

Lower Duwamish Waterway

NPDES Inspection Sampling Support 2014/2015

Prepared for



Toxics Cleanup Program
Northwest Regional Office
Washington State Department of Ecology
Bellevue, Washington

Prepared by



18912 North Creek Parkway, Suite 101
Bothell, Washington 98011

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Appendix P

Chemithon Corporation

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P-1 Introduction and Background

Facility Name	Chemithon Corporation
Facility/Site ID	41953656
Address	5430 West Marginal Way SW Seattle, WA 98106
NPDES Permit Type	Industrial Stormwater General Permit
NPDES Permit No.	WAR000033
Permit Monitoring Requirements	Turbidity, pH, total zinc, total copper, petroleum-oil, grease
SIC Code	8731: Commercial Physical Research 5169: Chemicals & Allied Products, NEC 3599: Industrial Machinery
Inspection Date	October 13, 2014
Grab Samples	2 water samples; 3 solids samples
Sample ID(s)	CC-A-01-20141013-W CC-FD-02-20141013-2 CC-A-01-20141013-S CC-CB-04-20141013-S CC-CB-22-20141013-S
Water Sample Analytes	Total metals, mercury, PCB congeners, SVOCs, dioxins/furans, alkalinity/carbonate/bicarbonate, anions, specific conductance, pH, TOC, DOC, TSS
Solids Sample Analytes	Total metals, mercury, PCB Aroclors, PCB congeners, dioxins/furans, SVOCs, VOCs (CC-CB-04 only), TPH-diesel/motor oil, TPH-gasoline (CC-CB-04 only), grain size, TOC
Split Samples with Facility	No

The Chemithon Corporation (Chemithon) is located along West Marginal Way SW at River Mile 1.2 West of the Lower Duwamish Waterway (LDW). The private storm drain system at Chemithon discharges directly to the LDW (Figure P-1). Materials and manufactured equipment are generally delivered by truck and transported by forklift trucks to storage areas. Large raw material items such as stainless steel rolled shells, pipe, and structural steel may be placed in outdoor storage areas or holding racks until needed. Fabrication work is generally conducted in the warehouse or under covered areas adjacent to the warehouse on the west wall.

Upon completion of the manufacturing process, finished goods are loaded onto trucks in the yard area. The scrap material from manufacturing processes is collected into temporary storage bins and recycling dumpsters that are stored outdoors and kept covered when not in use. Occasionally, Chemithon receives or ships liquid products in Department of Transportation

(DOT) approved containers such as 55-gallon drums. These materials are used in the manufacturing shops and in the research and development areas (Chemithon 2010).

The warehouse and manufacturing building located on the east side of the property is partially covered in galvanized corrugated sheet metal. The property is also surrounded by a galvanized chain link fence that is exposed to rainfall, and a portion of the fencing surrounds the stormwater collection zone. Chemithon maintains a number of storage racks for pipe and steel materials that are stored in the margins of the yard area and outdoors, exposed to precipitation. Temporary storage bins for waste and scrap metals are placed outdoors. Waste material dumpsters are present for general scrap materials going to waste disposal. A diesel fuel station is located at the southwest corner of the yard on a concrete drain pad with a sump (Chemithon 2010). An overview of the facility is presented in Figure P-1.

P-1.1 Stormwater Conveyance

The property is divided into two drainage zones. Stormwater gathered from the east and south portion of the property flows to a main collection vault in the southeast corner of Chemithon's property. Stormwater is pumped from the vault, underneath the Lafarge Cement Company (Lafarge) property to the east, and discharged to the LDW. Only stormwater structures in the eastern drainage zone were inspected and/or sampled (Figure P-2).

Industrial wastewater and combined stormwater (from the western portion of the site) and sanitary sewer discharge goes to the sanitary sewer system (Chemithon 2010). A facility drainage map is presented in Figure P-1.

P-1.2 Recent Compliance History

Ecology previously conducted a stormwater compliance inspection at the facility in November 2007. Stockpiles located on the Lafarge property to the east had the potential to spill or blow onto the Chemithon property. The inspectors identified the following corrective actions:

- Conduct quarterly stormwater monitoring.
- Update the facility SWPPP to reflect current site conditions.
- Clean up areas of accumulated sediment.
- Implement best management practices and provide proper storage for liquid, food waste, and/or dangerous waste container storage.

No information on the facility's compliance with these corrective actions was available for review.

Based on available discharge monitoring reports, Chemithon Corporation exceeded benchmarks for copper during the 2nd quarter of 2011 and 2010 (Ecology 2015).

P-2 Inspection and Sampling

P-2.1 October 2014 Stormwater Compliance Inspection

On October 13, 2014, Ecology conducted a stormwater compliance inspection at Chemithon. Leidos assisted Ecology with inspection and sampling of the facility's stormwater conveyance system. The inspection included investigating influent and effluent points at drainage structures, preparing written and photographic documentation, and assessing whether the drainage structures contained sufficient sampleable material. The coordinates of sample locations are plotted on Figure P-2 using geographic information system software. An inspection photographic log and field documentation are presented in Attachments P-1 and P-2, respectively.

The field team inspected the following stormwater conveyance structures at Chemithon, as shown on Figure P-2 (structures where samples were collected are shown in bold font):

- **Sump/vault 01 (CC-A-01)**
- **Catch basin 04 (CC-CB-04)**
- Catch basin 18 (CC-CB-18)
- Catch basin 20 (CC-CB-20)
- Catch basin 21 (CC-CB-21)
- **Catch basin 22 (CC-CB-22)**
- Additional drainage areas.

Drains along the paved area at the north boundary of the facility are rerouted to collect stormwater and reuse it in the manufacturing process. Stormwater collected in the area that is not reused in the manufacturing process is discharged to the sanitary sewer. According to the drainage map and facility personnel, stormwater along the northwest and western property boundary is conveyed to the sanitary sewer. Drainage information in that area of the site could not be confirmed.

P-2.2 Stormwater Conveyance System Sampling

Ecology collected two water samples (including one field duplicate) and three solids samples from the stormwater conveyance system at Chemithon. Sample locations, analytes, and analytical methods are listed on Table P-1. Results for water samples are presented in Tables P-2 through P-6. Results for the solids samples are presented in Tables P-7 through P-9. Chain of custody forms and the laboratory reports are provided as Attachments P-3 and P-4, respectively.

P-2.2.1 Water Samples

Water sample CC-A-01-20141013-W and field duplicate sample CC-FD-02-20141013-W were collected from CC-A-01 (Figure P-2 and Attachment P-1). This sampling location is the sump/vault in the southeast corner of the property. The vault receives stormwater from all areas that drain the eastern portion of the facility. Stormwater is conveyed from the vault to two large storage vaults located underneath the Lafarge property to the east. The downstream storage vaults are used to prevent tidally influenced river water from entering the sump at Chemithon.

Stormwater is conveyed from the downstream vaults and discharges to the LDW via a 30-inch outfall.

P-2.2.2 Solids Samples

Solids sample CC-A-01-20141013-S was collected from sump/vault CC-A-01 (Figure P-2 and Attachment P-1). The location did not contain sufficient sampleable solids material to analyze for all parameters. TPH-gasoline, VOCs, TOC, and grain size were not analyzed in this sample.

Solids sample CC-CB-04-20141013-S was collected from catch basin CB-04. This catch basin is located upstream of the vault CC-A-01 (Figure P-2 and Attachment P-1). Stormwater from the eastern and central portion of the facility is conveyed to CC-CB-04. An oil sheen was observed in the water during sampling activities. Catch basin CB-04 also receives stormwater from a catch basin in the loading dock area where a covered dumpster is stored. A drainage line depicted on the facility map that enters this catch basin at the northwest corner (Figure P-1) could not be confirmed. The drainage line was not observed entering the catch basin during inspection.

Solids sample CC-CB-22-20141013-S was collected as a composite sample from four catch basins located at the northeast portion of the facility (Figure P-2 and Attachment P-1). The four catch basins from which the solids sample was collected are CB-18, CB-20, CB-21, and CB-22. All four catch basins drain to the same drainage line that conveys stormwater south to sump/vault CC-A-01. The catch basins are located in the employee parking area and the manufacturing building.

P-3 Results

P-3.1 Chemical Analysis

Ecology collected two water (including one field duplicate) and three solids samples during the October 13, 2014 stormwater compliance inspection at Chemithon Corporation. Analytical methods, chemical results and regulatory criteria are presented in Tables P-1 through P-9.

All chemical results were independently validated by EcoChem, Inc. of Seattle, WA. A compliance-level, U.S. Environmental Protection Agency (EPA) Stage 2A data validation was performed on all chemistry results. Data validation was performed following EPA guidance (EPA 1994, 2008, 2009, 2010). The data validation report is available as Attachment 1 to the NPDES Inspection Sampling Support (2014/2015) Report (Leidos 2015).

Copper and total PCB congeners were present at concentrations above a screening level in both water samples (Table P-4). In solids samples, metals (arsenic, chromium, copper, zinc), PCBs (total Aroclors and total congeners), and phthalates (bis[2-ethylhexyl]phthalate, butylbenzylphthalate, dimethylphthalate) exceeded one or more screening levels in all three samples that were collected (Table P-8). In addition, benzyl alcohol and diesel-range hydrocarbons exceeded a screening level in one solids sample, and motor oil-range hydrocarbons exceeded a screening level in two solids samples (Table P-8).

P-3.2 Inspection Results and Permit Compliance Requirements

The Ecology inspection report was not available for review.

P-4 References

Chemithon. 2010. Stormwater Pollution Prevention Plan, The Chemithon Corporation, 5430 W. Marginal Way SW, Seattle, WA, 98106. November 5, 2010.

Ecology (Washington State Department of Ecology). 2008. Stormwater Compliance Inspection Report: Chemithon Corporation. January 22, 2008.

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EPA (Environmental Protection Agency). 1994. *USEPA Contract Laboratory Program, National Functional Guidelines for Inorganic Data Review*. EPA 540/R-94/013. Office of Emergency and Remedial Response. February 1994.

EPA. 2008. *USEPA Contract Laboratory Program, National Functional Guidelines for Organic Data Review*. EPA-540-R-08-01. Office of Emergency and Remedial Response. June 2008.

EPA. 2009. *Guidance for labeling externally validated laboratory analytical data for Superfund use*. EPA-540-R-08-005. Office of Emergency and Remedial Response. January 2009.

EPA. 2010. *USEPA Contract Laboratory Program, National Functional Guidelines for Inorganic Data Review*. EPA 540-R-10-011. Office of Emergency and Remedial Response. January 2010.

Leidos. 2015. Lower Duwamish Waterway NPDES Inspection Sampling Support, 2014/2015. Prepared for Washington State Department of Ecology, Toxics Cleanup Program, Northwest Regional Office. June 2015.

Figures

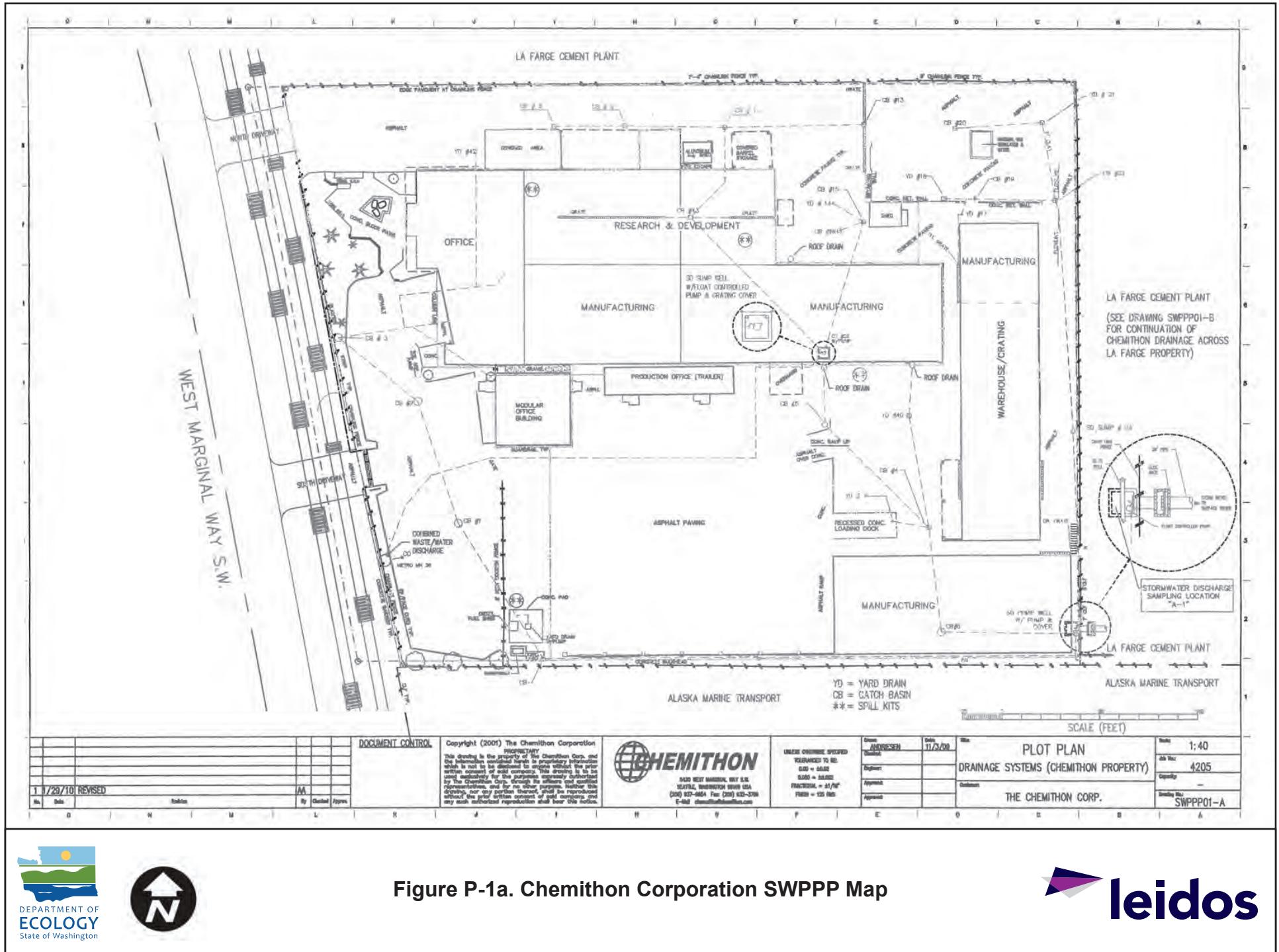


Figure P-1a. Chemithon Corporation SWPPP Map



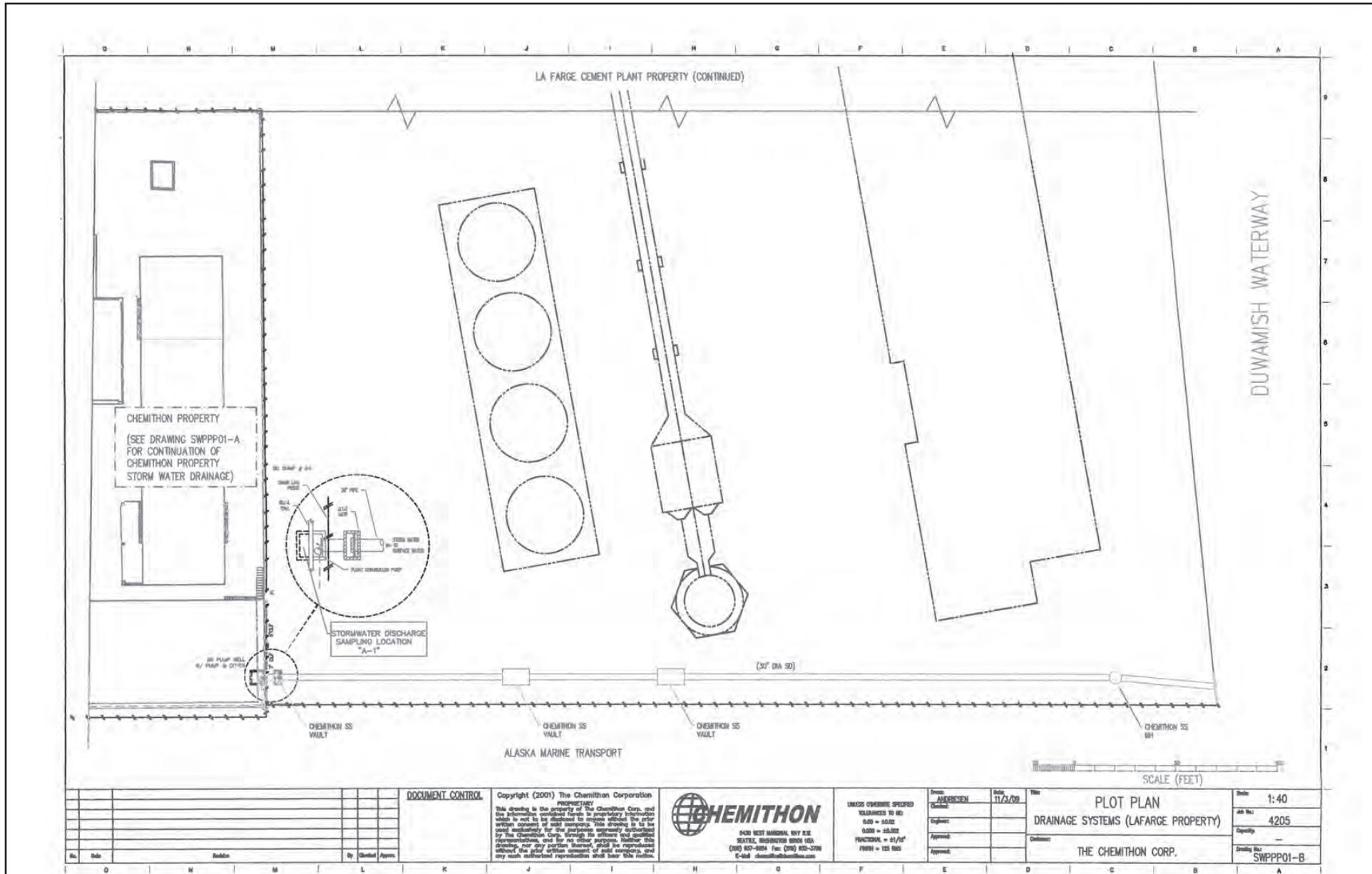


Figure P-1b. Chemithon Corporation SWPPP Map



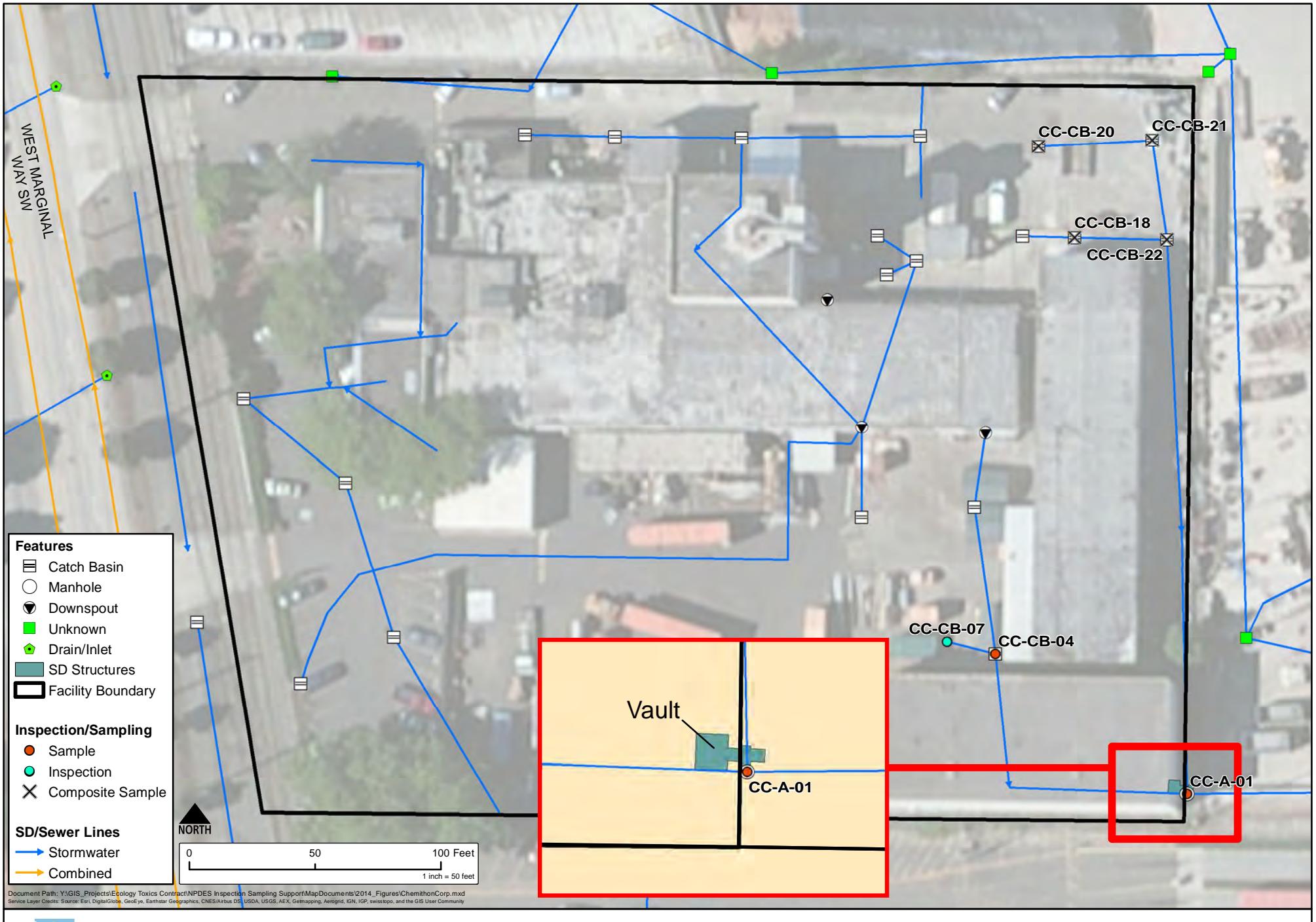


Figure P-2. Chemithon Corporation Inspection and Sample Locations

Tables

Acronyms and Abbreviations Used in Tables

<	not detected	ng/kg	nanograms per kilogram
%	percent	NPDES	National Pollutant Discharge Elimination System
2LAET	Second Lowest Apparent Effects Threshold	NR WQC	National Recommended Water Quality Criteria
CaCO ₃	calcium carbonate	NTR WQC	National Toxics Rule Water Quality Criteria
CB	chlorobiphenyl	NTU	Nephelometric Turbidity Units
cPAH	carcinogenic polycyclic aromatic hydrocarbon	OC	organic carbon
CSL	Cleanup Screening Level	ORP	Oxidation Reduction Potential
EF	exceedance factor (sample result / criteria value)	PAH	Polycyclic aromatic hydrocarbon
EMPC	estimated maximum possible concentration	PCB	Polychlorinated biphenyl
EPA	U.S. Environmental Protection Agency	pg/L	picograms per liter
HHO	human health – consumption of organisms only	PSEP	Puget Sound Estuary Program
HPAH	high molecular weight polycyclic aromatic hydrocarbon	R	rejected during data validation review
ICP-MS	Inductively coupled plasma – mass spectrometry	RAL	Remedial Action Level
ISGP	Industrial Stormwater General Permit	RL	reporting limit
J	estimated concentration	SCO	Sediment Cleanup Objective
JN	estimated concentration	SDL	sample detection limit
LAET	Lower Apparent Effects Threshold	SIM	Selected ion monitoring
LDW	Lower Duwamish Waterway	SMS	Washington State Sediment Management Standards
LPAH	low molecular weight polycyclic aromatic hydrocarbon	std units	standard units
MA	marine acute	SVOC	Semivolatile organic compound
MC	marine chronic	SW	Surface water
µg/L	micrograms per liter	TEQ	toxic equivalency
µmhos/cm	micromhos per centimeter	TPH	Total petroleum hydrocarbon
mg/kg	milligrams per kilogram	U	not detected
mg/L	milligrams per liter	U*	Flagged as EMPC by the laboratory; this was changed to U (non-detect) during data validation
mS/cm	millisiemens per centimeter	VOC	volatile organic compound
MTCA	Model Toxics Control Act	WA WQC	Washington State Water Quality Criteria
na	not analyzed	WQC	Water Quality Criteria
nd	not detected		

Table P-1
Sampling Locations and Analytical Methods
Chemithon

Analyte	Method	Sample Location / Collection Date			
		CC-A-01 10/13/2014	CC-FD-02 10/13/2014	CC-CB-04 10/13/2014	CC-CB-22 10/13/2014
Water Samples					
Metals (total)	EPA 200.8	●	●		
Mercury (total, dissolved)	EPA 245.1	●	●		
PCB Congeners	EPA 1668C	●	●		
SVOCs	SW 8270D-Low	●	●		
Dioxins/furans	EPA 1613B	●	●		
Alkalinity/Carbonate/Bicarbonate	SM 2320B	●	●		
Anions	EPA 300.0	●	●		
Specific Conductance	EPA 120.1	●	●		
pH	SM 4500H+B	●	●		
Total organic carbon	SM 5310B	●	●		
Dissolved organic carbon	SM 5310B	●	●		
Total suspended solids	SM 2540D	●	●		
Solids Samples					
Metals (total)	SW 6020	●		●	●
Mercury	SW 7471A	●		●	●
PCB Aroclors	EPA 8082	●		●	●
PCB Congeners	EPA 1668C	●		●	●
Dioxins/furans	EPA 1613B	●		●	●
SVOCs	SW 8270D-Low	●		●	●
VOCs	SW 8260B-Low			●	
TPH-diesel/motor oil	NWTPH-Dx	●		●	●
TPH-gasoline	NWTPH-Gx			●	
Grain size	PSEP Plumb 1981			●	●
Total organic carbon	PSEP 9060			●	●

Bullet indicates a sample was collected for the listed analyte at the specified location.

Table P-2. Water Quality Data - Field Measurements
Chemithon

Location ID		CC-A-01	
Collection Date		10/13/2014	
Analyte	ISGP Benchmark	Units	Result
Field Parameters			
Flow	--	Yes/No	No
pH	5.0 to 9.0	std units	7.1
Conductivity	--	mS/cm	0.21 a
Temperature	--	degrees C	17.8
Total Dissolved Solids	--	mg/L	na
Turbidity	25	NTU	18
Oil & Grease	No visible sheen	Yes/No	No
Dissolved Oxygen	--	mg/L	9.4 b
ORP	--	mV	259

Results in **bold** exceed the ISGP benchmark.

a - Field form incorrectly lists units as S/cm; should be mS/cm

b - Field form incorrectly lists units as g/L; should be mg/L

Table P-3. Water Sample Results
Chemithon

Analyte	ISGP Benchmark	Location ID			CC-A-01	CC-FD-02
		Collection Date			10/13/2014	10/13/2014
		WA WQC		NTR WQC	NR WQC	Result
		Marine	Chronic	Acute	HHO	
Total Metals (µg/L)						
Antimony	--	--	--	--	--	1.5
Arsenic	150	36	69	--	--	1.8
Beryllium	--	--	--	--	--	< 0.40 U
Cadmium	2.1	9.4	42	--	--	0.24 J
Chromium	--	--	--	--	--	1.1
Chromium, hexavalent	--	--	--	--	--	na
Copper	14	3.7	5.8	--	--	12
Lead	81.6	8.5	221	--	--	1.7
Mercury	1.4	0.025	2.1	--	--	< 0.20 U
Nickel	--	8.3	75	--	--	7.5
Selenium	5	71	291	--	--	< 1.0 U
Silver	3.8	--	2.2	--	--	< 0.40 U
Thallium	--	--	--	--	--	< 1.0 U
Zinc	117	86	95	--	--	70
PCB Congeners (µg/L)^a						
Total PCB Congeners	--	0.03	10	1.70E-04	6.40E-05	0.010 J
PCB TEQ, nd SDL*0	--	0.03	10	--	--	1.79E-06 J
PCB TEQ, nd SDL*0.5	--	0.03	10	--	--	1.86E-06 J
PCB TEQ, nd SDL*1	--	0.03	10	--	--	1.93E-06 J
Dioxins and Furans (pg/L)^a						
2,3,7,8-TCDD	--	--	--	0.014	0.0051	< 1.51 U
1,2,3,7,8-PeCDD	--	--	--	--	--	< 0.930 U
1,2,3,4,7,8-HxCDD	--	--	--	--	--	< 2.40 U
1,2,3,6,7,8-HxCDD	--	--	--	--	--	< 2.56 U
1,2,3,7,8,9-HxCDD	--	--	--	--	--	< 2.67 U
1,2,3,4,6,7,8-HpCDD	--	--	--	--	--	5.83 J
OCDD	--	--	--	--	--	33.7 J
2,3,7,8-TCDF	--	--	--	--	--	< 0.998 U
1,2,3,7,8-PeCDF	--	--	--	--	--	< 1.38 U
2,3,4,7,8-PeCDF	--	--	--	--	--	< 1.06 U
1,2,3,4,7,8-HxCDF	--	--	--	--	--	< 0.602 U
1,2,3,6,7,8-HxCDF	--	--	--	--	--	< 0.644 U
1,2,3,7,8,9-HxCDF	--	--	--	--	--	< 0.728 U
2,3,4,6,7,8-HxCDF	--	--	--	--	--	< 0.502 U
1,2,3,4,6,7,8-HpCDF	--	--	--	--	--	< 1.37 U*
1,2,3,4,7,8,9-HpCDF	--	--	--	--	--	< 1.17 U
OCDF	--	--	--	--	--	< 1.86 U
Total TCDD	--	--	--	--	--	< 1.51 U
Total PeCDD	--	--	--	--	--	< 0.93 U
Total HxCDD	--	--	--	--	--	< 3.64 U
Total HpCDD	--	--	--	--	--	14.0
Total TCDF	--	--	--	--	--	< 1.33 U
Total PeCDF	--	--	--	--	--	< 0.532 U*
Total HxCDF	--	--	--	--	--	< 0.886 U*
Total HpCDF	--	--	--	--	--	1.20 J
Dioxin/Furan TEQ, nd SDL*0	--	--	--	--	--	0.0684 J
Dioxin/Furan TEQ, nd SDL*0.5	--	--	--	--	--	2.04 J
Dioxin/Furan TEQ, nd SDL*1	--	--	--	--	--	4.00 J
PAHs (µg/L)						
1-Methylnaphthalene	--	--	--	--	--	< 0.058 U
2-Chloronaphthalene	--	--	--	--	1,600	< 0.058 U
2-Methylnaphthalene	--	--	--	--	--	< 0.19 U
Acenaphthene	--	--	--	--	990	< 0.096 U
Acenaphthylene	--	--	--	--	--	< 0.077 U
Anthracene	--	--	--	110,000	40,000	< 0.038 U
						< 0.039 U

Table P-3. Water Sample Results
Chemithon

Analyte	ISGP Benchmark	Location ID			CC-A-01	CC-FD-02
		Collection Date			10/13/2014	10/13/2014
		WA WQC		NTR WQC	NR WQC	Result
Analyte	ISGP Benchmark	Marine	Chronic	Acute	HHO	
			Chronic	Acute	HHO	
Benzo(a)anthracene	--	--	--	0.031	0.018	< 0.058 U < 0.059 U
Benzo(a)pyrene	--	--	--	0.031	0.018	< 0.038 U < 0.039 U
Benzo(b)fluoranthene	--	--	--	0.031	0.018	< 0.077 U < 0.078 U
Benzo(g,h,i)perylene	--	--	--	--	--	< 0.058 U < 0.059 U
Benzo(k)fluoranthene	--	--	--	0.031	0.018	< 0.058 U < 0.059 U
Chrysene	--	--	--	0.031	0.018	< 0.038 U < 0.039 U
Dibenz(a,h)anthracene	--	--	--	0.031	0.018	< 0.058 U < 0.059 U
Dibenzofuran	--	--	--	--	--	< 0.38 U < 0.39 U
Fluoranthene	--	--	--	370	140	< 0.048 U < 0.049 U
Fluorene	--	--	--	14,000	5,300	< 0.058 U < 0.059 U
Indeno(1,2,3-cd)pyrene	--	--	--	0.031	0.018	< 0.058 U < 0.059 U
Naphthalene	--	--	--	--	--	< 0.38 U < 0.39 U
Phenanthrene	--	--	--	--	--	< 0.077 U < 0.078 U
Pyrene	--	--	--	11,000	4,000	< 0.058 U < 0.059 U
Total Benzofluoranthenes	--	--	--	--	--	< 0.077 U < 0.078 U
Total HPAHs	--	--	--	--	--	< 0.077 U < 0.078 U
Total LPAHs	--	--	--	--	--	< 0.38 U < 0.39 U
Total PAHs	--	--	--	--	--	< 0.38 U < 0.078 U
cPAHs, nd RL*0	--	--	--	--	--	< 0 U < 0 U
cPAHs, nd RL*0.5	--	--	--	--	--	< 0.035 U < 0.035 U
cPAHs, nd RL*1	--	--	--	--	--	< 0.069 U < 0.071 U
Phthalates (µg/L)						
bis(2-Ethylhexyl)phthalate	--	--	--	5.9	2.2	< 2.0 U < 4.0 U
Butylbenzylphthalate	--	--	--	--	1,900	< 0.58 U < 0.59 U
Di-n-Butylphthalate	--	--	--	12,000	4,500	0.49 0.62
Diethylphthalate	--	--	--	120,000	44,000	0.11 J 0.13 J
Dimethylphthalate	--	--	--	2,900,000	1,100,000	< 0.38 U < 0.39 U
Di-n-Octyl phthalate	--	--	--	--	--	0.25 J < 0.39 U
Phenols (µg/L)						
2,3,4,6-Tetrachlorophenol	--	--	--	--	--	na na
2,4,5-Trichlorophenol	--	--	--	--	3,600	< 0.38 U < 0.39 U
2,4,6-Trichlorophenol	--	--	--	6.5	2.4	< 0.58 U < 0.59 U
2,4-Dichlorophenol	--	--	--	790	290	< 0.38 U < 0.39 U
2,4-Dimethylphenol	--	--	--	--	850	< 1.9 U < 2.0 U
2,4-Dinitrophenol	--	--	--	14,000	5,300	< 4.8 U < 4.9 U
2-Chlorophenol	--	--	--	--	150	< 0.38 U < 0.39 U
2-Methylphenol	--	--	--	--	--	< 0.38 U < 0.39 U
2-Nitrophenol	--	--	--	--	--	< 0.38 U < 0.39 U
4,6-Dinitro-2-Methylphenol	--	--	--	765	280	< 3.8 U < 3.9 U
4-Chloro-3-methylphenol	--	--	--	--	--	< 0.38 U < 0.39 U
4-Methylphenol	--	--	--	--	--	0.22 J 0.14 J
4-Nitrophenol	--	--	--	--	--	< 2.9 U < 2.9 U
Pentachlorophenol	--	7.9	13	8.2	3.0	< 0.67 U < 0.69 U
Phenol	--	--	--	4,600,000	860,000	< 0.58 U < 0.59 U
Other SVOCs (µg/L)						
1,2,4-Trichlorobenzene	--	--	--	--	70	< 0.38 U < 0.39 U
1,2-Dichlorobenzene	--	--	--	17,000	1,300	< 0.38 U < 0.39 U
1,3-Dichlorobenzene	--	--	--	2,600	960	< 0.38 U < 0.39 U
1,4-Dichlorobenzene	--	--	--	2,600	190	< 0.38 U < 0.39 U
2,4-Dinitrotoluene	--	--	--	9.1	3.4	< 0.38 U < 0.39 U
2,6-Dinitrotoluene	--	--	--	--	--	< 0.38 U < 0.39 U
2-Nitroaniline	--	--	--	--	--	< 0.38 U < 0.39 U
3,3'-Dichlorobenzidine	--	--	--	0.077	0.028	< 1.9 U < 2.0 U
3-Nitroaniline	--	--	--	--	--	< 0.38 U < 0.39 U
4-Bromophenyl-phenylether	--	--	--	--	--	< 0.38 U < 0.39 U
4-Chloroaniline	--	--	--	--	--	< 0.38 U < 0.39 U
4-Chlorophenyl-phenylether	--	--	--	--	--	< 0.38 U < 0.39 U

Table P-3. Water Sample Results
Chemithon

Analyte	ISGP Benchmark	Location ID				CC-A-01			CC-FD-02		
		Collection Date				10/13/2014			10/13/2014		
		WA WQC		NTR WQC	NR WQC	Result		Result			
Marine	Chronic	Acute	HHO	HHO							
4-Nitroaniline	--	--	--	--	--	<	0.58	U	<	0.59	U
Benzoic Acid	--	--	--	--	--		1.1	J		1.4	J
Benzyl Alcohol	--	--	--	--	--	<	0.38	U	<	0.39	U
2,2'-Oxybis(1-Chloropropane)	--	--	--	170,000	65,000	<	0.38	U	<	0.39	U
bis(2-Chloroethoxy) Methane	--	--	--	--	--	<	0.38	U	<	0.39	U
Bis-(2-Chloroethyl) Ether	--	--	--	1.4	0.53	<	0.38	U	<	0.39	U
Carbazole	--	--	--	--	--	<	0.38	U	<	0.39	U
Hexachlorobenzene	--	--	--	0.00077	0.00029	<	0.38	U	<	0.39	U
Hexachlorobutadiene	--	--	--	50	18	<	0.58	U	<	0.59	U
Hexachlorocyclopentadiene	--	--	--	17,000	1,100	<	1.9	U	<	2.0	U
Hexachloroethane	--	--	--	8.9	3.3	<	0.58	U	<	0.59	U
Isophorone	--	--	--	600	960	<	0.38	U		0.13	J
Nitrobenzene	--	--	--	1,900	690	<	0.38	U	<	0.39	U
N-Nitrosodimethylamine	--	--	--	8.1	3.0	<	1.9	U	<	2.0	U
N-Nitroso-Di-N-Propylamine	--	--	--	--	0.51	<	0.38	U	<	0.39	U
N-Nitrosodiphenylamine	--	--	--	16	6.0	<	0.38	U	<	0.39	U

Results in **bold** are detections.

Results that are shaded in gray exceed one or more criteria.

a - Total PCB congeners and PCB/dioxin/furan TEQs include only congeners that met identification criteria as required by EPA Method 1668C (PCBs) or EPA Method 1613B (dioxins/furans).

PCB and dioxin/furan congeners identified with a U* qualifier were tagged as "estimated maximum possible concentrations" by the laboratory. This was changed to non-detect (U) during data validation.

**Table P-4. Water Sample Results Compared to Criteria
Chemithon**

Location ID	CC-A-01					CC-FD-02				
Collection Date	10/13/2014					10/13/2014				
Analyte	Exceedance Factor					Exceedance Factor				
	ISGP Benchmark	WA Marine Chronic	WA Marine Acute	NTR Human Health - Organisms	NR Human Health - Organisms	ISGP Benchmark	WA Marine Chronic	WA Marine Acute	NTR Human Health - Organisms	NR Human Health - Organisms
Total Metals										
Copper		3.2	2.1				3.2	2.1		
PCB Congeners										
Total PCB Congeners				59	158				61	161

Exceedance Factors (EFs) are presented for detected concentrations only.

Only chemicals with EF > 1 are shown.

The EFs are calculated (result divided by criterion) and have no regulatory relevance. They provide an indication of the general magnitude of the concentration relative to the WA, NTR, or NR Water Quality Criteria.

Table P-5. Water Sample Results - PCB Congeners
Chemithon

Location ID	CC-A-01	CC-FD-02
Collection Date	10/13/2014	10/13/2014
Analyte	Result	Result
Total PCB Congeners ($\mu\text{g/L}$)	0.0101 J	0.0103 J
Total PCB Congeners (pg/L)	10,100 J	10,300 J
Total Mono-CB (pg/L)	6.01 J	6.03 J
PCB-1	2.64 J	2.50 J
PCB-2	1.06 J	1.05 J
PCB-3	2.31 J	2.48 J
Total Di-CB (pg/L)	29.5 J	24.0 J
PCB-4/10	6.28 J	< 6.14 U*
PCB-5/8	11.2 J	11.2 J
PCB-6	< 5.86 U	< 2.83 U*
PCB-7/9	< 5.82 U	< 6.01 U
PCB-11	< 78.5 U	< 80.4 U
PCB-12/13	< 5.78 U	< 5.98 U
PCB-14	< 5.16 U	< 5.33 U
PCB-15	12.0	12.8
Total Tri-CB (pg/L)	120 J	128 J
PCB-16/32	12.0	12.2
PCB-17	5.92	5.53
PCB-18	16.4	17.3
PCB-19	2.87 J	2.89 J
PCB-20/21/33	13.2 J	13.5 J
PCB-22	8.66	9.01
PCB-23	< 0.858 U	< 0.791 U
PCB-24/27	2.03 J	2.07 J
PCB-25	< 1.54 U*	2.12 J
PCB-26	< 4.12 U*	5.13
PCB-28	18.6	18.2
PCB-29	< 0.846 U	< 0.780 U
PCB-30	< 0.675 U	< 0.649 U
PCB-31	18.8	20.0
PCB-34	< 0.892 U	< 0.822 U
PCB-35	3.89 J	3.71 J
PCB-36	< 0.868 U	< 0.791 U
PCB-37	17.6	16.8
PCB-38	< 0.882 U	< 0.805 U
PCB-39	< 0.842 U	< 0.767 U
Total Tetra-CB (pg/L)	793 J	782 J
PCB-40	7.46	9.03
PCB-41/64/71/72	43.5	42.4
PCB-42/59	10.3	10.9
PCB-43/49	37.1	38.7
PCB-44	77.6	74.9
PCB-45	3.90 J	4.50 J
PCB-46	2.71 J	2.38 J
PCB-47	11.0	9.99
PCB-48/75	4.41 J	3.73 J
PCB-50	< 1.94 U	< 1.40 U
PCB-51	2.18 J	1.75 J
PCB-52/69	141	136
PCB-53	5.02	5.20
PCB-54	< 1.56 U	< 1.13 U
PCB-55	3.73 J	< 1.81 U*

Table P-5. Water Sample Results - PCB Congeners
Chemithon

Location ID	CC-A-01	CC-FD-02
Collection Date	10/13/2014	10/13/2014
Analyte	Result	Result
PCB-56/60	45.8	46.0
PCB-57	< 1.37 U	< 1.01 U
PCB-58	< 1.38 U	< 1.02 U
PCB-61/70	208	215
PCB-62	< 1.58 U	< 1.15 U
PCB-63	2.55 J	< 1.89 U*
PCB-65	< 1.53 U	< 1.11 U
PCB-67	2.75 J	2.91 J
PCB-68	< 1.37 U	< 0.998 U
PCB-73	< 1.54 U	< 1.15 U
PCB-74	39.6	39.1
PCB-76/66	70.4	70.6
PCB-77	64.2	68.0
PCB-78	< 1.38 U	< 1.08 U
PCB-79	7.56	< 5.17 U*
PCB-80	< 1.15 U	< 0.868 U
PCB-81	2.20 J	1.37 J
Total Penta-CB (pg/L)	3,600 J	3,610 J
PCB-82	73.8	76.5
PCB-83	< 1.96 U	< 1.87 U
PCB-84/92	198	191
PCB-85/116	79.4	80.0
PCB-86	< 2.92 U	< 2.78 U
PCB-87/117/125	212	215
PCB-88/91	60.2	58.4
PCB-89	3.05 J	2.75 J
PCB-90/101	541	537
PCB-93	< 2.74 U	< 2.38 U
PCB-94	< 2.80 U	< 2.43 U
PCB-95/98/102	344	341
PCB-96	< 2.16 U	< 2.08 U*
PCB-97	157	160
PCB-99	170	171
PCB-100	< 2.35 U	< 2.19 U
PCB-103	2.88 J	< 1.73 U*
PCB-104	< 1.87 U	< 1.75 U
PCB-105	272	275
PCB-106/118	649	655
PCB-107/109	49.3	49.0
PCB-108/112	23.0	24.7
PCB-110	665	671
PCB-111/115	9.57 J	8.84 J
PCB-113	2.71 J	< 1.82 U
PCB-114	12.1	13.2
PCB-119	7.65	6.88
PCB-120	< 1.68 U	2.80 J
PCB-121	< 1.63 U	< 1.41 U
PCB-122	7.50	8.00
PCB-123	9.91	9.49
PCB-124	31.5	31.5
PCB-126	17.5	18.6
PCB-127	< 3.24 U	< 3.98 U

Table P-5. Water Sample Results - PCB Congeners
Chemithon

Location ID	CC-A-01	CC-FD-02
Collection Date	10/13/2014	10/13/2014
Analyte	Result	Result
Total Hexa-CB (pg/L)	3,620 J	3,720 J
PCB-128/162	140	143
PCB-129	43.8	42.1
PCB-130	60.6	66.8
PCB-131	< 3.90 U	< 5.23 U
PCB-132/161	210	228
PCB-133/142	22.2	22.0
PCB-134/143	39.4	40.1
PCB-135	91.3	89.1
PCB-136	71.2	75.6
PCB-137	39.7	36.2
PCB-138/163/164	876	905
PCB-139/149	561	585
PCB-140	5.68	6.35
PCB-141	181	189
PCB-144	30.9	37.1
PCB-145	< 1.08 U	< 0.885 U
PCB-146/165	111	110
PCB-147	12.7	11.4
PCB-148	< 1.60 U	< 1.31 U
PCB-150	1.30 J	< 1.59 U*
PCB-151	134	136
PCB-152	< 1.08 U	< 0.881 U
PCB-153	737	740
PCB-154	8.71	9.69
PCB-155	< 1.04 U	< 0.852 U
PCB-156	72.5	77.9
PCB-157	21.6	22.4
PCB-158/160	102	105
PCB-159	< 3.05 U	< 3.97 U
PCB-166	3.72 J	< 4.15 U
PCB-167	42.5	45.5
PCB-168	< 2.60 U	< 3.49 U
PCB-169	< 4.54 U	< 6.02 U
Total Hepta-CB (pg/L)	1,630 J	1,700 J
PCB-170	178	184
PCB-171	53.4	52.9
PCB-172	41.4	43.7
PCB-173	< 3.61 U*	4.85
PCB-174	205	220
PCB-175	8.89	8.49
PCB-176	20.4	24.0
PCB-177	125	126
PCB-178	40.7	45.3
PCB-179	76.5	78.4
PCB-180	424	439
PCB-181	< 1.26 U	< 2.25 U
PCB-182/187	255	267
PCB-183	95.5	101
PCB-184	< 0.792 U	0.940 J
PCB-185	24.6	26.0
PCB-186	< 0.768 U	< 1.36 U

**Table P-5. Water Sample Results - PCB Congeners
Chemithon**

Location ID	CC-A-01	CC-FD-02
Collection Date	10/13/2014	10/13/2014
Analyte	Result	Result
PCB-188	1.47 J	1.15 J
PCB-189	6.86	6.71
PCB-190	36.7	34.7
PCB-191	8.62	9.60
PCB-192	< 1.12 U	< 2.01 U
PCB-193	23.1	23.5
Total Octa-CB (pg/L)	306 J	333 J
PCB-194	74.8	83.3
PCB-195	29.4	32.9
PCB-196/203	75.6	82.0
PCB-197	3.14 J	3.12 J
PCB-198	2.30 J	< 1.95 U*
PCB-199	79.3	87.0
PCB-200	9.68	10.2
PCB-201	12.4	12.6
PCB-202	19.3	21.6
PCB-204	< 1.33 U	< 1.37 U
PCB-205	< 5.54 U	< 7.36 U
Total Nona-CB (pg/L)	41.2 J	39.3 J
PCB-206	29.5	28.5
PCB-207	4.07 J	4.24 J
PCB-208	7.64	6.49
Deca-CB (pg/L)	< 7.34 U	< 15.1 U
PCB-209	< 7.34 U	< 15.1 U
PCB TEQ, nd SDL*0	1.79 J	1.90 J
PCB TEQ, nd SDL*0.5	1.86 J	1.99 J
PCB TEQ, nd SDL*1	1.93 J	2.08 J

Total PCB congeners and total PCB homologs include only congeners that met identification criteria as required by EPA Method 1668C.

**Table P-6. Water Sample Results - Conventional
Chemithon**

Location ID		CC-A-01	CC-FD-02	
Collection		10/13/2014	10/13/2014	
Analyte	ISGP Benchmark	Units	Result	Result
Conventional				
Alkalinity	--	mg/L	41	40
Bicarbonate	--	mg/L CaCO ₃	41	40
Carbonate	--	mg/L CaCO ₃	< 5 U	< 5 U
Chloride	--	mg/L	11	11
Specific Conductance	--	µhos/cm	170	170
Hydroxide	--	mg/L CaCO ₃	na	na
Nitrate	--	mg/L	0.22 J	0.22 J
pH	5-9	std units	7.06 J	7.07 J
Salinity	--	mg/L	na	na
Sulfate	--	mg/L	12	12
Dissolved Organic Carbon	--	mg/L	13	13
Total Organic Carbon	--	mg/L	14	14
Total Suspended Solids ^a	30	mg/L	< 10 U	10
Turbidity	25	NTU	na	na
Oil & Grease	--	mg/L	na	na
Oil & Grease - Polar	--	mg/L	na	na
Oil & Grease - Silica Gel Treated	--	mg/L	na	na

a - The ISGP benchmark for Total Suspended Solids becomes effective on January 1, 2017.

Shaded results exceed the ISGP benchmark for that parameter.

Table P-7. Solids Sample Results
Chemithon

Location ID			CC-A-01	CC-CB-04	CC-CB-22	
Collection Date			10/13/2014	10/13/2014	10/13/2014	
Analyte	SMS Criteria		Unit	Result	Result	Result
	SCO/ LAET ^a	CSL/ 2LAET				
Metals (Total) (mg/kg)						
Antimony	--	--	mg/kg	110	7.3	8.3
Arsenic	57	93	mg/kg	170	17	16
Beryllium	--	--	mg/kg	0.4	0.37	0.89
Cadmium	5.1	6.7	mg/kg	4.3	4.7	2.0
Chromium	260	270	mg/kg	3,800	8,600	380
Copper	390	390	mg/kg	540	420	540
Lead	450	530	mg/kg	250 J	69 J	180 J
Mercury	0.41	0.59	mg/kg	0.16	0.28	0.35
Nickel	--	--	mg/kg	2,800	5,900	360
Selenium	--	--	mg/kg	2.1	3.0	2.4
Silver	6.1	6.1	mg/kg	2.4	0.98	1.0
Thallium	--	--	mg/kg	< 0.87 U	< 0.73 U	0.22 J
Zinc	410	960	mg/kg	1,300	960	1,100
PCB Aroclors (µg/kg)						
Aroclor 1016	--	--	µg/kg	< 17 U	< 16 U	< 17 U
Aroclor 1221	--	--	µg/kg	< 19 U	< 18 U	< 19 U
Aroclor 1232	--	--	µg/kg	< 19 U	< 18 U	< 19 U
Aroclor 1242	--	--	µg/kg	< 17 U	< 16 U	< 17 U
Aroclor 1248	--	--	µg/kg	< 17 U	< 16 U	< 17 U
Aroclor 1254	--	--	µg/kg	< 17 UJ	< 16 UJ	< 17 UJ
Aroclor 1260	--	--	µg/kg	1,600 J	430 J	1,000 J
Total PCB Aroclors	130	1,000	µg/kg	1,600 J	430 J	1,000 J
PCB Congeners (ug/kg)^b						
Total PCB Congeners	130	1,000	µg/kg	1,150 J	1,370 J	2690 J
PCB TEQ, nd SDL*0	--	--	µg/kg	0.0756	0.0939	0.234
PCB TEQ, nd SDL*0.5	--	--	µg/kg	0.0767	0.0971	0.234
PCB TEQ, nd SDL*1	--	--	µg/kg	0.0779	0.1	0.234
Dioxins and Furans (ng/kg)						
2,3,7,8-TCDD	--	--	ng/kg	< 0.468 U*	< 0.542 U*	1.05
1,2,3,7,8-PeCDD	--	--	ng/kg	< 2.22 U*	3.3	3.96
1,2,3,4,7,8-HxCDD	--	--	ng/kg	3.94	4.09	5.9
1,2,3,6,7,8-HxCDD	--	--	ng/kg	8.89	11.2	12.8
1,2,3,7,8,9-HxCDD	--	--	ng/kg	7.79	10.8	11.3
1,2,3,4,6,7,8-HpCDD	--	--	ng/kg	175	212	289
OCDD	--	--	ng/kg	1490	2150	2750
2,3,7,8-TCDF	--	--	ng/kg	6.88	7.35	18.3
1,2,3,7,8-PeCDF	--	--	ng/kg	2.43 J	2.05 J	4.4
2,3,4,7,8-PeCDF	--	--	ng/kg	4.17	3.6	8.03
1,2,3,4,7,8-HxCDF	--	--	ng/kg	4.66	3.79	8.03
1,2,3,6,7,8-HxCDF	--	--	ng/kg	3.58	3.55	5.78
1,2,3,7,8,9-HxCDF	--	--	ng/kg	0.502 J	0.494 J	1.03 J
2,3,4,6,7,8-HxCDF	--	--	ng/kg	4.29	4	6.78
1,2,3,4,6,7,8-HpCDF	--	--	ng/kg	36.4	36.3	59.1
1,2,3,4,7,8,9-HpCDF	--	--	ng/kg	3.27	2.57	5.33
OCDF	--	--	ng/kg	69.1	57.4	130
Dioxin/Furan TEQ, nd SDL*0	25	--	ng/kg	7.99 J	12.1 J	18.9 J
Dioxin/Furan TEQ, nd SDL*0.5	25	--	ng/kg	9.33 J	12.4 J	18.9 J
Dioxin/Furan TEQ, nd SDL*1	25	--	ng/kg	10.7 J	12.7 J	18.9 J

Table P-7. Solids Sample Results
Chemithon

Location ID			CC-A-01	CC-CB-04	CC-CB-22	
Collection Date			10/13/2014	10/13/2014	10/13/2014	
Analyte	SMS Criteria		Unit	Result	Result	Result
	SCO/ LAET ^a	CSL/ 2LAET				
Total TCDD	--	--	ng/kg	12 J	16.8 J	30.4 J
Total TCDF	--	--	ng/kg	77.9 J	80.3 J	155 J
Total PeCDD	--	--	ng/kg	24 J	34.8	48.3
Total PeCDF	--	--	ng/kg	59.8	63.4 J	115 J
Total HxCDD	--	--	ng/kg	98.7	131	148
Total HxCDF	--	--	ng/kg	59.4	63.5	100
Total HpCDD	--	--	ng/kg	353	446	635
Total HpCDF	--	--	ng/kg	80.1	78.7	144
PAHs (µg/kg)						
1-Methylnaphthalene	--	--	µg/kg	270	110 J	97 J
2-Chloronaphthalene	--	--	µg/kg	< 35 U	< 170 U	< 170 U
2-Methylnaphthalene	670	1,400	µg/kg	350	210	170
Acenaphthene	500	730	µg/kg	140	170	100 J
Acenaphthylene	1,300	1,300	µg/kg	< 35 U	< 170 U	< 170 U
Anthracene	960	4,400	µg/kg	90	91 J	95 J
Benzo(a)anthracene	1,300	1,600	µg/kg	330	190	600
Benzo(a)pyrene	1,600	3,000	µg/kg	340 J	330	670
Benzo(g,h,i)perylene	670	720	µg/kg	290 J	210	260
Chrysene	1,400	2,800	µg/kg	520	410	920
Dibenz(a,h)anthracene	230	540	µg/kg	94 J	< 330 U	< 340 U
Dibenzofuran	540	700	µg/kg	100 J	< 840 U	64 J
Fluoranthene	1,700	2,500	µg/kg	940	b 830	1,500
Fluorene	540	1,000	µg/kg	120	130 J	56 J
Indeno(1,2,3-cd)pyrene	600	690	µg/kg	270 J	210 J	250 J
Naphthalene	2,100	2,400	µg/kg	160	< 170 U	140 J
Phenanthrene	1,500	5,400	µg/kg	520	540	540
Pyrene	2,600	3,300	µg/kg	930	700	1,400
Total Benzofluoranthenes	3,200	3,600	µg/kg	940	750	1,700
Total HPAHs	12,000	17,000	µg/kg	4,700	3,600	7,300
Total LPAHs	5,200	13,000	µg/kg	1,000	930	930
cPAHs, nd RL*0	1,000	--	µg/kg	510	450	940
cPAHs, nd RL*0.5	1,000	--	µg/kg	510	470	960
cPAHs, nd RL*1	1,000	--	µg/kg	510	480	970
Phthalates (µg/kg)						
bis(2-Ethylhexyl)phthalate	1,300	1,900	µg/kg	16,000	9,500	1,800 J
Butylbenzylphthalate	63	900	µg/kg	780	420 J	640 J
Di-n-Butylphthalate	1,400	5,100	µg/kg	220 J	< 4,200 U	< 4,300 U
Diethylphthalate	200	1,200	µg/kg	< 350 U	< 1,700 U	< 1,700 U
Dimethylphthalate	71	160	µg/kg	290	150 J	86 J
Di-n-Octyl phthalate	6,200	--	µg/kg	1100 J	790 J	< 4300 U
Phenols (µg/kg)						
2,4,5-Trichlorophenol	--	--	µg/kg	< 180 U	< 840 U	< 850 U
2,4,6-Trichlorophenol	--	--	µg/kg	< 260 U	< 1,300 U	< 1,300 U
2,4-Dichlorophenol	--	--	µg/kg	< 180 U	< 840 U	< 850 U
2,4-Dimethylphenol	29	29	µg/kg	< 180 U	< 840 U	< 850 U
2,4-Dinitrophenol	--	--	µg/kg	< 1,800 U	< 8,400 U	< 8,500 U
2-Chlorophenol	--	--	µg/kg	< 180 U	< 840 U	< 850 U
2-Methylphenol	63	63	µg/kg	< 180 U	< 840 U	< 850 U
2-Nitrophenol	--	--	µg/kg	< 180 U	< 840 U	< 850 U

Table P-7. Solids Sample Results
Chemithon

Analyte	Location ID		Unit	CC-A-01	CC-CB-04	CC-CB-22
	Collection Date			10/13/2014	10/13/2014	10/13/2014
	SMS Criteria	SCO/ LAET ^a	CSL/ 2LAET	Result	Result	Result
4,6-Dinitro-2-Methylphenol	--	--	µg/kg	< 1,800 U	< 8,400 U	< 8,500 U
4-Chloro-3-methylphenol	--	--	µg/kg	< 180 U	< 840 U	< 850 U
4-Methylphenol	670	670	µg/kg	78 J	130 J	< 1,700 U
4-Nitrophenol	--	--	µg/kg	560 J	< 8,400 U	< 8,500 U
Pentachlorophenol	360	690	µg/kg	< 350 U	< 1,700 U	< 1,700 U
Phenol	420	1,200	µg/kg	110 J	160 J	190 J
Other SVOCs (µg/kg)						
1,2,4-Trichlorobenzene	31	51	µg/kg	< 88 U	< 420 U	< 430 U
1,2-Dichlorobenzene	35	50	µg/kg	< 96 U	< 460 U	< 470 U
1,3-Dichlorobenzene	--	--	µg/kg	< 88 U	< 420 U	< 430 U
1,4-Dichlorobenzene	110	120	µg/kg	< 88 U	< 420 U	< 430 U
2,4-Dinitrotoluene	--	--	µg/kg	66 J	< 840 U	< 850 U
2,6-Dinitrotoluene	--	--	µg/kg	< 180 U	< 840 U	< 850 U
2-Nitroaniline	--	--	µg/kg	< 180 U	< 840 U	< 850 U
3,3'-Dichlorobenzidine	--	--	µg/kg	< 350 U	< 1,700 U	< 1,700 U
3-Nitroaniline	--	--	µg/kg	< 180 U	< 840 U	< 850 U
4-Bromophenyl-phenylether	--	--	µg/kg	< 180 U	< 840 U	< 850 U
4-Chloroaniline	--	--	µg/kg	< 180 U	< 840 U	< 850 U
4-Chlorophenyl-phenylether	--	--	µg/kg	< 180 U	< 840 U	< 850 U
4-Nitroaniline	--	--	µg/kg	< 180 U	< 840 U	< 850 U
Benzoic Acid	650	650	µg/kg	< 4,400 U	< 21,000 U	< 21,000 U
Benzyl Alcohol	57	73	µg/kg	< 180 U	< 840 U	180 J
2,2'-Oxybis(1-Chloropropane)	--	--	µg/kg	< 410 U	< 2,100 U	< 2,100 U
bis(2-Chloroethoxy) Methane	--	--	µg/kg	< 180 U	< 840 U	< 850 U
Bis-(2-Chloroethyl) Ether	--	--	µg/kg	< 180 U	< 840 U	< 850 U
Carbazole	--	--	µg/kg	110 J	130 J	170 J
Hexachlorobenzene	22	70	µg/kg	< 88 U	< 420 U	< 430 U
Hexachlorobutadiene	11	120	µg/kg	< 88 U	< 420 U	< 430 U
Hexachlorocyclopentadiene	--	--	µg/kg	< 180 U	< 840 U	< 850 U
Hexachloroethane	--	--	µg/kg	< 180 U	< 840 U	< 850 U
Isophorone	--	--	µg/kg	< 180 U	< 840 U	< 850 U
Nitrobenzene	--	--	µg/kg	< 180 U	< 840 U	< 850 U
N-Nitrosodimethylamine	--	--	µg/kg	< 1,800 U	< 8,400 U	< 8,500 U
N-Nitroso-Di-N-Propylamine	--	--	µg/kg	< 180 U	< 840 U	< 850 U
N-Nitrosodiphenylamine	28	40	µg/kg	< 88 U	< 420 U	< 430 U
VOCs (µg/kg)						
1,1,1,2-Tetrachloroethane	--	--	µg/kg	na	< 1.3 U	na
1,1,1-Trichloroethane	--	--	µg/kg	na	< 1.3 U	na
1,1,2,2-Tetrachloroethane	--	--	µg/kg	na	< 2.6 U	na
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	µg/kg	na	< 1.3 U	na
1,1,2-Trichloroethane	--	--	µg/kg	na	< 2.6 U	na
1,1-Dichloroethane	--	--	µg/kg	na	< 1.3 U	na
1,1-Dichloroethene	--	--	µg/kg	na	< 6.6 U	na
1,1-Dichloropropene	--	--	µg/kg	na	< 1.3 U	na
1,2,3-Trichlorobenzene	--	--	µg/kg	na	2.7 J	na
1,2,3-Trichloropropane	--	--	µg/kg	na	< 1.3 U	na
1,2,4-Trimethylbenzene	--	--	µg/kg	na	6.2 J	na
1,2-Dibromo-3-chloropropane	--	--	µg/kg	na	< 2.6 U	na
1,2-Dibromoethane	--	--	µg/kg	na	< 1.3 U	na
1,2-Dichloroethane	--	--	µg/kg	na	< 1.3 U	na

Table P-7. Solids Sample Results
Chemithon

Analyte	Location ID		Unit	Result	CC-CB-04		CC-CB-22	
	Collection Date				10/13/2014	10/13/2014	10/13/2014	
	SCO/ LAET ^a	CSL/ 2LAET						
1,2-Dichloropropane	--	--	µg/kg	na	< 1.3	U	na	
1,3,5-Trimethylbenzene	--	--	µg/kg	na	3.6	J	na	
1,3-Dichloropropane	--	--	µg/kg	na	< 2.6	U	na	
2,2-Dichloropropane	--	--	µg/kg	na	< 6.6	U	na	
2-Chloroethylvinylether	--	--	µg/kg	na	< 6.6	U	na	
2-Chlorotoluene	--	--	µg/kg	na	< 2.6	U	na	
2-Hexanone	--	--	µg/kg	na	< 6.6	U	na	
4-Chlorotoluene	--	--	µg/kg	na	< 2.6	U	na	
Acetone	--	--	µg/kg	na	460	J	na	
Acrolein	--	--	µg/kg	na	< 40	U	na	
Acrylonitrile	--	--	µg/kg	na	< 13	U	na	
Benzene	--	--	µg/kg	na	0.62	J	na	
Bromobenzene	--	--	µg/kg	na	< 2.6	U	na	
Bromoform	--	--	µg/kg	na	< 2.6	U	na	
Bromomethane	--	--	µg/kg	na	< 1.3	U	na	
Carbon Disulfide	--	--	µg/kg	na	12	J	na	
Carbon Tetrachloride	--	--	µg/kg	na	< 1.3	U	na	
Chlorobenzene	--	--	µg/kg	na	< 1.3	U	na	
Dibromochloromethane	--	--	µg/kg	na	< 1.3	U	na	
Chloroethane	--	--	µg/kg	na	< 1.3	U	na	
Chloroform	--	--	µg/kg	na	< 1.3	U	na	
Chloromethane	--	--	µg/kg	na	< 1.3	U	na	
cis-1,2-Dichloroethene	--	--	µg/kg	na	< 1.3	U	na	
cis-1,3-Dichloropropene	--	--	µg/kg	na	< 1.3	U	na	
Dibromomethane	--	--	µg/kg	na	< 1.3	U	na	
Bromodichloromethane	--	--	µg/kg	na	< 1.3	U	na	
Dichlorodifluoromethane	--	--	µg/kg	na	< 1.3	U	na	
Ethylbenzene	--	--	µg/kg	na	4.6	J	na	
Isopropylbenzene	--	--	µg/kg	na	1.5	J	na	
m,p-Xylene	--	--	µg/kg	na	14	J	na	
2-Butanone	--	--	µg/kg	na	140	J	na	
Iodomethane	--	--	µg/kg	na	< 20	U	na	
4-Methyl-2-Pentanone (MIBK)	--	--	µg/kg	na	12	J	na	
Methyl tert-Butyl Ether	--	--	µg/kg	na	< 1.3	U	na	
Methylene Chloride	--	--	µg/kg	na	< 20	U	na	
n-Butylbenzene	--	--	µg/kg	na	< 1.6	U	na	
n-Propylbenzene	--	--	µg/kg	na	1.2	J	na	
o-Xylene	--	--	µg/kg	na	14	J	na	
4-Isopropyltoluene	--	--	µg/kg	na	1.1	J	na	
sec-Butylbenzene	--	--	µg/kg	na	1.4	J	na	
Styrene	--	--	µg/kg	na	< 2.6	U	na	
tert-Butylbenzene	--	--	µg/kg	na	< 1.2	U	na	
Tetrachloroethene	--	--	µg/kg	na	< 1.3	U	na	
Toluene	--	--	µg/kg	na	7.9	J	na	
Total Xylenes	--	--	µg/kg	na	28	J	na	
trans-1,2-Dichloroethene	--	--	µg/kg	na	< 1.3	U	na	
trans-1,3-Dichloropropene	--	--	µg/kg	na	< 1.3	U	na	
trans-1,4-Dichloro-2-butene	--	--	µg/kg	na	< 6.6	U	na	
Trichloroethene	--	--	µg/kg	na	< 1.3	U	na	

Table P-7. Solids Sample Results
Chemithon

Location ID			CC-A-01	CC-CB-04	CC-CB-22	
Collection Date			10/13/2014	10/13/2014	10/13/2014	
Analyte	SMS Criteria		Unit	Result	Result	Result
	SCO/ LAET ^a	CSL/ 2LAET				
Trichlorofluoromethane	--	--	µg/kg	na	< 1.3 U	na
Vinyl Acetate	--	--	µg/kg	na	< 6.6 U	na
Vinyl Chloride	--	--	µg/kg	na	< 1.3 U	na
TPH (mg/kg)						
Gasoline-Range Hydrocarbons	30/100	--	mg/kg	na	19	na
Diesel-Range Hydrocarbons	2,000	--	mg/kg	2,600 J	840 J	410 J
Motor Oil-Range Hydrocarbons	2,000	--	mg/kg	10,000 J	5,400 J	1,900 J
Grain size (%)						
Clay	--	--	%	na	0.70	1.3
Silt	--	--	%	na	17	49
Sand	--	--	%	na	75	45
Gravel	--	--	%	na	7.2	5.0
Cobbles	--	--	%	na	0.0	0.0
Conventionals (%)						
Total Organic Carbon	--	--	%	na	6.9	7.6
Total Solids	--	--	%	57.0	59.7	57.4

a - LDW RALs are presented for cPAHs and dioxin/furan TEQs. MTCA Method A cleanup levels for soil are presented for TPH.

b - Total PCB congeners and PCB/dioxin/furan TEQs include only congeners that met identification criteria as required by EPA Method1668C (PCBs) or EPA Method 1613B (dioxins/furans).

PCB and dioxin/furan congeners identified with a U* qualifier were tagged as "estimated maximum possible concentrations" by the laboratory. This was changed to non-detect (U) during data validation.

Petroleum hydrocarbon results are compared to MTCA Method A cleanup levels. Two cleanup levels are available for TPH-Gasoline under MTCA Method A. The more stringent value (30 mg/kg) is applied for facilities where benzene has been detected.

Results in **bold** are detections.

Results shaded in gray exceed one or more criteria.

**Table P-8. Solids Sample Results Compared to Dry Weight Criteria
Chemithon**

Location ID	CC-A-01		CC-CB-04		CC-CB-22		
Collection Date	10/13/2014		10/13/2014		10/13/2014		
Analyte	Exceedance Factor		Exceedance Factor		Exceedance Factor		
	SCO/ LAET	CSL/ 2LAET	SCO/ LAET	CSL/ 2LAET	SCO/ LAET	CSL/ 2LAET	
Metals (Total)							
Arsenic	3.0	1.8					
Chromium	15	14	33	32	1.5	1.4	
Copper	1.4	1.4	1.1	1.1	1.4	1.4	
Zinc	3.2	1.4	2.3		2.7	1.1	
PCBs							
Total PCB Aroclors	12	1.6	3.3		7.7		
Total PCB Congeners	8.8	1.2	11	1.4	21	2.7	
Phthalates							
bis(2-Ethylhexyl)phthalate	12	8.4	7.3	5.0	1.4		
Butylbenzylphthalate	12		6.7		10		
Dimethylphthalate	4.1	1.8	2.1		1.2		
Other SVOCs							
Benzyl Alcohol					3.2	2.5	
TPH							
Diesel-Range Hydrocarbons	1.3						
Motor Oil-Range Hydrocarbons	5.0		2.7				

Exceedance factors are presented for detected concentrations that exceed the SMS/AET criteria, LDW RALs (dioxins/furans and cPAHs), or MTCA Method A cleanup levels for soil (TPH).

The exceedance factors are calculated (result divided by criterion) and have no regulatory relevance. They provide an indication of the general magnitude of the concentration relative to the identified criterion.

Table P-9. Solids Sample Results - PCB Congeners
Chemithon

Location ID	CC-A-01	CC-CB-04	CC-CB-22
Collection Date	10/13/2014	10/13/2014	10/13/2014
Analyte	Result	Result	Result
Total PCB Congeners (ng/kg) ^a	1,150,000 J	1,370,000 J	2,690,000 J
Total Monochlorobiphenyl (ng/kg)^a	112 J	212 J	228
PCB-1	83.1	84.1	79.0
PCB-2	29.1 J	42.0 J	54.9
PCB-3	< 62.0 U*	86.3	94.4
Total Dichlorobiphenyl (ng/kg)^a	1,900 J	3,500 J	3,960 J
PCB-4/10	< 124 U*	149 J	135 J
PCB-5/8	351	538	371
PCB-6	< 70.2 U*	< 93.4 U*	80.2 J
PCB-7/9	< 85.0 U	< 71.1 U	< 49.6 U*
PCB-11	1,210	2,360	2,760
PCB-12/13	< 79.6 U	< 69.3 U	67.2 J
PCB-14	< 85.8 U	< 74.6 U	< 93.5 U
PCB-15	341	448	546
Total Trichlorobiphenyl (ng/kg)^a	4,220 J	5,510 J	4,680 J
PCB-16/32	426	457	422
PCB-17	157	239	193
PCB-18	639	699	674
PCB-19	75.6	65.1	104
PCB-20/21/33	479	707	478
PCB-22	275	389	284
PCB-23	< 16.4 U	< 15.9 U	< 23.7 U
PCB-24/27	52.4 J	53.5 J	62.5 J
PCB-25	61.3	94.8	55.0
PCB-26	125	205	166
PCB-28	536	757	491
PCB-29	< 19.4 U	24.3 J	10.2 J
PCB-30	< 8.77 U	< 8.70 U	< 6.64 U
PCB-31	803	1,040	755
PCB-34	< 18.4 U	< 17.9 U	< 26.6 U
PCB-35	85.0	125	170
PCB-36	< 18.3 U	< 25.4 U	58.7
PCB-37	479	651	721
PCB-38	23.7 J	< 24.3 U*	37.7 J
PCB-39	< 18.7 U	< 26.0 U	< 32.3 U
Total Tetrachlorobiphenyl (ng/kg)^a	66,300 J	105,000 J	113,000 J
PCB-40	624	704	1,010
PCB-41/64/71/72	3,780	5,130	5,870
PCB-42/59	717	897	1,020
PCB-43/49	4,170	6,870	7,360
PCB-44	9,710	13,400	15,600
PCB-45	238	293	443
PCB-46	91.7	143	224
PCB-47	552	773	864
PCB-48/75	342	457	440
PCB-50	< 26.3 U	< 34.2 U	6.35 J
PCB-51	89.7	110	147
PCB-52/69	17,700	29,000	36,200
PCB-53	399	607	1,040
PCB-54	< 21.0 U	< 27.3 U	7.35 J
PCB-55	283	413	718
PCB-56/60	2,360	3,780	3,280

Table P-9. Solids Sample Results - PCB Congeners
Chemithon

Location ID	CC-A-01			CC-CB-04		CC-CB-22	
Collection Date	10/13/2014			10/13/2014		10/13/2014	
Analyte	Result			Result		Result	
PCB-57	<	15.6	U*	34.4	J	<	38.4 U
PCB-58	<	23.9	U	16.2	J	<	40.6 U
PCB-61/70		15,900		28,200			22,000
PCB-62	<	23.8	U	<	30.3 U	<	40.7 U
PCB-63		178		293			237
PCB-65	<	23.7	U	<	30.2 U	<	40.6 U
PCB-67		71.0		113			112
PCB-68		24.8	J	31.3	J	<	36.9 U
PCB-73	<	20.2	U	<	30.6 U	<	38.6 U
PCB-74		2,560		4,630			3,600
PCB-76/66		3,980		6,430			5,540
PCB-77		1,690		2,040			4,990
PCB-78	<	21.2	U	<	31.0 U	<	37.2 U
PCB-79		523		834			1,410
PCB-80	<	18.6	U	<	24.4 U	<	31.6 U
PCB-81		352		276			583
Total Pentachlorobiphenyl (ng/kg)^a	372,000			562,000	J	897,000	J
PCB-82		6,600		9,840			15,700
PCB-83	<	14.6	U	<	22.7 U	<	11.7 U
PCB-84/92		24,400		35,200			65,800
PCB-85/116		7,540		12,500			17,500
PCB-86	<	26.4	U	171		<	21.1 U
PCB-87/117/125		22,900		36,500			51,800
PCB-88/91		6,210		9,260			18,000
PCB-89		245		362			619
PCB-90/101		66,100		98,900			161,000
PCB-93	<	25.0	U	<	33.5 U	<	20.9 U
PCB-94		166		240			478
PCB-95/98/102		47,900		65,200			132,000
PCB-96	<	15.4	U	<	20.3 U		672
PCB-97		17,400		27,900			42,000
PCB-99		16,400		27,200			42,100
PCB-100		91.0		< 95.2 U*			210
PCB-103		237		355			586
PCB-104	<	14.8	U	< 19.5 U		<	10.7 U
PCB-105		20,600		31,000			40,900
PCB-106/118		51,800		84,400			107,000
PCB-107/109		3,360		4,810			7,290
PCB-108/112		2,670		3,940			6,680
PCB-110		70,100		103,000			169,000 J
PCB-111/115		855		1,450			2,350
PCB-113	<	14.5	U	< 20.0 U		<	12.1 U
PCB-114		1,410		1,970			2,680
PCB-119		704		1,220			1,860
PCB-120		190		220			571
PCB-121	<	13.0	U	< 17.5 U		<	10.9 U
PCB-122		630		926			1,470
PCB-123		689		1,050			1,470
PCB-124		2,470		3,420			5,430
PCB-126		726		895			2,240
PCB-127	<	97.5	U	< 84.9 U		<	93.5 U

Table P-9. Solids Sample Results - PCB Congeners
Chemithon

Location ID	CC-A-01		CC-CB-04		CC-CB-22	
Collection Date	10/13/2014		10/13/2014		10/13/2014	
Analyte	Result		Result		Result	
Total Hexachlorobiphenyl (ng/kg)^a	411,000	J	447,000	J	1,010,000	J
PCB-128/162	13,000		16,800		34,200	
PCB-129	5,460		6,470		13,000	
PCB-130	5,720		6,950		16,100	
PCB-131	< 57.1	U	< 24.7	U*	< 190	U
PCB-132/161	26,100		31,400		61,600	
PCB-133/142	2,910		3,490		7,480	
PCB-134/143	5,110		6,160		13,200	
PCB-135	10,700		11,300		30,300	
PCB-136	10,100		10,700		30,200	
PCB-137	4,940		6,070		11,200	
PCB-138/163/164	95,200		99,700		216,000	
PCB-139/149	70,500		78,300		199,000	J
PCB-140	371		473		1,150	
PCB-141	21,500		20,400		47,400	
PCB-144	4,150		5,170		12,700	
PCB-145	23.0	J	40.4	J	80.4	
PCB-146/165	10,500		11,500		25,200	
PCB-147	1,380		1,800		4,370	
PCB-148	< 22.1	U	< 21.9	U	< 14.6	U
PCB-150	102		115		290	
PCB-151	20,300		20,200		55,800	
PCB-152	70.4		89.9		211	
PCB-153	75,500		78,600		170,000	J
PCB-154	503		738		1,750	
PCB-155	< 14.8	U	< 14.7	U	< 9.74	U
PCB-156	9,300		11,100		19,500	
PCB-157	1,820		2,280		4,620	
PCB-158/160	11,800		12,900		27,000	
PCB-159	< 46.1	U	< 195	U	< 316	U
PCB-166	371		488		944	
PCB-167	3,480		4,050		8,580	
PCB-168	< 58.1	U*	96.8		211	
PCB-169	< 76.4	U	< 216	U	125	
Total Heptachlorobiphenyl (ng/kg)^a	225,000	J	186,000	J	508,000	J
PCB-170	25,400		19,900		53,600	
PCB-171	6,140		5,200		13,700	
PCB-172	3,750		3,180		8,760	
PCB-173	686		551		1,550	
PCB-174	29,000		24,200		65,300	
PCB-175	1,000		908		2,820	
PCB-176	3,350		2,680		8,300	
PCB-177	15,700		13,800		37,500	
PCB-178	5,400		4,240		13,800	
PCB-179	12,500		10,200		31,900	
PCB-180	66,000		56,000		138,000	
PCB-181	< 53.1	U	< 28.3	U	< 73.4	U
PCB-182/187	30,100		24,100		71,400	
PCB-183	13,800		11,000		33,400	
PCB-184	27.1	J	20.8	J	41.0	J
PCB-185	2,700		2,410		5,760	
PCB-186	< 9.50	U	< 17.0	U	< 38.7	U

**Table P-9. Solids Sample Results - PCB Congeners
Chemithon**

Location ID	CC-A-01		CC-CB-04		CC-CB-22	
Collection Date	10/13/2014		10/13/2014		10/13/2014	
Analyte	Result		Result		Result	
PCB-188	38.9	J	50.5		77.4	
PCB-189	826		822		2,250	
PCB-190	4,910		3,820		10,900	
PCB-191	1,060		900		2,300	
PCB-192	< 13.1	U	< 22.4	U	< 58.2	U
PCB-193	2,910		2,390		6,400	
Total Octachlorobiphenyl (ng/kg)^a	60,500		48,000		138,000	
PCB-194	14,000		11,800		36,200	
PCB-195	5,490		4,310		14,600	
PCB-196/203	17,000		12,800		35,600	
PCB-197	618		394		1,340	
PCB-198	807		411		1,310	
PCB-199	14,900		11,900		32,600	
PCB-200	2,000		1,530		4,210	
PCB-201	2,020		1,610		4,340	
PCB-202	3,060		2,820		6,130	
PCB-204	< 24.0	U	< 26.9	U	< 13.1	U
PCB-205	626		455		1,710	
Total Nonachlorobiphenyl (ng/kg)^a	5,290		6,350		9,460	
PCB-206	3,890		4,330		6,990	
PCB-207	491		652		963	
PCB-208	906		1,370		1,510	
Decachlorobiphenyl (ng/kg)	306		381		370	
PCB-209	306		381		370	
PCB TEQ, nd SDL*0	75.6		93.9		234	
PCB TEQ, nd SDL*0.5	76.7		97.1		234	
PCB TEQ, nd SDL*1	77.9		100		234	

a - Total PCBs and total PCB homologs include only congeners that met identification criteria as required by EPA Method1668C.

PCB congeners identified with a U* qualifier were tagged as "estimated maximum possible concentrations" by the laboratory. This was changed to non-detect (U) during data validation.

Attachment P-1

Inspection Photographic Log

Conveyance Structure Information	
Structure Identification Number: CC-A-01	N↓  10/13/2014, 11:14:29
Structure Type: Sump/Vault	
General Location: Southeast corner of facility	
Characteristics: 10' to bottom of structure, 8' depth to water, <1" depth of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Grate	
Volume Gauge: --	
Sample ID: CC-A-01-20141013-S	
Drainage Information:	
The location A-01 is a sump/vault in the southeast corner of the property. The vault receives stormwater from all areas that drain the north and eastern portion of the facility. Stormwater is conveyed from the vault to two large storage vaults located underneath the Lafarge property to the east. The downstream storage vaults are used to prevent tidally influenced river water from entering the sump at Chemithon. Stormwater is conveyed from the downstream vaults and discharges to the LDW via a 30" outfall.	N↖  10/13/2014, 11:14:36

Conveyance Structure Information	
Structure Identification Number: CB-04	N◀
Structure Type: Manhole	 10/13/2014, 10:43:26
General Location: Centrally located at facility	
Characteristics: 6' to bottom of structure, 4' to depth of water, 6" of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Manhole Cover	
Volume Gauge: --	
Sample ID: CC-CB-04-20141013-S	
Drainage Information:	
The location CB-04 is a manhole upstream of the vault A-01. Stormwater from the western and central portion of the facility is conveyed to CB-04. Catch basin CB-04 also receives stormwater from a catch basin in the loading dock area where a covered dumpster is stored. A drainage line depicted on the facility map that enters CB-04 at the northwest corner could not be confirmed.	N◀  10/13/2014, 10:43:16

Conveyance Structure Information	
Structure Identification Number: CB-18, CB-20, CB-21, CB-22	N↓
Structure Type: Catch Basin and Manholes	 10/13/2014, 14:18:36
General Location: Northeastern area of facility	
Characteristics: Between 2 to 4' to bottom of structure, 1 to 3' depth to water, 1 to 6" depth of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Manhole cover	
Volume Gauge: --	
Sample ID: CC-CB-22-20141013-S	CB-20
Drainage Information:	
Solids material was collected as a composite sample from four catch basins located at the north east portion of the facility. The four catch basins where the solids sample was collected from include CB-18, CB-20, CB-21, and CB-22. All four catch basins drain to the same drainage line that conveys stormwater south to A-01. The catch basins are located in the employee parking area and the manufacturing building.	N↑
	 10/13/2014, 14:18:40
	CB-21

Conveyance Structure Information	
Structure Identification Number: CB-18, CB-20, CB-21, CB-22	N↑
Structure Type: Catch Basin and Manholes	
General Location: Northeastern area of facility	
Characteristics: Between 2 to 4' to bottom of structure, 1 to 3' depth to water, 1 to 6" depth of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Manhole cover	
Volume Gauge: --	
Sample ID: CC-CB-22-20141013-S	10/13/2014, 14:23:39 CB-22
Drainage Information: <p>A solids sample was collected as a composite sample from four catch basins located at the north east portion of the facility. The four catch basins where the solids sample was collected from include CB-18, CB-20, CB-21, and CB-22. All four catch basins drain to the same drainage line that conveys stormwater south to A-01. The catch basins are located in the employee parking area and the manufacturing building.</p>	

Attachment P-2

Field Documentation

Location Chemithon

Project / Client NPDES/Ecology

Date 10/13/14

- 0650 M. Ivancevich stops to purchase ice while en route to storage unit
 0700 M. Ivancevich arrives at storage unit/field office; begins preparing sampling equipment for field event
 17 0910 M. Ivancevich departs field office.
 18 0925 Leidos onsite @ Chemithon. Mahrub Alam/Ecology also onsite.
 18 0930 Leidos & Ecology review SWPP maps.
 0940 Met with Brian & Tony with Chemithon; Brian described site.
 1000 Tony begins site walk with Leidos & Ecology.
 - CB 2 flows to CB3.
 11 - CB 20 plugged on West side
 - Potential sample locations:
 ① CB 4 - solids
 ② CB 22 - solids
 ③ Outfall - solids & water (A-1)
 1050 C. Wilson onsite
 1105 Begin setup at A-1 for solids & water sampling. Duplicate water sample to be collected at A-1.

Date 10/13/14

Location Chemithon

Project / Client NPDES/Ecology

Water sample ID: CC-A-01-20141013-W
 Dup sample ID: CC-FD-02-20141013-W
 Solids sample ID: CC-A-01-20141013-S

- 1152 CNancarrow offsite
 1145 Began water sample collection.
 1205 Completed water sample, began solids collection ~~at 11 10/13/14~~
 - Not enough material to run full analysis, prioritizing PCB congeners, Dioxins/Furans
 - Sheen observed when scraping bottom during solids collection
 1230 Completed solids sampling @ A-1; moved to CB-4.
 1235 Probed CB-4 - only 2 inlets, 1 outlet.
 1240 Lunch break.
 1255 Deconning equipment.
 1340 ~~10/13/14~~ Began solids collection at CB-4.
 1320 Sample ID: CC-CB-04-20141013-S
 1340 ~~see next page~~ Completed Sampling @ CB-4. Moved to CB-22 to collect a solids sample.

26

Location ChemithonProject / Client NPDES/EcologyDate 10/13/141345 ~~10/13/14~~

Investigated line from CB#5 to CB#4, unable to determine connection. Not enough sampleable material @ CB-22. Investigated CB-20 & CB-21 (CB-20 flows to CB-21, CB-21 flows to CB-22). Will do a composite sample of solids in outlet pipes of CB-20 & CB-21 as well as solids from CB-22 & CB-18.

1410 Began collecting composite sample. ID: CC-CB-22-20141013-S.

1440 Completed sampling. Began packing up sampling equipment.

1455 Checked out at Chemithon's main office.

1500 Leidos & Ecology offsite, moved to field office.

1515 Leidos @ field office - unloading sampling supplies & preparing samples for shipment.

1535 M. Ivancevich offsite to return water quality meter & sampling van to Fed Ex

Date 10/14/14

27

Location Field OfficeProject / Client NPDES/EcologyDate 10/14/14

0700 M. Ivancevich onsite at field office to pick up TA coolers.
 0705 M. Ivancevich departs field office.
 0735 M. Ivancevich arrives at Bothell office; replaces size in TA coolers.
 0830 TA coolers ready for pickup.

MM
10/14/14



Project: NPDES Sampling Support

Facility Name: Chemithon

Sampled By: MI & CW Date: 10 / 13 / 2014 Time: 10AM 1145
10/13/14

Sediment Collection Form

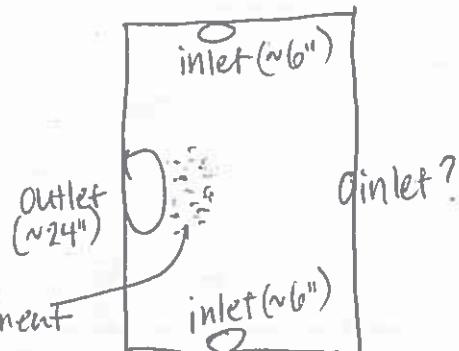
Location ID: A-01

Sample ID: CC-A-01-20141013-S

Structure Type:	Dimensions:	Standing Water:	Flow:
Vault/Sump	W 4' L 6'	(Y) N	Y/N

Conveyance System Sketch

↑N



Depth to Bottom: 10 ft	Depth to Water: 8 ft	Depth of Sediment: < 1 in	Sampled Y/N Discrete Composite (circle one)
Sediment type: Cobble Gravel Sand C M F Silt/clay Organic matter Debris	Sediment color: Drab olive Brown Brown surface Gray Black Tan	Sediment Odor: None Slight Moderate Strong Overwhelming H ₂ S Petroleum	Comments: Photo ID(s): GPS ID: _____ _____ _____

NOTES: approx 2 ft of water

Recorded By/Date: MI 10/13/14

Reviewed By/Date: CW 5/4/15



Sediment Collection Form

Project: NPDES Sampling Support

Location ID: CB-4

Facility Name: Chemithon

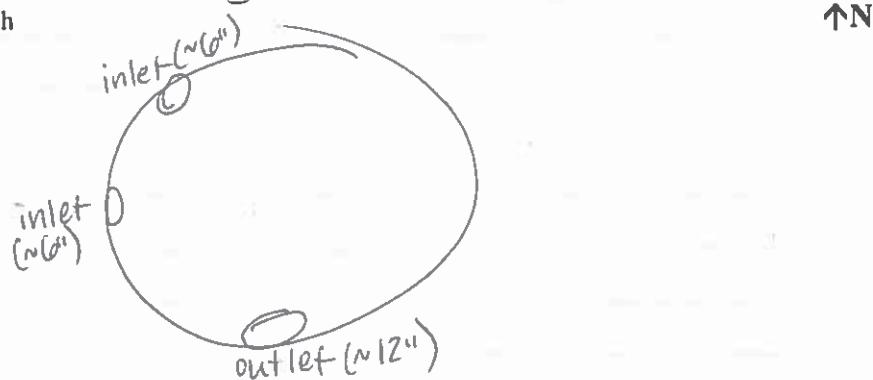
Sample ID: CC-CB-04-20141013-S

Sampled By: Mia CW

Date: 10 / 13 / 2014 Time: 1320

Structure Type: MH	Dimensions: W _____ L _____	Standing Water: Y / N	Flow: Y / N
------------------------------	--------------------------------	---------------------------------	-----------------------

Conveyance System Sketch



Depth to Bottom: <u>6</u> ft	Depth to Water: <u>4</u> ft	Depth of Sediment: <u>6</u> in	Sampled <input checked="" type="checkbox"/> Y/N Discrete <input type="checkbox"/> / Composite <input checked="" type="checkbox"/> (circle one)
Sediment type:	Sediment color:	Sediment Odor:	Comments:
Cobble	Drab olive	None	
Gravel	Brown	Slight	
Sand C M F	Brown surface	Moderate	
Silt/clay	Gray	Strong	
Organic matter	Black	Overwhelming	Photo ID(s):
Debris	Tan	H ₂ S	
		Petroleum	GPS ID:

NOTES: Sheen in water



Sediment Collection Form

Project: NPDES Sampling Support

Location ID: CB-22

Facility Name: Chemithon

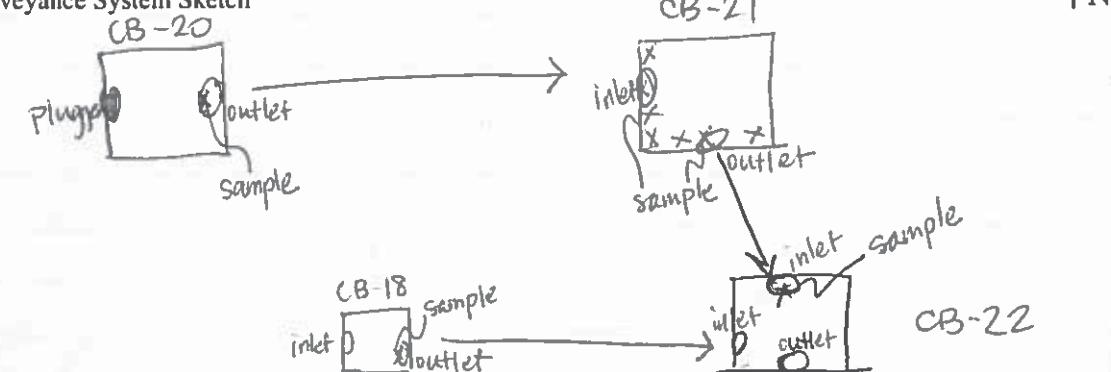
Sample ID: CC-CB-22-20141013-S

Sampled By: MI & CW

Date: 10 / 13 / 2014 Time: 1410

Structure Type:	Dimensions: W _____ L _____	Standing Water: Y / N	Flow: Y / N
-----------------	--------------------------------	--------------------------	----------------

Conveyance System Sketch



Depth to Bottom: 4 ft	Depth to Water: 3 ft	Depth of Sediment: in	Sampled: Y / N Discrete <input checked="" type="checkbox"/> Composite <input type="checkbox"/> (circle one)
Sediment type:	Sediment color:	Sediment Odor:	Comments:
Cobble Gravel <u>Sand C M F</u> Silt/clay Organic matter Debris	Drab olive Brown Brown surface Gray Black Tan	None Slight Moderate Strong Overwhelming H ₂ S Petroleum	Photo ID(s): GPS ID:

NOTES: Sheen observed

X = sample location

Recorded By/Date: MI 10/13/14 Reviewed By/Date: CW 5/4/15

Version2 -030311



SURFACE WATER SAMPLING FORM

Client: Department of Ecology

Site: Chemithan

Job #: 309382

Sample Date: 10/13/2014

Attachment P-3

Chain of Custody Forms

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: <input type="checkbox"/> DW <input checked="" type="checkbox"/> NPDES <input type="checkbox"/> RCRA <input type="checkbox"/> Other:						COC No: <u>1</u> of <u>2</u> COCs															
Client Contact		Project Manager: Christine Nancarrow			Site Contact: Melissa Ivancevich			Date: <u>10/13/14</u>													
Leidos 18912 N Creek Pkwy, Ste. 101 Bothell, WA 98011 425.398.2101 Phone 425.485.5566 FAX Project Name: NPDES Sampling Support Site: Lower Duwamish Waterway P O # P010163427		Tel/Fax: 206.300.2144			Lab Contact: Kris Allen			Carrier: Courier													
Analysis Turnaround Time						Sampler:															
<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS TAT if different from Below: 3 Weeks <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						For Lab Use Only: Walk-in Client: _____ Lab Sampling: _____															
						Job / SDG No.: _____															
						Sample Specific Notes:															
Sample Identification <u>CC-A-01-20141013-W</u> <u>CC-FD-02-20141013-W</u>						Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	SVOCs (Method 8270D)	Metals (Method 200.8/7470A)	pH (Method SM4500H)	Spec Cond (Method 120.1)	Alk/Bicarb/Carb (Method SM2320)	Anions (Method 300.0/353.2)	TOC (Method SM5310B)	DOC (Method SM5310B)	TSS (Method 2540D)
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
						<u>10/13/14</u>	<u>1145</u>	<u>G</u>	<u>W</u>	<u>8</u>	<u>N</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u></u>					

Chain of Custody Record

Regulatory Program: DW NPDES RCRA Other:

Client Contact		Project Manager: Christine Nancarrow			Site Contact: Melissa Ivancevich		Date:		COC No:	
Leidos 18912 N Creek Pkwy, Ste. 101 Bothell, WA 98011 425.398.2101 Phone 425.485.5566 FAX Project Name: NPDES Sampling Support Site: Lower Duwamish Waterway P O # P010163427		Tel/Fax: 206.300.2144			Lab Contact: Kris Allen		Carrier: Courier		<u>2</u> of <u>2</u> COCs	
		Analysis Turnaround Time							Sampler:	
		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS							For Lab Use Only:	
		TAT if different from Below 3 Weeks							Walk-in Client:	
		<input type="checkbox"/> 2 weeks							Lab Sampling:	
		<input type="checkbox"/> 1 week								
		<input type="checkbox"/> 2 days								
		<input type="checkbox"/> 1 day								
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp. G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)		Sample Specific Notes:
CC-A-01-20141013-SW 10/13/14				Sed	CW 10/13/14					
CC-A-01-20141013-S		10/13/14	1015	G	Sed	11		1		
CC-CB-04-20141013-S		10/13/14	1320	G	Sed	76		1	1 2 1 1	
CC-CB-22-20141013-S		10/13/14	1410	G	Sed	3		1	1 1 1	
<i>[Handwritten signatures and notes over the grid]</i>										
Preservation Used: 1=Ice; 2=HCl; 3=H ₂ SO ₄ ; 4=HNO ₃ ; 5=NaOH; 6=Other MeOH										
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
Special Instructions/QC Requirements & Comments: For Sample CC-A-01-20141013-S, Please prioritize ① PCB Aroclors ② Metals ③ SVOCs ④ Total Solids ⑤ TPH-Diesel volume requirements are an issue.										
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: 242406			Cooler Temp. (°C): Obs'd: Corr'd: Therm ID No.:					
Relinquished by: <i>Melissa Ivancevich</i>		Company: Leidos		Date/Time: 10/14/14 08:30	Received by:		Company:		Date/Time:	
Relinquished by:		Company:		Date/Time:	Received by:		Company:		Date/Time:	
Relinquished by:		Company:		Date/Time:	Received in Laboratory by:		Company:		Date/Time:	



CHAIN OF CUSTODY

FOR LABORATORY USE ONLY

Storage Secured

Yes No

Laboratory Project ID: _____

Digitized by srujanika@gmail.com

Temp _____ °C

TAT: (Check One):

H Standard: ☐ 21 Days

Rush (surcharge may apply):

14 days 7 days Specify:

Project I.D.: 14-00483

P.O. #Raleigh 5669

Sampler: Congregation
(Name)

Invoice to: Name	Company	Address	City	State	Zip	Ph#	Fax#
Relinquished by: (Signature and Printed Name)	Date:	Time: 1645	Received by: (Signature and Printed Name)			Date:	Time:
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)			Date:	Time:

See “Sample Log-in Checklist” for additional sample information.

SHIP TO: Vista Analytical Laboratory
1104 Windfield Way
El Dorado Hills, CA 95762
(916) 673-1520 • Fax (916) 673-0106

Method of Shipment

Frances E. Kellaway

ATTN: Sample Receiving

Sample ID	Date	Time	Location/Sample Description
CC-A-01-Canyon-W	10/11/11	11:15	Canyon / Streambed
CC-A-02-200m-200m-W	10/11/11	11:45	
CC-A-01-Canyon-S	10/11/11	11:15	Canyon / Sediment
CC-CC-05-200m-200m-S	10/11/11	11:45	Canyon / Sediment
CC-C-01-200m-200m-S	10/11/11	11:45	Canyon / Sediment

Add Analysis(es) Requested		EPA1613	EPA8290	EPA8280	EPA1668	EPA1614	CARBA49
Container(s)		PCDD/PCDF	PCDD/PCDF	PCDD/PCDF	PCDD/PCDF	PCDD/PCDF	PCDD/PCDF
Quantity	Type	2378-TCDD	2378-TCDD/TCDF	2378-TCDF	2378-TCDD/TCDF	2378-TCDD/TCDF	2378-TCDD/TCDF
4	A	✓			✓		
4	AQ	✓			✓		
1	G	SJ	✓		✓		
1	G	SD	✓		✓		
1	G	SE	✓		✓		

Special Instructions/Comments: _____

**SEND
DOCUMENTATION
AND RESULTS TO:**

Name: Charles Hargrove
Company: SAME AS ABOVE
Address: SAME AS ABOVE
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____
Email: _____
Matrix Types: DW = Drinking Water, EF = Effluent, PP = Pulp/Paper,
SD = Sediment, SL = Sludge, SO = Soil, WW = Wastewater, B = Blood/Serum
AQ = Aqueous, O = Other

**Container Types: A = 1 Liter Amber, G = Glass Jar
P = PUE T = MMS Train O= Other**

*Bottle Preservative Type: T = Thiosulfate
O = Other

Attachment P-4

Laboratory Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-45906-1

Client Project/Site: NPDES Sampling Support
Revision: 1

For:

Leidos, Inc.
18912 North Creek Parkway, Suite 101
Bothell, Washington 98011

Attn: Christine Nancarrow

Kristine D. Allen

Authorized for release by:
12/22/2014 5:12:14 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?

Ask
The
Expert

Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Job ID: 580-45906-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative 580-45906-1

Comments

No additional comments.

Receipt

The samples were received on 10/14/2014 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.4° C and 6.0° C.

GC/MS VOA

Method(s) 8260B

Samples 14ERSS06 (580-46001-7), 14ERSS06 (580-46001-7 MS), 14ERSS06 (580-46001-7 MSD) was received outside of the 48 hour holding time for unpreserved/unfrozen stir bar voa vials.

The surrogates 4-Bromofluorobenzene and Toluene-d8 recovery for sample CC-CB-04-2014013-S (580-45906-4) was outside control limits. Evidence of matrix interference is present; reanalysis was performed with similar high recoveries.

The Internal standard responses for Chlorobenzene-d5 and 1,4-Dichlorobenzene-d4 were outside of lower acceptance limits for sample(s): CC-CB-04-2014013-S (580-45906-4). The sample(s) was reanalyzed with similarly low internal standard response. The reanalysis is reported as the primary result.

The method blank for batch 173956 contained 1,2,4-Trimethylbenzene, Hexachloro-1,3-butadiene, Naphthalene, n-Butylbenzene, and tert-Butylbenzene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. The values should be considered as estimates, and have been "J" qualified. The associated sample results have been "B" qualified.

Method(s) NWTPH-Gx:

The method blank for batch 173053 contained gasoline above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. The values should be considered as estimates, and have been "J" qualified. The associated sample results have been "B" qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270D:

The following samples were diluted due to the nature of the sample matrix and abundance of target analytes: CC-A-01-2014013-S (580-45906-3), (580-45906-3 MS) and (580-45906-3 MSD). As such, surrogate and MS/MSD spike recoveries were diluted out and calculated recovery values are not meaningful. Elevated reporting limits (RLs) are provided.

In analysis batch 174626, surrogate recovery for the following sample(s) was outside control limits: CC-CB-04-2014013-S (580-45906-4), CC-CB-22-2014013-S (580-45906-5). Evidence of matrix interference is present; therefore, re-analysis was not performed. Data have been qualified and reported.

The method blank for batch 172794 contained Bis(2-ethylhexyl) phthalate above the reporting limit (RL). There are also hits in the associated samples; the data have been qualified and reported.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 172794 recovered outside control limits for Benzoic Acid, 4-Chloroaniline, Pentachlorophenol and Bis(2-ethylhexyl) phthalate. Data has been ** qualified and reported.

The continuing calibration verification (CCV) associated with analysis batch 172999 recovered above the upper control limit for 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been ^ qualified and reported. The following samples are impacted: (CCVIS 580-172999/3), (LCS 580-172868/2-A), (LCSD 580-172868/3-A), (MB 580-172868/1-A).

Case Narrative

Client: Leidos, Inc.
Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Job ID: 580-45906-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

The method blank for analysis batch 172999 contained Diethyl phthalate, Bis(2-ethylhexyl) phthalate and Butyl benzyl phthalate above the method detection limit. The target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. The values should be considered as estimates, and have been "J" qualified. The associated sample results have been "B" qualified.

Multiple analyte(s) recovered outside control limits for the LCS/LCSD associated with prep batch 172868. These analytes were outside the Marginal Exceedance Limits; therefore, re-extraction and/or re-analysis was performed (outside of holding time). Both sets of data have been reported. In addition, the %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) recovered outside control limits for Benzyl alcohol.

The method blank for analysis batch 173503 contained Diethyl phthalate, Bis(2-ethylhexyl) phthalate and Butyl benzyl phthalate above the method detection limit. The target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. The values should be considered as estimates, and have been "J" qualified. The associated sample results have been "B" qualified.

1,2-Dichlorobenzene (low), Anthracene (low), 1,3-Dichlorobenzene (low) and 1,4-Dichlorobenzene (low) recovered outside control limits for the LCSD associated with prep batch 173001. This is not indicative of a systematic control problem because these were random marginal exceedances. The lab SOP allows four marginal exceedances when a full list spike is utilized; data have been "*" qualified and reported.

The following samples were re-extracted outside of prep holding time due to LCS/LCSD failures in the original prep batch 172868: (LCS 580-173678/2-A), (LCSD 580-173678/3-A). The re-extracted LCS/LCSD associated with prep batch 173678 recovered outside control limits for the Anthracene and Benzyl alcohol. This is not indicative of a systematic control problem because these were random marginal exceedances. Results have been "*" qualified and reported. In addition, %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) recovered outside control limits for 4-Nitrophenol.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8082:

In analysis batch 174076, the following sample(s) required a copper clean-up (Lot# mkbm5574v) to reduce matrix interferences caused by sulfur: (580-45906-4 MS), (580-45906-4 MSD), (LCS 580-173768/14-A), (LCSD 580-173768/15-A), (MB 580-173768/1-A), CC-A-01-2014013-S (580-45906-3), CC-CB-04-2014013-S (580-45906-4), CC-CB-22-2014013-S (580-45906-5).

Sample (580-45906-4 MS), (580-45906-4 MSD), CC-A-01-2014013-S (580-45906-3), CC-CB-04-2014013-S (580-45906-4), CC-CB-22-2014013-S (580-45906-5) contained more than one Aroclor (auroclors 1260 and 1254) with insufficient separation to quantify individually. The PCBs present are quantified as the predominant Aroclor:

Method(s) NWTPH-Dx:

The method blank for prep batch 173189 contained #2 Diesel fuel (C10-C24) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. The values should be considered as estimates, and have been "J" qualified. The associated sample results have been "B" qualified.

Samples CC-A-01-2014013-S (580-45906-3), CC-CB-04-2014013-S (580-45906-4) and CC-CB-22-2014013-S (580-45906-5) from preparation batch 173189 contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6020:

The method blank for analysis batch 173140 contained Copper above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. The values should be considered as estimates, and have been "J" qualified. The associated sample results have been "B" qualified.

Case Narrative

Client: Leidos, Inc.
Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Job ID: 580-45906-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method(s) 300.0:

The following samples were received by the lab with insufficient time to complete the Nitrate as N analysis before the end of holding time:
CC-A-01-2014013-W (580-45906-1), CC-FD-02-2014013-W (580-45906-2). Data has been "H" qualified and reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Geotechnical

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Leidos, Inc.
Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
B	Compound was found in the blank and sample.
*	LCS or LCSD exceeds the control limits
F1	MS and/or MSD Recovery exceeds the control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

GC VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
Y	The chromatographic response resembles a typical fuel pattern.
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation

These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)

Definitions/Glossary

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Glossary (Continued)

Abbreviation **These commonly used abbreviations may or may not be present in this report.**

Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-A-01-2014013-W

Lab Sample ID: 580-45906-1

Matrix: Water

Date Collected: 10/13/14 11:45

Date Received: 10/14/14 16:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.58	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Bis(2-chloroethyl)ether	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
2-Chlorophenol	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
1,3-Dichlorobenzene	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
1,4-Dichlorobenzene	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Benzyl alcohol	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
1,2-Dichlorobenzene	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
2-Methylphenol	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
2,2'-oxybis[1-chloropropane]	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
3 & 4 Methylphenol	0.22 J		0.77	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
N-Nitrosodi-n-propylamine	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Hexachloroethane	ND		0.58	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Nitrobenzene	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Isophorone	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
2-Nitrophenol	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
2,4-Dimethylphenol	ND		1.9	0.29	ug/L		10/15/14 13:10	10/22/14 17:00	1
Benzoic acid	1.1 J*		2.9	0.58	ug/L		10/15/14 13:10	10/22/14 17:00	1
Bis(2-chloroethoxy)methane	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
2,4-Dichlorophenol	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
1,2,4-Trichlorobenzene	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Naphthalene	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
4-Chloroaniline	ND *		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Hexachlorobutadiene	ND		0.58	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
4-Chloro-3-methylphenol	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
1-Methylnaphthalene	ND		0.058	0.029	ug/L		10/15/14 13:10	10/22/14 17:00	1
Hexachlorocyclopentadiene	ND		1.9	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
2,4,6-Trichlorophenol	ND		0.58	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
2,4,5-Trichlorophenol	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
2-Chloronaphthalene	ND		0.058	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
2-Nitroaniline	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Dimethyl phthalate	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Acenaphthylene	ND		0.077	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
2,6-Dinitrotoluene	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
3-Nitroaniline	ND		0.38	0.12	ug/L		10/15/14 13:10	10/22/14 17:00	1
Acenaphthene	ND		0.096	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
2,4-Dinitrophenol	ND		4.8	0.96	ug/L		10/15/14 13:10	10/22/14 17:00	1
4-Nitrophenol	ND		2.9	0.96	ug/L		10/15/14 13:10	10/22/14 17:00	1
Dibenzofuran	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
2,4-Dinitrotoluene	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Diethyl phthalate	0.11 J		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
4-Chlorophenyl phenyl ether	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Fluorene	ND		0.058	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
4-Nitroaniline	ND		0.58	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
4,6-Dinitro-2-methylphenol	ND		3.8	0.96	ug/L		10/15/14 13:10	10/22/14 17:00	1
N-Nitrosodiphenylamine	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
4-Bromophenyl phenyl ether	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Hexachlorobenzene	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Pentachlorophenol	ND *		0.67	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-A-01-2014013-W**Lab Sample ID: 580-45906-1****Matrix: Water**

Date Collected: 10/13/14 11:45

Date Received: 10/14/14 16:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.077	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
Anthracene	ND		0.038	0.0096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Carbazole	ND		0.38	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Di-n-butyl phthalate	0.49		0.38	0.13	ug/L		10/15/14 13:10	10/22/14 17:00	1
Fluoranthene	ND		0.048	0.013	ug/L		10/15/14 13:10	10/22/14 17:00	1
Pyrene	ND		0.058	0.013	ug/L		10/15/14 13:10	10/22/14 17:00	1
Butyl benzyl phthalate	ND		0.58	0.19	ug/L		10/15/14 13:10	10/22/14 17:00	1
3,3'-Dichlorobenzidine	ND		1.9	0.096	ug/L		10/15/14 13:10	10/22/14 17:00	1
Benzo[a]anthracene	ND		0.058	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
Chrysene	ND		0.038	0.013	ug/L		10/15/14 13:10	10/22/14 17:00	1
Bis(2-ethylhexyl) phthalate	2.0	J B *	2.9	1.1	ug/L		10/15/14 13:10	10/22/14 17:00	1
Di-n-octyl phthalate	0.25	J	0.38	0.17	ug/L		10/15/14 13:10	10/22/14 17:00	1
Benzo[b]fluoranthene	ND		0.077	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
Benzo[k]fluoranthene	ND		0.058	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
Benzo[a]pyrene	ND		0.038	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
Indeno[1,2,3-cd]pyrene	ND		0.058	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
Dibenz(a,h)anthracene	ND		0.058	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
Benzo[g,h,i]perylene	ND		0.058	0.019	ug/L		10/15/14 13:10	10/22/14 17:00	1
N-Nitrosodimethylamine	ND		1.9	0.19	ug/L		10/15/14 13:10	10/22/14 17:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	74		30 - 134				10/15/14 13:10	10/22/14 17:00	1
Phenol-d5	89		52 - 120				10/15/14 13:10	10/22/14 17:00	1
2,4,6-Tribromophenol	116		44 - 125				10/15/14 13:10	10/22/14 17:00	1
Nitrobenzene-d5	92		59 - 120				10/15/14 13:10	10/22/14 17:00	1
2-Fluorobiphenyl	87		50 - 120				10/15/14 13:10	10/22/14 17:00	1
Terphenyl-d14	114		64 - 150				10/15/14 13:10	10/22/14 17:00	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0018		0.0010	0.00075	mg/L		10/15/14 12:02	10/16/14 09:16	1
Antimony	0.0015		0.00040	0.000080	mg/L		10/15/14 12:02	10/16/14 09:16	1
Beryllium	ND		0.00040	0.00010	mg/L		10/15/14 12:02	10/16/14 09:16	1
Cadmium	0.00024	J	0.00040	0.000028	mg/L		10/15/14 12:02	10/16/14 09:16	1
Chromium	0.0011		0.00040	0.00027	mg/L		10/15/14 12:02	10/16/14 09:16	1
Copper	0.012		0.0010	0.00011	mg/L		10/15/14 12:02	10/16/14 09:16	1
Lead	0.0017		0.00040	0.000034	mg/L		10/15/14 12:02	10/16/14 09:16	1
Nickel	0.0075		0.0030	0.00040	mg/L		10/15/14 12:02	10/16/14 09:16	1
Selenium	ND		0.0010	0.00071	mg/L		10/15/14 12:02	10/16/14 09:16	1
Silver	ND		0.00040	0.000030	mg/L		10/15/14 12:02	10/16/14 09:16	1
Thallium	ND		0.0010	0.00028	mg/L		10/15/14 12:02	10/16/14 09:16	1
Zinc	0.070		0.0040	0.0019	mg/L		10/15/14 12:02	10/16/14 09:16	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000041	mg/L		10/15/14 10:49	10/15/14 13:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	170		10	10	umhos/cm			10/17/14 16:30	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-A-01-2014013-W

Lab Sample ID: 580-45906-1

Matrix: Water

Date Collected: 10/13/14 11:45

Date Received: 10/14/14 16:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	41		5.0	5.0	mg/L			10/17/14 13:34	1
Bicarbonate Alkalinity as CaCO ₃	41		5.0	5.0	mg/L			10/17/14 13:34	1
Carbonate Alkalinity as CaCO ₃	ND		5.0	5.0	mg/L			10/17/14 13:34	1
Chloride	11		0.90	0.30	mg/L			10/15/14 14:54	1
Nitrate as N	0.22	J H	0.90	0.20	mg/L			10/15/14 14:54	1
Sulfate	12		1.2	0.40	mg/L			10/15/14 14:54	1
Total Suspended Solids	ND		10	10	mg/L			10/17/14 12:16	1
pH	7.06	HF	0.0100	0.0100	SU			10/15/14 11:05	1
Total Organic Carbon	14		1.0	0.33	mg/L			10/18/14 22:06	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	13		1.0	0.33	mg/L			10/20/14 11:41	1

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-FD-02-2014013-W

Lab Sample ID: 580-45906-2

Matrix: Water

Date Collected: 10/13/14 11:45

Date Received: 10/14/14 16:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.59	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Bis(2-chloroethyl)ether	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
2-Chlorophenol	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
1,3-Dichlorobenzene	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
1,4-Dichlorobenzene	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Benzyl alcohol	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
1,2-Dichlorobenzene	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
2-Methylphenol	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
2,2'-oxybis[1-chloropropane]	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
3 & 4 Methylphenol	0.14 J		0.78	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
N-Nitrosodi-n-propylamine	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Hexachloroethane	ND		0.59	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Nitrobenzene	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Isophorone	0.13 J		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
2-Nitrophenol	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
2,4-Dimethylphenol	ND		2.0	0.29	ug/L		10/15/14 13:10	10/22/14 17:26	1
Benzoic acid	1.4 J*		2.9	0.59	ug/L		10/15/14 13:10	10/22/14 17:26	1
Bis(2-chloroethoxy)methane	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
2,4-Dichlorophenol	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
1,2,4-Trichlorobenzene	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Naphthalene	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
4-Chloroaniline	ND *		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Hexachlorobutadiene	ND		0.59	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
4-Chloro-3-methylphenol	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
1-Methylnaphthalene	ND		0.059	0.029	ug/L		10/15/14 13:10	10/22/14 17:26	1
Hexachlorocyclopentadiene	ND		2.0	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
2,4,6-Trichlorophenol	ND		0.59	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
2,4,5-Trichlorophenol	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
2-Chloronaphthalene	ND		0.059	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
2-Nitroaniline	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Dimethyl phthalate	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Acenaphthylene	ND		0.078	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
2,6-Dinitrotoluene	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
3-Nitroaniline	ND		0.39	0.12	ug/L		10/15/14 13:10	10/22/14 17:26	1
Acenaphthene	ND		0.098	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
2,4-Dinitrophenol	ND		4.9	0.98	ug/L		10/15/14 13:10	10/22/14 17:26	1
4-Nitrophenol	ND		2.9	0.98	ug/L		10/15/14 13:10	10/22/14 17:26	1
Dibenzofuran	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
2,4-Dinitrotoluene	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Diethyl phthalate	0.13 J		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
4-Chlorophenyl phenyl ether	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Fluorene	ND		0.059	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
4-Nitroaniline	ND		0.59	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
4,6-Dinitro-2-methylphenol	ND		3.9	0.98	ug/L		10/15/14 13:10	10/22/14 17:26	1
N-Nitrosodiphenylamine	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
4-Bromophenyl phenyl ether	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Hexachlorobenzene	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Pentachlorophenol	ND *		0.69	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-FD-02-2014013-W**Lab Sample ID: 580-45906-2****Matrix: Water**

Date Collected: 10/13/14 11:45

Date Received: 10/14/14 16:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.078	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
Anthracene	ND		0.039	0.0098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Carbazole	ND		0.39	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Di-n-butyl phthalate	0.62		0.39	0.13	ug/L		10/15/14 13:10	10/22/14 17:26	1
Fluoranthene	ND		0.049	0.013	ug/L		10/15/14 13:10	10/22/14 17:26	1
Pyrene	ND		0.059	0.013	ug/L		10/15/14 13:10	10/22/14 17:26	1
Butyl benzyl phthalate	ND		0.59	0.20	ug/L		10/15/14 13:10	10/22/14 17:26	1
3,3'-Dichlorobenzidine	ND		2.0	0.098	ug/L		10/15/14 13:10	10/22/14 17:26	1
Benzo[a]anthracene	ND		0.059	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
Chrysene	ND		0.039	0.013	ug/L		10/15/14 13:10	10/22/14 17:26	1
Bis(2-ethylhexyl) phthalate	4.0	B *	2.9	1.2	ug/L		10/15/14 13:10	10/22/14 17:26	1
Di-n-octyl phthalate	ND		0.39	0.18	ug/L		10/15/14 13:10	10/22/14 17:26	1
Benzo[b]fluoranthene	ND		0.078	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
Benzo[k]fluoranthene	ND		0.059	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
Benzo[a]pyrene	ND		0.039	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
Indeno[1,2,3-cd]pyrene	ND		0.059	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
Dibenz(a,h)anthracene	ND		0.059	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
Benzo[g,h,i]perylene	ND		0.059	0.020	ug/L		10/15/14 13:10	10/22/14 17:26	1
N-Nitrosodimethylamine	ND		2.0	0.20	ug/L		10/15/14 13:10	10/22/14 17:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	62		30 - 134				10/15/14 13:10	10/22/14 17:26	1
Phenol-d5	83		52 - 120				10/15/14 13:10	10/22/14 17:26	1
2,4,6-Tribromophenol	116		44 - 125				10/15/14 13:10	10/22/14 17:26	1
Nitrobenzene-d5	86		59 - 120				10/15/14 13:10	10/22/14 17:26	1
2-Fluorobiphenyl	84		50 - 120				10/15/14 13:10	10/22/14 17:26	1
Terphenyl-d14	118		64 - 150				10/15/14 13:10	10/22/14 17:26	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0015		0.0010	0.00075	mg/L		10/15/14 12:02	10/16/14 09:26	1
Antimony	0.0013		0.00040	0.000080	mg/L		10/15/14 12:02	10/16/14 09:26	1
Beryllium	ND		0.00040	0.00010	mg/L		10/15/14 12:02	10/16/14 09:26	1
Cadmium	0.00023	J	0.00040	0.000028	mg/L		10/15/14 12:02	10/16/14 09:26	1
Chromium	0.0012		0.00040	0.00027	mg/L		10/15/14 12:02	10/16/14 09:26	1
Copper	0.012		0.0010	0.00011	mg/L		10/15/14 12:02	10/16/14 09:26	1
Lead	0.0016		0.00040	0.000034	mg/L		10/15/14 12:02	10/16/14 09:26	1
Nickel	0.0076		0.0030	0.00040	mg/L		10/15/14 12:02	10/16/14 09:26	1
Selenium	ND		0.0010	0.00071	mg/L		10/15/14 12:02	10/16/14 09:26	1
Silver	ND		0.00040	0.000030	mg/L		10/15/14 12:02	10/16/14 09:26	1
Thallium	ND		0.0010	0.00028	mg/L		10/15/14 12:02	10/16/14 09:26	1
Zinc	0.068		0.0040	0.0019	mg/L		10/15/14 12:02	10/16/14 09:26	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000041	mg/L		10/15/14 10:49	10/15/14 13:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	170		10	10	umhos/cm			10/17/14 16:30	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-FD-02-2014013-W

Lab Sample ID: 580-45906-2

Matrix: Water

Date Collected: 10/13/14 11:45

Date Received: 10/14/14 16:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	40		5.0	5.0	mg/L			10/17/14 13:34	1
Bicarbonate Alkalinity as CaCO ₃	40		5.0	5.0	mg/L			10/17/14 13:34	1
Carbonate Alkalinity as CaCO ₃	ND		5.0	5.0	mg/L			10/17/14 13:34	1
Chloride	11		0.90	0.30	mg/L			10/15/14 15:08	1
Nitrate as N	0.22	J H	0.90	0.20	mg/L			10/15/14 15:08	1
Sulfate	12		1.2	0.40	mg/L			10/15/14 15:08	1
Total Suspended Solids	10		10	10	mg/L			10/17/14 12:16	1
pH	7.07	HF	0.0100	0.0100	SU			10/15/14 11:06	1
Total Organic Carbon	14		1.0	0.33	mg/L			10/18/14 22:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	13		1.0	0.33	mg/L			10/21/14 09:10	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-A-01-2014013-S

Lab Sample ID: 580-45906-3

Date Collected: 10/13/14 12:15

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 57.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	110	J	180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Bis(2-chloroethyl)ether	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2-Chlorophenol	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
1,3-Dichlorobenzene	ND *		88	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
1,4-Dichlorobenzene	ND *		88	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Benzyl alcohol	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
1,2-Dichlorobenzene	ND *		96	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2-Methylphenol	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2,2'-oxybis[1-chloropropane]	ND		440	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
3 & 4 Methylphenol	78	J	350	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
N-Nitrosodi-n-propylamine	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Hexachloroethane	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Nitrobenzene	ND		180	60	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Isophorone	ND		180	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2-Nitrophenol	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2,4-Dimethylphenol	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Benzoic acid	ND		4400	1300	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Bis(2-chloroethoxy)methane	ND		180	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2,4-Dichlorophenol	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
1,2,4-Trichlorobenzene	ND		88	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Naphthalene	160		35	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
4-Chloroaniline	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Hexachlorobutadiene	ND		88	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
4-Chloro-3-methylphenol	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2-Methylnaphthalene	350		35	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
1-Methylnaphthalene	270		53	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Hexachlorocyclopentadiene	ND		180	18	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2,4,6-Trichlorophenol	ND		260	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2,4,5-Trichlorophenol	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2-Chloronaphthalene	ND		35	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2-Nitroaniline	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Dimethyl phthalate	290		180	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Acenaphthylene	ND		35	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2,6-Dinitrotoluene	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
3-Nitroaniline	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Acenaphthene	140		35	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2,4-Dinitrophenol	ND		1800	350	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
4-Nitrophenol	560	J	1800	440	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Dibenzofuran	100	J	180	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
2,4-Dinitrotoluene	66	J	180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Diethyl phthalate	ND		350	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
4-Chlorophenyl phenyl ether	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Fluorene	120		35	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
4-Nitroaniline	ND		180	35	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
4,6-Dinitro-2-methylphenol	ND		1800	180	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
N-Nitrosodiphenylamine	ND		88	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Hexachlorobenzene	ND		88	8.8	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10
Pentachlorophenol	ND		350	35	ug/Kg	⊗	10/17/14 11:05	10/22/14 19:08	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-A-01-2014013-S**Lab Sample ID: 580-45906-3**

Date Collected: 10/13/14 12:15

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 57.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	520		35	8.8	ug/Kg	☀	10/17/14 11:05	10/22/14 19:08	10
Anthracene	90 *		35	8.8	ug/Kg	☀	10/17/14 11:05	10/22/14 19:08	10
Carbazole	110 J		180	8.8	ug/Kg	☀	10/17/14 11:05	10/22/14 19:08	10
Di-n-butyl phthalate	220 J		880	88	ug/Kg	☀	10/17/14 11:05	10/22/14 19:08	10
Fluoranthene	940		35	8.8	ug/Kg	☀	10/17/14 11:05	10/22/14 19:08	10
Pyrene	930		35	8.8	ug/Kg	☀	10/17/14 11:05	10/22/14 19:08	10
Butyl benzyl phthalate	780 B		350	88	ug/Kg	☀	10/17/14 11:05	10/22/14 19:08	10
3,3'-Dichlorobenzidine	ND		350	53	ug/Kg	☀	10/17/14 11:05	10/22/14 19:08	10
Benzo[a]anthracene	330		35	8.8	ug/Kg	☀	10/17/14 11:05	10/22/14 19:08	10
Chrysene	520		44	8.8	ug/Kg	☀	10/17/14 11:05	10/22/14 19:08	10
N-Nitrosodimethylamine	ND		1800	440	ug/Kg	☀	10/17/14 11:05	10/22/14 19:08	10
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
2-Fluorophenol	66			36 - 145			10/17/14 11:05	10/22/14 19:08	10
Phenol-d5	64			38 - 149			10/17/14 11:05	10/22/14 19:08	10
2,4,6-Tribromophenol	96			28 - 143			10/17/14 11:05	10/22/14 19:08	10
Nitrobenzene-d5	79			38 - 141			10/17/14 11:05	10/22/14 19:08	10
2-Fluorobiphenyl	70			42 - 140			10/17/14 11:05	10/22/14 19:08	10
Terphenyl-d14	105			42 - 151			10/17/14 11:05	10/22/14 19:08	10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	16000 B		11000	880	ug/Kg	☀	10/17/14 11:05	11/04/14 19:30	100
Di-n-octyl phthalate	1100 J		8800	88	ug/Kg	☀	10/17/14 11:05	11/04/14 19:30	100
Benzo[b]fluoranthene	640		350	88	ug/Kg	☀	10/17/14 11:05	11/04/14 19:30	100
Benzo[k]fluoranthene	300 J		440	88	ug/Kg	☀	10/17/14 11:05	11/04/14 19:30	100
Benzo[a]pyrene	340 J		530	88	ug/Kg	☀	10/17/14 11:05	11/04/14 19:30	100
Indeno[1,2,3-cd]pyrene	270 J		700	88	ug/Kg	☀	10/17/14 11:05	11/04/14 19:30	100
Dibenz(a,h)anthracene	94 J		700	88	ug/Kg	☀	10/17/14 11:05	11/04/14 19:30	100
Benzo[g,h,i]perylene	290 J		440	88	ug/Kg	☀	10/17/14 11:05	11/04/14 19:30	100

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.017	0.0055	mg/Kg	☀	10/27/14 06:00	10/28/14 16:13	1
Arochlor 1221	ND		0.019	0.014	mg/Kg	☀	10/27/14 06:00	10/28/14 16:13	1
Arochlor 1232	ND		0.019	0.012	mg/Kg	☀	10/27/14 06:00	10/28/14 16:13	1
Arochlor 1242	ND		0.017	0.0036	mg/Kg	☀	10/27/14 06:00	10/28/14 16:13	1
Arochlor 1248	ND		0.017	0.0052	mg/Kg	☀	10/27/14 06:00	10/28/14 16:13	1
Arochlor 1254	ND		0.017	0.0036	mg/Kg	☀	10/27/14 06:00	10/28/14 16:13	1
Arochlor 1260	1.6		0.017	0.0052	mg/Kg	☀	10/27/14 06:00	10/28/14 16:13	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83			45 - 135			10/27/14 06:00	10/28/14 16:13	1
DCB Decachlorobiphenyl	82			50 - 140			10/27/14 06:00	10/28/14 16:13	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	2600 B Y		43	9.8	mg/Kg	☀	10/20/14 10:52	10/21/14 18:52	1
Motor Oil (>C24-C36)	10000 Y		86	16	mg/Kg	☀	10/20/14 10:52	10/21/14 18:52	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-A-01-2014013-S

Lab Sample ID: 580-45906-3

Matrix: Solid

Percent Solids: 57.0

Date Collected: 10/13/14 12:15

Date Received: 10/14/14 16:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	103		50 - 150	10/20/14 10:52	10/21/14 18:52	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	170		0.87	0.31	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10
Lead	250		0.35	0.023	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10
Antimony	110		0.35	0.073	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10
Beryllium	0.40		0.35	0.061	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10
Cadmium	4.3		0.35	0.014	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10
Chromium	3800		0.35	0.20	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10
Copper	540 B		0.70	0.17	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10
Nickel	2800		0.87	0.14	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10
Selenium	2.1		1.2	0.35	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10
Silver	2.4		0.35	0.021	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10
Thallium	ND		0.87	0.23	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10
Zinc	1300		3.5	1.9	mg/Kg	☀	10/15/14 17:54	10/16/14 17:38	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.020	0.0062	mg/Kg	☀	10/15/14 17:07	10/16/14 10:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	57		0.10	0.10	%		10/20/14 18:10		1

Client Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Client Sample ID: CC-CB-04-2014013-S

Lab Sample ID: 580-45906-4

Date Collected: 10/13/14 13:20

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 59.7

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Chloromethane	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Vinyl chloride	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Bromomethane	ND		1.3	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Chloroethane	ND		1.3	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Trichlorodifluoromethane	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,1-Dichloroethene	ND		6.6	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Methylene Chloride	ND		20	4.0	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
trans-1,2-Dichloroethene	ND		1.3	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,1-Dichloroethane	ND		1.3	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
2,2-Dichloropropane	ND		6.6	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
cis-1,2-Dichloroethene	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Bromochloromethane	ND		2.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Chloroform	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,1,1-Trichloroethane	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Acrolein	ND		40	11	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Carbon tetrachloride	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,1-Dichloropropene	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.3	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Benzene	0.62 J		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,2-Dichloroethane	ND		1.3	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Iodomethane	ND		20	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Carbon disulfide	12		1.3	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Trichloroethene	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,2-Dichloropropane	ND		1.3	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Acetone	460		20	3.2	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Dibromomethane	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Bromodichloromethane	ND		1.3	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
cis-1,3-Dichloropropene	ND *		1.3	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Toluene	7.9 *		2.6	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
trans-1,3-Dichloropropene	ND *		1.3	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,1,2-Trichloroethane	ND *		2.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Acrylonitrile	ND		13	3.7	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Tetrachloroethene	ND *		1.3	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,3-Dichloropropane	ND *		2.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Chlorodibromomethane	ND *		2.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,2-Dibromoethane	ND *		1.3	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Chlorobenzene	ND *		1.3	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Vinyl acetate	ND		6.6	0.79	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Ethylbenzene	4.6 *		1.3	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,1,1,2-Tetrachloroethane	ND *		1.3	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,1,2,2-Tetrachloroethane	ND *		2.6	1.2	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
2-Butanone	140		13	4.0	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
m-Xylene & p-Xylene	14 *		2.6	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
o-Xylene	14 *		2.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Styrene	ND *		2.6	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Bromoform	ND *		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Isopropylbenzene	1.5 J *		2.6	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Bromobenzene	ND *		2.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-CB-04-2014013-S**Lab Sample ID: 580-45906-4**

Date Collected: 10/13/14 13:20

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 59.7

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	1.2	J *	2.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,2,3-Trichloropropane	ND	*	1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
2-Chlorotoluene	ND	*	2.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,3,5-Trimethylbenzene	3.6	J *	6.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
4-Chlorotoluene	ND	*	2.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
tert-Butylbenzene	1.2	J * B	2.6	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,2,4-Trimethylbenzene	6.2	* B	2.6	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
sec-Butylbenzene	1.4	J *	2.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,3-Dichlorobenzene	0.77	J *	2.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
4-Isopropyltoluene	1.1	J *	2.6	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,4-Dichlorobenzene	1.2	J *	1.3	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
n-Butylbenzene	1.6	J * B	2.6	0.26	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,2-Dichlorobenzene	ND	*	2.6	0.79	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,2-Dibromo-3-Chloropropane	ND	*	2.6	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,2,4-Trichlorobenzene	2.4	J *	2.6	0.53	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
1,2,3-Trichlorobenzene	2.7	*	2.6	0.79	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
2-Chloroethyl vinyl ether	ND	*	6.6	1.9	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Hexachloro-1,3-butadiene	2.9	* B	2.6	0.79	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
4-Methyl-2-pentanone	12	*	6.6	2.0	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Naphthalene	6.0	J * B	6.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Methyl tert-butyl ether	ND		1.3	0.40	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
2-Hexanone	ND	*	6.6	0.66	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
trans-1,4-Dichloro-2-butene	ND	*	6.6	2.3	ug/Kg	⊗	10/14/14 16:40	10/27/14 18:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	133	* X	80 - 120				10/14/14 16:40	10/27/14 18:57	1
4-Bromofluorobenzene (Surr)	152	* X	70 - 120				10/14/14 16:40	10/27/14 18:57	1
Dibromofluoromethane (Surr)	115		75 - 132				10/14/14 16:40	10/27/14 18:57	1
Trifluorotoluene (Surr)	74		65 - 140				10/14/14 16:40	10/27/14 18:57	1
1,2-Dichloroethane-d4 (Surr)	132		71 - 136				10/14/14 16:40	10/27/14 18:57	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	120	J *	820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Bis(2-chloroethyl)ether	ND	*	820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2-Chlorophenol	ND	*	820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
1,3-Dichlorobenzene	ND	*	410	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
1,4-Dichlorobenzene	ND	*	410	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Benzyl alcohol	ND	*	820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
1,2-Dichlorobenzene	ND	*	450	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2-Methylphenol	ND	*	820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2,2'-oxybis[1-chloropropane]	ND		2100	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
3 & 4 Methylphenol	ND	*	1600	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
N-Nitrosodi-n-propylamine	ND	*	820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Hexachloroethane	ND	*	820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Nitrobenzene	ND	*	820	280	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Isophorone	ND	*	820	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2-Nitrophenol	ND	*	820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2,4-Dimethylphenol	ND		820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Benzoic acid	ND		21000	6200	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-CB-04-2014013-S

Lab Sample ID: 580-45906-4

Date Collected: 10/13/14 13:20

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 59.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND *		820	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2,4-Dichlorophenol	ND		820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
1,2,4-Trichlorobenzene	ND *		410	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Naphthalene	92 J *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
4-Chloroaniline	ND		820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Hexachlorobutadiene	ND *		410	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
4-Chloro-3-methylphenol	ND *		820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2-Methylnaphthalene	73 J *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
1-Methylnaphthalene	60 J *		250	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Hexachlorocyclopentadiene	ND		820	82	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2,4,6-Trichlorophenol	ND *		1200	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2,4,5-Trichlorophenol	ND		820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2-Chloronaphthalene	ND *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2-Nitroaniline	ND		820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Dimethyl phthalate	ND *		820	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Acenaphthylene	ND *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2,6-Dinitrotoluene	ND *		820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
3-Nitroaniline	ND		820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Acenaphthene	81 J *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2,4-Dinitrophenol	ND		8200	1600	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
4-Nitrophenol	ND		8200	2100	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Dibenzofuran	ND *		820	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
2,4-Dinitrotoluene	ND *		820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Diethyl phthalate	ND *		1600	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
4-Chlorophenyl phenyl ether	ND *		820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Fluorene	92 J *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
4-Nitroaniline	ND		820	160	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
4,6-Dinitro-2-methylphenol	ND		8200	820	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
N-Nitrosodiphenylamine	ND *		410	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
4-Bromophenyl phenyl ether	ND		820	120	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Hexachlorobenzene	ND *		410	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Pentachlorophenol	ND		1600	160	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Phenanthrene	370 *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Anthracene	53 J *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Carbazole	ND *		820	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Di-n-butyl phthalate	ND		4100	410	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Fluoranthene	750 *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Pyrene	540 *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Butyl benzyl phthalate	740 J B		1600	410	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
3,3'-Dichlorobenzidine	ND		1600	250	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Benzo[a]anthracene	210 *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Chrysene	480 *		210	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Bis(2-ethylhexyl) phthalate	8700 B		4900	410	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Di-n-octyl phthalate	760 J *		4100	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Benzo[b]fluoranthene	560 *		160	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Benzo[k]fluoranthene	170 J		210	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Benzo[a]pyrene	280 *		250	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Indeno[1,2,3-cd]pyrene	180 J		330	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50
Dibenz(a,h)anthracene	ND		330	41	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:19	50

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-CB-04-2014013-S

Lab Sample ID: 580-45906-4

Date Collected: 10/13/14 13:20

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 59.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	210		210	41	ug/Kg	⌚	10/16/14 09:52	11/03/14 21:19	50
N-Nitrosodimethylamine	ND		8200	2100	ug/Kg	⌚	10/16/14 09:52	11/03/14 21:19	50
Surrogate									
2-Fluorophenol	71		36 - 145				10/16/14 09:52	11/03/14 21:19	50
Phenol-d5	90		38 - 149				10/16/14 09:52	11/03/14 21:19	50
2,4,6-Tribromophenol	142		28 - 143				10/16/14 09:52	11/03/14 21:19	50
Nitrobenzene-d5	71		38 - 141				10/16/14 09:52	11/03/14 21:19	50
2-Fluorobiphenyl	49		42 - 140				10/16/14 09:52	11/03/14 21:19	50
Terphenyl-d14	116		42 - 151				10/16/14 09:52	11/03/14 21:19	50

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	160	J	840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Bis(2-chloroethyl)ether	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2-Chlorophenol	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
1,3-Dichlorobenzene	ND		420	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
1,4-Dichlorobenzene	ND		420	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Benzyl alcohol	ND *		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
1,2-Dichlorobenzene	ND		460	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2-Methylphenol	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2,2'-oxybis[1-chloropropane]	ND		2100	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
3 & 4 Methylphenol	130	J	1700	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
N-Nitrosodi-n-propylamine	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Hexachloroethane	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Nitrobenzene	ND		840	280	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Isophorone	ND		840	42	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2-Nitrophenol	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2,4-Dimethylphenol	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Benzoic acid	ND		21000	6300	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Bis(2-chloroethoxy)methane	ND		840	42	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2,4-Dichlorophenol	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
1,2,4-Trichlorobenzene	ND		420	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Naphthalene	ND		170	42	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
4-Chloroaniline	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Hexachlorobutadiene	ND		420	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
4-Chloro-3-methylphenol	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2-Methylnaphthalene	210		170	42	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
1-Methylnaphthalene	110	J	250	42	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Hexachlorocyclopentadiene	ND		840	84	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2,4,6-Trichlorophenol	ND		1300	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2,4,5-Trichlorophenol	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2-Chloronaphthalene	ND		170	42	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2-Nitroaniline	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Dimethyl phthalate	150	J	840	42	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Acenaphthylene	ND		170	42	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2,6-Dinitrotoluene	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
3-Nitroaniline	ND		840	130	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
Acenaphthene	170		170	42	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50
2,4-Dinitrophenol	ND		8400	1700	ug/Kg	⌚	10/24/14 12:00	11/03/14 22:10	50

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-CB-04-2014013-S**Lab Sample ID: 580-45906-4**

Date Collected: 10/13/14 13:20

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 59.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	ND	*	8400	2100	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Dibenzofuran	ND		840	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
2,4-Dinitrotoluene	ND		840	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Diethyl phthalate	ND		1700	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
4-Chlorophenyl phenyl ether	ND		840	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Fluorene	130	J	170	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
4-Nitroaniline	ND		840	170	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
4,6-Dinitro-2-methylphenol	ND		8400	840	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
N-Nitrosodiphenylamine	ND		420	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
4-Bromophenyl phenyl ether	ND		840	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Hexachlorobenzene	ND		420	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Pentachlorophenol	ND		1700	170	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Phenanthrene	540		170	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Anthracene	91	J *	170	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Carbazole	130	J	840	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Di-n-butyl phthalate	ND		4200	420	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Fluoranthene	830		170	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Pyrene	700		170	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Butyl benzyl phthalate	420	J	1700	420	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
3,3'-Dichlorobenzidine	ND		1700	250	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Benzo[a]anthracene	190		170	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Chrysene	410		210	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Bis(2-ethylhexyl) phthalate	9500		5000	420	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Di-n-octyl phthalate	790	J	4200	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Benzo[b]fluoranthene	540		170	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Benzo[k]fluoranthene	210		210	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Benzo[a]pyrene	330		250	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Indeno[1,2,3-cd]pyrene	210	J	330	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Dibenz(a,h)anthracene	ND		330	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
Benzo[g,h,i]perylene	210		210	42	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50
N-Nitrosodimethylamine	ND		8400	2100	ug/Kg	⊗	10/24/14 12:00	11/03/14 22:10	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		36 - 145	10/24/14 12:00	11/03/14 22:10	50
Phenol-d5	80		38 - 149	10/24/14 12:00	11/03/14 22:10	50
2,4,6-Tribromophenol	143		28 - 143	10/24/14 12:00	11/03/14 22:10	50
Nitrobenzene-d5	35	X	38 - 141	10/24/14 12:00	11/03/14 22:10	50
2-Fluorobiphenyl	24	X	42 - 140	10/24/14 12:00	11/03/14 22:10	50
Terphenyl-d14	179	X	42 - 151	10/24/14 12:00	11/03/14 22:10	50

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	19	B	14	1.7	mg/Kg	⊗	10/17/14 15:22	10/17/14 19:52	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	107		50 - 150	10/17/14 15:22	10/17/14 19:52	1			

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.016	0.0053	mg/Kg	⊗	10/27/14 06:00	10/28/14 16:28	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Client Sample ID: CC-CB-04-2014013-S

Lab Sample ID: 580-45906-4

Date Collected: 10/13/14 13:20

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 59.7

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1221	ND		0.018	0.013	mg/Kg	⊗	10/27/14 06:00	10/28/14 16:28	1
Arochlor 1232	ND		0.018	0.012	mg/Kg	⊗	10/27/14 06:00	10/28/14 16:28	1
Arochlor 1242	ND		0.016	0.0035	mg/Kg	⊗	10/27/14 06:00	10/28/14 16:28	1
Arochlor 1248	ND		0.016	0.0049	mg/Kg	⊗	10/27/14 06:00	10/28/14 16:28	1
Arochlor 1254	ND		0.016	0.0035	mg/Kg	⊗	10/27/14 06:00	10/28/14 16:28	1
Arochlor 1260	0.43		0.016	0.0049	mg/Kg	⊗	10/27/14 06:00	10/28/14 16:28	1
Surrogate	%Recovery	Qualifier			Limits				
Tetrachloro-m-xylene	79				45 - 135				
DCB Decachlorobiphenyl	73				50 - 140				
							Prepared	Analyzed	Dil Fac
							10/27/14 06:00	10/28/14 16:28	1
							10/27/14 06:00	10/28/14 16:28	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	840	B Y	40	9.1	mg/Kg	⊗	10/20/14 10:52	10/21/14 19:10	1
Motor Oil (>C24-C36)	5400	Y	80	15	mg/Kg	⊗	10/20/14 10:52	10/21/14 19:10	1
Surrogate	%Recovery	Qualifier			Limits				
o-Terphenyl	88				50 - 150				
							Prepared	Analyzed	Dil Fac
							10/20/14 10:52	10/21/14 19:10	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	17		0.73	0.26	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10
Lead	69		0.29	0.019	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10
Antimony	7.3		0.29	0.061	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10
Beryllium	0.37		0.29	0.051	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10
Cadmium	4.7		0.29	0.012	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10
Chromium	8600		0.29	0.16	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10
Copper	420	B	0.58	0.14	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10
Nickel	5900		0.73	0.12	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10
Selenium	3.0		1.0	0.29	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10
Silver	0.98		0.29	0.017	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10
Thallium	ND		0.73	0.19	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10
Zinc	960		2.9	1.6	mg/Kg	⊗	10/15/14 17:54	10/16/14 17:35	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28		0.025	0.0080	mg/Kg	⊗	10/15/14 17:07	10/16/14 10:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	60		0.10	0.10	%			10/20/14 18:10	1
Total Organic Carbon	69000		2000	250	mg/Kg			10/21/14 12:24	1

Method: PSEP Plumb 1981 - Grain Size (PSEP Plumb 1981)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobbles	0.00				%			10/16/14 12:09	1
Gravel	7.2				%			10/16/14 12:09	1
Sand	75				%			10/16/14 12:09	1
Silt	17				%			10/16/14 12:09	1
Clay	0.70				%			10/16/14 12:09	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Client Sample ID: CC-CB-22-2014013-S

Lab Sample ID: 580-45906-5

Date Collected: 10/13/14 14:10

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 57.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	150	J *	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Bis(2-chloroethyl)ether	ND	*	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2-Chlorophenol	ND	*	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
1,3-Dichlorobenzene	ND	*	430	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
1,4-Dichlorobenzene	ND	*	430	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Benzyl alcohol	ND	*	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
1,2-Dichlorobenzene	ND	*	470	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2-Methylphenol	ND	*	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2,2'-oxybis[1-chloropropane]	ND		2100	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
3 & 4 Methylphenol	160	J *	1700	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
N-Nitrosodi-n-propylamine	ND	*	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Hexachloroethane	ND	*	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Nitrobenzene	ND	*	860	290	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Isophorone	ND	*	860	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2-Nitrophenol	ND	*	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2,4-Dimethylphenol	ND		860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Benzoic acid	ND		21000	6400	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Bis(2-chloroethoxy)methane	ND	*	860	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2,4-Dichlorophenol	ND		860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
1,2,4-Trichlorobenzene	ND	*	430	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Naphthalene	190	*	170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
4-Chloroaniline	ND		860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Hexachlorobutadiene	ND	*	430	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
4-Chloro-3-methylphenol	ND	*	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2-Methylnaphthalene	220	*	170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
1-Methylnaphthalene	200	J *	260	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Hexachlorocyclopentadiene	ND		860	86	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2,4,6-Trichlorophenol	ND	*	1300	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2,4,5-Trichlorophenol	ND		860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2-Chloronaphthalene	ND	*	170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2-Nitroaniline	ND		860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Dimethyl phthalate	260	J *	860	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Acenaphthylene	ND	*	170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2,6-Dinitrotoluene	ND	*	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
3-Nitroaniline	ND		860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Acenaphthene	100	J *	170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2,4-Dinitrophenol	ND		8600	1700	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
4-Nitrophenol	ND		8600	2100	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Dibenzofuran	71	J *	860	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
2,4-Dinitrotoluene	ND	*	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Diethyl phthalate	140	J *	1700	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
4-Chlorophenyl phenyl ether	ND	*	860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Fluorene	69	J *	170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
4-Nitroaniline	ND		860	170	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
4,6-Dinitro-2-methylphenol	ND		8600	860	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
N-Nitrosodiphenylamine	ND	*	430	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
4-Bromophenyl phenyl ether	ND		860	130	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Hexachlorobenzene	ND	*	430	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Pentachlorophenol	ND		1700	170	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Client Sample ID: CC-CB-22-2014013-S**Lab Sample ID: 580-45906-5**

Date Collected: 10/13/14 14:10

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 57.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	730 *		170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Anthracene	150 J *		170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Carbazole	200 J *		860	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Di-n-butyl phthalate	ND		4300	430	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Fluoranthene	2000 *		170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Pyrene	1800 *		170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Butyl benzyl phthalate	800 J B		1700	430	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
3,3'-Dichlorobenzidine	ND		1700	260	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Benzo[a]anthracene	840 *		170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Chrysene	1200 *		210	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Bis(2-ethylhexyl) phthalate	2200 J B		5200	430	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Di-n-octyl phthalate	510 J *		4300	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Benzo[b]fluoranthene	1600 *		170	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Benzo[k]fluoranthene	540		210	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Benzo[a]pyrene	880 *		260	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Indeno[1,2,3-cd]pyrene	440		340	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Dibenz(a,h)anthracene	ND		340	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Benzo[g,h,i]perylene	280		210	43	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
N-Nitrosodimethylamine	ND		8600	2100	ug/Kg	⊗	10/16/14 09:52	11/03/14 21:44	50
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
2-Fluorophenol	75			36 - 145			10/16/14 09:52	11/03/14 21:44	50
Phenol-d5	77			38 - 149			10/16/14 09:52	11/03/14 21:44	50
2,4,6-Tribromophenol	133			28 - 143			10/16/14 09:52	11/03/14 21:44	50
Nitrobenzene-d5	91			38 - 141			10/16/14 09:52	11/03/14 21:44	50
2-Fluorobiphenyl	48			42 - 140			10/16/14 09:52	11/03/14 21:44	50
Terphenyl-d14	109			42 - 151			10/16/14 09:52	11/03/14 21:44	50

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	190 J		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Bis(2-chloroethyl)ether	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2-Chlorophenol	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
1,3-Dichlorobenzene	ND		430	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
1,4-Dichlorobenzene	ND		430	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Benzyl alcohol	180 J *		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
1,2-Dichlorobenzene	ND		470	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2-Methylphenol	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2,2'-oxybis[1-chloropropane]	ND		2100	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
3 & 4 Methylphenol	ND		1700	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
N-Nitrosodi-n-propylamine	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Hexachloroethane	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Nitrobenzene	ND		850	290	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Isophorone	ND		850	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2-Nitrophenol	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2,4-Dimethylphenol	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Benzoic acid	ND		21000	6400	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Bis(2-chloroethoxy)methane	ND		850	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2,4-Dichlorophenol	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
1,2,4-Trichlorobenzene	ND		430	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-CB-22-2014013-S

Lab Sample ID: 580-45906-5

Date Collected: 10/13/14 14:10

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 57.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	140	J	170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
4-Chloroaniline	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Hexachlorobutadiene	ND		430	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
4-Chloro-3-methylphenol	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2-Methylnaphthalene	170		170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
1-Methylnaphthalene	97	J	260	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Hexachlorocyclopentadiene	ND		850	85	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2,4,6-Trichlorophenol	ND		1300	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2,4,5-Trichlorophenol	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2-Chloronaphthalene	ND		170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2-Nitroaniline	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Dimethyl phthalate	86	J	850	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Acenaphthylene	ND		170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2,6-Dinitrotoluene	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
3-Nitroaniline	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Acenaphthene	100	J	170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2,4-Dinitrophenol	ND		8500	1700	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
4-Nitrophenol	ND *		8500	2100	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Dibenzofuran	64	J	850	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
2,4-Dinitrotoluene	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Diethyl phthalate	ND		1700	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
4-Chlorophenyl phenyl ether	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Fluorene	56	J	170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
4-Nitroaniline	ND		850	170	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
4,6-Dinitro-2-methylphenol	ND		8500	850	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
N-Nitrosodiphenylamine	ND		430	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
4-Bromophenyl phenyl ether	ND		850	130	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Hexachlorobenzene	ND		430	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Pentachlorophenol	ND		1700	170	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Phenanthrene	540		170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Anthracene	95	J *	170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Carbazole	170	J	850	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Di-n-butyl phthalate	ND		4300	430	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Fluoranthene	1500		170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Pyrene	1400		170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Butyl benzyl phthalate	640	J	1700	430	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
3,3'-Dichlorobenzidine	ND		1700	260	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Benzo[a]anthracene	600		170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Chrysene	920		210	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Bis(2-ethylhexyl) phthalate	1800	J	5100	430	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Di-n-octyl phthalate	ND		4300	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Benzo[b]fluoranthene	1400		170	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Benzo[k]fluoranthene	340		210	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Benzo[a]pyrene	670		260	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Indeno[1,2,3-cd]pyrene	250	J	340	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Dibenz(a,h)anthracene	ND		340	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
Benzo[g,h,i]perylene	260		210	43	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50
N-Nitrosodimethylamine	ND		8500	2100	ug/Kg	⊗	10/24/14 12:00	11/03/14 23:27	50

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-CB-22-2014013-S**Lab Sample ID: 580-45906-5**

Date Collected: 10/13/14 14:10

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 57.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	56		36 - 145	10/24/14 12:00	11/03/14 23:27	50
Phenol-d5	66		38 - 149	10/24/14 12:00	11/03/14 23:27	50
2,4,6-Tribromophenol	118		28 - 143	10/24/14 12:00	11/03/14 23:27	50
Nitrobenzene-d5	62		38 - 141	10/24/14 12:00	11/03/14 23:27	50
2-Fluorobiphenyl	37	X	42 - 140	10/24/14 12:00	11/03/14 23:27	50
Terphenyl-d14	111		42 - 151	10/24/14 12:00	11/03/14 23:27	50

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.017	0.0054	mg/Kg	☀	10/27/14 06:00	10/28/14 17:14	1
Arochlor 1221	ND		0.019	0.014	mg/Kg	☀	10/27/14 06:00	10/28/14 17:14	1
Arochlor 1232	ND		0.019	0.012	mg/Kg	☀	10/27/14 06:00	10/28/14 17:14	1
Arochlor 1242	ND		0.017	0.0035	mg/Kg	☀	10/27/14 06:00	10/28/14 17:14	1
Arochlor 1248	ND		0.017	0.0051	mg/Kg	☀	10/27/14 06:00	10/28/14 17:14	1
Arochlor 1254	ND		0.017	0.0035	mg/Kg	☀	10/27/14 06:00	10/28/14 17:14	1
Arochlor 1260	1.0		0.017	0.0051	mg/Kg	☀	10/27/14 06:00	10/28/14 17:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		45 - 135	10/27/14 06:00	10/28/14 17:14	1
DCB Decachlorobiphenyl	75		50 - 140	10/27/14 06:00	10/28/14 17:14	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	410	B Y	43	9.8	mg/Kg	☀	10/20/14 10:52	10/21/14 19:47	1
Motor Oil (>C24-C36)	1900	Y	86	16	mg/Kg	☀	10/20/14 10:52	10/21/14 19:47	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
<i>o-Terphenyl</i>	90		50 - 150	10/20/14 10:52	10/21/14 19:47	1			

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	16		0.66	0.24	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10
Lead	180		0.26	0.017	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10
Antimony	8.3		0.26	0.055	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10
Beryllium	0.89		0.26	0.046	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10
Cadmium	2.0		0.26	0.010	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10
Chromium	380		0.26	0.15	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10
Copper	540	B	0.52	0.13	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10
Nickel	360		0.66	0.11	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10
Selenium	2.4		0.92	0.26	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10
Silver	1.0		0.26	0.016	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10
Thallium	0.22	J	0.66	0.17	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10
Zinc	1100		2.6	1.5	mg/Kg	☀	10/15/14 17:54	10/16/14 17:09	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35		0.027	0.0084	mg/Kg	☀	10/15/14 17:07	10/16/14 10:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	57		0.10	0.10	%			10/20/14 15:14	1
Total Organic Carbon	76000		2000	250	mg/Kg			10/21/14 12:24	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-CB-22-2014013-S

Lab Sample ID: 580-45906-5

Date Collected: 10/13/14 14:10

Matrix: Solid

Date Received: 10/14/14 16:00

Method: PSEP Plumb 1981 - Grain Size (PSEP Plumb 1981)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobbles	0.00				%			10/16/14 12:09	1
Gravel	5.0				%			10/16/14 12:09	1
Sand	45				%			10/16/14 12:09	1
Silt	49				%			10/16/14 12:09	1
Clay	1.3				%			10/16/14 12:09	1

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-174012/1-A

Matrix: Solid

Analysis Batch: 173956

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 174012

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Chloromethane	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Vinyl chloride	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Bromomethane	ND		1.0	0.40	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Chloroethane	ND		1.0	0.20	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Trichlorofluoromethane	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,1-Dichloroethene	ND		5.0	0.20	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Methylene Chloride	ND		15	3.0	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,1-Dichloroethane	ND		1.0	0.40	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
2,2-Dichloropropane	ND		5.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Bromochloromethane	ND		2.0	0.50	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Chloroform	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Acrolein	ND		30	8.2	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Carbon tetrachloride	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,1-Dichloropropene	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.20	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Benzene	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,2-Dichloroethane	ND		1.0	0.40	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Iodomethane	ND		15	0.20	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Carbon disulfide	ND		1.0	0.20	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Trichloroethene	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,2-Dichloropropene	ND		1.0	0.40	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Acetone	ND		15	2.4	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Dibromomethane	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Bromodichloromethane	ND		1.0	0.40	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
cis-1,3-Dichloropropene	ND		1.0	0.20	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Toluene	ND		2.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
trans-1,3-Dichloropropene	ND		1.0	0.20	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,1,2-Trichloroethane	ND		2.0	0.50	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Acrylonitrile	ND		10	2.8	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Tetrachloroethene	ND		1.0	0.40	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,3-Dichloropropene	ND		2.0	0.50	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Chlorodibromomethane	ND		2.0	0.50	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,2-Dibromoethane	ND		1.0	0.20	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Chlorobenzene	ND		1.0	0.40	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Vinyl acetate	ND		5.0	0.60	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Ethylbenzene	ND		1.0	0.40	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.40	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
1,1,2,2-Tetrachloroethane	ND		2.0	0.90	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
2-Butanone	ND		10	3.0	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
m-Xylene & p-Xylene	ND		2.0	0.20	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
o-Xylene	ND		2.0	0.50	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Styrene	ND		2.0	0.20	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Bromoform	ND		1.0	0.30	ug/Kg	10/27/14 16:58	10/27/14 17:37		1
Isopropylbenzene	ND		2.0	0.20	ug/Kg	10/27/14 16:58	10/27/14 17:37		1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-174012/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 173956

Prep Batch: 174012

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene		ND			2.0	0.50	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
N-Propylbenzene		ND			2.0	0.50	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
1,2,3-Trichloropropane		ND			1.0	0.30	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
2-Chlorotoluene		ND			2.0	0.50	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
1,3,5-Trimethylbenzene		ND			5.0	0.50	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
4-Chlorotoluene		ND			2.0	0.50	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
tert-Butylbenzene		0.659	J		2.0	0.20	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
1,2,4-Trimethylbenzene		0.447	J		2.0	0.40	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
sec-Butylbenzene		ND			2.0	0.50	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
1,3-Dichlorobenzene		ND			2.0	0.50	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
4-Isopropyltoluene		ND			2.0	0.40	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
1,4-Dichlorobenzene		ND			1.0	0.20	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
n-Butylbenzene		0.439	J		2.0	0.20	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
1,2-Dichlorobenzene		ND			2.0	0.60	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
1,2-Dibromo-3-Chloropropane		ND			2.0	0.30	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
1,2,4-Trichlorobenzene		ND			2.0	0.40	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
1,2,3-Trichlorobenzene		ND			2.0	0.60	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
2-Chloroethyl vinyl ether		ND			5.0	1.4	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
Hexachloro-1,3-butadiene		0.782	J		2.0	0.60	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
4-Methyl-2-pentanone		ND			5.0	1.5	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
Naphthalene		0.760	J		5.0	0.50	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
Methyl tert-butyl ether		ND			1.0	0.30	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
2-Hexanone		ND			5.0	0.50	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
trans-1,4-Dichloro-2-butene		ND			5.0	1.7	ug/Kg		10/27/14 16:58	10/27/14 17:37	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
Toluene-d8 (Surr)		102			80 - 120				10/27/14 16:58	10/27/14 17:37	1
4-Bromofluorobenzene (Surr)		95			70 - 120				10/27/14 16:58	10/27/14 17:37	1
Dibromofluoromethane (Surr)		101			75 - 132				10/27/14 16:58	10/27/14 17:37	1
Trifluorotoluene (Surr)		103			65 - 140				10/27/14 16:58	10/27/14 17:37	1
1,2-Dichloroethane-d4 (Surr)		100			71 - 136				10/27/14 16:58	10/27/14 17:37	1

Lab Sample ID: LCS 580-174012/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 173956

Prep Batch: 174012

Analyte	Spike Added	LCS			D	%Rec	Limits
		Result	Qualifier	Unit			
Dichlorodifluoromethane	30.0	29.4		ug/Kg		98	38 - 150
Chloromethane	30.0	29.7		ug/Kg		99	55 - 136
Vinyl chloride	30.0	26.7		ug/Kg		89	67 - 131
Bromomethane	30.0	32.1		ug/Kg		107	57 - 148
Chloroethane	30.0	31.0		ug/Kg		103	48 - 167
Trichlorofluoromethane	30.0	30.2		ug/Kg		101	47 - 165
1,1-Dichloroethene	30.0	30.8		ug/Kg		103	70 - 133
Methylene Chloride	30.0	32.9		ug/Kg		110	57 - 146
trans-1,2-Dichloroethene	30.0	31.8		ug/Kg		106	76 - 131
1,1-Dichloroethane	30.0	31.6		ug/Kg		105	70 - 128
2,2-Dichloropropane	30.0	32.0		ug/Kg		107	56 - 144

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-174012/2-A

Matrix: Solid

Analysis Batch: 173956

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 174012

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
cis-1,2-Dichloroethene	30.0	32.2		ug/Kg	107	70 - 130	
Bromochloromethane	30.0	32.9		ug/Kg	110	78 - 123	
Chloroform	30.0	31.6		ug/Kg	105	78 - 125	
1,1,1-Trichloroethane	30.0	30.4		ug/Kg	101	63 - 135	
Acrolein	178	215		ug/Kg	121	10 - 125	
Carbon tetrachloride	30.0	30.6		ug/Kg	102	59 - 145	
1,1-Dichloropropene	30.0	32.5		ug/Kg	108	77 - 125	
1,1,2-Trichloro-1,2,2-trifluoroetha ne	30.0	30.3		ug/Kg	101	66 - 163	
Benzene	30.0	31.1		ug/Kg	104	70 - 128	
1,2-Dichloroethane	30.0	31.9		ug/Kg	106	71 - 128	
Iodomethane	30.0	31.1		ug/Kg	104	44 - 148	
Carbon disulfide	30.0	30.9		ug/Kg	103	45 - 160	
Trichloroethene	30.0	32.0		ug/Kg	107	83 - 124	
1,2-Dichloropropane	30.0	32.0		ug/Kg	107	76 - 161	
Acetone	120	117		ug/Kg	98	20 - 160	
Dibromomethane	30.0	32.7		ug/Kg	109	78 - 126	
Bromodichloromethane	30.0	31.9		ug/Kg	106	58 - 133	
cis-1,3-Dichloropropene	30.0	34.7		ug/Kg	116	69 - 129	
Toluene	30.0	31.9		ug/Kg	106	75 - 126	
trans-1,3-Dichloropropene	30.0	32.0		ug/Kg	107	72 - 129	
1,1,2-Trichloroethane	30.0	32.5		ug/Kg	108	77 - 124	
Acrylonitrile	300	323		ug/Kg	108	74 - 117	
Tetrachloroethene	30.0	26.4		ug/Kg	88	56 - 155	
1,3-Dichloropropane	30.0	32.6		ug/Kg	109	77 - 123	
Chlorodibromomethane	30.0	33.3		ug/Kg	111	42 - 129	
1,2-Dibromoethane	30.0	34.3		ug/Kg	114	69 - 126	
Chlorobenzene	30.0	31.6		ug/Kg	105	75 - 120	
Vinyl acetate	60.5	69.2		ug/Kg	114	19 - 144	
Ethylbenzene	30.0	33.3		ug/Kg	111	78 - 126	
1,1,1,2-Tetrachloroethane	30.0	32.6		ug/Kg	109	72 - 123	
1,1,2,2-Tetrachloroethane	30.0	33.8		ug/Kg	113	73 - 125	
2-Butanone	120	133		ug/Kg	111	30 - 160	
m-Xylene & p-Xylene	30.0	32.6		ug/Kg	109	78 - 126	
o-Xylene	30.0	33.7		ug/Kg	112	77 - 127	
Styrene	30.0	31.7		ug/Kg	106	79 - 127	
Bromoform	30.0	32.6		ug/Kg	109	50 - 124	
Isopropylbenzene	30.0	30.9		ug/Kg	103	79 - 127	
Bromobenzene	30.0	32.3		ug/Kg	108	80 - 120	
N-Propylbenzene	30.0	31.0		ug/Kg	103	81 - 127	
1,2,3-Trichloropropane	30.0	34.1		ug/Kg	114	77 - 123	
2-Chlorotoluene	30.0	30.8		ug/Kg	103	79 - 122	
1,3,5-Trimethylbenzene	30.0	30.9		ug/Kg	103	80 - 125	
4-Chlorotoluene	30.0	29.7		ug/Kg	99	80 - 122	
tert-Butylbenzene	30.0	30.1		ug/Kg	100	71 - 136	
1,2,4-Trimethylbenzene	30.0	30.8		ug/Kg	103	79 - 124	
sec-Butylbenzene	30.0	31.6		ug/Kg	105	78 - 128	
1,3-Dichlorobenzene	30.0	31.8		ug/Kg	106	79 - 119	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-174012/2-A

Matrix: Solid

Analysis Batch: 173956

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 174012

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
4-Isopropyltoluene	30.0	32.8		ug/Kg		109	78 - 126
1,4-Dichlorobenzene	30.0	31.5		ug/Kg		105	79 - 117
n-Butylbenzene	30.0	30.9		ug/Kg		103	78 - 128
1,2-Dichlorobenzene	30.0	32.2		ug/Kg		107	79 - 117
1,2-Dibromo-3-Chloropropane	30.0	31.9		ug/Kg		106	53 - 132
1,2,4-Trichlorobenzene	30.0	33.9		ug/Kg		113	61 - 130
1,2,3-Trichlorobenzene	30.0	34.2		ug/Kg		114	61 - 130
2-Chloroethyl vinyl ether	30.0	29.1		ug/Kg		97	60 - 150
Hexachloro-1,3-butadiene	30.0	30.7		ug/Kg		102	68 - 134
4-Methyl-2-pentanone	120	130		ug/Kg		108	45 - 145
Naphthalene	30.0	32.3		ug/Kg		108	14 - 170
Methyl tert-butyl ether	30.0	34.5		ug/Kg		115	65 - 125
2-Hexanone	120	139		ug/Kg		116	45 - 145
trans-1,4-Dichloro-2-butene	30.0	30.8		ug/Kg		103	42 - 160

Surrogate	LCS		Limits
	LCS	%Recovery	Qualifier
Toluene-d8 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	97		70 - 120
Dibromofluoromethane (Surr)	101		75 - 132
Trifluorotoluene (Surr)	96		65 - 140
1,2-Dichloroethane-d4 (Surr)	100		71 - 136

Lab Sample ID: LCSD 580-174012/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 173956

Prep Batch: 174012

Analyte	Spike Added	LCSD		Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
Dichlorodifluoromethane	30.0	29.7		ug/Kg		99	38 - 150	1	26
Chloromethane	30.0	29.7		ug/Kg		99	55 - 136	0	26
Vinyl chloride	30.0	27.4		ug/Kg		91	67 - 131	3	22
Bromomethane	30.0	31.9		ug/Kg		106	57 - 148	0	29
Chloroethane	30.0	30.7		ug/Kg		102	48 - 167	1	53
Trichlorofluoromethane	30.0	30.9		ug/Kg		103	47 - 165	2	54
1,1-Dichloroethene	30.0	30.7		ug/Kg		102	70 - 133	0	23
Methylene Chloride	30.0	32.7		ug/Kg		109	57 - 146	1	21
trans-1,2-Dichloroethene	30.0	32.2		ug/Kg		107	76 - 131	1	18
1,1-Dichloroethane	30.0	31.6		ug/Kg		105	70 - 128	0	21
2,2-Dichloropropane	30.0	31.3		ug/Kg		104	56 - 144	2	21
cis-1,2-Dichloroethene	30.0	31.2		ug/Kg		104	70 - 130	3	19
Bromochloromethane	30.0	32.6		ug/Kg		109	78 - 123	1	19
Chloroform	30.0	31.3		ug/Kg		104	78 - 125	1	17
1,1,1-Trichloroethane	30.0	30.9		ug/Kg		103	63 - 135	2	20
Acrolein	178	217		ug/Kg		122	10 - 125	1	30
Carbon tetrachloride	30.0	31.2		ug/Kg		104	59 - 145	2	19
1,1-Dichloropropene	30.0	32.5		ug/Kg		108	77 - 125	0	16
1,1,2-Trichloro-1,2,2-trifluoroethane	30.0	31.5		ug/Kg		105	66 - 163	4	30
Benzene	30.0	30.8		ug/Kg		103	70 - 128	1	19

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-174012/3-A

Matrix: Solid

Analysis Batch: 173956

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 174012

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Added	Result	Qualifier							
1,2-Dichloroethane	30.0	31.2		ug/Kg	104	71 - 128	2	18		
Iodomethane	30.0	31.3		ug/Kg	104	44 - 148	1	30		
Carbon disulfide	30.0	31.6		ug/Kg	105	45 - 160	2	30		
Trichloroethene	30.0	31.6		ug/Kg	105	83 - 124	1	17		
1,2-Dichloropropane	30.0	31.3		ug/Kg	104	76 - 161	2	15		
Acetone	120	120		ug/Kg	100	20 - 160	2	30		
Dibromomethane	30.0	32.7		ug/Kg	109	78 - 126	0	18		
Bromodichloromethane	30.0	30.6		ug/Kg	102	58 - 133	4	19		
cis-1,3-Dichloropropene	30.0	33.7		ug/Kg	112	69 - 129	3	19		
Toluene	30.0	31.8		ug/Kg	106	75 - 126	0	19		
trans-1,3-Dichloropropene	30.0	30.5		ug/Kg	102	72 - 129	5	20		
1,1,2-Trichloroethane	30.0	33.3		ug/Kg	111	77 - 124	2	18		
Acrylonitrile	300	328		ug/Kg	109	74 - 117	2	30		
Tetrachloroethene	30.0	27.0		ug/Kg	90	56 - 155	2	27		
1,3-Dichloropropane	30.0	31.8		ug/Kg	106	77 - 123	3	19		
Chlorodibromomethane	30.0	32.5		ug/Kg	108	42 - 129	2	23		
1,2-Dibromoethane	30.0	32.9		ug/Kg	110	69 - 126	4	21		
Chlorobenzene	30.0	30.8		ug/Kg	103	75 - 120	3	21		
Vinyl acetate	60.5	65.8		ug/Kg	109	19 - 144	5	30		
Ethylbenzene	30.0	34.0		ug/Kg	113	78 - 126	2	23		
1,1,1,2-Tetrachloroethane	30.0	32.8		ug/Kg	109	72 - 123	1	20		
1,1,2,2-Tetrachloroethane	30.0	34.6		ug/Kg	115	73 - 125	2	22		
2-Butanone	120	132		ug/Kg	110	30 - 160	1	30		
m-Xylene & p-Xylene	30.0	33.0		ug/Kg	110	78 - 126	1	23		
o-Xylene	30.0	34.4		ug/Kg	115	77 - 127	2	22		
Styrene	30.0	31.6		ug/Kg	105	79 - 127	0	21		
Bromoform	30.0	31.8		ug/Kg	106	50 - 124	2	25		
Isopropylbenzene	30.0	31.3		ug/Kg	104	79 - 127	1	20		
Bromobenzene	30.0	31.1		ug/Kg	104	80 - 120	4	19		
N-Propylbenzene	30.0	30.7		ug/Kg	102	81 - 127	1	20		
1,2,3-Trichloropropane	30.0	34.0		ug/Kg	113	77 - 123	0	23		
2-Chlorotoluene	30.0	30.4		ug/Kg	101	79 - 122	1	18		
1,3,5-Trimethylbenzene	30.0	29.8		ug/Kg	99	80 - 125	4	18		
4-Chlorotoluene	30.0	29.0		ug/Kg	97	80 - 122	3	18		
tert-Butylbenzene	30.0	28.7		ug/Kg	96	71 - 136	5	27		
1,2,4-Trimethylbenzene	30.0	30.3		ug/Kg	101	79 - 124	2	18		
sec-Butylbenzene	30.0	30.6		ug/Kg	102	78 - 128	3	17		
1,3-Dichlorobenzene	30.0	31.2		ug/Kg	104	79 - 119	2	17		
4-Isopropyltoluene	30.0	31.8		ug/Kg	106	78 - 126	3	18		
1,4-Dichlorobenzene	30.0	30.8		ug/Kg	103	79 - 117	2	18		
n-Butylbenzene	30.0	30.4		ug/Kg	101	78 - 128	2	17		
1,2-Dichlorobenzene	30.0	31.7		ug/Kg	106	79 - 117	2	17		
1,2-Dibromo-3-Chloropropane	30.0	32.2		ug/Kg	107	53 - 132	1	27		
1,2,4-Trichlorobenzene	30.0	33.3		ug/Kg	111	61 - 130	2	22		
1,2,3-Trichlorobenzene	30.0	33.5		ug/Kg	112	61 - 130	2	23		
2-Chloroethyl vinyl ether	30.0	28.8		ug/Kg	96	60 - 150	1	30		
Hexachloro-1,3-butadiene	30.0	29.6		ug/Kg	99	68 - 134	4	21		
4-Methyl-2-pentanone	120	137		ug/Kg	114	45 - 145	6	30		

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-174012/3-A

Matrix: Solid

Analysis Batch: 173956

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 174012

Analyte	Spike Added	LCSD		Unit	D	%Rec.		RPD	Limit
		Result	Qualifier			%Rec.	Limits		
Naphthalene	30.0	32.6		ug/Kg		109	14 - 170	1	50
Methyl tert-butyl ether	30.0	35.0		ug/Kg		117	65 - 125	2	30
2-Hexanone	120	144		ug/Kg		120	45 - 145	4	30
trans-1,4-Dichloro-2-butene	30.0	30.7		ug/Kg		102	42 - 160	0	30

Surrogate	LCSD %Recovery	LCSD		Limits
		LCSD	Qualifier	
Toluene-d8 (Surr)	103			80 - 120
4-Bromofluorobenzene (Surr)	98			70 - 120
Dibromofluoromethane (Surr)	102			75 - 132
Trifluorotoluene (Surr)	100			65 - 140
1,2-Dichloroethane-d4 (Surr)	100			71 - 136

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-172794/1-A

Matrix: Water

Analysis Batch: 173503

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 172794

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	ND		0.60	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Bis(2-chloroethyl)ether	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
2-Chlorophenol	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
1,3-Dichlorobenzene	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
1,4-Dichlorobenzene	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Benzyl alcohol	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
1,2-Dichlorobenzene	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
2-Methylphenol	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
2,2'-oxybis[1-chloropropane]	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
3 & 4 Methylphenol	ND		0.80	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
N-Nitrosodi-n-propylamine	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Hexachloroethane	ND		0.60	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Nitrobenzene	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Iso phorone	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
2-Nitrophenol	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
2,4-Dimethylphenol	ND		2.0	0.30	ug/L		10/15/14 13:10	10/22/14 15:19	1
Benzoic acid	ND		3.0	0.60	ug/L		10/15/14 13:10	10/22/14 15:19	1
Bis(2-chloroethoxy)methane	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
2,4-Dichlorophenol	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
1,2,4-Trichlorobenzene	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Naphthalene	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
4-Chloroaniline	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Hexachlorobutadiene	ND		0.60	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
4-Chloro-3-methylphenol	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
1-Methylnaphthalene	ND		0.060	0.030	ug/L		10/15/14 13:10	10/22/14 15:19	1
Hexachlorocyclopentadiene	ND		2.0	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
2,4,6-Trichlorophenol	ND		0.60	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
2,4,5-Trichlorophenol	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-172794/1-A

Matrix: Water

Analysis Batch: 173503

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 172794

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		0.060	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
2-Nitroaniline	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Dimethyl phthalate	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Acenaphthylene	ND		0.080	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
2,6-Dinitrotoluene	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
3-Nitroaniline	ND		0.40	0.12	ug/L		10/15/14 13:10	10/22/14 15:19	1
Acenaphthene	ND		0.10	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
2,4-Dinitrophenol	ND		5.0	1.0	ug/L		10/15/14 13:10	10/22/14 15:19	1
4-Nitrophenol	ND		3.0	1.0	ug/L		10/15/14 13:10	10/22/14 15:19	1
Dibenzofuran	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
2,4-Dinitrotoluene	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Diethyl phthalate	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
4-Chlorophenyl phenyl ether	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Fluorene	ND		0.060	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
4-Nitroaniline	ND		0.60	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
4,6-Dinitro-2-methylphenol	ND		4.0	1.0	ug/L		10/15/14 13:10	10/22/14 15:19	1
N-Nitrosodiphenylamine	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
4-Bromophenyl phenyl ether	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Hexachlorobenzene	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Pentachlorophenol	ND		0.70	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Phenanthrene	ND		0.080	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
Anthracene	ND		0.040	0.010	ug/L		10/15/14 13:10	10/22/14 15:19	1
Carbazole	ND		0.40	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Di-n-butyl phthalate	ND		0.40	0.13	ug/L		10/15/14 13:10	10/22/14 15:19	1
Fluoranthene	ND		0.050	0.013	ug/L		10/15/14 13:10	10/22/14 15:19	1
Pyrene	ND		0.060	0.013	ug/L		10/15/14 13:10	10/22/14 15:19	1
Butyl benzyl phthalate	ND		0.60	0.20	ug/L		10/15/14 13:10	10/22/14 15:19	1
3,3'-Dichlorobenzidine	ND		2.0	0.10	ug/L		10/15/14 13:10	10/22/14 15:19	1
Benzo[a]anthracene	ND		0.060	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
Chrysene	ND		0.040	0.013	ug/L		10/15/14 13:10	10/22/14 15:19	1
Bis(2-ethylhexyl) phthalate	17.1		3.0	1.2	ug/L		10/15/14 13:10	10/22/14 15:19	1
Di-n-octyl phthalate	ND		0.40	0.18	ug/L		10/15/14 13:10	10/22/14 15:19	1
Benzo[b]fluoranthene	ND		0.080	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
Benzo[k]fluoranthene	ND		0.060	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
Benzo[a]pyrene	ND		0.040	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
Indeno[1,2,3-cd]pyrene	ND		0.060	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
Dibenz(a,h)anthracene	ND		0.060	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
Benzo[g,h,i]perylene	ND		0.060	0.020	ug/L		10/15/14 13:10	10/22/14 15:19	1
N-Nitrosodimethylamine	ND		2.0	0.20	ug/L		10/15/14 13:10	10/22/14 15:19	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	69		30 - 134	10/15/14 13:10	10/22/14 15:19	1
Phenol-d5	75		52 - 120	10/15/14 13:10	10/22/14 15:19	1
2,4,6-Tribromophenol	88		44 - 125	10/15/14 13:10	10/22/14 15:19	1
Nitrobenzene-d5	83		59 - 120	10/15/14 13:10	10/22/14 15:19	1
2-Fluorobiphenyl	77		50 - 120	10/15/14 13:10	10/22/14 15:19	1
Terphenyl-d14	102		64 - 150	10/15/14 13:10	10/22/14 15:19	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-172794/2-A

Matrix: Water

Analysis Batch: 173503

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 172794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	2.00	1.82		ug/L	91	53 - 130	
Bis(2-chloroethyl)ether	2.00	1.73		ug/L	87	55 - 125	
2-Chlorophenol	2.00	1.78		ug/L	89	57 - 125	
1,3-Dichlorobenzene	2.00	1.23		ug/L	61	40 - 125	
1,4-Dichlorobenzene	2.00	1.27		ug/L	63	40 - 125	
Benzyl alcohol	2.00	1.83		ug/L	92	41 - 144	
1,2-Dichlorobenzene	2.00	1.38		ug/L	69	44 - 125	
2-Methylphenol	2.00	1.80		ug/L	90	60 - 130	
2,2'-oxybis[1-chloropropane]	2.00	1.61		ug/L	80	44 - 130	
3 & 4 Methylphenol	2.00	1.91		ug/L	96	60 - 130	
N-Nitrosodi-n-propylamine	2.00	1.76		ug/L	88	60 - 120	
Hexachloroethane	2.00	1.11		ug/L	55	30 - 125	
Nitrobenzene	2.00	1.75		ug/L	87	62 - 125	
Isophorone	2.00	1.90		ug/L	95	64 - 125	
2-Nitrophenol	2.00	1.88		ug/L	94	55 - 140	
2,4-Dimethylphenol	2.00	1.65 J		ug/L	83	30 - 135	
Benzoic acid	4.00	2.22 J		ug/L	56	20 - 144	
Bis(2-chloroethoxy)methane	2.00	1.81		ug/L	91	59 - 125	
2,4-Dichlorophenol	2.00	1.92		ug/L	96	50 - 140	
1,2,4-Trichlorobenzene	2.00	1.43		ug/L	71	40 - 125	
Naphthalene	2.00	1.56		ug/L	78	56 - 125	
4-Chloroaniline	2.00	1.43		ug/L	71	20 - 150	
Hexachlorobutadiene	2.00	1.30		ug/L	65	25 - 125	
4-Chloro-3-methylphenol	2.00	1.86		ug/L	93	65 - 145	
2-Methylnaphthalene	2.00	1.56		ug/L	78	56 - 125	
1-Methylnaphthalene	2.00	1.66		ug/L	83	54 - 125	
Hexachlorocyclopentadiene	2.00	1.04 J		ug/L	52	20 - 125	
2,4,6-Trichlorophenol	2.00	1.84		ug/L	92	55 - 140	
2,4,5-Trichlorophenol	2.00	1.92		ug/L	96	66 - 130	
2-Chloronaphthalene	2.00	1.68		ug/L	84	55 - 125	
2-Nitroaniline	2.00	2.15		ug/L	107	52 - 140	
Dimethyl phthalate	2.00	1.96		ug/L	98	65 - 155	
Acenaphthylene	2.00	1.88		ug/L	94	62 - 125	
2,6-Dinitrotoluene	2.00	1.82		ug/L	91	67 - 134	
3-Nitroaniline	2.00	1.60		ug/L	80	22 - 124	
Acenaphthene	2.00	1.74		ug/L	87	63 - 125	
2,4-Dinitrophenol	4.00	2.91 J		ug/L	73	24 - 146	
4-Nitrophenol	4.00	3.76		ug/L	94	35 - 153	
Dibenzofuran	2.00	1.84		ug/L	92	60 - 125	
2,4-Dinitrotoluene	2.00	1.99		ug/L	100	73 - 126	
Diethyl phthalate	2.00	2.03		ug/L	102	60 - 150	
4-Chlorophenyl phenyl ether	2.00	2.07		ug/L	103	59 - 125	
Fluorene	2.00	1.87		ug/L	93	69 - 125	
4-Nitroaniline	2.00	1.62		ug/L	81	49 - 125	
4,6-Dinitro-2-methylphenol	4.00	3.24 J		ug/L	81	50 - 136	
N-Nitrosodiphenylamine	2.00	1.73		ug/L	87	40 - 135	
4-Bromophenyl phenyl ether	2.00	2.16		ug/L	108	62 - 132	
Hexachlorobenzene	2.00	1.93		ug/L	96	61 - 125	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-172794/2-A

Matrix: Water

Analysis Batch: 173503

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 172794

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Pentachlorophenol	4.00	2.55		ug/L		64	20 - 145
Phenanthrene	2.00	1.88		ug/L		94	70 - 125
Anthracene	2.00	1.75		ug/L		88	50 - 125
Carbazole	2.00	2.00		ug/L		100	75 - 142
Di-n-butyl phthalate	2.00	2.07		ug/L		104	55 - 167
Fluoranthene	2.00	2.01		ug/L		100	70 - 145
Pyrene	2.00	1.96		ug/L		98	70 - 133
Butyl benzyl phthalate	2.00	2.08		ug/L		104	60 - 167
3,3'-Dichlorobenzidine	4.00	3.32		ug/L		83	20 - 175
Benzo[a]anthracene	2.00	1.91		ug/L		96	65 - 125
Chrysene	2.00	1.81		ug/L		91	70 - 125
Bis(2-ethylhexyl) phthalate	2.00	1.99 J		ug/L		99	70 - 185
Di-n-octyl phthalate	2.00	1.81		ug/L		90	55 - 150
Benzo[b]fluoranthene	2.00	1.79		ug/L		90	70 - 129
Benzo[k]fluoranthene	2.00	1.82		ug/L		91	70 - 123
Benzo[a]pyrene	2.00	1.84		ug/L		92	45 - 125
Indeno[1,2,3-cd]pyrene	2.00	1.94		ug/L		97	70 - 136
Dibenz(a,h)anthracene	2.00	1.90		ug/L		95	69 - 154
Benzo[g,h,i]perylene	2.00	1.86		ug/L		93	65 - 153
N-Nitrosodimethylamine	2.00	1.85 J		ug/L		93	33 - 143

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
2-Fluorophenol	70		30 - 134
Phenol-d5	76		52 - 120
2,4,6-Tribromophenol	101		44 - 125
Nitrobenzene-d5	92		59 - 120
2-Fluorobiphenyl	83		50 - 120
Terphenyl-d14	100		64 - 150

Lab Sample ID: LCSD 580-172794/3-A

Matrix: Water

Analysis Batch: 173503

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 172794

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Phenol	2.00	1.76		ug/L		88	53 - 130	4	20
Bis(2-chloroethyl)ether	2.00	1.72		ug/L		86	55 - 125	1	20
2-Chlorophenol	2.00	1.82		ug/L		91	57 - 125	2	20
1,3-Dichlorobenzene	2.00	1.13		ug/L		56	40 - 125	8	20
1,4-Dichlorobenzene	2.00	1.15		ug/L		58	40 - 125	10	20
Benzyl alcohol	2.00	2.09		ug/L		105	41 - 144	13	20
1,2-Dichlorobenzene	2.00	1.24		ug/L		62	44 - 125	11	20
2-Methylphenol	2.00	1.77		ug/L		89	60 - 130	1	20
2,2'-oxybis[1-chloropropane]	2.00	1.59		ug/L		80	44 - 130	1	20
3 & 4 Methylphenol	2.00	1.91		ug/L		95	60 - 130	0	20
N-Nitrosodi-n-propylamine	2.00	1.94		ug/L		97	60 - 120	10	20
Hexachloroethane	2.00	1.05		ug/L		53	30 - 125	5	20
Nitrobenzene	2.00	1.77		ug/L		88	62 - 125	1	20
Isophorone	2.00	1.92		ug/L		96	64 - 125	1	20

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-172794/3-A

Matrix: Water

Analysis Batch: 173503

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 172794

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Added	Result	Qualifier							
2-Nitrophenol	2.00	1.94		ug/L		97	55 - 140	3	20	
2,4-Dimethylphenol	2.00	1.39	J	ug/L		69	30 - 135	17	20	
Benzoic acid	4.00	3.16	*	ug/L		79	20 - 144	35	20	
Bis(2-chloroethoxy)methane	2.00	1.87		ug/L		93	59 - 125	3	20	
2,4-Dichlorophenol	2.00	1.95		ug/L		98	50 - 140	2	20	
1,2,4-Trichlorobenzene	2.00	1.28		ug/L		64	40 - 125	11	20	
Naphthalene	2.00	1.52		ug/L		76	56 - 125	3	20	
4-Chloroaniline	2.00	0.564	*	ug/L		28	20 - 150	87	20	
Hexachlorobutadiene	2.00	1.16		ug/L		58	25 - 125	12	20	
4-Chloro-3-methylphenol	2.00	1.85		ug/L		92	65 - 145	1	20	
2-Methylnaphthalene	2.00	1.45		ug/L		73	56 - 125	7	20	
1-Methylnaphthalene	2.00	1.55		ug/L		78	54 - 125	7	20	
Hexachlorocyclopentadiene	2.00	1.02	J	ug/L		51	20 - 125	2	20	
2,4,6-Trichlorophenol	2.00	1.72		ug/L		86	55 - 140	7	20	
2,4,5-Trichlorophenol	2.00	1.77		ug/L		88	66 - 130	8	20	
2-Chloronaphthalene	2.00	1.47		ug/L		74	55 - 125	13	20	
2-Nitroaniline	2.00	1.91		ug/L		95	52 - 140	12	20	
Dimethyl phthalate	2.00	1.83		ug/L		91	65 - 155	7	20	
Acenaphthylene	2.00	1.73		ug/L		87	62 - 125	8	20	
2,6-Dinitrotoluene	2.00	1.85		ug/L		93	67 - 134	2	20	
3-Nitroaniline	2.00	1.38		ug/L		69	22 - 124	15	20	
Acenaphthene	2.00	1.58		ug/L		79	63 - 125	9	20	
2,4-Dinitrophenol	4.00	2.83	J	ug/L		71	24 - 146	3	20	
4-Nitrophenol	4.00	4.57		ug/L		114	35 - 153	20	20	
Dibenzofuran	2.00	1.69		ug/L		85	60 - 125	8	20	
2,4-Dinitrotoluene	2.00	1.85		ug/L		92	73 - 126	8	20	
Diethyl phthalate	2.00	2.05		ug/L		103	60 - 150	1	20	
4-Chlorophenyl phenyl ether	2.00	1.79		ug/L		90	59 - 125	14	20	
Fluorene	2.00	1.76		ug/L		88	69 - 125	6	20	
4-Nitroaniline	2.00	1.62		ug/L		81	49 - 125	0	20	
4,6-Dinitro-2-methylphenol	4.00	3.40	J	ug/L		85	50 - 136	5	20	
N-Nitrosodiphenylamine	2.00	1.74		ug/L		87	40 - 135	1	20	
4-Bromophenyl phenyl ether	2.00	2.05		ug/L		103	62 - 132	5	20	
Hexachlorobenzene	2.00	1.91		ug/L		96	61 - 125	1	20	
Pentachlorophenol	4.00	2.03	*	ug/L		51	20 - 145	23	20	
Phenanthrene	2.00	1.82		ug/L		91	70 - 125	3	20	
Anthracene	2.00	1.70		ug/L		85	50 - 125	3	20	
Carbazole	2.00	1.90		ug/L		95	75 - 142	5	20	
Di-n-butyl phthalate	2.00	2.07		ug/L		103	55 - 167	0	20	
Fluoranthene	2.00	2.00		ug/L		100	70 - 145	0	20	
Pyrene	2.00	1.91		ug/L		95	70 - 133	3	20	
Butyl benzyl phthalate	2.00	1.95		ug/L		97	60 - 167	6	20	
3,3'-Dichlorobenzidine	4.00	2.92		ug/L		73	20 - 175	13	20	
Benzo[a]anthracene	2.00	1.89		ug/L		94	65 - 125	1	20	
Chrysene	2.00	1.78		ug/L		89	70 - 125	2	20	
Bis(2-ethylhexyl) phthalate	2.00	2.55	J *	ug/L		128	70 - 185	25	20	
Di-n-octyl phthalate	2.00	1.86		ug/L		93	55 - 150	3	20	
Benzo[b]fluoranthene	2.00	1.92		ug/L		96	70 - 129	7	20	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-172794/3-A

Matrix: Water

Analysis Batch: 173503

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 172794

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPL		
Benzo[k]fluoranthene	2.00	1.87		ug/L	93	70 - 123	2	20		
Benzo[a]pyrene	2.00	1.83		ug/L	92	45 - 125	0	20		
Indeno[1,2,3-cd]pyrene	2.00	2.01		ug/L	101	70 - 136	3	20		
Dibenz(a,h)anthracene	2.00	2.03		ug/L	102	69 - 154	6	20		
Benzo[g,h,i]perylene	2.00	1.98		ug/L	99	65 - 153	6	20		
N-Nitrosodimethylamine	2.00	1.83	J	ug/L	92	33 - 143	1	20		

Surrogate	LCSD		Limits
	LCSD	%Recovery	Qualifier
2-Fluorophenol	74		30 - 134
Phenol-d5	81		52 - 120
2,4,6-Tribromophenol	99		44 - 125
Nitrobenzene-d5	83		59 - 120
2-Fluorobiphenyl	80		50 - 120
Terphenyl-d14	96		64 - 150

Lab Sample ID: MB 580-172868/1-A

Matrix: Solid

Analysis Batch: 172999

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 172868

Analyte	MB		RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed		
Phenol	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
Bis(2-chloroethyl)ether	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
2-Chlorophenol	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
1,3-Dichlorobenzene	ND		5.0	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
1,4-Dichlorobenzene	ND		5.0	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
Benzyl alcohol	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
1,2-Dichlorobenzene	ND		5.5	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
2-Methylphenol	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
2,2'-oxybis[1-chloropropane]	ND		25	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
3 & 4 Methylphenol	ND		20	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
Hexachloroethane	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
Nitrobenzene	ND		10	3.4	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
Isophorone	ND		10	0.50	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
2-Nitrophenol	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
2,4-Dimethylphenol	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
Benzoic acid	ND		250	75	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
Bis(2-chloroethoxy)methane	ND		10	0.50	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
2,4-Dichlorophenol	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
1,2,4-Trichlorobenzene	ND		5.0	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
Naphthalene	ND		2.0	0.50	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
4-Chloroaniline	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
Hexachlorobutadiene	ND		5.0	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
4-Chloro-3-methylphenol	ND		10	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
2-Methylnaphthalene	ND		2.0	0.50	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
1-Methylnaphthalene	ND		3.0	0.50	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
Hexachlorocyclopentadiene	ND		10	1.0	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	
2,4,6-Trichlorophenol	ND		15	1.5	ug/Kg	10/16/14 09:52	10/17/14 14:31		1	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-172868/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 172999

Prep Batch: 172868

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2-Chloronaphthalene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2-Nitroaniline	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Dimethyl phthalate	ND		10	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Acenaphthylene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2,6-Dinitrotoluene	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
3-Nitroaniline	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Acenaphthene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2,4-Dinitrophenol	ND		100	20	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
4-Nitrophenol	ND ^		100	25	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Dibenzofuran	ND		10	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2,4-Dinitrotoluene	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Diethyl phthalate	ND		20	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
4-Chlorophenyl phenyl ether	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Fluorene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
4-Nitroaniline	ND		10	2.0	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
4,6-Dinitro-2-methylphenol	ND		100	10	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
N-Nitrosodimethylamine	ND		5.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
4-Bromophenyl phenyl ether	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Hexachlorobenzene	ND		5.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Pentachlorophenol	ND		20	2.0	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Phenanthrene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Anthracene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Carbazole	ND		10	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Di-n-butyl phthalate	7.13 J		50	5.0	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Fluoranthene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Pyrene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Butyl benzyl phthalate	6.05 J		20	5.0	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
3,3'-Dichlorobenzidine	ND		20	3.0	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Benzo[a]anthracene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Chrysene	ND		2.5	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Bis(2-ethylhexyl) phthalate	6.88 J		60	5.0	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Di-n-octyl phthalate	ND		50	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Benzo[b]fluoranthene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Benzo[k]fluoranthene	ND		2.5	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Benzo[a]pyrene	ND		3.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Indeno[1,2,3-cd]pyrene	ND		4.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Dibenz(a,h)anthracene	ND		4.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Benzo[g,h,i]perylene	ND		2.5	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
N-Nitrosodimethylamine	ND		100	25	ug/Kg		10/16/14 09:52	10/17/14 14:31	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	60		36 - 145		10/16/14 09:52	10/17/14 14:31
Phenol-d5	65		38 - 149		10/16/14 09:52	10/17/14 14:31
2,4,6-Tribromophenol	73		28 - 143		10/16/14 09:52	10/17/14 14:31
Nitrobenzene-d5	65		38 - 141		10/16/14 09:52	10/17/14 14:31
2-Fluorobiphenyl	66		42 - 140		10/16/14 09:52	10/17/14 14:31
Terphenyl-d14	76		42 - 151		10/16/14 09:52	10/17/14 14:31

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-172868/2-A

Matrix: Solid

Analysis Batch: 172999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 172868

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	100	61.6	*	ug/Kg	62	63 - 111	
Bis(2-chloroethyl)ether	100	52.7	*	ug/Kg	53	62 - 110	
2-Chlorophenol	100	61.5	*	ug/Kg	61	68 - 117	
1,3-Dichlorobenzene	100	49.4	*	ug/Kg	49	64 - 111	
1,4-Dichlorobenzene	100	49.4	*	ug/Kg	49	65 - 110	
Benzyl alcohol	100	59.0		ug/Kg	59	55 - 123	
1,2-Dichlorobenzene	100	48.2	*	ug/Kg	48	64 - 112	
2-Methylphenol	100	66.4	*	ug/Kg	66	71 - 116	
2,2'-oxybis[1-chloropropane]	100	48.0		ug/Kg	48	41 - 126	
3 & 4 Methylphenol	100	62.3	*	ug/Kg	62	70 - 116	
N-Nitrosodi-n-propylamine	100	58.3	*	ug/Kg	58	62 - 116	
Hexachloroethane	100	52.6	*	ug/Kg	53	62 - 120	
Nitrobenzene	100	58.2	*	ug/Kg	58	64 - 118	
Isophorone	100	61.7	*	ug/Kg	62	67 - 119	
2-Nitrophenol	100	59.9	*	ug/Kg	60	67 - 127	
2,4-Dimethylphenol	100	68.2		ug/Kg	68	54 - 139	
Benzoic acid	200	129	J	ug/Kg	65	29 - 158	
Bis(2-chloroethoxy)methane	100	61.7	*	ug/Kg	62	69 - 107	
2,4-Dichlorophenol	100	72.8		ug/Kg	73	68 - 125	
1,2,4-Trichlorobenzene	100	55.4	*	ug/Kg	55	66 - 115	
Naphthalene	100	54.3	*	ug/Kg	54	62 - 112	
4-Chloroaniline	100	36.5		ug/Kg	36	20 - 103	
Hexachlorobutadiene	100	58.6	*	ug/Kg	59	65 - 116	
4-Chloro-3-methylphenol	100	70.8		ug/Kg	71	69 - 121	
2-Methylnaphthalene	100	56.4	*	ug/Kg	56	64 - 119	
1-Methylnaphthalene	100	57.7	*	ug/Kg	58	62 - 118	
Hexachlorocyclopentadiene	100	55.4		ug/Kg	55	46 - 131	
2,4,6-Trichlorophenol	100	61.5		ug/Kg	62	62 - 133	
2,4,5-Trichlorophenol	100	66.7		ug/Kg	67	57 - 133	
2-Chloronaphthalene	100	54.8	*	ug/Kg	55	68 - 112	
2-Nitroaniline	100	65.6		ug/Kg	66	64 - 112	
Dimethyl phthalate	100	68.0	*	ug/Kg	68	78 - 117	
Acenaphthylene	100	61.7	*	ug/Kg	62	68 - 120	
2,6-Dinitrotoluene	100	65.6		ug/Kg	66	66 - 123	
3-Nitroaniline	100	49.0		ug/Kg	49	27 - 103	
Acenaphthene	100	54.3	*	ug/Kg	54	68 - 116	
2,4-Dinitrophenol	200	128		ug/Kg	64	20 - 141	
4-Nitrophenol	200	258	^	ug/Kg	129	20 - 165	
Dibenzofuran	100	60.1	*	ug/Kg	60	72 - 109	
2,4-Dinitrotoluene	100	64.1	*	ug/Kg	64	68 - 121	
Diethyl phthalate	100	71.8	*	ug/Kg	72	73 - 116	
4-Chlorophenyl phenyl ether	100	67.9	*	ug/Kg	68	75 - 108	
Fluorene	100	60.4	*	ug/Kg	60	70 - 121	
4-Nitroaniline	100	60.2		ug/Kg	60	58 - 108	
4,6-Dinitro-2-methylphenol	200	129		ug/Kg	65	48 - 130	
N-Nitrosodiphenylamine	100	62.7	*	ug/Kg	63	73 - 115	
4-Bromophenyl phenyl ether	100	67.9		ug/Kg	68	68 - 122	
Hexachlorobenzene	100	64.2	*	ug/Kg	64	66 - 117	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-172868/2-A

Matrix: Solid

Analysis Batch: 172999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 172868

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Pentachlorophenol	200	127		ug/Kg		64	45 - 117
Phenanthrene	100	63.1	*	ug/Kg		63	73 - 106
Anthracene	100	61.6	*	ug/Kg		62	73 - 116
Carbazole	100	69.5	*	ug/Kg		70	76 - 135
Di-n-butyl phthalate	100	69.7		ug/Kg		70	66 - 140
Fluoranthene	100	71.3	*	ug/Kg		71	73 - 125
Pyrene	100	65.1	*	ug/Kg		65	70 - 120
Butyl benzyl phthalate	100	74.0		ug/Kg		74	69 - 142
3,3'-Dichlorobenzidine	200	117		ug/Kg		58	20 - 103
Benzo[a]anthracene	100	68.2	*	ug/Kg		68	76 - 119
Chrysene	100	67.9	*	ug/Kg		68	75 - 114
Bis(2-ethylhexyl) phthalate	100	69.2		ug/Kg		69	62 - 144
Di-n-octyl phthalate	100	60.9	*	ug/Kg		61	65 - 141
Benzo[b]fluoranthene	100	58.4	*	ug/Kg		58	63 - 132
Benzo[k]fluoranthene	100	68.4		ug/Kg		68	63 - 119
Benzo[a]pyrene	100	67.9	*	ug/Kg		68	72 - 117
Indeno[1,2,3-cd]pyrene	100	71.9		ug/Kg		72	56 - 127
Dibenz(a,h)anthracene	100	61.7		ug/Kg		62	56 - 134
Benzo[g,h,i]perylene	100	65.1		ug/Kg		65	55 - 139
N-Nitrosodimethylamine	100	60.7	J	ug/Kg		61	38 - 133

Surrogate	LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	50		36 - 145
Phenol-d5	57		38 - 149
2,4,6-Tribromophenol	63		28 - 143
Nitrobenzene-d5	54		38 - 141
2-Fluorobiphenyl	52		42 - 140
Terphenyl-d14	65		42 - 151

Lab Sample ID: LCSD 580-172868/3-A

Matrix: Solid

Analysis Batch: 172999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 172868

Analyte	Spike Added	LCSD		Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
Phenol	100	65.5		ug/Kg		66	63 - 111	6	26
Bis(2-chloroethyl)ether	100	59.6	*	ug/Kg		60	62 - 110	12	22
2-Chlorophenol	100	66.5	*	ug/Kg		67	68 - 117	8	27
1,3-Dichlorobenzene	100	59.3	*	ug/Kg		59	64 - 111	18	30
1,4-Dichlorobenzene	100	60.4	*	ug/Kg		60	65 - 110	20	30
Benzyl alcohol	100	2.36	J *	ug/Kg		2	55 - 123	185	60
1,2-Dichlorobenzene	100	59.9	*	ug/Kg		60	64 - 112	22	30
2-Methylphenol	100	69.8	*	ug/Kg		70	71 - 116	5	25
2,2'-oxybis[1-chloropropane]	100	58.9		ug/Kg		59	41 - 126	20	57
3 & 4 Methylphenol	100	74.9		ug/Kg		75	70 - 116	18	27
N-Nitrosodi-n-propylamine	100	66.0		ug/Kg		66	62 - 116	12	28
Hexachloroethane	100	58.8	*	ug/Kg		59	62 - 120	11	30
Nitrobenzene	100	67.2		ug/Kg		67	64 - 118	14	30
Isophorone	100	68.1		ug/Kg		68	67 - 119	10	30

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-172868/3-A

Matrix: Solid

Analysis Batch: 172999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 172868

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Added	Result	Qualifier							
2-Nitrophenol	100	72.6		ug/Kg	73	67 - 127	19	30		
2,4-Dimethylphenol	100	67.4		ug/Kg	67	54 - 139	1	30		
Benzoic acid	200	121	J	ug/Kg	60	29 - 158	7	28		
Bis(2-chloroethoxy)methane	100	66.2	*	ug/Kg	66	69 - 107	7	30		
2,4-Dichlorophenol	100	70.4		ug/Kg	70	68 - 125	3	30		
1,2,4-Trichlorobenzene	100	65.1	*	ug/Kg	65	66 - 115	16	28		
Naphthalene	100	62.4		ug/Kg	62	62 - 112	14	26		
4-Chloroaniline	100	30.8		ug/Kg	31	20 - 103	17	60		
Hexachlorobutadiene	100	71.9		ug/Kg	72	65 - 116	20	30		
4-Chloro-3-methylphenol	100	68.2	*	ug/Kg	68	69 - 121	4	27		
2-Methylnaphthalene	100	65.9		ug/Kg	66	64 - 119	16	27		
1-Methylnaphthalene	100	65.9		ug/Kg	66	62 - 118	13	30		
Hexachlorocyclopentadiene	100	72.6		ug/Kg	73	46 - 131	27	29		
2,4,6-Trichlorophenol	100	59.6	*	ug/Kg	60	62 - 133	3	30		
2,4,5-Trichlorophenol	100	73.5		ug/Kg	74	57 - 133	10	30		
2-Chloronaphthalene	100	65.6	*	ug/Kg	66	68 - 112	18	25		
2-Nitroaniline	100	64.6		ug/Kg	65	64 - 112	2	22		
Dimethyl phthalate	100	70.6	*	ug/Kg	71	78 - 117	4	30		
Acenaphthylene	100	70.2		ug/Kg	70	68 - 120	13	28		
2,6-Dinitrotoluene	100	63.5	*	ug/Kg	63	66 - 123	3	30		
3-Nitroaniline	100	42.5		ug/Kg	42	27 - 103	14	33		
Acenaphthene	100	63.0	*	ug/Kg	63	68 - 116	15	27		
2,4-Dinitrophenol	200	128		ug/Kg	64	20 - 141	0	36		
4-Nitrophenol	200	257	^	ug/Kg	128	20 - 165	1	30		
Dibenzofuran	100	68.7	*	ug/Kg	69	72 - 109	13	30		
2,4-Dinitrotoluene	100	72.2		ug/Kg	72	68 - 121	12	30		
Diethyl phthalate	100	75.9		ug/Kg	76	73 - 116	6	26		
4-Chlorophenyl phenyl ether	100	74.0	*	ug/Kg	74	75 - 108	9	30		
Fluorene	100	69.6		ug/Kg	70	70 - 121	14	30		
4-Nitroaniline	100	63.1		ug/Kg	63	58 - 108	5	32		
4,6-Dinitro-2-methylphenol	200	121		ug/Kg	61	48 - 130	6	22		
N-Nitrosodiphenylamine	100	64.0	*	ug/Kg	64	73 - 115	2	30		
4-Bromophenyl phenyl ether	100	76.5		ug/Kg	76	68 - 122	12	30		
Hexachlorobenzene	100	68.9		ug/Kg	69	66 - 117	7	30		
Pentachlorophenol	200	127		ug/Kg	64	45 - 117	0	23		
Phenanthrene	100	66.5	*	ug/Kg	67	73 - 106	5	28		
Anthracene	100	63.6	*	ug/Kg	64	73 - 116	3	27		
Carbazole	100	68.7	*	ug/Kg	69	76 - 135	1	30		
Di-n-butyl phthalate	100	70.5		ug/Kg	71	66 - 140	1	30		
Fluoranthene	100	72.4	*	ug/Kg	72	73 - 125	2	30		
Pyrene	100	68.2	*	ug/Kg	68	70 - 120	5	30		
Butyl benzyl phthalate	100	73.9		ug/Kg	74	69 - 142	0	30		
3,3'-Dichlorobenzidine	200	84.7		ug/Kg	42	20 - 103	32	60		
Benzo[a]anthracene	100	68.3	*	ug/Kg	68	76 - 119	0	27		
Chrysene	100	68.6	*	ug/Kg	69	75 - 114	1	26		
Bis(2-ethylhexyl) phthalate	100	68.0		ug/Kg	68	62 - 144	2	30		
Di-n-octyl phthalate	100	62.9	*	ug/Kg	63	65 - 141	3	30		
Benzo[b]fluoranthene	100	60.8	*	ug/Kg	61	63 - 132	4	30		

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-172868/3-A

Matrix: Solid

Analysis Batch: 172999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 172868

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
Benzo[k]fluoranthene	100	67.7		ug/Kg	68	63 - 119		1	30	
Benzo[a]pyrene	100	69.0	*	ug/Kg	69	72 - 117		2	30	
Indeno[1,2,3-cd]pyrene	100	66.5		ug/Kg	67	56 - 127		8	29	
Dibenz(a,h)anthracene	100	67.7		ug/Kg	68	56 - 134		9	30	
Benzo[g,h,i]perylene	100	64.8		ug/Kg	65	55 - 139		1	28	
N-Nitrosodimethylamine	100	52.6	J	ug/Kg	53	38 - 133		14	30	

Surrogate	LCSD		Limits
	LCSD	%Recovery	Qualifier
2-Fluorophenol	58		36 - 145
Phenol-d5	62		38 - 149
2,4,6-Tribromophenol	58		28 - 143
Nitrobenzene-d5	66		38 - 141
2-Fluorobiphenyl	68		42 - 140
Terphenyl-d14	71		42 - 151

Lab Sample ID: MB 580-173001/1-A

Matrix: Solid

Analysis Batch: 173503

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
							10/17/14 11:05	10/22/14 14:03		
Phenol	ND		10	1.5	ug/Kg				10/22/14 14:03	1
Bis(2-chloroethyl)ether	ND		10	1.5	ug/Kg				10/22/14 14:03	1
2-Chlorophenol	ND		10	1.5	ug/Kg				10/22/14 14:03	1
1,3-Dichlorobenzene	ND		5.0	1.5	ug/Kg				10/22/14 14:03	1
1,4-Dichlorobenzene	ND		5.0	1.5	ug/Kg				10/22/14 14:03	1
Benzyl alcohol	ND		10	1.5	ug/Kg				10/22/14 14:03	1
1,2-Dichlorobenzene	ND		5.5	1.5	ug/Kg				10/22/14 14:03	1
2-Methylphenol	ND		10	1.5	ug/Kg				10/22/14 14:03	1
2,2'-oxybis[1-chloropropane]	ND		25	1.5	ug/Kg				10/22/14 14:03	1
3 & 4 Methylphenol	ND		20	1.5	ug/Kg				10/22/14 14:03	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/Kg				10/22/14 14:03	1
Hexachloroethane	ND		10	1.5	ug/Kg				10/22/14 14:03	1
Nitrobenzene	ND		10	3.4	ug/Kg				10/22/14 14:03	1
Isophorone	ND		10	0.50	ug/Kg				10/22/14 14:03	1
2-Nitrophenol	ND		10	1.5	ug/Kg				10/22/14 14:03	1
2,4-Dimethylphenol	ND		10	1.5	ug/Kg				10/22/14 14:03	1
Benzoic acid	ND		250	75	ug/Kg				10/22/14 14:03	1
Bis(2-chloroethoxy)methane	ND		10	0.50	ug/Kg				10/22/14 14:03	1
2,4-Dichlorophenol	ND		10	1.5	ug/Kg				10/22/14 14:03	1
1,2,4-Trichlorobenzene	ND		5.0	1.5	ug/Kg				10/22/14 14:03	1
Naphthalene	ND		2.0	0.50	ug/Kg				10/22/14 14:03	1
4-Chloroaniline	ND		10	1.5	ug/Kg				10/22/14 14:03	1
Hexachlorobutadiene	ND		5.0	1.5	ug/Kg				10/22/14 14:03	1
4-Chloro-3-methylphenol	ND		10	1.5	ug/Kg				10/22/14 14:03	1
2-Methylnaphthalene	ND		2.0	0.50	ug/Kg				10/22/14 14:03	1
1-Methylnaphthalene	ND		3.0	0.50	ug/Kg				10/22/14 14:03	1
Hexachlorocyclopentadiene	ND		10	1.0	ug/Kg				10/22/14 14:03	1
2,4,6-Trichlorophenol	ND		15	1.5	ug/Kg				10/22/14 14:03	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-173001/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 173503

Prep Batch: 173001

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifer							Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		ND		10	1.5	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
2-Chloronaphthalene	ND		ND		2.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
2-Nitroaniline	ND		ND		10	1.5	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Dimethyl phthalate	ND		ND		10	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Acenaphthylene	ND		ND		2.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
2,6-Dinitrotoluene	ND		ND		10	1.5	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
3-Nitroaniline	ND		ND		10	1.5	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Acenaphthene	ND		ND		2.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
2,4-Dinitrophenol	ND		ND		100	20	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
4-Nitrophenol	ND		ND		100	25	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Dibenzofuran	ND		ND		10	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
2,4-Dinitrotoluene	ND		ND		10	1.5	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Diethyl phthalate	5.74	J	ND		20	1.5	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
4-Chlorophenyl phenyl ether	ND		ND		10	1.5	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Fluorene	ND		ND		2.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
4-Nitroaniline	ND		ND		10	2.0	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
4,6-Dinitro-2-methylphenol	ND		ND		100	10	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
N-Nitrosodimethylamine	ND		ND		5.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
4-Bromophenyl phenyl ether	ND		ND		10	1.5	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Hexachlorobenzene	ND		ND		5.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Pentachlorophenol	ND		ND		20	2.0	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Phenanthrene	ND		ND		2.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Anthracene	ND		ND		2.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Carbazole	ND		ND		10	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Di-n-butyl phthalate	ND		ND		50	5.0	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Fluoranthene	ND		ND		2.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Pyrene	ND		ND		2.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Butyl benzyl phthalate	7.95	J	ND		20	5.0	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
3,3'-Dichlorobenzidine	ND		ND		20	3.0	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Benzo[a]anthracene	ND		ND		2.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Chrysene	ND		ND		2.5	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Bis(2-ethylhexyl) phthalate	9.29	J	ND		60	5.0	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Di-n-octyl phthalate	ND		ND		50	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Benzo[b]fluoranthene	ND		ND		2.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Benzo[k]fluoranthene	ND		ND		2.5	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Benzo[a]pyrene	ND		ND		3.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Indeno[1,2,3-cd]pyrene	ND		ND		4.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Dibenz(a,h)anthracene	ND		ND		4.0	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
Benzo[g,h,i]perylene	ND		ND		2.5	0.50	ug/Kg		10/17/14 11:05	10/22/14 14:03	1
N-Nitrosodimethylamine	ND		ND		100	25	ug/Kg		10/17/14 11:05	10/22/14 14:03	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
	Result	Qualifer							
2-Fluorophenol	69		69		36 - 145		10/17/14 11:05	10/22/14 14:03	1
Phenol-d5	73		73		38 - 149		10/17/14 11:05	10/22/14 14:03	1
2,4,6-Tribromophenol	80		80		28 - 143		10/17/14 11:05	10/22/14 14:03	1
Nitrobenzene-d5	82		82		38 - 141		10/17/14 11:05	10/22/14 14:03	1
2-Fluorobiphenyl	80		80		42 - 140		10/17/14 11:05	10/22/14 14:03	1
Terphenyl-d14	92		92		42 - 151		10/17/14 11:05	10/22/14 14:03	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-173001/2-A

Matrix: Solid

Analysis Batch: 173503

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	100	79.1		ug/Kg	79	63 - 111	
Bis(2-chloroethyl)ether	100	74.9		ug/Kg	75	62 - 110	
2-Chlorophenol	100	81.9		ug/Kg	82	68 - 117	
1,3-Dichlorobenzene	100	70.2		ug/Kg	70	64 - 111	
1,4-Dichlorobenzene	100	71.6		ug/Kg	72	65 - 110	
Benzyl alcohol	100	73.2		ug/Kg	73	55 - 123	
1,2-Dichlorobenzene	100	70.4		ug/Kg	70	64 - 112	
2-Methylphenol	100	80.8		ug/Kg	81	71 - 116	
2,2'-oxybis[1-chloropropane]	100	68.5		ug/Kg	69	41 - 126	
3 & 4 Methylphenol	100	83.0		ug/Kg	83	70 - 116	
N-Nitrosodi-n-propylamine	100	85.3		ug/Kg	85	62 - 116	
Hexachloroethane	100	75.9		ug/Kg	76	62 - 120	
Nitrobenzene	100	78.5		ug/Kg	79	64 - 118	
Isophorone	100	83.8		ug/Kg	84	67 - 119	
2-Nitrophenol	100	86.8		ug/Kg	87	67 - 127	
2,4-Dimethylphenol	100	66.0		ug/Kg	66	54 - 139	
Benzoic acid	200	107 J		ug/Kg	53	29 - 158	
Bis(2-chloroethoxy)methane	100	81.1		ug/Kg	81	69 - 107	
2,4-Dichlorophenol	100	87.5		ug/Kg	87	68 - 125	
1,2,4-Trichlorobenzene	100	75.7		ug/Kg	76	66 - 115	
Naphthalene	100	72.9		ug/Kg	73	62 - 112	
4-Chloroaniline	100	31.9		ug/Kg	32	20 - 103	
Hexachlorobutadiene	100	87.4		ug/Kg	87	65 - 116	
4-Chloro-3-methylphenol	100	83.1		ug/Kg	83	69 - 121	
2-Methylnaphthalene	100	78.2		ug/Kg	78	64 - 119	
1-Methylnaphthalene	100	76.0		ug/Kg	76	62 - 118	
Hexachlorocyclopentadiene	100	67.7		ug/Kg	68	46 - 131	
2,4,6-Trichlorophenol	100	82.6		ug/Kg	83	62 - 133	
2,4,5-Trichlorophenol	100	76.7		ug/Kg	77	57 - 133	
2-Chloronaphthalene	100	75.8		ug/Kg	76	68 - 112	
2-Nitroaniline	100	86.3		ug/Kg	86	64 - 112	
Dimethyl phthalate	100	85.5		ug/Kg	85	78 - 117	
Acenaphthylene	100	82.2		ug/Kg	82	68 - 120	
2,6-Dinitrotoluene	100	81.0		ug/Kg	81	66 - 123	
3-Nitroaniline	100	57.2		ug/Kg	57	27 - 103	
Acenaphthene	100	75.7		ug/Kg	76	68 - 116	
2,4-Dinitrophenol	200	149		ug/Kg	75	20 - 141	
4-Nitrophenol	200	176		ug/Kg	88	20 - 165	
Dibenzofuran	100	80.9		ug/Kg	81	72 - 109	
2,4-Dinitrotoluene	100	85.7		ug/Kg	86	68 - 121	
Diethyl phthalate	100	91.5		ug/Kg	92	73 - 116	
4-Chlorophenyl phenyl ether	100	86.5		ug/Kg	86	75 - 108	
Fluorene	100	80.2		ug/Kg	80	70 - 121	
4-Nitroaniline	100	74.5		ug/Kg	74	58 - 108	
4,6-Dinitro-2-methylphenol	200	163		ug/Kg	81	48 - 130	
N-Nitrosodiphenylamine	100	81.2		ug/Kg	81	73 - 115	
4-Bromophenyl phenyl ether	100	89.5		ug/Kg	90	68 - 122	
Hexachlorobenzene	100	89.7		ug/Kg	90	66 - 117	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-173001/2-A

Matrix: Solid

Analysis Batch: 173503

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Pentachlorophenol	200	126		ug/Kg		63	45 - 117
Phenanthrene	100	82.4		ug/Kg		82	73 - 106
Anthracene	100	80.1		ug/Kg		80	73 - 116
Carbazole	100	86.6		ug/Kg		87	76 - 135
Di-n-butyl phthalate	100	94.3		ug/Kg		94	66 - 140
Fluoranthene	100	95.0		ug/Kg		95	73 - 125
Pyrene	100	88.5		ug/Kg		89	70 - 120
Butyl benzyl phthalate	100	92.8		ug/Kg		93	69 - 142
3,3'-Dichlorobenzidine	200	96.9		ug/Kg		48	20 - 103
Benzo[a]anthracene	100	85.8		ug/Kg		86	76 - 119
Chrysene	100	85.6		ug/Kg		86	75 - 114
Bis(2-ethylhexyl) phthalate	100	98.0		ug/Kg		98	62 - 144
Di-n-octyl phthalate	100	86.7		ug/Kg		87	65 - 141
Benzo[b]fluoranthene	100	86.9		ug/Kg		87	63 - 132
Benzo[k]fluoranthene	100	83.2		ug/Kg		83	63 - 119
Benzo[a]pyrene	100	86.7		ug/Kg		87	72 - 117
Indeno[1,2,3-cd]pyrene	100	95.8		ug/Kg		96	56 - 127
Dibenz(a,h)anthracene	100	89.9		ug/Kg		90	56 - 134
Benzo[g,h,i]perylene	100	87.1		ug/Kg		87	55 - 139
N-Nitrosodimethylamine	100	79.3 J		ug/Kg		79	38 - 133

Surrogate	LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	75		36 - 145
Phenol-d5	77		38 - 149
2,4,6-Tribromophenol	95		28 - 143
Nitrobenzene-d5	80		38 - 141
2-Fluorobiphenyl	79		42 - 140
Terphenyl-d14	94		42 - 151

Lab Sample ID: LCSD 580-173001/3-A

Matrix: Solid

Analysis Batch: 173503

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Spike Added	LCSD		Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
Phenol	100	65.6		ug/Kg		66	63 - 111	19	26
Bis(2-chloroethyl)ether	100	70.6		ug/Kg		71	62 - 110	6	22
2-Chlorophenol	100	69.3		ug/Kg		69	68 - 117	17	27
1,3-Dichlorobenzene	100	63.5 *		ug/Kg		63	64 - 111	10	30
1,4-Dichlorobenzene	100	62.3 *		ug/Kg		62	65 - 110	14	30
Benzyl alcohol	100	74.0		ug/Kg		74	55 - 123	1	60
1,2-Dichlorobenzene	100	62.9 *		ug/Kg		63	64 - 112	11	30
2-Methylphenol	100	73.2		ug/Kg		73	71 - 116	10	25
2,2'-oxybis[1-chloropropane]	100	62.0		ug/Kg		62	41 - 126	10	57
3 & 4 Methylphenol	100	71.4		ug/Kg		71	70 - 116	15	27
N-Nitrosodi-n-propylamine	100	73.9		ug/Kg		74	62 - 116	14	28
Hexachloroethane	100	67.8		ug/Kg		68	62 - 120	11	30
Nitrobenzene	100	75.9		ug/Kg		76	64 - 118	3	30
Isophorone	100	77.6		ug/Kg		78	67 - 119	8	30

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-173001/3-A

Matrix: Solid

Analysis Batch: 173503

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Added	Result	Qualifier							
2-Nitrophenol	100	78.7		ug/Kg		79	67 - 127	10		30
2,4-Dimethylphenol	100	73.3		ug/Kg		73	54 - 139	11		30
Benzoic acid	200	114	J	ug/Kg		57	29 - 158	7		28
Bis(2-chloroethoxy)methane	100	73.2		ug/Kg		73	69 - 107	10		30
2,4-Dichlorophenol	100	77.3		ug/Kg		77	68 - 125	12		30
1,2,4-Trichlorobenzene	100	72.6		ug/Kg		73	66 - 115	4		28
Naphthalene	100	67.6		ug/Kg		68	62 - 112	8		26
4-Chloroaniline	100	32.0		ug/Kg		32	20 - 103	0		60
Hexachlorobutadiene	100	81.1		ug/Kg		81	65 - 116	8		30
4-Chloro-3-methylphenol	100	71.7		ug/Kg		72	69 - 121	15		27
2-Methylnaphthalene	100	70.9		ug/Kg		71	64 - 119	10		27
1-Methylnaphthalene	100	72.2		ug/Kg		72	62 - 118	5		30
Hexachlorocyclopentadiene	100	64.0		ug/Kg		64	46 - 131	6		29
2,4,6-Trichlorophenol	100	75.2		ug/Kg		75	62 - 133	9		30
2,4,5-Trichlorophenol	100	67.4		ug/Kg		67	57 - 133	13		30
2-Chloronaphthalene	100	70.4		ug/Kg		70	68 - 112	7		25
2-Nitroaniline	100	80.5		ug/Kg		80	64 - 112	7		22
Dimethyl phthalate	100	78.2		ug/Kg		78	78 - 117	9		30
Acenaphthylene	100	75.9		ug/Kg		76	68 - 120	8		28
2,6-Dinitrotoluene	100	75.7		ug/Kg		76	66 - 123	7		30
3-Nitroaniline	100	57.9		ug/Kg		58	27 - 103	1		33
Acenaphthene	100	69.3		ug/Kg		69	68 - 116	9		27
2,4-Dinitrophenol	200	130		ug/Kg		65	20 - 141	13		36
4-Nitrophenol	200	167		ug/Kg		84	20 - 165	5		30
Dibenzofuran	100	72.7		ug/Kg		73	72 - 109	11		30
2,4-Dinitrotoluene	100	76.4		ug/Kg		76	68 - 121	12		30
Diethyl phthalate	100	81.6		ug/Kg		82	73 - 116	11		26
4-Chlorophenyl phenyl ether	100	76.2		ug/Kg		76	75 - 108	13		30
Fluorene	100	73.5		ug/Kg		74	70 - 121	9		30
4-Nitroaniline	100	63.7		ug/Kg		64	58 - 108	16		32
4,6-Dinitro-2-methylphenol	200	137		ug/Kg		68	48 - 130	18		22
N-Nitrosodiphenylamine	100	72.7		ug/Kg		73	73 - 115	11		30
4-Bromophenyl phenyl ether	100	85.0		ug/Kg		85	68 - 122	5		30
Hexachlorobenzene	100	76.7		ug/Kg		77	66 - 117	16		30
Pentachlorophenol	200	105		ug/Kg		52	45 - 117	18		23
Phenanthrene	100	72.9		ug/Kg		73	73 - 106	12		28
Anthracene	100	71.5	*	ug/Kg		71	73 - 116	11		27
Carbazole	100	77.0		ug/Kg		77	76 - 135	12		30
Di-n-butyl phthalate	100	83.3		ug/Kg		83	66 - 140	12		30
Fluoranthene	100	80.0		ug/Kg		80	73 - 125	17		30
Pyrene	100	75.7		ug/Kg		76	70 - 120	16		30
Butyl benzyl phthalate	100	88.4		ug/Kg		88	69 - 142	5		30
3,3'-Dichlorobenzidine	200	84.5		ug/Kg		42	20 - 103	14		60
Benzo[a]anthracene	100	79.1		ug/Kg		79	76 - 119	8		27
Chrysene	100	80.4		ug/Kg		80	75 - 114	6		26
Bis(2-ethylhexyl) phthalate	100	90.0		ug/Kg		90	62 - 144	9		30
Di-n-octyl phthalate	100	74.8		ug/Kg		75	65 - 141	15		30
Benzo[b]fluoranthene	100	84.3		ug/Kg		84	63 - 132	3		30

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-173001/3-A

Matrix: Solid

Analysis Batch: 173503

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
Benzo[k]fluoranthene	100	68.6		ug/Kg		69	63 - 119	19	30	
Benzo[a]pyrene	100	80.3		ug/Kg		80	72 - 117	8	30	
Indeno[1,2,3-cd]pyrene	100	83.0		ug/Kg		83	56 - 127	14	29	
Dibenz(a,h)anthracene	100	81.1		ug/Kg		81	56 - 134	10	30	
Benzo[g,h,i]perylene	100	78.2		ug/Kg		78	55 - 139	11	28	
N-Nitrosodimethylamine	100	58.8 J		ug/Kg		59	38 - 133	30	30	

Surrogate	LCSD		Limits
	LCSD	LCSD	
2-Fluorophenol	63		36 - 145
Phenol-d5	67		38 - 149
2,4,6-Tribromophenol	83		28 - 143
Nitrobenzene-d5	75		38 - 141
2-Fluorobiphenyl	73		42 - 140
Terphenyl-d14	82		42 - 151

Lab Sample ID: 580-45906-3 MS

Matrix: Solid

Analysis Batch: 173503

Client Sample ID: CC-A-01-2014013-S

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Phenol	110 J		175	243		ug/Kg	⊗	74	63 - 111	
Bis(2-chloroethyl)ether	ND		175	142 J		ug/Kg	⊗	81	62 - 110	
2-Chlorophenol	ND		175	138 J		ug/Kg	⊗	79	68 - 117	
1,3-Dichlorobenzene	ND *		175	99.5 F1		ug/Kg	⊗	57	64 - 111	
1,4-Dichlorobenzene	ND *		175	116		ug/Kg	⊗	66	65 - 110	
Benzyl alcohol	ND		175	195		ug/Kg	⊗	111	55 - 123	
1,2-Dichlorobenzene	ND *		175	109 F1		ug/Kg	⊗	62	64 - 112	
2-Methylphenol	ND		175	150 J		ug/Kg	⊗	86	71 - 116	
2,2'-oxybis[1-chloropropane]	ND		175	74.8 J		ug/Kg	⊗	43	41 - 126	
3 & 4 Methylphenol	78 J		175	191 J F1		ug/Kg	⊗	65	70 - 116	
N-Nitrosodi-n-propylamine	ND		175	139 J		ug/Kg	⊗	79	62 - 116	
Hexachloroethane	ND		175	75.4 J F1		ug/Kg	⊗	43	62 - 120	
Nitrobenzene	ND		175	164 J		ug/Kg	⊗	94	64 - 118	
Isophorone	ND		175	174		ug/Kg	⊗	100	67 - 119	
2-Nitrophenol	ND		175	132 J		ug/Kg	⊗	75	67 - 127	
2,4-Dimethylphenol	ND		175	160 J		ug/Kg	⊗	91	54 - 139	
Benzoic acid	ND		350	ND		ug/Kg	⊗	NC	29 - 158	
Bis(2-chloroethoxy)methane	ND		175	125 J		ug/Kg	⊗	72	69 - 107	
2,4-Dichlorophenol	ND		175	149 J		ug/Kg	⊗	85	68 - 125	
1,2,4-Trichlorobenzene	ND		175	140		ug/Kg	⊗	80	66 - 115	
Naphthalene	160		175	225 F1		ug/Kg	⊗	38	62 - 112	
4-Chloroaniline	ND		175	81.9 J		ug/Kg	⊗	47	20 - 103	
Hexachlorobutadiene	ND		175	149		ug/Kg	⊗	85	65 - 116	
4-Chloro-3-methylphenol	ND		175	185		ug/Kg	⊗	106	69 - 121	
2-Methylnaphthalene	350		175	310 F1		ug/Kg	⊗	-25	64 - 119	
1-Methylnaphthalene	270		175	265 F1		ug/Kg	⊗	-5	62 - 118	
Hexachlorocyclopentadiene	ND		175	ND F1		ug/Kg	⊗	0	46 - 131	
2,4,6-Trichlorophenol	ND		175	161 J		ug/Kg	⊗	92	62 - 133	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 580-45906-3 MS

Matrix: Solid

Analysis Batch: 173503

Client Sample ID: CC-A-01-2014013-S

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier	Added	Result	Qualifier					
2,4,5-Trichlorophenol	ND		175	154	J	ug/Kg	⊗	88	57 - 133	
2-Chloronaphthalene	ND		175	131		ug/Kg	⊗	75	68 - 112	
2-Nitroaniline	ND		175	171		ug/Kg	⊗	98	64 - 112	
Dimethyl phthalate	290		175	500	F1	ug/Kg	⊗	119	78 - 117	
Acenaphthylene	ND		175	159		ug/Kg	⊗	91	68 - 120	
2,6-Dinitrotoluene	ND		175	154	J	ug/Kg	⊗	88	66 - 123	
3-Nitroaniline	ND		175	45.4	J F1	ug/Kg	⊗	26	27 - 103	
Acenaphthene	140		175	275		ug/Kg	⊗	78	68 - 116	
2,4-Dinitrophenol	ND		350	ND		ug/Kg	⊗	NC	20 - 141	
4-Nitrophenol	560	J	350	597	J F1	ug/Kg	⊗	12	20 - 165	
Dibenzofuran	100	J	175	233		ug/Kg	⊗	76	72 - 109	
2,4-Dinitrotoluene	66	J	175	194		ug/Kg	⊗	74	68 - 121	
Diethyl phthalate	ND		175	186	J	ug/Kg	⊗	106	73 - 116	
4-Chlorophenyl phenyl ether	ND		175	146	J	ug/Kg	⊗	84	75 - 108	
Fluorene	120		175	259		ug/Kg	⊗	79	70 - 121	
4-Nitroaniline	ND		175	76.4	J F1	ug/Kg	⊗	44	58 - 108	
4,6-Dinitro-2-methylphenol	ND		350	ND	F1	ug/Kg	⊗	0	48 - 130	
N-Nitrosodiphenylamine	ND		175	158		ug/Kg	⊗	90	73 - 115	
4-Bromophenyl phenyl ether	ND		175	ND	F1	ug/Kg	⊗	0	68 - 122	
Hexachlorobenzene	ND		175	156		ug/Kg	⊗	89	66 - 117	
Pentachlorophenol	ND		350	386		ug/Kg	⊗	110	45 - 117	
Phenanthrene	520		175	704		ug/Kg	⊗	103	73 - 106	
Anthracene	90	*	175	234		ug/Kg	⊗	83	73 - 116	
Carbazole	110	J	175	249		ug/Kg	⊗	78	76 - 135	
Di-n-butyl phthalate	220	J	175	368	J	ug/Kg	⊗	87	66 - 140	
Fluoranthene	940		175	1220	4	ug/Kg	⊗	163	73 - 125	
Pyrene	930		175	1160	4	ug/Kg	⊗	134	70 - 120	
Butyl benzyl phthalate	780	B	175	444	4	ug/Kg	⊗	-193	69 - 142	
3,3'-Dichlorobenzidine	ND		350	92.6	J	ug/Kg	⊗	26	20 - 103	
Benzo[a]anthracene	330		175	498		ug/Kg	⊗	98	76 - 119	
Chrysene	520		175	645	F1	ug/Kg	⊗	72	75 - 114	
N-Nitrosodimethylamine	ND		175	ND		ug/Kg	⊗	NC	38 - 133	
MS MS										
Surrogate	%Recovery	Qualifier		MS	MS					
2-Fluorophenol	55			36 - 145						
Phenol-d5	63			38 - 149						
2,4,6-Tribromophenol	83			28 - 143						
Nitrobenzene-d5	62			38 - 141						
2-Fluorobiphenyl	62			42 - 140						
Terphenyl-d14	104			42 - 151						

Lab Sample ID: 580-45906-3 MSD

Matrix: Solid

Analysis Batch: 173503

Client Sample ID: CC-A-01-2014013-S

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Phenol	110	J	172	193	F1	ug/Kg	⊗	46	63 - 111	23	26
Bis(2-chloroethyl)ether	ND		172	ND	F1	ug/Kg	⊗	0	62 - 110	NC	60

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 580-45906-3 MSD

Client Sample ID: CC-A-01-2014013-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 173503

Prep Batch: 173001

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
2-Chlorophenol	ND		172	ND	F1	ug/Kg	⊗	0	68 - 117	NC	27
1,3-Dichlorobenzene	ND *		172	ND	F1	ug/Kg	⊗	0	64 - 111	NC	60
1,4-Dichlorobenzene	ND *		172	ND	F1	ug/Kg	⊗	0	65 - 110	NC	32
Benzyl alcohol	ND		172	97.4	J F2	ug/Kg	⊗	57	55 - 123	67	60
1,2-Dichlorobenzene	ND *		172	ND	F1	ug/Kg	⊗	0	64 - 112	NC	60
2-Methylphenol	ND		172	ND	F1	ug/Kg	⊗	0	71 - 116	NC	25
2,2'-oxybis[1-chloropropane]	ND		172	ND	F1	ug/Kg	⊗	0	41 - 126	NC	60
3 & 4 Methylphenol	78 J		172	75.3	J F1 F2	ug/Kg	⊗	-2	70 - 116	87	27
N-Nitrosodi-n-propylamine	ND		172	67.7	J F1 F2	ug/Kg	⊗	39	62 - 116	69	28
Hexachloroethane	ND		172	ND	F1	ug/Kg	⊗	0	62 - 120	NC	60
Nitrobenzene	ND		172	ND	F1	ug/Kg	⊗	0	64 - 118	NC	60
Isophorone	ND		172	109	J F1	ug/Kg	⊗	63	67 - 119	46	60
2-Nitrophenol	ND		172	ND	F1	ug/Kg	⊗	0	67 - 127	NC	60
2,4-Dimethylphenol	ND		172	ND	F1	ug/Kg	⊗	0	54 - 139	NC	60
Benzoic acid	ND		344	4500		ug/Kg	⊗	NC	29 - 158	NC	60
Bis(2-chloroethoxy)methane	ND		172	18.5	J F1 F2	ug/Kg	⊗	11	69 - 107	149	60
2,4-Dichlorophenol	ND		172	ND	F1	ug/Kg	⊗	0	68 - 125	NC	60
1,2,4-Trichlorobenzene	ND		172	ND	F1	ug/Kg	⊗	0	66 - 115	NC	28
Naphthalene	160		172	158	F1 F2	ug/Kg	⊗	-0.9	62 - 112	35	26
4-Chloroaniline	ND		172	ND	F1	ug/Kg	⊗	0	20 - 103	NC	60
Hexachlorobutadiene	ND		172	ND	F1	ug/Kg	⊗	0	65 - 116	NC	60
4-Chloro-3-methylphenol	ND		172	27.9	J F1 F2	ug/Kg	⊗	16	69 - 121	148	27
2-Methylnaphthalene	350		172	369	F1	ug/Kg	⊗	9	64 - 119	17	27
1-Methylnaphthalene	270		172	235	F1	ug/Kg	⊗	-22	62 - 118	12	30
Hexachlorocyclopentadiene	ND		172	ND	F1	ug/Kg	⊗	0	46 - 131	NC	60
2,4,6-Trichlorophenol	ND		172	ND	F1	ug/Kg	⊗	0	62 - 133	NC	60
2,4,5-Trichlorophenol	ND		172	31.9	J F1 F2	ug/Kg	⊗	19	57 - 133	131	60
2-Chloronaphthalene	ND		172	11.1	J F1 F2	ug/Kg	⊗	6	68 - 112	169	25
2-Nitroaniline	ND		172	71.4	J F1 F2	ug/Kg	⊗	41	64 - 112	82	60
Dimethyl phthalate	290		172	2040	F1 F2	ug/Kg	⊗	1017	78 - 117	121	60
Acenaphthylene	ND		172	27.4	J F1 F2	ug/Kg	⊗	16	68 - 120	141	28
2,6-Dinitrotoluene	ND		172	149	J	ug/Kg	⊗	87	66 - 123	3	60
3-Nitroaniline	ND		172	36.1	J F1	ug/Kg	⊗	21	27 - 103	23	60
Acenaphthene	140		172	135	F1 F2	ug/Kg	⊗	-2	68 - 116	68	27
2,4-Dinitrophenol	ND		344	ND	F1	ug/Kg	⊗	0	20 - 141	NC	60
4-Nitrophenol	560 J		344	517	J F1	ug/Kg	⊗	-11	20 - 165	14	33
Dibenzofuran	100 J		172	98.6	J F1 F2	ug/Kg	⊗	-0.9	72 - 109	81	60
2,4-Dinitrotoluene	66 J		172	58.8	J F1 F2	ug/Kg	⊗	-4	68 - 121	107	31
Diethyl phthalate	ND		172	ND	F1	ug/Kg	⊗	0	73 - 116	NC	26
4-Chlorophenyl phenyl ether	ND		172	104	J F1	ug/Kg	⊗	60	75 - 108	34	60
Fluorene	120		172	125	F1 F2	ug/Kg	⊗	3	70 - 121	69	31
4-Nitroaniline	ND		172	49.4	J F1	ug/Kg	⊗	29	58 - 108	43	60
4,6-Dinitro-2-methylphenol	ND		344	ND	F1	ug/Kg	⊗	0	48 - 130	NC	60
N-Nitrosodiphenylamine	ND		172	30.1	J F1 F2	ug/Kg	⊗	17	73 - 115	136	60
4-Bromophenyl phenyl ether	ND		172	ND	F1	ug/Kg	⊗	0	68 - 122	NC	60
Hexachlorobenzene	ND		172	ND	F1	ug/Kg	⊗	0	66 - 117	NC	60
Pentachlorophenol	ND		344	137	J F1 F2	ug/Kg	⊗	40	45 - 117	95	68
Phenanthrene	520		172	729	F1	ug/Kg	⊗	118	73 - 106	3	28

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 580-45906-3 MSD

Matrix: Solid

Analysis Batch: 173503

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Anthracene	90	*	172	135	F1 F2	ug/Kg	⊗	26	73 - 116	54	27
Carbazole	110	J	172	142	J F1	ug/Kg	⊗	18	76 - 135	55	60
Di-n-butyl phthalate	220	J	172	225	J F1	ug/Kg	⊗	6	66 - 140	48	60
Fluoranthene	940		172	1400	4	ug/Kg	⊗	265	73 - 125	13	36
Pyrene	930		172	1310	4	ug/Kg	⊗	223	70 - 120	12	31
Butyl benzyl phthalate	780	B	172	600	4	ug/Kg	⊗	-105	69 - 142	30	60
3,3'-Dichlorobenzidine	ND		344	85.3	J	ug/Kg	⊗	25	20 - 103	8	60
Benzo[a]anthracene	330		172	614	F1	ug/Kg	⊗	167	76 - 119	21	27
Chrysene	520		172	772	F1	ug/Kg	⊗	147	75 - 114	18	26
N-Nitrosodimethylamine	ND		172	ND		ug/Kg	⊗	NC	38 - 133	NC	60
<hr/>											
Surrogate	MSD	MSD	Limits	%Recovery	Qualifier						
2-Fluorophenol	72		36 - 145								
Phenol-d5	78		38 - 149								
2,4,6-Tribromophenol	107		28 - 143								
Nitrobenzene-d5	88		38 - 141								
2-Fluorobiphenyl	74		42 - 140								
Terphenyl-d14	124		42 - 151								

Lab Sample ID: MB 580-173678/1-A

Matrix: Solid

Analysis Batch: 174213

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Bis(2-chloroethyl)ether	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2-Chlorophenol	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
1,3-Dichlorobenzene	ND		5.0	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
1,4-Dichlorobenzene	ND		5.0	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Benzyl alcohol	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
1,2-Dichlorobenzene	ND		5.5	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2-Methylphenol	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2,2'-oxybis[1-chloropropane]	ND		25	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
3 & 4 Methylphenol	ND		20	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Hexachloroethane	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Nitrobenzene	ND		10	3.4	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Isophorone	ND		10	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2-Nitrophenol	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2,4-Dimethylphenol	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Benzoic acid	ND		250	75	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Bis(2-chloroethoxy)methane	ND		10	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2,4-Dichlorophenol	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
1,2,4-Trichlorobenzene	ND		5.0	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Naphthalene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
4-Chloroaniline	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Hexachlorobutadiene	ND		5.0	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
4-Chloro-3-methylphenol	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-173678/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174213

Prep Batch: 173678

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
1-Methylnaphthalene	ND		3.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Hexachlorocyclopentadiene	ND		10	1.0	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2,4,6-Trichlorophenol	ND		15	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2,4,5-Trichlorophenol	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2-Chloronaphthalene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2-Nitroaniline	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Dimethyl phthalate	ND		10	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Acenaphthylene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2,6-Dinitrotoluene	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
3-Nitroaniline	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Acenaphthene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2,4-Dinitrophenol	ND		100	20	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
4-Nitrophenol	ND		100	25	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Dibenzofuran	ND		10	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
2,4-Dinitrotoluene	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Diethyl phthalate	ND		20	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
4-Chlorophenyl phenyl ether	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Fluorene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
4-Nitroaniline	ND		10	2.0	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
4,6-Dinitro-2-methylphenol	ND		100	10	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
N-Nitrosodiphenylamine	ND		5.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
4-Bromophenyl phenyl ether	ND		10	1.5	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Hexachlorobenzene	ND		5.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Pentachlorophenol	ND		20	2.0	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Phenanthrene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Anthracene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Carbazole	ND		10	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Di-n-butyl phthalate	ND		50	5.0	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Fluoranthene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Pyrene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Butyl benzyl phthalate	ND		20	5.0	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
3,3'-Dichlorobenzidine	ND		20	3.0	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Benzo[a]anthracene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Chrysene	ND		2.5	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Bis(2-ethylhexyl) phthalate	ND		60	5.0	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Di-n-octyl phthalate	ND		50	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Benzo[b]fluoranthene	ND		2.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Benzo[k]fluoranthene	ND		2.5	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Benzo[a]pyrene	ND		3.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Indeno[1,2,3-cd]pyrene	ND		4.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Dibenz(a,h)anthracene	ND		4.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Benzo[g,h,i]perylene	ND		2.5	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
N-Nitrosodimethylamine	ND		100	25	ug/Kg		10/24/14 12:00	10/29/14 19:14	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	48		36 - 145	10/24/14 12:00	10/29/14 19:14	1
Phenol-d5	50		38 - 149	10/24/14 12:00	10/29/14 19:14	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-173678/1-A

Matrix: Solid

Analysis Batch: 174213

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 173678

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	50		50		28 - 143	10/24/14 12:00	10/29/14 19:14	1
Nitrobenzene-d5	53		53		38 - 141	10/24/14 12:00	10/29/14 19:14	1
2-Fluorobiphenyl	53		53		42 - 140	10/24/14 12:00	10/29/14 19:14	1
Terphenyl-d14	63		63		42 - 151	10/24/14 12:00	10/29/14 19:14	1

Lab Sample ID: LCS 580-173678/2-A

Matrix: Solid

Analysis Batch: 174213

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 173678

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
Phenol	100	83.0		ug/Kg		83	63 - 111	
Bis(2-chloroethyl)ether	100	82.1		ug/Kg		82	62 - 110	
2-Chlorophenol	100	86.4		ug/Kg		86	68 - 117	
1,3-Dichlorobenzene	100	72.3		ug/Kg		72	64 - 111	
1,4-Dichlorobenzene	100	72.9		ug/Kg		73	65 - 110	
Benzyl alcohol	100	69.3		ug/Kg		69	55 - 123	
1,2-Dichlorobenzene	100	77.7		ug/Kg		78	64 - 112	
2-Methylphenol	100	84.4		ug/Kg		84	71 - 116	
2,2'-oxybis[1-chloropropane]	100	67.1		ug/Kg		67	41 - 126	
3 & 4 Methylphenol	100	88.1		ug/Kg		88	70 - 116	
N-Nitrosodi-n-propylamine	100	79.9		ug/Kg		80	62 - 116	
Hexachloroethane	100	78.2		ug/Kg		78	62 - 120	
Nitrobenzene	100	83.7		ug/Kg		84	64 - 118	
Isophorone	100	83.3		ug/Kg		83	67 - 119	
2-Nitrophenol	100	84.2		ug/Kg		84	67 - 127	
2,4-Dimethylphenol	100	76.1		ug/Kg		76	54 - 139	
Benzoic acid	200	134 J		ug/Kg		67	29 - 158	
Bis(2-chloroethoxy)methane	100	81.1		ug/Kg		81	69 - 107	
2,4-Dichlorophenol	100	89.7		ug/Kg		90	68 - 125	
1,2,4-Trichlorobenzene	100	80.0		ug/Kg		80	66 - 115	
Naphthalene	100	77.3		ug/Kg		77	62 - 112	
4-Chloroaniline	100	35.6		ug/Kg		36	20 - 103	
Hexachlorobutadiene	100	90.6		ug/Kg		91	65 - 116	
4-Chloro-3-methylphenol	100	82.8		ug/Kg		83	69 - 121	
2-Methylnaphthalene	100	78.7		ug/Kg		79	64 - 119	
1-Methylnaphthalene	100	78.5		ug/Kg		78	62 - 118	
Hexachlorocyclopentadiene	100	83.8		ug/Kg		84	46 - 131	
2,4,6-Trichlorophenol	100	74.7		ug/Kg		75	62 - 133	
2,4,5-Trichlorophenol	100	92.4		ug/Kg		92	57 - 133	
2-Chloronaphthalene	100	79.3		ug/Kg		79	68 - 112	
2-Nitroaniline	100	78.6		ug/Kg		79	64 - 112	
Dimethyl phthalate	100	85.0		ug/Kg		85	78 - 117	
Acenaphthylene	100	87.2		ug/Kg		87	68 - 120	
2,6-Dinitrotoluene	100	79.6		ug/Kg		80	66 - 123	
3-Nitroaniline	100	56.8		ug/Kg		57	27 - 103	
Acenaphthene	100	80.1		ug/Kg		80	68 - 116	
2,4-Dinitrophenol	200	130		ug/Kg		65	20 - 141	
4-Nitrophenol	200	165		ug/Kg		83	20 - 165	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-173678/2-A

Matrix: Solid

Analysis Batch: 174213

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 173678

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
Dibenzofuran	100	80.4		ug/Kg		80	72 - 109	
2,4-Dinitrotoluene	100	80.4		ug/Kg		80	68 - 121	
Diethyl phthalate	100	88.4		ug/Kg		88	73 - 116	
4-Chlorophenyl phenyl ether	100	86.4		ug/Kg		86	75 - 108	
Fluorene	100	84.3		ug/Kg		84	70 - 121	
4-Nitroaniline	100	71.3		ug/Kg		71	58 - 108	
4,6-Dinitro-2-methylphenol	200	158		ug/Kg		79	48 - 130	
N-Nitrosodiphenylamine	99.7	85.6		ug/Kg		86	73 - 115	
4-Bromophenyl phenyl ether	100	88.3		ug/Kg		88	68 - 122	
Hexachlorobenzene	100	89.9		ug/Kg		90	66 - 117	
Pentachlorophenol	200	135		ug/Kg		67	45 - 117	
Phenanthrene	100	78.8		ug/Kg		79	73 - 106	
Anthracene	100	75.1		ug/Kg		75	73 - 116	
Carbazole	100	82.5		ug/Kg		83	76 - 135	
Di-n-butyl phthalate	100	90.1		ug/Kg		90	66 - 140	
Fluoranthene	100	85.7		ug/Kg		86	73 - 125	
Pyrene	100	83.6		ug/Kg		84	70 - 120	
Butyl benzyl phthalate	100	86.8		ug/Kg		87	69 - 142	
3,3'-Dichlorobenzidine	200	138		ug/Kg		69	20 - 103	
Benzo[a]anthracene	100	92.5		ug/Kg		92	76 - 119	
Chrysene	100	81.4		ug/Kg		81	75 - 114	
Bis(2-ethylhexyl) phthalate	100	84.6		ug/Kg		85	62 - 144	
Di-n-octyl phthalate	100	73.4		ug/Kg		73	65 - 141	
Benzo[b]fluoranthene	100	85.5		ug/Kg		85	63 - 132	
Benzo[k]fluoranthene	100	73.3		ug/Kg		73	63 - 119	
Benzo[a]pyrene	100	80.5		ug/Kg		81	72 - 117	
Indeno[1,2,3-cd]pyrene	100	83.1		ug/Kg		83	56 - 127	
Dibenz(a,h)anthracene	100	84.5		ug/Kg		85	56 - 134	
Benzo[g,h,i]perylene	100	79.2		ug/Kg		79	55 - 139	
N-Nitrosodimethylamine	100	78.9 J		ug/Kg		79	38 - 133	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol	78		36 - 145
Phenol-d5	80		38 - 149
2,4,6-Tribromophenol	89		28 - 143
Nitrobenzene-d5	84		38 - 141
2-Fluorobiphenyl	84		42 - 140
Terphenyl-d14	96		42 - 151

Lab Sample ID: LCSD 580-173678/3-A

Matrix: Solid

Analysis Batch: 174213

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 173678

Analyte	Spike		LCSD		Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier	Unit						
Phenol	100	74.5		ug/Kg		75	63 - 111		11	26
Bis(2-chloroethyl)ether	100	72.2		ug/Kg		72	62 - 110		13	22
2-Chlorophenol	100	74.4		ug/Kg		74	68 - 117		15	27
1,3-Dichlorobenzene	100	70.2		ug/Kg		70	64 - 111		3	30

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-173678/3-A

Matrix: Solid

Analysis Batch: 174213

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 173678

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Added	Result	Qualifier							
1,4-Dichlorobenzene	100	66.9		ug/Kg		67	65 - 110	9	30	
Benzyl alcohol	100	40.6 *		ug/Kg		41	55 - 123	52	60	
1,2-Dichlorobenzene	100	67.6		ug/Kg		68	64 - 112	14	30	
2-Methylphenol	100	74.8		ug/Kg		75	71 - 116	12	25	
2,2'-oxybis[1-chloropropane]	100	67.2		ug/Kg		67	41 - 126	0	57	
3 & 4 Methylphenol	100	79.9		ug/Kg		80	70 - 116	10	27	
N-Nitrosodi-n-propylamine	100	79.5		ug/Kg		80	62 - 116	0	28	
Hexachloroethane	100	70.8		ug/Kg		71	62 - 120	10	30	
Nitrobenzene	100	77.9		ug/Kg		78	64 - 118	7	30	
Isophorone	100	79.8		ug/Kg		80	67 - 119	4	30	
2-Nitrophenol	100	78.8		ug/Kg		79	67 - 127	7	30	
2,4-Dimethylphenol	100	73.8		ug/Kg		74	54 - 139	3	30	
Benzoic acid	200	115 J		ug/Kg		58	29 - 158	15	28	
Bis(2-chloroethoxy)methane	100	74.7		ug/Kg		75	69 - 107	8	30	
2,4-Dichlorophenol	100	79.7		ug/Kg		80	68 - 125	12	30	
1,2,4-Trichlorobenzene	100	76.5		ug/Kg		77	66 - 115	4	28	
Naphthalene	100	71.2		ug/Kg		71	62 - 112	8	26	
4-Chloroaniline	100	31.3		ug/Kg		31	20 - 103	13	60	
Hexachlorobutadiene	100	86.5		ug/Kg		87	65 - 116	5	30	
4-Chloro-3-methylphenol	100	78.6		ug/Kg		79	69 - 121	5	27	
2-Methylnaphthalene	100	73.3		ug/Kg		73	64 - 119	7	27	
1-Methylnaphthalene	100	74.6		ug/Kg		75	62 - 118	5	30	
Hexachlorocyclopentadiene	100	83.6		ug/Kg		84	46 - 131	0	29	
2,4,6-Trichlorophenol	100	61.7		ug/Kg		62	62 - 133	19	30	
2,4,5-Trichlorophenol	100	82.5		ug/Kg		83	57 - 133	11	30	
2-Chloronaphthalene	100	73.2		ug/Kg		73	68 - 112	8	25	
2-Nitroaniline	100	71.7		ug/Kg		72	64 - 112	9	22	
Dimethyl phthalate	100	78.0		ug/Kg		78	78 - 117	9	30	
Acenaphthylene	100	80.7		ug/Kg		81	68 - 120	8	28	
2,6-Dinitrotoluene	100	70.6		ug/Kg		71	66 - 123	12	30	
3-Nitroaniline	100	54.2		ug/Kg		54	27 - 103	5	33	
Acenaphthene	100	71.8		ug/Kg		72	68 - 116	11	27	
2,4-Dinitrophenol	200	119		ug/Kg		59	20 - 141	9	36	
4-Nitrophenol	200	118 *		ug/Kg		59	20 - 165	34	30	
Dibenzofuran	100	76.0		ug/Kg		76	72 - 109	6	30	
2,4-Dinitrotoluene	100	73.6		ug/Kg		74	68 - 121	9	30	
Diethyl phthalate	100	83.1		ug/Kg		83	73 - 116	6	26	
4-Chlorophenyl phenyl ether	100	84.5		ug/Kg		84	75 - 108	2	30	
Fluorene	100	81.7		ug/Kg		82	70 - 121	3	30	
4-Nitroaniline	100	60.4		ug/Kg		60	58 - 108	17	32	
4,6-Dinitro-2-methylphenol	200	147		ug/Kg		73	48 - 130	7	22	
N-Nitrosodiphenylamine	99.7	83.5		ug/Kg		84	73 - 115	2	30	
4-Bromophenyl phenyl ether	100	91.8		ug/Kg		92	68 - 122	4	30	
Hexachlorobenzene	100	87.2		ug/Kg		87	66 - 117	3	30	
Pentachlorophenol	200	121		ug/Kg		60	45 - 117	11	23	
Phenanthrene	100	77.1		ug/Kg		77	73 - 106	2	28	
Anthracene	100	72.1 *		ug/Kg		72	73 - 116	4	27	
Carbazole	100	80.2		ug/Kg		80	76 - 135	3	30	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-173678/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174213

Prep Batch: 173678

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
Di-n-butyl phthalate	100	88.2		ug/Kg		88	66 - 140	2	30	
Fluoranthene	100	85.1		ug/Kg		85	73 - 125	1	30	
Pyrene	100	79.7		ug/Kg		80	70 - 120	5	30	
Butyl benzyl phthalate	100	84.5		ug/Kg		84	69 - 142	3	30	
3,3'-Dichlorobenzidine	200	131		ug/Kg		66	20 - 103	5	60	
Benzo[a]anthracene	100	80.0		ug/Kg		80	76 - 119	14	27	
Chrysene	100	81.9		ug/Kg		82	75 - 114	1	26	
Bis(2-ethylhexyl) phthalate	100	82.9		ug/Kg		83	62 - 144	2	30	
Di-n-octyl phthalate	100	71.9		ug/Kg		72	65 - 141	2	30	
Benzo[b]fluoranthene	100	81.4		ug/Kg		81	63 - 132	5	30	
Benzo[k]fluoranthene	100	68.7		ug/Kg		69	63 - 119	7	30	
Benzo[a]pyrene	100	76.7		ug/Kg		77	72 - 117	5	30	
Indeno[1,2,3-cd]pyrene	100	76.6		ug/Kg		77	56 - 127	8	29	
Dibenz(a,h)anthracene	100	82.7		ug/Kg		83	56 - 134	2	30	
Benzo[g,h,i]perylene	100	79.1		ug/Kg		79	55 - 139	0	28	
N-Nitrosodimethylamine	100	77.5 J		ug/Kg		77	38 - 133	2	30	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2-Fluorophenol	70		36 - 145
Phenol-d5	72		38 - 149
2,4,6-Tribromophenol	78		28 - 143
Nitrobenzene-d5	77		38 - 141
2-Fluorobiphenyl	78		42 - 140
Terphenyl-d14	86		42 - 151

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Lab Sample ID: 580-45906-3 MS

Client Sample ID: CC-A-01-2014013-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174767

Prep Batch: 173001

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD
Phenol - DL	ND		175	ND		ug/Kg	⊗	NC	63 - 111	
Bis(2-chloroethyl)ether - DL	ND		175	ND		ug/Kg	⊗	NC	62 - 110	
2-Chlorophenol - DL	ND		175	ND		ug/Kg	⊗	NC	68 - 117	
1,3-Dichlorobenzene - DL	ND *		175	ND		ug/Kg	⊗	NC	64 - 111	
1,4-Dichlorobenzene - DL	ND *		175	ND		ug/Kg	⊗	NC	65 - 110	
Benzyl alcohol - DL	ND		175	370 J		ug/Kg	⊗	NC	55 - 123	
1,2-Dichlorobenzene - DL	ND *		175	ND		ug/Kg	⊗	NC	64 - 112	
2-Methylphenol - DL	ND		175	ND		ug/Kg	⊗	NC	71 - 116	
2,2'-oxybis[1-chloropropane] - DL	ND		175	ND		ug/Kg	⊗	NC	41 - 126	
3 & 4 Methylphenol - DL	ND		175	ND		ug/Kg	⊗	NC	70 - 116	
N-Nitrosodi-n-propylamine - DL	ND		175	ND		ug/Kg	⊗	NC	62 - 116	
Hexachloroethane - DL	ND		175	ND		ug/Kg	⊗	NC	62 - 120	
Nitrobenzene - DL	ND		175	ND		ug/Kg	⊗	NC	64 - 118	
Isophorone - DL	ND		175	166 J		ug/Kg	⊗	95	67 - 119	
2-Nitrophenol - DL	ND		175	ND		ug/Kg	⊗	NC	67 - 127	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL (Continued)

Lab Sample ID: 580-45906-3 MS

Client Sample ID: CC-A-01-2014013-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174767

Prep Batch: 173001

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier	Added	Result	Qualifier					
2,4-Dimethylphenol - DL	ND		175	ND		ug/Kg	⊗	NC	54 - 139	
Benzoic acid - DL	ND		350	ND		ug/Kg	⊗	NC	29 - 158	
Bis(2-chloroethoxy)methane - DL	ND		175	166	J	ug/Kg	⊗	95	69 - 107	
2,4-Dichlorophenol - DL	ND		175	ND		ug/Kg	⊗	NC	68 - 125	
1,2,4-Trichlorobenzene - DL	ND		175	ND		ug/Kg	⊗	NC	66 - 115	
Naphthalene - DL	ND		175	265	J F1	ug/Kg	⊗	151	62 - 112	
4-Chloroaniline - DL	ND		175	ND		ug/Kg	⊗	NC	20 - 103	
Hexachlorobutadiene - DL	ND		175	ND		ug/Kg	⊗	NC	65 - 116	
4-Chloro-3-methylphenol - DL	ND		175	ND		ug/Kg	⊗	NC	69 - 121	
2-Methylnaphthalene - DL	390		175	388	F1	ug/Kg	⊗	-0.9	64 - 119	
1-Methylnaphthalene - DL	310	J	175	316	J F1	ug/Kg	⊗	2	62 - 118	
Hexachlorocyclopentadiene - DL	ND		175	ND	F1	ug/Kg	⊗	0	46 - 131	
2,4,6-Trichlorophenol - DL	ND		175	ND		ug/Kg	⊗	NC	62 - 133	
2,4,5-Trichlorophenol - DL	ND		175	ND		ug/Kg	⊗	NC	57 - 133	
2-Chloronaphthalene - DL	ND		175	137	J	ug/Kg	⊗	78	68 - 112	
2-Nitroaniline - DL	ND		175	366	J	ug/Kg	⊗	NC	64 - 112	
Dimethyl phthalate - DL	ND		175	421	J F1	ug/Kg	⊗	241	78 - 117	
Acenaphthylene - DL	ND		175	187	J	ug/Kg	⊗	107	68 - 120	
2,6-Dinitrotoluene - DL	ND		175	267	J	ug/Kg	⊗	NC	66 - 123	
3-Nitroaniline - DL	ND		175	300	J	ug/Kg	⊗	NC	27 - 103	
Acenaphthene - DL	ND		175	231	J F1	ug/Kg	⊗	132	68 - 116	
2,4-Dinitrophenol - DL	ND		350	ND		ug/Kg	⊗	NC	20 - 141	
4-Nitrophenol - DL	ND		350	ND		ug/Kg	⊗	NC	20 - 165	
Dibenzofuran - DL	120	J	175	264	J	ug/Kg	⊗	83	72 - 109	
2,4-Dinitrotoluene - DL	ND		175	ND		ug/Kg	⊗	NC	68 - 121	
Diethyl phthalate - DL	ND		175	ND		ug/Kg	⊗	NC	73 - 116	
4-Chlorophenyl phenyl ether - DL	ND		175	ND		ug/Kg	⊗	NC	75 - 108	
Fluorene - DL	130	J	175	207	J F1	ug/Kg	⊗	43	70 - 121	
4-Nitroaniline - DL	ND		175	449	J	ug/Kg	⊗	NC	58 - 108	
4,6-Dinitro-2-methylphenol - DL	ND		350	ND		ug/Kg	⊗	NC	48 - 130	
N-Nitrosodiphenylamine - DL	ND		175	106	J F1	ug/Kg	⊗	61	73 - 115	
4-Bromophenyl phenyl ether - DL	ND		175	ND		ug/Kg	⊗	NC	68 - 122	
Hexachlorobenzene - DL	ND		175	145	J	ug/Kg	⊗	83	66 - 117	
Pentachlorophenol - DL	ND		350	1400	J	ug/Kg	⊗	NC	45 - 117	
Phenanthrene - DL	410		175	675	F1	ug/Kg	⊗	149	73 - 106	
Anthracene - DL	ND	*	175	299	J F1	ug/Kg	⊗	171	73 - 116	
Carbazole - DL	ND		175	367	J F1	ug/Kg	⊗	210	76 - 135	
Di-n-butyl phthalate - DL	ND		175	ND		ug/Kg	⊗	NC	66 - 140	
Fluoranthene - DL	1200		175	1350	4	ug/Kg	⊗	84	73 - 125	
Pyrene - DL	1200		175	1440	4	ug/Kg	⊗	139	70 - 120	
Butyl benzyl phthalate - DL	ND		175	ND		ug/Kg	⊗	NC	69 - 142	
3,3'-Dichlorobenzidine - DL	ND		350	ND		ug/Kg	⊗	NC	20 - 103	
Benzo[a]anthracene - DL	420		175	725	F1	ug/Kg	⊗	176	76 - 119	
Chrysene - DL	580		175	640	F1	ug/Kg	⊗	34	75 - 114	
Bis(2-ethylhexyl) phthalate - DL	16000	B	175	15300	4	ug/Kg	⊗	-701	62 - 144	
Di-n-octyl phthalate - DL	1100	J	175	1380	J 4	ug/Kg	⊗	153	65 - 141	
Benzo[b]fluoranthene - DL	640		175	757		ug/Kg	⊗	69	63 - 132	
Benzo[k]fluoranthene - DL	300	J	175	363	J F1	ug/Kg	⊗	38	63 - 119	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL (Continued)

Lab Sample ID: 580-45906-3 MS

Matrix: Solid

Analysis Batch: 174767

Client Sample ID: CC-A-01-2014013-S

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier	Added	Result	Qualifier					
Benzo[a]pyrene - DL	340	J	175	625	F1	ug/Kg	⊗	164	72 - 117	
Indeno[1,2,3-cd]pyrene - DL	270	J	175	386	J	ug/Kg	⊗	66	56 - 127	
Dibenz(a,h)anthracene - DL	94	J	175	96.1	J F1	ug/Kg	⊗	1	56 - 134	
Benzo[g,h,i]perylene - DL	290	J	175	308	J F1	ug/Kg	⊗	9	55 - 139	
N-Nitrosodimethylamine - DL	ND		175	ND		ug/Kg	⊗	NC	38 - 133	

Lab Sample ID: 580-45906-3 MSD

Matrix: Solid

Analysis Batch: 174767

Client Sample ID: CC-A-01-2014013-S

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Phenol - DL	ND		172	ND		ug/Kg	⊗	NC	63 - 111	NC	26	
Bis(2-chloroethyl)ether - DL	ND		172	ND		ug/Kg	⊗	NC	62 - 110	NC	60	
2-Chlorophenol - DL	ND		172	ND		ug/Kg	⊗	NC	68 - 117	NC	27	
1,3-Dichlorobenzene - DL	ND *		172	ND		ug/Kg	⊗	NC	64 - 111	NC	60	
1,4-Dichlorobenzene - DL	ND *		172	ND		ug/Kg	⊗	NC	65 - 110	NC	32	
Benzyl alcohol - DL	ND		172	298	J	ug/Kg	⊗	NC	55 - 123	22	60	
1,2-Dichlorobenzene - DL	ND *		172	ND		ug/Kg	⊗	NC	64 - 112	NC	60	
2-Methylphenol - DL	ND		172	ND		ug/Kg	⊗	NC	71 - 116	NC	25	
2,2'-oxybis[1-chloropropane] - DL	ND		172	ND		ug/Kg	⊗	NC	41 - 126	NC	60	
3 & 4 Methylphenol - DL	ND		172	ND		ug/Kg	⊗	NC	70 - 116	NC	27	
N-Nitrosodi-n-propylamine - DL	ND		172	ND		ug/Kg	⊗	NC	62 - 116	NC	28	
Hexachloroethane - DL	ND		172	ND		ug/Kg	⊗	NC	62 - 120	NC	60	
Nitrobenzene - DL	ND		172	ND		ug/Kg	⊗	NC	64 - 118	NC	60	
Isophorone - DL	ND		172	100	J F1	ug/Kg	⊗	58	67 - 119	49	60	
2-Nitrophenol - DL	ND		172	ND		ug/Kg	⊗	NC	67 - 127	NC	60	
2,4-Dimethylphenol - DL	ND		172	ND		ug/Kg	⊗	NC	54 - 139	NC	60	
Benzoic acid - DL	ND		344	ND		ug/Kg	⊗	NC	29 - 158	NC	60	
Bis(2-chloroethoxy)methane - DL	ND		172	ND	F1	ug/Kg	⊗	0	69 - 107	NC	60	
2,4-Dichlorophenol - DL	ND		172	ND		ug/Kg	⊗	NC	68 - 125	NC	60	
1,2,4-Trichlorobenzene - DL	ND		172	ND		ug/Kg	⊗	NC	66 - 115	NC	28	
Naphthalene - DL	ND		172	154	J F2	ug/Kg	⊗	90	62 - 112	53	26	
4-Chloroaniline - DL	ND		172	ND		ug/Kg	⊗	NC	20 - 103	NC	60	
Hexachlorobutadiene - DL	ND		172	ND		ug/Kg	⊗	NC	65 - 116	NC	60	
4-Chloro-3-methylphenol - DL	ND		172	ND		ug/Kg	⊗	NC	69 - 121	NC	27	
2-Methylnaphthalene - DL	390		172	419	F1	ug/Kg	⊗	17	64 - 119	8	27	
1-Methylnaphthalene - DL	310	J	172	297	J F1	ug/Kg	⊗	-9	62 - 118	6	30	
Hexachlorocyclopentadiene - DL	ND		172	ND	F1	ug/Kg	⊗	0	46 - 131	NC	60	
2,4,6-Trichlorophenol - DL	ND		172	ND		ug/Kg	⊗	NC	62 - 133	NC	60	
2,4,5-Trichlorophenol - DL	ND		172	ND		ug/Kg	⊗	NC	57 - 133	NC	60	
2-Chloronaphthalene - DL	ND		172	ND	F1	ug/Kg	⊗	0	68 - 112	NC	25	
2-Nitroaniline - DL	ND		172	280	J	ug/Kg	⊗	NC	64 - 112	26	60	
Dimethyl phthalate - DL	ND		172	1820	F1 F2	ug/Kg	⊗	1057	78 - 117	125	60	
Acenaphthylene - DL	ND		172	ND	F1	ug/Kg	⊗	0	68 - 120	NC	28	
2,6-Dinitrotoluene - DL	ND		172	266	J	ug/Kg	⊗	NC	66 - 123	0	60	
3-Nitroaniline - DL	ND		172	315	J	ug/Kg	⊗	NC	27 - 103	5	60	
Acenaphthene - DL	ND		172	119	J F2	ug/Kg	⊗	69	68 - 116	64	27	
2,4-Dinitrophenol - DL	ND		344	ND		ug/Kg	⊗	NC	20 - 141	NC	60	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL (Continued)

Lab Sample ID: 580-45906-3 MSD

Matrix: Solid

Analysis Batch: 174767

Client Sample ID: CC-A-01-2014013-S

Prep Type: Total/NA

Prep Batch: 173001

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
4-Nitrophenol - DL	ND		344	ND		ug/Kg	⊗	NC	20 - 165	NC	33
Dibenzofuran - DL	120	J	172	ND	F1	ug/Kg	⊗	0	72 - 109	NC	60
2,4-Dinitrotoluene - DL	ND		172	ND		ug/Kg	⊗	NC	68 - 121	NC	31
Diethyl phthalate - DL	ND		172	ND		ug/Kg	⊗	NC	73 - 116	NC	26
4-Chlorophenyl phenyl ether - DL	ND		172	ND		ug/Kg	⊗	NC	75 - 108	NC	60
Fluorene - DL	130	J	172	ND	F1	ug/Kg	⊗	0	70 - 121	NC	31
4-Nitroaniline - DL	ND		172	416	J	ug/Kg	⊗	NC	58 - 108	8	60
4,6-Dinitro-2-methylphenol - DL	ND		344	ND		ug/Kg	⊗	NC	48 - 130	NC	60
N-Nitrosodiphenylamine - DL	ND		172	358	J F1 F2	ug/Kg	⊗	208	73 - 115	109	60
4-Bromophenyl phenyl ether - DL	ND		172	ND		ug/Kg	⊗	NC	68 - 122	NC	60
Hexachlorobenzene - DL	ND		172	ND	F1	ug/Kg	⊗	0	66 - 117	NC	60
Pentachlorophenol - DL	ND		344	ND	F1	ug/Kg	⊗	0	45 - 117	NC	68
Phenanthrene - DL	410		172	576		ug/Kg	⊗	94	73 - 106	16	28
Anthracene - DL	ND	*	172	196	J F2	ug/Kg	⊗	114	73 - 116	42	27
Carbazole - DL	ND		172	196	J F2	ug/Kg	⊗	114	76 - 135	61	60
Di-n-butyl phthalate - DL	ND		172	ND		ug/Kg	⊗	NC	66 - 140	NC	60
Fluoranthene - DL	1200		172	1840	4	ug/Kg	⊗	373	73 - 125	31	36
Pyrene - DL	1200		172	1690	4	ug/Kg	⊗	286	70 - 120	16	31
Butyl benzyl phthalate - DL	ND		172	ND		ug/Kg	⊗	NC	69 - 142	NC	60
3,3'-Dichlorobenzidine - DL	ND		344	ND		ug/Kg	⊗	NC	20 - 103	NC	60
Benzo[a]anthracene - DL	420		172	646	F1	ug/Kg	⊗	133	76 - 119	11	27
Chrysene - DL	580		172	1000	F1 F2	ug/Kg	⊗	246	75 - 114	44	26
Bis(2-ethylhexyl) phthalate - DL	16000	B	172	17200	4	ug/Kg	⊗	408	62 - 144	12	60
Di-n-octyl phthalate - DL	1100	J	172	1270	J 4	ug/Kg	⊗	93	65 - 141	8	31
Benzo[b]fluoranthene - DL	640		172	1320	F1 F2	ug/Kg	⊗	399	63 - 132	54	31
Benzo[k]fluoranthene - DL	300	J	172	314	J F1	ug/Kg	⊗	10	63 - 119	15	31
Benzo[a]pyrene - DL	340	J	172	626	F1	ug/Kg	⊗	167	72 - 117	0	30
Indeno[1,2,3-cd]pyrene - DL	270	J	172	365	J F1	ug/Kg	⊗	55	56 - 127	6	29
Dibenz(a,h)anthracene - DL	94	J	172	ND	F1	ug/Kg	⊗	0	56 - 134	NC	30
Benzo[g,h,i]perylene - DL	290	J	172	246	J F1	ug/Kg	⊗	-27	55 - 139	22	28
N-Nitrosodimethylamine - DL	ND		172	ND		ug/Kg	⊗	NC	38 - 133	NC	60

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE

Lab Sample ID: 580-45906-4 MS

Client Sample ID: CC-CB-04-2014013-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174626

Prep Batch: 173678

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
Phenol - RE	160	J	167	222	J F1	ug/Kg	⊗	39	63 - 111		
Bis(2-chloroethyl)ether - RE	ND		167	ND	F1	ug/Kg	⊗	0	62 - 110		
2-Chlorophenol - RE	ND		167	159	J	ug/Kg	⊗	95	68 - 117		
1,3-Dichlorobenzene - RE	ND		167	ND	F1	ug/Kg	⊗	0	64 - 111		
1,4-Dichlorobenzene - RE	ND		167	ND	F1	ug/Kg	⊗	0	65 - 110		
Benzyl alcohol - RE	ND	*	167	268	J F1	ug/Kg	⊗	161	55 - 123		
1,2-Dichlorobenzene - RE	ND		167	ND	F1	ug/Kg	⊗	0	64 - 112		
2-Methylphenol - RE	ND		167	218	J F1	ug/Kg	⊗	131	71 - 116		

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Lab Sample ID: 580-45906-4 MS

Client Sample ID: CC-CB-04-2014013-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174626

Prep Batch: 173678

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	
2,2'-oxybis[1-chloropropane] - RE	ND		167	ND	F1	ug/Kg	⊗	0	41 - 126	
3 & 4 Methylphenol - RE	130	J	167	157	J	ug/Kg	⊗	94	70 - 116	
N-Nitrosodi-n-propylamine - RE	ND		167	ND	F1	ug/Kg	⊗	0	62 - 116	
Hexachloroethane - RE	ND		167	ND	F1	ug/Kg	⊗	0	62 - 120	
Nitrobenzene - RE	ND		167	ND		ug/Kg	⊗	NC	64 - 118	
Isophorone - RE	ND		167	155	J	ug/Kg	⊗	93	67 - 119	
2-Nitrophenol - RE	ND		167	ND	F1	ug/Kg	⊗	0	67 - 127	
2,4-Dimethylphenol - RE	ND		167	192	J	ug/Kg	⊗	115	54 - 139	
Benzoic acid - RE	ND		334	ND		ug/Kg	⊗	NC	29 - 158	
Bis(2-chloroethoxy)methane - RE	ND		167	122	J	ug/Kg	⊗	73	69 - 107	
2,4-Dichlorophenol - RE	ND		167	ND	F1	ug/Kg	⊗	0	68 - 125	
1,2,4-Trichlorobenzene - RE	ND		167	ND	F1	ug/Kg	⊗	0	66 - 115	
Naphthalene - RE	ND		167	192	F1	ug/Kg	⊗	115	62 - 112	
4-Chloroaniline - RE	ND		167	ND	F1	ug/Kg	⊗	0	20 - 103	
Hexachlorobutadiene - RE	ND		167	144	J	ug/Kg	⊗	86	65 - 116	
4-Chloro-3-methylphenol - RE	ND		167	366	J F1	ug/Kg	⊗	220	69 - 121	
2-Methylnaphthalene - RE	210		167	191	F1	ug/Kg	⊗	-13	64 - 119	
1-Methylnaphthalene - RE	110	J	167	183	J F1	ug/Kg	⊗	41	62 - 118	
Hexachlorocyclopentadiene - RE	ND		167	154	J	ug/Kg	⊗	92	46 - 131	
2,4,6-Trichlorophenol - RE	ND		167	179	J	ug/Kg	⊗	107	62 - 133	
2,4,5-Trichlorophenol - RE	ND		167	236	J F1	ug/Kg	⊗	142	57 - 133	
2-Chloronaphthalene - RE	ND		167	143	J	ug/Kg	⊗	86	68 - 112	
2-Nitroaniline - RE	ND		167	191	J F1	ug/Kg	⊗	115	64 - 112	
Dimethyl phthalate - RE	150	J	167	286	J	ug/Kg	⊗	82	78 - 117	
Acenaphthylene - RE	ND		167	159	J	ug/Kg	⊗	95	68 - 120	
2,6-Dinitrotoluene - RE	ND		167	245	J F1	ug/Kg	⊗	147	66 - 123	
3-Nitroaniline - RE	ND		167	221	J F1	ug/Kg	⊗	133	27 - 103	
Acenaphthene - RE	170		167	213	F1	ug/Kg	⊗	29	68 - 116	
2,4-Dinitrophenol - RE	ND		334	ND		ug/Kg	⊗	NC	20 - 141	
4-Nitrophenol - RE	ND	*	334	ND		ug/Kg	⊗	NC	20 - 165	
Dibenzofuran - RE	ND		167	210	J F1	ug/Kg	⊗	126	72 - 109	
2,4-Dinitrotoluene - RE	ND		167	222	J F1	ug/Kg	⊗	133	68 - 121	
Diethyl phthalate - RE	ND		167	344	J F1	ug/Kg	⊗	206	73 - 116	
4-Chlorophenyl phenyl ether - RE	ND		167	139	J	ug/Kg	⊗	83	75 - 108	
Fluorene - RE	130	J	167	208	F1	ug/Kg	⊗	48	70 - 121	
4-Nitroaniline - RE	ND		167	351	J	ug/Kg	⊗	NC	58 - 108	
4,6-Dinitro-2-methylphenol - RE	ND		334	ND		ug/Kg	⊗	NC	48 - 130	
N-Nitrosodiphenylamine - RE	ND		166	202	J F1	ug/Kg	⊗	121	73 - 115	
4-Bromophenyl phenyl ether - RE	ND		167	177	J	ug/Kg	⊗	106	68 - 122	
Hexachlorobenzene - RE	ND		167	168	J	ug/Kg	⊗	100	66 - 117	
Pentachlorophenol - RE	ND		334	888	J F1	ug/Kg	⊗	266	45 - 117	
Phenanthrene - RE	540		167	553	F1	ug/Kg	⊗	6	73 - 106	
Anthracene - RE	91	J *	167	234		ug/Kg	⊗	85	73 - 116	
Carbazole - RE	130	J	167	305	J	ug/Kg	⊗	107	76 - 135	
Di-n-butyl phthalate - RE	ND		167	ND		ug/Kg	⊗	NC	66 - 140	
Fluoranthene - RE	830		167	1030	4	ug/Kg	⊗	116	73 - 125	
Pyrene - RE	700		167	769	4	ug/Kg	⊗	39	70 - 120	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Lab Sample ID: 580-45906-4 MS

Client Sample ID: CC-CB-04-2014013-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174626

Prep Batch: 173678

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier	Added	Result	Qualifier					
Butyl benzyl phthalate - RE	420	J	167	676	J	ug/Kg	⊗	NC	69 - 142	
3,3'-Dichlorobenzidine - RE	ND		334	ND	F1	ug/Kg	⊗	0	20 - 103	
Benzo[a]anthracene - RE	190		167	448	F1	ug/Kg	⊗	156	76 - 119	
Chrysene - RE	410		167	612	F1	ug/Kg	⊗	123	75 - 114	
Bis(2-ethylhexyl) phthalate - RE	9500		167	17800	4	ug/Kg	⊗	4975	62 - 144	
Di-n-octyl phthalate - RE	790	J	167	1340	J 4	ug/Kg	⊗	327	65 - 141	
Benzo[b]fluoranthene - RE	540		167	605	F1	ug/Kg	⊗	38	63 - 132	
Benzo[k]fluoranthene - RE	210		167	406		ug/Kg	⊗	115	63 - 119	
Benzo[a]pyrene - RE	330		167	363	F1	ug/Kg	⊗	22	72 - 117	
Indeno[1,2,3-cd]pyrene - RE	210	J	167	205	J F1	ug/Kg	⊗	-0.1	56 - 127	
Dibenz(a,h)anthracene - RE	ND		167	81.9	J F1	ug/Kg	⊗	49	56 - 134	
Benzo[g,h,i]perylene - RE	210		167	163	J F1	ug/Kg	⊗	-30	55 - 139	
N-Nitrosodimethylamine - RE	ND		167	ND		ug/Kg	⊗	NC	38 - 133	

MS MS

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Fluorophenol - RE	59		36 - 145
Phenol-d5 - RE	81		38 - 149
2,4,6-Tribromophenol - RE	110		28 - 143
Nitrobenzene-d5 - RE	54		38 - 141
2-Fluorobiphenyl - RE	56		42 - 140
Terphenyl-d14 - RE	119		42 - 151

Lab Sample ID: 580-45906-4 MSD

Client Sample ID: CC-CB-04-2014013-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174626

Prep Batch: 173678

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Phenol - RE	160	J	165	223	J F1	ug/Kg	⊗	40	63 - 111	0	26
Bis(2-chloroethyl)ether - RE	ND		165	ND	F1	ug/Kg	⊗	0	62 - 110	NC	60
2-Chlorophenol - RE	ND		165	ND	F1	ug/Kg	⊗	0	68 - 117	NC	27
1,3-Dichlorobenzene - RE	ND		165	126	J	ug/Kg	⊗	77	64 - 111	NC	60
1,4-Dichlorobenzene - RE	ND		165	ND	F1	ug/Kg	⊗	0	65 - 110	NC	32
Benzyl alcohol - RE	ND	*	165	235	J F1	ug/Kg	⊗	142	55 - 123	13	60
1,2-Dichlorobenzene - RE	ND		165	ND	F1	ug/Kg	⊗	0	64 - 112	NC	60
2-Methylphenol - RE	ND		165	182	J	ug/Kg	⊗	110	71 - 116	18	25
2,2'-oxybis[1-chloropropane] - RE	ND		165	ND	F1	ug/Kg	⊗	0	41 - 126	NC	60
3 & 4 Methylphenol - RE	130	J	165	214	J F1 F2	ug/Kg	⊗	130	70 - 116	31	27
N-Nitrosodi-n-propylamine - RE	ND		165	ND	F1	ug/Kg	⊗	0	62 - 116	NC	28
Hexachloroethane - RE	ND		165	120	J F1	ug/Kg	⊗	0	62 - 120	NC	60
Nitrobenzene - RE	ND		165	442	J	ug/Kg	⊗	NC	64 - 118	NC	60
Iso phorone - RE	ND		165	110	J	ug/Kg	⊗	67	67 - 119	34	60
2-Nitrophenol - RE	ND		165	ND	F1	ug/Kg	⊗	0	67 - 127	NC	60
2,4-Dimethylphenol - RE	ND		165	178	J	ug/Kg	⊗	108	54 - 139	7	60
Benzoic acid - RE	ND		330	ND		ug/Kg	⊗	NC	29 - 158	NC	60
Bis(2-chloroethoxy)methane - RE	ND		165	115	J	ug/Kg	⊗	70	69 - 107	6	60
2,4-Dichlorophenol - RE	ND		165	140	J	ug/Kg	⊗	85	68 - 125	NC	60
1,2,4-Trichlorobenzene - RE	ND		165	123	J	ug/Kg	⊗	75	66 - 115	NC	28

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Lab Sample ID: 580-45906-4 MSD

Client Sample ID: CC-CB-04-2014013-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174626

Prep Batch: 173678

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Naphthalene - RE	ND		165	219	F1	ug/Kg	⊗	133	62 - 112	13	26
4-Chloroaniline - RE	ND		165	ND	F1	ug/Kg	⊗	0	20 - 103	NC	60
Hexachlorobutadiene - RE	ND		165	ND	F1	ug/Kg	⊗	0	65 - 116	NC	60
4-Chloro-3-methylphenol - RE	ND		165	286	J F1	ug/Kg	⊗	173	69 - 121	25	27
2-Methylnaphthalene - RE	210		165	188	F1	ug/Kg	⊗	-15	64 - 119	1	27
1-Methylnaphthalene - RE	110	J	165	163	J F1	ug/Kg	⊗	29	62 - 118	12	30
Hexachlorocyclopentadiene - RE	ND		165	ND	F1	ug/Kg	⊗	0	46 - 131	NC	60
2,4,6-Trichlorophenol - RE	ND		165	183	J	ug/Kg	⊗	111	62 - 133	2	60
2,4,5-Trichlorophenol - RE	ND		165	202	J	ug/Kg	⊗	122	57 - 133	16	60
2-Chloronaphthalene - RE	ND		165	112	J	ug/Kg	⊗	68	68 - 112	25	25
2-Nitroaniline - RE	ND		165	278	J F1	ug/Kg	⊗	168	64 - 112	37	60
Dimethyl phthalate - RE	150	J	165	573	J F1 F2	ug/Kg	⊗	257	78 - 117	67	60
Acenaphthylene - RE	ND		165	138	J	ug/Kg	⊗	83	68 - 120	14	28
2,6-Dinitrotoluene - RE	ND		165	252	J F1	ug/Kg	⊗	153	66 - 123	3	60
3-Nitroaniline - RE	ND		165	171	J	ug/Kg	⊗	103	27 - 103	26	60
Acenaphthene - RE	170		165	195	F1	ug/Kg	⊗	18	68 - 116	9	27
2,4-Dinitrophenol - RE	ND		330	ND		ug/Kg	⊗	NC	20 - 141	NC	60
4-Nitrophenol - RE	ND	*	330	ND		ug/Kg	⊗	NC	20 - 165	NC	33
Dibenzofuran - RE	ND		165	202	J F1	ug/Kg	⊗	123	72 - 109	3	60
2,4-Dinitrotoluene - RE	ND		165	234	J F1	ug/Kg	⊗	141	68 - 121	5	31
Diethyl phthalate - RE	ND		165	303	J F1	ug/Kg	⊗	184	73 - 116	13	26
4-Chlorophenyl phenyl ether - RE	ND		165	ND	F1	ug/Kg	⊗	0	75 - 108	NC	60
Fluorene - RE	130	J	165	183	F1	ug/Kg	⊗	34	70 - 121	13	31
4-Nitroaniline - RE	ND		165	254	J	ug/Kg	⊗	NC	58 - 108	32	60
4,6-Dinitro-2-methylphenol - RE	ND		330	ND		ug/Kg	⊗	NC	48 - 130	NC	60
N-Nitrosodiphenylamine - RE	ND		165	210	J F1	ug/Kg	⊗	128	73 - 115	4	60
4-Bromophenyl phenyl ether - RE	ND		165	271	J F1	ug/Kg	⊗	164	68 - 122	42	60
Hexachlorobenzene - RE	ND		165	119	J	ug/Kg	⊗	72	66 - 117	34	60
Pentachlorophenol - RE	ND		330	781	J F1	ug/Kg	⊗	237	45 - 117	13	68
Phenanthrene - RE	540		165	400	F1 F2	ug/Kg	⊗	-87	73 - 106	32	28
Anthracene - RE	91	J *	165	167	J F1 F2	ug/Kg	⊗	46	73 - 116	34	27
Carbazole - RE	130	J	165	220	J F1	ug/Kg	⊗	57	76 - 135	32	60
Di-n-butyl phthalate - RE	ND		165	ND		ug/Kg	⊗	NC	66 - 140	NC	60
Fluoranthene - RE	830		165	783	4	ug/Kg	⊗	-31	73 - 125	27	36
Pyrene - RE	700		165	646	4	ug/Kg	⊗	-34	70 - 120	17	31
Butyl benzyl phthalate - RE	420	J	165	620	J	ug/Kg	⊗	NC	69 - 142	9	60
3,3'-Dichlorobenzidine - RE	ND		330	ND	F1	ug/Kg	⊗	0	20 - 103	NC	60
Benzo[a]anthracene - RE	190		165	355		ug/Kg	⊗	101	76 - 119	23	27
Chrysene - RE	410		165	523	F1	ug/Kg	⊗	70	75 - 114	16	26
Bis(2-ethylhexyl) phthalate - RE	9500		165	11700	4	ug/Kg	⊗	1336	62 - 144	41	60
Di-n-octyl phthalate - RE	790	J	165	2140	J 4 F2	ug/Kg	⊗	813	65 - 141	46	31
Benzo[b]fluoranthene - RE	540		165	761	F1	ug/Kg	⊗	133	63 - 132	23	31
Benzo[k]fluoranthene - RE	210		165	107	J F1 F2	ug/Kg	⊗	-65	63 - 119	117	31
Benzo[a]pyrene - RE	330		165	277	F1	ug/Kg	⊗	-30	72 - 117	27	30
Indeno[1,2,3-cd]pyrene - RE	210	J	165	127	J F1 F2	ug/Kg	⊗	-47	56 - 127	47	29
Dibenz(a,h)anthracene - RE	ND		165	129	J F2	ug/Kg	⊗	78	56 - 134	45	30
Benzo[g,h,i]perylene - RE	210		165	100	J F1 F2	ug/Kg	⊗	-69	55 - 139	47	28
N-Nitrosodimethylamine - RE	ND		165	ND		ug/Kg	⊗	NC	38 - 133	NC	60

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Lab Sample ID: 580-45906-4 MSD

Client Sample ID: CC-CB-04-2014013-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174626

Prep Batch: 173678

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorophenol - RE	60		36 - 145
Phenol-d5 - RE	76		38 - 149
2,4,6-Tribromophenol - RE	133		28 - 143
Nitrobenzene-d5 - RE	54		38 - 141
2-Fluorobiphenyl - RE	51		42 - 140
Terphenyl-d14 - RE	115		42 - 151

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-173048/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 173053

Prep Batch: 173048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	1.10	J	4.0	0.50	mg/Kg		10/17/14 14:50	10/17/14 17:48	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		50 - 150				10/17/14 14:50	10/17/14 17:48	1

Lab Sample ID: LCS 580-173048/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 173053

Prep Batch: 173048

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
Gasoline		40.0	43.1		mg/Kg		108	68 - 120	
Surrogate	LCSS %Recovery	LCSS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	113		50 - 150						

Lab Sample ID: LCSD 580-173048/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 173053

Prep Batch: 173048

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline		40.0	43.0		mg/Kg		107	68 - 120	0	25
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits							
4-Bromofluorobenzene (Surr)	110		50 - 150							

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 580-173768/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174076

Prep Batch: 173768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.010	0.0032	mg/Kg		10/27/14 06:00	10/28/14 15:27	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 580-173768/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174076

Prep Batch: 173768

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arochlor 1221	ND		0.011	0.0080	mg/Kg		10/27/14 06:00	10/28/14 15:27	1
Arochlor 1232	ND		0.011	0.0070	mg/Kg		10/27/14 06:00	10/28/14 15:27	1
Arochlor 1242	ND		0.010	0.0021	mg/Kg		10/27/14 06:00	10/28/14 15:27	1
Arochlor 1248	ND		0.010	0.0030	mg/Kg		10/27/14 06:00	10/28/14 15:27	1
Arochlor 1254	ND		0.010	0.0021	mg/Kg		10/27/14 06:00	10/28/14 15:27	1
Arochlor 1260	ND		0.010	0.0030	mg/Kg		10/27/14 06:00	10/28/14 15:27	1

MB MB

Surrogate	%Recovery		Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier					
Tetrachloro-m-xylene	83		45 - 135		10/27/14 06:00	10/28/14 15:27	1
DCB Decachlorobiphenyl	95		50 - 140		10/27/14 06:00	10/28/14 15:27	1

Lab Sample ID: LCS 580-173768/14-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174076

Prep Batch: 173768

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
	Added							
Arochlor 1016		0.100	0.103		mg/Kg		103	40 - 140
Arochlor 1260		0.100	0.0962		mg/Kg		96	60 - 130

LCS LCS

Surrogate	%Recovery		Qualifier	Limits
	%Recovery	Qualifier		
Tetrachloro-m-xylene	93		45 - 135	
DCB Decachlorobiphenyl	106		50 - 140	

Lab Sample ID: LCSD 580-173768/15-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174076

Prep Batch: 173768

Analyte	Spike		LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD
	Added								
Arochlor 1016		0.100	0.112		mg/Kg		112	40 - 140	9
Arochlor 1260		0.100	0.0985		mg/Kg		98	60 - 130	2

LCSD LCSD

Surrogate	%Recovery		Qualifier	Limits
	%Recovery	Qualifier		
Tetrachloro-m-xylene	93		45 - 135	
DCB Decachlorobiphenyl	105		50 - 140	

Lab Sample ID: 580-45906-4 MS

Client Sample ID: CC-CB-04-2014013-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 174076

Prep Batch: 173768

Analyte	Sample		Spike	MS MS		D	%Rec	%Rec.
	Result	Qualifier		Added	Result			
Arochlor 1016	ND		0.162		0.201		124	40 - 140
Arochlor 1260	0.43		0.162		1.00 F1		354	60 - 130

MS MS

Surrogate	%Recovery		Qualifier	Limits
	%Recovery	Qualifier		
Tetrachloro-m-xylene	73		45 - 135	
DCB Decachlorobiphenyl	69		50 - 140	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 580-45906-4 MSD

Matrix: Solid

Analysis Batch: 174076

Client Sample ID: CC-CB-04-2014013-S

Prep Type: Total/NA

Prep Batch: 173768

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Arochlor 1016	ND		0.162	0.163	F2	mg/Kg	*	101	40 - 140	21	20	
Arochlor 1260	0.43		0.162	0.450	F1 F2	mg/Kg	*	12	60 - 130	76	20	
Surrogate												
Tetrachloro-m-xylene	71			45 - 135								
DCB Decachlorobiphenyl	72			50 - 140								

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-173189/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 173296

Prep Batch: 173189

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	10.0	J	25	5.7	mg/Kg		10/20/14 10:52	10/21/14 13:04	1
Motor Oil (>C24-C36)	ND		50	9.1	mg/Kg		10/20/14 10:52	10/21/14 13:04	1
Surrogate									
<i>o-Terphenyl</i>	86		50 - 150				10/20/14 10:52	10/21/14 13:04	1

Lab Sample ID: LCS 580-173189/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 173296

Prep Batch: 173189

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	Dil Fac
	Added	Result	Qualifier					
#2 Diesel (C10-C24)	500	462		mg/Kg		92	70 - 125	
Motor Oil (>C24-C36)	502	509		mg/Kg		101	64 - 127	
Surrogate								
<i>o-Terphenyl</i>	95		50 - 150					

Lab Sample ID: LCSD 580-173189/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 173296

Prep Batch: 173189

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
#2 Diesel (C10-C24)	500	453		mg/Kg		91	70 - 125	2	16
Motor Oil (>C24-C36)	502	502		mg/Kg		100	64 - 127	1	17
Surrogate									
<i>o-Terphenyl</i>	91		50 - 150						

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 580-45906-5 MS

Matrix: Solid

Analysis Batch: 173296

Client Sample ID: CC-CB-22-2014013-S

Prep Type: Total/NA

Prep Batch: 173189

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
#2 Diesel (C10-C24)	410	B Y	843	1070		mg/Kg	*	79	70 - 125
Motor Oil (>C24-C36)	1900	Y	846	2560		mg/Kg	*	78	64 - 127
Surrogate									
<i>o-Terphenyl</i>	89			50 - 150					

Lab Sample ID: 580-45906-5 MSD

Matrix: Solid

Analysis Batch: 173296

Client Sample ID: CC-CB-22-2014013-S

Prep Type: Total/NA

Prep Batch: 173189

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
#2 Diesel (C10-C24)	410	B Y	858	1160		mg/Kg	*	88	70 - 125	8	16
Motor Oil (>C24-C36)	1900	Y	861	2610		mg/Kg	*	83	64 - 127	2	17
Surrogate											
<i>o-Terphenyl</i>	90			50 - 150							

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-172766/20-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 172910

Prep Batch: 172766

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.0010	0.00075	mg/L		10/15/14 12:02	10/16/14 08:20	1
Antimony	ND		0.00040	0.000080	mg/L		10/15/14 12:02	10/16/14 08:20	1
Beryllium	ND		0.00040	0.00010	mg/L		10/15/14 12:02	10/16/14 08:20	1
Cadmium	ND		0.00040	0.000028	mg/L		10/15/14 12:02	10/16/14 08:20	1
Chromium	ND		0.00040	0.00027	mg/L		10/15/14 12:02	10/16/14 08:20	1
Copper	ND		0.0010	0.00011	mg/L		10/15/14 12:02	10/16/14 08:20	1
Lead	ND		0.00040	0.000034	mg/L		10/15/14 12:02	10/16/14 08:20	1
Nickel	ND		0.0030	0.00040	mg/L		10/15/14 12:02	10/16/14 08:20	1
Selenium	ND		0.0010	0.00071	mg/L		10/15/14 12:02	10/16/14 08:20	1
Silver	ND		0.00040	0.000030	mg/L		10/15/14 12:02	10/16/14 08:20	1
Thallium	ND		0.0010	0.00028	mg/L		10/15/14 12:02	10/16/14 08:20	1
Zinc	ND		0.0040	0.0019	mg/L		10/15/14 12:02	10/16/14 08:20	1

Lab Sample ID: LCS 580-172766/21-A

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 172910

Prep Batch: 172766

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Arsenic	0.100	0.0969		mg/L		97	80 - 120
Antimony	0.100	0.0945		mg/L		94	80 - 120
Beryllium	0.100	0.0928		mg/L		93	80 - 120
Cadmium	0.100	0.0944		mg/L		94	80 - 120
Chromium	0.100	0.0895		mg/L		90	80 - 120

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-172766/21-A

Matrix: Water

Analysis Batch: 172910

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 172766

Analyte	Spike	LCS	LCS	%Rec.			
	Added	Result	Qualifier	Unit	D	%Rec	Limits
Copper	0.100	0.0898		mg/L		90	80 - 120
Lead	0.100	0.0933		mg/L		93	80 - 120
Nickel	0.100	0.0909		mg/L		91	80 - 120
Selenium	0.100	0.105		mg/L		105	80 - 120
Silver	0.100	0.0931		mg/L		93	80 - 120
Thallium	0.100	0.0951		mg/L		95	80 - 120
Zinc	0.100	0.0975		mg/L		97	80 - 120

Lab Sample ID: LCSD 580-172766/22-A

Matrix: Water

Analysis Batch: 172910

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 172766

Analyte	Spike	LCSD	LCSD	%Rec.				RPD	
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	0.100	0.0977		mg/L		98	80 - 120	1	20
Antimony	0.100	0.0944		mg/L		94	80 - 120	0	20
Beryllium	0.100	0.0938		mg/L		94	80 - 120	1	20
Cadmium	0.100	0.0945		mg/L		95	80 - 120	0	20
Chromium	0.100	0.0907		mg/L		91	80 - 120	1	20
Copper	0.100	0.0910		mg/L		91	80 - 120	1	20
Lead	0.100	0.0927		mg/L		93	80 - 120	1	20
Nickel	0.100	0.0915		mg/L		91	80 - 120	1	20
Selenium	0.100	0.105		mg/L		105	80 - 120	0	20
Silver	0.100	0.0935		mg/L		93	80 - 120	0	20
Thallium	0.100	0.0942		mg/L		94	80 - 120	1	20
Zinc	0.100	0.0983		mg/L		98	80 - 120	1	20

Lab Sample ID: 580-45906-1 MS

Matrix: Water

Analysis Batch: 172910

Client Sample ID: CC-A-01-2014013-W

Prep Type: Total/NA

Prep Batch: 172766

Analyte	Sample	Sample	Spike	MS	MS	%Rec.			
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Arsenic	0.0018		0.100	0.104		mg/L		102	80 - 120
Antimony	0.0015		0.100	0.0987		mg/L		97	80 - 120
Beryllium	ND		0.100	0.0979		mg/L		98	80 - 120
Cadmium	0.00024	J	0.100	0.0961		mg/L		96	80 - 120
Chromium	0.0011		0.100	0.0951		mg/L		94	80 - 120
Copper	0.012		0.100	0.105		mg/L		94	80 - 120
Lead	0.0017		0.100	0.101		mg/L		99	80 - 120
Nickel	0.0075		0.100	0.102		mg/L		94	80 - 120
Selenium	ND		0.100	0.110		mg/L		110	80 - 120
Silver	ND		0.100	0.0987		mg/L		99	80 - 120
Thallium	ND		0.100	0.101		mg/L		101	80 - 120
Zinc	0.070		0.100	0.162		mg/L		92	80 - 120

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-45906-1 MSD

Matrix: Water

Analysis Batch: 172910

Client Sample ID: CC-A-01-2014013-W

Prep Type: Total/NA

Prep Batch: 172766

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Arsenic	0.0018		0.100	0.106		mg/L		104	80 - 120	2	20	
Antimony	0.0015		0.100	0.0996		mg/L		98	80 - 120	1	20	
Beryllium	ND		0.100	0.0999		mg/L		100	80 - 120	2	20	
Cadmium	0.00024	J	0.100	0.0965		mg/L		96	80 - 120	0	20	
Chromium	0.0011		0.100	0.0968		mg/L		96	80 - 120	2	20	
Copper	0.012		0.100	0.106		mg/L		94	80 - 120	1	20	
Lead	0.0017		0.100	0.102		mg/L		100	80 - 120	1	20	
Nickel	0.0075		0.100	0.103		mg/L		96	80 - 120	2	20	
Selenium	ND		0.100	0.111		mg/L		111	80 - 120	1	20	
Silver	ND		0.100	0.0996		mg/L		100	80 - 120	1	20	
Thallium	ND		0.100	0.103		mg/L		103	80 - 120	1	20	
Zinc	0.070		0.100	0.165		mg/L		95	80 - 120	2	20	

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 580-172758/25-A

Matrix: Water

Analysis Batch: 172806

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 172758

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.00020	0.000041	mg/L		10/15/14 10:50	10/15/14 13:00	1

Lab Sample ID: LCS 580-172758/26-A

Matrix: Water

Analysis Batch: 172806

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 172758

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	Dil Fac
	Added	Result	Qualifier					
Mercury	0.00200	0.00191		mg/L		96	80 - 120	

Lab Sample ID: LCSD 580-172758/27-A

Matrix: Water

Analysis Batch: 172806

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 172758

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Mercury	0.00200	0.00192		mg/L		96	80 - 120	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-172827/21-A

Matrix: Solid

Analysis Batch: 173140

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 172827

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.50	0.18	mg/Kg		10/15/14 17:54	10/16/14 16:55	10
Lead	ND		0.20	0.013	mg/Kg		10/15/14 17:54	10/16/14 16:55	10
Antimony	ND		0.20	0.042	mg/Kg		10/15/14 17:54	10/16/14 16:55	10
Beryllium	ND		0.20	0.035	mg/Kg		10/15/14 17:54	10/16/14 16:55	10
Cadmium	ND		0.20	0.0080	mg/Kg		10/15/14 17:54	10/16/14 16:55	10

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-172827/21-A

Matrix: Solid

Analysis Batch: 173140

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 172827

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.20	0.11	mg/Kg		10/15/14 17:54	10/16/14 16:55	10
Copper	0.116	J	0.40	0.098	mg/Kg		10/15/14 17:54	10/16/14 16:55	10
Nickel	ND		0.50	0.081	mg/Kg		10/15/14 17:54	10/16/14 16:55	10
Selenium	ND		0.70	0.20	mg/Kg		10/15/14 17:54	10/16/14 16:55	10
Silver	ND		0.20	0.012	mg/Kg		10/15/14 17:54	10/16/14 16:55	10
Thallium	ND		0.50	0.13	mg/Kg		10/15/14 17:54	10/16/14 16:55	10
Zinc	ND		2.0	1.1	mg/Kg		10/15/14 17:54	10/16/14 16:55	10

Lab Sample ID: LCS 580-172827/22-A

Matrix: Solid

Analysis Batch: 173140

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 172827

Analyte	Spike Added	LCS LCS			D	%Rec	Limits	%Rec.
		Result	Qualifier	Unit				
Arsenic	200	201		mg/Kg		100	80 - 120	
Lead	50.0	50.3		mg/Kg		101	80 - 120	
Antimony	150	150		mg/Kg		100	80 - 120	
Beryllium	5.00	5.12		mg/Kg		102	80 - 120	
Cadmium	5.00	5.28		mg/Kg		106	80 - 120	
Chromium	20.0	19.8		mg/Kg		99	80 - 120	
Copper	25.0	25.9		mg/Kg		104	80 - 120	
Nickel	50.0	50.7		mg/Kg		101	80 - 120	
Selenium	200	196		mg/Kg		98	80 - 120	
Silver	30.0	30.4		mg/Kg		101	80 - 120	
Thallium	200	192		mg/Kg		96	80 - 120	
Zinc	200	200		mg/Kg		100	80 - 120	

Lab Sample ID: LCSD 580-172827/23-A

Matrix: Solid

Analysis Batch: 173140

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 172827

Analyte	Spike Added	LCSD LCSD			D	%Rec	Limits	%Rec.	RPD	Limit
		Result	Qualifier	Unit						
Arsenic	200	199		mg/Kg		99	80 - 120		1	20
Lead	50.0	49.8		mg/Kg		100	80 - 120		1	20
Antimony	150	149		mg/Kg		99	80 - 120		0	20
Beryllium	5.00	5.03		mg/Kg		101	80 - 120		2	20
Cadmium	5.00	5.26		mg/Kg		105	80 - 120		0	20
Chromium	20.0	19.7		mg/Kg		99	80 - 120		0	20
Copper	25.0	25.0		mg/Kg		100	80 - 120		3	20
Nickel	50.0	50.0		mg/Kg		100	80 - 120		1	20
Selenium	200	198		mg/Kg		99	80 - 120		1	20
Silver	30.0	30.5		mg/Kg		102	80 - 120		0	20
Thallium	200	191		mg/Kg		96	80 - 120		0	20
Zinc	200	199		mg/Kg		100	80 - 120		0	20

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-45906-5 MS

Matrix: Solid

Analysis Batch: 173140

Client Sample ID: CC-CB-22-2014013-S

Prep Type: Total/NA

Prep Batch: 172827

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD
Arsenic	16		251	281		mg/Kg	⊗	106	80 - 120	
Lead	180		62.7	262	F1	mg/Kg	⊗	127	80 - 120	
Antimony	8.3		188	190		mg/Kg	⊗	97	80 - 120	
Beryllium	0.89		6.27	7.75		mg/Kg	⊗	109	80 - 120	
Cadmium	2.0		6.27	9.30		mg/Kg	⊗	116	80 - 120	
Chromium	380		25.1	376	4	mg/Kg	⊗	2	80 - 120	
Copper	540	B	31.3	577	4	mg/Kg	⊗	113	80 - 120	
Nickel	360		62.7	387	4	mg/Kg	⊗	51	80 - 120	
Selenium	2.4		251	262		mg/Kg	⊗	104	80 - 120	
Silver	1.0		37.6	40.5		mg/Kg	⊗	105	80 - 120	
Thallium	0.22	J	251	258		mg/Kg	⊗	103	80 - 120	
Zinc	1100		251	1470	4	mg/Kg	⊗	139	80 - 120	

Lab Sample ID: 580-45906-5 MSD

Matrix: Solid

Analysis Batch: 173140

Client Sample ID: CC-CB-22-2014013-S

Prep Type: Total/NA

Prep Batch: 172827

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Arsenic	16		275	319		mg/Kg	⊗	110	80 - 120	13	20	
Lead	180		68.7	282	F1	mg/Kg	⊗	146	80 - 120	8	20	
Antimony	8.3		206	216		mg/Kg	⊗	101	80 - 120	13	20	
Beryllium	0.89		6.87	8.61		mg/Kg	⊗	112	80 - 120	11	20	
Cadmium	2.0		6.87	9.45		mg/Kg	⊗	108	80 - 120	2	20	
Chromium	380		27.5	499	4 F2	mg/Kg	⊗	453	80 - 120	28	20	
Copper	540	B	34.3	800	4 F2	mg/Kg	⊗	751	80 - 120	32	20	
Nickel	360		68.7	487	4 F2	mg/Kg	⊗	192	80 - 120	23	20	
Selenium	2.4		275	299		mg/Kg	⊗	108	80 - 120	13	20	
Silver	1.0		41.2	45.7		mg/Kg	⊗	108	80 - 120	12	20	
Thallium	0.22	J	275	294		mg/Kg	⊗	107	80 - 120	13	20	
Zinc	1100		275	1630	4	mg/Kg	⊗	186	80 - 120	10	20	

Lab Sample ID: 580-45906-5 DU

Matrix: Solid

Analysis Batch: 173140

Client Sample ID: CC-CB-22-2014013-S

Prep Type: Total/NA

Prep Batch: 172827

Analyte	Sample	Sample	Spike	DU	DU	Unit	D		RPD		Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	
Arsenic	16			16.6		mg/Kg	⊗			3	20
Lead	180			187		mg/Kg	⊗			3	20
Antimony	8.3			8.52		mg/Kg	⊗			3	20
Beryllium	0.89			0.890		mg/Kg	⊗			0.3	20
Cadmium	2.0			2.18		mg/Kg	⊗			7	20
Chromium	380			386		mg/Kg	⊗			3	20
Copper	540	B		561		mg/Kg	⊗			3	20
Nickel	360			368		mg/Kg	⊗			3	20
Selenium	2.4			2.35		mg/Kg	⊗			0.7	20
Silver	1.0			1.01		mg/Kg	⊗			0.3	20
Thallium	0.22	J		0.221	J	mg/Kg	⊗			2	20
Zinc	1100			1160		mg/Kg	⊗			4	20

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-172822/17-A

Matrix: Solid

Analysis Batch: 172879

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 172822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0053	mg/Kg		10/15/14 17:07	10/16/14 09:51	1

Lab Sample ID: LCS 580-172822/18-A

Matrix: Solid

Analysis Batch: 172879

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 172822

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Mercury	0.167	0.151		mg/Kg		90	80 - 120

Lab Sample ID: LCSD 580-172822/19-A

Matrix: Solid

Analysis Batch: 172879

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 172822

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	Limit	
Mercury	0.167	0.154		mg/Kg		92	80 - 120	2	20

Method: 120.1 - Conductivity, Specific Conductance

Lab Sample ID: MB 580-173061/1

Client Sample ID: Method Blank

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 173061

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		10	10	umhos/cm			10/17/14 16:30	1

Lab Sample ID: LCS 580-173061/2

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 173061

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Specific Conductance	100	107		umhos/cm		107	90 - 110

Lab Sample ID: 580-45906-1 DU

Client Sample ID: CC-A-01-2014013-W

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 173061

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Specific Conductance	170		166		umhos/cm		0.1	20

Method: 2320B - Alkalinity - Titrimetric

Lab Sample ID: LCS 580-173038/2

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 173038

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Alkalinity	100	104		mg/L		104	85 - 115

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-172865/1

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 172865

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nitrate as N	ND		0.90	0.20	mg/L			10/15/14 11:09	1

Lab Sample ID: LCS 580-172865/2

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 172865

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier					
Nitrate as N	1.80	1.85		mg/L		103	90 - 110	

Lab Sample ID: LCSD 580-172865/3

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 172865

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier					
Nitrate as N	1.80	1.85		mg/L		103	90 - 110	0

Lab Sample ID: 580-45906-1 MS

Client Sample ID: CC-A-01-2014013-W

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 172865

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec
	Result	Qualifier	Added	Result	Qualifier			
Nitrate as N	0.22	J H	1.80	2.13		mg/L	106	90 - 110

Lab Sample ID: 580-45906-1 DU

Client Sample ID: CC-A-01-2014013-W

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 172865

Analyte	Sample	Sample	DU	DU	Unit	D	RPD
	Result	Qualifier	Result	Qualifier			
Nitrate as N	0.22	J H	0.220	J	mg/L		0

Lab Sample ID: MB 580-172903/1

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 172903

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		0.90	0.30	mg/L			10/15/14 11:09	1
Sulfate	ND		1.2	0.40	mg/L			10/15/14 11:09	1

Lab Sample ID: LCS 580-172903/2

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 172903

Analyte	Spike	LCS	LCS	Unit	D	%Rec
	Added	Result	Qualifier			
Chloride	9.00	9.41		mg/L		105
Sulfate	12.0	11.5		mg/L		96

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 580-172903/3

Matrix: Water

Analysis Batch: 172903

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Chloride	9.00	9.41		mg/L		105	90 - 110	0	15
Sulfate	12.0	11.3		mg/L		95	90 - 110	2	15

Lab Sample ID: 580-45906-1 MS

Matrix: Water

Analysis Batch: 172903

Client Sample ID: CC-A-01-2014013-W

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chloride	11		9.00	20.9		mg/L		106	90 - 110
Sulfate	12		12.0	23.7		mg/L		97	90 - 110

Lab Sample ID: 580-45906-1 DU

Matrix: Water

Analysis Batch: 172903

Client Sample ID: CC-A-01-2014013-W

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	11			11.4		mg/L		0.4	10
Sulfate	12			12.0		mg/L		0.08	10

Method: 9060_PSEP - TOC (Puget Sound)

Lab Sample ID: MB 580-173358/3

Client Sample ID: Method Blank

Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 173358

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		2000	250	mg/Kg			10/21/14 12:24	1

Lab Sample ID: LCS 580-173358/4

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 173358

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Organic Carbon	2850	3100		mg/Kg		109	27.8 - 170

Lab Sample ID: LCSD 580-173358/5

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 173358

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Total Organic Carbon	2850	3000		mg/Kg		105	27.8 - 170	3	35

Lab Sample ID: 580-45906-4 MS

Client Sample ID: CC-CB-04-2014013-S

Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 173358

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Total Organic Carbon	69000		124000	174000		mg/Kg		85	50 - 140

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: 9060_PSEP - TOC (Puget Sound) (Continued)

Lab Sample ID: 580-45906-4 MSD

Matrix: Solid

Analysis Batch: 173358

Client Sample ID: CC-CB-04-2014013-S

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier			97			
Total Organic Carbon	69000		119000	185000		mg/Kg		50 - 140	6		35

Lab Sample ID: 580-45906-4 DU

Client Sample ID: CC-CB-04-2014013-S

Prep Type: Total/NA

Analysis Batch: 173358

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier					
Total Organic Carbon	69000			59400	mg/Kg			15	50

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 580-173015/1

Client Sample ID: Method Blank

Prep Type: Total/NA

Analysis Batch: 173015

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Suspended Solids	ND		2.0	2.0	mg/L			10/17/14 12:16	1

Lab Sample ID: LCS 580-173015/2

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analysis Batch: 173015

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Total Suspended Solids		30.0	24.8	mg/L		83	70.6 - 120

Method: SM 4500 H+ B - pH

Lab Sample ID: 580-45906-2 DU

Client Sample ID: CC-FD-02-2014013-W

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 172829

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier					
pH	7.07	HF		7.130	SU			0.8	1

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-173083/1

Client Sample ID: Method Blank

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 173083

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Organic Carbon	ND		1.0	0.33	mg/L			10/18/14 12:23	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 580-173083/2

Matrix: Water

Analysis Batch: 173083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Organic Carbon	15.0	16.4		mg/L		109	85 - 115

Lab Sample ID: MB 580-173201/1

Matrix: Water

Analysis Batch: 173201

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.33	mg/L			10/20/14 11:41	1

Lab Sample ID: LCS 580-173201/2

Matrix: Water

Analysis Batch: 173201

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Organic Carbon	15.0	16.6		mg/L		111	85 - 115

Lab Chronicle

Client: Leidos, Inc.
Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-A-01-2014013-W

Lab Sample ID: 580-45906-1

Matrix: Water

Date Collected: 10/13/14 11:45

Date Received: 10/14/14 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			172794	10/15/14 13:10	LHJ	TAL SEA
Total/NA	Analysis	8270D		1	173503	10/22/14 17:00	AHP	TAL SEA
Total/NA	Prep	200.8			172766	10/15/14 12:02	PAB	TAL SEA
Total/NA	Analysis	200.8		1	172910	10/16/14 09:16	FCW	TAL SEA
Total/NA	Prep	245.1			172758	10/15/14 10:49	PAB	TAL SEA
Total/NA	Analysis	245.1		1	172806	10/15/14 13:30	FCW	TAL SEA
Total/NA	Analysis	120.1		1	173061	10/17/14 16:30	JLS	TAL SEA
Total/NA	Analysis	2320B		1	173038	10/17/14 13:34	SPP	TAL SEA
Total/NA	Analysis	300.0		1	172865	10/15/14 14:54	JLS	TAL SEA
Total/NA	Analysis	300.0		1	172903	10/15/14 14:54	JLS	TAL SEA
Total/NA	Analysis	SM 2540D		1	173015	10/17/14 12:16	LKC	TAL SEA
Total/NA	Analysis	SM 4500 H+ B		1	172829	10/15/14 11:05	JLS	TAL SEA
Dissolved	Analysis	SM 5310B		1	173201	10/20/14 11:41	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	173083	10/18/14 22:06	JLS	TAL SEA

Client Sample ID: CC-FD-02-2014013-W

Lab Sample ID: 580-45906-2

Matrix: Water

Date Collected: 10/13/14 11:45

Date Received: 10/14/14 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			172794	10/15/14 13:10	LHJ	TAL SEA
Total/NA	Analysis	8270D		1	173503	10/22/14 17:26	AHP	TAL SEA
Total/NA	Prep	200.8			172766	10/15/14 12:02	PAB	TAL SEA
Total/NA	Analysis	200.8		1	172910	10/16/14 09:26	FCW	TAL SEA
Total/NA	Prep	245.1			172758	10/15/14 10:49	PAB	TAL SEA
Total/NA	Analysis	245.1		1	172806	10/15/14 13:33	FCW	TAL SEA
Total/NA	Analysis	120.1		1	173061	10/17/14 16:30	JLS	TAL SEA
Total/NA	Analysis	2320B		1	173038	10/17/14 13:34	SPP	TAL SEA
Total/NA	Analysis	300.0		1	172865	10/15/14 15:08	JLS	TAL SEA
Total/NA	Analysis	300.0		1	172903	10/15/14 15:08	JLS	TAL SEA
Total/NA	Analysis	SM 2540D		1	173015	10/17/14 12:16	LKC	TAL SEA
Total/NA	Analysis	SM 4500 H+ B		1	172829	10/15/14 11:06	JLS	TAL SEA
Dissolved	Analysis	SM 5310B		1	173201	10/21/14 09:10	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	173083	10/18/14 22:27	JLS	TAL SEA

Client Sample ID: CC-A-01-2014013-S

Lab Sample ID: 580-45906-3

Matrix: Solid

Percent Solids: 57.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			173001	10/17/14 11:05	ALL	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Leidos, Inc.
Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-A-01-2014013-S

Lab Sample ID: 580-45906-3

Date Collected: 10/13/14 12:15

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 57.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		10	173503	10/22/14 19:08	AHP	TAL SEA
Total/NA	Prep	3550B	DL		173001	10/17/14 11:05	ALL	TAL SEA
Total/NA	Analysis	8270D	DL	100	174767	11/04/14 19:30	AHP	TAL SEA
Total/NA	Prep	3550B			173768	10/27/14 06:00	ALL	TAL SEA
Total/NA	Analysis	8082		1	174076	10/28/14 16:13	ALC	TAL SEA
Total/NA	Prep	3546			173189	10/20/14 10:52	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	173296	10/21/14 18:52	EKK	TAL SEA
Total/NA	Prep	3050B			172827	10/15/14 17:54	PAB	TAL SEA
Total/NA	Analysis	6020		10	173140	10/16/14 17:38	FCW	TAL SEA
Total/NA	Prep	7471A			172822	10/15/14 17:07	PAB	TAL SEA
Total/NA	Analysis	7471A		1	172879	10/16/14 10:26	FCW	TAL SEA
Total/NA	Analysis	2540B		1	173274	10/20/14 18:10	CTC	TAL SEA

Client Sample ID: CC-CB-04-2014013-S

Lab Sample ID: 580-45906-4

Date Collected: 10/13/14 13:20

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 59.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035	RA		174012	10/14/14 16:40	CTC	TAL SEA
Total/NA	Analysis	8260B	RA	1	173956	10/27/14 18:57	JMB	TAL SEA
Total/NA	Prep	3550B			172868	10/16/14 09:52	ALL	TAL SEA
Total/NA	Analysis	8270D		50	174626	11/03/14 21:19	AHP	TAL SEA
Total/NA	Prep	3550B	RE		173678	10/24/14 12:00	ALL	TAL SEA
Total/NA	Analysis	8270D	RE	50	174626	11/03/14 22:10	AHP	TAL SEA
Total/NA	Prep	5035			173048	10/17/14 15:22	IWH	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	173053	10/17/14 19:52	IWH	TAL SEA
Total/NA	Prep	3550B			173768	10/27/14 06:00	ALL	TAL SEA
Total/NA	Analysis	8082		1	174076	10/28/14 16:28	ALC	TAL SEA
Total/NA	Prep	3546			173189	10/20/14 10:52	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	173296	10/21/14 19:10	EKK	TAL SEA
Total/NA	Prep	3050B			172827	10/15/14 17:54	PAB	TAL SEA
Total/NA	Analysis	6020		10	173140	10/16/14 17:35	FCW	TAL SEA
Total/NA	Prep	7471A			172822	10/15/14 17:07	PAB	TAL SEA
Total/NA	Analysis	7471A		1	172879	10/16/14 10:29	FCW	TAL SEA
Total/NA	Analysis	2540B		1	173274	10/20/14 18:10	CTC	TAL SEA
Total/NA	Analysis	9060_PSEP		1	173358	10/21/14 12:24	CRH	TAL SEA
Total/NA	Analysis	PSEP Plumb 1981		1	172900	10/16/14 12:09	LKC	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Client Sample ID: CC-CB-22-2014013-S

Lab Sample ID: 580-45906-5

Date Collected: 10/13/14 14:10

Matrix: Solid

Date Received: 10/14/14 16:00

Percent Solids: 57.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			172868	10/16/14 09:52	ALL	TAL SEA
Total/NA	Analysis	8270D		50	174626	11/03/14 21:44	AHP	TAL SEA
Total/NA	Prep	3550B	RE		173678	10/24/14 12:00	ALL	TAL SEA
Total/NA	Analysis	8270D	RE	50	174626	11/03/14 23:27	AHP	TAL SEA
Total/NA	Prep	3550B			173768	10/27/14 06:00	ALL	TAL SEA
Total/NA	Analysis	8082		1	174076	10/28/14 17:14	ALC	TAL SEA
Total/NA	Prep	3546			173189	10/20/14 10:52	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	173296	10/21/14 19:47	EKK	TAL SEA
Total/NA	Prep	3050B			172827	10/15/14 17:54	PAB	TAL SEA
Total/NA	Analysis	6020		10	173140	10/16/14 17:09	FCW	TAL SEA
Total/NA	Prep	7471A			172822	10/15/14 17:07	PAB	TAL SEA
Total/NA	Analysis	7471A		1	172879	10/16/14 10:31	FCW	TAL SEA
Total/NA	Analysis	2540B		1	173248	10/20/14 15:14	CLH	TAL SEA
Total/NA	Analysis	9060_PSEP		1	173358	10/21/14 12:24	CRH	TAL SEA
Total/NA	Analysis	PSEP Plumb 1981		1	172900	10/16/14 12:09	LKC	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TestAmerica Seattle

Certification Summary

Client: Leidos, Inc.

TestAmerica Job ID: 580-45906-1

Project/Site: NPDES Sampling Support

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-15
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-15
US Fish & Wildlife	Federal		LE192332-0	02-28-16
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

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TestAmerica Seattle

Sample Summary

Client: Leidos, Inc.

Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45906-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-45906-1	CC-A-01-2014013-W	Water	10/13/14 11:45	10/14/14 16:00
580-45906-2	CC-FD-02-2014013-W	Water	10/13/14 11:45	10/14/14 16:00
580-45906-3	CC-A-01-2014013-S	Solid	10/13/14 12:15	10/14/14 16:00
580-45906-4	CC-CB-04-2014013-S	Solid	10/13/14 13:20	10/14/14 16:00
580-45906-5	CC-CB-22-2014013-S	Solid	10/13/14 14:10	10/14/14 16:00

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TestAmerica Seattle

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424
5755 8th Street East
phone 253.922.2310 fax

Leidos

18912 N Creek Pkwy, Ste. 101

Bothell, WA 98011

Client Contact

Leidos

Tel/Fax: 206.300.2144

Project Manager: Christine Nancarrow

Site Contact: Melissa Ivancevich

Date: 10/13/14

Carrier: Courier

Lab Contact: Kris Allen

Analysis Turnaround Time

CALENDAR DAYS

WORKING DAYS

TAT if different from Below 3 Weeks

2 weeks

1 week

2 days

1 day

Sample Identification

Sample

Sample Date

Sample Time

Type

(C-Conn,
G-Grab)

Matrix

of Cont.

Filtered Sample (Y / N)

Perform MS / MSD (Y / N)

SVOCs (Method 8270D)

Metals (Method 200.8/7470A)

pH (Method SM4500H)

Spec Cond (Method 120.1)

Alk/Bicarb/Carb (Method SM2320)

Anions (Method 300.0/353.2)

TOC (Method SM5310B)

DOC (Method SM5310B)

TSS (Method 2540D)

Sample Specific Notes:

10/13/14

10/13/14

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10/13/14

10/13/14

DW

NPDES

RCRA

Other

COC No:

1 of 1 COCS

Sampler:

For Lab Use Only:

Walk-in Client:

Lab Sampling:

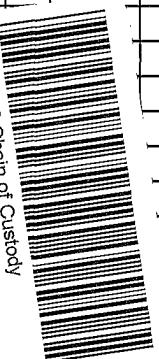
Job / SDG No.:

TestAmerica Laboratories, Inc

THE LEADER IN ENVIRONMENTAL TESTING

12/22

Page 81 of 83



580-45906 Chain of Custody

Page 81 of 83

Possibility Used: 1=Ice, 2=HC, 3=H₂SO₄, 4=HNO₃, 5=NaOH, 6=Other, MeOH

Possible Hazard Identification:

Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the

Comments Section if the lab is to dispose of the sample.

Non-Hazard

Flammable

Skin Irritant

Poison B

Unknown

Return to Client

Disposal by Lab

Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact:

Yes

No

Custody Seal No.: 242407

Cooler Temp. (°C): Obs'd: _____

Corrid: _____

Theirm ID No.: _____

Relinquished by:

Melissa J. Allen

Company: Leidos

Date/Time: 10/14/14 08:30

Received by: *J. Allen*

Company: Leidos

Date/Time: _____

Received by: _____

Relinquished by:

Company: _____

Date/Time: _____

Received in Laboratory by: _____

Company: _____

Date/Time: _____

Form No. CA-C-WI-002, Rev. 4.3, dated 12/05/2013

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424
phone 253.922.2310 fax

5755 8th Street East

Regulatory Program: DW NPDES RCRA Other:

Project Manager: Christine Nancarrow
Tel/Fax: 206.300.2144

Client Contact

Site Contact: Melissa Ivancevich
Lab Contact: Kris Allen

Date:

Carrier: Courier

COC No.:

2

of

2

COCs

12/22/2014

Leidos
18912 N Creek Pkwy, Ste. 101
Bothell, WA 98011

Phone
425.338.2101
FAX
425.435.5566

Project Name: NPDES Sampling Support

Site: Lower Duwamish Waterway
P O # P010163427

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 580-45906-1

Login Number: 45906

List Source: TestAmerica Seattle

List Number: 1

Creator: McDaniel, Ronald T

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Not present.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



October 30, 2014

Vista Project I.D.: 1400762

Ms. Christine Nancarrow
Leidos
18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Dear Ms. Nancarrow,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on October 14, 2014. This sample set was analyzed on a standard turn-around time, under your Project Name '1400647'. The work was authorized under your Purchase Order No. P010163569.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier
Laboratory Director



Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAC for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Work Order No. 1400762**Case Narrative****Sample Condition on Receipt:**

Two aqueous samples and three sediment samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology.

Analytical Notes:**EPA Method 1613**

The samples were extracted and analyzed for tetra-through-octa chlorinated dioxins and furans by EPA Method 1613 using a ZB-5MS GC column.

Holding Times

These samples were extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with each preparation batch. No analytes were detected in the Method Blanks. The OPR recoveries were within the method acceptance criteria.

Labeled standard recoveries for all QC and field samples were within method acceptance criteria.

EPA Method 1668C

The samples were extracted and analyzed for 209 PCB congeners by EPA Method 1668C using a ZB-1 GC column.

Holding Times

The samples were extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with each preparation batch. PCB-11 was detected at 23.5 pg/L in the aqueous method blank, which is above the sample quantitation limit. No other analytes were detected above the sample quantitation limit in the Method Blanks. The OPR recoveries were within the method acceptance criteria.

Labeled standard recoveries for all QC and field samples were within method acceptance criteria.

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1400762-01	CC-A-01-20141013-W	13-Oct-14 11:45	14-Oct-14 08:45	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
1400762-02	CC-FD-02-20141013-W	13-Oct-14 11:45	14-Oct-14 08:45	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
1400762-03	CC-A-01-20141013-S	13-Oct-14 12:15	14-Oct-14 08:45	Amber Glass, 250mL
1400762-04	CC-CB-04-20141013-S	13-Oct-14 13:20	14-Oct-14 08:45	Amber Glass, 250mL
1400762-05	CC-CB-22-20141013-S	13-Oct-14 14:10	14-Oct-14 08:45	Amber Glass, 250mL

ANALYTICAL RESULTS

Sample ID: Method Blank								EPA Method 1613B							
Matrix:	Aqueous <th>QC Batch:</th> <td>B4J0106</td> <th data-cs="3" data-kind="parent"></th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <th>Lab Sample:</th> <td data-cs="3" data-kind="parent">B4J0106-BLK1</td> <td data-kind="ghost"></td> <td data-kind="ghost"></td>	QC Batch:	B4J0106				Lab Sample:	B4J0106-BLK1							
Sample Size:	1.00 L	Date Extracted:	20-Oct-2014 8:21				Date Analyzed :	22-Oct-14 17:56 Column: ZB-5MS Analyst: MAS							
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers					
2,3,7,8-TCDD	ND	5.00	0.967		0.943		IS 13C-2,3,7,8-TCDD	82.7	25 - 164						
1,2,3,7,8-PeCDD	ND	25.0	0.894		4.51		13C-1,2,3,7,8-PeCDD	82.6	25 - 181						
1,2,3,4,7,8-HxCDD	ND	25.0	1.02		2.21		13C-1,2,3,4,7,8-HxCDD	84.6	32 - 141						
1,2,3,6,7,8-HxCDD	ND	25.0	1.10		1.93		13C-1,2,3,6,7,8-HxCDD	84.8	28 - 130						
1,2,3,7,8,9-HxCDD	ND	25.0	1.13		2.02		13C-1,2,3,7,8,9-HxCDD	83.3	32 - 141						
1,2,3,4,6,7,8-HpCDD	ND	25.0	1.94		2.98		13C-1,2,3,4,6,7,8-HpCDD	84.6	23 - 140						
OCDD	ND	50.0	1.62		3.57		13C-OCDD	67.0	17 - 157						
2,3,7,8-TCDF	ND	5.00	0.513		0.984		13C-2,3,7,8-TCDF	76.3	24 - 169						
1,2,3,7,8-PeCDF	ND	25.0	1.35		2.50		13C-1,2,3,7,8-PeCDF	81.2	24 - 185						
2,3,4,7,8-PeCDF	ND	25.0	0.743		1.73		13C-2,3,4,7,8-PeCDF	80.1	21 - 178						
1,2,3,4,7,8-HxCDF	ND	25.0	1.52		1.36		13C-1,2,3,4,7,8-HxCDF	90.7	26 - 152						
1,2,3,6,7,8-HxCDF	ND	25.0	0.819		1.56		13C-1,2,3,6,7,8-HxCDF	83.5	26 - 123						
2,3,4,6,7,8-HxCDF	ND	25.0	0.979		2.05		13C-2,3,4,6,7,8-HxCDF	83.3	28 - 136						
1,2,3,7,8,9-HxCDF	ND	25.0	1.39		1.34		13C-1,2,3,7,8,9-HxCDF	84.8	29 - 147						
1,2,3,4,6,7,8-HpCDF	ND	25.0	0.655		1.46		13C-1,2,3,4,6,7,8-HpCDF	76.4	28 - 143						
1,2,3,4,7,8,9-HpCDF	ND	25.0	0.572		1.75		13C-1,2,3,4,7,8,9-HpCDF	81.1	26 - 138						
OCDF	ND	50.0	1.74		2.98		13C-OCDF	69.4	17 - 157						
							CRS 37Cl-2,3,7,8-TCDD	86.4	35 - 197						
								Toxic Equivalent Quotient (TEQ) Data							
								TEQMinWHO2005Dioxin	0.00						
TOTALS															
Total TCDD	ND	0.967													
Total PeCDD	ND	1.68													
Total HxCDD	ND	1.95													
Total HpCDD	ND	1.94													
Total TCDF	ND	0.513													
Total PeCDF	ND	1.40													
Total HxCDF	ND	1.99													
Total HpCDF	ND	0.885													

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

EMPC - Estimated maximum possible concentration

RL - Reporting limit

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: OPR					EPA Method 1613B			
Matrix:	Aqueous <th>QC Batch:</th> <td>B4J0106</td> <th>Lab Sample:</th> <td>B4J0106-BS1</td> <th data-cs="2" data-kind="parent"></th> <th data-kind="ghost"></th>	QC Batch:	B4J0106	Lab Sample:	B4J0106-BS1			
Sample Size:	1.00 L	Date Extracted:	20-Oct-2014 8:21	Date Analyzed:	22-Oct-14 16:19	Column:	ZB-5MS	
Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL	
2,3,7,8-TCDD	177	200	88.6	67 - 158	IS	13C-2,3,7,8-TCDD	72.2	20 - 175
1,2,3,7,8-PeCDD	962	1000	96.2	70 - 142		13C-1,2,3,7,8-PeCDD	71.6	21 - 227
1,2,3,4,7,8-HxCDD	918	1000	91.8	70 - 164		13C-1,2,3,4,7,8-HxCDD	75.9	21 - 193
1,2,3,6,7,8-HxCDD	951	1000	95.1	76 - 134		13C-1,2,3,6,7,8-HxCDD	78.0	25 - 163
1,2,3,7,8,9-HxCDD	962	1000	96.2	64 - 162		13C-1,2,3,7,8,9-HxCDD	74.4	21 - 193
1,2,3,4,6,7,8-HpCDD	958	1000	95.8	70 - 140		13C-1,2,3,4,6,7,8-HpCDD	76.9	26 - 166
OCDD	1880	2000	94.1	78 - 144		13C-OCDD	64.8	13 - 199
2,3,7,8-TCDF	176	200	88.1	75 - 158		13C-2,3,7,8-TCDF	71.2	22 - 152
1,2,3,7,8-PeCDF	931	1000	93.1	80 - 134		13C-1,2,3,7,8-PeCDF	70.6	21 - 192
2,3,4,7,8-PeCDF	942	1000	94.2	68 - 160		13C-2,3,4,7,8-PeCDF	68.6	13 - 328
1,2,3,4,7,8-HxCDF	930	1000	93.0	72 - 134		13C-1,2,3,4,7,8-HxCDF	82.1	19 - 202
1,2,3,6,7,8-HxCDF	932	1000	93.2	84 - 130		13C-1,2,3,6,7,8-HxCDF	74.7	21 - 159
2,3,4,6,7,8-HxCDF	927	1000	92.7	70 - 156		13C-2,3,4,6,7,8-HxCDF	73.9	22 - 176
1,2,3,7,8,9-HxCDF	938	1000	93.8	78 - 130		13C-1,2,3,7,8,9-HxCDF	77.0	17 - 205
1,2,3,4,6,7,8-HpCDF	927	1000	92.7	82 - 122		13C-1,2,3,4,6,7,8-HpCDF	72.2	21 - 158
1,2,3,4,7,8,9-HpCDF	934	1000	93.4	78 - 138		13C-1,2,3,4,7,8,9-HpCDF	72.0	20 - 186
OCDF	1910	2000	95.5	63 - 170		13C-OCDF	68.2	13 - 199
					CRS	37Cl-2,3,7,8-TCDD	83.0	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: CC-A-01-20141013-W							EPA Method 1613B			
Client Data		Sample Data			Laboratory Data					
Name:	Leidos	Matrix: Aqueous			Lab Sample:	1400762-01	Date Received:	14-Oct-2014 8:45		
Project:	1400647	Sample Size: 1.01 L			QC Batch:	B4J0106	Date Extracted:	20-Oct-2014 8:21		
Date Collected:	13-Oct-2014 11:45				Date Analyzed :	22-Oct-14 18:44	Column:	ZB-5MS	Analyst:	MAS
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	4.96	1.51		0.943		IS 13C-2,3,7,8-TCDD	80.7	25 - 164	
1,2,3,7,8-PeCDD	ND	24.8	0.930		4.51		13C-1,2,3,7,8-PeCDD	79.9	25 - 181	
1,2,3,4,7,8-HxCDD	ND	24.8	2.40		2.21		13C-1,2,3,4,7,8-HxCDD	79.3	32 - 141	
1,2,3,6,7,8-HxCDD	ND	24.8	2.56		1.93		13C-1,2,3,6,7,8-HxCDD	77.6	28 - 130	
1,2,3,7,8,9-HxCDD	ND	24.8	2.67		2.02		13C-1,2,3,7,8,9-HxCDD	79.3	32 - 141	
1,2,3,4,6,7,8-HpCDD	5.83	24.8			2.98	J	13C-1,2,3,4,6,7,8-HpCDD	76.9	23 - 140	
OCDD	33.7	49.6			3.57	J	13C-OCDD	71.8	17 - 157	
2,3,7,8-TCDF	ND	4.96	0.998		0.984		13C-2,3,7,8-TCDF	80.3	24 - 169	
1,2,3,7,8-PeCDF	ND	24.8	1.38		2.50		13C-1,2,3,7,8-PeCDF	92.0	24 - 185	
2,3,4,7,8-PeCDF	ND	24.8	1.06		1.73		13C-2,3,4,7,8-PeCDF	80.0	21 - 178	
1,2,3,4,7,8-HxCDF	ND	24.8	0.602		1.36		13C-1,2,3,4,7,8-HxCDF	84.7	26 - 152	
1,2,3,6,7,8-HxCDF	ND	24.8	0.644		1.56		13C-1,2,3,6,7,8-HxCDF	79.6	26 - 123	
2,3,4,6,7,8-HxCDF	ND	24.8	0.502		2.05		13C-2,3,4,6,7,8-HxCDF	77.3	28 - 136	
1,2,3,7,8,9-HxCDF	ND	24.8	0.728		1.34		13C-1,2,3,7,8,9-HxCDF	79.2	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	24.8		1.37	1.46		13C-1,2,3,4,6,7,8-HpCDF	74.5	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	24.8	1.17		1.75		13C-1,2,3,4,7,8,9-HpCDF	75.7	26 - 138	
OCDF	ND	49.6	1.86		2.98		13C-OCDF	72.7	17 - 157	
							CRS 37Cl-2,3,7,8-TCDD	87.1	35 - 197	
							Toxic Equivalent Quotient (TEQ) Data			
							TEQMinWHO2005Dioxin	0.0684		
TOTALS										
Total TCDD	ND		1.51							
Total PeCDD	ND		0.930							
Total HxCDD	ND		3.64							
Total HpCDD	14.0									
Total TCDF	ND		1.33							
Total PeCDF	ND		0	0.532						
Total HxCDF	ND			0.886						
Total HpCDF	1.20			2.57						

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

EMPC - Estimated maximum possible concentration

RL - Reporting limit

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: CC-FD-02-20141013-W							EPA Method 1613B			
Client Data		Sample Data			Laboratory Data					
Name:	Leidos	Matrix:	Aqueous		Lab Sample:	1400762-02	Date Received:	14-Oct-2014	8:45	
Project:	1400647	Sample Size:	1.00 L		QC Batch:	B4J0106	Date Extracted:	20-Oct-2014	8:21	
Date Collected:	13-Oct-2014 11:45	Date Analyzed :	22-Oct-14 19:33		Column:	ZB-5MS	Analyst:	MAS		
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	4.99	1.30		0.943		IS 13C-2,3,7,8-TCDD	78.4	25 - 164	
1,2,3,7,8-PeCDD	ND	24.9	0.770		4.51		13C-1,2,3,7,8-PeCDD	78.7	25 - 181	
1,2,3,4,7,8-HxCDD	ND	24.9	2.24		2.21		13C-1,2,3,4,7,8-HxCDD	72.9	32 - 141	
1,2,3,6,7,8-HxCDD	ND	24.9	2.31		1.93		13C-1,2,3,6,7,8-HxCDD	72.6	28 - 130	
1,2,3,7,8,9-HxCDD	ND	24.9	2.44		2.02		13C-1,2,3,7,8,9-HxCDD	74.1	32 - 141	
1,2,3,4,6,7,8-HpCDD	5.82	24.9			2.98	J	13C-1,2,3,4,6,7,8-HpCDD	75.6	23 - 140	
OCDD	33.9	49.9			3.57	J	13C-OCDD	65.4	17 - 157	
2,3,7,8-TCDF	ND	4.99	1.73		0.984		13C-2,3,7,8-TCDF	77.1	24 - 169	
1,2,3,7,8-PeCDF	ND	24.9	1.44		2.50		13C-1,2,3,7,8-PeCDF	87.7	24 - 185	
2,3,4,7,8-PeCDF	ND	24.9	1.69		1.73		13C-2,3,4,7,8-PeCDF	76.0	21 - 178	
1,2,3,4,7,8-HxCDF	ND	24.9	0.807		1.36		13C-1,2,3,4,7,8-HxCDF	78.1	26 - 152	
1,2,3,6,7,8-HxCDF	ND	24.9	0.912		1.56		13C-1,2,3,6,7,8-HxCDF	73.3	26 - 123	
2,3,4,6,7,8-HxCDF	ND	24.9	0.591		2.05		13C-2,3,4,6,7,8-HxCDF	70.8	28 - 136	
1,2,3,7,8,9-HxCDF	ND	24.9	0.817		1.34		13C-1,2,3,7,8,9-HxCDF	72.7	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	24.9	2.37		1.46		13C-1,2,3,4,6,7,8-HpCDF	68.1	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	24.9	0.790		1.75		13C-1,2,3,4,7,8,9-HpCDF	72.6	26 - 138	
OCDF	ND	49.9	2.50		2.98		13C-OCDF	67.1	17 - 157	
							CRS 37Cl-2,3,7,8-TCDD	88.5	35 - 197	
							Toxic Equivalent Quotient (TEQ) Data			
							TEQMinWHO2005Dioxin	0.0684		
TOTALS										
Total TCDD	ND		1.30							
Total PeCDD	ND		1.18							
Total HxCDD	ND		3.70							
Total HpCDD	5.82			11.5						
Total TCDF	ND		1.73							
Total PeCDF	ND			0.462						
Total HxCDF	ND			0.960						
Total HpCDF	ND		2.70							

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

EMPC - Estimated maximum possible concentration

RL - Reporting limit

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: Method Blank							EPA Method 1613B			
Matrix:	Solid	QC Batch:	B4J0118				Lab Sample:	B4J0118-BLK1		
Sample Size:	10.0 g	Date Extracted:	22-Oct-2014 8:44				Date Analyzed :	23-Oct-14 21:43 Column: ZB-5MS Analyst: MAS		
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.500	0.108		0.0778		IS 13C-2,3,7,8-TCDD	88.6	25 - 164	
1,2,3,7,8-PeCDD	ND	2.50	0.231		0.230		13C-1,2,3,7,8-PeCDD	86.3	25 - 181	
1,2,3,4,7,8-HxCDD	ND	2.50	0.117		0.231		13C-1,2,3,4,7,8-HxCDD	79.8	32 - 141	
1,2,3,6,7,8-HxCDD	ND	2.50	0.124		0.126		13C-1,2,3,6,7,8-HxCDD	79.3	28 - 130	
1,2,3,7,8,9-HxCDD	ND	2.50	0.125		0.173		13C-1,2,3,7,8,9-HxCDD	78.8	32 - 141	
1,2,3,4,6,7,8-HpCDD	ND	2.50	0.125		0.263		13C-1,2,3,4,6,7,8-HpCDD	81.6	23 - 140	
OCDD	ND	5.00	0.271		0.167		13C-OCDD	69.7	17 - 157	
2,3,7,8-TCDF	ND	0.500	0.0790		0.0289		13C-2,3,7,8-TCDF	83.4	24 - 169	
1,2,3,7,8-PeCDF	ND	2.50	0.0593		0.254		13C-1,2,3,7,8-PeCDF	84.2	24 - 185	
2,3,4,7,8-PeCDF	ND	2.50	0.0631		0.211		13C-2,3,4,7,8-PeCDF	82.5	21 - 178	
1,2,3,4,7,8-HxCDF	ND	2.50	0.0451		0.154		13C-1,2,3,4,7,8-HxCDF	86.7	26 - 152	
1,2,3,6,7,8-HxCDF	ND	2.50	0.0523		0.195		13C-1,2,3,6,7,8-HxCDF	84.5	26 - 123	
2,3,4,6,7,8-HxCDF	ND	2.50	0.0340		0.0805		13C-2,3,4,6,7,8-HxCDF	82.5	28 - 136	
1,2,3,7,8,9-HxCDF	ND	2.50	0.0495		0.195		13C-1,2,3,7,8,9-HxCDF	83.7	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	2.50	0.167		0.230		13C-1,2,3,4,6,7,8-HpCDF	75.0	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	2.50	0.145		0.211		13C-1,2,3,4,7,8,9-HpCDF	74.9	26 - 138	
OCDF	ND	5.00	0.102		0.470		13C-OCDF	72.3	17 - 157	
						CRS	37Cl-2,3,7,8-TCDD	86.2	35 - 197	
							Toxic Equivalent Quotient (TEQ) Data			
							TEQMinWHO2005Dioxin	0.00		
TOTALS										
Total TCDD	ND	0.108								
Total PeCDD	ND	0.231								
Total HxCDD	ND	0.197								
Total HpCDD	ND	0.125								
Total TCDF	ND	0.0790								
Total PeCDF	ND	0.0998								
Total HxCDF	ND	0.0579								
Total HpCDF	ND	0.243								

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

EMPC - Estimated maximum possible concentration

RL - Reporting limit

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: OPR					EPA Method 1613B			
Matrix:	Solid Sample Size: 10.0 g <th>QC Batch:</th> <td>B4J0118 Date Extracted: 22-Oct-2014 8:44</td> <th>Lab Sample:</th> <td>B4J0118-BS1 Date Analyzed: 23-Oct-14 19:17 Column: ZB-5MS Analyst: MAS</td> <th data-cs="2" data-kind="parent"></th> <th data-kind="ghost"></th>	QC Batch:	B4J0118 Date Extracted: 22-Oct-2014 8:44	Lab Sample:	B4J0118-BS1 Date Analyzed: 23-Oct-14 19:17 Column: ZB-5MS Analyst: MAS			
Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL	
2,3,7,8-TCDD	18.2	20.0	91.1	67 - 158	IS	13C-2,3,7,8-TCDD	97.0	20 - 175
1,2,3,7,8-PeCDD	97.3	100	97.3	70 - 142		13C-1,2,3,7,8-PeCDD	123	21 - 227
1,2,3,4,7,8-HxCDD	104	100	104	70 - 164		13C-1,2,3,4,7,8-HxCDD	78.0	21 - 193
1,2,3,6,7,8-HxCDD	101	100	101	76 - 134		13C-1,2,3,6,7,8-HxCDD	82.0	25 - 163
1,2,3,7,8,9-HxCDD	101	100	101	64 - 162		13C-1,2,3,7,8,9-HxCDD	78.8	21 - 193
1,2,3,4,6,7,8-HpCDD	96.9	100	96.9	70 - 140		13C-1,2,3,4,6,7,8-HpCDD	73.3	26 - 166
OCDD	199	200	99.5	78 - 144		13C-OCDD	59.0	13 - 199
2,3,7,8-TCDF	18.7	20.0	93.3	75 - 158		13C-2,3,7,8-TCDF	82.1	22 - 152
1,2,3,7,8-PeCDF	97.6	100	97.6	80 - 134		13C-1,2,3,7,8-PeCDF	99.0	21 - 192
2,3,4,7,8-PeCDF	98.4	100	98.4	68 - 160		13C-2,3,4,7,8-PeCDF	101	13 - 328
1,2,3,4,7,8-HxCDF	97.4	100	97.4	72 - 134		13C-1,2,3,4,7,8-HxCDF	93.2	19 - 202
1,2,3,6,7,8-HxCDF	96.0	100	96.0	84 - 130		13C-1,2,3,6,7,8-HxCDF	88.3	21 - 159
2,3,4,6,7,8-HxCDF	97.1	100	97.1	70 - 156		13C-2,3,4,6,7,8-HxCDF	81.7	22 - 176
1,2,3,7,8,9-HxCDF	96.7	100	96.7	78 - 130		13C-1,2,3,7,8,9-HxCDF	81.3	17 - 205
1,2,3,4,6,7,8-HpCDF	102	100	102	82 - 122		13C-1,2,3,4,6,7,8-HpCDF	71.5	21 - 158
1,2,3,4,7,8,9-HpCDF	101	100	101	78 - 138		13C-1,2,3,4,7,8,9-HpCDF	66.9	20 - 186
OCDF	200	200	99.9	63 - 170		13C-OCDF	61.4	13 - 199
					CRS	37Cl-2,3,7,8-TCDD	92.5	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: CC-A-01-20141013-S							EPA Method 1613B			
Client Data		Sample Data			Laboratory Data					
Name:	Leidos	Matrix: Sediment			Lab Sample: 1400762-03			Date Received: 14-Oct-2014 8:45		
Project:	1400647	Sample Size: 17.0 g			QC Batch: B4J0118			Date Extracted: 22-Oct-2014 8:44		
Date Collected:	13-Oct-2014 12:15	% Solids: 58.8			Date Analyzed : 28-Oct-14 00:13			Column: ZB-5MS	Analyst: MAS	
					28-Oct-14 17:44			Column: DB-225	Analyst: MAS	
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.499		0.468	0.0778		IS 13C-2,3,7,8-TCDD	83.0	25 - 164	
1,2,3,7,8-PeCDD	ND	2.50		2.22	0.230		13C-1,2,3,7,8-PeCDD	76.6	25 - 181	
1,2,3,4,7,8-HxCDD	3.94	2.50			0.231		13C-1,2,3,4,7,8-HxCDD	73.7	32 - 141	
1,2,3,6,7,8-HxCDD	8.89	2.50			0.126		13C-1,2,3,6,7,8-HxCDD	86.4	28 - 130	
1,2,3,7,8,9-HxCDD	7.79	2.50			0.173		13C-1,2,3,7,8,9-HxCDD	77.9	32 - 141	
1,2,3,4,6,7,8-HpCDD	175	2.50			0.263		13C-1,2,3,4,6,7,8-HpCDD	82.0	23 - 140	
OCDD	1490	4.99			0.167		13C-OCDD	68.3	17 - 157	
2,3,7,8-TCDF	6.88	0.499			0.0289		13C-2,3,7,8-TCDF	85.4	24 - 169	
1,2,3,7,8-PeCDF	2.43	2.50			0.254	J	13C-1,2,3,7,8-PeCDF	84.8	24 - 185	
2,3,4,7,8-PeCDF	4.17	2.50			0.211		13C-2,3,4,7,8-PeCDF	78.4	21 - 178	
1,2,3,4,7,8-HxCDF	4.66	2.50			0.154		13C-1,2,3,4,7,8-HxCDF	71.4	26 - 152	
1,2,3,6,7,8-HxCDF	3.58	2.50			0.195		13C-1,2,3,6,7,8-HxCDF	74.7	26 - 123	
2,3,4,6,7,8-HxCDF	4.29	2.50			0.0805		13C-2,3,4,6,7,8-HxCDF	72.7	28 - 136	
1,2,3,7,8,9-HxCDF	0.502	2.50			0.195	J	13C-1,2,3,7,8,9-HxCDF	77.4	29 - 147	
1,2,3,4,6,7,8-HpCDF	36.4	2.50			0.230		13C-1,2,3,4,6,7,8-HpCDF	75.4	28 - 143	
1,2,3,4,7,8,9-HpCDF	3.27	2.50			0.211		13C-1,2,3,4,7,8,9-HpCDF	76.0	26 - 138	
OCDF	69.1	4.99			0.470		13C-OCDF	64.1	17 - 157	
							CRS 37Cl-2,3,7,8-TCDD	82.8	35 - 197	
							Toxic Equivalent Quotient (TEQ) Data			
							TEQMinWHO2005Dioxin	7.99		
TOTALS										
Total TCDD	12.0			13.0						
Total PeCDD	24.0			26.3						
Total HxCDD	98.7									
Total HpCDD	353									
Total TCDF	77.9			78.6						
Total PeCDF	59.8									
Total HxCDF	59.4									
Total HpCDF	80.1									

DL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

RL - Reporting limit

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: CC-CB-04-20141013-S							EPA Method 1613B			
Client Data		Sample Data			Laboratory Data					
Name:	Leidos	Matrix:	Sediment			Lab Sample:	1400762-04	Date Received:	14-Oct-2014 8:45	
Project:	1400647	Sample Size:	17.4 g			QC Batch:	B4J0118	Date Extracted:	22-Oct-2014 8:44	
Date Collected:	13-Oct-2014 13:20	% Solids:	57.6			Date Analyzed :	28-Oct-14 01:01	Column:	ZB-5MS	Analyst: MAS
							28-Oct-14 18:16	Column:	DB-225	Analyst: MAS
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.499		0.542	0.0778		IS 13C-2,3,7,8-TCDD	80.5	25 - 164	
1,2,3,7,8-PeCDD	3.30	2.50		0.230			13C-1,2,3,7,8-PeCDD	78.8	25 - 181	
1,2,3,4,7,8-HxCDD	4.09	2.50		0.231			13C-1,2,3,4,7,8-HxCDD	72.3	32 - 141	
1,2,3,6,7,8-HxCDD	11.2	2.50		0.126			13C-1,2,3,6,7,8-HxCDD	78.5	28 - 130	
1,2,3,7,8,9-HxCDD	10.8	2.50		0.173			13C-1,2,3,7,8,9-HxCDD	74.1	32 - 141	
1,2,3,4,6,7,8-HpCDD	212	2.50		0.263			13C-1,2,3,4,6,7,8-HpCDD	76.5	23 - 140	
OCDD	2150	4.99		0.167			13C-OCDD	64.8	17 - 157	
2,3,7,8-TCDF	7.35	0.499		0.0289			13C-2,3,7,8-TCDF	83.8	24 - 169	
1,2,3,7,8-PeCDF	2.05	2.50		0.254	J		13C-1,2,3,7,8-PeCDF	84.1	24 - 185	
2,3,4,7,8-PeCDF	3.60	2.50		0.211			13C-2,3,4,7,8-PeCDF	80.2	21 - 178	
1,2,3,4,7,8-HxCDF	3.79	2.50		0.154			13C-1,2,3,4,7,8-HxCDF	72.0	26 - 152	
1,2,3,6,7,8-HxCDF	3.55	2.50		0.195			13C-1,2,3,6,7,8-HxCDF	76.4	26 - 123	
2,3,4,6,7,8-HxCDF	4.00	2.50		0.0805			13C-2,3,4,6,7,8-HxCDF	68.6	28 - 136	
1,2,3,7,8,9-HxCDF	0.494	2.50		0.195	J		13C-1,2,3,7,8,9-HxCDF	73.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	36.3	2.50		0.230			13C-1,2,3,4,6,7,8-HpCDF	69.4	28 - 143	
1,2,3,4,7,8,9-HpCDF	2.57	2.50		0.211			13C-1,2,3,4,7,8,9-HpCDF	65.4	26 - 138	
OCDF	57.4	4.99		0.470			13C-OCDF	59.9	17 - 157	
							CRS 37Cl-2,3,7,8-TCDD	79.6	35 - 197	
							Toxic Equivalent Quotient (TEQ) Data			
							TEQMinWHO2005Dioxin	12.1		
TOTALS										
Total TCDD	16.8		19.2							
Total PeCDD	34.8									
Total HxCDD	131									
Total HpCDD	446									
Total TCDF	80.3		80.8							
Total PeCDF	63.4		63.8							
Total HxCDF	63.5									
Total HpCDF	78.7									

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

EMPC - Estimated maximum possible concentration

RL - Reporting limit

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: CC-CB-22-20141013-S							EPA Method 1613B			
Client Data		Sample Data			Laboratory Data					
Name:	Leidos	Matrix:	Sediment			Lab Sample:	1400762-05	Date Received:	14-Oct-2014 8:45	
Project:	1400647	Sample Size:	18.5 g			QC Batch:	B4J0118	Date Extracted:	22-Oct-2014 8:44	
Date Collected:	13-Oct-2014 14:10	% Solids:	54.0			Date Analyzed :	28-Oct-14 01:50	Column:	ZB-5MS Analyst: MAS	
							28-Oct-14 18:48	Column:	DB-225 Analyst: MAS	
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	1.05	0.499			0.0778		IS 13C-2,3,7,8-TCDD	88.5	25 - 164	
1,2,3,7,8-PeCDD	3.96	2.50			0.230		13C-1,2,3,7,8-PeCDD	89.1	25 - 181	
1,2,3,4,7,8-HxCDD	5.90	2.50			0.231		13C-1,2,3,4,7,8-HxCDD	77.8	32 - 141	
1,2,3,6,7,8-HxCDD	12.8	2.50			0.126		13C-1,2,3,6,7,8-HxCDD	110	28 - 130	
1,2,3,7,8,9-HxCDD	11.3	2.50			0.173		13C-1,2,3,7,8,9-HxCDD	82.0	32 - 141	
1,2,3,4,6,7,8-HpCDD	289	2.50			0.263		13C-1,2,3,4,6,7,8-HpCDD	77.8	23 - 140	
OCDD	2750	4.99			0.167		13C-OCDD	65.7	17 - 157	
2,3,7,8-TCDF	18.3	0.499			0.0289		13C-2,3,7,8-TCDF	91.7	24 - 169	
1,2,3,7,8-PeCDF	4.40	2.50			0.254		13C-1,2,3,7,8-PeCDF	94.3	24 - 185	
2,3,4,7,8-PeCDF	8.03	2.50			0.211		13C-2,3,4,7,8-PeCDF	88.1	21 - 178	
1,2,3,4,7,8-HxCDF	8.03	2.50			0.154		13C-1,2,3,4,7,8-HxCDF	80.4	26 - 152	
1,2,3,6,7,8-HxCDF	5.78	2.50			0.195		13C-1,2,3,6,7,8-HxCDF	81.0	26 - 123	
2,3,4,6,7,8-HxCDF	6.78	2.50			0.0805		13C-2,3,4,6,7,8-HxCDF	76.9	28 - 136	
1,2,3,7,8,9-HxCDF	1.03	2.50			0.195	J	13C-1,2,3,7,8,9-HxCDF	89.6	29 - 147	
1,2,3,4,6,7,8-HpCDF	59.1	2.50			0.230		13C-1,2,3,4,6,7,8-HpCDF	77.7	28 - 143	
1,2,3,4,7,8,9-HpCDF	5.33	2.50			0.211		13C-1,2,3,4,7,8,9-HpCDF	69.2	26 - 138	
OCDF	130	4.99			0.470		13C-OCDF	60.0	17 - 157	
							CRS 37Cl-2,3,7,8-TCDD	92.0	35 - 197	
							Toxic Equivalent Quotient (TEQ) Data			
							TEQMinWHO2005Dioxin	18.9		
TOTALS										
Total TCDD	30.4		31.7							
Total PeCDD	48.3									
Total HxCDD	148									
Total HpCDD	635									
Total TCDF	155		167							
Total PeCDF	115		116							
Total HxCDF	100									
Total HpCDF	144									

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

EMPC - Estimated maximum possible concentration

RL - Reporting limit

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: Method Blank							EPA Method 1668C						
Matrix:	Aqueous	QC Batch: B4J0110 Date Extracted: 20-Oct-2014 9:32				Lab Sample:	B4J0110-BLK1 Date Analyzed: 22-Oct-14 01:30 Column: ZB-1 Analyst: DMS						
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	5.00	2.00		1.21		PCB-43/49	ND	10.0	0.967		3.38	
PCB-2	ND	5.00	2.12		1.75		PCB-44	ND	5.00	1.09		2.48	
PCB-3	ND	5.00	2.05		1.49		PCB-45	ND	5.00	1.11		1.96	
PCB-4/10	ND	20.0	7.79		5.64		PCB-46	ND	5.00	1.13		2.49	
PCB-5/8	ND	20.0	6.22		3.59		PCB-47	ND	5.00	0.908		4.42	
PCB-6	ND	10.0	6.09		3.10		PCB-48/75	ND	10.0	0.789		2.09	
PCB-7/9	ND	20.0	6.05		6.22		PCB-50	ND	5.00	0.968		1.40	
PCB-11	23.5	10.0			3.86		PCB-51	ND	5.00	0.933		1.42	
PCB-12/13	ND	20.0	5.88		5.01		PCB-52/69	ND	10.0	0.842		3.64	
PCB-14	ND	10.0	5.24		3.98		PCB-53	ND	5.00	0.905		1.12	
PCB-15	ND	10.0	5.35		2.53		PCB-54	ND	5.00	0.782		1.51	
PCB-16/32	1.81	10.0			2.87	J	PCB-55	ND	5.00	0.657		1.19	
PCB-17	ND	5.00	0.858		1.37		PCB-56/60	ND	10.0	0.671		2.19	
PCB-18	1.89	5.00			2.57	J	PCB-57	ND	5.00	0.652		0.857	
PCB-19	ND	5.00	0.954		2.38		PCB-58	ND	5.00	0.659		1.81	
PCB-20/21/33	ND	15.0	0.612		10.3		PCB-61/70	ND	10.0	0.673		2.40	
PCB-22	ND	5.00	0.607		3.17		PCB-62	ND	5.00	0.796		1.46	
PCB-23	ND	5.00	0.612		1.35		PCB-63	ND	5.00	0.650		0.696	
PCB-24/27	ND	10.0	0.656		3.16		PCB-65	ND	5.00	0.771		0.953	
PCB-25	ND	5.00	0.598		3.34		PCB-66/76	ND	10.0	0.639		2.82	
PCB-26	ND	5.00	0.621		2.19		PCB-67	ND	5.00	0.677		1.22	
PCB-28	1.08	5.00			2.90	J	PCB-68	ND	5.00	0.693		1.24	
PCB-29	ND	5.00	0.604		1.60		PCB-73	ND	5.00	0.784		1.56	
PCB-30	ND	5.00	0.675		2.09		PCB-74	ND	5.00	0.604		1.53	
PCB-31	1.10	5.00			4.29	J	PCB-77	ND	5.00	0.637		1.34	
PCB-34	ND	5.00	0.636		2.34		PCB-78	ND	5.00	0.682		0.990	
PCB-35	ND	5.00	0.607		1.65		PCB-79	ND	5.00	0.649		1.60	
PCB-36	ND	5.00	0.607		2.69		PCB-80	ND	5.00	0.571		1.98	
PCB-37	ND	5.00	0.600		1.92		PCB-81	ND	5.00	0.611		2.34	
PCB-38	ND	5.00	0.617		1.56		PCB-82	ND	5.00	3.14		1.69	
PCB-39	ND	5.00	0.588		2.60		PCB-83	ND	5.00	2.14		1.32	
PCB-40	ND	5.00	1.26		3.08		PCB-84/92	ND	10.0	2.80		3.38	
PCB-41/64/71/72	ND	20.0	0.784		5.57		PCB-85/116	ND	10.0	2.50		2.83	
PCB-42/59	ND	10.0	0.845		2.84		PCB-86	ND	5.00	3.19		2.34	

RL - Reporting limit

EMPC - Estimated maximum possible concentration

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL - Lower control limit - upper control limit

Sample ID: Method Blank							EPA Method 1668C						
Matrix:	Aqueous	QC Batch: B4J0110 Date Extracted: 20-Oct-2014 9:32				Lab Sample: B4J0110-BLK1 Date Analyzed: 22-Oct-14 01:30 Column: ZB-1 Analyst: DMS							
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-87/117/125	ND	15.0	2.09		3.79		PCB-133/142	ND	10.0	1.12		2.19	
PCB-88/91	ND	5.00	3.04		3.25		PCB-134/143	ND	10.0	1.14		2.40	
PCB-89	ND	5.00	2.90		1.84		PCB-135	ND	5.00	1.51		2.90	
PCB-90/101	ND	10.0	2.48		1.92		PCB-136	ND	5.00	1.08		2.89	
PCB-93	ND	5.00	2.74		1.47		PCB-137	ND	5.00	1.04		2.08	
PCB-94	ND	5.00	2.79		1.91		PCB-138/163/164	ND	15.0	0.928		2.68	
PCB-95/98/102	ND	15.0	2.55		6.58		PCB-139/149	ND	10.0	1.39		7.87	
PCB-96	ND	5.00	2.15		2.16		PCB-140	ND	5.00	1.49		3.52	
PCB-97	ND	5.00	2.61		1.24		PCB-141	ND	5.00	1.14		1.15	
PCB-99	ND	5.00	2.29		1.94		PCB-144	ND	5.00	1.43		3.22	
PCB-100	ND	5.00	2.34		2.03		PCB-145	ND	5.00	1.07		1.73	
PCB-103	ND	5.00	2.52		2.28		PCB-146/165	ND	10.0	0.916		1.91	
PCB-104	ND	5.00	1.87		0.931		PCB-147	ND	5.00	1.42		3.62	
PCB-105	ND	5.00	1.61		2.21		PCB-148	ND	5.00	1.58		1.68	
PCB-106/118	ND	10.0	1.86		2.44		PCB-150	ND	5.00	1.10		1.14	
PCB-107/109	ND	10.0	1.90		1.98		PCB-151	ND	5.00	1.45		3.59	
PCB-108/112	ND	10.0	2.53		1.86		PCB-152	ND	5.00	1.07		1.82	
PCB-110	ND	5.00	1.94		1.94		PCB-153	ND	5.00	0.899		1.83	
PCB-111/115	ND	10.0	1.86		0.768		PCB-154	ND	5.00	1.33		2.78	
PCB-113	ND	5.00	2.18		1.31		PCB-155	ND	5.00	1.03		1.45	
PCB-114	ND	5.00	1.64		1.81		PCB-156	ND	5.00	0.873		1.74	
PCB-119	ND	5.00	1.89		0.949		PCB-157	ND	5.00	0.966		1.17	
PCB-120	ND	5.00	1.83		1.01		PCB-158/160	ND	10.0	0.882		1.99	
PCB-121	ND	5.00	1.63		1.94		PCB-159	ND	5.00	0.889		1.20	
PCB-122	ND	5.00	1.80		1.84		PCB-166	ND	5.00	0.929		0.920	
PCB-123	ND	5.00	1.90		1.35		PCB-167	ND	5.00	0.930		1.65	
PCB-124	ND	5.00	1.75		1.79		PCB-168	ND	5.00	0.774		0.933	
PCB-126	ND	5.00	1.78		2.05		PCB-169	ND	5.00	1.07		1.12	
PCB-127	ND	5.00	1.74		0.808		PCB-170	ND	5.00	1.05		1.38	
PCB-128/162	ND	10.0	1.02		1.68		PCB-171	ND	5.00	0.951		1.61	
PCB-129	ND	5.00	1.23		1.11		PCB-172	ND	5.00	1.02		1.46	
PCB-130	ND	5.00	1.31		2.21		PCB-173	ND	5.00	1.08		1.49	
PCB-131	ND	5.00	1.16		1.46		PCB-174	ND	5.00	0.934		1.42	
PCB-132/161	ND	10.0	0.952		2.34		PCB-175	ND	5.00	0.842		3.15	

RL - Reporting limit

EMPC - Estimated maximum possible concentration

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL - Lower control limit - upper control limit

Sample ID: Method Blank							EPA Method 1668C						
Matrix:	Aqueous	QC Batch: B4J0110 Date Extracted: 20-Oct-2014 9:32				Lab Sample: B4J0110-BLK1 Date Analyzed: 22-Oct-14 01:30 Column: ZB-1 Analyst: DMS							
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-176	ND	5.00	0.599		2.17		Total triCB	5.88	5.00				
PCB-177	ND	5.00	1.01		1.34		Total tetraCB	ND	5.00	1.26			
PCB-178	ND	5.00	0.871		2.25		Total pentaCB	ND	5.00	3.19			
PCB-179	ND	5.00	0.626		1.57		Total hexaCB	ND	5.00	1.58			
PCB-180	ND	5.00	0.874		0.610		Total heptaCB	ND	5.00	1.08			
PCB-181	ND	5.00	0.918		1.01		Total octaCB	ND	5.00	2.48			
PCB-182/187	ND	10.0	0.804		6.20		Total nonaCB	ND	5.00	3.82			
PCB-183	ND	5.00	0.754		3.29		DecaCB	ND	5.00	4.02			
PCB-184	ND	5.00	0.659		1.25		Total PCB	29.4	10.0				
PCB-185	ND	5.00	0.930		1.47								
PCB-186	ND	5.00	0.640		2.43								
PCB-188	ND	5.00	0.581		1.08								
PCB-189	ND	5.00	0.984		1.49								
PCB-190	ND	5.00	0.781		1.70								
PCB-191	ND	5.00	0.747		1.96								
PCB-192	ND	5.00	0.818		1.69								
PCB-193	ND	5.00	0.755		1.46								
PCB-194	ND	5.00	2.39		1.71								
PCB-195	ND	5.00	2.48		1.47								
PCB-196/203	ND	10.0	1.41		6.35								
PCB-197	ND	5.00	1.01		1.80								
PCB-198	ND	5.00	1.46		3.78								
PCB-199	ND	5.00	1.49		4.05								
PCB-200	ND	5.00	1.07		1.75								
PCB-201	ND	5.00	0.986		1.02								
PCB-202	ND	5.00	1.05		1.55								
PCB-204	ND	5.00	1.09		1.48								
PCB-205	ND	5.00	2.11		1.53								
PCB-206	ND	5.00	3.82		1.32								
PCB-207	ND	5.00	1.21		1.51								
PCB-208	ND	5.00	1.16		1.34								
PCB-209	ND	5.00	4.02		1.86								
Total monoCB	ND	5.00	2.12										
Total diCB	23.5	10.0											

RL - Reporting limit

EMPC - Estimated maximum possible concentration

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL - Lower control limit - upper control limit

Sample ID: Method Blank				EPA Method 1668C					
Matrix: Aqueous Sample Size: 1.00 L		QC Batch: B4J0110 Date Extracted: 20-Oct-2014 9:32		Lab Sample: B4J0110-BLK1 Date Analyzed: 22-Oct-14 01:30 Column: ZB-1 Analyst: DMS					
Labeled Standard		%R	LCL-UCL	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	69.7	5-145			13C-PCB-157	82.2	10-145	
	13C-PCB-3	70.3	5-145			13C-PCB-159	83.7	10-145	
	13C-PCB-4	55.2	5-145			13C-PCB-167	82.3	10-145	
	13C-PCB-11	63.7	5-145			13C-PCB-169	83.6	10-145	
	13C-PCB-9	58.0	5-145			13C-PCB-170	80.1	10-145	
	13C-PCB-19	70.6	5-145			13C-PCB-180	80.9	10-145	
	13C-PCB-28	75.0	5-145			13C-PCB-188	80.9	10-145	
	13C-PCB-32	74.9	5-145			13C-PCB-189	82.8	10-145	
	13C-PCB-37	76.0	5-145			13C-PCB-194	83.3	10-145	
	13C-PCB-47	68.3	5-145			13C-PCB-202	79.6	10-145	
	13C-PCB-52	68.2	5-145			13C-PCB-206	69.4	10-145	
	13C-PCB-54	64.8	5-145			13C-PCB-208	80.0	10-145	
	13C-PCB-70	75.9	5-145			13C-PCB-209	67.9	10-145	
	13C-PCB-77	79.2	10-145			CRS	13C-PCB-79	78.7	10-145
	13C-PCB-80	77.1	10-145				13C-PCB-178	81.7	10-145
	13C-PCB-81	78.5	10-145						
	13C-PCB-95	72.4	10-145						
	13C-PCB-97	76.6	10-145						
	13C-PCB-101	74.0	10-145						
	13C-PCB-104	70.5	10-145						
	13C-PCB-105	85.1	10-145						
	13C-PCB-114	83.0	10-145						
	13C-PCB-118	78.8	10-145						
	13C-PCB-123	77.4	10-145						
	13C-PCB-126	88.4	10-145						
	13C-PCB-127	86.7	10-145						
	13C-PCB-138	83.7	10-145						
	13C-PCB-141	84.3	10-145						
	13C-PCB-153	83.7	10-145						
	13C-PCB-155	71.1	10-145						
	13C-PCB-156	85.1	10-145						

RL - Reporting limit

EMPC - Estimated maximum possible concentration

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL - Lower control limit - upper control limit

Sample ID: OPR					EPA Method 1668C			
Matrix:	Aqueous <th>QC Batch:</th> <td>B4J0110</td> <th></th> <th>Lab Sample:</th> <td>B4J0110-BS1</td> <th></th> <th></th>	QC Batch:	B4J0110		Lab Sample:	B4J0110-BS1		
Sample Size:	1.00 L	Date Extracted:	20-Oct-2014 9:32		Date Analyzed:	21-Oct-14 23:23	Column: ZB-1 Analyst: DMS	
Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL	
PCB-1	898	1000	89.8	60 - 135	IS 13C-PCB-1	82.9	15 - 145	
PCB-3	908	1000	90.8	60 - 135	IS 13C-PCB-3	84.7	15 - 145	
PCB-4/10	4310	4000	108	60 - 135	IS 13C-PCB-4	66.4	15 - 145	
PCB-15	2100	2000	105	60 - 135	IS 13C-PCB-11	76.1	15 - 145	
PCB-19	1020	1000	102	60 - 135	IS 13C-PCB-9	69.5	15 - 145	
PCB-37	1020	1000	102	60 - 135	IS 13C-PCB-19	82.2	15 - 145	
PCB-54	1010	1000	101	60 - 135	IS 13C-PCB-28	72.9	15 - 145	
PCB-77	1010	1000	101	60 - 135	IS 13C-PCB-32	86.5	15 - 145	
PCB-81	1000	1000	100	60 - 135	IS 13C-PCB-37	83.4	15 - 145	
PCB-104	1040	1000	104	60 - 135	IS 13C-PCB-47	75.4	15 - 145	
PCB-105	1110	1000	111	60 - 135	IS 13C-PCB-52	76.5	15 - 145	
PCB-106/118	2070	2000	104	60 - 135	IS 13C-PCB-54	71.4	15 - 145	
PCB-114	1100	1000	110	60 - 135	IS 13C-PCB-70	81.1	15 - 145	
PCB-123	1030	1000	103	60 - 135	IS 13C-PCB-77	86.3	40 - 145	
PCB-126	1080	1000	108	60 - 135	IS 13C-PCB-80	85.1	40 - 145	
PCB-155	1100	1000	110	60 - 135	IS 13C-PCB-81	86.0	40 - 145	
PCB-156	1060	1000	106	60 - 135	IS 13C-PCB-95	78.5	40 - 145	
PCB-157	1080	1000	108	60 - 135	IS 13C-PCB-97	82.7	40 - 145	
PCB-167	1100	1000	110	60 - 135	IS 13C-PCB-101	82.5	40 - 145	
PCB-169	1080	1000	108	60 - 135	IS 13C-PCB-104	75.3	40 - 145	
PCB-188	1080	1000	108	60 - 135	IS 13C-PCB-105	88.4	40 - 145	
PCB-189	1120	1000	112	60 - 135	IS 13C-PCB-114	86.8	40 - 145	
PCB-202	1050	1000	105	60 - 135	IS 13C-PCB-118	85.0	40 - 145	
PCB-205	1060	1000	106	60 - 135	IS 13C-PCB-123	83.9	40 - 145	
PCB-206	1060	1000	106	60 - 135	IS 13C-PCB-126	92.0	40 - 145	
PCB-208	1050	1000	105	60 - 135	IS 13C-PCB-127	91.0	40 - 145	
PCB-209	1090	1000	109	60 - 135	IS 13C-PCB-138	87.3	40 - 145	
					IS 13C-PCB-141	88.7	40 - 145	
					IS 13C-PCB-153	88.2	40 - 145	
					IS 13C-PCB-155	75.8	40 - 145	
					IS 13C-PCB-156	88.7	40 - 145	
					IS 13C-PCB-157	86.9	40 - 145	
					IS 13C-PCB-159	91.4	40 - 145	
					IS 13C-PCB-167	87.8	40 - 145	
					IS 13C-PCB-169	88.4	40 - 145	
					IS 13C-PCB-170	83.1	40 - 145	
					IS 13C-PCB-180	83.6	40 - 145	
					IS 13C-PCB-188	84.5	40 - 145	
					IS 13C-PCB-189	89.2	40 - 145	
					IS 13C-PCB-194	86.1	40 - 145	

Sample ID: OPR					EPA Method 1668C				
Matrix:	Aqueous <th>QC Batch:</th> <td>B4J0110<th>Lab Sample:</th><td>B4J0110-BS1<th data-cs="3" data-kind="parent"></th><th data-kind="ghost"></th><th data-kind="ghost"></th></td></td>	QC Batch:	B4J0110 <th>Lab Sample:</th> <td>B4J0110-BS1<th data-cs="3" data-kind="parent"></th><th data-kind="ghost"></th><th data-kind="ghost"></th></td>	Lab Sample:	B4J0110-BS1 <th data-cs="3" data-kind="parent"></th> <th data-kind="ghost"></th> <th data-kind="ghost"></th>				
Sample Size:	1.00 L	Date Extracted:	20-Oct-2014 9:32	Date Analyzed:	21-Oct-14 23:23	Column:	ZB-1	Analyst:	DMS
Analyte	Amt Found (pg/L)		Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL	
						IS 13C-PCB-202	81.5	40 - 145	
						IS 13C-PCB-206	72.3	40 - 145	
						IS 13C-PCB-208	85.1	40 - 145	
						IS 13C-PCB-209	69.2	40 - 145	
						CRS 13C-PCB-79	91.8	40 - 145	
						CRS 13C-PCB-178	90.0	40 - 145	

LCL-UCL - Lower control limit - upper control limit

Sample ID: CC-A-01-20141013-W

EPA Method 1668C

Client Data							Sample Data							Laboratory Data						
Name:	Leidos			Matrix:	Aqueous			Lab Sample:	1400762-01			Date Received:	14-Oct-2014 8:45							
Project:	1400647			Sample Size:	1.01 L			QC Batch:	B4J0110			Date Extracted:	20-Oct-2014 9:32							
Date Analyzed : 22-Oct-14 02:33 Column: ZB-1 Analyst: DMS																				
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers							
PCB-1	2.64	4.94			1.21	J	PCB-44	77.6	4.94			2.48								
PCB-2	1.06	4.94			1.75	J	PCB-45	3.90	4.94			1.96	J							
PCB-3	2.31	4.94			1.49	J	PCB-46	2.71	4.94			2.49	J							
PCB-4/10	6.28	19.7			5.64	J	PCB-47	11.0	4.94			4.42								
PCB-5/8	11.2	19.7			3.59	J	PCB-48/75	4.41	9.87			2.09	J							
PCB-6	ND	9.87	5.86		3.10		PCB-50	ND	4.94	1.94		1.40								
PCB-7/9	ND	19.7	5.82		6.22		PCB-51	2.18	4.94			1.42	J							
PCB-11	78.5	9.87			3.86	B	PCB-52/69	141	9.87			3.64								
PCB-12/13	ND	19.7	5.78		5.01		PCB-53	5.02	4.94			1.12								
PCB-14	ND	9.87	5.16		3.98		PCB-54	ND	4.94	1.56		1.51								
PCB-15	12.0	9.87			2.53		PCB-55	3.73	4.94			1.19	J							
PCB-16/32	12.0	9.87			2.87	B	PCB-56/60	45.8	9.87			2.19								
PCB-17	5.92	4.94			1.37		PCB-57	ND	4.94	1.37		0.857								
PCB-18	16.4	4.94			2.57	B	PCB-58	ND	4.94	1.38		1.81								
PCB-19	2.87	4.94			2.38	J	PCB-61/70	208	9.87			2.40								
PCB-20/21/33	13.2	14.8			10.3	J	PCB-62	ND	4.94	1.58		1.46								
PCB-22	8.66	4.94			3.17		PCB-63	2.55	4.94			0.696	J							
PCB-23	ND	4.94	0.858		1.35		PCB-65	ND	4.94	1.53		0.953								
PCB-24/27	2.03	9.87			3.16	J	PCB-66/76	70.4	9.87			2.82								
PCB-25	ND	4.94		1.54	3.34		PCB-67	2.75	4.94			1.22	J							
PCB-26	ND	4.94		4.12	2.19		PCB-68	ND	4.94	1.37		1.24								
PCB-28	18.6	4.94			2.90	B	PCB-73	ND	4.94	1.54		1.56								
PCB-29	ND	4.94	0.846		1.60		PCB-74	39.6	4.94			1.53								
PCB-30	ND	4.94	0.675		2.09		PCB-77	64.2	4.94			1.34								
PCB-31	18.8	4.94			4.29	B	PCB-78	ND	4.94	1.38		0.990								
PCB-34	ND	4.94	0.892		2.34		PCB-79	7.56	4.94			1.60								
PCB-35	3.89	4.94			1.65	J	PCB-80	ND	4.94	1.15		1.98								
PCB-36	ND	4.94	0.868		2.69		PCB-81	2.20	4.94			2.34	J							
PCB-37	17.6	4.94			1.92		PCB-82	73.8	4.94			1.69								
PCB-38	ND	4.94	0.882		1.56		PCB-83	ND	4.94	1.96		1.32								
PCB-39	ND	4.94	0.842		2.60		PCB-84/92	198	9.87			3.38								
PCB-40	7.46	4.94			3.08		PCB-85/116	79.4	9.87			2.83								
PCB-41/64/71/72	43.5	19.7			5.57		PCB-86	ND	4.94	2.92		2.34								
PCB-42/59	10.3	9.87			2.84		PCB-87/117/125	212	14.8			3.79								
PCB-43/49	37.1	9.87			3.38		PCB-88/91	60.2	4.94			3.25								

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

Sample ID: CC-A-01-20141013-W

EPA Method 1668C

Client Data							Sample Data							Laboratory Data						
Name:	Leidos			Matrix:	Aqueous			Lab Sample:	1400762-01			Date Received:	14-Oct-2014 8:45							
Project:	1400647			Sample Size:	1.01 L			QC Batch:	B4J0110			Date Extracted:	20-Oct-2014 9:32							
Date Analyzed : 22-Oct-14 02:33 Column: ZB-1 Analyst: DMS																				
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers							
PCB-89	3.05	4.94			1.84	J	PCB-136	71.2	4.94			2.89								
PCB-90/101	541	9.87			1.92		PCB-137	39.7	4.94			2.08								
PCB-93	ND	4.94	2.74		1.47		PCB-138/163/164	876	14.8			2.68								
PCB-94	ND	4.94	2.80		1.91		PCB-139/149	561	9.87			7.87								
PCB-95/98/102	344	14.8			6.58		PCB-140	5.68	4.94			3.52								
PCB-96	ND	4.94	2.16		2.16		PCB-141	181	4.94			1.15								
PCB-97	157	4.94			1.24		PCB-144	30.9	4.94			3.22								
PCB-99	170	4.94			1.94		PCB-145	ND	4.94	1.08		1.73								
PCB-100	ND	4.94	2.35		2.03		PCB-146/165	111	9.87			1.91								
PCB-103	2.88	4.94			2.28	J	PCB-147	12.7	4.94			3.62								
PCB-104	ND	4.94	1.87		0.931		PCB-148	ND	4.94	1.60		1.68								
PCB-105	272	4.94			2.21		PCB-150	1.30	4.94			1.14	J							
PCB-106/118	649	9.87			2.44		PCB-151	134	4.94			3.59								
PCB-107/109	49.3	9.87			1.98		PCB-152	ND	4.94	1.08		1.82								
PCB-108/112	23.0	9.87			1.86		PCB-153	737	4.94			1.83								
PCB-110	665	4.94			1.94		PCB-154	8.71	4.94			2.78								
PCB-111/115	9.57	9.87			0.768	J	PCB-155	ND	4.94	1.04		1.45								
PCB-113	2.71	4.94			1.31	J	PCB-156	72.5	4.94			1.74								
PCB-114	12.1	4.94			1.81		PCB-157	21.6	4.94			1.17								
PCB-119	7.65	4.94			0.949		PCB-158/160	102	9.87			1.99								
PCB-120	ND	4.94	1.68		1.01		PCB-159	ND	4.94	3.05		1.20								
PCB-121	ND	4.94	1.63		1.94		PCB-166	3.72	4.94			0.920	J							
PCB-122	7.50	4.94			1.84		PCB-167	42.5	4.94			1.65								
PCB-123	9.91	4.94			1.35		PCB-168	ND	4.94	2.60		0.933								
PCB-124	31.5	4.94			1.79		PCB-169	ND	4.94	4.54		1.12								
PCB-126	17.5	4.94			2.05		PCB-170	178	4.94			1.38								
PCB-127	ND	4.94	3.24		0.808		PCB-171	53.4	4.94			1.61								
PCB-128/162	140	9.87			1.68		PCB-172	41.4	4.94			1.46								
PCB-129	43.8	4.94			1.11		PCB-173	ND	4.94		3.61	1.49								
PCB-130	60.6	4.94			2.21		PCB-174	205	4.94			1.42								
PCB-131	ND	4.94	3.90		1.46		PCB-175	8.89	4.94			3.15								
PCB-132/161	210	9.87			2.34		PCB-176	20.4	4.94			2.17								
PCB-133/142	22.2	9.87			2.19		PCB-177	125	4.94			1.34								
PCB-134/143	39.4	9.87			2.40		PCB-178	40.7	4.94			2.25								
PCB-135	91.3	4.94			2.90		PCB-179	76.5	4.94			1.57								

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

Sample ID: CC-A-01-20141013-W

EPA Method 1668C

Client Data							Sample Data							Laboratory Data						
Name:	Leidos			Matrix:	Aqueous			Lab Sample:	1400762-01			Date Received:	14-Oct-2014 8:45							
Project:	1400647			Sample Size:	1.01 L			QC Batch:	B4J0110			Date Extracted:	20-Oct-2014 9:32							
Date Analyzed : 22-Oct-14 02:33 Column: ZB-1 Analyst: DMS																				
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers							
PCB-180	424	4.94			0.610		Total octaCB	306	4.94											
PCB-181	ND	4.94	1.26		1.01		Total nonaCB	41.2	4.94											
PCB-182/187	255	9.87			6.20		DecaCB	ND	4.94	7.34										
PCB-183	95.5	4.94			3.29		Total PCB	10200	9.87								B			
PCB-184	ND	4.94	0.792		1.25															
PCB-185	24.6	4.94			1.47															
PCB-186	ND	4.94	0.768		2.43															
PCB-188	1.47	4.94			1.08	J														
PCB-189	6.86	4.94			1.49															
PCB-190	36.7	4.94			1.70															
PCB-191	8.62	4.94			1.96															
PCB-192	ND	4.94	1.12		1.69															
PCB-193	23.1	4.94			1.46															
PCB-194	74.8	4.94			1.71															
PCB-195	29.4	4.94			1.47															
PCB-196/203	75.6	9.87			6.35															
PCB-197	3.14	4.94			1.80	J														
PCB-198	2.30	4.94			3.78	J														
PCB-199	79.3	4.94			4.05															
PCB-200	9.68	4.94			1.75															
PCB-201	12.4	4.94			1.02															
PCB-202	19.3	4.94			1.55															
PCB-204	ND	4.94	1.33		1.48															
PCB-205	ND	4.94	5.54		1.53															
PCB-206	29.5	4.94			1.32															
PCB-207	4.07	4.94			1.51	J														
PCB-208	7.64	4.94			1.34															
PCB-209	ND	4.94	7.34		1.86															
Total monoCB	6.01	4.94																		
Total diCB	108	9.87				B														
Total triCB	120	4.94		126		B														
Total tetraCB	793	4.94																		
Total pentaCB	3600	4.94																		
Total hexaCB	3620	4.94																		
Total heptaCB	1630	4.94																		

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

Sample ID: CC-A-01-20141013-W**EPA Method 1668C**

Client Data				Sample Data				Laboratory Data			
Name:		Leidos		Matrix:		Aqueous		Lab Sample:		Date Received:	
Project:		1400647		Sample Size:		1.01 L		QC Batch:		14-Oct-2014 8:45	
Date Collected:		13-Oct-2014 11:45						Date Extracted:		20-Oct-2014 9:32	
Date Analyzed :		22-Oct-14 02:33		Column:		ZB-1		Analyst:		DMS	
Labeled Standard	%R	LCL-UCL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers				
IS 13C-PCB-1	99.9	5 -145		13C-PCB-170	80.5	10 -145					
13C-PCB-3	98.4	5 -145		13C-PCB-180	86.9	10 -145					
13C-PCB-4	77.1	5 -145		13C-PCB-188	97.3	10 -145					
13C-PCB-11	82.6	5 -145		13C-PCB-189	70.0	10 -145					
13C-PCB-9	80.6	5 -145		13C-PCB-194	90.4	10 -145					
13C-PCB-19	96.6	5 -145		13C-PCB-202	97.7	10 -145					
13C-PCB-28	87.3	5 -145		13C-PCB-206	72.9	10 -145					
13C-PCB-32	95.9	5 -145		13C-PCB-208	93.8	10 -145					
13C-PCB-37	88.8	5 -145		13C-PCB-209	67.8	10 -145					
13C-PCB-47	79.4	5 -145		CRS 13C-PCB-79	90.6	10 -145					
13C-PCB-52	80.0	5 -145		13C-PCB-178	97.7	10 -145					
13C-PCB-54	75.7	5 -145									
13C-PCB-70	84.5	5 -145									
13C-PCB-77	85.4	10 -145									
13C-PCB-80	86.1	10 -145									
13C-PCB-81	85.7	10 -145									
13C-PCB-95	79.7	10 -145									
13C-PCB-97	87.2	10 -145									
13C-PCB-101	83.5	10 -145									
13C-PCB-104	75.3	10 -145									
13C-PCB-105	86.9	10 -145									
13C-PCB-114	87.7	10 -145									
13C-PCB-118	83.4	10 -145									
13C-PCB-123	83.1	10 -145									
13C-PCB-126	83.5	10 -145									
13C-PCB-127	86.1	10 -145									
13C-PCB-138	91.3	10 -145									
13C-PCB-141	93.7	10 -145									
13C-PCB-153	92.0	10 -145									
13C-PCB-155	84.3	10 -145									
13C-PCB-156	87.6	10 -145									
13C-PCB-157	84.1	10 -145									
13C-PCB-159	90.4	10 -145									
13C-PCB-167	89.1	10 -145									
13C-PCB-169	75.2	10 -145									

RL - Reporting limit

EMPC - Estimated maximum possible concentration

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

Sample ID: CC-FD-02-20141013-W

EPA Method 1668C

Client Data							Sample Data							Laboratory Data						
Name:	Leidos			Matrix:	Aqueous			Lab Sample:	1400762-02			Date Received:	14-Oct-2014 8:45							
Project:	1400647			Sample Size:	1.03 L			QC Batch:	B4J0110			Date Extracted:	20-Oct-2014 9:32							
Date Analyzed : 22-Oct-14 03:37 Column: ZB-1 Analyst: DMS																				
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers							
PCB-1	2.50	4.85			1.21	J	PCB-44	74.9	4.85			2.48								
PCB-2	1.05	4.85			1.75	J	PCB-45	4.50	4.85			1.96	J							
PCB-3	2.48	4.85			1.49	J	PCB-46	2.38	4.85			2.49	J							
PCB-4/10	ND	19.4		6.14	5.64		PCB-47	9.99	4.85			4.42								
PCB-5/8	11.2	19.4			3.59	J	PCB-48/75	3.73	9.70			2.09	J							
PCB-6	ND	9.70		2.83	3.10		PCB-50	ND	4.85	1.40		1.40								
PCB-7/9	ND	19.4	6.01		6.22		PCB-51	1.75	4.85			1.42	J							
PCB-11	80.4	9.70			3.86	B	PCB-52/69	136	9.70			3.64								
PCB-12/13	ND	19.4	5.98		5.01		PCB-53	5.20	4.85			1.12								
PCB-14	ND	9.70	5.33		3.98		PCB-54	ND	4.85	1.13		1.51								
PCB-15	12.8	9.70			2.53		PCB-55	ND	4.85		1.81	1.19								
PCB-16/32	12.2	9.70			2.87	B	PCB-56/60	46.0	9.70			2.19								
PCB-17	5.53	4.85			1.37		PCB-57	ND	4.85	1.01		0.857								
PCB-18	17.3	4.85			2.57	B	PCB-58	ND	4.85	1.02		1.81								
PCB-19	2.89	4.85			2.38	J	PCB-61/70	215	9.70			2.40								
PCB-20/21/33	13.5	14.5			10.3	J	PCB-62	ND	4.85	1.15		1.46								
PCB-22	9.01	4.85			3.17		PCB-63	ND	4.85		1.89	0.696								
PCB-23	ND	4.85	0.791		1.35		PCB-65	ND	4.85	1.11		0.953								
PCB-24/27	2.07	9.70			3.16	J	PCB-66/76	70.6	9.70			2.82								
PCB-25	2.12	4.85			3.34	J	PCB-67	2.91	4.85			1.22	J							
PCB-26	5.13	4.85			2.19		PCB-68	ND	4.85	0.998		1.24								
PCB-28	18.2	4.85			2.90	B	PCB-73	ND	4.85	1.15		1.56								
PCB-29	ND	4.85	0.780		1.60		PCB-74	39.1	4.85			1.53								
PCB-30	ND	4.85	0.649		2.09		PCB-77	68.0	4.85			1.34								
PCB-31	20.0	4.85			4.29	B	PCB-78	ND	4.85	1.08		0.990								
PCB-34	ND	4.85	0.822		2.34		PCB-79	ND	4.85		5.17	1.60								
PCB-35	3.71	4.85			1.65	J	PCB-80	ND	4.85	0.868		1.98								
PCB-36	ND	4.85	0.791		2.69		PCB-81	1.37	4.85			2.34	J							
PCB-37	16.8	4.85			1.92		PCB-82	76.5	4.85			1.69								
PCB-38	ND	4.85	0.805		1.56		PCB-83	ND	4.85	1.87		1.32								
PCB-39	ND	4.85	0.767		2.60		PCB-84/92	191	9.70			3.38								
PCB-40	9.03	4.85			3.08		PCB-85/116	80.0	9.70			2.83								
PCB-41/64/71/72	42.4	19.4			5.57		PCB-86	ND	4.85	2.78		2.34								
PCB-42/59	10.9	9.70			2.84		PCB-87/117/125	215	14.5			3.79								
PCB-43/49	38.7	9.70			3.38		PCB-88/91	58.4	4.85			3.25								

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

Sample ID: CC-FD-02-20141013-W

EPA Method 1668C

Client Data		Sample Data			Laboratory Data								
Name:	Leidos	Matrix:	Aqueous	Lab Sample:	1400762-02	Date Received:	14-Oct-2014 8:45						
Project:	1400647	Sample Size:	1.03 L	QC Batch:	B4J0110	Date Extracted:	20-Oct-2014 9:32						
Date Collected:	13-Oct-2014 11:45 <th data-cs="2" data-kind="parent"></th> <th data-kind="ghost"></th> <th data-cs="2" data-kind="parent">Date Analyzed : 22-Oct-14 03:37 Column: ZB-1 Analyst: DMS</th> <th data-kind="ghost"></th> <th data-cs="4" data-kind="parent"></th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <th data-kind="ghost"></th>			Date Analyzed : 22-Oct-14 03:37 Column: ZB-1 Analyst: DMS									
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-89	2.75	4.85			1.84	J	PCB-136	75.6	4.85			2.89	
PCB-90/101	537	9.70			1.92		PCB-137	36.2	4.85			2.08	
PCB-93	ND	4.85	2.38		1.47		PCB-138/163/164	905	14.5			2.68	
PCB-94	ND	4.85	2.43		1.91		PCB-139/149	585	9.70			7.87	
PCB-95/98/102	341	14.5			6.58		PCB-140	6.35	4.85			3.52	
PCB-96	ND	4.85		2.08	2.16		PCB-141	189	4.85			1.15	
PCB-97	160	4.85			1.24		PCB-144	37.1	4.85			3.22	
PCB-99	171	4.85			1.94		PCB-145	ND	4.85	0.885		1.73	
PCB-100	ND	4.85	2.19		2.03		PCB-146/165	110	9.70			1.91	
PCB-103	ND	4.85		1.73	2.28		PCB-147	11.4	4.85			3.62	
PCB-104	ND	4.85	1.75		0.931		PCB-148	ND	4.85	1.31		1.68	
PCB-105	275	4.85			2.21		PCB-150	ND	4.85		1.59	1.14	
PCB-106/118	655	9.70			2.44		PCB-151	136	4.85			3.59	
PCB-107/109	49.0	9.70			1.98		PCB-152	ND	4.85	0.881		1.82	
PCB-108/112	24.7	9.70			1.86		PCB-153	740	4.85			1.83	
PCB-110	671	4.85			1.94		PCB-154	9.69	4.85			2.78	
PCB-111/115	8.84	9.70			0.768	J	PCB-155	ND	4.85	0.852		1.45	
PCB-113	ND	4.85	1.82		1.31		PCB-156	77.9	4.85			1.74	
PCB-114	13.2	4.85			1.81		PCB-157	22.4	4.85			1.17	
PCB-119	6.88	4.85			0.949		PCB-158/160	105	9.70			1.99	
PCB-120	2.80	4.85			1.01	J	PCB-159	ND	4.85	3.97		1.20	
PCB-121	ND	4.85	1.41		1.94		PCB-166	ND	4.85	4.15		0.920	
PCB-122	8.00	4.85			1.84		PCB-167	45.5	4.85			1.65	
PCB-123	9.49	4.85			1.35		PCB-168	ND	4.85	3.49		0.933	
PCB-124	31.5	4.85			1.79		PCB-169	ND	4.85	6.02		1.12	
PCB-126	18.6	4.85			2.05		PCB-170	184	4.85			1.38	
PCB-127	ND	4.85	3.98		0.808		PCB-171	52.9	4.85			1.61	
PCB-128/162	143	9.70			1.68		PCB-172	43.7	4.85			1.46	
PCB-129	42.1	4.85			1.11		PCB-173	4.85	4.85			1.49	
PCB-130	66.8	4.85			2.21		PCB-174	220	4.85			1.42	
PCB-131	ND	4.85	5.23		1.46		PCB-175	8.49	4.85			3.15	
PCB-132/161	228	9.70			2.34		PCB-176	24.0	4.85			2.17	
PCB-133/142	22.0	9.70			2.19		PCB-177	126	4.85			1.34	
PCB-134/143	40.1	9.70			2.40		PCB-178	45.3	4.85			2.25	
PCB-135	89.1	4.85			2.90		PCB-179	78.4	4.85			1.57	

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

Sample ID: CC-FD-02-20141013-W

EPA Method 1668C

Client Data							Sample Data							Laboratory Data							
Name:	Leidos						Matrix:	Aqueous						Lab Sample:	1400762-02			Date Received:	14-Oct-2014 8:45		
Project:	1400647						Sample Size:	1.03 L						QC Batch:	B4J0110			Date Extracted:	20-Oct-2014 9:32		
Date Collected: 13-Oct-2014 11:45															Date Analyzed : 22-Oct-14 03:37 Column: ZB-1 Analyst: DMS						
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers								
PCB-180	439	4.85			0.610		Total octaCB	333	4.85			335									
PCB-181	ND	4.85	2.25		1.01		Total nonaCB	39.3	4.85												
PCB-182/187	267	9.70			6.20		DecaCB	ND	4.85	15.1											
PCB-183	101	4.85			3.29		Total PCB	10400	9.70										B		
PCB-184	0.940	4.85			1.25	J															
PCB-185	26.0	4.85			1.47																
PCB-186	ND	4.85	1.36		2.43																
PCB-188	1.15	4.85			1.08	J															
PCB-189	6.71	4.85			1.49																
PCB-190	34.7	4.85			1.70																
PCB-191	9.60	4.85			1.96																
PCB-192	ND	4.85	2.01		1.69																
PCB-193	23.5	4.85			1.46																
PCB-194	83.3	4.85			1.71																
PCB-195	32.9	4.85			1.47																
PCB-196/203	82.0	9.70			6.35																
PCB-197	3.12	4.85			1.80	J															
PCB-198	ND	4.85		1.95	3.78																
PCB-199	87.0	4.85			4.05																
PCB-200	10.2	4.85			1.75																
PCB-201	12.6	4.85			1.02																
PCB-202	21.6	4.85			1.55																
PCB-204	ND	4.85	1.37		1.48																
PCB-205	ND	4.85	7.36		1.53																
PCB-206	28.5	4.85			1.32																
PCB-207	4.24	4.85			1.51	J															
PCB-208	6.49	4.85			1.34																
PCB-209	ND	4.85	15.1		1.86																
Total monoCB	6.03	4.85																			
Total diCB	104	9.70		113		B															
Total triCB	128	4.85				B															
Total tetraCB	783	4.85		792																	
Total pentaCB	3610	4.85																			
Total hexaCB	3730	4.85																			
Total heptaCB	1700	4.85																			

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

Sample ID: CC-FD-02-20141013-W

EPA Method 1668C

Client Data				Sample Data				Laboratory Data			
Name:		Leidos		Matrix:		Aqueous		Lab Sample:		Date Received:	
Project:		1400647		Sample Size:		1.03 L		QC Batch:		14-Oct-2014 8:45	
Date Collected:		13-Oct-2014 11:45						Date Extracted:		20-Oct-2014 9:32	
Date Analyzed :		22-Oct-14 03:37		Column:		ZB-1		Analyst:		DMS	
Labeled Standard	%R	LCL-UCL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers				
IS 13C-PCB-1	94.1	5 -145		13C-PCB-170	76.1	10 -145					
13C-PCB-3	95.5	5 -145		13C-PCB-180	81.8	10 -145					
13C-PCB-4	74.0	5 -145		13C-PCB-188	92.1	10 -145					
13C-PCB-11	80.8	5 -145		13C-PCB-189	64.7	10 -145					
13C-PCB-9	78.3	5 -145		13C-PCB-194	89.1	10 -145					
13C-PCB-19	91.3	5 -145		13C-PCB-202	90.7	10 -145					
13C-PCB-28	76.6	5 -145		13C-PCB-206	69.0	10 -145					
13C-PCB-32	94.5	5 -145		13C-PCB-208	91.8	10 -145					
13C-PCB-37	86.3	5 -145		13C-PCB-209	63.9	10 -145					
13C-PCB-47	78.0	5 -145		CRS 13C-PCB-79	91.4	10 -145					
13C-PCB-52	77.5	5 -145		13C-PCB-178	97.6	10 -145					
13C-PCB-54	73.7	5 -145									
13C-PCB-70	83.7	5 -145									
13C-PCB-77	82.7	10 -145									
13C-PCB-80	83.6	10 -145									
13C-PCB-81	83.8	10 -145									
13C-PCB-95	79.1	10 -145									
13C-PCB-97	85.2	10 -145									
13C-PCB-101	83.1	10 -145									
13C-PCB-104	74.8	10 -145									
13C-PCB-105	79.6	10 -145									
13C-PCB-114	82.1	10 -145									
13C-PCB-118	81.0	10 -145									
13C-PCB-123	80.7	10 -145									
13C-PCB-126	78.3	10 -145									
13C-PCB-127	79.4	10 -145									
13C-PCB-138	84.8	10 -145									
13C-PCB-141	85.0	10 -145									
13C-PCB-153	86.0	10 -145									
13C-PCB-155	82.2	10 -145									
13C-PCB-156	79.9	10 -145									
13C-PCB-157	78.1	10 -145									
13C-PCB-159	85.8	10 -145									
13C-PCB-167	79.4	10 -145									
13C-PCB-169	69.9	10 -145									

RL - Reporting limit

EMPC - Estimated maximum possible concentration

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

Sample ID: Method Blank							EPA Method 1668C						
Matrix:	Solid	QC Batch: B4J0119 Date Extracted: 22-Oct-2014 9:03				Lab Sample: B4J0119-BLK1 Date Analyzed: 25-Oct-14 06:24 Column: ZB-1 Analyst: DMS							
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	2.50	1.03		0.320		PCB-43/49	ND	5.00	0.381		0.879	
PCB-2	ND	2.50	1.03		0.240		PCB-44	ND	2.50	0.416		0.745	
PCB-3	ND	2.50	0.857		0.323		PCB-45	ND	2.50	0.439		0.402	
PCB-4/10	ND	10.0	5.38		1.14		PCB-46	ND	2.50	0.449		0.537	
PCB-5/8	ND	10.0	4.68		1.76		PCB-47	ND	2.50	0.338		2.19	
PCB-6	ND	5.00	4.12		1.00		PCB-48/75	ND	5.00	0.291		0.983	
PCB-7/9	ND	10.0	4.44		1.34		PCB-50	ND	2.50	0.373		0.603	
PCB-11	ND	5.00	4.56		3.48		PCB-51	ND	2.50	0.383		0.789	
PCB-12/13	ND	10.0	4.15		1.37		PCB-52/69	ND	5.00	0.296		0.722	
PCB-14	ND	5.00	4.47		0.337		PCB-53	ND	2.50	0.357		0.331	
PCB-15	ND	5.00	3.87		0.634		PCB-54	ND	2.50	0.298		0.275	
PCB-16/32	ND	10.0	0.331		0.430		PCB-55	ND	2.50	0.249		0.416	
PCB-17	ND	2.50	0.338		0.658		PCB-56/60	0.582	5.00			0.825	J
PCB-18	ND	2.50	0.398		0.696		PCB-57	ND	2.50	0.271		0.354	
PCB-19	ND	2.50	0.464		0.612		PCB-58	ND	2.50	0.287		0.589	
PCB-20/21/33	ND	7.50	0.365		2.47		PCB-61/70	ND	5.00	0.279		1.20	
PCB-22	ND	2.50	0.327		0.964		PCB-62	ND	2.50	0.293		0.597	
PCB-23	ND	2.50	0.309		0.543		PCB-63	ND	2.50	0.279		0.524	
PCB-24/27	ND	5.00	0.262		0.742		PCB-65	ND	2.50	0.292		0.842	
PCB-25	ND	2.50	0.313		0.768		PCB-66/76	0.762	5.00			1.31	J
PCB-26	ND	2.50	0.327		0.766		PCB-67	ND	2.50	0.240		0.486	
PCB-28	0.460	2.50			1.12	J	PCB-68	ND	2.50	0.265		0.658	
PCB-29	ND	2.50	0.365		0.949		PCB-73	ND	2.50	0.280		0.454	
PCB-30	ND	2.50	0.283		0.355		PCB-74	ND	2.50	0.214		0.781	
PCB-31	0.487	2.50			0.809	J	PCB-77	ND	2.50	0.258		0.748	
PCB-34	ND	2.50	0.347		1.57		PCB-78	ND	2.50	0.232		0.385	
PCB-35	ND	2.50	0.370		0.565		PCB-79	ND	2.50	0.241		0.633	
PCB-36	ND	2.50	0.400		0.406		PCB-80	ND	2.50	0.218		0.336	
PCB-37	ND	2.50	0.371		0.389		PCB-81	ND	2.50	0.222		0.674	
PCB-38	ND	2.50	0.380		0.528		PCB-82	ND	2.50	0.933		0.981	
PCB-39	ND	2.50	0.409		0.461		PCB-83	ND	2.50	0.621		0.440	
PCB-40	ND	2.50	0.510		0.927		PCB-84/92	ND	5.00	0.852		1.01	
PCB-41/64/71/72	ND	10.0	0.296		1.70		PCB-85/116	ND	5.00	0.724		1.64	
PCB-42/59	ND	5.00	0.314		0.899		PCB-86	ND	2.50	1.12		1.79	

RL - Reporting limit

EMPC - Estimated maximum possible concentration

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: Method Blank							EPA Method 1668C						
Matrix:	Solid	QC Batch: B4J0119 Date Extracted: 22-Oct-2014 9:03				Lab Sample: B4J0119-BLK1 Date Analyzed: 25-Oct-14 06:24 Column: ZB-1 Analyst: DMS							
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-87/117/125	ND	7.50	0.608		0.880		PCB-133/142	ND	5.00	0.513		1.04	
PCB-88/91	ND	5.00	0.857		1.25		PCB-134/143	ND	5.00	0.458		1.05	
PCB-89	ND	2.50	0.789		1.22		PCB-135	ND	2.50	0.500		1.47	
PCB-90/101	1.28	5.00			1.19	J	PCB-136	0.627	2.50			0.776	J
PCB-93	ND	2.50	1.13		2.53		PCB-137	ND	2.50	0.426		0.541	
PCB-94	ND	2.50	0.905		0.874		PCB-138/163/164	ND	7.50		1.47	0.809	
PCB-95/98/102	1.86	7.50			1.38	J	PCB-139/149	2.43	2.50			1.49	J
PCB-96	ND	2.50	0.653		0.588		PCB-140	ND	2.50	0.548		1.20	
PCB-97	ND	2.50	0.797		0.675		PCB-141	ND	2.50	0.417		0.678	
PCB-99	ND	2.50	0.667		0.474		PCB-144	ND	2.50	0.520		1.38	
PCB-100	ND	2.50	0.793		0.511		PCB-145	ND	2.50	0.330		1.05	
PCB-103	ND	2.50	0.777		0.428		PCB-146/165	ND	5.00	0.337		0.792	
PCB-104	ND	2.50	0.628		0.876		PCB-147	ND	2.50	0.483		5.26	
PCB-105	0.499	2.50			0.462	J	PCB-148	ND	2.50	0.532		1.45	
PCB-106/118	ND	5.00	0.594		0.728		PCB-150	ND	2.50	0.397		0.801	
PCB-107/109	ND	5.00	0.536		0.631		PCB-151	ND	2.50		0.811	1.16	
PCB-108/112	ND	5.00	0.736		0.844		PCB-152	ND	2.50	0.355		0.744	
PCB-110	0.874	2.50			0.555	J	PCB-153	1.72	2.50			0.484	J
PCB-111/115	ND	5.00	0.577		1.24		PCB-154	ND	2.50	0.462		0.837	
PCB-113	ND	2.50	0.632		0.495		PCB-155	ND	2.50	0.356		0.767	
PCB-114	ND	2.50	0.595		0.418		PCB-156	ND	2.50	0.349		0.534	
PCB-119	ND	2.50	0.615		0.383		PCB-157	ND	2.50	0.331		0.485	
PCB-120	ND	2.50	0.562		0.622		PCB-158/160	ND	5.00	0.322		0.915	
PCB-121	ND	2.50	0.592		0.978		PCB-159	ND	2.50	0.359		0.578	
PCB-122	ND	2.50	0.688		0.619		PCB-166	ND	2.50	0.337		0.425	
PCB-123	ND	2.50	0.606		0.494		PCB-167	ND	2.50	0.310		0.653	
PCB-124	ND	2.50	0.482		0.813		PCB-168	ND	2.50	0.290		0.502	
PCB-126	ND	2.50	0.724		0.543		PCB-169	ND	2.50	0.352		0.767	
PCB-127	ND	2.50	0.561		0.326		PCB-170	ND	2.50	0.259		0.758	
PCB-128/162	ND	5.00	0.381		1.08		PCB-171	ND	2.50	0.222		0.372	
PCB-129	ND	2.50	0.507		0.567		PCB-172	ND	2.50	0.215		0.857	
PCB-130	ND	2.50	0.469		0.798		PCB-173	ND	2.50	0.316		0.507	
PCB-131	ND	2.50	0.463		0.731		PCB-174	ND	2.50		0.362	0.797	
PCB-132/161	ND	5.00		0.612	1.05		PCB-175	ND	2.50	0.263		0.679	

RL - Reporting limit

EMPC - Estimated maximum possible concentration

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: Method Blank							EPA Method 1668C						
Matrix:	Solid	QC Batch: B4J0119 Date Extracted: 22-Oct-2014 9:03				Lab Sample: B4J0119-BLK1 Date Analyzed: 25-Oct-14 06:24 Column: ZB-1 Analyst: DMS							
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-176	ND	2.50	0.180		0.729		Total triCB	0.947	2.50				J
PCB-177	ND	2.50	0.280		0.404		Total tetraCB	1.34	2.50				J
PCB-178	ND	2.50	0.257		0.610		Total pentaCB	4.52	2.50				
PCB-179	0.617	2.50			0.418	J	Total hexaCB	4.78	2.50		7.67		
PCB-180	ND	2.50	0.261		0.420		Total heptaCB	1.74	2.50		2.10		J
PCB-181	ND	2.50	0.254		1.26		Total octaCB	ND	2.50	0.869			
PCB-182/187	0.579	5.00			1.33	J	Total nonaCB	ND	2.50	0.828			
PCB-183	0.543	2.50			0.638	J	DecaCB	ND	2.50	0.872			
PCB-184	ND	2.50	0.163		0.597		Total PCB	13.3	5.00				
PCB-185	ND	2.50	0.195		0.557								
PCB-186	ND	2.50	0.183		0.421								
PCB-188	ND	2.50	0.168		0.759								
PCB-189	ND	2.50	0.230		0.483								
PCB-190	ND	2.50	0.187		0.686								
PCB-191	ND	2.50	0.207		0.447								
PCB-192	ND	2.50	0.202		0.528								
PCB-193	ND	2.50	0.205		0.836								
PCB-194	ND	2.50	0.869		0.645								
PCB-195	ND	2.50	0.859		0.722								
PCB-196/203	ND	5.00	0.462		0.983								
PCB-197	ND	2.50	0.344		0.794								
PCB-198	ND	2.50	0.490		0.792								
PCB-199	ND	2.50	0.464		0.615								
PCB-200	ND	2.50	0.348		0.795								
PCB-201	ND	2.50	0.322		0.317								
PCB-202	ND	2.50	0.342		0.759								
PCB-204	ND	2.50	0.325		0.543								
PCB-205	ND	2.50	0.683		0.471								
PCB-206	ND	2.50	0.828		0.852								
PCB-207	ND	2.50	0.264		0.402								
PCB-208	ND	2.50	0.307		0.441								
PCB-209	ND	2.50	0.872		1.10								
Total monoCB	ND	2.50	1.03										
Total diCB	ND	5.00	5.38										

RL - Reporting limit

EMPC - Estimated maximum possible concentration

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: Method Blank				EPA Method 1668C					
Matrix: Solid Sample Size: 10.0 g		QC Batch: B4J0119 Date Extracted: 22-Oct-2014 9:03		Lab Sample: B4J0119-BLK1 Date Analyzed: 25-Oct-14 06:24 Column: ZB-1 Analyst: DMS					
Labeled Standard		%R	LCL-UCL	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	94.8	5-145			13C-PCB-157	90.9	10-145	
	13C-PCB-3	95.9	5-145			13C-PCB-159	89.3	10-145	
	13C-PCB-4	69.1	5-145			13C-PCB-167	89.4	10-145	
	13C-PCB-11	74.6	5-145			13C-PCB-169	89.7	10-145	
	13C-PCB-9	70.8	5-145			13C-PCB-170	106	10-145	
	13C-PCB-19	90.7	5-145			13C-PCB-180	104	10-145	
	13C-PCB-28	79.1	5-145			13C-PCB-188	99.2	10-145	
	13C-PCB-32	95.2	5-145			13C-PCB-189	105	10-145	
	13C-PCB-37	86.9	5-145			13C-PCB-194	95.6	10-145	
	13C-PCB-47	78.7	5-145			13C-PCB-202	115	10-145	
	13C-PCB-52	76.1	5-145			13C-PCB-206	85.7	10-145	
	13C-PCB-54	70.5	5-145			13C-PCB-208	96.3	10-145	
	13C-PCB-70	87.1	5-145			13C-PCB-209	90.9	10-145	
	13C-PCB-77	89.3	10-145			CRS	13C-PCB-79	86.8	10-145
	13C-PCB-80	90.4	10-145				13C-PCB-178	99.2	10-145
	13C-PCB-81	89.7	10-145						
	13C-PCB-95	82.8	10-145						
	13C-PCB-97	89.9	10-145						
	13C-PCB-101	86.9	10-145						
	13C-PCB-104	78.1	10-145						
	13C-PCB-105	74.2	10-145						
	13C-PCB-114	73.5	10-145						
	13C-PCB-118	92.5	10-145						
	13C-PCB-123	93.8	10-145						
	13C-PCB-126	71.7	10-145						
	13C-PCB-127	70.7	10-145						
	13C-PCB-138	88.7	10-145						
	13C-PCB-141	87.7	10-145						
	13C-PCB-153	88.3	10-145						
	13C-PCB-155	96.1	10-145						
	13C-PCB-156	89.8	10-145						

RL - Reporting limit

EMPC - Estimated maximum possible concentration

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: OPR					EPA Method 1668C			
Matrix:	Solid	QC Batch:	B4J0119		Lab Sample:	B4J0119-BS1		
Sample Size:	10.0 g	Date Extracted:	22-Oct-2014 9:03		Date Analyzed:	25-Oct-14 03:14	Column: ZB-1 Analyst: DMS	
Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL	
PCB-1	362	500	72.5	60 - 135	IS 13C-PCB-1	102	15 - 145	
PCB-3	361	500	72.3	60 - 135	IS 13C-PCB-3	106	15 - 145	
PCB-4/10	1950	2000	97.5	60 - 135	IS 13C-PCB-4	75.9	15 - 145	
PCB-15	930	1000	93.0	60 - 135	IS 13C-PCB-9	78.6	15 - 145	
PCB-19	460	500	91.9	60 - 135	IS 13C-PCB-11	84.7	15 - 145	
PCB-37	503	500	101	60 - 135	IS 13C-PCB-19	101	15 - 145	
PCB-54	447	500	89.3	60 - 135	IS 13C-PCB-28	87.5	15 - 145	
PCB-77	449	500	89.8	60 - 135	IS 13C-PCB-32	106	15 - 145	
PCB-81	433	500	86.6	60 - 135	IS 13C-PCB-37	85.9	15 - 145	
PCB-104	481	500	96.3	60 - 135	IS 13C-PCB-47	85.6	15 - 145	
PCB-105	496	500	99.1	60 - 135	IS 13C-PCB-52	83.8	15 - 145	
PCB-106/118	938	1000	93.8	60 - 135	IS 13C-PCB-54	77.6	15 - 145	
PCB-114	491	500	98.2	60 - 135	IS 13C-PCB-70	89.1	15 - 145	
PCB-123	464	500	92.7	60 - 135	IS 13C-PCB-77	90.7	40 - 145	
PCB-126	505	500	101	60 - 135	IS 13C-PCB-80	91.2	40 - 145	
PCB-155	461	500	92.2	60 - 135	IS 13C-PCB-81	92.1	40 - 145	
PCB-156	447	500	89.5	60 - 135	IS 13C-PCB-95	88.0	40 - 145	
PCB-157	424	500	84.8	60 - 135	IS 13C-PCB-97	93.0	40 - 145	
PCB-167	435	500	87.1	60 - 135	IS 13C-PCB-101	92.1	40 - 145	
PCB-169	418	500	83.7	60 - 135	IS 13C-PCB-104	83.0	40 - 145	
PCB-188	453	500	90.6	60 - 135	IS 13C-PCB-105	76.2	40 - 145	
PCB-189	453	500	90.6	60 - 135	IS 13C-PCB-114	77.0	40 - 145	
PCB-202	451	500	90.3	60 - 135	IS 13C-PCB-118	96.1	40 - 145	
PCB-205	447	500	89.3	60 - 135	IS 13C-PCB-123	97.5	40 - 145	
PCB-206	467	500	93.5	60 - 135	IS 13C-PCB-126	75.5	40 - 145	
PCB-208	475	500	95.0	60 - 135	IS 13C-PCB-127	75.7	40 - 145	
PCB-209	464	500	92.8	60 - 135	IS 13C-PCB-138	92.0	40 - 145	
					IS 13C-PCB-141	90.2	40 - 145	
					IS 13C-PCB-153	91.2	40 - 145	
					IS 13C-PCB-155	101	40 - 145	
					IS 13C-PCB-156	94.6	40 - 145	
					IS 13C-PCB-157	96.0	40 - 145	
					IS 13C-PCB-159	93.6	40 - 145	
					IS 13C-PCB-167	92.6	40 - 145	
					IS 13C-PCB-169	93.9	40 - 145	
					IS 13C-PCB-170	110	40 - 145	
					IS 13C-PCB-180	110	40 - 145	
					IS 13C-PCB-188	103	40 - 145	
					IS 13C-PCB-189	108	40 - 145	
					IS 13C-PCB-194	99.3	40 - 145	

Sample ID: OPR					EPA Method 1668C				
Matrix:	Solid	QC Batch:	B4J0119	Lab Sample:	B4J0119-BS1				
Sample Size:	10.0 g	Date Extracted:	22-Oct-2014 9:03	Date Analyzed:	25-Oct-14 03:14	Column:	ZB-1	Analyst:	DMS
Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL		
					IS 13C-PCB-202	122	40 - 145		
					IS 13C-PCB-206	91.3	40 - 145		
					IS 13C-PCB-208	99.7	40 - 145		
					IS 13C-PCB-209	96.6	40 - 145		
					CRS 13C-PCB-79	88.3	40 - 145		
					CRS 13C-PCB-178	101	40 - 145		

LCL-UCL - Lower control limit - upper control limit

Sample ID: CC-A-01-20141013-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data						
Name:	Leidos			Matrix:	Sediment			Lab Sample:	1400762-03			Date Received:	14-Oct-2014 8:45							
Project:	1400647			Sample Size:	17.0 g			QC Batch:	B4J0119			Date Extracted:	22-Oct-2014 9:03							
Date Collected:	13-Oct-2014 12:15			% Solids:	58.8			Date Analyzed :	25-Oct-14 08:31 Column: ZB-1 Analyst: DMS											
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers							
PCB-1	83.1	49.9			0.320	D	PCB-44	9710	49.9			0.745	D							
PCB-2	29.1	49.9			0.240	J, D	PCB-45	238	49.9			0.402	D							
PCB-3	ND	49.9		62.0	0.323	D	PCB-46	91.7	49.9			0.537	D							
PCB-4/10	ND	200		124	1.14	D	PCB-47	552	49.9			2.19	D							
PCB-5/8	351	200			1.76	D	PCB-48/75	342	99.9			0.983	D							
PCB-6	ND	99.9		70.2	1.00	D	PCB-50	ND	49.9	26.3		0.603	D							
PCB-7/9	ND	200	85.0		1.34	D	PCB-51	89.7	49.9			0.789	D							
PCB-11	1210	99.9			3.48	D	PCB-52/69	17700	99.9			0.722	D							
PCB-12/13	ND	200	79.6		1.37	D	PCB-53	399	49.9			0.331	D							
PCB-14	ND	99.9	85.8		0.337	D	PCB-54	ND	49.9	21.0		0.275	D							
PCB-15	341	99.9			0.634	D	PCB-55	283	49.9			0.416	D							
PCB-16/32	426	200			0.430	D	PCB-56/60	2360	99.9			0.825	B, D							
PCB-17	157	49.9			0.658	D	PCB-57	ND	49.9		15.6	0.354	D							
PCB-18	639	49.9			0.696	D	PCB-58	ND	49.9	23.9		0.589	D							
PCB-19	75.6	49.9			0.612	D	PCB-61/70	15900	99.9			1.20	D							
PCB-20/21/33	479	150			2.47	D	PCB-62	ND	49.9	23.8		0.597	D							
PCB-22	275	49.9			0.964	D	PCB-63	178	49.9			0.524	D							
PCB-23	ND	49.9	16.4		0.543	D	PCB-65	ND	49.9	23.7		0.842	D							
PCB-24/27	52.4	99.9			0.742	J, D	PCB-66/76	3980	99.9			1.31	B, D							
PCB-25	61.3	49.9			0.768	D	PCB-67	71.0	49.9			0.486	D							
PCB-26	125	49.9			0.766	D	PCB-68	24.8	49.9			0.658	J, D							
PCB-28	536	49.9			1.12	B, D	PCB-73	ND	49.9	20.2		0.454	D							
PCB-29	ND	49.9	19.4		0.949	D	PCB-74	2560	49.9			0.781	D							
PCB-30	ND	49.9	8.77		0.355	D	PCB-77	1690	49.9			0.748	D							
PCB-31	803	49.9			0.809	B, D	PCB-78	ND	49.9	21.2		0.385	D							
PCB-34	ND	49.9	18.4		1.57	D	PCB-79	523	49.9			0.633	D							
PCB-35	85.0	49.9			0.565	D	PCB-80	ND	49.9	18.6		0.336	D							
PCB-36	ND	49.9	18.3		0.406	D	PCB-81	352	49.9			0.674	D							
PCB-37	479	49.9			0.389	D	PCB-82	6600	49.9			0.981	D							
PCB-38	23.7	49.9			0.528	J, D	PCB-83	ND	49.9	14.6		0.440	D							
PCB-39	ND	49.9	18.7		0.461	D	PCB-84/92	24400	99.9			1.01	D							
PCB-40	624	49.9			0.927	D	PCB-85/116	7540	99.9			1.64	D							
PCB-41/64/71/72	3780	200			1.70	D	PCB-86	ND	49.9	26.4		1.79	D							
PCB-42/59	717	99.9			0.899	D	PCB-87/117/125	22900	150			0.880	D							
PCB-43/49	4170	99.9			0.879	D	PCB-88/91	6210	99.9			1.25	D							

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: CC-A-01-20141013-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data						
Name:	Leidos			Matrix:	Sediment			Lab Sample:	1400762-03			Date Received:	14-Oct-2014 8:45							
Project:	1400647			Sample Size:	17.0 g			QC Batch:	B4J0119			Date Extracted:	22-Oct-2014 9:03							
Date Collected:	13-Oct-2014 12:15			% Solids:	58.8			Date Analyzed :	25-Oct-14 08:31 Column: ZB-1 Analyst: DMS											
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers							
PCB-89	245	49.9			1.22	D	PCB-136	10100	49.9			0.776	B, D							
PCB-90/101	66100	99.9			1.19	B, D	PCB-137	4940	49.9			0.541	D							
PCB-93	ND	49.9	25.0		2.53	D	PCB-138/163/164	95200	150			0.809	D							
PCB-94	166	49.9			0.874	D	PCB-139/149	70500	49.9			1.49	B, D							
PCB-95/98/102	47900	150			1.38	B, D	PCB-140	371	49.9			1.20	D							
PCB-96	ND	49.9	15.4		0.588	D	PCB-141	21500	49.9			0.678	D							
PCB-97	17400	49.9			0.675	D	PCB-144	4150	49.9			1.38	D							
PCB-99	16400	49.9			0.474	D	PCB-145	23.0	49.9			1.05	J, D							
PCB-100	91.0	49.9			0.511	D	PCB-146/165	10500	99.9			0.792	D							
PCB-103	237	49.9			0.428	D	PCB-147	1380	49.9			5.26	D							
PCB-104	ND	49.9	14.8		0.876	D	PCB-148	ND	49.9	22.1		1.45	D							
PCB-105	20600	49.9			0.462	B, D	PCB-150	102	49.9			0.801	D							
PCB-106/118	51800	99.9			0.728	D	PCB-151	20300	49.9			1.16	D							
PCB-107/109	3360	99.9			0.631	D	PCB-152	70.4	49.9			0.744	D							
PCB-108/112	2670	99.9			0.844	D	PCB-153	75500	49.9			0.484	B, D							
PCB-110	70100	49.9			0.555	B, D	PCB-154	503	49.9			0.837	D							
PCB-111/115	855	99.9			1.24	D	PCB-155	ND	49.9	14.8		0.767	D							
PCB-113	ND	49.9	14.5		0.495	D	PCB-156	9300	49.9			0.534	D							
PCB-114	1410	49.9			0.418	D	PCB-157	1820	49.9			0.485	D							
PCB-119	704	49.9			0.383	D	PCB-158/160	11800	99.9			0.915	D							
PCB-120	190	49.9			0.622	D	PCB-159	ND	49.9	46.1		0.578	D							
PCB-121	ND	49.9	13.0		0.978	D	PCB-166	371	49.9			0.425	D							
PCB-122	630	49.9			0.619	D	PCB-167	3480	49.9			0.653	D							
PCB-123	689	49.9			0.494	D	PCB-168	ND	49.9	58.1	0.502	D								
PCB-124	2470	49.9			0.813	D	PCB-169	ND	49.9	76.4		0.767	D							
PCB-126	726	49.9			0.543	D	PCB-170	25400	49.9			0.758	D							
PCB-127	ND	49.9	97.5		0.326	D	PCB-171	6140	49.9			0.372	D							
PCB-128/162	13000	99.9			1.08	D	PCB-172	3750	49.9			0.857	D							
PCB-129	5460	49.9			0.567	D	PCB-173	686	49.9			0.507	D							
PCB-130	5720	49.9			0.798	D	PCB-174	29000	49.9			0.797	D							
PCB-131	ND	49.9	57.1		0.731	D	PCB-175	1000	49.9			0.679	D							
PCB-132/161	26100	99.9			1.05	D	PCB-176	3350	49.9			0.729	D							
PCB-133/142	2910	99.9			1.04	D	PCB-177	15700	49.9			0.404	D							
PCB-134/143	5110	99.9			1.05	D	PCB-178	5400	49.9			0.610	D							
PCB-135	10700	49.9			1.47	D	PCB-179	12500	49.9			0.418	B, D							

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: CC-A-01-20141013-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data						
Name:	Leidos			Matrix:	Sediment			Lab Sample:	1400762-03			Date Received:	14-Oct-2014 8:45							
Project:	1400647			Sample Size:	17.0 g			QC Batch:	B4J0119			Date Extracted:	22-Oct-2014 9:03							
Date Collected:	13-Oct-2014 12:15			% Solids:	58.8			Date Analyzed :	25-Oct-14 08:31 Column: ZB-1 Analyst: DMS											
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers							
PCB-180	66000	49.9			0.420	D	Total octaCB	60500	49.9											
PCB-181	ND	49.9	53.1		1.26	D	Total nonaCB	5290	49.9											
PCB-182/187	30100	99.9			1.33	B, D	DecaCB	306	49.9											
PCB-183	13800	49.9			0.638	B, D	Total PCB	1150000	99.9								B			
PCB-184	27.1	49.9			0.597	J, D														
PCB-185	2700	49.9			0.557	D														
PCB-186	ND	49.9	9.50		0.421	D														
PCB-188	38.9	49.9			0.759	J, D														
PCB-189	826	49.9			0.483	D														
PCB-190	4910	49.9			0.686	D														
PCB-191	1060	49.9			0.447	D														
PCB-192	ND	49.9	13.1		0.528	D														
PCB-193	2910	49.9			0.836	D														
PCB-194	14000	49.9			0.645	D														
PCB-195	5490	49.9			0.722	D														
PCB-196/203	17000	99.9			0.983	D														
PCB-197	618	49.9			0.794	D														
PCB-198	807	49.9			0.792	D														
PCB-199	14900	49.9			0.615	D														
PCB-200	2000	49.9			0.795	D														
PCB-201	2020	49.9			0.317	D														
PCB-202	3060	49.9			0.759	D														
PCB-204	ND	49.9	24.0		0.543	D														
PCB-205	626	49.9			0.471	D														
PCB-206	3890	49.9			0.852	D														
PCB-207	491	49.9			0.402	D														
PCB-208	906	49.9			0.441	D														
PCB-209	306	49.9			1.10	D														
Total monoCB	112	49.9	174																	
Total diCB	1900	99.9	2100																	
Total triCB	4220	49.9				B														
Total tetraCB	66400	49.9				B														
Total pentaCB	372000	49.9				B														
Total hexaCB	411000	49.9				B														
Total heptaCB	225000	49.9				B														

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: CC-A-01-20141013-S

EPA Method 1668C

Client Data				Sample Data				Laboratory Data			
Name:		Leidos		Matrix:		Sediment		Lab Sample:		Date Received:	
Project:		1400647		Sample Size:		17.0 g		QC Batch:		Date Extracted:	
Date Collected:		13-Oct-2014 12:15		% Solids:		58.8		Date Analyzed :		25-Oct-14 08:31 Column: ZB-1 Analyst: DMS	
Labeled Standard	%R	LCL-UCL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
IS 13C-PCB-1	119	5 -145	D	13C-PCB-170	89.9	10 -145	D	13C-PCB-3	102	5 -145	D
13C-PCB-3	102	5 -145	D	13C-PCB-180	96.9	10 -145	D	13C-PCB-4	83.8	5 -145	D
13C-PCB-4	83.8	5 -145	D	13C-PCB-188	101	10 -145	D	13C-PCB-11	75.7	5 -145	D
13C-PCB-11	75.7	5 -145	D	13C-PCB-189	95.1	10 -145	D	13C-PCB-9	88.3	5 -145	D
13C-PCB-9	88.3	5 -145	D	13C-PCB-194	99.0	10 -145	D	13C-PCB-19	97.6	5 -145	D
13C-PCB-19	97.6	5 -145	D	13C-PCB-202	94.3	10 -145	D	13C-PCB-28	95.4	5 -145	D
13C-PCB-28	95.4	5 -145	D	13C-PCB-206	92.2	10 -145	D	13C-PCB-32	108	5 -145	D
13C-PCB-32	108	5 -145	D	13C-PCB-208	87.6	10 -145	D	13C-PCB-37	97.9	5 -145	D
13C-PCB-37	97.9	5 -145	D	13C-PCB-209	93.0	10 -145	D	13C-PCB-47	83.5	5 -145	D
13C-PCB-47	83.5	5 -145	D	CRS 13C-PCB-79	82.8	10 -145	D	13C-PCB-52	92.6	5 -145	D
13C-PCB-52	92.6	5 -145	D	13C-PCB-178	89.9	10 -145	D	13C-PCB-54	85.6	5 -145	D
13C-PCB-54	85.6	5 -145	D					13C-PCB-70	92.0	5 -145	D
13C-PCB-70	92.0	5 -145	D					13C-PCB-77	78.5	10 -145	D
13C-PCB-77	78.5	10 -145	D					13C-PCB-80	89.1	10 -145	D
13C-PCB-80	89.1	10 -145	D					13C-PCB-81	81.3	10 -145	D
13C-PCB-81	81.3	10 -145	D					13C-PCB-95	103	10 -145	D
13C-PCB-95	103	10 -145	D					13C-PCB-97	92.5	10 -145	D
13C-PCB-97	92.5	10 -145	D					13C-PCB-101	103	10 -145	D
13C-PCB-101	103	10 -145	D					13C-PCB-104	93.0	10 -145	D
13C-PCB-104	93.0	10 -145	D					13C-PCB-105	82.7	10 -145	D
13C-PCB-105	82.7	10 -145	D					13C-PCB-114	81.6	10 -145	D
13C-PCB-114	81.6	10 -145	D					13C-PCB-118	90.7	10 -145	D
13C-PCB-118	90.7	10 -145	D					13C-PCB-123	93.1	10 -145	D
13C-PCB-123	93.1	10 -145	D					13C-PCB-126	72.7	10 -145	D
13C-PCB-126	72.7	10 -145	D					13C-PCB-127	81.9	10 -145	D
13C-PCB-127	81.9	10 -145	D					13C-PCB-138	85.1	10 -145	D
13C-PCB-138	85.1	10 -145	D					13C-PCB-141	90.2	10 -145	D
13C-PCB-141	90.2	10 -145	D					13C-PCB-153	95.2	10 -145	D
13C-PCB-153	95.2	10 -145	D					13C-PCB-155	107	10 -145	D
13C-PCB-155	107	10 -145	D					13C-PCB-156	88.1	10 -145	D
13C-PCB-156	88.1	10 -145	D					13C-PCB-157	89.7	10 -145	D
13C-PCB-157	89.7	10 -145	D					13C-PCB-159	95.3	10 -145	D
13C-PCB-159	95.3	10 -145	D					13C-PCB-167	88.8	10 -145	D
13C-PCB-167	88.8	10 -145	D					13C-PCB-169	80.4	10 -145	D

RL - Reporting limit

EMPC - Estimated maximum possible concentration

DL - Sample specific estimated detection limit

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: CC-CB-04-20141013-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data						
Name:	Leidos			Matrix:	Sediment			Lab Sample:	1400762-04			Date Received:	14-Oct-2014 8:45							
Project:	1400647			Sample Size:	17.4 g			QC Batch:	B4J0119			Date Extracted:	22-Oct-2014 9:03							
Date Collected:	13-Oct-2014 13:20			% Solids:	57.6			Date Analyzed :	25-Oct-14 09:35 Column: ZB-1 Analyst: DMS											
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers							
PCB-1	84.1	50.0			0.320	D	PCB-44	13400	50.0			0.745	D							
PCB-2	42.0	50.0			0.240	J, D	PCB-45	293	50.0			0.402	D							
PCB-3	86.3	50.0			0.323	D	PCB-46	143	50.0			0.537	D							
PCB-4/10	149	200			1.14	J, D	PCB-47	773	50.0			2.19	D							
PCB-5/8	538	200			1.76	D	PCB-48/75	457	100			0.983	D							
PCB-6	ND	100		93.4	1.00	D	PCB-50	ND	50.0	34.2		0.603	D							
PCB-7/9	ND	200	71.1		1.34	D	PCB-51	110	50.0			0.789	D							
PCB-11	2360	100			3.48	D	PCB-52/69	29000	100			0.722	D							
PCB-12/13	ND	200	69.3		1.37	D	PCB-53	607	50.0			0.331	D							
PCB-14	ND	100	74.6		0.337	D	PCB-54	ND	50.0	27.3		0.275	D							
PCB-15	448	100			0.634	D	PCB-55	413	50.0			0.416	D							
PCB-16/32	457	200			0.430	D	PCB-56/60	3780	100			0.825	B, D							
PCB-17	239	50.0			0.658	D	PCB-57	34.4	50.0			0.354	J, D							
PCB-18	699	50.0			0.696	D	PCB-58	16.2	50.0			0.589	J, D							
PCB-19	65.1	50.0			0.612	D	PCB-61/70	28200	100			1.20	D							
PCB-20/21/33	707	150			2.47	D	PCB-62	ND	50.0	30.3		0.597	D							
PCB-22	389	50.0			0.964	D	PCB-63	293	50.0			0.524	D							
PCB-23	ND	50.0	15.9		0.543	D	PCB-65	ND	50.0	30.2		0.842	D							
PCB-24/27	53.5	100			0.742	J, D	PCB-66/76	6430	100			1.31	B, D							
PCB-25	94.8	50.0			0.768	D	PCB-67	113	50.0			0.486	D							
PCB-26	205	50.0			0.766	D	PCB-68	31.3	50.0			0.658	J, D							
PCB-28	757	50.0			1.12	B, D	PCB-73	ND	50.0	30.6		0.454	D							
PCB-29	24.3	50.0			0.949	J, D	PCB-74	4630	50.0			0.781	D							
PCB-30	ND	50.0	8.70		0.355	D	PCB-77	2040	50.0			0.748	D							
PCB-31	1040	50.0			0.809	B, D	PCB-78	ND	50.0	31.0		0.385	D							
PCB-34	ND	50.0	17.9		1.57	D	PCB-79	834	50.0			0.633	D							
PCB-35	125	50.0			0.565	D	PCB-80	ND	50.0	24.4		0.336	D							
PCB-36	ND	50.0	25.4		0.406	D	PCB-81	276	50.0			0.674	D							
PCB-37	651	50.0			0.389	D	PCB-82	9840	50.0			0.981	D							
PCB-38	ND	50.0		24.3	0.528	D	PCB-83	ND	50.0	22.7		0.440	D							
PCB-39	ND	50.0	26.0		0.461	D	PCB-84/92	35200	100			1.01	D							
PCB-40	704	50.0			0.927	D	PCB-85/116	12500	100			1.64	D							
PCB-41/64/71/72	5130	200			1.70	D	PCB-86	171	50.0			1.79	D							
PCB-42/59	897	100			0.899	D	PCB-87/117/125	36500	150			0.880	D							
PCB-43/49	6870	100			0.879	D	PCB-88/91	9260	100			1.25	D							

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: CC-CB-04-20141013-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data						
Name:	Leidos			Matrix:	Sediment			Lab Sample:	1400762-04			Date Received:	14-Oct-2014 8:45							
Project:	1400647			Sample Size:	17.4 g			QC Batch:	B4J0119			Date Extracted:	22-Oct-2014 9:03							
Date Collected:	13-Oct-2014 13:20			% Solids:	57.6			Date Analyzed :	25-Oct-14 09:35 Column: ZB-1 Analyst: DMS											
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers							
PCB-89	362	50.0			1.22	D	PCB-136	10700	50.0			0.776	B, D							
PCB-90/101	98900	100			1.19	B, D	PCB-137	6070	50.0			0.541	D							
PCB-93	ND	50.0	33.5		2.53	D	PCB-138/163/164	99700	150			0.809	D							
PCB-94	240	50.0			0.874	D	PCB-139/149	78300	50.0			1.49	B, D							
PCB-95/98/102	65200	150			1.38	B, D	PCB-140	473	50.0			1.20	D							
PCB-96	ND	50.0	20.3		0.588	D	PCB-141	20400	50.0			0.678	D							
PCB-97	27900	50.0			0.675	D	PCB-144	5170	50.0			1.38	D							
PCB-99	27200	50.0			0.474	D	PCB-145	40.4	50.0			1.05	J, D							
PCB-100	ND	50.0		95.2	0.511	D	PCB-146/165	11500	100			0.792	D							
PCB-103	355	50.0			0.428	D	PCB-147	1800	50.0			5.26	D							
PCB-104	ND	50.0	19.5		0.876	D	PCB-148	ND	50.0	21.9		1.45	D							
PCB-105	31000	50.0			0.462	B, D	PCB-150	115	50.0			0.801	D							
PCB-106/118	84400	100			0.728	D	PCB-151	20200	50.0			1.16	D							
PCB-107/109	4810	100			0.631	D	PCB-152	89.9	50.0			0.744	D							
PCB-108/112	3940	100			0.844	D	PCB-153	78600	50.0			0.484	B, D							
PCB-110	103000	50.0			0.555	B, D	PCB-154	738	50.0			0.837	D							
PCB-111/115	1450	100			1.24	D	PCB-155	ND	50.0	14.7		0.767	D							
PCB-113	ND	50.0	20.0		0.495	D	PCB-156	11100	50.0			0.534	D							
PCB-114	1970	50.0			0.418	D	PCB-157	2280	50.0			0.485	D							
PCB-119	1220	50.0			0.383	D	PCB-158/160	12900	100			0.915	D							
PCB-120	220	50.0			0.622	D	PCB-159	ND	50.0	195		0.578	D							
PCB-121	ND	50.0	17.5		0.978	D	PCB-166	488	50.0			0.425	D							
PCB-122	926	50.0			0.619	D	PCB-167	4050	50.0			0.653	D							
PCB-123	1050	50.0			0.494	D	PCB-168	96.8	50.0			0.502	D							
PCB-124	3420	50.0			0.813	D	PCB-169	ND	50.0	216		0.767	D							
PCB-126	895	50.0			0.543	D	PCB-170	19900	50.0			0.758	D							
PCB-127	ND	50.0	84.9		0.326	D	PCB-171	5200	50.0			0.372	D							
PCB-128/162	16800	100			1.08	D	PCB-172	3180	50.0			0.857	D							
PCB-129	6470	50.0			0.567	D	PCB-173	551	50.0			0.507	D							
PCB-130	6950	50.0			0.798	D	PCB-174	24200	50.0			0.797	D							
PCB-131	ND	50.0		24.7	0.731	D	PCB-175	908	50.0			0.679	D							
PCB-132/161	31400	100			1.05	D	PCB-176	2680	50.0			0.729	D							
PCB-133/142	3490	100			1.04	D	PCB-177	13800	50.0			0.404	D							
PCB-134/143	6160	100			1.05	D	PCB-178	4240	50.0			0.610	D							
PCB-135	11300	50.0			1.47	D	PCB-179	10200	50.0			0.418	B, D							

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: CC-CB-04-20141013-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data						
Name:	Leidos			Matrix:	Sediment			Lab Sample:	1400762-04			Date Received:	14-Oct-2014 8:45							
Project:	1400647			Sample Size:	17.4 g			QC Batch:	B4J0119			Date Extracted:	22-Oct-2014 9:03							
Date Collected:	13-Oct-2014 13:20			% Solids:	57.6			Date Analyzed :	25-Oct-14 09:35 Column: ZB-1 Analyst: DMS											
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers							
PCB-180	56000	50.0			0.420	D	Total octaCB	48000	50.0											
PCB-181	ND	50.0	28.3		1.26	D	Total nonaCB	6360	50.0											
PCB-182/187	24100	100			1.33	B, D	DecaCB	381	50.0											
PCB-183	11000	50.0			0.638	B, D	Total PCB	1370000	100								B			
PCB-184	20.8	50.0			0.597	J, D														
PCB-185	2410	50.0			0.557	D														
PCB-186	ND	50.0	17.0		0.421	D														
PCB-188	50.5	50.0			0.759	D														
PCB-189	822	50.0			0.483	D														
PCB-190	3820	50.0			0.686	D														
PCB-191	900	50.0			0.447	D														
PCB-192	ND	50.0	22.4		0.528	D														
PCB-193	2390	50.0			0.836	D														
PCB-194	11800	50.0			0.645	D														
PCB-195	4310	50.0			0.722	D														
PCB-196/203	12800	100			0.983	D														
PCB-197	394	50.0			0.794	D														
PCB-198	411	50.0			0.792	D														
PCB-199	11900	50.0			0.615	D														
PCB-200	1530	50.0			0.795	D														
PCB-201	1610	50.0			0.317	D														
PCB-202	2820	50.0			0.759	D														
PCB-204	ND	50.0	26.9		0.543	D														
PCB-205	455	50.0			0.471	D														
PCB-206	4330	50.0			0.852	D														
PCB-207	652	50.0			0.402	D														
PCB-208	1370	50.0			0.441	D														
PCB-209	381	50.0			1.10	D														
Total monoCB	212	50.0																		
Total diCB	3490	100		3590																
Total triCB	5510	50.0		5530		B														
Total tetraCB	106000	50.0				B														
Total pentaCB	562000	50.0				B														
Total hexaCB	447000	50.0				B														
Total heptaCB	186000	50.0				B														

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: CC-CB-04-20141013-S**EPA Method 1668C**

Client Data				Sample Data				Laboratory Data			
Name:		Leidos		Matrix:		Sediment		Lab Sample:		Date Received:	
Project:		1400647		Sample Size:		17.4 g		QC Batch:		Date Extracted:	
Date Collected:		13-Oct-2014 13:20		% Solids:		57.6		Date Analyzed :		25-Oct-14 09:35 Column: ZB-1 Analyst: DMS	
Labeled Standard	%R	LCL-UCL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers				
IS 13C-PCB-1	121	5 -145	D	13C-PCB-170	89.4	10 -145	D				
13C-PCB-3	111	5 -145	D	13C-PCB-180	84.0	10 -145	D				
13C-PCB-4	88.0	5 -145	D	13C-PCB-188	95.0	10 -145	D				
13C-PCB-11	90.9	5 -145	D	13C-PCB-189	80.7	10 -145	D				
13C-PCB-9	91.6	5 -145	D	13C-PCB-194	82.4	10 -145	D				
13C-PCB-19	117	5 -145	D	13C-PCB-202	107	10 -145	D				
13C-PCB-28	77.8	5 -145	D	13C-PCB-206	87.6	10 -145	D				
13C-PCB-32	110	5 -145	D	13C-PCB-208	78.7	10 -145	D				
13C-PCB-37	82.7	5 -145	D	13C-PCB-209	90.6	10 -145	D				
13C-PCB-47	89.2	5 -145	D	CRS 13C-PCB-79	86.4	10 -145	D				
13C-PCB-52	86.4	5 -145	D	13C-PCB-178	88.4	10 -145	D				
13C-PCB-54	88.0	5 -145	D								
13C-PCB-70	92.5	5 -145	D								
13C-PCB-77	81.5	10 -145	D								
13C-PCB-80	89.4	10 -145	D								
13C-PCB-81	82.2	10 -145	D								
13C-PCB-95	88.4	10 -145	D								
13C-PCB-97	81.4	10 -145	D								
13C-PCB-101	87.8	10 -145	D								
13C-PCB-104	79.4	10 -145	D								
13C-PCB-105	75.6	10 -145	D								
13C-PCB-114	79.1	10 -145	D								
13C-PCB-118	81.7	10 -145	D								
13C-PCB-123	88.6	10 -145	D								
13C-PCB-126	70.5	10 -145	D								
13C-PCB-127	67.9	10 -145	D								
13C-PCB-138	83.6	10 -145	D								
13C-PCB-141	84.9	10 -145	D								
13C-PCB-153	85.3	10 -145	D								
13C-PCB-155	94.7	10 -145	D								
13C-PCB-156	84.7	10 -145	D								
13C-PCB-157	85.3	10 -145	D								
13C-PCB-159	84.0	10 -145	D								
13C-PCB-167	84.4	10 -145	D								
13C-PCB-169	80.2	10 -145	D								

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

DL - Sample specific estimated detection limit

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: CC-CB-22-20141013-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data						
Name:	Leidos			Matrix:	Sediment			Lab Sample:	1400762-05			Date Received:	14-Oct-2014 8:45							
Project:	1400647			Sample Size:	18.5 g			QC Batch:	B4J0119			Date Extracted:	22-Oct-2014 9:03							
Date Collected:	13-Oct-2014 14:10			% Solids:	54.0			Date Analyzed :	25-Oct-14 10:39 Column: ZB-1 Analyst: DMS			27-Oct-14 16:54 Column: ZB-1 Analyst: DMS								
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers							
PCB-1	79.0	50.0			0.320	D	PCB-44	15600	50.0			0.745	D							
PCB-2	54.9	50.0			0.240	D	PCB-45	443	50.0			0.402	D							
PCB-3	94.4	50.0			0.323	D	PCB-46	224	50.0			0.537	D							
PCB-4/10	135	200			1.14	J, D	PCB-47	864	50.0			2.19	D							
PCB-5/8	371	200			1.76	D	PCB-48/75	440	100			0.983	D							
PCB-6	80.2	100			1.00	J, D	PCB-50	6.35	50.0			0.603	J, D							
PCB-7/9	ND	200		49.6	1.34	D	PCB-51	147	50.0			0.789	D							
PCB-11	2760	100			3.48	D	PCB-52/69	36200	100			0.722	D							
PCB-12/13	67.2	200			1.37	J, D	PCB-53	1040	50.0			0.331	D							
PCB-14	ND	100	93.5		0.337	D	PCB-54	7.35	50.0			0.275	J, D							
PCB-15	546	100			0.634	D	PCB-55	718	50.0			0.416	D							
PCB-16/32	422	200			0.430	D	PCB-56/60	3280	100			0.825	B, D							
PCB-17	193	50.0			0.658	D	PCB-57	ND	50.0	38.4		0.354	D							
PCB-18	674	50.0			0.696	D	PCB-58	ND	50.0	40.6		0.589	D							
PCB-19	104	50.0			0.612	D	PCB-61/70	22000	100			1.20	D							
PCB-20/21/33	478	150			2.47	D	PCB-62	ND	50.0	40.7		0.597	D							
PCB-22	284	50.0			0.964	D	PCB-63	237	50.0			0.524	D							
PCB-23	ND	50.0	23.7		0.543	D	PCB-65	ND	50.0	40.6		0.842	D							
PCB-24/27	62.5	100			0.742	J, D	PCB-66/76	5540	100			1.31	B, D							
PCB-25	55.0	50.0			0.768	D	PCB-67	112	50.0			0.486	D							
PCB-26	166	50.0			0.766	D	PCB-68	ND	50.0	36.9		0.658	D							
PCB-28	491	50.0			1.12	B, D	PCB-73	ND	50.0	38.6		0.454	D							
PCB-29	10.2	50.0			0.949	J, D	PCB-74	3600	50.0			0.781	D							
PCB-30	ND	50.0	6.64		0.355	D	PCB-77	4990	50.0			0.748	D							
PCB-31	755	50.0			0.809	B, D	PCB-78	ND	50.0	37.2		0.385	D							
PCB-34	ND	50.0	26.6		1.57	D	PCB-79	1410	50.0			0.633	D							
PCB-35	170	50.0			0.565	D	PCB-80	ND	50.0	31.6		0.336	D							
PCB-36	58.7	50.0			0.406	D	PCB-81	583	50.0			0.674	D							
PCB-37	721	50.0			0.389	D	PCB-82	15700	50.0			0.981	D							
PCB-38	37.7	50.0			0.528	J, D	PCB-83	ND	50.0	11.7		0.440	D							
PCB-39	ND	50.0	32.3		0.461	D	PCB-84/92	65800	100			1.01	D							
PCB-40	1010	50.0			0.927	D	PCB-85/116	17500	100			1.64	D							
PCB-41/64/71/72	5870	200			1.70	D	PCB-86	ND	50.0	21.1		1.79	D							
PCB-42/59	1020	100			0.899	D	PCB-87/117/125	51800	150			0.880	D							
PCB-43/49	7360	100			0.879	D	PCB-88/91	18000	100			1.25	D							

RL - Reporting limit

DL - Sample specific estimated detection limit

LCL-UCL- Lower control limit - upper control limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: CC-CB-22-20141013-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data							
Name:	Leidos						Matrix:	Sediment						Lab Sample:	1400762-05			Date Received:	14-Oct-2014 8:45		
Project:	1400647						Sample Size:	18.5 g						QC Batch:	B4J0119			Date Extracted:	22-Oct-2014 9:03		
Date Collected:	13-Oct-2014 14:10						% Solids:	54.0						Date Analyzed :	25-Oct-14 10:39 Column: ZB-1 Analyst: DMS			27-Oct-14 16:54 Column: ZB-1 Analyst: DMS			
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	
PCB-89	619	50.0			1.22	D	PCB-136	30200	50.0			0.776	B, D	PCB-136	30200	50.0			0.776	B, D	
PCB-90/101	161000	100			1.19	B, D	PCB-137	11200	50.0			0.541	D	PCB-137	11200	50.0			0.541	D	
PCB-93	ND	50.0	20.9		2.53	D	PCB-138/163/164	216000	150			0.809	D	PCB-138/163/164	216000	150			0.809	D	
PCB-94	478	50.0			0.874	D	PCB-139/149	199000	50.0			1.49	B, E, D	PCB-139/149	199000	50.0			1.49	B, E, D	
PCB-95/98/102	132000	150			1.38	B, D	PCB-140	1150	50.0			1.20	D	PCB-140	1150	50.0			1.20	D	
PCB-96	672	50.0			0.588	D	PCB-141	47400	50.0			0.678	D	PCB-141	47400	50.0			0.678	D	
PCB-97	42000	50.0			0.675	D	PCB-144	12700	50.0			1.38	D	PCB-144	12700	50.0			1.38	D	
PCB-99	42100	50.0			0.474	D	PCB-145	80.4	50.0			1.05	D	PCB-145	80.4	50.0			1.05	D	
PCB-100	210	50.0			0.511	D	PCB-146/165	25200	100			0.792	D	PCB-146/165	25200	100			0.792	D	
PCB-103	586	50.0			0.428	D	PCB-147	4370	50.0			5.26	D	PCB-147	4370	50.0			5.26	D	
PCB-104	ND	50.0	10.7		0.876	D	PCB-148	ND	50.0	14.6		1.45	D	PCB-148	ND	50.0	14.6		1.45	D	
PCB-105	40900	50.0			0.462	B, D	PCB-150	290	50.0			0.801	D	PCB-150	290	50.0			0.801	D	
PCB-106/118	107000	100			0.728	D	PCB-151	55800	50.0			1.16	D	PCB-151	55800	50.0			1.16	D	
PCB-107/109	7290	100			0.631	D	PCB-152	211	50.0			0.744	D	PCB-152	211	50.0			0.744	D	
PCB-108/112	6680	100			0.844	D	PCB-153	170000	50.0			0.484	B, E, D	PCB-153	170000	50.0			0.484	B, E, D	
PCB-110	169000	50.0			0.555	B, E, D	PCB-154	1750	50.0			0.837	D	PCB-154	1750	50.0			0.837	D	
PCB-111/115	2350	100			1.24	D	PCB-155	ND	50.0	9.74		0.767	D	PCB-155	ND	50.0	9.74		0.767	D	
PCB-113	ND	50.0	12.1		0.495	D	PCB-156	19500	50.0			0.534	D	PCB-156	19500	50.0			0.534	D	
PCB-114	2680	50.0			0.418	D	PCB-157	4620	50.0			0.485	D	PCB-157	4620	50.0			0.485	D	
PCB-119	1860	50.0			0.383	D	PCB-158/160	27000	100			0.915	D	PCB-158/160	27000	100			0.915	D	
PCB-120	571	50.0			0.622	D	PCB-159	ND	50.0	316		0.578	D	PCB-159	ND	50.0	316		0.578	D	
PCB-121	ND	50.0	10.9		0.978	D	PCB-166	944	50.0			0.425	D	PCB-166	944	50.0			0.425	D	
PCB-122	1470	50.0			0.619	D	PCB-167	8580	50.0			0.653	D	PCB-167	8580	50.0			0.653	D	
PCB-123	1470	50.0			0.494	D	PCB-168	211	50.0			0.502	D	PCB-168	211	50.0			0.502	D	
PCB-124	5430	50.0			0.813	D	PCB-169	125	50.0			0.767	D	PCB-169	125	50.0			0.767	D	
PCB-126	2240	50.0			0.543	D	PCB-170	53600	50.0			0.758	D	PCB-170	53600	50.0			0.758	D	
PCB-127	ND	50.0	93.5		0.326	D	PCB-171	13700	50.0			0.372	D	PCB-171	13700	50.0			0.372	D	
PCB-128/162	34200	100			1.08	D	PCB-172	8760	50.0			0.857	D	PCB-172	8760	50.0			0.857	D	
PCB-129	13000	50.0			0.567	D	PCB-173	1550	50.0			0.507	D	PCB-173	1550	50.0			0.507	D	
PCB-130	16100	50.0			0.798	D	PCB-174	65300	50.0			0.797	D	PCB-174	65300	50.0			0.797	D	
PCB-131	ND	50.0	190		0.731	D	PCB-175	2820	50.0			0.679	D	PCB-175	2820	50.0			0.679	D	
PCB-132/161	61600	100			1.05	D	PCB-176	8300	50.0			0.729	D	PCB-176	8300	50.0			0.729	D	
PCB-133/142	7480	100			1.04	D	PCB-177	37500	50.0			0.404	D	PCB-177	37500	50.0			0.404	D	
PCB-134/143	13200	100			1.05	D	PCB-178	13800	50.0			0.610	D	PCB-178	13800	50.0			0.610	D	
PCB-135	30300	50.0			1.47	D	PCB-179	31900	50.0			0.418	B, D	PCB-179	31900	50.0			0.418	B, D	

RL - Reporting limit

DL - Sample specific estimated detection limit

LCL-UCL- Lower control limit - upper control limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: CC-CB-22-20141013-S

EPA Method 1668C

Client Data		Sample Data			Laboratory Data								
Name:	Leidos	Matrix:	Sediment		Lab Sample:	1400762-05	Date Received: 14-Oct-2014 8:45						
Project:	1400647	Sample Size:	18.5 g		QC Batch:	B4J0119	Date Extracted: 22-Oct-2014 9:03						
Date Collected:	13-Oct-2014 14:10	% Solids:	54.0		Date Analyzed :	25-Oct-14 10:39 Column: ZB-1 Analyst: DMS 27-Oct-14 16:54 Column: ZB-1 Analyst: DMS							
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-180	138000	50.0			0.420	D	Total octaCB	138000	50.0				
PCB-181	ND	50.0	73.4		1.26	D	Total nonaCB	9460	50.0				
PCB-182/187	71400	100			1.33	B, D	DecaCB	370	50.0				
PCB-183	33400	50.0			0.638	B, D	Total PCB	2690000	100				B
PCB-184	41.0	50.0			0.597	J, D							
PCB-185	5760	50.0			0.557	D							
PCB-186	ND	50.0	38.7		0.421	D							
PCB-188	77.4	50.0			0.759	D							
PCB-189	2250	50.0			0.483	D							
PCB-190	10900	50.0			0.686	D							
PCB-191	2300	50.0			0.447	D							
PCB-192	ND	50.0	58.2		0.528	D							
PCB-193	6400	50.0			0.836	D							
PCB-194	36200	50.0			0.645	D							
PCB-195	14600	50.0			0.722	D							
PCB-196/203	35600	100			0.983	D							
PCB-197	1340	50.0			0.794	D							
PCB-198	1310	50.0			0.792	D							
PCB-199	32600	50.0			0.615	D							
PCB-200	4210	50.0			0.795	D							
PCB-201	4340	50.0			0.317	D							
PCB-202	6130	50.0			0.759	D							
PCB-204	ND	50.0	13.1		0.543	D							
PCB-205	1710	50.0			0.471	D							
PCB-206	6990	50.0			0.852	D							
PCB-207	963	50.0			0.402	D							
PCB-208	1510	50.0			0.441	D							
PCB-209	370	50.0			1.10	D							
Total monoCB	228	50.0											
Total diCB	3960	100	4010										
Total triCB	4680	50.0				B							
Total tetraCB	113000	50.0				B							
Total pentaCB	898000	50.0				B							
Total hexaCB	1010000	50.0				B							
Total heptaCB	507000	50.0				B							

RL - Reporting limit

DL - Sample specific estimated detection limit

LCL-UCL- Lower control limit - upper control limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: CC-CB-22-20141013-S

EPA Method 1668C

Client Data				Sample Data				Laboratory Data			
Name:		Leidos		Matrix:		Sediment		Lab Sample:		Date Received:	
Project:		1400647		Sample Size:		18.5 g		QC Batch:		Date Extracted:	
Date Collected:		13-Oct-2014 14:10		% Solids:		54.0		Date Analyzed :		25-Oct-14 10:39 Column: ZB-1 Analyst: DMS	
								27-Oct-14 16:54 Column: ZB-1 Analyst: DMS			
Labeled Standard	%R	LCL-UCL		Qualifiers		Labeled Standard	%R	LCL-UCL		Qualifiers	
IS 13C-PCB-1	120	5 -145		D		13C-PCB-170	101	10 -145		D	
13C-PCB-3	122	5 -145		D		13C-PCB-180	122	10 -145		D	
13C-PCB-4	88.1	5 -145		D		13C-PCB-188	98.4	10 -145		D	
13C-PCB-11	95.7	5 -145		D		13C-PCB-189	86.3	10 -145		D	
13C-PCB-9	97.1	5 -145		D		13C-PCB-194	104	10 -145		D	
13C-PCB-19	108	5 -145		D		13C-PCB-202	105	10 -145		D	
13C-PCB-28	91.7	5 -145		D		13C-PCB-206	109	10 -145		D	
13C-PCB-32	113	5 -145		D		13C-PCB-208	104	10 -145		D	
13C-PCB-37	89.7	5 -145		D		13C-PCB-209	94.6	10 -145		D	
13C-PCB-47	96.2	5 -145		D		CRS 13C-PCB-79	87.4	10 -145		D	
13C-PCB-52	99.6	5 -145		D		13C-PCB-178	88.7	10 -145		D	
13C-PCB-54	93.7	5 -145		D							
13C-PCB-70	103	5 -145		D							
13C-PCB-77	90.4	10 -145		D							
13C-PCB-80	99.1	10 -145		D							
13C-PCB-81	89.4	10 -145		D							
13C-PCB-95	92.1	10 -145		D							
13C-PCB-97	95.3	10 -145		D							
13C-PCB-101	95.5	10 -145		D							
13C-PCB-104	92.8	10 -145		D							
13C-PCB-105	76.9	10 -145		D							
13C-PCB-114	79.1	10 -145		D							
13C-PCB-118	92.1	10 -145		D							
13C-PCB-123	96.4	10 -145		D							
13C-PCB-126	68.4	10 -145		D							
13C-PCB-127	75.1	10 -145		D							
13C-PCB-138	85.9	10 -145		D							
13C-PCB-141	87.2	10 -145		D							
13C-PCB-153	91.7	10 -145		D							
13C-PCB-155	96.8	10 -145		D							
13C-PCB-156	91.5	10 -145		D							
13C-PCB-157	87.4	10 -145		D							
13C-PCB-159	87.4	10 -145		D							
13C-PCB-167	85.2	10 -145		D							
13C-PCB-169	79.0	10 -145		D							

RL - Reporting limit

DL - Sample specific estimated detection limit

LCL-UCL- Lower control limit - upper control limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

The results are reported in dry weight. The sample size is reported in wet weight.

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank.
D	Dilution
E	The amount detected is above the High Calibration Limit.
H	Recovery was outside laboratory acceptance limits.
I	Chemical Interference
J	The amount detected is below the Low Calibration Limit.
P	The amount reported is the maximum possible concentration due to possible chlorinated diphenylether interference.
*	See Cover Letter
Conc.	Concentration
DL	Sample-specific estimated detection limit
MDL	Method Detection Limit as determined by 40 CFR 136, Appendix B.
EMPC	Estimated Maximum Possible Concentration
M	Estimated Maximum Possible Concentration (CA Region 2)
NA	Not applicable
RL	Reporting Limit – concentrations that correspond to low calibration point
ND	Not Detected
TEQ	Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
Alabama Department of Environmental Management	41610
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2014022
Michigan Department of Natural Resources	9932
Nevada Division of Environmental Protection	CA004132015-1
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
North Carolina Department of Health & Human Services	06700
Oregon Laboratory Accreditation Program	4042-002
Pennsylvania Department of Environmental Protection	011
South Carolina Department of Health	87002001
Tennessee Department of Environment & Conservation	TN02996
Texas Commission on Environmental Quality	T104704189-14-5
Virginia Department of General Services	3138
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

SAMPLE LOG-IN CHECKLIST

Vista Project #: 1400762TAT std

Samples Arrival:	Date/Time <u>10/14/14</u>	Initials: <u>UBB</u>	Location: <u>WR-2</u>			
			Shelf/Rack: <u>NA</u>			
Logged In:	Date/Time <u>10/15/14</u>	Initials: <u>UBB</u>	Location: <u>WR-2</u>			
			Shelf/Rack: <u>C4</u>			
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> On Trac	<input type="checkbox"/> DHL	<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Other
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice		<input type="checkbox"/> Dry Ice		<input type="checkbox"/> None
Temp °C: <u>3.6</u> (uncorrected)	Time: <u>0848</u>			Thermometer ID: IR-1		
Temp °C: <u>3.6</u> (corrected)						

	YES	NO	NA		
Adequate Sample Volume Received?	<input checked="" type="checkbox"/>				
Holding Time Acceptable?	<input checked="" type="checkbox"/>				
Shipping Container(s) Intact?	<input checked="" type="checkbox"/>				
Shipping Custody Seals Intact?	<input checked="" type="checkbox"/>				
Shipping Documentation Present?	<input checked="" type="checkbox"/>				
Airbill <u>1 of 2</u> Trk # <u>8d64 5979 2426</u>	<input checked="" type="checkbox"/>				
Sample Container Intact?	<input checked="" type="checkbox"/>				
Sample Custody Seals Intact?		<input checked="" type="checkbox"/>			
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>				
COC Anomaly/Sample Acceptance Form completed?		<input checked="" type="checkbox"/>			
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			<input checked="" type="checkbox"/>		
Na ₂ S ₂ O ₃ Preservation Documented? <u>NA</u>	<input type="checkbox"/> COC	<input type="checkbox"/> Sample Container	<input type="checkbox"/> None		
Shipping Container	<u>Vista</u>	Client	Retain	Return	Dispose

Comments:

ID: CC-FD-02-20141013-W A,B,C ~~ConcSSB~~ 10/15/14
C,D, containers
CC-A-01-20141013-W A,B,C,D Containers

SAMPLE LOG-IN CHECKLIST

Vista Project #: 1400762TAT Std

Samples Arrival:	Date/Time <u>10/14/14 0845</u>	Initials: <u>BB</u>	Location: WR-2			
			Shelf/Rack: NA			
Logged In:	Date/Time <u>10/15/14 1224</u>	Initials: <u>BB</u>	Location: WR2			
			Shelf/Rack: C4/F4			
Delivered By:	FedEx	UPS	On Trac	DHL	Hand Delivered	Other
Preservation:	Ice	Blue Ice	Dry Ice	None		
Temp °C: 3.1 (uncorrected)	Time: 0851			Thermometer ID: IR-1		
Temp °C: 3.1 (corrected)						

	YES	NO	NA		
Adequate Sample Volume Received?	✓				
Holding Time Acceptable?	✓				
Shipping Container(s) Intact?	✓				
Shipping Custody Seals Intact?	✓				
Shipping Documentation Present?	✓				
Airbill 2 of 2 Trk # <u>7801 4745 5483</u>	✓				
Sample Container Intact?	✓				
Sample Custody Seals Intact?		✓			
Chain of Custody / Sample Documentation Present?	✓				
COC Anomaly/Sample Acceptance Form completed?		✓			
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓		
Na ₂ S ₂ O ₃ Preservation Documented? NA	COC	Sample Container	None		
Shipping Container	Vista	Client	Retain	Return	Dispose

Comments:

ID: CC-FD-02-2014-1013-W

A & B containers AQ

CC-A-01-2014-1013-S

250ml jar each Sed

CC-CB-22-2014 1013-S



CC-CB-04-2014 1013-S



EXTRACTION INFORMATION

Process Sheet

Workorder: **1400762**

Prep Expiration: 10/13/2015

Client: Leidos

Workorder Due:04-Nov-14 00:00

TAT: 21

Method: **1613 Full List**Matrix: **Aqueous**

Client Matrix: Aqueous

Also run: **Percent Solids**Prep Batch: **BYJ0106**Prep Data Entered: **10/22/14 BMS**

Date and Initials

Initial Sequence: **S450042**

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400762-01	<u>H</u> <input checked="" type="checkbox"/>	CC-A-01-20141013-W	14-Oct-14 08:45	WR-2 C-4	
1400762-02	<u>B</u> <input checked="" type="checkbox"/>	CC-FD-02-20141013-W	14-Oct-14 08:45	WR-2 C-4	<i>SMS 10/20/14</i>

Vista PM:Martha Maier

Vial Box ID: **SLT**Sample Reconciled By: **B. Smith** **10/20/14**

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B4J0105

Analyst: B. Smith

Test Code: %Moist/%Solids

Analyte:

Units: %

Dried at 110°C +/- 5°C

Date/Time IN: 10/20/14 0933 Date/Time OUT: 10/21/14 0923

HRMS-4

(A) Sample put in oven 10/20/14 10:16. BMS 10/20/14
(B) Crystals turned white in oven overnight. BMS 10/21/14

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B4J0105

Analyst: B. Smith

Test Code: %Moist/%Solids

Analyte:

Units: %

Dried at 110°C +/- 5°C

Date/Time IN: Date/Time OUT

10/20/14 0933 10/21/14 0923

HRMS-4

PREPARATION BENCH SHEET

B4J0106

Chemist: B. Smith

Prep Date/Time: 20-Oct-14 08:21

Matrix: Aqueous

Method: 1613 Full List

Method: 1613 2.3.7.8s Only

Method: 1613 TCDD Only

Prepared using: HRMS - SPE Extraction

C	VISTA Sample ID	Bottle + Sample (L)	Bottle Only (L)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
<input type="checkbox"/>	B4J0106-BLK1	MA	MA	(1.000)	Bms 10/20/14	Abms 10/20/14	MA	BMS 10/22/14	BMS 10/22/14	BMS 10/22/14	BMS 10/22/14
<input type="checkbox"/>	B4J0106-BS1	J	L	L							
<input type="checkbox"/>	1400762-01	1510.62	502.70	1.06792							
<input type="checkbox"/>	1400762-02	1504.48	1505.80	503.14	1.00266						
<input type="checkbox"/>	1400773-01	1502.89	498.21	1.00468							
<input type="checkbox"/>	1400776-01	1300.52	1300.52	49.34	0.88118						
<input type="checkbox"/>	1400776-02	1325.65	412.64	0.91301							

IS Name PCDD/F	NS Name PCDD/F	CRS Name PCDD/F	RS Name PCDD/F	Cycle Time Start Date/Time 10/20/14 17:10	APP: SEFUN SOX SDS SOLV: TDI Other SPE	Check Out: Chemist/Date: BMS 10/20/14
PCB	PCB	PCB	PCB	Stop Date/Time 10/21/14 09:11	Final Volume(s) 20uL C14	Check In: Chemist/Date: empty J
PAH	PAH	PAH	PAH			Balance ID: NLMS-4

Comments:

Process Sheet

Workorder: 1400762

Prep Expiration: 10/13/2015

Client: Leidos

Workorder Due: 04-Nov-14 00:00

TAT: 21

Method: **1613 Full List**
Matrix: **Solid**

Client Matrix: Sediment

Also run: **Percent Solids**Prep Batch: B4J0118Prep Data Entered: 10/23/14 08
Date and InitialsInitial Sequence: S450045

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400762-03	<input checked="" type="checkbox"/>	CC-A-01-20141013-S	14-Oct-14 08:45	WR-2 F-4	
1400762-04	<input checked="" type="checkbox"/>	CC-CB-04-20141013-S	14-Oct-14 08:45	WR-2 F-4	
1400762-05	<input checked="" type="checkbox"/>	CC-CB-22-20141013-S	14-Oct-14 08:45	WR-2 F-4	

Vista PM:Martha Maier

Vial Box ID: SLTSample Reconciled By: CH 10/17/14

Page 3 of 4

Solids estimate

Batch: B4J0097

Lab ID	Analysis	% Solids	Entered	Target weight	Weigh this much
1400762-03	Percent Solids	58.78		10.00	17.01
1400762-04	Percent Solids	57.64		10.00	17.35
1400762-05	Percent Solids	54.03		10.00	18.51
1400763-01 A	Percent Solids	59.32		10.00	16.86
1400763-02 A	Percent Solids	25.09		10.00	39.85
1400763-03 A	Percent Solids	27.12		10.00	36.87
763-1 B		56.04			17.84
763-2 B		25.38			39.40
763-3 B		29.39			34.03
763-1 C		63.60			15.72
763-2 C		26.73			37.41
763-3 C		27.13			36.86

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B4J0097

Analyst: C.Gallardo

Test Code: %Moist/%Solids

Analyte:

Units: %

Dried at 110°C +/- 5°C

Date/Time IN: Date/Time OUT

10/17/14 12:00 10/18/14 14:03

HRMS-2

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B4J0097

Analyst: Test Code: %Moist/%Solids
Analyte: Units: %
Dried at 110°C +/- 5°C

HRMS-2

Date/Time IN: Date/Time OUT
10/17/14 12:00 10/18/14 2:03

PREPARATION BENCH SHEET

Matrix: Solid

B4J0118

Chemist: E.Schneider

Method: 1613 Full List

Prep Date/Time: 22-Oct-14 08:44

Prepared using: HRMS - Soxhlet

C	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	B4J0127	C4J0128	C4J0129	C4J0129	RS CHEM/WIT DATE
<input type="checkbox"/> B4J0118-BLK1	① 10.00	(10.00)	88 8/22/14	10/22/14 08 8/23/14	10/23/14	88 8/23/14	88 10/23/14	88 10/23/14	88 10/23/14	08 10/23/14
<input type="checkbox"/> B4J0118-BS1		↓	↓							
<input type="checkbox"/> 1400762-03	② 17.01	17.04								
<input type="checkbox"/> 1400762-04	17.35	17.37								
<input type="checkbox"/> 1400762-05	18.51	18.54	↓	↓	↓	↓	↓	↓	↓	↓

- Ⓐ Second acid partition performed. 88 8/23/14
 Ⓑ 1:5 dilution made per request. 88 8/23/14

IS Name <u>V10</u>	NS Name <u>V14</u>	CRS Name <u>V10</u>	RS Name <u>V10</u>	Cycle Time	APP: SEFUN SOX SDS	Check Out: Chemist/Date: <u>E.Schneider 10/22/14</u>
PCDD/F <u>14H2704, 10µL</u>	PCDD/F <u>13L10A, 10µL</u>	PCDD/F <u>14H2705, 10µL</u>	PCDD/F <u>14H2706, 10µL</u>	Start Date/Time	SOLV: <u>TOL</u>	Check In: Chemist/Date: <u> </u>
PCB _____	PCB _____	PCB _____	PCB _____	Other	<u>N/A</u>	Balance ID: <u>HRMS-2</u>
PAH _____	PAH _____	PAH _____	PAH _____	Stop Date/Time	Final Volume(s) <u>20mL</u>	
				<u>10/22/14 15:28</u>	<u>014</u>	
Comments:						

Process Sheet

Workorder: 1400762

Prep Expiration: 10/13/2015

Client: Leidos

Workorder Due: 04-Nov-14 00:00

TAT: 21

Method: **1668C Full List**Matrix: **Aqueous**

Client Matrix: Aqueous

Also run: **Percent Solids**Prep Batch: B4J0110Prep Data Entered: 10/21/14 SR

Date and Initials

Initial Sequence: _____

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400762-01 "D"	<input checked="" type="checkbox"/>	CC-A-01-20141013-W	14-Oct-14 08:45	WR-2 C-4	
1400762-02 D'	<input checked="" type="checkbox"/>	CC-FD-02-20141013-W	14-Oct-14 08:45	WR-2 C-4	

Vista PM:Martha Maier

Vial Box ID: L0COSample Reconciled By: M.T 10/20/14

Page 2 of 4

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B4J0109

Analyst: MJT

Test Code: %Moist/%Solids

Analyte:

Units: %

Dried at 110°C +/- 5°C

INST HRMS-4

Date/Time IN: Date/Time OUT
10/20/14 11:00 10/21/14 11:22

B	C	D	E	F	G	H	K	M	N	O	P
Pan #	SampID	Source ID	SampType	Initial and Date:	MT 10/20/14	SR 10/21/14					MT 10/20/14
				Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid A Added
	1400762-01RE1		Sample	1.23	9.69	1.23			6	3	10 0
	1400762-02RE1		Sample	1.22	12.17	1.22			6	3	10 0
	1400768-01		Sample	1.23	11.03	1.25			7	3	20 0
	1400774-01 1400766-01	10/21/14	Sample	1.25	8.35	1.36			7	3	45 0
	1400776-01RE1		Sample	1.25	10.19	1.26			7	3	10 0
	1400727-LOD		QC	NA	NA	NA	NA	NA	5	2	10 0
	1400727-LOQ		QC						5	2	0 0
	B4J0110-MB		QC						5	2	0 0
	T -OPR		QC						5	2	0 0
	B4J0111-MB		QC						5	2	0 0
	T -OPR		QC						5	2	0 0

(A) Acid Added in Drops. M.T 10/21/14

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B4J0109

Analyst: MJT

Test Code: %Moist/%Solids

Analyte:

Units: %

Dried at 110°C +/- 5°C

Date/Time IN: Date/Time OUT

10/20/14 1100 10/21/14 1122

HMRS-4

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 1668A Full List

Method: 1668C Full List

B4J0110

Chemist: M.T

Prep Date/Time: 20-Oct-14 09:32

Prepared using: HRMS - Separatory Funnel

C	VISTA Sample ID	Bottle + Sample	Bottle Only	Sample Amt. (L)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
<input type="checkbox"/>	B4J0110-BLK1	NA	NA	(1.000)	M.T/MS 10/20/14	SR/BL 10/21/14	N/A	SR 10/21/14	N/A	N/A	SR/OF 10/21/14
<input type="checkbox"/>	B4J0110-BS1	T	T				T	T	T	T	T
<input type="checkbox"/>	B4J0110-BS2	A	T								
<input type="checkbox"/>	B4J0110-BS3	B	T								
<input type="checkbox"/>	1400727-01	C	T								
<input type="checkbox"/>	1400762-01	1516.63	503.53	1.0131							
<input type="checkbox"/>	1400762-02	1534.82	503.49	1.03133							
<input type="checkbox"/>	1400774-01	796.64	286.84	0.5098							

M.T
10/20/14

IS Name PCDD/F PCB PAH	NS Name PCB PCB PAH	CRS Name A 13I2503, 10ml B 10601, 10ml C 13I0601, 25ml	RS Name PCDD/F PCB PAH	Cycle Time Start Date/Time Stop Date/Time Final Volume(s)	APP SEFUN SOX SDS SOLV: DOM NA NA 20ml C9	Check Out: Chemist/Date: M.T 10/20/14
						Check In: Chemist/Date: Empty
						Balance ID: HRMS-4

Comments:

Process Sheet

Workorder: 1400762

Prep Expiration: 10/13/2015

Client: Leidos

Workorder Due: 04-Nov-14 00:00

TAT: 21

Method: **1668C Full List**Matrix: **Solid**

Client Matrix: Sediment

Also run: **Percent Solids**Prep Batch: B4J0119Prep Data Entered: 10/24/14 88

Date and Initials

Initial Sequence: S4-J0044E

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400762-03	<input checked="" type="checkbox"/>	CC-A-01-20141013-S	14-Oct-14 08:45	WR-2 F-4	
1400762-04	<input checked="" type="checkbox"/>	CC-CB-04-20141013-S	14-Oct-14 08:45	WR-2 F-4	
1400762-05	<input checked="" type="checkbox"/>	CC-CB-22-20141013-S	14-Oct-14 08:45	WR-2 F-4	

Vista PM:Martha Maier

Vial Box ID: MUSCLE UPSample Reconciled By: cly 10/17/14

Page 4 of 4

Solids estimate

Batch: B4J0097

Lab ID	Analysis	% Solids	Entered	Target weight	Weigh this much
1400762-03	Percent Solids	58.78		10.00	17.01
1400762-04	Percent Solids	57.64		10.00	17.35
1400762-05	Percent Solids	54.03		10.00	18.51
1400763-01 A	Percent Solids	59.32		10.00	16.86
1400763-02 A	Percent Solids	25.09		10.00	39.85
1400763-03 A	Percent Solids	27.12		10.00	36.87
763-1 B		56.04			17.84
763-2 B		25.33			39.40
763-3 B		29.39			34.03
763-1 C		63.60			15.72
763-2 C		26.73			37.41
763-3 C		27.13			36.86

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B4J0097

Analyst: C.Gallardo

Test Code: %Moist/%Solids

Analyte:

Units: %

Dried at 110°C +/- 5°C

HRMS-2

Date/Time IN: Date/Time OUT
10/17/14 12:00 10/18/14 14:03

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B4J0097

Analyst: **Test Code:** %Moist/%Solids
Analyte: **Units:** %
Dried at 110°C +/- 5°C

HRMS-2

Date/Time IN: 10/17/14 12:00 Date/Time OUT: 10/18/14 2:03

PREPARATION BENCH SHEET

Matrix: Solid

B4J0119

Chemist: Esonneid

Method: 1668C Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 22-Oct-14 09:03

PS

C	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	RS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
				C4J0130	C4J0131	NA	NA	NA	NA	RS CHEM/WIT DATE
<input type="checkbox"/> B4J0119-BLK1	(A)	10.00	(10.00)	ES 10/22/14 BLK	ES 10/23/14	BLK 10/23/14	ES 10/24/14	NA	NA	SD BLK 10/24/14
<input type="checkbox"/> B4J0119-BS1		↓	↓	—	—	—	—	—	—	—
<input type="checkbox"/> 1400762-03	(F)	17.01	17.03	—	—	—	—	—	—	—
<input type="checkbox"/> 1400762-04	(D)	17.35	17.35	—	—	—	—	—	—	—
<input type="checkbox"/> 1400762-05	(B)	18.57	18.49	↓	↓	↓	↓	✓	↓	✓

- (A) Put through AP 2x BLK 10/23/14
- (B) Crystals present in round bottom before F.V. ES 10/24/14
- (C) Crystals present at F.V. ES 10/24/14
- (D) Cloudy at F.V. ES 10/24/14
- (E) 1:20 dilution made per request. ES 10/24/14
- (F) ~150 µL F.V. ES 10/24/14

PS

IS Name PCDD/F PCB	NS Name PCDD/F PCB	RS Name PCDD/F PCB	Cycle Time Start Date/Time Stop Date/Time	APP: SEFUN SOX SDS SOLV: TOL Other N/A	Check Out: Chemist/Date: ES 10/22/14 Check In: Chemist/Date: ↓ Balance ID: HRMS-2
V3 14D2901, 10µL	V2 14D1501, 10µL	V3 14D2903, 10µL	10/22/14 15:25 10/23/14 08:00	100µL C9	
PAH	PAH	PAH	Final Volume(s)		

Comments:

SAMPLE DATA

EPA Method 1613

Client ID: Method Blank
 Lab ID: B4J0106-BLK1

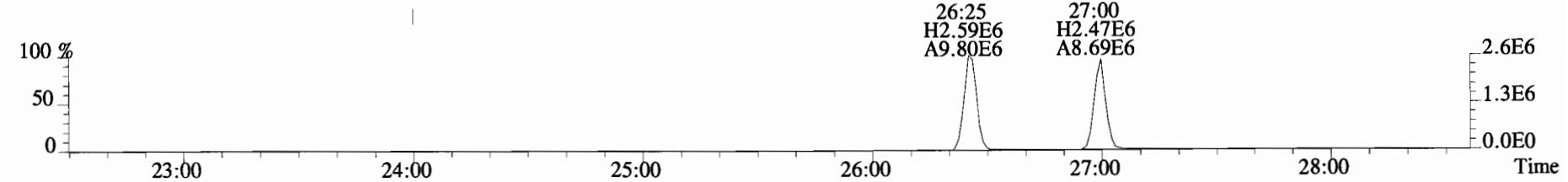
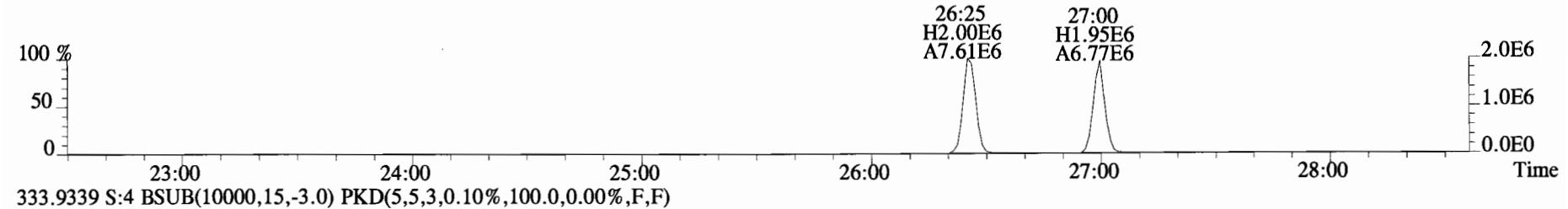
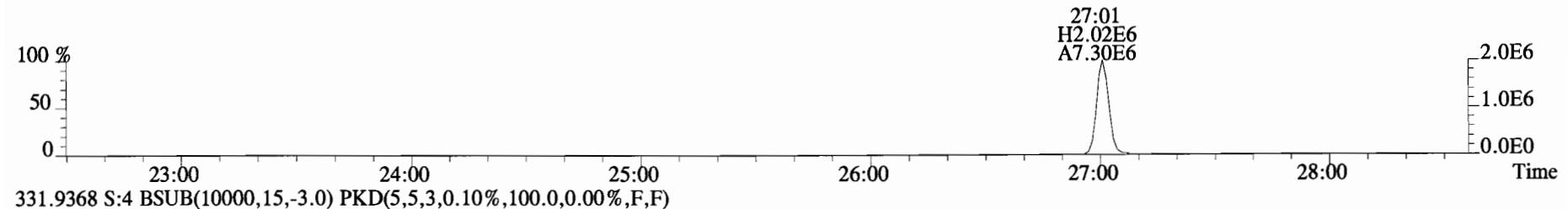
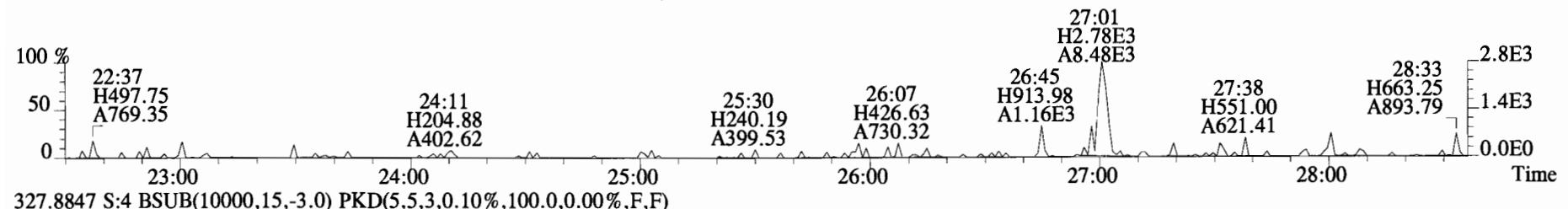
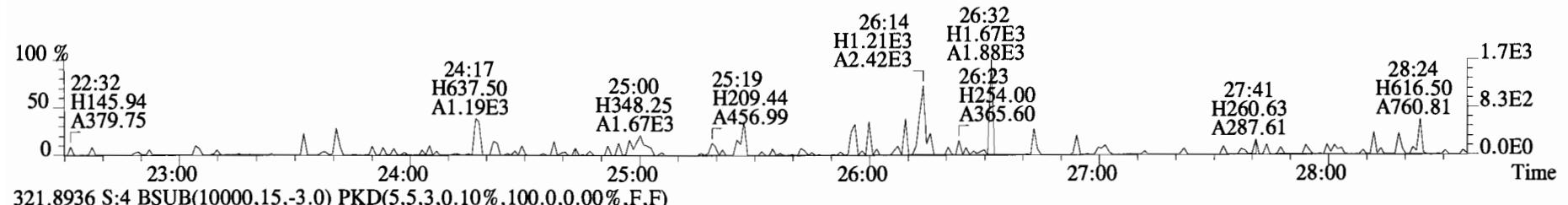
Filename: 141022D1 S:4 Acq:22-OCT-14 17:56:26
 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000

ConCal: ST141022D1-1
 EndCAL: NA

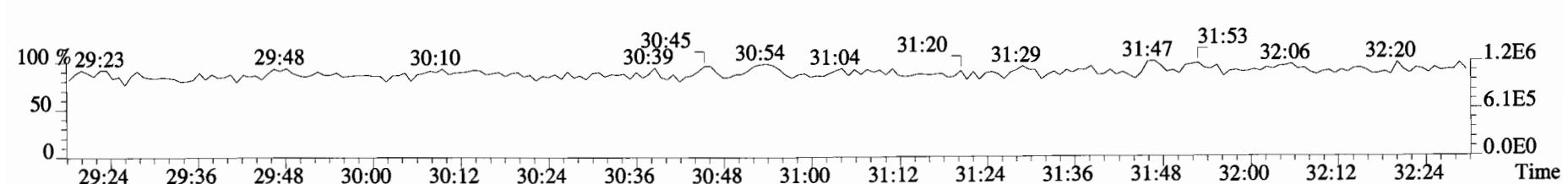
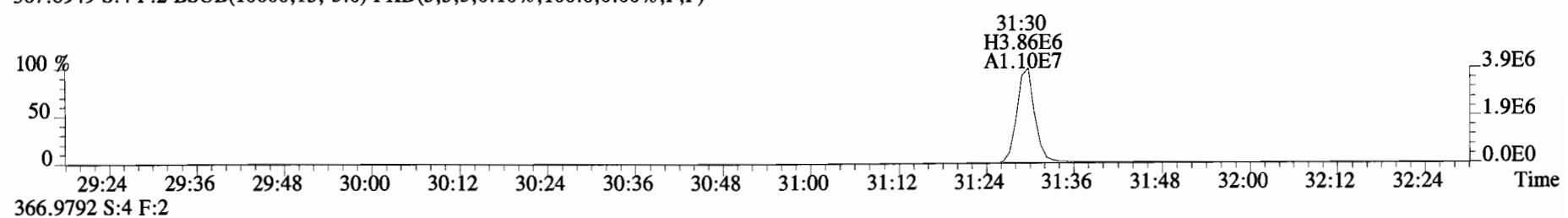
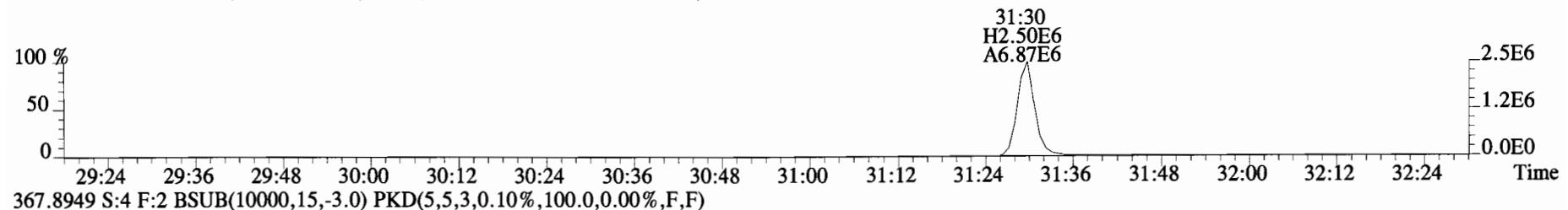
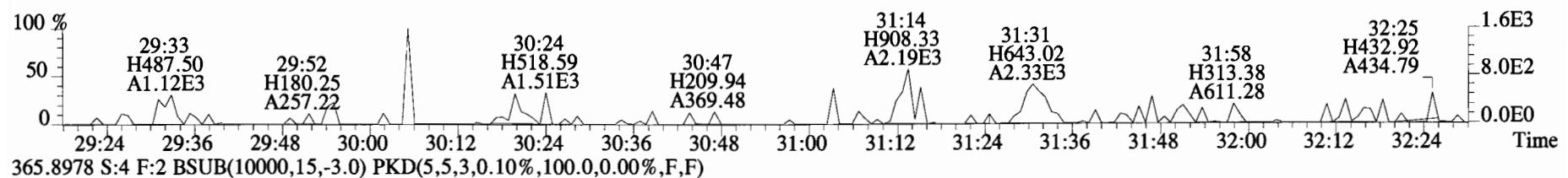
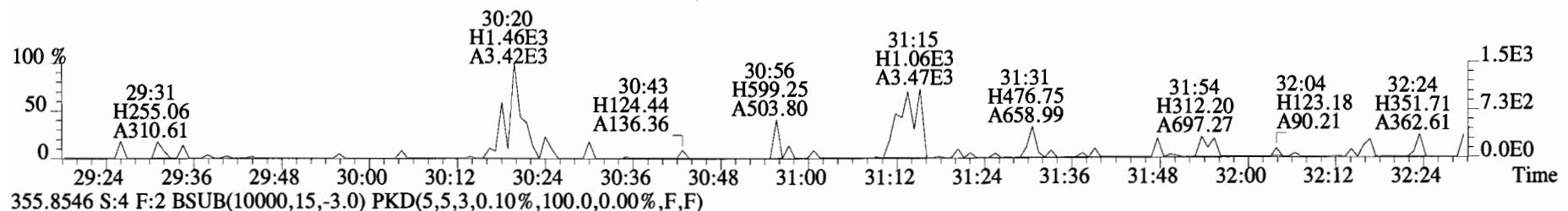
Page 3 of 3

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	*	* n	1.18	Not F _q	*	*		570	2.5	0.967	Total Tetra-Dioxins	*	*		570	0.967
	1,2,3,7,8-PeCDD	*	* n	0.92	Not F _q	*	*		643	2.5	0.894	Total Penta-Dioxins	*	*		1210	1.68
	1,2,3,4,7,8-HxCDD	*	* n	1.09	Not F _q	*	*		353	2.5	1.02	Total Hexa-Dioxins	*	*		634	1.95
	1,2,3,6,7,8-HxCDD	*	* n	1.07	Not F _q	*	*		353	2.5	1.10	Total Hepta-Dioxins	*	*		625	1.94
	1,2,3,7,8,9-HxCDD	*	* n	0.93	Not F _q	*	*		353	2.5	1.13	Total Tetra-Furans	*	*		356	0.513
	1,2,3,4,6,7,8-HpCDD	*	* n	1.12	Not F _q	*	*		625	2.5	1.94	Total Penta-Furans	0.0000	0.0000		881	1.40
	OCDD	*	* n	0.95	Not F _q	*	*		1000	1.0	1.62	Total Hexa-Furans	*	*		1730	1.99
	Total Hepta-Furans	*	*									Total Hepta-Furans	*	*		538	0.885
	2,3,7,8-TCDF	*	* n	1.08	Not F _q	*	*		356	2.5	0.513						
	1,2,3,7,8-PeCDF	*	* n	1.09	Not F _q	*	*		881	2.5	1.35						
	2,3,4,7,8-PeCDF	*	* n	1.04	Not F _q	*	*		453	2.5	0.743						
	1,2,3,4,7,8-HxCDF	*	* n	1.39	Not F _q	*	*		1730	2.5	1.52						
	1,2,3,6,7,8-HxCDF	*	* n	1.26	Not F _q	*	*		821	2.5	0.819						
	2,3,4,6,7,8-HxCDF	*	* n	1.30	Not F _q	*	*		821	2.5	0.979						
	1,2,3,7,8,9-HxCDF	*	* n	1.19	Not F _q	*	*		821	2.5	1.39						
	1,2,3,4,6,7,8-HpCDF	*	* n	1.62	Not F _q	*	*		373	2.5	0.655						
	1,2,3,4,7,8,9-HpCDF	*	* n	1.53	Not F _q	*	*		373	2.5	0.572						
	OCDF	*	* n	1.10	Not F _q	*	*		529	2.5	1.74						
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.55e+07	0.78	y	1.07	26:60	1.022		1654.9			82.7					
IS	13C-1,2,3,7,8-PeCDD	1.78e+07	0.63	y	1.24	31:30	1.192		1651.7			82.6					
IS	13C-1,2,3,4,7,8-HxCDD	1.27e+07	1.31	y	0.72	34:50	1.014		1691.6			84.6					
IS	13C-1,2,3,6,7,8-HxCDD	1.30e+07	1.23	y	0.74	34:56	1.017		1696.2			84.8					
IS	13C-1,2,3,7,8,9-HxCDD	1.48e+07	1.25	y	0.86	35:14	1.026		1666.5			83.3					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.13e+07	1.05	y	0.64	38:42	1.126		1691.2			84.6					
IS	13C-OCDD	2.18e+07	0.89	y	0.78	42:01	1.223		2678.3			67.0					
IS	13C-2,3,7,8-TCDF	2.15e+07	0.76	y	0.92	26:13	0.992		1526.2			76.3					
IS	13C-1,2,3,7,8-PeCDF	2.35e+07	1.59	y	0.95	30:20	1.148		1624.1			81.2					
IS	13C-2,3,4,7,8-PeCDF	2.37e+07	1.62	y	0.97	31:13	1.182		1601.2			80.1					
IS	13C-1,2,3,4,7,8-HxCDF	1.87e+07	0.52	y	0.99	33:55	0.988		1814.0			90.7					
IS	13C-1,2,3,6,7,8-HxCDF	1.90e+07	0.53	y	1.10	34:03	0.992		1669.8			83.5					
IS	13C-2,3,4,6,7,8-HxCDF	1.78e+07	0.52	y	1.03	34:40	1.009		1665.5			83.3					
IS	13C-1,2,3,7,8,9-HxCDF	1.51e+07	0.51	y	0.86	35:38	1.037		1696.8			84.8					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.13e+07	0.44	y	0.71	37:29	1.091		1528.6			76.4					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.19e+07	0.43	y	0.71	39:15	1.143		1621.1			81.1					
IS	13C-OCDF	2.52e+07	0.89	y	0.87	42:15	1.230		2774.8			69.4					
C/Up	37Cl-2,3,7,8-TCDD	7.30e+06			1.21	27:01	1.022		691.52			86.4	Integrations by _____		Reviewed by _____		
RS/RT	13C-1,2,3,4-TCDD	1.74e+07	0.78	y	1.00	26:25	*		2000.0			Analyst: <u>M</u>			Analyst: <u>MF</u>		
RS	13C-1,2,3,4-TCDF	3.04e+07	0.78	y	1.00	25:00	*		2000.0								
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.08e+07	0.51	y	1.00	34:21	*		2000.0			Date: <u>10/23/14</u>			Date: <u>10/24/14</u>		

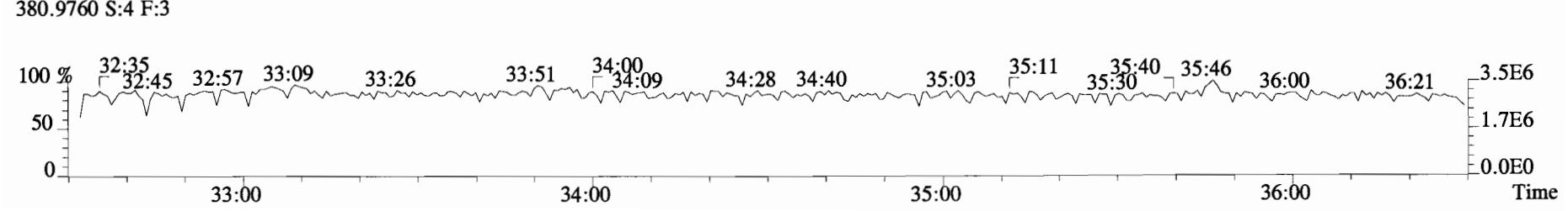
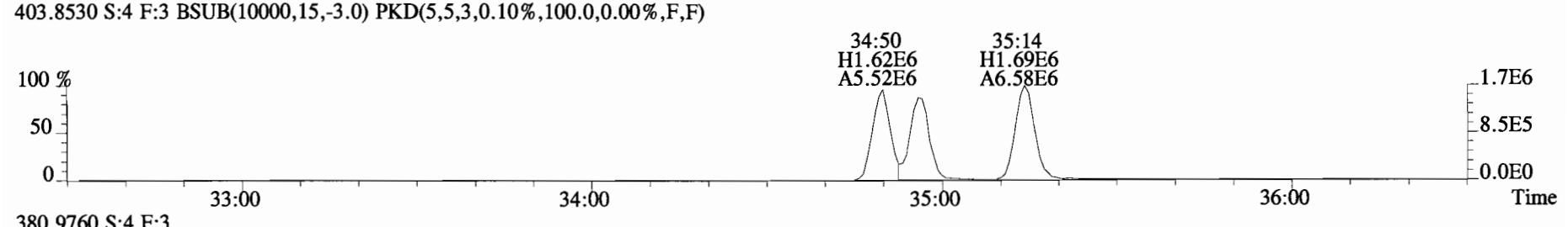
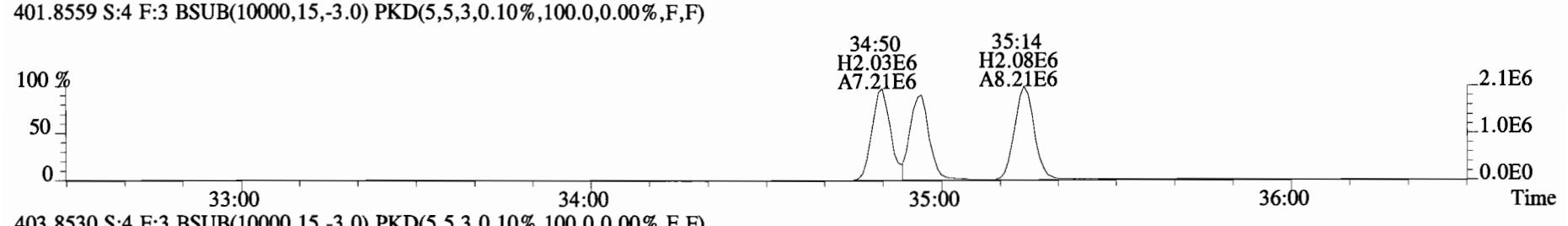
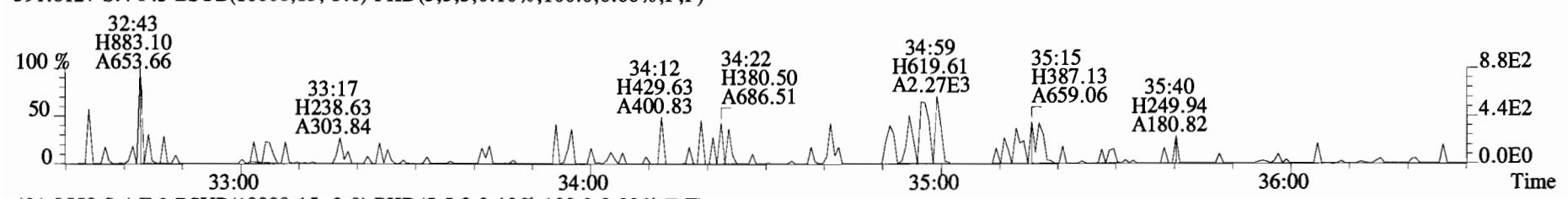
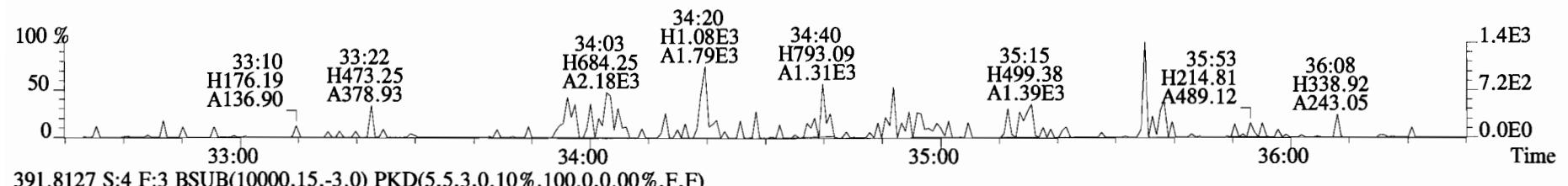
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 319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



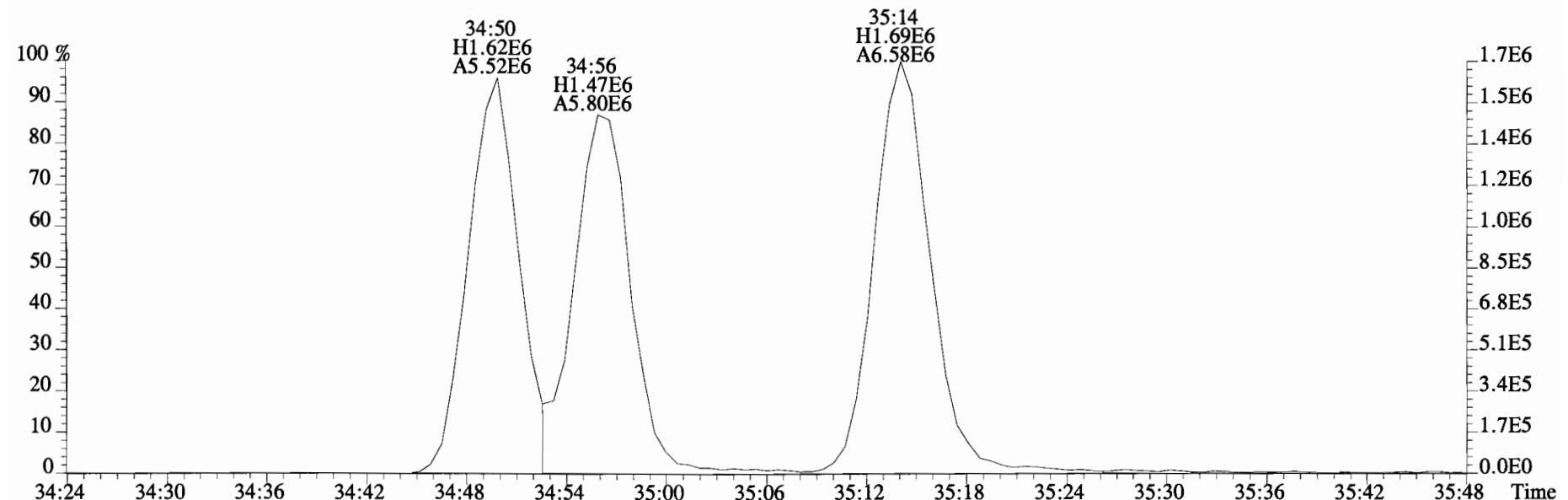
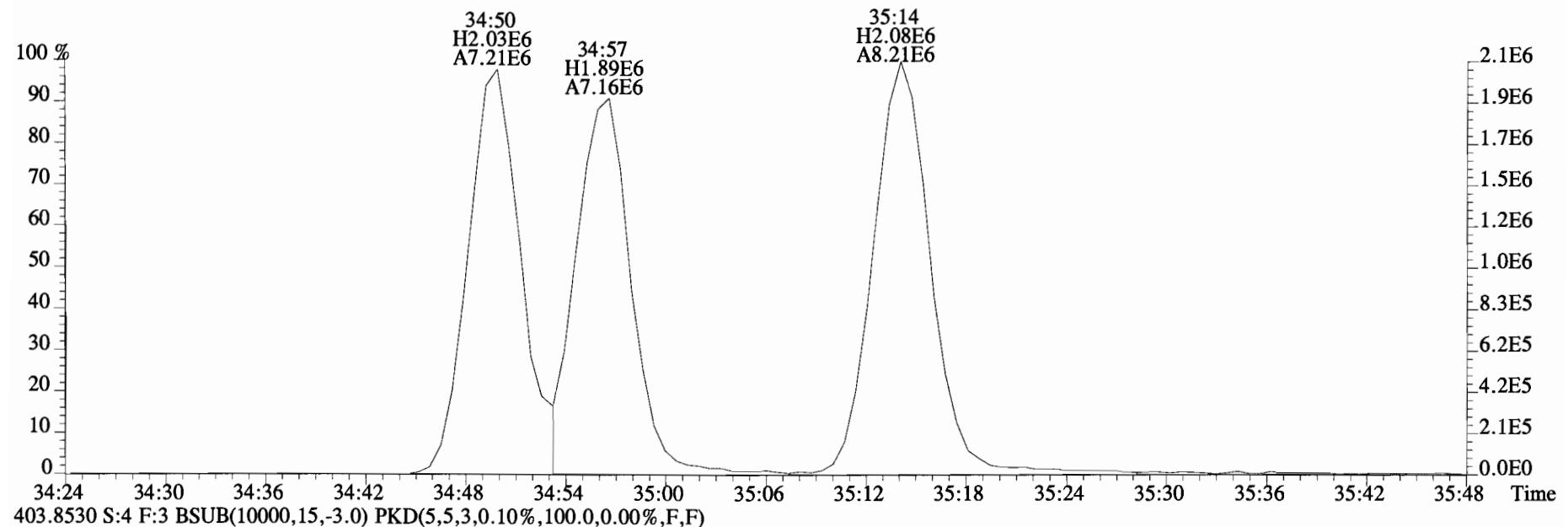
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 353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



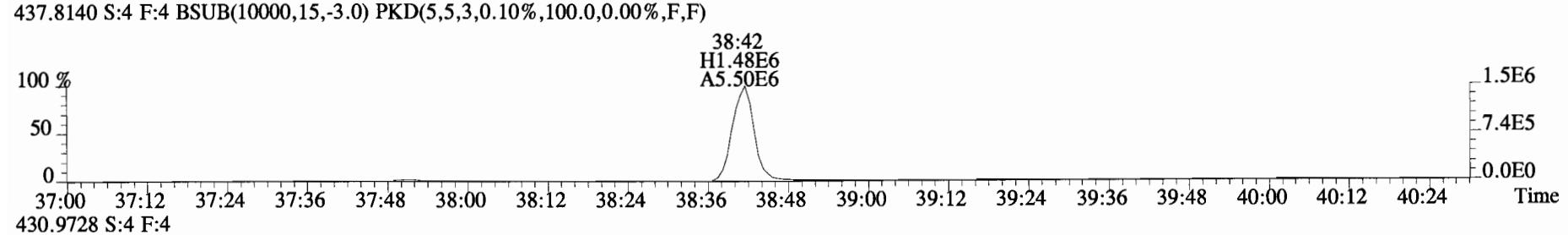
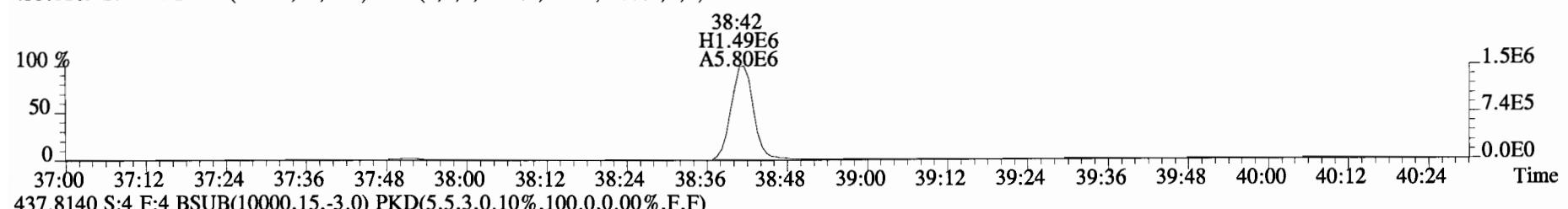
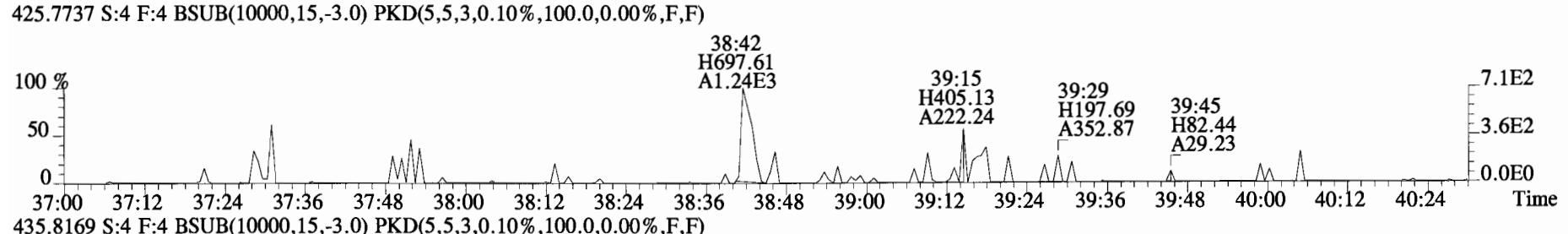
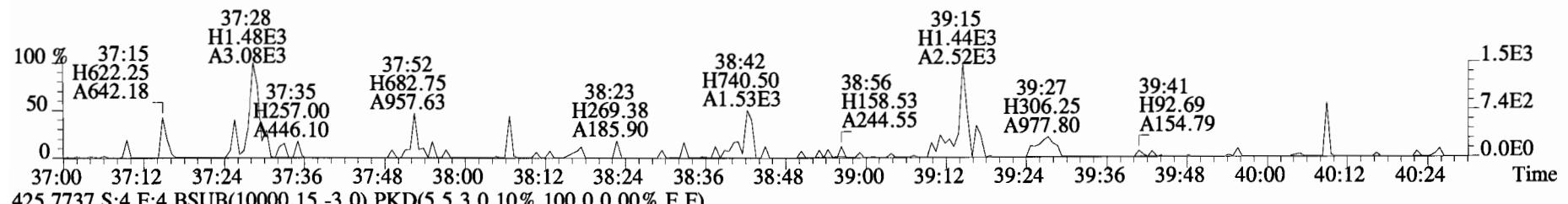
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 389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



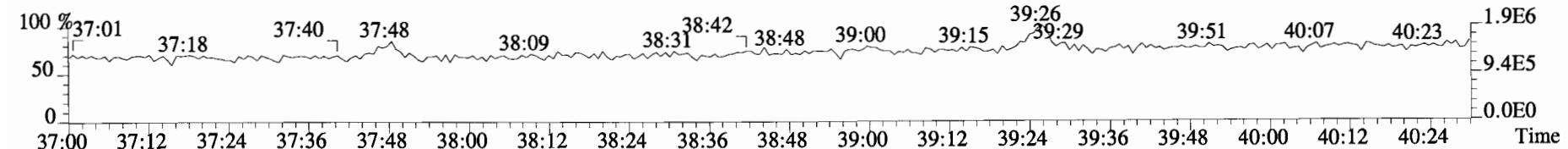
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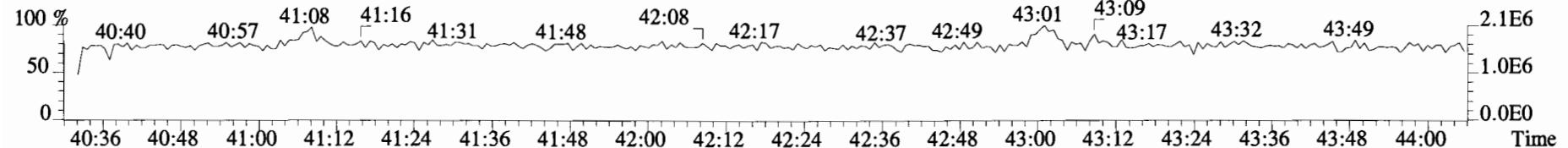
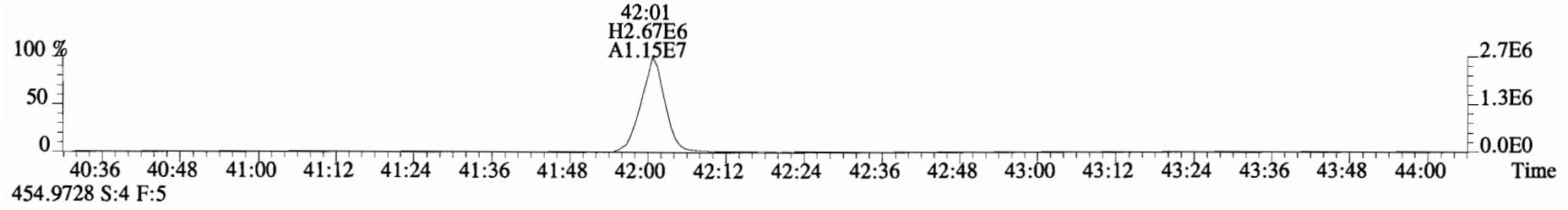
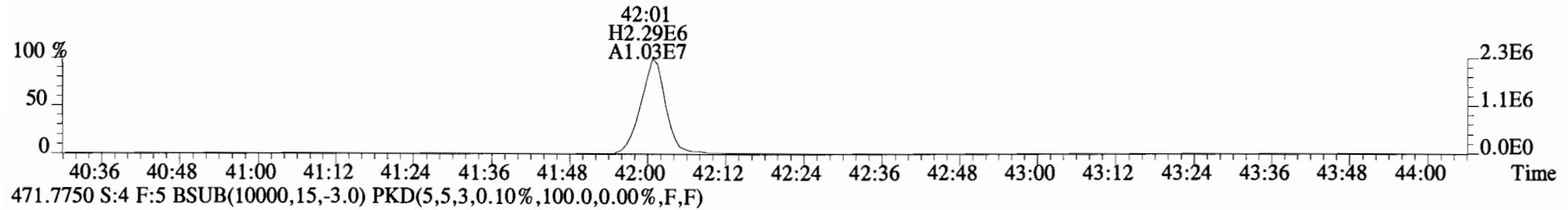
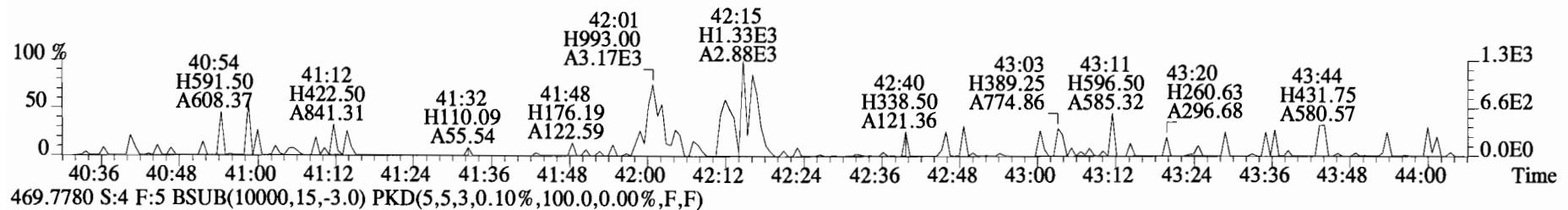
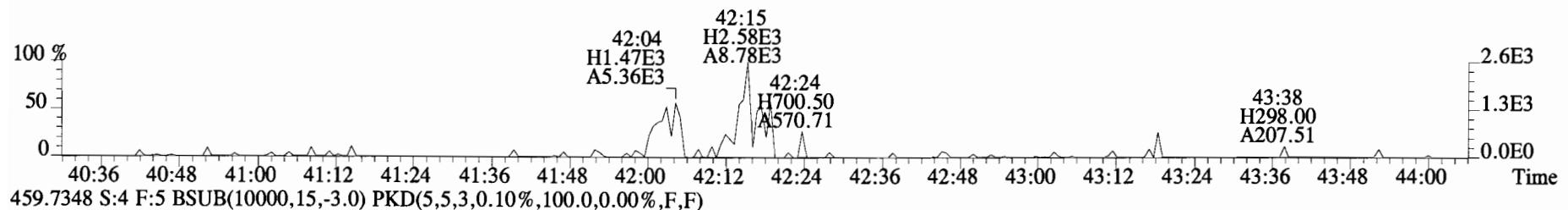
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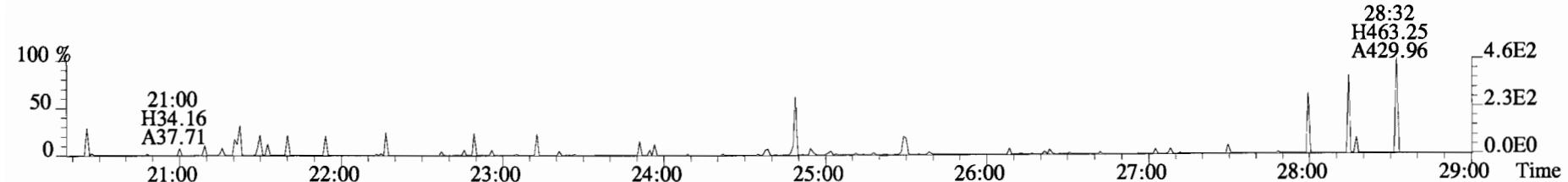
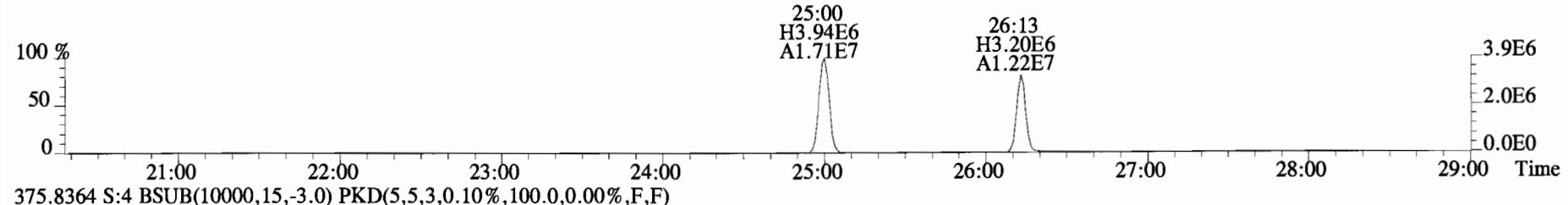
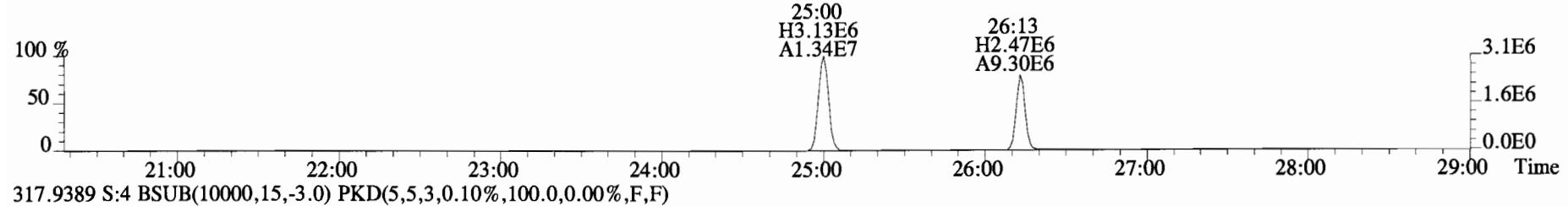
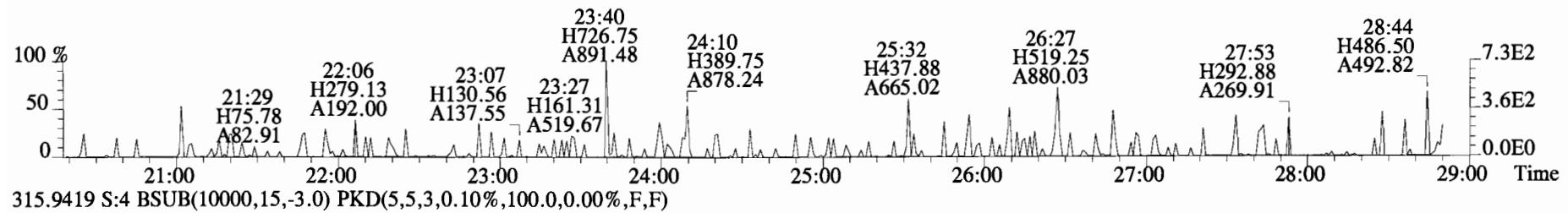
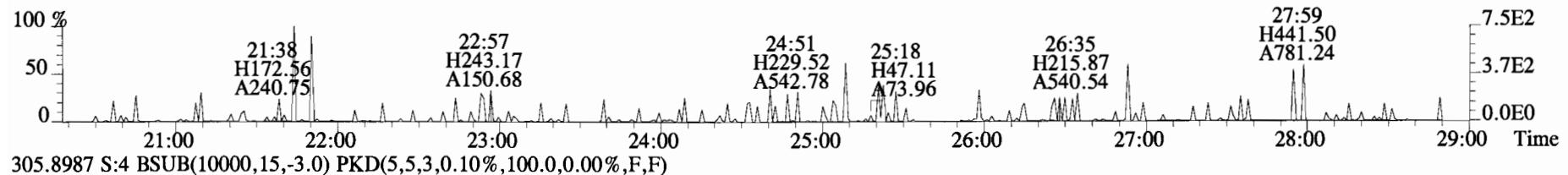
430.9728 S:4 F:4



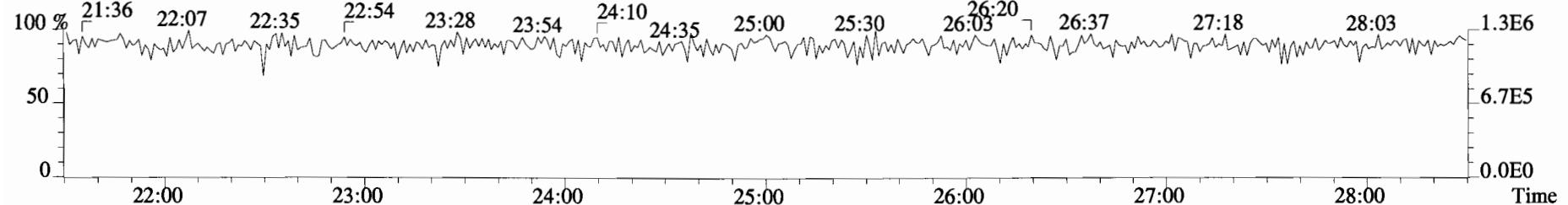
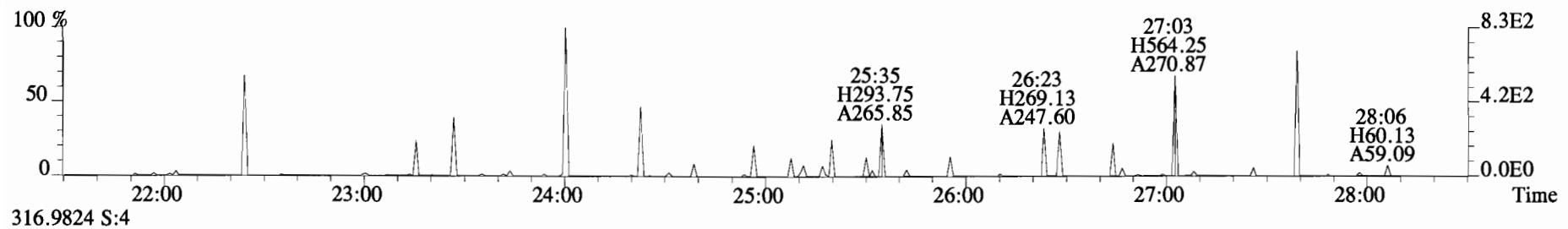
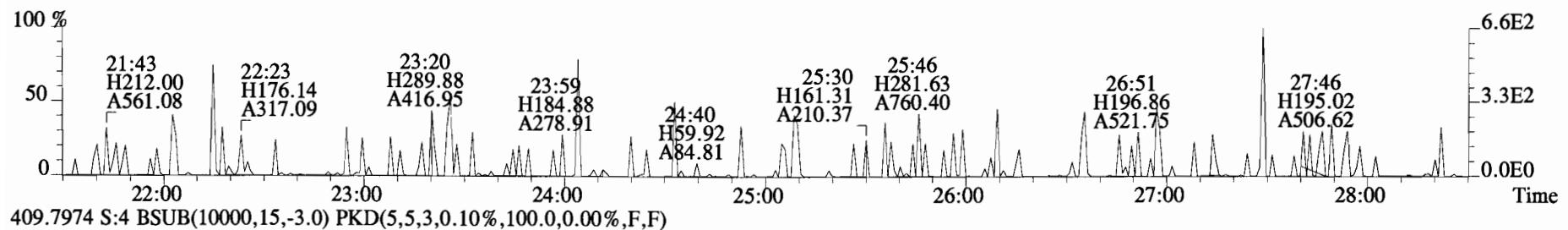
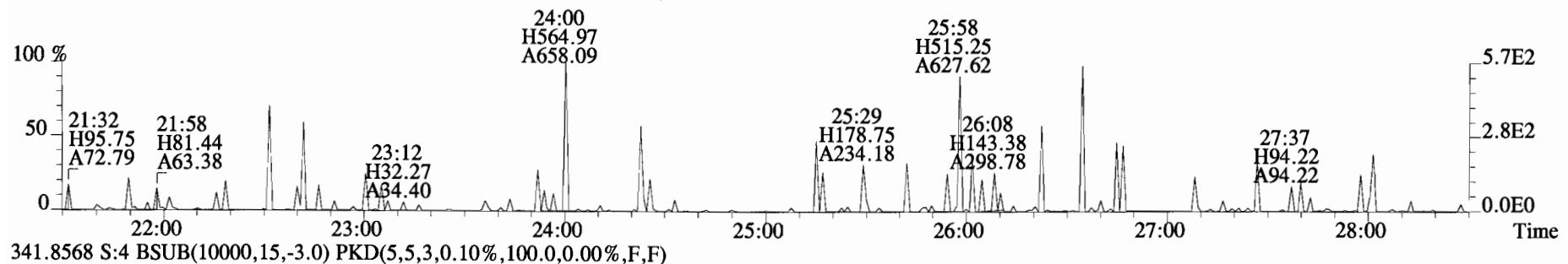
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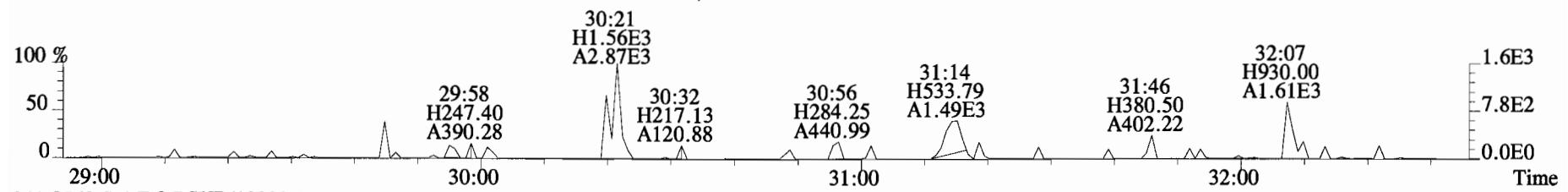
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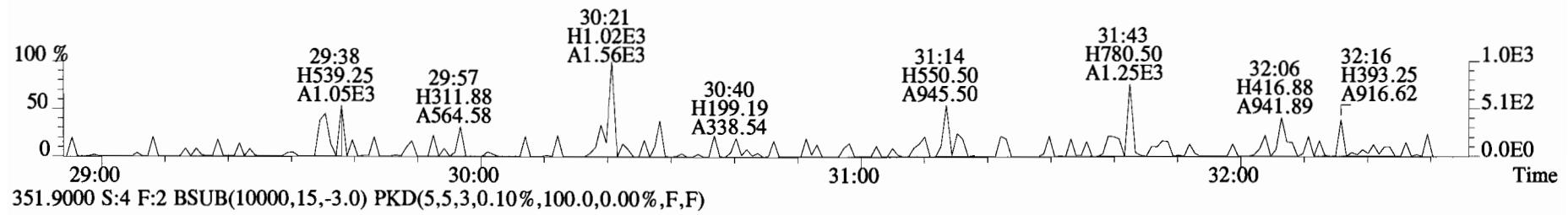
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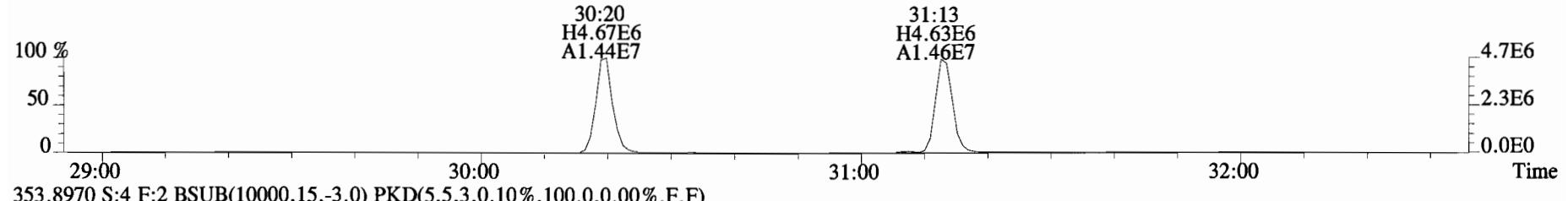
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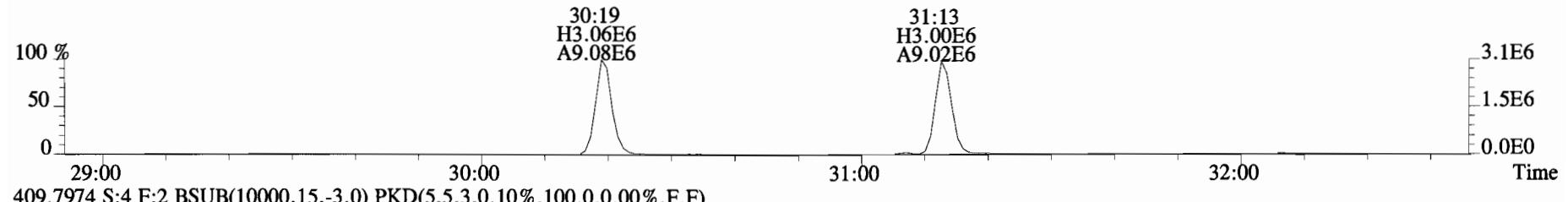
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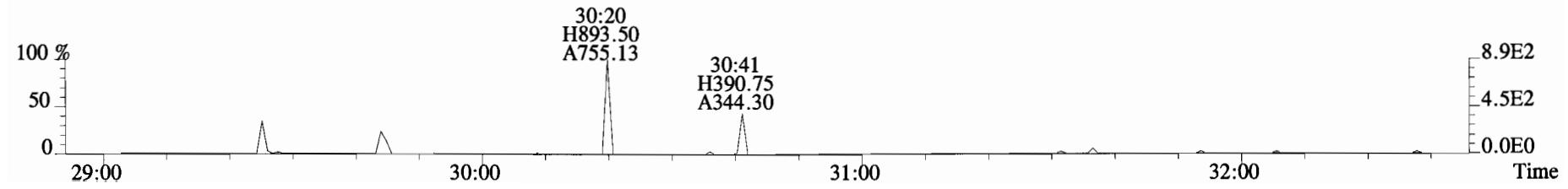
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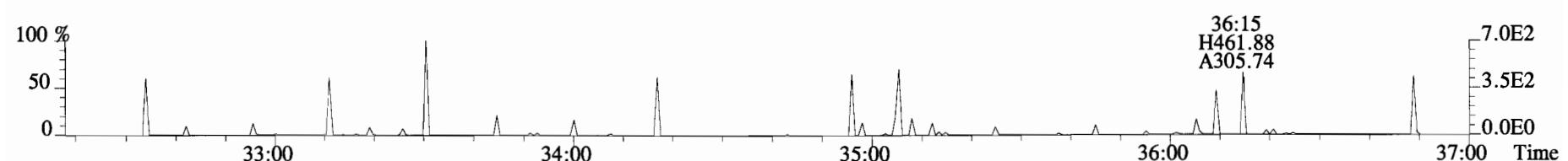
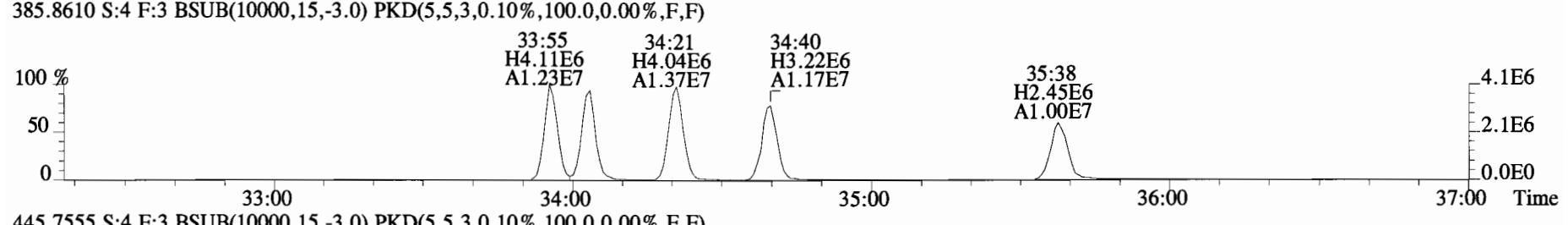
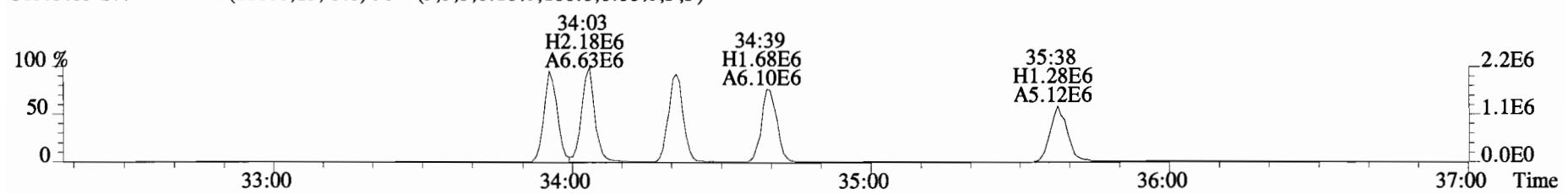
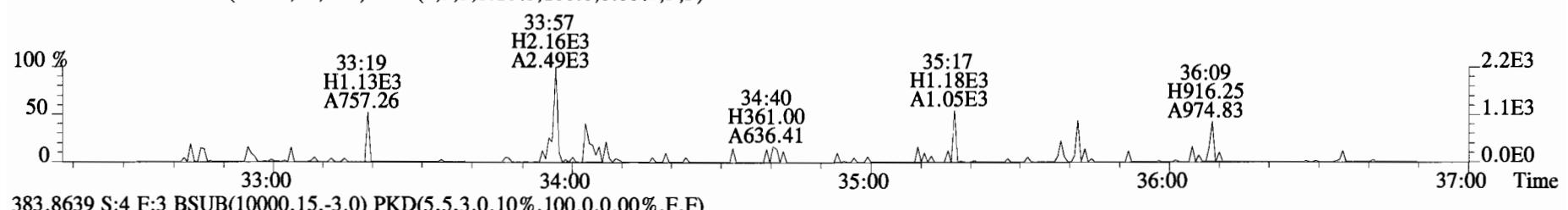
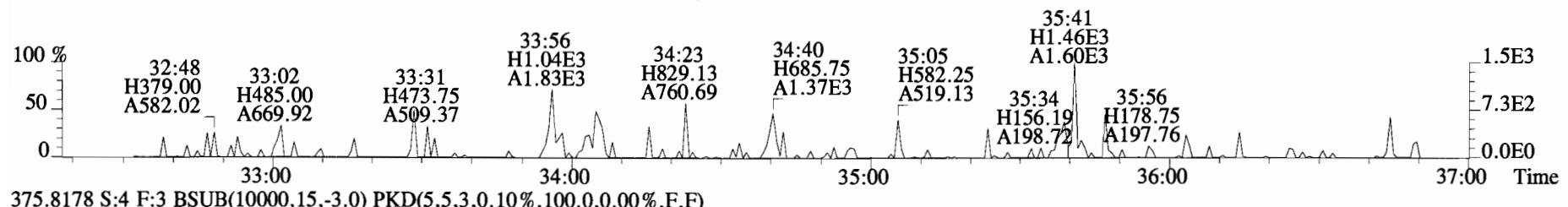
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



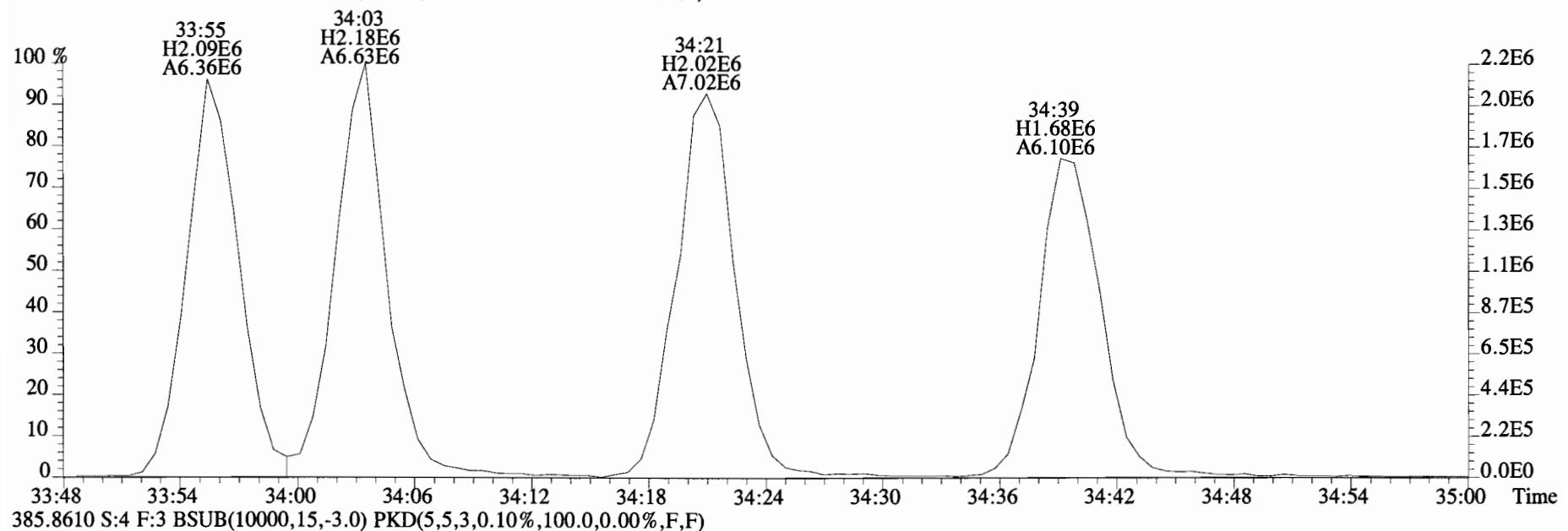
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



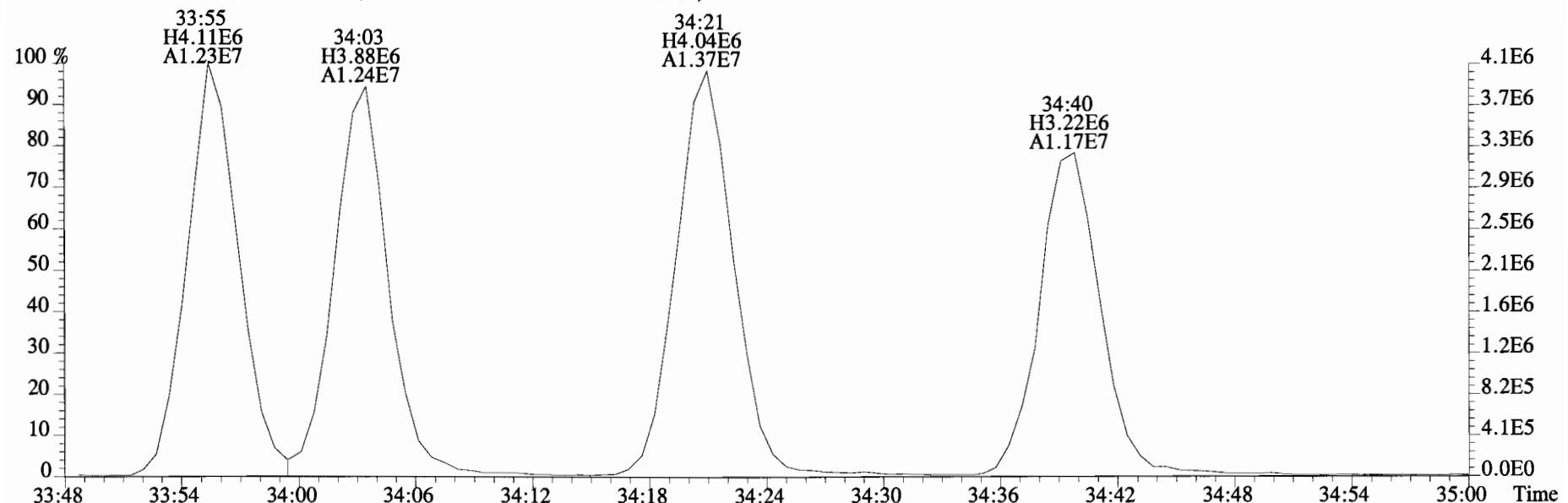
File:141022D1 #1-385 Acq:22-OCT-2014 17:56:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BLK1 Method Blank 1 Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



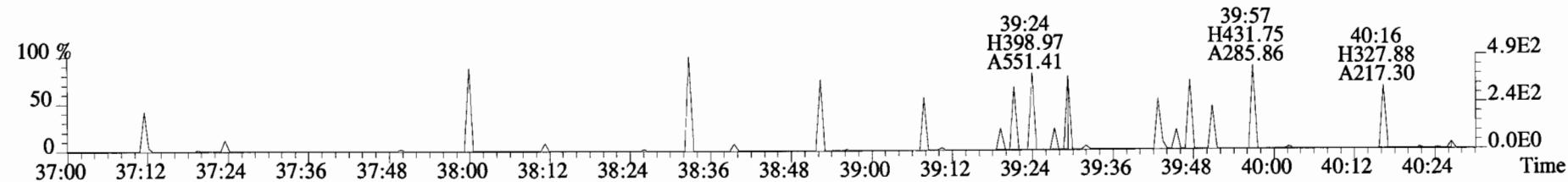
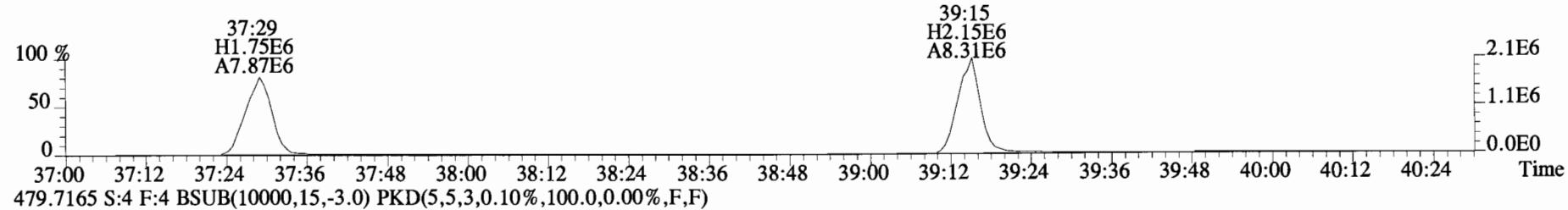
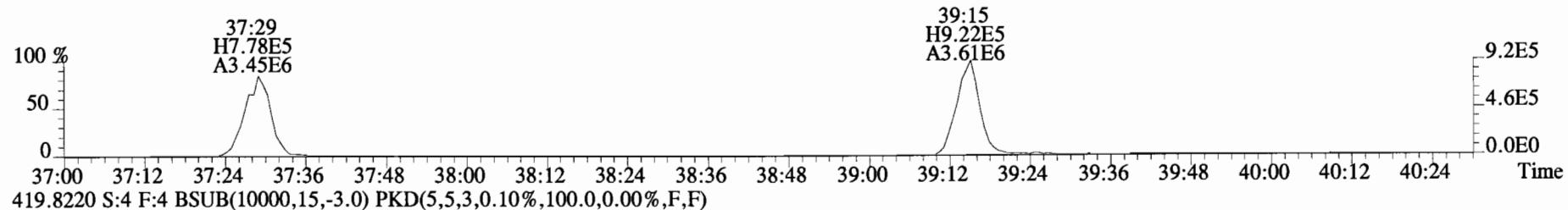
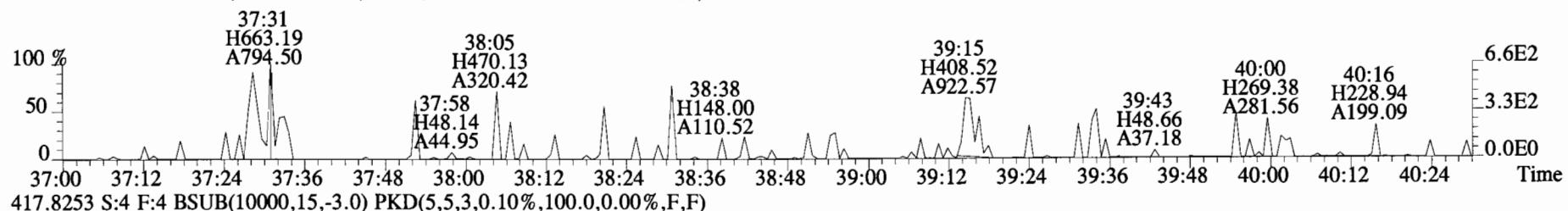
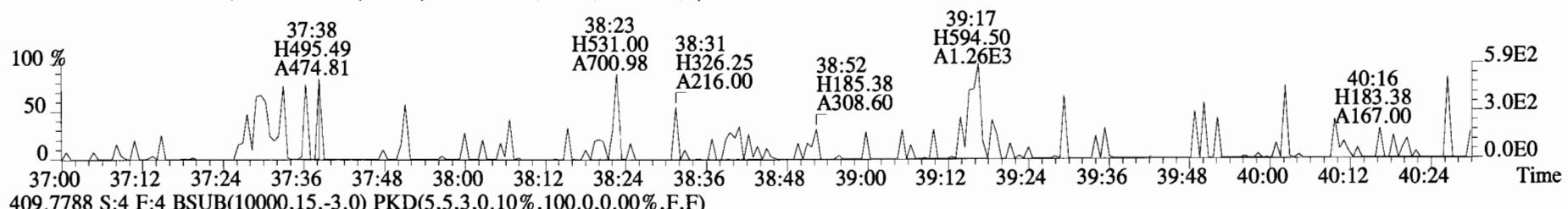
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Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BLK1 Method Blank 1 Exp:OCDD_DB5
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



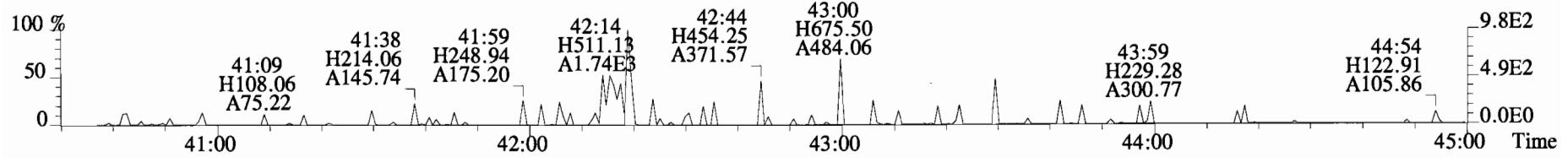
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



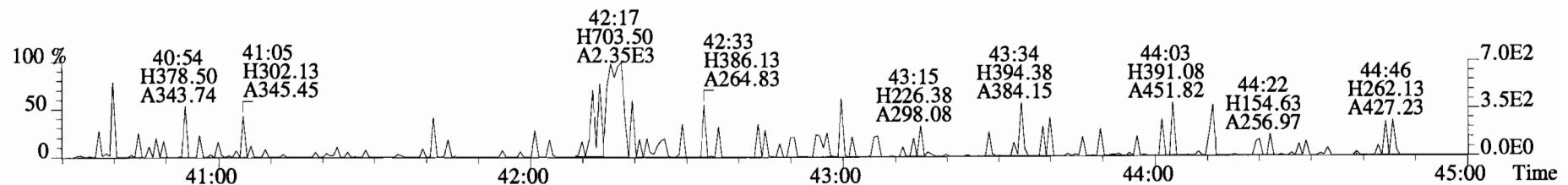
File:141022D1 #1-326 Acq:22-OCT-2014 17:56:26 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BLK1 Method Blank 1 Exp:OCDD_DB5
 407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



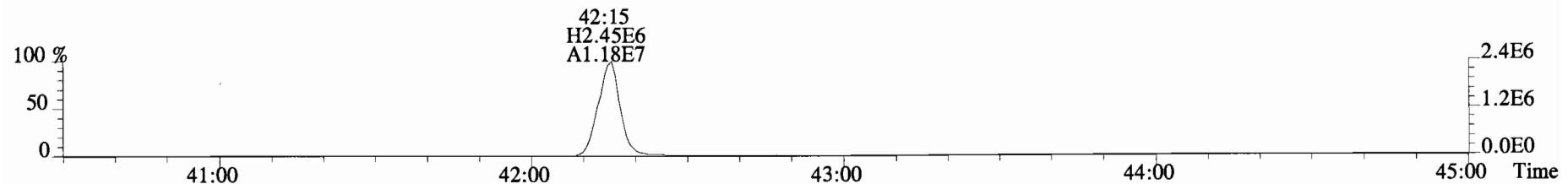
File:141022D1 #1-388 Acq:22-OCT-2014 17:56:26 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BLK1 Method Blank 1 Exp:OCDD_DB5
 441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



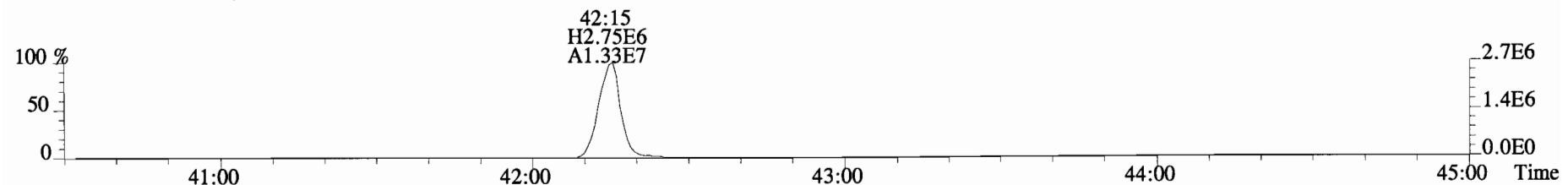
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



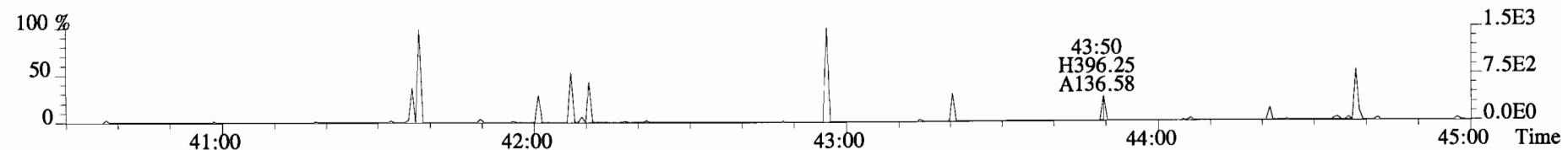
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



FORM 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory Extraction Batch: B4J0106-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): AQUEOUS OPR Data Filename: 141022D1-2

Ext. Date: 10-20-14 Shift: Day Analysis Date: 22-OCT-14 Time: 16:19:38

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

NATIVE ANALYTES	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)	
2,3,7,8-TCDD	10	8.86	6.7 - 15.8 7.3 - 14.6 (2)	(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94
1,2,3,7,8-PeCDD	50	48.1	35.0 - 71.0	(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94
1,2,3,4,7,8-HxCDD	50	45.9	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	50	47.5	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	50	48.1	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	50	47.9	35.0 - 70.0	
OCDD	100	94.1	78.0 - 144.0	
2,3,7,8-TCDF	10	8.81	7.5 - 15.8 8.0 - 14.7 (2)	
1,2,3,7,8-PeCDF	50	46.5	40.0 - 67.0	
2,3,4,7,8-PeCDF	50	47.1	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	50	46.5	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	50	46.6	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	50	46.3	35.0 - 78.0	
1,2,3,7,8,9-HxCDF	50	46.9	39.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	50	46.3	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	50	46.7	39.0 - 69.0	
OCDF	100	95.5	63.0 - 170.0	Analyst: <u>M</u> Date: <u>10/23/14</u>

FORM 8B
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory Extraction Batch: B4J0106-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): AQUEOUS OPR Data Filename: 141022D1-2

Ext. Date: 10-20-14 Shift: Day Analysis Date: 22-OCT-14 Time: 16:19:38

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

LABELED COMPOUNDS	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
13C-2,3,7,8-TCDD	100	72.2	20.0 - 175.0 25.0 - 141.0 (2)
13C-1,2,3,7,8-PeCDD	100	71.6	21.0 - 227.0
13C-1,2,3,4,7,8-HxCDD	100	75.9	21.0 - 193.0
13C-1,2,3,6,7,8-HxCDD	100	78.0	25.0 - 163.0
13C-1,2,3,7,8,9-HxCDD	100	74.4	21.0 - 193.0
13C-1,2,3,4,6,7,8-HpCDD	100	76.9	26.0 - 166.0
13C-OCDD	200	130	26.0 - 397.0
13C-2,3,7,8-TCDF	100	71.2	22.0 - 152.0 26.0 - 126.0 (2)
13C-1,2,3,7,8-PeCDF	100	70.6	21.0 - 192.0
13C-2,3,4,7,8-PeCDF	100	68.6	13.0 - 328.0
13C-1,2,3,4,7,8-HxCDF	100	82.1	19.0 - 202.0
13C-1,2,3,6,7,8-HxCDF	100	74.7	21.0 - 159.0
13C-2,3,4,6,7,8-HxCDF	100	73.9	22.0 - 176.0
13C-1,2,3,7,8,9-HxCDF	100	77.0	17.0 - 205.0
13C-1,2,3,4,6,7,8-HpCDF	100	72.2	21.0 - 158.0
13C-1,2,3,4,7,8,9-HpCDF	100	72.0	20.0 - 186.0
13C-OCDF	200	136	26.0 - 397.0
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	33.2	12.4 - 76.4

Analyst: m)

Date: 10/23/14

Client ID: OPR
Lab ID: B4J0106-BS1

Filename: 141022D1 S:2 Acq:22-OCT-14 16:19:38
GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000

ConCal: ST141022D1-1
EndCAL: NA

Page 2 of 2

Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
2,3,7,8-TCDD	1.60e+06	0.73 y	1.18	27:01	1.001	8.8600	*	2.5	*		Total Tetra-Dioxins	9.19	9.23	*	*	
1,2,3,7,8-PeCDD	7.71e+06	0.60 y	0.92	31:31	1.001	48.092	*	2.5	*		Total Penta-Dioxins	48.3	48.3	*	*	
1,2,3,4,7,8-HxCDD	6.27e+06	1.25 y	1.09	34:50	1.000	45.922	*	2.5	*		Total Hexa-Dioxins	142	143	*	*	
1,2,3,6,7,8-HxCDD	6.64e+06	1.25 y	1.07	34:57	1.000	47.534	*	2.5	*		Total Hepta-Dioxins	48.6	49.3	*	*	
1,2,3,7,8,9-HxCDD	6.50e+06	1.28 y	0.93	35:15	1.000	48.115	*	2.5	*		Total Tetra-Furans	8.88	9.10	*	*	
1,2,3,4,6,7,8-HpCDD	6.03e+06	1.05 y	1.12	38:42	1.000	47.891	*	2.5	*		Total Penta-Furans	95.322	95.723	*	*	
OCDD	1.03e+07	0.89 y	0.95	42:02	1.000	94.066	*	2.5	*		Total Hexa-Furans	186	187	*	*	
											Total Hepta-Furans	93.1	94.4	*	*	
2,3,7,8-TCDF	2.12e+06	0.78 y	1.08	26:14	1.001	8.8127	*	2.5	*							
1,2,3,7,8-PeCDF	1.15e+07	1.59 y	1.09	30:20	1.000	46.532	*	2.5	*							
2,3,4,7,8-PeCDF	1.11e+07	1.57 y	1.04	31:14	1.000	47.103	*	2.5	*							
1,2,3,4,7,8-HxCDF	1.20e+07	1.28 y	1.39	33:57	1.000	46.509	*	2.5	*							
1,2,3,6,7,8-HxCDF	1.10e+07	1.27 y	1.26	34:05	1.001	46.589	*	2.5	*							
2,3,4,6,7,8-HxCDF	1.05e+07	1.29 y	1.30	34:41	1.001	46.325	*	2.5	*							
1,2,3,7,8,9-HxCDF	8.41e+06	1.26 y	1.19	35:39	1.001	46.887	*	2.5	*							
1,2,3,4,6,7,8-HpCDF	8.80e+06	1.09 y	1.62	37:30	1.001	46.325	*	2.5	*							
1,2,3,4,7,8,9-HpCDF	8.28e+06	1.05 y	1.53	39:16	1.000	46.699	*	2.5	*							
OCDF	1.43e+07	0.91 y	1.10	42:16	1.000	95.455	*	2.5	*							
											Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.52e+07	0.80 y	1.07	26:60	1.022	72.197				72.2					
IS	13C-1,2,3,7,8-PeCDD	1.74e+07	0.63 y	1.24	31:30	1.192	71.554				71.6					
IS	13C-1,2,3,4,7,8-HxCDD	1.26e+07	1.25 y	0.72	34:50	1.014	75.946				75.9					
IS	13C-1,2,3,6,7,8-HxCDD	1.31e+07	1.25 y	0.74	34:56	1.017	78.001				78.0					
IS	13C-1,2,3,7,8,9-HxCDD	1.45e+07	1.24 y	0.86	35:15	1.026	74.391				74.4					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.13e+07	1.05 y	0.64	38:41	1.126	76.875				76.9					
IS	13C-OCDD	2.31e+07	0.87 y	0.78	42:01	1.223	129.58				64.8					
IS	13C-2,3,7,8-TCDF	2.23e+07	0.78 y	0.92	26:14	0.992	71.247				71.2					
IS	13C-1,2,3,7,8-PeCDF	2.27e+07	1.58 y	0.95	30:19	1.147	70.629				70.6					
IS	13C-2,3,4,7,8-PeCDF	2.26e+07	1.58 y	0.97	31:13	1.181	68.632				68.6					
IS	13C-1,2,3,4,7,8-HxCDF	1.86e+07	0.50 y	0.99	33:56	0.988	82.145				82.1					
IS	13C-1,2,3,6,7,8-HxCDF	1.87e+07	0.53 y	1.10	34:03	0.991	74.684				74.7					
IS	13C-2,3,4,6,7,8-HxCDF	1.74e+07	0.52 y	1.03	34:40	1.009	73.912				73.9					
IS	13C-1,2,3,7,8,9-HxCDF	1.51e+07	0.51 y	0.86	35:38	1.037	76.975				77.0					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.18e+07	0.44 y	0.71	37:29	1.091	72.231				72.2					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.16e+07	0.42 y	0.71	39:15	1.142	71.977				72.0					
IS	13C-OCDF	2.72e+07	0.90 y	0.87	42:15	1.230	136.39				68.2					
C/Up	37Cl-2,3,7,8-TCDD	7.92e+06		1.21	27:01	1.022	33.214				83.0	Integrations by Analyst: <u>M</u>	Reviewed by Analyst: <u>M</u>			
RS/RT	13C-1,2,3,4-TCDD	1.97e+07	0.81 y	1.00	26:26	*	100.00									
RS	13C-1,2,3,4-TCDF	3.39e+07	0.75 y	1.00	25:00	*	100.00									
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.28e+07	0.52 y	1.00	34:21	*	100.00					Date: <u>10/23/14</u>	Date: <u>10/24/14</u>			

Client ID: OPR
Lab ID: B4J0106-BS1

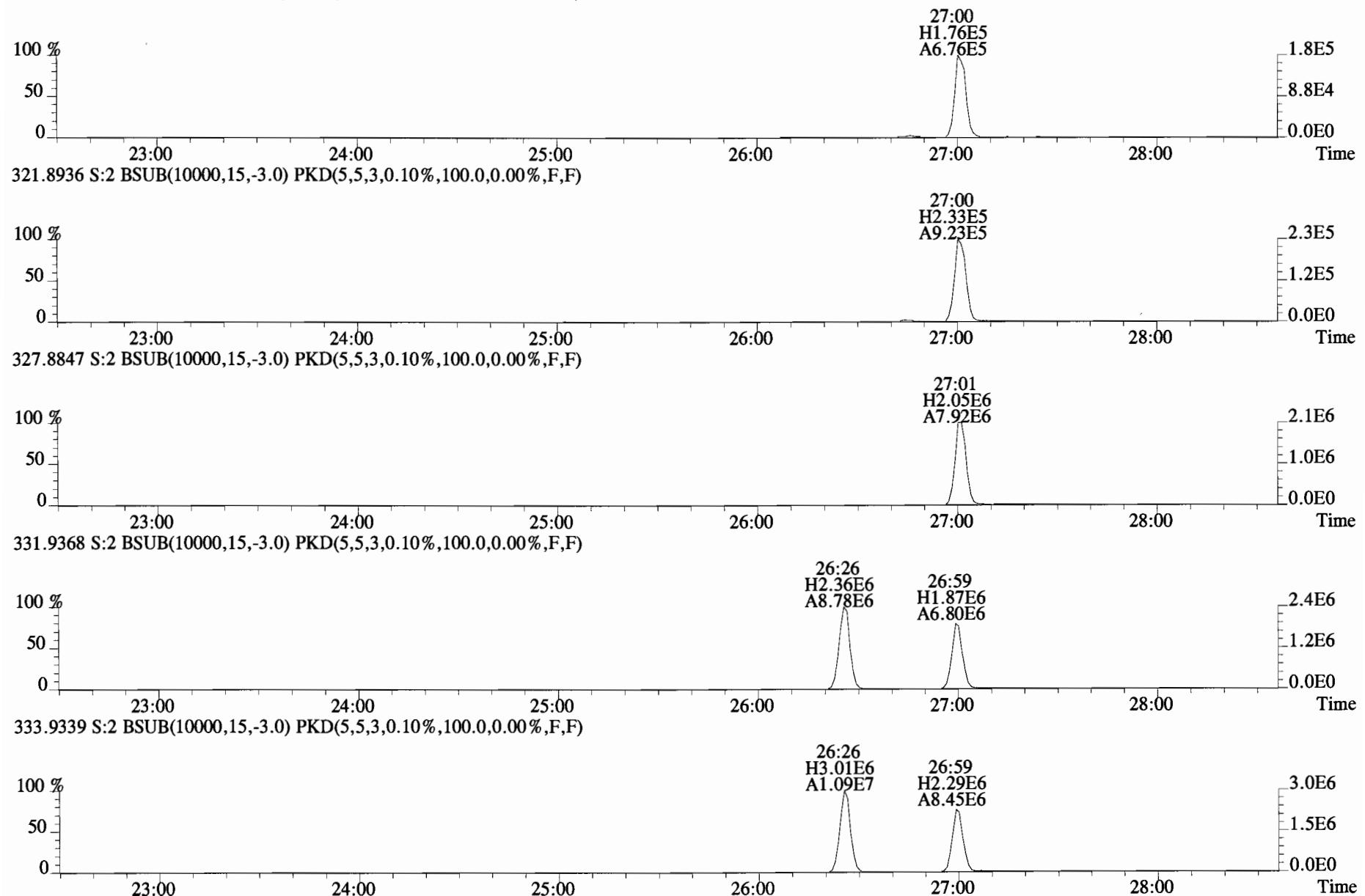
Filename: 141022D1 S:2 Acq:22-OCT-14 16:19:38
GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000

ConCal: ST141022D1-1
EndCAL: NA

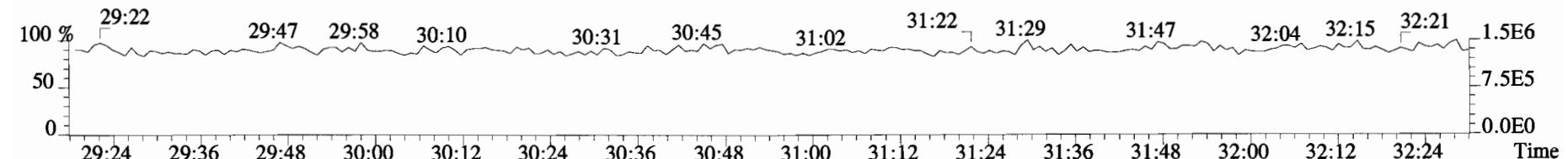
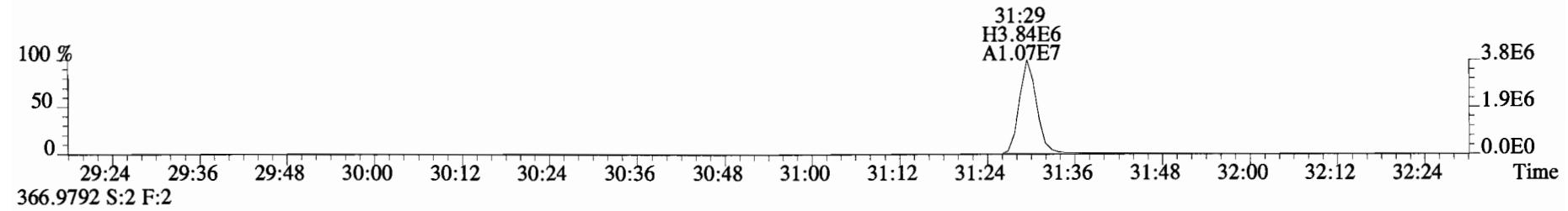
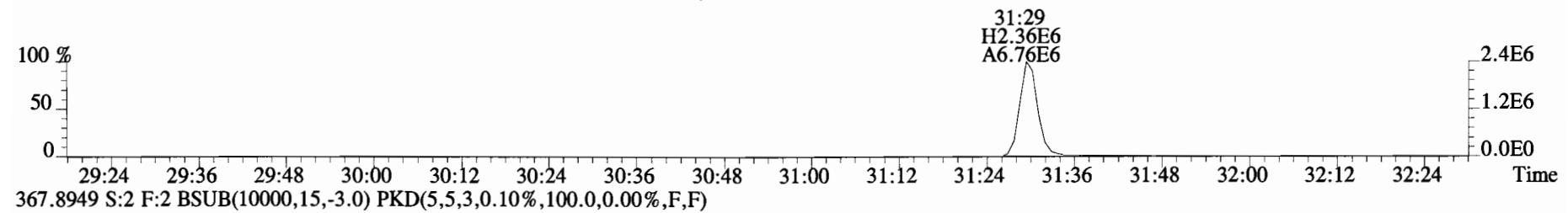
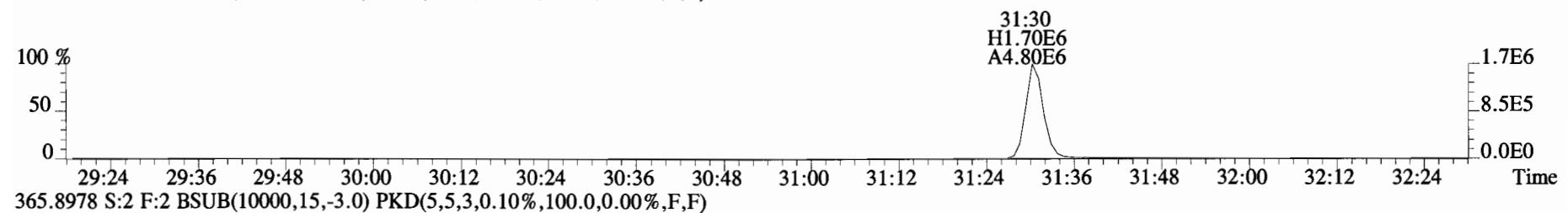
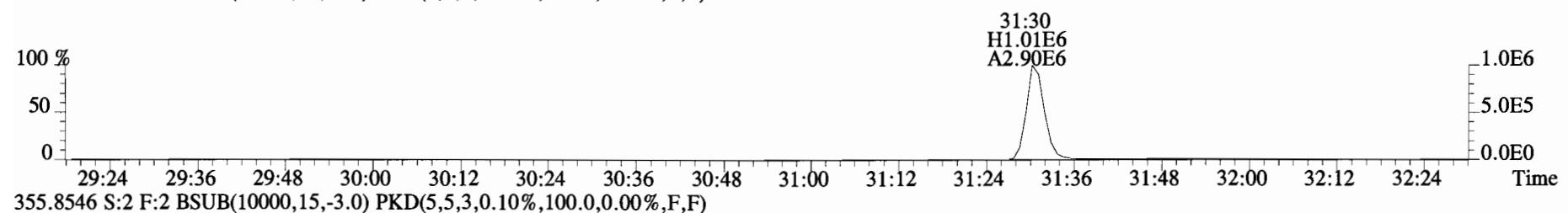
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	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	1.60e+06	0.73 y	1.18	27:01	1.001	177.20	*	2.5	*		Total Tetra-Dioxins	184	185	*	*	
	1,2,3,7,8-PeCDD	7.71e+06	0.60 y	0.92	31:31	1.001	961.84	*	2.5	*		Total Penta-Dioxins	966	966	*	*	
	1,2,3,4,7,8-HxCDD	6.27e+06	1.25 y	1.09	34:50	1.000	918.45	*	2.5	*		Total Hexa-Dioxins	2840	2860	*	*	
	1,2,3,6,7,8-HxCDD	6.64e+06	1.25 y	1.07	34:57	1.000	950.69	*	2.5	*		Total Hepta-Dioxins	971	985	*	*	
	1,2,3,7,8,9-HxCDD	6.50e+06	1.28 y	0.93	35:15	1.000	962.29	*	2.5	*		Total Tetra-Furans	178	182	*	*	
	1,2,3,4,6,7,8-HpCDD	6.03e+06	1.05 y	1.12	38:42	1.000	957.81	*	2.5	*		Total Penta-Furans	1906.4	1914.5	*	*	
	OCDD	1.03e+07	0.89 y	0.95	42:02	1.000	1881.3	*	2.5	*		Total Hexa-Furans	3730	3750	*	*	
												Total Hepta-Furans	1860	1890	*	*	
	2,3,7,8-TCDF	2.12e+06	0.78 y	1.08	26:14	1.001	176.25	*	2.5	*							
	1,2,3,7,8-PeCDF	1.15e+07	1.59 y	1.09	30:20	1.000	930.64	*	2.5	*							
	2,3,4,7,8-PeCDF	1.11e+07	1.57 y	1.04	31:14	1.000	942.06	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.20e+07	1.28 y	1.39	33:57	1.000	930.17	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.10e+07	1.27 y	1.26	34:05	1.001	931.77	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.05e+07	1.29 y	1.30	34:41	1.001	926.50	*	2.5	*							
	1,2,3,7,8,9-HxCDF	8.41e+06	1.26 y	1.19	35:39	1.001	937.73	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	8.80e+06	1.09 y	1.62	37:30	1.001	926.50	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	8.28e+06	1.05 y	1.53	39:16	1.000	933.97	*	2.5	*							
	OCDF	1.43e+07	0.91 y	1.10	42:16	1.000	1909.1	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.52e+07	0.80 y	1.07	26:60	1.022	1443.9					72.2					
IS	13C-1,2,3,7,8-PeCDD	1.74e+07	0.63 y	1.24	31:30	1.192	1431.1					71.6					
IS	13C-1,2,3,4,7,8-HxCDD	1.26e+07	1.25 y	0.72	34:50	1.014	1518.9					75.9					
IS	13C-1,2,3,6,7,8-HxCDD	1.31e+07	1.25 y	0.74	34:56	1.017	1560.0					78.0					
IS	13C-1,2,3,7,8,9-HxCDD	1.45e+07	1.24 y	0.86	35:15	1.026	1487.8					74.4					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.13e+07	1.05 y	0.64	38:41	1.126	1537.5					76.9					
IS	13C-OCDD	2.31e+07	0.87 y	0.78	42:01	1.223	2591.5					64.8					
IS	13C-2,3,7,8-TCDF	2.23e+07	0.78 y	0.92	26:14	0.992	1424.9					71.2					
IS	13C-1,2,3,7,8-PeCDF	2.27e+07	1.58 y	0.95	30:19	1.147	1412.6					70.6					
IS	13C-2,3,4,7,8-PeCDF	2.26e+07	1.58 y	0.97	31:13	1.181	1372.6					68.6					
IS	13C-1,2,3,4,7,8-HxCDF	1.86e+07	0.50 y	0.99	33:56	0.988	1642.9					82.1					
IS	13C-1,2,3,6,7,8-HxCDF	1.87e+07	0.53 y	1.10	34:03	0.991	1493.7					74.7					
IS	13C-2,3,4,6,7,8-HxCDF	1.74e+07	0.52 y	1.03	34:40	1.009	1478.2					73.9					
IS	13C-1,2,3,7,8,9-HxCDF	1.51e+07	0.51 y	0.86	35:38	1.037	1539.5					77.0					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.18e+07	0.44 y	0.71	37:29	1.091	1444.6					72.2					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.16e+07	0.42 y	0.71	39:15	1.142	1439.5					72.0					
IS	13C-OCDF	2.72e+07	0.90 y	0.87	42:15	1.230	2727.8					68.2					
C/Up	37Cl-2,3,7,8-TCDD	7.92e+06		1.21	27:01	1.022	664.29					83.0	Integrations by		Reviewed by		
RS/RT	13C-1,2,3,4-TCDD	1.97e+07	0.81 y	1.00	26:26	*	2000.0						Analyst: M		Analyst:		
RS	13C-1,2,3,4-TCDF	3.39e+07	0.75 y	1.00	25:00	*	2000.0										
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.28e+07	0.52 y	1.00	34:21	*	2000.0						Date: 10/23/14		Date:		

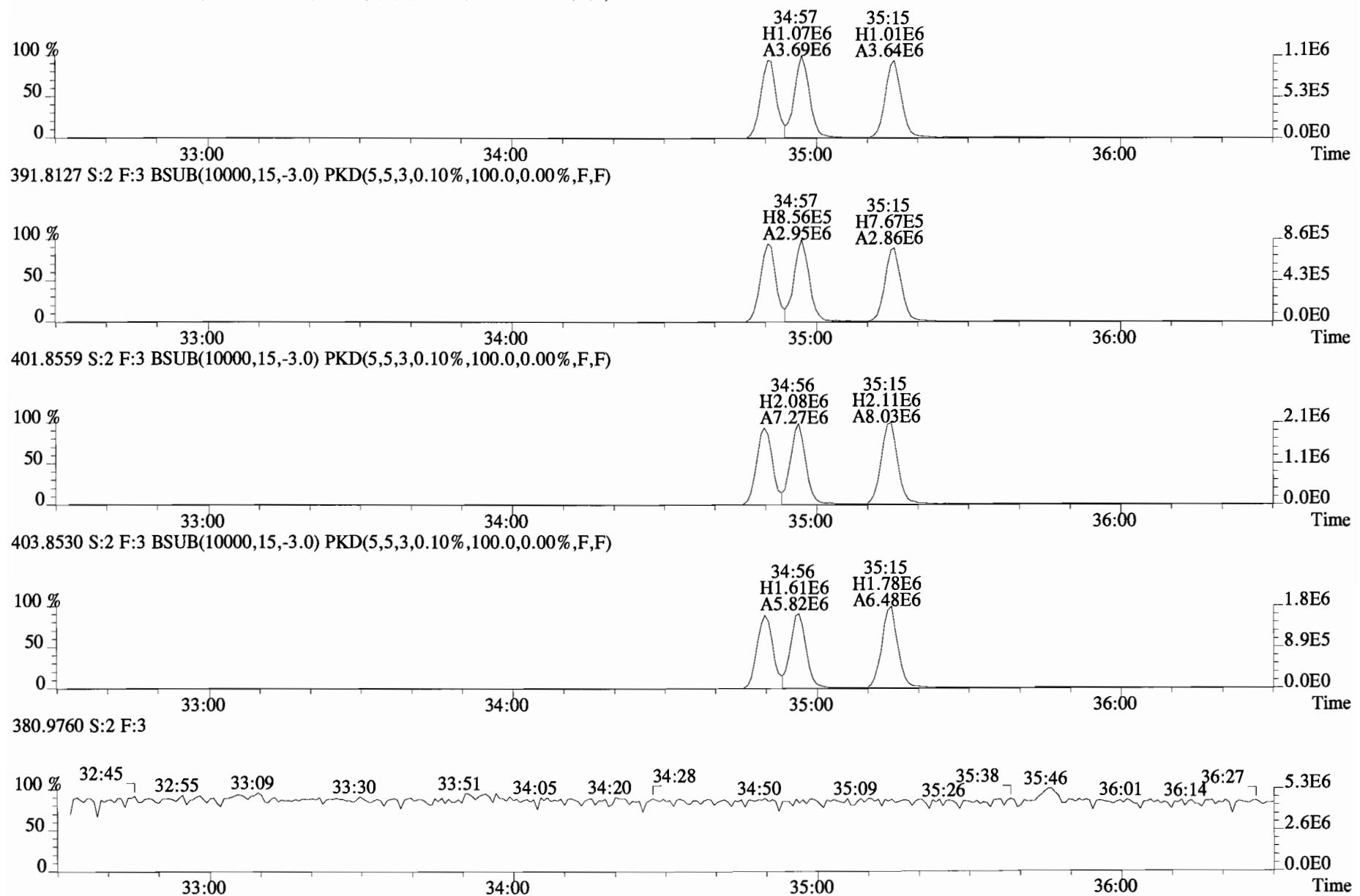
File:141022D1 #1-551 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



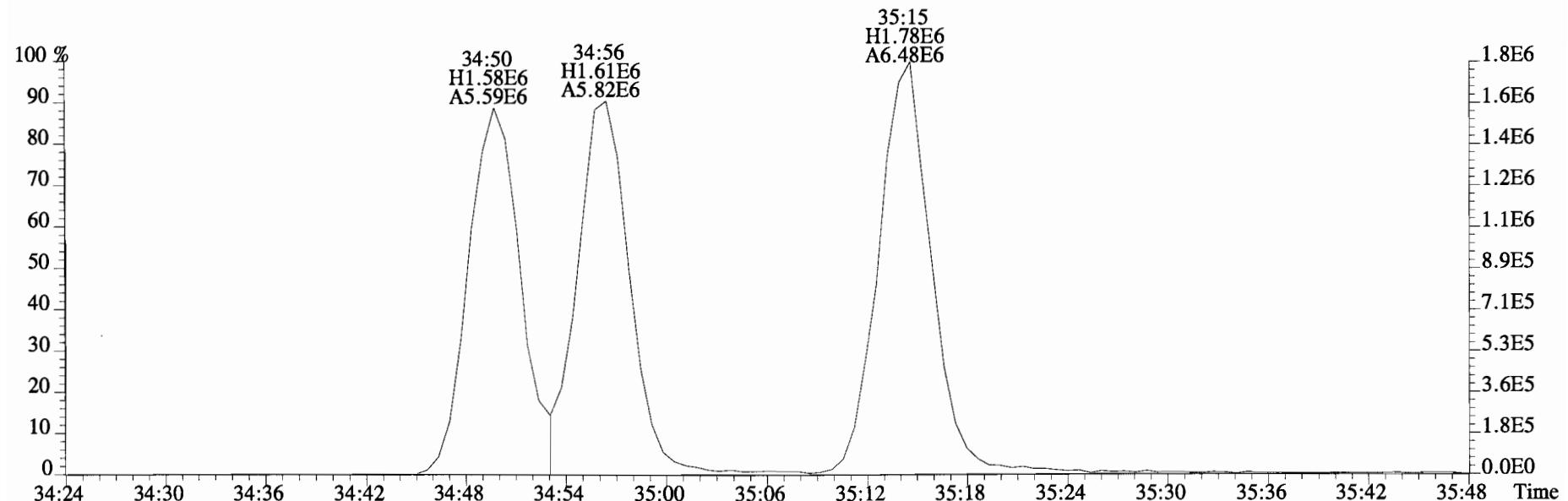
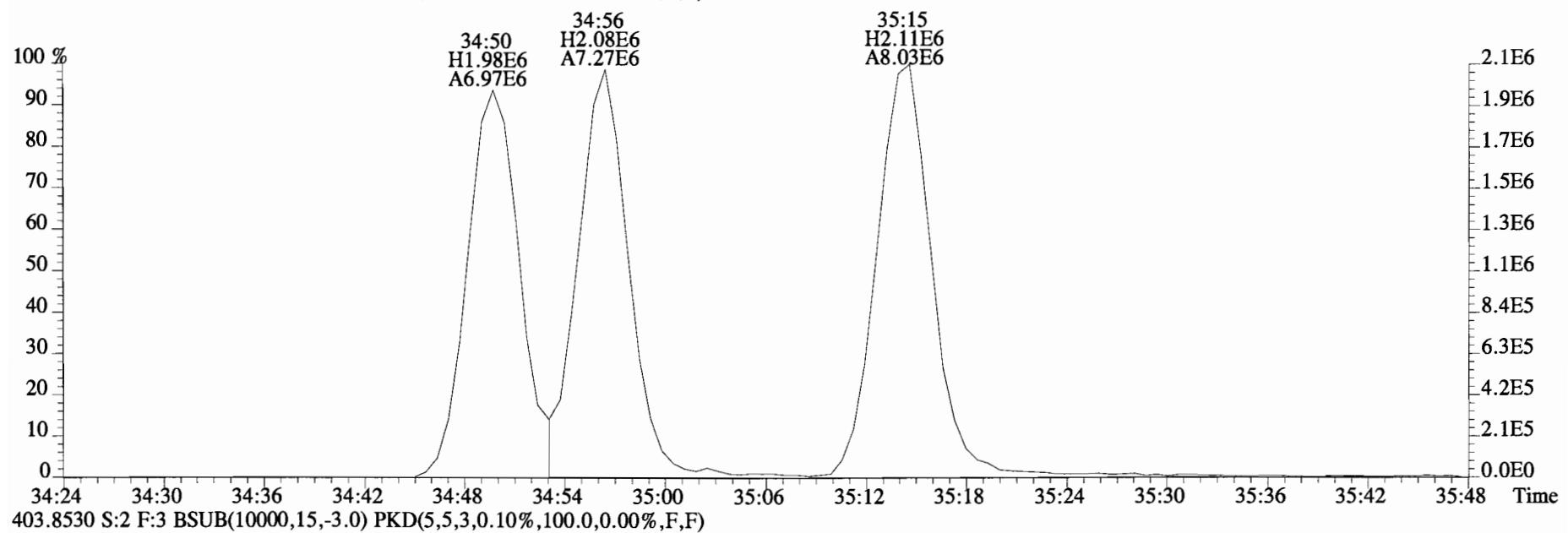
File:141022D1 #1-257 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
353.8576 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



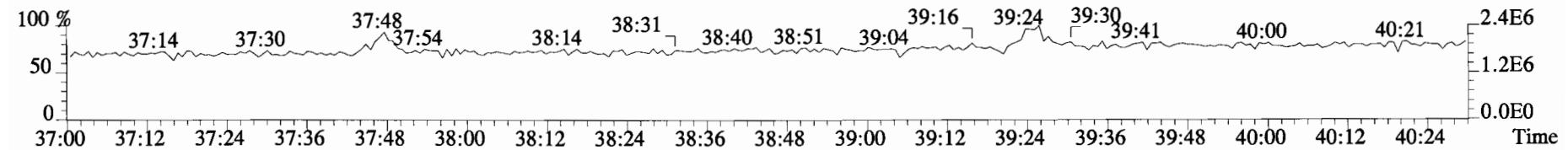
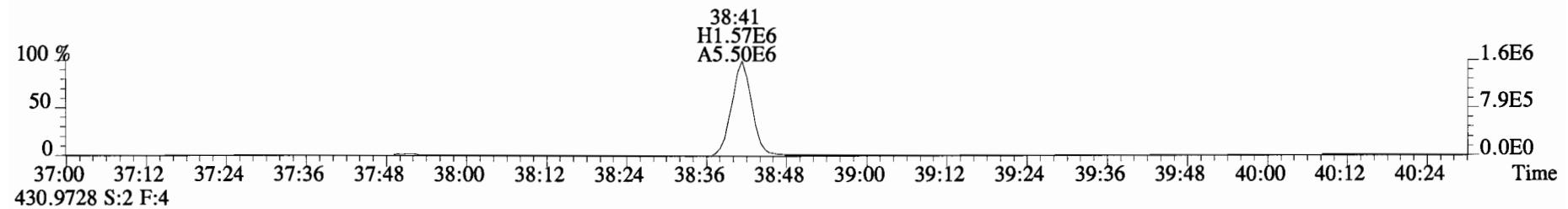
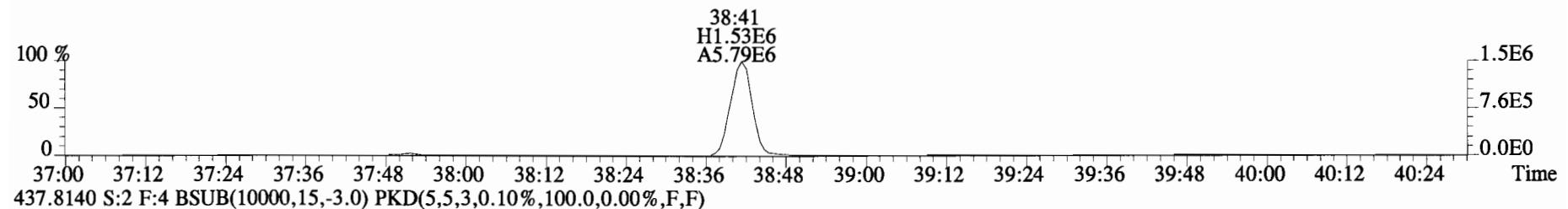
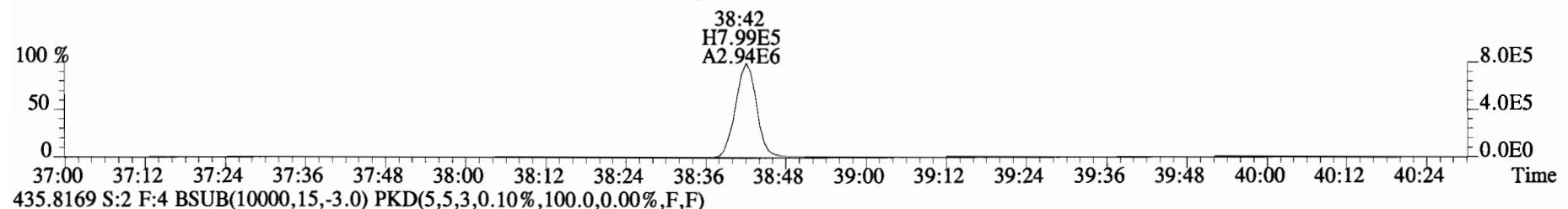
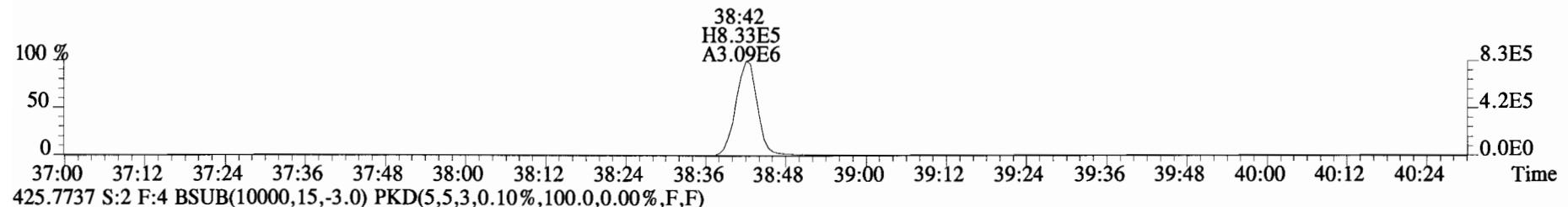
File:141022D1 #1-384 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



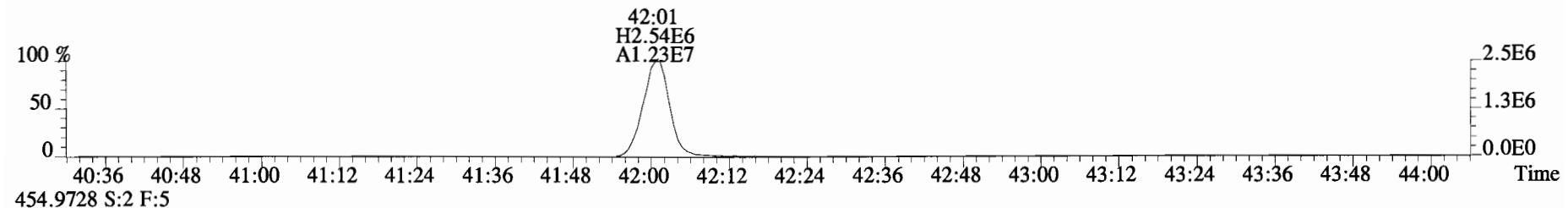
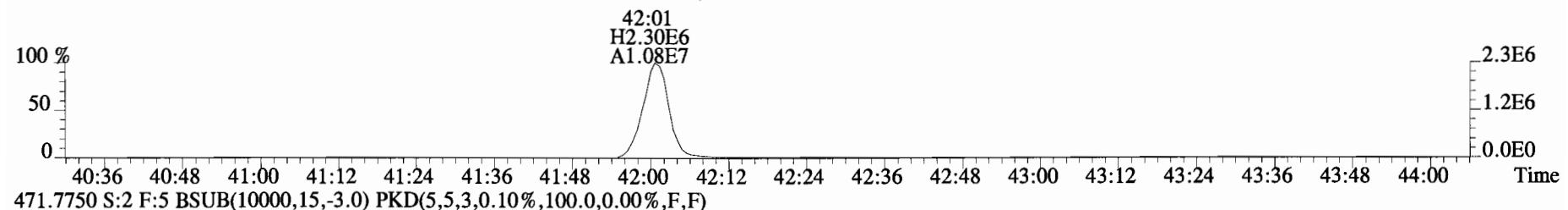
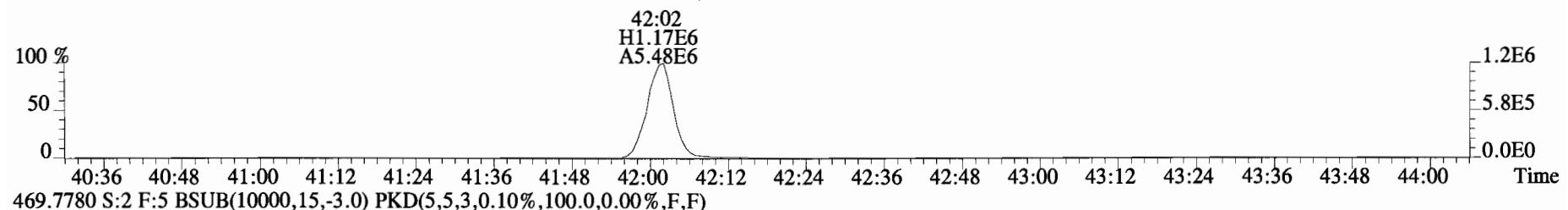
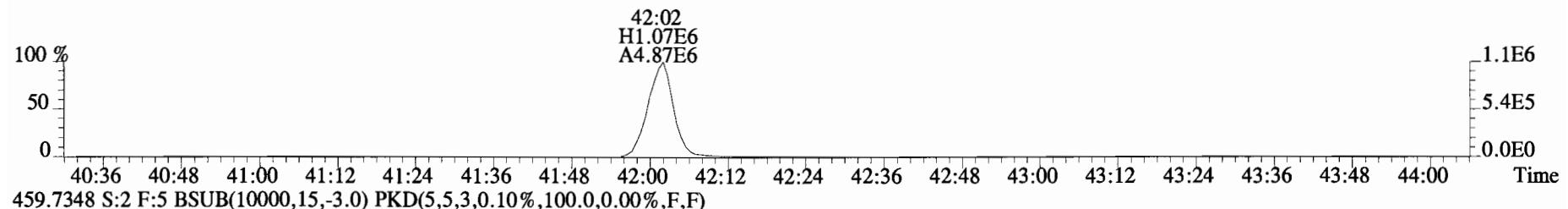
File:141022D1 #1-384 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



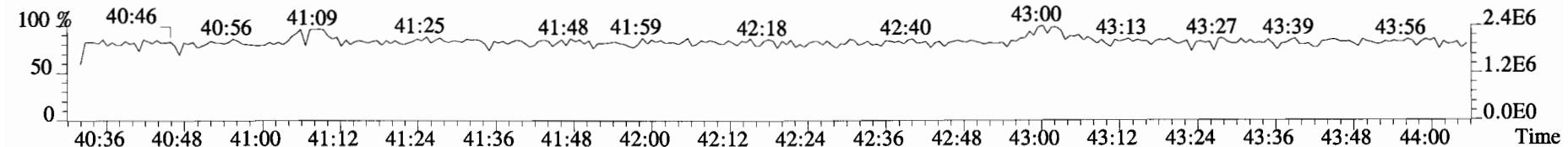
File:141022D1 #1-326 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
 423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



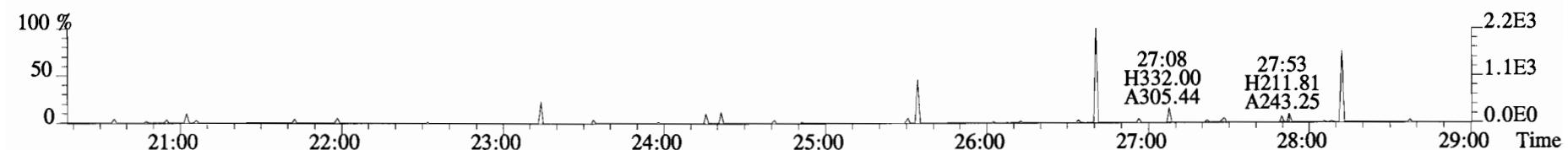
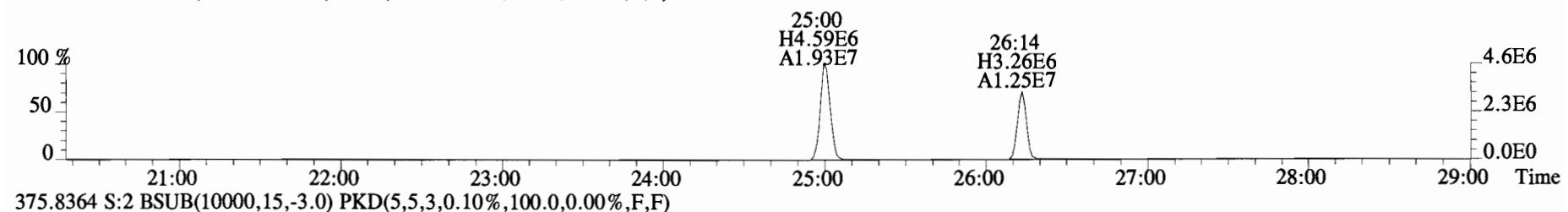
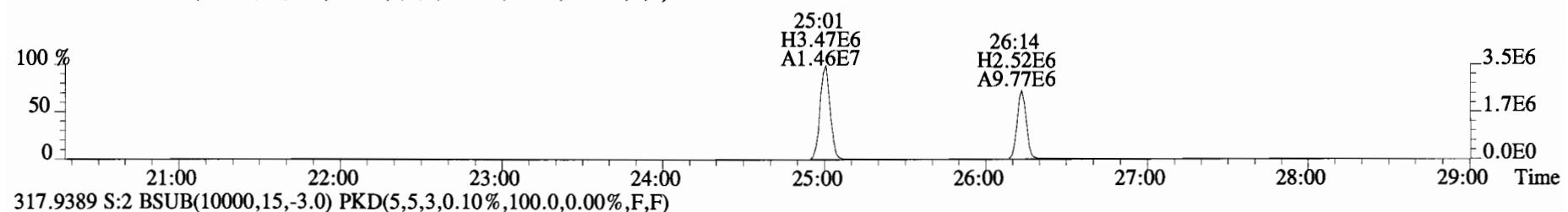
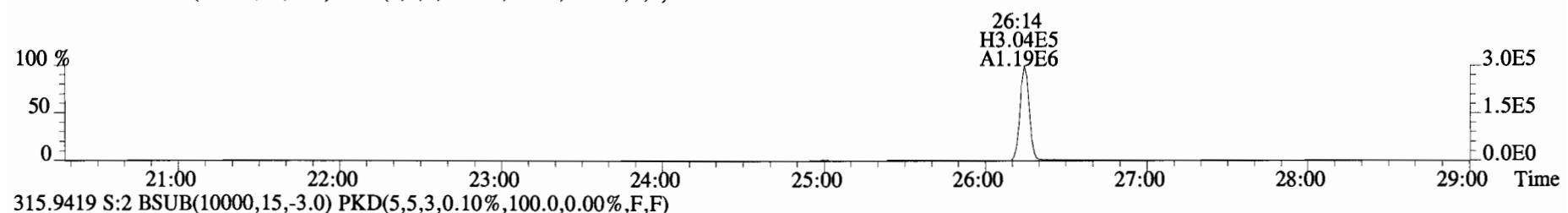
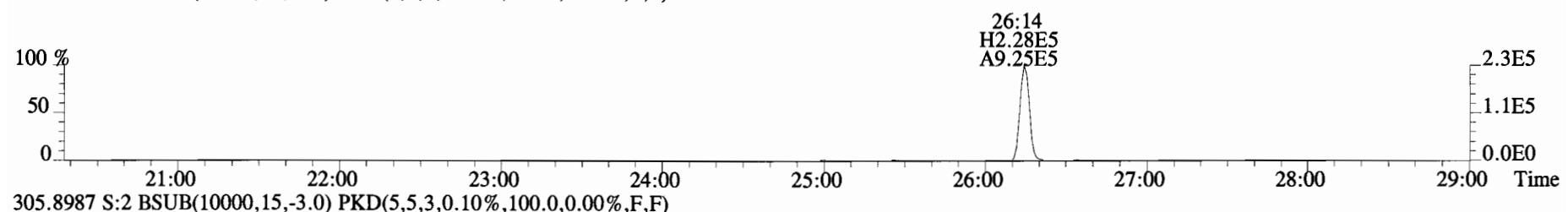
File:141022D1 #1-388 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
 457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



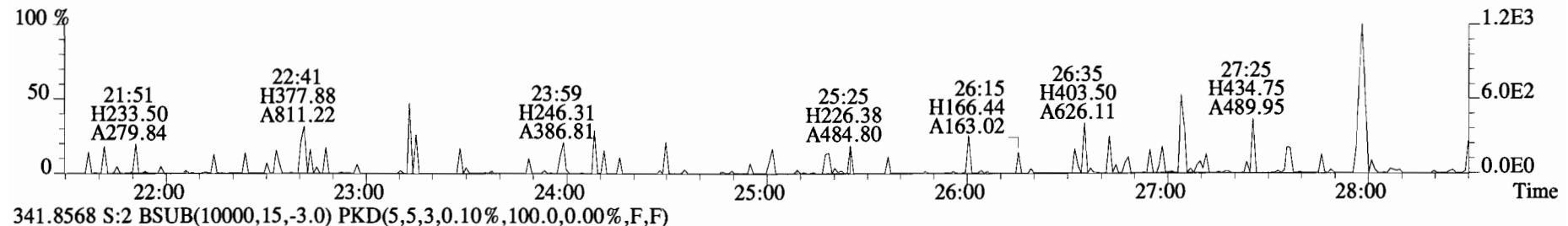
454.9728 S:2 F:5



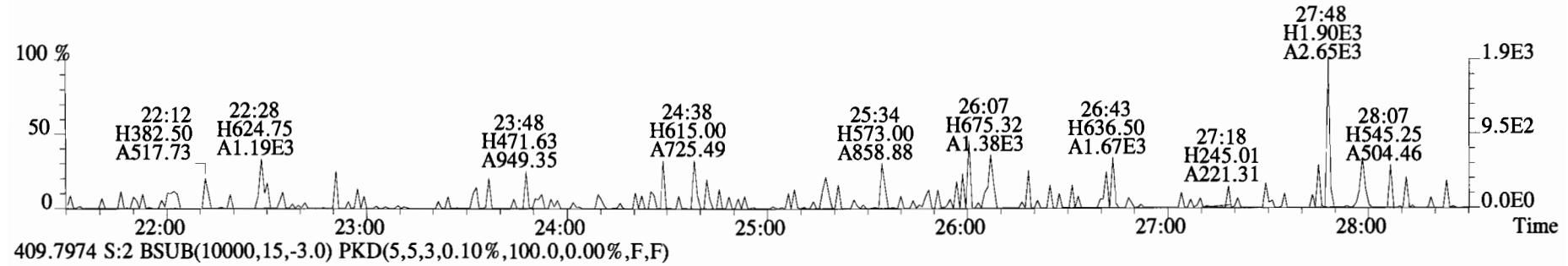
File:141022D1 #1-551 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



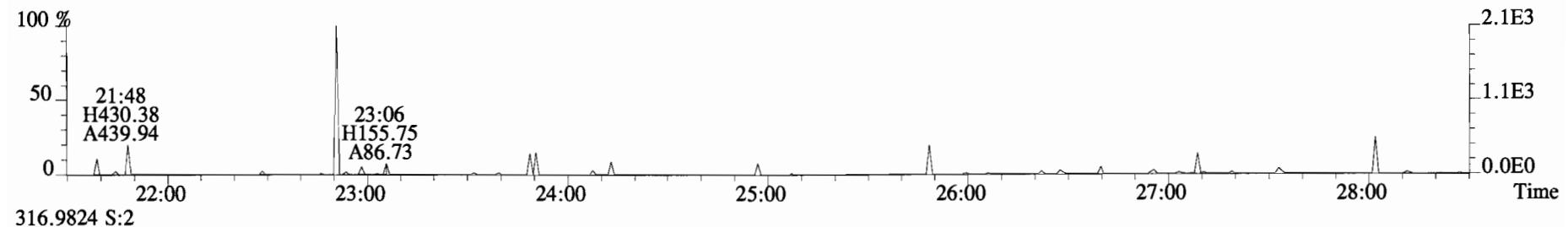
File:141022D1 #1-551 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
 339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



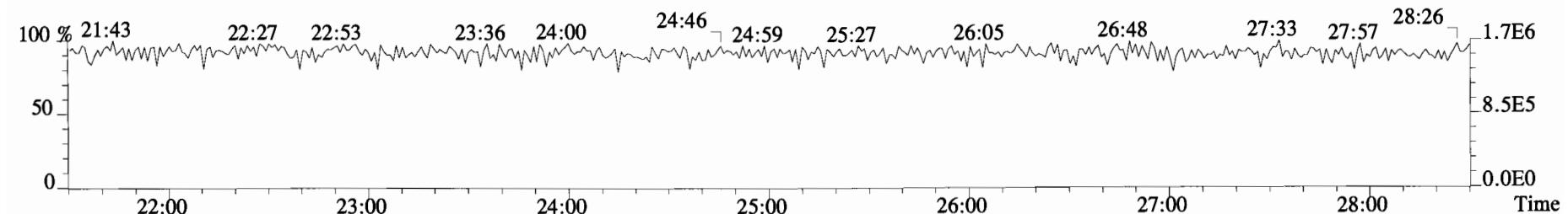
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



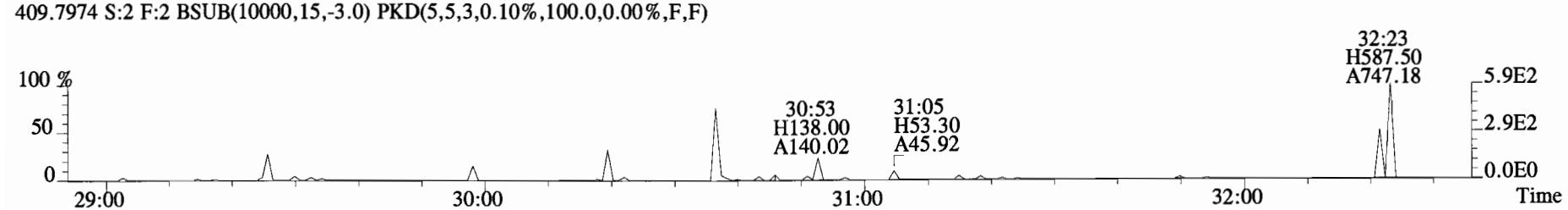
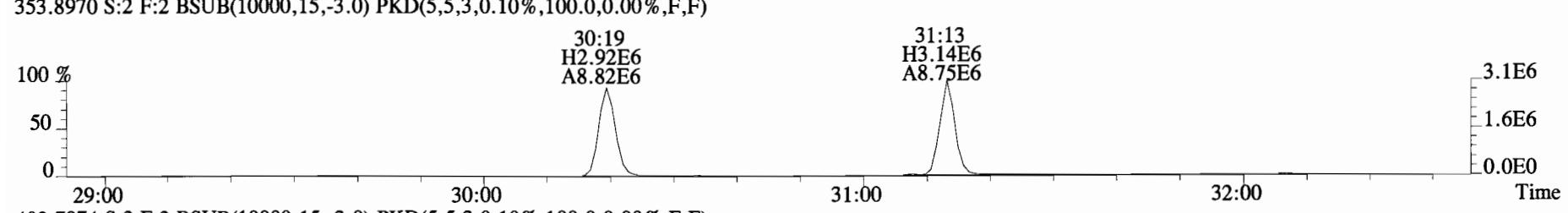
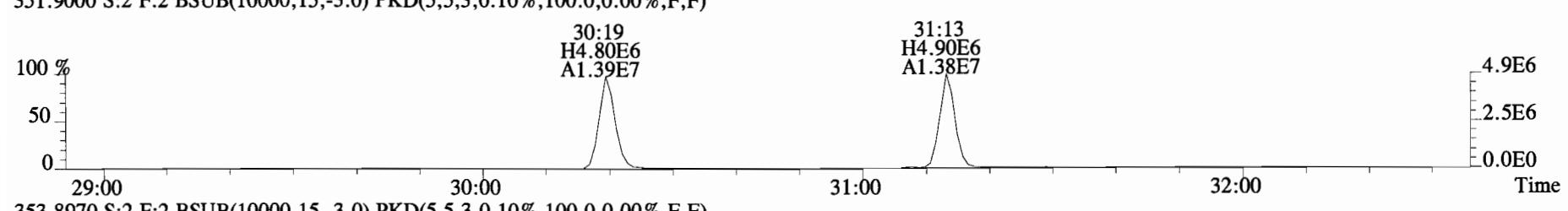
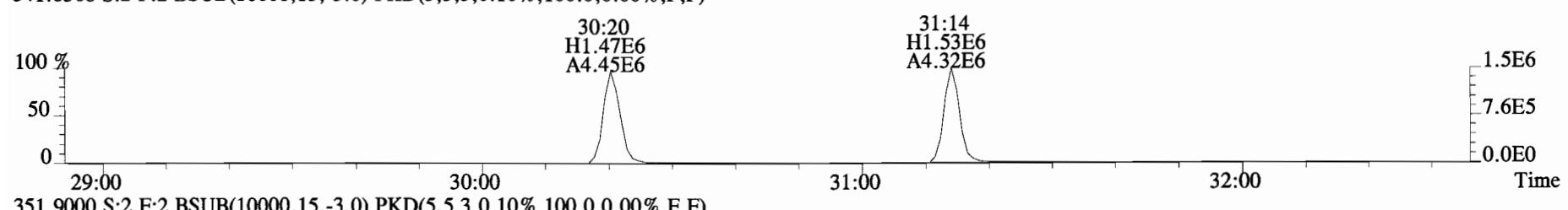
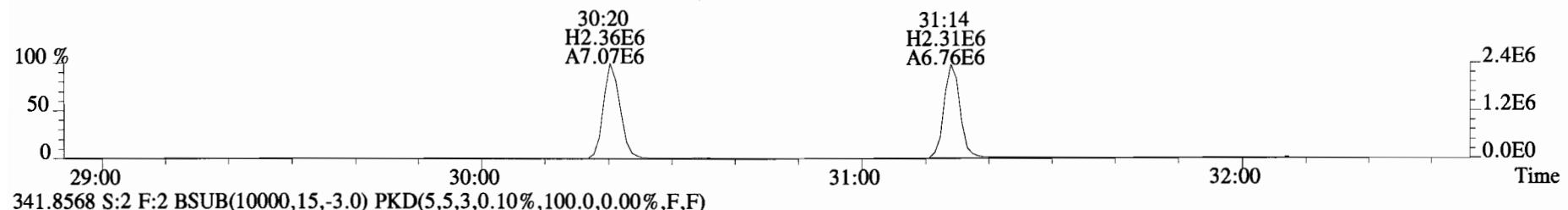
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



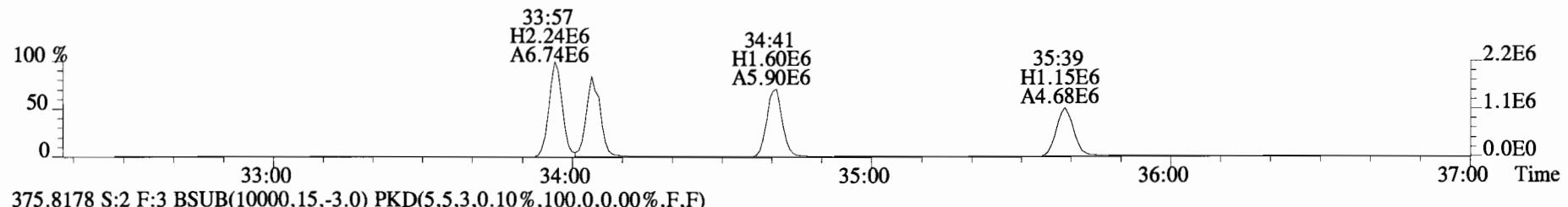
316.9824 S:2



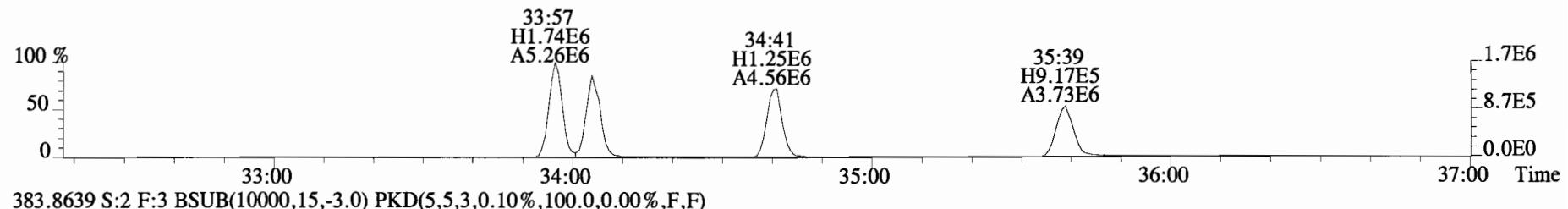
File:141022D1 #1-257 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



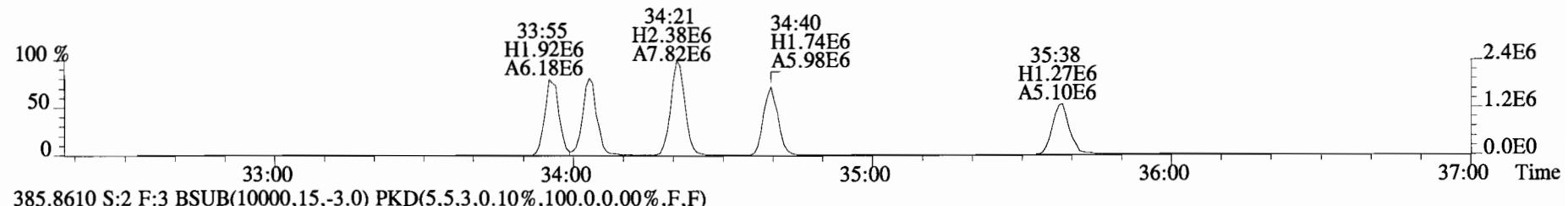
File:141022D1 #1-384 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
 373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



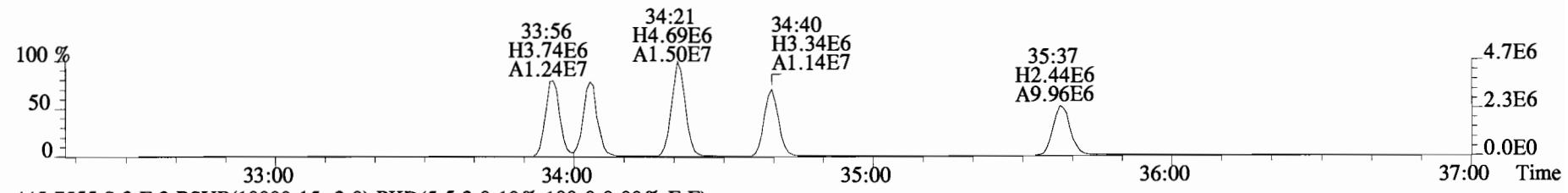
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



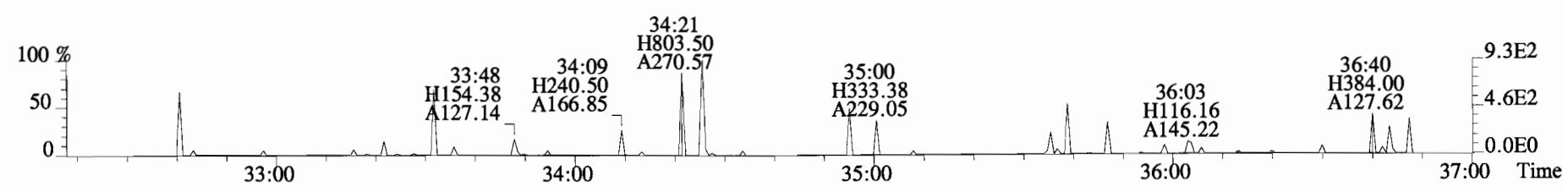
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



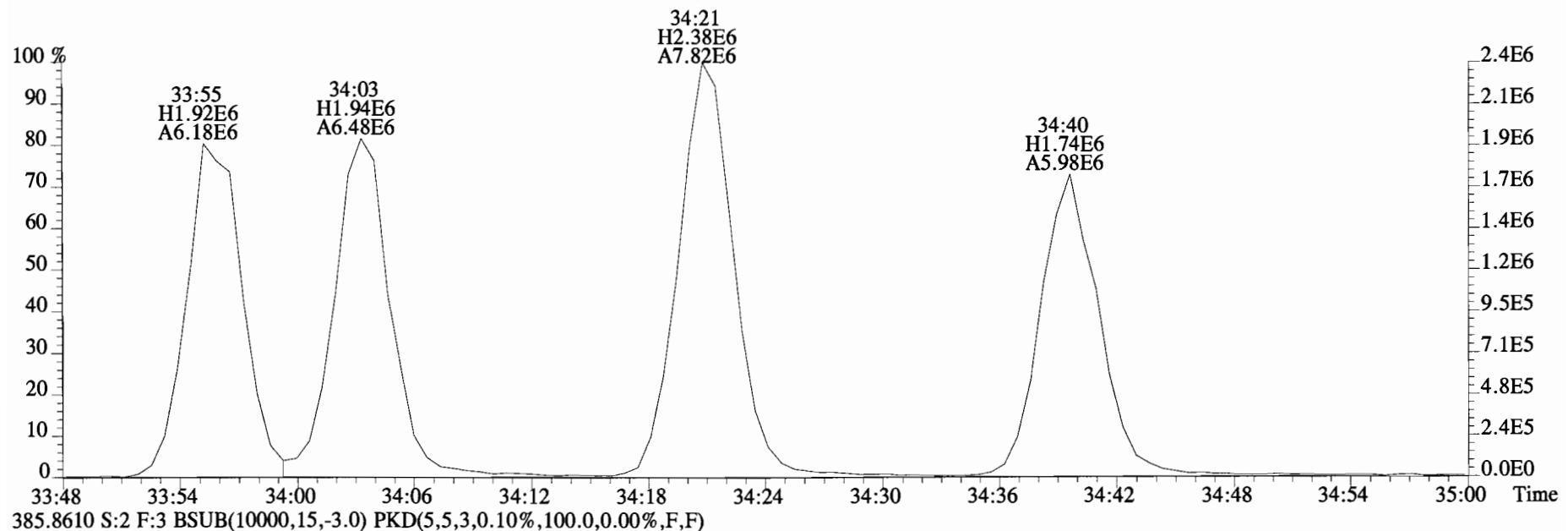
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



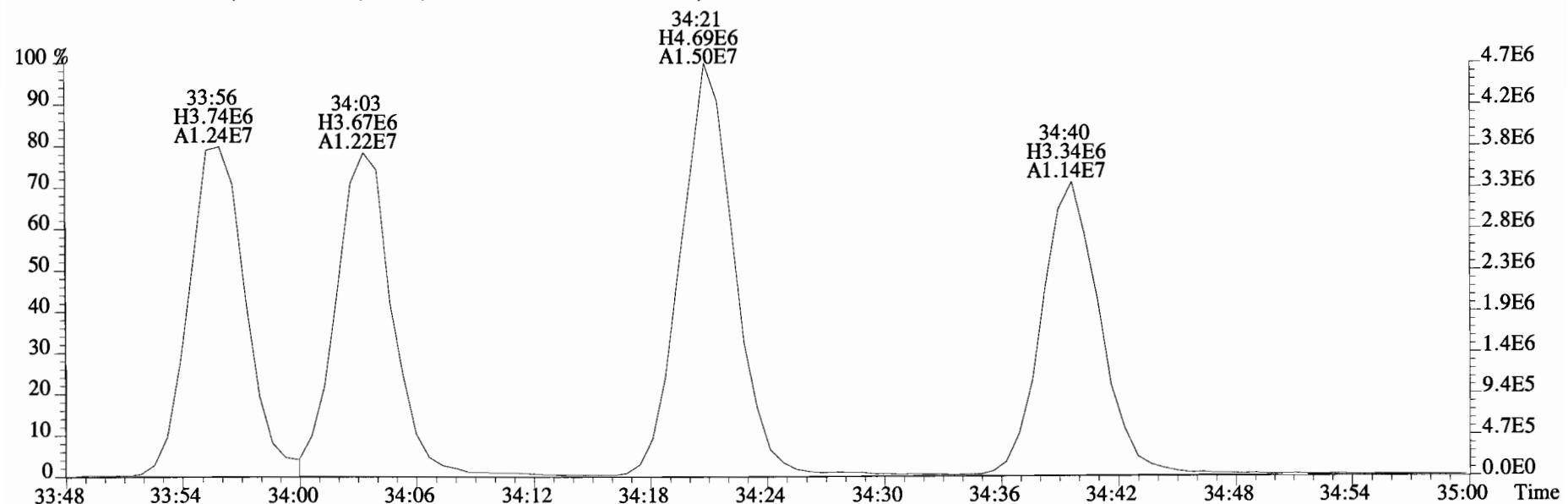
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



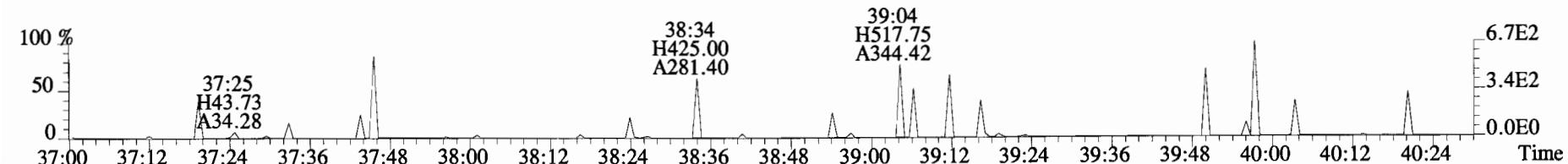
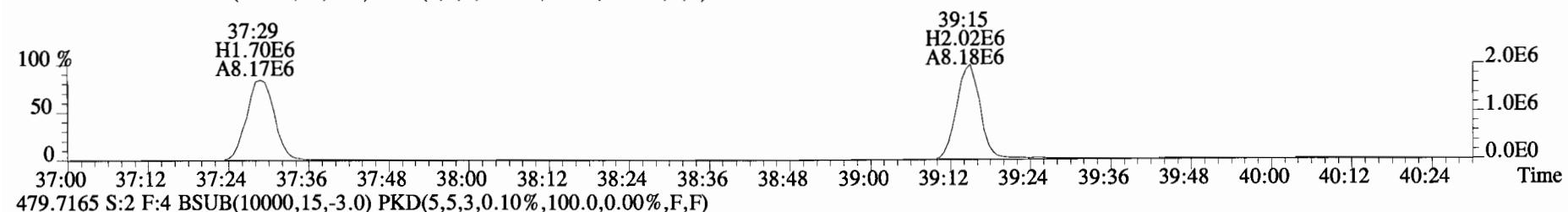
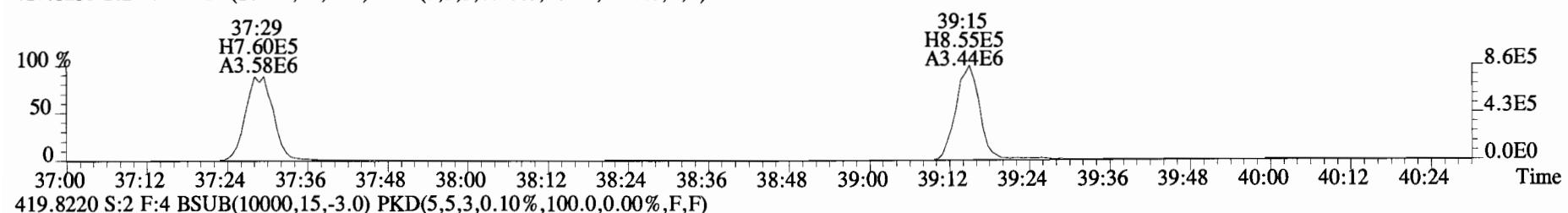
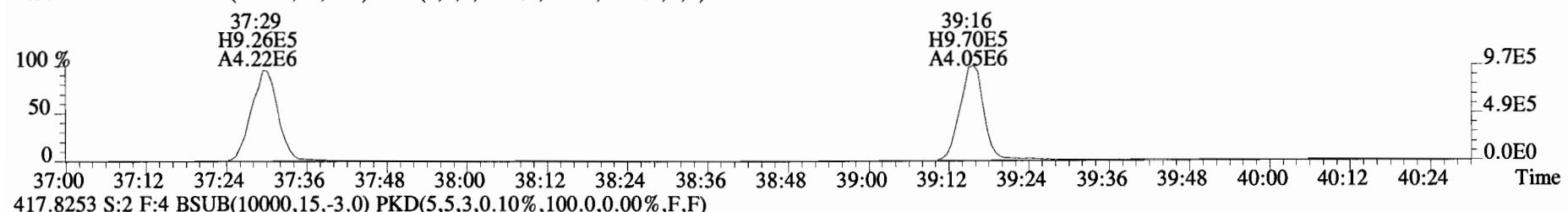
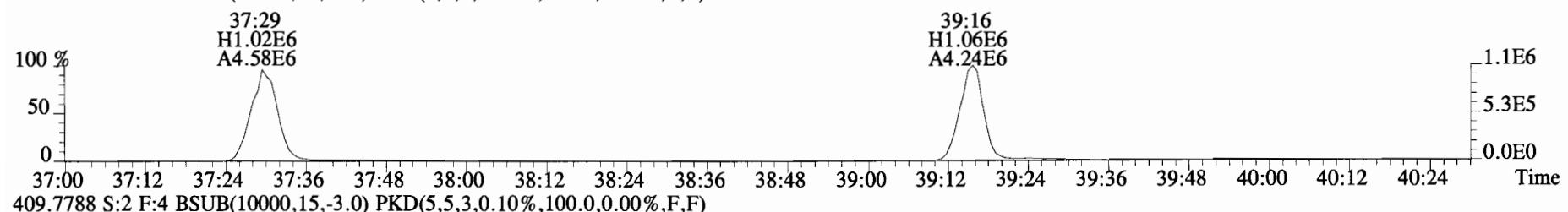
File:141022D1 #1-384 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



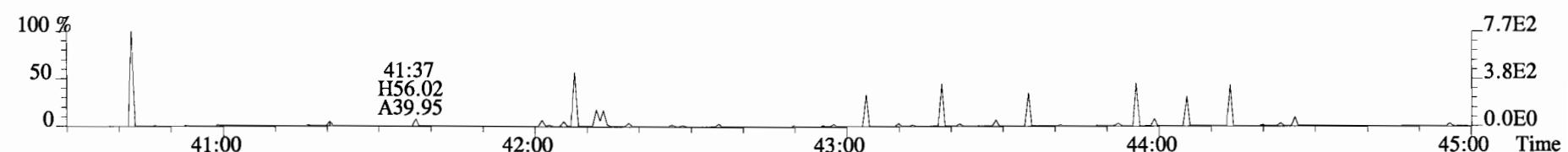
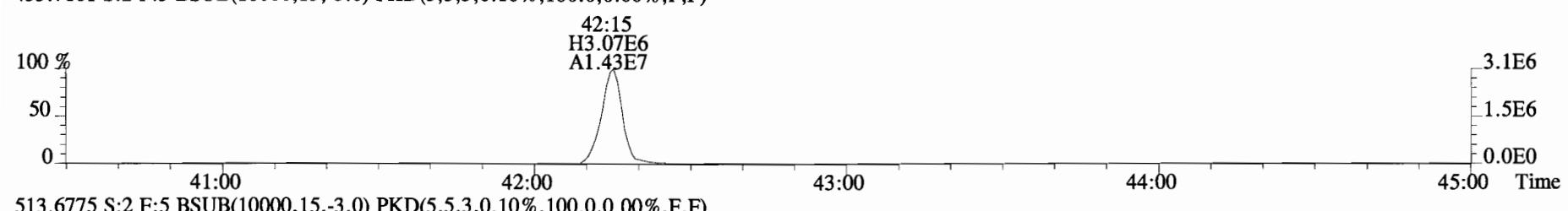
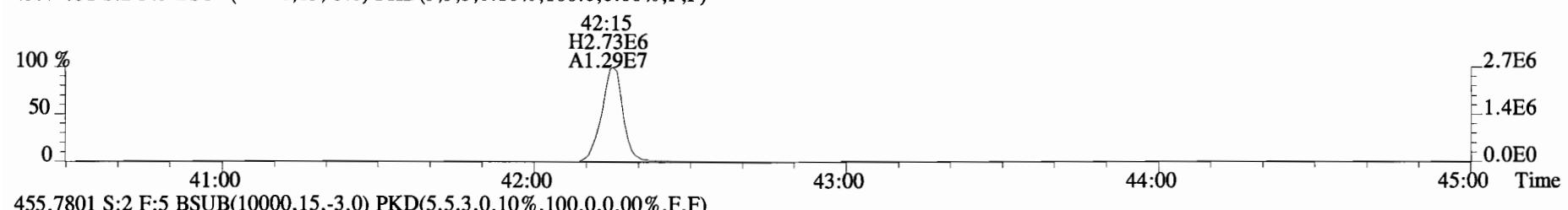
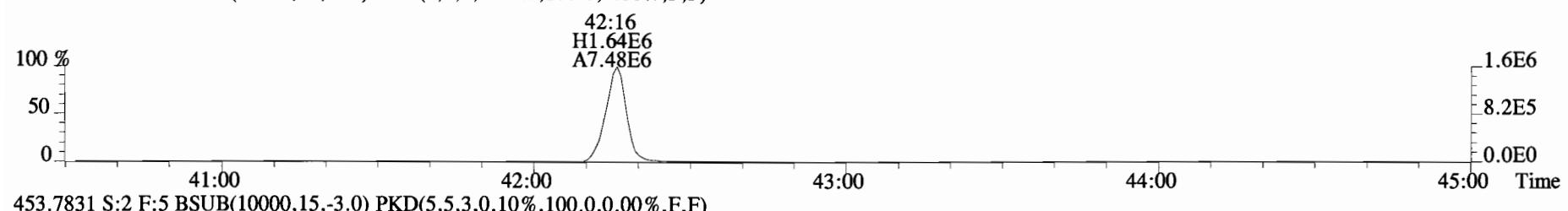
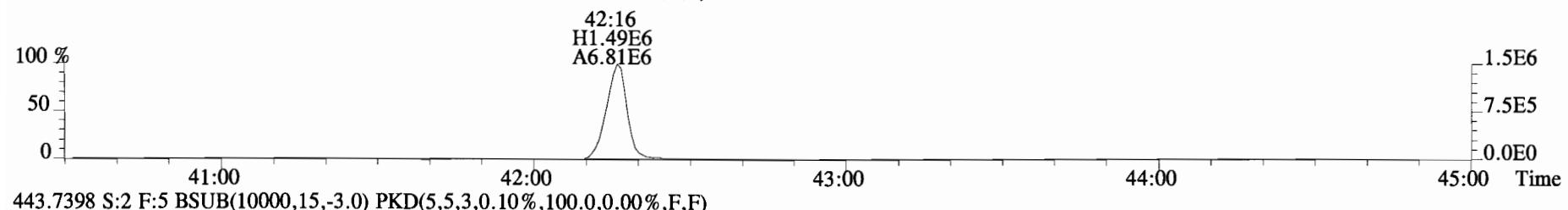
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141022D1 #1-326 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
 407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141022D1 #1-388 Acq:22-OCT-2014 16:19:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0106-BS1 OPR 1 Exp:OCDD_DB5
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: CC-A-01-20141013-W
 Lab ID: 1400762-01

Filename: 141022D1 S:5 Acq:22-OCT-14 18:44:48
 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.008

ConCal: ST141022D1-1
 EndCAL: NA

Page 4 of 4

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL		Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	*	* n	1.18	Not F _q	*		*	756	2.5	1.51		Total Tetra-Dioxins	*	*	756	1.51	
	1,2,3,7,8-PeCDD	*	* n	0.92	Not F _q	*		*	566	2.5	0.930		Total Penta-Dioxins	*	*	566	0.930	
	1,2,3,4,7,8-HxCDD	*	* n	1.09	Not F _q	*		*	756	2.5	2.40		Total Hexa-Dioxins	*	*	1080	3.64	
	1,2,3,6,7,8-HxCDD	*	* n	1.07	Not F _q	*		*	756	2.5	2.56		Total Hepta-Dioxins	14.0	14.0	*	*	
	1,2,3,7,8,9-HxCDD	*	* n	0.93	Not F _q	*		*	756	2.5	2.67		Total Tetra-Furans	*	*	906	1.33	
	1,2,3,4,6,7,8-HpCDD	3.18e+04	0.96 y	1.12	38:42	1.000	5.8279	*	2.5	*			Total Penta-Furans	0.0000	0.53231	*	*	
	OCDD	1.78e+05	0.86 y	0.95	42:01	1.000	33.727	*	2.5	*			Total Hexa-Furans	*	0.886	*	*	
	2,3,7,8-TCDF	*	* n	1.08	Not F _q	*		*	678	2.5	0.998		Total Hepta-Furans	1.20	2.57	*	*	
	1,2,3,7,8-PeCDF	*	* n	1.09	Not F _q	*		*	913	2.5	1.38							
	2,3,4,7,8-PeCDF	*	* n	1.04	Not F _q	*		*	592	2.5	1.06							
	1,2,3,4,7,8-HxCDF	*	* n	1.39	Not F _q	*		*	553	2.5	0.602							
	1,2,3,6,7,8-HxCDF	*	* n	1.26	Not F _q	*		*	553	2.5	0.644							
	2,3,4,6,7,8-HxCDF	*	* n	1.30	Not F _q	*		*	372	2.5	0.502							
	1,2,3,7,8,9-HxCDF	*	* n	1.19	Not F _q	*		*	372	2.5	0.728							
	1,2,3,4,6,7,8-HpCDF	1.16e+04	1.39 n	1.62	37:29	1.000	1.3696	*	2.5	*								
	1,2,3,4,7,8,9-HpCDF	*	* n	1.53	Not F _q	*		*	643	2.5	1.17							
	OCDF	*	* n	1.10	Not F _q	*		*	1440	1.0	1.86							

Rec Qual

IS	13C-2,3,7,8-TCDD	1.40e+07	0.79 y	1.07	26:59	1.021	1600.5								80.7		
IS	13C-1,2,3,7,8-PeCDD	1.60e+07	0.63 y	1.24	31:29	1.192	1585.5								79.9		
IS	13C-1,2,3,4,7,8-HxCDD	1.13e+07	1.30 y	0.72	34:49	1.014	1573.2								79.3		
IS	13C-1,2,3,6,7,8-HxCDD	1.12e+07	1.25 y	0.74	34:56	1.017	1540.6								77.6		
IS	13C-1,2,3,7,8,9-HxCDD	1.33e+07	1.24 y	0.86	35:14	1.026	1574.5								79.3		
IS	13C-1,2,3,4,6,7,8-HpCDD	9.70e+06	1.07 y	0.64	38:41	1.126	1525.9								76.9		
IS	13C-OCDD	2.20e+07	0.86 y	0.78	42:01	1.223	2847.8								71.8		
IS	13C-2,3,7,8-TCDF	2.03e+07	0.74 y	0.92	26:13	0.992	1593.7								80.3		
IS	13C-1,2,3,7,8-PeCDF	2.39e+07	1.58 y	0.95	30:19	1.148	1824.8								92.0		
IS	13C-2,3,4,7,8-PeCDF	2.13e+07	1.61 y	0.97	31:13	1.181	1586.5								80.0		
IS	13C-1,2,3,4,7,8-HxCDF	1.64e+07	0.50 y	0.99	33:55	0.988	1680.1								84.7		
IS	13C-1,2,3,6,7,8-HxCDF	1.71e+07	0.51 y	1.10	34:03	0.992	1579.6								79.6		
IS	13C-2,3,4,6,7,8-HxCDF	1.56e+07	0.52 y	1.03	34:39	1.009	1534.5								77.3		
IS	13C-1,2,3,7,8,9-HxCDF	1.33e+07	0.51 y	0.86	35:38	1.038	1572.3								79.2		
IS	13C-1,2,3,4,6,7,8-HpCDF	1.04e+07	0.44 y	0.71	37:29	1.091	1479.3								74.5		
IS	13C-1,2,3,4,7,8,9-HpCDF	1.05e+07	0.44 y	0.71	39:15	1.143	1501.6								75.7		
IS	13C-OCDF	2.49e+07	0.90 y	0.87	42:15	1.230	2885.2								72.7		

C/Up 37Cl-2,3,7,8-TCDD 6.82e+06 1.21 27:00 1.022 691.53

87.1 Integrations

Reviewed

by

Analyst: MJ

Analyst:



Date: 10/23/14

Date: 10/24/14

Totals class: HpCDD EMPC

Entry #: 25

Run: 10 File: 141022D1 S: 5 I: 1 F: 4
Acquired: 22-OCT-14 18:44:48 Processed: 23-OCT-14 08:38:47

Total Concentration: 13.987 Unnamed Concentration: 8.159

RT	m1	Resp	m2	Resp	RA		Resp	Concentration	Name
----	----	------	----	------	----	--	------	---------------	------

37:51	2.202e+04		2.246e+04	0.98	y	4.448e+04		8.1589	
38:42	1.553e+04		1.624e+04	0.96	y	3.177e+04		5.8279	1,2,3,4,6,7,8-HpCDD

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 10 File: 141022D1 S: 5 I: 1 F: 1
Acquired: 22-OCT-14 18:44:48 Processed: 23-OCT-14 08:38:47

Total Concentration: 0.53231 Unnamed Concentration: 0.532

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
----	----	------	----	------	----	------	---------------	------

27:57	6.938e+03		2.532e+03	2.74	n	6.457e+03	0.53231	
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Totals class: HxCDF EMPC

Entry #: 33

Run: 10 File: 141022D1 S: 5 I: 1 F: 3
Acquired: 22-OCT-14 18:44:48 Processed: 23-OCT-14 08:38:47

Total Concentration: 0.88609 Unnamed Concentration: 0.886

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
32:54	7.001e+03	4.012e+03	1.75	n	8.986e+03	0.88609

Totals class: HpCDF EMPC

Entry #: 35

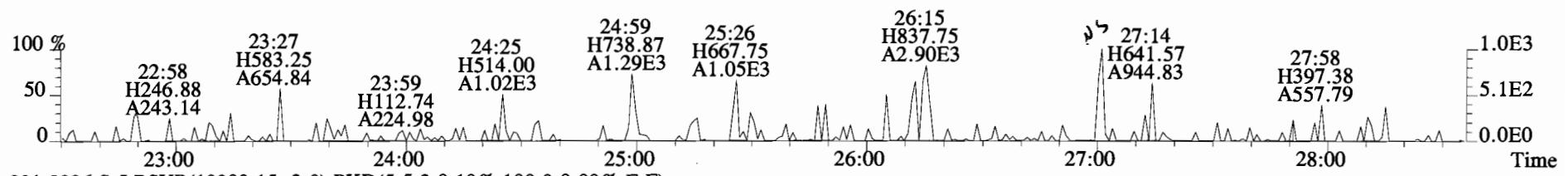
Run: 10 File: 141022D1 S: 5 I: 1 F: 4
Acquired: 22-OCT-14 18:44:48 Processed: 23-OCT-14 08:38:47

Total Concentration: 2.5710 Unnamed Concentration: 1.201

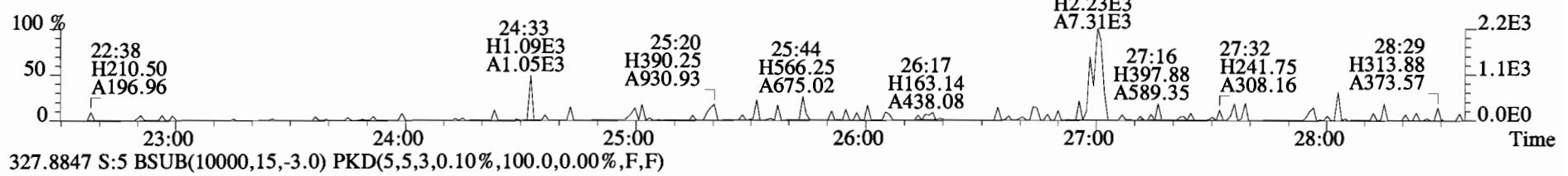
RT	m1 Resp	m2 Resp RA	Resp Concentration	Name
----	---------	------------	--------------------	------

37:29	7.918e+03	5.697e+03	1.39 n	1.162e+04	1.3696	1,2,3,4,6,7,8-HpCDF
38:04	5.107e+03	4.841e+03	1.05 y	9.948e+03	1.2014	

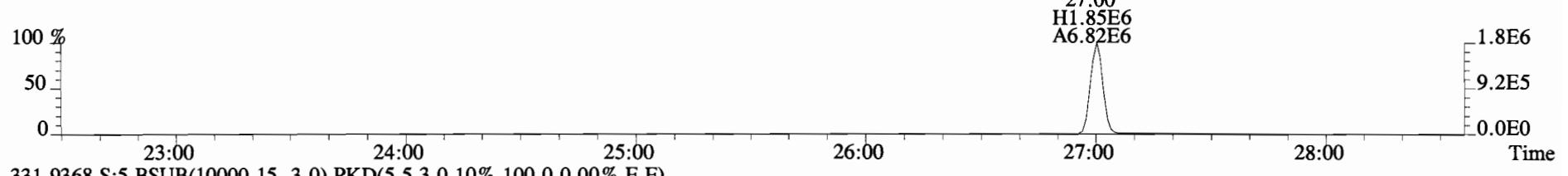
File:141022D1 #1-551 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
 319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



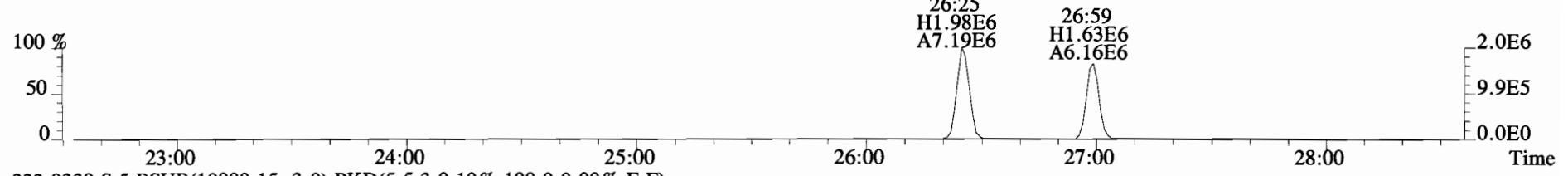
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



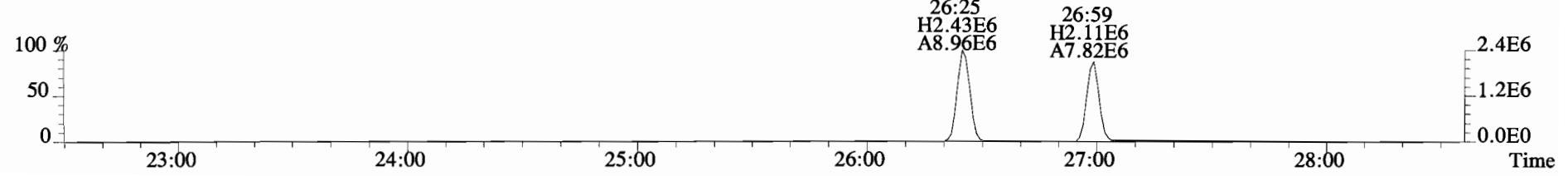
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



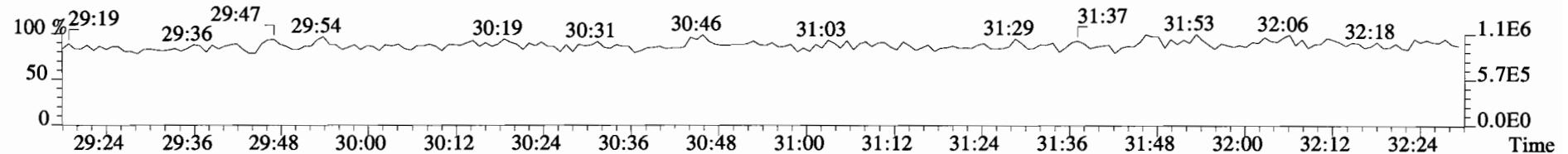
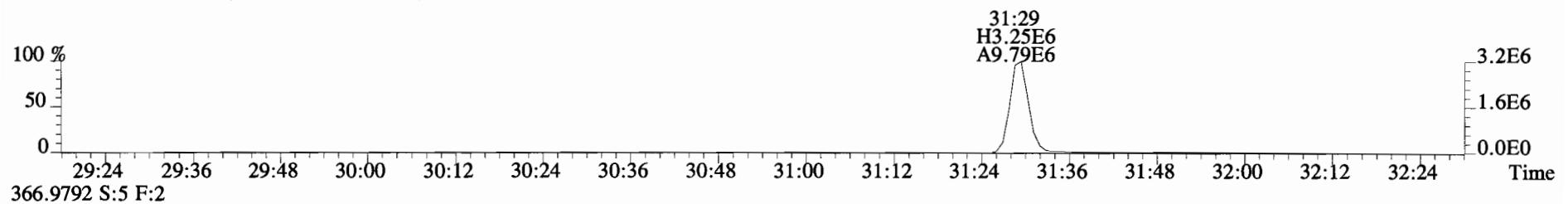
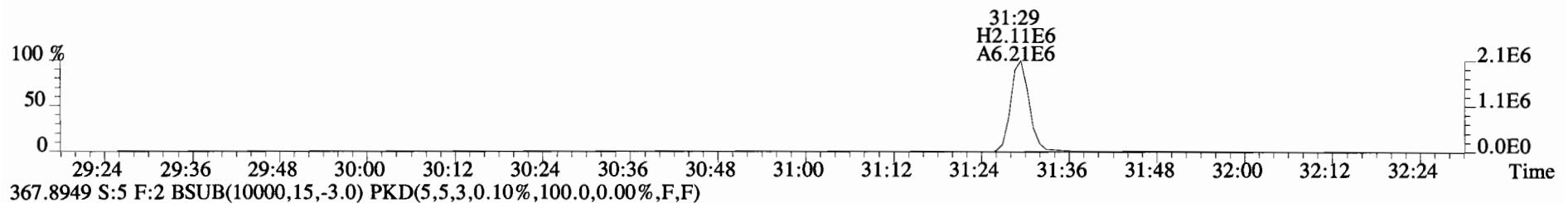
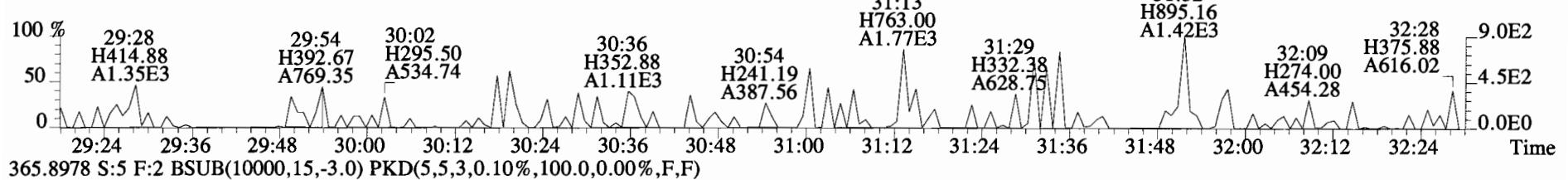
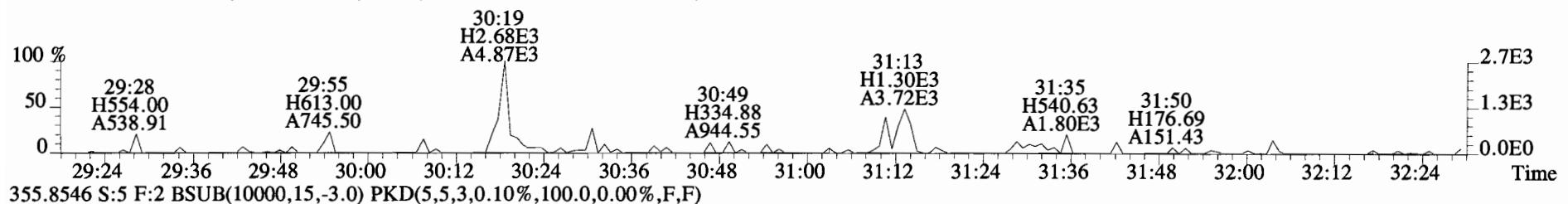
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



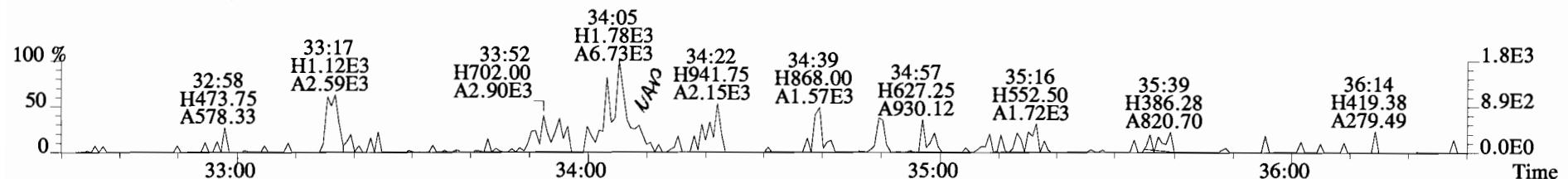
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



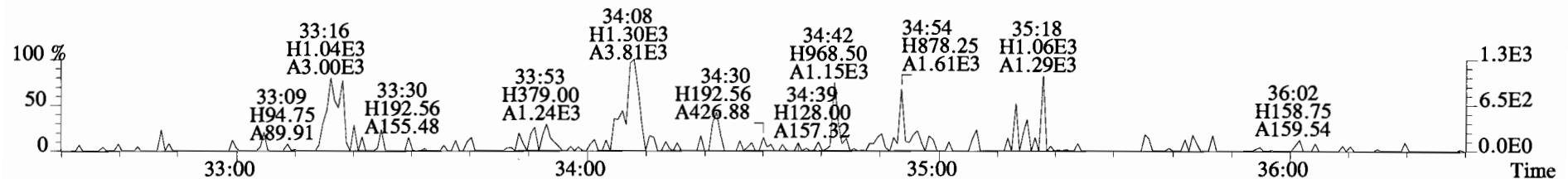
File:141022D1 #1-256 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
 353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



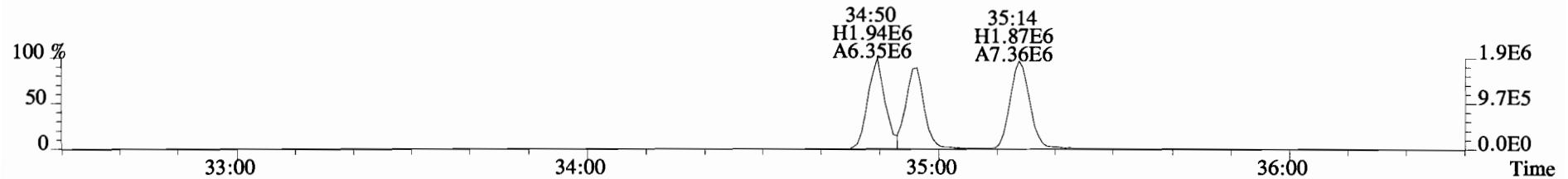
File:141022D1 #1-386 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
 389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



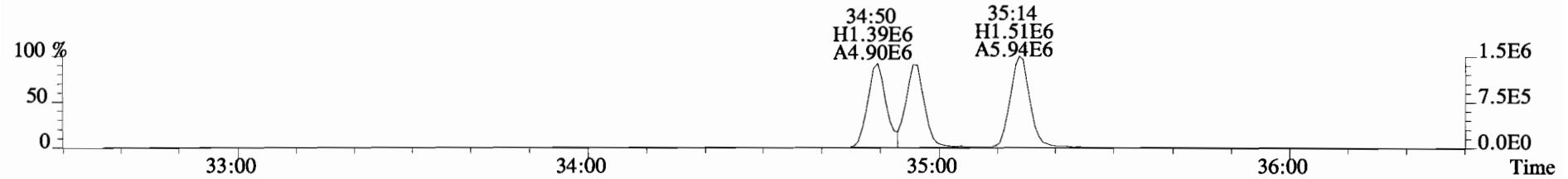
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



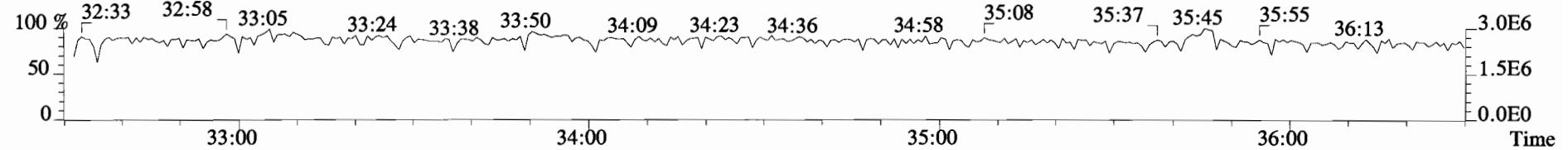
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



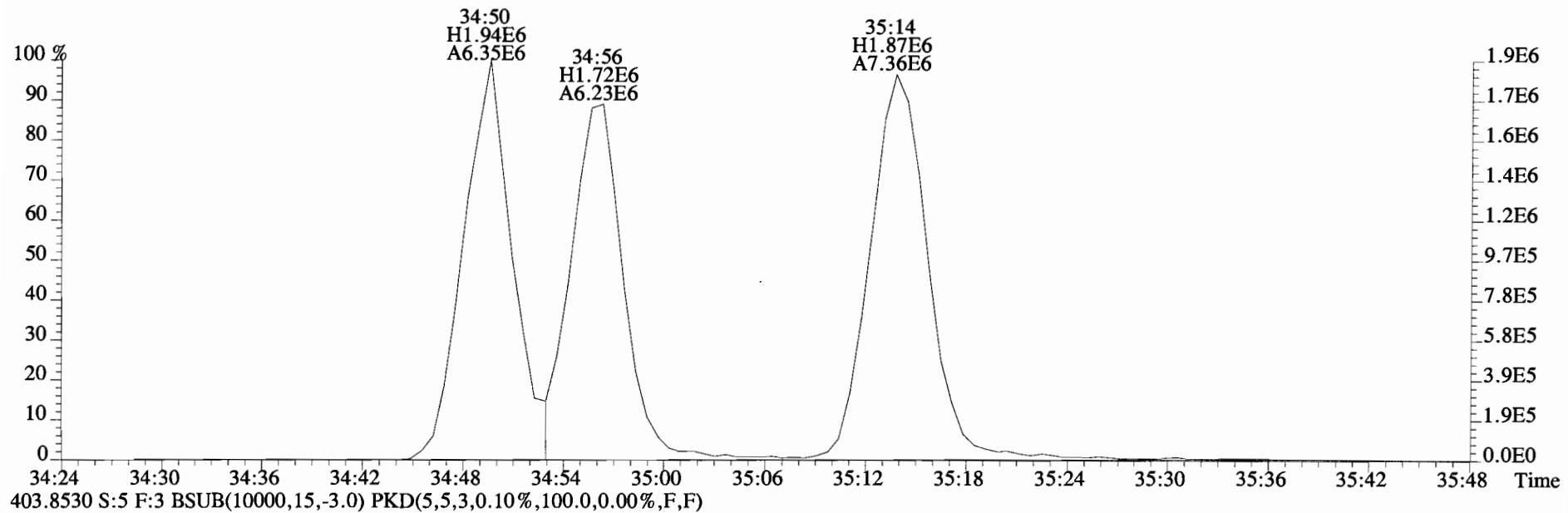
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



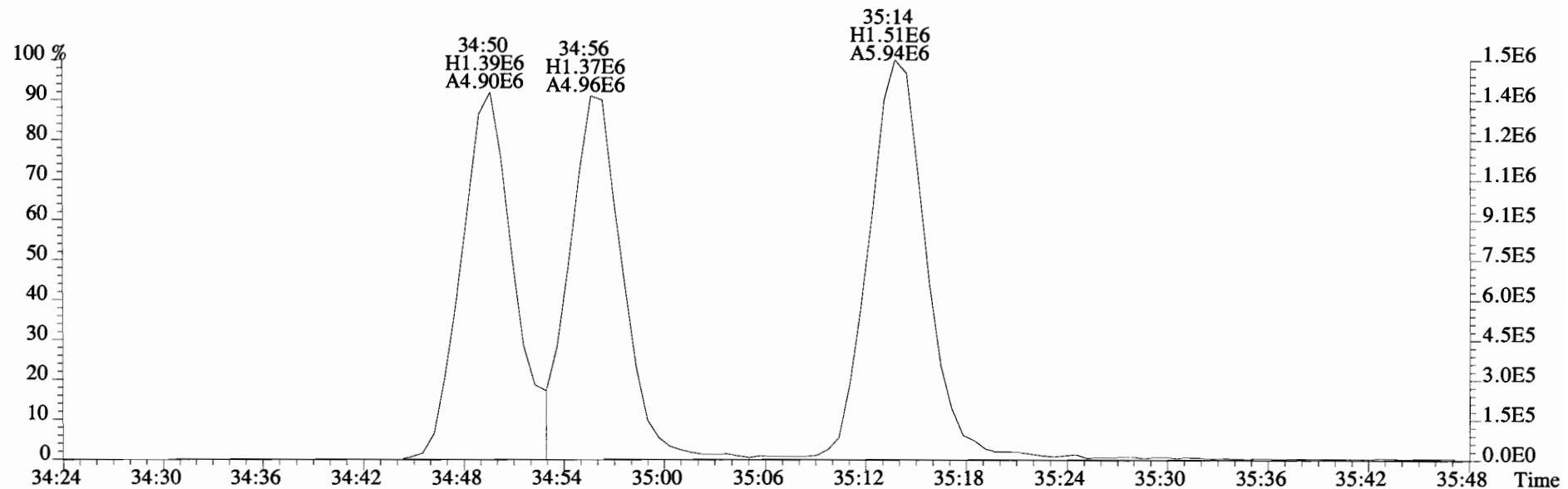
380.9760 S:5 F:3



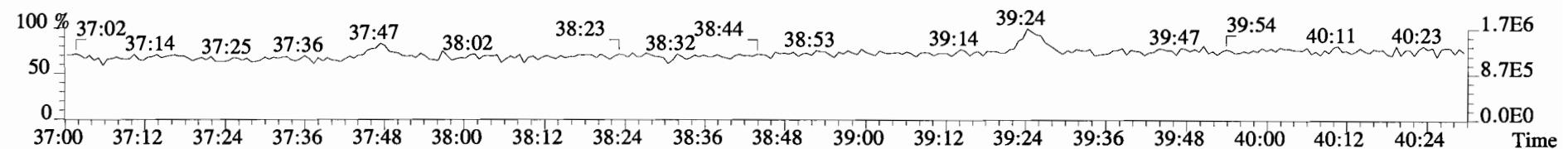
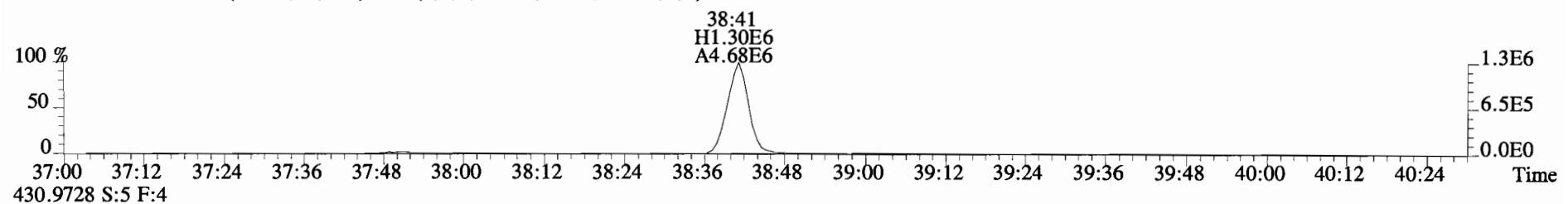
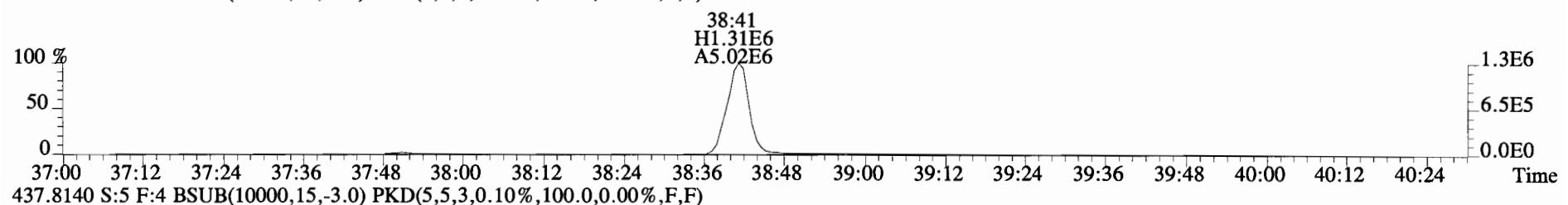
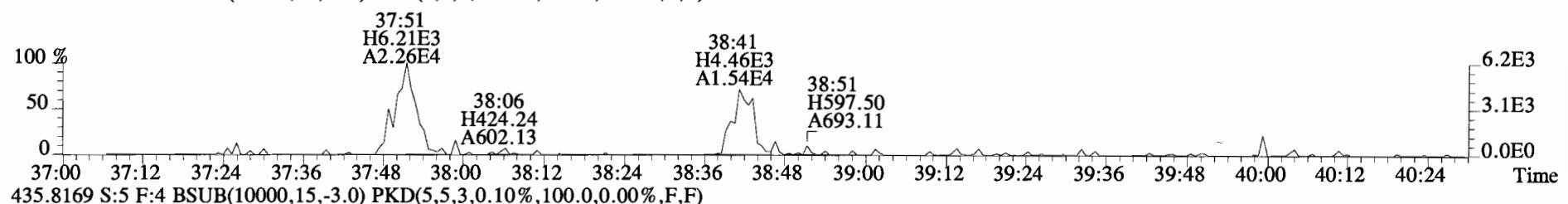
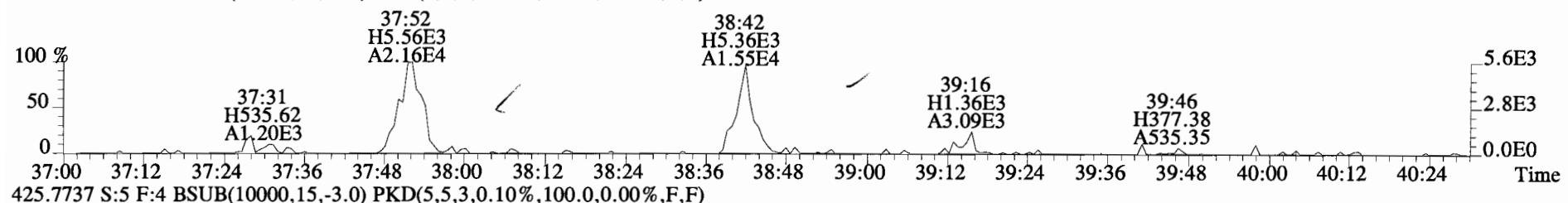
File:141022D1 #1-386 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



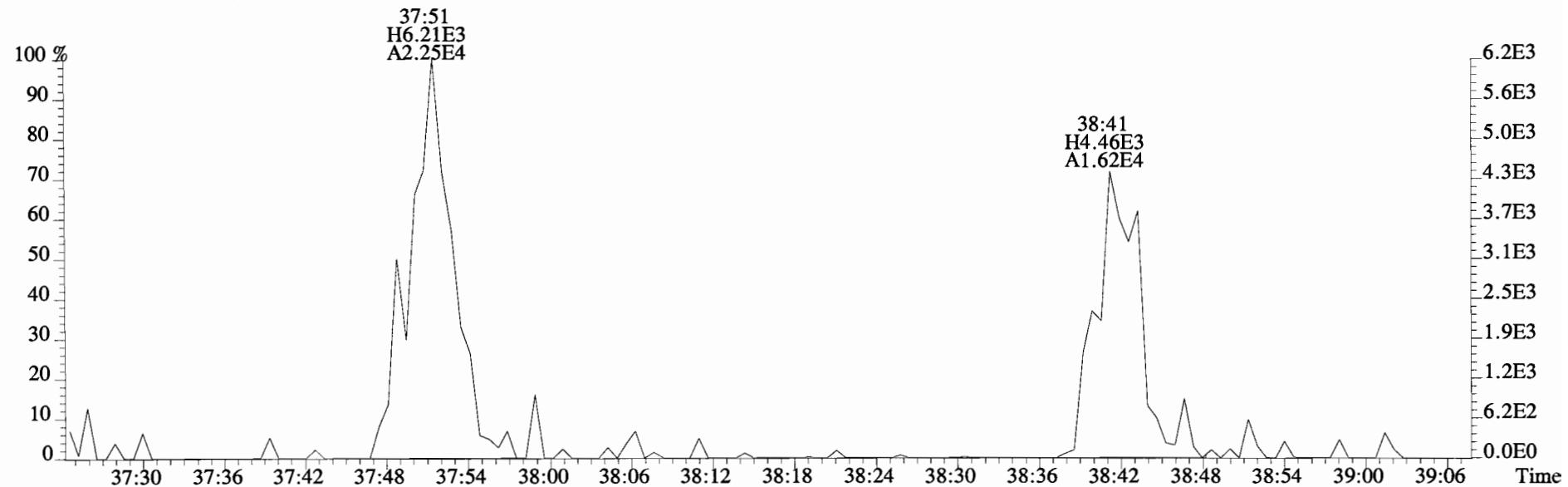
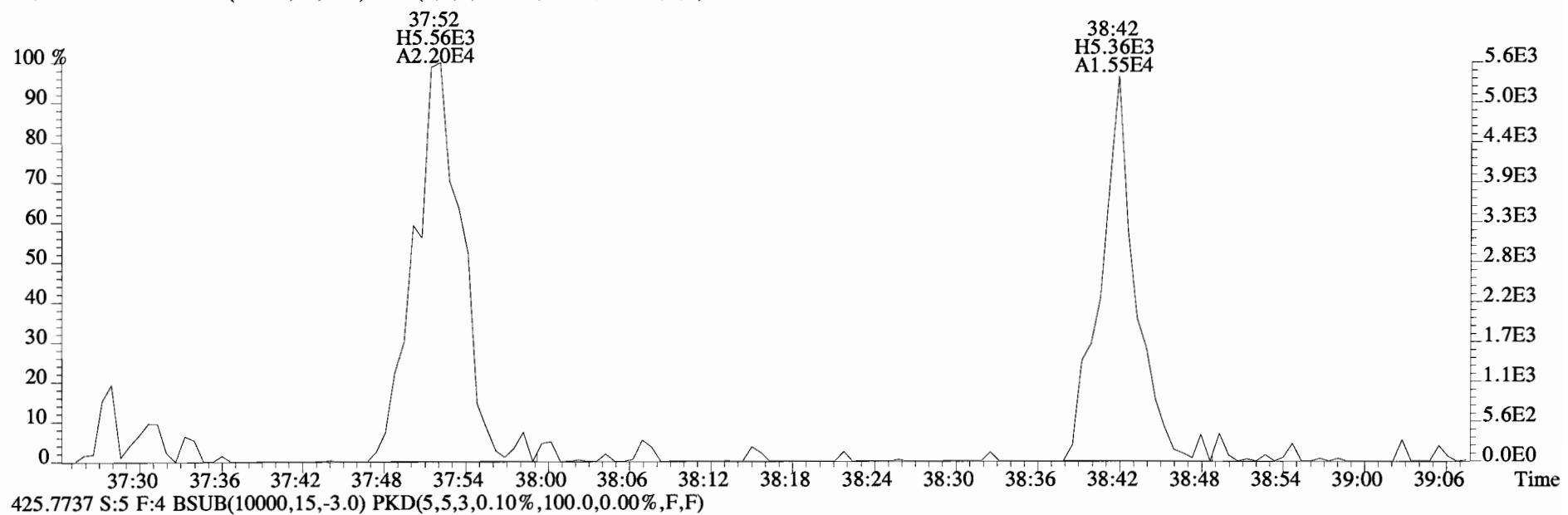
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



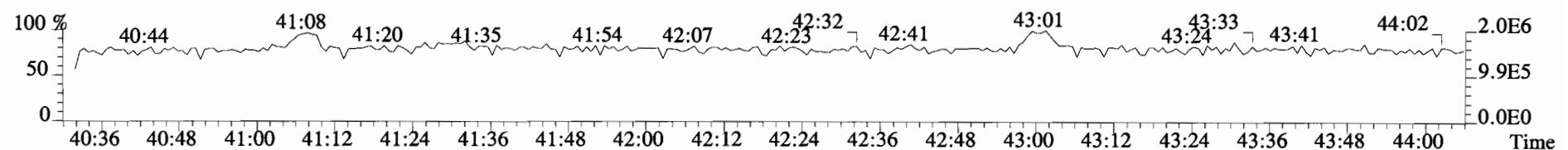
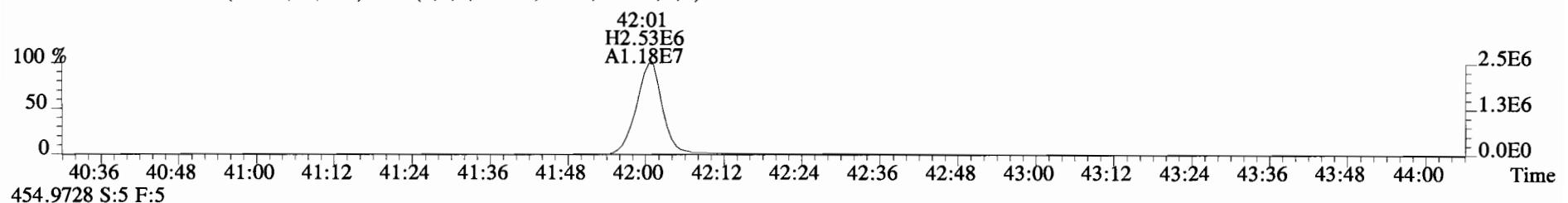
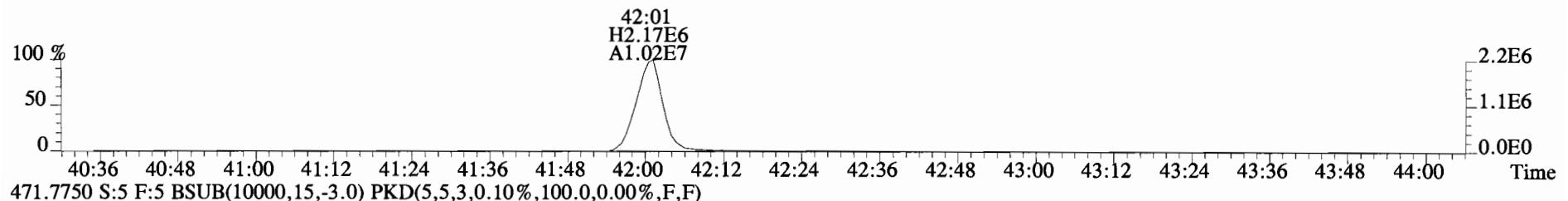
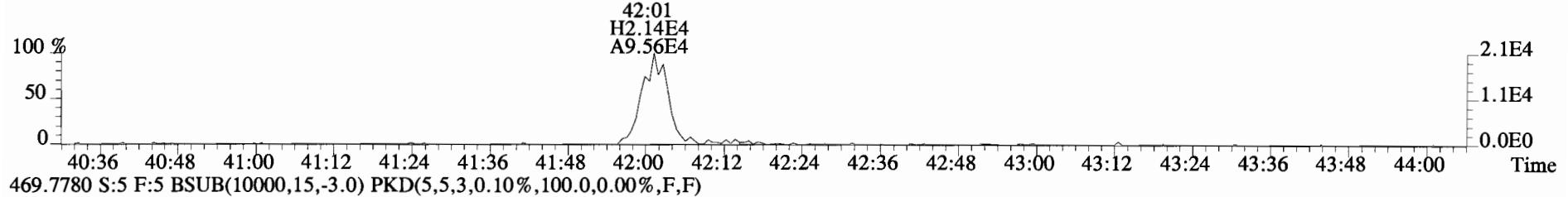
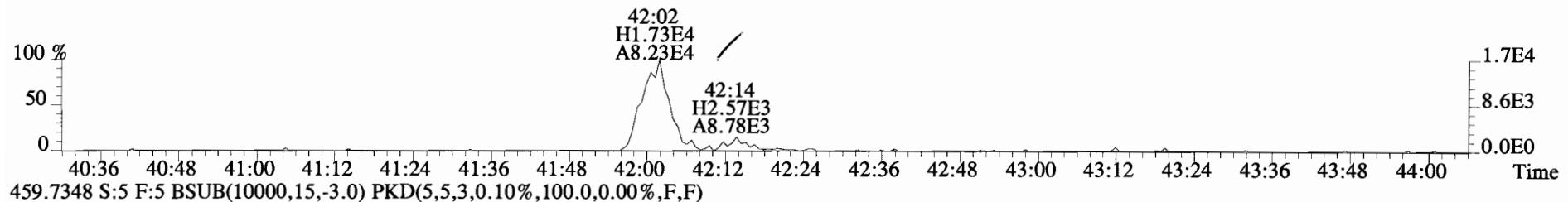
File:141022D1 #1-325 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
 423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



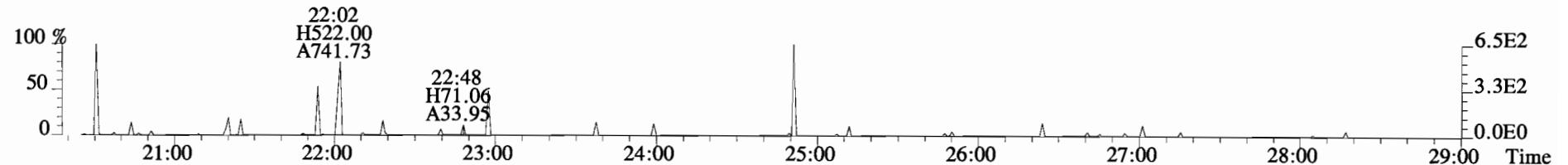
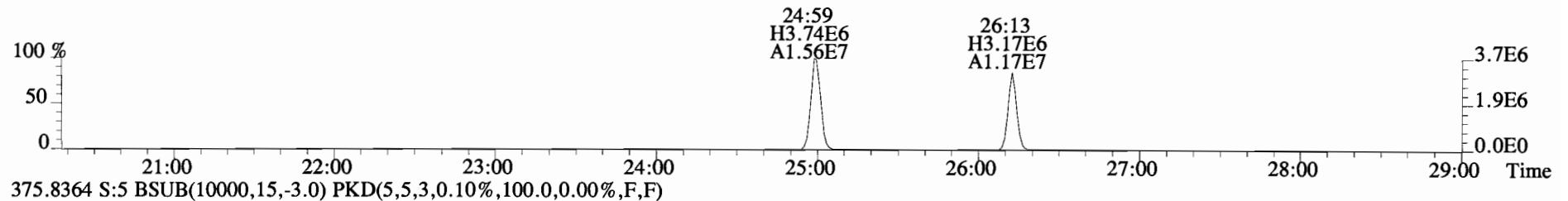
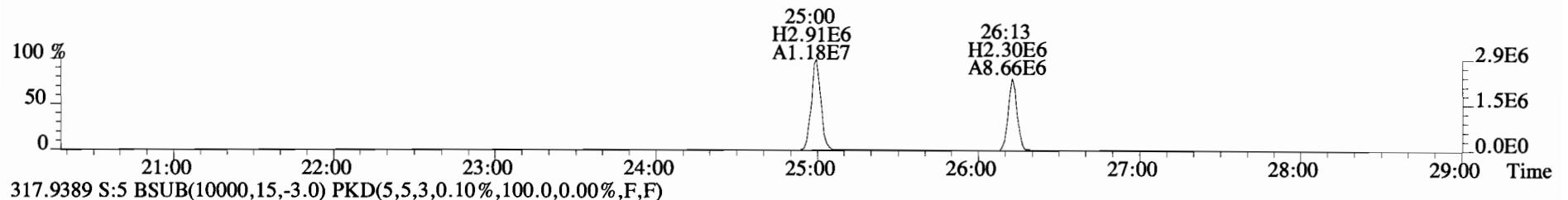
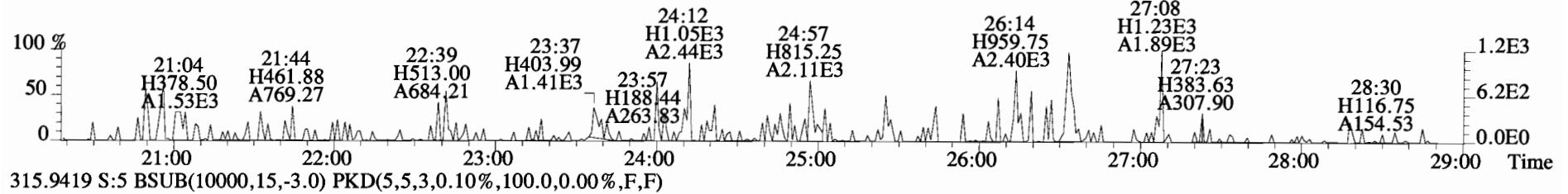
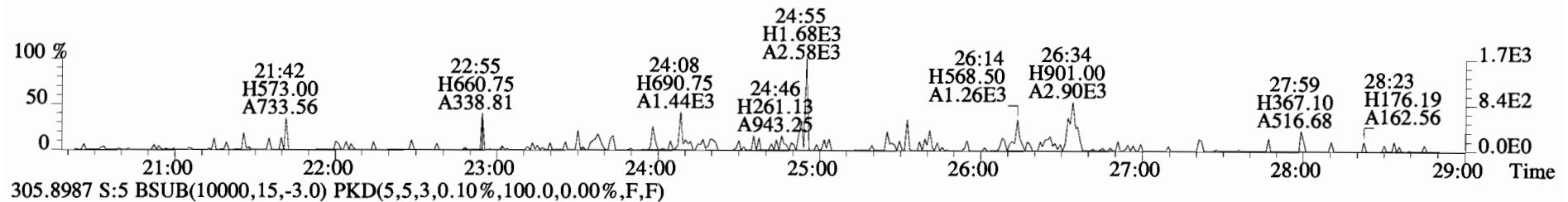
File:141022D1 #1-325 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



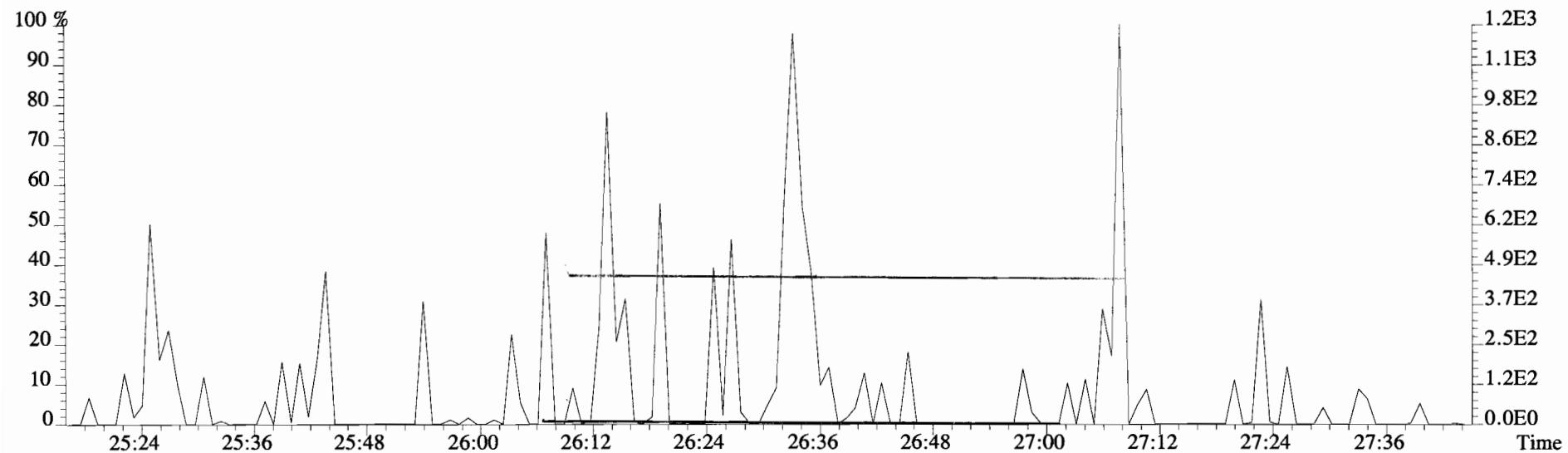
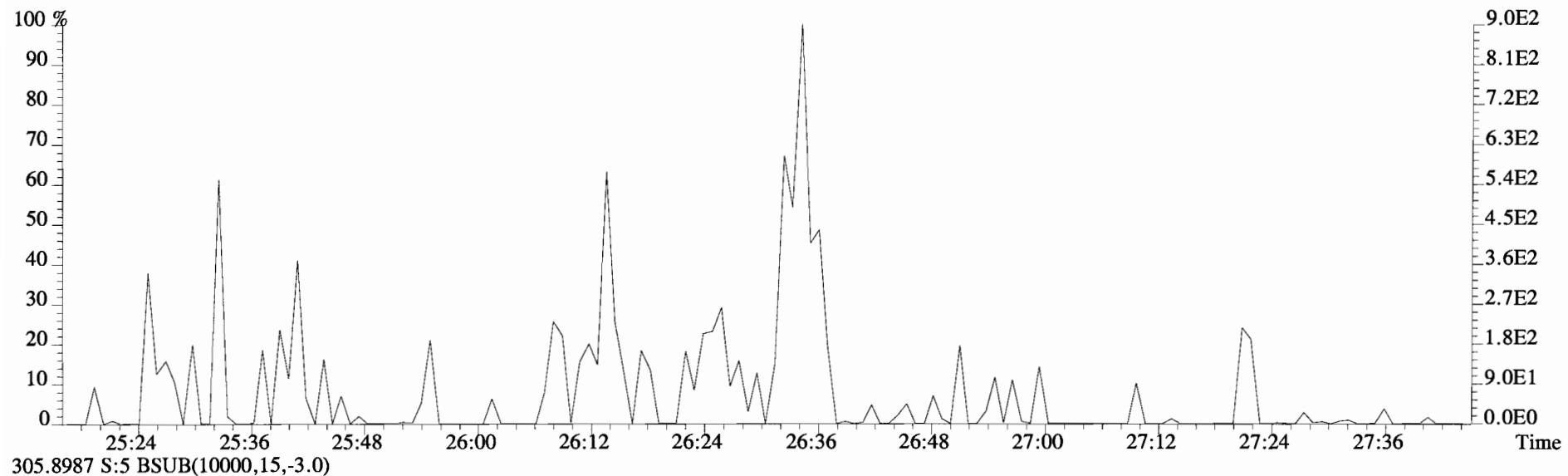
File:141022D1 #1-389 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
 457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



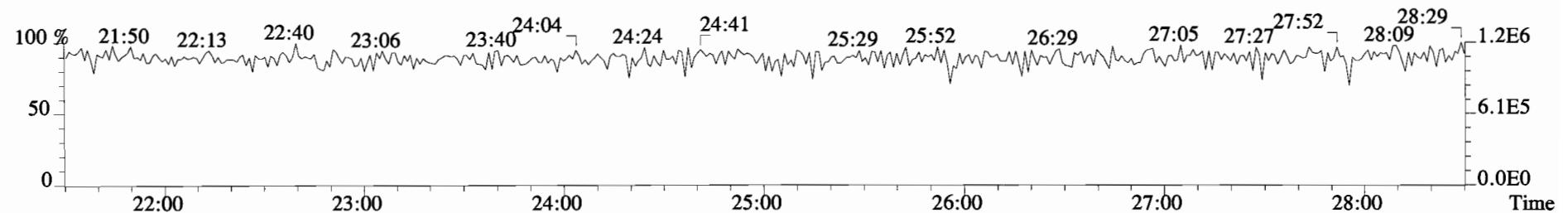
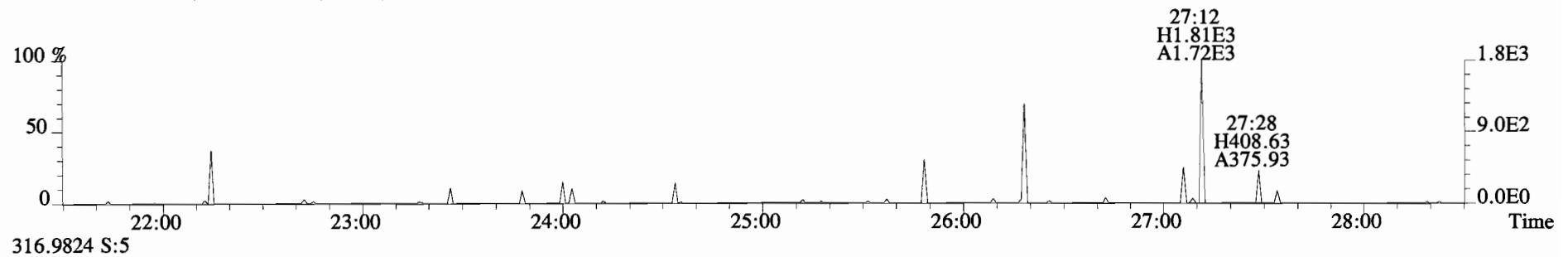
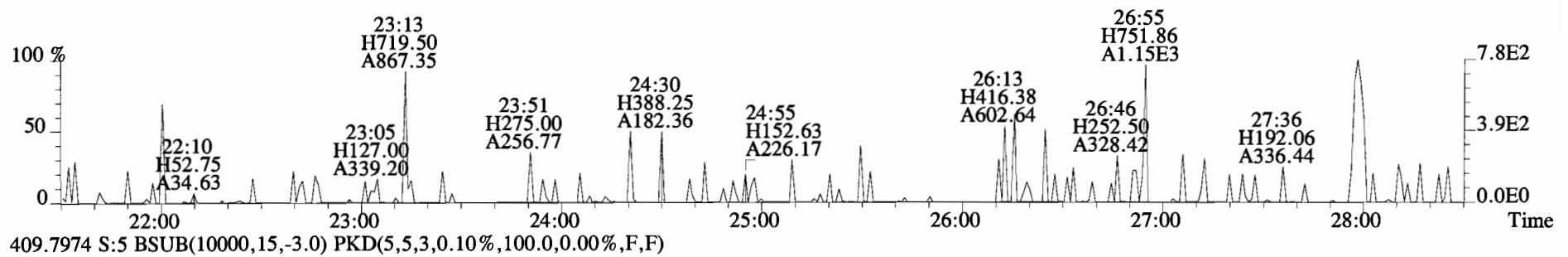
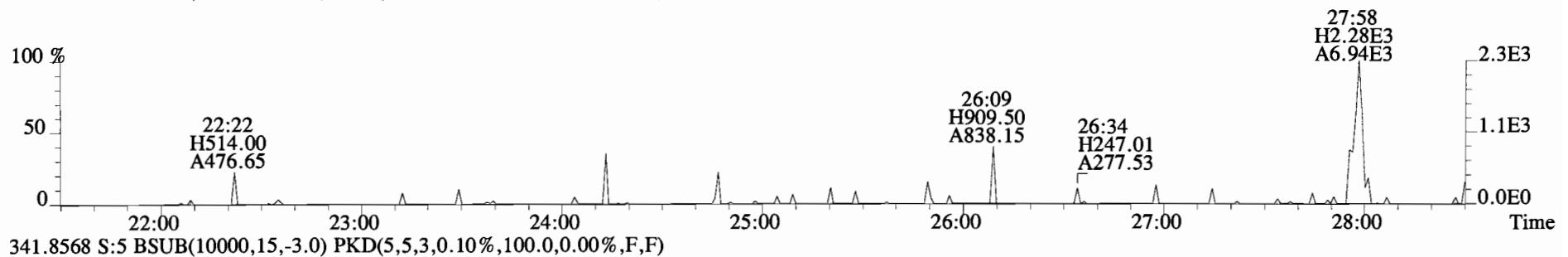
File:141022D1 #1-551 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



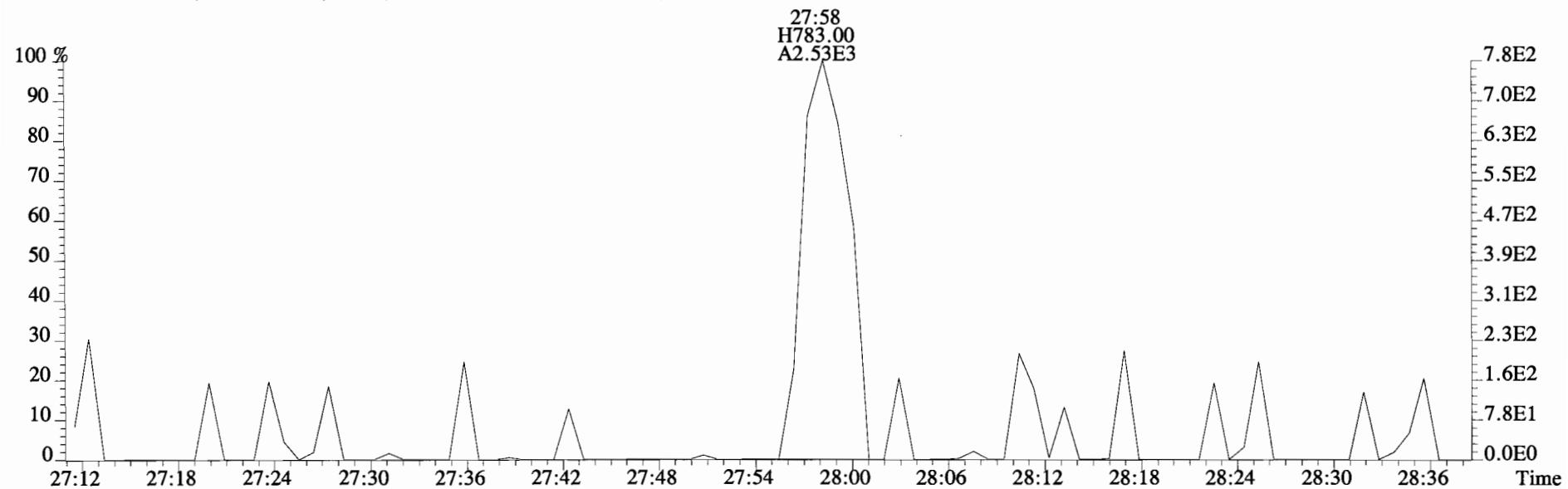
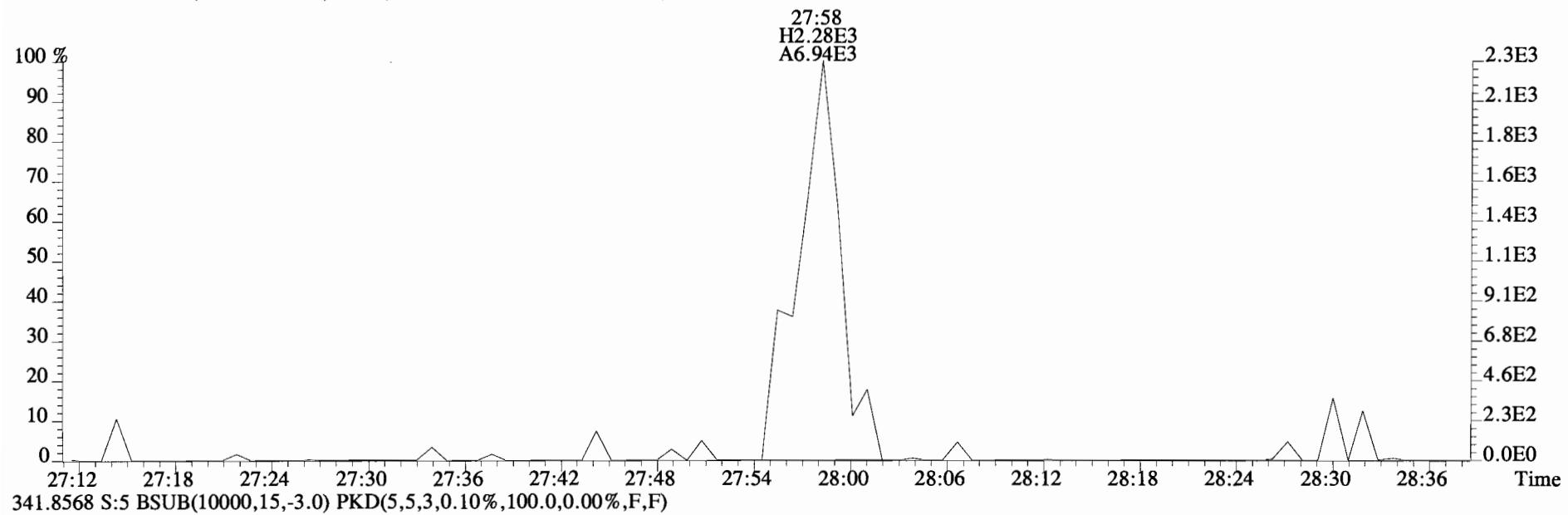
File:141022D1 #1-551 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0)



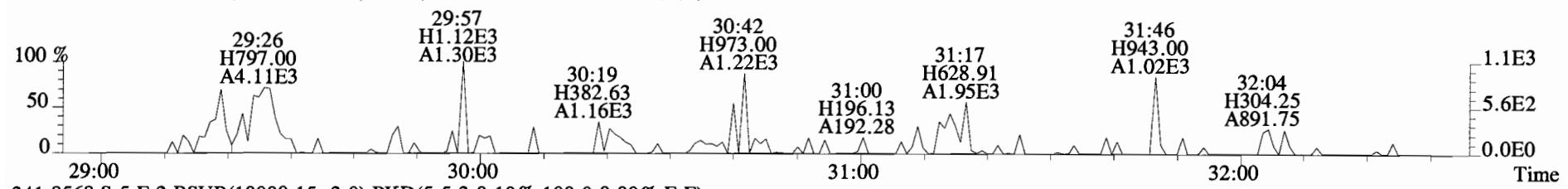
File:141022D1 #1-551 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
 339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



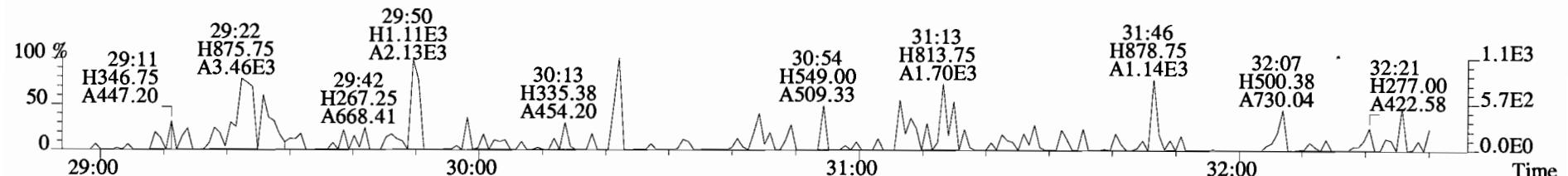
File:141022D1 #1-551 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



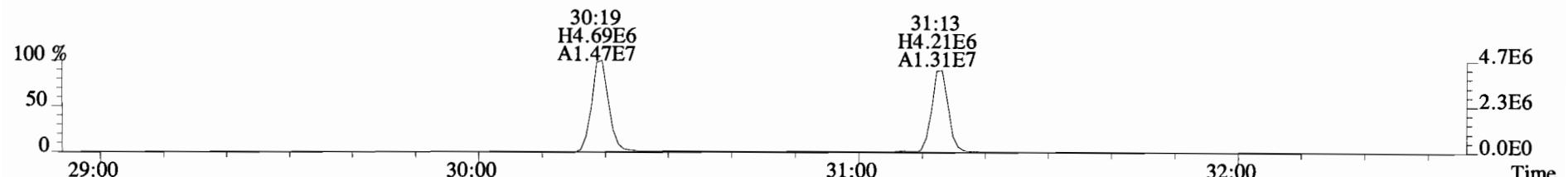
File:141022D1 #1-256 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
 339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



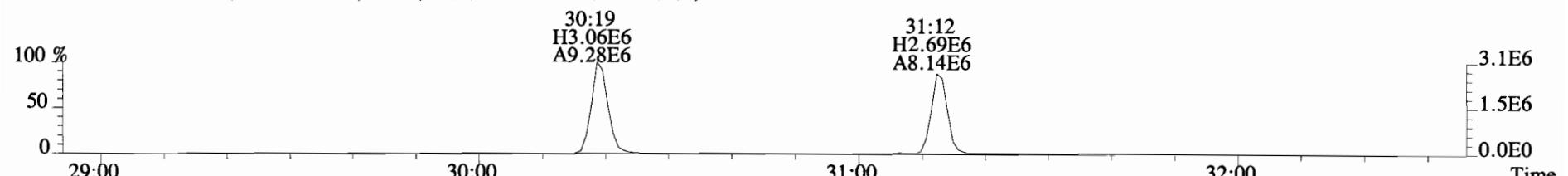
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



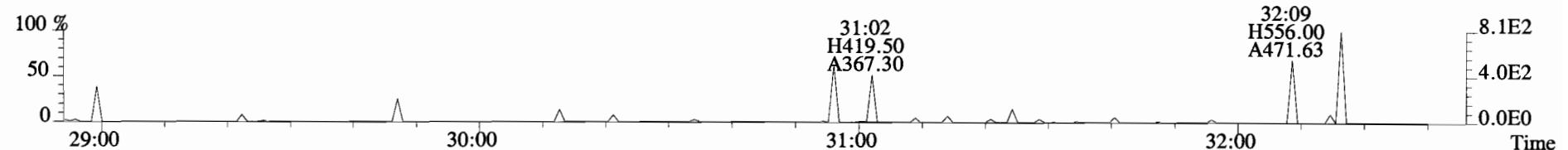
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



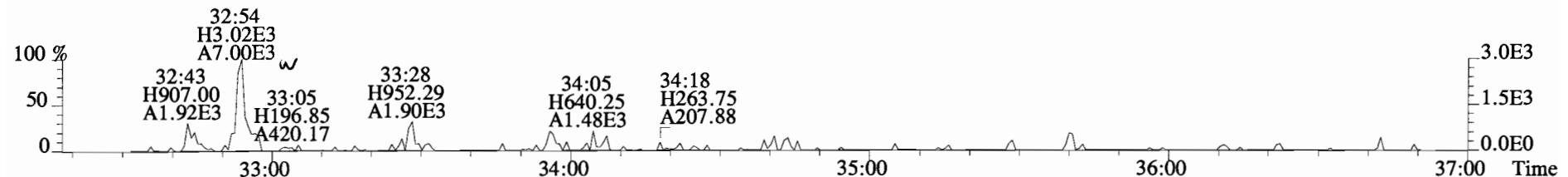
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



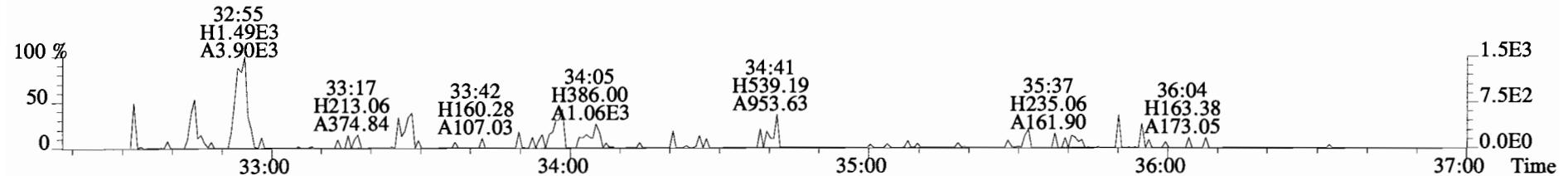
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



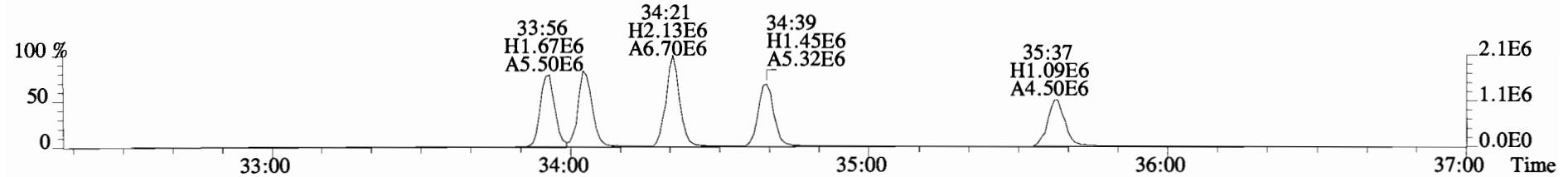
File:141022D1 #1-386 Acq:22-OCT-2014 18:44:48 GC EI + Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
 373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



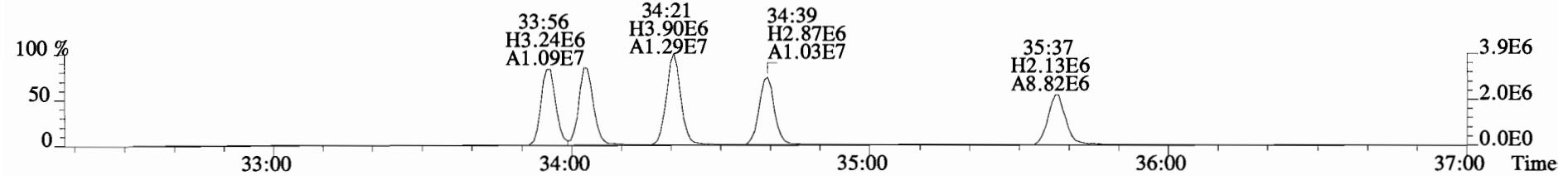
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



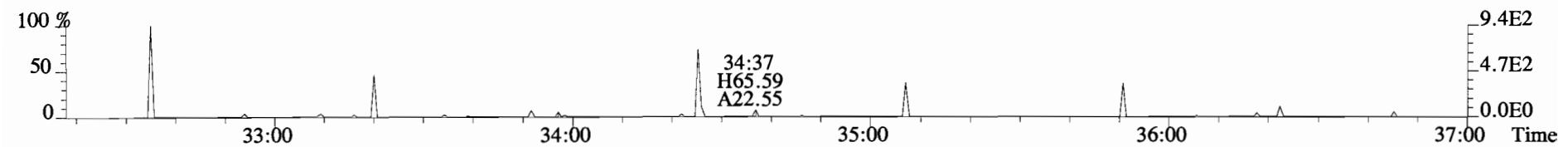
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



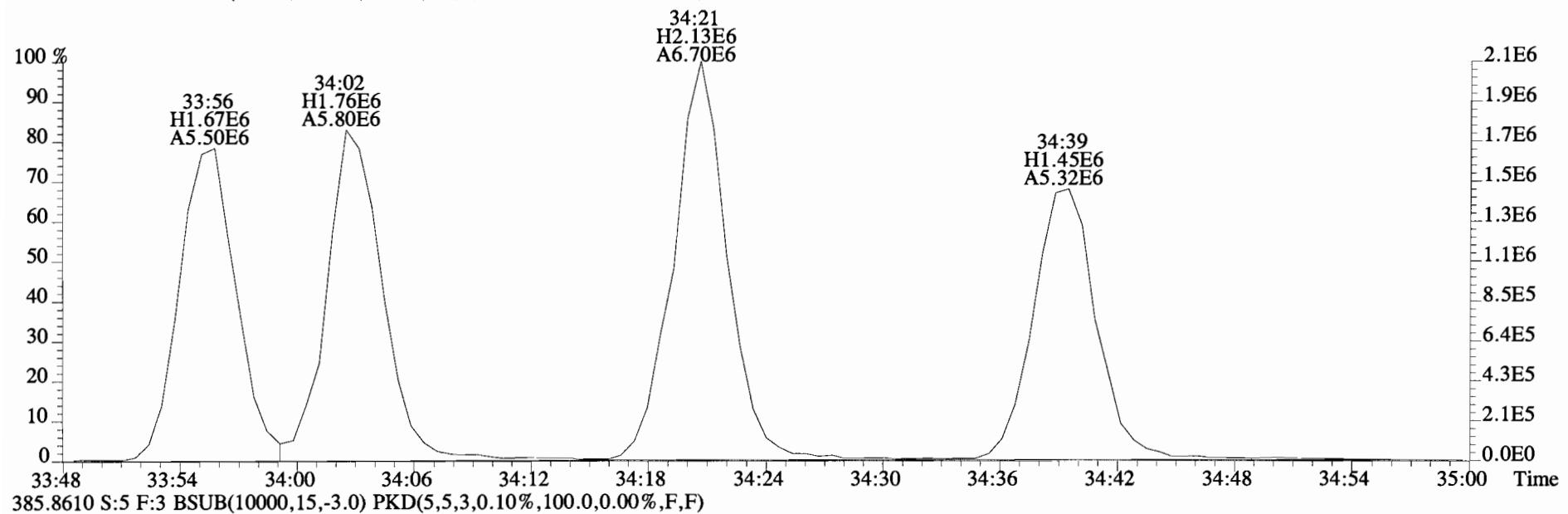
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



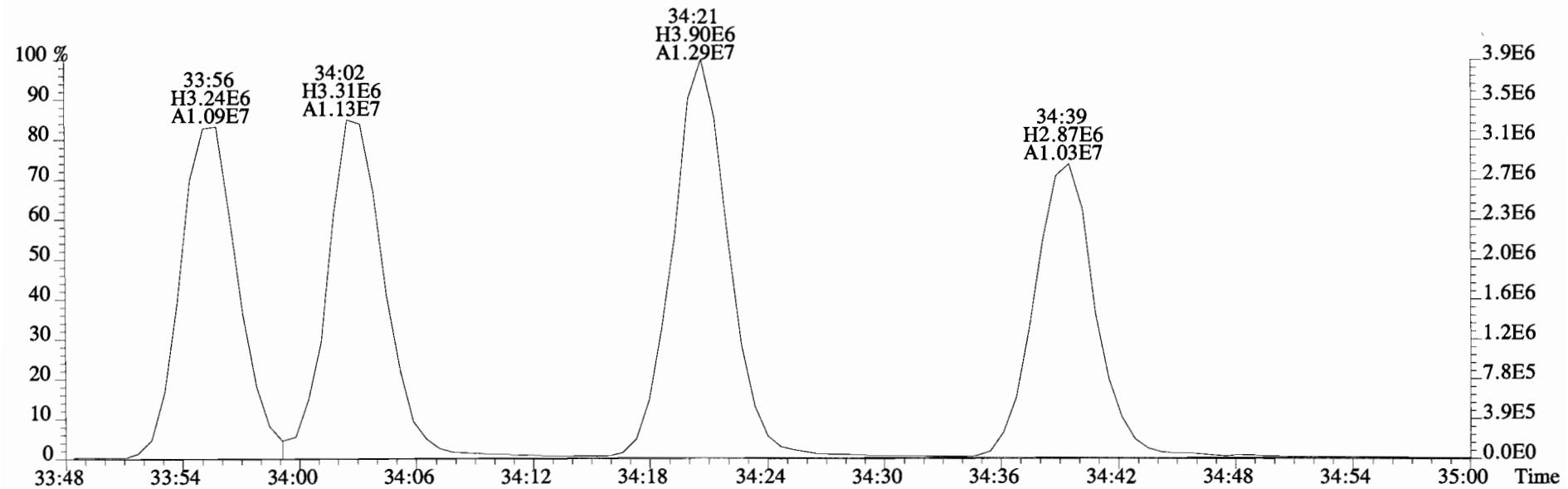
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



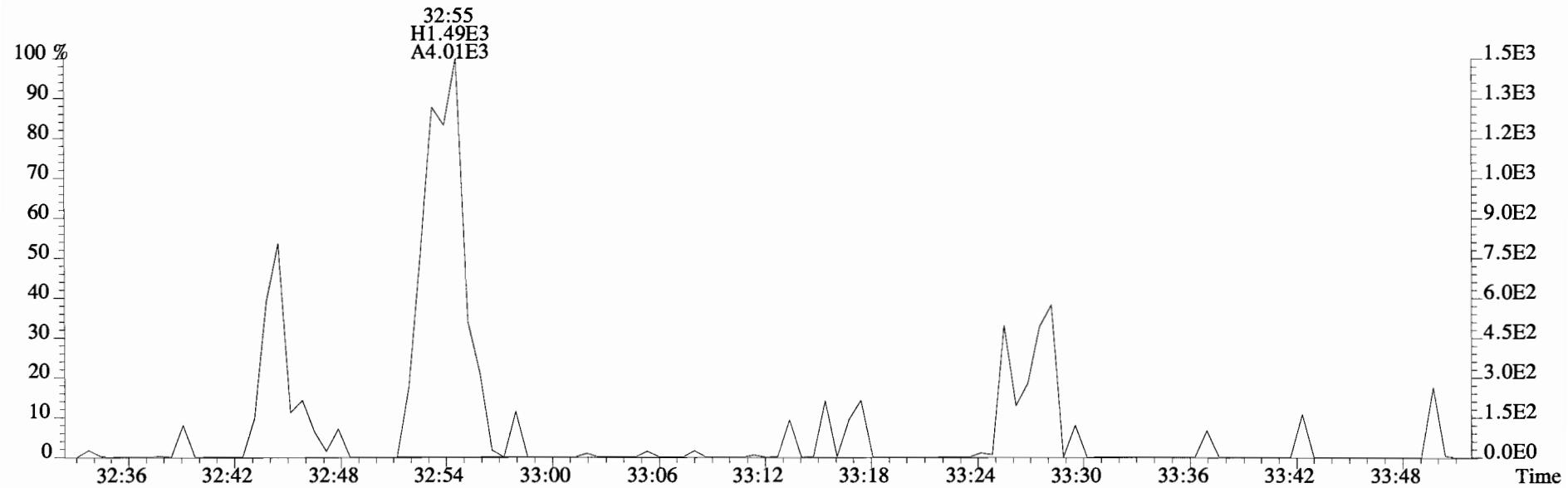
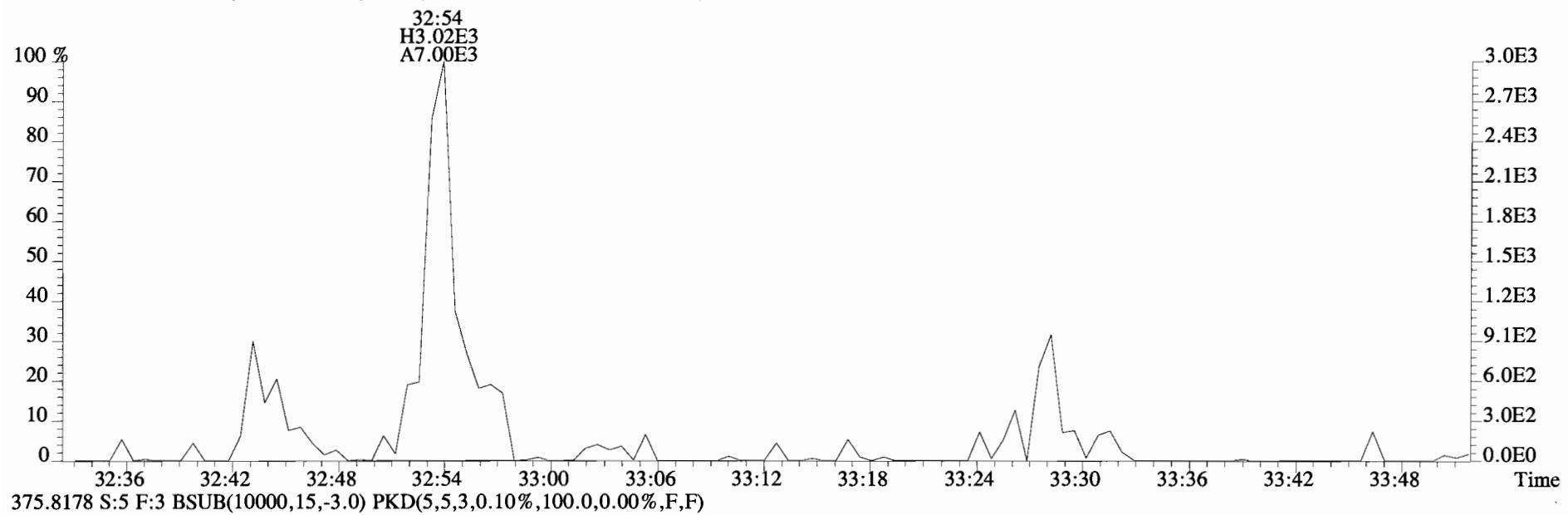
File:141022D1 #1-386 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



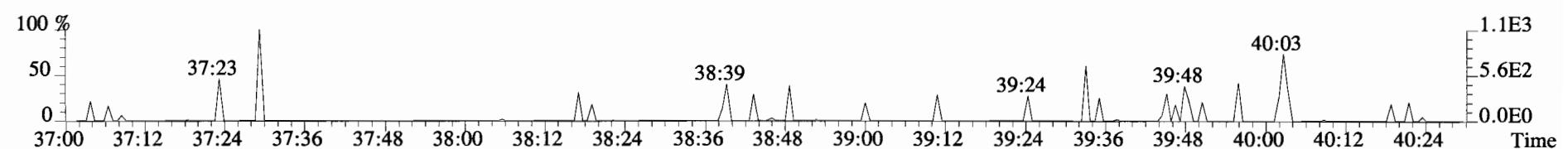
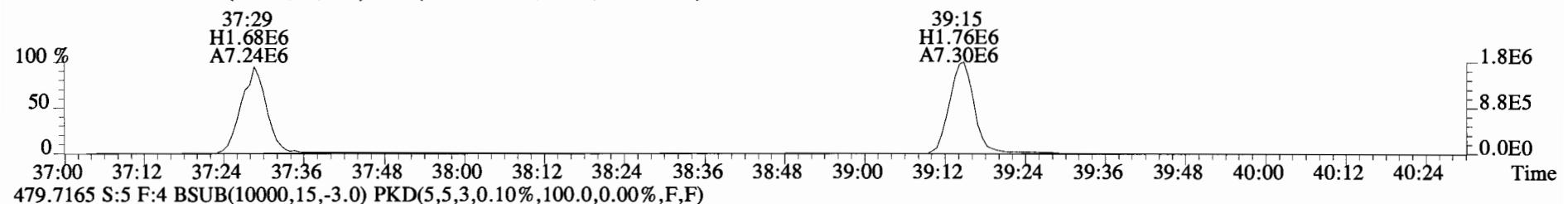
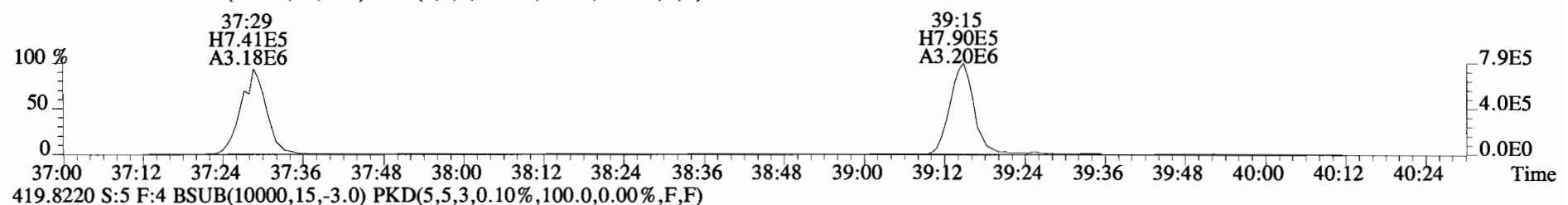
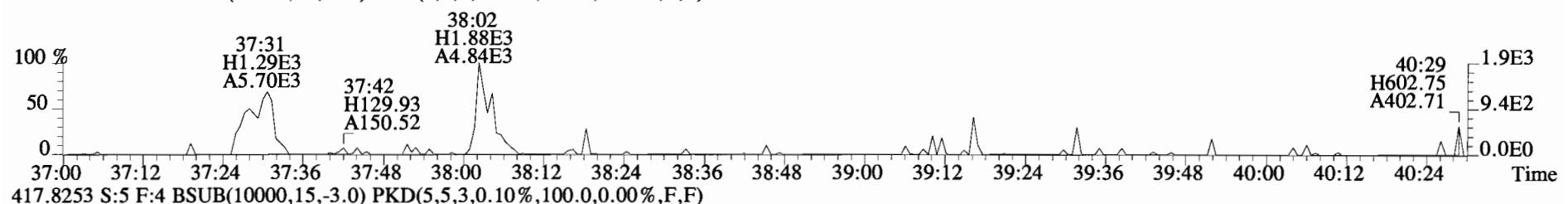
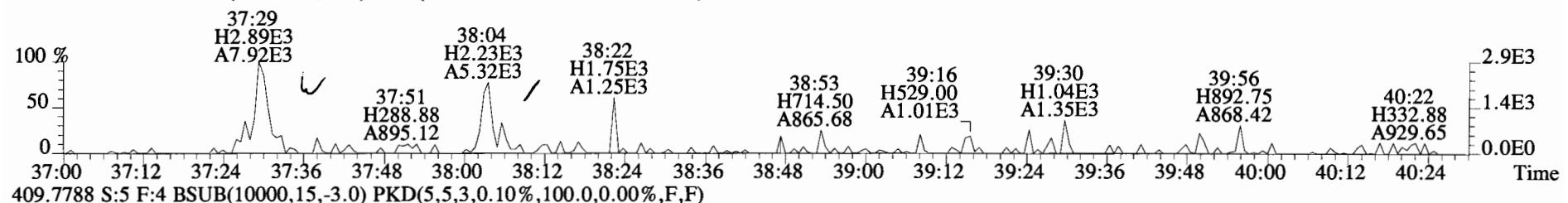
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



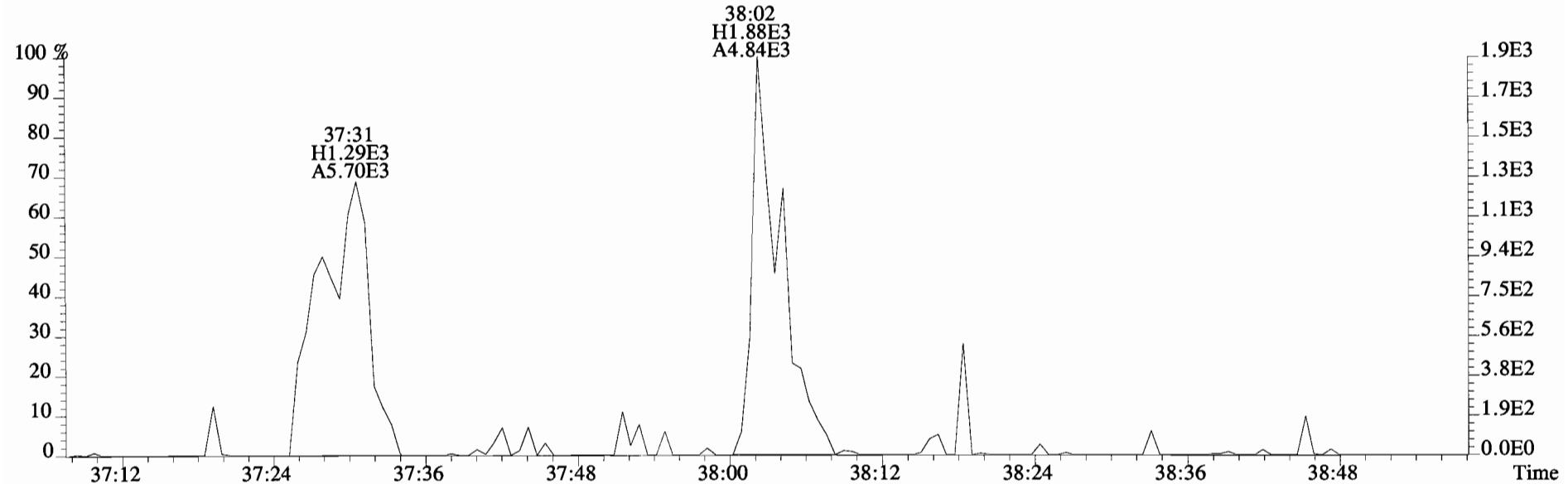
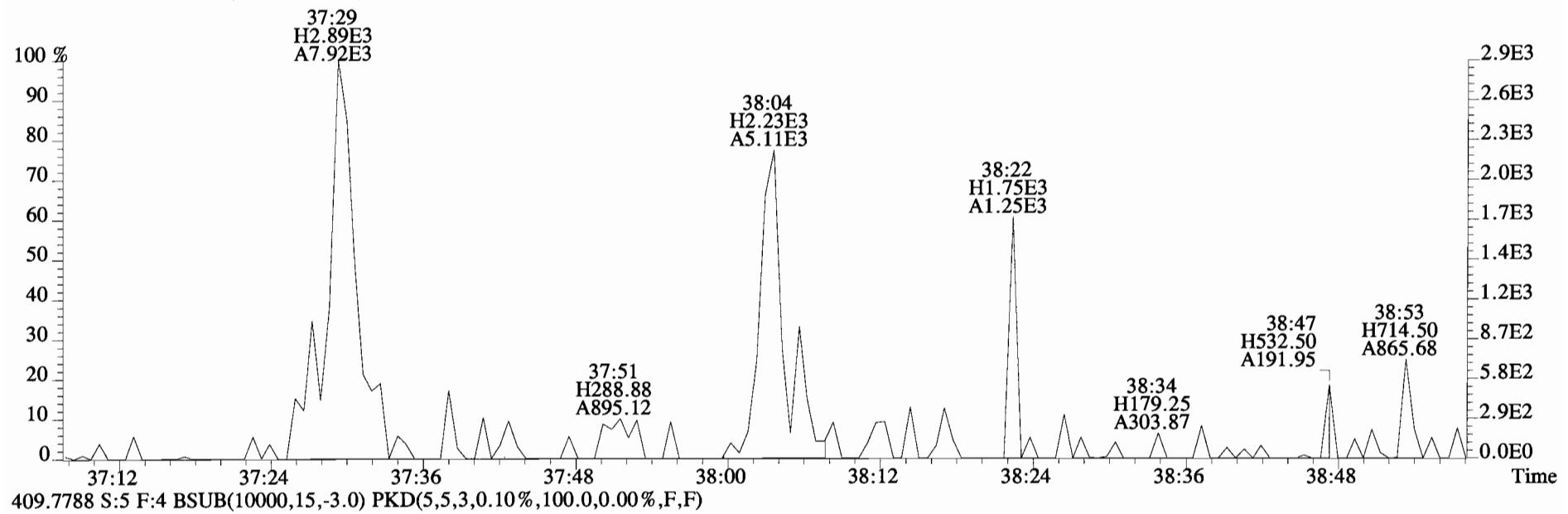
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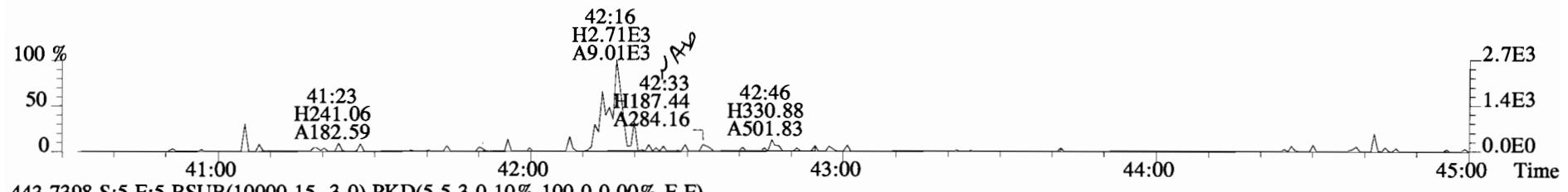
File:141022D1 #1-325 Acq:22-OCT-2014 18:44:48 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
 407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



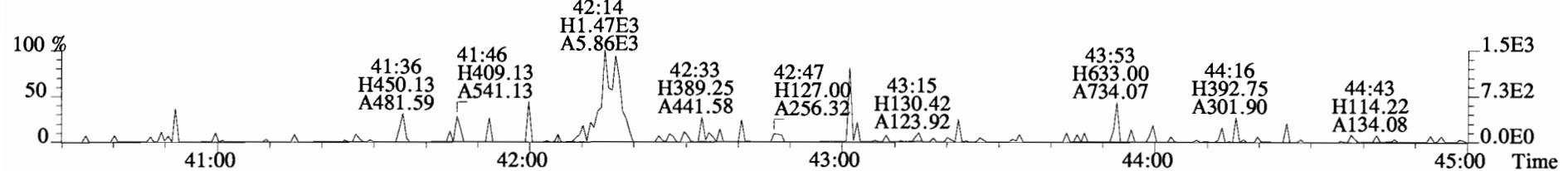
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407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



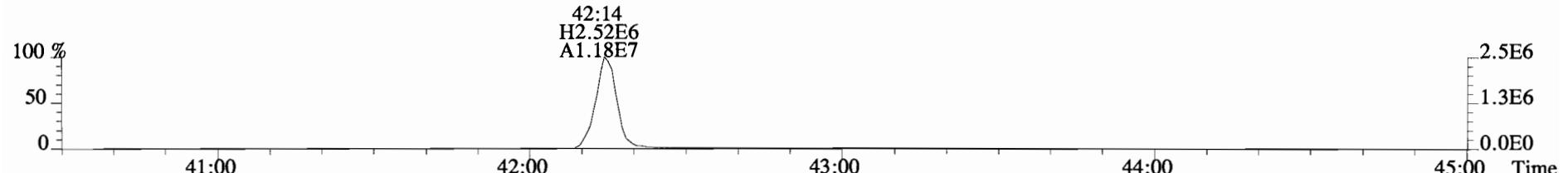
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 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400762-01 CC-A-01-20141013-W 1.00792 Exp:OCDD_DB5
 441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



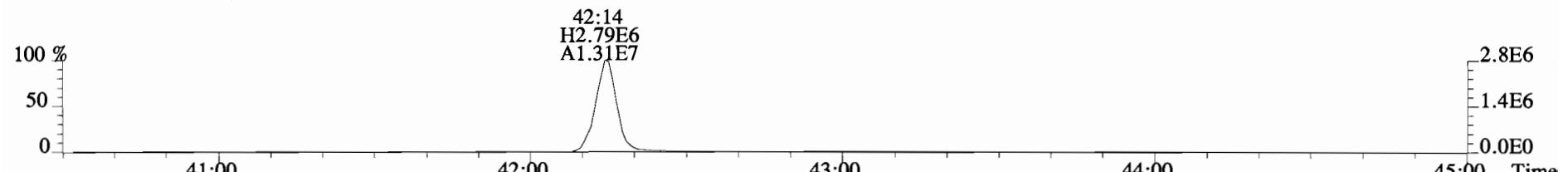
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



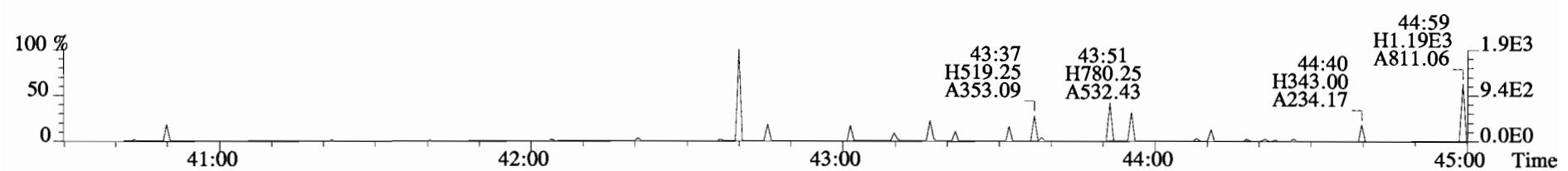
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: CC-FD-02-20141013-W
 Lab ID: 1400762-02

Filename: 141022D1 S:6 Acq:22-OCT-14 19:33:10
 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.003

ConCal: ST141022D1-1
 EndCAL: NA

Page 5 of 5

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	*	* n	1.18	NotF _q	*	*		632	2.5	1.30	Total Tetra-Dioxins	*	*	632	1.30	
	1,2,3,7,8-PeCDD	*	* n	0.92	NotF _q	*	*		478	2.5	0.770	Total Penta-Dioxins	*	*	734	1.18	
	1,2,3,4,7,8-HxCDD	*	* n	1.09	NotF _q	*	*		645	2.5	2.24	Total Hexa-Dioxins	*	*	1030	3.70	
	1,2,3,6,7,8-HxCDD	*	* n	1.07	NotF _q	*	*		645	2.5	2.31	Total Hepta-Dioxins	5.82	11.5	*	*	
	1,2,3,7,8,9-HxCDD	*	* n	0.93	NotF _q	*	*		645	2.5	2.44	Total Tetra-Furans	*	*	1050	1.73	
	1,2,3,4,6,7,8-HpCDD	3.24e+04	0.99 y	1.12	38:42	1.000	5.8165	*	2.5	*		Total Penta-Furans	0.0000	0.46175	*	*	
	OCDD	1.69e+05	0.87 y	0.95	42:01	1.000	33.897	*	2.5	*		Total Hexa-Furans	*	0.960	*	*	
												Total Hepta-Furans	*	*	1330	2.70	
	2,3,7,8-TCDF	*	* n	1.08	NotF _q	*	*		1050	2.5	1.73						
	1,2,3,7,8-PeCDF	*	* n	1.09	NotF _q	*	*		907	2.5	1.44						
	2,3,4,7,8-PeCDF	*	* n	1.04	NotF _q	*	*		907	2.5	1.69						
	1,2,3,4,7,8-HxCDF	*	* n	1.39	NotF _q	*	*		741	2.5	0.807						
	1,2,3,6,7,8-HxCDF	*	* n	1.26	NotF _q	*	*		741	2.5	0.912						
	2,3,4,6,7,8-HxCDF	*	* n	1.30	NotF _q	*	*		416	2.5	0.591						
	1,2,3,7,8,9-HxCDF	*	* n	1.19	NotF _q	*	*		416	2.5	0.817						
	1,2,3,4,6,7,8-HpCDF	*	* n	1.62	NotF _q	*	*		1140	2.5	2.37						
	1,2,3,4,7,8,9-HpCDF	*	* n	1.53	NotF _q	*	*		402	2.5	0.790						
	OCDF	*	* n	1.10	NotF _q	*	*		1800	1.0	2.50						
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.33e+07	0.80 y	1.07	26:59	1.021	1563.4					78.4					
IS	13C-1,2,3,7,8-PeCDD	1.54e+07	0.64 y	1.24	31:29	1.192	1569.7					78.7					
IS	13C-1,2,3,4,7,8-HxCDD	1.08e+07	1.29 y	0.72	34:50	1.014	1454.4					72.9					
IS	13C-1,2,3,6,7,8-HxCDD	1.09e+07	1.25 y	0.74	34:56	1.017	1447.5					72.6					
IS	13C-1,2,3,7,8,9-HxCDD	1.30e+07	1.28 y	0.86	35:14	1.026	1478.0					74.1					
IS	13C-1,2,3,4,6,7,8-HpCDD	9.98e+06	1.07 y	0.64	38:41	1.126	1508.8					75.6					
IS	13C-OCDD	2.10e+07	0.89 y	0.78	42:01	1.223	2609.4					65.4					
IS	13C-2,3,7,8-TCDF	1.97e+07	0.77 y	0.92	26:13	0.992	1538.3					77.1					
IS	13C-1,2,3,7,8-PeCDF	2.30e+07	1.58 y	0.95	30:19	1.147	1748.7					87.7					
IS	13C-2,3,4,7,8-PeCDF	2.04e+07	1.61 y	0.97	31:13	1.181	1515.8					76.0					
IS	13C-1,2,3,4,7,8-HxCDF	1.58e+07	0.51 y	0.99	33:56	0.988	1557.4					78.1					
IS	13C-1,2,3,6,7,8-HxCDF	1.65e+07	0.52 y	1.10	34:03	0.992	1462.9					73.3					
IS	13C-2,3,4,6,7,8-HxCDF	1.50e+07	0.52 y	1.03	34:40	1.009	1412.3					70.8					
IS	13C-1,2,3,7,8,9-HxCDF	1.28e+07	0.53 y	0.86	35:38	1.038	1451.0					72.7					
IS	13C-1,2,3,4,6,7,8-HpCDF	9.95e+06	0.43 y	0.71	37:29	1.091	1358.1					68.1					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.05e+07	0.45 y	0.71	39:15	1.143	1447.8					72.6					
IS	13C-OCDF	2.40e+07	0.90 y	0.87	42:15	1.230	2677.0					67.1					

C/Up 37C1-2,3,7,8-TCDD 6.79e+06 1.21 27:00 1.022 706.31

RS/RT 13C-1,2,3,4-TCDD 1.58e+07 0.79 y 1.00 26:26 * 1994.7

RS 13C-1,2,3,4-TCDF 2.76e+07 0.78 y 1.00 24:60 * 1994.7

RS/RT 13C-1,2,3,4,6,9-HxCDF 2.05e+07 0.52 y 1.00 34:21 * 1994.7

Reviewed by Analyst: M Date: 10/23/14

Reviewed by Analyst: JK Date: 10/24/14

Totals class: HpCDD EMPC

Entry #: 25

Run: 11 File: 141022D1 S: 6 I: 1 F: 4
Acquired: 22-OCT-14 19:33:10 Processed: 23-OCT-14 08:38:49

Total Concentration: 11.498 Unnamed Concentration: 5.682

RT	m1	Resp	m2	Resp	RA		Resp	Concentration	Name
37:51	1.616e+04		2.305e+04	0.70	n	3.170e+04		5.6818	
38:42	1.616e+04		1.629e+04	0.99	y	3.245e+04		5.8165	1,2,3,4,6,7,8-HpCDD

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 11 File: 141022D1 S: 6 I: 1 F: 1
Acquired: 22-OCT-14 19:33:10 Processed: 23-OCT-14 08:38:49

Total Concentration: 0.46175 Unnamed Concentration: 0.462

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
27:58	3.250e+03	3.434e+03	0.95 n	5.347e+03	0.46175	

Totals class: HxCDF EMPC

Entry #: 33

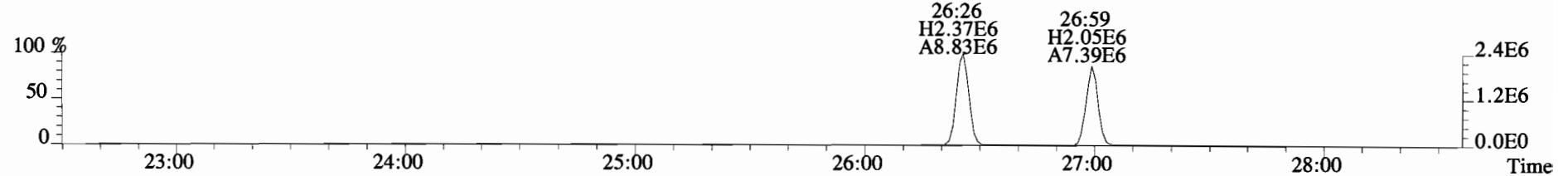
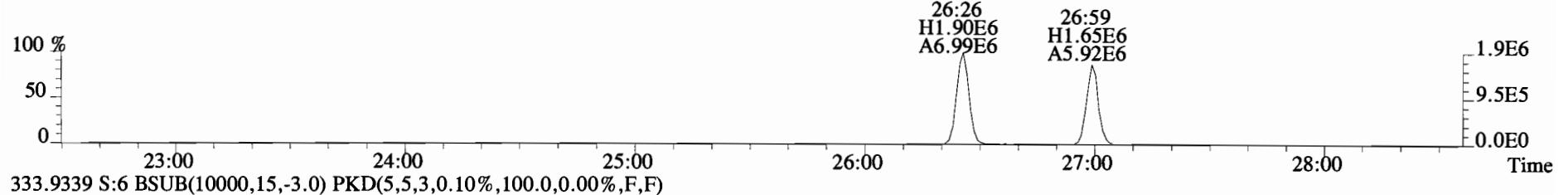
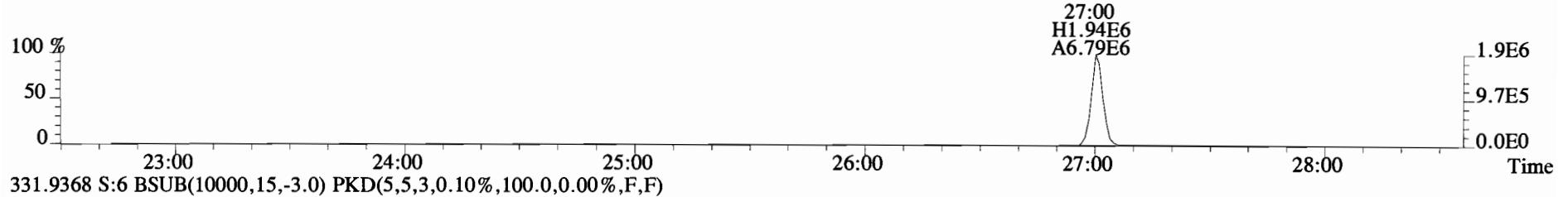
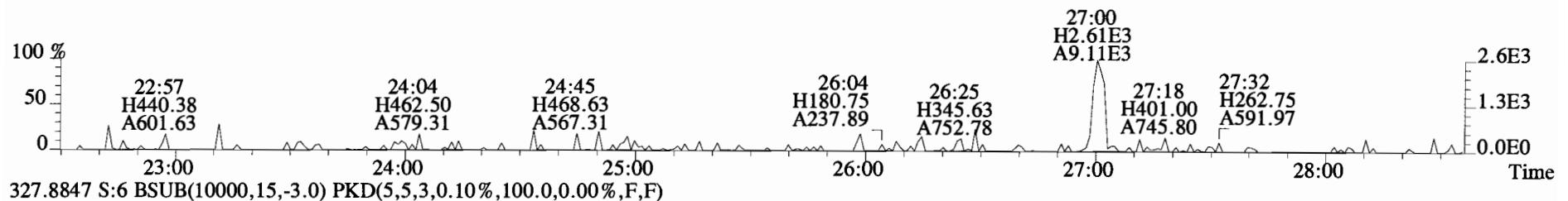
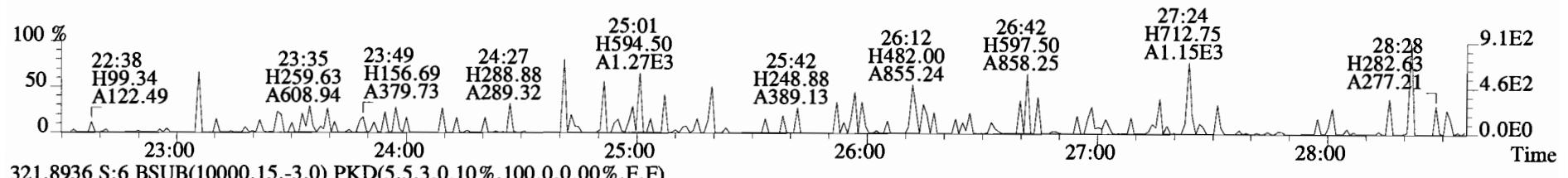
Run: 11 File: 141022D1 S: 6 I: 1 F: 3
Acquired: 22-OCT-14 19:33:10 Processed: 23-OCT-14 08:38:49

Total Concentration: 0.95954 Unnamed Concentration: 0.960

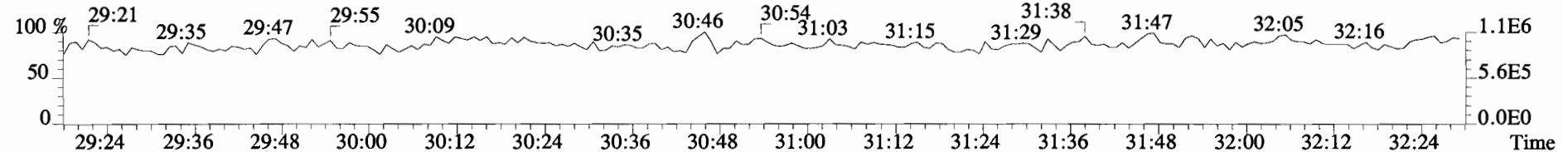
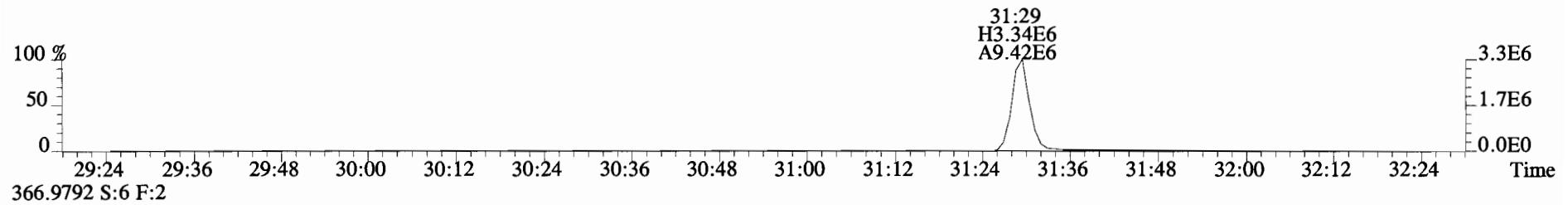
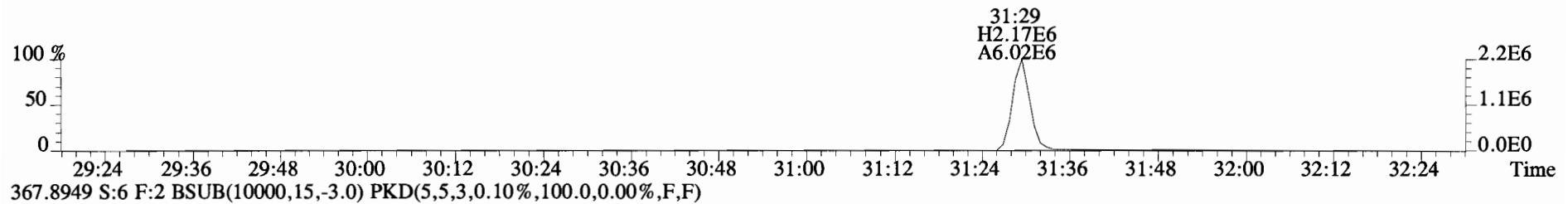
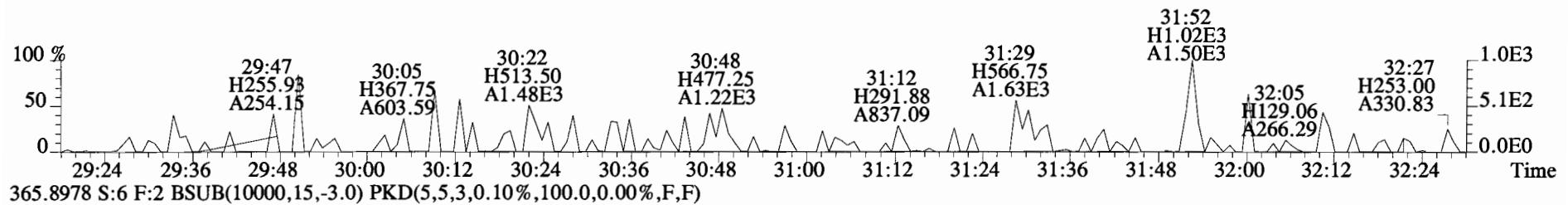
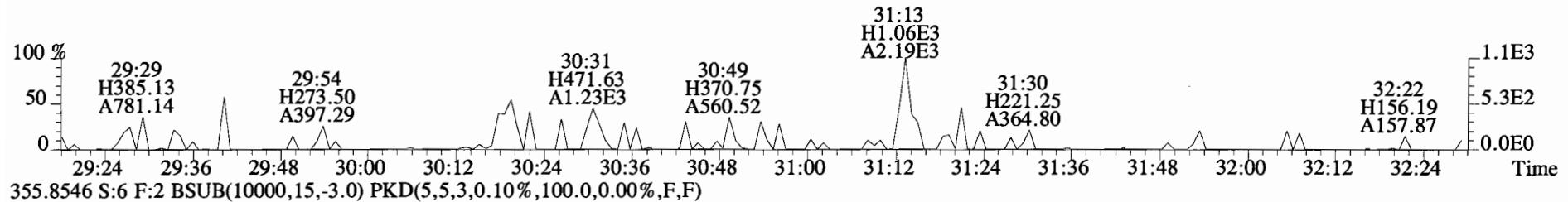
RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
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32:54	5.152e+03	5.483e+03	0.94 n	9.307e+03	0.95954	
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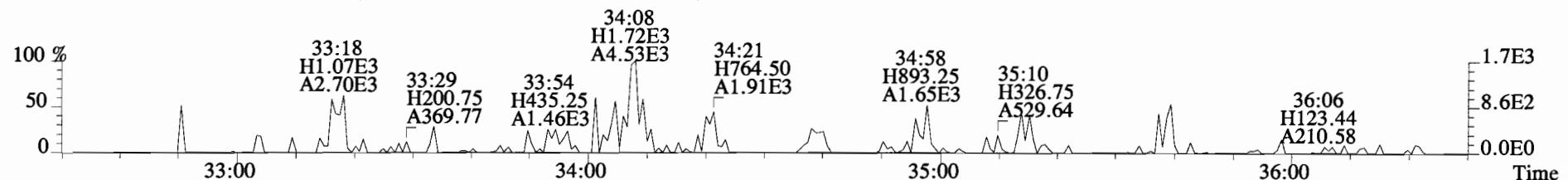
File:141022D1 #1-551 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



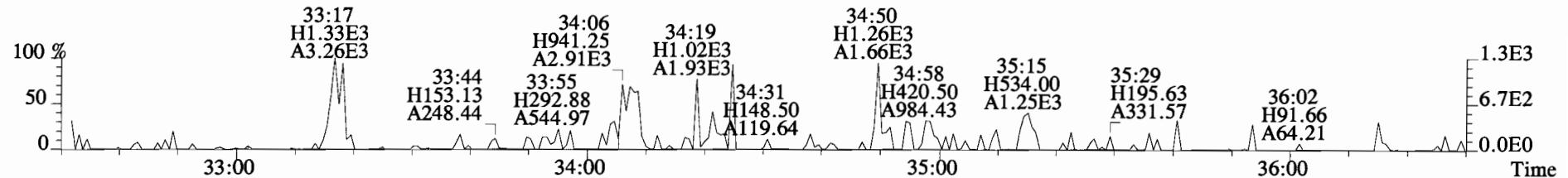
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 Sample#6 File Text: Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
 353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



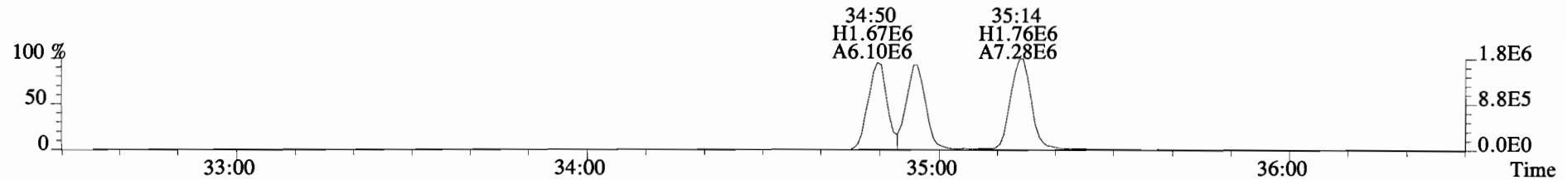
File:141022D1 #1-386 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
 389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



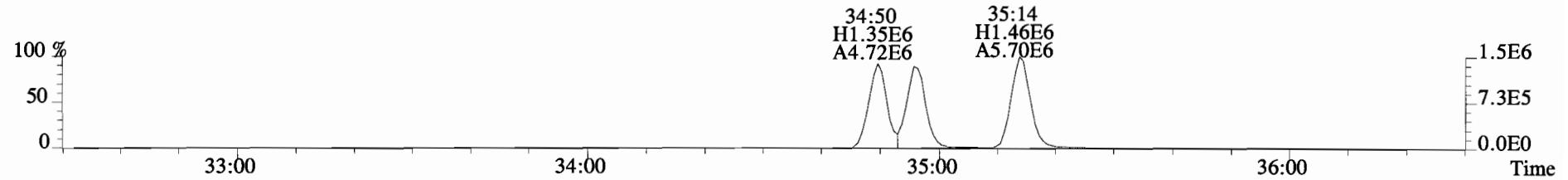
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



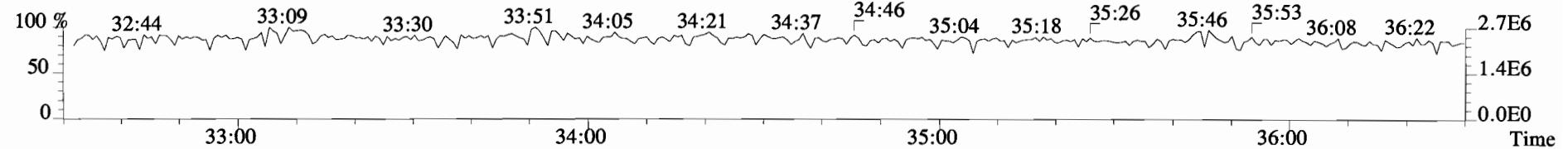
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



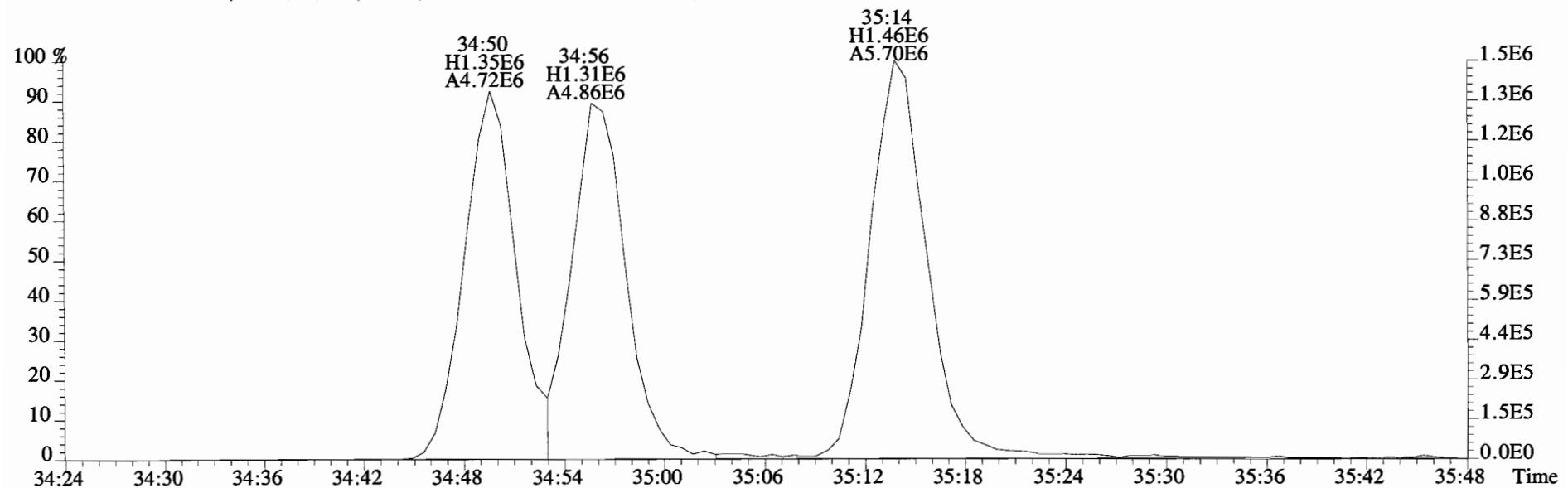
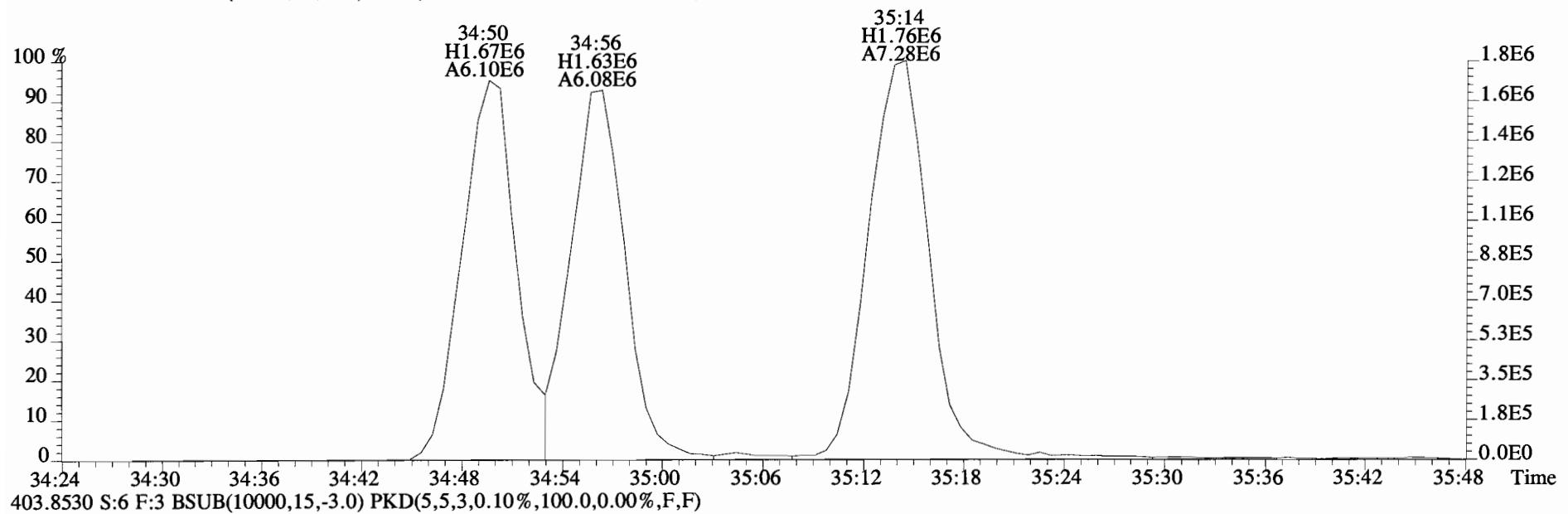
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



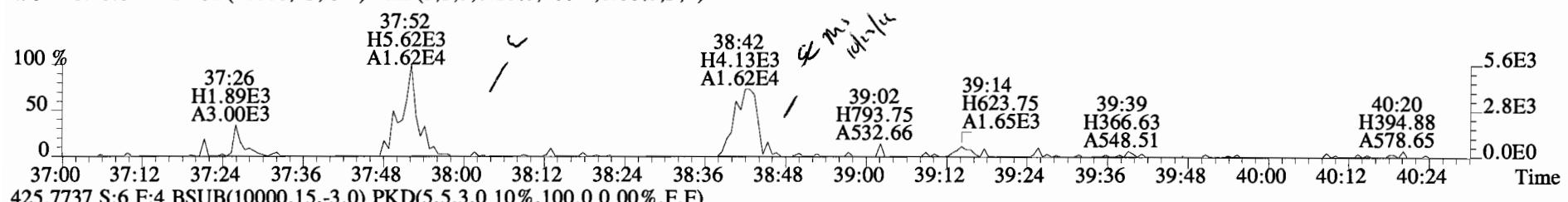
380.9760 S:6 F:3



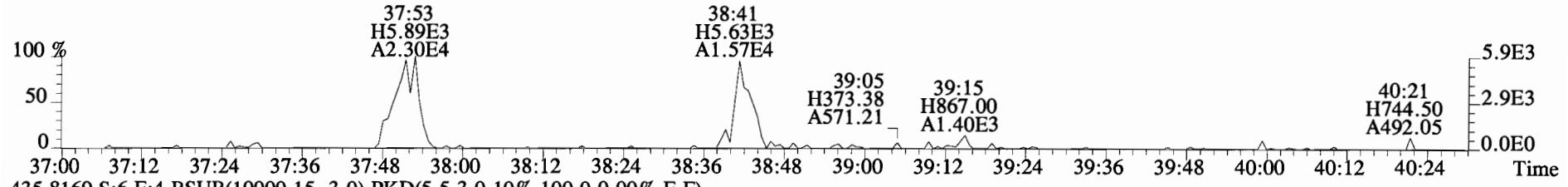
File:141022D1 #1-386 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



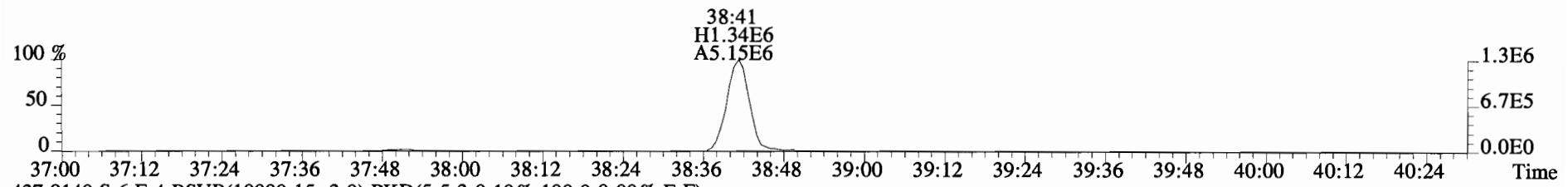
File:141022D1 #1-325 Acq:22-OCT-2014 19:33:10 GC EI + Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
 423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



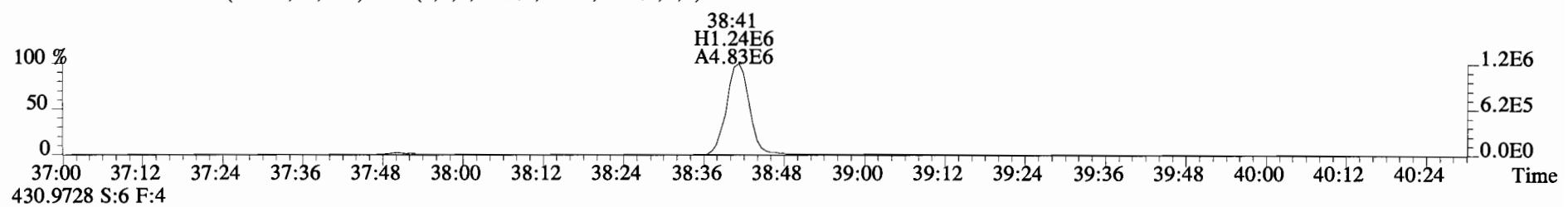
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



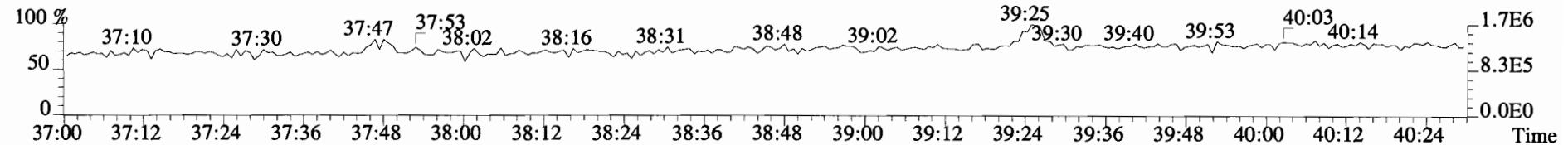
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



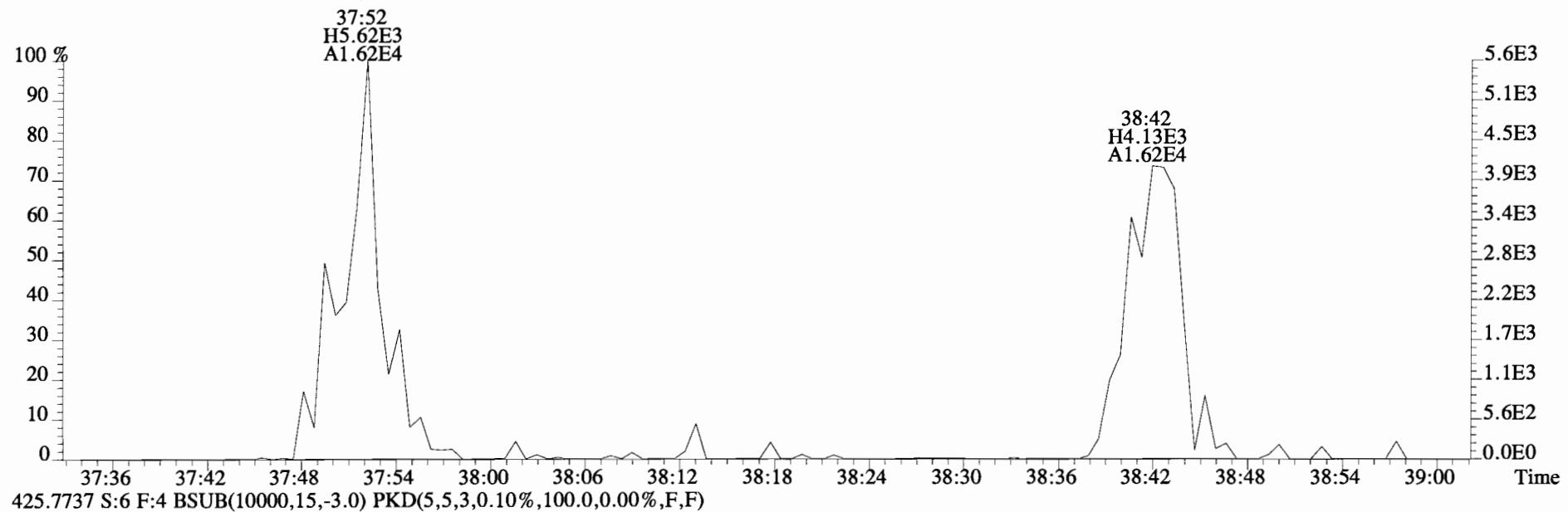
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



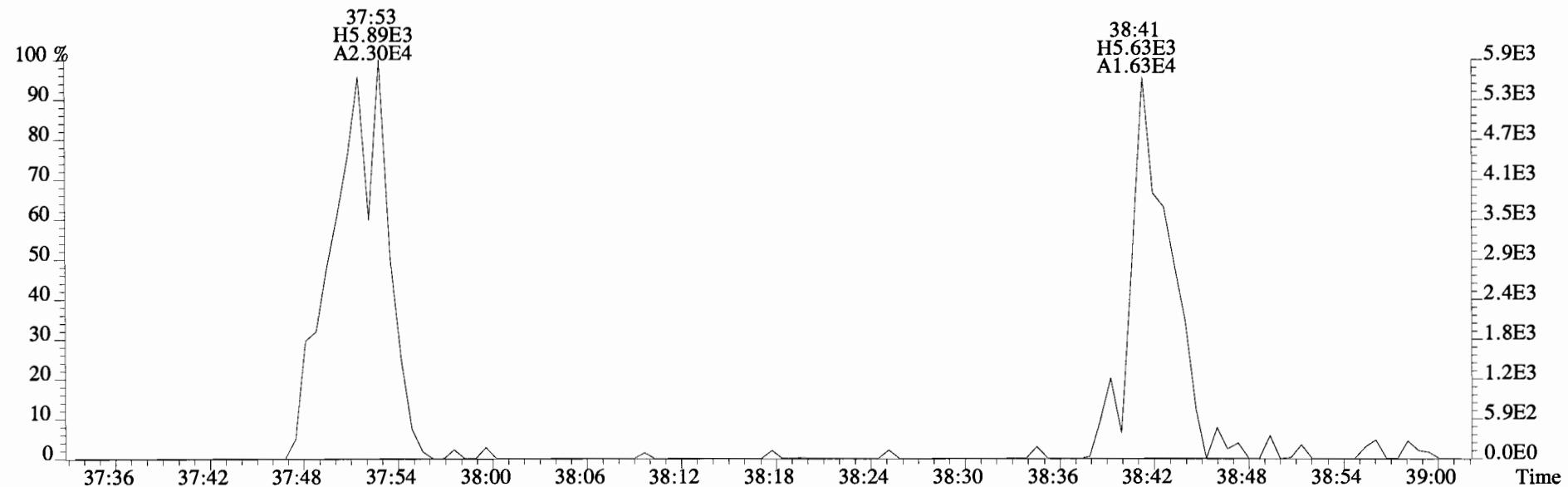
430.9728 S:6 F:4



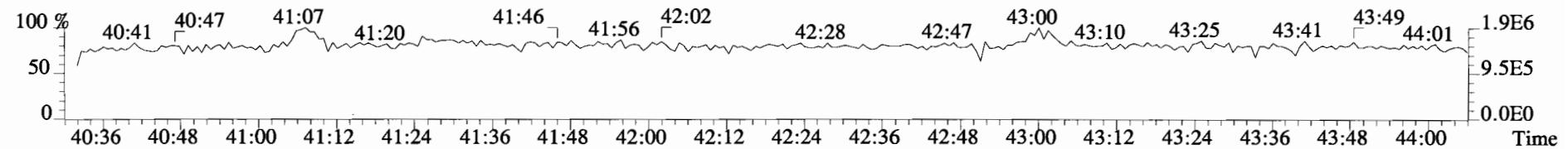
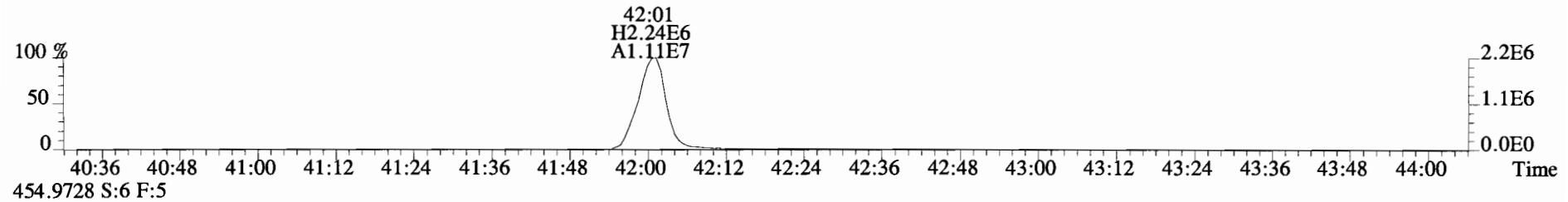
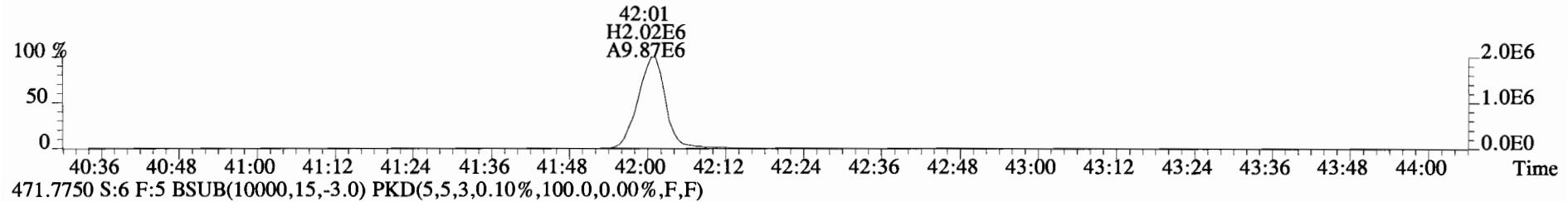
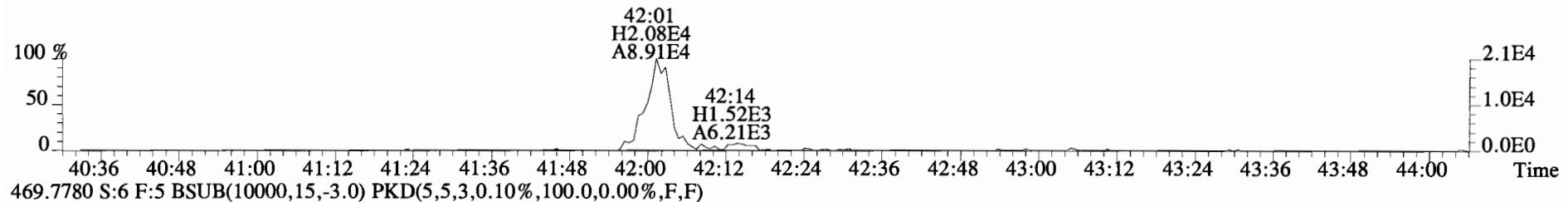
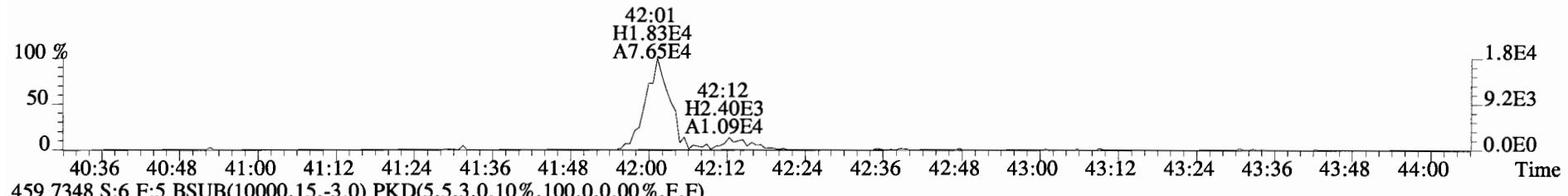
File:141022D1 #1-325 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



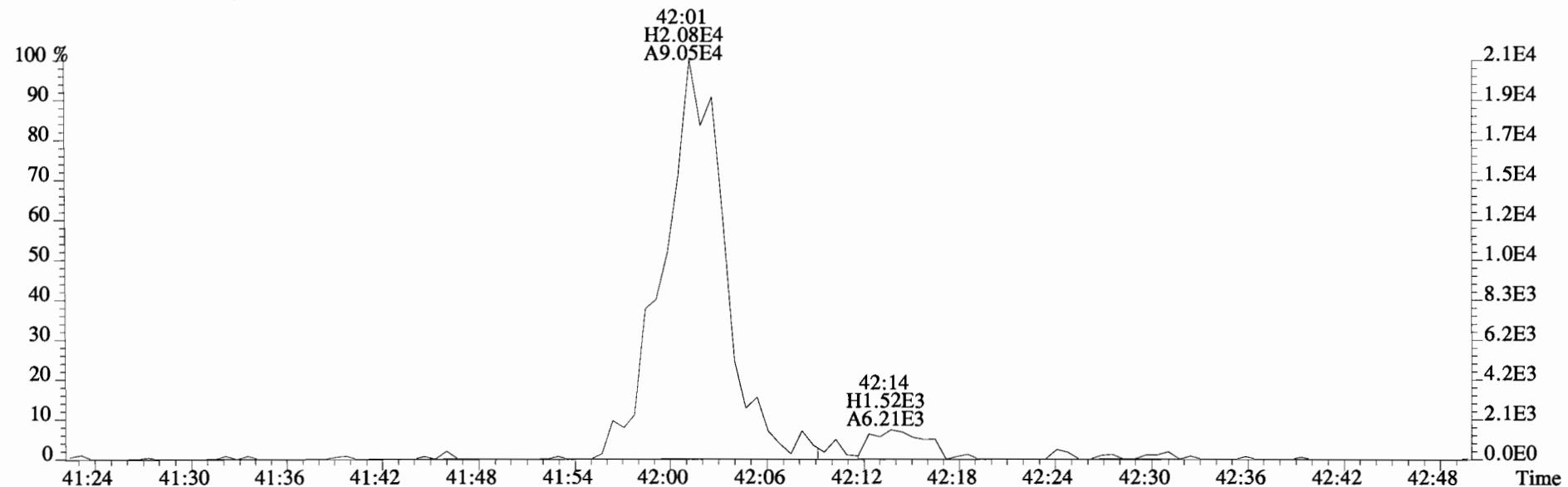
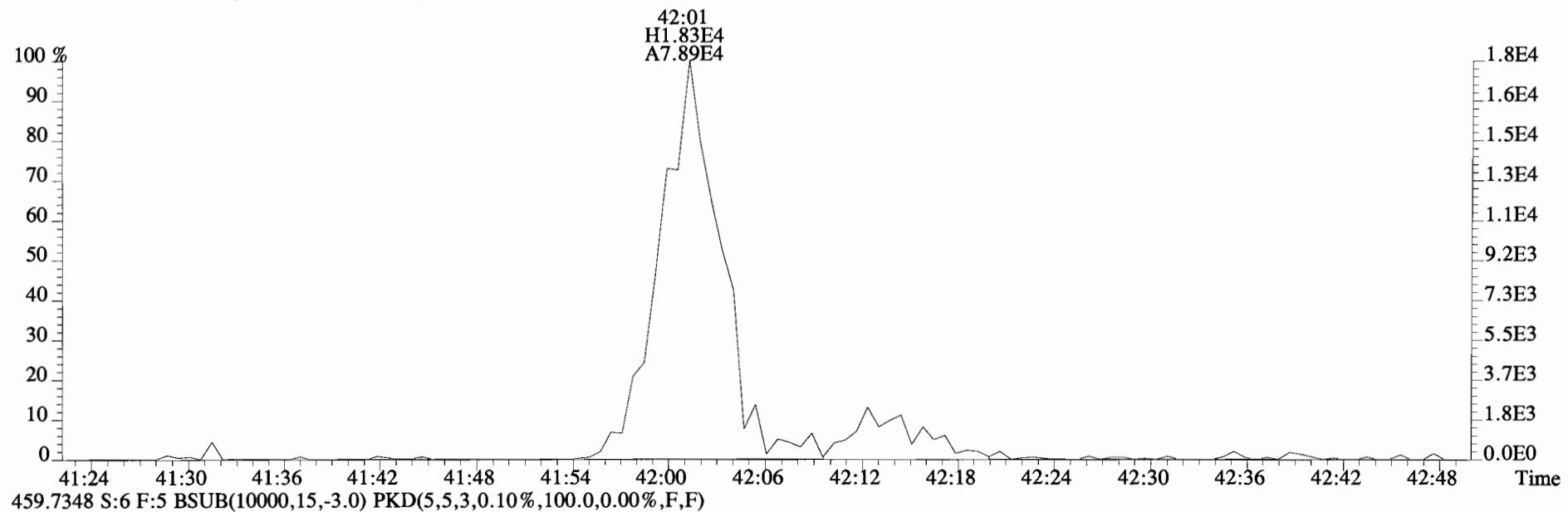
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



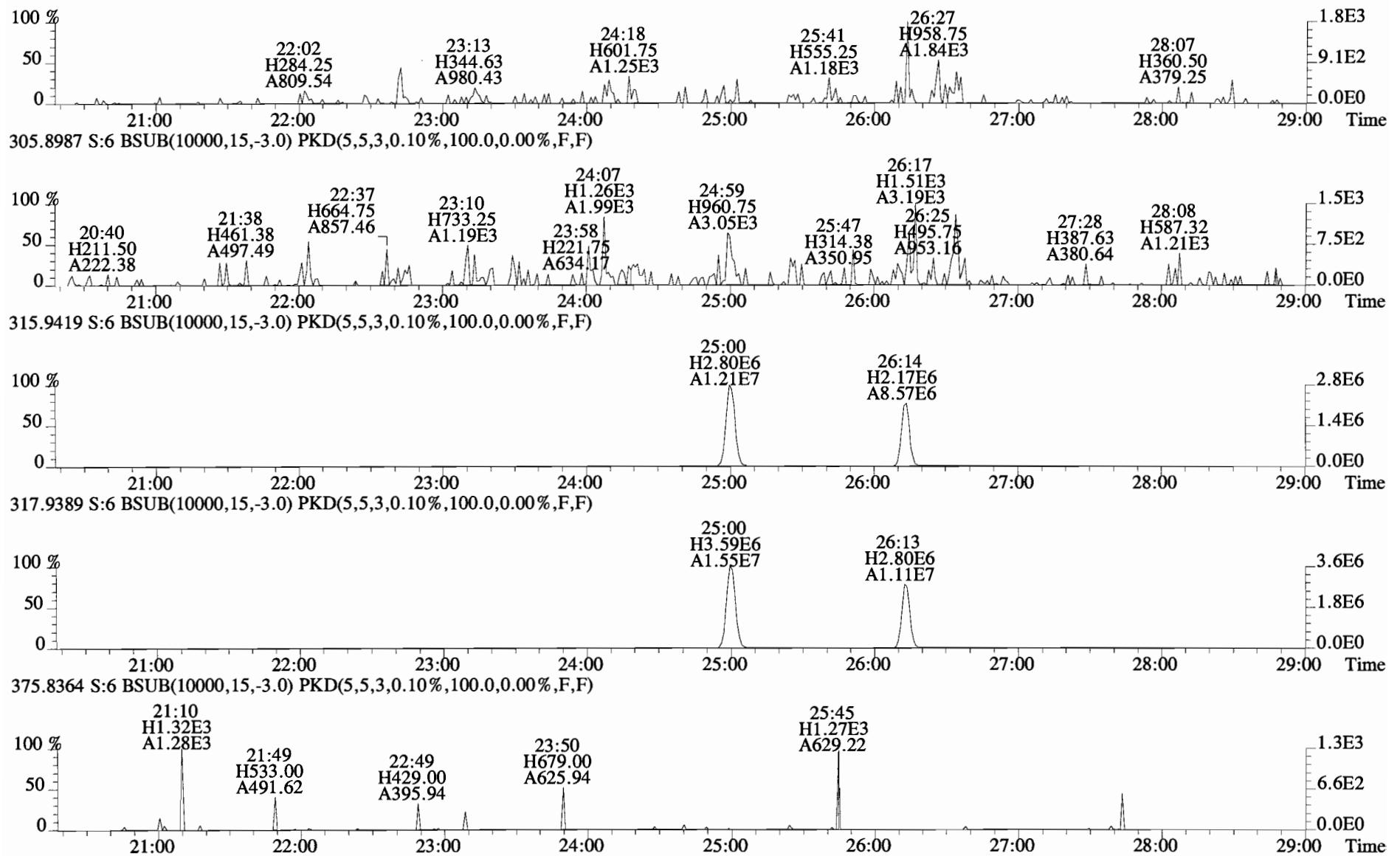
File:141022D1 #1-389 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
 457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



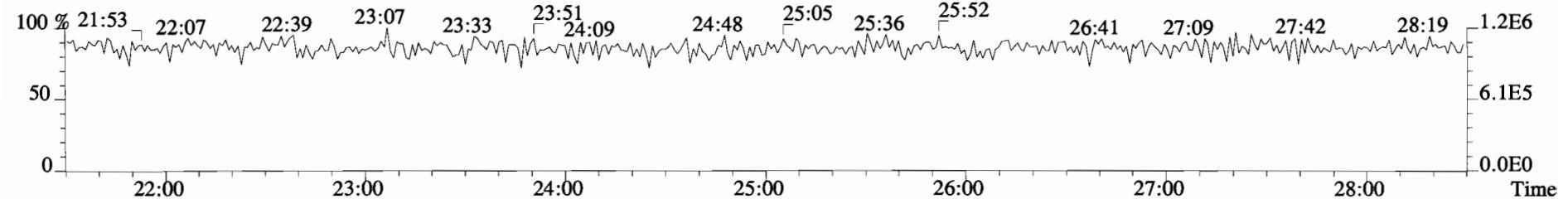
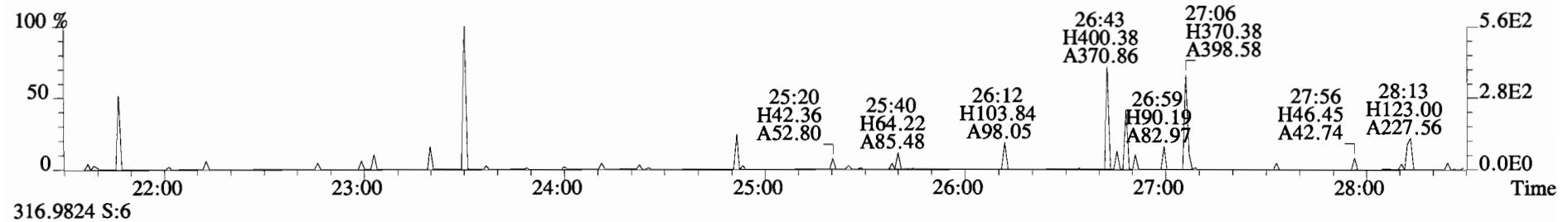
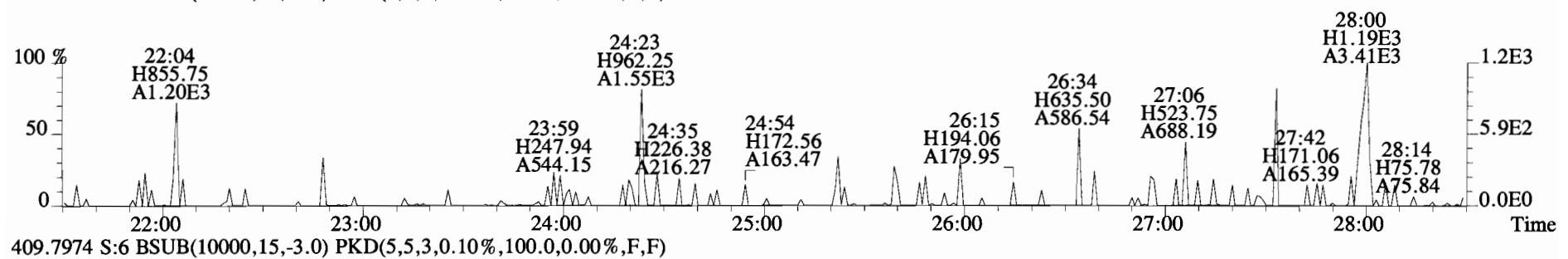
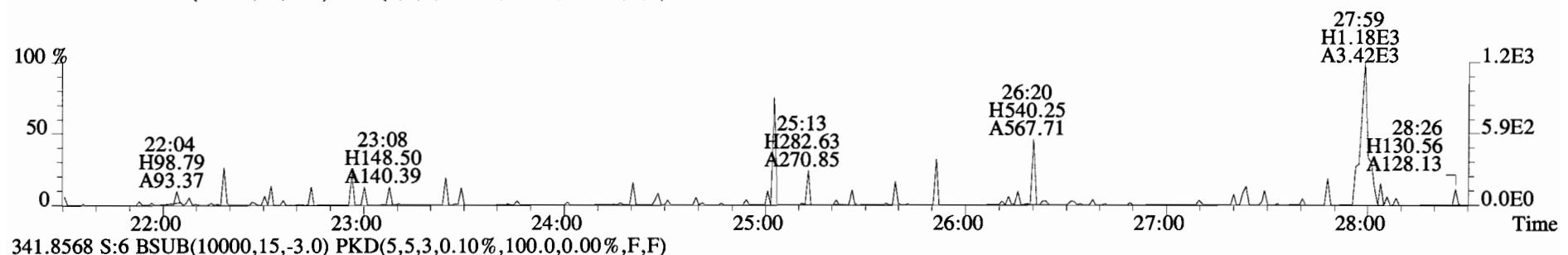
File:141022D1 #1-389 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



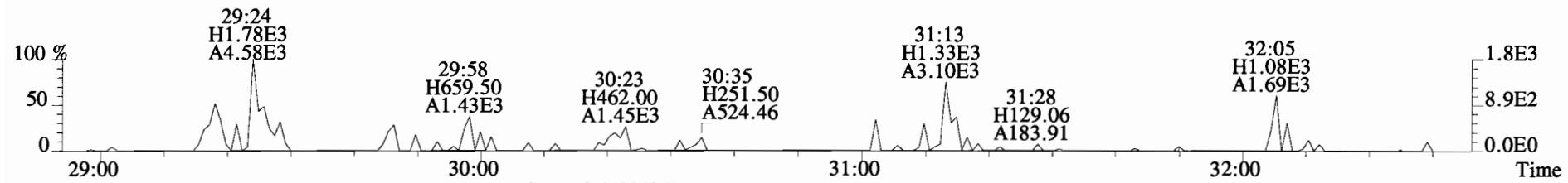
File:141022D1 #1-551 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
 303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



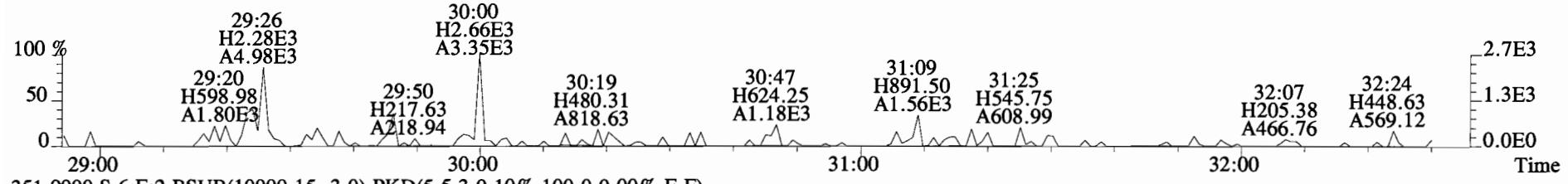
File:141022D1 #1-551 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text: Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
 339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



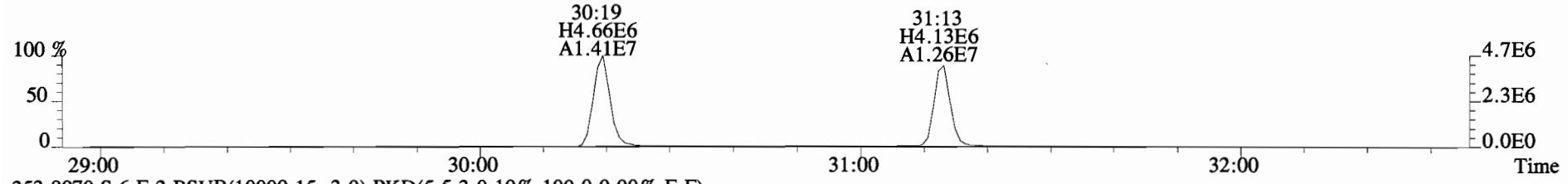
File:141022D1 #1-256 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



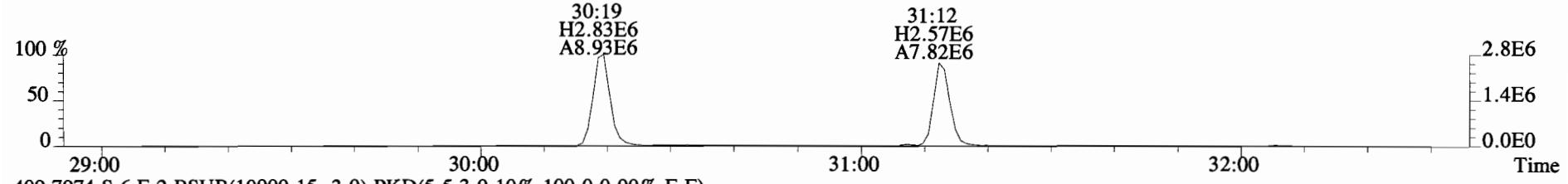
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



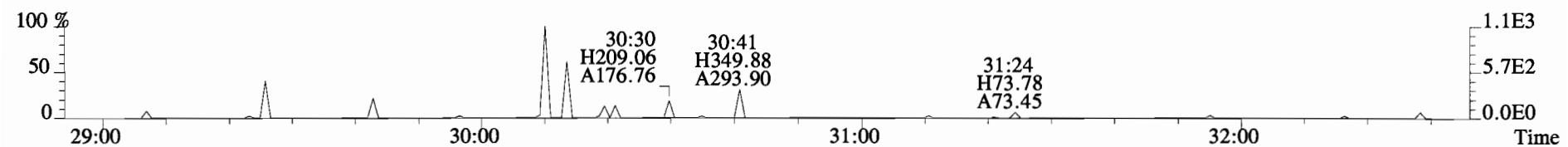
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



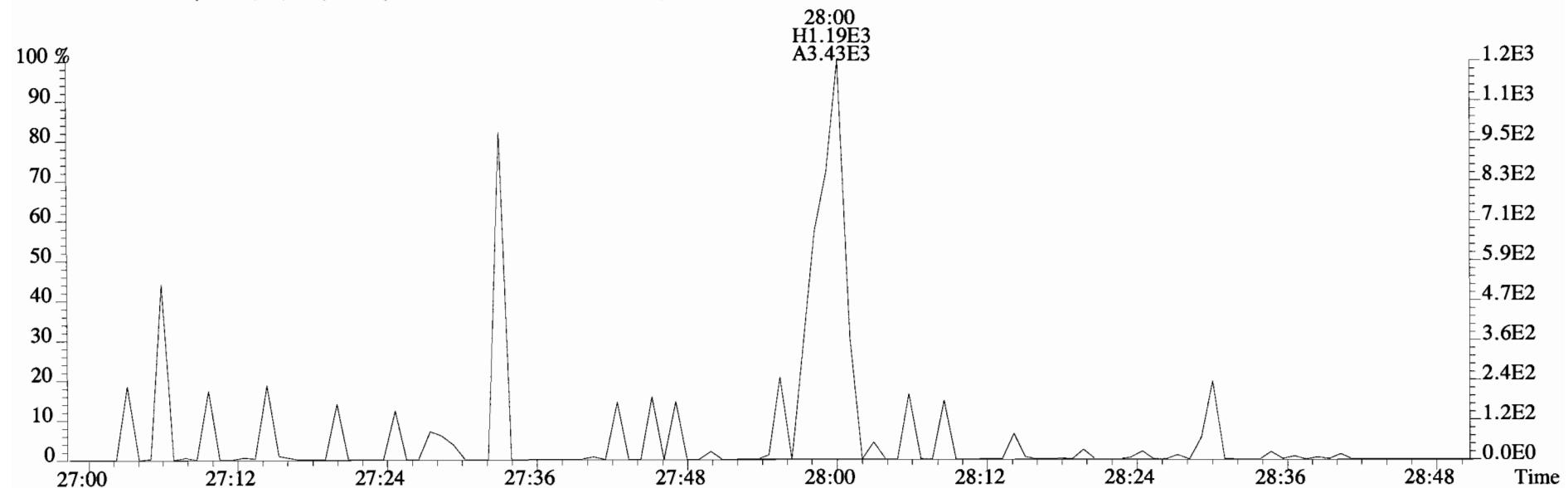
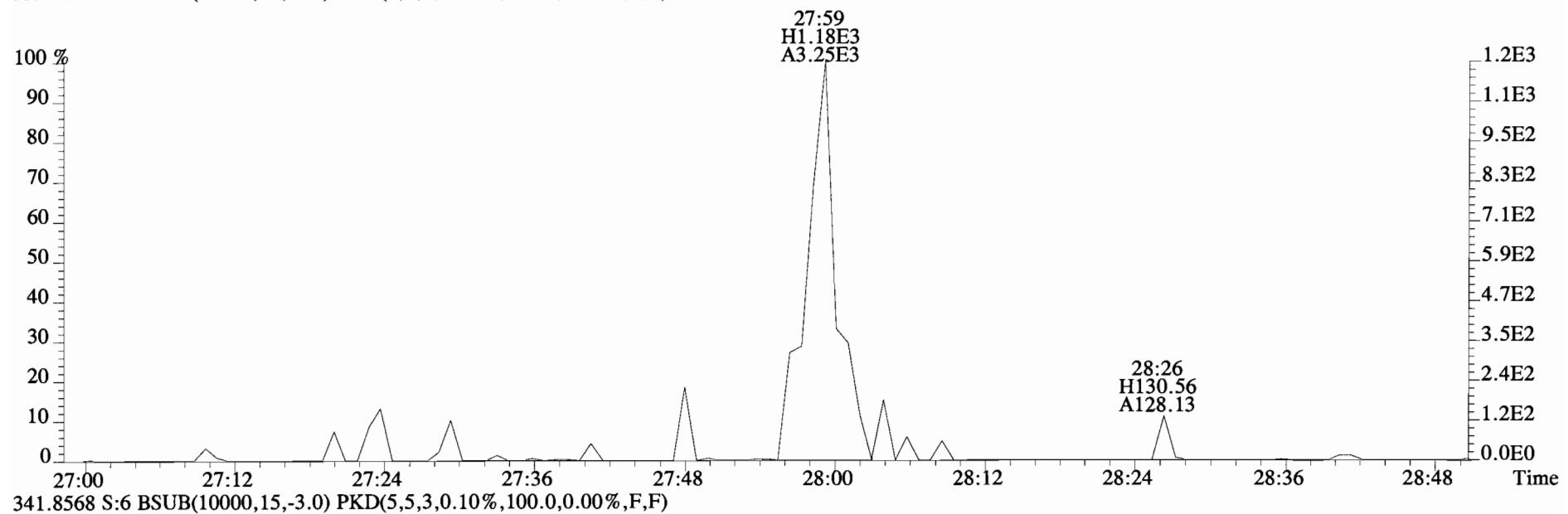
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



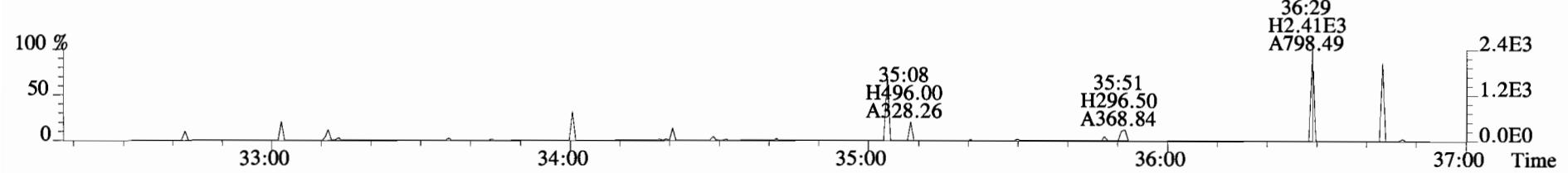
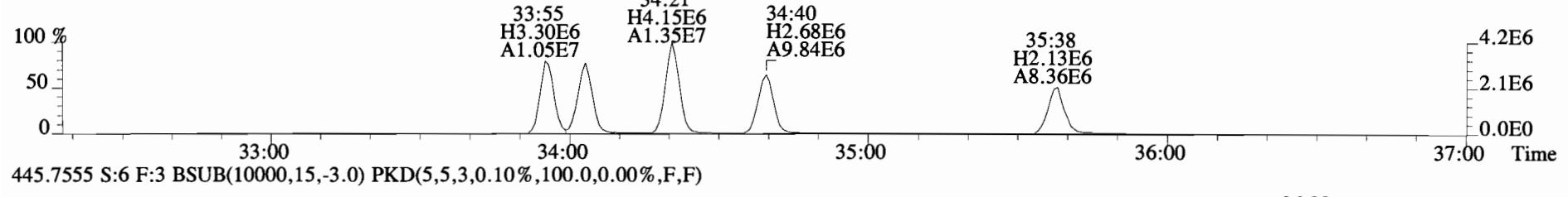
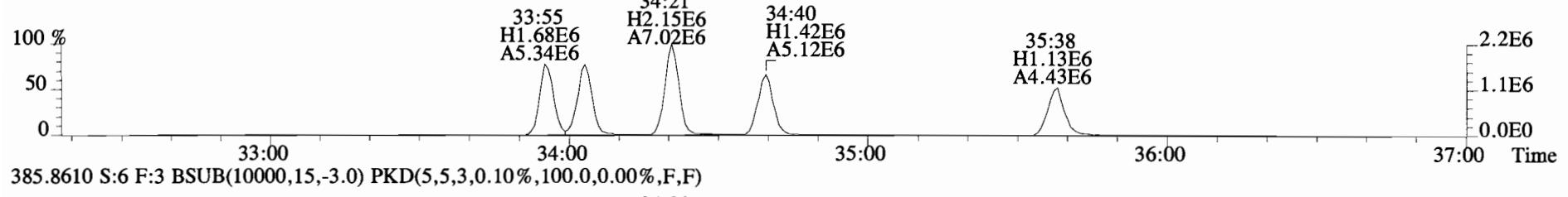
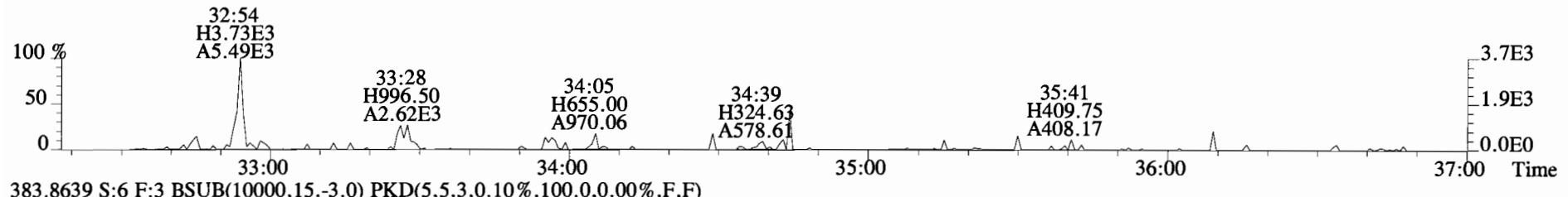
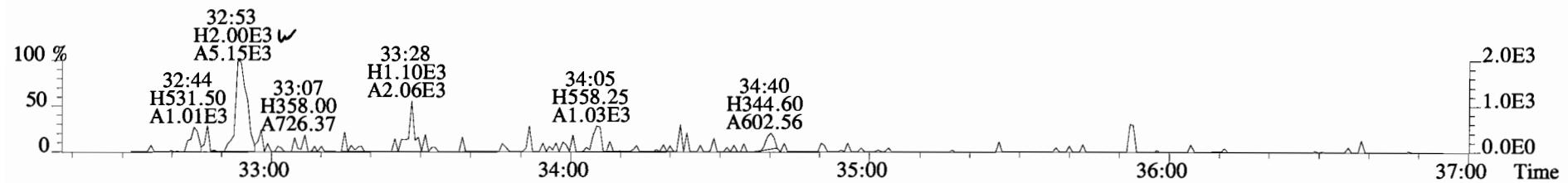
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



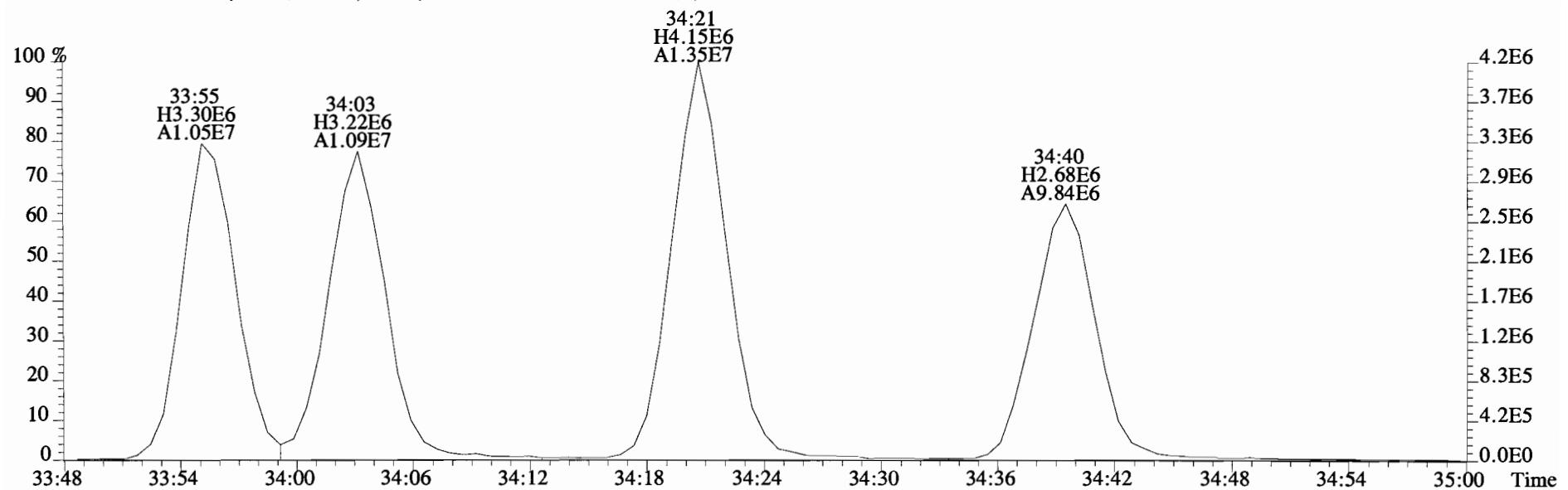
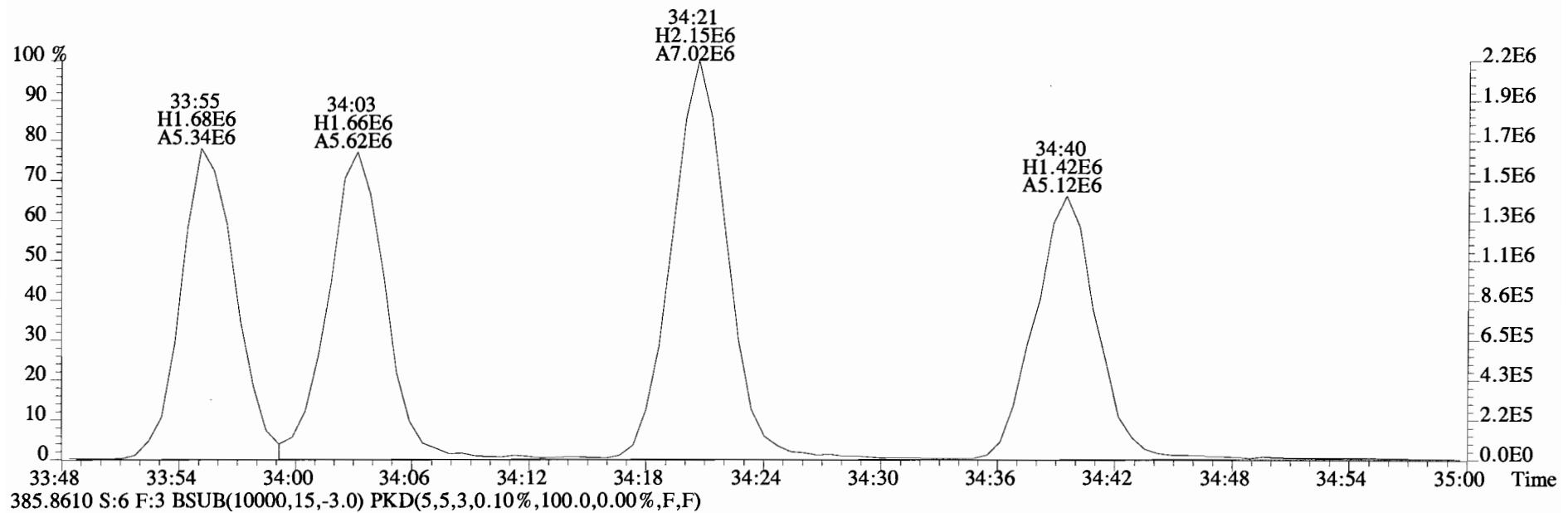
File:141022D1 #1-551 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



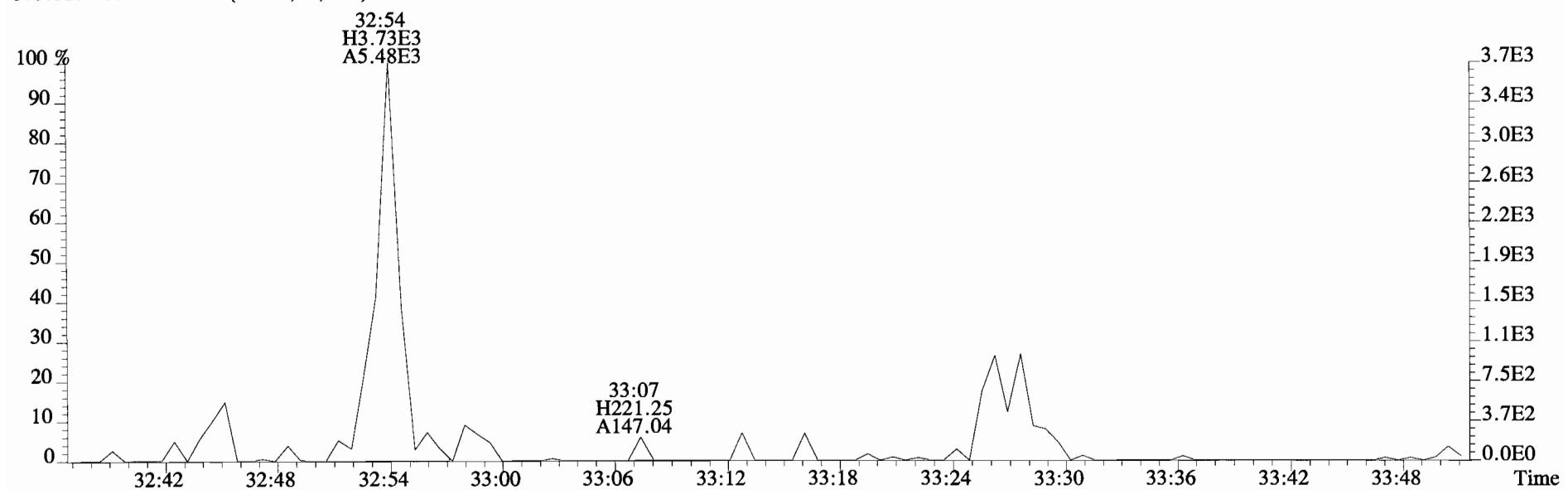
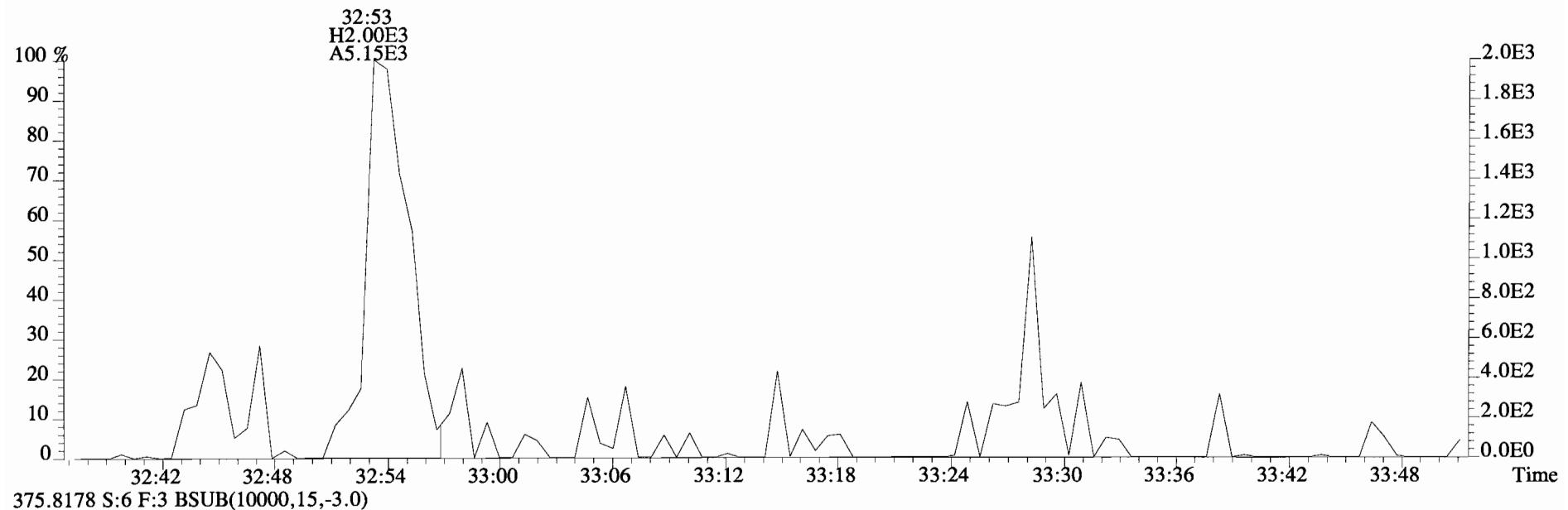
File:141022D1 #1-386 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
 373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



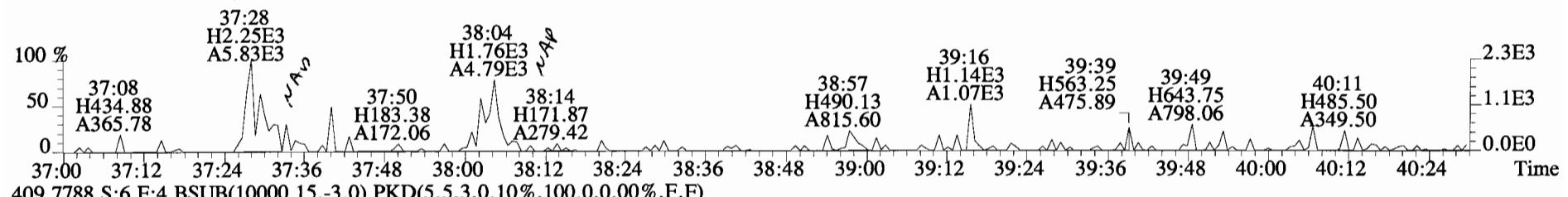
File:141022D1 #1-386 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



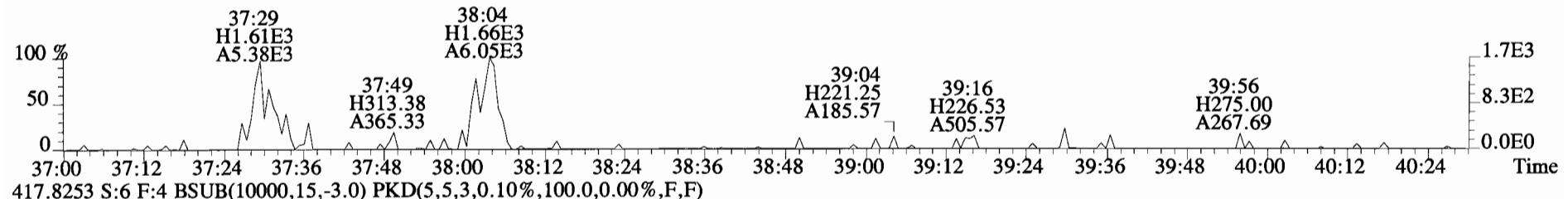
File:141022D1 #1-386 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
373.8207 S:6 F:3 BSUB(10000,15,-3.0)



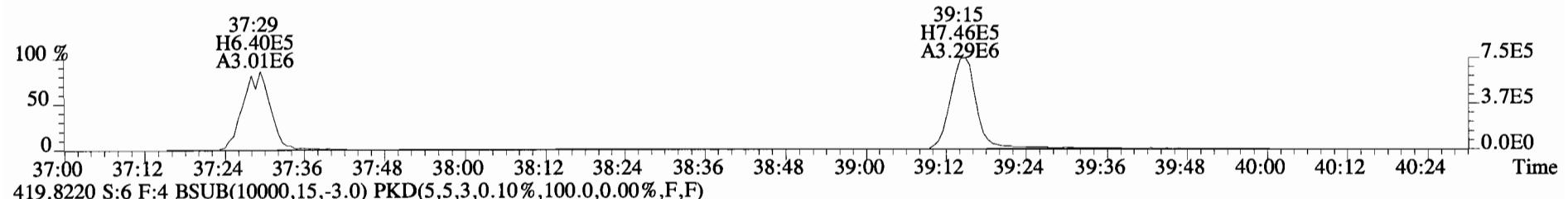
File:141022D1 #1-325 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
 407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



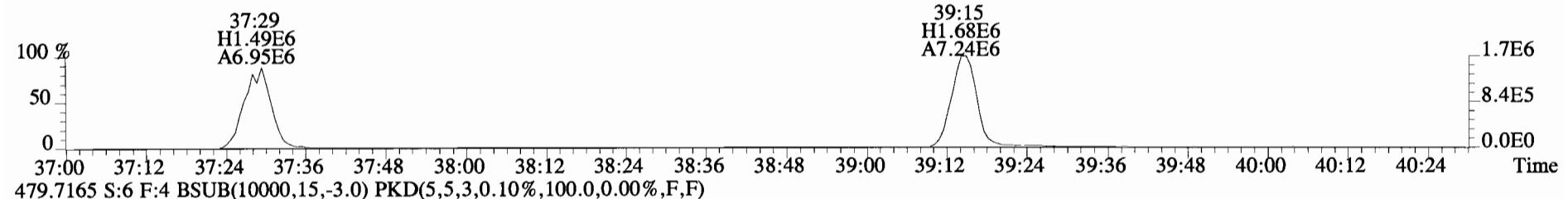
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



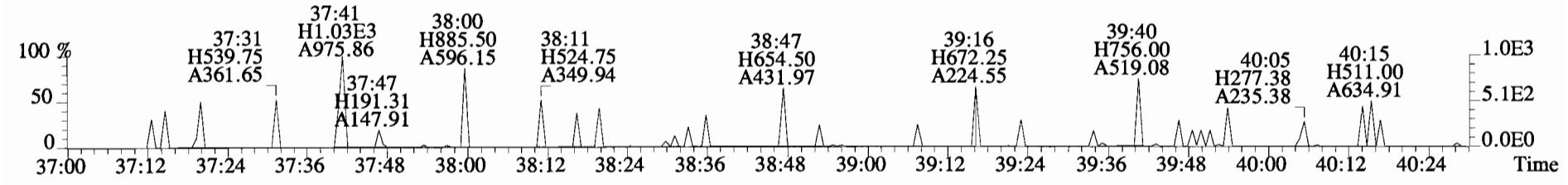
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



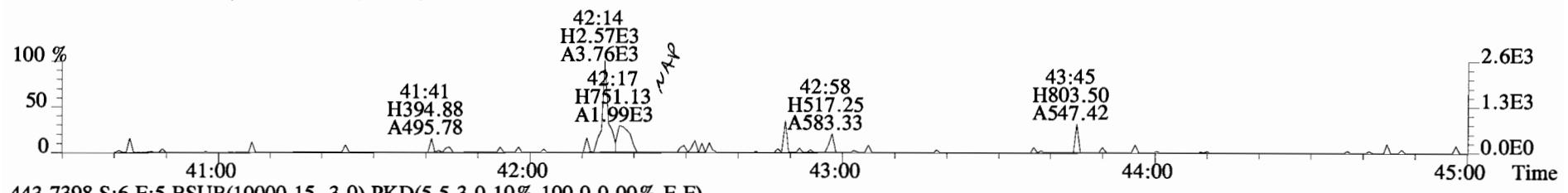
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



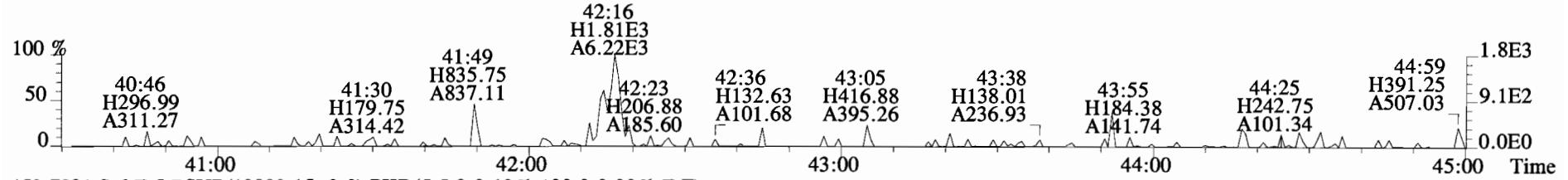
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



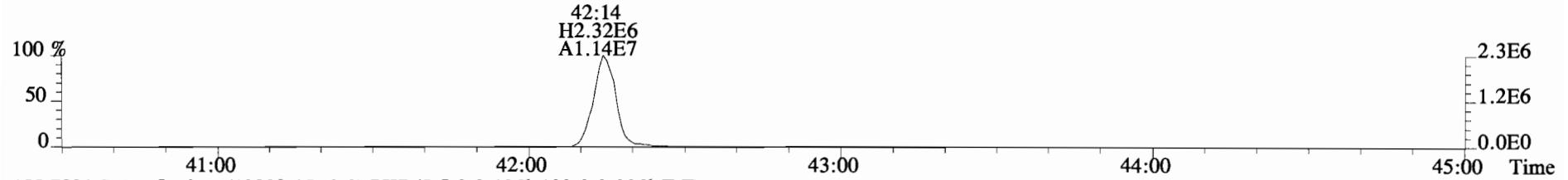
File:141022D1 #1-389 Acq:22-OCT-2014 19:33:10 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400762-02 CC-FD-02-20141013-W 1.00266 Exp:OCDD_DB5
 441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



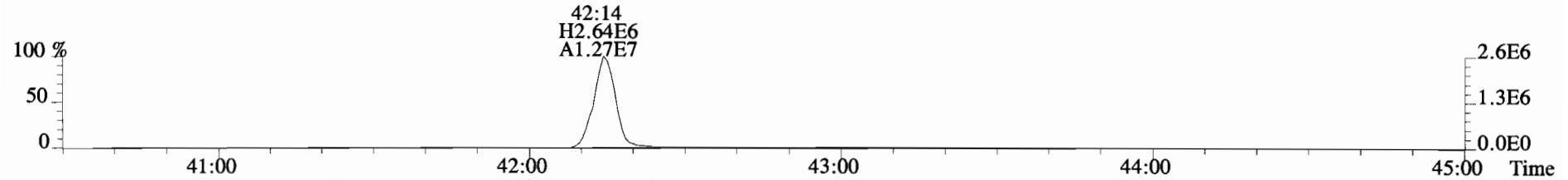
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



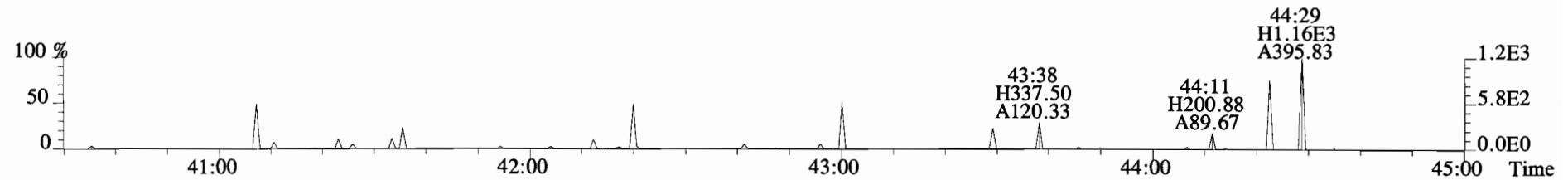
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: Method Blank
 Lab ID: B4J0118-BLK1

Filename: 141023D2 S:5 Acq:23-OCT-14 21:43:05
 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol:10.000

ConCal: ST141023D2-1
 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
2,3,7,8-TCDD	*	* n	1.18	NotF _q	*	*		669	2.5	0.108
1,2,3,7,8-PeCDD	*	* n	0.92	NotF _q	*	*		1720	2.5	0.231
1,2,3,4,7,8-HxCDD	*	* n	1.09	NotF _q	*	*		443	2.5	0.117
1,2,3,6,7,8-HxCDD	*	* n	1.07	NotF _q	*	*		443	2.5	0.124
1,2,3,7,8,9-HxCDD	*	* n	0.93	NotF _q	*	*		443	2.5	0.125
1,2,3,4,6,7,8-HpCDD	*	* n	1.12	NotF _q	*	*		473	2.5	0.125
OCDD	*	* n	0.95	NotF _q	*	*		803	2.5	0.271
2,3,7,8-TCDF	*	* n	1.08	NotF _q	*	*		632	2.5	0.0790
1,2,3,7,8-PeCDF	*	* n	1.09	NotF _q	*	*		412	2.5	0.0593
2,3,4,7,8-PeCDF	*	* n	1.04	NotF _q	*	*		412	2.5	0.0631
1,2,3,4,7,8-HxCDF	*	* n	1.39	NotF _q	*	*		549	2.5	0.0451
1,2,3,6,7,8-HxCDF	*	* n	1.26	NotF _q	*	*		549	2.5	0.0523
2,3,4,6,7,8-HxCDF	*	* n	1.30	NotF _q	*	*		325	2.5	0.0340
1,2,3,7,8,9-HxCDF	*	* n	1.19	NotF _q	*	*		325	2.5	0.0495
1,2,3,4,6,7,8-HpCDF	*	* n	1.62	NotF _q	*	*		1040	2.5	0.167
1,2,3,4,7,8,9-HpCDF	*	* n	1.53	NotF _q	*	*		1040	2.5	0.145
OCDF	*	* n	1.10	NotF _q	*	*		1070	1.0	0.102

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		669	0.108
Total Penta-Dioxins	*	*		1720	0.231
Total Hexa-Dioxins	*	*		717	0.197
Total Hepta-Dioxins	*	*		473	0.125
Total Tetra-Furans	*	*		632	0.0790
Total Penta-Furans	0.0000	0.0000		672	0.0998
Total Hexa-Furans	*	*		549	0.0579
Total Hepta-Furans	*	*		1620	0.243

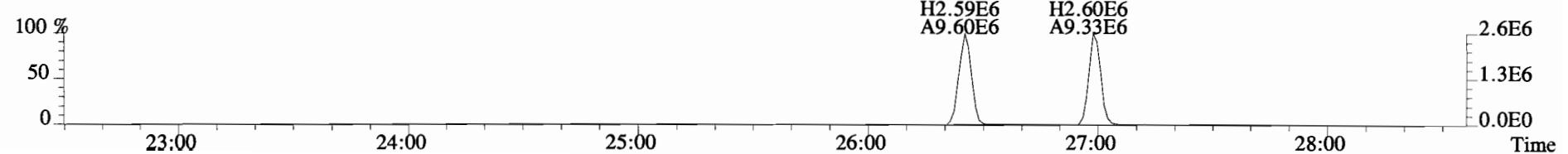
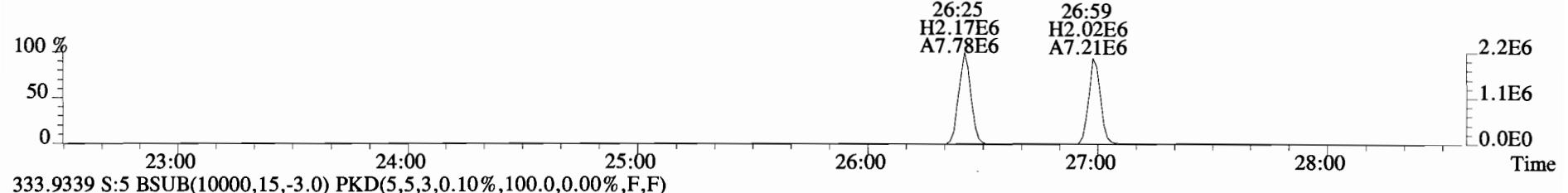
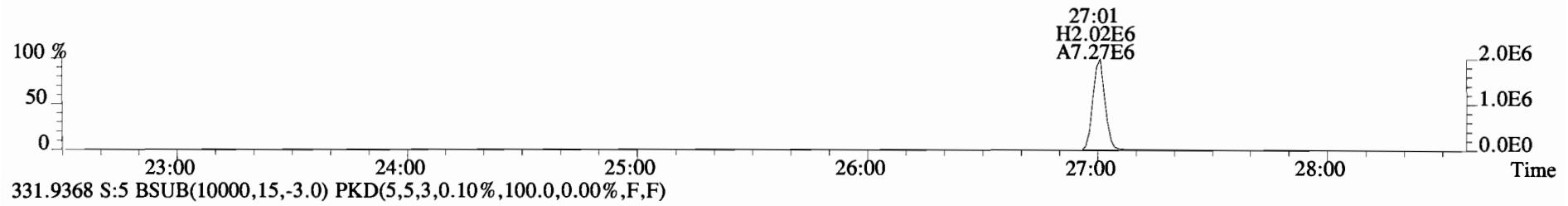
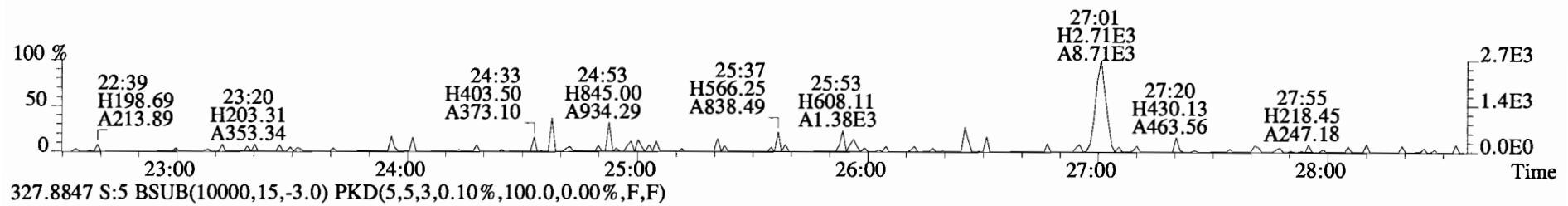
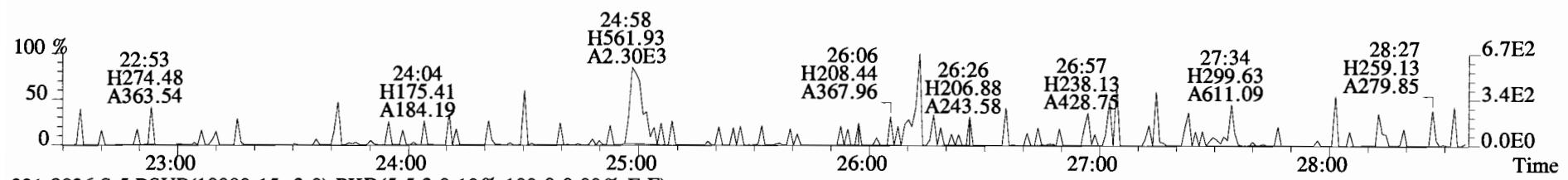
							Rec	Qual
IS	13C-2,3,7,8-TCDD	1.65e+07	0.77	y	1.07	26:59	1.022	177.28
IS	13C-1,2,3,7,8-PeCDD	1.86e+07	0.63	y	1.24	31:29	1.192	172.66
IS	13C-1,2,3,4,7,8-HxCDD	1.32e+07	1.23	y	0.72	34:49	1.014	159.65
IS	13C-1,2,3,6,7,8-HxCDD	1.33e+07	1.30	y	0.74	34:56	1.017	158.64
IS	13C-1,2,3,7,8,9-HxCDD	1.53e+07	1.28	y	0.86	35:14	1.026	157.53
IS	13C-1,2,3,4,6,7,8-HpCDD	1.20e+07	1.07	y	0.64	38:41	1.126	163.30
IS	13C-OCDD	2.49e+07	0.87	y	0.78	42:01	1.223	278.92
IS	13C-2,3,7,8-TCDF	2.40e+07	0.75	y	0.92	26:13	0.992	166.85
IS	13C-1,2,3,7,8-PeCDF	2.49e+07	1.62	y	0.95	30:19	1.147	168.34
IS	13C-2,3,4,7,8-PeCDF	2.49e+07	1.62	y	0.97	31:13	1.181	165.02
IS	13C-1,2,3,4,7,8-HxCDF	1.96e+07	0.51	y	0.99	33:55	0.988	173.42
IS	13C-1,2,3,6,7,8-HxCDF	2.11e+07	0.53	y	1.10	34:03	0.991	169.00
IS	13C-2,3,4,6,7,8-HxCDF	1.94e+07	0.52	y	1.03	34:40	1.009	164.94
IS	13C-1,2,3,7,8,9-HxCDF	1.64e+07	0.52	y	0.86	35:38	1.037	167.37
IS	13C-1,2,3,4,6,7,8-HpCDF	1.22e+07	0.42	y	0.71	37:29	1.091	150.01
IS	13C-1,2,3,4,7,8,9-HpCDF	1.21e+07	0.44	y	0.71	39:15	1.143	149.82
IS	13C-OCDF	2.88e+07	0.90	y	0.87	42:15	1.230	289.38

C/Up	37Cl-2,3,7,8-TCDD	7.27e+06		1.21	27:01	1.022	68.991	86.2	Integrations by Analyst: <u>M</u>
RS/RT	13C-1,2,3,4-TCDD	1.74e+07	0.81	y	1.00	26:25	*	200.00	
RS	13C-1,2,3,4-TCDF	3.11e+07	0.76	y	1.00	24:60	*	200.00	
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.28e+07	0.52	y	1.00	34:21	*	200.00	

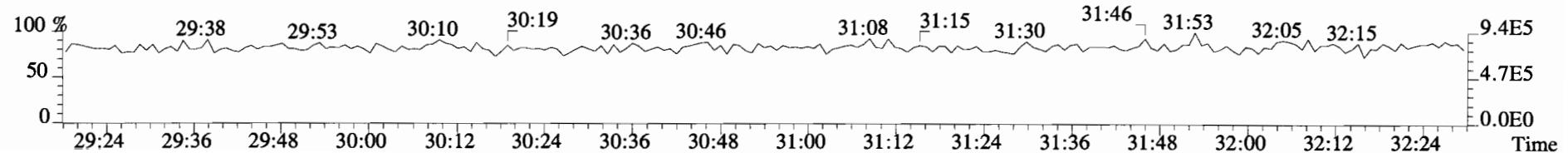
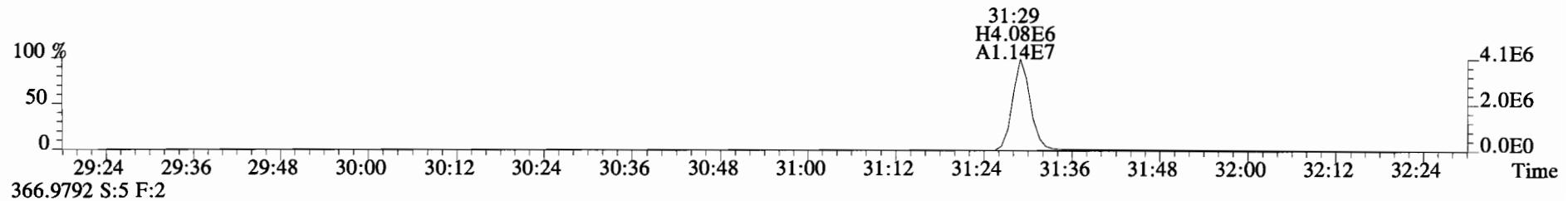
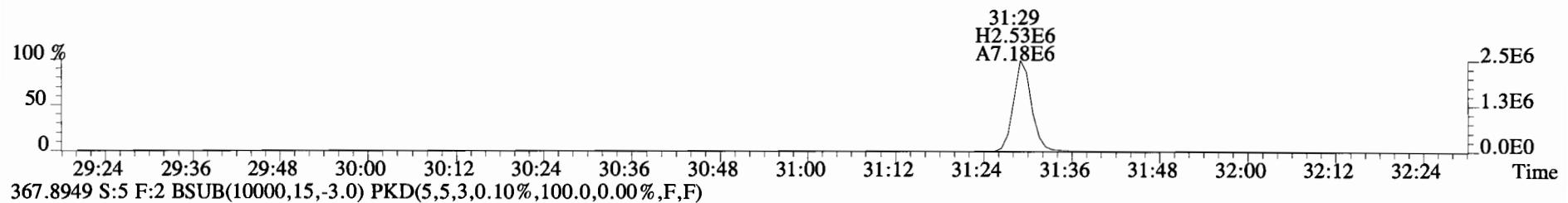
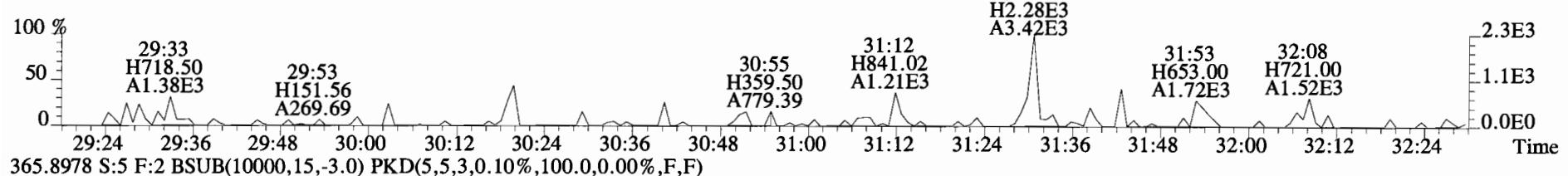
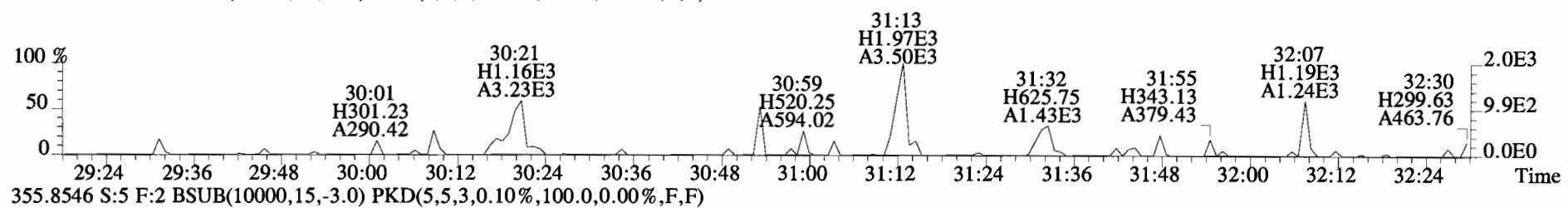
Reviewed by Analyst: M
 Date: 10/24/14

Reviewed by Analyst: JR
 Date: 10/24/14

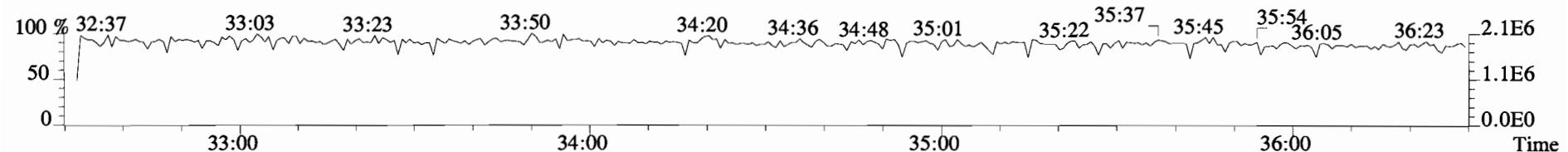
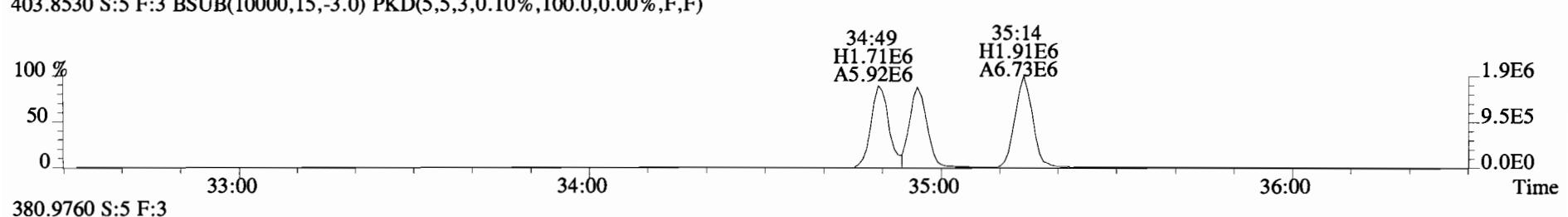
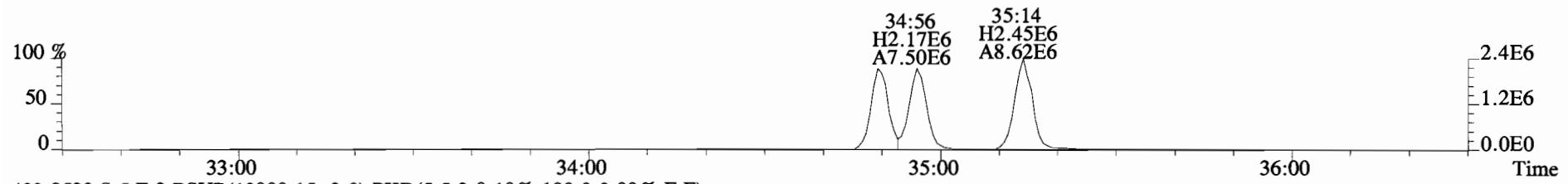
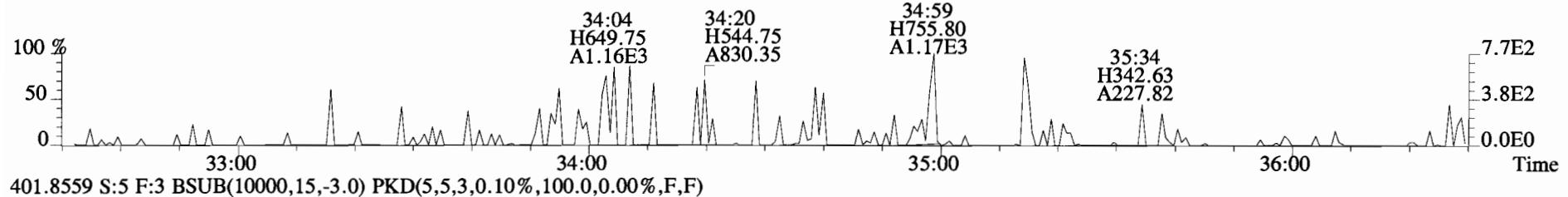
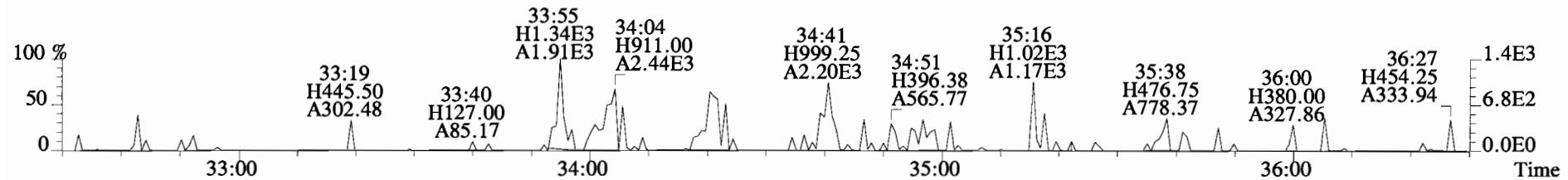
File:141023D2 #1-551 Acq:23-OCT-2014 21:43:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



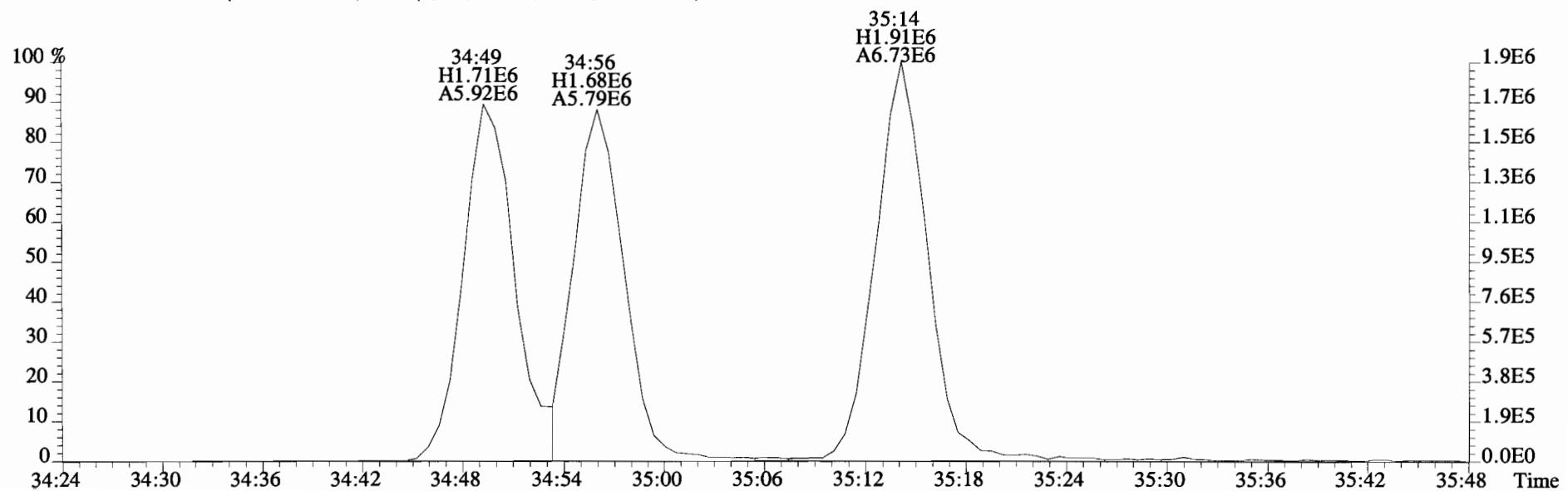
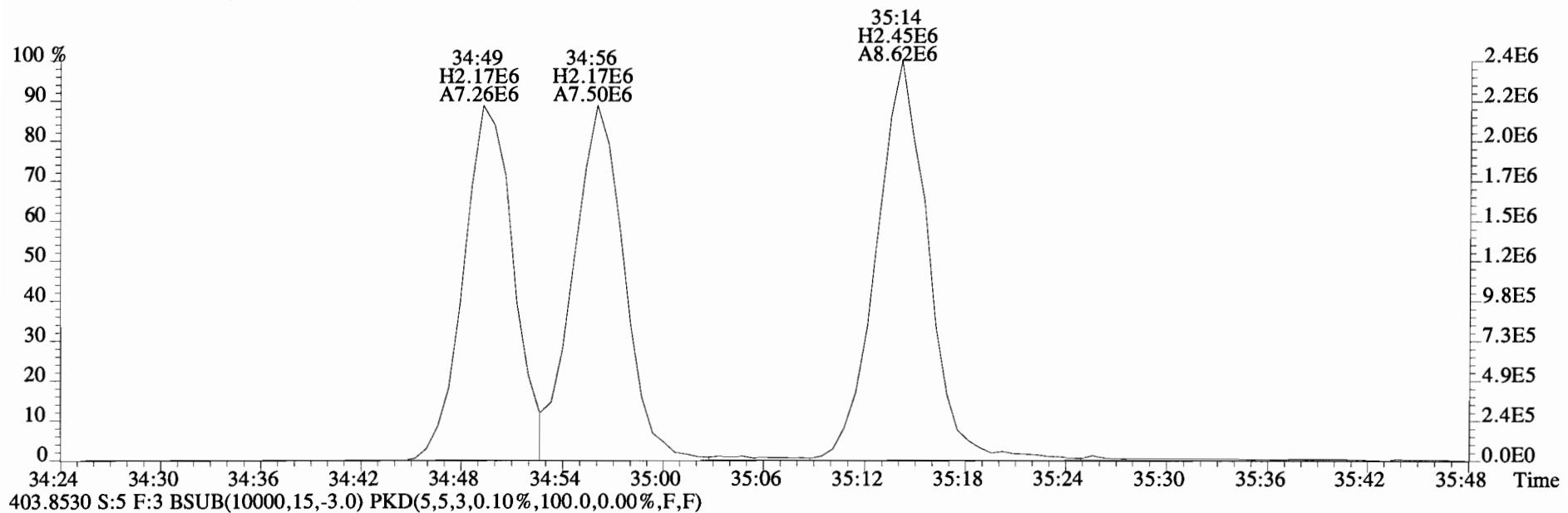
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 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
 353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



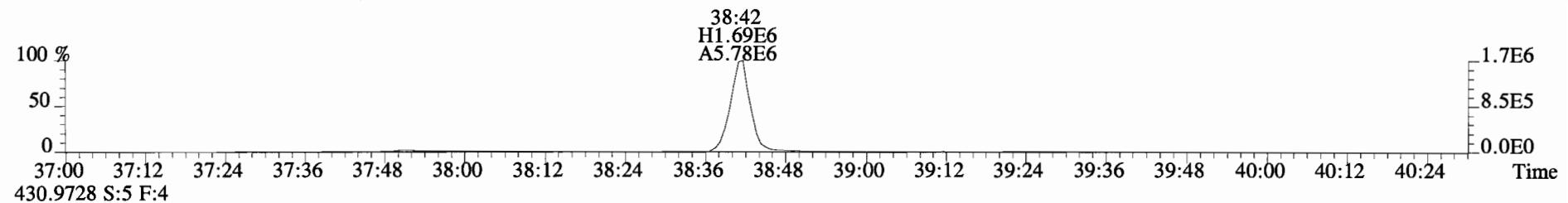
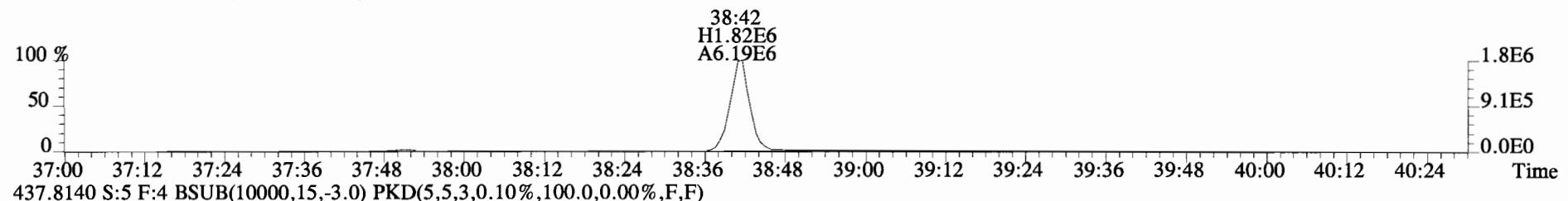
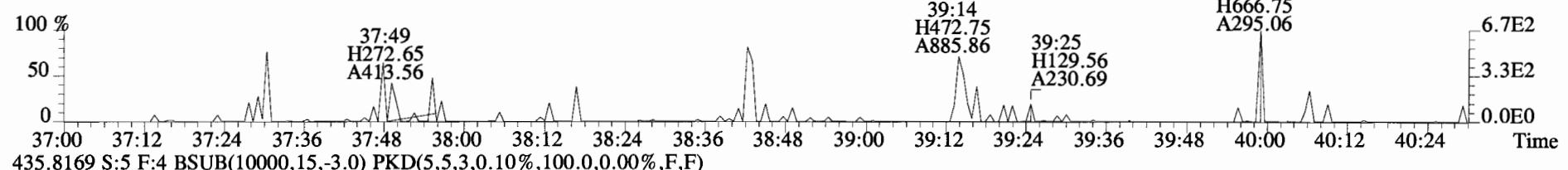
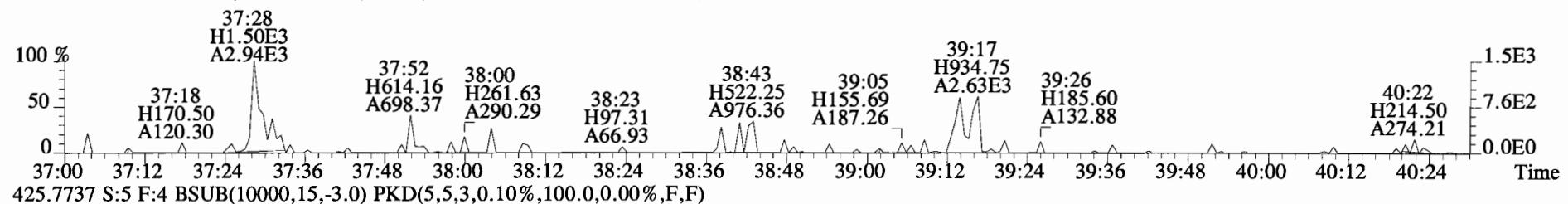
File:141023D2 #1-385 Acq:23-OCT-2014 21:43:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



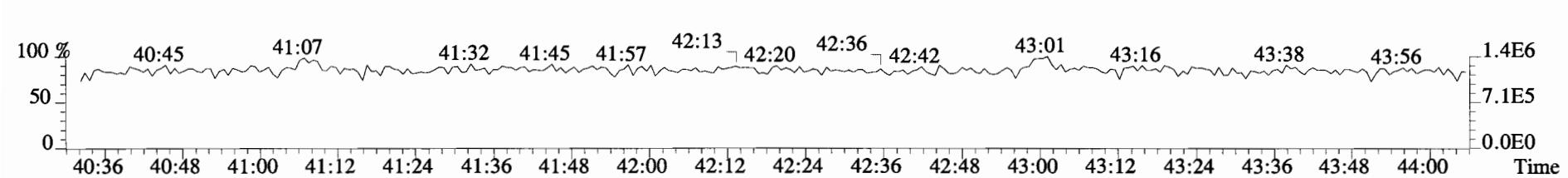
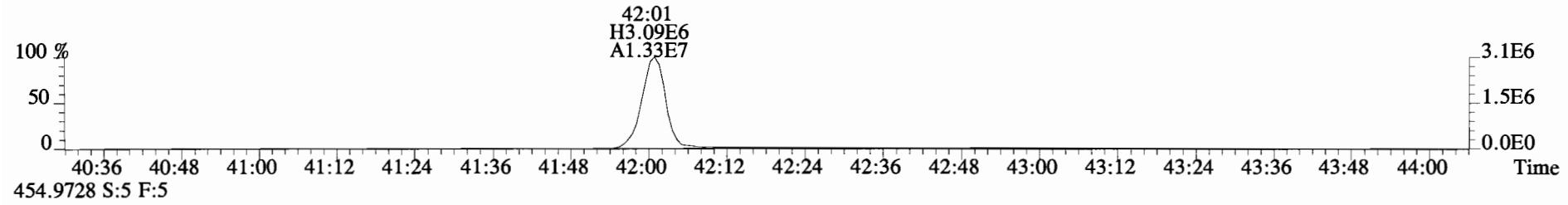
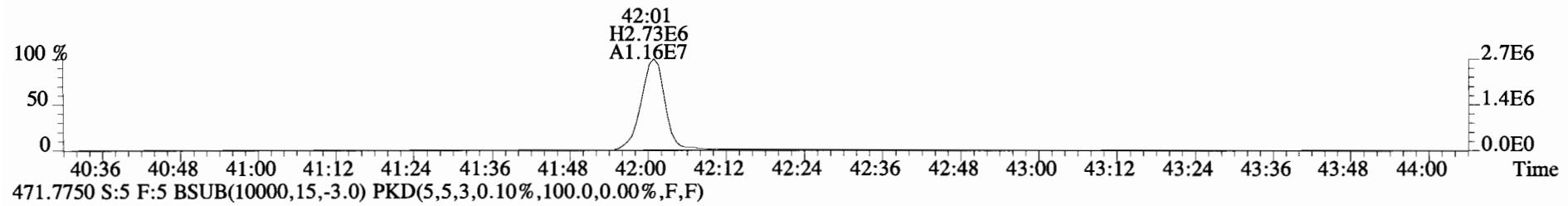
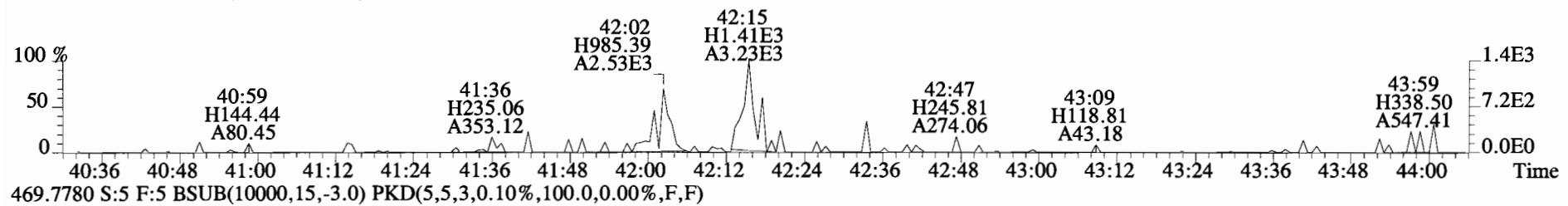
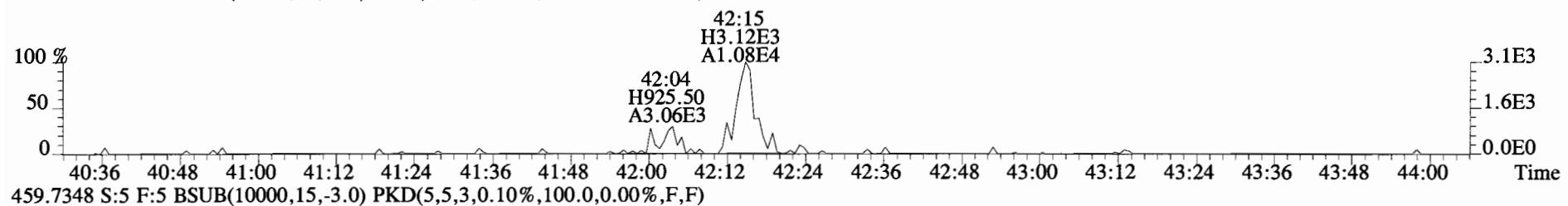
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Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



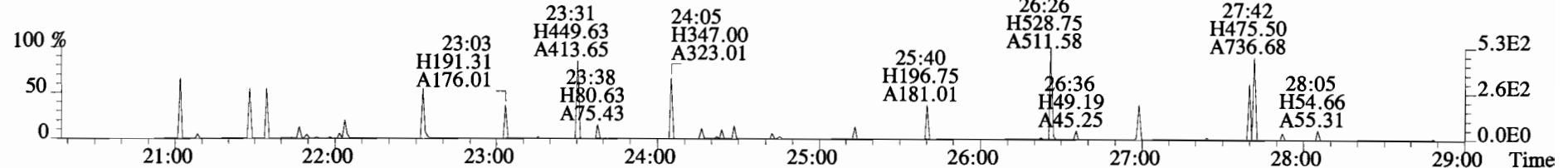
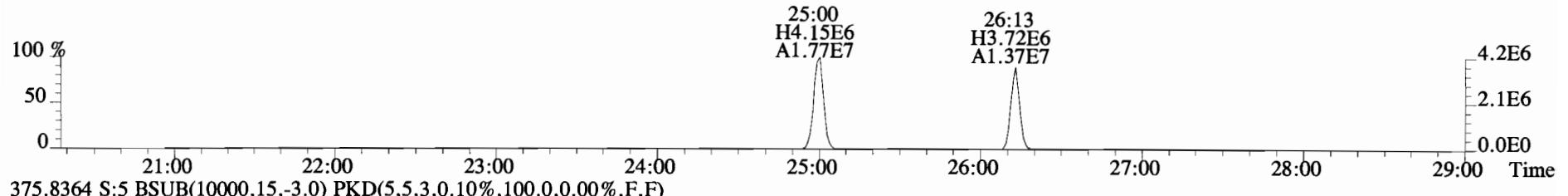
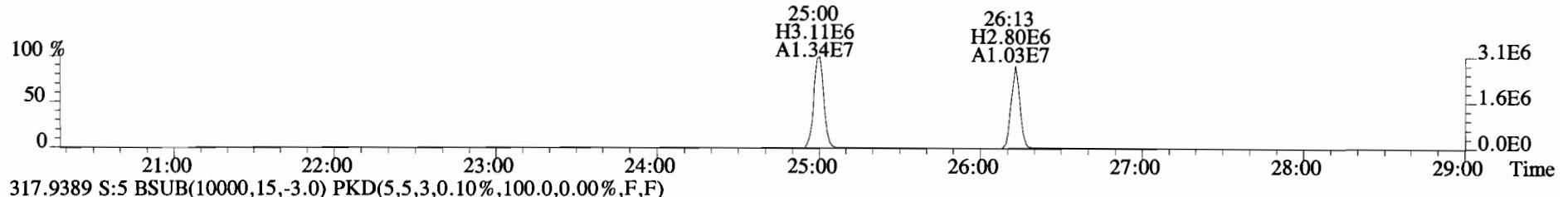
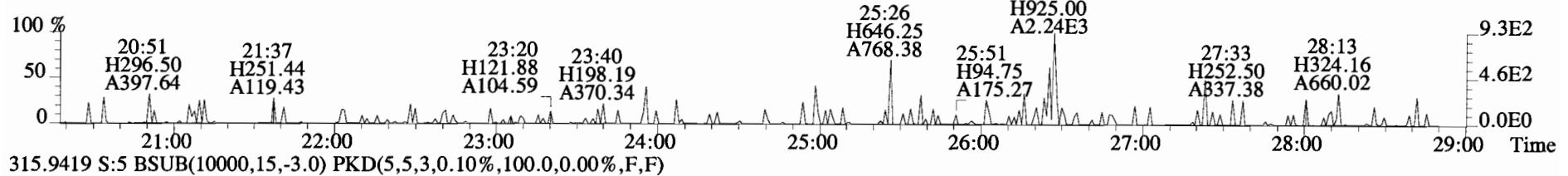
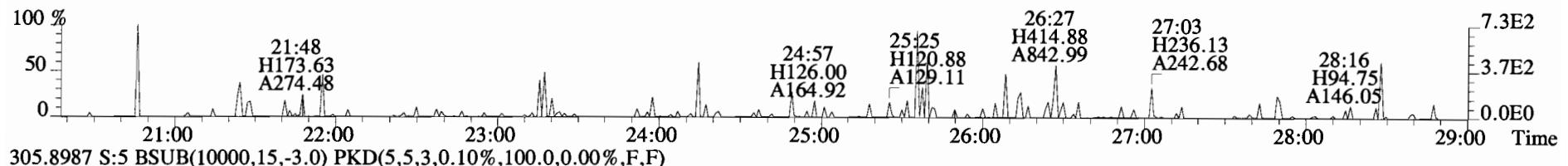
File:141023D2 #1-326 Acq:23-OCT-2014 21:43:05 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
 423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



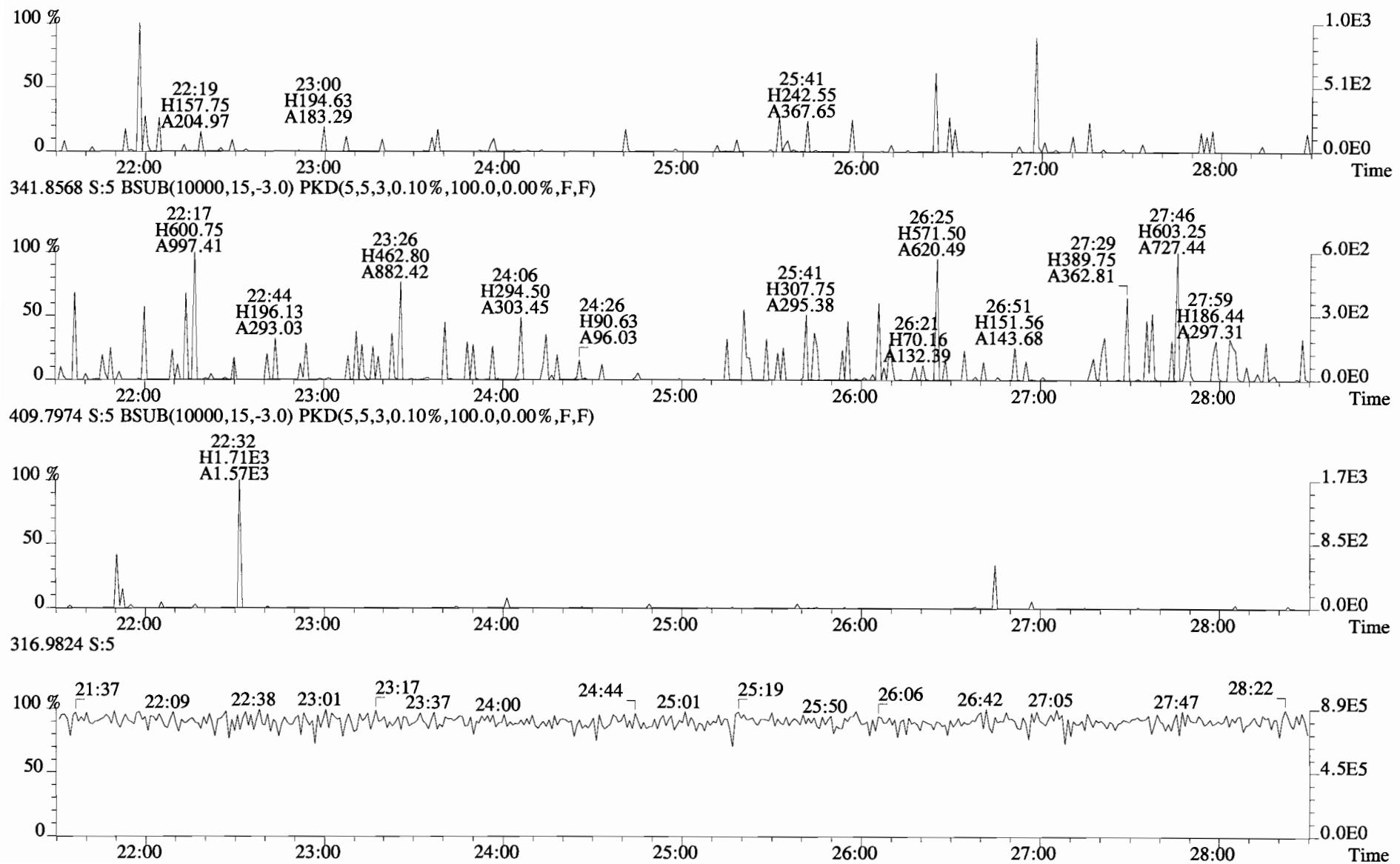
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 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
 457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



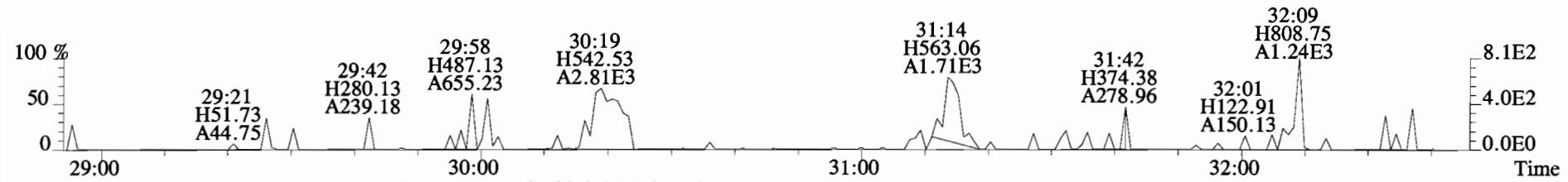
File:141023D2 #1-551 Acq:23-OCT-2014 21:43:05 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
 303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



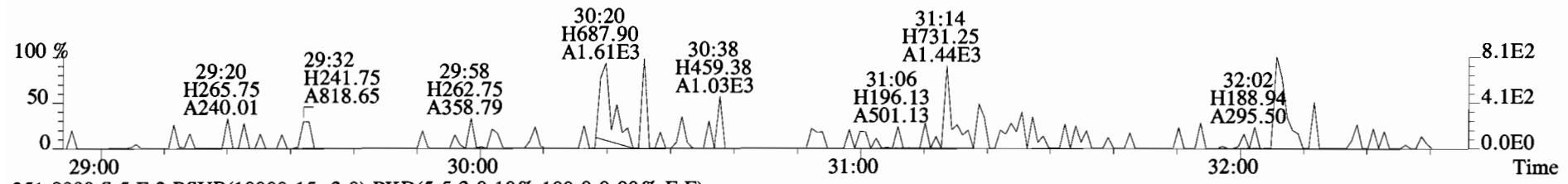
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Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



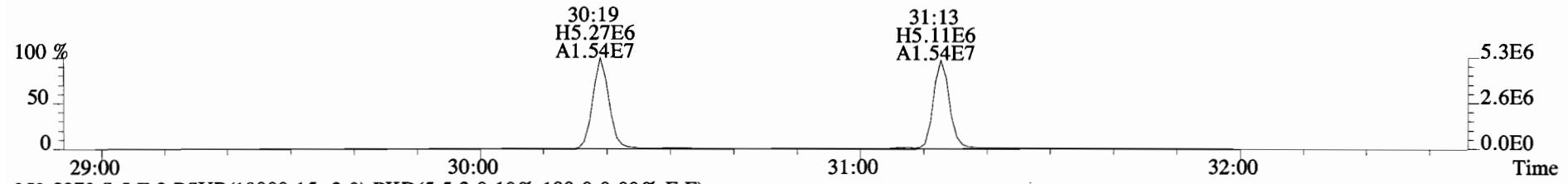
File:141023D2 #1-257 Acq:23-OCT-2014 21:43:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



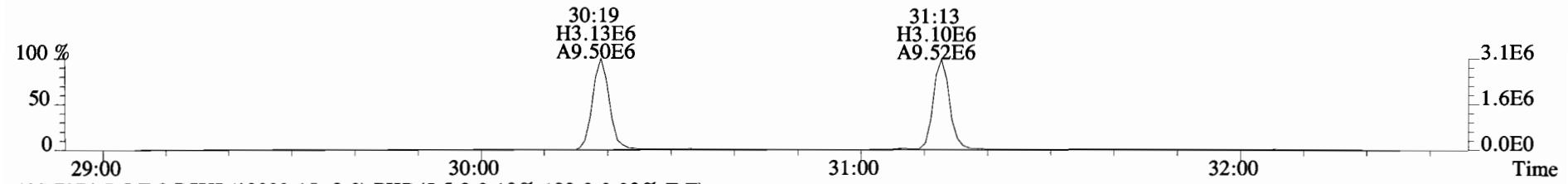
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



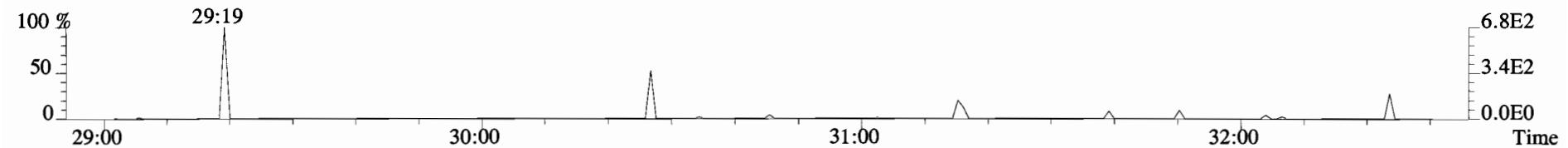
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



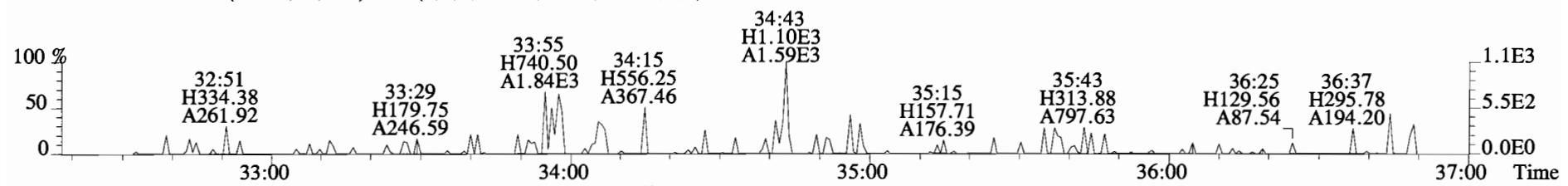
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



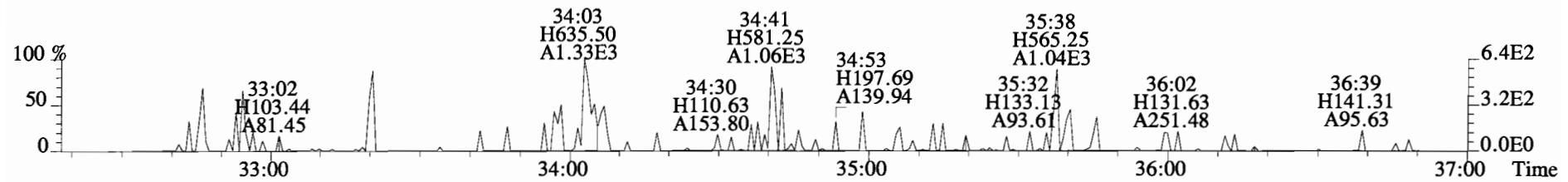
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



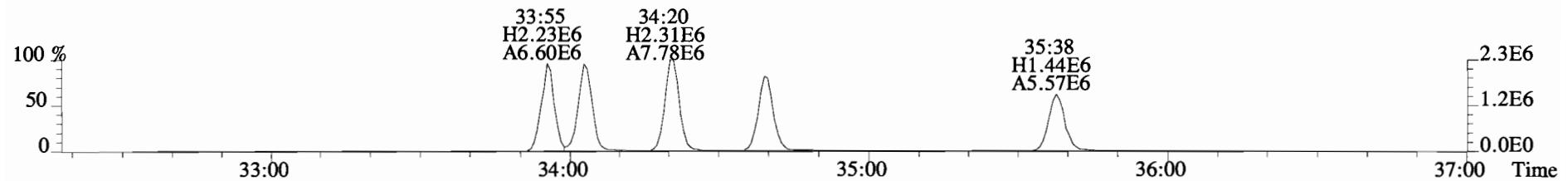
File:141023D2 #1-385 Acq:23-OCT-2014 21:43:05 GC EI + Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



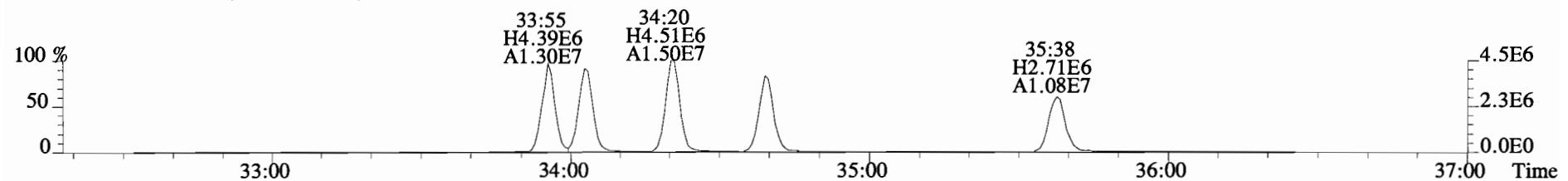
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



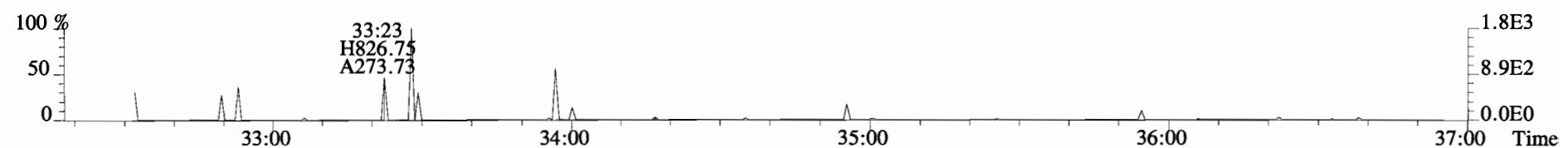
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



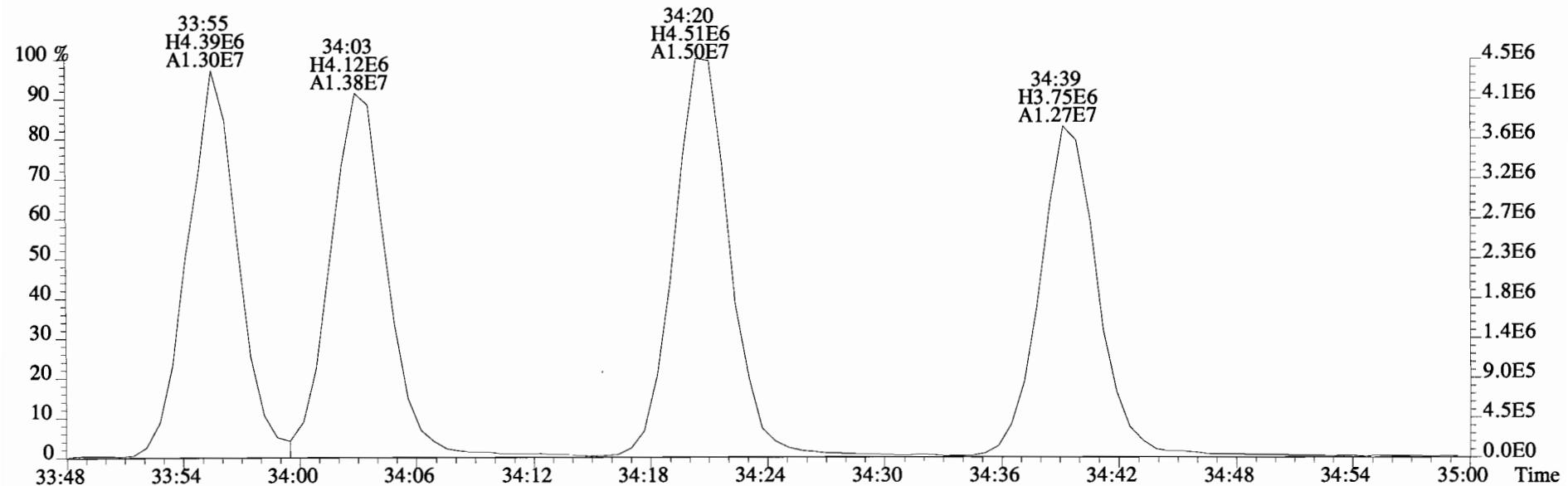
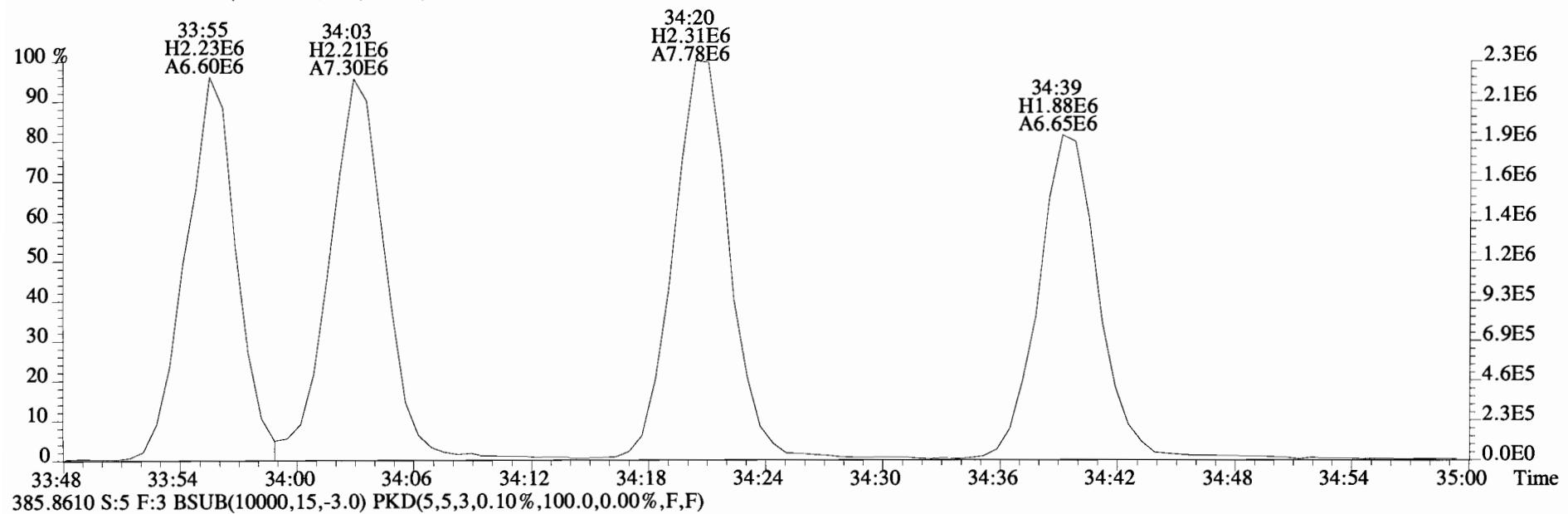
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



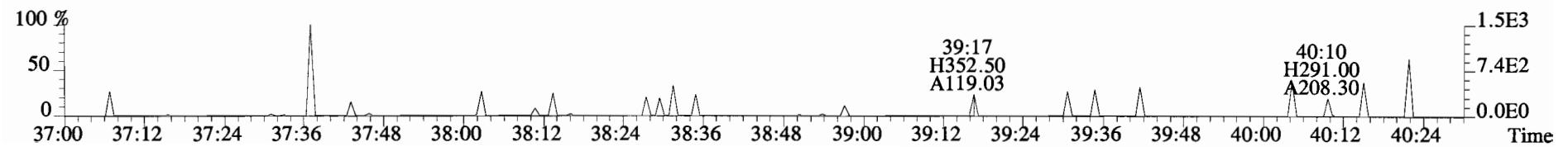
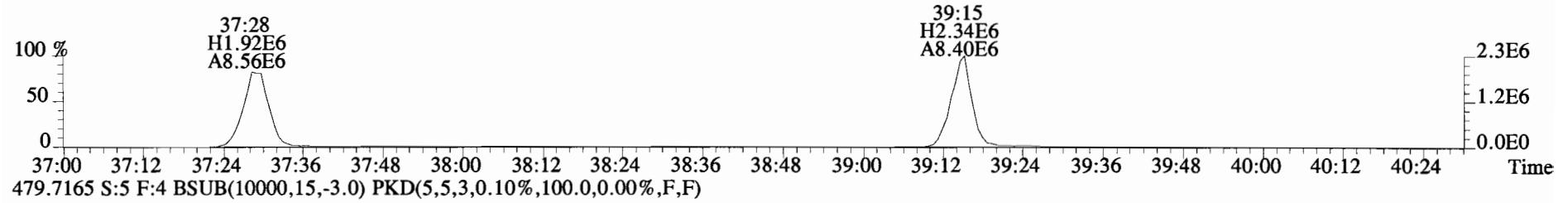
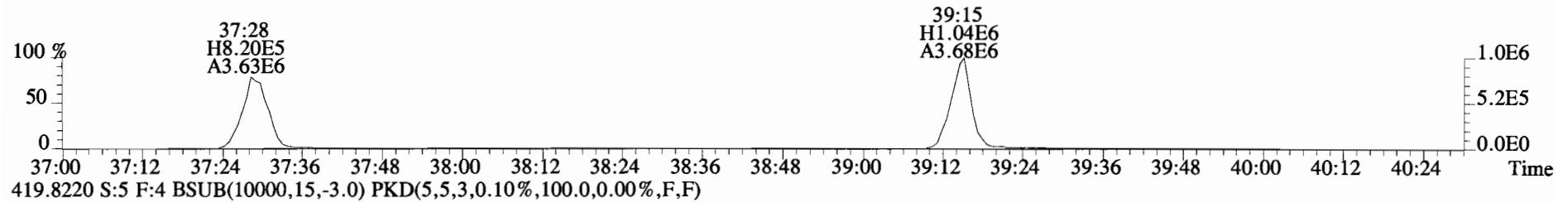
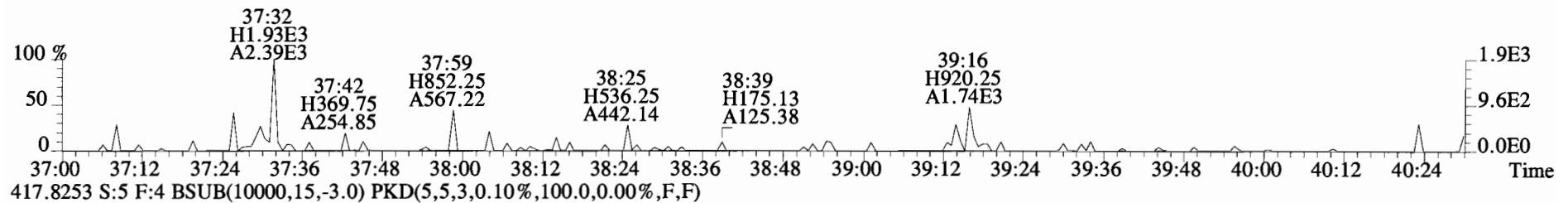
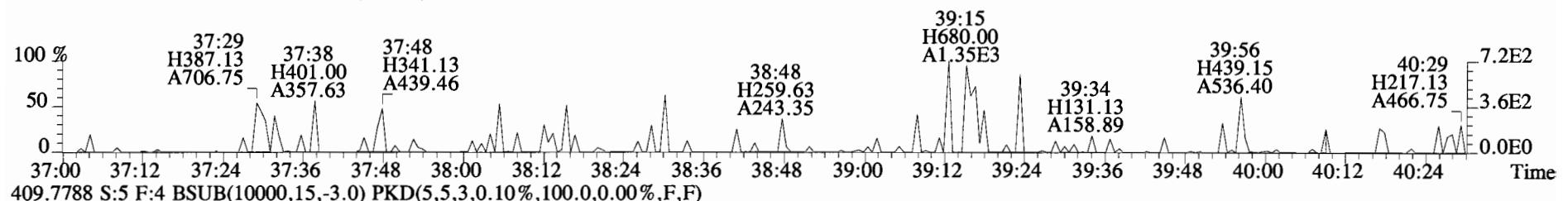
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



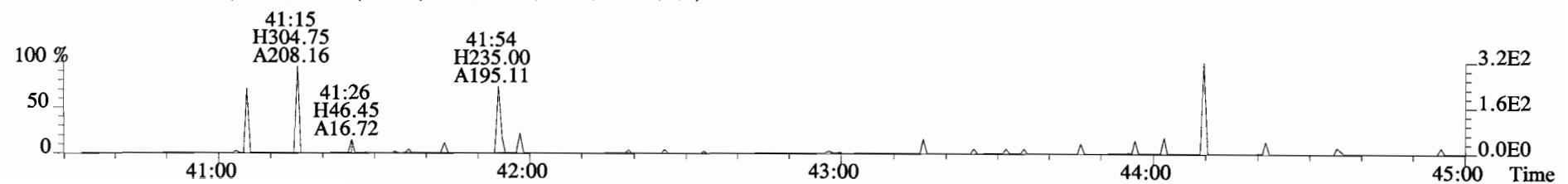
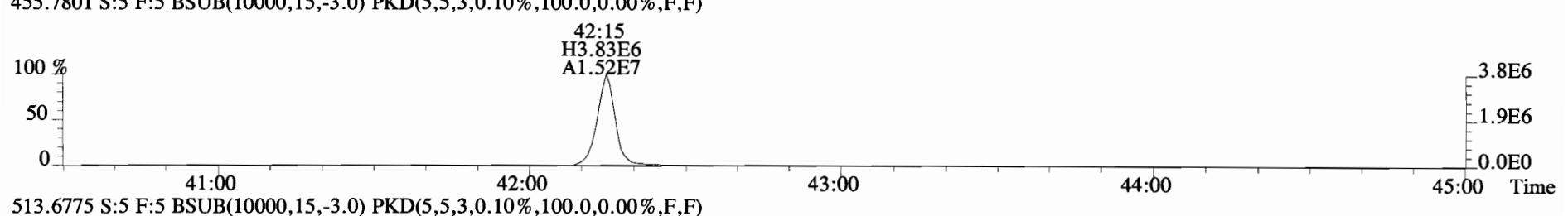
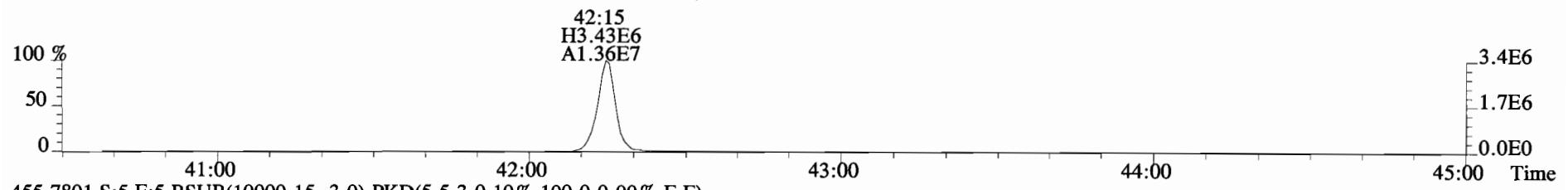
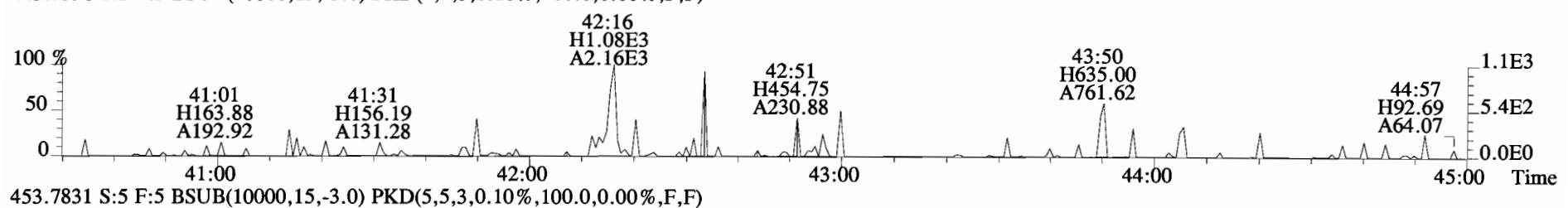
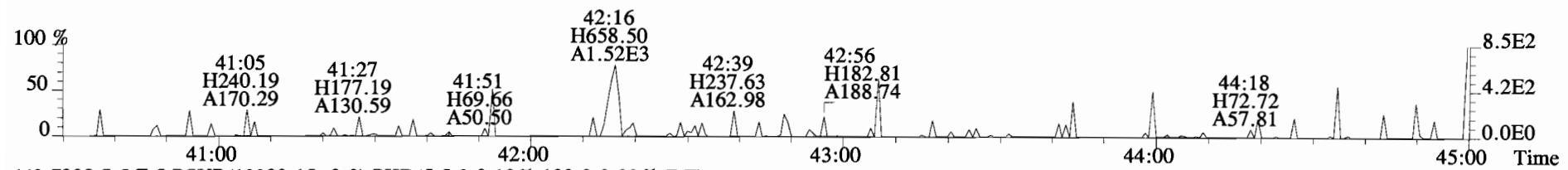
File:141023D2 #1-385 Acq:23-OCT-2014 21:43:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141023D2 #1-326 Acq:23-OCT-2014 21:43:05 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
 407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141023D2 #1-388 Acq:23-OCT-2014 21:43:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BLK1 Method Blank 10 Exp:OCDD_DB5
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



FORM 8A

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory Extraction Batch: B4J0118-BS1

Contract No.:

SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 141023D2-2

Ext. Date: 10-22-14 Shift: Day Analysis Date: 23-OCT-14 Time: 19:17:58

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

NATIVE ANALYTES	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)	
2,3,7,8-TCDD	10	9.11	6.7 - 15.8 7.3 - 14.6 (2)	(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94
1,2,3,7,8-PeCDD	50	48.6	35.0 - 71.0	(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94
1,2,3,4,7,8-HxCDD	50	52.2	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	50	50.3	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	50	50.4	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	50	48.5	35.0 - 70.0	
OCDD	100	99.5	78.0 - 144.0	
2,3,7,8-TCDF	10	9.33	7.5 - 15.8 8.0 - 14.7 (2)	
1,2,3,7,8-PeCDF	50	48.8	40.0 - 67.0	
2,3,4,7,8-PeCDF	50	49.2	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	50	48.7	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	50	48.0	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	50	48.5	35.0 - 78.0	
1,2,3,7,8,9-HxCDF	50	48.3	39.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	50	51.0	41.0 - 61.0	Analyst: <u>M</u>
1,2,3,4,7,8,9-HpCDF	50	50.4	39.0 - 69.0	Date: <u>10/24/14</u>
OCDF	100	99.9	63.0 - 170.0	

FORM 8B

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory Extraction Batch: B4J0118-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 141023D2-2

Ext. Date: 10-22-14 Shift: Day Analysis Date: 23-OCT-14 Time: 19:17:58

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

LABELED COMPOUNDS	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)	
13C-2,3,7,8-TCDD	100	97.0	20.0 - 175.0 25.0 - 141.0 (2)	(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94
13C-1,2,3,7,8-PeCDD	100	123	21.0 - 227.0	
13C-1,2,3,4,7,8-HxCDD	100	78.0	21.0 - 193.0	(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94
13C-1,2,3,6,7,8-HxCDD	100	82.0	25.0 - 163.0	
13C-1,2,3,7,8,9-HxCDD	100	78.8	21.0 - 193.0	
13C-1,2,3,4,6,7,8-HpCDD	100	73.3	26.0 - 166.0	
13C-OCDD	200	118	26.0 - 397.0	
13C-2,3,7,8-TCDF	100	82.1	22.0 - 152.0 26.0 - 126.0 (2)	
13C-1,2,3,7,8-PeCDF	100	99.0	21.0 - 192.0	
13C-2,3,4,7,8-PeCDF	100	101	13.0 - 328.0	
13C-1,2,3,4,7,8-HxCDF	100	93.2	19.0 - 202.0	
13C-1,2,3,6,7,8-HxCDF	100	88.3	21.0 - 159.0	
13C-2,3,4,6,7,8-HxCDF	100	81.7	22.0 - 176.0	
13C-1,2,3,7,8,9-HxCDF	100	81.3	17.0 - 205.0	
13C-1,2,3,4,6,7,8-HpCDF	100	71.5	21.0 - 158.0	
13C-1,2,3,4,7,8,9-HpCDF	100	66.9	20.0 - 186.0	
13C-OCDF	200	123	26.0 - 397.0	
CLEANUP STANDARD				Analyst: <u>MJ</u>
37Cl-2,3,7,8-TCDD	40	37.0	12.4 - 76.4	Date: <u>10/24/14</u>

Client ID: OPR Filename: 141023D2 S:2 Acq:23-OCT-14 19:17:58
 Lab ID: B4J0118-BS1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000 ConCal: ST141023D2-1
Page 2 of 2

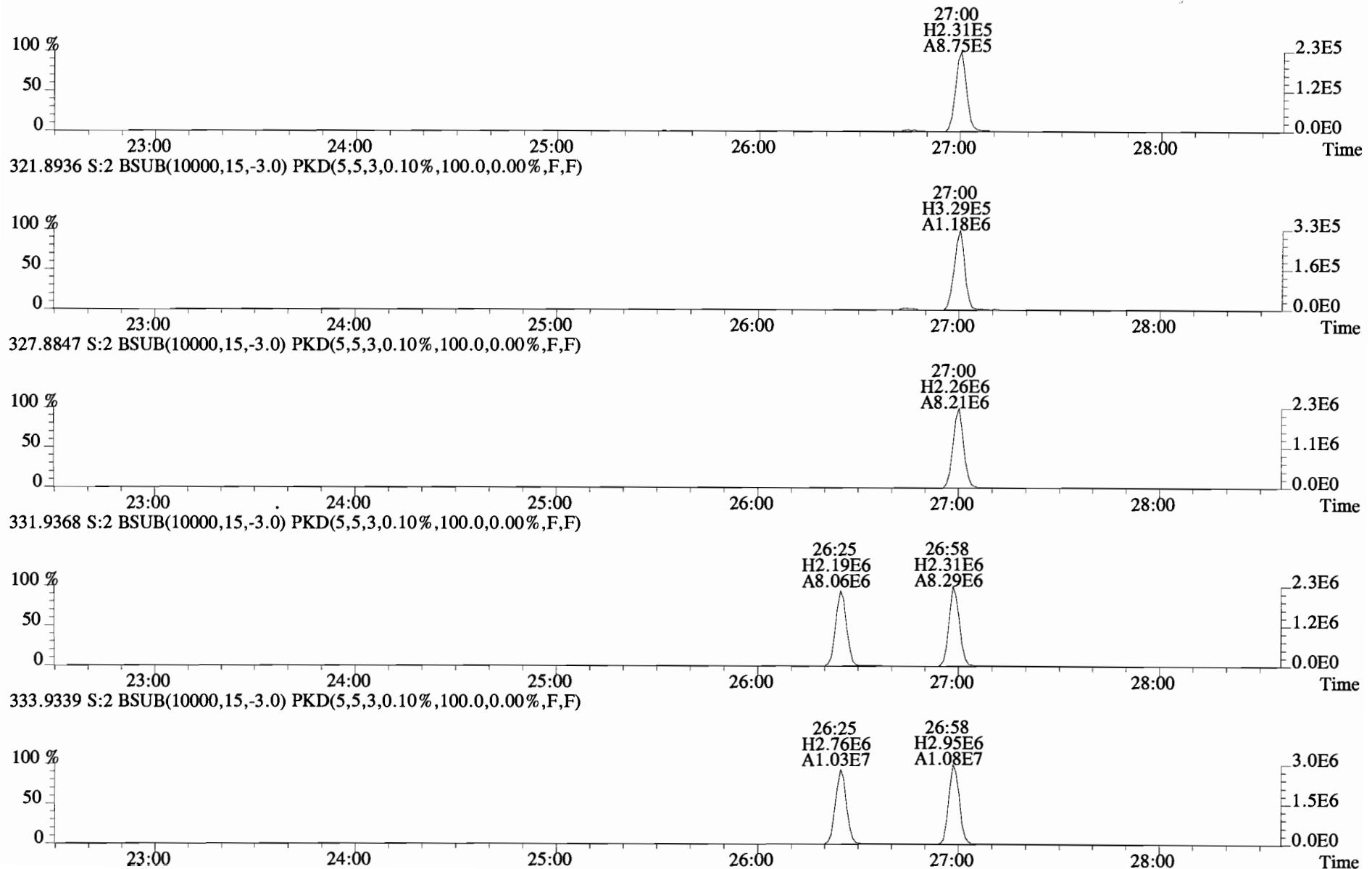
	Name	Resp	RA	RRF	RT	RRT	Conc	Q noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	2.06e+06	0.74 y	1.18	27:00	1.001	9.1097	*	2.5	*	Total Tetra-Dioxins	9.45	9.55	*	*	
	1,2,3,7,8-PeCDD	1.24e+07	0.60 y	0.92	31:30	1.000	48.635	*	2.5	*	Total Penta-Dioxins	48.6	49.0	*	*	
	1,2,3,4,7,8-HxCDD	8.54e+06	1.27 y	1.09	34:50	1.000	52.248	*	2.5	*	Total Hexa-Dioxins	153	154	*	*	
	1,2,3,6,7,8-HxCDD	8.60e+06	1.27 y	1.07	34:57	1.000	50.281	*	2.5	*	Total Hepta-Dioxins	48.9	50.2	*	*	
	1,2,3,7,8,9-HxCDD	8.40e+06	1.24 y	0.93	35:15	1.000	50.372	*	2.5	*	Total Tetra-Furans	9.49	9.87	*	*	
	1,2,3,4,6,7,8-HpCDD	6.78e+06	1.05 y	1.12	38:42	1.000	48.454	*	2.5	*	Total Penta-Furans	98.876	100.34	*	*	
	OCDD	1.16e+07	0.89 y	0.95	42:01	1.000	99.477	*	2.5	*	Total Hexa-Furans	194	195	*	*	
											Total Hepta-Furans	102	104	*	*	
	2,3,7,8-TCDF	2.59e+06	0.80 y	1.08	26:14	1.001	9.3344	*	2.5	*						
	1,2,3,7,8-PeCDF	1.70e+07	1.57 y	1.09	30:20	1.000	48.786	*	2.5	*						
	2,3,4,7,8-PeCDF	1.70e+07	1.55 y	1.04	31:14	1.000	49.208	*	2.5	*						
	1,2,3,4,7,8-HxCDF	1.66e+07	1.29 y	1.39	33:56	1.000	48.725	*	2.5	*						
	1,2,3,6,7,8-HxCDF	1.56e+07	1.26 y	1.26	34:04	1.000	47.980	*	2.5	*						
	2,3,4,6,7,8-HxCDF	1.41e+07	1.28 y	1.30	34:40	1.000	48.549	*	2.5	*						
	1,2,3,7,8,9-HxCDF	1.07e+07	1.27 y	1.19	35:39	1.000	48.348	*	2.5	*						
	1,2,3,4,6,7,8-HpCDF	1.12e+07	1.10 y	1.62	37:30	1.000	51.034	*	2.5	*						
	1,2,3,4,7,8,9-HpCDF	9.69e+06	1.08 y	1.53	39:15	1.000	50.441	*	2.5	*						
	OCDF	1.57e+07	0.92 y	1.10	42:16	1.000	99.899	*	2.5	*						
											Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.91e+07	0.77 y	1.07	26:59	1.022	97.018					97.0				
IS	13C-1,2,3,7,8-PeCDD	2.79e+07	0.63 y	1.24	31:29	1.192	122.68					123				
IS	13C-1,2,3,4,7,8-HxCDD	1.50e+07	1.31 y	0.72	34:49	1.014	78.011					78.0				
IS	13C-1,2,3,6,7,8-HxCDD	1.60e+07	1.27 y	0.74	34:56	1.017	82.006					82.0				
IS	13C-1,2,3,7,8,9-HxCDD	1.79e+07	1.25 y	0.86	35:14	1.026	78.801					78.8				
IS	13C-1,2,3,4,6,7,8-HpCDD	1.26e+07	1.05 y	0.64	38:41	1.126	73.340					73.3				
IS	13C-OCDD	2.46e+07	0.89 y	0.78	42:01	1.223	118.08					59.0				
IS	13C-2,3,7,8-TCDF	2.58e+07	0.77 y	0.92	26:13	0.992	82.066					82.1				
IS	13C-1,2,3,7,8-PeCDF	3.20e+07	1.57 y	0.95	30:19	1.148	99.036					99.0				
IS	13C-2,3,4,7,8-PeCDF	3.32e+07	1.57 y	0.97	31:13	1.182	100.73					101				
IS	13C-1,2,3,4,7,8-HxCDF	2.45e+07	0.51 y	0.99	33:55	0.988	93.173					93.2				
IS	13C-1,2,3,6,7,8-HxCDF	2.58e+07	0.52 y	1.10	34:03	0.992	88.328					88.3				
IS	13C-2,3,4,6,7,8-HxCDF	2.24e+07	0.52 y	1.03	34:39	1.009	81.669					81.7				
IS	13C-1,2,3,7,8,9-HxCDF	1.85e+07	0.51 y	0.86	35:38	1.037	81.270					81.3				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.36e+07	0.44 y	0.71	37:29	1.091	71.519					71.5				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.26e+07	0.42 y	0.71	39:15	1.143	66.907					66.9				
IS	13C-OCDF	2.85e+07	0.90 y	0.87	42:15	1.230	122.75					61.4				

C/Up	37Cl-2,3,7,8-TCDD	8.21e+06		1.21	27:00	1.022	36.986		92.5	Integrations by Analyst: <u>MJ</u>	Reviewed by Analyst: <u>EG</u>
RS/RT	13C-1,2,3,4-TCDD	1.83e+07	0.79 y	1.00	26:25	*	100.00				
RS	13C-1,2,3,4-TCDF	3.40e+07	0.77 y	1.00	24:59	*	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.66e+07	0.52 y	1.00	34:21	*	100.00			Date: <u>10/24/14</u>	Date: <u>10/29/14</u>

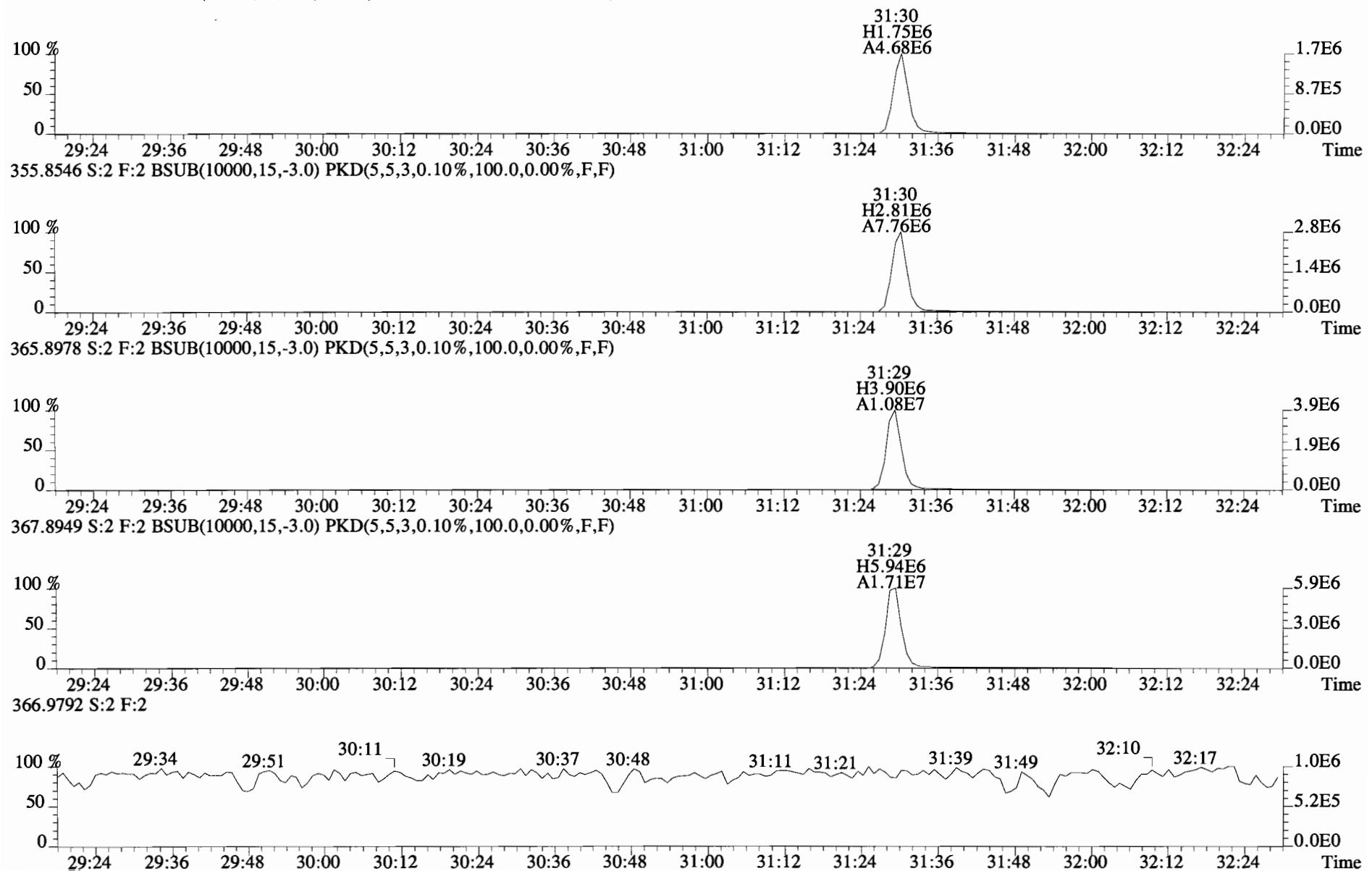
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 Lab ID: B4J0118-BS1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol:10.000 ConCal: ST141023D2-1
Page 2 of 3

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	2.06e+06	0.74 y	1.18	27:00	1.001	18.219	*	2.5	*		Total Tetra-Dioxins	18.9	19.1	*	*	
	1,2,3,7,8-PeCDD	1.24e+07	0.60 y	0.92	31:30	1.000	97.270	*	2.5	*		Total Penta-Dioxins	97.3	98.1	*	*	
	1,2,3,4,7,8-HxCDD	8.54e+06	1.27 y	1.09	34:50	1.000	104.50	*	2.5	*		Total Hexa-Dioxins	307	308	*	*	
	1,2,3,6,7,8-HxCDD	8.60e+06	1.27 y	1.07	34:57	1.000	100.56	*	2.5	*		Total Hepta-Dioxins	97.9	100	*	*	
	1,2,3,7,8,9-HxCDD	8.40e+06	1.24 y	0.93	35:15	1.000	100.74	*	2.5	*		Total Tetra-Furans	19.0	19.7	*	*	
	1,2,3,4,6,7,8-HpCDD	6.78e+06	1.05 y	1.12	38:42	1.000	96.909	*	2.5	*		Total Penta-Furans	197.75	200.67	*	*	
	OCDD	1.16e+07	0.89 y	0.95	42:01	1.000	198.95	*	2.5	*		Total Hexa-Furans	388	389	*	*	
												Total Hepta-Furans	204	209	*	*	
	2,3,7,8-TCDF	2.59e+06	0.80 y	1.08	26:14	1.001	18.669	*	2.5	*							
	1,2,3,7,8-PeCDF	1.70e+07	1.57 y	1.09	30:20	1.000	97.571	*	2.5	*							
	2,3,4,7,8-PeCDF	1.70e+07	1.55 y	1.04	31:14	1.000	98.416	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.66e+07	1.29 y	1.39	33:56	1.000	97.450	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.56e+07	1.26 y	1.26	34:04	1.000	95.959	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.41e+07	1.28 y	1.30	34:40	1.000	97.099	*	2.5	*							
	1,2,3,7,8,9-HxCDF	1.07e+07	1.27 y	1.19	35:39	1.000	96.697	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.12e+07	1.10 y	1.62	37:30	1.000	102.07	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	9.69e+06	1.08 y	1.53	39:15	1.000	100.88	*	2.5	*							
	OCDF	1.57e+07	0.92 y	1.10	42:16	1.000	199.80	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.91e+07	0.77 y	1.07	26:59	1.022	194.04					97.0					
IS	13C-1,2,3,7,8-PeCDD	2.79e+07	0.63 y	1.24	31:29	1.192	245.37					123					
IS	13C-1,2,3,4,7,8-HxCDD	1.50e+07	1.31 y	0.72	34:49	1.014	156.02					78.0					
IS	13C-1,2,3,6,7,8-HxCDD	1.60e+07	1.27 y	0.74	34:56	1.017	164.01					82.0					
IS	13C-1,2,3,7,8,9-HxCDD	1.79e+07	1.25 y	0.86	35:14	1.026	157.60					78.8					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.26e+07	1.05 y	0.64	38:41	1.126	146.68					73.3					
IS	13C-OCDD	2.46e+07	0.89 y	0.78	42:01	1.223	236.17					59.0					
IS	13C-2,3,7,8-TCDF	2.58e+07	0.77 y	0.92	26:13	0.992	164.13					82.1					
IS	13C-1,2,3,7,8-PeCDF	3.20e+07	1.57 y	0.95	30:19	1.148	198.07					99.0					
IS	13C-2,3,4,7,8-PeCDF	3.32e+07	1.57 y	0.97	31:13	1.182	201.46					101					
IS	13C-1,2,3,4,7,8-HxCDF	2.45e+07	0.51 y	0.99	33:55	0.988	186.35					93.2					
IS	13C-1,2,3,6,7,8-HxCDF	2.58e+07	0.52 y	1.10	34:03	0.992	176.66					88.3					
IS	13C-2,3,4,6,7,8-HxCDF	2.24e+07	0.52 y	1.03	34:39	1.009	163.34					81.7					
IS	13C-1,2,3,7,8,9-HxCDF	1.85e+07	0.51 y	0.86	35:38	1.037	162.54					81.3					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.36e+07	0.44 y	0.71	37:29	1.091	143.04					71.5					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.26e+07	0.42 y	0.71	39:15	1.143	133.81					66.9					
IS	13C-OCDF	2.85e+07	0.90 y	0.87	42:15	1.230	245.50					61.4					
C/Up	37Cl-2,3,7,8-TCDD	8.21e+06		1.21	27:00	1.022	73.972					92.5	Integrations by _____	Reviewed by _____			
RS/RT	13C-1,2,3,4-TCDD	1.83e+07	0.79 y	1.00	26:25	*	200.00						Analyst: _____				
RS	13C-1,2,3,4-TCDF	3.40e+07	0.77 y	1.00	24:59	*	200.00						Analyst: _____				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.66e+07	0.52 y	1.00	34:21	*	200.00						Date: 10/24/14	Date: _____			

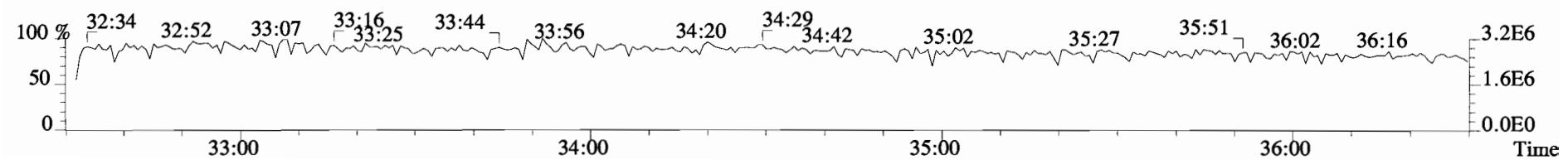
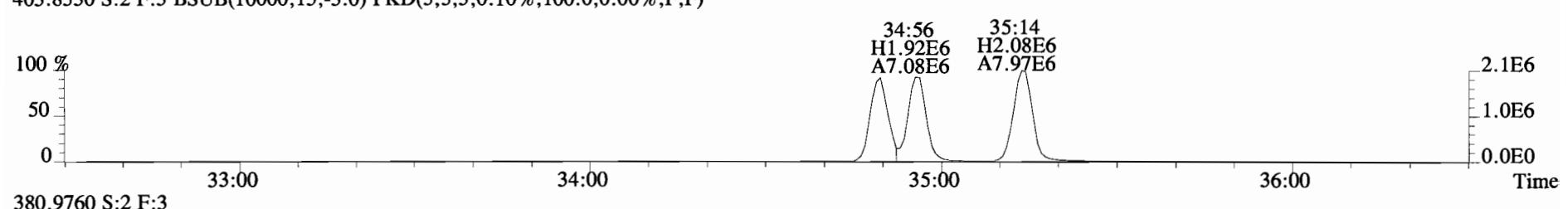
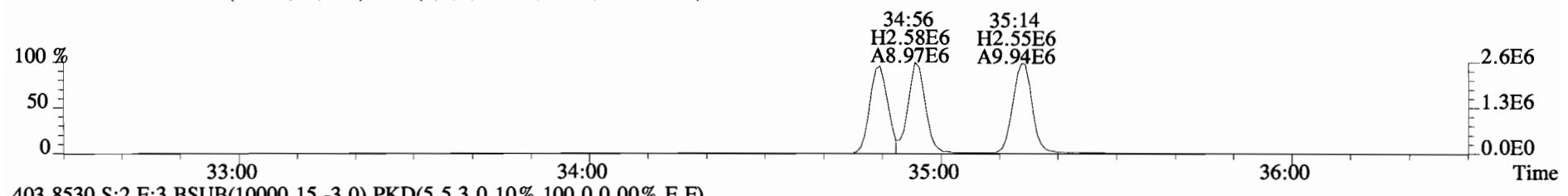
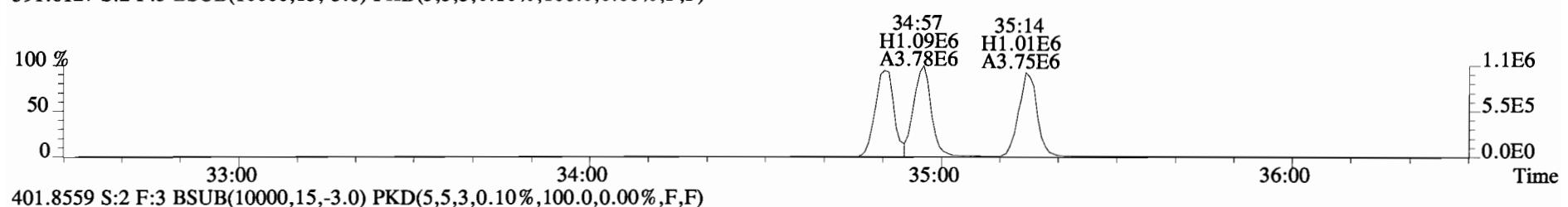
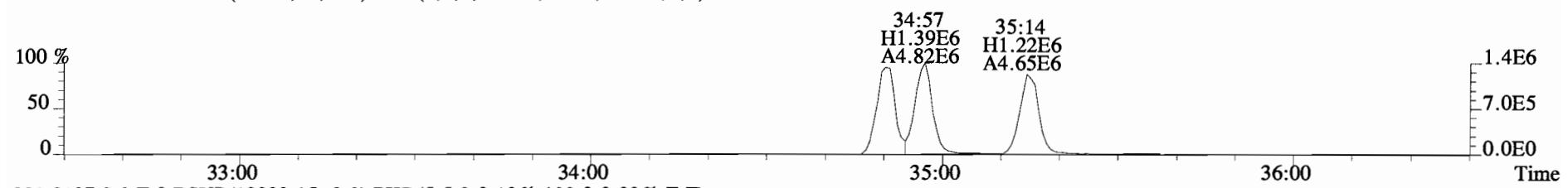
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319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



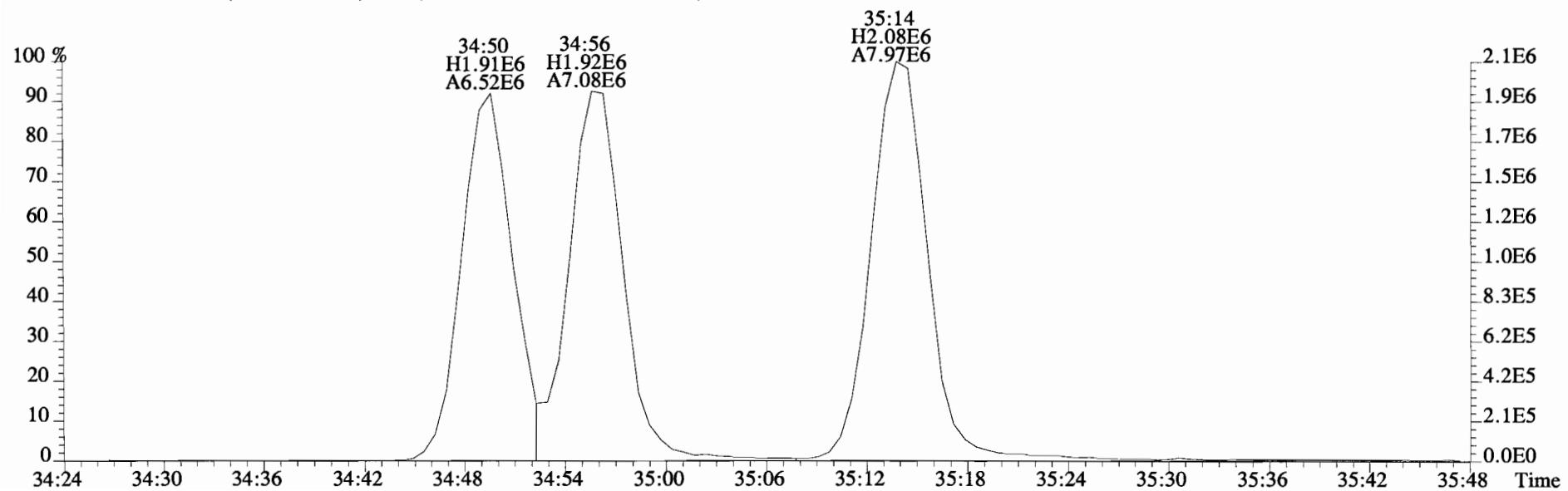
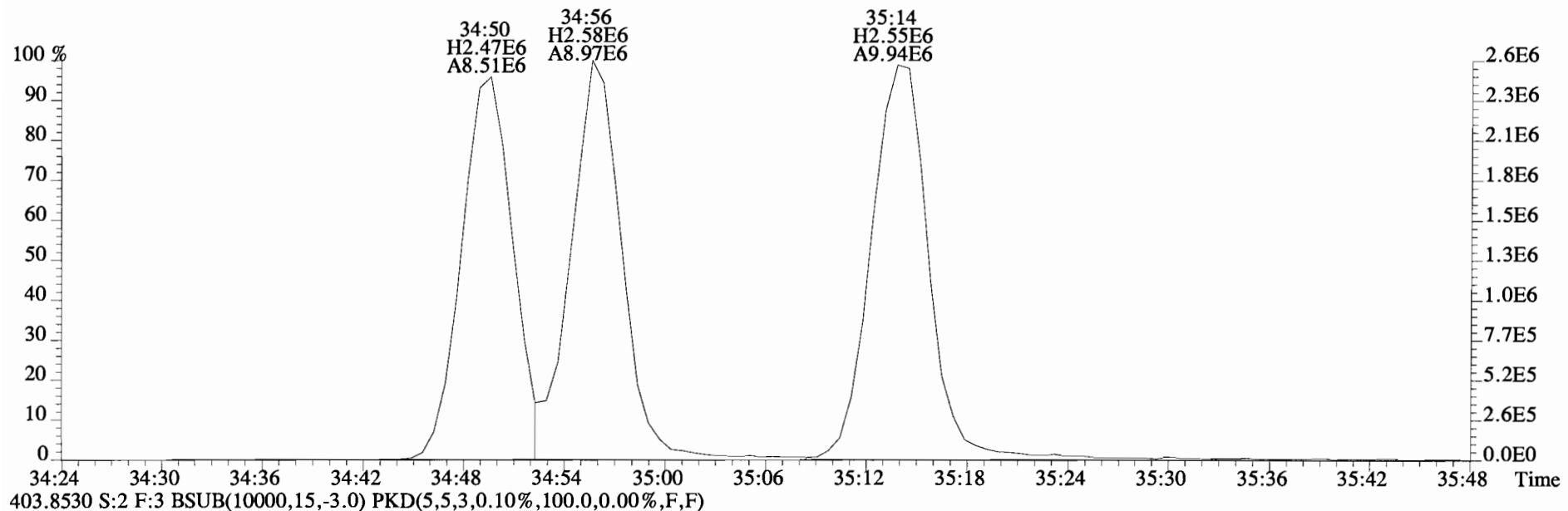
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 353.8576 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



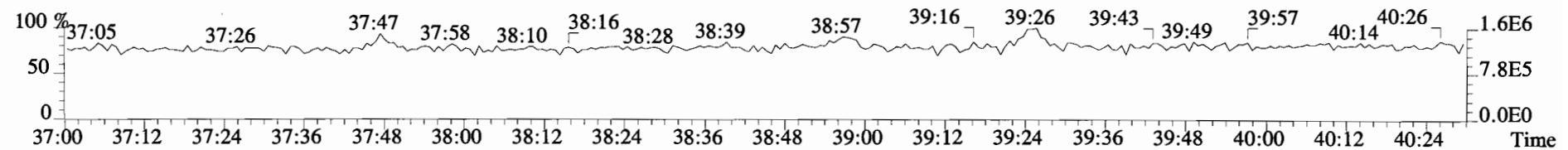
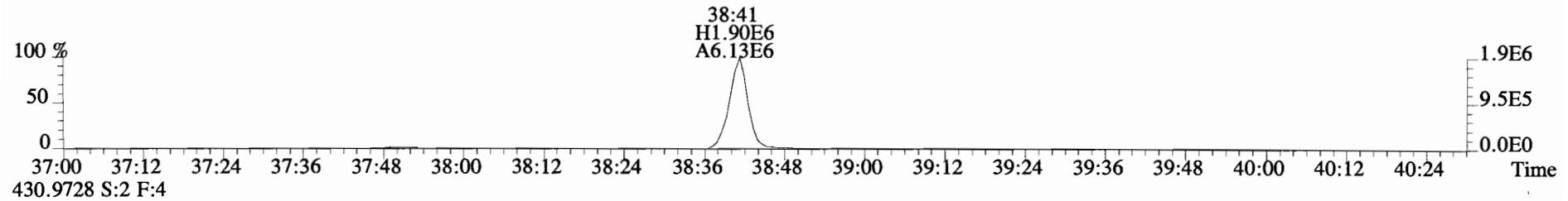
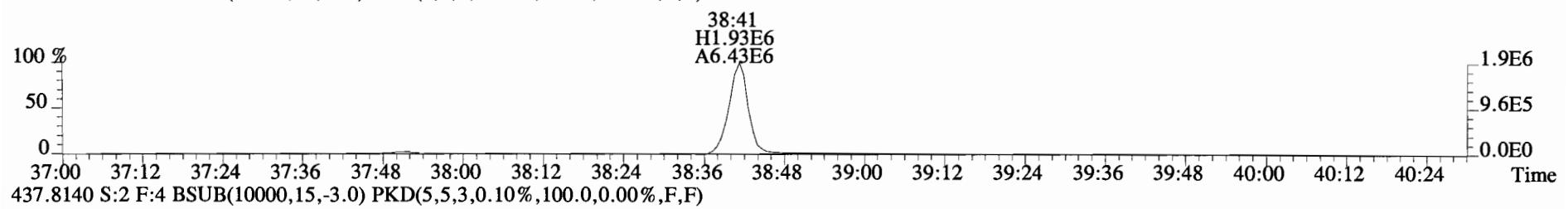
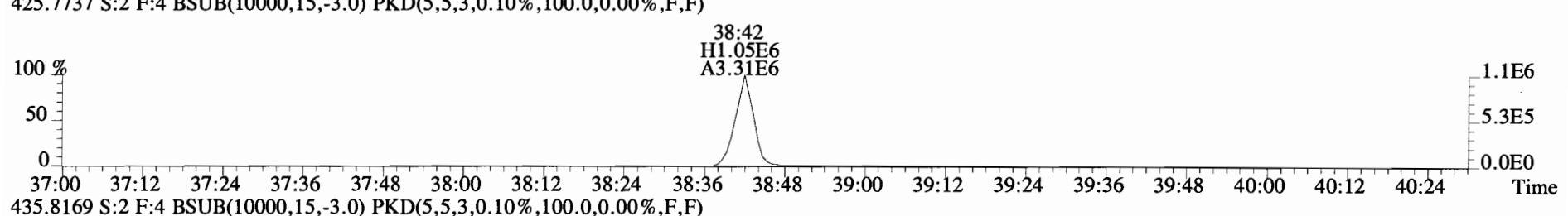
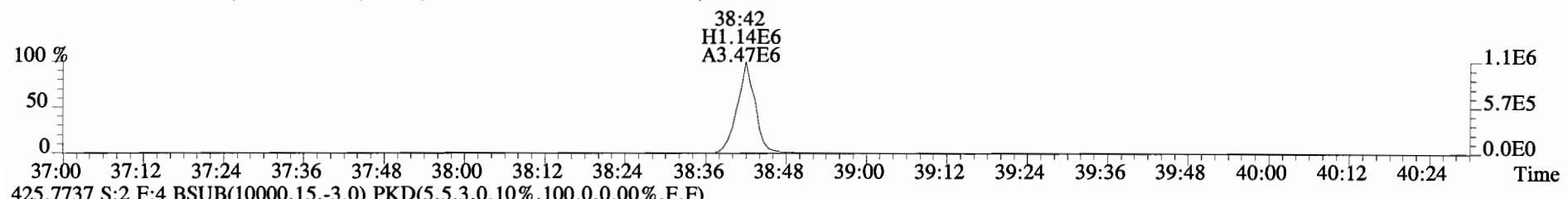
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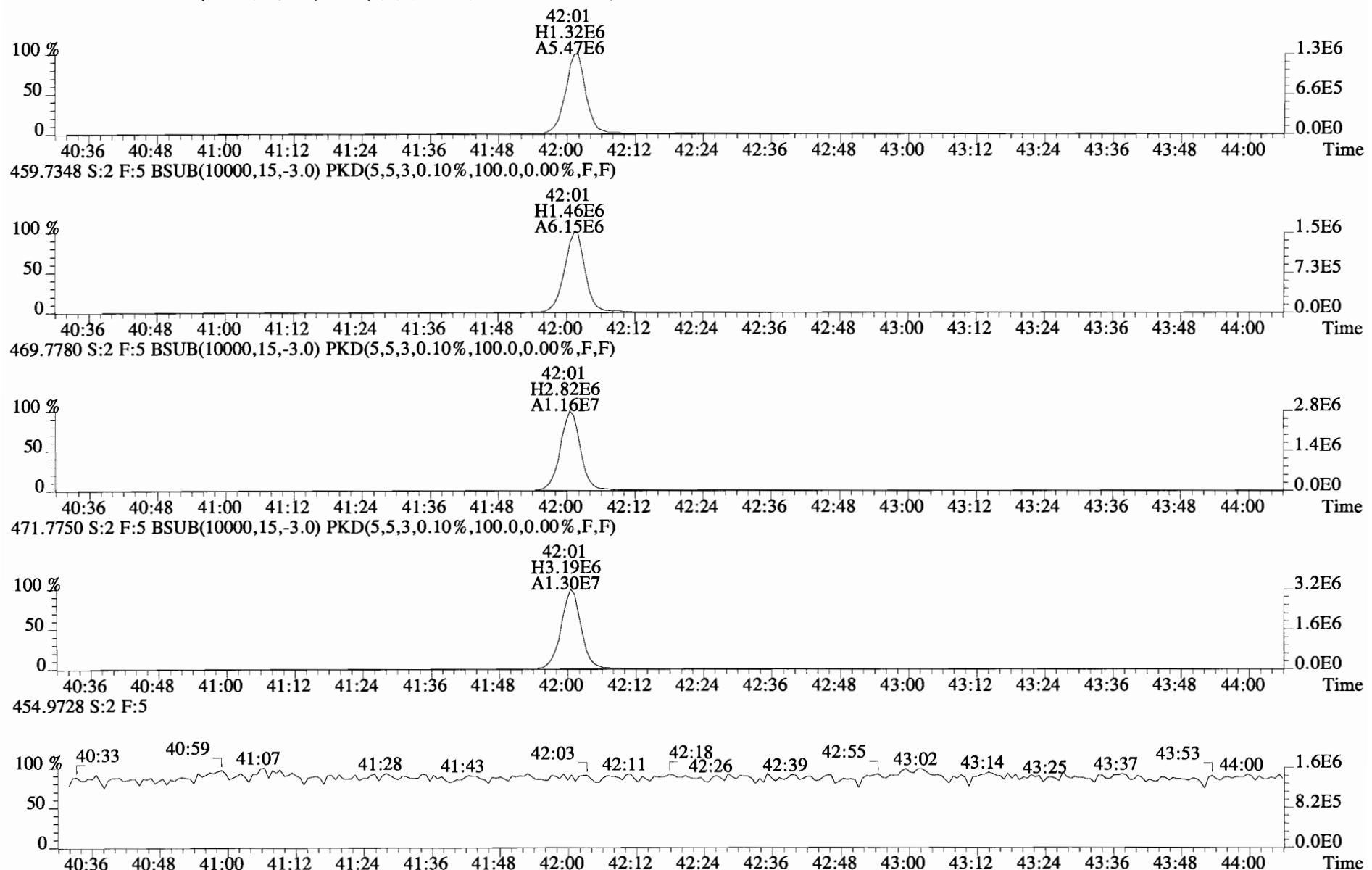
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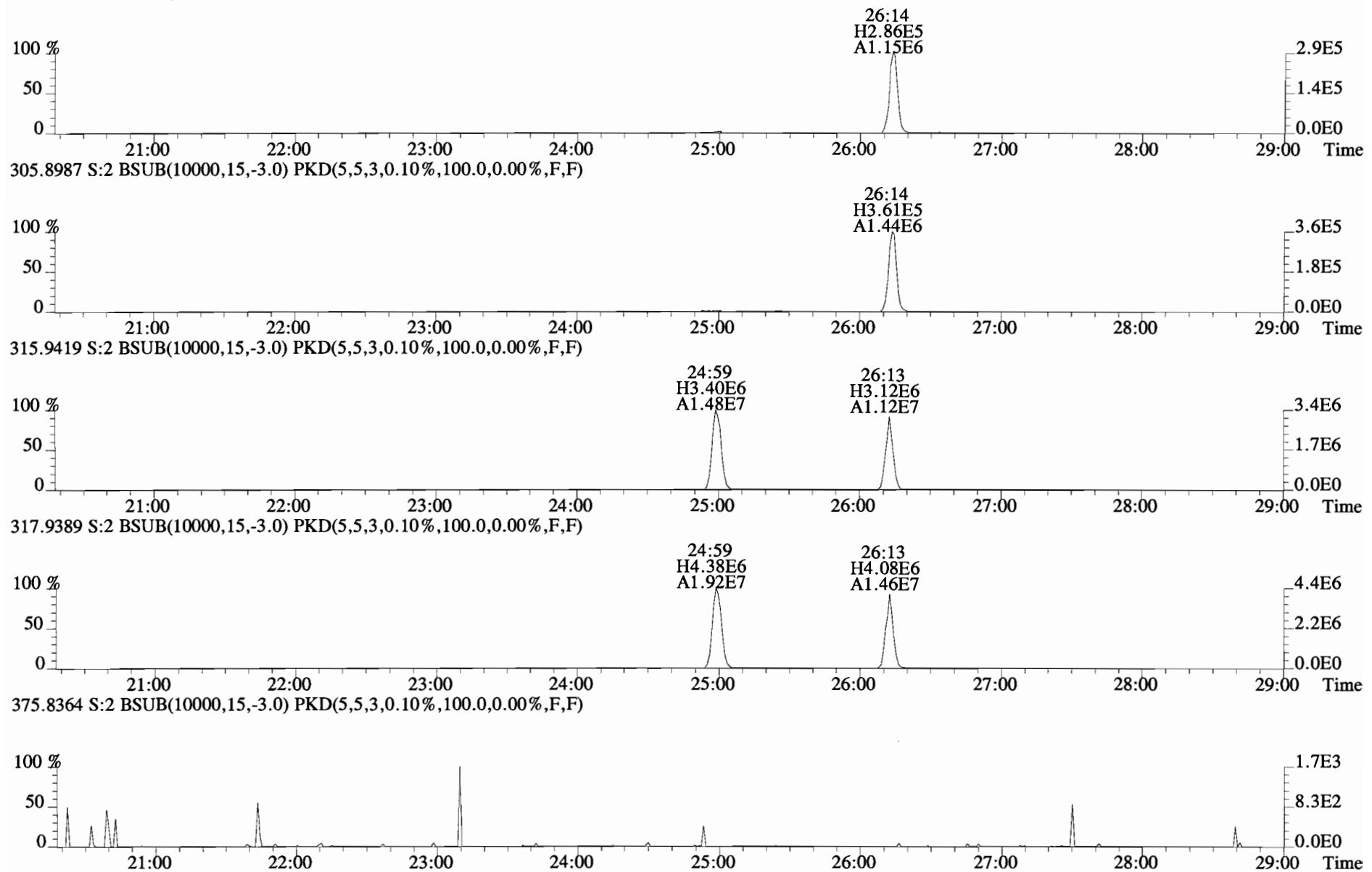
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423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



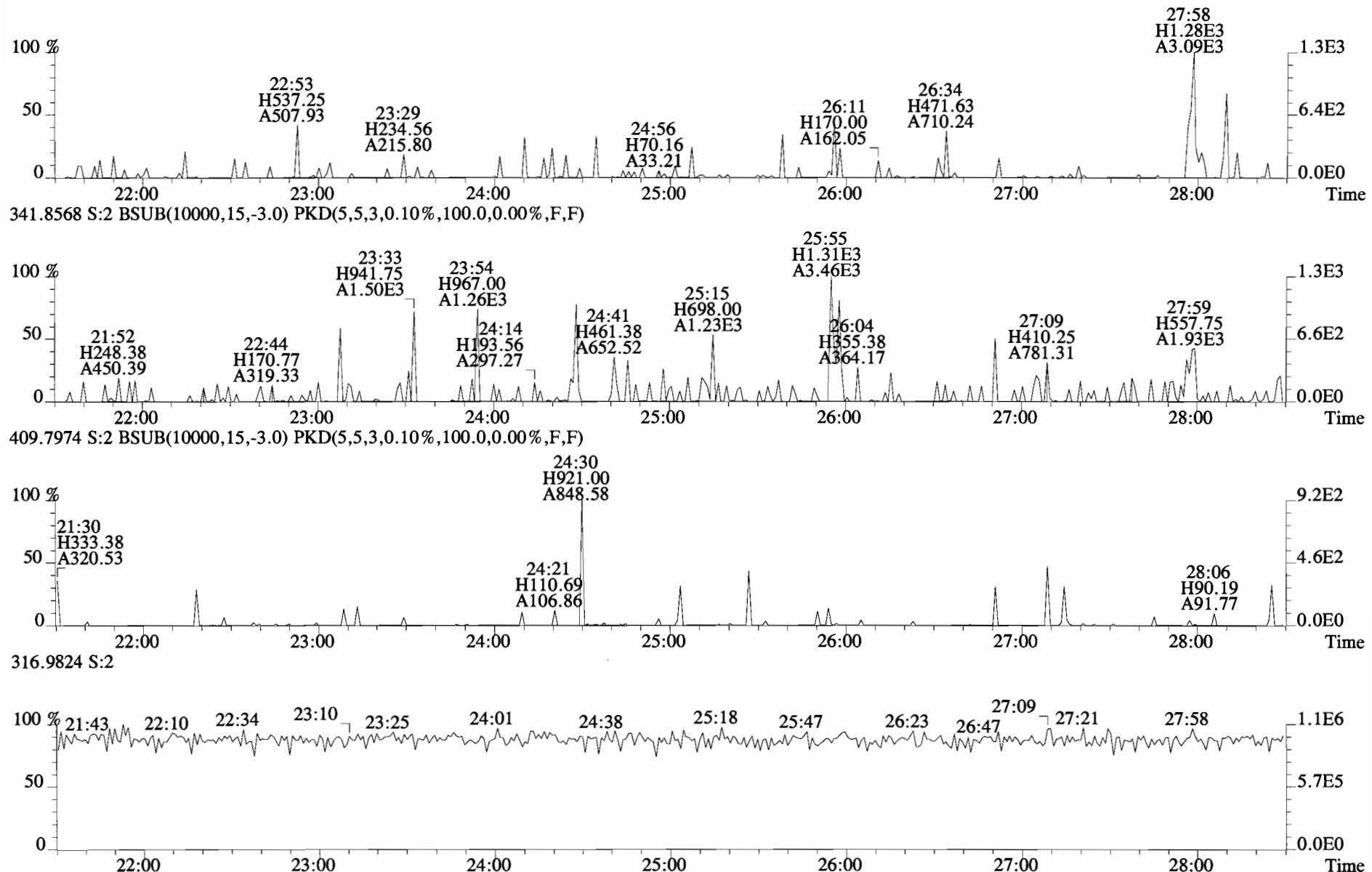
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457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



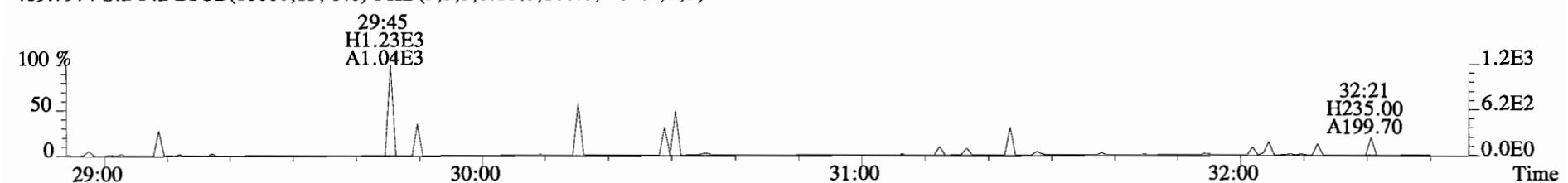
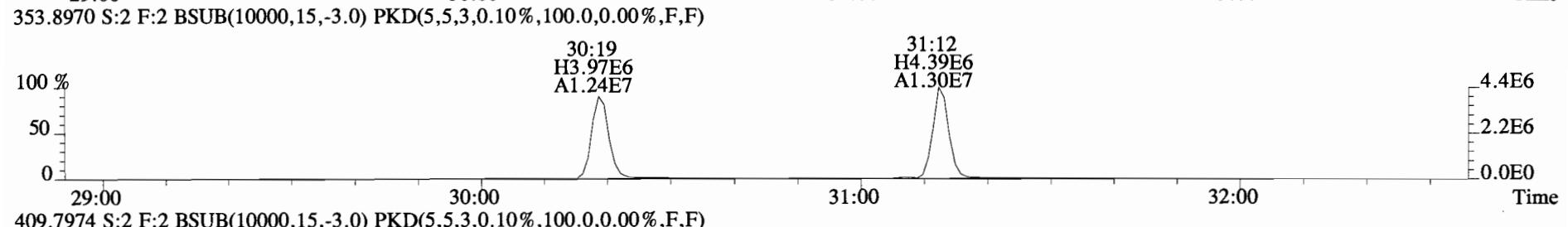
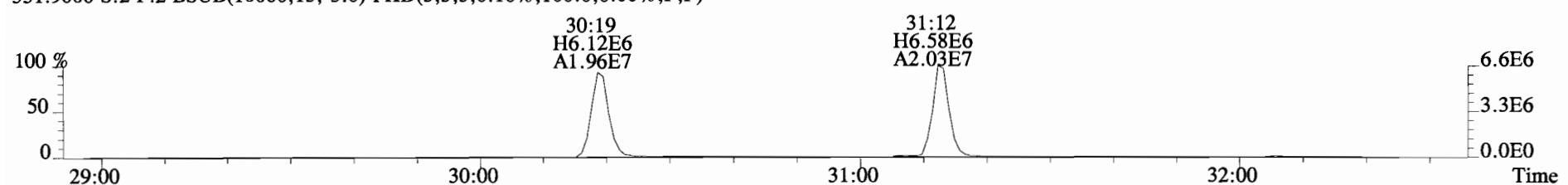
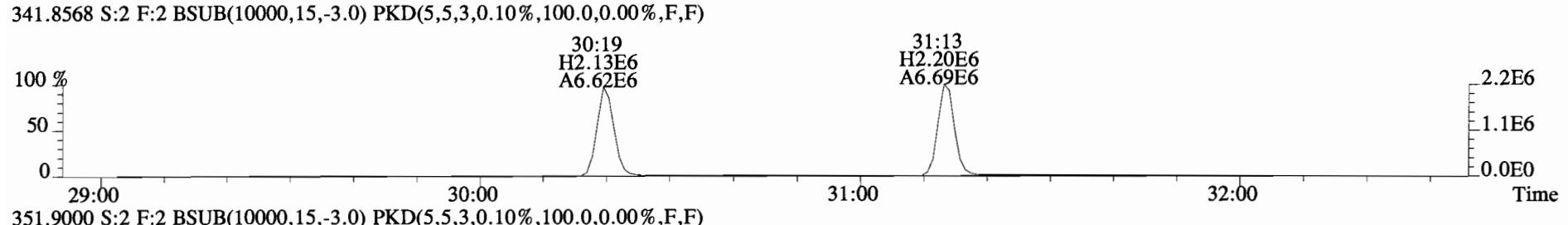
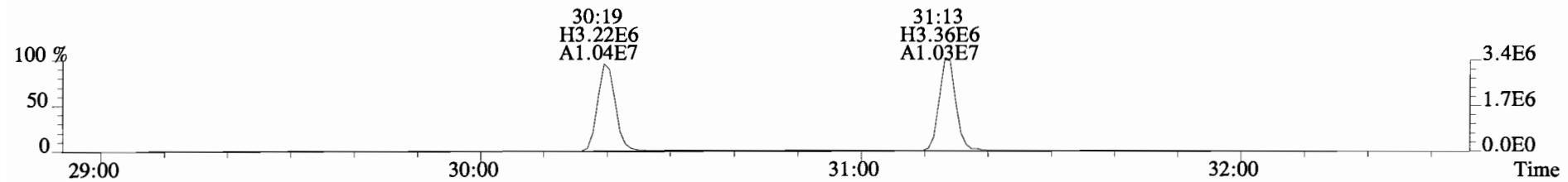
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303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



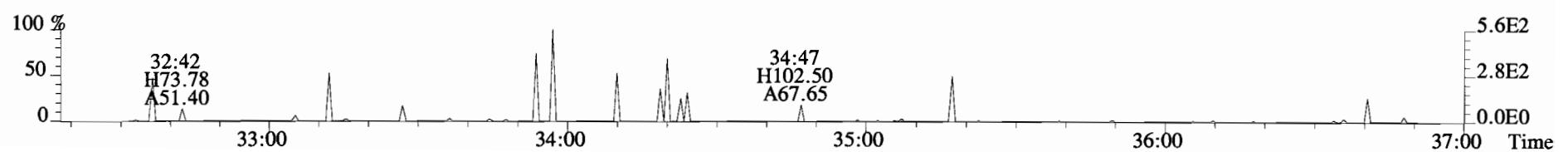
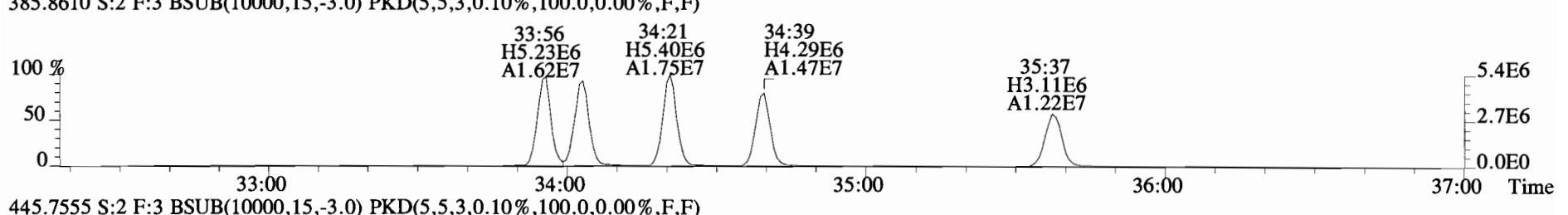
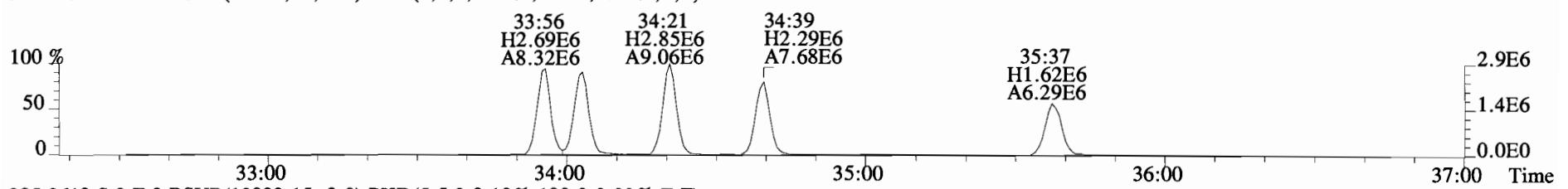
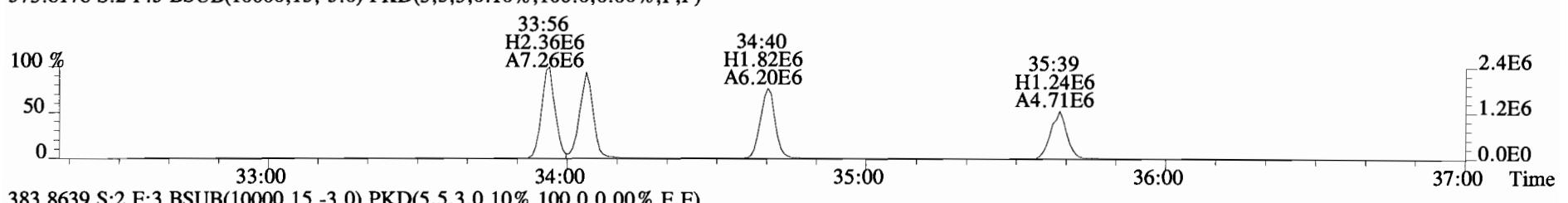
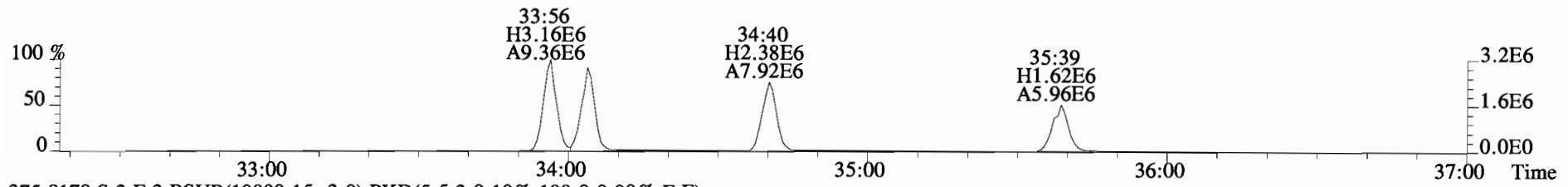
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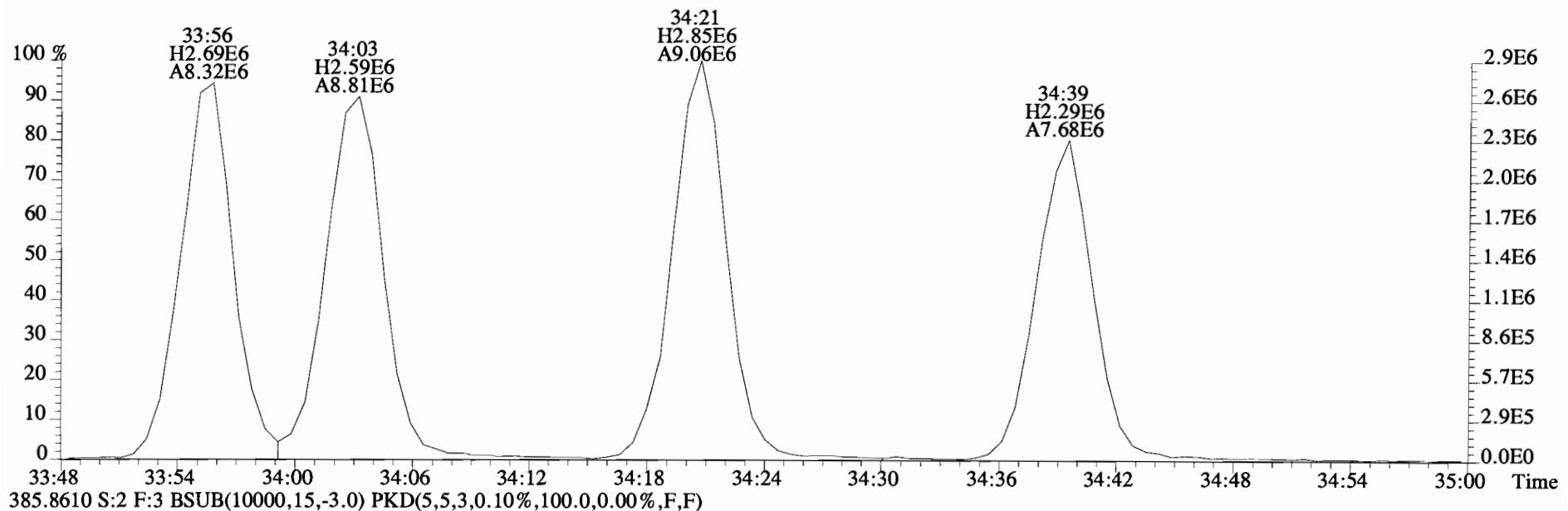
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Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BS1 OPR 10 Exp:OCDD_DB5
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



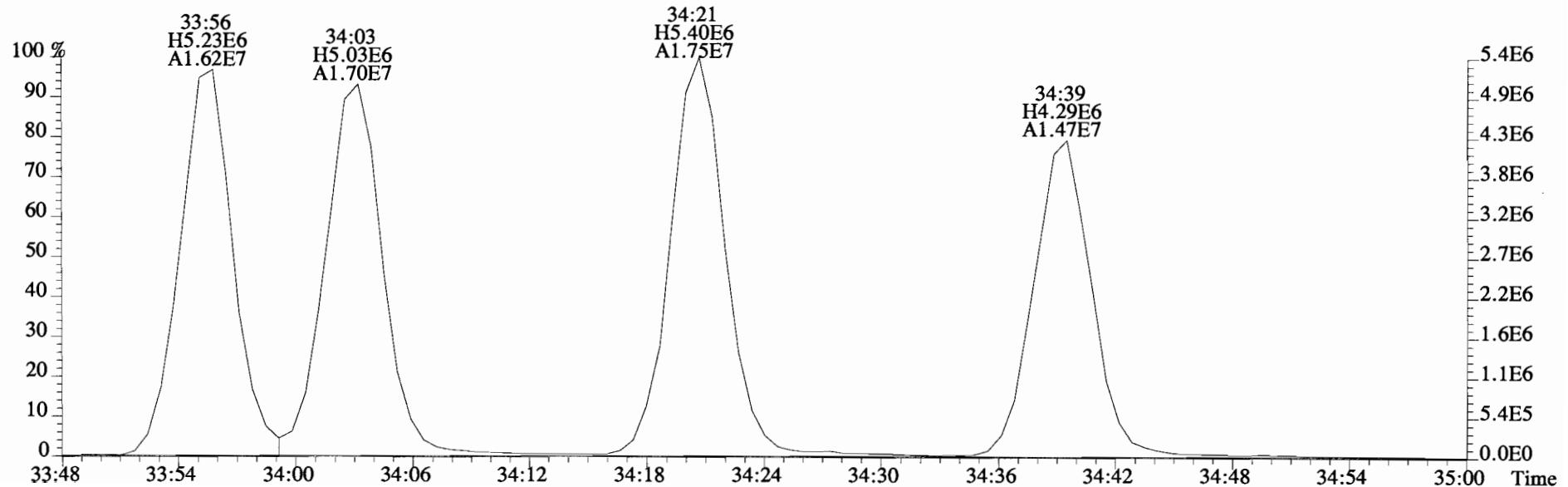
File:141023D2 #1-386 Acq:23-OCT-2014 19:17:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BS1 OPR 10 Exp:OCDD_DB5
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



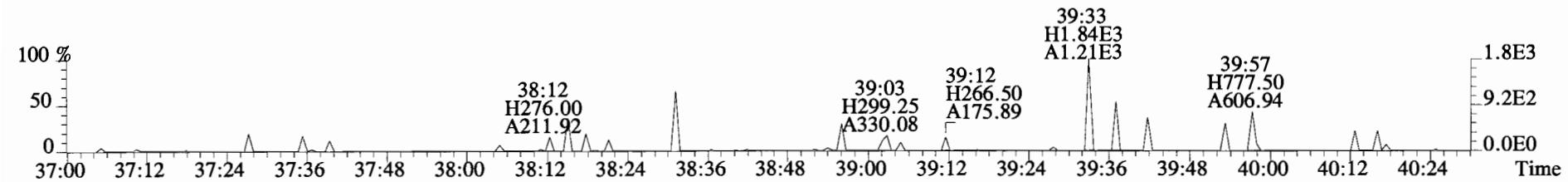
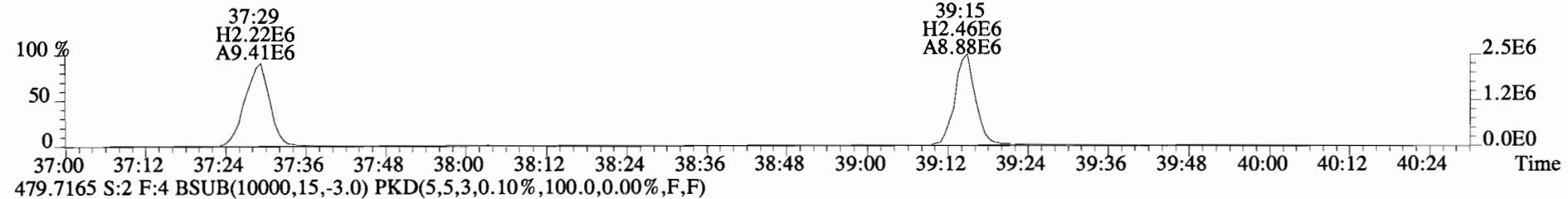
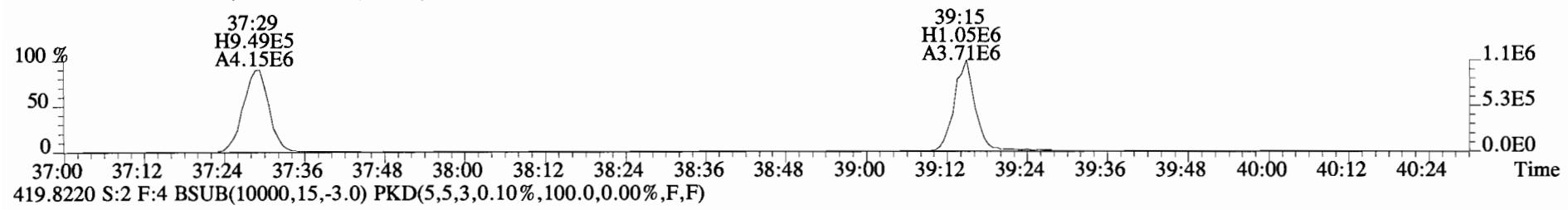
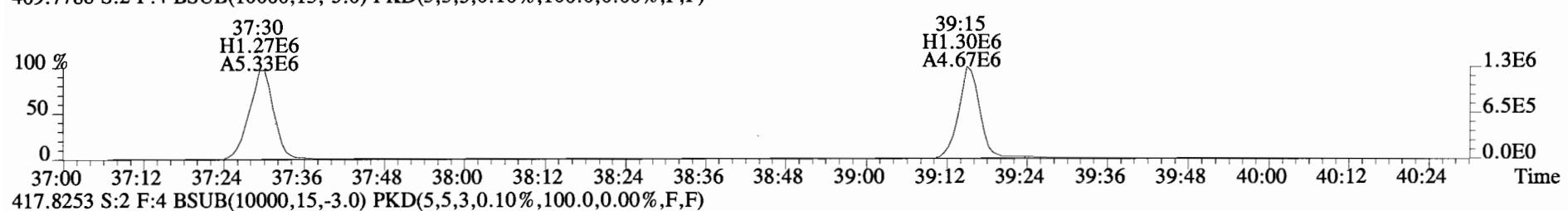
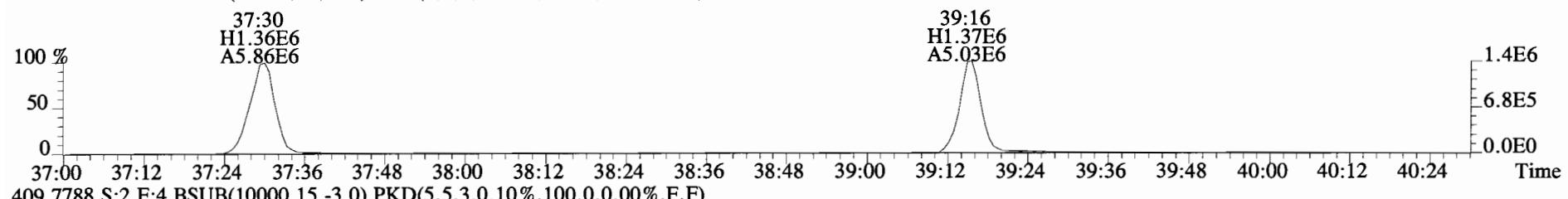
File:141023D2 #1-386 Acq:23-OCT-2014 19:17:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BS1 OPR 10 Exp:OCDD_DB5
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



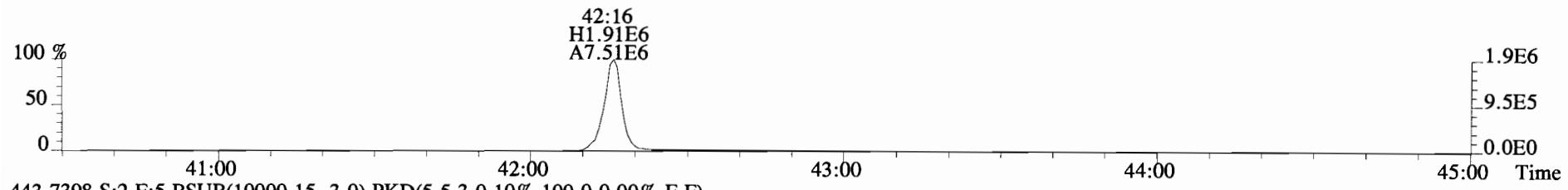
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



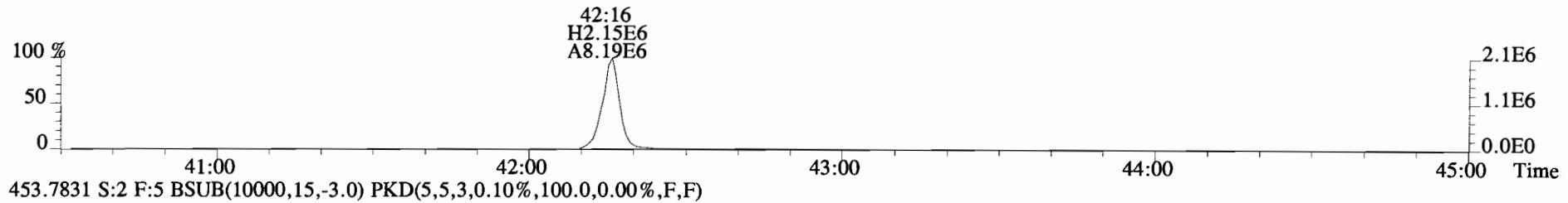
File:141023D2 #1-325 Acq:23-OCT-2014 19:17:58 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BS1 OPR 10 Exp:OCDD_DB5
 407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



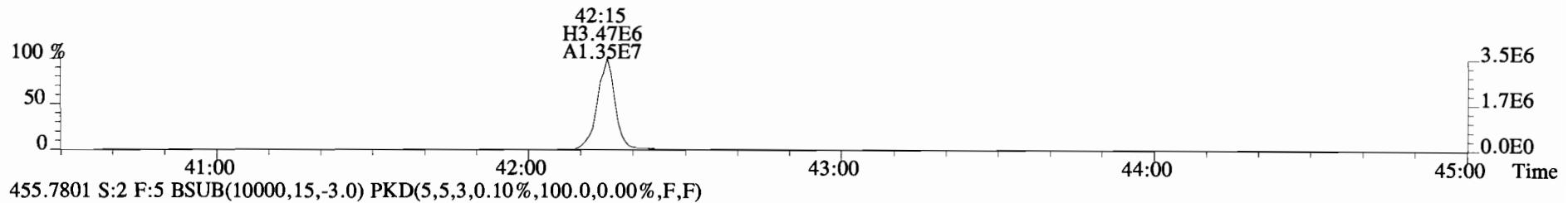
File:141023D2 #1-389 Acq:23-OCT-2014 19:17:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4J0118-BS1 OPR 10 Exp:OCDD_DB5
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



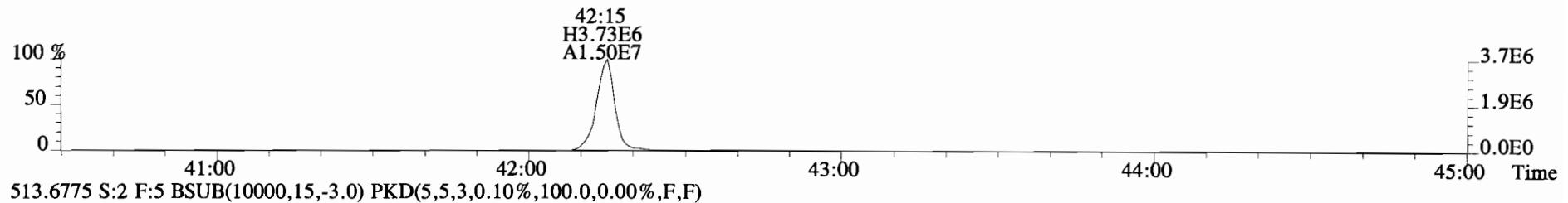
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



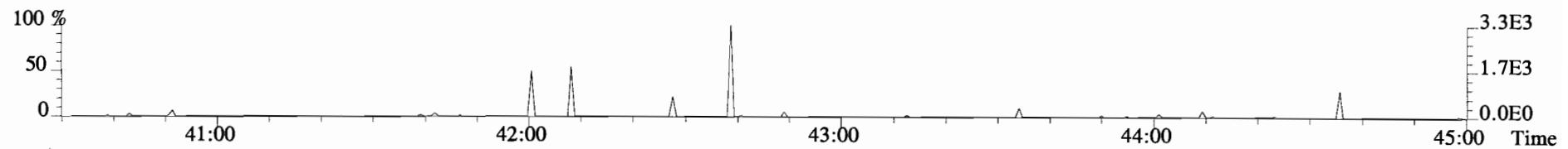
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: CC-A-01-20141013-S

Filename: 141027D1 S:13 Acq:28-OCT-14 00:13:15

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Lab ID: 1400762-03

GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14

wt/vol:10.016

ConCal: ST141027D1-1

EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	2.61e+04	0.55 n	1.18	27:02	1.000	0.46827	*	2.5	*		Total Tetra-Dioxins	12.0	13.0	*	*	
	1,2,3,7,8-PeCDD	1.02e+05	0.80 n	0.92	31:33	1.000	2.2175	*	2.5	*		Total Penta-Dioxins	24.0	26.3	*	*	
	1,2,3,4,7,8-HxCDD	1.62e+05	1.12 y	1.09	34:54	1.000	3.9417	*	2.5	*		Total Hexa-Dioxins	98.7	98.7	*	*	
	1,2,3,6,7,8-HxCDD	4.25e+05	1.27 y	1.07	35:01	1.000	8.8873	*	2.5	*		Total Hepta-Dioxins	353	353	*	*	
	1,2,3,7,8,9-HxCDD	3.41e+05	1.28 y	0.93	35:19	1.000	7.7890	*	2.5	*		Total Tetra-Furans	77.9	78.6	*	*	
	1,2,3,4,6,7,8-HpCDD	7.27e+06	1.03 y	1.12	38:46	1.000	174.94	*	2.5	*		Total Penta-Furans	59.758	59.758	*	*	
	OCDD	5.35e+07	0.90 y	0.95	42:06	1.000	1492.5	*	2.5	*		Total Hexa-Furans	59.4	59.4	*	*	
												Total Hepta-Furans	80.1	80.1	*	*	
	2,3,7,8-TCDF	5.51e+05	0.84 y	1.08	26:16	1.001	7.3923 <i>0.477</i>	*	2.5	*							
	1,2,3,7,8-PeCDF	1.87e+05	1.57 y	1.09	30:23	1.000	2.4255	*	2.5	*							
	2,3,4,7,8-PeCDF	2.90e+05	1.56 y	1.04	31:17	1.000	4.1666	*	2.5	*							
	1,2,3,4,7,8-HxCDF	3.23e+05	1.19 y	1.39	34:00	1.000	4.6569	*	2.5	*							
	1,2,3,6,7,8-HxCDF	2.61e+05	1.31 y	1.26	34:07	1.000	3.5776	*	2.5	*							
	2,3,4,6,7,8-HxCDF	2.95e+05	1.24 y	1.30	34:44	1.000	4.2858	*	2.5	*							
	1,2,3,7,8,9-HxCDF	2.80e+04	1.32 y	1.19	35:42	1.000	0.50197	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	2.24e+06	1.09 y	1.62	37:34	1.001	36.436	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	1.90e+05	1.19 y	1.53	39:19	1.000	3.2718	*	2.5	*							
	OCDF	3.01e+06	0.90 y	1.10	42:19	1.000	69.067	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	9.41e+06	0.81 y	1.07	27:02	1.022	165.75					83.0					
IS	13C-1,2,3,7,8-PeCDD	1.00e+07	0.64 y	1.24	31:34	1.193	153.03					76.6					
IS	13C-1,2,3,4,7,8-HxCDD	7.53e+06	1.24 y	0.72	34:53	1.014	147.17					73.7					
IS	13C-1,2,3,6,7,8-HxCDD	8.96e+06	1.28 y	0.74	35:00	1.017	172.61					86.4					
IS	13C-1,2,3,7,8,9-HxCDD	9.39e+06	1.25 y	0.86	35:18	1.026	155.62					77.9					
IS	13C-1,2,3,4,6,7,8-HpCDD	7.44e+06	1.06 y	0.64	38:46	1.127	163.74					82.0					
IS	13C-OCDD	1.51e+07	0.89 y	0.78	42:05	1.223	272.58					68.3					
IS	13C-2,3,7,8-TCDF	1.38e+07	0.78 y	0.92	26:15	0.992	170.58					85.4					
IS	13C-1,2,3,7,8-PeCDF	1.41e+07	1.56 y	0.95	30:22	1.148	169.28					84.8					
IS	13C-2,3,4,7,8-PeCDF	1.33e+07	1.58 y	0.97	31:17	1.183	156.54					78.4					
IS	13C-1,2,3,4,7,8-HxCDF	9.97e+06	0.51 y	0.99	33:59	0.988	142.60					71.4					
IS	13C-1,2,3,6,7,8-HxCDF	1.16e+07	0.53 y	1.10	34:07	0.992	149.13					74.7					
IS	13C-2,3,4,6,7,8-HxCDF	1.06e+07	0.53 y	1.03	34:44	1.009	145.26					72.7					
IS	13C-1,2,3,7,8,9-HxCDF	9.36e+06	0.52 y	0.86	35:42	1.037	154.64					77.4					
IS	13C-1,2,3,4,6,7,8-HpCDF	7.59e+06	0.44 y	0.71	37:33	1.091	150.65					75.4					
IS	13C-1,2,3,4,7,8,9-HpCDF	7.58e+06	0.42 y	0.71	39:19	1.143	151.81					76.0					
IS	13C-OCDF	1.58e+07	0.88 y	0.87	42:19	1.230	256.03					64.1					
C/Up	37Cl-2,3,7,8-TCDD	4.24e+06		1.21	27:02	1.022	66.127					82.8	Integrations by		Reviewed by		
RS/RT	13C-1,2,3,4-TCDD	1.06e+07	0.83 y	1.00	26:27	*	199.68						Analyst: <u>MJ</u>		Analyst: <u>JZ</u>		
RS	13C-1,2,3,4-TCDF	1.75e+07	0.78 y	1.00	25:01	*	199.68										
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.41e+07	0.51 y	1.00	34:24	*	199.68						Date: <u>10/28/14</u>		Date: <u>10/29/14</u>		

Totals class: TCDD EMPC

Entry #: 19

Run: 19 File: 141027D1 S: 13 I: 1 F: 1
 Acquired: 28-OCT-14 00:13:15 Processed: 28-OCT-14 08:33:56

Total Concentration: 13.045 Unnamed Concentration: 12.577

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
23:37	1.014e+05	1.190e+05	0.85 y	2.204e+05	3.9507
23:59	6.571e+04	8.218e+04	0.80 y	1.479e+05	2.6505
24:24	1.453e+04	1.660e+04	0.88 y	3.113e+04	0.55789
25:22	3.365e+04	3.924e+04	0.86 y	7.289e+04	1.3063
25:33	2.650e+04	3.631e+04	0.73 y	6.281e+04	1.1257
25:43	1.022e+04	1.205e+04	0.85 y	2.227e+04	0.39922
25:57	6.043e+03	5.064e+03	1.19 n	8.963e+03	0.16064
26:06	1.188e+04	1.720e+04	0.69 y	2.908e+04	0.52122
26:26	1.640e+04	2.159e+04	0.76 y	3.799e+04	0.68088
26:48	1.847e+04	2.424e+04	0.76 y	4.270e+04	0.76535
27:02	1.137e+04	2.064e+04	0.55 n	2.613e+04	0.46827 2,3,7,8-TCDD
27:19	1.368e+04	1.445e+04	0.95 n	2.558e+04	0.45856

Totals class: PeCDD EMPC

Entry #: 21

Run: 19 File: 141027D1 S: 13 I: 1 F: 2
 Acquired: 28-OCT-14 00:13:15 Processed: 28-OCT-14 08:33:56

Total Concentration: 26.265 Unnamed Concentration: 24.048

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
29:30	1.132e+05		1.837e+05	0.62	y	2.968e+05	6.4345	
29:57	3.169e+04		5.788e+04	0.55	y	8.957e+04	1.9417	
30:24	6.561e+04		1.029e+05	0.64	y	1.686e+05	3.6540	
30:33	4.749e+04		7.784e+04	0.61	y	1.253e+05	2.7170	
30:39	5.184e+04		8.697e+04	0.60	y	1.388e+05	3.0093	
30:51	5.942e+04		8.483e+04	0.70	y	1.443e+05	3.1271	
31:09	1.968e+04		3.666e+04	0.54	y	5.634e+04	1.2214	
31:33	5.033e+04		6.275e+04	0.80	n	1.023e+05	2.2175	1,2,3,7,8-PeCDD
31:38	1.550e+04		2.646e+04	0.59	y	4.196e+04	0.90971	
31:55	1.988e+04		2.777e+04	0.72	y	4.765e+04	1.0330	

Totals class: HxCDD EMPC

Entry #: 23

Run: 19 File: 141027D1 S: 13 I: 1 F: 3
Acquired: 28-OCT-14 00:13:15 Processed: 28-OCT-14 08:33:56

Total Concentration: 98.720 Unnamed Concentration: 78.102

RT	m1 Resp	m2 Resp RA	Resp Concentration	Name
33:20	5.958e+05	4.750e+05 1.25 y	1.071e+06	24.233
33:55	3.013e+05	2.281e+05 1.32 y	5.293e+05	11.979
34:11	8.947e+05	7.147e+05 1.25 y	1.609e+06	36.421
34:19	7.144e+04	5.889e+04 1.21 y	1.303e+05	2.9494
34:54	8.527e+04	7.623e+04 1.12 y	1.615e+05	3.9417 1,2,3,4,7,8-HxCDD
35:01	2.384e+05	1.871e+05 1.27 y	4.255e+05	8.8873 1,2,3,6,7,8-HxCDD
35:13	6.399e+04	4.732e+04 1.35 y	1.113e+05	2.5190
35:19	1.917e+05	1.493e+05 1.28 y	3.410e+05	7.7890 1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 19 File: 141027D1 S: 13 I: 1 F: 4
Acquired: 28-OCT-14 00:13:15 Processed: 28-OCT-14 08:33:56

Total Concentration: 352.84 Unnamed Concentration: 177.902

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
37:56	3.723e+06	3.669e+06	1.01 y	7.392e+06	177.90
38:46	3.681e+06	3.588e+06	1.03 y	7.269e+06	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 19 File: 141027D1 S: 13 I: 1 F: 1
 Acquired: 28-OCT-14 00:13:15 Processed: 28-OCT-14 08:33:56

Total Concentration: 78.638 Unnamed Concentration: 71.246

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
21:27	1.574e+04	1.871e+04	0.84	y	3.446e+04	0.46232
22:02	6.325e+04	8.823e+04	0.72	y	1.515e+05	2.0324
22:41	1.493e+05	1.902e+05	0.79	y	3.396e+05	4.5561
23:12	2.146e+05	2.916e+05	0.74	y	5.062e+05	6.7917
23:35	2.096e+05	2.504e+05	0.84	y	4.600e+05	6.1723
24:01	9.571e+04	1.216e+05	0.79	y	2.174e+05	2.9165
24:09	1.594e+05	2.111e+05	0.76	y	3.705e+05	4.9718
24:18	1.903e+05	2.316e+05	0.82	y	4.219e+05	5.6604
24:40	3.304e+04	3.877e+04	0.85	y	7.181e+04	0.96352
24:47	7.019e+04	9.847e+04	0.71	y	1.687e+05	2.2631
24:56	1.529e+05	1.860e+05	0.82	y	3.389e+05	4.5479
25:03	1.381e+05	2.064e+05	0.67	y	3.445e+05	4.6227
25:27	1.444e+05	1.944e+05	0.74	y	3.388e+05	4.5461
25:42	9.189e+04	1.369e+05	0.67	y	2.288e+05	3.0701
25:52	4.910e+04	6.741e+04	0.73	y	1.165e+05	1.5633
26:04	5.012e+04	5.913e+04	0.85	y	1.093e+05	1.4659
26:09	4.499e+04	6.360e+04	0.71	y	1.086e+05	1.4570
26:16	2.508e+05	3.001e+05	0.84	y	5.509e+05	7.3923 2,3,7,8-TCDF
26:35	3.730e+05	4.830e+05	0.77	y	8.561e+05	11.487
26:48	2.903e+04	4.091e+04	0.71	y	6.994e+04	0.93846
28:02	3.731e+04	3.189e+04	1.17	n	5.645e+04	0.75748

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 19 File: 141027D1 S: 13 I: 1 F: 1
Acquired: 28-OCT-14 00:13:15 Processed: 28-OCT-14 08:33:56

Total Concentration: 14.292 Unnamed Concentration: 14.292

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
28:01	6.401e+05	4.055e+05	1.58	y	1.046e+06	14.292

Totals class: PeCDF EMPC

Entry #: 31

Run: 19 File: 141027D1 S: 13 I: 1 F: 2
 Acquired: 28-OCT-14 00:13:15 Processed: 28-OCT-14 08:33:56

Total Concentration: 45.466 Unnamed Concentration: 38.874

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
29:20	2.636e+05		1.649e+05	1.60	y	4.286e+05	5.8577	
29:29	7.007e+05		4.565e+05	1.53	y	1.157e+06	15.816	
29:49	4.905e+04		3.707e+04	1.32	y	8.612e+04	1.1771	
30:01	2.866e+05		1.790e+05	1.60	y	4.657e+05	6.3646	
30:13	6.993e+04		4.083e+04	1.71	y	1.108e+05	1.5139	
30:23	1.139e+05		7.268e+04	1.57	y	1.866e+05	2.4255	1,2,3,7,8-PeCDF
30:37	1.653e+05		1.218e+05	1.36	y	2.871e+05	3.9243	
31:05	1.610e+04		9.689e+03	1.66	y	2.579e+04	0.35249	
31:11	1.225e+05		7.432e+04	1.65	y	1.968e+05	2.6901	
31:17	1.765e+05		1.132e+05	1.56	y	2.897e+05	4.1666	2,3,4,7,8-PeCDF
31:20	3.927e+04		2.523e+04	1.56	y	6.450e+04	0.88156	
32:10	1.337e+04		8.306e+03	1.61	y	2.167e+04	0.29622	

Totals class: HxCDF EMPC

Entry #: 33

Run: 19 File: 141027D1 S: 13 I: 1 F: 3
 Acquired: 28-OCT-14 00:13:15 Processed: 28-OCT-14 08:33:56

Total Concentration: 59.352 Unnamed Concentration: 46.330

RT	m1 Resp	m2 Resp RA	Resp Concentration	Name
32:48	2.560e+05	2.071e+05 1.24 y	4.630e+05	6.9265
32:58	9.329e+05	7.255e+05 1.29 y	1.658e+06	24.807
33:20	3.998e+04	3.119e+04 1.28 y	7.117e+04	1.0647
33:31	3.808e+05	2.851e+05 1.34 y	6.659e+05	9.9609
33:53	8.835e+04	6.999e+04 1.26 y	1.583e+05	2.3686
34:00	1.756e+05	1.475e+05 1.19 y	3.230e+05	4.6569 1,2,3,4,7,8-HxCDF
34:07	1.481e+05	1.132e+05 1.31 y	2.613e+05	3.5776 1,2,3,6,7,8-HxCDF
34:24	2.327e+04	2.186e+04 1.06 y	4.514e+04	0.67520
34:44	1.634e+05	1.313e+05 1.24 y	2.947e+05	4.2858 2,3,4,6,7,8-HxCDF
35:42	1.594e+04	1.209e+04 1.32 y	2.804e+04	0.50197 1,2,3,7,8,9-HxCDF
35:45	1.967e+04	1.553e+04 1.27 y	3.521e+04	0.52663

Totals class: HpCDF EMPC

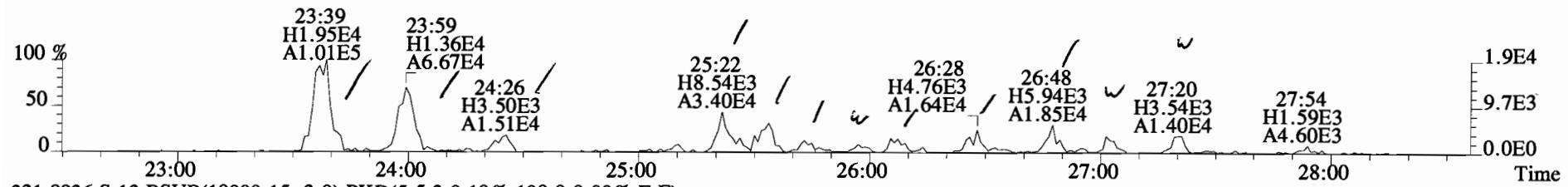
Entry #: 35

Run: 19 File: 141027D1 S: 13 I: 1 F: 4
Acquired: 28-OCT-14 00:13:15 Processed: 28-OCT-14 08:33:56

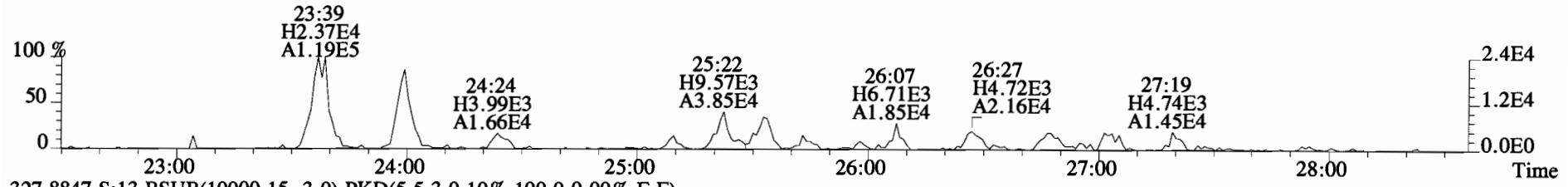
Total Concentration: 80.071 Unnamed Concentration: 40.363

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
37:34	1.166e+06	1.070e+06	1.09	y	2.237e+06	36.436		1,2,3,4,6,7,8-HpCDF
37:56	6.597e+04	5.664e+04	1.16	y	1.226e+05	2.0546		
38:08	1.203e+06	1.083e+06	1.11	y	2.286e+06	38.309		
39:19	1.030e+05	8.661e+04	1.19	y	1.897e+05	3.2718		1,2,3,4,7,8,9-HpCDF

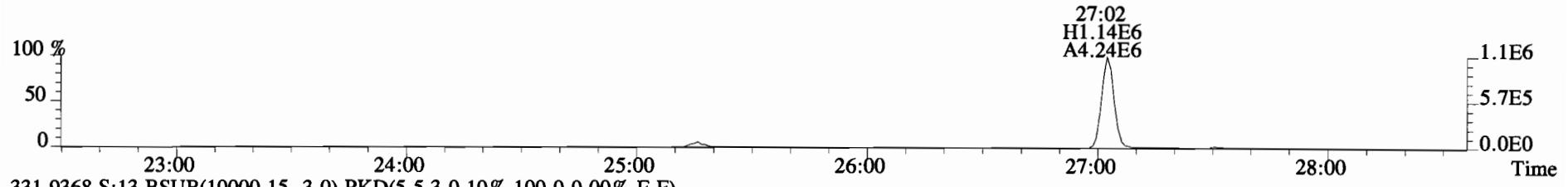
File:141027D1 #1-552 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



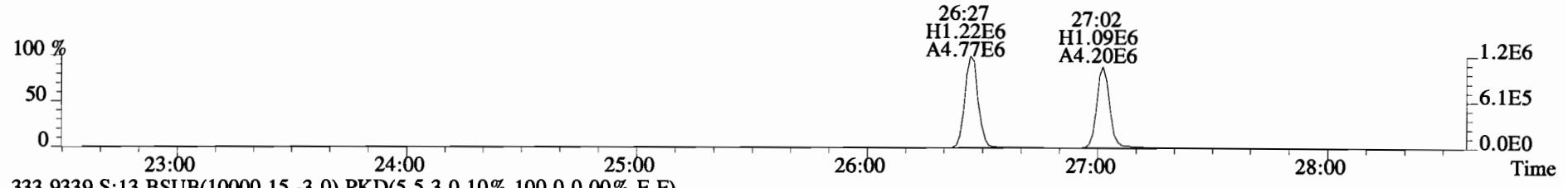
321.8936 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



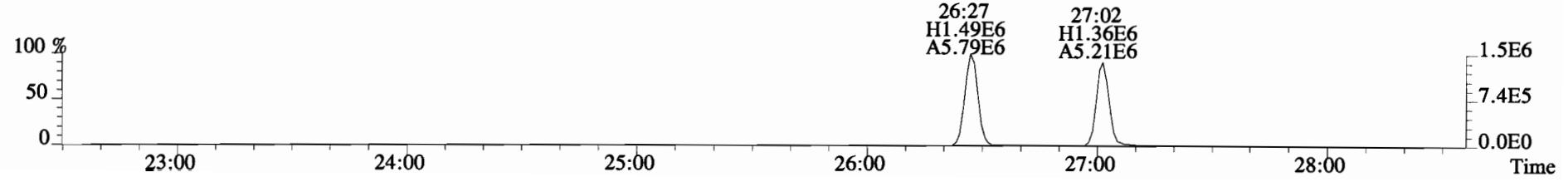
327.8847 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



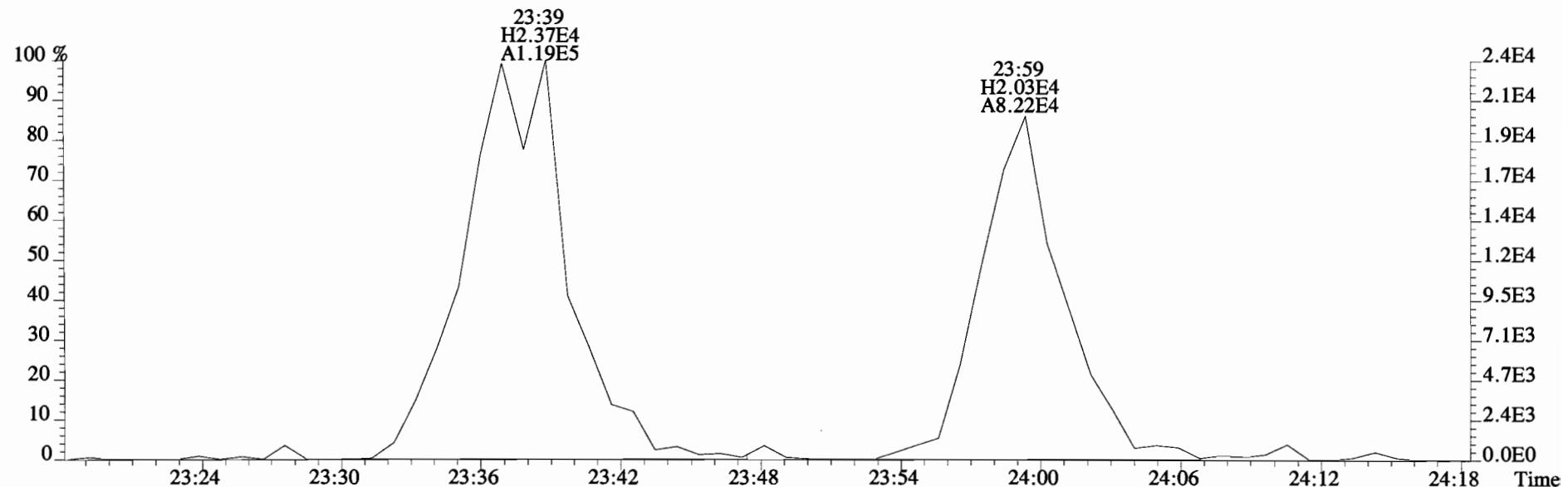
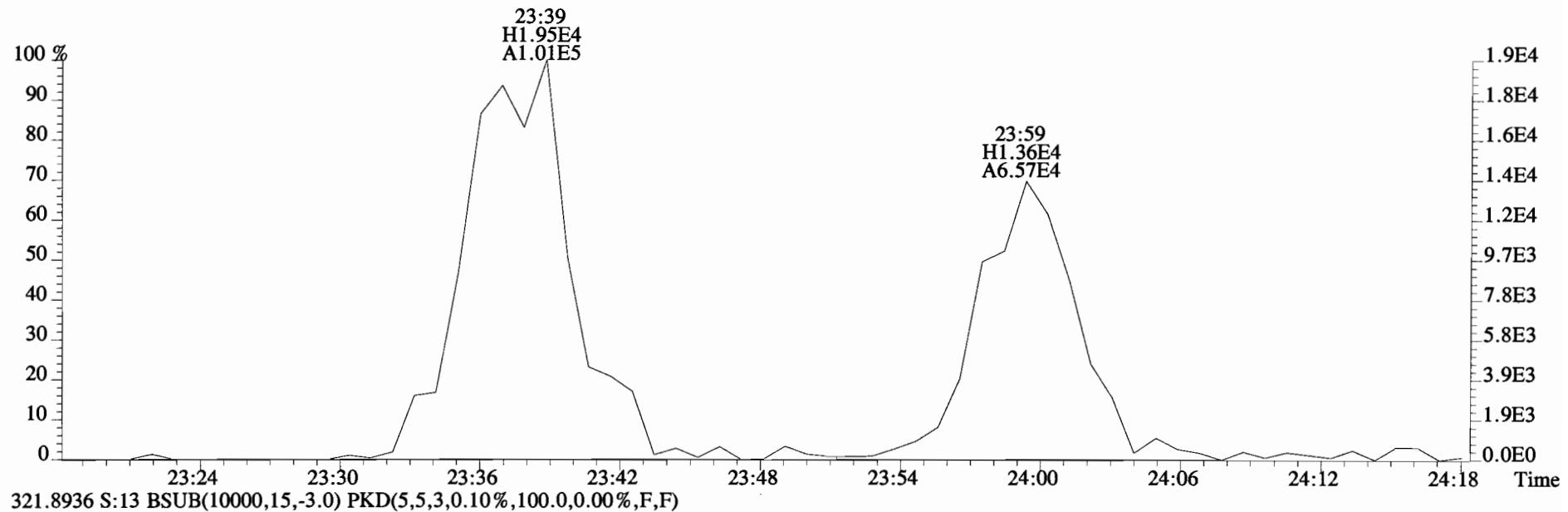
331.9368 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



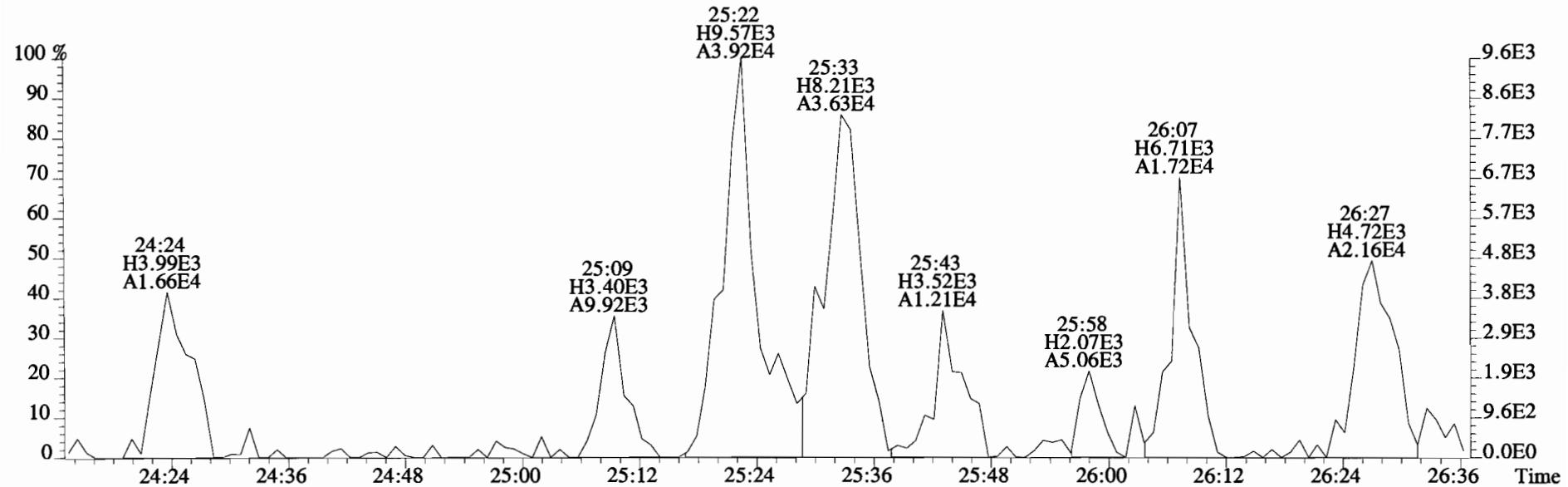
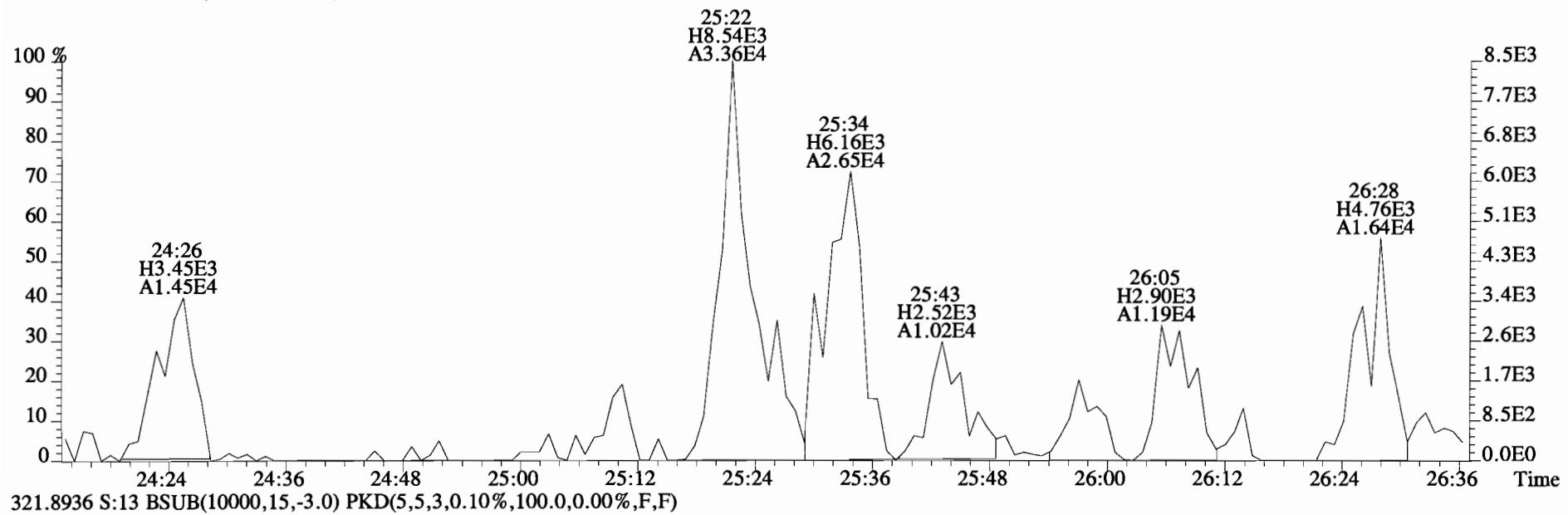
333.9339 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



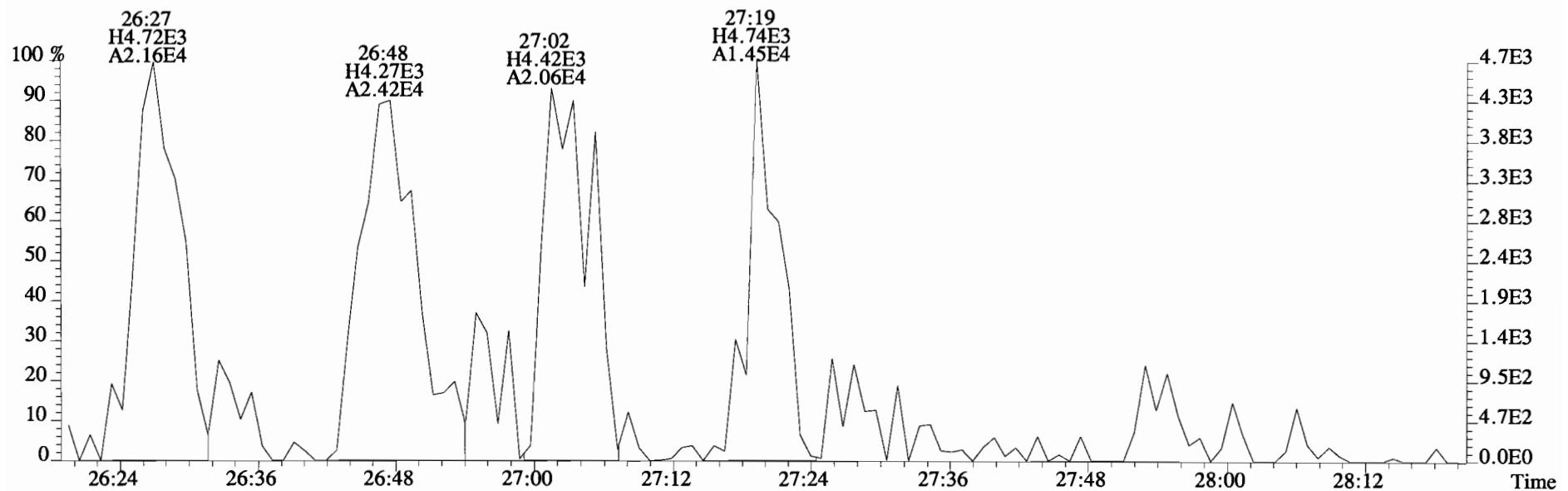
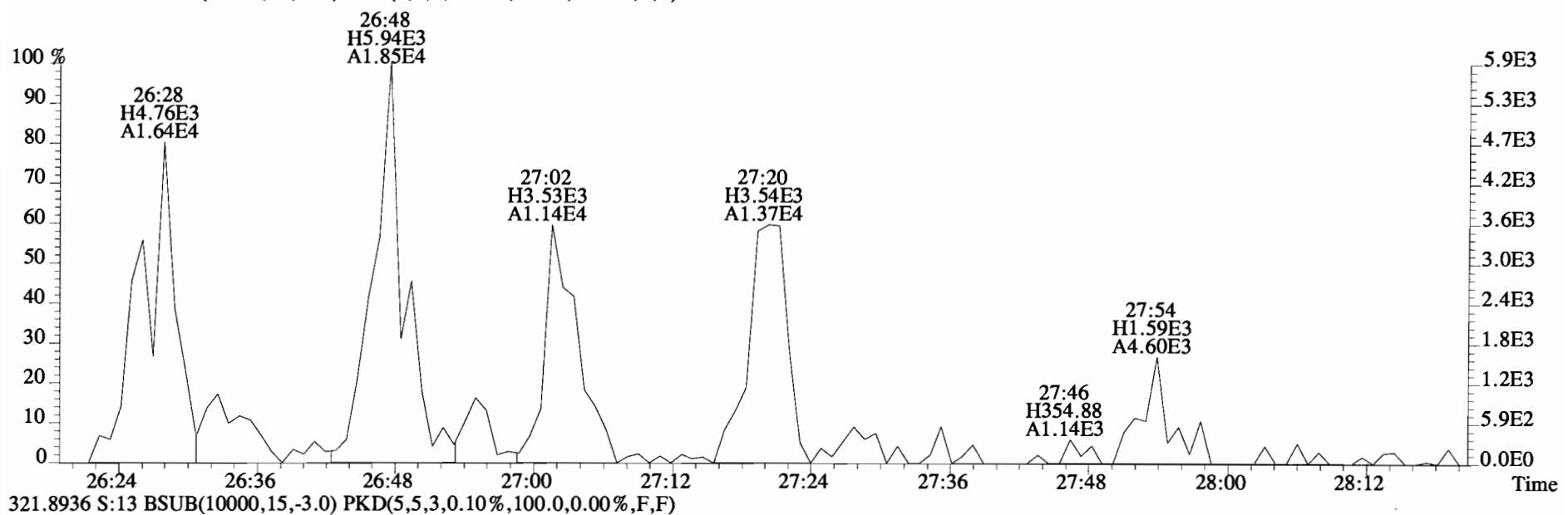
File:141027D1 #1-552 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



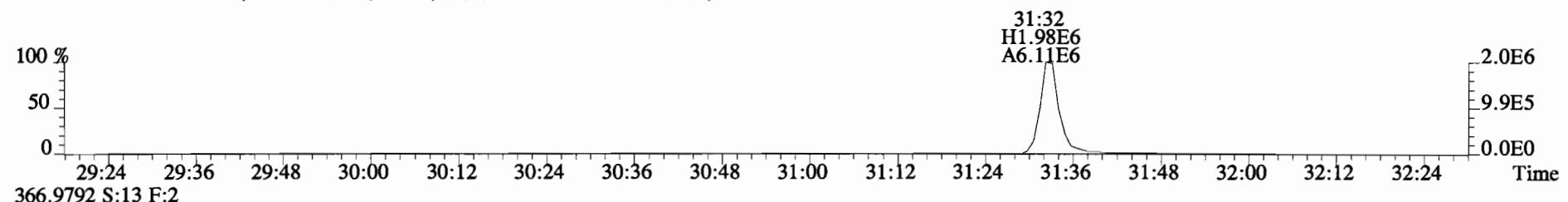
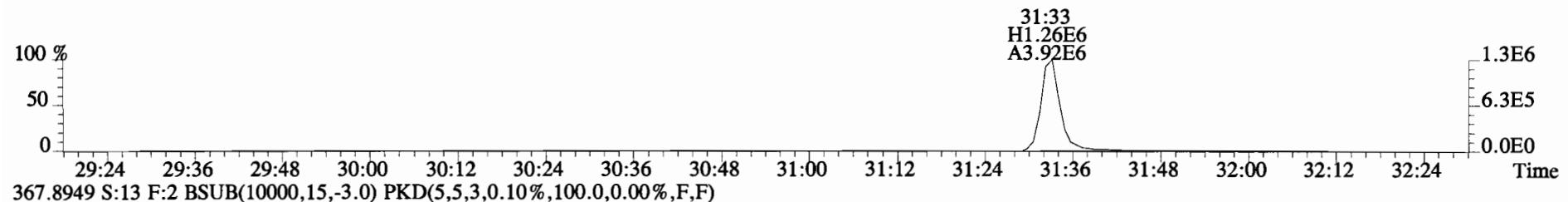
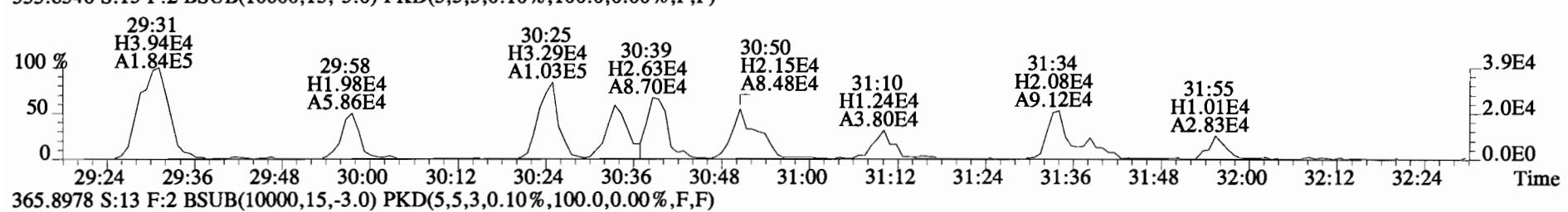
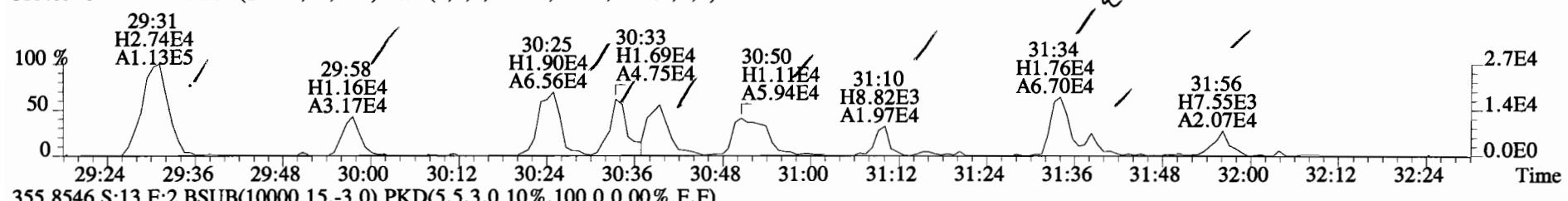
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Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
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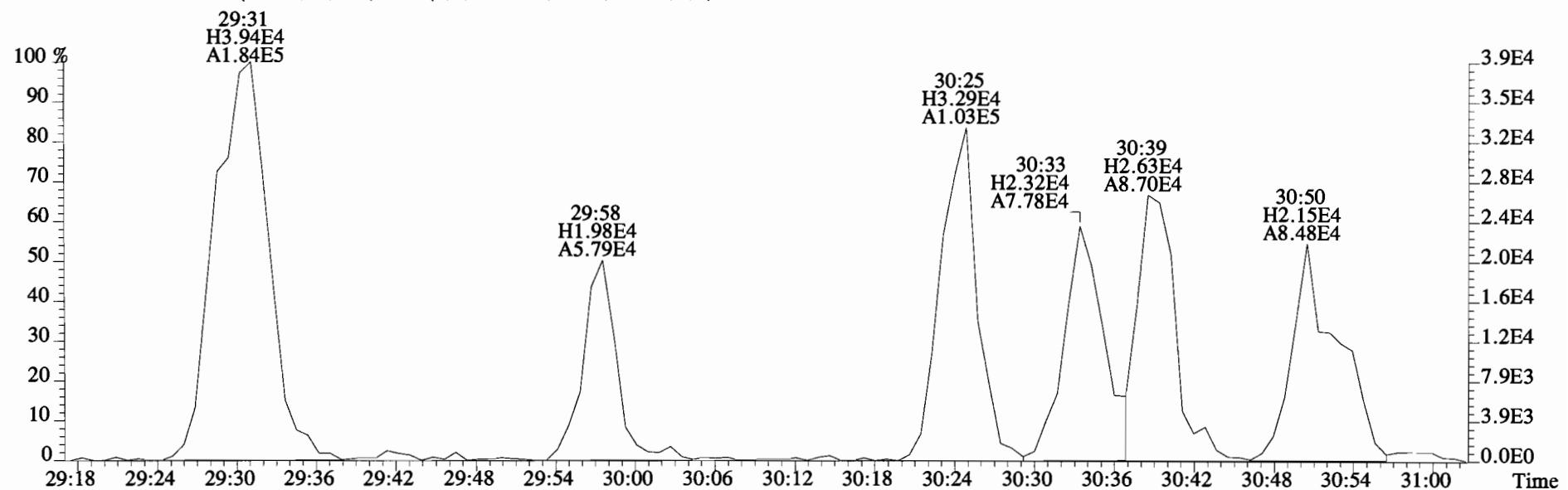
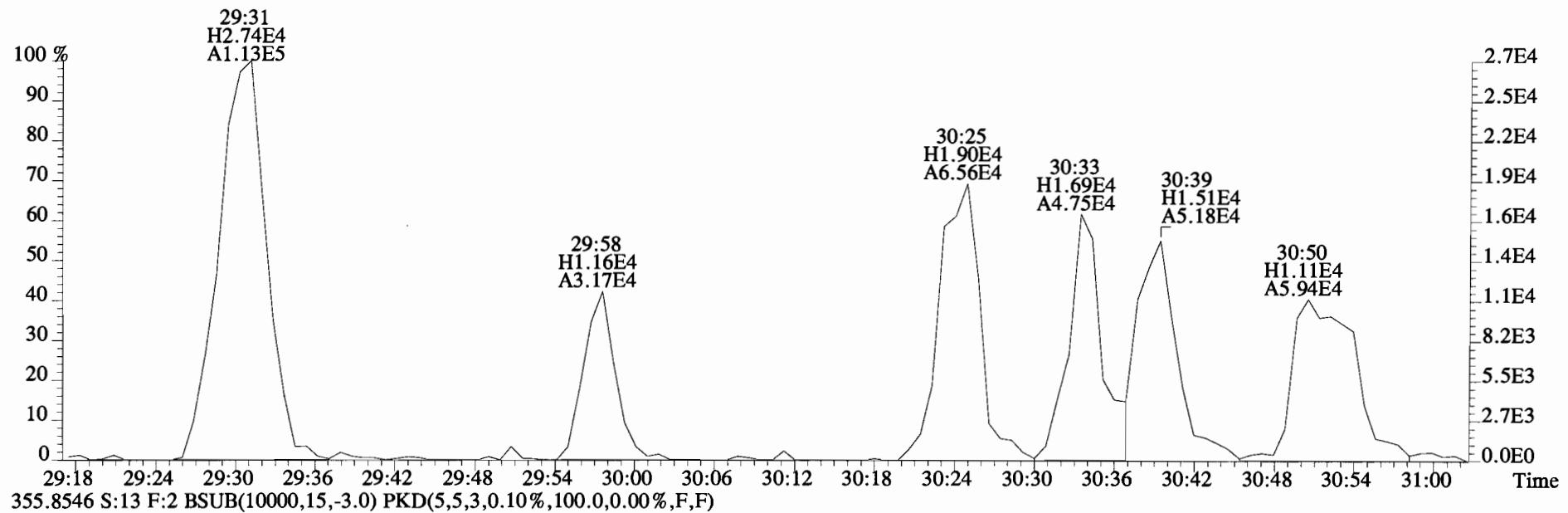
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 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



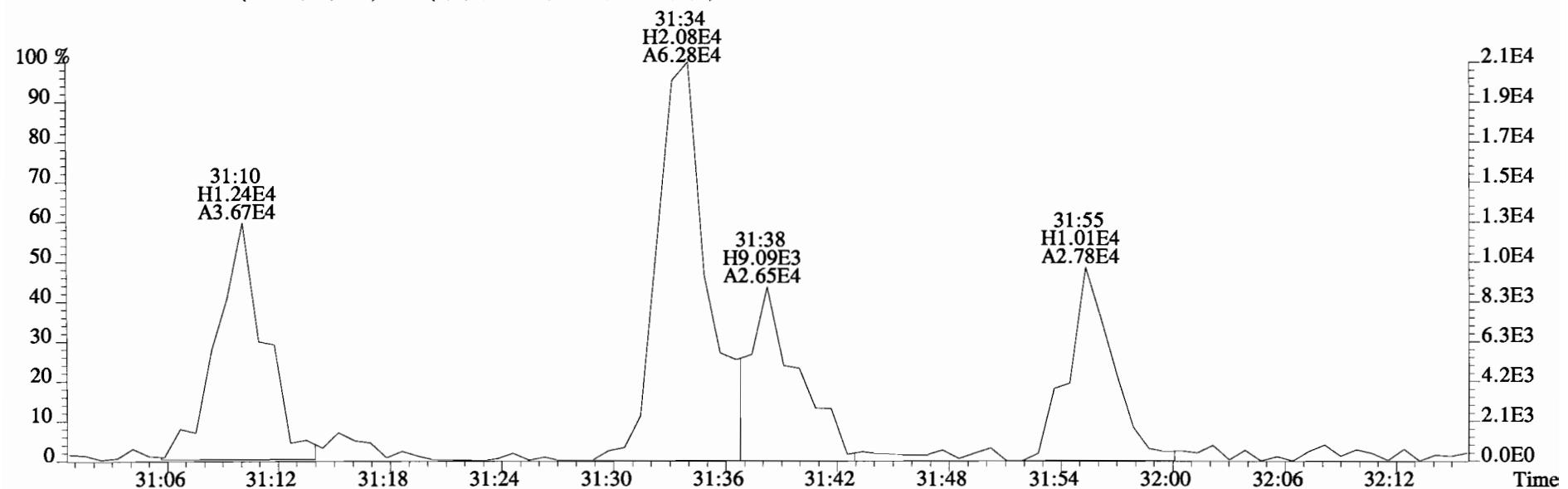
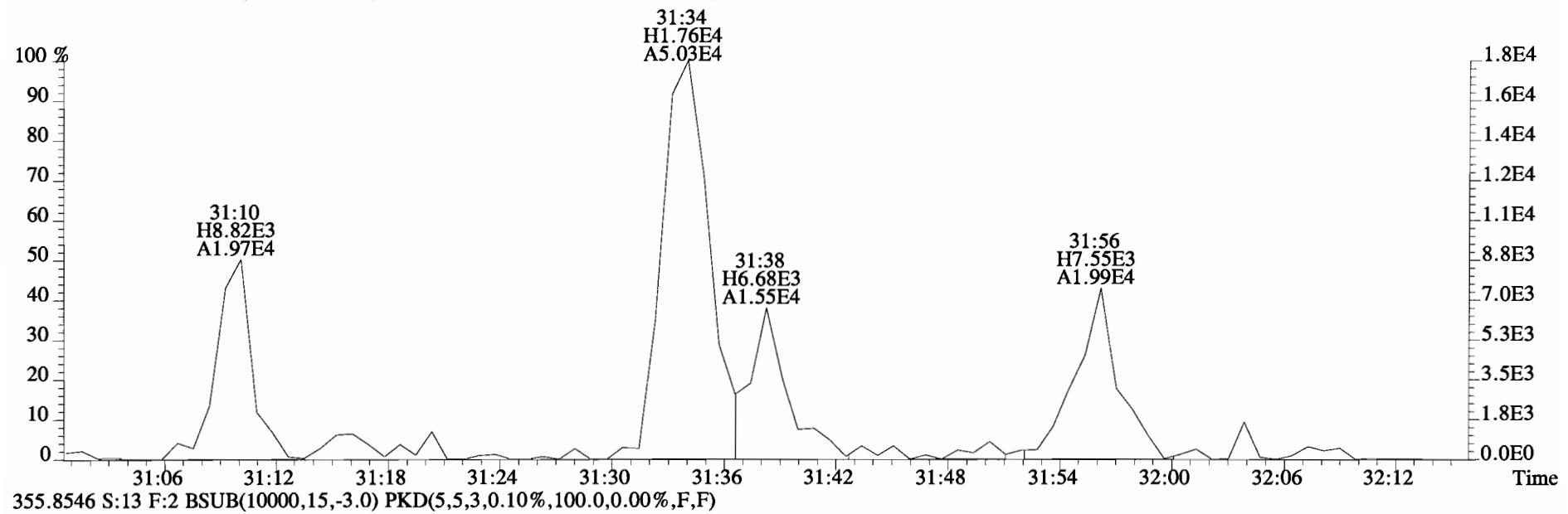
File:141027D1 #1-256 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



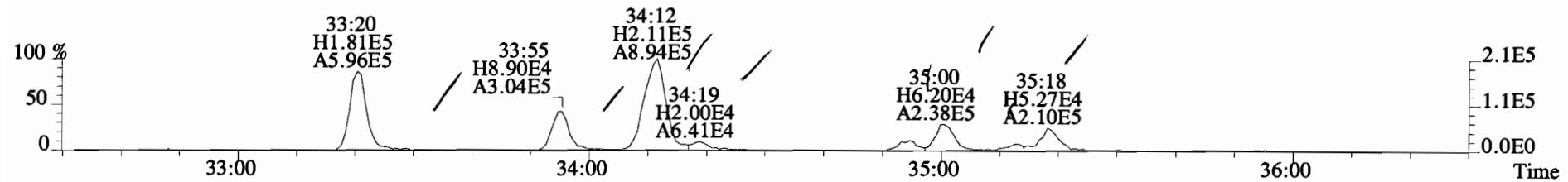
File:141027D1 #1-256 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



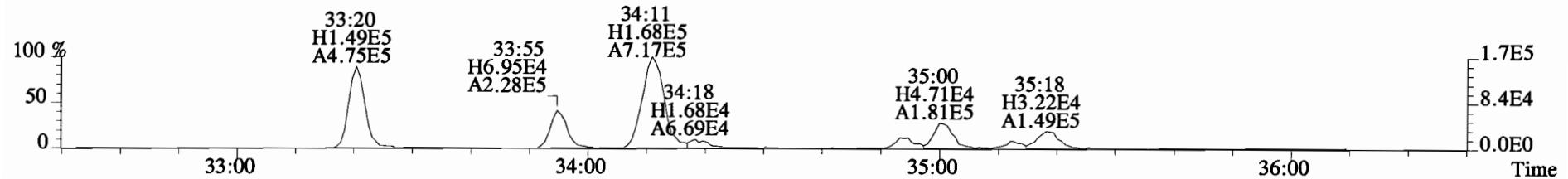
File:141027D1 #1-256 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



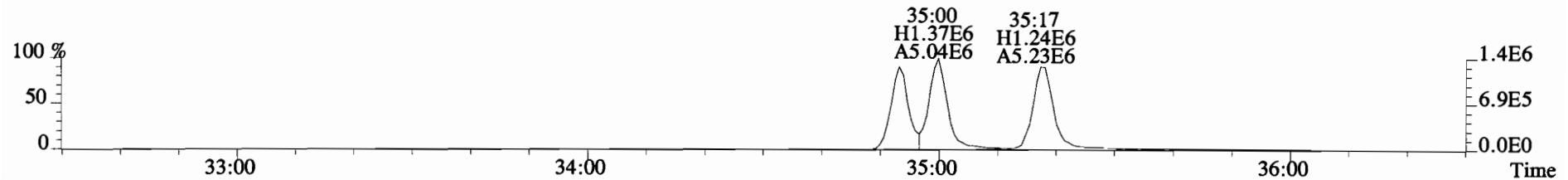
File:141027D1 #1-385 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



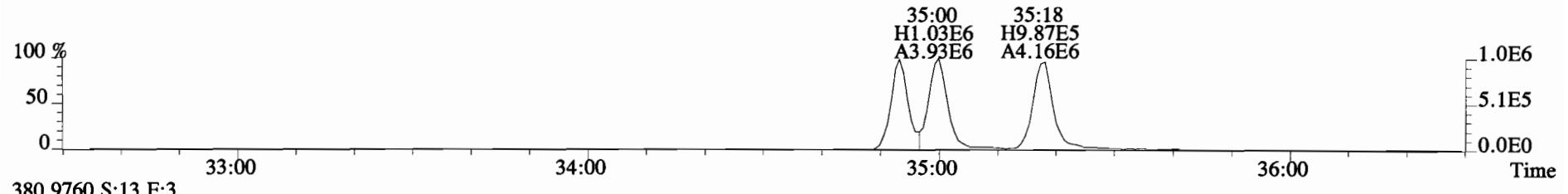
391.8127 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



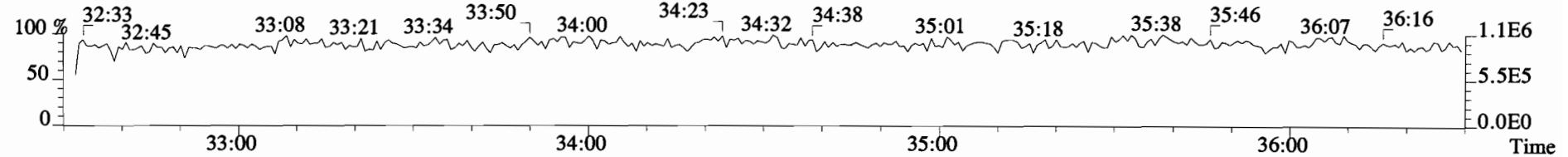
401.8559 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



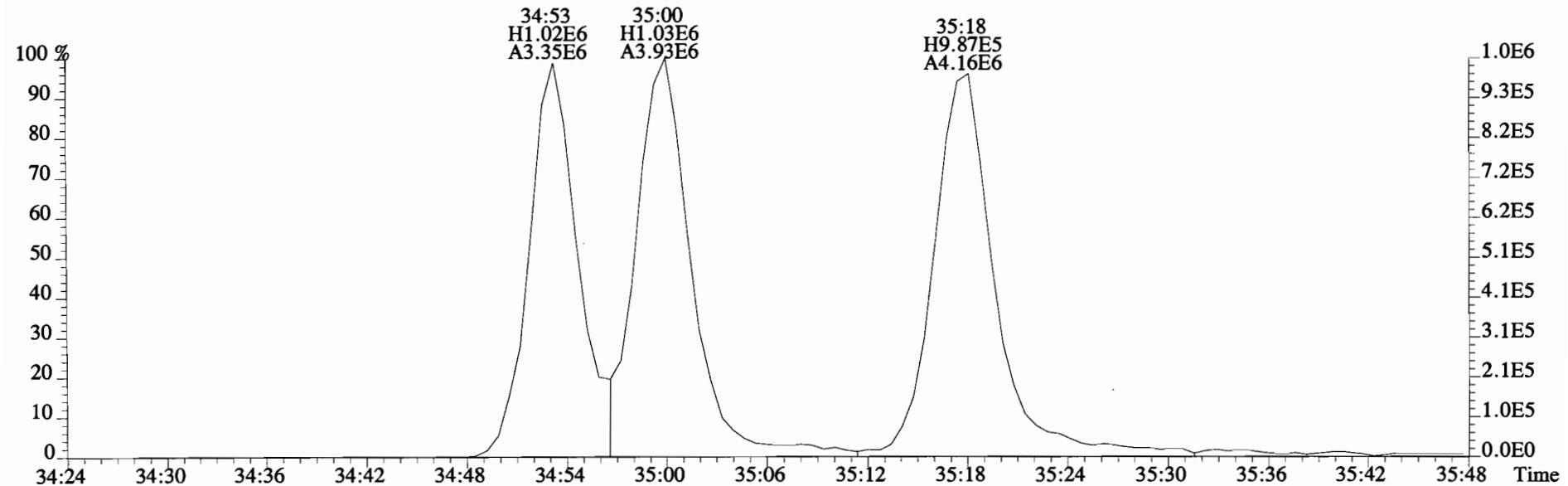
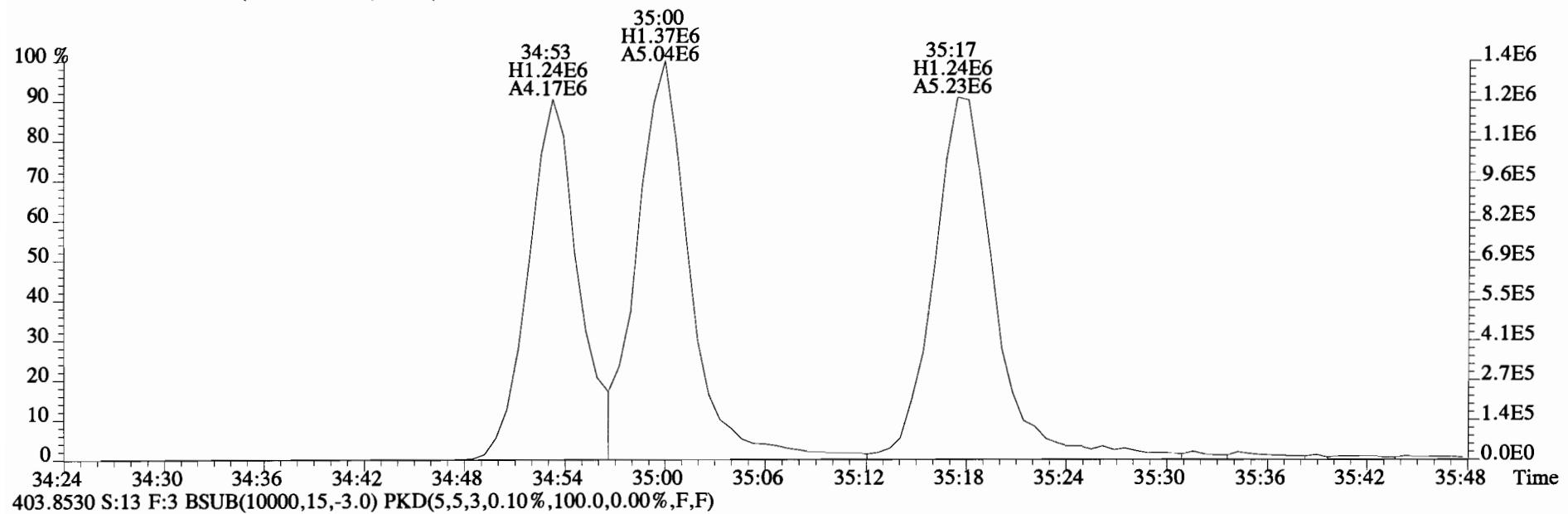
403.8530 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



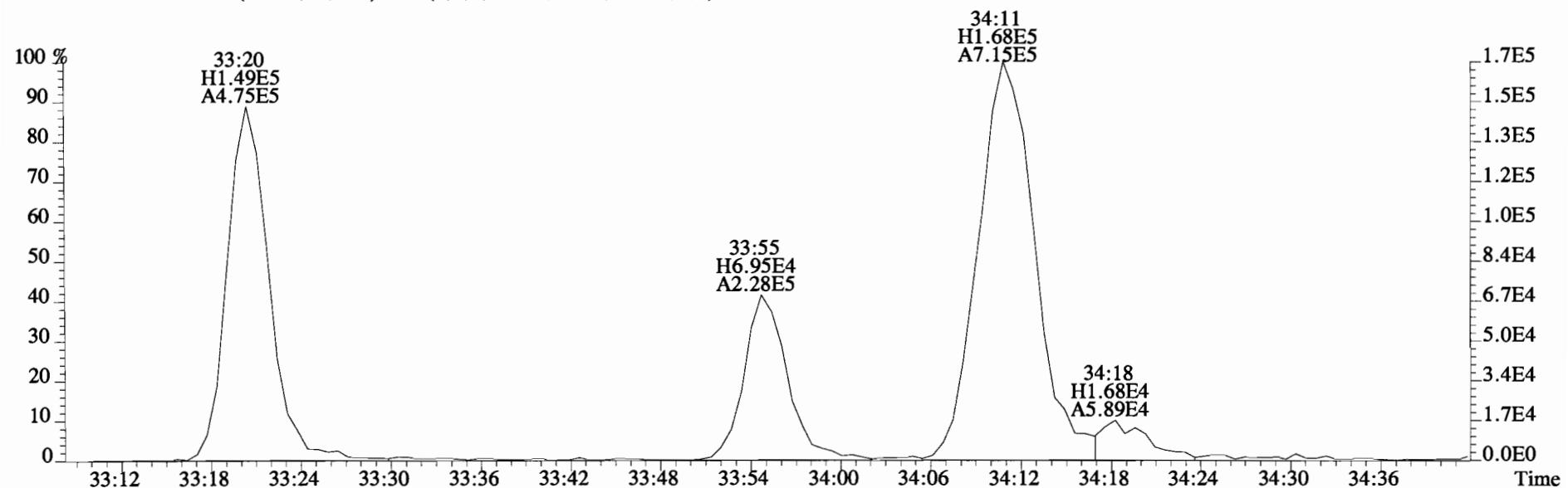
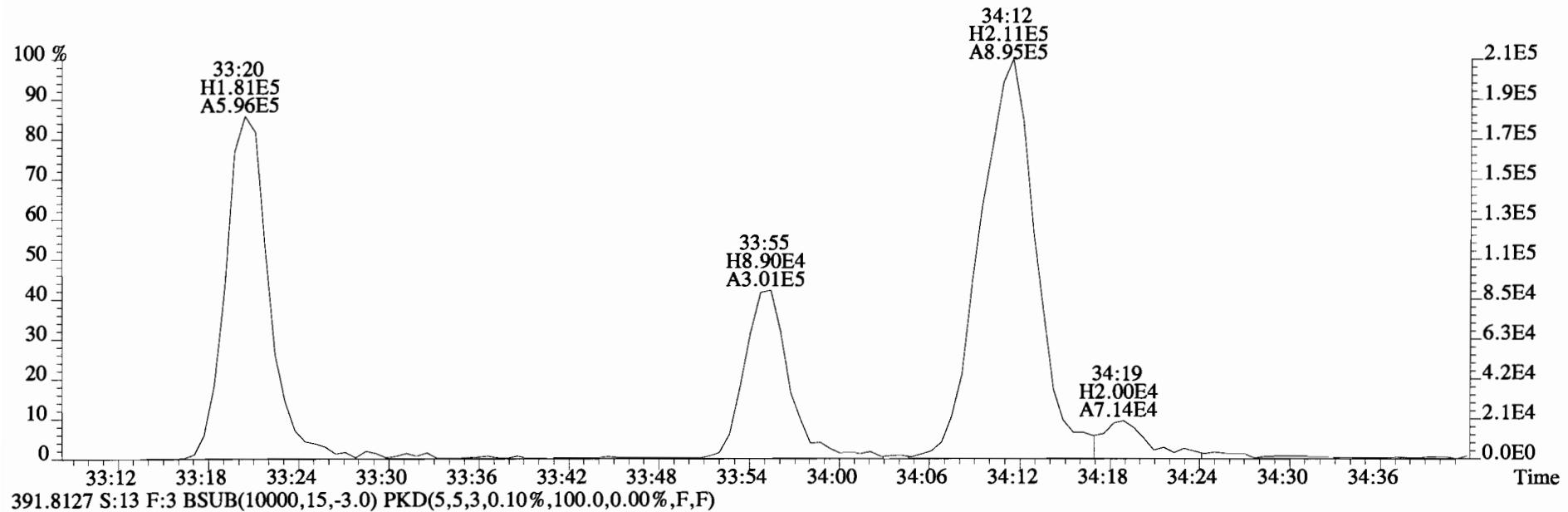
380.9760 S:13 F:3



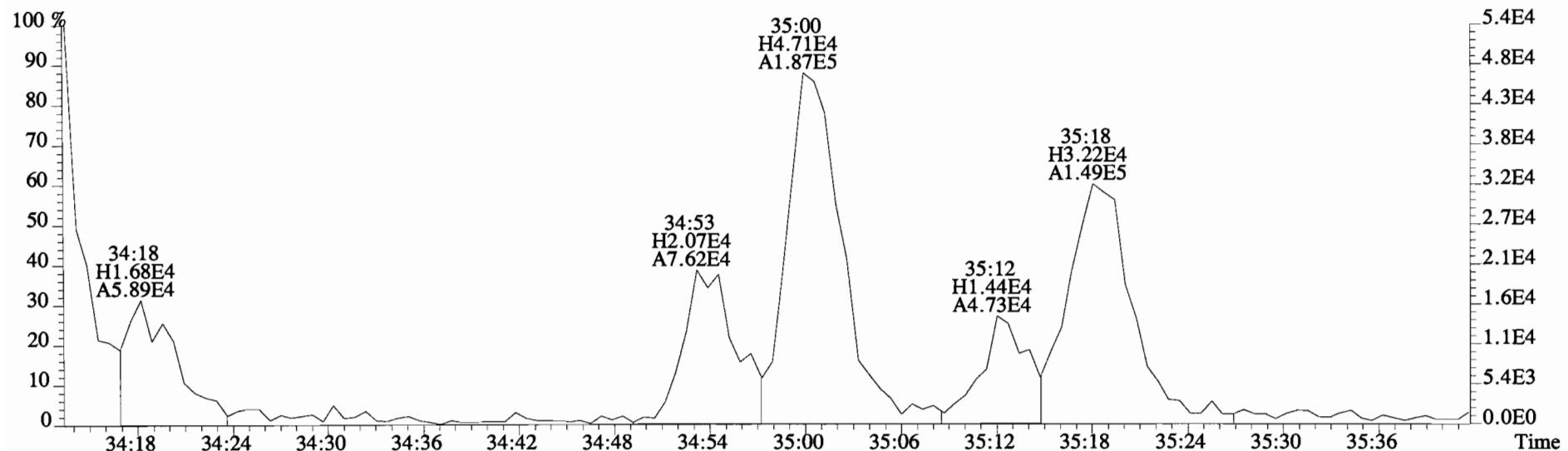
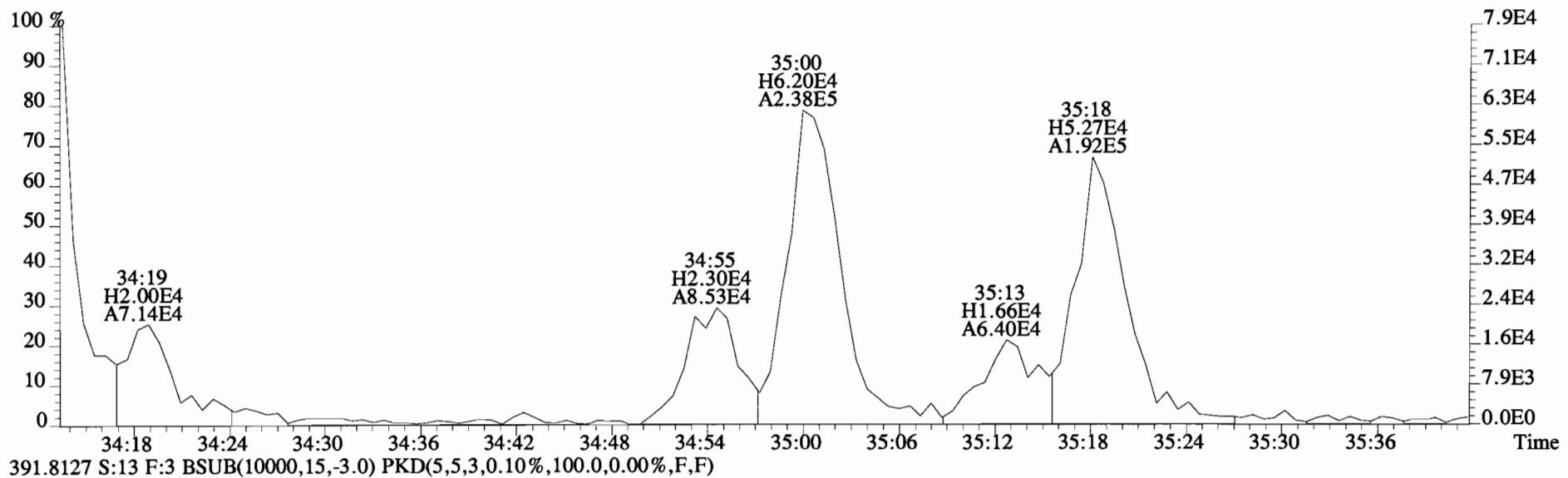
File:141027D1 #1-385 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
401.8559 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



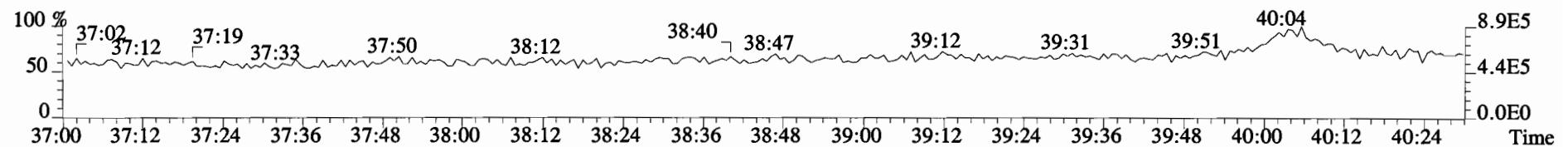
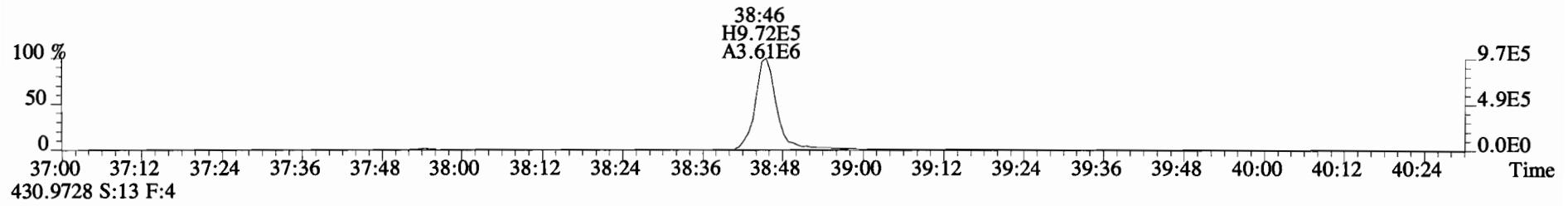
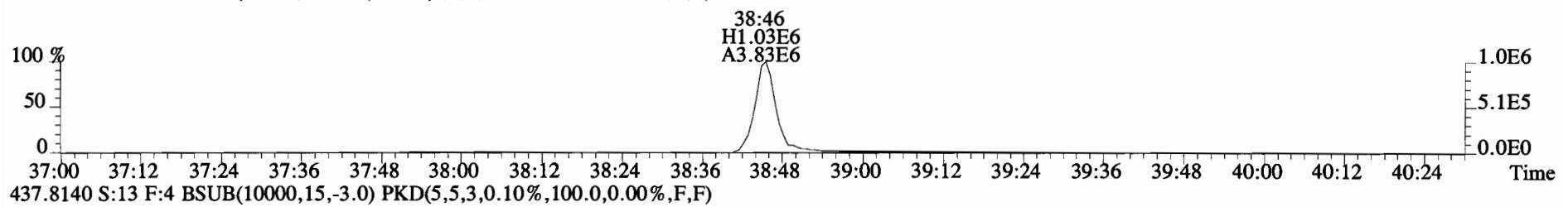
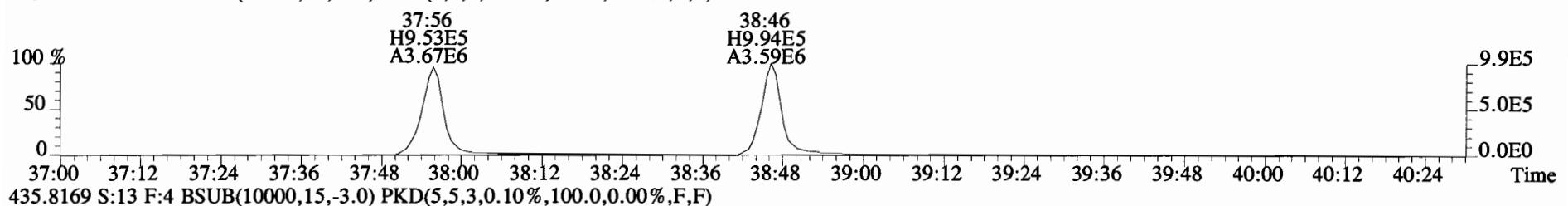
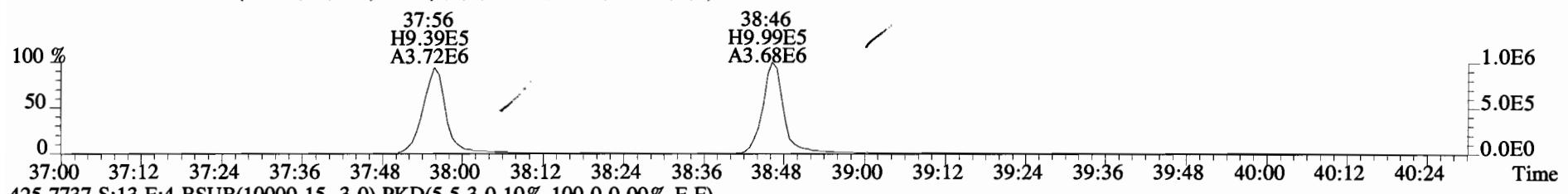
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Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



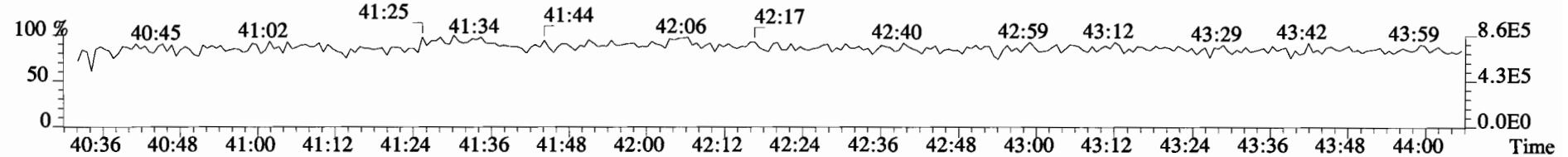
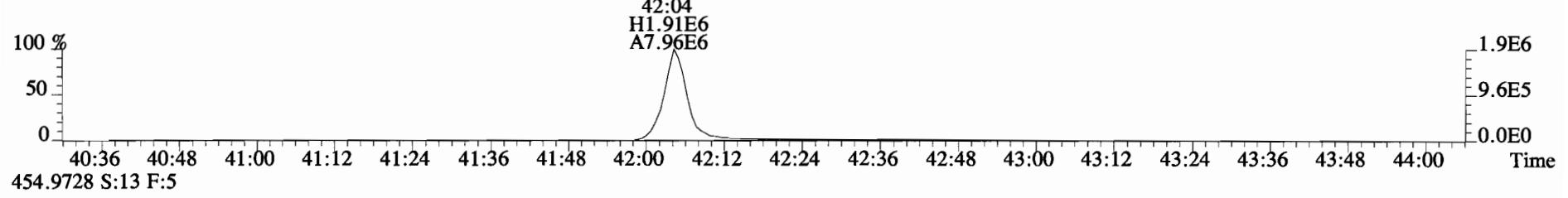
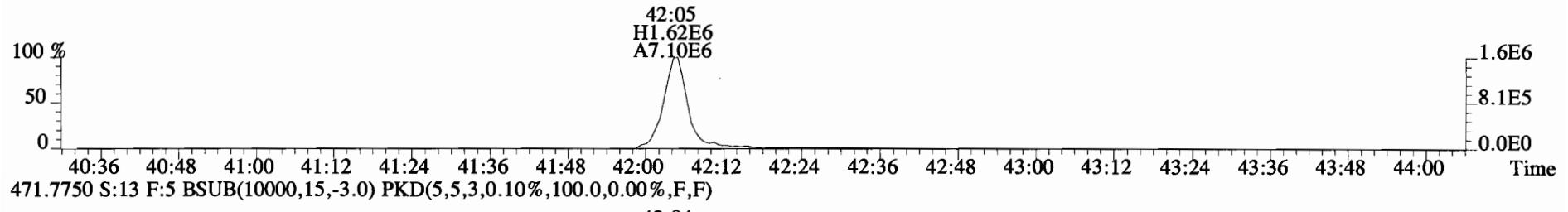
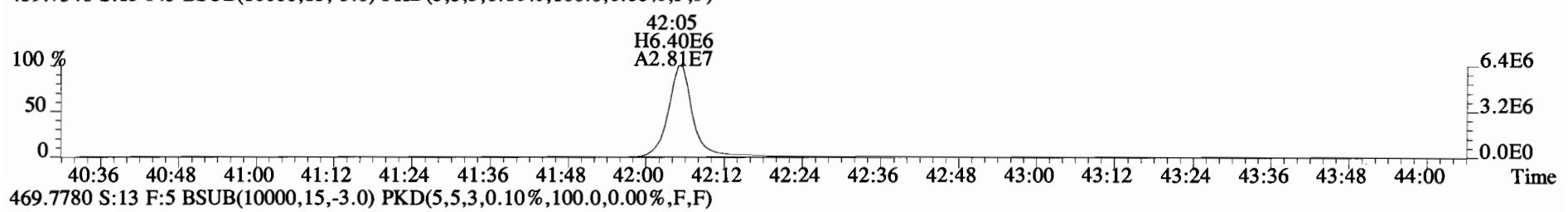
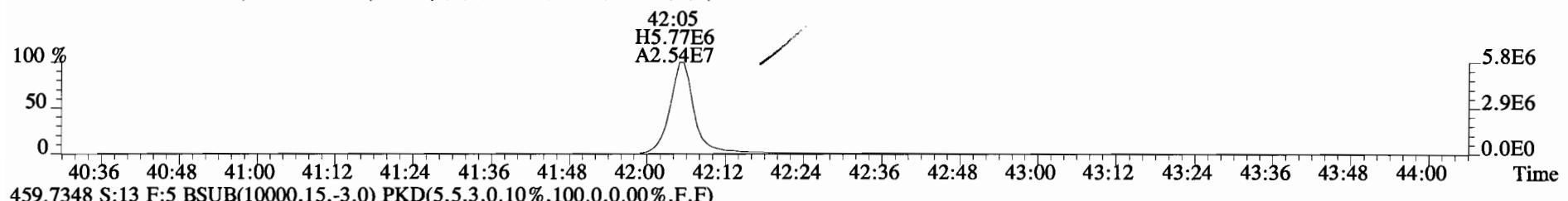
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389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



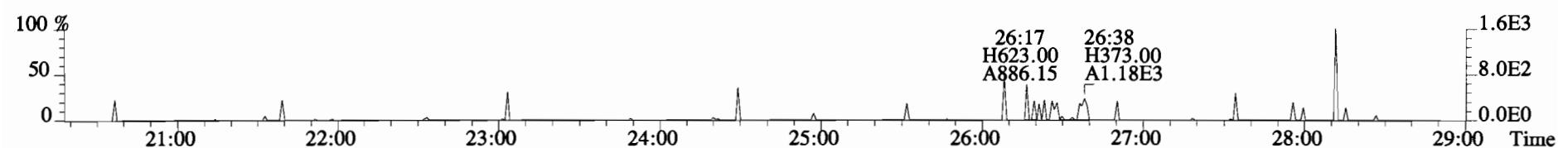
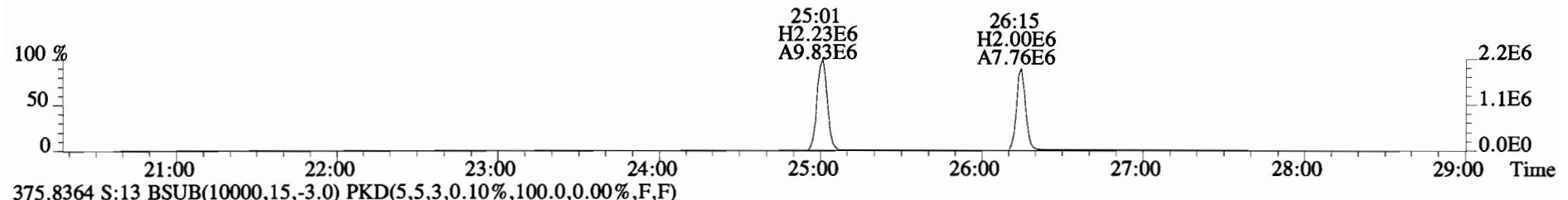
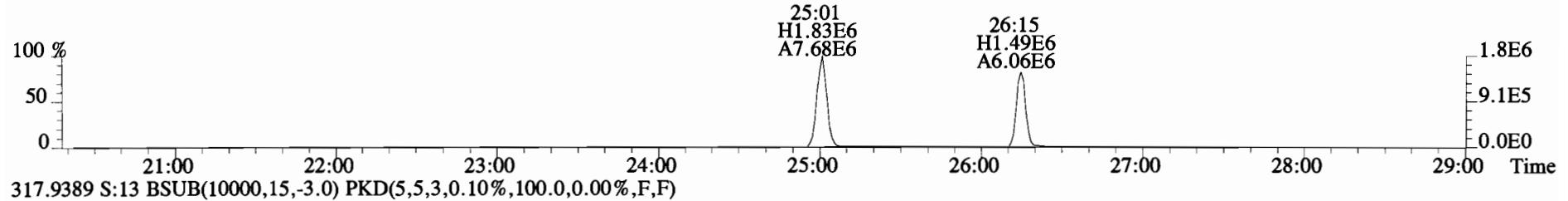
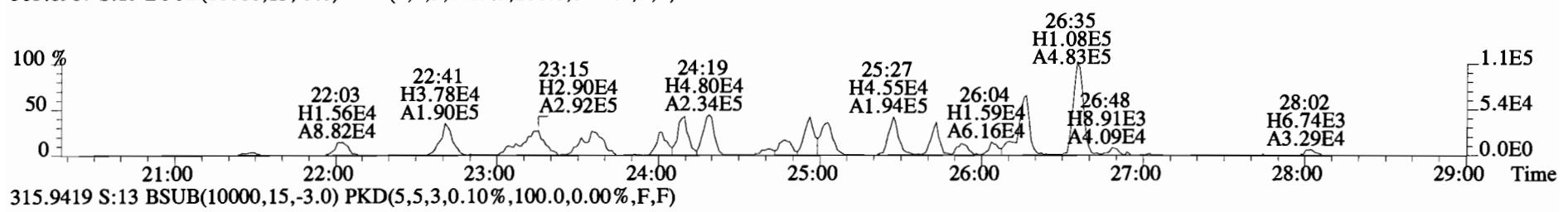
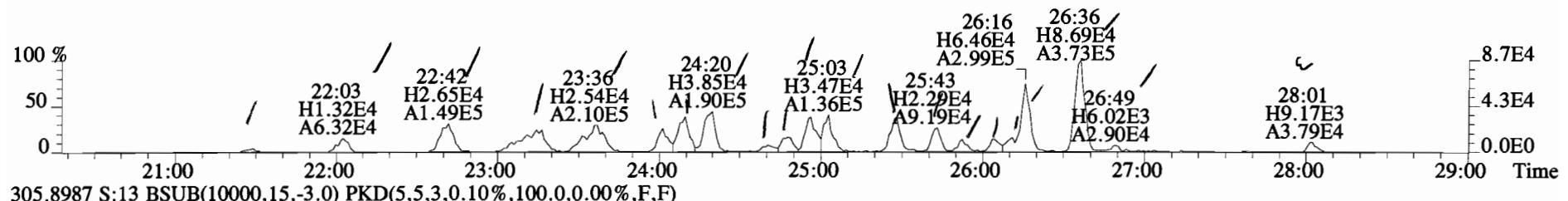
File:141027D1 #1-326 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 423.7767 S:13 F:4 BSB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



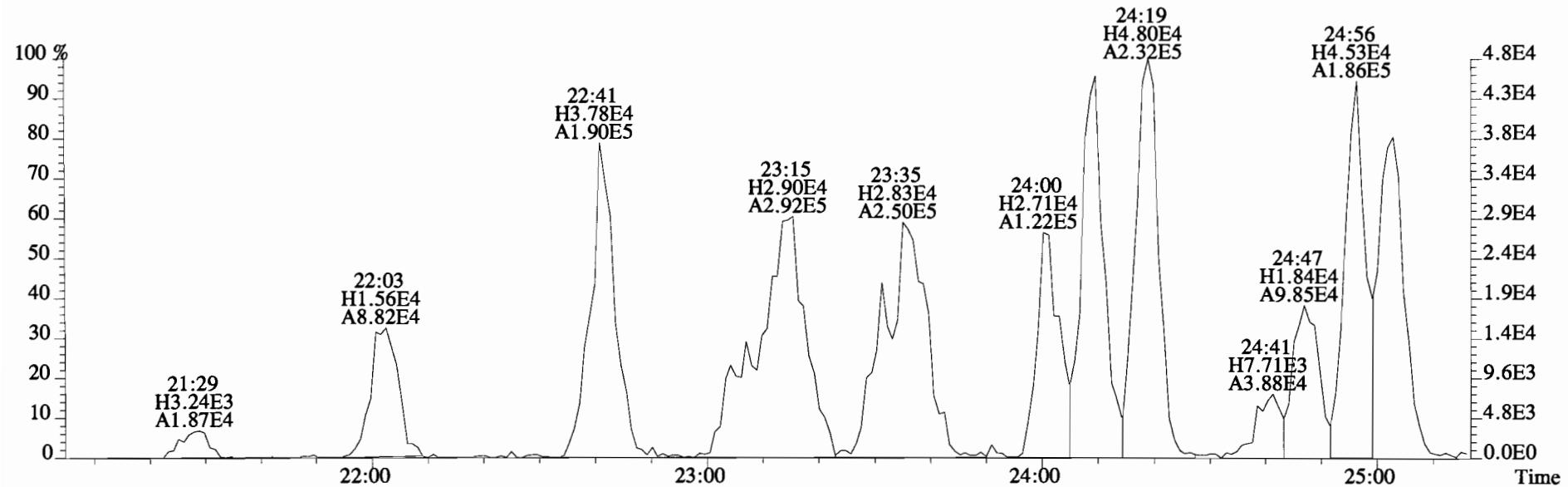
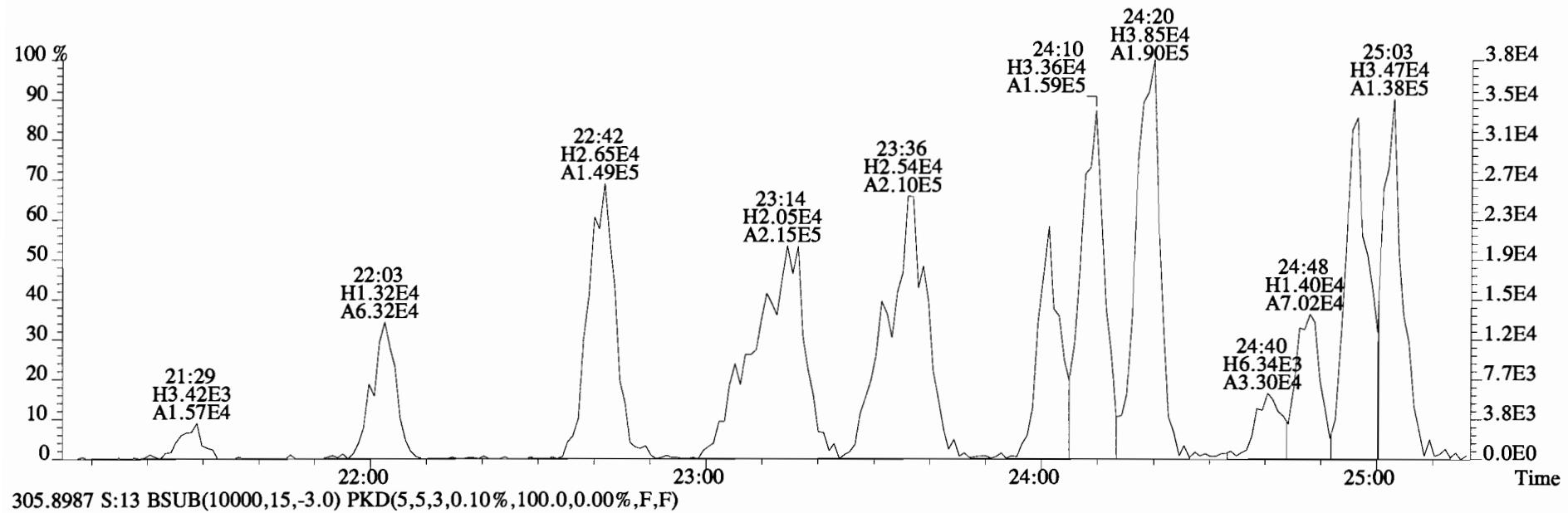
File:141027D1 #1-388 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
457.7377 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



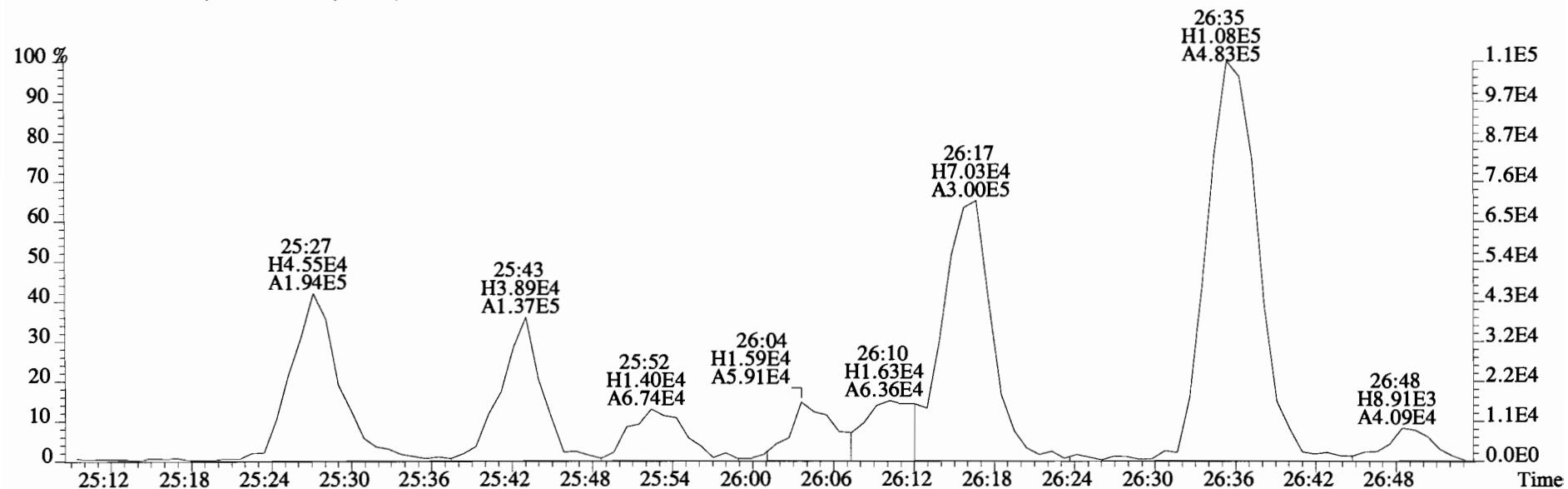
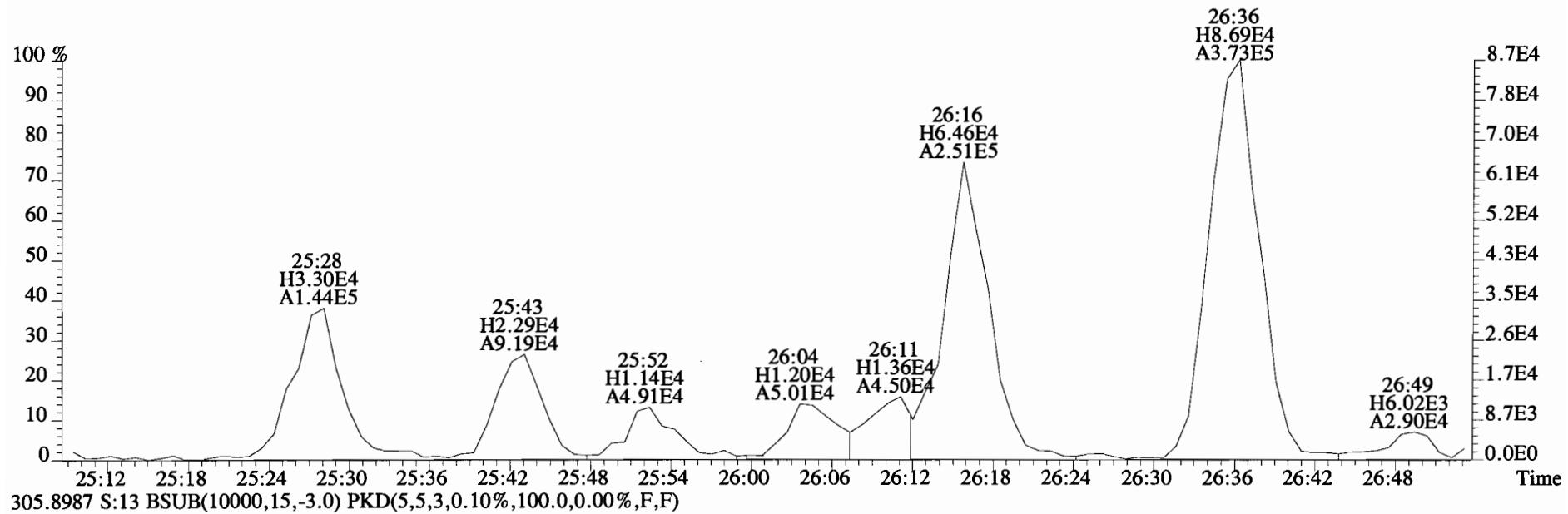
File:141027D1 #1-552 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



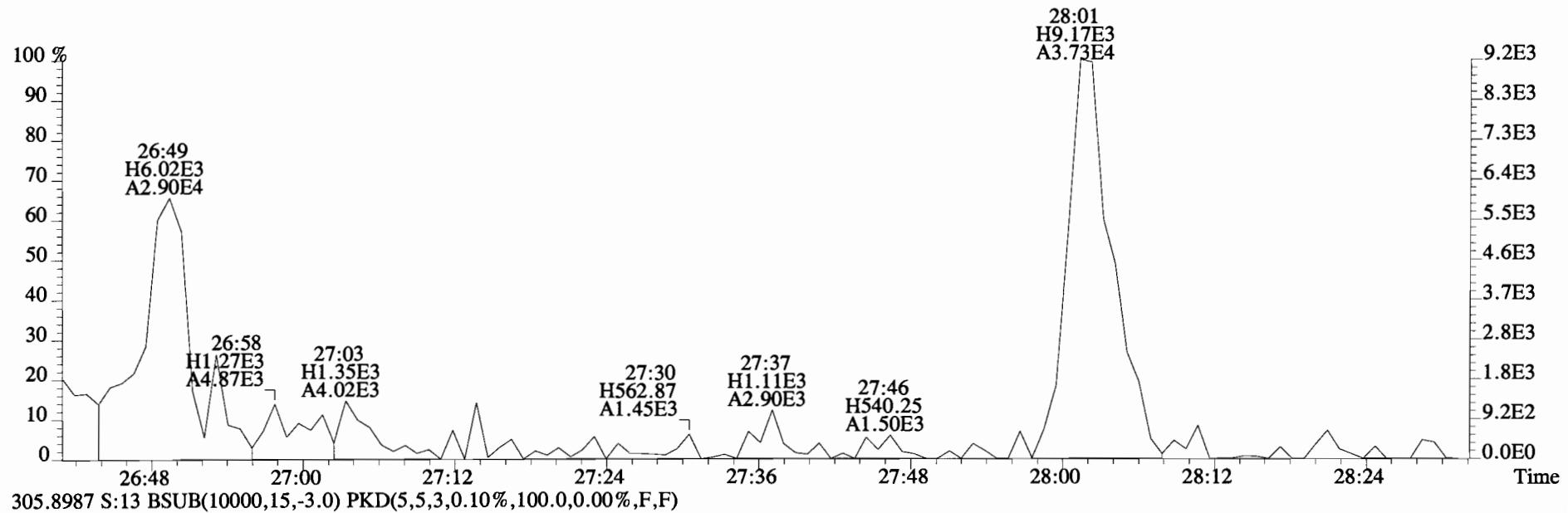
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 303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



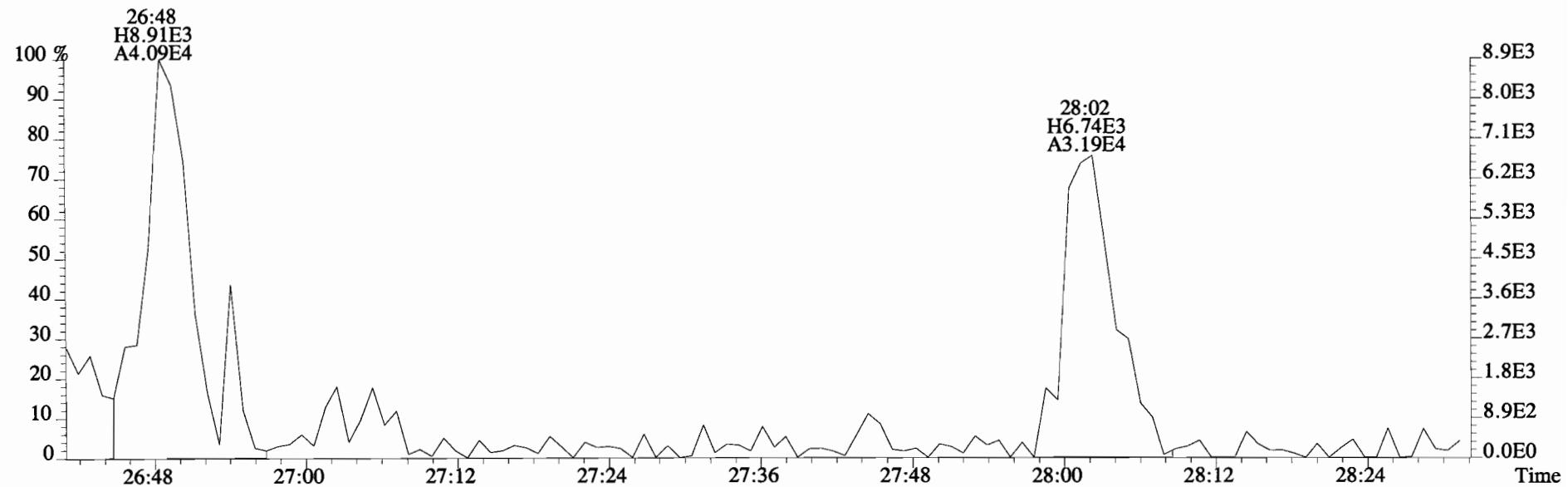
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Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



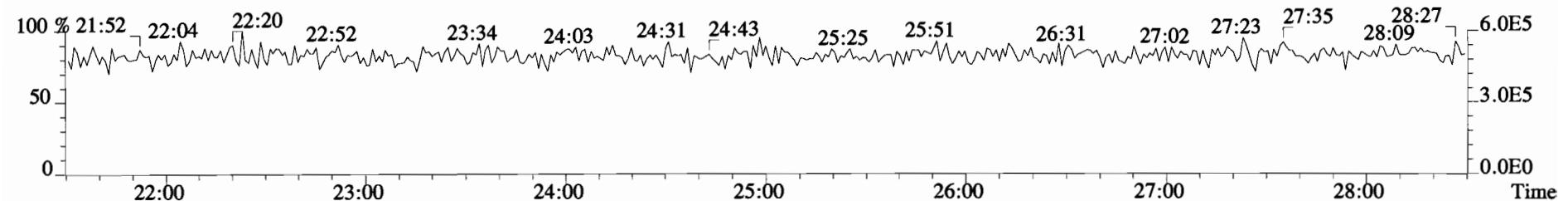
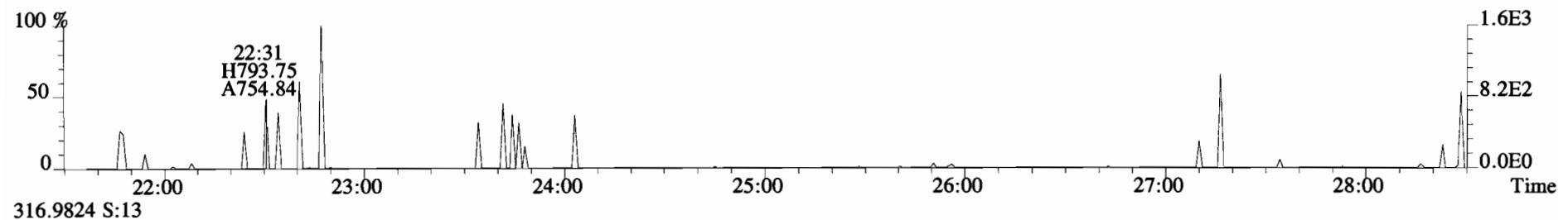
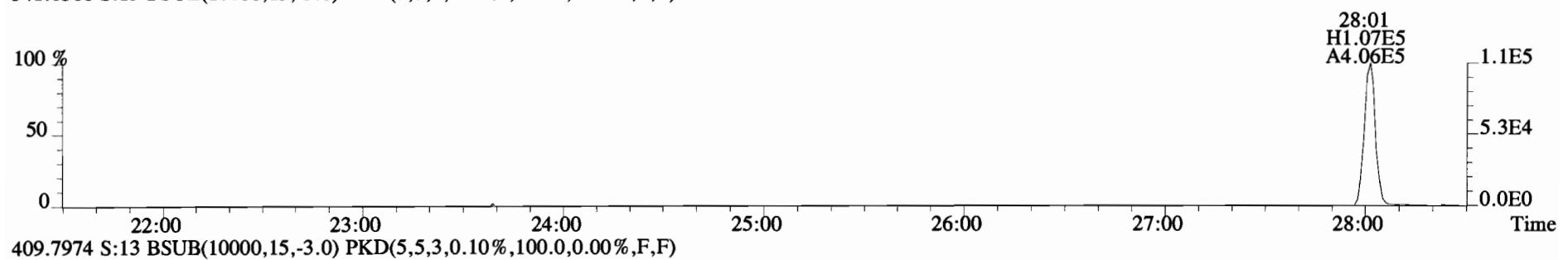
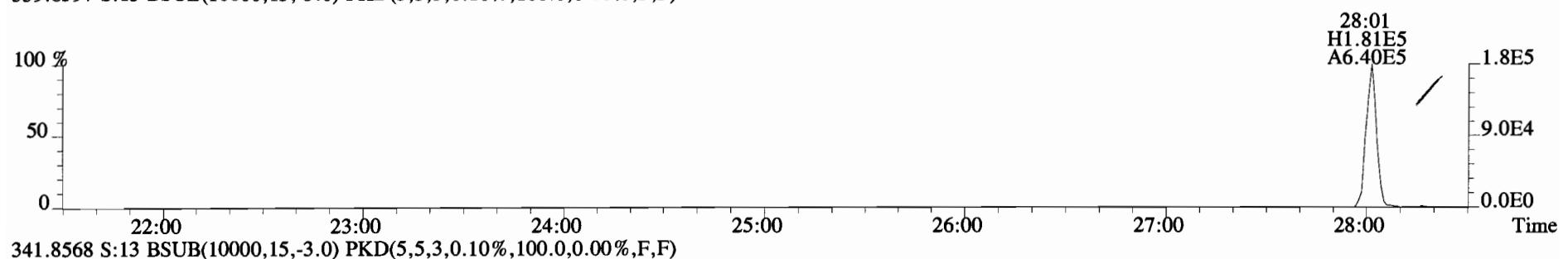
File:141027D1 #1-552 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



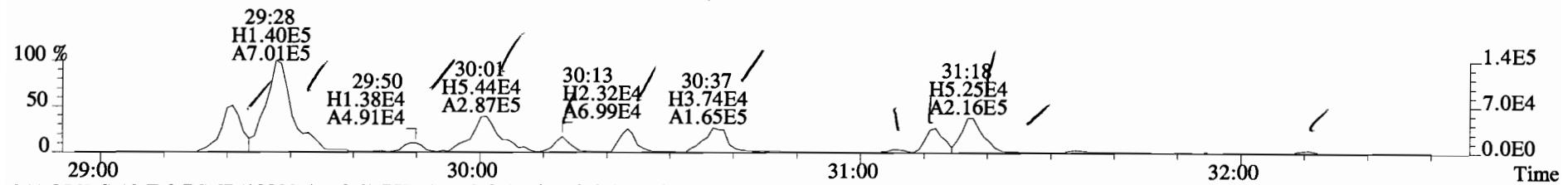
305.8987 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



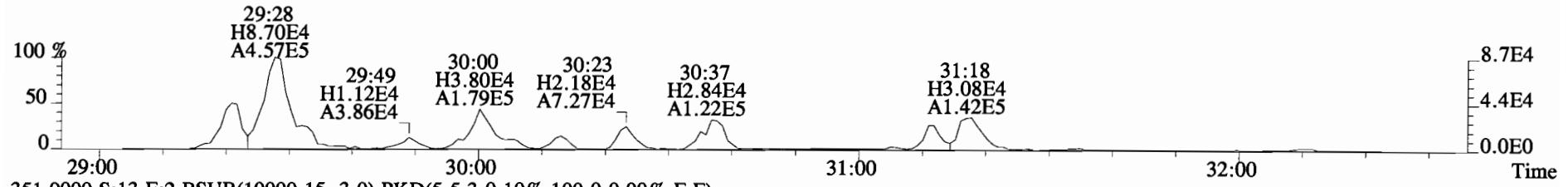
File:141027D1 #1-552 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
339.8597 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



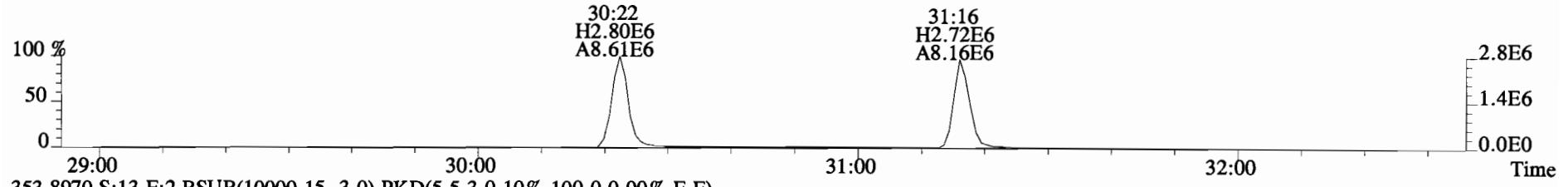
File:141027D1 #1-256 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



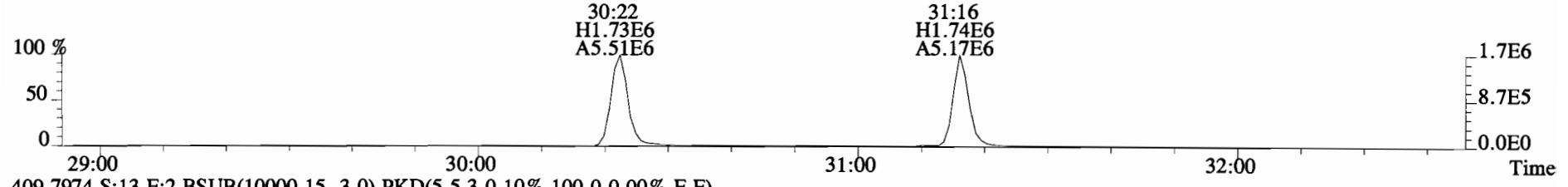
341.8568 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



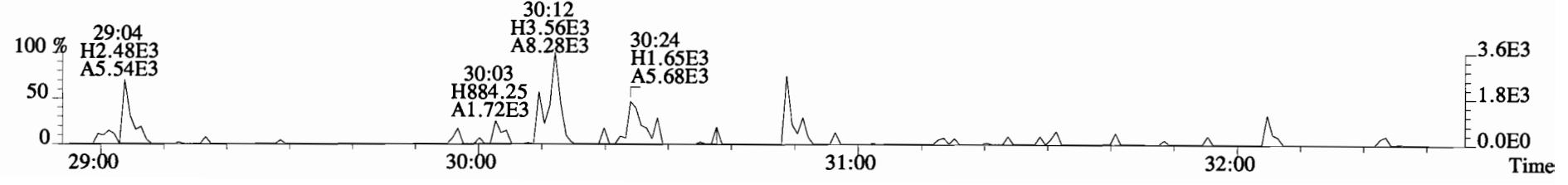
351.9000 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



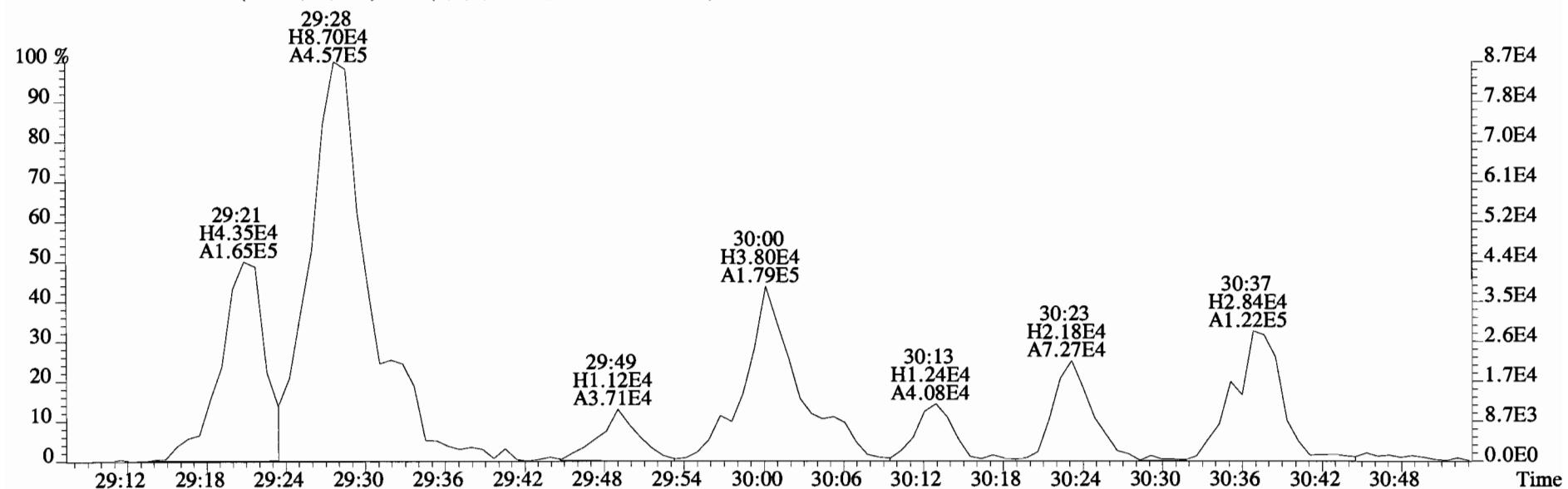
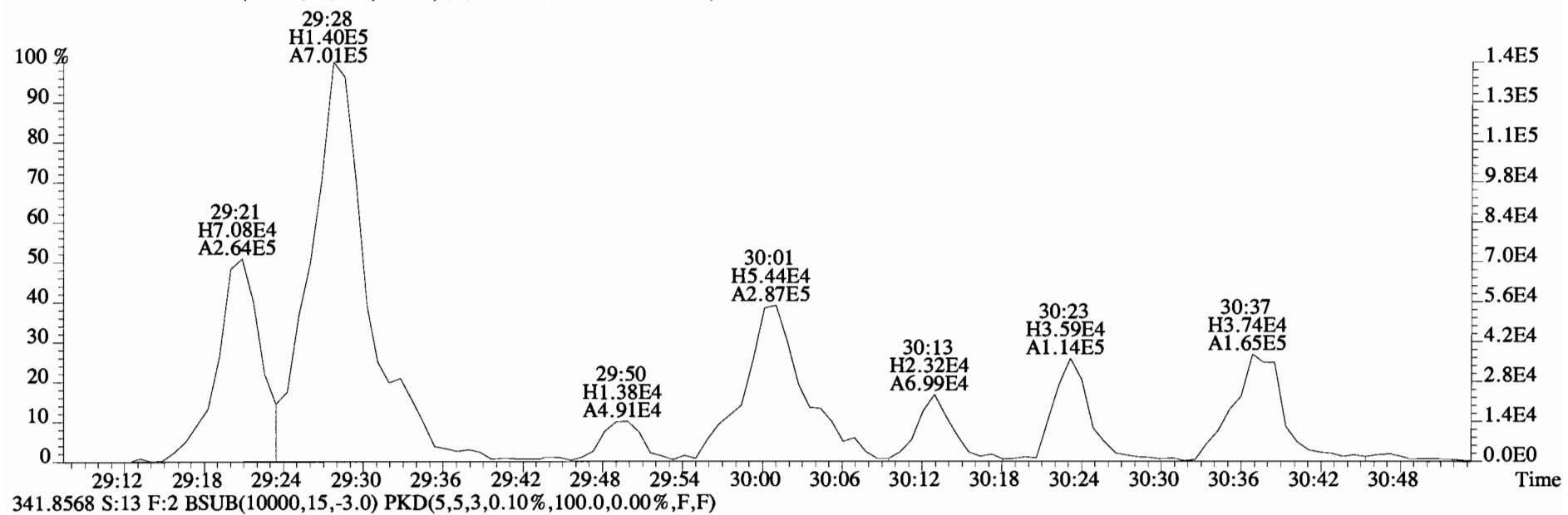
353.8970 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



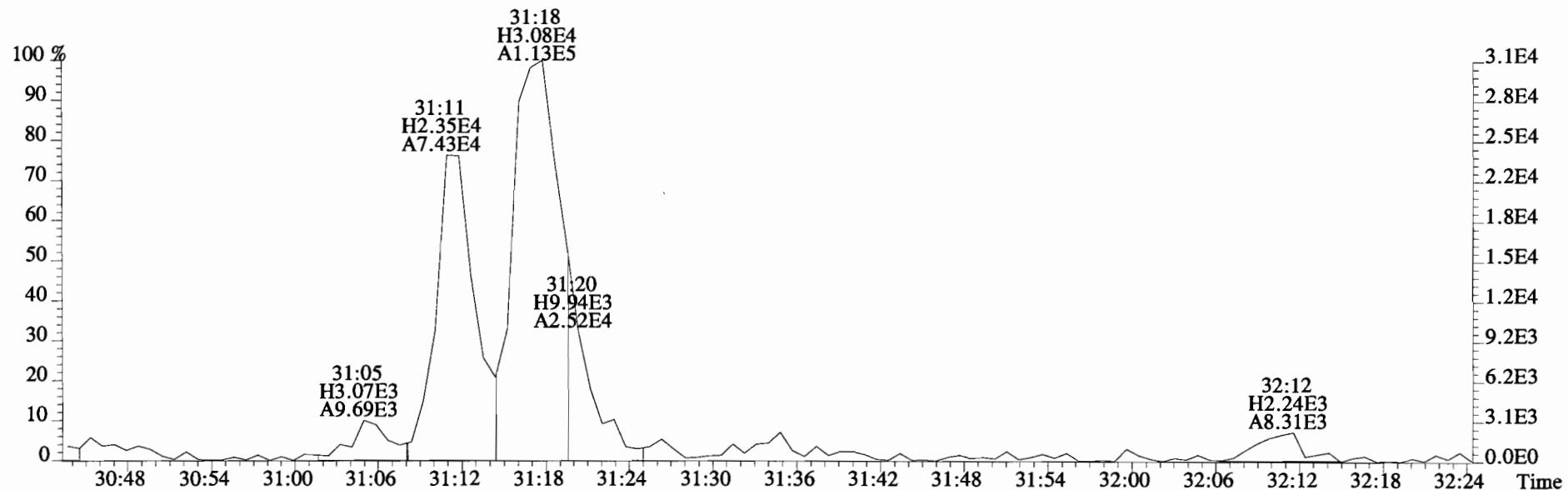
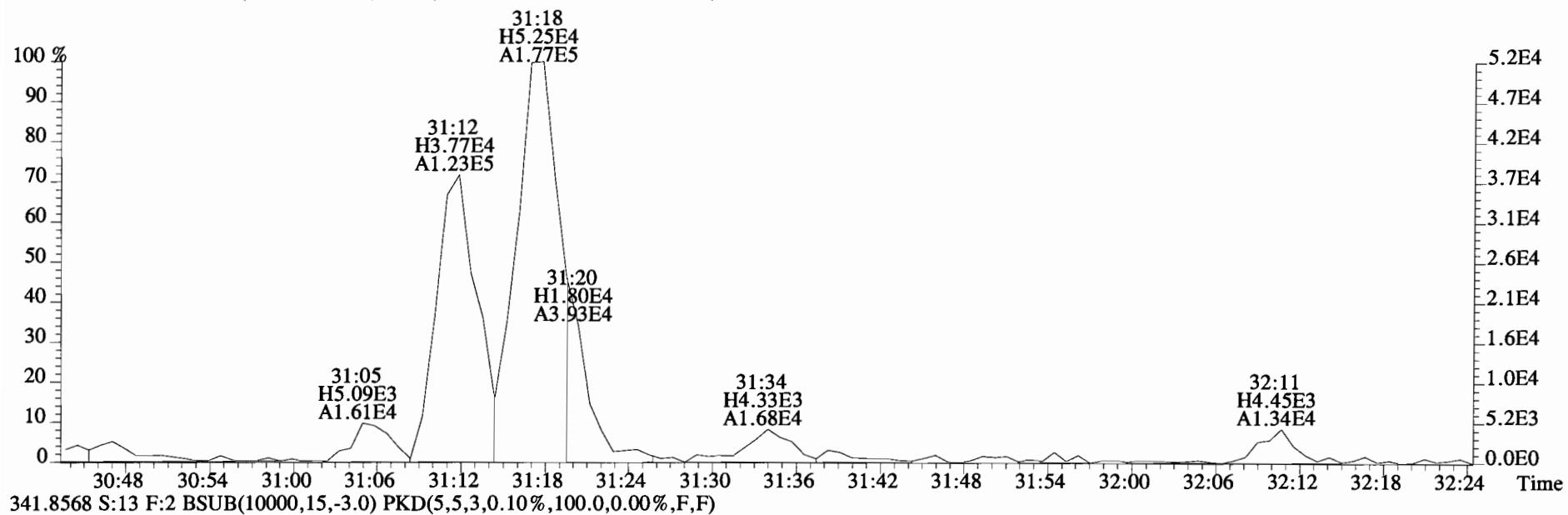
409.7974 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



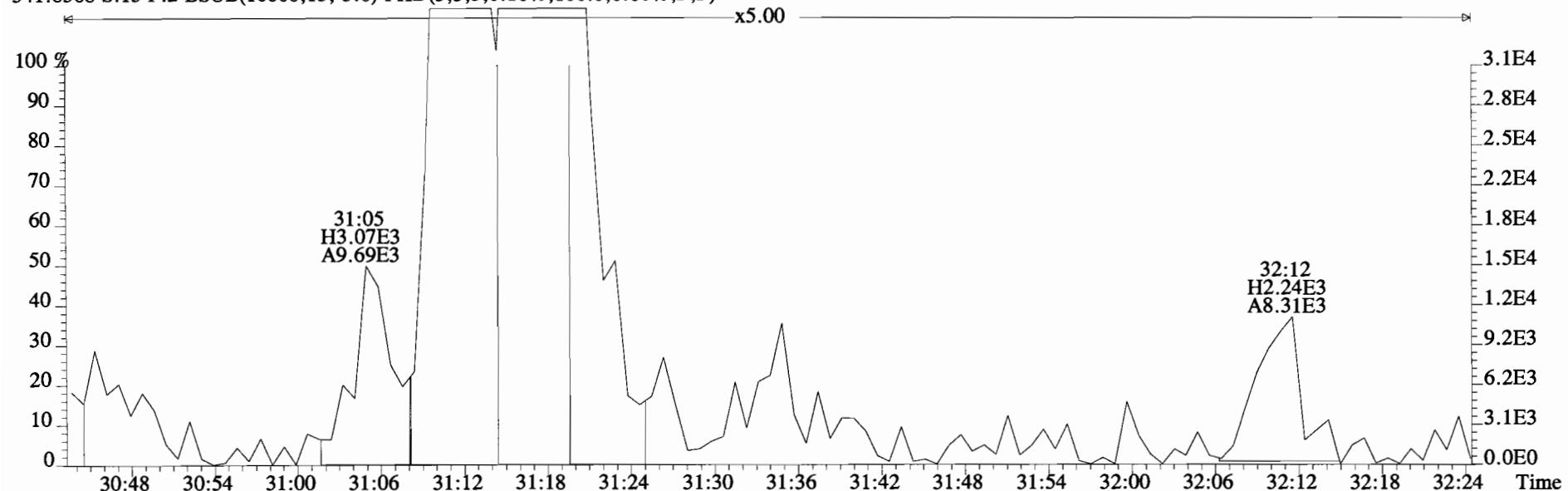
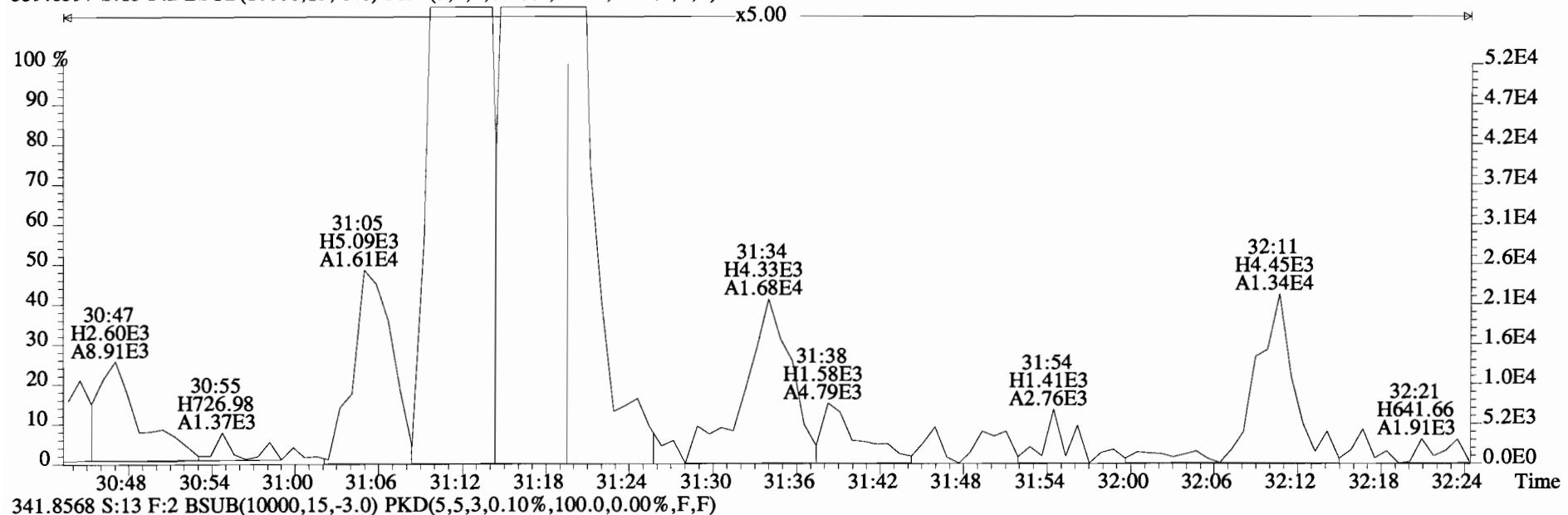
File:141027D1 #1-256 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



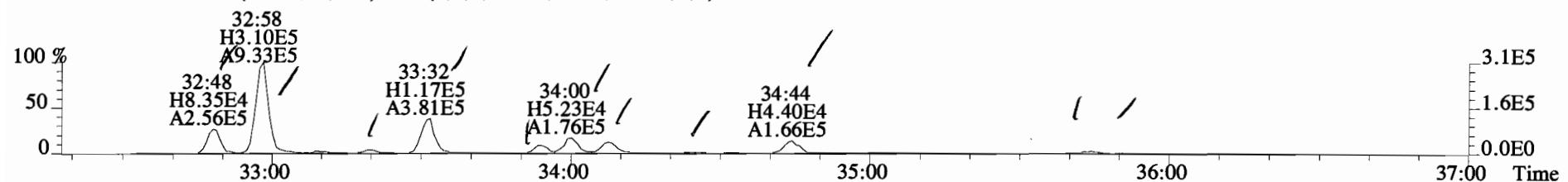
File:141027D1 #1-256 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



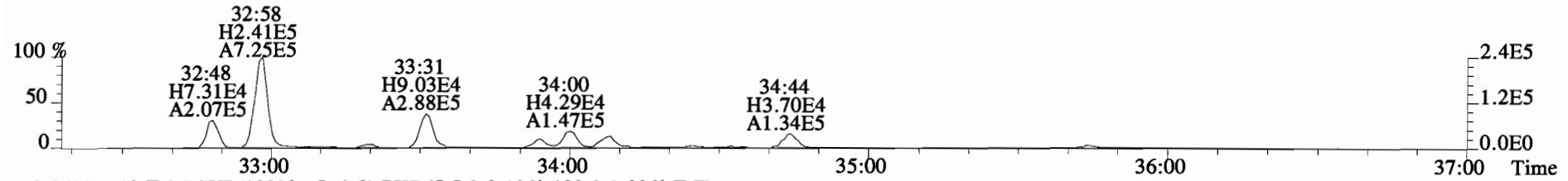
File:141027D1 #1-256 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



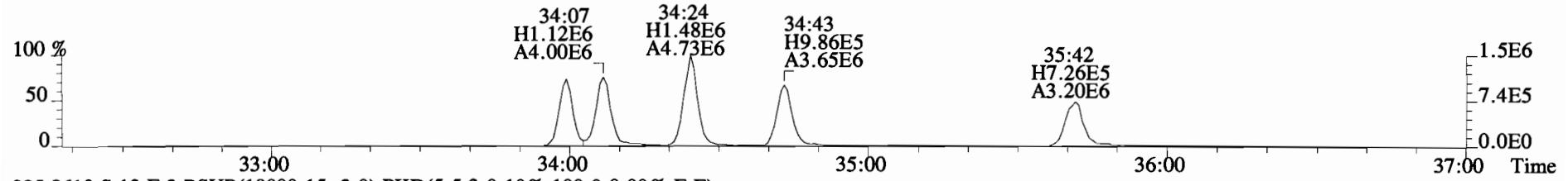
File:141027D1 #1-385 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



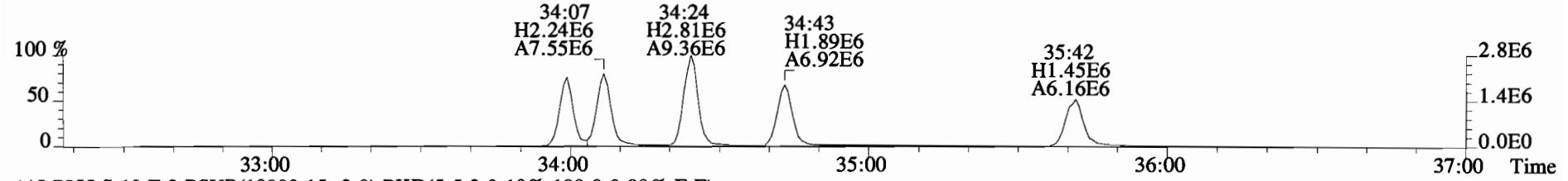
375.8178 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



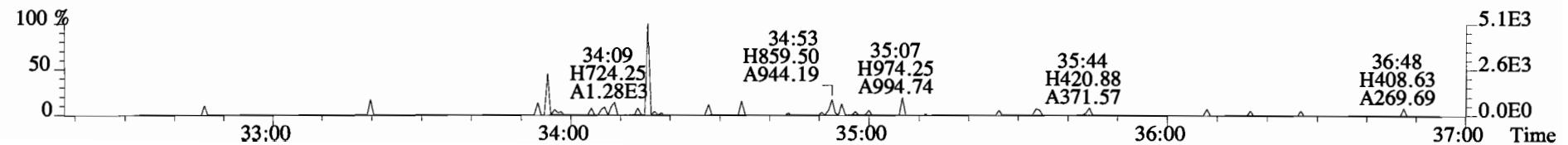
383.8639 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



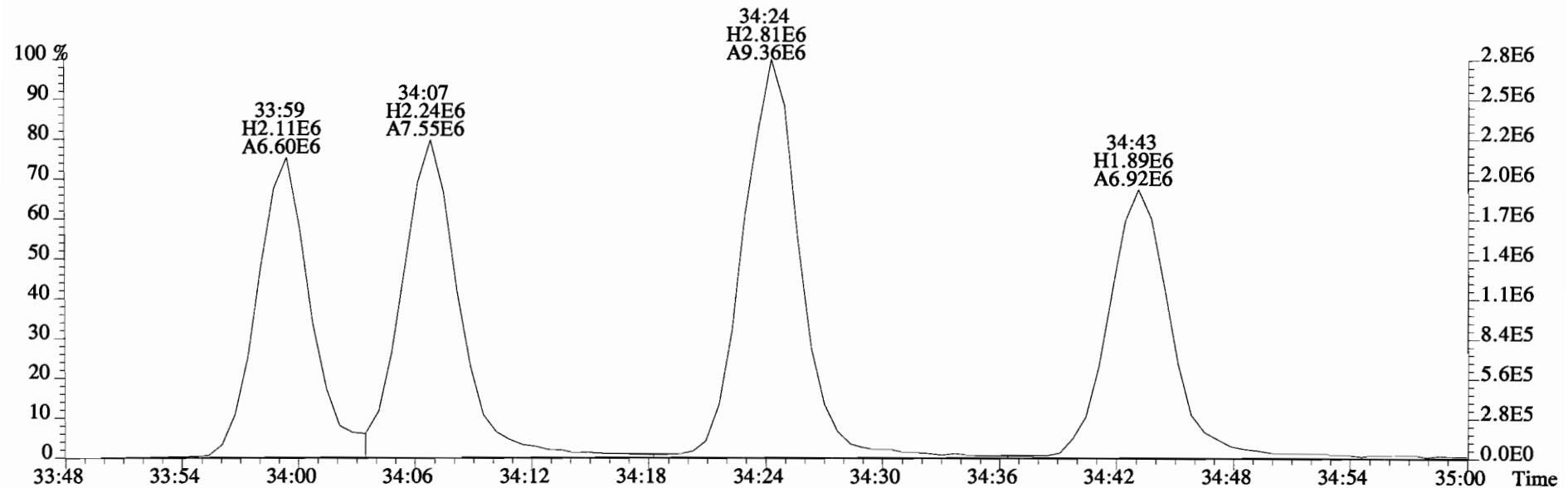
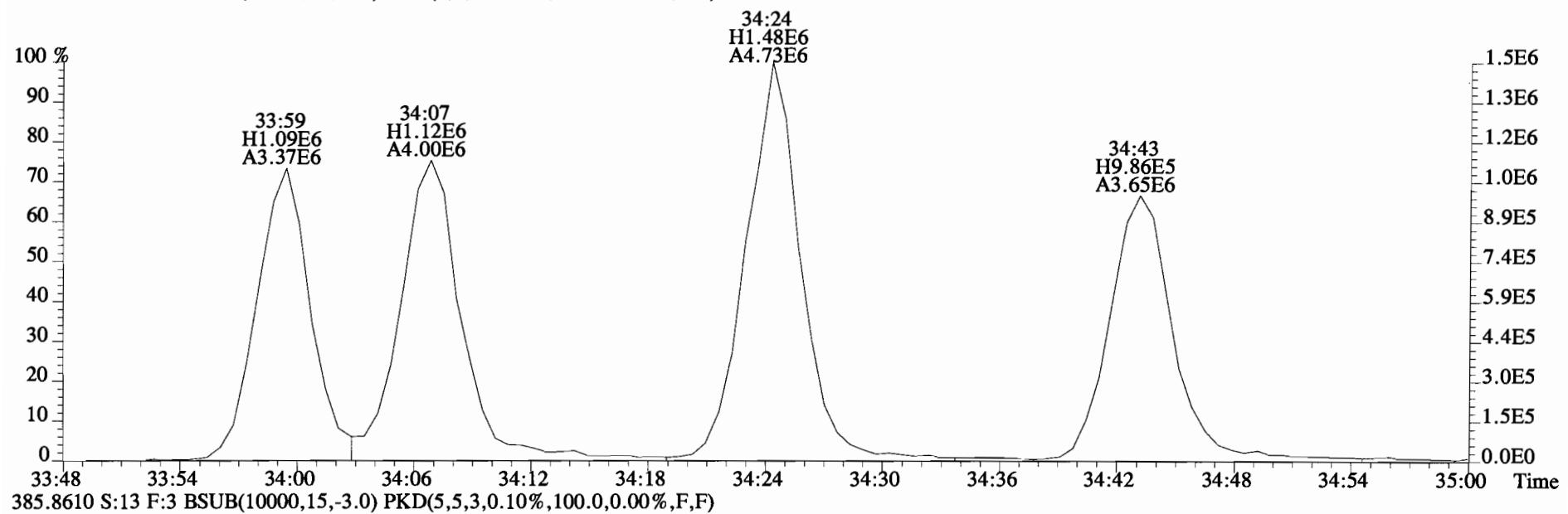
385.8610 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



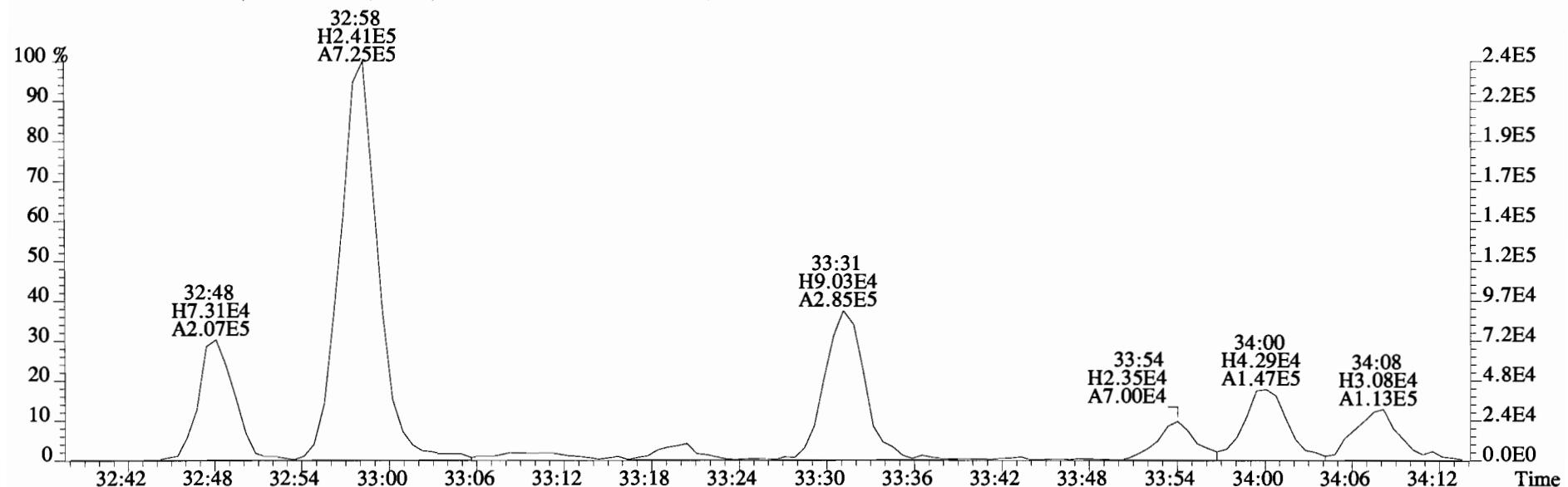
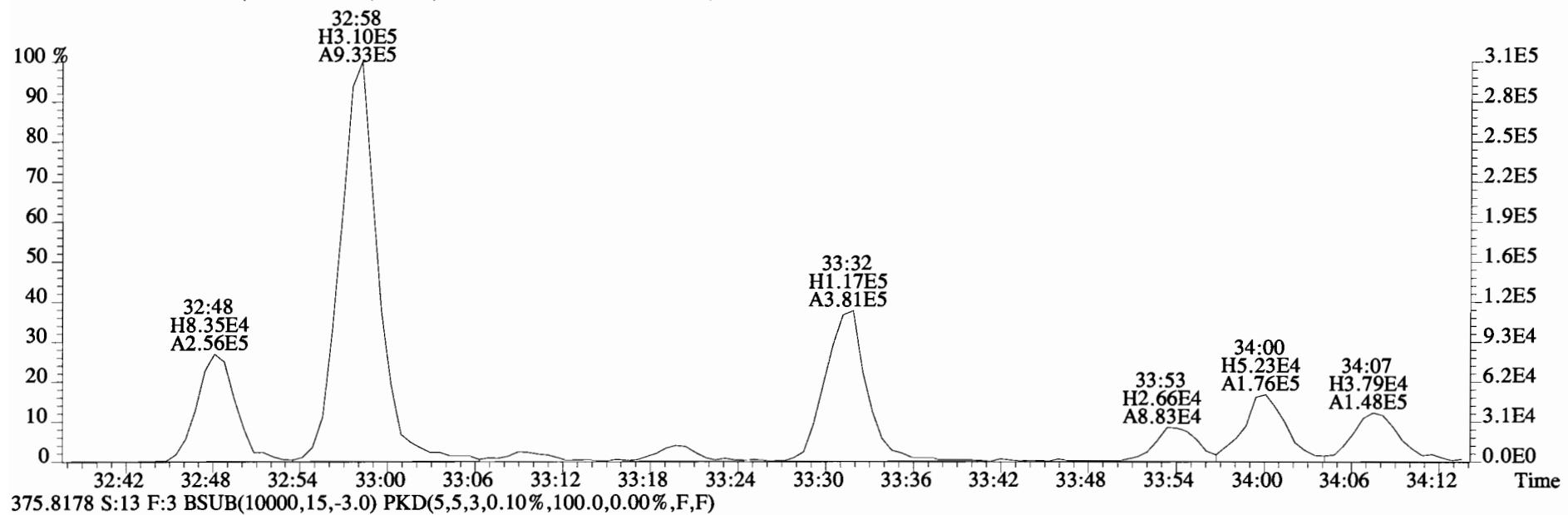
445.7555 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



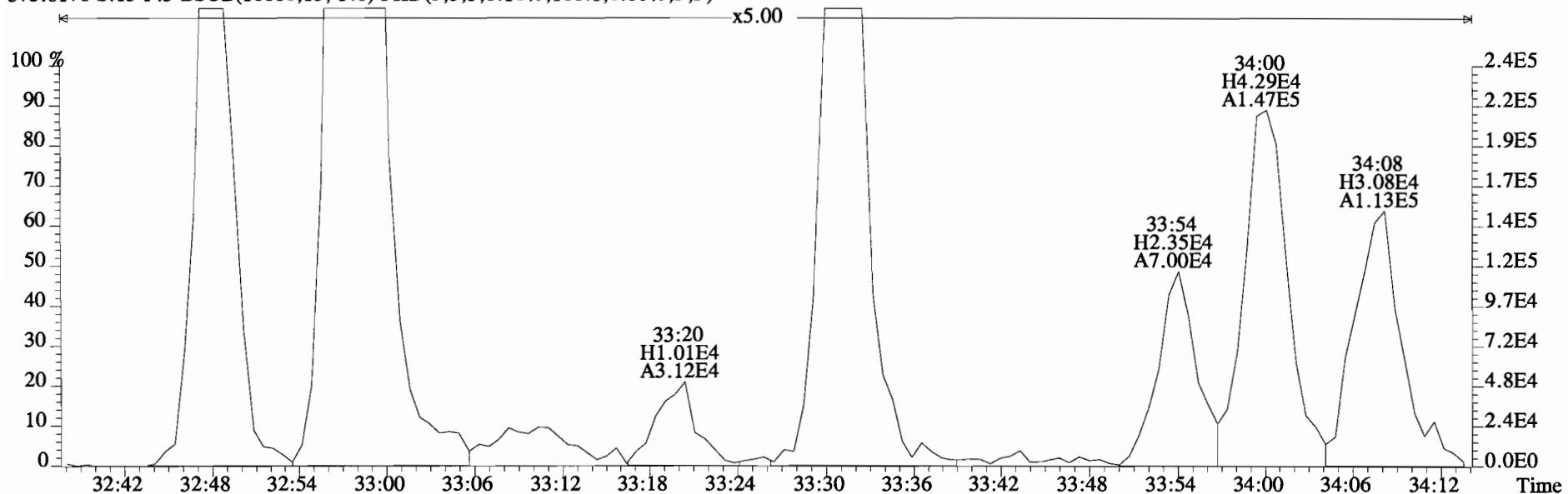
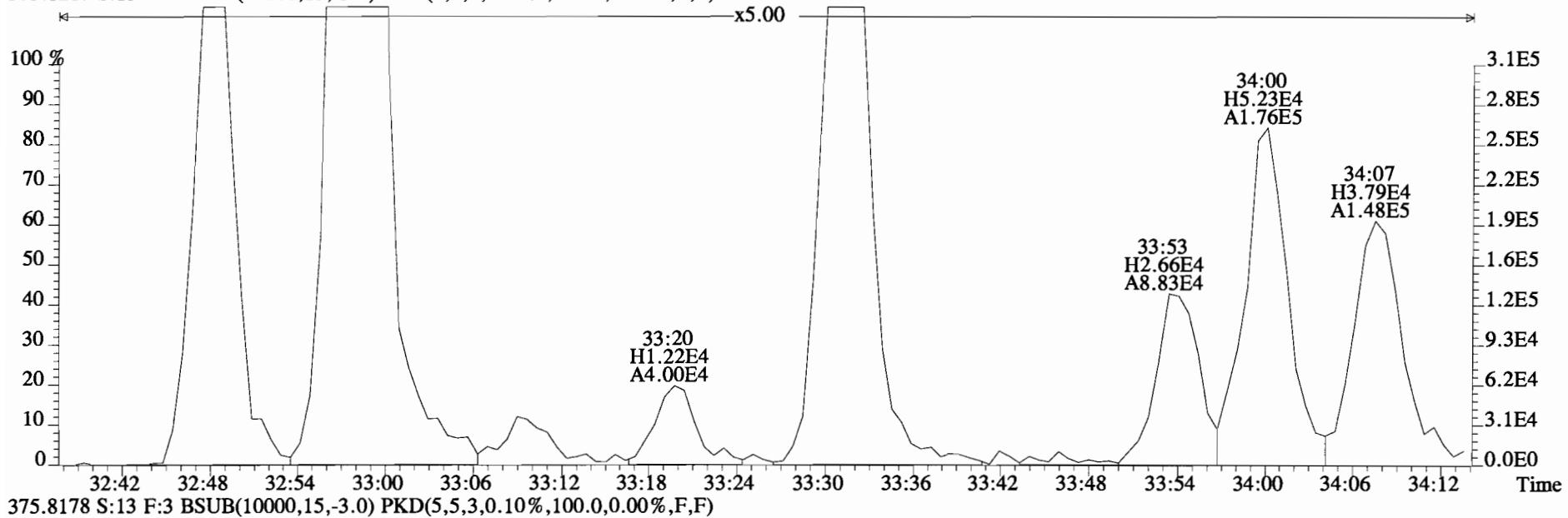
File:141027D1 #1-385 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
383.8639 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



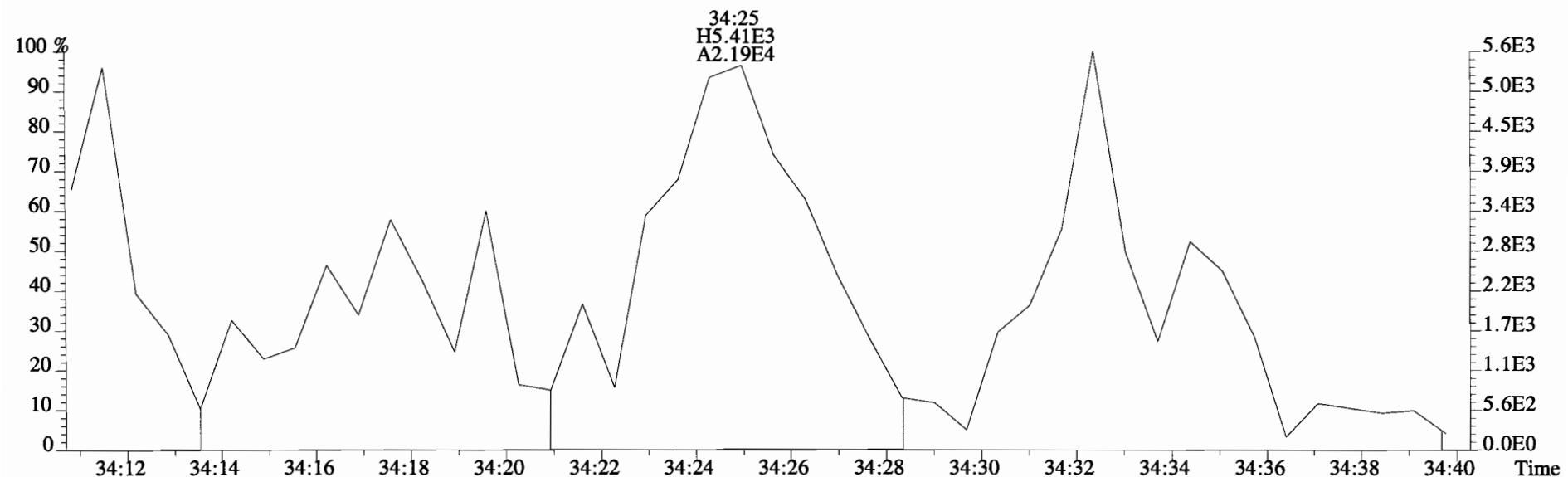
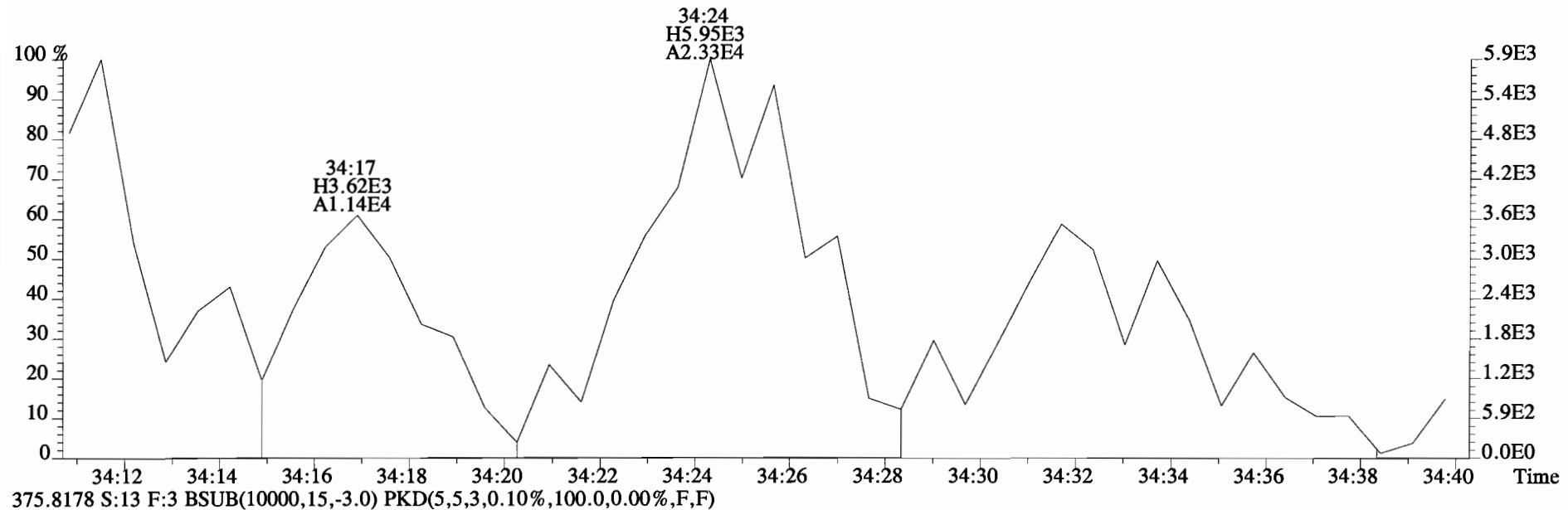
File:141027D1 #1-385 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



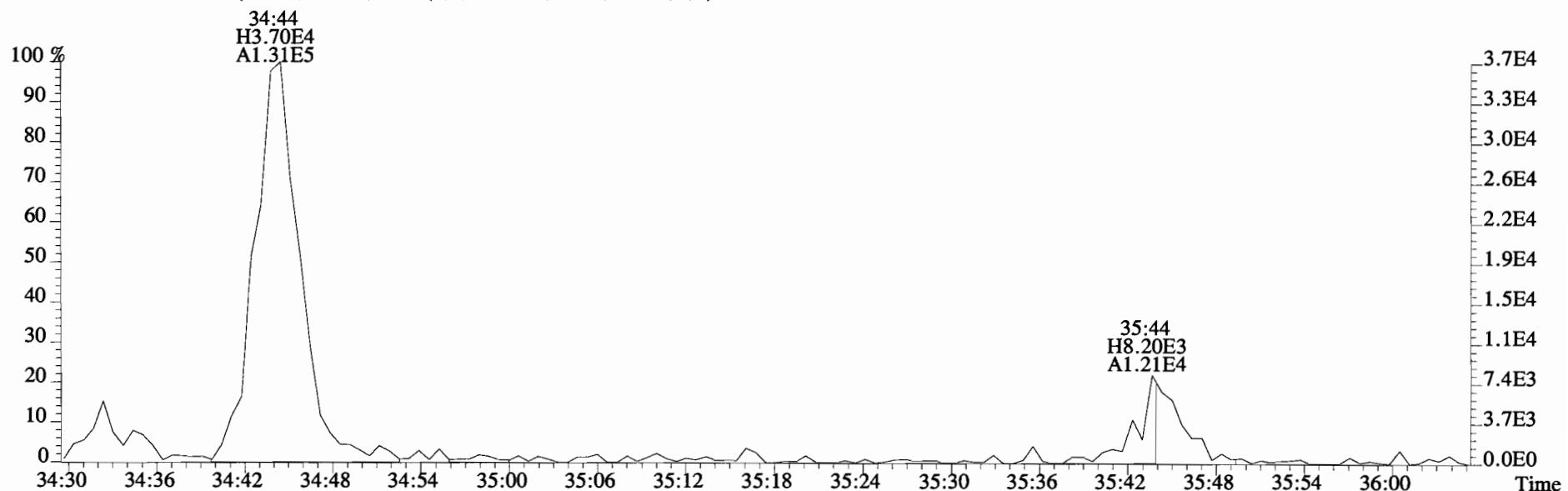
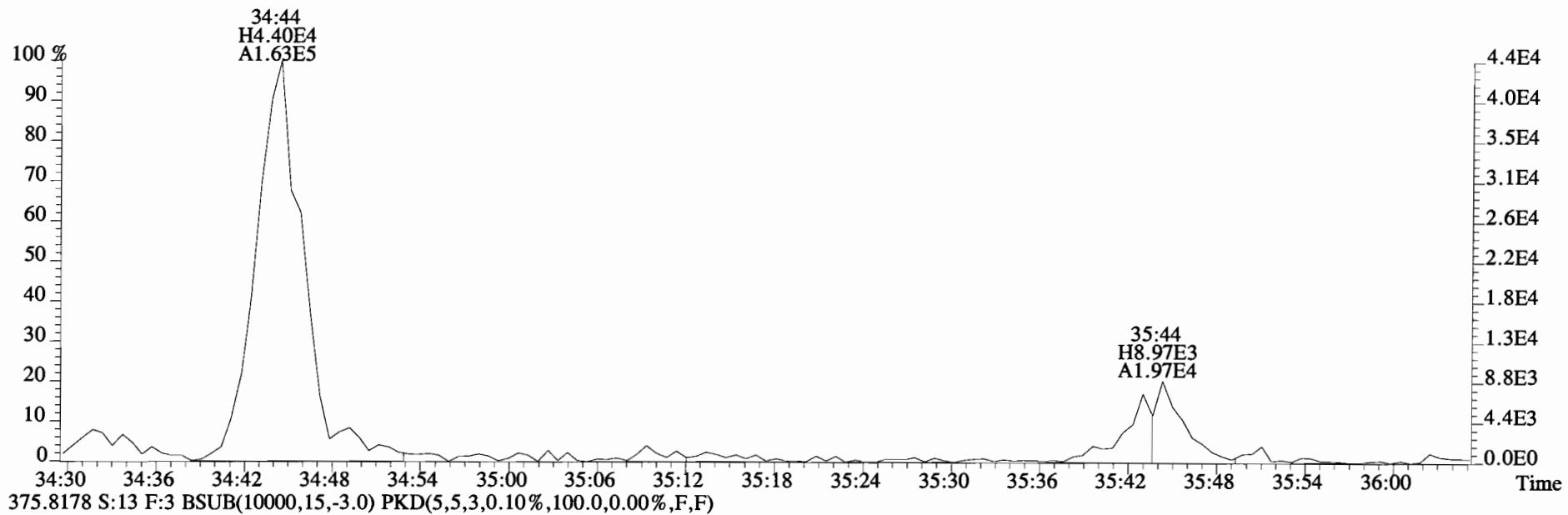
File:141027D1 #1-385 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



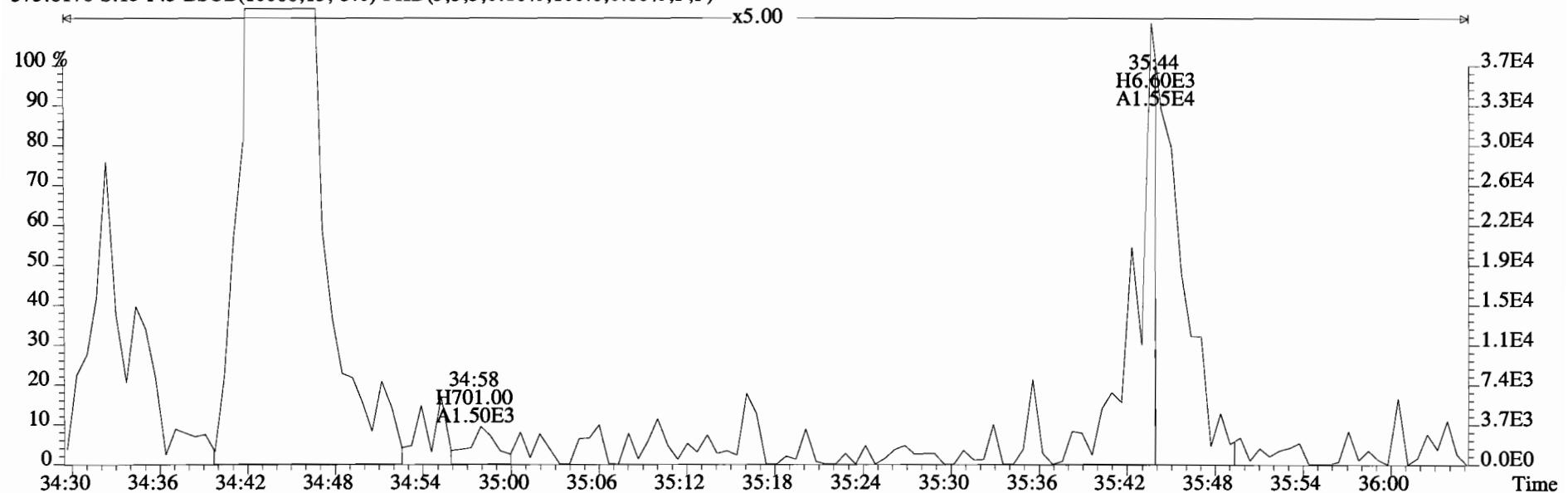
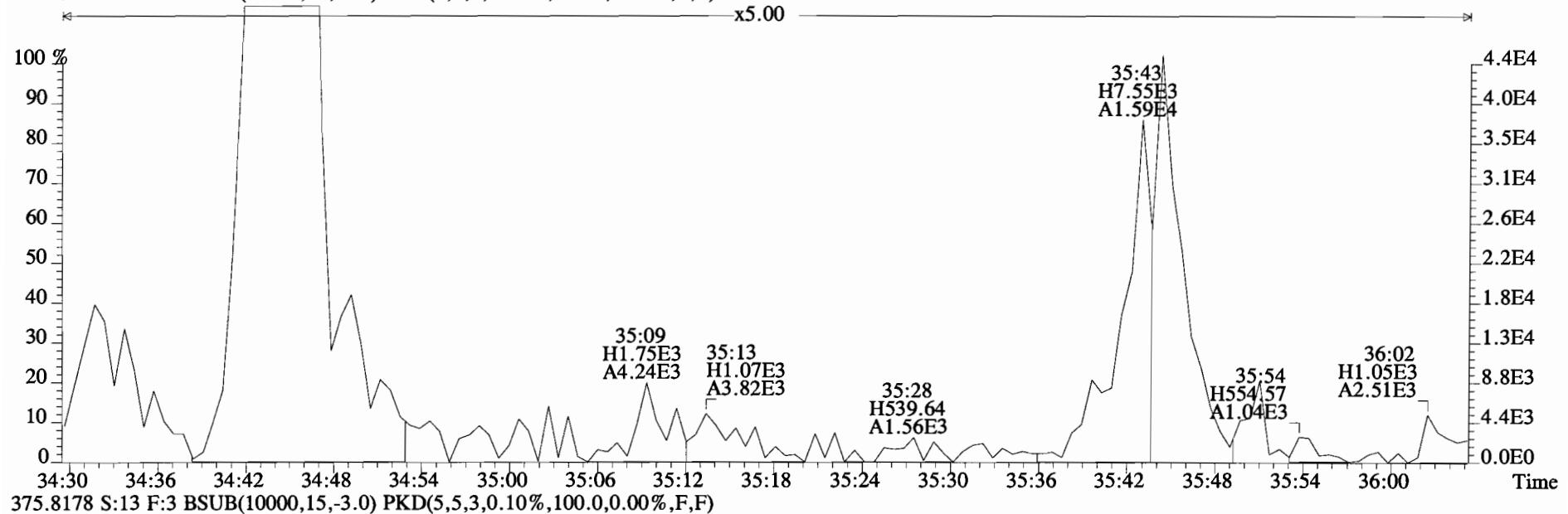
File:141027D1 #1-385 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



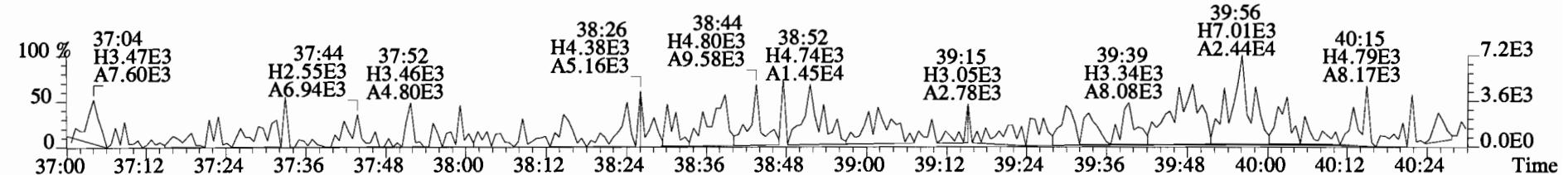
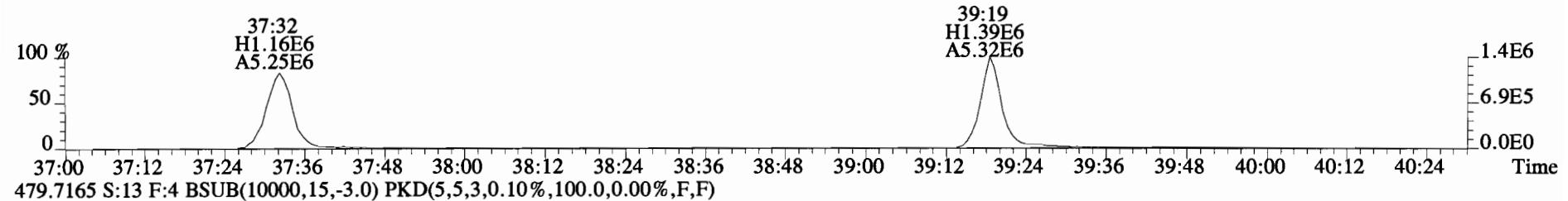
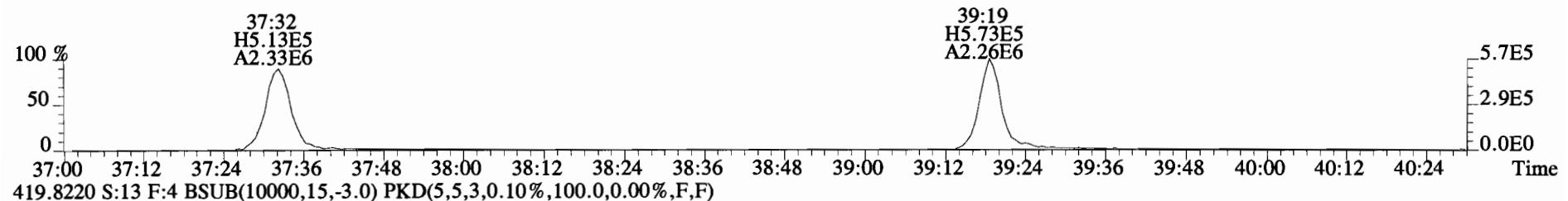
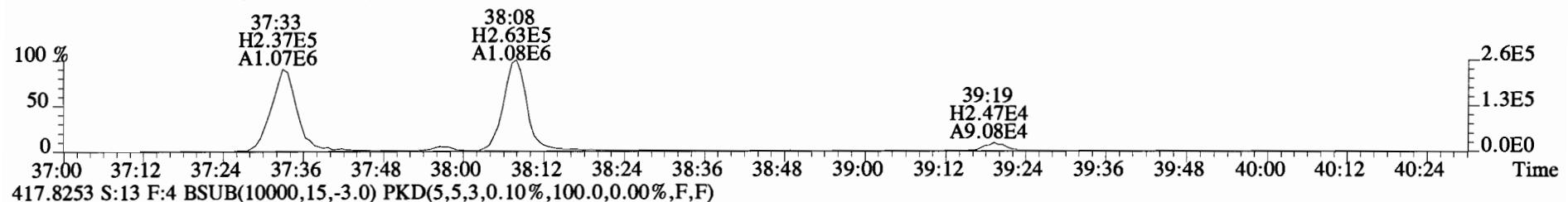
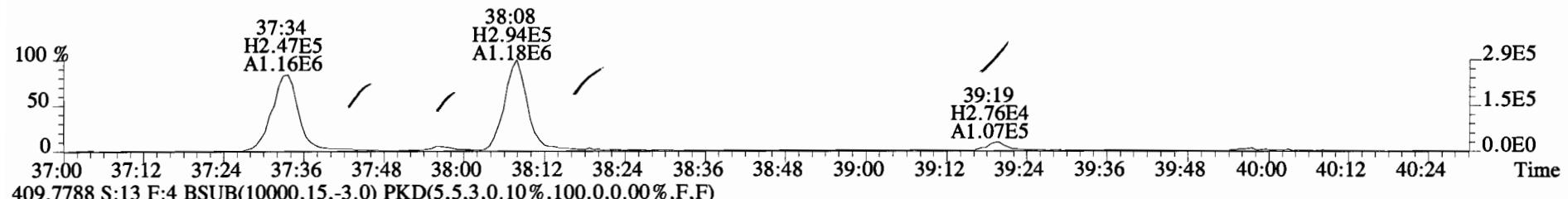
File:141027D1 #1-385 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



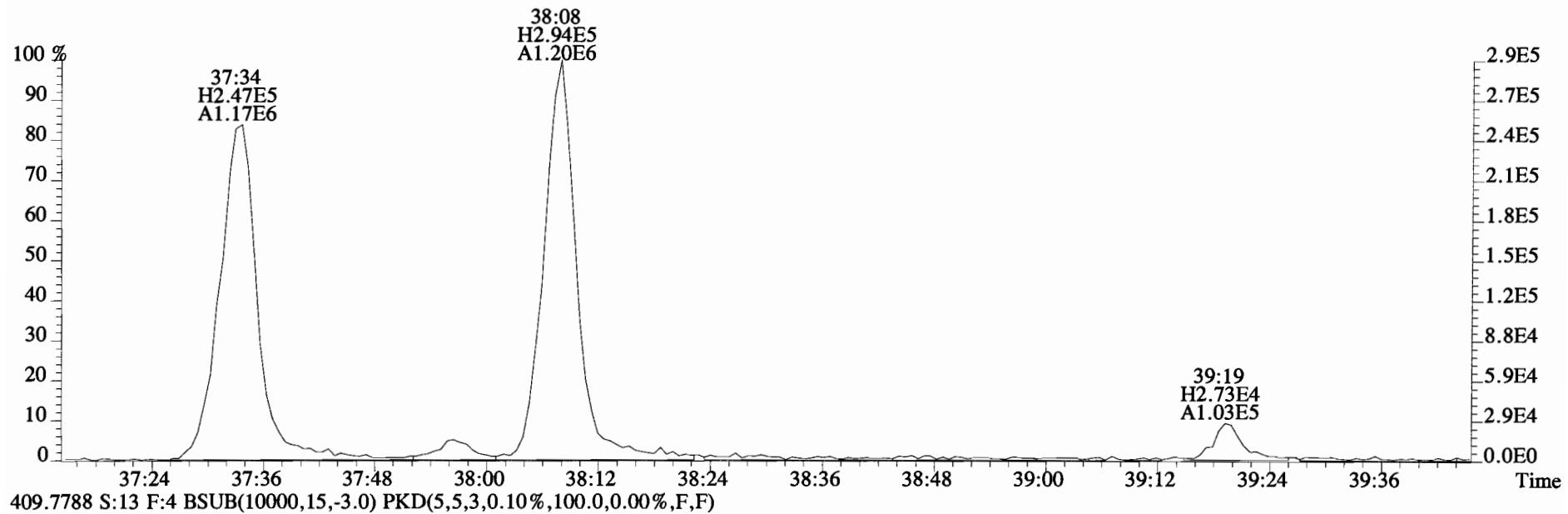
File:141027D1 #1-385 Acq:28-OCT-2014 00:13:15 GC EI + Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



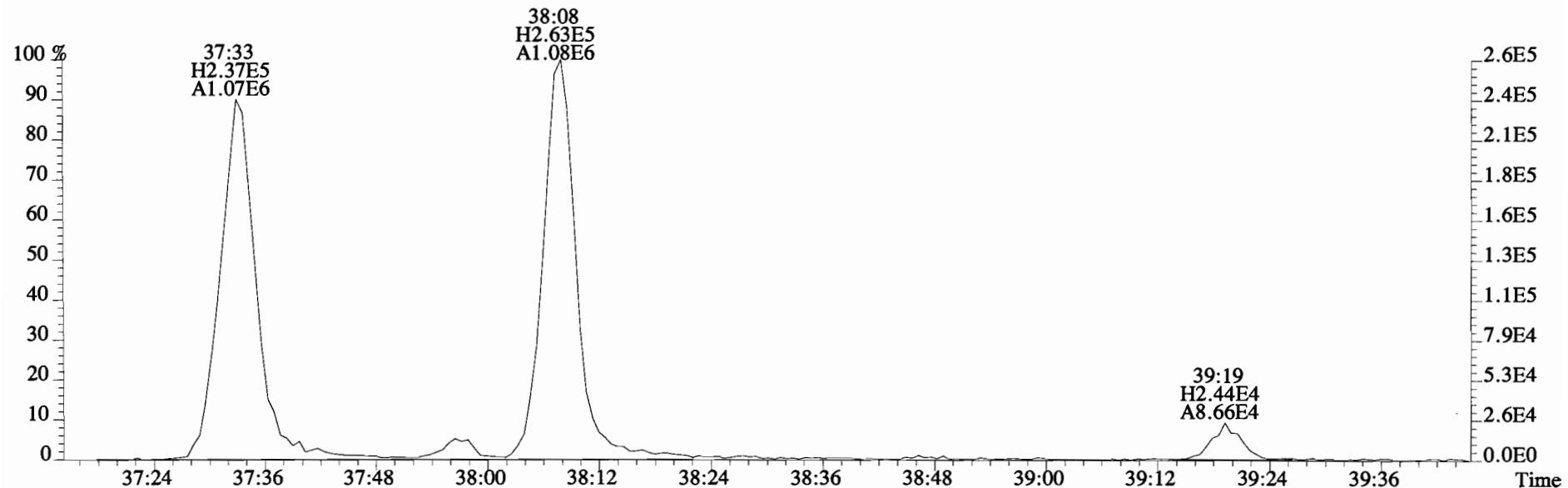
File:141027D1 #1-326 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



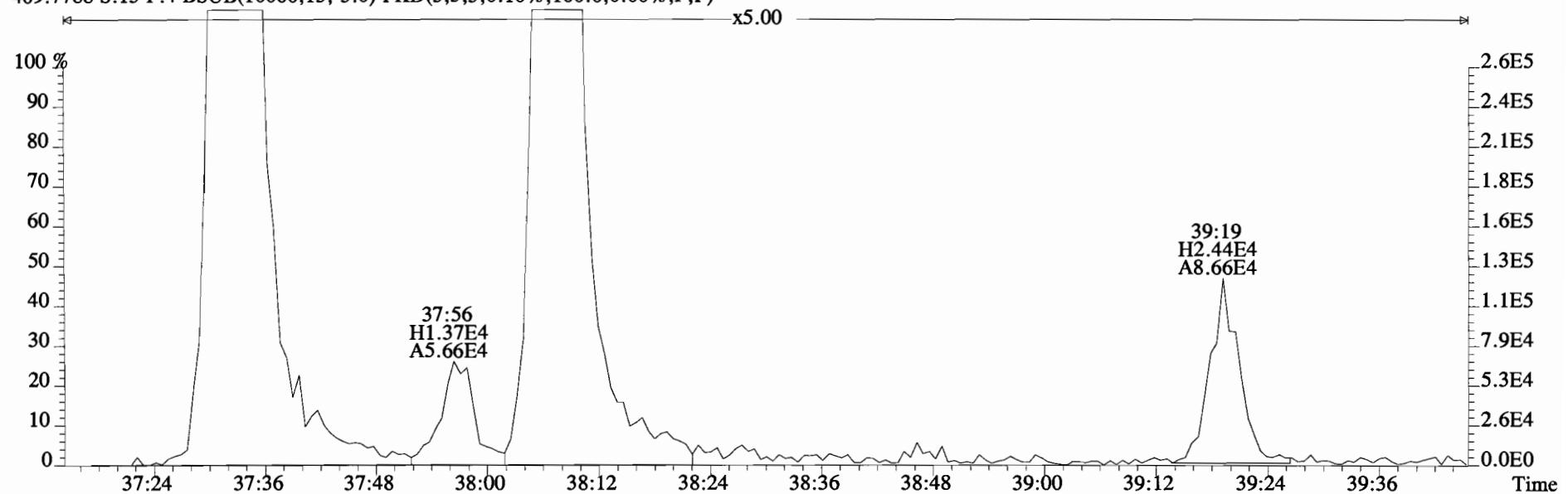
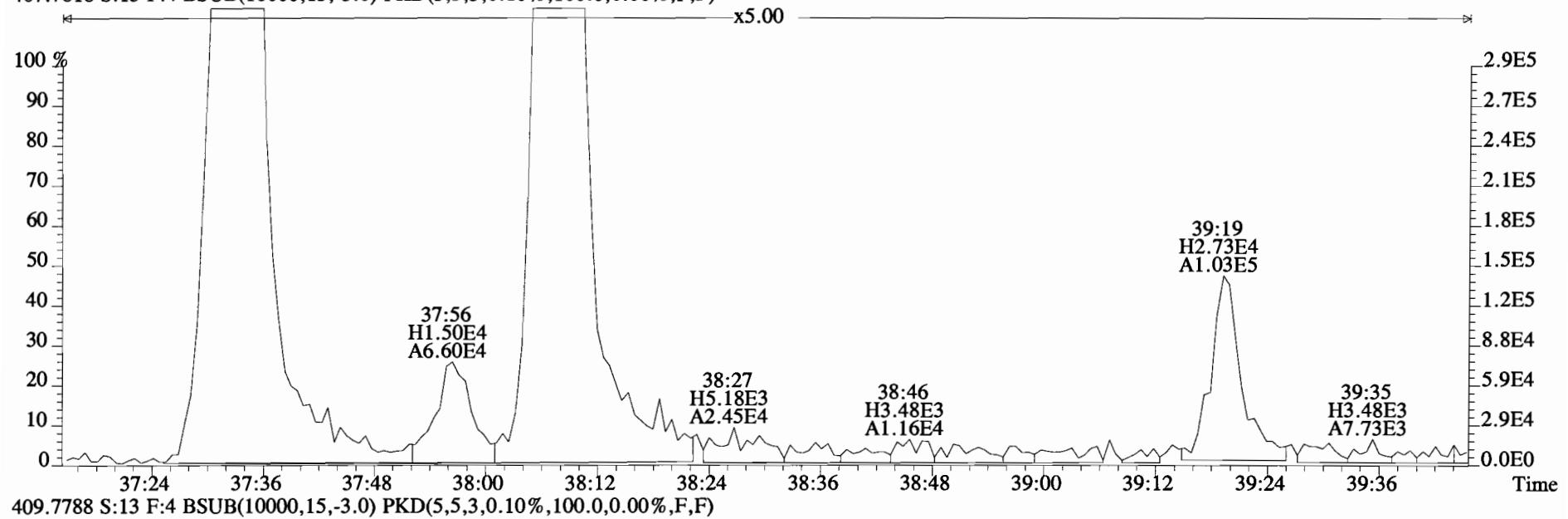
File:141027D1 #1-326 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text: Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



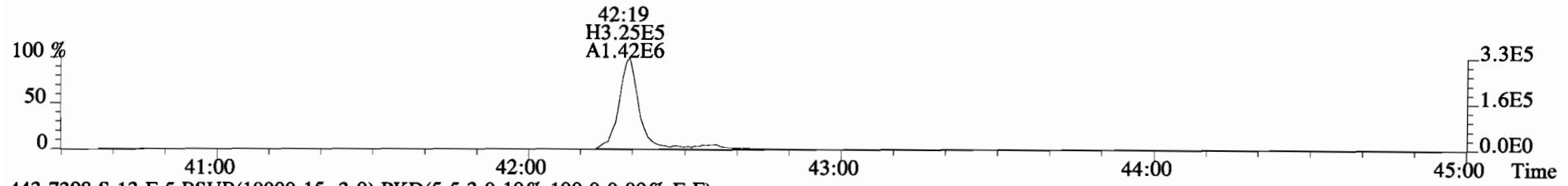
409.7788 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



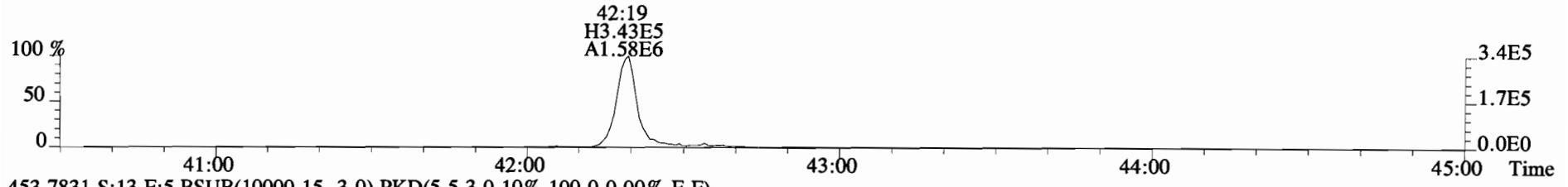
File:141027D1 #1-326 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
407.7818 S:13 F:4 BSB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



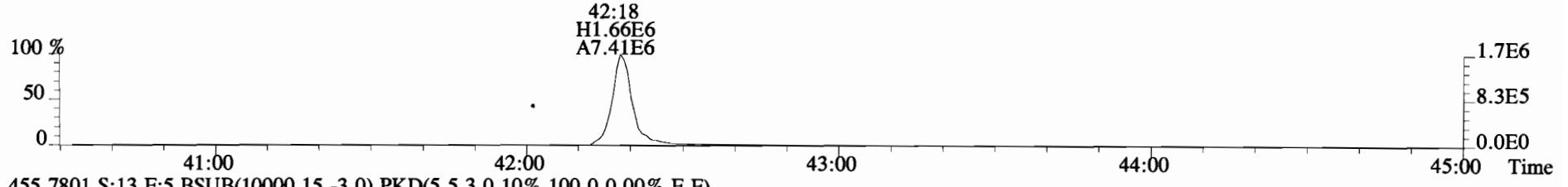
File:141027D1 #1-388 Acq:28-OCT-2014 00:13:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03 CC-A-01-20141013-S 17.04 Exp:OCDD_DB5
 441.7428 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



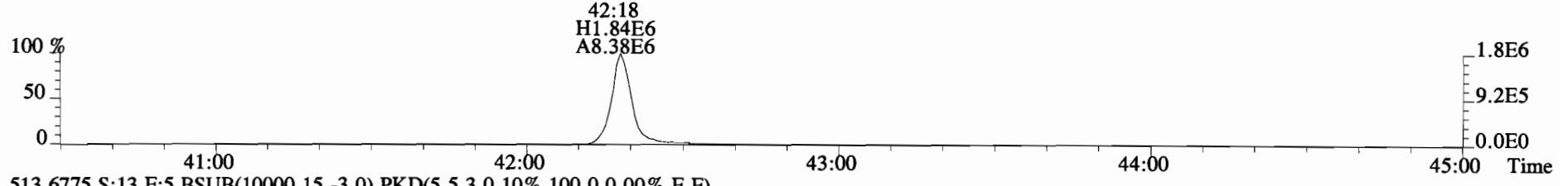
443.7398 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



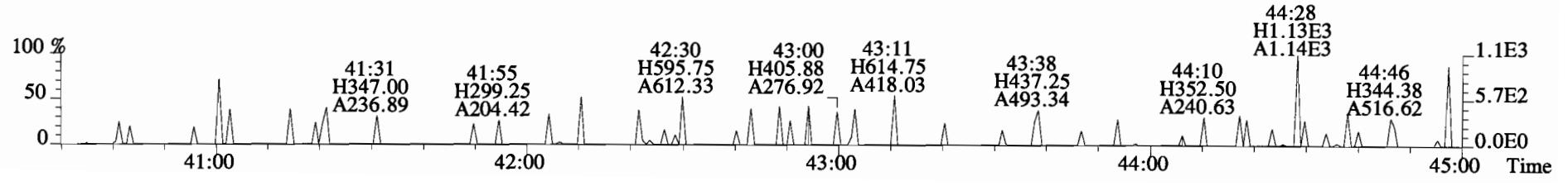
453.7831 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: CC-CB-04-20141013-S

Filename: 141027D1 S:14 Acq:28-OCT-14 01:01:43

ConCal: ST141027D1-1

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Lab ID: 1400762-04

GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14

wt/vol:10.011

EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	2.94e+04	0.51 n	1.18	27:02	1.000	0.54186	*	2.5	*		Total Tetra-Dioxins	16.8	19.2	*	*	*
	1,2,3,7,8-PeCDD	1.57e+05	0.57 y	0.92	31:33	1.000	3.2955	*	2.5	*		Total Penta-Dioxins	34.8	34.8	*	*	*
	1,2,3,4,7,8-HxCDD	1.66e+05	1.17 y	1.09	34:54	1.000	4.0932	*	2.5	*		Total Hexa-Dioxins	131	131	*	*	*
	1,2,3,6,7,8-HxCDD	4.92e+05	1.35 y	1.07	35:00	1.000	11.245	*	2.5	*		Total Hepta-Dioxins	446	446	*	*	*
	1,2,3,7,8,9-HxCDD	4.53e+05	1.17 y	0.93	35:18	1.000	10.819	*	2.5	*		Total Tetra-Furans	80.3	80.8	*	*	*
	1,2,3,4,6,7,8-HpCDD	8.28e+06	1.02 y	1.12	38:46	1.000	212.46	*	2.5	*		Total Penta-Furans	63.425	63.848	*	*	*
	OCDD	7.37e+07	0.88 y	0.95	42:06	1.000	2151.2	*	2.5	*		Total Hexa-Furans	63.5	63.5	*	*	*
												Total Hepta-Furans	78.7	78.7	*	*	*
	2,3,7,8-TCDF	5.32e+05	0.81 y	1.08	26:16	1.001	7.3450	OK	*	2.5	*						
	1,2,3,7,8-PeCDF	1.55e+05	1.50 y	1.09	30:23	1.000	2.0533	*	2.5	*							
	2,3,4,7,8-PeCDF	2.54e+05	1.70 y	1.04	31:17	1.000	3.6025	*	2.5	*							
	1,2,3,4,7,8-HxCDF	2.67e+05	1.14 y	1.39	34:00	1.000	3.7881	*	2.5	*							
	1,2,3,6,7,8-HxCDF	2.67e+05	1.31 y	1.26	34:07	1.000	3.5505	*	2.5	*							
	2,3,4,6,7,8-HxCDF	2.61e+05	1.27 y	1.30	34:44	1.000	4.0013	*	2.5	*							
	1,2,3,7,8,9-HxCDF	2.62e+04	1.30 y	1.19	35:42	1.000	0.49404	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	2.06e+06	1.10 y	1.62	37:33	1.000	36.316	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	1.29e+05	1.15 y	1.53	39:19	1.000	2.5669	*	2.5	*							
	OCDF	2.35e+06	0.87 y	1.10	42:19	1.000	57.415	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	9.15e+06	0.80 y	1.07	27:01	1.022	160.84					80.5					
IS	13C-1,2,3,7,8-PeCDD	1.03e+07	0.63 y	1.24	31:33	1.193	157.36					78.8					
IS	13C-1,2,3,4,7,8-HxCDD	7.44e+06	1.29 y	0.72	34:53	1.014	144.52					72.3					
IS	13C-1,2,3,6,7,8-HxCDD	8.19e+06	1.27 y	0.74	34:60	1.017	156.78					78.5					
IS	13C-1,2,3,7,8,9-HxCDD	8.98e+06	1.26 y	0.86	35:18	1.026	147.99					74.1					
IS	13C-1,2,3,4,6,7,8-HpCDD	6.99e+06	1.08 y	0.64	38:46	1.127	152.81					76.5					
IS	13C-OCDD	1.44e+07	0.86 y	0.78	42:05	1.223	259.01					64.8					
IS	13C-2,3,7,8-TCDF	1.34e+07	0.74 y	0.92	26:15	0.992	167.39					83.8					
IS	13C-1,2,3,7,8-PeCDF	1.39e+07	1.57 y	0.95	30:22	1.148	167.99					84.1					
IS	13C-2,3,4,7,8-PeCDF	1.35e+07	1.59 y	0.97	31:16	1.183	160.19					80.2					
IS	13C-1,2,3,4,7,8-HxCDF	1.01e+07	0.50 y	0.99	33:59	0.988	143.89					72.0					
IS	13C-1,2,3,6,7,8-HxCDF	1.19e+07	0.51 y	1.10	34:07	0.992	152.56					76.4					
IS	13C-2,3,4,6,7,8-HxCDF	1.00e+07	0.50 y	1.03	34:43	1.009	136.96					68.6					
IS	13C-1,2,3,7,8,9-HxCDF	8.88e+06	0.52 y	0.86	35:41	1.037	145.79					73.0					
IS	13C-1,2,3,4,6,7,8-HpCDF	7.02e+06	0.43 y	0.71	37:32	1.091	138.63					69.4					
IS	13C-1,2,3,4,7,8,9-HpCDF	6.56e+06	0.44 y	0.71	39:19	1.143	130.60					65.4					
IS	13C-OCDF	1.48e+07	0.88 y	0.87	42:19	1.230	239.36					59.9					
C/Up	37Cl-2,3,7,8-TCDD	4.09e+06		1.21	27:02	1.022	63.614					79.6	Integrations by				
RS/RT	13C-1,2,3,4-TCDD	1.06e+07	0.78 y	1.00	26:27	*	199.77					Analyst: <u>M</u>					
RS	13C-1,2,3,4-TCDF	1.73e+07	0.76 y	1.00	25:01	*	199.77					Analyst: <u>M</u>					
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.42e+07	0.51 y	1.00	34:24	*	199.77					Date: <u>10/28/14</u>					
												Date: <u>10/29/14</u>					

Totals class: TCDD EMPC

Entry #: 19

Run: 20 File: 141027D1 S: 14 I: 1 F: 1
 Acquired: 28-OCT-14 01:01:43 Processed: 28-OCT-14 08:33:59

Total Concentration: 19.192 Unnamed Concentration: 18.651

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
23:37	1.551e+05	1.865e+05	0.83	y	3.417e+05 6.2956
23:58	9.594e+04	1.281e+05	0.75	y	2.240e+05 4.1283
24:23	1.768e+04	2.210e+04	0.80	y	3.978e+04 0.73302
25:08	8.532e+03	1.283e+04	0.67	y	2.136e+04 0.39360
25:21	3.171e+04	3.953e+04	0.80	y	7.124e+04 1.3127
25:33	3.011e+04	3.855e+04	0.78	y	6.866e+04 1.2652
25:43	1.688e+04	2.025e+04	0.83	y	3.713e+04 0.68414
25:57	8.760e+03	8.090e+03	1.08	n	1.432e+04 0.26387
26:06	1.630e+04	2.826e+04	0.58	n	3.747e+04 0.69054
26:27	2.053e+04	2.356e+04	0.87	y	4.409e+04 0.81247
26:33	4.015e+03	5.926e+03	0.68	y	9.942e+03 0.18319
26:47	2.474e+04	2.265e+04	1.09	n	4.008e+04 0.73861
26:55	4.919e+03	5.729e+03	0.86	y	1.065e+04 0.19620
27:02	1.279e+04	2.523e+04	0.51	n	2.941e+04 0.54186 2,3,7,8-TCDD
27:19	1.426e+04	1.903e+04	0.75	y	3.329e+04 0.61346
27:26	4.839e+03	6.625e+03	0.73	y	1.146e+04 0.21123
27:54	4.908e+03	3.937e+03	1.25	n	6.969e+03 0.12841

Totals class: PeCDD EMPC

Entry #: 21

Run: 20 File: 141027D1 S: 14 I: 1 F: 2
 Acquired: 28-OCT-14 01:01:43 Processed: 28-OCT-14 08:33:59

Total Concentration: 34.830 Unnamed Concentration: 31.535

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
29:30	1.748e+05	2.939e+05	0.59	y	4.687e+05		9.8577	
29:57	4.581e+04	7.450e+04	0.61	y	1.203e+05		2.5305	
30:24	7.439e+04	1.110e+05	0.67	y	1.854e+05		3.8994	
30:33	5.470e+04	9.996e+04	0.55	y	1.547e+05		3.2529	
30:39	6.264e+04	9.902e+04	0.63	y	1.617e+05		3.4001	
30:51	8.683e+04	1.347e+05	0.64	y	2.215e+05		4.6584	
31:09	1.957e+04	3.617e+04	0.54	y	5.574e+04		1.1723	
31:33	5.685e+04	9.984e+04	0.57	y	1.567e+05		3.2955	1,2,3,7,8-PeCDD
31:38	1.994e+04	3.195e+04	0.62	y	5.189e+04		1.0913	
31:55	3.173e+04	4.777e+04	0.66	y	7.950e+04		1.6720	

Totals class: HxCDD EMPC

Entry #: 23

Run: 20 File: 141027D1 S: 14 I: 1 F: 3
Acquired: 28-OCT-14 01:01:43 Processed: 28-OCT-14 08:33:59

Total Concentration: 131.03 Unnamed Concentration: 104.871

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
33:20	8.815e+05	6.923e+05	1.27 y	1.574e+06	37.472
33:55	2.300e+05	1.924e+05	1.20 y	4.224e+05	10.056
34:11	1.190e+06	9.602e+05	1.24 y	2.150e+06	51.193
34:19	8.146e+04	6.509e+04	1.25 y	1.466e+05	3.4893
34:54	8.922e+04	7.639e+04	1.17 y	1.656e+05	4.0932 1,2,3,4,7,8-HxCDD
35:00	2.827e+05	2.090e+05	1.35 y	4.917e+05	11.245 1,2,3,6,7,8-HxCDD
35:12	6.180e+04	4.994e+04	1.24 y	1.117e+05	2.6606
35:18	2.446e+05	2.083e+05	1.17 y	4.529e+05	10.819 1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 20 File: 141027D1 S: 14 I: 1 F: 4
Acquired: 28-OCT-14 01:01:43 Processed: 28-OCT-14 08:33:59

Total Concentration: 445.85 Unnamed Concentration: 233.392

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
37:56	4.662e+06	4.439e+06	1.05	y	9.101e+06		233.39	
38:46	4.189e+06	4.095e+06	1.02	y	8.284e+06		212.46	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 20 File: 141027D1 S: 14 I: 1 F: 1
 Acquired: 28-OCT-14 01:01:43 Processed: 28-OCT-14 08:33:59

Total Concentration: 80.843 Unnamed Concentration: 73.498

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
21:27	1.300e+04	1.879e+04	0.69	y	3.179e+04		0.43932	
22:01	7.196e+04	8.850e+04	0.81	y	1.605e+05		2.2174	
22:41	2.143e+05	3.053e+05	0.70	y	5.195e+05		7.1795	
23:12	1.887e+05	2.526e+05	0.75	y	4.413e+05		6.0989	
23:35	2.255e+05	2.868e+05	0.79	y	5.123e+05		7.0791	
24:00	1.172e+05	1.497e+05	0.78	y	2.669e+05		3.6888	
24:09	1.726e+05	2.117e+05	0.82	y	3.843e+05		5.3100	
24:18	1.741e+05	2.172e+05	0.80	y	3.913e+05		5.4077	
24:39	3.036e+04	3.679e+04	0.83	y	6.715e+04		0.92799	
24:47	6.574e+04	9.371e+04	0.70	y	1.595e+05		2.2035	
24:55	1.349e+05	1.871e+05	0.72	y	3.220e+05		4.4496	
25:02	1.832e+05	2.412e+05	0.76	y	4.244e+05		5.8647	
25:27	1.301e+05	1.693e+05	0.77	y	2.994e+05		4.1370	
25:42	1.011e+05	1.175e+05	0.86	y	2.186e+05		3.0211	
25:52	3.811e+04	4.649e+04	0.82	y	8.460e+04		1.1690	
26:03	3.935e+04	4.921e+04	0.80	y	8.856e+04		1.2238	
26:09	4.479e+04	5.678e+04	0.79	y	1.016e+05		1.4036	
26:16	2.377e+05	2.939e+05	0.81	y	5.315e+05		7.3450	2,3,7,8-TCDF
26:35	3.309e+05	4.271e+05	0.77	y	7.580e+05		10.475	
26:49	1.847e+04	2.780e+04	0.66	y	4.627e+04		0.63945	
28:01	2.216e+04	2.298e+04	0.96	n	4.068e+04		0.56213	

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 20 File: 141027D1 S: 14 I: 1 F: 1
Acquired: 28-OCT-14 01:01:43 Processed: 28-OCT-14 08:33:59

Total Concentration: 18.182 Unnamed Concentration: 18.182

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
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28:01	8.077e+05	5.183e+05	1.56	y	1.326e+06
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18.182

Totals class: PeCDF EMPC

Entry #: 31

Run: 20 File: 141027D1 S: 14 I: 1 F: 2
 Acquired: 28-OCT-14 01:01:43 Processed: 28-OCT-14 08:33:59

Total Concentration: 45.666 Unnamed Concentration: 40.010

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
29:20	2.598e+05	1.613e+05	1.61	y	4.210e+05	5.7733
29:28	8.479e+05	5.278e+05	1.61	y	1.376e+06	18.863
29:49	5.343e+04	3.296e+04	1.62	y	8.638e+04	1.1845
30:00	2.763e+05	1.744e+05	1.58	y	4.507e+05	6.1800
30:13	5.563e+04	3.654e+04	1.52	y	9.217e+04	1.2638
30:23	9.318e+04	6.194e+04	1.50	y	1.551e+05	2.0533
30:37	1.478e+05	8.685e+04	1.70	y	2.347e+05	3.2178
31:05	9.313e+03	7.838e+03	1.19	n	1.532e+04	0.21010
31:11	1.039e+05	6.426e+04	1.62	y	1.682e+05	2.3064
31:17	1.597e+05	9.390e+04	1.70	y	2.536e+05	3.6025
31:20	3.395e+04	2.424e+04	1.40	y	5.819e+04	0.79789
32:10	9.454e+03	7.877e+03	1.20	n	1.555e+04	0.21328

Totals class: HxCDF EMPC

Entry #: 33

Run: 20 File: 141027D1 S: 14 I: 1 F: 3
 Acquired: 28-OCT-14 01:01:43 Processed: 28-OCT-14 08:33:59

Total Concentration: 63.456 Unnamed Concentration: 51.622

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
32:48	2.730e+05	2.266e+05	1.20	y	4.996e+05		7.5745	
32:57	1.105e+06	8.676e+05	1.27	y	1.972e+06		29.904	
33:20	3.466e+04	3.133e+04	1.11	y	6.599e+04		1.0005	
33:31	3.888e+05	3.183e+05	1.22	y	7.071e+05		10.721	
33:53	8.065e+04	5.721e+04	1.41	y	1.379e+05		2.0902	
34:00	1.422e+05	1.244e+05	1.14	y	2.666e+05		3.7881	1,2,3,4,7,8-HxCDF
34:07	1.511e+05	1.156e+05	1.31	y	2.667e+05		3.5505	1,2,3,6,7,8-HxCDF
34:44	1.458e+05	1.150e+05	1.27	y	2.609e+05		4.0013	2,3,4,6,7,8-HxCDF
35:42	1.480e+04	1.137e+04	1.30	y	2.616e+04		0.49404	1,2,3,7,8,9-HxCDF
35:46	1.215e+04	9.754e+03	1.25	y	2.190e+04		0.33213	

Totals class: HpCDF EMPC

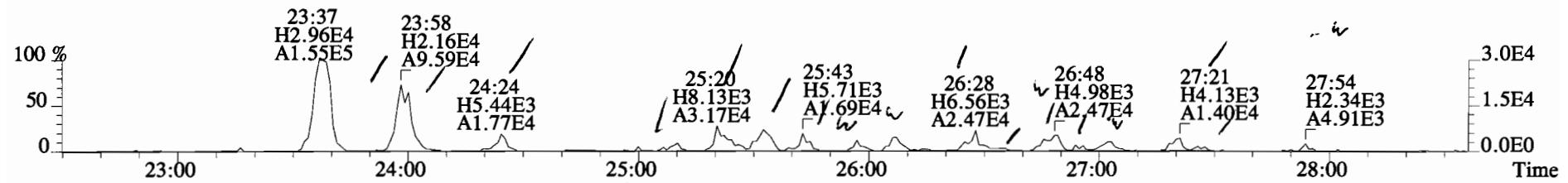
Entry #: 35

Run: 20 File: 141027D1 S: 14 I: 1 F: 4
Acquired: 28-OCT-14 01:01:43 Processed: 28-OCT-14 08:33:59

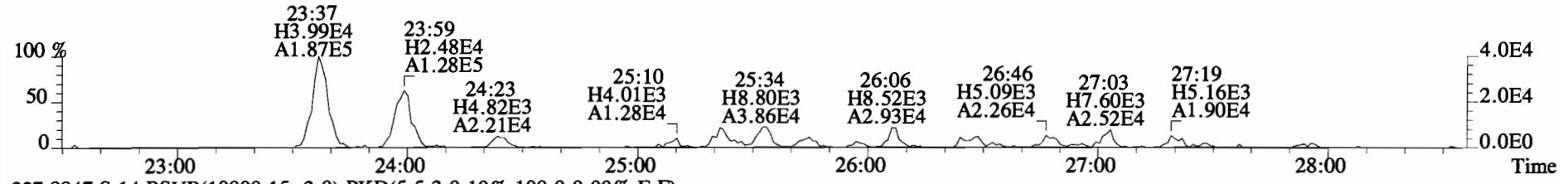
Total Concentration: 78.733 Unnamed Concentration: 39.851

RT	m1	Resp	m2	Resp	RA	Resp Concentration	Name
37:33	1.081e+06	9.813e+05	1.10	y	2.063e+06	36.316	1,2,3,4,6,7,8-HpCDF
38:08	1.096e+06	1.033e+06	1.06	y	2.129e+06	39.851	
39:19	6.874e+04	5.998e+04	1.15	y	1.287e+05	2.5669	1,2,3,4,7,8,9-HpCDF

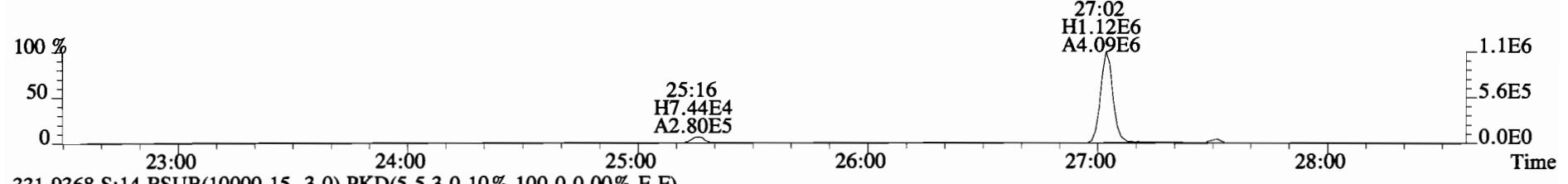
File:141027D1 #1-551 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



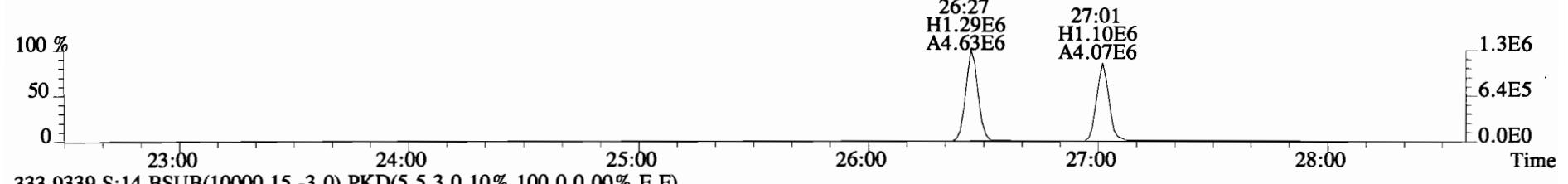
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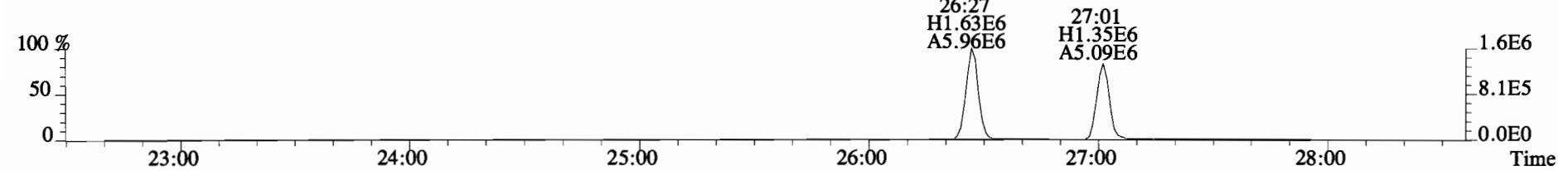
327.8847 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



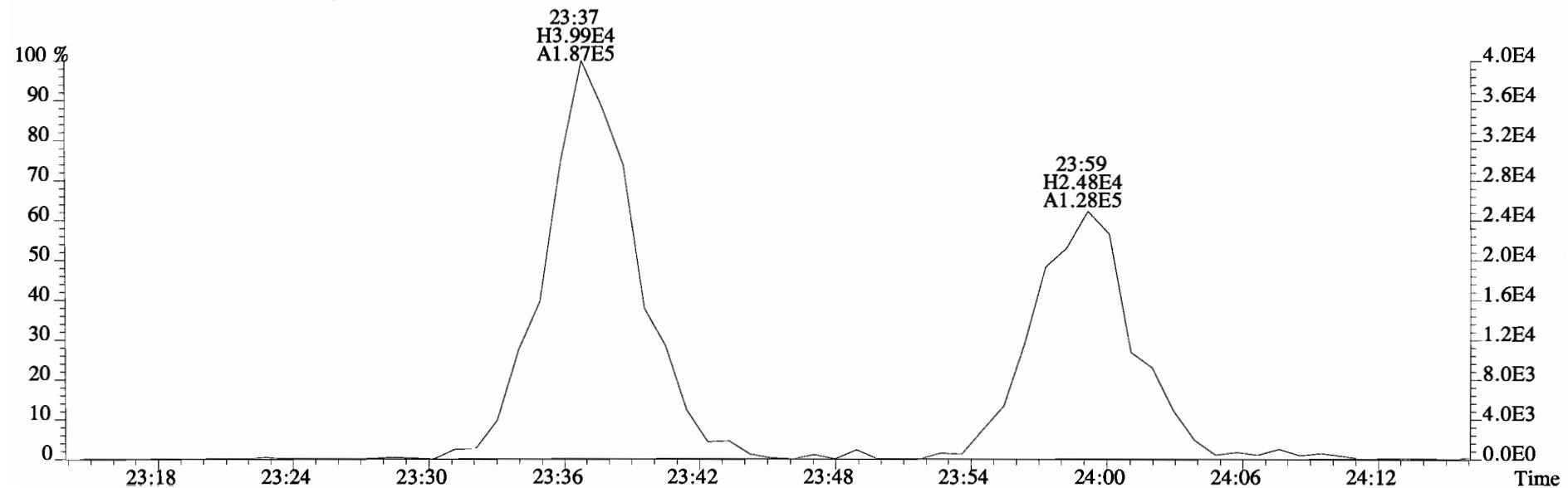
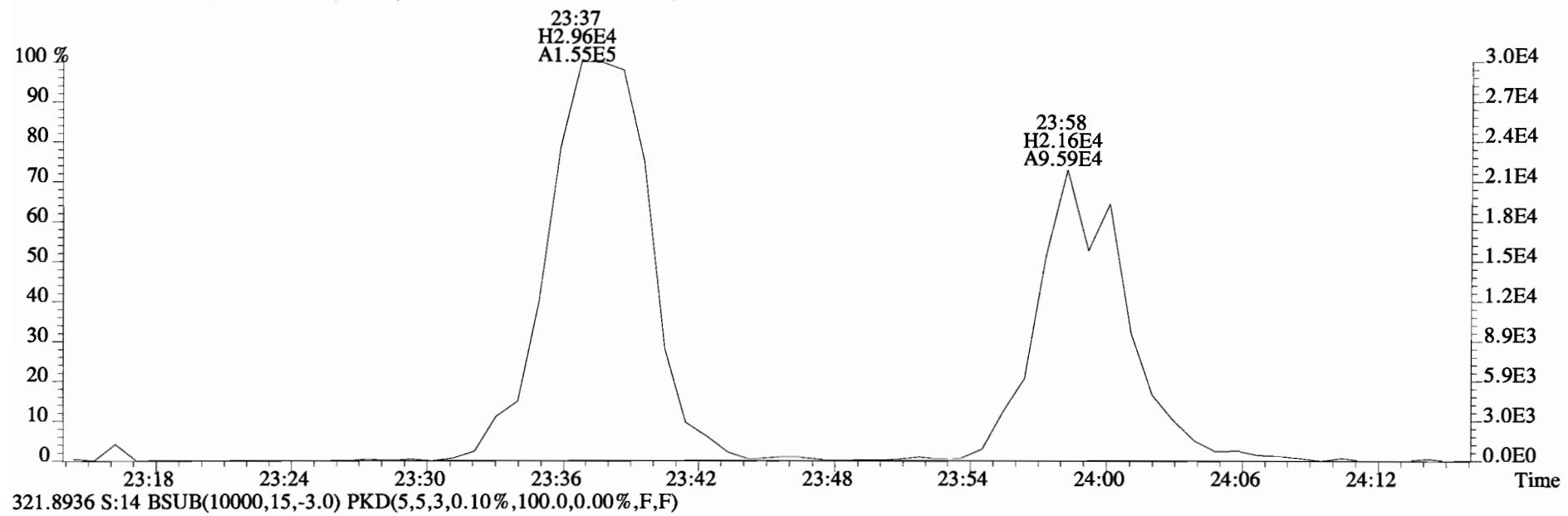
331.9368 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



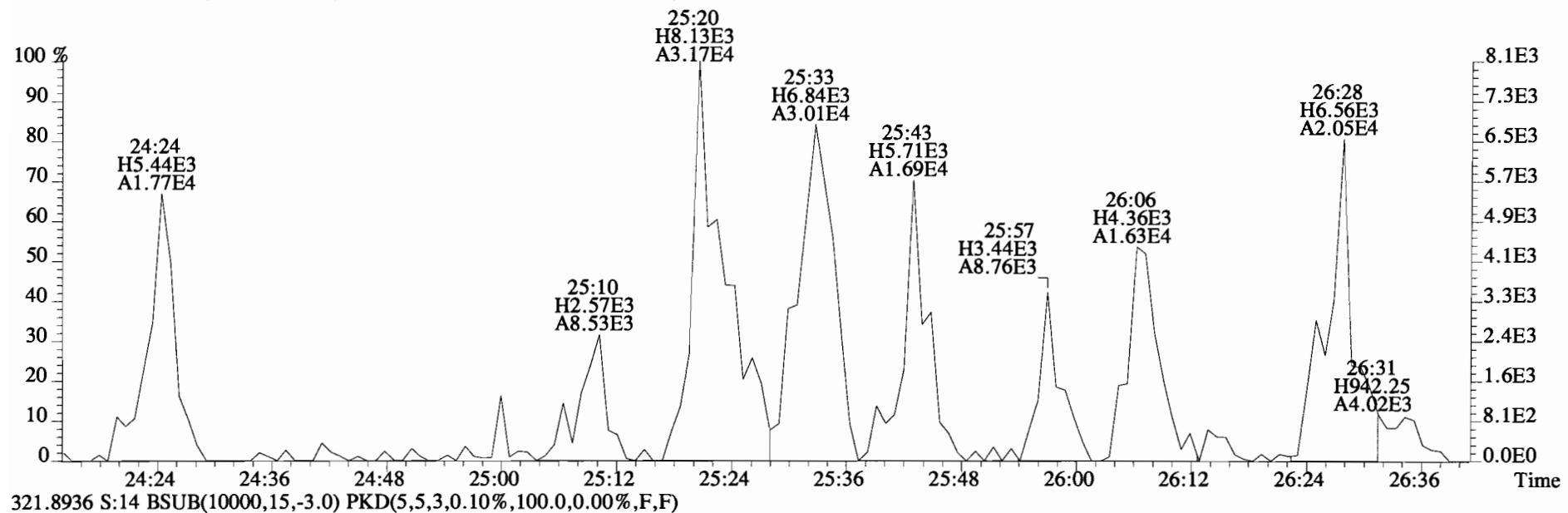
333.9339 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



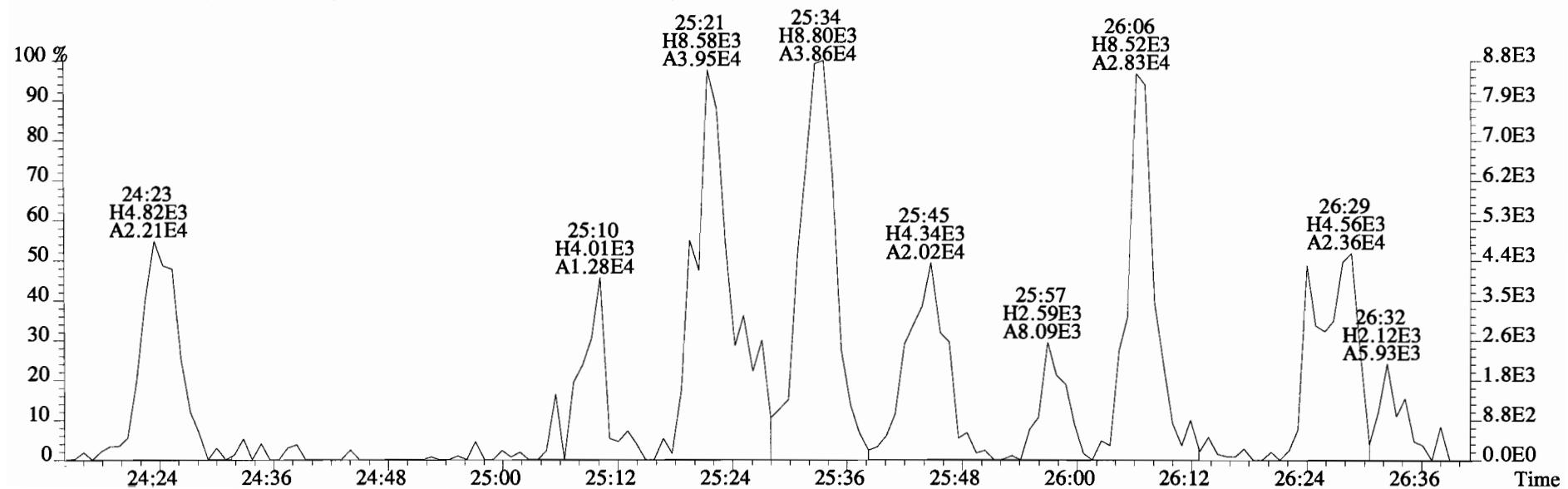
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Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



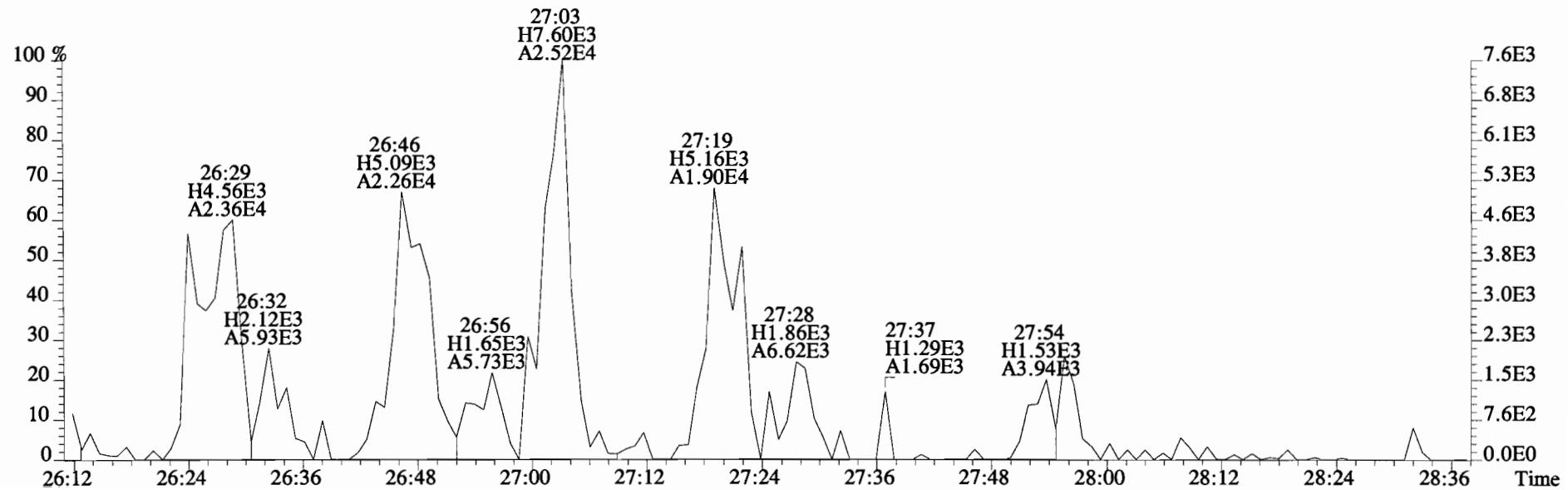
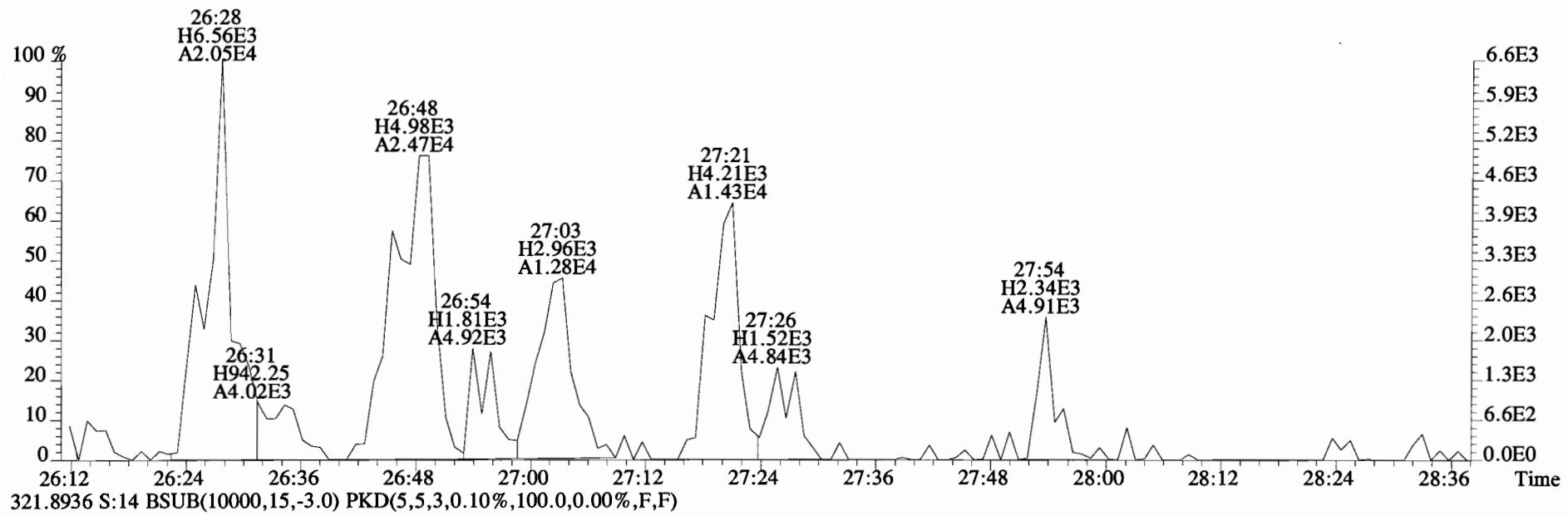
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 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



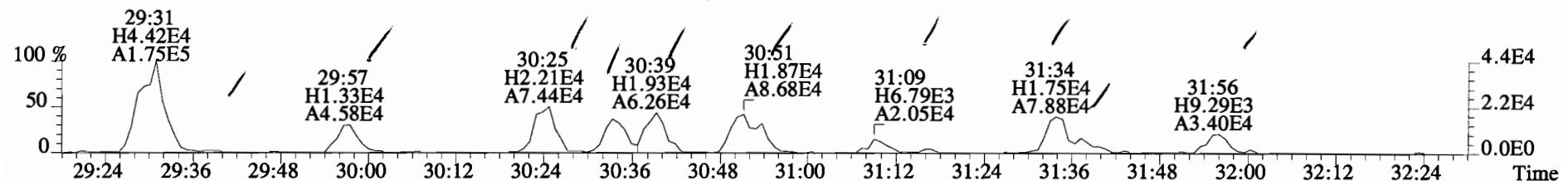
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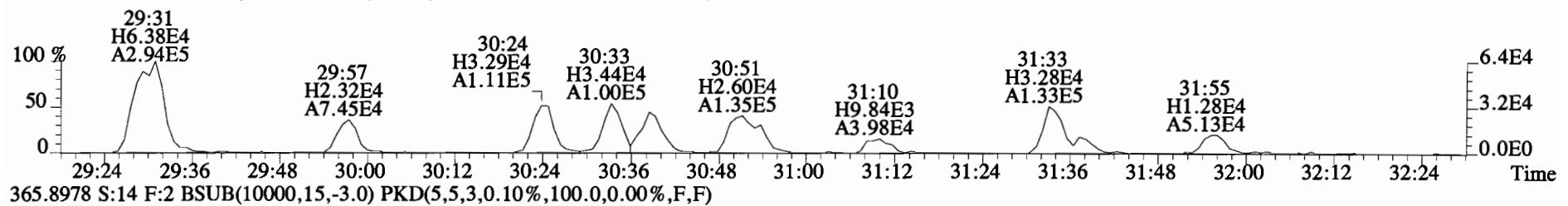
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 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



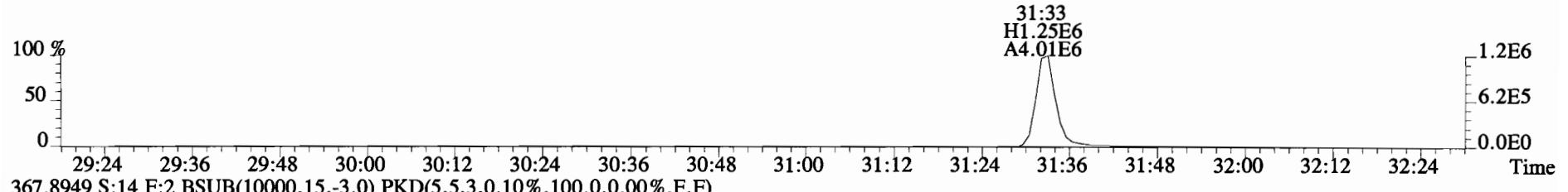
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 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 353.8576 S:14 F:2 BSBUS(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



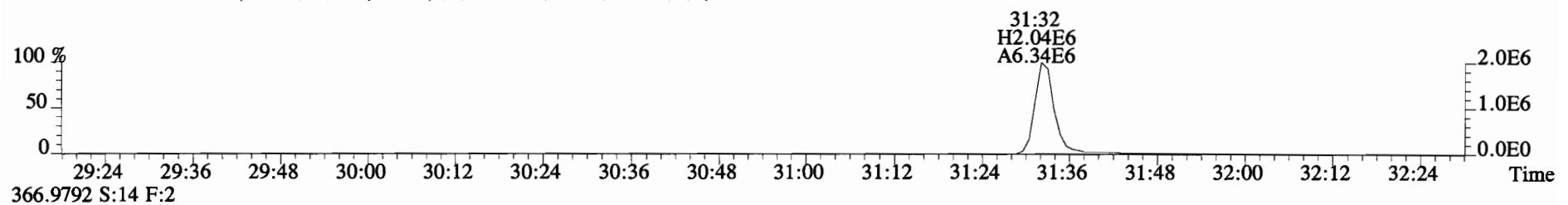
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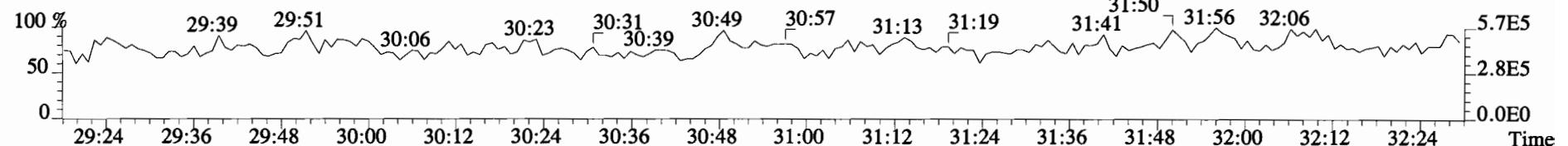
365.8978 S:14 F:2 BSBUS(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



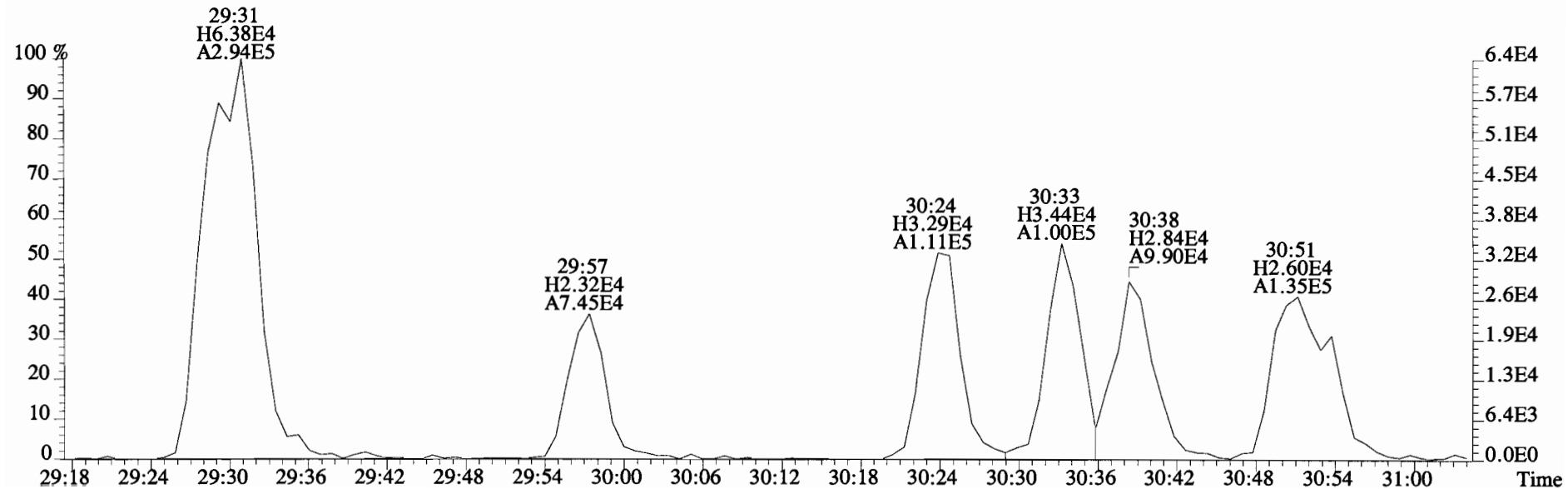
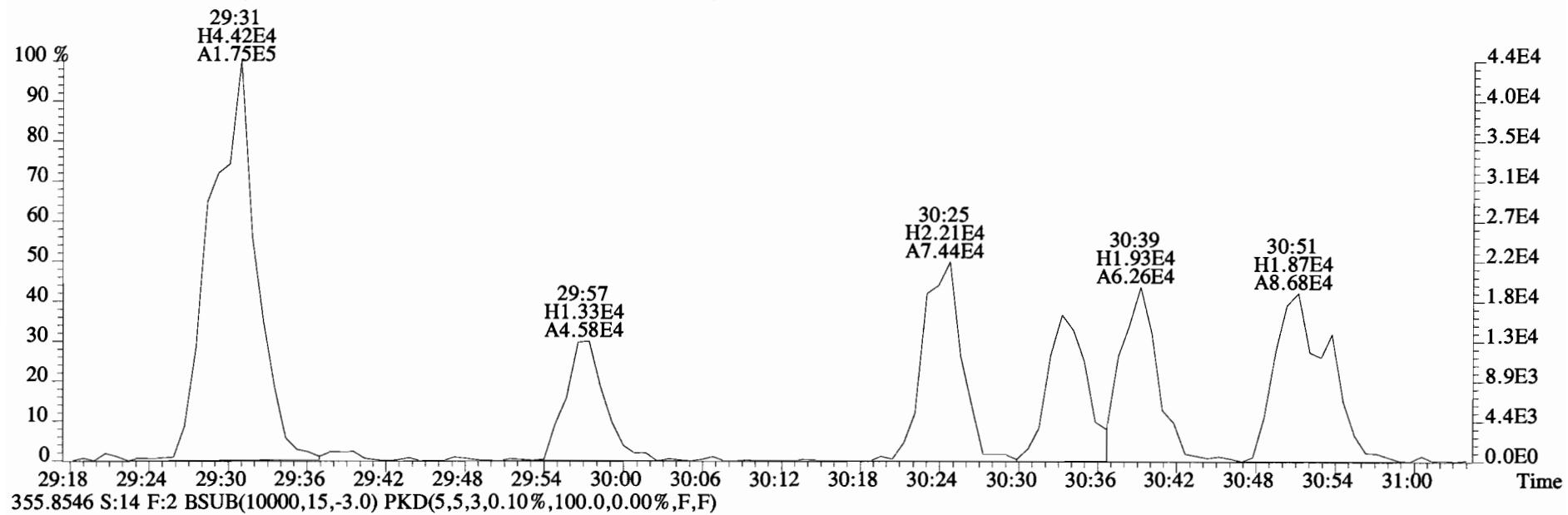
367.8949 S:14 F:2 BSBUS(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



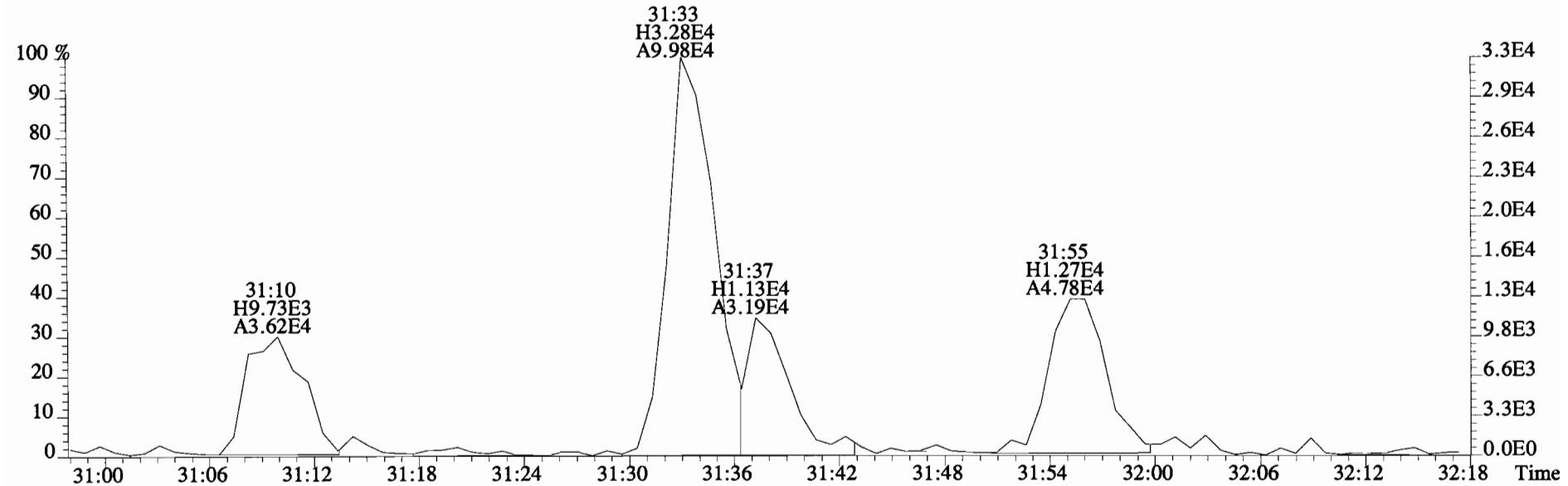
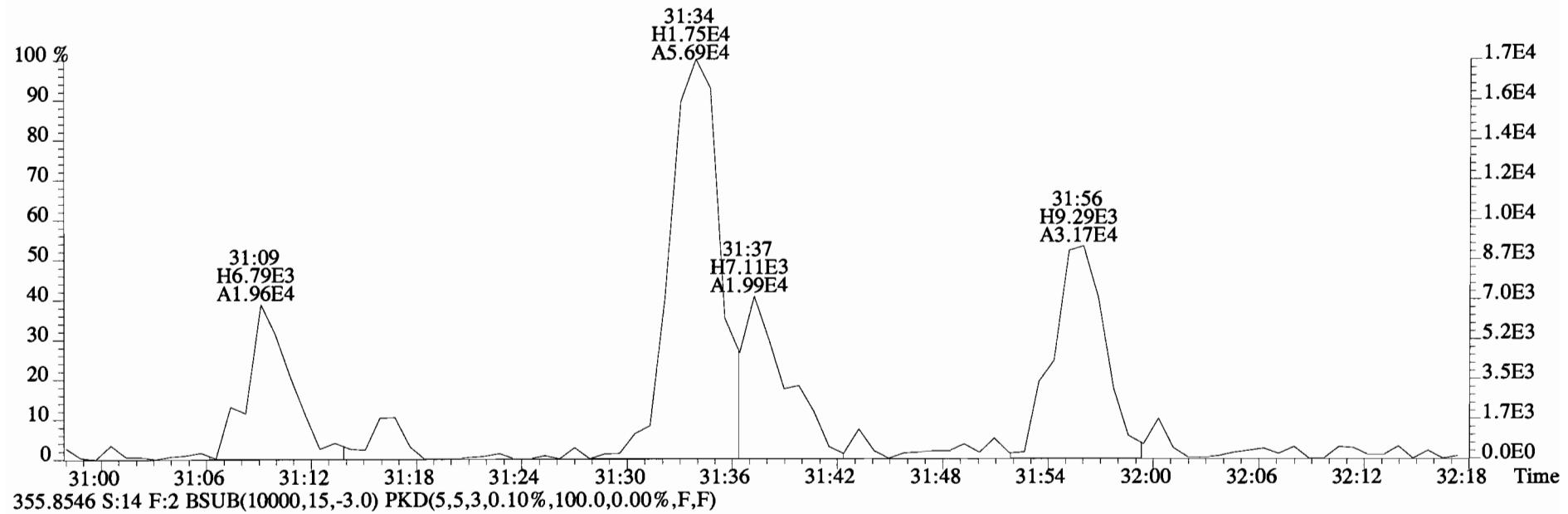
366.9792 S:14 F:2



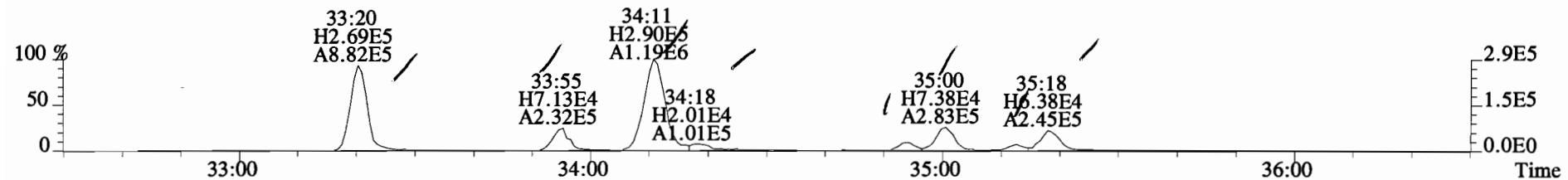
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Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
353.8576 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



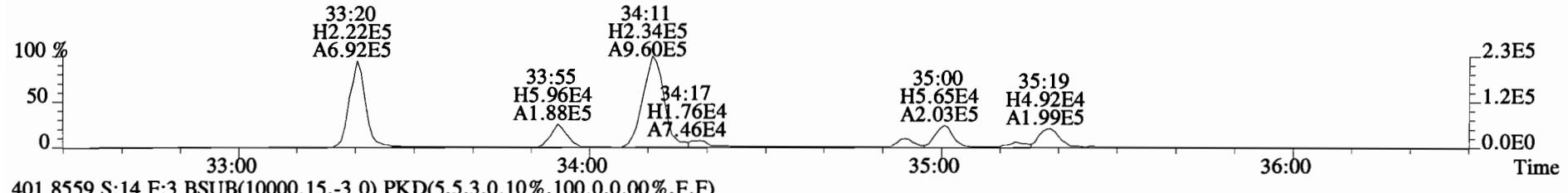
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Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
353.8576 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



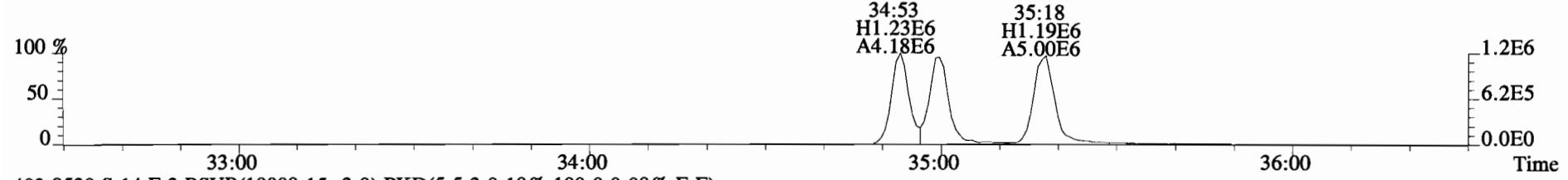
File:141027D1 #1-385 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



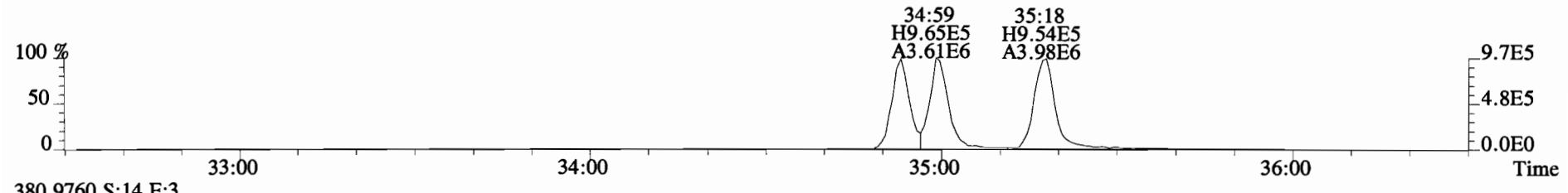
391.8127 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



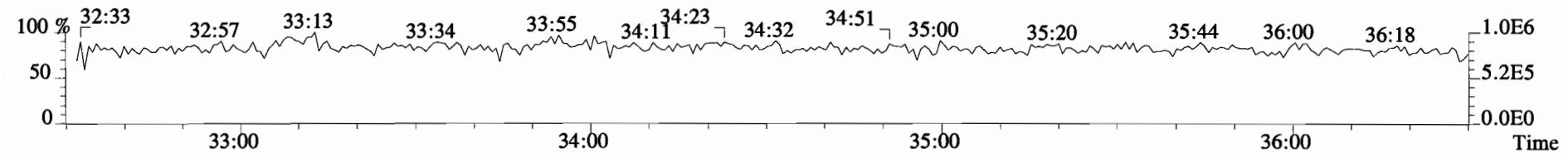
401.8559 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



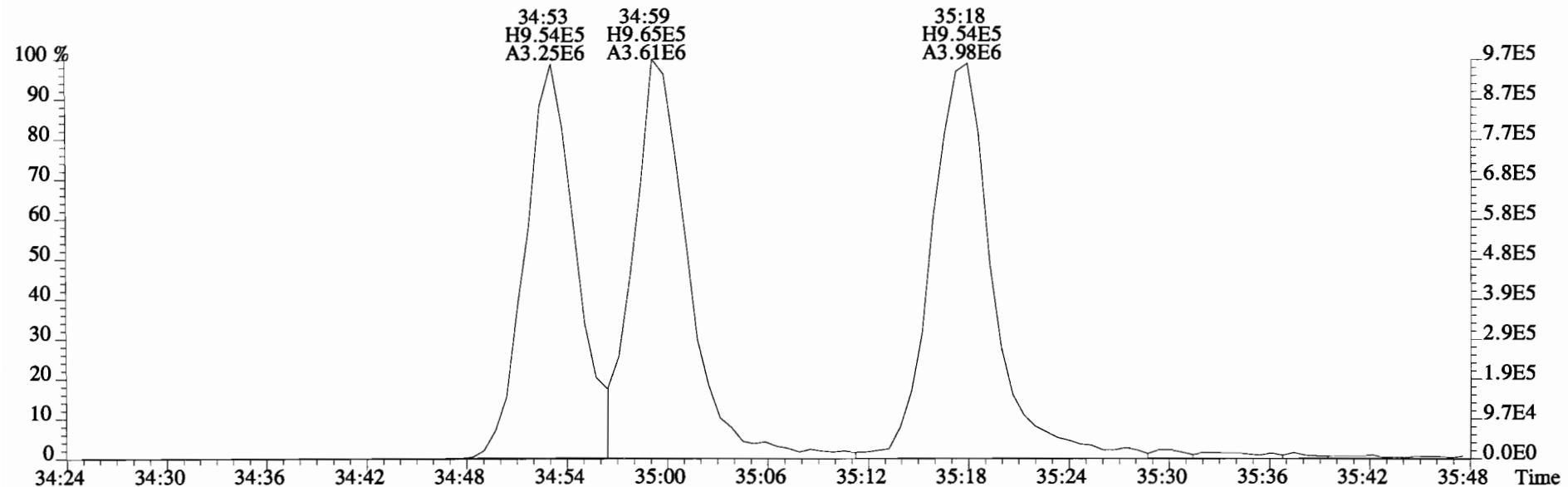
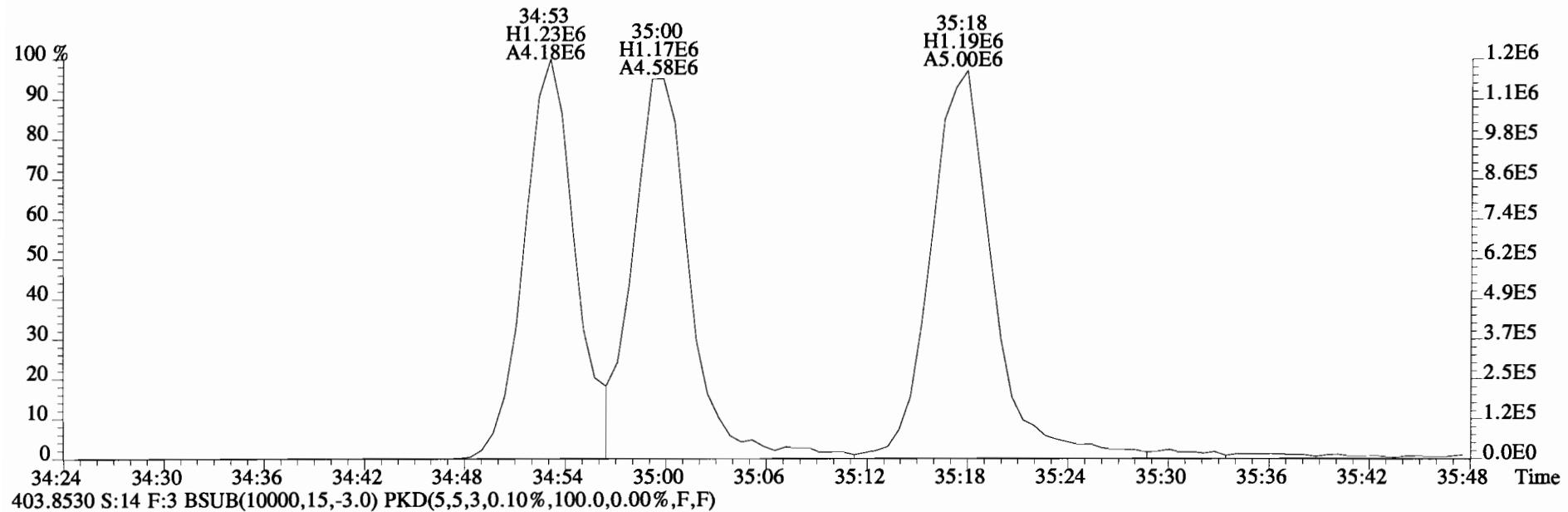
403.8530 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



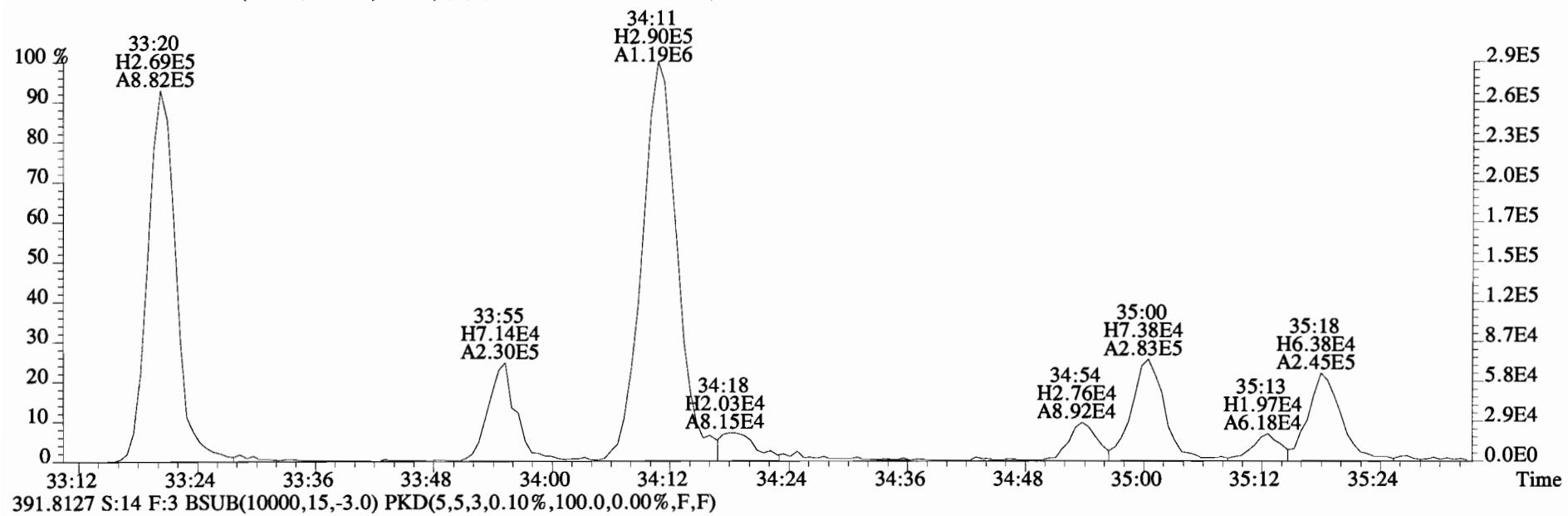
380.9760 S:14 F:3



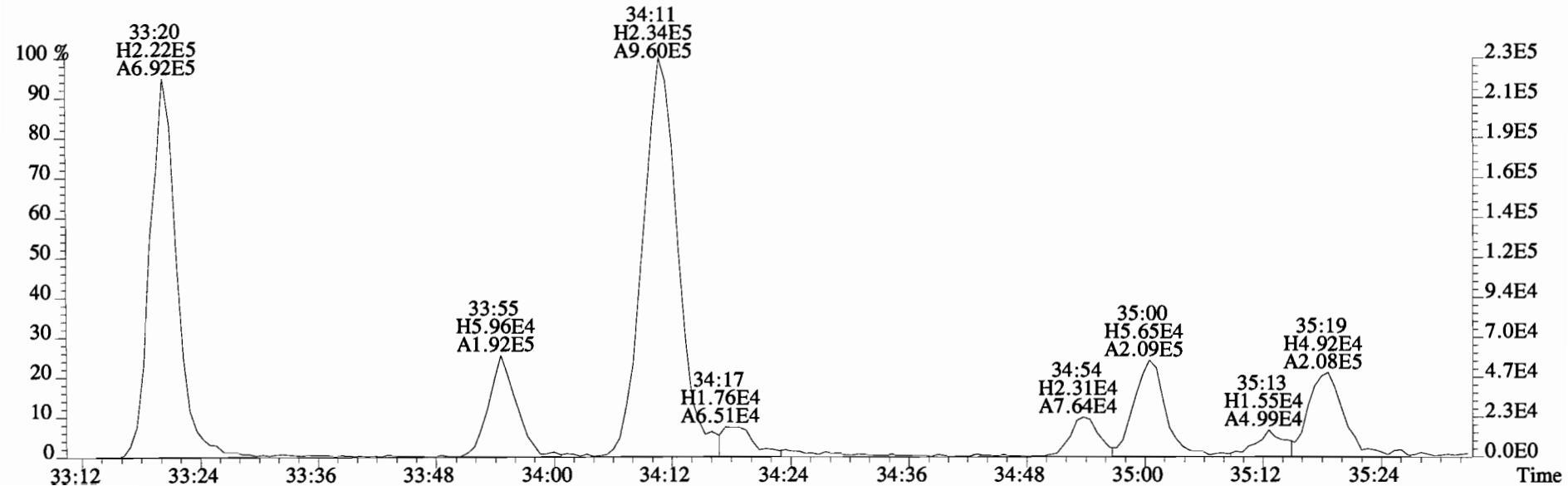
File:141027D1 #1-385 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
401.8559 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



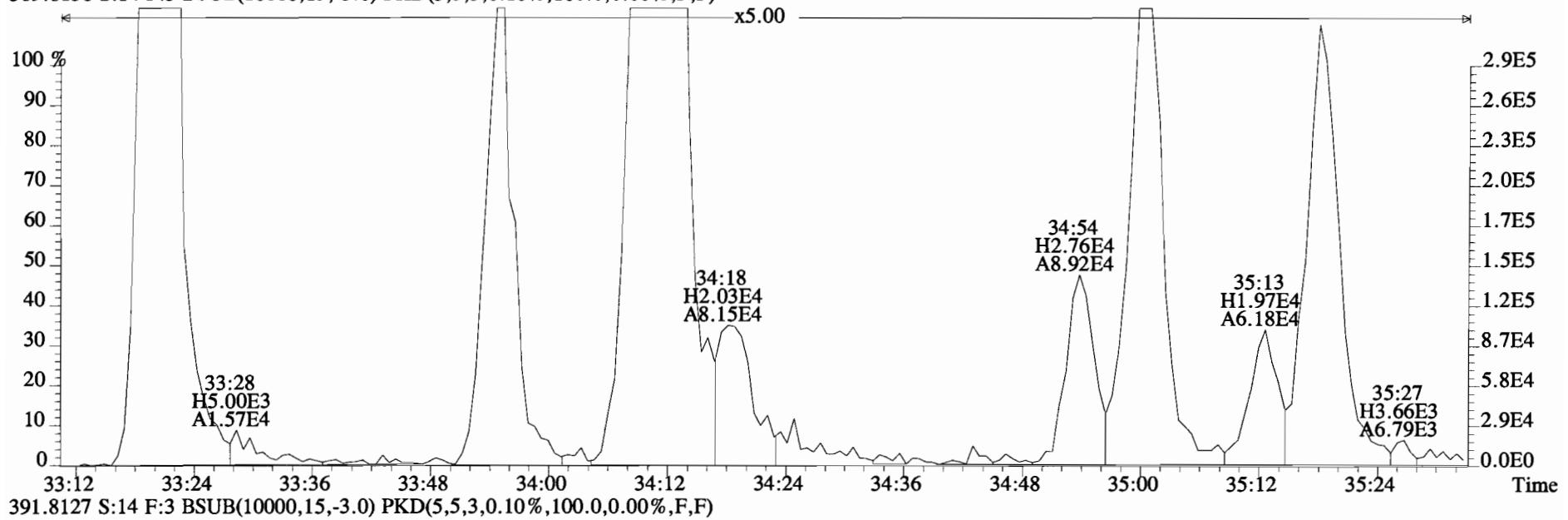
File:141027D1 #1-385 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



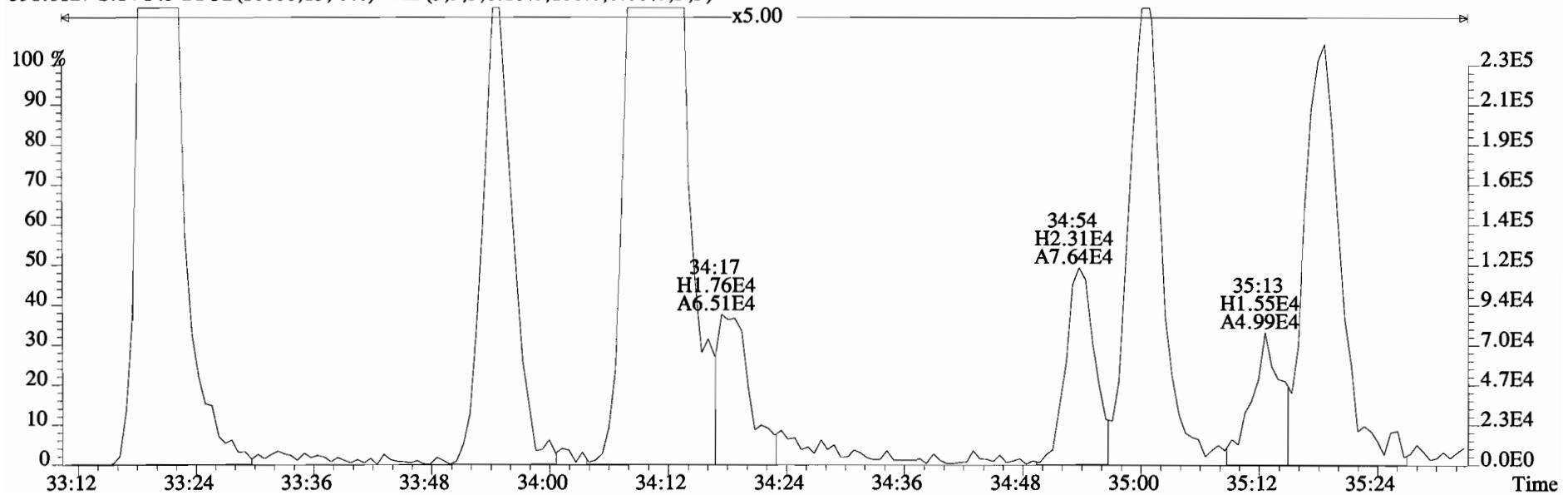
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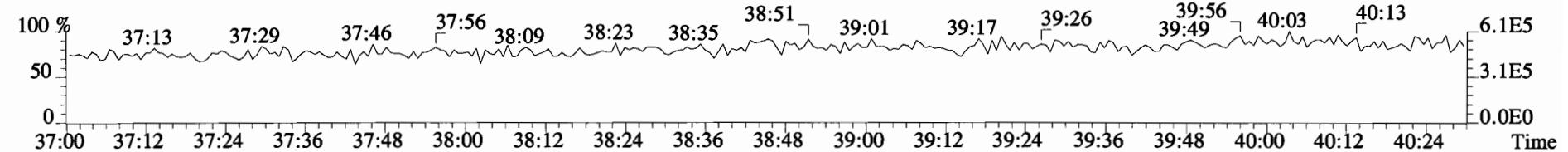
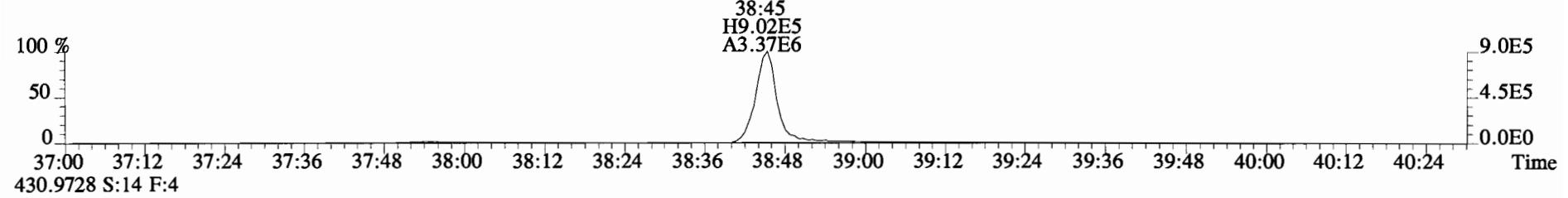
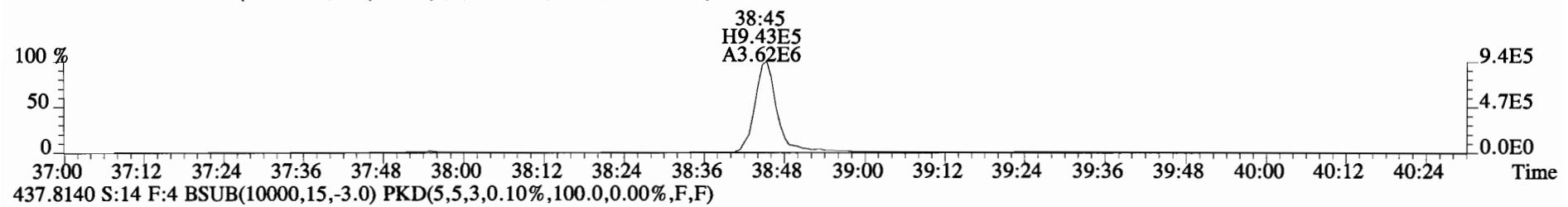
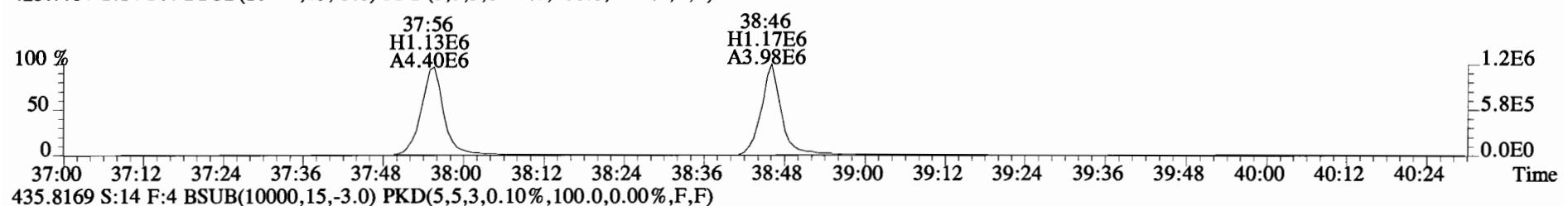
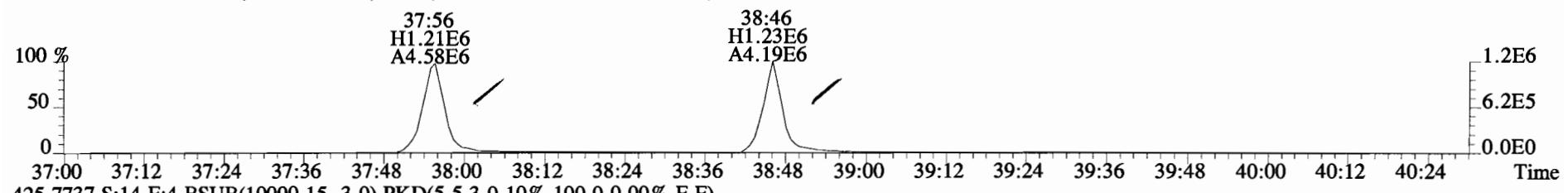
File:141027D1 #1-385 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



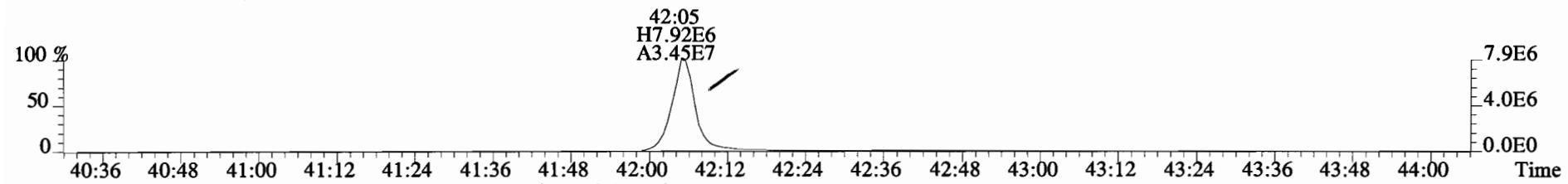
391.8127 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



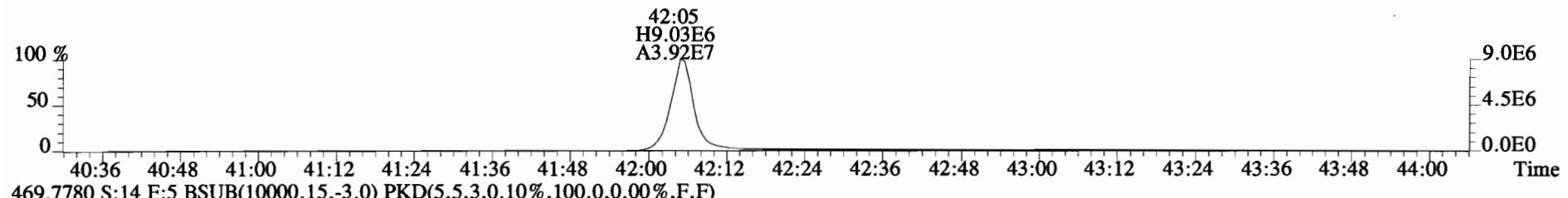
File:141027D1 #1-326 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 423.7767 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



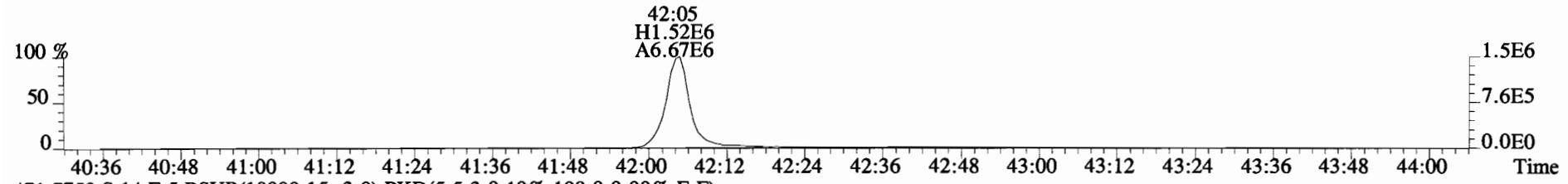
File:141027D1 #1-389 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 457.7377 S:14 F:5 BSBUS(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



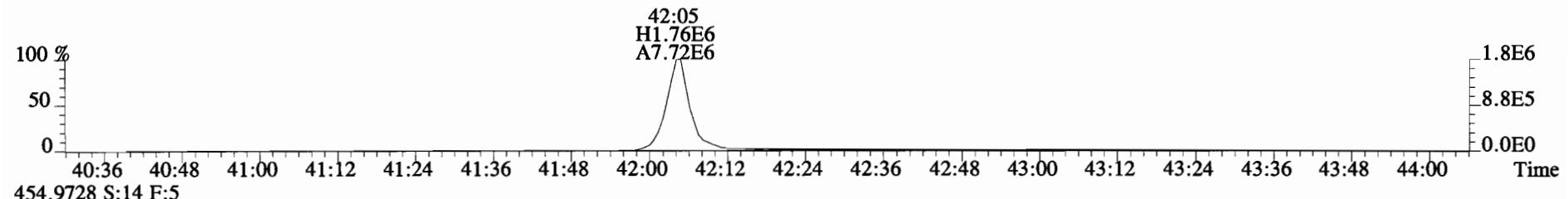
459.7348 S:14 F:5 BSBUS(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



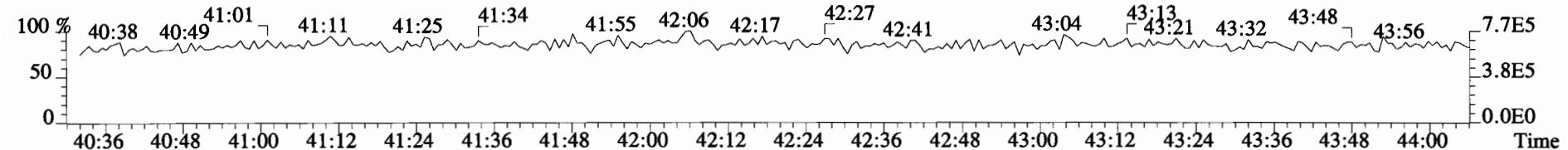
469.7780 S:14 F:5 BSBUS(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



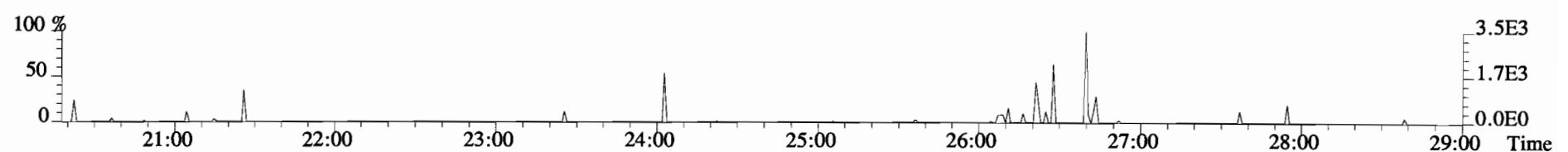
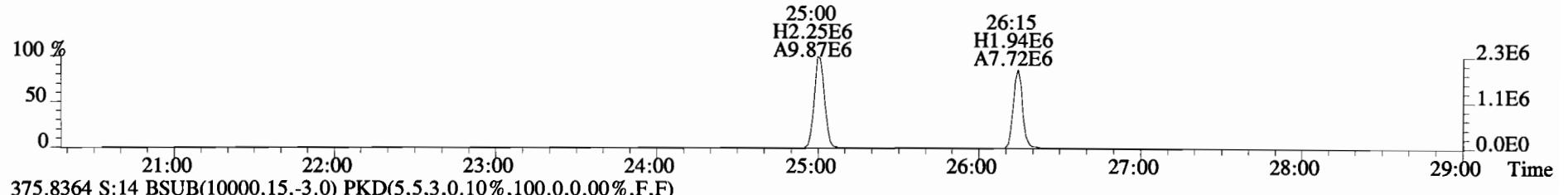
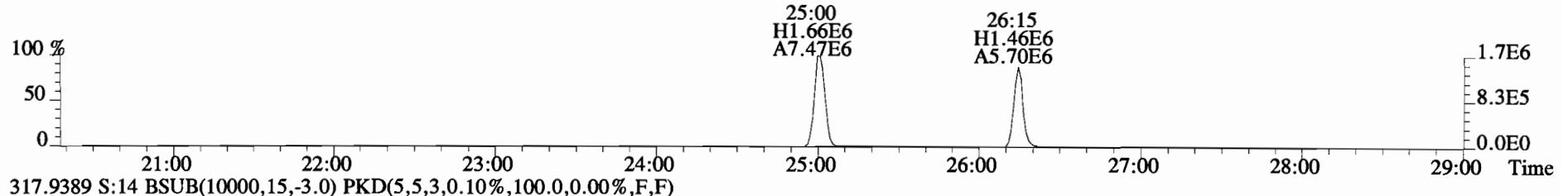
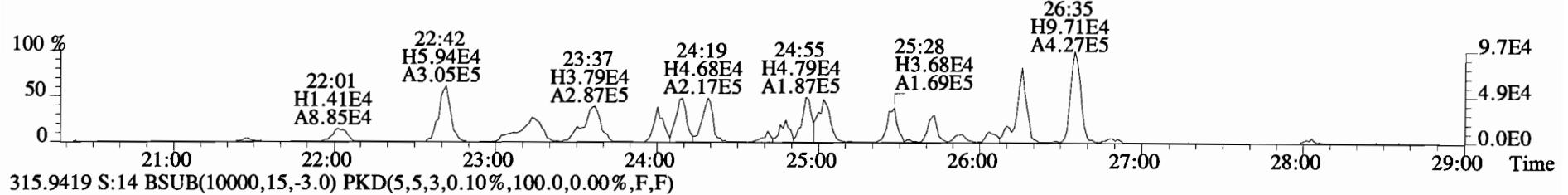
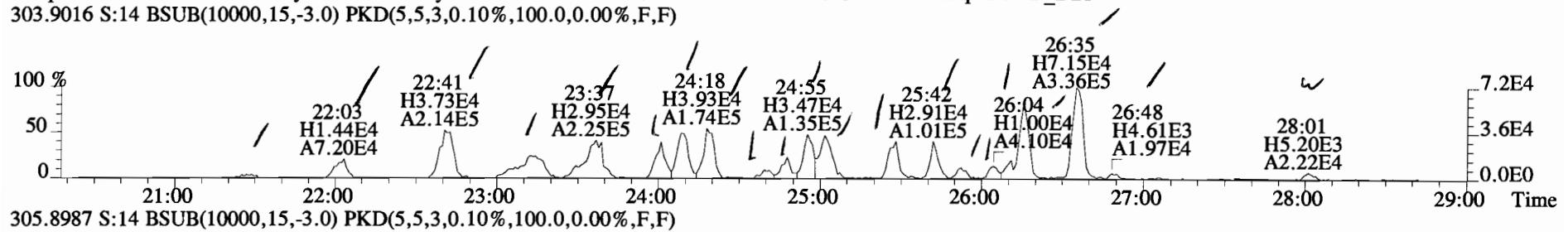
471.7750 S:14 F:5 BSBUS(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



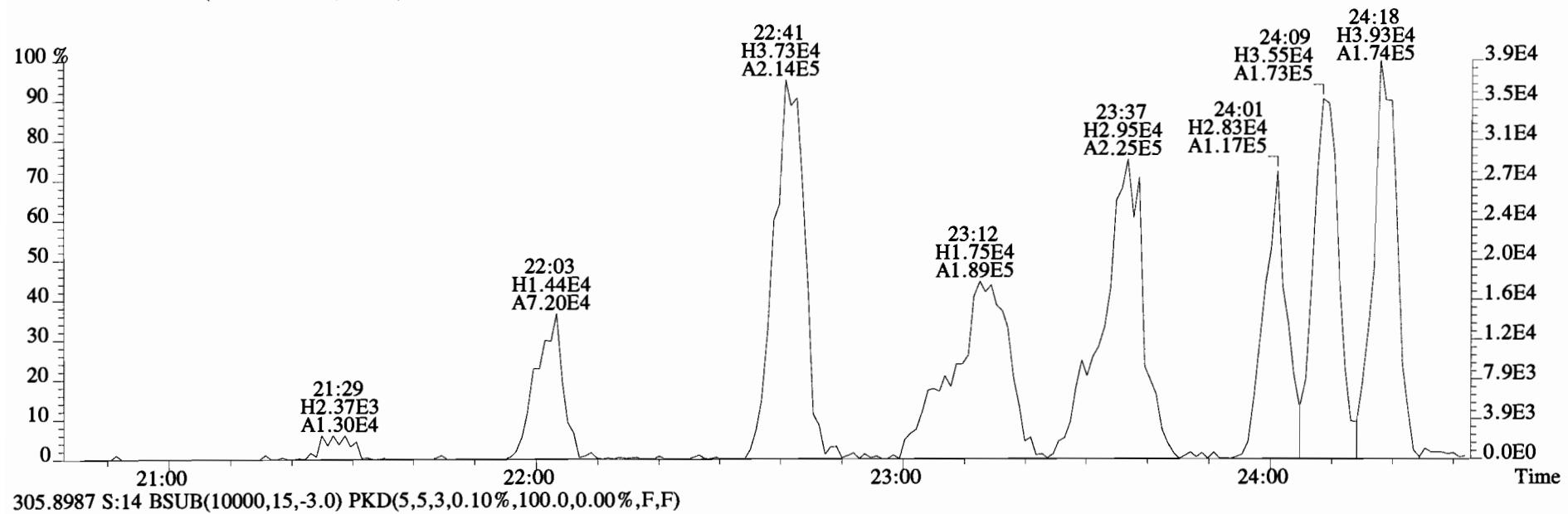
454.9728 S:14 F:5



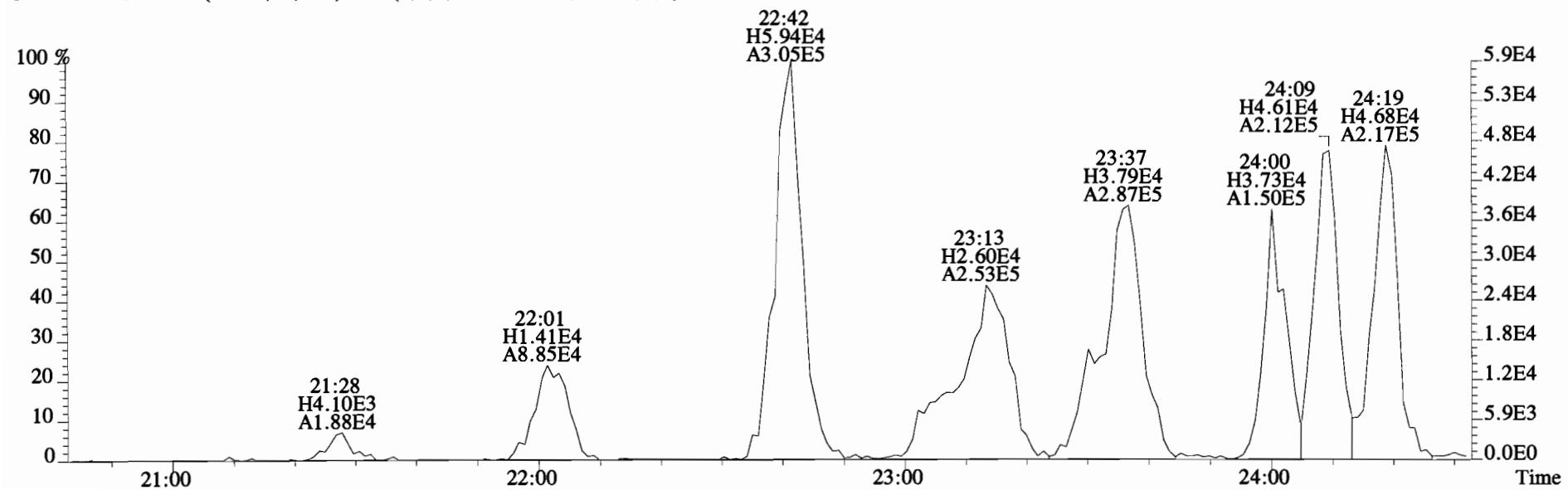
File:141027D1 #1-551 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



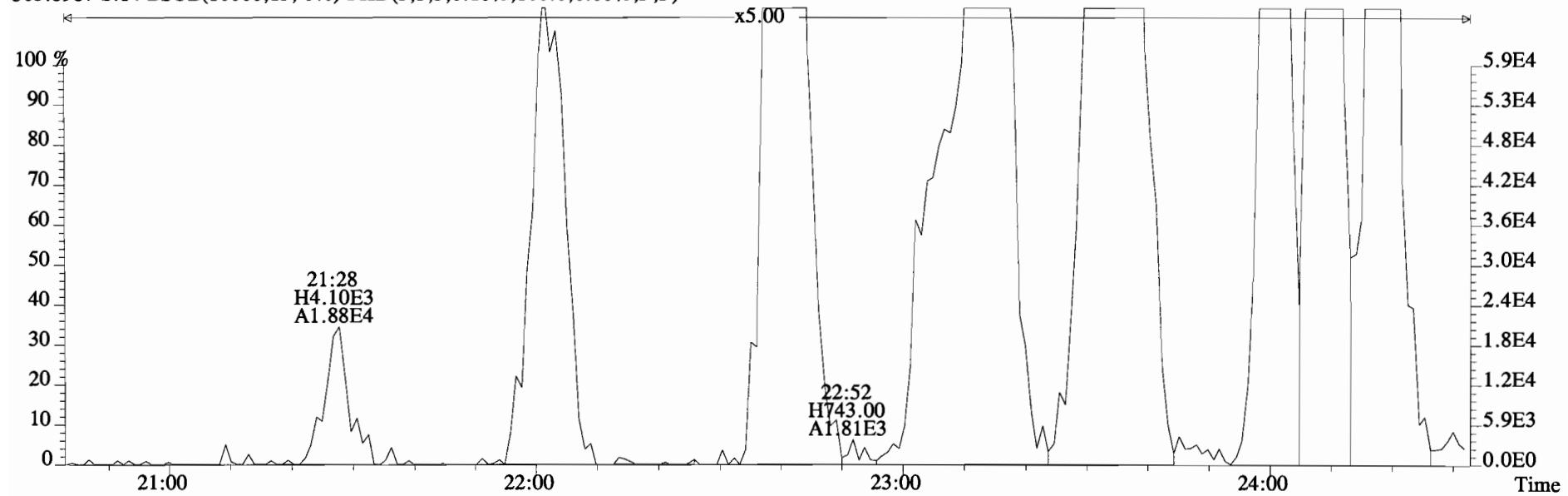
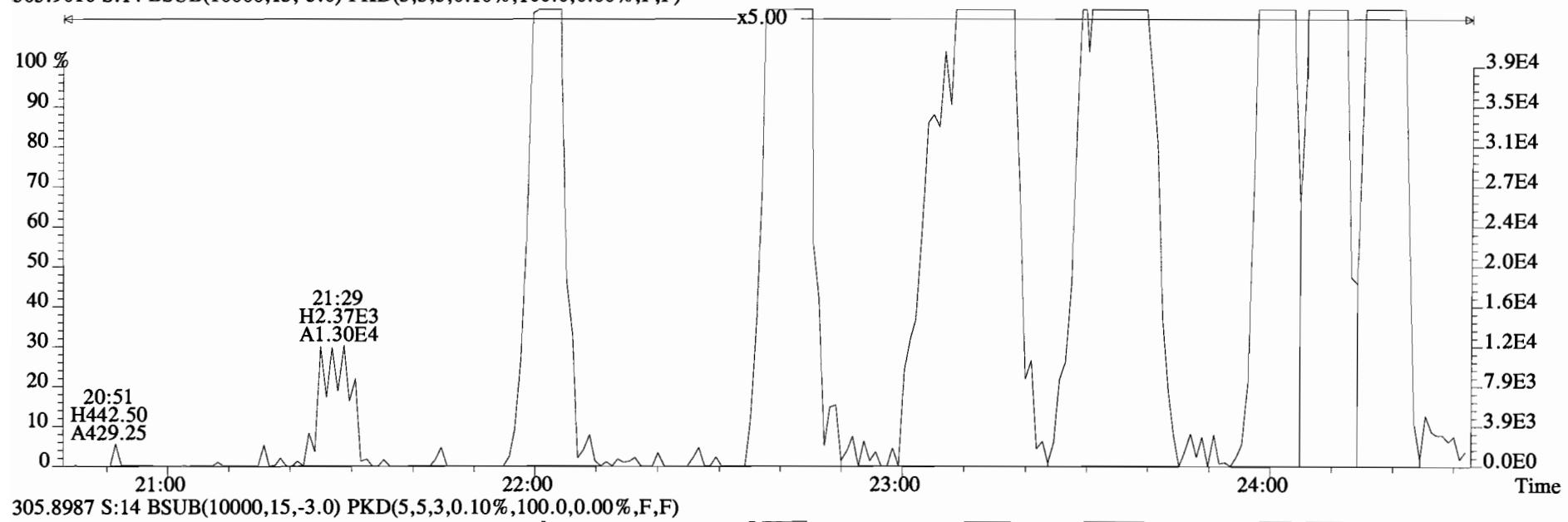
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Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



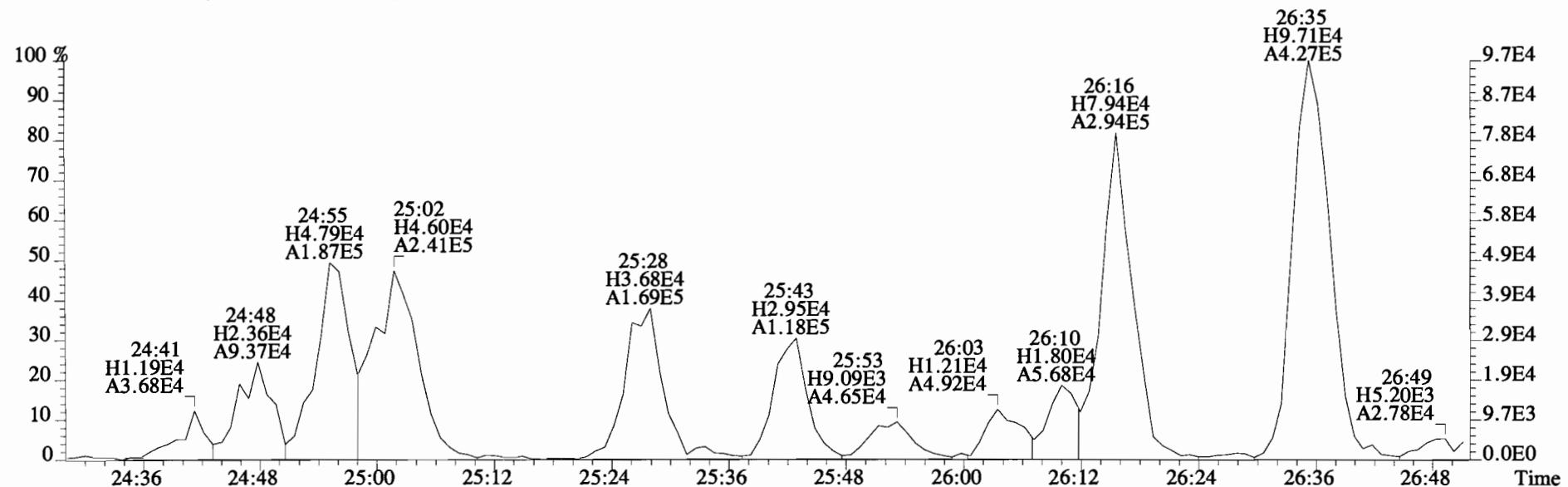
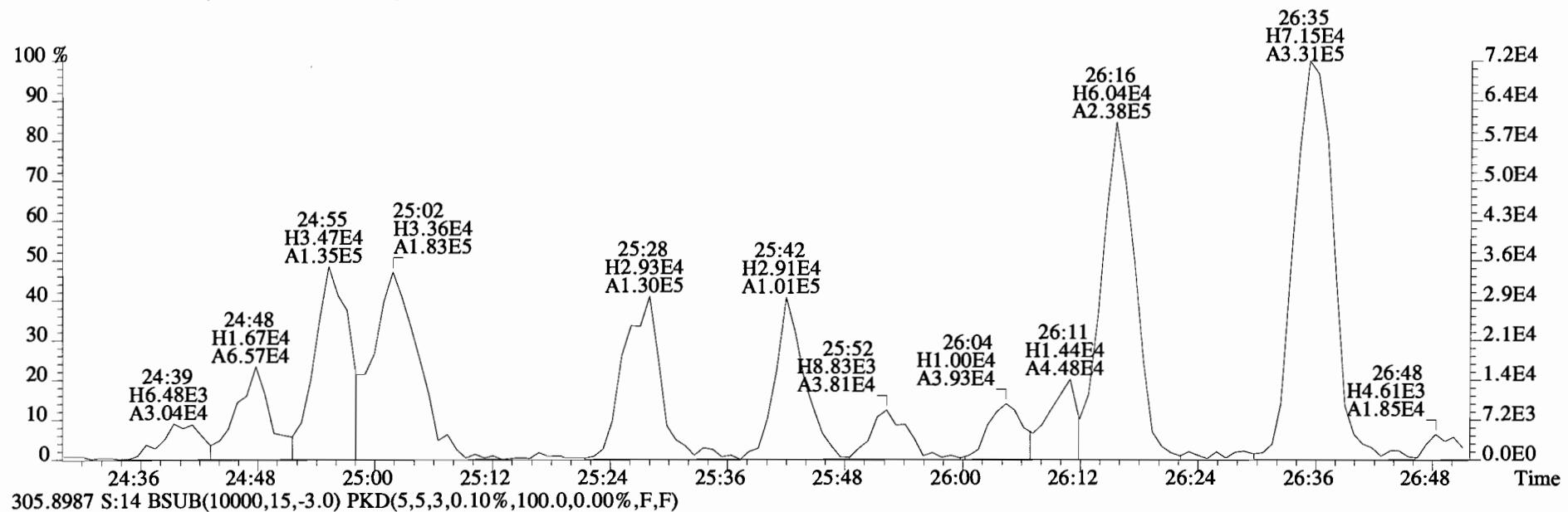
305.8987 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



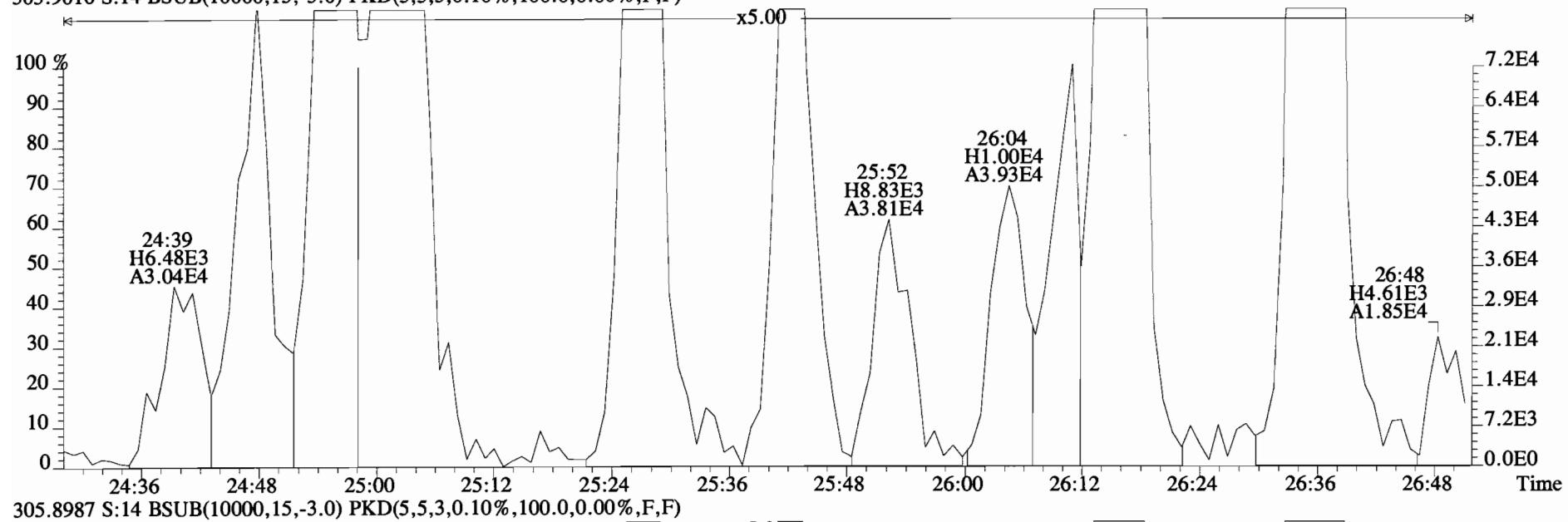
File:141027D1 #1-551 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



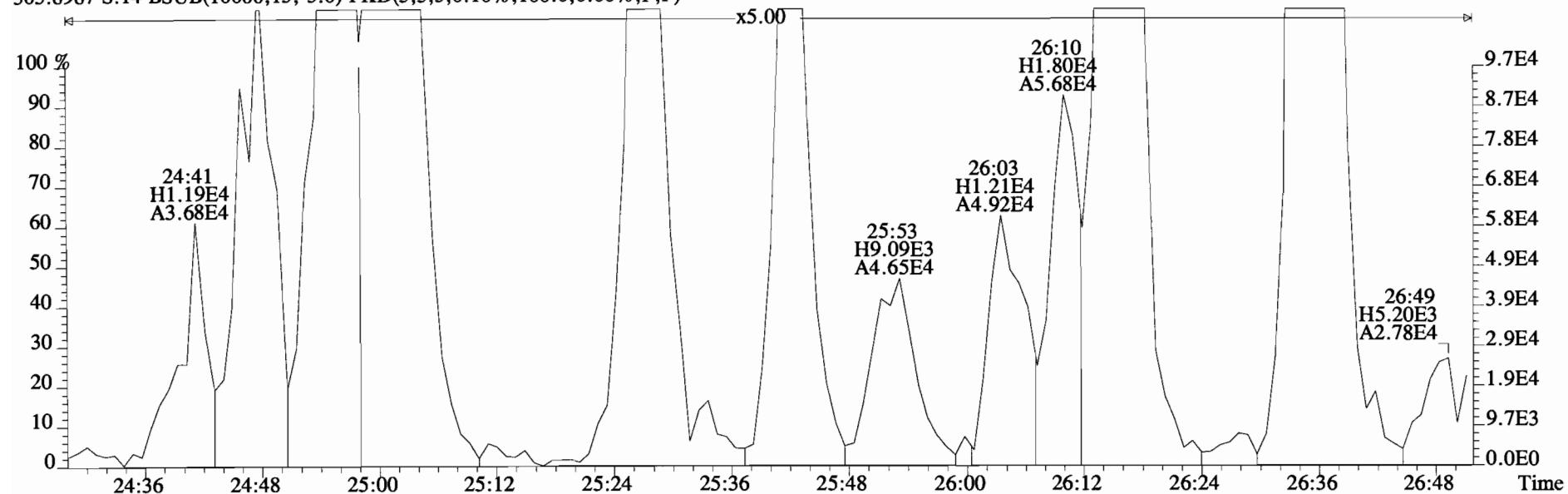
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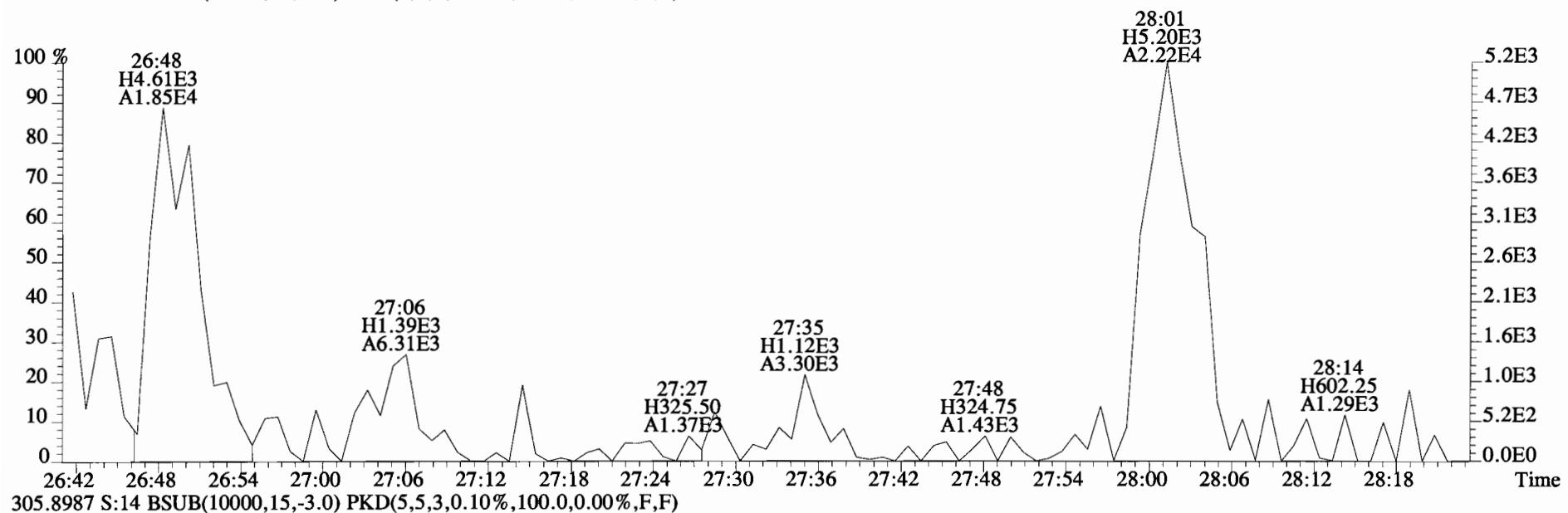
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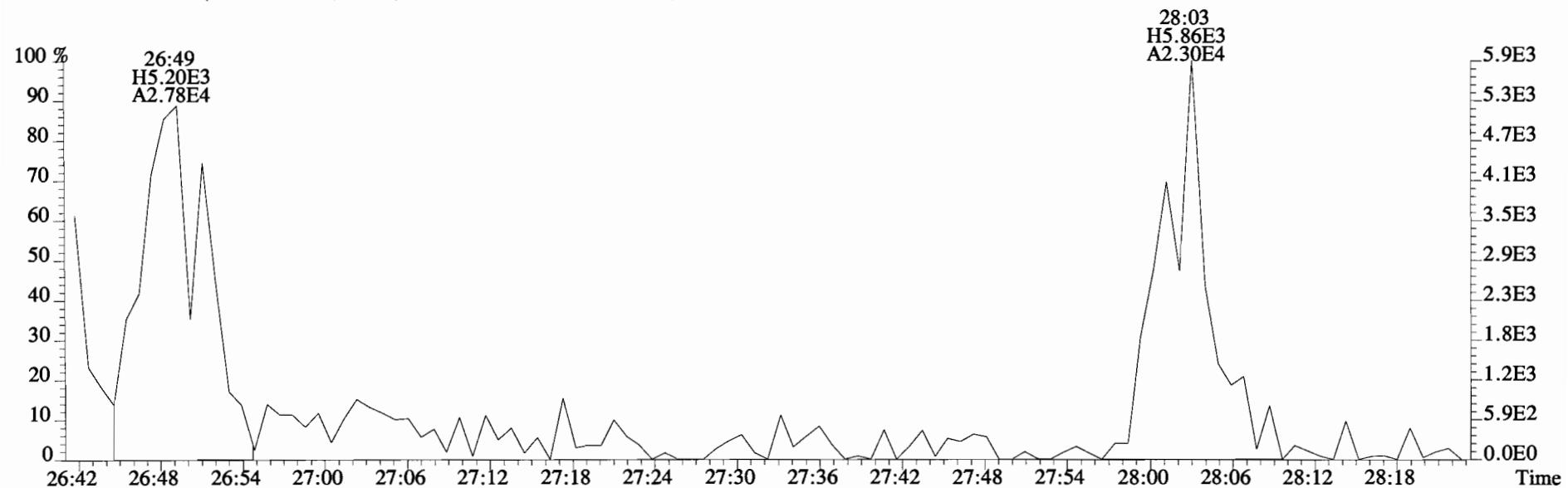
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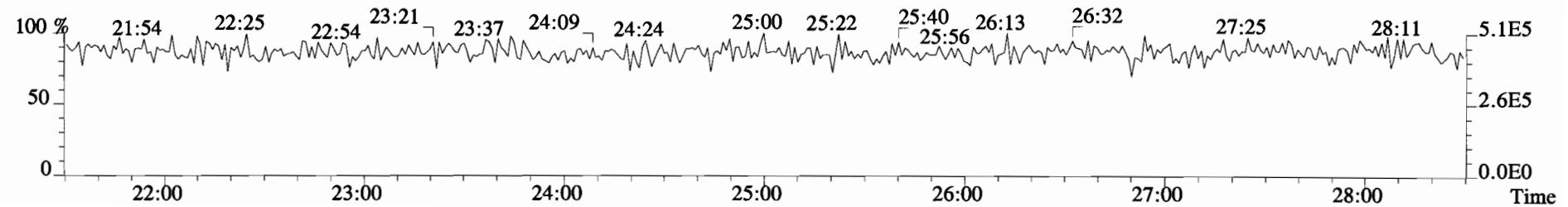
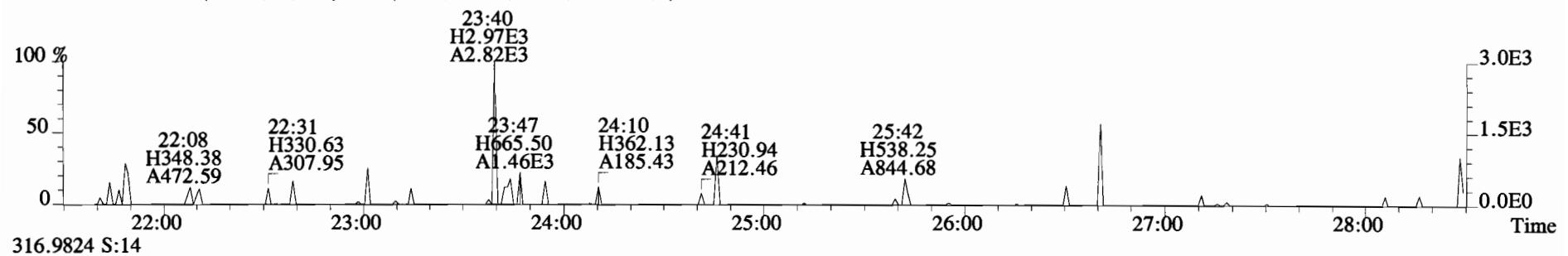
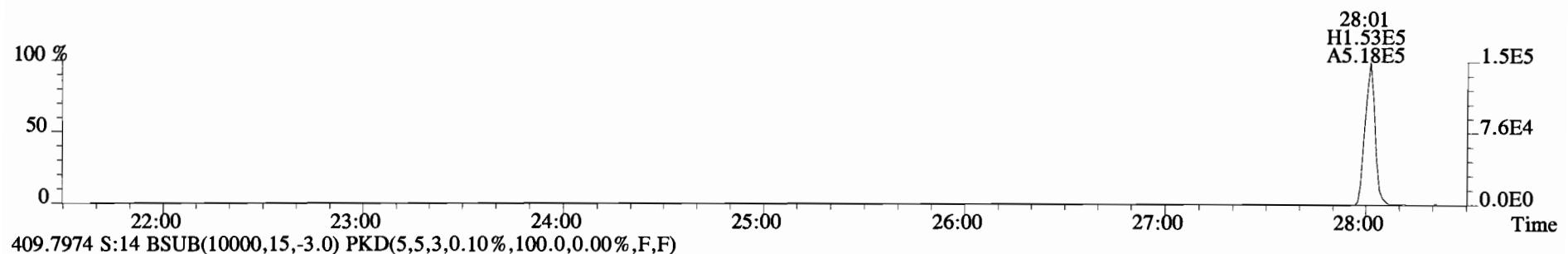
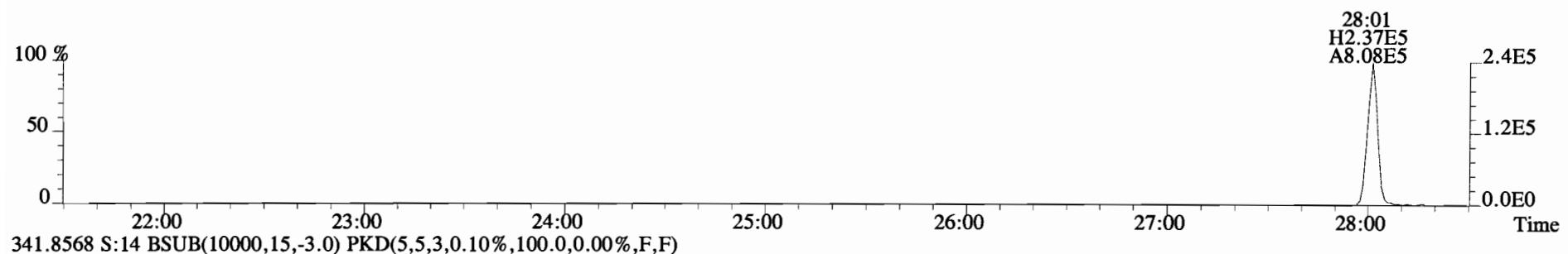
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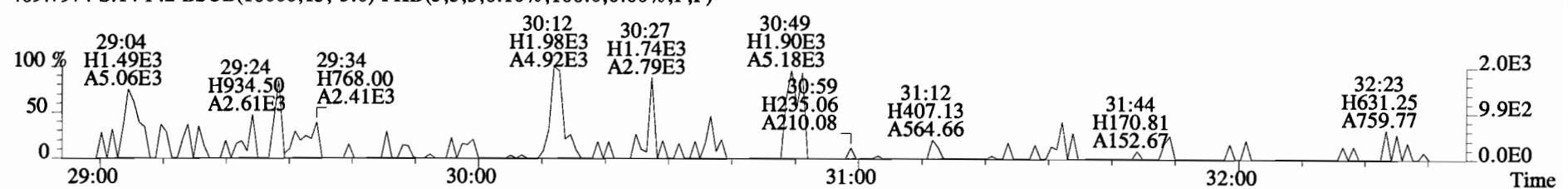
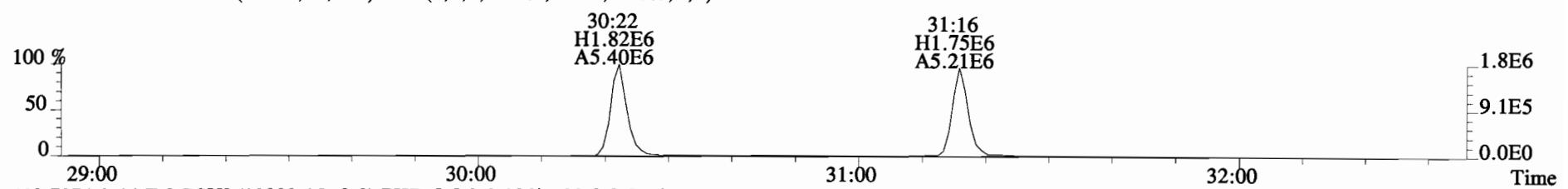
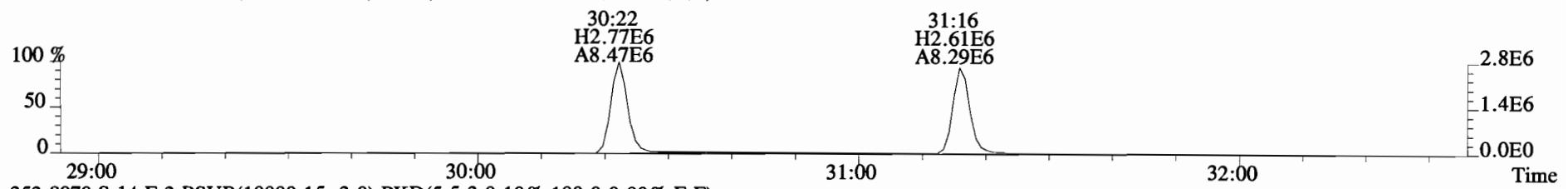
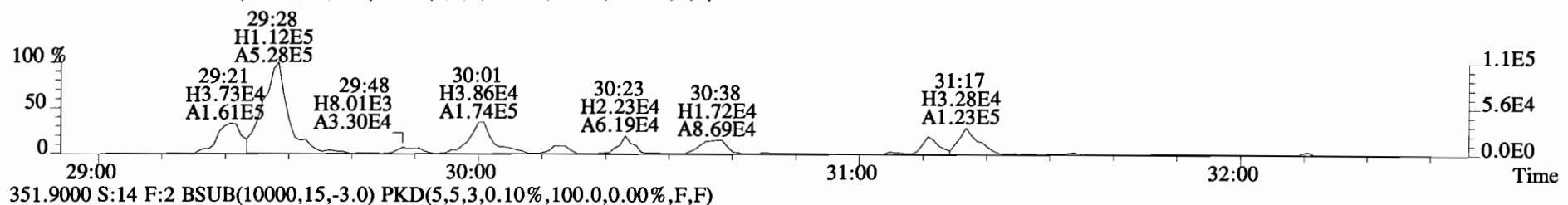
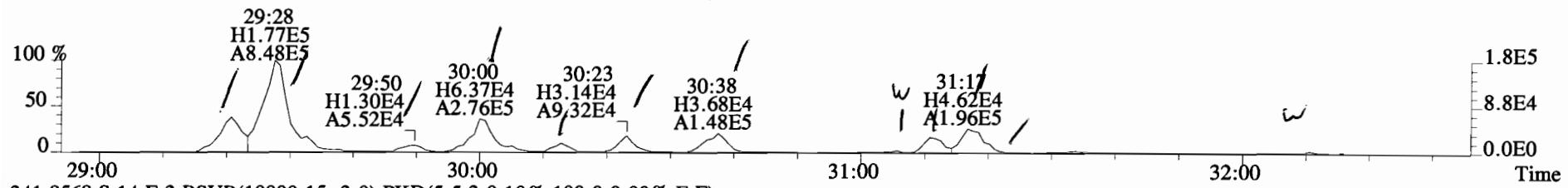
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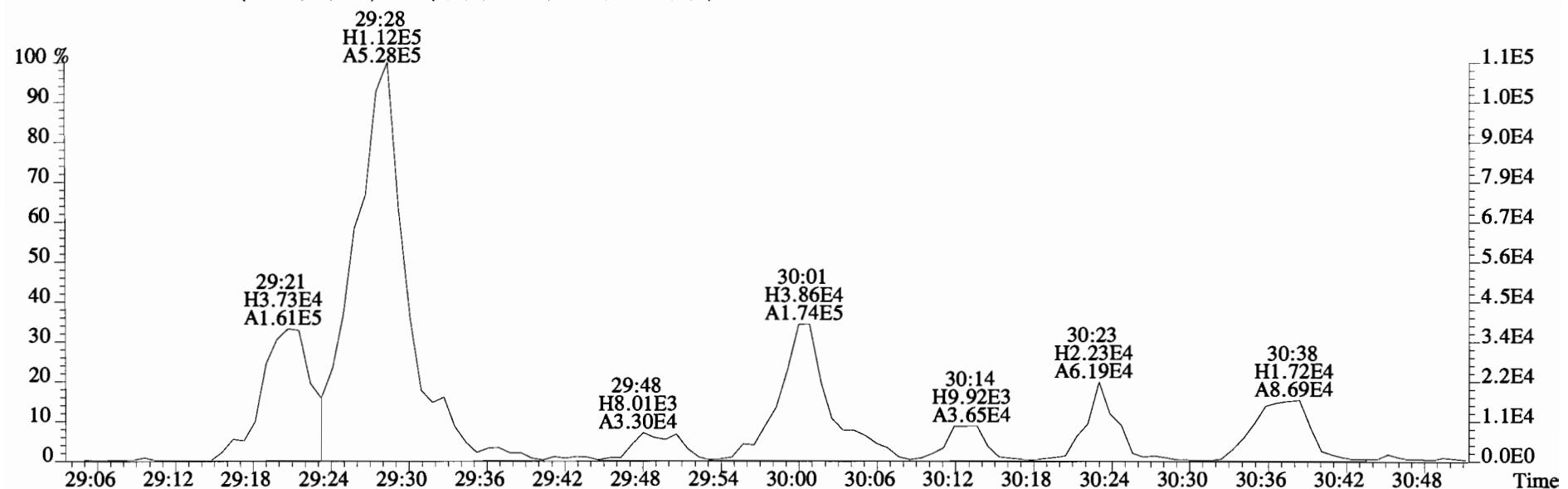
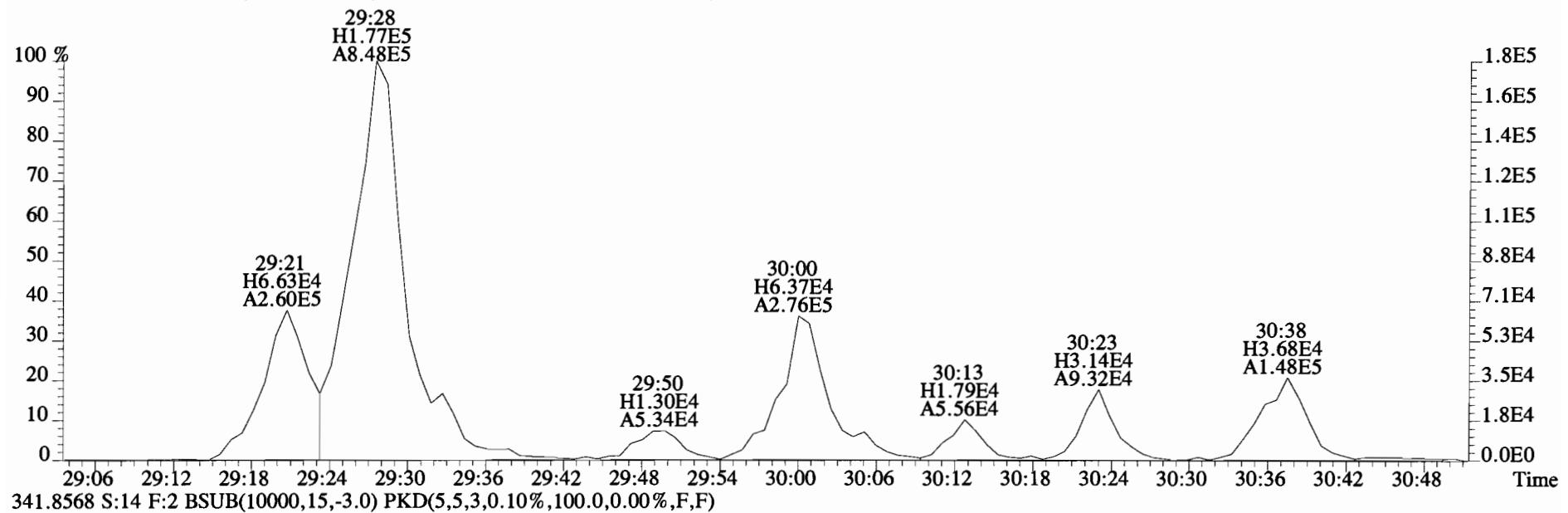
File:141027D1 #1-551 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 339.8597 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



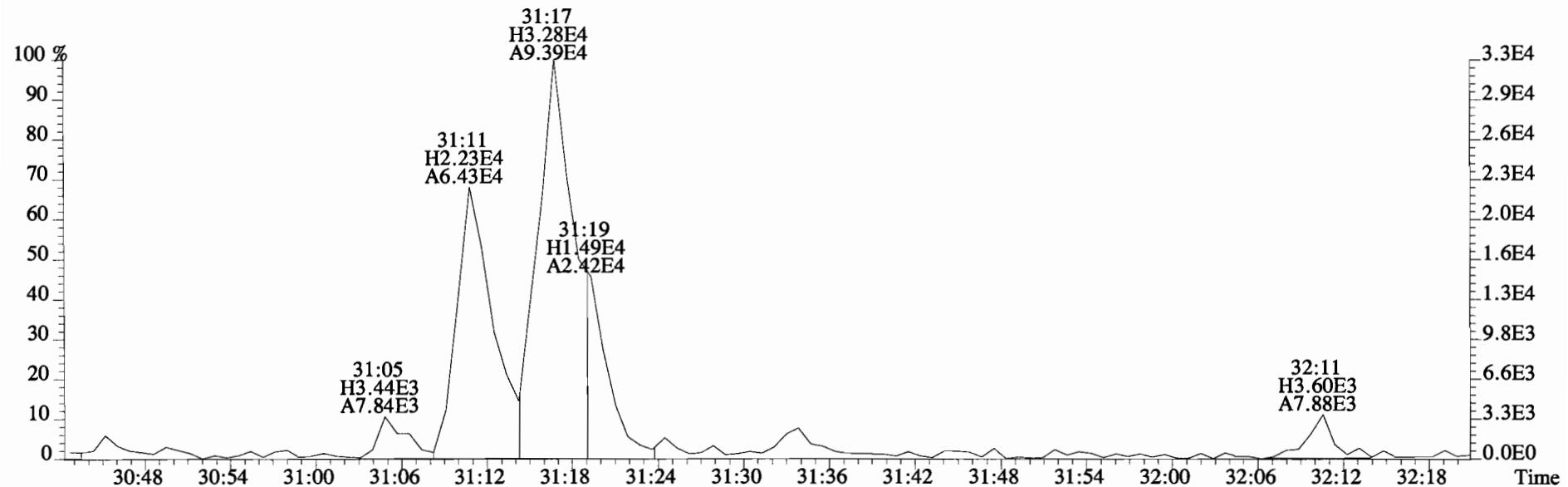
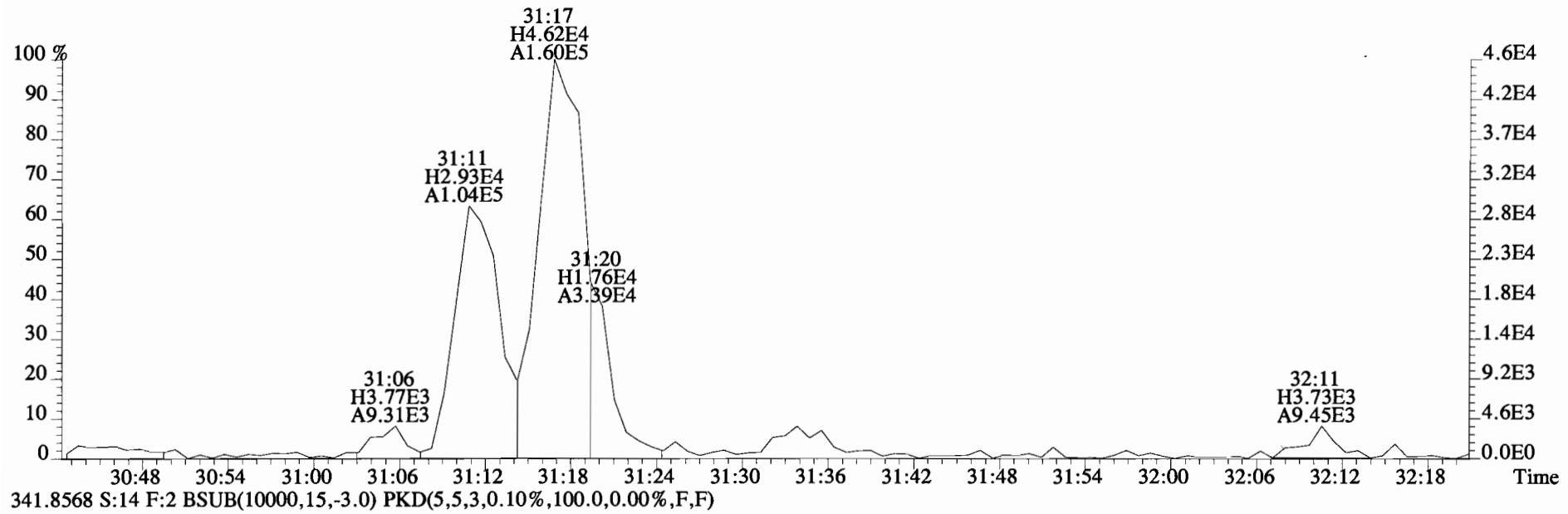
File:141027D1 #1-256 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



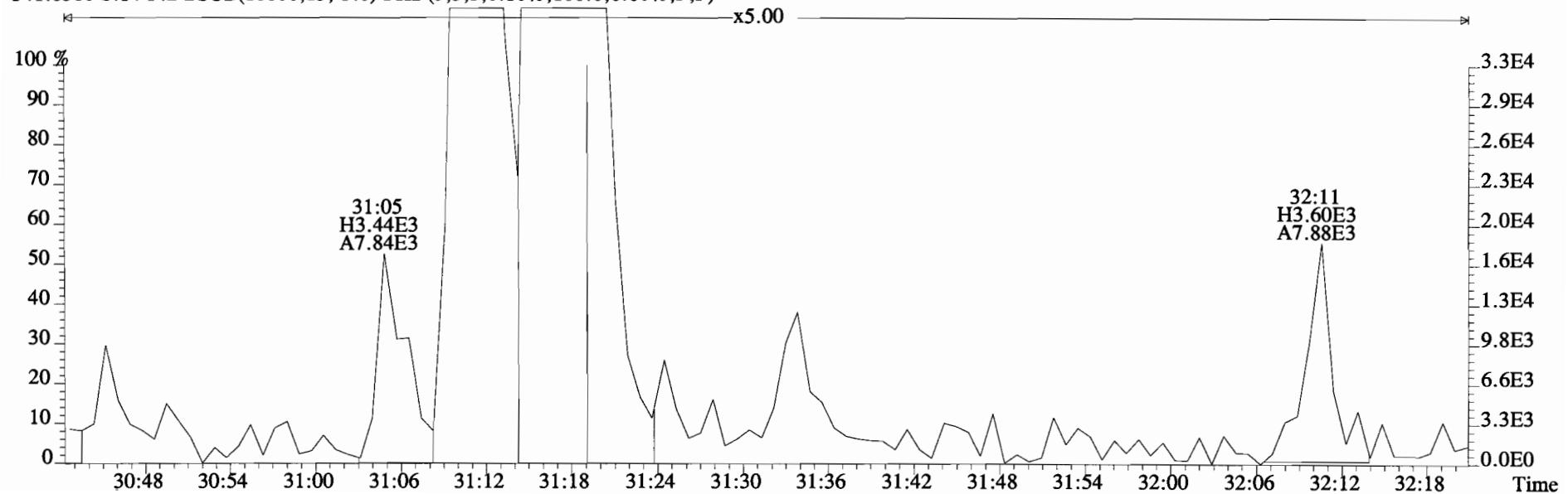
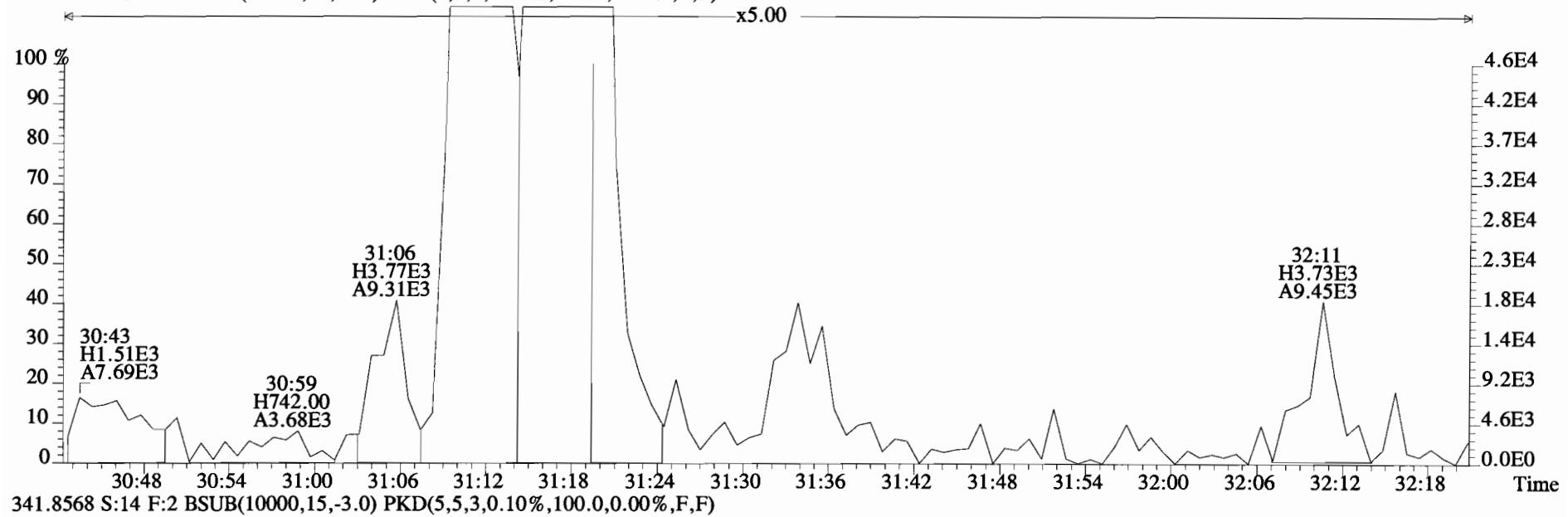
File:141027D1 #1-256 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



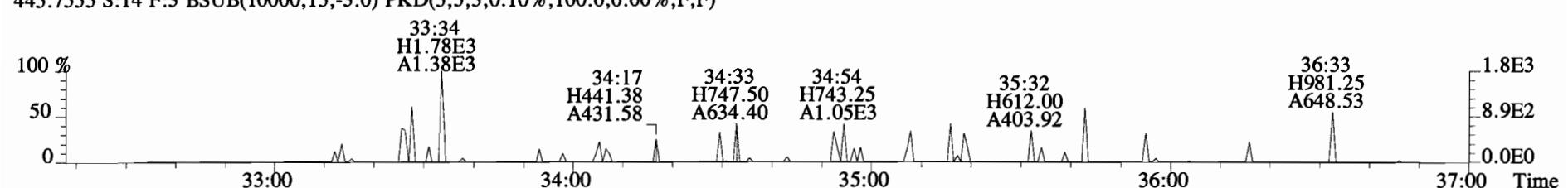
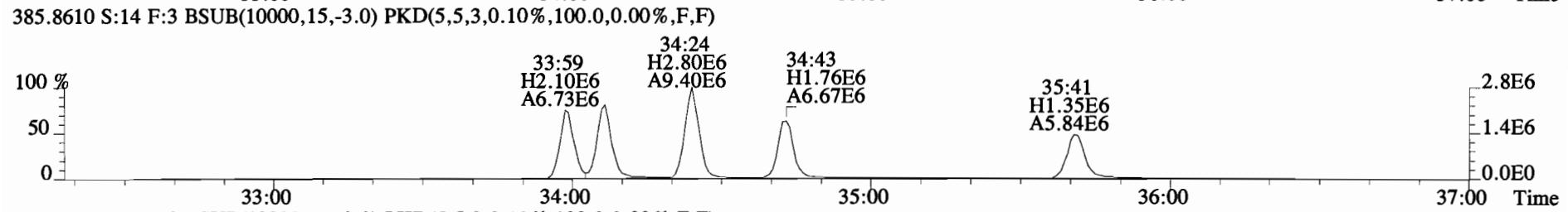
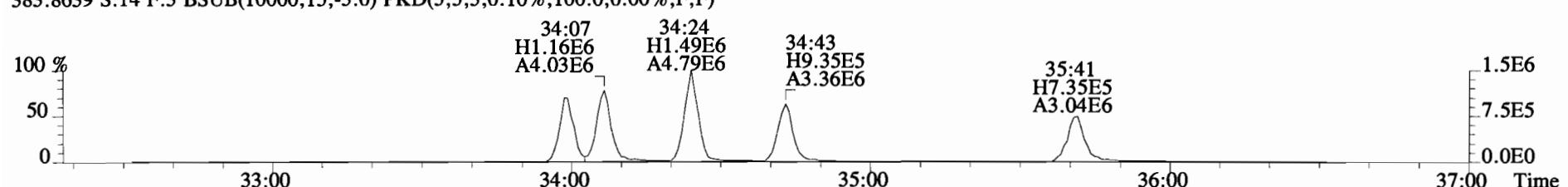
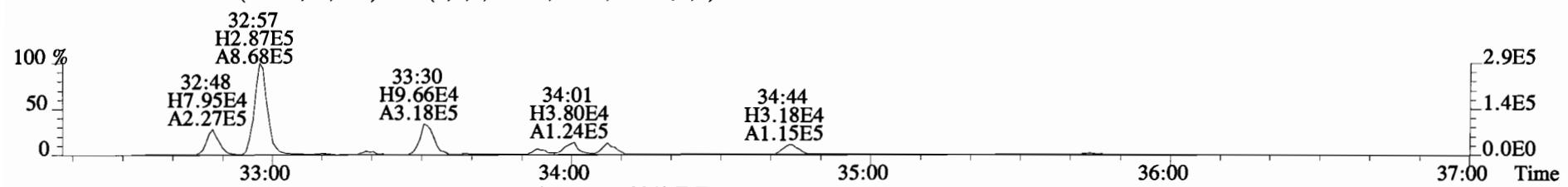
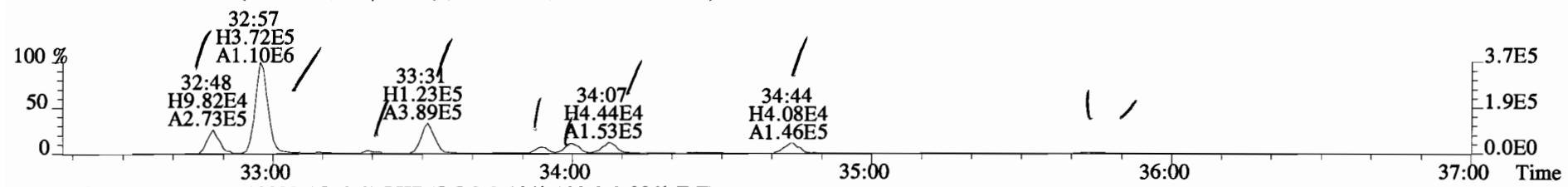
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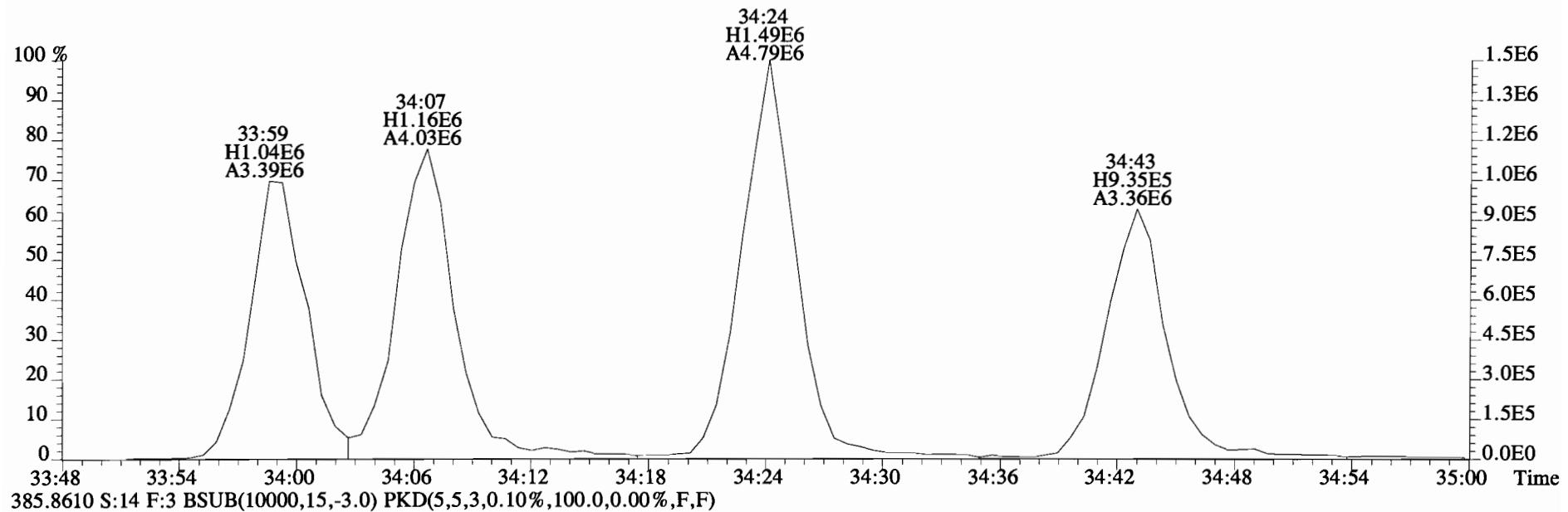
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Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



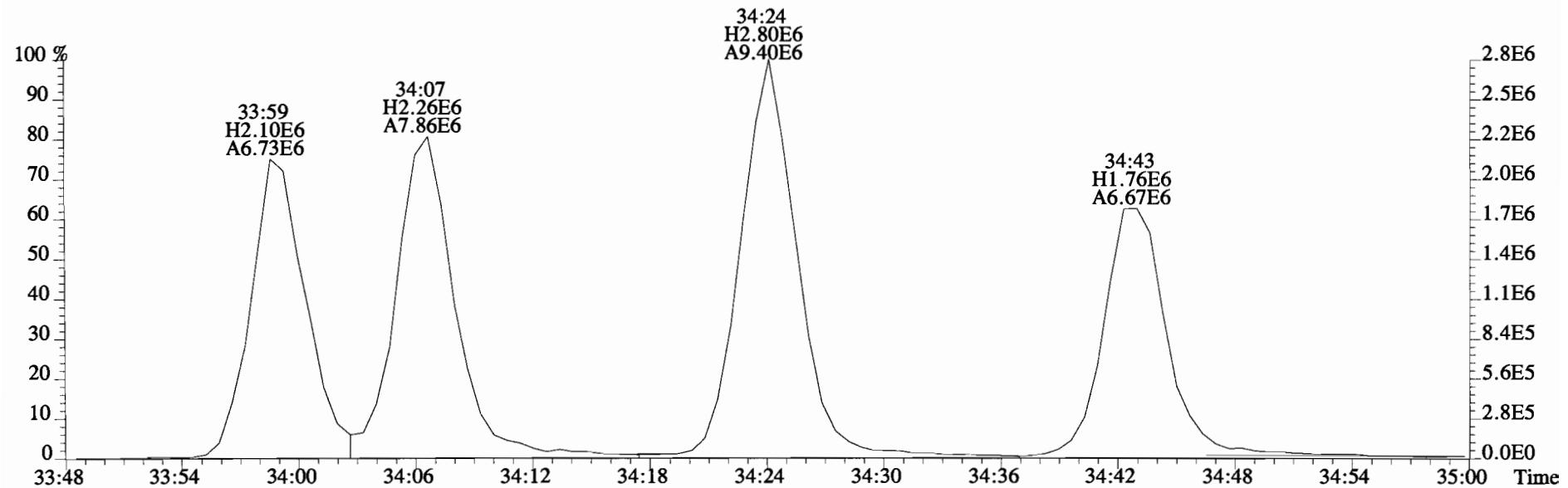
File:141027D1 #1-385 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



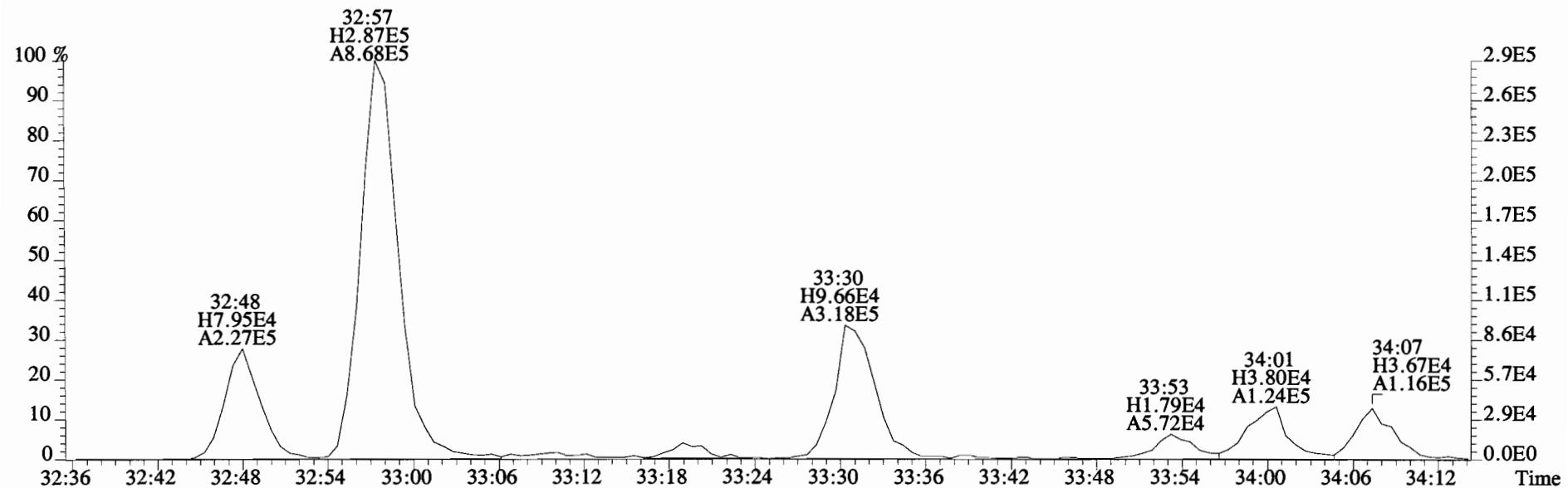
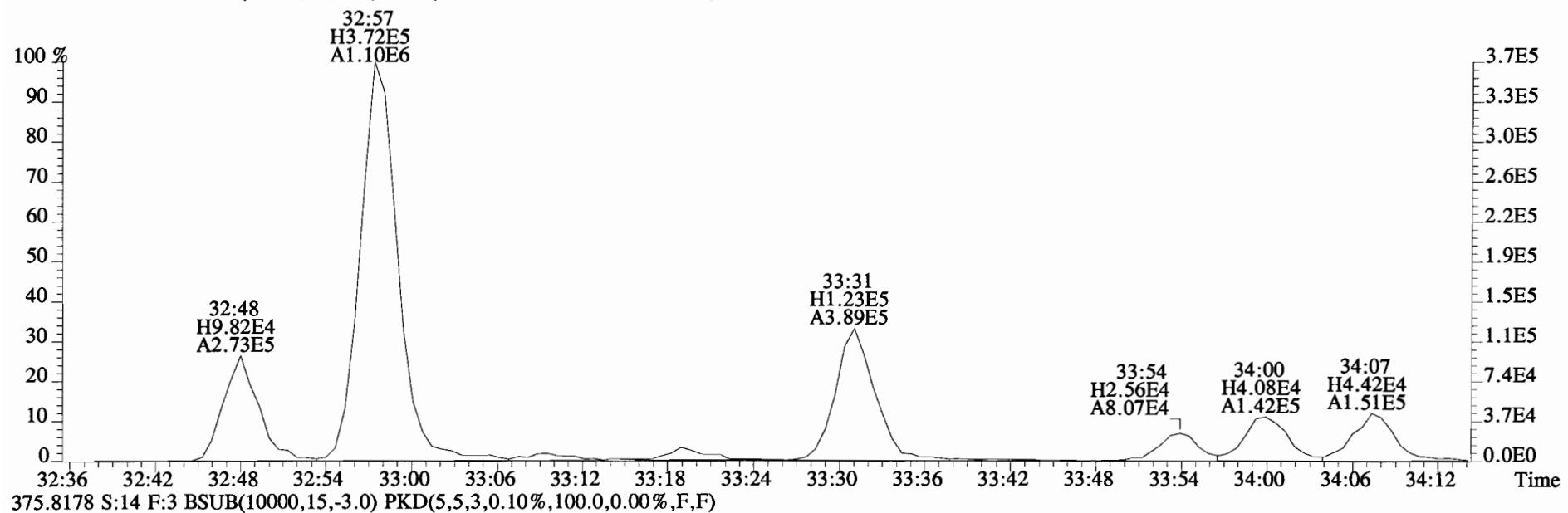
File:141027D1 #1-385 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
383.8639 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



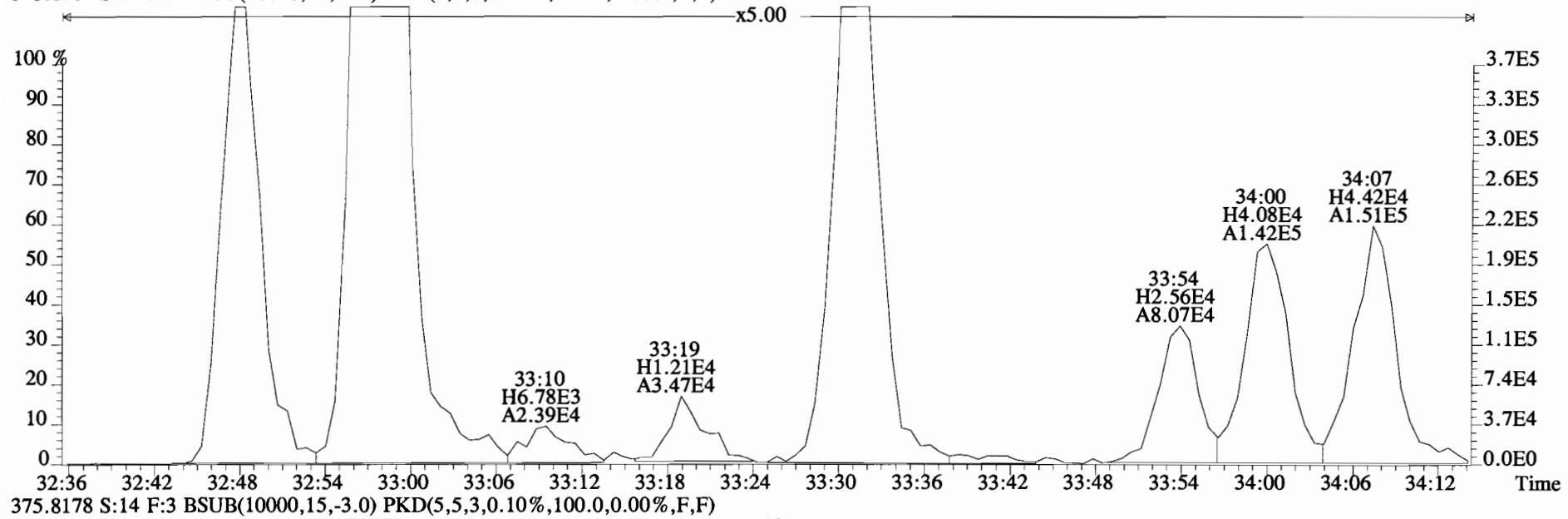
385.8610 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



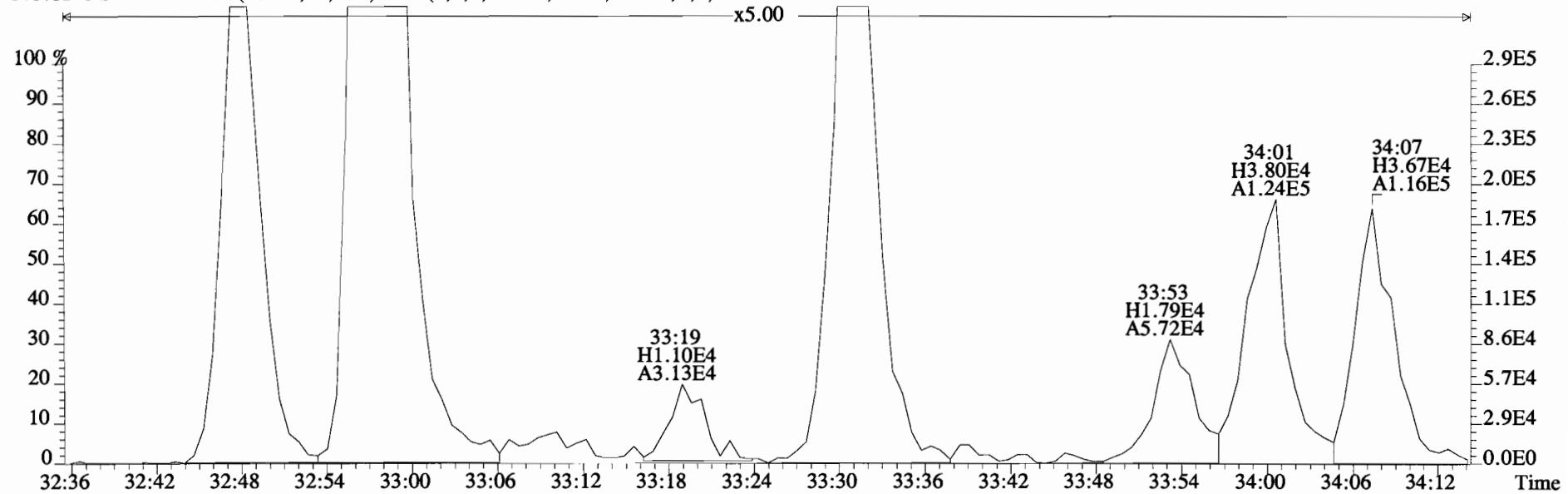
File:141027D1 #1-385 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



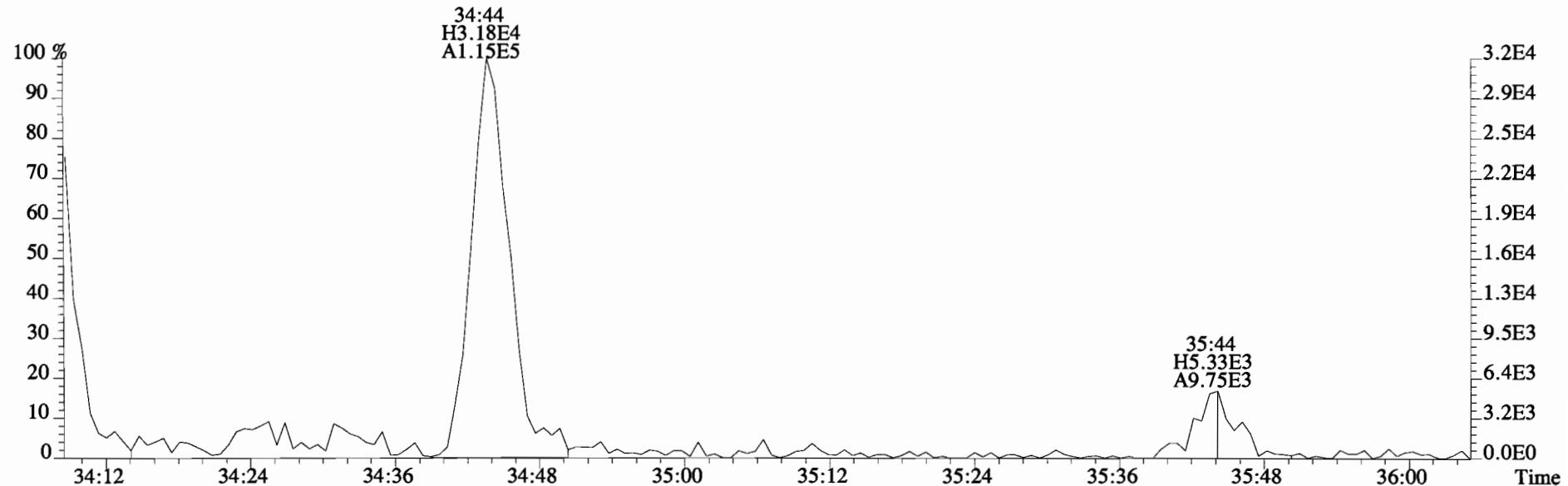
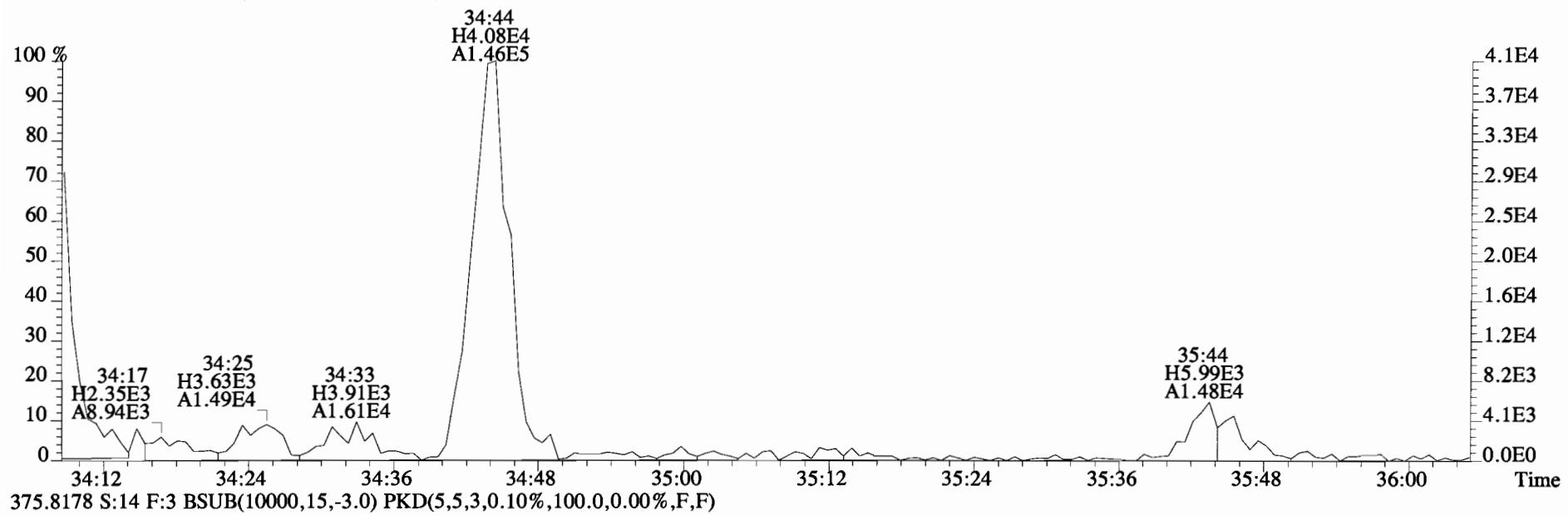
File:141027D1 #1-385 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



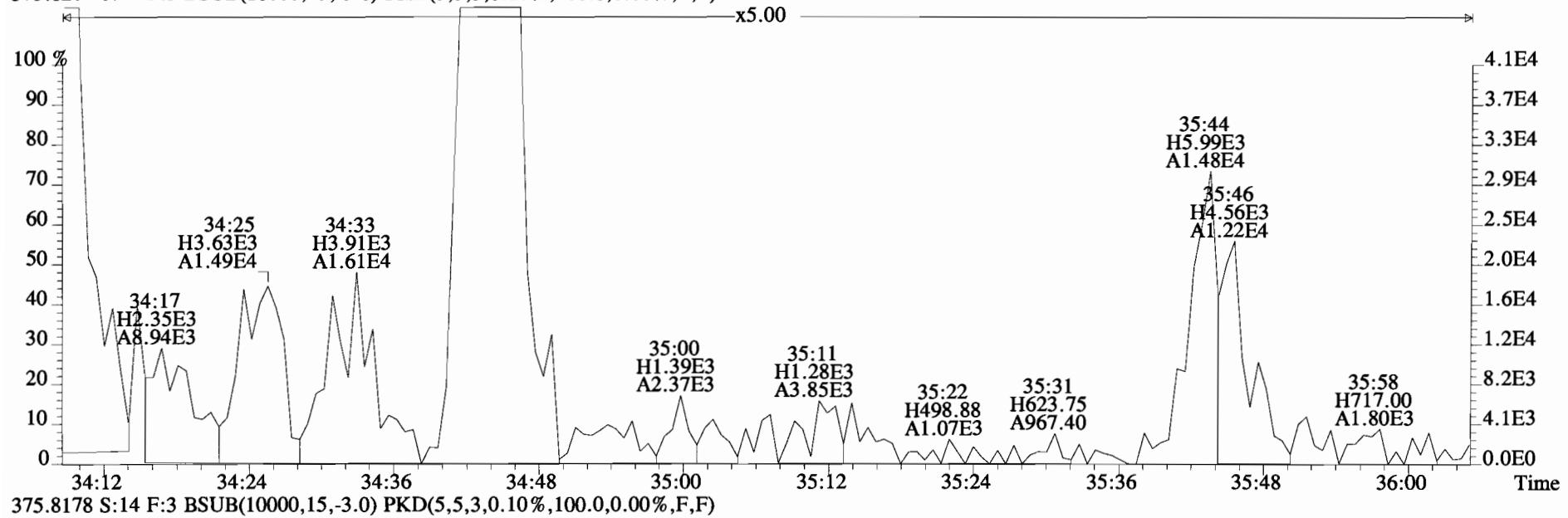
375.8178 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



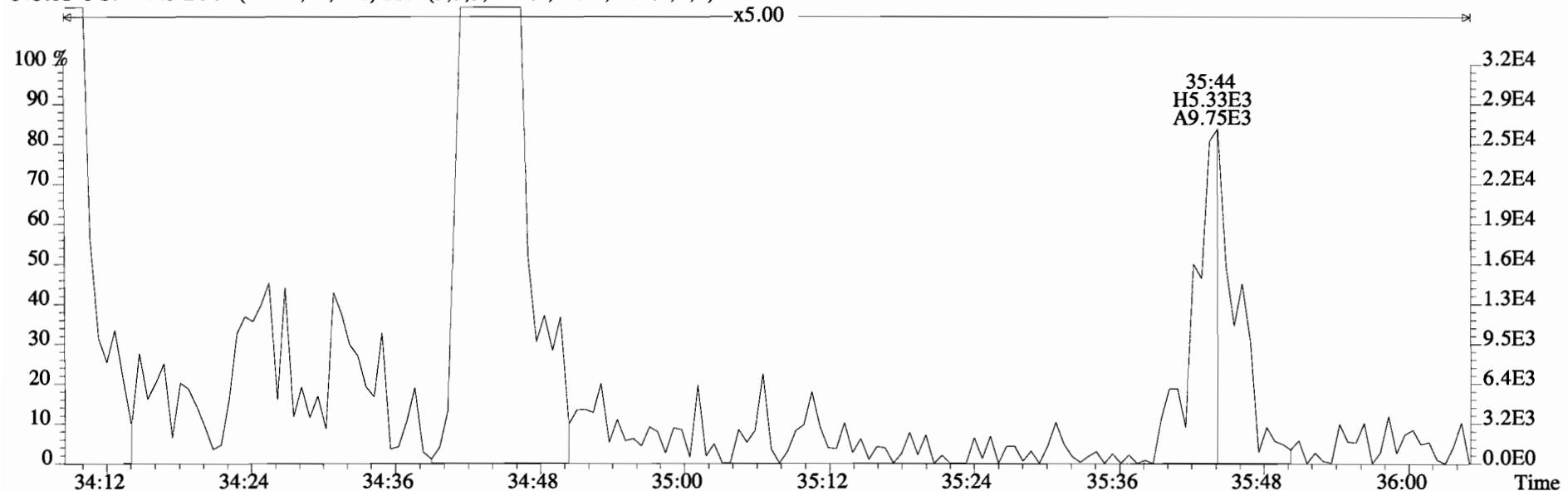
File:141027D1 #1-385 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



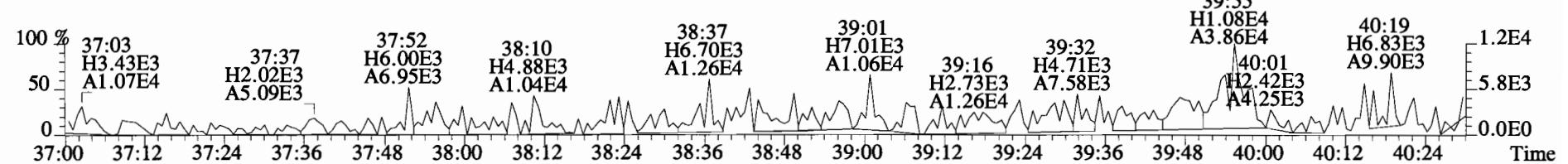
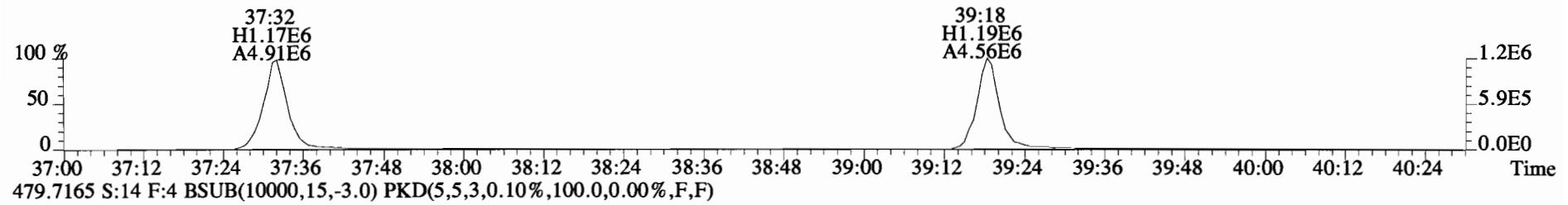
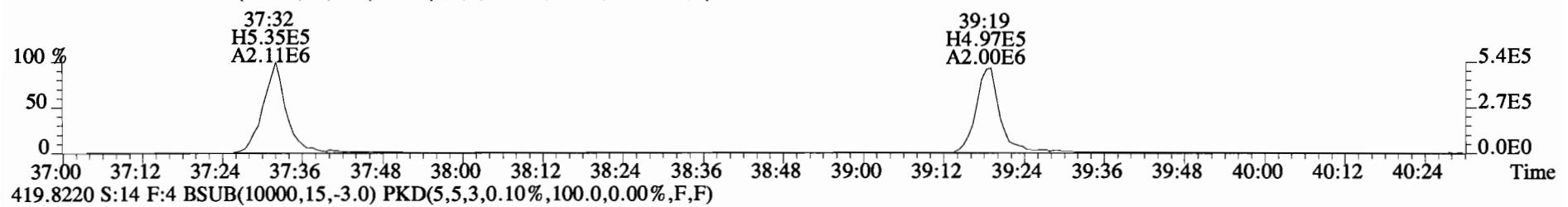
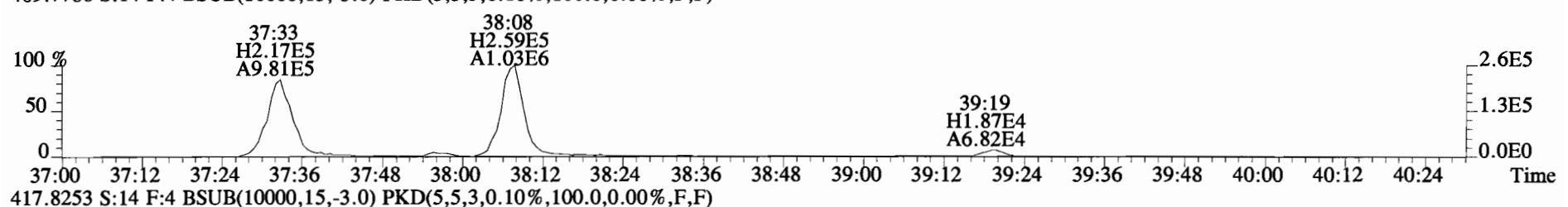
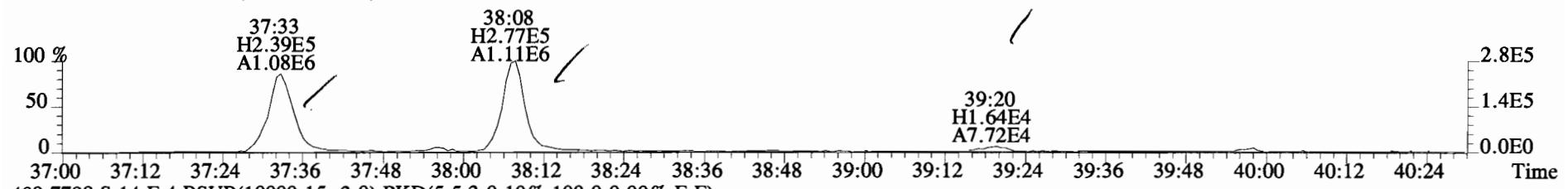
File:141027D1 #1-385 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



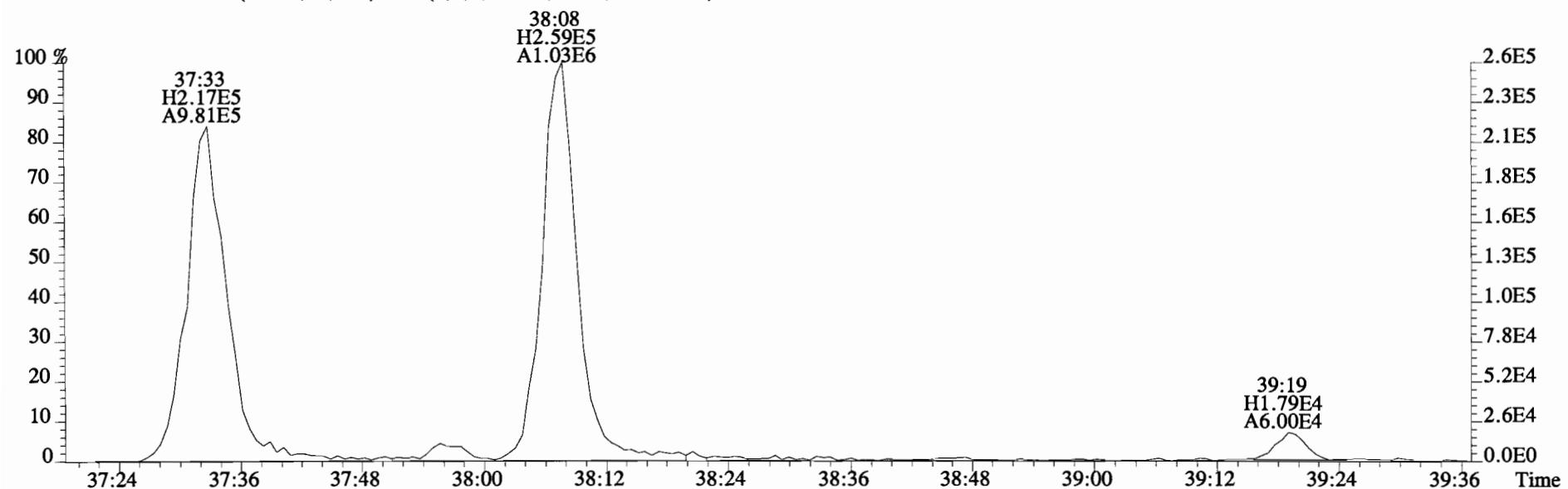
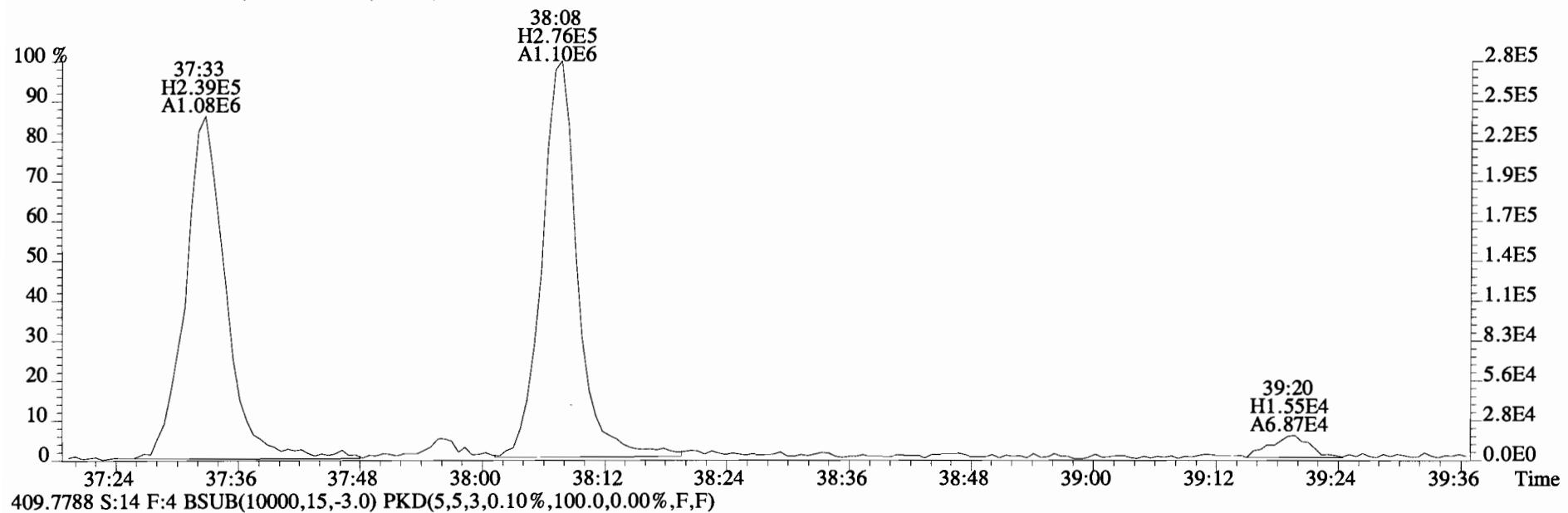
375.8178 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



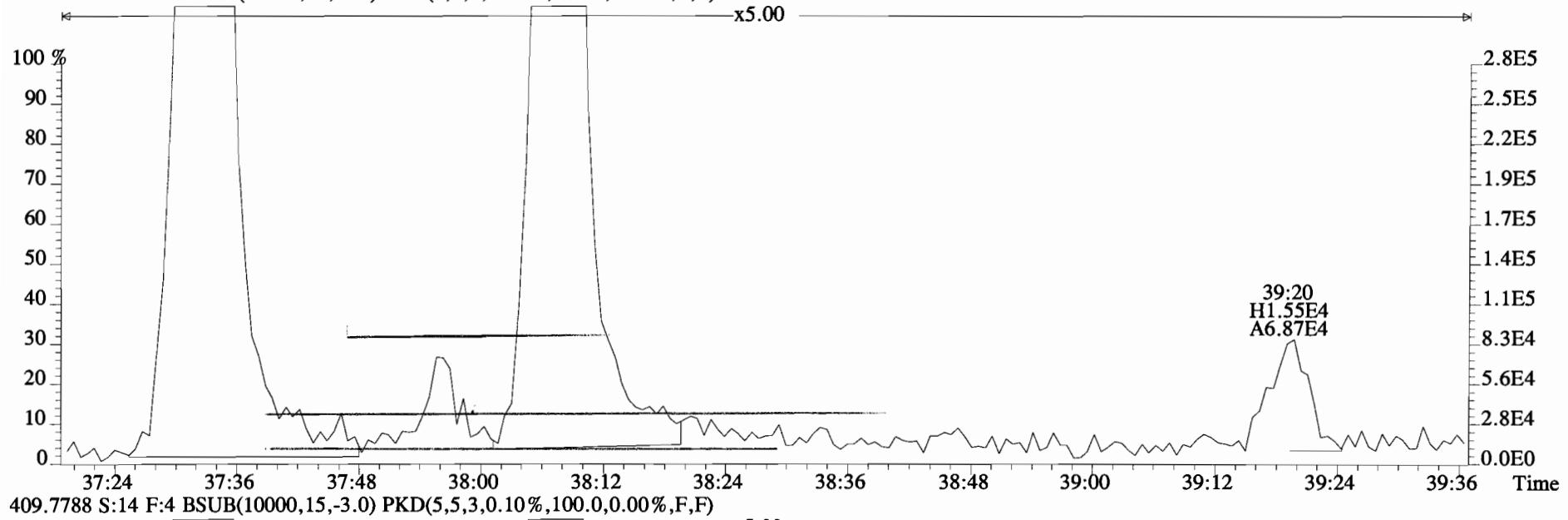
File:141027D1 #1-326 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 407.7818 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



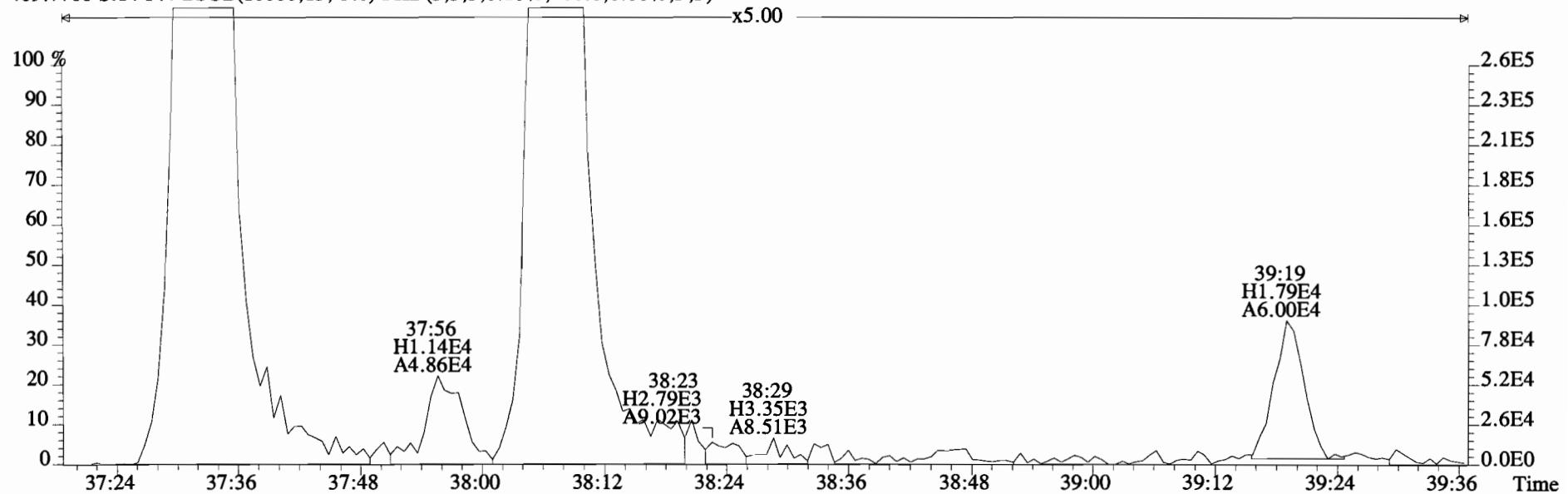
File:141027D1 #1-326 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
407.7818 S:14 F:4 BSB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



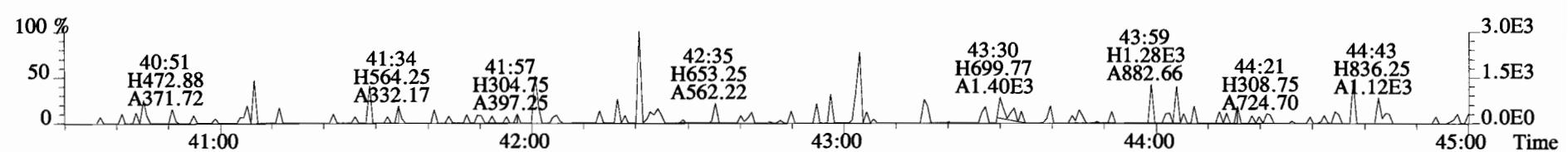
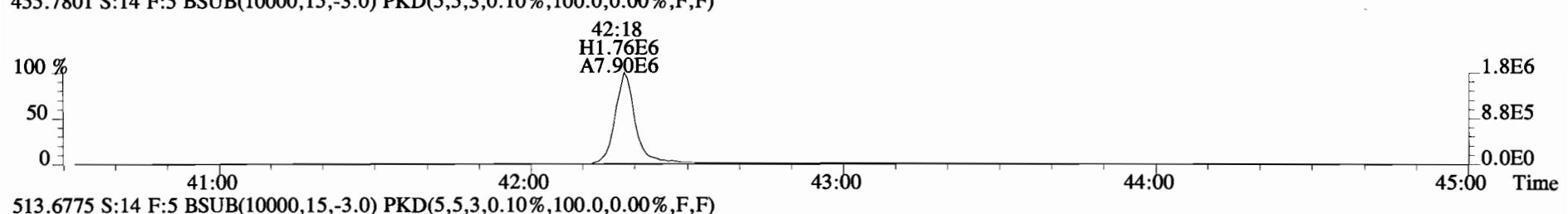
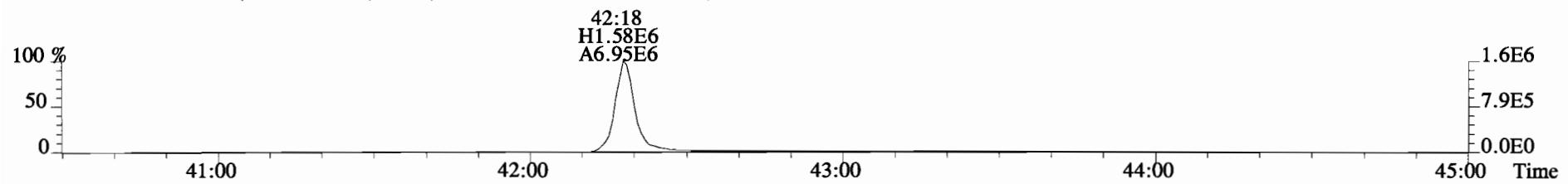
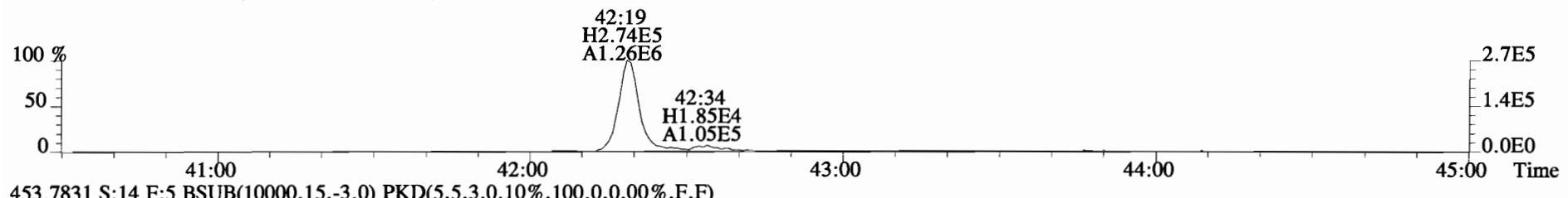
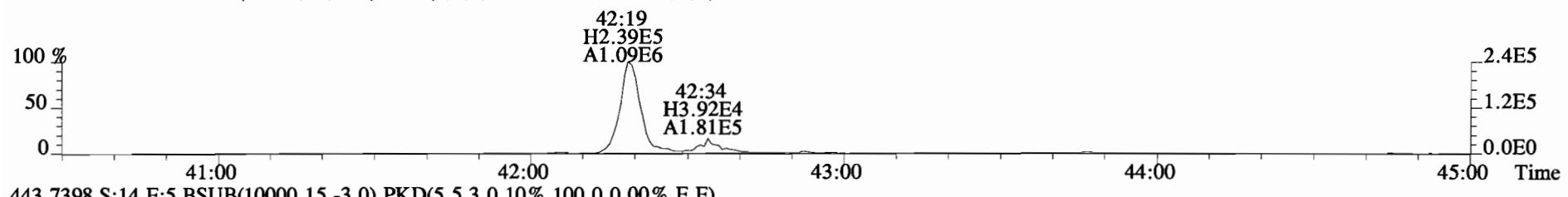
File:141027D1 #1-326 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
407.7818 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7788 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141027D1 #1-389 Acq:28-OCT-2014 01:01:43 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04 CC-CB-04-20141013-S 17.37 Exp:OCDD_DB5
 441.7428 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: CC-CB-22-20141013-S
 Lab ID: 1400762-05

Filename: 141027D1 S:15 Acq:28-OCT-14 01:50:12
 GC Column ID: ZB-SMS ICal: 1613VG7-10-16-14 wt/vol:10.018

ConCal: ST141027D1-1
 EndCAL: NA

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	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	6.19e+04	0.76 y	1.18	27:02	1.000	1.0456	*	2.5	*		Total Tetra-Dioxins	30.4	31.7	*	*	
	1,2,3,7,8-PeCDD	2.11e+05	0.58 y	0.92	31:33	1.000	3.9639	*	2.5	*		Total Penta-Dioxins	48.3	48.3	*	*	
	1,2,3,4,7,8-HxCDD	2.78e+05	1.24 y	1.09	34:54	1.000	5.9048	*	2.5	*		Total Hexa-Dioxins	148	148	*	*	
	1,2,3,6,7,8-HxCDD	8.50e+05	1.24 y	1.07	35:01	1.001	12.846	*	2.5	*		Total Hepta-Dioxins	635	635	*	*	
	1,2,3,7,8,9-HxCDD	5.66e+05	1.31 y	0.93	35:19	1.001	11.285	*	2.5	*		Total Tetra-Furans	155	167	*	*	
	1,2,3,4,6,7,8-HpCDD	1.24e+07	1.02 y	1.12	38:46	1.000	289.31	*	2.5	*		Total Penta-Furans	115.15	115.63	*	*	
	OCDD	1.03e+08	0.89 y	0.95	42:06	1.000	2747.7	*	2.5	*		Total Hexa-Furans	100	100	*	*	
												Total Hepta-Furans	144	144	*	*	
	2,3,7,8-TCDF	1.46e+06	0.77 y	1.08	26:16	1.001	18.334 ok	*	2.5	*							
	1,2,3,7,8-PeCDF	3.75e+05	1.55 y	1.09	30:23	1.000	4.3958	*	2.5	*							
	2,3,4,7,8-PeCDF	6.24e+05	1.46 y	1.04	31:16	1.000	8.0295	*	2.5	*							
	1,2,3,4,7,8-HxCDF	6.82e+05	1.27 y	1.39	33:59	1.000	8.0255	*	2.5	*							
	1,2,3,6,7,8-HxCDF	4.98e+05	1.24 y	1.26	34:07	1.000	5.7840	*	2.5	*							
	2,3,4,6,7,8-HxCDF	5.36e+05	1.33 y	1.30	34:44	1.000	6.7765	*	2.5	*							
	1,2,3,7,8,9-HxCDF	7.23e+04	1.38 y	1.19	35:42	1.000	1.0280	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	4.07e+06	1.09 y	1.62	37:33	1.000	59.076	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	3.06e+05	1.18 y	1.53	39:19	1.000	5.3343	*	2.5	*							
	OCDF	5.78e+06	0.88 y	1.10	42:19	1.000	130.44	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	9.98e+06	0.78 y	1.07	27:01	1.022	176.73					88.5					
IS	13C-1,2,3,7,8-PeCDD	1.16e+07	0.64 y	1.24	31:33	1.193	177.82					89.1					
IS	13C-1,2,3,4,7,8-HxCDD	8.64e+06	1.29 y	0.72	34:53	1.014	155.31					77.8					
IS	13C-1,2,3,6,7,8-HxCDD	1.24e+07	1.25 y	0.74	34:60	1.017	219.26					110					
IS	13C-1,2,3,7,8,9-HxCDD	1.08e+07	1.30 y	0.86	35:18	1.026	163.73					82.0					
IS	13C-1,2,3,4,6,7,8-HpCDD	7.68e+06	1.04 y	0.64	38:45	1.127	155.34					77.8					
IS	13C-OCDD	1.58e+07	0.87 y	0.78	42:05	1.223	262.38					65.7					
IS	13C-2,3,7,8-TCDF	1.48e+07	0.78 y	0.92	26:15	0.992	183.12					91.7					
IS	13C-1,2,3,7,8-PeCDF	1.56e+07	1.58 y	0.95	30:22	1.148	188.32					94.3					
IS	13C-2,3,4,7,8-PeCDF	1.49e+07	1.62 y	0.97	31:16	1.182	175.88					88.1					
IS	13C-1,2,3,4,7,8-HxCDF	1.22e+07	0.52 y	0.99	33:59	0.988	160.48					80.4					
IS	13C-1,2,3,6,7,8-HxCDF	1.36e+07	0.53 y	1.10	34:07	0.992	161.69					81.0					
IS	13C-2,3,4,6,7,8-HxCDF	1.22e+07	0.51 y	1.03	34:43	1.009	153.51					76.9					
IS	13C-1,2,3,7,8,9-HxCDF	1.18e+07	0.50 y	0.86	35:42	1.037	178.92					89.6					
IS	13C-1,2,3,4,6,7,8-HpCDF	8.50e+06	0.44 y	0.71	37:32	1.091	155.17					77.7					
IS	13C-1,2,3,4,7,8,9-HpCDF	7.51e+06	0.43 y	0.71	39:19	1.143	138.11					69.2					
IS	13C-OCDF	1.61e+07	0.91 y	0.87	42:19	1.230	239.44					60.0					
C/Up	37Cl-2,3,7,8-TCDD	4.68e+06		1.21	27:02	1.022	73.445					92.0	Integrations by Analyst: <u>MJ</u>	Reviewed by Analyst: <u>JL</u>			
RS/RT	13C-1,2,3,4-TCDD	1.05e+07	0.78 y	1.00	26:27	*	199.65										
RS	13C-1,2,3,4-TCDF	1.74e+07	0.77 y	1.00	25:01	*	199.65										
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.53e+07	0.51 y	1.00	34:24	*	199.65						Date: <u>10/28/14</u>	Date: <u>10/29/14</u>			

Totals class: TCDD EMPC

Entry #: 19

Run: 21 File: 141027D1 S: 15 I: 1 F: 1
 Acquired: 28-OCT-14 01:50:12 Processed: 28-OCT-14 08:34:01

Total Concentration: 31.711 Unnamed Concentration: 30.665

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
23:37	2.615e+05	3.522e+05	0.74 y	6.137e+05	10.364	
23:58	1.665e+05	2.191e+05	0.76 y	3.856e+05	6.5122	
24:24	2.600e+04	3.684e+04	0.71 y	6.284e+04	1.0612	
25:08	8.695e+03	9.580e+03	0.91 n	1.696e+04	0.28635	
25:21	6.449e+04	8.660e+04	0.74 y	1.511e+05	2.5514	
25:33	6.816e+04	8.534e+04	0.80 y	1.535e+05	2.5921	
25:43	2.253e+04	3.309e+04	0.68 y	5.563e+04	0.93936	
25:57	1.048e+04	1.439e+04	0.73 y	2.487e+04	0.42006	
26:06	2.476e+04	2.683e+04	0.92 n	4.749e+04	0.80204	
26:28	4.135e+04	5.277e+04	0.78 y	9.412e+04	1.5894	
26:47	5.953e+04	7.218e+04	0.82 y	1.317e+05	2.2242	
26:55	9.459e+03	1.085e+04	0.87 y	2.031e+04	0.34294	
27:02	2.666e+04	3.526e+04	0.76 y	6.192e+04	1.0456	2,3,7,8-TCDD
27:19	1.984e+04	2.527e+04	0.79 y	4.511e+04	0.76179	
27:54	1.071e+04	7.316e+03	1.46 n	1.295e+04	0.21869	

Totals class: PeCDD EMPC

Entry #: 21

Run: 21 File: 141027D1 S: 15 I: 1 F: 2
 Acquired: 28-OCT-14 01:50:12 Processed: 28-OCT-14 08:34:01

Total Concentration: 48.321 Unnamed Concentration: 44.357

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
29:30	2.652e+05	4.363e+05	0.61	y	7.015e+05		13.147	
29:57	5.762e+04	8.062e+04	0.71	y	1.382e+05		2.5907	
30:24	1.475e+05	2.341e+05	0.63	y	3.816e+05		7.1513	
30:33	7.997e+04	1.362e+05	0.59	y	2.162e+05		4.0514	
30:38	1.197e+05	1.979e+05	0.60	y	3.176e+05		5.9521	
30:51	1.132e+05	1.626e+05	0.70	y	2.758e+05		5.1691	
31:09	6.930e+04	1.105e+05	0.63	y	1.798e+05		3.3705	
31:33	7.764e+04	1.339e+05	0.58	y	2.115e+05	3.9639	1,2,3,7,8-PeCDD	
31:38	2.810e+04	3.937e+04	0.71	y	6.747e+04		1.2646	
31:55	3.570e+04	5.288e+04	0.68	y	8.858e+04		1.6602	

Totals class: HxCDD EMPC

Entry #: 23

Run: 21 File: 141027D1 S: 15 I: 1 F: 3
Acquired: 28-OCT-14 01:50:12 Processed: 28-OCT-14 08:34:01

Total Concentration: 148.42 Unnamed Concentration: 118.380

RT	m1 Resp	m2 Resp RA	Resp Concentration	Name
33:20	1.019e+06	8.053e+05 1.27 y	1.824e+06	33.606
33:55	8.154e+05	6.533e+05 1.25 y	1.469e+06	27.058
34:11	1.493e+06	1.201e+06 1.24 y	2.694e+06	49.630
34:18	1.432e+05	1.051e+05 1.36 y	2.483e+05	4.5740
34:54	1.539e+05	1.240e+05 1.24 y	2.779e+05	5.9048 1,2,3,4,7,8-HxCDD
35:01	4.713e+05	3.790e+05 1.24 y	8.503e+05	12.846 1,2,3,6,7,8-HxCDD
35:11	1.032e+05	8.746e+04 1.18 y	1.907e+05	3.5123
35:19	3.214e+05	2.444e+05 1.31 y	5.658e+05	11.285 1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 21 File: 141027D1 S: 15 I: 1 F: 4
Acquired: 28-OCT-14 01:50:12 Processed: 28-OCT-14 08:34:01

Total Concentration: 634.75 Unnamed Concentration: 345.447

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
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37:56	7.594e+06	7.227e+06	1.05 y	1.482e+07	345.45
38:46	6.261e+06	6.152e+06	1.02 y	1.241e+07	289.31

Totals class: TCDF EMPC

Entry #: 27

Run: 21 File: 141027D1 S: 15 I: 1 F: 1
 Acquired: 28-OCT-14 01:50:12 Processed: 28-OCT-14 08:34:01

Total Concentration: 167.37 Unnamed Concentration: 149.039

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
21:27	4.283e+04	5.842e+04	0.73 y	1.013e+05	1.2712	
22:02	1.298e+05	1.790e+05	0.73 y	3.089e+05	3.8775	
22:41	3.056e+05	3.694e+05	0.83 y	6.750e+05	8.4740	
23:12	4.264e+05	5.353e+05	0.80 y	9.617e+05	12.073	
23:35	3.704e+05	4.919e+05	0.75 y	8.623e+05	10.825	
24:00	1.784e+05	2.161e+05	0.83 y	3.945e+05	4.9530	
24:09	3.308e+05	4.318e+05	0.77 y	7.626e+05	9.5737	
24:18	4.594e+05	5.868e+05	0.78 y	1.046e+06	13.134	
24:39	6.692e+04	8.811e+04	0.76 y	1.550e+05	1.9462	
24:47	1.663e+05	2.050e+05	0.81 y	3.713e+05	4.6614	
24:55	3.234e+05	4.149e+05	0.78 y	7.383e+05	9.2687	
25:02	2.446e+05	3.123e+05	0.78 y	5.569e+05	6.9913	
25:27	3.081e+05	3.967e+05	0.78 y	7.049e+05	8.8489	
25:42	2.104e+05	2.810e+05	0.75 y	4.913e+05	6.1683	
25:52	7.677e+04	9.069e+04	0.85 y	1.675e+05	2.1023	
26:04	1.015e+05	1.358e+05	0.75 y	2.373e+05	2.9786	
26:09	9.420e+04	1.183e+05	0.80 y	2.125e+05	2.6682	
26:16	6.340e+05	8.264e+05	0.77 y	1.460e+06	18.334	2,3,7,8-TCDF
26:35	8.934e+05	1.152e+06	0.78 y	2.046e+06	25.683	
26:49	4.227e+04	4.926e+04	0.86 y	9.153e+04	1.1491	
28:01	9.117e+05	5.577e+05	1.63 n	9.870e+05	12.391	

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 21 File: 141027D1 S: 15 I: 1 F: 1
Acquired: 28-OCT-14 01:50:12 Processed: 28-OCT-14 08:34:01

Total Concentration: 27.590 Unnamed Concentration: 27.590

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
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28:00	1.358e+06	8.886e+05	1.53	y	2.247e+06
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Totals class: PeCDF EMPC

Entry #: 31

Run: 21 File: 141027D1 S: 15 I: 1 F: 2
 Acquired: 28-OCT-14 01:50:12 Processed: 28-OCT-14 08:34:01

Total Concentration: 88.039 Unnamed Concentration: 75.614

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
29:20	6.533e+05		4.198e+05	1.56	y	1.073e+06	13.179	
29:28	1.577e+06		1.020e+06	1.55	y	2.597e+06	31.891	
29:49	9.853e+04		5.786e+04	1.70	y	1.564e+05	1.9206	
30:00	5.467e+05		3.341e+05	1.64	y	8.808e+05	10.817	
30:13	1.008e+05		6.401e+04	1.58	y	1.648e+05	2.0242	
30:23	2.280e+05		1.466e+05	1.55	y	3.746e+05	4.3958	1,2,3,7,8-PeCDF
30:37	3.542e+05		2.241e+05	1.58	y	5.783e+05	7.1020	
31:05	2.739e+04		1.782e+04	1.54	y	4.521e+04	0.55518	
31:11	2.535e+05		1.522e+05	1.67	y	4.057e+05	4.9819	
31:16	3.707e+05		2.538e+05	1.46	y	6.244e+05	8.0295	2,3,4,7,8-PeCDF
31:19	1.113e+05		7.287e+04	1.53	y	1.842e+05	2.2618	
31:34	1.984e+04		1.325e+04	1.50	y	3.309e+04	0.40635	
32:09	2.351e+04		1.898e+04	1.24	n	3.868e+04	0.47502	

Totals class: HxCDF EMPC

Entry #: 33

Run: 21 File: 141027D1 S: 15 I: 1 F: 3
 Acquired: 28-OCT-14 01:50:12 Processed: 28-OCT-14 08:34:01

Total Concentration: 100.49 Unnamed Concentration: 78.881

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
32:47	4.701e+05	3.611e+05	1.30 y	8.312e+05	10.351
32:57	1.758e+06	1.397e+06	1.26 y	3.155e+06	39.290
33:10	5.286e+04	3.991e+04	1.32 y	9.277e+04	1.1553
33:19	7.382e+04	5.898e+04	1.25 y	1.328e+05	1.6538
33:31	8.673e+05	6.762e+05	1.28 y	1.543e+06	19.221
33:53	1.844e+05	1.484e+05	1.24 y	3.329e+05	4.1456
33:59	3.819e+05	3.000e+05	1.27 y	6.819e+05	8.0255 1,2,3,4,7,8-HxCDF
34:07	2.761e+05	2.223e+05	1.24 y	4.985e+05	5.7840 1,2,3,6,7,8-HxCDF
34:17	2.326e+04	1.875e+04	1.24 y	4.201e+04	0.52311
34:25	3.118e+04	2.938e+04	1.06 y	6.057e+04	0.75428
34:32	3.881e+04	3.474e+04	1.12 y	7.355e+04	0.91595
34:44	3.057e+05	2.304e+05	1.33 y	5.361e+05	6.7765 2,3,4,6,7,8-HxCDF
35:42	4.191e+04	3.040e+04	1.38 y	7.231e+04	1.0280 1,2,3,7,8,9-HxCDF
35:46	3.774e+04	3.215e+04	1.17 y	6.989e+04	0.87035

Totals class: HpCDF EMPC

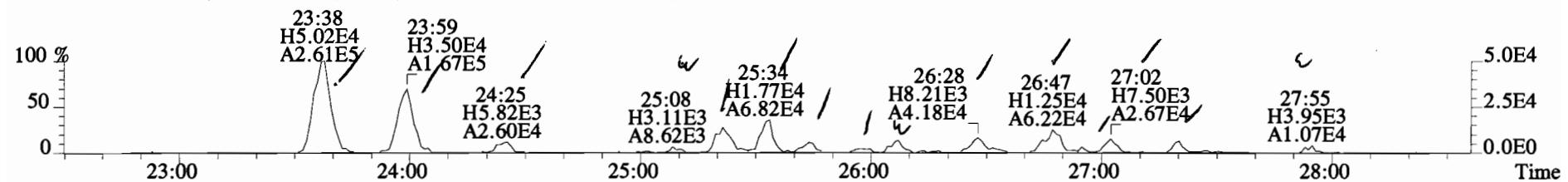
Entry #: 35

Run: 21 File: 141027D1 S: 15 I: 1 F: 4
Acquired: 28-OCT-14 01:50:12 Processed: 28-OCT-14 08:34:01

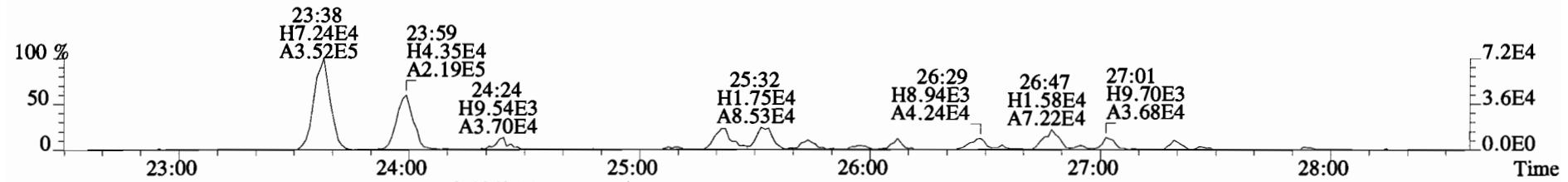
Total Concentration: 144.50 Unnamed Concentration: 80.086

RT	m1 Resp	m2 Resp RA	Resp Concentration	Name
37:33	2.116e+06	1.949e+06 1.09 y	4.066e+06 59.076	1,2,3,4,6,7,8-HpCDF
37:56	1.274e+05	1.070e+05 1.19 y	2.344e+05 3.7203	
38:08	2.517e+06	2.294e+06 1.10 y	4.811e+06 76.366	
39:19	1.657e+05	1.405e+05 1.18 y	3.062e+05 5.3343	1,2,3,4,7,8,9-HpCDF

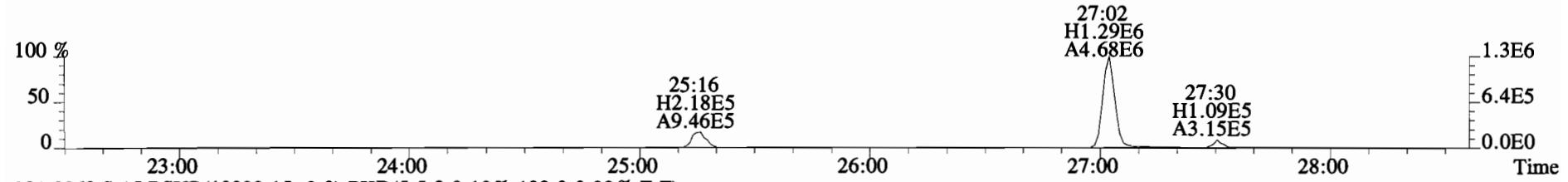
File:141027D1 #1-552 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 319.8965 S:15 BSB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



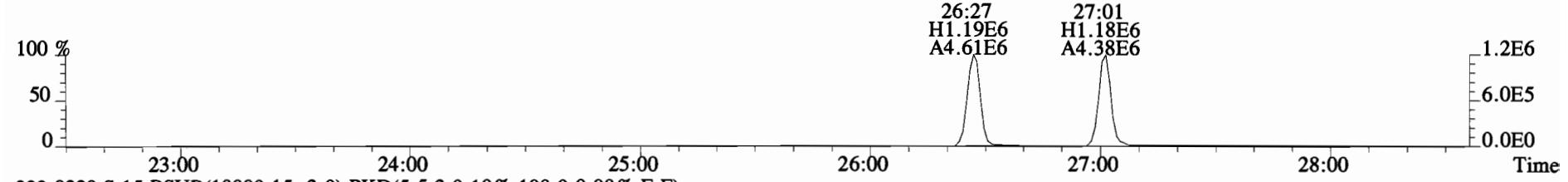
321.8936 S:15 BSB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



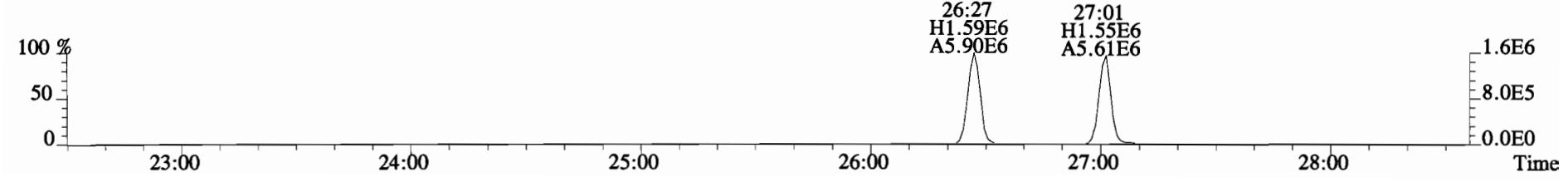
327.8847 S:15 BSB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



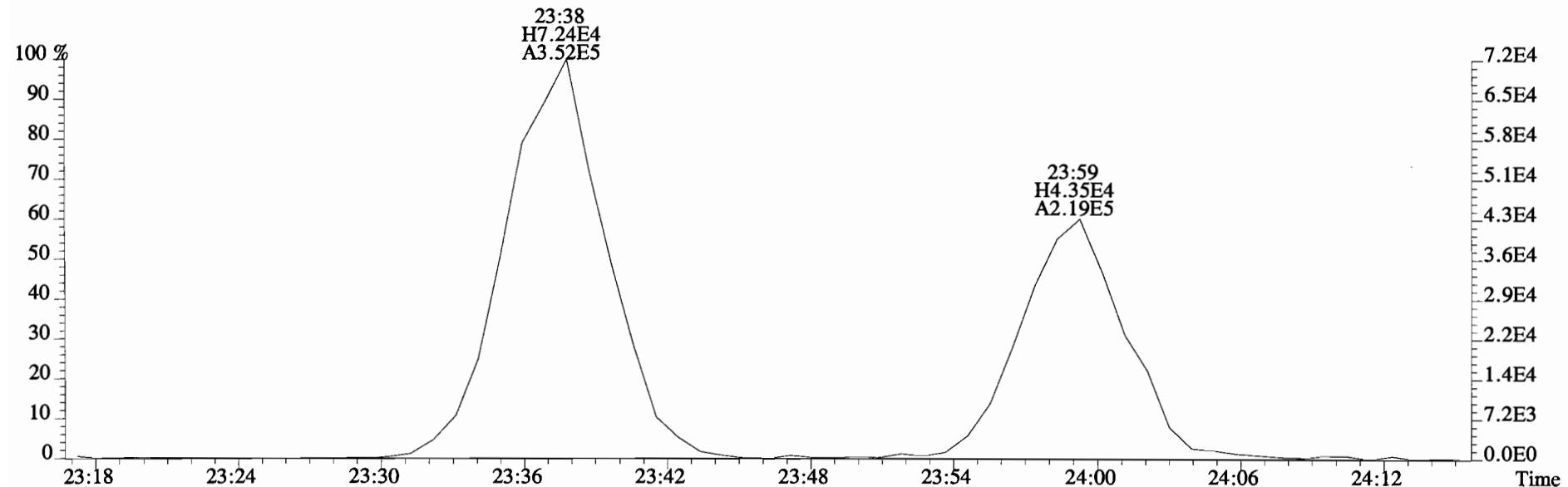
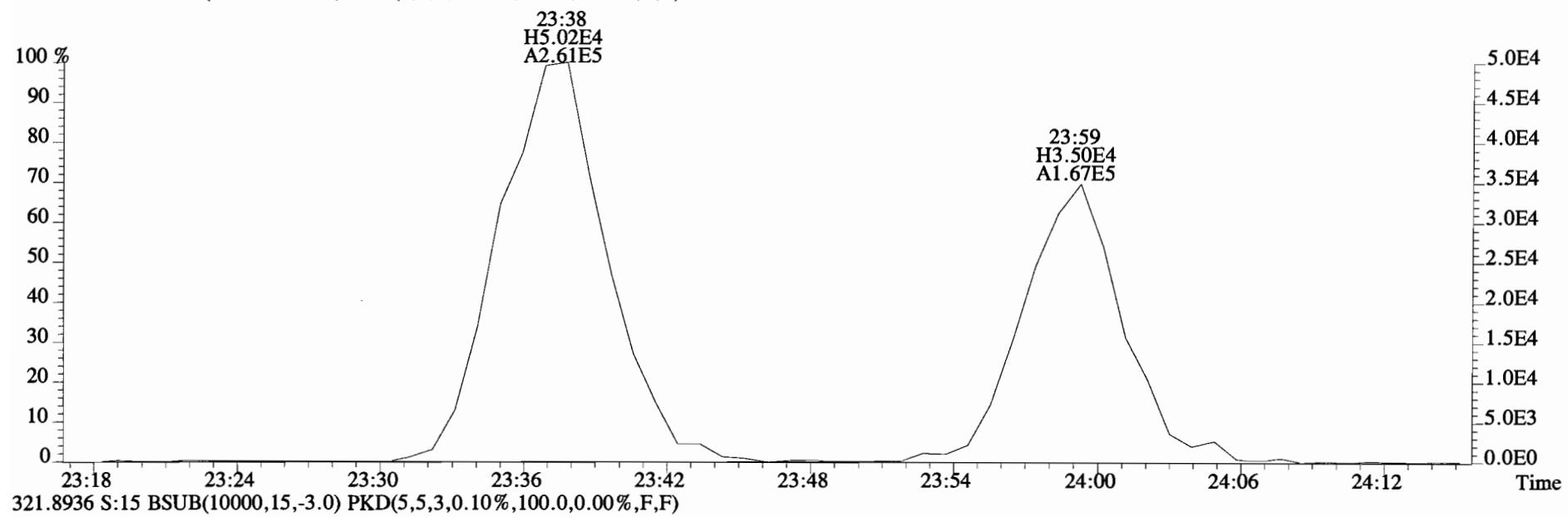
331.9368 S:15 BSB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



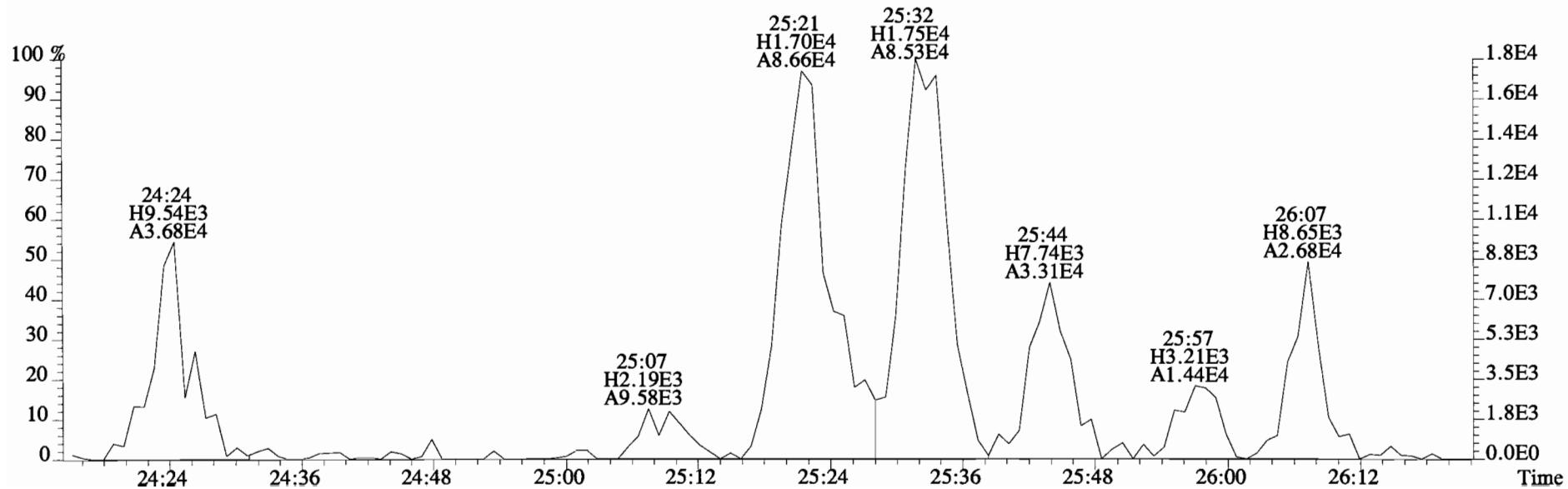
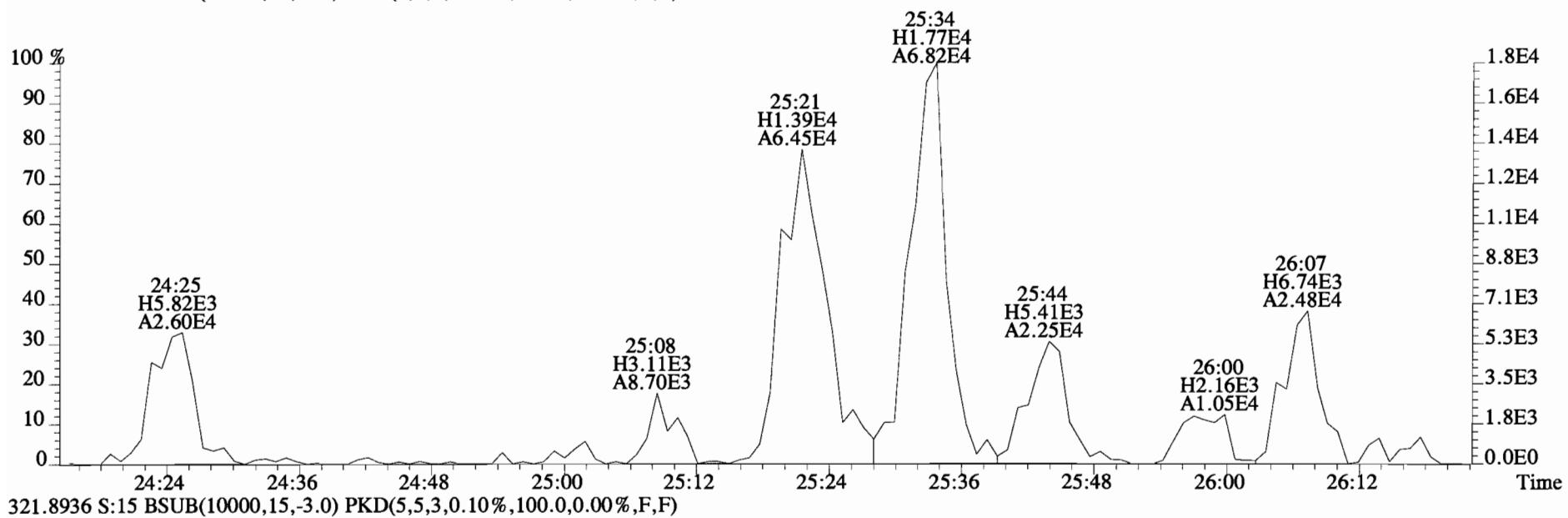
333.9339 S:15 BSB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



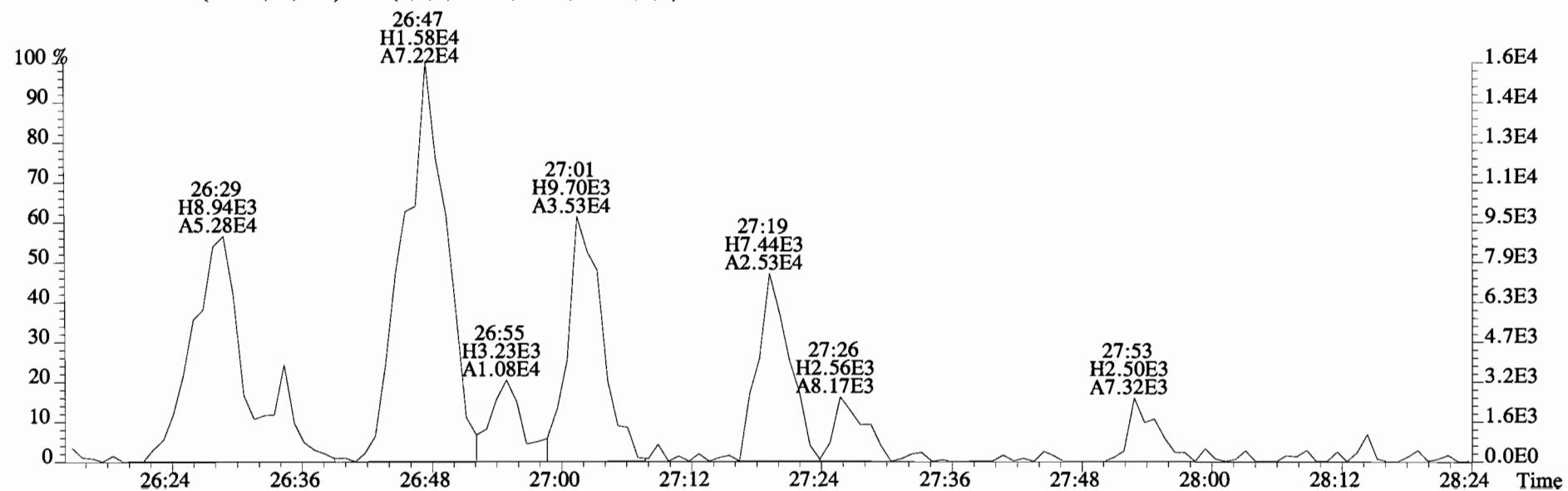
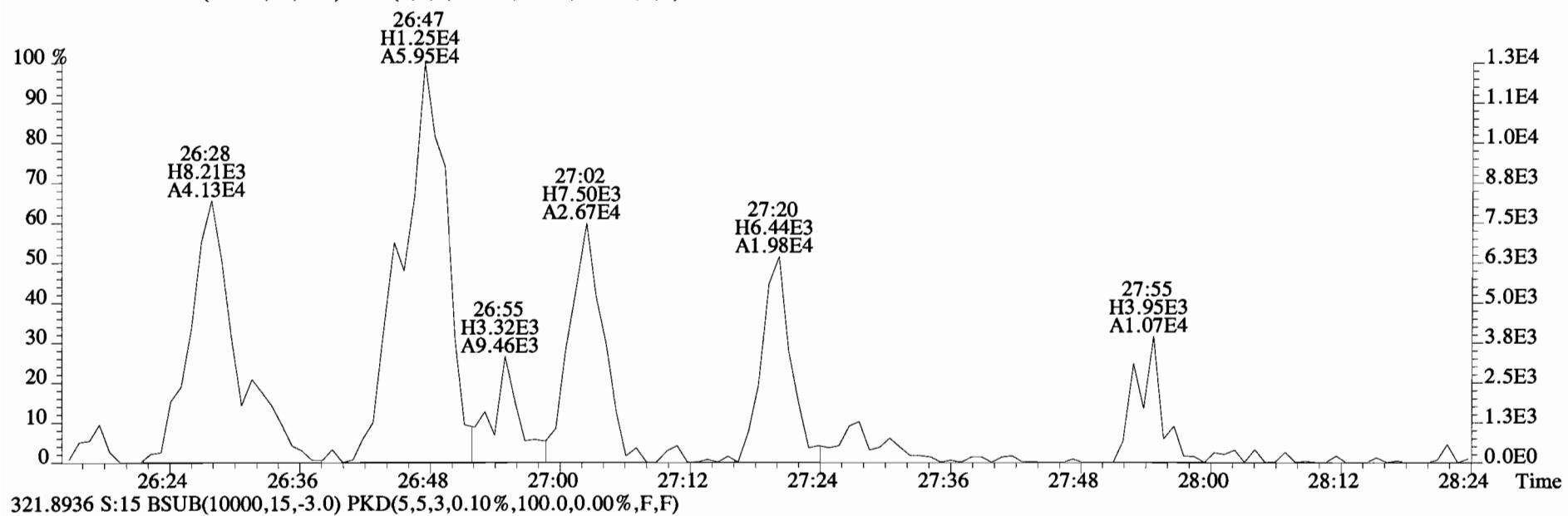
File:141027D1 #1-552 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



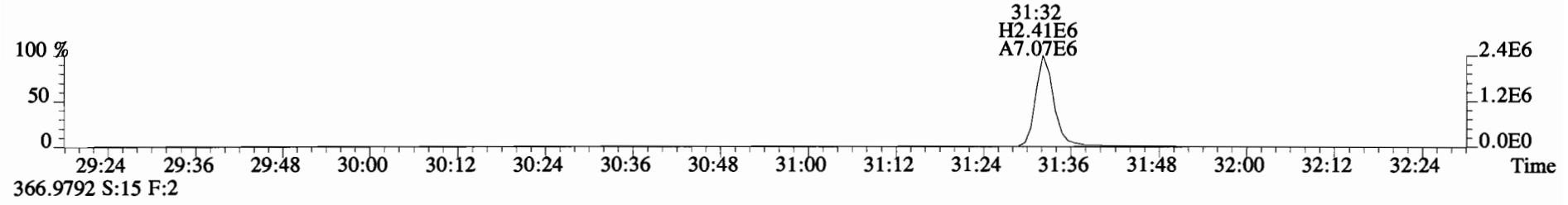
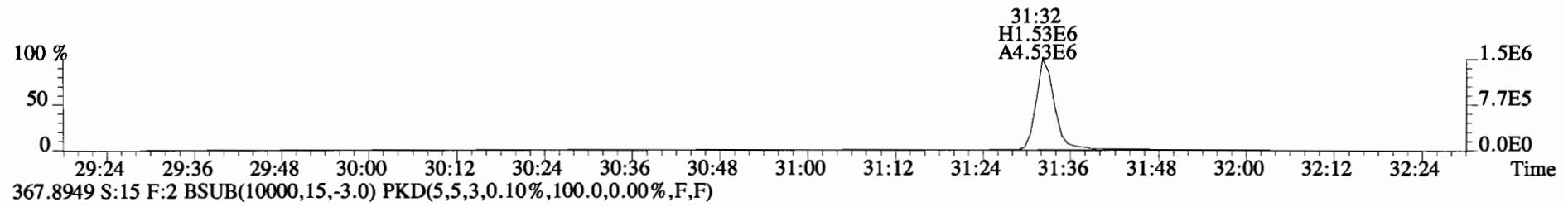
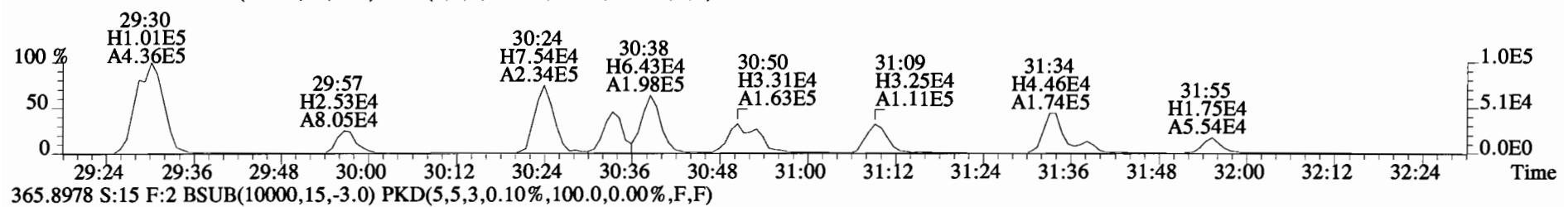
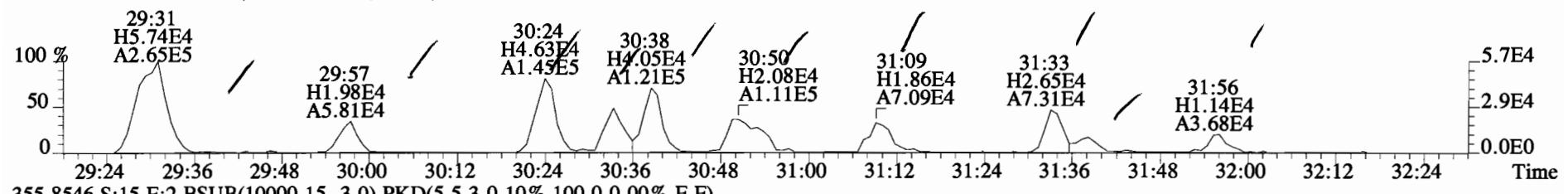
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 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
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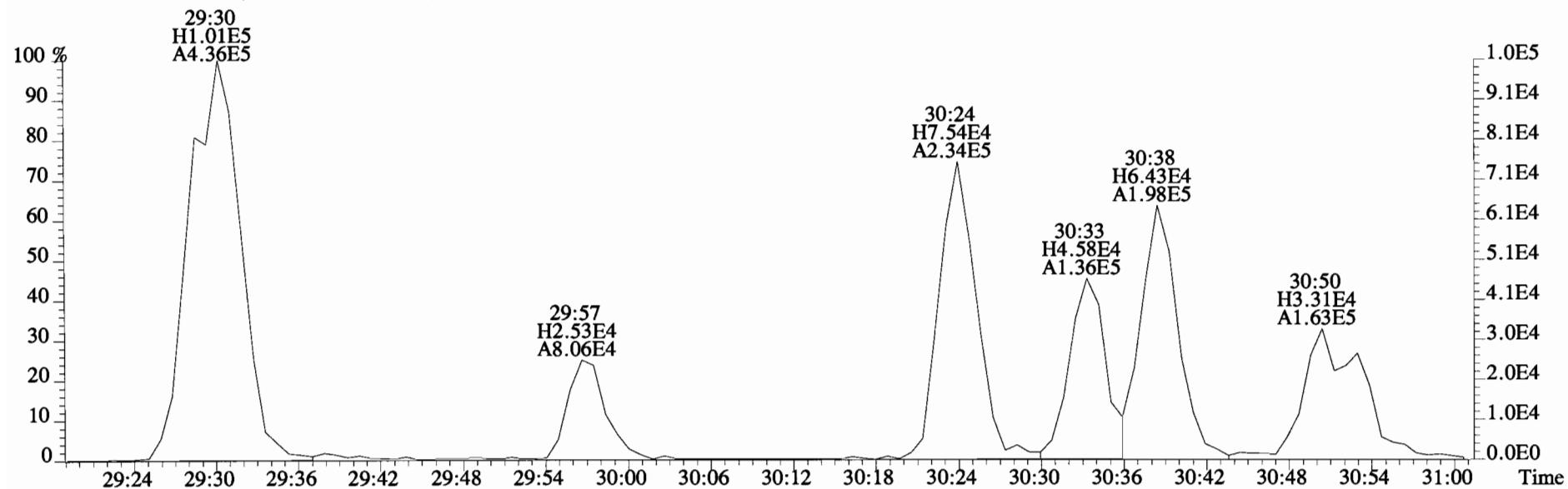
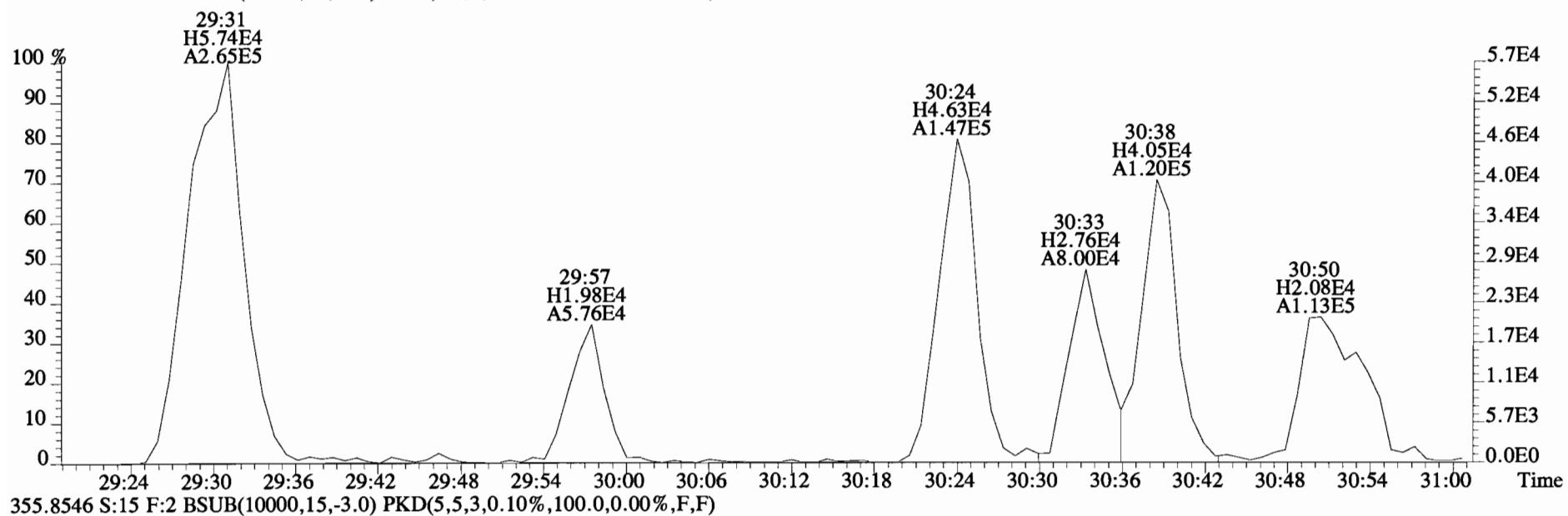
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 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
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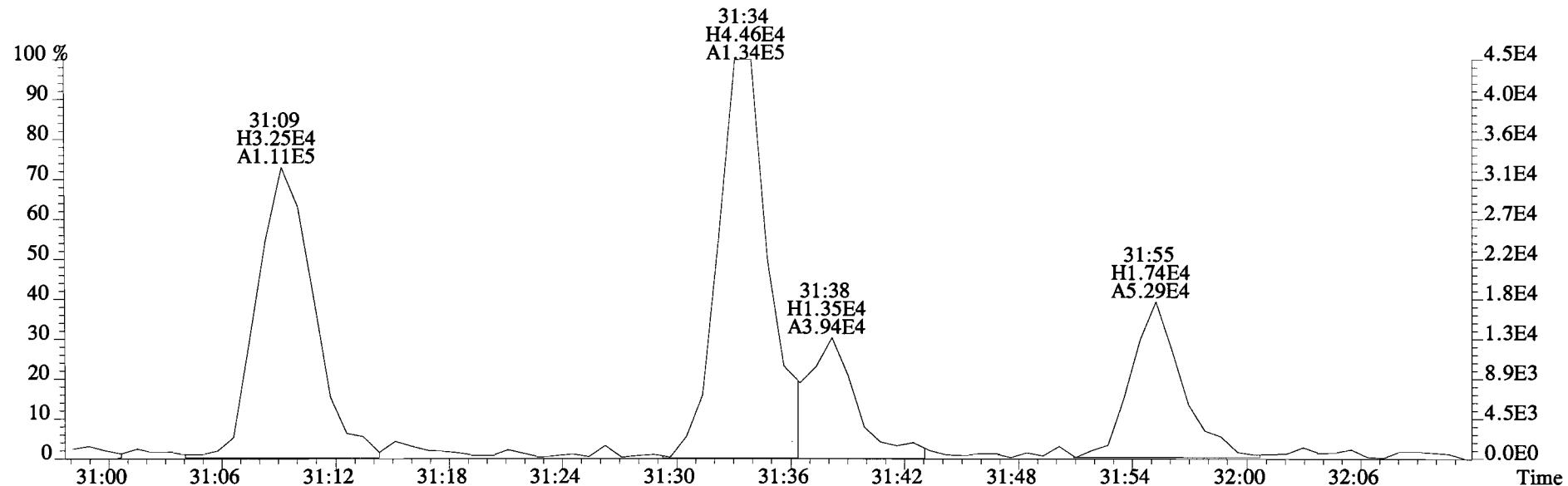
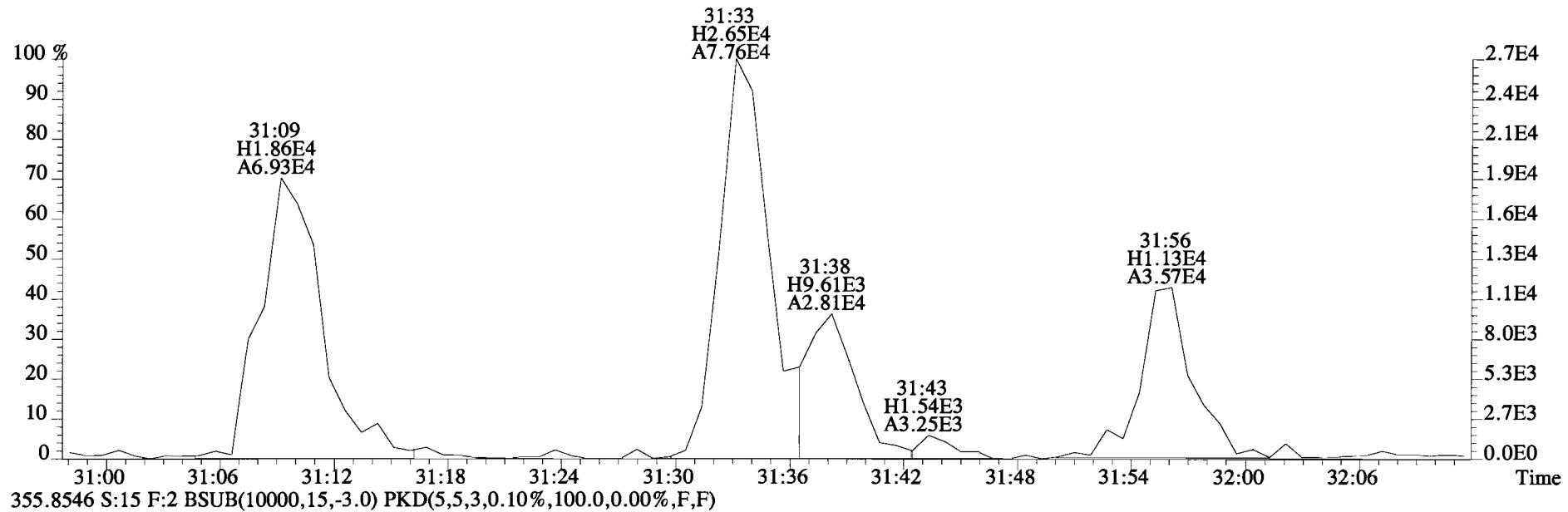
File:141027D1 #1-256 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 353.8576 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



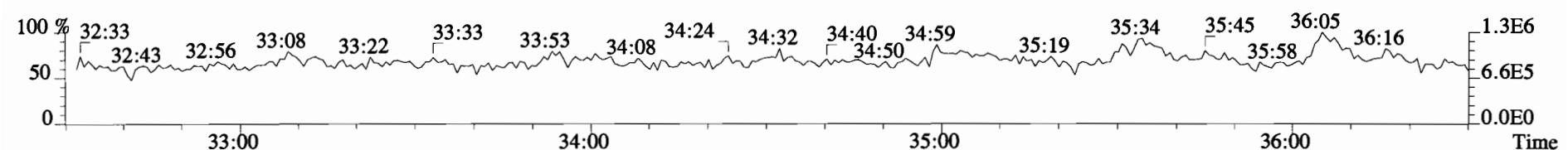
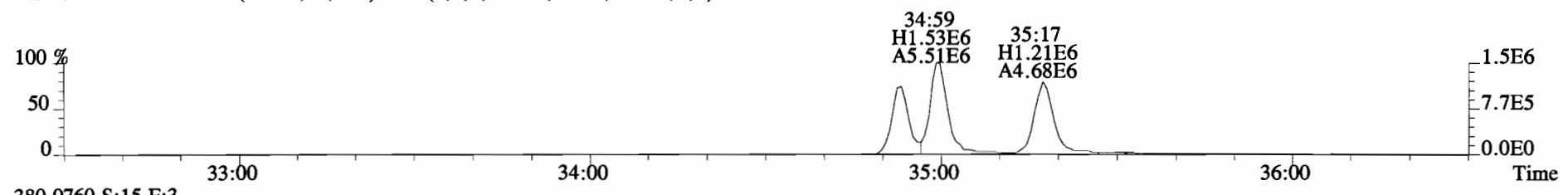
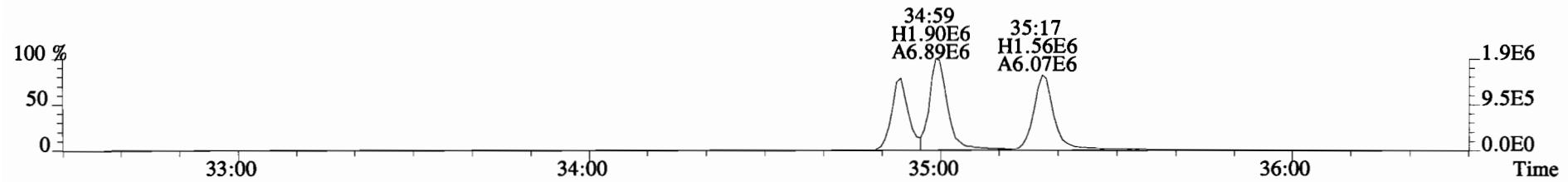
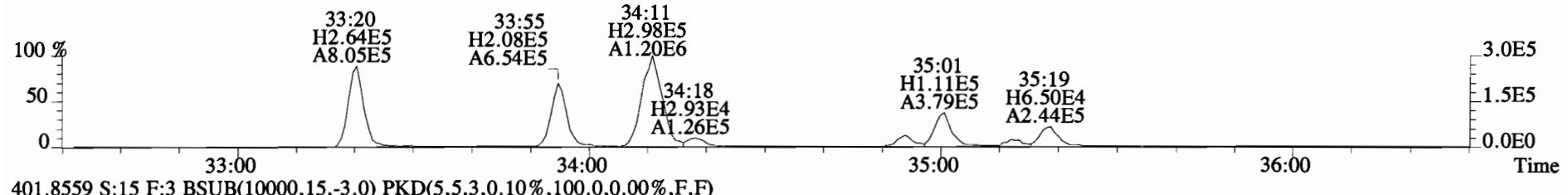
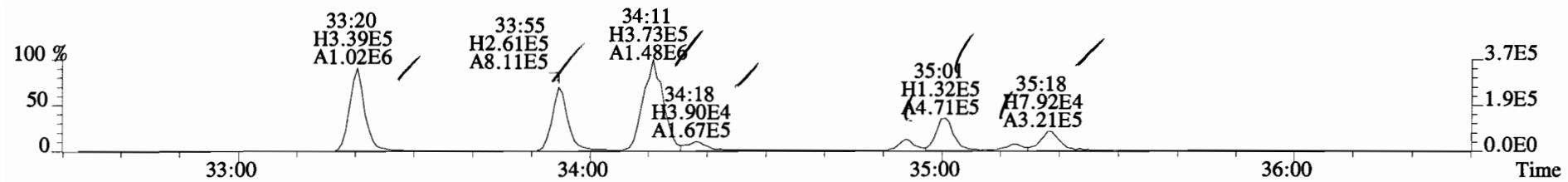
File:141027D1 #1-256 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 353.8576 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



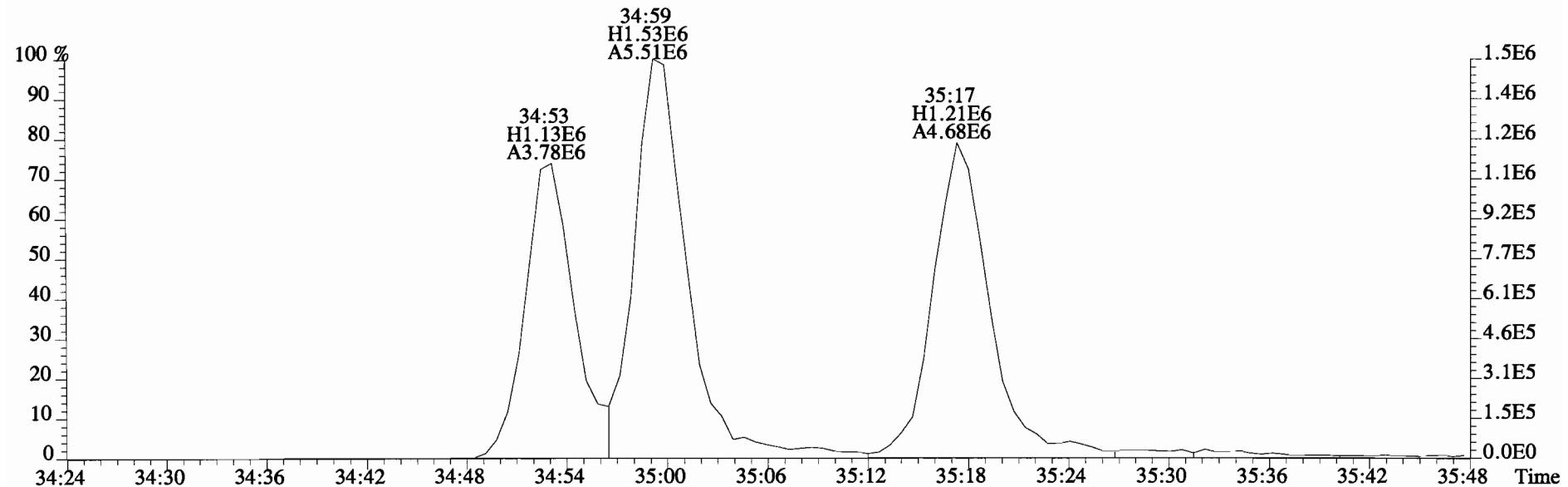
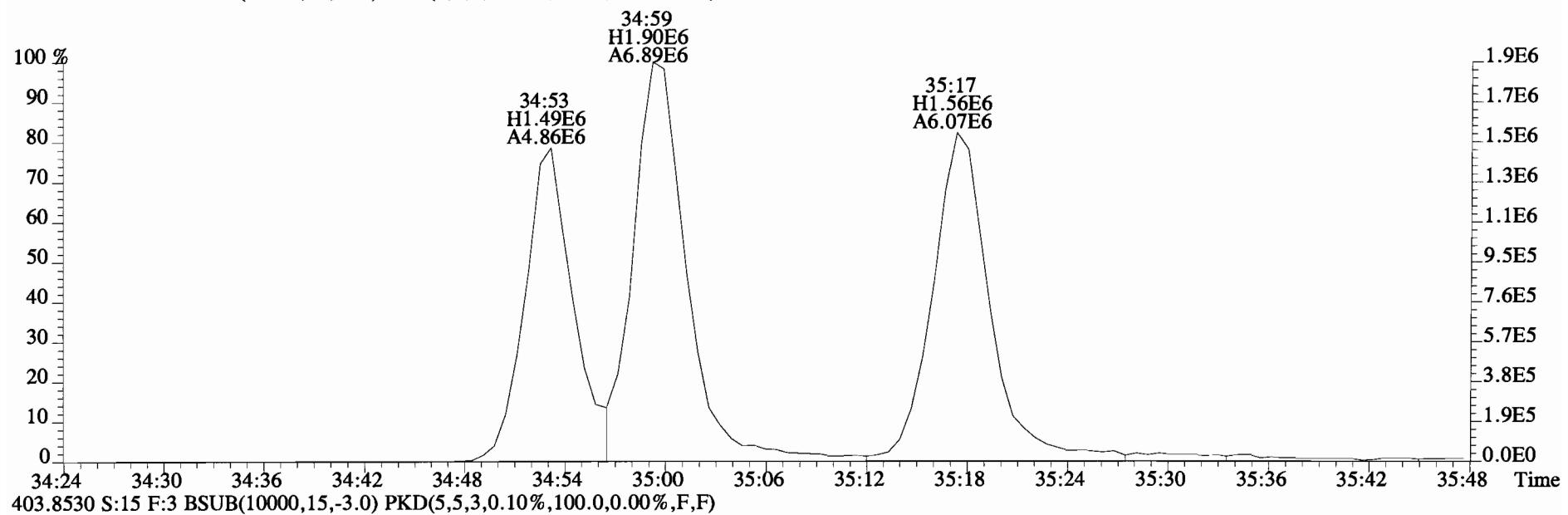
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353.8576 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



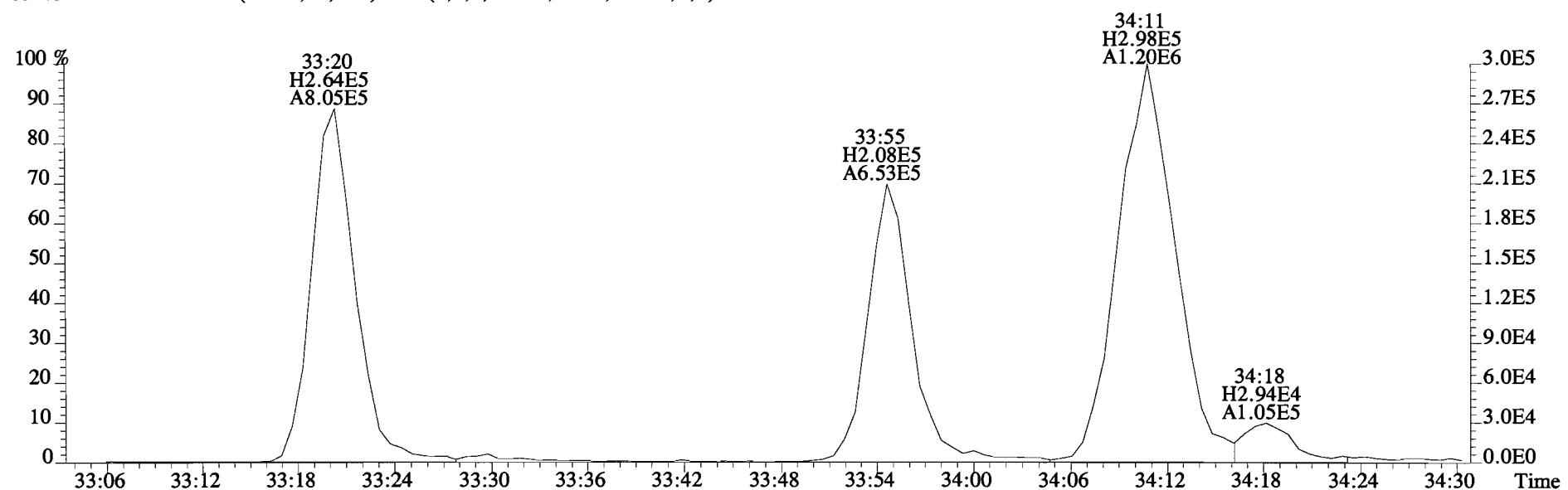
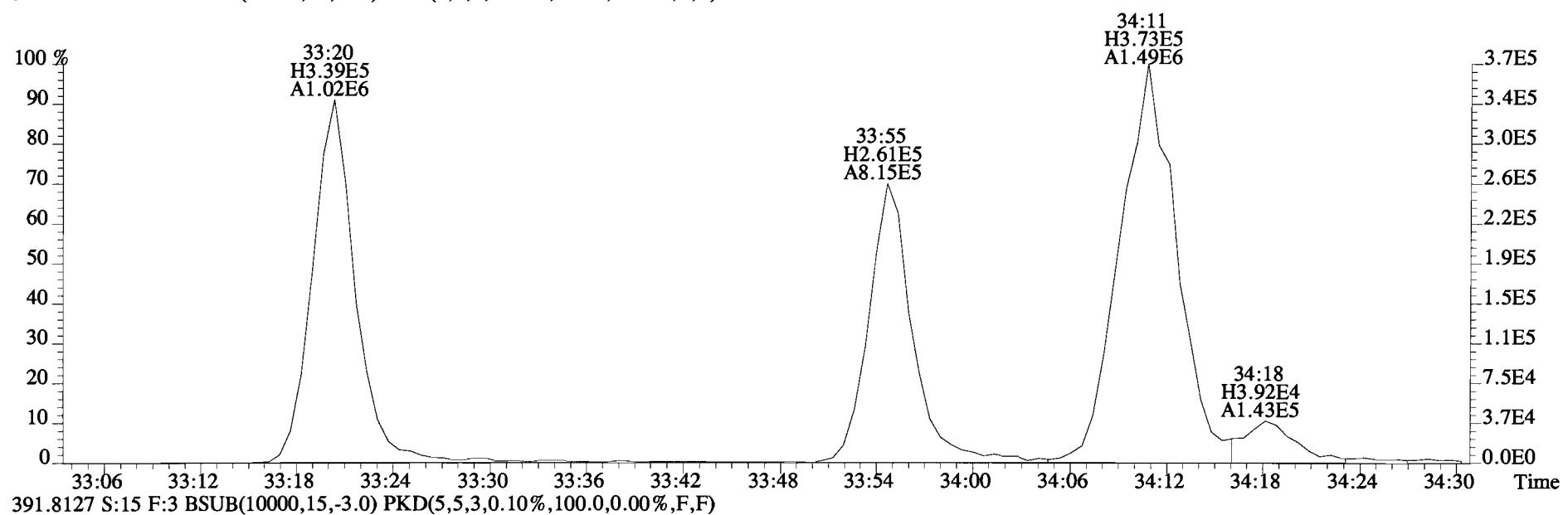
File:141027D1 #1-385 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



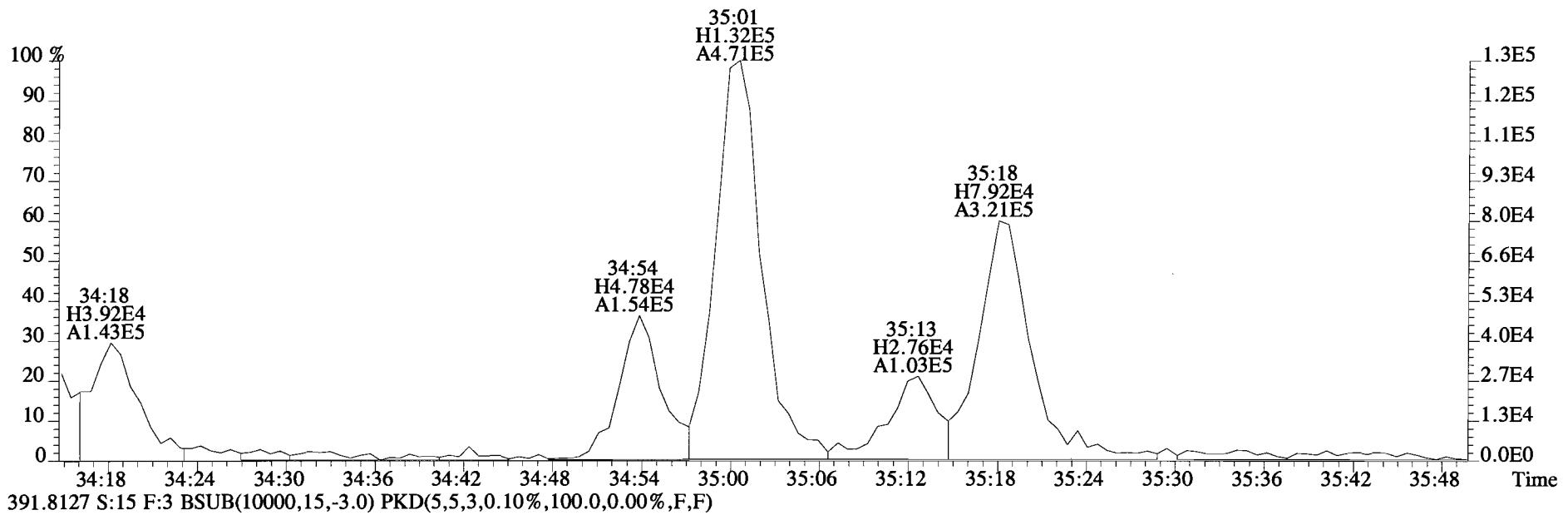
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Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
401.8559 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



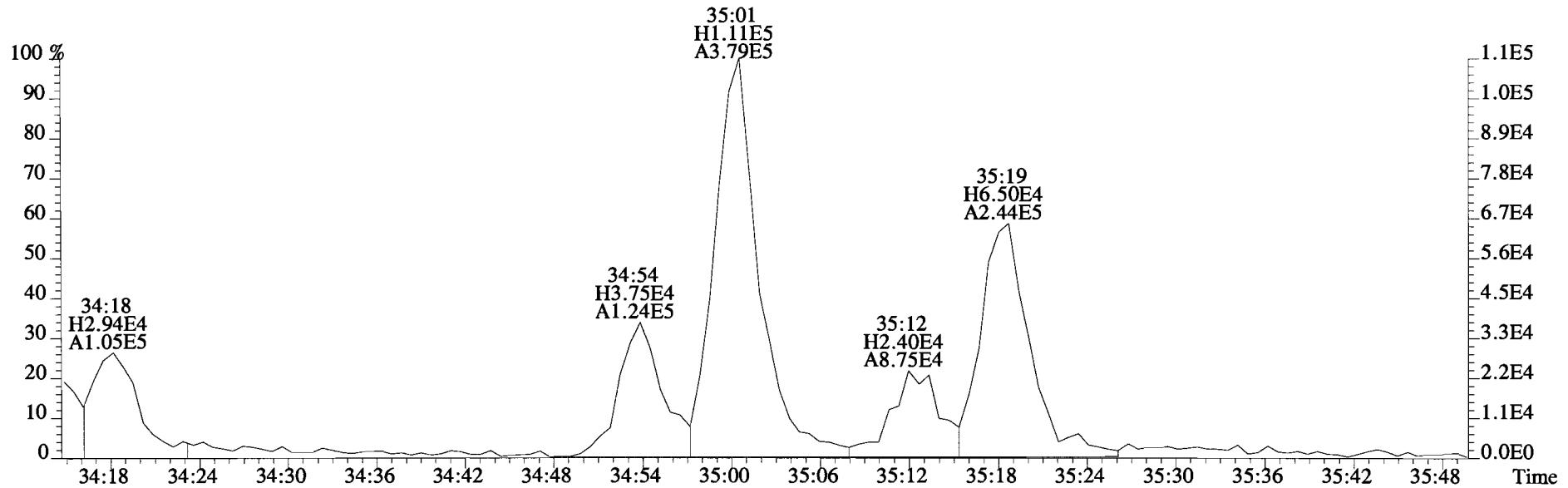
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389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



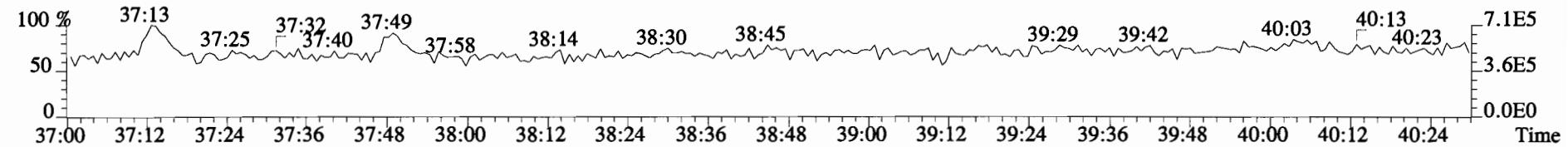
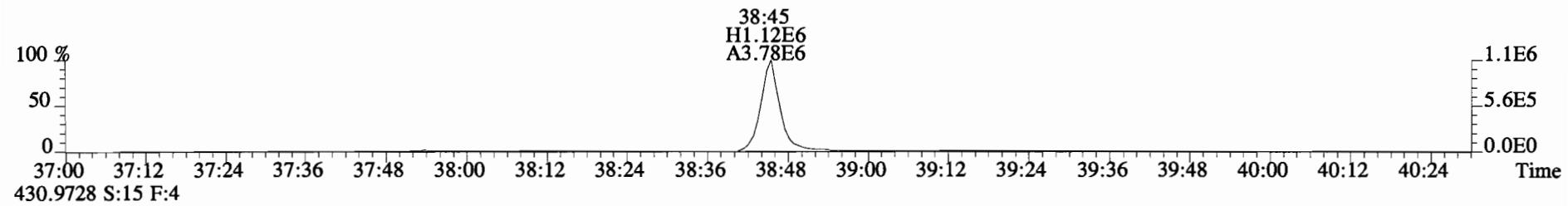
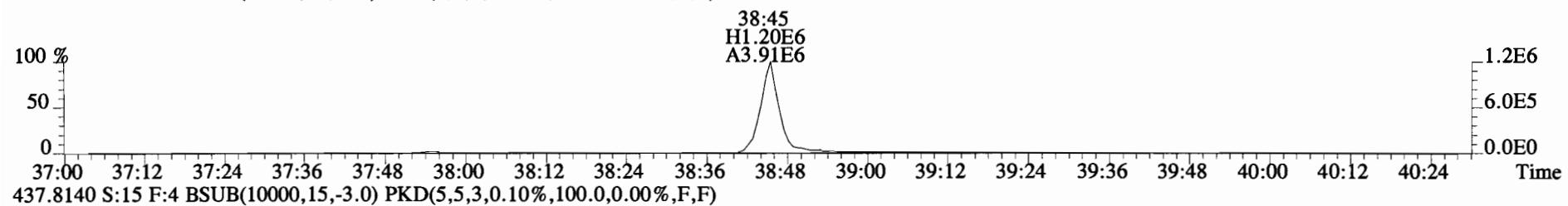
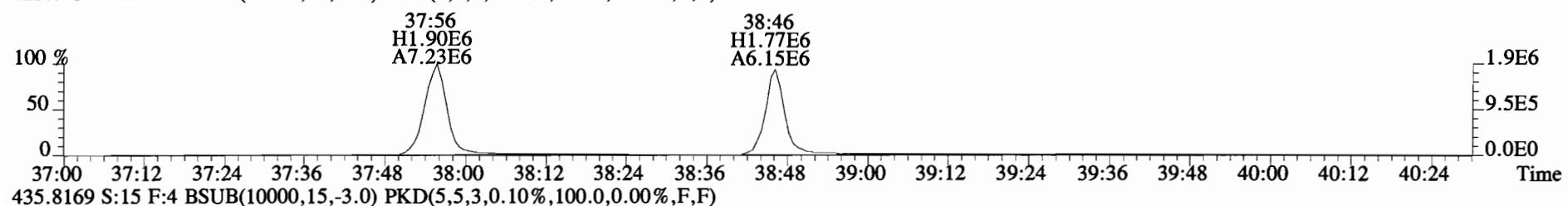
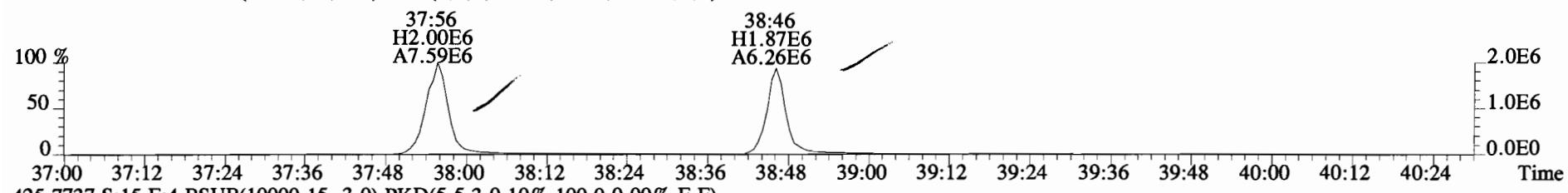
File:141027D1 #1-385 Acq:28-OCT-2014 01:50:12 GC EI + Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



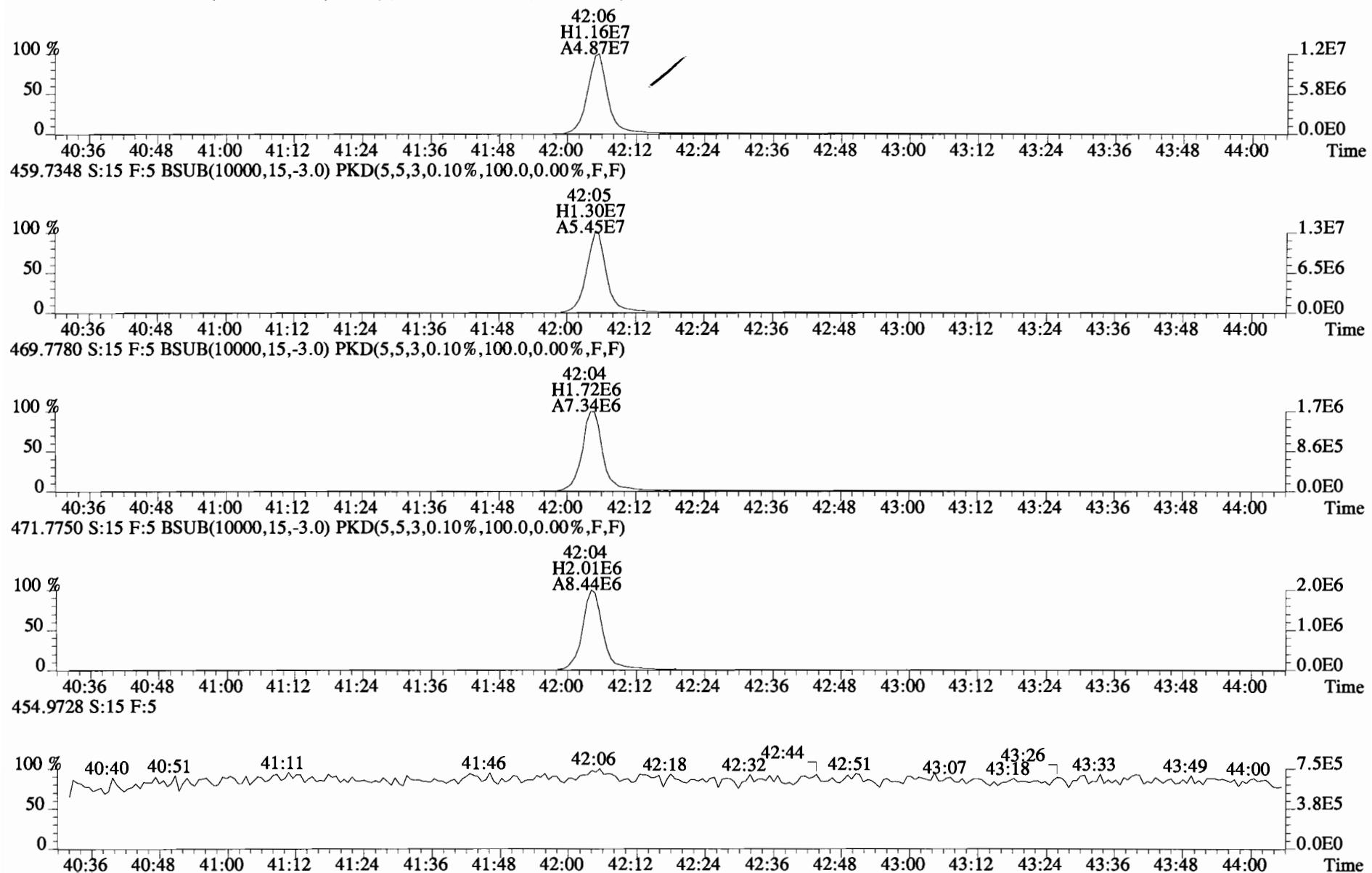
391.8127 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



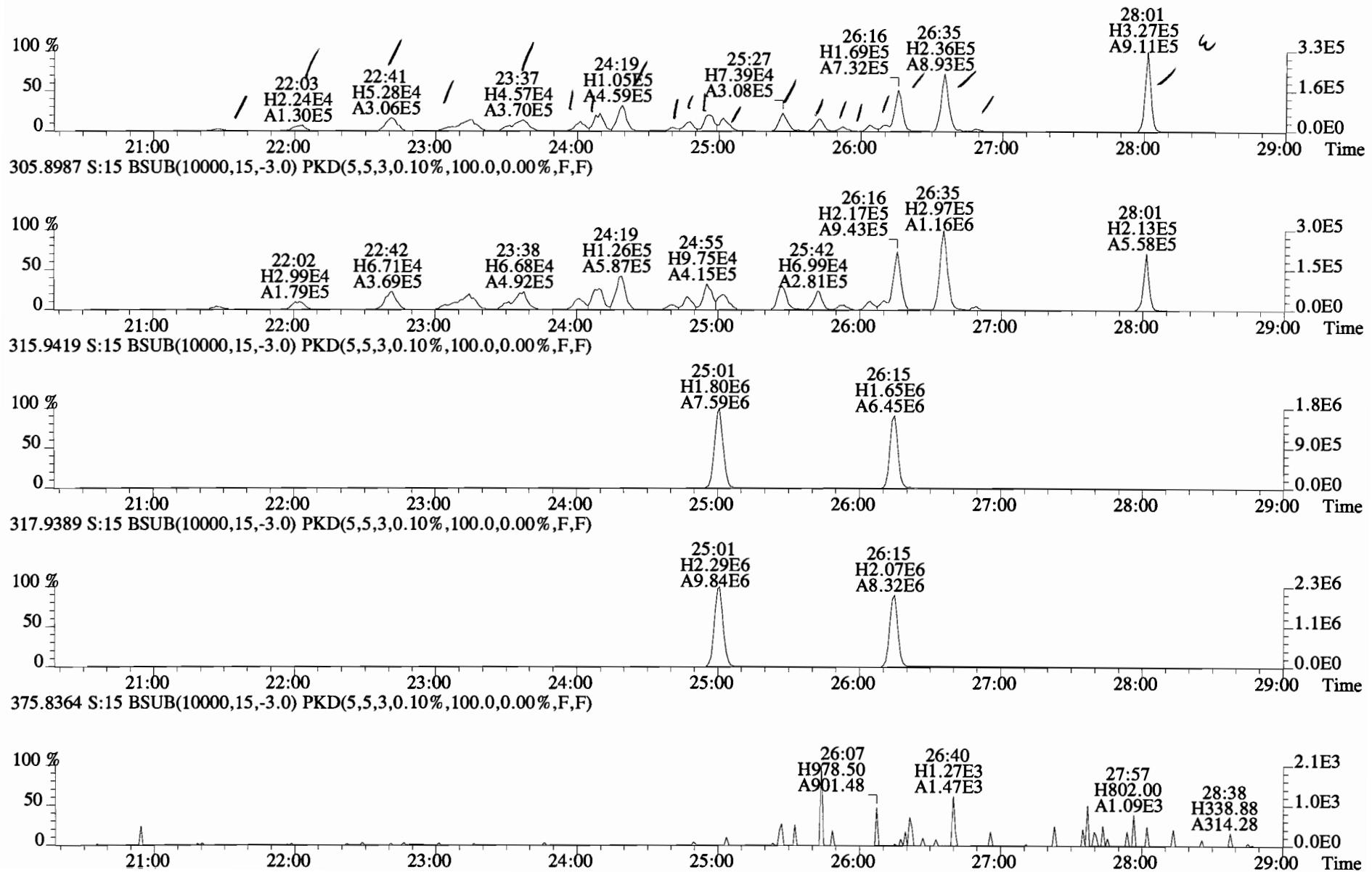
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 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 423.7767 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



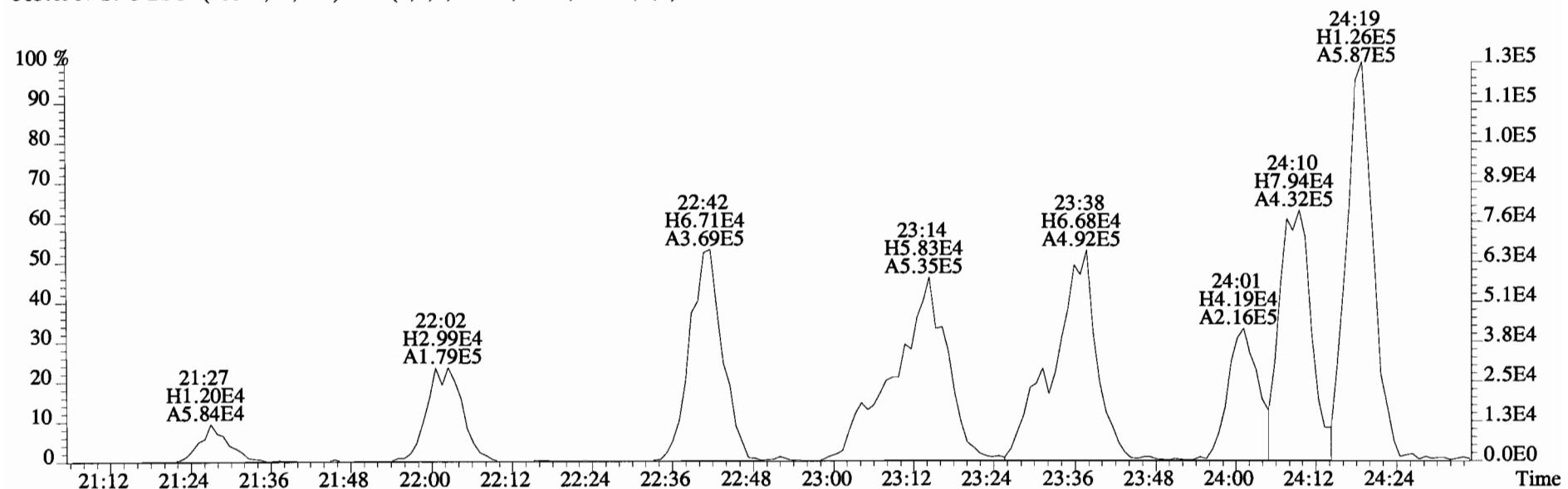
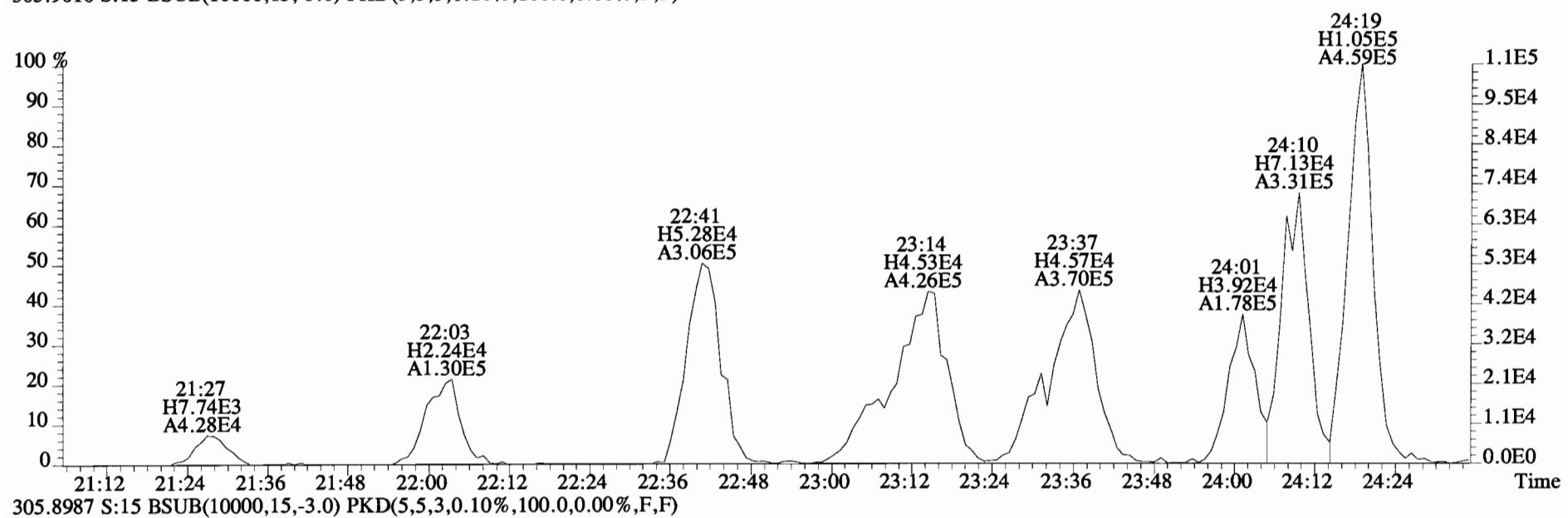
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457.7377 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



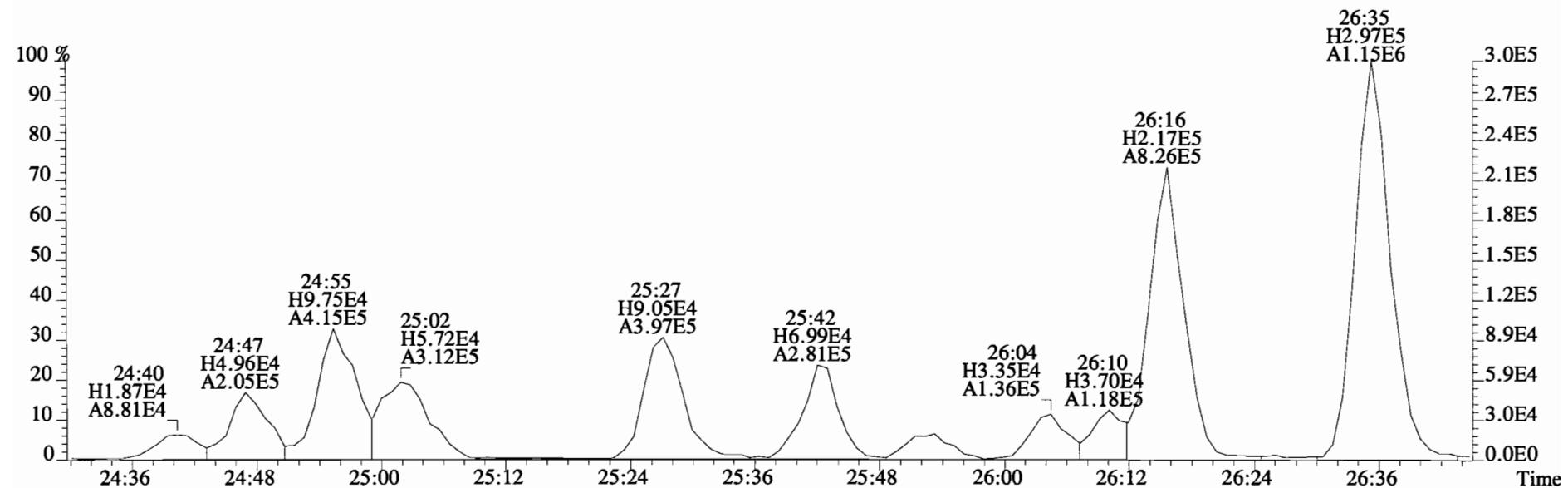
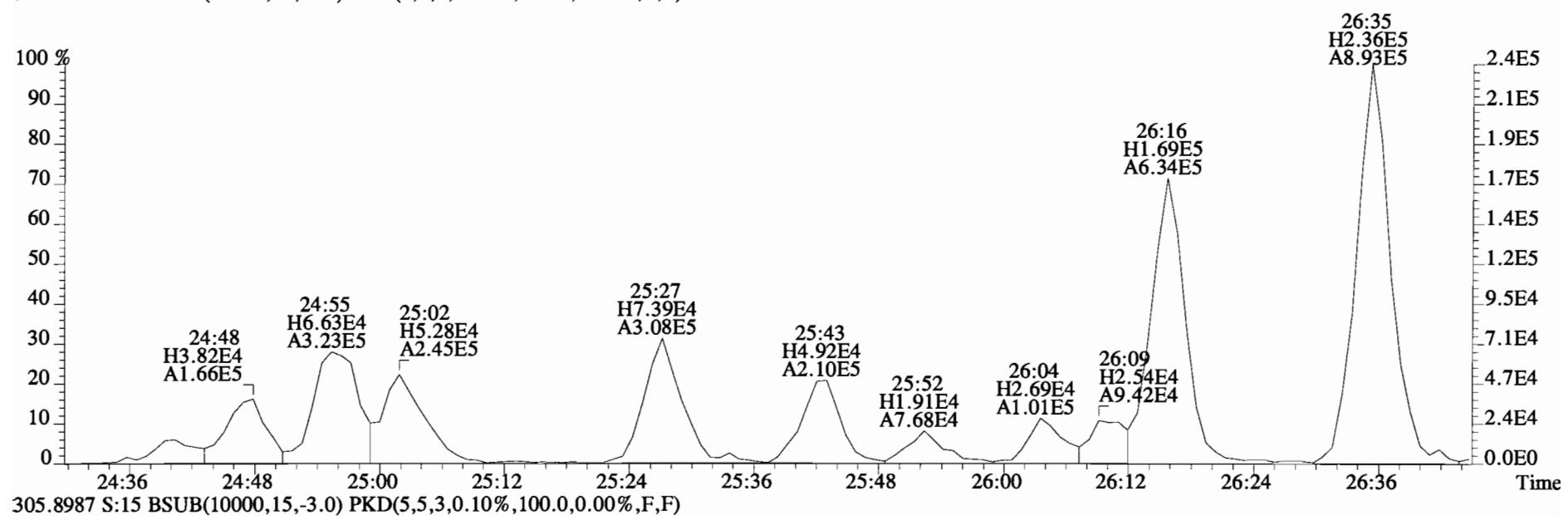
File:141027D1 #1-552 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



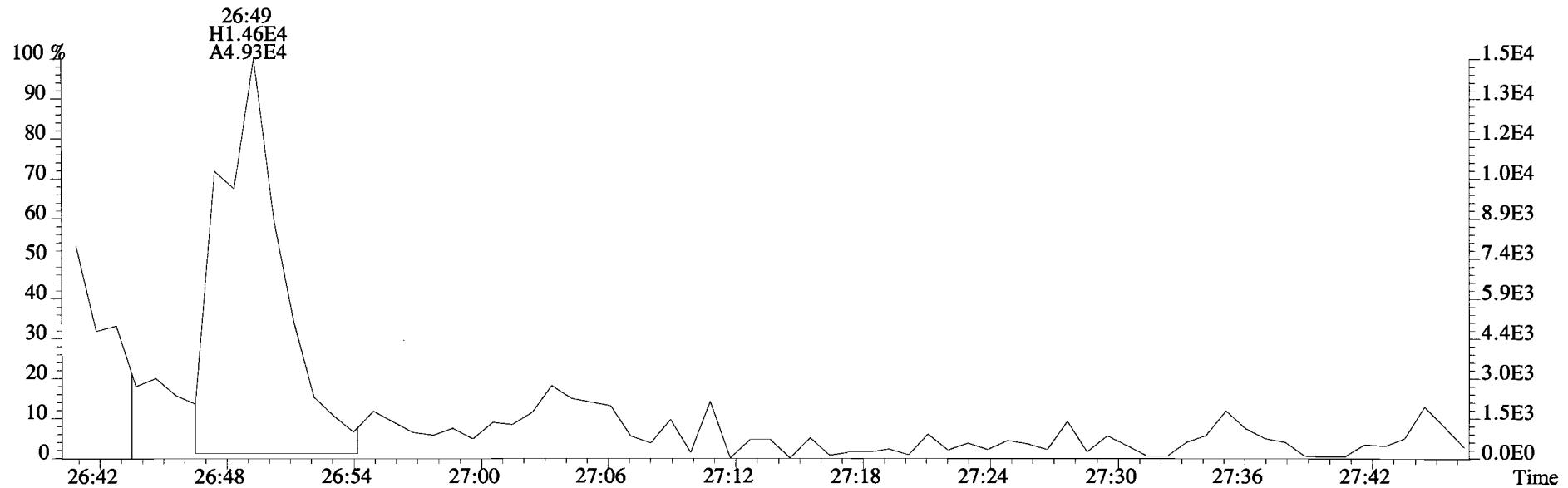
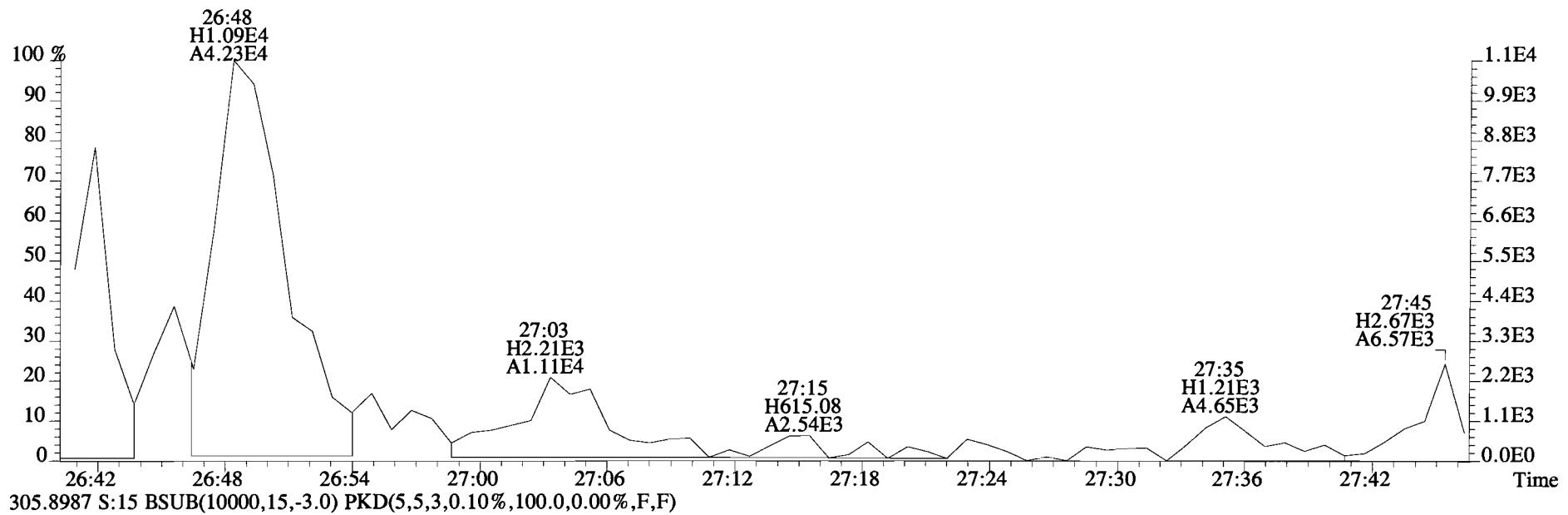
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 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
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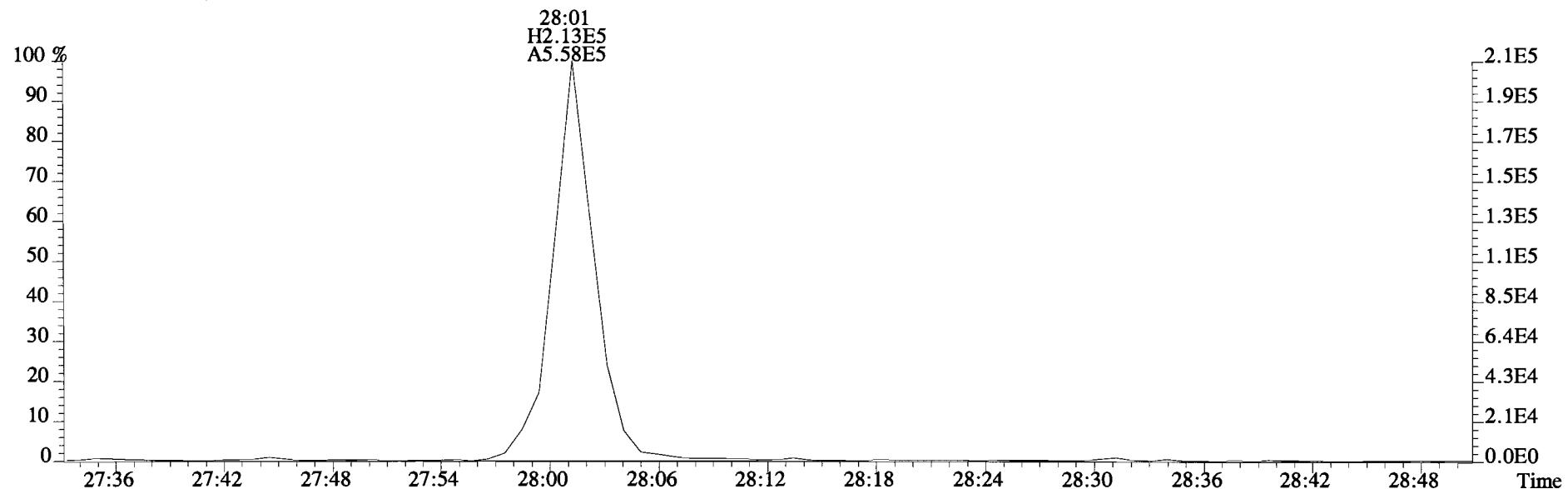
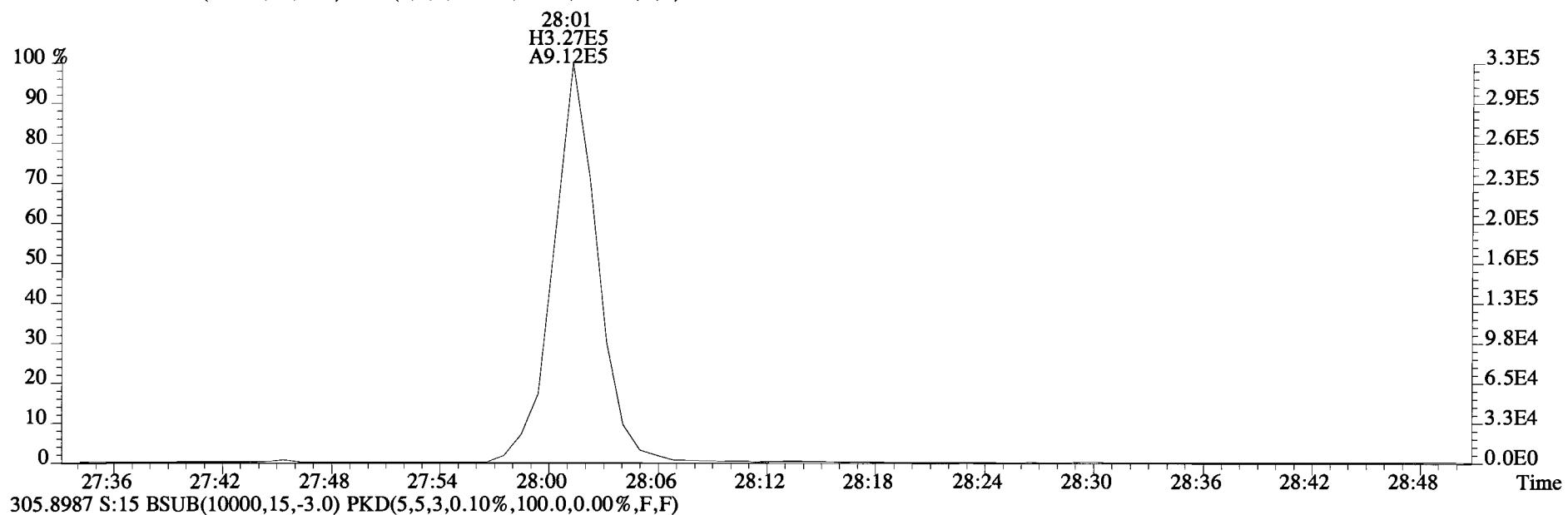
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Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



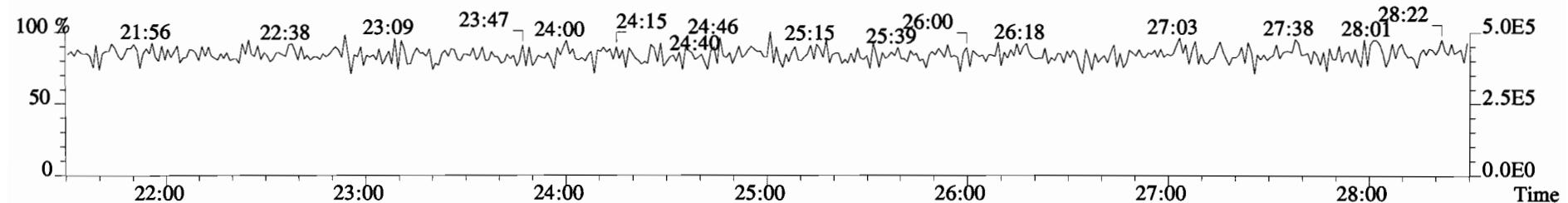
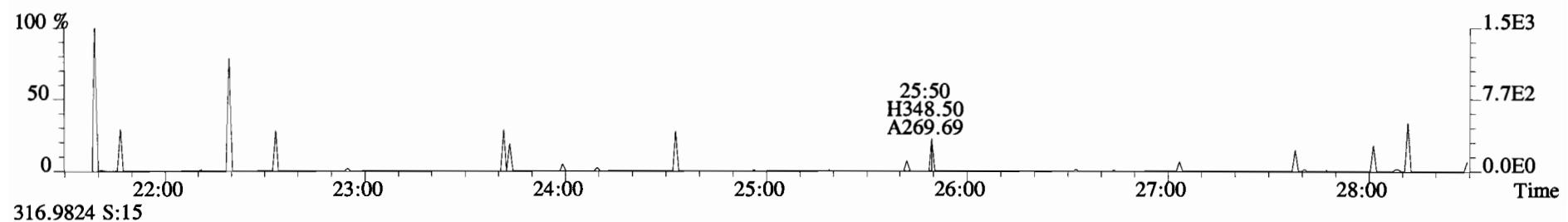
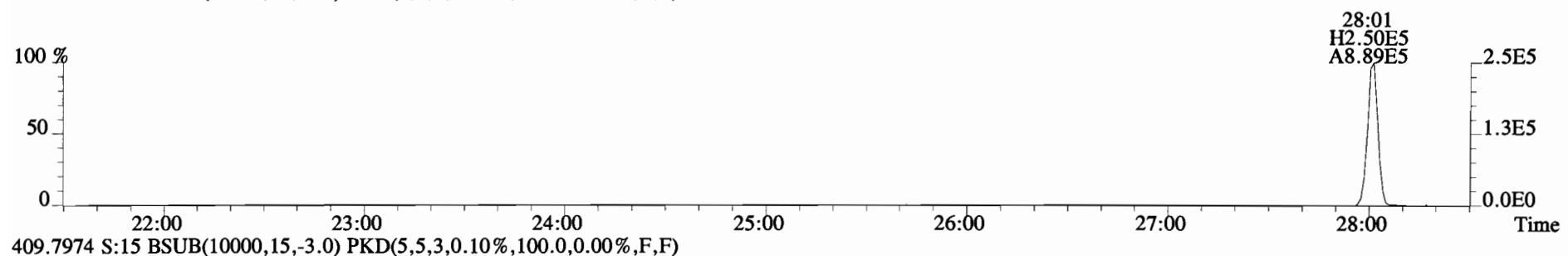
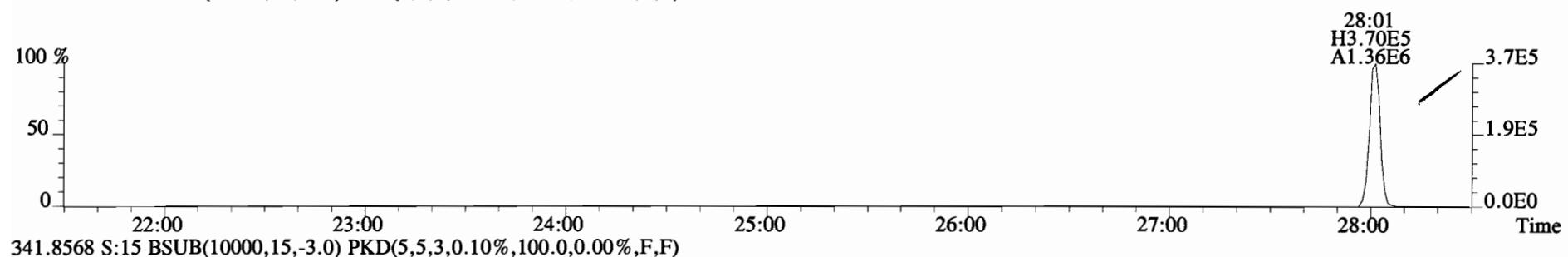
File:141027D1 #1-552 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
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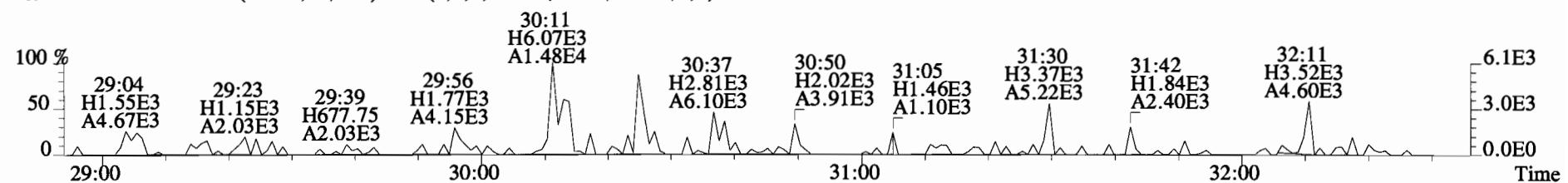
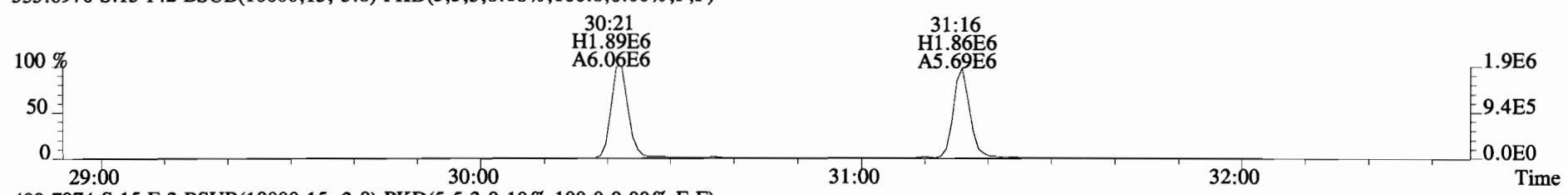
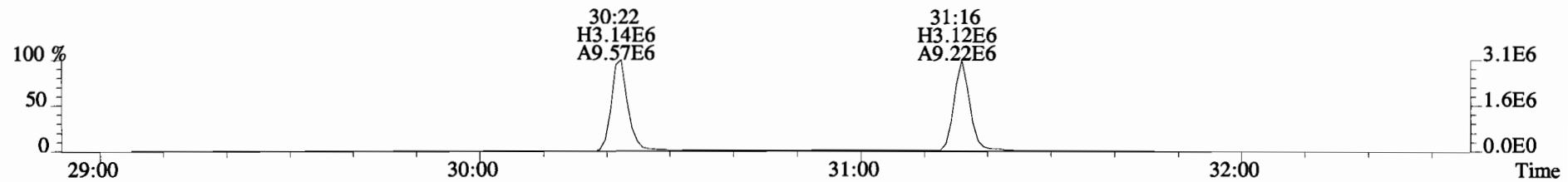
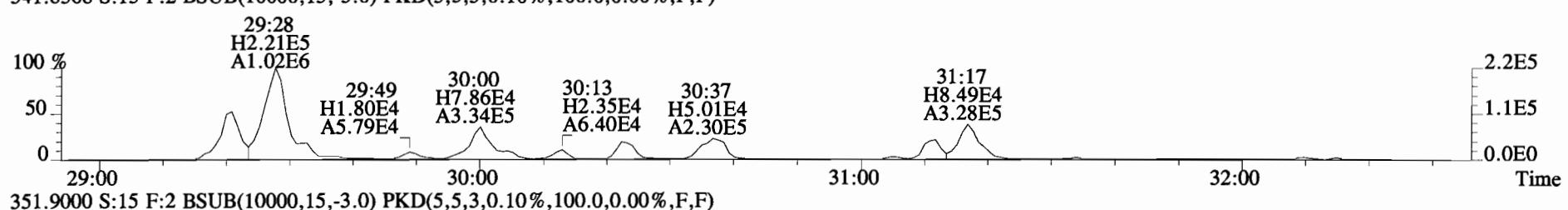
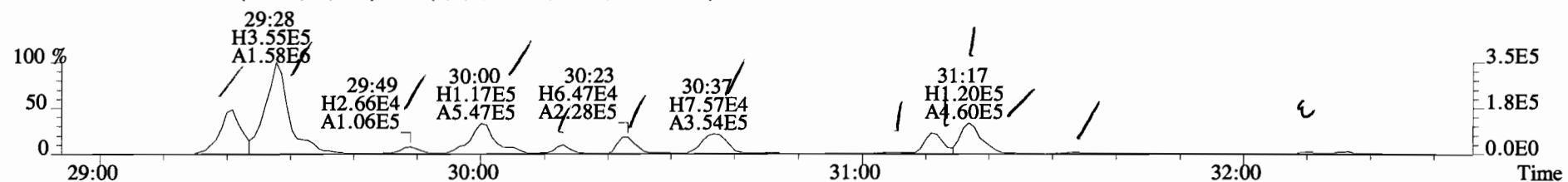
File:141027D1 #1-552 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



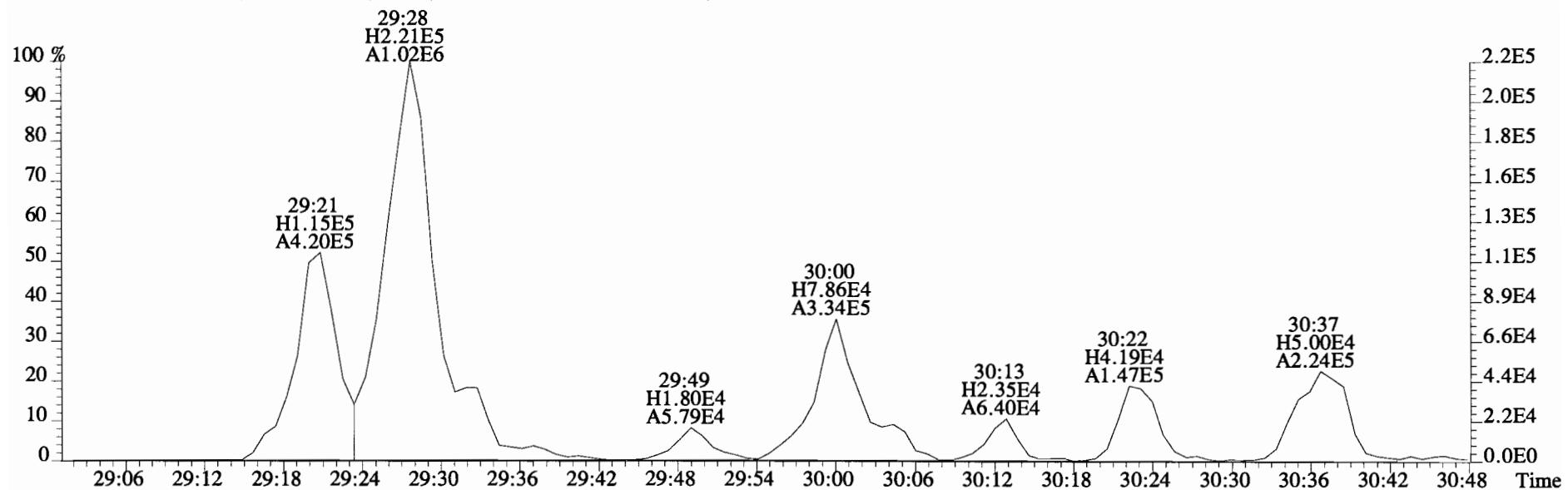
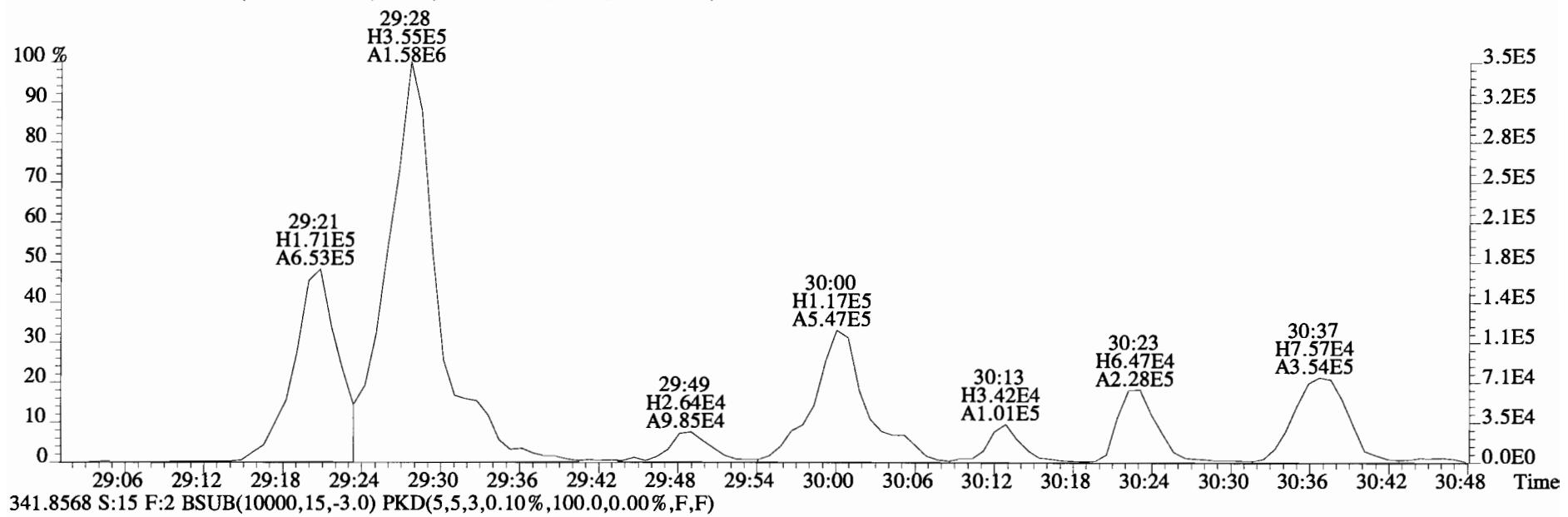
File:141027D1 #1-552 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
339.8597 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



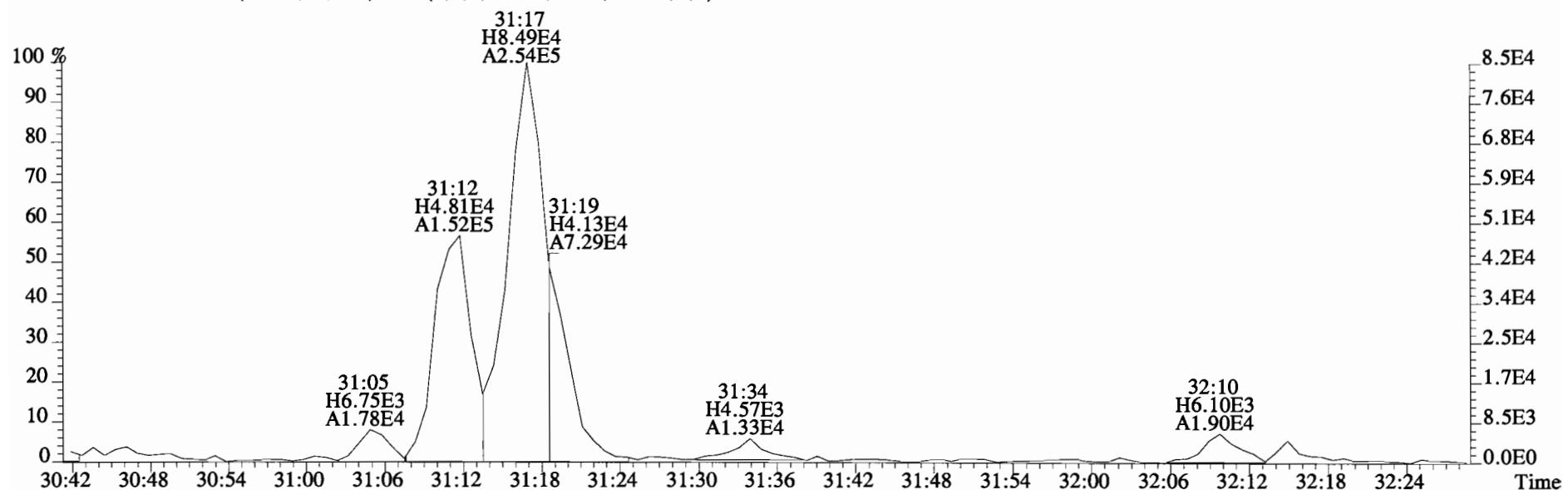
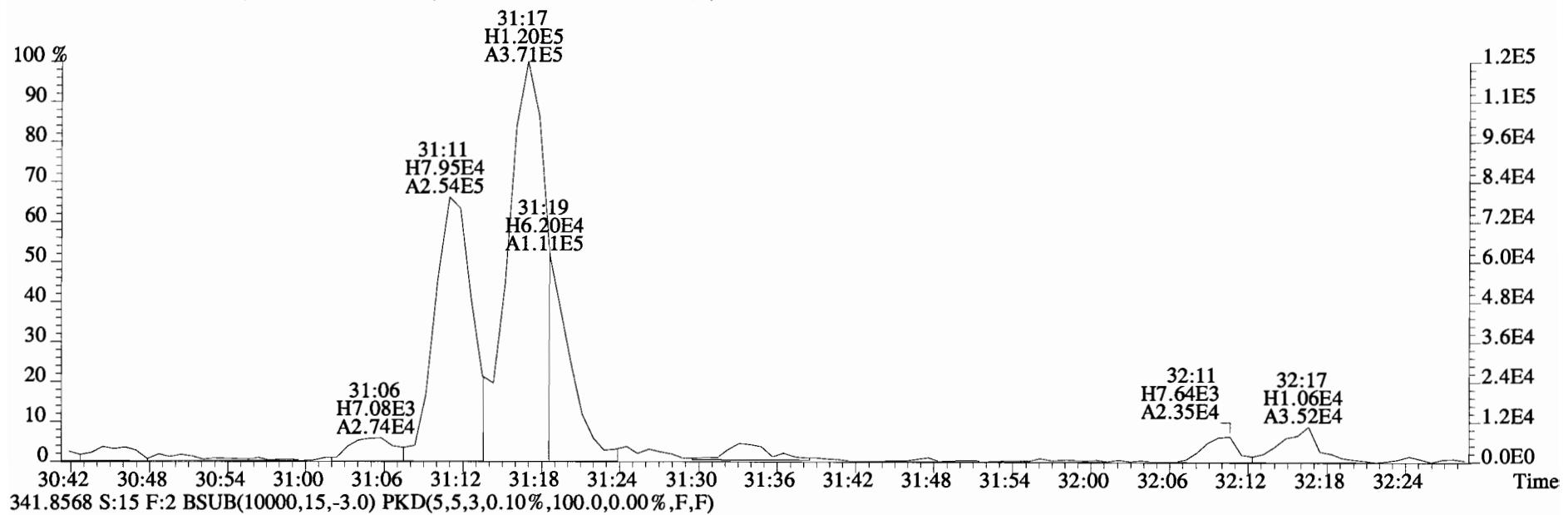
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 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



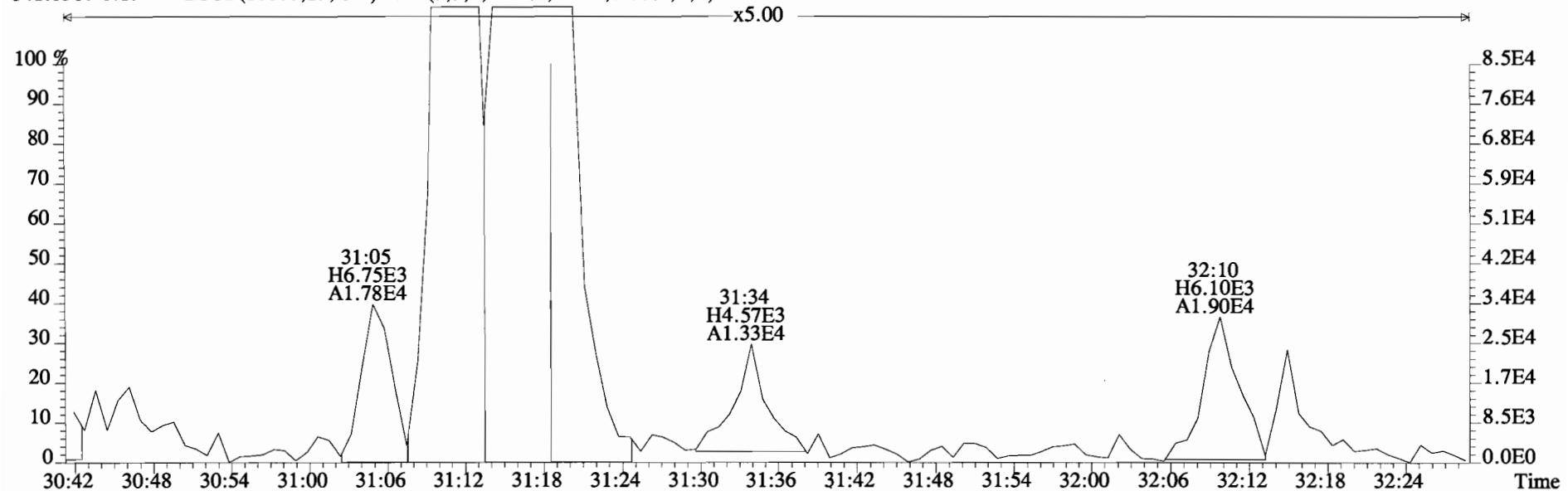
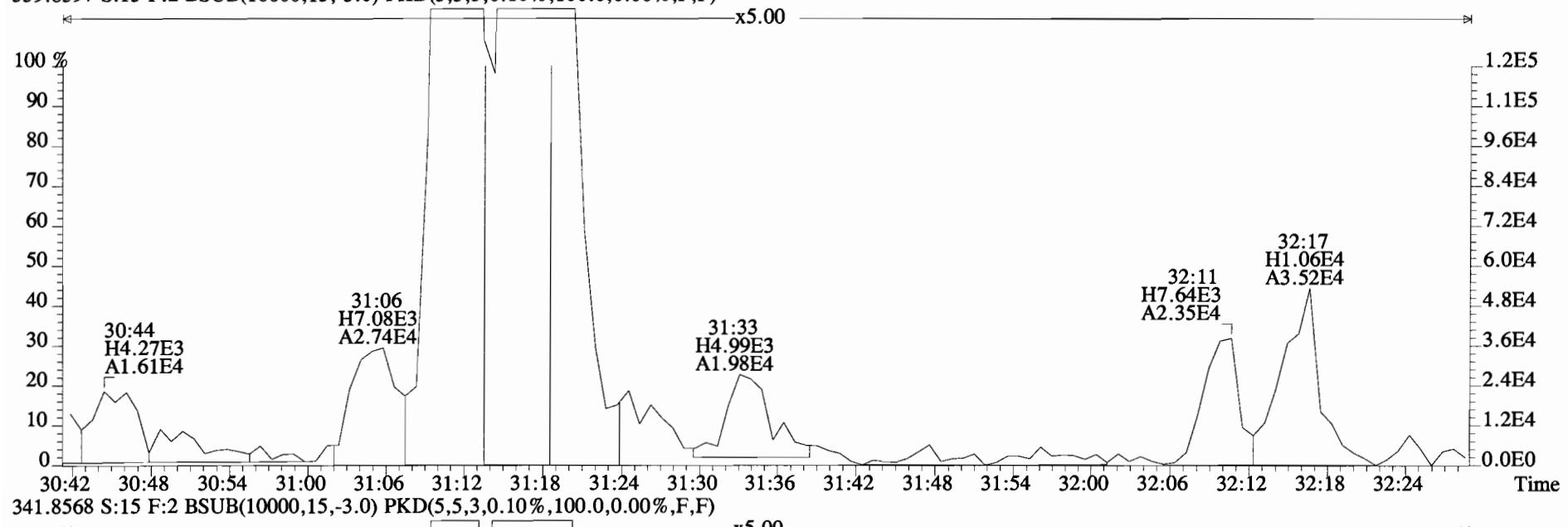
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 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



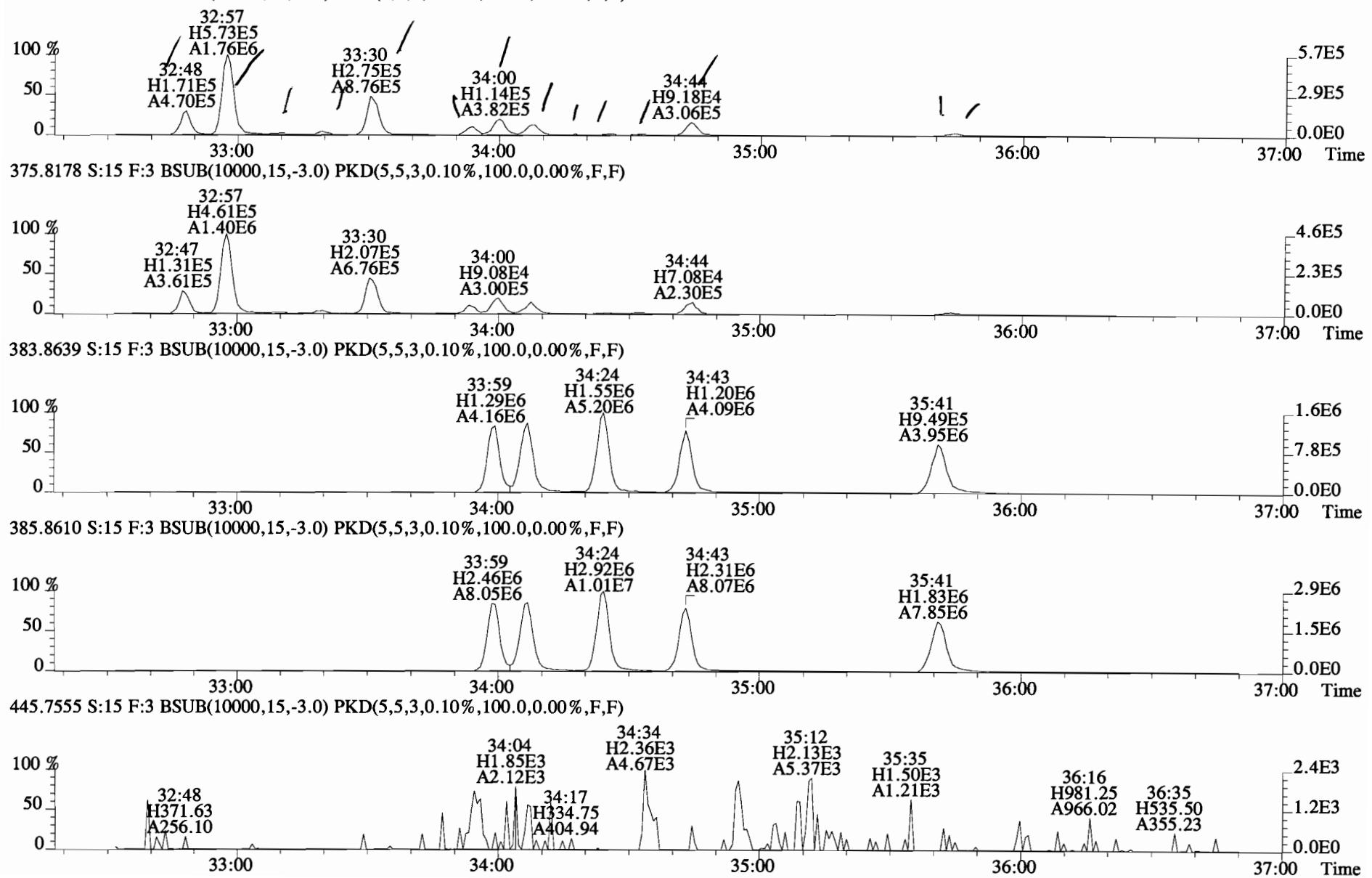
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 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



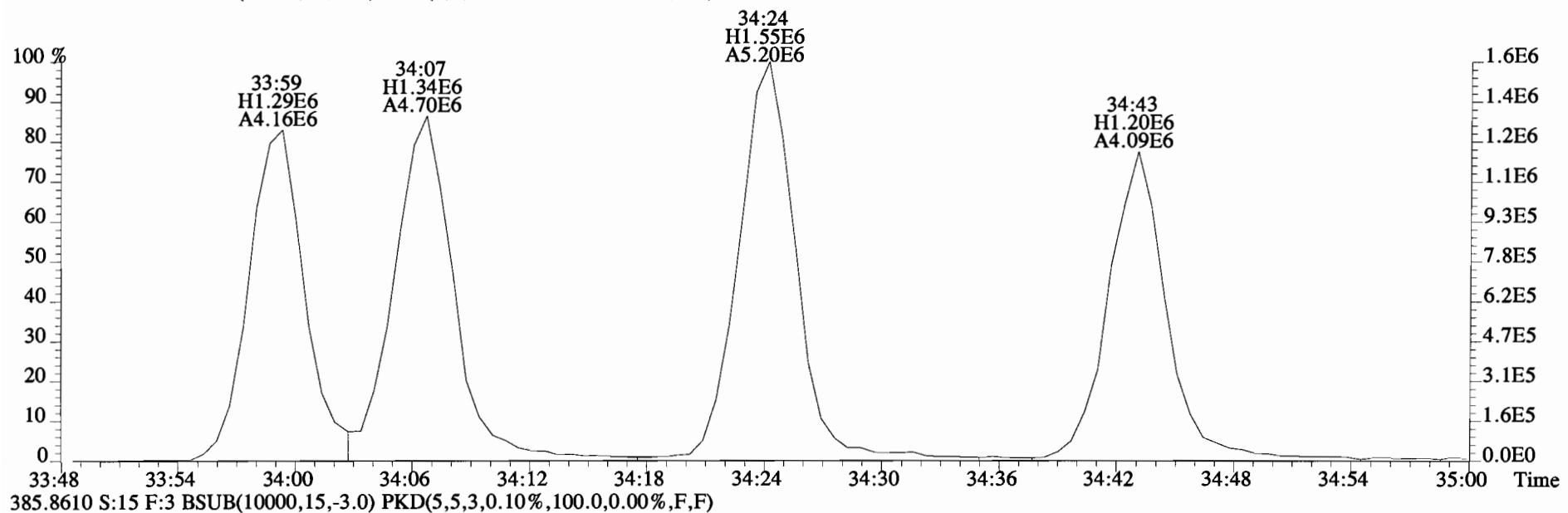
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Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



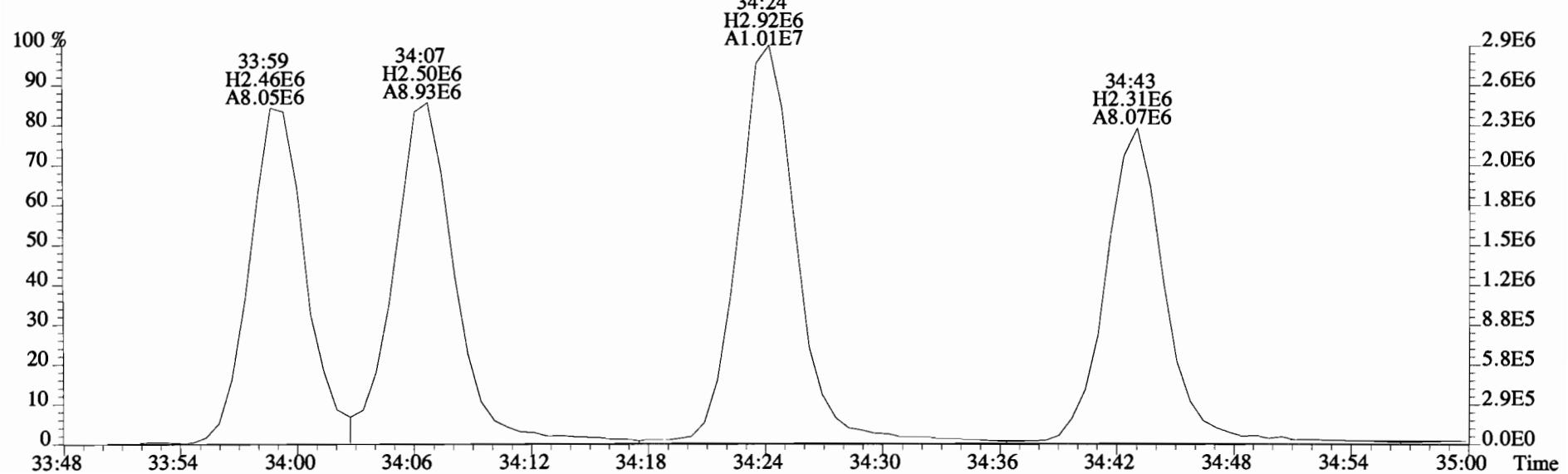
File:141027D1 #1-385 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



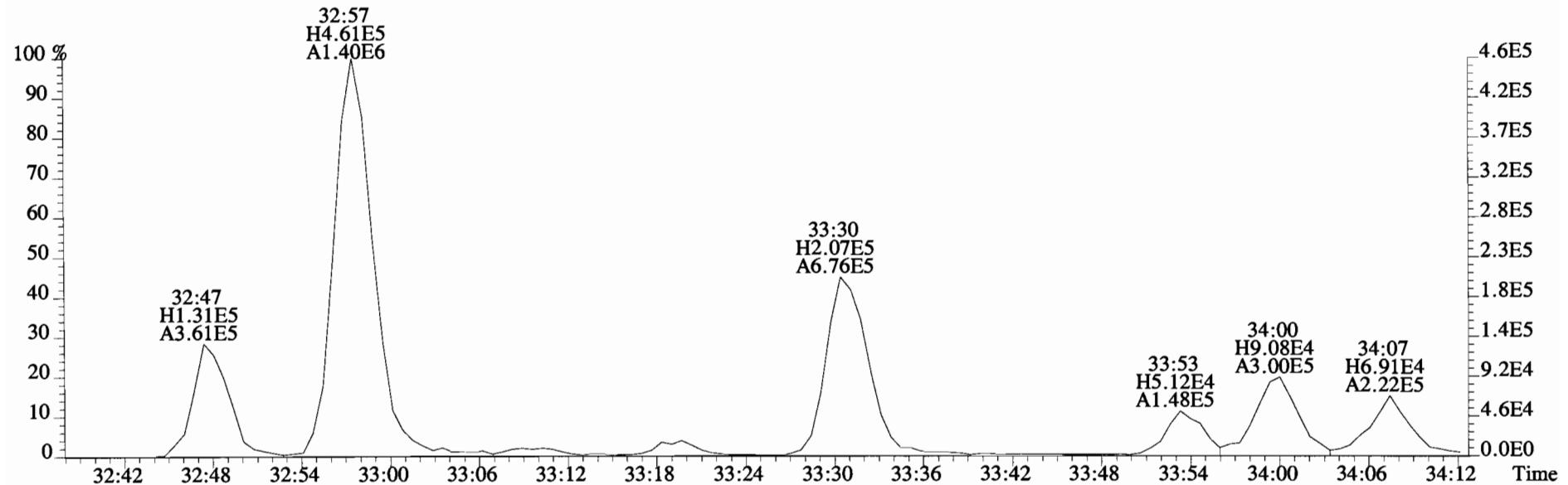
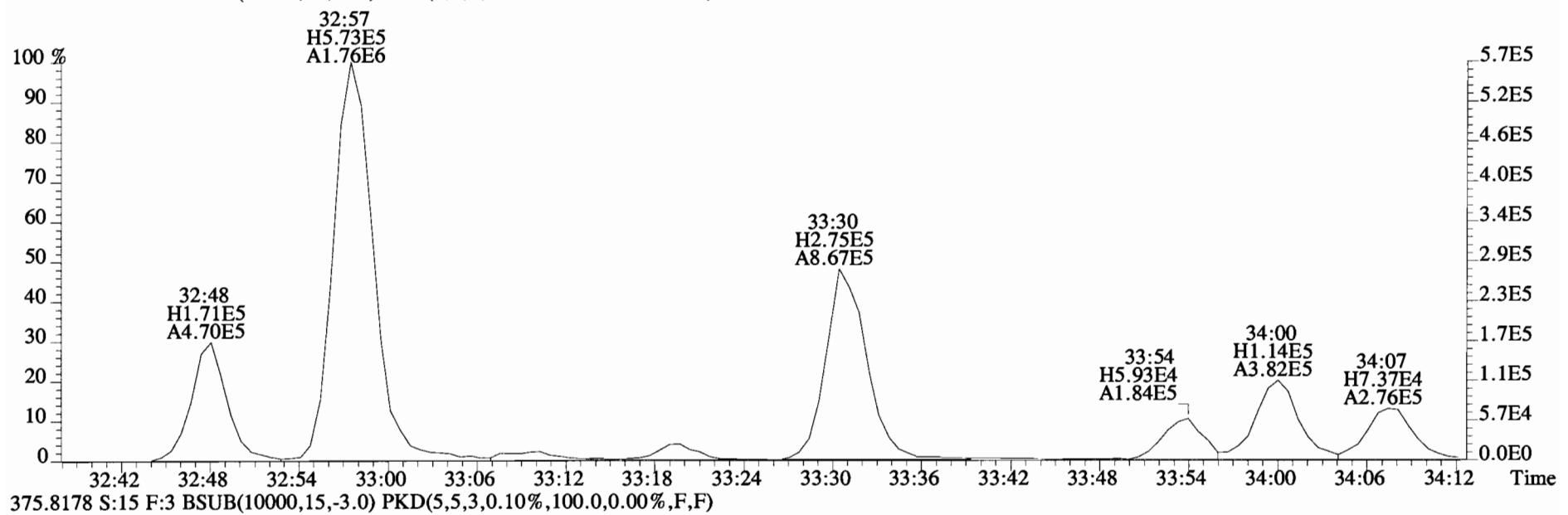
File:141027D1 #1-385 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
383.8639 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



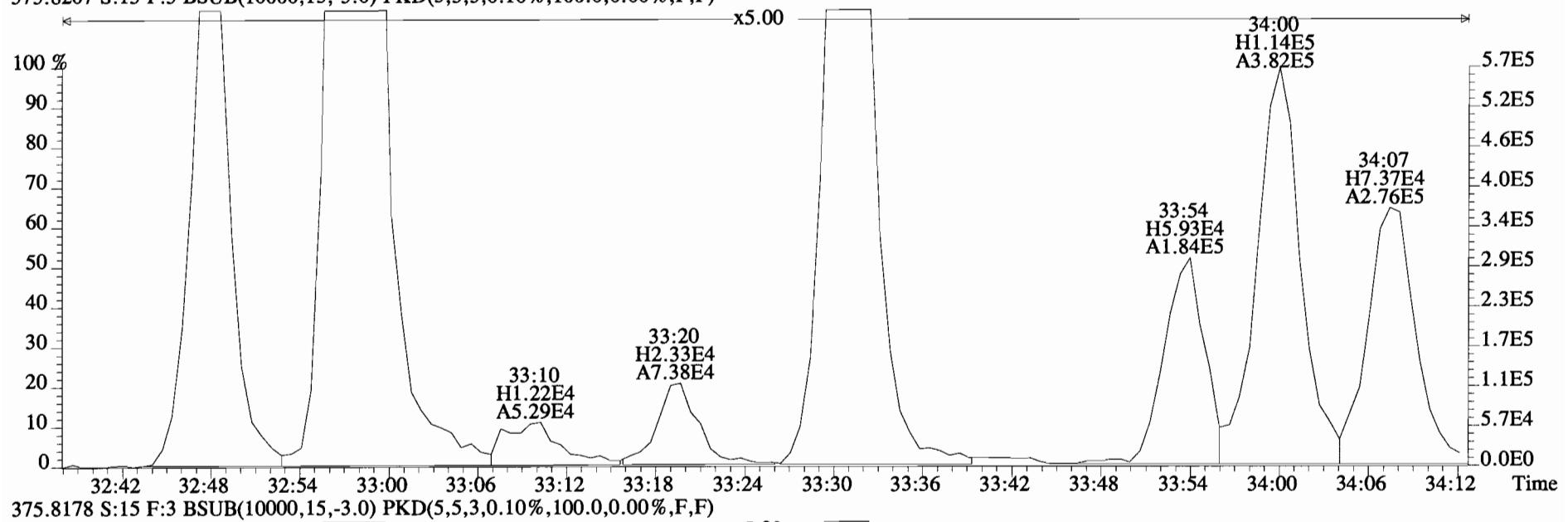
385.8610 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



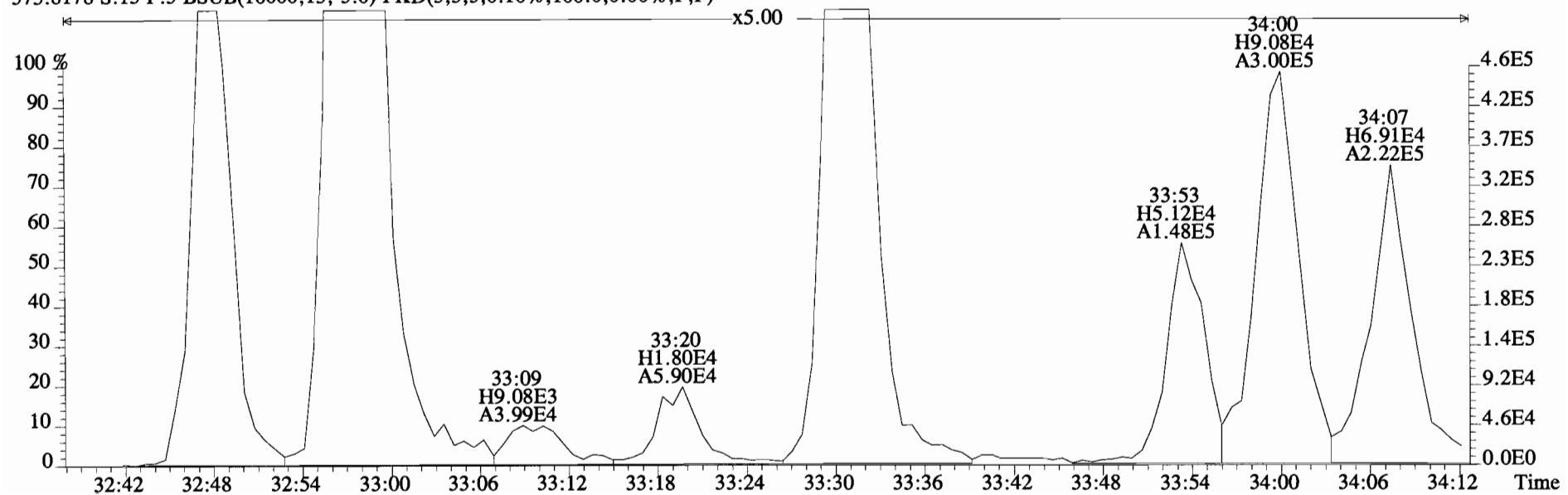
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 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



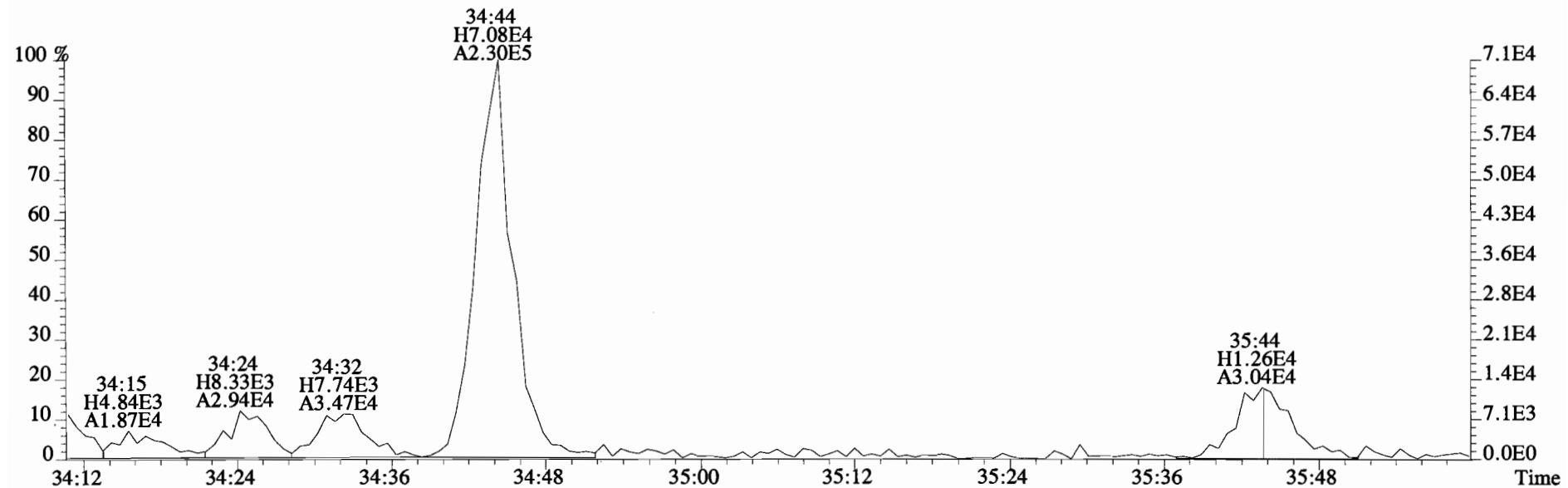
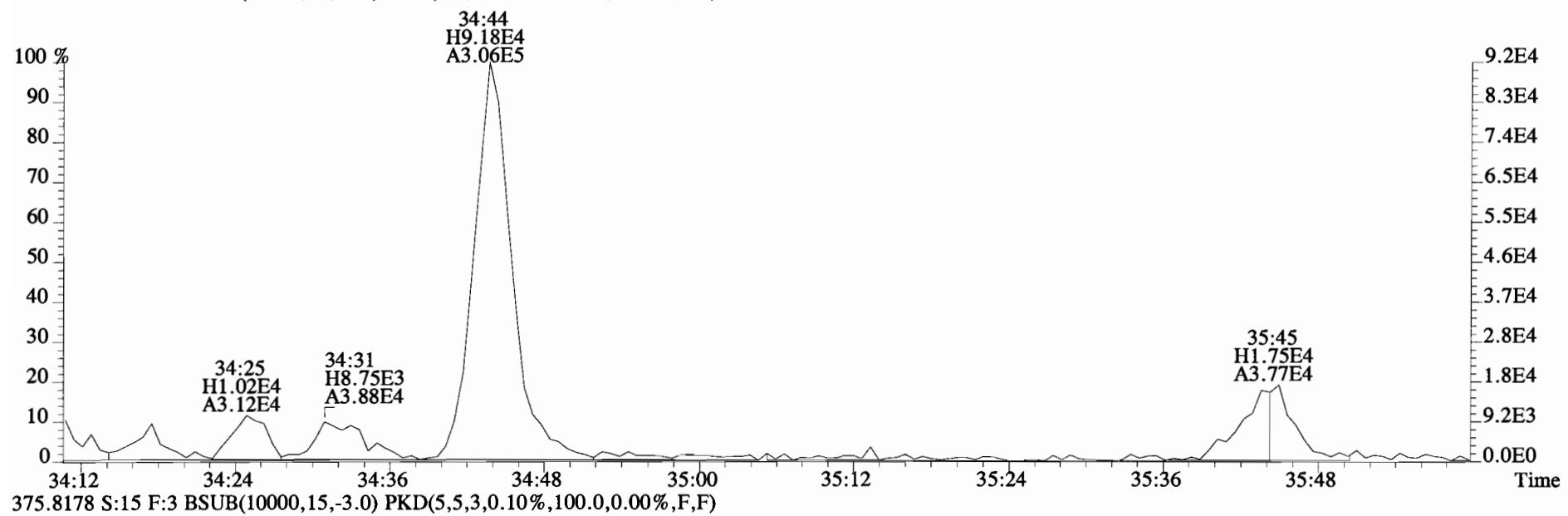
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Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



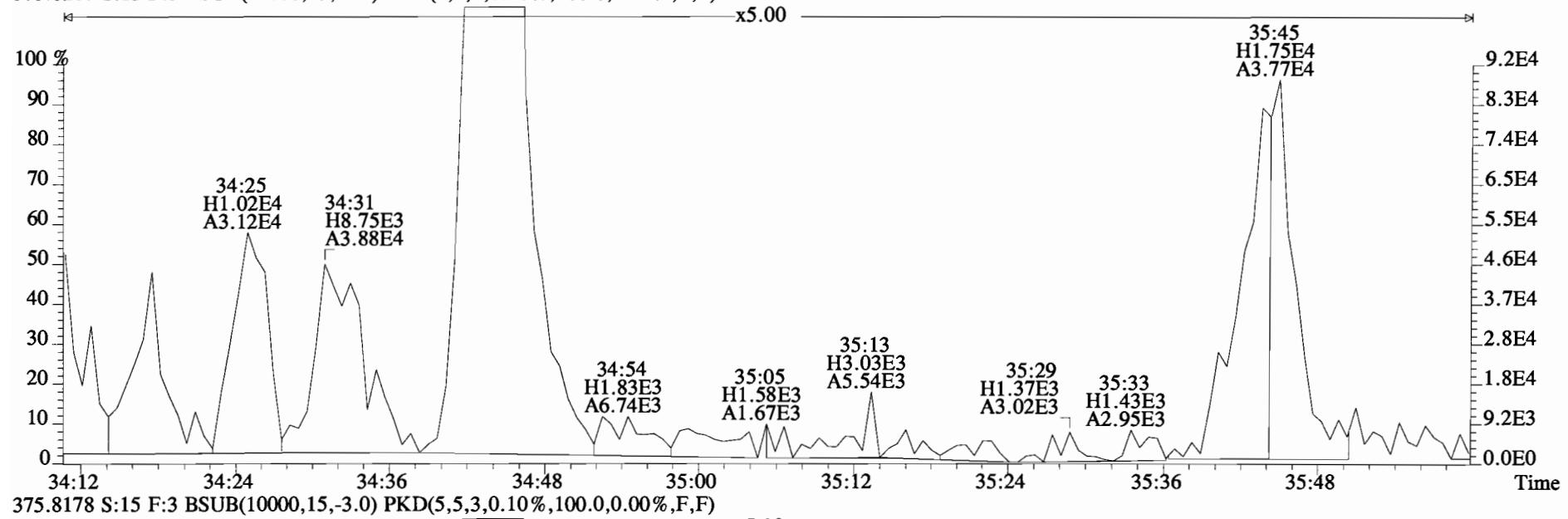
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



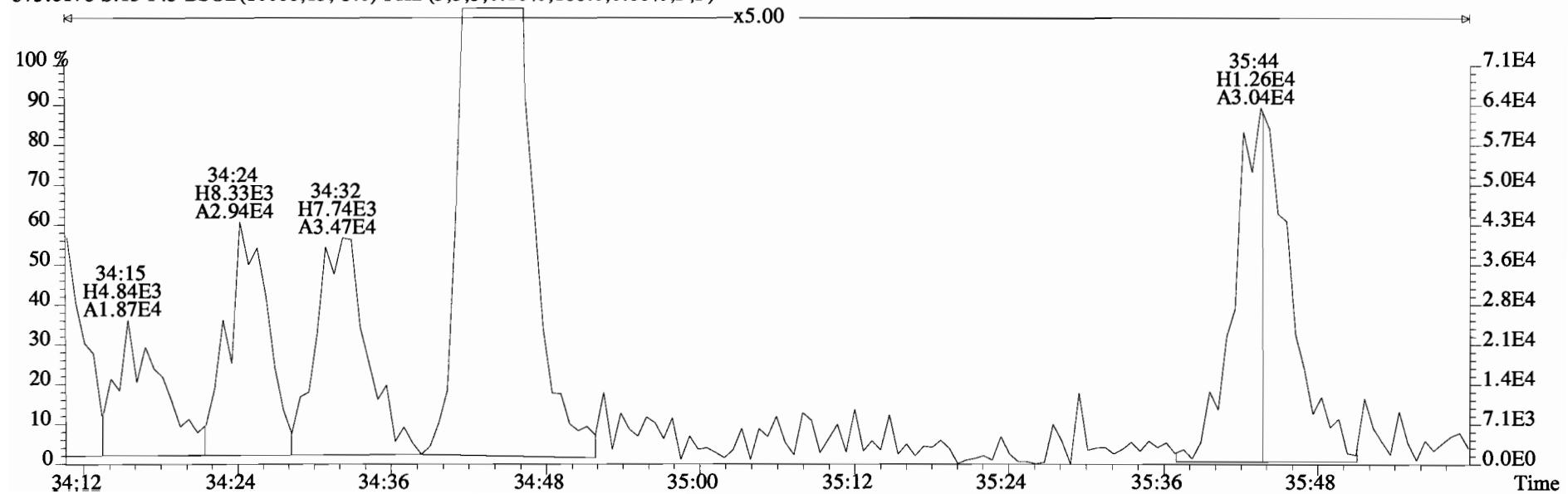
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Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



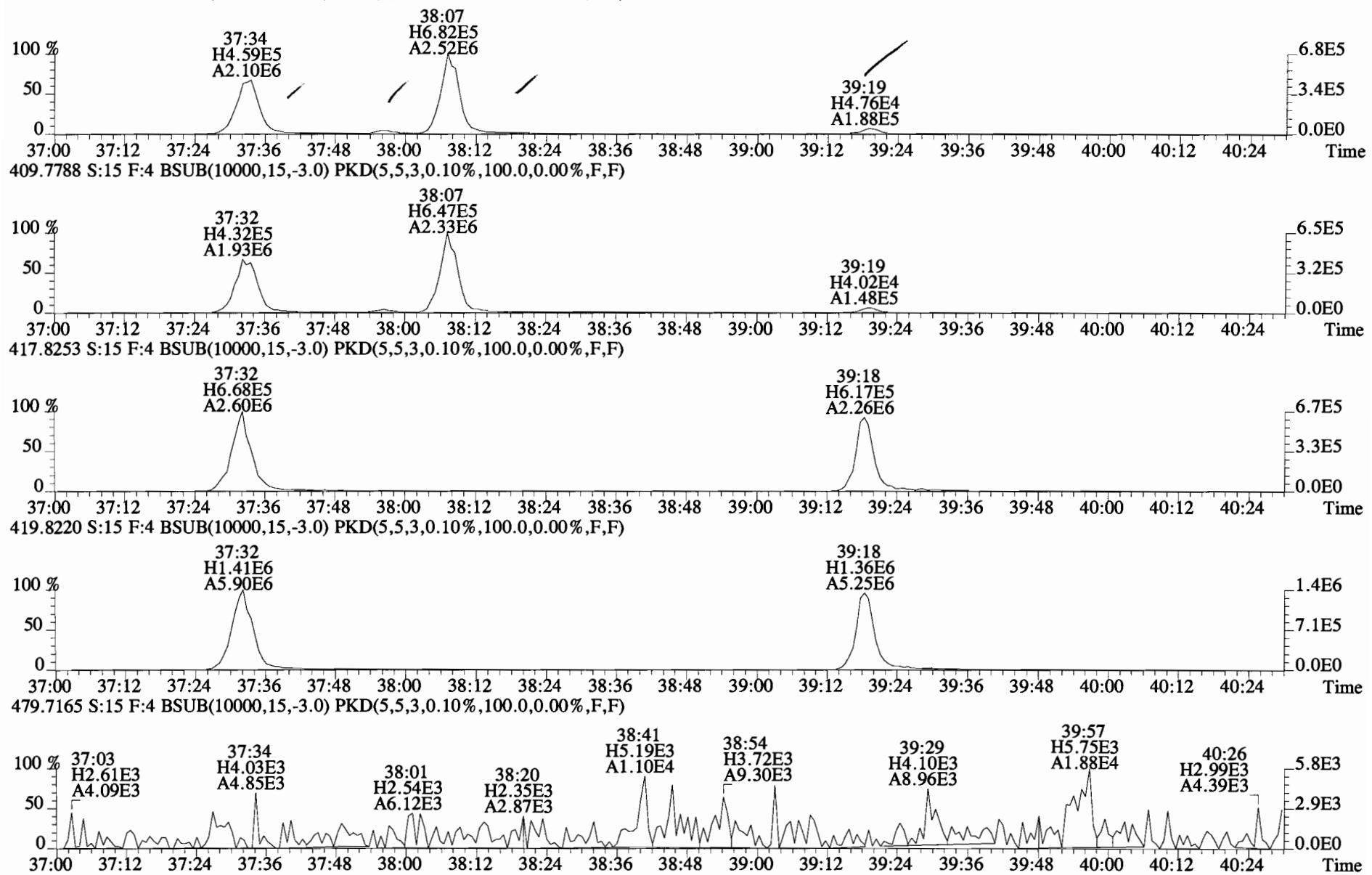
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Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



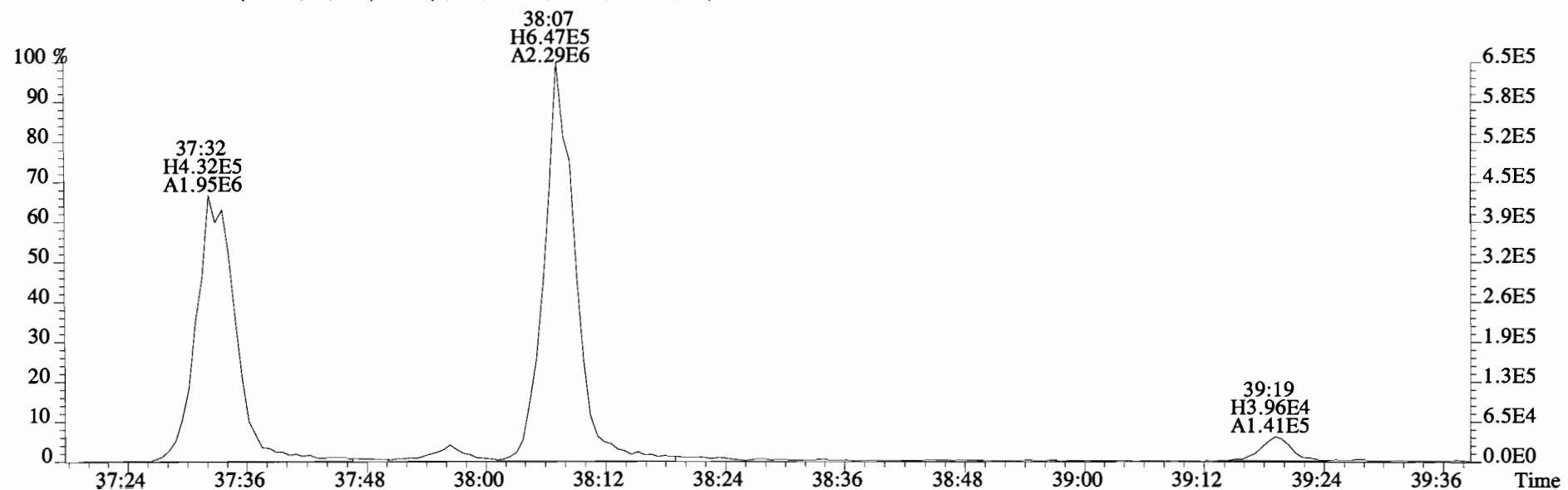
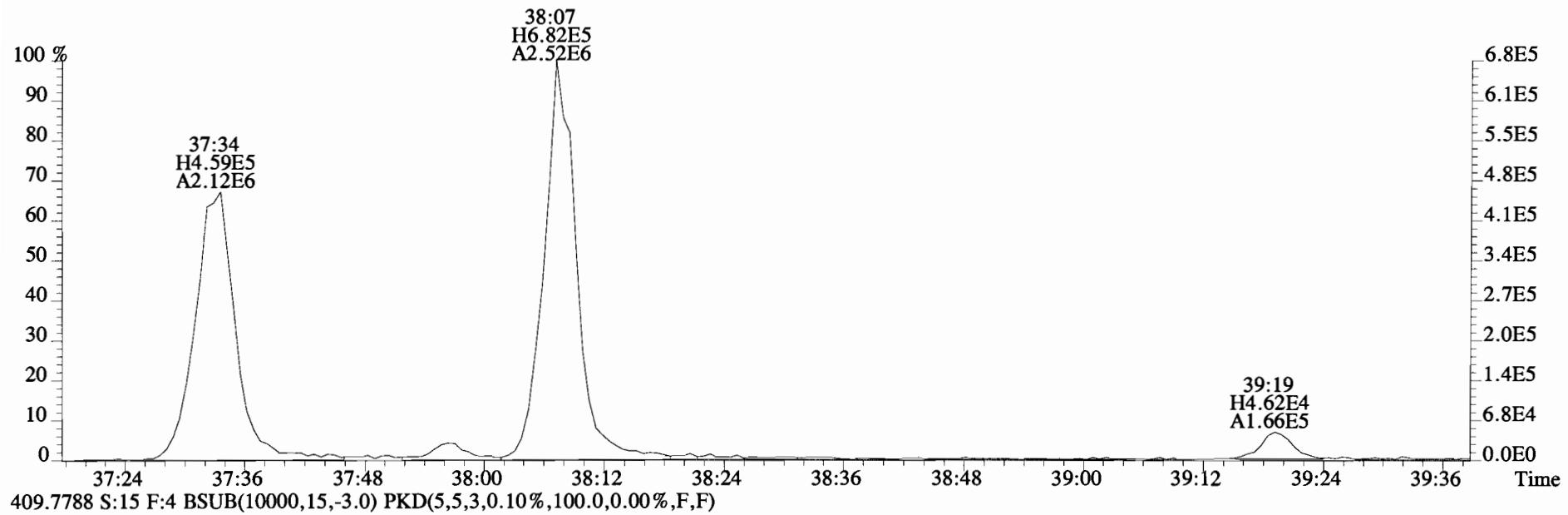
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



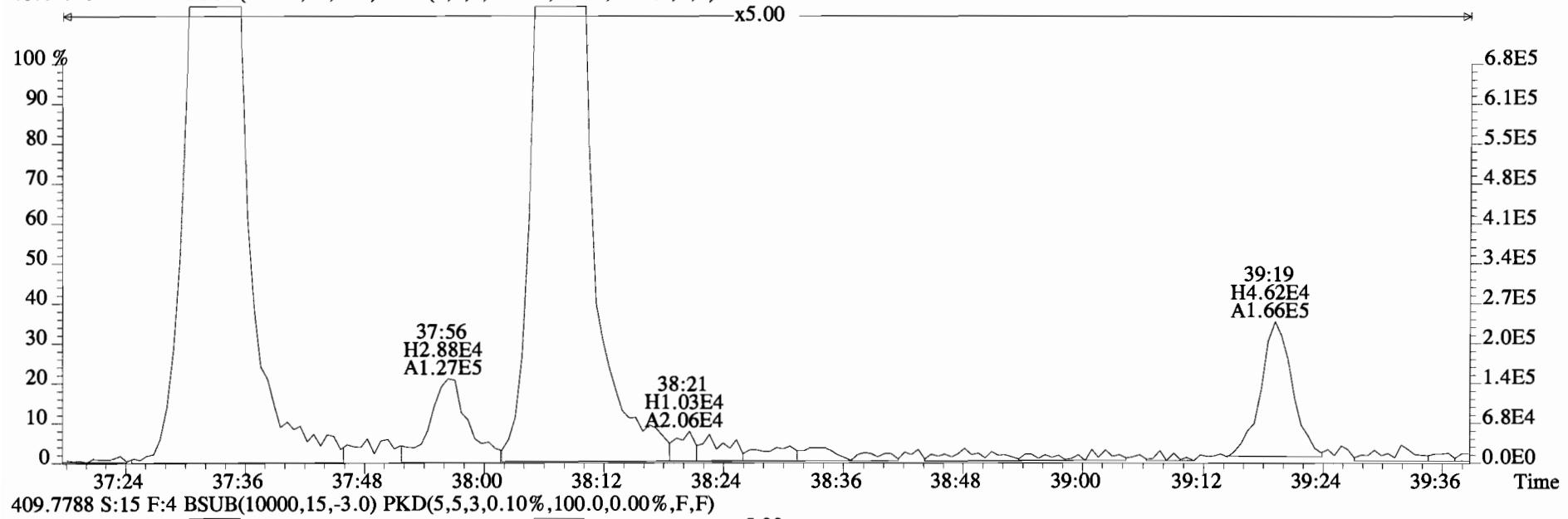
File:141027D1 #1-326 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 407.7818 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



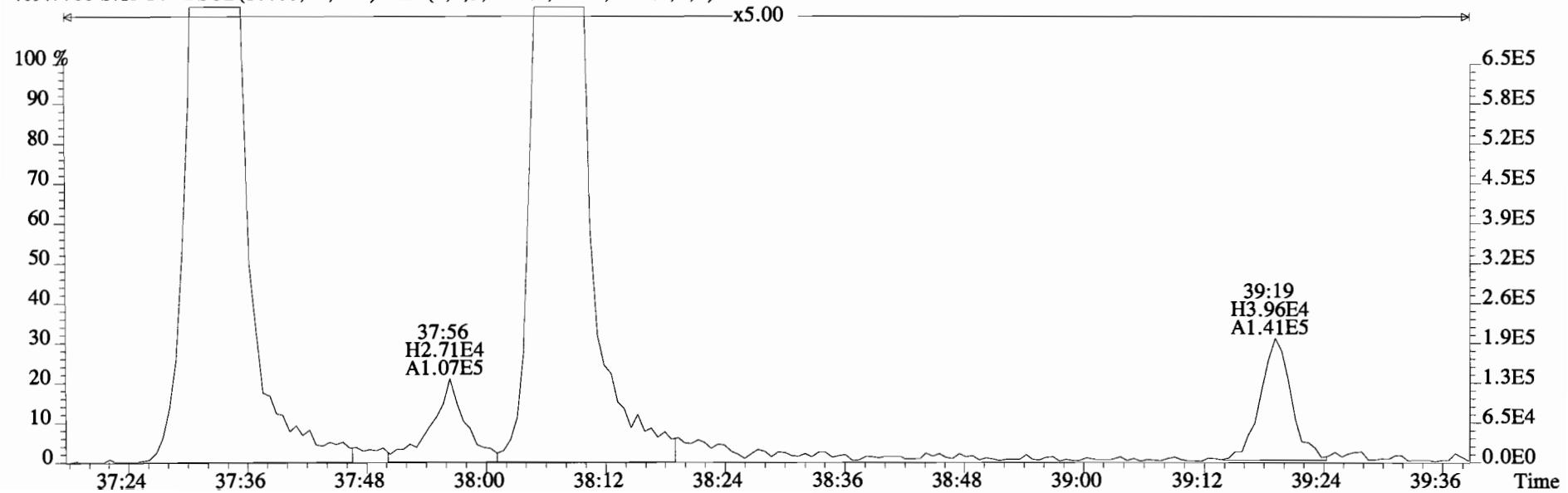
File:141027D1 #1-326 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
407.7818 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



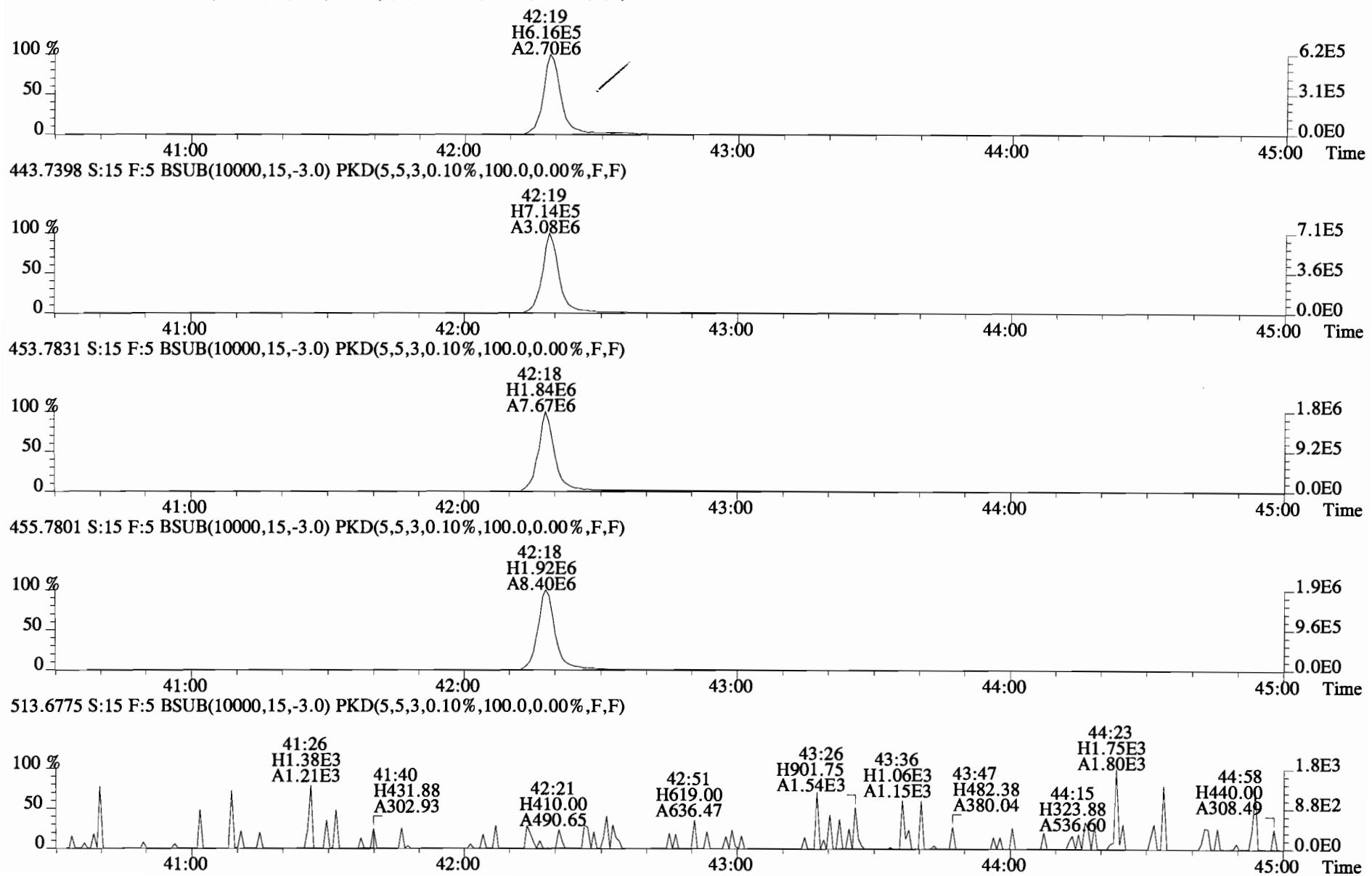
File:141027D1 #1-326 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
407.7818 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7788 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141027D1 #1-388 Acq:28-OCT-2014 01:50:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05 CC-CB-22-20141013-S 18.54 Exp:OCDD_DB5
 441.7428 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



SAMPLE DATA

EPA Method 1668C

Client ID: Method Blank
 Lab ID: B4J0110-BLK1

Filename: 141021E2 S:6 Acq:22-OCT-14 01:30:11
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000
 ConCal: ST141021E2-1
 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n NotFq	1.25	*		5260	2.5	2.00	*	0.996-1.006	
Mono	PCB-2	*	*	n NotFq	1.18	*		5260	2.5	2.12	*	0.983-0.993	
Mono	PCB-3	*	*	n NotFq	1.22	*		5260	2.5	2.05	*	0.996-1.006	
Di	PCB-4/10	*	*	n NotFq	1.55	*		17500	2.5	7.79	*	0.998-1.008	
Di	PCB-7/9	*	*	n NotFq	1.27	*		17500	2.5	6.05	*	0.865-0.873	
Di	PCB-6	*	*	n NotFq	1.26	*		17500	2.5	6.09	*	0.890-0.899	
Di	PCB-5/8	*	*	n NotFq	1.23	*		17500	2.5	6.22	*	0.906-0.916	
Di	PCB-14	*	*	n NotFq	1.23	*		17500	2.5	5.24	*	0.949-0.959	
Di	PCB-11	1.82e+06	1.54	y 25:19	1.16	23.5		*	2.5	*	1.001	0.996-1.006	
Di	PCB-12/13	*	*	n NotFq	1.10	*		17500	2.5	5.88	*	1.010-1.020	
Di	PCB-15	*	*	n NotFq	1.21	*		17500	2.5	5.35	*	1.024-1.034	
Tri	PCB-19	*	*	n NotFq	1.30	*		2660	2.5	0.954	*	0.996-1.006	
Tri	PCB-30	*	*	n NotFq	1.83	*		2660	2.5	0.675	*	1.032-1.042	
Tri	PCB-18	1.11e+05	1.07	y 25:56	0.86	1.89		*	2.5	*	0.955	0.949-0.959	
Tri	PCB-17	*	*	n NotFq	0.90	*		2660	2.5	0.858	*	0.955-0.965	
Tri	PCB-24/27	*	*	n NotFq	1.18	*		2660	2.5	0.656	*	0.976-0.986	
Tri	PCB-16/32	1.26e+05	1.18	y 27:10	1.03	1.81		*	2.5	*	1.000	0.995-1.005	
Tri	PCB-34	*	*	n NotFq	1.26	*		2170	2.5	0.636	*	0.956-0.966	
Tri	PCB-23	*	*	n NotFq	1.31	*		2170	2.5	0.612	*	0.959-0.969	
Tri	PCB-29	*	*	n NotFq	1.33	*		2170	2.5	0.604	*	0.967-0.977	
Tri	PCB-26	*	*	n NotFq	1.29	*		2170	2.5	0.621	*	0.974-0.984	
Tri	PCB-25	*	*	n NotFq	1.34	*		2170	2.5	0.598	*	0.980-0.990	
Tri	PCB-31	1.01e+05	0.91	y 29:00	1.42	1.10		*	2.5	*	0.997	0.992-1.002	
Tri	PCB-28	9.60e+04	1.16	y 29:07	1.38	1.08		*	2.5	*	1.001	0.996-1.006	
Tri	PCB-20/21/33	*	*	n NotFq	1.31	*		2170	2.5	0.612	*	1.017-1.027	
Tri	PCB-22	*	*	n NotFq	1.32	*		2170	2.5	0.607	*	1.032-1.042	
Tri	PCB-36	*	*	n NotFq	1.38	*		2170	2.5	0.607	*	0.929-0.939	
Tri	PCB-39	*	*	n NotFq	1.42	*		2170	2.5	0.588	*	0.943-0.953	
Tri	PCB-38	*	*	n NotFq	1.35	*		2170	2.5	0.617	*	0.967-0.976	
Tri	PCB-35	*	*	n NotFq	1.38	*		2170	2.5	0.607	*	0.982-0.992	
Tri	PCB-37	*	*	n NotFq	1.39	*		2170	2.5	0.600	*	0.996-1.006	
Tetra	PCB-54	*	*	n NotFq	1.20	*		2480	2.5	0.782	*	0.996-1.006	
Tetra	PCB-50	*	*	n NotFq	0.97	*		2480	2.5	0.968	*	1.037-1.047	
Tetra	PCB-53	*	*	n NotFq	1.19	*		2480	2.5	0.905	*	0.941-0.951	
Tetra	PCB-51	*	*	n NotFq	1.15	*		2480	2.5	0.933	*	0.952-0.962	
Tetra	PCB-45	*	*	n NotFq	0.97	*		2480	2.5	1.11	*	0.966-0.976	
Tetra	PCB-46	*	*	n NotFq	0.95	*		2480	2.5	1.13	*	0.982-0.992	

Integrations by:

Analyst: DmsDate: 10/27/14Reviewed by: 1/2 Date: 10/20/14

Client ID: Method Blank
Lab ID: B4J0110-BLK1

Filename: 141021E2 S:6 Acq:22-OCT-14 01:30:11
GC Column ID: ZB-1 ICAL: PCBVG8-6-20-14 wt/vol: 1.000
ConCal: ST141021E2-1
EndCAL: NA

Page 5 of

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	*	*	n NotFq	1.28	*		2480	2.5	0.842	*	0.996-1.006	
Tetra	PCB-73	*	*	n NotFq	1.37	*		2480	2.5	0.784	*	1.000-1.010	
Tetra	PCB-43/49	*	*	n NotFq	1.11	*		2480	2.5	0.967	*	1.005-1.015	
Tetra	PCB-47	*	*	n NotFq	1.13	*		2480	2.5	0.908	*	0.996-1.006	
Tetra	PCB-48/75	*	*	n NotFq	1.30	*		2480	2.5	0.789	*	0.999-1.009	
Tetra	PCB-65	*	*	n NotFq	1.33	*		2480	2.5	0.771	*	1.007-1.017	
Tetra	PCB-62	*	*	n NotFq	1.29	*		2480	2.5	0.796	*	1.011-1.021	
Tetra	PCB-44	*	*	n NotFq	0.94	*		2480	2.5	1.09	*	1.020-1.030	
Tetra	PCB-42/59	*	*	n NotFq	1.22	*		2480	2.5	0.845	*	1.028-1.038	
Tetra	PCB-41/64/71/72	*	*	n NotFq	1.31	*		2480	2.5	0.784	*	1.046-1.056	
Tetra	PCB-68	*	*	n NotFq	1.49	*		2480	2.5	0.693	*	1.054-1.064	
Tetra	PCB-40	*	*	n NotFq	0.82	*		2480	2.5	1.26	*	1.061-1.071	
Tetra	PCB-57	*	*	n NotFq	1.11	*		2480	2.5	0.652	*	0.965-0.975	
Tetra	PCB-67	*	*	n NotFq	1.07	*		2480	2.5	0.677	*	0.974-0.984	
Tetra	PCB-58	*	*	n NotFq	1.10	*		2480	2.5	0.659	*	0.977-0.987	
Tetra	PCB-63	*	*	n NotFq	1.12	*		2480	2.5	0.650	*	0.982-0.992	
Tetra	PCB-74	*	*	n NotFq	1.20	*		2480	2.5	0.604	*	0.990-1.000	
Tetra	PCB-61/70	*	*	n NotFq	1.08	*		2480	2.5	0.673	*	0.994-1.004	
Tetra	PCB-76/66	*	*	n NotFq	1.14	*		2480	2.5	0.639	*	1.001-1.011	
Tetra	PCB-80	*	*	n NotFq	1.28	*		2480	2.5	0.571	*	0.996-1.006	
Tetra	PCB-55	*	*	n NotFq	1.11	*		2480	2.5	0.657	*	1.005-1.015	
Tetra	PCB-56/60	*	*	n NotFq	1.09	*		2480	2.5	0.671	*	1.018-1.028	
Tetra	PCB-79	*	*	n NotFq	1.12	*		2480	2.5	0.649	*	1.048-1.058	
Tetra	PCB-78	*	*	n NotFq	1.24	*		2480	2.5	0.682	*	0.982-0.992	
Tetra	PCB-81	*	*	n NotFq	1.38	*		2480	2.5	0.611	*	0.995-1.005	
Tetra	PCB-77	*	*	n NotFq	1.21	*		2480	2.5	0.637	*	0.995-1.005	
Penta	PCB-104	*	*	n NotFq	1.26	*		3350	2.5	1.87	*	0.996-1.006	
Penta	PCB-96	*	*	n NotFq	1.09	*		3350	2.5	2.15	*	1.034-1.044	
Penta	PCB-103	*	*	n NotFq	0.93	*		3350	2.5	2.52	*	1.050-1.060	
Penta	PCB-100	*	*	n NotFq	1.00	*		3350	2.5	2.34	*	1.061-1.071	
Penta	PCB-94	*	*	n NotFq	1.11	*		3350	2.5	2.79	*	0.981-0.991	
Penta	PCB-95/98/102	*	*	n NotFq	1.21	*		3350	2.5	2.55	*	0.994-1.004	
Penta	PCB-93	*	*	n NotFq	1.13	*		3350	2.5	2.74	*	0.998-1.008	
Penta	PCB-88/91	*	*	n NotFq	1.02	*		3350	2.5	3.04	*	1.006-1.016	
Penta	PCB-121	*	*	n NotFq	1.90	*		3350	2.5	1.63	*	1.009-1.019	
Penta	PCB-84/92	*	*	n NotFq	1.05	*		3350	2.5	2.80	*	0.986-0.996	
Penta	PCB-89	*	*	n NotFq	1.02	*		3350	2.5	2.90	*	0.991-1.001	

Analyst: DMS

Date: 10/27/14

Client ID: Method Blank
Lab ID: B4J0110-BLK1

Filename: 141021E2 S:6 Acq:22-OCT-14 01:30:11
GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000

ConCal: ST141021E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	*	*	n NotF ₁₁	1.19	*		3350	2.5	2.48	*	0.996-1.006	
Penta	PCB-113	*	*	n NotF ₁₁	1.35	*		3350	2.5	2.18	*	1.002-1.012	
Penta	PCB-99	*	*	n NotF ₁₁	1.29	*		3350	2.5	2.29	*	1.005-1.015	
Penta	PCB-119	*	*	n NotF ₁₁	1.72	*		3350	2.5	1.89	*	0.982-0.992	
Penta	PCB-108/112	*	*	n NotF ₁₁	1.29	*		3350	2.5	2.53	*	0.986-0.996	
Penta	PCB-83	*	*	n NotF ₁₁	1.52	*		3350	2.5	2.14	*	0.991-1.001	
Penta	PCB-97	*	*	n NotF ₁₁	1.25	*		3350	2.5	2.61	*	0.996-1.006	
Penta	PCB-86	*	*	n NotF ₁₁	1.02	*		3350	2.5	3.19	*	1.000-1.010	
Penta	PCB-87/117/125	*	*	n NotF ₁₁	1.56	*		3350	2.5	2.09	*	1.002-1.012	
Penta	PCB-111/115	*	*	n NotF ₁₁	1.75	*		3350	2.5	1.86	*	1.007-1.017	
Penta	PCB-85/116	*	*	n NotF ₁₁	1.30	*		3350	2.5	2.50	*	1.010-1.020	
Penta	PCB-120	*	*	n NotF ₁₁	1.78	*		3350	2.5	1.83	*	1.016-1.026	
Penta	PCB-110	*	*	n NotF ₁₁	1.68	*		3350	2.5	1.94	*	1.020-1.030	
Penta	PCB-82	*	*	n NotF ₁₁	0.74	*		3350	2.5	3.14	*	0.972-0.982	
Penta	PCB-124	*	*	n NotF ₁₁	1.32	*		3350	2.5	1.75	*	0.988-0.998	
Penta	PCB-107/109	*	*	n NotF ₁₁	1.22	*		3350	2.5	1.90	*	0.991-1.001	
Penta	PCB-123	*	*	n NotF ₁₁	1.22	*		3350	2.5	1.90	*	0.995-1.005	
Penta	PCB-106/118	*	*	n NotF ₁₁	1.22	*		3350	2.5	1.86	*	0.996-1.006	
Penta	PCB-114	*	*	n NotF ₁₁	1.36	*		3330	2.5	1.64	*	0.995-1.005	
Penta	PCB-122	*	*	n NotF ₁₁	1.24	*		3330	2.5	1.80	*	0.999-1.009	
Penta	PCB-105	*	*	n NotF ₁₁	1.28	*		3330	2.5	1.61	*	0.995-1.005	
Penta	PCB-127	*	*	n NotF ₁₁	1.14	*		3330	2.5	1.74	*	0.995-1.005	
Penta	PCB-126	*	*	n NotF ₁₁	1.28	*		3330	2.5	1.78	*	0.995-1.005	
Hexa	PCB-155	*	*	n NotF ₁₁	1.14	*		1560	2.5	1.03	*	0.966-1.006	
Hexa	PCB-150	*	*	n NotF ₁₁	1.06	*		1560	2.5	1.10	*	1.030-1.040	
Hexa	PCB-152	*	*	n NotF ₁₁	1.10	*		1560	2.5	1.07	*	1.043-1.053	
Hexa	PCB-145	*	*	n NotF ₁₁	1.09	*		1560	2.5	1.07	*	1.055-1.065	
Hexa	PCB-136	*	*	n NotF ₁₁	1.08	*		1560	2.5	1.08	*	1.064-1.074	
Hexa	PCB-148	*	*	n NotF ₁₁	0.74	*		1560	2.5	1.58	*	1.066-1.076	
Hexa	PCB-154	*	*	n NotF ₁₁	0.88	*		1560	2.5	1.33	*	1.079-1.089	
Hexa	PCB-151	*	*	n NotF ₁₁	0.81	*		1560	2.5	1.45	*	1.097-1.107	
Hexa	PCB-135	*	*	n NotF ₁₁	0.78	*		1560	2.5	1.51	*	1.101-1.113	
Hexa	PCB-144	*	*	n NotF ₁₁	0.82	*		1560	2.5	1.43	*	1.105-1.116	
Hexa	PCB-147	*	*	n NotF ₁₁	0.83	*		1560	2.5	1.42	*	1.011-1.120	
Hexa	PCB-139/149	*	*	n NotF ₁₁	0.84	*		1560	2.5	1.39	*	1.115-1.127	
Hexa	PCB-140	*	*	n NotF ₁₁	0.79	*		1560	2.5	1.49	*	1.120-1.132	
Hexa	PCB-134/143	*	*	n NotF ₁₁	0.93	*		1740	2.5	1.14	*	0.970-0.980	

Analyst: DMS

Date: 10/27/14

Client ID: Method Blank
Lab ID: B4J0110-BLK1

Filename: 141021E2 S:6 Acq:22-OCT-14 01:30:11
GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000
ConCal: ST141021E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	*	*	n NotFq	0.95	*		1740	2.5	1.12	*	0.977-0.987	
Hexa	PCB-131	*	*	n NotFq	0.91	*		1740	2.5	1.16	*	0.981-0.991	
Hexa	PCB-146/165	*	*	n NotFq	1.16	*		1740	2.5	0.916	*	0.986-0.996	
Hexa	PCB-132/161	*	*	n NotFq	1.11	*		1740	2.5	0.952	*	0.992-1.002	
Hexa	PCB-153	*	*	n NotFq	1.18	*		1740	2.5	0.899	*	0.995-1.005	
Hexa	PCB-168	*	*	n NotFq	1.37	*		1740	2.5	0.774	*	1.000-1.010	
Hexa	PCB-141	*	*	n NotFq	0.97	*		1740	2.5	1.14	*	0.996-1.005	
Hexa	PCB-137	*	*	n NotFq	1.07	*		1740	2.5	1.04	*	1.004-1.014	
Hexa	PCB-130	*	*	n NotFq	0.85	*		1740	2.5	1.31	*	1.007-1.017	
Hexa	PCB-138/163/164	*	*	n NotFq	1.23	*		1740	2.5	0.928	*	0.996-1.006	
Hexa	PCB-158/160	*	*	n NotFq	1.29	*		1740	2.5	0.882	*	1.001-1.011	
Hexa	PCB-129	*	*	n NotFq	0.92	*		1740	2.5	1.23	*	1.007-1.017	
Hexa	PCB-166	*	*	n NotFq	1.12	*		1740	2.5	0.929	*	0.988-0.998	
Hexa	PCB-159	*	*	n NotFq	1.16	*		1740	2.5	0.889	*	0.995-1.005	
Hexa	PCB-128/162	*	*	n NotFq	1.02	*		1740	2.5	1.02	*	1.002-1.012	
Hexa	PCB-167	*	*	n NotFq	1.06	*		1740	2.5	0.930	*	0.995-1.005	
Hexa	PCB-156	*	*	n NotFq	1.18	*		1740	2.5	0.873	*	0.995-1.005	
Hexa	PCB-157	*	*	n NotFq	1.08	*		1740	2.5	0.966	*	0.995-1.005	
Hexa	PCB-169	*	*	n NotFq	1.11	*		1740	2.5	1.07	*	0.995-1.005	
Hepta	PCB-188	*	*	n NotFq	1.40	*		1700	2.5	0.581	*	0.995-1.005	
Hepta	PCB-184	*	*	n NotFq	1.24	*		1700	2.5	0.659	*	1.006-1.016	
Hepta	PCB-179	*	*	n NotFq	1.30	*		1700	2.5	0.626	*	1.024-1.034	
Hepta	PCB-176	*	*	n NotFq	1.36	*		1700	2.5	0.599	*	1.035-1.045	
Hepta	PCB-186	*	*	n NotFq	1.28	*		1700	2.5	0.640	*	1.049-1.059	
Hepta	PCB-178	*	*	n NotFq	0.94	*		1700	2.5	0.871	*	1.061-1.071	
Hepta	PCB-175	*	*	n NotFq	0.97	*		1700	2.5	0.842	*	1.069-1.079	
Hepta	PCB-182/187	*	*	n NotFq	1.01	*		1700	2.5	0.804	*	1.073-1.083	
Hepta	PCB-183	*	*	n NotFq	1.08	*		1700	2.5	0.754	*	1.080-1.090	
Hepta	PCB-185	*	*	n NotFq	1.34	*		1700	2.5	0.930	*	0.951-0.961	
Hepta	PCB-174	*	*	n NotFq	1.34	*		1700	2.5	0.934	*	0.958-0.968	
Hepta	PCB-181	*	*	n NotFq	1.36	*		1700	2.5	0.918	*	0.961-0.971	
Hepta	PCB-177	*	*	n NotFq	1.24	*		1700	2.5	1.01	*	0.964-0.974	
Hepta	PCB-171	*	*	n NotFq	1.31	*		1700	2.5	0.951	*	0.970-0.980	
Hepta	PCB-173	*	*	n NotFq	1.16	*		1700	2.5	1.08	*	0.979-0.989	
Hepta	PCB-172	*	*	n NotFq	1.22	*		1700	2.5	1.02	*	0.988-0.998	
Hepta	PCB-192	*	*	n NotFq	1.53	*		1700	2.5	0.818	*	0.991-1.001	
Hepta	PCB-180	*	*	n NotFq	1.43	*		1700	2.5	0.874	*	0.995-1.005	

Analyst: DMS

Date: 10/27/14

Client ID: Method Blank
Lab ID: B4J0110-BLK1

Filename: 141021E2 S:6 Acq:22-OCT-14 01:30:11
GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000

ConCal: ST141021E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	*	*	n NotFq	1.65	*		1700	2.5	0.755	*	0.999-1.009	
Hepta	PCB-191	*	*	n NotFq	1.67	*		1700	2.5	0.747	*	1.004-1.014	
Hepta	PCB-170	*	*	n NotFq	1.50	*		1700	2.5	1.05	*	0.995-1.005	
Hepta	PCB-190	*	*	n NotFq	2.02	*		1700	2.5	0.781	*	0.998-1.008	
Hepta	PCB-189	*	*	n NotFq	1.54	*		1700	2.5	0.984	*	0.995-1.005	
Octa	PCB-202	*	*	n NotFq	1.04	*		1370	2.5	1.05	*	0.995-1.005	
Octa	PCB-201	*	*	n NotFq	1.10	*		1370	2.5	0.986	*	1.006-1.016	
Octa	PCB-204	*	*	n NotFq	0.99	*		1370	2.5	1.09	*	1.009-1.019	
Octa	PCB-197	*	*	n NotFq	1.07	*		1370	2.5	1.01	*	1.015-1.025	
Octa	PCB-200	*	*	n NotFq	1.02	*		1370	2.5	1.07	*	1.032-1.044	
Octa	PCB-198	*	*	n NotFq	0.74	*		1370	2.5	1.46	*	1.058-1.068	
Octa	PCB-199	*	*	n NotFq	0.73	*		1370	2.5	1.49	*	1.060-1.070	
Octa	PCB-196/203	*	*	n NotFq	0.77	*		1370	2.5	1.41	*	1.066-1.076	
Octa	PCB-195	*	*	n NotFq	1.20	*		1790	2.5	2.48	*	0.979-0.989	
Octa	PCB-194	*	*	n NotFq	1.25	*		1790	2.5	2.39	*	0.995-1.005	
Octa	PCB-205	*	*	n NotFq	1.41	*		1790	2.5	2.11	*	1.001-1.011	
Nonna	PCB-208	*	*	n NotFq	0.96	*		1370	2.5	1.16	*	0.995-1.005	
Nonna	PCB-207	*	*	n NotFq	0.92	*		1370	2.5	1.21	*	1.001-1.011	
Nonna	PCB-206	*	*	n NotFq	1.03	*		1370	2.5	3.82	*	0.995-1.005	
Deca	PCB-209	*	*	n NotFq	1.18	*		953	2.5	4.02	*	0.995-1.005	

Analyst: DMS

Date: 10/27/14

Client ID: Method Blank
Lab ID: B4J0110-BLK1

Filename: 141021E2 S:6 Acq:22-OCT-14 01:30:11 ConCal: ST141021E2-1
GC Column ID: ZB-1 ICAL: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	*	* n	NotFnd	1.22	*
Total Di-PCB	1.82e+06	1.54	y	25:19	1.21 23.5415
Total Tri-PCB	2.37e+05	1.07	y	25:56	1.16 3.70213
Total Tri-PCB	1.96e+05	0.91	y	29:00	1.35 2.17719 Sum:5.87932
Total Tetra-PCB	*	* n	NotFnd	1.17	*
Total Penta-PCB	*	* n	NotFnd	1.21	*
Total Penta-PCB	*	* n	NotFnd	1.26	* Sum:0.00000
Total Hexa-PCB	*	* n	NotFnd	0.92	*
Total Hexa-PCB	*	* n	NotFnd	1.08	* Sum:0.00000
Total Hepta-PCB	*	* n	NotFnd	1.27	*
Total Octa-PCB	*	* n	NotFnd	0.92	*
Total Octa-PCB	*	* n	NotFnd	1.29	* Sum:0.00000
Total Nona-PCB	*	* n	NotFnd	0.96	*
Total Deca-PCB	*	* n	NotFnd	1.18	*

Total PCB Conc:29.4207750000

Integrations
by
Analyst: DmS
Date: 10/27/14

Client ID: Method Blank
Lab ID: B4J0110-BLK1

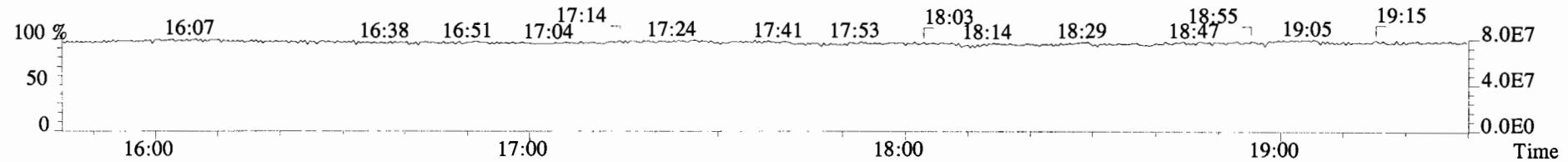
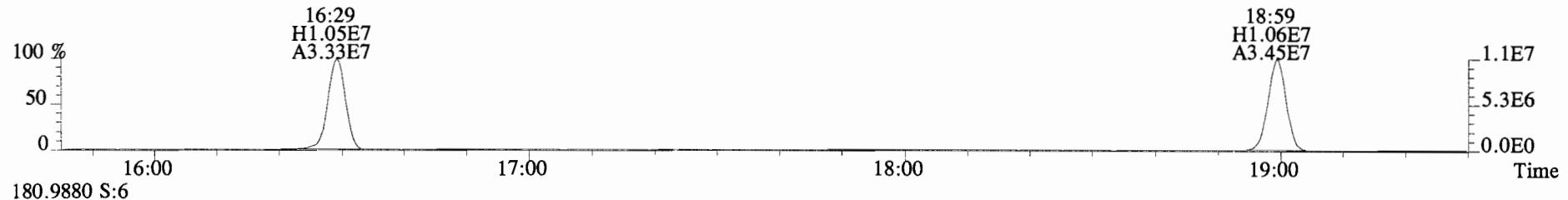
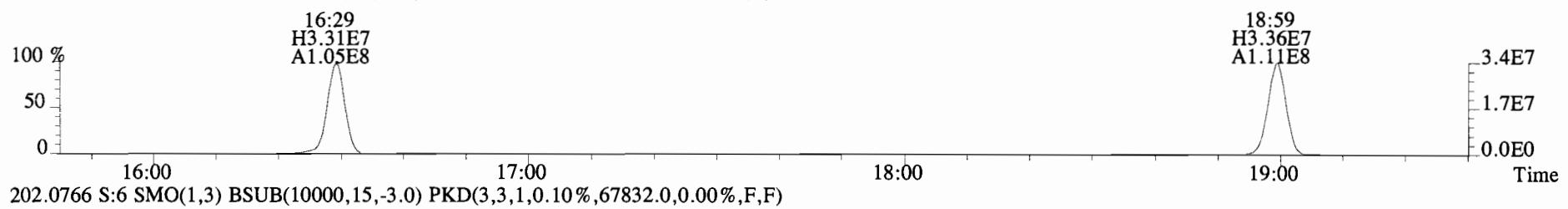
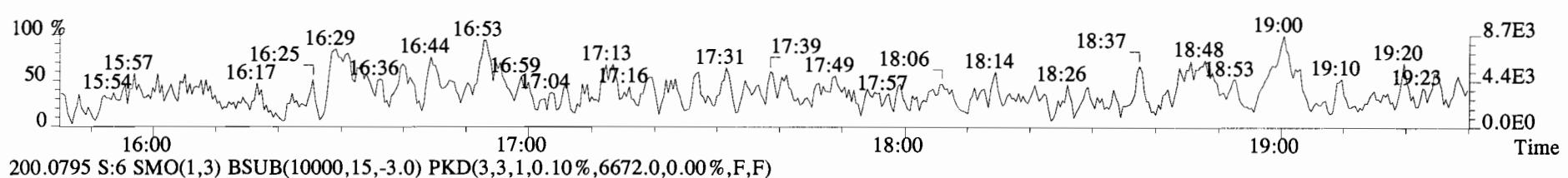
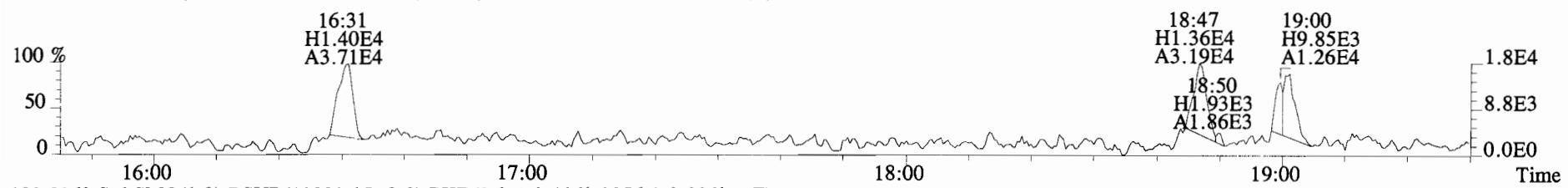
Filename: 141021E2 S:6 Acq:22-OCT-14 01:30:11
GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:1.0000
ConCal: ST141021E2-1
EndCAL: NA

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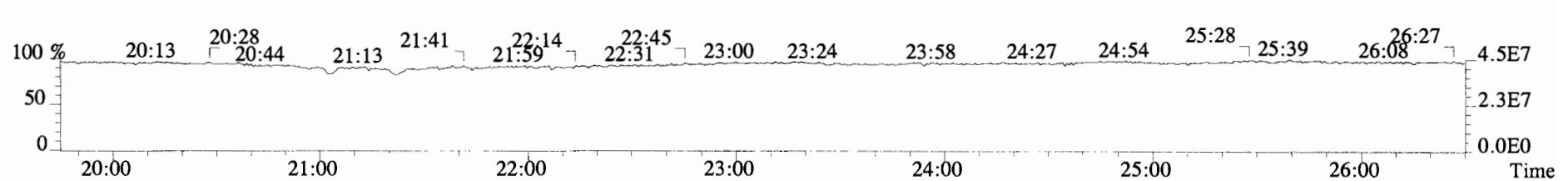
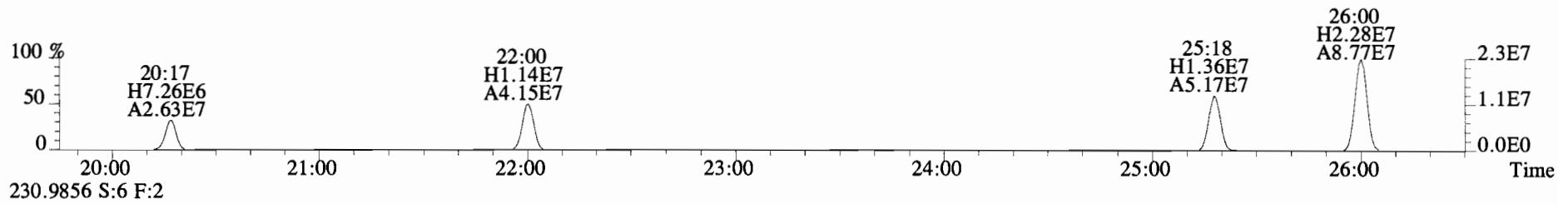
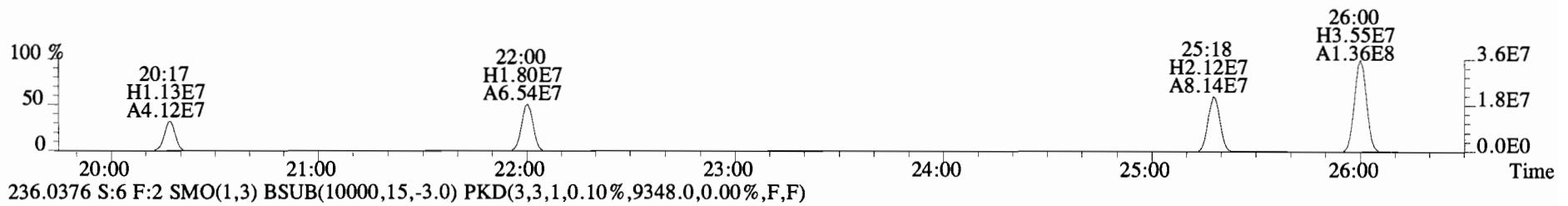
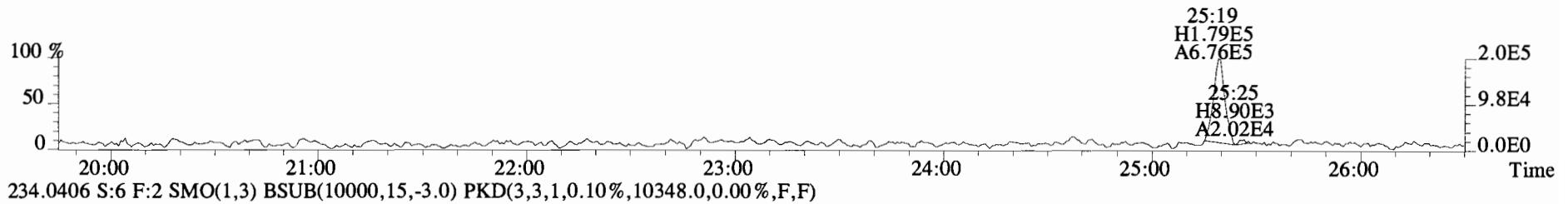
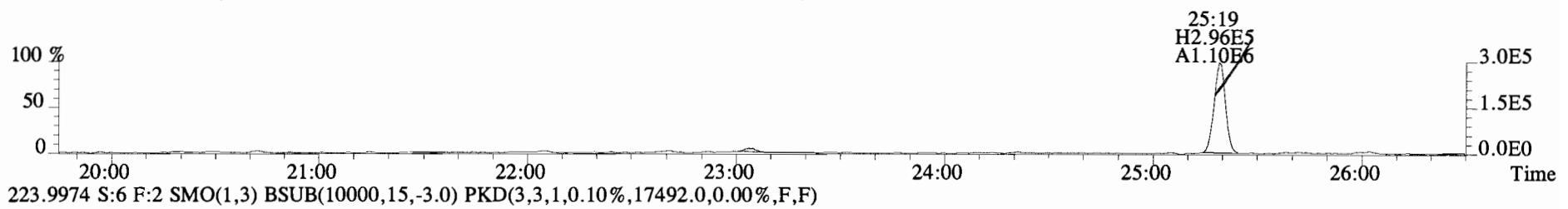
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.38e+08	3.16	y	0.89	16:29	0.634*	0.622-0.628	1390	69.7	13C-PCB-79	1.53e+08	0.78	y	1.01	37:46	1.028	1.023-1.033	1570	78.7	
13C-PCB-3	1.45e+08	3.21	y	0.93	18:59	0.730*	0.721-0.729	1410	70.3	13C-PCB-178	4.84e+07	0.46	y	0.63	45:38	0.984	0.979-0.989	1630	81.7	
13C-PCB-4	6.75e+07	1.57	y	0.55	20:17	0.780	0.772-0.780	1100	55.2	13C-PCB-178	4.84e+07	0.46	y	0.63	45:38	0.984	0.979-0.989	1630	81.7	
13C-PCB-9	1.07e+08	1.58	y	0.83	22:00	0.846	0.840-0.848	1160	58.0											
13C-PCB-11	1.33e+08	1.58	y	0.94	25:18	0.973	0.968-0.978	1270	63.7	PS vs. IS										
13C-PCB-19	8.39e+07	1.07	y	0.53	24:19	0.935	0.929-0.939	1410	70.6	13C-PCB-79	1.53e+08	0.78	y	1.20	37:46	0.968	0.963-0.973	2010	100	
13C-PCB-28	1.29e+08	1.06	y	0.89	29:06	1.004	0.999-1.009	1500	75.0	13C-PCB-178	4.84e+07	0.46	y	0.94	45:38	0.925	0.920-0.930	2020	101	
13C-PCB-32	1.36e+08	1.08	y	0.81	27:10	1.045	1.041-1.051	1500	74.9	13C-PCB-178	4.84e+07	0.46	y	0.94	45:38	0.925	0.920-0.930	2020	101	
13C-PCB-37	1.22e+08	1.07	y	0.83	32:57	1.137	1.131-1.143	1520	76.0											
13C-PCB-47	9.80e+07	0.77	y	0.74	31:59	0.871	0.867-0.875	1370	68.3											
13C-PCB-52	9.33e+07	0.79	y	0.71	31:29	0.857	0.853-0.861	1360	68.2											
13C-PCB-54	1.06e+08	0.80	y	0.85	28:01	0.763	0.758-0.766	1300	64.8											
13C-PCB-70	1.38e+08	0.79	y	0.94	35:29	0.966	0.961-0.971	1520	75.9											
13C-PCB-77	1.37e+08	0.79	y	0.89	39:37	1.078	1.073-1.083	1580	79.2											
13C-PCB-80	1.43e+08	0.81	y	0.96	35:53	0.977	0.972-0.982	1540	77.1											
13C-PCB-81	1.27e+08	0.80	y	0.84	39:00	1.062	1.057-1.067	1570	78.5											
13C-PCB-95	6.46e+07	1.60	y	0.74	35:47	0.914	0.908-0.918	1450	72.4	RS										
13C-PCB-97	6.34e+07	1.65	y	0.69	38:46	0.990	0.984-0.994	1530	76.6	13C-PCB-15	2.23e+08	1.55	y	1.00	26:00	2000				
13C-PCB-101	6.98e+07	1.62	y	0.79	37:27	0.956	0.951-0.961	1480	74.0	13C-PCB-31	1.94e+08	1.06	y	1.00	28:59	2000				
13C-PCB-104	8.42e+07	1.52	y	1.00	32:38	0.833	0.829-0.837	1410	70.5	13C-PCB-60	1.93e+08	0.80	y	1.00	36:44	2000				
13C-PCB-105	9.90e+07	1.58	y	1.24	43:03	0.928	0.924-0.934	1700	85.1	13C-PCB-111	1.20e+08	1.62	y	1.00	39:10	2000				
13C-PCB-114	9.41e+07	1.61	y	1.21	42:11	0.910	0.905-0.915	1660	83.0	13C-PCB-128	9.40e+07	1.29	y	1.00	46:22	2000				
13C-PCB-118	9.32e+07	1.61	y	0.98	41:31	1.060	1.054-1.064	1580	78.8	13C-PCB-205	6.87e+07	0.92	y	1.00	54:00	2000				
13C-PCB-123	8.82e+07	1.63	y	0.95	41:20	1.055	1.049-1.059	1550	77.4											
13C-PCB-126	9.66e+07	1.61	y	1.16	45:17	0.977	0.972-0.982	1770	88.4											
13C-PCB-127	1.09e+08	1.60	y	1.34	43:22	0.935	0.931-0.941	1730	86.7											
13C-PCB-138	8.21e+07	1.26	y	1.04	44:47	0.966	0.961-0.971	1670	83.7											
13C-PCB-141	8.49e+07	1.28	y	1.07	43:56	0.948	0.943-0.953	1690	84.3											
13C-PCB-153	8.76e+07	1.26	y	1.11	43:11	0.931	0.927-0.937	1670	83.7											
13C-PCB-155	7.10e+07	1.31	y	0.83	37:00	0.945	0.939-0.949	1420	71.1											
13C-PCB-156	9.96e+07	1.29	y	1.24	48:05	1.037	1.032-1.042	1700	85.1											
13C-PCB-157	1.01e+08	1.29	y	1.31	48:21	1.043	1.037-1.047	1640	82.2											
13C-PCB-159	9.44e+07	1.26	y	1.20	46:05	0.994	0.989-0.999	1670	83.7											
13C-PCB-167	1.02e+08	1.27	y	1.32	46:46	1.009	1.004-1.014	1650	82.3											
13C-PCB-169	9.55e+07	1.29	y	1.22	50:23	1.087	1.082-1.092	1670	83.6											
13C-PCB-170	4.03e+07	0.45	y	0.54	50:43	1.094	1.089-1.101	1600	80.1											
13C-PCB-180	5.12e+07	0.46	y	0.67	49:20	1.064	1.059-1.069	1620	80.9											
13C-PCB-188	7.11e+07	0.46	y	0.94	42:49	0.923	0.919-0.929	1620	80.9											
13C-PCB-189	5.57e+07	0.47	y	0.72	52:10	1.125	1.120-1.132	1660	82.8											
13C-PCB-194	4.63e+07	0.92	y	0.81	53:42	0.994	0.990-1.000	1670	83.3											
13C-PCB-202	6.23e+07	0.93	y	0.83	48:17	1.041	1.036-1.046	1590	79.6											
13C-PCB-206	3.14e+07	0.82	y	0.66	55:28	1.027	1.021-1.031	1390	69.4											
13C-PCB-208	6.17e+07	0.79	y	1.12	52:54	0.980	0.976-0.986	1600	80.0											
13C-PCB-209	2.86e+07	1.23	y	0.61	56:45	1.051	1.044-1.054	1360	67.9											

Analyst: *Dmrs*
Date: *10/27/14*

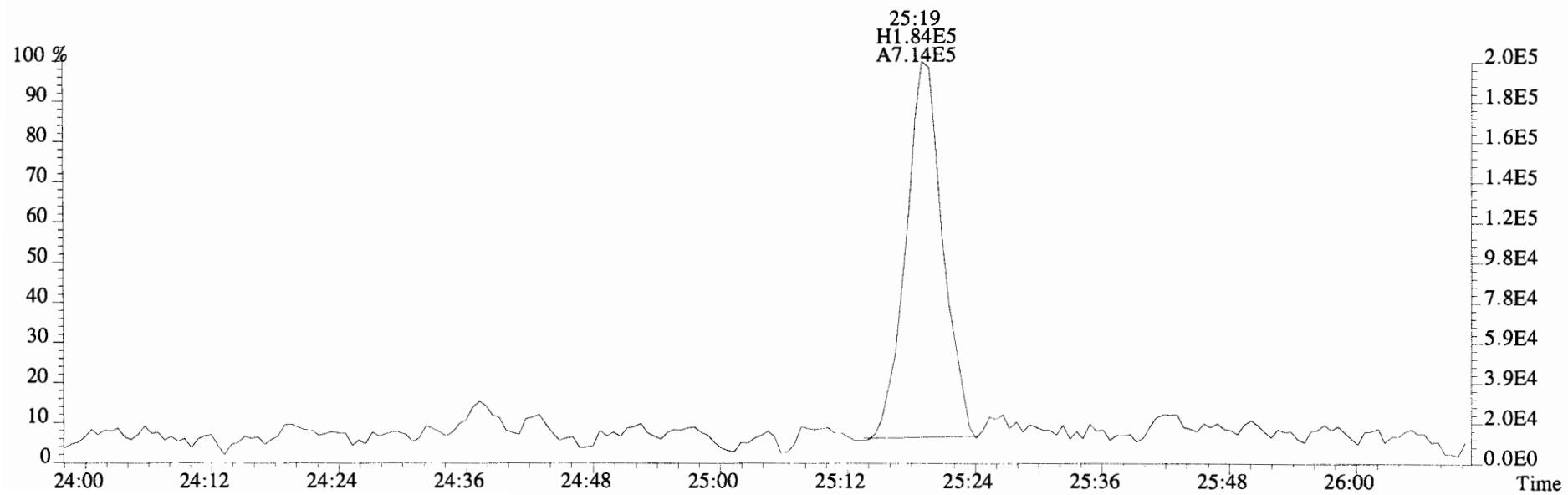
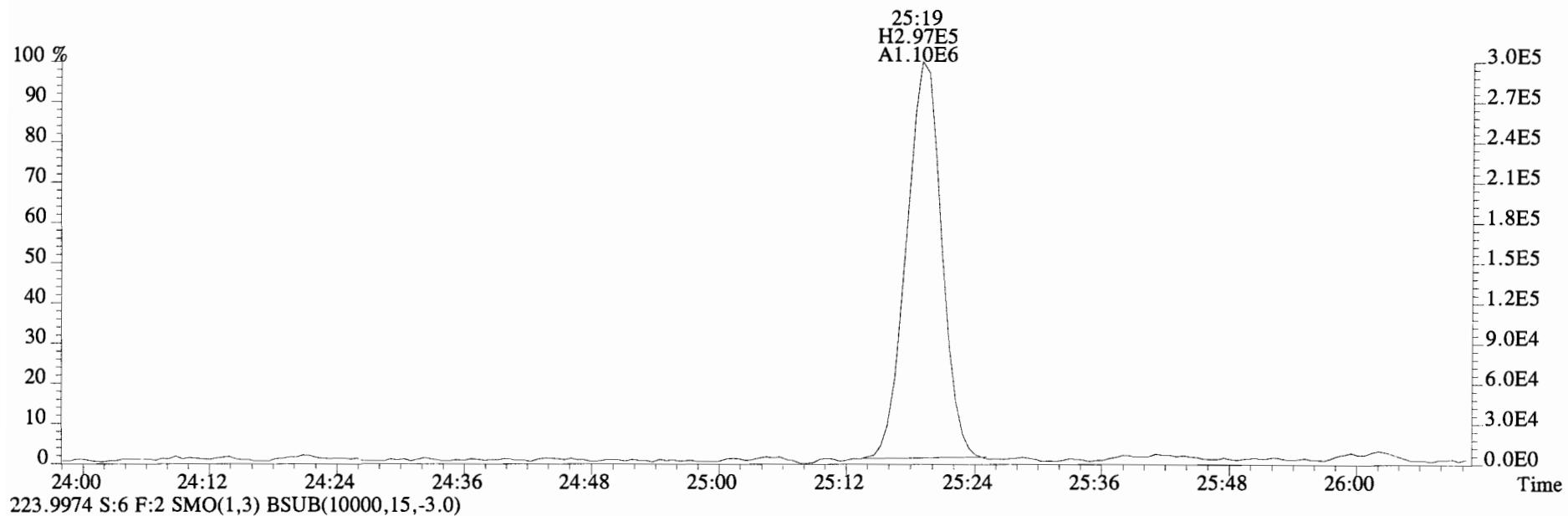
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 188.0393 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3148.0,0.00%,F,F)



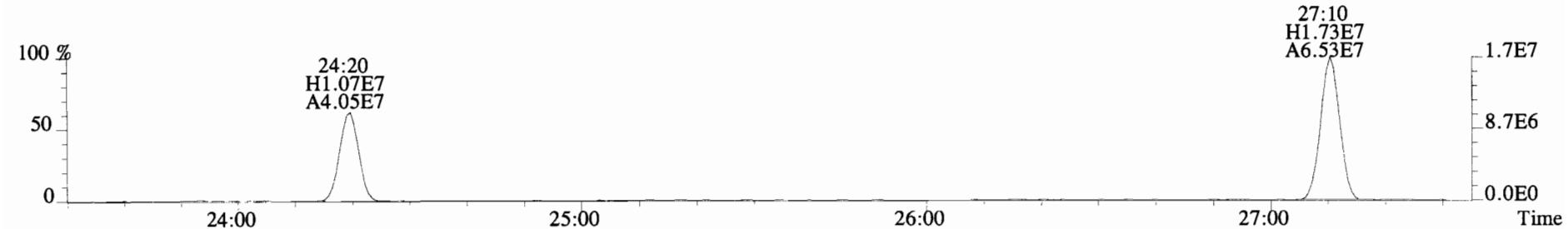
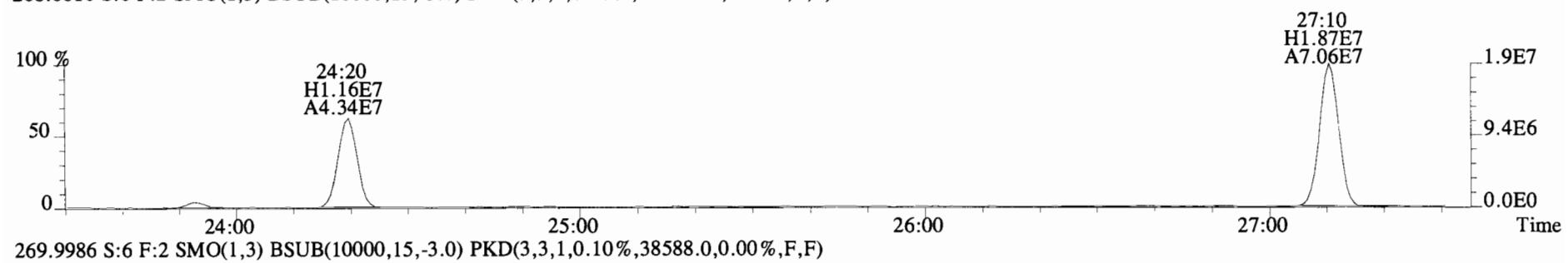
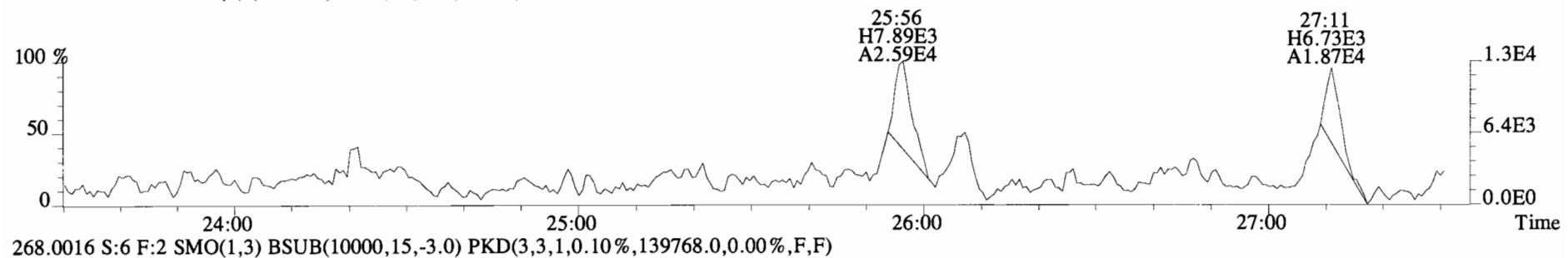
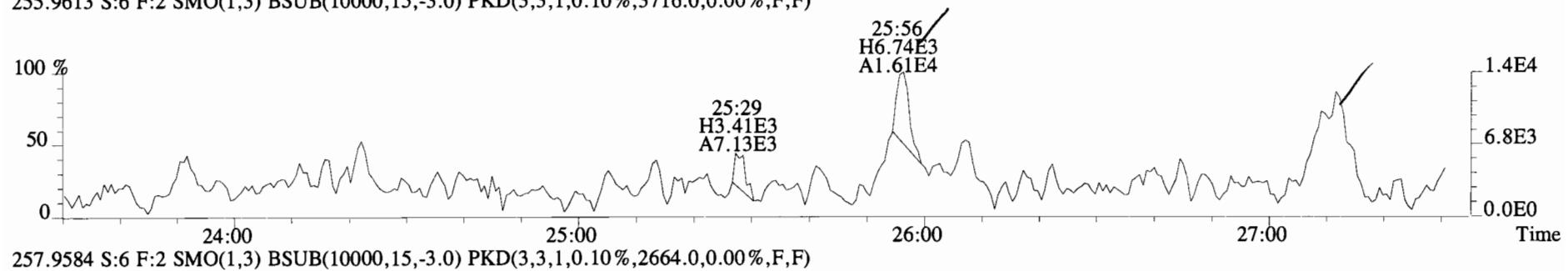
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 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
 222.0003 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3904.0,0.00%,F,F)



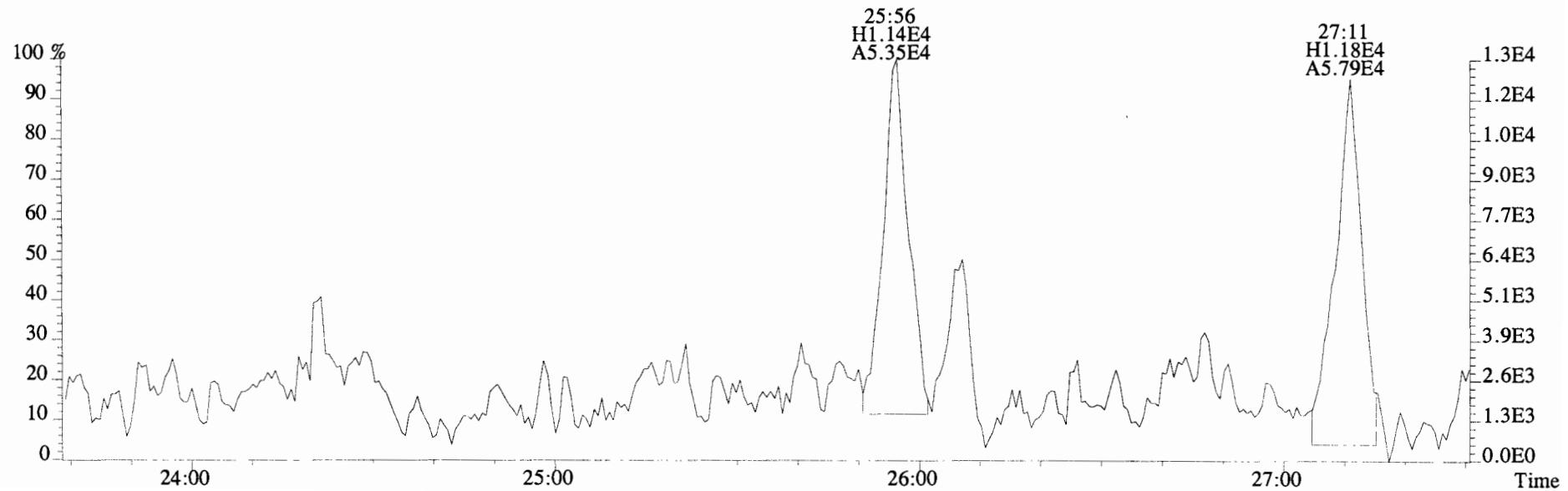
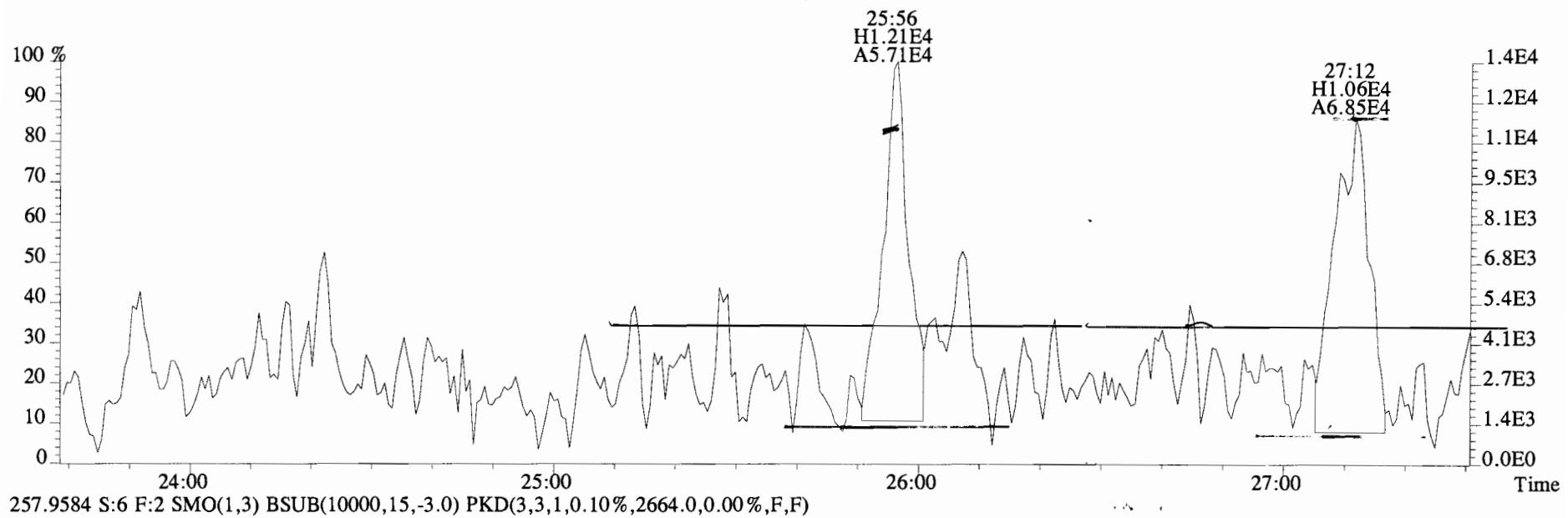
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222.0003 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3904.0,0.00%,F,F)



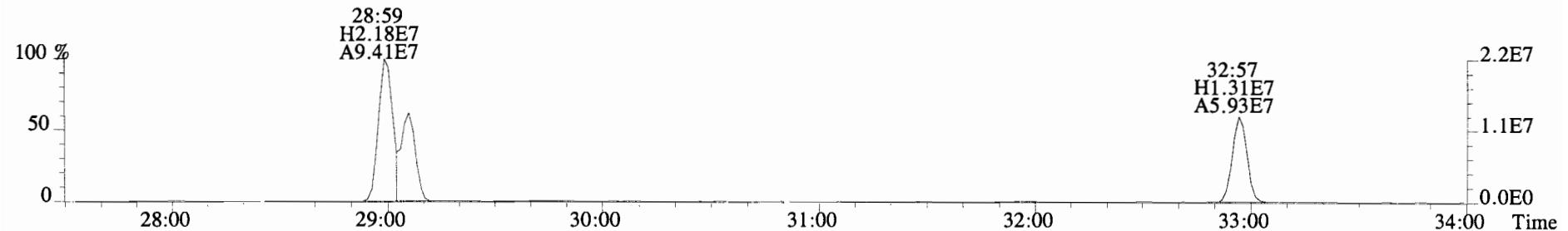
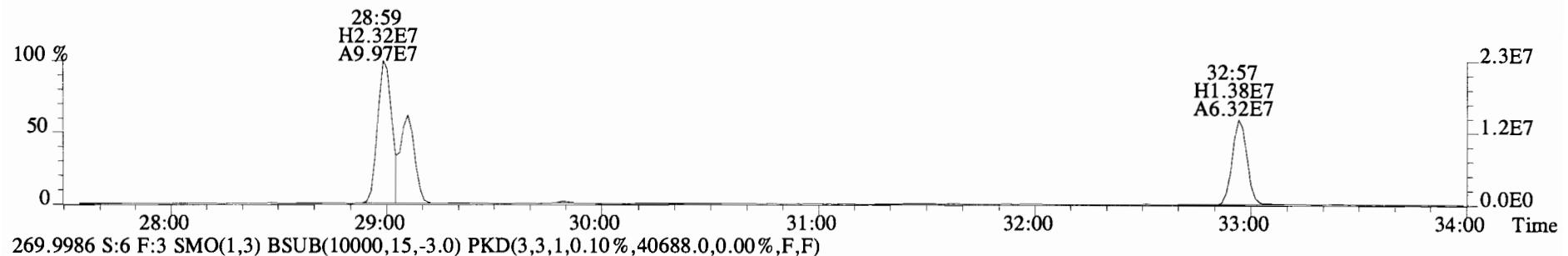
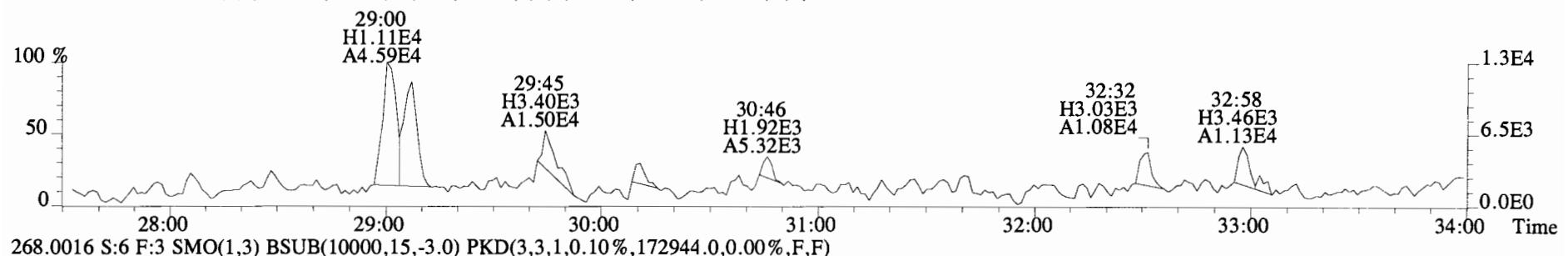
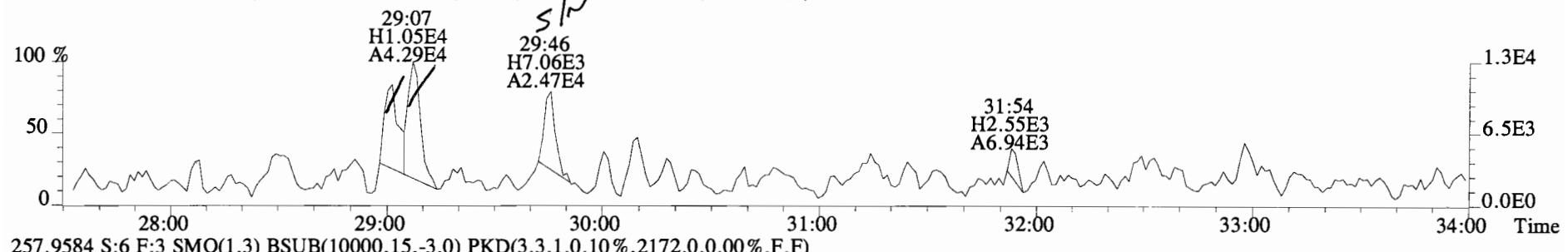
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Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3716.0,0.00%,F,F)



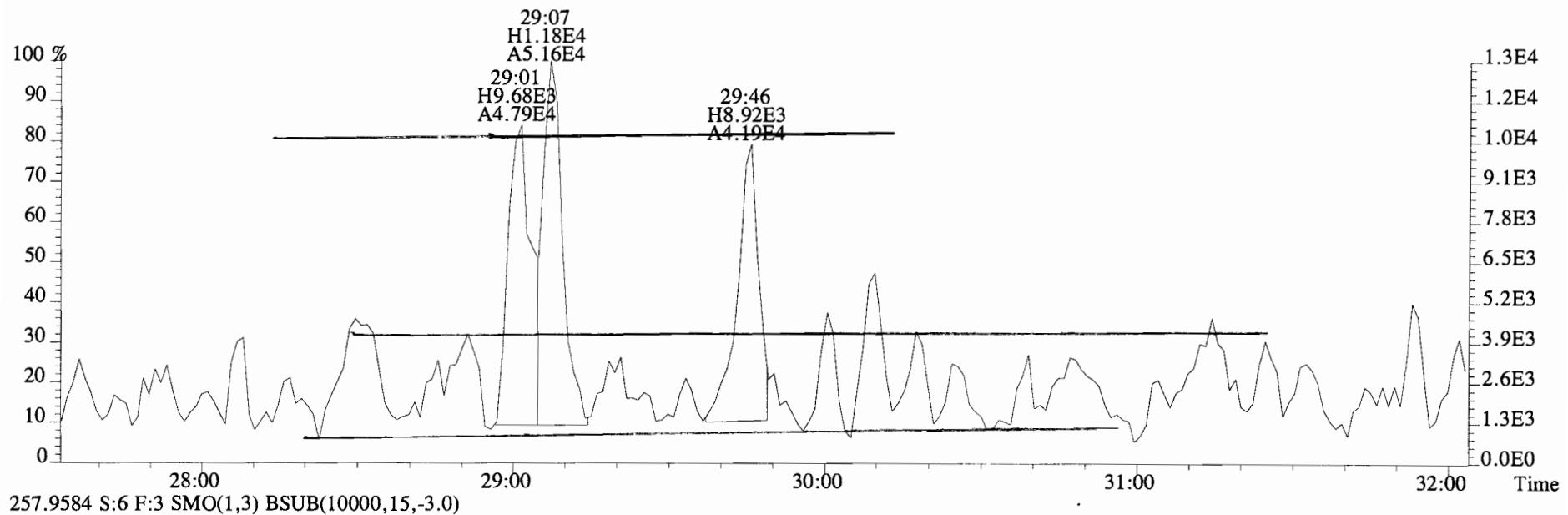
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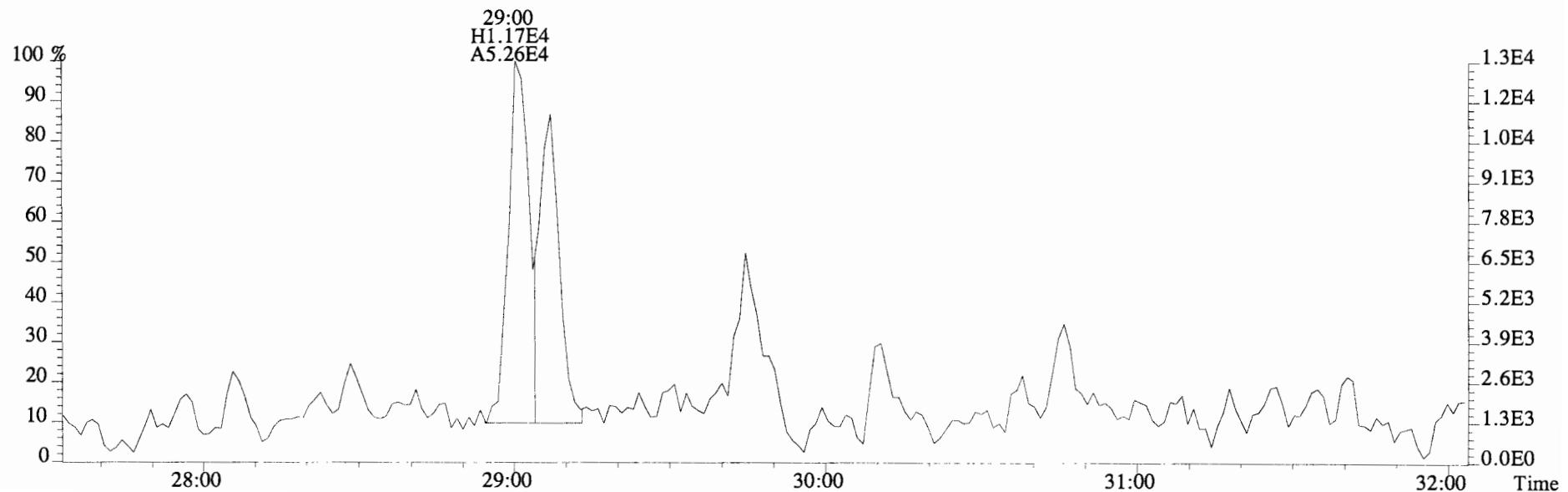
File:141021E2 #1-761 Acq:22-OCT-2014 01:30:11 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
 255.9613 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3052.0,0.00%,F,F)



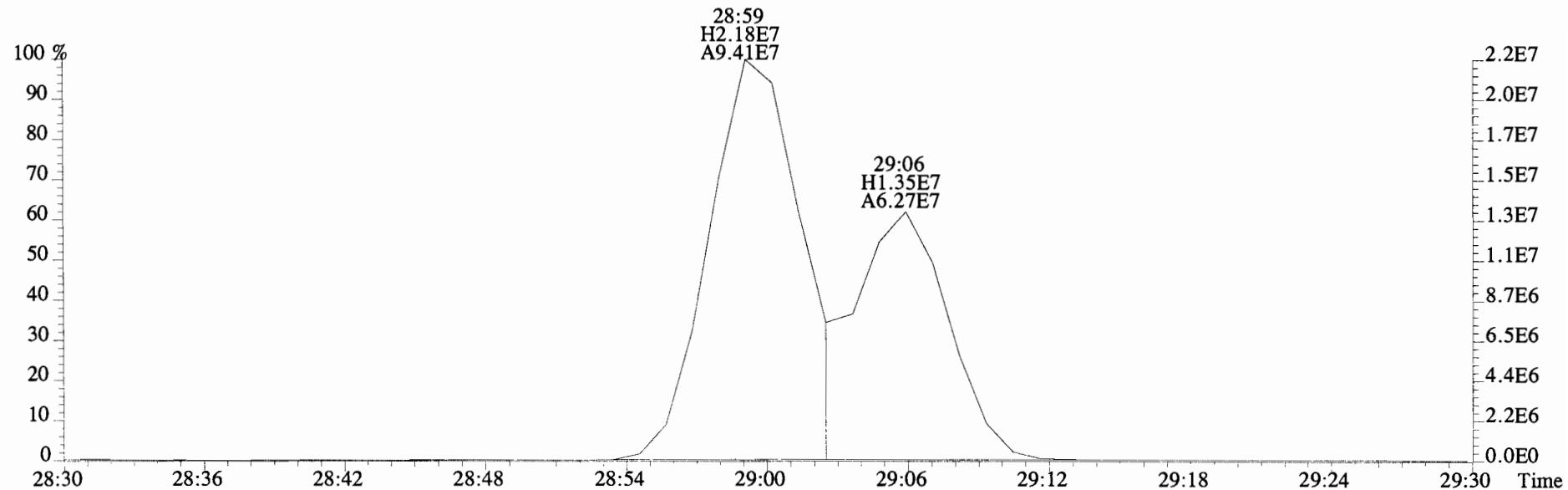
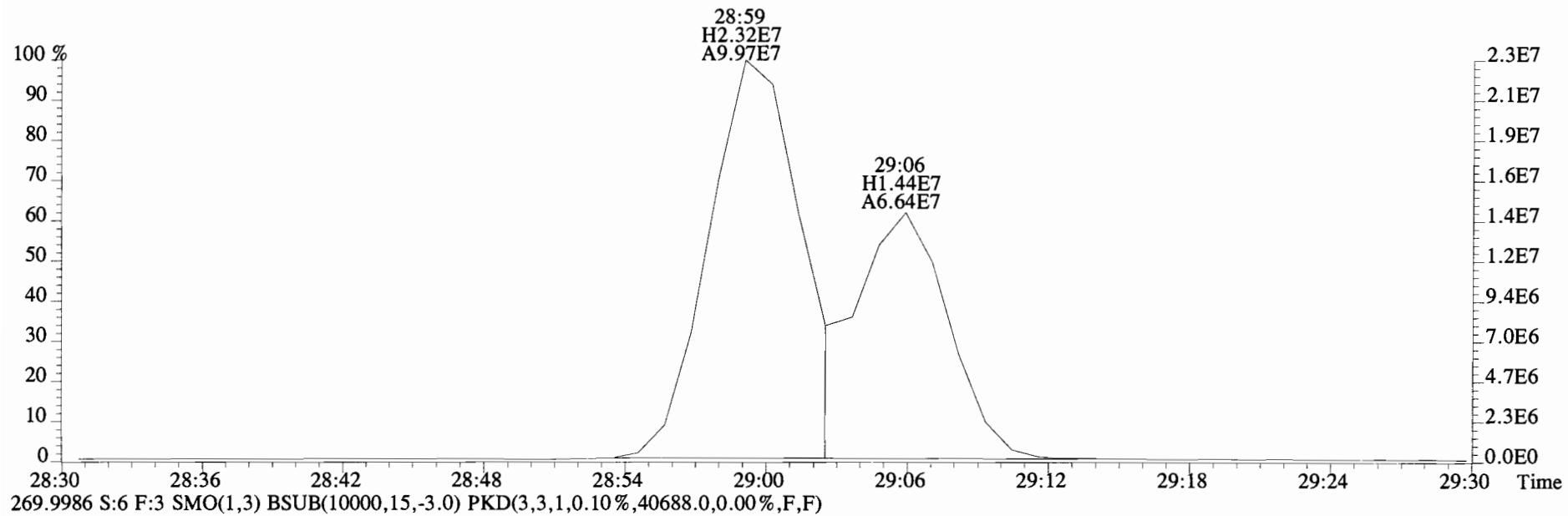
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Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



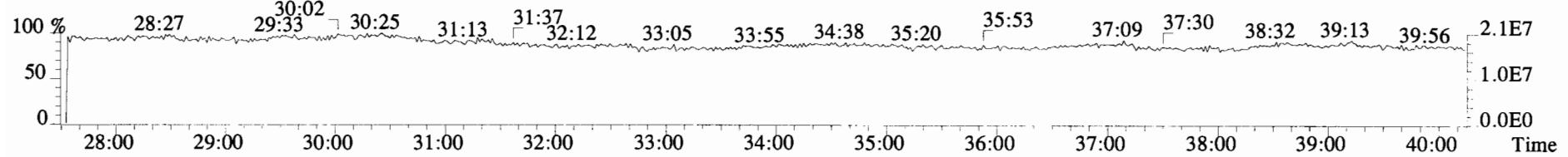
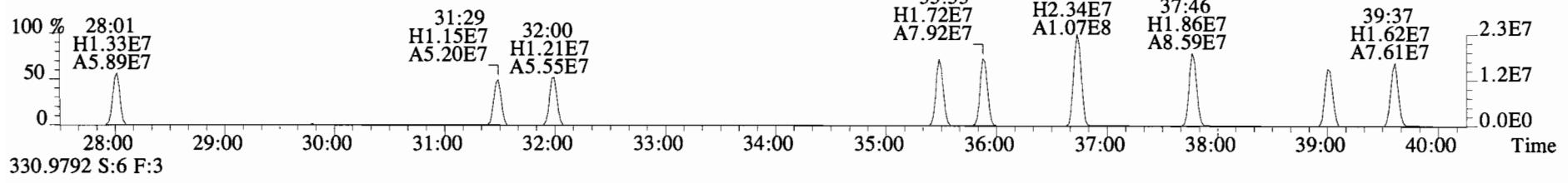
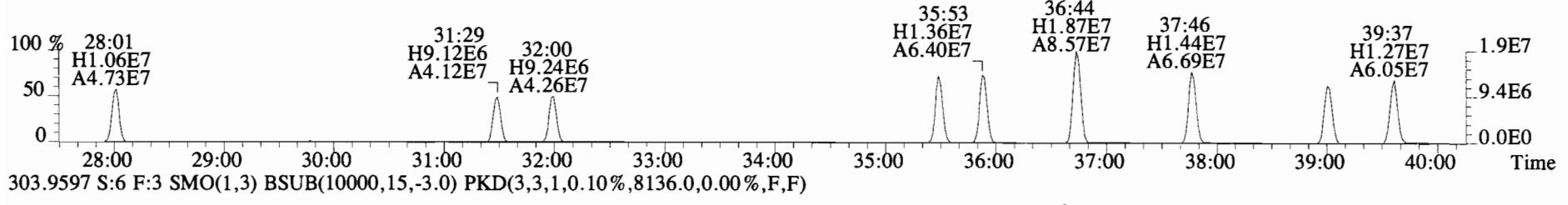
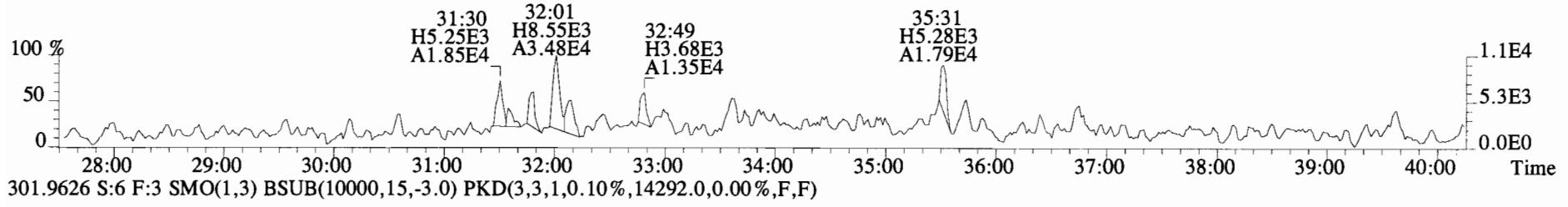
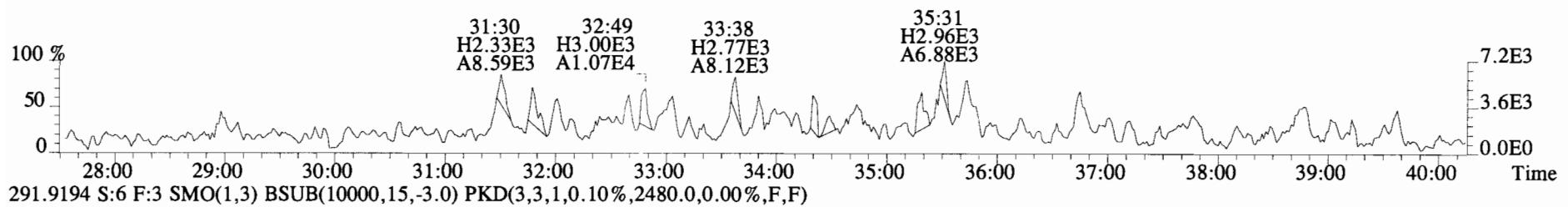
257.9584 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



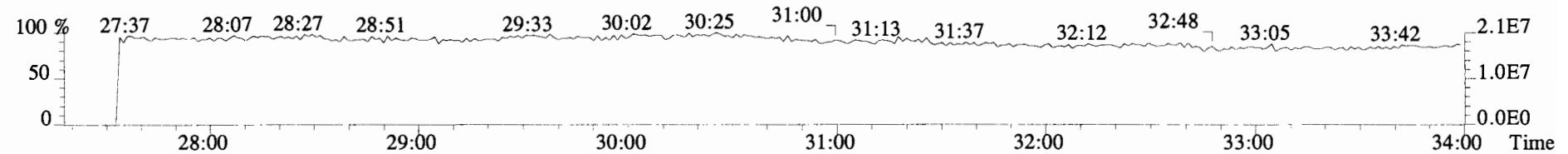
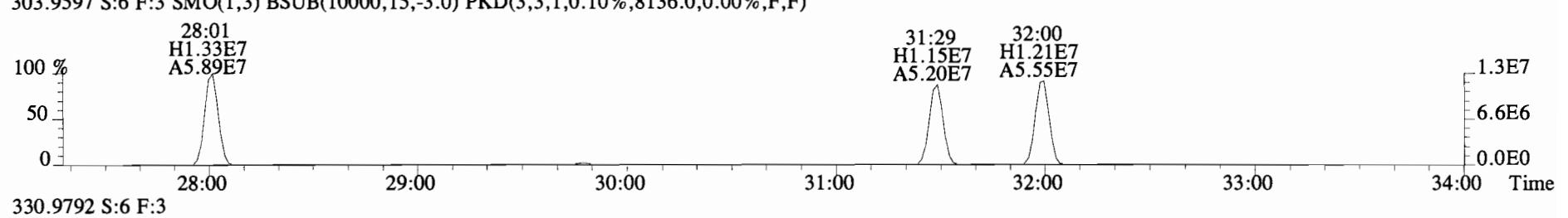
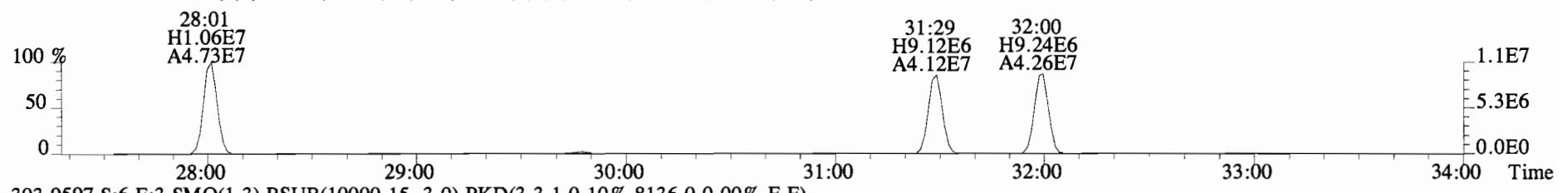
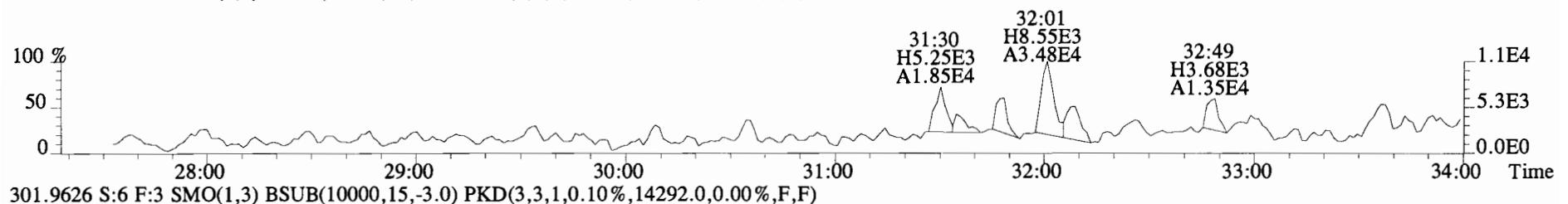
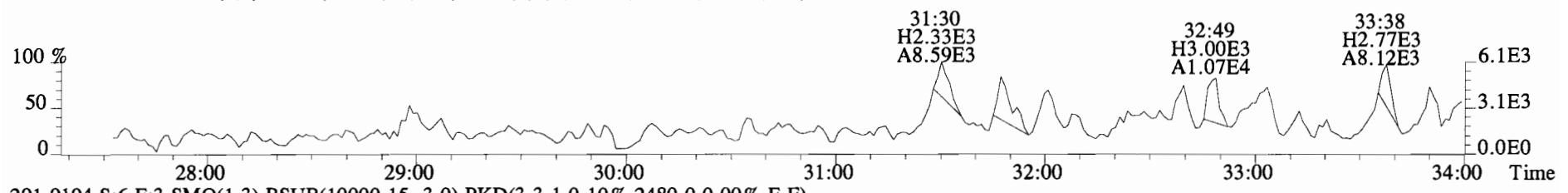
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Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
268.0016 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,172944.0,0.00%,F,F)



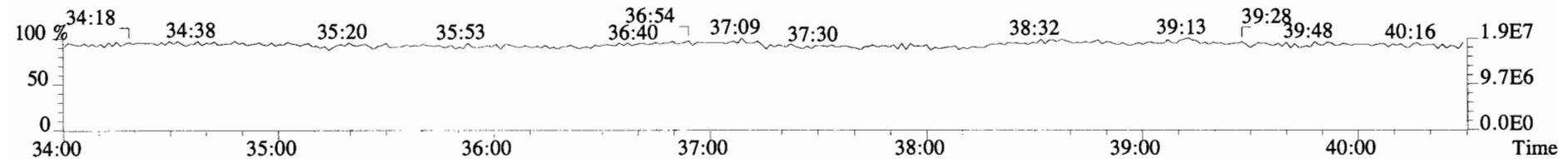
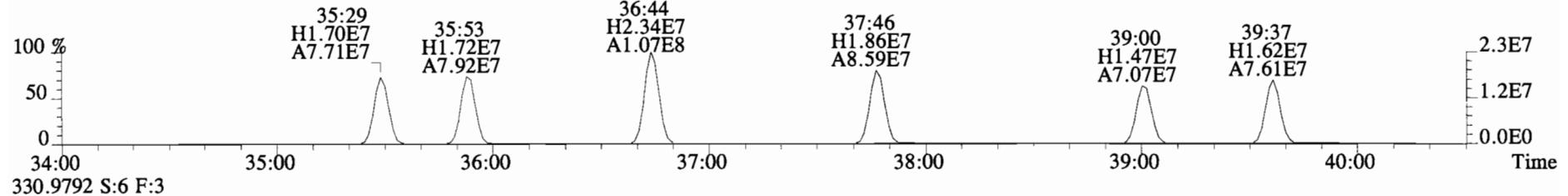
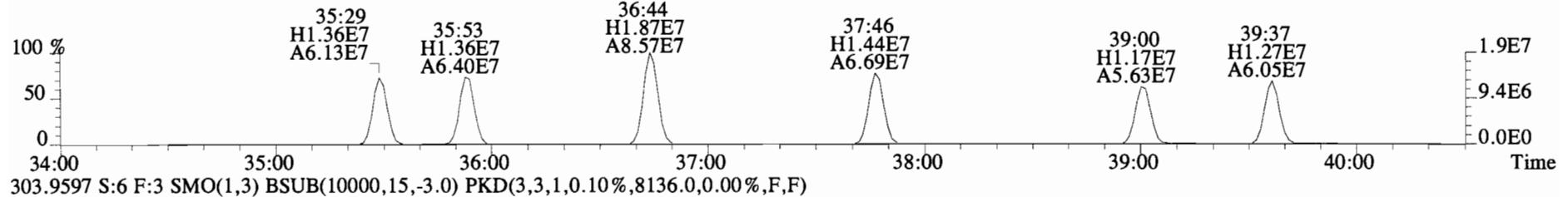
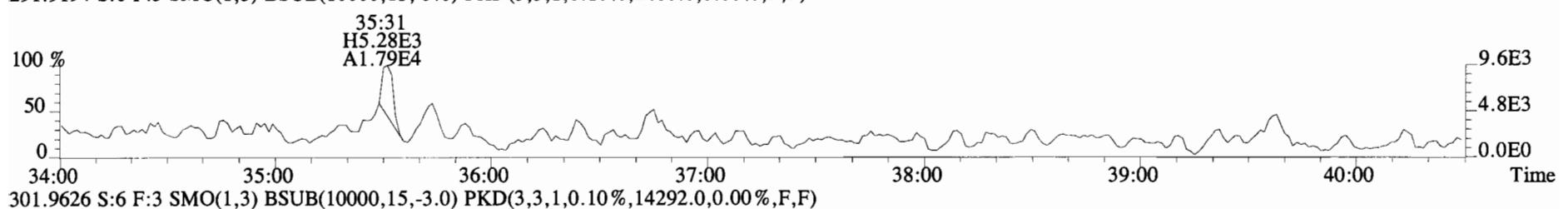
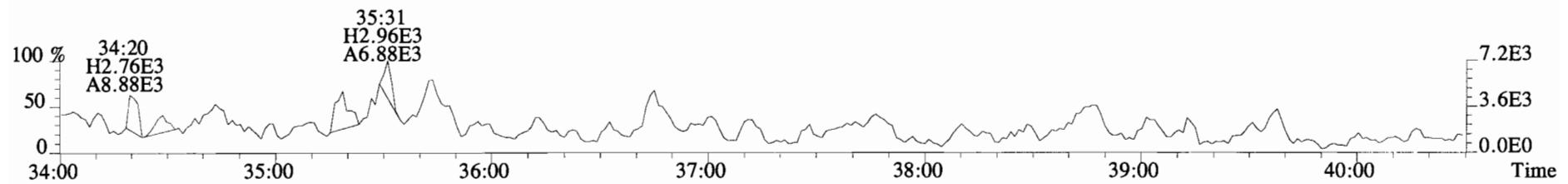
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 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
 289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1936.0,0.00%,F,F)



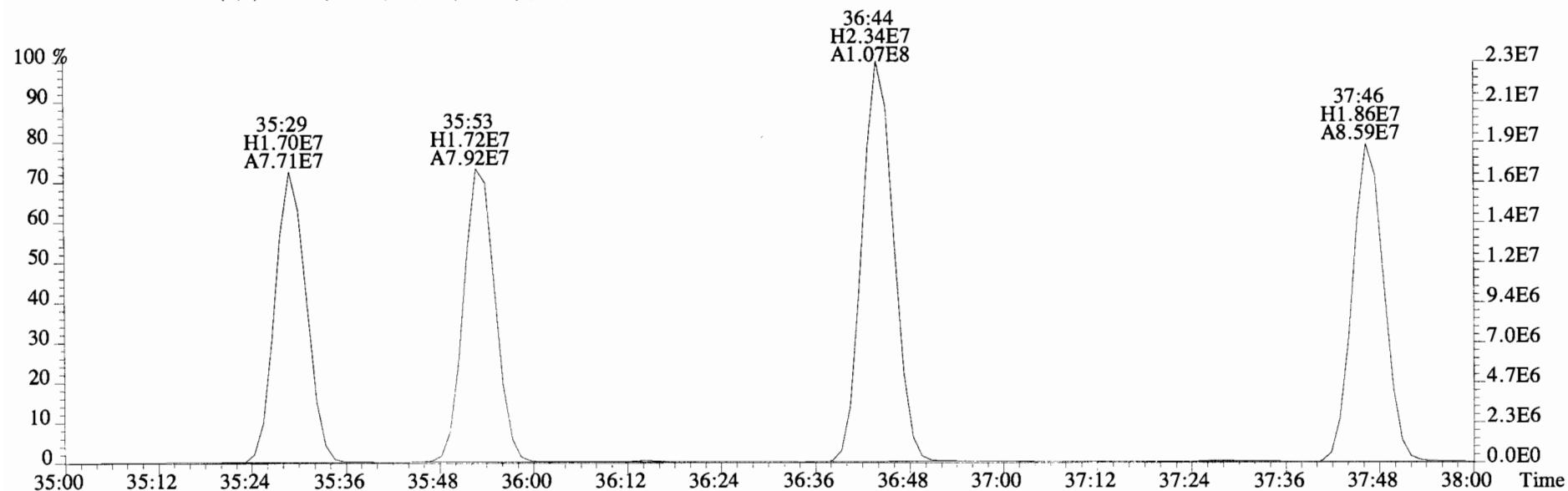
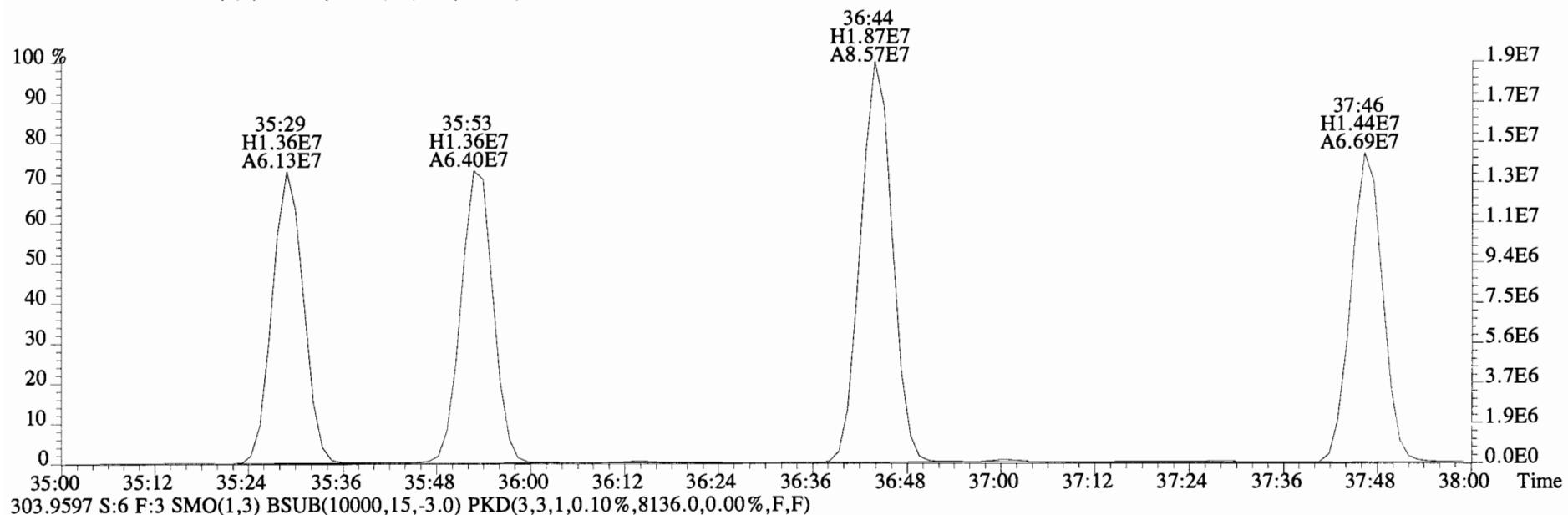
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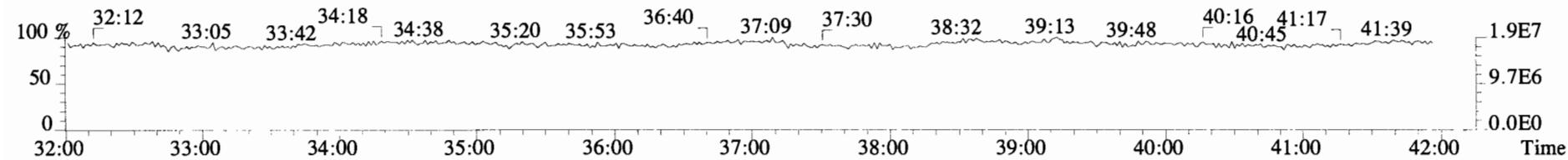
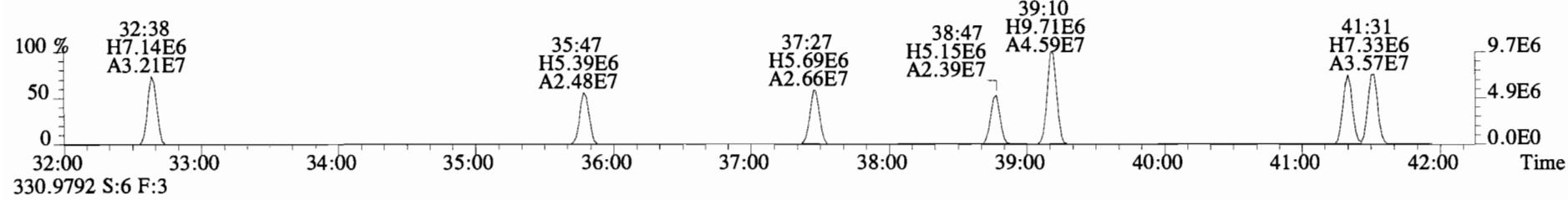
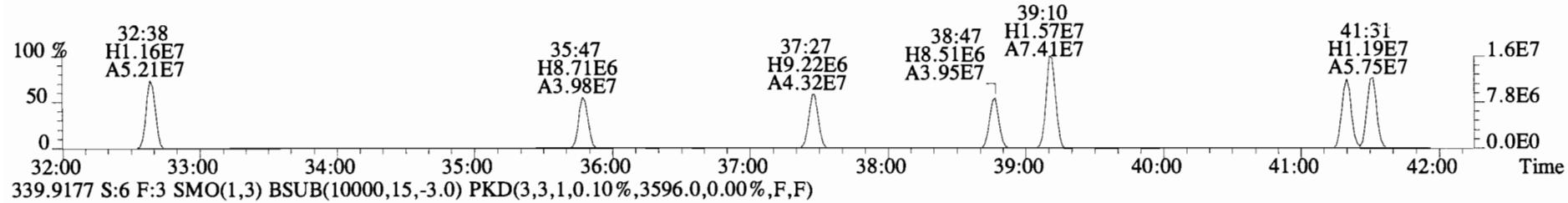
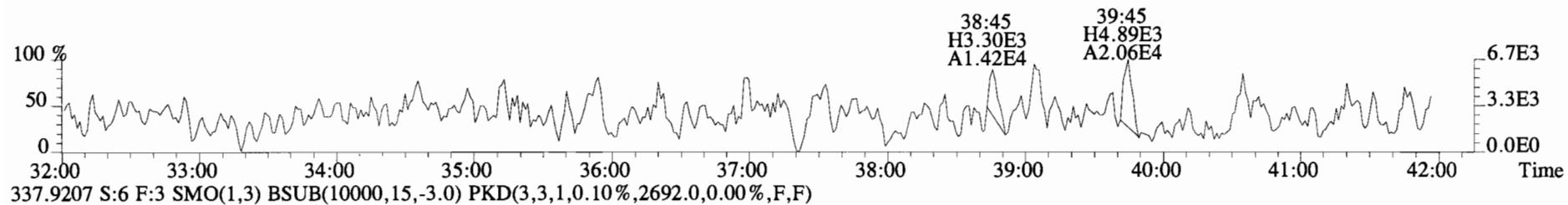
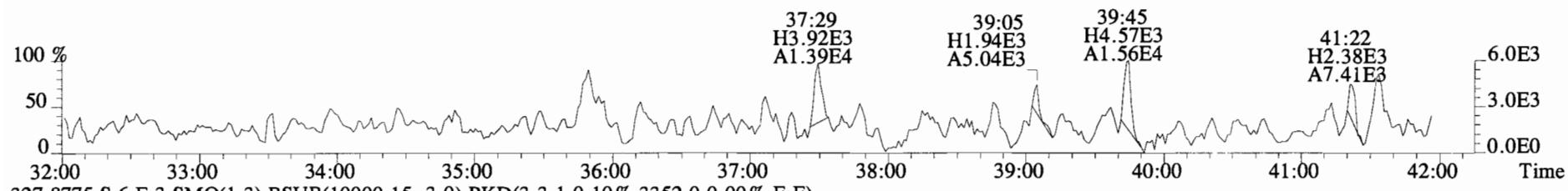
File:141021E2 #1-761 Acq:22-OCT-2014 01:30:11 GC EI + Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
 289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1936.0,0.00%,F,F)



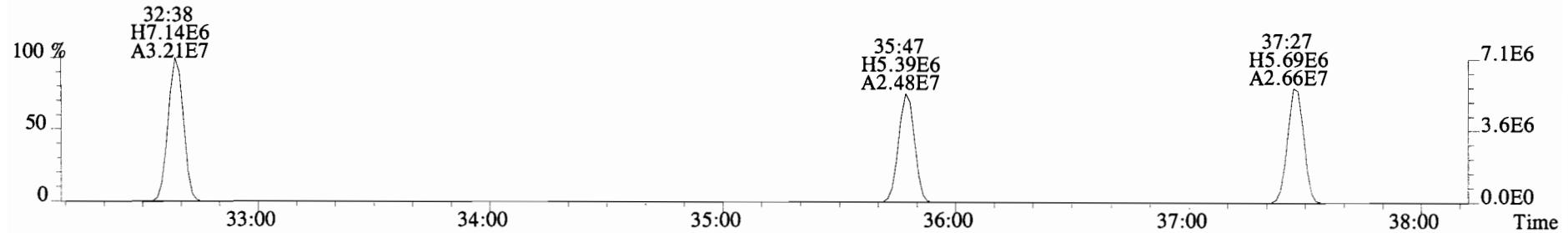
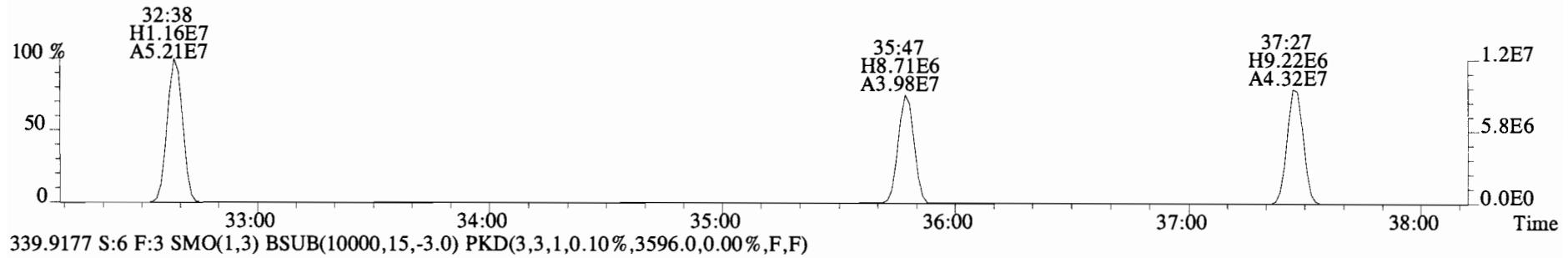
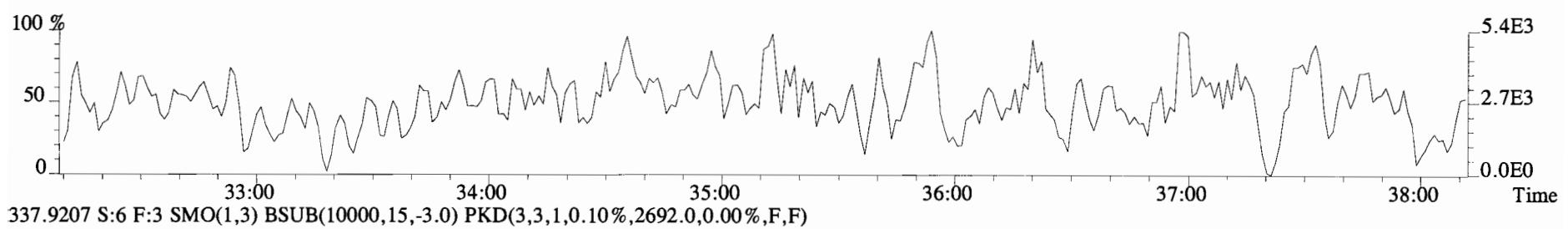
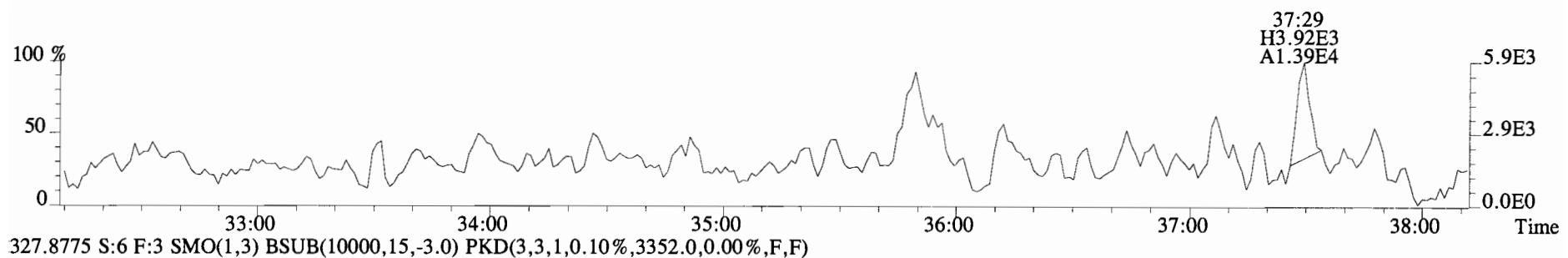
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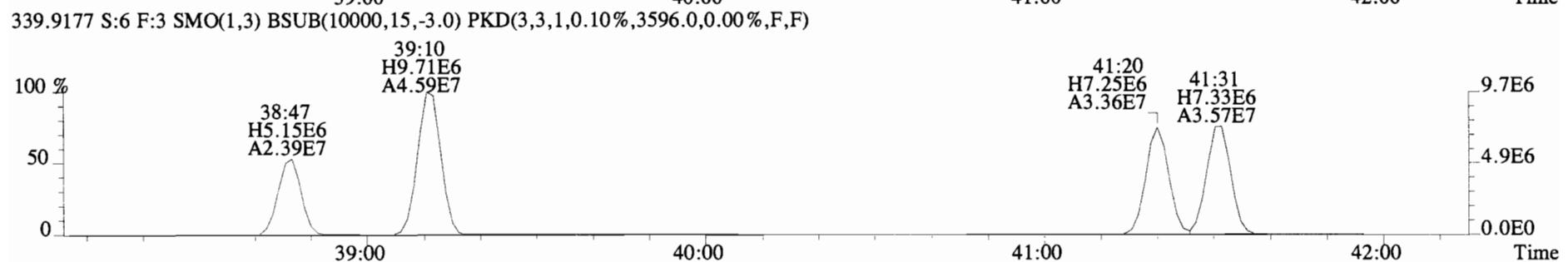
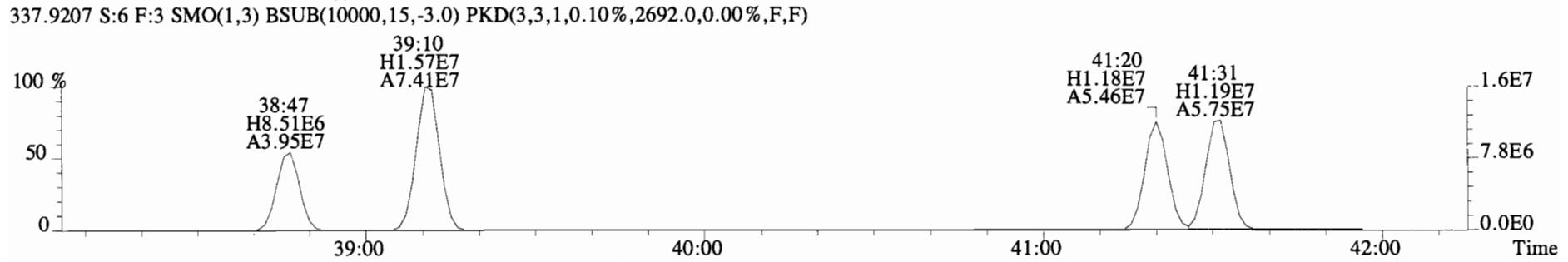
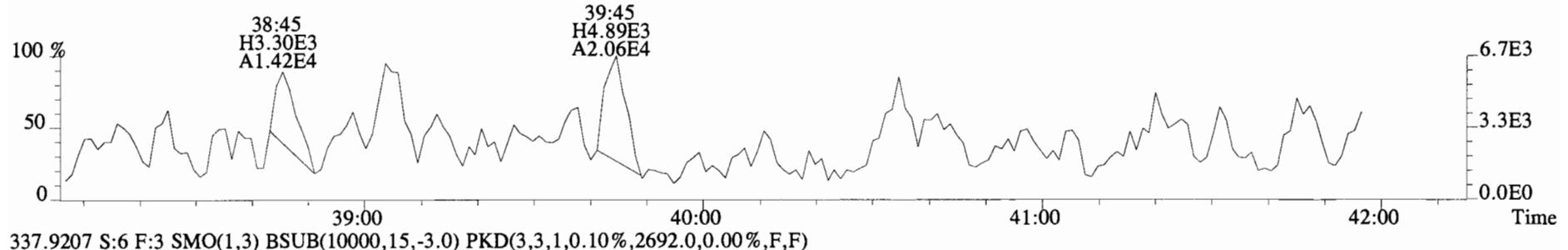
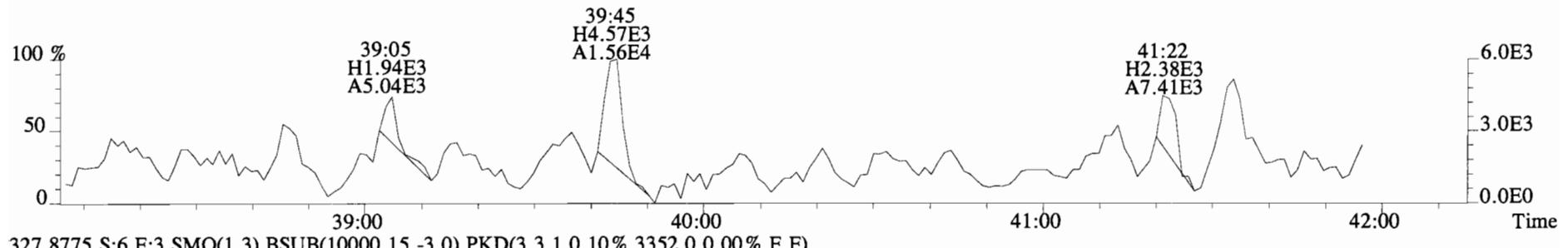
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 325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2100.0,0.00%,F,F)



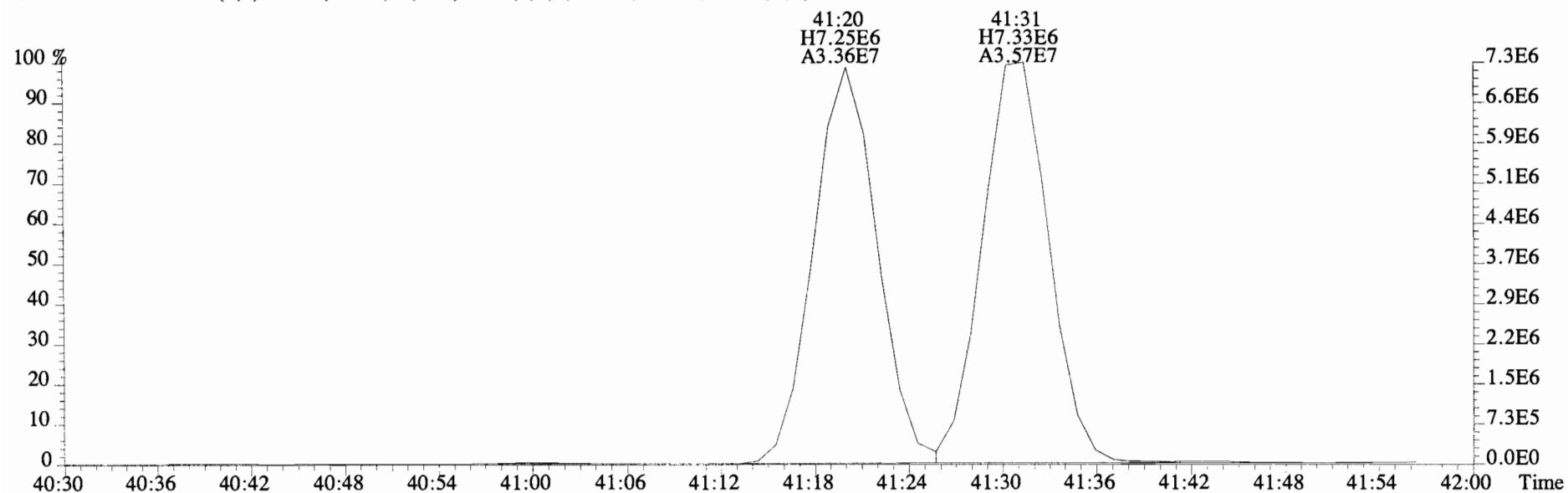
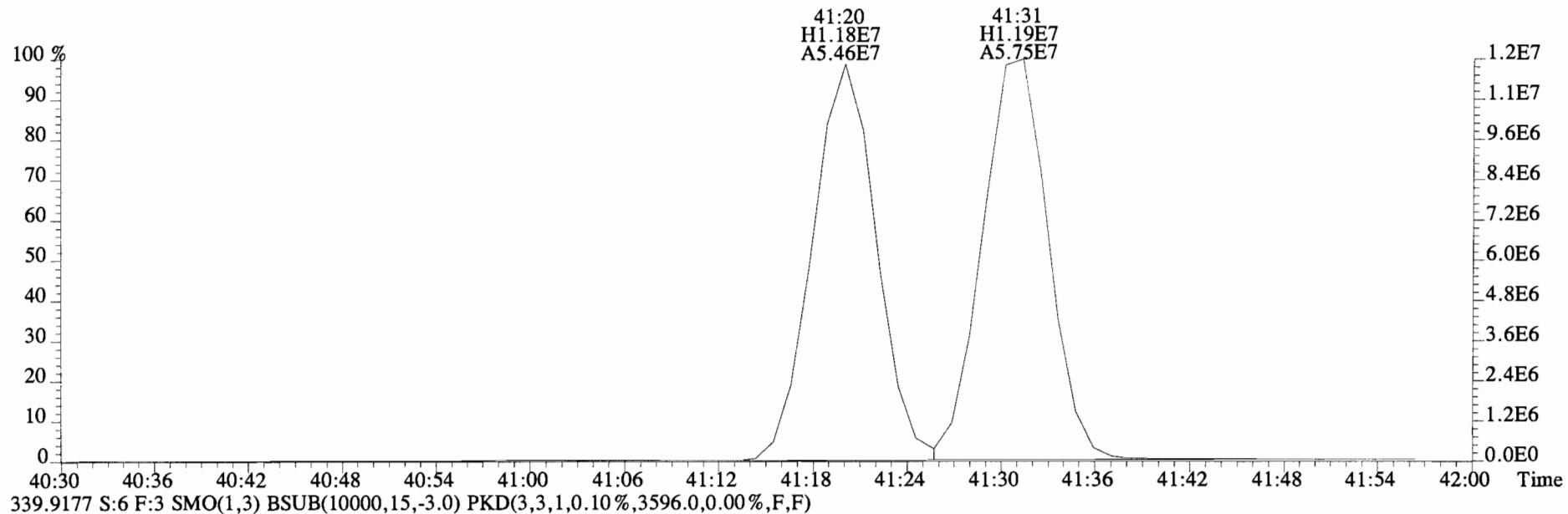
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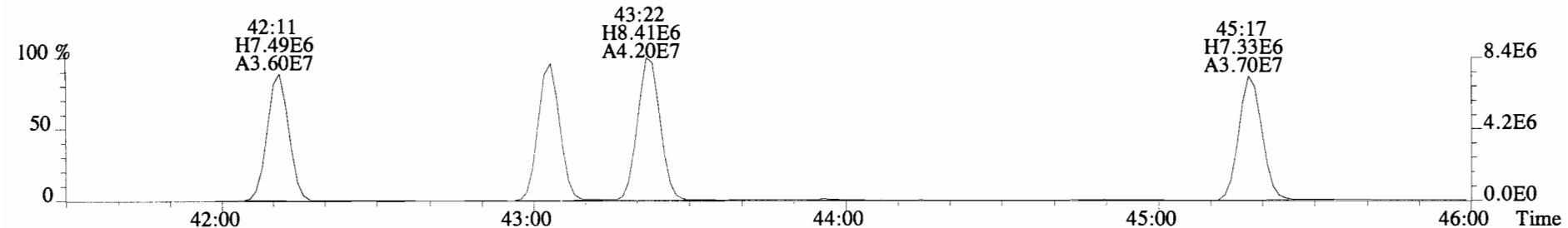
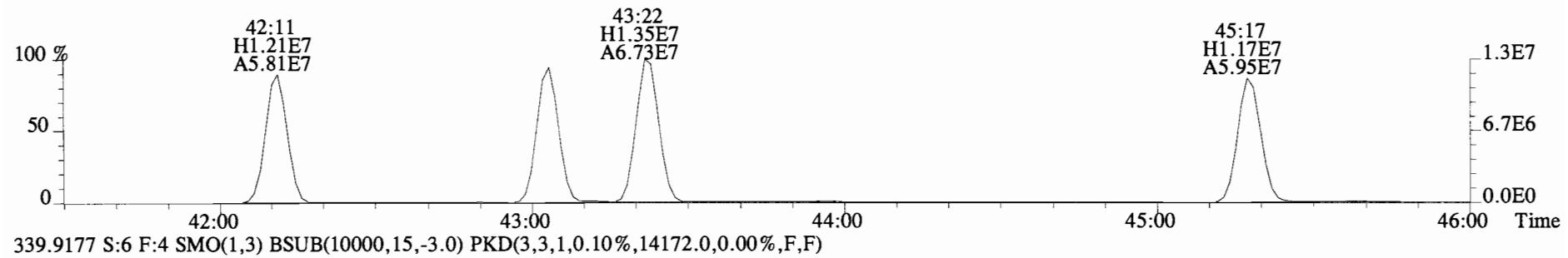
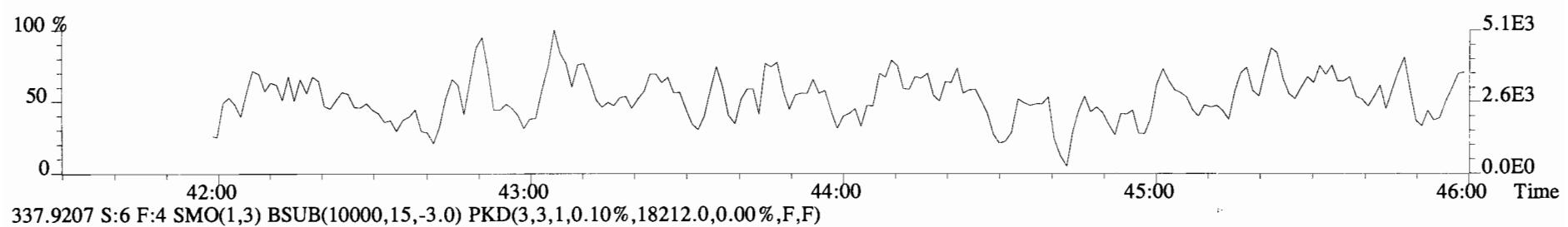
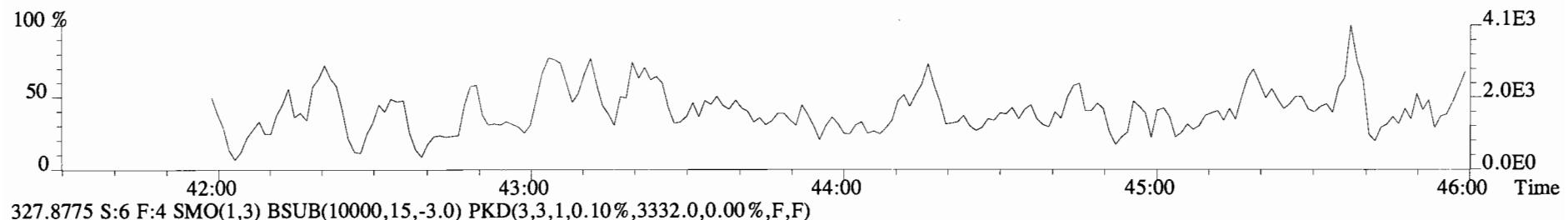
File:141021E2 #1-761 Acq:22-OCT-2014 01:30:11 GC EI + Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
 325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2100.0,0.00%,F,F)



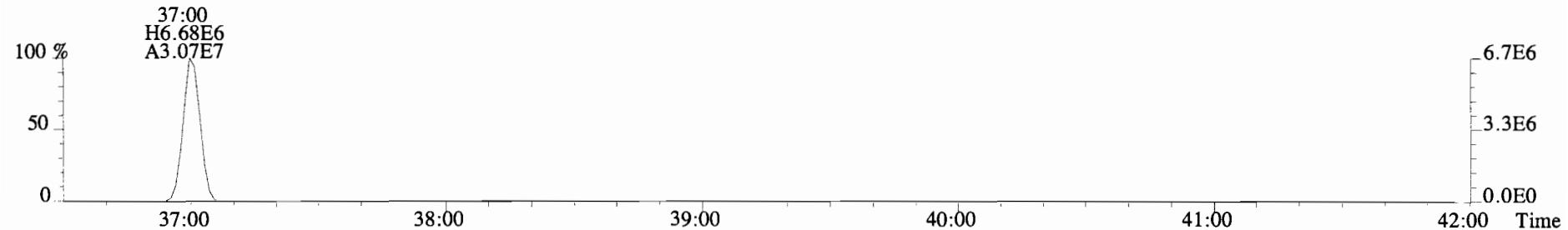
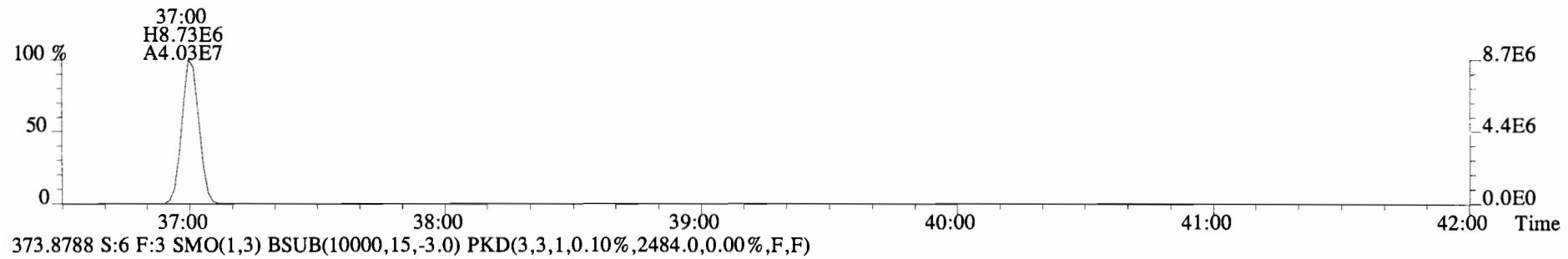
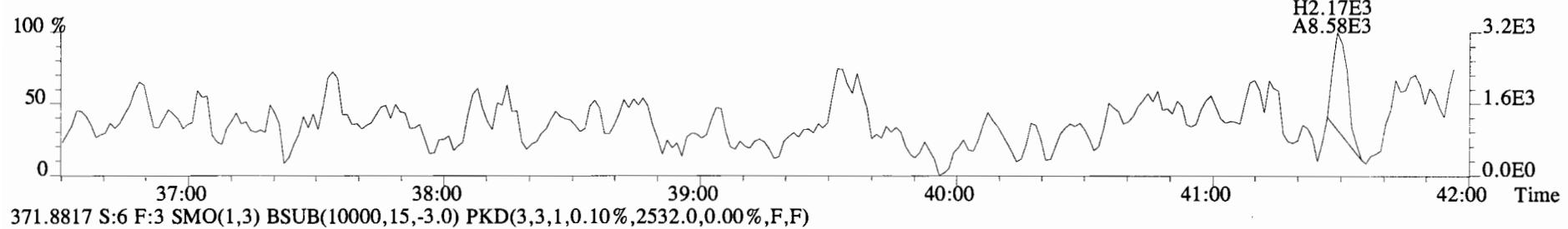
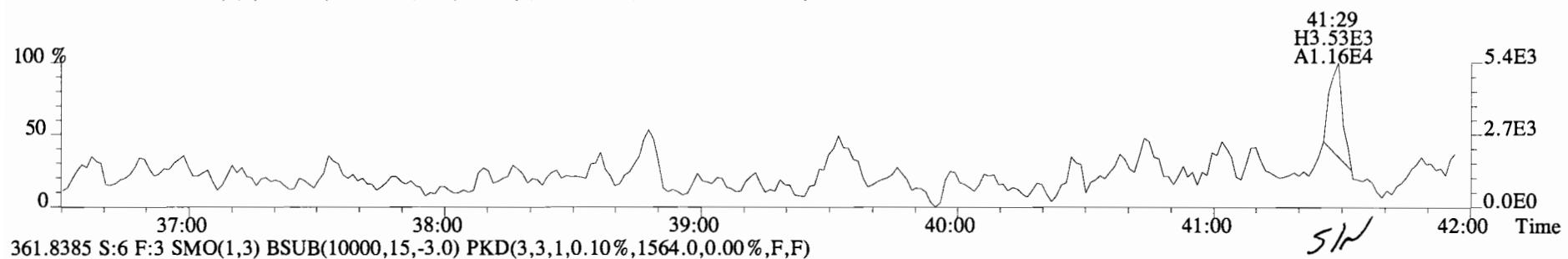
File:141021E2 #1-761 Acq:22-OCT-2014 01:30:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2692.0,0.00%,F,F)



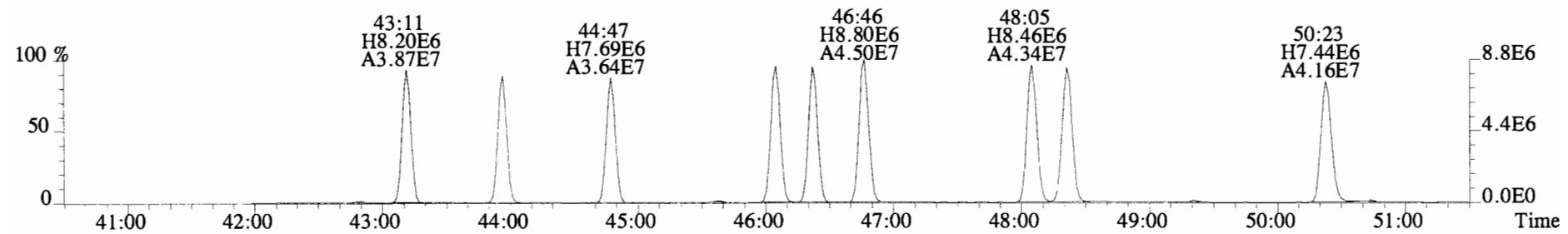
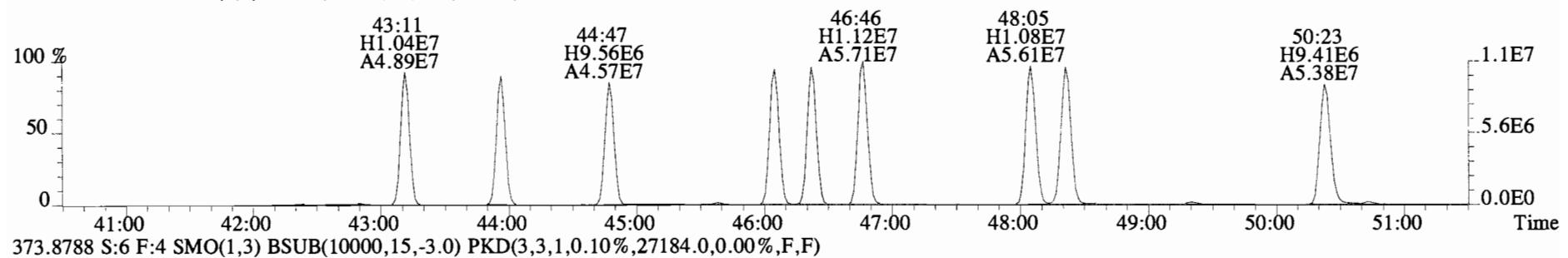
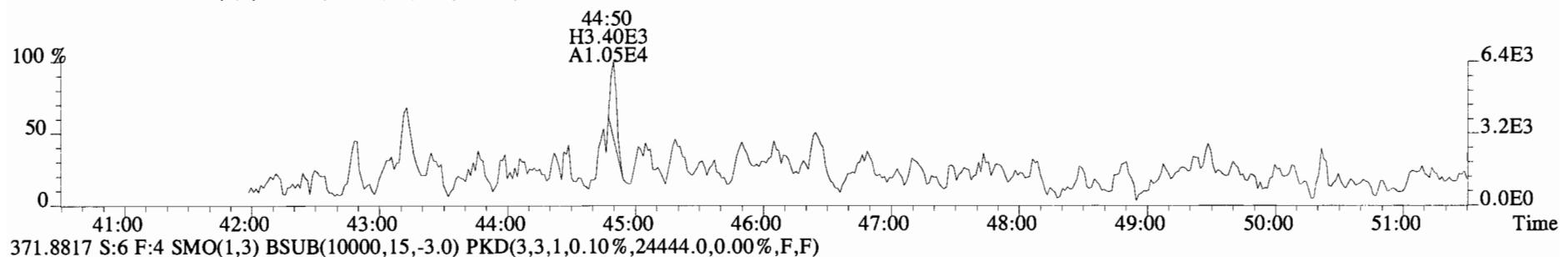
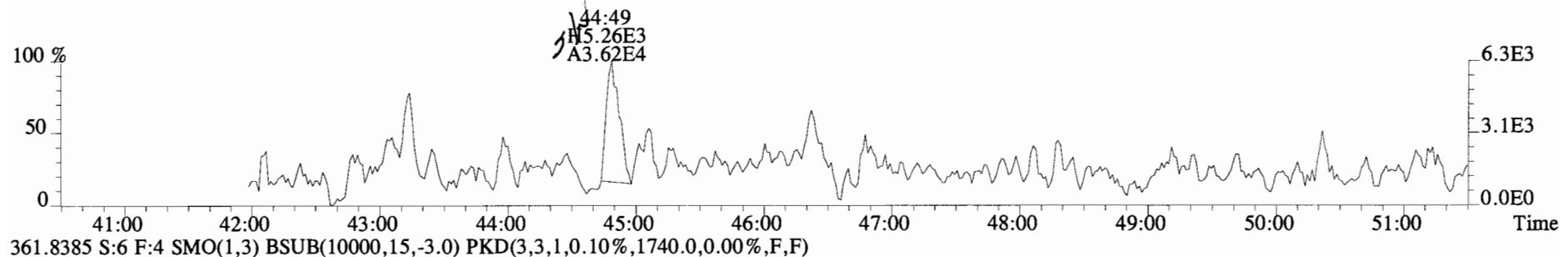
File:141021E2 #1-547 Acq:22-OCT-2014 01:30:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2056.0,0.00%,F,F)



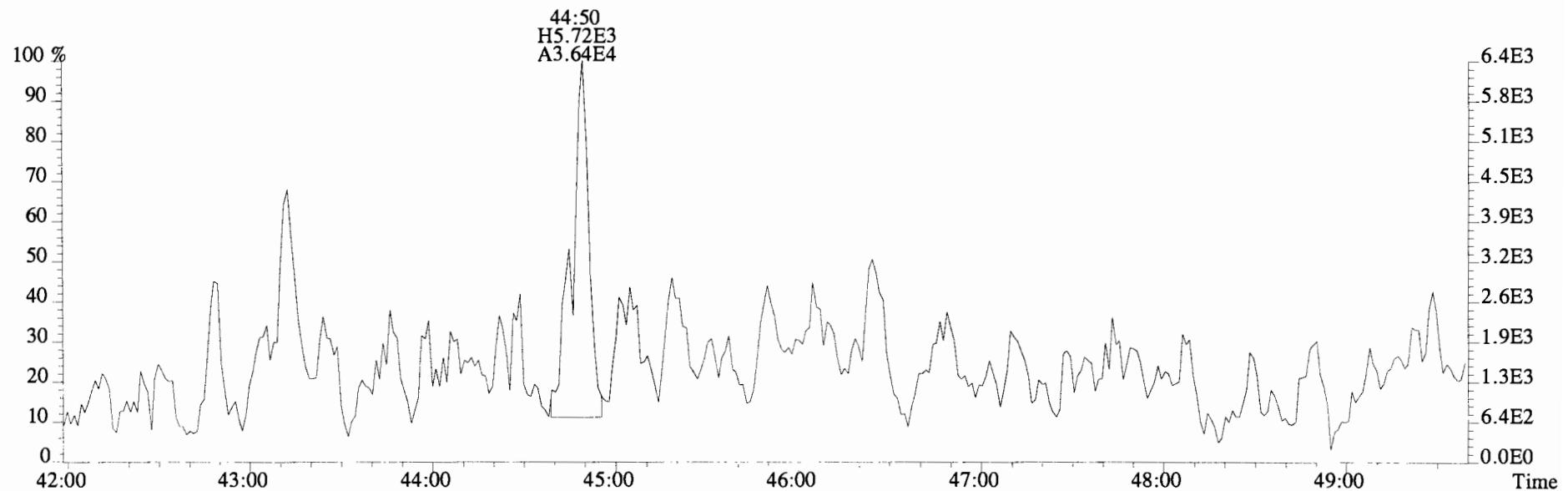
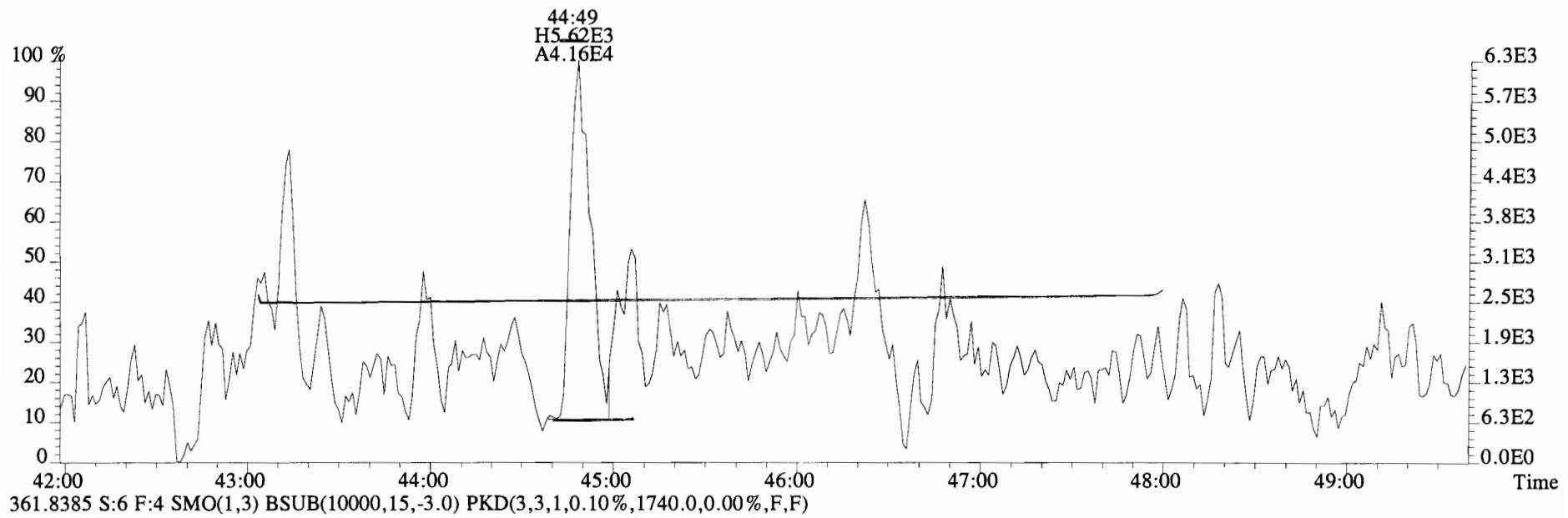
File:141021E2 #1-761 Acq:22-OCT-2014 01:30:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1560.0,0.00%,F,F)



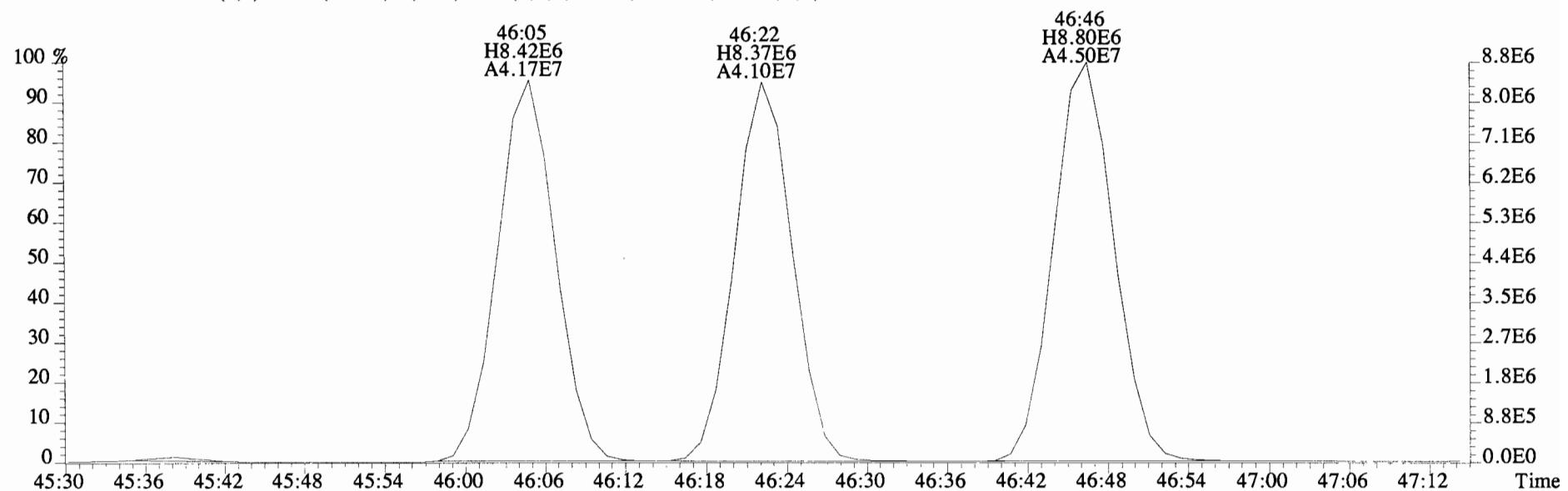
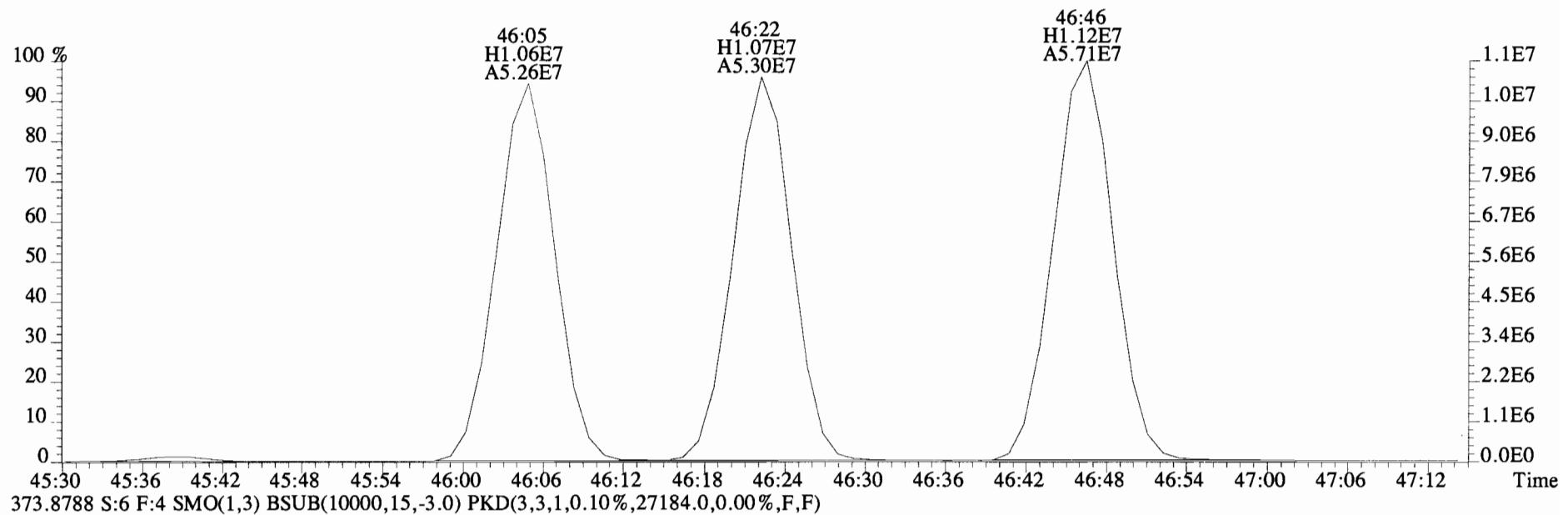
File:141021E2 #1-547 Acq:22-OCT-2014 01:30:11 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
 359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1924.0,0.00%,F,F)



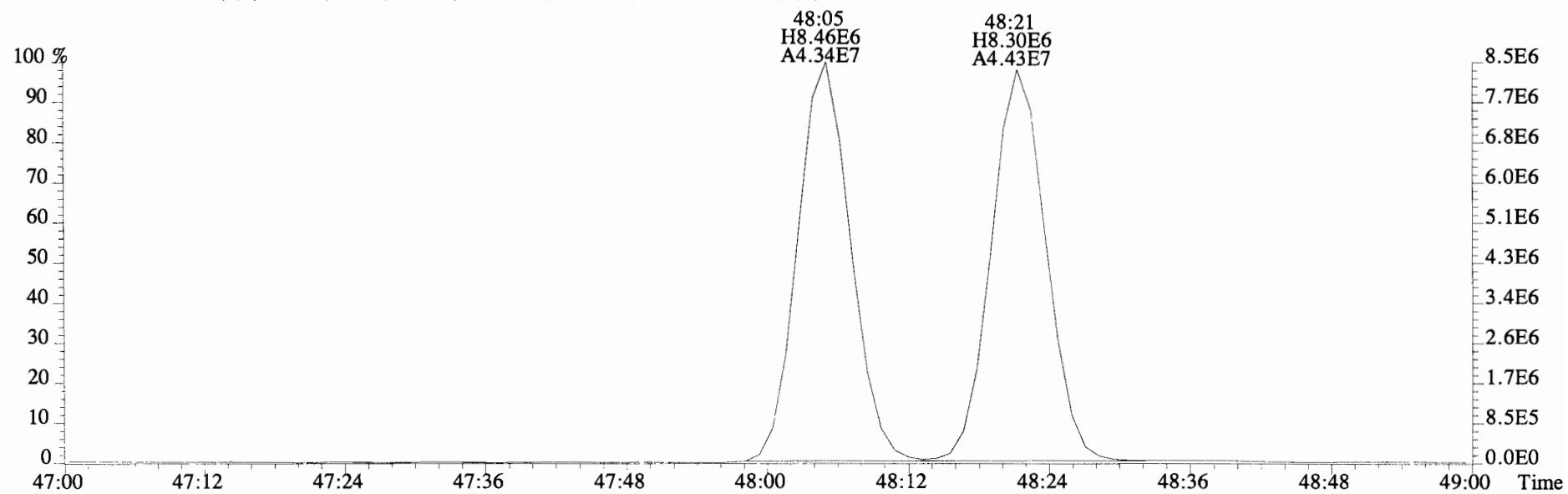
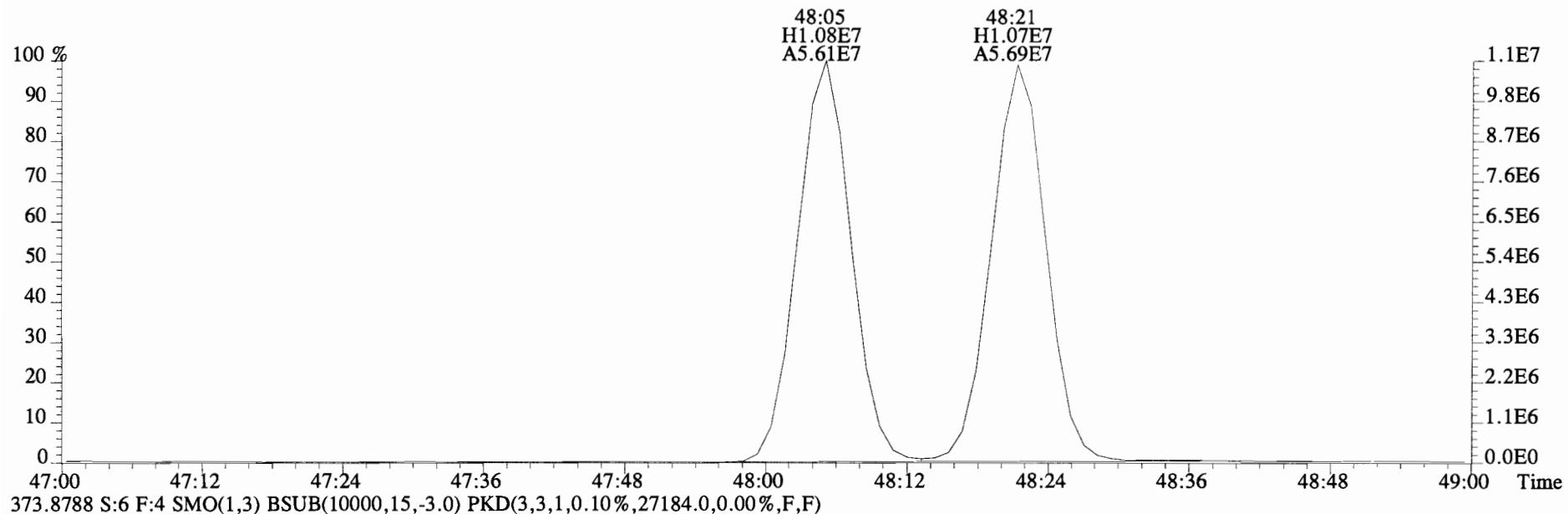
File:141021E2 #1-547 Acq:22-OCT-2014 01:30:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1924.0,0.00%,F,F)



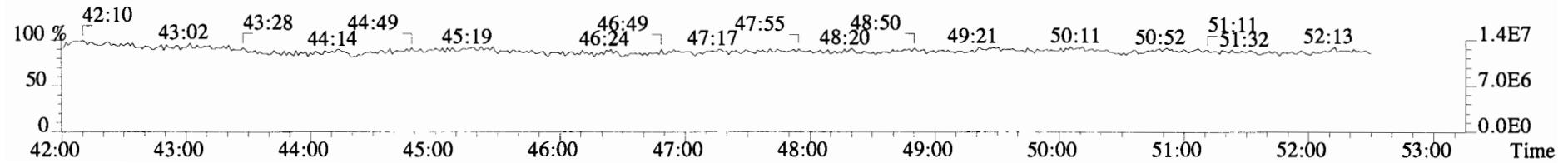
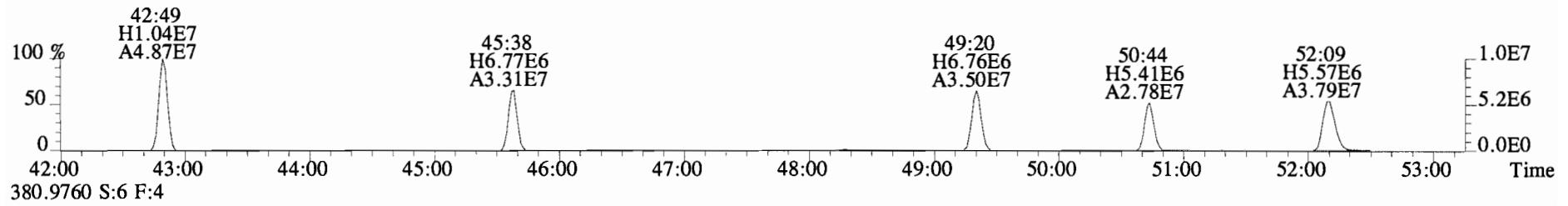
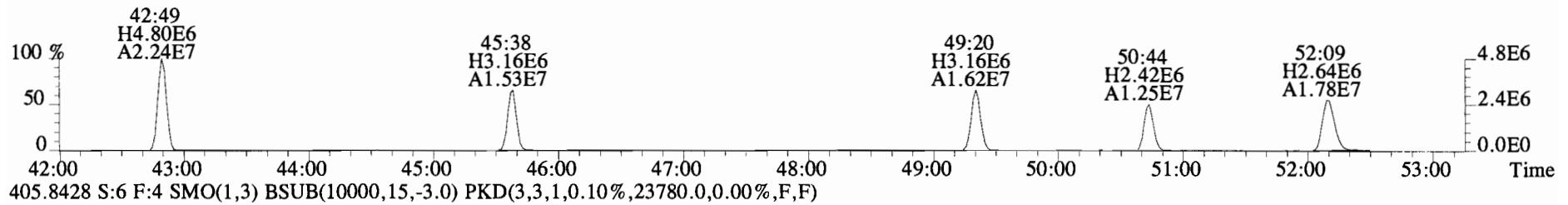
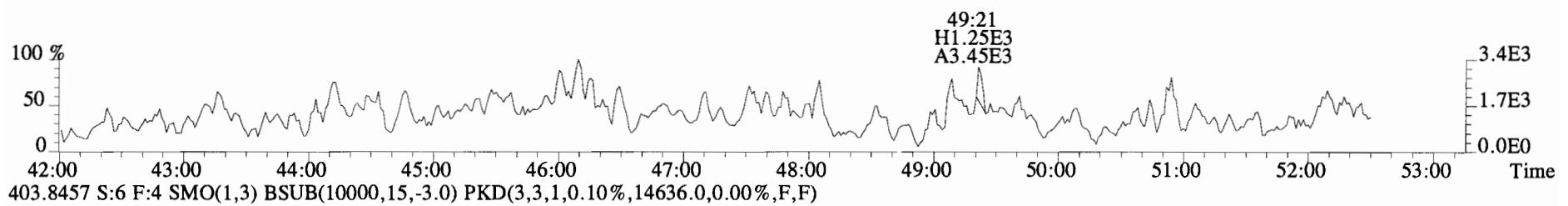
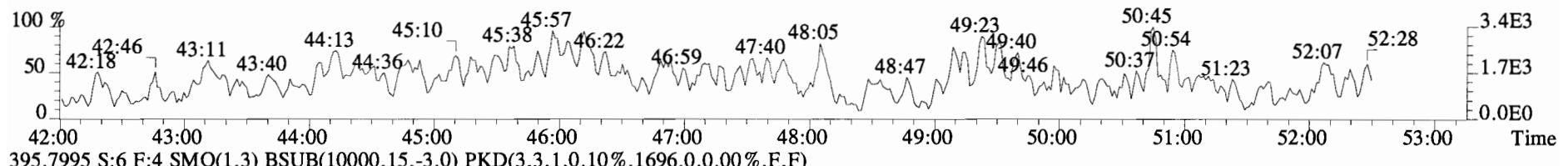
File:141021E2 #1-547 Acq:22-OCT-2014 01:30:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,24444.0,0.00%,F,F)



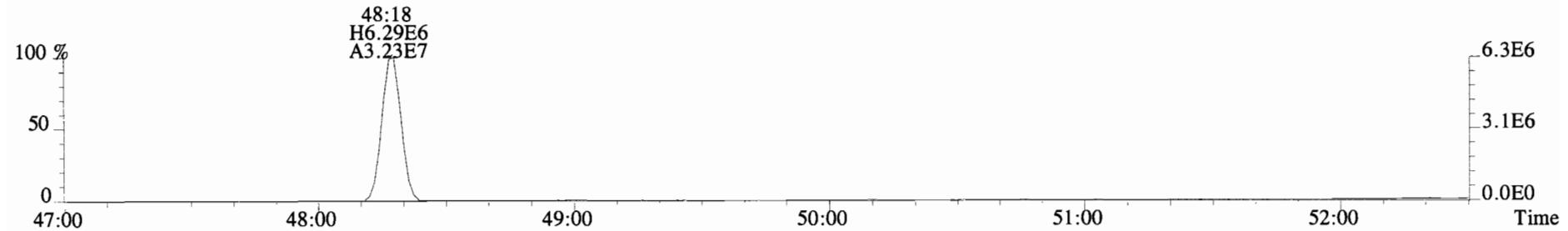
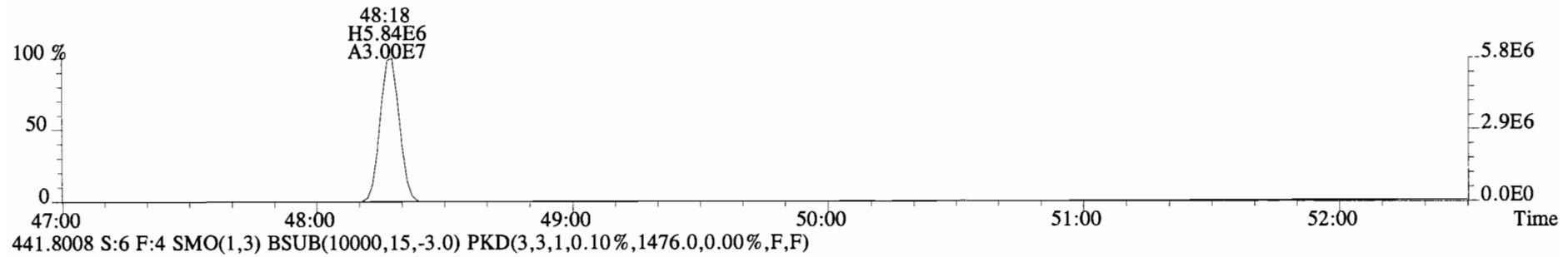
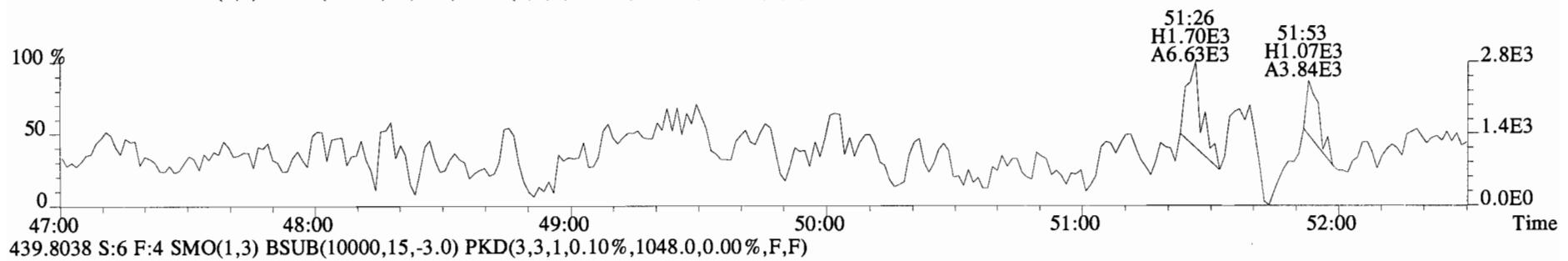
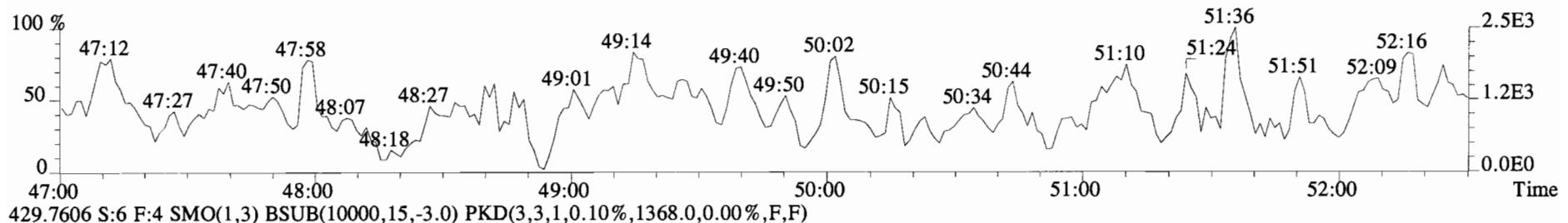
File:141021E2 #1-547 Acq:22-OCT-2014 01:30:11 GC EI + Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,24444.0,0.00%,F,F)



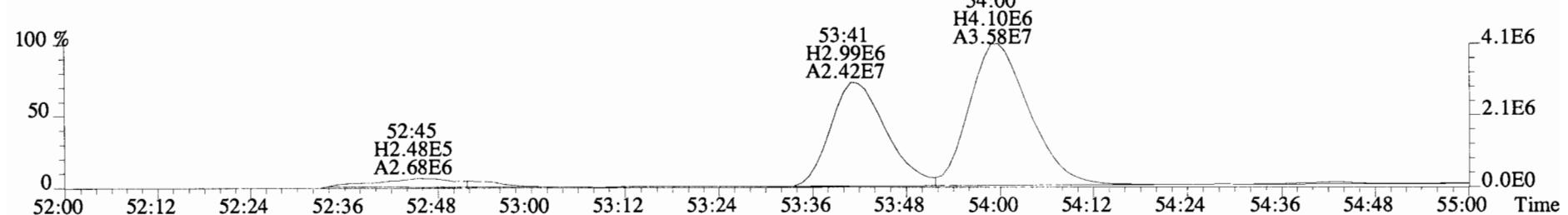
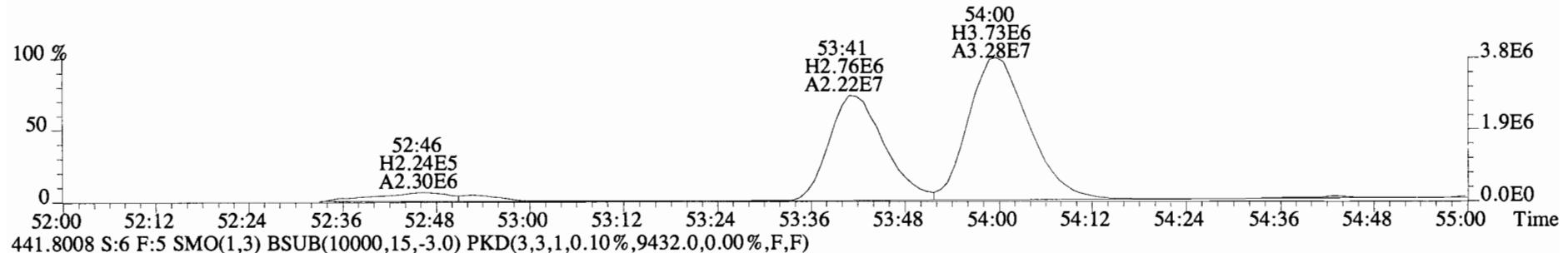
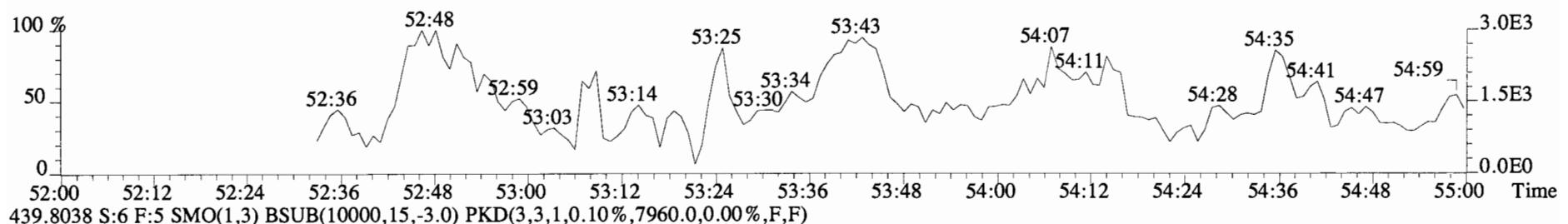
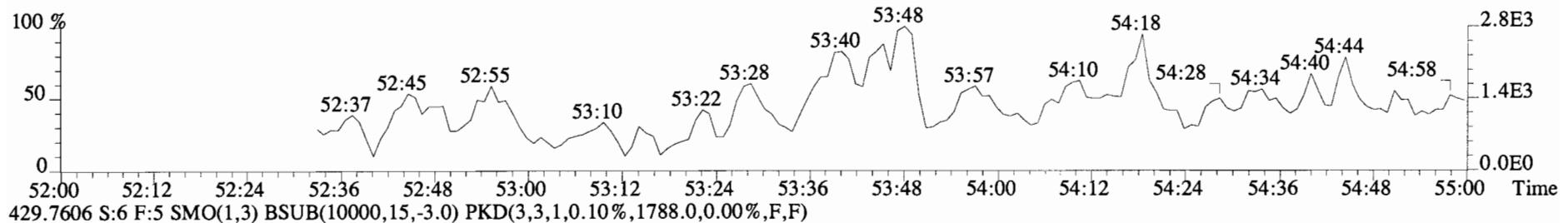
File:141021E2 #1-547 Acq:22-OCT-2014 01:30:11 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
 393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1700.0,0.00%,F,F)



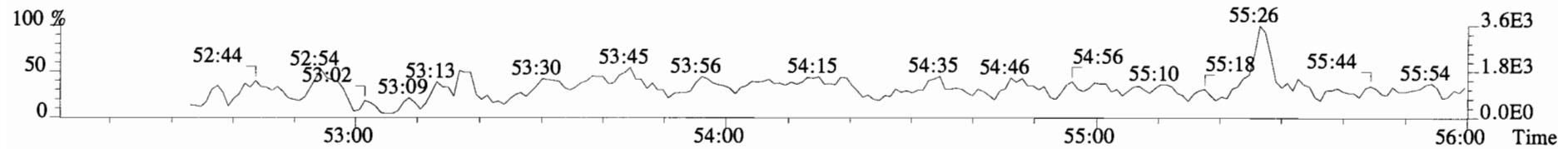
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Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
427.7635 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1420.0,0.00%,F,F)



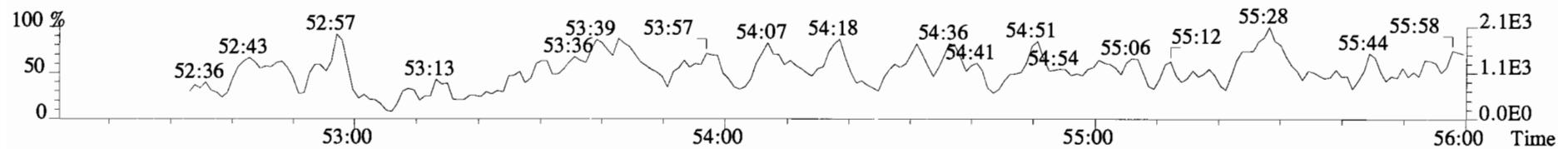
File:141021E2 #1-434 Acq:22-OCT-2014 01:30:11 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
 427.7635 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1488.0,0.00%,F,F)



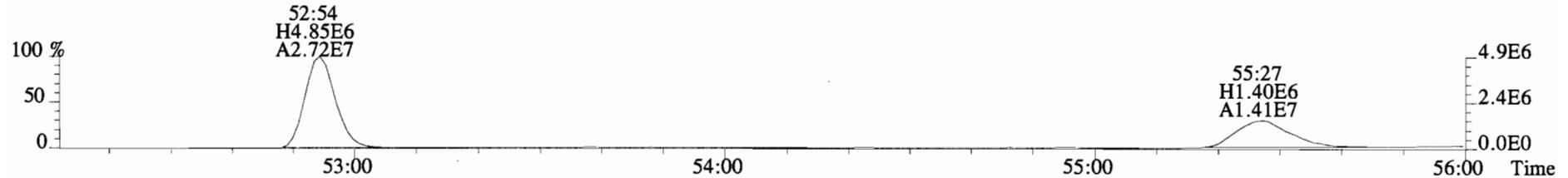
File:141021E2 #1-434 Acq:22-OCT-2014 01:30:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
463.7216 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1404.0,0.00%,F,F)



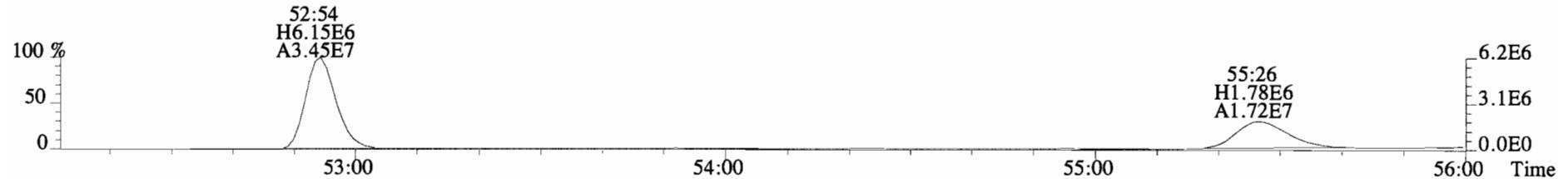
465.7186 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1368.0,0.00%,F,F)



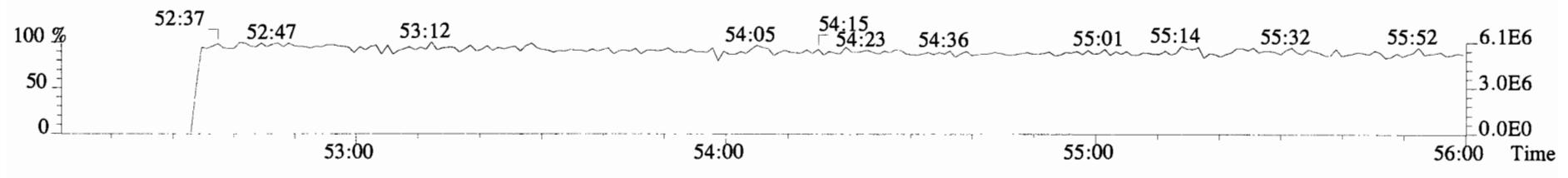
473.7648 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,38880.0,0.00%,F,F)



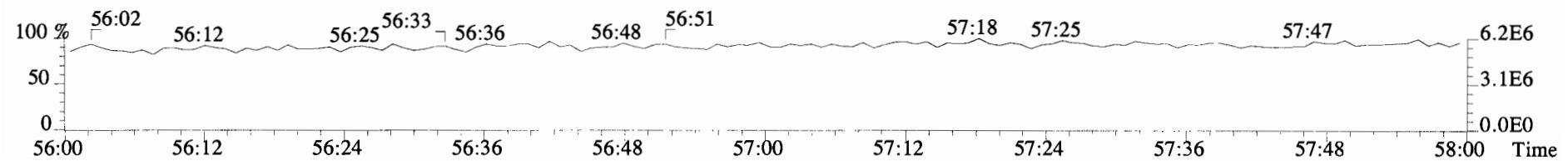
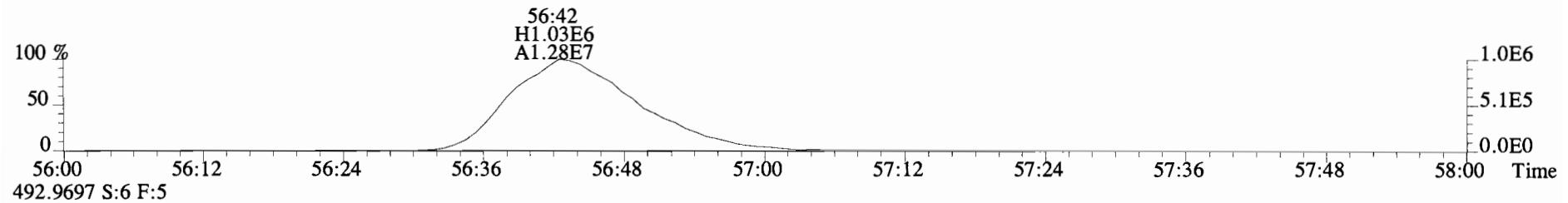
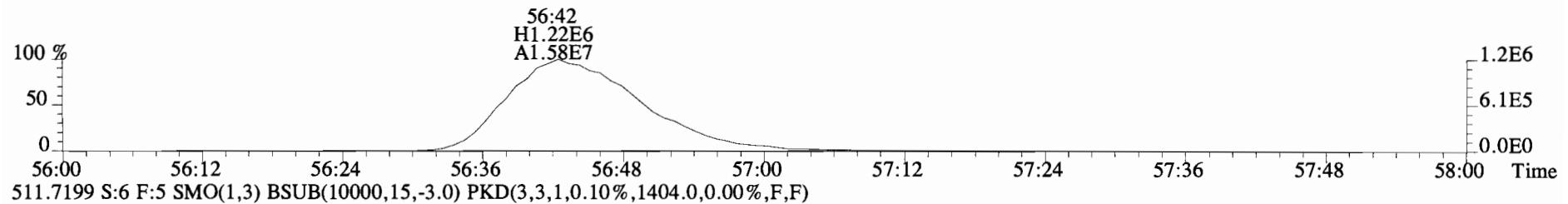
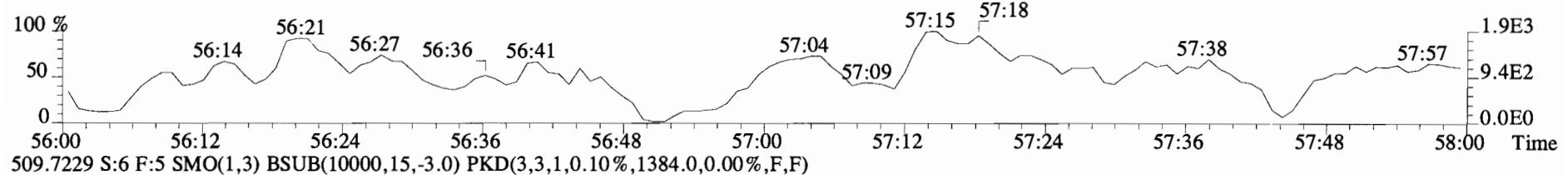
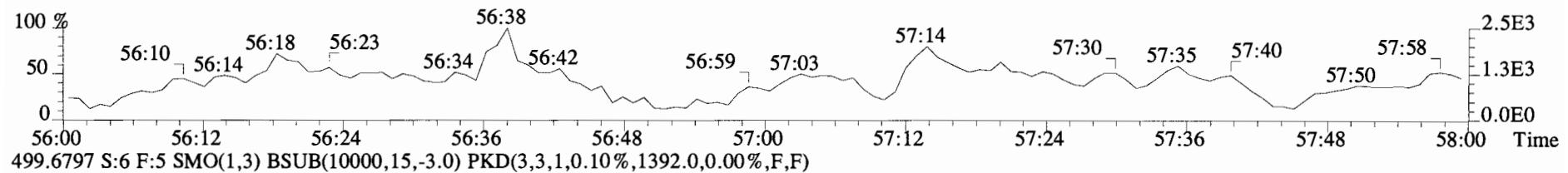
475.7619 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,51888.0,0.00%,F,F)



492.9697 S:6 F:5



File:141021E2 #1-434 Acq:22-OCT-2014 01:30:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BLK1 Method Blank 1 Exp:PCB_ZB1
497.6826 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1424.0,0.00%,F,F)



Lab Name: Vista Analytical Laboratory OPR Data Filename: B4J0110-BS1

Matrix : AQUEOUS Ext. Date: 10-20-14 Analysis Date: 21-OCT-14 Time: 23:23:06

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

NATIVE ANALYTES	SPIKE CONC. CONC.	CONC. FOUND	OPR CONC. LIMITS	Labeled Compounds	SPIKE CONC. CONC.	CONC. FOUND	OPR CONC. LIMITS	CLEAN UP STANDARD	SPIKE CONC. CONC.	CONC. FOUND	OPR CONC. LIMITS
	(ng/mL)	(ng/mL)	(ng/mL)		(ng/mL)	(ng/mL)	(ng/mL)		(ng/mL)	(ng/mL)	(ng/mL)
PCB-1	50	44.9	25.0-75.0	13C-PCB-1	100	82.9	15-140	13C-PCB-79	100	91.8	40-125
PCB-3	50	45.4	25.0-75.0	13C-PCB-3	100	84.7	15-140	13C-PCB-178	100	90.0	40-125
PCB-4/10	200	215.6	100-300	13C-PCB-4	100	66.4	30-140				
PCB-15	100	104.9	50.0-150	13C-PCB-11	100	76.1	30-140				
PCB-19	50	51.0	25.0-75.0	13C-PCB-19	100	82.2	30-140				
PCB-37	50	50.8	25.0-75.0	13C-PCB-37	100	83.4	30-140				
PCB-54	50	50.6	25.0-75.0	13C-PCB-54	100	71.4	30-140				
PCB-81	50	50.2	25.0-75.0	13C-PCB-81	100	86.0	30-140				
PCB-77	50	50.3	25.0-75.0	13C-PCB-77	100	86.3	30-140				
PCB-104	50	52.2	25.0-75.0	13C-PCB-104	100	75.3	30-140				
PCB-123	50	51.4	25.0-75.0	13C-PCB-123	100	83.9	30-140				
PCB-106/118	100	103.6	50.0-150	13C-PCB-118	100	85.0	30-140				
PCB-114	50	55.2	25.0-75.0	13C-PCB-114	100	86.8	30-140				
PCB-105	50	55.5	25.0-75.0	13C-PCB-105	100	88.4	30-140				
PCB-126	50	54.1	25.0-75.0	13C-PCB-126	100	92.0	30-140				
PCB-155	50	55.0	25.0-75.0	13C-PCB-155	100	75.8	30-140				
PCB-167	50	54.7	25.0-75.0	13C-PCB-167	100	87.8	30-140				
PCB-156	50	53.0	25.0-75.0	13C-PCB-156	100	88.7	30-140				
PCB-157	50	54.2	25.0-75.0	13C-PCB-157	100	86.9	30-140				
PCB-169	50	53.8	25.0-75.0	13C-PCB-169	100	88.4	30-140				
PCB-188	50	54.0	25.0-75.0	13C-PCB-188	100	84.5	30-140				
PCB-189	50	56.1	25.0-75.0	13C-PCB-189	100	89.2	30-140				
PCB-202	50	52.7	25.0-75.0	13C-PCB-202	100	81.5	30-140				
PCB-205	50	53.2	25.0-75.0	13C-PCB-194	100	86.1	30-140				
PCB-208	50	52.6	25.0-75.0	13C-PCB-208	100	85.1	30-140				
PCB-206	50	52.9	25.0-75.0	13C-PCB-206	100	72.3	30-140				
PCB-209	50	54.4	25.0-75.0	13C-PCB-209	100	69.2	30-140				

Analyst: DMDate: 10/27/14

Lab Name: Vista Analytical Laboratory OPR Data Filename: B4J0110-BS1

Matrix : AQUEOUS Ext. Date: 10-20-14 Analysis Date: 21-OCT-14 Time: 23:23:06

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

NATIVE ANALYTES	SPIKE CONC. CONC.	CONC. FOUND	OPR CONC. LIMITS	Labeled Compounds	SPIKE CONC. CONC.	CONC. FOUND	OPR CONC. LIMITS	Clean Up Standard	SPIKE CONC. CONC.	CONC. FOUND	OPR CONC. LIMITS
	(ng/mL)	(ng/mL)	(ng/mL)		(ng/mL)	(ng/mL)	(ng/mL)		(ng/mL)	(ng/mL)	(ng/mL)
PCB-1	50	44.9	30.0-67.5	13C-PCB-1	100	82.9	15-145	13C-PCB-79	100	91.8	40-145
PCB-3	50	45.4	30.0-67.5	13C-PCB-3	100	84.7	15-145	13C-PCB-178	100	90.0	40-145
PCB-4/10	200	215.6	120-270	13C-PCB-4	100	66.4	15-145				
PCB-15	100	104.9	60.0-135	13C-PCB-11	100	76.1	15-145				
PCB-19	50	51.0	30.0-67.5	13C-PCB-19	100	82.2	15-145				
PCB-37	50	50.8	30.0-67.5	13C-PCB-37	100	83.4	15-145				
PCB-54	50	50.6	30.0-67.5	13C-PCB-54	100	71.4	15-145				
PCB-81	50	50.2	30.0-67.5	13C-PCB-81	100	86.0	40-145				
PCB-77	50	50.3	30.0-67.5	13C-PCB-77	100	86.3	40-145				
PCB-104	50	52.2	30.0-67.5	13C-PCB-104	100	75.3	40-145				
PCB-123	50	51.4	30.0-67.5	13C-PCB-123	100	83.9	40-145				
PCB-106/118	100	103.6	60.0-135	13C-PCB-118	100	85.0	40-145				
PCB-114	50	55.2	30.0-67.5	13C-PCB-114	100	86.8	40-145				
PCB-105	50	55.5	30.0-67.5	13C-PCB-105	100	88.4	40-145				
PCB-126	50	54.1	30.0-67.5	13C-PCB-126	100	92.0	40-145				
PCB-155	50	55.0	30.0-67.5	13C-PCB-155	100	75.8	40-145				
PCB-167	50	54.7	30.0-67.5	13C-PCB-167	100	87.8	40-145				
PCB-156	50	53.0	30.0-67.5	13C-PCB-156	100	88.7	40-145				
PCB-157	50	54.2	30.0-67.5	13C-PCB-157	100	86.9	40-145				
PCB-169	50	53.8	30.0-67.5	13C-PCB-169	100	88.4	40-145				
PCB-188	50	54.0	30.0-67.5	13C-PCB-188	100	84.5	40-145				
PCB-189	50	56.1	30.0-67.5	13C-PCB-189	100	89.2	40-145				
PCB-202	50	52.7	30.0-67.5	13C-PCB-202	100	81.5	40-145				
PCB-205	50	53.2	30.0-67.5	13C-PCB-194	100	86.1	40-145				
PCB-208	50	52.6	30.0-67.5	13C-PCB-208	100	85.1	40-145				
PCB-206	50	52.9	30.0-67.5	13C-PCB-206	100	72.3	40-145				
PCB-209	50	54.4	30.0-67.5	13C-PCB-209	100	69.2	40-145				

Analyst: DMSDate: 10/27/17

Client ID: OPR
Lab ID: B4J0110-BS1

Filename: 141021E2 S:4 Acq:21-OCT-14 23:23:06
GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

Page 4 of

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	6.76e+07	2.89	y	1.25	16:31	1.001	0.996-1.006	44.9123	PCB-52/69	9.96e+07	0.81	y	1.28	31:31	1.001	0.996-1.006	98.9149
PCB-2	7.06e+07	2.96	y	1.18	18:47	0.989	0.983-0.993	46.8705	PCB-73	5.32e+07	0.65	n	1.37	31:38	1.005	1.000-1.010	49.1842
PCB-3	7.06e+07	2.95	y	1.22	19:01	1.001	0.996-1.006	45.4142	PCB-43/49	8.78e+07	0.75	y	1.11	31:48	1.010	1.005-1.015	100.178
PCB-4/10	1.98e+08	1.61	y	1.55	20:20	1.002	0.998-1.008	215.638	PCB-47	4.34e+07	0.74	y	1.13	32:01	1.001	0.996-1.006	46.9218
PCB-7/9	2.48e+08	1.62	y	1.27	22:03	0.872	0.865-0.873	209.964	PCB-48/75	1.13e+08	0.75	y	1.30	32:07	1.004	0.999-1.009	105.825
PCB-6	1.25e+08	1.63	y	1.26	22:41	0.897	0.890-0.899	106.859	PCB-65	5.60e+07	0.75	y	1.33	32:24	1.012	1.007-1.017	51.4316
PCB-5/8	2.54e+08	1.63	y	1.23	23:06	0.913	0.906-0.916	221.144	PCB-62	5.74e+07	0.76	y	1.29	32:30	1.016	1.011-1.021	54.4818
PCB-14	1.44e+08	1.62	y	1.23	24:09	0.955	0.949-0.959	101.062	PCB-44	4.09e+07	0.75	y	0.94	32:49	1.026	1.020-1.030	53.3399
PCB-11	1.43e+08	1.64	y	1.16	25:20	1.001	0.996-1.006	106.311	PCB-42/59	1.05e+08	0.74	y	1.22	33:02	1.032	1.028-1.038	105.487
PCB-12/13	2.68e+08	1.62	y	1.10	25:43	1.016	1.010-1.020	210.611	PCB-41/64/71/72	2.20e+08	0.76	y	1.31	33:36	1.050	1.046-1.056	205.346
PCB-15	1.47e+08	1.62	y	1.21	26:01	1.028	1.024-1.034	104.897	PCB-68	6.33e+07	0.74	y	1.49	33:51	1.058	1.054-1.064	52.2469
PCB-19	4.69e+07	1.04	y	1.30	24:21	1.001	0.996-1.006	50.9742	PCB-40	3.44e+07	0.76	y	0.82	34:06	1.066	1.061-1.071	51.4856
PCB-30	6.92e+07	1.05	y	1.83	25:13	1.036	1.032-1.042	53.1804	PCB-57	6.12e+07	0.76	y	1.11	34:26	0.970	0.965-0.975	49.2666
PCB-18	4.99e+07	1.05	y	0.86	25:57	0.955	0.949-0.959	50.8258	PCB-67	6.02e+07	0.76	y	1.07	34:45	0.979	0.974-0.984	50.2817
PCB-17	5.21e+07	1.06	y	0.90	26:07	0.961	0.955-0.965	50.5890	PCB-58	6.08e+07	0.76	y	1.10	34:51	0.982	0.977-0.987	49.4943
PCB-24/27	1.43e+08	1.06	y	1.18	26:41	0.982	0.976-0.986	106.650	PCB-63	6.40e+07	0.76	y	1.12	35:00	0.986	0.982-0.992	51.4274
PCB-16/32	1.22e+08	1.05	y	1.03	27:11	1.000	0.995-1.005	103.298	PCB-74	6.76e+07	0.76	y	1.20	35:18	0.995	0.990-1.000	50.3951
PCB-34	6.70e+07	1.03	y	1.26	27:58	0.961	0.956-0.966	54.4604	PCB-61/70	1.24e+08	0.76	y	1.08	35:29	1.000	0.994-1.004	102.725
PCB-23	5.98e+07	1.05	y	1.31	28:03	0.964	0.959-0.969	46.7480	PCB-76/66	1.30e+08	0.76	y	1.14	35:41	1.006	1.001-1.011	102.595
PCB-29	6.45e+07	1.04	y	1.33	28:18	0.973	0.967-0.977	49.7828	PCB-80	7.52e+07	0.77	y	1.28	35:55	1.000	0.996-1.006	49.4478
PCB-26	6.40e+07	1.04	y	1.29	28:30	0.979	0.974-0.984	50.8178	PCB-55	6.71e+07	0.77	y	1.11	36:15	1.010	1.005-1.015	50.7982
PCB-25	6.91e+07	1.03	y	1.34	28:40	0.985	0.980-0.990	52.7481	PCB-56/60	1.27e+08	0.75	y	1.09	36:45	1.024	1.018-1.028	98.3266
PCB-31	6.96e+07	1.02	y	1.42	29:00	0.997	0.992-1.002	50.3007	PCB-79	6.98e+07	0.77	y	1.12	37:48	1.053	1.048-1.058	52.1982
PCB-28	6.80e+07	1.04	y	1.38	29:07	1.001	0.996-1.006	50.6184	PCB-78	6.57e+07	0.75	y	1.24	38:30	0.987	0.982-0.992	50.6527
PCB-20/21/33	1.99e+08	1.04	y	1.31	29:43	1.021	1.017-1.027	155.681	PCB-81	7.27e+07	0.76	y	1.38	39:02	1.000	0.995-1.005	50.1606
PCB-22	6.82e+07	1.03	y	1.32	30:11	1.037	1.032-1.042	52.9076	PCB-77	6.82e+07	0.75	y	1.21	39:38	1.000	0.995-1.005	50.2815
PCB-36	6.98e+07	1.05	y	1.38	30:46	0.934	0.929-0.939	48.5579	PCB-104	4.60e+07	1.58	y	1.26	32:40	1.001	0.996-1.006	52.2308
PCB-39	6.83e+07	1.03	y	1.42	31:14	0.948	0.943-0.953	46.0988	PCB-96	3.97e+07	1.53	y	1.09	33:56	1.039	1.034-1.044	51.8728
PCB-38	6.99e+07	1.04	y	1.35	32:01	0.972	0.967-0.976	49.4636	PCB-103	3.45e+07	1.57	y	0.93	34:26	1.055	1.050-1.060	52.8160
PCB-35	7.10e+07	1.03	y	1.38	32:32	0.987	0.982-0.992	49.4248	PCB-100	3.78e+07	1.57	y	1.00	34:48	1.066	1.061-1.071	53.9465
PCB-37	7.38e+07	1.07	y	1.39	32:58	1.001	0.996-1.006	50.8314	PCB-94	3.09e+07	1.57	y	1.11	35:16	0.985	0.981-0.991	51.0771
PCB-54	5.36e+07	0.76	y	1.20	28:02	1.001	0.996-1.006	50.6453	PCB-95/98/102	1.03e+08	1.55	y	1.21	35:46	0.999	0.994-1.004	155.773
PCB-50	4.30e+07	0.75	y	0.97	29:10	1.041	1.037-1.047	50.3242	PCB-93	3.15e+07	1.57	y	1.13	35:54	1.003	0.998-1.008	51.1725
PCB-53	4.49e+07	0.76	y	1.19	29:49	0.947	0.941-0.951	47.9740	PCB-88/91	6.46e+07	1.60	y	1.02	36:11	1.011	1.006-1.016	116.109
PCB-51	4.47e+07	0.75	y	1.15	30:09	0.958	0.952-0.962	49.1540	PCB-121	4.93e+07	1.58	y	1.90	36:17	1.014	1.009-1.019	47.4973
PCB-45	3.80e+07	0.76	y	0.97	30:35	0.971	0.966-0.976	49.8783	PCB-84/92	6.65e+07	1.57	y	1.05	37:07	0.991	0.986-0.996	104.554
PCB-46	3.54e+07	0.76	y	0.95	31:05	0.987	0.982-0.992	47.1937	PCB-89	3.23e+07	1.55	y	1.02	37:19	0.996	0.991-1.001	52.5451

RL: MONO, TRI - DECA: _____

RL: DI : _____

Integrations
by
Analyst: *DMJ*
Date: *10/28/14*

Reviewed
by
Analyst: *MZ*
Date: *10/28/14*

Client ID: OPR
Lab ID: B4J0110-BS1

Filename: 141021E2 S:4 Acq:21-OCT-14 23:23:06 ConCal: ST141021E2-1
GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-90/101	7.49e+07	1.57	y	1.19	37:28	1.000	0.996-1.006	104.013	PCB-133/142	6.91e+07	1.24	y	0.95	42:25	0.982	0.977-0.987	100.635
PCB-113	4.52e+07	1.59	y	1.35	37:43	1.007	1.002-1.012	55.2916	PCB-131	3.35e+07	1.25	y	0.91	42:36	0.986	0.981-0.991	50.5432
PCB-99	3.95e+07	1.60	y	1.29	37:49	1.009	1.005-1.015	50.6560	PCB-146/165	8.88e+07	1.23	y	1.16	42:47	0.991	0.986-0.996	105.760
PCB-119	4.99e+07	1.58	y	1.72	38:16	0.987	0.982-0.992	54.4411	PCB-132/161	8.28e+07	1.23	y	1.11	43:03	0.997	0.992-1.002	102.433
PCB-108/112	7.18e+07	1.58	y	1.29	38:26	0.991	0.986-0.996	104.720	PCB-153	4.88e+07	1.26	y	1.18	43:13	1.001	0.995-1.005	57.0823
PCB-83	4.34e+07	1.57	y	1.52	38:35	0.995	0.991-1.001	53.6878	PCB-168	5.16e+07	1.23	y	1.37	43:25	1.005	1.000-1.010	51.9582
PCB-97	3.43e+07	1.56	y	1.25	38:48	1.000	0.996-1.006	51.6583	PCB-141	3.73e+07	1.23	y	0.97	43:58	1.001	0.996-1.005	54.3731
PCB-86	2.68e+07	1.56	y	1.02	38:56	1.004	1.000-1.010	49.2126	PCB-137	3.93e+07	1.23	y	1.07	44:21	1.009	1.004-1.014	52.1870
B-87/117/125	1.29e+08	1.57	y	1.56	39:04	1.007	1.002-1.012	154.923	PCB-130	3.56e+07	1.25	y	0.85	44:27	1.012	1.007-1.017	59.8367
PCB-111/115	9.40e+07	1.56	y	1.75	39:13	1.011	1.007-1.017	100.850	PCB-138/163/164	1.39e+08	1.24	y	1.23	44:50	1.001	0.996-1.006	168.182
PCB-85/116	7.57e+07	1.58	y	1.30	39:21	1.015	1.010-1.020	109.296	PCB-158/160	1.00e+08	1.23	y	1.29	45:05	1.007	1.001-1.011	115.615
PCB-120	5.03e+07	1.56	y	1.78	39:34	1.020	1.016-1.026	53.0454	PCB-129	3.32e+07	1.23	y	0.92	45:19	1.012	1.007-1.017	53.3329
PCB-110	4.76e+07	1.55	y	1.68	39:45	1.025	1.020-1.030	53.2088	PCB-166	4.87e+07	1.22	y	1.12	45:46	0.993	0.988-0.998	53.7890
PCB-82	2.76e+07	1.51	y	0.74	40:22	0.977	0.972-0.982	50.1747	PCB-159	5.04e+07	1.24	y	1.16	46:06	1.000	0.995-1.005	53.3406
PCB-124	5.12e+07	1.56	y	1.32	41:02	0.993	0.988-0.998	52.0773	PCB-128/162	8.84e+07	1.25	y	1.02	46:23	1.007	1.002-1.012	106.819
PCB-107/109	1.00e+08	1.57	y	1.22	41:11	0.996	0.991-1.001	110.208	PCB-167	4.99e+07	1.24	y	1.06	46:48	1.001	0.995-1.005	54.7499
PCB-123	4.66e+07	1.56	y	1.22	41:21	1.000	0.995-1.005	51.3843	PCB-156	5.12e+07	1.23	y	1.18	48:06	1.000	0.995-1.005	53.0288
- PCB-106/118	9.91e+07	1.60	y	1.22	41:34	1.001	0.996-1.006	103.557	PCB-157	4.95e+07	1.25	y	1.08	48:22	1.000	0.995-1.005	54.2087
- PCB-114	5.80e+07	1.62	y	1.36	42:12	1.000	0.995-1.005	55.1989	PCB-169	4.74e+07	1.23	y	1.11	50:24	1.000	0.995-1.005	53.8080
PCB-122	5.20e+07	1.64	y	1.24	42:20	1.004	0.999-1.009	54.1574	PCB-188	4.44e+07	1.06	y	1.40	42:51	1.000	0.995-1.005	53.9788
PCB-105	5.77e+07	1.62	y	1.28	43:04	1.000	0.995-1.005	55.5092	PCB-184	4.02e+07	1.06	y	1.24	43:18	1.011	1.006-1.016	55.4766
PCB-127	5.50e+07	1.61	y	1.14	43:23	1.000	0.995-1.005	53.3267	PCB-179	4.26e+07	1.06	y	1.30	44:06	1.030	1.024-1.034	55.7544
PCB-126	5.50e+07	1.63	y	1.28	45:19	1.000	0.995-1.005	54.1228	PCB-176	4.46e+07	1.05	y	1.36	44:33	1.040	1.035-1.045	55.9293
PCB-155	3.68e+07	1.26	y	1.14	37:01	1.000	0.966-1.006	54.9748	PCB-186	4.14e+07	1.06	y	1.28	45:10	1.054	1.049-1.059	55.5085
PCB-150	3.50e+07	1.26	y	1.06	38:18	1.035	1.030-1.040	55.8465	PCB-178	3.10e+07	1.06	y	0.94	45:39	1.066	1.061-1.071	56.5069
PCB-152	3.49e+07	1.26	y	1.10	38:47	1.048	1.043-1.053	53.9947	PCB-175	3.28e+07	1.04	y	0.97	46:00	1.074	1.069-1.079	57.8091
PCB-145	3.47e+07	1.27	y	1.09	39:14	1.060	1.055-1.065	53.9844	PCB-182/187	6.90e+07	1.06	y	1.01	46:11	1.078	1.073-1.083	116.148
PCB-136	3.68e+07	1.23	y	1.08	39:33	1.068	1.064-1.074	57.6814	PCB-183	3.42e+07	1.04	y	1.08	46:30	1.086	1.080-1.090	53.9458
PCB-148	2.34e+07	1.31	y	0.74	39:38	1.071	1.066-1.076	53.5483	PCB-185	3.17e+07	1.07	y	1.34	47:11	0.956	0.951-0.961	56.6409
PCB-154	2.91e+07	1.26	y	0.88	40:07	1.084	1.079-1.089	55.8518	PCB-174	2.95e+07	1.05	y	1.34	47:32	0.963	0.958-0.968	52.9526
PCB-151	2.56e+07	1.25	y	0.81	40:46	1.101	1.097-1.107	53.7130	PCB-181	3.48e+07	1.06	y	1.36	47:38	0.965	0.961-0.971	61.3739
PCB-135	2.36e+07	1.22	y	0.78	41:00	1.108	1.101-1.113	51.4481	PCB-177	2.92e+07	1.04	y	1.24	47:49	0.969	0.964-0.974	56.3423
PCB-144	3.13e+07	1.24	y	0.82	41:06	1.110	1.105-1.116	64.7442	PCB-171	3.01e+07	1.08	y	1.31	48:07	0.975	0.970-0.980	54.9029
PCB-147	2.66e+07	1.26	y	0.83	41:14	1.114	1.011-1.120	54.4493	PCB-173	2.64e+07	1.06	y	1.16	48:33	0.984	0.979-0.989	54.6055
PCB-139/149	5.59e+07	1.28	y	0.84	41:30	1.121	1.115-1.127	112.581	PCB-172	2.80e+07	1.06	y	1.22	48:59	0.993	0.988-0.998	54.9887
- PCB-140	2.57e+07	1.26	y	0.79	41:42	1.127	1.120-1.132	55.6022	PCB-192	3.65e+07	1.06	y	1.53	49:10	0.996	0.991-1.001	57.3378
- PCB-134/143	6.98e+07	1.23	y	0.93	42:08	0.976	0.970-0.980	103.754	PCB-180	3.17e+07	1.05	y	1.43	49:21	1.000	0.995-1.005	53.1713

RL: MONO, TRI - DECA: _____

Integrations
by _____
Analyst: DMS
Date: 10/27/14

Client ID: OPR
Lab ID: B4J0110-BS1

Filename: 141021E2 S:4 Acq:21-OCT-14 23:23:06
GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 ConCal: ST141021E2-1
EndCAL: NA

Page 4 of

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-193	3.86e+07	1.06	y	1.65	49:33	1.004	0.999-1.009	55.9215
PCB-191	3.96e+07	1.06	y	1.67	49:47	1.009	1.004-1.014	56.8699
PCB-170	2.67e+07	1.04	y	1.50	50:45	1.001	0.995-1.005	54.1037
PCB-190	3.87e+07	1.03	y	2.02	50:55	1.004	0.998-1.008	58.3449
PCB-189	4.08e+07	1.05	y	1.54	52:11	1.000	0.995-1.005	56.0783
PCB-202	2.75e+07	0.92	y	1.04	48:19	1.001	0.995-1.005	52.7019
PCB-201	2.95e+07	0.89	y	1.10	48:48	1.011	1.006-1.016	53.2528
PCB-204	2.74e+07	0.90	y	0.99	48:57	1.014	1.009-1.019	54.9514
PCB-197	2.90e+07	0.91	y	1.07	49:14	1.020	1.015-1.025	53.9106
PCB-200	3.20e+07	0.91	y	1.02	50:03	1.037	1.032-1.044	62.6399
PCB-198	1.71e+07	0.88	y	0.74	51:17	1.062	1.058-1.068	45.7275
PCB-199	2.14e+07	0.91	y	0.73	51:24	1.065	1.060-1.070	58.5021
- PCB-196/203	4.12e+07	0.91	y	0.77	51:40	1.070	1.066-1.076	106.199
- PCB-195	2.48e+07	1.00	y	1.20	52:48	0.983	0.979-0.989	56.5132
PCB-194	2.36e+07	0.92	y	1.25	53:44	1.000	0.995-1.005	51.7736
PCB-205	2.75e+07	0.93	y	1.41	54:01	1.006	1.001-1.011	53.2080
PCB-208	2.53e+07	1.31	y	0.96	52:56	1.000	0.995-1.005	52.5988
PCB-207	2.45e+07	1.31	y	0.92	53:16	1.007	1.001-1.011	53.3626
PCB-206	1.36e+07	1.36	y	1.03	55:29	1.000	0.995-1.005	52.8595
PCB-209	1.42e+07	1.22	y	1.18	56:44	1.000	0.995-1.005	54.4321

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	2.09e+08	2.89	y	16:31	1.22
Total Di-PCB	1.53e+09	1.61	y	20:20	1.21
Total Tri-PCB	4.83e+08	1.04	y	24:21	1.16
Total Tri-PCB	1.10e+09	1.03	y	27:58	1.35
Total Tetra-PCB	2.32e+09	0.76	y	28:02	1.17
Total Penta-PCB	1.65e+09	1.58	y	32:40	1.21
Total Penta-PCB	2.98e+08	1.62	y	42:12	1.26
Total Hexa-PCB	4.19e+08	1.26	y	37:01	0.92
Total Hexa-PCB	1.22e+09	1.23	y	42:08	1.08
Total Hepta-PCB	8.47e+08	1.06	y	42:51	1.27
Total Octa-PCB	2.25e+08	0.92	y	48:19	0.92
Total Octa-PCB	7.58e+07	1.00	y	52:48	1.29
Total Nona-PCB	6.42e+07	1.31	y	52:56	0.96
Total Deca-PCB	1.42e+07	1.22	y	56:44	1.18

Total PCB Conc:11653.7807960

RL: MONO, TRI - DECA: _____

Integrations
by
Analyst: DMS
Date: 10/27/14

Client ID: OPR
Lab ID: B4J0110-BS1

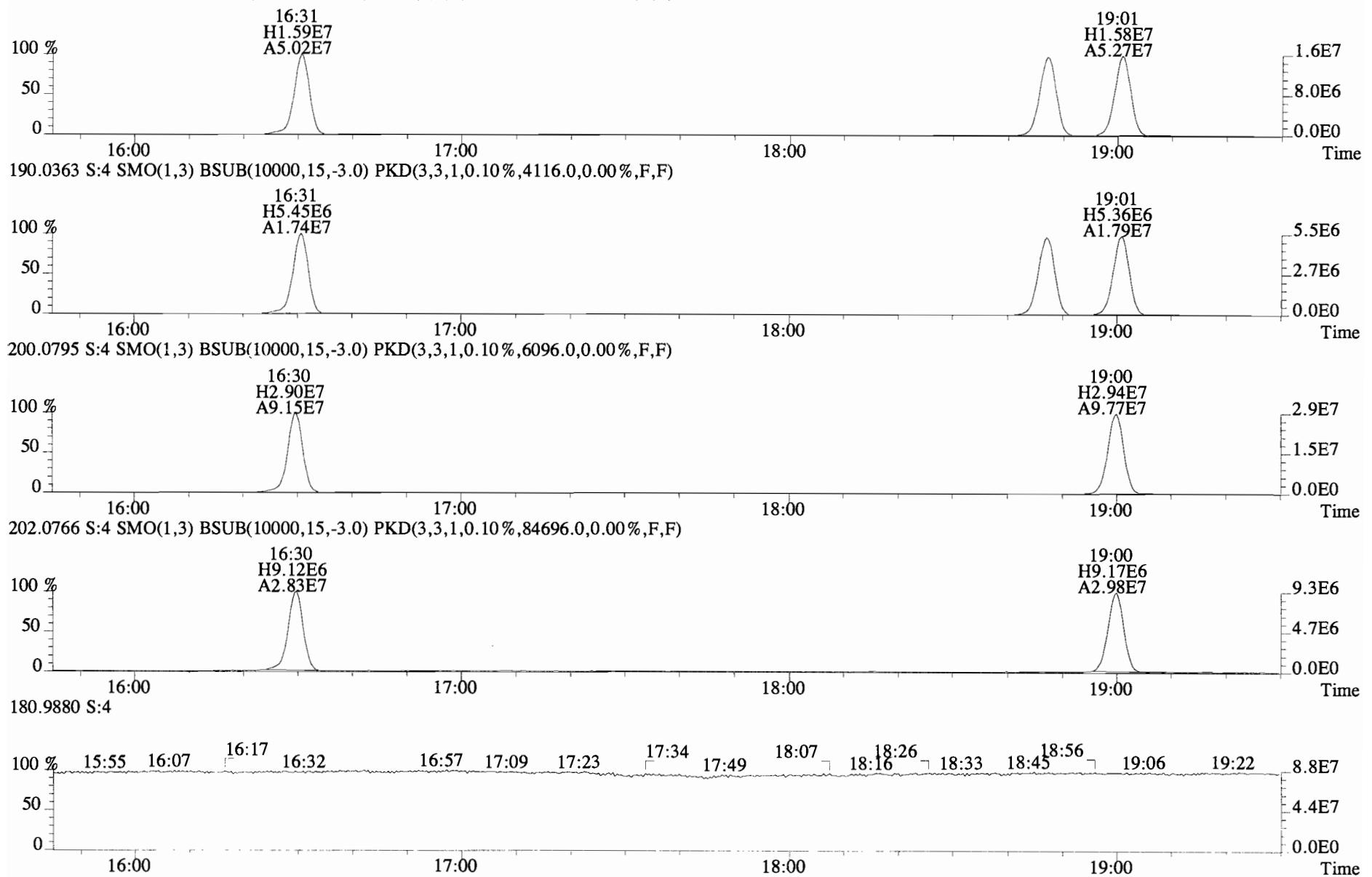
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Page 4 of

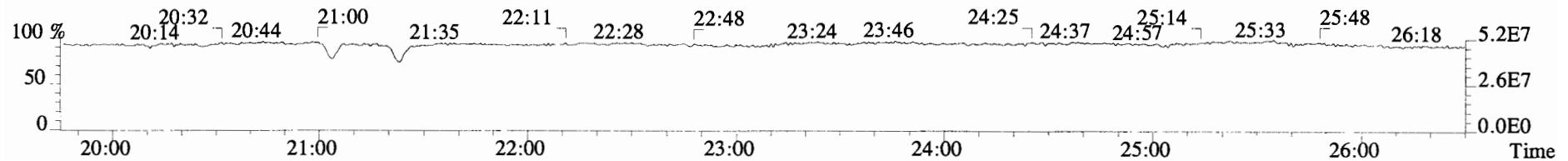
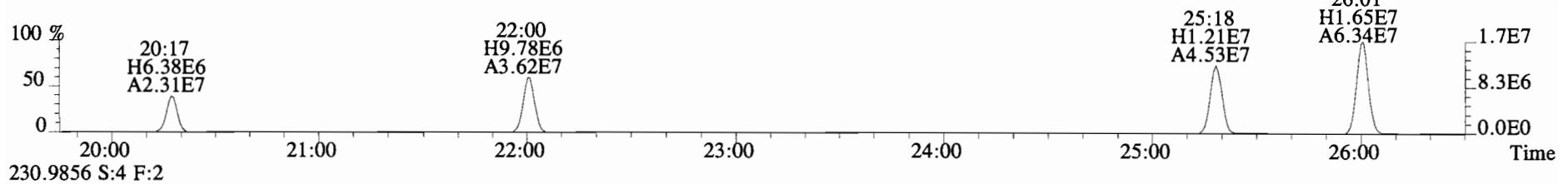
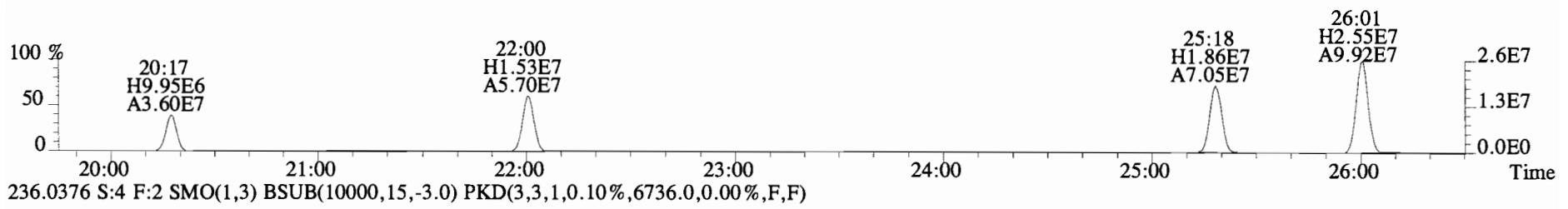
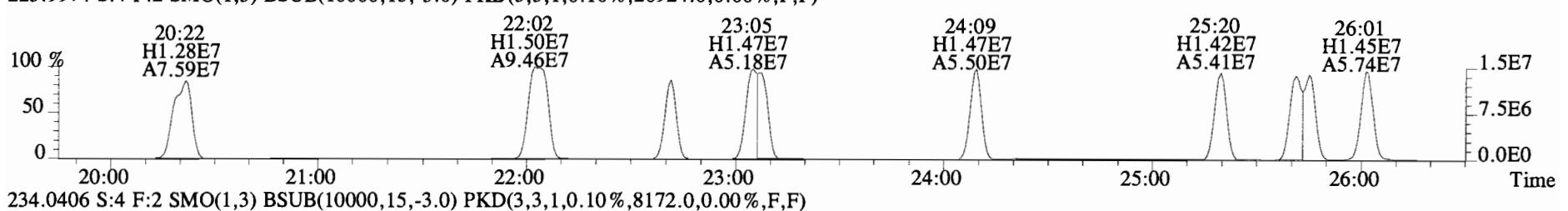
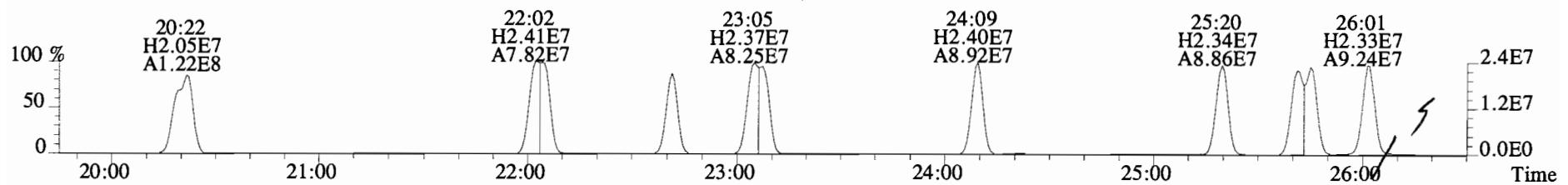
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.20e+08	3.23	y	0.89	16:30	0.634	0.622-0.628	82.9	82.9		13C-PCB-79	1.34e+08	0.79	y	1.01	37:47	1.028	1.023-1.033	91.8	91.8
13C-PCB-3	1.27e+08	3.28	y	0.93	19:00	0.730	0.721-0.729	84.7	84.7		13C-PCB-178	4.20e+07	0.46	y	0.63	45:38	0.984	0.979-0.989	90.0	90.0
13C-PCB-4	5.91e+07	1.56	y	0.55	20:17	0.780	0.772-0.780	66.4	66.4											
13C-PCB-9	9.32e+07	1.58	y	0.83	22:00	0.846	0.840-0.848	69.5	69.5											
13C-PCB-11	1.16e+08	1.56	y	0.94	25:18	0.972	0.968-0.978	76.1	76.1	PS vs. IS										
13C-PCB-19	7.11e+07	1.06	y	0.53	24:20	0.935	0.929-0.939	82.2	82.2		13C-PCB-79	1.34e+08	0.79	y	1.20	37:47	0.968	0.963-0.973	107	107
13C-PCB-28	9.75e+07	1.06	y	0.89	29:06	1.003	0.999-1.009	72.9	72.9		13C-PCB-178	4.20e+07	0.46	y	0.94	45:38	0.925	0.920-0.930	108	108
13C-PCB-32	1.14e+08	1.08	y	0.81	27:11	1.045	1.041-1.051	86.5	86.5											
13C-PCB-37	1.04e+08	1.06	y	0.83	32:57	1.136	1.131-1.143	83.4	83.4											
13C-PCB-47	8.16e+07	0.80	y	0.74	32:00	0.871	0.867-0.875	75.4	75.4											
13C-PCB-52	7.88e+07	0.78	y	0.71	31:29	0.857	0.853-0.861	76.5	76.5											
13C-PCB-54	8.83e+07	0.81	y	0.85	28:01	0.762	0.758-0.766	71.4	71.4											
13C-PCB-70	1.11e+08	0.79	y	0.94	35:29	0.966	0.961-0.971	81.1	81.1											
13C-PCB-77	1.12e+08	0.79	y	0.89	39:37	1.078	1.073-1.083	86.3	86.3											
13C-PCB-80	1.19e+08	0.81	y	0.96	35:54	0.977	0.972-0.982	85.1	85.1											
13C-PCB-81	1.05e+08	0.78	y	0.84	39:01	1.062	1.057-1.067	86.0	86.0											
13C-PCB-95	5.45e+07	1.62	y	0.74	35:48	0.914	0.908-0.918	78.5	78.5	RS										
13C-PCB-97	5.32e+07	1.62	y	0.69	38:47	0.990	0.984-0.994	82.7	82.7		13C-PCB-15	1.63e+08	1.57	y	1.00	26:01	100			
13C-PCB-101	6.05e+07	1.62	y	0.79	37:28	0.956	0.951-0.961	82.5	82.5		13C-PCB-31	1.51e+08	1.05	y	1.00	29:00	100			
13C-PCB-104	7.00e+07	1.62	y	1.00	32:39	0.833	0.829-0.837	75.3	75.3		13C-PCB-60	1.45e+08	0.79	y	1.00	36:45	100			
13C-PCB-105	8.10e+07	1.61	y	1.24	43:03	0.928	0.924-0.934	88.4	88.4		13C-PCB-111	9.34e+07	1.61	y	1.00	39:11	100			
13C-PCB-114	7.75e+07	1.61	y	1.21	42:11	0.910	0.905-0.915	86.8	86.8		13C-PCB-128	7.40e+07	1.29	y	1.00	46:22	100			
13C-PCB-118	7.81e+07	1.69	y	0.98	41:31	1.060	1.054-1.064	85.0	85.0		13C-PCB-205	5.24e+07	0.89	y	1.00	54:01	100			
13C-PCB-123	7.44e+07	1.65	y	0.95	41:20	1.055	1.049-1.059	83.9	83.9											
13C-PCB-126	7.91e+07	1.58	y	1.16	45:18	0.977	0.972-0.982	92.0	92.0											
13C-PCB-127	9.04e+07	1.60	y	1.34	43:23	0.936	0.931-0.941	91.0	91.0											
13C-PCB-138	6.74e+07	1.27	y	1.04	44:47	0.966	0.961-0.971	87.3	87.3											
13C-PCB-141	7.03e+07	1.31	y	1.07	43:56	0.948	0.943-0.953	88.7	88.7											
13C-PCB-153	7.26e+07	1.25	y	1.11	43:11	0.931	0.927-0.937	88.2	88.2											
13C-PCB-155	5.89e+07	1.29	y	0.83	37:01	0.945	0.939-0.949	75.8	75.8											
13C-PCB-156	8.17e+07	1.28	y	1.24	48:05	1.037	1.032-1.042	88.7	88.7											
13C-PCB-157	8.43e+07	1.28	y	1.31	48:21	1.043	1.037-1.047	86.9	86.9											
13C-PCB-159	8.12e+07	1.26	y	1.20	46:05	0.994	0.989-0.999	91.4	91.4											
13C-PCB-167	8.58e+07	1.28	y	1.32	46:46	1.009	1.004-1.014	87.8	87.8											
13C-PCB-169	7.94e+07	1.28	y	1.22	50:24	1.087	1.082-1.092	88.4	88.4											
13C-PCB-170	3.29e+07	0.46	y	0.54	50:43	1.094	1.089-1.101	83.1	83.1											
13C-PCB-180	4.17e+07	0.46	y	0.67	49:21	1.064	1.059-1.069	83.6	83.6											
13C-PCB-188	5.85e+07	0.46	y	0.94	42:50	0.924	0.919-0.929	84.5	84.5											
13C-PCB-189	4.72e+07	0.46	y	0.72	52:10	1.125	1.120-1.132	89.2	89.2											
13C-PCB-194	3.66e+07	0.89	y	0.81	53:43	0.994	0.990-1.000	86.1	86.1											
13C-PCB-202	5.02e+07	0.92	y	0.83	48:17	1.041	1.036-1.046	81.5	81.5											
13C-PCB-206	2.49e+07	0.81	y	0.66	55:28	1.027	1.021-1.031	72.3	72.3											
13C-PCB-208	5.01e+07	0.77	y	1.12	52:55	0.980	0.976-0.986	85.1	85.1											
13C-PCB-209	2.22e+07	1.21	y	0.61	56:43	1.050	1.044-1.054	69.2	69.2											

Analyst: Dms
Date: 10/27/14

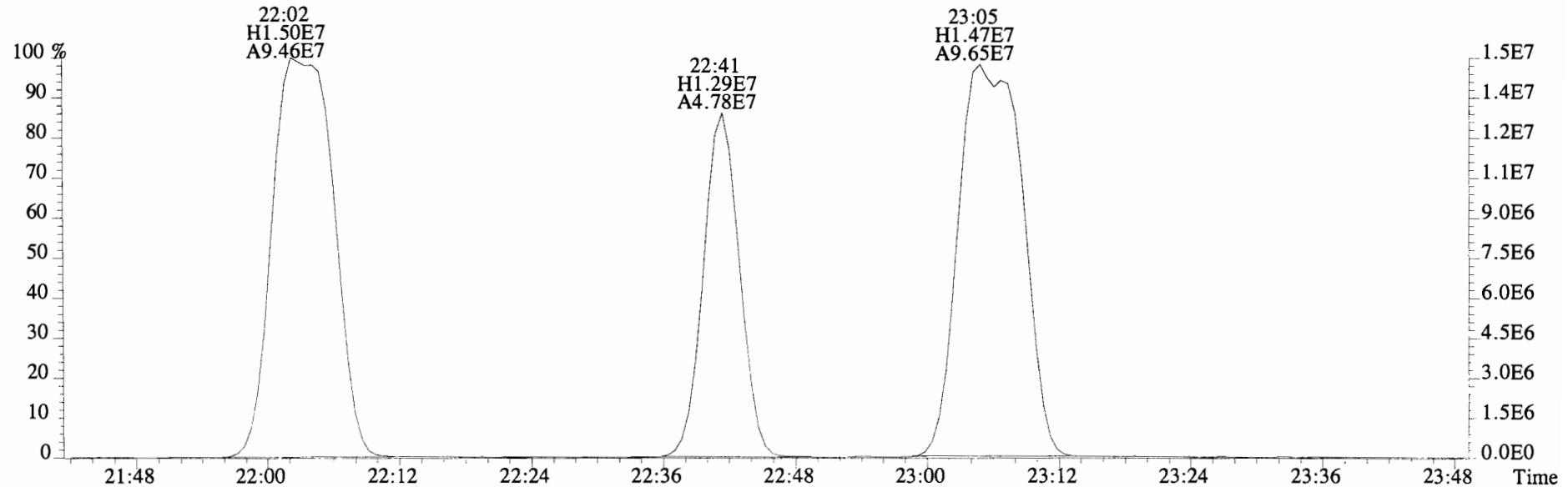
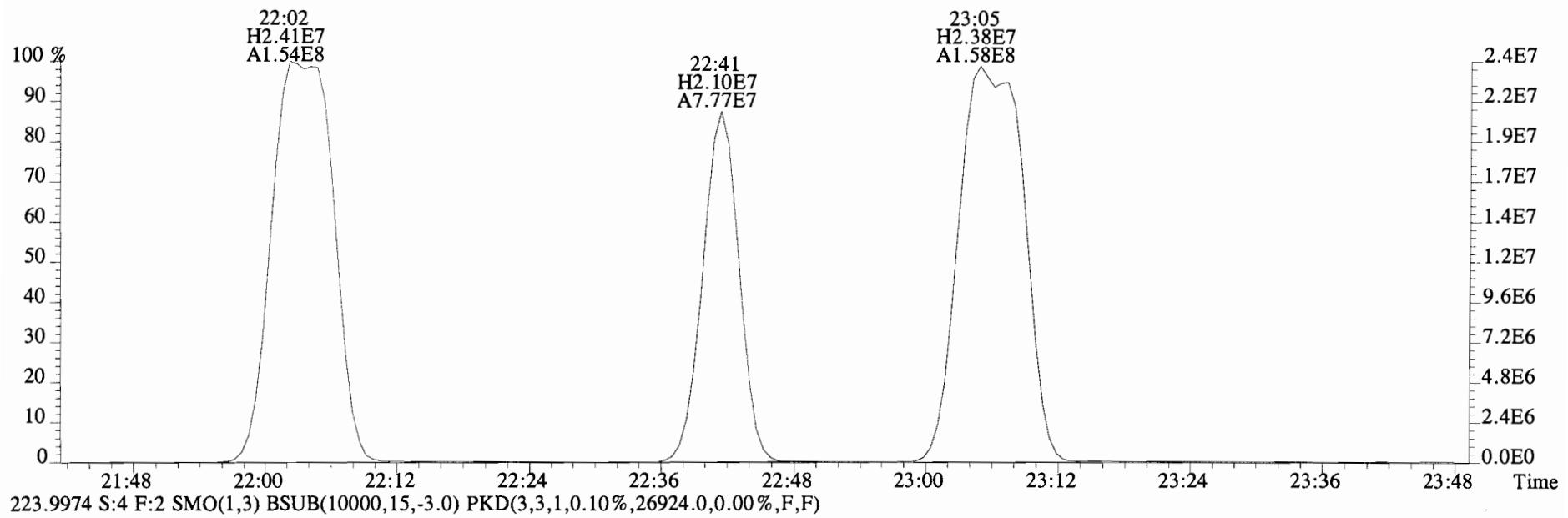
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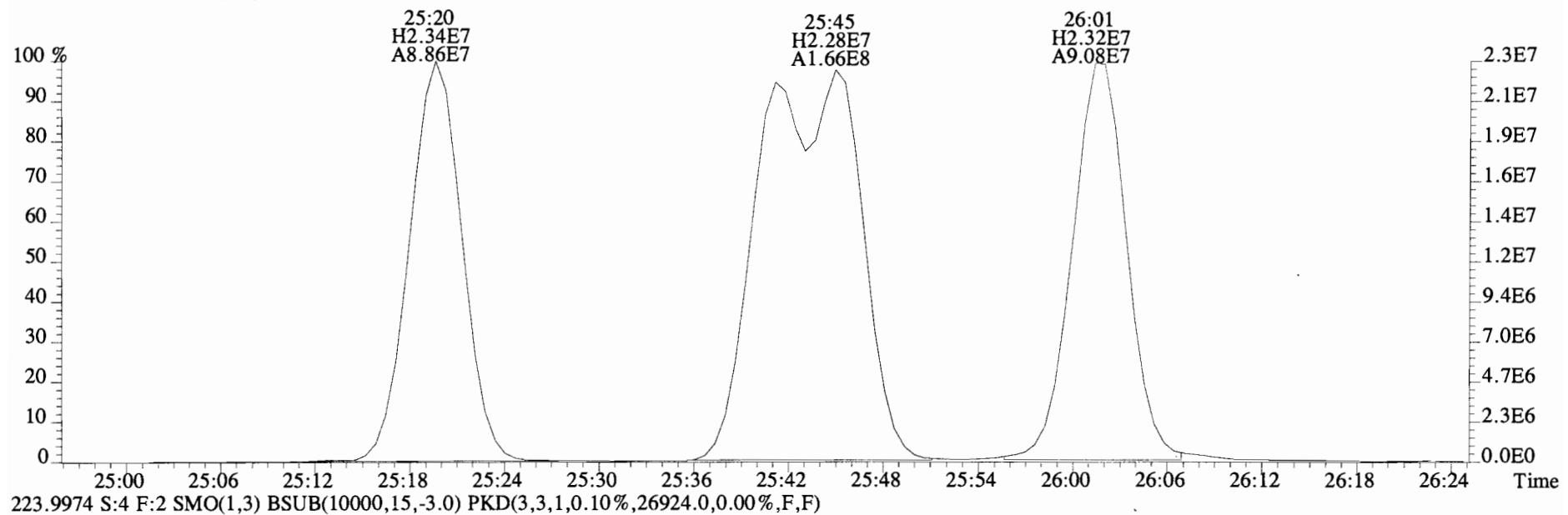
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 222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7368.0,0.00%,F,F)



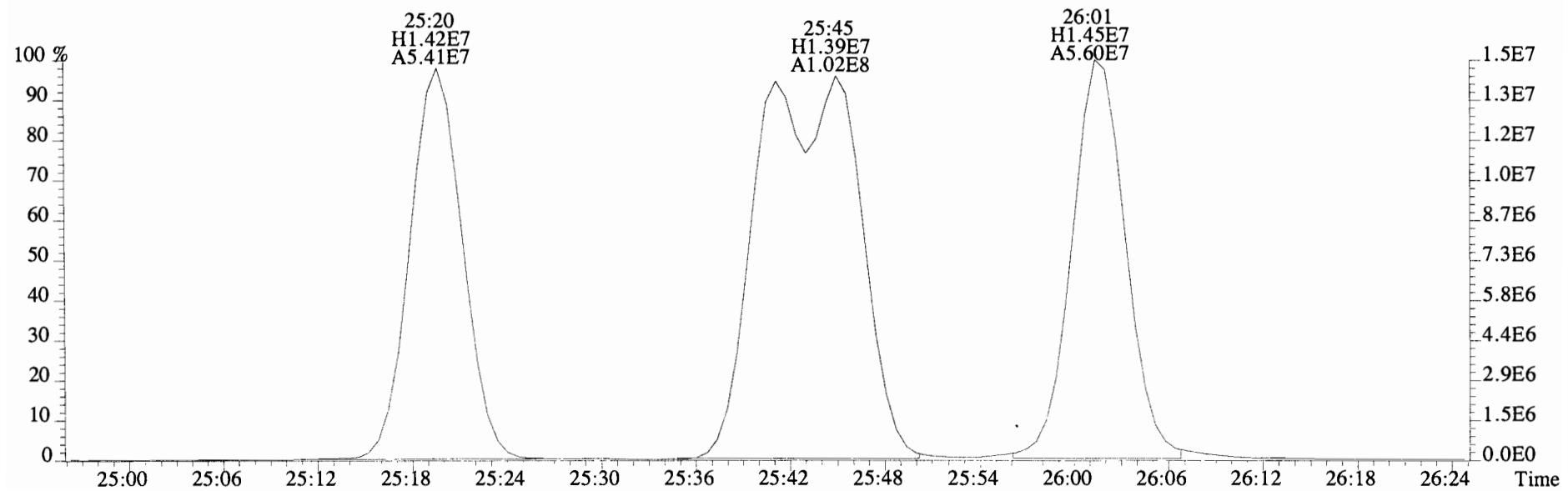
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222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7368.0,0.00%,F,F)



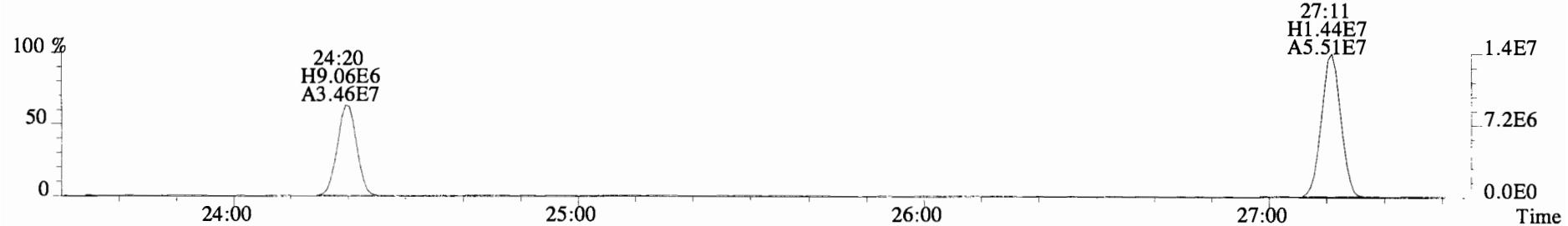
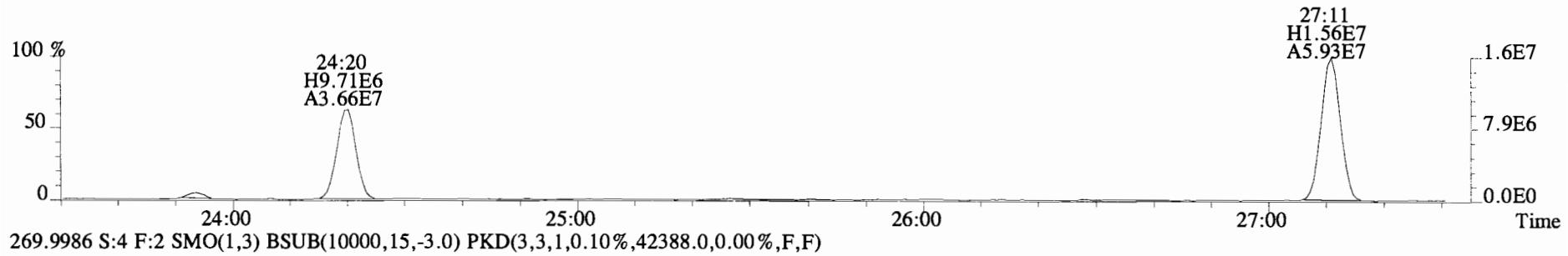
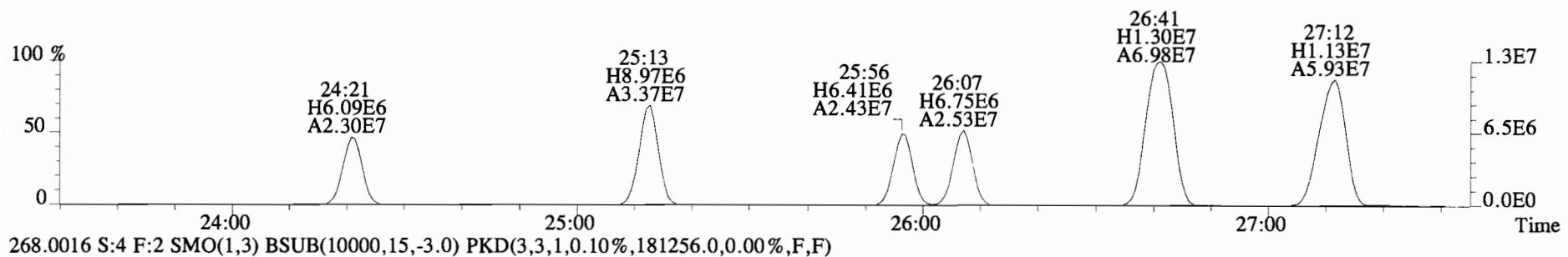
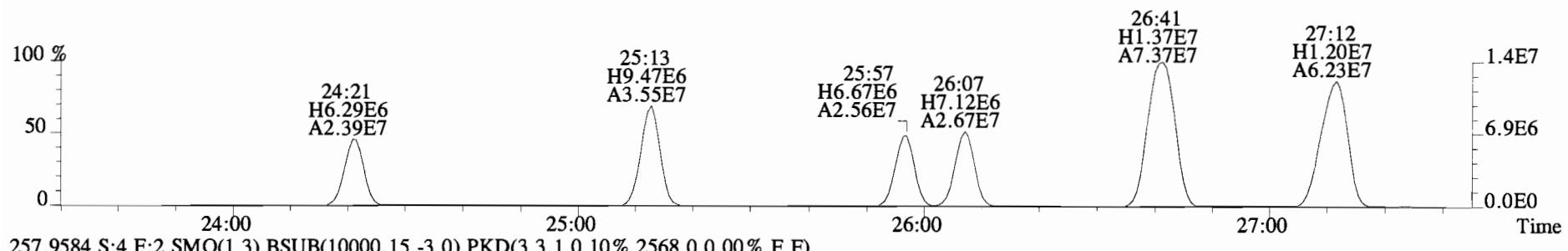
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Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7368.0,0.00%,F,F)



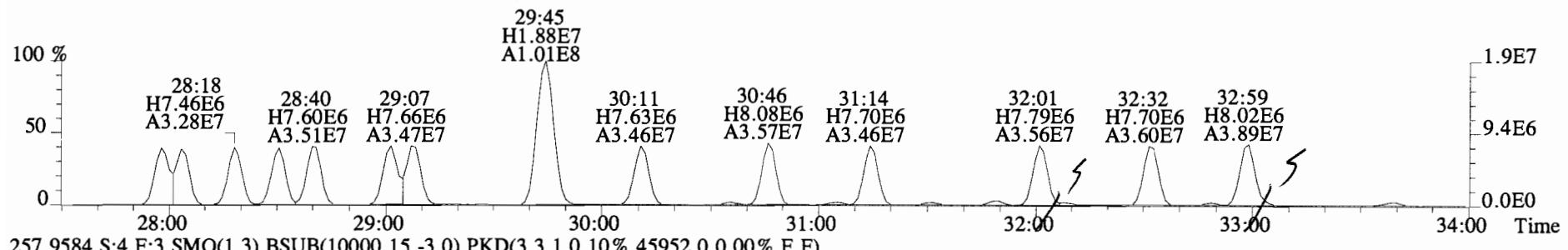
223.9974 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26924.0,0.00%,F,F)



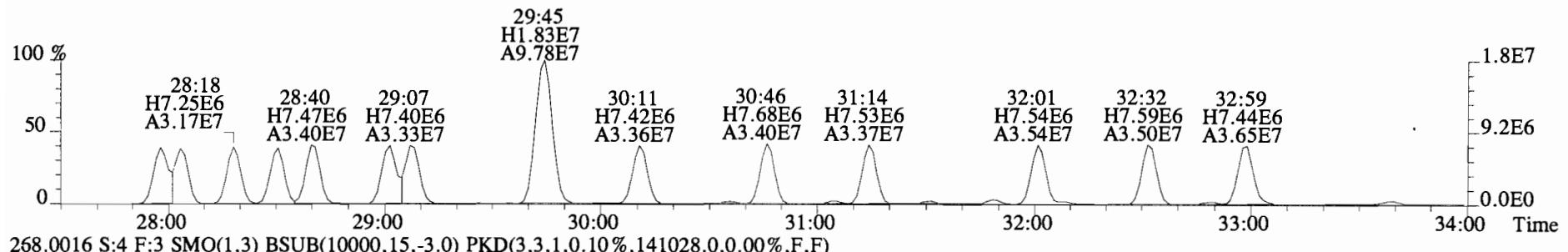
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Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5880.0,0.00%,F,F)



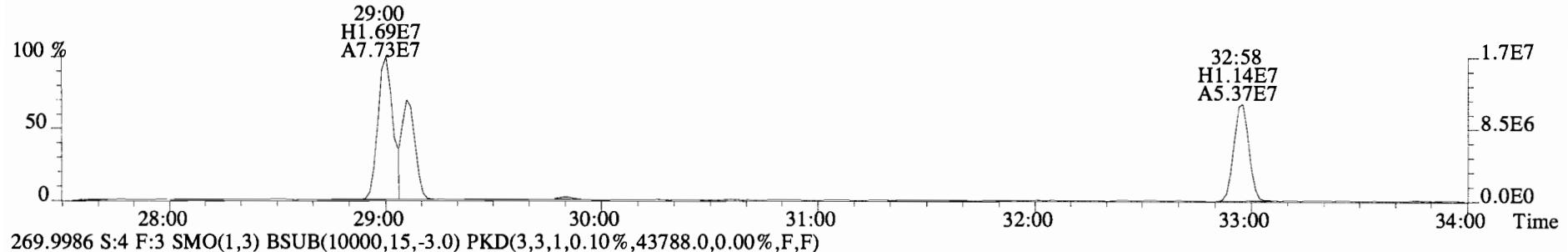
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Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,44236.0,0.00%,F,F)



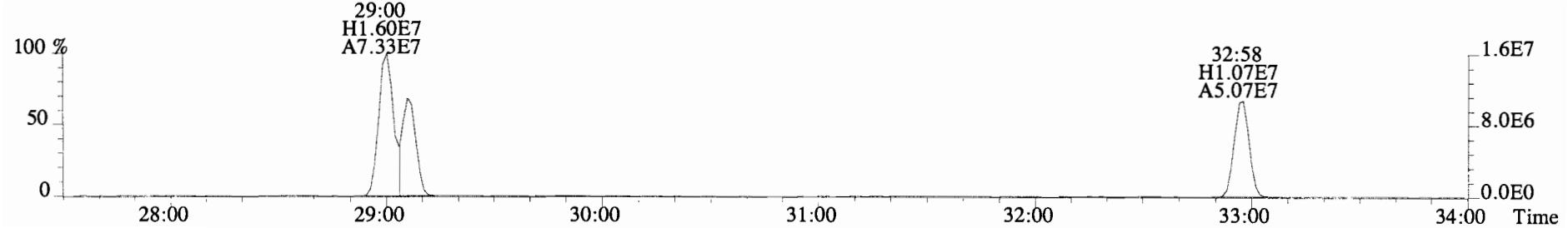
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,45952.0,0.00%,F,F)



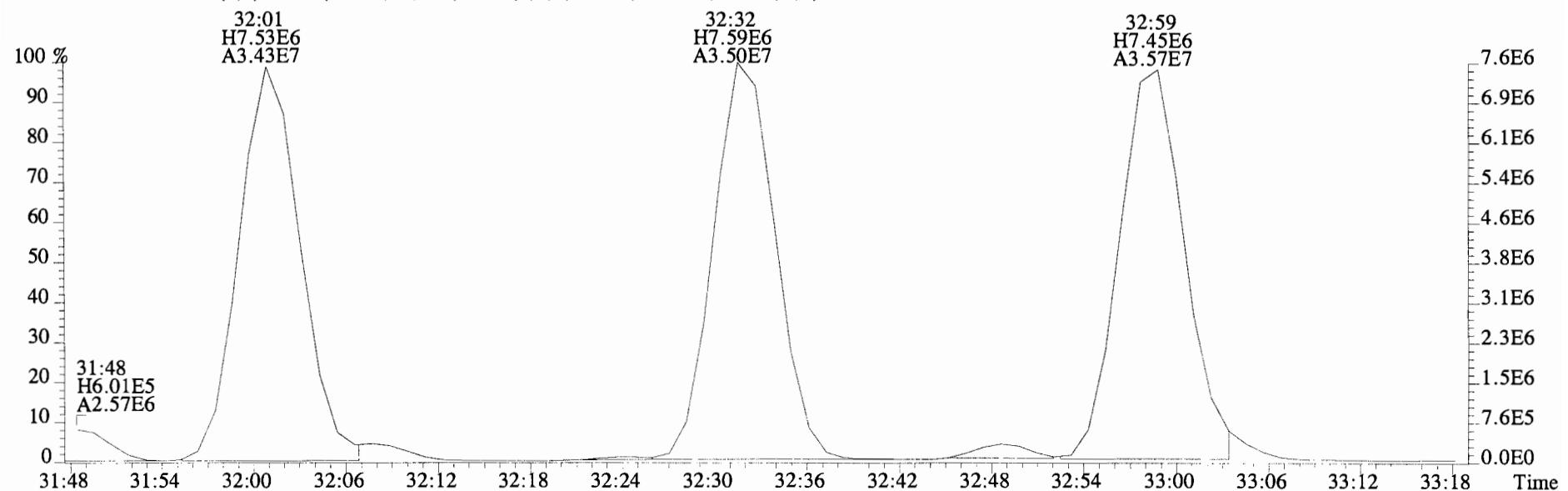
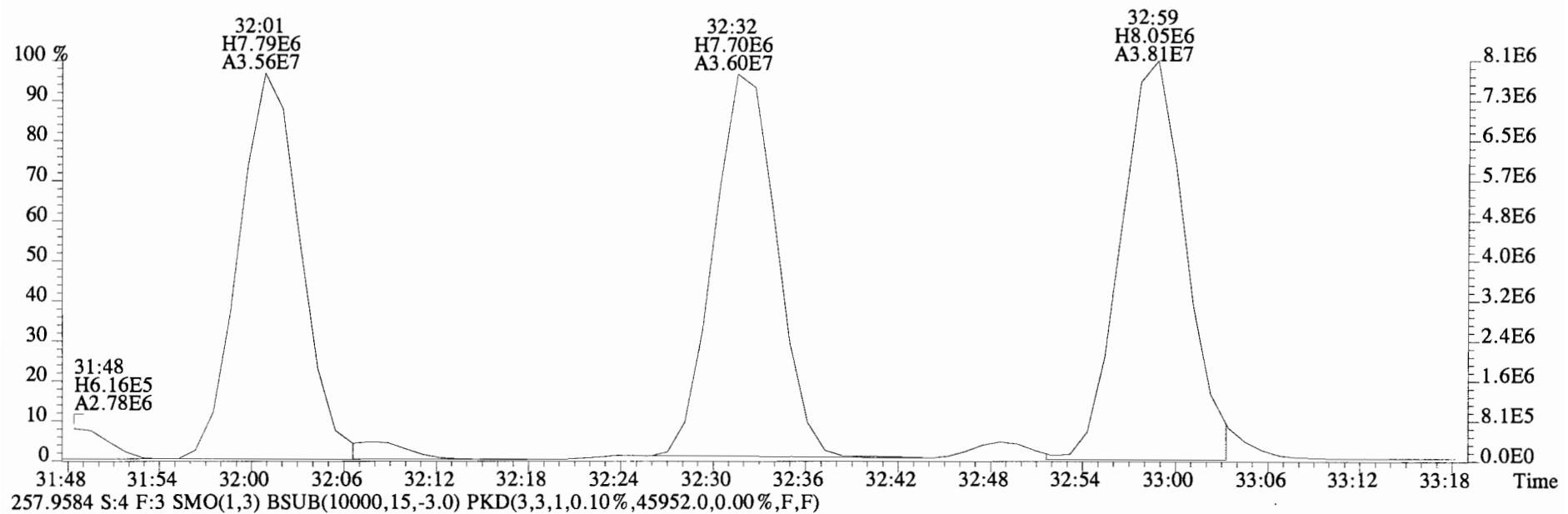
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,141028.0,0.00%,F,F)



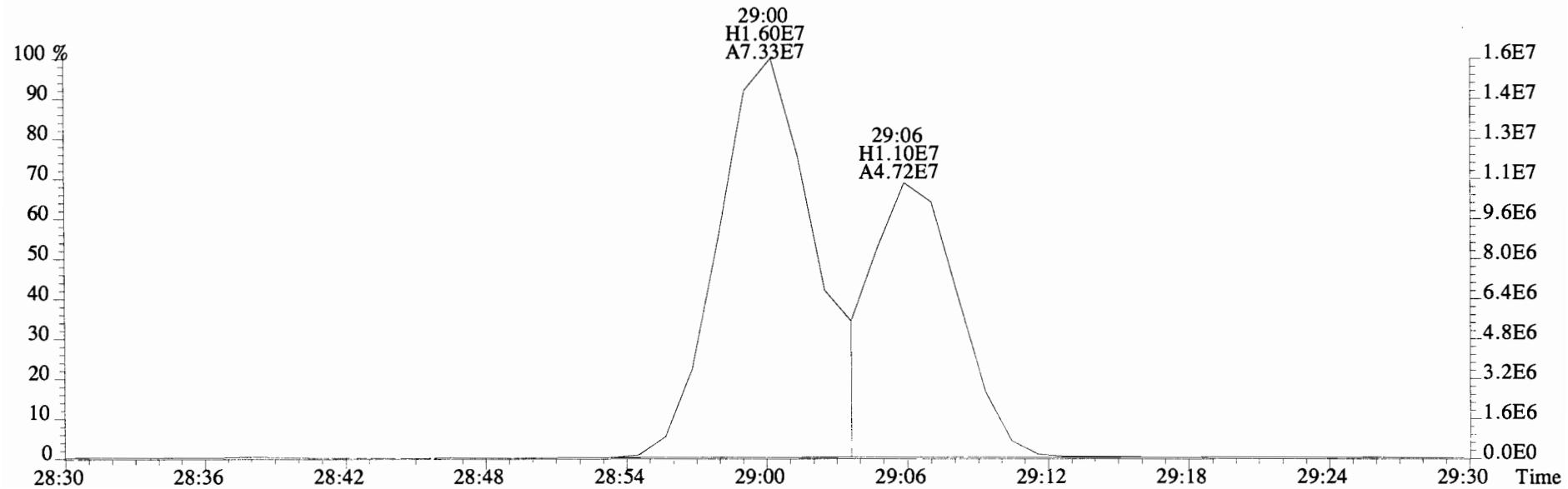
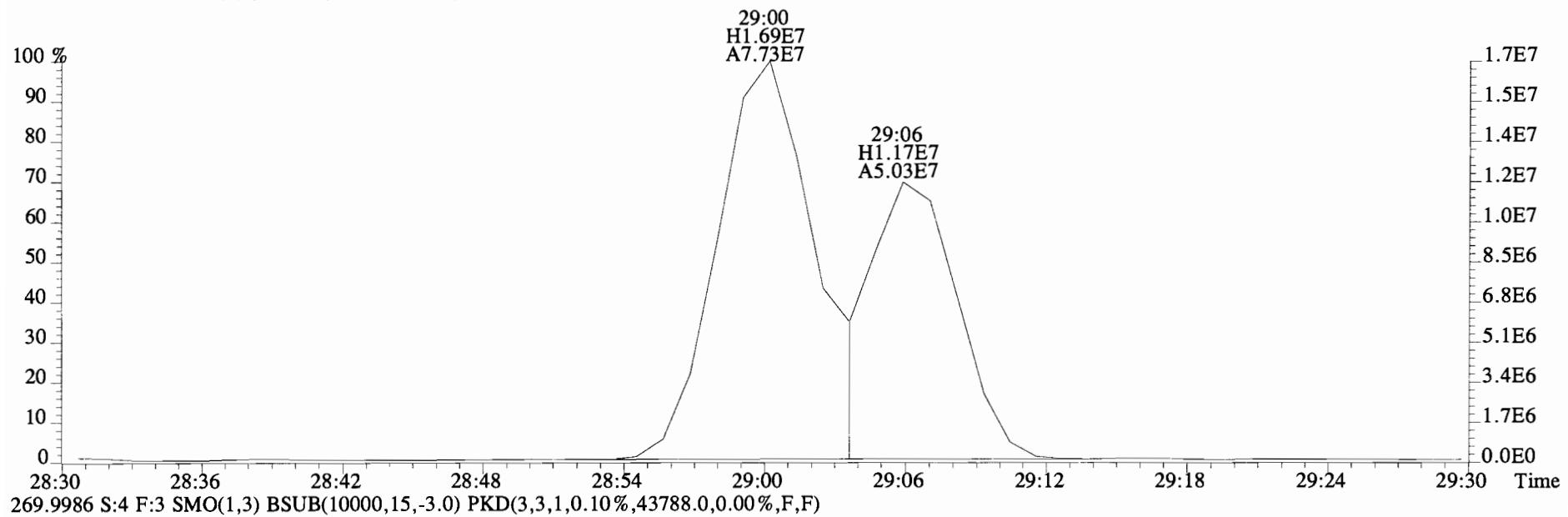
269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,43788.0,0.00%,F,F)



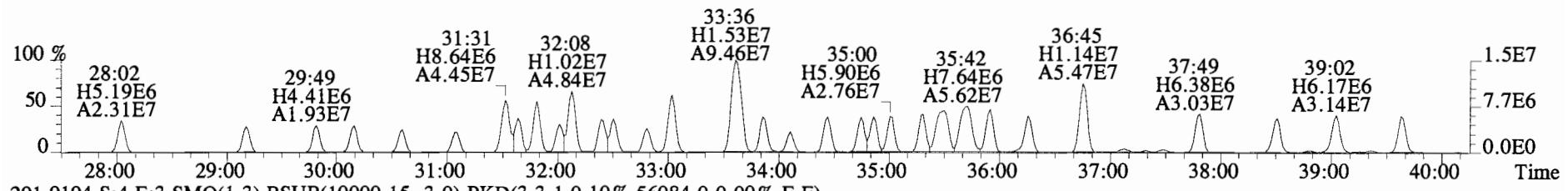
File:141021E2 #1-761 Acq:21-OCT-2014 23:23:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
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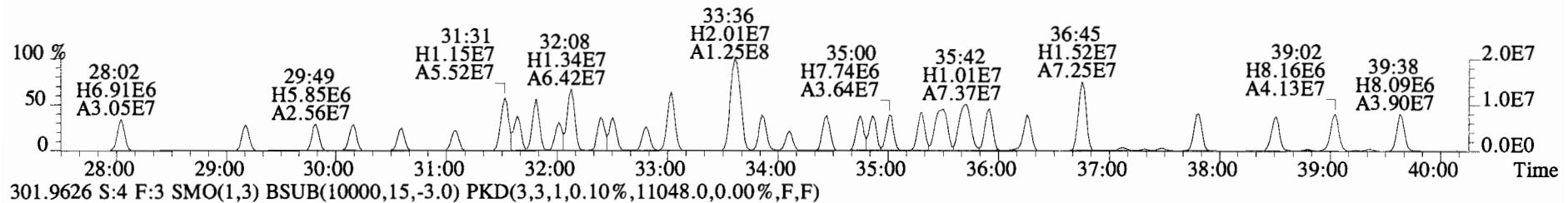
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Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB ZB1
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,141028.0,0.00%,F,F)



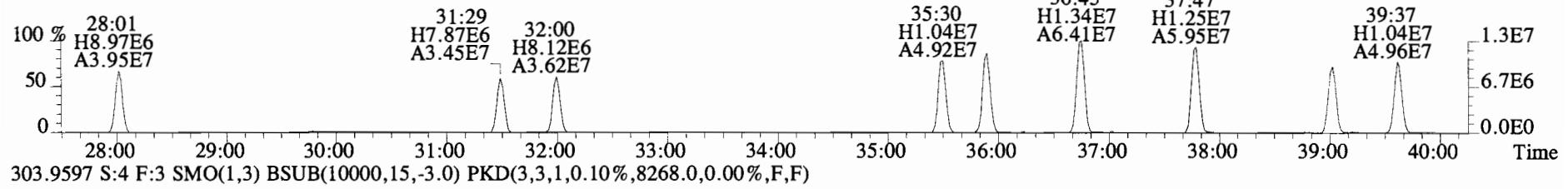
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 Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
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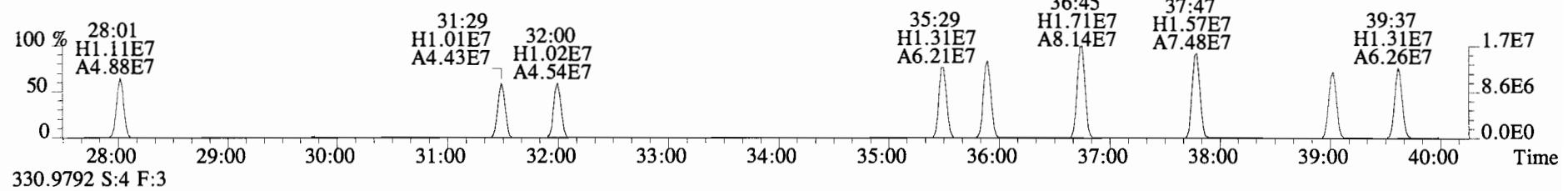
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,56084.0,0.00%,F,F)



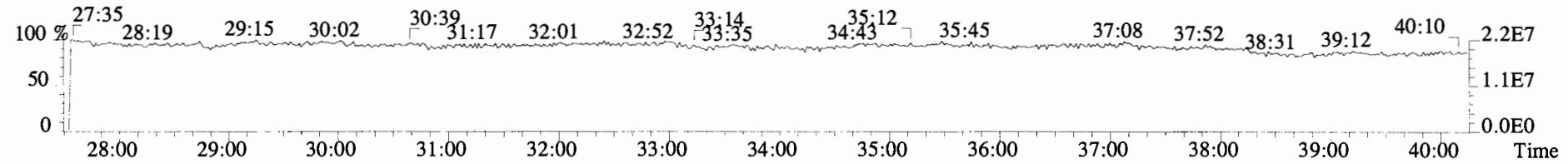
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11048.0,0.00%,F,F)



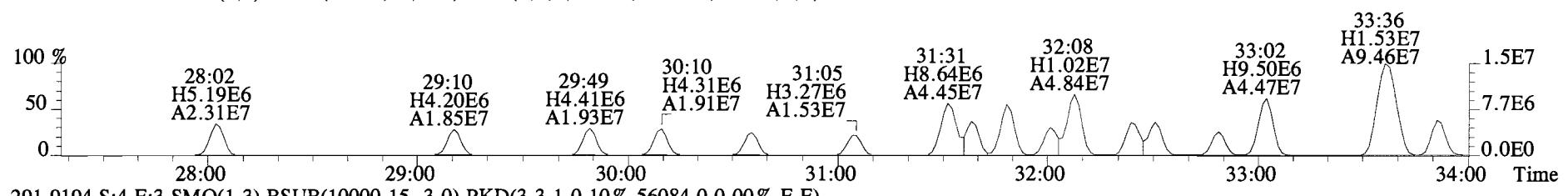
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8268.0,0.00%,F,F)



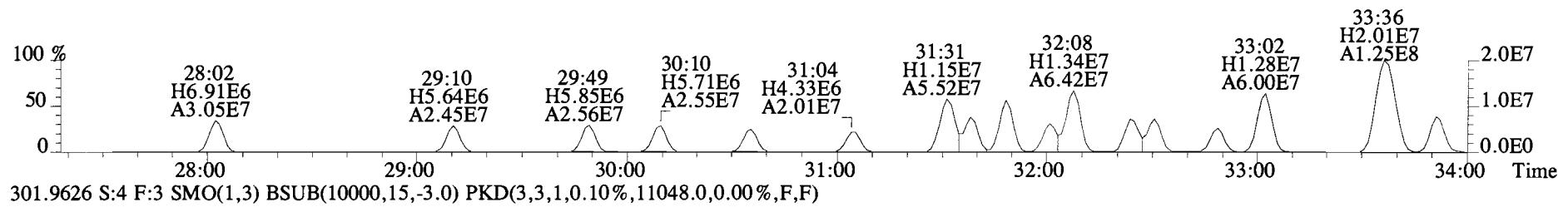
330.9792 S:4 F:3



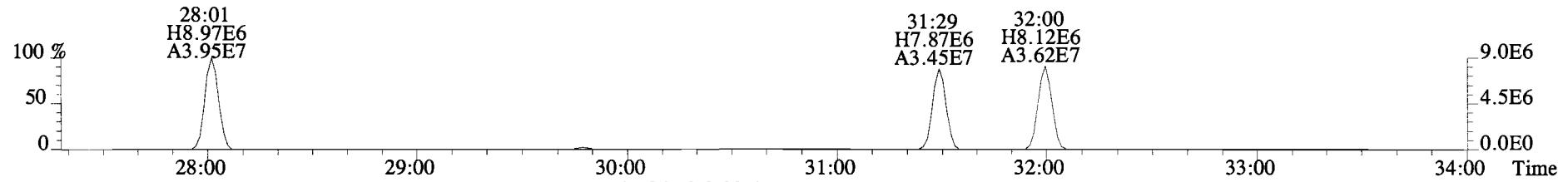
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 Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
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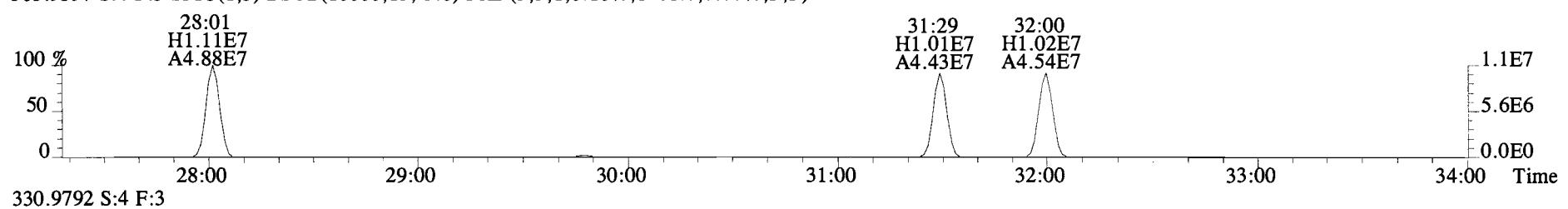
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,56084.0,0.00%,F,F)



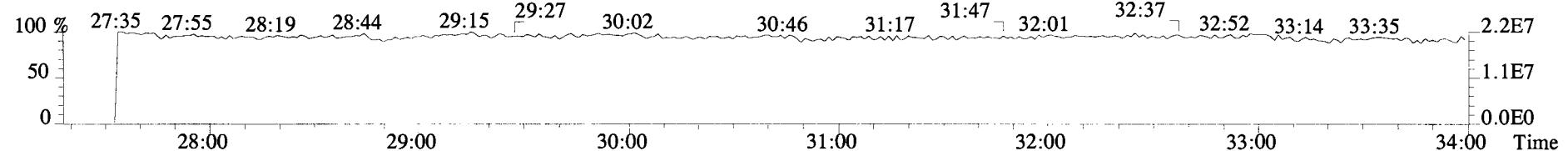
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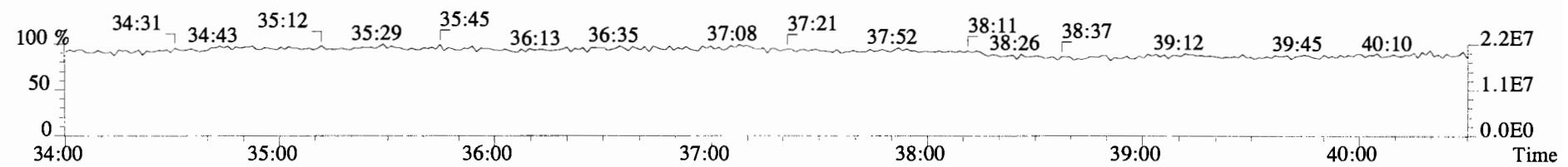
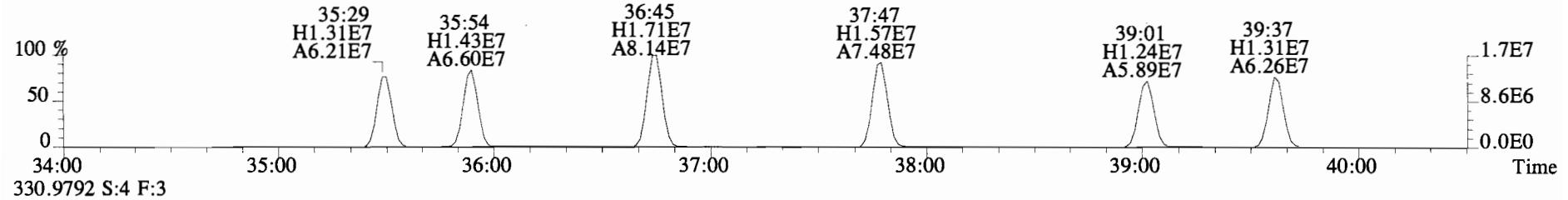
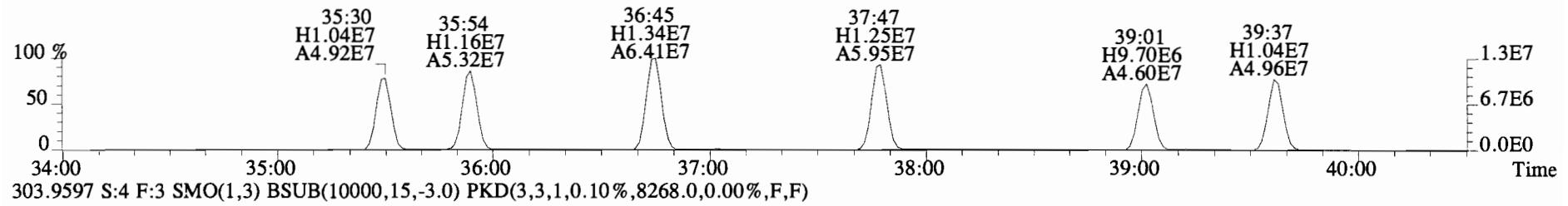
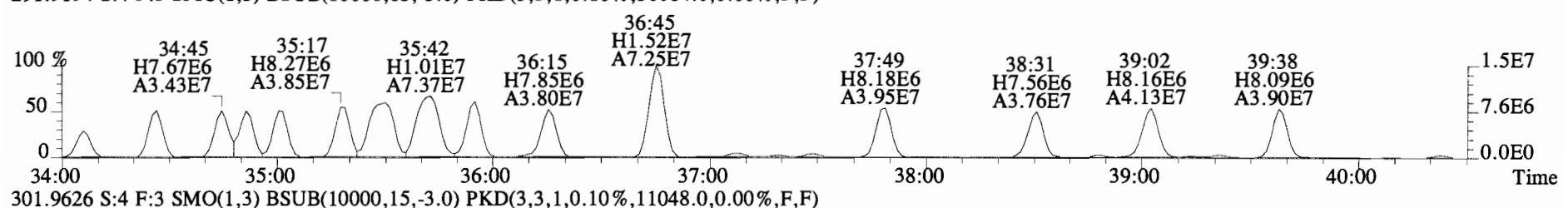
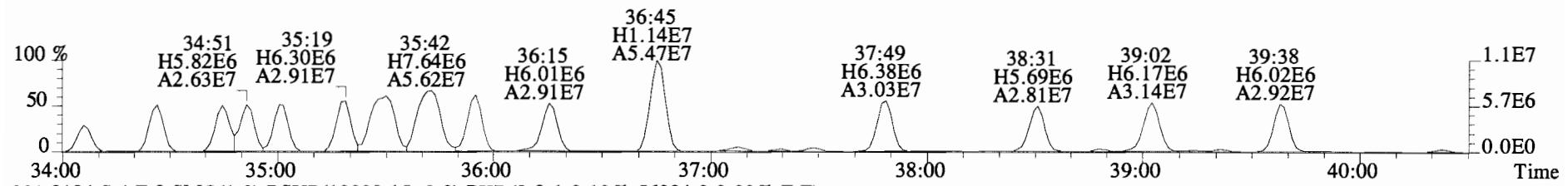
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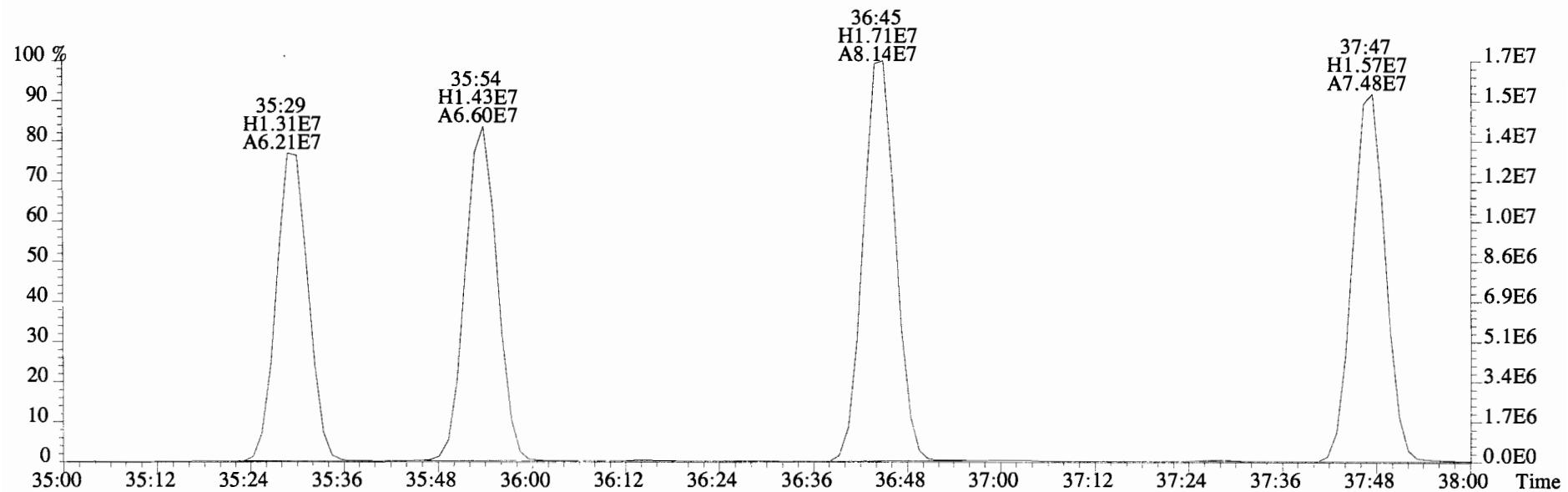
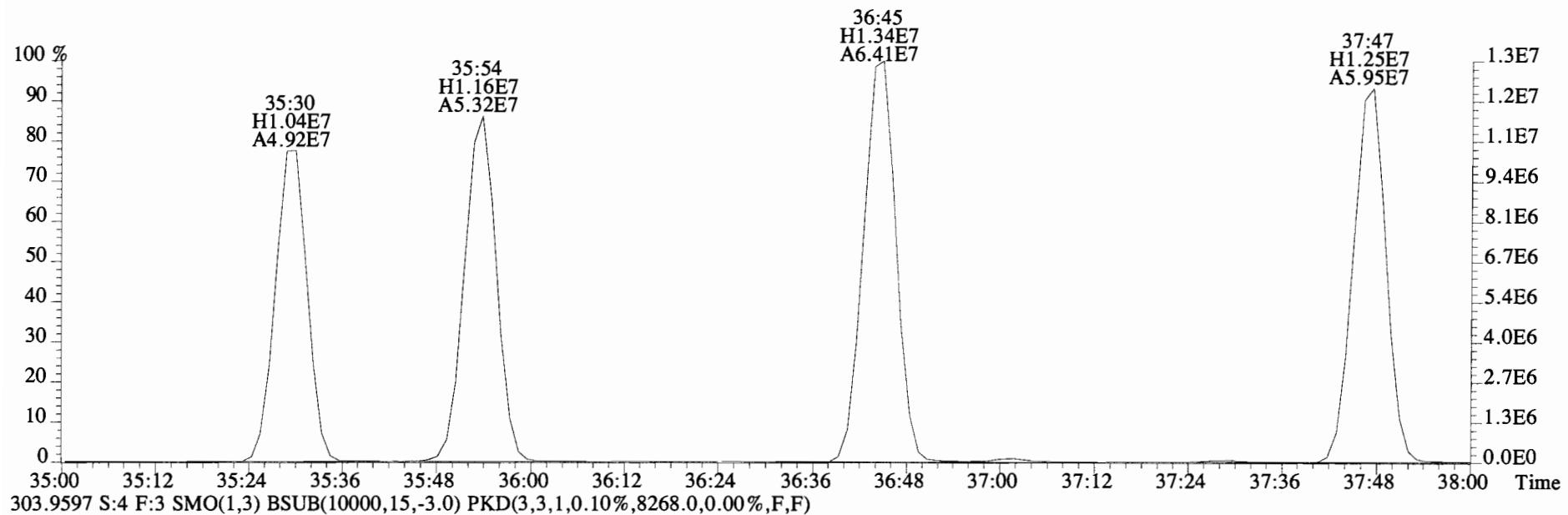
330.9792 S:4 F:3



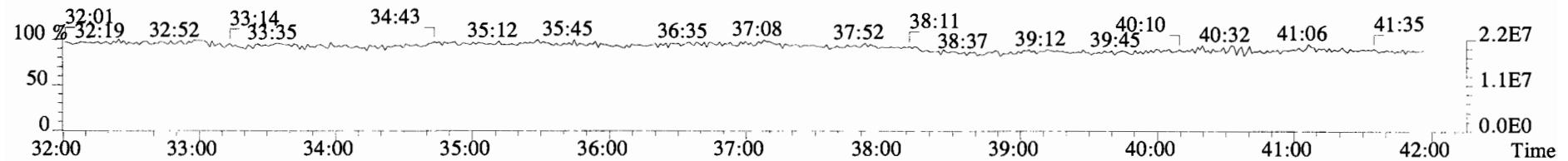
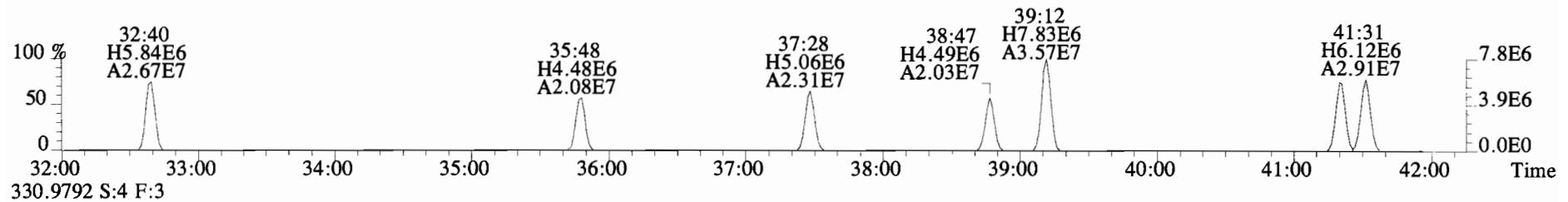
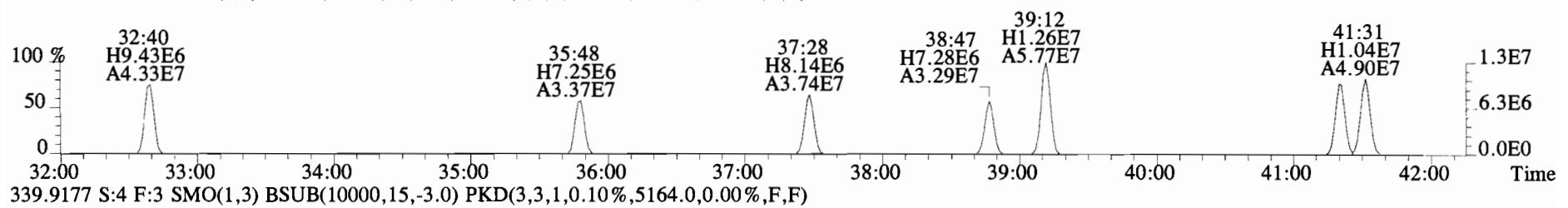
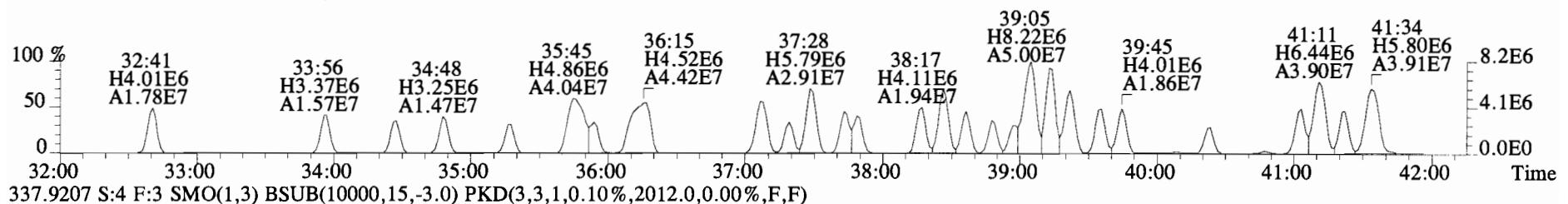
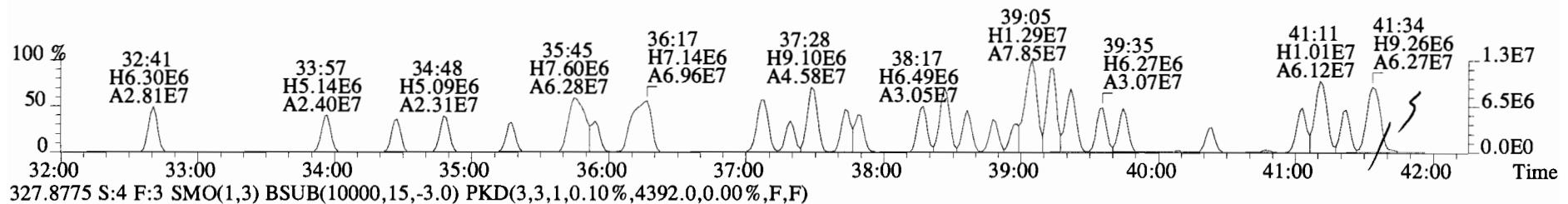
File:141021E2 #1-761 Acq:21-OCT-2014 23:23:06 GC EI + Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
 289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,47228.0,0.00%,F,F)



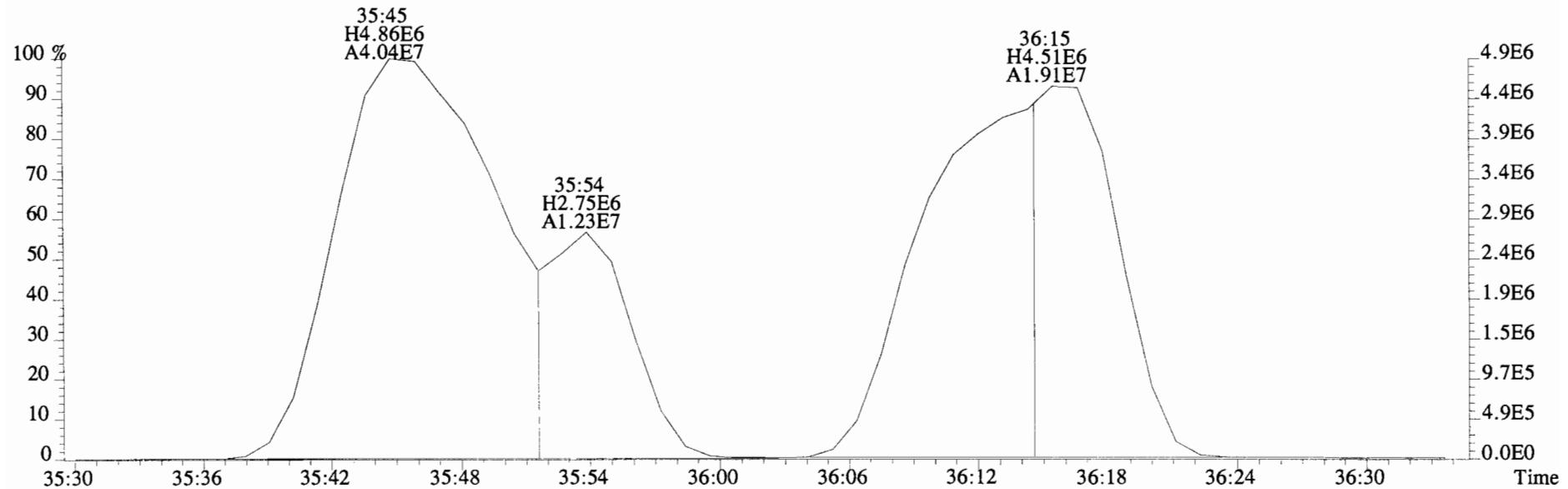
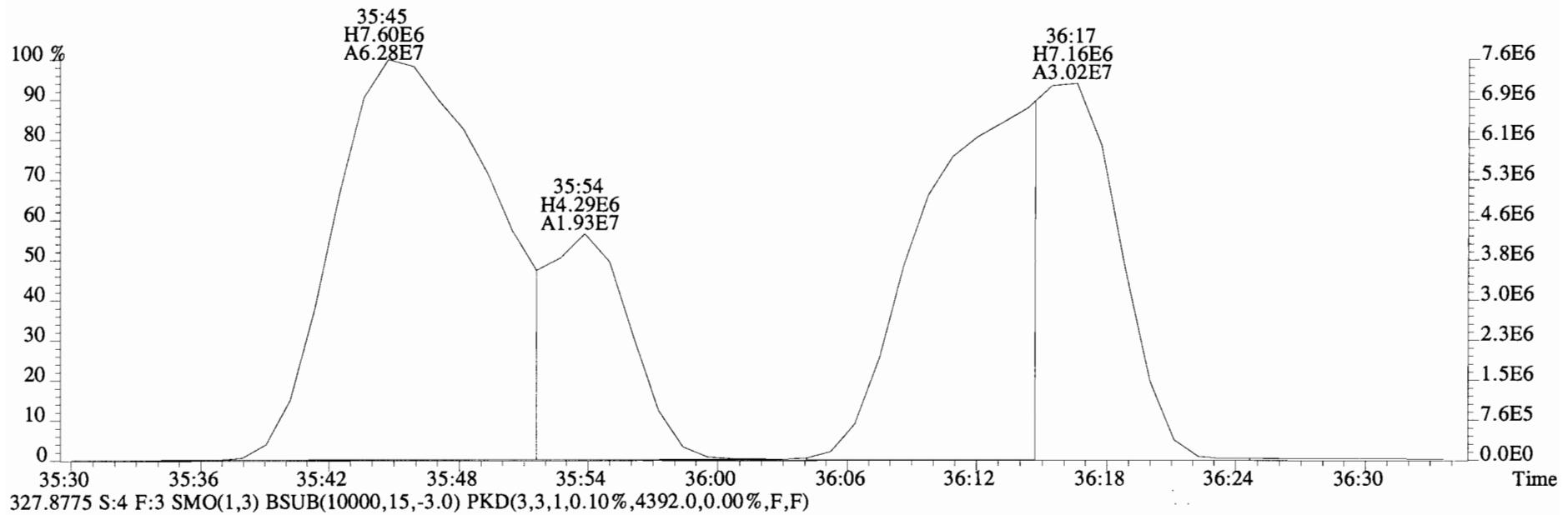
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Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11048.0,0.00%,F,F)



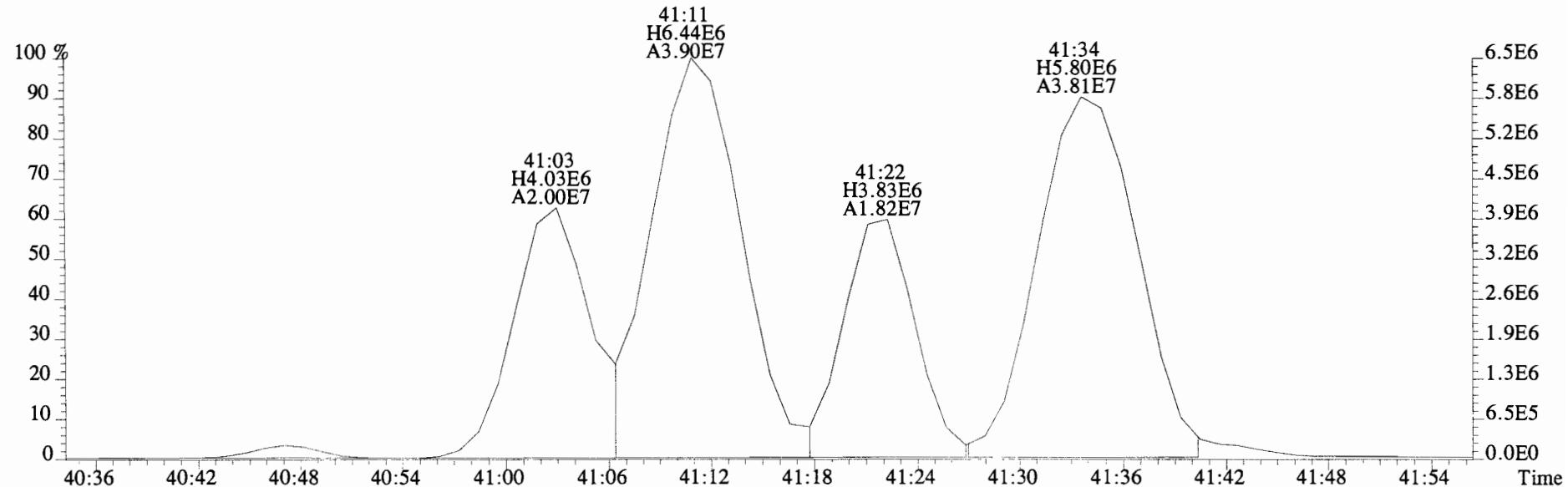
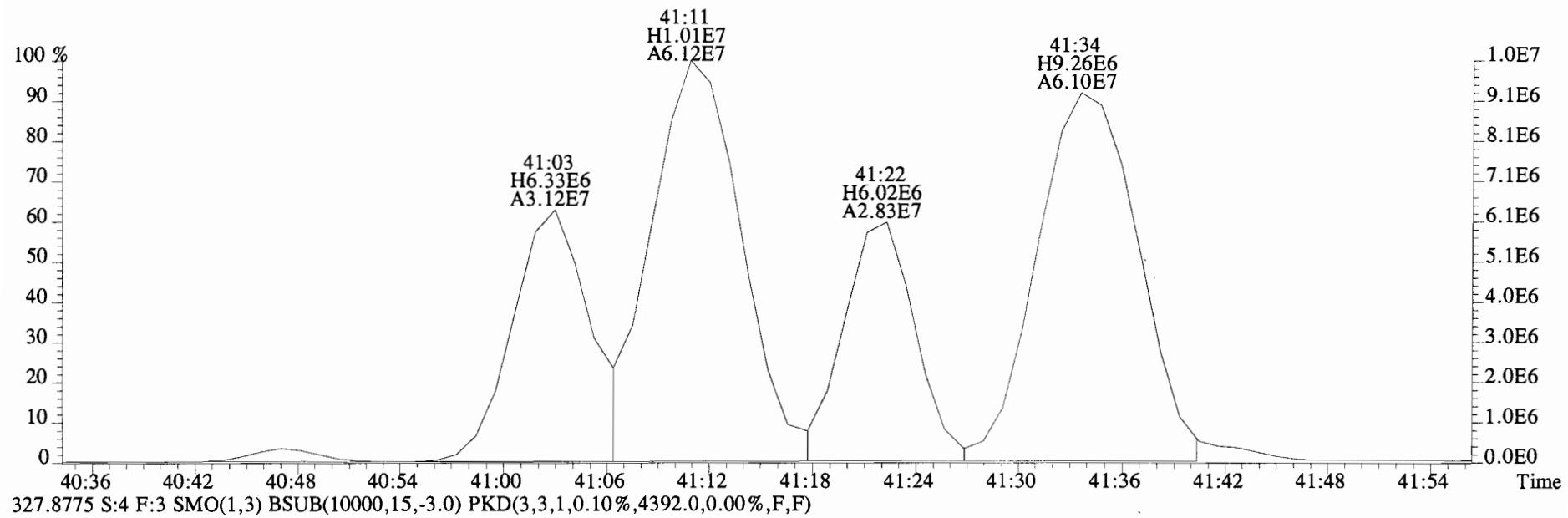
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 325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1628.0,0.00%,F,F)



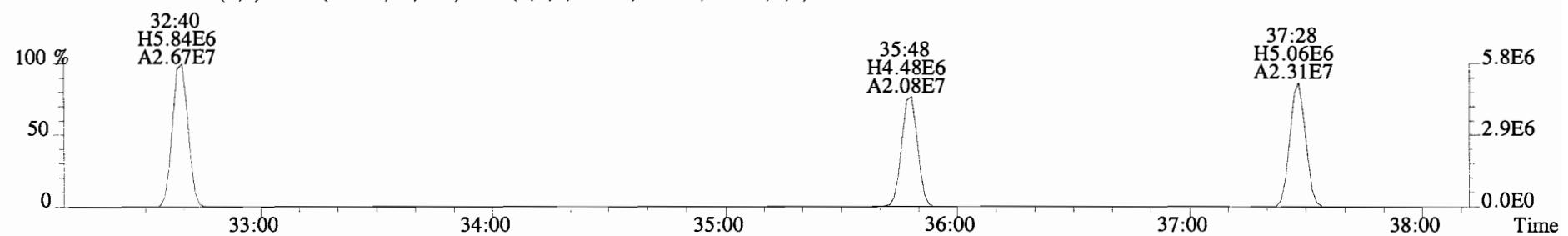
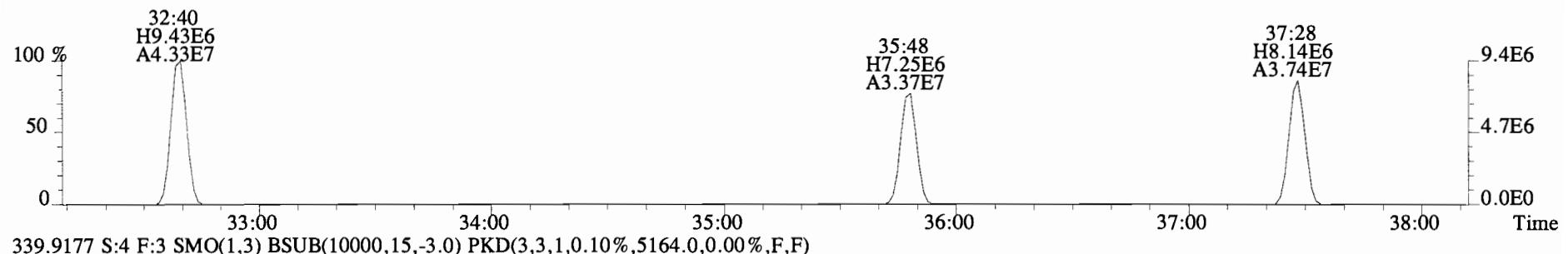
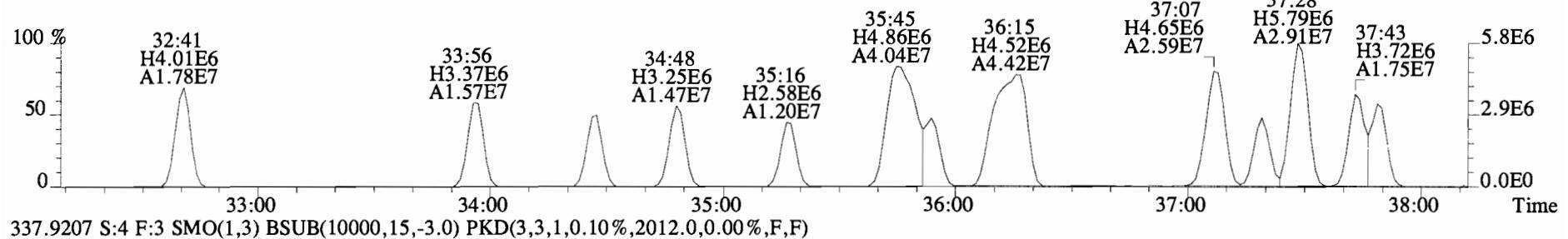
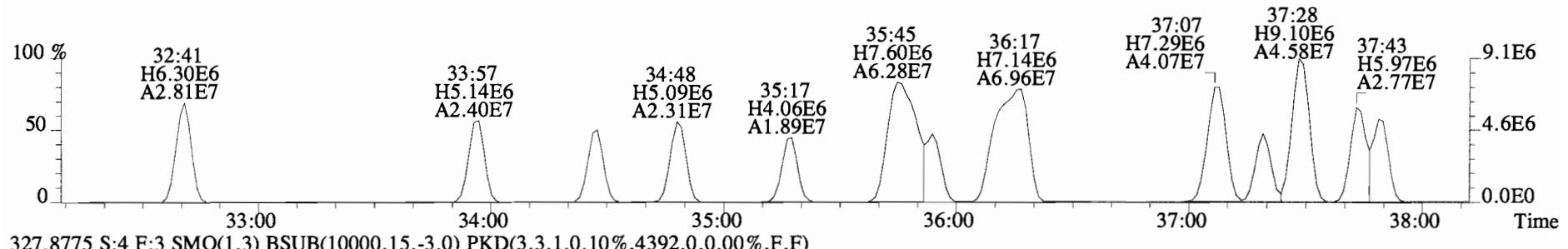
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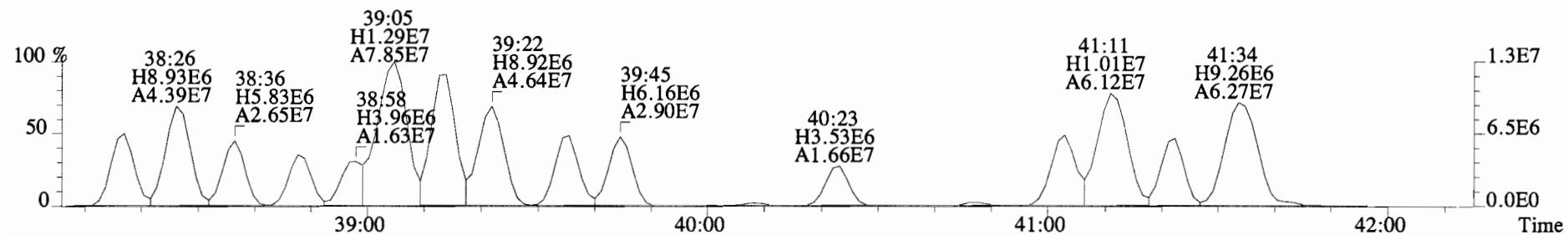
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Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1628.0,0.00%,F,F)



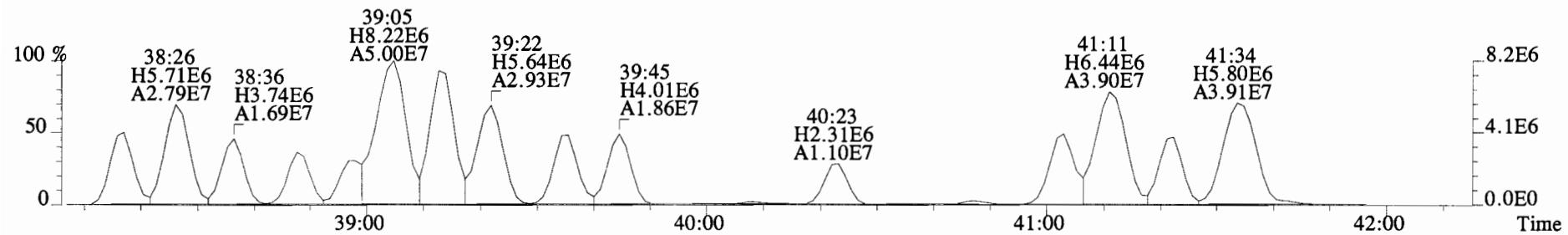
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 Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
 325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1628.0,0.00%,F,F)



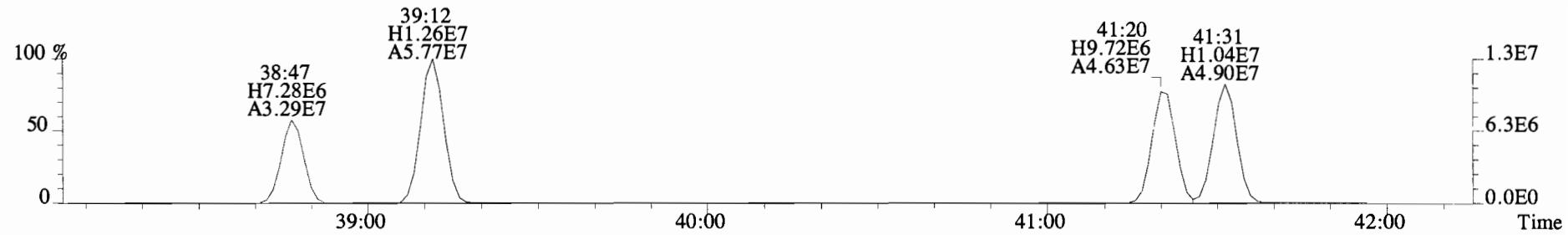
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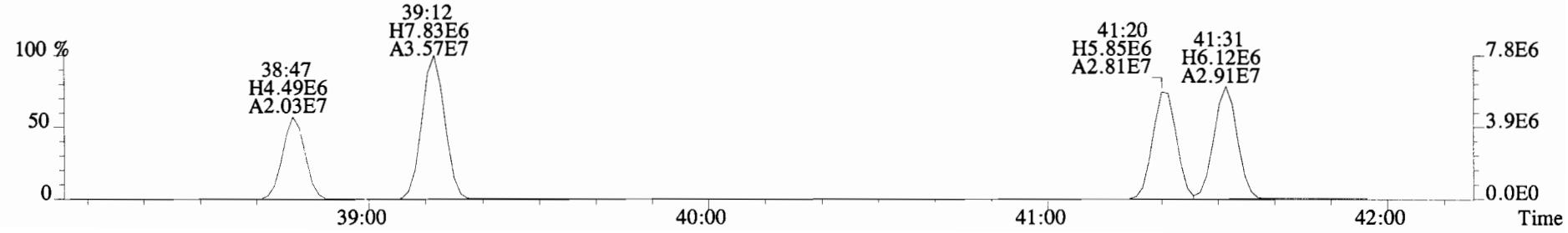
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4392.0,0.00%,F,F)



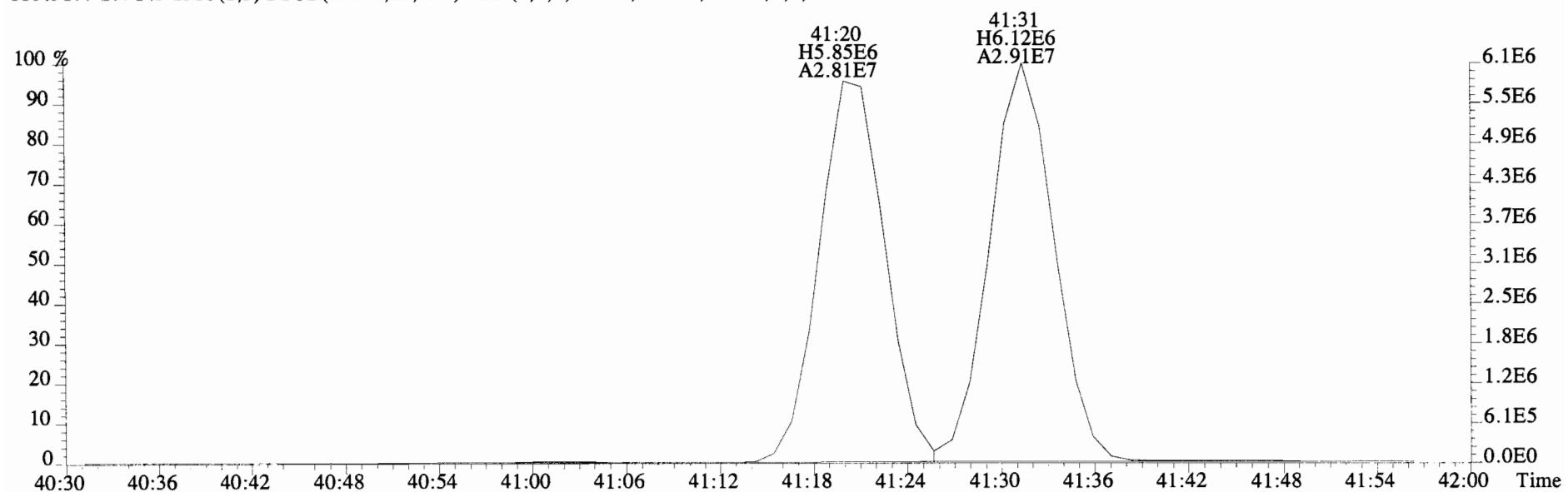
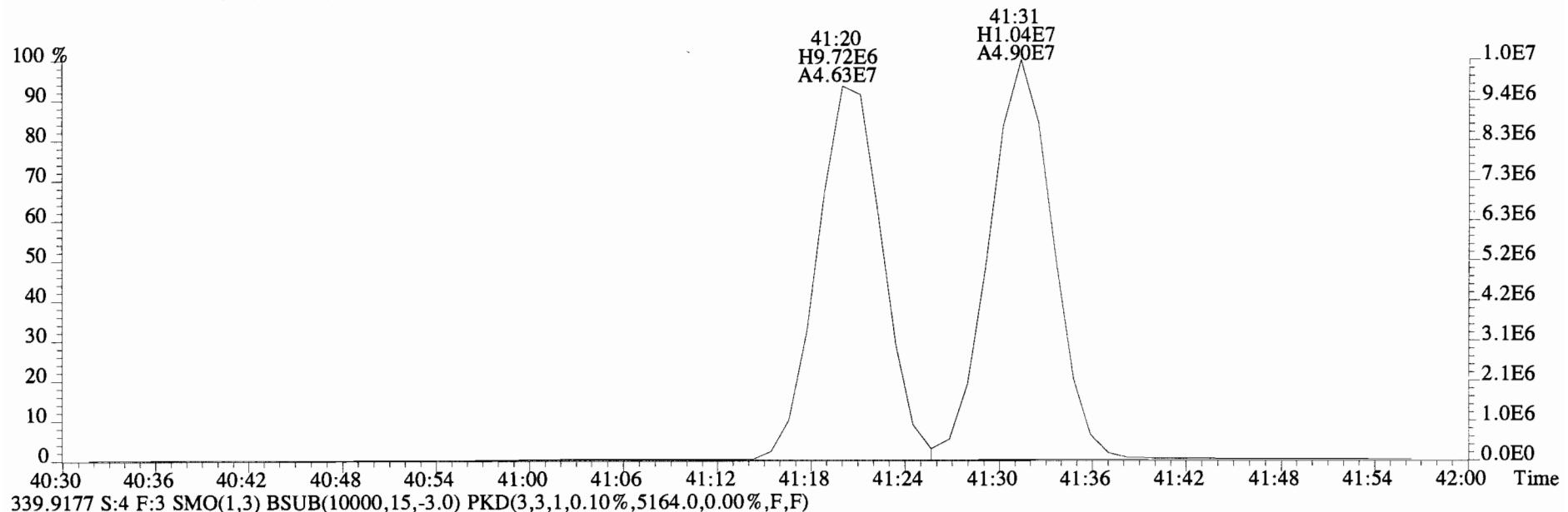
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2012.0,0.00%,F,F)



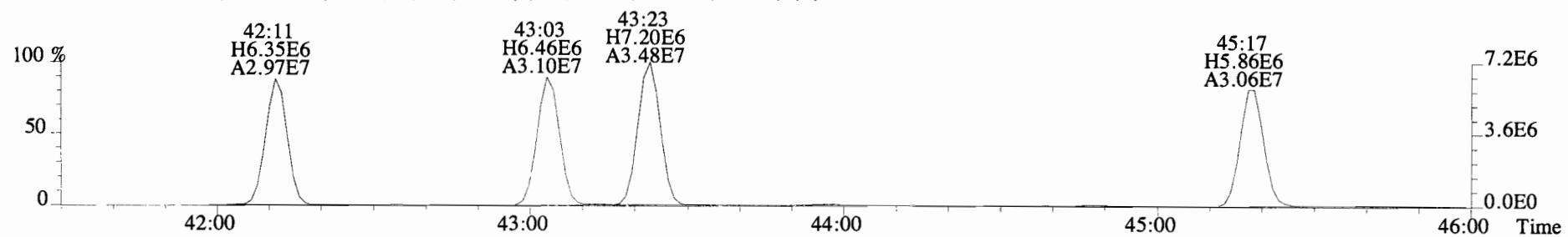
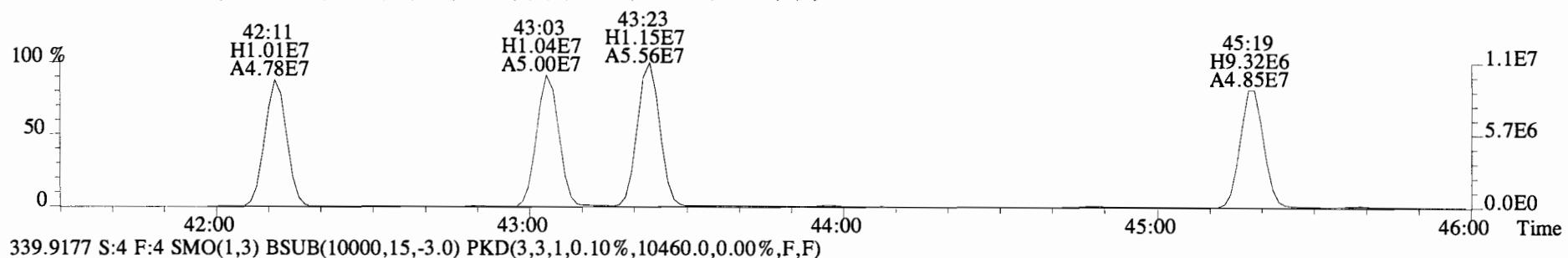
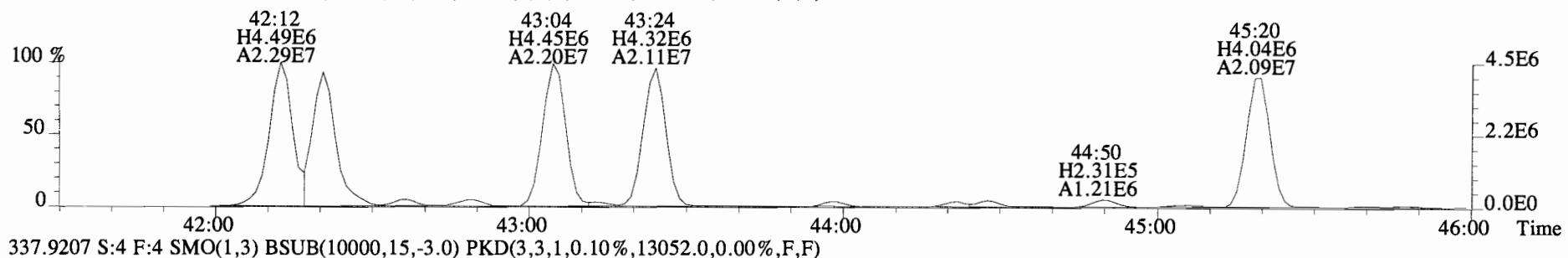
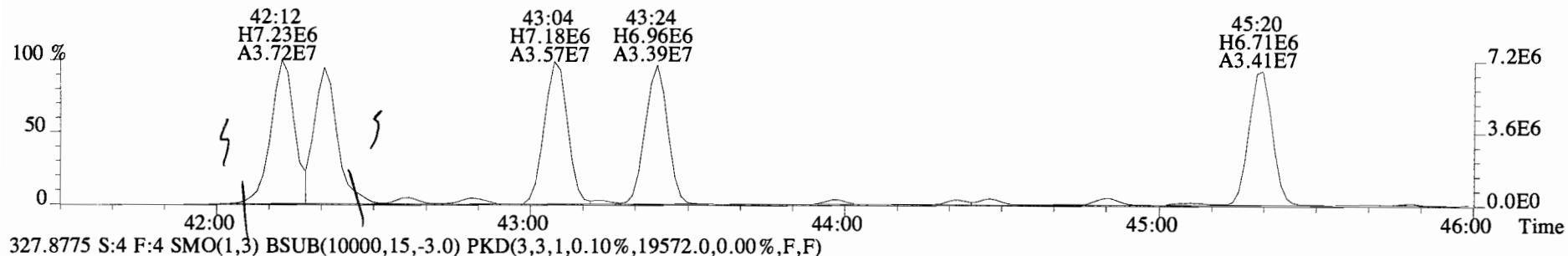
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5164.0,0.00%,F,F)



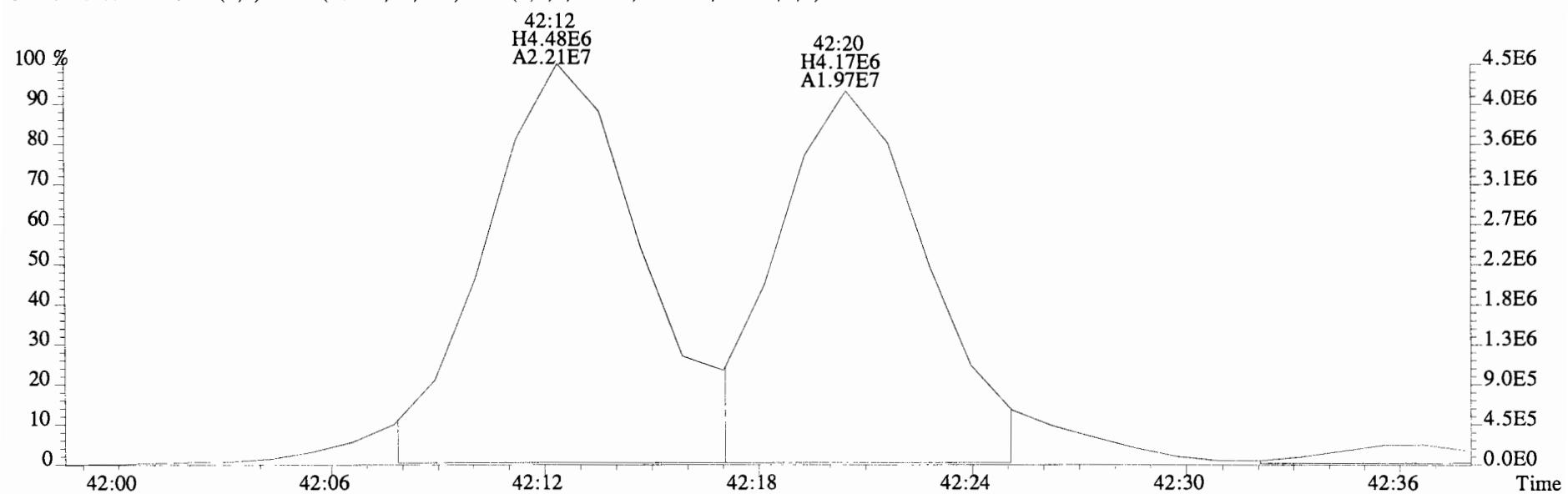
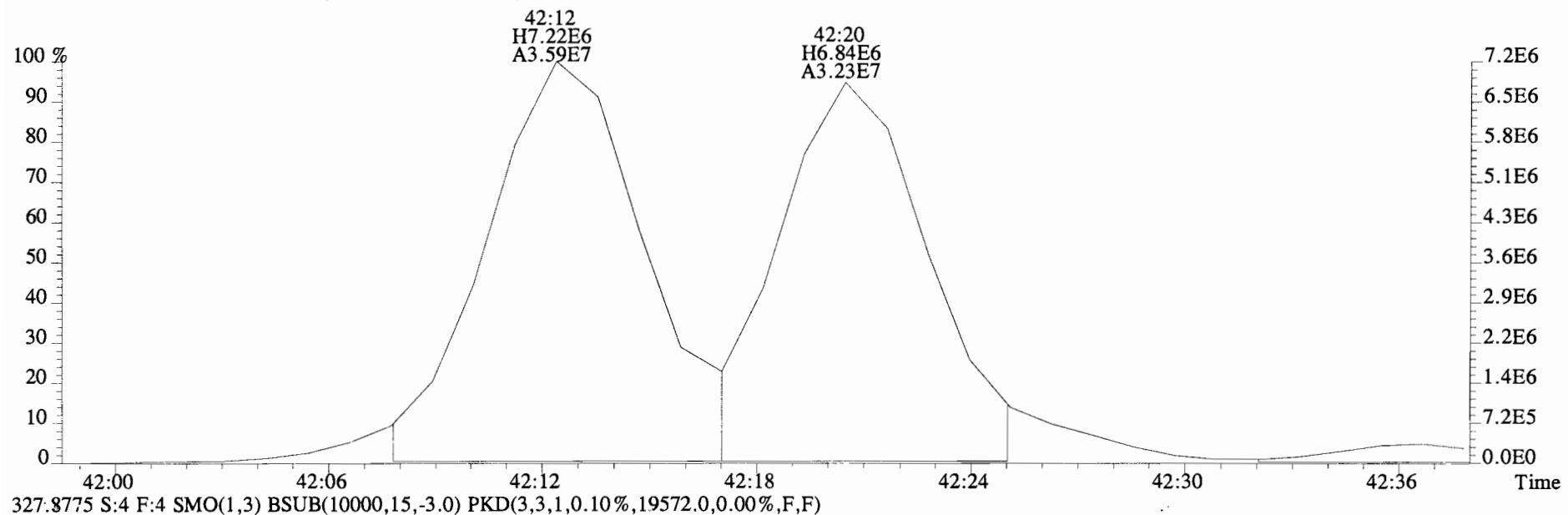
File:141021E2 #1-761 Acq:21-OCT-2014 23:23:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2012.0,0.00%,F,F)



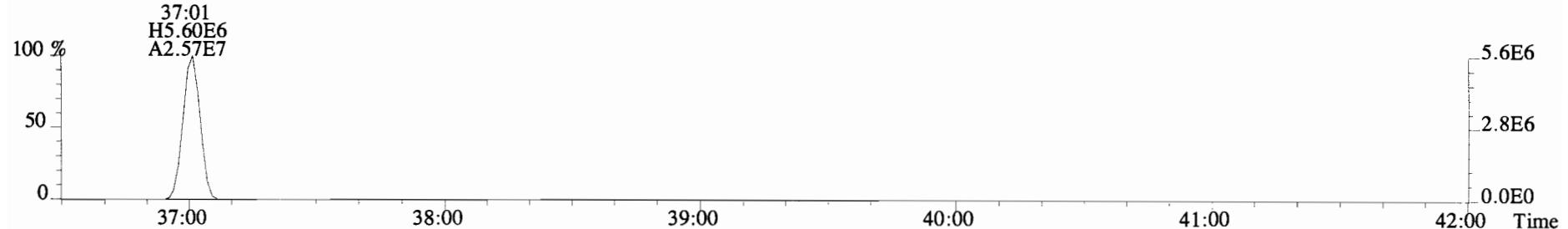
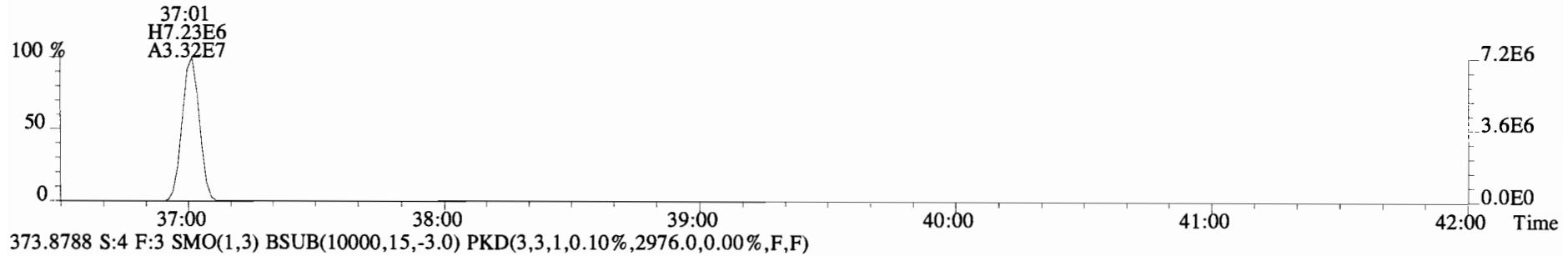
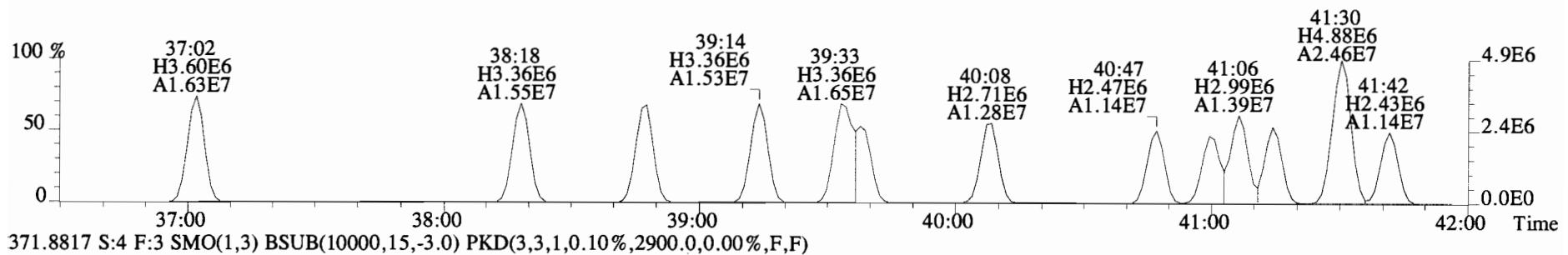
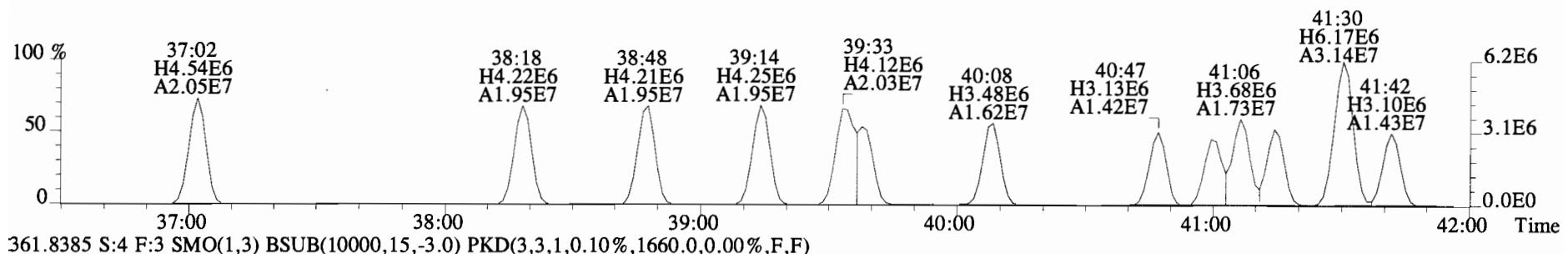
File:141021E2 #1-547 Acq:21-OCT-2014 23:23:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30956.0,0.00%,F,F)



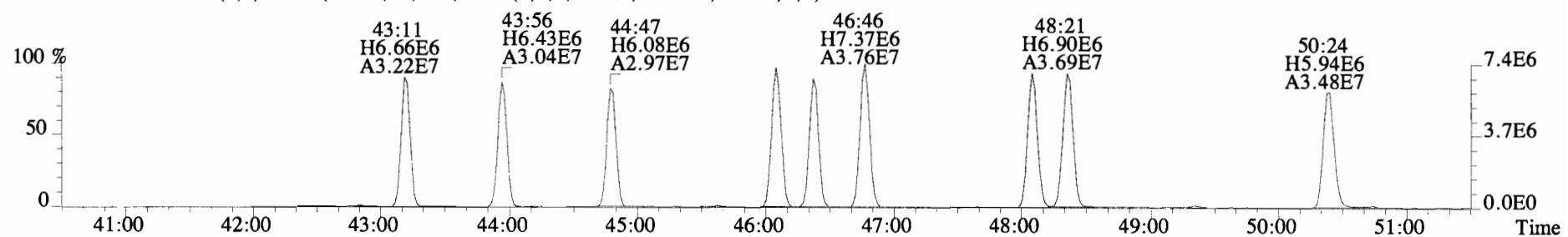
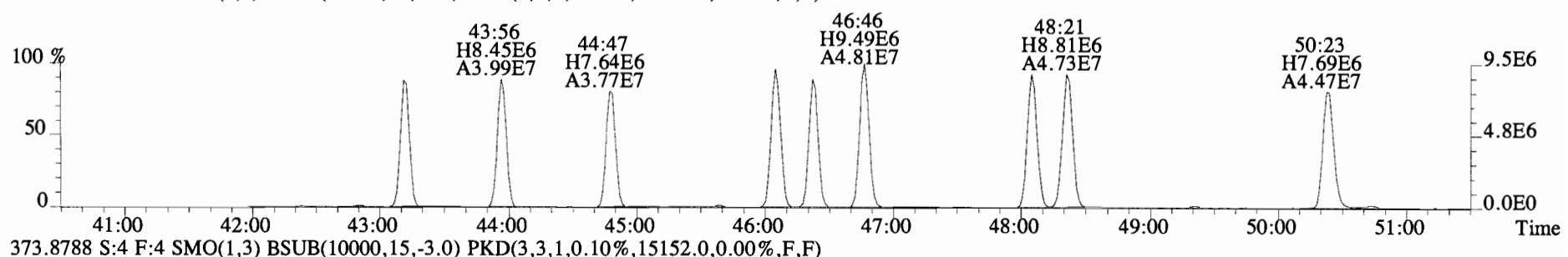
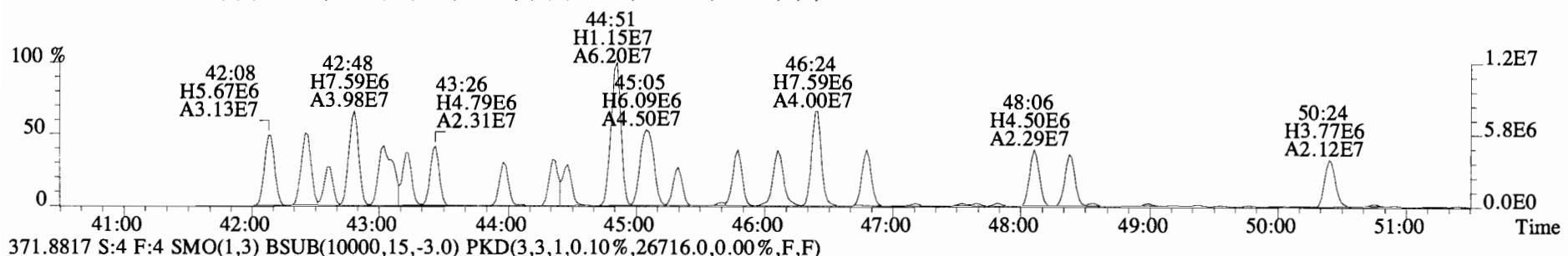
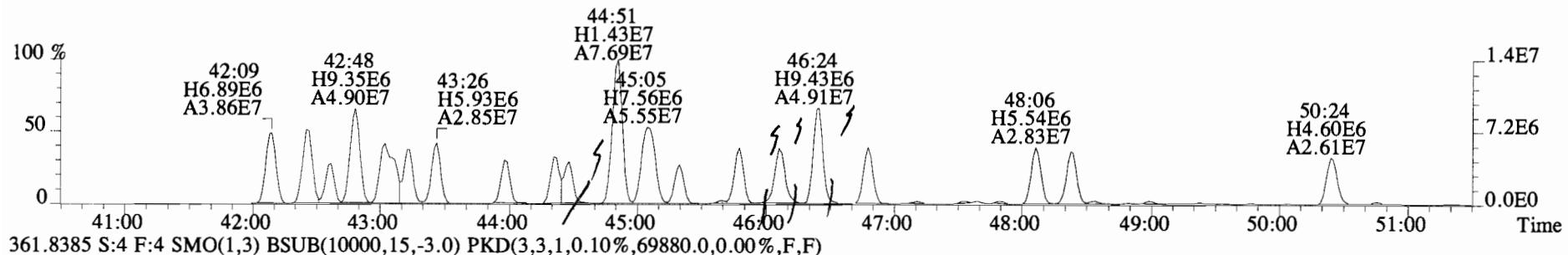
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Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30956.0,0.00%,F,F)



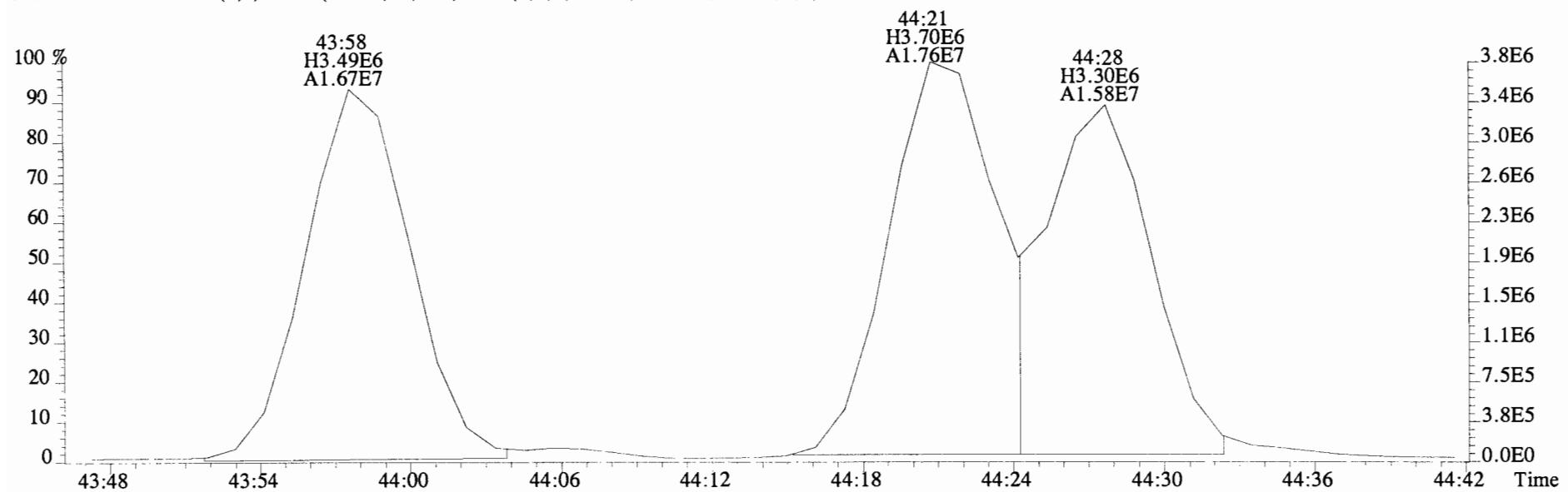
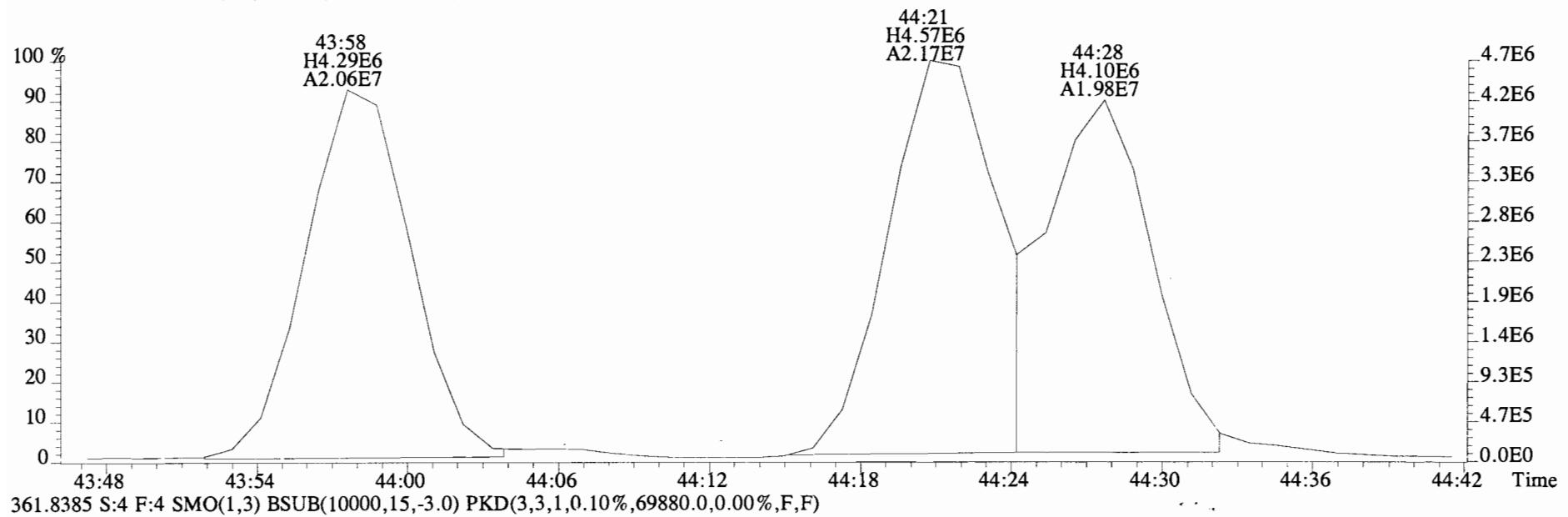
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 Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
 359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1688.0,0.00%,F,F)



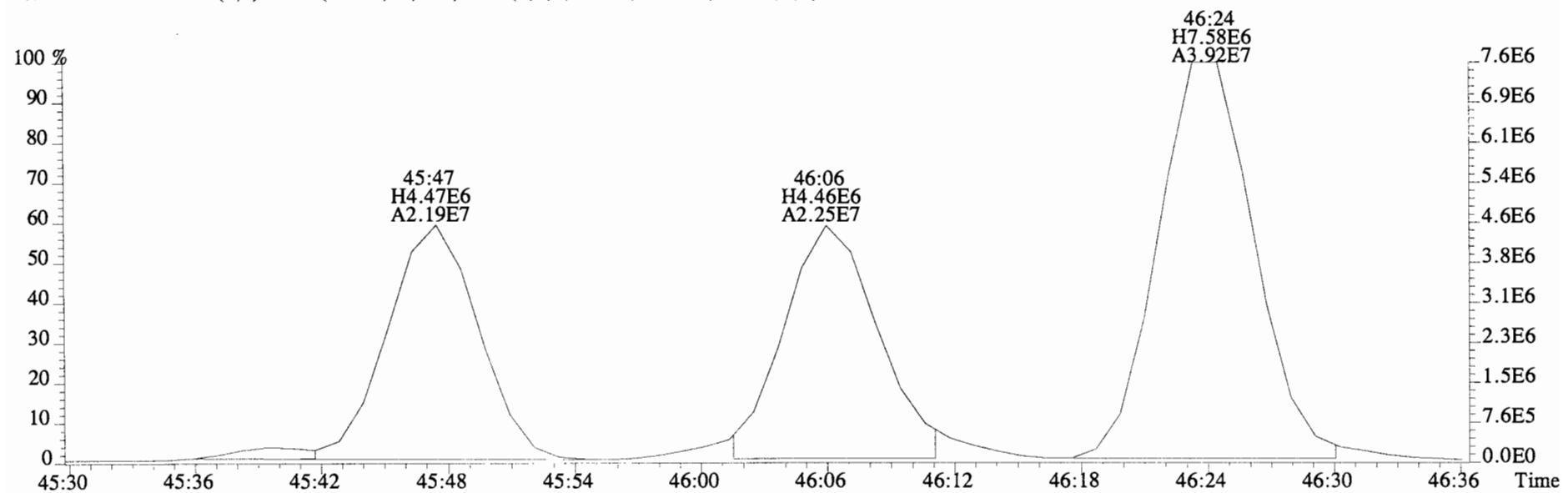
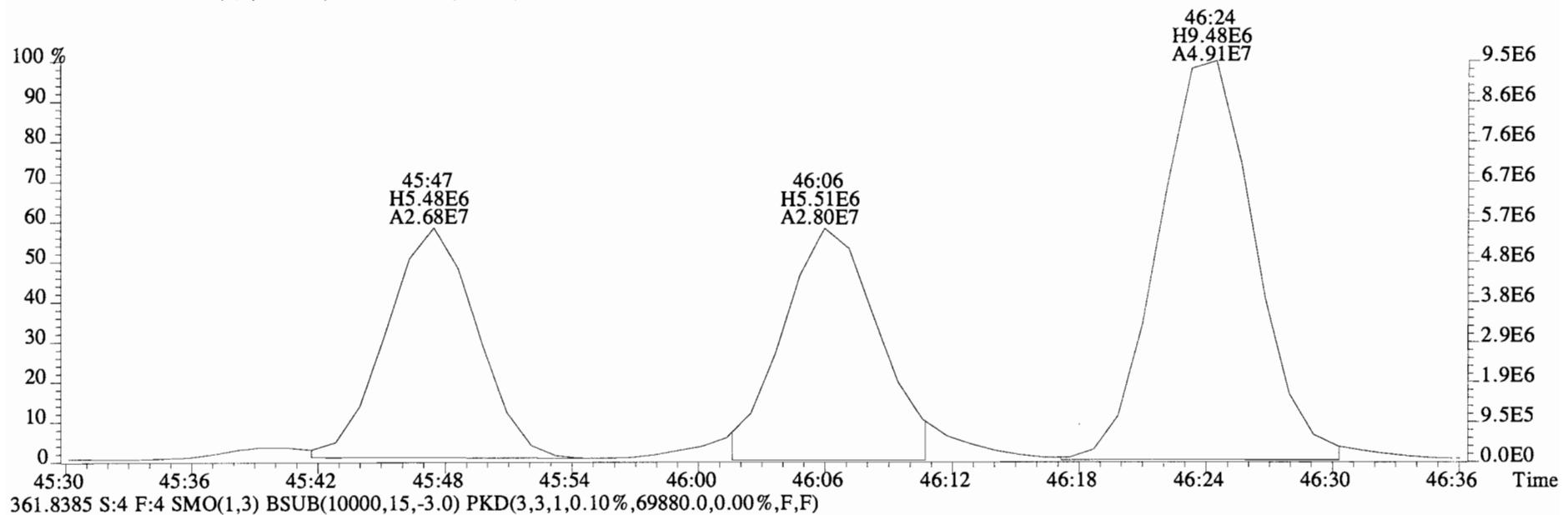
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 Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J01I0-BS1 OPR 1 Exp:PCB_ZB1
 359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,97388.0,0.00%,F,F)



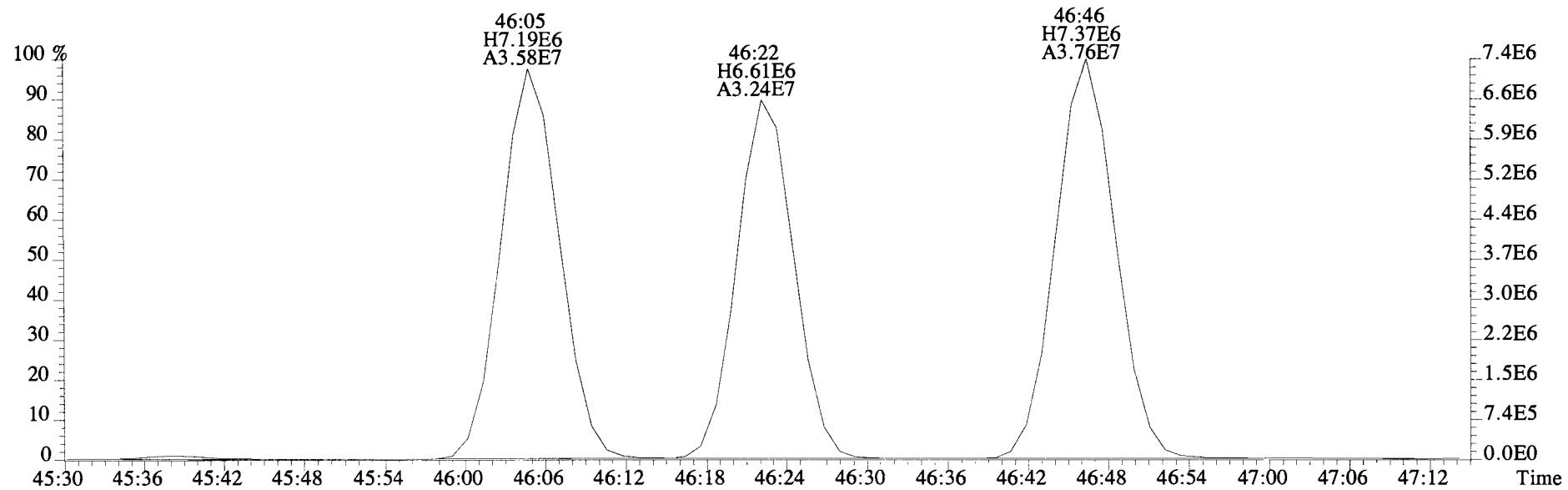
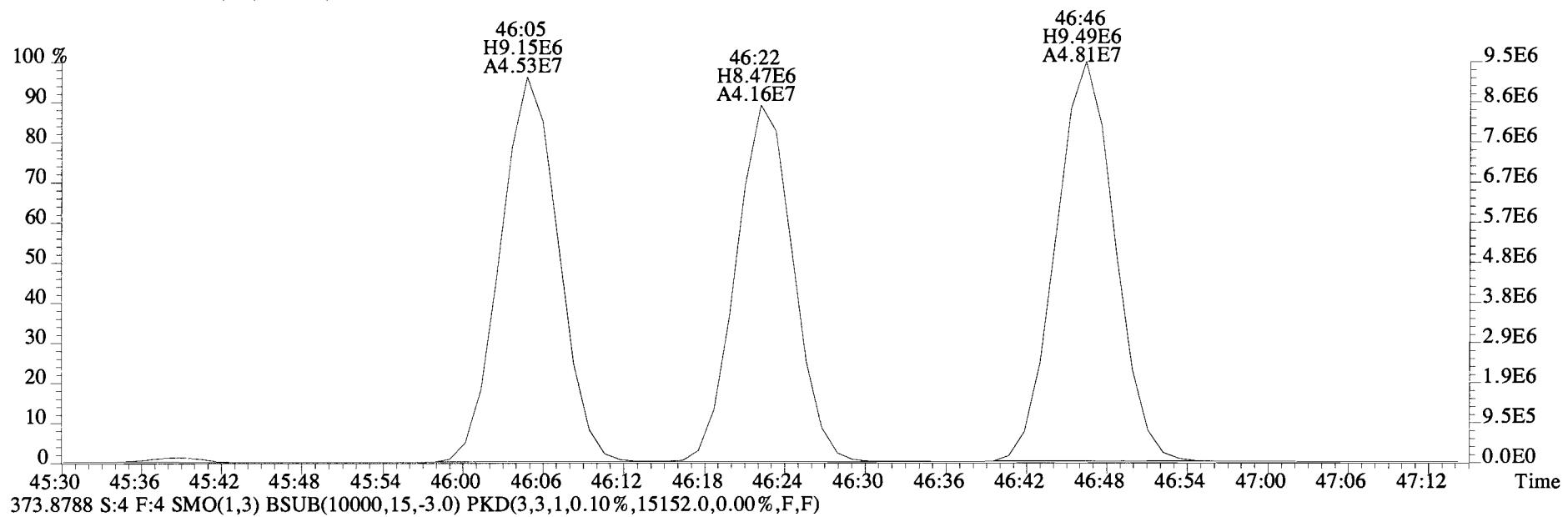
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Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J01I0-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,97388.0,0.00%,F,F)



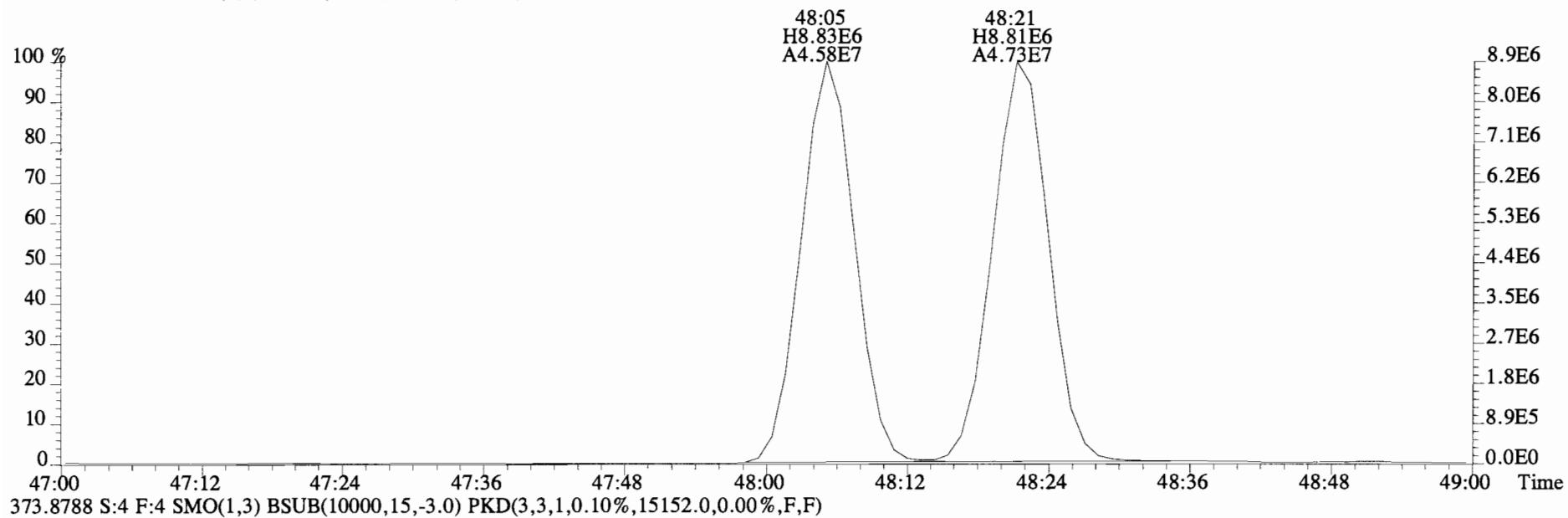
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Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,97388.0,0.00%,F,F)



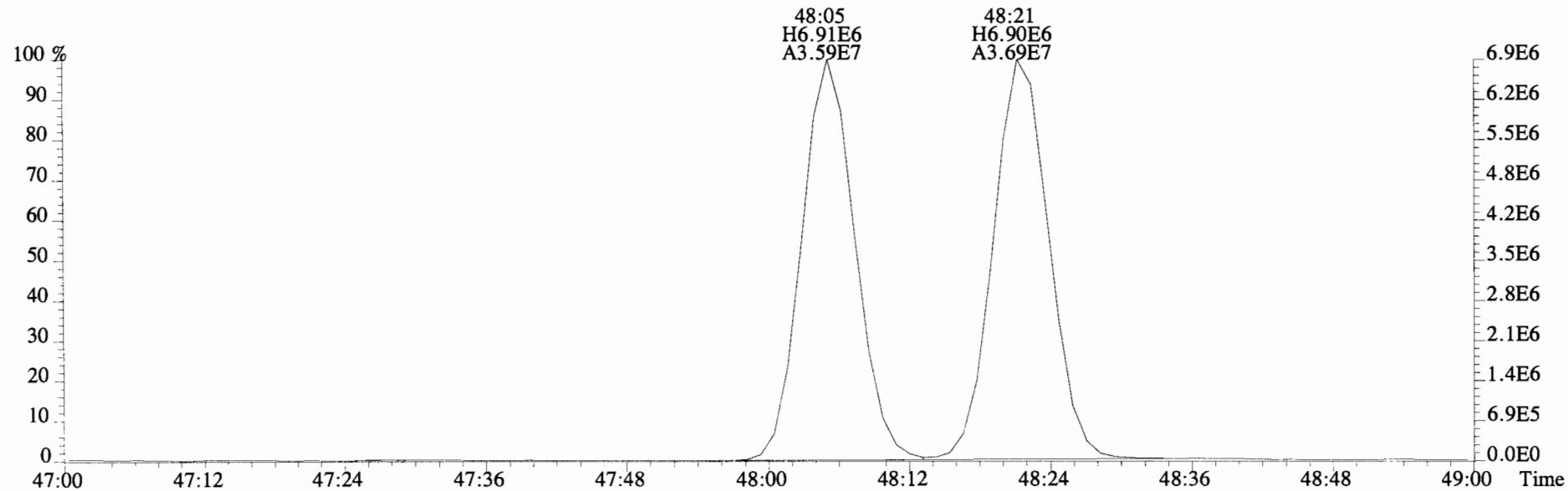
File:141021E2 #1-547 Acq:21-OCT-2014 23:23:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26716.0,0.00%,F,F)



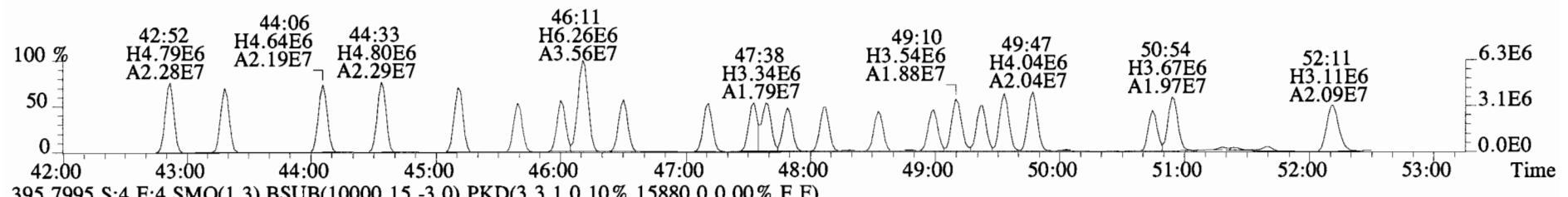
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Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26716.0,0.00%,F,F)



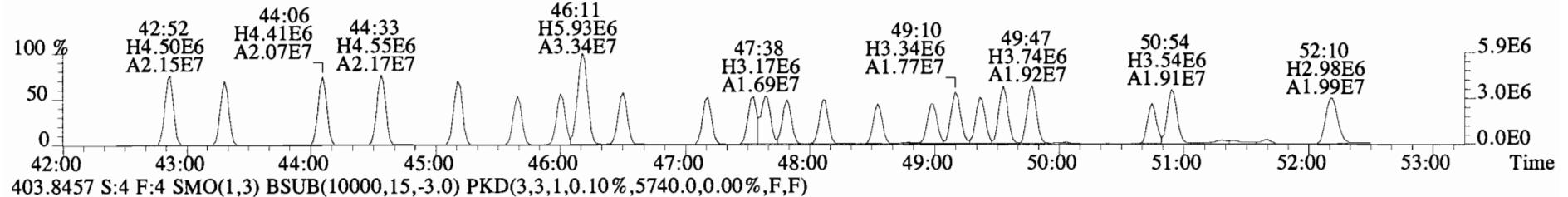
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15152.0,0.00%,F,F)



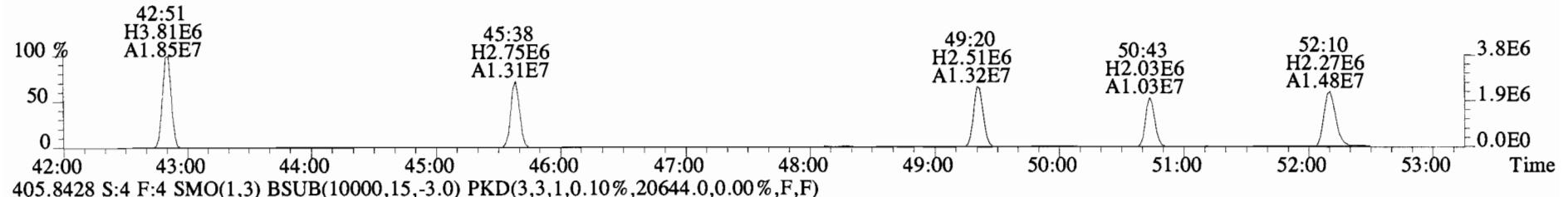
File:141021E2 #1-547 Acq:21-OCT-2014 23:23:06 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
 393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,21196.0,0.00%,F,F)



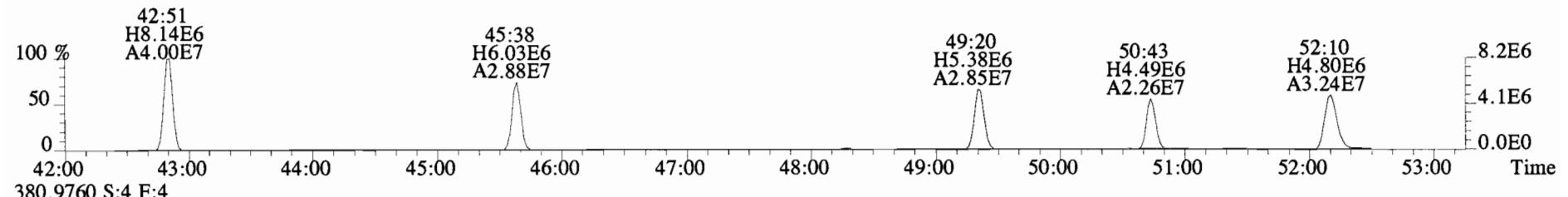
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15880.0,0.00%,F,F)



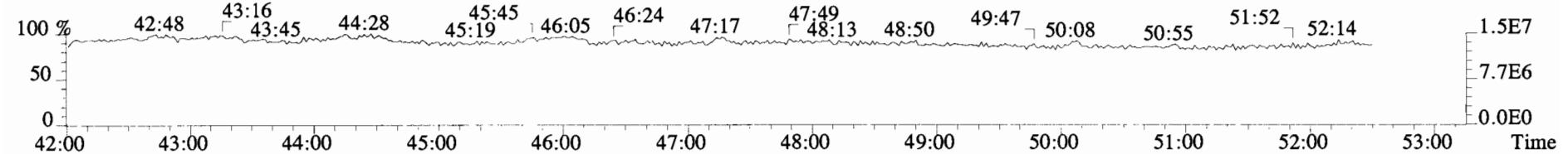
403.8457 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5740.0,0.00%,F,F)



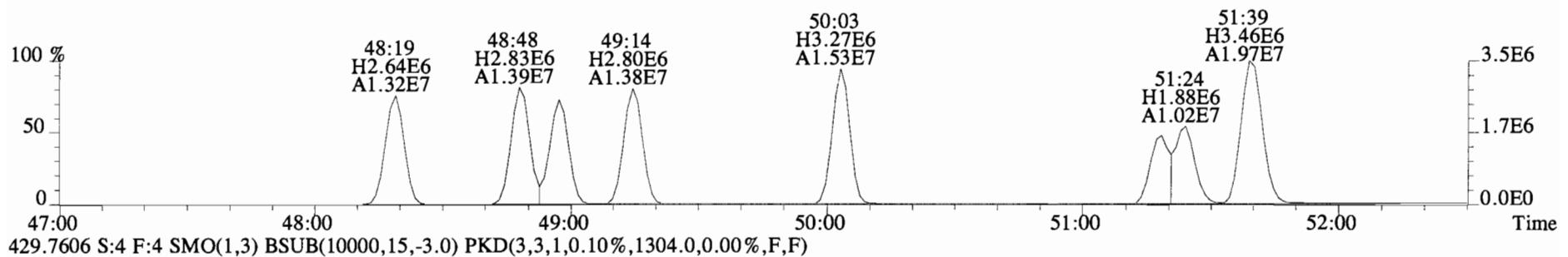
405.8428 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,20644.0,0.00%,F,F)



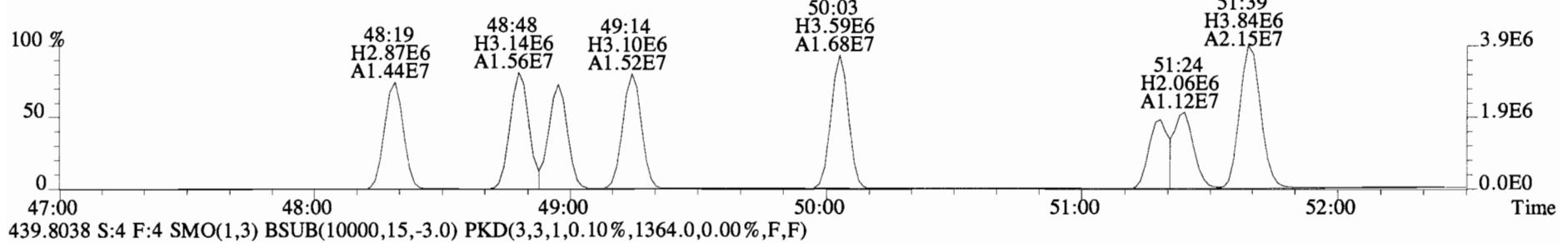
380.9760 S:4 F:4



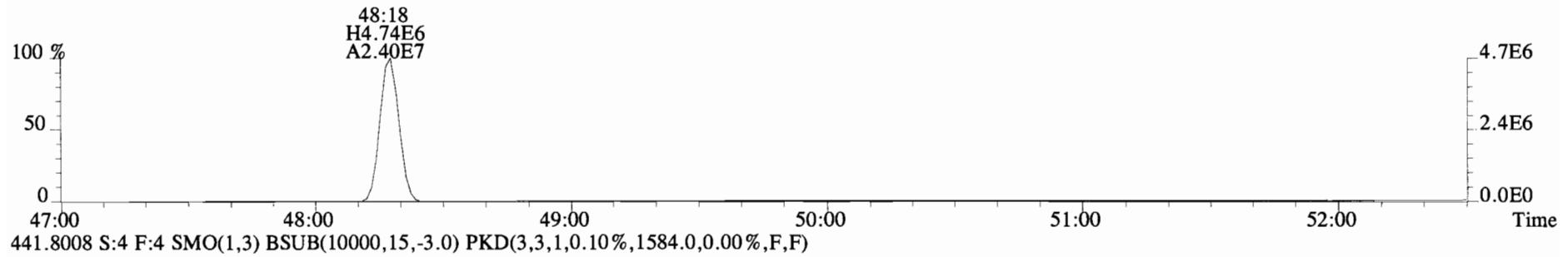
File:141021E2 #1-547 Acq:21-OCT-2014 23:23:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
427.7635 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1276.0,0.00%,F,F)



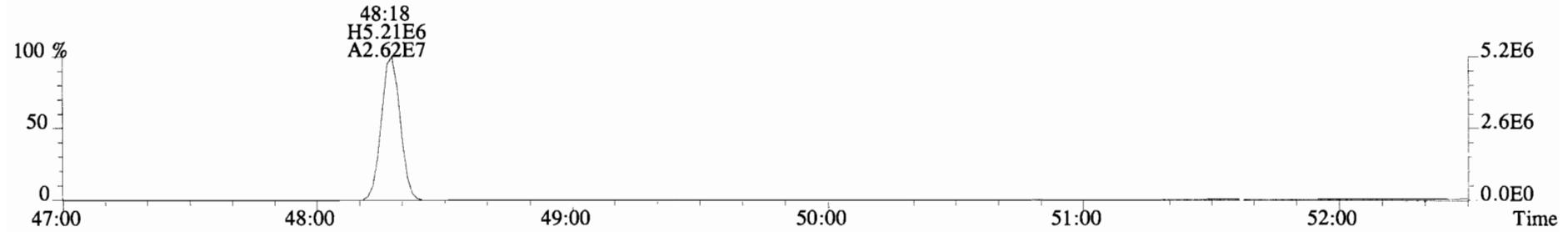
429.7606 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1304.0,0.00%,F,F)



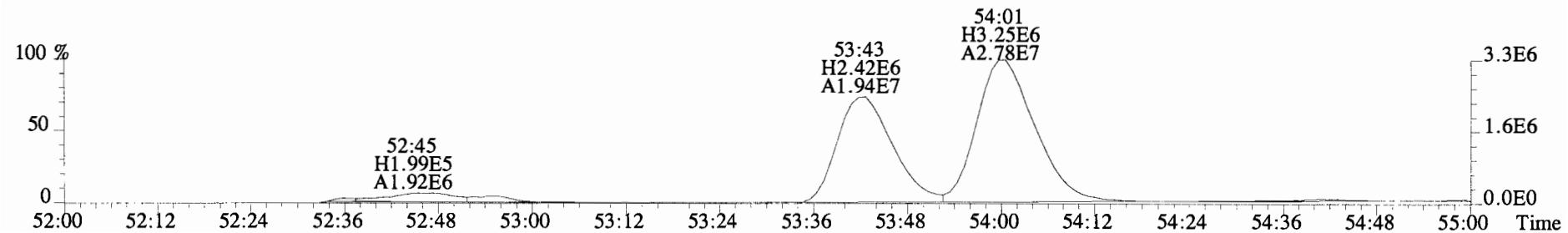
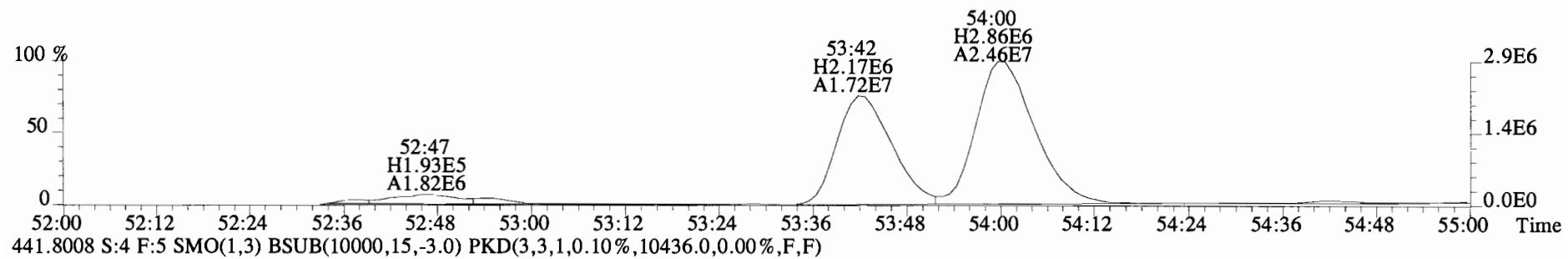
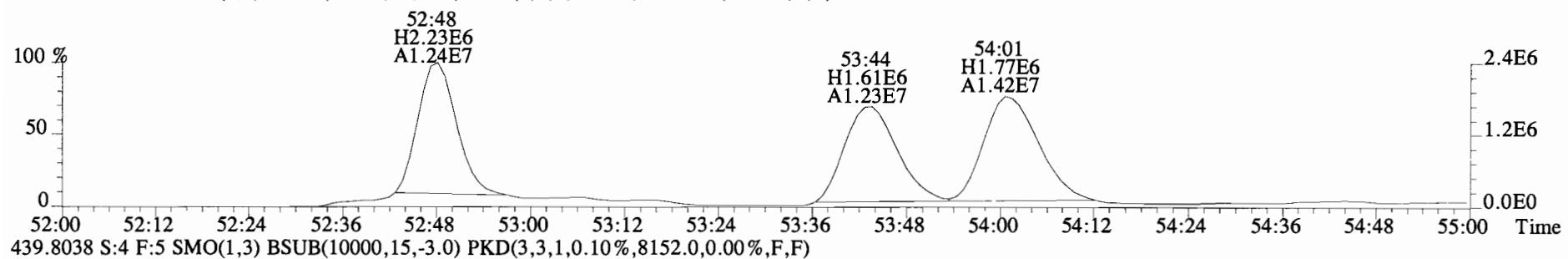
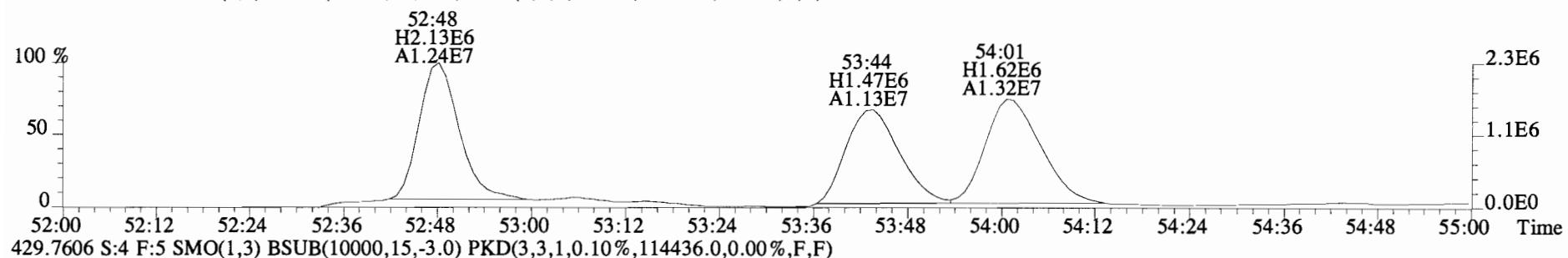
439.8038 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1364.0,0.00%,F,F)



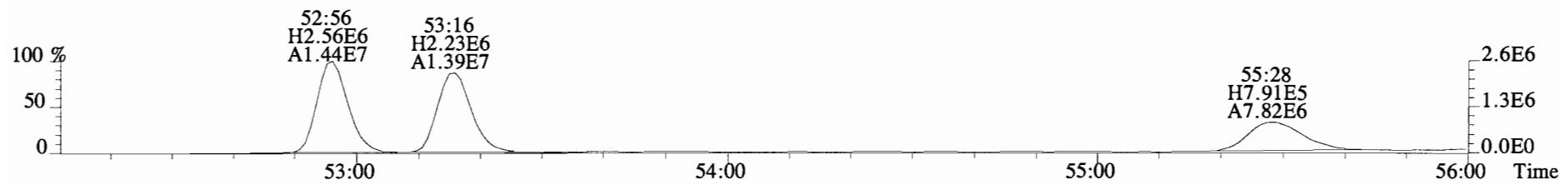
441.8008 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1584.0,0.00%,F,F)



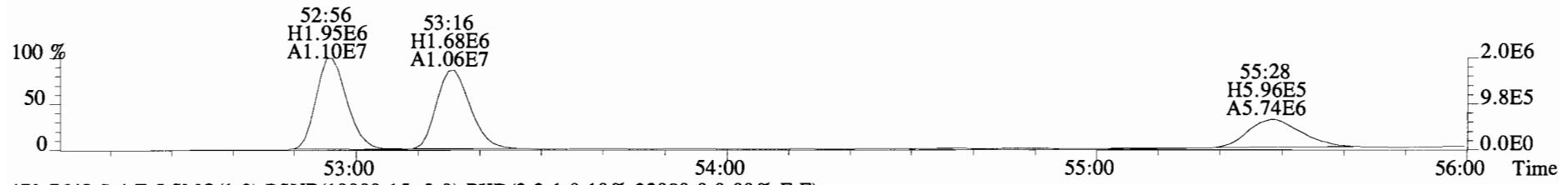
File:141021E2 #1-434 Acq:21-OCT-2014 23:23:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB ZB1
427.7635 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,70840.0,0.00%,F,F)



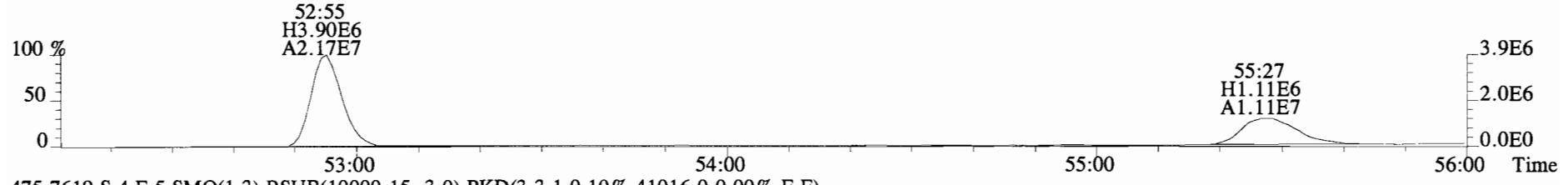
File:141021E2 #1-434 Acq:21-OCT-2014 23:23:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
463.7216 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,29584.0,0.00%,F,F)



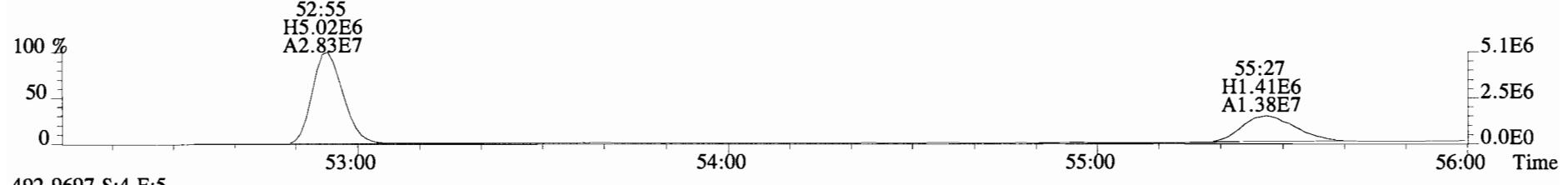
465.7186 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,22272.0,0.00%,F,F)



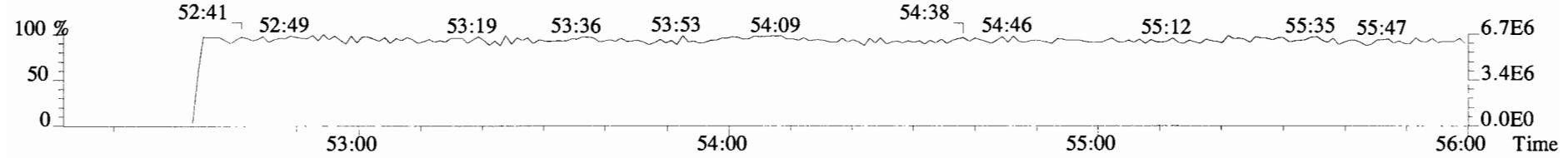
473.7648 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,32080.0,0.00%,F,F)



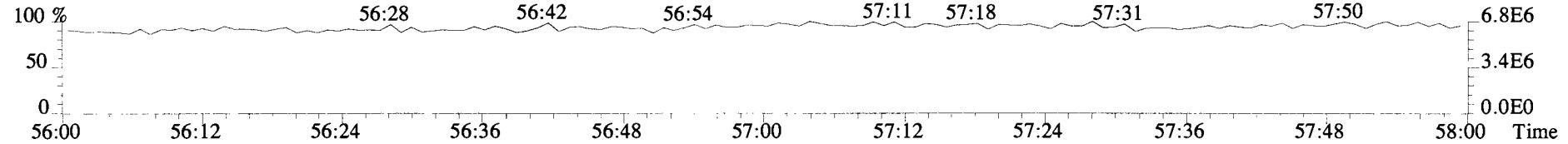
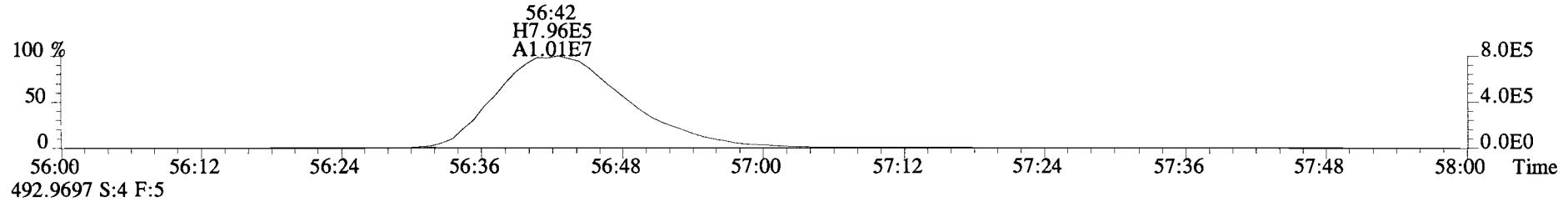
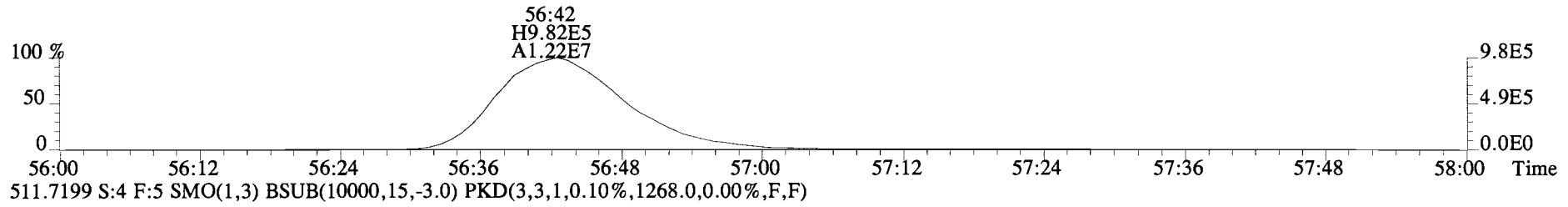
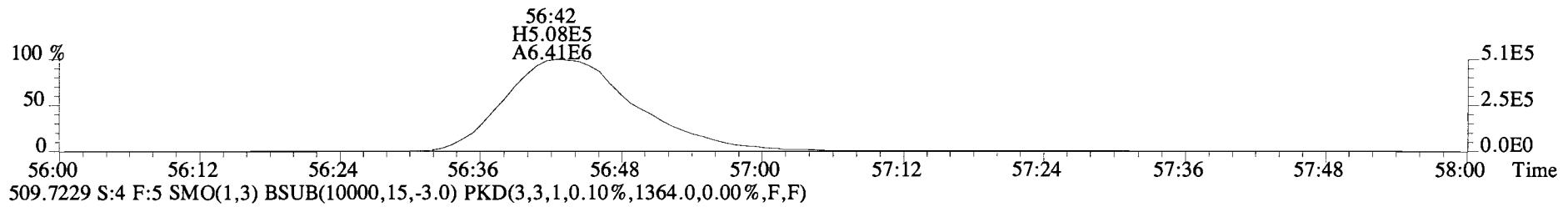
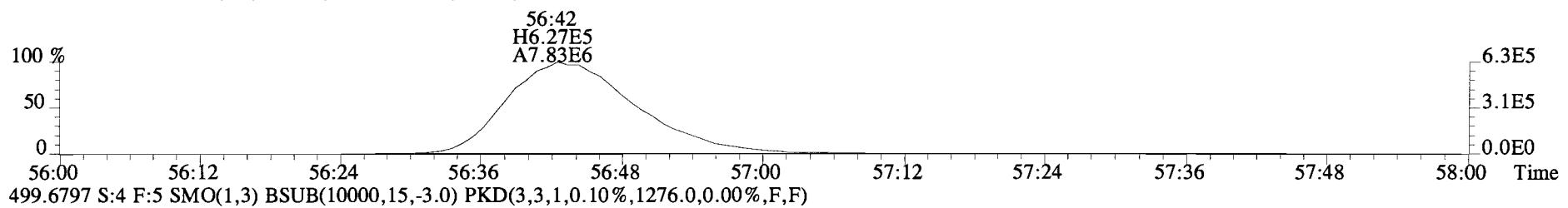
475.7619 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,41016.0,0.00%,F,F)



492.9697 S:4 F:5



File:141021E2 #1-434 Acq:21-OCT-2014 23:23:06 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0110-BS1 OPR 1 Exp:PCB_ZB1
 497.6826 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1124.0,0.00%,F,F)



Client ID: CC-A-01-20141013-W
 Lab ID: 1400762-01

Filename: 141021E2 S:7 Acq:22-OCT-14 02:33:44
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.013

ConCal: ST141021E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	2.32e+05	2.71	y 16:29	1.25	2.64	*	2.5	*	1.000	0.996-1.006		
Mono	PCB-2	8.97e+04	2.78	y 18:46	1.18	1.06	*	2.5	*	0.989	0.983-0.993		
Mono	PCB-3	2.03e+05	3.03	y 19:00	1.22	2.31	*	2.5	*	1.001	0.996-1.006		
Di	PCB-4/10	3.24e+05	1.43	y 20:18	1.55	6.28	*	2.5	*	1.001	0.998-1.008		
Di	PCB-7/9	*	*	n NotF _g	1.27	*	15900	2.5	5.82	*	0.865-0.873		
Di	PCB-6	*	*	n NotF _g	1.26	*	15900	2.5	5.86	*	0.890-0.899		
Di	PCB-5/8	7.22e+05	1.57	y 23:04	1.23	11.2	*	2.5	*	0.912	0.906-0.916		
Di	PCB-14	*	*	n NotF _g	1.23	*	15900	2.5	5.16	*	0.949-0.959		
Di	PCB-11	5.55e+06	1.63	y 25:19	1.16	78.5	*	2.5	*	1.001	0.996-1.006		
Di	PCB-12/13	*	*	n NotF _g	1.10	*	15900	2.5	5.78	*	1.010-1.020		
Di	PCB-15	8.82e+05	1.55	y 26:01	1.21	12.0	*	2.5	*	1.028	1.024-1.034		
Tri	PCB-19	1.50e+05	1.11	y 24:20	1.30	2.87	*	2.5	*	1.001	0.996-1.006		
Tri	PCB-30	*	*	n NotF _g	1.83	*	2520	2.5	0.675	*	1.032-1.042		
Tri	PCB-18	8.69e+05	1.13	y 25:56	0.86	16.4	*	2.5	*	0.955	0.949-0.959		
Tri	PCB-17	3.27e+05	1.11	y 26:06	0.90	5.92	*	2.5	*	0.961	0.955-0.965		
Tri	PCB-24/27	1.47e+05	1.06	y 26:39	1.18	2.03	*	2.5	*	0.981	0.976-0.986		
Tri	PCB-16/32	7.60e+05	1.08	y 27:10	1.03	12.0	*	2.5	*	1.000	0.995-1.005		
Tri	PCB-34	*	*	n NotF _g	1.26	*	2670	2.5	0.892	*	0.956-0.966		
Tri	PCB-23	*	*	n NotF _g	1.31	*	2670	2.5	0.858	*	0.959-0.969		
Tri	PCB-29	*	*	n NotF _g	1.33	*	2670	2.5	0.846	*	0.967-0.977		
Tri	PCB-26	2.91e+05	0.86	n 28:29	1.29	4.12	R	*	2.5	*	0.979	0.974-0.984	
Tri	PCB-25	1.13e+05	1.37	n 28:40	1.34	1.54	R	*	2.5	*	0.985	0.980-0.990	
Tri	PCB-31	1.46e+06	1.02	y 29:00	1.42	18.8	*	2.5	*	0.997	0.992-1.002		
Tri	PCB-28	1.40e+06	1.06	y 29:06	1.38	18.6	*	2.5	*	1.000	0.996-1.006		
Tri	PCB-20/21/33	9.49e+05	1.10	y 29:44	1.31	13.2	*	2.5	*	1.022	1.017-1.027		
Tri	PCB-22	6.27e+05	1.00	y 30:09	1.32	8.66	*	2.5	*	1.036	1.032-1.042		
Tri	PCB-36	*	*	n NotF _g	1.38	*	2670	2.5	0.868	*	0.929-0.939		
Tri	PCB-39	*	*	n NotF _g	1.42	*	2670	2.5	0.842	*	0.943-0.953		
Tri	PCB-38	*	*	n NotF _g	1.35	*	2670	2.5	0.882	*	0.967-0.976		
Tri	PCB-35	2.79e+05	1.19	y 32:32	1.38	3.89	*	2.5	*	0.987	0.982-0.992		
Tri	PCB-37	1.28e+06	1.02	y 32:58	1.39	17.6	*	2.5	*	1.001	0.996-1.006		
Tetra	PCB-54	*	*	n NotF _g	1.20	*	4410	2.5	1.56	*	0.996-1.006	Integrations by:	
Tetra	PCB-50	*	*	n NotF _g	0.97	*	4410	2.5	1.94	*	1.037-1.047		
Tetra	PCB-53	2.55e+05	0.66	y 29:48	1.19	5.02	*	2.5	*	0.947	0.941-0.951	Analyst: <u>DMS</u>	
Tetra	PCB-51	1.08e+05	0.85	y 30:08	1.15	2.18	*	2.5	*	0.957	0.952-0.962		
Tetra	PCB-45	1.61e+05	0.69	y 30:34	0.97	3.90	*	2.5	*	0.971	0.966-0.976		
Tetra	PCB-46	1.10e+05	0.87	y 31:04	0.95	2.71	*	2.5	*	0.987	0.982-0.992	Date: <u>10/28/14</u>	

Reviewed by: m

Date: 10/28/14

Client ID: CC-A-01-20141013-W
 Lab ID: 1400762-01

Filename: 141021E2 S:7 Acq:22-OCT-14 02:33:44
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.013

ConCal: ST141021E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	7.72e+06	0.76	y 31:29	1.28	141	*	2.5	*	1.000	0.996-1.006		
Tetra	PCB-73	*	*	n NotFq	1.37	*	4410	2.5	1.54	*	1.000-1.010		
Tetra	PCB-43/49	1.77e+06	0.77	y 31:47	1.11	37.1	*	2.5	*	1.010	1.005-1.015		
Tetra	PCB-47	5.58e+05	0.67	y 32:00	1.13	11.0	*	2.5	*	1.001	0.996-1.006		
Tetra	PCB-48/75	2.57e+05	0.85	y 32:07	1.30	4.41	*	2.5	*	1.004	0.999-1.009		
Tetra	PCB-65	*	*	n NotFq	1.33	*	4410	2.5	1.53	*	1.007-1.017		
Tetra	PCB-62	*	*	n NotFq	1.29	*	4410	2.5	1.58	*	1.011-1.021		
Tetra	PCB-44	3.26e+06	0.72	y 32:47	0.94	77.6	*	2.5	*	1.025	1.020-1.030		
Tetra	PCB-42/59	5.57e+05	0.78	y 33:01	1.22	10.3	*	2.5	*	1.032	1.028-1.038		
Tetra	PCB-41/64/71/72	2.55e+06	0.75	y 33:36	1.31	43.5	*	2.5	*	1.051	1.046-1.056		
Tetra	PCB-68	*	*	n NotFq	1.49	*	4410	2.5	1.37	*	1.054-1.064		
Tetra	PCB-40	2.73e+05	0.83	y 34:05	0.82	7.46	*	2.5	*	1.066	1.061-1.071		
Tetra	PCB-57	*	*	n NotFq	1.11	*	4410	2.5	1.37	*	0.965-0.975		
Tetra	PCB-67	1.78e+05	0.73	y 34:44	1.07	2.75	*	2.5	*	0.979	0.974-0.984		
Tetra	PCB-58	*	*	n NotFq	1.10	*	4410	2.5	1.38	*	0.977-0.987		
Tetra	PCB-63	1.72e+05	0.81	y 35:00	1.12	2.55	*	2.5	*	0.986	0.982-0.992		
Tetra	PCB-74	2.88e+06	0.77	y 35:17	1.20	39.6	*	2.5	*	0.994	0.990-1.000		
Tetra	PCB-61/70	1.35e+07	0.76	y 35:30	1.08	208	*	2.5	*	1.000	0.994-1.004		
Tetra	PCB-76/66	4.83e+06	0.79	y 35:42	1.14	70.4	*	2.5	*	1.006	1.001-1.011		
Tetra	PCB-80	*	*	n NotFq	1.28	*	4410	2.5	1.15	*	0.996-1.006		
Tetra	PCB-55	2.59e+05	0.71	y 36:13	1.11	3.73	*	2.5	*	1.009	1.005-1.015		
Tetra	PCB-56/60	3.12e+06	0.74	y 36:45	1.09	45.8	*	2.5	*	1.024	1.018-1.028		
Tetra	PCB-79	5.32e+05	0.78	y 37:49	1.12	7.56	*	2.5	*	1.053	1.048-1.058		
Tetra	PCB-78	*	*	n NotFq	1.24	*	4410	2.5	1.38	*	0.982-0.992		
Tetra	PCB-81	1.65e+05	0.72	y 39:01	1.38	2.20	*	2.5	*	1.000	0.995-1.005		
Tetra	PCB-77	4.48e+06	0.76	y 39:38	1.21	64.2	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-104	*	*	n NotFq	1.26	*	3030	2.5	1.87	*	0.996-1.006		
Penta	PCB-96	*	*	n NotFq	1.09	*	3030	2.5	2.16	*	1.034-1.044		
Penta	PCB-103	1.03e+05	1.41	y 34:26	0.93	2.88	*	2.5	*	1.055	1.050-1.060		
Penta	PCB-100	*	*	n NotFq	1.00	*	3030	2.5	2.35	*	1.061-1.071		
Penta	PCB-94	*	*	n NotFq	1.11	*	3030	2.5	2.80	*	0.981-0.991		
Penta	PCB-95/98/102	1.26e+07	1.61	y 35:48	1.21	344	*	2.5	*	1.000	0.994-1.004		
Penta	PCB-93	*	*	n NotFq	1.13	*	3030	2.5	2.74	*	0.998-1.008		
Penta	PCB-88/91	1.86e+06	1.71	y 36:12	1.02	60.2	*	2.5	*	1.012	1.006-1.016		
Penta	PCB-121	*	*	n NotFq	1.90	*	3030	2.5	1.63	*	1.009-1.019		
Penta	PCB-84/92	6.98e+06	1.61	y 37:07	1.05	198	*	2.5	*	0.991	0.986-0.996		
Penta	PCB-89	1.04e+05	1.48	y 37:18	1.02	3.05	*	2.5	*	0.996	0.991-1.001		

Analyst: *DMS*

Date: *10/28/14*

Client ID: CC-A-01-20141013-W
 Lab ID: 1400762-01

Filename: 141021E2 S:7 Acq:22-OCT-14 02:33:44
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.013

ConCal: ST141021E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	2.15e+07	1.55	y 37:29	1.19	541	*	2.5	*	1.000	0.996-1.006		
Penta	PCB-113	1.22e+05	1.73	y 37:42	1.35	2.71	*	2.5	*	1.006	1.002-1.012		
Penta	PCB-99	7.35e+06	1.56	y 37:49	1.29	170	*	2.5	*	1.009	1.005-1.015		
Penta	PCB-119	4.04e+05	1.46	y 38:16	1.72	7.65	*	2.5	*	0.987	0.982-0.992		
Penta	PCB-108/112	9.07e+05	1.78	y 38:27	1.29	23.0	*	2.5	*	0.991	0.986-0.996		
Penta	PCB-83	*	*	n NotFq	1.52	*	3030	2.5	1.96	*	0.991-1.001		
Penta	PCB-97	6.00e+06	1.58	y 38:48	1.25	157	*	2.5	*	1.000	0.996-1.006		
Penta	PCB-86	*	*	n NotFq	1.02	*	3030	2.5	2.92	*	1.000-1.010		
Penta	PCB-87/117/125	1.01e+07	1.58	y 39:05	1.56	212	*	2.5	*	1.008	1.002-1.012		
Penta	PCB-111/115	5.14e+05	1.43	y 39:13	1.75	9.57	*	2.5	*	1.011	1.007-1.017		
Penta	PCB-85/116	3.17e+06	1.51	y 39:21	1.30	79.4	*	2.5	*	1.015	1.010-1.020		
Penta	PCB-120	*	*	n NotFq	1.78	*	3030	2.5	1.68	*	1.016-1.026		
Penta	PCB-110	3.43e+07	1.55	y 39:44	1.68	665	*	2.5	*	1.024	1.020-1.030		
Penta	PCB-82	2.19e+06	1.46	y 40:22	0.74	73.8	*	2.5	*	0.976	0.972-0.982		
Penta	PCB-124	1.68e+06	1.68	y 41:03	1.32	31.5	*	2.5	*	0.993	0.988-0.998		
Penta	PCB-107/109	2.43e+06	1.62	y 41:12	1.22	49.3	*	2.5	*	0.996	0.991-1.001		
Penta	PCB-123	4.86e+05	1.56	y 41:22	1.22	9.91	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-106/118	3.33e+07	1.58	y 41:32	1.22	649	*	2.5	*	1.000	0.996-1.006		
Penta	PCB-114	6.11e+05	1.72	y 42:12	1.36	12.1	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-122	3.46e+05	1.51	y 42:20	1.24	7.50	*	2.5	*	1.003	0.999-1.009		
Penta	PCB-105	1.32e+07	1.60	y 43:04	1.28	272	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-127	*	*	n NotFq	1.14	*	4680	2.5	3.24	*	0.995-1.005		
Penta	PCB-126	7.65e+05	1.78	y 45:20	1.28	17.5	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-155	*	*	n NotFq	1.14	*	1620	2.5	1.04	*	0.966-1.006		
Hexa	PCB-150	4.95e+04	1.18	y 38:18	1.06	1.30	*	2.5	*	1.035	1.030-1.040		
Hexa	PCB-152	*	*	n NotFq	1.10	*	1620	2.5	1.08	*	1.043-1.053		
Hexa	PCB-145	*	*	n NotFq	1.09	*	1620	2.5	1.08	*	1.055-1.065		
Hexa	PCB-136	2.76e+06	1.30	y 39:33	1.08	71.2	*	2.5	*	1.069	1.064-1.074		
Hexa	PCB-148	*	*	n NotFq	0.74	*	1620	2.5	1.60	*	1.066-1.076		
Hexa	PCB-154	2.75e+05	1.08	y 40:07	0.88	8.71	*	2.5	*	1.084	1.079-1.089		
Hexa	PCB-151	3.88e+06	1.26	y 40:47	0.81	134	*	2.5	*	1.102	1.097-1.107		
Hexa	PCB-135	2.54e+06	1.19	y 40:59	0.78	91.3	*	2.5	*	1.108	1.101-1.113		
Hexa	PCB-144	9.05e+05	1.25	y 41:06	0.82	30.9	*	2.5	*	1.111	1.105-1.116		
Hexa	PCB-147	3.76e+05	1.10	y 41:14	0.83	12.7	*	2.5	*	1.114	1.011-1.120		
Hexa	PCB-139/149	1.69e+07	1.26	y 41:29	0.84	561	*	2.5	*	1.121	1.115-1.127		
Hexa	PCB-140	1.59e+05	1.42	y 41:42	0.79	5.68	*	2.5	*	1.127	1.120-1.132		
Hexa	PCB-134/143	1.32e+06	1.18	y 42:09	0.93	39.4	*	2.5	*	0.976	0.970-0.980		

Analyst: Dms

Date: 10/28/14

Client ID: CC-A-01-20141013-W
 Lab ID: 1400762-01

Filename: 141021E2 S:7 Acq:22-OCT-14 02:33:44
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.013

ConCal: ST141021E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL	
Hexa	PCB-133/142	7.55e+05	1.28	y 42:25	0.95	22.2	*	2.5	*	0.982	0.977-0.987			
Hexa	PCB-131	*	*	n NotF ₁₁	0.91	*	4660	2.5	3.90	*	0.981-0.991			
Hexa	PCB-146/165	4.61e+06	1.20	y 42:49	1.16	111	*	2.5	*	0.991	0.986-0.996			
Hexa	PCB-132/161	8.42e+06	1.27	y 43:06	1.11	210	*	2.5	*	0.998	0.992-1.002			
Hexa	PCB-153	3.13e+07	1.25	y 43:14	1.18	737	*	2.5	*	1.001	0.995-1.005			
Hexa	PCB-168	*	*	n NotF ₁₁	1.37	*	4660	2.5	2.60	*	1.000-1.010			
Hexa	PCB-141	6.24e+06	1.20	y 43:59	0.97	181	*	2.5	*	1.000	0.996-1.005			
Hexa	PCB-137	1.50e+06	1.22	y 44:22	1.07	39.7	*	2.5	*	1.009	1.004-1.014			
Hexa	PCB-130	1.82e+06	1.25	y 44:28	0.85	60.6	*	2.5	*	1.011	1.007-1.017			
Hexa	PCB-138/163/164	3.60e+07	1.22	y 44:50	1.23	876	*	2.5	*	1.001	0.996-1.006			
Hexa	PCB-158/160	4.40e+06	1.21	y 45:03	1.29	102	*	2.5	*	1.006	1.001-1.011			
Hexa	PCB-129	1.36e+06	1.27	y 45:20	0.92	43.8	*	2.5	*	1.012	1.007-1.017			
Hexa	PCB-166	1.58e+05	1.30	y 45:49	1.12	3.72	*	2.5	*	0.993	0.988-0.998			
Hexa	PCB-159	*	*	n NotF ₁₁	1.16	*	4660	2.5	3.05	*	0.995-1.005			
Hexa	PCB-128/162	5.43e+06	1.18	y 46:24	1.02	140	*	2.5	*	1.006	1.002-1.012			
Hexa	PCB-167	1.87e+06	1.25	y 46:49	1.06	42.5	*	2.5	*	1.000	0.995-1.005			
Hexa	PCB-156	3.29e+06	1.26	y 48:08	1.18	72.5	*	2.5	*	1.000	0.995-1.005			
Hexa	PCB-157	9.08e+05	1.23	y 48:25	1.08	21.6	*	2.5	*	1.001	0.995-1.005			
Hexa	PCB-169	*	*	n NotF ₁₁	1.11	*	4660	2.5	4.54	*	0.995-1.005			
Hepta	PCB-188	6.59e+04	1.16	y 42:52	1.40	1.47	*	2.5	*	1.001	0.995-1.005			
Hepta	PCB-184	*	*	n NotF ₁₁	1.24	*	1850	2.5	0.792	*	1.006-1.016			
Hepta	PCB-179	3.20e+06	1.08	y 44:06	1.30	76.5	*	2.5	*	1.030	1.024-1.034			
Hepta	PCB-176	8.89e+05	1.19	y 44:33	1.36	20.4	*	2.5	*	1.040	1.035-1.045			
Hepta	PCB-186	*	*	n NotF ₁₁	1.28	*	1850	2.5	0.768	*	1.049-1.059			
Hepta	PCB-178	1.22e+06	1.03	y 45:39	0.94	40.7	*	2.5	*	1.066	1.061-1.071			
Hepta	PCB-175	2.76e+05	1.03	y 46:01	0.97	8.89	*	2.5	*	1.074	1.069-1.079			
Hepta	PCB-182/187	8.28e+06	1.07	y 46:11	1.01	255	*	2.5	*	1.078	1.073-1.083			
Hepta	PCB-183	3.31e+06	1.09	y 46:31	1.08	95.5	*	2.5	*	1.086	1.080-1.090			
Hepta	PCB-185	6.80e+05	1.15	y 47:11	1.34	24.6	*	2.5	*	0.956	0.951-0.961			
Hepta	PCB-174	5.66e+06	1.06	y 47:33	1.34	205	*	2.5	*	0.963	0.958-0.968			
Hepta	PCB-181	*	*	n NotF ₁₁	1.36	*	1850	2.5	1.26	*	0.961-0.971			
Hepta	PCB-177	3.21e+06	0.98	y 47:50	1.24	125	*	2.5	*	0.969	0.964-0.974			
Hepta	PCB-171	1.45e+06	1.02	y 48:07	1.31	53.4	*	2.5	*	0.975	0.970-0.980			
Hepta	PCB-173	8.64e+04	0.84	n 48:34	1.16	3.61	R	*	2.5	*	0.984	0.979-0.989		
Hepta	PCB-172	1.04e+06	1.00	y 49:01	1.22	41.4	*	2.5	*	0.993	0.988-0.998			
Hepta	PCB-192	*	*	n NotF ₁₁	1.53	*	1850	2.5	1.12	*	0.991-1.001			
Hepta	PCB-180	1.25e+07	1.04	y 49:24	1.43	424	*	2.5	*	1.001	0.995-1.005			

Analyst: *Dms*

Date: *10/28/14*

Client ID: CC-A-01-20141013-W
Lab ID: 1400762-01

Filename: 141021E2 S:7 Acq:22-OCT-14 02:33:44
GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.013

ConCal: ST141021E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	7.88e+05	1.04	y 49:34	1.65	23.1	*	2.5	*	1.004	0.999-1.009		
Hepta	PCB-191	2.97e+05	1.06	y 49:48	1.67	8.62	*	2.5	*	1.009	1.004-1.014		
Hepta	PCB-170	4.06e+06	1.07	y 50:46	1.50	178	*	2.5	*	1.000	0.995-1.005		
Hepta	PCB-190	1.12e+06	1.03	y 50:55	2.02	36.7	*	2.5	*	1.003	0.998-1.008		
Hepta	PCB-189	1.86e+05	1.12	y 52:11	1.54	6.86	*	2.5	*	1.000	0.995-1.005		
Octa	PCB-202	5.76e+05	0.85	y 48:20	1.04	19.3	*	2.5	*	1.000	0.995-1.005		
Octa	PCB-201	3.90e+05	0.88	y 48:49	1.10	12.4	*	2.5	*	1.010	1.006-1.016		
Octa	PCB-204	*	*	n Not F ₁₁	0.99	*	1580	2.5	1.33	*	1.009-1.019		
Octa	PCB-197	9.63e+04	0.78	y 49:16	1.07	3.14	*	2.5	*	1.020	1.015-1.025		
Octa	PCB-200	2.82e+05	0.98	y 50:04	1.02	9.68	*	2.5	*	1.036	1.032-1.044		
Octa	PCB-198	4.90e+04	0.89	y 51:17	0.74	2.30	*	2.5	*	1.061	1.058-1.068		
Octa	PCB-199	1.65e+06	0.98	y 51:24	0.73	79.3	*	2.5	*	1.064	1.060-1.070		
Octa	PCB-196/203	1.67e+06	0.91	y 51:40	0.77	75.6	*	2.5	*	1.069	1.066-1.076		
Octa	PCB-195	4.31e+05	0.88	y 52:49	1.20	29.4	*	2.5	*	0.983	0.979-0.989		
Octa	PCB-194	1.14e+06	0.99	y 53:44	1.25	74.8	*	2.5	*	1.000	0.995-1.005		
Octa	PCB-205	*	*	n Not F ₁₁	1.41	*	2480	2.5	5.54	*	1.001-1.011		
Nonna	PCB-208	1.29e+05	1.23	y 52:57	0.96	7.64	*	2.5	*	1.000	0.995-1.005		
Nonna	PCB-207	6.57e+04	1.40	y 53:17	0.92	4.07	*	2.5	*	1.007	1.001-1.011		
Nonna	PCB-206	2.43e+05	1.35	y 55:30	1.03	29.5	*	2.5	*	1.000	0.995-1.005		
Deca	PCB-209	*	*	n Not F ₁₁	1.18	*	835	2.5	7.34	*	0.995-1.005		

Analyst: DMS

Date: 10/28/14

Client ID: CC-A-01-20141013-W
Lab ID: 1400762-01

Filename: 141021E2 S:7 Acq:22-OCT-14 02:33:44 ConCal: ST141021E2-1
GC Column ID: ZB-1 ICal: PCVG8-6-20-14 wt/vol: 1.0131 EndCAL: NA

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Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	5.25e+05	2.71 y	16:29	1.22	6.01190
Total Di-PCB	7.48e+06	1.43 y	20:18	1.21	107.921
Total Tri-PCB	2.25e+06	1.11 y	24:20	1.16	39.2695
Total Tri-PCB	6.00e+06	1.02 y	29:00	1.35	80.7606 Sum:120.030
Total Tetra-PCB	4.77e+07	0.66 y	29:48	1.17	792.504
Total Penta-PCB	1.46e+08	1.41 y	34:26	1.21	3288.39
Total Penta-PCB	1.49e+07	1.72 y	42:12	1.26	308.767 Sum:3597.16
Total Hexa-PCB	2.79e+07	1.18 y	38:18	0.92	916.545
Total Hexa-PCB	1.09e+08	1.18 y	42:09	1.08	2701.94 Sum:3618.49
Total Hepta-PCB	4.82e+07	1.16 y	42:52	1.27	1625.98
Total Octa-PCB	4.72e+06	0.85 y	48:20	0.92	201.679
Total Octa-PCB	1.57e+06	0.88 y	52:49	1.29	104.137 Sum:305.816
Total Nona-PCB	4.38e+05	1.23 y	52:57	0.96	41.1757
Total Deca-PCB	*	* n	Not Fnd	1.18	*

Total PCB Conc:10224.3554440

Integrations
by
Analyst: DMS
Date: 10/28/14

Client ID: CC-A-01-20141013-W
 Lab ID: 1400762-01

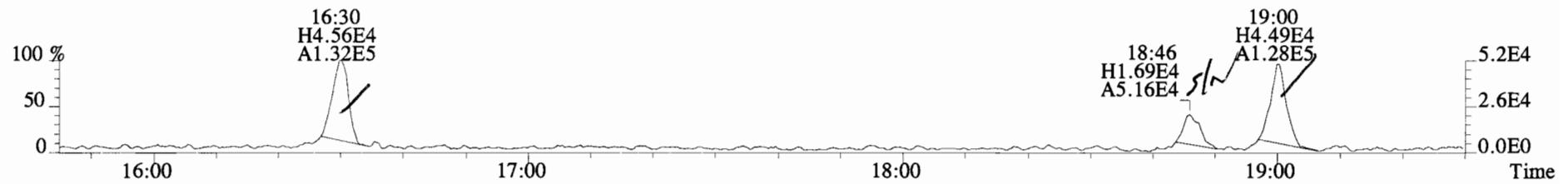
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 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:1.0131
 ConCal: ST141021E2-1 EndCAL: NA

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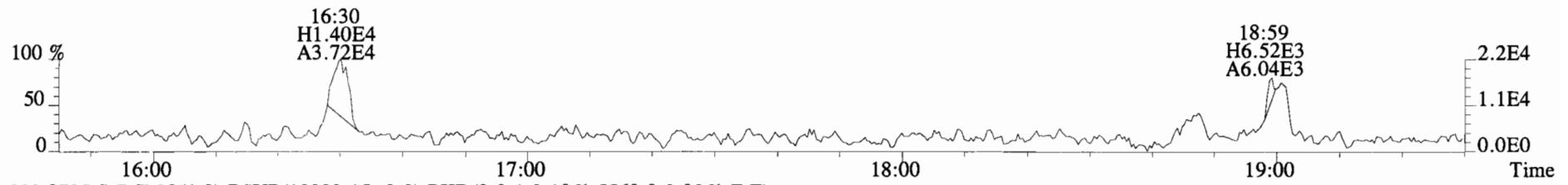
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13C-PCB-1	1.38e+08	3.16	y	0.89	16:29	0.634	0.622-0.628	1970	99.9			13C-PCB-79	1.36e+08	0.80	y	1.01	37:47	1.029	1.023-1.033	1790	90.6
13C-PCB-3	1.42e+08	3.22	y	0.93	18:59	0.730	0.721-0.729	1940	98.4			13C-PCB-178	4.28e+07	0.46	y	0.63	45:39	0.984	0.979-0.989	1930	97.7
13C-PCB-4	6.57e+07	1.59	y	0.55	20:17	0.780	0.772-0.780	1520	77.1												
13C-PCB-9	1.04e+08	1.57	y	0.83	22:00	0.846	0.840-0.848	1590	80.6												
13C-PCB-11	1.20e+08	1.56	y	0.94	25:18	0.973	0.968-0.978	1630	82.6												
13C-PCB-19	8.00e+07	1.08	y	0.53	24:19	0.935	0.929-0.939	1910	96.6			13C-PCB-79	1.36e+08	0.80	y	1.20	37:47	0.968	0.963-0.973	2090	106
13C-PCB-28	1.08e+08	1.04	y	0.89	29:06	1.004	0.999-1.009	1720	87.3			13C-PCB-178	4.28e+07	0.46	y	0.94	45:39	0.925	0.920-0.930	2220	112
13C-PCB-32	1.21e+08	1.07	y	0.81	27:10	1.045	1.041-1.051	1890	95.9												
13C-PCB-37	1.03e+08	1.03	y	0.83	32:57	1.137	1.131-1.143	1750	88.8												
13C-PCB-47	8.82e+07	0.79	y	0.74	31:59	0.871	0.867-0.875	1570	79.4												
13C-PCB-52	8.46e+07	0.79	y	0.71	31:29	0.857	0.853-0.861	1580	80.0												
13C-PCB-54	9.60e+07	0.79	y	0.85	28:01	0.763	0.758-0.766	1490	75.7												
13C-PCB-70	1.19e+08	0.79	y	0.94	35:29	0.966	0.961-0.971	1670	84.5												
13C-PCB-77	1.14e+08	0.79	y	0.89	39:37	1.078	1.073-1.083	1690	85.4												
13C-PCB-80	1.24e+08	0.79	y	0.96	35:54	0.977	0.972-0.982	1700	86.1												
13C-PCB-81	1.07e+08	0.78	y	0.84	39:01	1.062	1.057-1.067	1690	85.7												
13C-PCB-95	5.97e+07	1.66	y	0.74	35:47	0.913	0.908-0.918	1570	79.7												
13C-PCB-97	6.06e+07	1.64	y	0.69	38:47	0.989	0.984-0.994	1720	87.2												
13C-PCB-101	6.61e+07	1.63	y	0.79	37:28	0.956	0.951-0.961	1650	83.5			13C-PCB-15	1.56e+08	1.56	y	1.00	26:00			1970	
13C-PCB-104	7.55e+07	1.64	y	1.00	32:38	0.832	0.829-0.837	1490	75.3			13C-PCB-31	1.40e+08	1.05	y	1.00	28:59			1970	
13C-PCB-105	7.47e+07	1.59	y	1.24	43:04	0.928	0.924-0.934	1720	86.9			13C-PCB-60	1.49e+08	0.77	y	1.00	36:44			1970	
13C-PCB-114	7.35e+07	1.59	y	1.21	42:12	0.910	0.905-0.915	1730	87.7			13C-PCB-111	1.01e+08	1.60	y	1.00	39:12			1970	
13C-PCB-118	8.27e+07	1.63	y	0.98	41:32	1.060	1.054-1.064	1650	83.4			13C-PCB-128	6.95e+07	1.28	y	1.00	46:23			1970	
13C-PCB-123	7.95e+07	1.61	y	0.95	41:21	1.055	1.049-1.059	1640	83.1			13C-PCB-205	3.30e+07	0.88	y	1.00	54:02			1970	
13C-PCB-126	6.74e+07	1.57	y	1.16	45:20	0.977	0.972-0.982	1650	83.5												
13C-PCB-127	8.02e+07	1.56	y	1.34	43:24	0.936	0.931-0.941	1700	86.1												
13C-PCB-138	6.62e+07	1.27	y	1.04	44:48	0.966	0.961-0.971	1800	91.3												
13C-PCB-141	6.97e+07	1.25	y	1.07	43:58	0.948	0.943-0.953	1850	93.7												
13C-PCB-153	7.11e+07	1.28	y	1.11	43:12	0.931	0.927-0.937	1820	92.0												
13C-PCB-155	7.06e+07	1.28	y	0.83	37:00	0.944	0.939-0.949	1660	84.3												
13C-PCB-156	7.57e+07	1.24	y	1.24	48:07	1.037	1.032-1.042	1730	87.6												
13C-PCB-157	7.67e+07	1.29	y	1.31	48:23	1.043	1.037-1.047	1660	84.1												
13C-PCB-159	7.53e+07	1.26	y	1.20	46:07	0.994	0.989-0.999	1780	90.4												
13C-PCB-167	8.18e+07	1.26	y	1.32	46:48	1.009	1.004-1.014	1760	89.1												
13C-PCB-169	6.34e+07	1.27	y	1.22	50:26	1.087	1.082-1.092	1480	75.2												
13C-PCB-170	3.00e+07	0.46	y	0.54	50:45	1.094	1.089-1.101	1590	80.5												
13C-PCB-180	4.07e+07	0.46	y	0.67	49:22	1.064	1.059-1.069	1720	86.9												
13C-PCB-188	6.32e+07	0.44	y	0.94	42:50	0.923	0.919-0.929	1920	97.3												
13C-PCB-189	3.48e+07	0.44	y	0.72	52:12	1.125	1.120-1.132	1380	70.0												
13C-PCB-194	2.41e+07	0.89	y	0.81	53:44	0.994	0.990-1.000	1780	90.4												
13C-PCB-202	5.65e+07	0.90	y	0.83	48:19	1.042	1.036-1.046	1930	97.7												
13C-PCB-206	1.58e+07	0.78	y	0.66	55:30	1.027	1.021-1.031	1440	72.9												
13C-PCB-208	3.47e+07	0.77	y	1.12	52:56	0.980	0.976-0.986	1850	93.8												
13C-PCB-209	1.37e+07	1.17	y	0.61	56:47	1.051	1.044-1.054	1340	67.8												

Analyst: DMS
 Date: 10/27/14

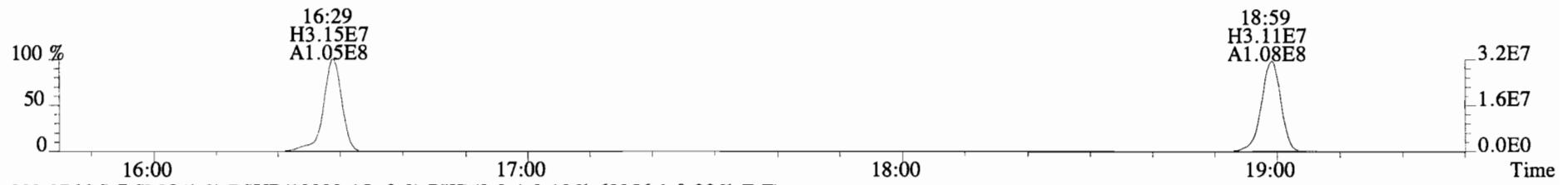
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188.0393 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3348.0,0.00%,F,F)



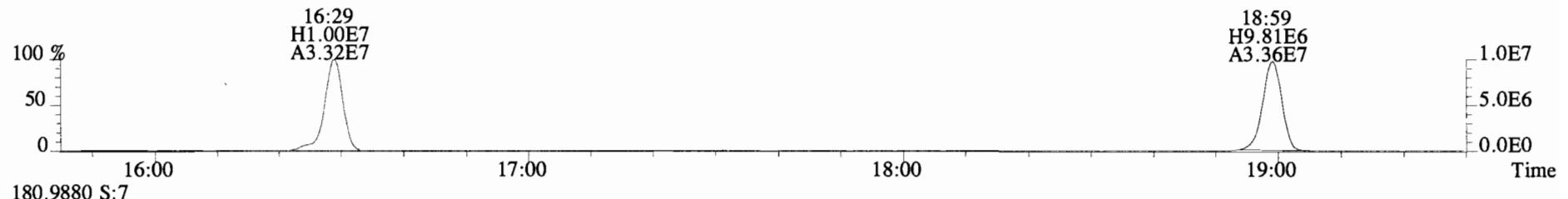
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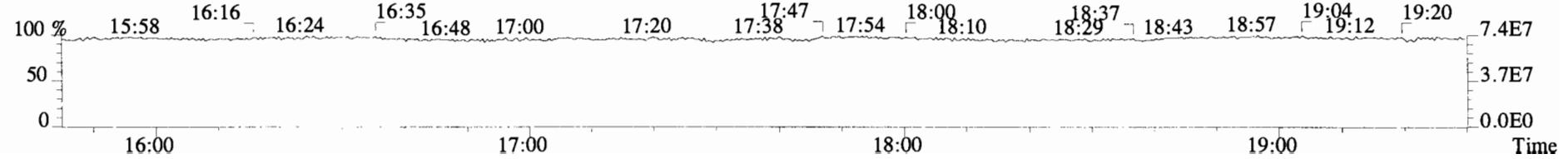
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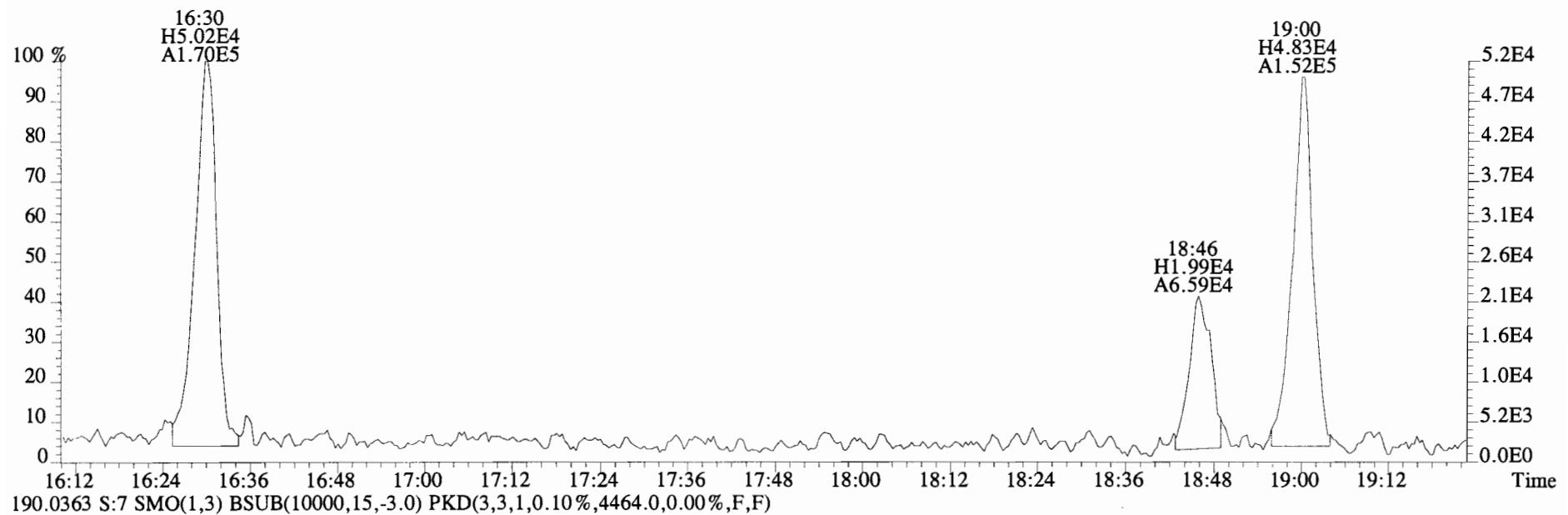
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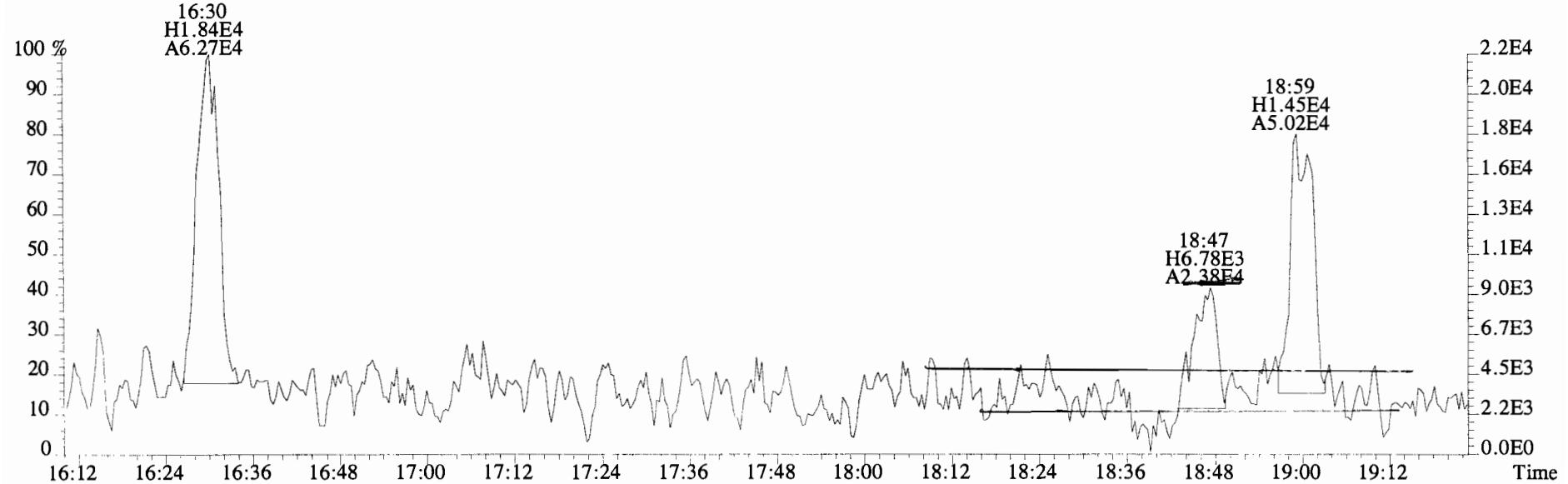
180.9880 S:7



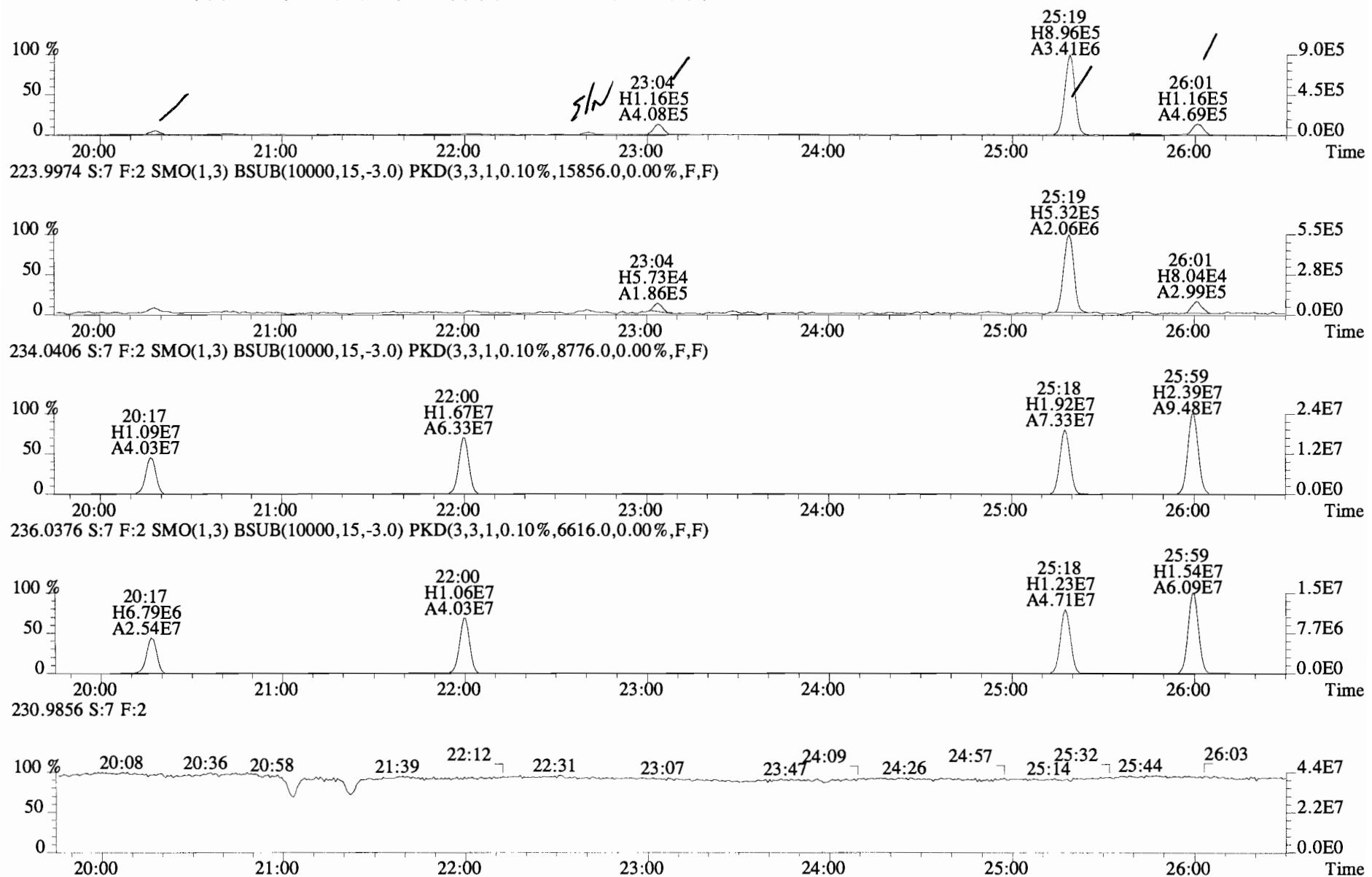
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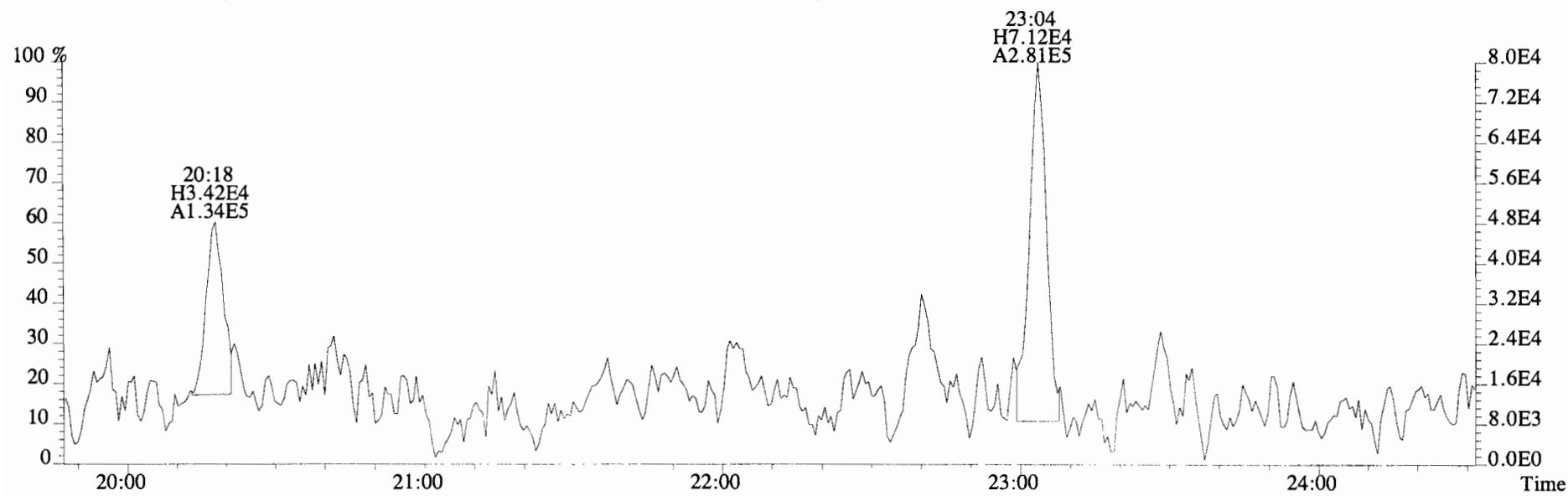
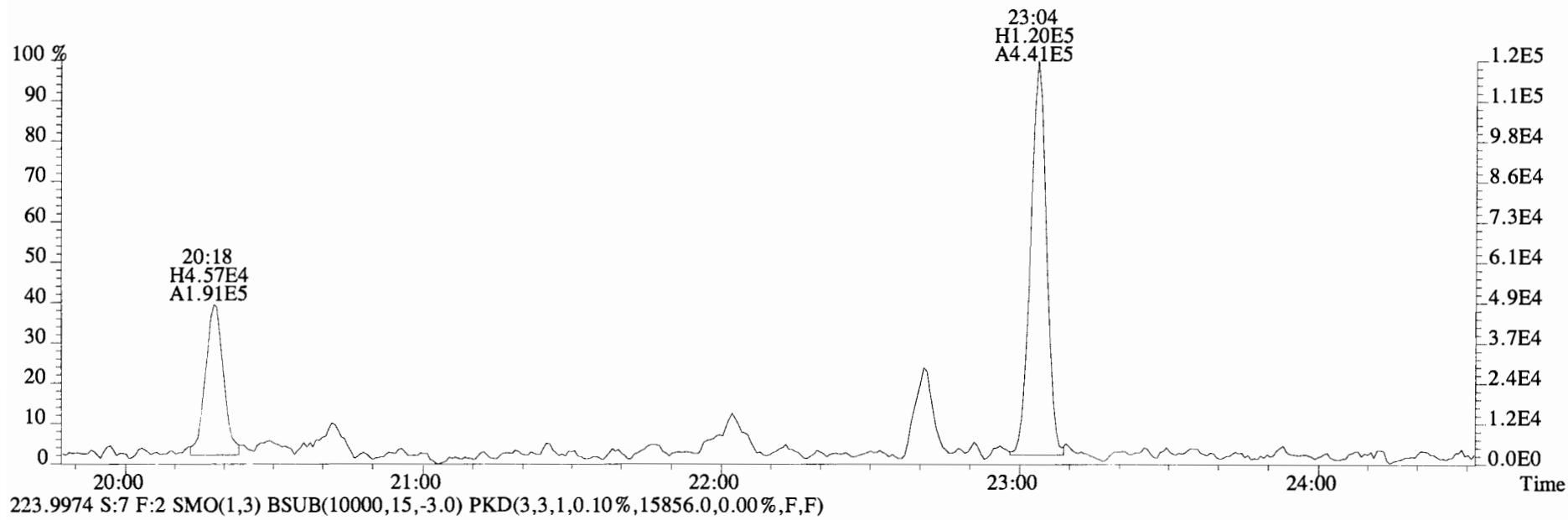
190.0363 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4464.0,0.00%,F,F)



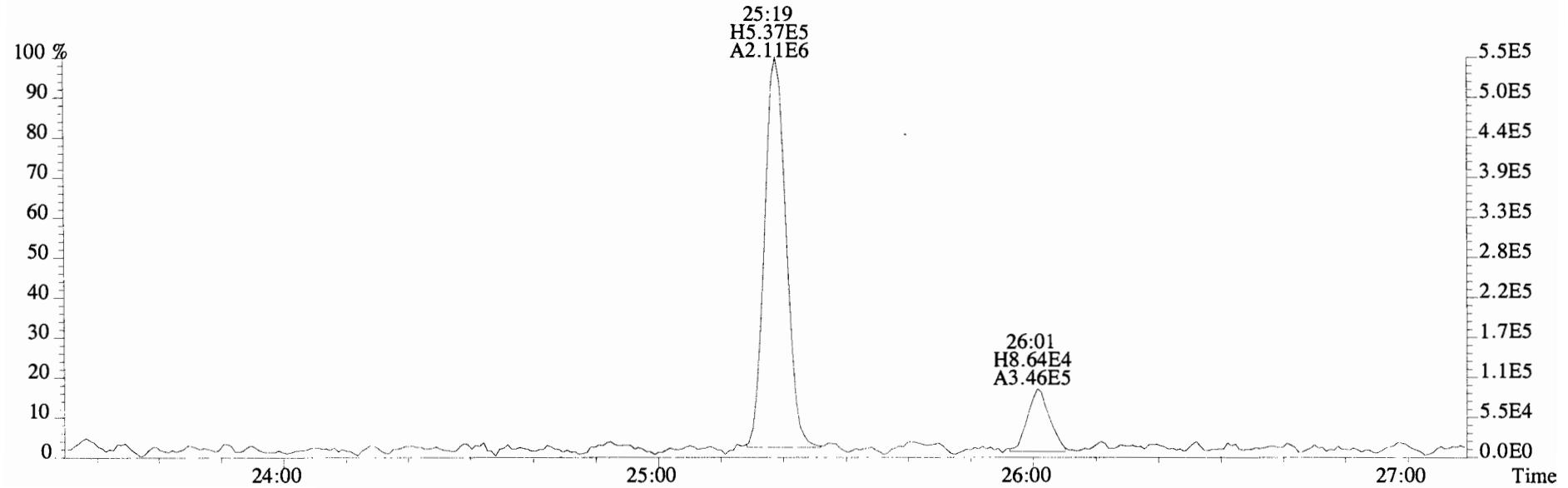
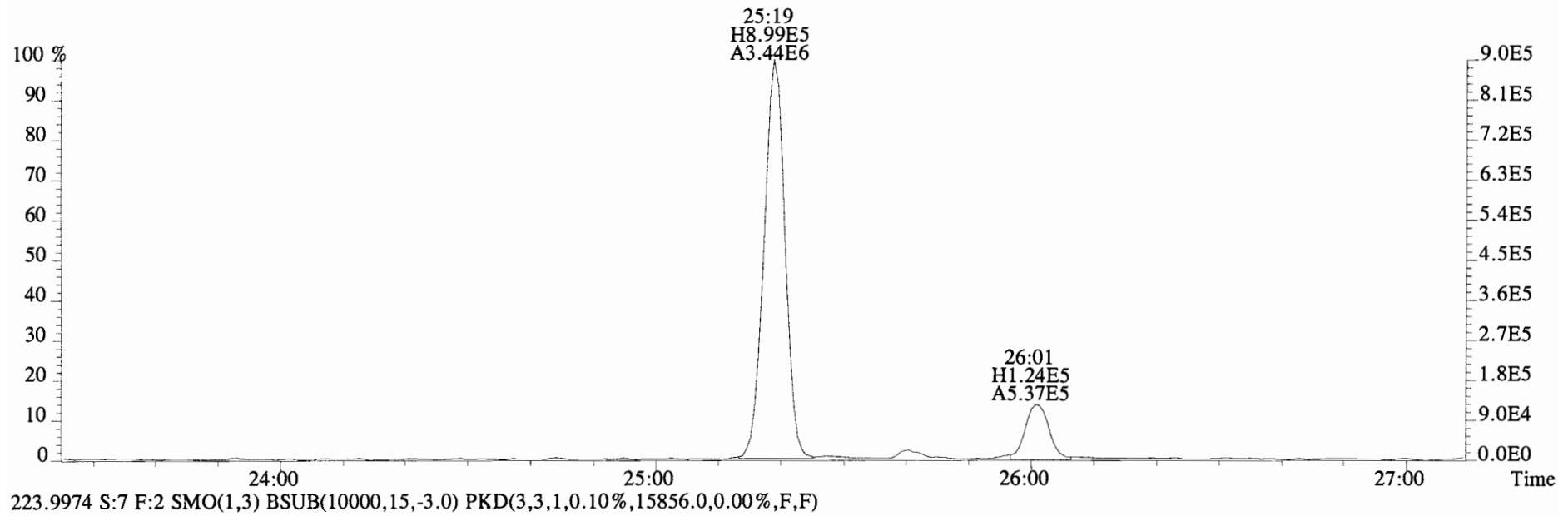
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 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
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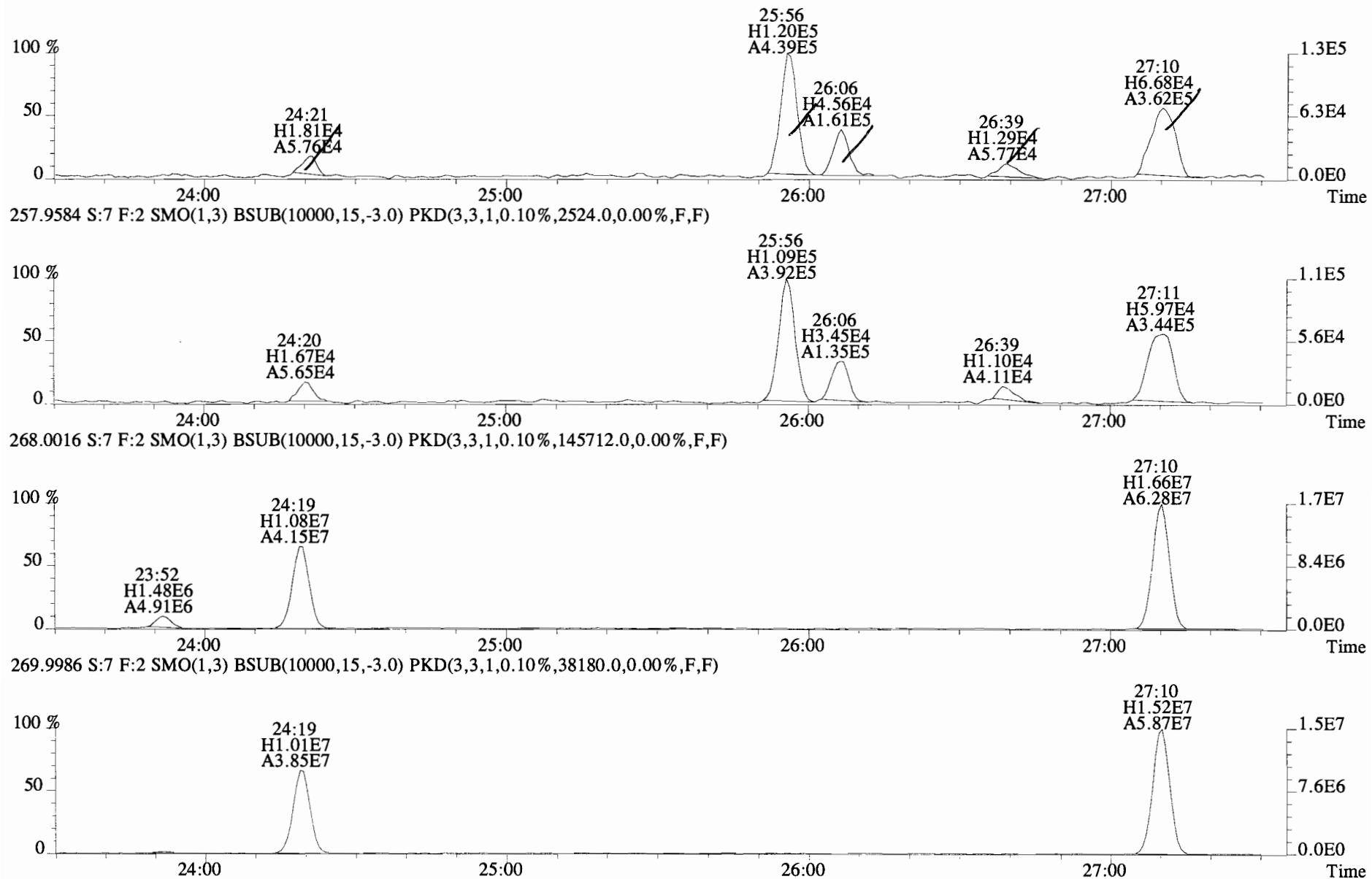
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222.0003 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4032.0,0.00%,F,F)



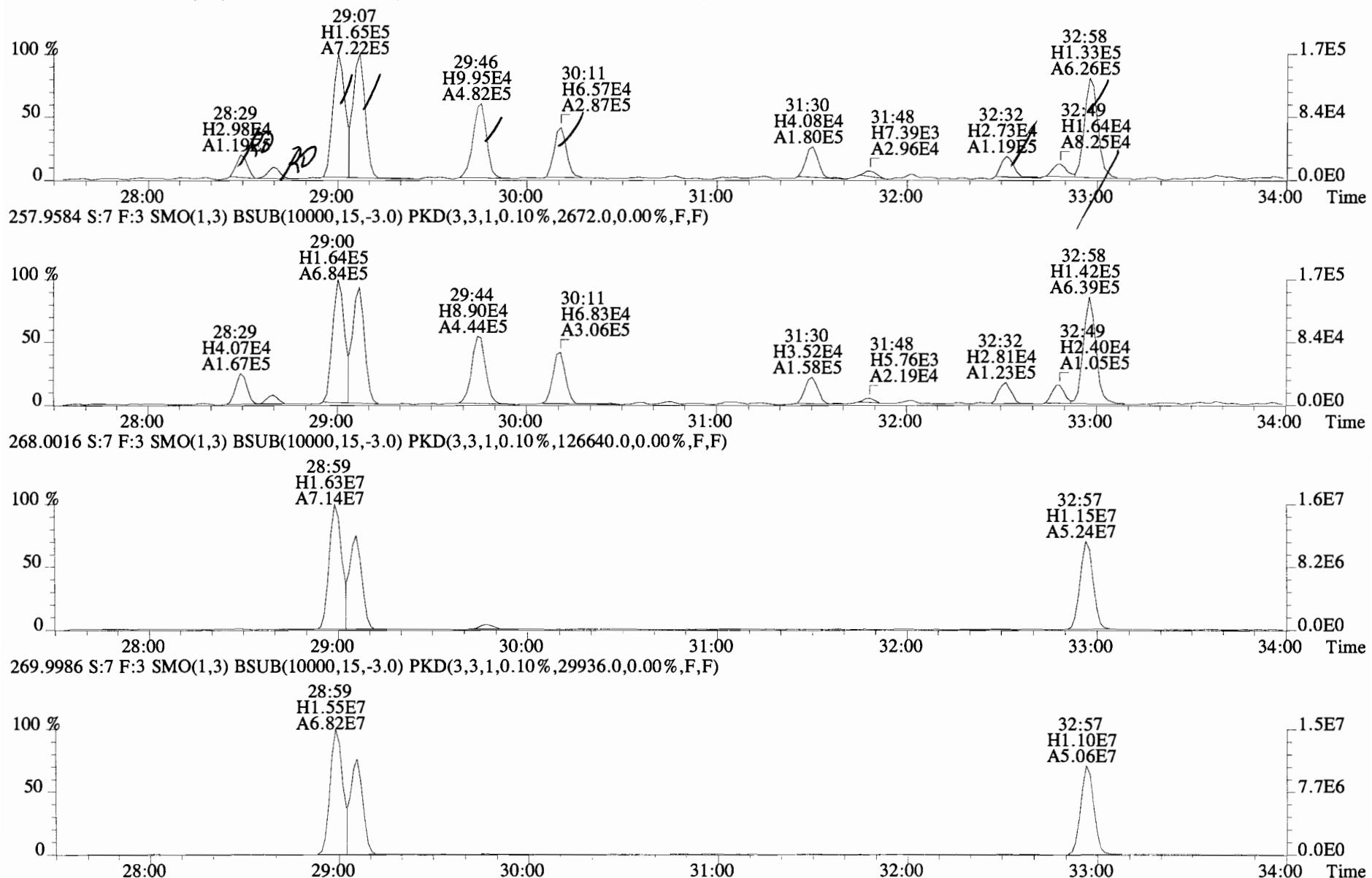
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
222.0003 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4032.0,0.00%,F,F)



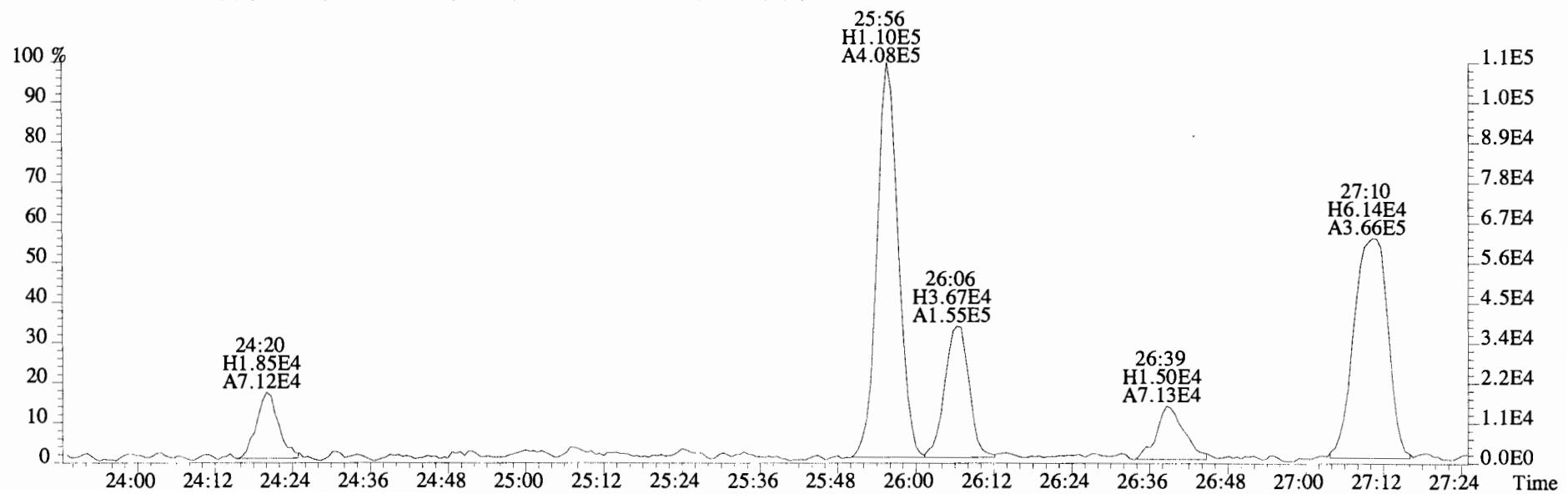
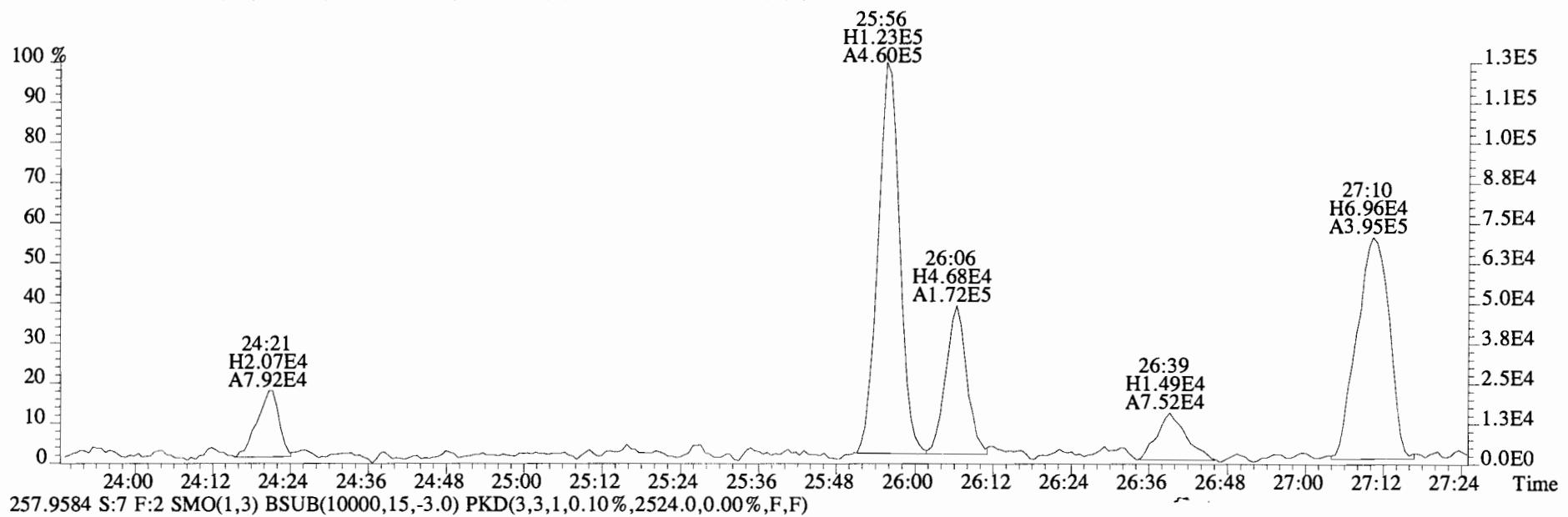
File:141021E2 #1-758 Acq:22-OCT-2014 02:33:44 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
 255.9613 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3892.0,0.00%,F,F)



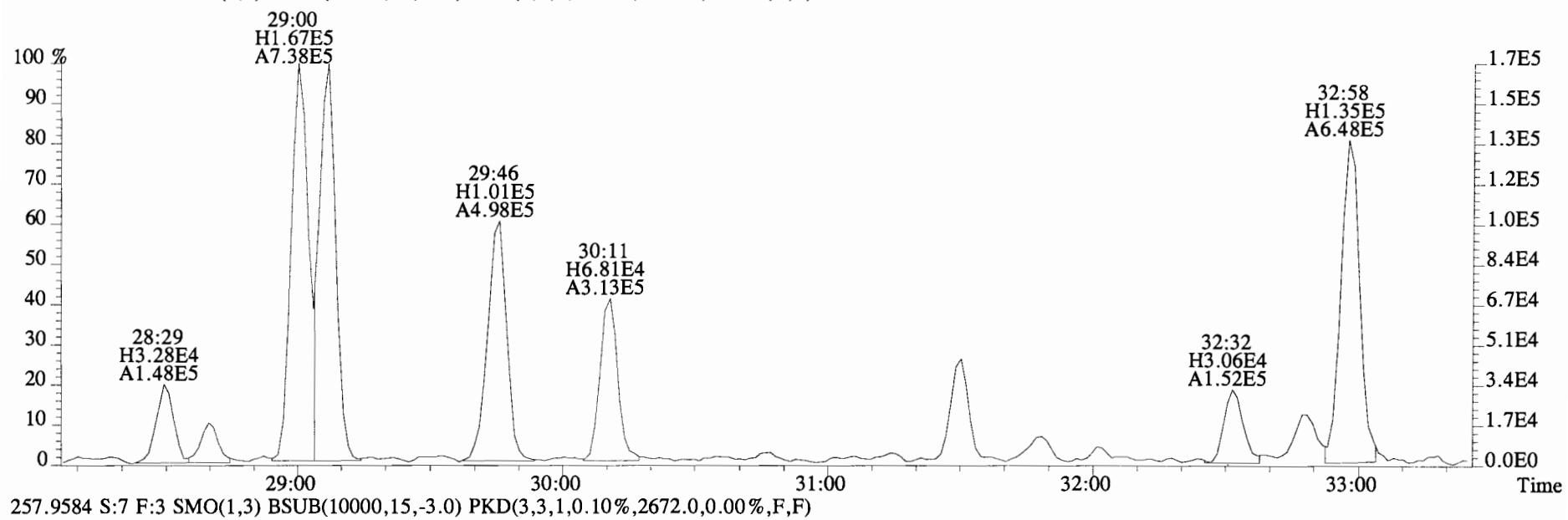
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 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
 255.9613 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3700.0,0.00%,F,F)



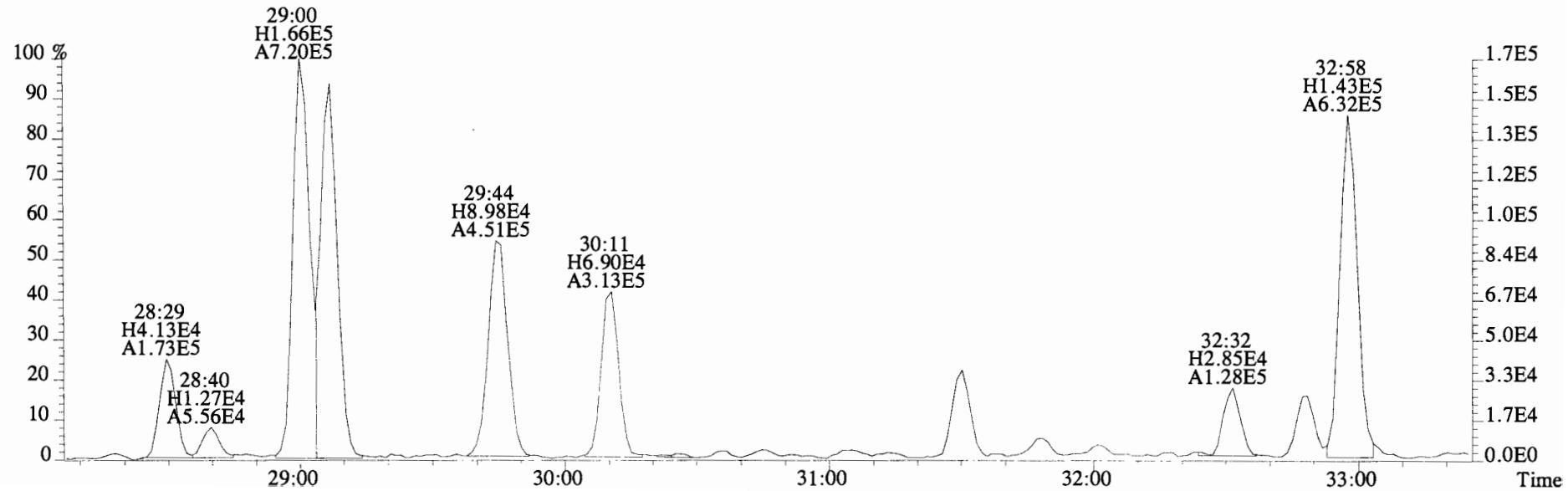
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
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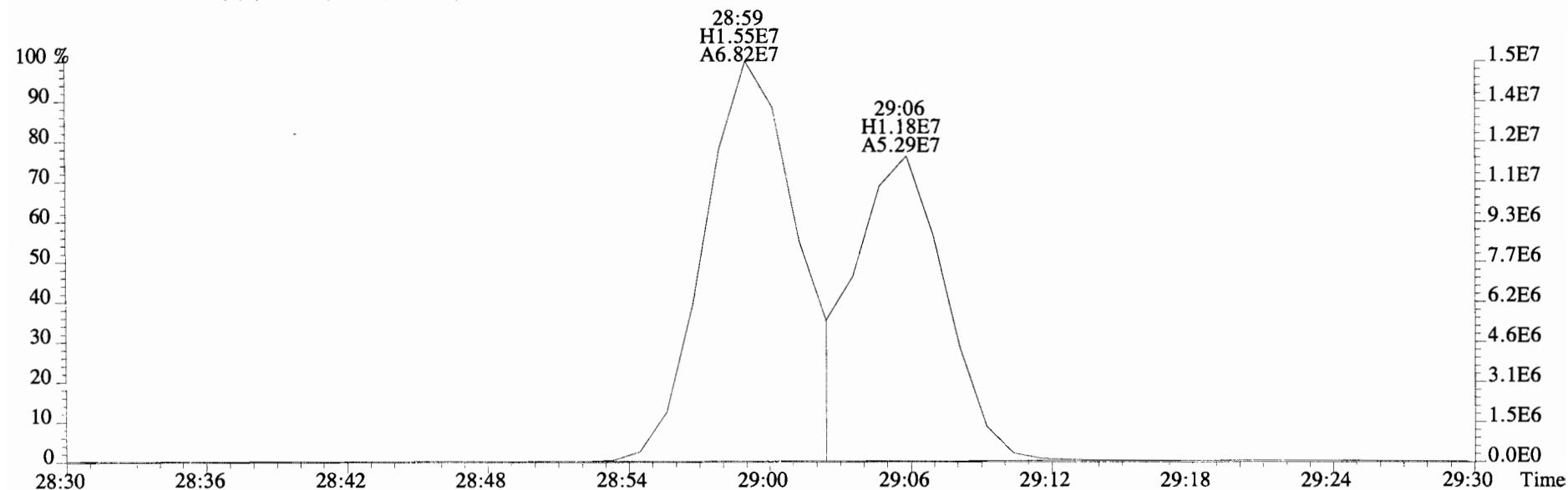
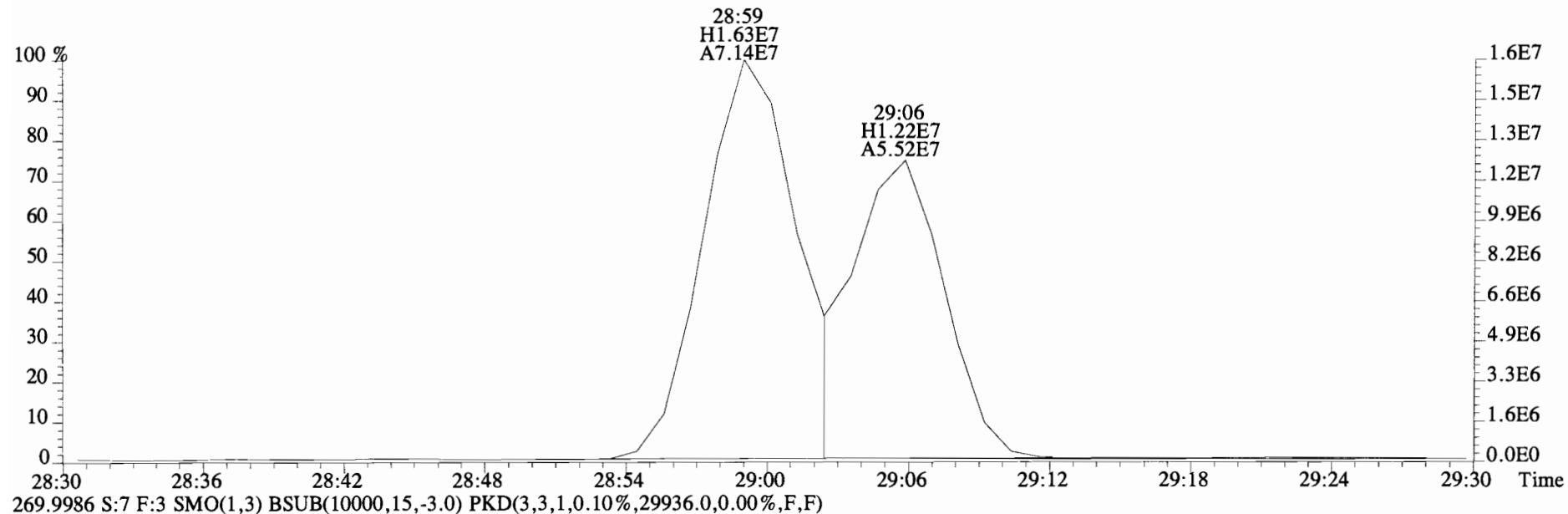
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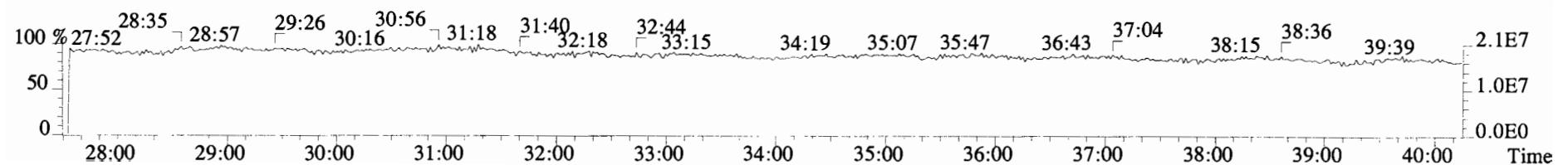
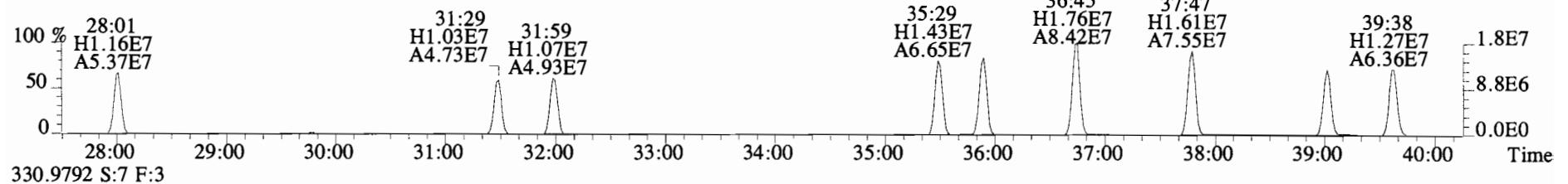
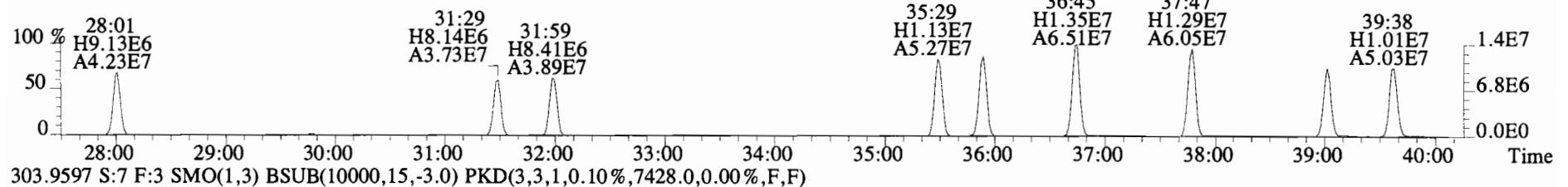
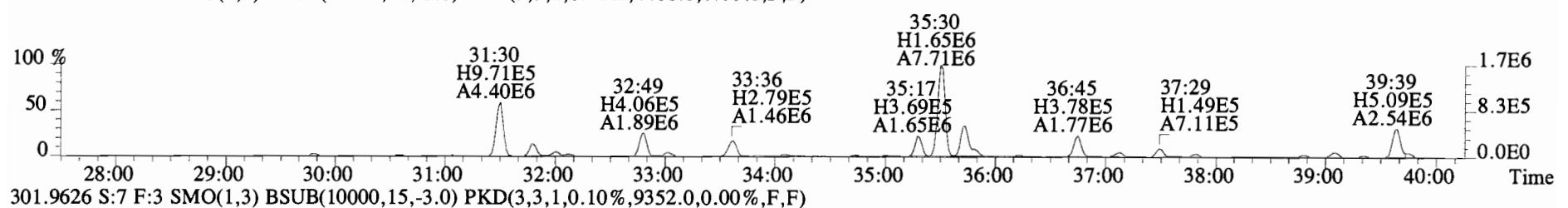
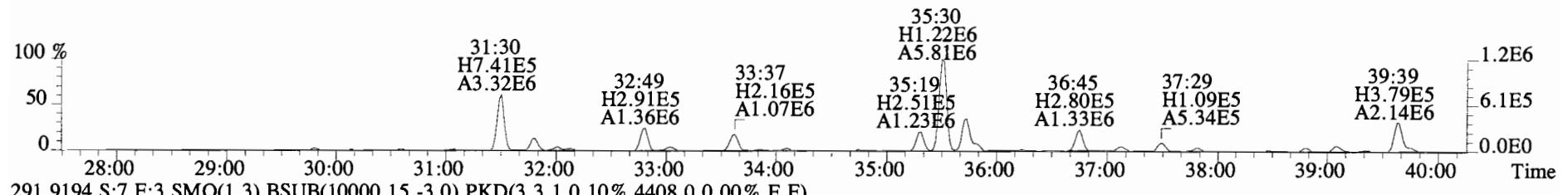
257.9584 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2672.0,0.00%,F,F)



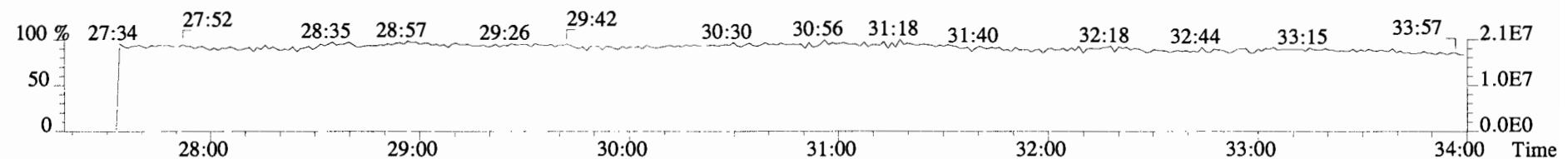
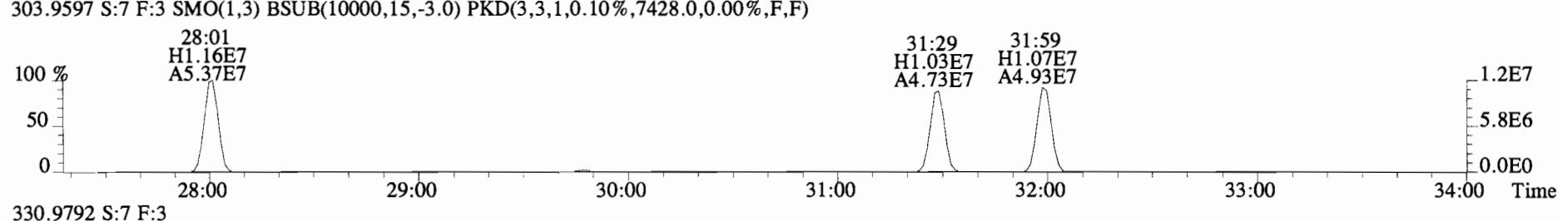
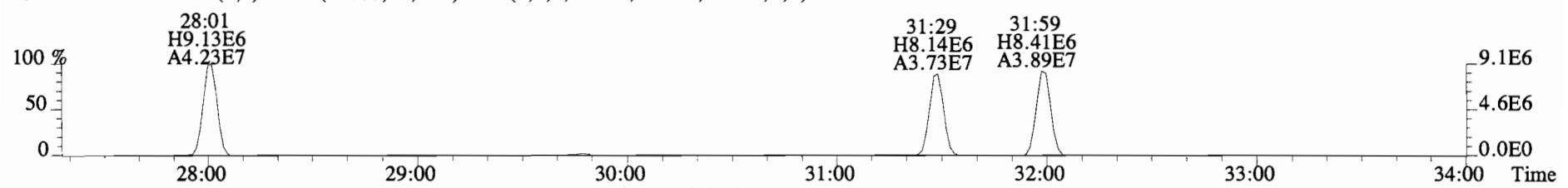
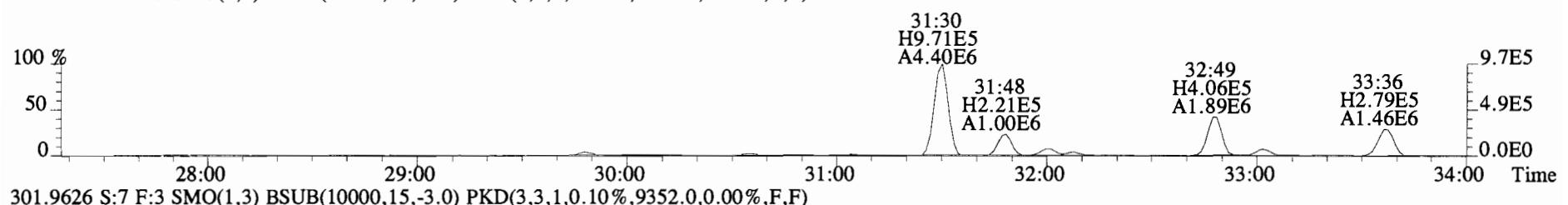
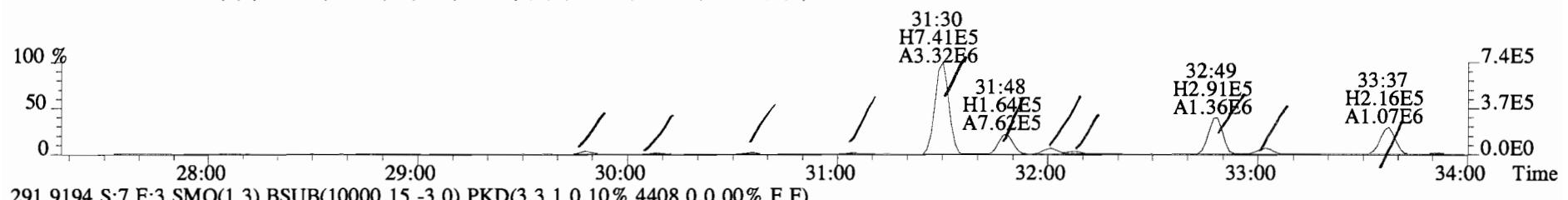
File:141021E2 #1-761 Acq:22-OCT-2014 02:33:44 GC EI+ Voltage SIR Autospec-UltimaE
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268.0016 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,126640,0.0,0.00%,F,F)



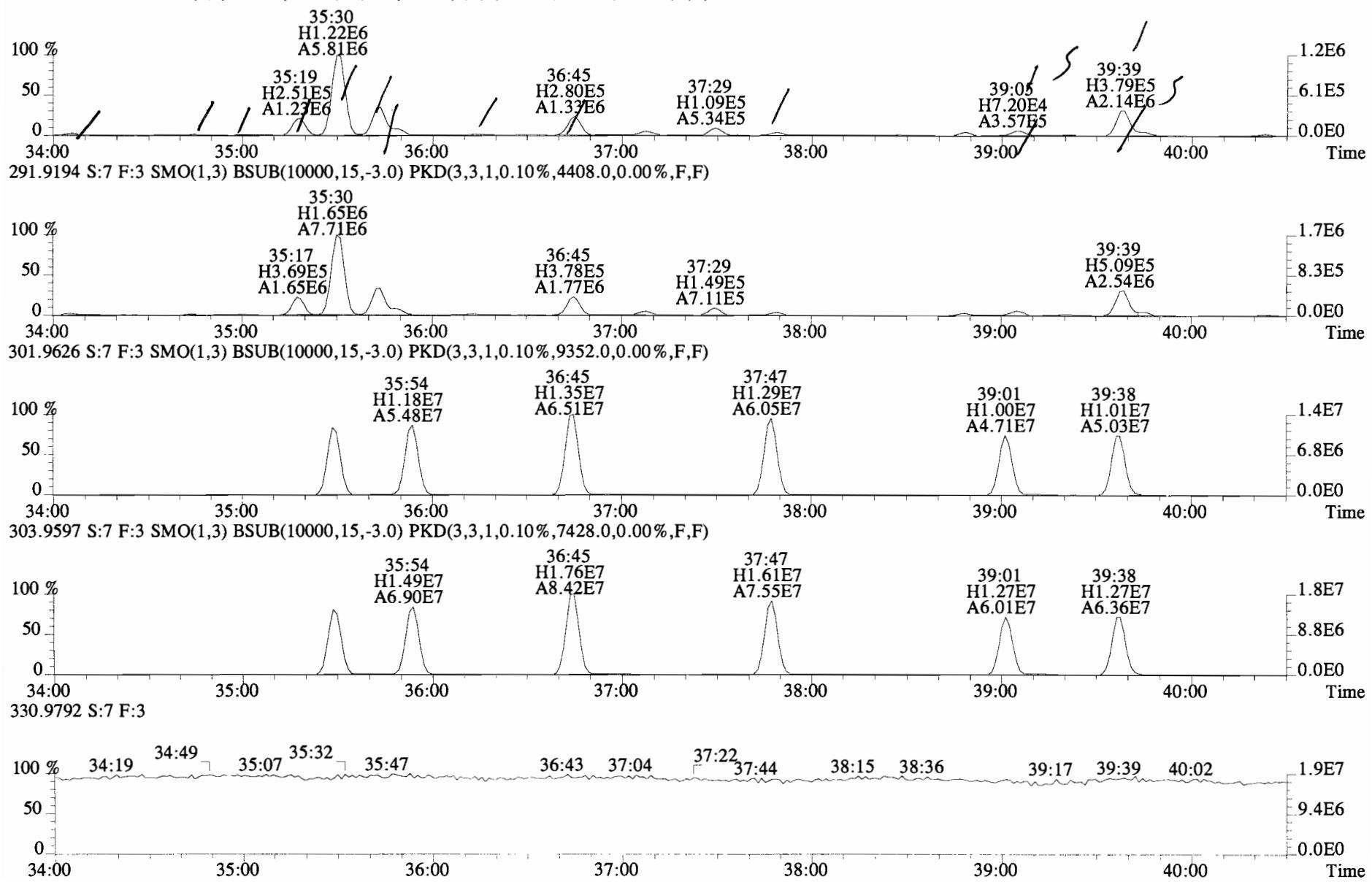
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 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
 289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2992.0,0.00%,F,F)



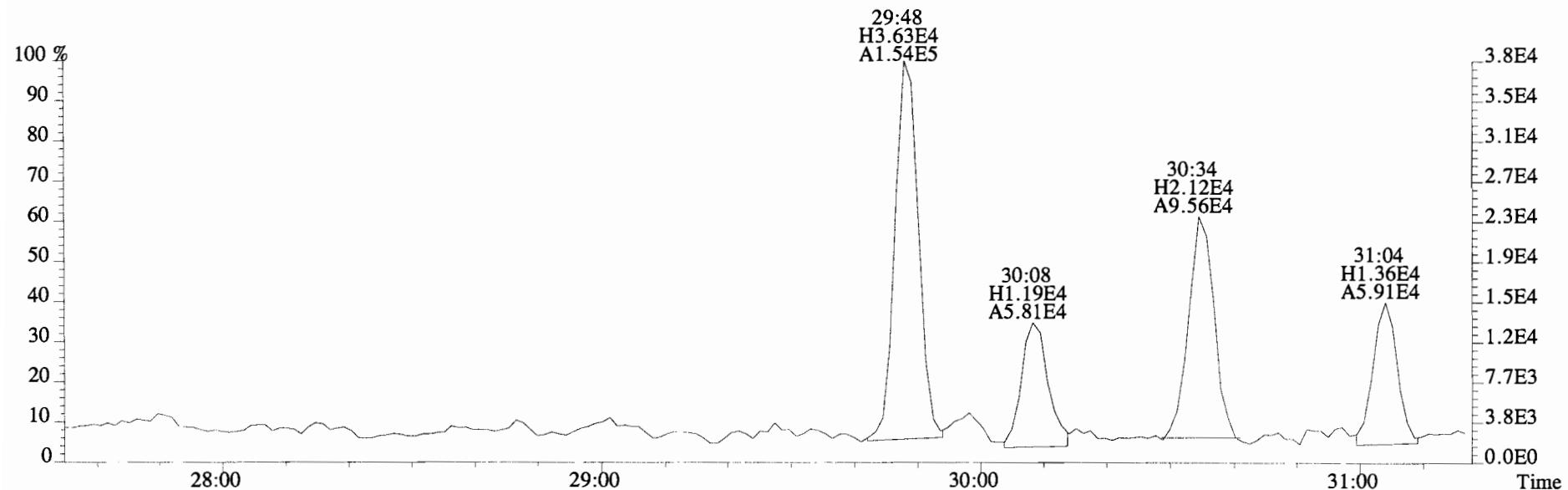
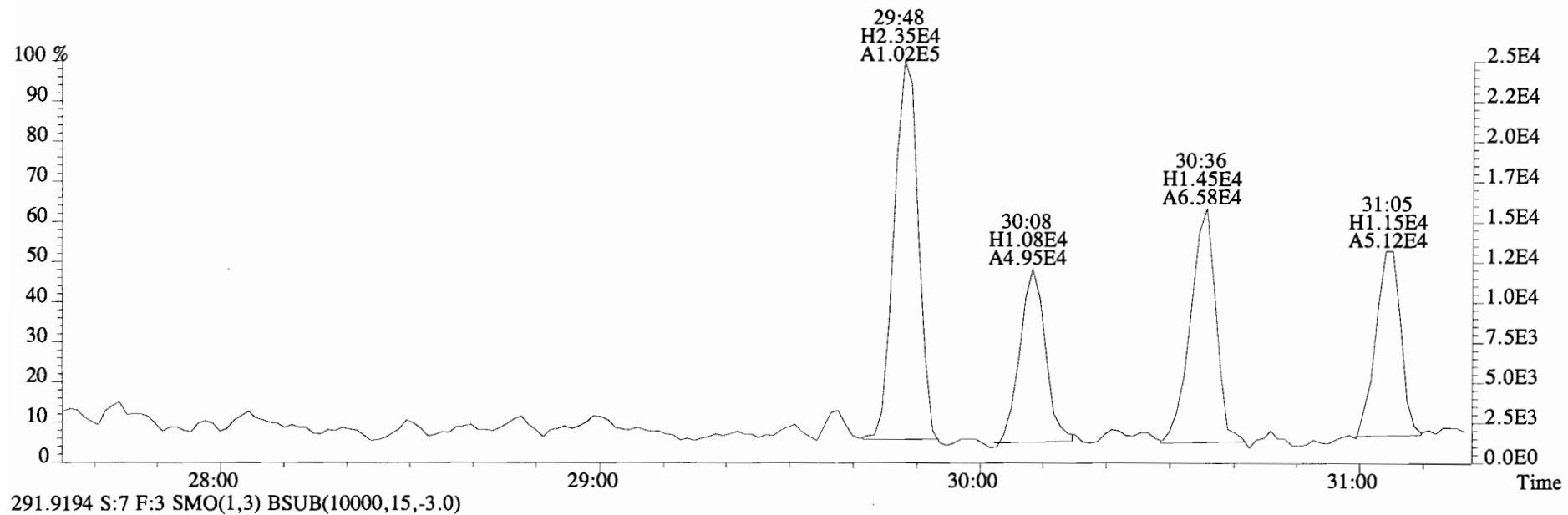
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 289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2992.0,0.00%,F,F)



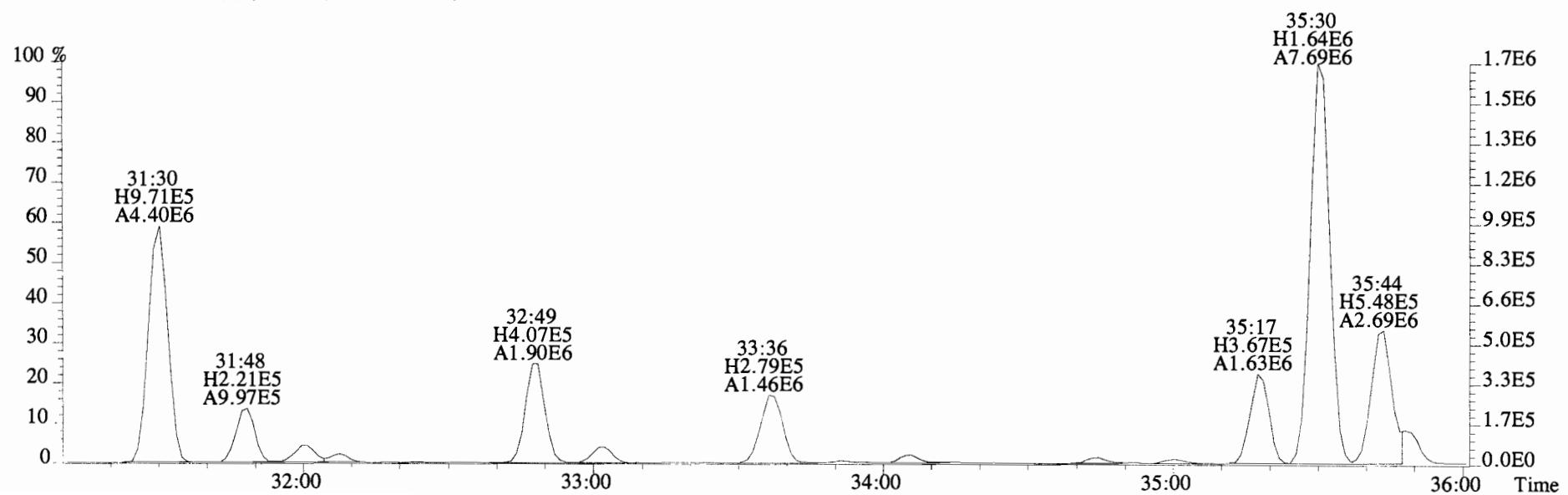
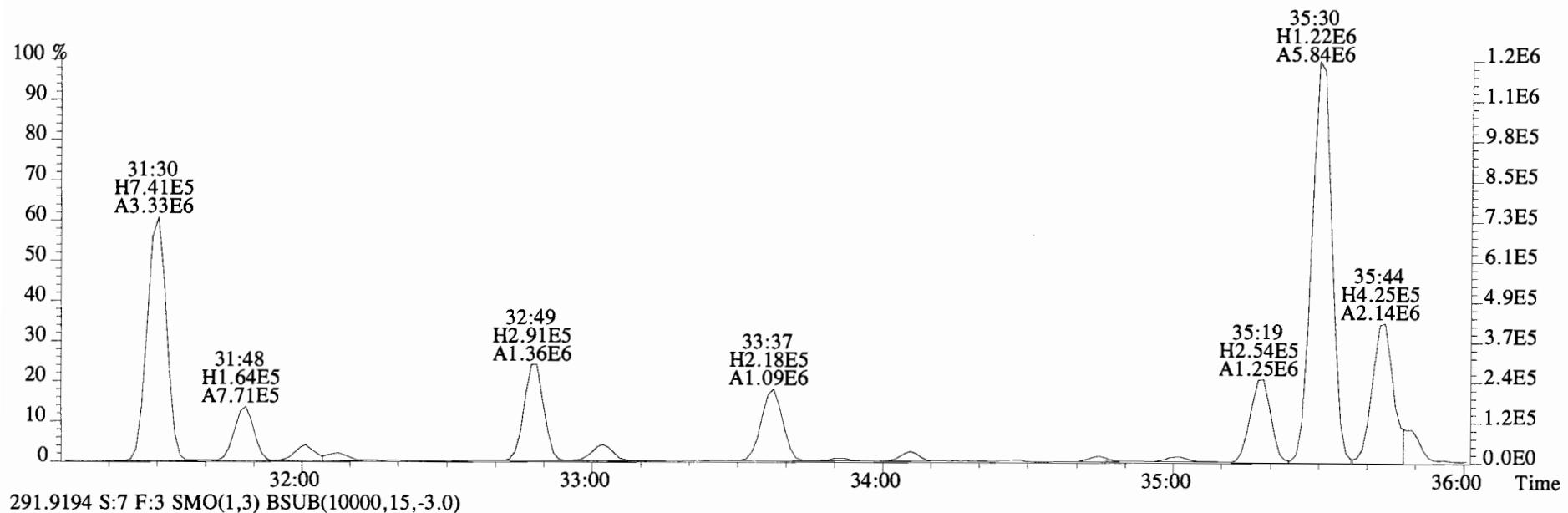
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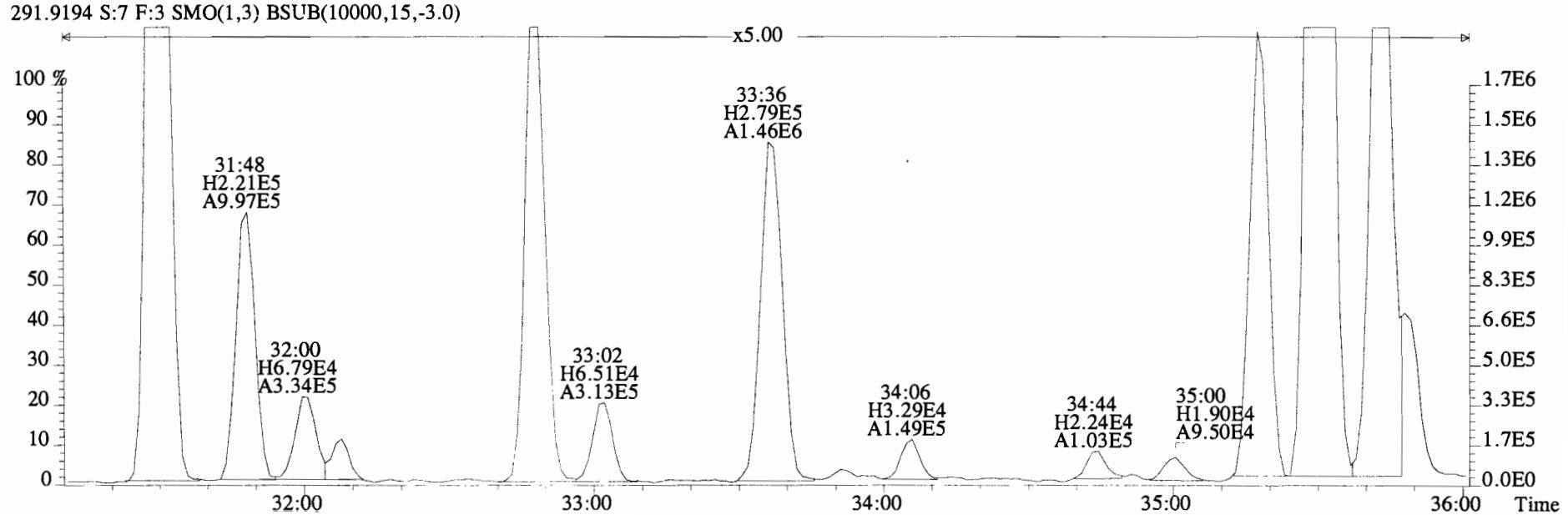
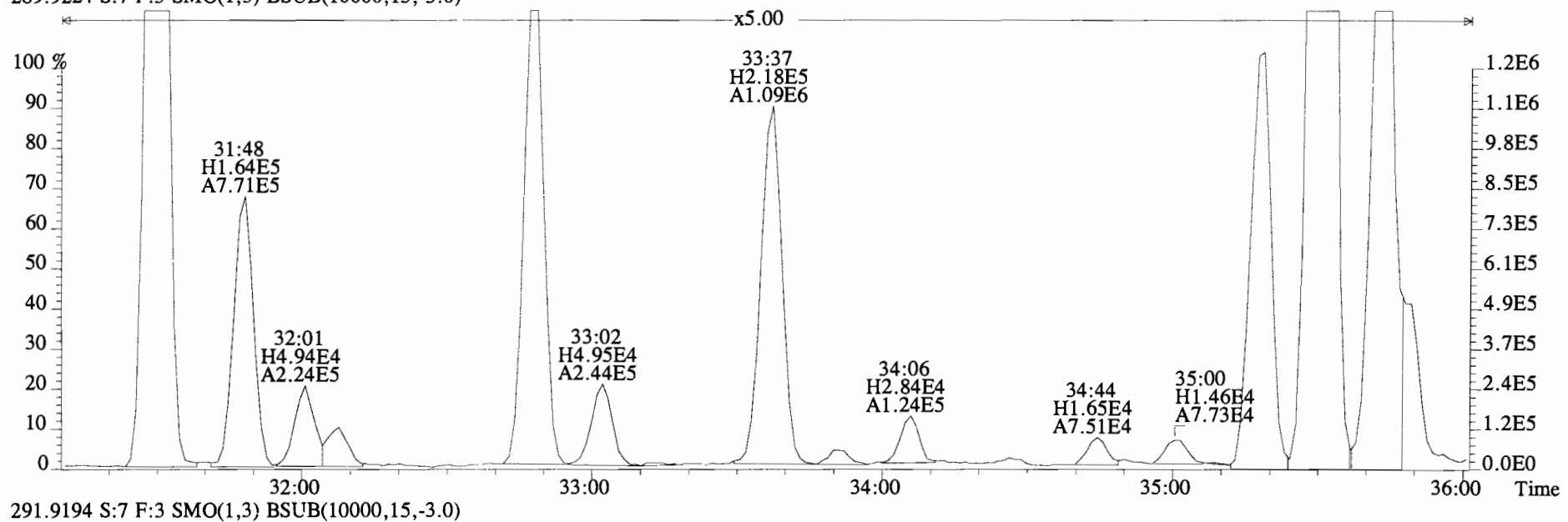
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



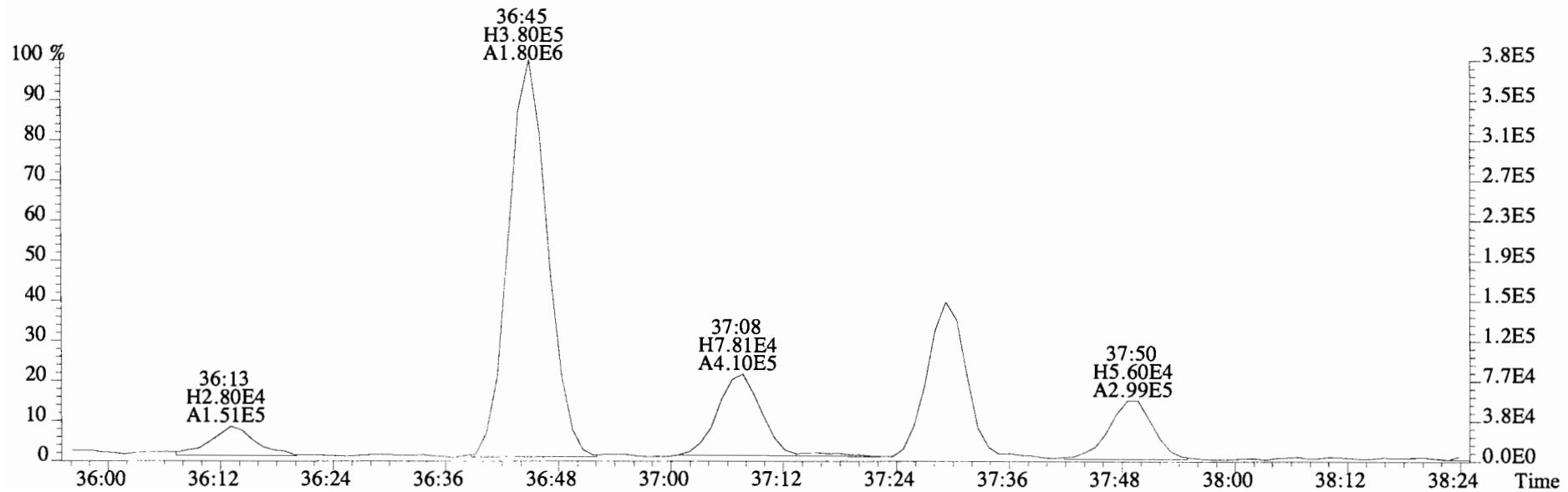
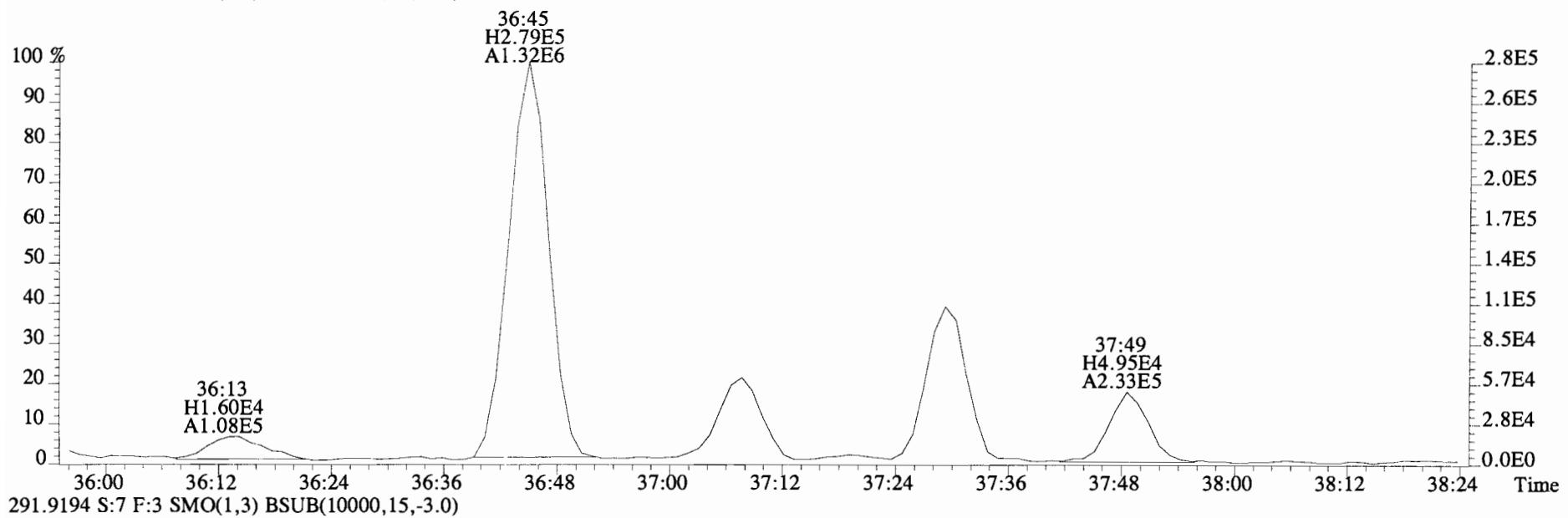
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



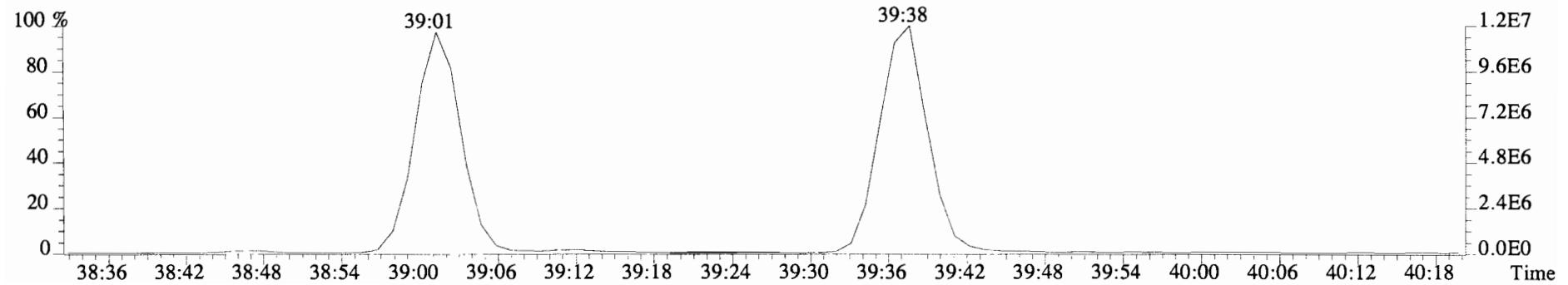
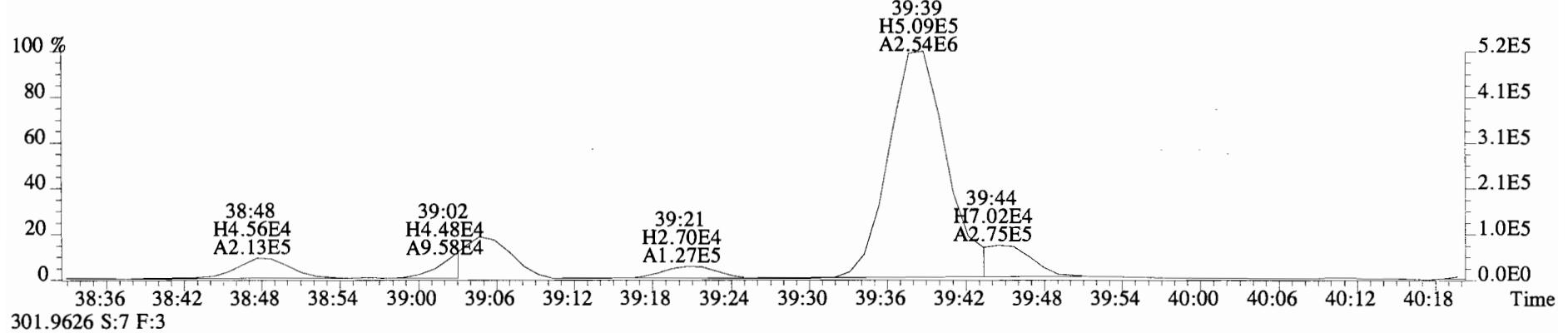
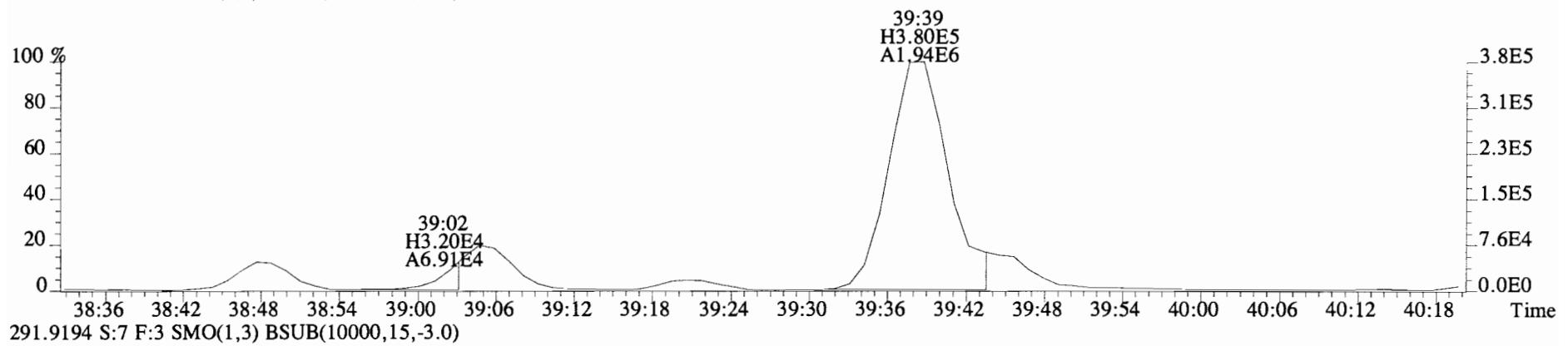
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



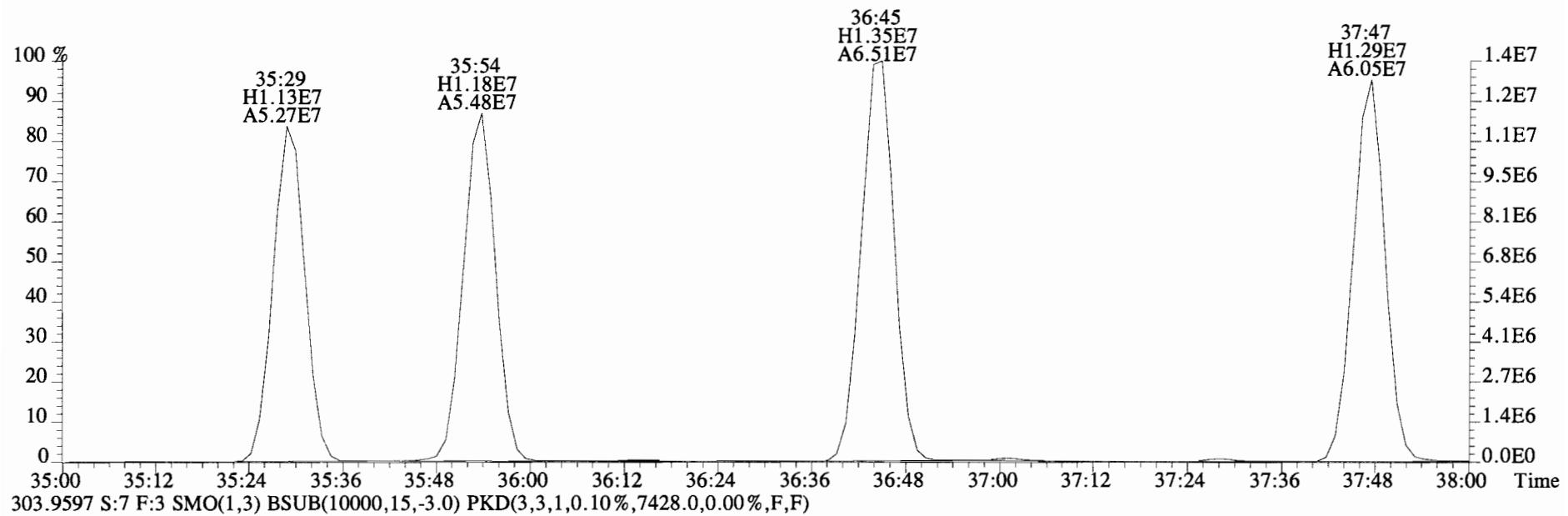
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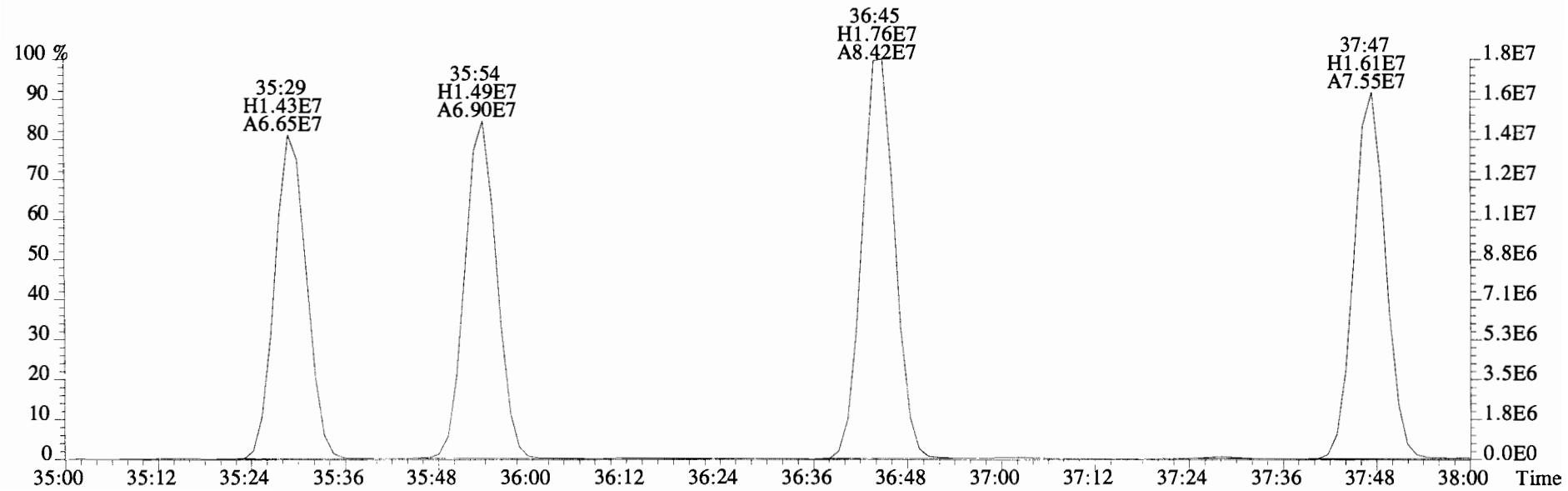
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



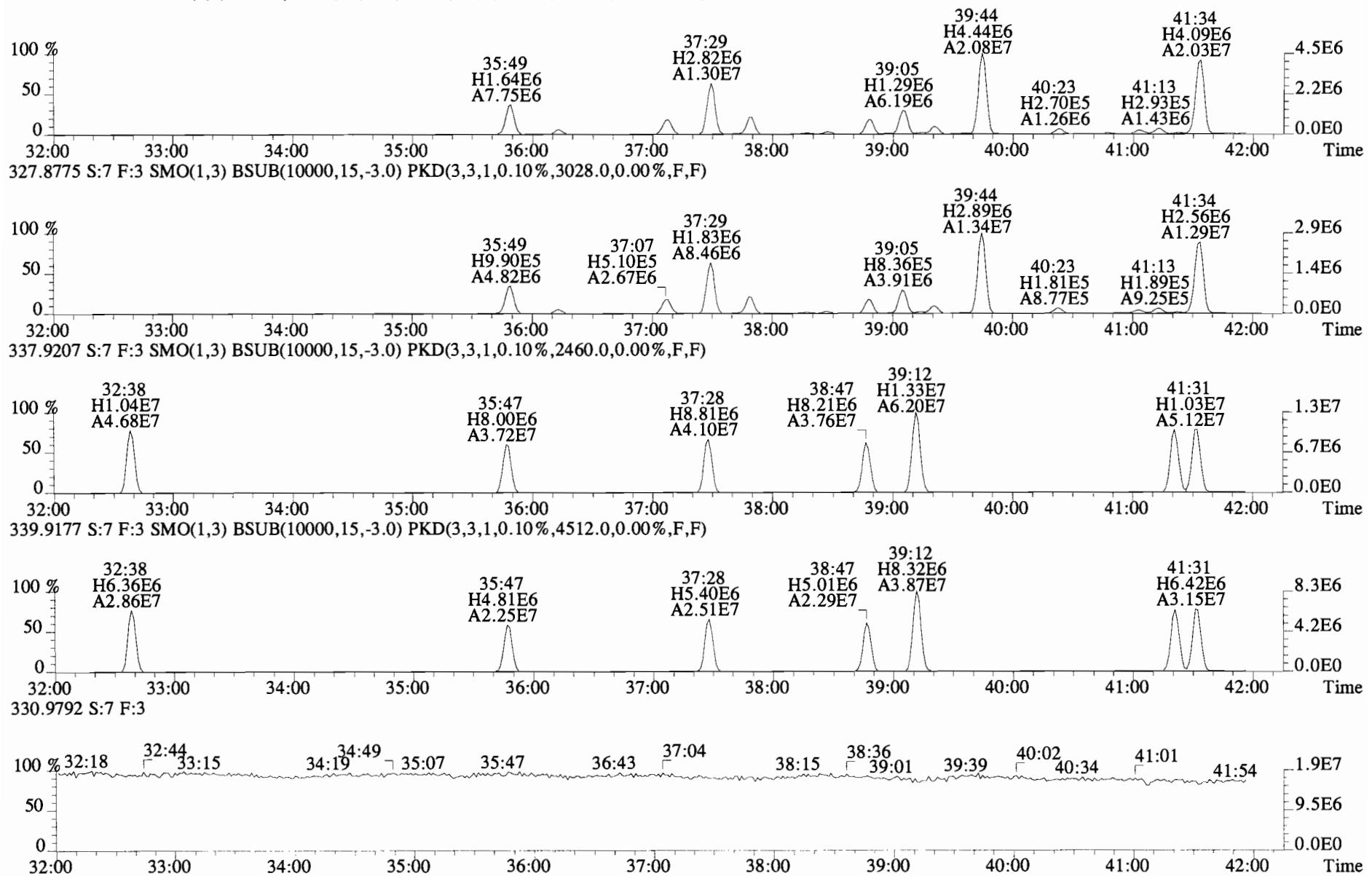
File:141021E2 #1-761 Acq:22-OCT-2014 02:33:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
301.9626 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9352.0,0.00%,F,F)



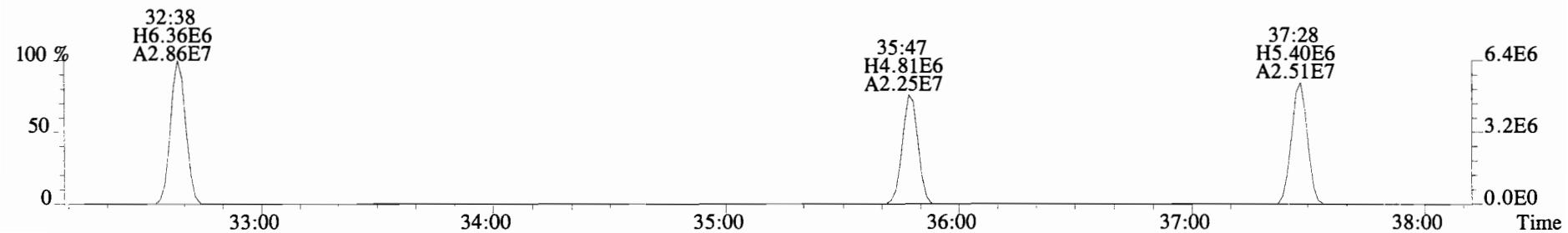
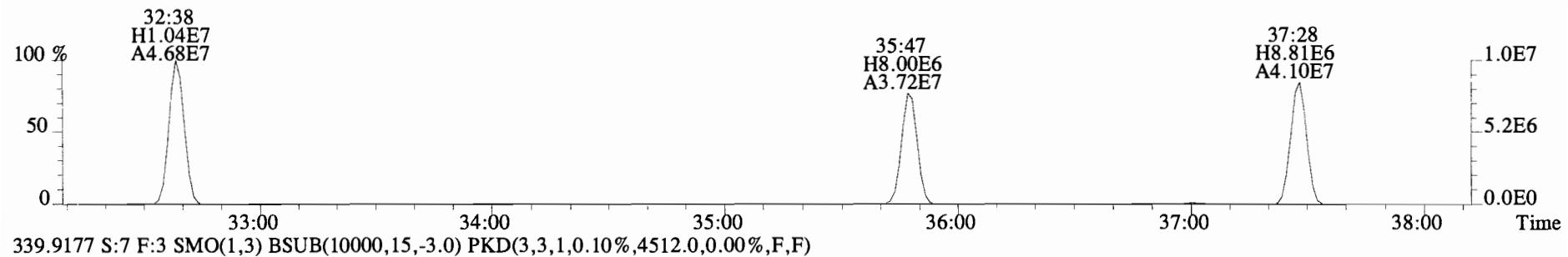
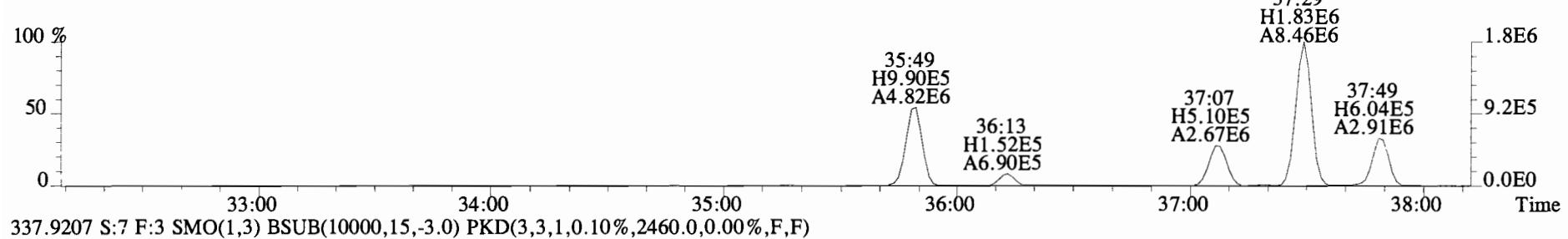
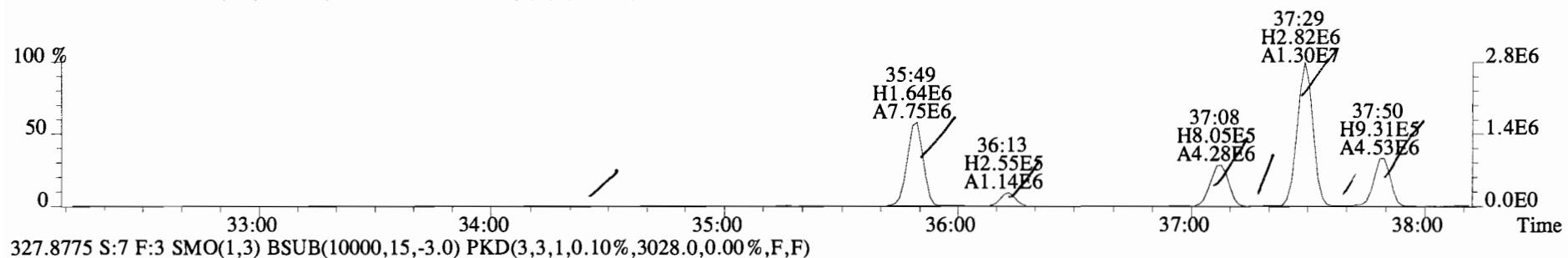
303.9597 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7428.0,0.00%,F,F)



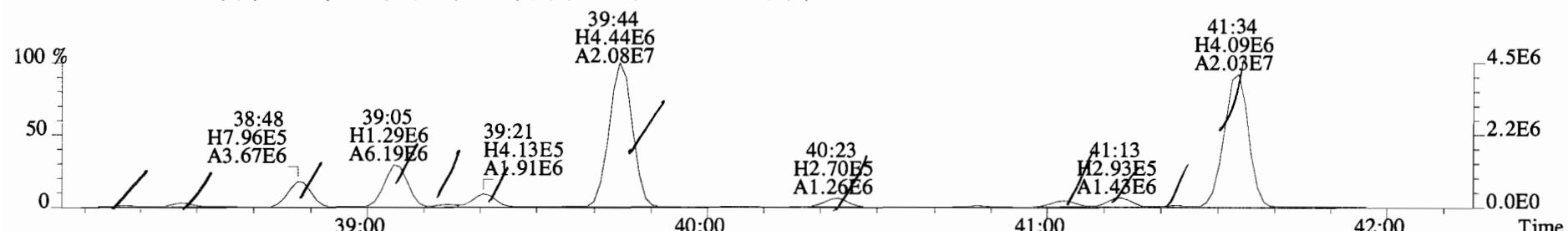
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 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
 325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1732.0,0.00%,F,F)



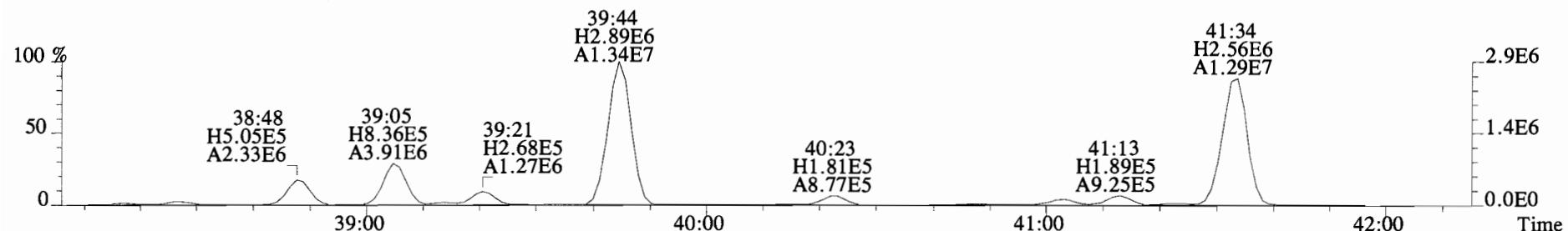
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325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1732.0,0.00%,F,F)



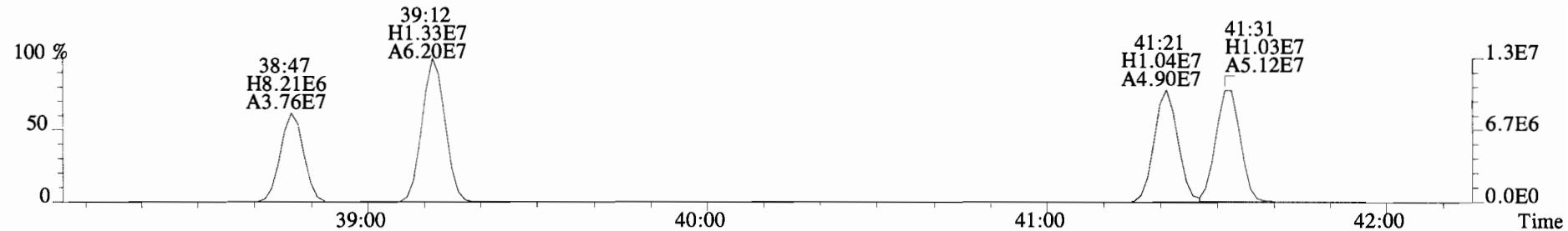
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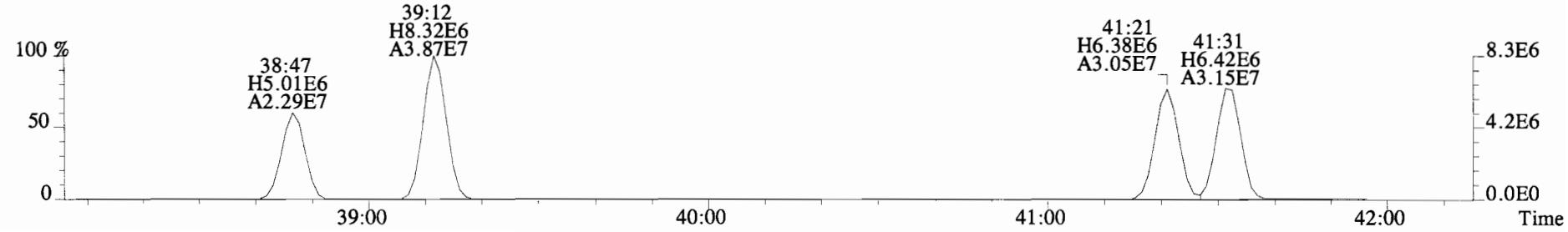
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3028.0,0.00%,F,F)



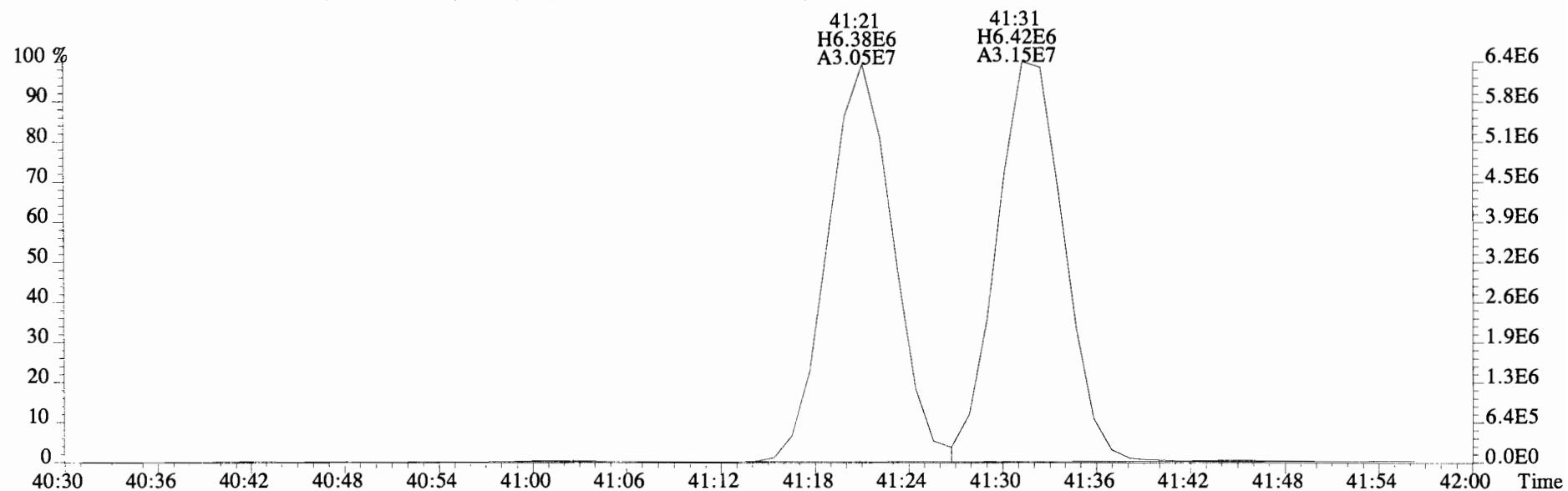
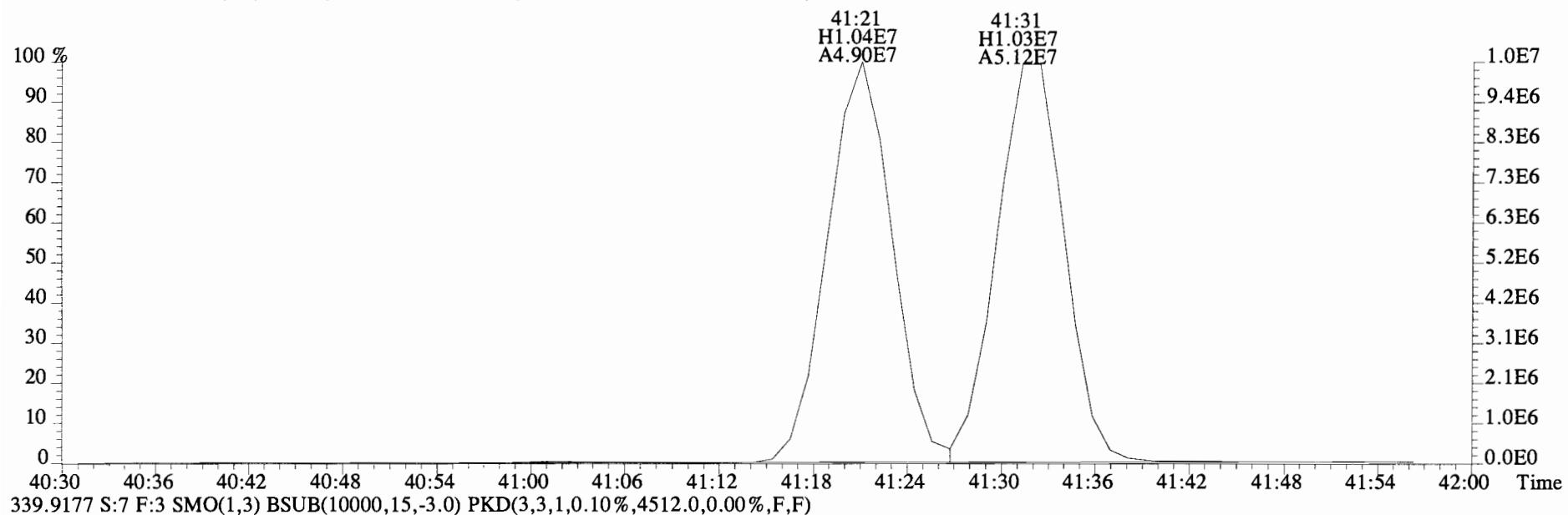
337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2460.0,0.00%,F,F)



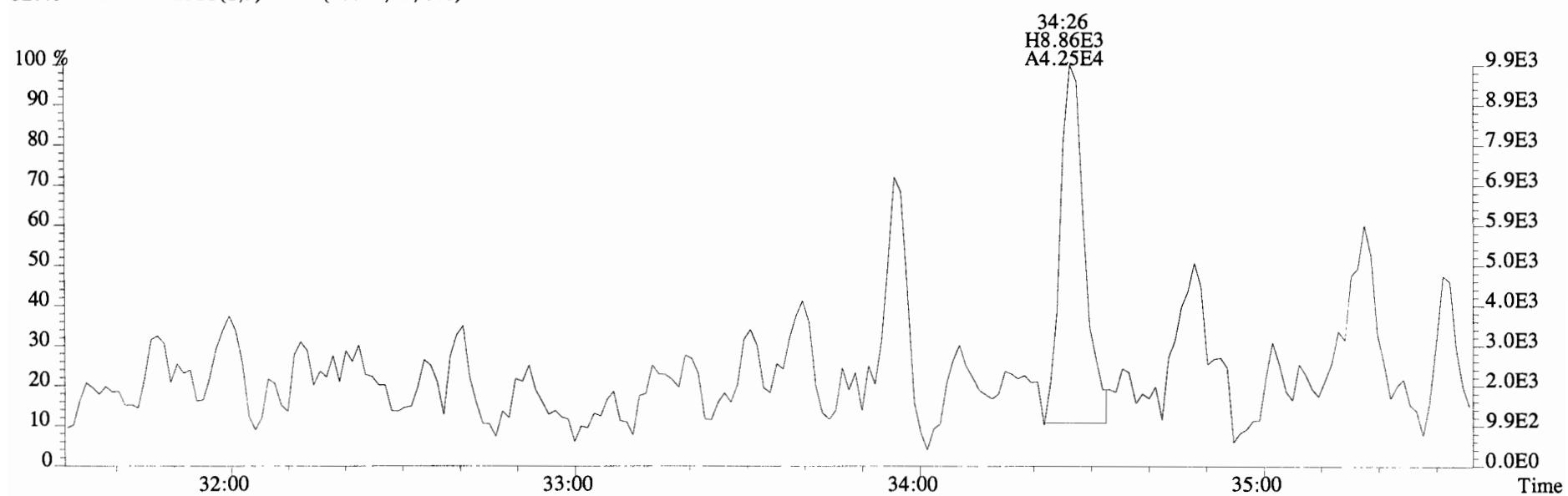
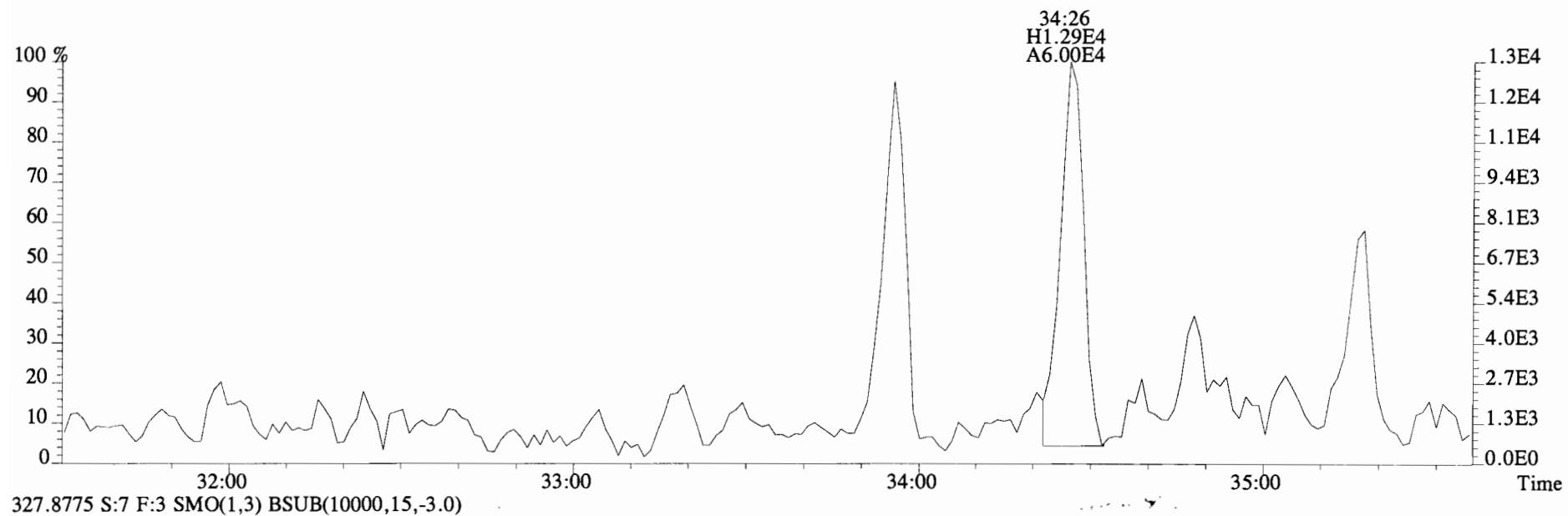
339.9177 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4512.0,0.00%,F,F)



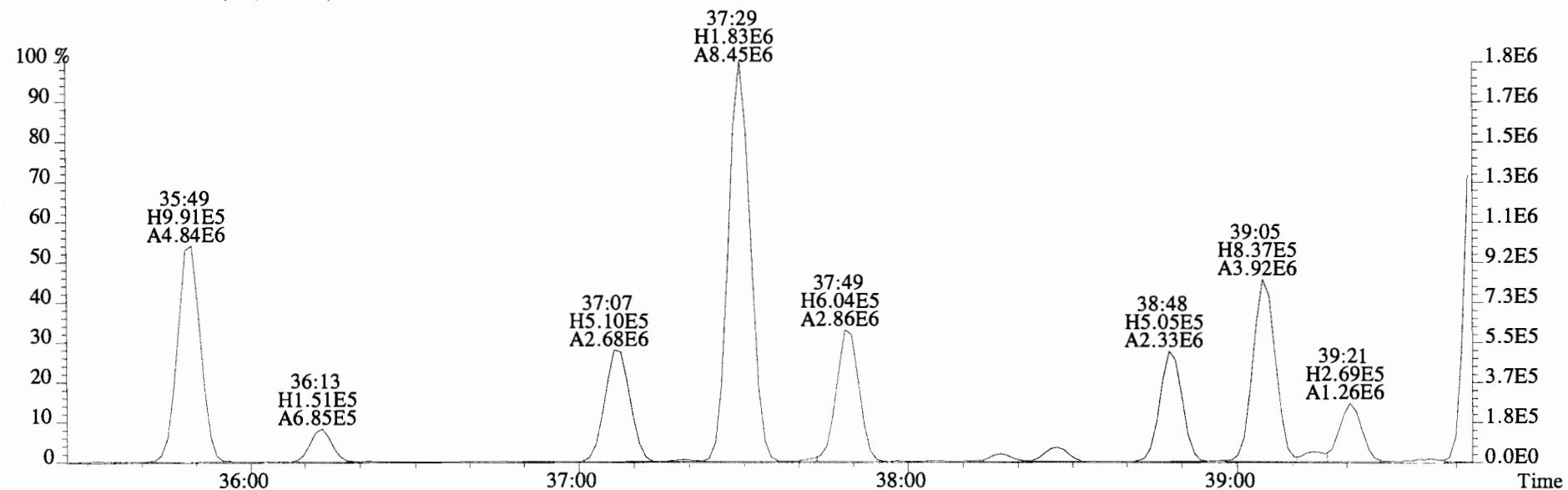
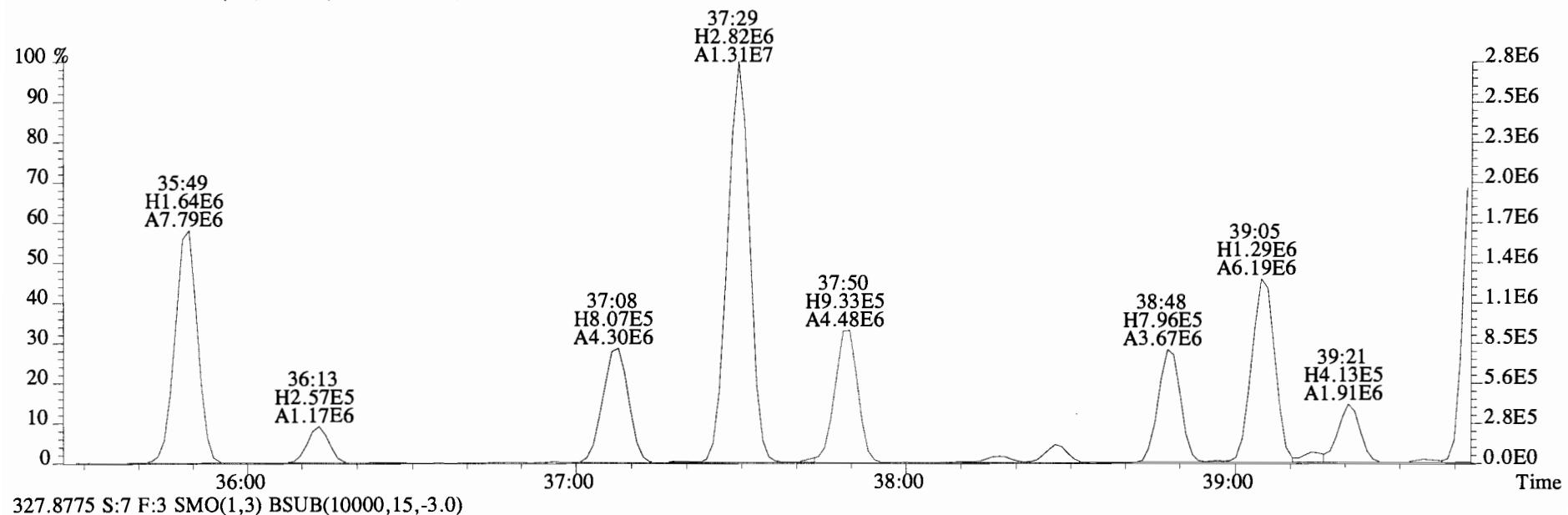
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
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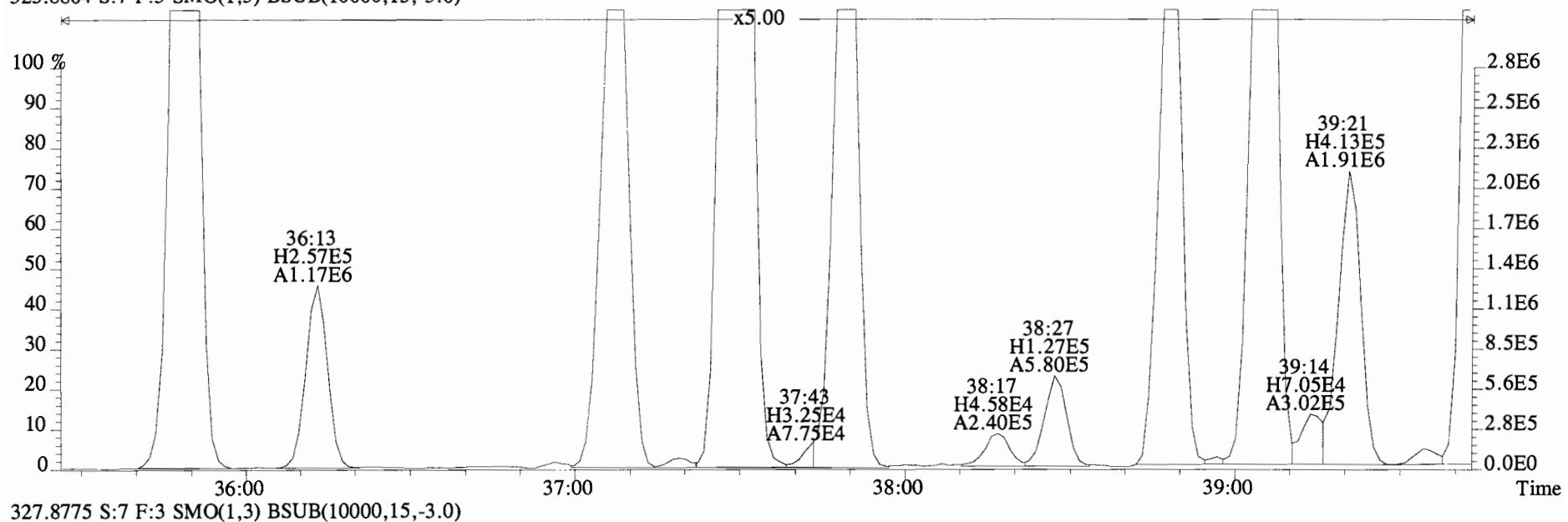
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



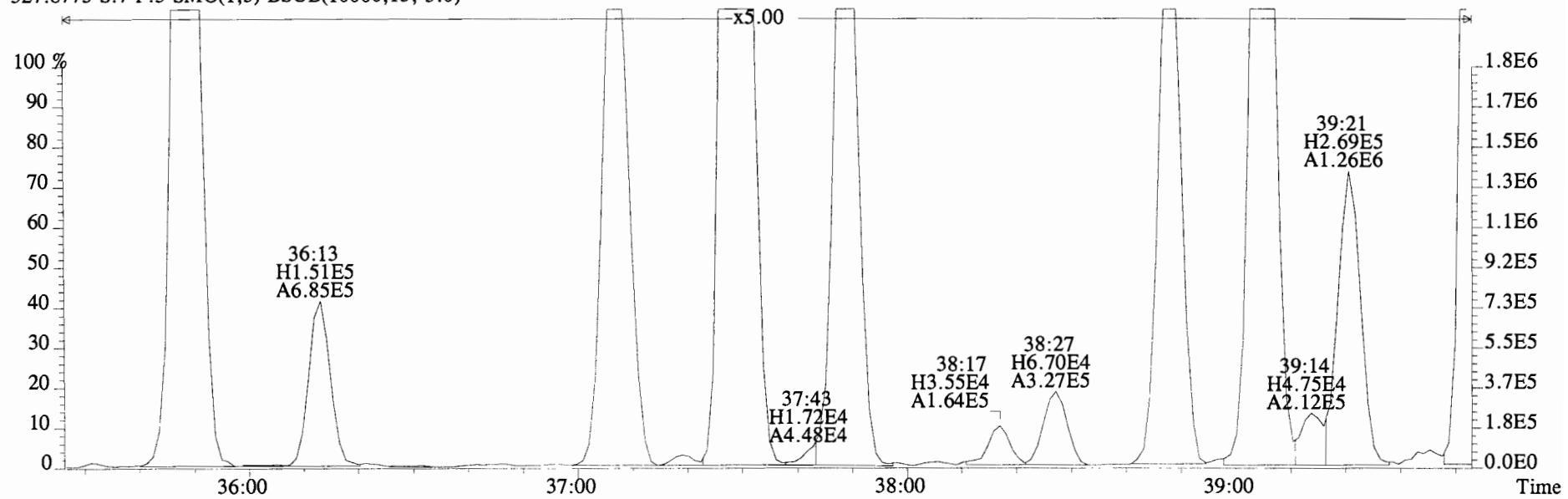
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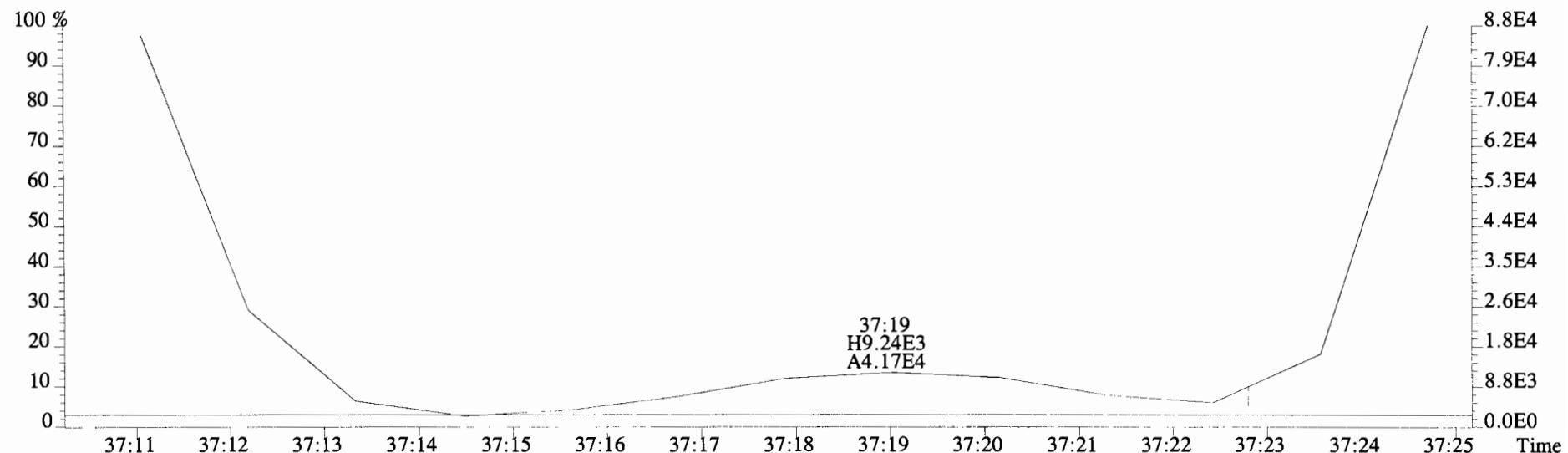
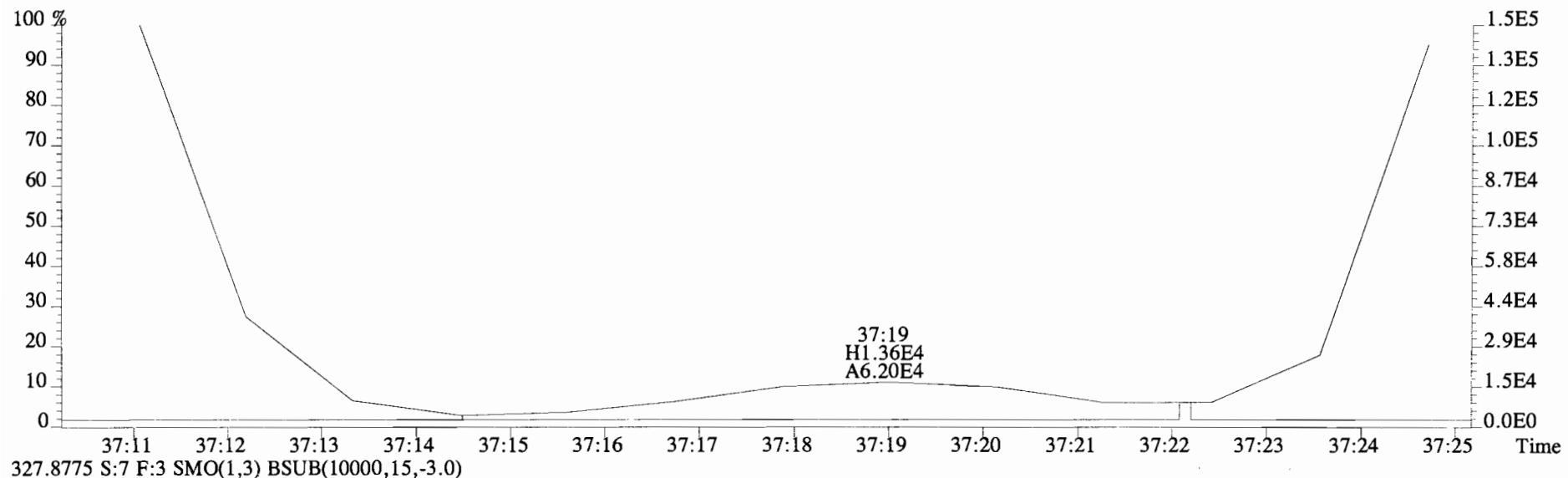
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



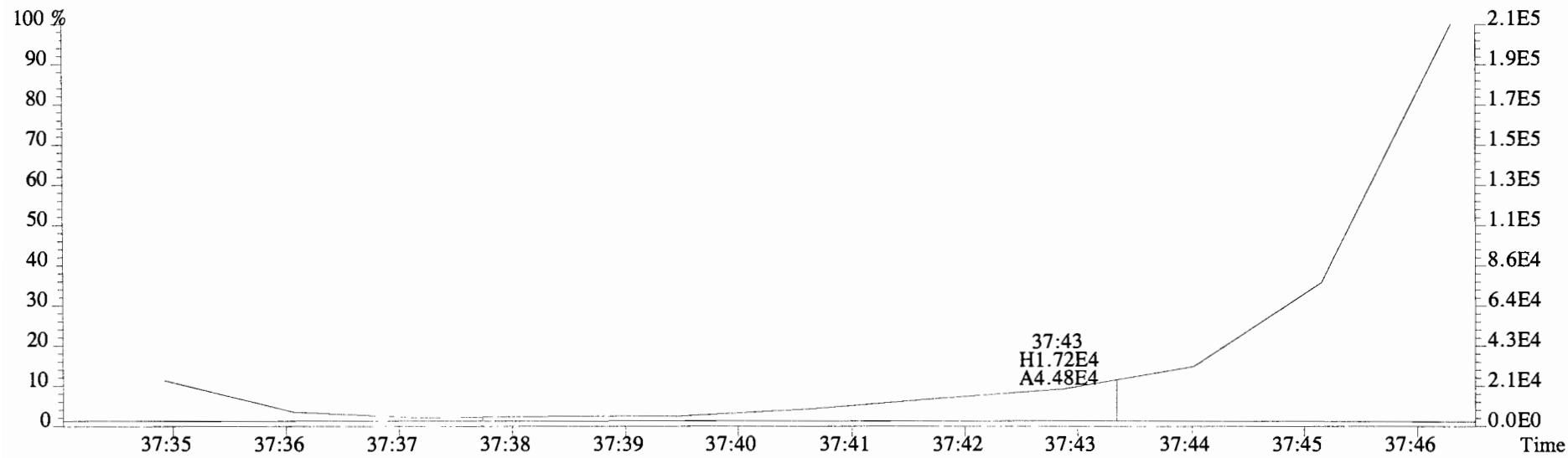
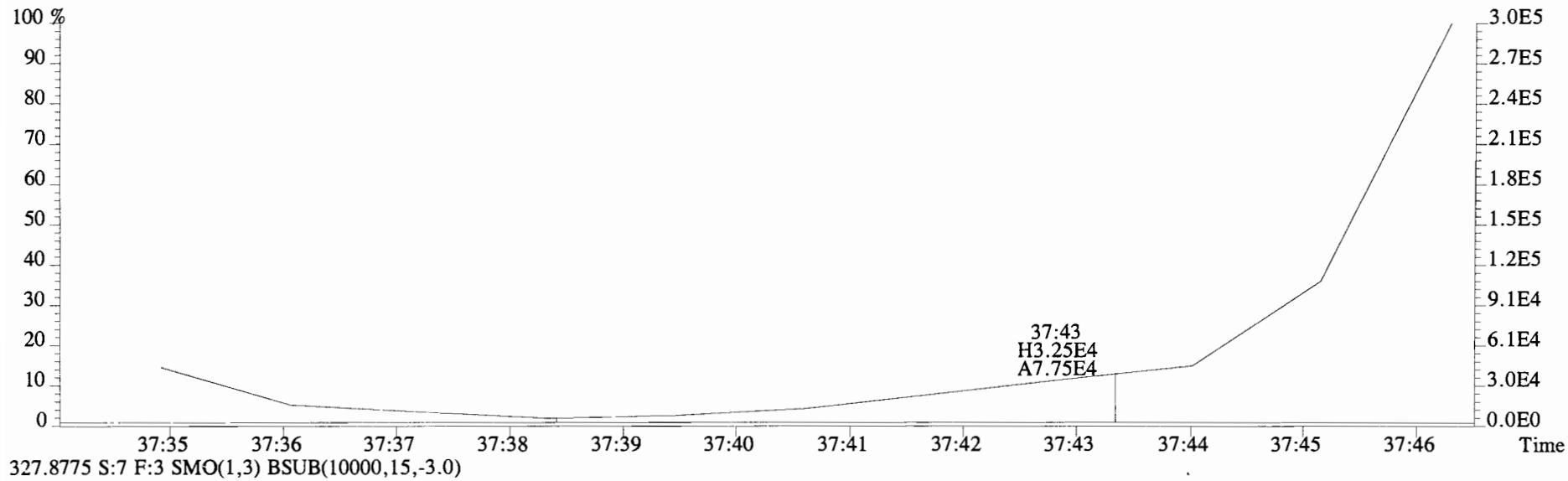
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



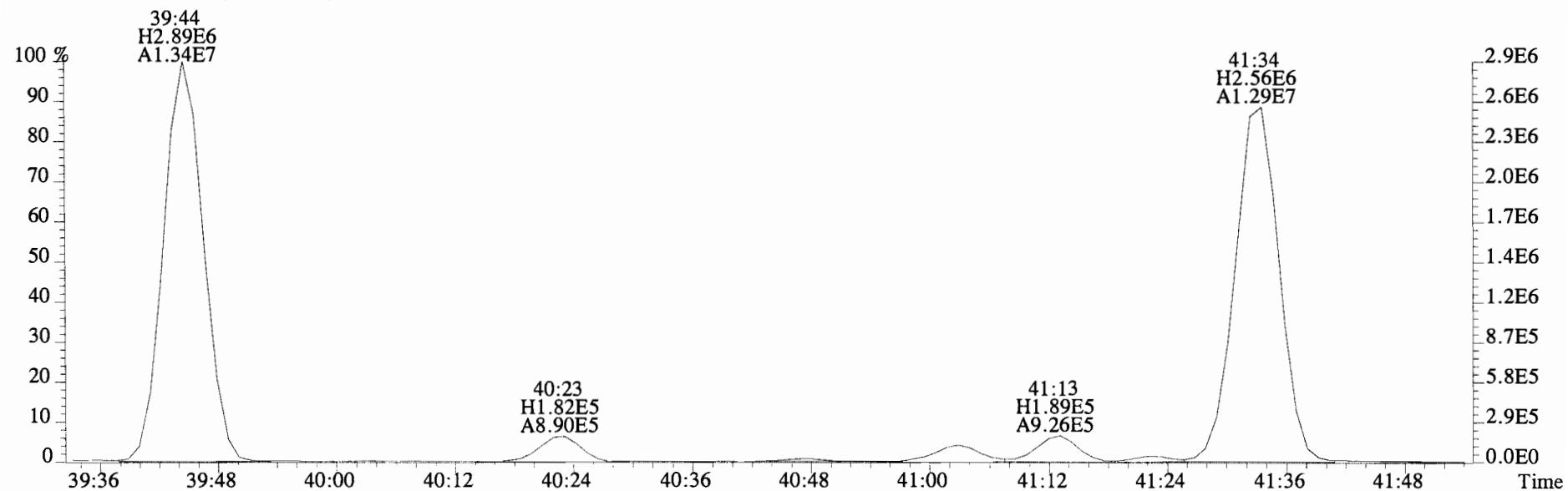
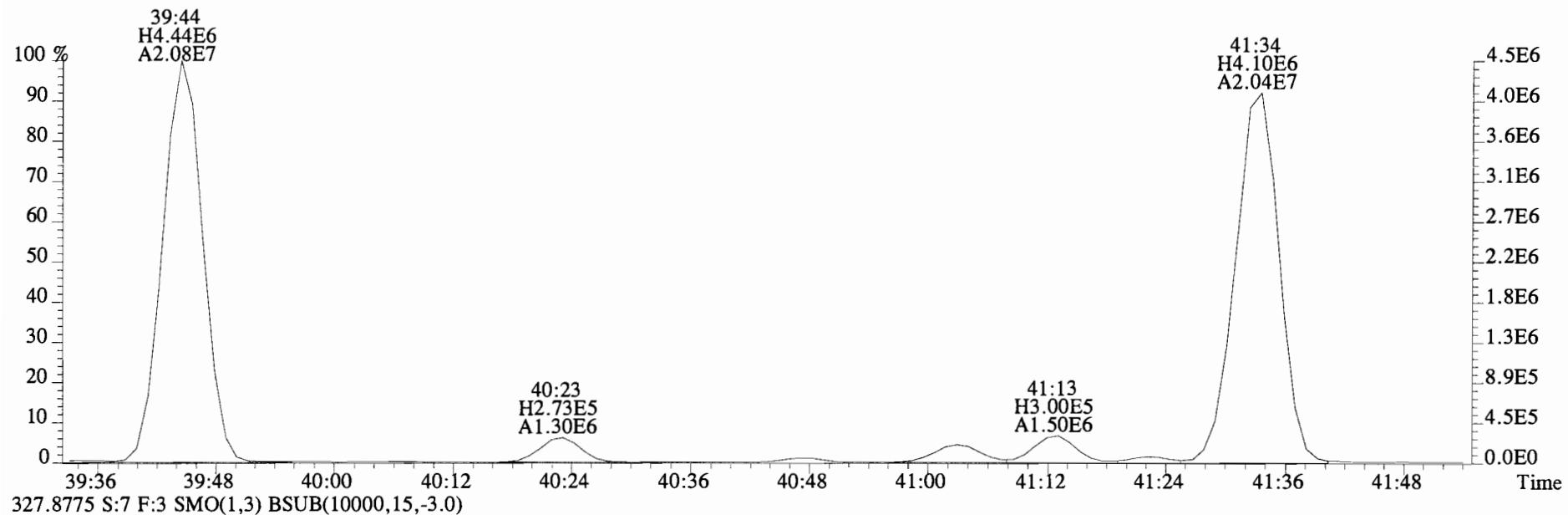
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



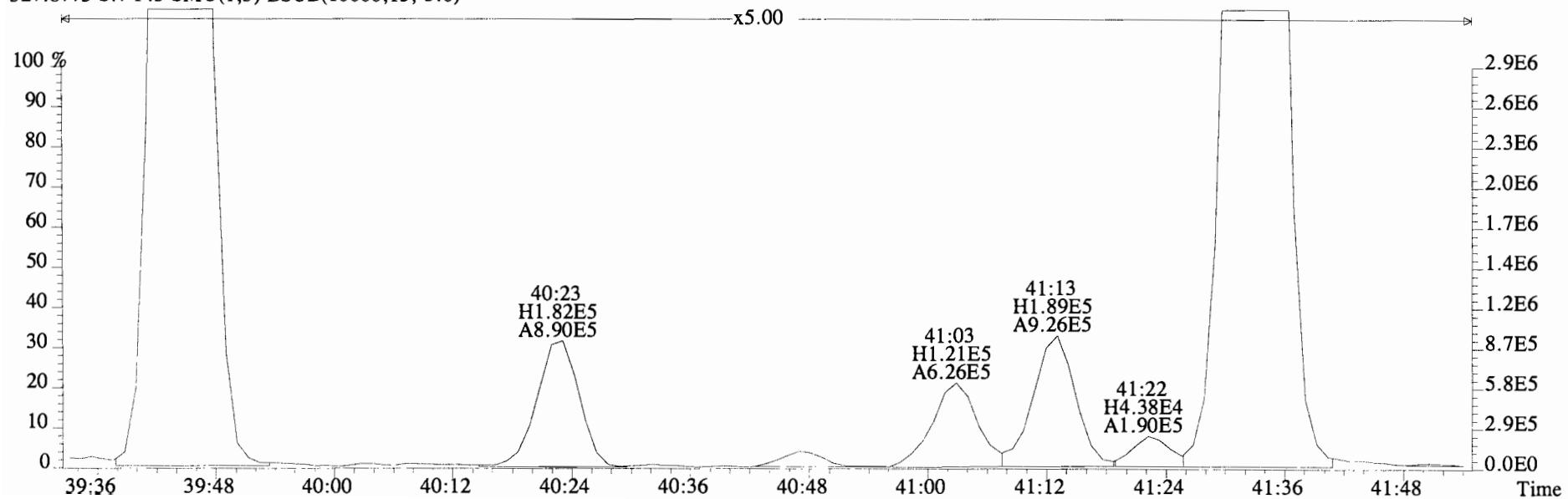
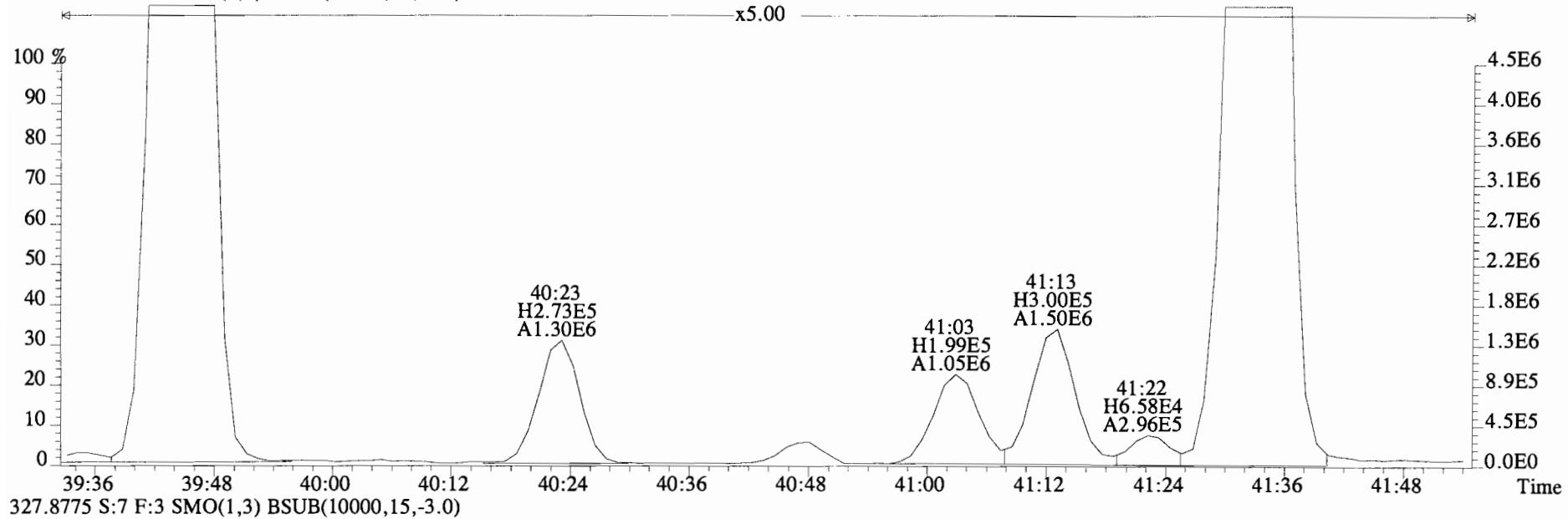
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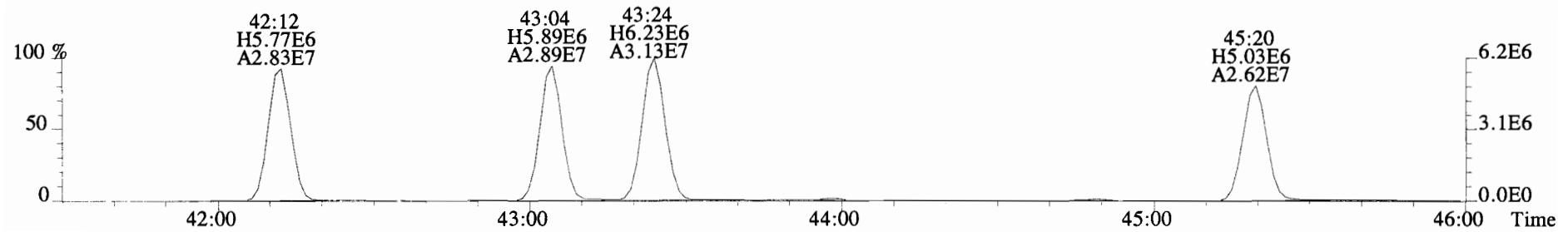
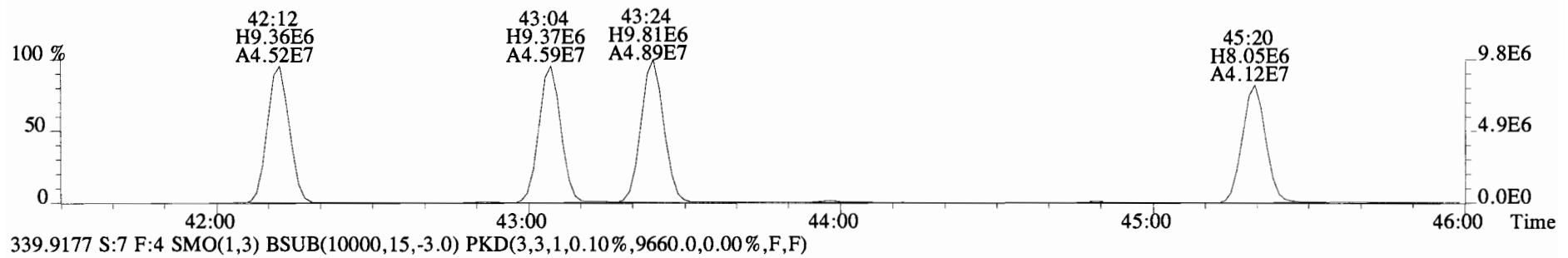
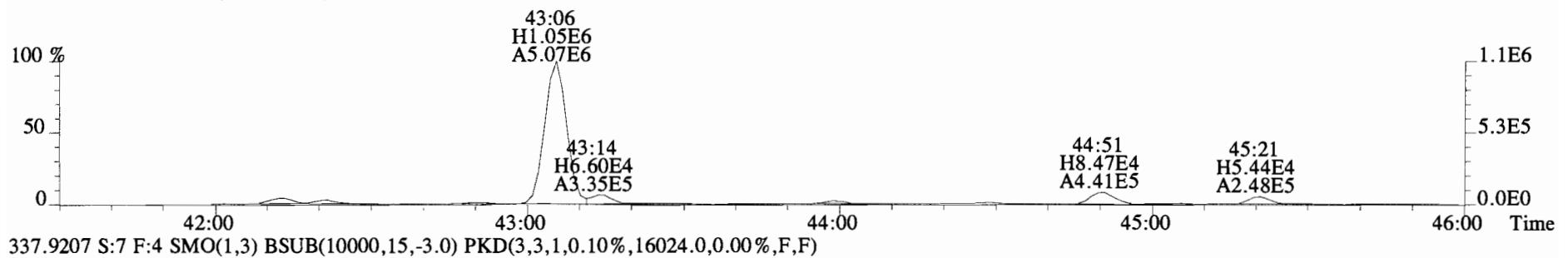
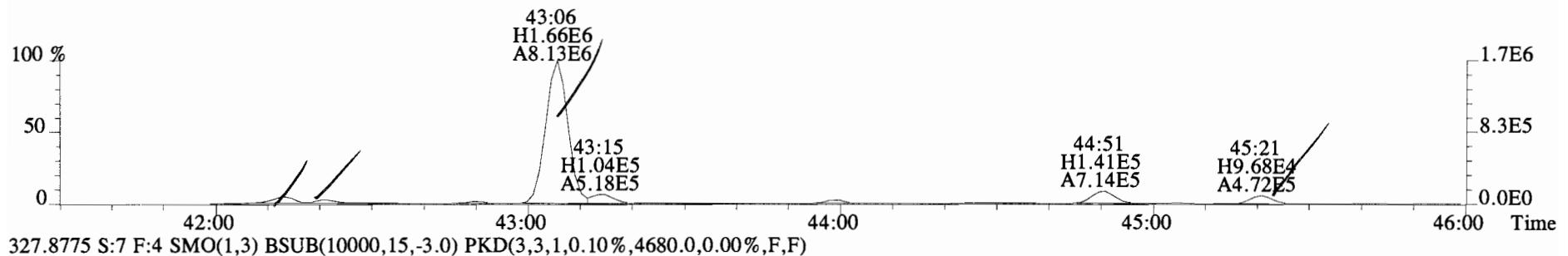
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



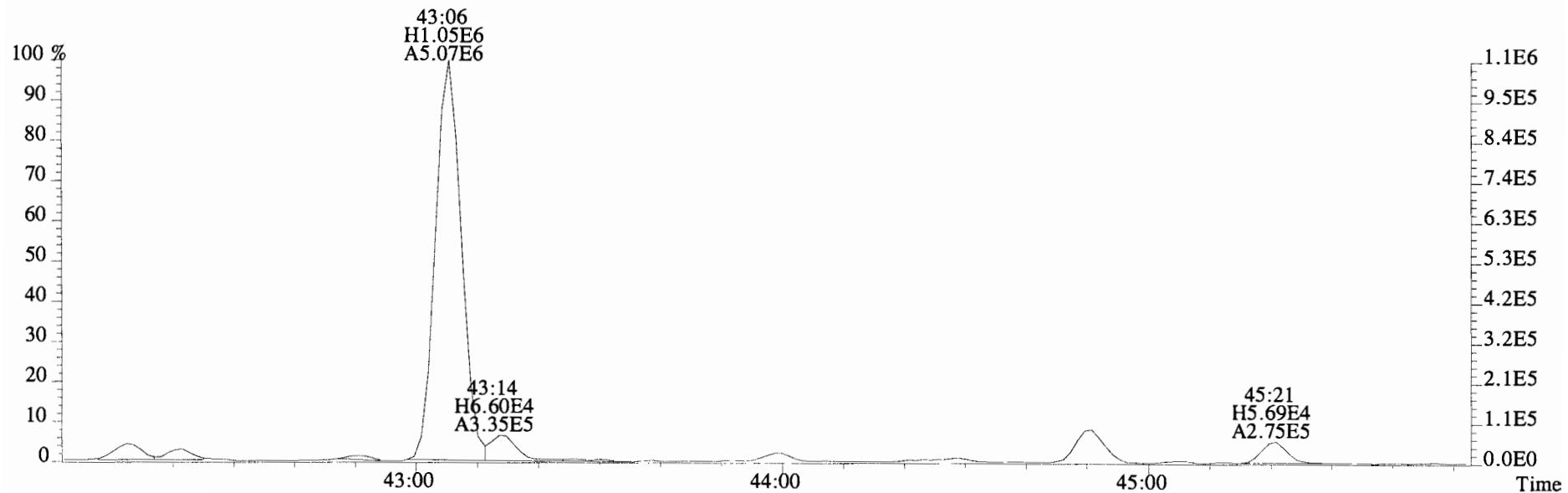
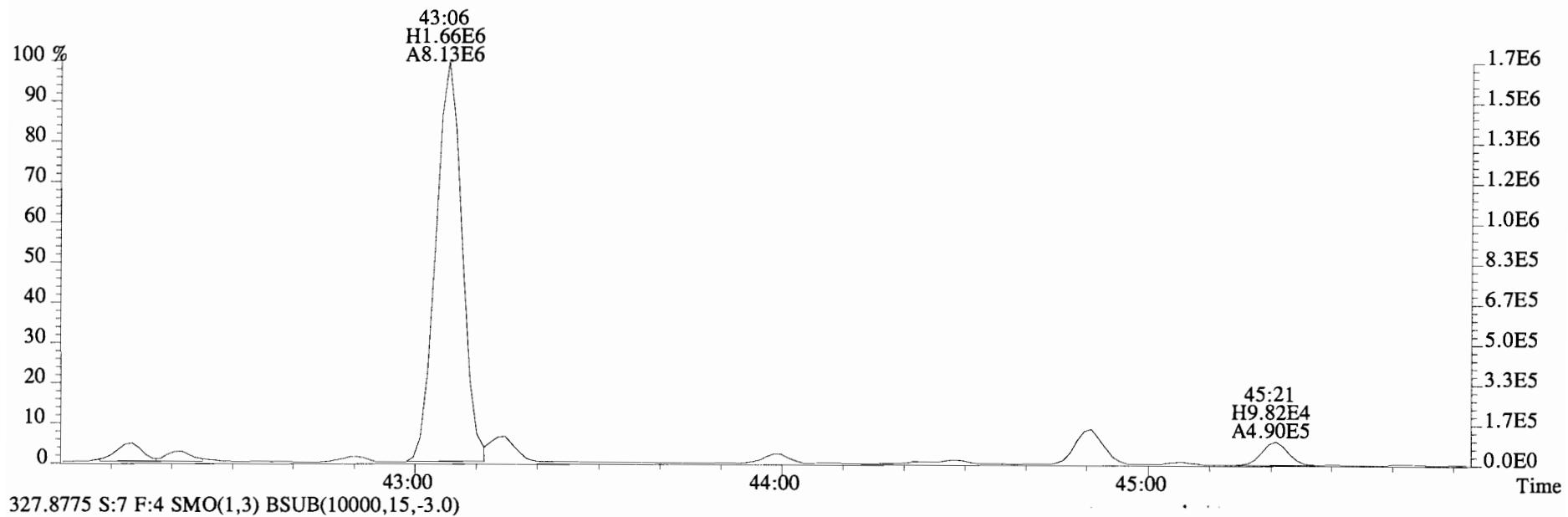
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325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



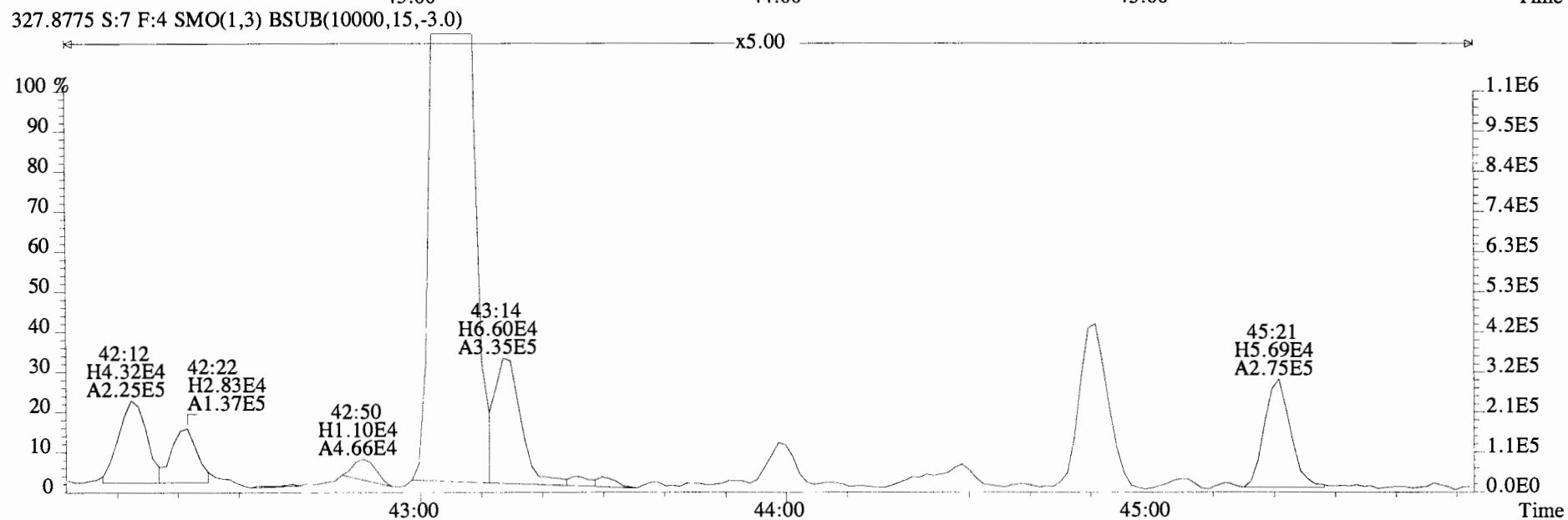
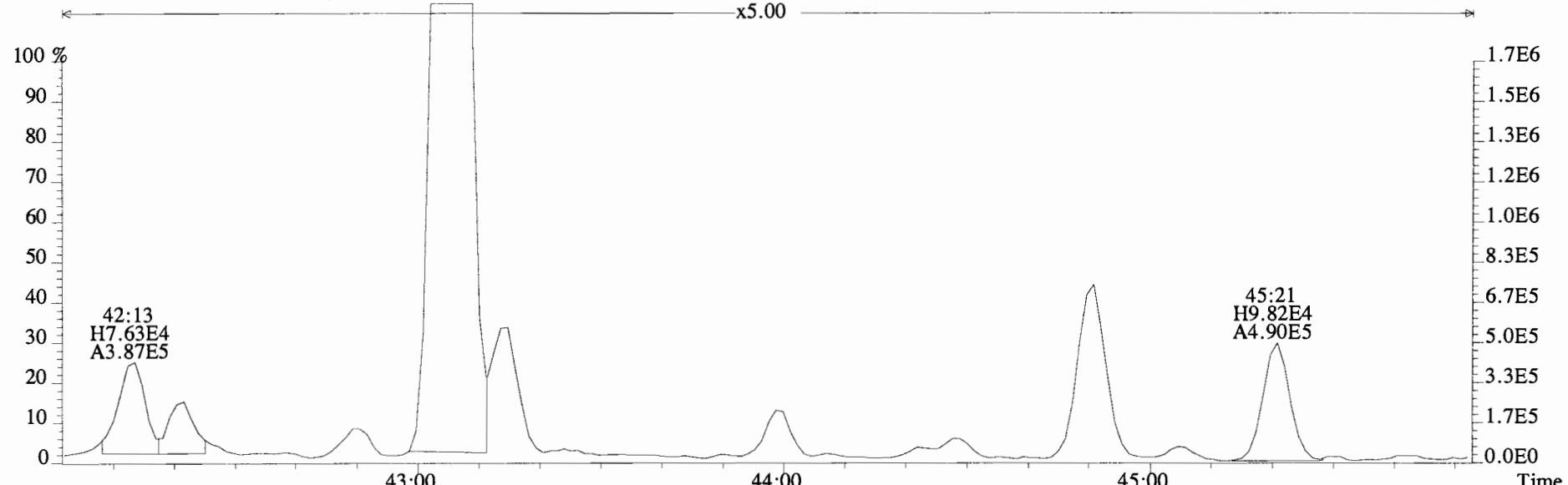
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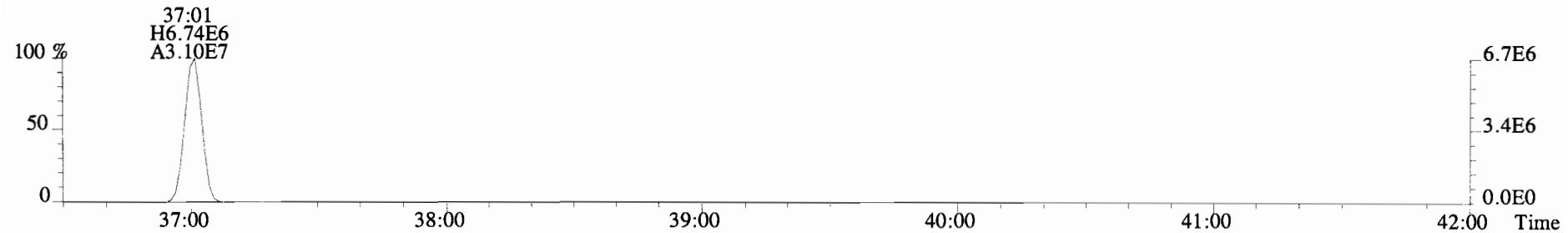
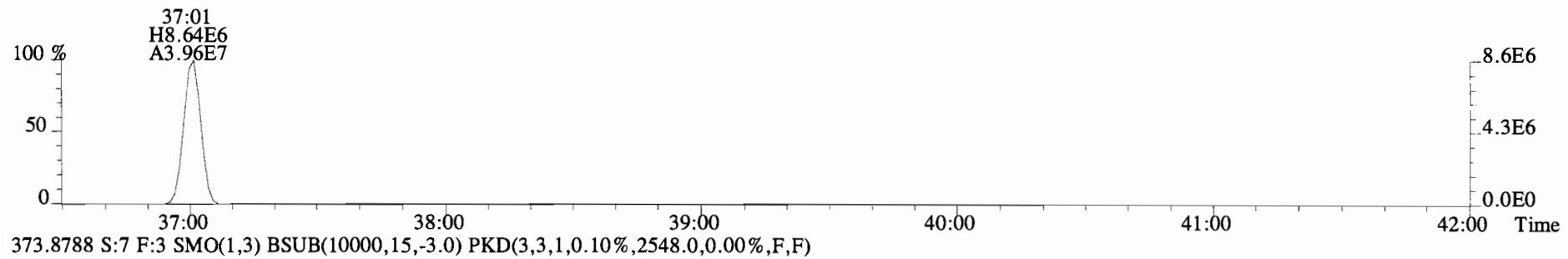
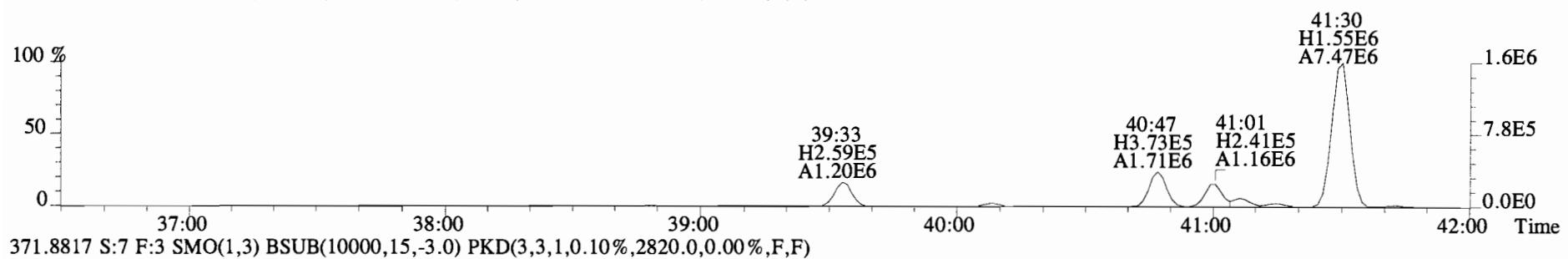
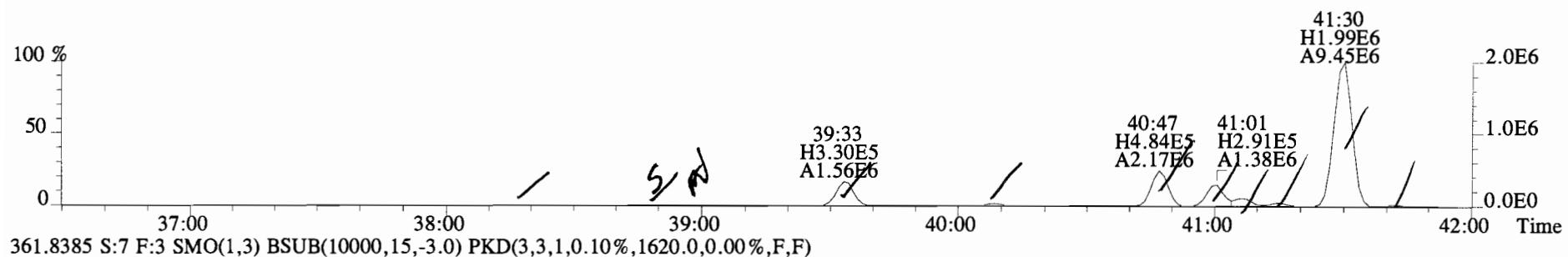
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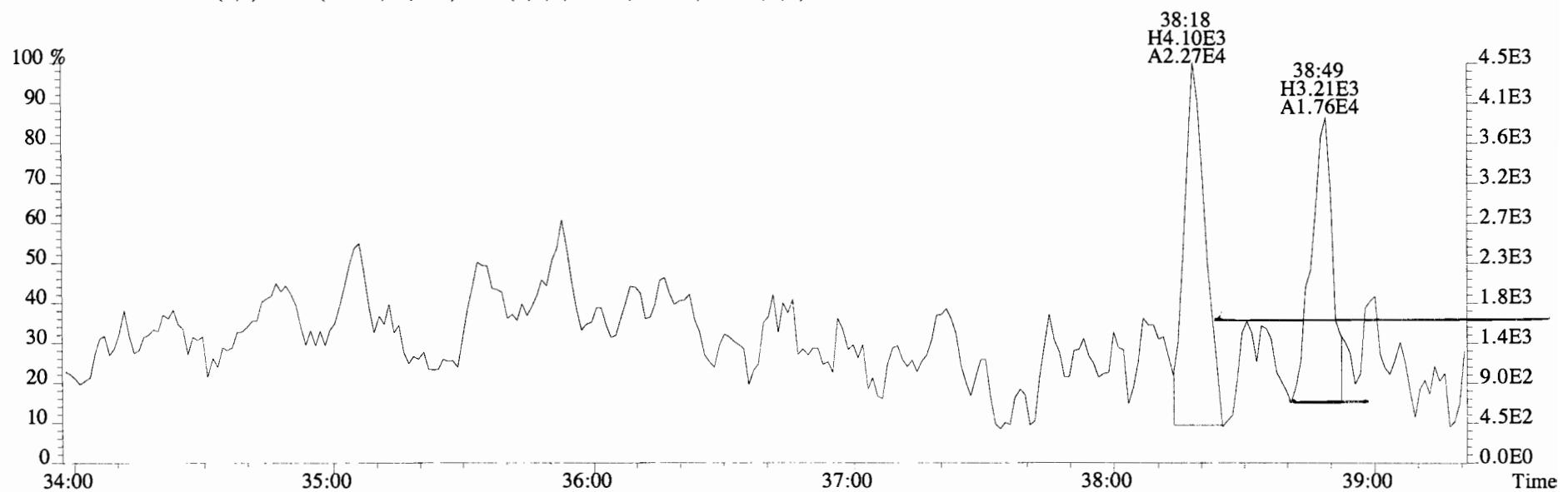
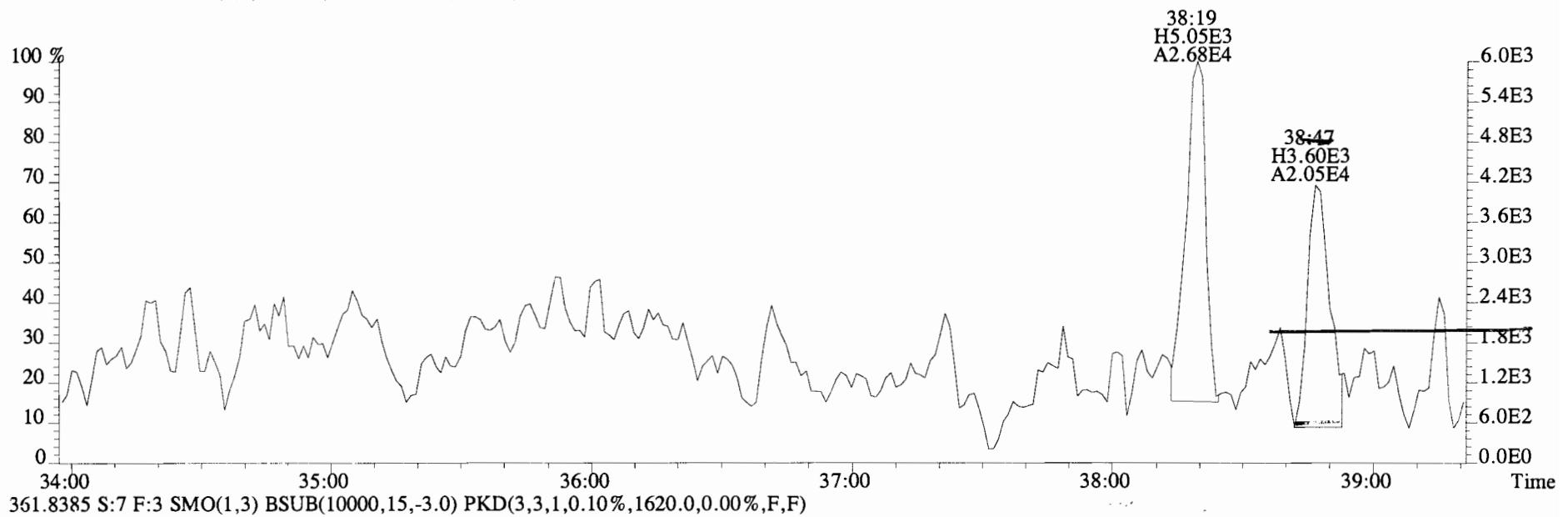
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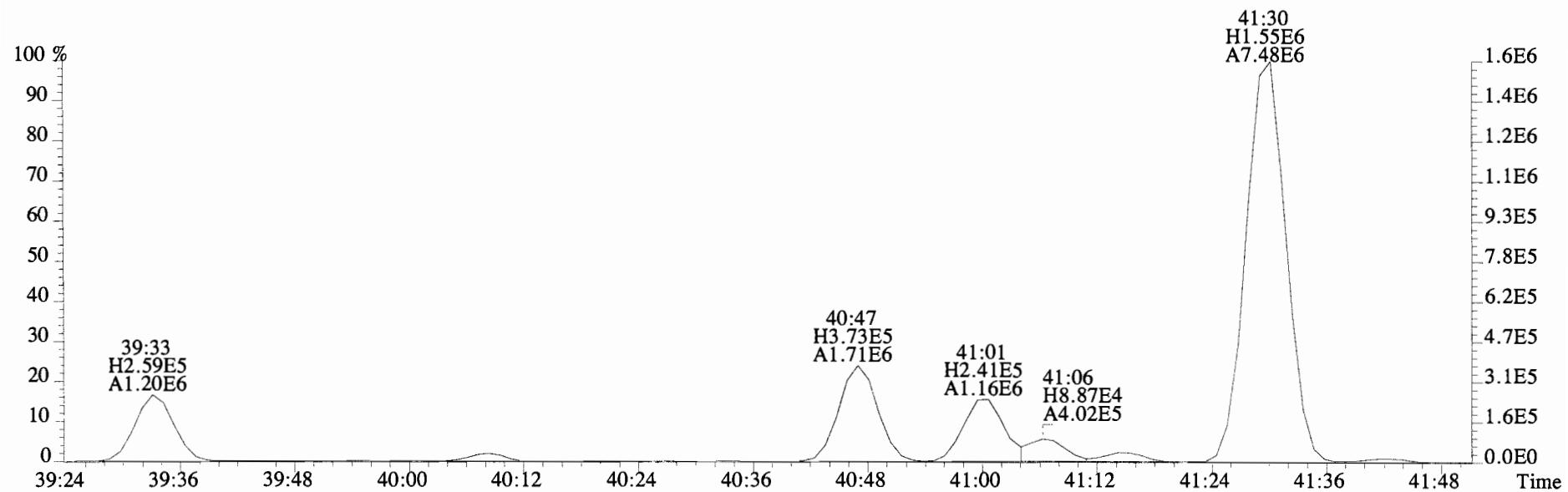
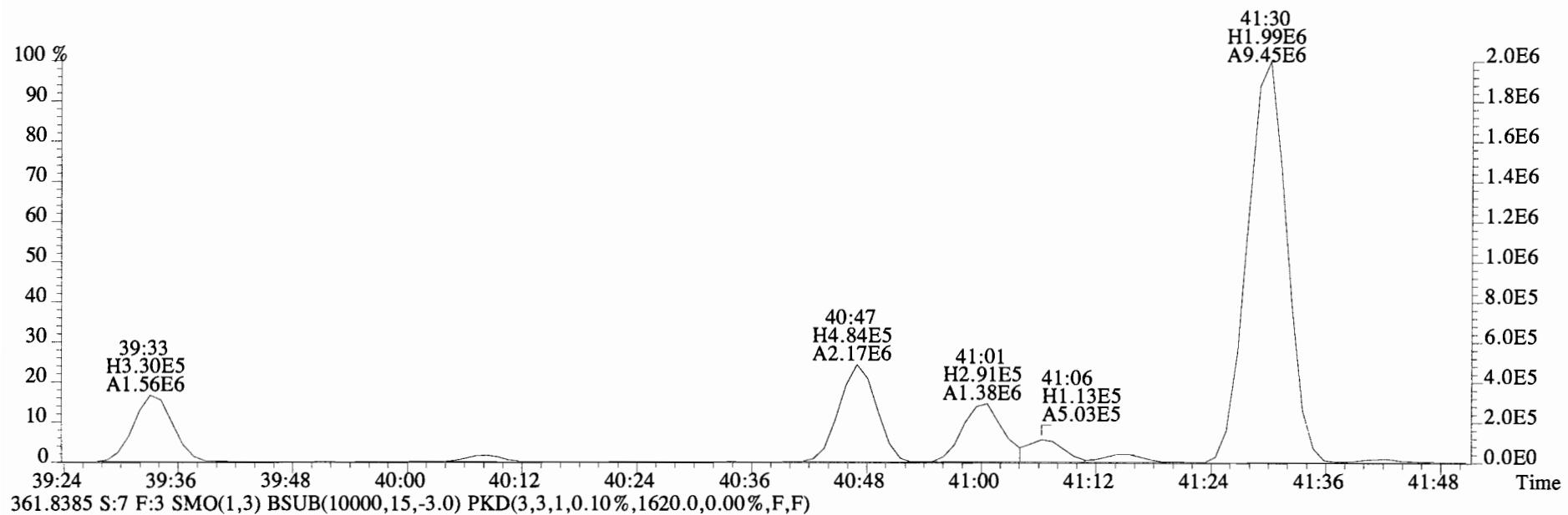
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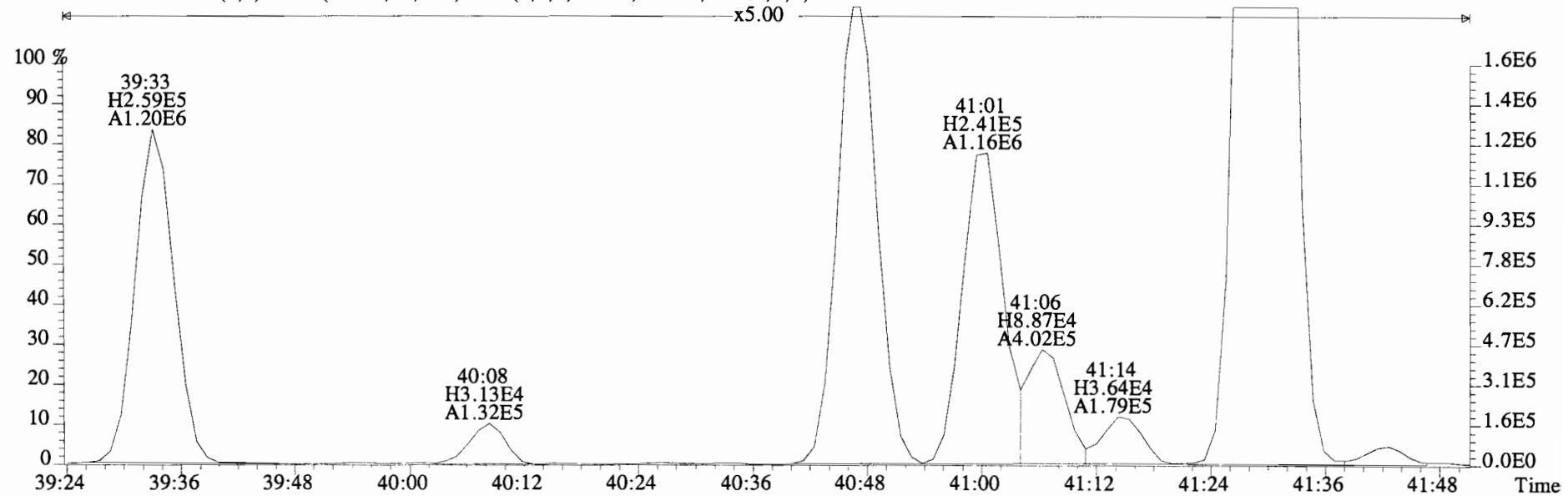
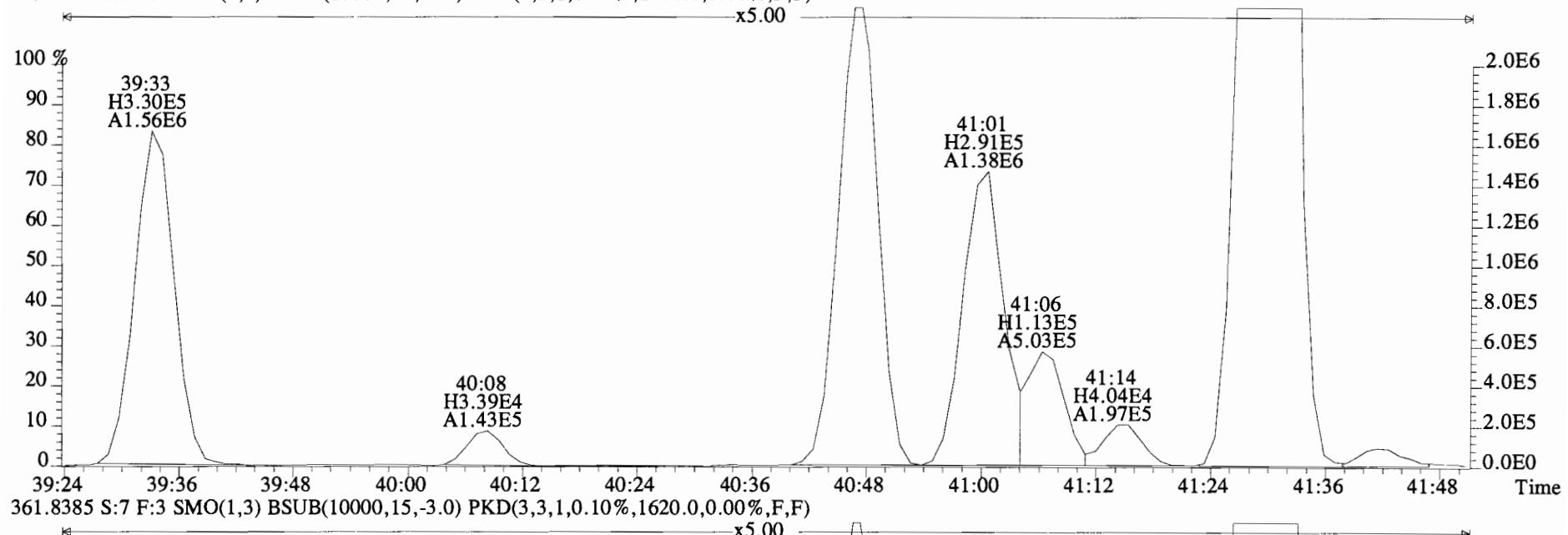
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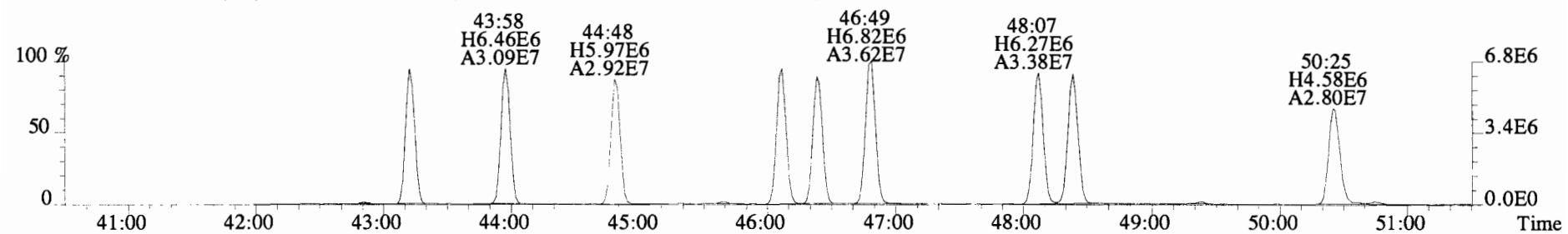
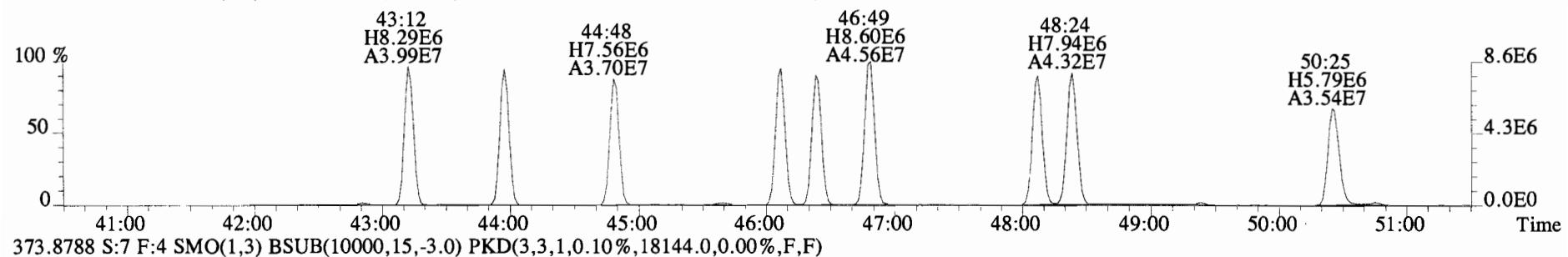
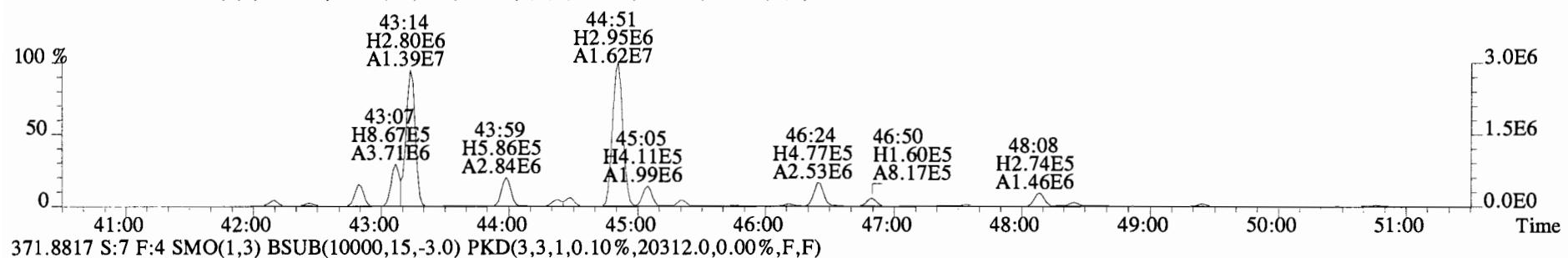
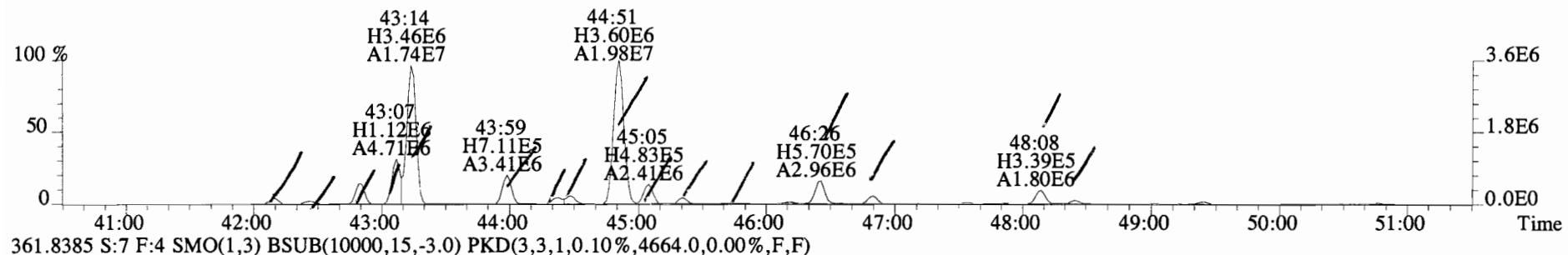
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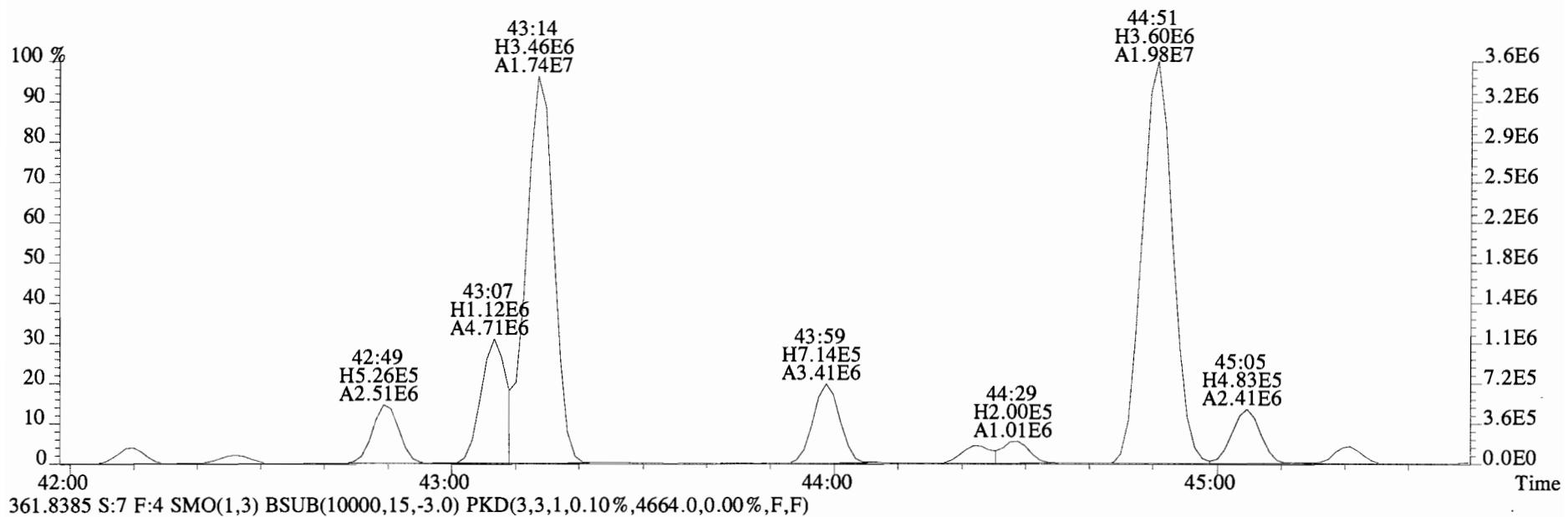
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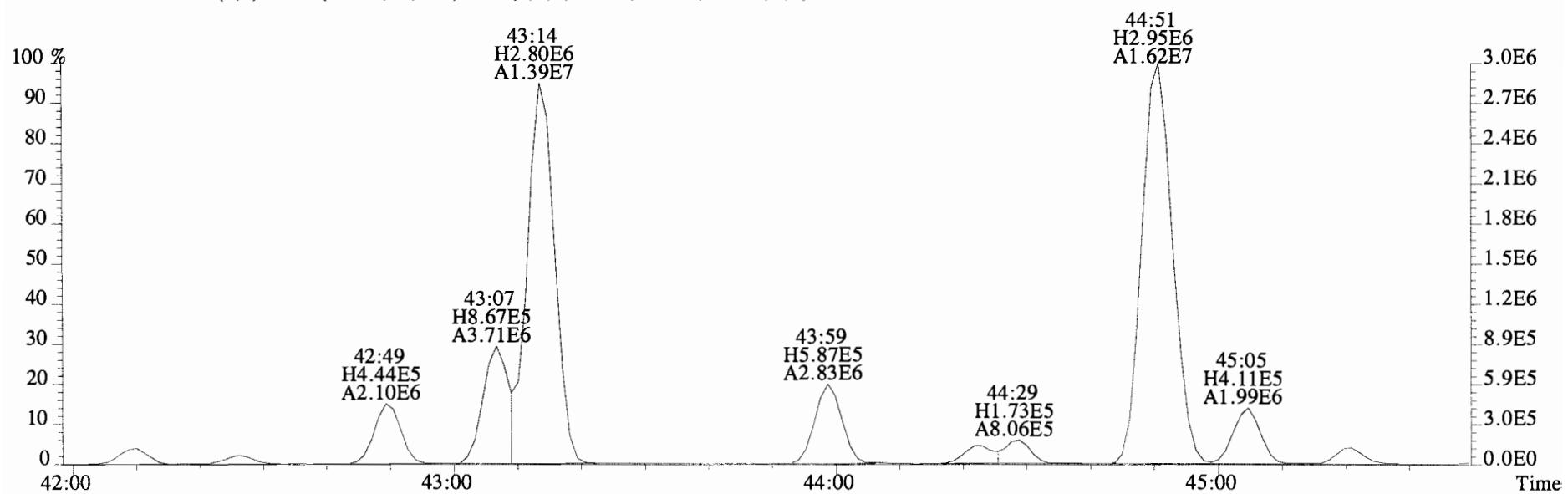
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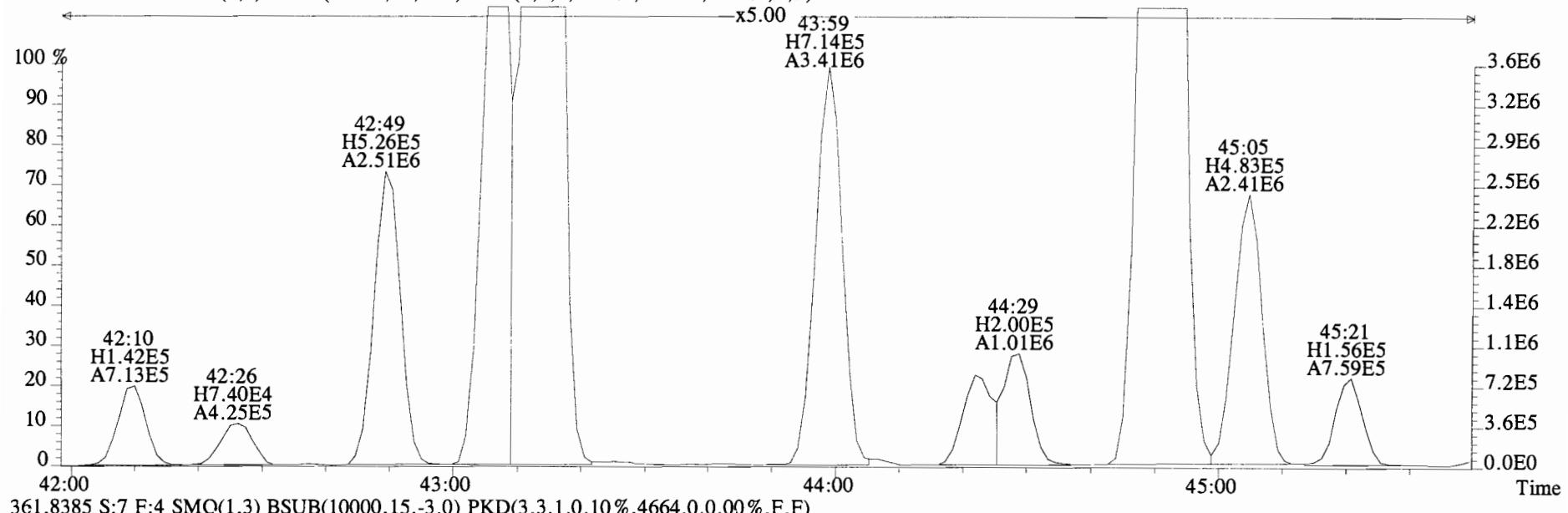
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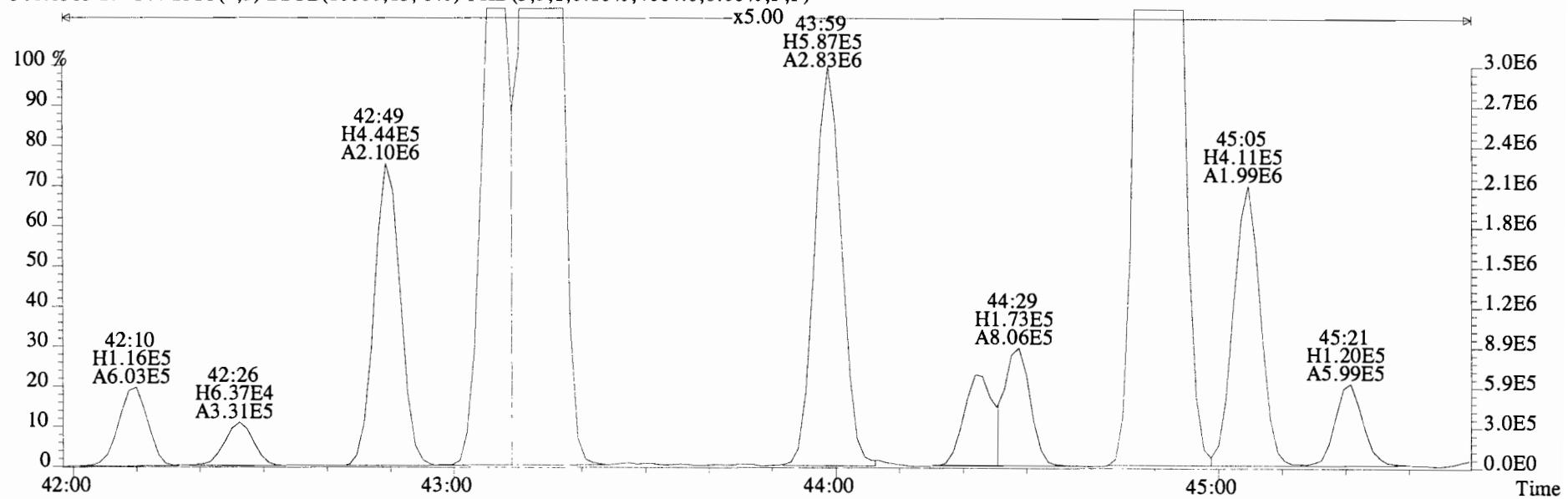
361.8385 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4664.0,0.00%,F,F)



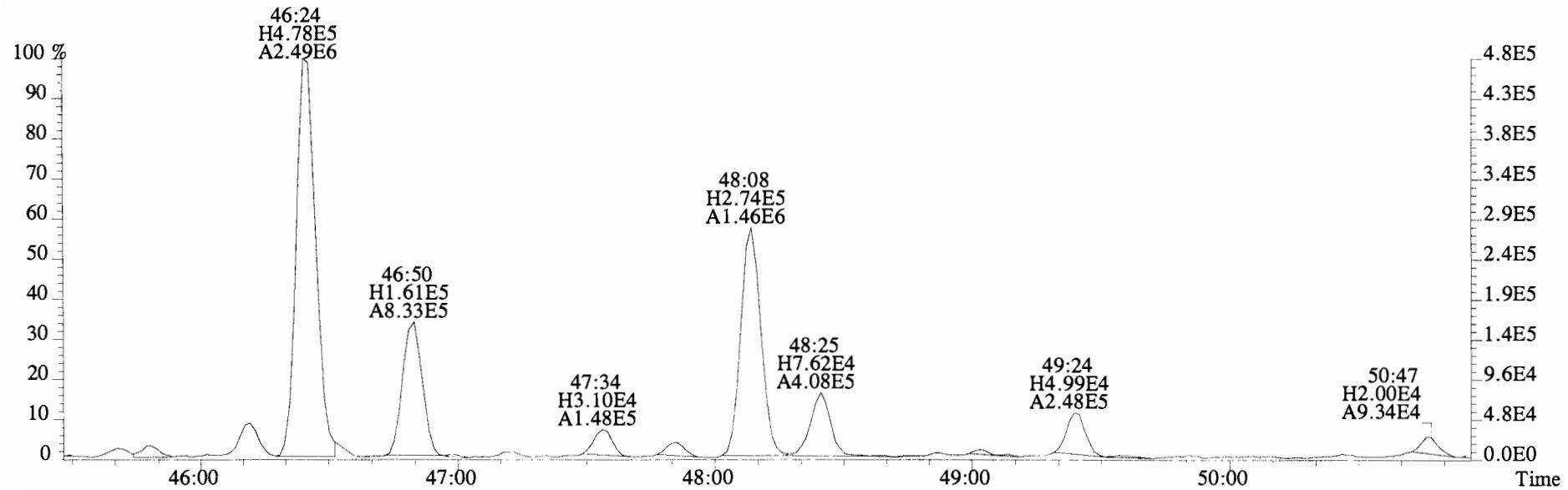
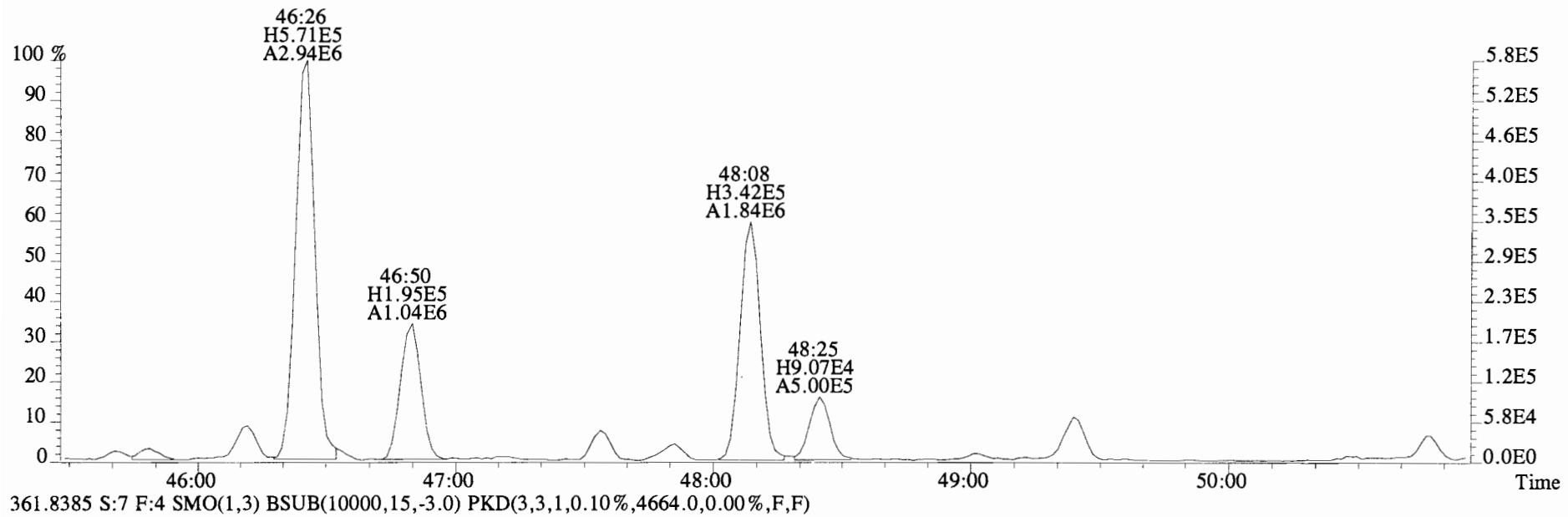
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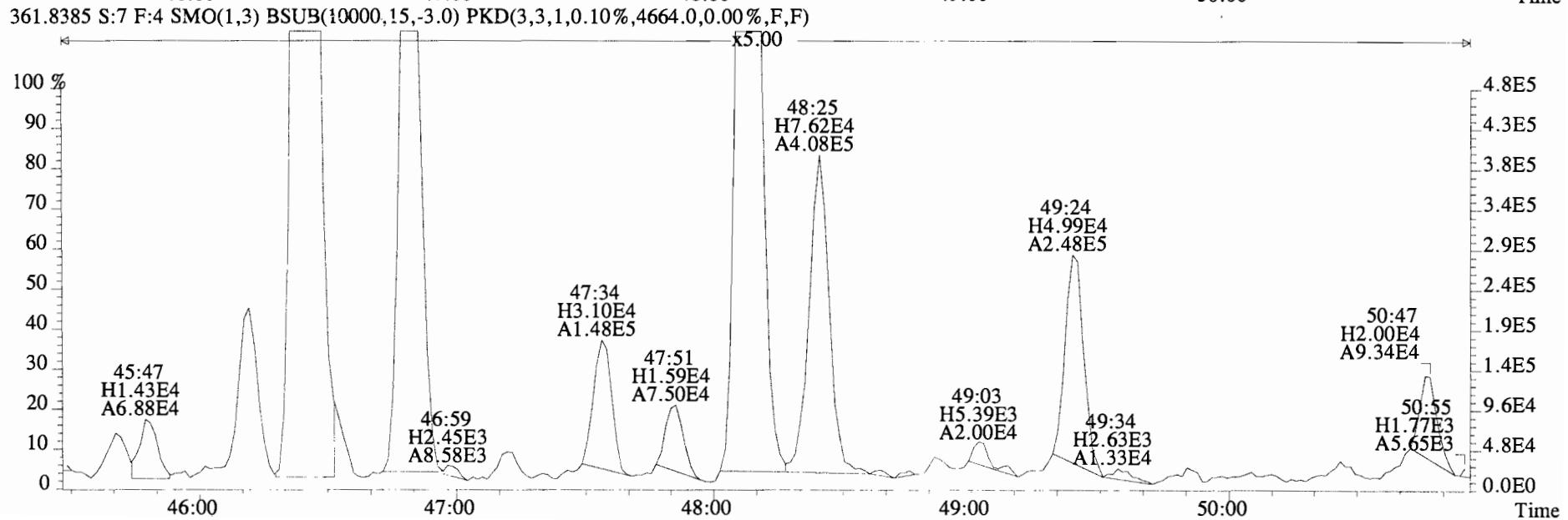
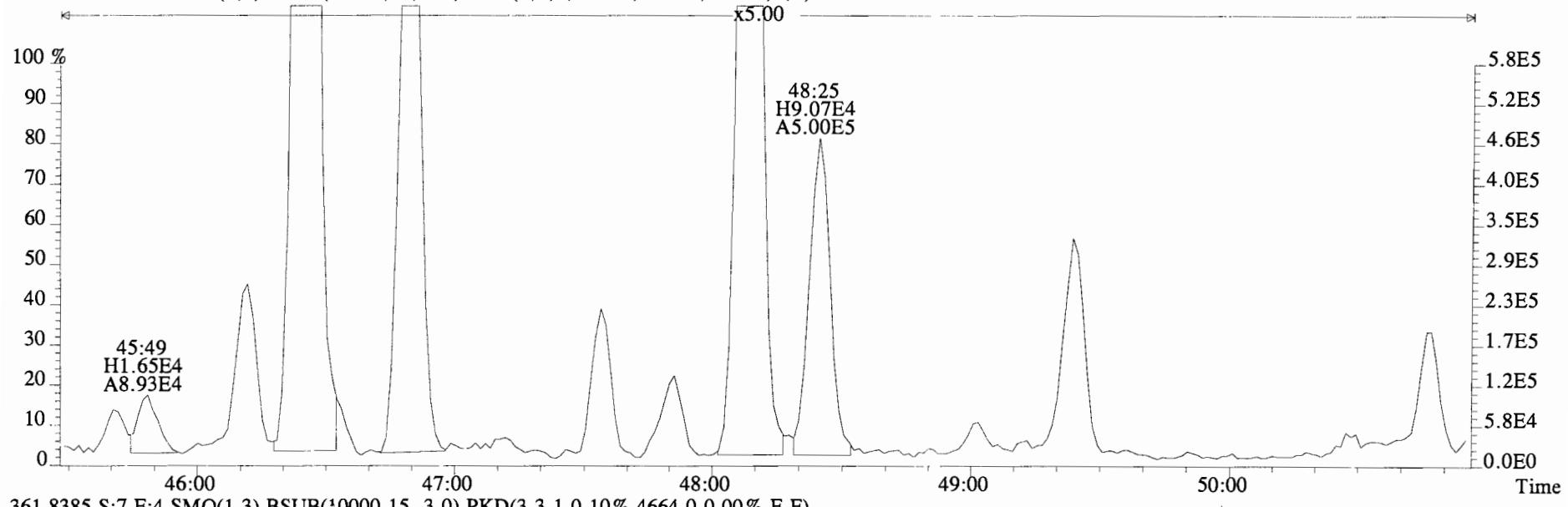
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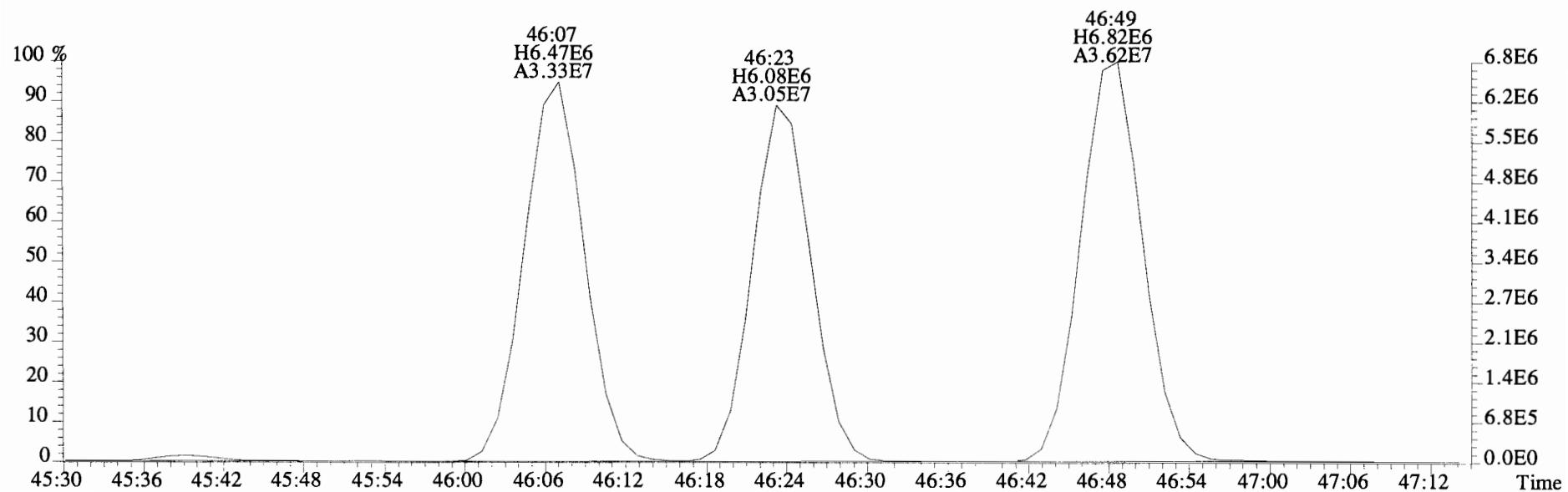
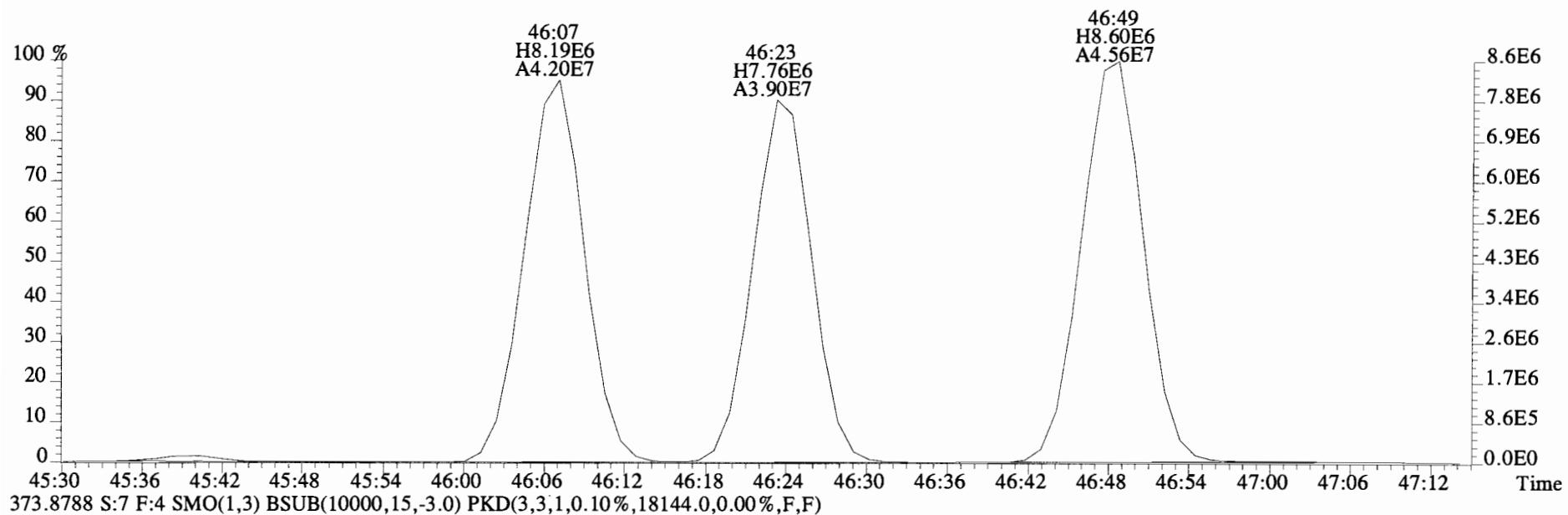
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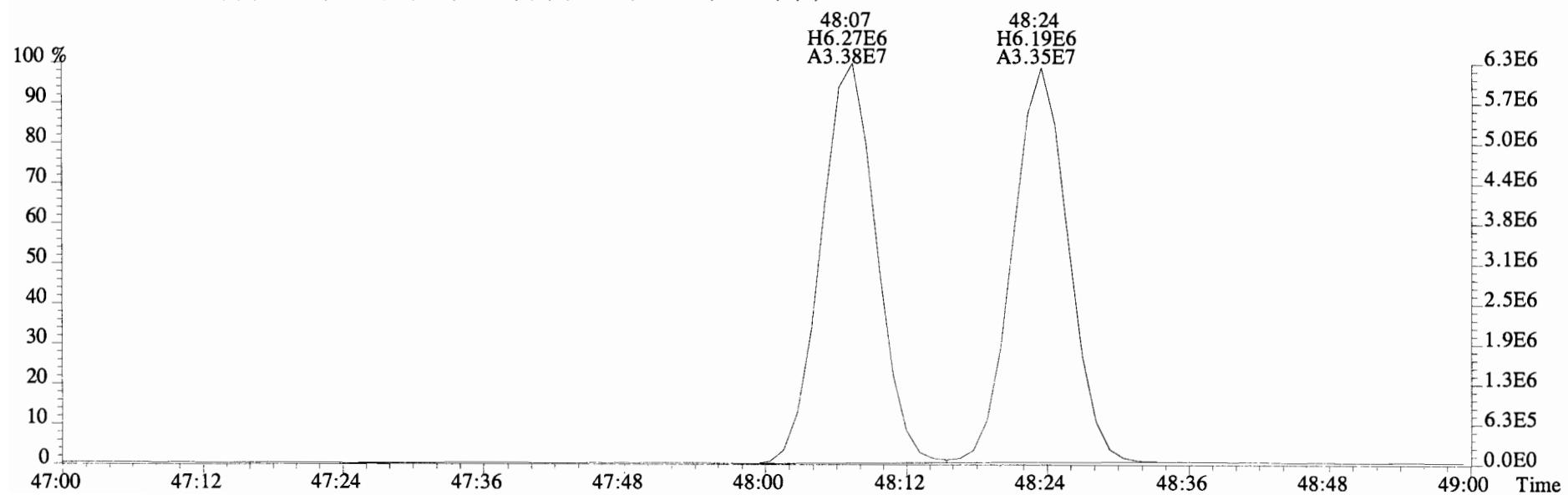
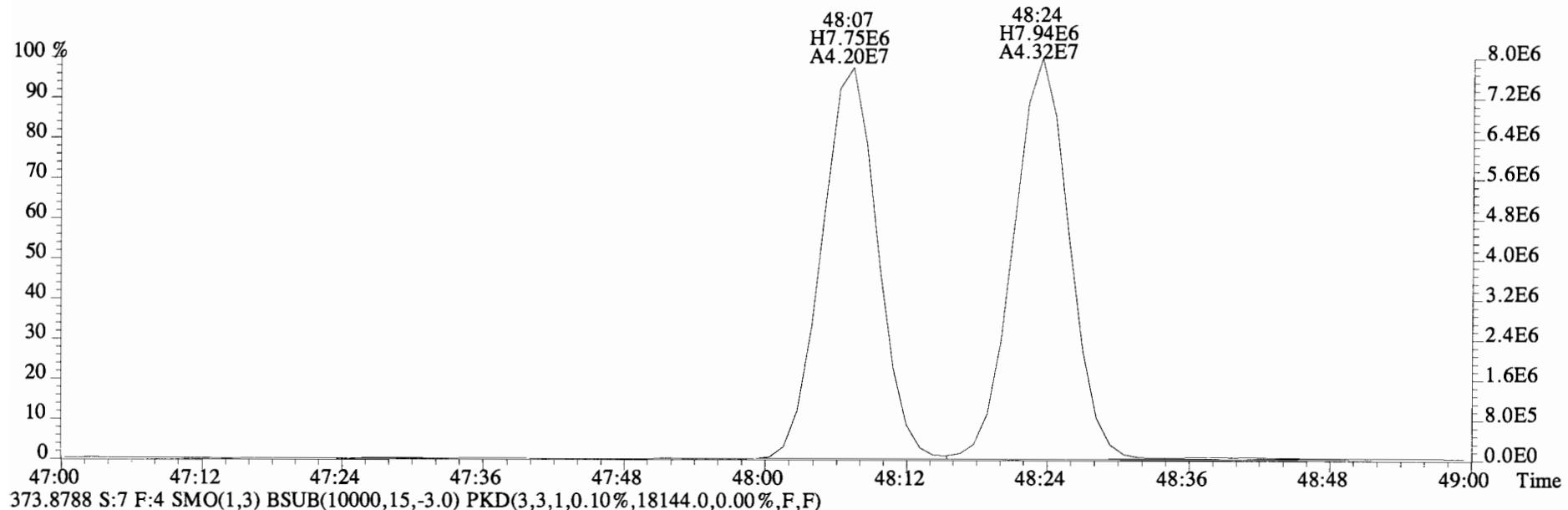
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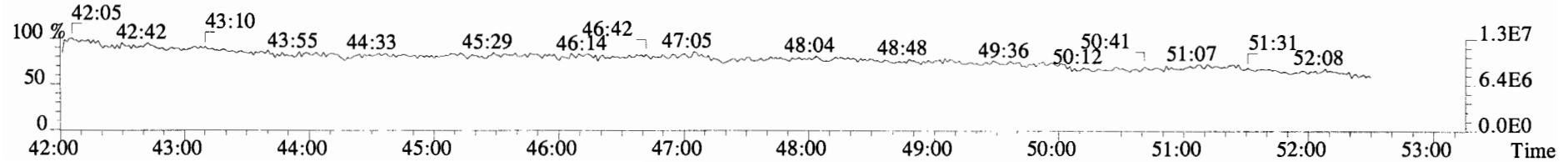
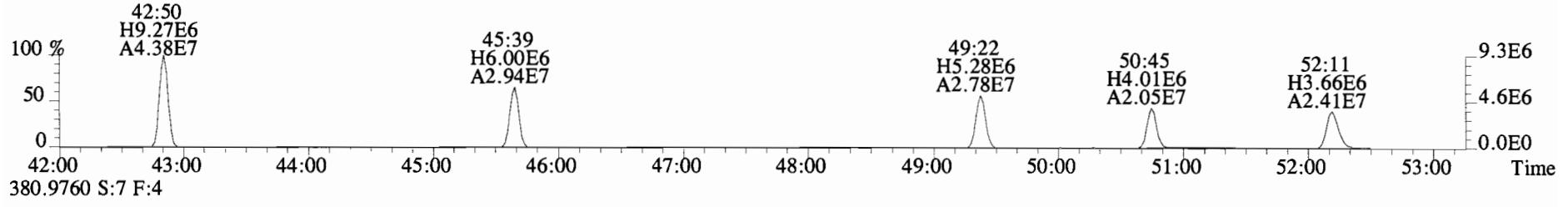
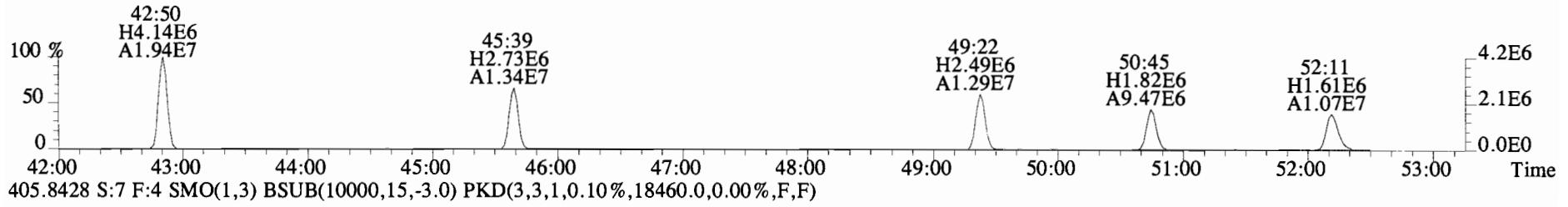
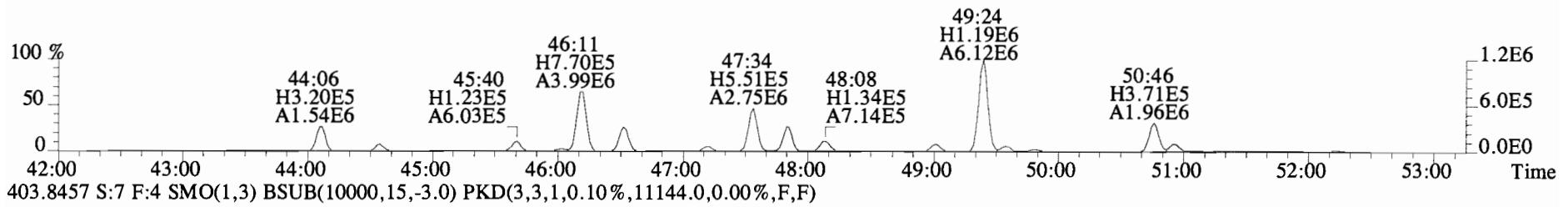
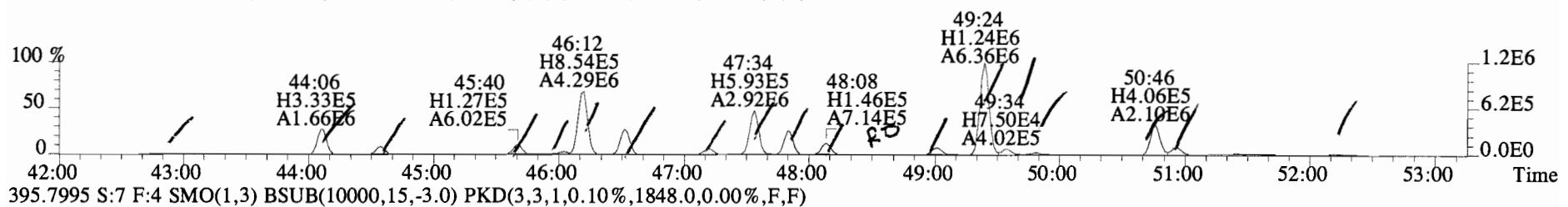
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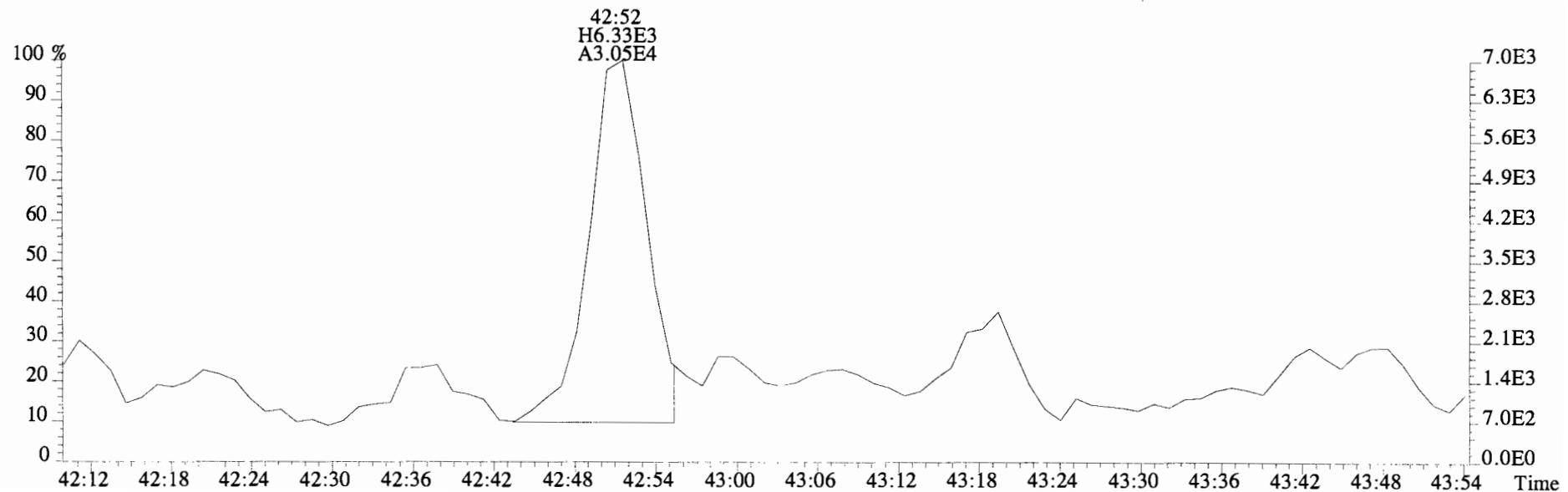
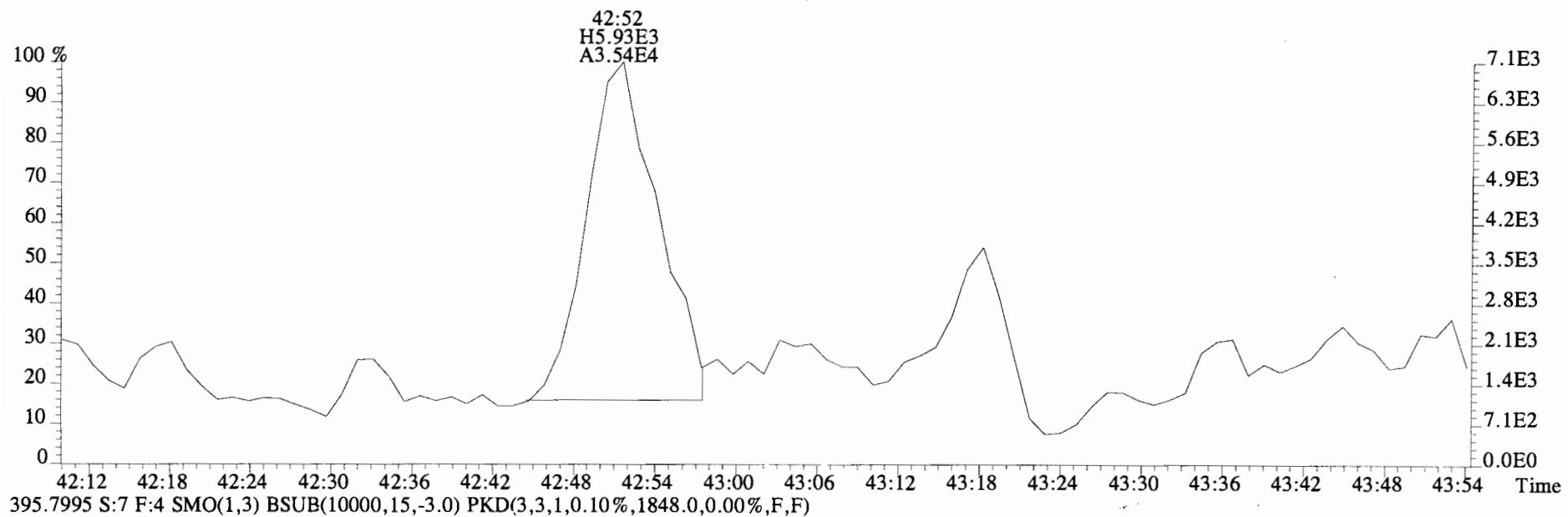
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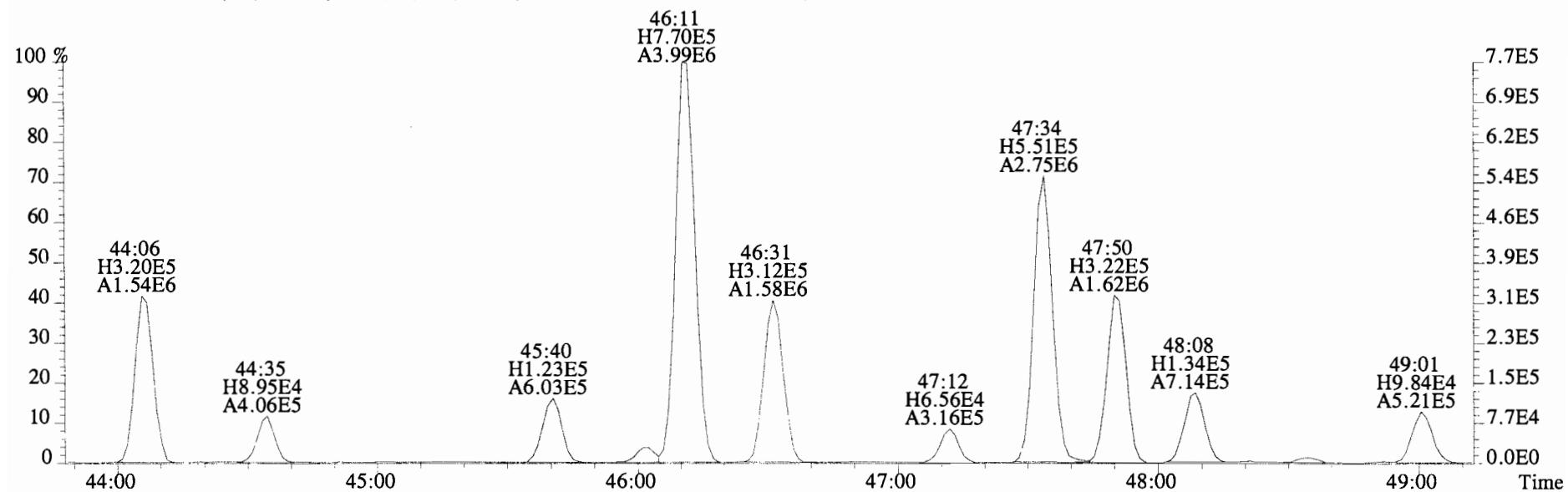
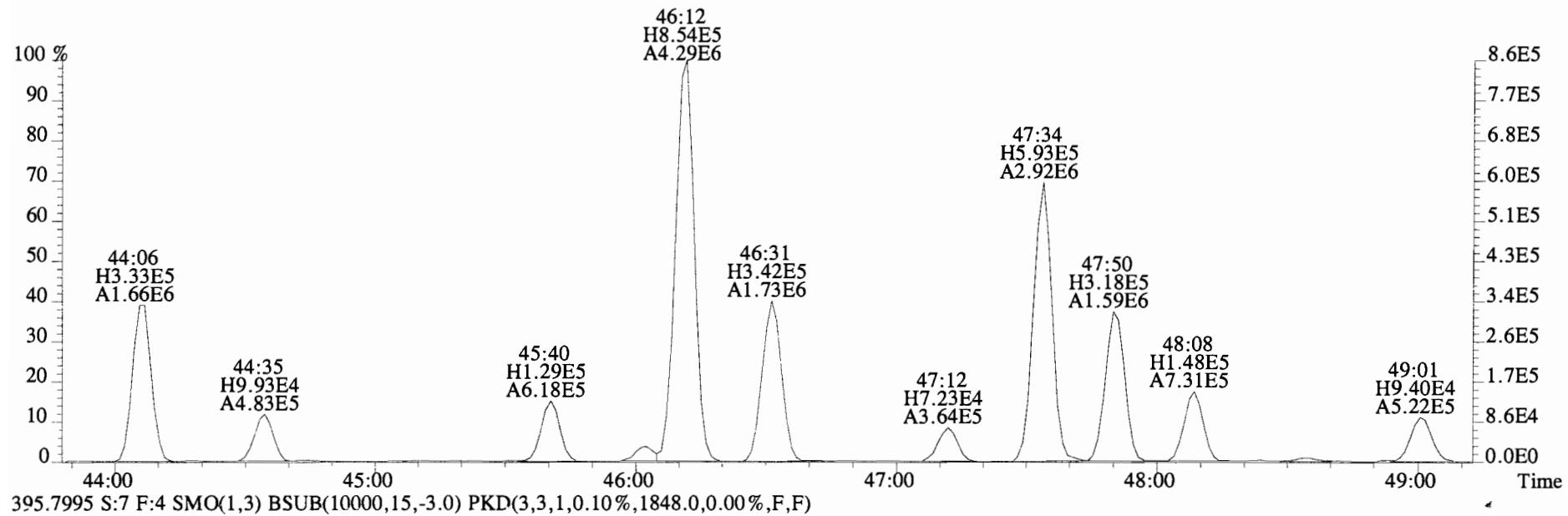
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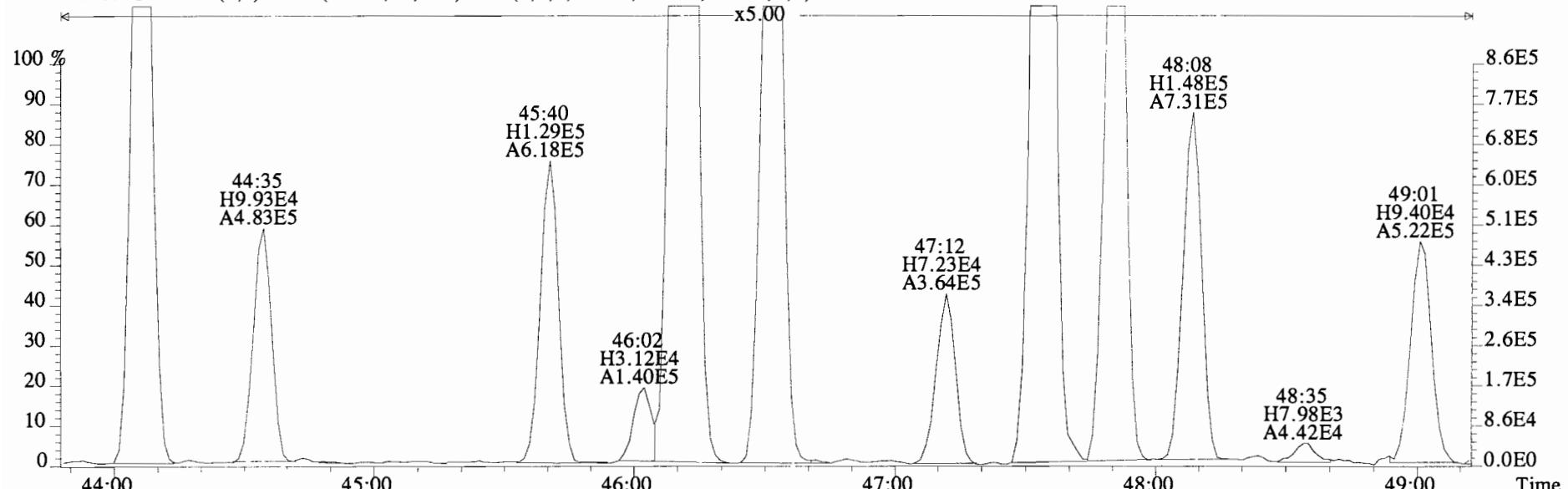
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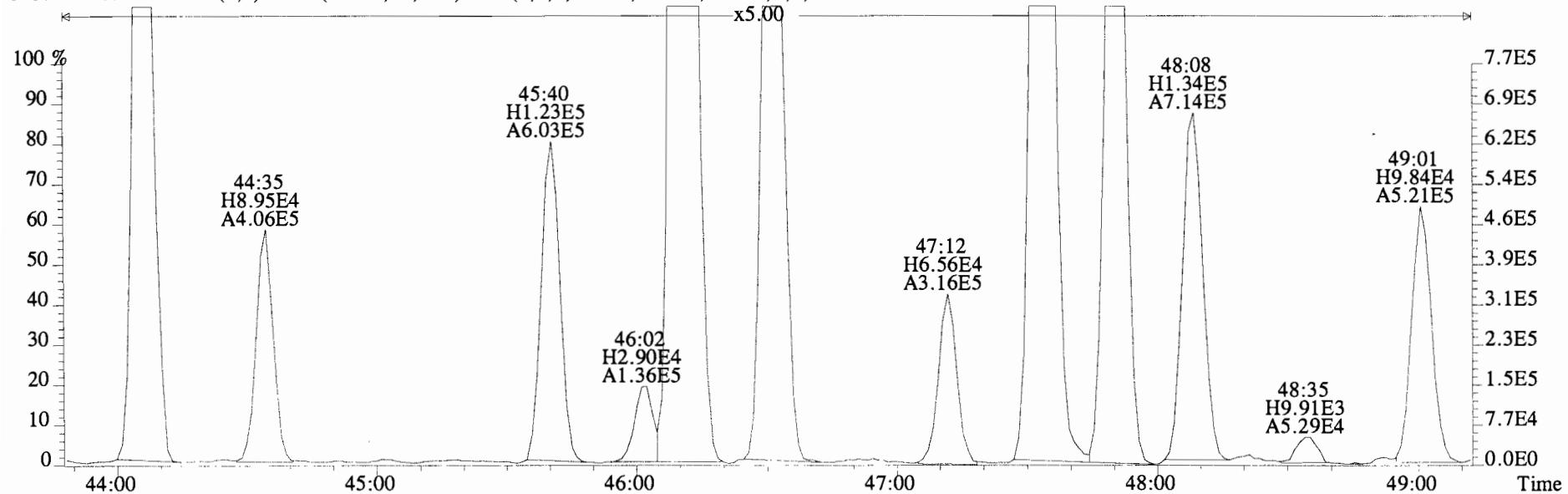
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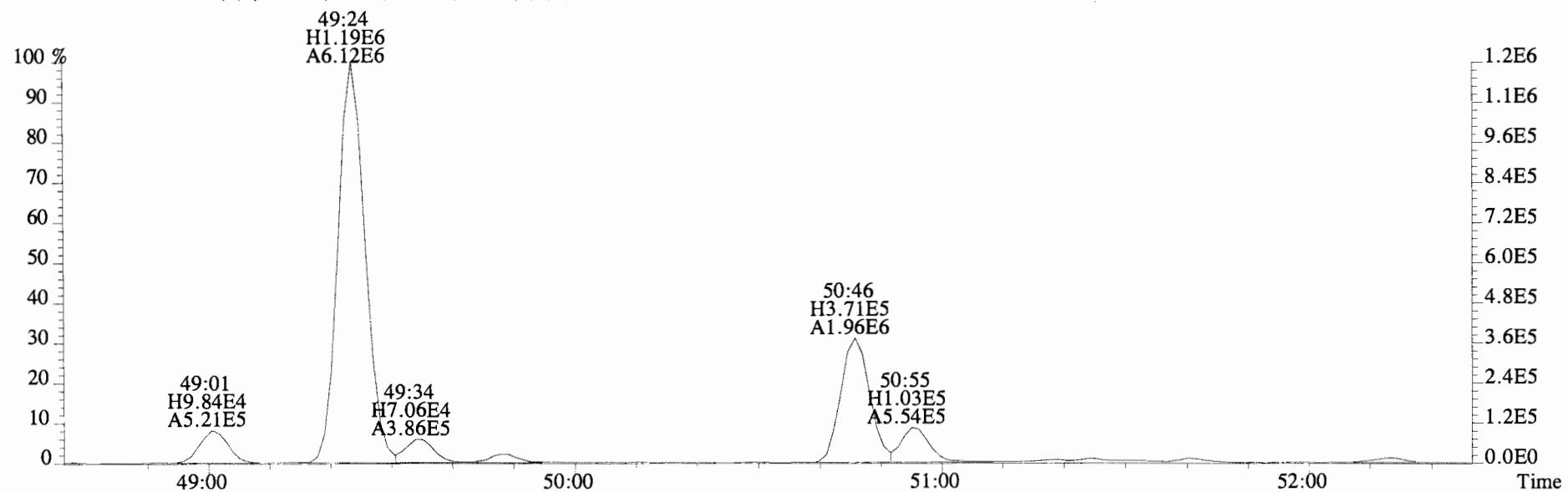
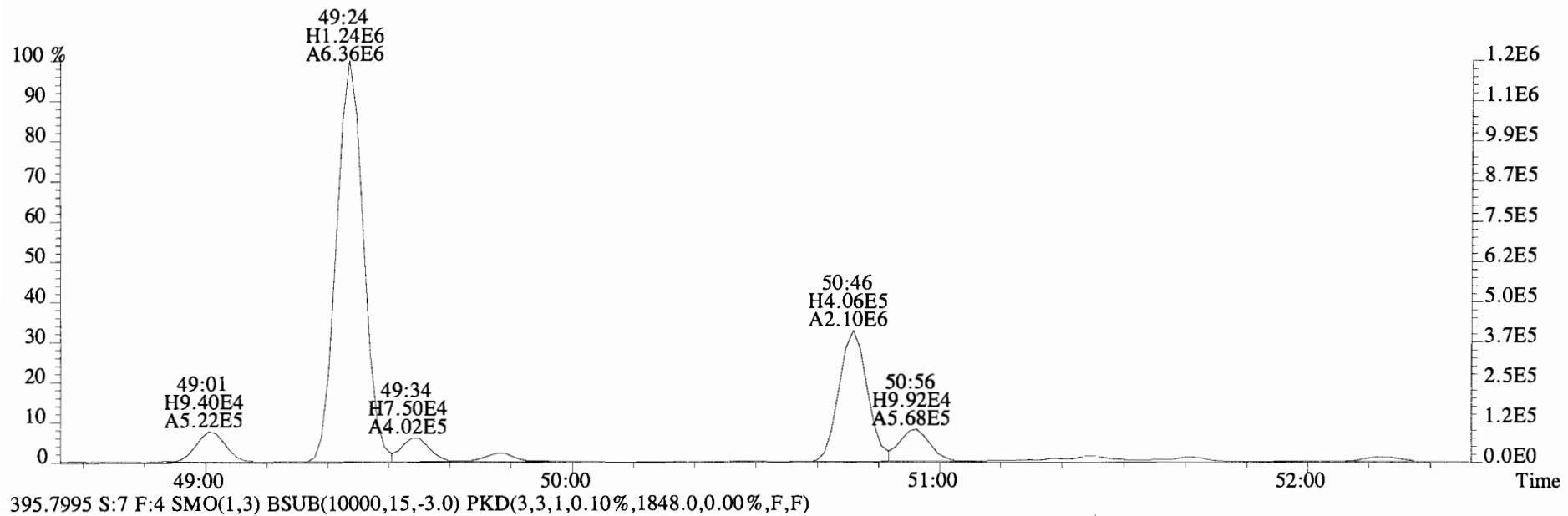
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 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
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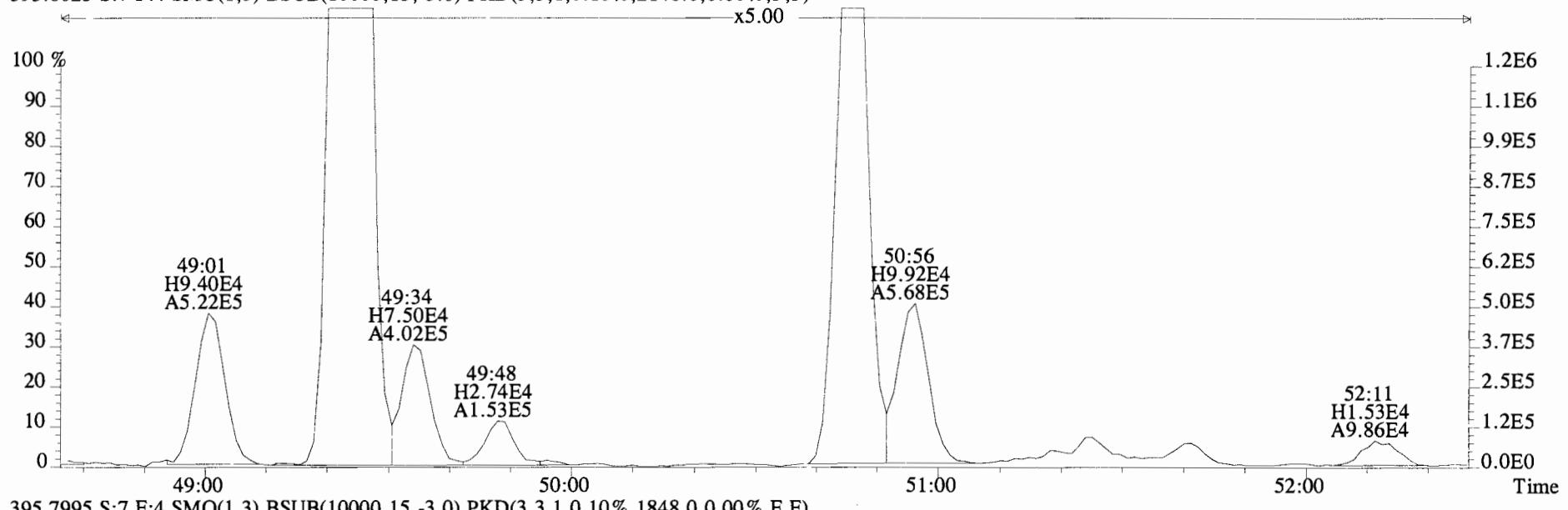
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1848.0,0.00%,F,F)



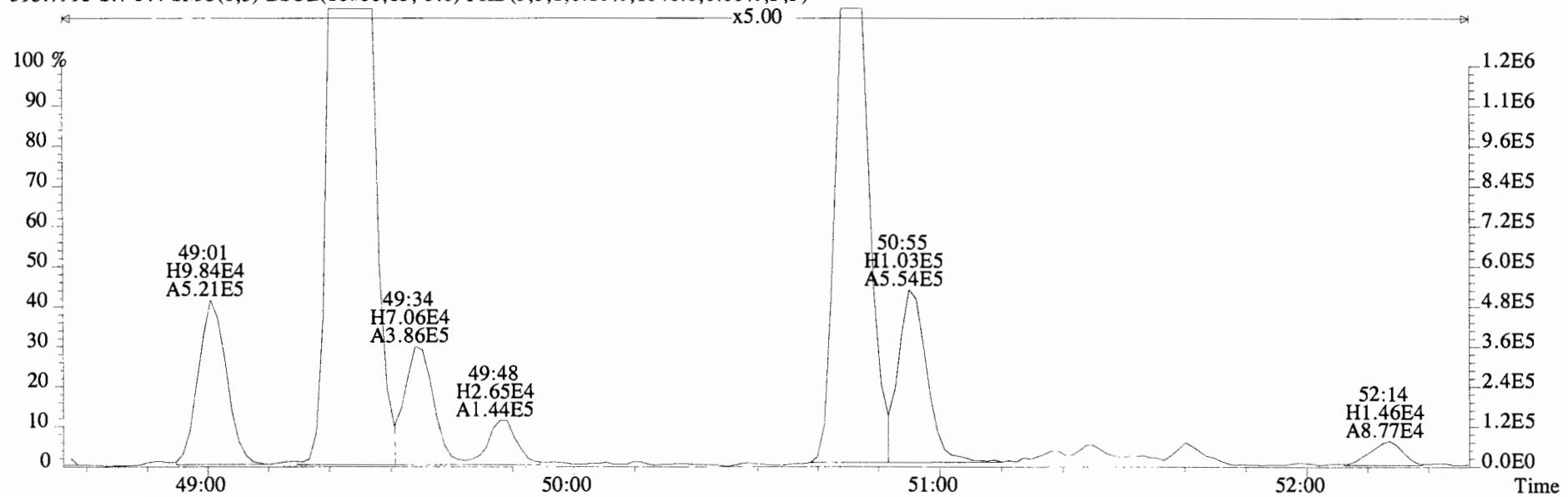
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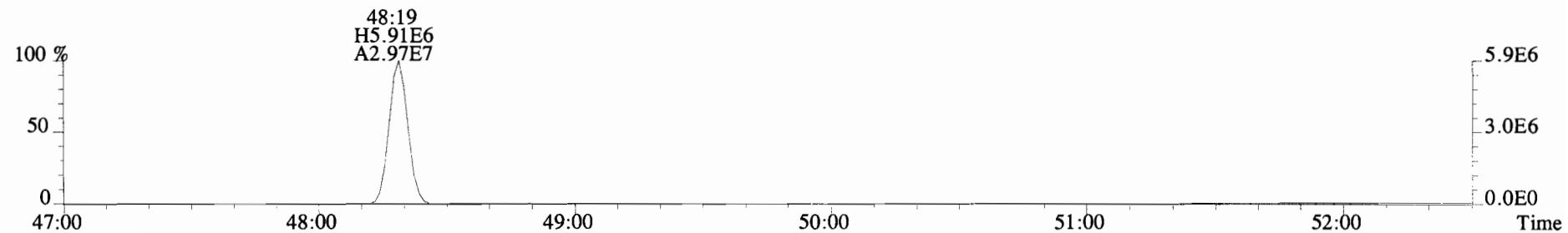
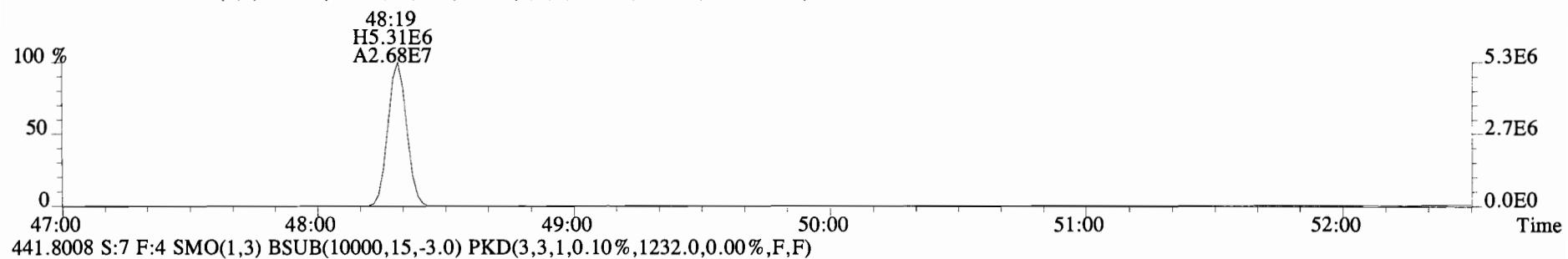
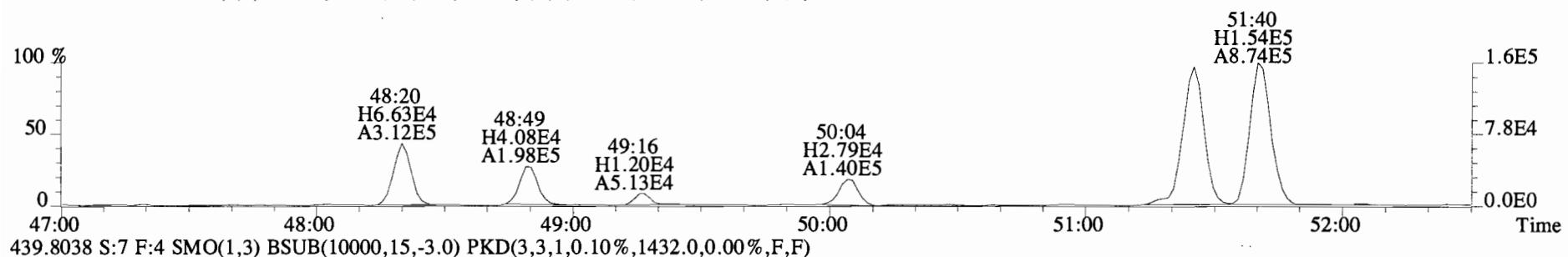
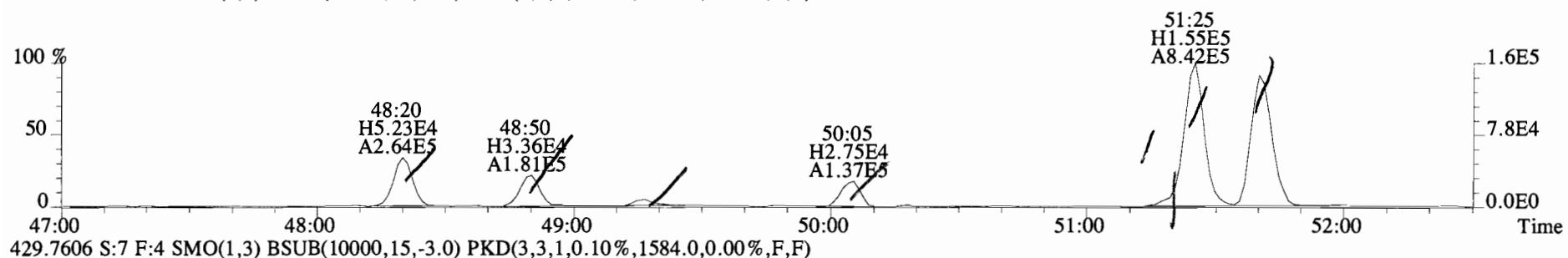
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
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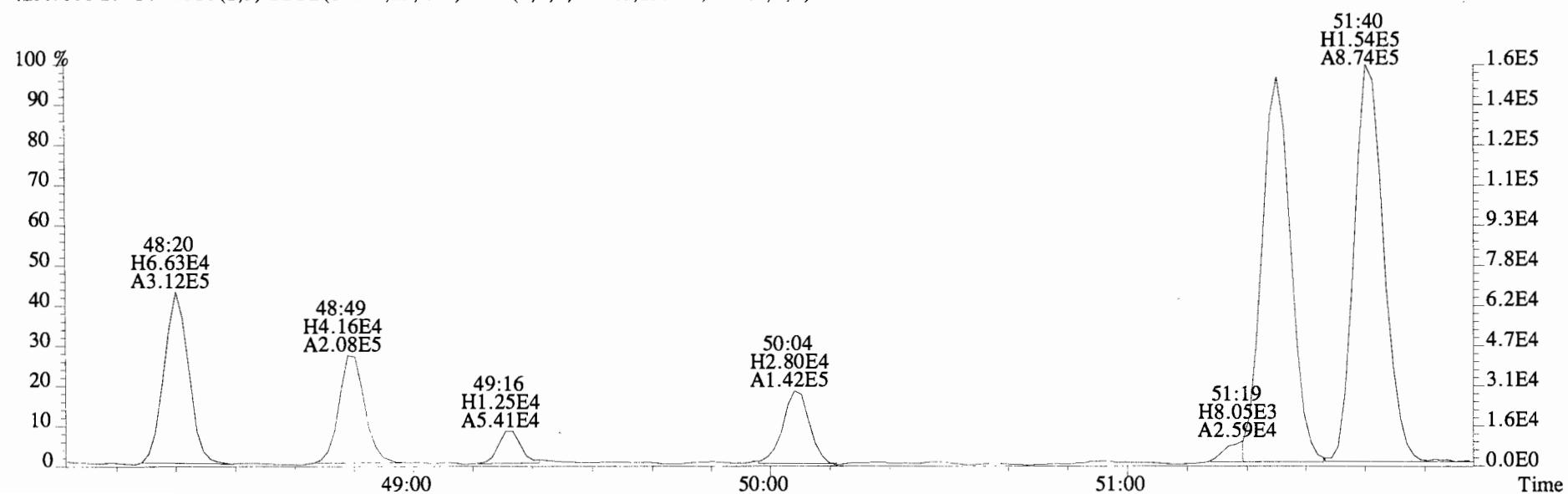
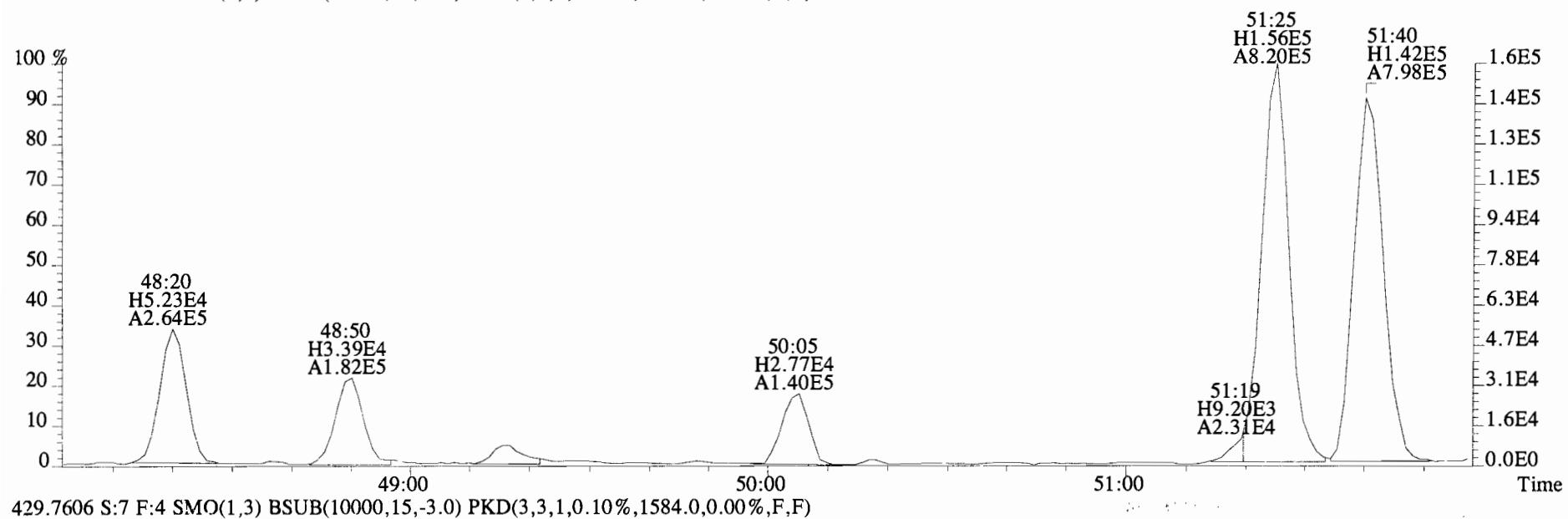
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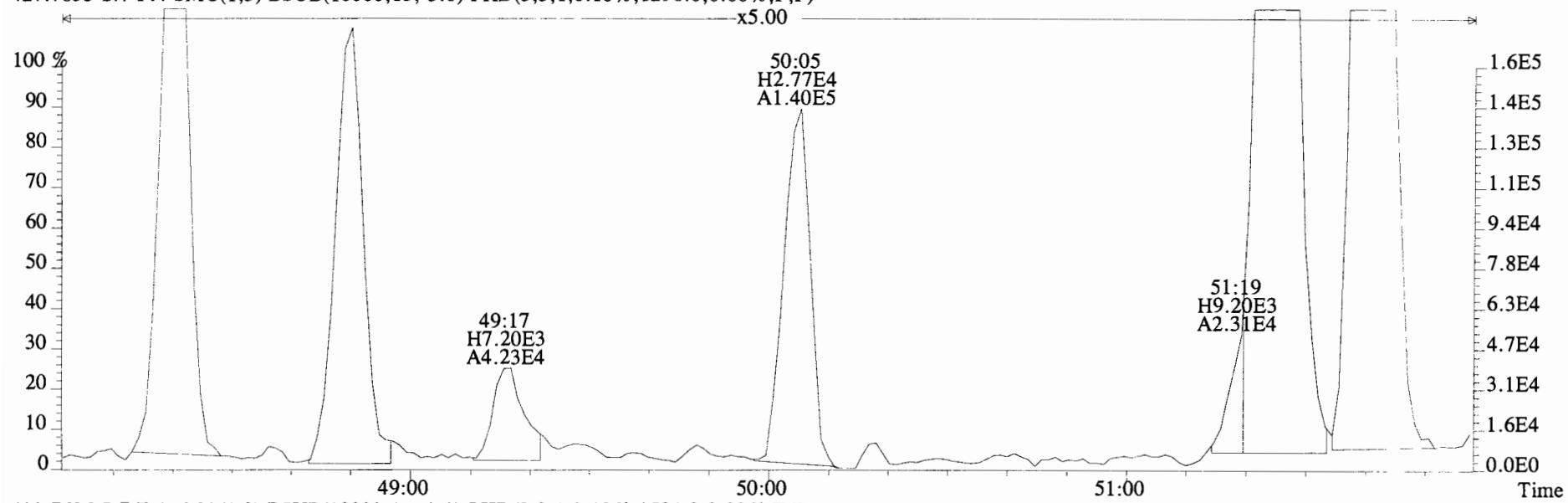
File:141021E2 #1-547 Acq:22-OCT-2014 02:33:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
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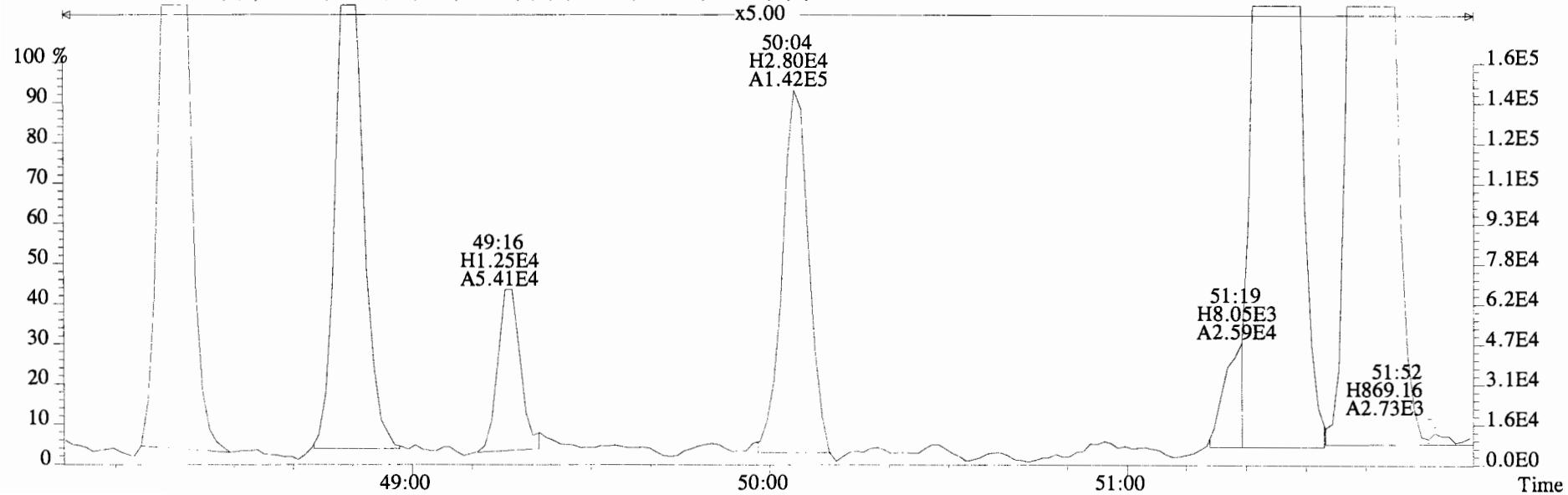
File:141021E2 #1-547 Acq:22-OCT-2014 02:33:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
427.7635 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1296.0,0.00%,F,F)



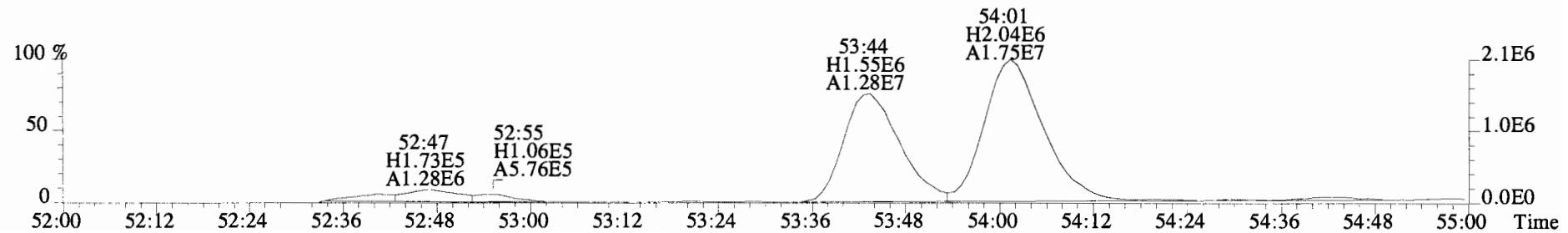
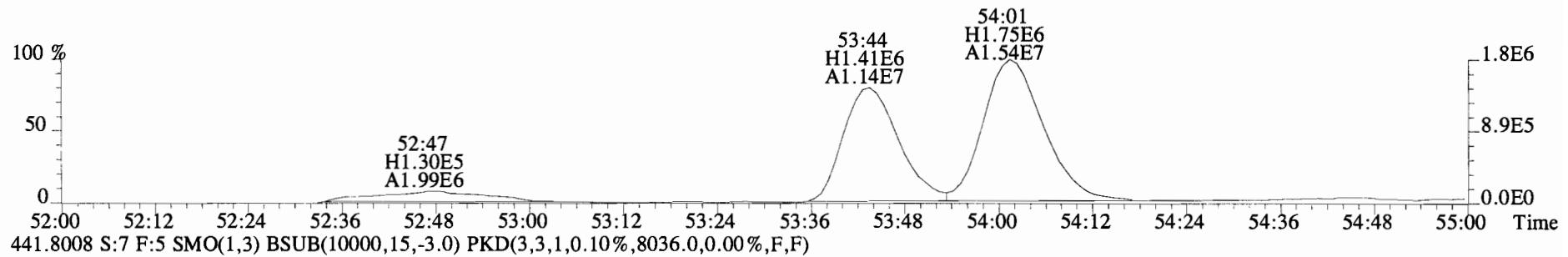
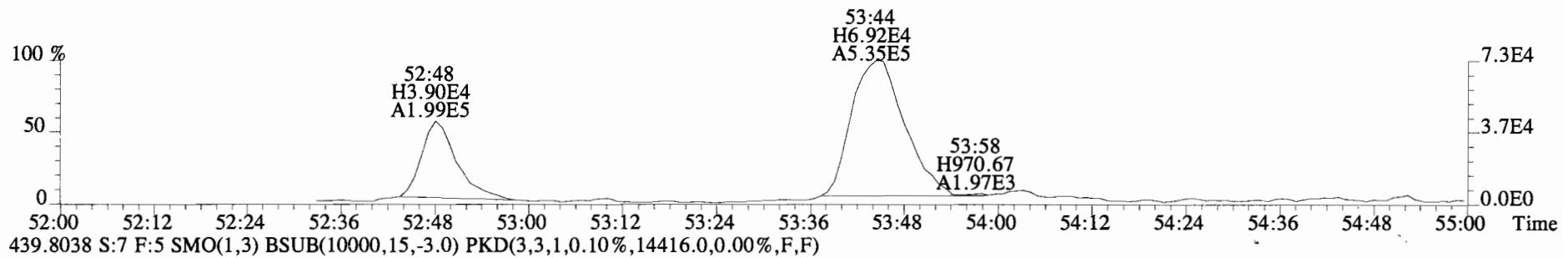
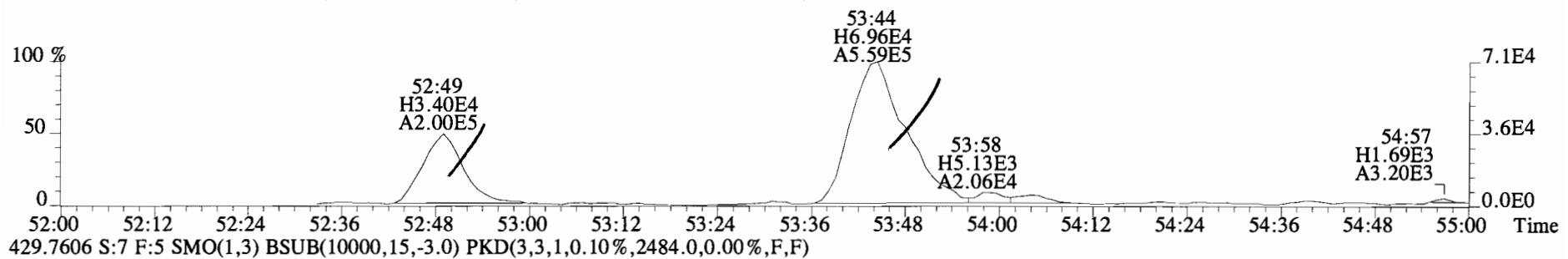
File:141021E2 #1-547 Acq:22-OCT-2014 02:33:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
427.7635 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1296.0,0.00%,F,F)



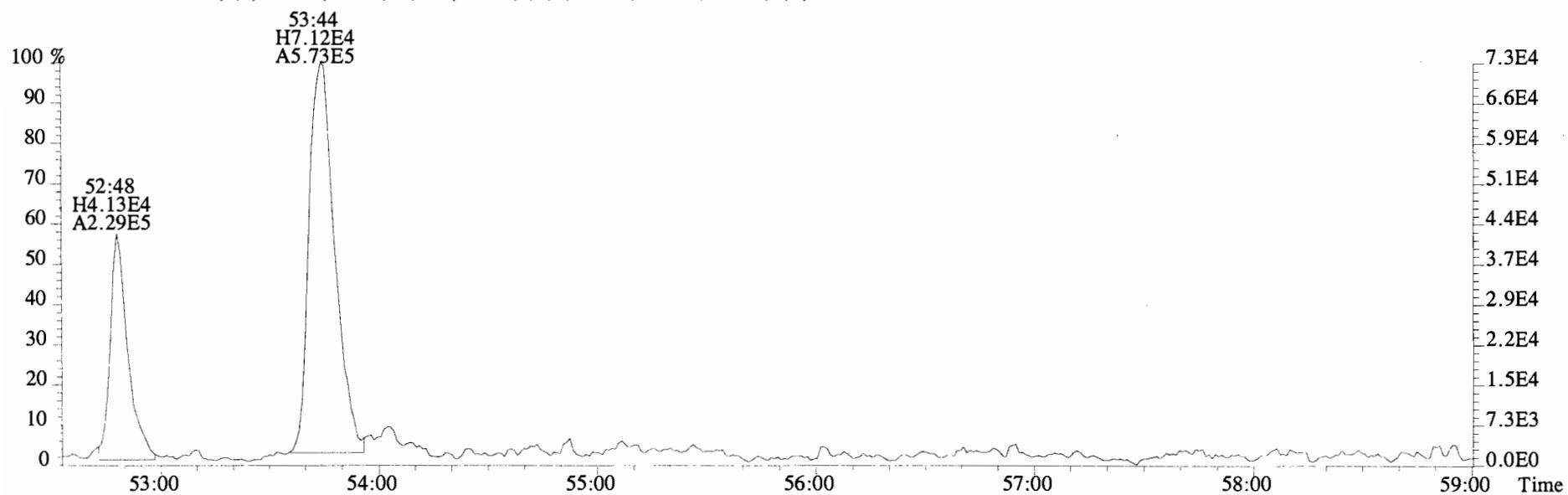
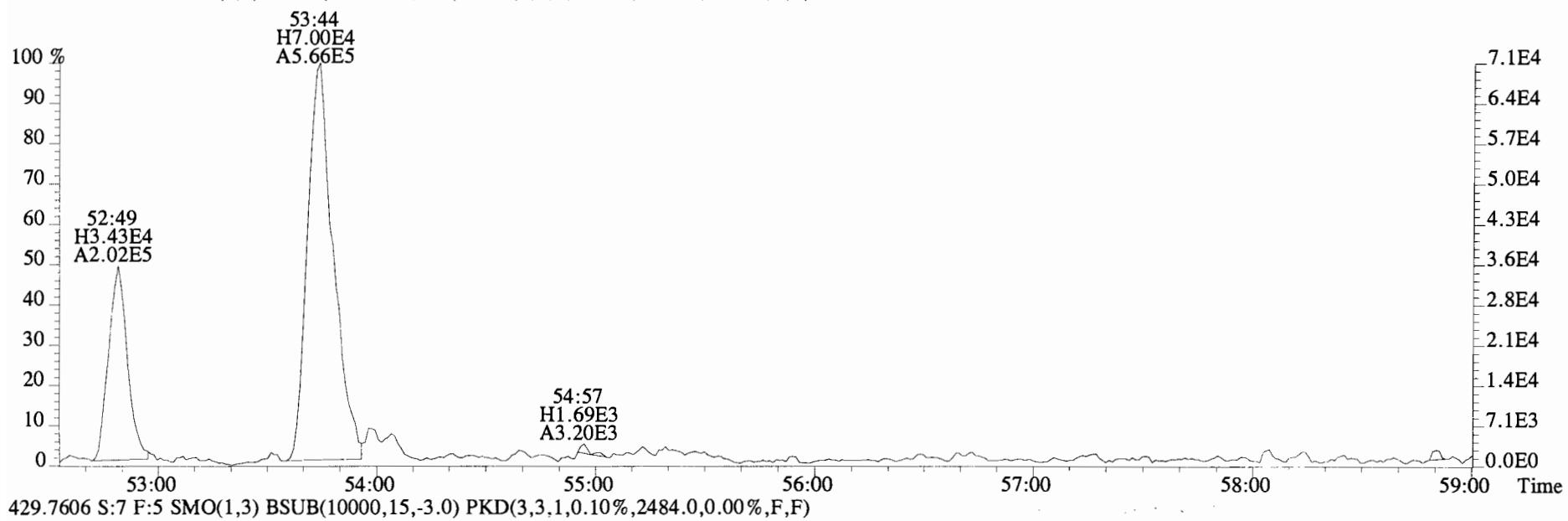
429.7606 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1584.0,0.00%,F,F)



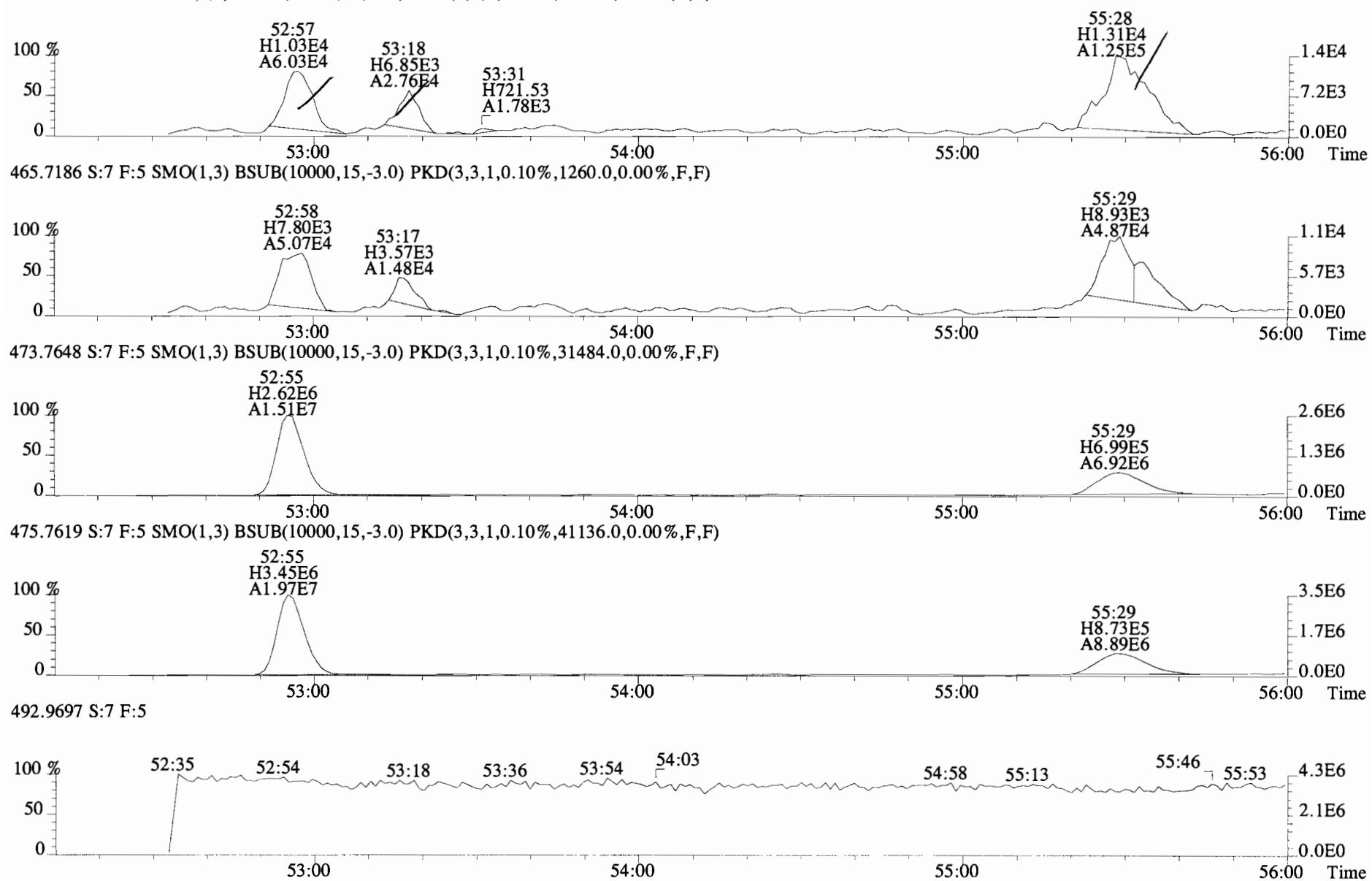
File:141021E2 #1-434 Acq:22-OCT-2014 02:33:44 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
 427.7635 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1644.0,0.00%,F,F)



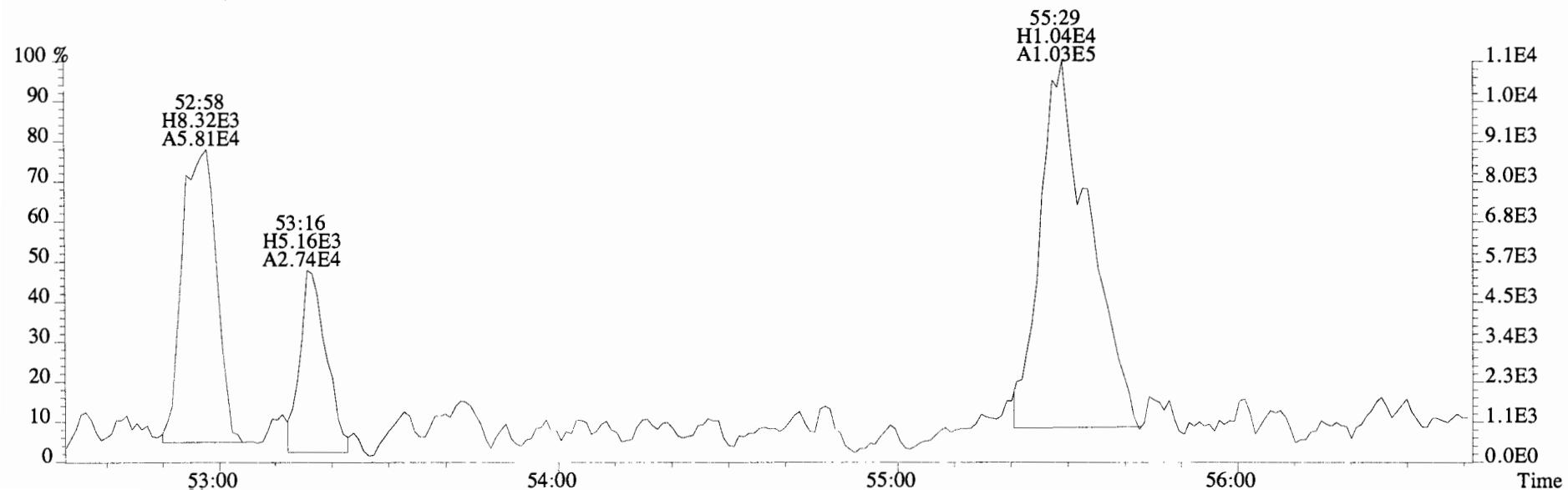
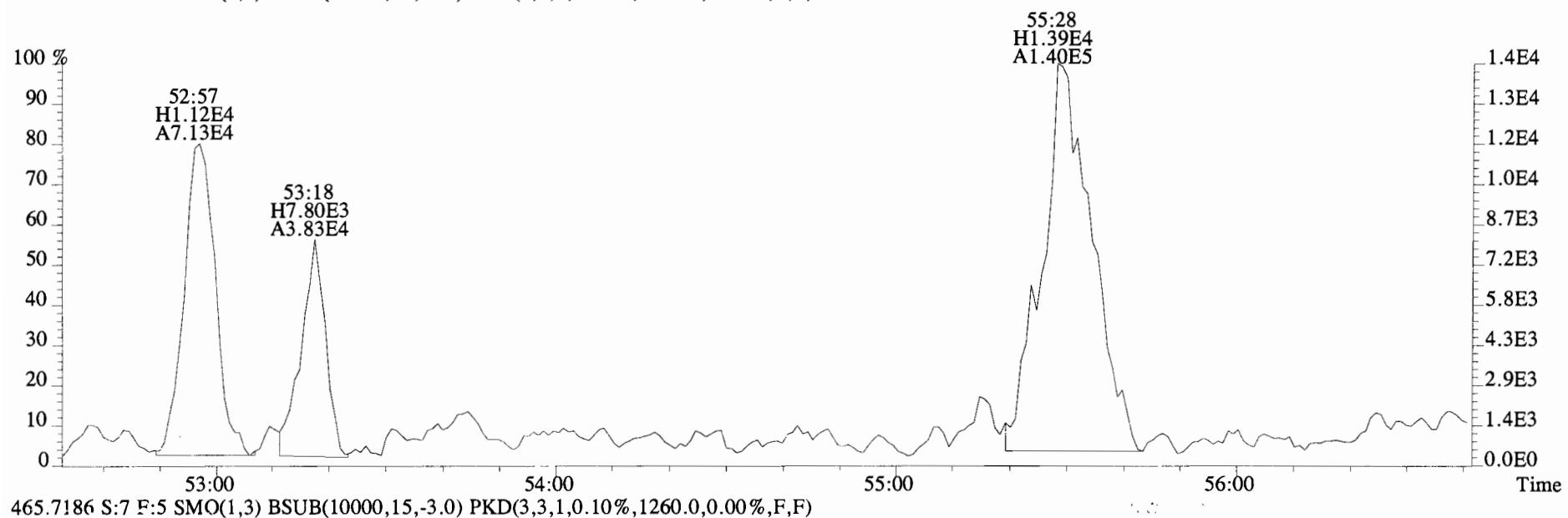
File:141021E2 #1-434 Acq:22-OCT-2014 02:33:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
427.7635 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1644.0,0.00%,F,F)



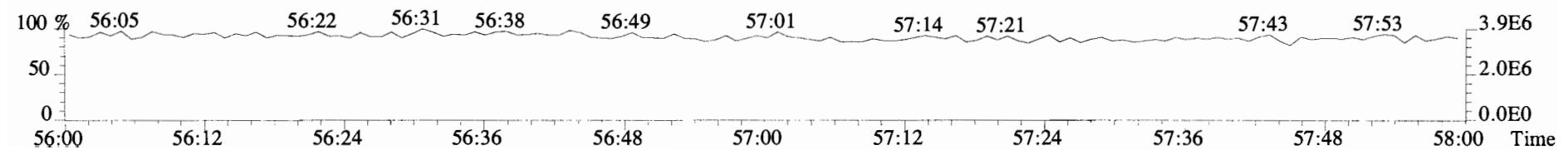
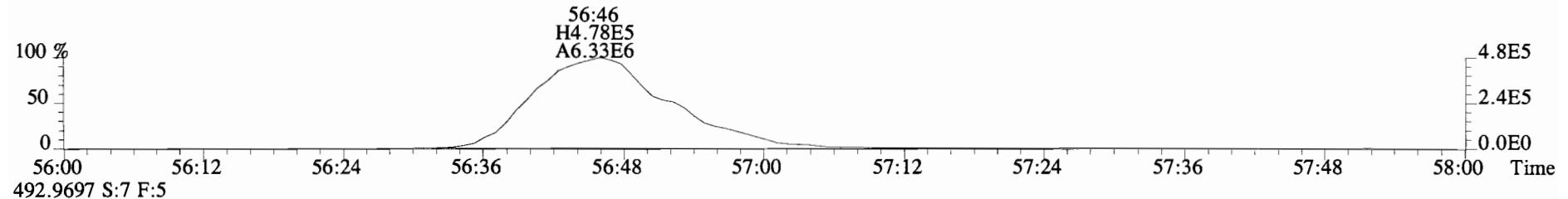
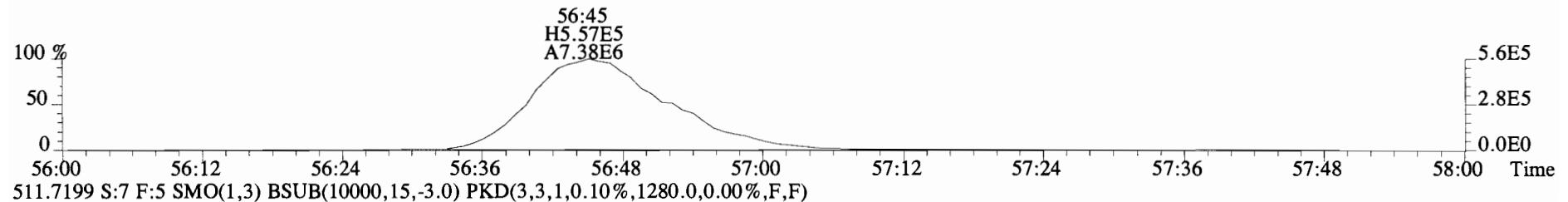
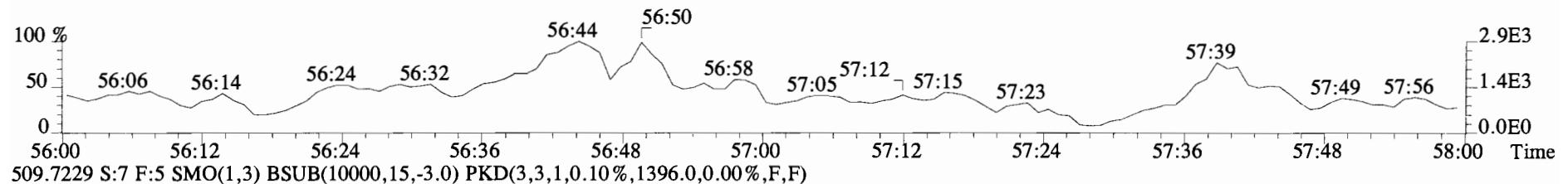
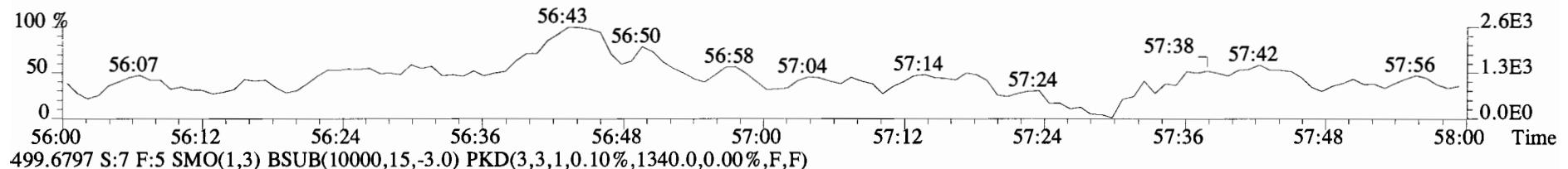
File:141021E2 #1-434 Acq:22-OCT-2014 02:33:44 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
 463.7216 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1296.0,0.00%,F,F)



File:14021E2 #1-434 Acq:22-OCT-2014 02:33:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
463.7216 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1296.0,0.00%,F,F)



File:141021E2 #1-434 Acq:22-OCT-2014 02:33:44 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-01 CC-A-01-20141013-W 1 Exp:PCB_ZB1
 497.6826 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1248.0,0.00%,F,F)



Client ID: CC-FD-02-20141013-W
 Lab ID: 1400762-02

Filename: 141021E2 S:8 Acq:22-OCT-14 03:37:15
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.031
 ConCal: ST141021E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	1.99e+05	3.31	y 16:30	1.25	2.50	*	2.5	*	*	1.001	0.996-1.006	
Mono	PCB-2	8.34e+04	2.99	y 18:46	1.18	1.05	*	2.5	*	*	0.989	0.983-0.993	
Mono	PCB-3	2.03e+05	2.98	y 19:00	1.22	2.48	*	2.5	*	*	1.001	0.996-1.006	
Di	PCB-4/10	2.92e+05	1.22	n 20:18	1.55	6.14	R	*	2.5	*	1.001	0.998-1.008	
Di	PCB-7/9	*	*	n NotFq	1.27	*		15600	2.5	6.01	*	0.865-0.873	
Di	PCB-6	1.75e+05	1.09	n 22:40	1.26	2.83	R	*	2.5	*	0.896	0.890-0.899	
Di	PCB-5/8	6.75e+05	1.73	y 23:03	1.23	11.2		*	2.5	*	0.911	0.906-0.916	
Di	PCB-14	*	*	n NotFq	1.23	*		15600	2.5	5.33	*	0.949-0.959	
Di	PCB-11	5.34e+06	1.62	y 25:19	1.16	80.4		*	2.5	*	1.001	0.996-1.006	
Di	PCB-12/13	*	*	n NotFq	1.10	*		15600	2.5	5.98	*	1.010-1.020	
Di	PCB-15	8.84e+05	1.37	y 26:01	1.21	12.8		*	2.5	*	1.028	1.024-1.034	
Tri	PCB-19	1.38e+05	1.17	y 24:20	1.30	2.89		*	2.5	*	1.001	0.996-1.006	
Tri	PCB-30	*	*	n NotFq	1.83	*		2240	2.5	0.649	*	1.032-1.042	
Tri	PCB-18	8.65e+05	1.17	y 25:56	0.86	17.3		*	2.5	*	0.955	0.949-0.959	
Tri	PCB-17	2.90e+05	1.12	y 26:06	0.90	5.53		*	2.5	*	0.961	0.955-0.965	
Tri	PCB-24/27	1.42e+05	1.14	y 26:39	1.18	2.07		*	2.5	*	0.981	0.976-0.986	
Tri	PCB-16/32	7.30e+05	1.11	y 27:10	1.03	12.2		*	2.5	*	1.000	0.995-1.005	
Tri	PCB-34	*	*	n NotFq	1.26	*		2210	2.5	0.822	*	0.956-0.966	
Tri	PCB-23	*	*	n NotFq	1.31	*		2210	2.5	0.791	*	0.959-0.969	
Tri	PCB-29	*	*	n NotFq	1.33	*		2210	2.5	0.780	*	0.967-0.977	
Tri	PCB-26	3.08e+05	1.13	y 28:29	1.29	5.13		*	2.5	*	0.979	0.974-0.984	
Tri	PCB-25	1.32e+05	0.93	y 28:39	1.34	2.12		*	2.5	*	0.985	0.980-0.990	
Tri	PCB-31	1.32e+06	1.01	y 29:00	1.42	20.0		*	2.5	*	0.997	0.992-1.002	
Tri	PCB-28	1.16e+06	1.05	y 29:07	1.38	18.2		*	2.5	*	1.001	0.996-1.006	
Tri	PCB-20/21/33	8.25e+05	1.05	y 29:44	1.31	13.5		*	2.5	*	1.022	1.017-1.027	
Tri	PCB-22	5.54e+05	1.12	y 30:10	1.32	9.01		*	2.5	*	1.037	1.032-1.042	
Tri	PCB-36	*	*	n NotFq	1.38	*		2210	2.5	0.791	*	0.929-0.939	
Tri	PCB-39	*	*	n NotFq	1.42	*		2210	2.5	0.767	*	0.943-0.953	
Tri	PCB-38	*	*	n NotFq	1.35	*		2210	2.5	0.805	*	0.967-0.976	
Tri	PCB-35	2.51e+05	0.92	y 32:31	1.38	3.71		*	2.5	*	0.987	0.982-0.992	
Tri	PCB-37	1.15e+06	0.93	y 32:57	1.39	16.8		*	2.5	*	1.000	0.996-1.006	
Tetra	PCB-54	*	*	n NotFq	1.20	*		3140	2.5	1.13	*	0.996-1.006	Integrations by:
Tetra	PCB-50	*	*	n NotFq	0.97	*		3140	2.5	1.40	*	1.037-1.047	
Tetra	PCB-53	2.47e+05	0.71	y 29:48	1.19	5.20		*	2.5	*	0.947	0.941-0.951	Analyst: <u>DMS</u>
Tetra	PCB-51	8.03e+04	0.83	y 30:09	1.15	1.75		*	2.5	*	0.958	0.952-0.962	
Tetra	PCB-45	1.73e+05	0.73	y 30:35	0.97	4.50		*	2.5	*	0.971	0.966-0.976	
Tetra	PCB-46	9.05e+04	0.88	y 31:04	0.95	2.38		*	2.5	*	0.987	0.982-0.992	Date: <u>10/28/14</u>

Reviewed by: mpz Date: 10/28/14

Client ID: CC-FD-02-20141013-W
 Lab ID: 1400762-02

Filename: 141021E2 S:8 Acq:22-OCT-14 03:37:15
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.031

ConCal: ST141021E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	6.95e+06	0.72	y 31:30	1.28	136	*	2.5	*	1.001	0.996-1.006		
Tetra	PCB-73	*	*	n NotF _¶	1.37	*	3140	2.5	1.15	*	1.000-1.010		
Tetra	PCB-43/49	1.72e+06	0.72	y 31:48	1.11	38.7	*	2.5	*	1.010	1.005-1.015		
Tetra	PCB-47	4.77e+05	0.70	y 31:59	1.13	9.99	*	2.5	*	1.000	0.996-1.006		
Tetra	PCB-48/75	2.05e+05	0.82	y 32:07	1.30	3.73	*	2.5	*	1.004	0.999-1.009		
Tetra	PCB-65	*	*	n NotF _¶	1.33	*	3140	2.5	1.11	*	1.007-1.017		
Tetra	PCB-62	*	*	n NotF _¶	1.29	*	3140	2.5	1.15	*	1.011-1.021		
Tetra	PCB-44	2.97e+06	0.79	y 32:47	0.94	74.9	*	2.5	*	1.025	1.020-1.030		
Tetra	PCB-42/59	5.60e+05	0.79	y 33:02	1.22	10.9	*	2.5	*	1.033	1.028-1.038		
Tetra	PCB-41/64/71/72	2.35e+06	0.71	y 33:36	1.31	42.4	*	2.5	*	1.051	1.046-1.056		
Tetra	PCB-68	*	*	n NotF _¶	1.49	*	3140	2.5	0.998	*	1.054-1.064		
Tetra	PCB-40	3.12e+05	0.82	y 34:06	0.82	9.03	*	2.5	*	1.066	1.061-1.071		
Tetra	PCB-57	*	*	n NotF _¶	1.11	*	3140	2.5	1.01	*	0.965-0.975		
Tetra	PCB-67	1.80e+05	0.68	y 34:44	1.07	2.92	*	2.5	*	0.979	0.974-0.984		
Tetra	PCB-58	*	*	n NotF _¶	1.10	*	3140	2.5	1.02	*	0.977-0.987		
Tetra	PCB-63	1.21e+05	0.92	n 35:00	1.12	1.89	R	*	2.5	*	0.986	0.982-0.992	
Tetra	PCB-74	2.71e+06	0.77	y 35:17	1.20	39.1	*	2.5	*	0.994	0.990-1.000		
Tetra	PCB-61/70	1.34e+07	0.74	y 35:30	1.08	215	*	2.5	*	1.000	0.994-1.004		
Tetra	PCB-76/66	4.61e+06	0.76	y 35:43	1.14	70.6	*	2.5	*	1.007	1.001-1.011		
Tetra	PCB-80	*	*	n NotF _¶	1.28	*	3140	2.5	0.868	*	0.996-1.006		
Tetra	PCB-55	1.17e+05	0.91	n 36:13	1.11	1.81	R	*	2.5	*	1.009	1.005-1.015	
Tetra	PCB-56/60	2.92e+06	0.77	y 36:45	1.09	46.0	*	2.5	*	1.024	1.018-1.028		
Tetra	PCB-79	3.40e+05	1.03	n 37:48	1.12	5.17	R	*	2.5	*	1.053	1.048-1.058	
Tetra	PCB-78	*	*	n NotF _¶	1.24	*	3140	2.5	1.08	*	0.982-0.992		
Tetra	PCB-81	9.65e+04	0.70	y 39:00	1.38	1.37	*	2.5	*	0.999	0.995-1.005		
Tetra	PCB-77	4.41e+06	0.76	y 39:38	1.21	68.0	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-104	*	*	n NotF _¶	1.26	*	2660	2.5	1.75	*	0.996-1.006		
Penta	PCB-96	8.42e+04	1.92	n 33:55	1.09	2.08	R	*	2.5	*	1.039	1.034-1.044	
Penta	PCB-103	5.96e+04	1.03	n 34:26	0.93	1.73	R	*	2.5	*	1.055	1.050-1.060	
Penta	PCB-100	*	*	n NotF _¶	1.00	*	2660	2.5	2.19	*	1.061-1.071		
Penta	PCB-94	*	*	n NotF _¶	1.11	*	2660	2.5	2.43	*	0.981-0.991		
Penta	PCB-95/98/102	1.21e+07	1.64	y 35:48	1.21	341	*	2.5	*	1.000	0.994-1.004		
Penta	PCB-93	*	*	n NotF _¶	1.13	*	2660	2.5	2.38	*	0.998-1.008		
Penta	PCB-88/91	1.74e+06	1.65	y 36:13	1.02	58.4	*	2.5	*	1.012	1.006-1.016		
Penta	PCB-121	*	*	n NotF _¶	1.90	*	2660	2.5	1.41	*	1.009-1.019		
Penta	PCB-84/92	6.52e+06	1.65	y 37:07	1.05	191	*	2.5	*	0.991	0.986-0.996		
Penta	PCB-89	9.08e+04	1.34	y 37:19	1.02	2.75	*	2.5	*	0.996	0.991-1.001		

Analyst: DMS

Date: 10/28/14

Client ID: CC-FD-02-20141013-W
 Lab ID: 1400762-02

Filename: 141021E2 S:8 Acq:22-OCT-14 03:37:15
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.031

ConCal: ST141021E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	2.08e+07	1.59	y 37:29	1.19	537		*	2.5	*	1.000	0.996-1.006	
Penta	PCB-113	*	*	n NotF _{fl}	1.35		*	2660	2.5	1.82	*	1.002-1.012	
Penta	PCB-99	7.14e+06	1.55	y 37:48	1.29	171		*	2.5	*	1.009	1.005-1.015	
Penta	PCB-119	3.46e+05	1.54	y 38:17	1.72	6.88		*	2.5	*	0.987	0.982-0.992	
Penta	PCB-108/112	9.29e+05	1.61	y 38:27	1.29	24.7		*	2.5	*	0.991	0.986-0.996	
Penta	PCB-83	*	*	n NotF _{fl}	1.52		*	R	2660	2.5	1.87	*	0.991-1.001
Penta	PCB-97	5.85e+06	1.57	y 38:47	1.25	160		*	2.5	*	1.000	0.996-1.006	
Penta	PCB-86	*	*	n NotF _{fl}	1.02		*	2660	2.5	2.78	*	1.000-1.010	
Penta	PCB-87/117/125	9.77e+06	1.55	y 39:04	1.56	215		*	2.5	*	1.007	1.002-1.012	
Penta	PCB-111/115	4.52e+05	1.34	y 39:13	1.75	8.84		*	2.5	*	1.011	1.007-1.017	
Penta	PCB-85/116	3.04e+06	1.59	y 39:20	1.30	80.0		*	2.5	*	1.014	1.010-1.020	
Penta	PCB-120	1.46e+05	1.77	y 39:34	1.78	2.80		*	2.5	*	1.020	1.016-1.026	
Penta	PCB-110	3.29e+07	1.57	y 39:44	1.68	671		*	2.5	*	1.024	1.020-1.030	
Penta	PCB-82	2.15e+06	1.53	y 40:23	0.74	76.5		*	2.5	*	0.977	0.972-0.982	
Penta	PCB-124	1.59e+06	1.58	y 41:03	1.32	31.5		*	2.5	*	0.993	0.988-0.998	
Penta	PCB-107/109	2.28e+06	1.55	y 41:13	1.22	49.0		*	2.5	*	0.997	0.991-1.001	
Penta	PCB-123	4.40e+05	1.67	y 41:22	1.22	9.49		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-106/118	3.19e+07	1.57	y 41:33	1.22	655		*	2.5	*	1.000	0.996-1.006	
Penta	PCB-114	6.06e+05	1.48	y 42:12	1.36	13.2		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-122	3.34e+05	1.56	y 42:21	1.24	8.00		*	2.5	*	1.004	0.999-1.009	
Penta	PCB-105	1.18e+07	1.66	y 43:05	1.28	275		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-127	*	*	n NotF _{fl}	1.14	*	5050	2.5	3.98	*	0.995-1.005		
Penta	PCB-126	7.40e+05	1.50	y 45:20	1.28	18.6		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-155	*	*	n NotF _{fl}	1.14	*	1270	2.5	0.852	*	0.966-1.006		
Hexa	PCB-150	5.76e+04	0.98	n 38:18	1.06	1.59	R	*	2.5	*	1.035	1.030-1.040	
Hexa	PCB-152	*	*	n NotF _{fl}	1.10		1270	2.5	0.881	*	1.043-1.053		
Hexa	PCB-145	*	*	n NotF _{fl}	1.09	*	1270	2.5	0.885	*	1.055-1.065		
Hexa	PCB-136	2.79e+06	1.32	y 39:33	1.08	75.6		*	2.5	*	1.068	1.064-1.074	
Hexa	PCB-148	*	*	n NotF _{fl}	0.74	*	1270	2.5	1.31	*	1.066-1.076		
Hexa	PCB-154	2.91e+05	1.23	y 40:08	0.88	9.69		*	2.5	*	1.084	1.079-1.089	
Hexa	PCB-151	3.75e+06	1.22	y 40:47	0.81	136		*	2.5	*	1.102	1.097-1.107	
Hexa	PCB-135	2.36e+06	1.26	y 40:59	0.78	89.1		*	2.5	*	1.107	1.101-1.113	
Hexa	PCB-144	1.04e+06	1.34	y 41:06	0.82	37.1		*	2.5	*	1.110	1.105-1.116	
Hexa	PCB-147	3.22e+05	1.20	y 41:14	0.83	11.4		*	2.5	*	1.114	1.011-1.120	
Hexa	PCB-139/149	1.68e+07	1.27	y 41:30	0.84	585		*	2.5	*	1.121	1.115-1.127	
Hexa	PCB-140	1.70e+05	1.21	y 41:42	0.79	6.35		*	2.5	*	1.127	1.120-1.132	
Hexa	PCB-134/143	1.21e+06	1.31	y 42:10	0.93	40.1		*	2.5	*	0.976	0.970-0.980	

Analyst: Dmj

Date: 10/28/14

Client ID: CC-FD-02-20141013-W
 Lab ID: 1400762-02

Filename: 141021E2 S:8 Acq:22-OCT-14 03:37:15
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.031

ConCal: ST141021E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	6.78e+05	1.31	y 42:26	0.95	22.0	*	2.5	*	0.982	0.977-0.987		
Hexa	PCB-131	*	*	n NotF _g	0.91	*	5520	2.5	5.23	*	0.981-0.991		
Hexa	PCB-146/165	4.17e+06	1.26	y 42:49	1.16	110	*	2.5	*	0.991	0.986-0.996		
Hexa	PCB-132/161	8.28e+06	1.16	y 43:06	1.11	228	*	2.5	*	0.997	0.992-1.002		
Hexa	PCB-153	2.85e+07	1.25	y 43:13	1.18	740	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-168	*	*	n NotF _g	1.37	*	5520	2.5	3.49	*	1.000-1.010		
Hexa	PCB-141	5.74e+06	1.18	y 43:58	0.97	189	*	2.5	*	1.000	0.996-1.005		
Hexa	PCB-137	1.21e+06	1.21	y 44:22	1.07	36.2	*	2.5	*	1.009	1.004-1.014		
Hexa	PCB-130	1.76e+06	1.19	y 44:28	0.85	66.8	*	2.5	*	1.012	1.007-1.017		
Hexa	PCB-138/163/164	3.35e+07	1.22	y 44:50	1.23	905	*	2.5	*	1.000	0.996-1.006		
Hexa	PCB-158/160	4.11e+06	1.17	y 45:04	1.29	105	*	2.5	*	1.006	1.001-1.011		
Hexa	PCB-129	1.17e+06	1.16	y 45:20	0.92	42.1	*	2.5	*	1.012	1.007-1.017		
Hexa	PCB-166	*	*	n NotF _g	1.12	*	5520	2.5	4.15	*	0.988-0.998		
Hexa	PCB-159	*	*	n NotF _g	1.16	*	5520	2.5	3.97	*	0.995-1.005		
Hexa	PCB-128/162	5.12e+06	1.22	y 46:24	1.02	143	*	2.5	*	1.006	1.002-1.012		
Hexa	PCB-167	1.73e+06	1.30	y 46:50	1.06	45.5	*	2.5	*	1.001	0.995-1.005		
Hexa	PCB-156	3.13e+06	1.24	y 48:08	1.18	77.9	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-157	8.47e+05	1.29	y 48:24	1.08	22.4	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-169	*	*	n NotF _g	1.11	*	5520	2.5	6.02	*	0.995-1.005		
Hepta	PCB-188	4.75e-04	1.07	y 42:52	1.40	1.15	*	2.5	*	1.001	0.995-1.005		
Hepta	PCB-184	3.42e+04	1.12	y 43:18	1.24	0.940	*	2.5	*	1.011	1.006-1.016		
Hepta	PCB-179	3.01e+06	1.06	y 44:05	1.30	78.4	*	2.5	*	1.029	1.024-1.034		
Hepta	PCB-176	9.64e+05	0.99	y 44:34	1.36	24.0	*	2.5	*	1.040	1.035-1.045		
Hepta	PCB-186	*	*	n NotF _g	1.28	*	2890	2.5	1.36	*	1.049-1.059		
Hepta	PCB-178	1.25e+06	0.97	y 45:40	0.94	45.3	*	2.5	*	1.066	1.061-1.071		
Hepta	PCB-175	2.42e+05	0.97	y 46:01	0.97	8.49	*	2.5	*	1.074	1.069-1.079		
Hepta	PCB-182/187	7.98e+06	1.04	y 46:10	1.01	267	*	2.5	*	1.078	1.073-1.083		
Hepta	PCB-183	3.22e+06	1.08	y 46:31	1.08	101	*	2.5	*	1.086	1.080-1.090		
Hepta	PCB-185	6.56e+05	1.15	y 47:11	1.34	26.0	*	2.5	*	0.955	0.951-0.961		
Hepta	PCB-174	5.53e+06	1.08	y 47:33	1.34	220	*	2.5	*	0.963	0.958-0.968		
Hepta	PCB-181	*	*	n NotF _g	1.36	*	2890	2.5	2.25	*	0.961-0.971		
Hepta	PCB-177	2.94e+06	1.08	y 47:50	1.24	126	*	2.5	*	0.969	0.964-0.974		
Hepta	PCB-171	1.31e+06	1.00	y 48:08	1.31	52.9	*	2.5	*	0.975	0.970-0.980		
Hepta	PCB-173	1.06e+05	1.14	y 48:35	1.16	4.85	*	2.5	*	0.984	0.979-0.989		
Hepta	PCB-172	1.01e+06	1.09	y 49:00	1.22	43.7	*	2.5	*	0.992	0.988-0.998		
Hepta	PCB-192	*	*	n NotF _g	1.53	*	2890	2.5	2.01	*	0.991-1.001		
Hepta	PCB-180	1.18e+07	1.07	y 49:23	1.43	439	*	2.5	*	1.000	0.995-1.005		

Analyst: *DMS*

Date: *10/28/14*

Client ID: CC-FD-02-20141013-W Filename: 141021E2 S:8 Acq:22-OCT-14 03:37:15
 Lab ID: 1400762-02 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.031

ConCal: ST141021E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	7.30e+05	1.08	y 49:35	1.65	23.5		*	2.5	*	1.004	0.999-1.009	
Hepta	PCB-191	3.02e+05	1.17	y 49:48	1.67	9.60		*	2.5	*	1.008	1.004-1.014	
Hepta	PCB-170	3.83e+06	1.06	y 50:45	1.50	184		*	2.5	*	1.000	0.995-1.005	
Hepta	PCB-190	9.72e+05	0.99	y 50:56	2.02	34.7		*	2.5	*	1.004	0.998-1.008	
Hepta	PCB-189	1.63e+05	0.90	y 52:12	1.54	6.71		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-202	5.80e+05	0.91	y 48:20	1.04	21.6		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-201	3.58e+05	0.79	y 48:49	1.10	12.6		*	2.5	*	1.010	1.006-1.016	
Octa	PCB-204	*	*	n NotFq	0.99	*		1430	2.5	1.37	*	1.009-1.019	
Octa	PCB-197	8.62e+04	0.85	y 49:15	1.07	3.12		*	2.5	*	1.019	1.015-1.025	
Octa	PCB-200	2.67e+05	0.87	y 50:04	1.02	10.2		*	2.5	*	1.036	1.032-1.044	
Octa	PCB-198	3.74e+04	0.75	n 51:17	0.74	1.95	R	*	2.5	*	1.061	1.058-1.068	
Octa	PCB-199	1.63e+06	0.93	y 51:25	0.73	87.0		*	2.5	*	1.064	1.060-1.070	
Octa	PCB-196/203	1.63e+06	0.93	y 51:41	0.77	82.0		*	2.5	*	1.070	1.066-1.076	
Octa	PCB-195	4.23e+05	0.97	y 52:49	1.20	32.9		*	2.5	*	0.983	0.979-0.989	
Octa	PCB-194	1.11e+06	0.88	y 53:46	1.25	83.3		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-205	*	*	n NotFq	1.41	*		2830	2.5	7.36	*	1.001-1.011	
Nonna	PCB-208	9.56e+04	1.21	y 52:57	0.96	6.49		*	2.5	*	1.000	0.995-1.005	
Nonna	PCB-207	5.95e+04	1.52	y 53:17	0.92	4.24		*	2.5	*	1.007	1.001-1.011	
Nonna	PCB-206	1.98e+05	1.19	y 55:31	1.03	28.5		*	2.5	*	1.000	0.995-1.005	
Deca	PCB-209	*	*	n NotFq	1.18	*		1280	2.5	15.1	*	0.995-1.005	

Analyst: *Dm*

Date: *10/28/14*

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	4.85e+05	3.31 y	16:30	1.22	6.03208
Total Di-PCB	6.90e+06	1.73 y	23:03	1.21	104.319
Total Tri-PCB	2.16e+06	1.17 y	24:20	1.16	39.9935
Total Tri-PCB	5.70e+06	1.13 y	28:29	1.35	88.4363 Sum:128.430
Total Tetra-PCB	4.44e+07	0.71 y	29:48	1.17	782.739
Total Penta-PCB	1.40e+08	1.64 y	35:48	1.21	3292.15
Total Penta-PCB	1.35e+07	1.48 y	42:12	1.26	314.332 Sum:3606.49
Total Hexa-PCB	2.75e+07	1.32 y	39:33	0.92	950.684
Total Hexa-PCB	1.01e+08	1.31 y	42:10	1.08	2774.40 Sum:3725.09
Total Hepta-PCB	4.61e+07	1.07 y	42:52	1.27	1697.23
Total Octa-PCB	4.56e+06	0.91 y	48:20	0.92	216.505
Total Octa-PCB	1.54e+06	0.97 y	52:49	1.29	116.269 Sum:332.773
Total Nona-PCB	3.53e+05	1.21 y	52:57	0.96	39.2795
Total Deca-PCB	*	* n	Not Fnd	1.18	*

Total PCB Conc:10447.5647130

Integrations
by
Analyst: DMS
Date: 10/28/14

Client ID: CC-FD-02-20141013-W
Lab ID: 1400762-02

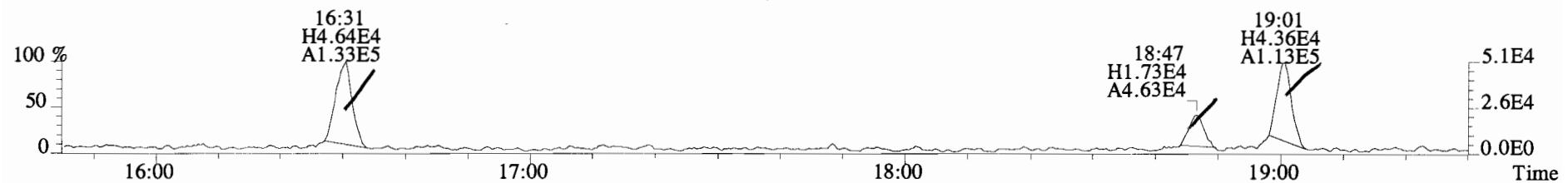
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GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:1.0313
ConCal: ST141021E2-1 EndCAL: NA

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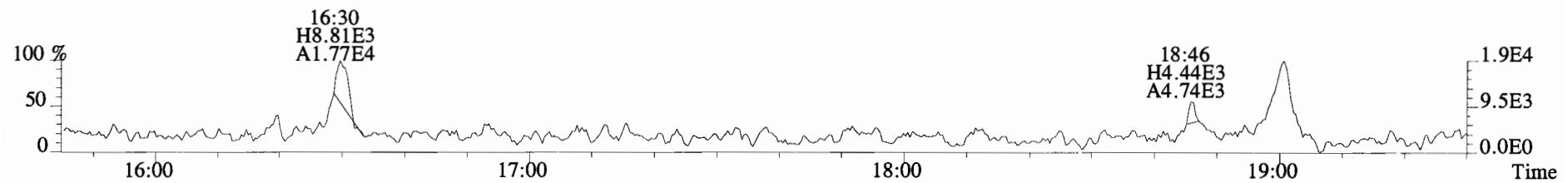
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.23e+08	3.21	y	0.89	16:29	0.634	0.622-0.628	1820	94.1	13C-PCB-79	1.30e+08	0.78	y	1.01	37:47	1.028	1.023-1.033	1770	91.4	
13C-PCB-3	1.30e+08	3.24	y	0.93	18:59	0.730	0.721-0.729	1850	95.5	13C-PCB-178	4.07e+07	0.46	y	0.63	45:39	0.984	0.979-0.989	1890	97.6	
13C-PCB-4	5.95e+07	1.57	y	0.55	20:17	0.780	0.772-0.780	1430	74.0											
13C-PCB-9	9.50e+07	1.59	y	0.83	22:00	0.846	0.840-0.848	1520	78.3											
13C-PCB-11	1.11e+08	1.55	y	0.94	25:18	0.973	0.968-0.978	1570	80.8	PS vs. IS										
13C-PCB-19	7.13e+07	1.05	y	0.53	24:19	0.935	0.929-0.939	1770	91.3	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	
13C-PCB-28	9.02e+07	1.06	y	0.89	29:06	1.003	0.999-1.009	1490	76.6	13C-PCB-79	1.30e+08	0.78	y	1.20	37:47	0.968	0.963-0.973	2110	109	
13C-PCB-32	1.13e+08	1.09	y	0.81	27:10	1.045	1.041-1.051	1830	94.5	13C-PCB-178	4.07e+07	0.46	y	0.94	45:39	0.924	0.920-0.930	2310	119	
13C-PCB-37	9.52e+07	1.06	y	0.83	32:57	1.136	1.131-1.143	1670	86.3											
13C-PCB-47	8.18e+07	0.78	y	0.74	31:59	0.870	0.867-0.875	1510	78.0											
13C-PCB-52	7.74e+07	0.80	y	0.71	31:29	0.857	0.853-0.861	1500	77.5											
13C-PCB-54	8.83e+07	0.79	y	0.85	28:01	0.762	0.758-0.766	1430	73.7											
13C-PCB-70	1.11e+08	0.79	y	0.94	35:29	0.966	0.961-0.971	1620	83.7											
13C-PCB-77	1.04e+08	0.80	y	0.89	39:37	1.078	1.073-1.083	1600	82.7											
13C-PCB-80	1.13e+08	0.79	y	0.96	35:53	0.976	0.972-0.982	1620	83.6											
13C-PCB-81	9.91e+07	0.78	y	0.84	39:02	1.062	1.057-1.067	1630	83.8											
13C-PCB-95	5.68e+07	1.59	y	0.74	35:47	0.913	0.908-0.918	1530	79.1	RS										
13C-PCB-97	5.66e+07	1.61	y	0.69	38:47	0.989	0.984-0.994	1650	85.2	Name	Resp	RA	RRF	RT	Conc					
13C-PCB-101	6.29e+07	1.61	y	0.79	37:28	0.956	0.951-0.961	1610	83.1	13C-PCB-15	1.47e+08	1.54	y	1.00	26:00	1940				
13C-PCB-104	7.18e+07	1.62	y	1.00	32:39	0.833	0.829-0.837	1450	74.8	13C-PCB-31	1.33e+08	1.04	y	1.00	29:00	1940				
13C-PCB-105	6.52e+07	1.55	y	1.24	43:04	0.928	0.924-0.934	1540	79.6	13C-PCB-60	1.41e+08	0.77	y	1.00	36:45	1940				
13C-PCB-114	6.55e+07	1.58	y	1.21	42:12	0.909	0.905-0.915	1590	82.1	13C-PCB-111	9.65e+07	1.59	y	1.00	39:12	1940				
13C-PCB-118	7.70e+07	1.59	y	0.98	41:32	1.060	1.054-1.064	1570	81.0	13C-PCB-128	6.62e+07	1.29	y	1.00	46:24	1940				
13C-PCB-123	7.39e+07	1.57	y	0.95	41:21	1.055	1.049-1.059	1560	80.7	13C-PCB-205	2.88e+07	0.90	y	1.00	54:03	1940				
13C-PCB-126	6.02e+07	1.56	y	1.16	45:19	0.977	0.972-0.982	1520	78.3											
13C-PCB-127	7.05e+07	1.58	y	1.34	43:24	0.935	0.931-0.941	1540	79.4											
13C-PCB-138	5.86e+07	1.31	y	1.04	44:49	0.966	0.961-0.971	1640	84.8											
13C-PCB-141	6.03e+07	1.24	y	1.07	43:57	0.947	0.943-0.953	1650	85.0											
13C-PCB-153	6.33e+07	1.28	y	1.11	43:13	0.931	0.927-0.937	1670	86.0											
13C-PCB-155	6.60e+07	1.29	y	0.83	37:01	0.944	0.939-0.949	1590	82.2											
13C-PCB-156	6.58e+07	1.26	y	1.24	48:07	1.037	1.032-1.042	1550	79.9											
13C-PCB-157	6.77e+07	1.27	y	1.31	48:23	1.043	1.037-1.047	1510	78.1											
13C-PCB-159	6.81e+07	1.26	y	1.20	46:07	0.994	0.989-0.999	1660	85.8											
13C-PCB-167	6.94e+07	1.30	y	1.32	46:48	1.009	1.004-1.014	1540	79.4											
13C-PCB-169	5.62e+07	1.34	y	1.22	50:26	1.087	1.082-1.092	1360	69.9											
13C-PCB-170	2.70e+07	0.46	y	0.54	50:45	1.094	1.089-1.101	1480	76.1											
13C-PCB-180	3.65e+07	0.47	y	0.67	49:23	1.064	1.059-1.069	1590	81.8											
13C-PCB-188	5.70e+07	0.46	y	0.94	42:50	0.923	0.919-0.929	1790	92.1											
13C-PCB-189	3.06e+07	0.45	y	0.72	52:12	1.125	1.120-1.132	1250	64.7											
13C-PCB-194	2.08e+07	0.89	y	0.81	53:45	0.994	0.990-1.000	1730	89.1											
13C-PCB-202	4.99e+07	0.93	y	0.83	48:19	1.041	1.036-1.046	1760	90.7											
13C-PCB-206	1.31e+07	0.80	y	0.66	55:31	1.027	1.021-1.031	1340	69.0											
13C-PCB-208	2.97e+07	0.80	y	1.12	52:56	0.979	0.976-0.986	1780	91.8											
13C-PCB-209	1.13e+07	1.20	y	0.61	56:48	1.051	1.044-1.054	1240	63.9											

Analyst: DMS
Date: 10/28/14

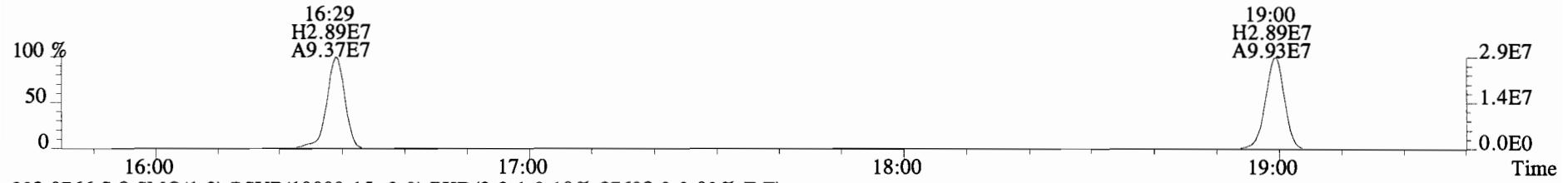
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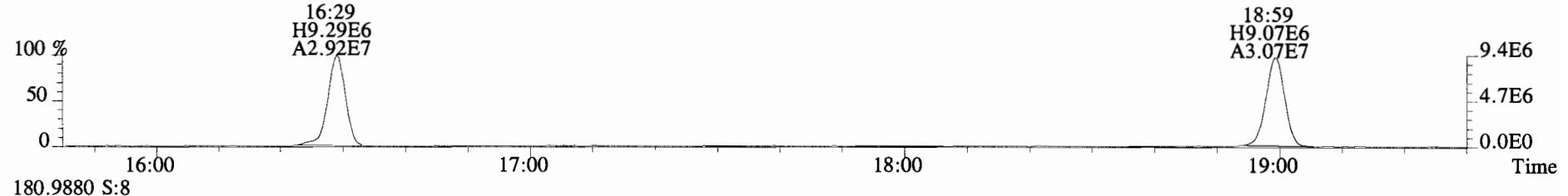
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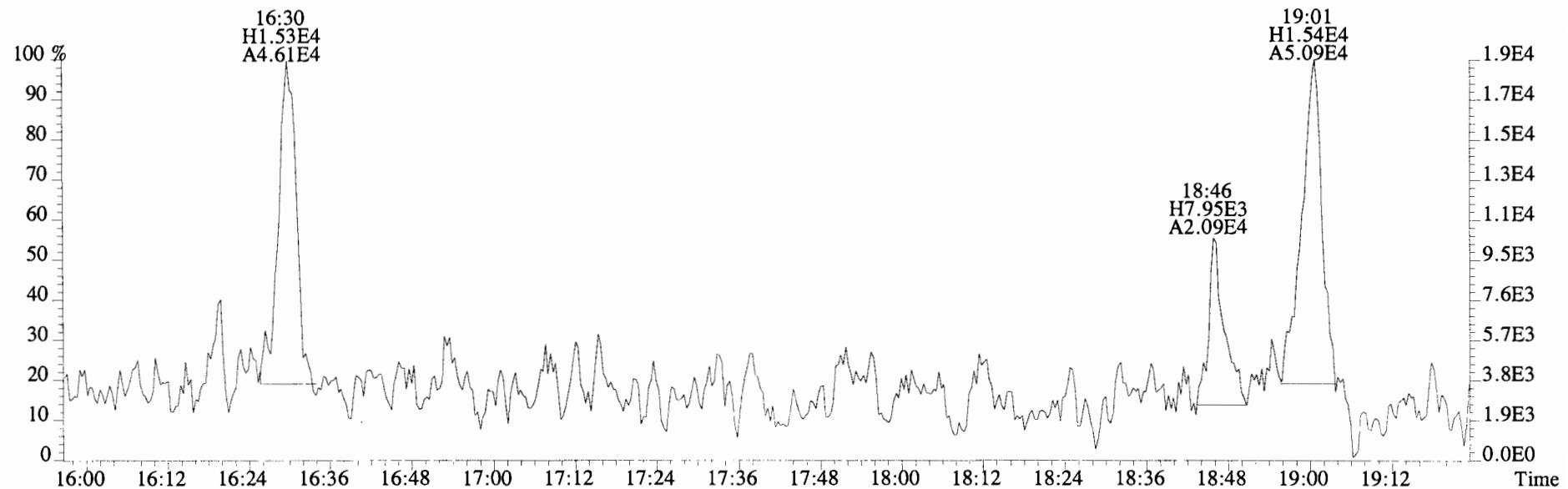
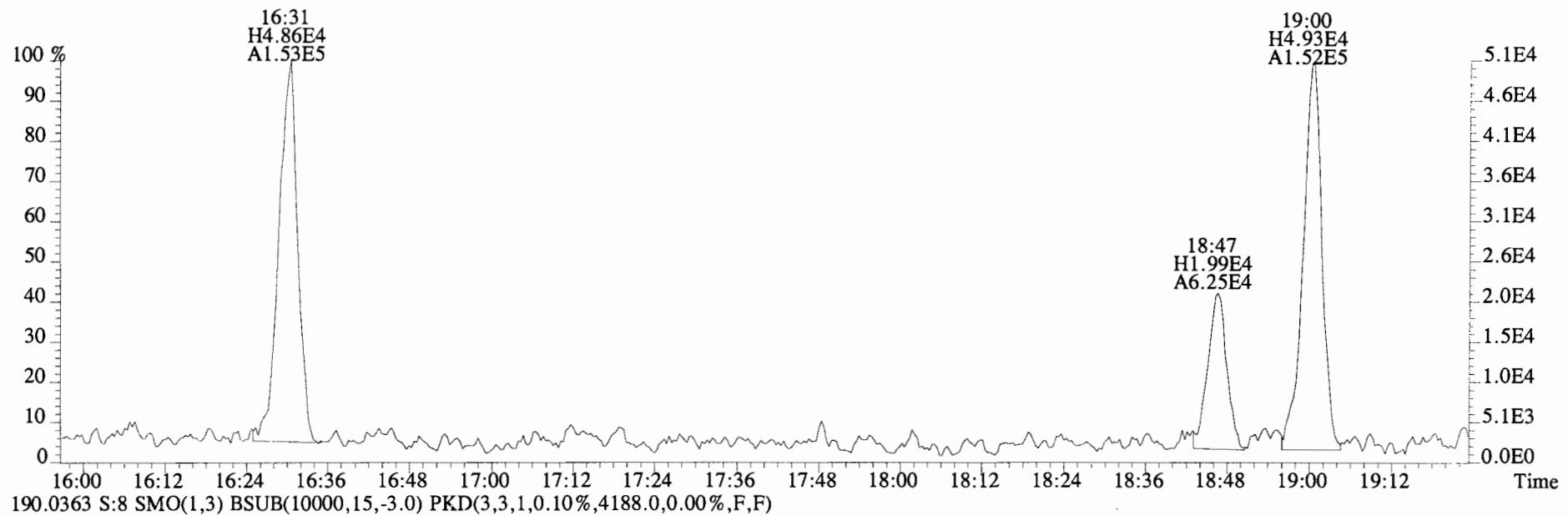


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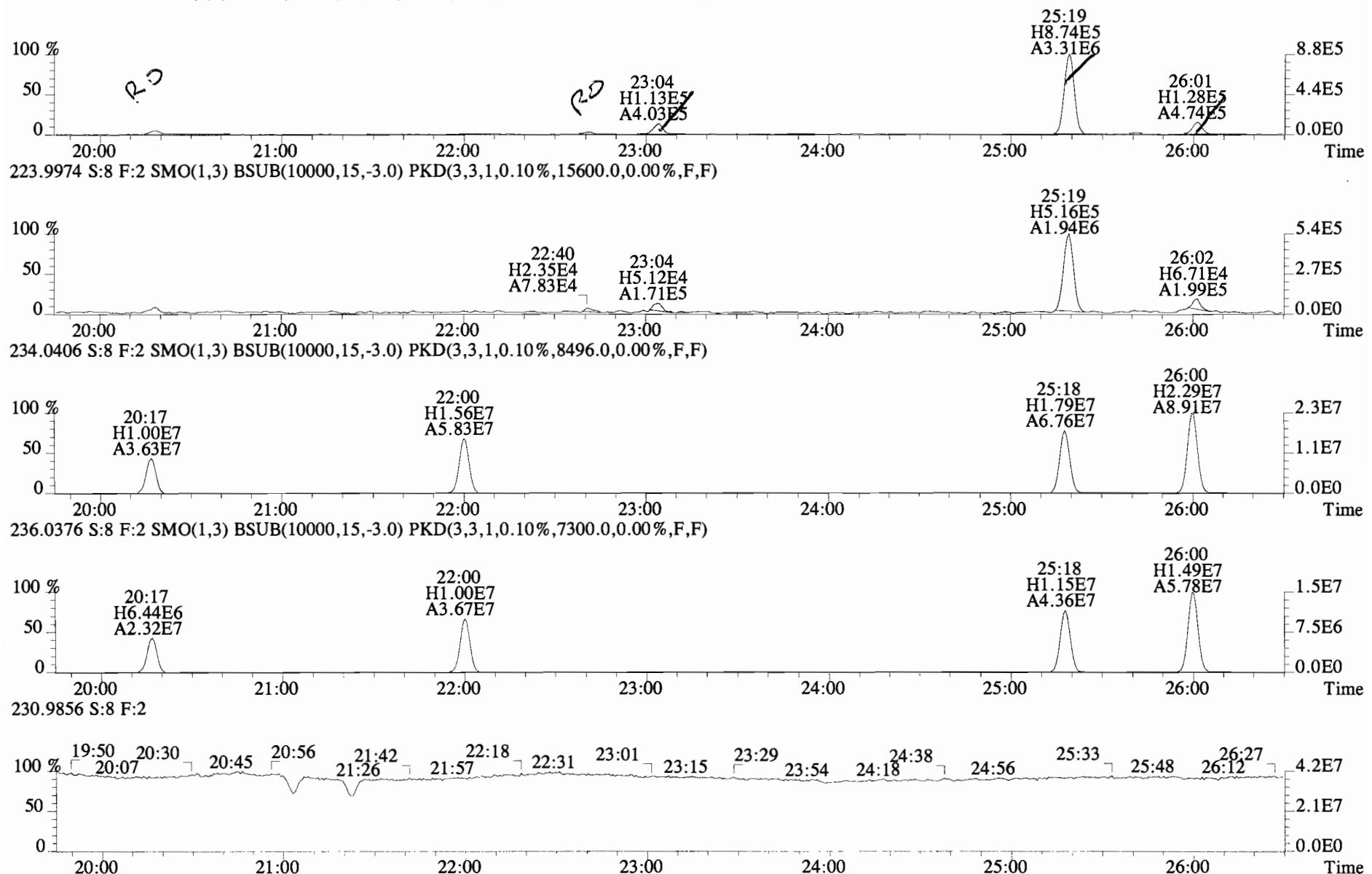


180.9880 S:8

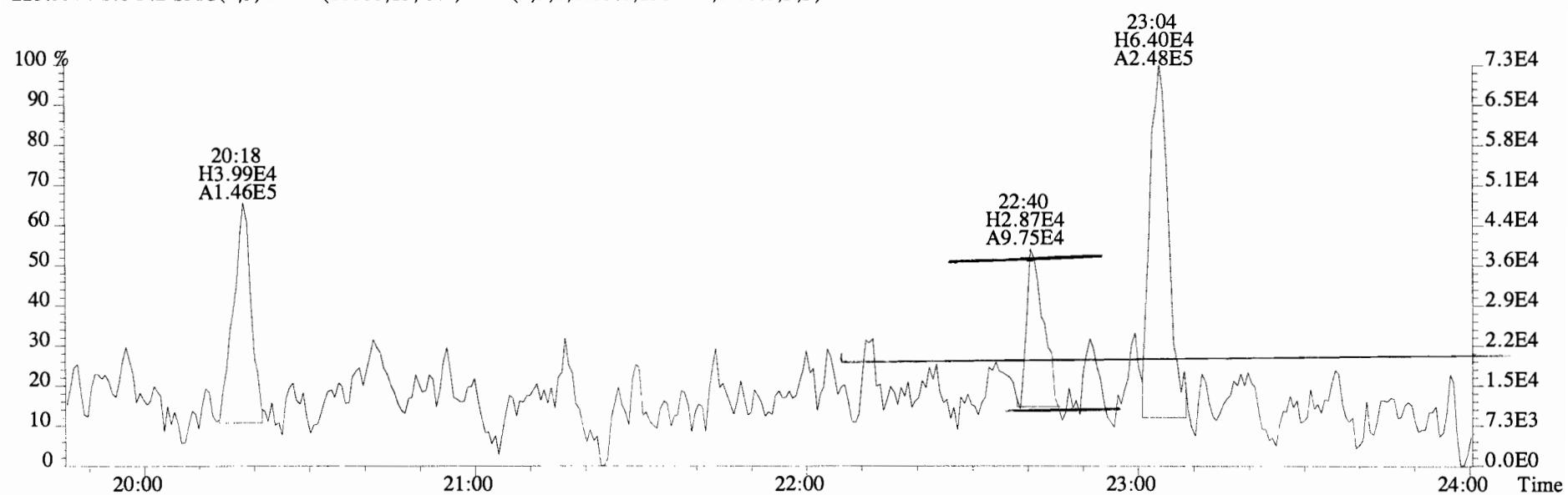
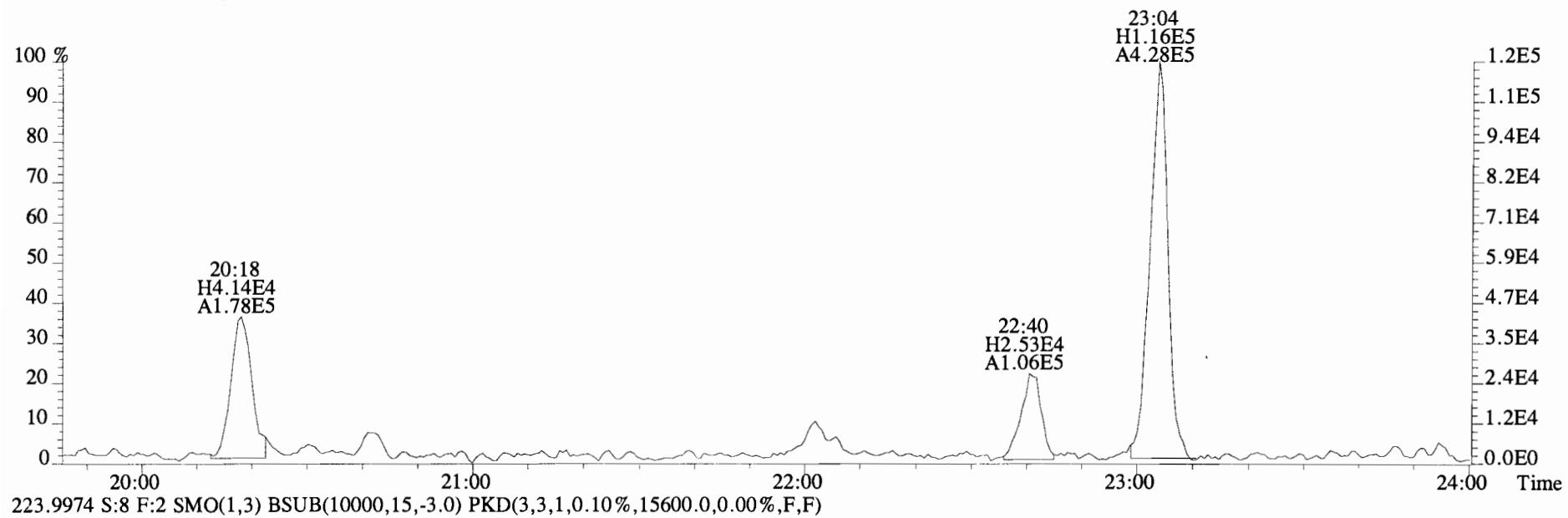
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
188.0393 S:8 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3508.0,0.00%,F,F)



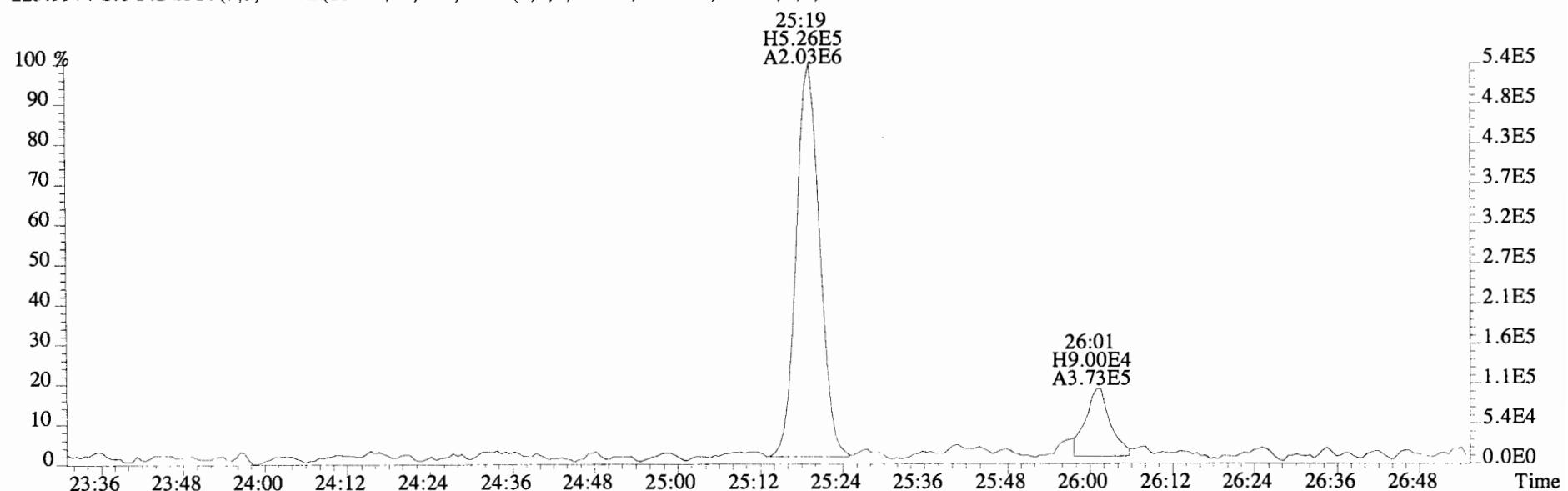
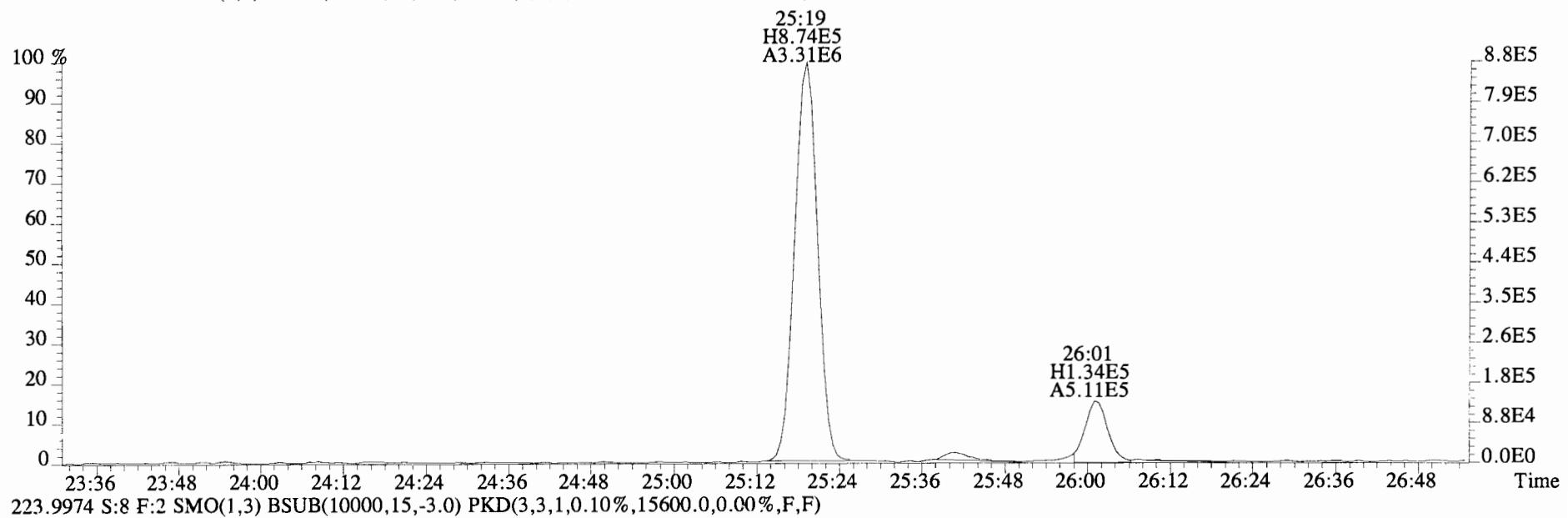
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 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
 222.0003 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3340.0,0.00%,F,F)



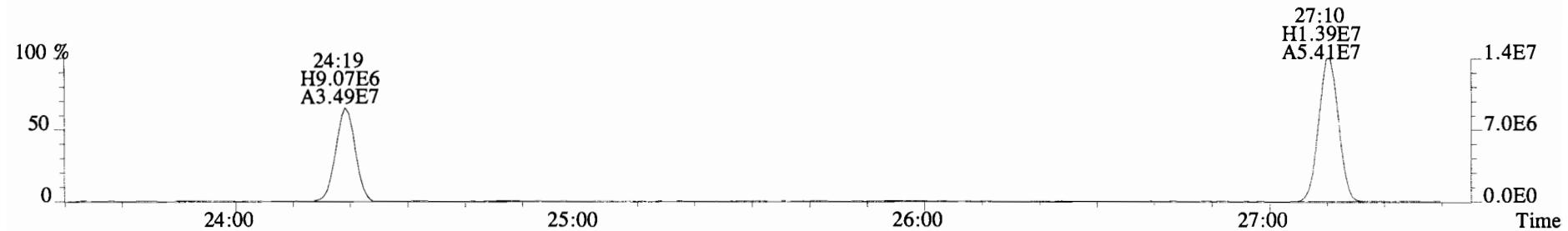
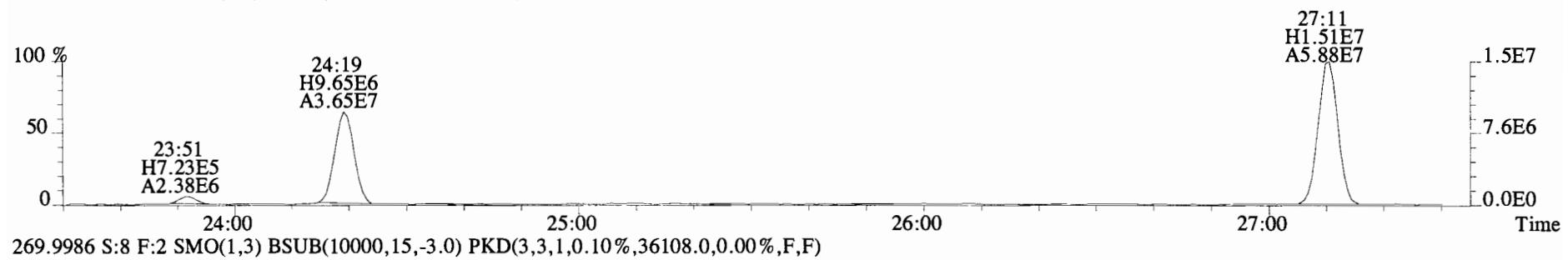
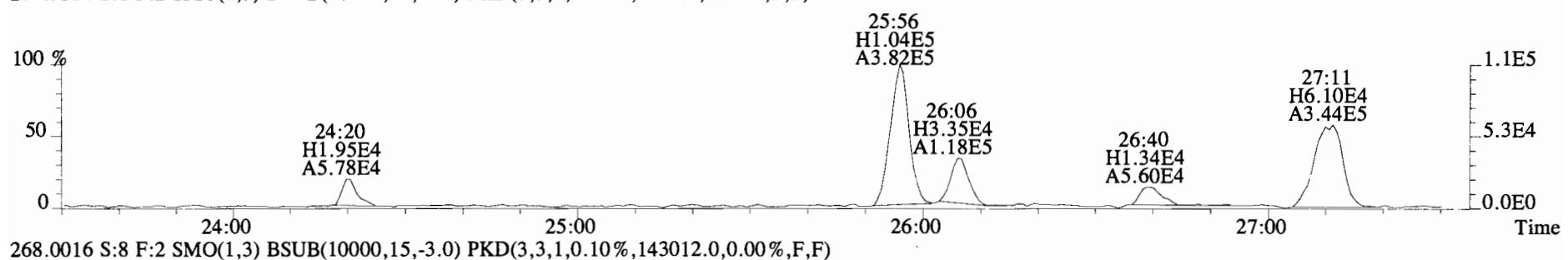
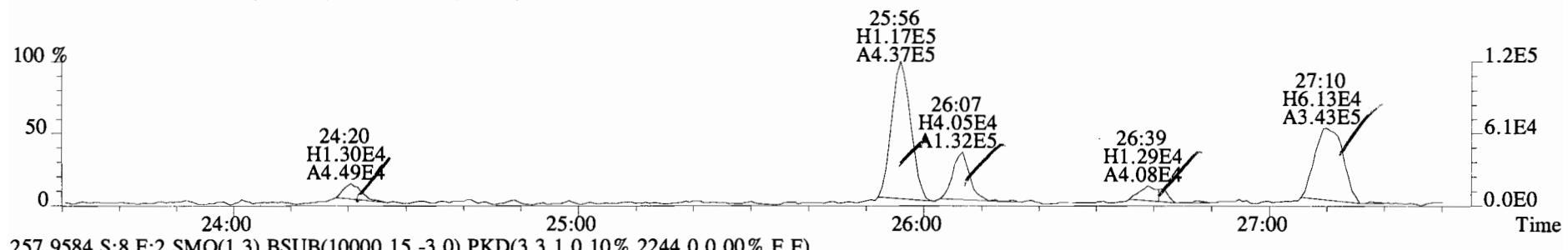
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
222.0003 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3340.0,0.00%,F,F)



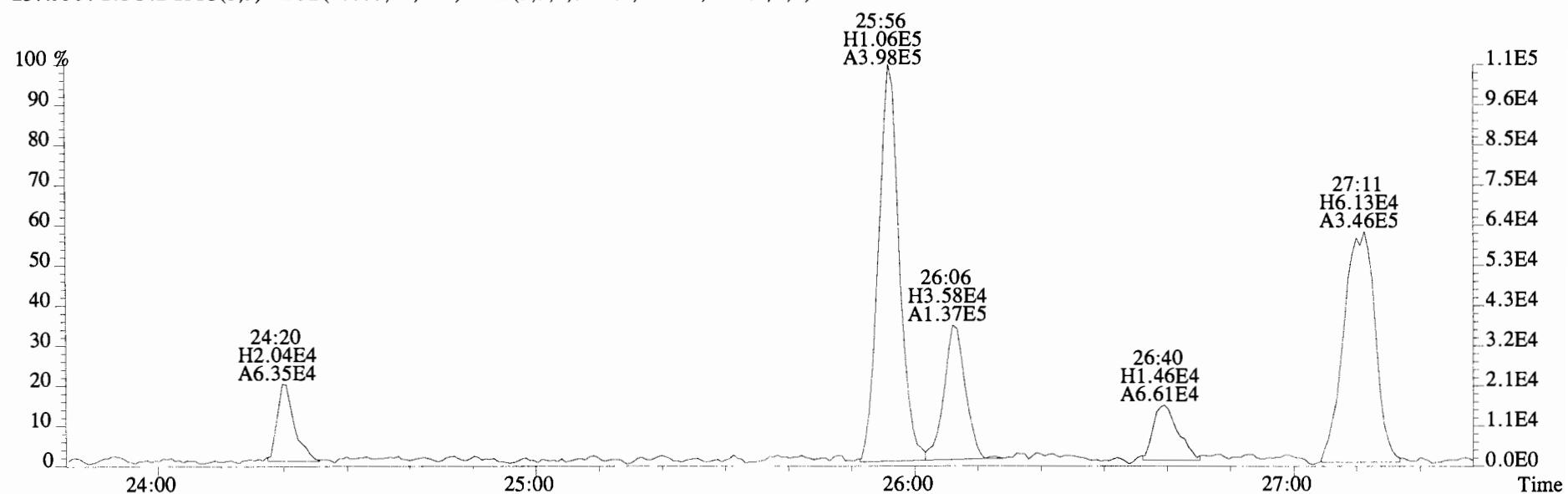
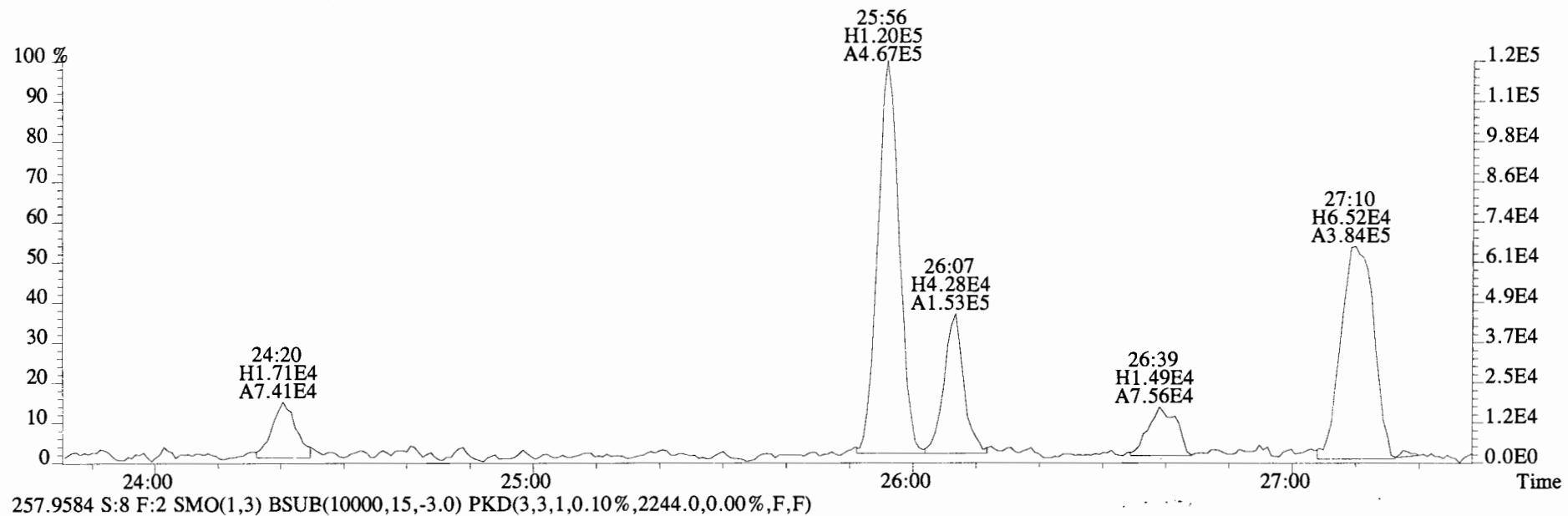
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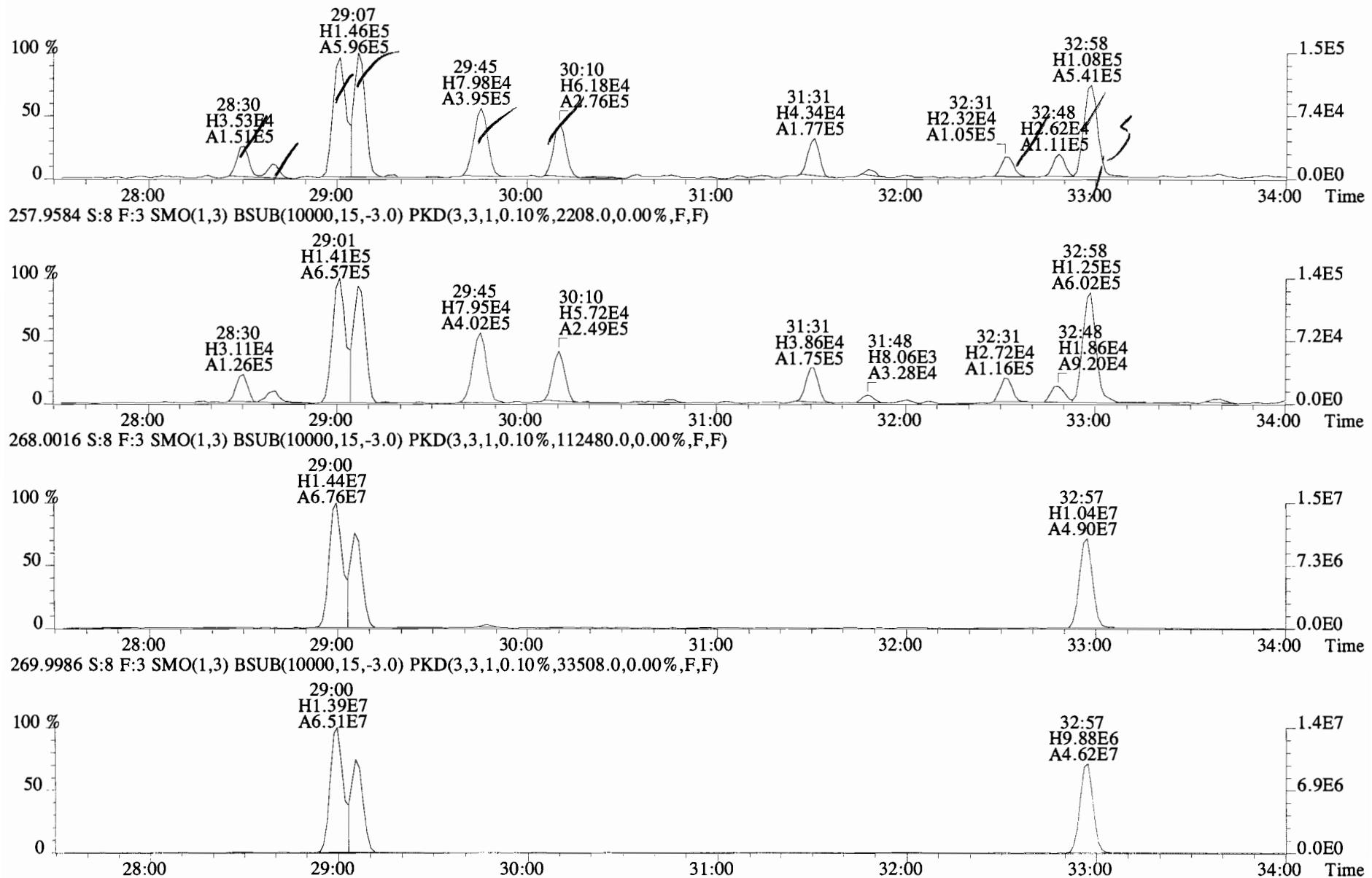
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 255.9613 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3332.0,0.00%,F,F)



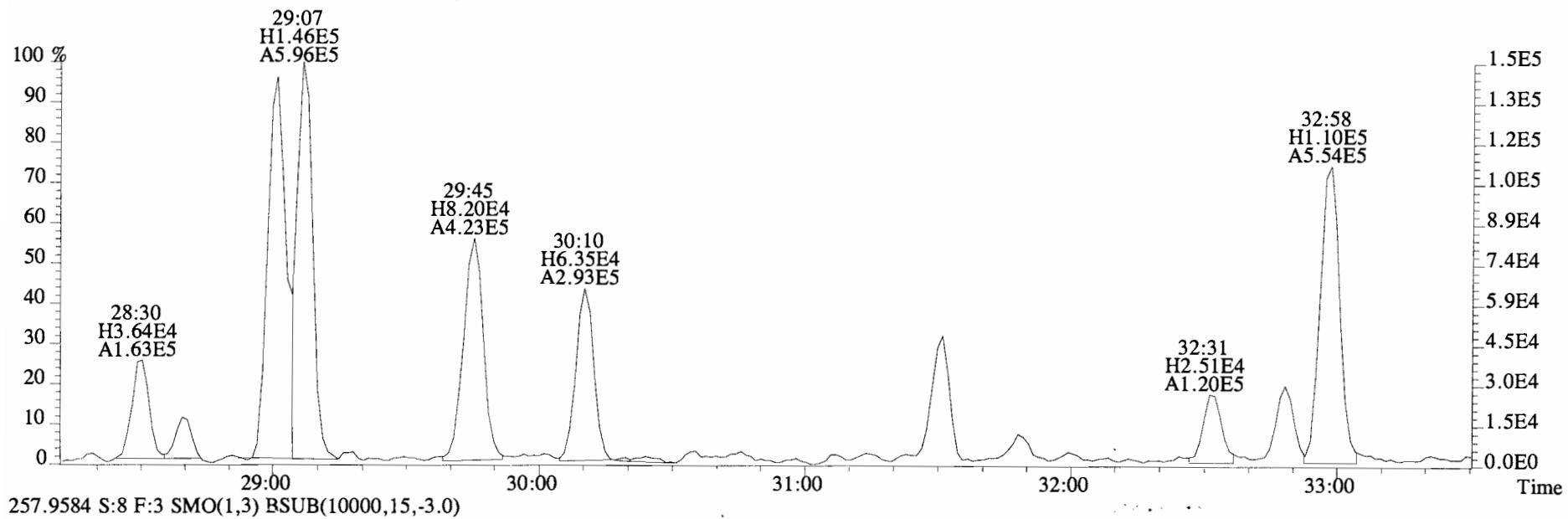
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
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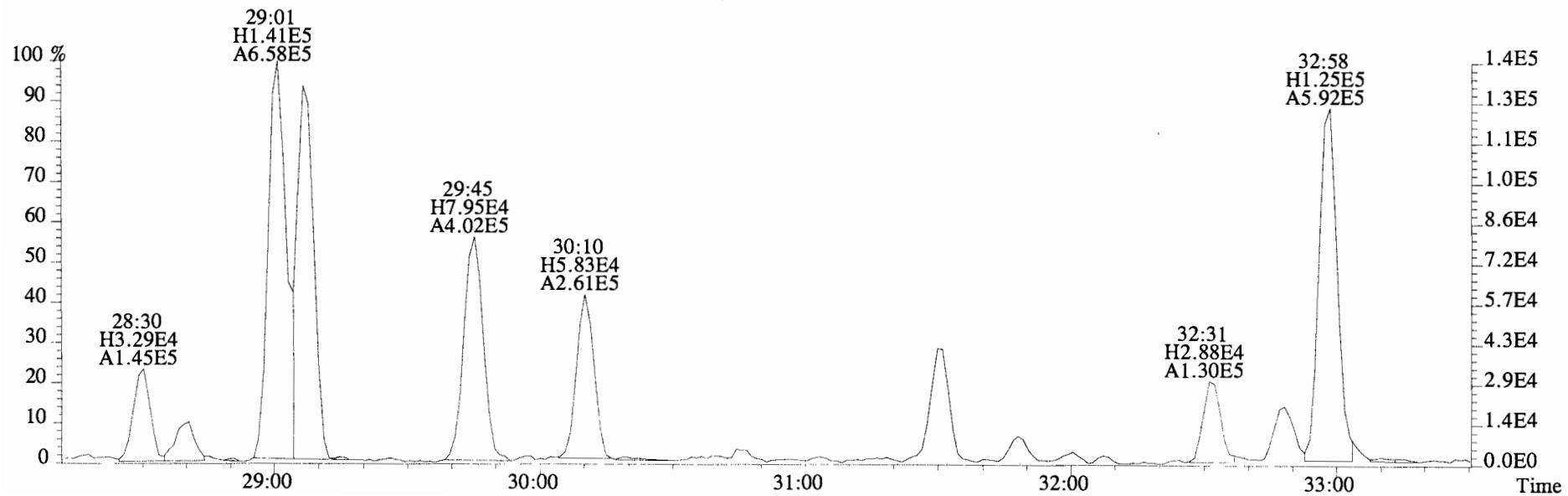
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 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
 255.9613 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3612.0,0.00%,F,F)



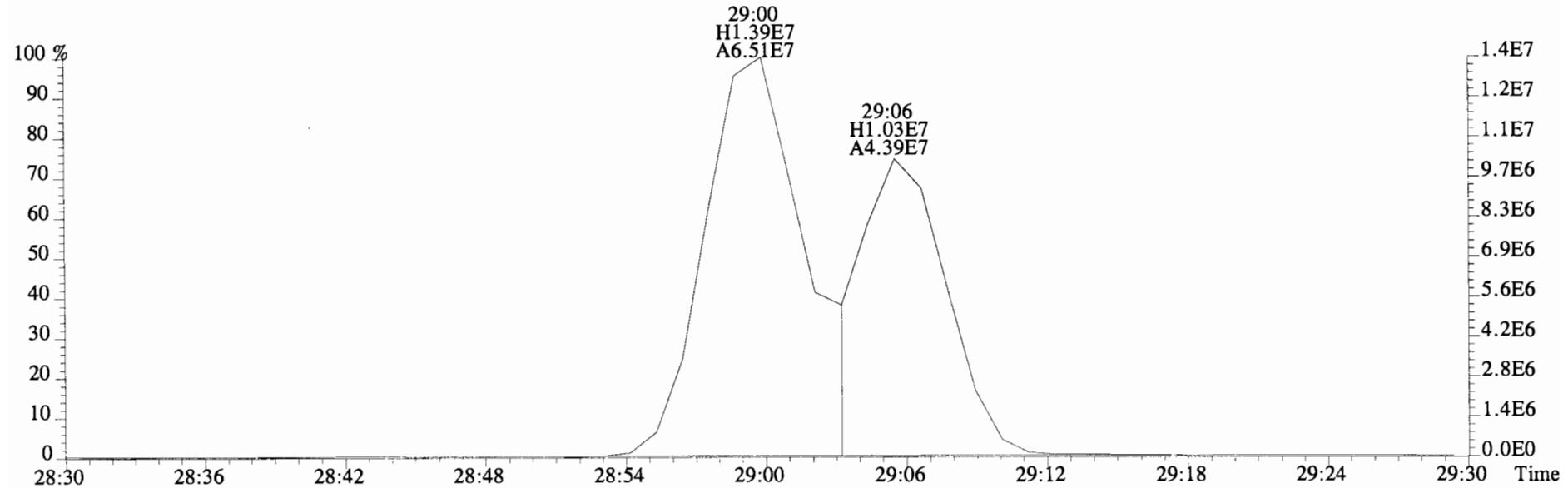
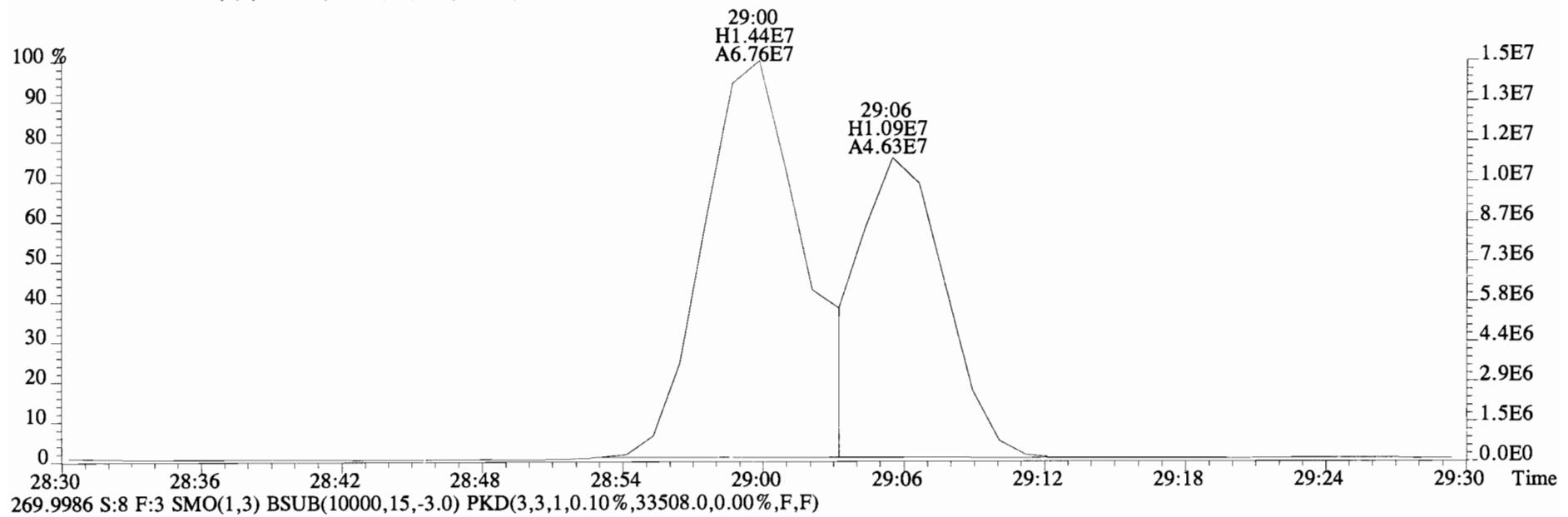
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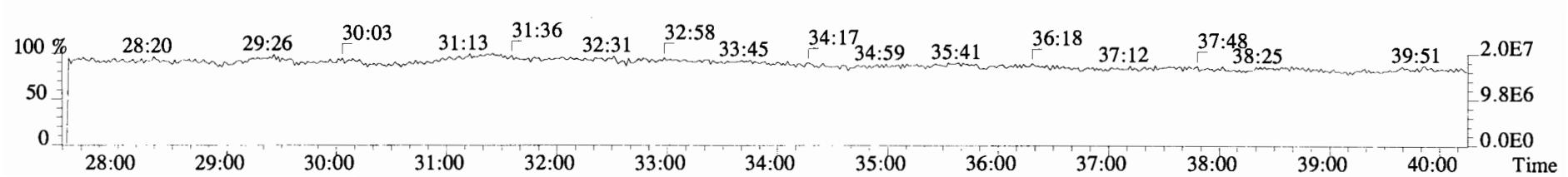
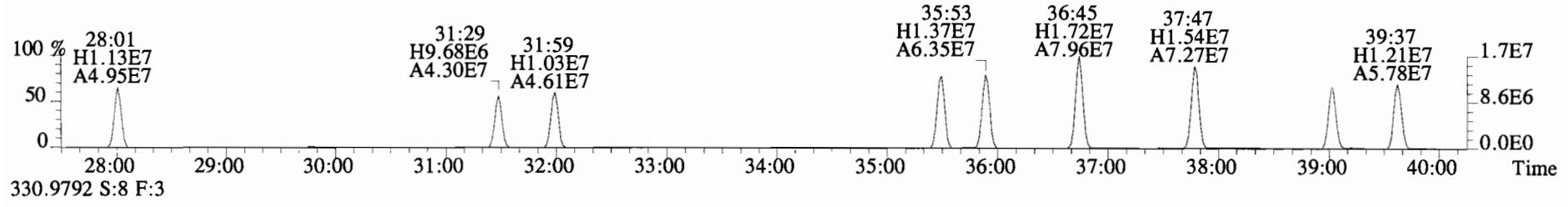
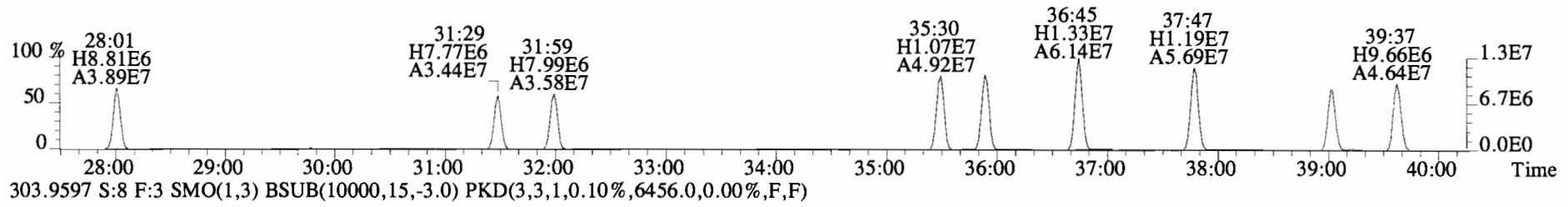
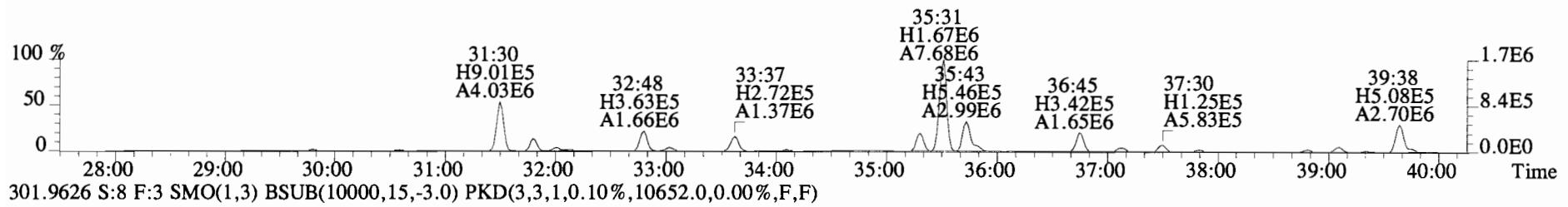
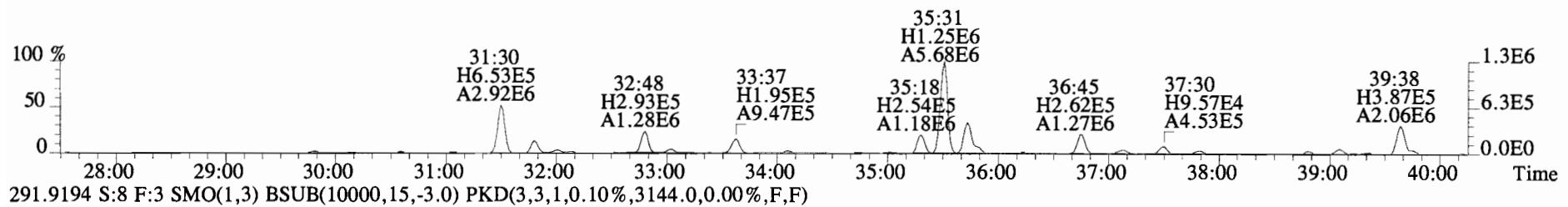
257.9584 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



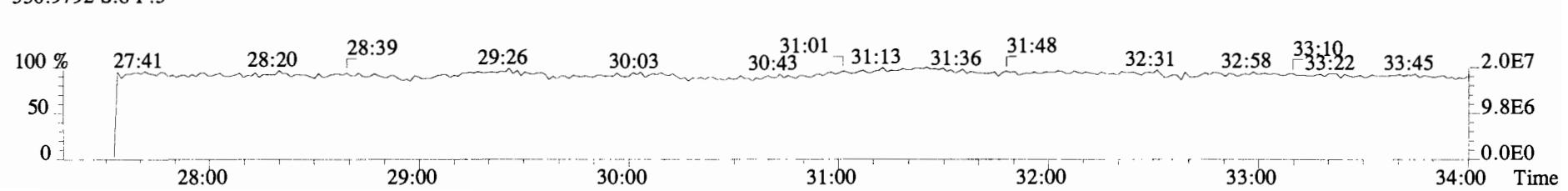
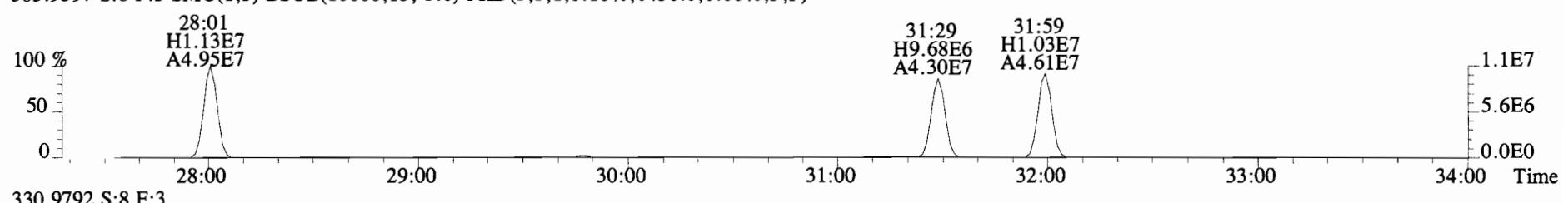
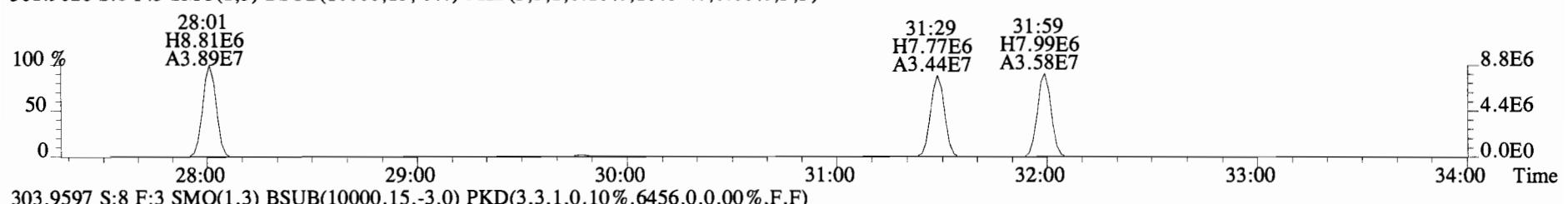
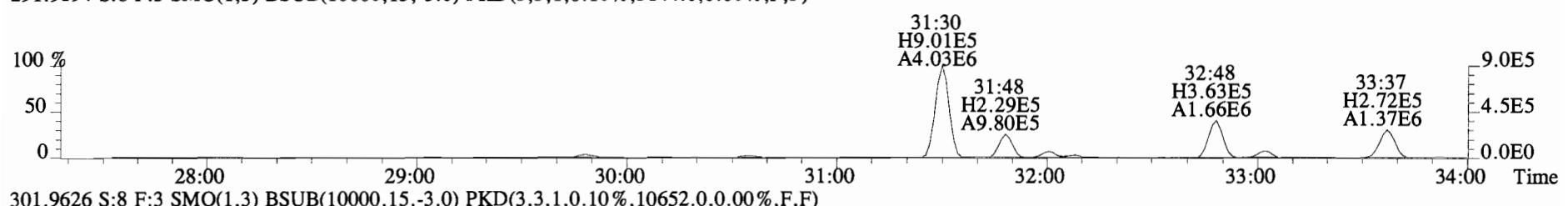
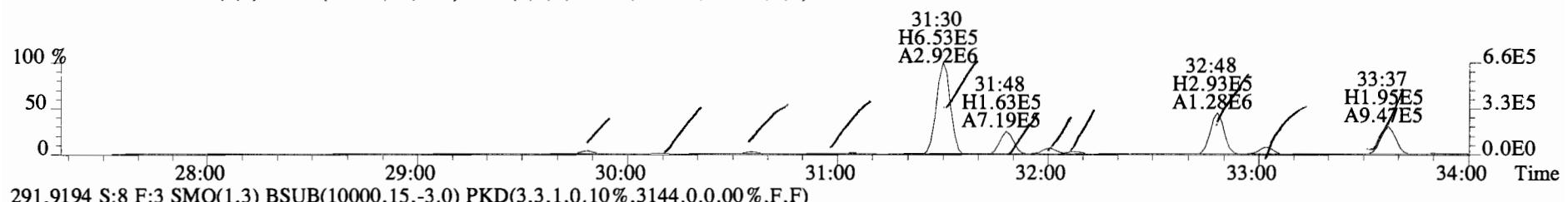
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
268.0016 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,112480.0,0.00%,F,F)



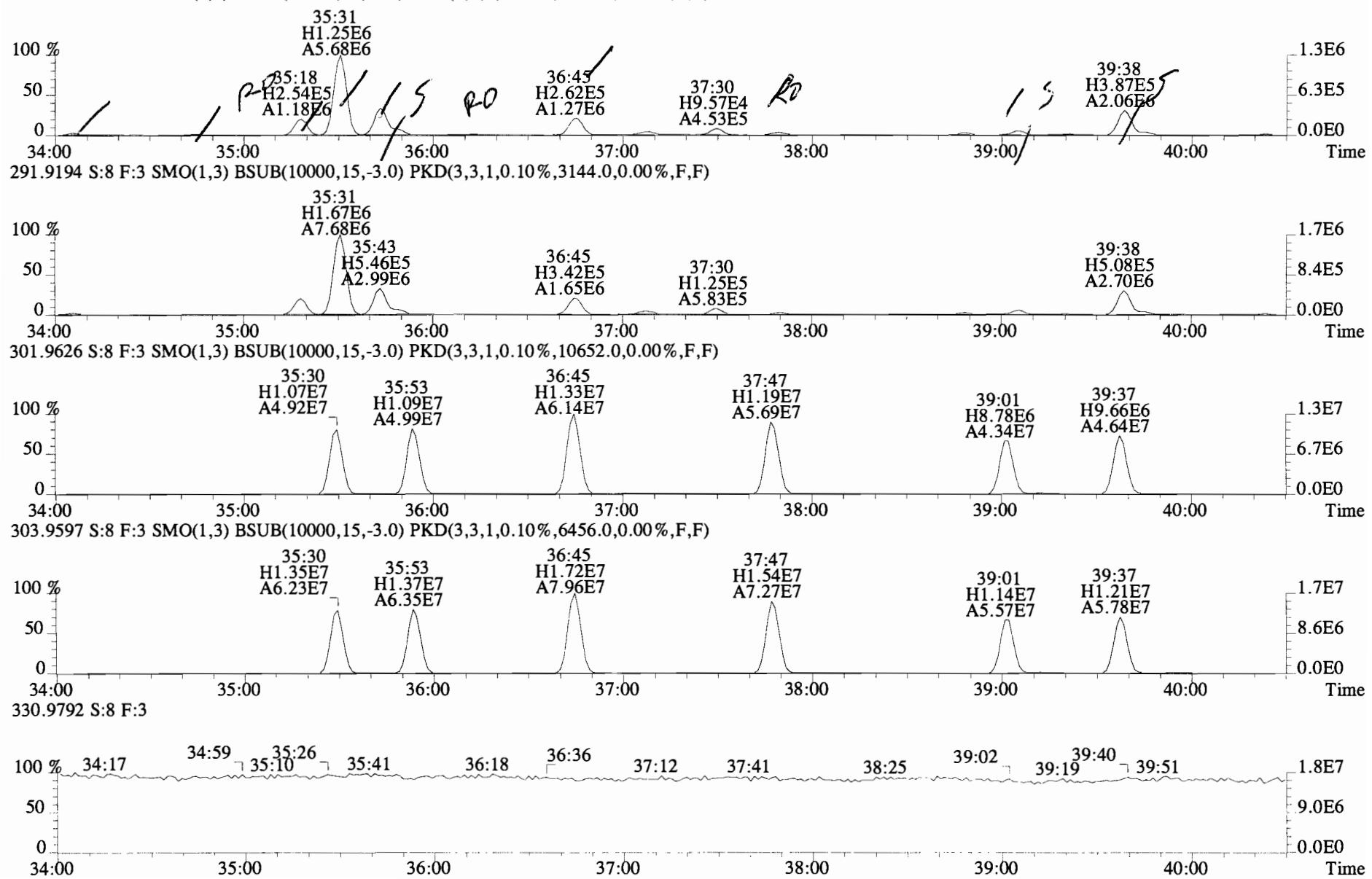
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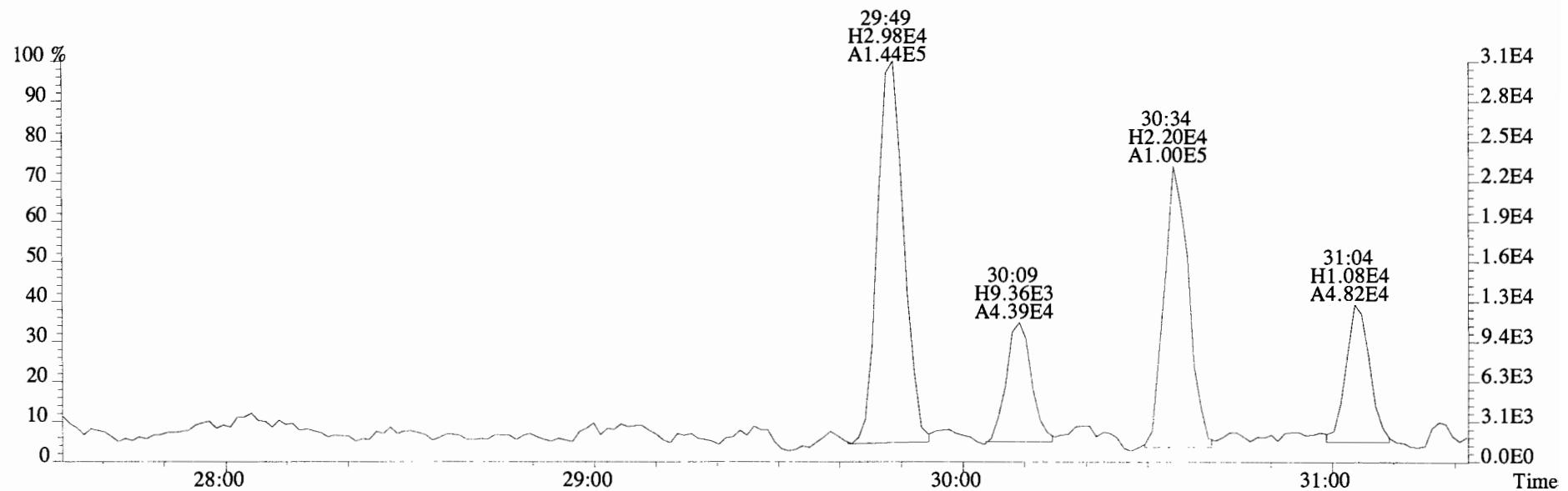
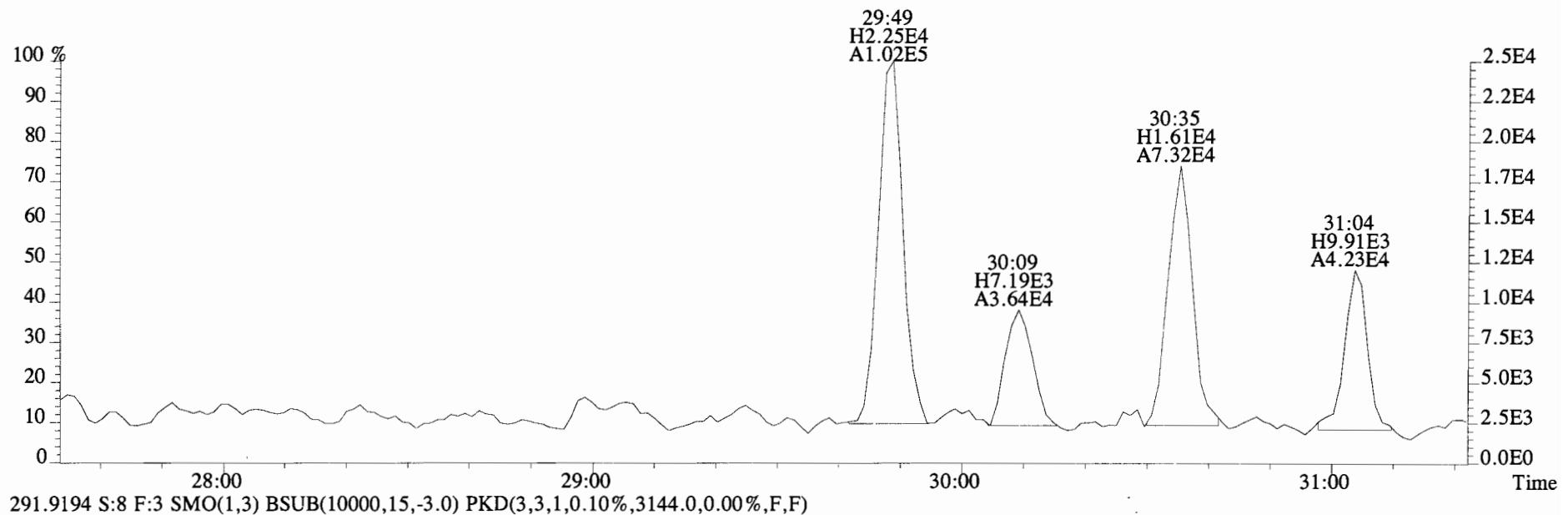
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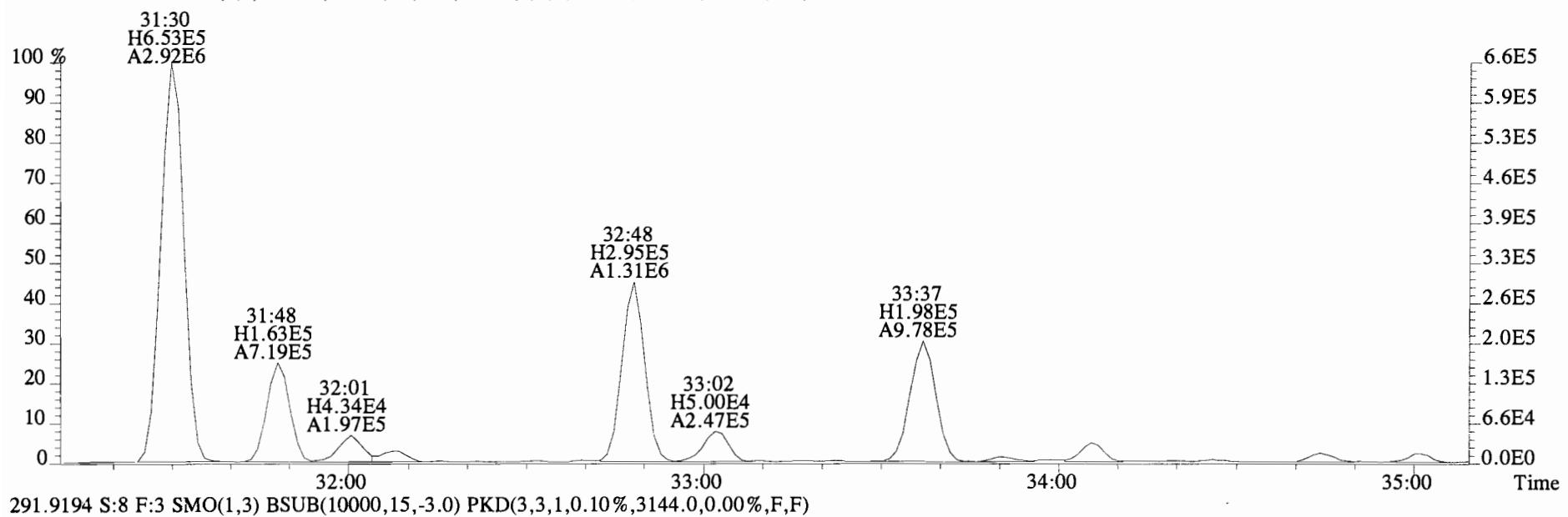
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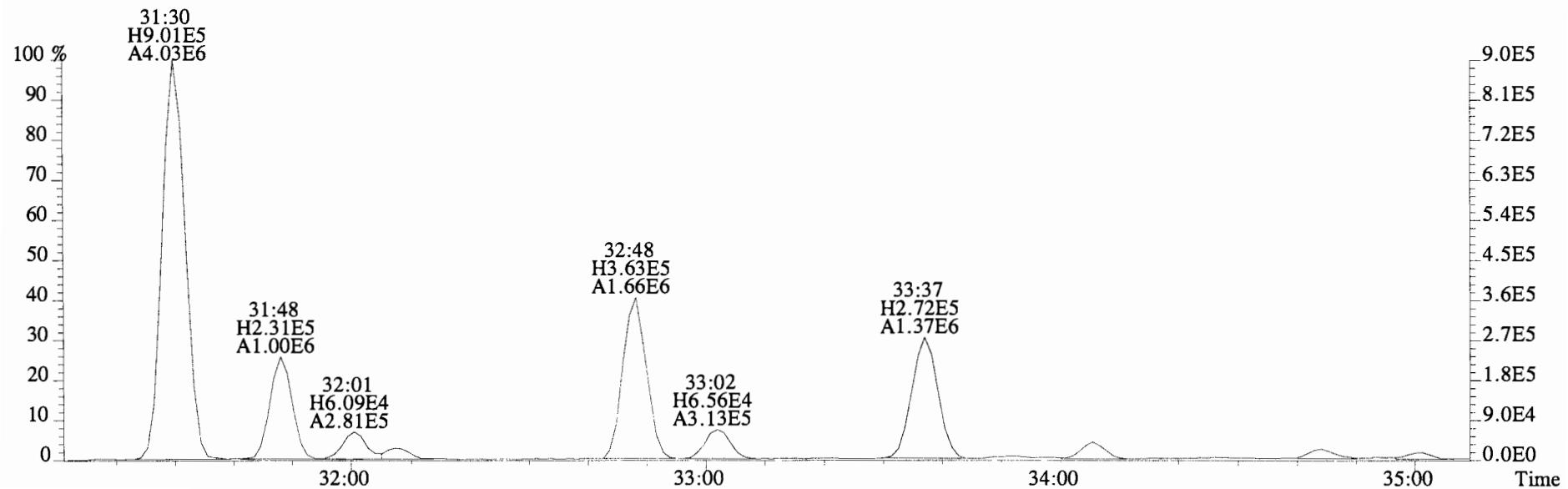
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
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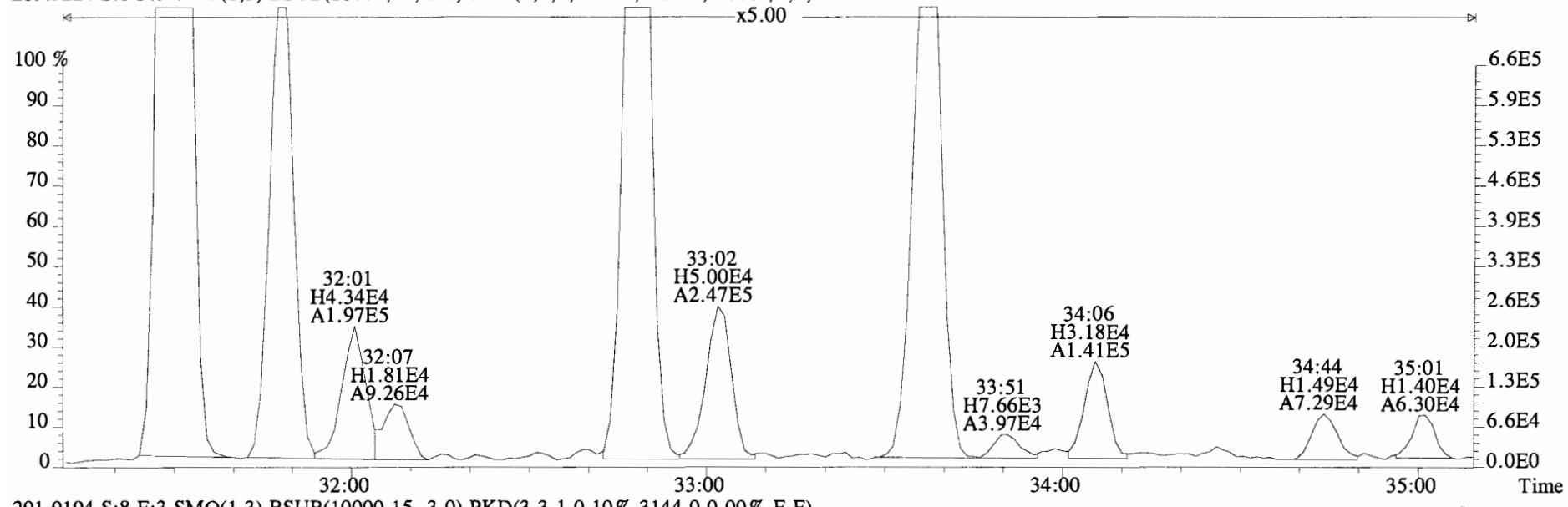
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
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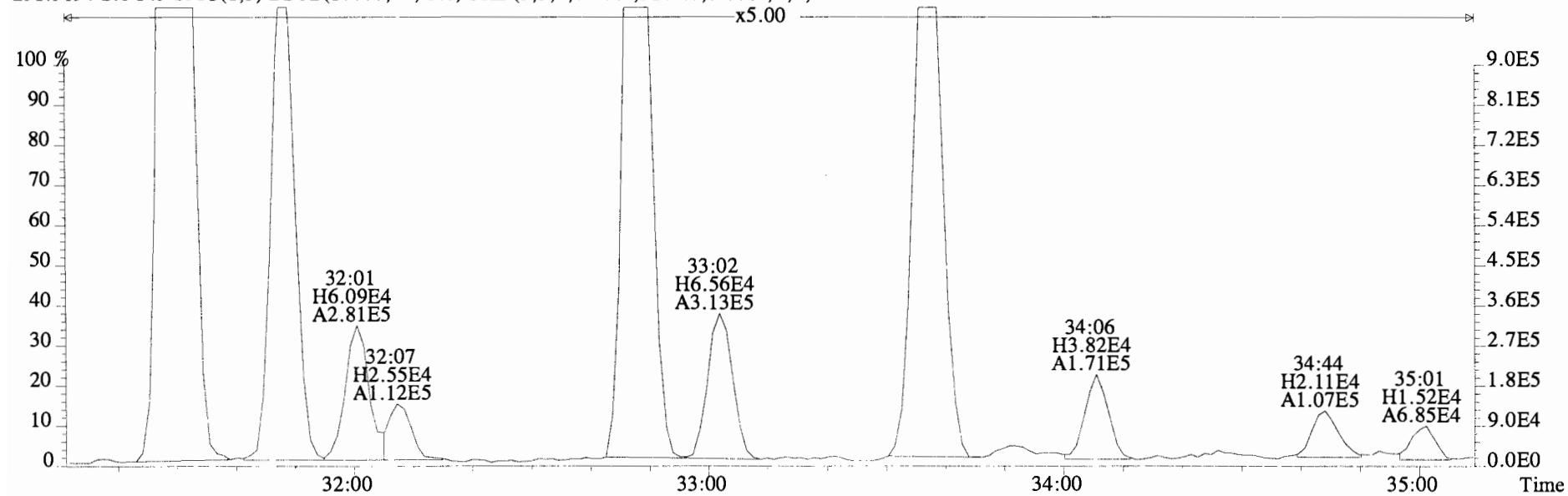
291.9194 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3144.0,0.00%,F,F)



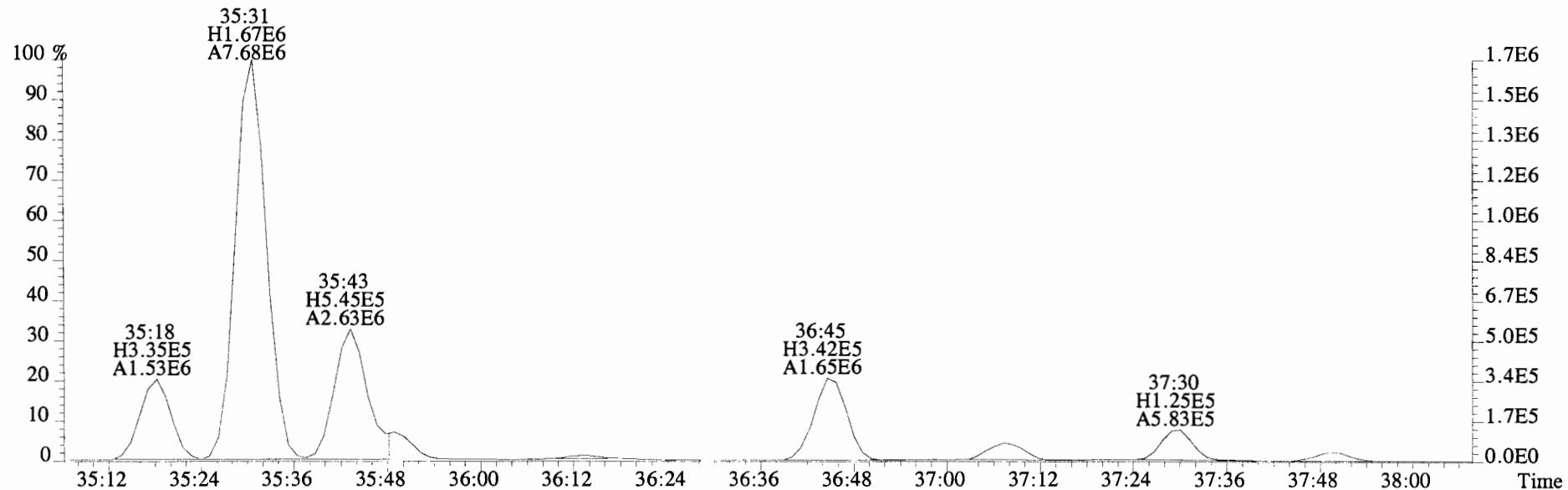
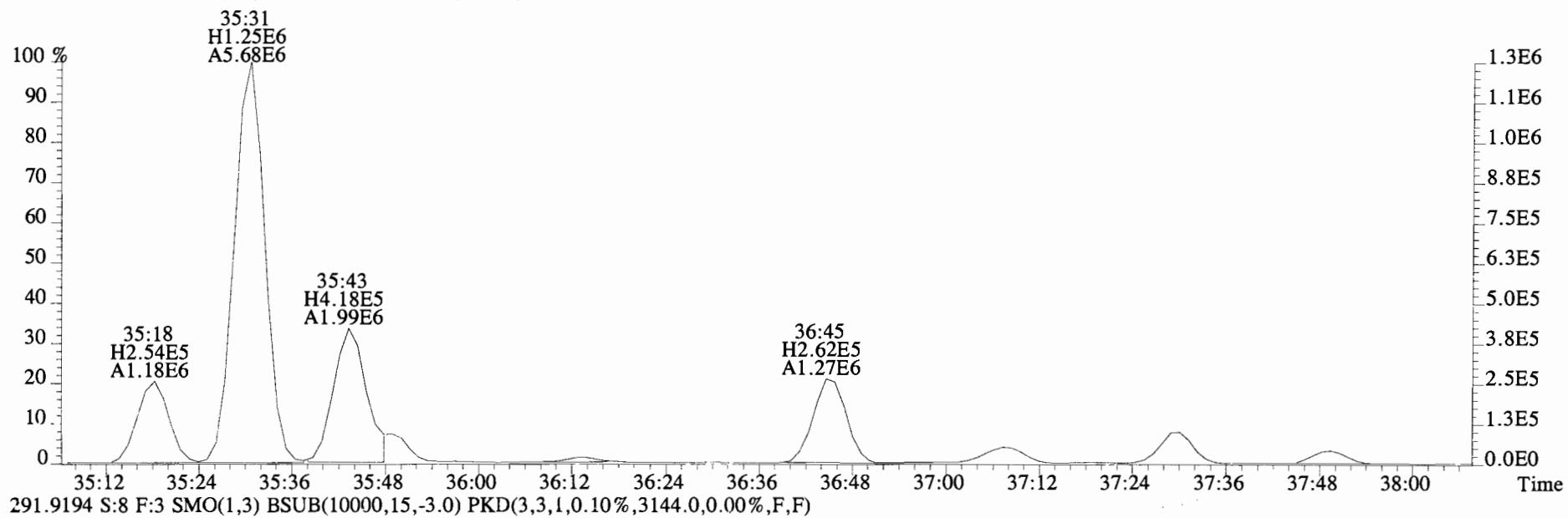
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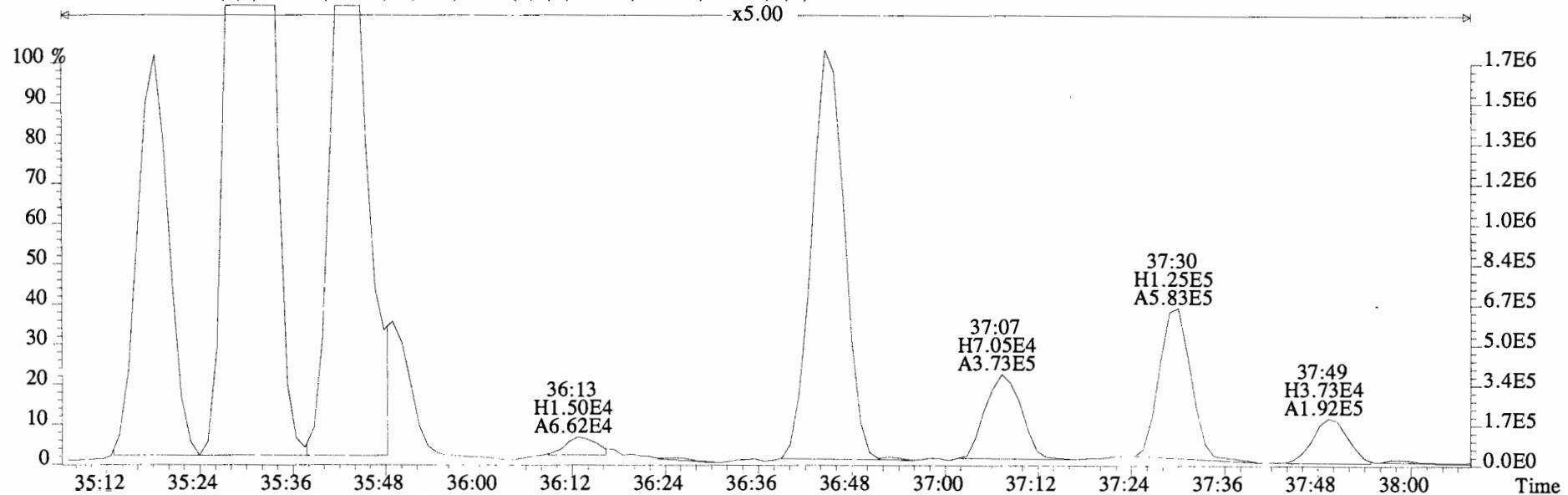
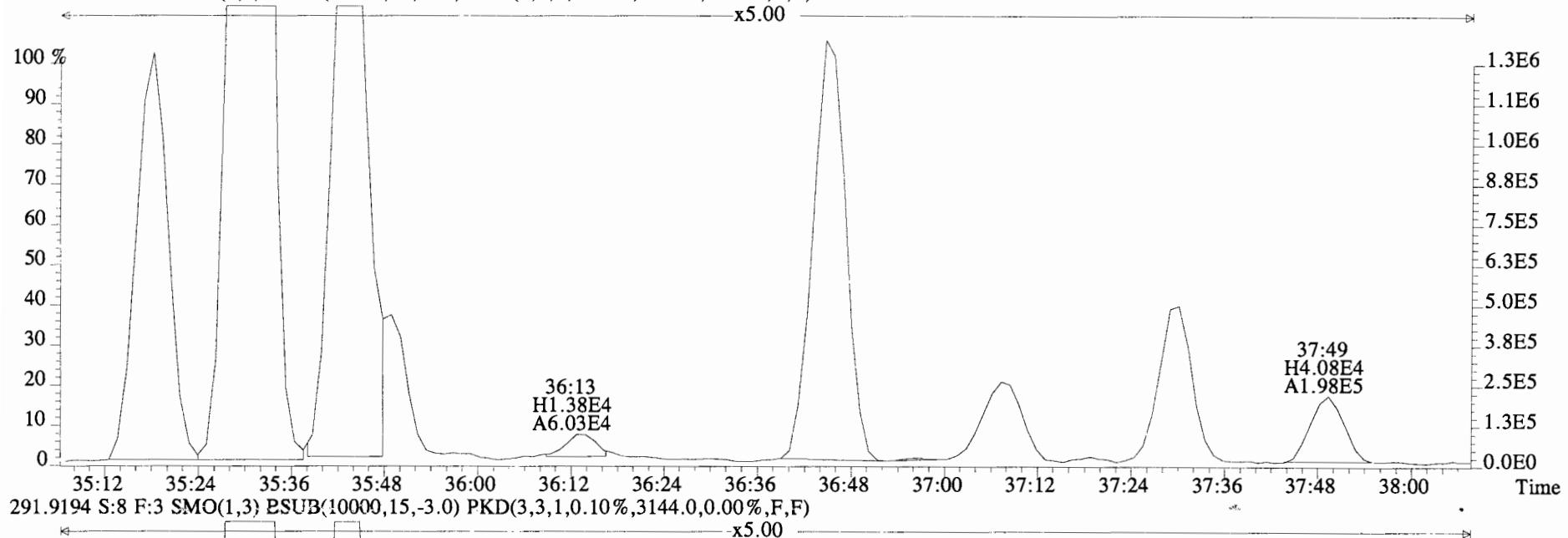
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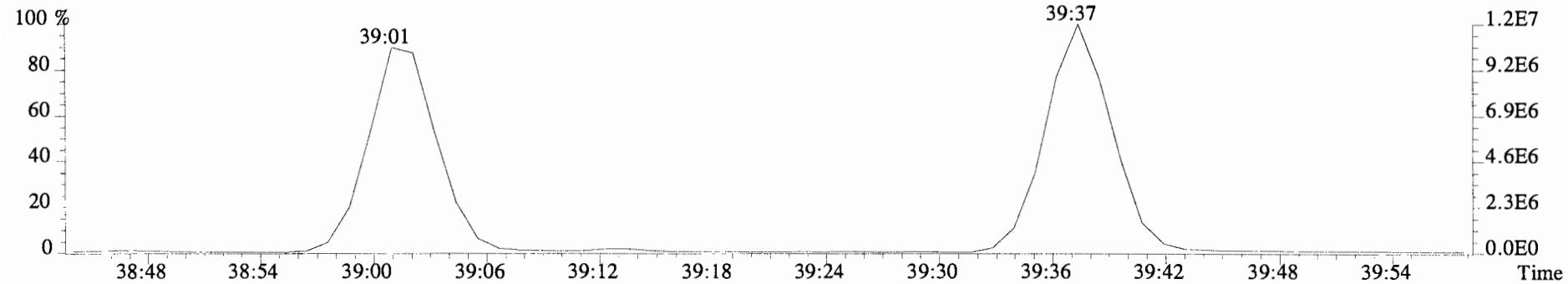
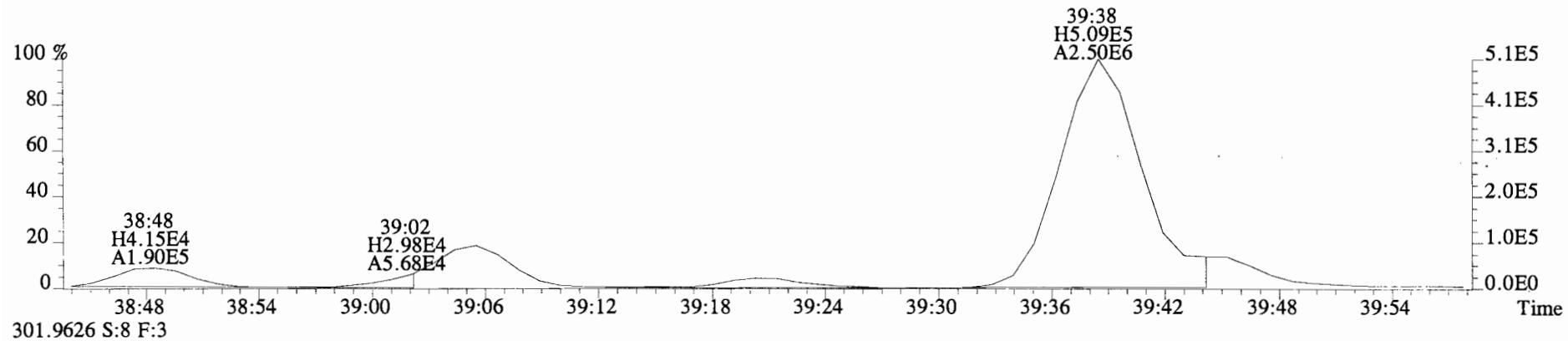
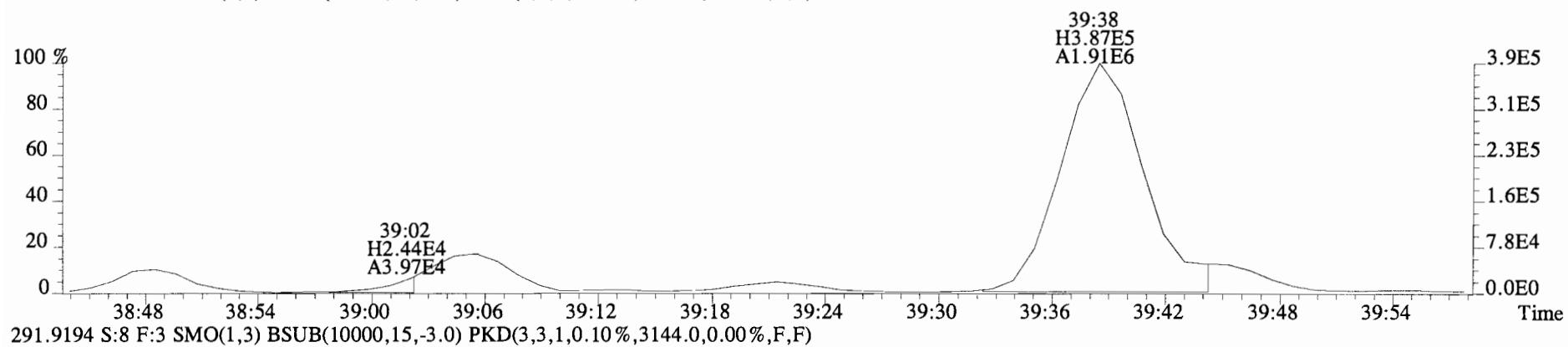
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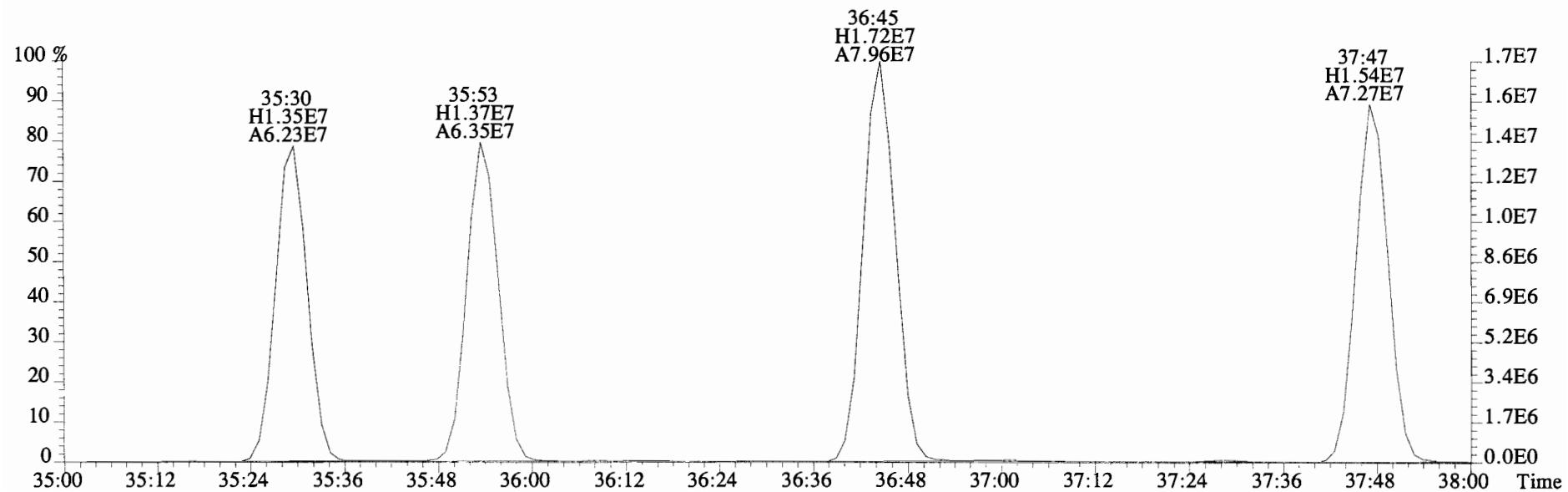
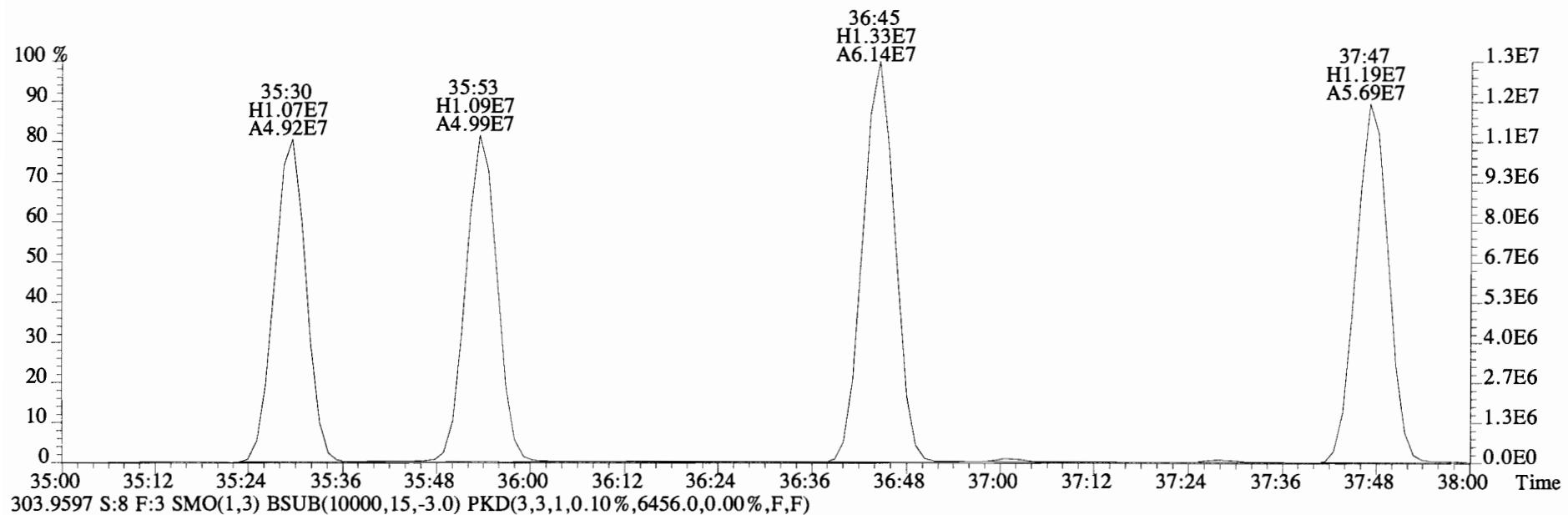
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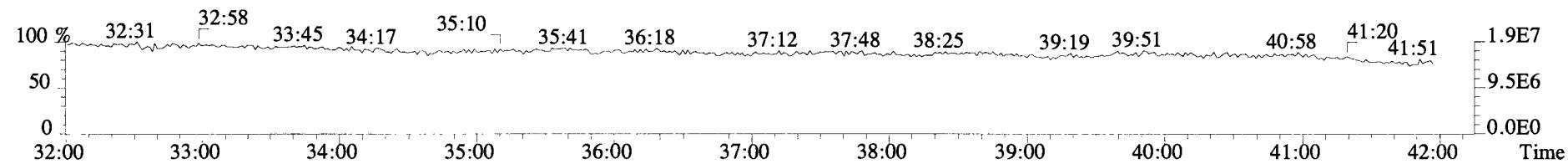
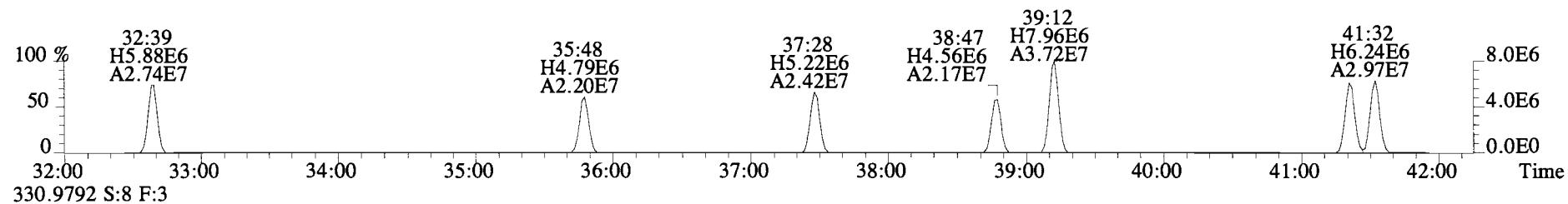
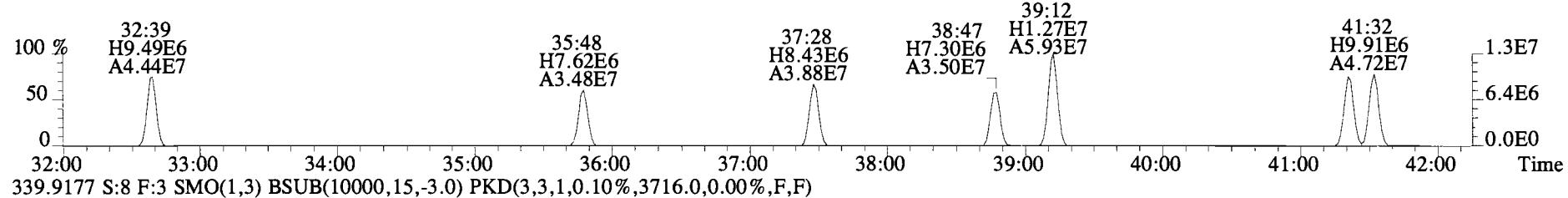
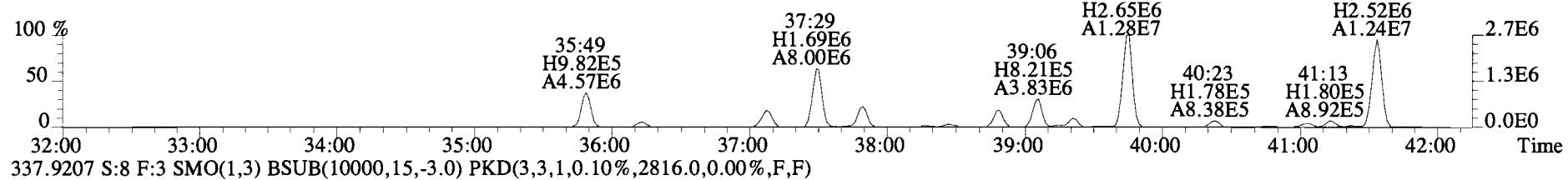
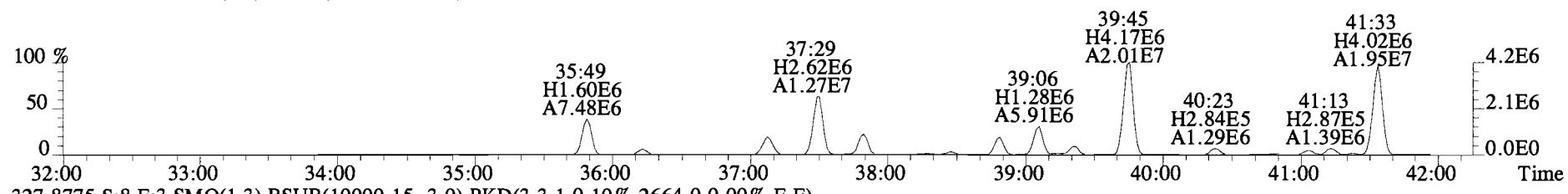
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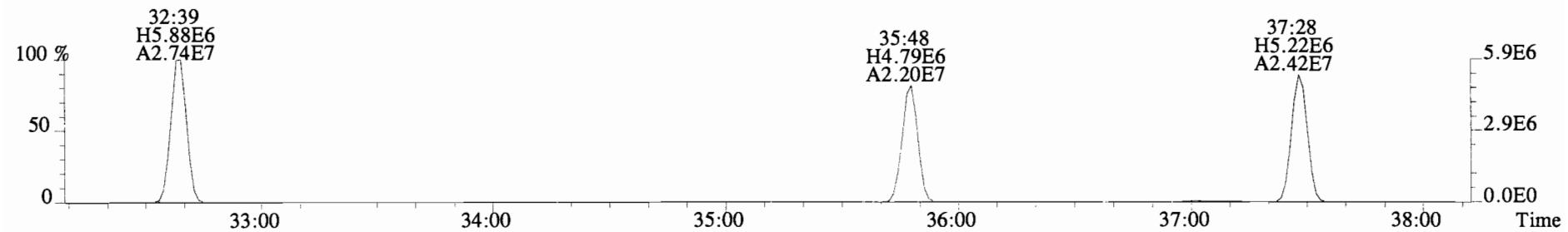
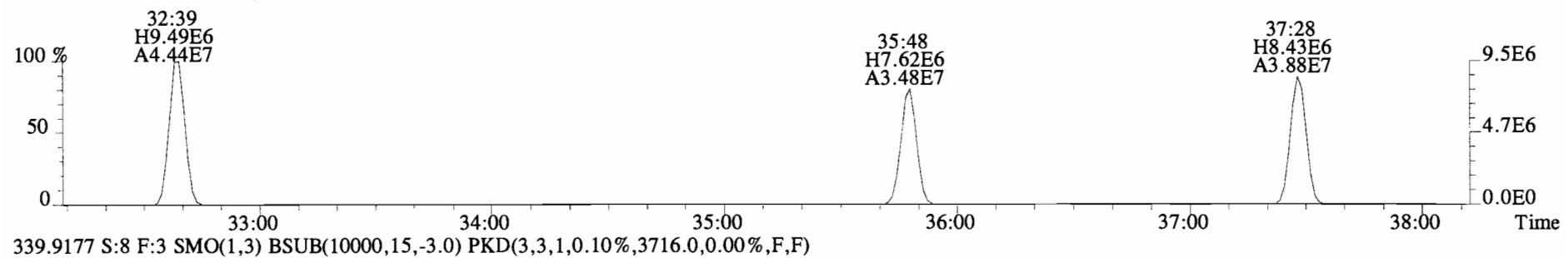
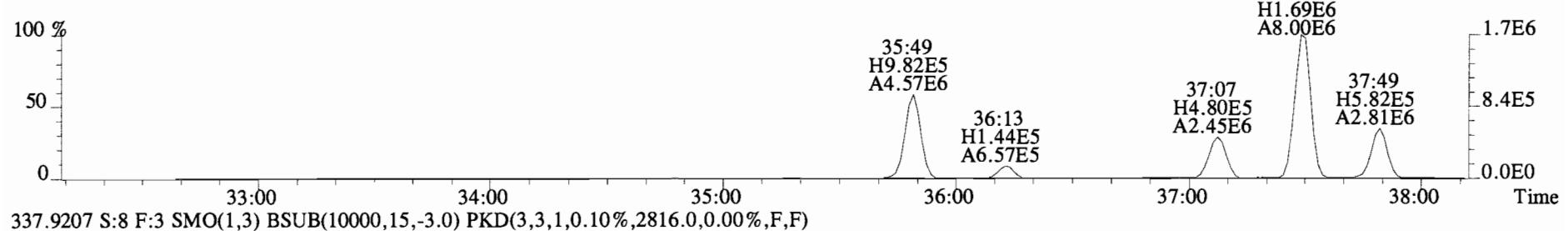
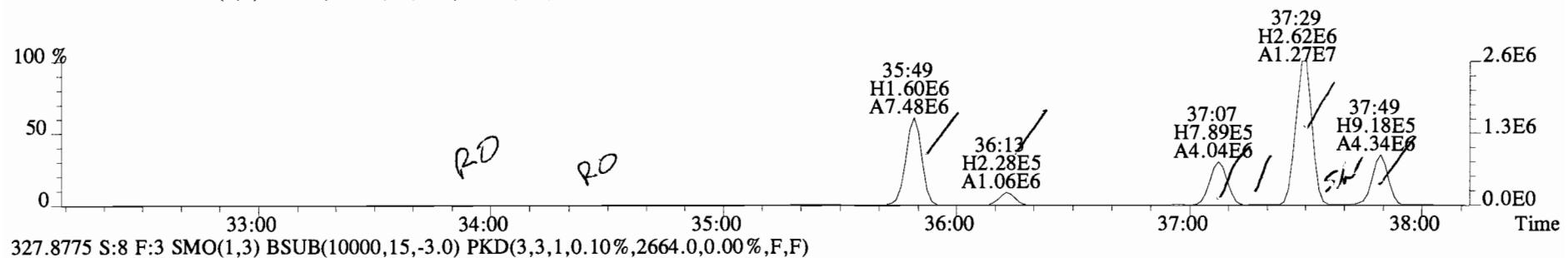
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301.9626 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10652.0,0.00%,F,F)



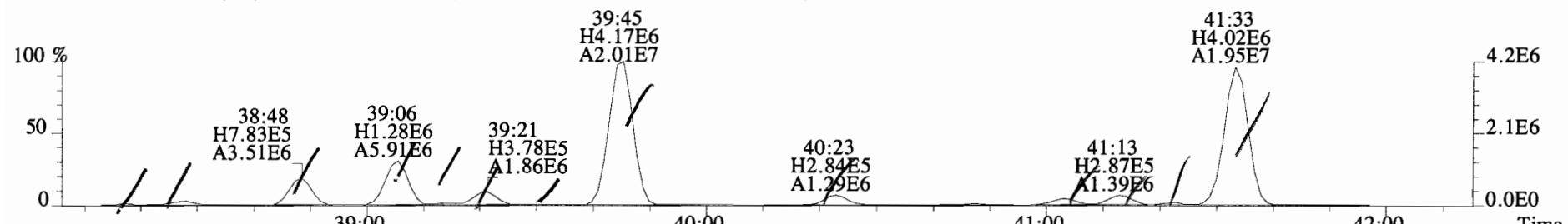
File:141021E2 #1-762 Acq:22-OCT-2014 03:37:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
 325.8804 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1932.0,0.00%,F,F)



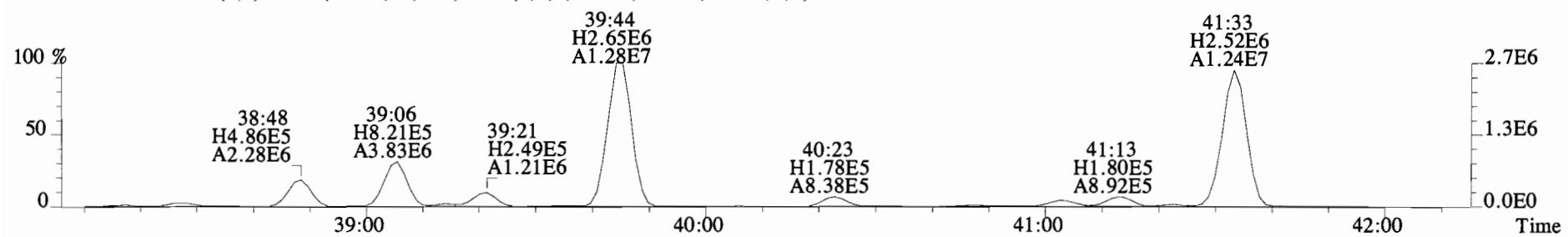
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 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
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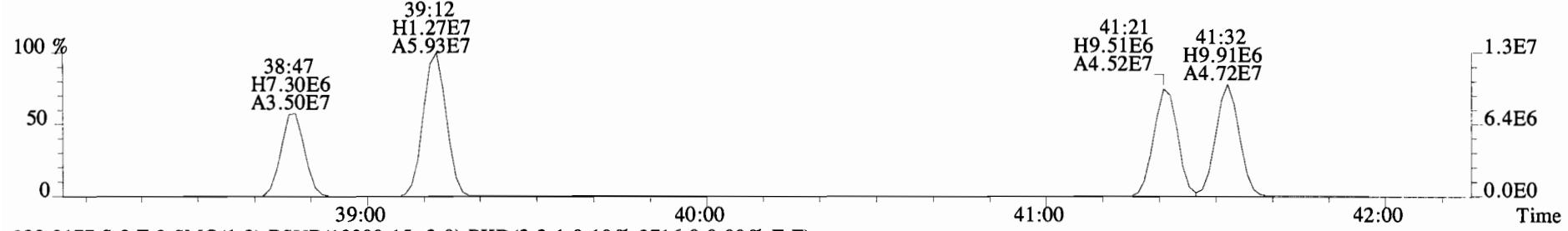
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 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
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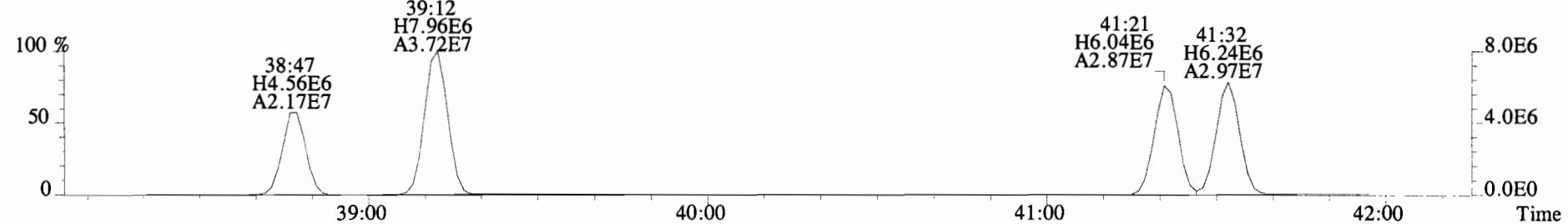
327.8775 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2664.0,0.00%,F,F)



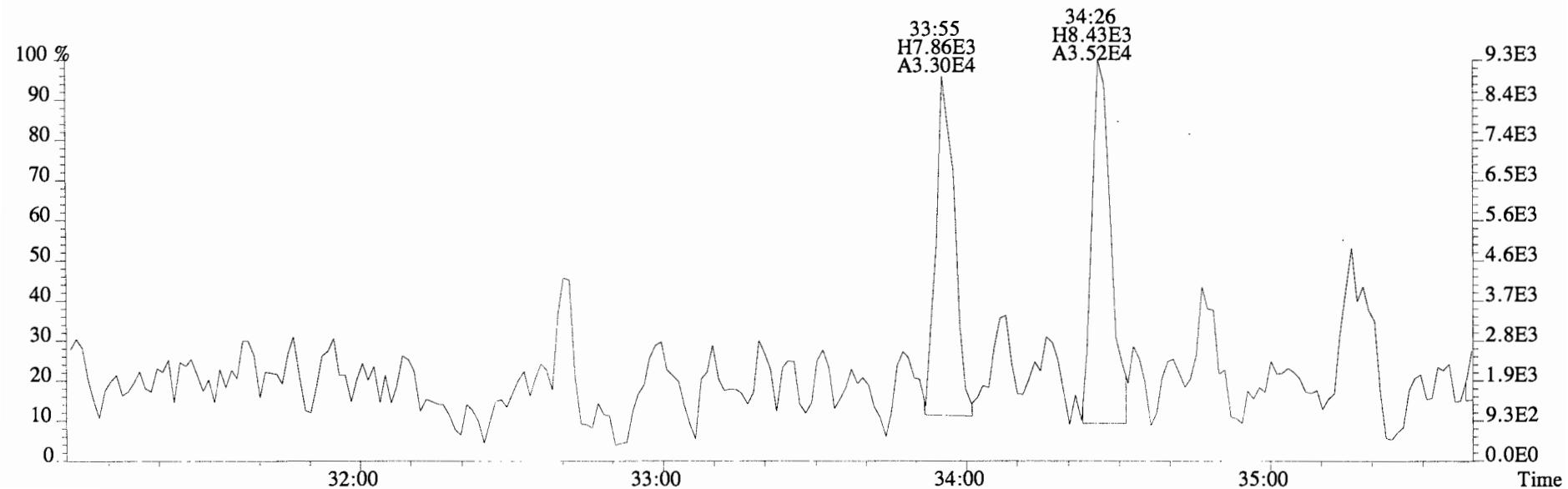
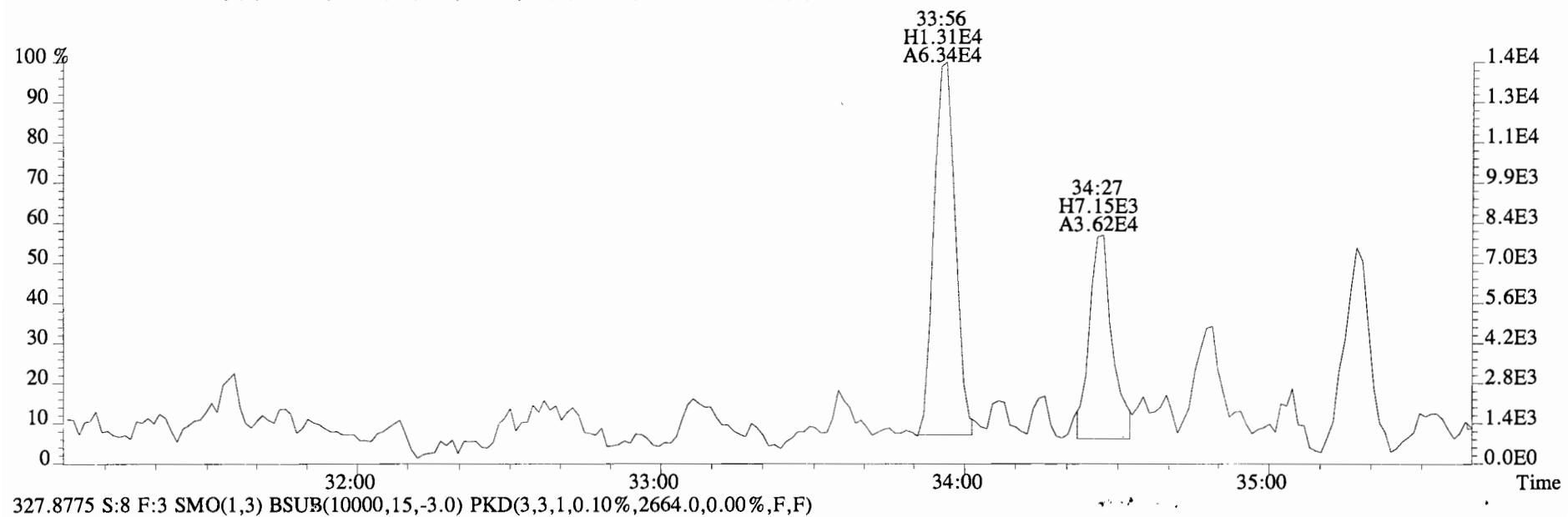
337.9207 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2816.0,0.00%,F,F)



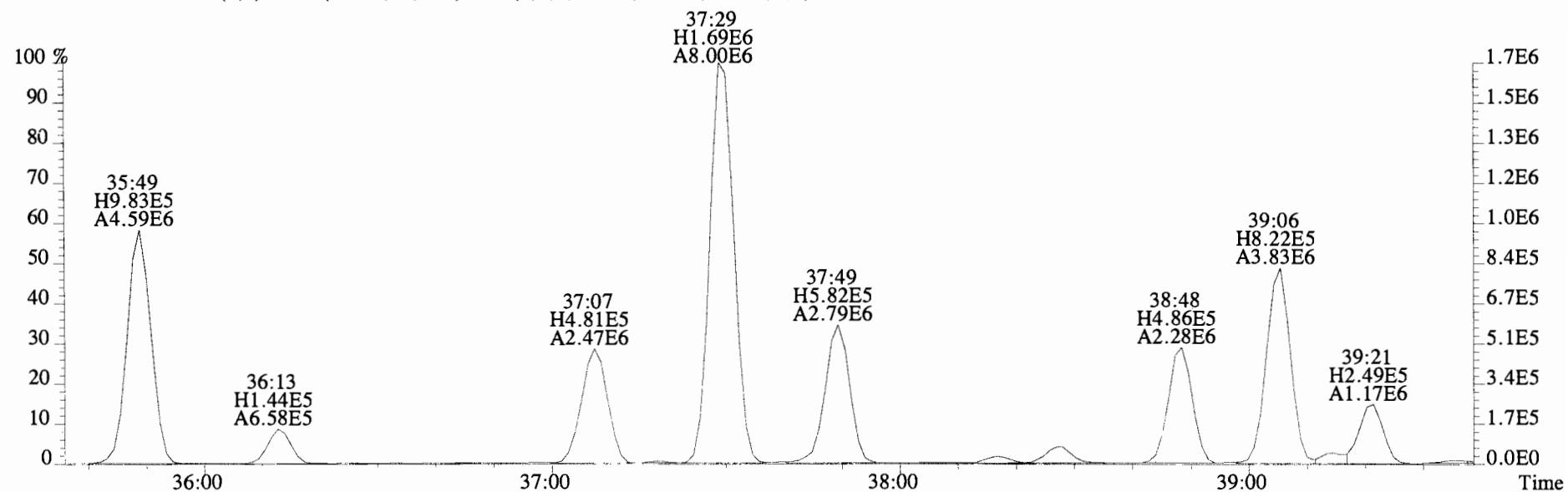
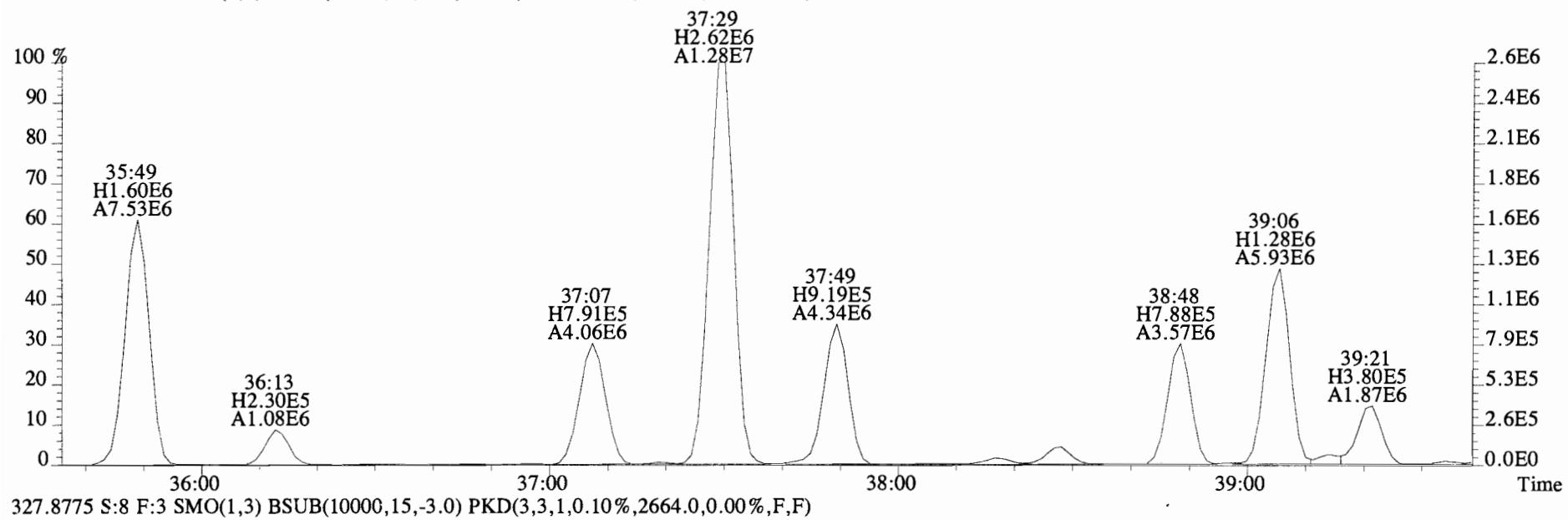
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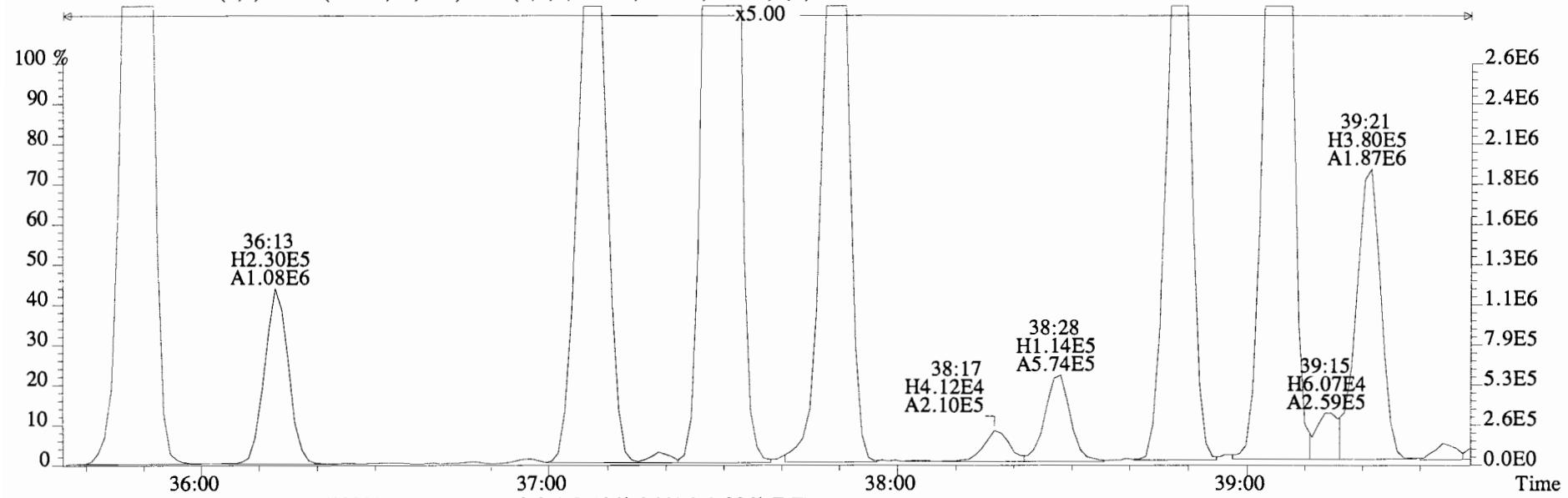
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
325.8804 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1932.0,0.00%,F,F)



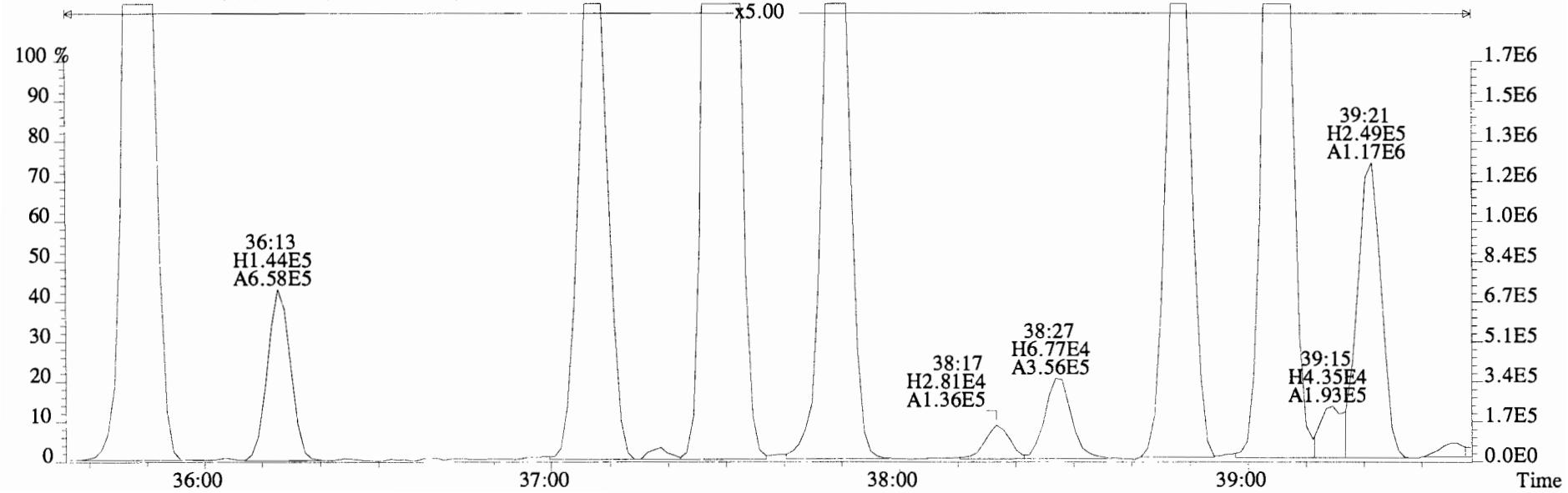
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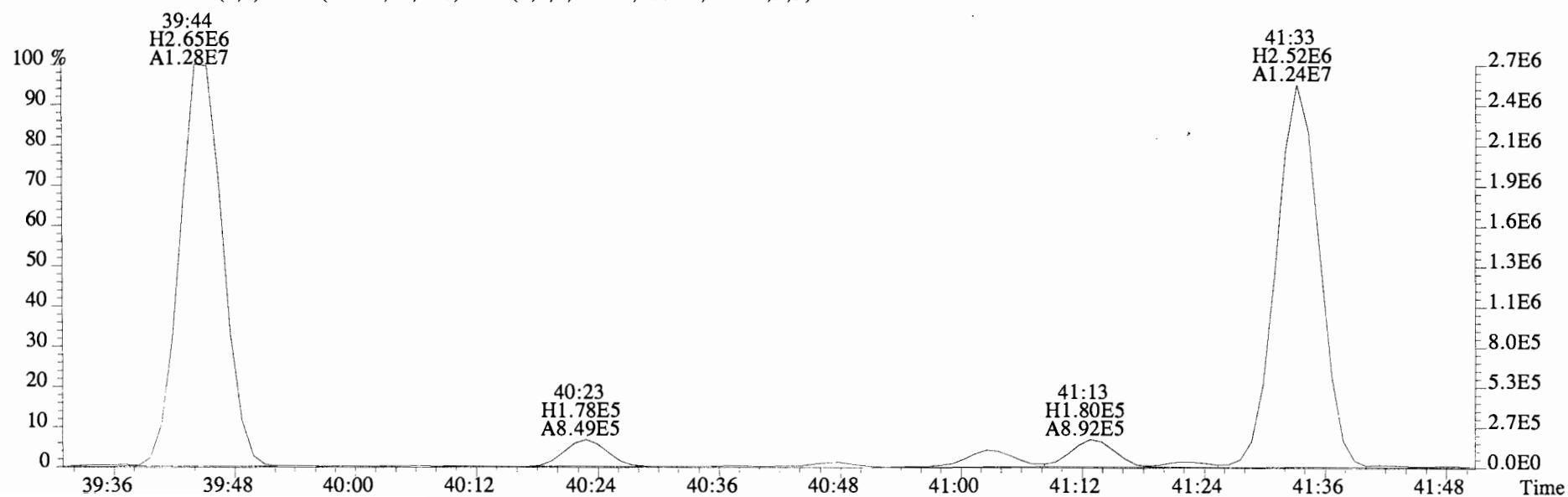
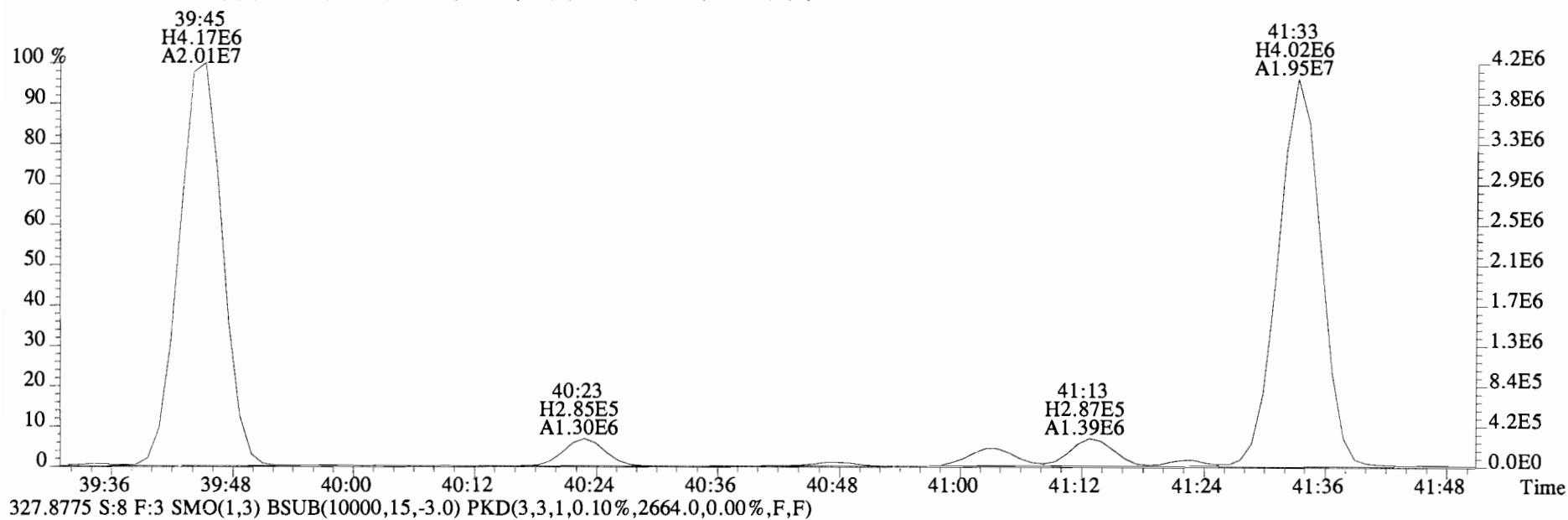
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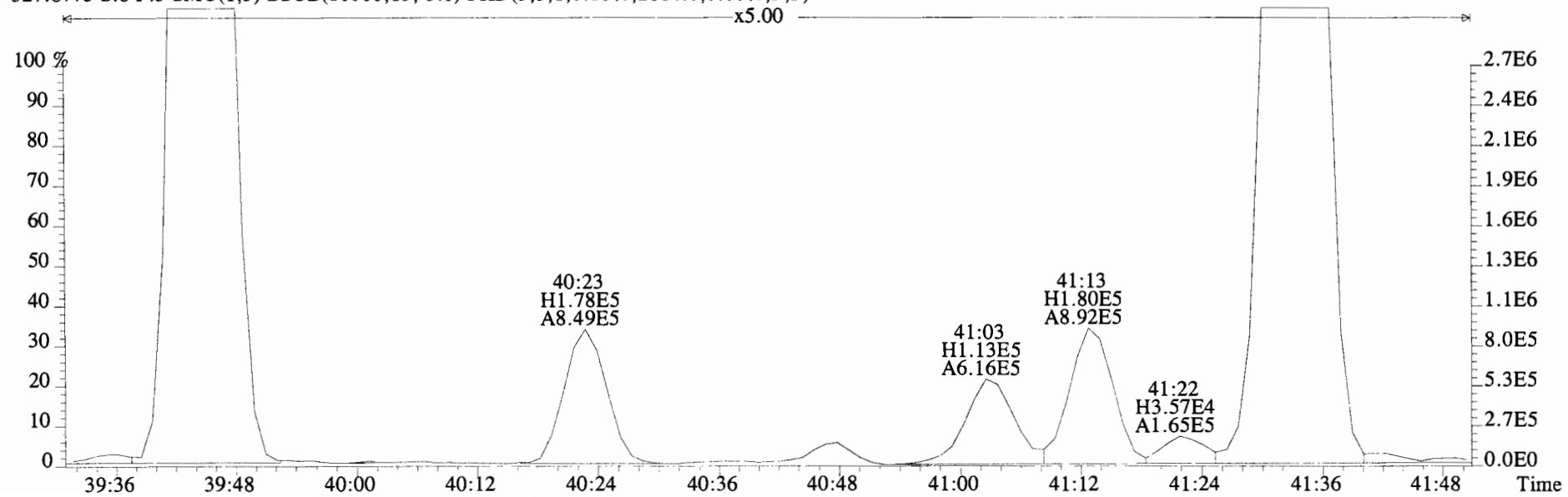
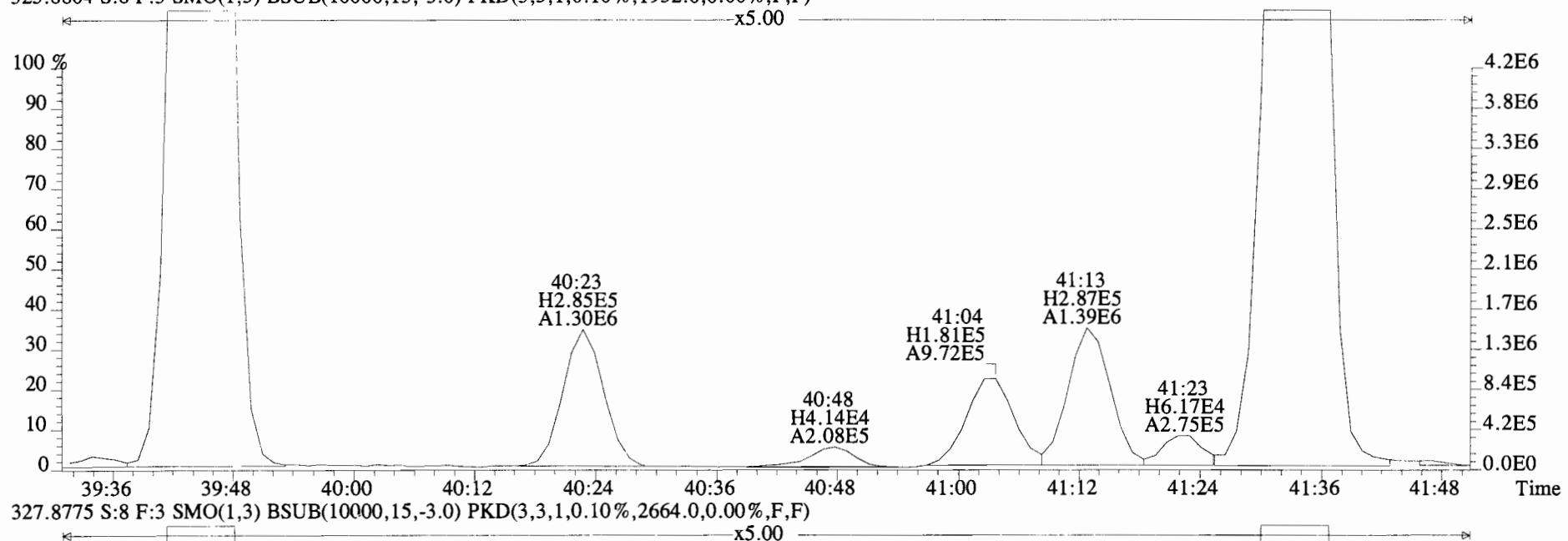
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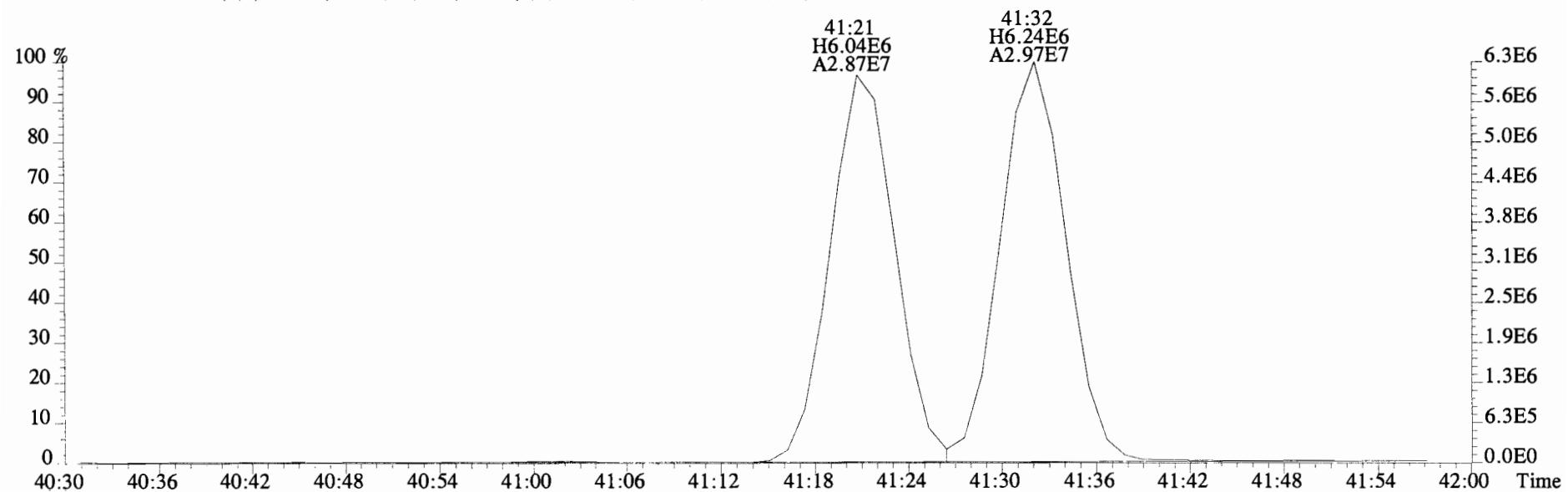
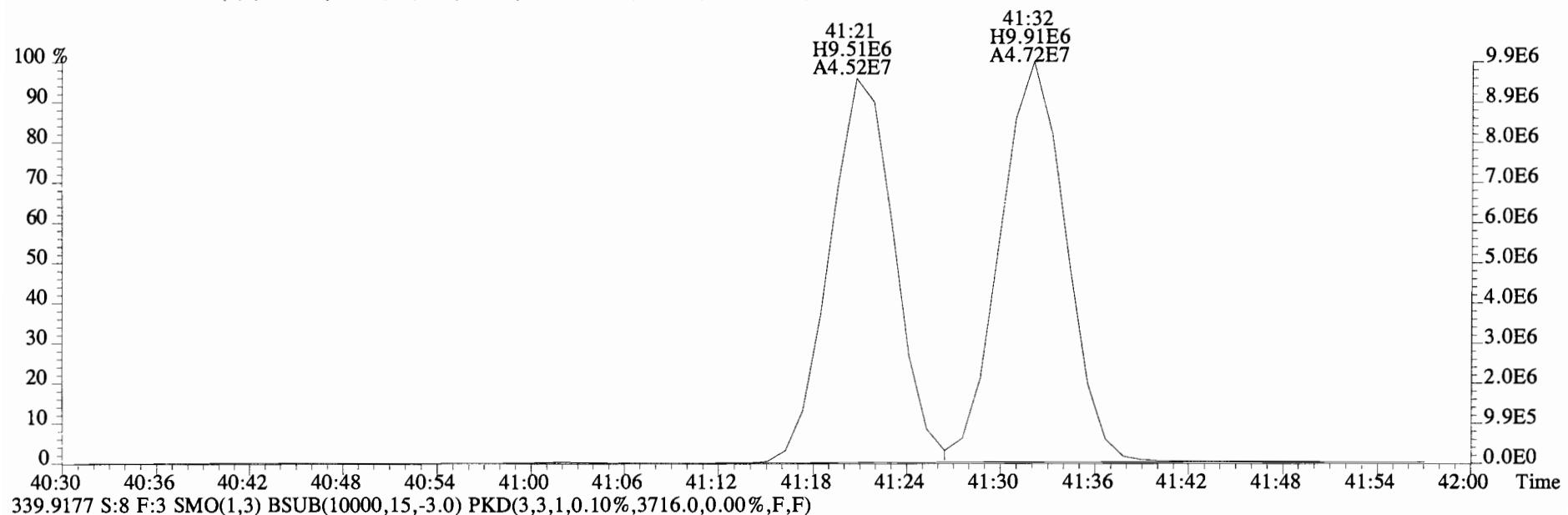
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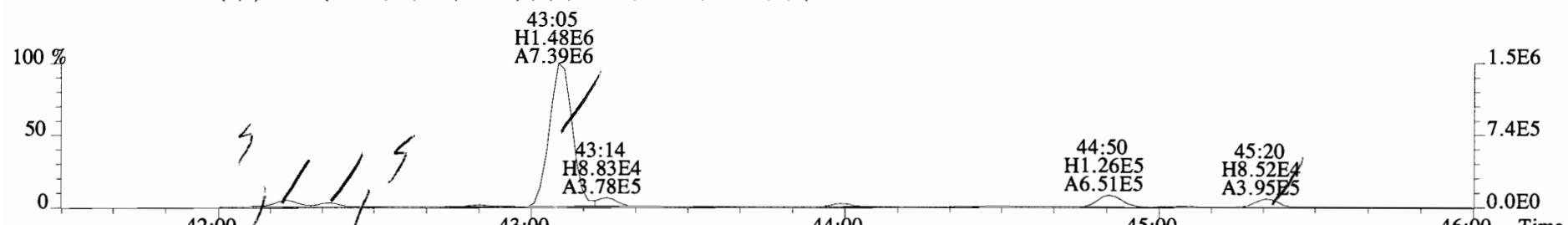
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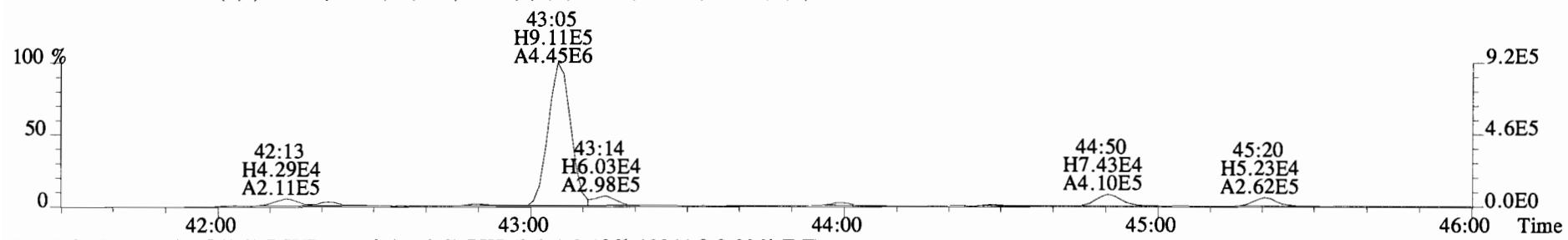
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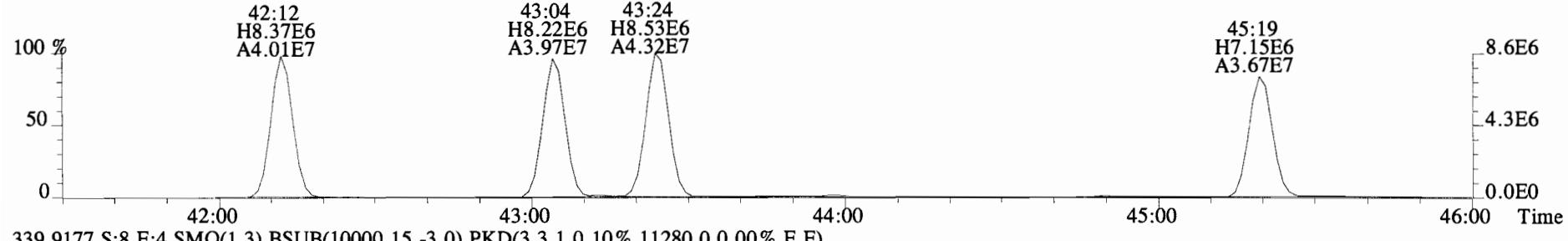
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 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
 325.8804 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6020.0,0.00%,F,F)



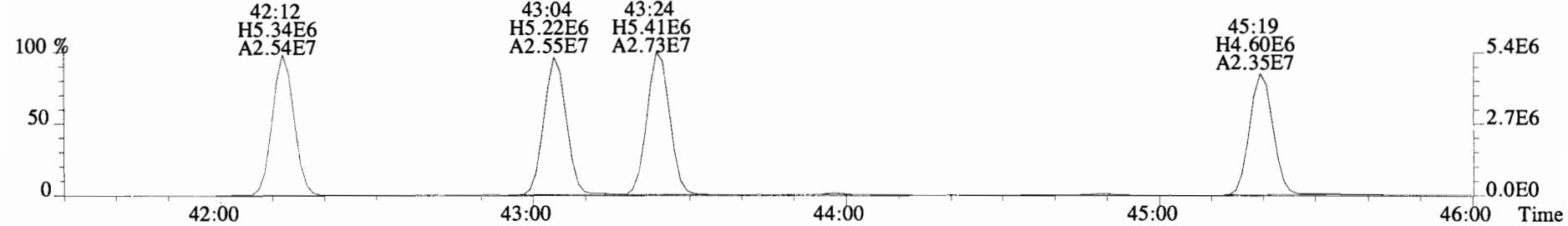
327.8775 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5052.0,0.00%,F,F)



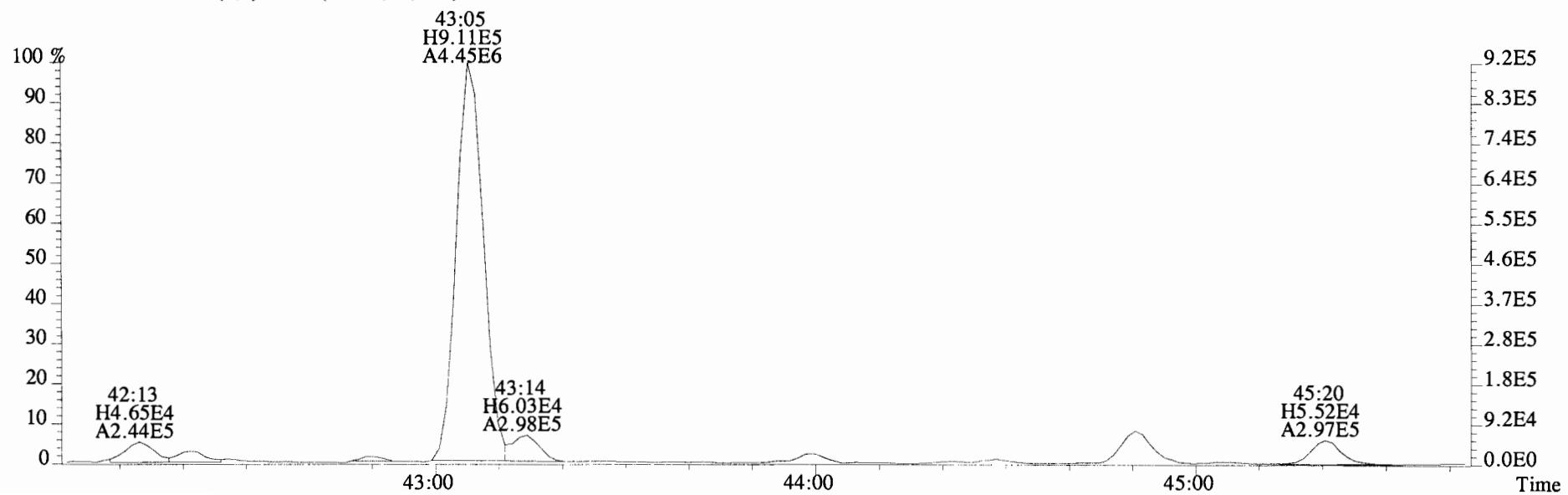
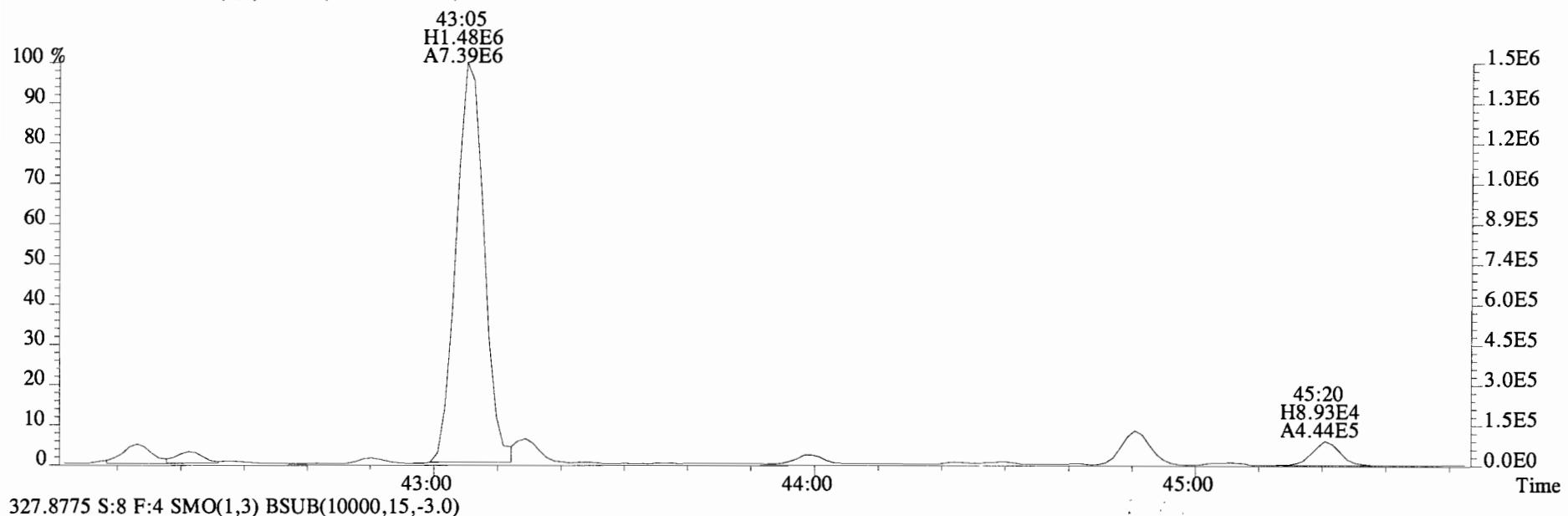
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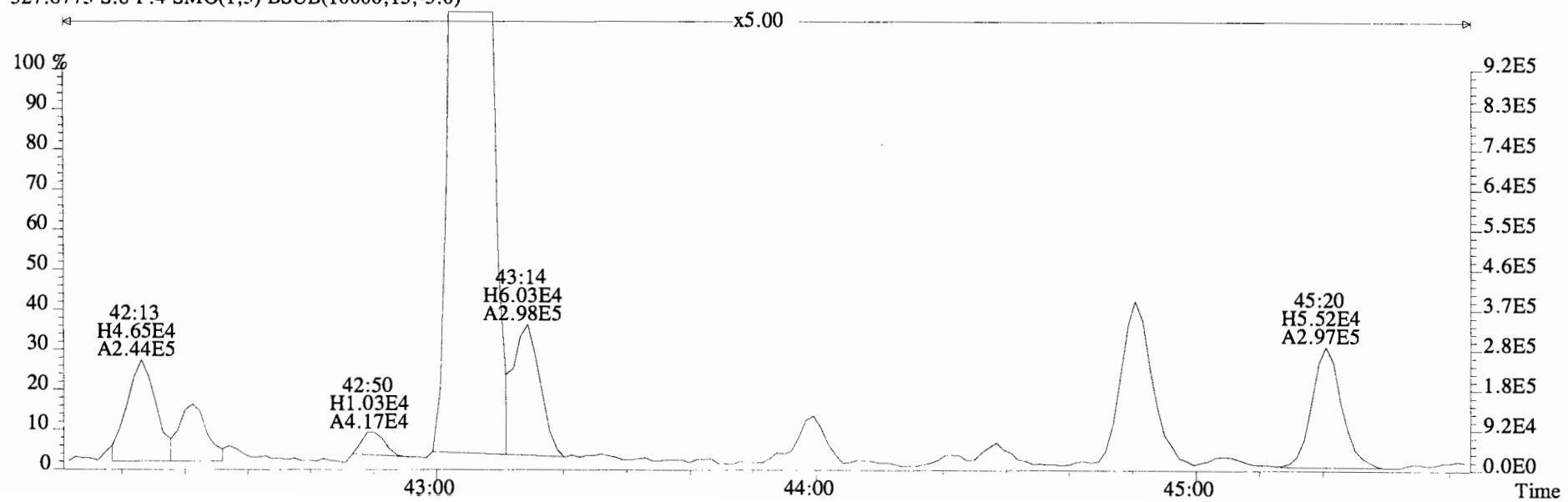
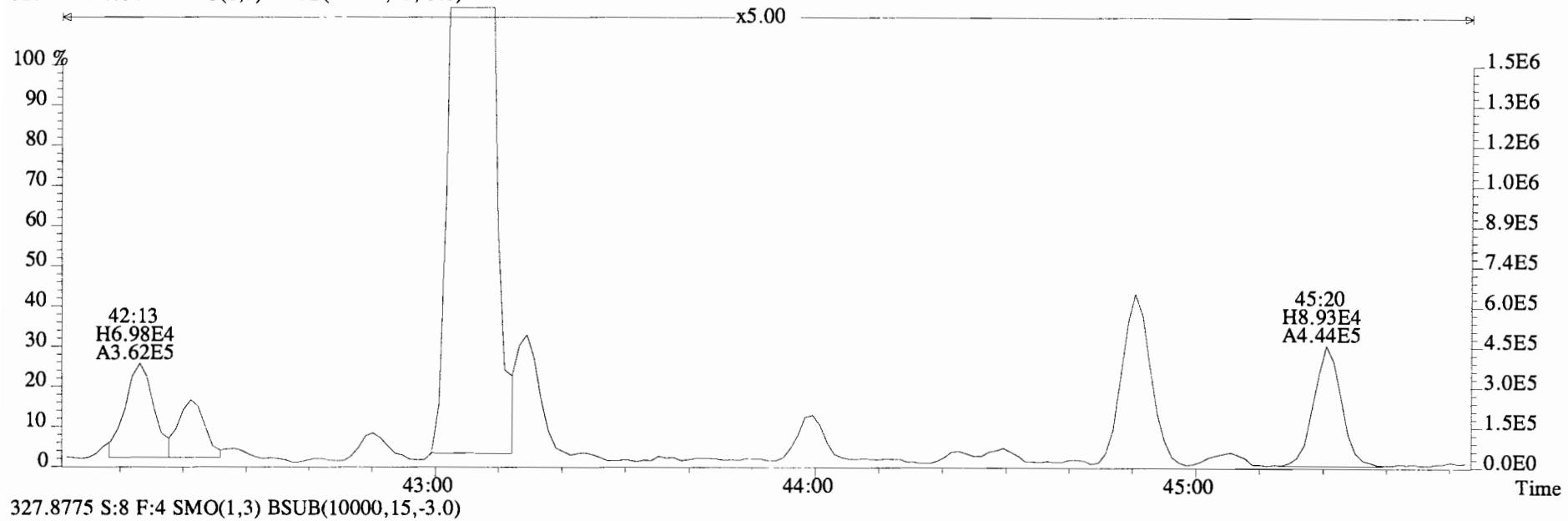
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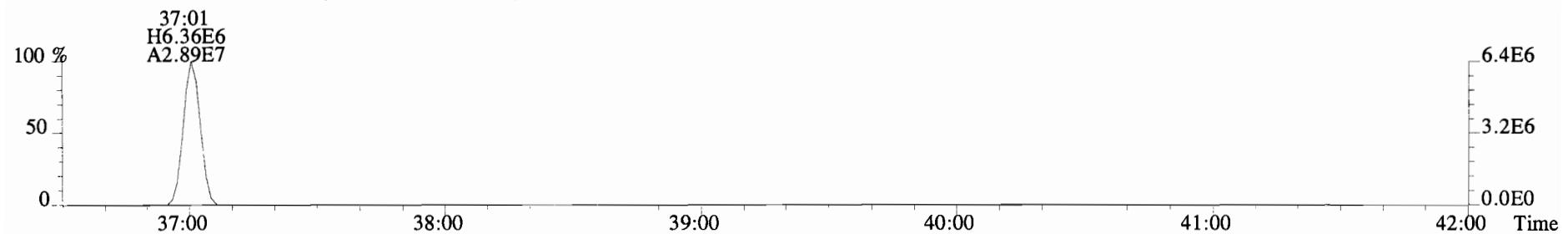
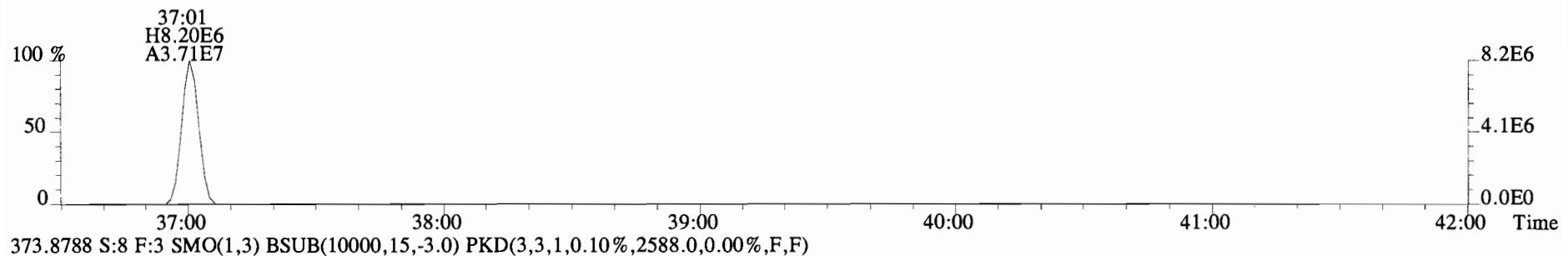
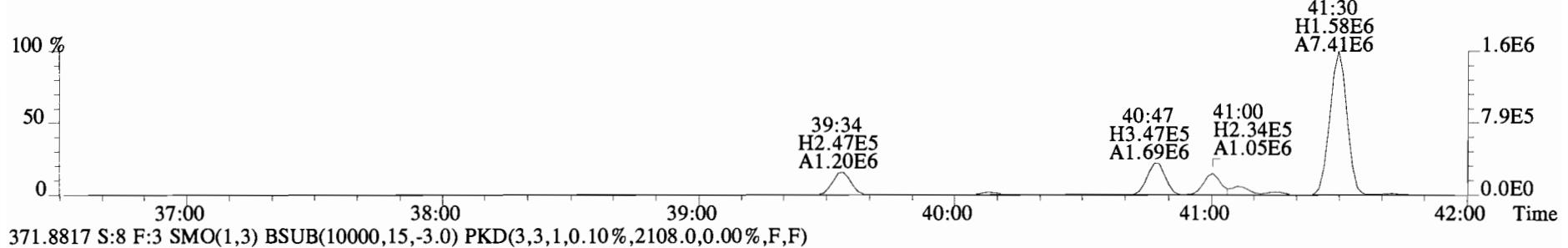
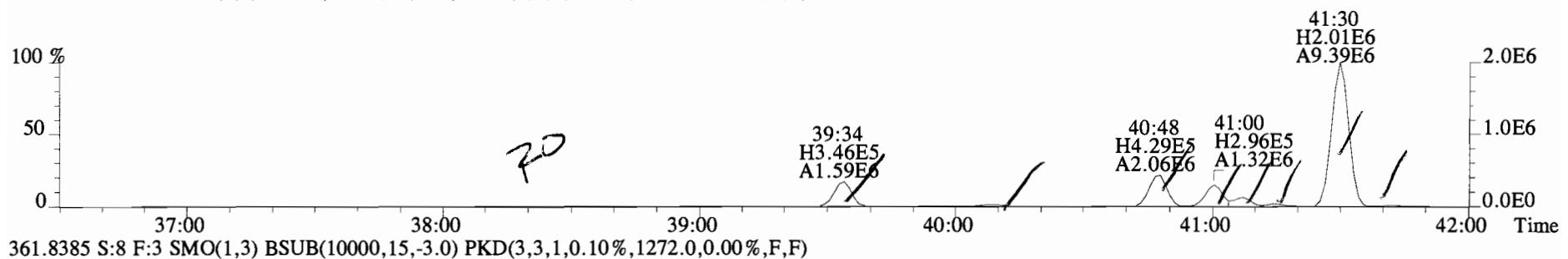
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325.8804 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0)



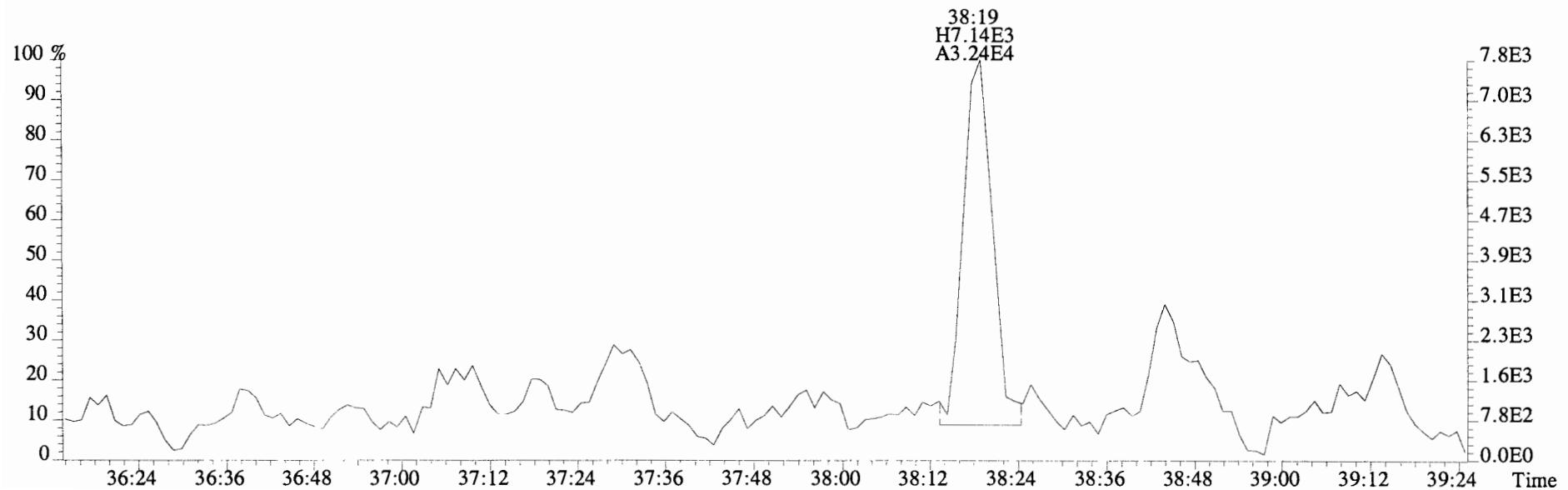
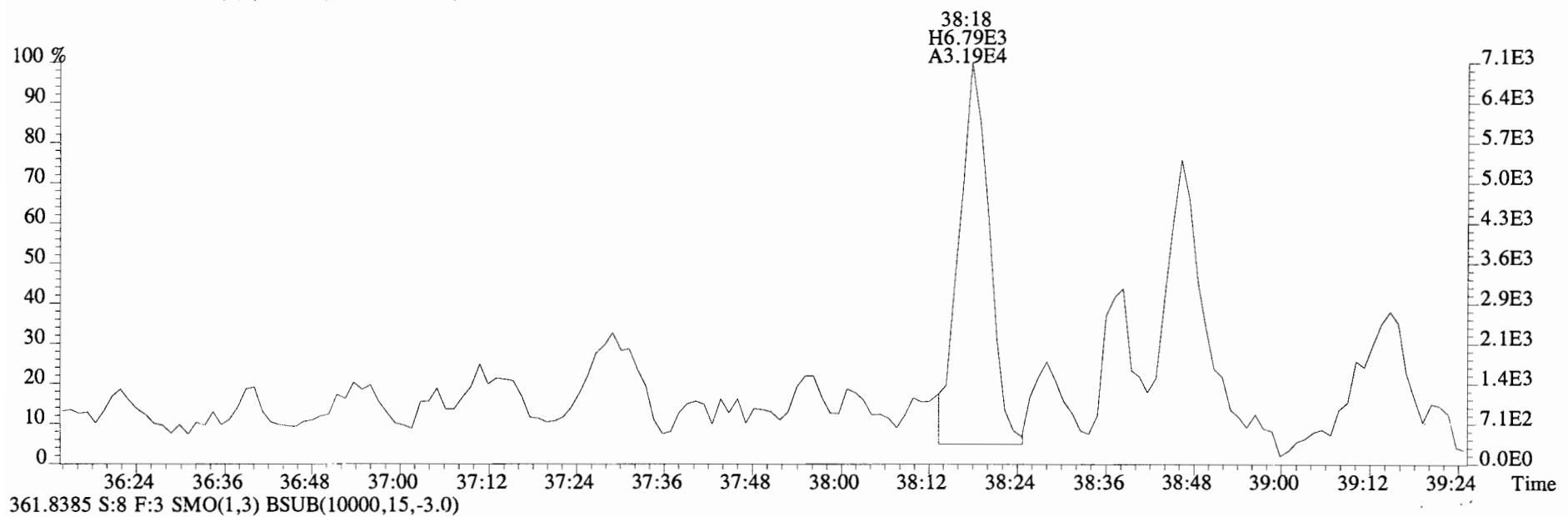
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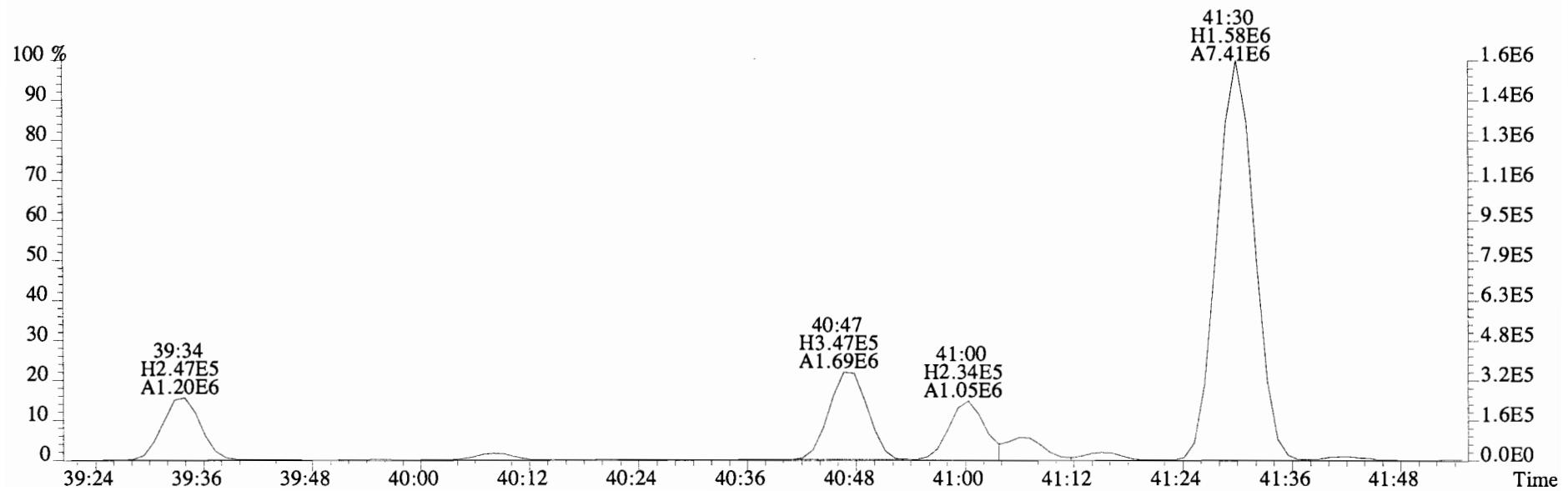
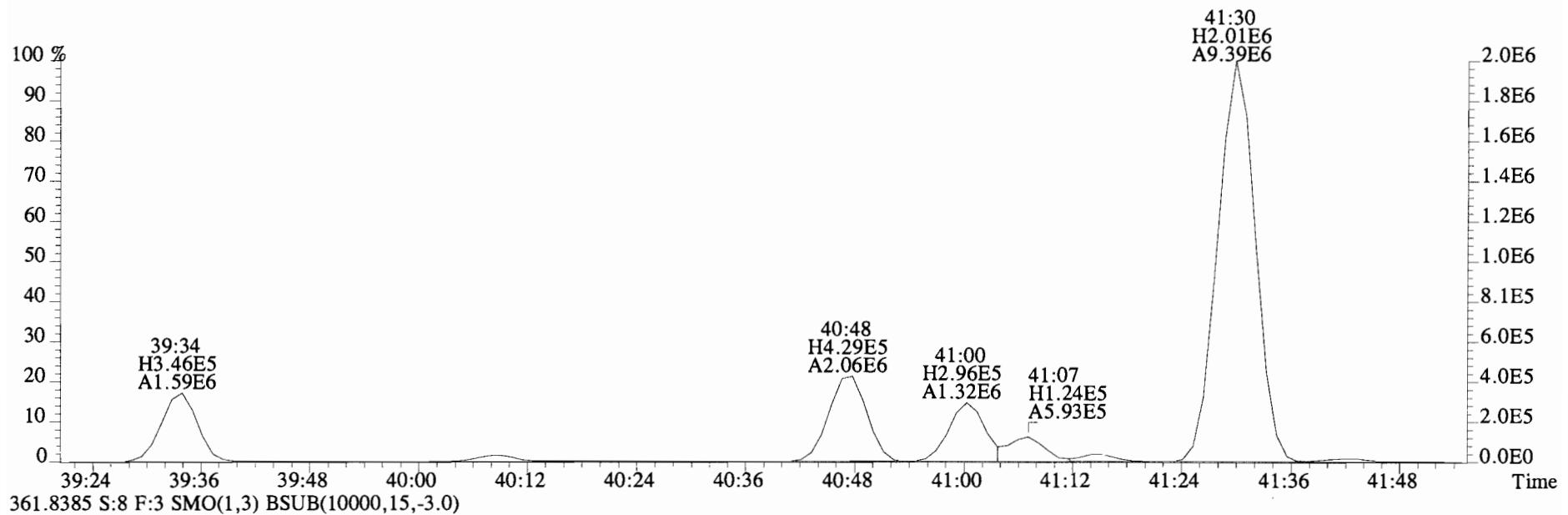
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359.8415 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1340.0,0.00%,F,F)



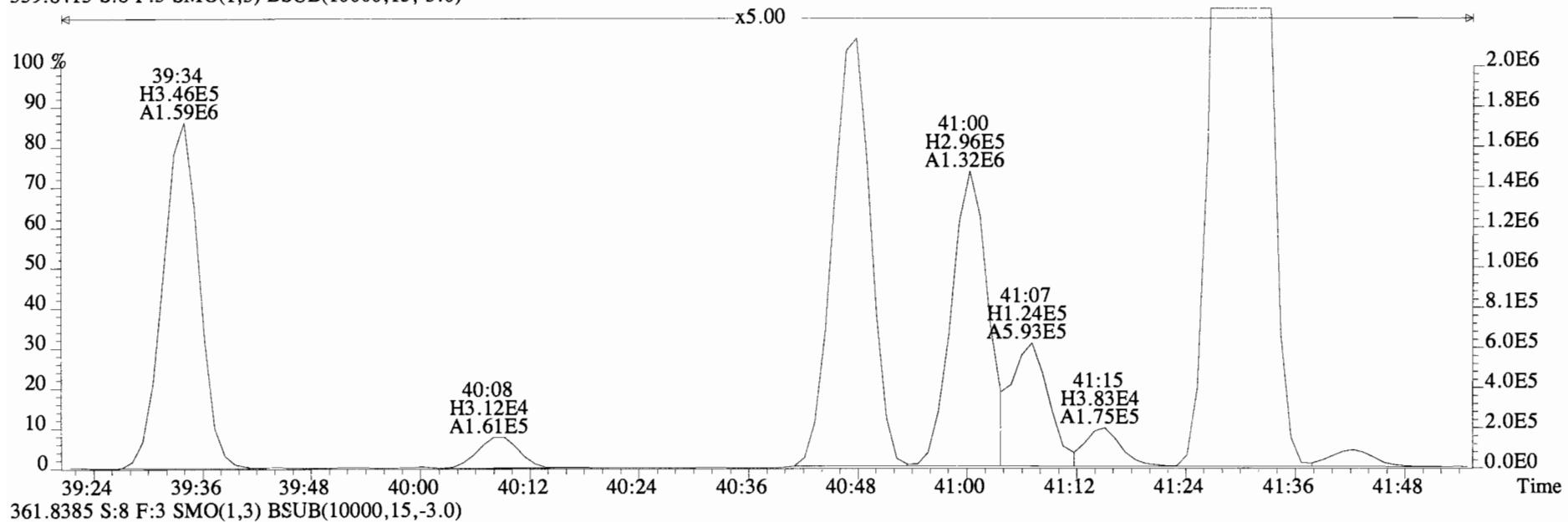
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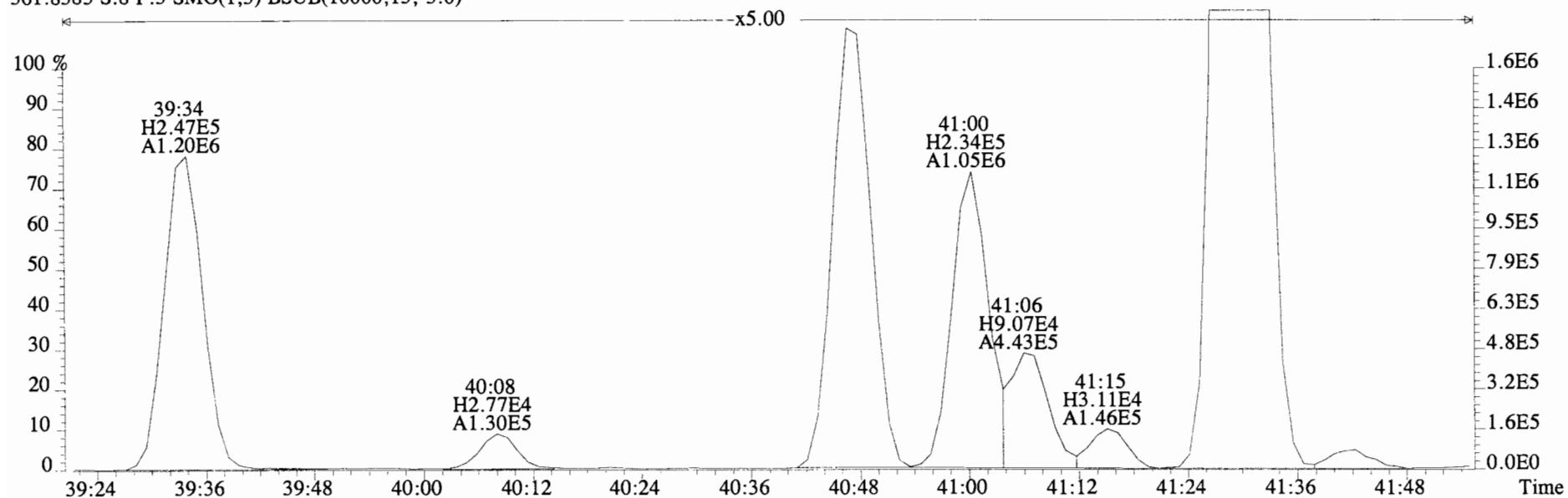
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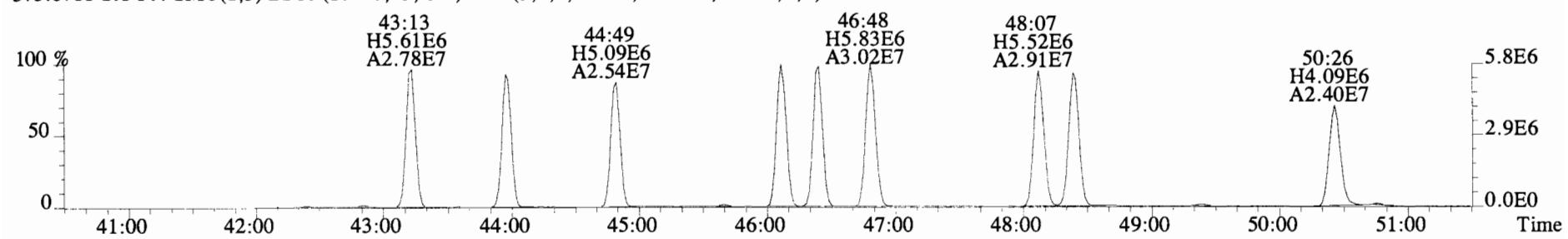
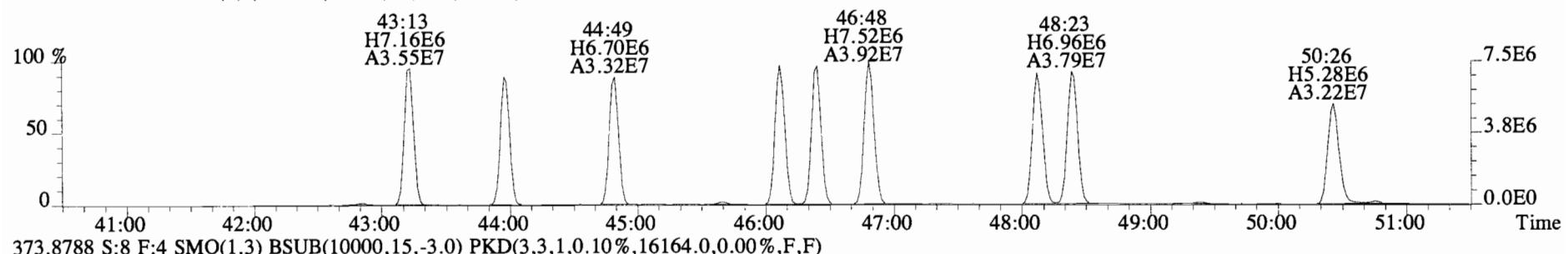
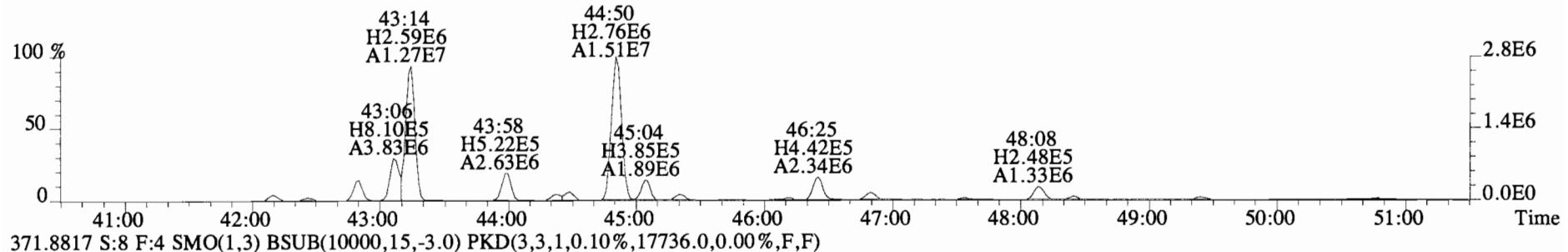
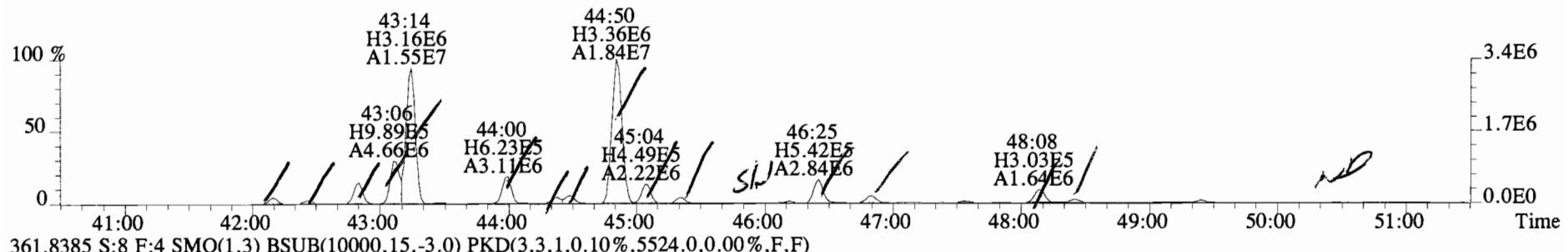
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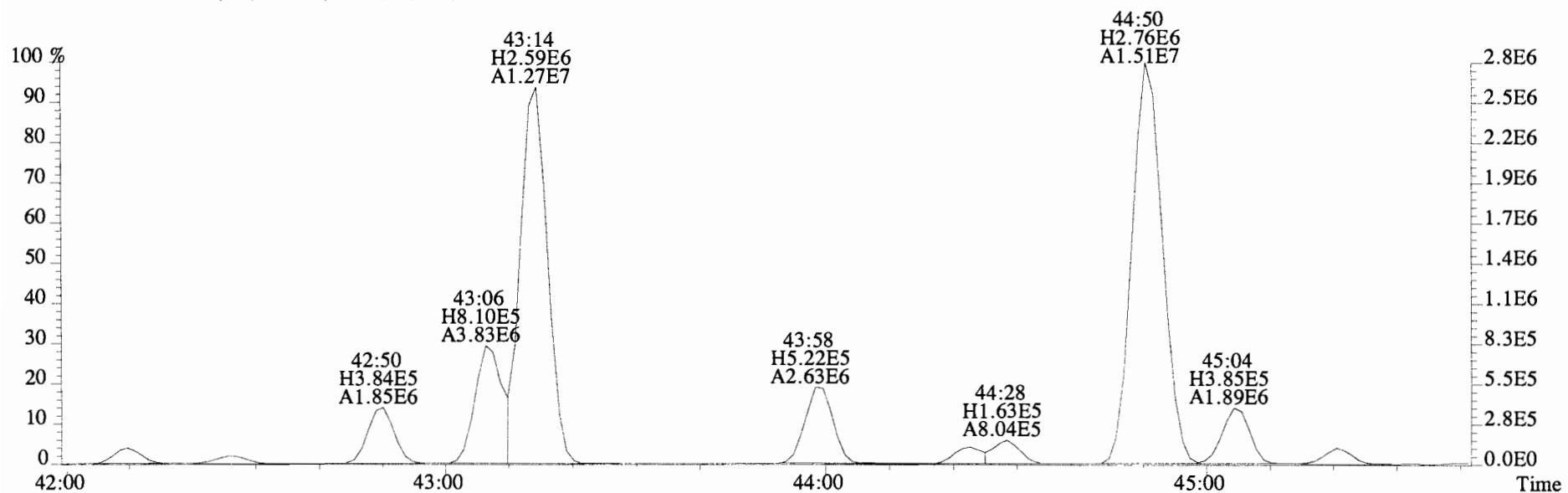
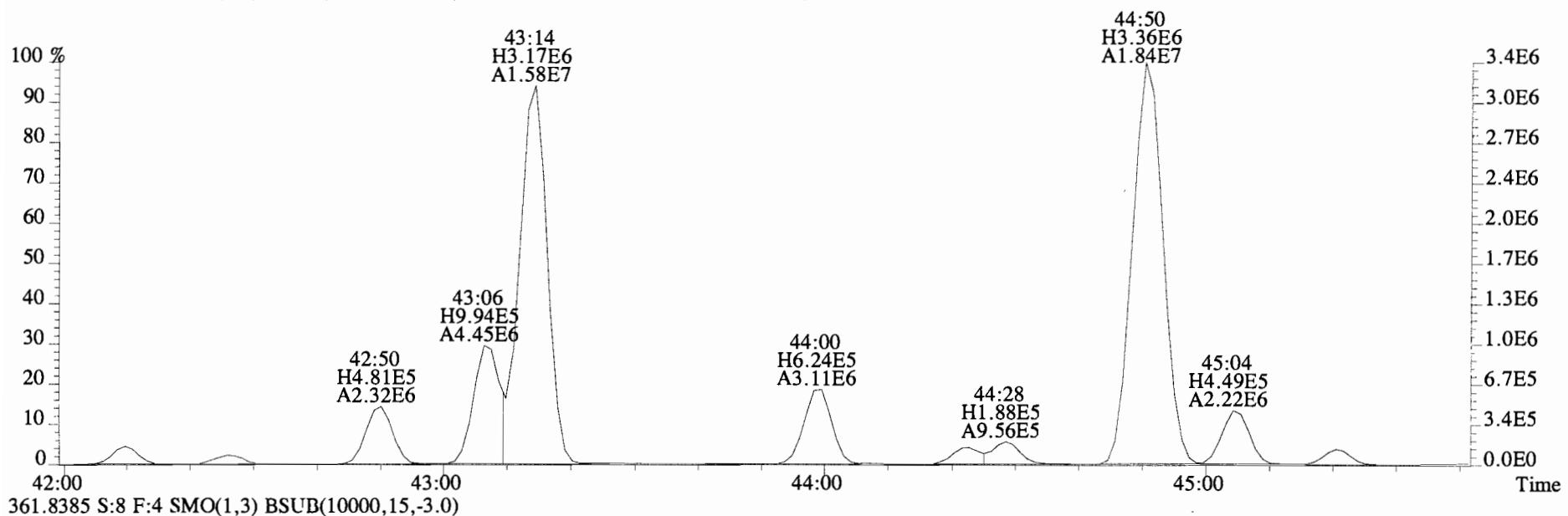
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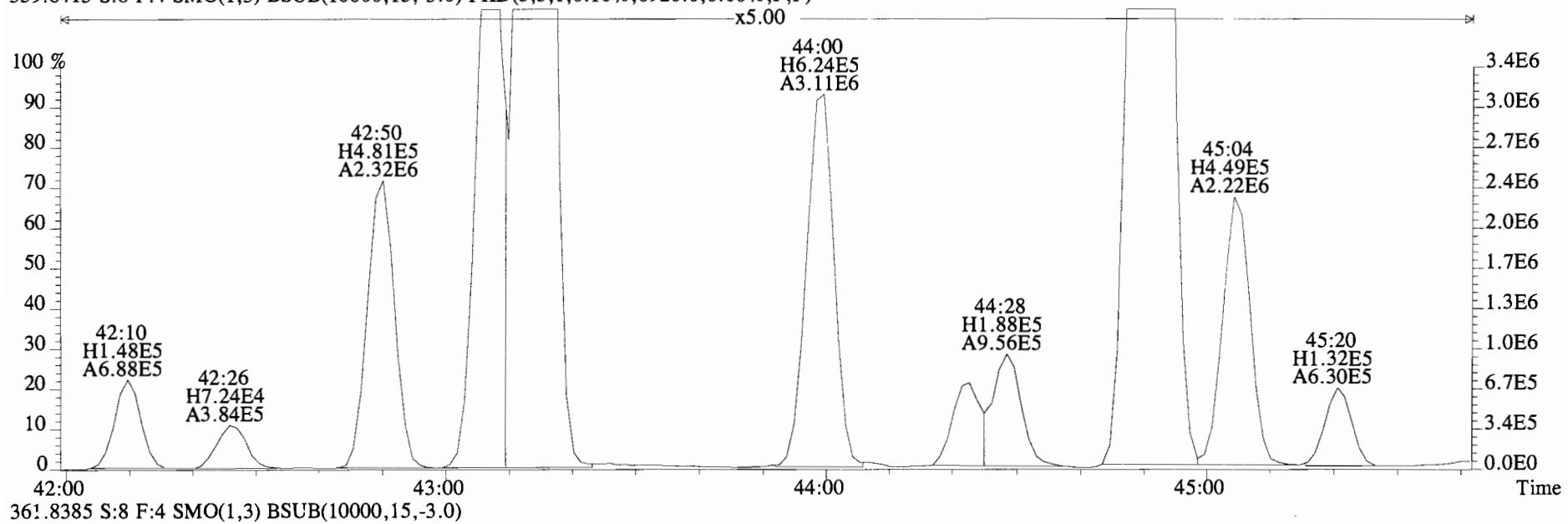
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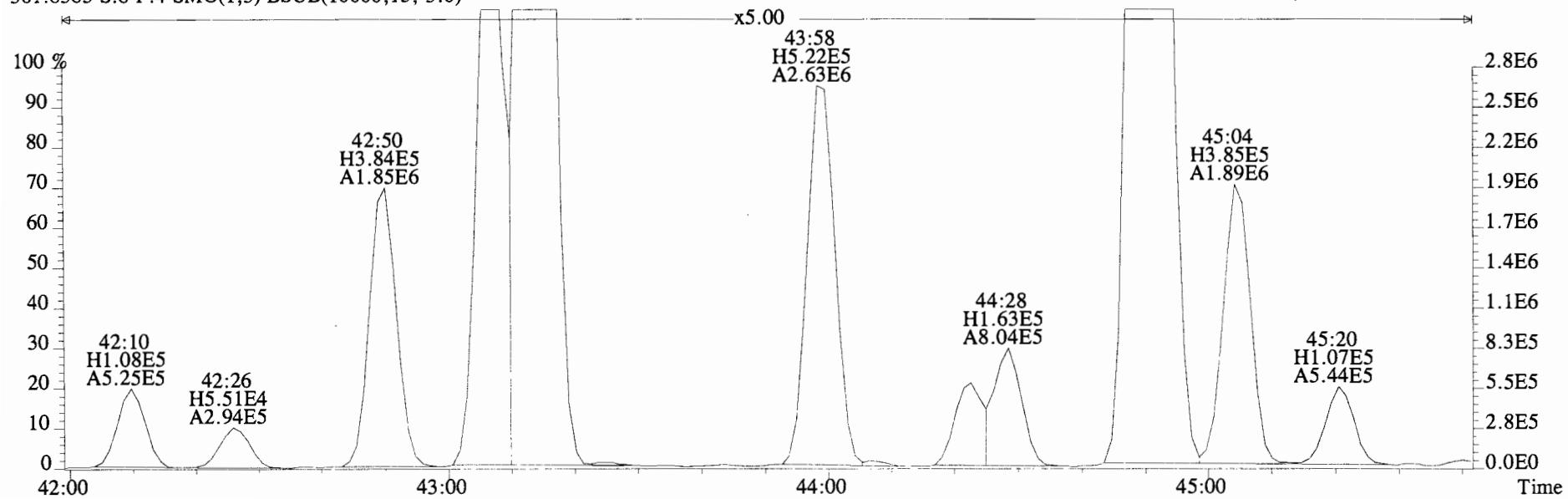
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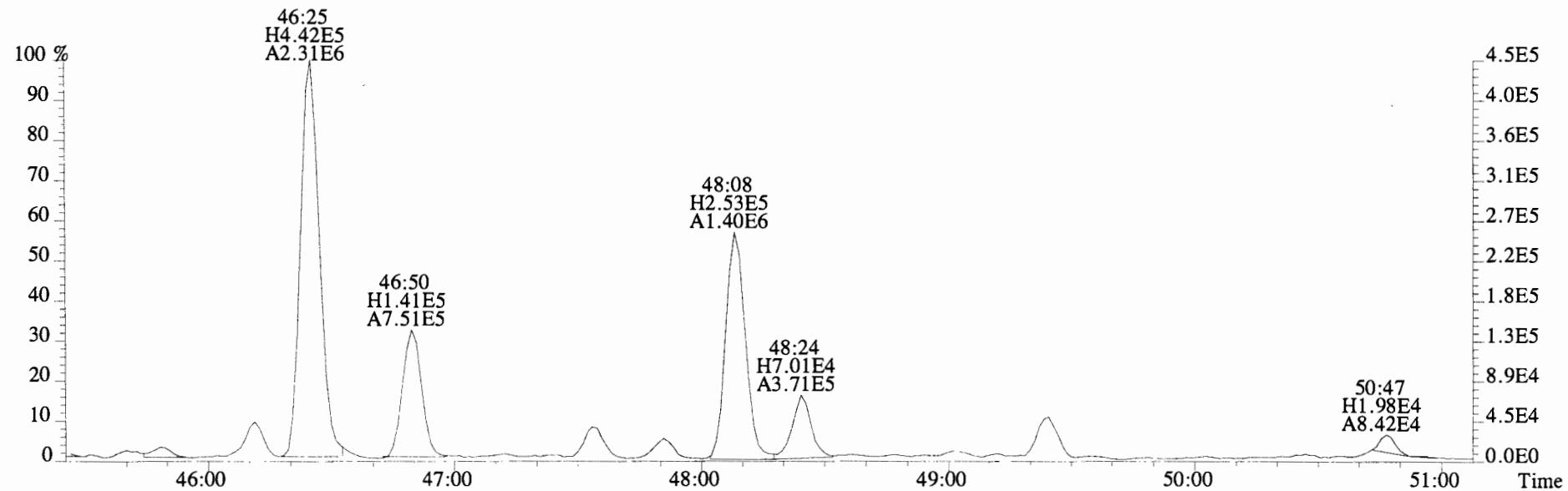
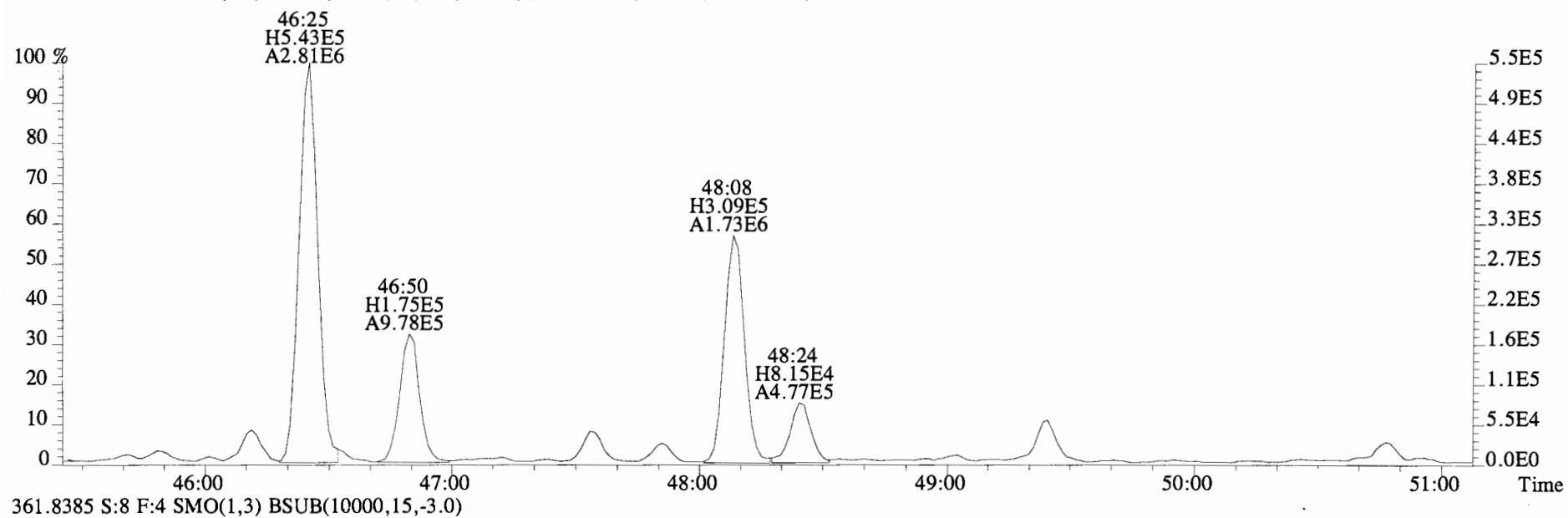
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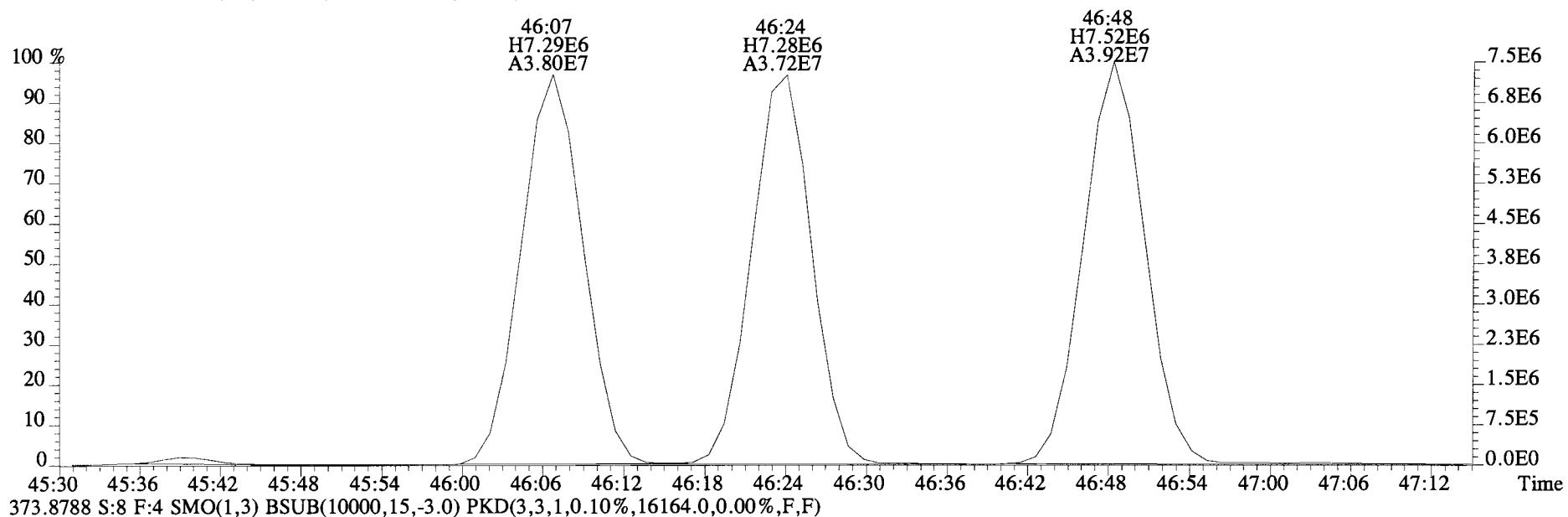
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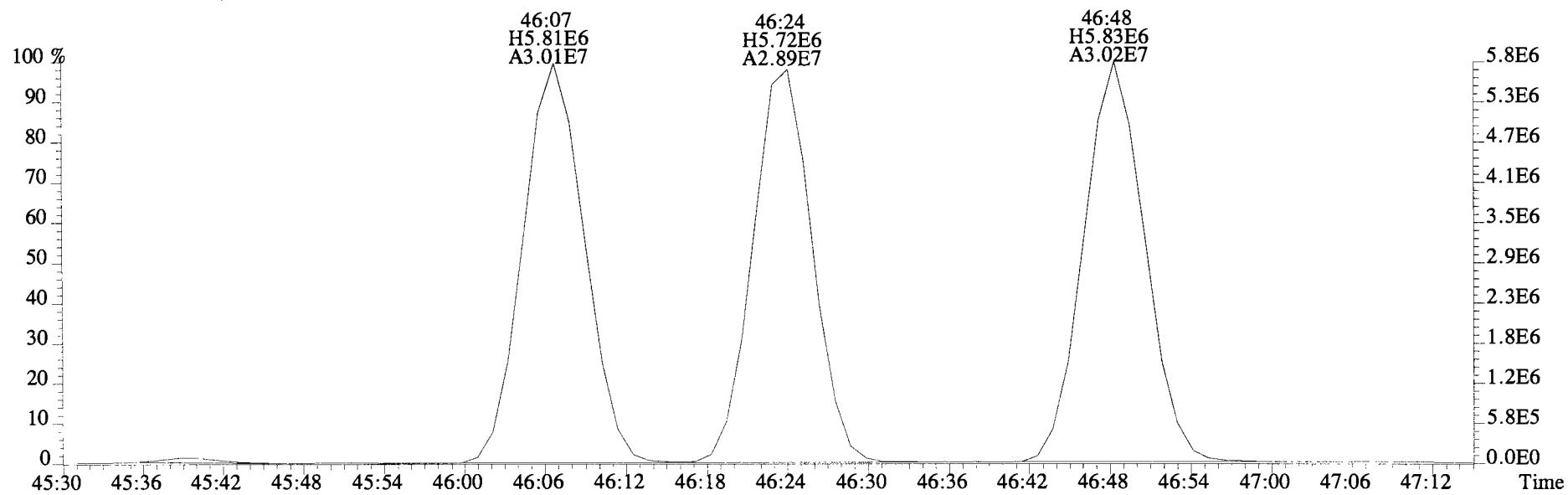
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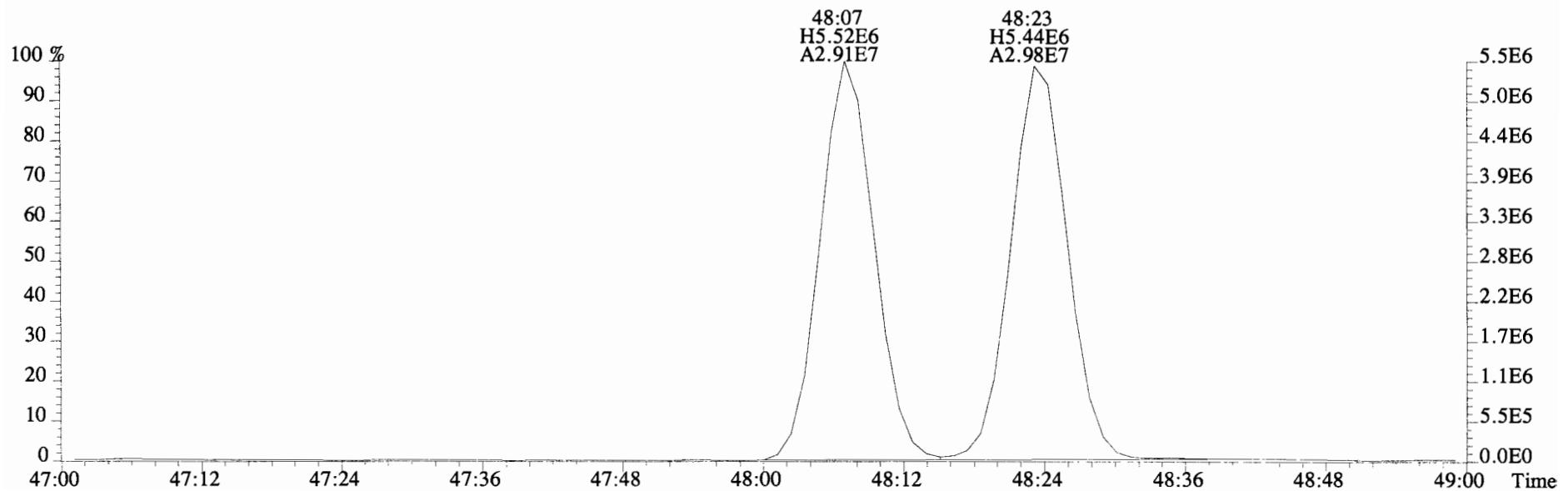
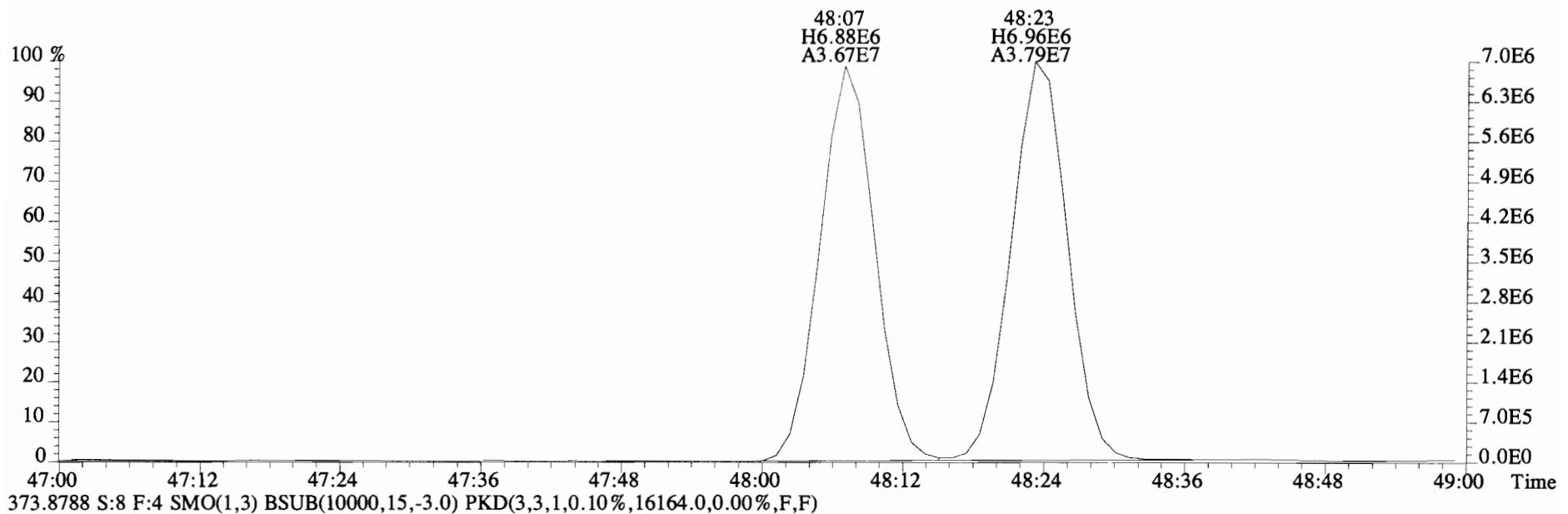
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
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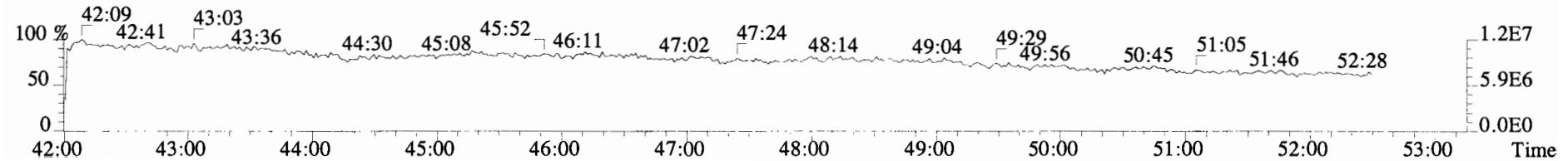
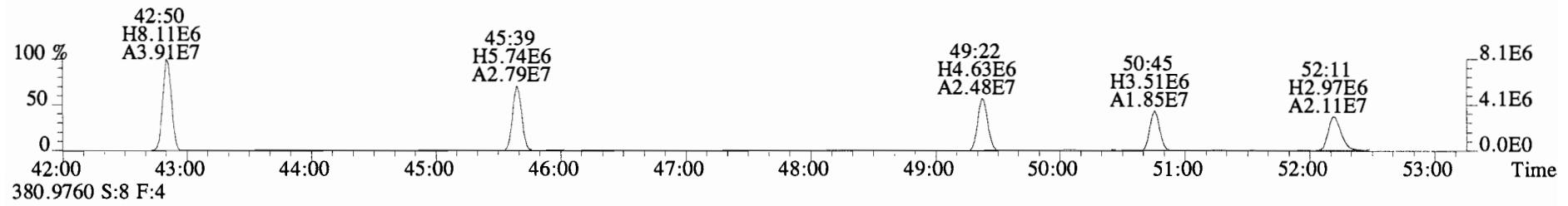
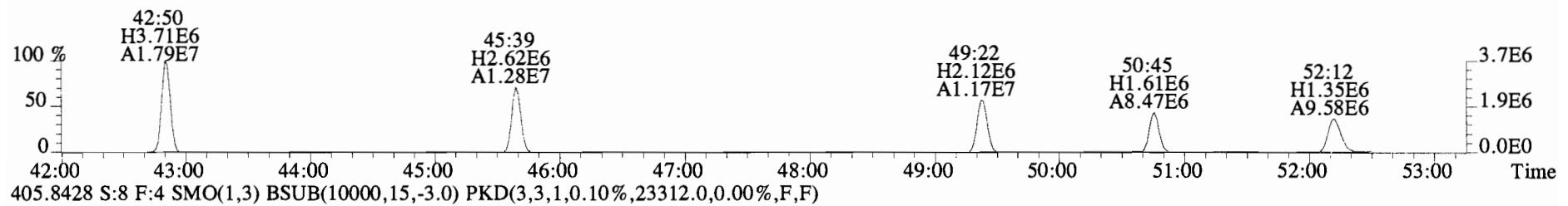
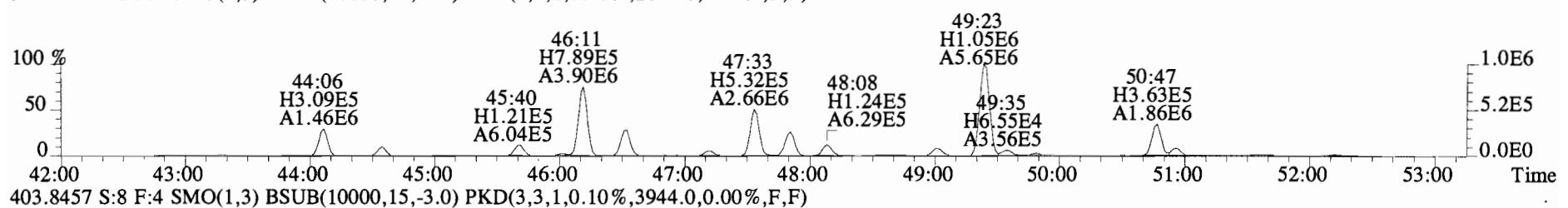
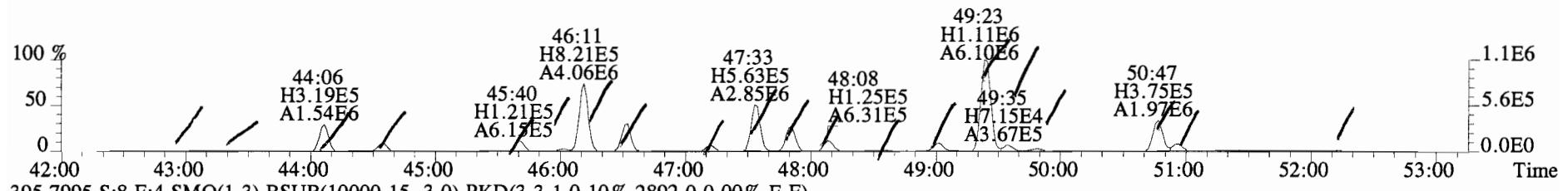
373.8788 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16164.0,0.00%,F,F)



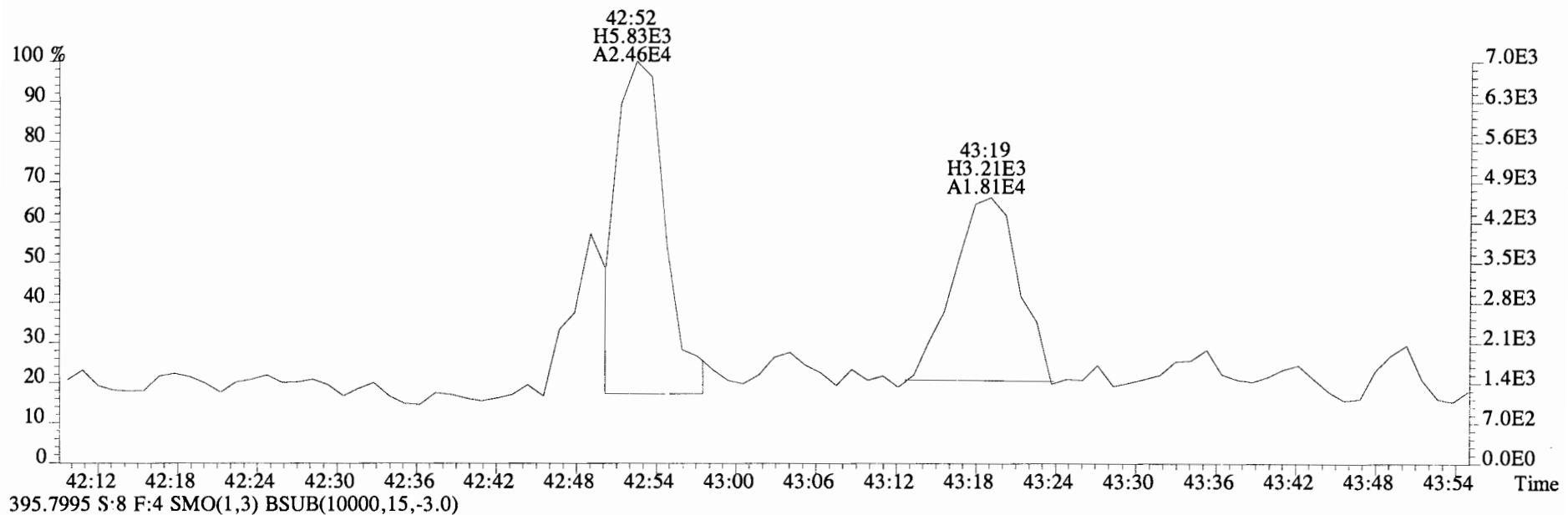
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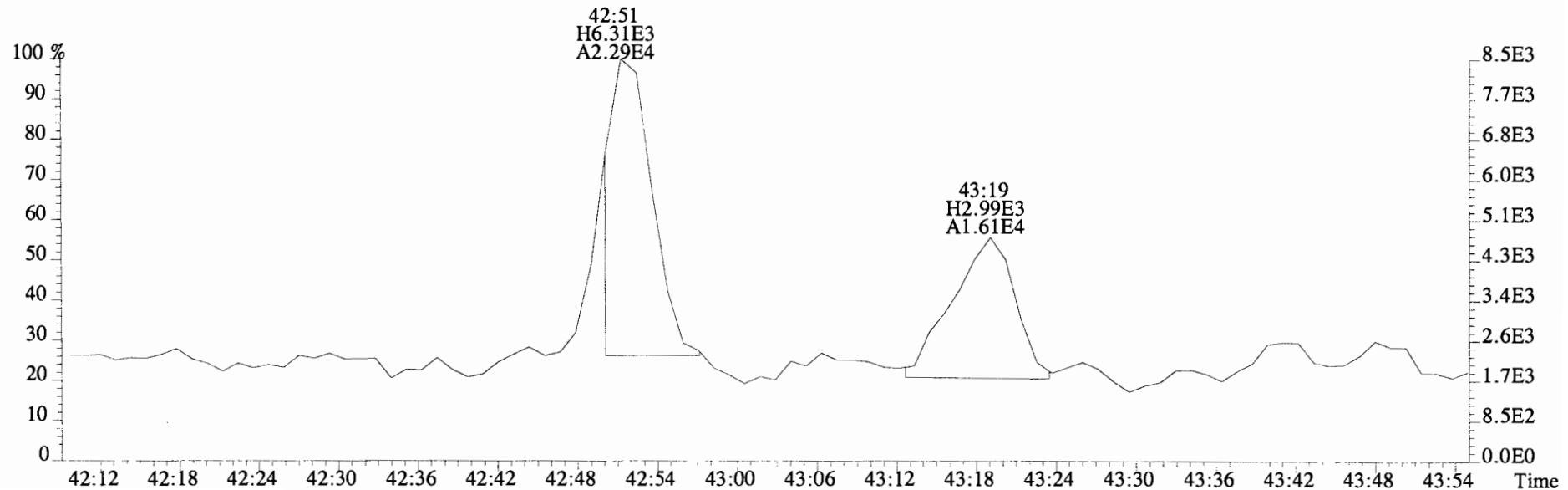
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 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
 393.8025 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1992.0,0.00%,F,F)



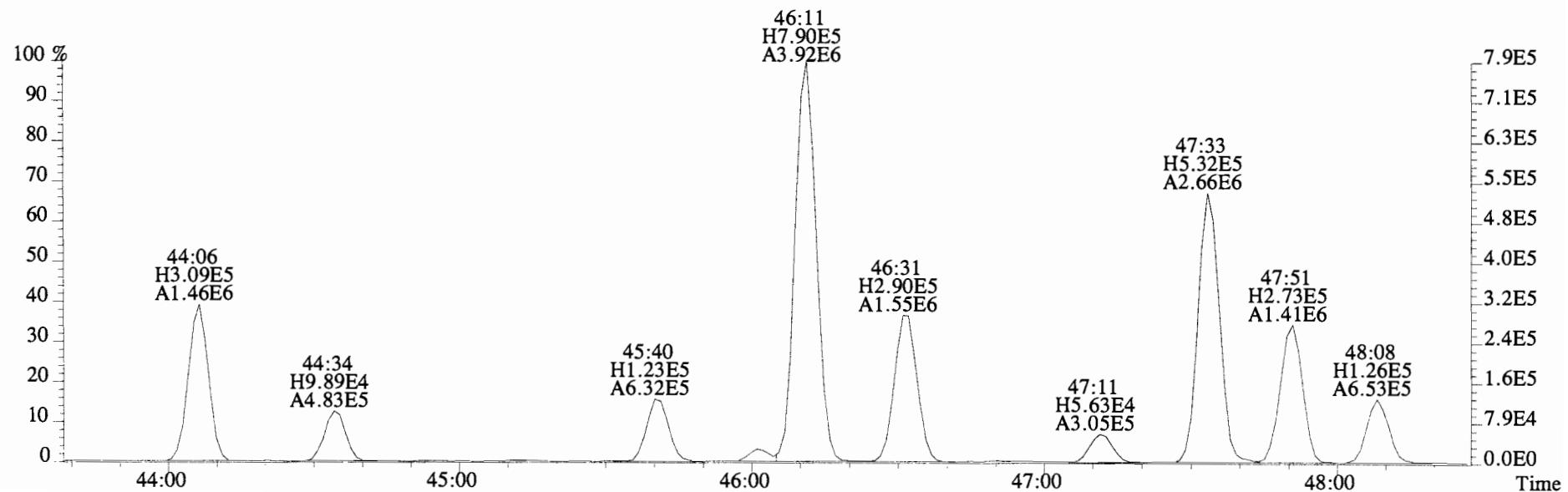
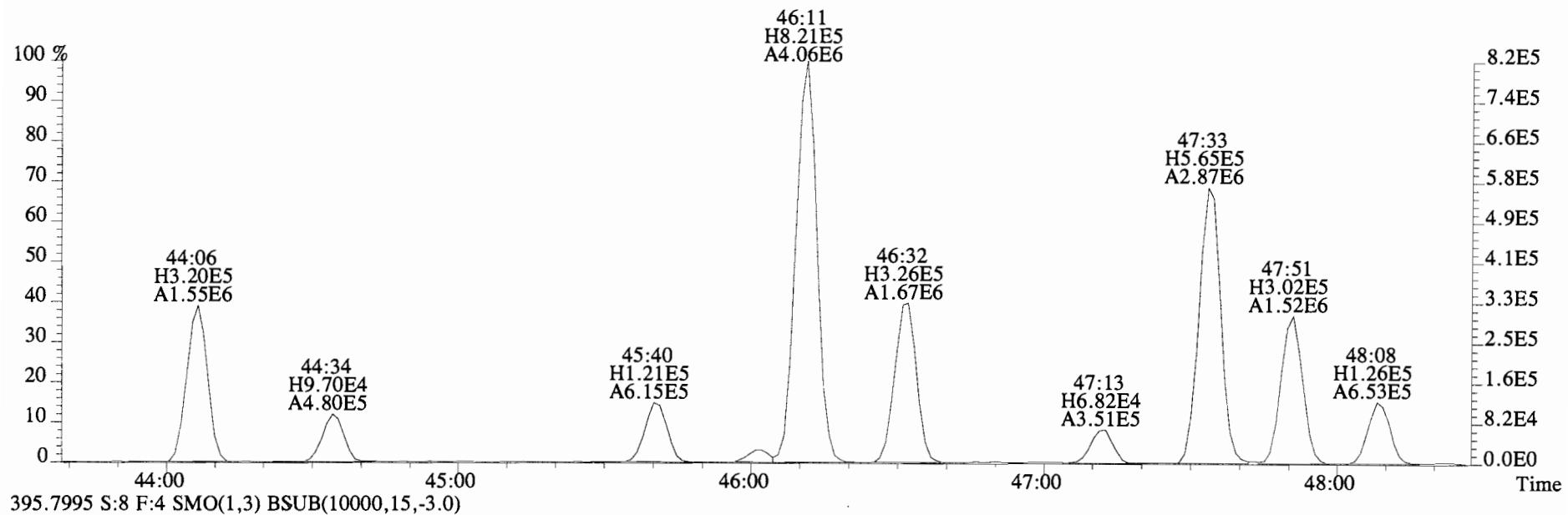
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
393.8025 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0)



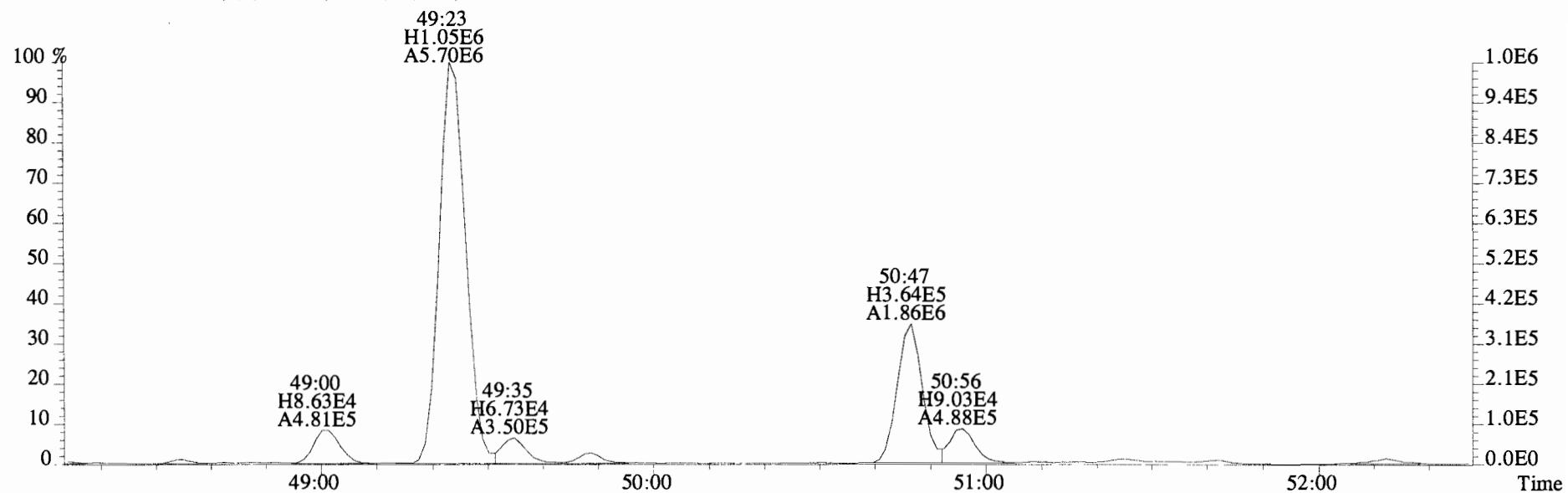
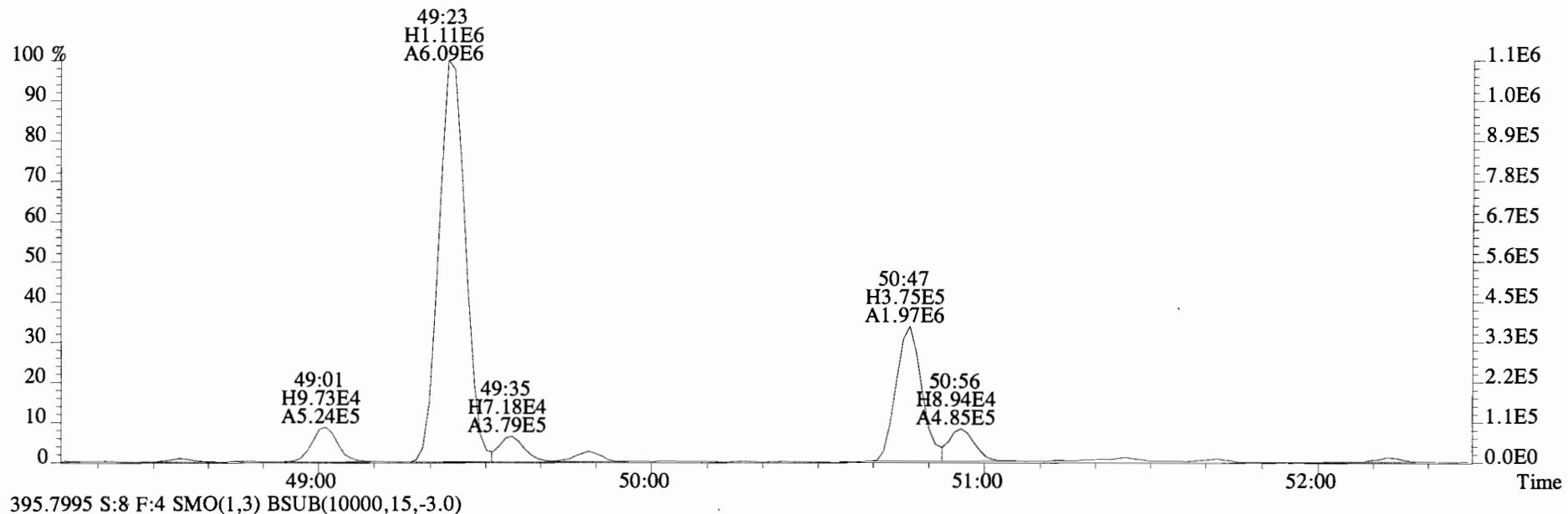
395.7995 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0)



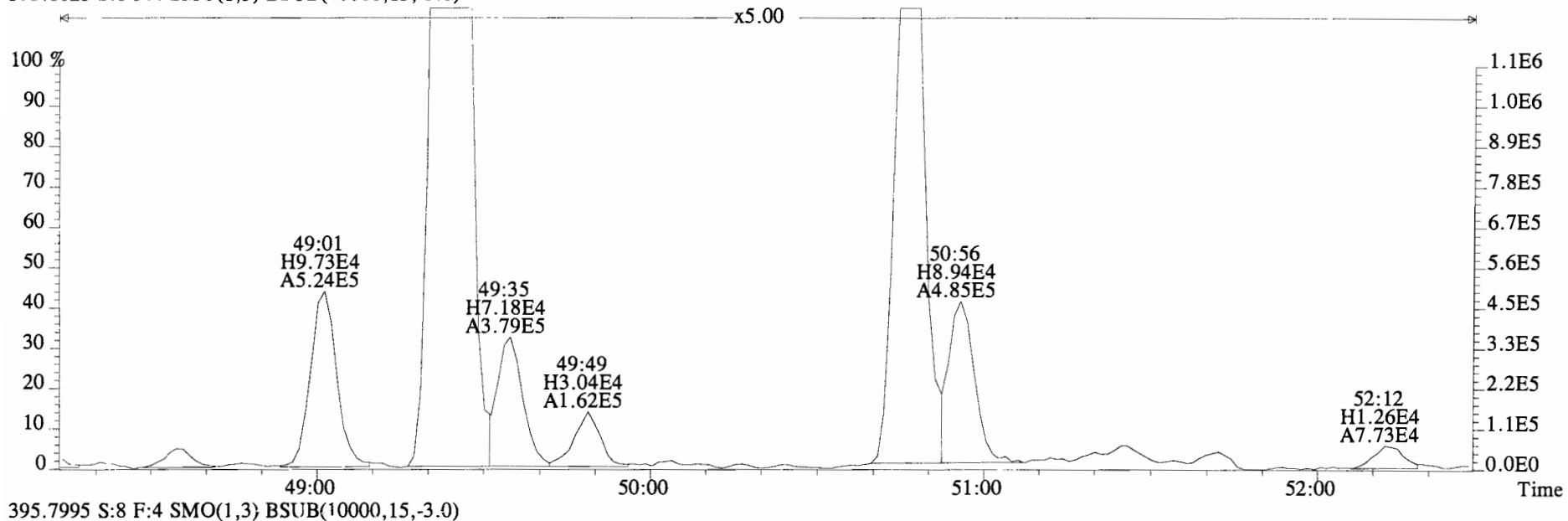
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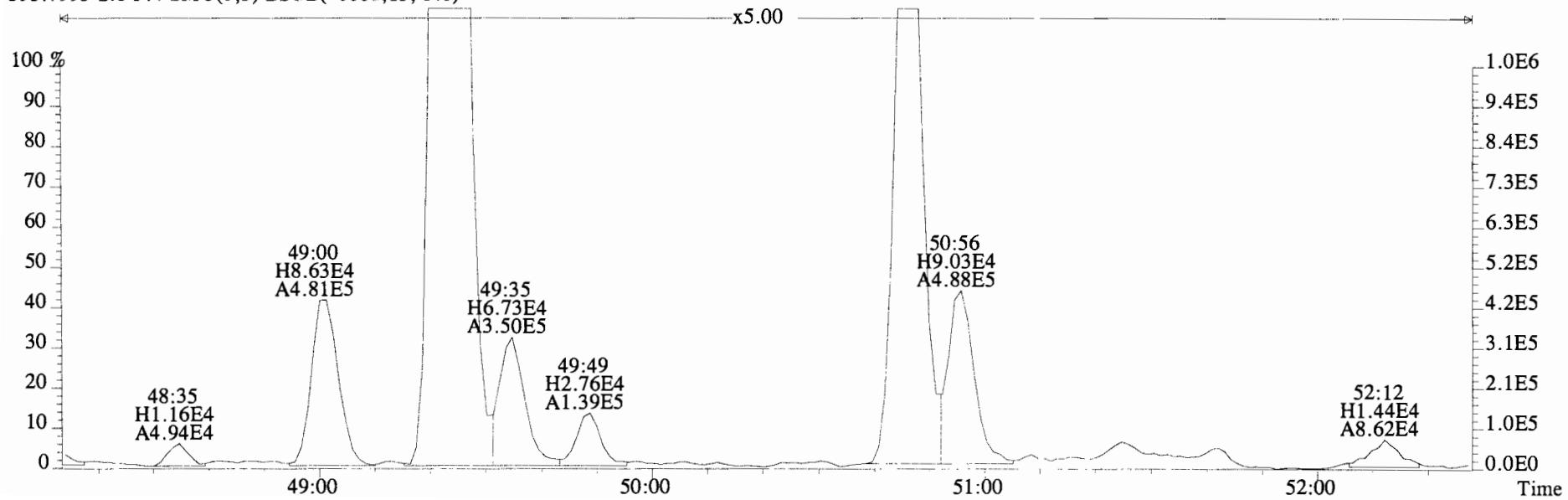
File:141021E2 #1-546 Acq:22-OCT-2014 03:37:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
393.8025 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0)



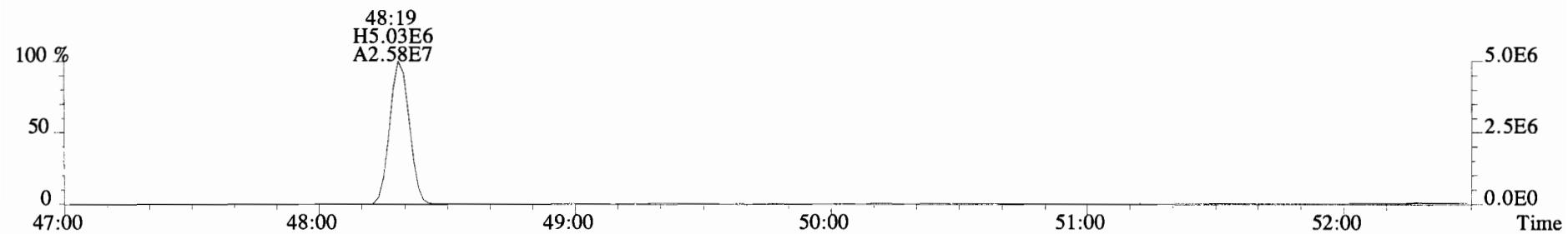
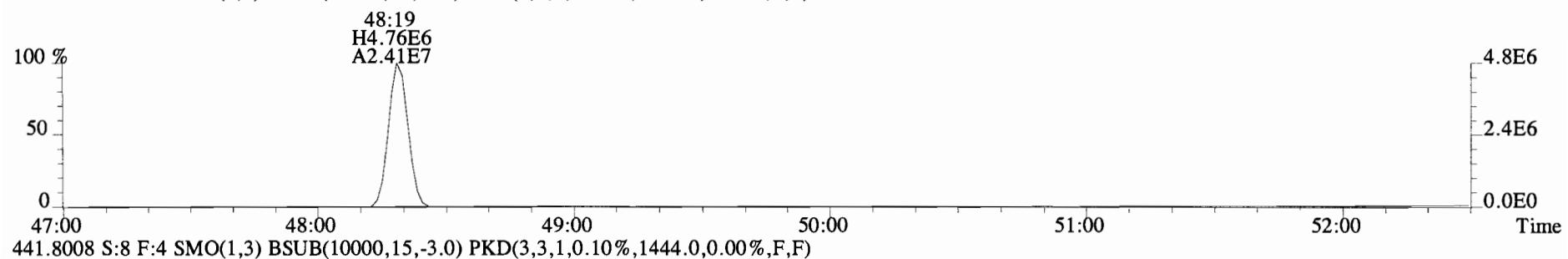
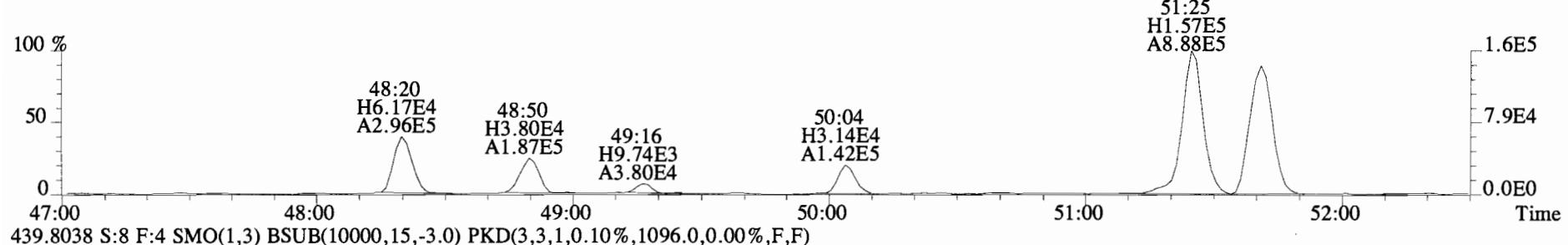
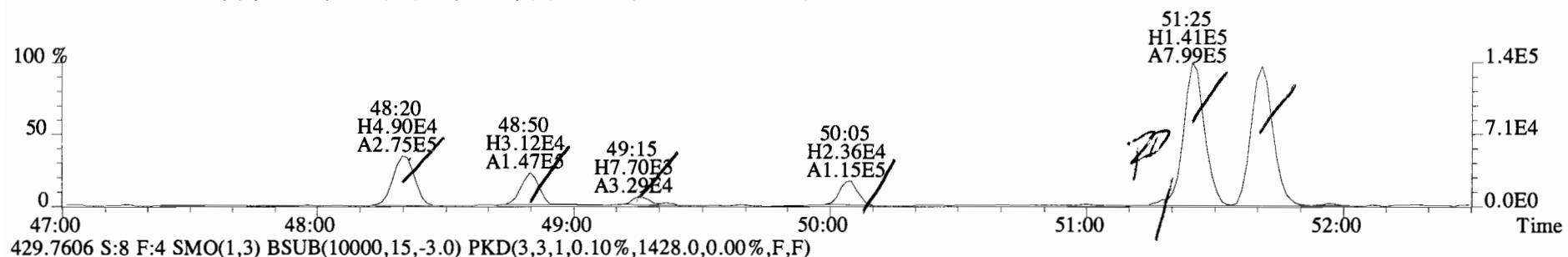
File:141021E2 #1-546 Acq:22-OCT-2014 03:37:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
393.8025 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0)



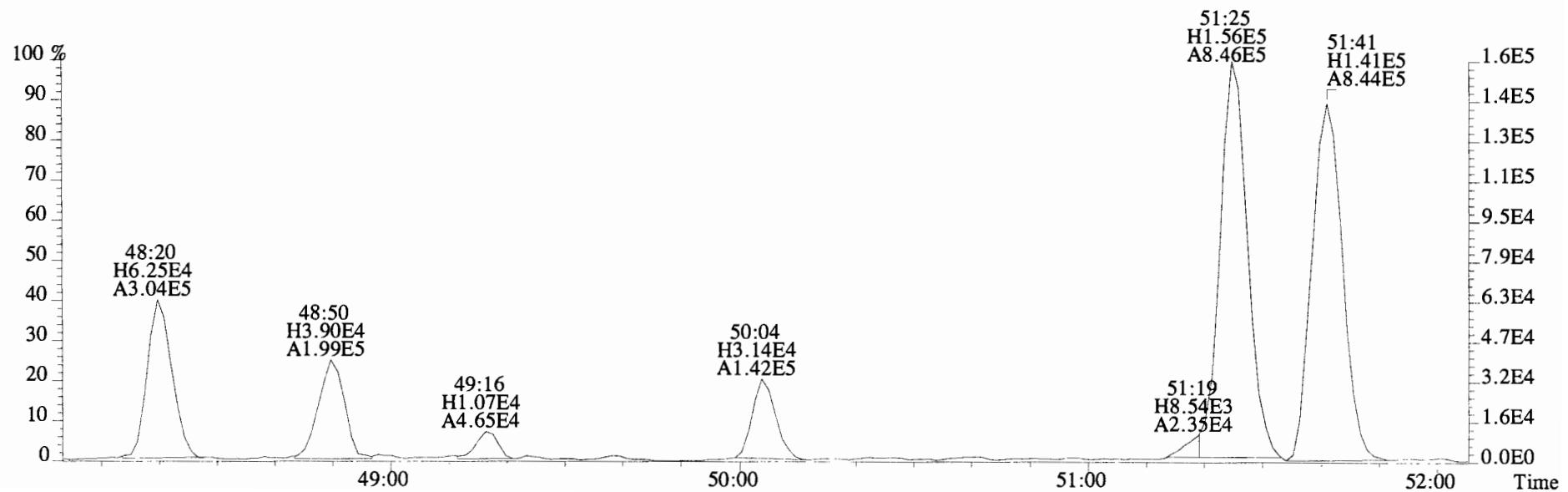
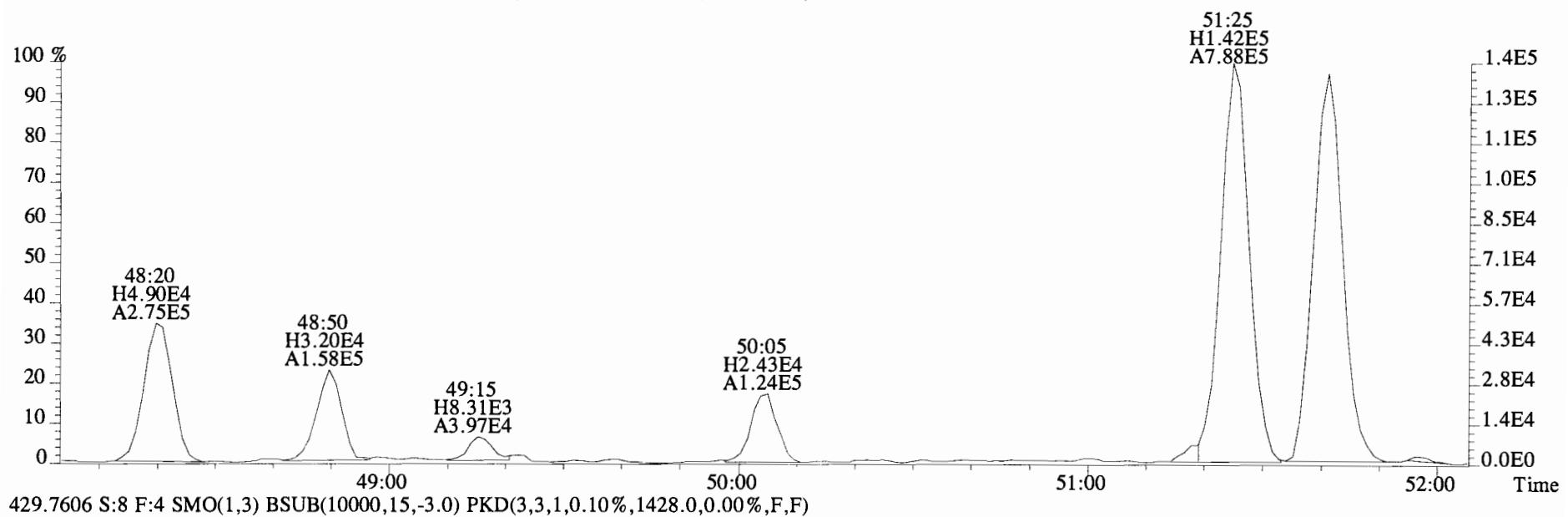
395.7995 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0)



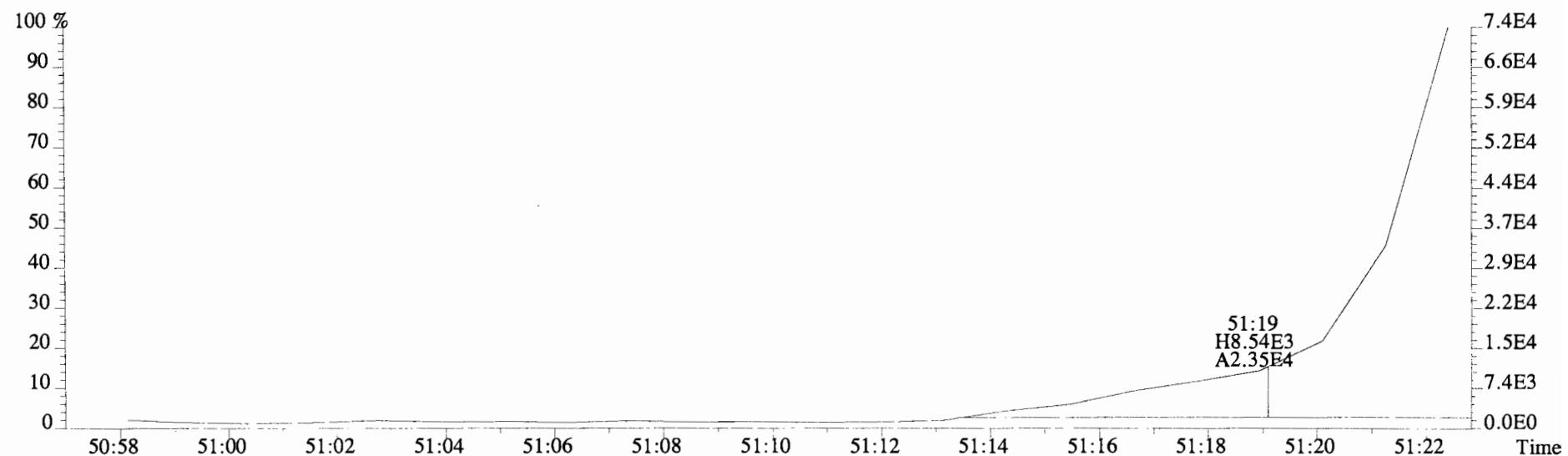
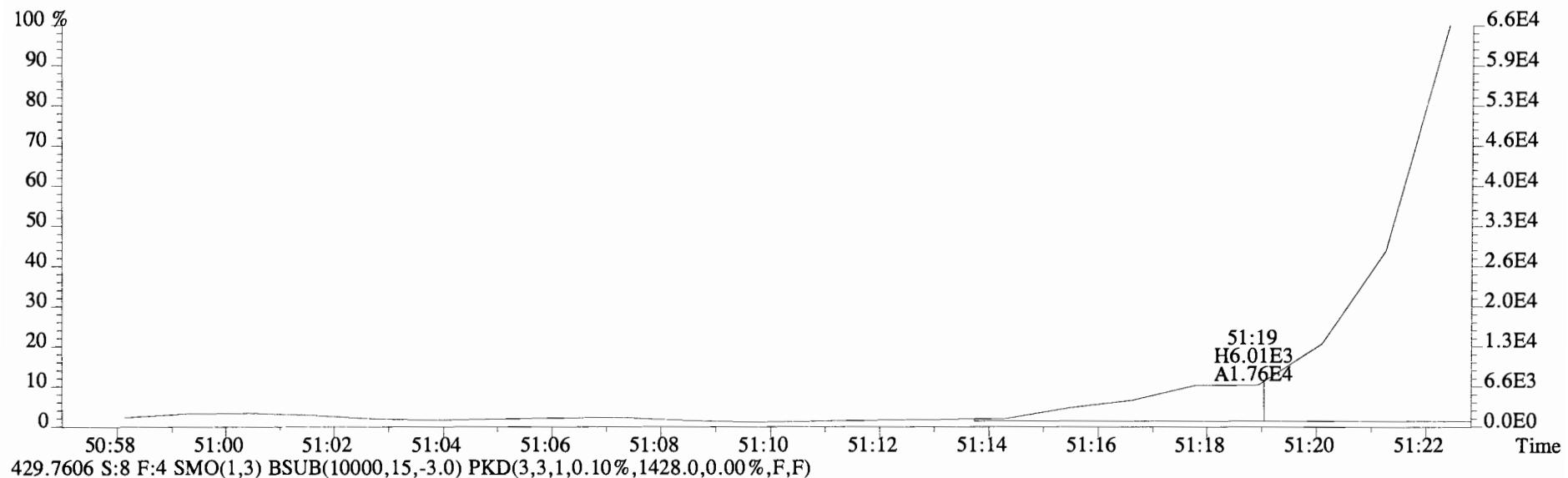
File:141021E2 #1-546 Acq:22-OCT-2014 03:37:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
427.7635 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1492.0,0.00%,F,F)



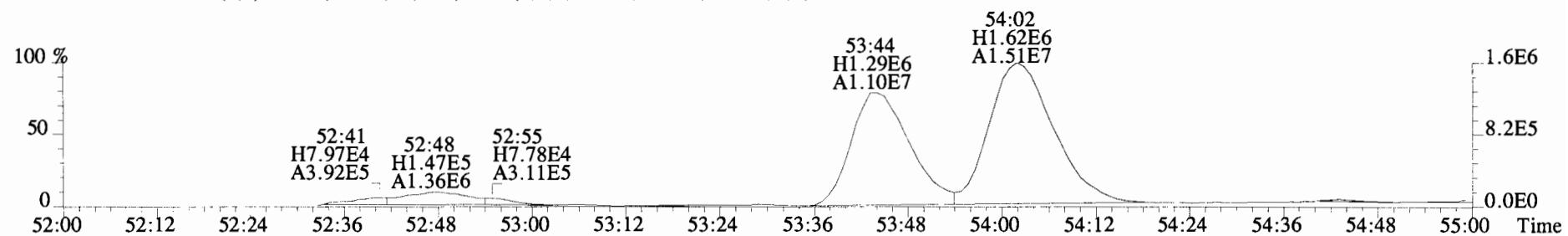
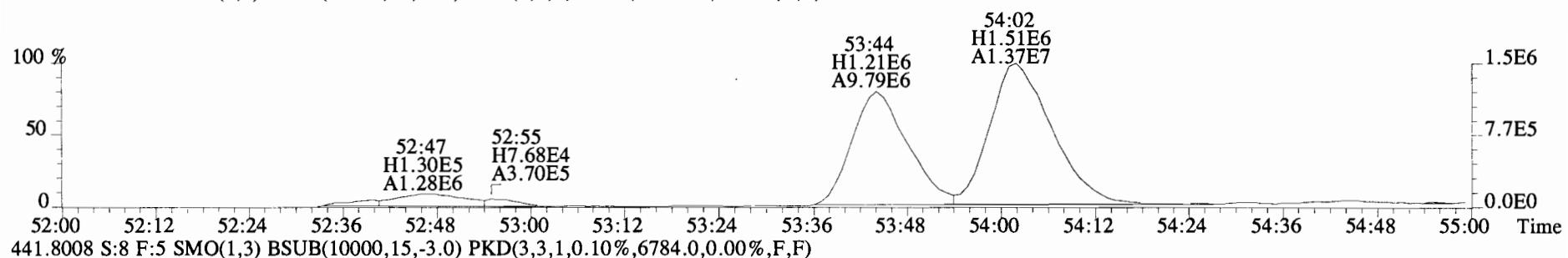
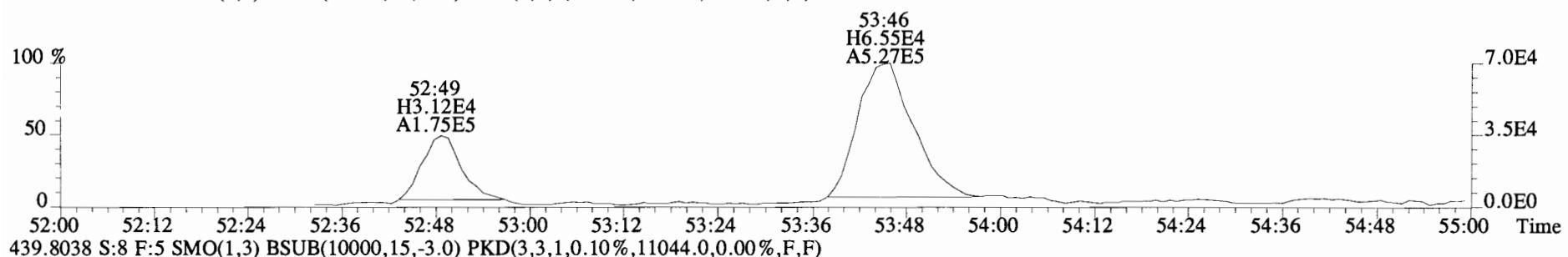
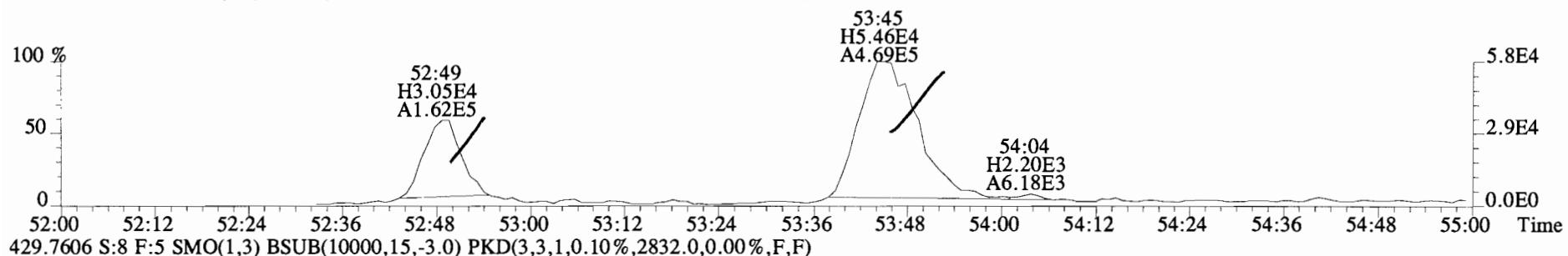
File:141021E2 #1-546 Acq:22-OCT-2014 03:37:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
427.7635 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1492.0,0.00%,F,F)



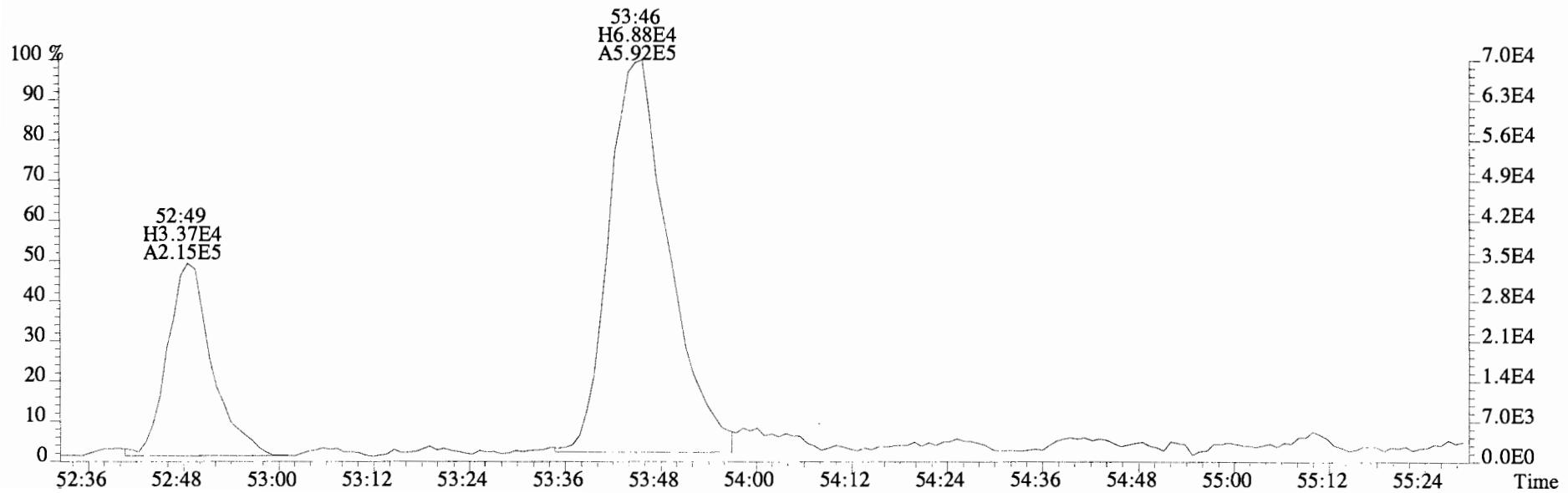
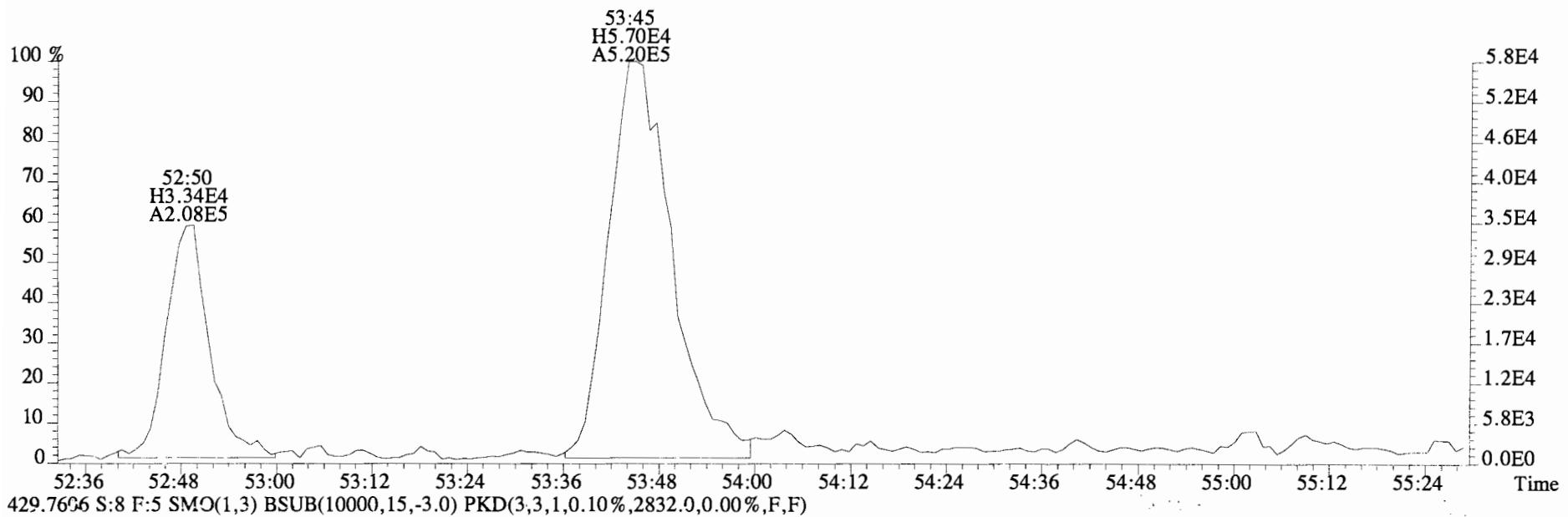
File:141021E2 #1-546 Acq:22-OCT-2014 03:37:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
427.7635 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1492.0,0.00%,F,F)



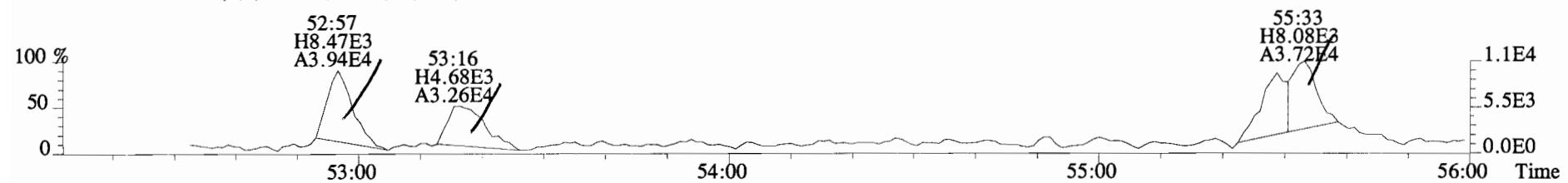
File:141021E2 #1-435 Acq:22-OCT-2014 03:37:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
 427.7635 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2220.0,0.00%,F,F)



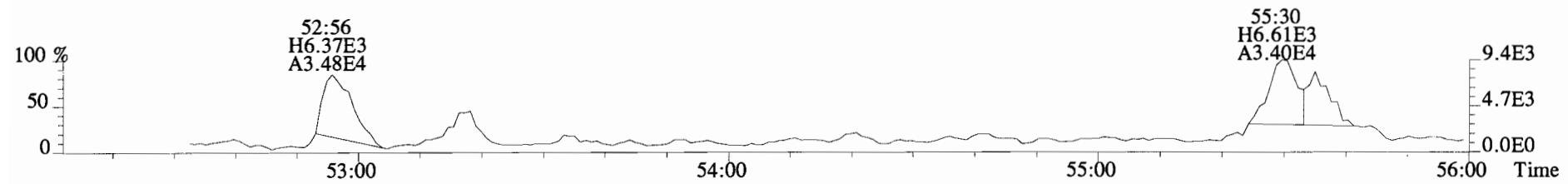
File:141021E2 #1-435 Acq:22-OCT-2014 03:37:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
427.7635 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2220.0,0.00%,F,F)



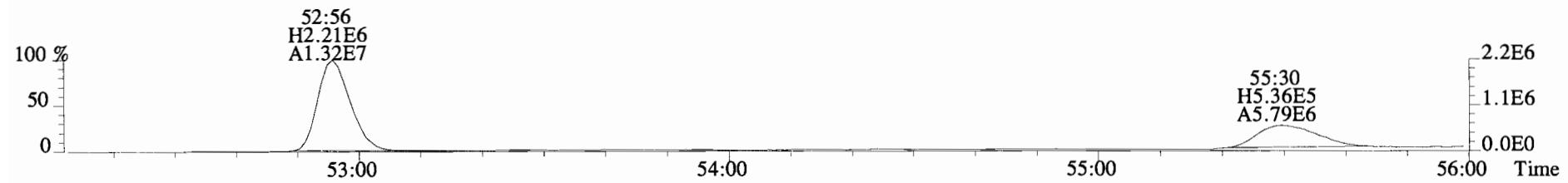
File:141021E2 #1-435 Acq:22-OCT-2014 03:37:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
463.7216 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1428.0,0.00%,F,F)



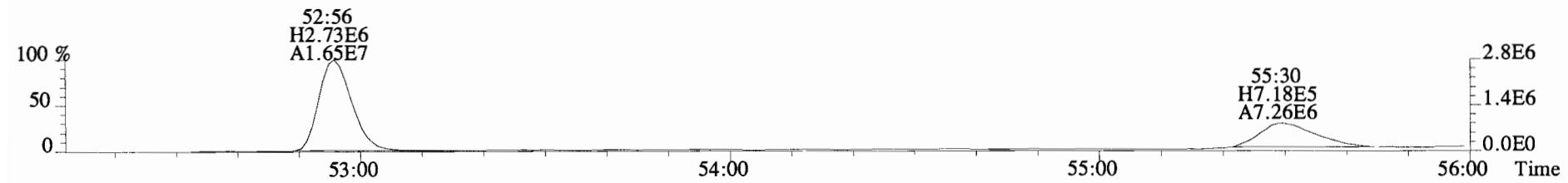
465.7186 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1492.0,0.00%,F,F)



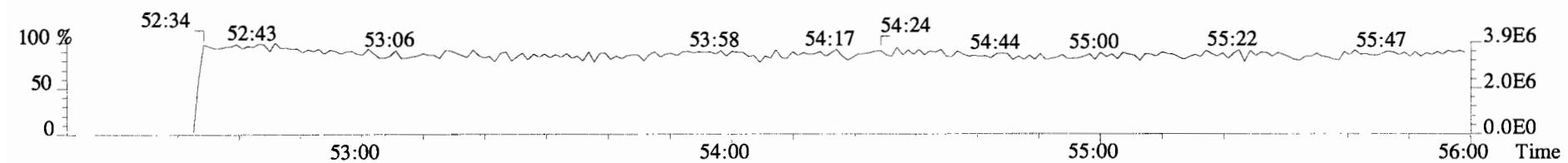
473.7648 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,28524.0,0.00%,F,F)



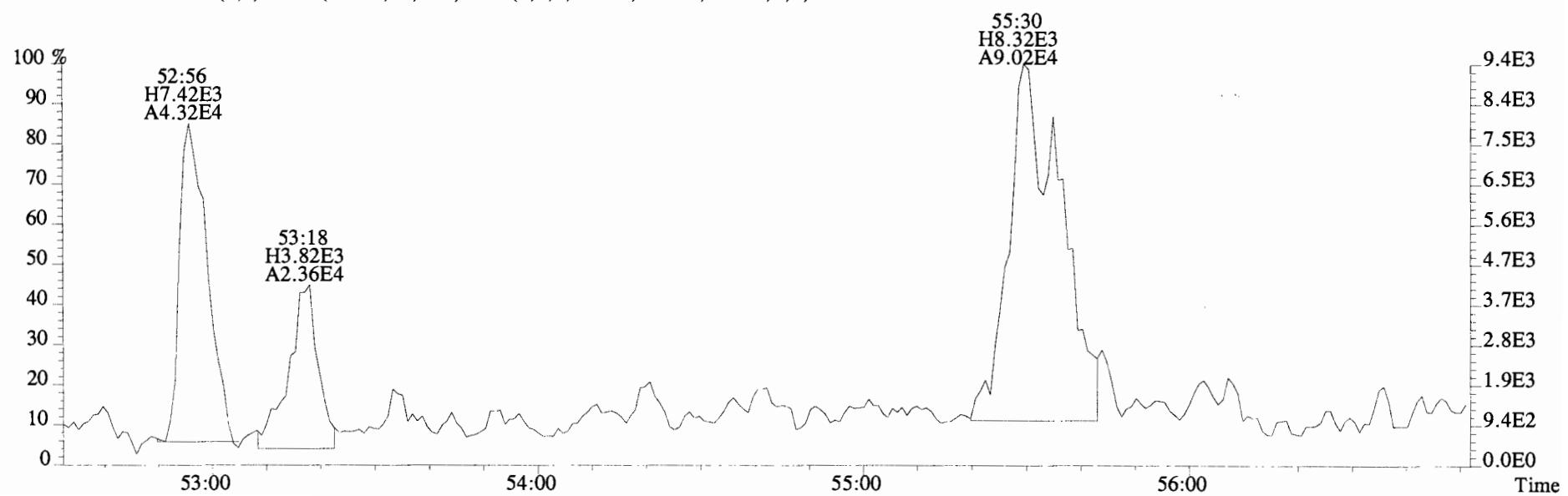
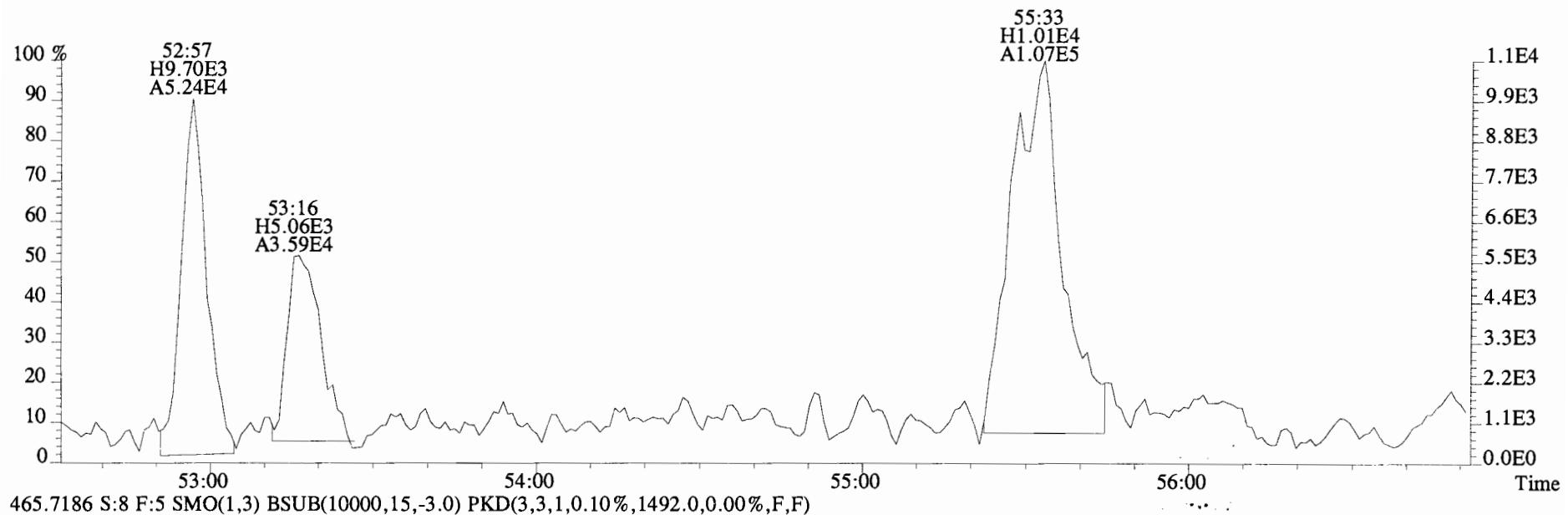
475.7619 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,36524.0,0.00%,F,F)



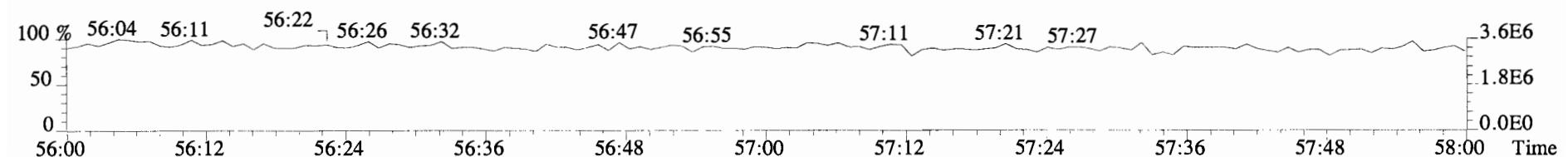
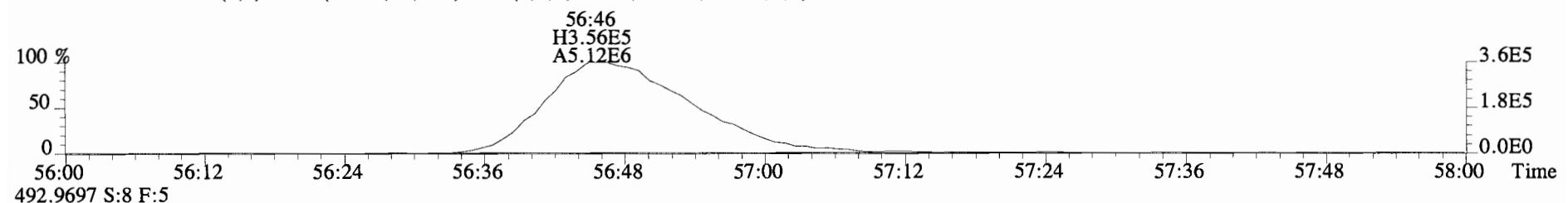
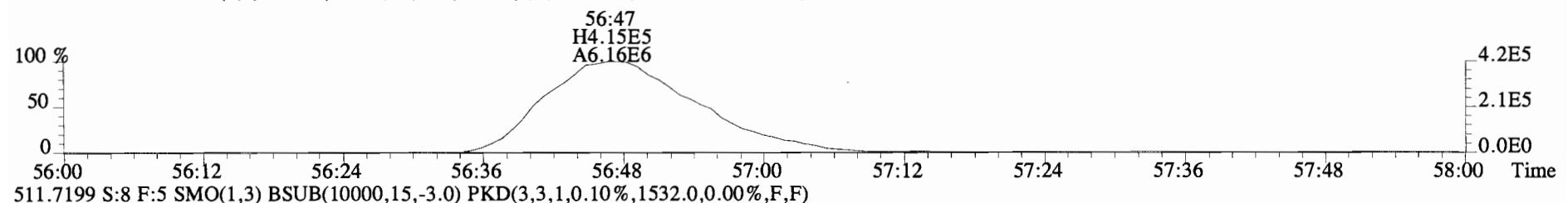
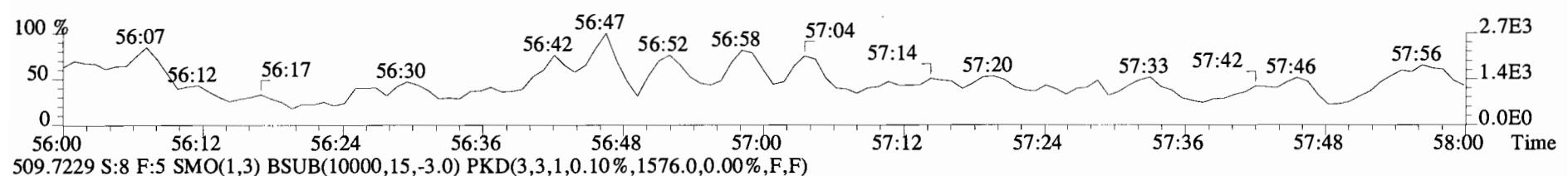
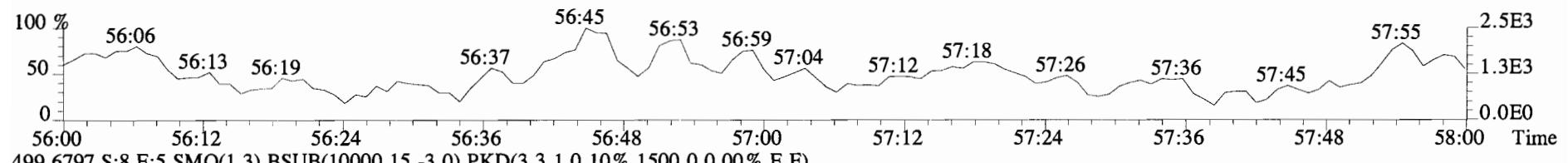
492.9697 S:8 F:5



File:141021E2 #1-435 Acq:22-OCT-2014 03:37:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
463.7216 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1428.0,0.00%,F,F)



File:141021E2 #1-435 Acq:22-OCT-2014 03:37:15 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-02 CC-FD-02-20141013-W 1 Exp:PCB_ZB1
 497.6826 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1368.0,0.00%,F,F)



Client ID: Method Blank
Lab ID: B4J0119-BLK1

Filename: 141024E2 S:5 Acq:25-OCT-14 06:24:56
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 10.000
ConCal: ST141024E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n NotFq	1.19	*		5450	2.5	1.03	*	0.996-1.006	
Mono	PCB-2	*	*	n NotFq	1.18	*		5450	2.5	1.03	*	0.984-0.994	
Mono	PCB-3	*	*	n NotFq	1.43	*		5450	2.5	0.857	*	0.996-1.006	
Di	PCB-4/10	*	*	n NotFq	1.57	*		26700	2.5	5.38	*	0.997-1.007	
Di	PCB-7/9	*	*	n NotFq	1.21	*		26700	2.5	4.44	*	0.866-0.874	
Di	PCB-6	*	*	n NotFq	1.30	*		26700	2.5	4.12	*	0.890-0.899	
Di	PCB-5/8	*	*	n NotFq	1.15	*		26700	2.5	4.68	*	0.907-0.917	
Di	PCB-14	*	*	n NotFq	1.11	*		26700	2.5	4.47	*	0.949-0.959	
Di	PCB-11	*	*	n NotFq	1.09	*		26700	2.5	4.56	*	0.995-1.005	
Di	PCB-12/13	*	*	n NotFq	1.19	*		26700	2.5	4.15	*	1.011-1.021	
Di	PCB-15	*	*	n NotFq	1.28	*		26700	2.5	3.87	*	1.023-1.033	
Tri	PCB-19	*	*	n NotFq	1.04	*		2260	2.5	0.464	*	0.996-1.006	
Tri	PCB-30	*	*	n NotFq	1.71	*		2260	2.5	0.283	*	1.032-1.042	
Tri	PCB-18	*	*	n NotFq	0.78	*		2260	2.5	0.398	*	0.949-0.959	
Tri	PCB-17	*	*	n NotFq	0.92	*		2260	2.5	0.338	*	0.956-0.966	
Tri	PCB-24/27	*	*	n NotFq	1.19	*		2260	2.5	0.262	*	0.977-0.987	
Tri	PCB-16/32	*	*	n NotFq	0.94	*		2260	2.5	0.331	*	0.995-1.005	
Tri	PCB-34	*	*	n NotFq	1.14	*		2190	2.5	0.347	*	0.955-0.965	
Tri	PCB-23	*	*	n NotFq	1.28	*		2190	2.5	0.309	*	0.959-0.969	
Tri	PCB-29	*	*	n NotFq	1.08	*		2190	2.5	0.365	*	0.967-0.977	
Tri	PCB-26	*	*	n NotFq	1.21	*		2190	2.5	0.327	*	0.974-0.984	
Tri	PCB-25	*	*	n NotFq	1.26	*		2190	2.5	0.313	*	0.979-0.989	
Tri	PCB-31	7.34e+04	1.10	y 28:56	1.28	0.487		*	2.5	*	0.997	0.992-1.002	
Tri	PCB-28	9.24e+04	0.95	y 29:03	1.71	0.460		*	2.5	*	1.001	0.995-1.005	
Tri	PCB-20/21/33	*	*	n NotFq	1.08	*		2190	2.5	0.365	*	1.017-1.027	
Tri	PCB-22	*	*	n NotFq	1.21	*		2190	2.5	0.327	*	1.032-1.042	
Tri	PCB-36	*	*	n NotFq	1.14	*		2190	2.5	0.400	*	0.928-0.938	
Tri	PCB-39	*	*	n NotFq	1.12	*		2190	2.5	0.409	*	0.943-0.953	
Tri	PCB-38	*	*	n NotFq	1.20	*		2190	2.5	0.380	*	0.966-0.976	
Tri	PCB-35	*	*	n NotFq	1.23	*		2190	2.5	0.370	*	0.982-0.992	
Tri	PCB-37	*	*	n NotFq	1.23	*		2190	2.5	0.371	*	0.995-1.005	
Tetra	PCB-54	*	*	n NotFq	1.10	*		2020	2.5	0.298	*	0.996-1.006	Integrations by:
Tetra	PCB-50	*	*	n NotFq	0.88	*		2020	2.5	0.373	*	1.037-1.047	
Tetra	PCB-53	*	*	n NotFq	1.06	*		2020	2.5	0.357	*	0.942-0.952	Analyst <u>DMS</u>
Tetra	PCB-51	*	*	n NotFq	0.99	*		2020	2.5	0.383	*	0.952-0.962	
Tetra	PCB-45	*	*	n NotFq	0.86	*		2020	2.5	0.439	*	0.966-0.976	
Tetra	PCB-46	*	*	n NotFq	0.85	*		2020	2.5	0.449	*	0.981-0.991	Date: <u>10/28/14</u>

Reviewed by:  Date: 10/30/14

Client ID: Method Blank
Lab ID: B4J0119-BLK1

Filename: 141024E2 S:5 Acq:25-OCT-14 06:24:56
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.000
ConCal: ST141024E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	*	*	n NotFq	1.28	*		2020	2.5	0.296	*	0.996-1.006	
Tetra	PCB-73	*	*	n NotFq	1.35	*		2020	2.5	0.280	*	1.000-1.010	
Tetra	PCB-43/49	*	*	n NotFq	0.99	*		2020	2.5	0.381	*	1.005-1.015	
Tetra	PCB-47	*	*	n NotFq	1.06	*		2020	2.5	0.338	*	0.996-1.006	
Tetra	PCB-48/75	*	*	n NotFq	1.23	*		2020	2.5	0.291	*	0.999-1.009	
Tetra	PCB-65	*	*	n NotFq	1.22	*		2020	2.5	0.292	*	1.008-1.018	
Tetra	PCB-62	*	*	n NotFq	1.22	*		2020	2.5	0.293	*	1.011-1.021	
Tetra	PCB-44	*	*	n NotFq	0.86	*		2020	2.5	0.416	*	1.021-1.031	
Tetra	PCB-42/59	*	*	n NotFq	1.14	*		2020	2.5	0.314	*	1.028-1.038	
Tetra	PCB-41/64/71/72	*	*	n NotFq	1.21	*		2020	2.5	0.296	*	1.046-1.056	
Tetra	PCB-68	*	*	n NotFq	1.35	*		2020	2.5	0.265	*	1.054-1.064	
Tetra	PCB-40	*	*	n NotFq	0.70	*		2020	2.5	0.510	*	1.061-1.071	
Tetra	PCB-57	*	*	n NotFq	0.98	*		2020	2.5	0.271	*	0.965-0.975	
Tetra	PCB-67	*	*	n NotFq	1.11	*		2020	2.5	0.240	*	0.974-0.984	
Tetra	PCB-58	*	*	n NotFq	0.93	*		2020	2.5	0.287	*	0.977-0.987	
Tetra	PCB-63	*	*	n NotFq	0.95	*		2020	2.5	0.279	*	0.982-0.992	
Tetra	PCB-74	*	*	n NotFq	1.24	*		2020	2.5	0.214	*	0.990-1.000	
Tetra	PCB-61/70	*	*	n NotFq	0.95	*		2020	2.5	0.279	*	0.995-1.005	
Tetra	PCB-76/66	1.23e+05	0.82	y 35:40	1.04	0.762		*	2.5	*	1.007	1.001-1.011	
Tetra	PCB-80	*	*	n NotFq	1.19	*		2020	2.5	0.218	*	0.996-1.006	
Tetra	PCB-55	*	*	n NotFq	1.04	*		2020	2.5	0.249	*	1.005-1.015	
Tetra	PCB-56/60	9.73e+04	0.74	y 36:40	1.01	0.582		*	2.5	*	1.024	1.019-1.029	
Tetra	PCB-79	*	*	n NotFq	1.08	*		2020	2.5	0.241	*	1.048-1.058	
Tetra	PCB-78	*	*	n NotFq	1.27	*		2020	2.5	0.232	*	0.982-0.992	
Tetra	PCB-81	*	*	n NotFq	1.33	*		2020	2.5	0.222	*	0.995-1.005	
Tetra	PCB-77	*	*	n NotFq	1.10	*		2020	2.5	0.258	*	0.995-1.005	
Penta	PCB-104	*	*	n NotFq	1.18	*		2860	2.5	0.628	*	0.996-1.006	
Penta	PCB-96	*	*	n NotFq	1.14	*		2860	2.5	0.653	*	1.034-1.044	
Penta	PCB-103	*	*	n NotFq	0.96	*		2860	2.5	0.777	*	1.050-1.060	
Penta	PCB-100	*	*	n NotFq	0.94	*		2860	2.5	0.793	*	1.061-1.071	
Penta	PCB-94	*	*	n NotFq	1.06	*		2860	2.5	0.905	*	0.980-0.990	
Penta	PCB-95/98/102	2.02e+05	1.37	y 35:44	1.22	1.86		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-93	*	*	n NotFq	0.84	*		2860	2.5	1.13	*	0.997-1.007	
Penta	PCB-88/91	*	*	n NotFq	1.12	*		2860	2.5	0.857	*	1.005-1.015	
Penta	PCB-121	*	*	n NotFq	1.62	*		2860	2.5	0.592	*	1.009-1.019	
Penta	PCB-84/92	*	*	n NotFq	1.05	*		2860	2.5	0.852	*	0.985-0.995	
Penta	PCB-89	*	*	n NotFq	1.13	*		2860	2.5	0.789	*	0.991-1.001	

Analyst: Dms

Date: 10/28/14

Client ID: Method Blank
Lab ID: B4J0119-BLK1

Filename: 141024E2 S:5 Acq:25-OCT-14 06:24:56
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.000

ConCal: ST141024E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	1.39e+05	1.61	y 37:24	1.10	1.28	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-113	*	*	n NotFq	1.41	*	2860	2.5	0.632	*	1.002-1.012		
Penta	PCB-99	*	*	n NotFq	1.34	*	2860	2.5	0.667	*	1.004-1.014		
Penta	PCB-119	*	*	n NotFq	1.53	*	2860	2.5	0.615	*	0.982-0.992		
Penta	PCB-108/112	*	*	n NotFq	1.28	*	2860	2.5	0.736	*	0.986-0.996		
Penta	PCB-83	*	*	n NotFq	1.52	*	2860	2.5	0.621	*	0.990-1.000		
Penta	PCB-97	*	*	n NotFq	1.18	*	2860	2.5	0.797	*	0.995-1.005		
Penta	PCB-86	*	*	n NotFq	0.84	*	2860	2.5	1.12	*	0.999-1.009		
Penta	PCB-87/117/125	*	*	n NotFq	1.55	*	2860	2.5	0.608	*	1.002-1.012		
Penta	PCB-111/115	*	*	n NotFq	1.63	*	2860	2.5	0.577	*	1.006-1.016		
Penta	PCB-85/116	*	*	n NotFq	1.30	*	2860	2.5	0.724	*	1.010-1.020		
Penta	PCB-120	*	*	n NotFq	1.68	*	2860	2.5	0.562	*	1.016-1.026		
Penta	PCB-110	1.24e+05	1.45	y 39:40	1.56	0.874	*	2.5	*	1.025	1.020-1.030		
Penta	PCB-82	*	*	n NotFq	0.76	*	2860	2.5	0.933	*	0.971-0.981		
Penta	PCB-124	*	*	n NotFq	1.47	*	2860	2.5	0.482	*	0.988-0.998		
Penta	PCB-107/109	*	*	n NotFq	1.32	*	2860	2.5	0.536	*	0.991-1.001		
Penta	PCB-123	*	*	n NotFq	1.17	*	2860	2.5	0.606	*	0.996-1.006		
Penta	PCB-106/118	*	*	n NotFq	1.17	*	2860	2.5	0.594	*	0.996-1.006		
Penta	PCB-114	*	*	n NotFq	1.30	*	2820	2.5	0.595	*	0.995-1.005		
Penta	PCB-122	*	*	n NotFq	1.12	*	2820	2.5	0.688	*	0.999-1.009		
Penta	PCB-105	7.42e+04	1.46	y 43:00	1.30	0.499	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-127	*	*	n NotFq	1.33	*	2820	2.5	0.561	*	0.996-1.006		
Penta	PCB-126	*	*	n NotFq	1.18	*	2820	2.5	0.724	*	0.995-1.005		
Hexa	PCB-155	*	*	n NotFq	1.11	*	1770	2.5	0.356	*	0.966-1.006		
Hexa	PCB-150	*	*	n NotFq	1.00	*	1770	2.5	0.397	*	1.030-1.040		
Hexa	PCB-152	*	*	n NotFq	1.12	*	1770	2.5	0.355	*	1.043-1.053		
Hexa	PCB-145	*	*	n NotFq	1.20	*	1770	2.5	0.330	*	1.055-1.065		
Hexa	PCB-136	8.61e+04	1.32	y 39:29	1.18	0.627	*	2.5	*	1.069	1.064-1.074		
Hexa	PCB-148	*	*	n NotFq	0.74	*	1770	2.5	0.532	*	1.066-1.076		
Hexa	PCB-154	*	*	n NotFq	0.86	*	1770	2.5	0.462	*	1.080-1.090		
Hexa	PCB-151	7.06e+04	1.65	n 40:42	0.75	0.811	R	*	2.5	*	1.102	1.097-1.107	
Hexa	PCB-135	*	*	n NotFq	0.79	*	1770	2.5	0.500	*	1.103-1.113		
Hexa	PCB-144	*	*	n NotFq	0.76	*	1770	2.5	0.520	*	1.105-1.117		
Hexa	PCB-147	*	*	n NotFq	0.82	*	1770	2.5	0.483	*	1.109-1.121		
Hexa	PCB-139/149	2.16e+05	1.13	y 41:25	0.76	2.43	*	2.5	*	1.121	1.116-1.128		
Hexa	PCB-140	*	*	n NotFq	0.72	*	1770	2.5	0.548	*	1.121-1.133		
Hexa	PCB-134/143	*	*	n NotFq	0.92	*	1810	2.5	0.458	*	0.970-0.980		

Analyst: DmJ

Date: 10/28/14

Client ID: Method Blank
Lab ID: B4J0119-BLK1

Filename: 141024E2 S:5 Acq:25-OCT-14 06:24:56
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.000

ConCal: ST141024E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	*	*	n NotFq	0.82	*		1810	2.5	0.513	*	0.977-0.987	
Hexa	PCB-131	*	*	n NotFq	0.91	*		1810	2.5	0.463	*	0.981-0.991	
Hexa	PCB-146/165	*	*	n NotFq	1.25	*		1810	2.5	0.337	*	0.986-0.996	
Hexa	PCB-132/161	7.73e+04	1.00	n 43:00	1.10	0.612	R	*	2.5	*	0.997	0.992-1.002	
Hexa	PCB-153	2.46e+05	1.42	y 43:07	1.25	1.72		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-168	*	*	n NotFq	1.45	*		1810	2.5	0.290	*	1.001-1.011	
Hexa	PCB-141	*	*	n NotFq	1.09	*		1810	2.5	0.417	*	0.995-1.005	
Hexa	PCB-137	*	*	n NotFq	1.06	*		1810	2.5	0.426	*	1.004-1.014	
Hexa	PCB-130	*	*	n NotFq	0.96	*		1810	2.5	0.469	*	1.006-1.016	
Hexa	PCB-138/163/164	2.10e+05	1.00	n 44:45	1.29	1.47	R	*	2.5	*	1.001	0.996-1.006	
Hexa	PCB-158/160	*	*	n NotFq	1.34	*		1810	2.5	0.322	*	1.001-1.011	
Hexa	PCB-129	*	*	n NotFq	0.85	*		1810	2.5	0.507	*	1.007-1.017	
Hexa	PCB-166	*	*	n NotFq	1.19	*		1810	2.5	0.337	*	0.988-0.998	
Hexa	PCB-159	*	*	n NotFq	1.11	*		1810	2.5	0.359	*	0.996-1.006	
Hexa	PCB-128/162	*	*	n NotFq	1.05	*		1810	2.5	0.381	*	1.002-1.012	
Hexa	PCB-167	*	*	n NotFq	1.20	*		1810	2.5	0.310	*	0.995-1.005	
Hexa	PCB-156	*	*	n NotFq	1.14	*		1810	2.5	0.349	*	0.996-1.006	
Hexa	PCB-157	*	*	n NotFq	1.16	*		1810	2.5	0.331	*	0.995-1.005	
Hexa	PCB-169	*	*	n NotFq	1.12	*		1810	2.5	0.352	*	0.995-1.005	
Hepta	PCB-188	*	*	n NotFq	1.58	*		1610	2.5	0.168	*	0.996-1.006	
Hepta	PCB-184	*	*	n NotFq	1.63	*		1610	2.5	0.163	*	1.006-1.016	
Hepta	PCB-179	8.27e+04	1.21	y 44:01	1.30	0.617		*	2.5	*	1.029	1.024-1.034	
Hepta	PCB-176	*	*	n NotFq	1.48	*		1610	2.5	0.180	*	1.035-1.045	
Hepta	PCB-186	*	*	n NotFq	1.45	*		1610	2.5	0.183	*	1.050-1.060	
Hepta	PCB-178	*	*	n NotFq	1.03	*		1610	2.5	0.257	*	1.061-1.071	
Hepta	PCB-175	*	*	n NotFq	1.01	*		1610	2.5	0.263	*	1.069-1.079	
Hepta	PCB-182/187	7.45e+04	1.20	y 46:05	1.25	0.579		*	2.5	*	1.078	1.073-1.083	
Hepta	PCB-183	6.75e+04	1.18	y 46:25	1.21	0.543		*	2.5	*	1.086	1.081-1.091	
Hepta	PCB-185	*	*	n NotFq	1.80	*		1610	2.5	0.195	*	0.951-0.961	
Hepta	PCB-174	4.01e+04	0.78	n 47:28	1.38	0.362	R	*	2.5	*	0.963	0.958-0.968	
Hepta	PCB-181	*	*	n NotFq	1.38	*		1610	2.5	0.254	*	0.960-0.970	
Hepta	PCB-177	*	*	n NotFq	1.26	*		1610	2.5	0.280	*	0.963-0.973	
Hepta	PCB-171	*	*	n NotFq	1.58	*		1610	2.5	0.222	*	0.970-0.980	
Hepta	PCB-173	*	*	n NotFq	1.11	*		1610	2.5	0.316	*	0.978-0.988	
Hepta	PCB-172	*	*	n NotFq	1.63	*		1610	2.5	0.215	*	0.987-0.997	
Hepta	PCB-192	*	*	n NotFq	1.74	*		1610	2.5	0.202	*	0.991-1.001	
Hepta	PCB-180	*	*	n NotFq	1.34	*		1610	2.5	0.261	*	0.995-1.005	

Analyst: DMS

Date: 10/28/14

Client ID: Method Blank
Lab ID: B4J0119-BLK1

Filename: 141024E2 S:5 Acq:25-OCT-14 06:24:56
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.000

ConCal: ST141024E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	*	*	n NotFq	1.72	*		1610	2.5	0.205	*	0.999-1.009	
Hepta	PCB-191	*	*	n NotFq	1.69	*		1610	2.5	0.207	*	1.004-1.014	
Hepta	PCB-170	*	*	n NotFq	1.60	*		1610	2.5	0.259	*	0.995-1.005	
Hepta	PCB-190	*	*	n NotFq	2.21	*		1610	2.5	0.187	*	0.998-1.008	
Hepta	PCB-189	*	*	n NotFq	1.55	*		1610	2.5	0.230	*	0.995-1.005	
Octa	PCB-202	*	*	n NotFq	1.08	*		1740	2.5	0.342	*	0.995-1.005	
Octa	PCB-201	*	*	n NotFq	1.15	*		1740	2.5	0.322	*	1.005-1.015	
Octa	PCB-204	*	*	n NotFq	1.14	*		1740	2.5	0.325	*	1.008-1.018	
Octa	PCB-197	*	*	n NotFq	1.07	*		1740	2.5	0.344	*	1.015-1.025	
Octa	PCB-200	*	*	n NotFq	1.06	*		1740	2.5	0.348	*	1.032-1.044	
Octa	PCB-198	*	*	n NotFq	0.76	*		1740	2.5	0.490	*	1.059-1.069	
Octa	PCB-199	*	*	n NotFq	0.80	*		1740	2.5	0.464	*	1.061-1.071	
Octa	PCB-196/203	*	*	n NotFq	0.80	*		1740	2.5	0.462	*	1.066-1.076	
Octa	PCB-195	*	*	n NotFq	1.23	*		2610	2.5	0.859	*	0.979-0.989	
Octa	PCB-194	*	*	n NotFq	1.21	*		2610	2.5	0.869	*	0.995-1.005	
Octa	PCB-205	*	*	n NotFq	1.54	*		2610	2.5	0.683	*	1.001-1.011	
Nona	PCB-208	*	*	n NotFq	0.93	*		1380	2.5	0.307	*	0.995-1.005	
Nona	PCB-207	*	*	n NotFq	1.08	*		1380	2.5	0.264	*	1.001-1.011	
Nona	PCB-206	*	*	n NotFq	1.02	*		1380	2.5	0.828	*	0.995-1.005	
Deca	PCB-209	*	*	n NotFq	1.17	*		1130	2.5	0.872	*	0.995-1.005	

Analyst: Dms

Date: 10/28/14

Client ID: Method Blank
Lab ID: B4J0119-BLK1

Filename: 141024E2 S:5 Acq:25-OCT-14 06:24:56 ConCal: ST141024E2-1
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 10.0000 EndCAL: NA

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Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	*	*	n	NotFnd	1.27 *
Total Di-PCB	*	*	n	NotFnd	1.21 *
Total Tri-PCB	*	*	n	NotFnd	1.10 *
Total Tri-PCB	1.66e+05	1.10	y	28:56	1.21 0.947261 Sum:0.947261
Total Tetra-PCB	2.20e+05	0.82	y	35:40	1.09 1.34382
Total Penta-PCB	4.65e+05	1.37	y	35:44	1.18 4.01613
Total Penta-PCB	7.42e+04	1.46	y	43:00	1.25 0.499227 Sum:4.51536
Total Hexa-PCB	3.02e+05	1.32	y	39:29	0.90 3.05652
Total Hexa-PCB	2.46e+05	1.42	y	43:07	1.11 1.72211 Sum:4.77864
Total Hepta-PCB	2.25e+05	1.21	y	44:01	1.42 1.73871
Total Octa-PCB	*	*	n	NotFnd	0.96 *
Total Octa-PCB	*	*	n	NotFnd	1.33 * Sum:0.00000
Total Nona-PCB	*	*	n	NotFnd	1.01 *
Total Deca-PCB	*	*	n	NotFnd	1.17 *

Total PCB Conc:16.5812560000

13,3

Integrations
by
Analyst: DMS
Date: 10/28/14

Client ID: Method Blank
Lab ID: B4J0119-BLK1

Filename: 141024E2 S:5 Acq:25-OCT-14 06:24:56
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.00µl
ConCal: ST141024E2-1
EndCAL: NA

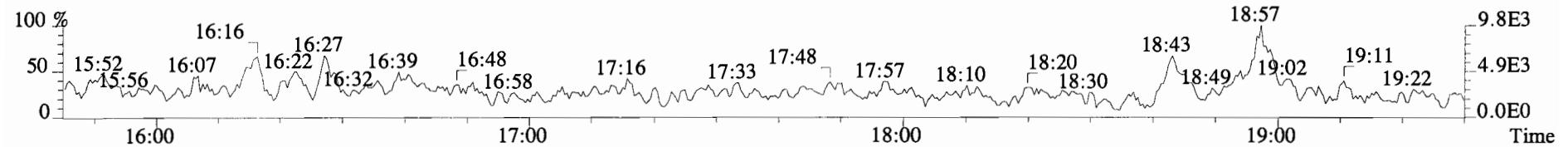
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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS		Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.61e+08	3.24	y	0.87	16:26	0.633	0.629-0.635	948	94.8	13C-PCB-79	1.57e+08	0.78	y	1.02	37:42	1.028	1.023-1.034	868	86.8		
13C-PCB-3	1.70e+08	3.27	y	0.91	18:56	0.730	0.725-0.733	959	95.9	13C-PCB-178	6.87e+07	0.45	y	0.61	45:33	0.984	0.979-0.990	992	99.2		
13C-PCB-4	7.88e+07	1.59	y	0.59	20:14	0.780	0.775-0.783	691	69.1	13C-PCB-178	6.87e+07	0.45	y	0.61	45:33	0.984	0.979-0.990	992	99.2		
13C-PCB-9	1.23e+08	1.59	y	0.90	21:57	0.846	0.842-0.850	708	70.8	13C-PCB-11	1.36e+08	1.56	y	0.94	25:14	0.973	0.968-0.978	746	74.6		
13C-PCB-19	9.37e+07	1.10	y	0.53	24:16	0.935	0.930-0.940	907	90.7	13C-PCB-19	9.37e+07	1.10	y	0.53	24:16	0.935	0.930-0.940	907	90.7		
13C-PCB-28	1.17e+08	0.91	y	0.93	29:02	1.003	0.999-1.009	791	79.1	13C-PCB-28	1.17e+08	0.91	y	0.93	29:02	1.003	0.999-1.009	791	79.1		
13C-PCB-32	1.47e+08	1.10	y	0.80	27:07	1.045	1.040-1.050	952	95.2	13C-PCB-32	1.47e+08	1.10	y	0.80	27:07	1.045	1.040-1.050	952	95.2		
13C-PCB-37	1.16e+08	1.08	y	0.84	32:53	1.136	1.131-1.143	869	86.9	13C-PCB-37	1.16e+08	1.08	y	0.84	32:53	1.136	1.131-1.143	869	86.9		
13C-PCB-47	1.13e+08	0.76	y	0.81	31:56	0.871	0.866-0.874	787	78.7	13C-PCB-47	1.13e+08	0.76	y	0.81	31:56	0.871	0.866-0.874	787	78.7		
13C-PCB-52	1.04e+08	0.76	y	0.77	31:25	0.857	0.853-0.861	761	76.1	13C-PCB-52	1.04e+08	0.76	y	0.77	31:25	0.857	0.853-0.861	761	76.1		
13C-PCB-54	1.22e+08	0.79	y	0.97	27:57	0.762	0.758-0.766	705	70.5	13C-PCB-54	1.22e+08	0.79	y	0.97	27:57	0.762	0.758-0.766	705	70.5		
13C-PCB-70	1.54e+08	0.79	y	1.00	35:25	0.966	0.961-0.971	871	87.1	13C-PCB-70	1.54e+08	0.79	y	1.00	35:25	0.966	0.961-0.971	871	87.1		
13C-PCB-77	1.49e+08	0.79	y	0.94	39:33	1.079	1.073-1.083	893	89.3	13C-PCB-77	1.49e+08	0.79	y	0.94	39:33	1.079	1.073-1.083	893	89.3		
13C-PCB-80	1.66e+08	0.79	y	1.03	35:49	0.977	0.972-0.982	904	90.4	13C-PCB-80	1.66e+08	0.79	y	1.03	35:49	0.977	0.972-0.982	904	90.4		
13C-PCB-81	1.47e+08	0.78	y	0.92	38:57	1.062	1.057-1.067	897	89.7	13C-PCB-81	1.47e+08	0.78	y	0.92	38:57	1.062	1.057-1.067	897	89.7		
13C-PCB-95	8.86e+07	1.60	y	0.74	35:43	0.913	0.908-0.918	828	82.8	13C-PCB-95	8.86e+07	1.60	y	0.74	35:43	0.913	0.908-0.918	828	82.8		
13C-PCB-97	9.14e+07	1.62	y	0.70	38:42	0.990	0.984-0.994	899	89.9	13C-PCB-97	9.14e+07	1.62	y	0.70	38:42	0.990	0.984-0.994	899	89.9		
13C-PCB-101	9.83e+07	1.61	y	0.78	37:24	0.956	0.951-0.961	869	86.9	13C-PCB-101	9.83e+07	1.61	y	0.78	37:24	0.956	0.951-0.961	869	86.9		
13C-PCB-104	1.13e+08	1.59	y	1.00	32:35	0.833	0.828-0.836	781	78.1	13C-PCB-104	1.13e+08	1.59	y	1.00	32:35	0.833	0.828-0.836	781	78.1		
13C-PCB-105	1.15e+08	1.59	y	1.37	42:59	0.928	0.924-0.934	742	74.2	13C-PCB-105	1.15e+08	1.59	y	1.37	42:59	0.928	0.924-0.934	742	74.2		
13C-PCB-114	1.13e+08	1.60	y	1.36	42:07	0.910	0.905-0.915	735	73.5	13C-PCB-114	1.13e+08	1.60	y	1.36	42:07	0.910	0.905-0.915	735	73.5		
13C-PCB-118	1.28e+08	1.62	y	0.96	41:27	1.060	1.054-1.064	925	92.5	13C-PCB-118	1.28e+08	1.62	y	0.96	41:27	1.060	1.054-1.064	925	92.5		
13C-PCB-123	1.21e+08	1.59	y	0.89	41:16	1.055	1.050-1.060	938	93.8	13C-PCB-123	1.21e+08	1.59	y	0.89	41:16	1.055	1.050-1.060	938	93.8		
13C-PCB-126	1.06e+08	1.58	y	1.31	45:13	0.977	0.972-0.982	717	71.7	13C-PCB-126	1.06e+08	1.58	y	1.31	45:13	0.977	0.972-0.982	717	71.7		
13C-PCB-127	1.18e+08	1.58	y	1.47	43:18	0.935	0.931-0.941	707	70.7	13C-PCB-127	1.18e+08	1.58	y	1.47	43:18	0.935	0.931-0.941	707	70.7		
13C-PCB-138	1.10e+08	1.27	y	1.10	44:43	0.966	0.961-0.971	887	88.7	13C-PCB-138	1.10e+08	1.27	y	1.10	44:43	0.966	0.961-0.971	887	88.7		
13C-PCB-141	1.06e+08	1.26	y	1.07	43:52	0.948	0.943-0.953	877	87.7	13C-PCB-141	1.06e+08	1.26	y	1.07	43:52	0.948	0.943-0.953	877	87.7		
13C-PCB-153	1.14e+08	1.28	y	1.15	43:07	0.931	0.927-0.937	883	88.3	13C-PCB-153	1.14e+08	1.28	y	1.15	43:07	0.931	0.927-0.937	883	88.3		
13C-PCB-155	1.17e+08	1.25	y	0.84	36:56	0.944	0.939-0.949	961	96.1	13C-PCB-155	1.17e+08	1.25	y	0.84	36:56	0.944	0.939-0.949	961	96.1		
13C-PCB-156	1.31e+08	1.28	y	1.30	47:60	1.037	1.032-1.042	898	89.8	13C-PCB-156	1.31e+08	1.28	y	1.30	47:60	1.037	1.032-1.042	898	89.8		
13C-PCB-157	1.39e+08	1.29	y	1.36	48:17	1.043	1.038-1.048	909	90.9	13C-PCB-157	1.39e+08	1.29	y	1.36	48:17	1.043	1.038-1.048	909	90.9		
13C-PCB-159	1.26e+08	1.27	y	1.25	45:60	0.993	0.989-0.999	893	89.3	13C-PCB-159	1.26e+08	1.27	y	1.25	45:60	0.993	0.989-0.999	893	89.3		
13C-PCB-167	1.36e+08	1.28	y	1.35	46:41	1.008	1.004-1.014	894	89.4	13C-PCB-167	1.36e+08	1.28	y	1.35	46:41	1.008	1.004-1.014	894	89.4		
13C-PCB-169	1.30e+08	1.26	y	1.29	50:19	1.087	1.083-1.093	897	89.7	13C-PCB-169	1.30e+08	1.26	y	1.29	50:19	1.087	1.083-1.093	897	89.7		
13C-PCB-170	6.48e+07	0.46	y	0.54	50:40	1.094	1.089-1.101	1060	106	13C-PCB-170	6.48e+07	0.46	y	0.54	50:40	1.094	1.089-1.101	1060	106		
13C-PCB-180	8.05e+07	0.47	y	0.68	49:16	1.064	1.060-1.070	1040	104	13C-PCB-180	8.05e+07	0.47	y	0.68	49:16	1.064	1.060-1.070	1040	104		
13C-PCB-188	1.03e+08	0.46	y	0.92	42:45	0.924	0.919-0.929	992	99.2	13C-PCB-188	1.03e+08	0.46	y	0.92	42:45	0.924	0.919-0.929	992	99.2		
13C-PCB-189	8.49e+07	0.46	y	0.72	52:05	1.125	1.120-1.132	1050	105	13C-PCB-189	8.49e+07	0.46	y	0.72	52:05	1.125	1.120-1.132	1050	105		
13C-PCB-194	6.84e+07	0.93	y	0.80	53:37	0.994	0.990-1.000	956	95.6	13C-PCB-194	6.84e+07	0.93	y	0.80	53:37	0.994	0.990-1.000	956	95.6		
13C-PCB-202	1.09e+08	0.92	y	0.84	48:13	1.041	1.036-1.046	1150	115	13C-PCB-202	1.09e+08	0.92	y	0.84	48:13	1.041	1.036-1.046	1150	115		
13C-PCB-206	5.00e+07	0.79	y	0.65	55:20	1.026	1.021-1.031	857	85.7	13C-PCB-206	5.00e+07	0.79	y	0.65	55:20	1.026	1.021-1.031	857	85.7		
13C-PCB-208	9.33e+07	0.77	y	1.08	52:50	0.980	0.976-0.986	963	96.3	13C-PCB-208	9.33e+07	0.77	y	1.08	52:50	0.980	0.976-0.986	963	96.3		
13C-PCB-209	4.98e+07	1.18	y	0.61	56:36	1.050	1.045-1.055	909	90.9	13C-PCB-209	4.98e+07	1.18	y	0.61	56:36	1.050	1.045-1.055	909	90.9		

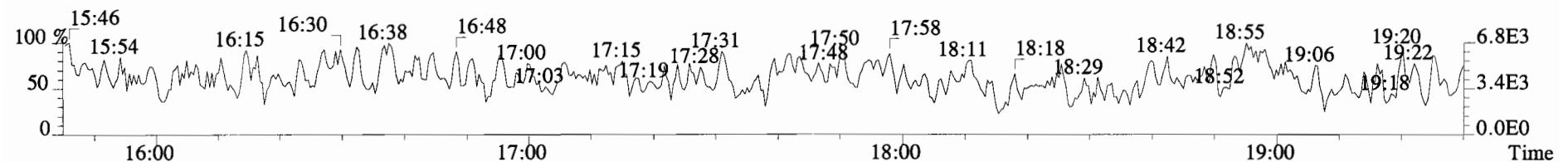
Analyst: DMS

Date: 10/28/14

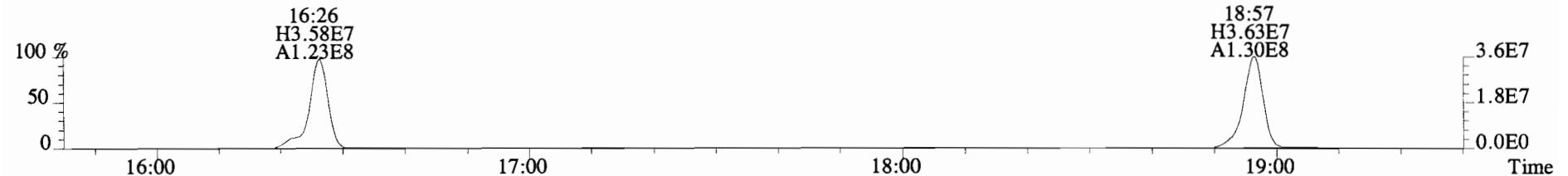
File:141024E2 #1-729 Acq:25-OCT-2014 06:24:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
 188.0393 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3356.0,0.00%,F,F)



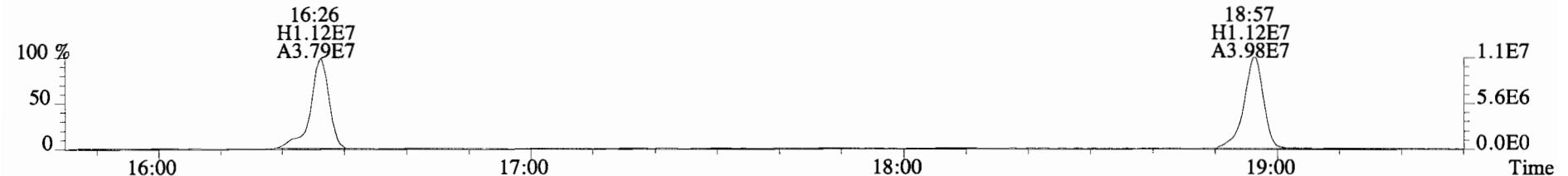
190.0363 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5452.0,0.00%,F,F)



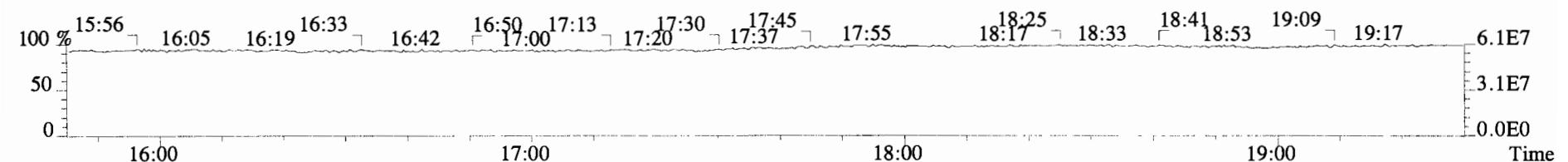
200.0795 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7236.0,0.00%,F,F)



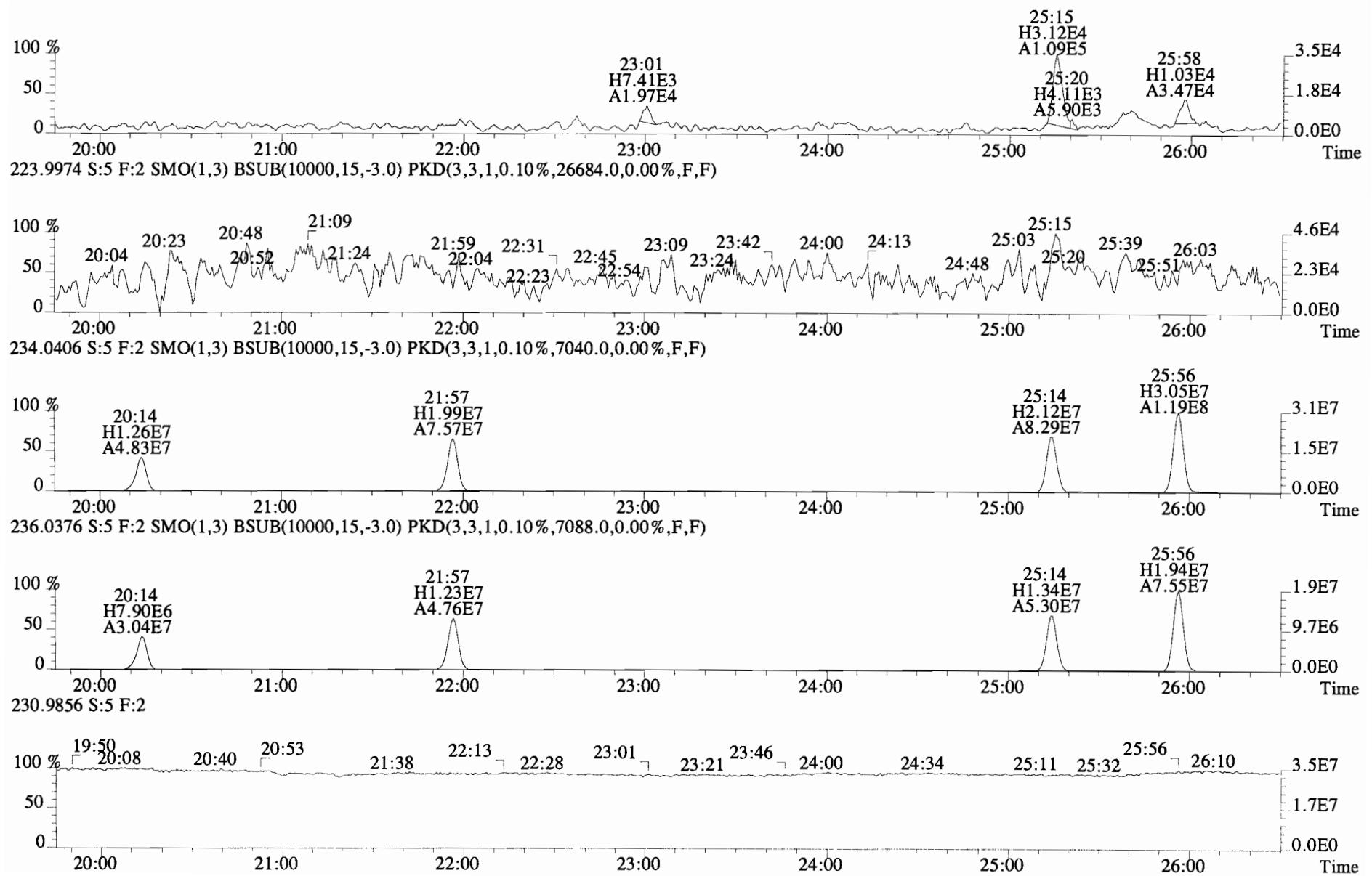
202.0766 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,54900.0,0.00%,F,F)



180.9880 S:5

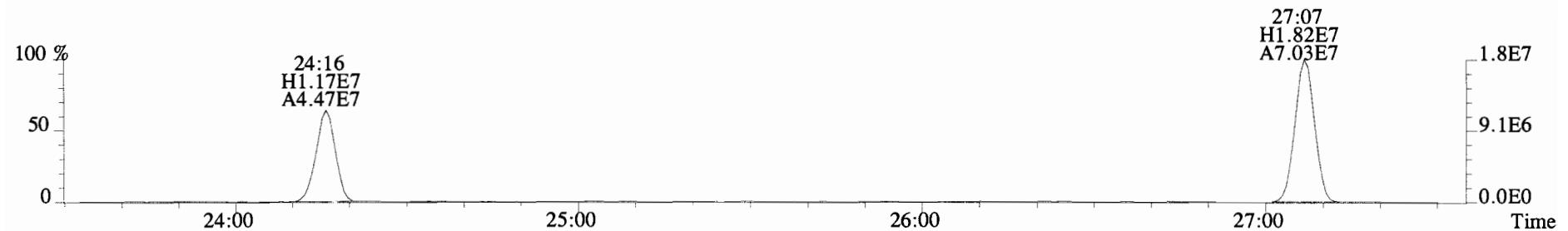
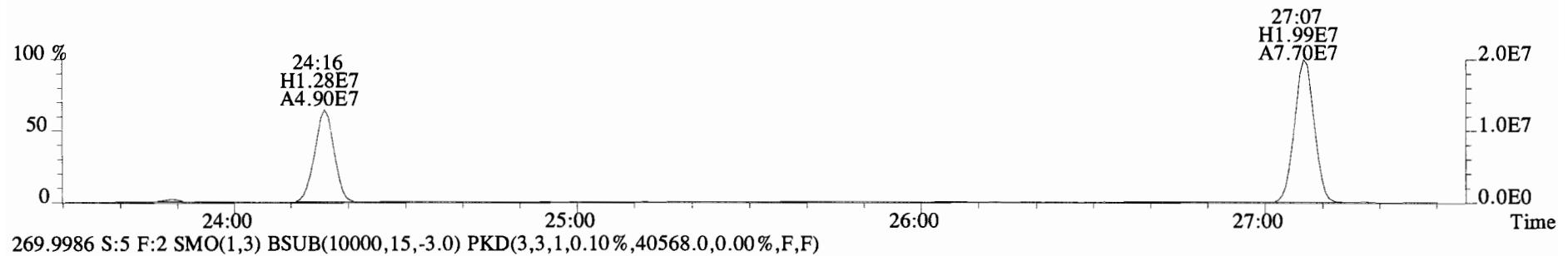
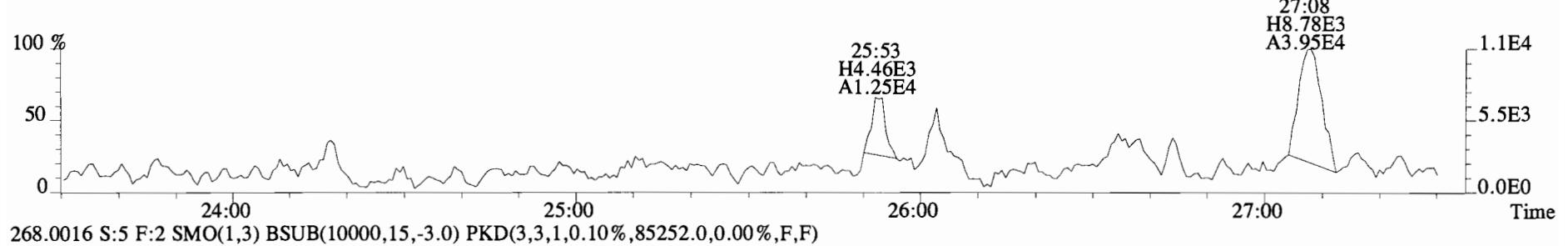
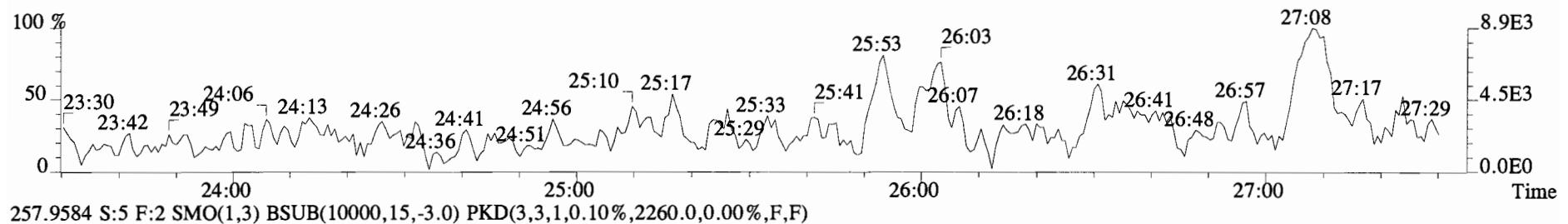


File:141024E2 #1-757 Acq:25-OCT-2014 06:24:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
 222.0003 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3688.0,0.00%,F,F)

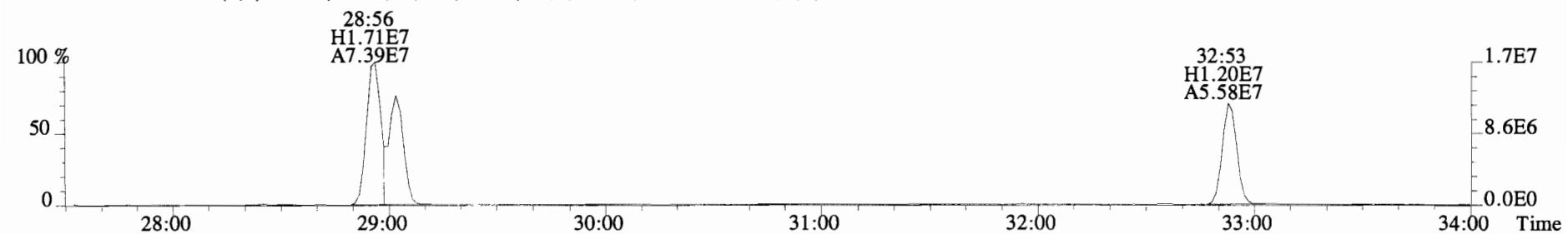
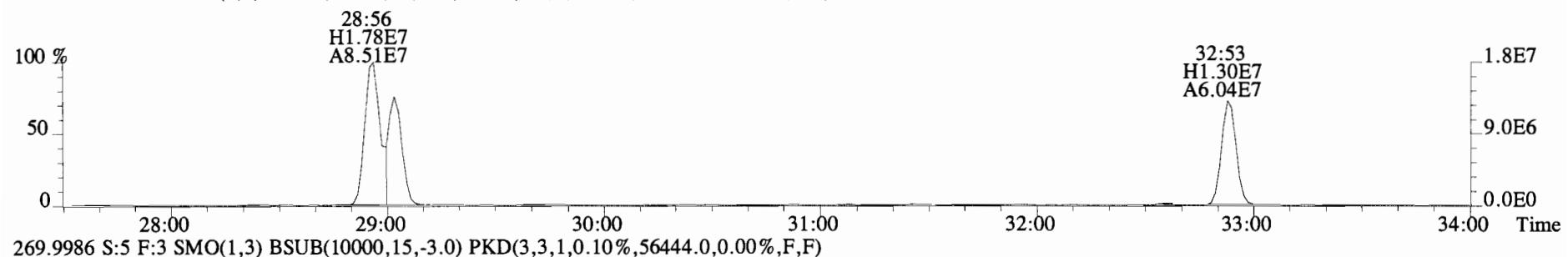
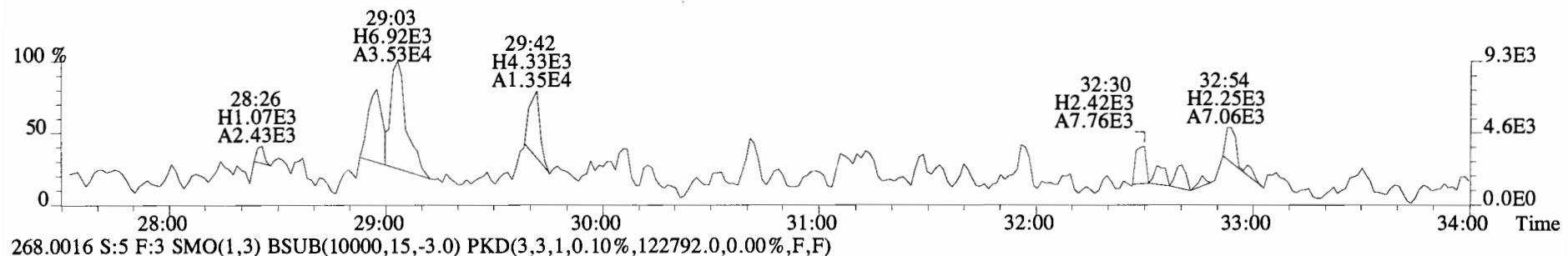
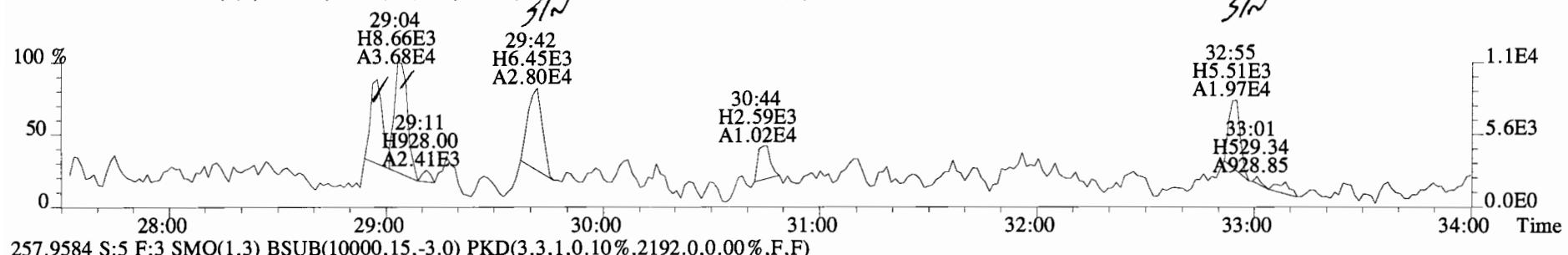


File:141024E2 #1-757 Acq:25-OCT-2014 06:24:56 GC EI + Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
255.9613 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2996.0,0.00%,F,F)

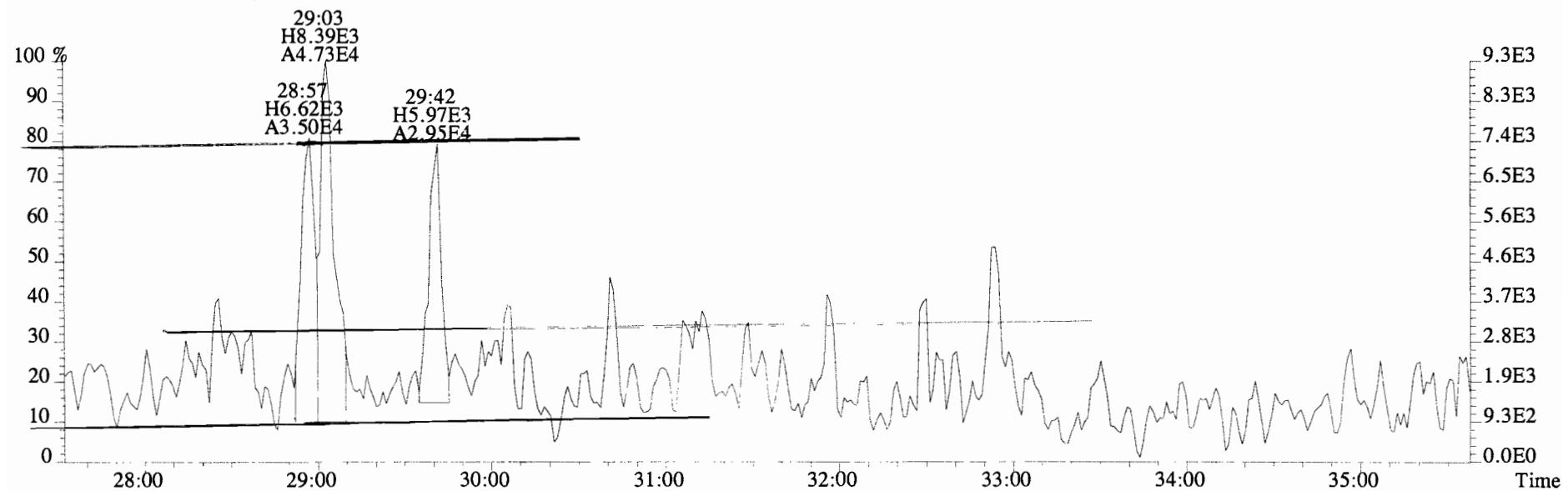
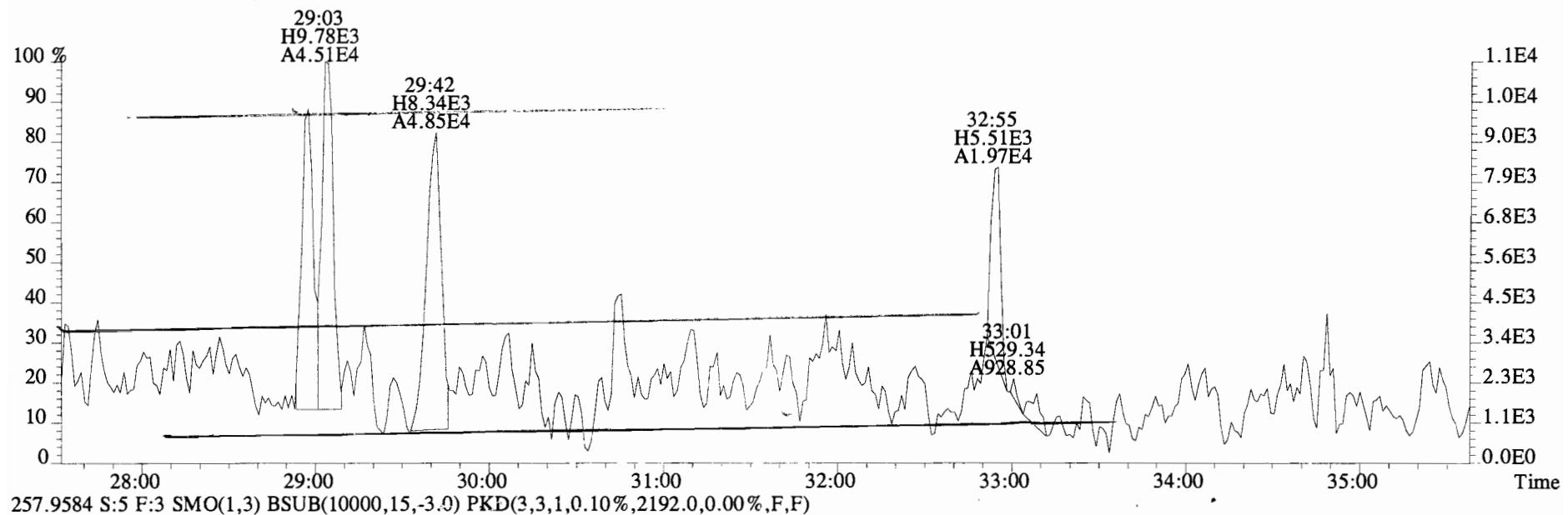
S/N



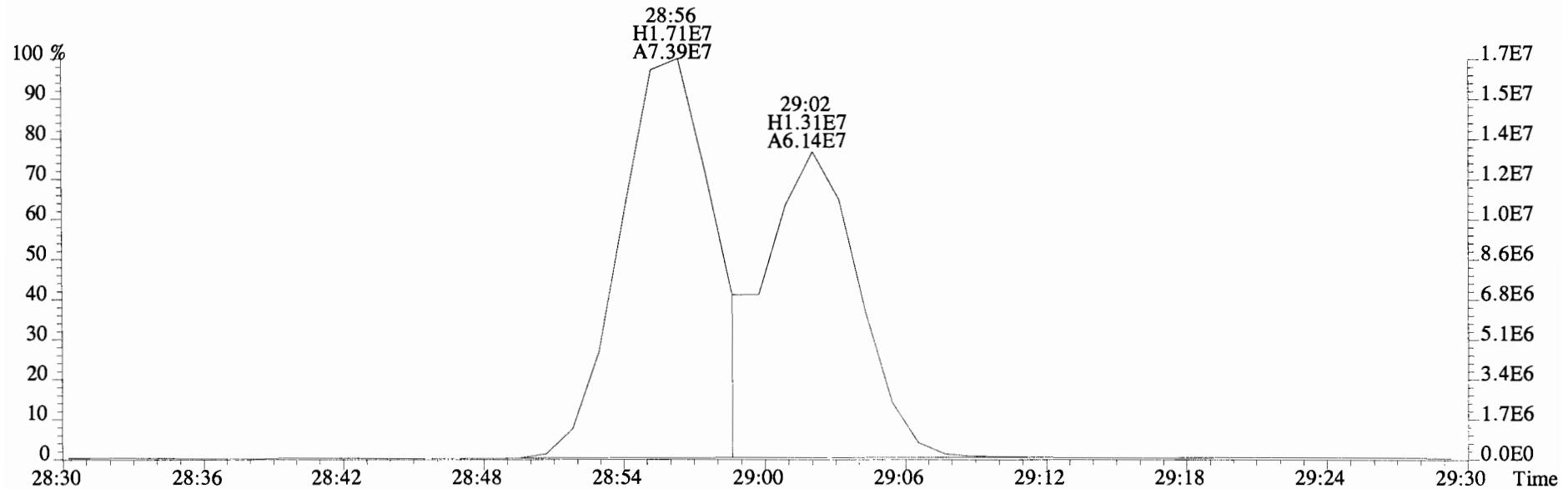
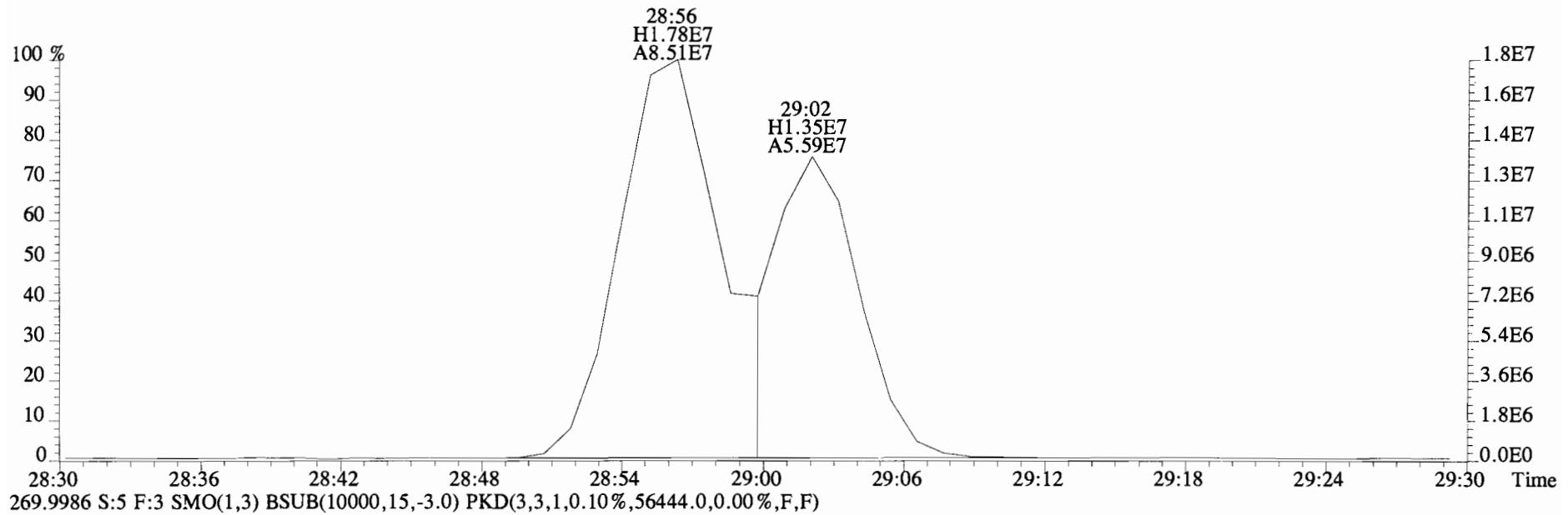
File:141024E2 #1-762 Acq:25-OCT-2014 06:24:56 GC EI + Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
255.9613 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2740.0,0.00%,F,F)



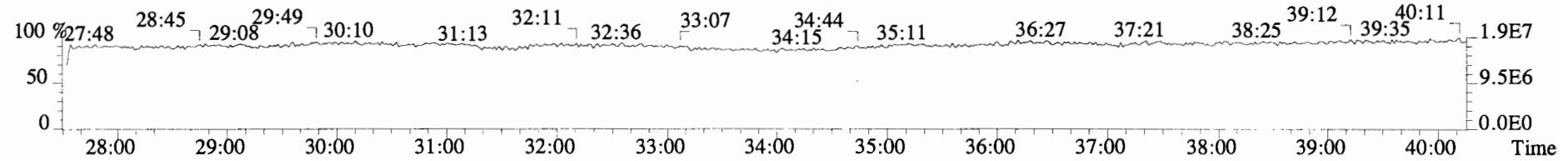
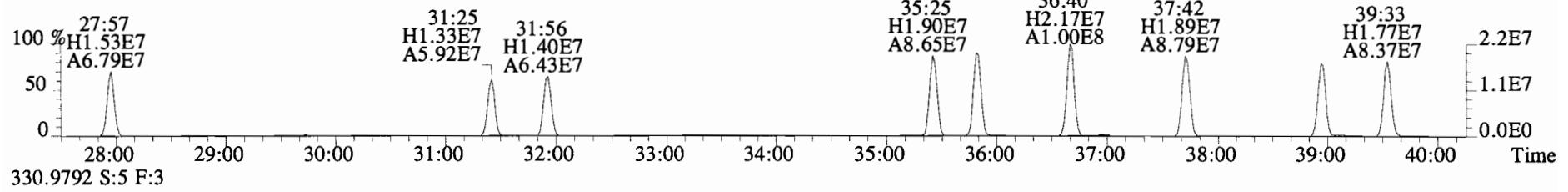
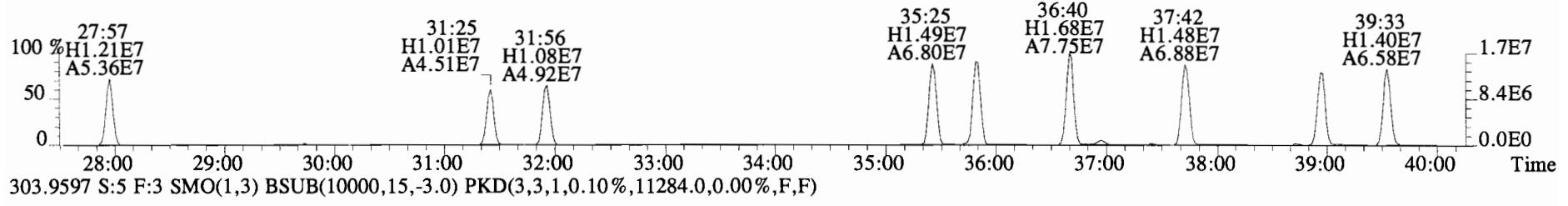
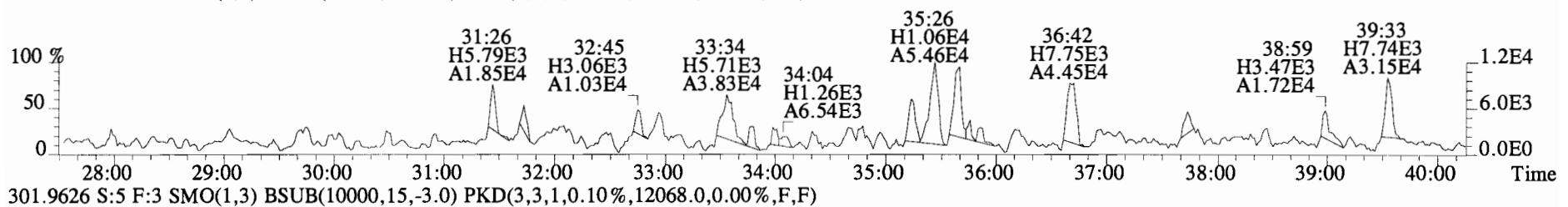
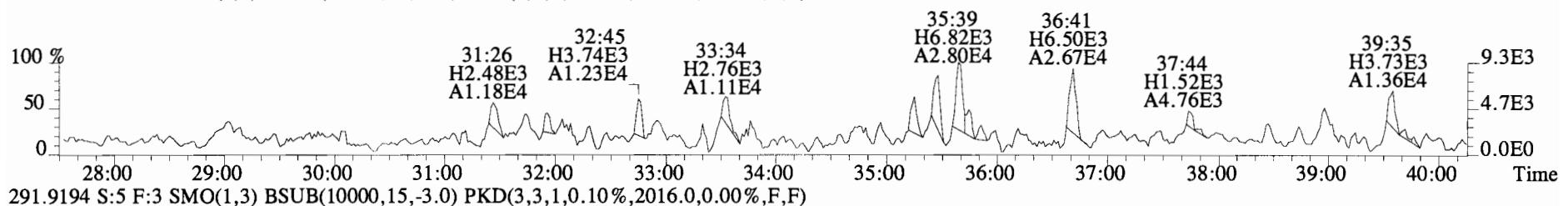
File:141024E2 #1-762 Acq:25-OCT-2014 06:24:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
255.9613 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2740.0,0.00%,F,F)



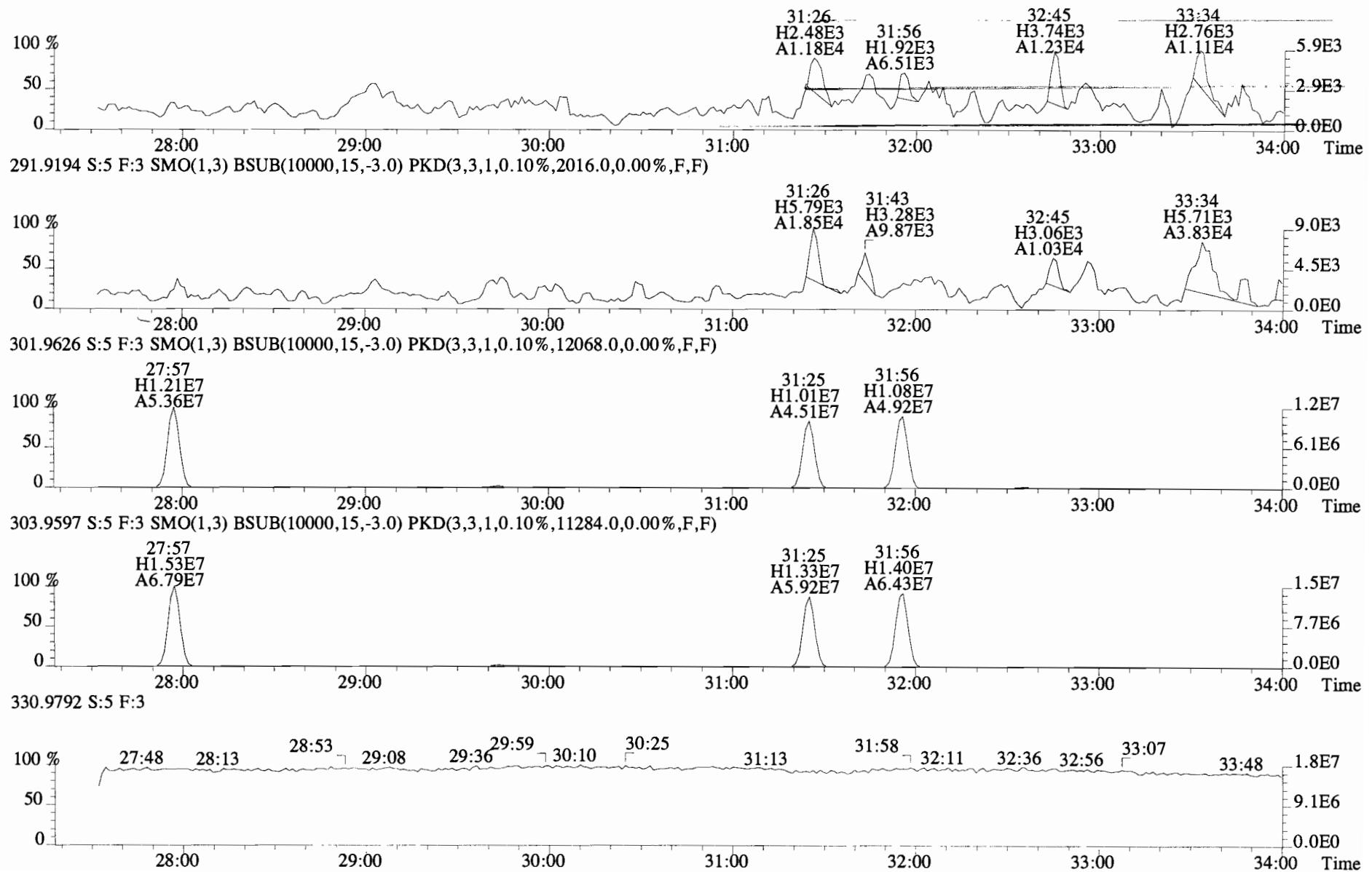
File:141024E2 #1-762 Acq:25-OCT-2014 06:24:56 GC EI + Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
268.0016 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,122792.0,0.00%,F,F)



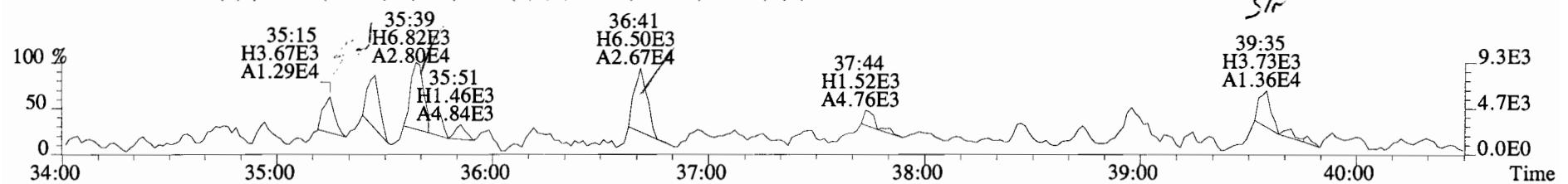
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 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
 289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2008.0,0.00%,F,F)



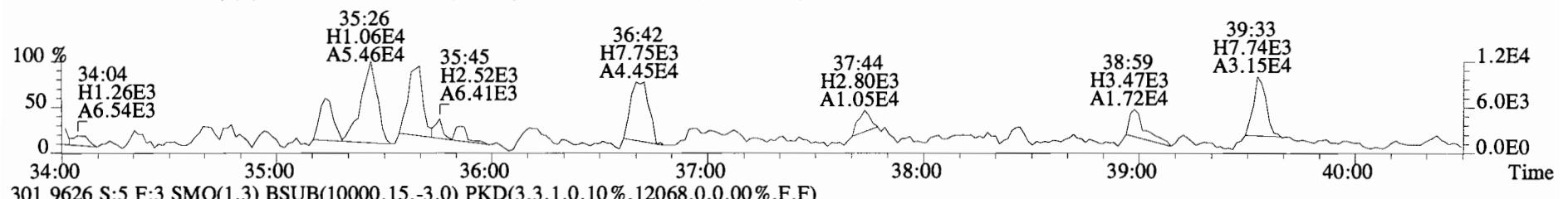
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 289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2008.0,0.00%,F,F)



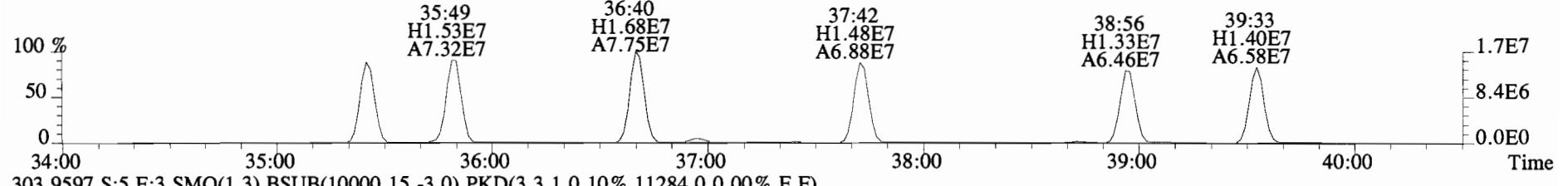
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 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
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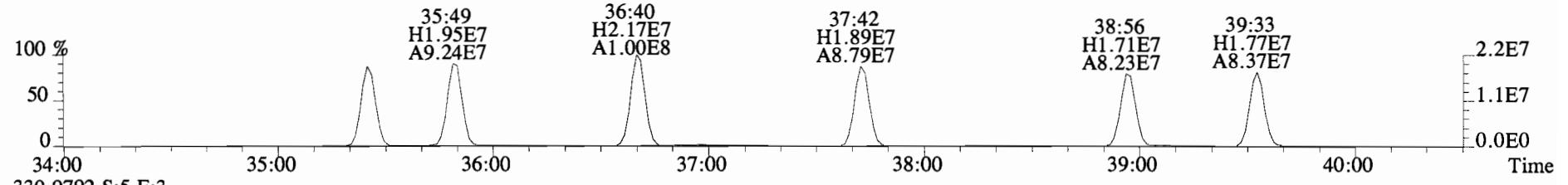
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2016.0,0.00%,F,F)



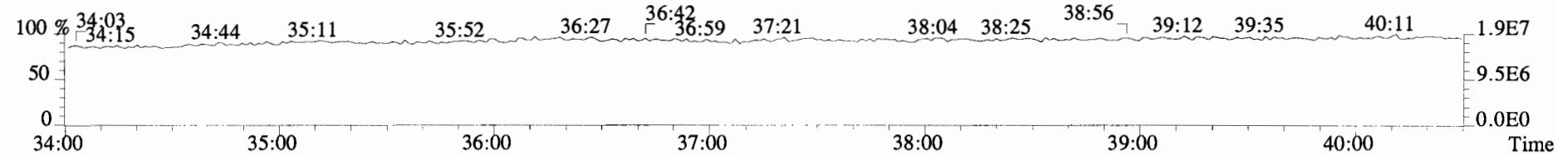
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12068.0,0.00%,F,F)



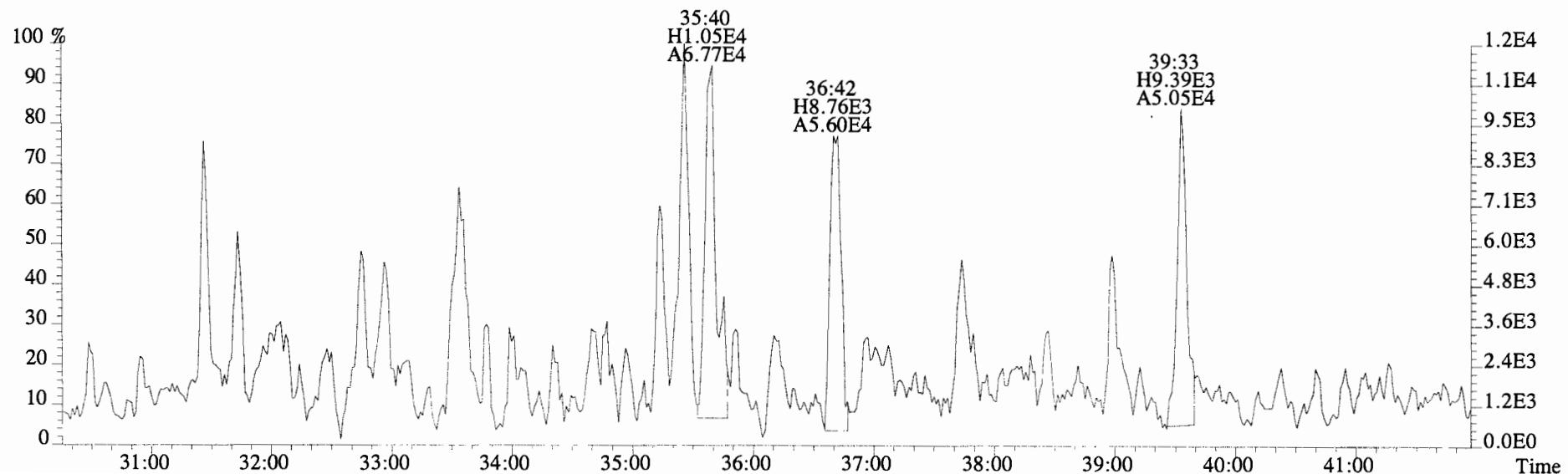
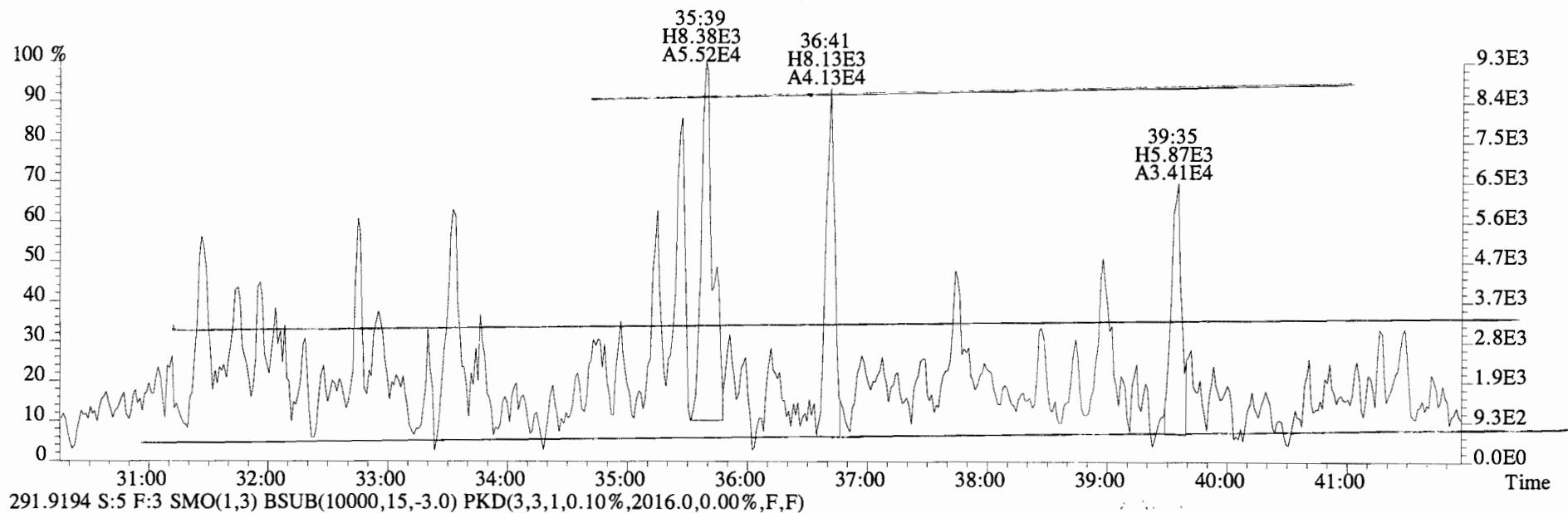
303.9597 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11284.0,0.00%,F,F)



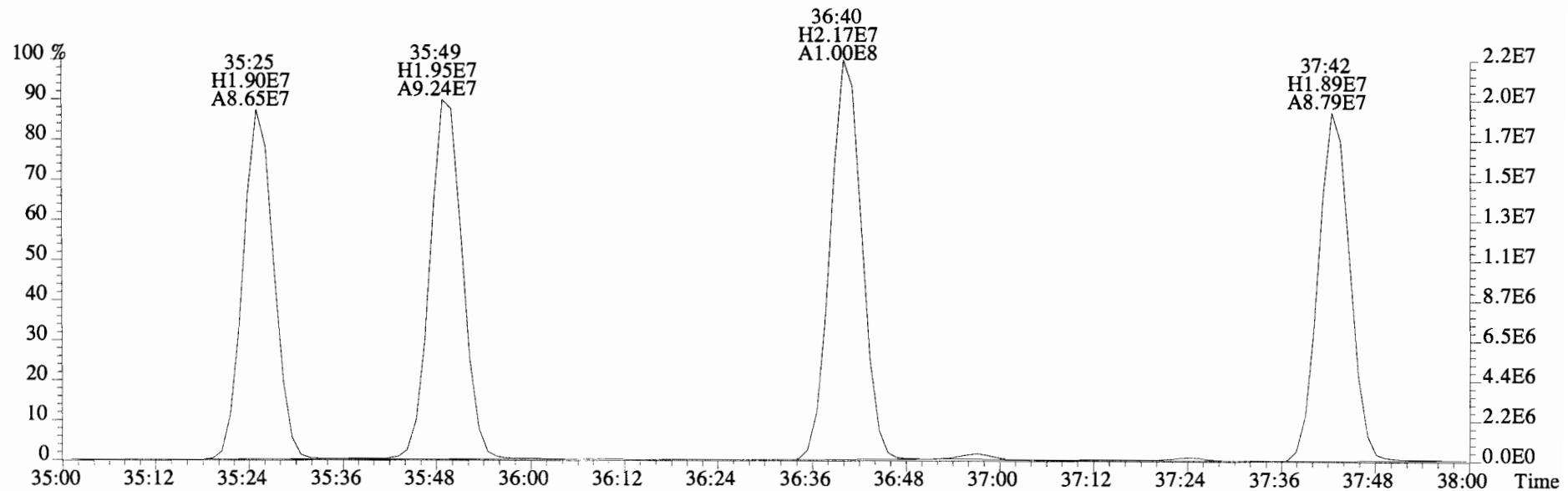
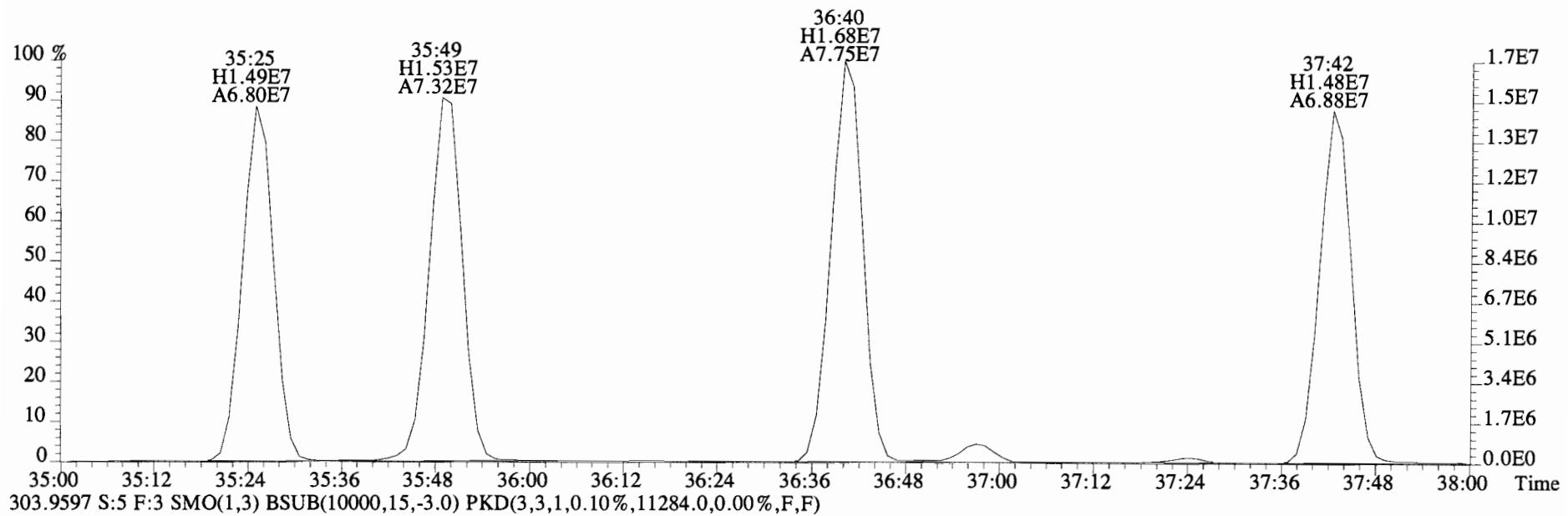
330.9792 S:5 F:3



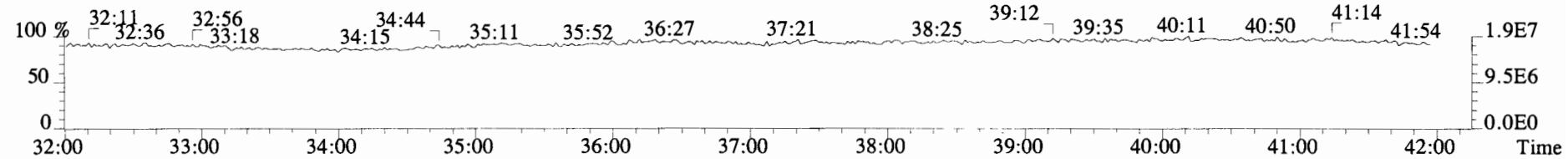
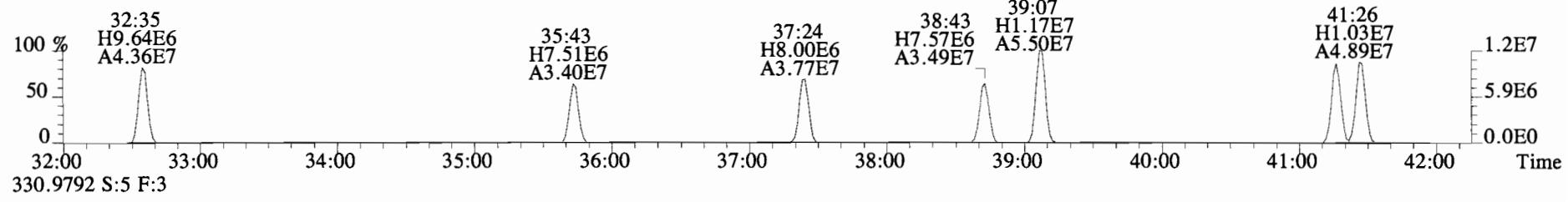
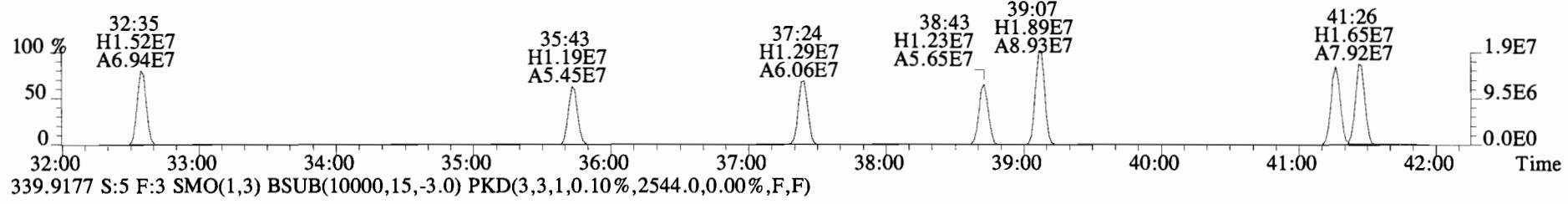
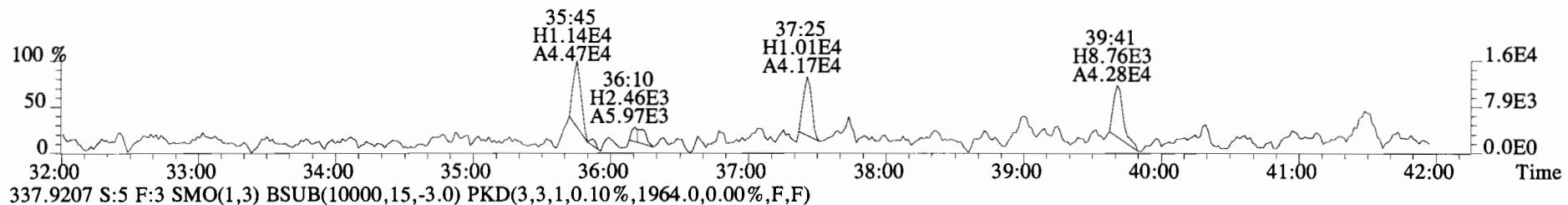
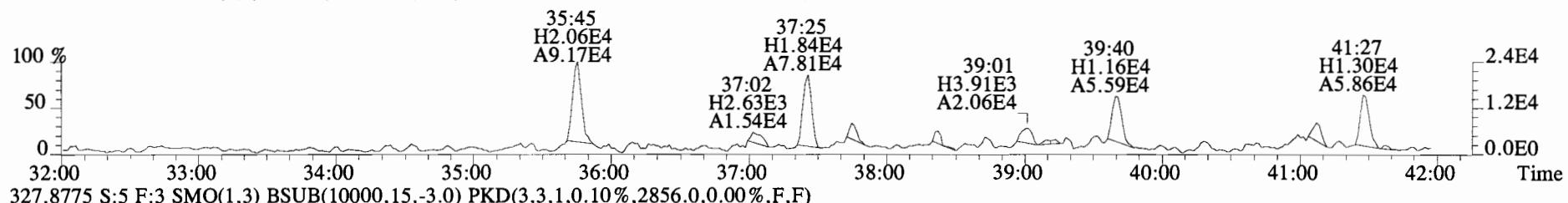
File:141024E2 #1-762 Acq:25-OCT-2014 06:24:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2008.0,0.00%,F,F)



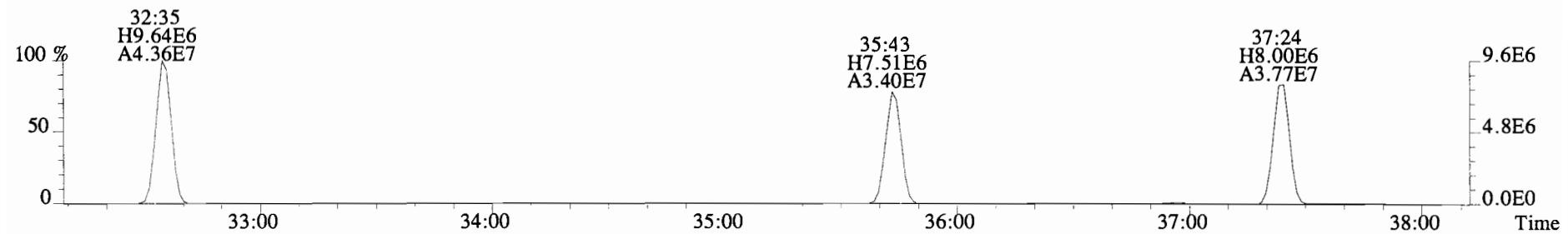
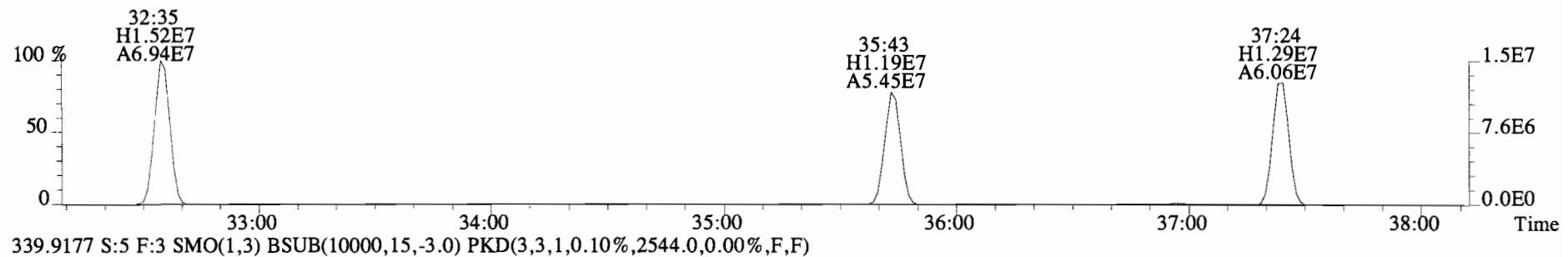
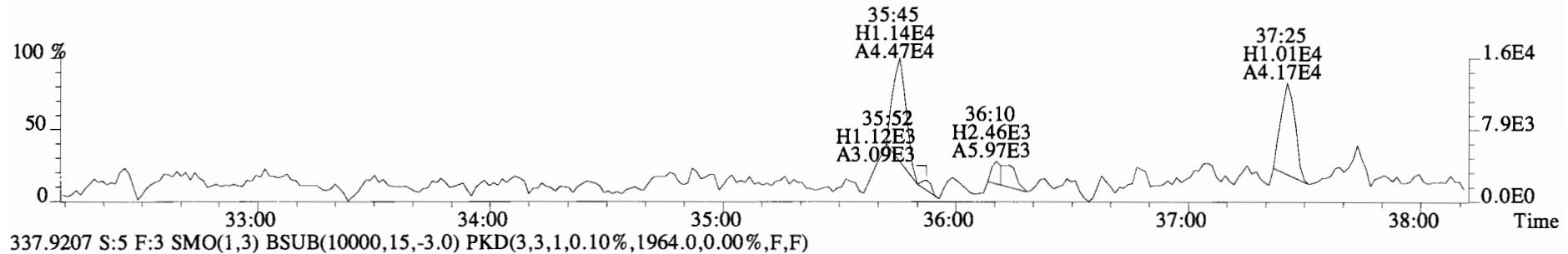
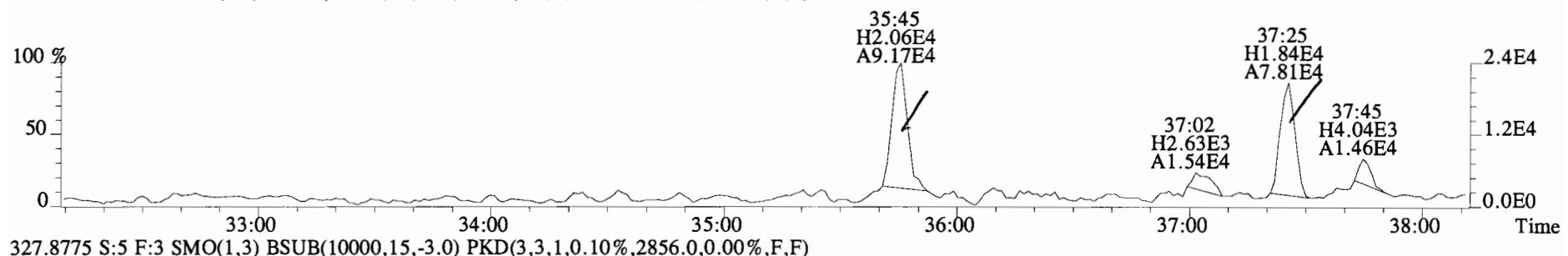
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Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12068.0,0.00%,F,F)



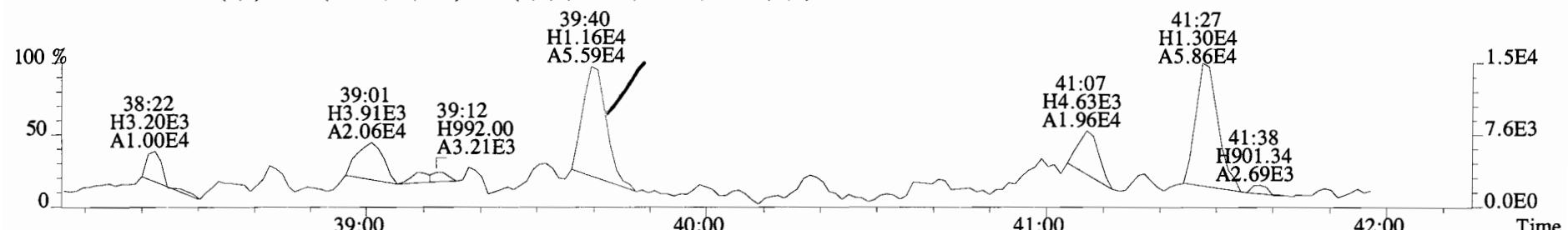
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 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
 325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2132.0,0.00%,F,F)



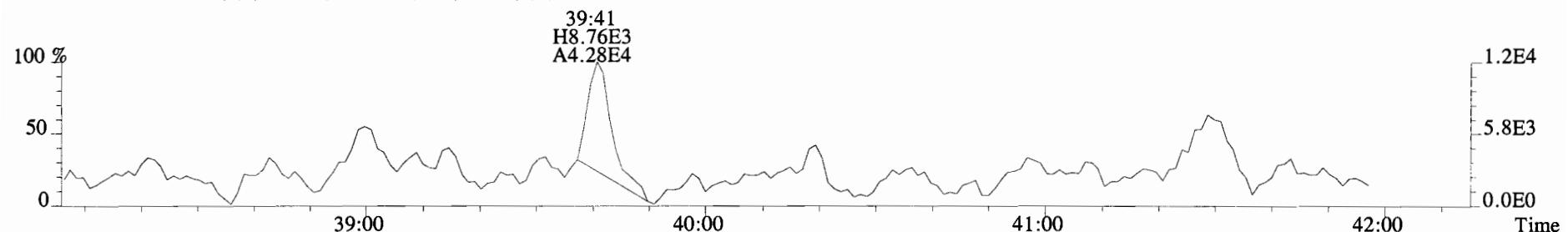
File:141024E2 #1-762 Acq:25-OCT-2014 06:24:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
 325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2132.0,0.00%,F,F)



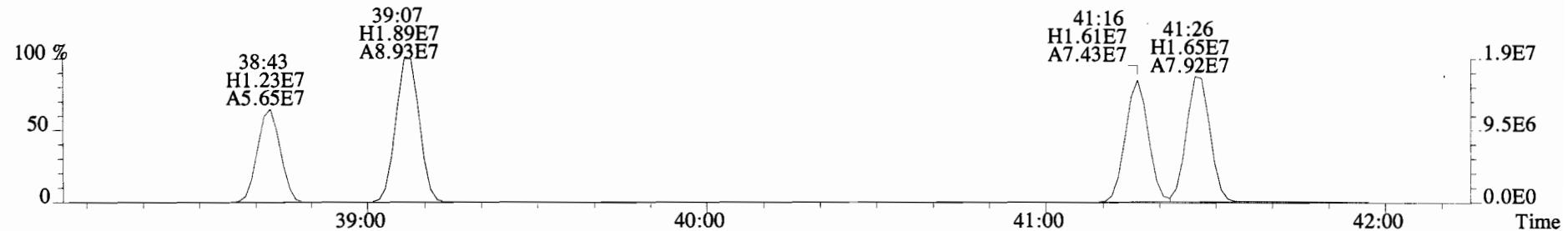
File:141024E2 #1-762 Acq:25-OCT-2014 06:24:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
 325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2132.0,0.00%,F,F)



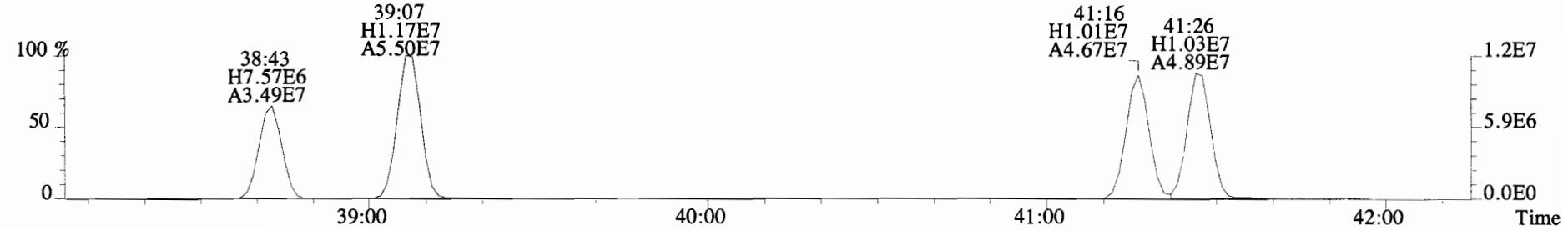
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2856.0,0.00%,F,F)



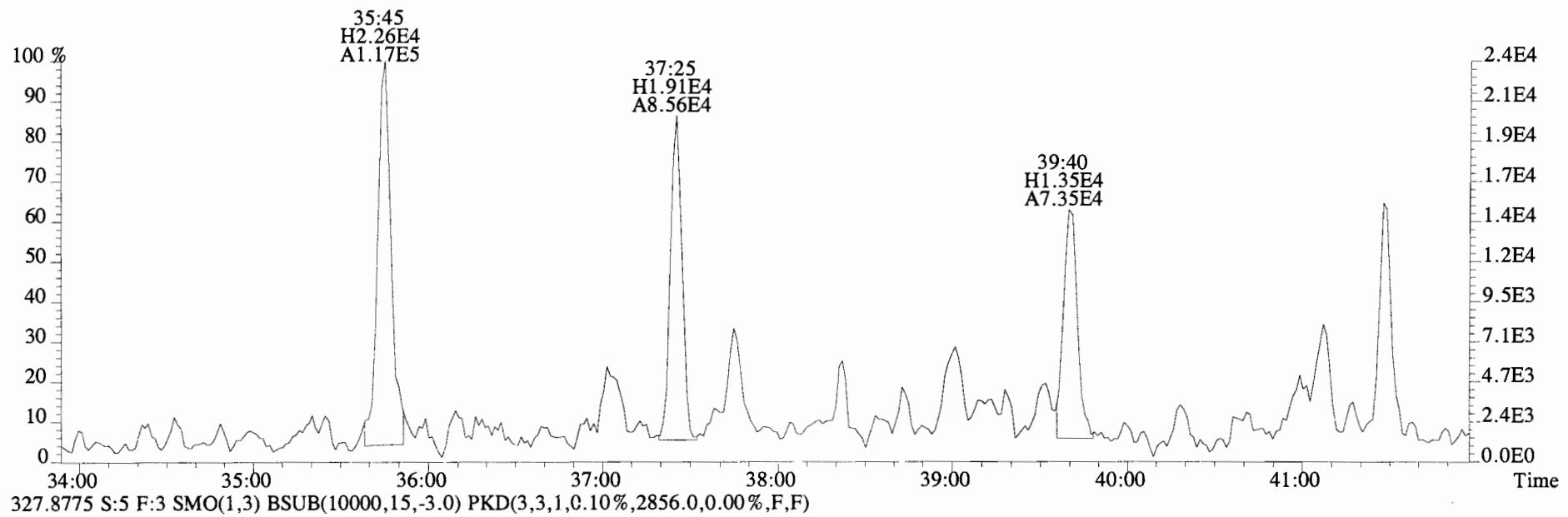
337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1964.0,0.00%,F,F)



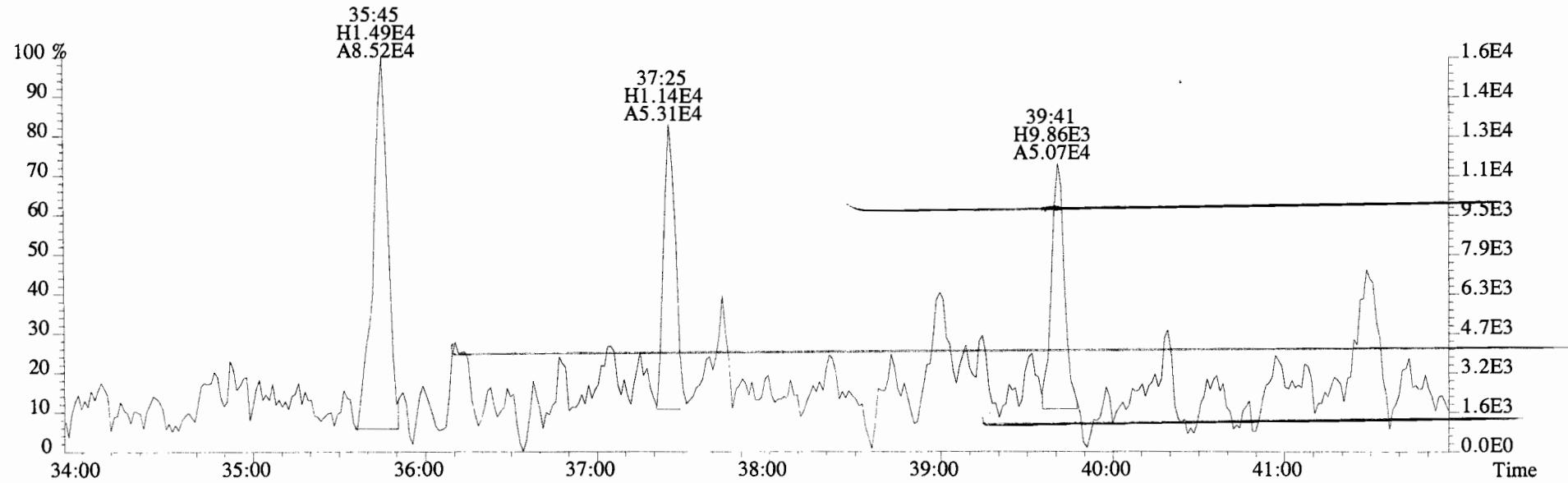
339.9177 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2544.0,0.00%,F,F)



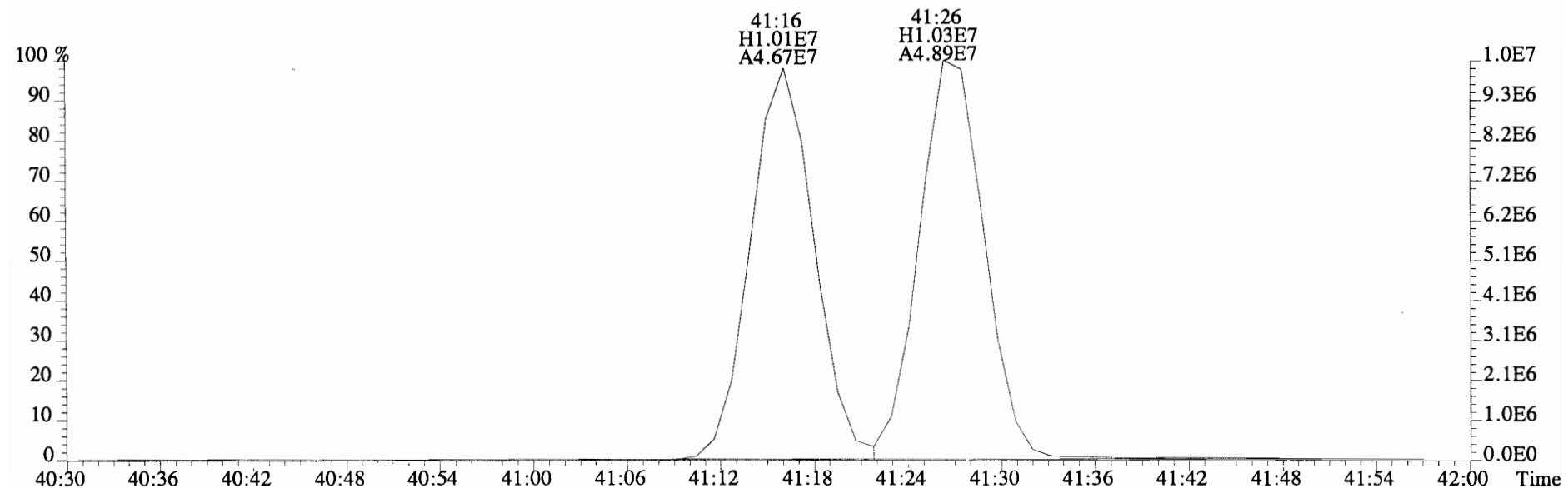
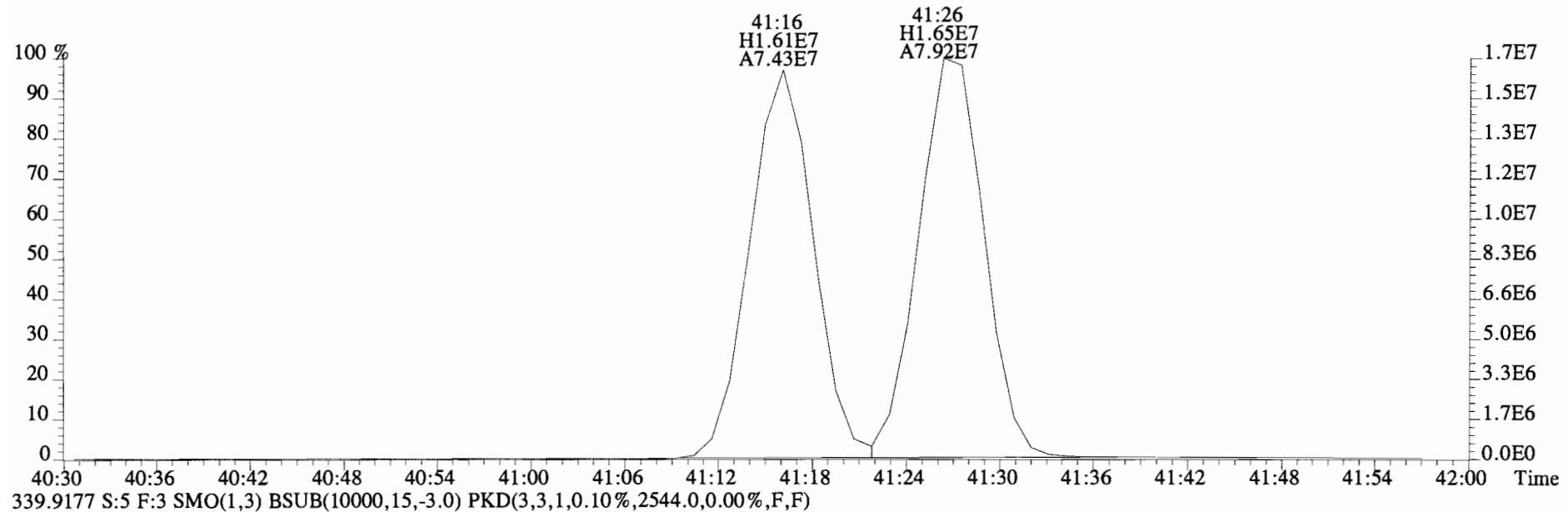
File:141024E2 #1-762 Acq:25-OCT-2014 06:24:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2132.0,0.00%,F,F)



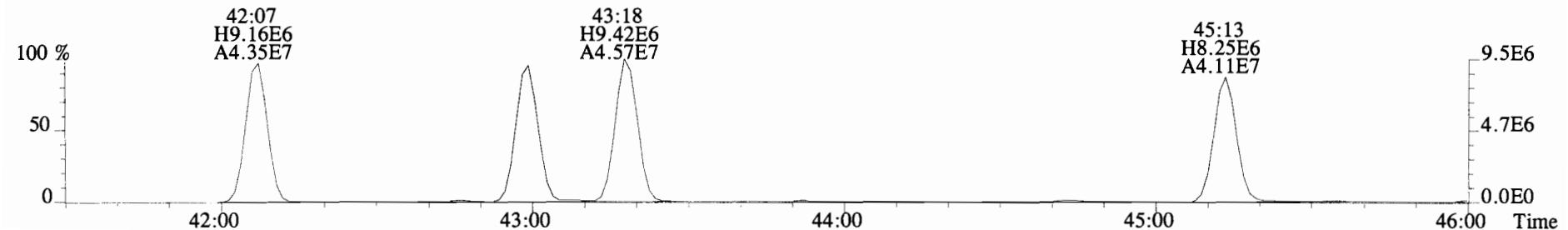
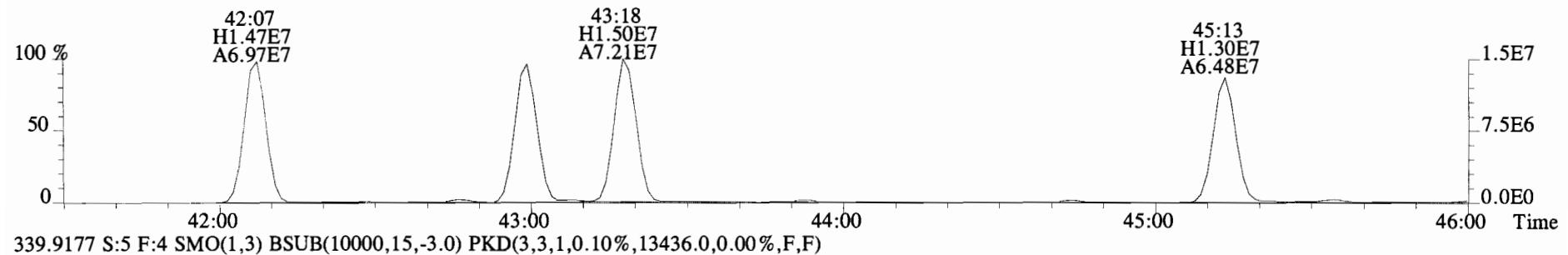
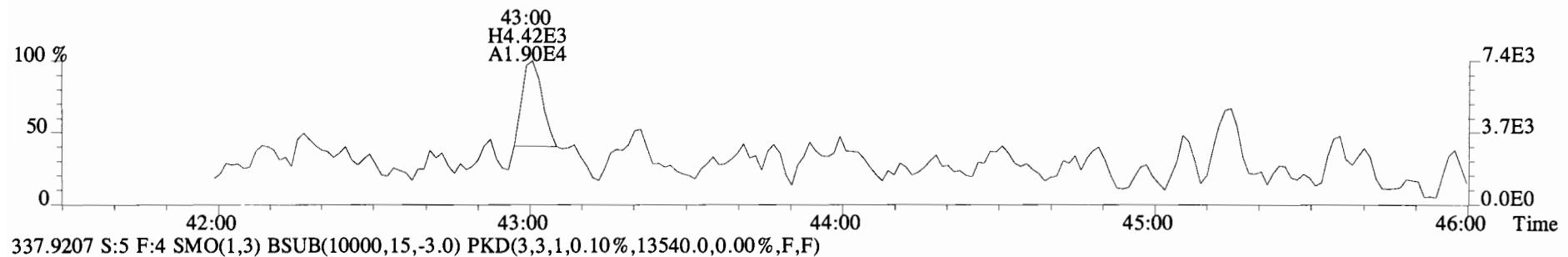
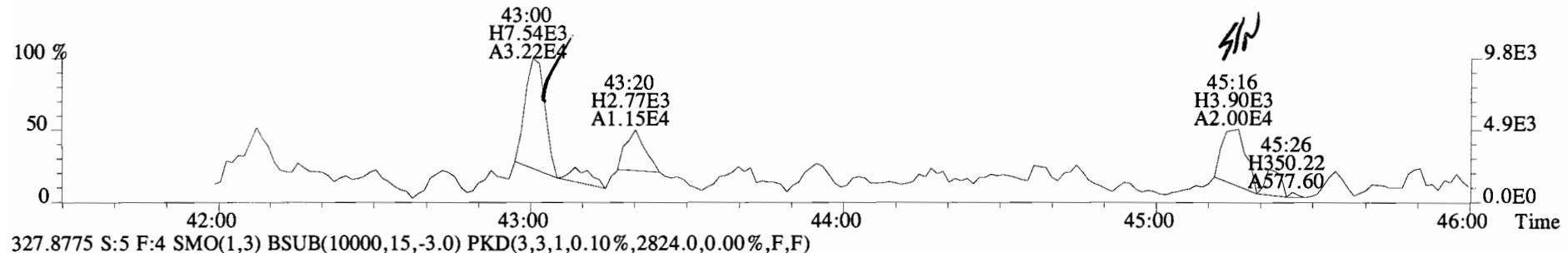
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2856.0,0.00%,F,F)



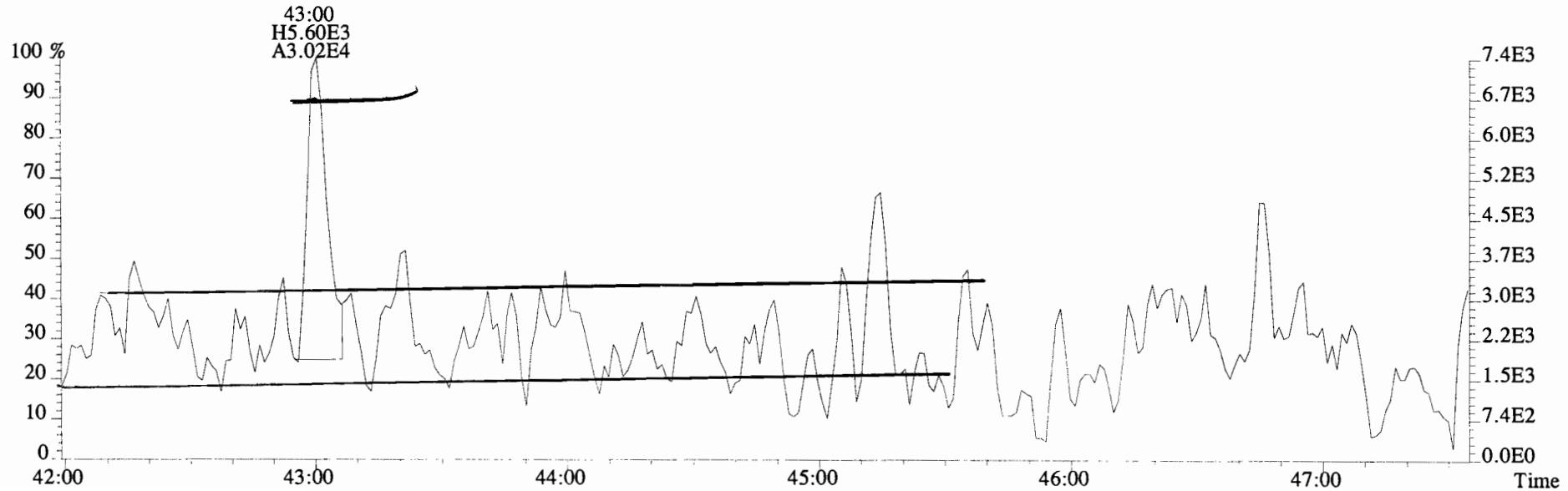
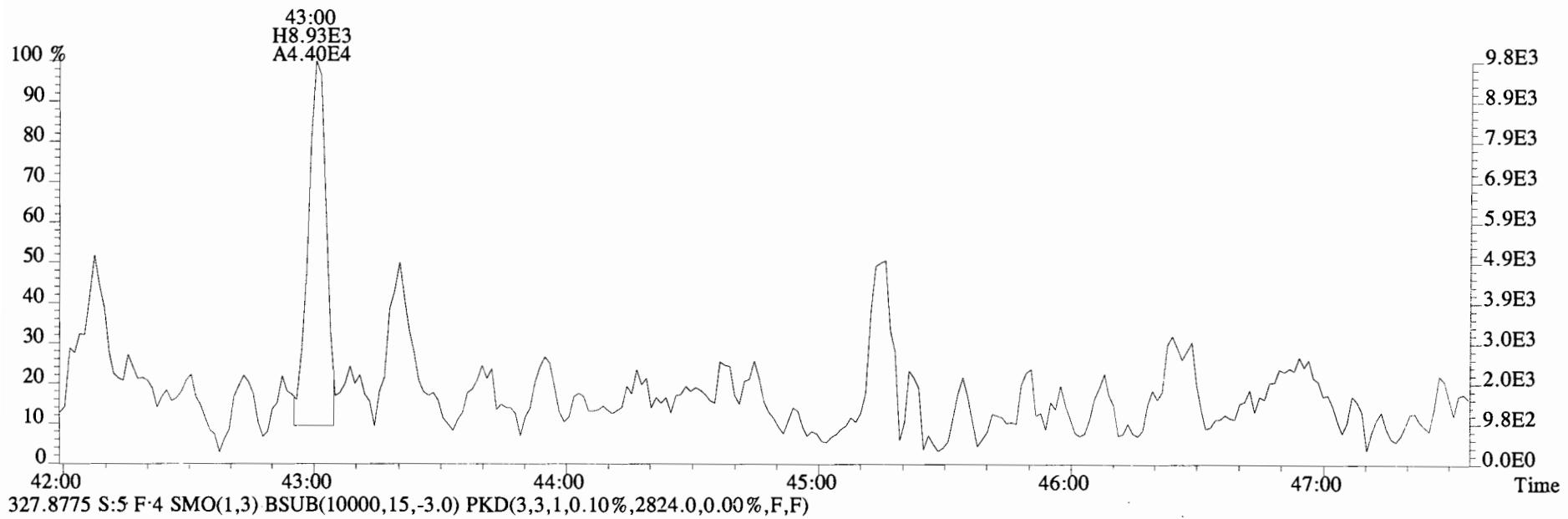
File:141024E2 #1-762 Acq:25-OCT-2014 06:24:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1964.0,0.00%,F,F)



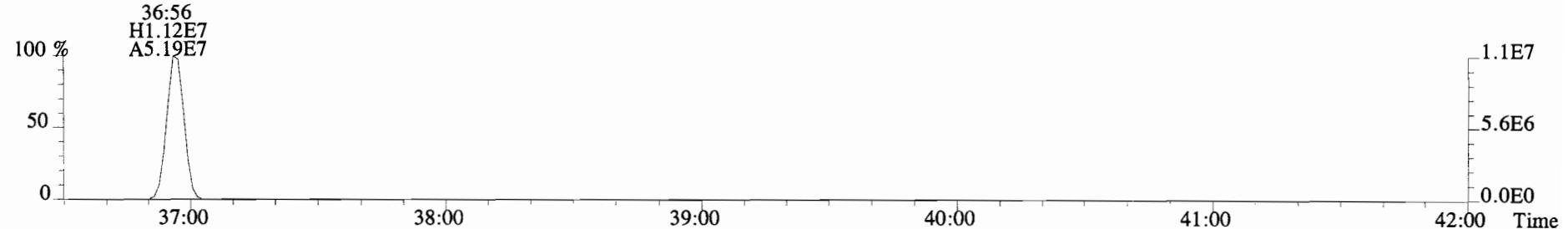
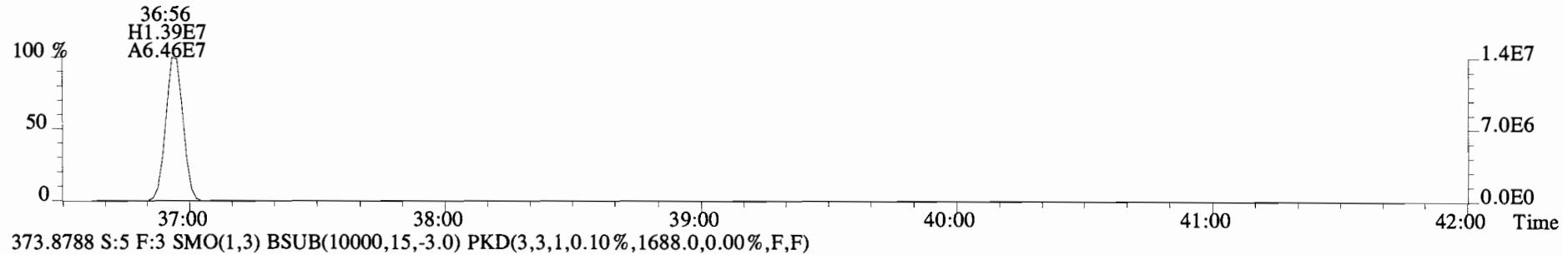
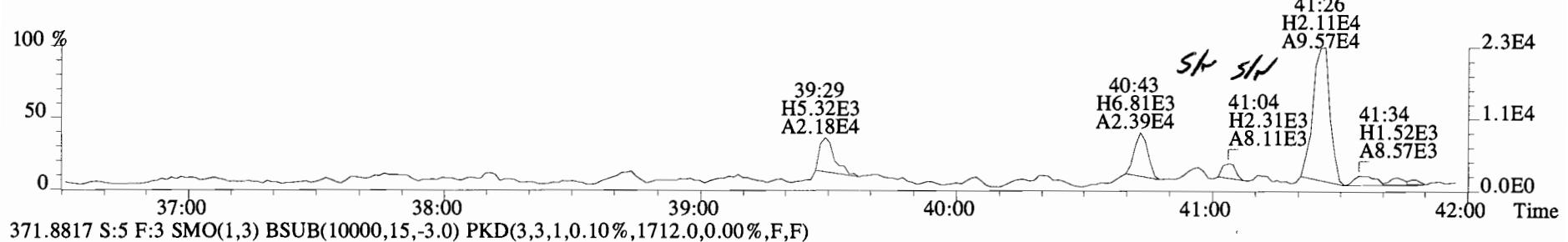
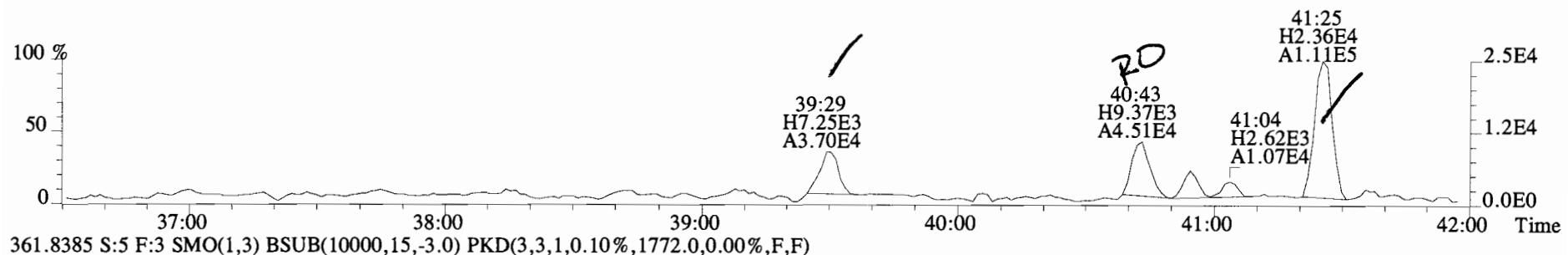
File:141024E2 #1-546 Acq:25-OCT-2014 06:24:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
325.8804 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1996.0,0.00%,F,F)



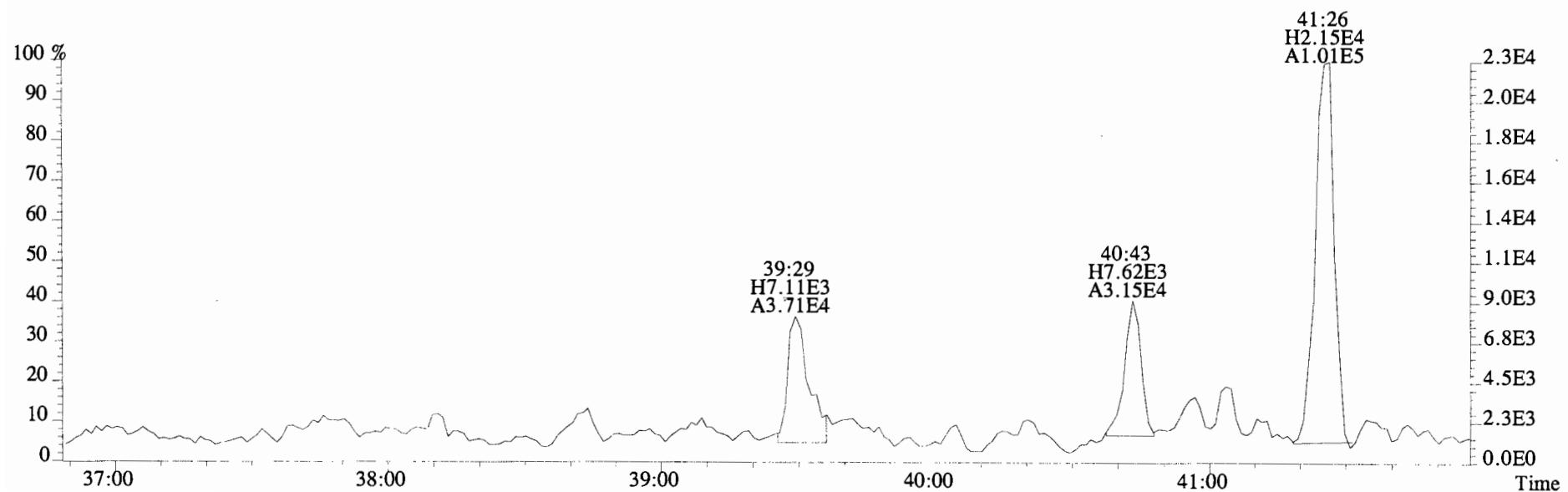
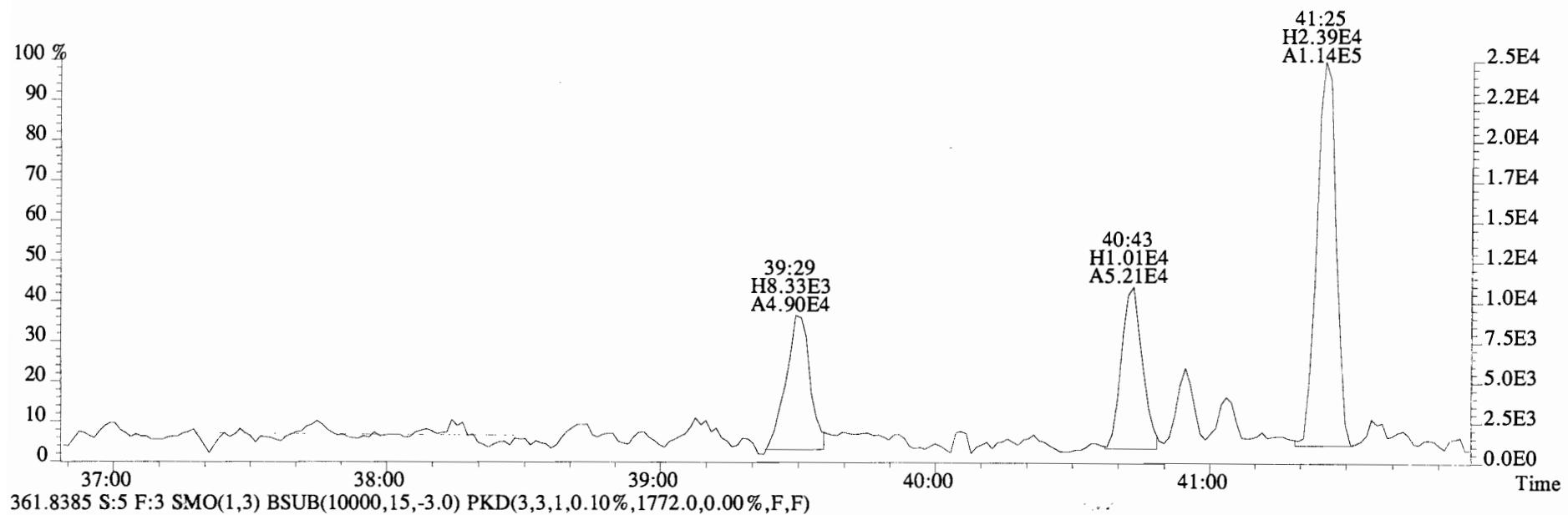
File:141024E2 #1-546 Acq:25-OCT-2014 06:24:56 GC EI + Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
325.8804 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1996.0,0.00%,F,F)



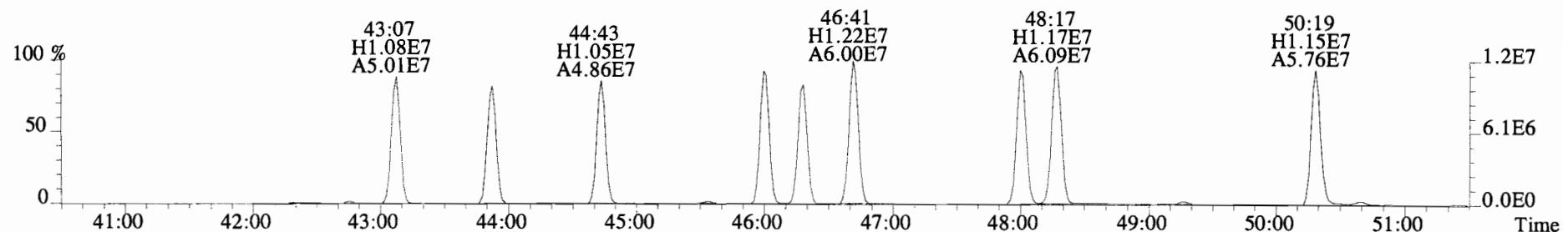
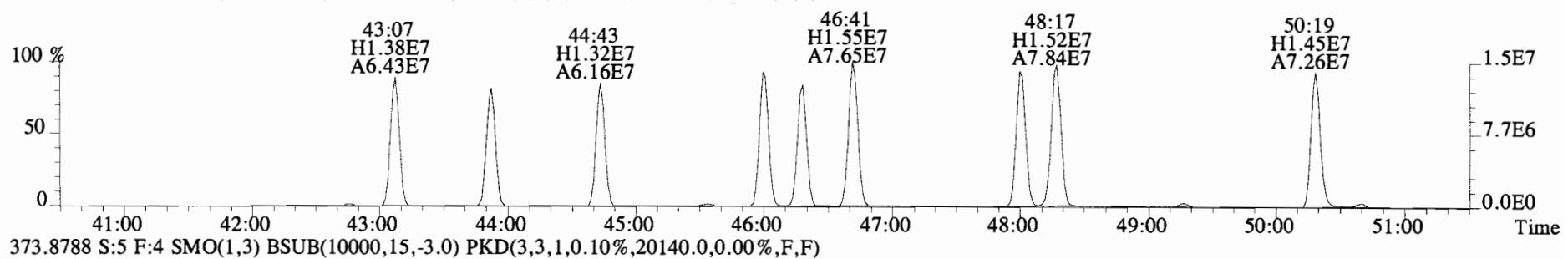
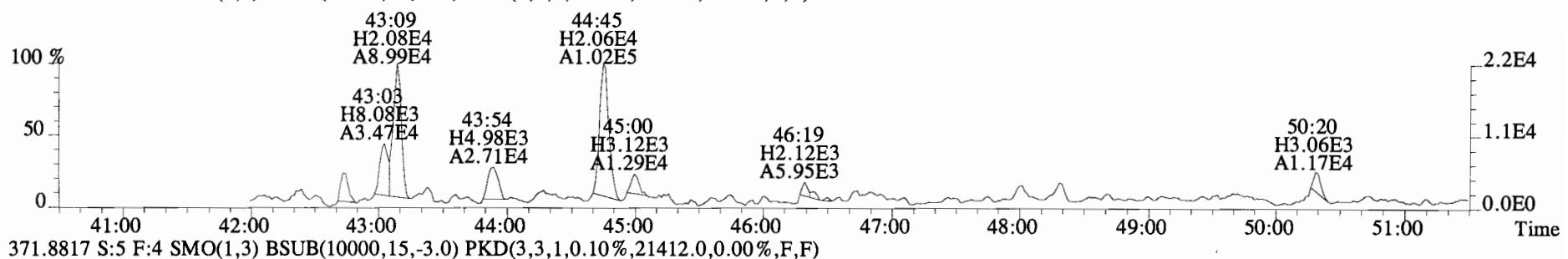
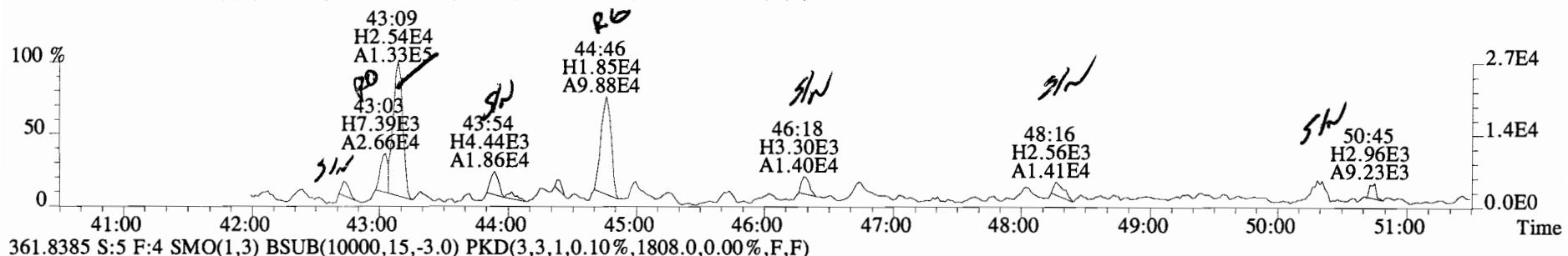
File:141024E2 #1-762 Acq:25-OCT-2014 06:24:56 GC EI + Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
359.8415 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1728.0,0.00%,F,F)



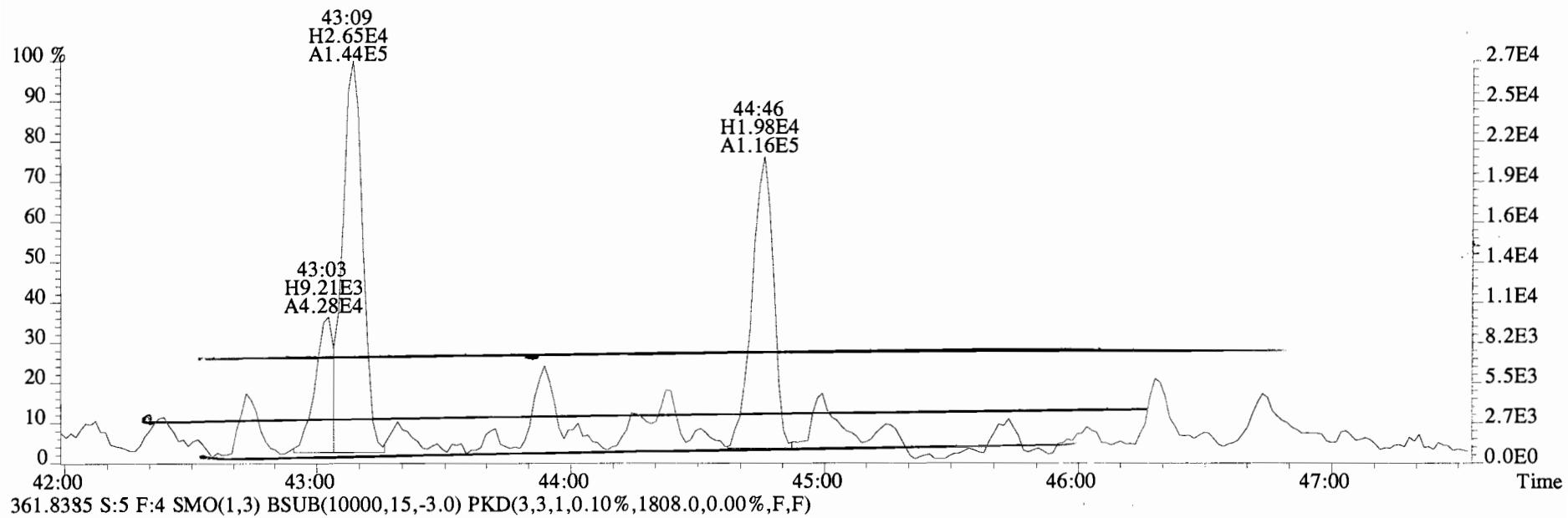
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Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
359.8415 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1728.0,0.00%,F,F)



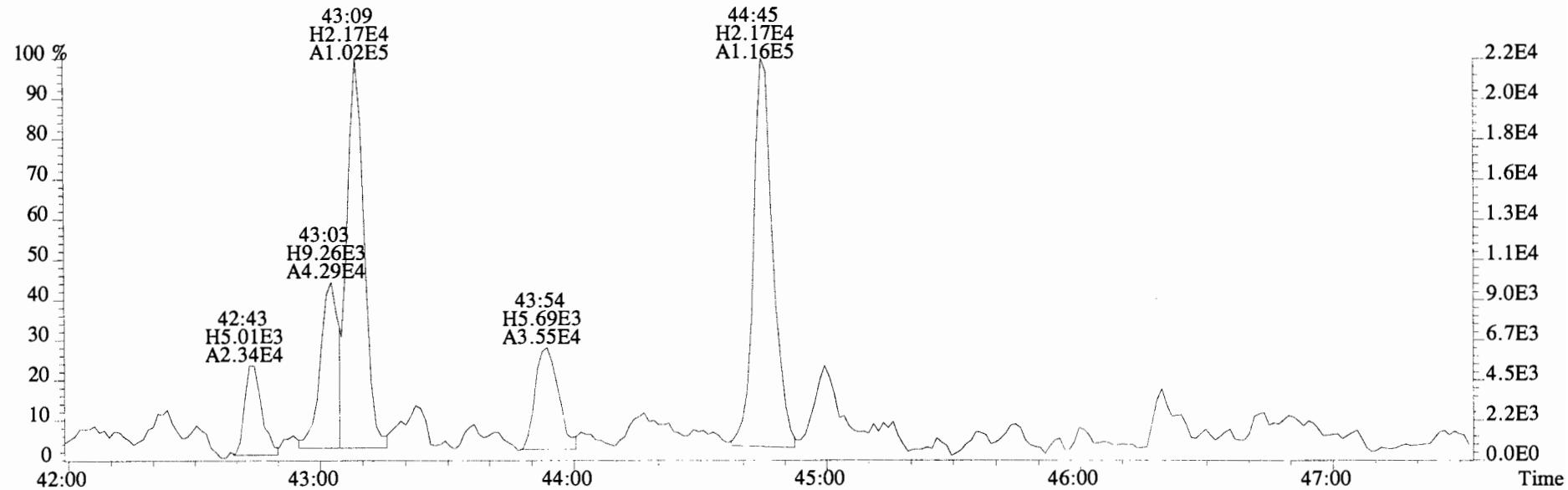
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 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
 359.8415 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2052.0,0.00%,F,F)



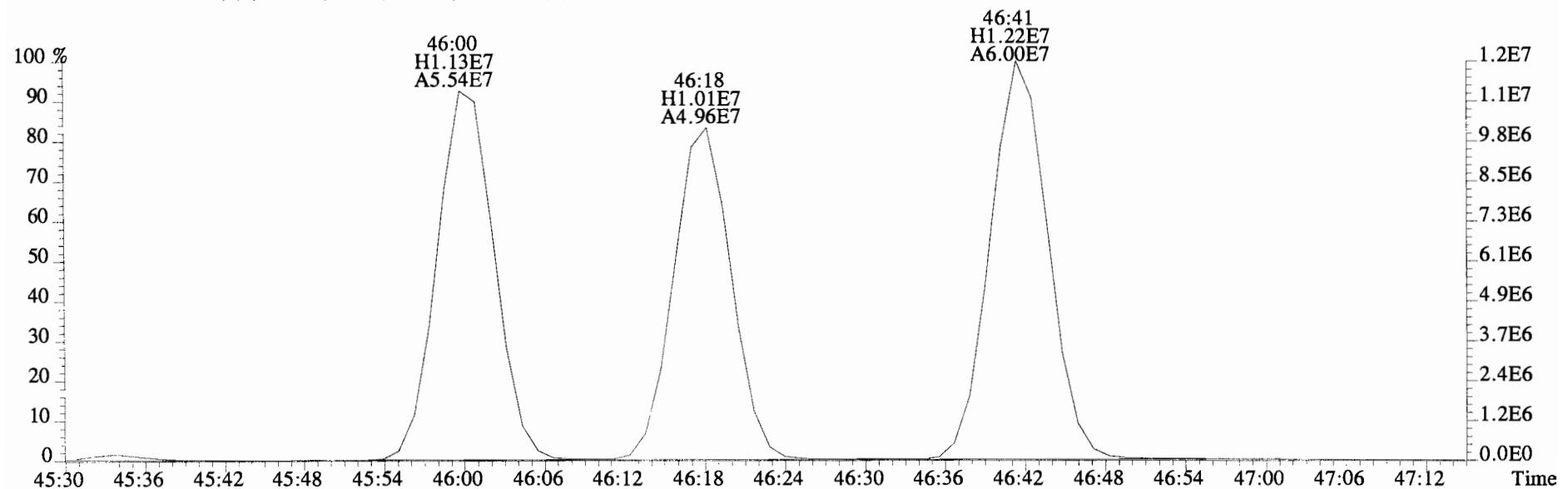
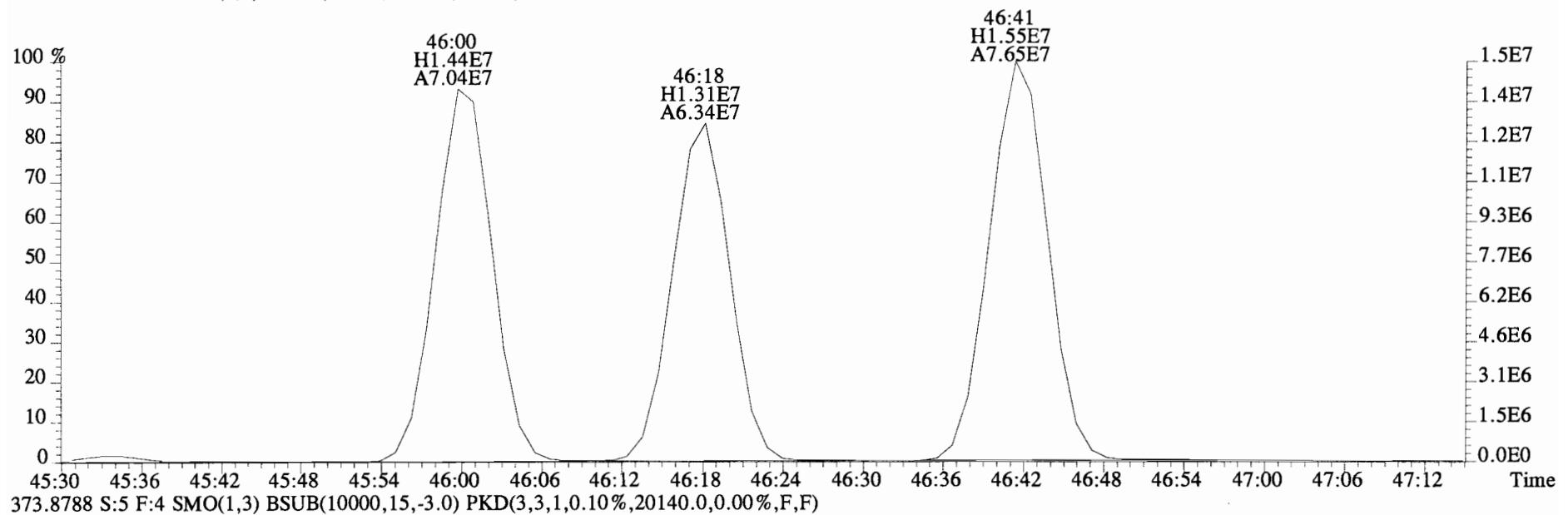
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Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
359.8415 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2052.0,0.00%,F,F)



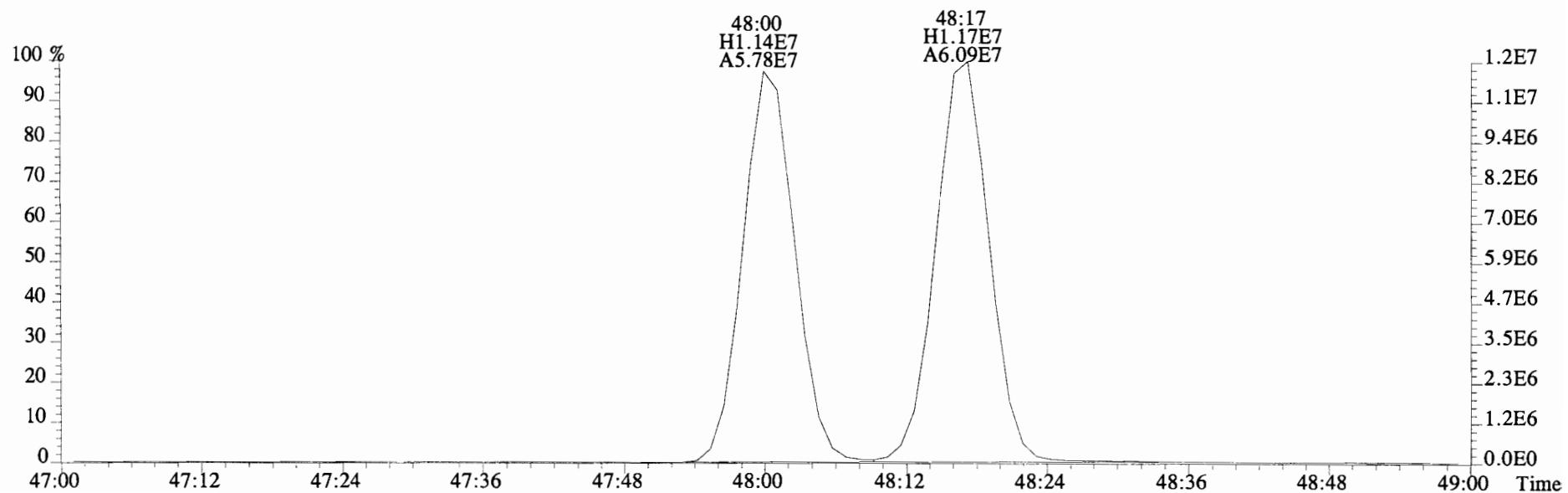
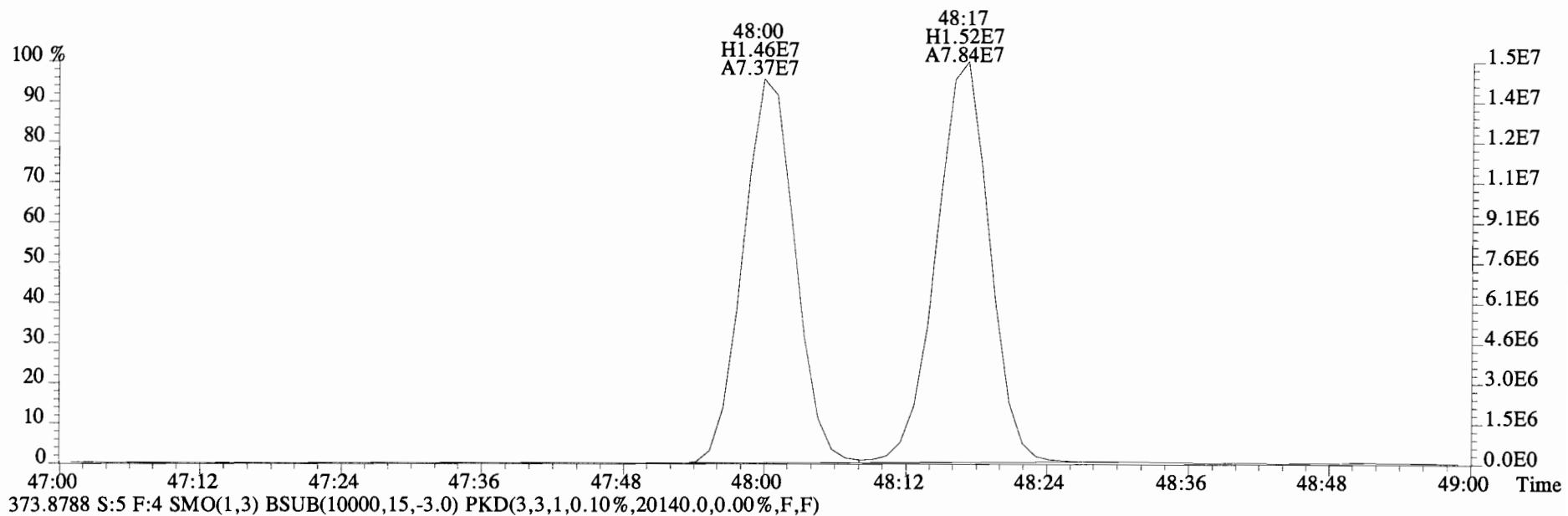
361.8385 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1808.0,0.00%,F,F)



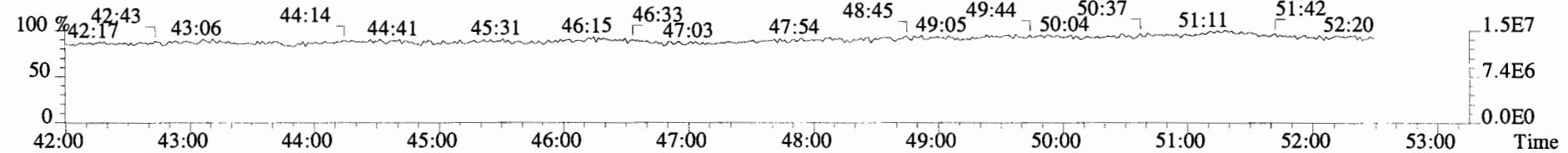
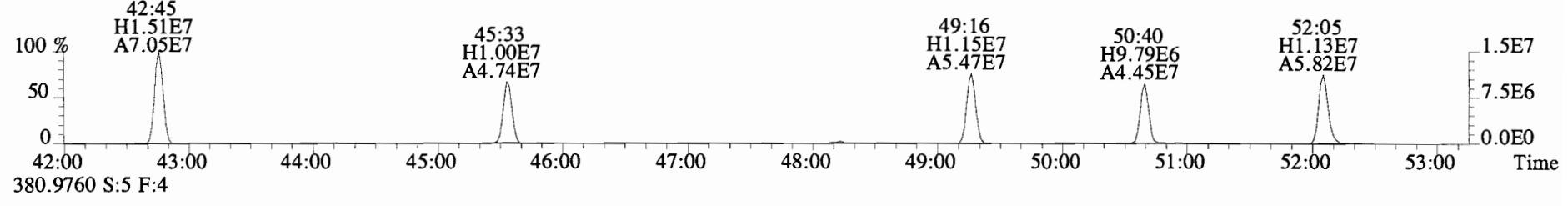
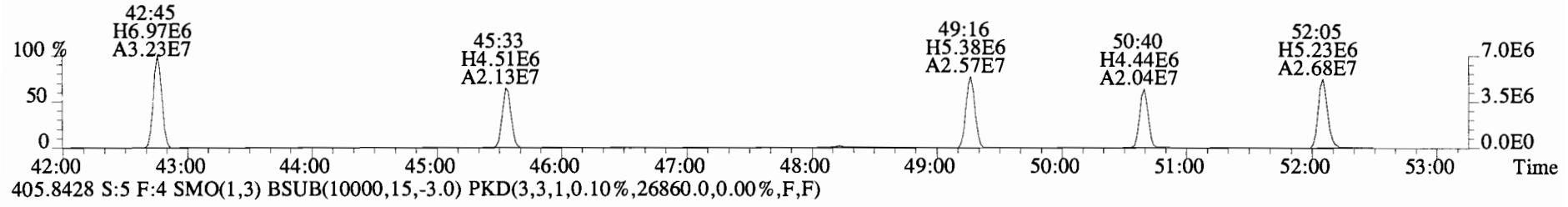
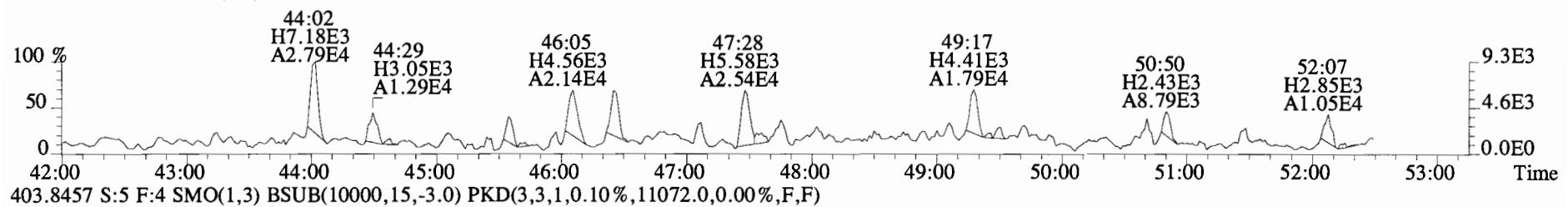
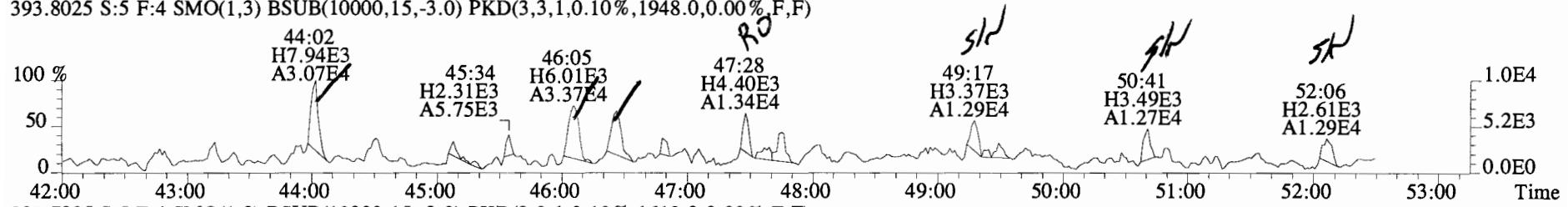
File:141024E2 #1-546 Acq:25-OCT-2014 06:24:56 GC EI + Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
371.8817 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,21412.0,0.00%,F,F)



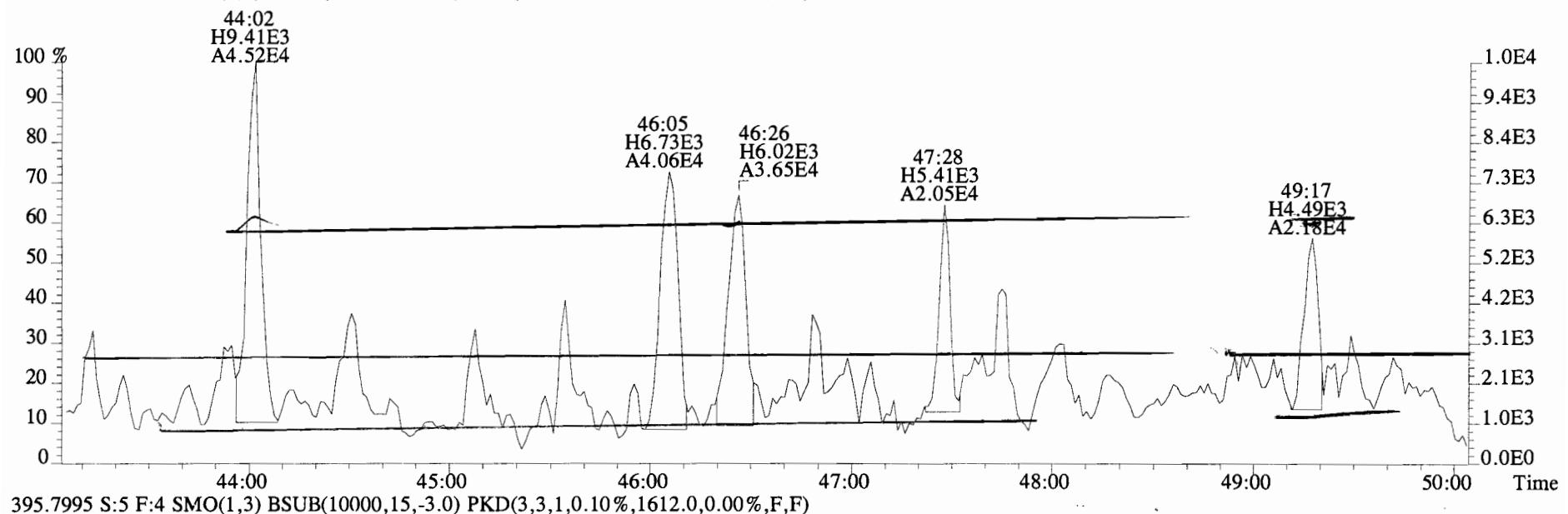
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Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
371.8817 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,21412.0,0.00%,F,F)



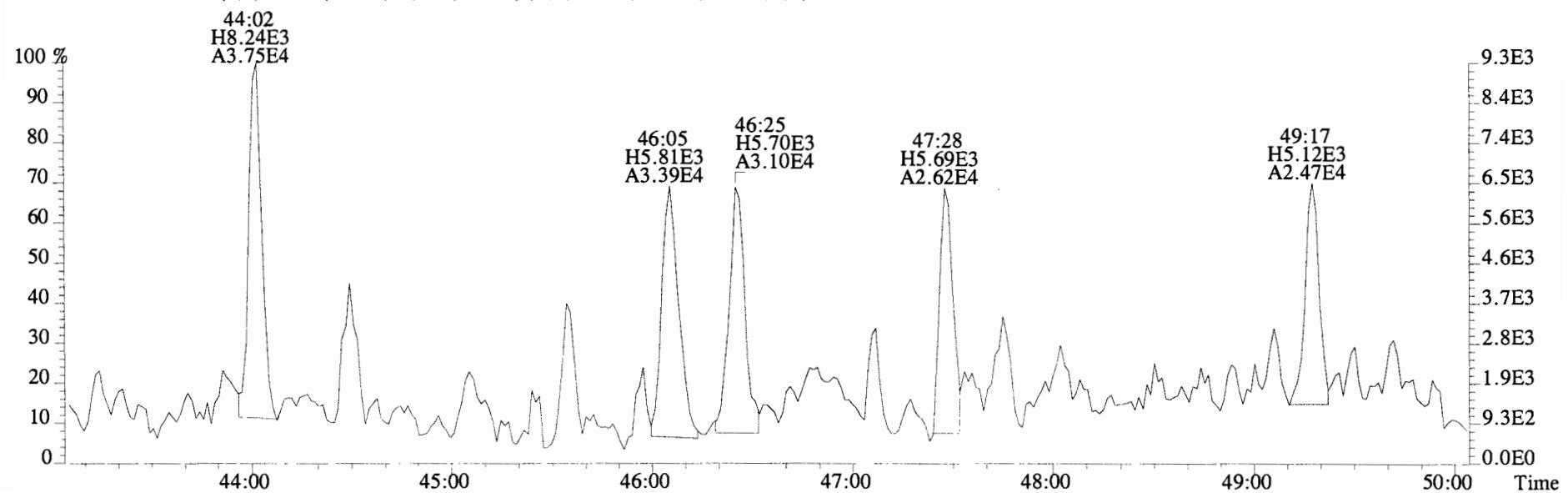
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 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
 393.8025 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1948.0,0.00%,F,F)



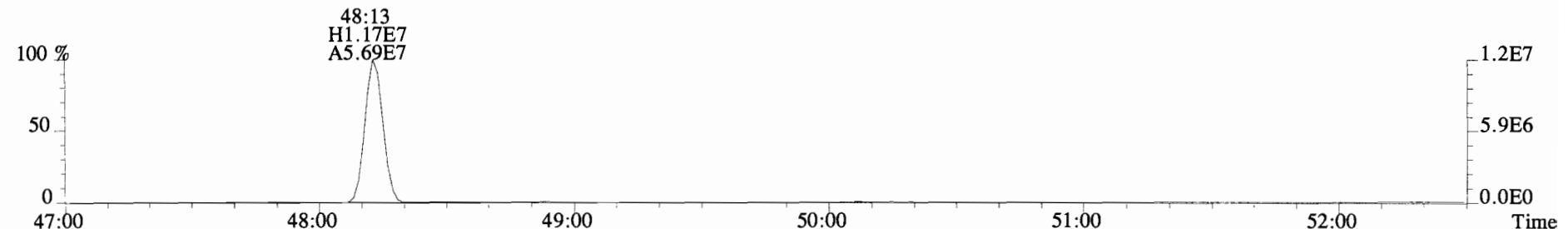
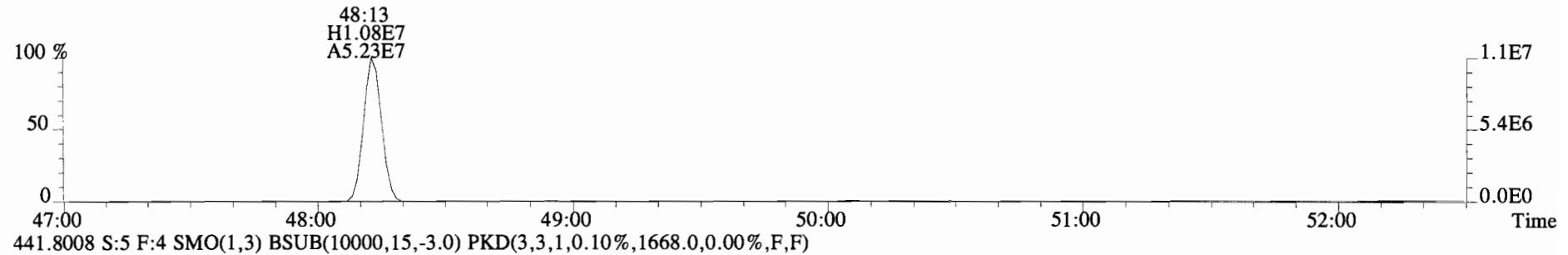
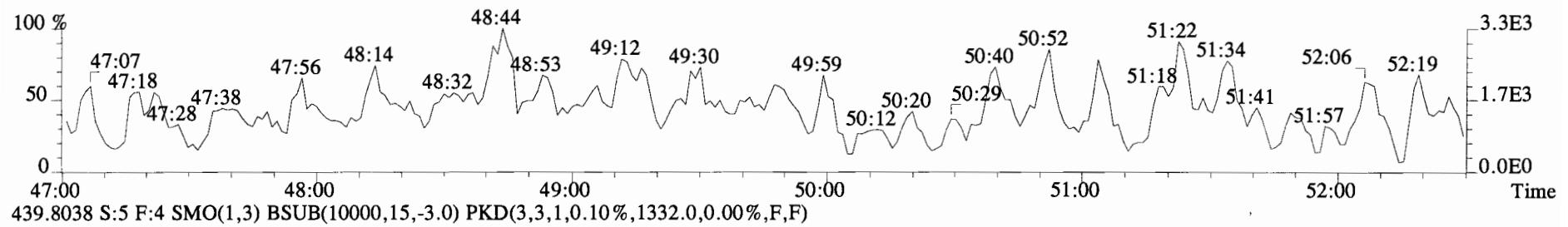
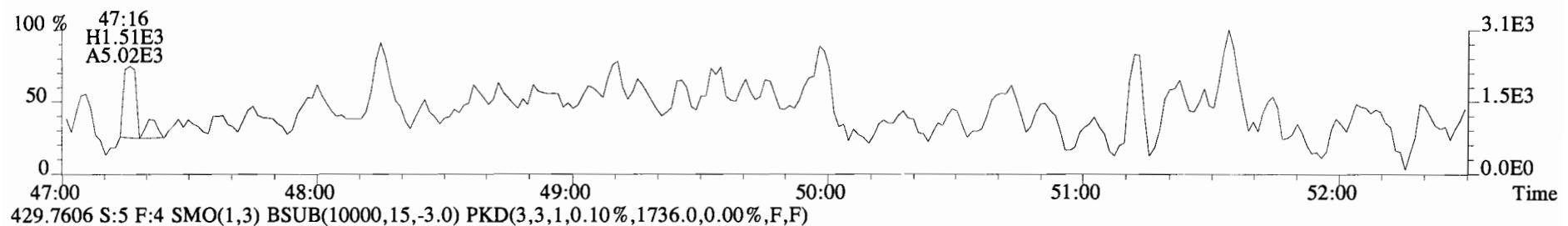
File:141024E2 #1-546 Acq:25-OCT-2014 06:24:56 GC EI + Voltage SIR Autospec-UltimaE
Sample#5 File Text: Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
393.8025 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1948.0,0.00%,F,F)



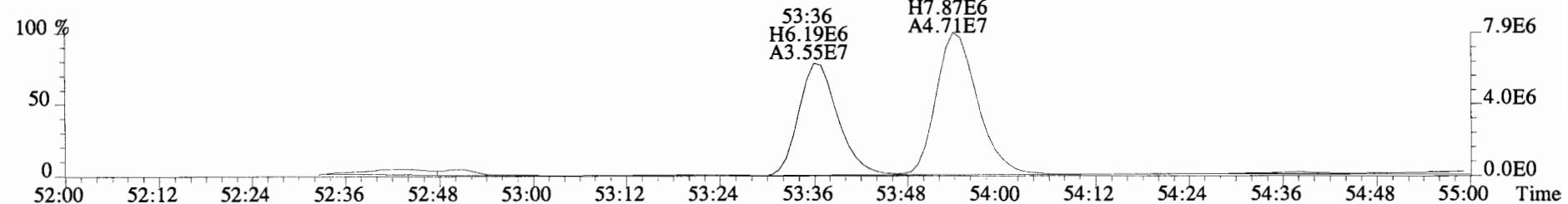
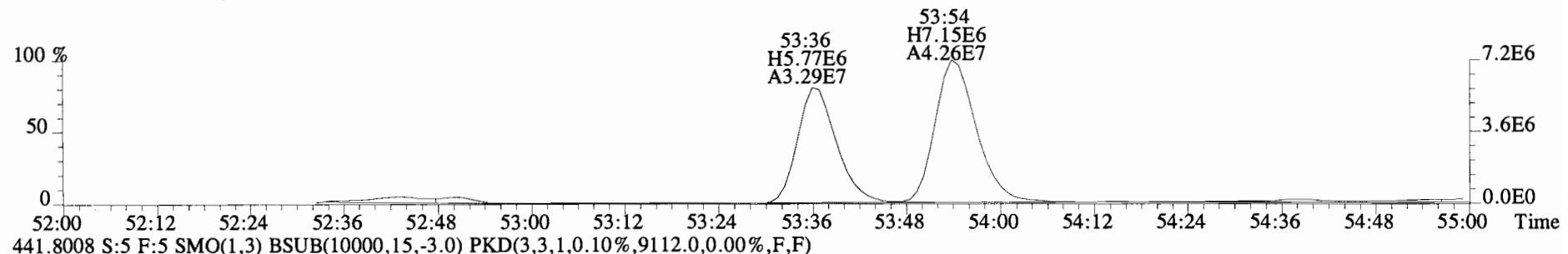
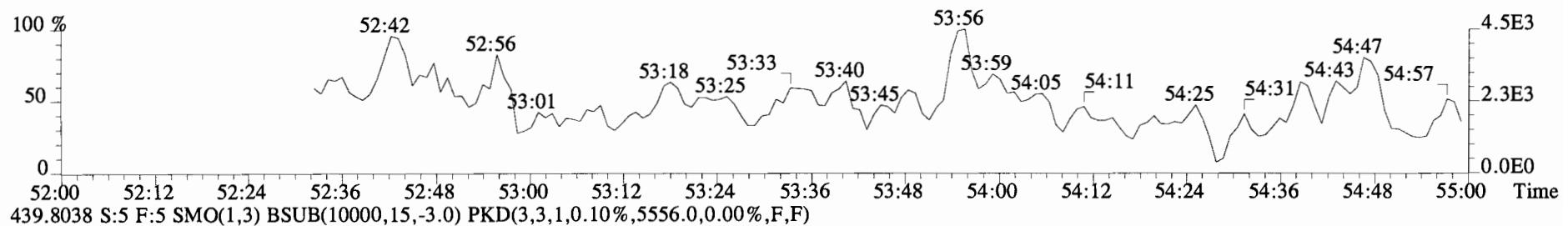
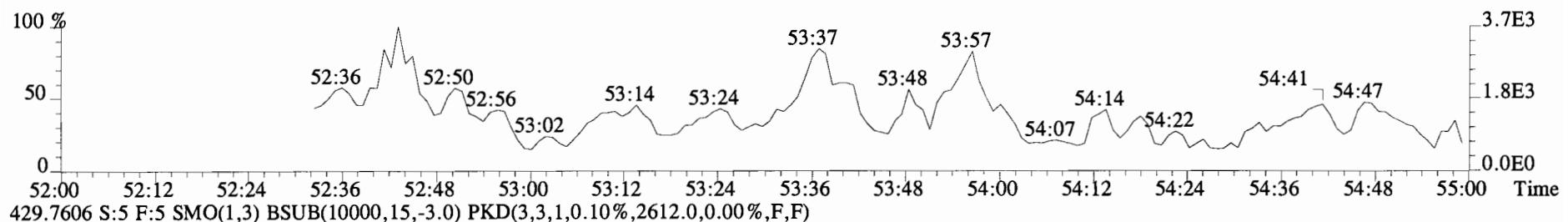
395.7995 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1612.0,0.00%,F,F)



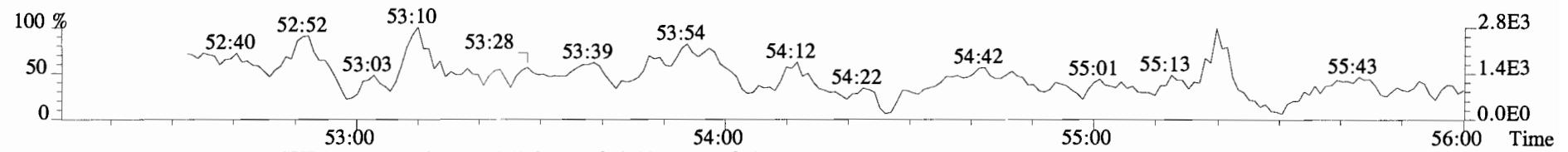
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Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
427.7635 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1640.0,0.00%,F,F)



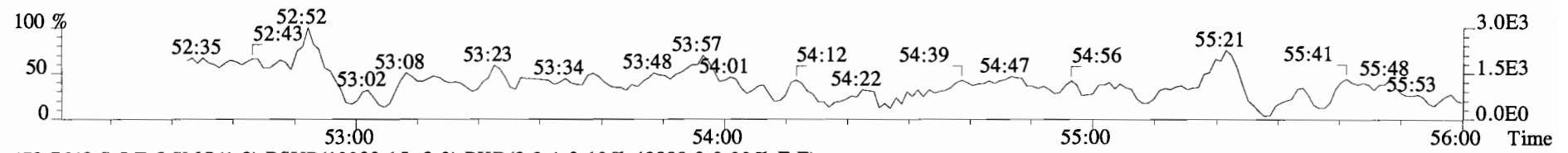
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Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
427.7635 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1428.0,0.00%,F,F)



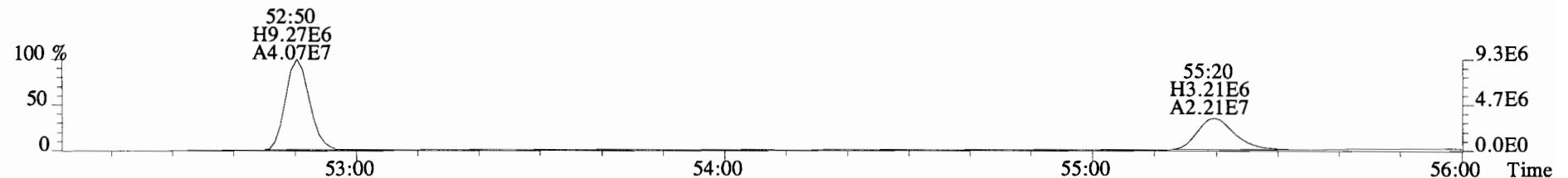
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Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
463.7216 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1664.0,0.00%,F,F)



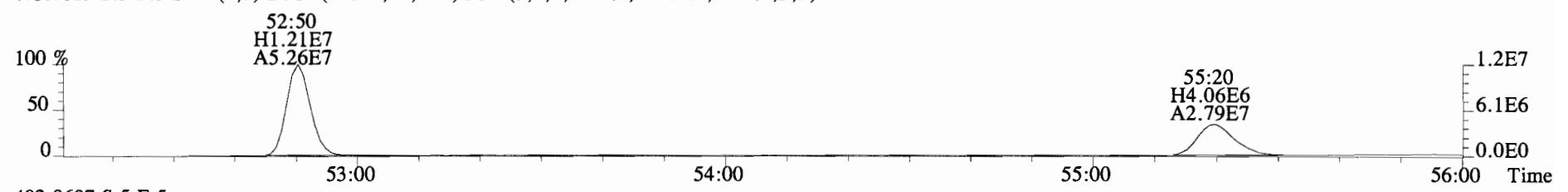
465.7186 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1376.0,0.00%,F,F)



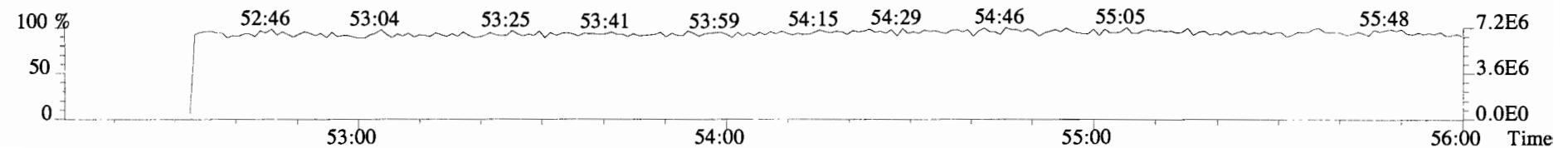
473.7648 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,42888.0,0.00%,F,F)



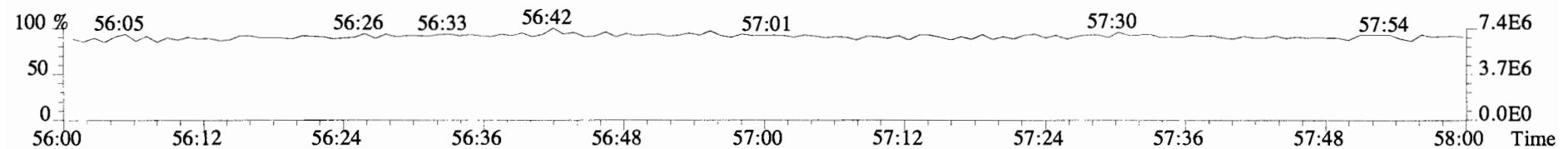
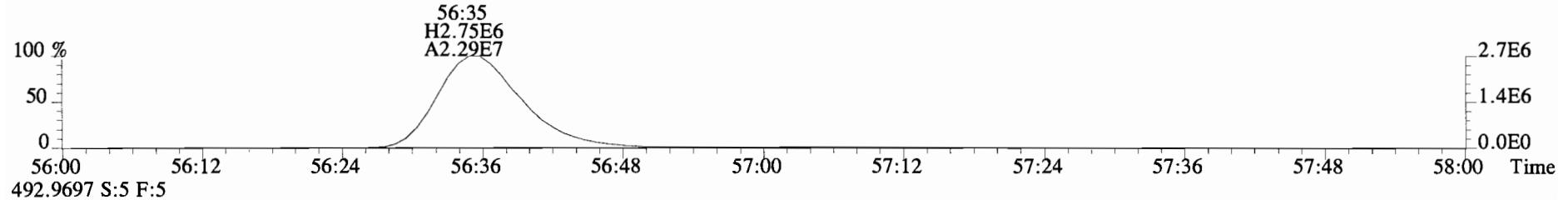
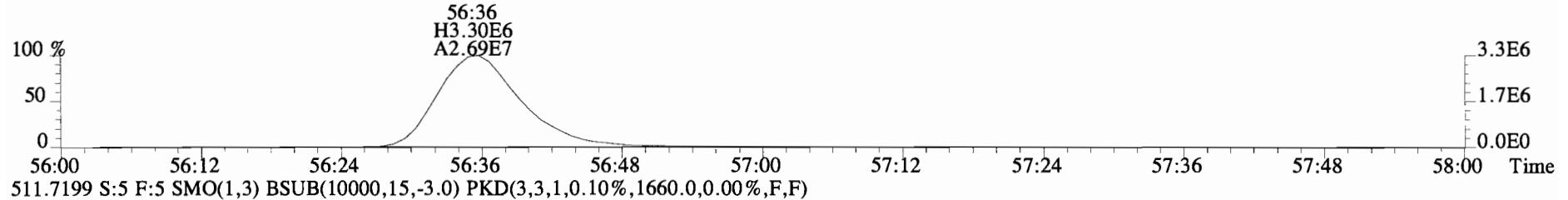
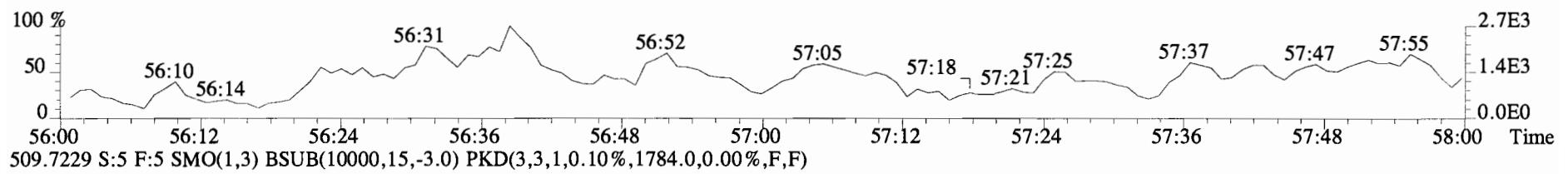
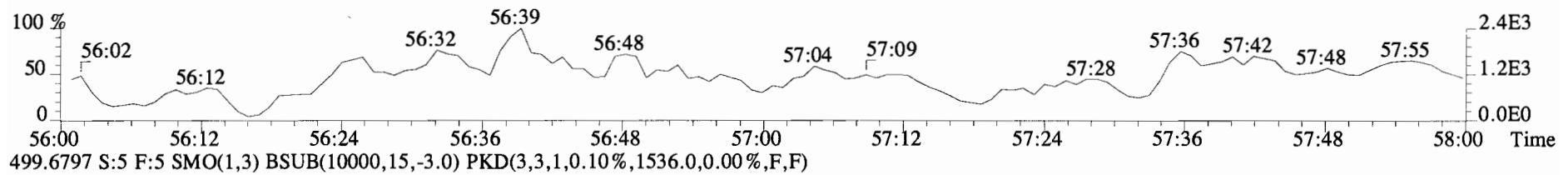
475.7619 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,54868.0,0.00%,F,F)



492.9697 S:5 F:5



File:141024E2 #1-435 Acq:25-OCT-2014 06:24:56 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BLK1 Method Blank 10 Exp:PCB_ZB1
 497.6826 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1476.0,0.00%,F,F)



Lab Name: Vista Analytical Laboratory OPR Data Filename: B4J0119-BS1

Matrix : SOLID Ext. Date: 10-22-14 Analysis Date: 25-OCT-14 Time: 03:14:20

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

NATIVE ANALYTES	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	Labeled Compounds	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	Clean Up Standard	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)
	CONC. (ng/mL)	FOUND (ng/mL)	LIMITS (ng/mL)		CONC. (ng/mL)	FOUND (ng/mL)	LIMITS (ng/mL)		CONC. (ng/mL)	FOUND (ng/mL)	LIMITS (ng/mL)
PCB-1	50	36.2	30.0-67.5	13C-PCB-1	100	102.0	15-145	13C-PCB-79	100	88.3	40-145
PCB-3	50	36.1	30.0-67.5	13C-PCB-3	100	106.2	15-145	13C-PCB-178	100	100.7	40-145
PCB-4/10	200	195.1	120-270	13C-PCB-4	100	75.9	15-145				
PCB-15	100	93.0	60.0-135	13C-PCB-11	100	84.7	15-145				
PCB-19	50	46.0	30.0-67.5	13C-PCB-19	100	101.3	15-145				
PCB-37	50	50.3	30.0-67.5	13C-PCB-37	100	85.9	15-145				
PCB-54	50	44.7	30.0-67.5	13C-PCB-54	100	77.6	15-145				
PCB-81	50	43.3	30.0-67.5	13C-PCB-81	100	92.1	40-145				
PCB-77	50	44.9	30.0-67.5	13C-PCB-77	100	90.7	40-145				
PCB-104	50	48.1	30.0-67.5	13C-PCB-104	100	83.0	40-145				
PCB-123	50	46.4	30.0-67.5	13C-PCB-123	100	97.5	40-145				
PCB-106/118	100	93.8	60.0-135	13C-PCB-118	100	96.1	40-145				
PCB-114	50	49.1	30.0-67.5	13C-PCB-114	100	77.0	40-145				
PCB-105	50	49.6	30.0-67.5	13C-PCB-105	100	76.2	40-145				
PCB-126	50	50.5	30.0-67.5	13C-PCB-126	100	75.5	40-145				
PCB-155	50	46.1	30.0-67.5	13C-PCB-155	100	100.8	40-145				
PCB-167	50	43.5	30.0-67.5	13C-PCB-167	100	92.6	40-145				
PCB-156	50	44.7	30.0-67.5	13C-PCB-156	100	94.6	40-145				
PCB-157	50	42.4	30.0-67.5	13C-PCB-157	100	96.0	40-145				
PCB-169	50	41.8	30.0-67.5	13C-PCB-169	100	93.9	40-145				
PCB-188	50	45.3	30.0-67.5	13C-PCB-188	100	103.0	40-145				
PCB-189	50	45.3	30.0-67.5	13C-PCB-189	100	107.6	40-145				
PCB-202	50	45.1	30.0-67.5	13C-PCB-202	100	121.6	40-145				
PCB-205	50	44.7	30.0-67.5	13C-PCB-194	100	99.3	40-145				
PCB-208	50	47.5	30.0-67.5	13C-PCB-208	100	99.7	40-145				
PCB-206	50	46.7	30.0-67.5	13C-PCB-206	100	91.3	40-145				
PCB-209	50	46.4	30.0-67.5	13C-PCB-209	100	96.6	40-145				

Analyst: DMSDate: 10/28/14

Client ID: OPR
Lab ID: B4J0119-BS1

Filename: 141024E2 S:2 Acq:25-OCT-14 03:14:20 ConCal: ST141024E2-1
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	7.09e+07	2.94	y	1.19	16:27	1.001	0.996-1.006	36.2313
PCB-2	7.67e+07	2.94	y	1.18	18:44	0.989	0.984-0.994	36.2637
PCB-3	9.20e+07	2.93	y	1.43	18:58	1.001	0.996-1.006	36.1423
PCB-4/10	2.51e+08	1.62	y	1.57	20:17	1.002	0.997-1.007	195.052
PCB-7/9	3.02e+08	1.62	y	1.21	22:00	0.871	0.866-0.874	191.942
PCB-6	1.62e+08	1.64	y	1.30	22:38	0.897	0.890-0.899	95.7471
PCB-5/8	2.96e+08	1.62	y	1.15	23:03	0.913	0.907-0.917	198.438
PCB-14	1.53e+08	1.63	y	1.11	24:06	0.955	0.949-0.959	94.0812
PCB-11	1.51e+08	1.66	y	1.09	25:16	1.001	0.995-1.005	95.0111
PCB-12/13	3.33e+08	1.63	y	1.19	25:39	1.016	1.011-1.021	190.554
PCB-15	1.74e+08	1.65	y	1.28	25:58	1.029	1.023-1.033	92.9919
PCB-19	4.76e+07	1.04	y	1.04	24:18	1.001	0.996-1.006	45.9667
PCB-30	7.97e+07	1.05	y	1.71	25:09	1.036	1.032-1.042	46.9501
PCB-18	5.58e+07	1.04	y	0.78	25:53	0.954	0.949-0.959	45.9249
PCB-17	6.50e+07	1.06	y	0.92	26:03	0.961	0.956-0.966	45.4034
PCB-24/27	1.69e+08	1.05	y	1.19	26:38	0.982	0.977-0.987	91.4968
PCB-16/32	1.33e+08	1.05	y	0.94	27:08	1.000	0.995-1.005	91.1739
PCB-34	7.29e+07	1.04	y	1.14	27:54	0.960	0.955-0.965	50.2362
PCB-23	8.09e+07	1.05	y	1.28	28:00	0.964	0.959-0.969	49.5102
PCB-29	7.08e+07	1.05	y	1.08	28:14	0.972	0.967-0.977	51.2916
PCB-26	7.92e+07	1.04	y	1.21	28:27	0.979	0.974-0.984	51.3870
PCB-25	8.34e+07	1.06	y	1.26	28:36	0.985	0.979-0.989	51.7337
PCB-31	8.11e+07	1.04	y	1.28	28:57	0.997	0.992-1.002	49.4066
PCB-28	1.10e+08	1.06	y	1.71	29:03	1.000	0.995-1.005	50.2451
PCB-20/21/33	2.02e+08	1.05	y	1.08	29:41	1.022	1.017-1.027	145.938
PCB-22	7.05e+07	1.05	y	1.21	30:07	1.037	1.032-1.042	45.6328
PCB-36	6.46e+07	1.05	y	1.14	30:42	0.933	0.928-0.938	50.0325
PCB-39	6.57e+07	1.04	y	1.12	31:10	0.947	0.943-0.953	52.1282
PCB-38	6.91e+07	1.05	y	1.20	31:57	0.971	0.966-0.976	50.9674
PCB-35	7.76e+07	1.09	y	1.23	32:28	0.987	0.982-0.992	55.7211
PCB-37	7.00e+07	1.05	y	1.23	32:55	1.001	0.995-1.005	50.3186
PCB-54	6.33e+07	0.75	y	1.10	27:59	1.001	0.996-1.006	44.6519
PCB-50	5.24e+07	0.75	y	0.88	29:07	1.041	1.037-1.047	46.2584
PCB-53	4.96e+07	0.74	y	1.06	29:45	0.947	0.942-0.952	42.3148
PCB-51	4.50e+07	0.73	y	0.99	30:06	0.958	0.952-0.962	41.2188
PCB-45	4.06e+07	0.74	y	0.86	30:32	0.972	0.966-0.976	42.5751
PCB-46	4.06e+07	0.72	y	0.85	31:01	0.987	0.981-0.991	43.5895

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	1.25e+08	0.73	y	1.28	31:28	1.002	0.996-1.006	88.3955
PCB-73	6.62e+07	0.75	y	1.35	31:35	1.005	1.000-1.010	44.3647
PCB-43/49	9.71e+07	0.74	y	0.99	31:45	1.010	1.005-1.015	88.5100
PCB-47	5.72e+07	0.73	y	1.06	31:57	1.001	0.996-1.006	45.4865
PCB-48/75	1.28e+08	0.75	y	1.23	32:04	1.004	0.999-1.009	87.9070
PCB-65	6.47e+07	0.84	y	1.22	32:21	1.013	1.008-1.018	44.5330
PCB-62	6.47e+07	0.67	y	1.22	32:27	1.016	1.011-1.021	44.6174
PCB-44	4.38e+07	0.74	y	0.86	32:45	1.026	1.021-1.031	42.9330
PCB-42/59	1.18e+08	0.74	y	1.14	32:58	1.033	1.028-1.038	87.0822
PCB-41/64/71/72	2.49e+08	0.74	y	1.21	33:33	1.051	1.046-1.056	173.908
PCB-68	7.17e+07	0.73	y	1.35	33:48	1.059	1.054-1.064	44.7997
PCB-40	3.85e+07	0.75	y	0.70	34:02	1.066	1.061-1.071	46.1870
PCB-57	6.67e+07	0.73	y	0.98	34:22	0.970	0.965-0.975	44.8296
PCB-67	7.06e+07	0.73	y	1.11	34:41	0.979	0.974-0.984	41.9955
PCB-58	6.79e+07	0.76	y	0.93	34:47	0.982	0.977-0.987	48.2300
PCB-63	6.36e+07	0.73	y	0.95	34:57	0.987	0.982-0.992	44.0091
PCB-74	8.39e+07	0.74	y	1.24	35:15	0.995	0.990-1.000	44.4197
PCB-61/70	1.31e+08	0.75	y	0.95	35:25	1.000	0.995-1.005	90.3434
PCB-76/66	1.40e+08	0.74	y	1.04	35:38	1.006	1.001-1.011	88.5507
PCB-80	8.69e+07	0.75	y	1.19	35:51	1.001	0.996-1.006	45.3749
PCB-55	7.60e+07	0.74	y	1.04	36:12	1.010	1.005-1.015	45.4651
PCB-56/60	1.43e+08	0.73	y	1.01	36:41	1.024	1.019-1.029	88.5126
PCB-79	7.71e+07	0.76	y	1.08	37:45	1.053	1.048-1.058	44.5059
PCB-78	8.19e+07	0.76	y	1.27	38:27	0.987	0.982-0.992	44.4593
PCB-81	8.35e+07	0.75	y	1.33	38:59	1.000	0.995-1.005	43.2956
PCB-77	7.20e+07	0.78	y	1.10	39:34	1.000	0.995-1.005	44.8904
PCB-104	6.44e+07	1.55	y	1.18	32:37	1.001	0.996-1.006	48.1408
PCB-96	6.22e+07	1.57	y	1.14	33:52	1.039	1.034-1.044	48.3458
PCB-103	5.30e+07	1.58	y	0.96	34:22	1.054	1.050-1.060	49.0053
PCB-100	5.34e+07	1.57	y	0.94	34:44	1.066	1.061-1.071	50.4202
PCB-94	4.33e+07	1.60	y	1.06	35:12	0.985	0.980-0.990	46.2681
PCB-95/98/102	1.56e+08	1.57	y	1.22	35:42	0.999	0.995-1.005	144.049
PCB-93	3.63e+07	1.62	y	0.84	35:50	1.003	0.997-1.007	48.5761
PCB-88/91	9.88e+07	1.52	y	1.12	36:07	1.011	1.005-1.015	99.8270
PCB-121	7.06e+07	1.71	y	1.62	36:13	1.013	1.009-1.019	49.2930
PCB-84/92	9.58e+07	1.57	y	1.05	37:03	0.991	0.985-0.995	93.4677
PCB-89	5.26e+07	1.57	y	1.13	37:15	0.996	0.991-1.001	47.4708

Integrations

by Analyst: DmS

Date: 10/28/14

Reviewed

by Analyst: JL

Date: 10/30/14

Client ID: OPR
Lab ID: B4J0119-BS1

Filename: 141024E2 S:2 Acq:25-OCT-14 03:14:20 ConCal: ST141024E2-1
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-90/101	1.02e+08	1.56	y	1.10	37:24	1.000	0.995-1.005	94.6786	PCB-133/142	8.00e+07	1.23	y	0.82	42:21	0.982	0.977-0.987	87.6906
PCB-113	6.46e+07	1.58	y	1.41	37:39	1.007	1.002-1.012	46.7350	PCB-131	4.32e+07	1.23	y	0.91	42:32	0.986	0.981-0.991	42.6626
PCB-99	6.44e+07	1.58	y	1.34	37:45	1.009	1.004-1.014	49.2024	PCB-146/165	1.20e+08	1.22	y	1.25	42:43	0.991	0.986-0.996	86.4077
PCB-119	6.62e+07	1.57	y	1.53	38:12	0.987	0.982-0.992	48.5211	PCB-132/161	1.05e+08	1.23	y	1.10	42:59	0.997	0.992-1.002	85.4104
PCB-108/112	1.08e+08	1.55	y	1.28	38:22	0.991	0.986-0.996	94.7973	PCB-153	6.21e+07	1.19	y	1.25	43:09	1.001	0.995-1.005	44.5826
PCB-83	6.33e+07	1.58	y	1.52	38:32	0.995	0.990-1.000	46.7826	PCB-168	7.14e+07	1.22	y	1.45	43:21	1.005	1.001-1.011	44.2350
PCB-97	4.98e+07	1.63	y	1.18	38:44	1.001	0.995-1.005	47.3082	PCB-141	4.81e+07	1.21	y	1.09	43:54	1.001	0.995-1.005	42.9101
PCB-86	3.53e+07	1.43	y	0.84	38:53	1.004	0.999-1.009	47.0903	PCB-137	4.80e+07	1.21	y	1.06	44:17	1.009	1.004-1.014	43.6952
B-87/117/125	1.99e+08	1.57	y	1.55	39:00	1.007	1.002-1.012	144.231	PCB-130	4.60e+07	1.23	y	0.96	44:24	1.012	1.006-1.016	46.0904
PCB-111/115	1.34e+08	1.55	y	1.63	39:09	1.011	1.006-1.016	92.2057	PCB-138/163/164	1.79e+08	1.22	y	1.29	44:46	1.001	0.996-1.006	128.208
PCB-85/116	1.15e+08	1.57	y	1.30	39:18	1.015	1.010-1.020	99.3926	PCB-158/160	1.28e+08	1.21	y	1.34	45:01	1.007	1.001-1.011	88.4664
PCB-120	7.19e+07	1.58	y	1.68	39:30	1.020	1.016-1.026	48.1693	PCB-129	4.05e+07	1.22	y	0.85	45:15	1.012	1.007-1.017	43.9994
PCB-110	6.61e+07	1.57	y	1.56	39:41	1.025	1.020-1.030	47.6508	PCB-166	6.34e+07	1.22	y	1.19	45:42	0.993	0.988-0.998	42.9434
PCB-82	4.28e+07	1.57	y	0.76	40:18	0.977	0.971-0.981	47.6045	PCB-159	6.68e+07	1.22	y	1.11	46:02	1.000	0.996-1.006	48.2068
PCB-124	8.33e+07	1.56	y	1.47	40:58	0.993	0.988-0.998	47.8477	PCB-128/162	1.14e+08	1.23	y	1.05	46:19	1.007	1.002-1.012	87.2608
PCB-107/109	1.48e+08	1.57	y	1.32	41:07	0.996	0.991-1.001	94.3170	PCB-167	6.97e+07	1.21	y	1.20	46:42	1.000	0.995-1.005	43.5410
PCB-123	6.41e+07	1.55	y	1.17	41:17	1.000	0.996-1.006	46.3534	PCB-156	6.65e+07	1.23	y	1.14	48:01	1.000	0.996-1.006	44.7407
- PCB-106/118	1.38e+08	1.55	y	1.17	41:30	1.001	0.996-1.006	93.7813	PCB-157	6.85e+07	1.25	y	1.16	48:18	1.000	0.995-1.005	42.4081
- PCB-114	7.13e+07	1.63	y	1.30	42:08	1.000	0.995-1.005	49.1067	PCB-169	6.02e+07	1.25	y	1.12	50:20	1.000	0.995-1.005	41.8320
PCB-122	6.17e+07	1.66	y	1.12	42:17	1.004	0.999-1.009	49.2123	PCB-188	7.22e+07	1.06	y	1.58	42:47	1.001	0.996-1.006	45.3051
PCB-105	7.14e+07	1.61	y	1.30	43:00	1.000	0.995-1.005	49.5612	PCB-184	7.59e+07	1.05	y	1.63	43:14	1.011	1.006-1.016	46.1708
PCB-127	7.76e+07	1.64	y	1.33	43:19	1.000	0.996-1.006	48.9527	PCB-179	6.00e+07	1.06	y	1.30	44:02	1.029	1.024-1.034	45.6220
PCB-126	6.28e+07	1.63	y	1.18	45:15	1.000	0.995-1.005	50.4753	PCB-176	6.80e+07	1.06	y	1.48	44:29	1.040	1.035-1.045	45.6645
PCB-155	5.91e+07	1.27	y	1.11	36:58	1.000	0.966-1.006	46.1198	PCB-186	6.77e+07	1.05	y	1.45	45:07	1.055	1.050-1.060	46.1701
PCB-150	5.46e+07	1.26	y	1.00	38:14	1.035	1.030-1.040	47.5449	PCB-178	4.87e+07	1.07	y	1.03	45:35	1.066	1.061-1.071	46.6696
PCB-152	5.98e+07	1.25	y	1.12	38:43	1.048	1.043-1.053	46.6333	PCB-175	4.80e+07	1.05	y	1.01	45:56	1.074	1.069-1.079	46.9908
PCB-145	6.42e+07	1.24	y	1.20	39:10	1.060	1.055-1.065	46.4359	PCB-182/187	1.19e+08	1.06	y	1.25	46:07	1.078	1.073-1.083	94.4000
PCB-136	6.74e+07	1.26	y	1.18	39:29	1.069	1.064-1.074	49.7445	PCB-183	5.64e+07	1.04	y	1.21	46:26	1.086	1.081-1.091	46.3108
PCB-148	3.79e+07	1.26	y	0.74	39:35	1.071	1.066-1.076	44.2631	PCB-185	6.33e+07	1.05	y	1.80	47:06	0.956	0.951-0.961	43.7340
PCB-154	4.84e+07	1.23	y	0.86	40:03	1.084	1.080-1.090	49.0995	PCB-174	4.75e+07	1.04	y	1.38	47:28	0.963	0.958-0.968	42.9731
PCB-151	4.14e+07	1.25	y	0.75	40:42	1.102	1.097-1.107	48.1849	PCB-181	5.43e+07	1.07	y	1.38	47:35	0.966	0.960-0.970	48.9885
PCB-135	4.27e+07	1.25	y	0.79	40:56	1.108	1.103-1.113	46.8313	PCB-177	4.62e+07	1.05	y	1.26	47:45	0.969	0.963-0.973	45.8266
PCB-144	4.66e+07	1.26	y	0.76	41:02	1.111	1.105-1.117	53.1563	PCB-171	5.77e+07	1.05	y	1.58	48:02	0.975	0.970-0.980	45.4389
PCB-147	4.64e+07	1.28	y	0.82	41:10	1.114	1.109-1.121	49.2207	PCB-173	4.15e+07	1.06	y	1.11	48:29	0.984	0.978-0.988	46.6258
PCB-139/149	8.68e+07	1.26	y	0.76	41:26	1.121	1.116-1.128	99.0528	PCB-172	6.10e+07	1.04	y	1.63	48:54	0.993	0.987-0.997	46.4496
- PCB-140	4.22e+07	1.25	y	0.72	41:38	1.127	1.121-1.133	50.8509	PCB-192	6.63e+07	1.06	y	1.74	49:06	0.996	0.991-1.001	47.4202
- PCB-134/143	8.91e+07	1.23	y	0.92	42:04	0.975	0.970-0.980	87.1968	PCB-180	4.93e+07	1.04	y	1.34	49:17	1.000	0.995-1.005	45.6990

Integrations
by
Analyst: DMS
Date: 10/28/14

Client ID: OPR
Lab ID: B4J0119-BS1

Filename: 141024E2 S:2 Acq:25-OCT-14 03:14:20
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 ConCal: ST141024E2-1
EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-193	6.24e+07	1.04	y	1.72	49:29	1.004	0.999-1.009	45.3032
PCB-191	6.22e+07	1.04	y	1.69	49:43	1.009	1.004-1.014	45.7387
PCB-170	4.63e+07	1.04	y	1.60	50:41	1.000	0.995-1.005	45.7807
PCB-190	6.34e+07	1.06	y	2.21	50:50	1.003	0.998-1.008	45.3243
PCB-189	5.77e+07	1.05	y	1.55	52:07	1.000	0.995-1.005	45.3230
PCB-202	5.31e+07	0.90	y	1.08	48:15	1.000	0.995-1.005	45.1449
PCB-201	5.78e+07	0.89	y	1.15	48:44	1.011	1.005-1.015	46.2634
PCB-204	5.67e+07	0.90	y	1.14	48:53	1.014	1.008-1.018	45.8306
PCB-197	5.35e+07	0.90	y	1.07	49:10	1.020	1.015-1.025	45.8454
PCB-200	5.33e+07	0.91	y	1.06	49:60	1.037	1.032-1.044	46.0845
PCB-198	3.33e+07	0.88	y	0.76	51:14	1.062	1.059-1.069	40.5217
PCB-199	4.28e+07	0.88	y	0.80	51:20	1.064	1.061-1.071	49.3583
- PCB-196/203	7.87e+07	0.89	y	0.80	51:36	1.070	1.066-1.076	90.2906
- PCB-195	3.94e+07	0.91	y	1.23	52:44	0.983	0.979-0.989	48.4666
PCB-194	3.67e+07	0.90	y	1.21	53:38	1.000	0.995-1.005	45.6716
PCB-205	4.56e+07	0.91	y	1.54	53:56	1.006	1.001-1.011	44.6745
PCB-208	3.98e+07	1.33	y	0.93	52:52	1.000	0.995-1.005	47.4791
PCB-207	4.57e+07	1.34	y	1.08	53:11	1.006	1.001-1.011	46.8800
PCB-206	2.37e+07	1.33	y	1.02	55:22	1.000	0.995-1.005	46.7389
PCB-209	2.68e+07	1.17	y	1.17	56:37	1.000	0.995-1.005	46.4206

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	2.40e+08	2.94	y	16:27	1.27
Total Di-PCB	1.82e+09	1.62	y	20:17	1.21
Total Tri-PCB	5.50e+08	1.04	y	24:18	1.10
Total Tri-PCB	1.21e+09	1.04	y	27:54	1.21
Total Tetra-PCB	2.68e+09	0.75	y	27:59	1.09
Total Penta-PCB	2.41e+09	1.55	y	32:37	1.18
Total Penta-PCB	3.68e+08	1.63	y	42:08	1.25
Total Hexa-PCB	6.97e+08	1.27	y	36:58	0.90
Total Hexa-PCB	1.59e+09	1.23	y	42:04	1.11
Total Hepta-PCB	1.40e+09	1.06	y	42:47	1.42
Total Octa-PCB	4.29e+08	0.90	y	48:15	0.96
Total Octa-PCB	1.24e+08	0.91	y	52:44	1.33
Total Nona-PCB	1.11e+08	1.33	y	52:52	1.01
Total Deca-PCB	2.68e+07	1.17	y	56:37	1.17

Total PCB Conc:10240.1994880

Integrations
by
Analyst: DMS

Date: 10/28/14

Client ID: OPR
Lab ID: B4J0119-BS1

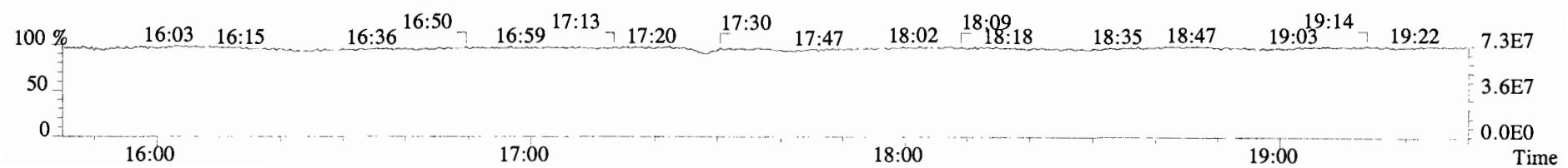
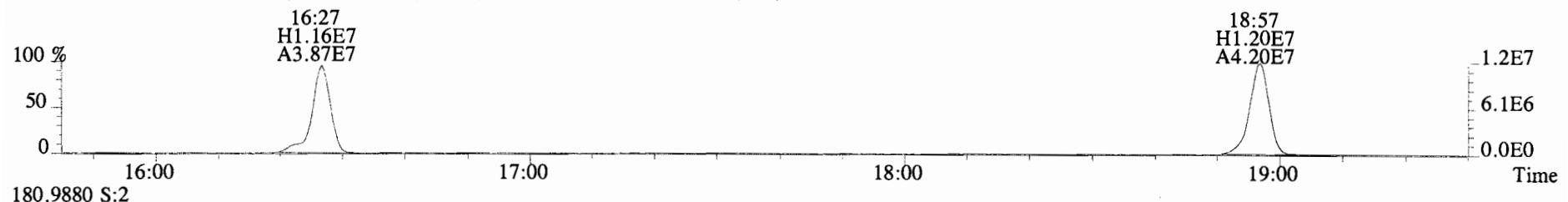
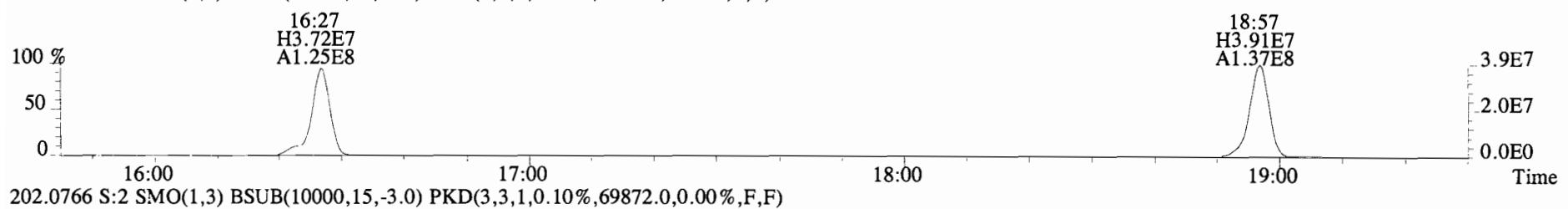
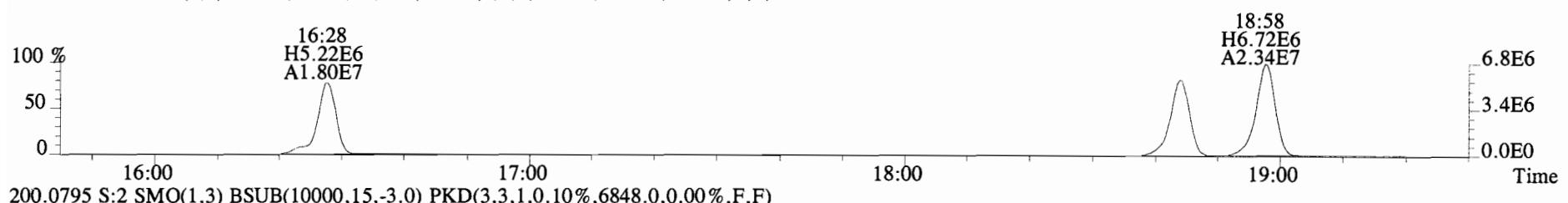
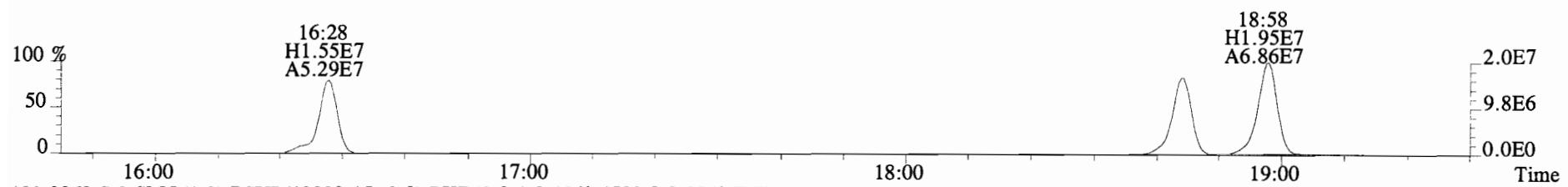
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ConCal: ST141024E2-1
EndCAL: NA

Page 3 of

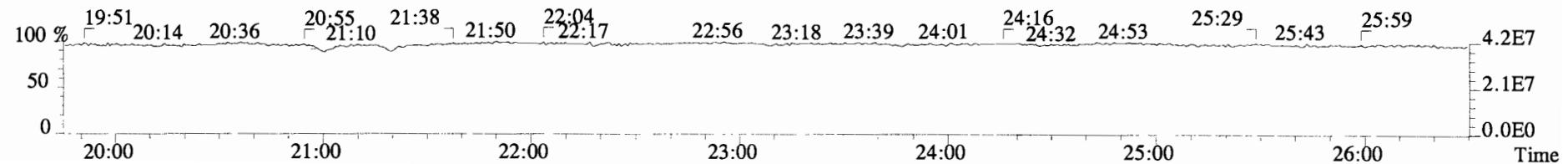
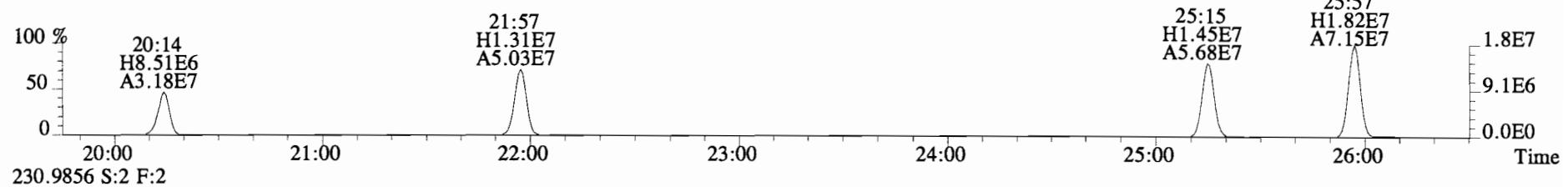
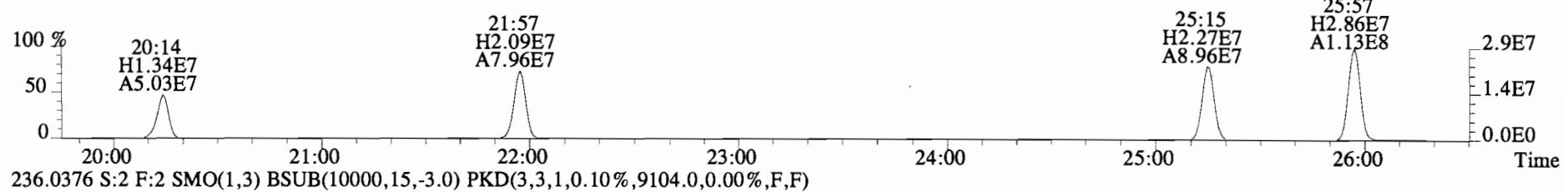
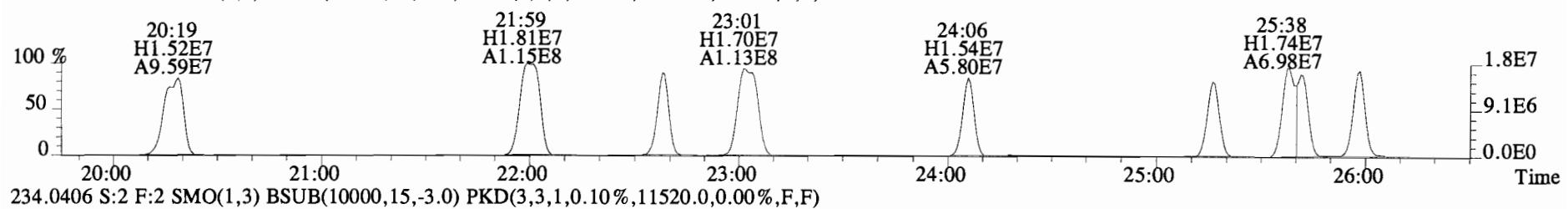
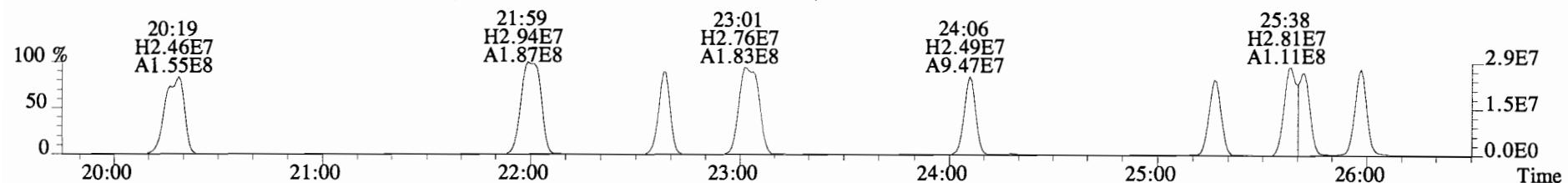
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13C-PCB-1	1.64e+08	3.24	y	0.87	16:26	0.633	0.629-0.635	102	102	13C-PCB-79	1.53e+08	0.78	y	1.02	37:43	1.028	1.023-1.034	88.3	88.3		
13C-PCB-3	1.79e+08	3.25	y	0.91	18:57	0.730	0.725-0.733	106	106	13C-PCB-178	6.59e+07	0.45	y	0.61	45:34	0.984	0.979-0.990	101	101		
13C-PCB-4	8.21e+07	1.58	y	0.59	20:14	0.780	0.775-0.783	75.9	75.9	13C-PCB-178	6.59e+07	0.45	y	0.61	45:34	0.984	0.979-0.990	101	101		
13C-PCB-9	1.30e+08	1.58	y	0.90	21:57	0.846	0.842-0.850	78.6	78.6	13C-PCB-11	1.46e+08	1.58	y	0.94	25:15	0.973	0.968-0.978	84.7	84.7		
13C-PCB-11	1.46e+08	1.58	y	0.94	25:15	0.973	0.968-0.978	84.7	84.7	PS vs. IS											
13C-PCB-19	9.92e+07	1.08	y	0.53	24:16	0.935	0.930-0.940	101	101	13C-PCB-79	1.53e+08	0.78	y	1.10	37:43	0.968	0.964-0.974	95.7	95.7		
13C-PCB-28	1.28e+08	1.03	y	0.93	29:03	1.004	0.999-1.009	87.5	87.5	13C-PCB-178	6.59e+07	0.45	y	0.90	45:34	0.925	0.920-0.930	91.4	91.4		
13C-PCB-32	1.55e+08	1.10	y	0.80	27:07	1.045	1.040-1.050	106	106	13C-PCB-37	1.13e+08	1.04	y	0.84	32:54	1.137	1.131-1.143	85.9	85.9		
13C-PCB-37	1.13e+08	1.04	y	0.84	32:54	1.137	1.131-1.143	85.9	85.9	13C-PCB-47	1.19e+08	0.77	y	0.81	31:56	0.870	0.866-0.874	85.6	85.6		
13C-PCB-47	1.19e+08	0.77	y	0.81	31:56	0.870	0.866-0.874	85.6	85.6	13C-PCB-52	1.10e+08	0.79	y	0.77	31:25	0.857	0.853-0.861	83.8	83.8		
13C-PCB-52	1.10e+08	0.79	y	0.77	31:25	0.857	0.853-0.861	83.8	83.8	13C-PCB-54	1.29e+08	0.79	y	0.97	27:57	0.762	0.758-0.766	77.6	77.6		
13C-PCB-54	1.29e+08	0.79	y	0.97	27:57	0.762	0.758-0.766	77.6	77.6	13C-PCB-70	1.52e+08	0.78	y	1.00	35:26	0.966	0.961-0.971	89.1	89.1		
13C-PCB-70	1.52e+08	0.78	y	1.00	35:26	0.966	0.961-0.971	89.1	89.1	13C-PCB-77	1.46e+08	0.78	y	0.94	39:33	1.078	1.073-1.083	90.7	90.7		
13C-PCB-77	1.46e+08	0.78	y	0.94	39:33	1.078	1.073-1.083	90.7	90.7	13C-PCB-80	1.60e+08	0.77	y	1.03	35:50	0.977	0.972-0.982	91.2	91.2		
13C-PCB-80	1.60e+08	0.77	y	1.03	35:50	0.977	0.972-0.982	91.2	91.2	13C-PCB-81	1.45e+08	0.78	y	0.92	38:57	1.062	1.057-1.067	92.1	92.1		
13C-PCB-81	1.45e+08	0.78	y	0.92	38:57	1.062	1.057-1.067	92.1	92.1	13C-PCB-95	8.86e+07	1.59	y	0.74	35:44	0.913	0.908-0.918	88.0	88.0		
13C-PCB-95	8.86e+07	1.59	y	0.74	35:44	0.913	0.908-0.918	88.0	88.0	RS											
13C-PCB-97	8.91e+07	1.60	y	0.70	38:43	0.989	0.984-0.994	93.0	93.0	13C-PCB-101	9.81e+07	1.60	y	0.78	37:24	0.956	0.951-0.961	92.1	92.1		
13C-PCB-101	9.81e+07	1.60	y	0.78	37:24	0.956	0.951-0.961	92.1	92.1	13C-PCB-104	1.13e+08	1.61	y	1.00	32:36	0.833	0.828-0.836	83.0	83.0		
13C-PCB-104	1.13e+08	1.61	y	1.00	32:36	0.833	0.828-0.836	83.0	83.0	13C-PCB-105	1.11e+08	1.59	y	1.37	42:59	0.928	0.924-0.934	76.2	76.2		
13C-PCB-105	1.11e+08	1.59	y	1.37	42:59	0.928	0.924-0.934	76.2	76.2	13C-PCB-114	1.12e+08	1.59	y	1.36	42:07	0.910	0.905-0.915	77.0	77.0		
13C-PCB-114	1.12e+08	1.59	y	1.36	42:07	0.910	0.905-0.915	77.0	77.0	13C-PCB-118	1.25e+08	1.62	y	0.96	41:27	1.060	1.054-1.064	96.1	96.1		
13C-PCB-118	1.25e+08	1.62	y	0.96	41:27	1.060	1.054-1.064	96.1	96.1	13C-PCB-123	1.18e+08	1.58	y	0.89	41:16	1.055	1.050-1.060	97.5	97.5		
13C-PCB-123	1.18e+08	1.58	y	0.89	41:16	1.055	1.050-1.060	97.5	97.5	13C-PCB-126	1.05e+08	1.55	y	1.31	45:14	0.977	0.972-0.982	75.5	75.5		
13C-PCB-126	1.05e+08	1.55	y	1.31	45:14	0.977	0.972-0.982	75.5	75.5	13C-PCB-127	1.19e+08	1.58	y	1.47	43:19	0.935	0.931-0.941	75.7	75.7		
13C-PCB-127	1.19e+08	1.58	y	1.47	43:19	0.935	0.931-0.941	75.7	75.7	13C-PCB-138	1.08e+08	1.27	y	1.10	44:43	0.966	0.961-0.971	92.0	92.0		
13C-PCB-138	1.08e+08	1.27	y	1.10	44:43	0.966	0.961-0.971	92.0	92.0	13C-PCB-141	1.03e+08	1.28	y	1.07	43:52	0.948	0.943-0.953	90.2	90.2		
13C-PCB-141	1.03e+08	1.28	y	1.07	43:52	0.948	0.943-0.953	90.2	90.2	13C-PCB-153	1.11e+08	1.27	y	1.15	43:07	0.931	0.927-0.937	91.2	91.2		
13C-PCB-153	1.11e+08	1.27	y	1.15	43:07	0.931	0.927-0.937	91.2	91.2	13C-PCB-155	1.15e+08	1.29	y	0.84	36:57	0.944	0.939-0.949	101	101		
13C-PCB-155	1.15e+08	1.29	y	0.84	36:57	0.944	0.939-0.949	101	101	13C-PCB-156	1.31e+08	1.27	y	1.30	48:01	1.037	1.032-1.042	94.6	94.6		
13C-PCB-156	1.31e+08	1.27	y	1.30	48:01	1.037	1.032-1.042	94.6	94.6	13C-PCB-157	1.39e+08	1.30	y	1.36	48:17	1.043	1.038-1.048	96.0	96.0		
13C-PCB-157	1.39e+08	1.30	y	1.36	48:17	1.043	1.038-1.048	96.0	96.0	13C-PCB-159	1.25e+08	1.27	y	1.25	46:01	0.994	0.989-0.999	93.6	93.6		
13C-PCB-159	1.25e+08	1.27	y	1.25	46:01	0.994	0.989-0.999	93.6	93.6	13C-PCB-167	1.33e+08	1.26	y	1.35	46:42	1.009	1.004-1.014	92.6	92.6		
13C-PCB-167	1.33e+08	1.26	y	1.35	46:42	1.009	1.004-1.014	92.6	92.6	13C-PCB-169	1.29e+08	1.29	y	1.29	50:19	1.087	1.083-1.093	93.9	93.9		
13C-PCB-169	1.29e+08	1.29	y	1.29	50:19	1.087	1.083-1.093	93.9	93.9	13C-PCB-170	6.33e+07	0.46	y	0.54	50:40	1.094	1.089-1.101	110	110		
13C-PCB-170	6.33e+07	0.46	y	0.54	50:40	1.094	1.089-1.101	110	110	13C-PCB-180	8.03e+07	0.47	y	0.68	49:16	1.064	1.060-1.070	110	110		
13C-PCB-180	8.03e+07	0.47	y	0.68	49:16	1.064	1.060-1.070	110	110	13C-PCB-188	1.01e+08	0.45	y	0.92	42:46	0.924	0.919-0.929	103	103		
13C-PCB-188	1.01e+08	0.45	y	0.92	42:46	0.924	0.919-0.929	103	103	13C-PCB-189	8.22e+07	0.46	y	0.72	52:06	1.125	1.120-1.132	108	108		
13C-PCB-189	8.22e+07	0.46	y	0.72	52:06	1.125	1.120-1.132	108	108	13C-PCB-194	6.63e+07	0.92	y	0.80	53:37	0.995	0.990-1.000	99.3	99.3		
13C-PCB-194	6.63e+07	0.92	y	0.80	53:37	0.995	0.990-1.000	99.3	99.3	13C-PCB-202	1.09e+08	0.91	y	0.84	48:13	1.041	1.036-1.046	122	122		
13C-PCB-202	1.09e+08	0.91	y	0.84	48:13	1.041	1.036-1.046	122	122	13C-PCB-206	4.96e+07	0.79	y	0.65	55:21	1.027	1.021-1.031	91.3	91.3		
13C-PCB-206	4.96e+07	0.79	y	0.65	55:21	1.027	1.021-1.031	91.3	91.3	13C-PCB-208	9.01e+07	0.77	y	1.08	52:51	0.980	0.976-0.986	99.7	99.7		
13C-PCB-208	9.01e+07	0.77	y	1.08	52:51	0.980	0.976-0.986	99.7	99.7	13C-PCB-209	4.93e+07	1.18	y	0.61	56:37	1.050	1.045-1.055	96.6	96.6		

Analyst DMS
Date: 12/28/14

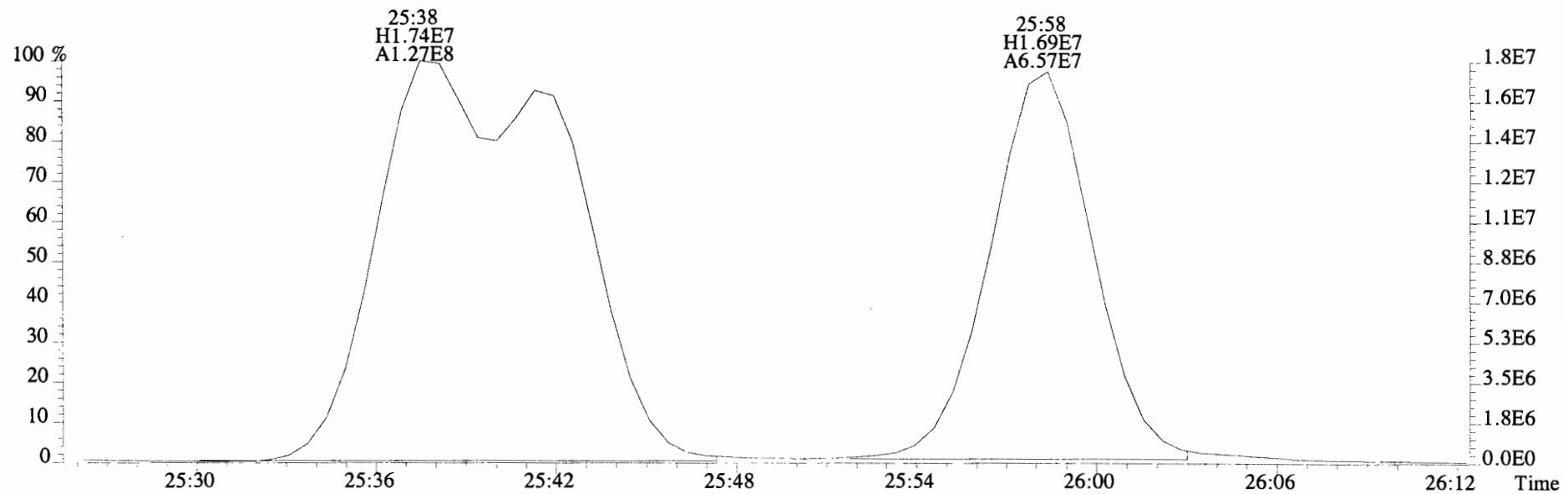
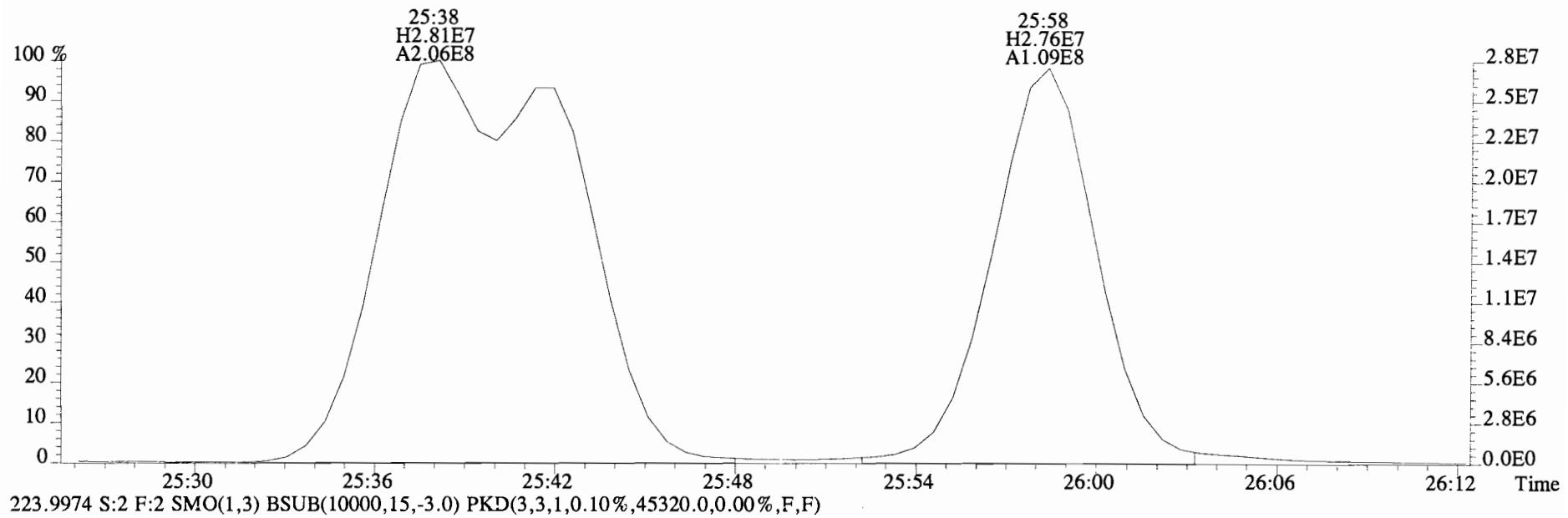
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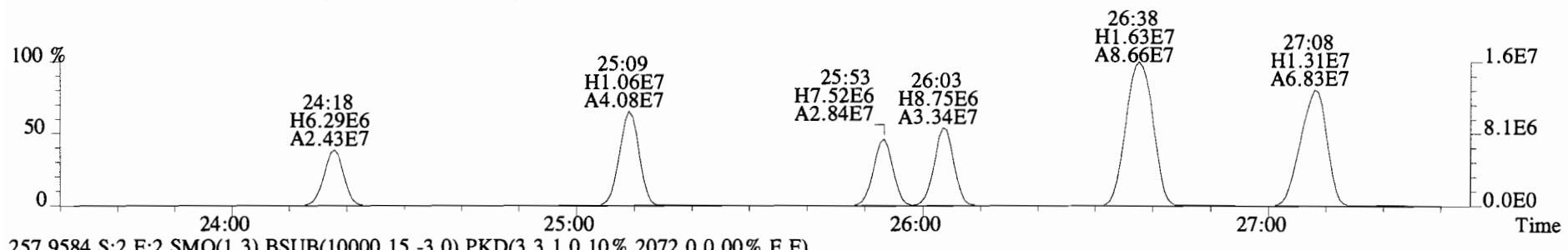
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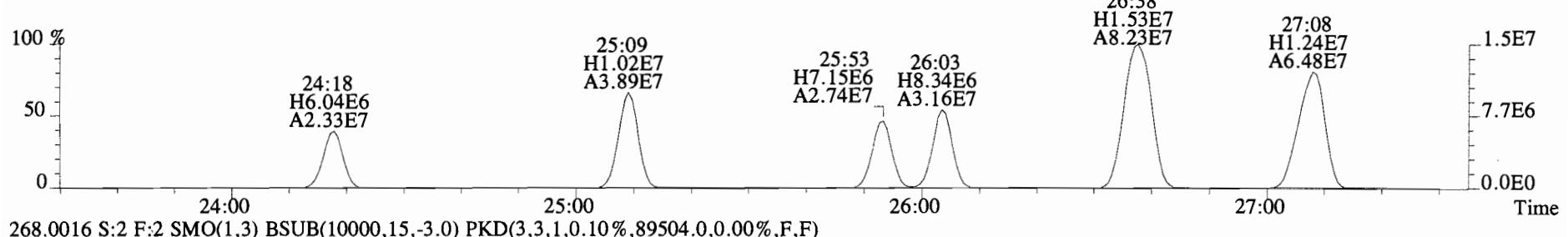
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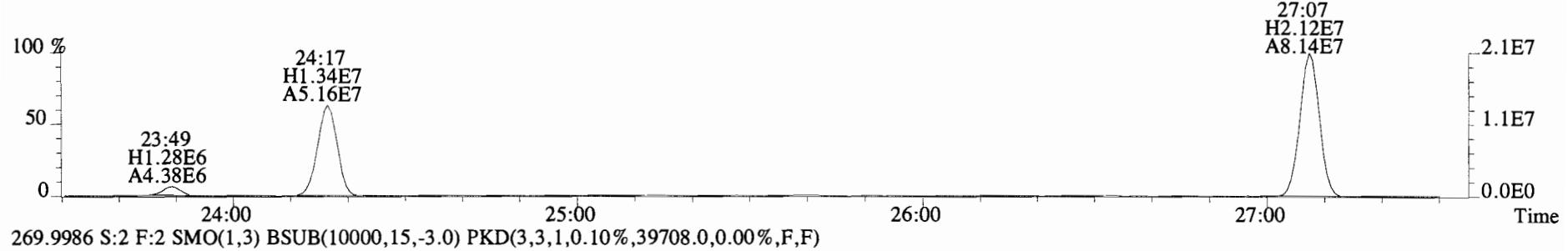
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255.9613 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4412.0,0.00%,F,F)



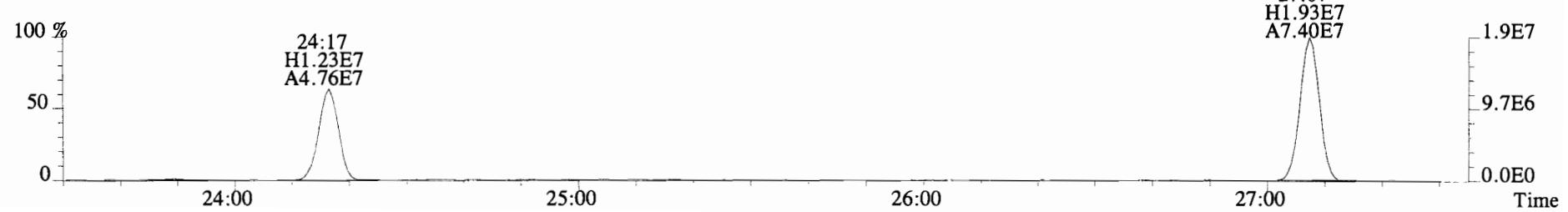
257.9584 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2072.0,0.00%,F,F)



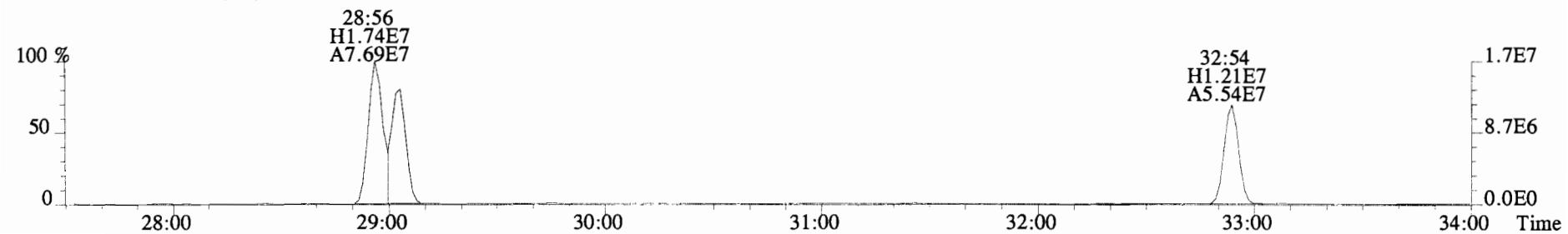
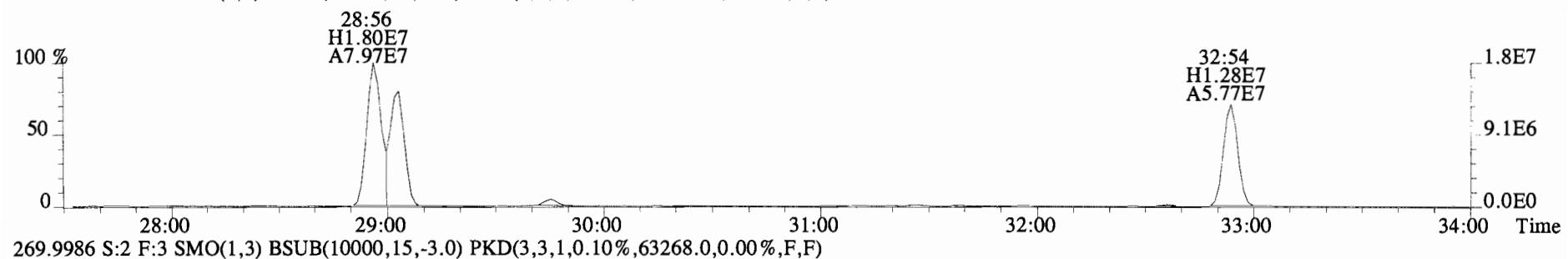
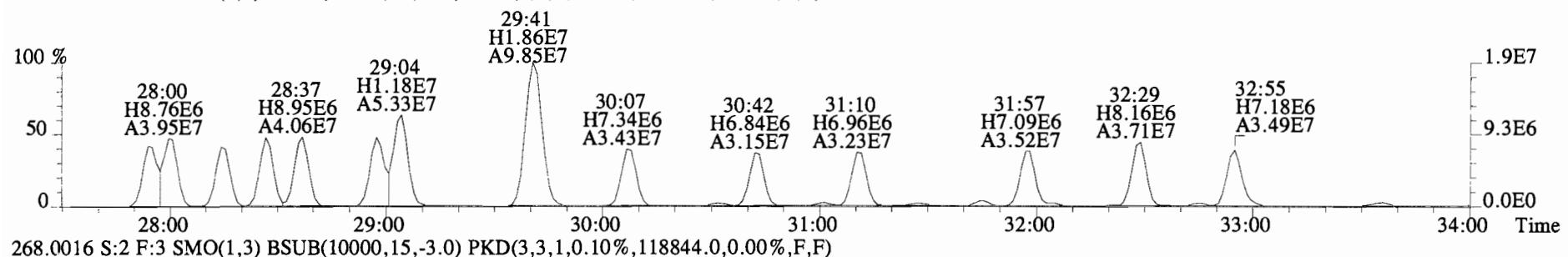
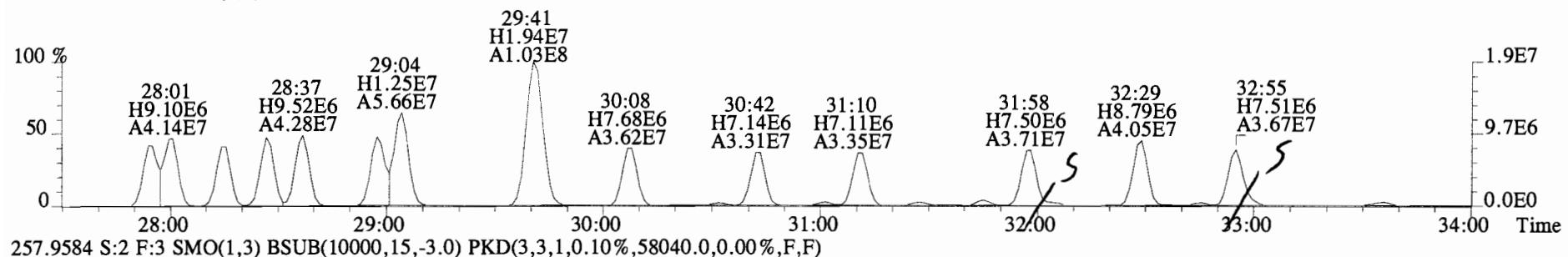
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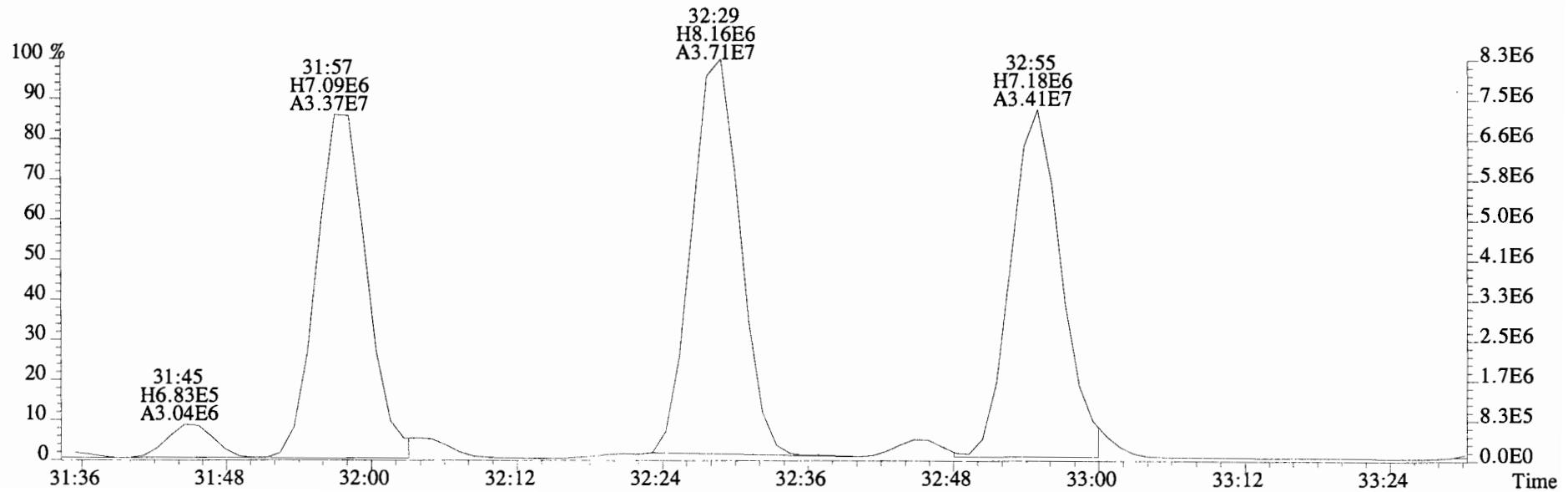
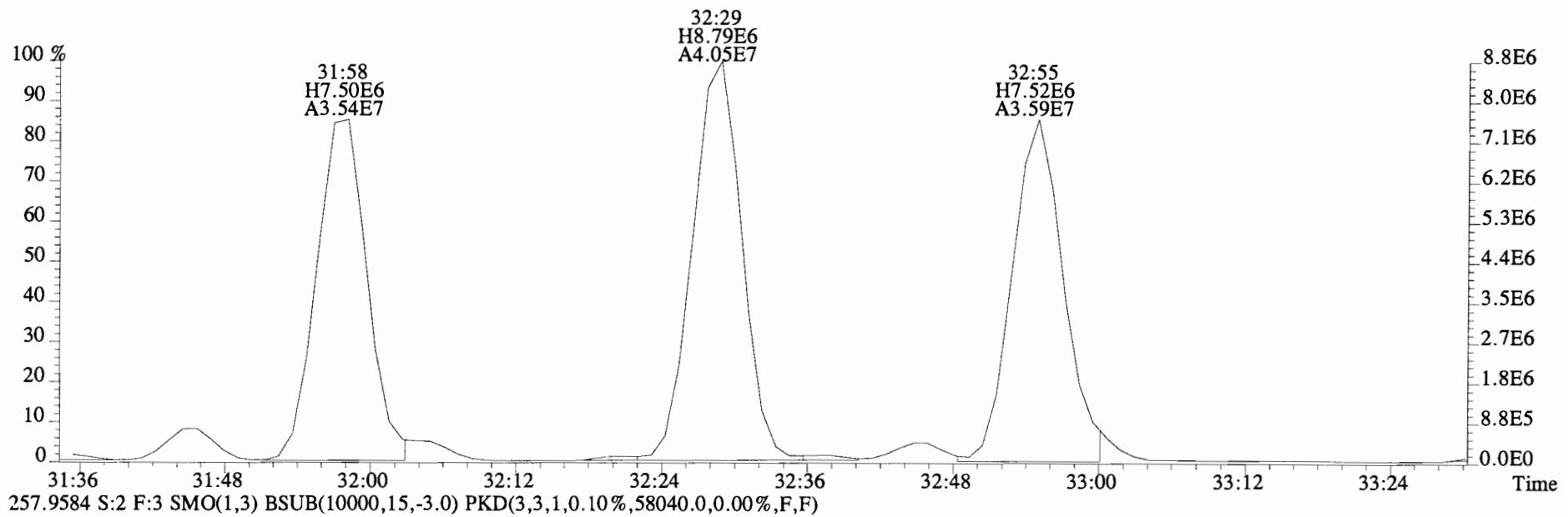
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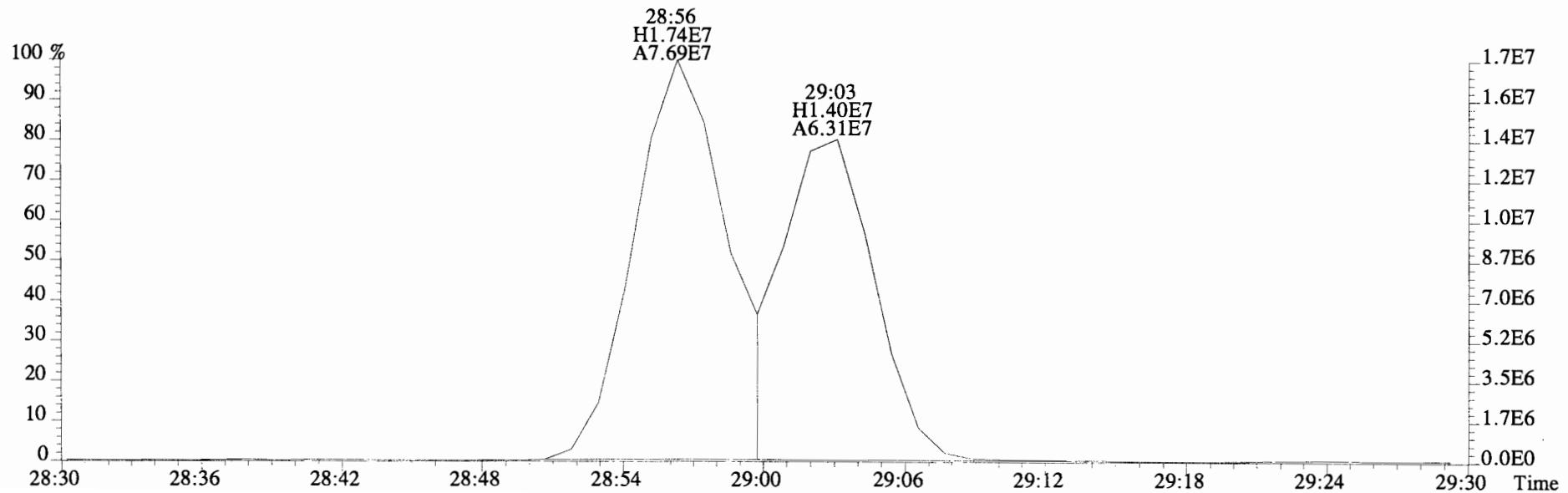
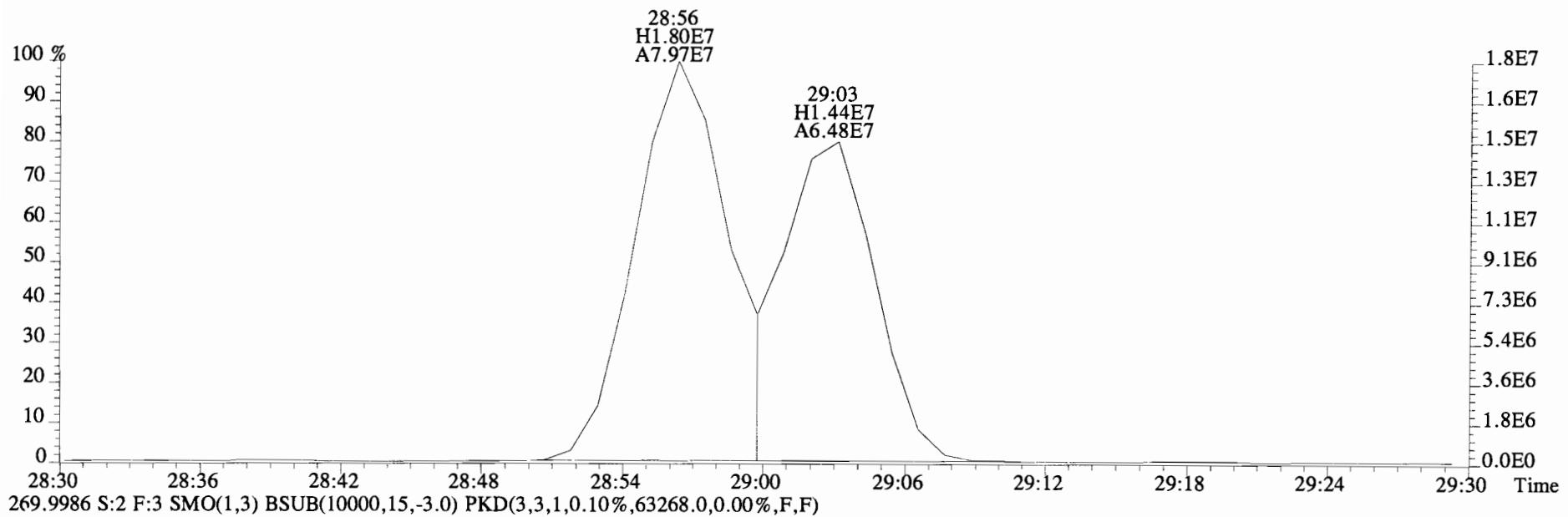
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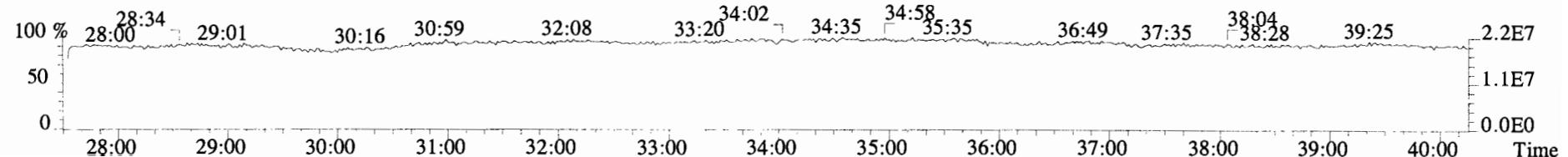
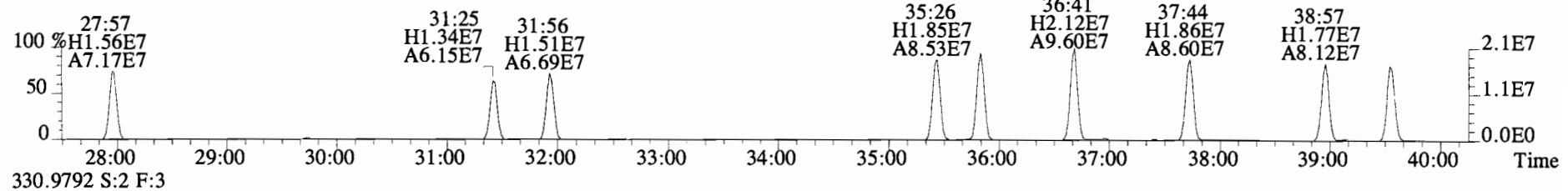
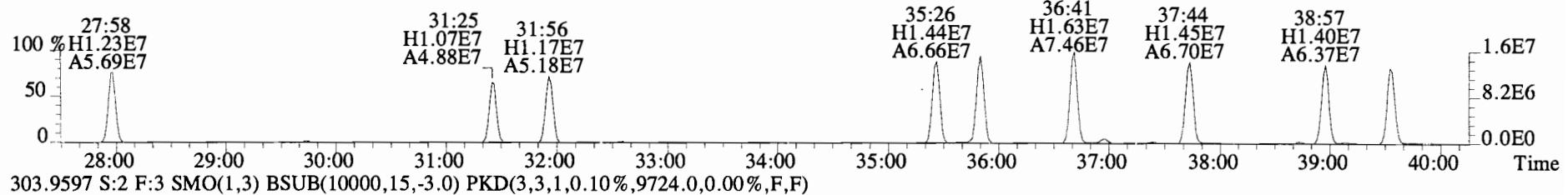
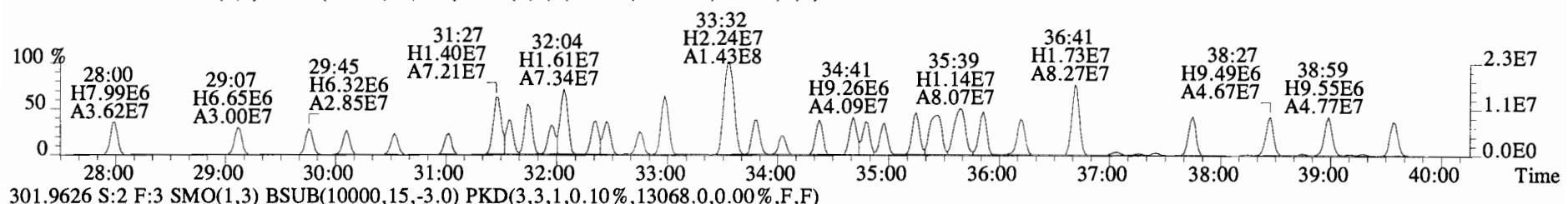
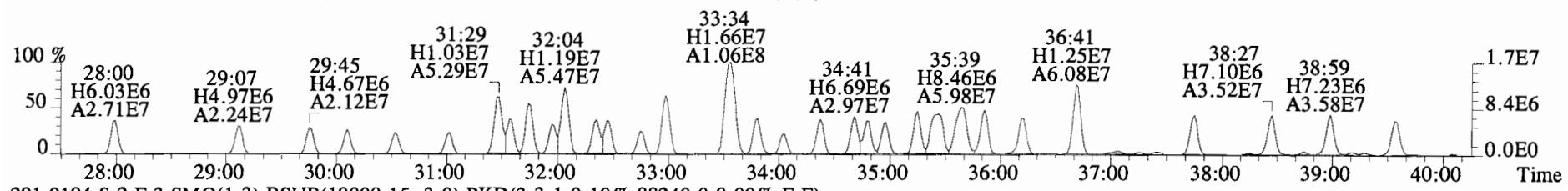
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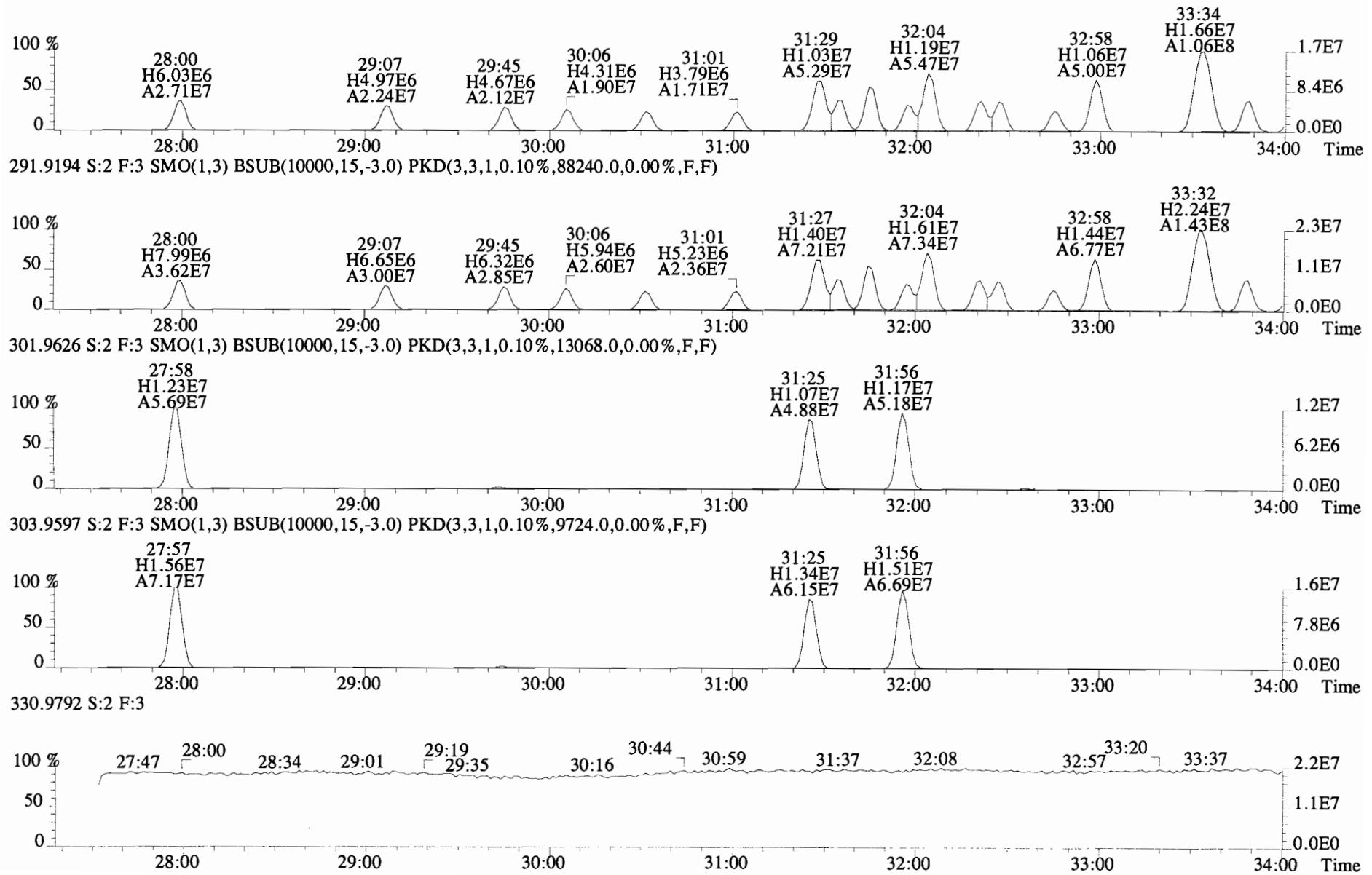
File:141024E2 #1-762 Acq:25-OCT-2014 03:14:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
268.0016 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,118844.0,0.00%,F,F)



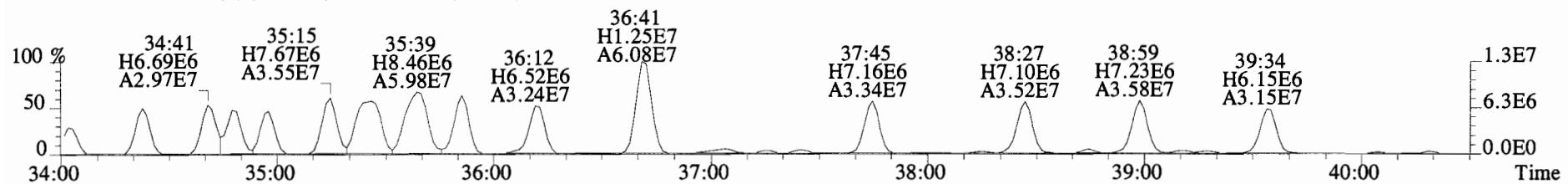
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 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
 289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,50064.0,0.00%,F,F)



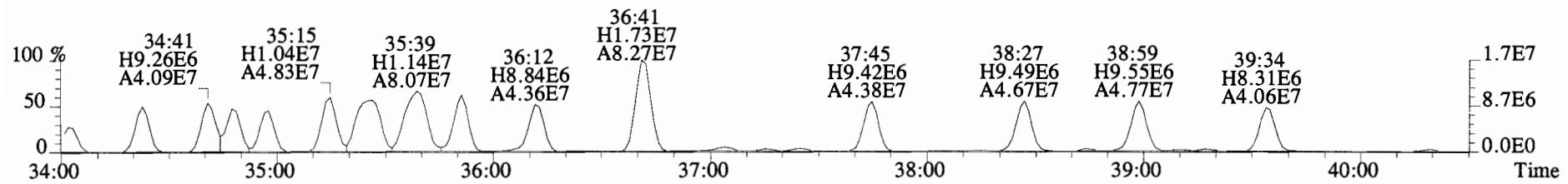
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 289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,50064.0,0.00%,F,F)



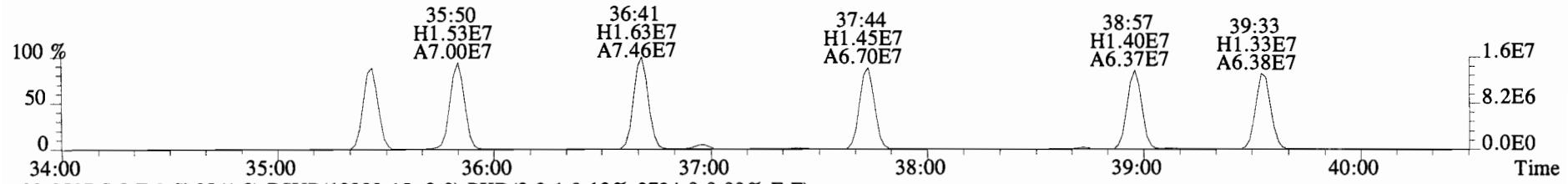
File:141024E2 #1-762 Acq:25-OCT-2014 03:14:20 GC EI + Voltage SIR Autospec-UltimaE
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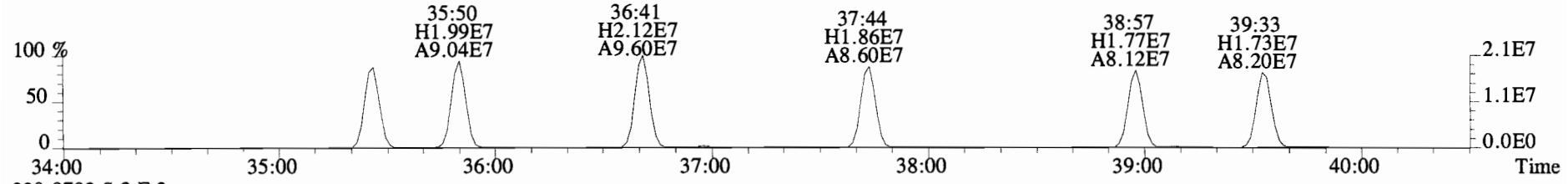
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,88240.0,0.00%,F,F)



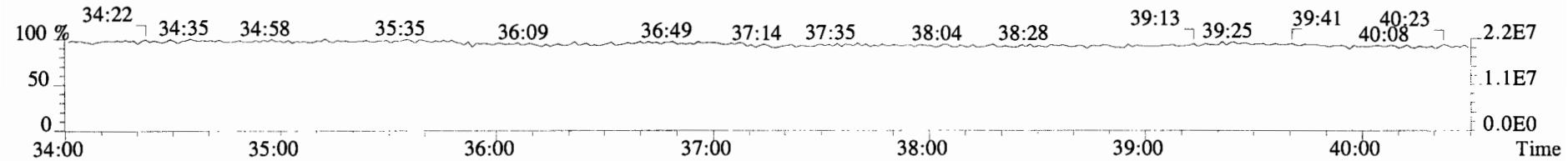
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13068.0,0.00%,F,F)



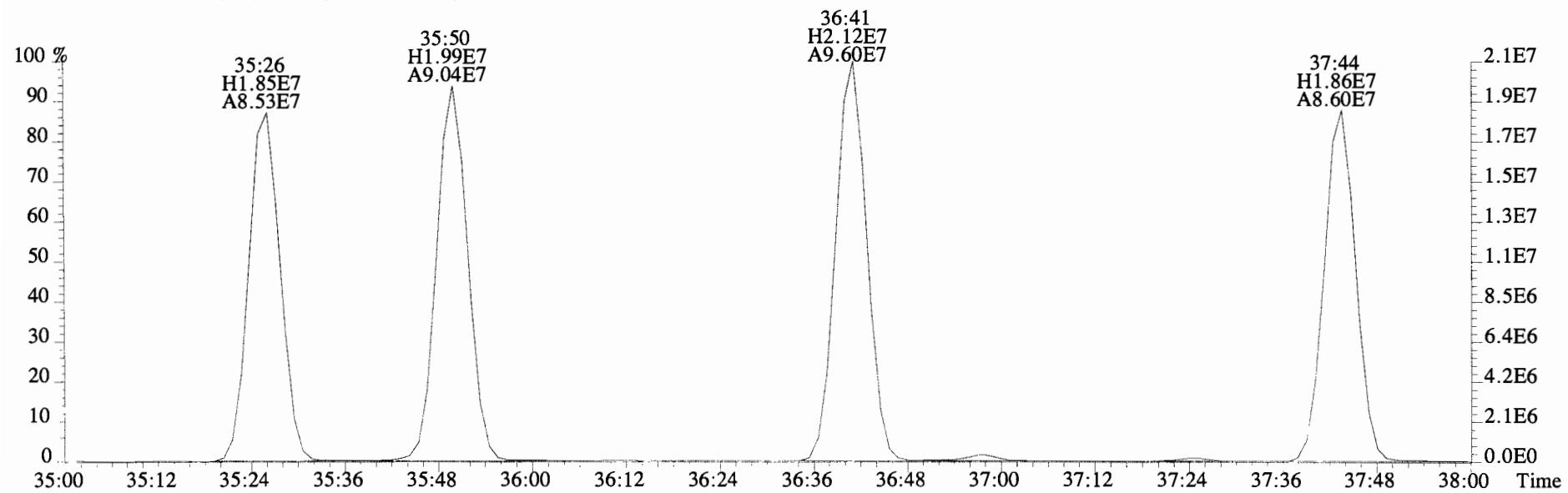
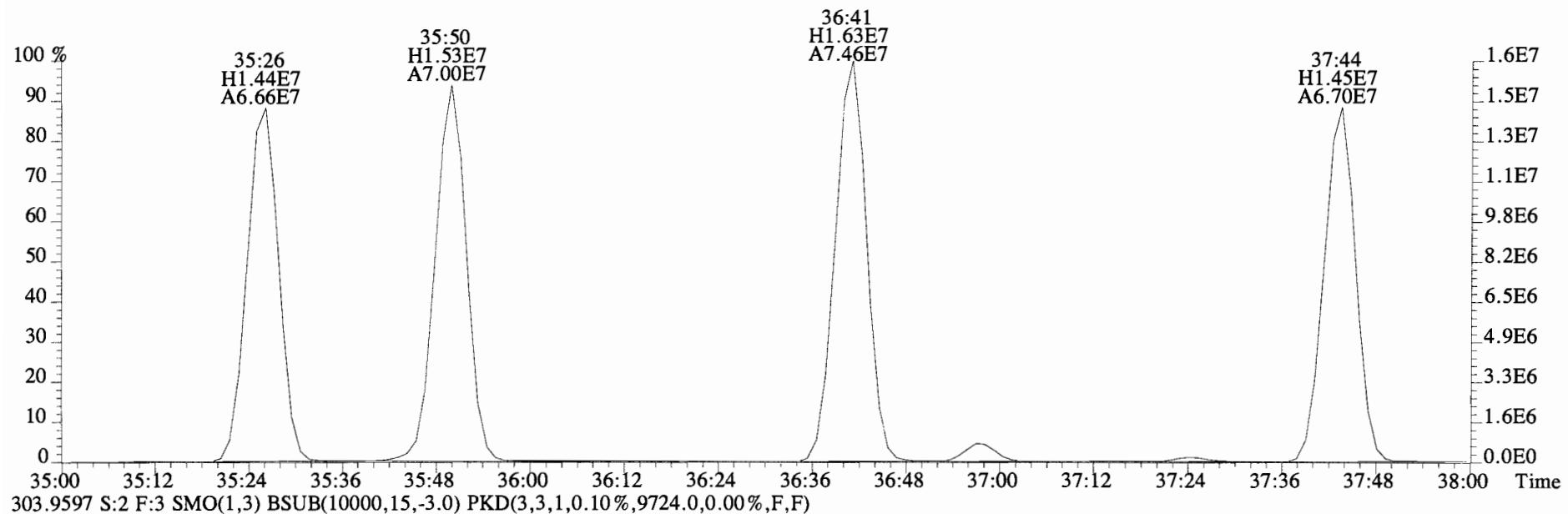
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,97240.0,0.00%,F,F)



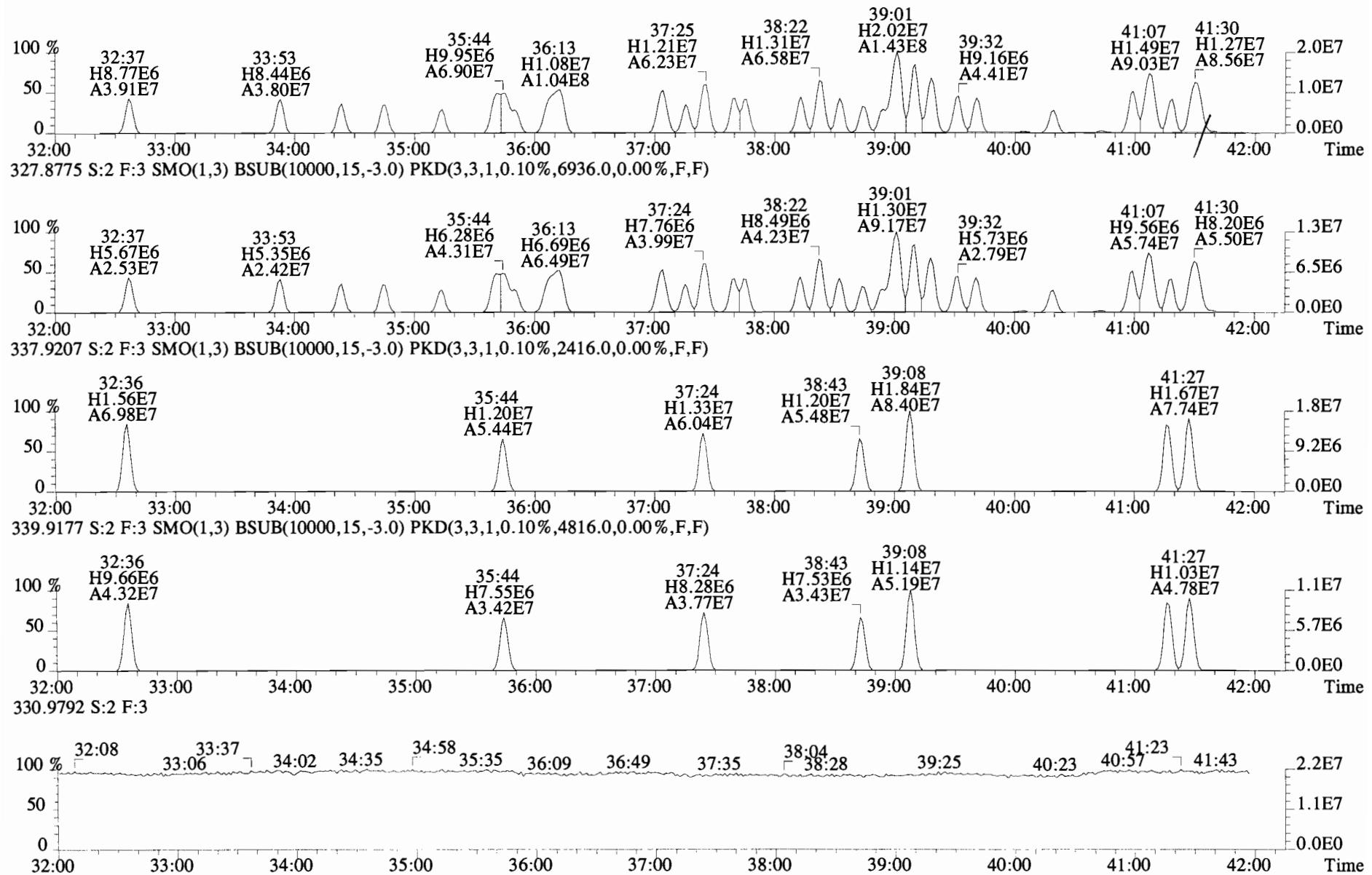
330.9792 S:2 F:3



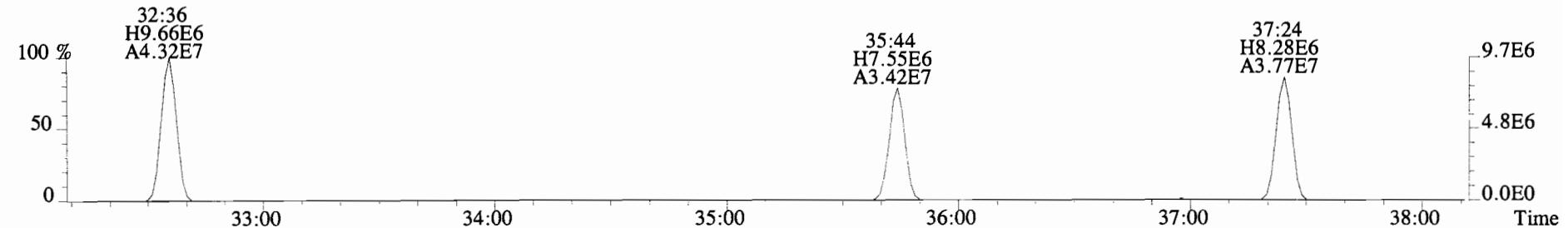
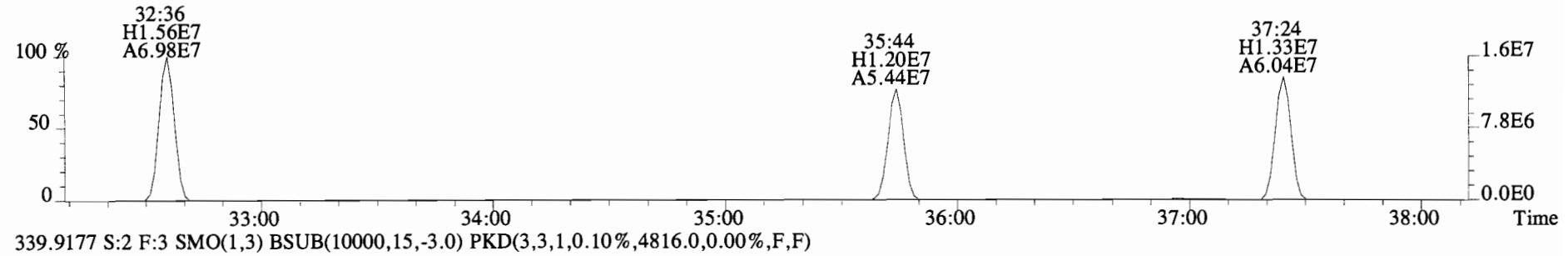
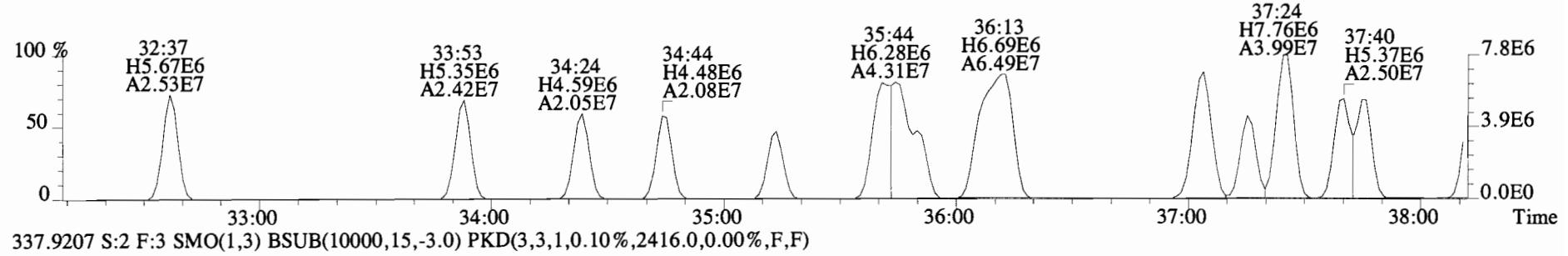
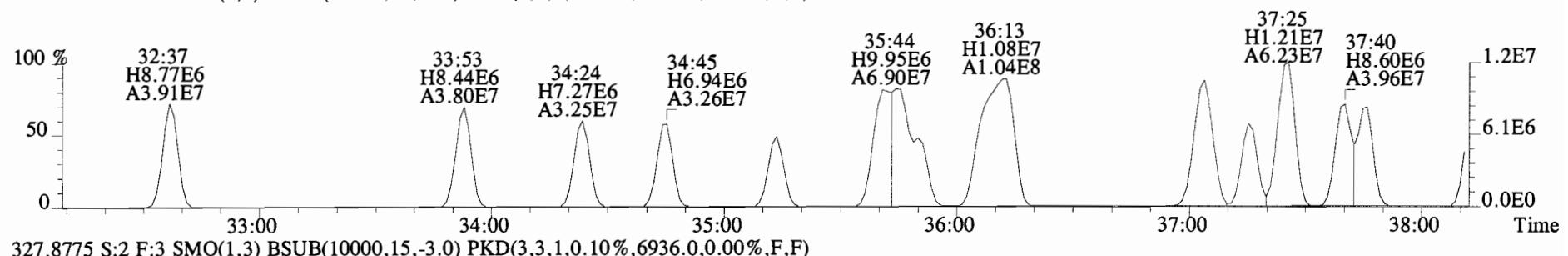
File:141024E2 #1-762 Acq:25-OCT-2014 03:14:20 GC EI + Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
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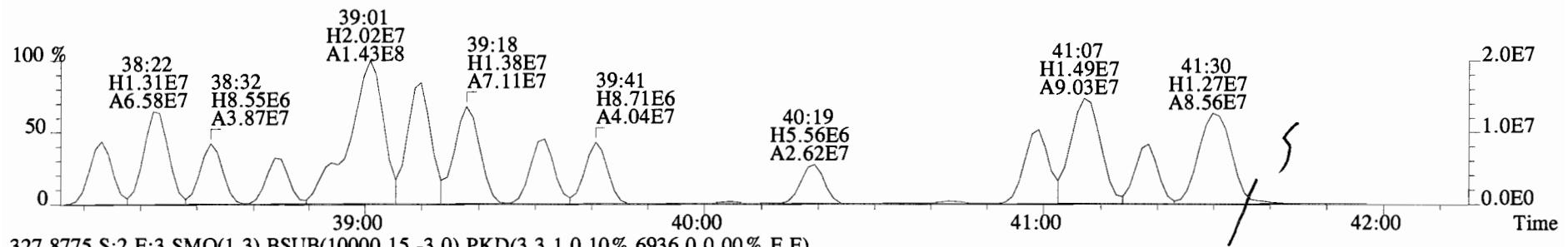
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 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
 325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2316.0,0.00%,F,F)



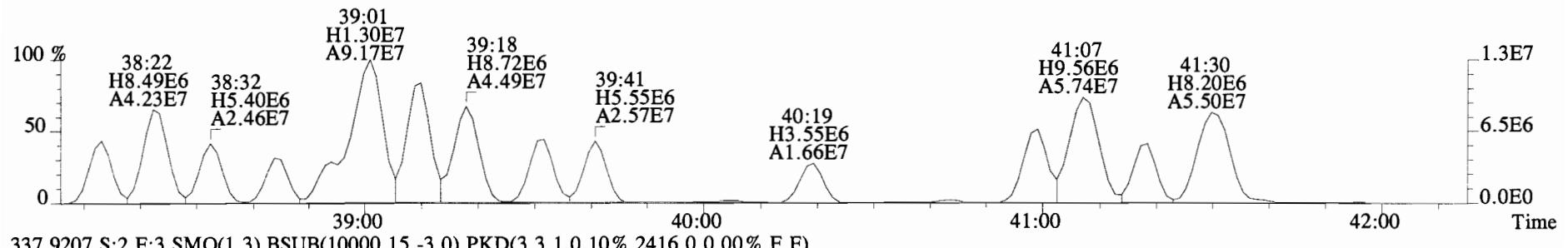
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 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
 325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2316.0,0.00%,F,F)



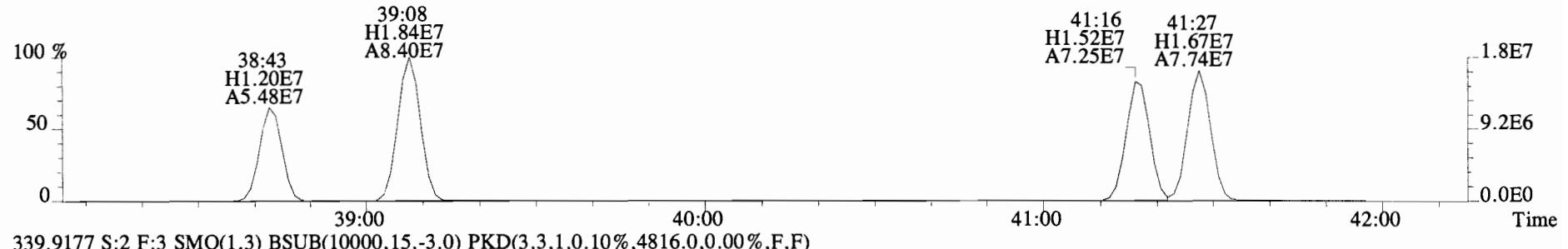
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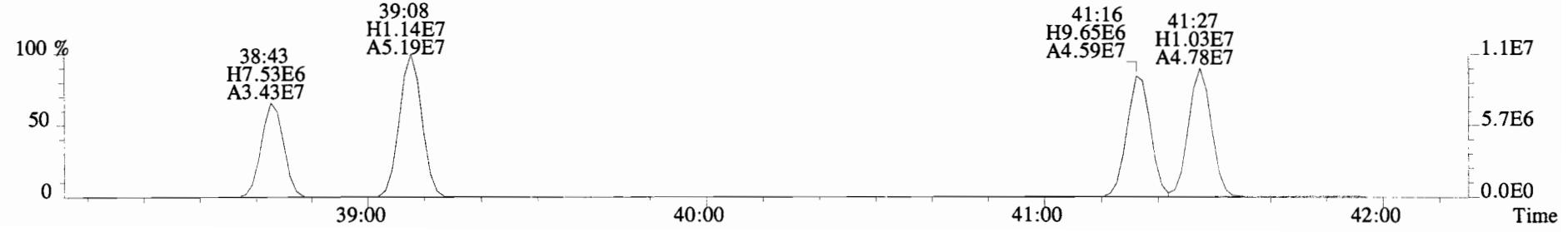
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6936.0,0.00%,F,F)



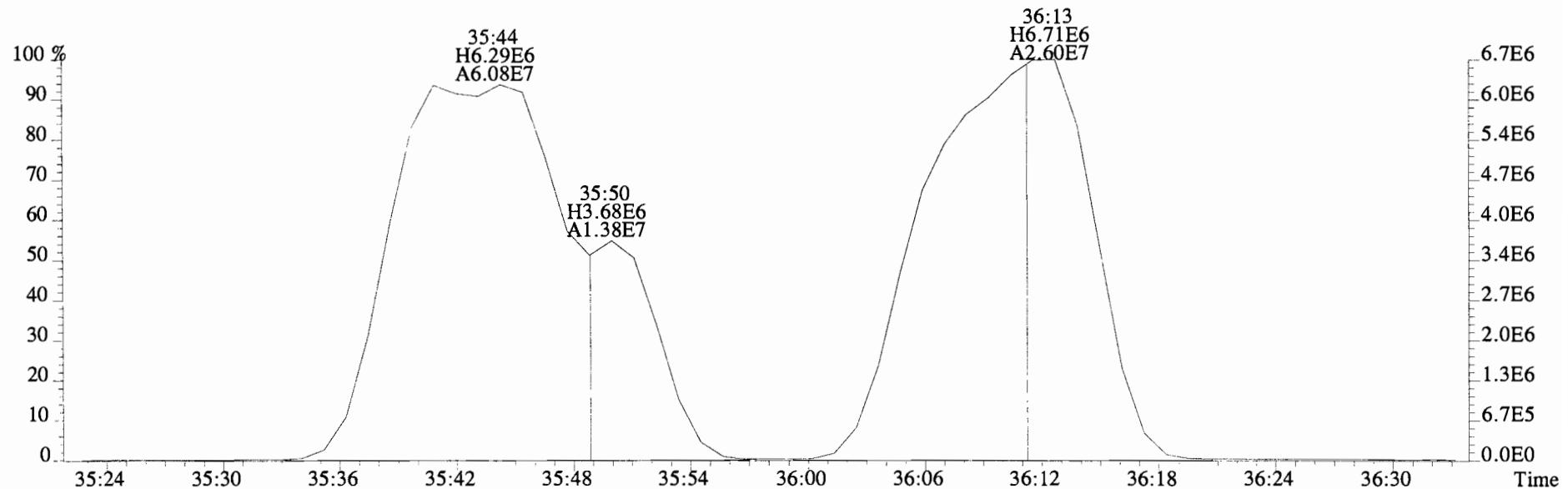
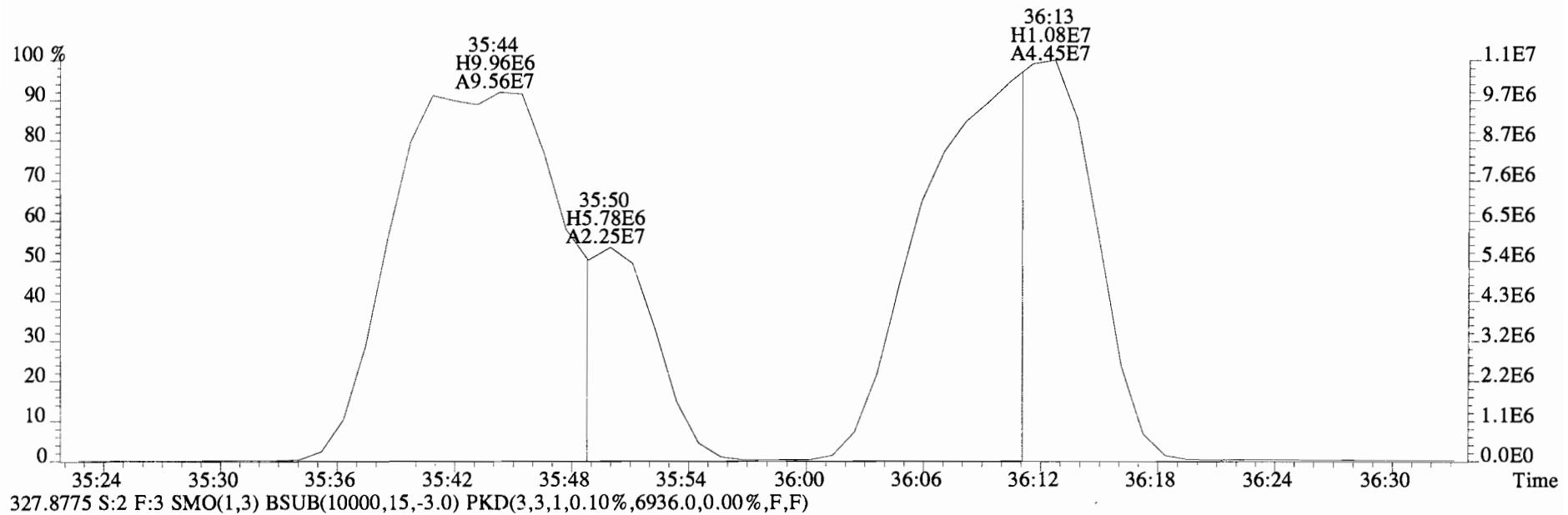
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2416.0,0.00%,F,F)



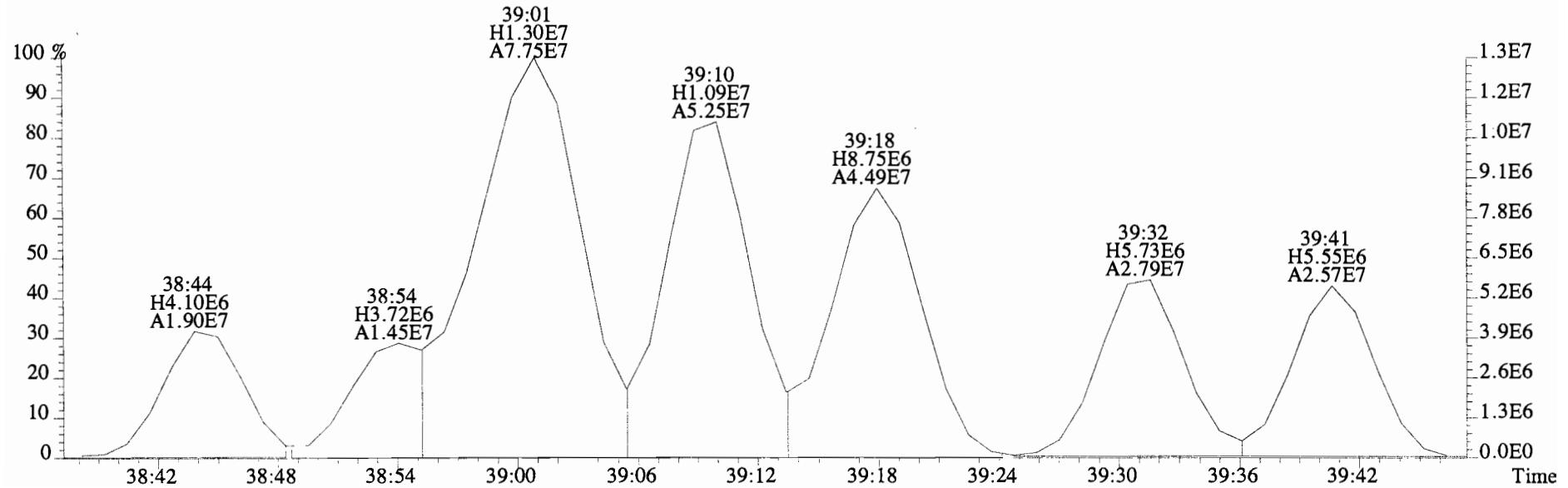
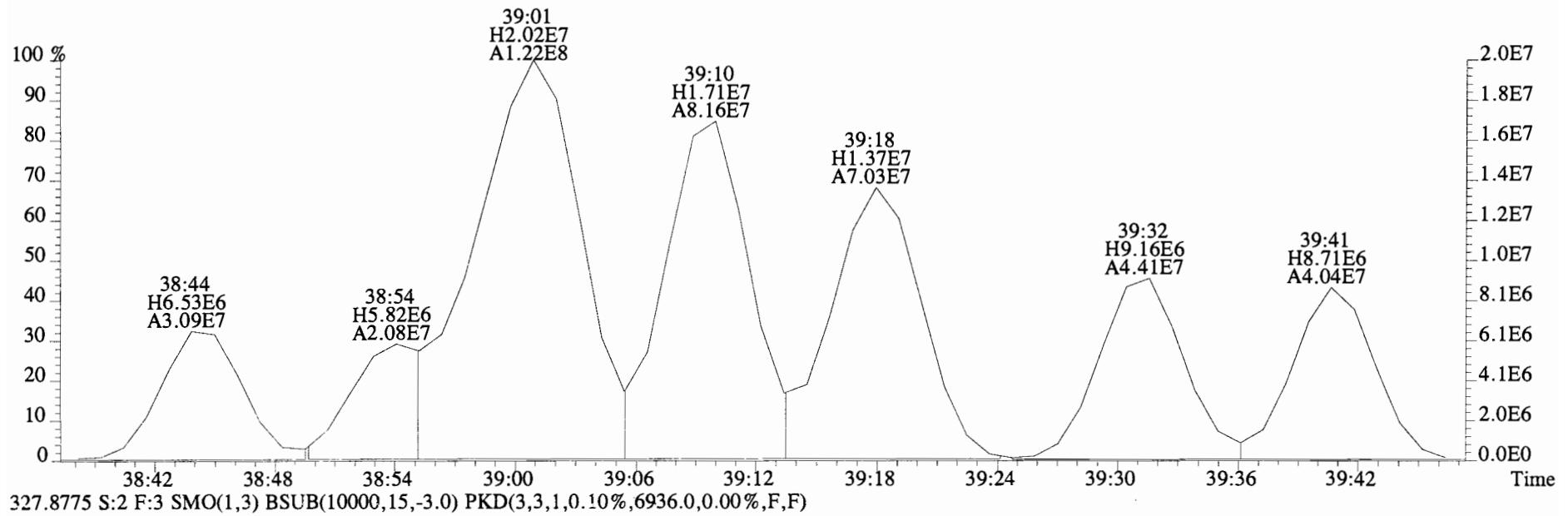
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4816.0,0.00%,F,F)



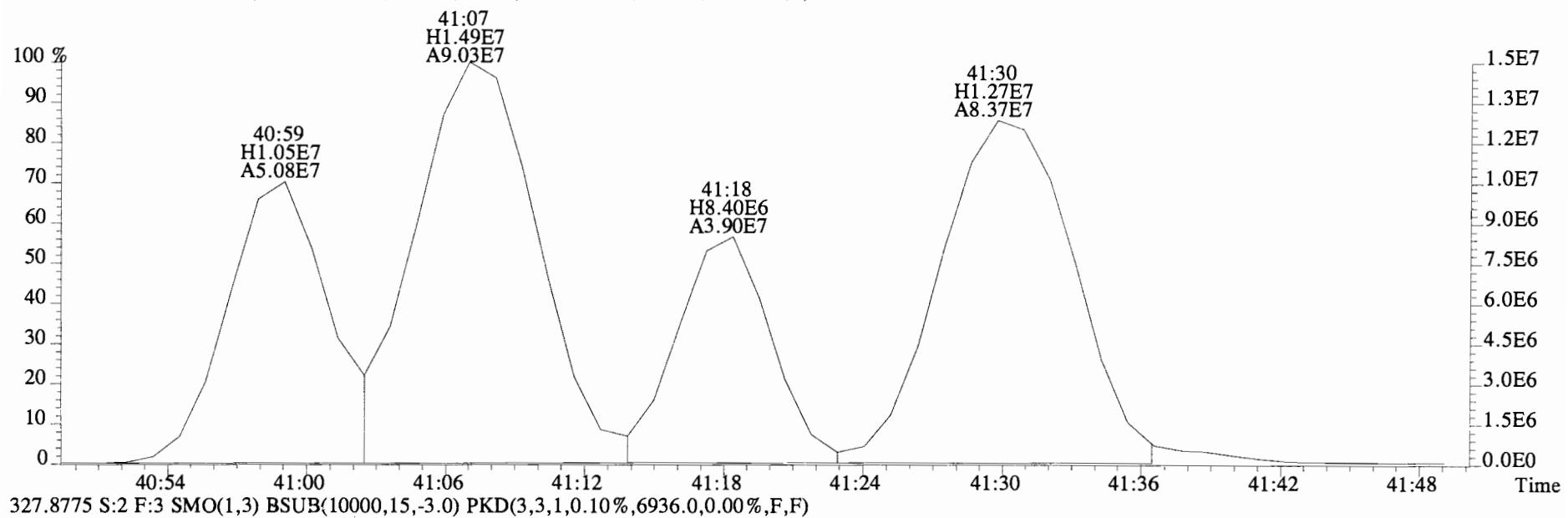
File:141024E2 #1-762 Acq:25-OCT-2014 03:14:20 GC EI + Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
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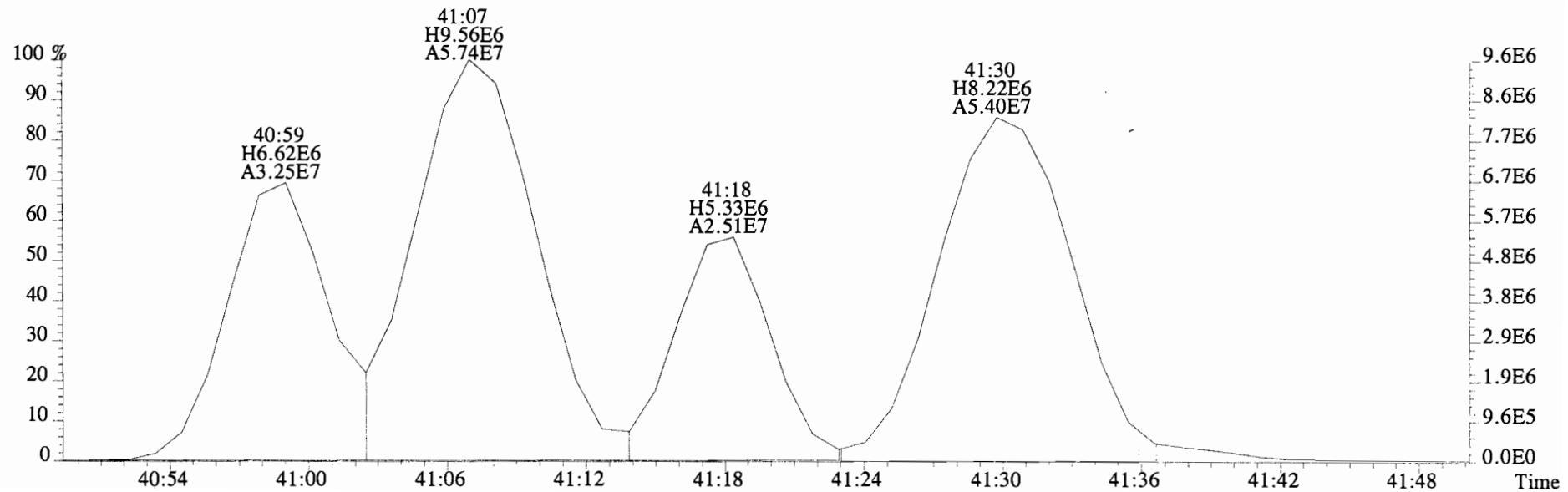
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
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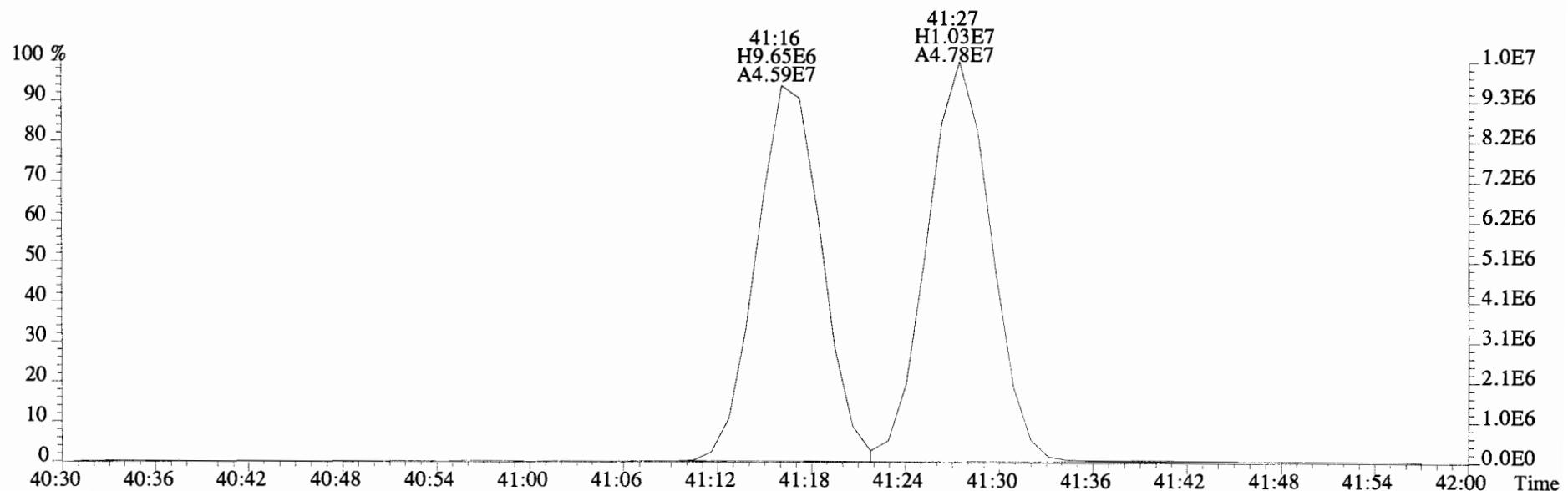
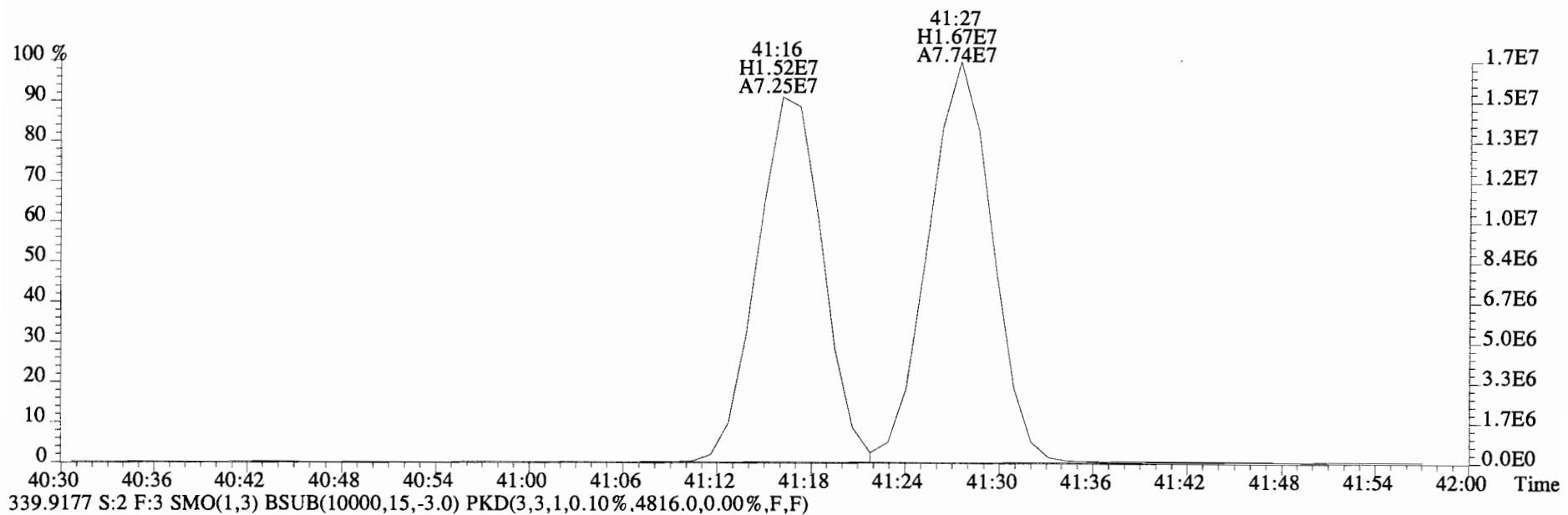
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
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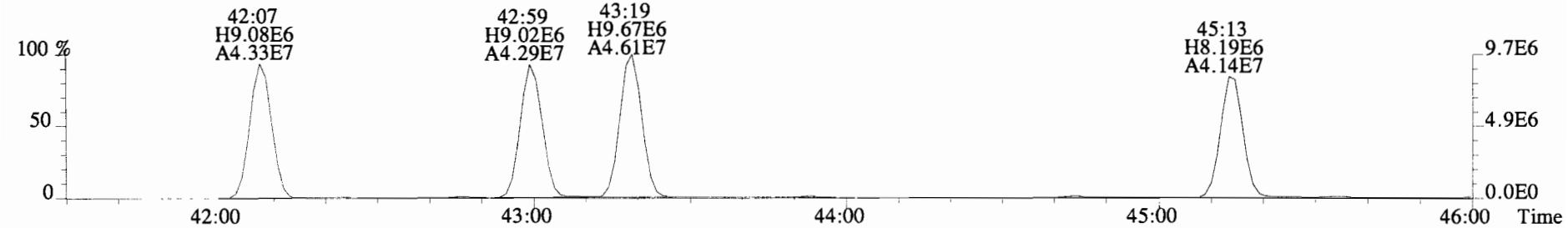
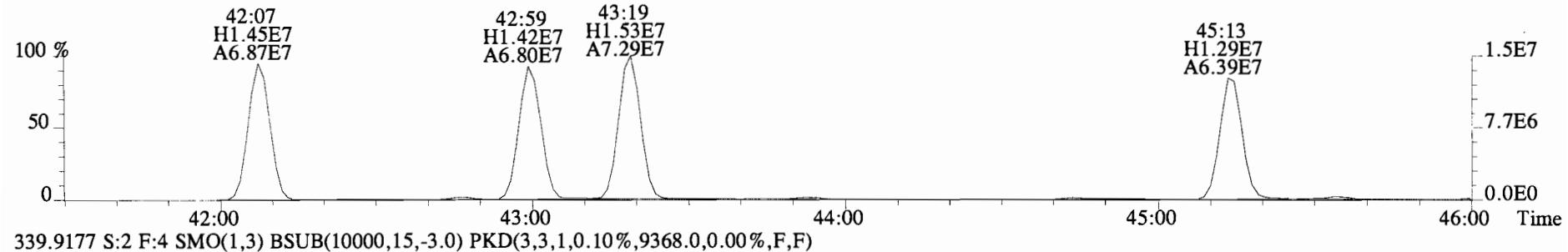
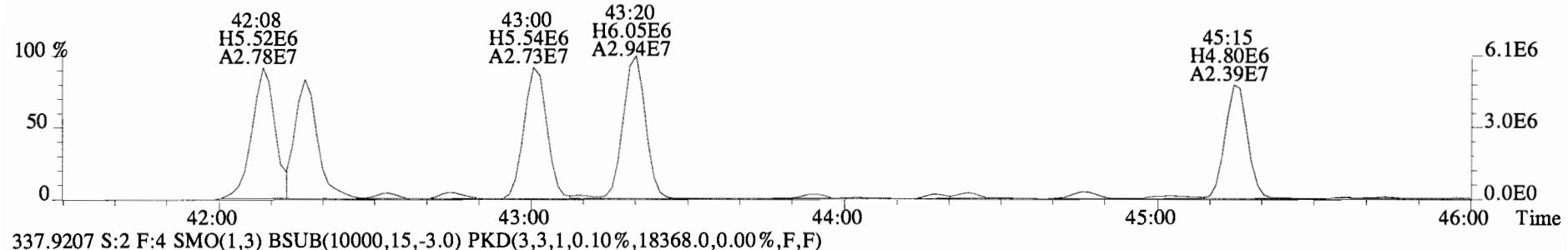
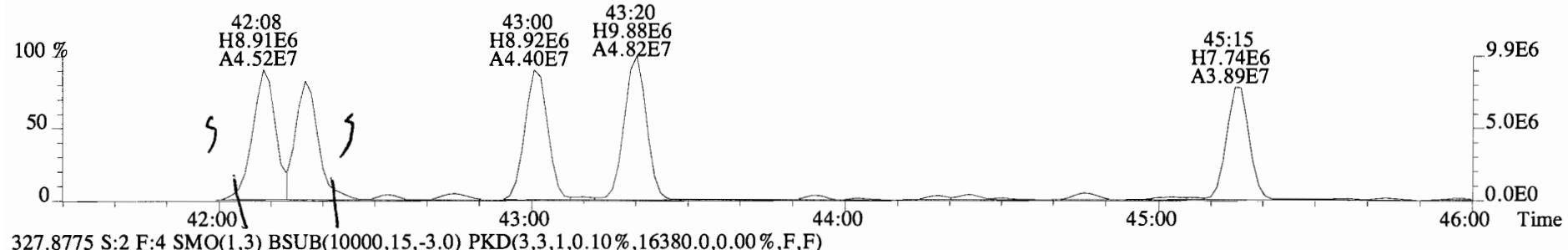
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6936.0,0.00%,F,F)



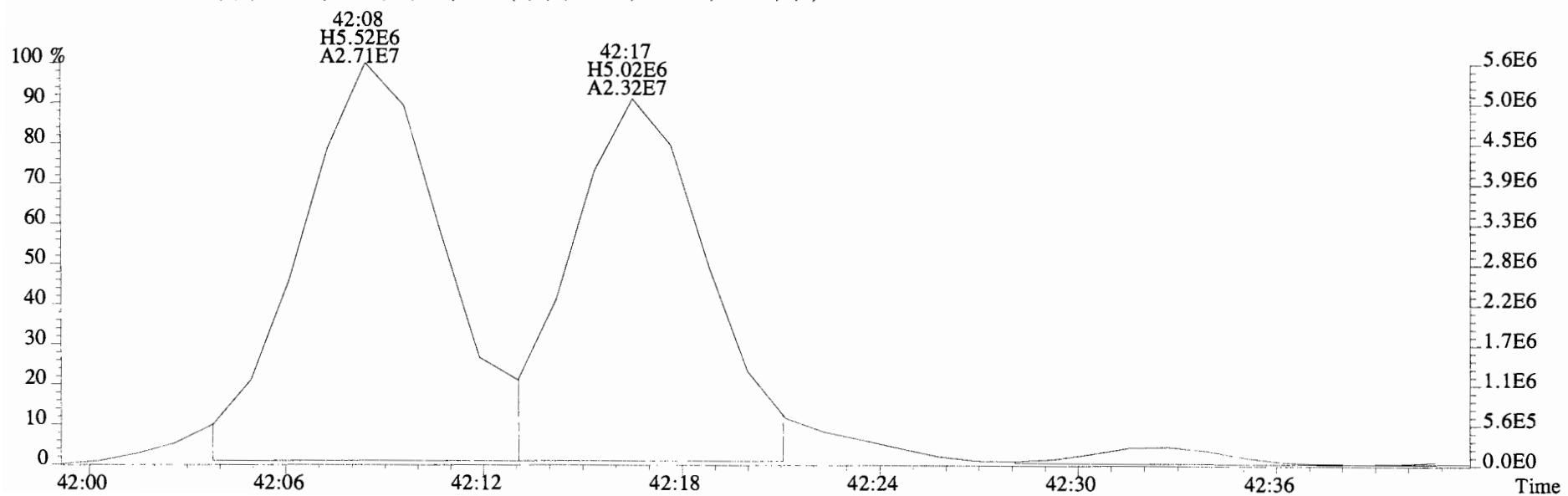
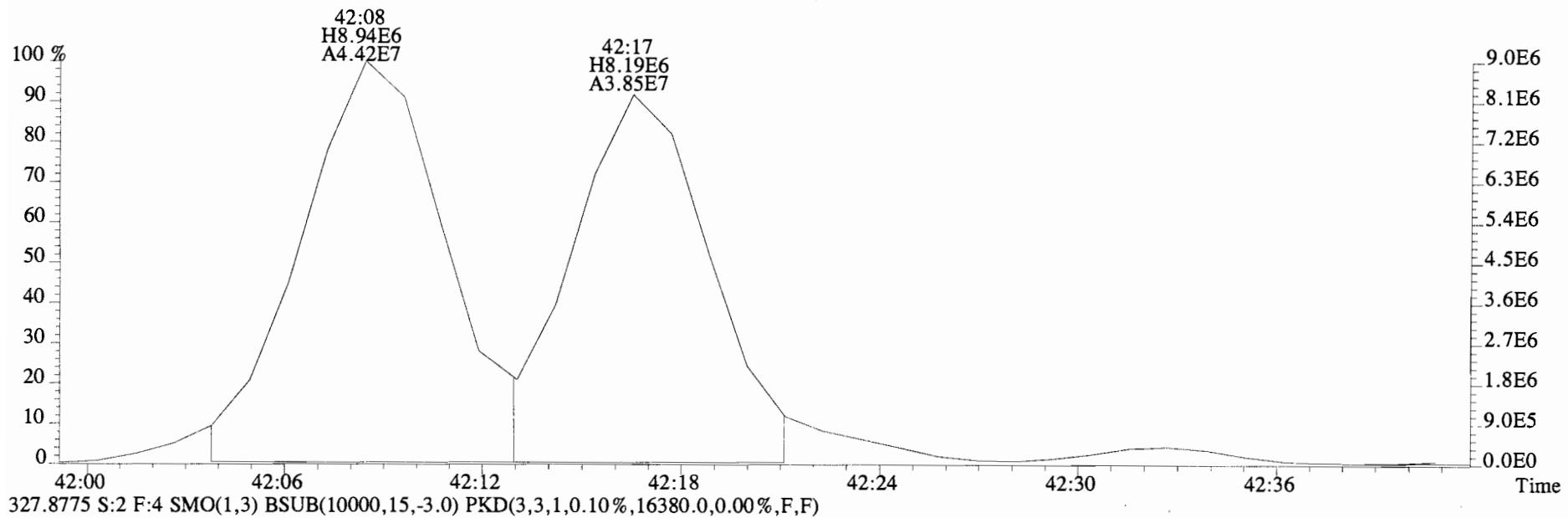
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2416.0,0.00%,F,F)



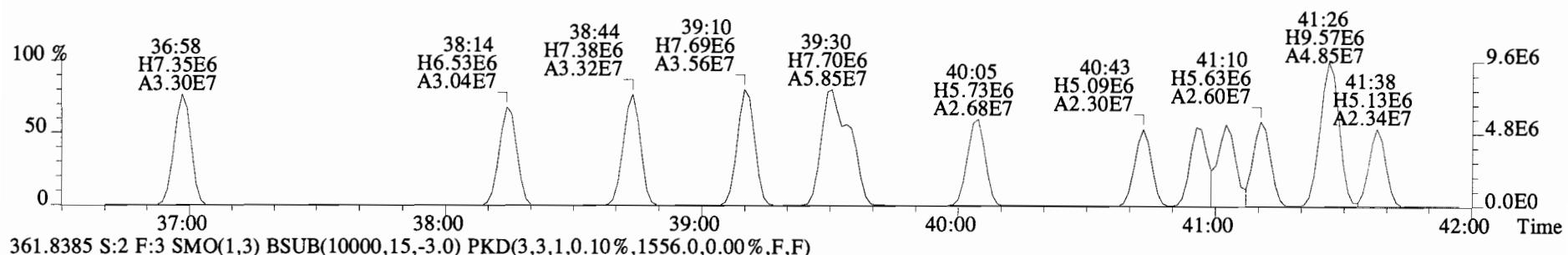
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
325.8804 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,21916.0,0.00%,F,F)



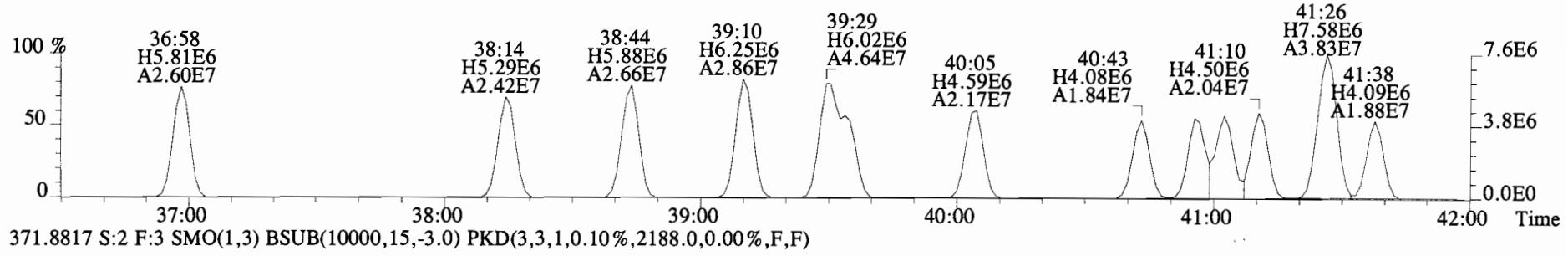
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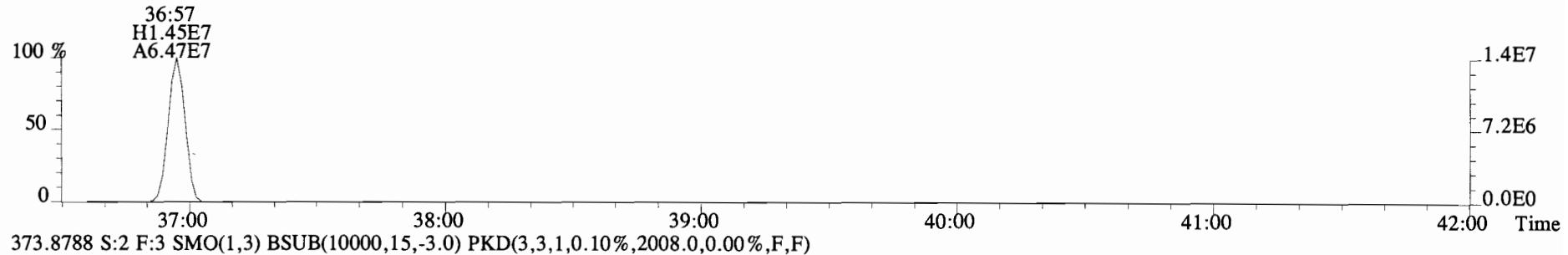
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 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
 359.8415 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1572.0,0.00%,F,F)



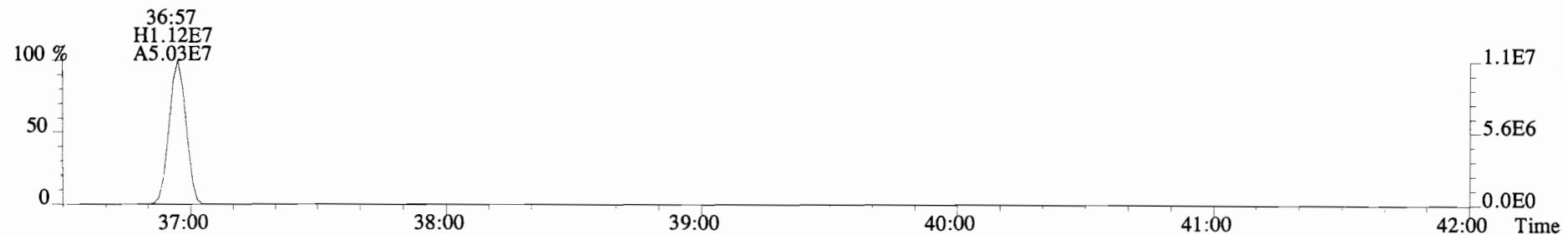
361.8385 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1556.0,0.00%,F,F)



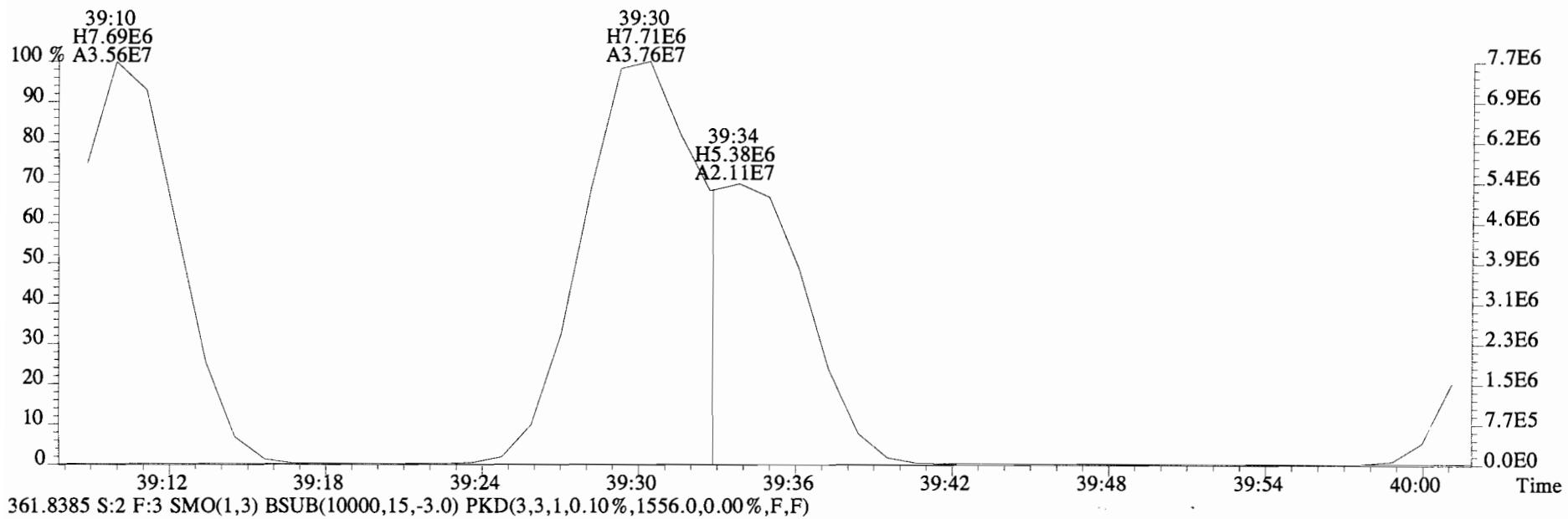
371.8817 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2188.0,0.00%,F,F)



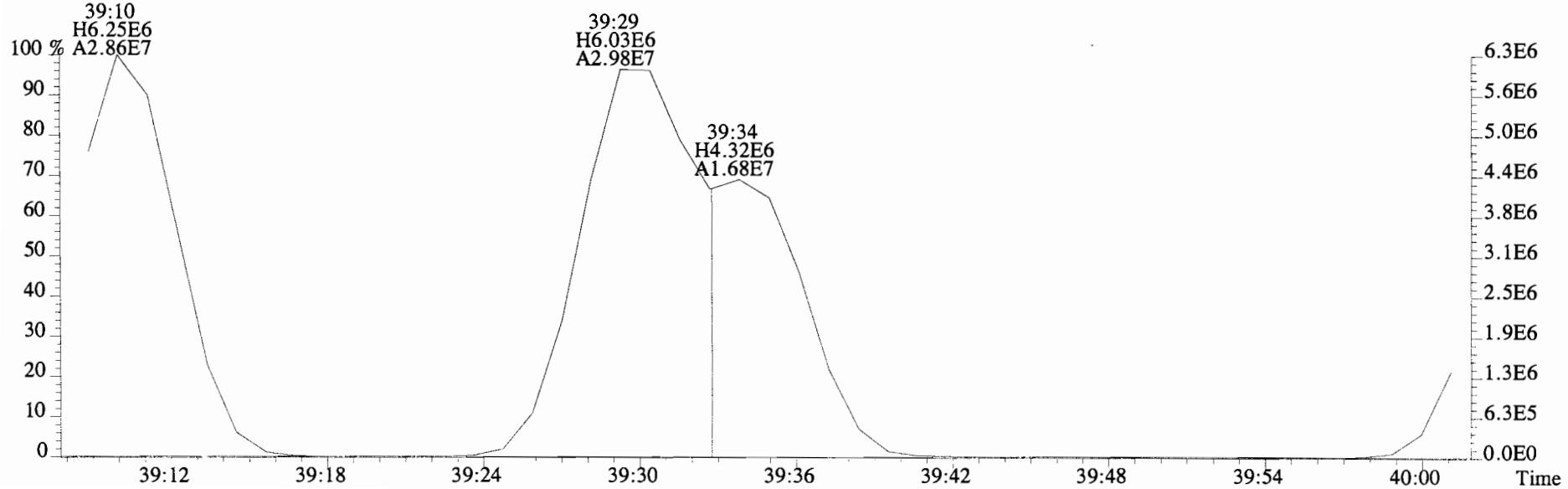
373.8788 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2008.0,0.00%,F,F)



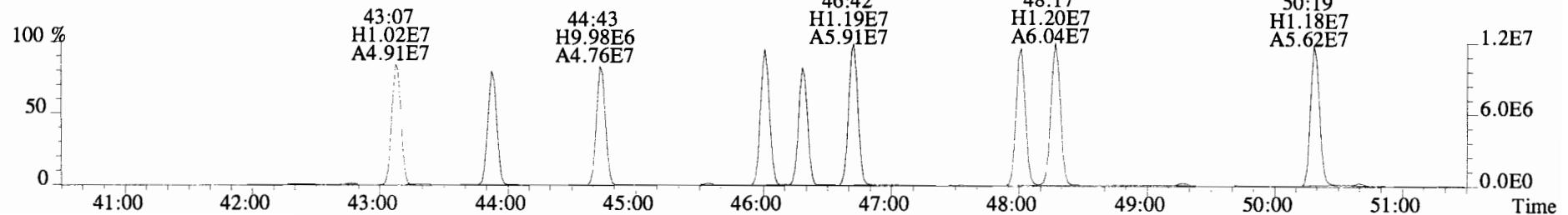
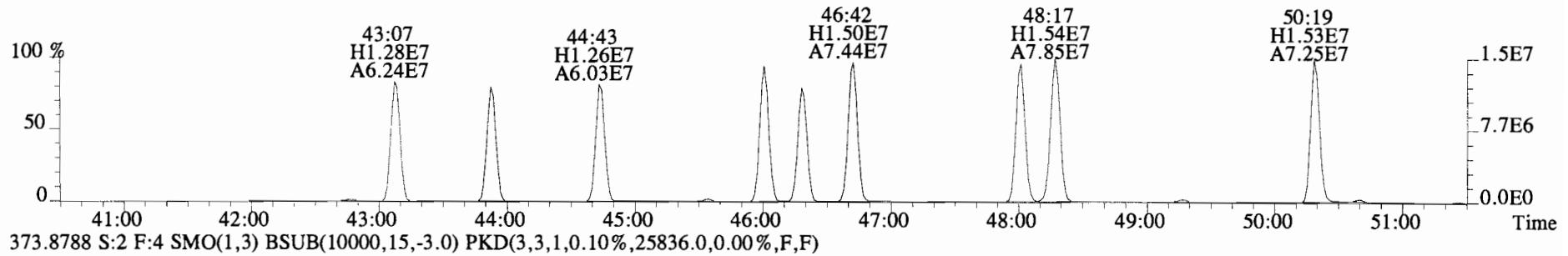
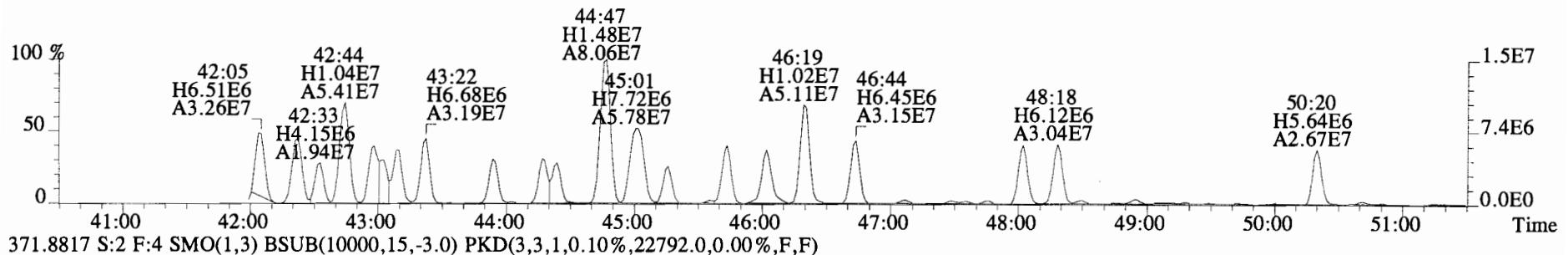
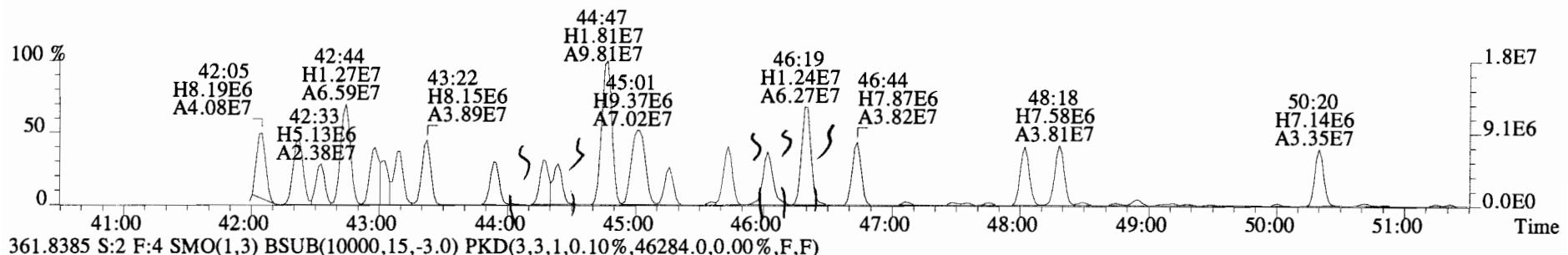
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
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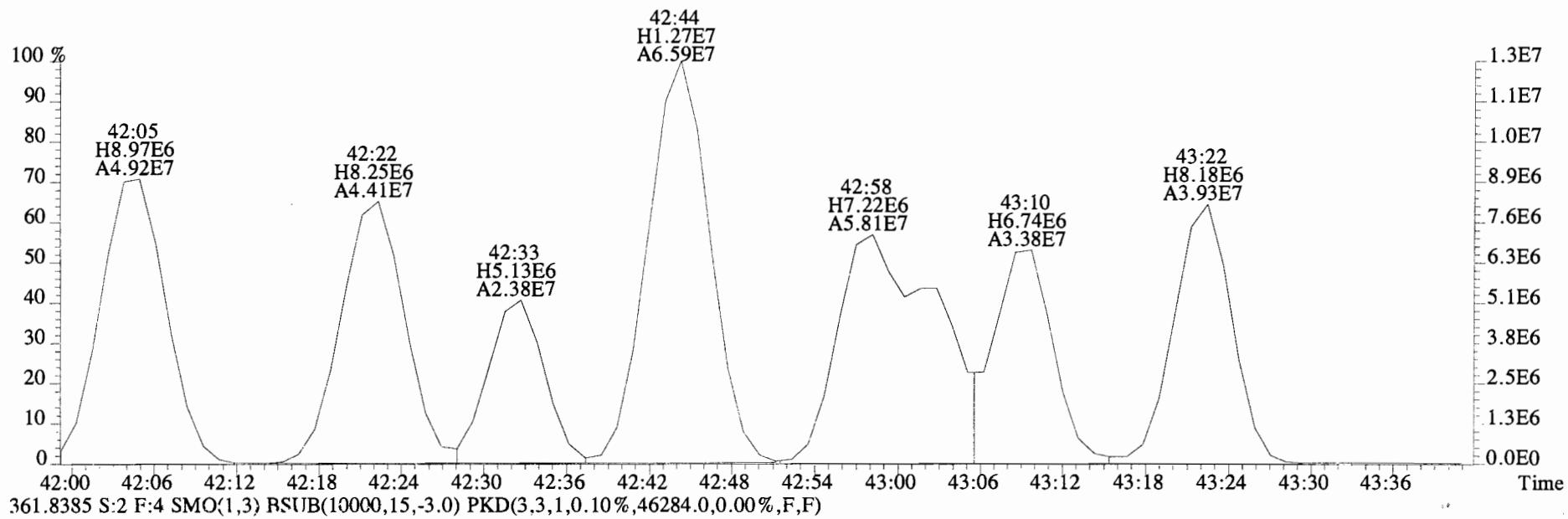
361.8385 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1556.0,0.00%,F,F)



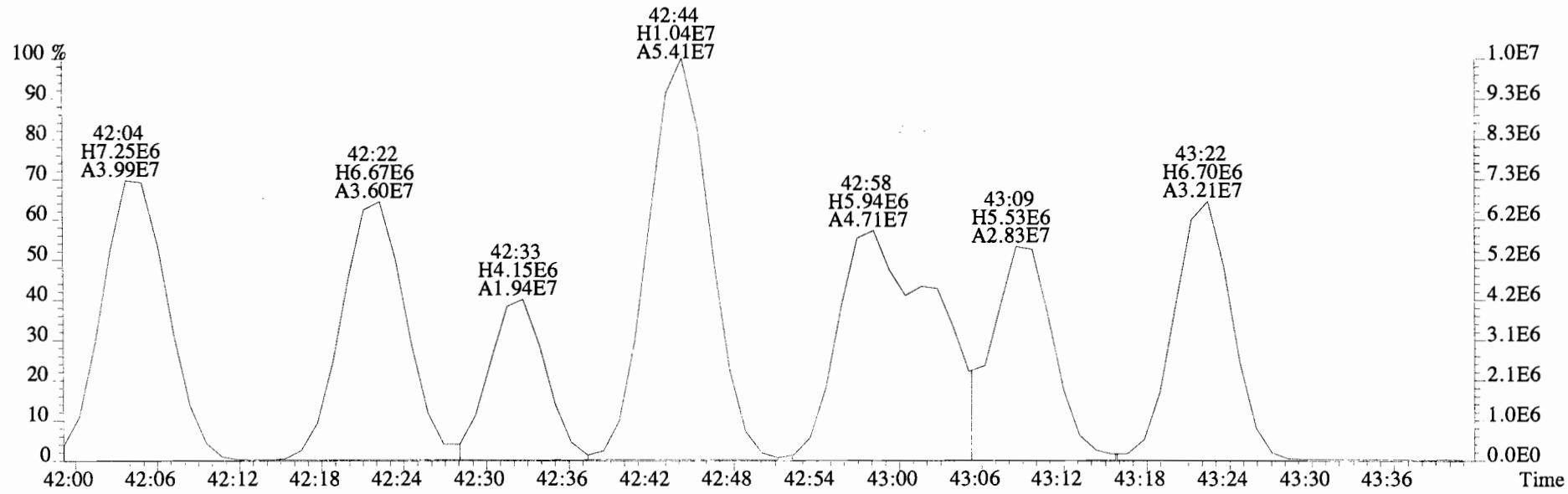
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 359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,58540.0,0.00%,F,F)



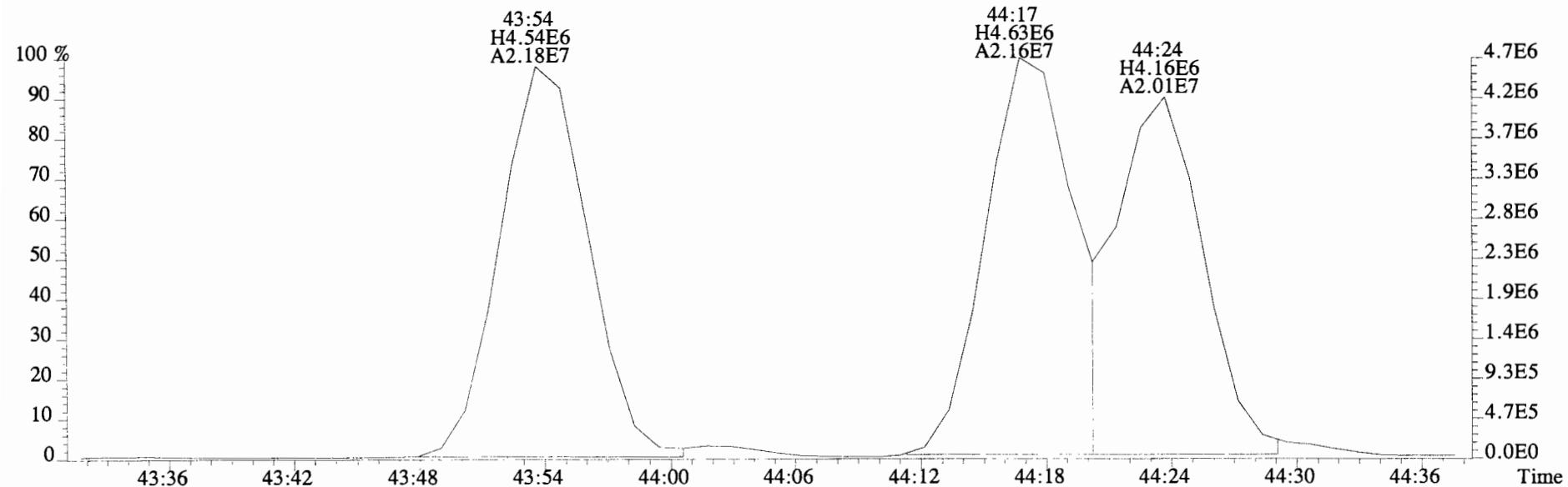
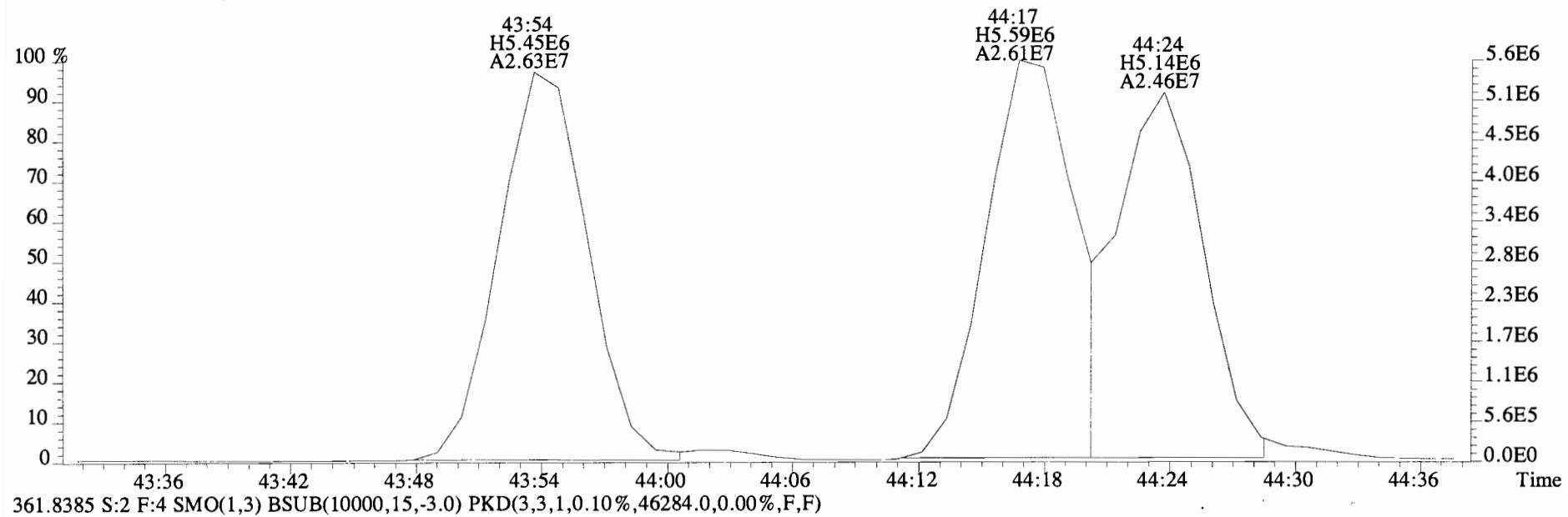
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
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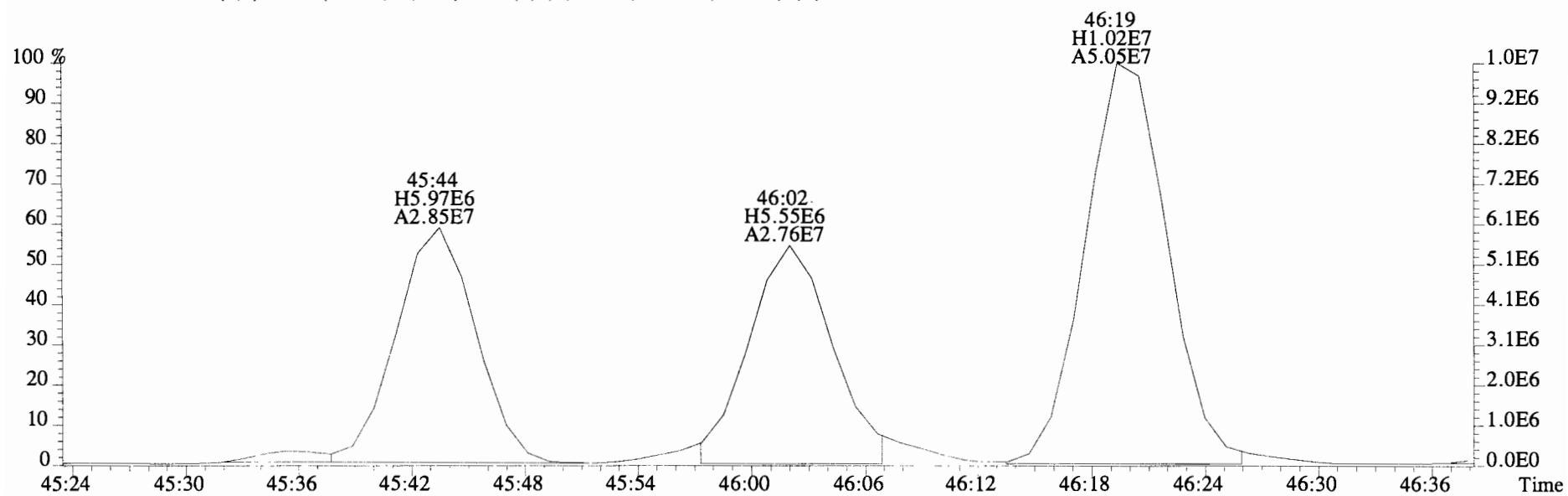
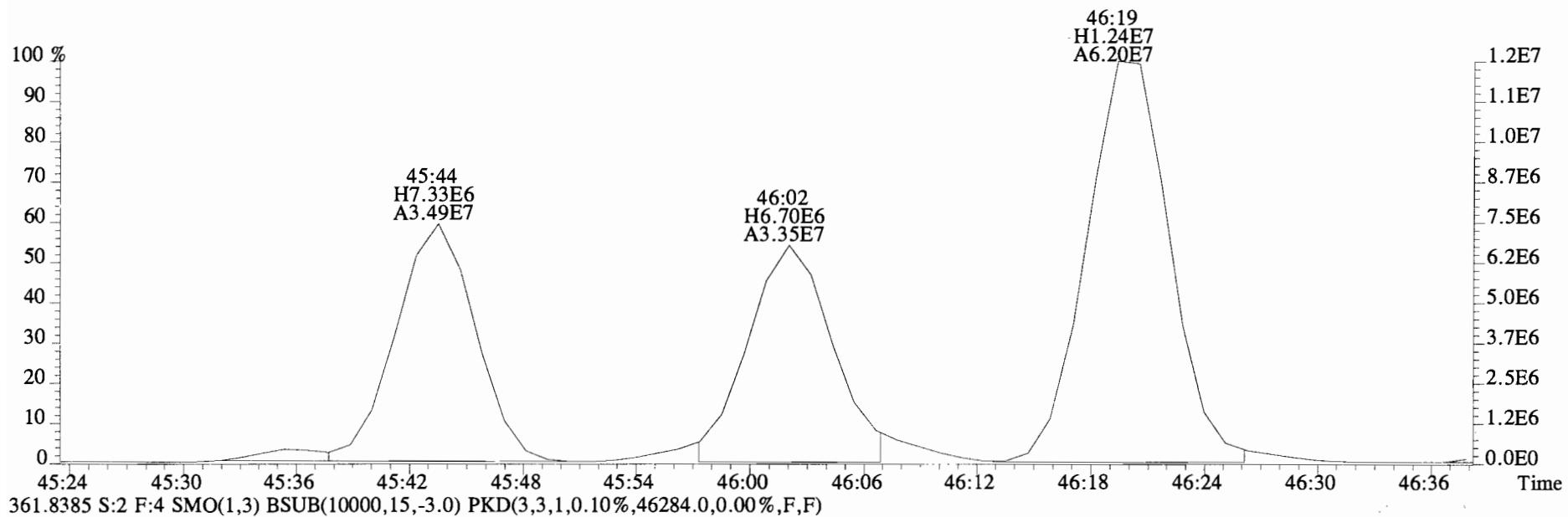
361.8385 S:2 F:4 SMO(1,3) RSUB(10000,15,-3.0) PKD(3,3,1,0.10%,46284.0,0.00%,F,F)



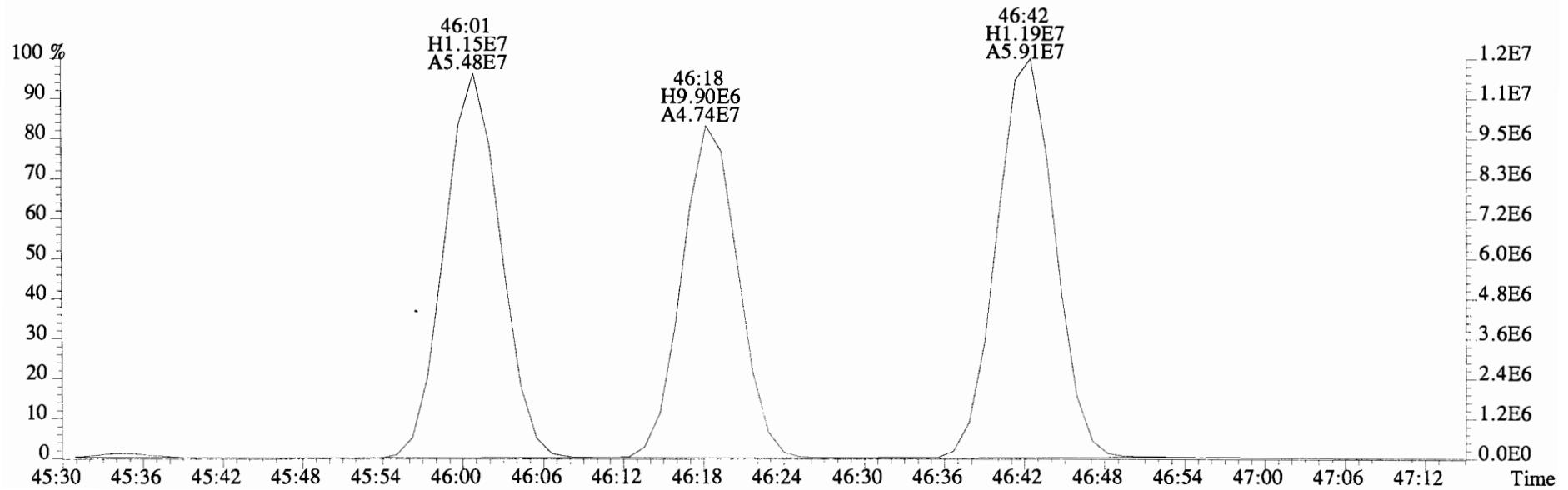
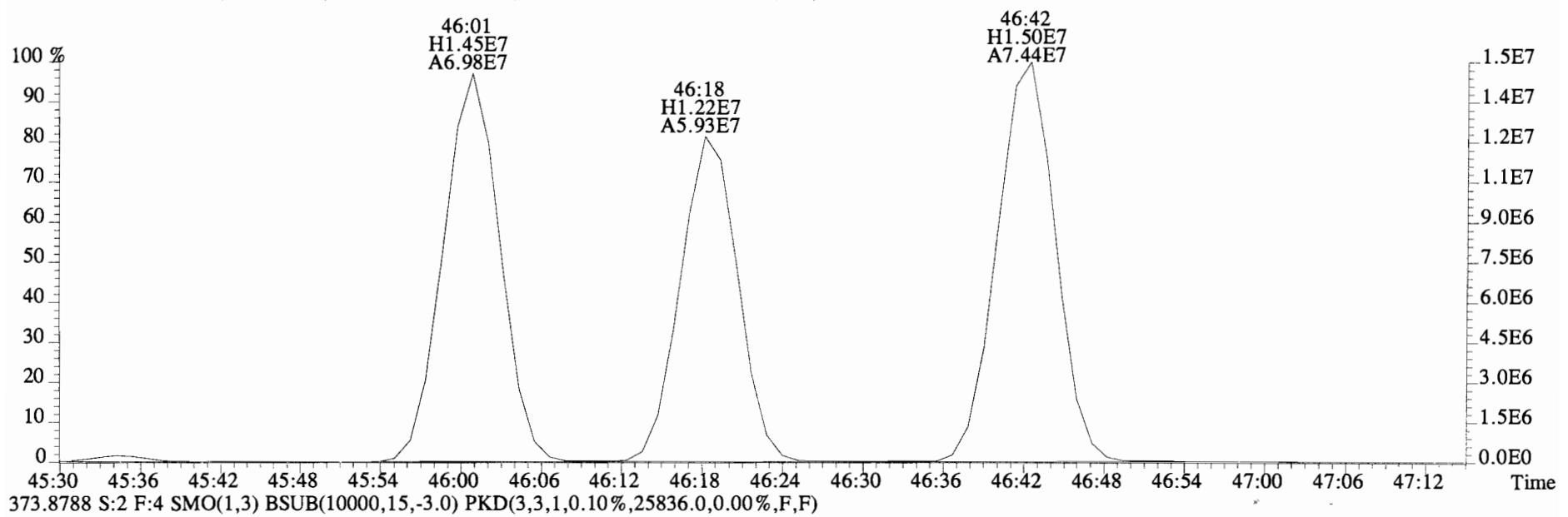
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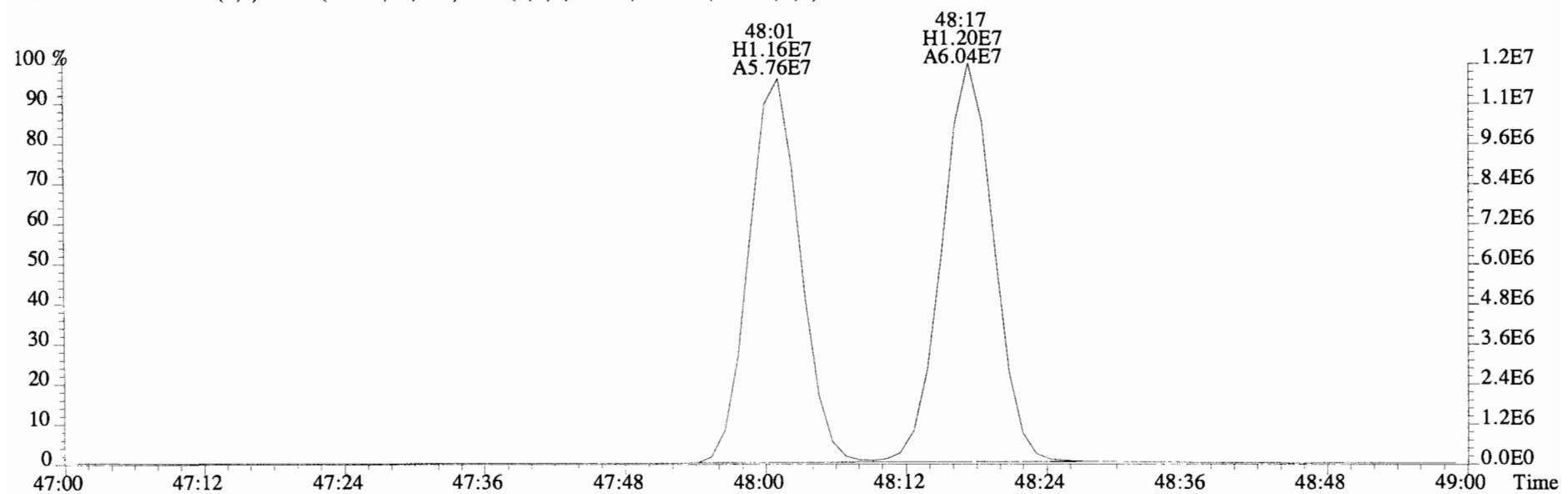
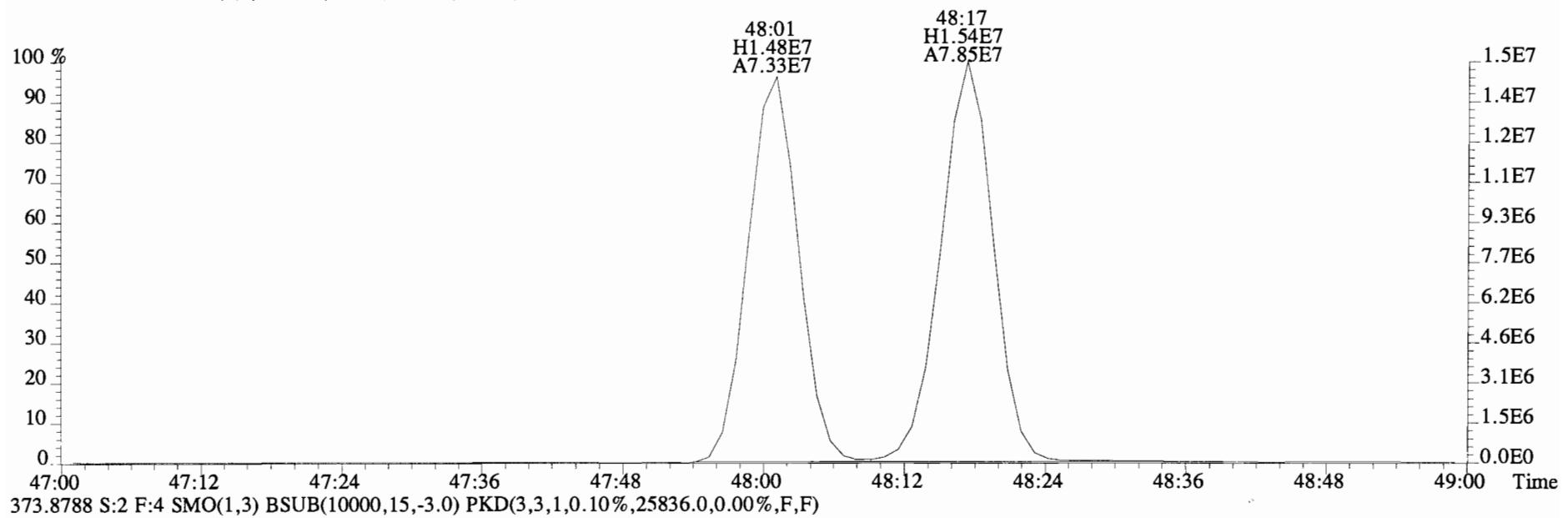
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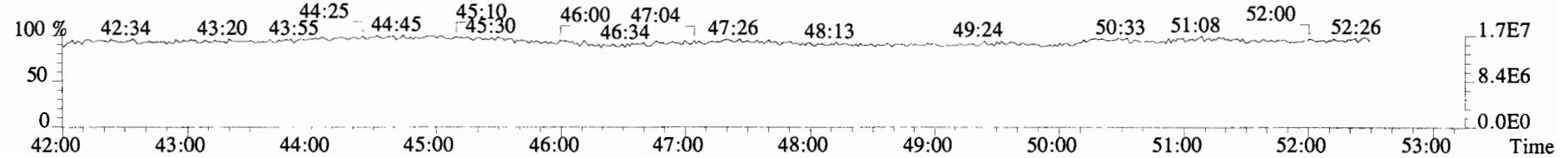
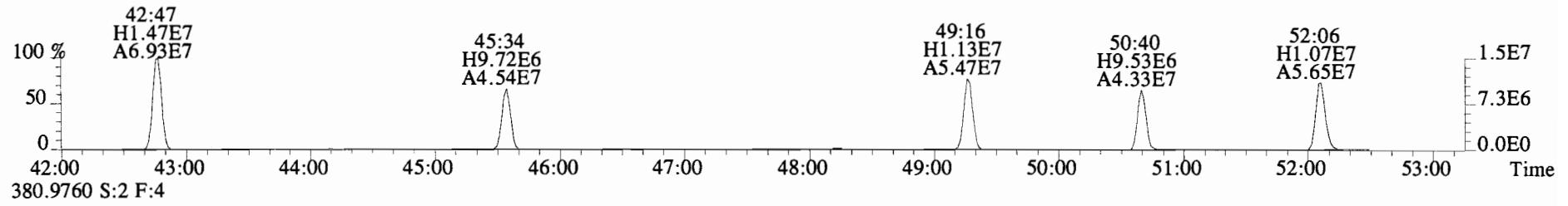
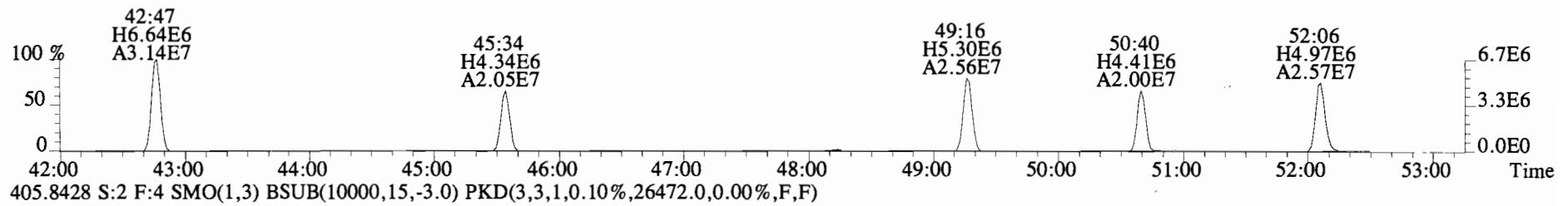
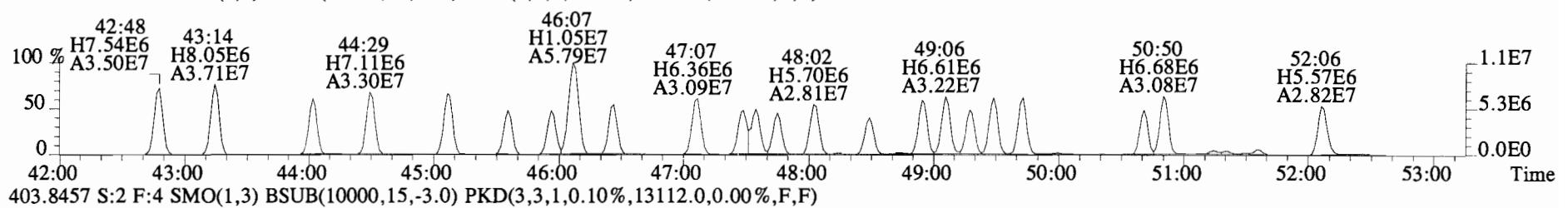
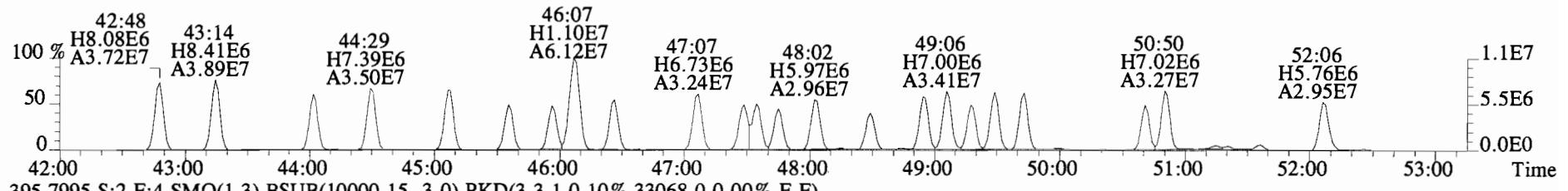
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,22792.0,0.00%,F,F)



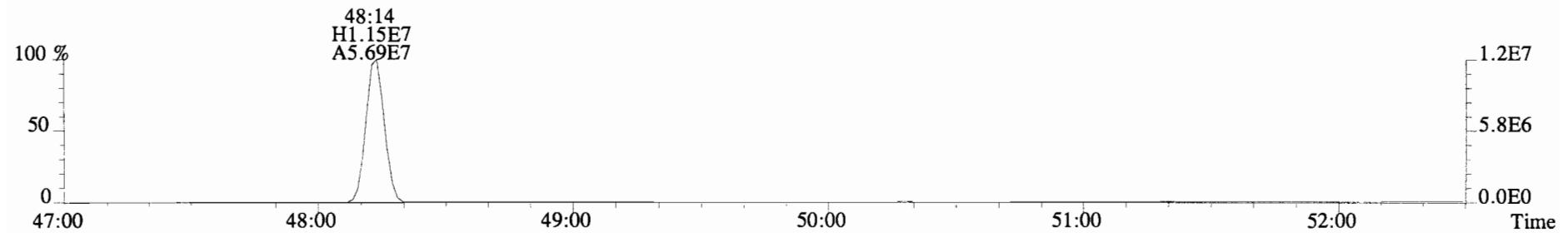
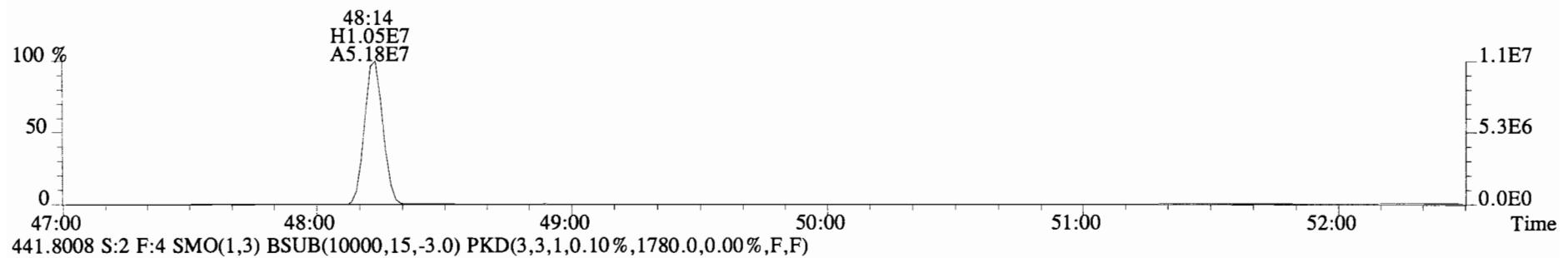
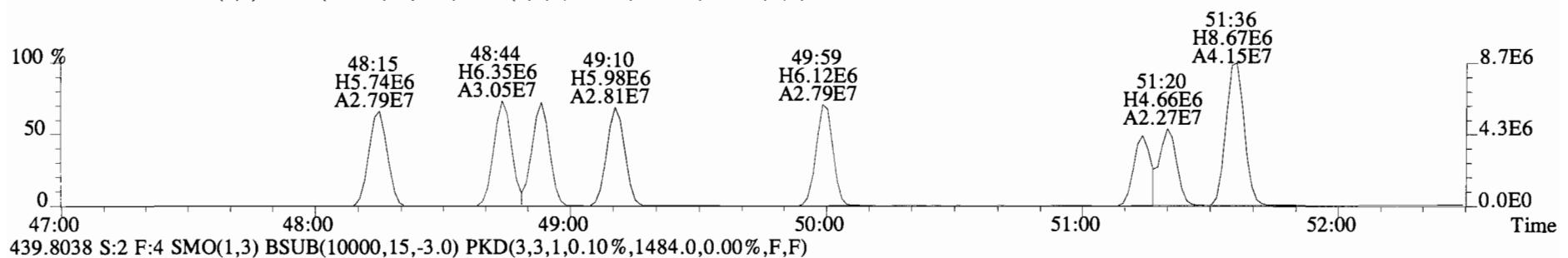
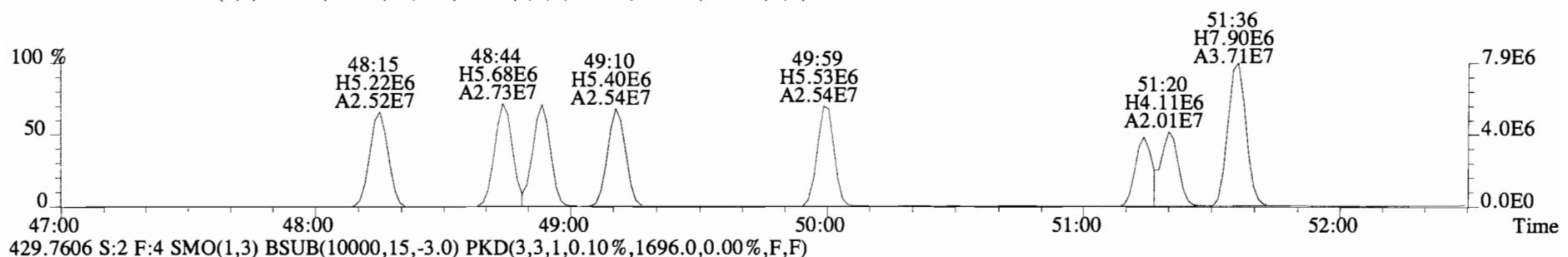
File:141024E2 #1-546 Acq:25-OCT-2014 03:14:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,22792.0,0.00%,F,F)



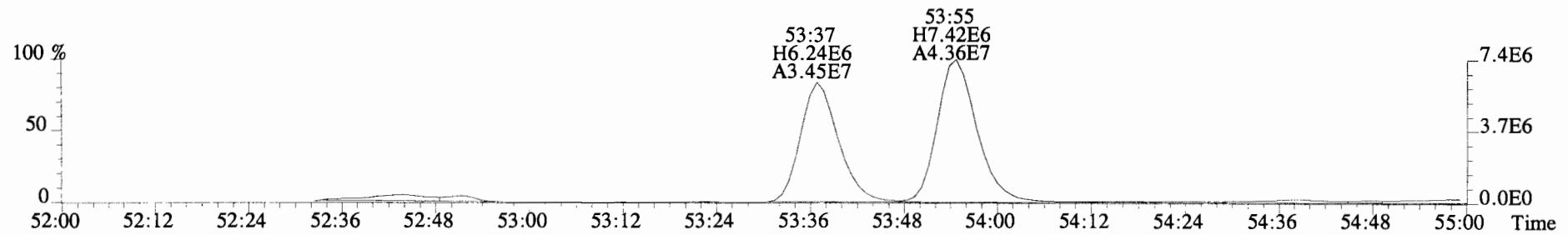
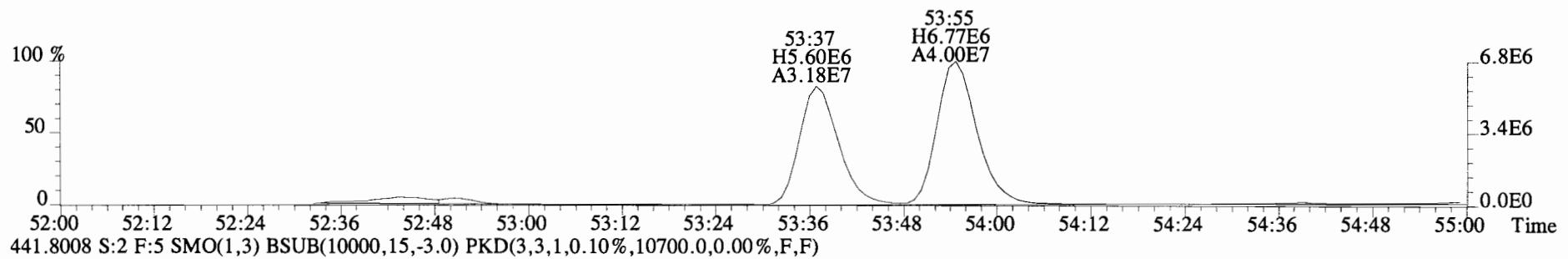
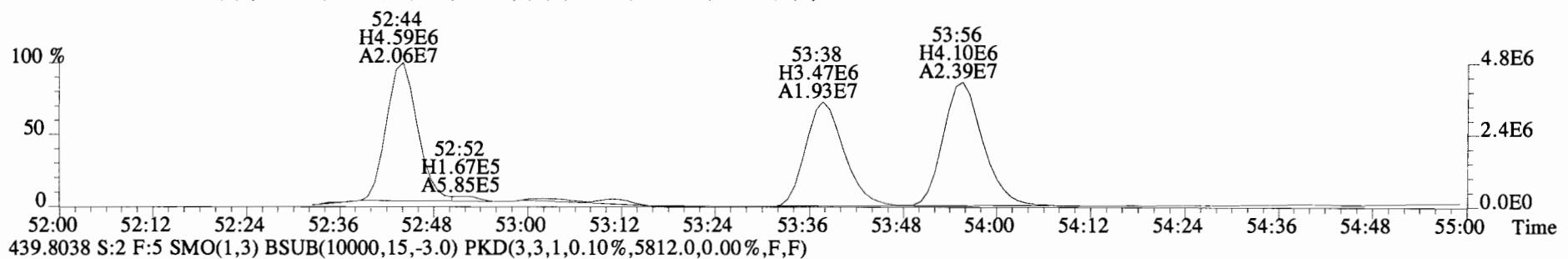
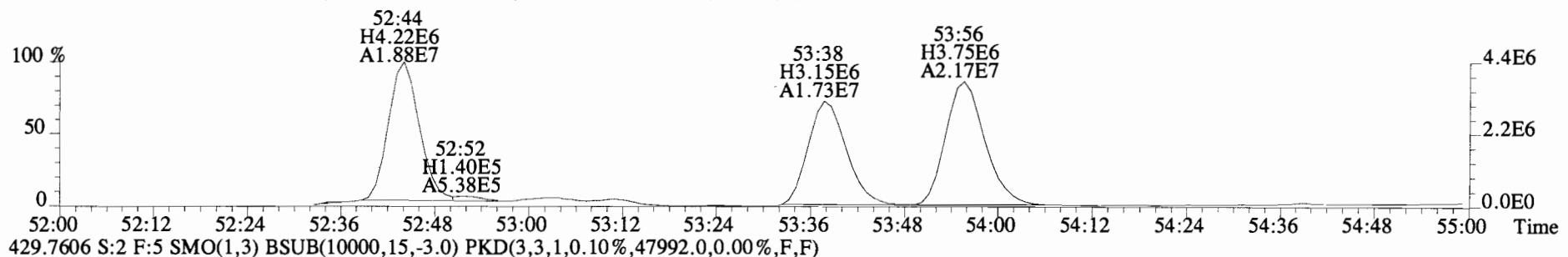
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 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
 393.8025 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,27668.0,0.00%,F,F)



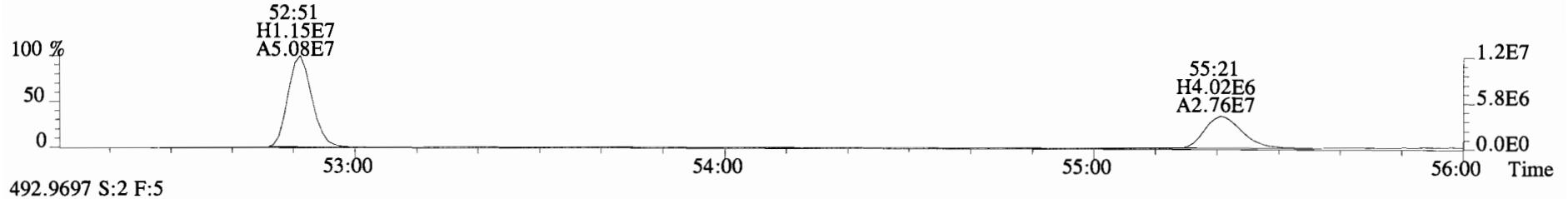
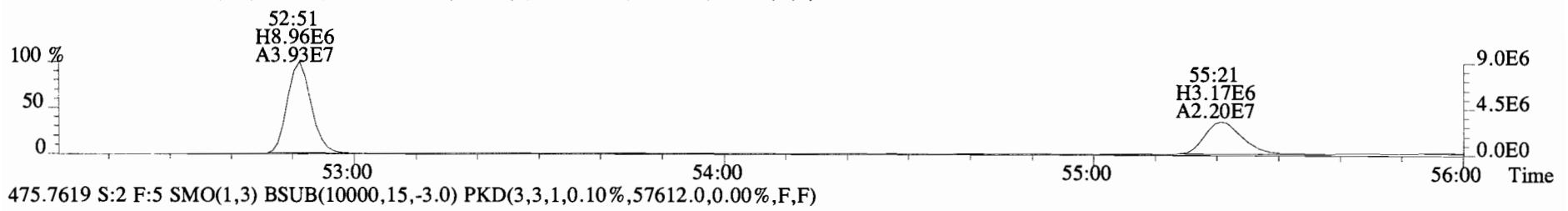
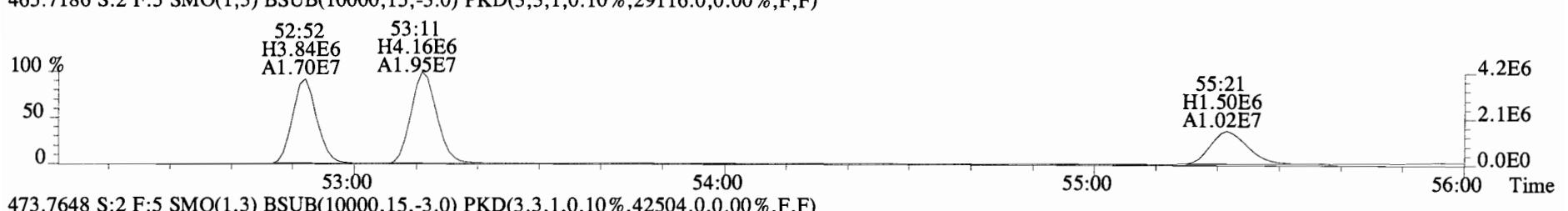
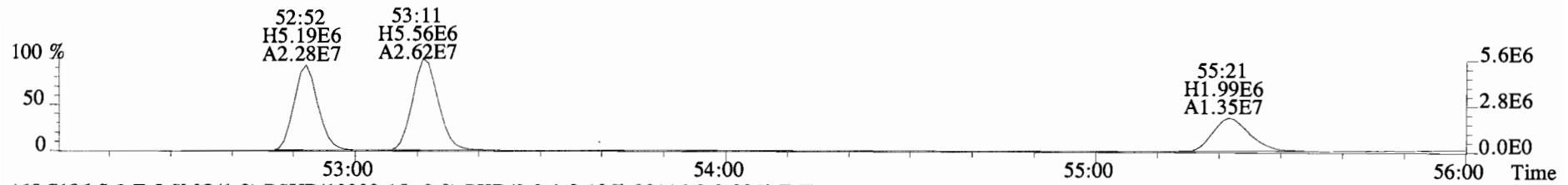
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
427.7635 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1472.0,0.00%,F,F)



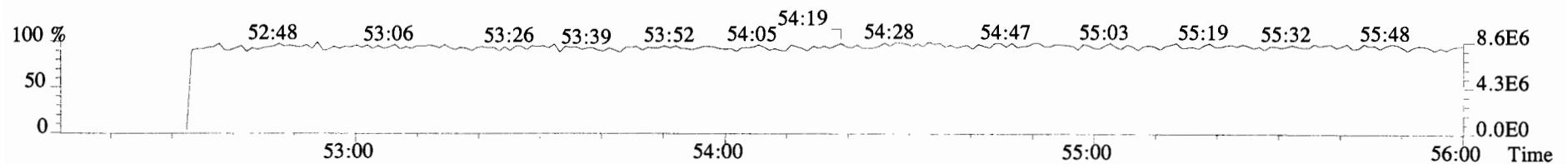
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
427.7635 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,46784.0,0.00%,F,F)



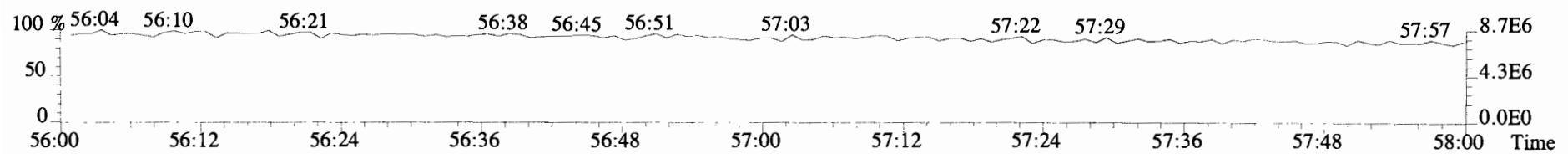
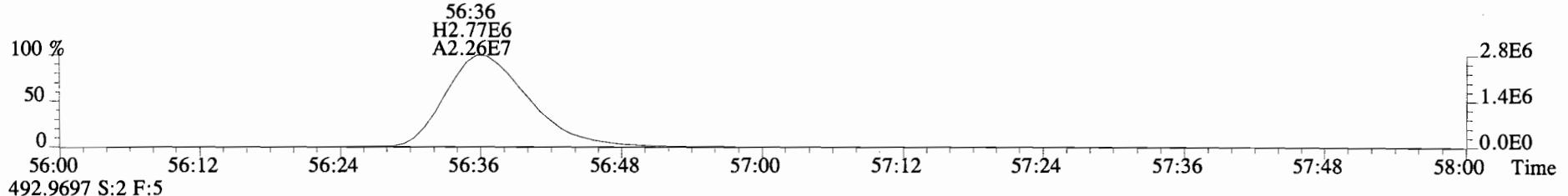
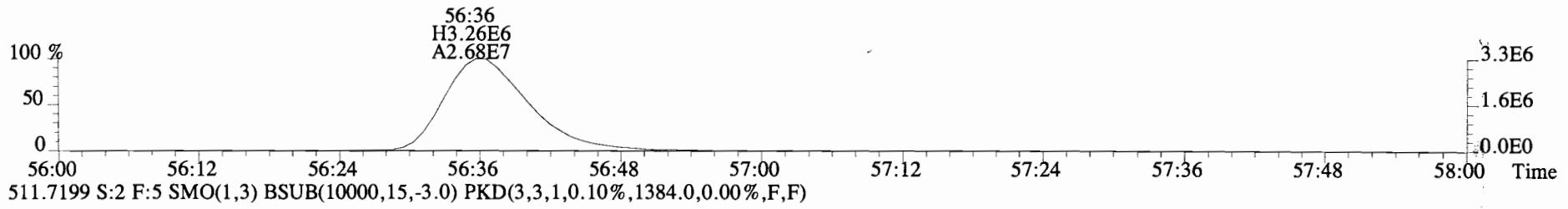
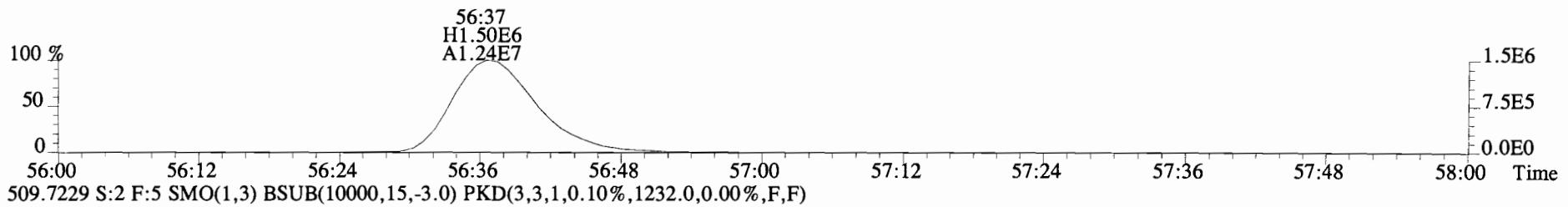
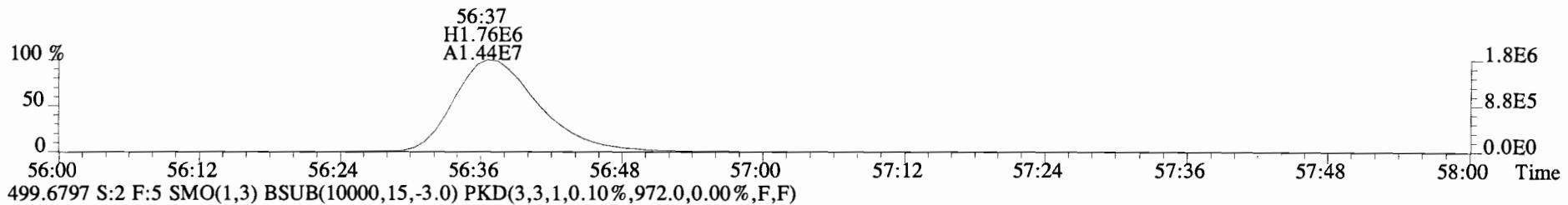
File:141024E2 #1-435 Acq:25-OCT-2014 03:14:20 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
 463.7216 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,37372.0,0.00%,F,F)



492.9697 S:2 F:5



File:141024E2 #1-435 Acq:25-OCT-2014 03:14:20 GC EI + Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0119-BS1 OPR 10 Exp:PCB_ZB1
497.6826 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1296.0,0.00%,F,F)



Client ID: CC-A-01-20141013-S
 Lab ID: 1400762-03@20X

Filename: 141024E2 S:7 Acq:25-OCT-14 08:31:59
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 10.010 ✓ ConCal: ST141024E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	5.23e+05	2.87	y 16:27	1.19	83.1		*	2.5	*	1.001	0.996-1.006	
Mono	PCB-2	1.64e+05	2.79	y 18:44	1.18	29.1		*	2.5	*	0.989	0.984-0.994	
Mono	PCB-3	4.20e+05	2.40	n 18:58	1.43	62.0	R	*	2.5	*	1.002	0.996-1.006	
Di	PCB-4/10	4.87e+05	1.24	n 20:15	1.57	124	R	*	2.5	*	1.001	0.997-1.007	
Di	PCB-7/9	*	*	n NotFq	1.21			17500	2.5	85.0	*	0.866-0.874	
Di	PCB-6	3.69e+05	1.28	n 22:38	1.30	70.2	R	*	2.5	*	0.895	0.890-0.899	
Di	PCB-5/8	1.63e+06	1.54	y 23:02	1.15	351		*	2.5	*	0.911	0.907-0.917	
Di	PCB-14	*	*	n NotFq	1.11			12100	2.5	85.8	*	0.949-0.959	
Di	PCB-11	4.75e+06	1.78	y 25:18	1.09	1210		*	2.5	*	1.001	0.995-1.005	
Di	PCB-12/13	*	*	n NotFq	1.19			12100	2.5	79.6	*	1.011-1.021	
Di	PCB-15	1.58e+06	1.62	y 26:00	1.28	341		*	2.5	*	1.028	1.023-1.033	
Tri	PCB-19	2.08e+05	1.19	y 24:18	1.04	75.6		*	2.5	*	1.001	0.996-1.006	
Tri	PCB-30	*	*	n NotFq	1.71			2210	2.5	8.77	*	1.032-1.042	
Tri	PCB-18	2.18e+06	1.01	y 25:54	0.78	639		*	2.5	*	0.955	0.949-0.959	
Tri	PCB-17	6.35e+05	1.05	y 26:05	0.92	157		*	2.5	*	0.961	0.956-0.966	
Tri	PCB-24/27	2.72e+05	1.14	y 26:38	1.19	52.4		*	2.5	*	0.982	0.977-0.987	
Tri	PCB-16/32	1.75e+06	1.06	y 27:08	0.94	426		*	2.5	*	1.000	0.995-1.005	
Tri	PCB-34	*	*	n NotFq	1.14			3010	2.5	18.4	*	0.955-0.965	
Tri	PCB-23	*	*	n NotFq	1.28			3010	2.5	16.4	*	0.959-0.969	
Tri	PCB-29	*	*	n NotFq	1.08			3010	2.5	19.4	*	0.967-0.977	
Tri	PCB-26	5.70e+05	1.01	y 28:28	1.21	125		*	2.5	*	0.979	0.974-0.984	
Tri	PCB-25	2.92e+05	0.96	y 28:38	1.26	61.3		*	2.5	*	0.985	0.979-0.989	
Tri	PCB-31	3.90e+06	0.99	y 28:59	1.28	803		*	2.5	*	0.997	0.992-1.002	
Tri	PCB-28	3.46e+06	1.00	y 29:05	1.71	536		*	2.5	*	1.001	0.995-1.005	
Tri	PCB-20/21/33	1.96e+06	1.09	y 29:44	1.08	479		*	2.5	*	1.023	1.017-1.027	
Tri	PCB-22	1.25e+06	1.08	y 30:09	1.21	275		*	2.5	*	1.037	1.032-1.042	
Tri	PCB-36	*	*	n NotFq	1.14			3010	2.5	18.3	*	0.928-0.938	
Tri	PCB-39	*	*	n NotFq	1.12			3010	2.5	18.7	*	0.943-0.953	
Tri	PCB-38	9.92e+04	1.18	y 32:00	1.20	23.7		*	2.5	*	0.971	0.966-0.976	
Tri	PCB-35	3.66e+05	1.09	y 32:32	1.23	85.0		*	2.5	*	0.987	0.982-0.992	
Tri	PCB-37	2.06e+06	1.05	y 32:59	1.23	479		*	2.5	*	1.001	0.995-1.005	
Tetra	PCB-54	*	*	n NotFq	1.10	*		3740	2.5	21.0	*	0.996-1.006	
Tetra	PCB-50	*	*	n NotFq	0.88	*		3740	2.5	26.3	*	1.037-1.047	
Tetra	PCB-53	1.24e+06	0.77	y 29:46	1.06	399		*	2.5	*	0.946	0.942-0.952	
Tetra	PCB-51	2.61e+05	0.76	y 30:07	0.99	89.7		*	2.5	*	0.958	0.952-0.962	
Tetra	PCB-45	6.03e+05	0.83	y 30:33	0.86	238		*	2.5	*	0.971	0.966-0.976	
Tetra	PCB-46	2.27e+05	0.78	y 31:01	0.85	91.7		*	2.5	*	0.986	0.981-0.991	

Integrations by:

Analyst: DME

Date: 10/30/14

Reviewed by: MFZ

Date: 10/30/14

Client ID: CC-A-01-20141013-S
 Lab ID: 1400762-03@20X

Filename: 141024E2 S:7 Acq:25-OCT-14 08:31:59
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.010

ConCal: ST141024E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	6.67e+07	0.74	y 31:28	1.28	17700		*	2.5	*	1.001	0.996-1.006	
Tetra	PCB-73	*	*	n NotF ₁₁	1.35			3740	2.5	20.2	*	1.000-1.010	
Tetra	PCB-43/49	1.22e+07	0.73	y 31:47	0.99	4170		*	2.5	*	1.011	1.005-1.015	
Tetra	PCB-47	1.63e+06	0.66	y 31:59	1.06	552		*	2.5	*	1.001	0.996-1.006	
Tetra	PCB-48/75	1.17e+06	0.71	y 32:06	1.23	342		*	2.5	*	1.004	0.999-1.009	
Tetra	PCB-65	*	*	n NotF ₁₁	1.22			3740	2.5	23.7	*	1.008-1.018	
Tetra	PCB-62	*	*	n NotF ₁₁	1.22			3740	2.5	23.8	*	1.011-1.021	
Tetra	PCB-44	2.32e+07	0.74	y 32:49	0.86	9710		*	2.5	*	1.027	1.021-1.031	
Tetra	PCB-42/59	2.27e+06	0.71	y 33:03	1.14	717		*	2.5	*	1.034	1.028-1.038	
Tetra	PCB-41/64/71/72	1.27e+07	0.74	y 33:36	1.21	3780		*	2.5	*	1.051	1.046-1.056	
Tetra	PCB-68	9.28e+04	0.77	y 33:49	1.35	24.8		*	2.5	*	1.058	1.054-1.064	
Tetra	PCB-40	1.22e+06	0.76	y 34:03	0.70	624		*	2.5	*	1.065	1.061-1.071	
Tetra	PCB-57	5.74e+04	1.00	n 34:25	0.98	15.6	R	*	2.5	*	0.970	0.965-0.975	
Tetra	PCB-67	2.96e+05	0.80	y 34:43	1.11	71.0		*	2.5	*	0.979	0.974-0.984	
Tetra	PCB-58	*	*	n NotF ₁₁	0.93			3740	2.5	23.9	*	0.977-0.987	
Tetra	PCB-63	6.38e+05	0.75	y 34:59	0.95	178		*	2.5	*	0.986	0.982-0.992	
Tetra	PCB-74	1.20e+07	0.74	y 35:16	1.24	2560		*	2.5	*	0.994	0.990-1.000	
Tetra	PCB-61/70	5.69e+07	0.73	y 35:28	0.95	15900		*	2.5	*	1.000	0.995-1.005	
Tetra	PCB-76/66	1.57e+07	0.74	y 35:42	1.04	3980		*	2.5	*	1.007	1.001-1.011	
Tetra	PCB-80	*	*	n NotF ₁₁	1.19			3740	2.5	18.6	*	0.996-1.006	
Tetra	PCB-55	1.11e+06	0.81	y 36:11	1.04	283		*	2.5	*	1.008	1.005-1.015	
Tetra	PCB-56/60	9.00e+06	0.74	y 36:43	1.01	2360		*	2.5	*	1.023	1.019-1.029	
Tetra	PCB-79	2.13e+06	0.77	y 37:48	1.08	523		*	2.5	*	1.053	1.048-1.058	
Tetra	PCB-78	*	*	n NotF ₁₁	1.27			3740	2.5	21.2	*	0.982-0.992	
Tetra	PCB-81	1.44e+06	0.74	y 39:01	1.33	352		*	2.5	*	1.000	0.995-1.005	
Tetra	PCB-77	5.65e+06	0.73	y 39:37	1.10	1690		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-104	*	*	n NotF ₁₁	1.18	*		1460	2.5	14.8	*	0.996-1.006	
Penta	PCB-96	*	*	n NotF ₁₁	1.14	*		1460	2.5	15.4	*	1.034-1.044	
Penta	PCB-103	6.11e+05	1.69	y 34:25	0.96	237		*	2.5	*	1.054	1.050-1.060	
Penta	PCB-100	2.29e+05	1.62	y 34:46	0.94	91.0		*	2.5	*	1.065	1.061-1.071	
Penta	PCB-94	3.87e+05	1.66	y 35:15	1.06	166		*	2.5	*	0.986	0.980-0.990	
Penta	PCB-95/98/102	1.29e+08	1.58	y 35:46	1.22	47900		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-93	*	*	n NotF ₁₁	0.84	*		1460	2.5	25.0	*	0.997-1.007	
Penta	PCB-88/91	1.53e+07	1.58	y 36:10	1.12	6210		*	2.5	*	1.012	1.005-1.015	
Penta	PCB-121	*	*	n NotF ₁₁	1.62	*		1460	2.5	13.0	*	1.009-1.019	
Penta	PCB-84/92	5.97e+07	1.57	y 37:05	1.05	24400		*	2.5	*	0.991	0.985-0.995	
Penta	PCB-89	6.47e+05	1.75	y 37:16	1.13	245		*	2.5	*	0.996	0.991-1.001	

Analyst: DMS

Date: 10/30/14

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	1.70e+08	1.57	y 37:28	1.10	66100	*	2.5	*	1.001	0.995-1.005		
Penta	PCB-113	*	*	n NotF ₁₁	1.41		1460	2.5	14.5	*	1.002-1.012		
Penta	PCB-99	5.11e+07	1.59	y 37:47	1.34	16400	*	2.5	*	1.009	1.004-1.014		
Penta	PCB-119	2.03e+06	1.49	y 38:15	1.53	704	*	2.5	*	0.987	0.982-0.992		
Penta	PCB-108/112	6.42e+06	1.60	y 38:26	1.28	2670	*	2.5	*	0.991	0.986-0.996		
Penta	PCB-83	*	*	n NotF ₁₁	1.52		1460	2.5	14.6	*	0.990-1.000		
Penta	PCB-97	3.87e+07	1.56	y 38:46	1.18	17400	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-86	*	*	n NotF ₁₁	0.84		1460	2.5	26.4	*	0.999-1.009		
Penta	PCB-87/117/125	6.67e+07	1.56	y 39:03	1.55	22900	*	2.5	*	1.007	1.002-1.012		
Penta	PCB-111/115	2.63e+06	1.35	y 39:12	1.63	855	*	2.5	*	1.011	1.006-1.016		
Penta	PCB-85/116	1.85e+07	1.59	y 39:19	1.30	7540	*	2.5	*	1.014	1.010-1.020		
Penta	PCB-120	6.00e+05	1.59	y 39:31	1.68	190	*	2.5	*	1.019	1.016-1.026		
Penta	PCB-110	2.05e+08	1.57	y 39:43	1.56	70100	*	2.5	*	1.025	1.020-1.030		
Penta	PCB-82	1.20e+07	1.53	y 40:21	0.76	6600	*	2.5	*	0.976	0.971-0.981		
Penta	PCB-124	8.73e+06	1.67	y 41:01	1.47	2470	*	2.5	*	0.992	0.988-0.998		
Penta	PCB-107/109	1.07e+07	1.55	y 41:11	1.32	3360	*	2.5	*	0.996	0.991-1.001		
Penta	PCB-123	1.93e+06	1.68	y 41:21	1.17	689	*	2.5	*	1.000	0.996-1.006		
Penta	PCB-106/118	1.53e+08	1.58	y 41:32	1.17	51800	*	2.5	*	1.000	0.996-1.006		
Penta	PCB-114	4.59e+06	1.59	y 42:12	1.30	1410	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-122	1.77e+06	1.66	y 42:20	1.12	630	*	2.5	*	1.004	0.999-1.009		
Penta	PCB-105	6.82e+07	1.62	y 43:04	1.30	20600	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-127	*	*	n NotF ₁₁	1.33		9490	2.5	97.5	*	0.996-1.006		
Penta	PCB-126	1.84e+06	1.55	y 45:20	1.18	726	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-155	*	*	n NotF ₁₁	1.11	*	1500	2.5	14.8	*	0.966-1.006		
Hexa	PCB-150	2.64e+05	1.15	y 38:16	1.00	102	*	2.5	*	1.035	1.030-1.040		
Hexa	PCB-152	2.03e+05	1.27	y 38:45	1.12	70.4	*	2.5	*	1.048	1.043-1.053		
Hexa	PCB-145	7.13e+04	1.11	y 39:12	1.20	23.0	*	2.5	*	1.060	1.055-1.065		
Hexa	PCB-136	3.08e+07	1.26	y 39:31	1.18	10100	*	2.5	*	1.068	1.064-1.074		
Hexa	PCB-148	*	*	n NotF ₁₁	0.74	*	1500	2.5	22.1	*	1.066-1.076		
Hexa	PCB-154	1.12e+06	1.33	y 40:07	0.86	503	*	2.5	*	1.085	1.080-1.090		
Hexa	PCB-151	3.92e+07	1.25	y 40:45	0.75	20300	*	2.5	*	1.102	1.097-1.107		
Hexa	PCB-135	2.20e+07	1.23	y 40:59	0.79	10700	*	2.5	*	1.108	1.103-1.113		
Hexa	PCB-144	8.16e+06	1.27	y 41:06	0.76	4150	*	2.5	*	1.111	1.105-1.117		
Hexa	PCB-147	2.93e+06	1.24	y 41:14	0.82	1380	*	2.5	*	1.115	1.109-1.121		
Hexa	PCB-139/149	1.39e+08	1.25	y 41:28	0.76	70500	*	2.5	*	1.121	1.116-1.128		
Hexa	PCB-140	6.92e+05	1.24	y 41:40	0.72	371	*	2.5	*	1.127	1.121-1.133		
Hexa	PCB-134/143	1.15e+07	1.21	y 42:08	0.92	5110	*	2.5	*	0.975	0.970-0.980		

Analyst: *Dms*Date: *10/30/14*

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	5.86e+06	1.21	y 42:24	0.82	2910	*	2.5	*	0.981	0.977-0.987		
Hexa	PCB-131	*	*	n NotF _{fl}	0.91	*	4190	2.5	57.1	*	0.981-0.991		
Hexa	PCB-146/165	3.22e+07	1.24	y 42:49	1.25	10500	*	2.5	*	0.991	0.986-0.996		
Hexa	PCB-132/161	7.10e+07	1.28	y 43:05	1.10	26100	*	2.5	*	0.997	0.992-1.002		
Hexa	PCB-153	2.32e+08	1.22	y 43:13	1.25	75500	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-168	2.07e+05	1.49	n 43:26	1.45	58.1	R	*	2.5	*	1.005	1.001-1.011	
Hexa	PCB-141	5.09e+07	1.21	y 43:58	1.09	21500	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-137	1.15e+07	1.23	y 44:21	1.06	4940	*	2.5	*	1.009	1.004-1.014		
Hexa	PCB-130	1.21e+07	1.28	y 44:27	0.96	5720	*	2.5	*	1.011	1.006-1.016		
Hexa	PCB-138/163/164	2.60e+08	1.22	y 44:49	1.29	95200	*	2.5	*	1.000	0.996-1.006		
Hexa	PCB-158/160	3.34e+07	1.21	y 45:03	1.34	11800	*	2.5	*	1.006	1.001-1.011		
Hexa	PCB-129	9.83e+06	1.21	y 45:19	0.85	5460	*	2.5	*	1.012	1.007-1.017		
Hexa	PCB-166	1.18e+06	1.22	y 45:48	1.19	371	*	2.5	*	0.993	0.988-0.998		
Hexa	PCB-159	*	*	n NotF _{fl}	1.11	*	4190	2.5	46.1	*	0.996-1.006		
Hexa	PCB-128/162	3.65e+07	1.24	y 46:24	1.05	13000	*	2.5	*	1.006	1.002-1.012		
Hexa	PCB-167	1.13e+07	1.19	y 46:49	1.20	3480	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-156	2.72e+07	1.25	y 48:08	1.14	9300	*	2.5	*	1.000	0.996-1.006		
Hexa	PCB-157	5.81e+06	1.32	y 48:24	1.16	1820	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-169	*	*	n NotF _{fl}	1.12	*	7190	2.5	76.4	*	0.995-1.005		
Hepta	PCB-188	1.28e+05	1.01	y 42:50	1.58	38.9	*	2.5	*	1.000	0.996-1.006		
Hepta	PCB-184	9.19e+04	0.98	y 43:17	1.63	27.1	*	2.5	*	1.011	1.006-1.016		
Hepta	PCB-179	3.38e+07	1.06	y 44:04	1.30	12500	*	2.5	*	1.029	1.024-1.034		
Hepta	PCB-176	1.03e+07	1.04	y 44:33	1.48	3350	*	2.5	*	1.040	1.035-1.045		
Hepta	PCB-186	*	*	n NotF _{fl}	1.45	*	1570	2.5	9.50	*	1.050-1.060		
Hepta	PCB-178	1.16e+07	1.04	y 45:39	1.03	5400	*	2.5	*	1.066	1.061-1.071		
Hepta	PCB-175	2.11e+06	1.04	y 46:00	1.01	1000	*	2.5	*	1.074	1.069-1.079		
Hepta	PCB-182/187	7.84e+07	1.06	y 46:10	1.25	30100	*	2.5	*	1.078	1.073-1.083		
Hepta	PCB-183	3.47e+07	1.04	y 46:31	1.21	13800	*	2.5	*	1.086	1.081-1.091		
Hepta	PCB-185	7.27e+06	1.05	y 47:10	1.80	2700	*	2.5	*	0.955	0.951-0.961		
Hepta	PCB-174	5.96e+07	1.04	y 47:32	1.38	29000	*	2.5	*	0.963	0.958-0.968		
Hepta	PCB-181	*	*	n NotF _{fl}	1.38	*	5070	2.5	53.1	*	0.960-0.970		
Hepta	PCB-177	2.94e+07	1.06	y 47:49	1.26	15700	*	2.5	*	0.969	0.963-0.973		
Hepta	PCB-171	1.45e+07	1.07	y 48:07	1.58	6140	*	2.5	*	0.975	0.970-0.980		
Hepta	PCB-173	1.14e+06	1.11	y 48:33	1.11	686	*	2.5	*	0.983	0.978-0.988		
Hepta	PCB-172	9.16e+06	1.08	y 49:00	1.63	3750	*	2.5	*	0.993	0.987-0.997		
Hepta	PCB-192	*	*	n NotF _{fl}	1.74	*	1570	2.5	13.1	*	0.991-1.001		
Hepta	PCB-180	1.33e+08	1.04	y 49:23	1.34	66000	*	2.5	*	1.000	0.995-1.005		

Analyst: DmjDate: 10/30/14

Client ID: CC-A-01-20141013-S
Lab ID: 1400762-03@20X

Filename: 141024E2 S:7 Acq:25-OCT-14 08:31:59
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.010

ConCal: ST141024E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	7.44e+06	1.04	y 49:33	1.72	2910	*	2.5	*	1.004	0.999-1.009		
Hepta	PCB-191	2.67e+06	1.09	y 49:47	1.69	1060	*	2.5	*	1.008	1.004-1.014		
Hepta	PCB-170	4.46e+07	1.06	y 50:45	1.60	25400	*	2.5	*	1.000	0.995-1.005		
Hepta	PCB-190	1.19e+07	1.06	y 50:54	2.21	4910	*	2.5	*	1.003	0.998-1.008		
Hepta	PCB-189	1.97e+06	1.00	y 52:12	1.55	826	*	2.5	*	1.000	0.995-1.005		
Octa	PCB-202	5.91e+06	0.90	y 48:18	1.08	3060	*	2.5	*	1.000	0.995-1.005		
Octa	PCB-201	4.14e+06	0.89	y 48:48	1.15	2020	*	2.5	*	1.011	1.005-1.015		
Octa	PCB-204	*	*	n NotFn	1.14	*	1800	2.5	24.0	*	1.008-1.018		
Octa	PCB-197	1.18e+06	0.91	y 49:15	1.07	618	*	2.5	*	1.020	1.015-1.025		
Octa	PCB-200	3.78e+06	0.88	y 50:02	1.06	2000	*	2.5	*	1.036	1.032-1.044		
Octa	PCB-198	1.09e+06	0.91	y 51:18	0.76	807	*	2.5	*	1.062	1.059-1.069		
Octa	PCB-199	2.11e+07	0.89	y 51:23	0.80	14900	*	2.5	*	1.064	1.061-1.071		
Octa	PCB-196/203	2.42e+07	0.89	y 51:40	0.80	17000	*	2.5	*	1.070	1.066-1.076		
Octa	PCB-195	9.46e+06	0.89	y 52:47	1.23	5490	*	2.5	*	0.983	0.979-0.989		
Octa	PCB-194	2.39e+07	0.91	y 53:44	1.21	14000	*	2.5	*	1.000	0.995-1.005		
Octa	PCB-205	1.36e+06	0.99	y 54:02	1.54	626	*	2.5	*	1.006	1.001-1.011		
Nonna	PCB-208	1.42e+06	1.36	y 52:56	0.93	906	*	2.5	*	1.000	0.995-1.005		
Nonna	PCB-207	8.96e+05	1.38	y 53:15	1.08	491	*	2.5	*	1.006	1.001-1.011		
Nonna	PCB-206	4.25e+06	1.33	y 55:28	1.02	3890	*	2.5	*	1.000	0.995-1.005		
Deca	PCB-209	3.62e+05	1.11	y 56:44	1.17	306	*	2.5	*	1.000	0.995-1.005		

Analyst: *DMS*

Date: *10/30/14*

Client ID: CC-A-01-20141013-S
Lab ID: 1400762-03@20X

Filename: 141024E2 S:7 Acq:25-OCT-14 08:31:59
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 10.0102 ConCal: ST141024E2-1
EndCAL: NA

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Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	6.87e+05	2.87 y	16:27	1.27	112.173
Total Di-PCB	7.95e+06	1.54 y	23:02	1.21	1900.98
Total Tri-PCB	5.05e+06	1.19 y	24:18	1.10	1349.63
Total Tri-PCB	1.40e+07	1.01 y	28:28	1.21	2866.83 Sum:4216.46
Total Tetra-PCB	2.28e+08	0.77 y	29:46	1.09	66350.2
Total Penta-PCB	9.54e+08	1.69 y	34:25	1.18	348958
Total Penta-PCB	7.63e+07	1.59 y	42:12	1.25	23390.9 Sum:372349
Total Hexa-PCB	2.44e+08	1.15 y	38:16	0.90	118258
Total Hexa-PCB	8.12e+08	1.21 y	42:08	1.11	292733 Sum:410991
Total Hepta-PCB	4.93e+08	1.01 y	42:50	1.42	225263
Total Octa-PCB	6.14e+07	0.90 y	48:18	0.96	40312.9
Total Octa-PCB	3.47e+07	0.89 y	52:47	1.33	20141.6 Sum:60454.5
Total Nona-PCB	6.57e+06	1.36 y	52:56	1.01	5290.55
Total Deca-PCB	3.62e+05	1.11 y	56:44	1.17	305.605

Total PCB Conc:1147562.99184

Integrations
by
Analyst: Dm7
Date: 10/30/14

Client ID: CC-A-01-20141013-S
 Lab ID: 1400762-03@20X

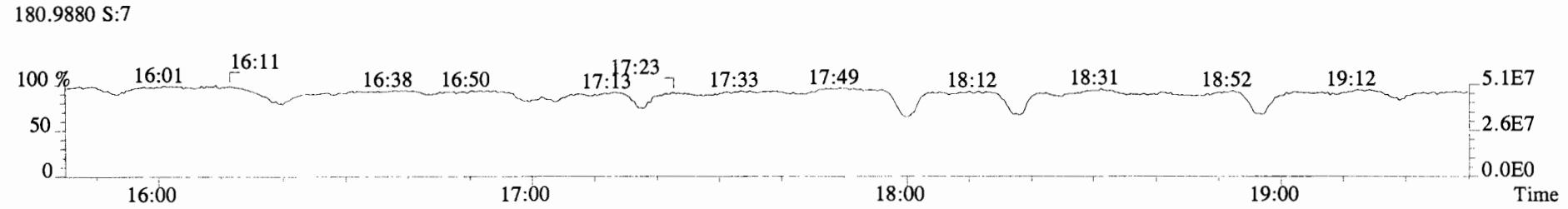
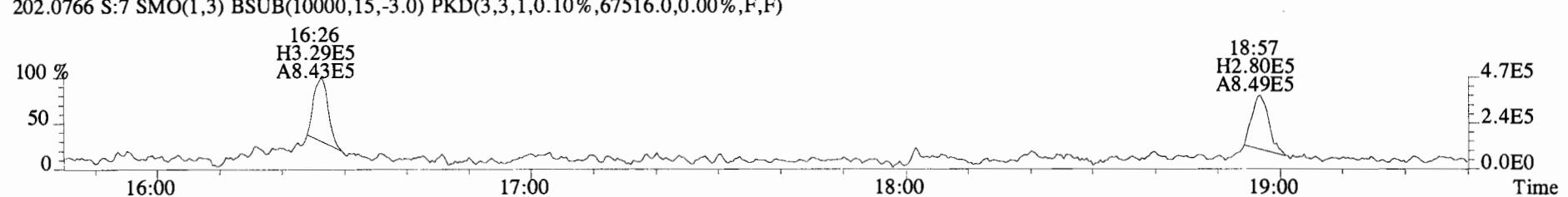
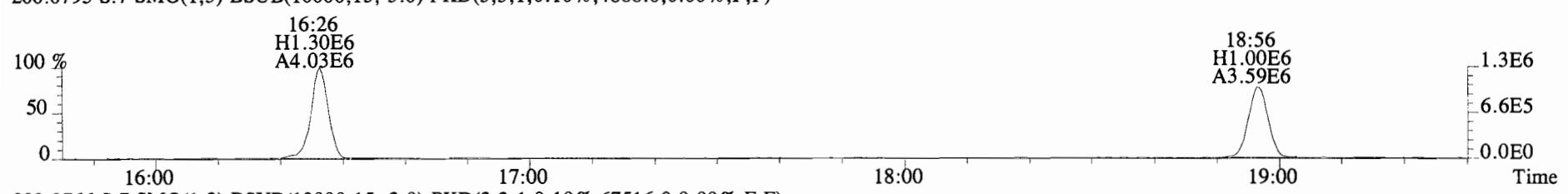
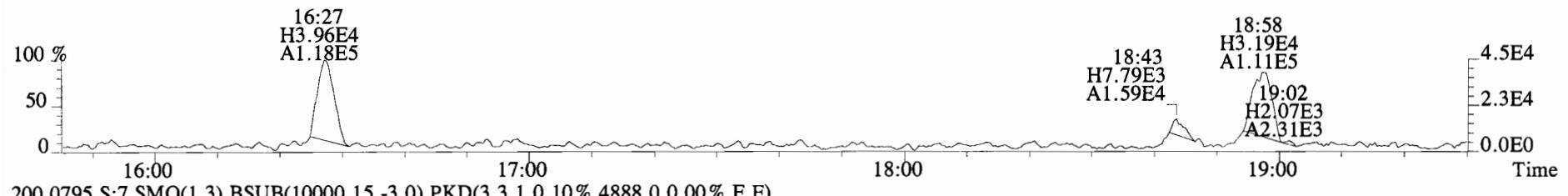
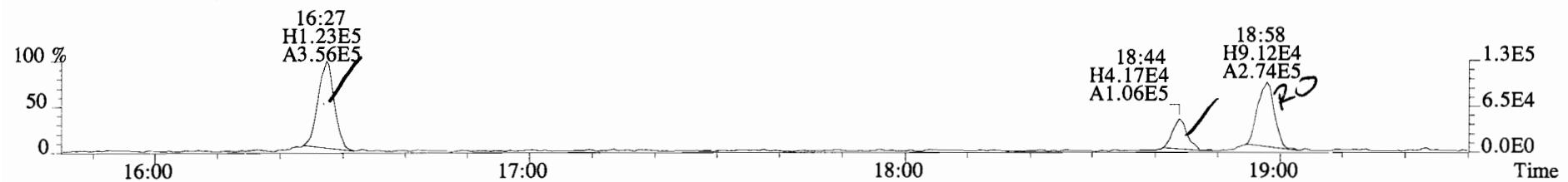
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 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.01
 ConCal: ST141024E2-1 EndCAL: NA

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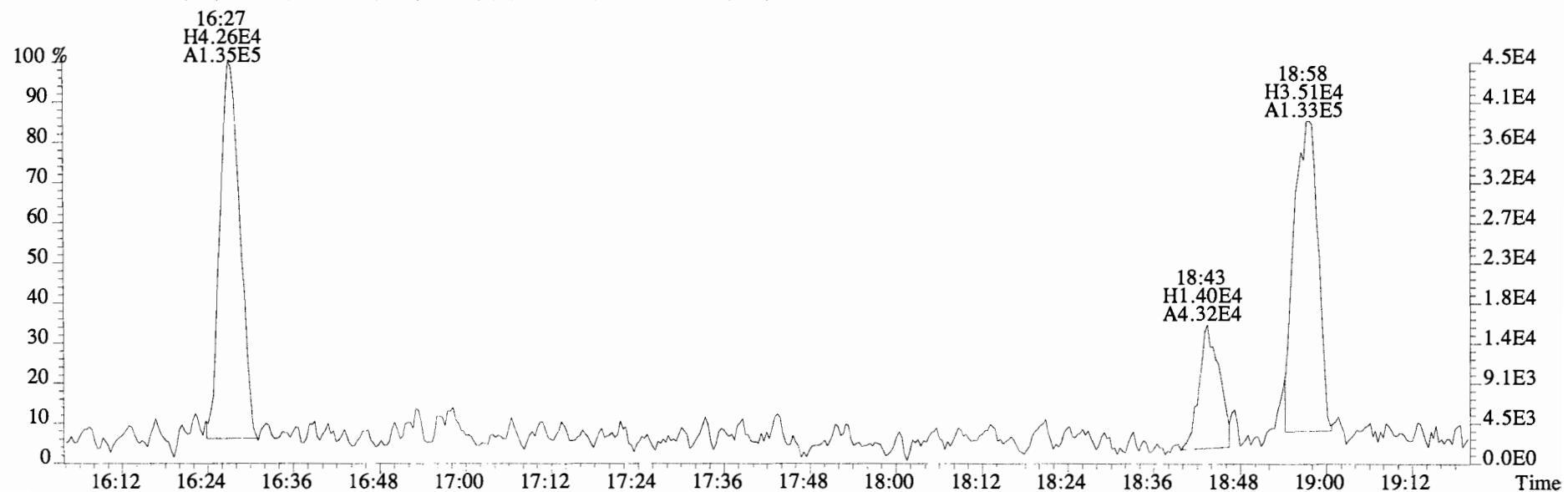
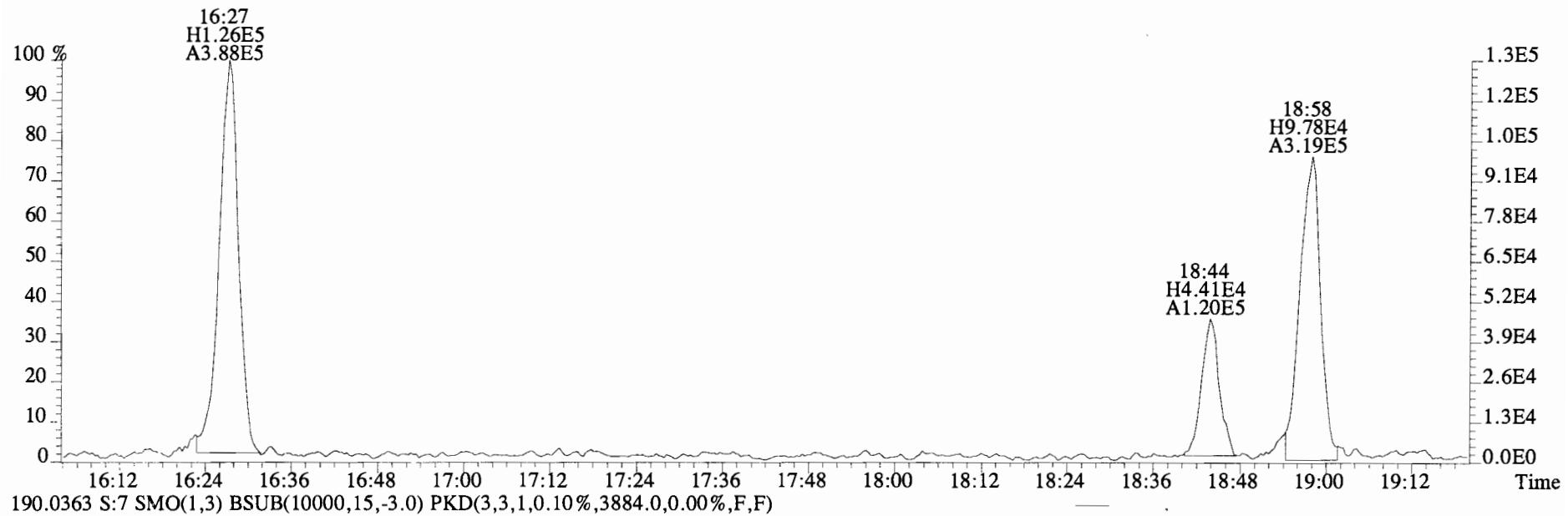
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS		Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	5.27e+06	3.11	y	0.87	16:26	0.632	0.629-0.635	1190	119	13C-PCB-79	3.45e+06	0.84	y	1.02	37:46	1.029	1.023-1.034	827	82.8		
13C-PCB-3	4.75e+06	3.14	y	0.91	18:56	0.729	0.725-0.733	1020	102	13C-PCB-178	1.24e+06	0.49	y	0.61	45:38	0.984	0.979-0.990	898	89.9		
13C-PCB-4	2.50e+06	1.59	y	0.59	20:14	0.779	0.775-0.783	837	83.8	13C-PCB-178	1.24e+06	0.49	y	0.61	45:38	0.984	0.979-0.990	898	89.9		
13C-PCB-9	4.03e+06	1.56	y	0.90	21:58	0.845	0.842-0.850	882	88.3												
13C-PCB-11	3.61e+06	1.63	y	0.94	25:17	0.973	0.968-0.978	757	75.7	PS vs. IS											
13C-PCB-19	2.64e+06	0.91	y	0.53	24:16	0.934	0.930-0.940	975	97.6	13C-PCB-79	3.45e+06	0.84	y	1.10	37:46	0.968	0.964-0.974	1020	102		
13C-PCB-28	3.77e+06	1.18	y	0.93	29:04	1.003	0.999-1.009	953	95.4	13C-PCB-178	1.24e+06	0.49	y	0.90	45:38	0.924	0.920-0.930	927	92.8		
13C-PCB-32	4.37e+06	1.11	y	0.80	27:08	1.044	1.040-1.050	1080	108	13C-PCB-178	1.24e+06	0.49	y	0.90	45:38	0.924	0.920-0.930	927	92.8		
13C-PCB-37	3.49e+06	1.03	y	0.84	32:58	1.137	1.131-1.143	978	97.9												
13C-PCB-47	2.78e+06	0.76	y	0.81	31:58	0.871	0.866-0.874	835	83.5												
13C-PCB-52	2.93e+06	0.81	y	0.77	31:27	0.857	0.853-0.861	925	92.6												
13C-PCB-54	3.40e+06	0.83	y	0.97	27:58	0.762	0.758-0.766	855	85.6												
13C-PCB-70	3.76e+06	0.79	y	1.00	35:28	0.966	0.961-0.971	919	92.0												
13C-PCB-77	3.03e+06	0.72	y	0.94	39:36	1.079	1.073-1.083	784	78.5												
13C-PCB-80	3.77e+06	0.75	y	1.03	35:53	0.977	0.972-0.982	890	89.1												
13C-PCB-81	3.07e+06	0.71	y	0.92	39:01	1.063	1.057-1.067	812	81.3												
13C-PCB-95	2.20e+06	1.75	y	0.74	35:45	0.912	0.908-0.918	1030	103	RS											
13C-PCB-97	1.88e+06	1.32	y	0.70	38:46	0.989	0.984-0.994	924	92.5	13C-PCB-15	5.08e+06	1.66	y	1.00	25:59	999					
13C-PCB-101	2.34e+06	1.74	y	0.78	37:26	0.955	0.951-0.961	1030	103	13C-PCB-31	4.24e+06	1.09	y	1.00	28:59	999					
13C-PCB-104	2.69e+06	1.51	y	1.00	32:39	0.833	0.828-0.836	929	93.0	13C-PCB-60	4.10e+06	0.77	y	1.00	36:43	999					
13C-PCB-105	2.54e+06	1.72	y	1.37	43:03	0.928	0.924-0.934	826	82.7	13C-PCB-111	2.88e+06	1.75	y	1.00	39:11	999					
13C-PCB-114	2.51e+06	1.56	y	1.36	42:11	0.909	0.905-0.915	816	81.6	13C-PCB-128	2.25e+06	1.15	y	1.00	46:23	999					
13C-PCB-118	2.51e+06	1.59	y	0.96	41:31	1.060	1.054-1.064	906	90.7	13C-PCB-205	1.78e+06	0.96	y	1.00	54:01	999					
13C-PCB-123	2.40e+06	1.60	y	0.89	41:20	1.055	1.050-1.060	930	93.1												
13C-PCB-126	2.14e+06	1.67	y	1.31	45:19	0.977	0.972-0.982	726	72.7												
13C-PCB-127	2.72e+06	1.51	y	1.47	43:23	0.935	0.931-0.941	818	81.9												
13C-PCB-138	2.11e+06	1.25	y	1.10	44:48	0.966	0.961-0.971	851	85.1												
13C-PCB-141	2.18e+06	1.35	y	1.07	43:57	0.948	0.943-0.953	901	90.2												
13C-PCB-153	2.46e+06	1.27	y	1.15	43:12	0.931	0.927-0.937	951	95.2												
13C-PCB-155	2.58e+06	1.26	y	0.84	36:59	0.944	0.939-0.949	1070	107												
13C-PCB-156	2.57e+06	1.16	y	1.30	48:07	1.037	1.032-1.042	880	88.1												
13C-PCB-157	2.74e+06	1.23	y	1.36	48:23	1.043	1.038-1.048	896	89.7												
13C-PCB-159	2.68e+06	1.28	y	1.25	46:07	0.994	0.989-0.999	952	95.3												
13C-PCB-167	2.70e+06	1.27	y	1.35	46:48	1.009	1.004-1.014	887	88.8												
13C-PCB-169	2.33e+06	1.11	y	1.29	50:25	1.087	1.083-1.093	803	80.4												
13C-PCB-170	1.10e+06	0.41	y	0.54	50:44	1.094	1.089-1.101	898	89.9												
13C-PCB-180	1.49e+06	0.51	y	0.68	49:22	1.064	1.060-1.070	968	96.9												
13C-PCB-188	2.08e+06	0.44	y	0.92	42:49	0.923	0.919-0.929	1000	101												
13C-PCB-189	1.53e+06	0.49	y	0.72	52:11	1.125	1.120-1.132	950	95.1												
13C-PCB-194	1.41e+06	0.93	y	0.80	53:43	0.994	0.990-1.000	989	99.0												
13C-PCB-202	1.78e+06	1.01	y	0.84	48:17	1.041	1.036-1.046	942	94.3												
13C-PCB-206	1.07e+06	0.82	y	0.65	55:27	1.027	1.021-1.031	921	92.2												
13C-PCB-208	1.68e+06	0.73	y	1.08	52:55	0.980	0.976-0.986	875	87.6												
13C-PCB-209	1.01e+06	1.12	y	0.61	56:43	1.050	1.045-1.055	929	93.0												

Analyst: *DMS*
 Date: *10/30/14*

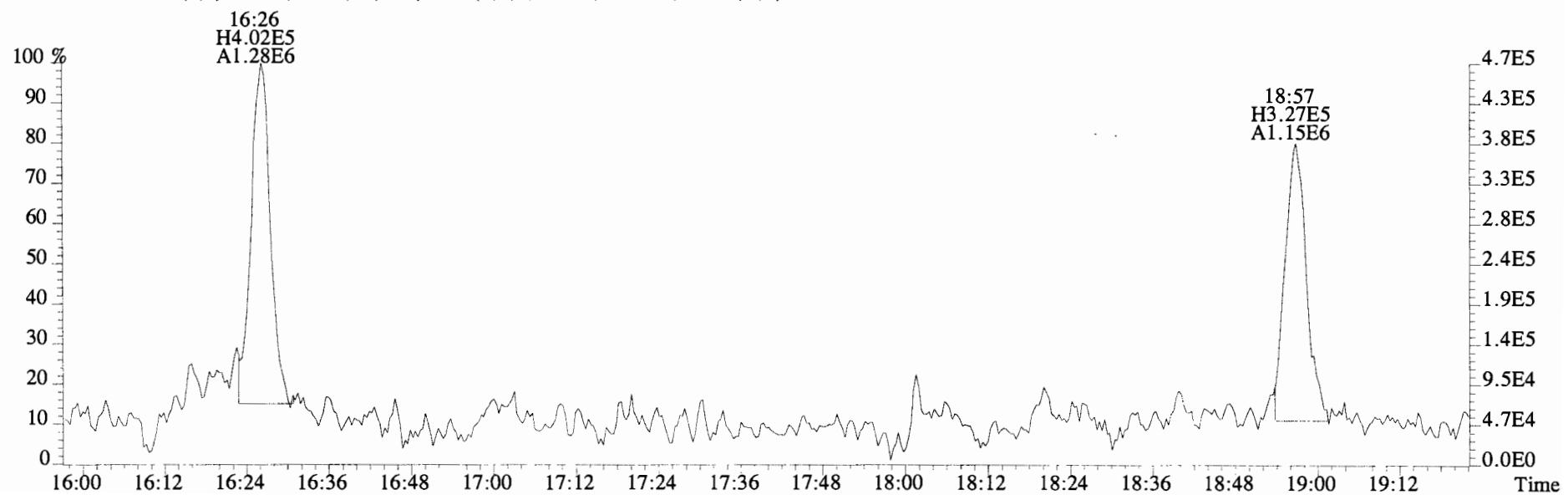
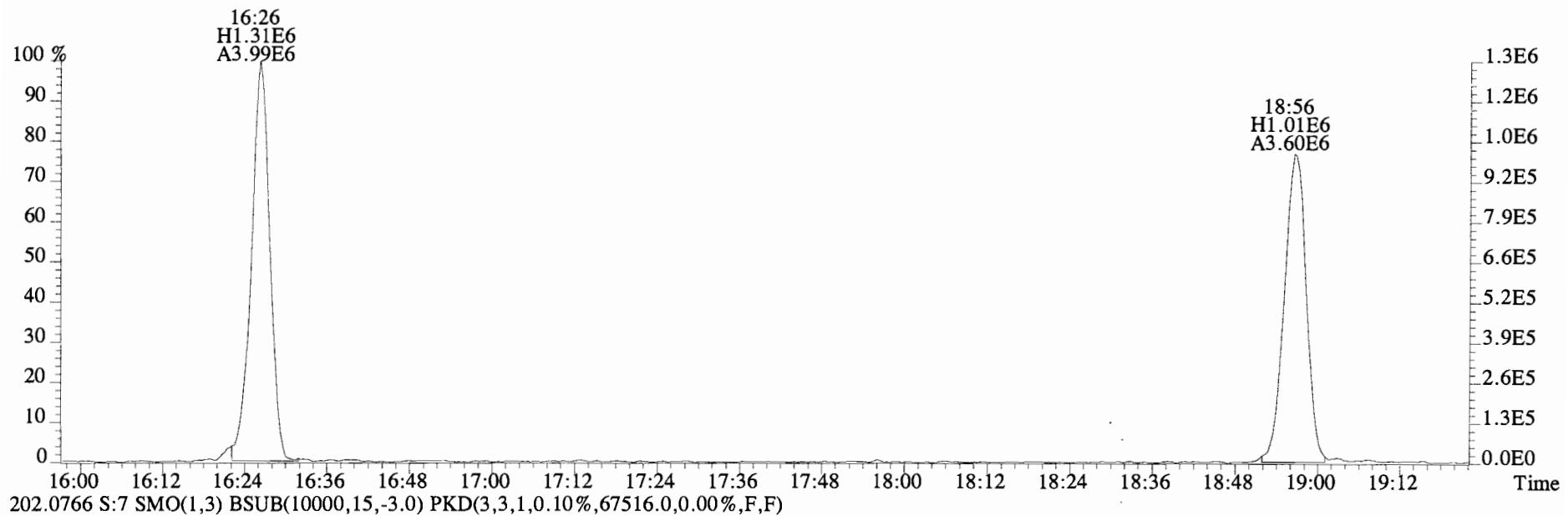
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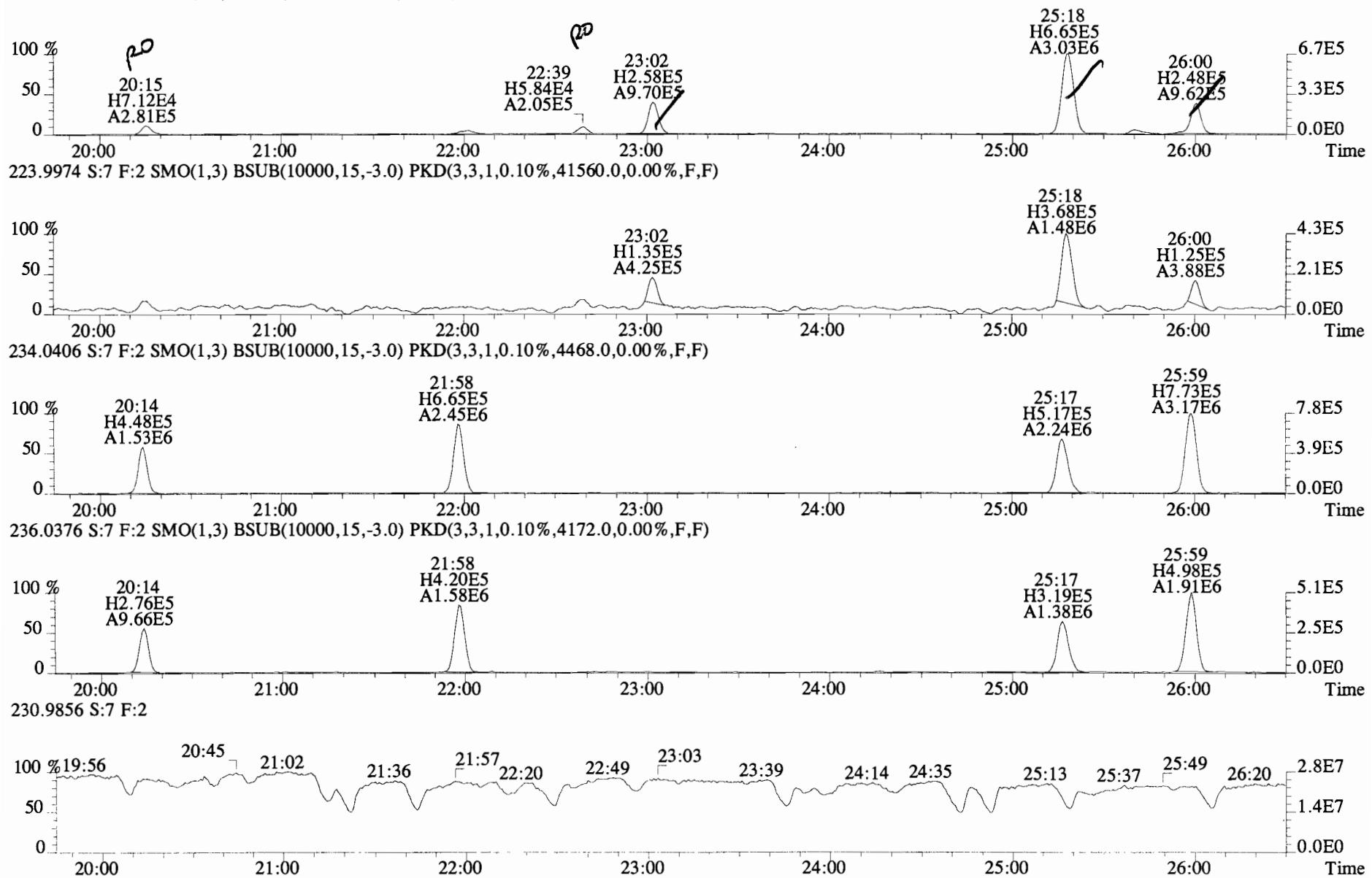
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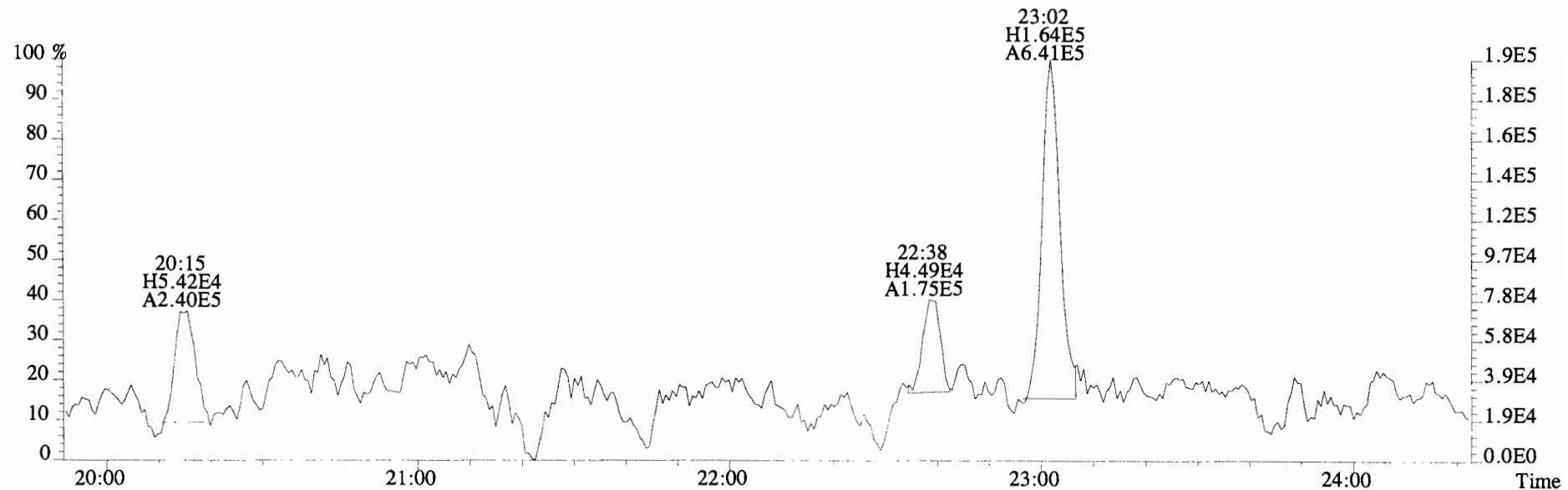
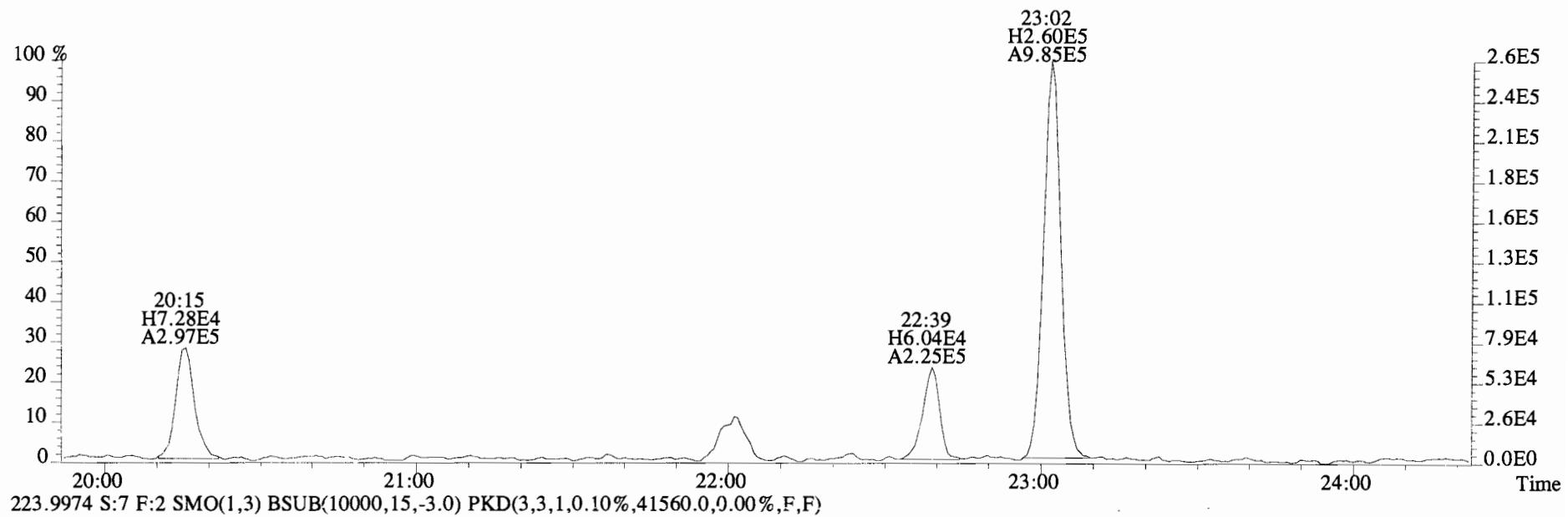
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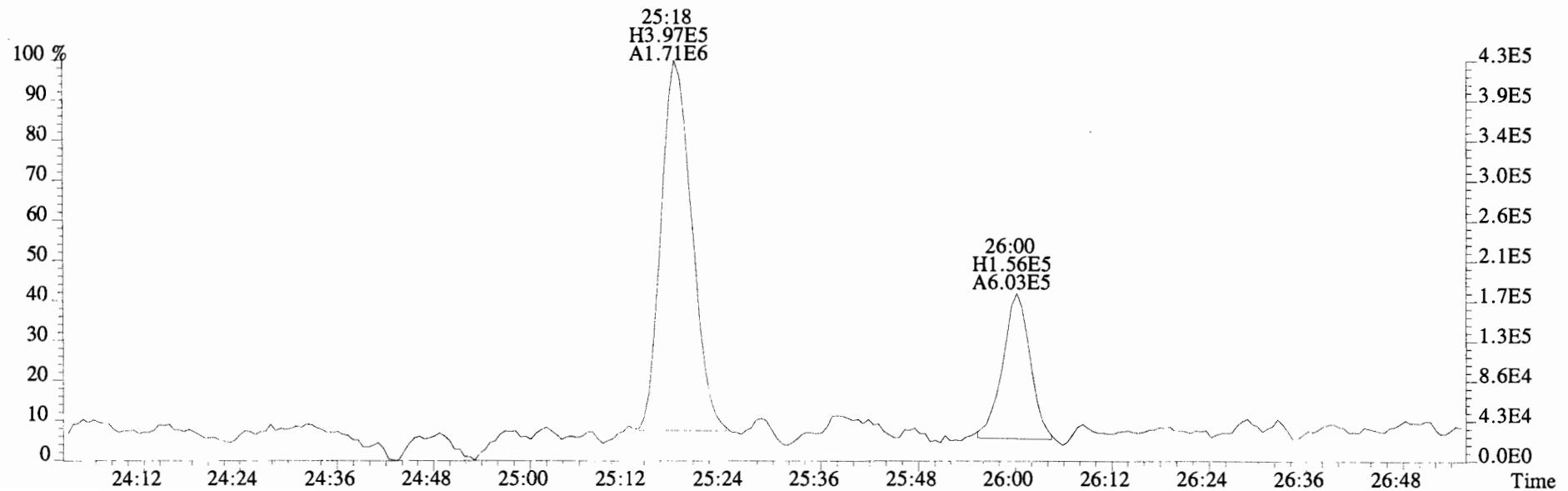
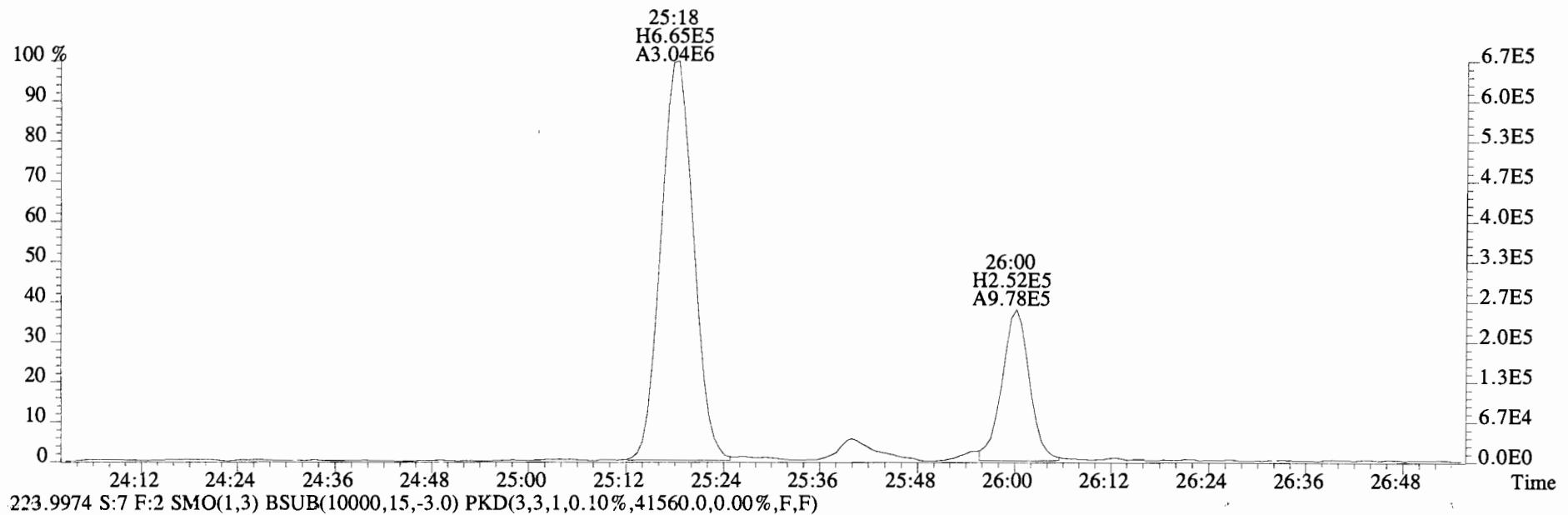
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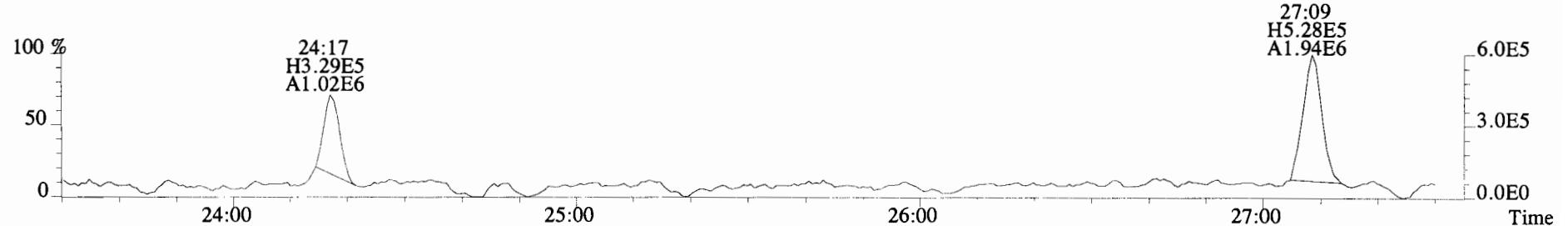
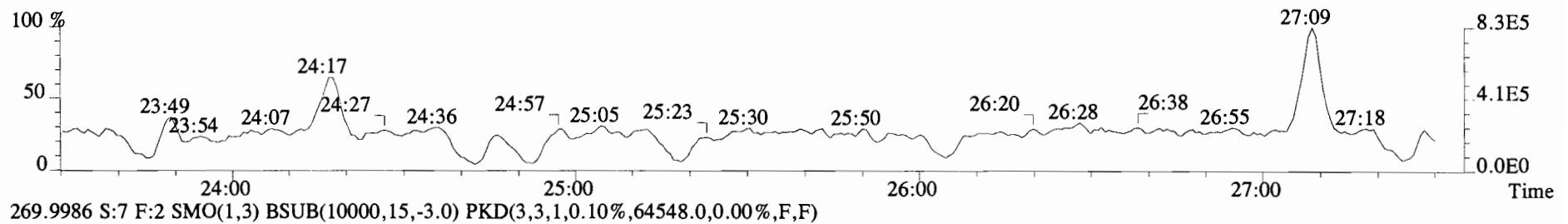
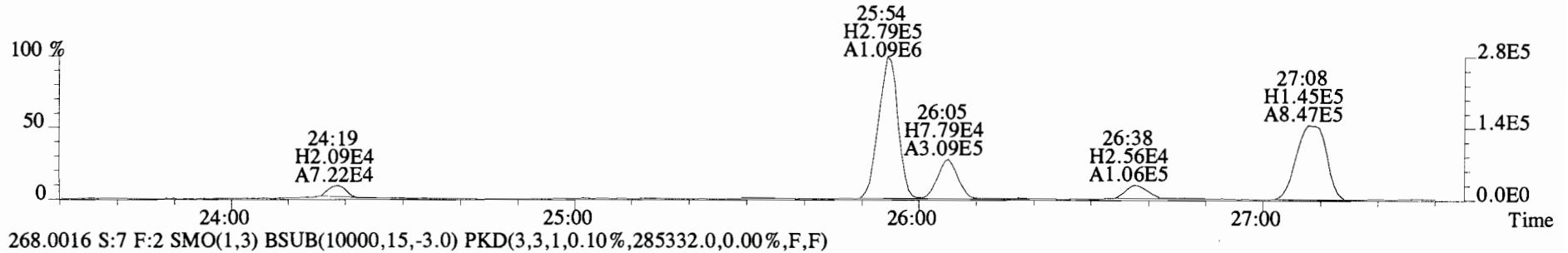
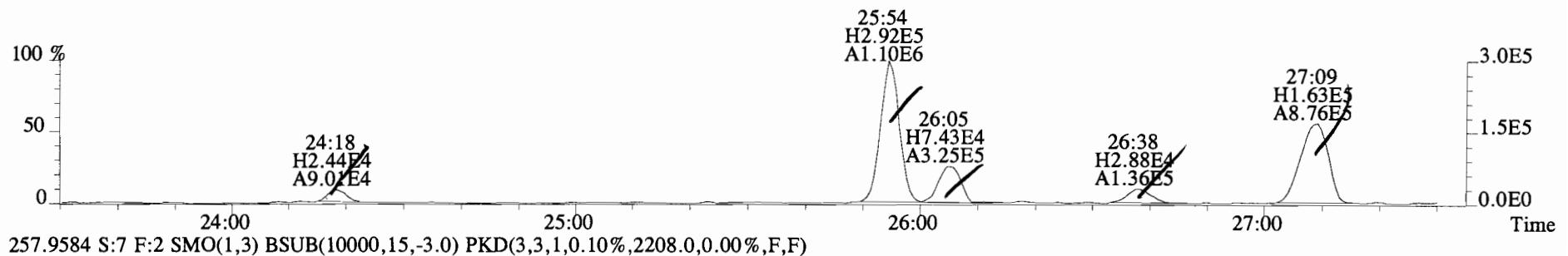
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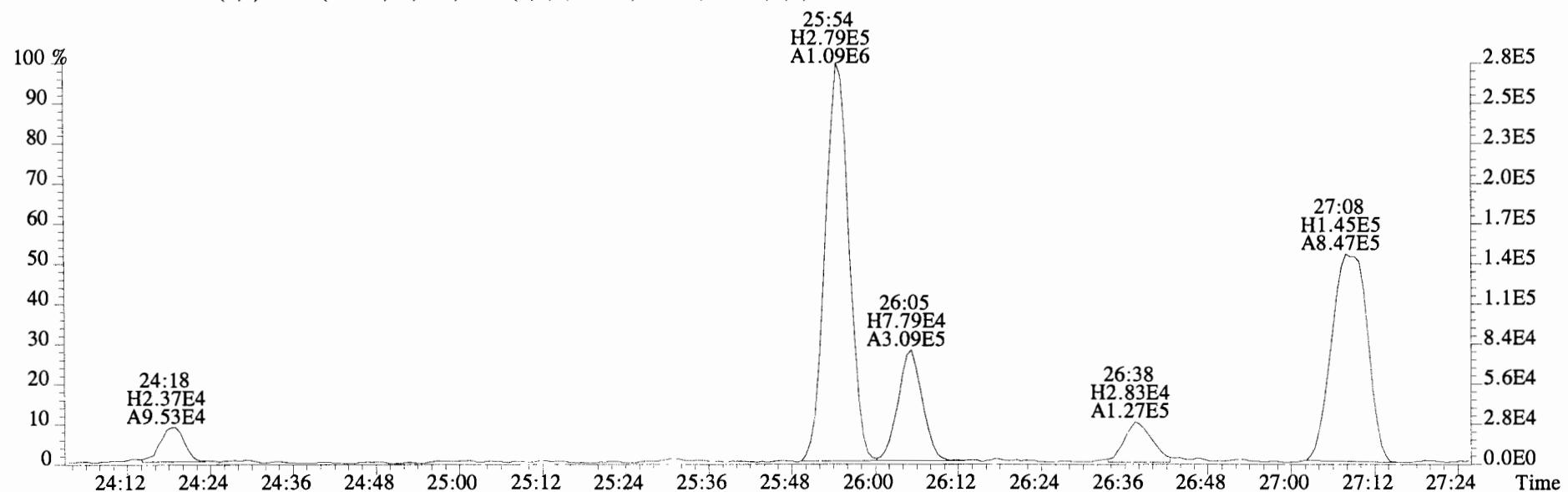
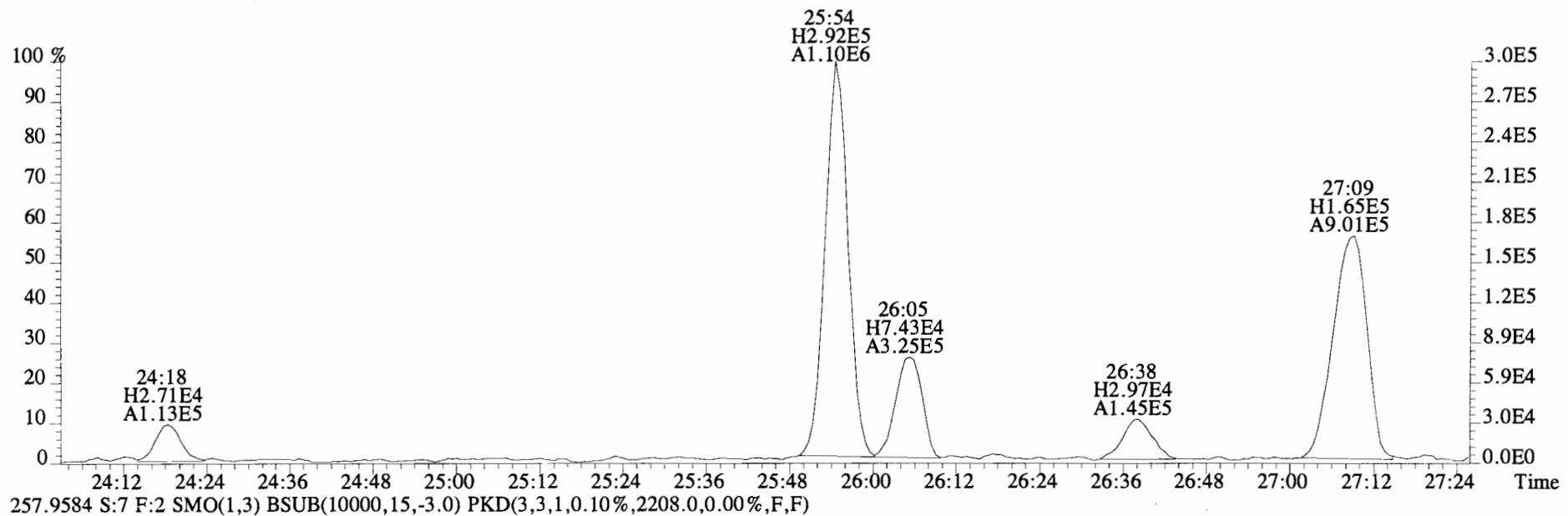
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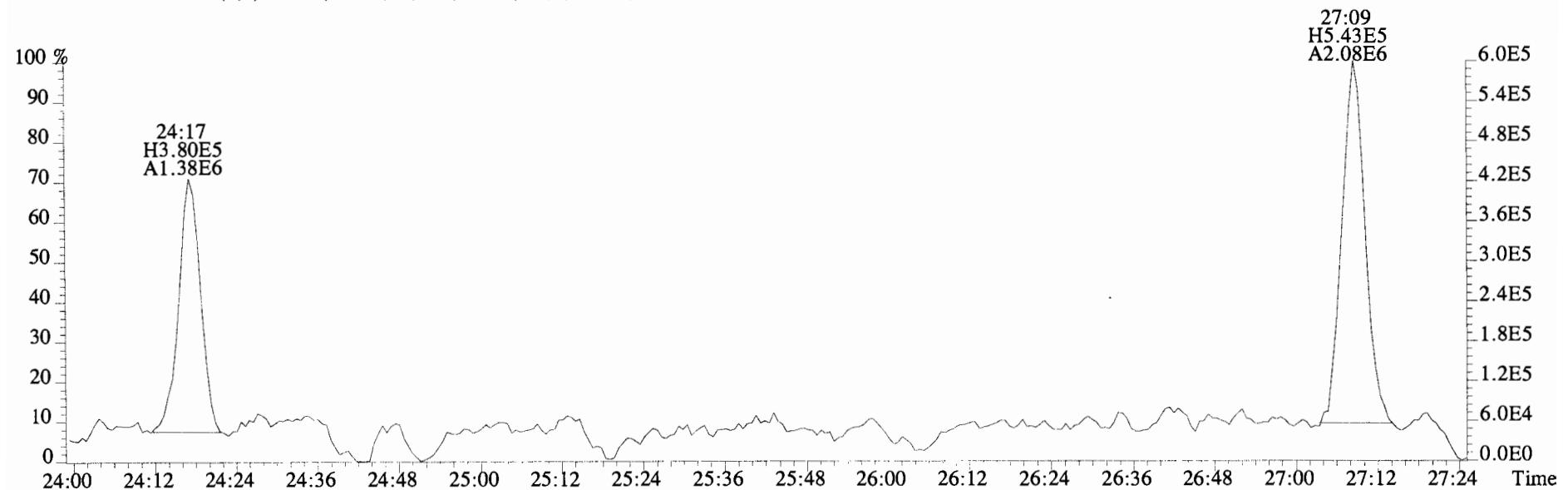
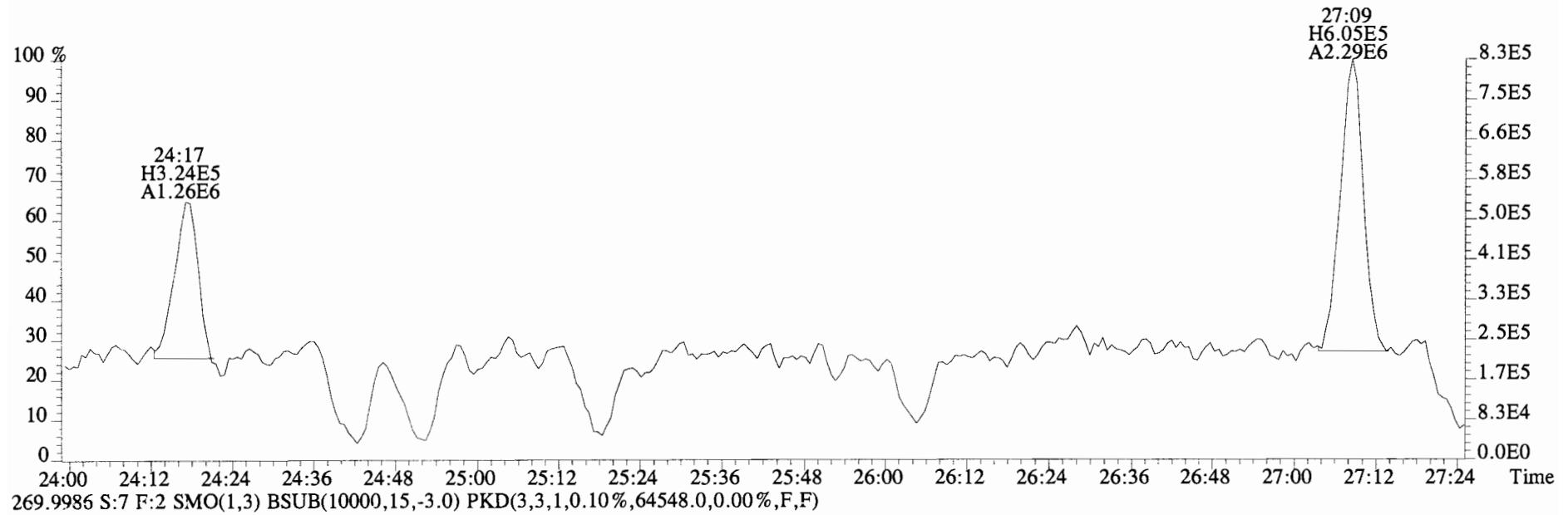
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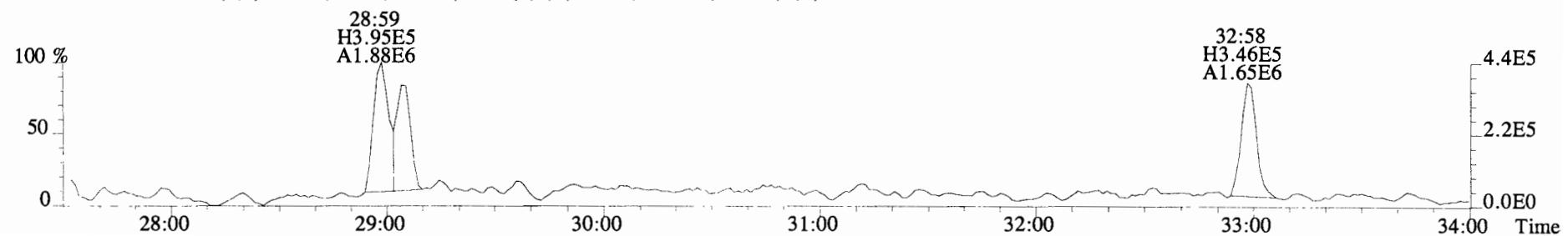
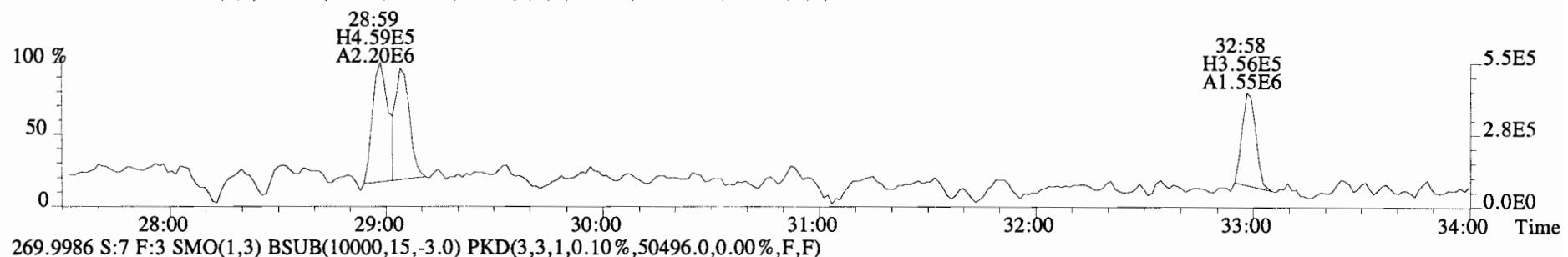
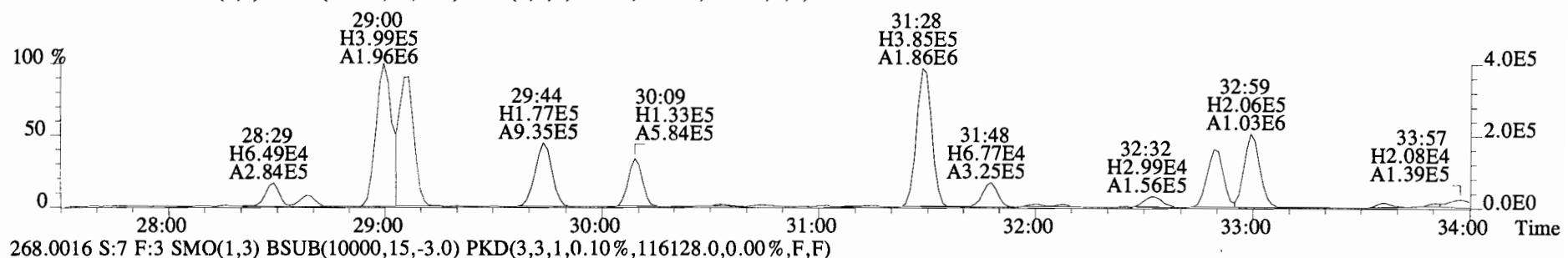
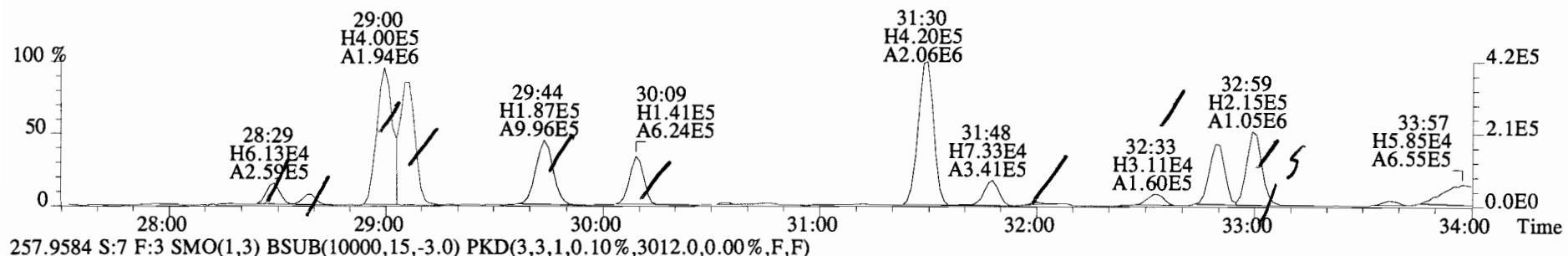
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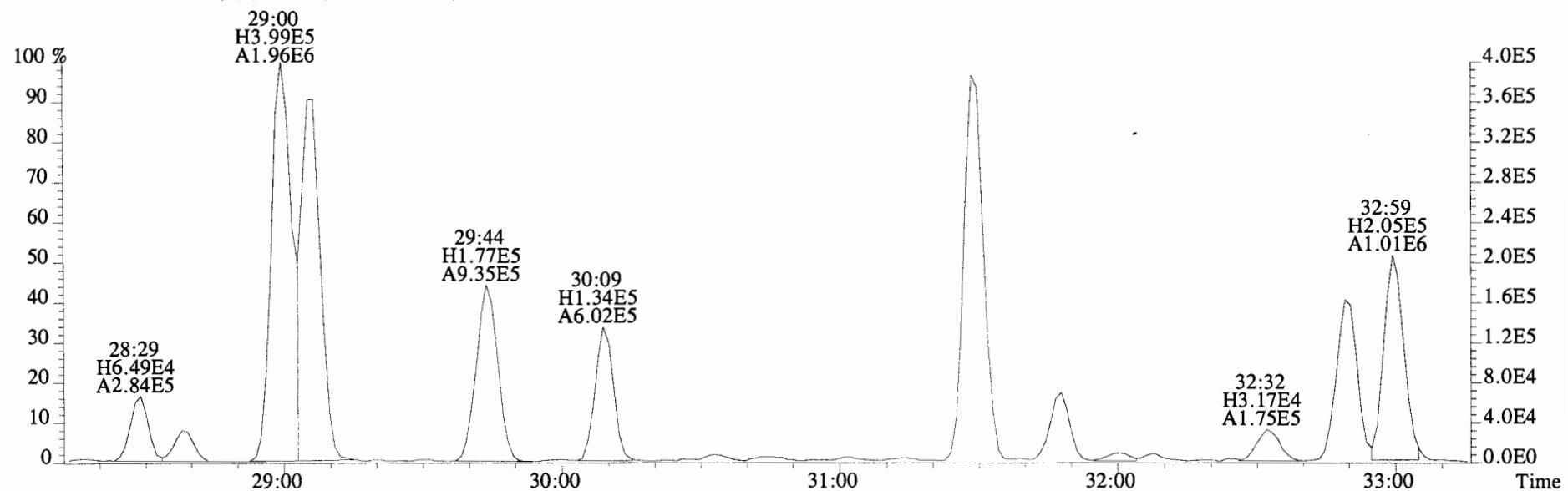
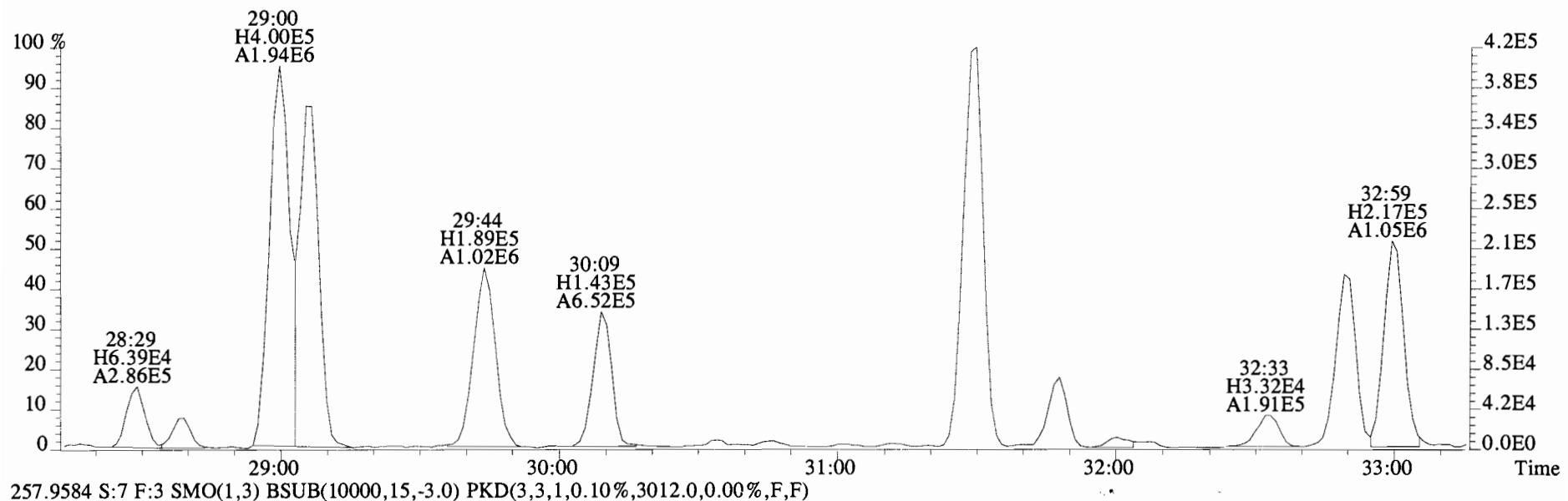
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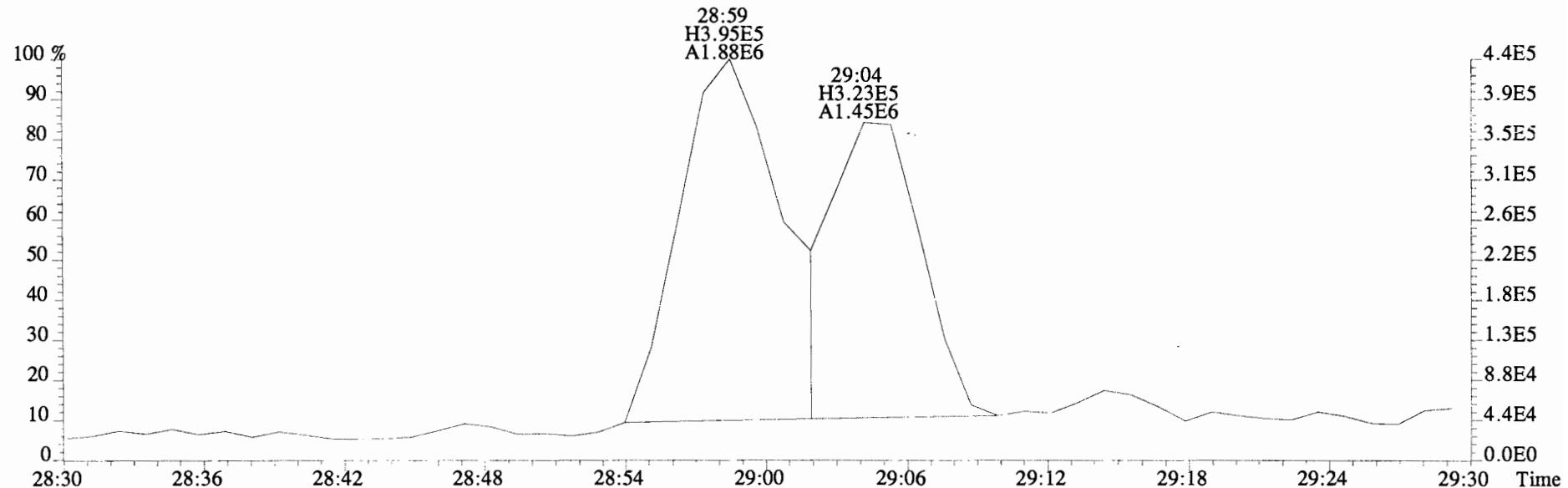
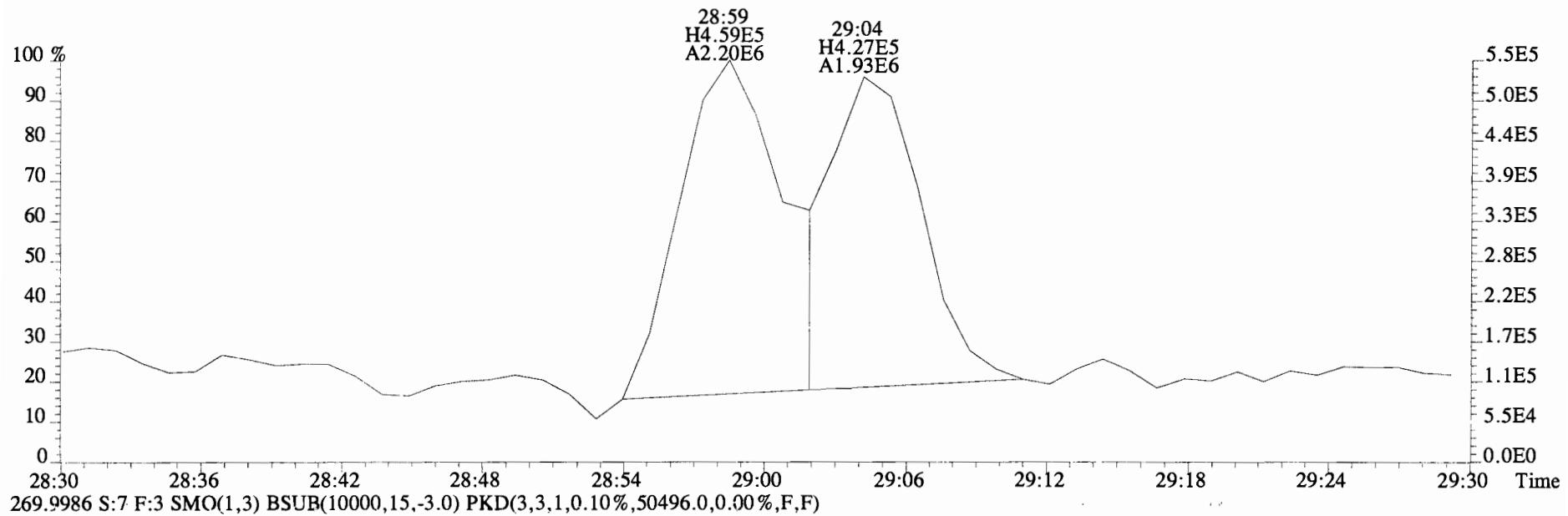
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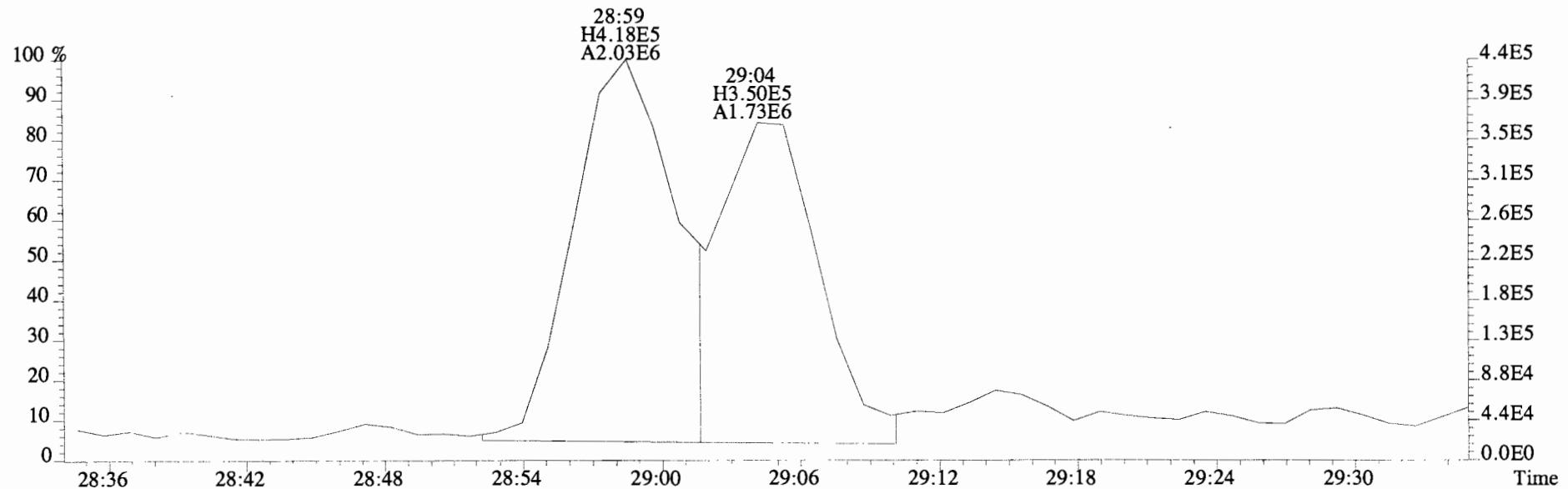
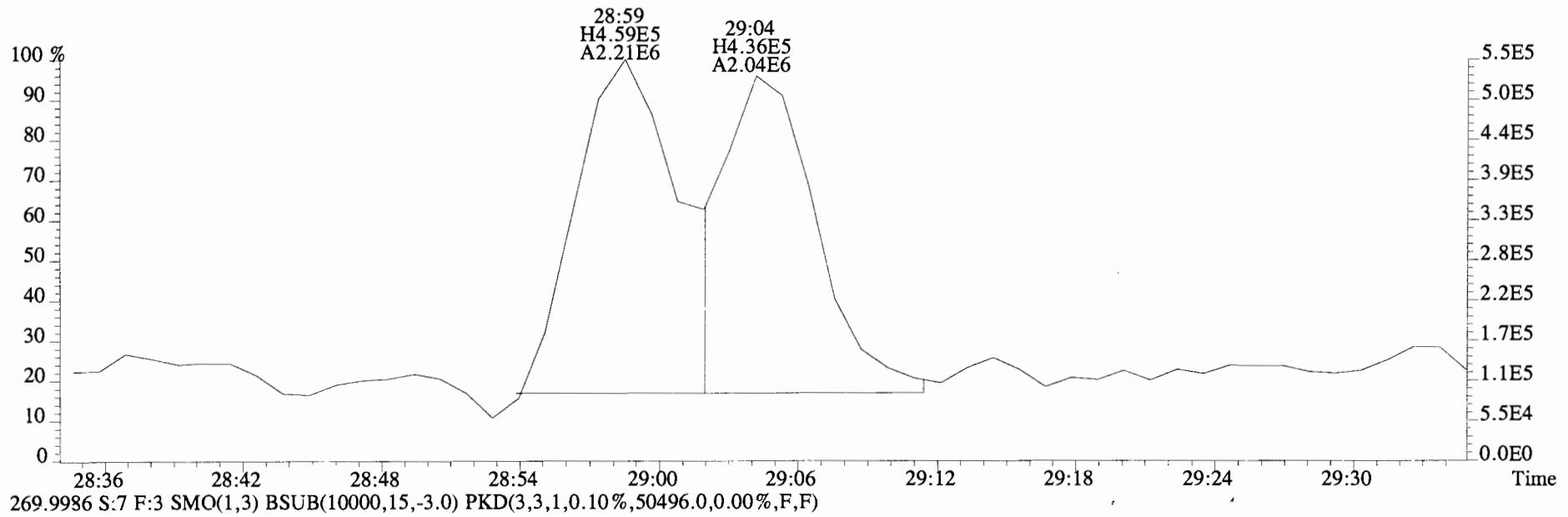
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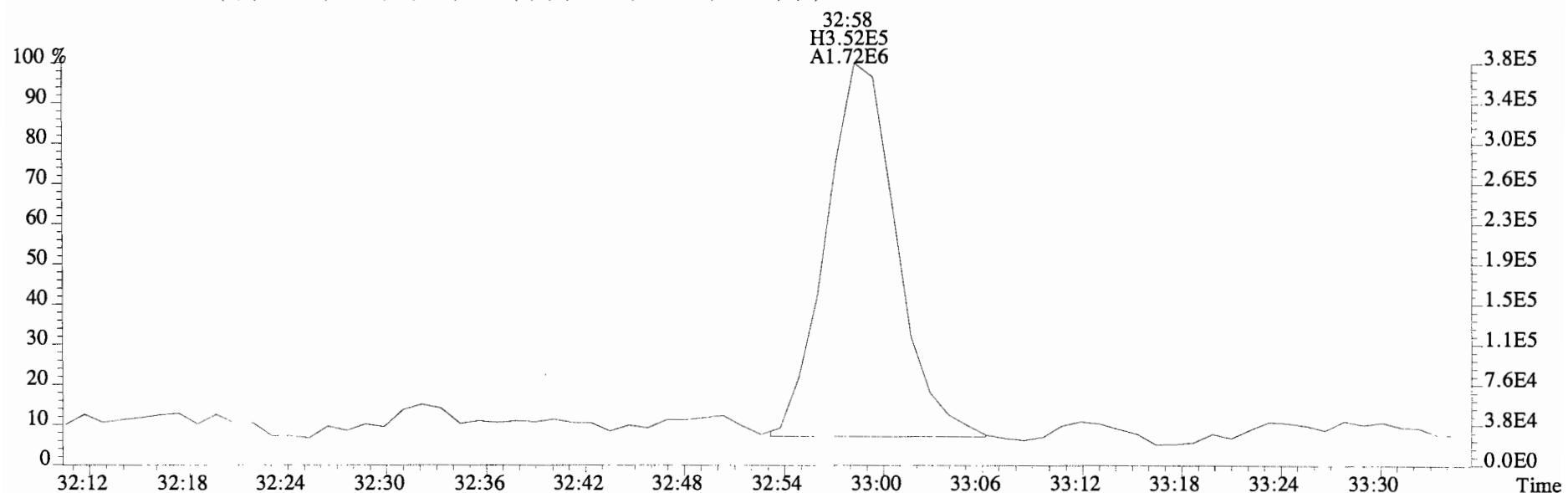
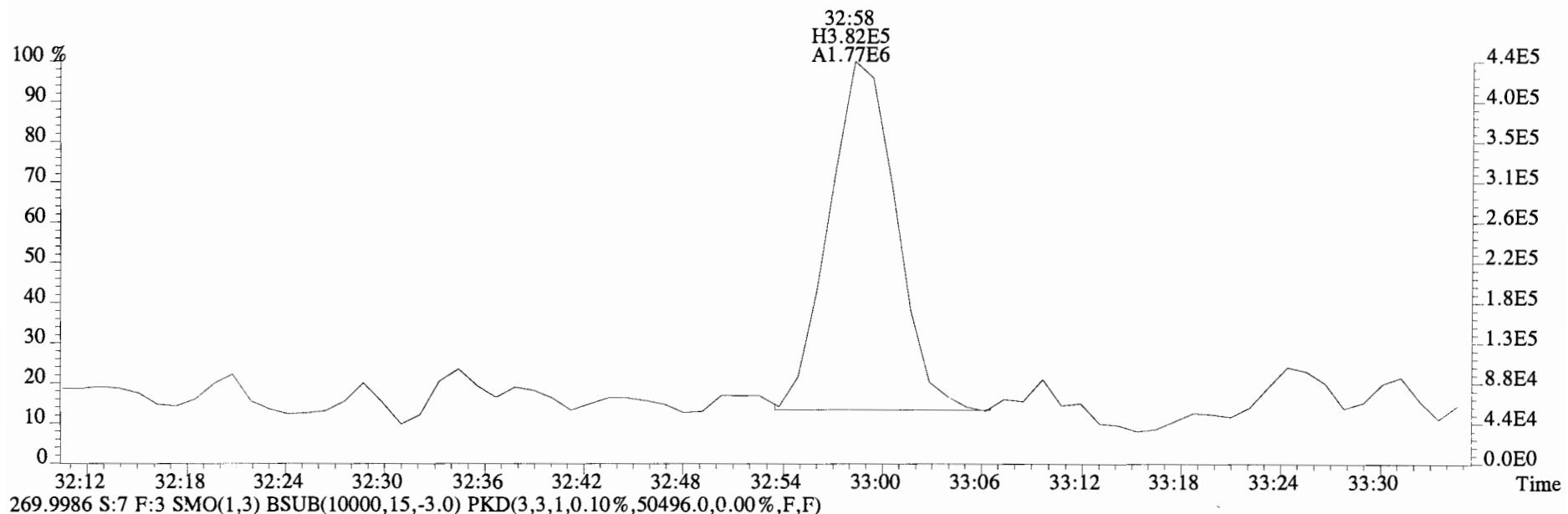
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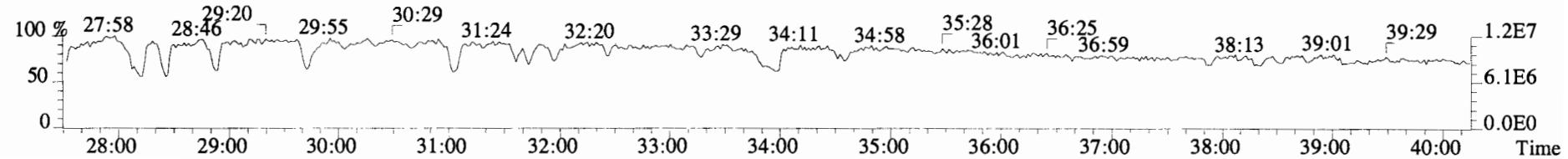
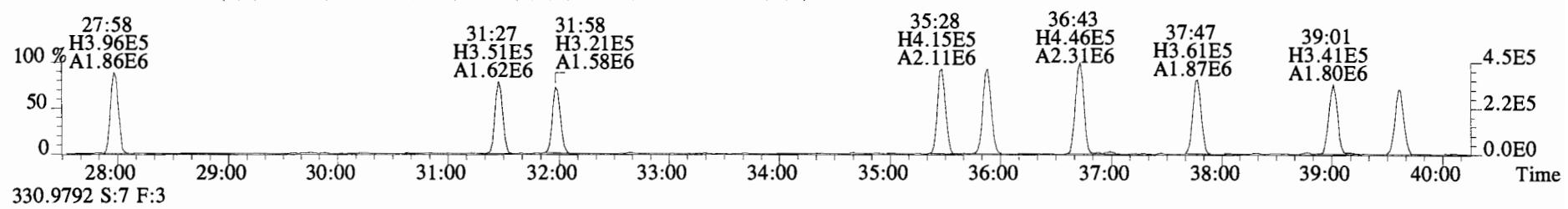
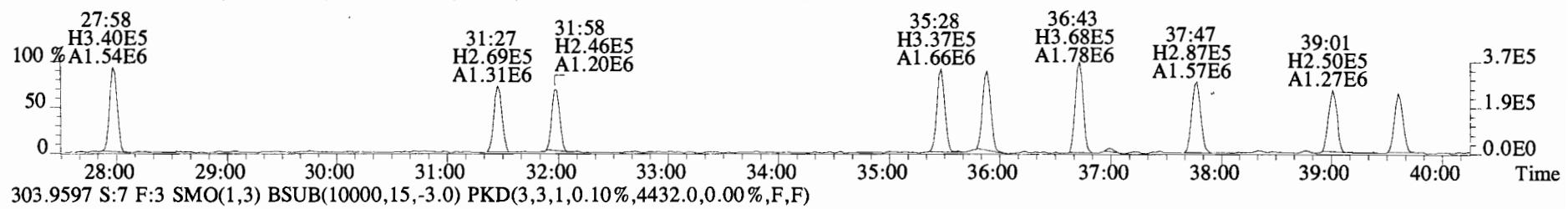
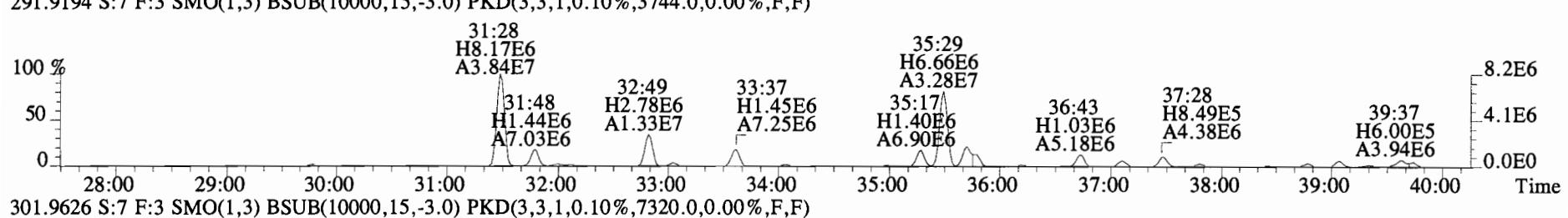
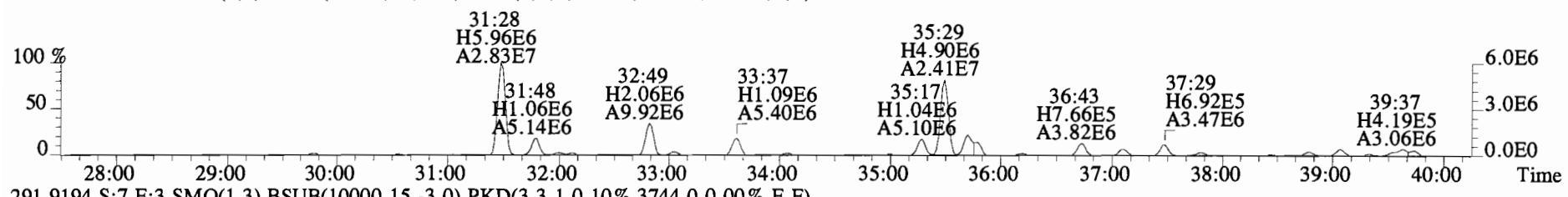
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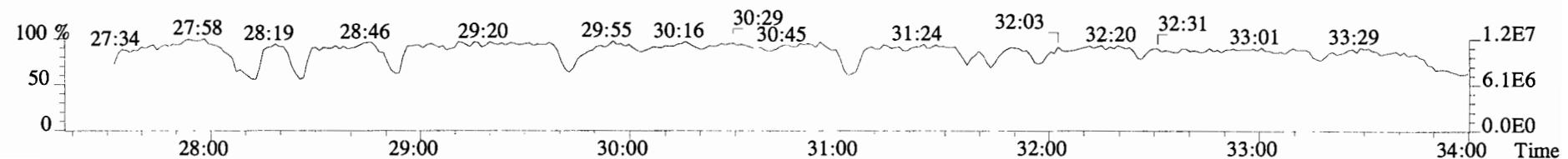
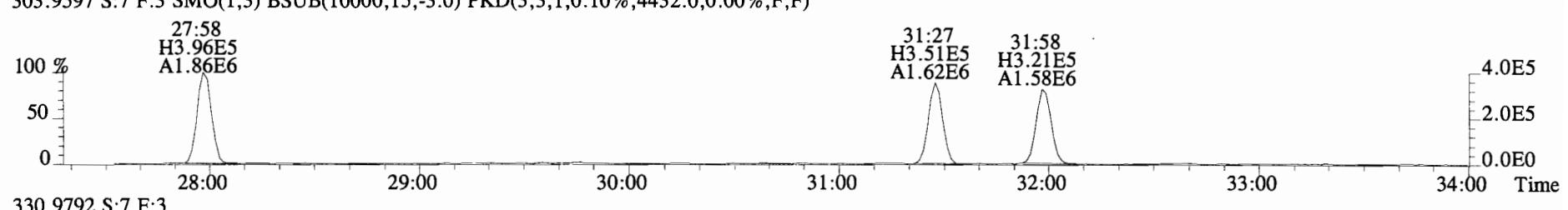
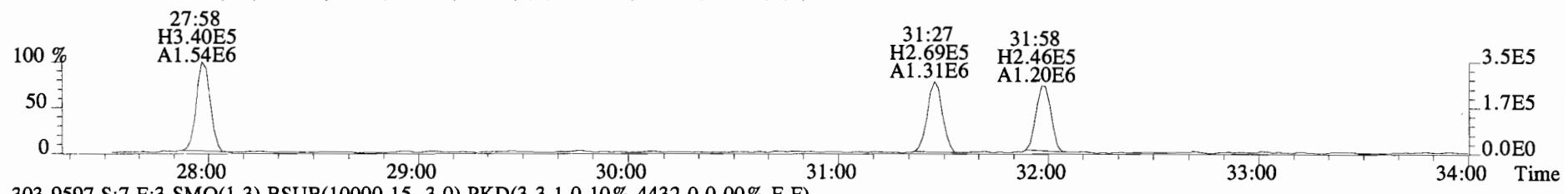
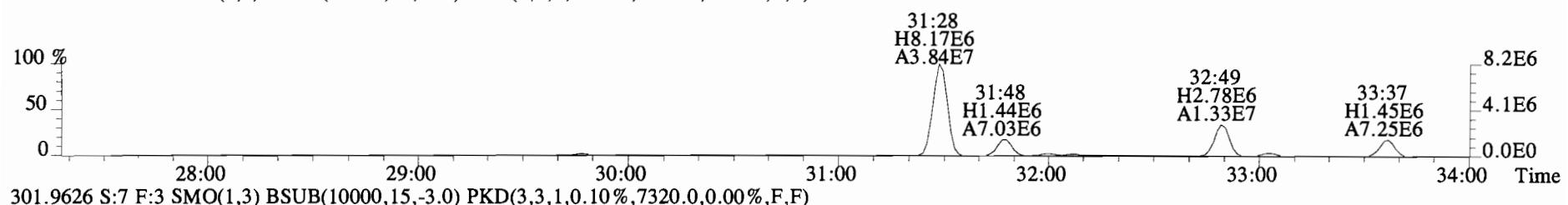
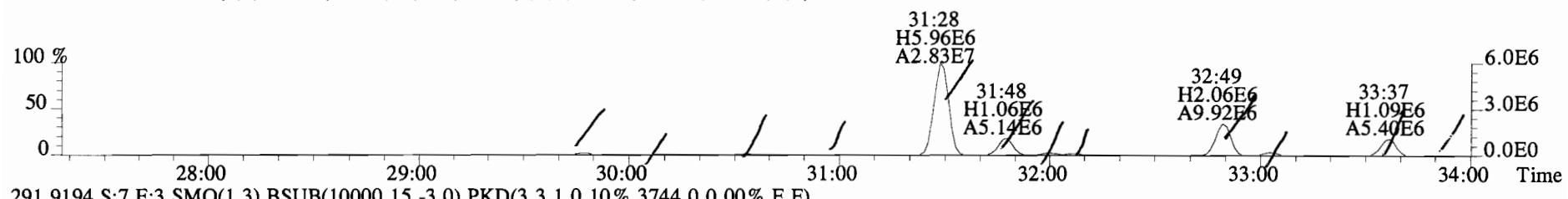
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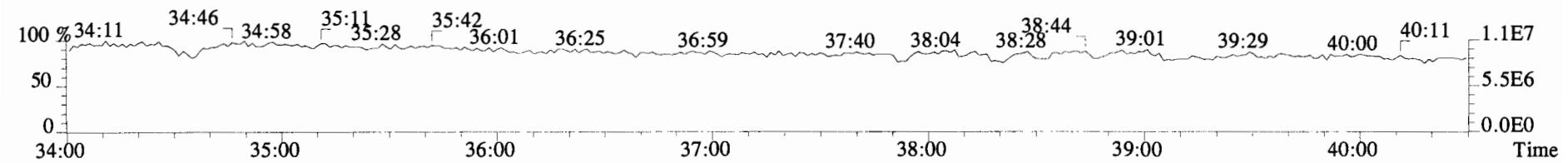
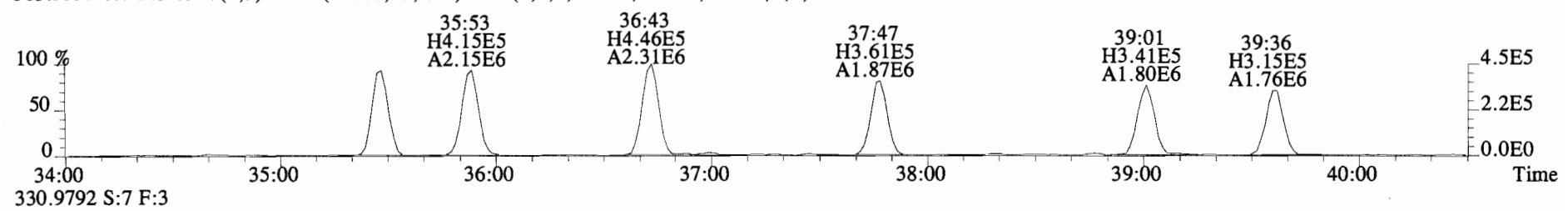
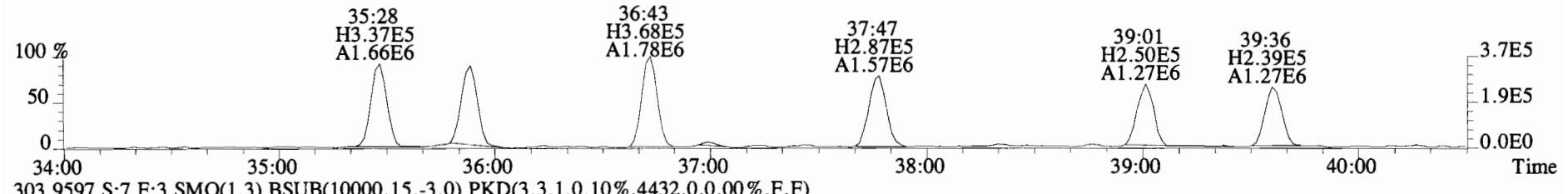
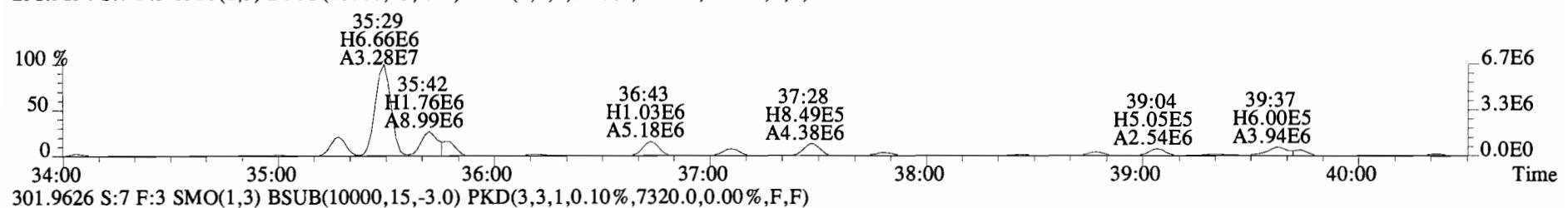
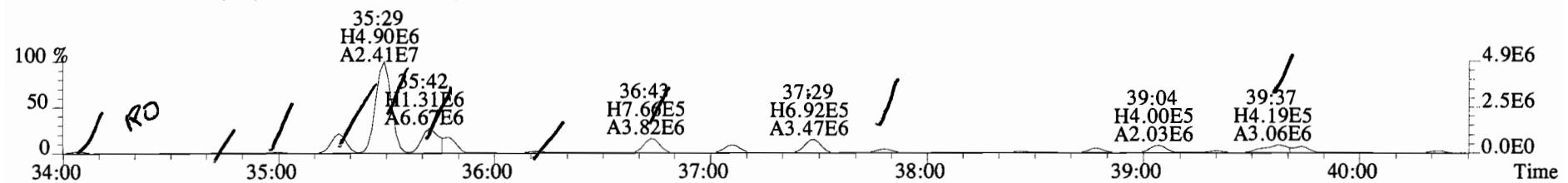
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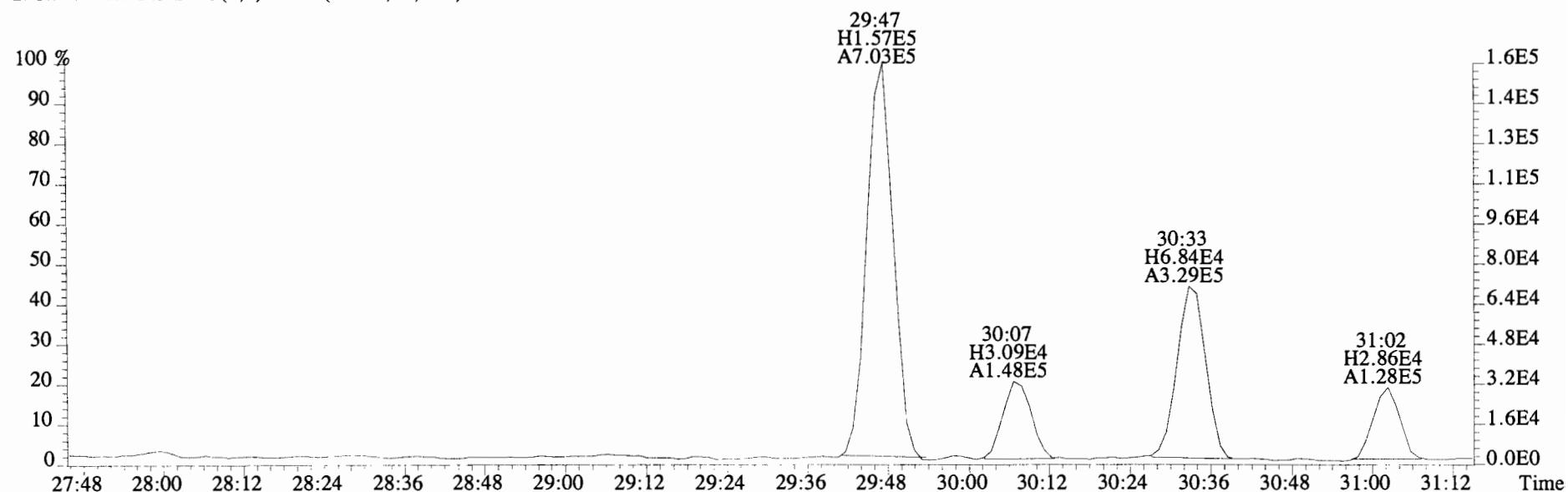
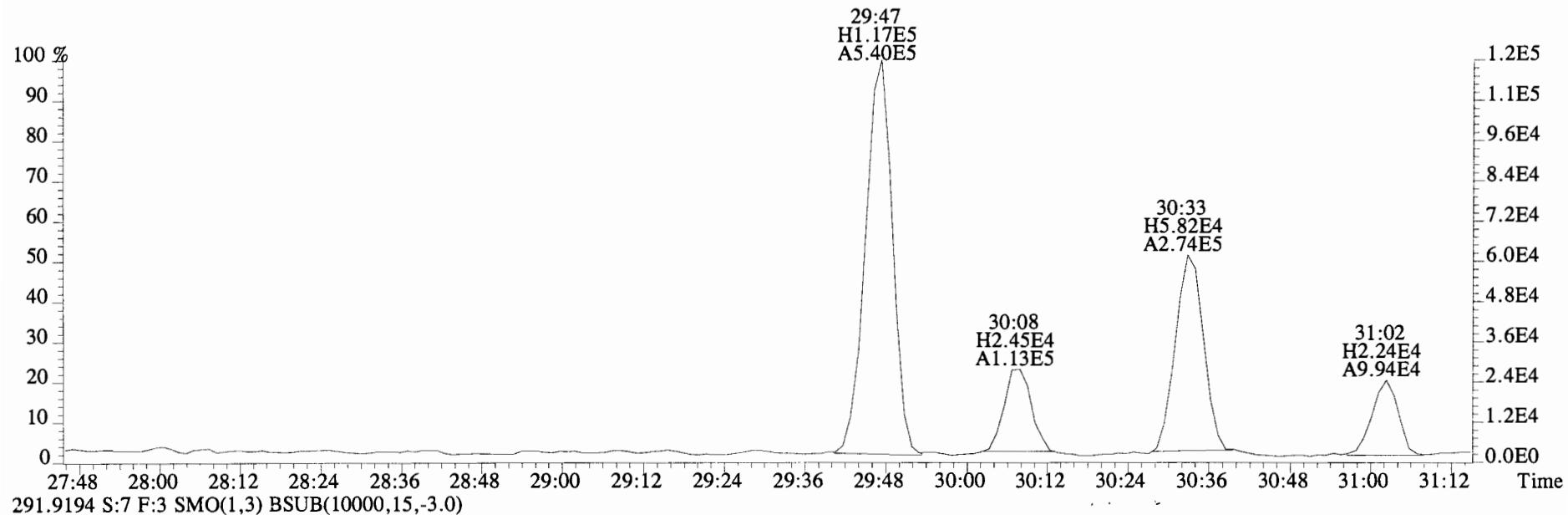
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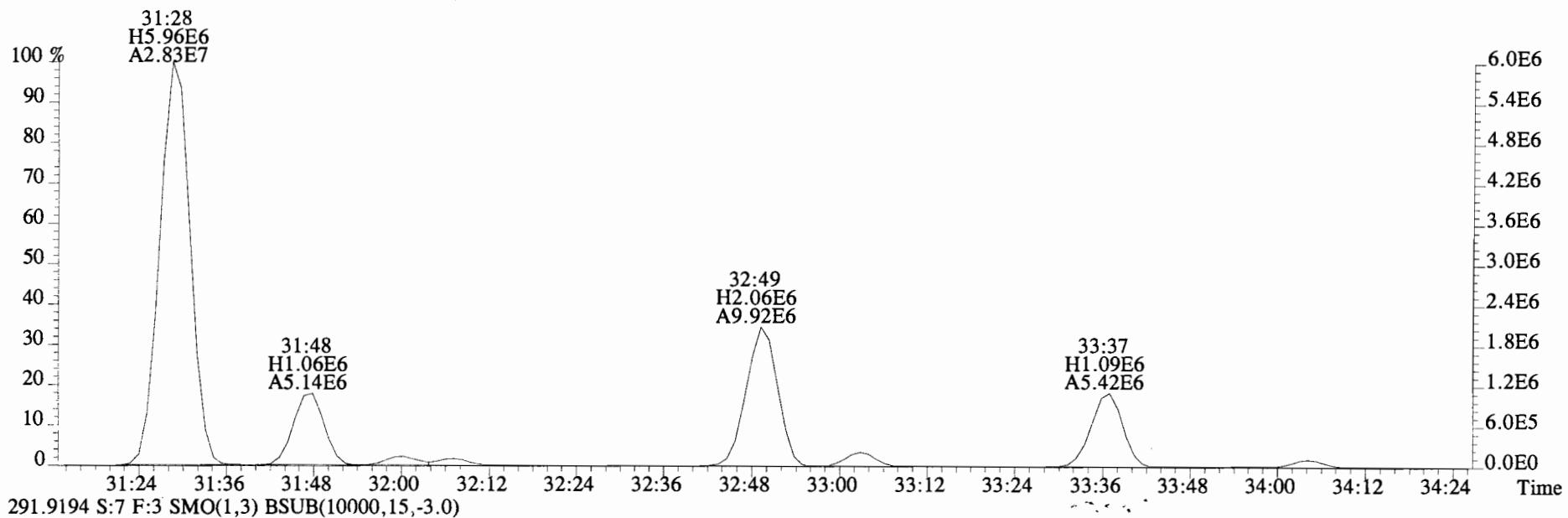
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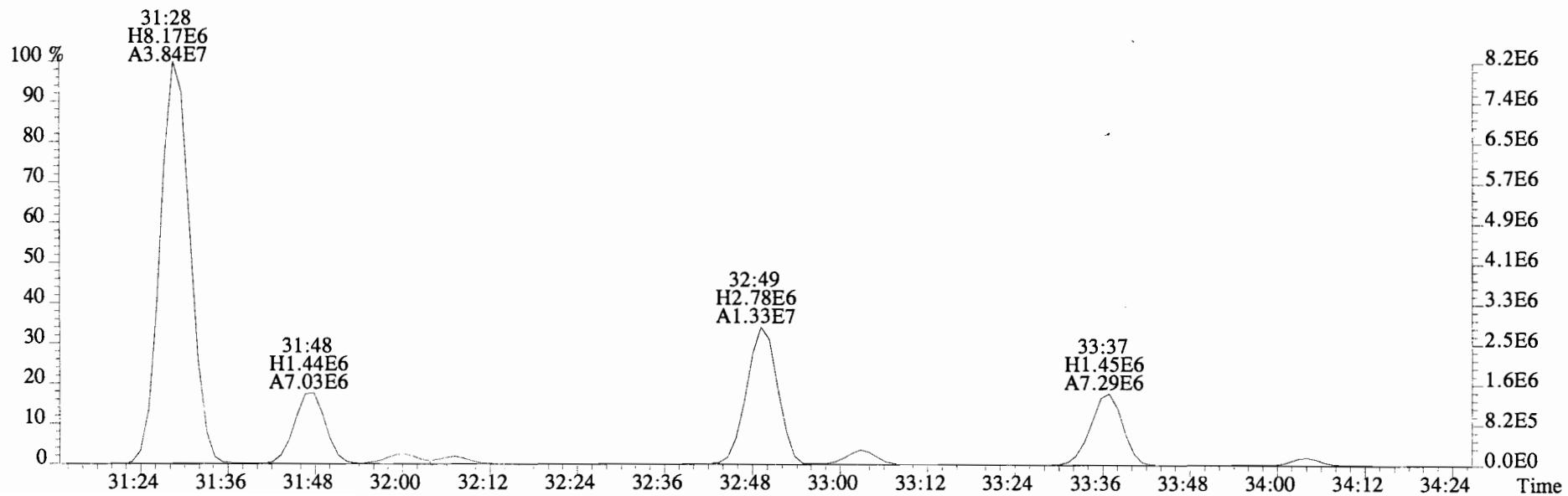
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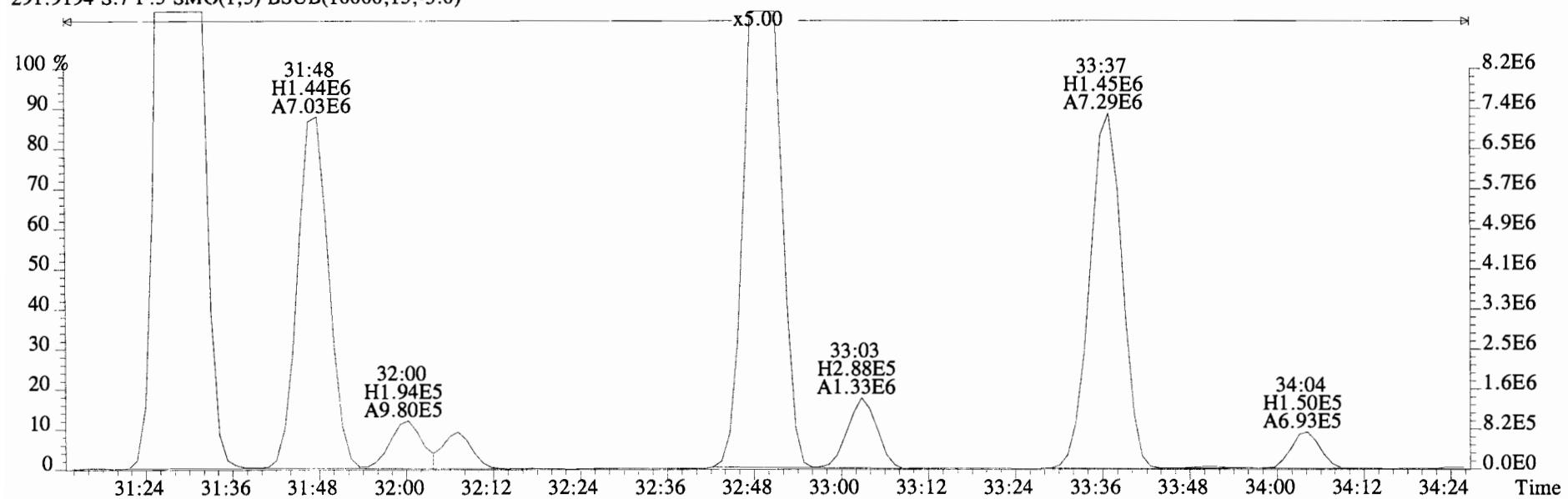
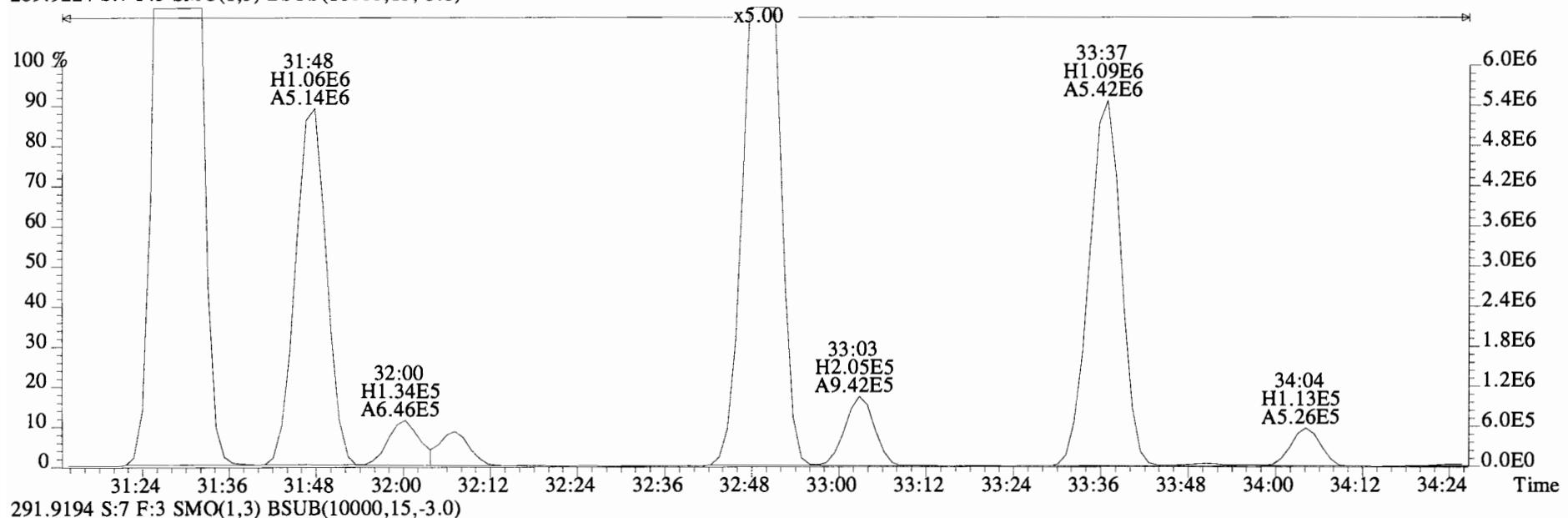
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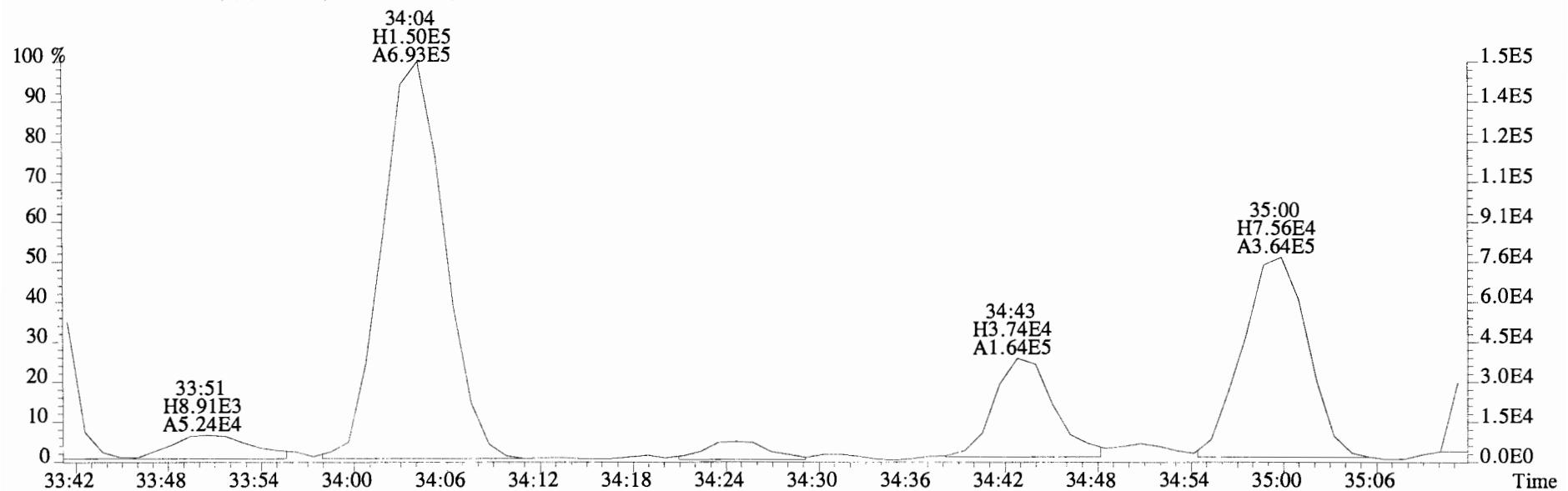
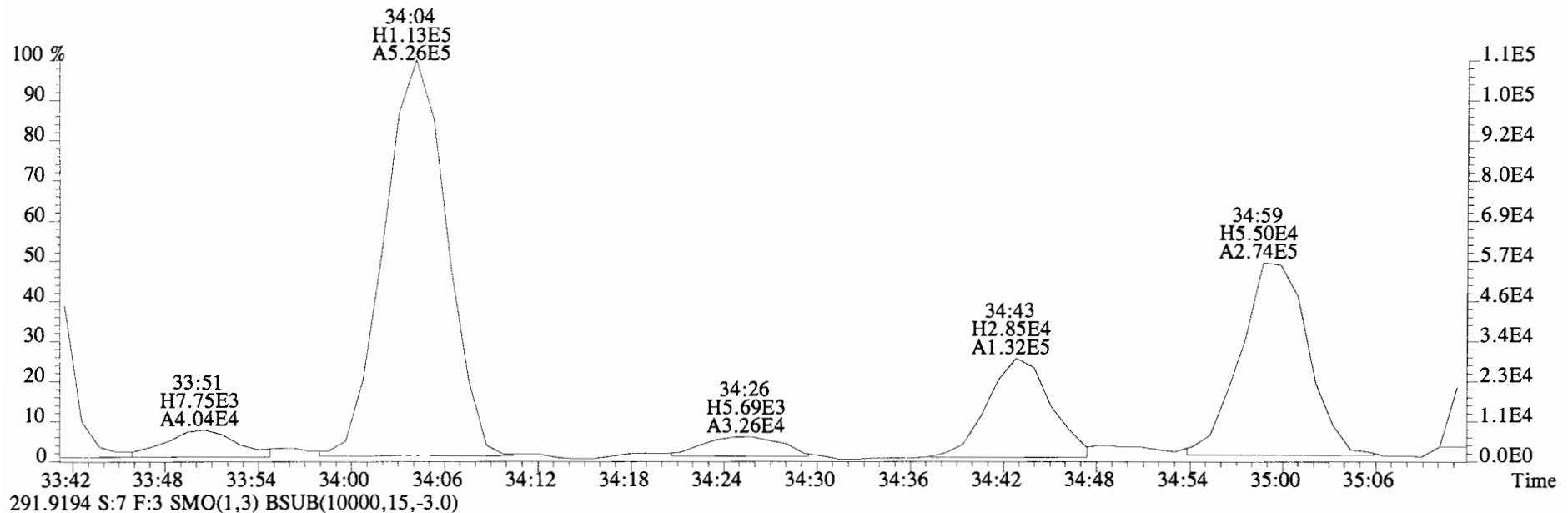
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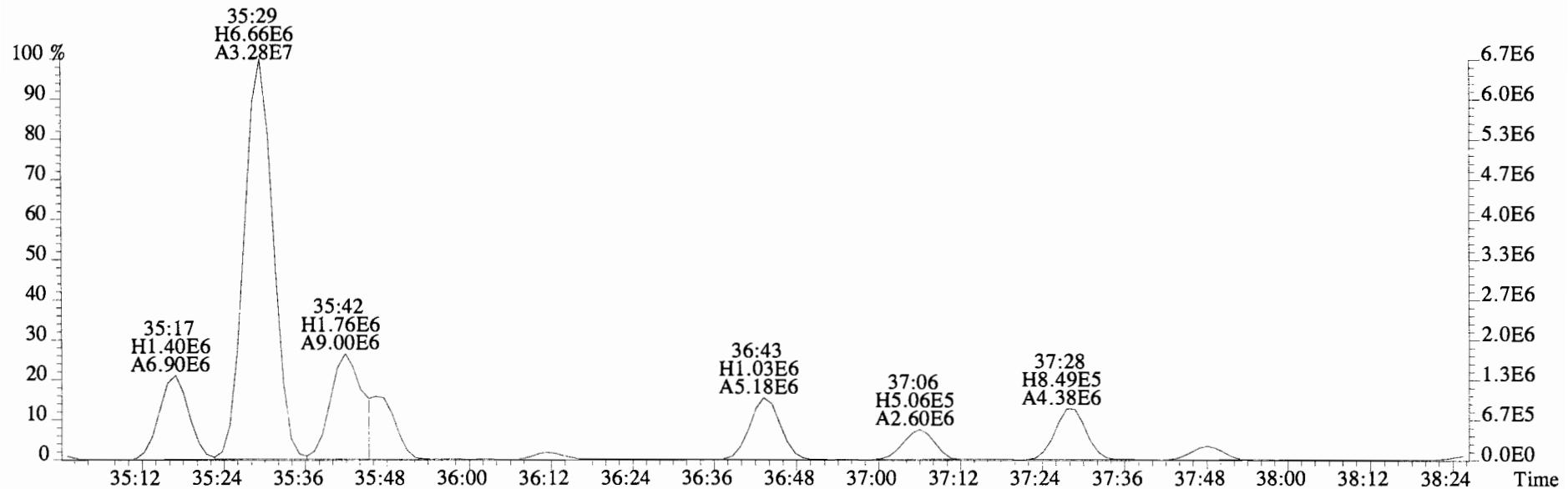
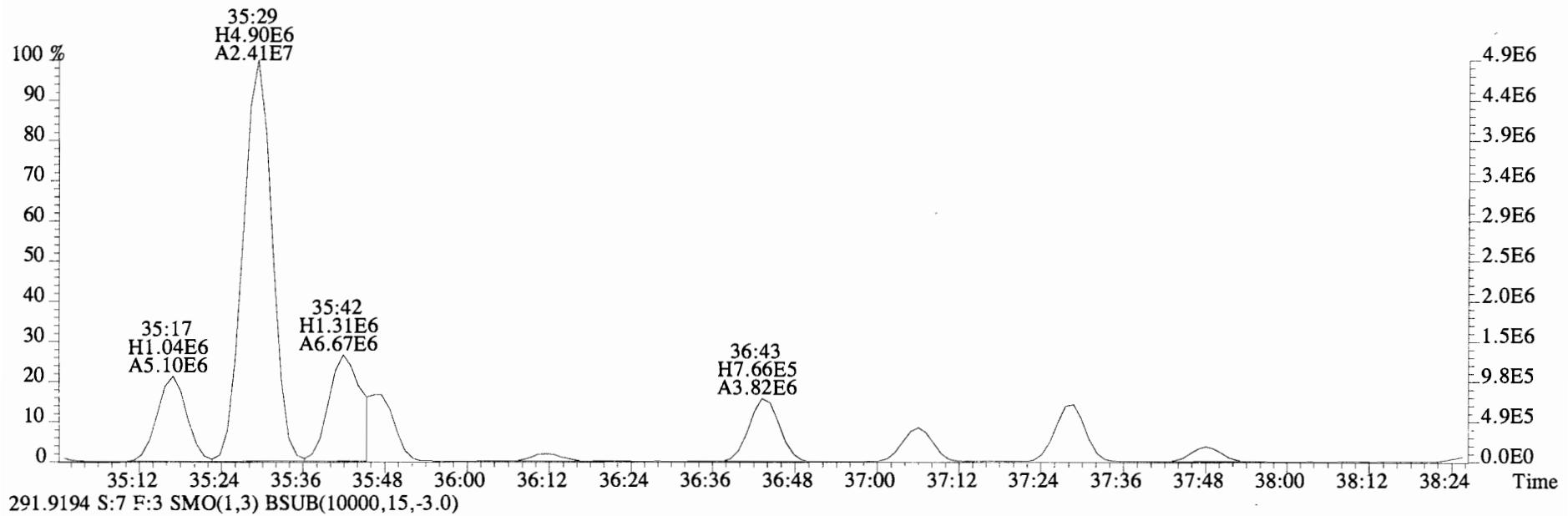
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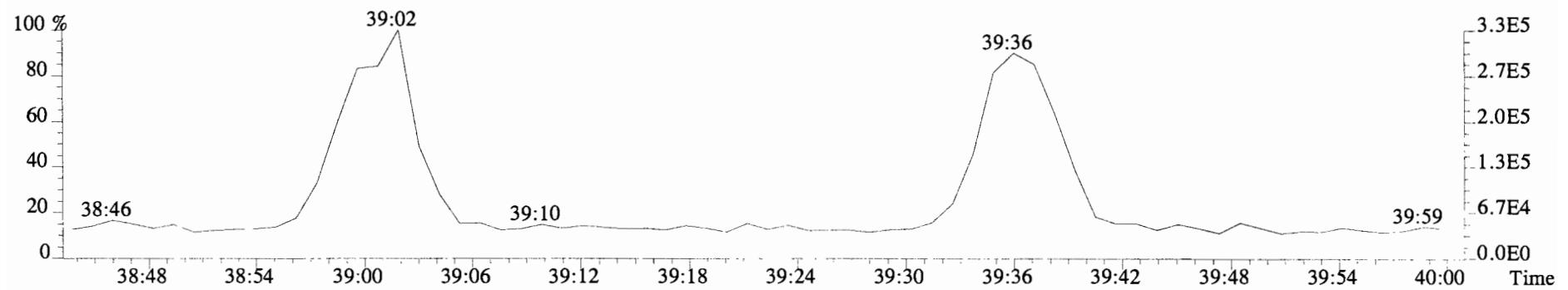
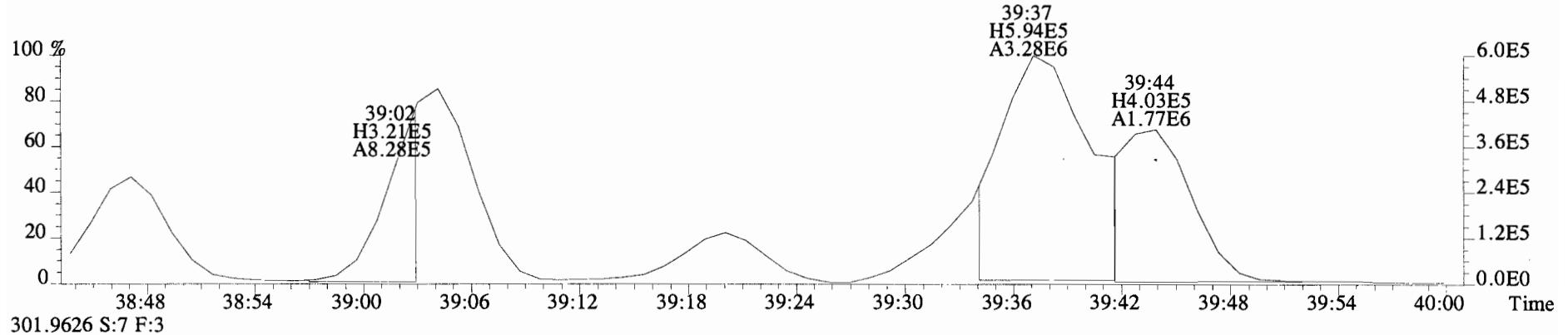
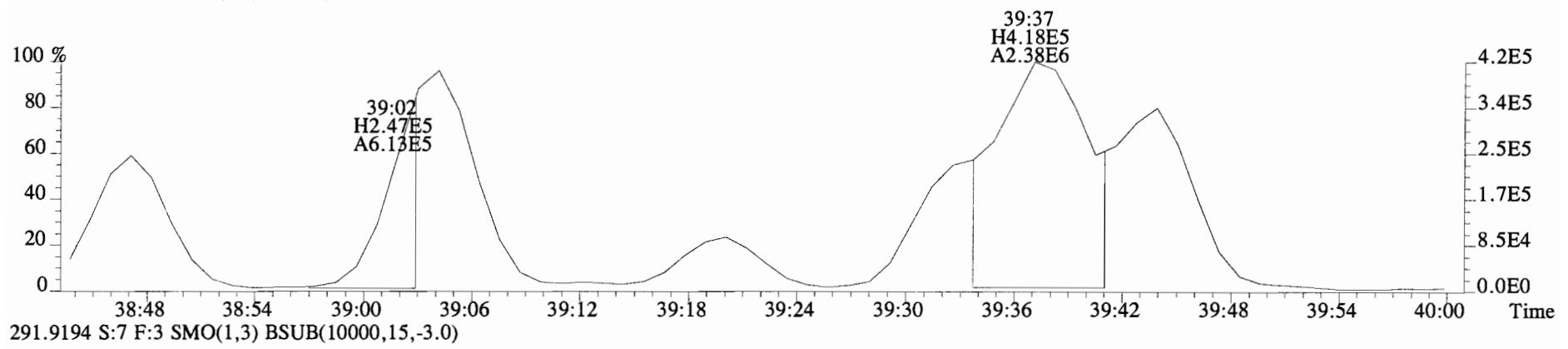
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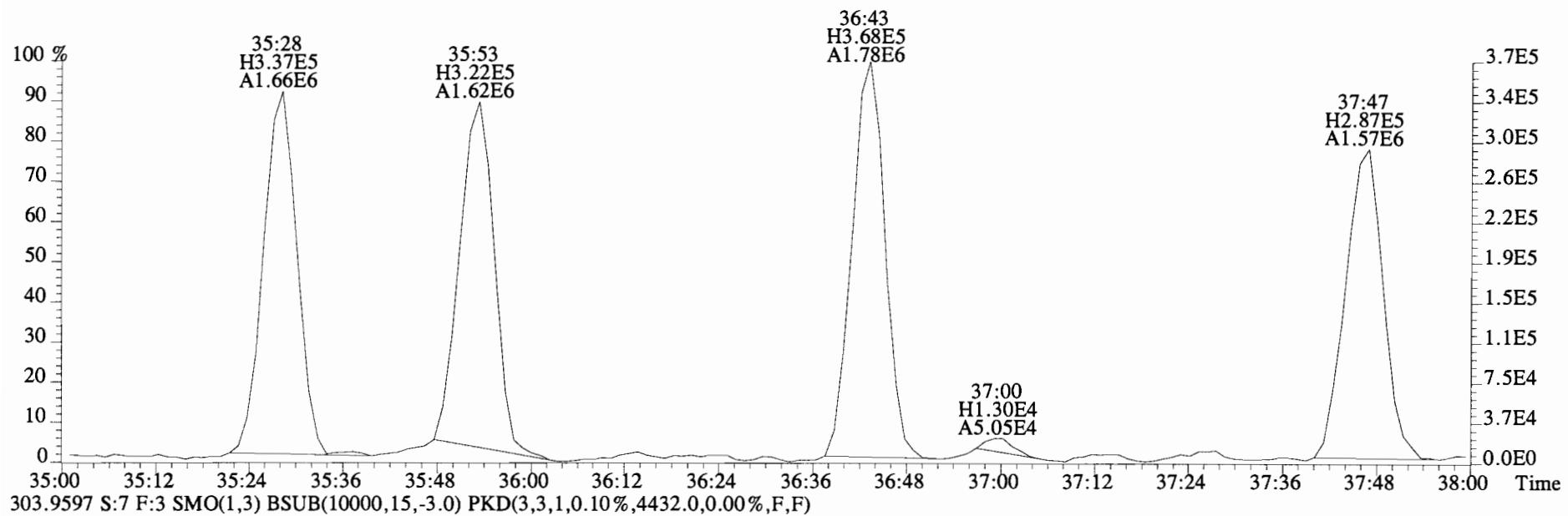
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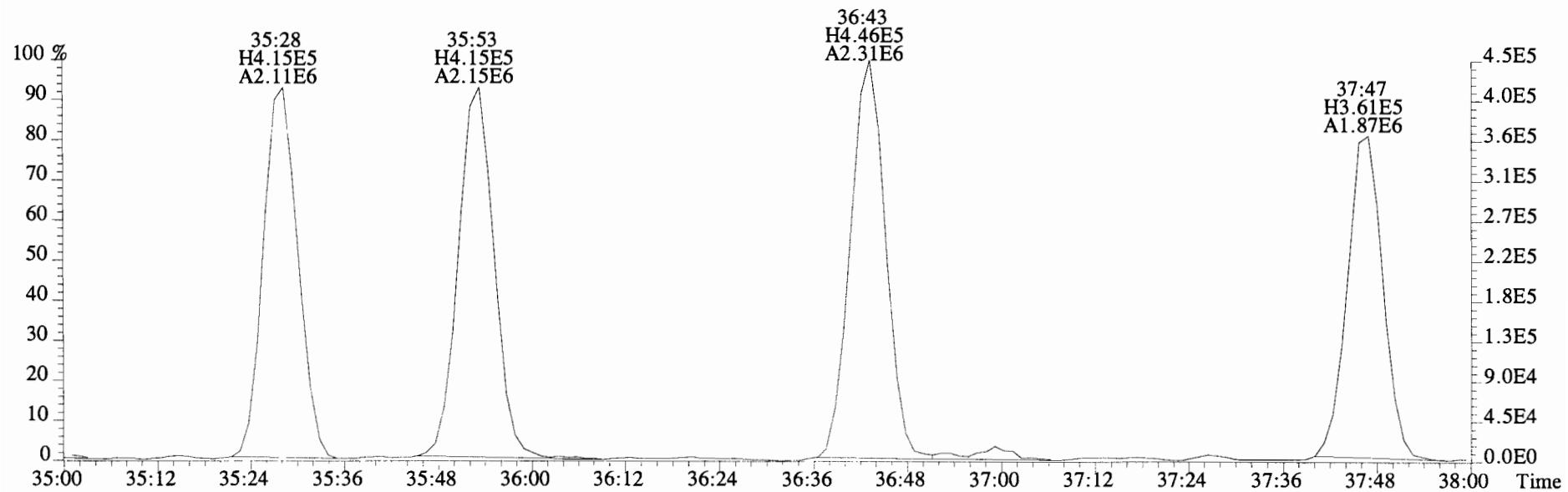
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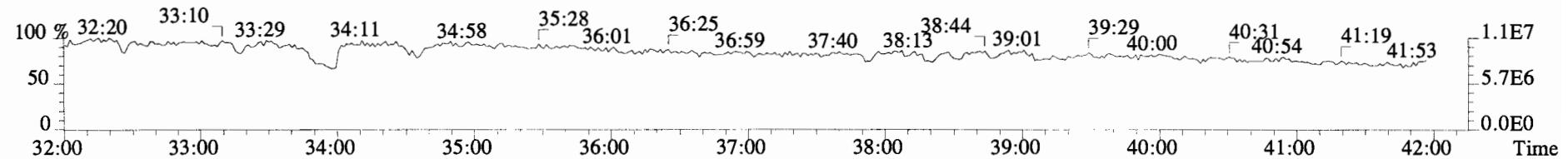
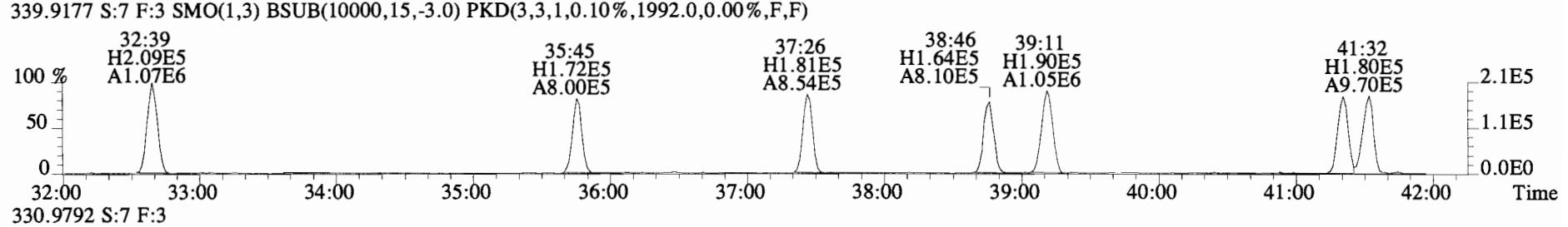
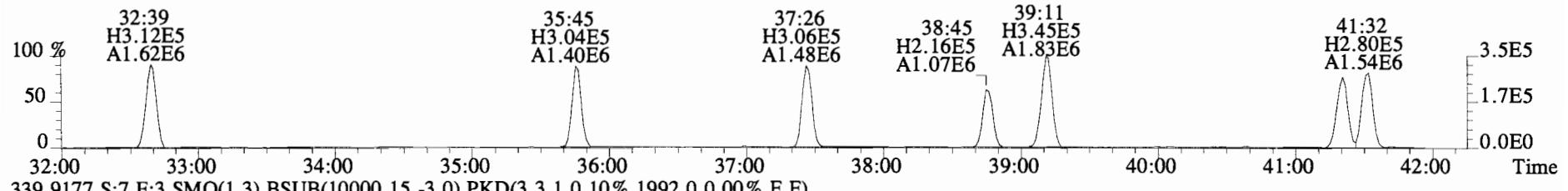
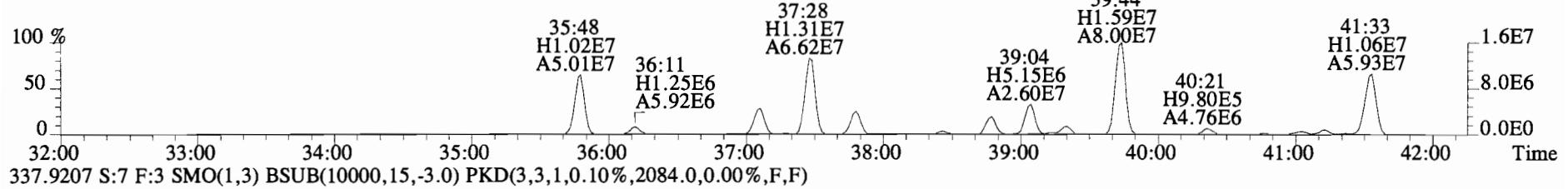
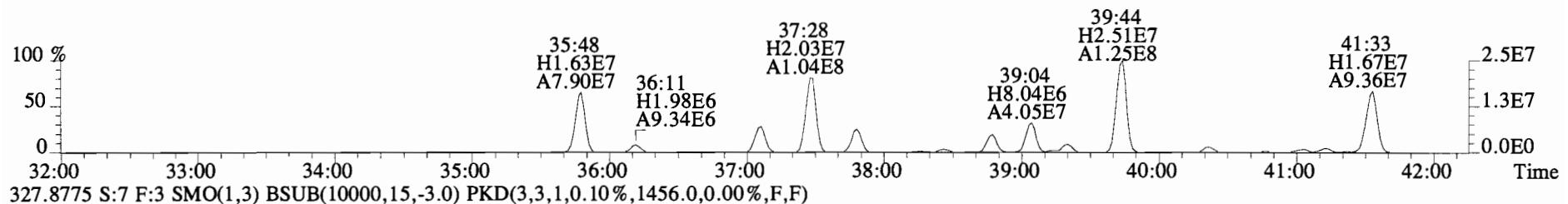
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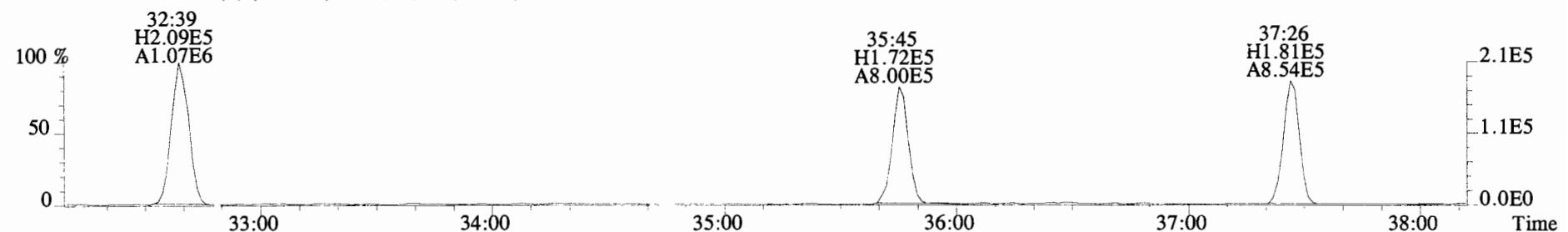
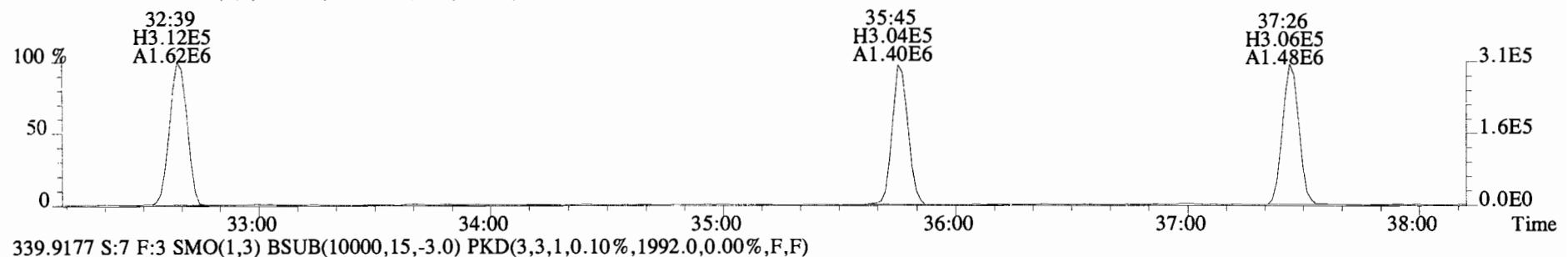
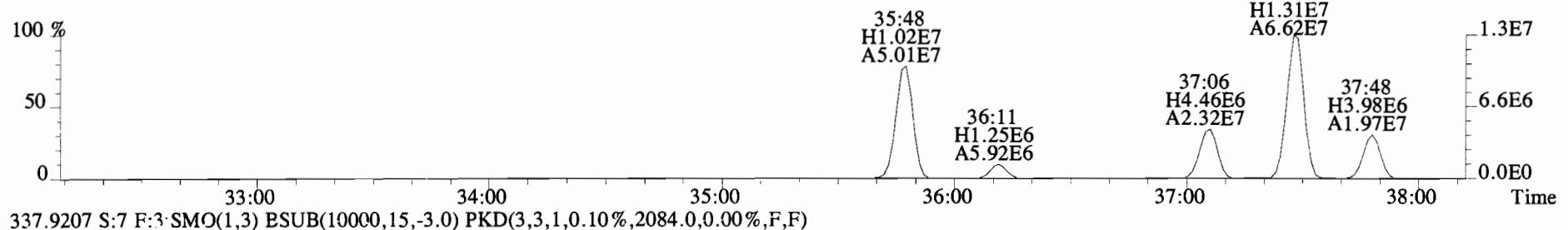
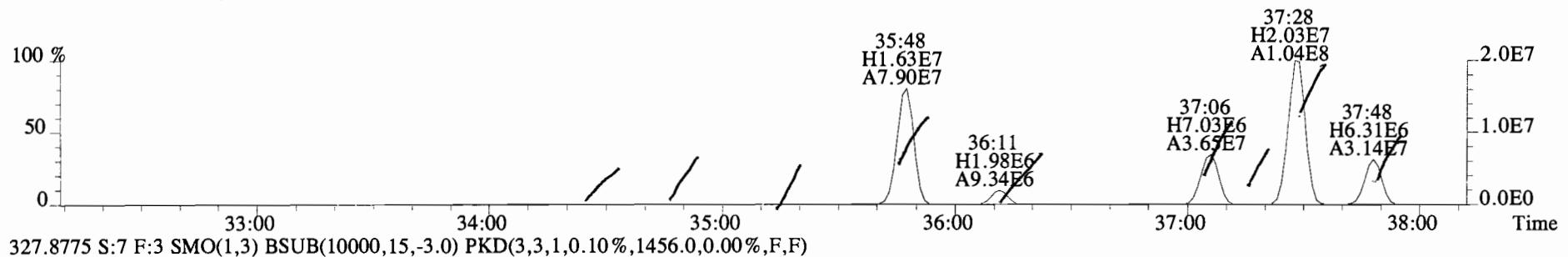
303.9597 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4432.0,0.00%,F,F)



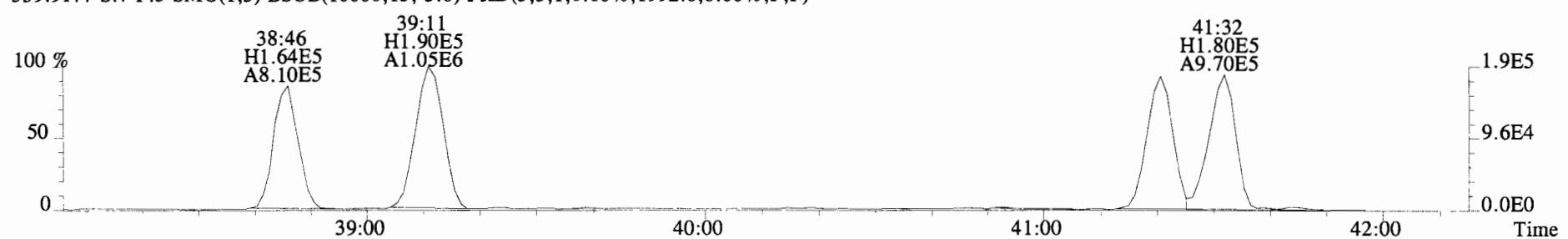
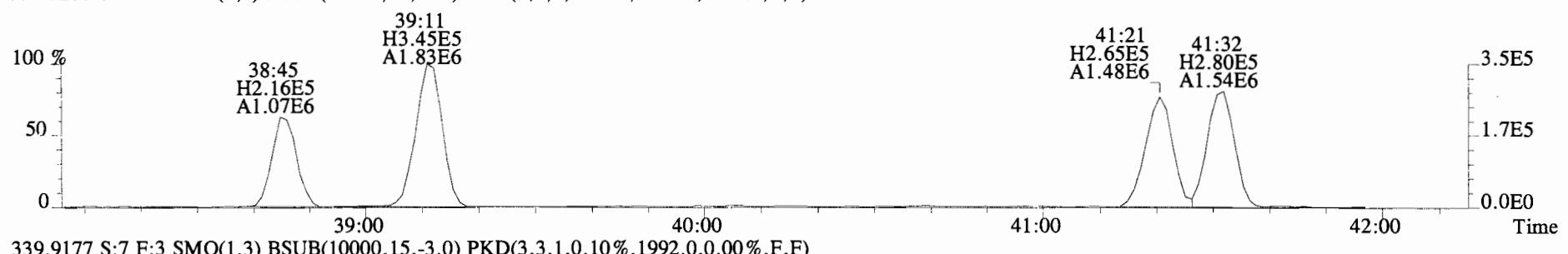
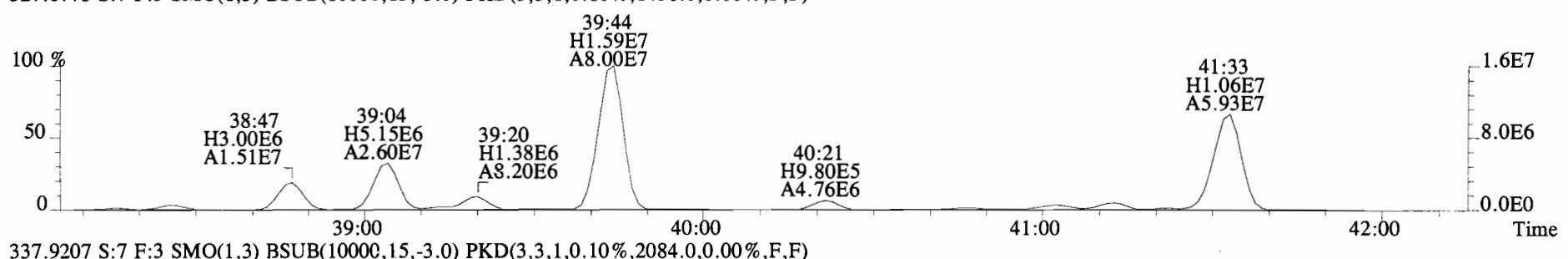
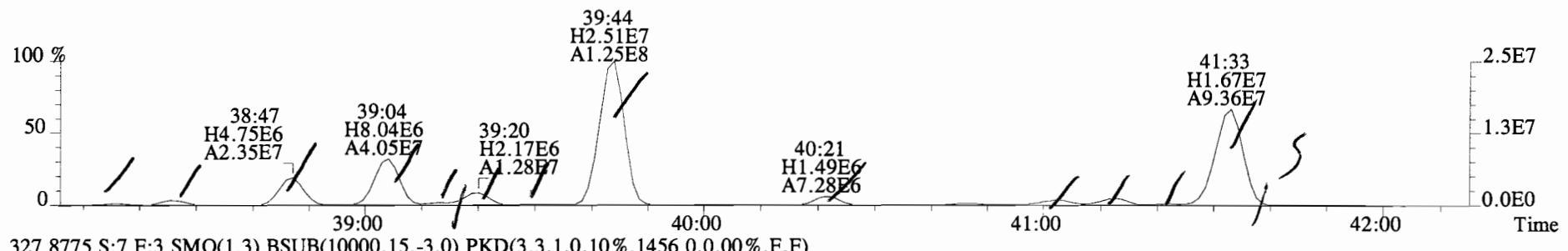
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 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
 325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1428.0,0.00%,F,F)



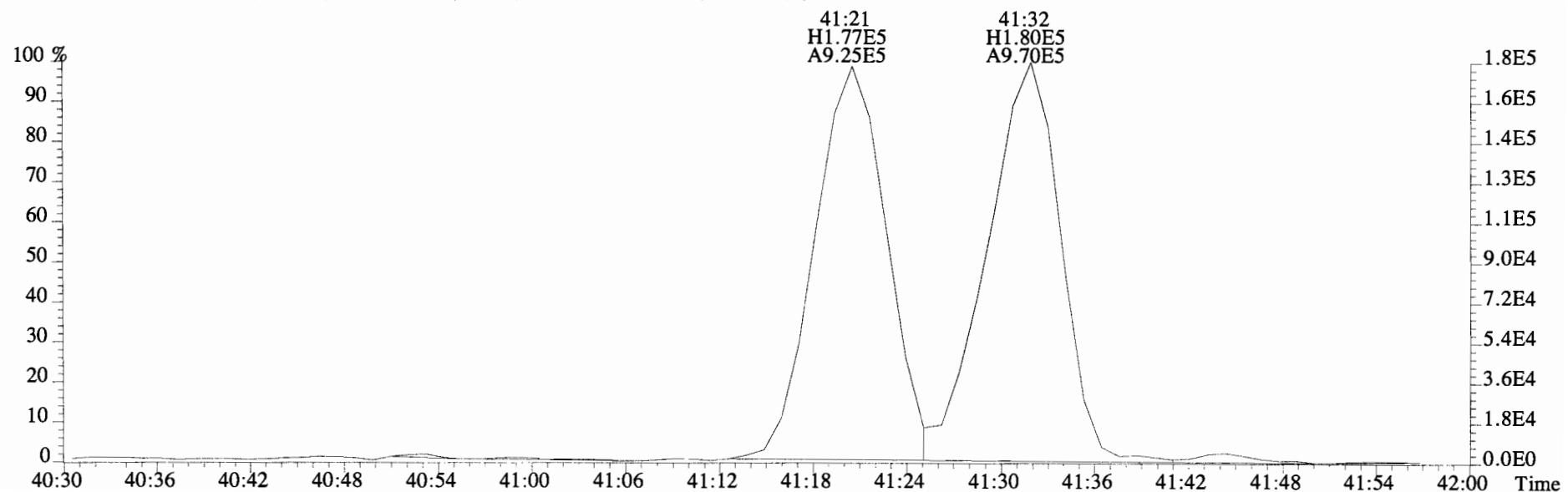
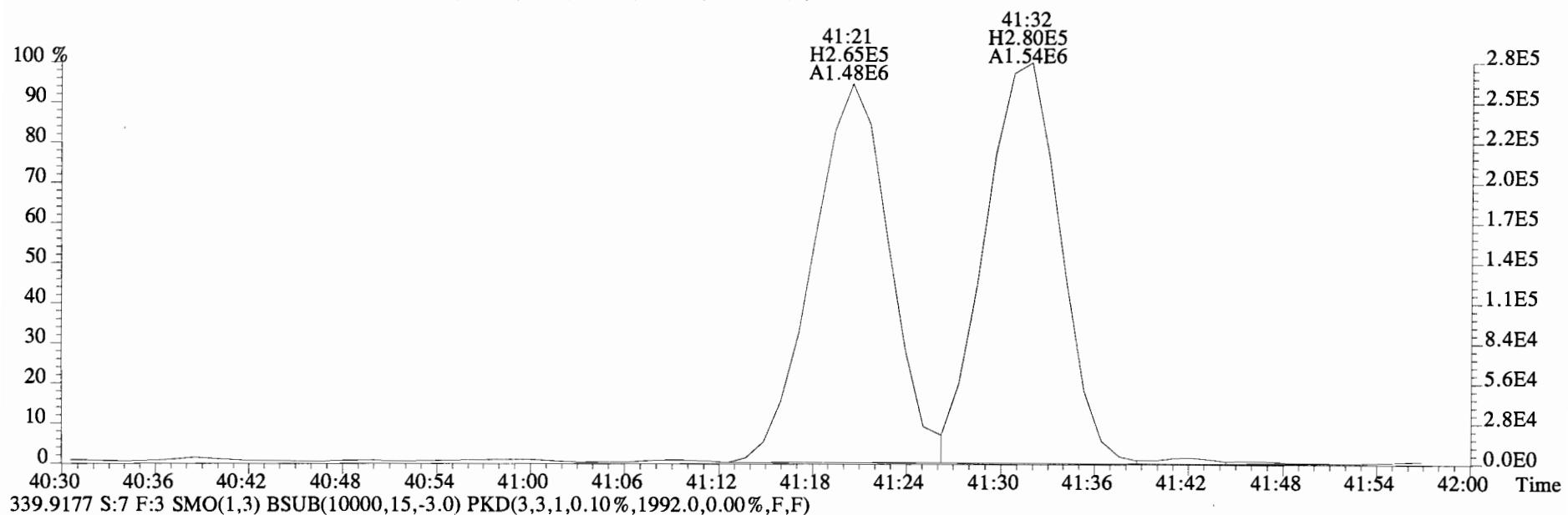
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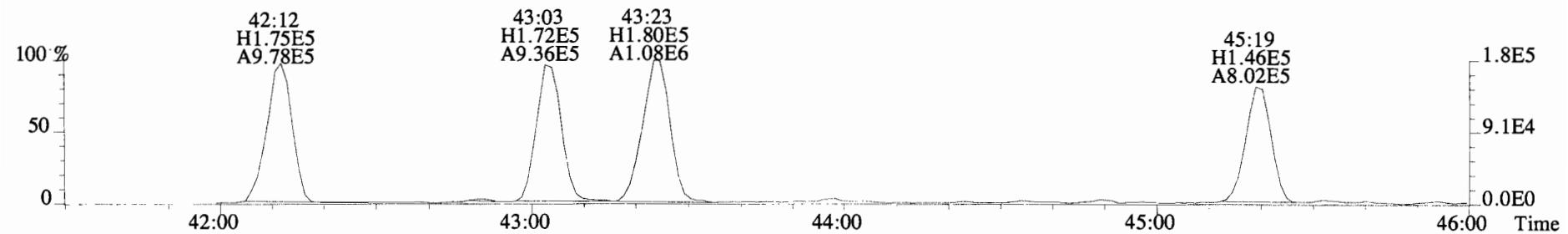
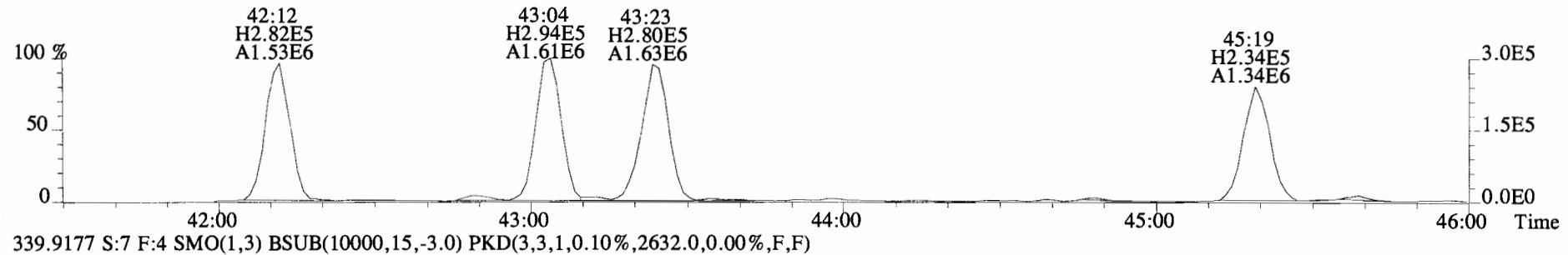
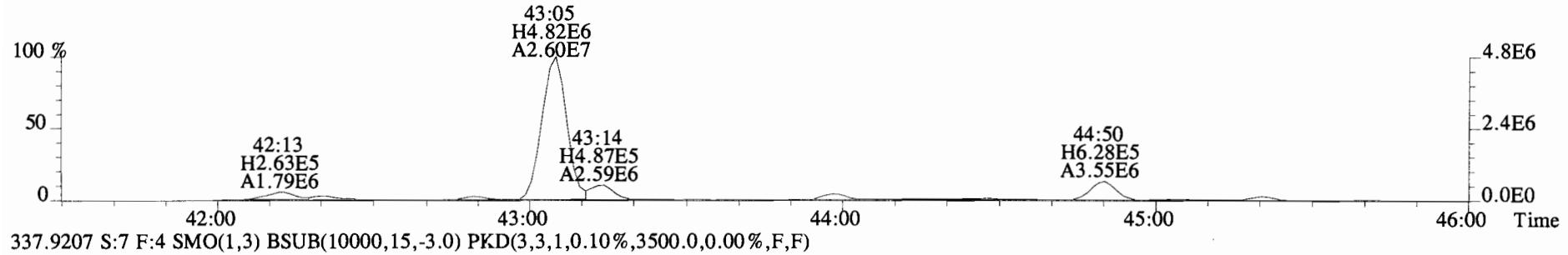
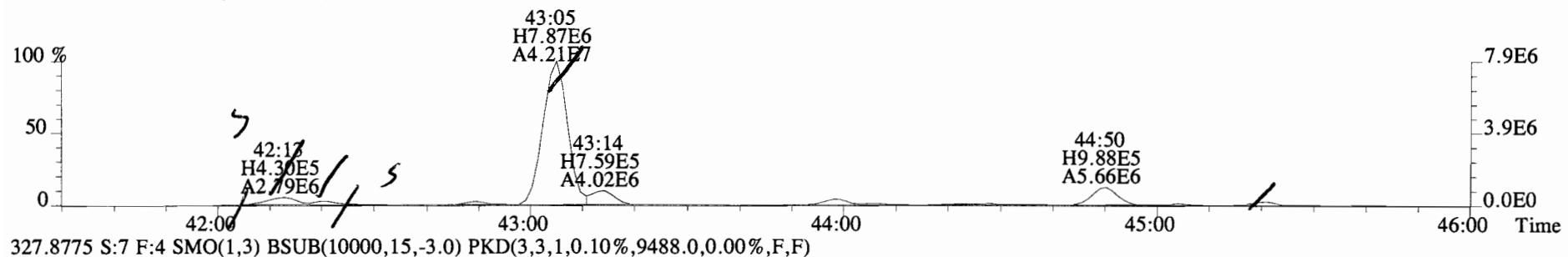
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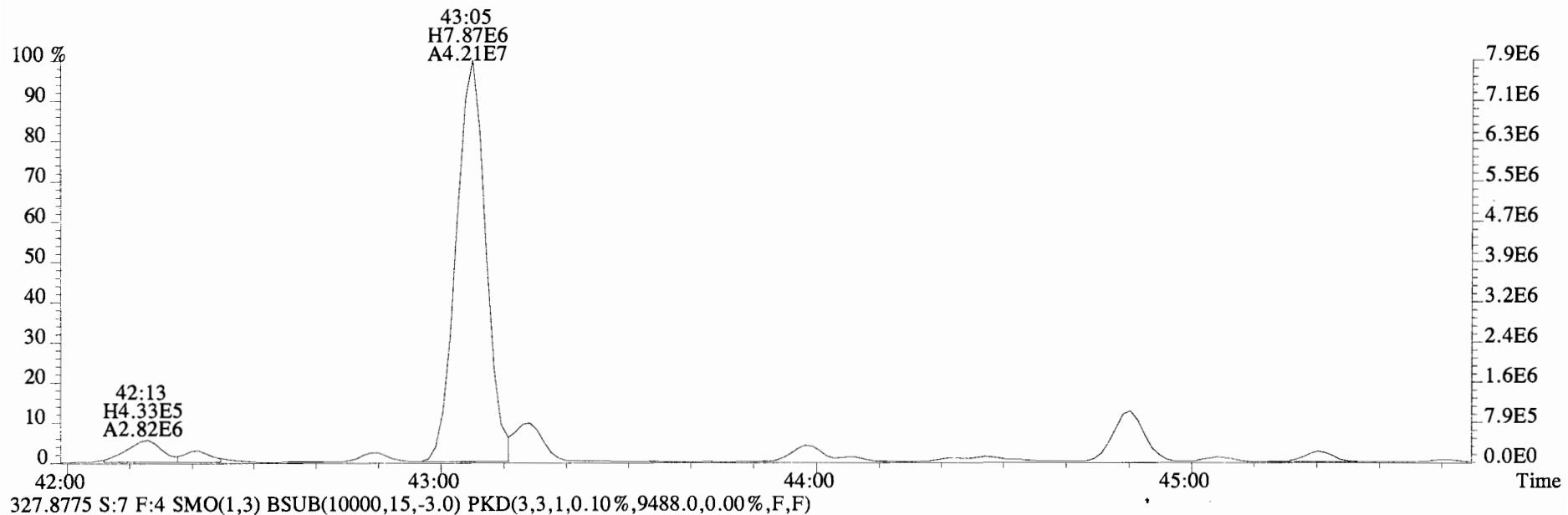
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
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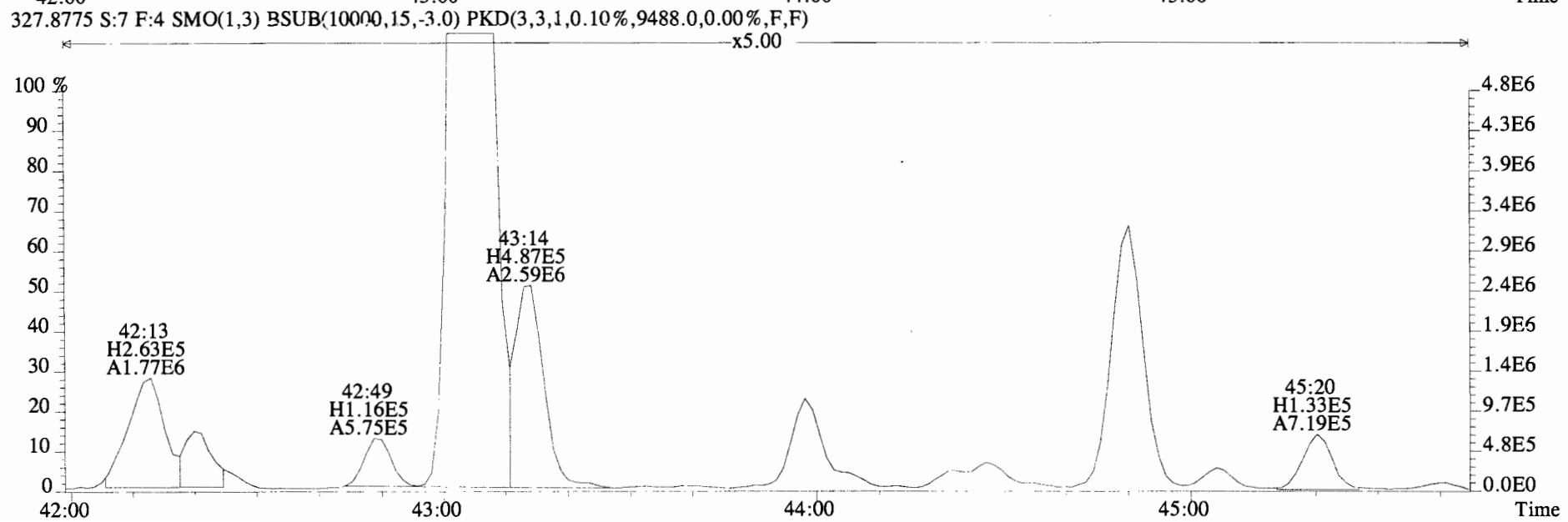
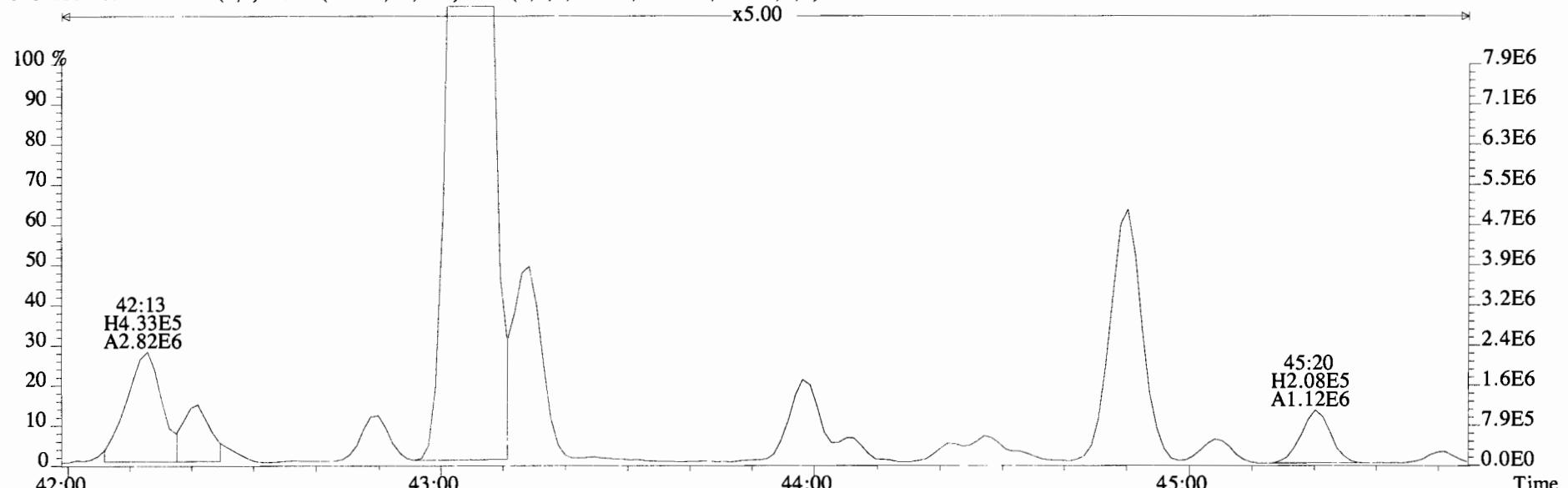
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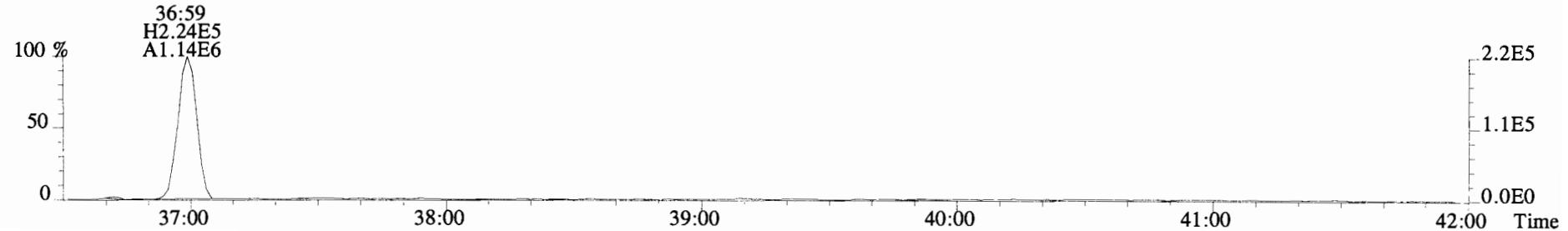
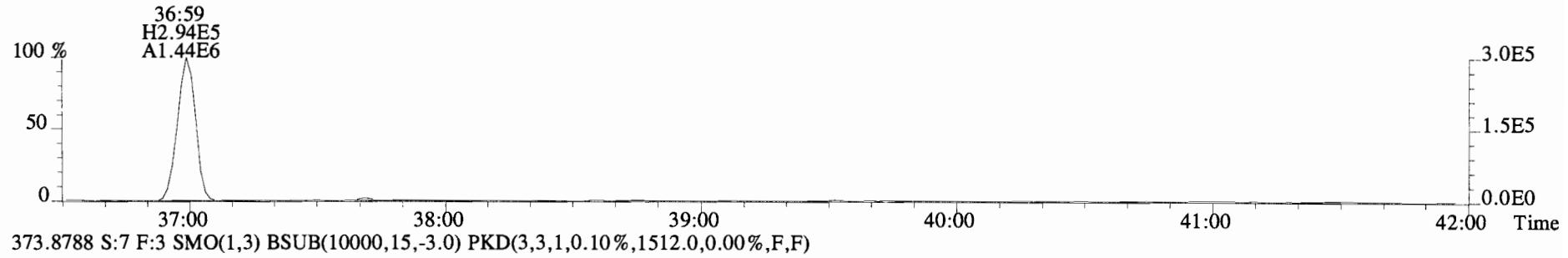
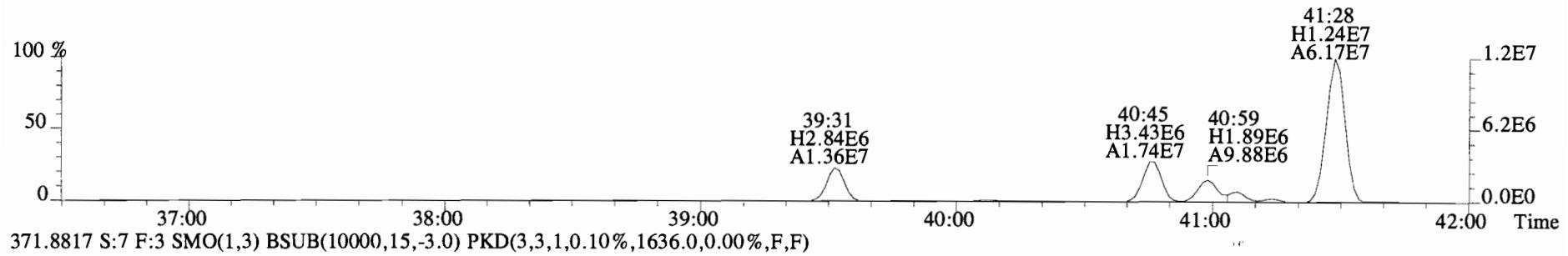
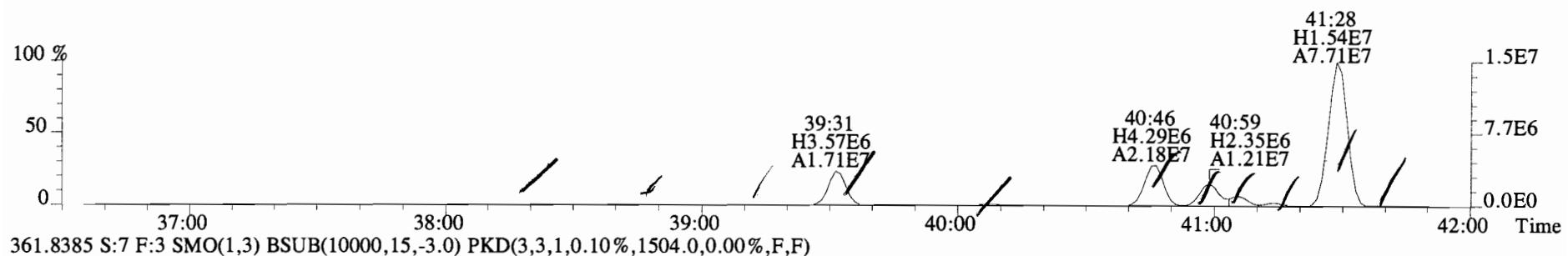
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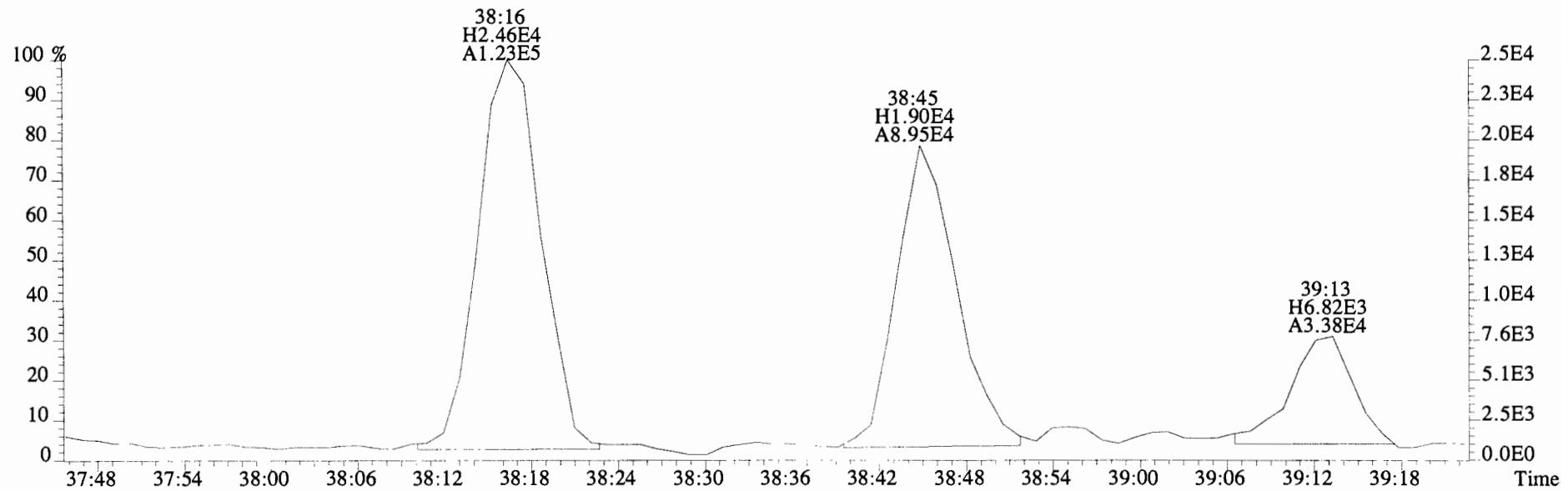
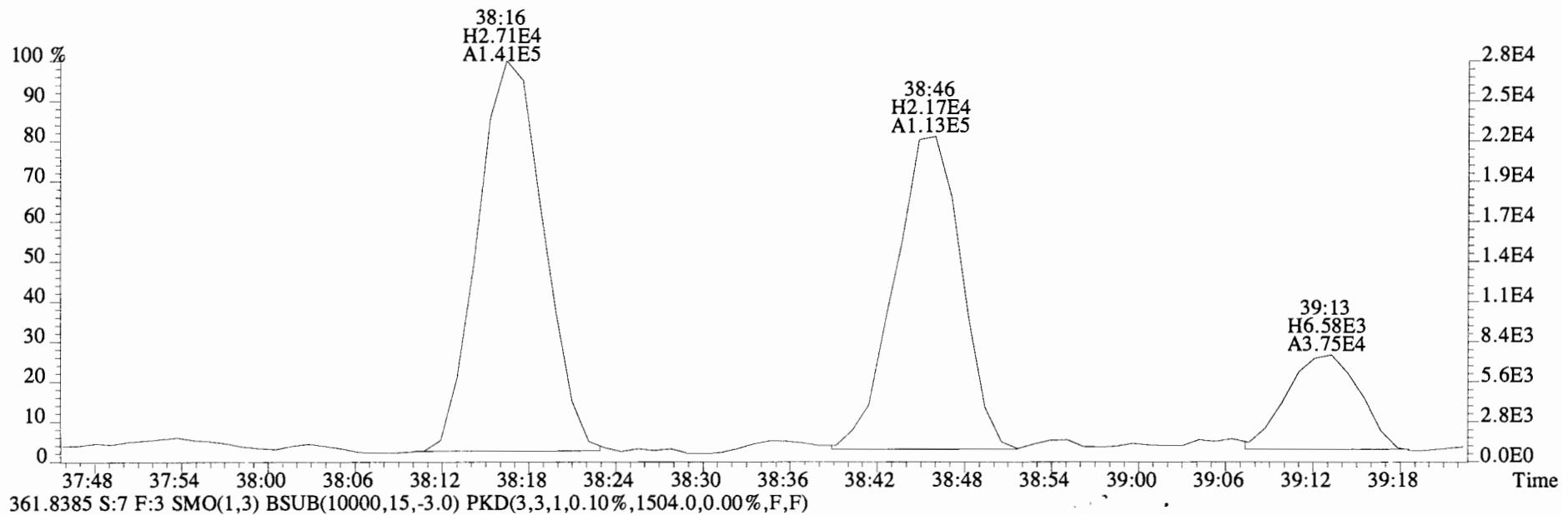
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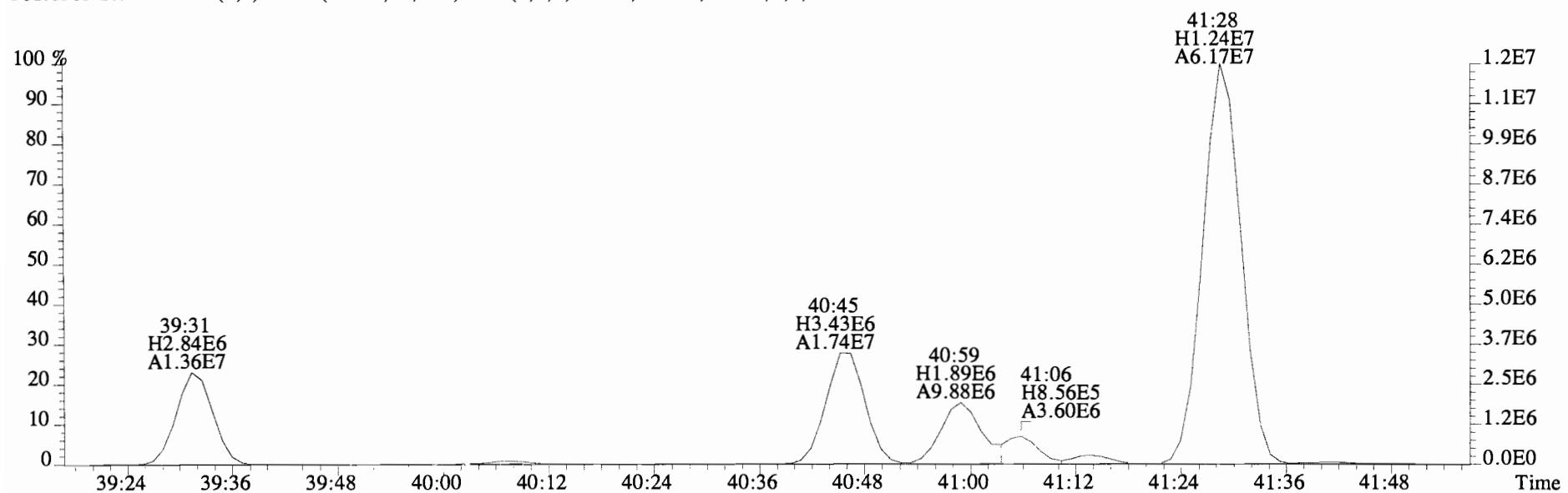
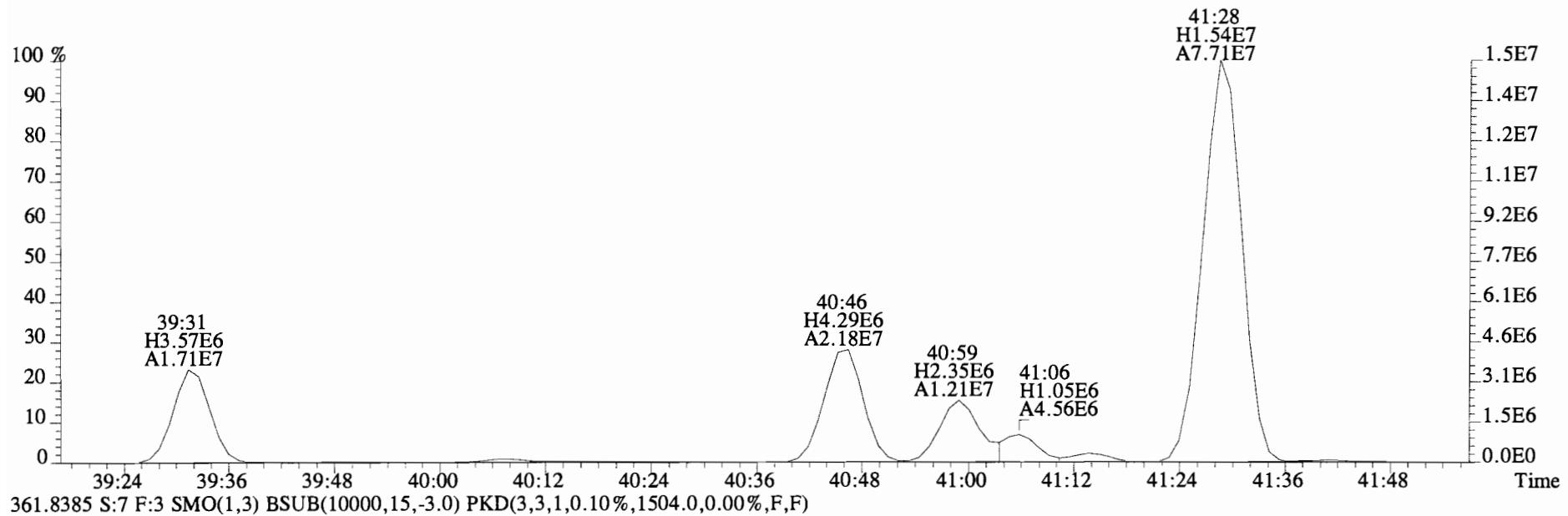
File:141024E2 #1-762 Acq:25-OCT-2014 08:31:59 GC EI + Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
359.8415 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1496.0,0.00%,F,F)



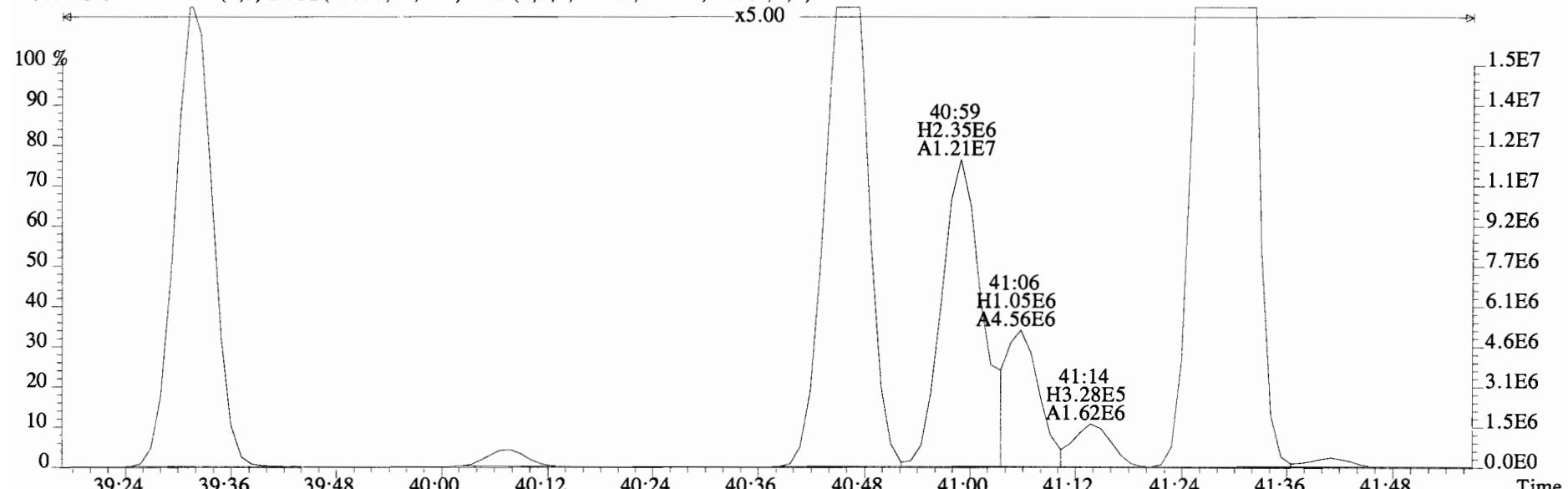
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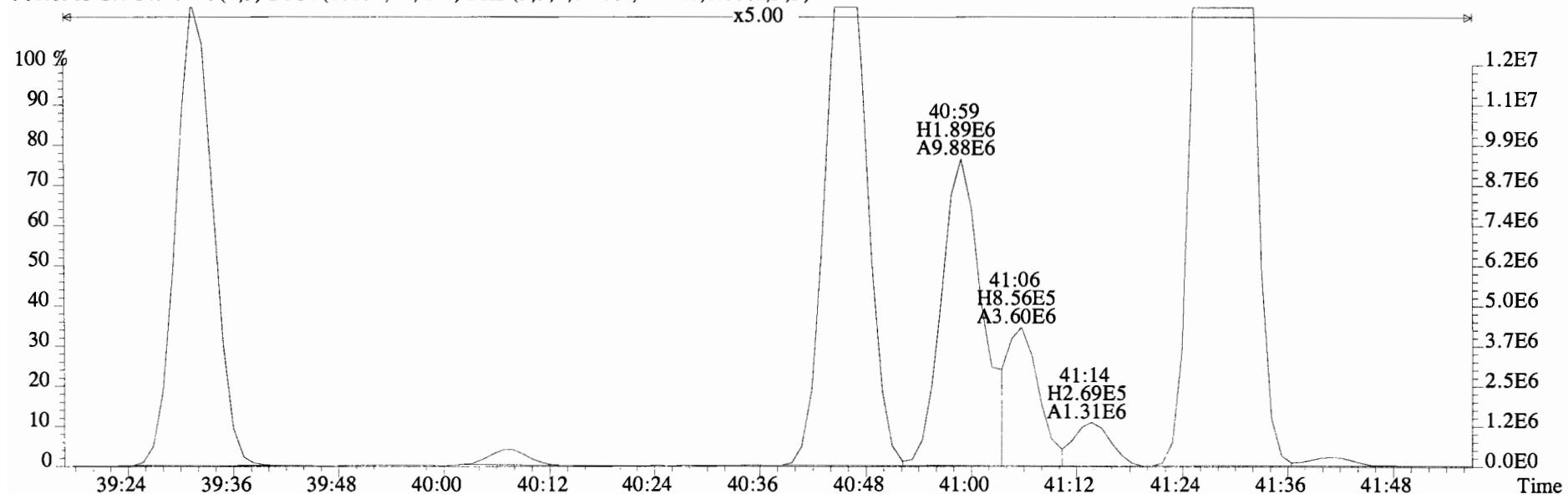
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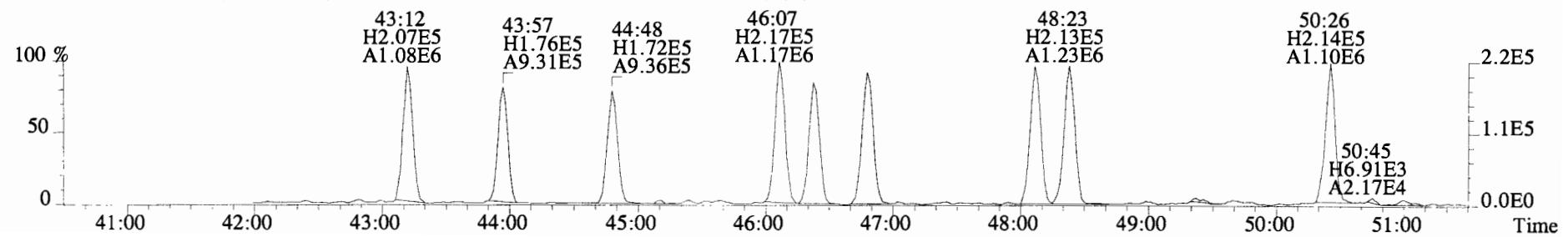
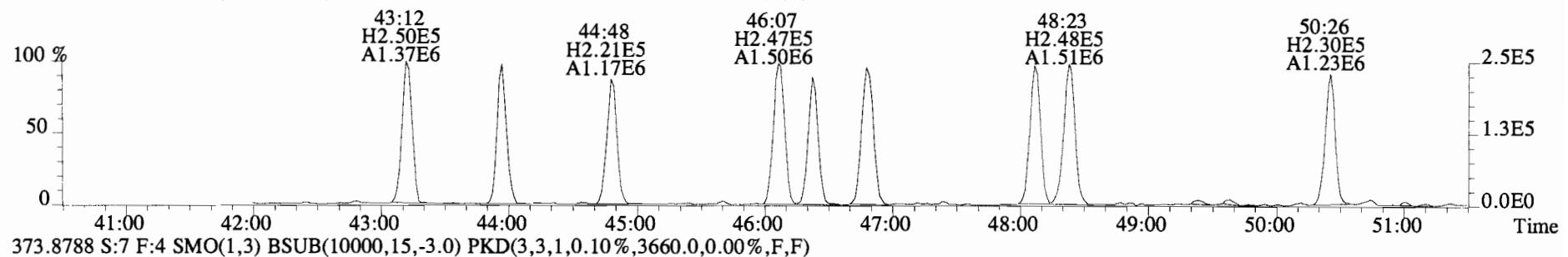
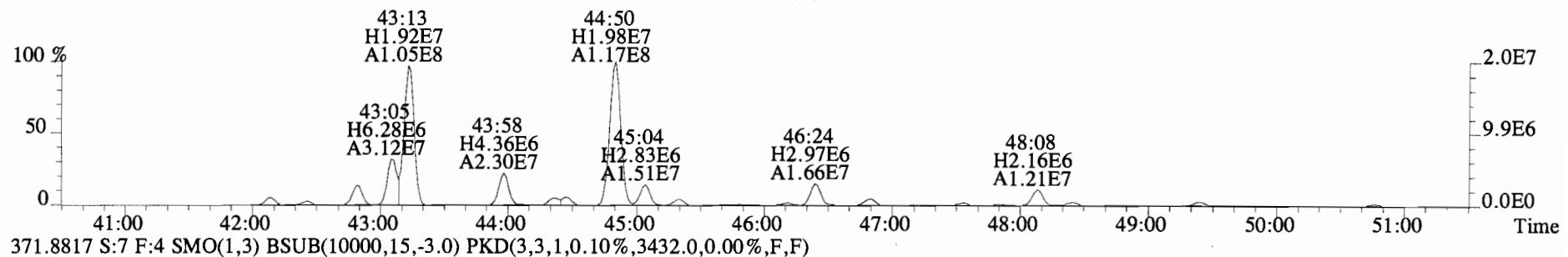
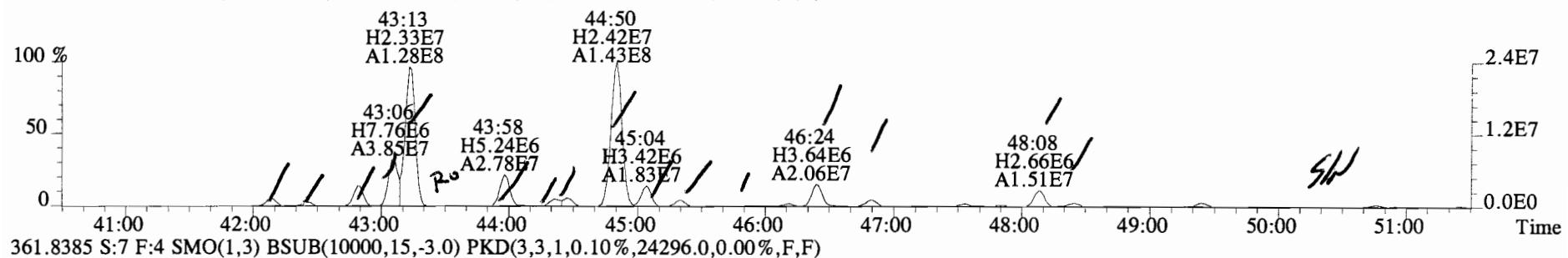
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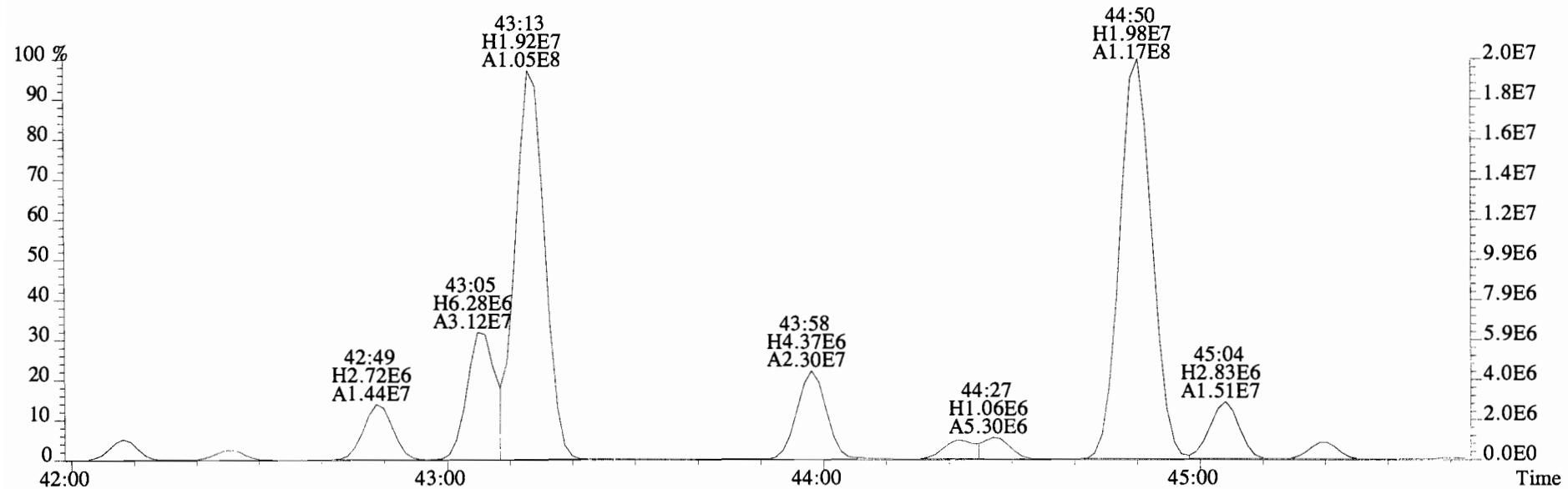
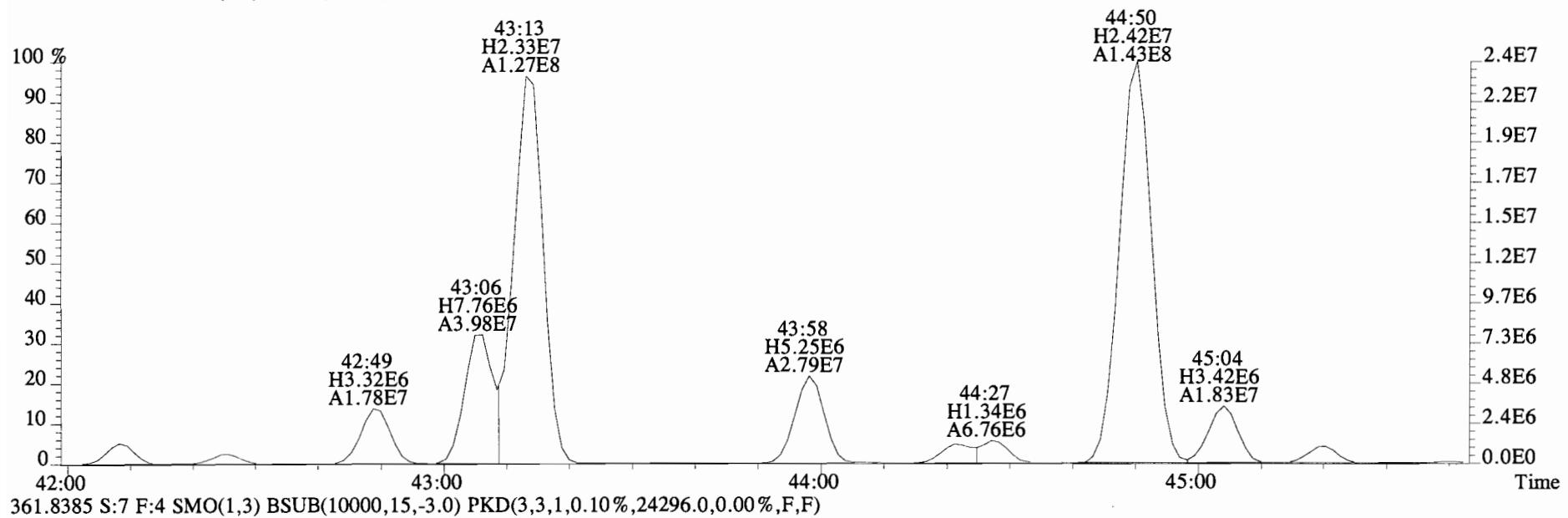
361.8385 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1504.0,0.00%,F,F)



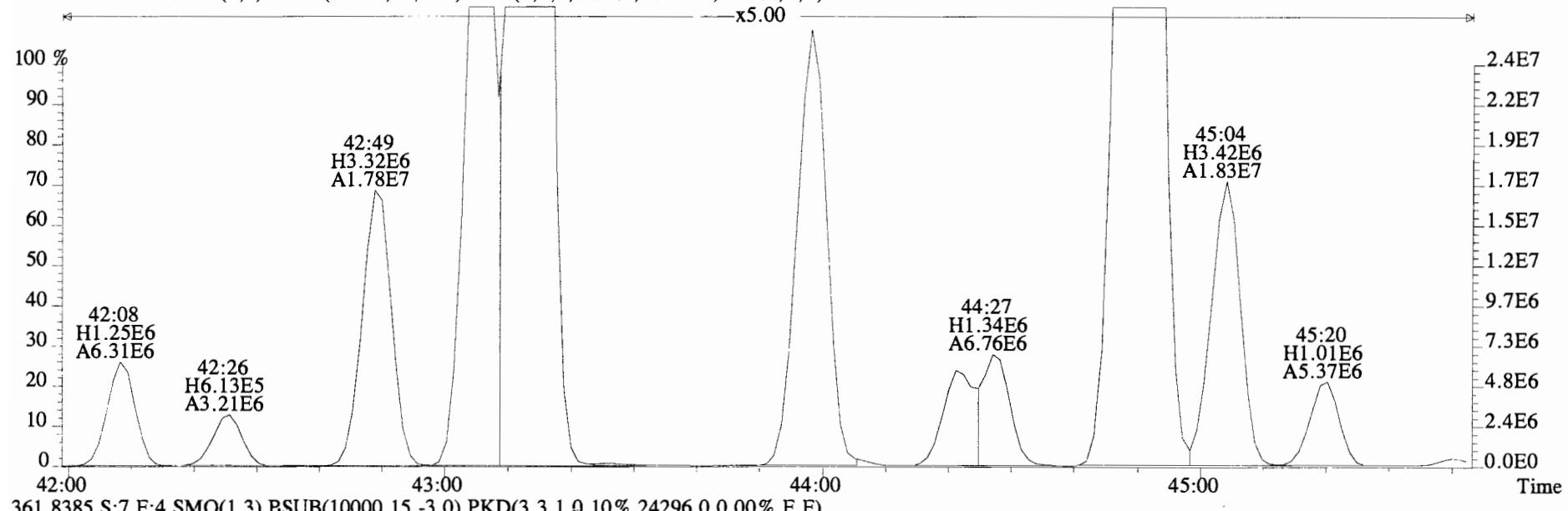
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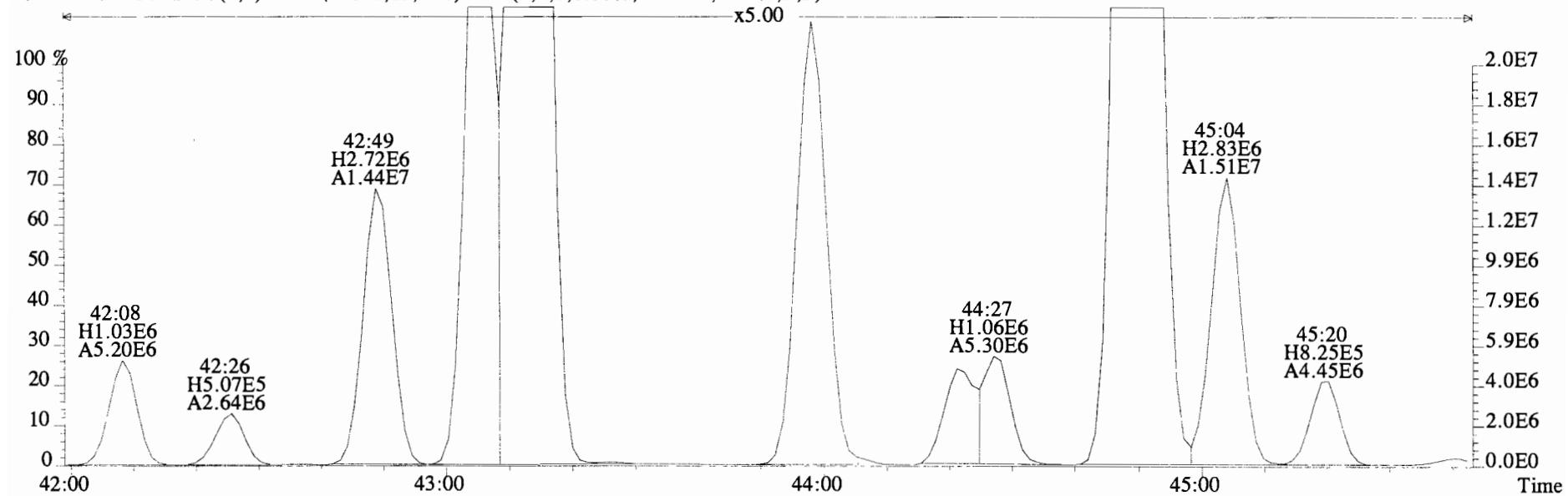
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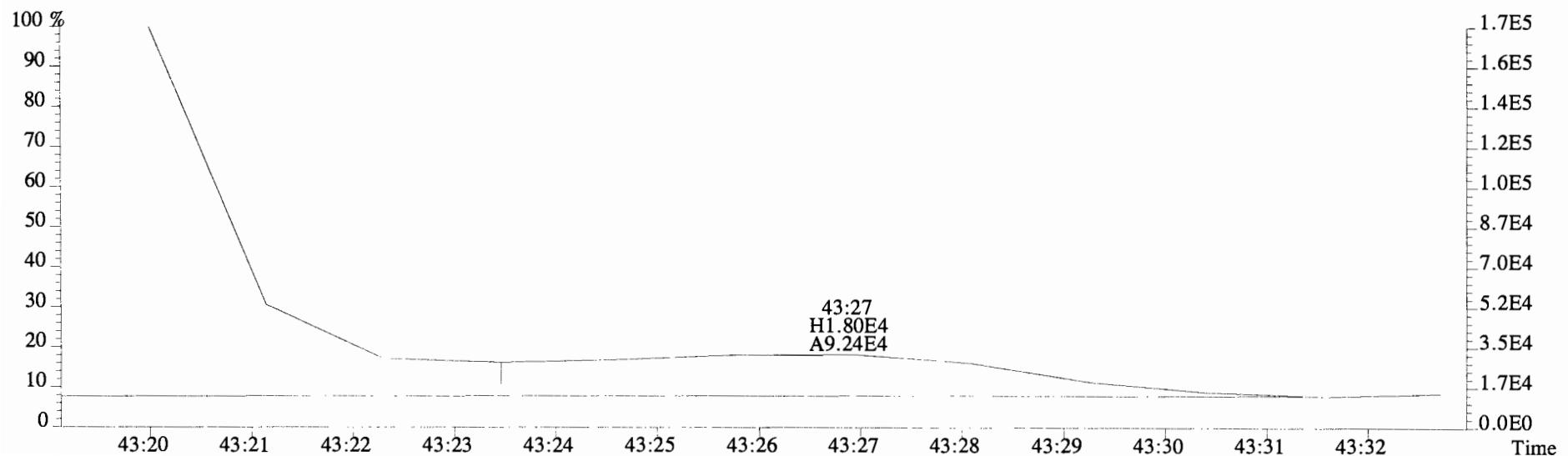
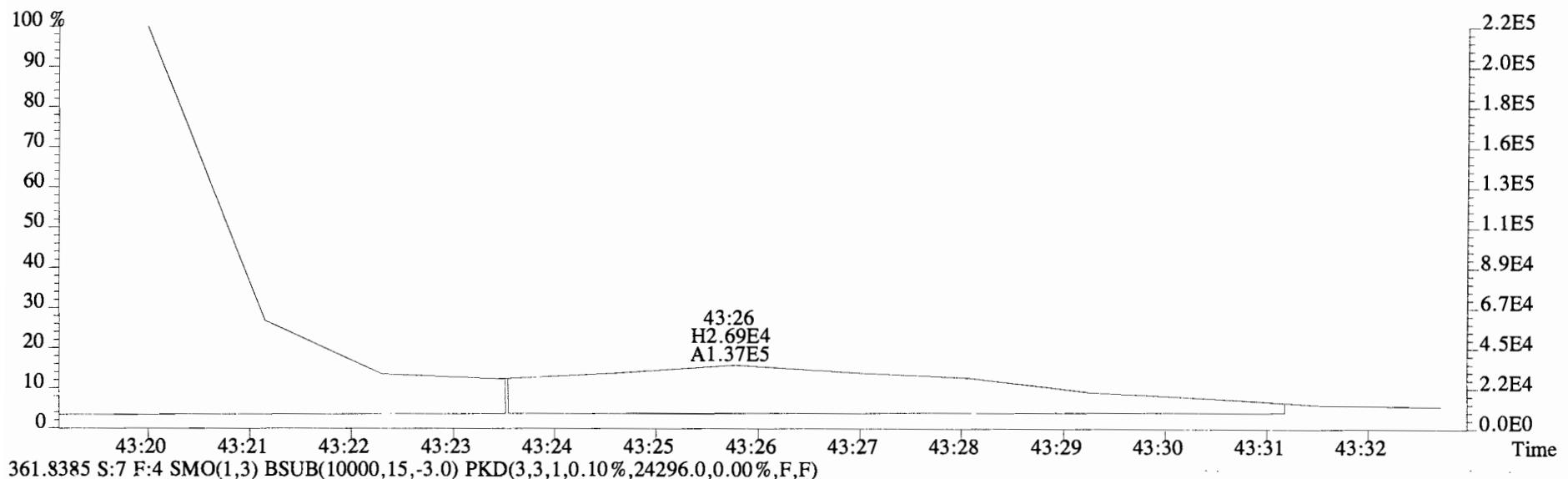
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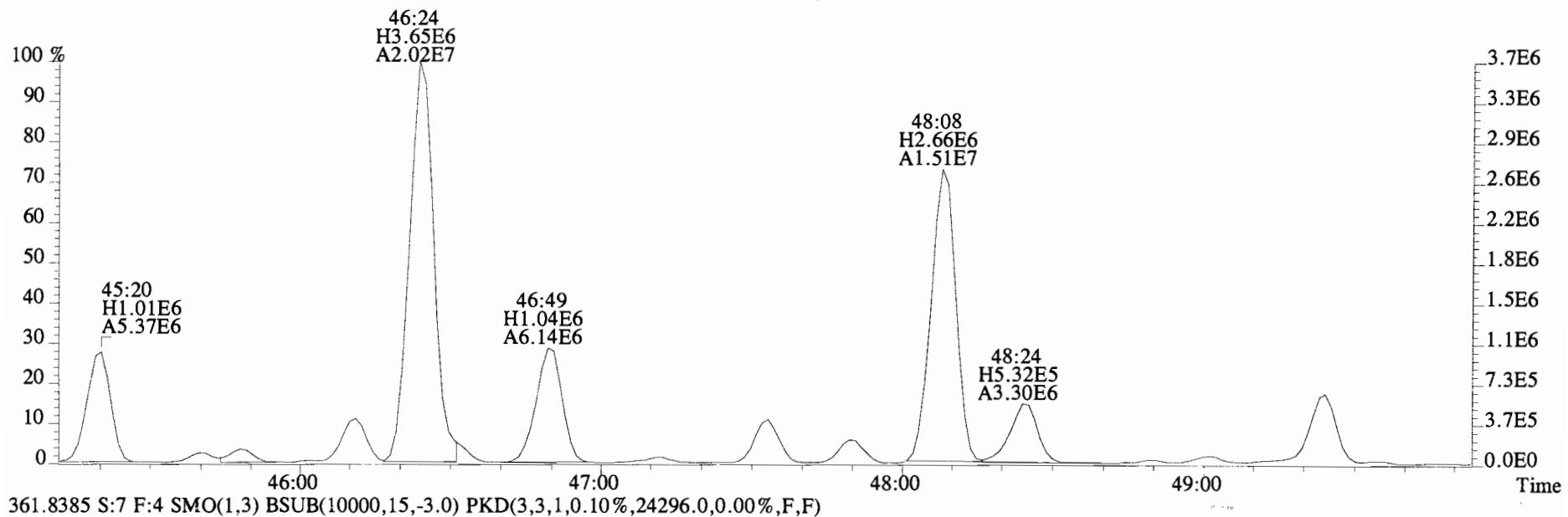
361.8385 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,24296.0,0.00%,F,F)



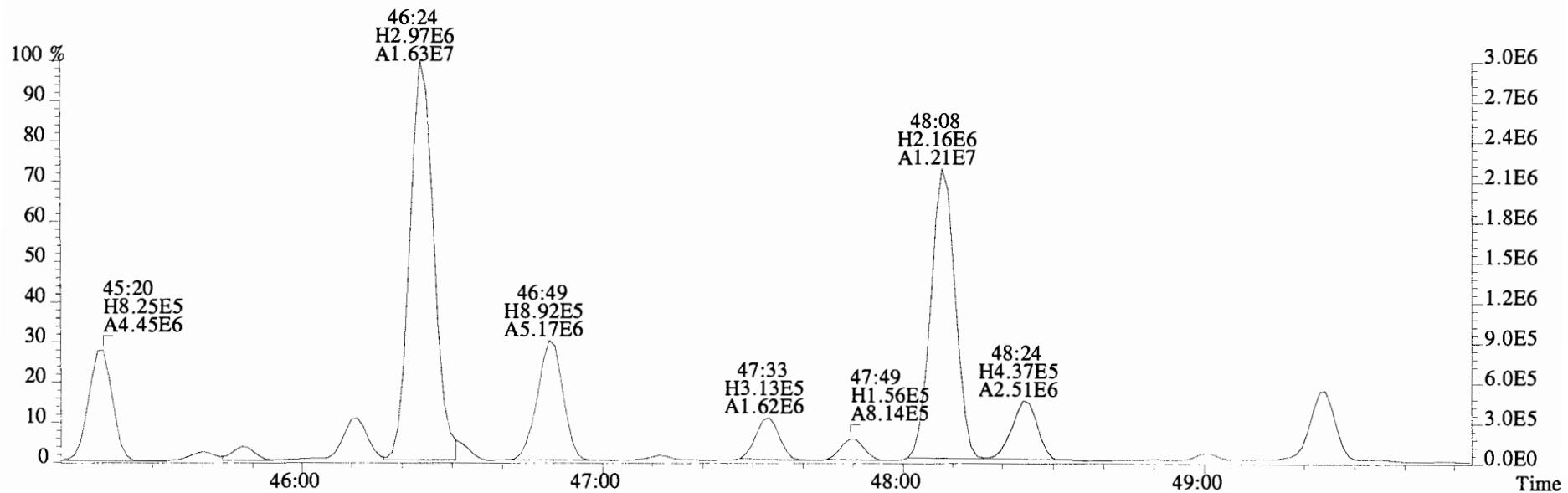
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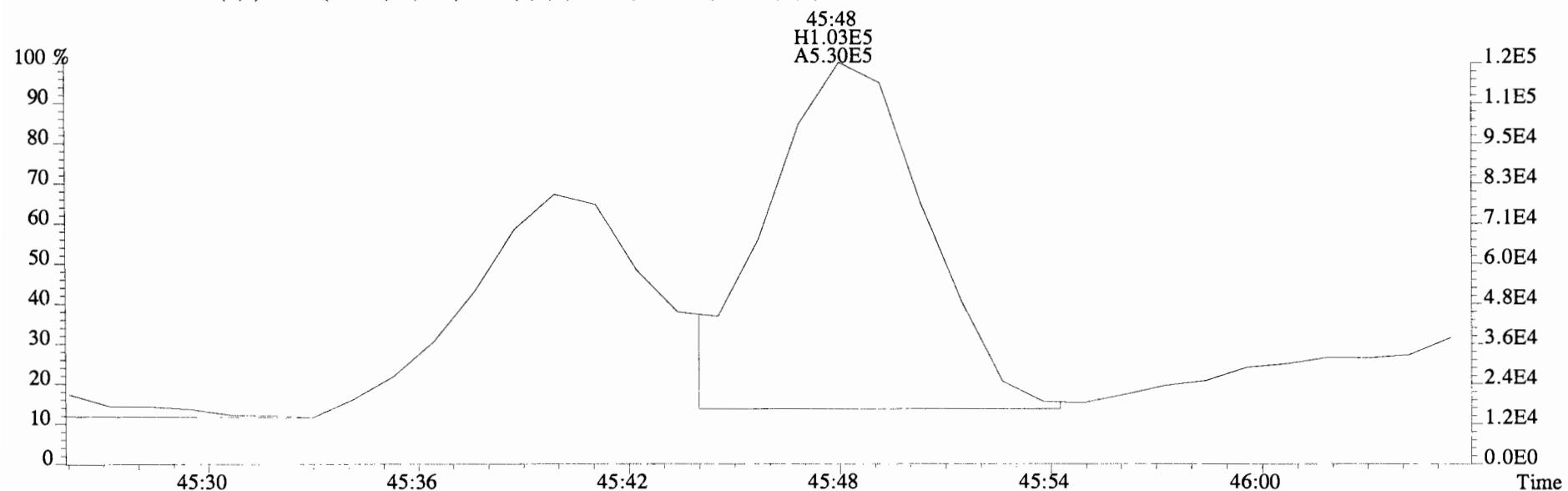
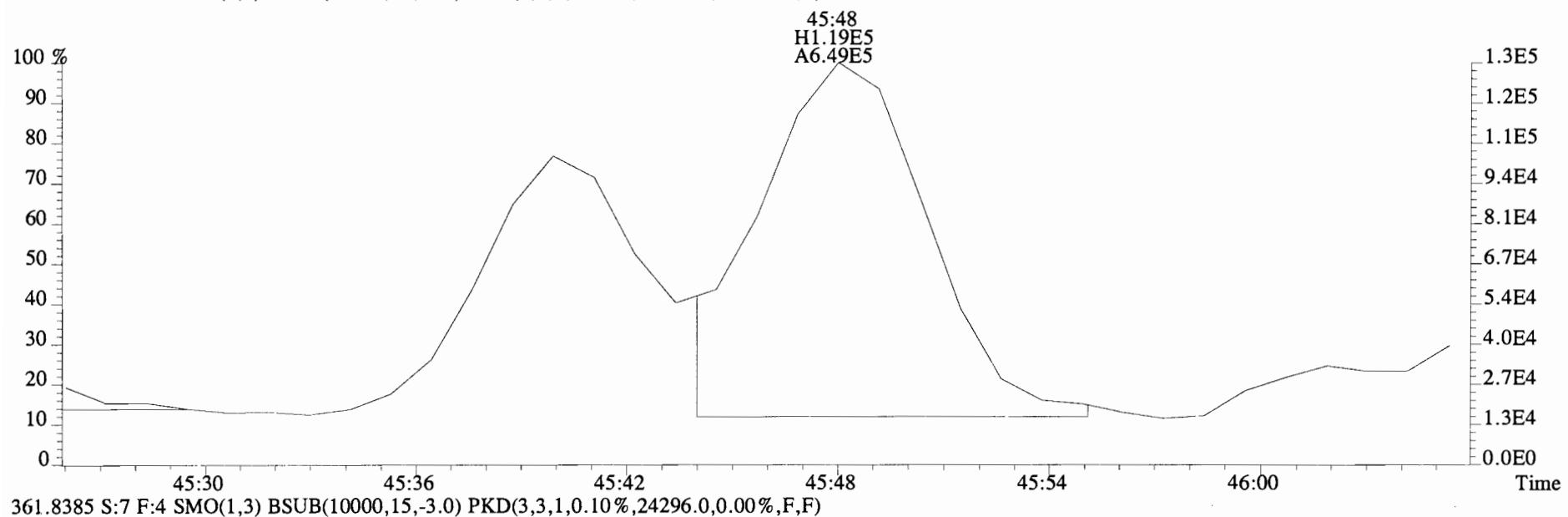
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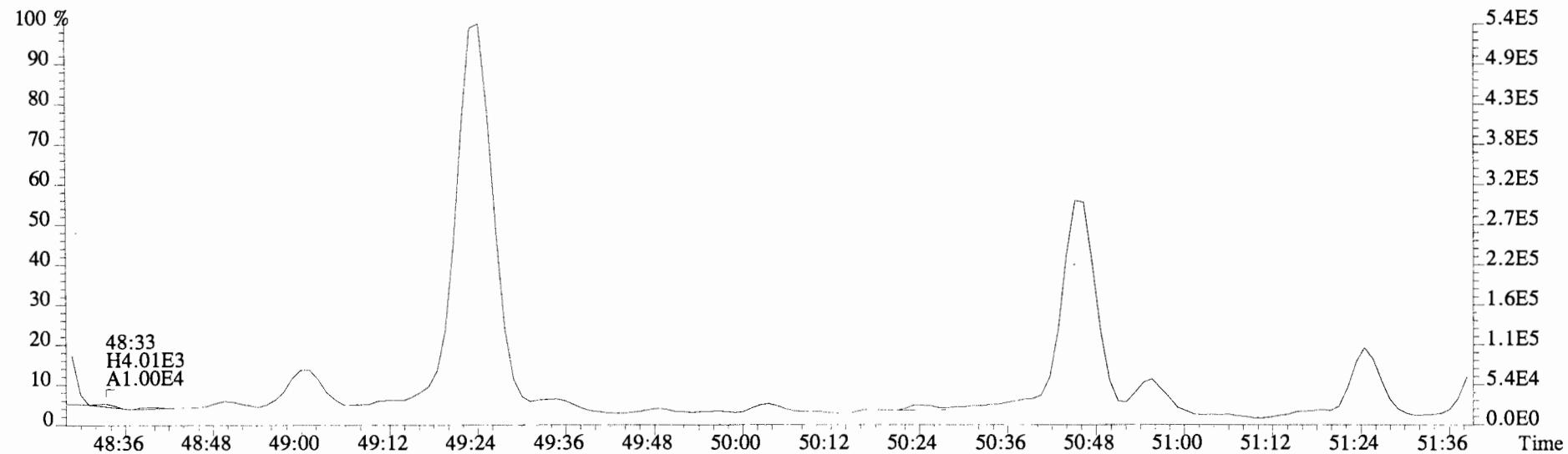
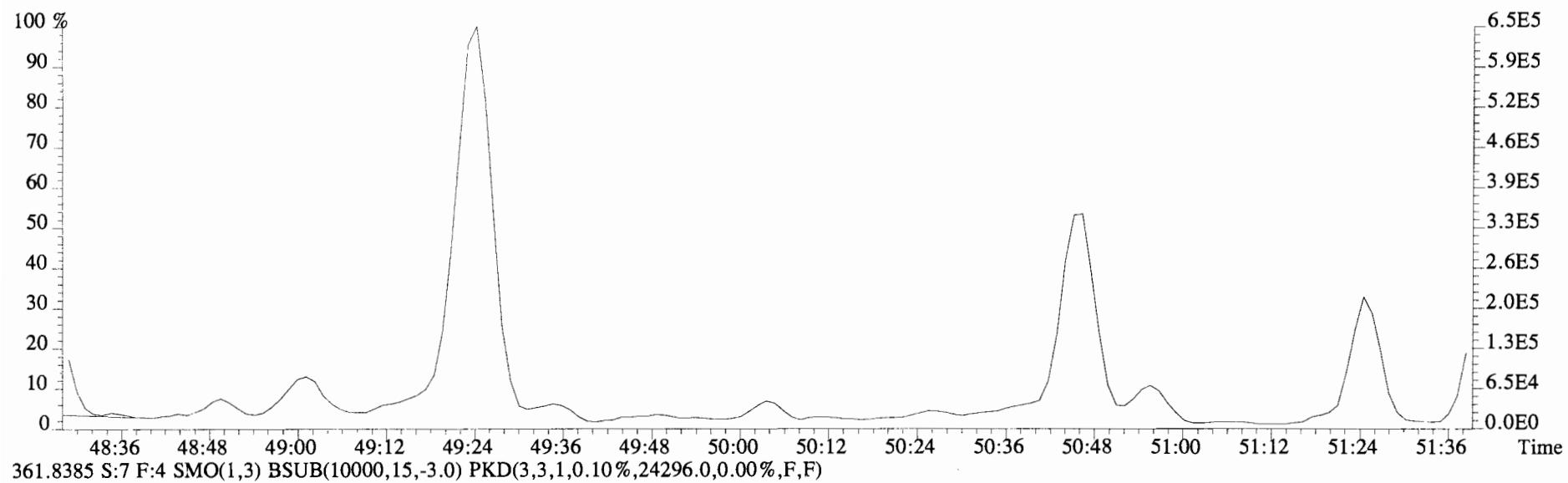
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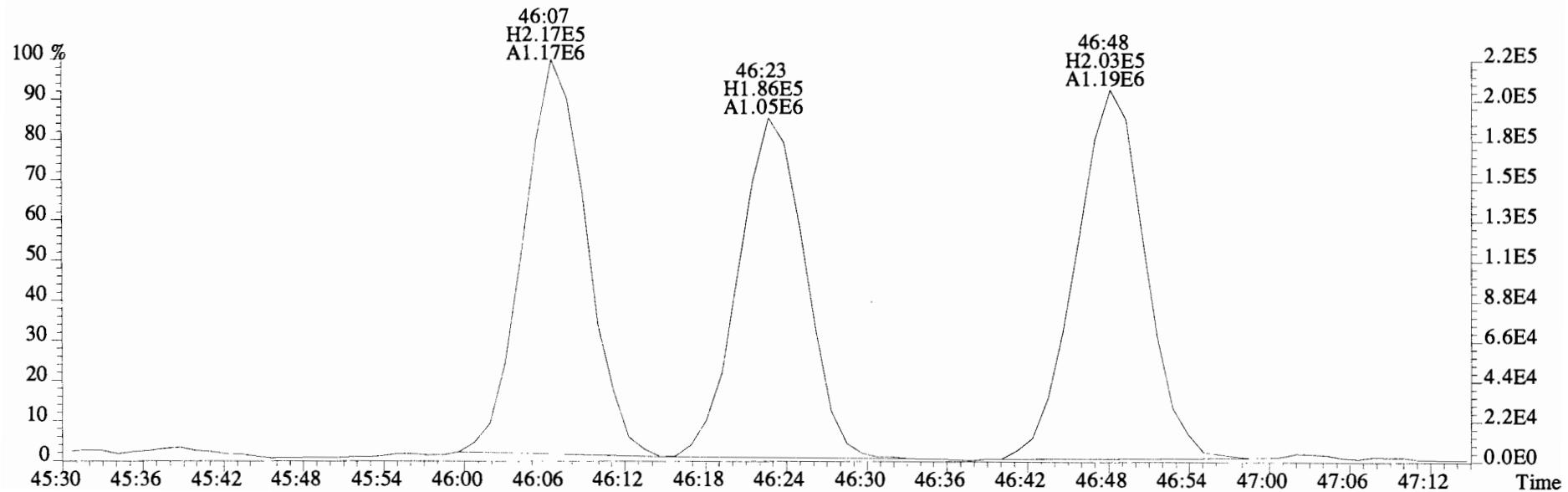
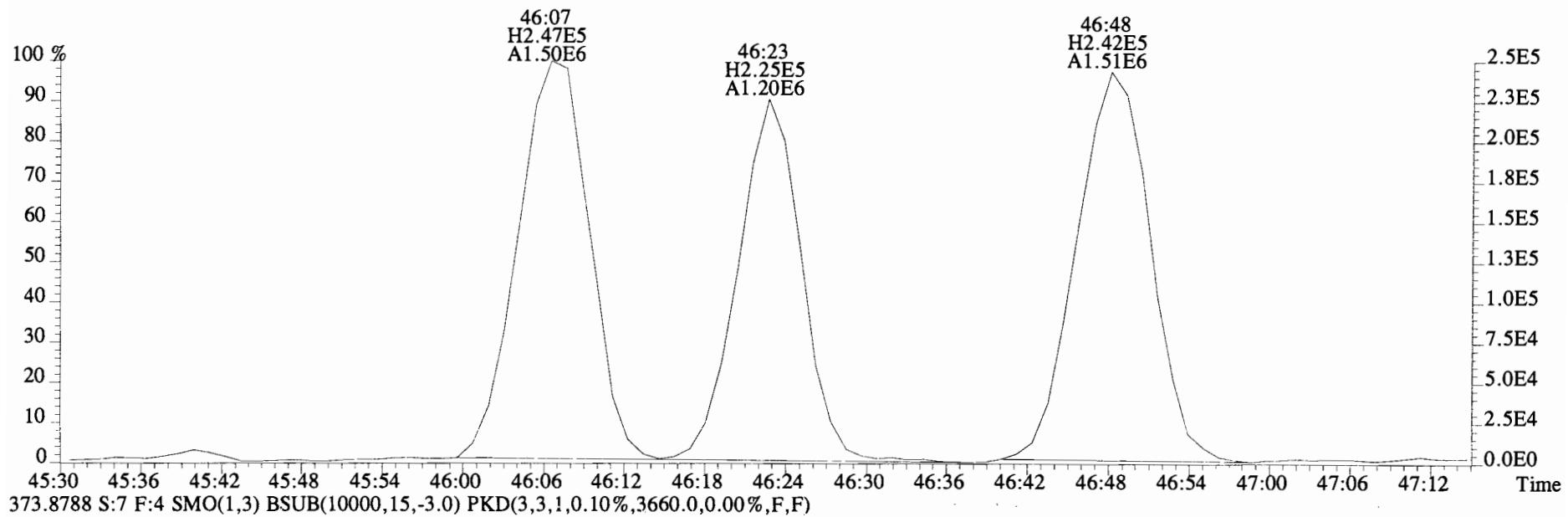
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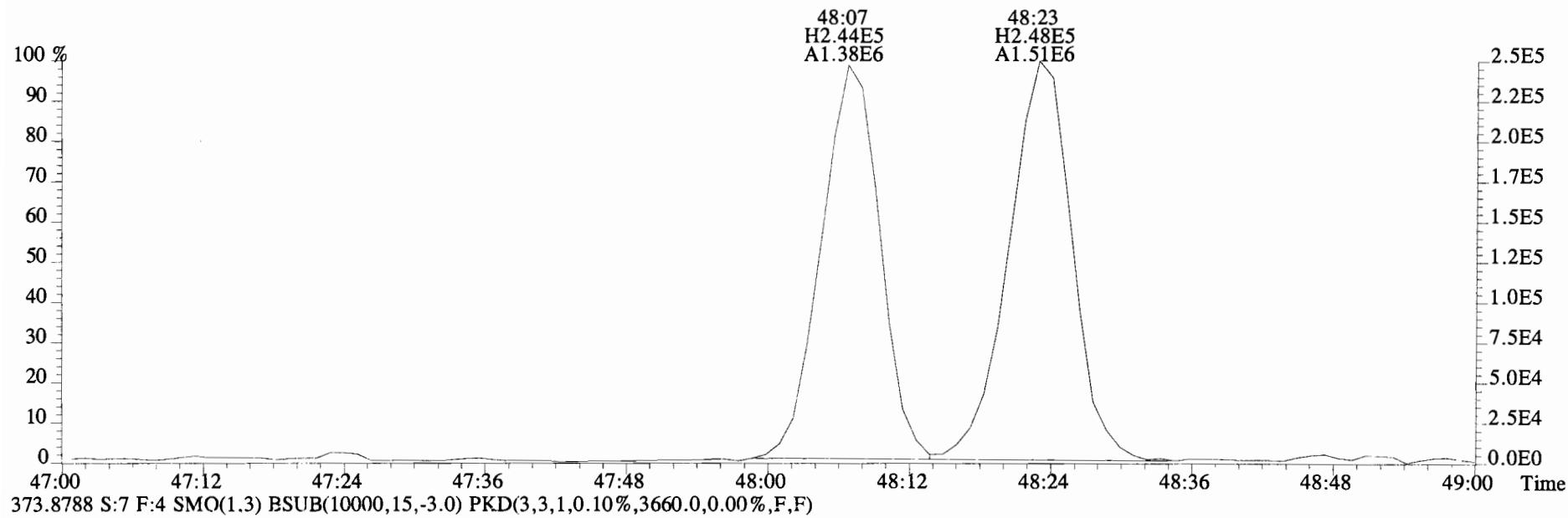
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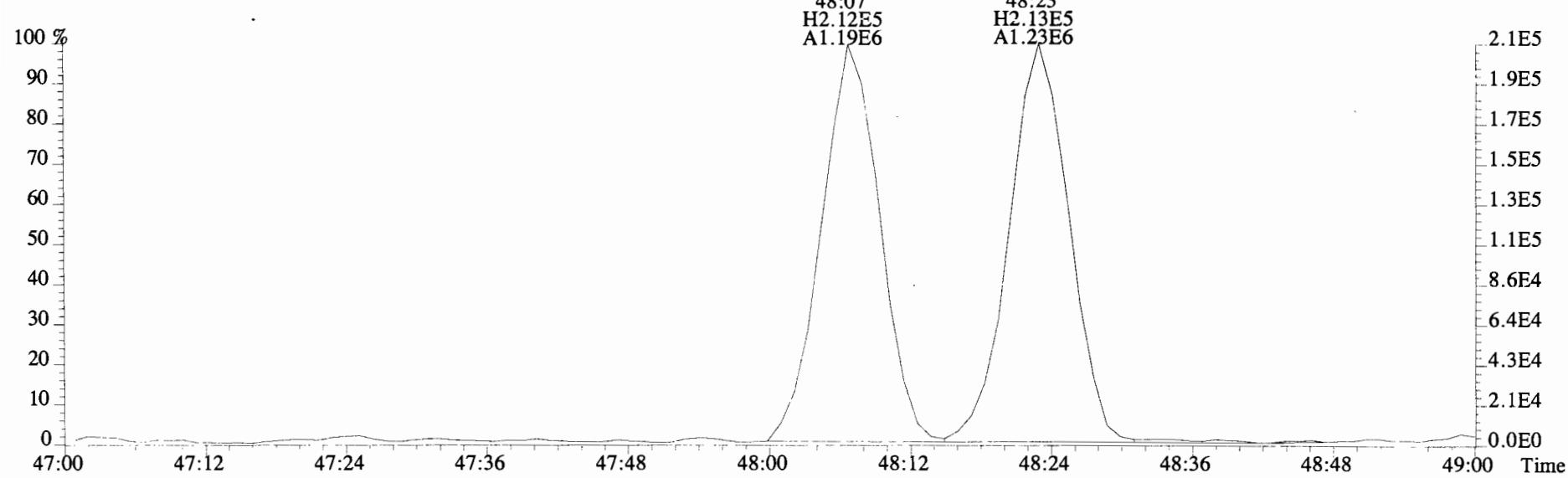
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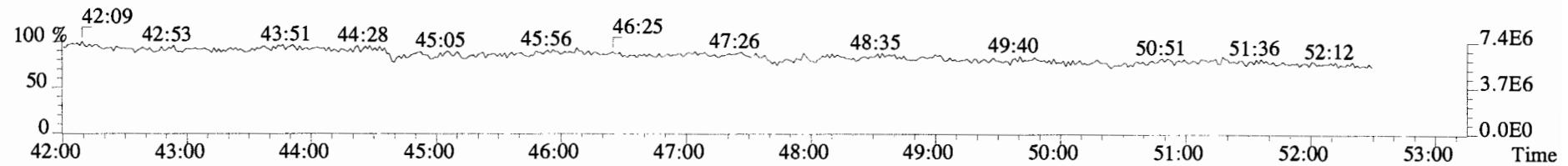
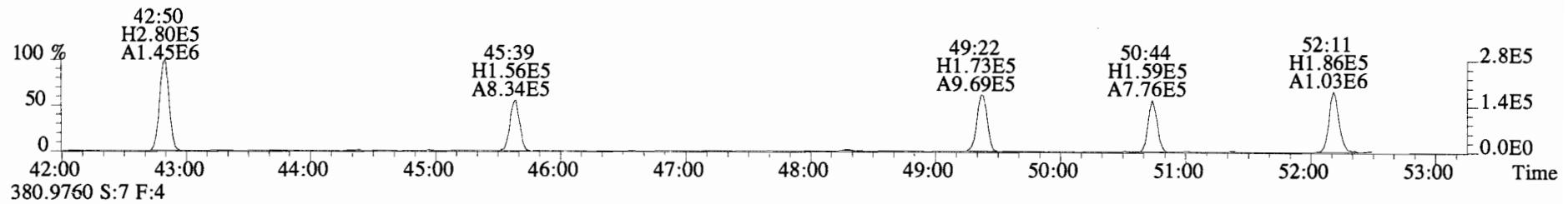
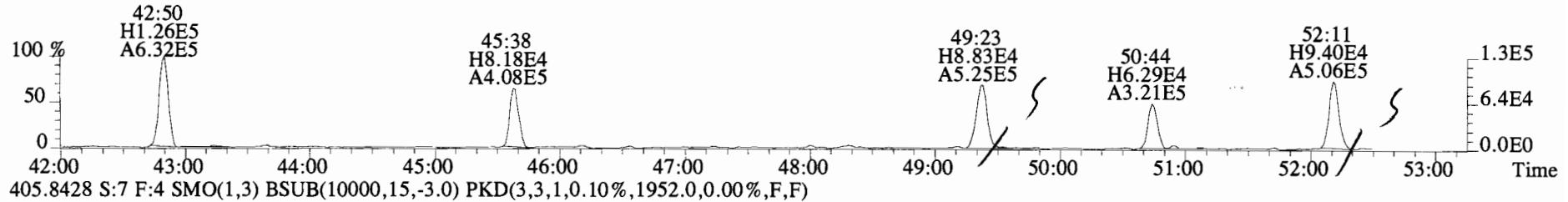
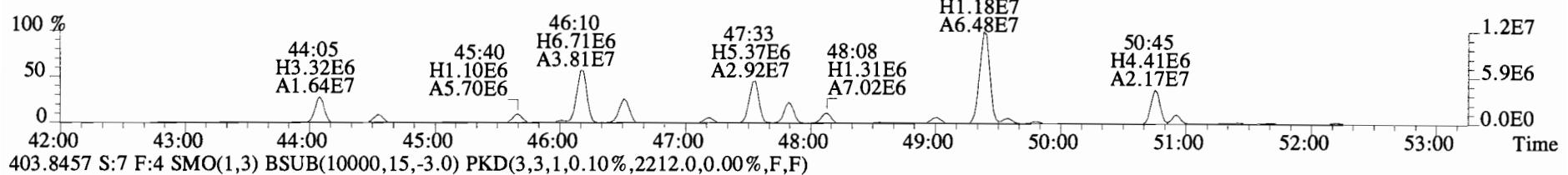
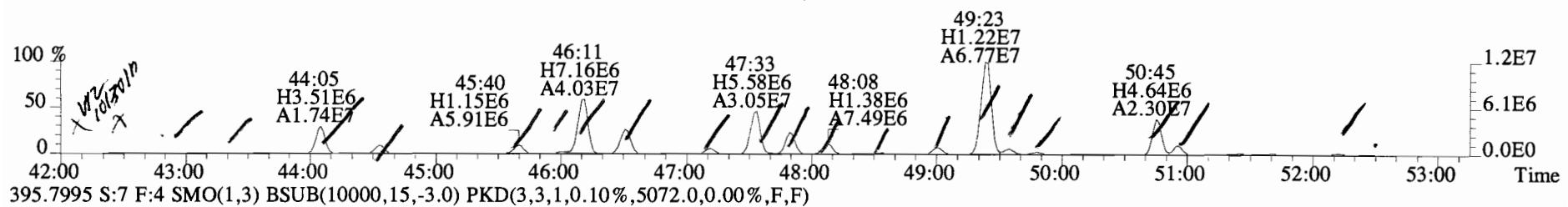
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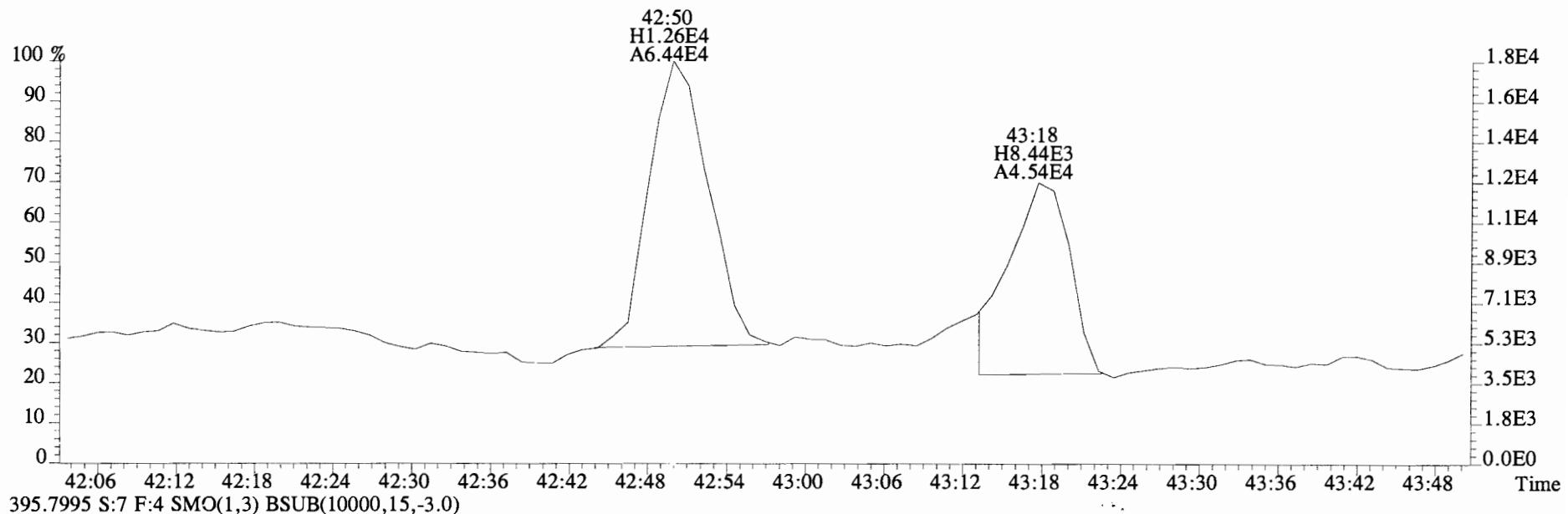
373.8788 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3660.0,0.00%,F,F)



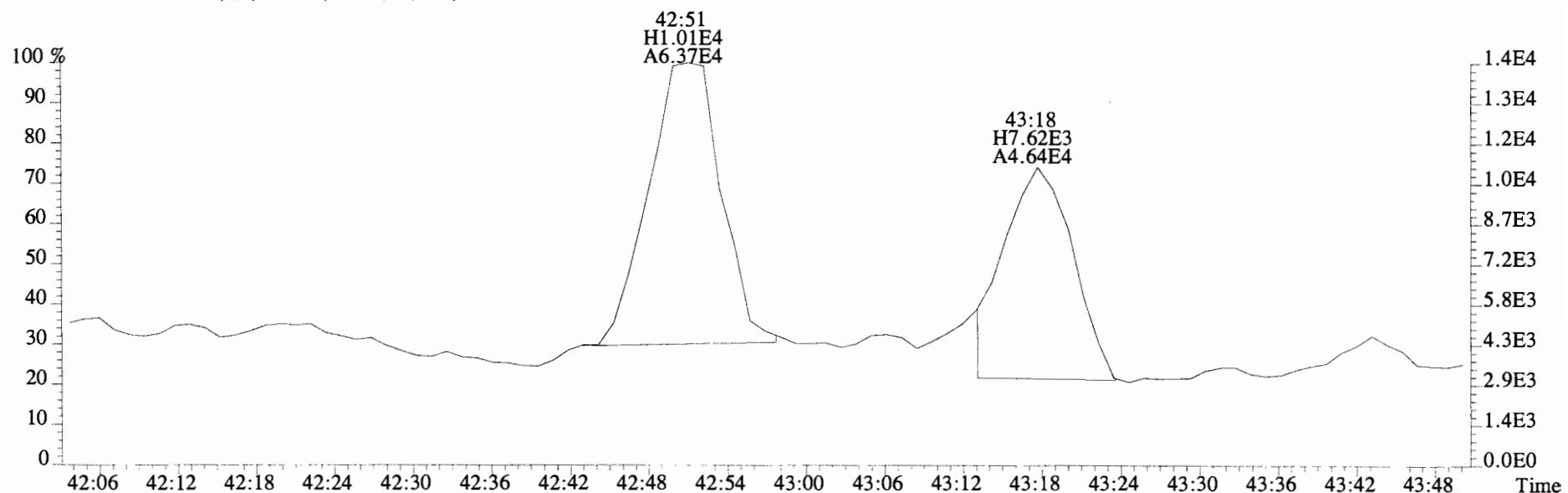
File:141024E2 #1-546 Acq:25-OCT-2014 08:31:59 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
 393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6320.0,0.00%,F,F)



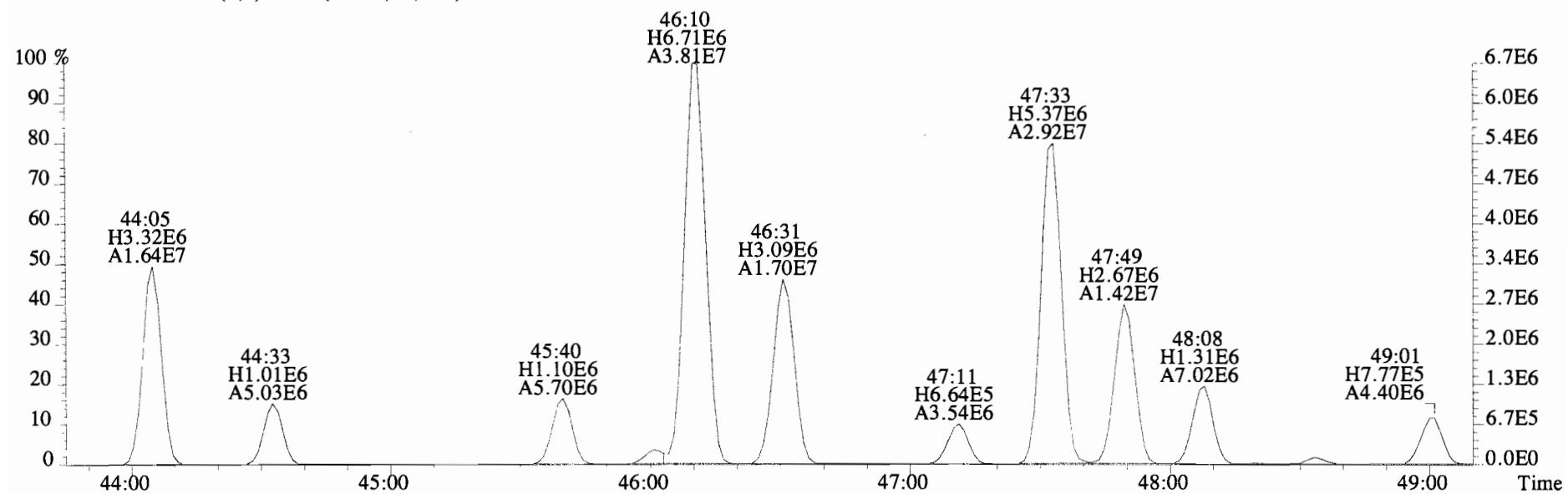
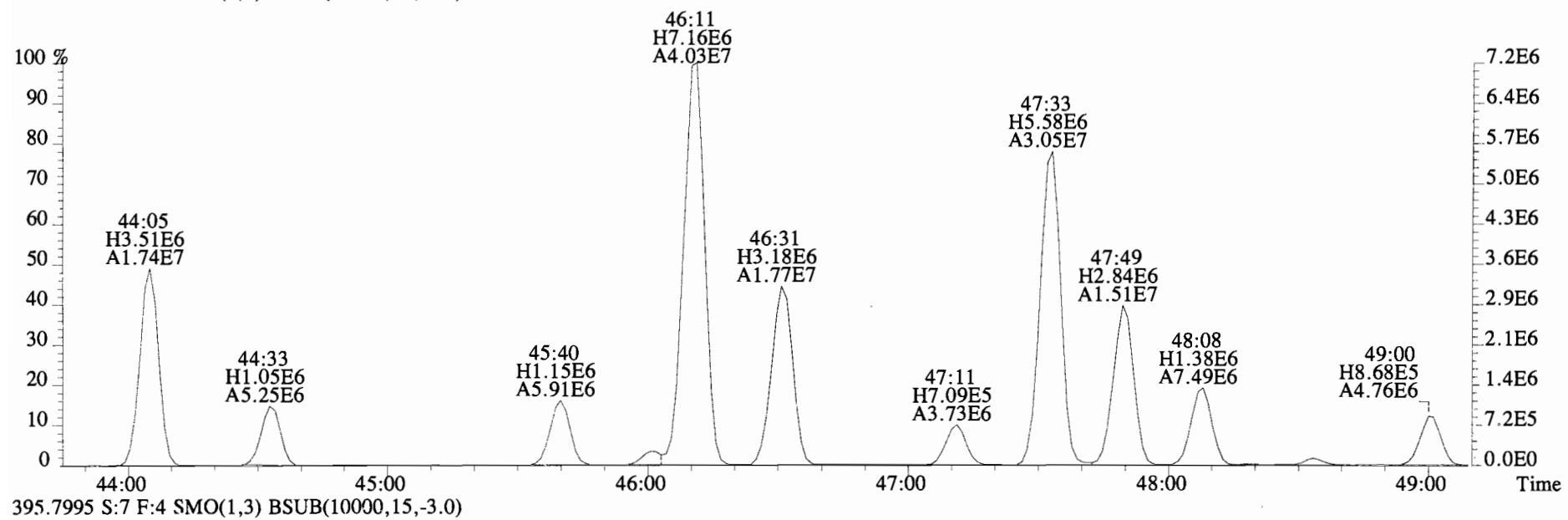
File:141024E2 #1-546 Acq:25-OCT-2014 08:31:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



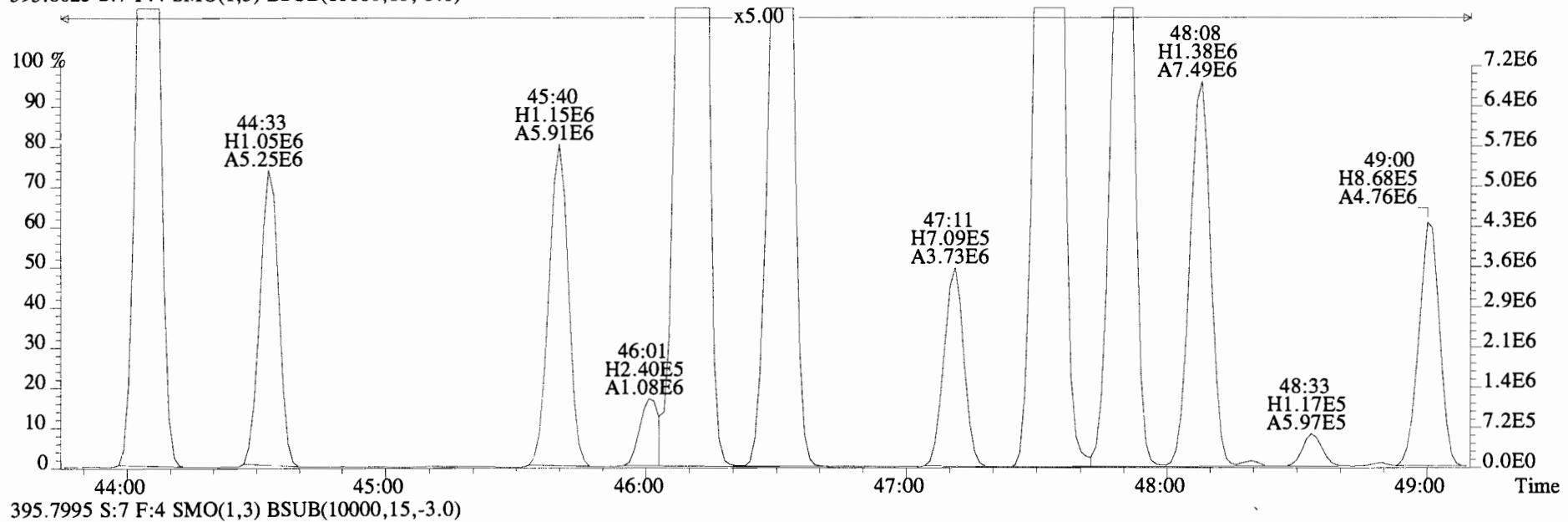
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



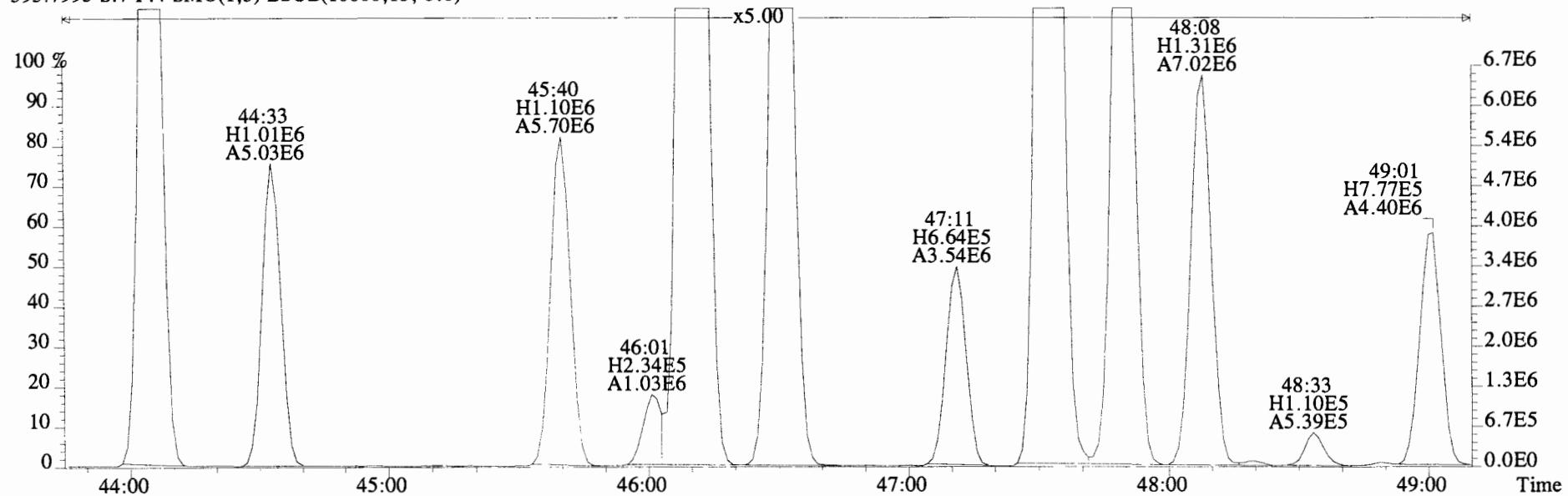
File:141024E2 #1-546 Acq:25-OCT-2014 08:31:59 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
 393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



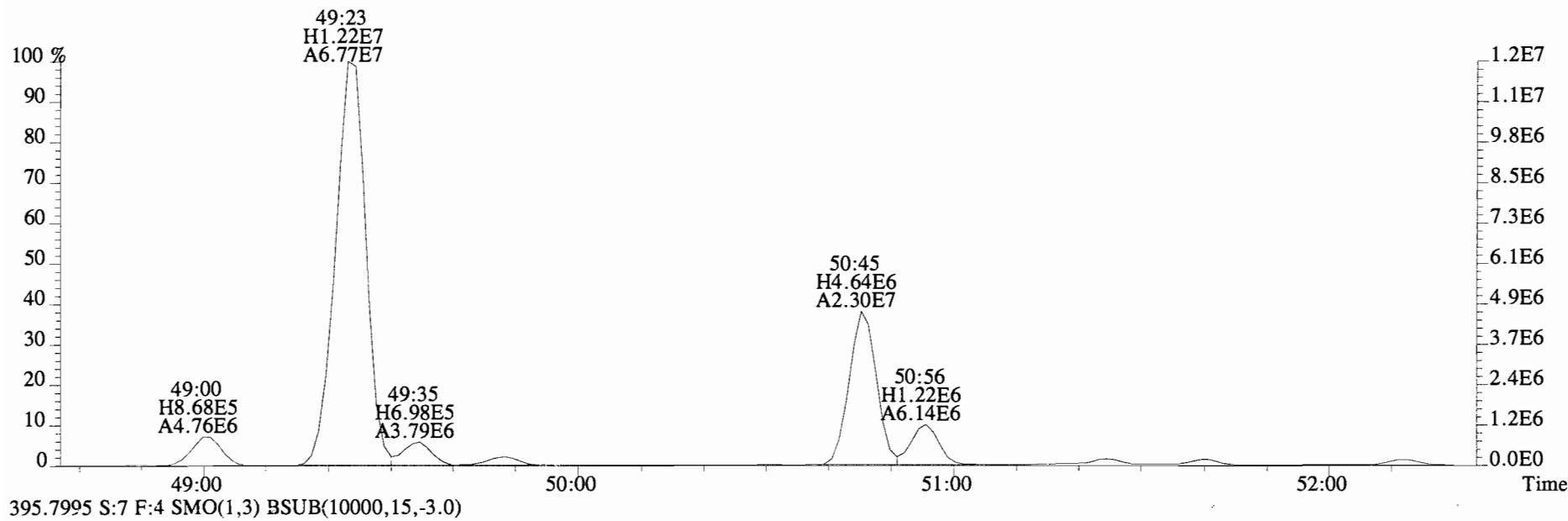
File:141024E2 #1-546 Acq:25-OCT-2014 08:31:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



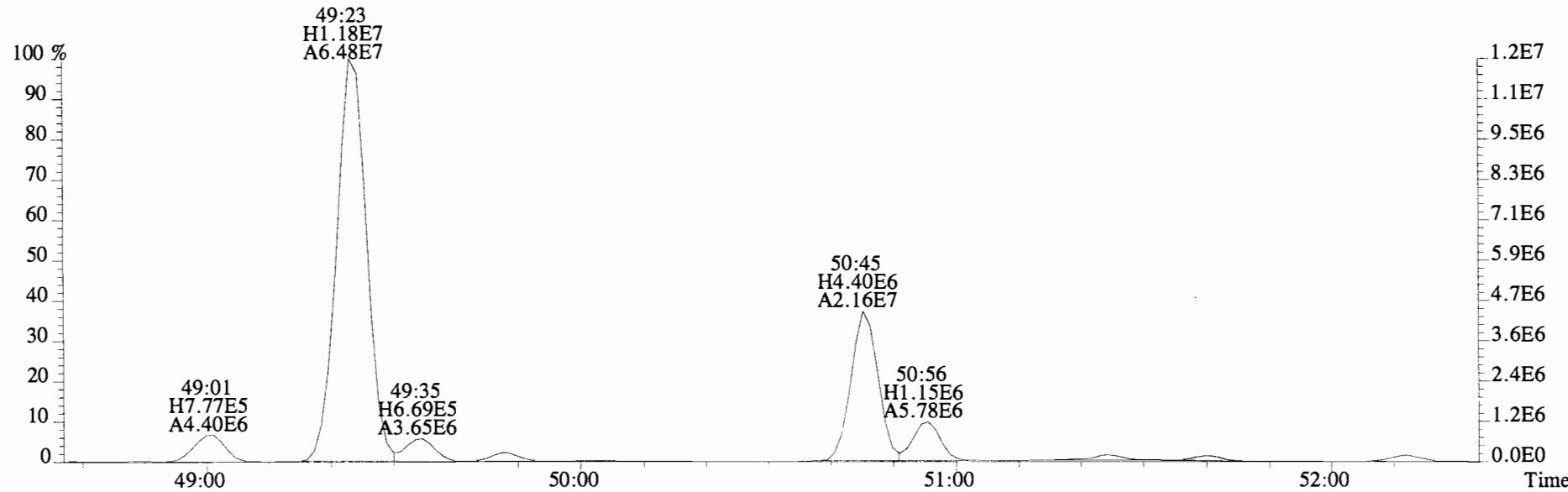
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



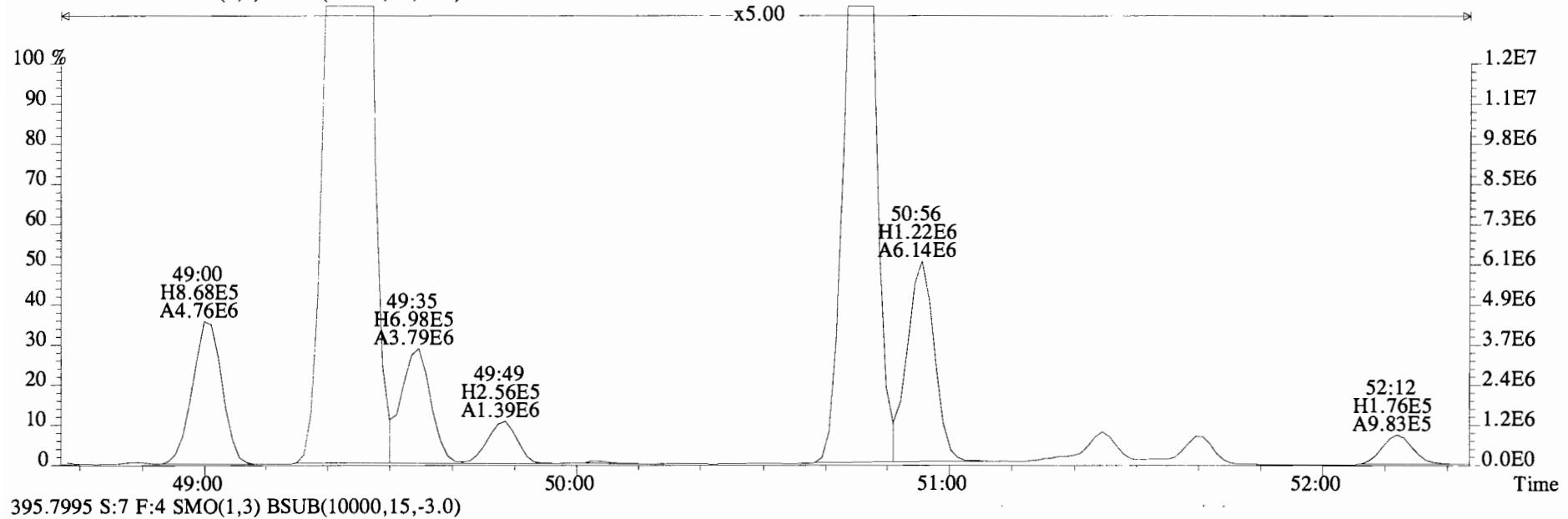
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



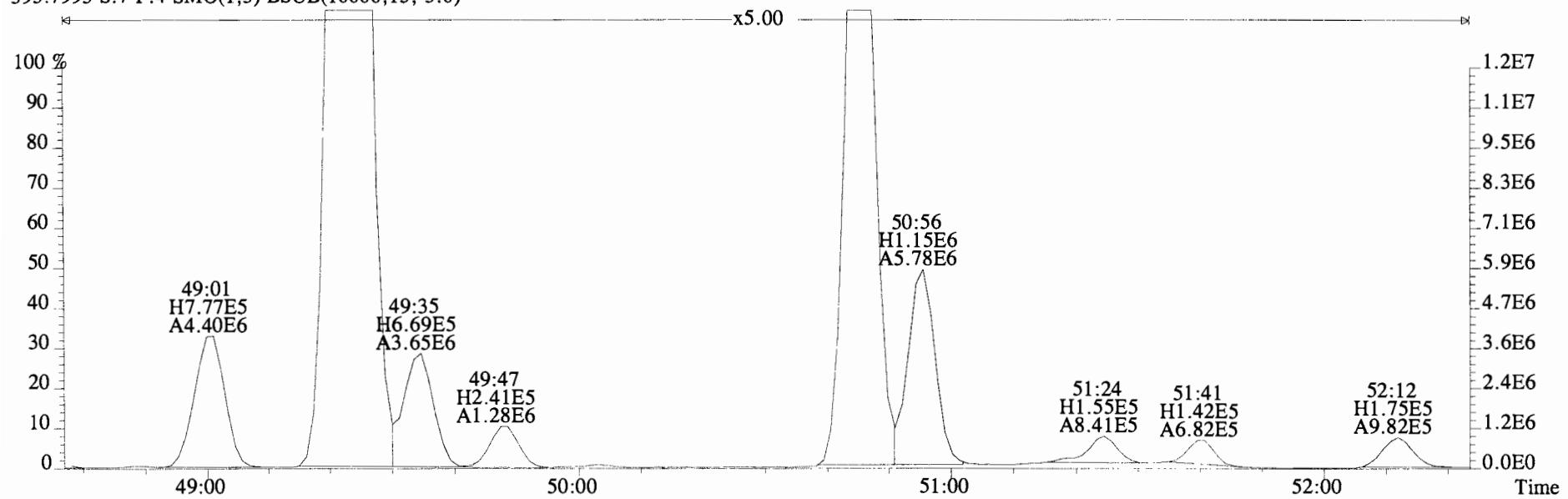
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



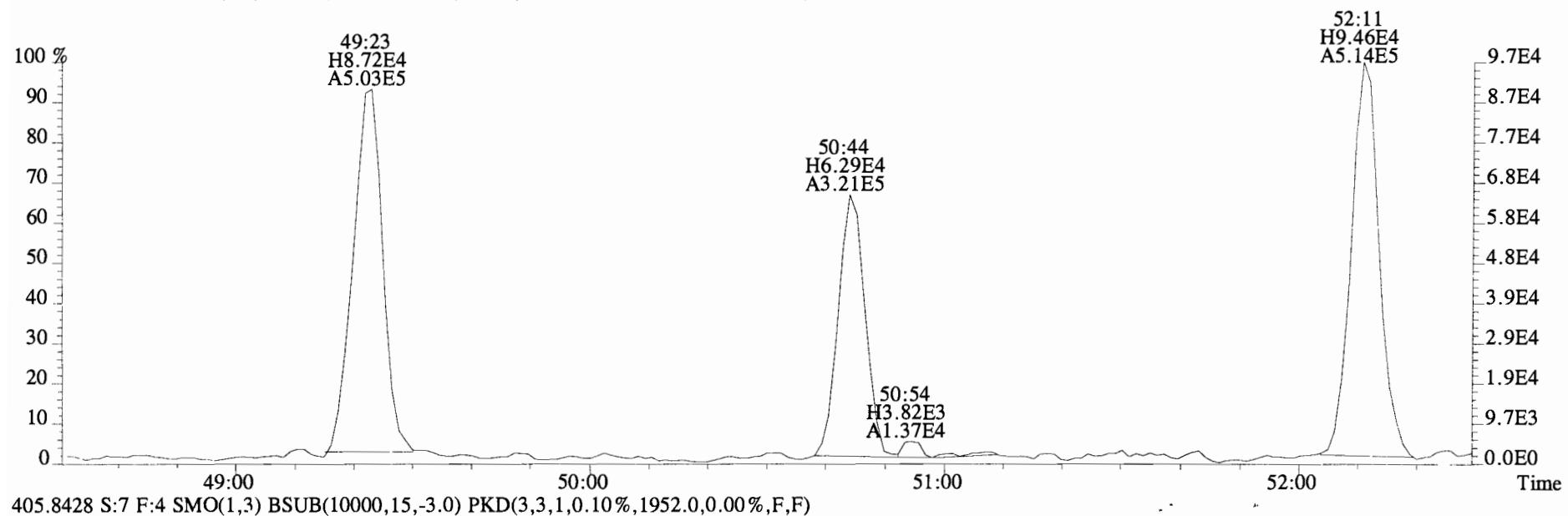
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



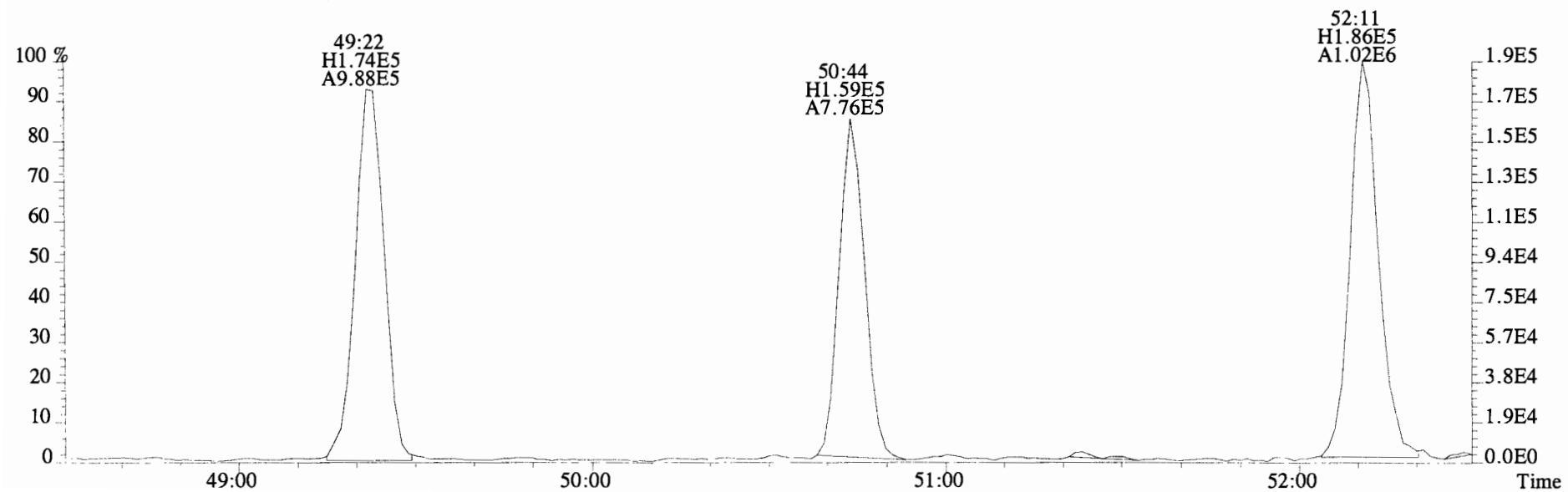
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



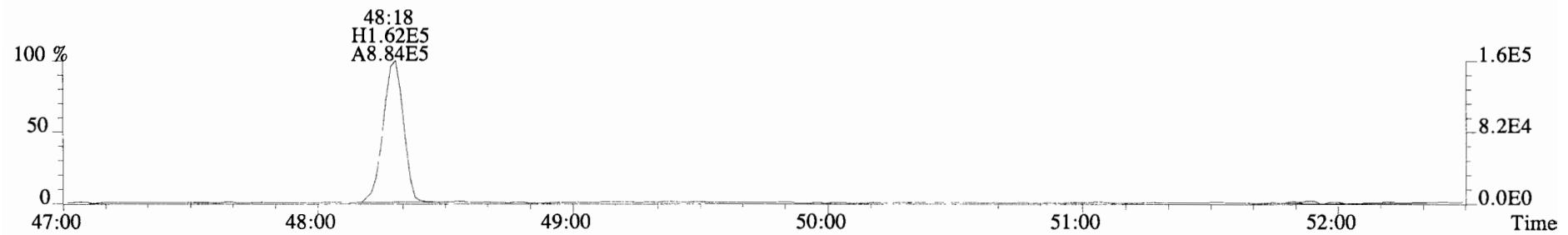
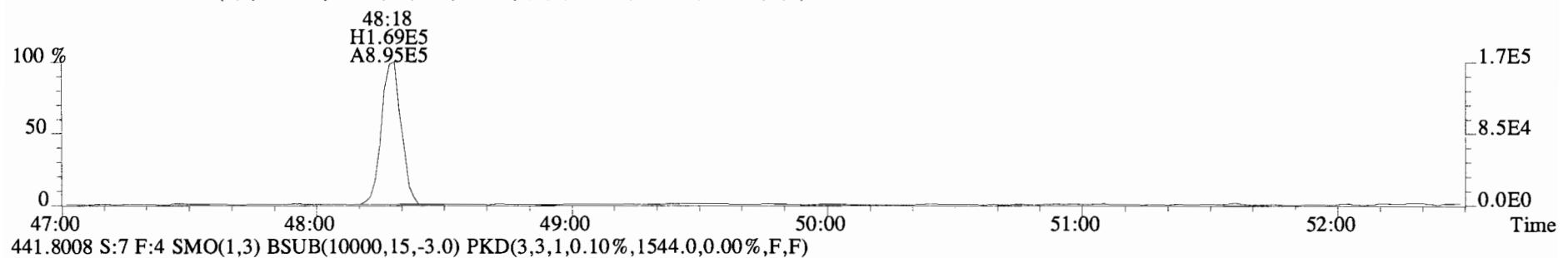
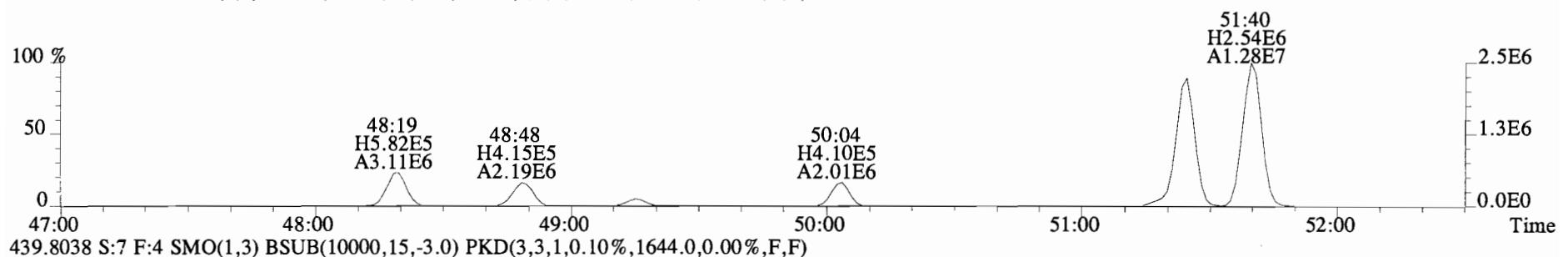
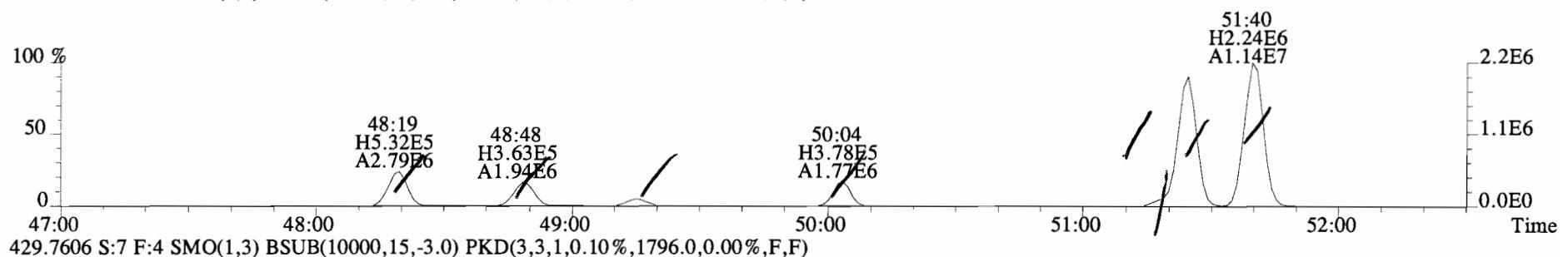
File:141024E2 #1-546 Acq:25-OCT-2014 08:31:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
403.8457 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2212.0,0.00%,F,F)



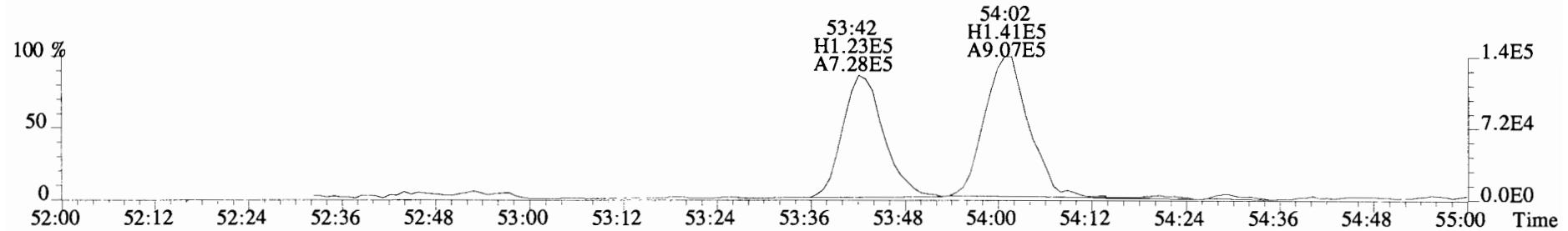
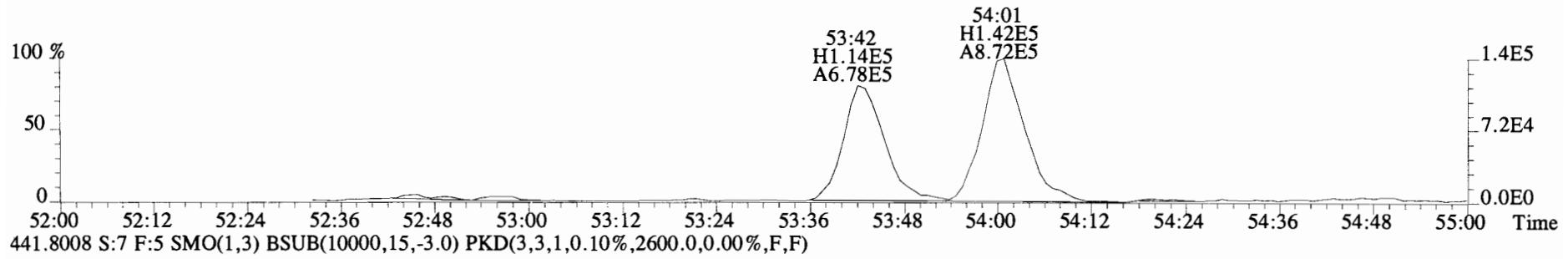
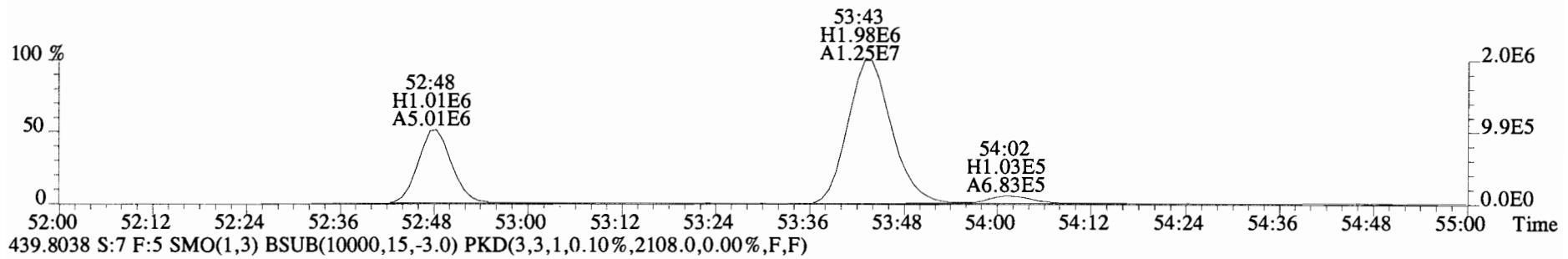
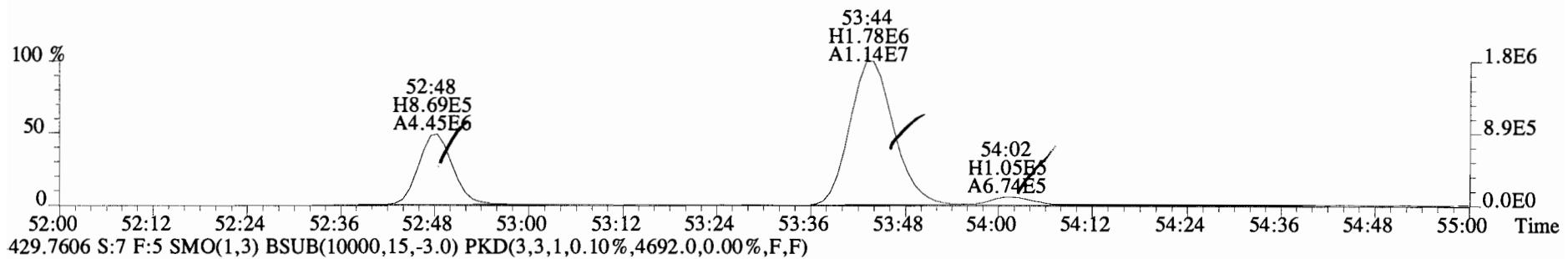
405.8428 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1952.0,0.00%,F,F)



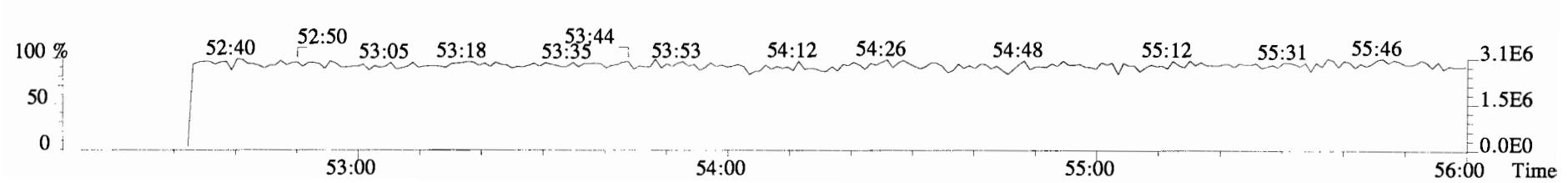
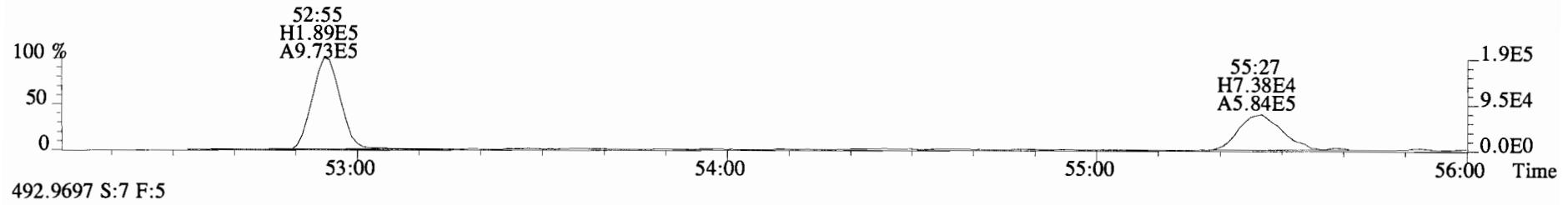
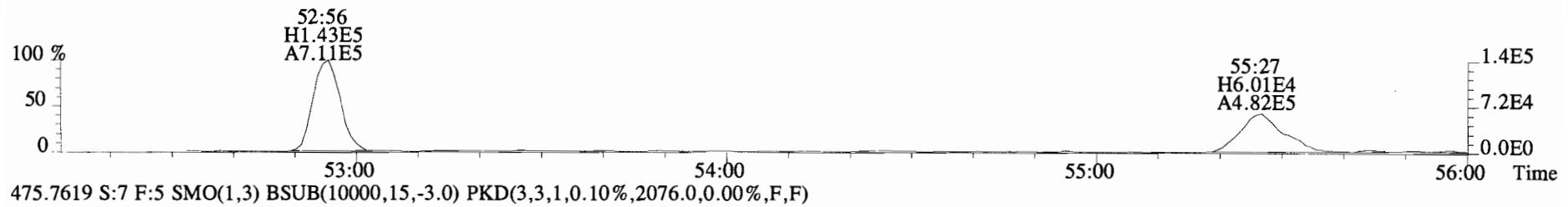
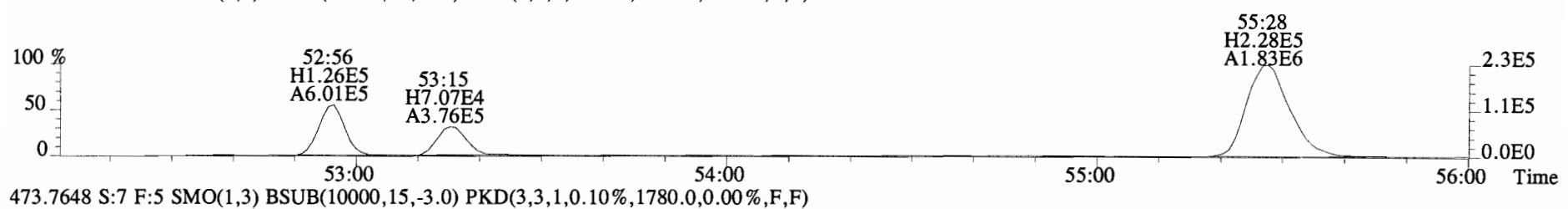
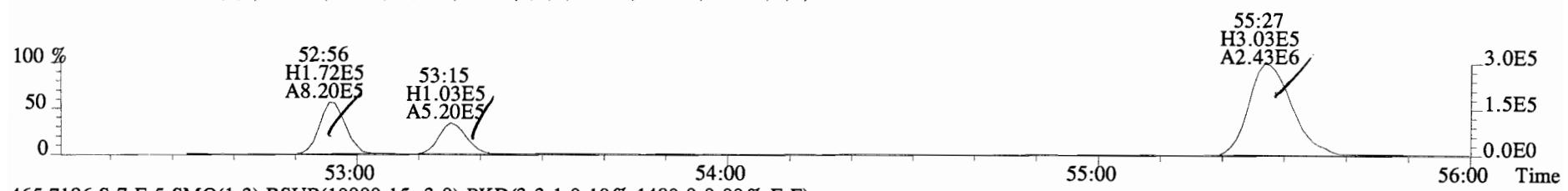
File:141024E2 #1-546 Acq:25-OCT-2014 08:31:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
427.7635 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1708.0,0.00%,F,F)



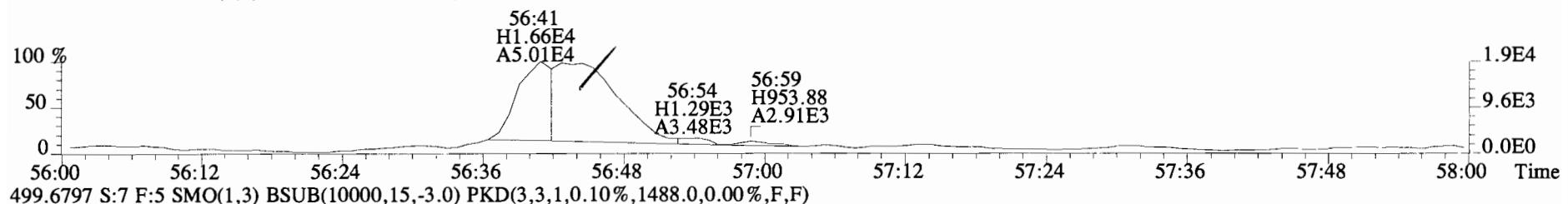
File:141024E2 #1-435 Acq:25-OCT-2014 08:31:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
427.7635 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3708.0,0.00%,F,F)



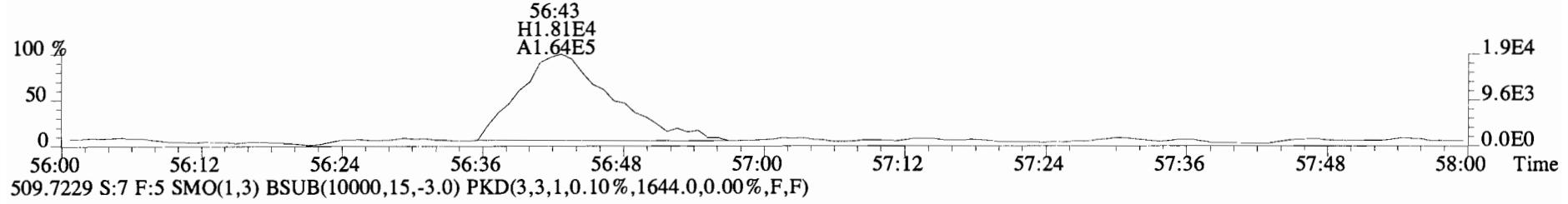
File:141024E2 #1-435 Acq:25-OCT-2014 08:31:59 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
 463.7216 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1300.0,0.00%,F,F)



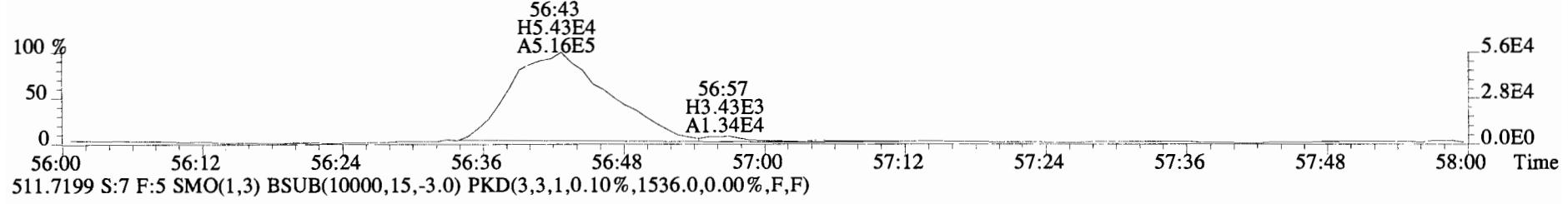
File:141024E2 #1-435 Acq:25-OCT-2014 08:31:59 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
 497.6826 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1532.0,0.00%,F,F)



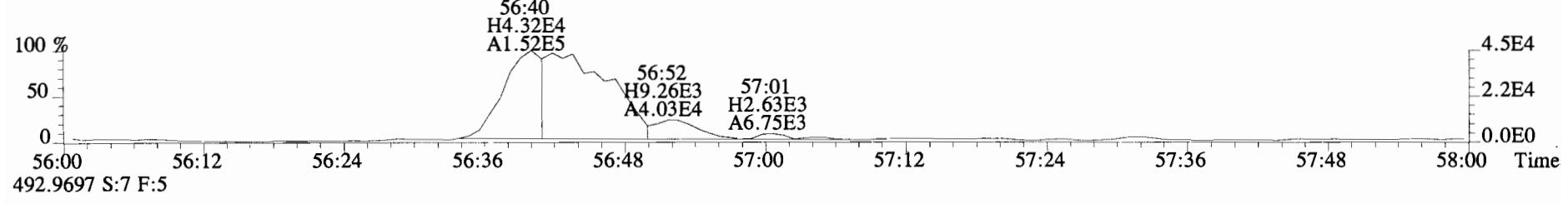
499.6797 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1488.0,0.00%,F,F)



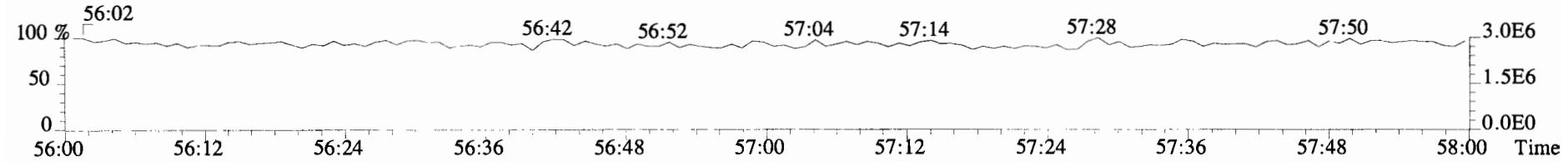
509.7229 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1644.0,0.00%,F,F)



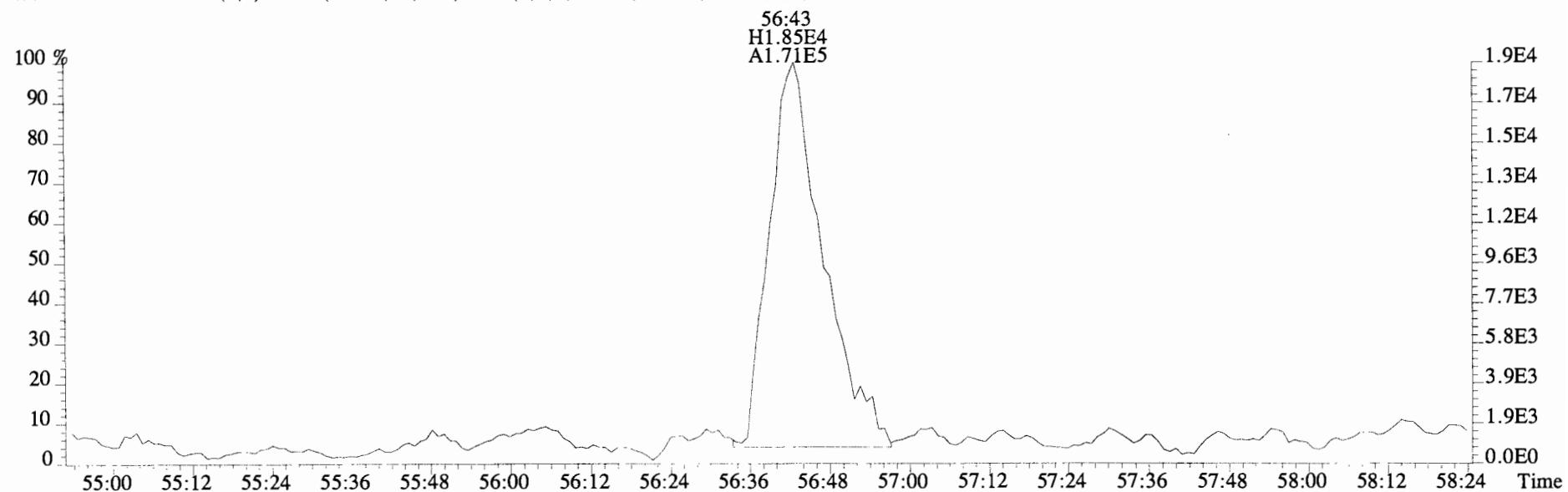
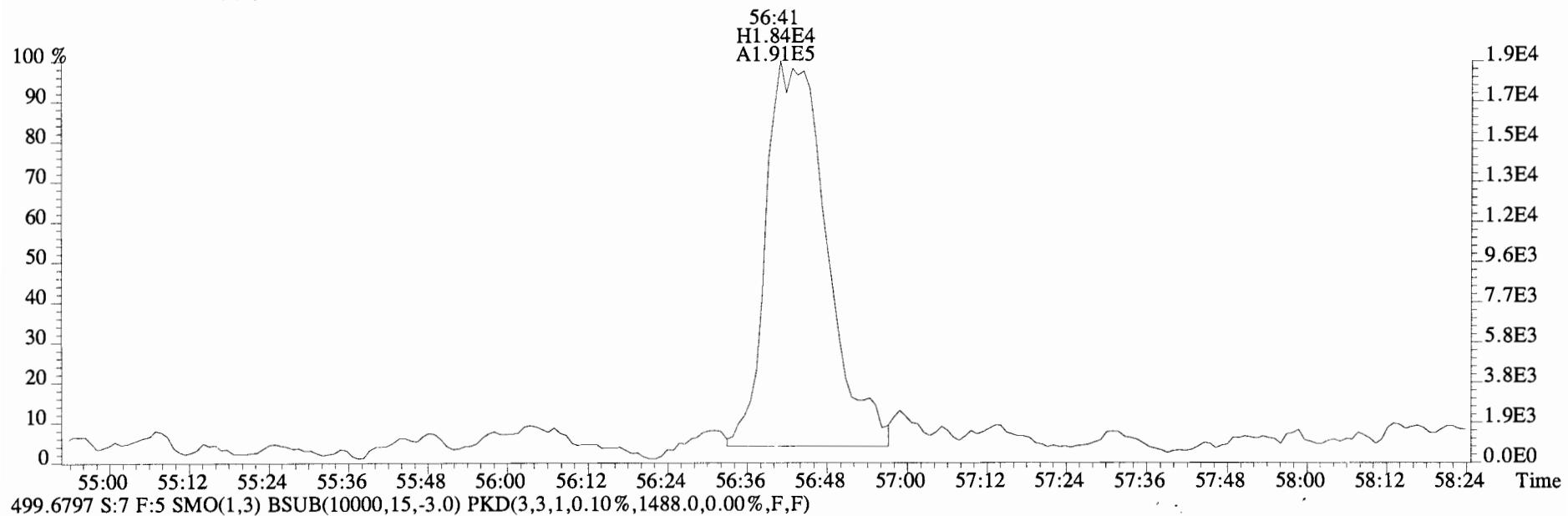
511.7199 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1536.0,0.00%,F,F)



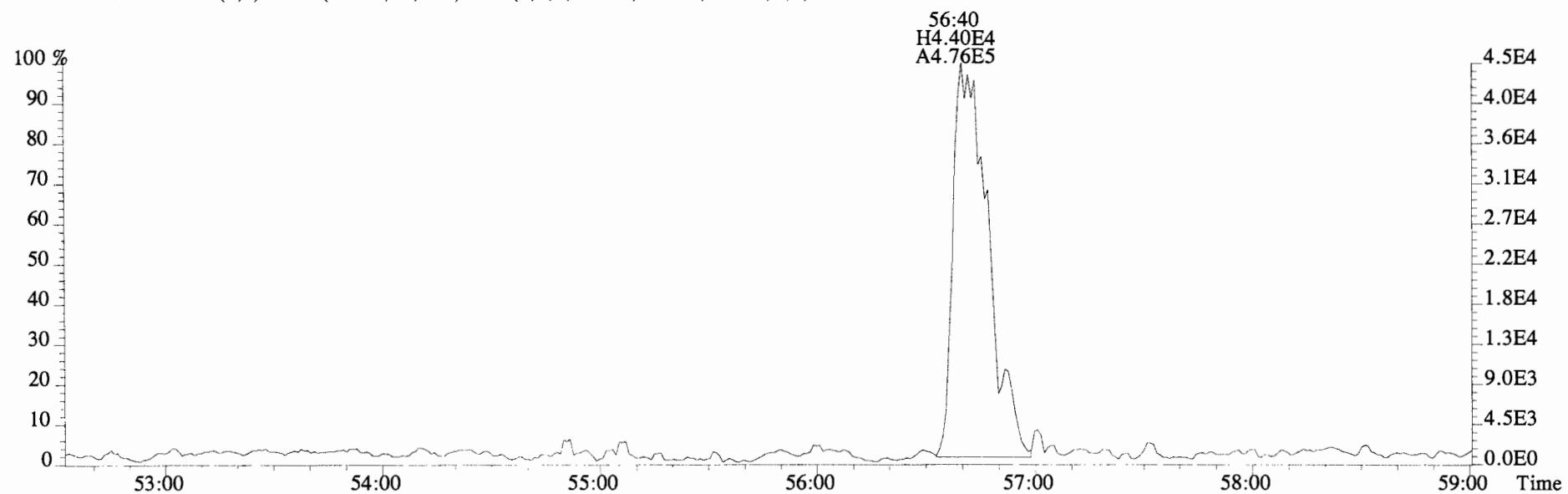
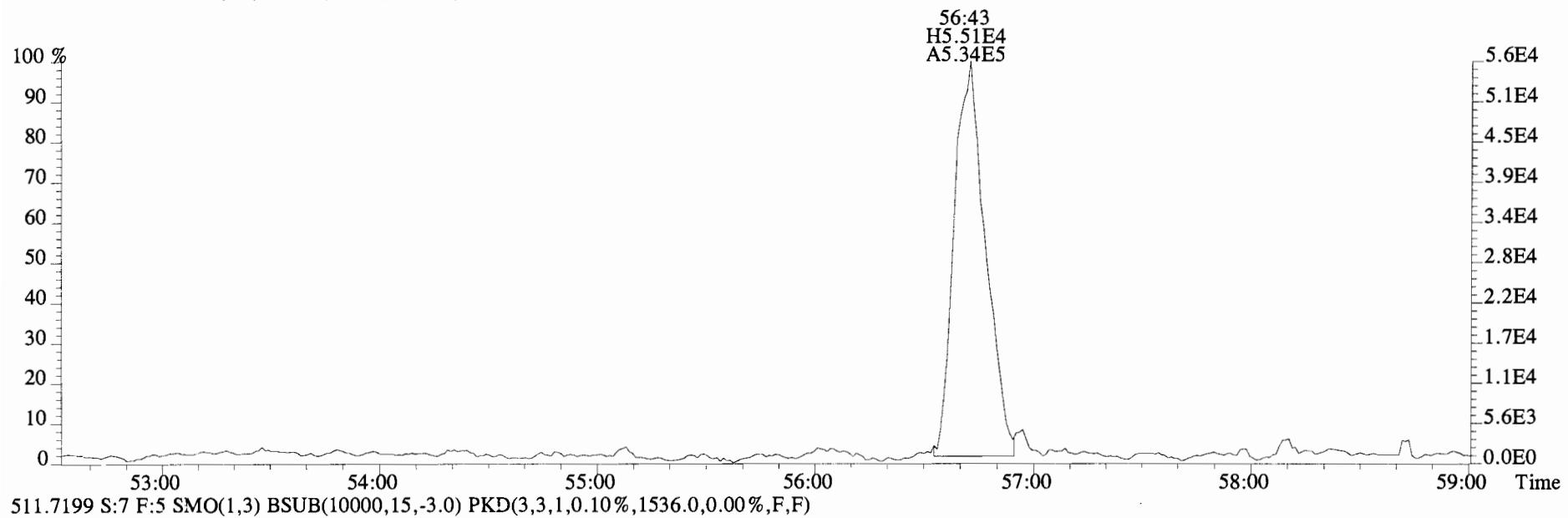
492.9697 S:7 F:5



File:141024E2 #1-435 Acq:25-OCT-2014 08:31:59 GC EI + Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
497.6826 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1532.0,0.00%,F,F)



File:141024E2 #1-435 Acq:25-OCT-2014 08:31:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-03@20X CC-A-01-20141013-S Exp:PCB_ZB1
509.7229 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1644.0,0.00%,F,F)



Client ID: CC-CB-04-20141013-S
 Lab ID: 1400762-04020X

Filename: 141024E2 S:8 Acq:25-OCT-14 09:35:32
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 10.006 / ConCal: ST141024E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	5.28e+05	3.05	y 16:28	1.19	84.1		*	2.5	*	1.001	0.996-1.006	
Mono	PCB-2	2.50e+05	2.80	y 18:44	1.18	42.0		*	2.5	*	0.989	0.984-0.994	
Mono	PCB-3	6.19e+05	2.95	y 18:58	1.43	86.3		*	2.5	*	1.001	0.996-1.006	
Di	PCB-4/10	6.01e+05	1.71	y 20:15	1.57	149		*	2.5	*	1.000	0.997-1.007	
Di	PCB-7/9	*	*	n NotFq	1.21		14400	2.5		71.1	*	0.866-0.874	
Di	PCB-6	4.99e+05	1.94	n 22:38	1.30	93.4	R	*	2.5	*	0.896	0.890-0.899	
Di	PCB-5/8	2.53e+06	1.65	y 23:01	1.15	538		*	2.5	*	0.911	0.907-0.917	
Di	PCB-14	*	*	n NotFq	1.11		14400	2.5		74.6	*	0.949-0.959	
Di	PCB-11	1.09e+07	1.61	y 25:17	1.09	2360		*	2.5	*	1.001	0.995-1.005	
Di	PCB-12/13	*	*	n NotFq	1.19		14400	2.5		69.3	*	1.011-1.021	
Di	PCB-15	2.44e+06	1.53	y 25:59	1.28	448		*	2.5	*	1.028	1.023-1.033	
Tri	PCB-19	2.10e+05	1.16	y 24:18	1.04	65.1		*	2.5	*	1.001	0.996-1.006	
Tri	PCB-30	*	*	n NotFq	1.71		2140	2.5		8.70	*	1.032-1.042	
Tri	PCB-18	2.38e+06	1.02	y 25:54	0.78	699		*	2.5	*	0.955	0.949-0.959	
Tri	PCB-17	9.59e+05	1.02	y 26:04	0.92	239		*	2.5	*	0.961	0.956-0.966	
Tri	PCB-24/27	2.77e+05	1.14	y 26:37	1.19	53.5		*	2.5	*	0.981	0.977-0.987	
Tri	PCB-16/32	1.87e+06	1.10	y 27:08	0.94	457		*	2.5	*	1.000	0.995-1.005	
Tri	PCB-34	*	*	n NotFq	1.14		3090	2.5		17.9	*	0.955-0.965	
Tri	PCB-23	*	*	n NotFq	1.28		3090	2.5		15.9	*	0.959-0.969	
Tri	PCB-29	8.28e+04	1.12	y 28:16	1.08	24.3		*	2.5	*	0.972	0.967-0.977	
Tri	PCB-26	7.79e+05	1.11	y 28:27	1.21	205		*	2.5	*	0.979	0.974-0.984	
Tri	PCB-25	3.77e+05	1.15	y 28:36	1.26	94.8		*	2.5	*	0.984	0.979-0.989	
Tri	PCB-31	4.22e+06	1.05	y 28:58	1.28	1040		*	2.5	*	0.997	0.992-1.002	
Tri	PCB-28	4.09e+06	1.00	y 29:04	1.71	757		*	2.5	*	1.000	0.995-1.005	
Tri	PCB-20/21/33	2.41e+06	0.99	y 29:42	1.08	707		*	2.5	*	1.022	1.017-1.027	
Tri	PCB-22	1.48e+06	1.11	y 30:07	1.21	389		*	2.5	*	1.036	1.032-1.042	
Tri	PCB-36	*	*	n NotFq	1.14		3090	2.5		25.4	*	0.928-0.938	
Tri	PCB-39	*	*	n NotFq	1.12		3090	2.5		26.0	*	0.943-0.953	
Tri	PCB-38	8.82e+04	0.71	n 31:59	1.20	24.3	R	*	2.5	*	0.970	0.966-0.976	
Tri	PCB-35	4.66e+05	1.10	y 32:32	1.23	125		*	2.5	*	0.986	0.982-0.992	
Tri	PCB-37	2.42e+06	1.12	y 33:00	1.23	651		*	2.5	*	1.001	0.995-1.005	
Tetra	PCB-54	*	*	n NotFq	1.10	*	5240	2.5		27.3	*	0.996-1.006	Integrations by:
Tetra	PCB-50	*	*	n NotFq	0.88	*	5240	2.5		34.2	*	1.037-1.047	
Tetra	PCB-53	1.73e+06	0.72	y 29:46	1.06	607		*	2.5	*	0.946	0.942-0.952	Analyst: <u>DMS</u>
Tetra	PCB-51	2.91e+05	0.79	y 30:06	0.99	110		*	2.5	*	0.957	0.952-0.962	
Tetra	PCB-45	6.79e+05	0.67	y 30:32	0.86	293		*	2.5	*	0.971	0.966-0.976	Date: <u>10/30/14</u>
Tetra	PCB-46	3.24e+05	0.76	y 31:01	0.85	143		*	2.5	*	0.986	0.981-0.991	

Reviewed by: 

Date: 10/30/14

Client ID: CC-CB-04-20141013-S
 Lab ID: 1400762-04@20X

Filename: 141024E2 S:8 Acq:25-OCT-14 09:35:32
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.006

ConCal: ST141024E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	9.99e+07	0.74	y 31:28	1.28	29000	*	2.5	*	1.001	0.996-1.006		
Tetra	PCB-73	*	*	n NotFq	1.35		*	5240	2.5	30.6	*	1.000-1.010	
Tetra	PCB-43/49	1.83e+07	0.71	y 31:46	0.99	6870	*	2.5	*	1.010	1.005-1.015		
Tetra	PCB-47	2.39e+06	0.71	y 31:59	1.06	773	*	2.5	*	1.001	0.996-1.006		
Tetra	PCB-48/75	1.64e+06	0.71	y 32:05	1.23	457	*	2.5	*	1.004	0.999-1.009		
Tetra	PCB-65	*	*	n NotFq	1.22		*	5240	2.5	30.2	*	1.008-1.018	
Tetra	PCB-62	*	*	n NotFq	1.22		*	5240	2.5	30.3	*	1.011-1.021	
Tetra	PCB-44	3.37e+07	0.74	y 32:49	0.86	13400	*	2.5	*	1.027	1.021-1.031		
Tetra	PCB-42/59	2.98e+06	0.72	y 33:04	1.14	897	*	2.5	*	1.035	1.028-1.038		
Tetra	PCB-41/64/71/72	1.81e+07	0.73	y 33:36	1.21	5130	*	2.5	*	1.052	1.046-1.056		
Tetra	PCB-68	1.23e+05	0.77	y 33:51	1.35	31.3	*	2.5	*	1.059	1.054-1.064		
Tetra	PCB-40	1.44e+06	0.70	y 34:04	0.70	704	*	2.5	*	1.066	1.061-1.071		
Tetra	PCB-57	1.25e+05	0.85	y 34:24	0.98	34.4	*	2.5	*	0.970	0.965-0.975		
Tetra	PCB-67	4.66e+05	0.73	y 34:42	1.11	113	*	2.5	*	0.978	0.974-0.984		
Tetra	PCB-58	5.57e+04	0.88	y 34:50	0.93	16.2	*	2.5	*	0.982	0.977-0.987		
Tetra	PCB-63	1.04e+06	0.74	y 34:58	0.95	293	*	2.5	*	0.986	0.982-0.992		
Tetra	PCB-74	2.14e+07	0.75	y 35:15	1.24	4630	*	2.5	*	0.994	0.990-1.000		
Tetra	PCB-61/70	9.98e+07	0.74	y 35:28	0.95	28200	*	2.5	*	1.000	0.995-1.005		
Tetra	PCB-76/66	2.50e+07	0.73	y 35:41	1.04	6430	*	2.5	*	1.006	1.001-1.011		
Tetra	PCB-80	*	*	n NotFq	1.19		*	5240	2.5	24.4	*	0.996-1.006	
Tetra	PCB-55	1.60e+06	0.80	y 36:11	1.04	413	*	2.5	*	1.009	1.005-1.015		
Tetra	PCB-56/60	1.42e+07	0.72	y 36:43	1.01	3780	*	2.5	*	1.024	1.019-1.029		
Tetra	PCB-79	3.34e+06	0.80	y 37:46	1.08	834	*	2.5	*	1.053	1.048-1.058		
Tetra	PCB-78	*	*	n NotFq	1.27		*	5240	2.5	31.0	*	0.982-0.992	
Tetra	PCB-81	1.12e+06	0.66	y 38:59	1.33	276	*	2.5	*	1.000	0.995-1.005		
Tetra	PCB-77	6.95e+06	0.77	y 39:35	1.10	2040	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-104	*	*	n NotFq	1.18	*		1970	2.5	19.5	*	0.996-1.006	
Penta	PCB-96	*	*	n NotFq	1.14	*		1970	2.5	20.3	*	1.034-1.044	
Penta	PCB-103	8.74e+05	1.49	y 34:24	0.96	355	*	2.5	*	1.054	1.050-1.060		
Penta	PCB-100	2.30e+05	1.92	n 34:46	0.94	95.2		R	2.5	*	1.065	1.061-1.071	
Penta	PCB-94	5.39e+05	1.62	y 35:14	1.06	240	*	2.5	*	0.986	0.980-0.990		
Penta	PCB-95/98/102	1.70e+08	1.55	y 35:46	1.22	65200	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-93	*	*	n NotFq	0.84	*		1970	2.5	33.5	*	0.997-1.007	
Penta	PCB-88/91	2.19e+07	1.53	y 36:11	1.12	9260	*	2.5	*	1.012	1.005-1.015		
Penta	PCB-121	*	*	n NotFq	1.62	*		1970	2.5	17.5	*	1.009-1.019	
Penta	PCB-84/92	8.20e+07	1.57	y 37:04	1.05	35200	*	2.5	*	0.990	0.985-0.995		
Penta	PCB-89	9.10e+05	1.33	y 37:16	1.13	362	*	2.5	*	0.996	0.991-1.001		

Analyst: DmJ

Date: 10/30/14

Client ID: CC-CB-04-20141013-S
 Lab ID: 1400762-04@20X

Filename: 141024E2 S:8 Acq:25-OCT-14 09:35:32
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.006

ConCal: ST141024E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	2.43e+08	1.55	y 37:27	1.10	98900	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-113	*	*	n NotF _g	1.41		*	1970	2.5	20.0	*	1.002-1.012	
Penta	PCB-99	8.11e+07	1.56	y 37:46	1.34	27200	*	2.5	*	1.009	1.004-1.014		
Penta	PCB-119	3.46e+06	1.58	y 38:15	1.53	1220	*	2.5	*	0.988	0.982-0.992		
Penta	PCB-108/112	9.36e+06	1.52	y 38:25	1.28	3940	*	2.5	*	0.992	0.986-0.996		
Penta	PCB-83	*	*	n NotF _g	1.52		*	1970	2.5	22.7	*	0.990-1.000	
Penta	PCB-97	6.11e+07	1.57	y 38:45	1.18	27900	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-86	2.68e+05	1.39	y 38:54	0.84	171	*	2.5	*	1.004	0.999-1.009		
Penta	PCB-87/117/125	1.05e+08	1.57	y 39:02	1.55	36500	*	2.5	*	1.008	1.002-1.012		
Penta	PCB-111/115	4.39e+06	1.49	y 39:12	1.63	1450	*	2.5	*	1.012	1.006-1.016		
Penta	PCB-85/116	3.02e+07	1.55	y 39:18	1.30	12500	*	2.5	*	1.015	1.010-1.020		
Penta	PCB-120	6.85e+05	1.50	y 39:31	1.68	220	*	2.5	*	1.020	1.016-1.026		
Penta	PCB-110	2.97e+08	1.54	y 39:42	1.56	103000	*	2.5	*	1.025	1.020-1.030		
Penta	PCB-82	1.92e+07	1.59	y 40:20	0.76	9840	*	2.5	*	0.976	0.971-0.981		
Penta	PCB-124	1.29e+07	1.55	y 41:01	1.47	3420	*	2.5	*	0.993	0.988-0.998		
Penta	PCB-107/109	1.63e+07	1.54	y 41:11	1.32	4810	*	2.5	*	0.997	0.991-1.001		
Penta	PCB-123	3.13e+06	1.59	y 41:20	1.17	1050	*	2.5	*	1.000	0.996-1.006		
Penta	PCB-106/118	2.51e+08	1.57	y 41:30	1.17	84400	*	2.5	*	1.000	0.996-1.006		
Penta	PCB-114	6.58e+06	1.61	y 42:10	1.30	1970	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-122	2.68e+06	1.72	y 42:18	1.12	926	*	2.5	*	1.003	0.999-1.009		
Penta	PCB-105	9.92e+07	1.63	y 43:03	1.30	31000	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-127	*	*	n NotF _g	1.33	*	8740	2.5	84.9	*	0.996-1.006		
Penta	PCB-126	2.33e+06	1.59	y 45:19	1.18	895	*	2.5	*	1.001	0.995-1.005		
Hexa	PCB-155	*	*	n NotF _g	1.11	*	1680	2.5	14.7	*	0.966-1.006		
Hexa	PCB-150	2.96e+05	1.18	y 38:16	1.00	115	*	2.5	*	1.035	1.030-1.040		
Hexa	PCB-152	2.58e+05	1.10	y 38:44	1.12	89.9	*	2.5	*	1.047	1.043-1.053		
Hexa	PCB-145	1.25e+05	1.16	y 39:12	1.20	40.4	*	2.5	*	1.060	1.055-1.065		
Hexa	PCB-136	3.25e+07	1.28	y 39:31	1.18	10700	*	2.5	*	1.068	1.064-1.074		
Hexa	PCB-148	*	*	n NotF _g	0.74	*	1680	2.5	21.9	*	1.066-1.076		
Hexa	PCB-154	1.63e+06	1.26	y 40:06	0.86	738	*	2.5	*	1.084	1.080-1.090		
Hexa	PCB-151	3.89e+07	1.23	y 40:45	0.75	20200	*	2.5	*	1.102	1.097-1.107		
Hexa	PCB-135	2.30e+07	1.26	y 40:57	0.79	11300	*	2.5	*	1.107	1.103-1.113		
Hexa	PCB-144	1.02e+07	1.24	y 41:04	0.76	5170	*	2.5	*	1.110	1.105-1.117		
Hexa	PCB-147	3.79e+06	1.24	y 41:12	0.82	1800	*	2.5	*	1.114	1.109-1.121		
Hexa	PCB-139/149	1.54e+08	1.26	y 41:27	0.76	78300	*	2.5	*	1.121	1.116-1.128		
Hexa	PCB-140	8.79e+05	1.27	y 41:39	0.72	473	*	2.5	*	1.126	1.121-1.133		
Hexa	PCB-134/143	1.32e+07	1.21	y 42:07	0.92	6160	*	2.5	*	0.976	0.970-0.980		

Analyst: *DMS*

Date: *10/30/14*

Client ID: CC-CB-04-20141013-S Filename: 141024E2 S:8 Acq:25-OCT-14 09:35:32
 Lab ID: 1400762-04@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.006

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ConCal: ST141024E2-1

EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	6.69e+06	1.23	y 42:24	0.82	3490		*	2.5	*	0.982	0.977-0.987	
Hexa	PCB-131	5.25e+04	1.90	n 42:33	0.91	24.7	R	*	2.5	*	0.986	0.981-0.991	
Hexa	PCB-146/165	3.36e+07	1.23	y 42:47	1.25	11500		*	2.5	*	0.991	0.986-0.996	
Hexa	PCB-132/161	8.12e+07	1.21	y 43:04	1.10	31400		*	2.5	*	0.998	0.992-1.002	
Hexa	PCB-153	2.30e+08	1.22	y 43:11	1.25	78600		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-168	3.28e+05	1.20	y 43:24	1.45	96.8		*	2.5	*	1.005	1.001-1.011	
Hexa	PCB-141	4.83e+07	1.22	y 43:56	1.09	20400		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-137	1.41e+07	1.23	y 44:20	1.06	6070		*	2.5	*	1.009	1.004-1.014	
Hexa	PCB-130	1.46e+07	1.24	y 44:25	0.96	6950		*	2.5	*	1.011	1.006-1.016	
Hexa	PCB-138/163/164	2.83e+08	1.23	y 44:48	1.29	99700		*	2.5	*	1.001	0.996-1.006	
Hexa	PCB-158/160	3.82e+07	1.21	y 45:02	1.34	12900		*	2.5	*	1.006	1.001-1.011	
Hexa	PCB-129	1.21e+07	1.25	y 45:17	0.85	6470		*	2.5	*	1.012	1.007-1.017	
Hexa	PCB-166	1.45e+06	1.27	y 45:46	1.19	488		*	2.5	*	0.993	0.988-0.998	
Hexa	PCB-159	*	*	n NotF _g	1.11	*		19400	2.5	195	*	0.996-1.006	
Hexa	PCB-128/162	4.40e+07	1.21	y 46:22	1.05	16800		*	2.5	*	1.007	1.002-1.012	
Hexa	PCB-167	1.33e+07	1.26	y 46:46	1.20	4050		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-156	3.32e+07	1.23	y 48:05	1.14	11100		*	2.5	*	1.000	0.996-1.006	
Hexa	PCB-157	7.34e+06	1.29	y 48:21	1.16	2280		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-169	*	*	n NotF _g	1.12	*		19400	2.5	216	*	0.995-1.005	
Hepta	PCB-188	1.66e+05	1.16	y 42:49	1.58	50.5		*	2.5	*	1.000	0.996-1.006	
Hepta	PCB-184	7.07e+04	0.92	y 43:16	1.63	20.8		*	2.5	*	1.011	1.006-1.016	
Hepta	PCB-179	2.77e+07	1.04	y 44:03	1.30	10200		*	2.5	*	1.029	1.024-1.034	
Hepta	PCB-176	8.24e+06	1.08	y 44:31	1.48	2680		*	2.5	*	1.040	1.035-1.045	
Hepta	PCB-186	*	*	n NotF _g	1.45	*		3040	2.5	17.0	*	1.050-1.060	
Hepta	PCB-178	9.13e+06	1.03	y 45:38	1.03	4240		*	2.5	*	1.066	1.061-1.071	
Hepta	PCB-175	1.92e+06	1.09	y 45:59	1.01	908		*	2.5	*	1.074	1.069-1.079	
Hepta	PCB-182/187	6.29e+07	1.06	y 46:08	1.25	24100		*	2.5	*	1.078	1.073-1.083	
Hepta	PCB-183	2.76e+07	1.05	y 46:29	1.21	11000		*	2.5	*	1.086	1.081-1.091	
Hepta	PCB-185	5.96e+06	1.05	y 47:08	1.80	2410		*	2.5	*	0.955	0.951-0.961	
Hepta	PCB-174	4.58e+07	1.06	y 47:30	1.38	24200		*	2.5	*	0.963	0.958-0.968	
Hepta	PCB-181	*	*	n NotF _g	1.38	*		3040	2.5	28.3	*	0.960-0.970	
Hepta	PCB-177	2.38e+07	1.07	y 47:48	1.26	13800		*	2.5	*	0.969	0.963-0.973	
Hepta	PCB-171	1.13e+07	1.04	y 48:05	1.58	5200	R	*	2.5	*	0.975	0.970-0.980	
Hepta	PCB-173	8.40e+05	1.19	y 48:32	1.11	551		*	2.5	*	0.984	0.978-0.988	
Hepta	PCB-172	7.14e+06	1.04	y 48:58	1.63	3180		*	2.5	*	0.993	0.987-0.997	
Hepta	PCB-192	*	*	n NotF _g	1.74	*		3040	2.5	22.4	*	0.991-1.001	
Hepta	PCB-180	1.04e+08	1.05	y 49:21	1.34	56000	R	*	2.5	*	1.000	0.995-1.005	

Analyst: *DMS*

Date: *10/30/17*

Client ID: CC-CB-04-20141013-S Filename: 141024E2 S:8 Acq:25-OCT-14 09:35:32
 Lab ID: 1400762-04@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.006

ConCal: ST141024E2-1

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EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	5.63e+06	1.06	y 49:32	1.72	2390		*	2.5	*	1.004	0.999-1.009	
Hepta	PCB-191	2.09e+06	1.04	y 49:46	1.69	900		*	2.5	*	1.009	1.004-1.014	
Hepta	PCB-170	3.69e+07	1.06	y 50:43	1.60	19900		*	2.5	*	1.000	0.995-1.005	
Hepta	PCB-190	9.79e+06	1.08	y 50:53	2.21	3820		*	2.5	*	1.003	0.998-1.008	
Hepta	PCB-189	1.76e+06	1.05	y 52:10	1.55	822		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-202	6.56e+06	0.89	y 48:17	1.08	2820		*	2.5	*	1.001	0.995-1.005	
Octa	PCB-201	3.97e+06	0.86	y 48:47	1.15	1610		*	2.5	*	1.011	1.005-1.015	
Octa	PCB-204	*	*	n Not F ₁₁	1.14	*	2640	2.5	26.9	*	1.008-1.018		
Octa	PCB-197	9.09e+05	0.90	y 49:13	1.07	394		*	2.5	*	1.020	1.015-1.025	
Octa	PCB-200	3.49e+06	0.89	y 50:02	1.06	1530		*	2.5	*	1.037	1.032-1.044	
Octa	PCB-198	6.67e+05	0.88	y 51:15	0.76	411		*	2.5	*	1.062	1.059-1.069	
Octa	PCB-199	2.04e+07	0.92	y 51:22	0.80	11900		*	2.5	*	1.065	1.061-1.071	
Octa	PCB-196/203	2.21e+07	0.91	y 51:38	0.80	12800		*	2.5	*	1.070	1.066-1.076	
Octa	PCB-195	7.16e+06	0.91	y 52:46	1.23	4310		*	2.5	*	0.983	0.979-0.989	
Octa	PCB-194	1.93e+07	0.91	y 53:42	1.21	11800		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-205	9.49e+05	0.92	y 54:01	1.54	455		*	2.5	*	1.006	1.001-1.011	
Nonna	PCB-208	2.24e+06	1.35	y 52:54	0.93	1370		*	2.5	*	1.000	0.995-1.005	
Nonna	PCB-207	1.24e+06	1.41	y 53:14	1.08	652		*	2.5	*	1.007	1.001-1.011	
Nonna	PCB-206	5.20e+06	1.36	y 55:29	1.02	4330		*	2.5	*	1.001	0.995-1.005	
Deca	PCB-209	5.08e+05	1.31	y 56:46	1.17	381		*	2.5	*	1.000	0.995-1.005	

Analyst: *DMS*

Date: *10/30/17*

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	1.40e+06	3.05 y	16:28	1.27	212.388
Total Di-PCB	1.65e+07	1.71 y	20:15	1.21	3493.99
Total Tri-PCB	5.69e+06	1.16 y	24:18	1.10	1513.38
Total Tri-PCB	1.63e+07	1.12 y	28:16	1.21	3993.19 Sum:5506.57
Total Tetra-PCB	3.57e+08	0.72 y	29:46	1.09	105513
Total Penta-PCB	1.41e+09	1.49 y	34:24	1.18	527089
Total Penta-PCB	1.11e+08	1.61 y	42:10	1.25	34739.9 Sum:561829
Total Hexa-PCB	2.65e+08	1.18 y	38:16	0.90	128958
Total Hexa-PCB	8.74e+08	1.21 y	42:07	1.11	318495 Sum:447453
Total Hepta-PCB	3.92e+08	1.16 y	42:49	1.42	186420
Total Octa-PCB	5.80e+07	0.89 y	48:17	0.96	31432.4
Total Octa-PCB	2.74e+07	0.91 y	52:46	1.33	16547.9 Sum:47980.3
Total Nona-PCB	8.68e+06	1.35 y	52:54	1.01	6356.85
Total Deca-PCB	5.08e+05	1.31 y	56:46	1.17	380.760

Total PCB Conc:1365383.71999

Integrations
by
Analyst: DmJ
Date: 10/30/14

Client ID: CC-CB-04-20141013-S
 Lab ID: 1400762-04@20X

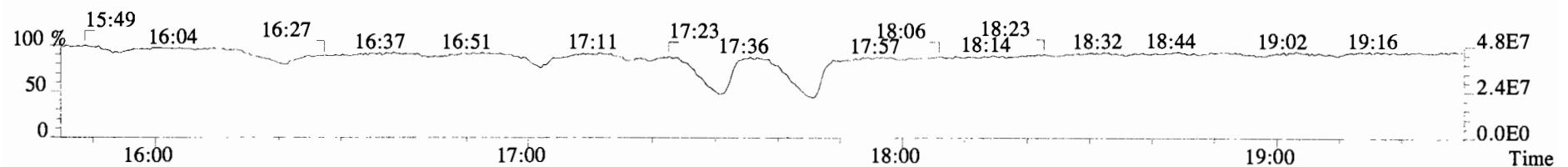
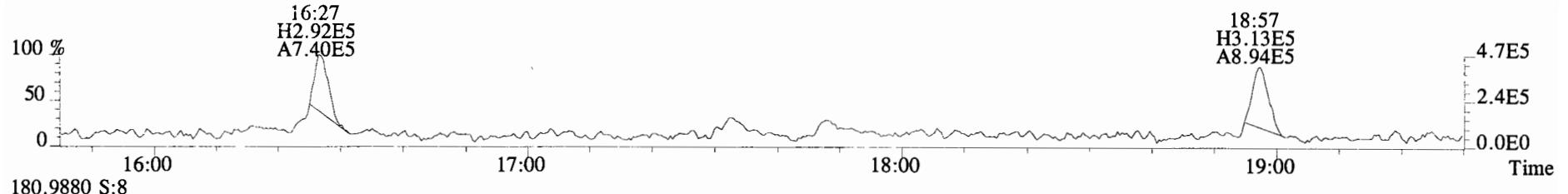
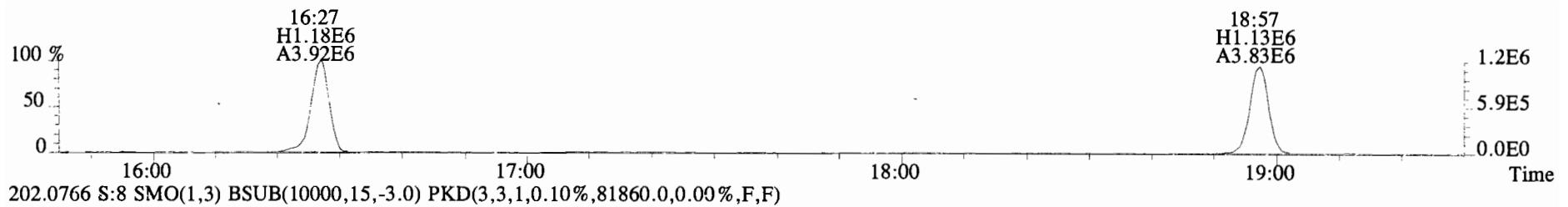
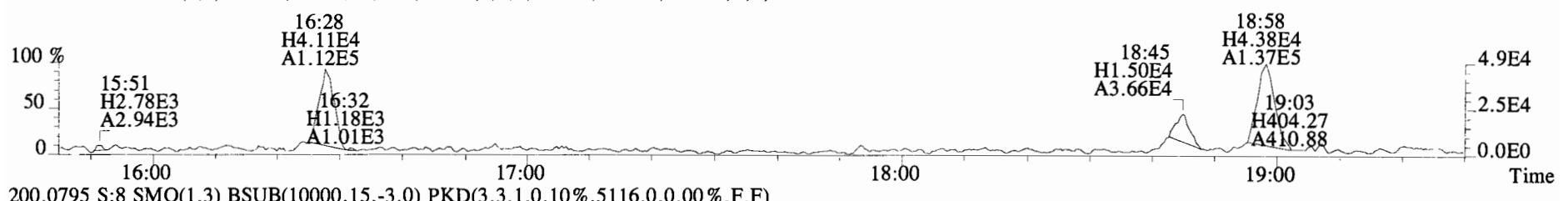
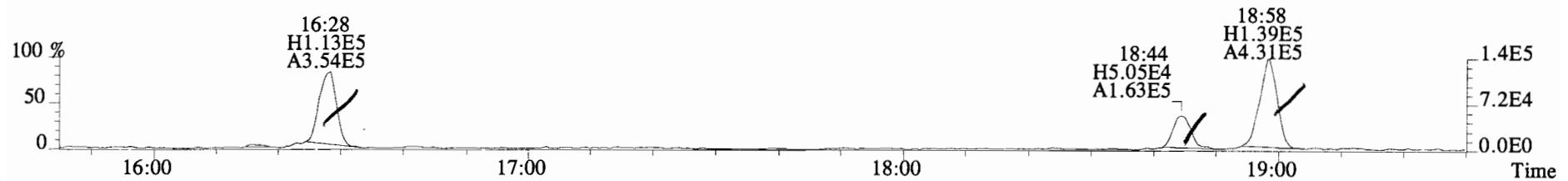
Filename: 141024E2 S:8 Acq:25-OCT-14 09:35:32
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:10.00%
 ConCal: ST141024E2-1
 EndCAL: NA

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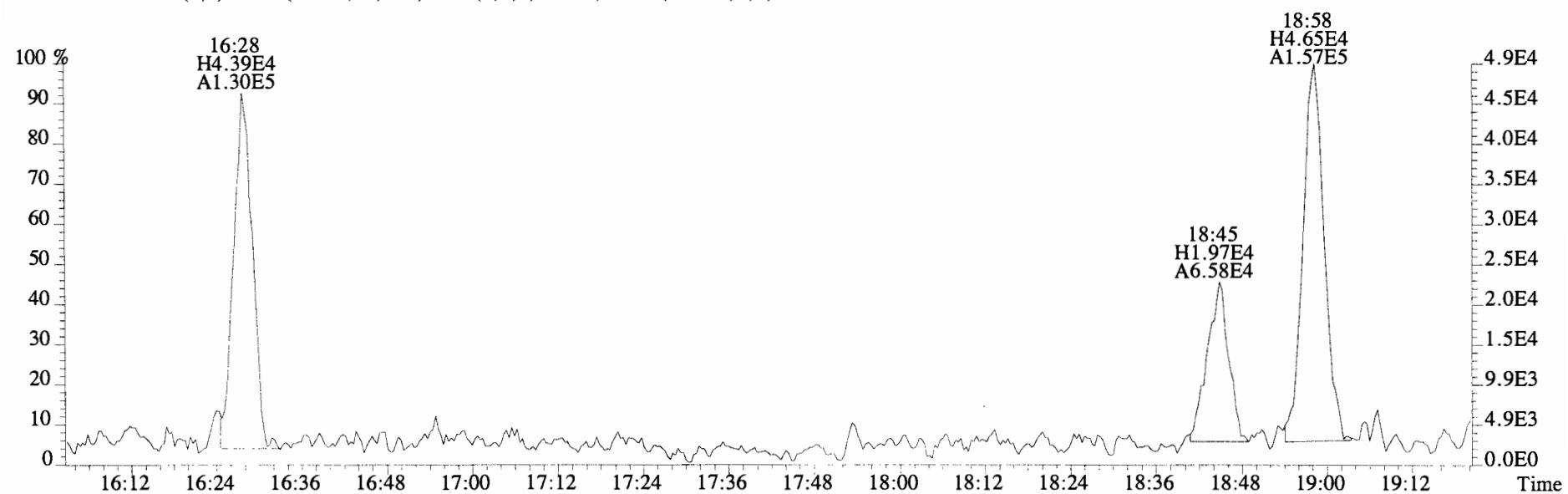
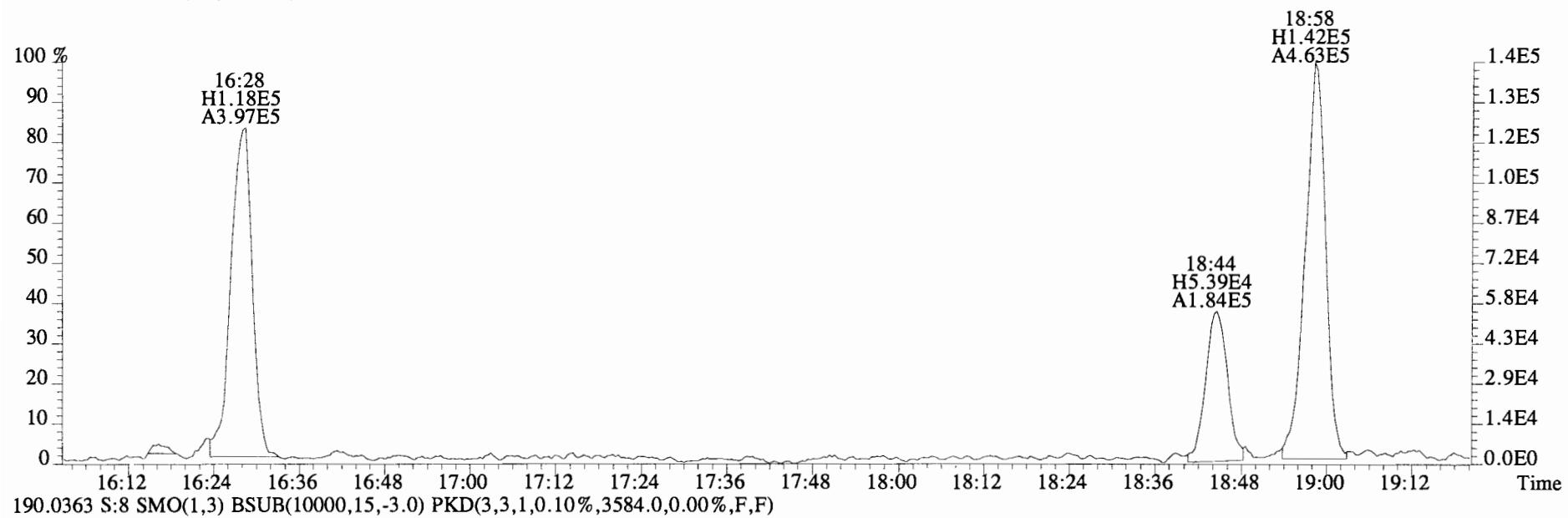
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS		Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	5.25e+06	2.74	y	0.87	16:27	0.634	0.629-0.635	1210	121	13C-PCB-79	3.53e+06	0.77	y	1.02	37:45	1.028	1.023-1.034	863	86.4		
13C-PCB-3	5.03e+06	3.17	y	0.91	18:57	0.730	0.725-0.733	1110	111	13C-PCB-178	1.30e+06	0.42	y	0.61	45:37	0.984	0.979-0.990	883	88.4		
13C-PCB-4	2.57e+06	1.70	y	0.59	20:15	0.780	0.775-0.783	879	88.0												
13C-PCB-9	4.09e+06	1.65	y	0.90	21:58	0.846	0.842-0.850	916	91.6												
13C-PCB-11	4.25e+06	1.62	y	0.94	25:16	0.973	0.968-0.978	908	90.9	PS vs. IS											
13C-PCB-19	3.10e+06	1.12	y	0.53	24:16	0.935	0.930-0.940	1170	117	13C-PCB-79	3.53e+06	0.77	y	1.10	37:45	0.968	0.964-0.974	1050	105		
13C-PCB-28	3.16e+06	0.93	y	0.93	29:04	1.004	0.999-1.009	777	77.8	13C-PCB-178	1.30e+06	0.42	y	0.90	45:37	0.925	0.920-0.930	1050	105		
13C-PCB-32	4.35e+06	1.06	y	0.80	27:08	1.045	1.040-1.050	1100	110												
13C-PCB-37	3.02e+06	1.05	y	0.84	32:59	1.139	1.131-1.143	826	82.7												
13C-PCB-47	2.92e+06	0.71	y	0.81	31:57	0.870	0.866-0.874	892	89.2												
13C-PCB-52	2.68e+06	0.85	y	0.77	31:27	0.857	0.853-0.861	864	86.4												
13C-PCB-54	3.43e+06	0.73	y	0.97	27:58	0.762	0.758-0.766	879	88.0												
13C-PCB-70	3.72e+06	0.78	y	1.00	35:28	0.966	0.961-0.971	925	92.5												
13C-PCB-77	3.09e+06	0.75	y	0.94	39:35	1.078	1.073-1.083	814	81.5												
13C-PCB-80	3.71e+06	0.70	y	1.03	35:52	0.977	0.972-0.982	893	89.4												
13C-PCB-81	3.05e+06	0.82	y	0.92	38:59	1.062	1.057-1.067	822	82.2												
13C-PCB-95	2.12e+06	1.64	y	0.74	35:45	0.913	0.908-0.918	884	88.4	RS											
13C-PCB-97	1.86e+06	1.69	y	0.70	38:44	0.989	0.984-0.994	813	81.4	13C-PCB-15	4.98e+06	1.66	y	1.00	25:58	999					
13C-PCB-101	2.23e+06	1.60	y	0.78	37:26	0.956	0.951-0.961	878	87.8	13C-PCB-31	4.35e+06	1.14	y	1.00	28:57	999					
13C-PCB-104	2.57e+06	1.49	y	1.00	32:38	0.833	0.828-0.836	793	79.4	13C-PCB-60	4.02e+06	0.82	y	1.00	36:43	999					
13C-PCB-105	2.47e+06	1.57	y	1.37	43:02	0.928	0.924-0.934	755	75.6	13C-PCB-111	3.24e+06	1.73	y	1.00	39:10	999					
13C-PCB-114	2.58e+06	1.65	y	1.36	42:10	0.910	0.905-0.915	791	79.1	13C-PCB-128	2.39e+06	1.23	y	1.00	46:21	999					
13C-PCB-118	2.54e+06	1.51	y	0.96	41:30	1.060	1.054-1.064	817	81.7	13C-PCB-205	2.06e+06	0.95	y	1.00	54:00	999					
13C-PCB-123	2.56e+06	1.64	y	0.89	41:19	1.055	1.050-1.060	885	88.6												
13C-PCB-126	2.20e+06	1.60	y	1.31	45:17	0.977	0.972-0.982	705	70.5												
13C-PCB-127	2.39e+06	1.41	y	1.47	43:22	0.936	0.931-0.941	679	67.9												
13C-PCB-138	2.20e+06	1.37	y	1.10	44:46	0.966	0.961-0.971	836	83.6												
13C-PCB-141	2.18e+06	1.40	y	1.07	43:55	0.948	0.943-0.953	849	84.9												
13C-PCB-153	2.34e+06	1.33	y	1.15	43:10	0.931	0.927-0.937	853	85.3												
13C-PCB-155	2.57e+06	1.18	y	0.84	36:59	0.944	0.939-0.949	947	94.7												
13C-PCB-156	2.63e+06	1.29	y	1.30	48:04	1.037	1.032-1.042	847	84.7												
13C-PCB-157	2.77e+06	1.24	y	1.36	48:20	1.043	1.038-1.048	853	85.3												
13C-PCB-159	2.50e+06	1.13	y	1.25	46:04	0.994	0.989-0.999	839	84.0												
13C-PCB-167	2.73e+06	1.33	y	1.35	46:45	1.009	1.004-1.014	844	84.4												
13C-PCB-169	2.46e+06	1.30	y	1.29	50:23	1.087	1.083-1.093	801	80.2												
13C-PCB-170	1.16e+06	0.49	y	0.54	50:43	1.094	1.089-1.101	893	89.4												
13C-PCB-180	1.37e+06	0.44	y	0.68	49:20	1.064	1.060-1.070	840	84.0												
13C-PCB-188	2.08e+06	0.40	y	0.92	42:48	0.923	0.919-0.929	949	95.0												
13C-PCB-189	1.38e+06	0.45	y	0.72	52:09	1.125	1.120-1.132	806	80.7												
13C-PCB-194	1.35e+06	1.00	y	0.80	53:42	0.994	0.990-1.000	824	82.4												
13C-PCB-202	2.15e+06	0.90	y	0.84	48:15	1.041	1.036-1.046	1070	107												
13C-PCB-206	1.17e+06	0.67	y	0.65	55:27	1.027	1.021-1.031	875	87.6												
13C-PCB-208	1.75e+06	0.78	y	1.08	52:53	0.979	0.976-0.986	787	78.7												
13C-PCB-209	1.14e+06	1.33	y	0.61	56:45	1.051	1.045-1.055	905	90.6												

Analyst: DMJ
 Date: 10/30/14

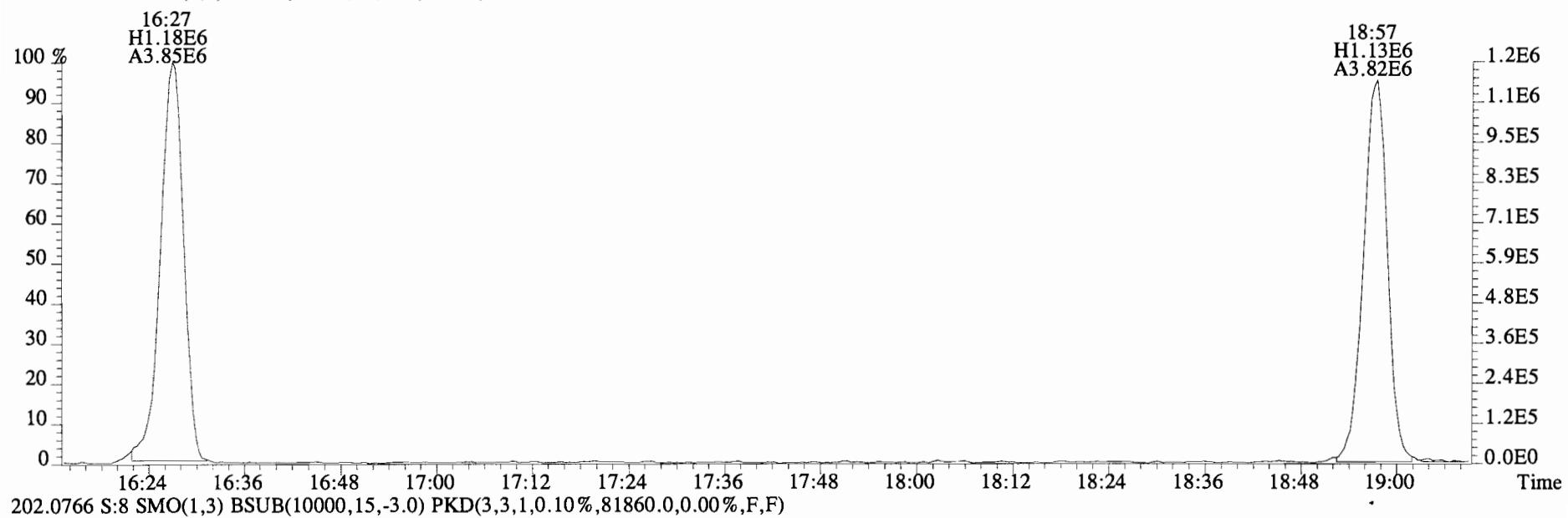
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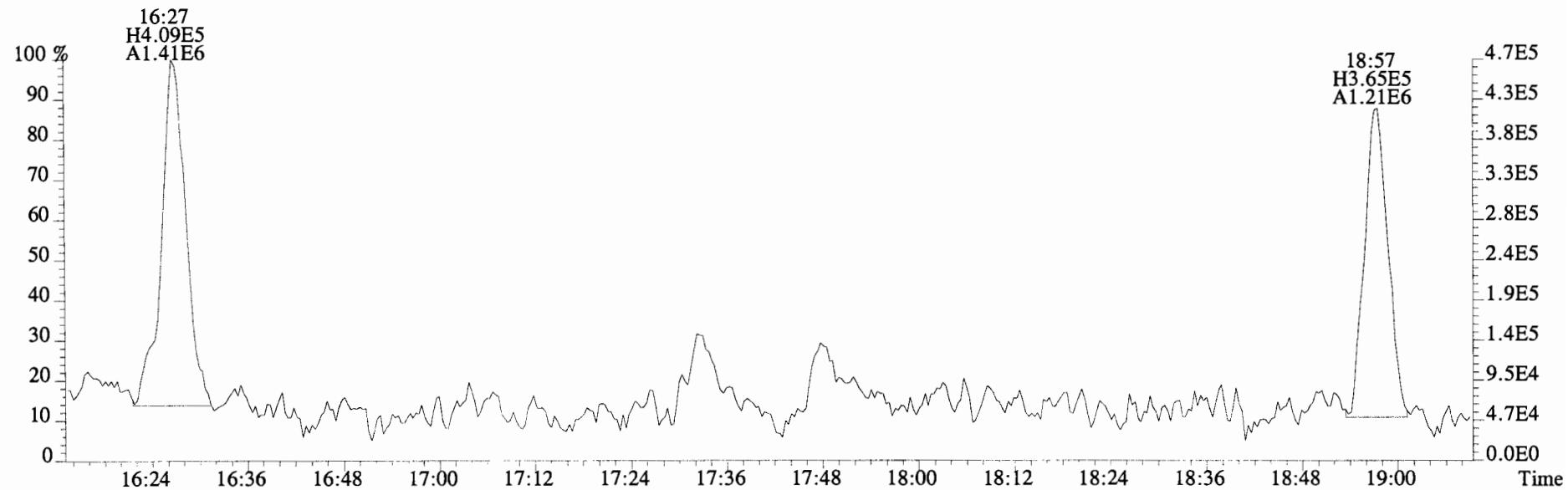
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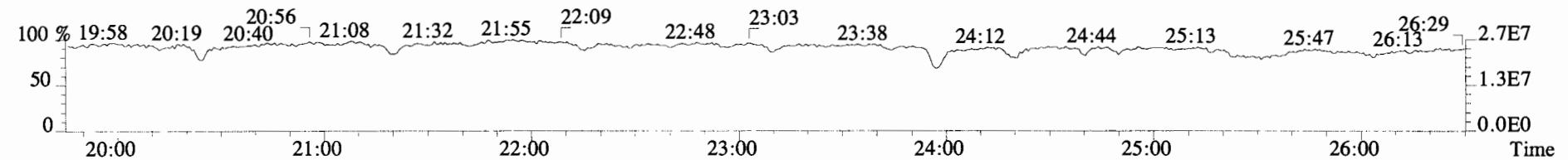
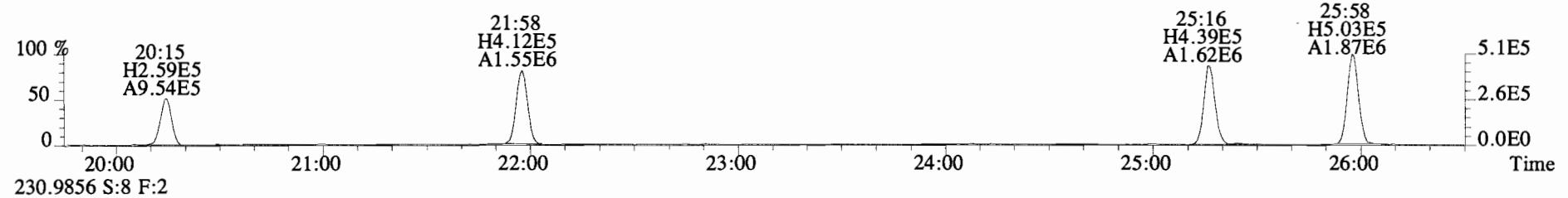
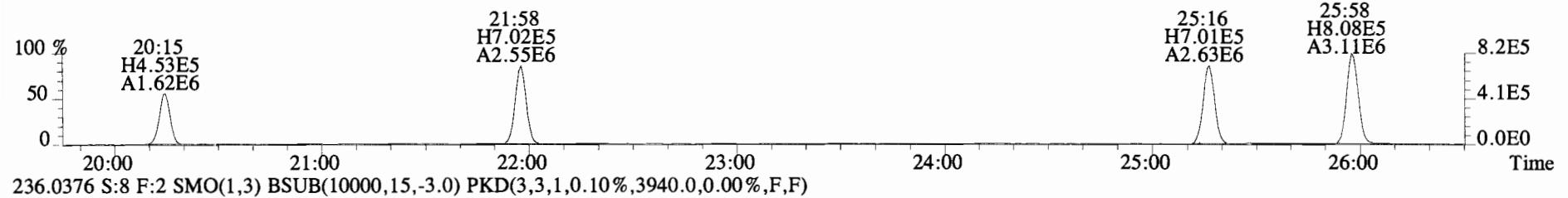
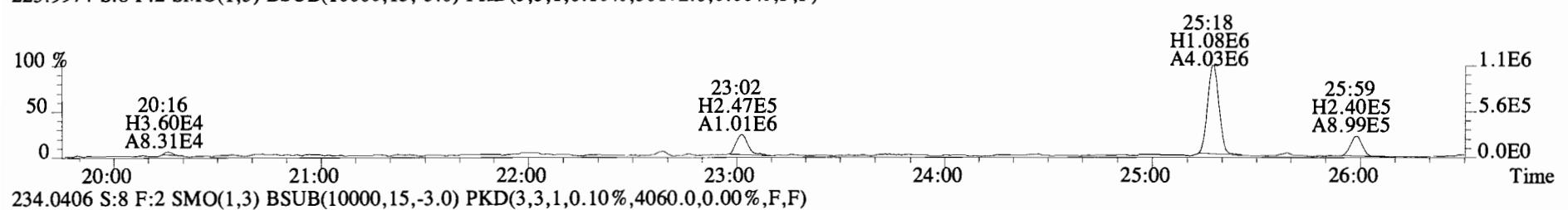
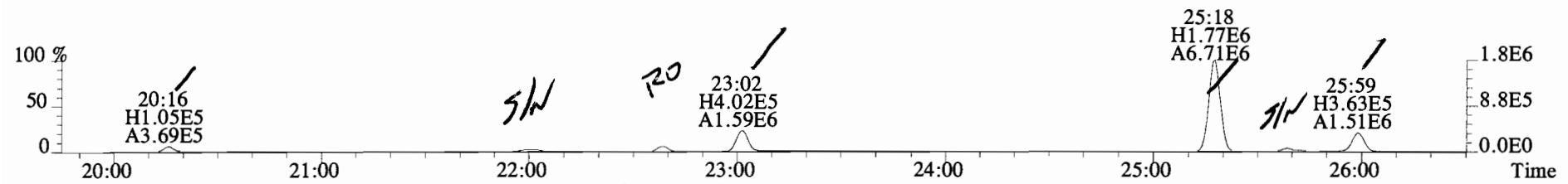
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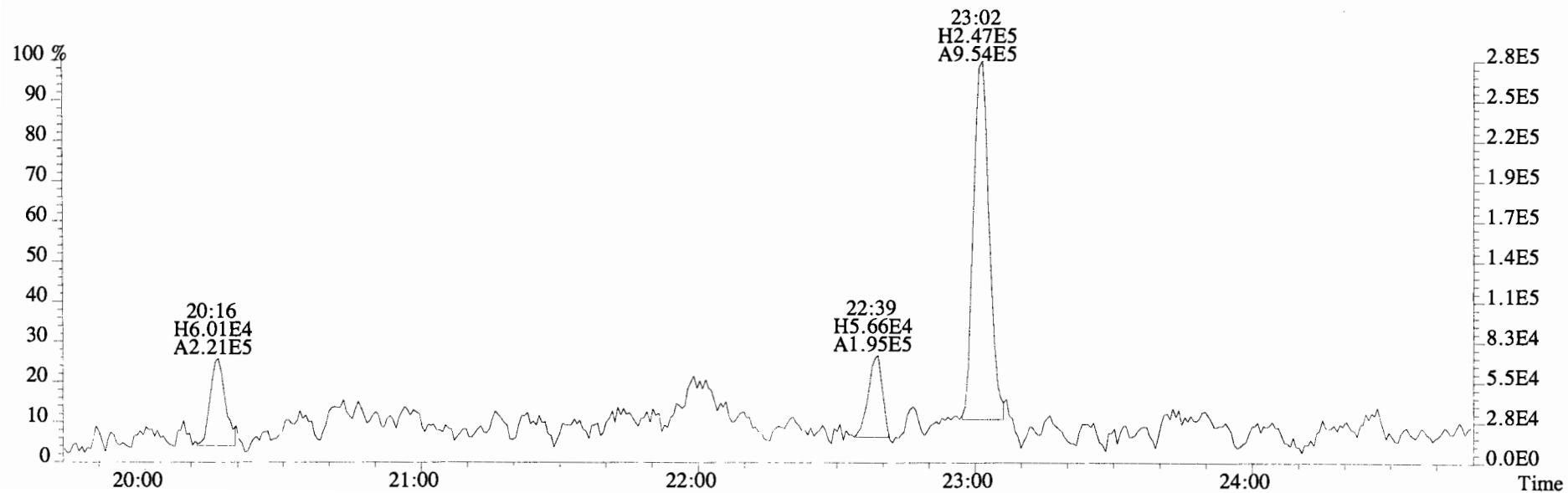
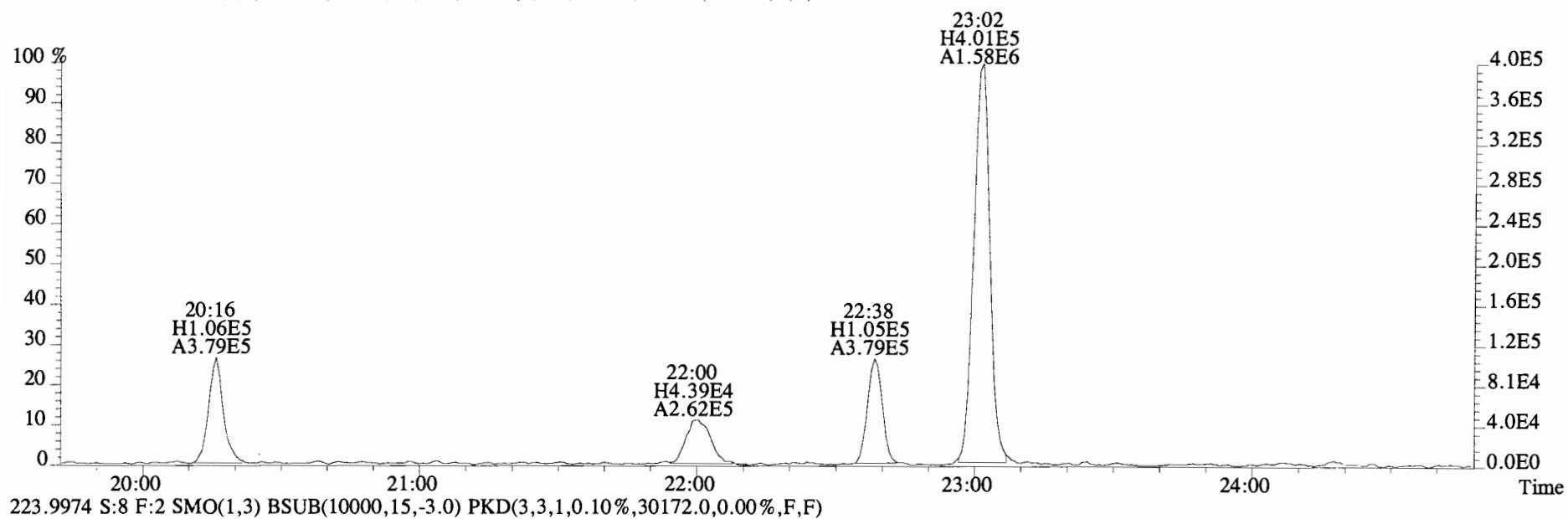
202.0766 S:8 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,81860.0,0.00%,F,F)



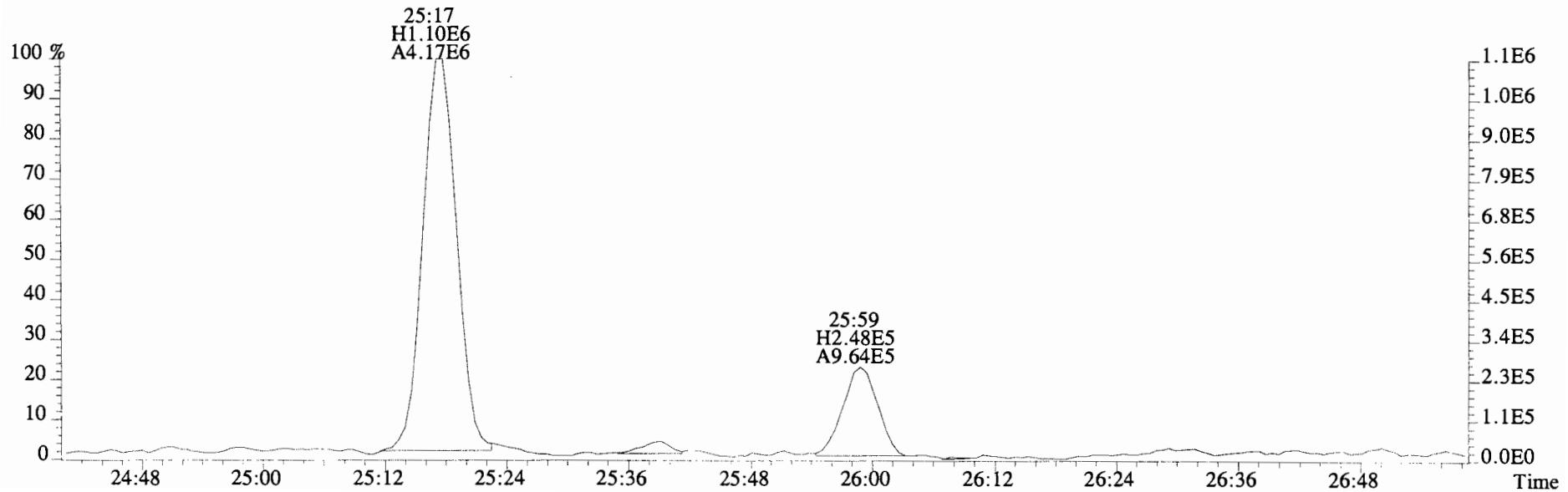
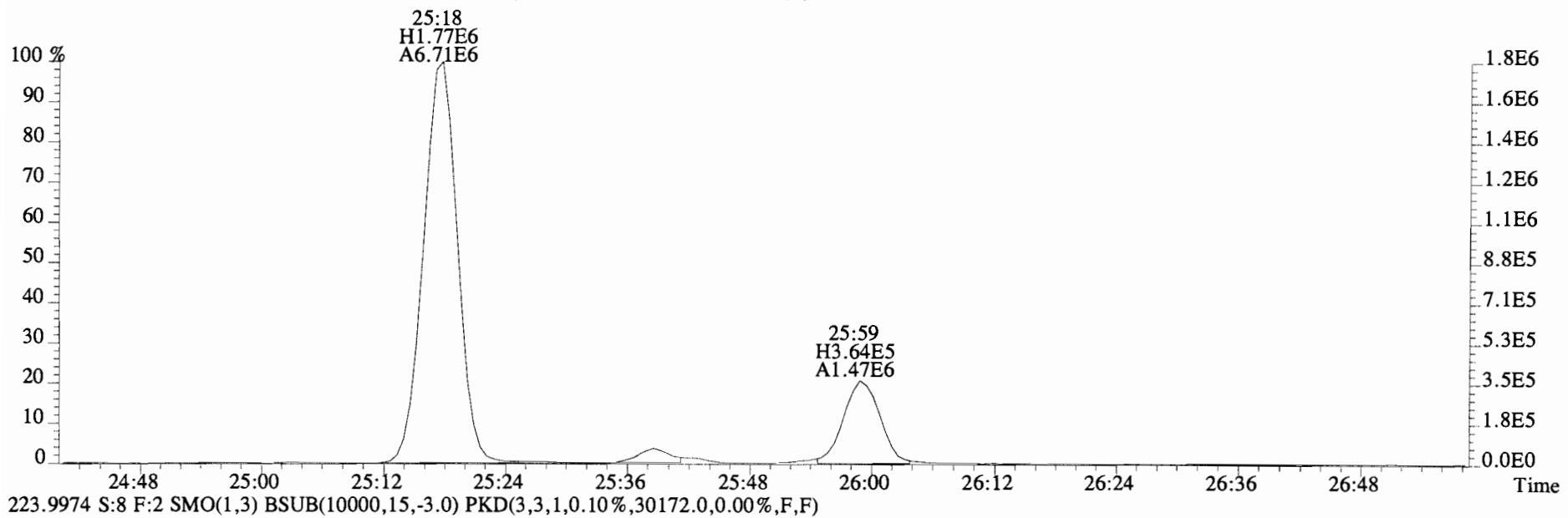
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 222.0003 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2832.0,0.00%,F,F)



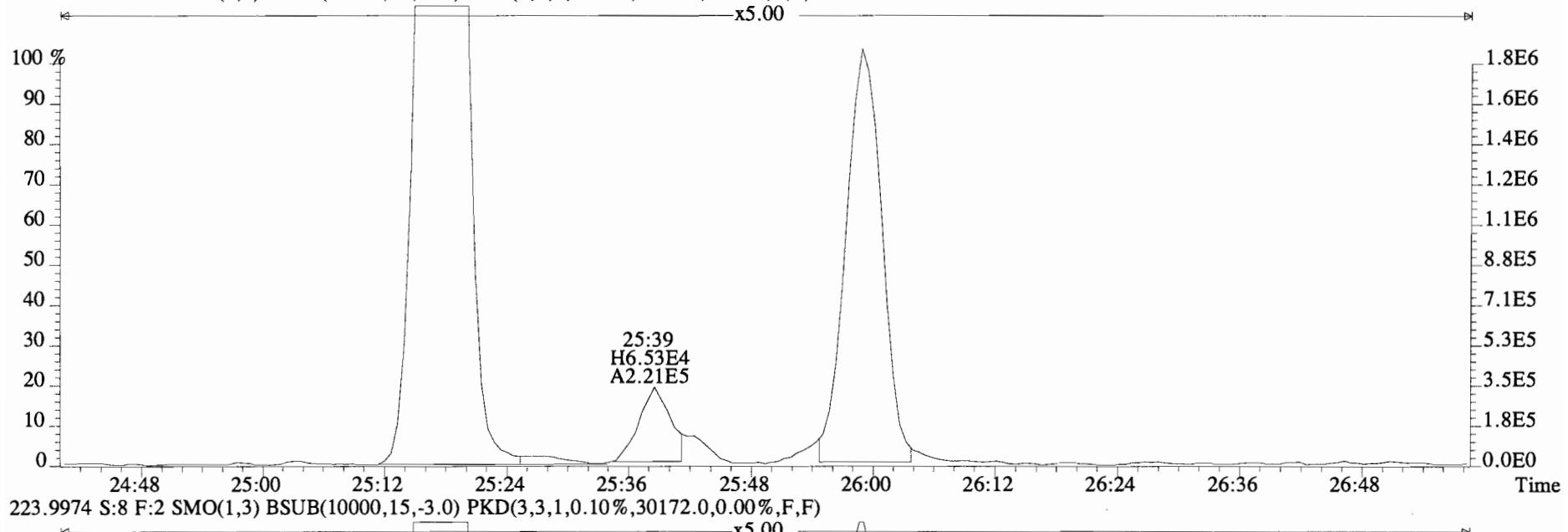
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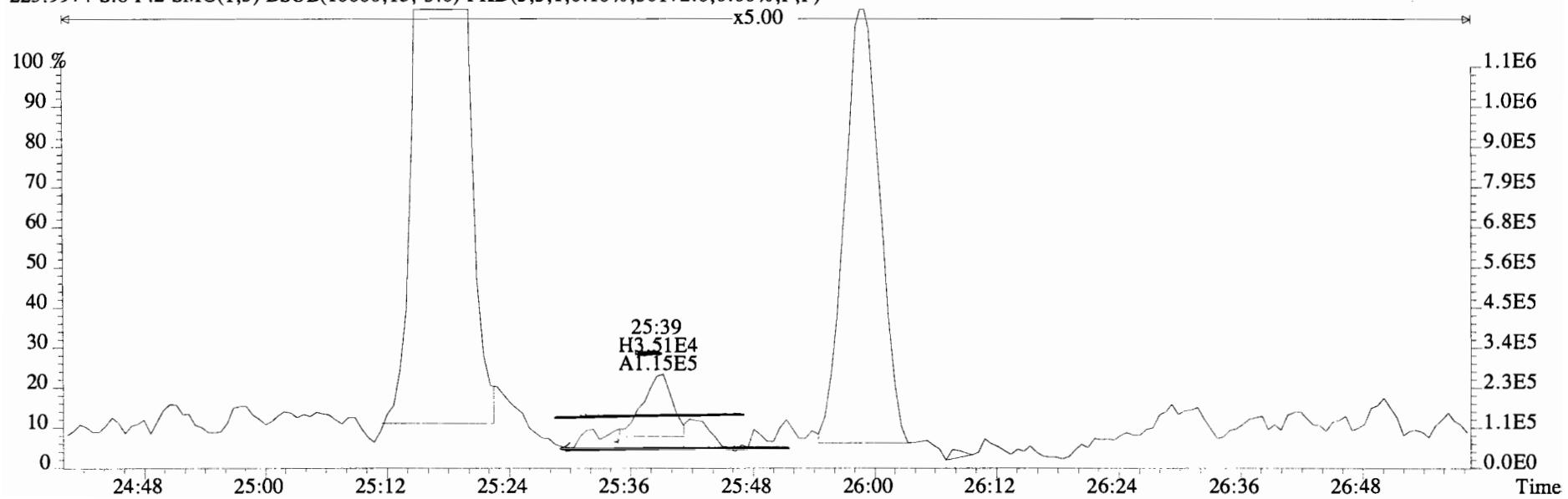
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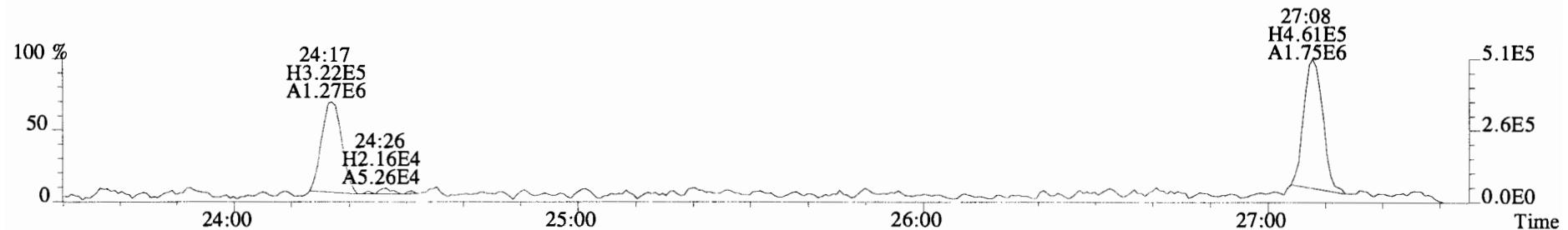
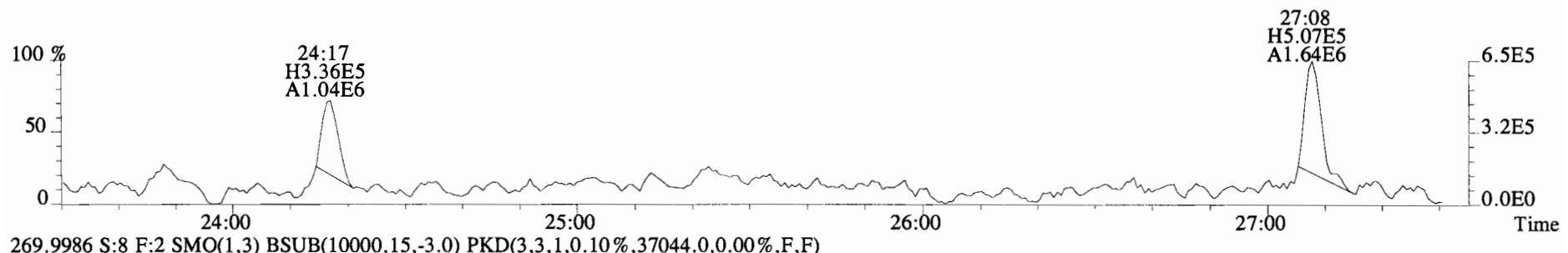
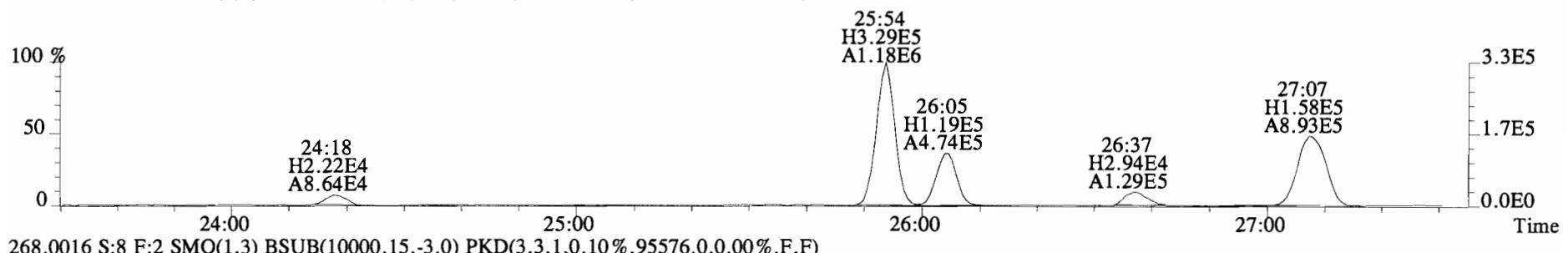
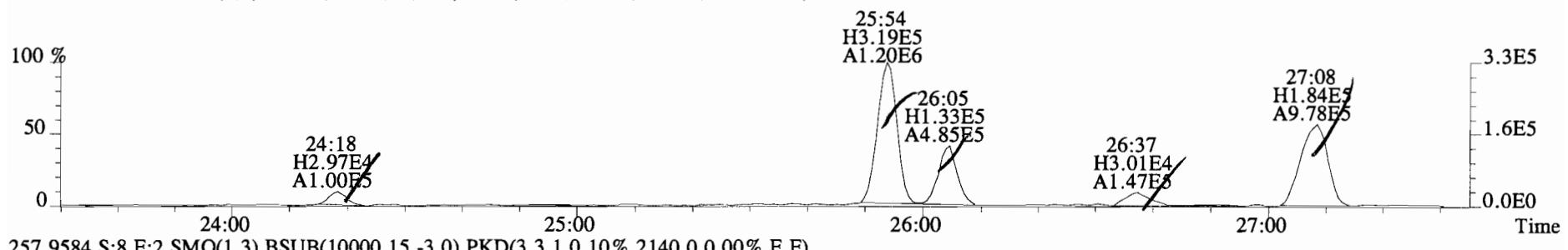
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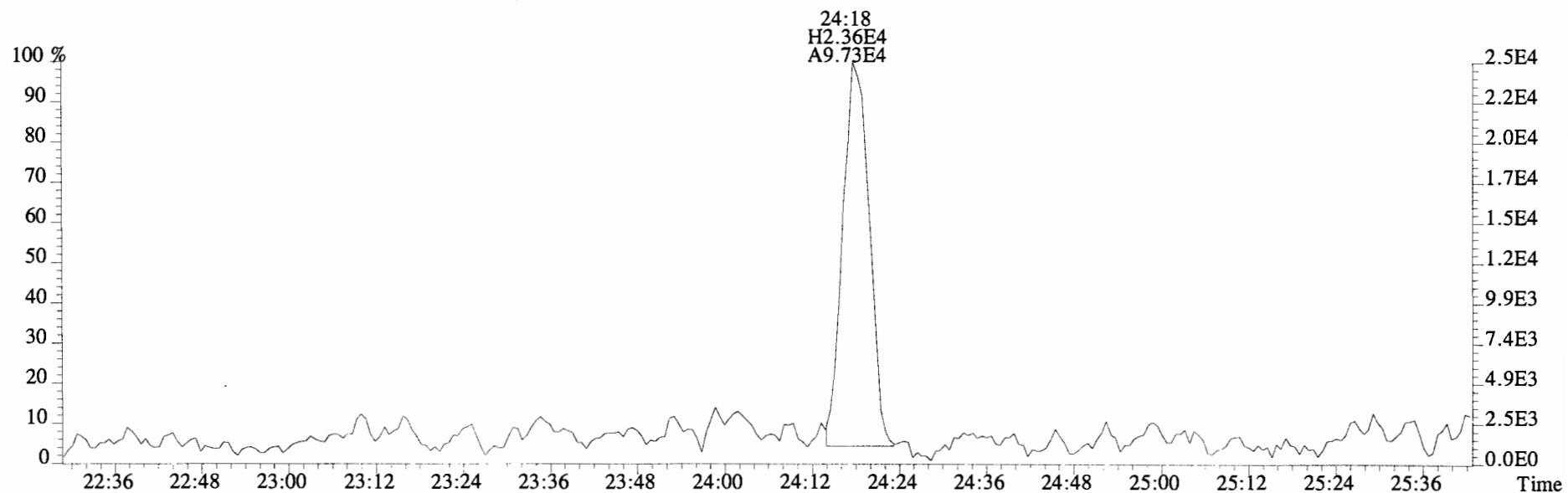
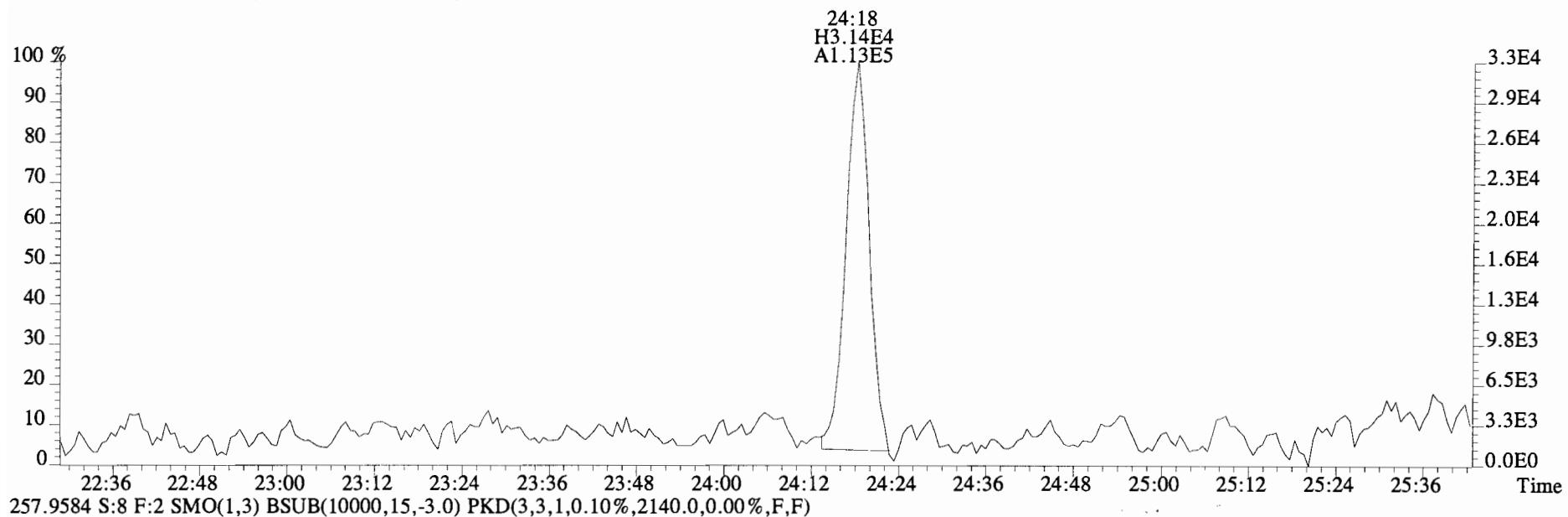
223.9974 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30172.0,0.00%,F,F)



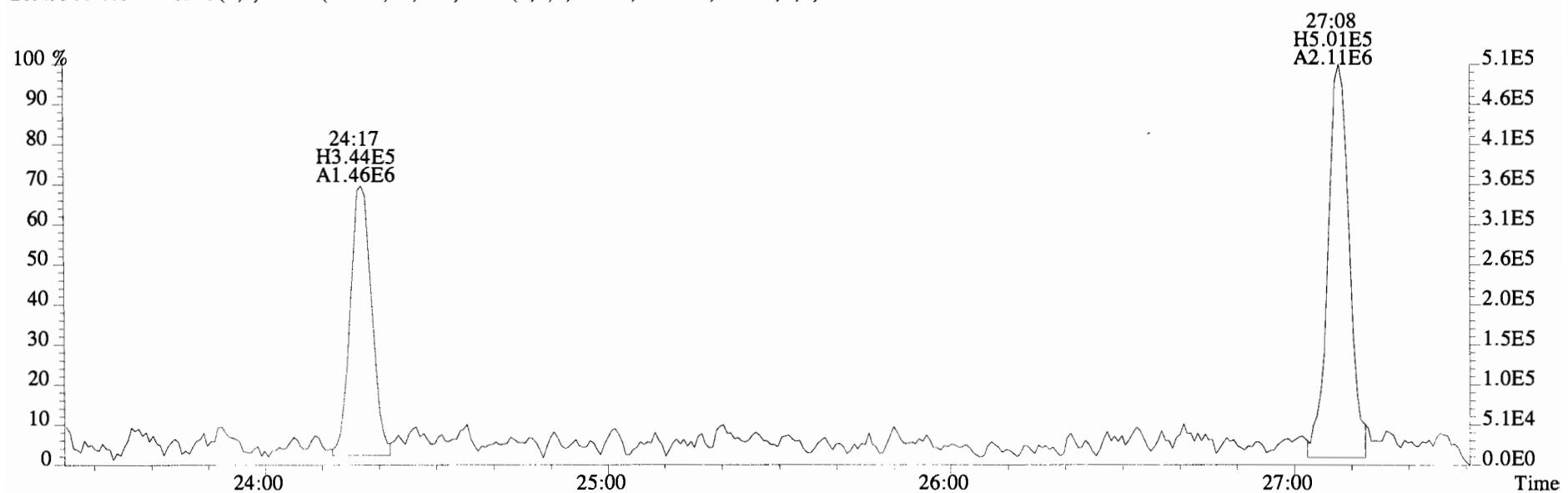
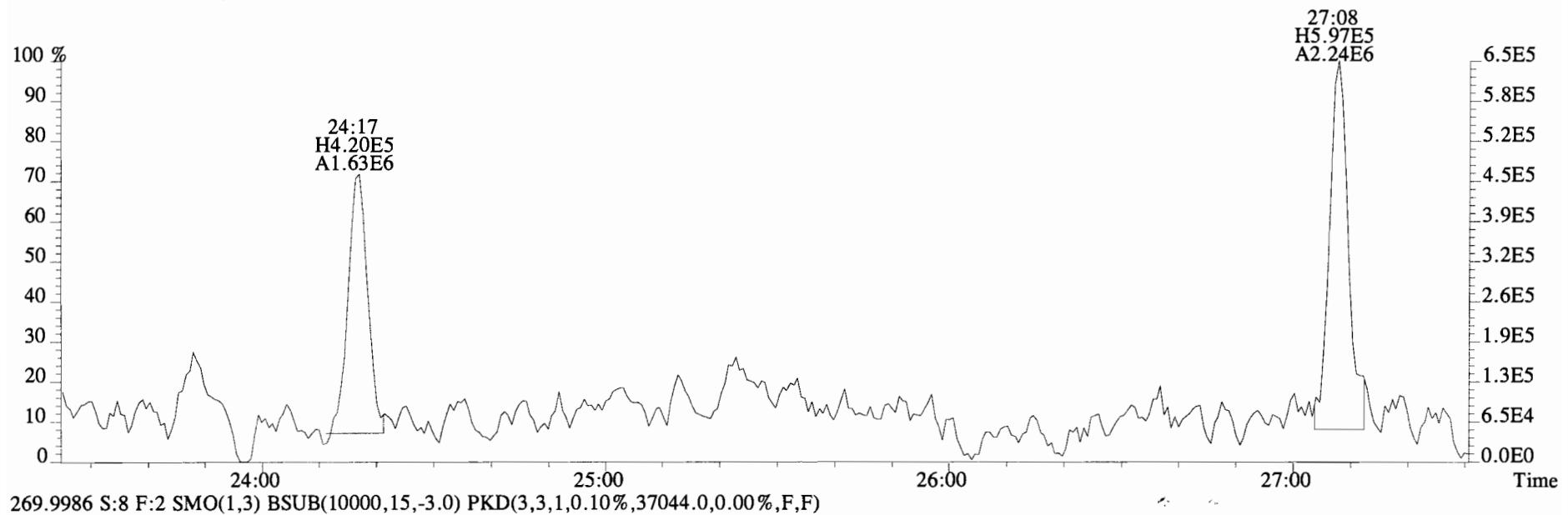
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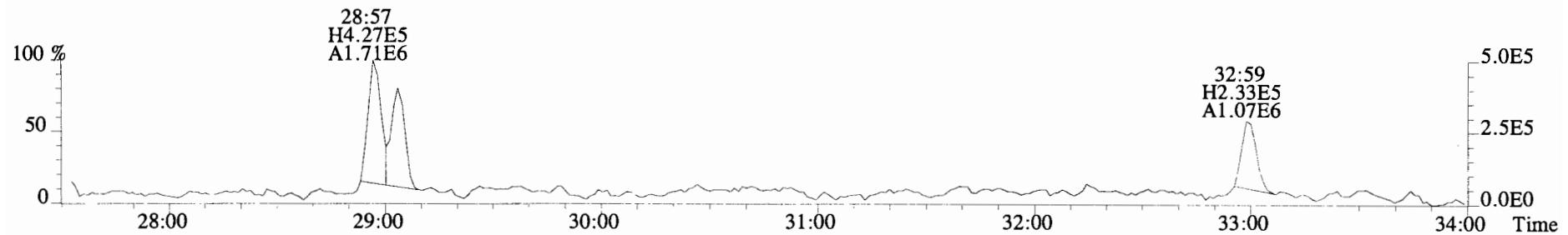
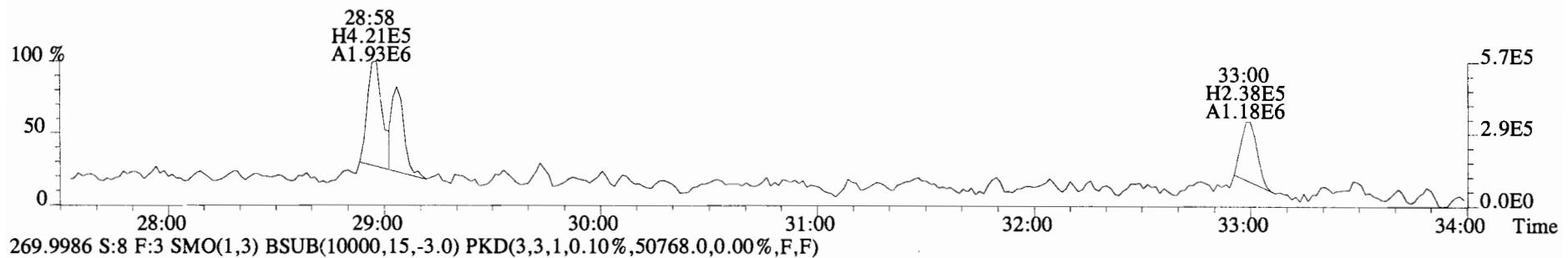
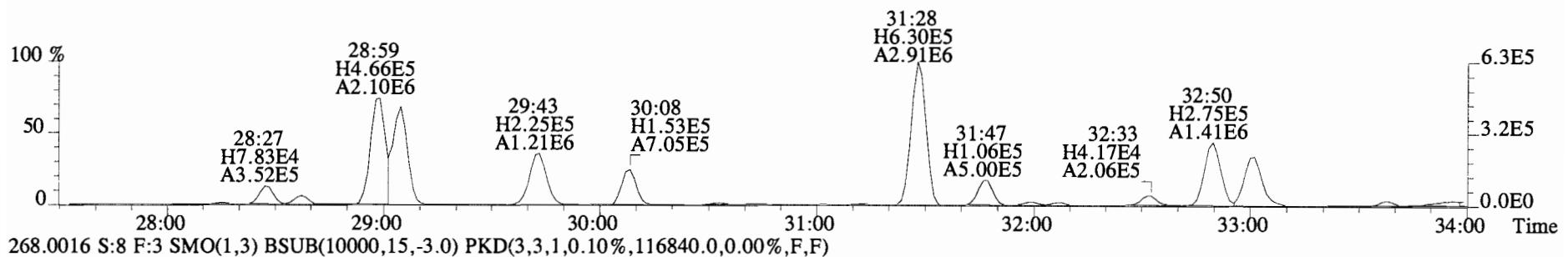
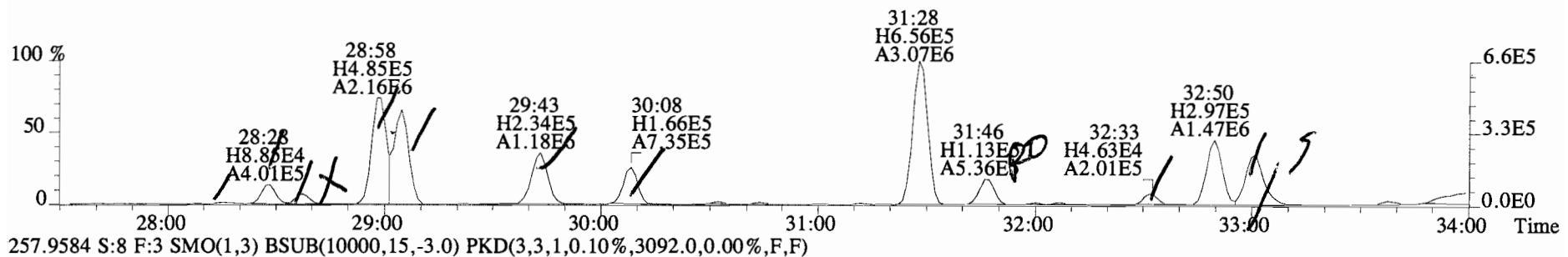
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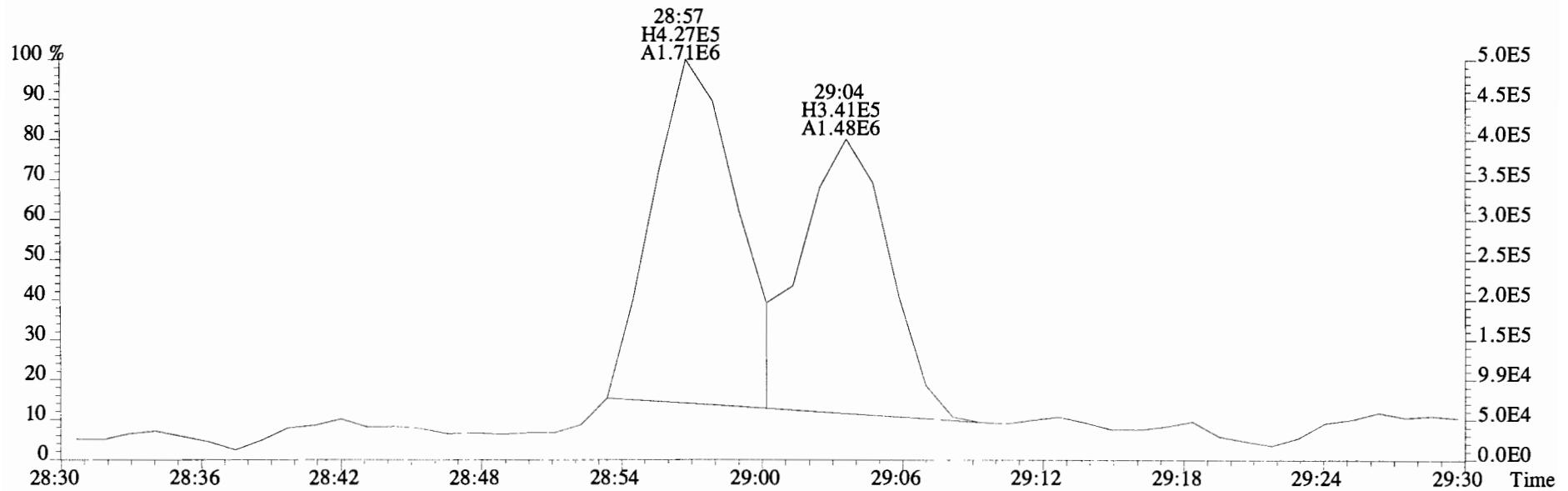
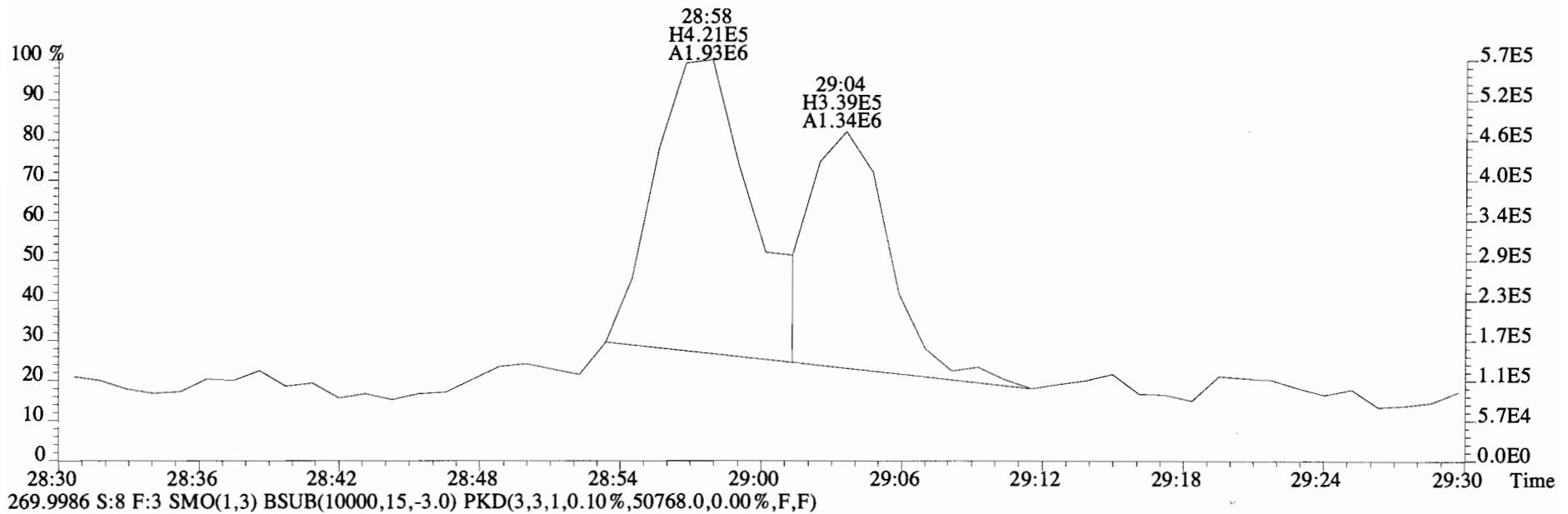
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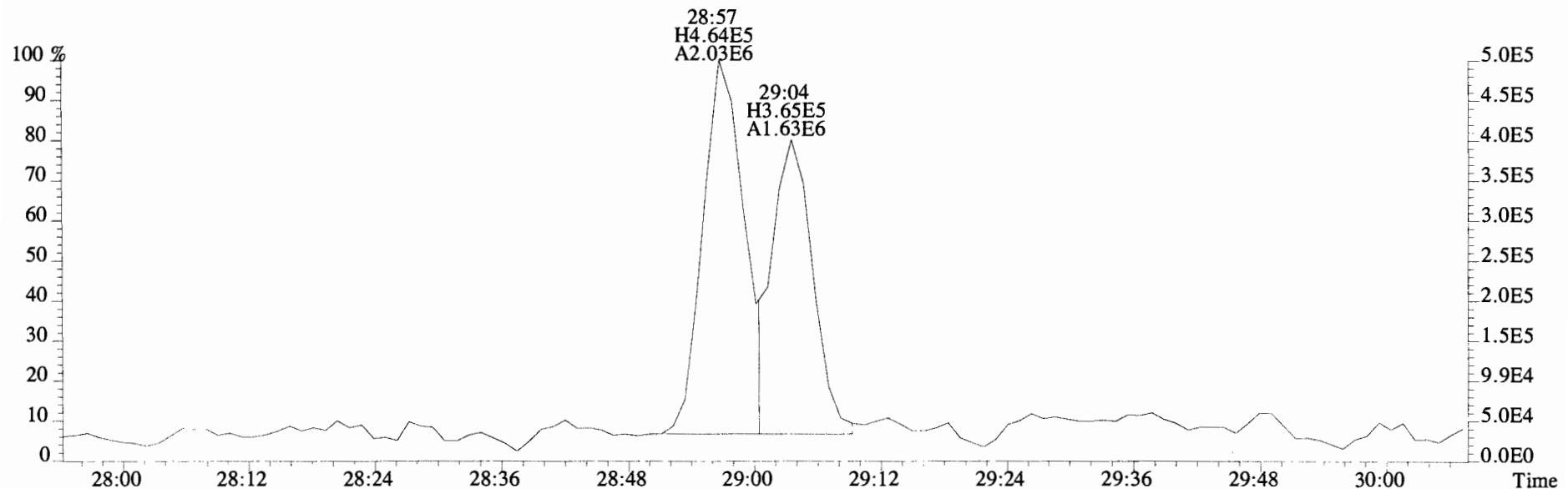
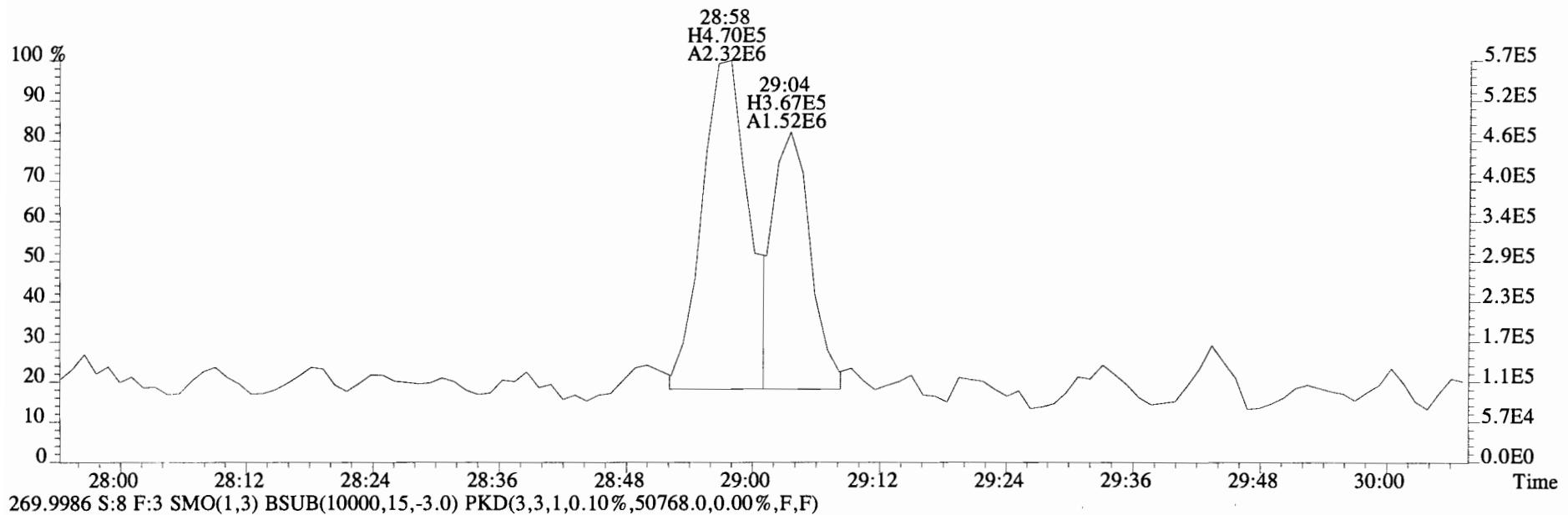
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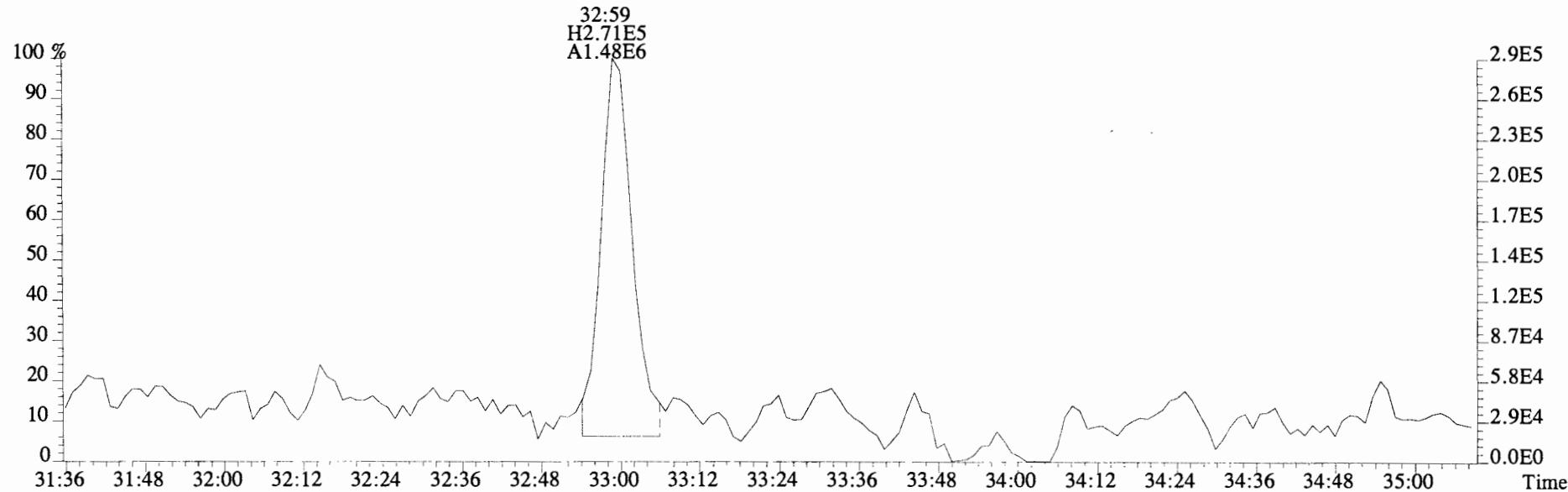
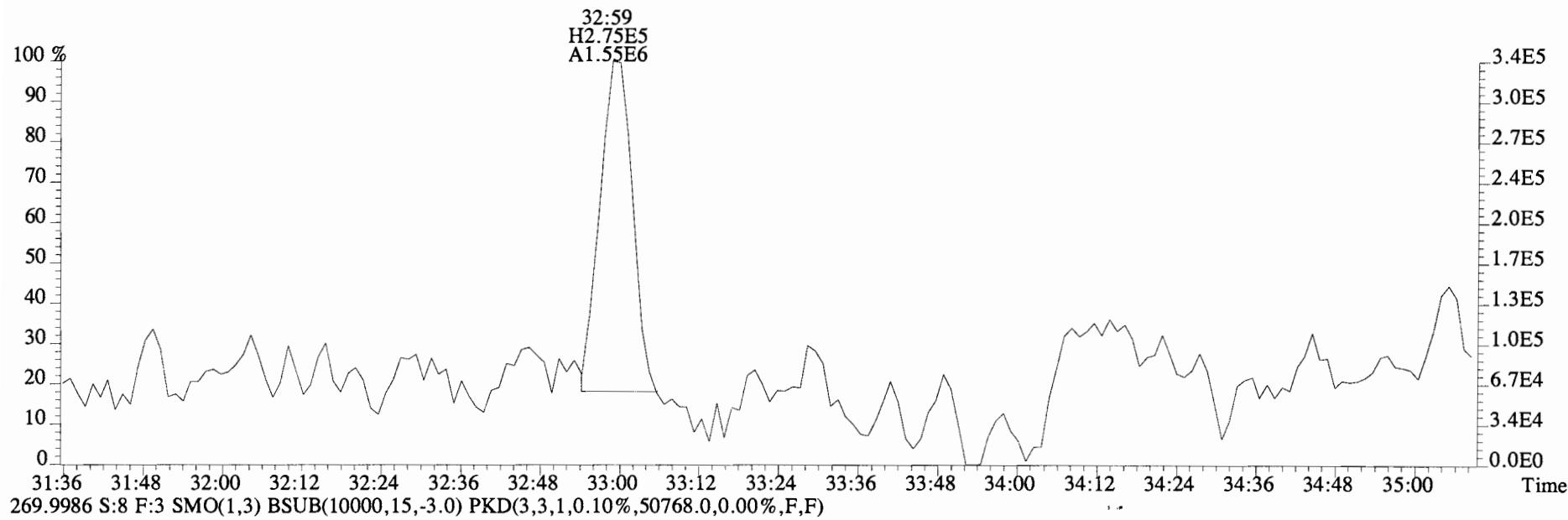
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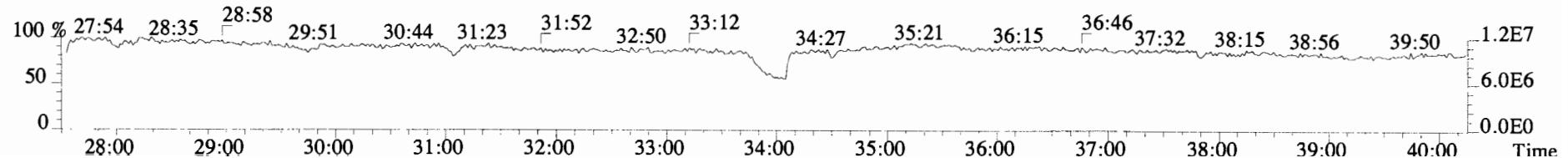
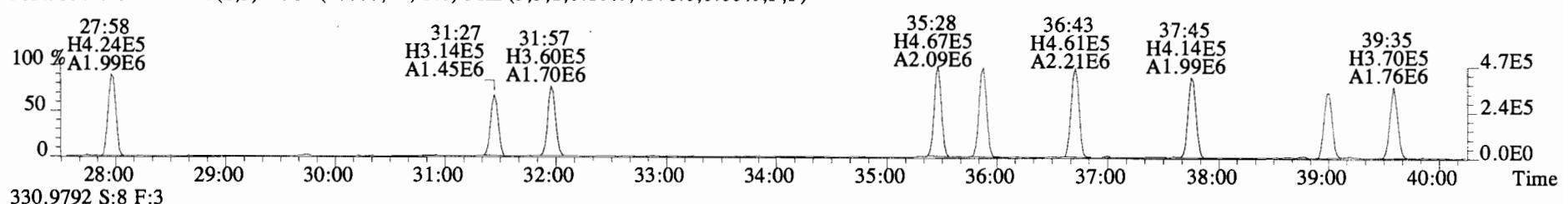
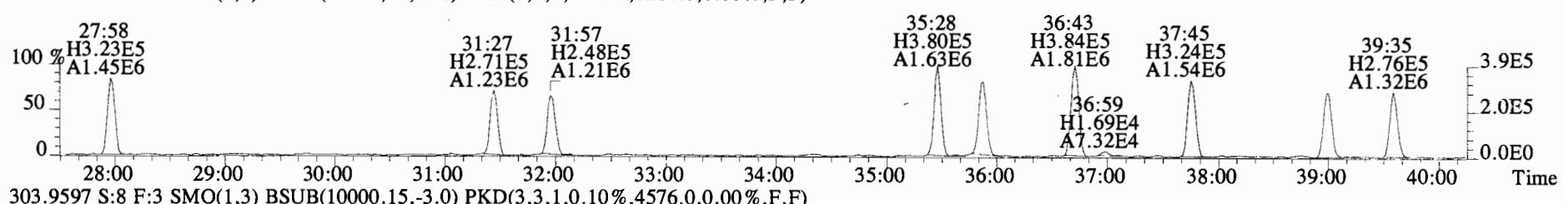
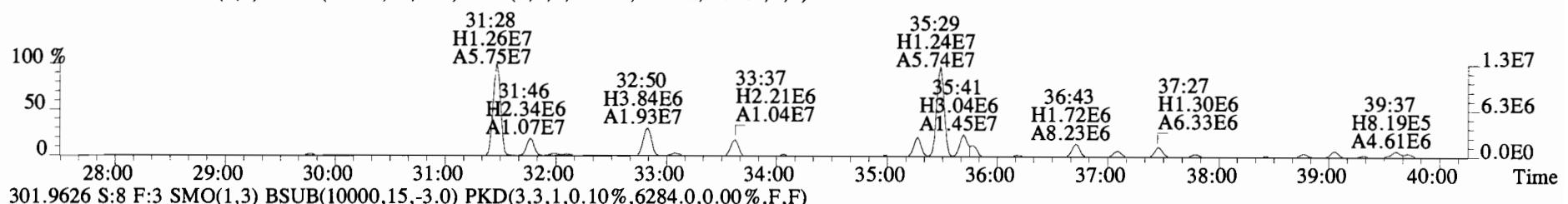
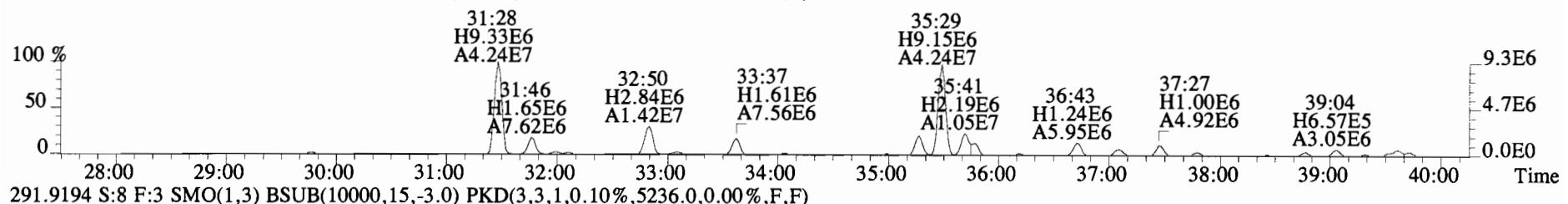
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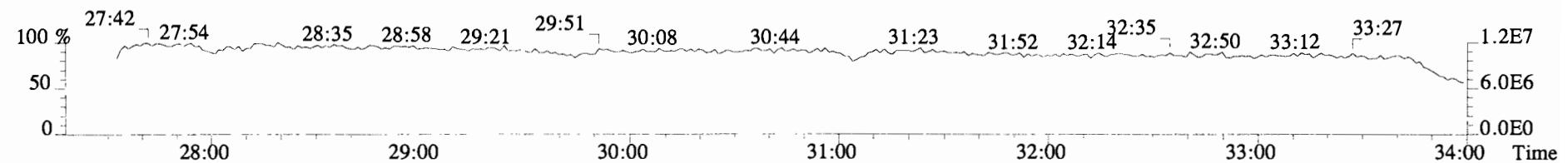
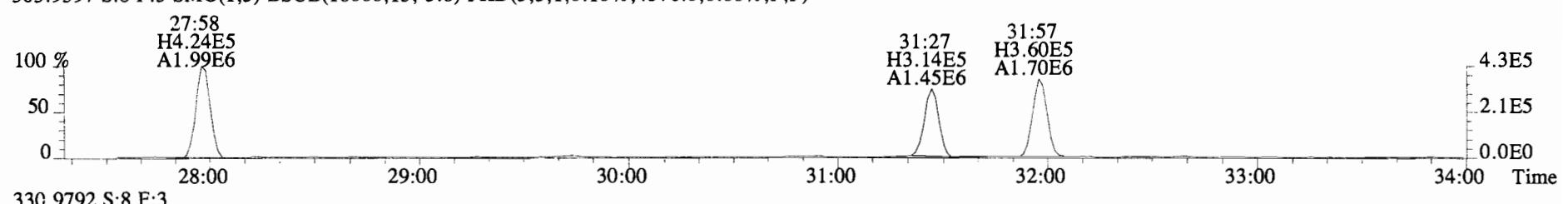
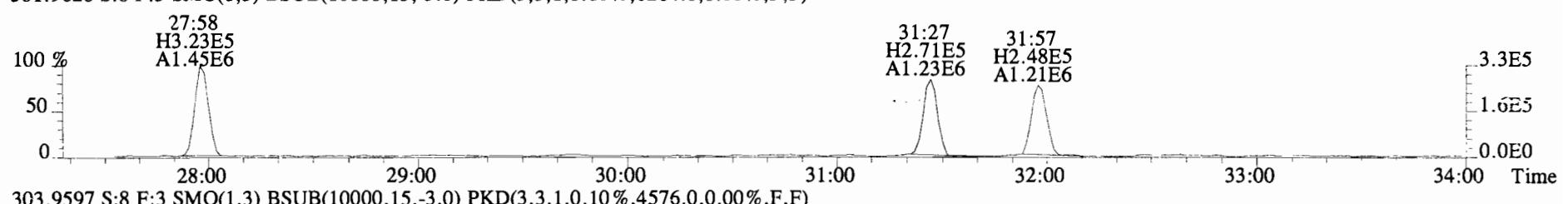
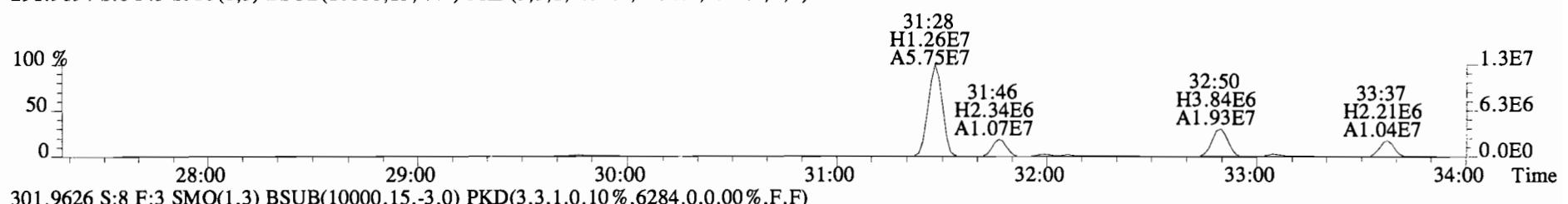
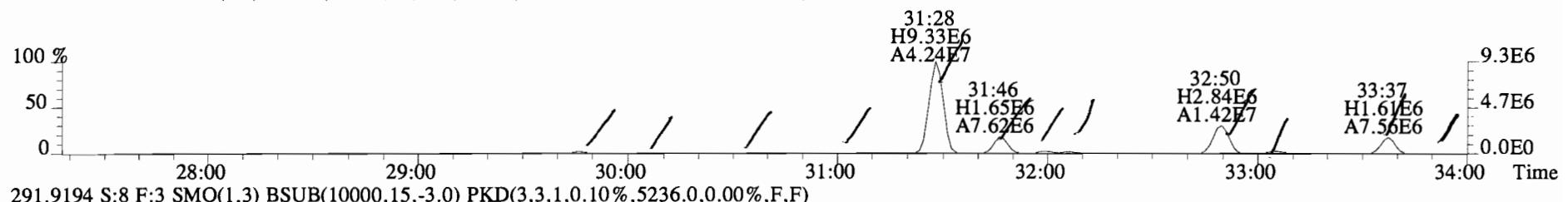
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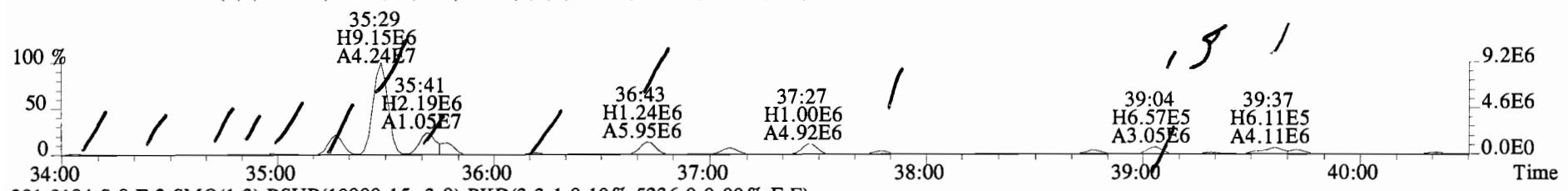
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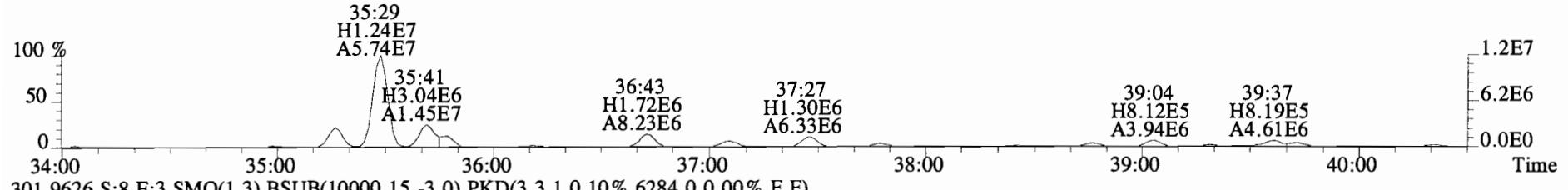
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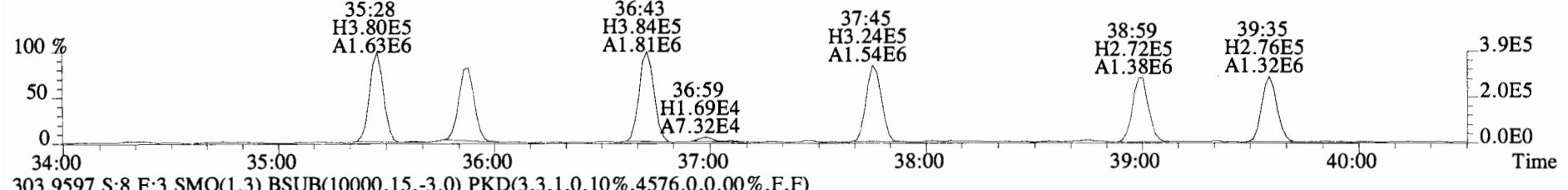
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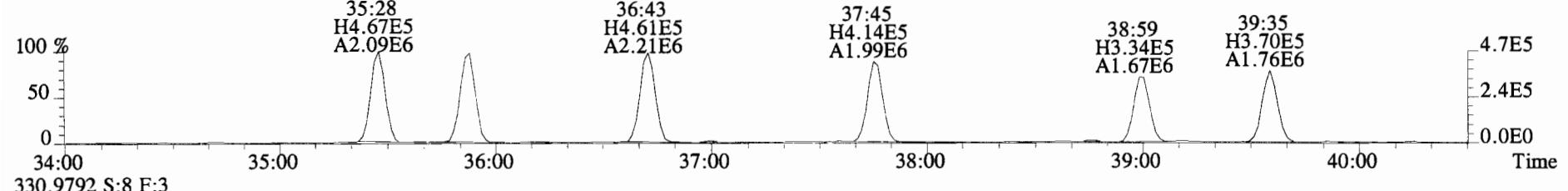
291.9194 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5236.0,0.00%,F,F)



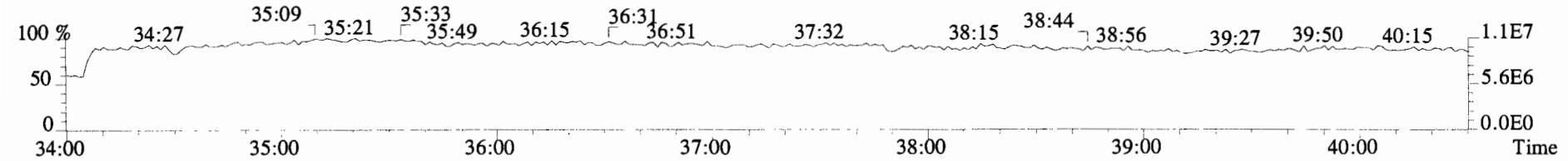
301.9626 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6284.0,0.00%,F,F)



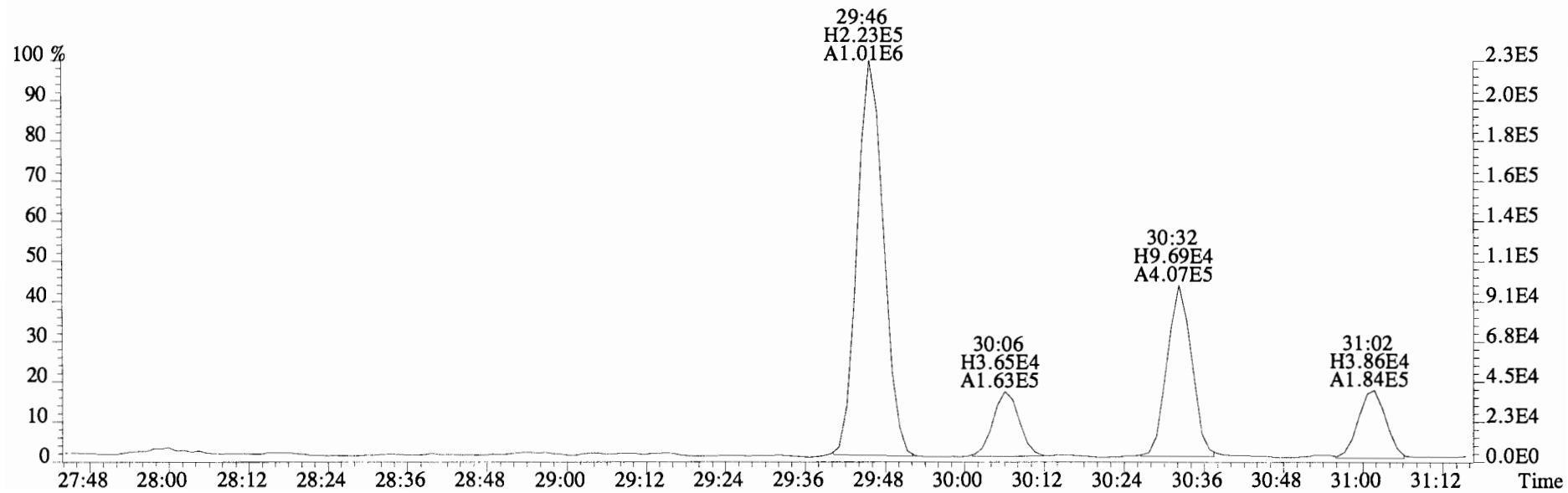
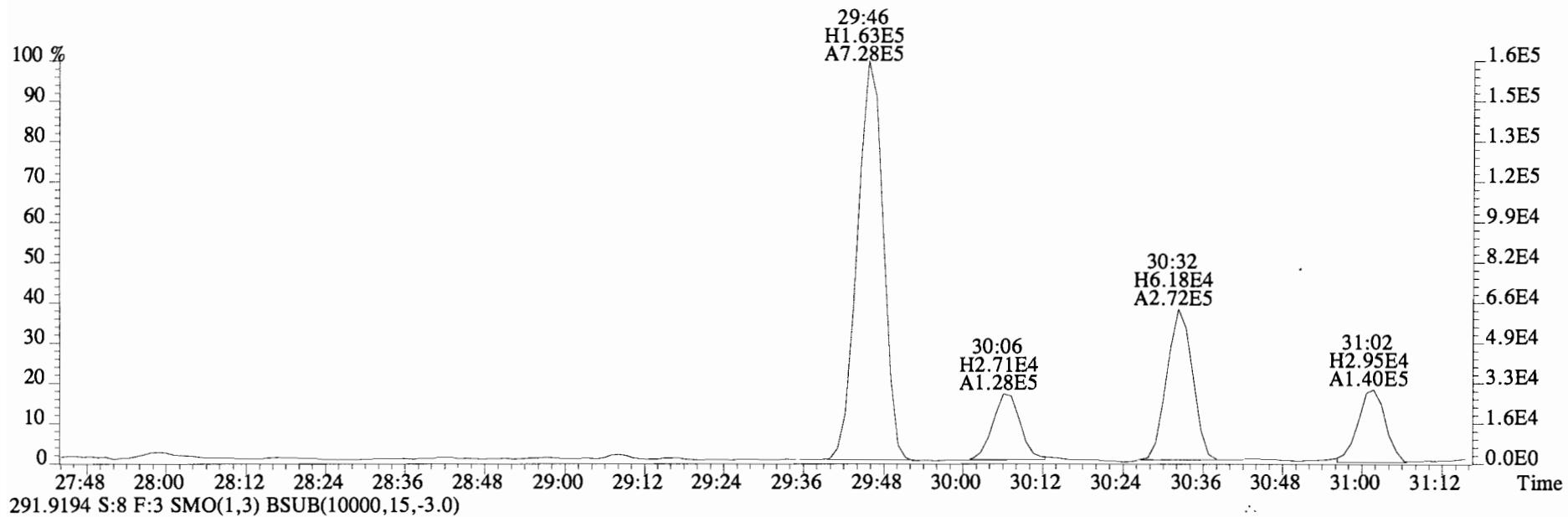
303.9597 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4576.0,0.00%,F,F)



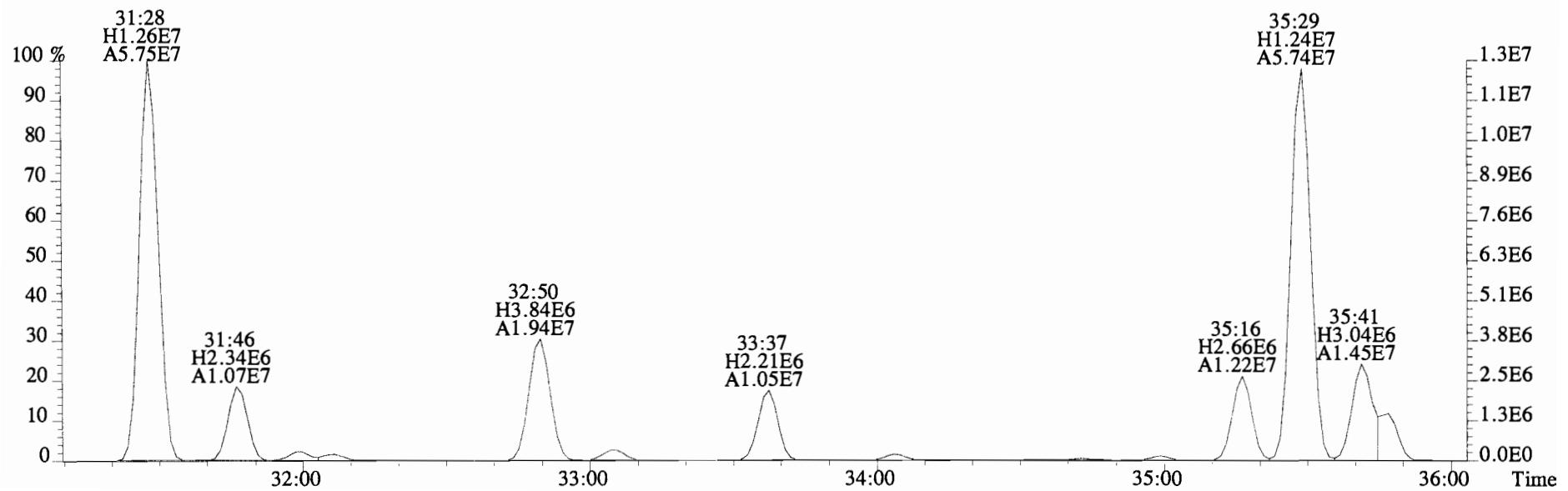
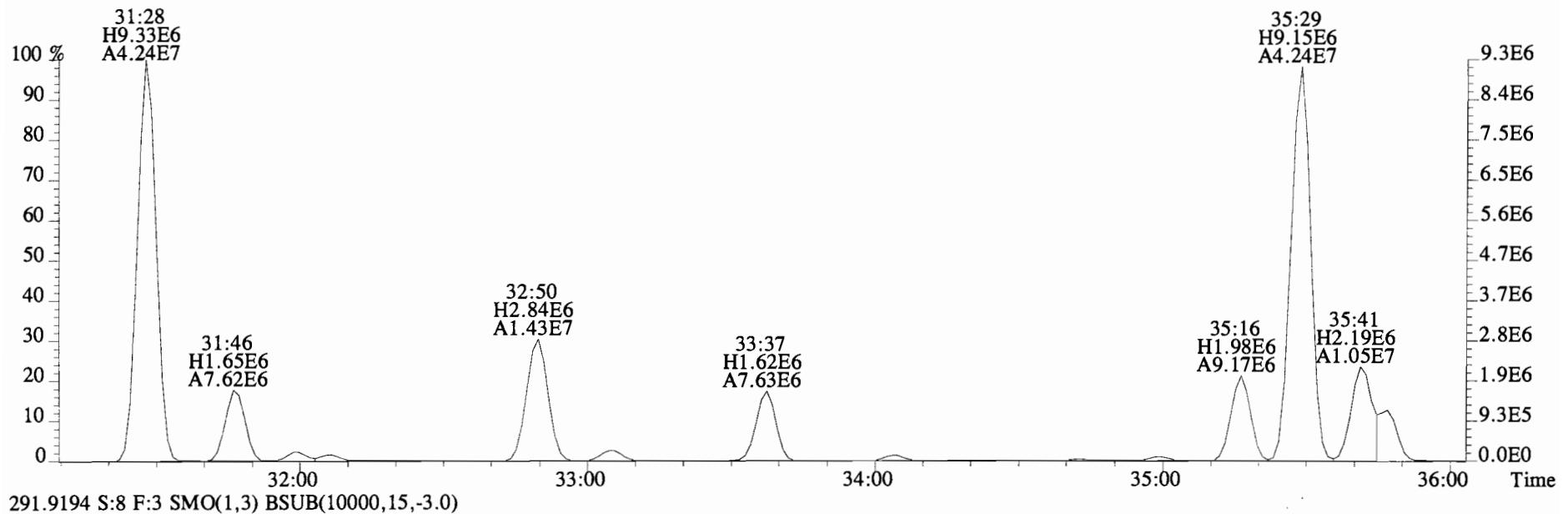
330.9792 S:8 F:3



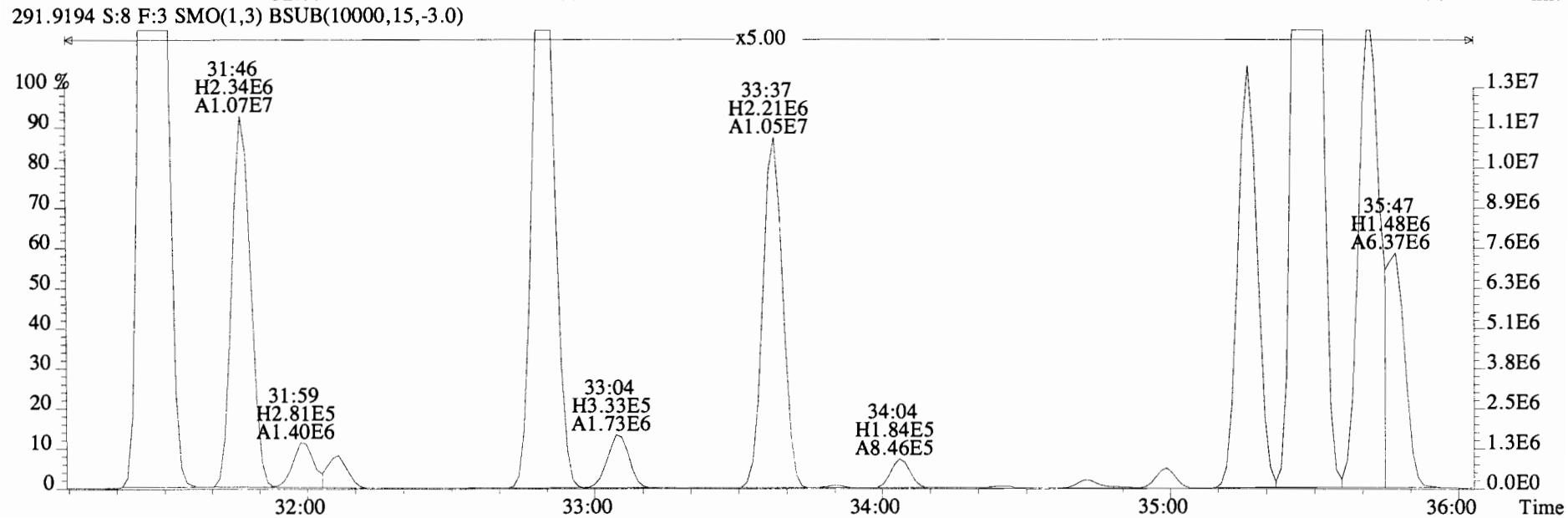
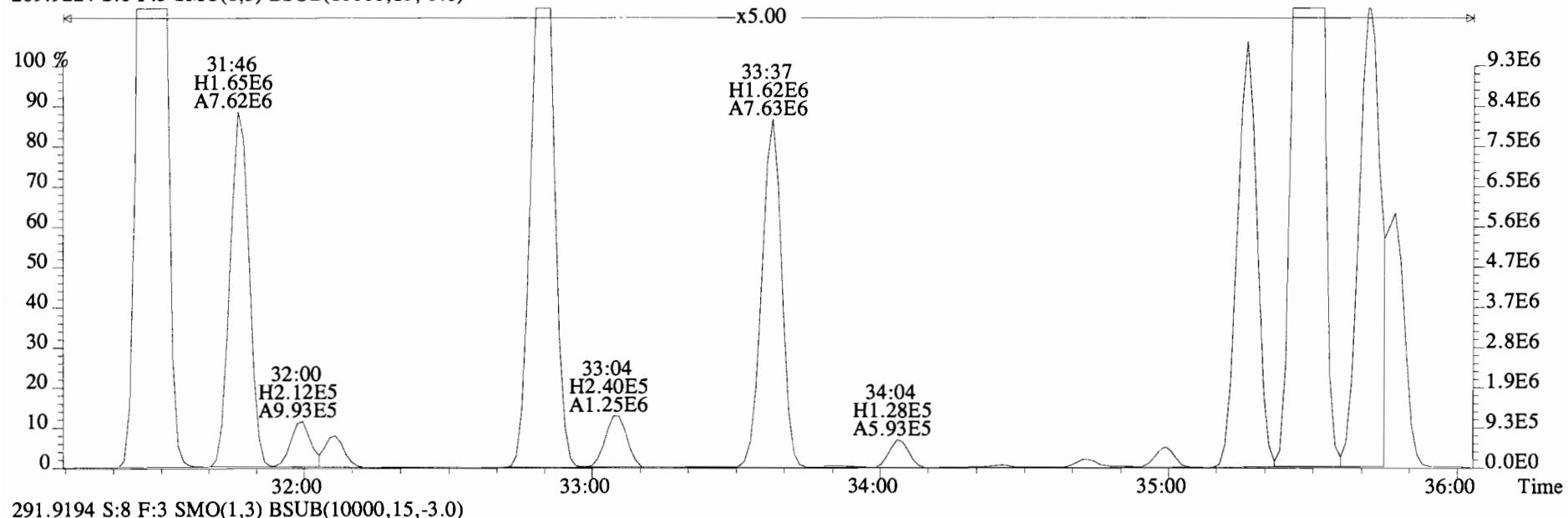
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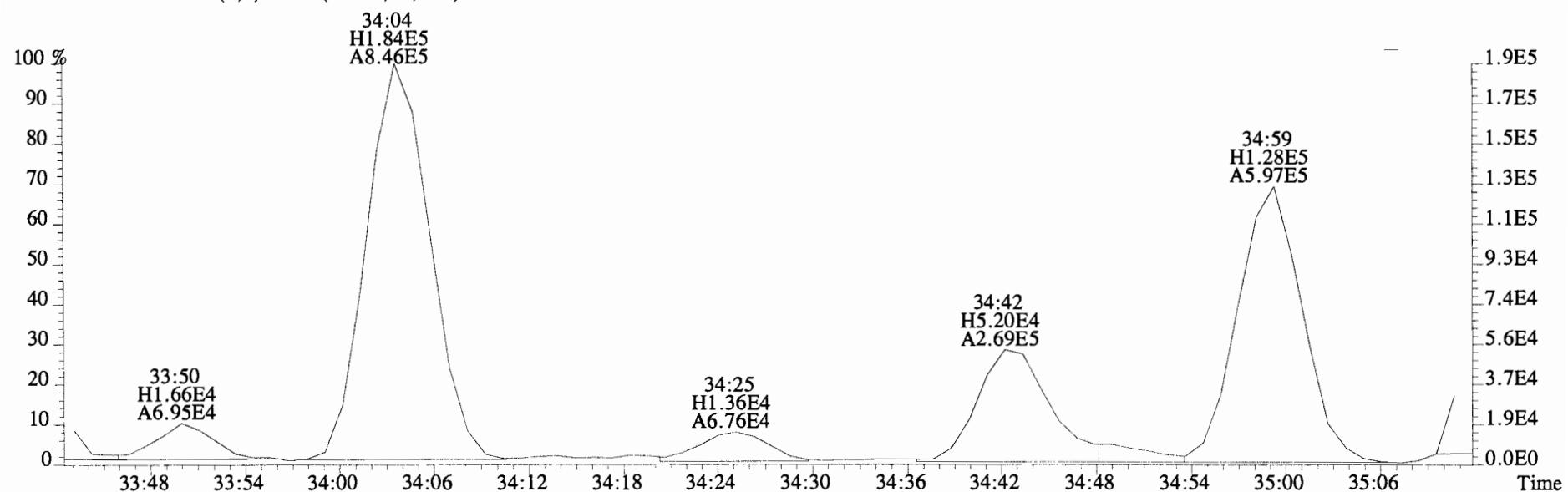
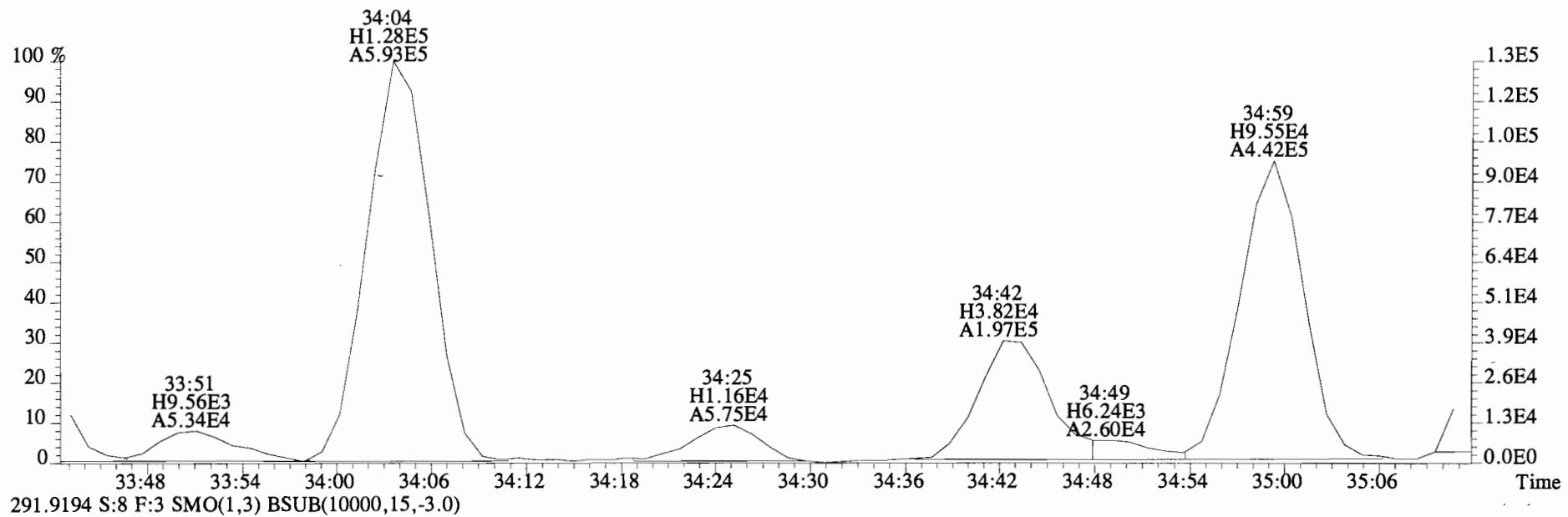
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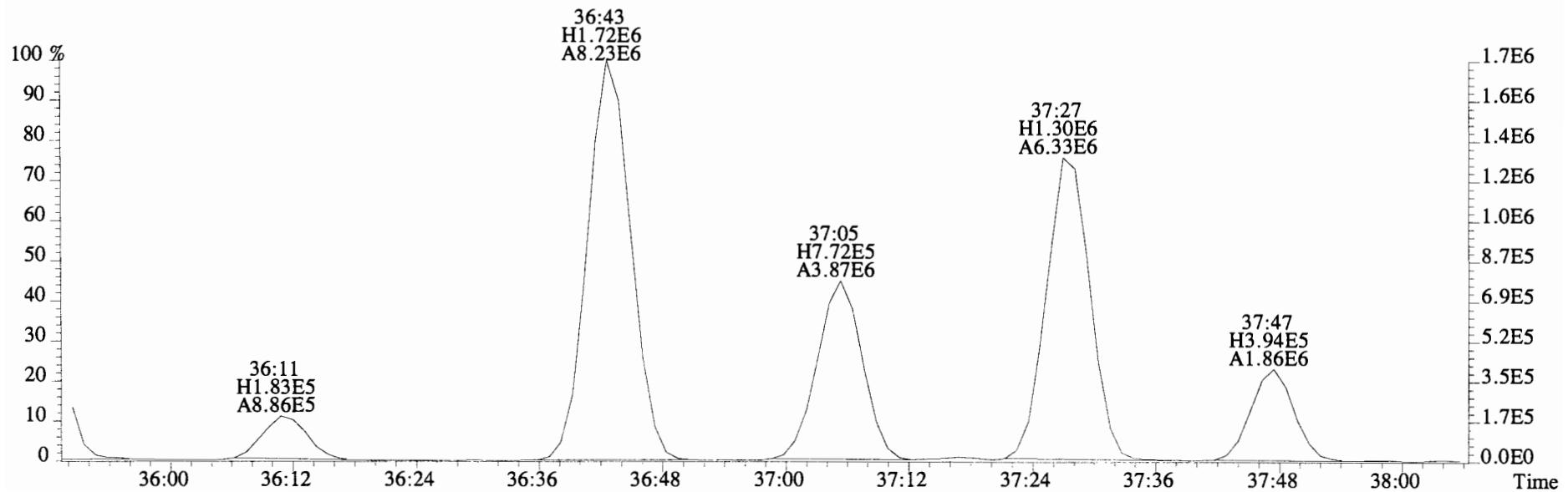
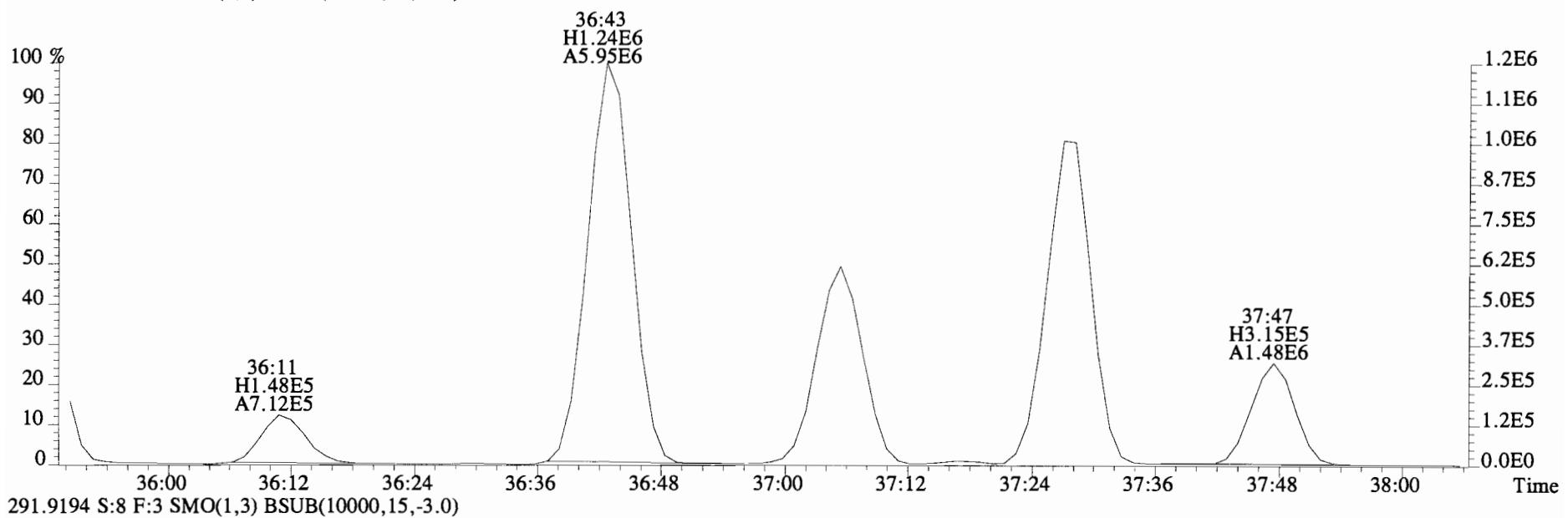
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289.9224 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



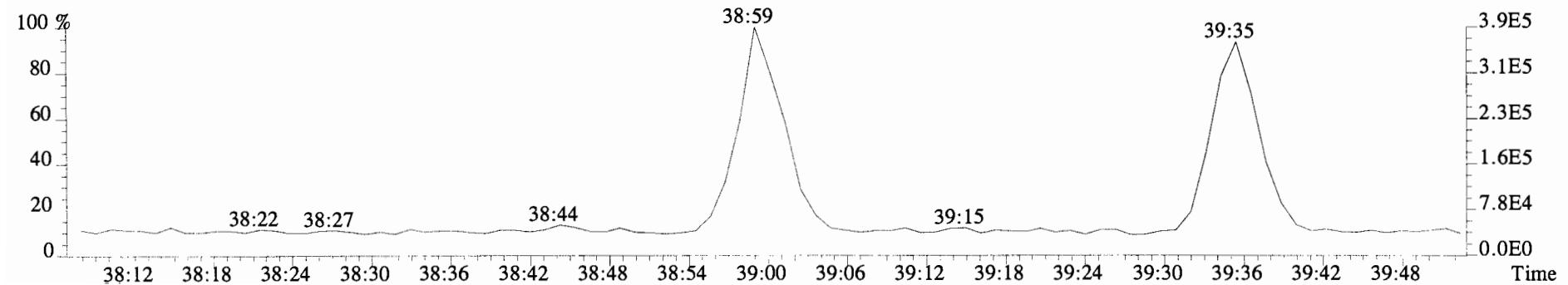
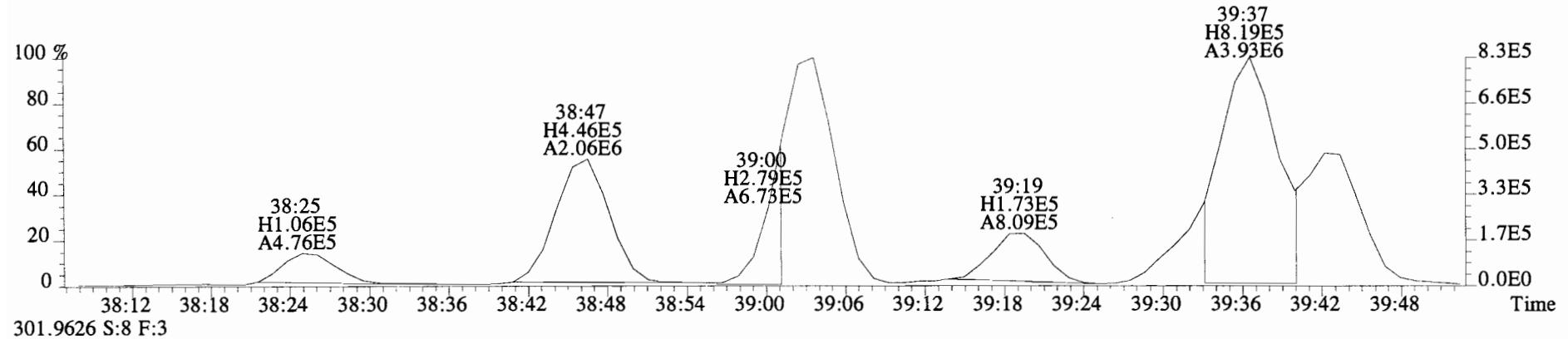
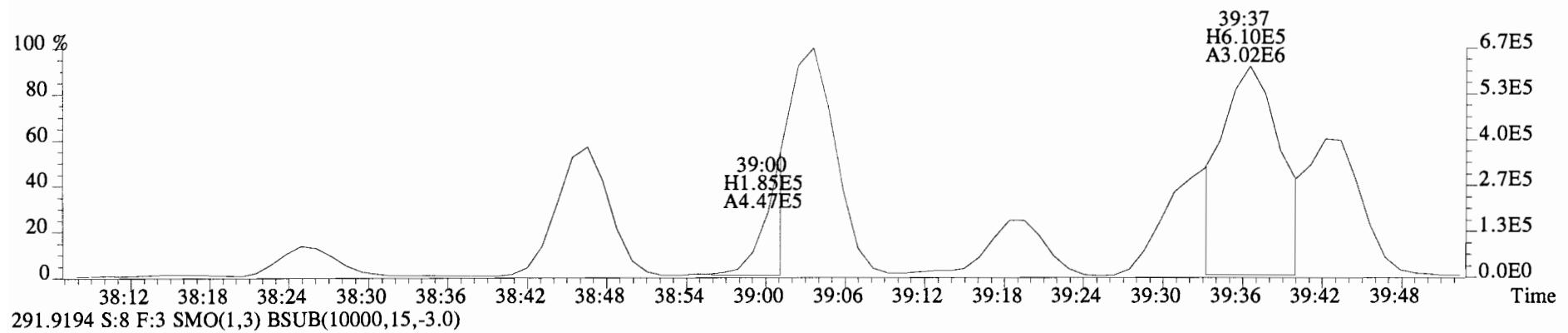
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289.9224 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



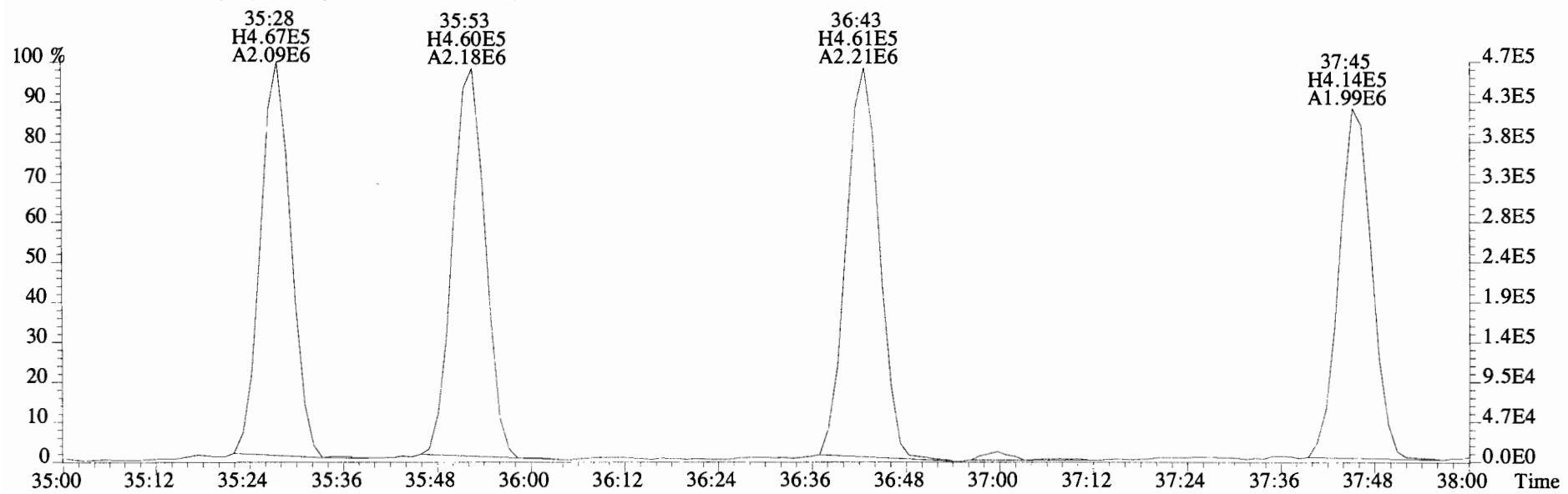
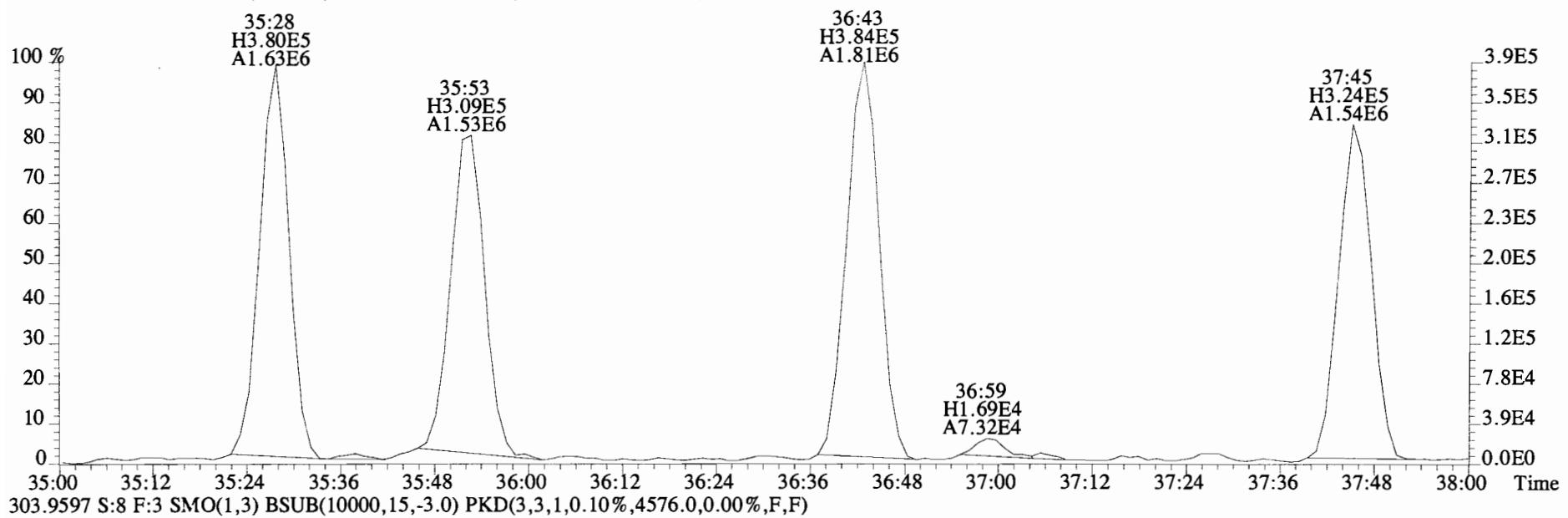
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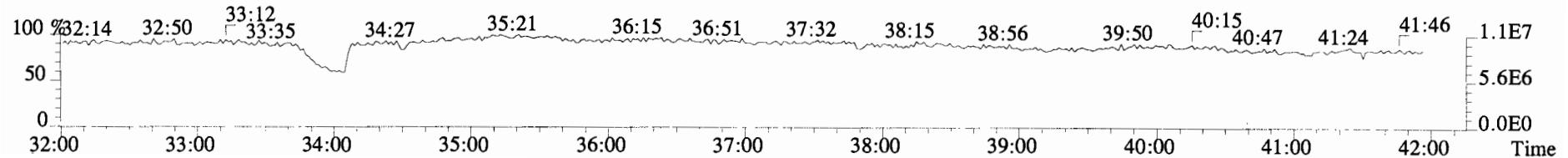
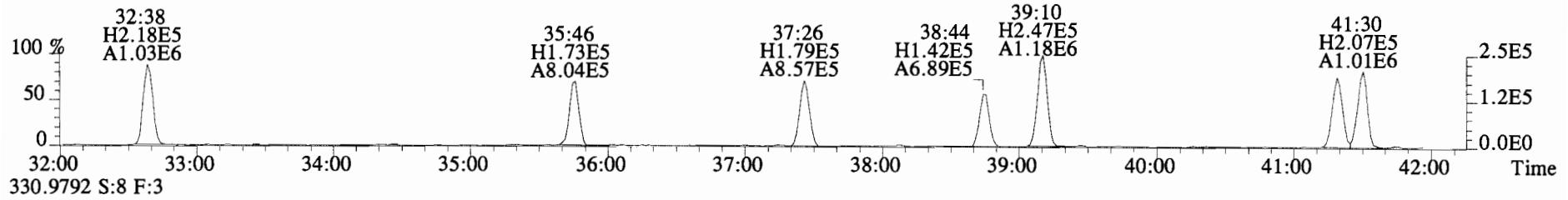
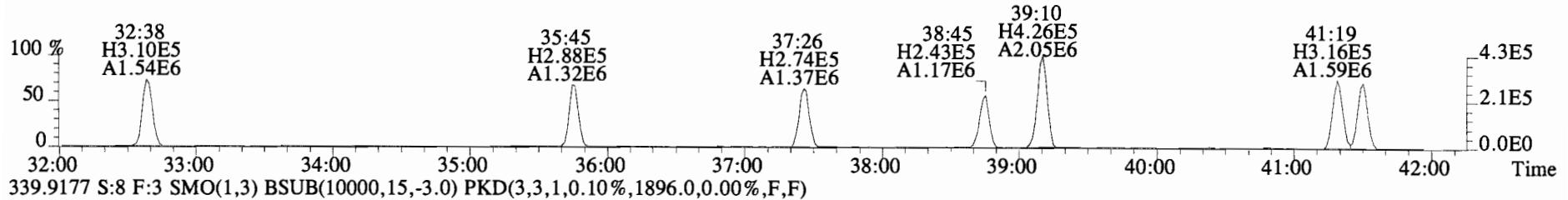
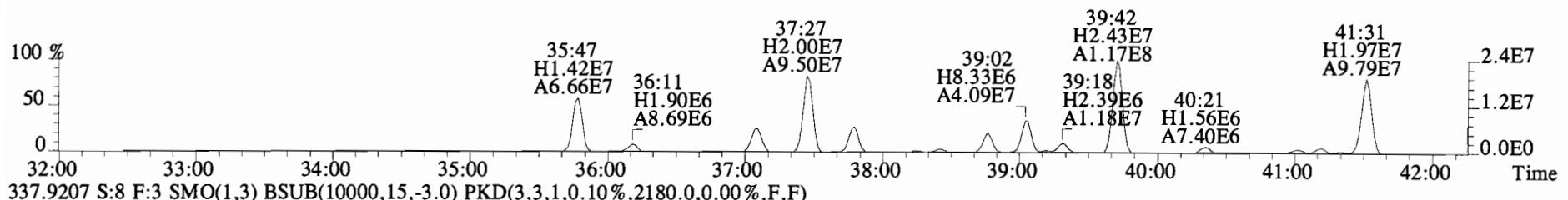
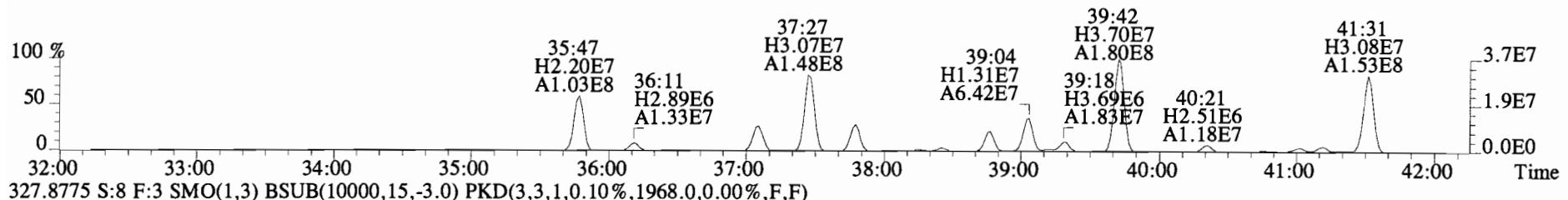
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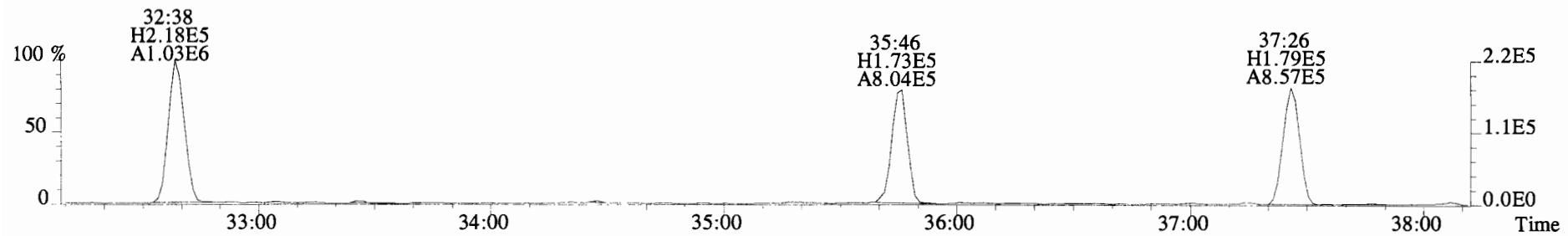
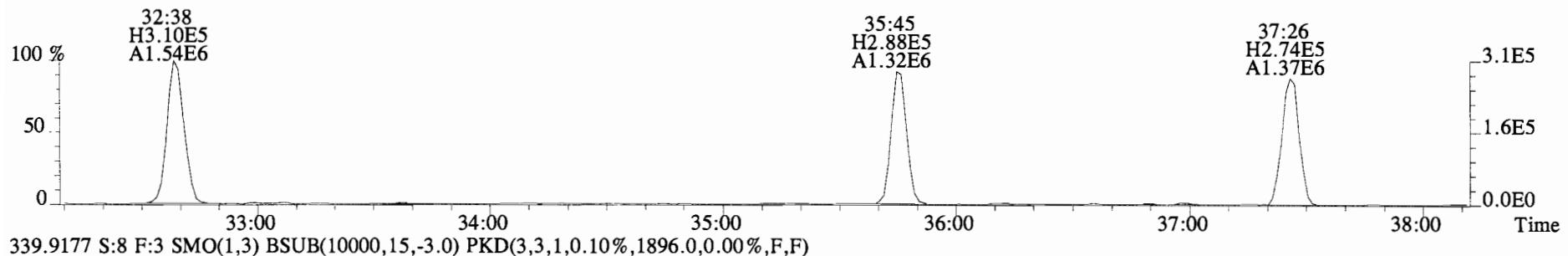
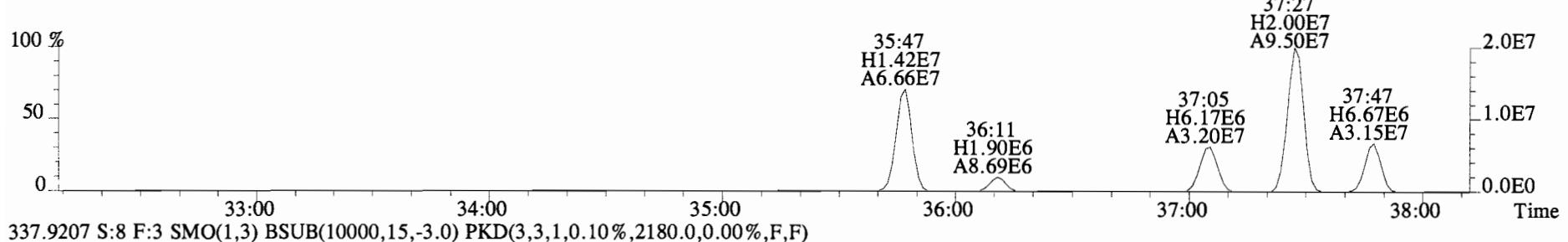
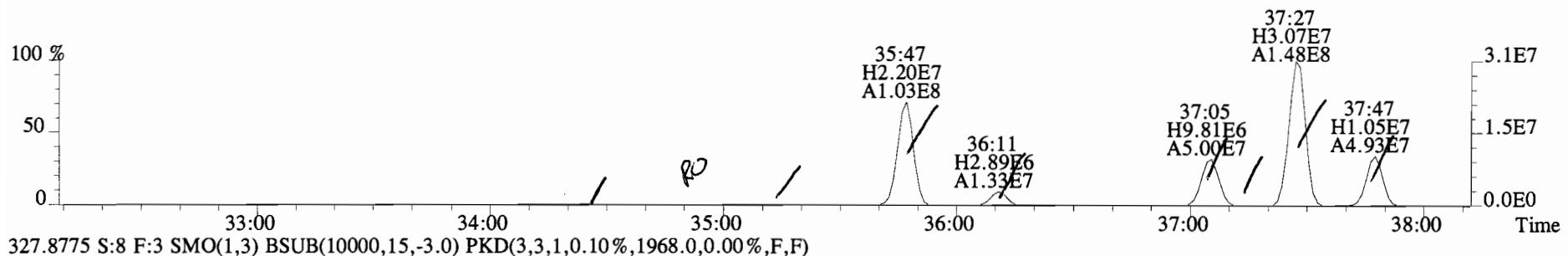
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301.9626 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6284.0,0.00%,F,F)



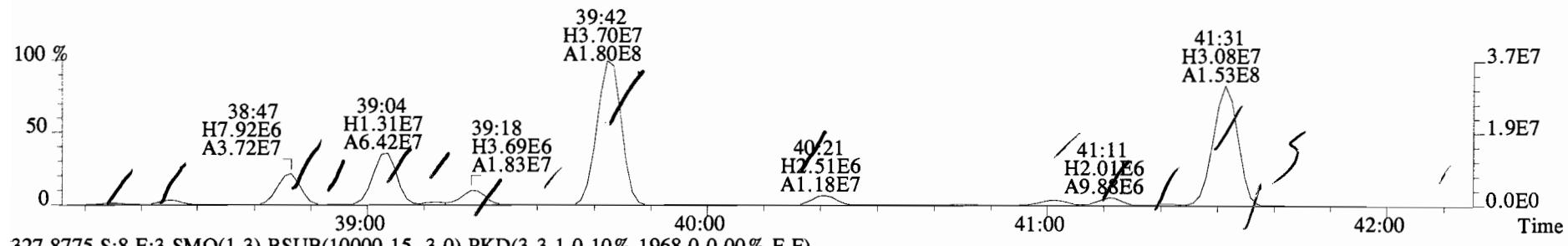
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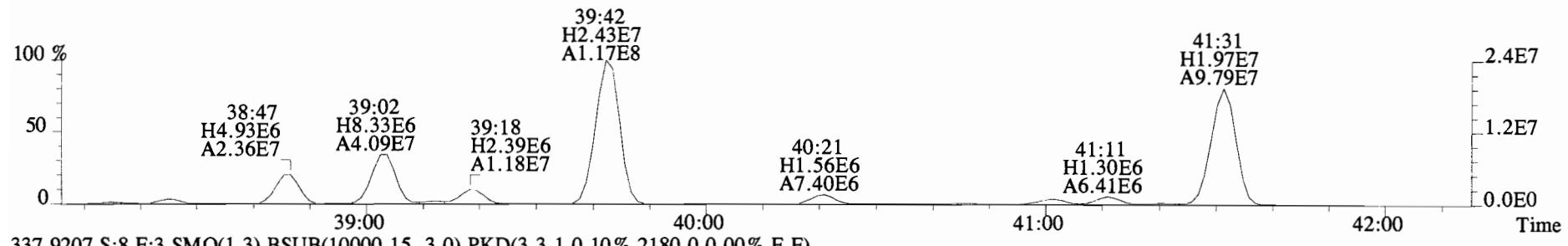
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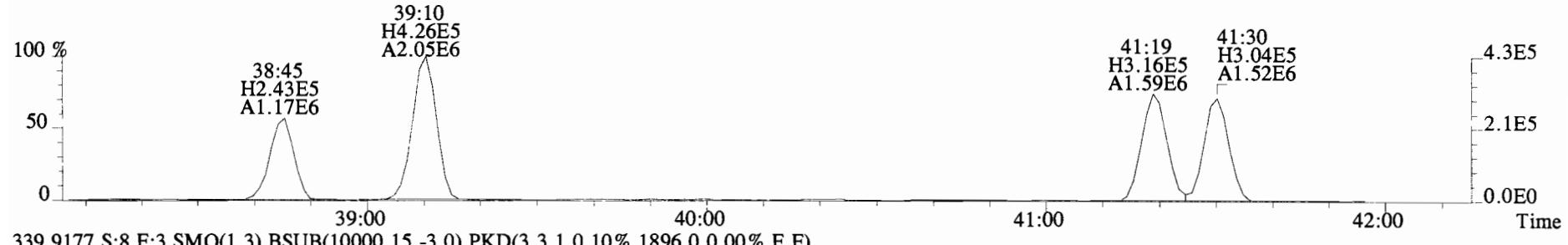
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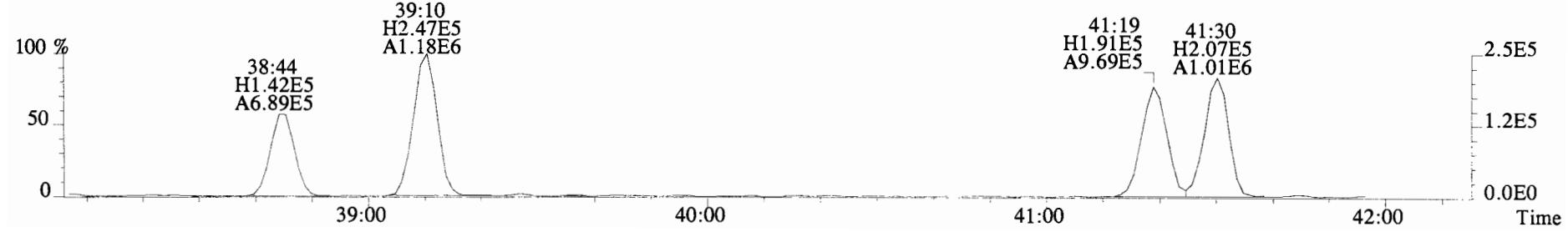
327.8775 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1968.0,0.00%,F,F)



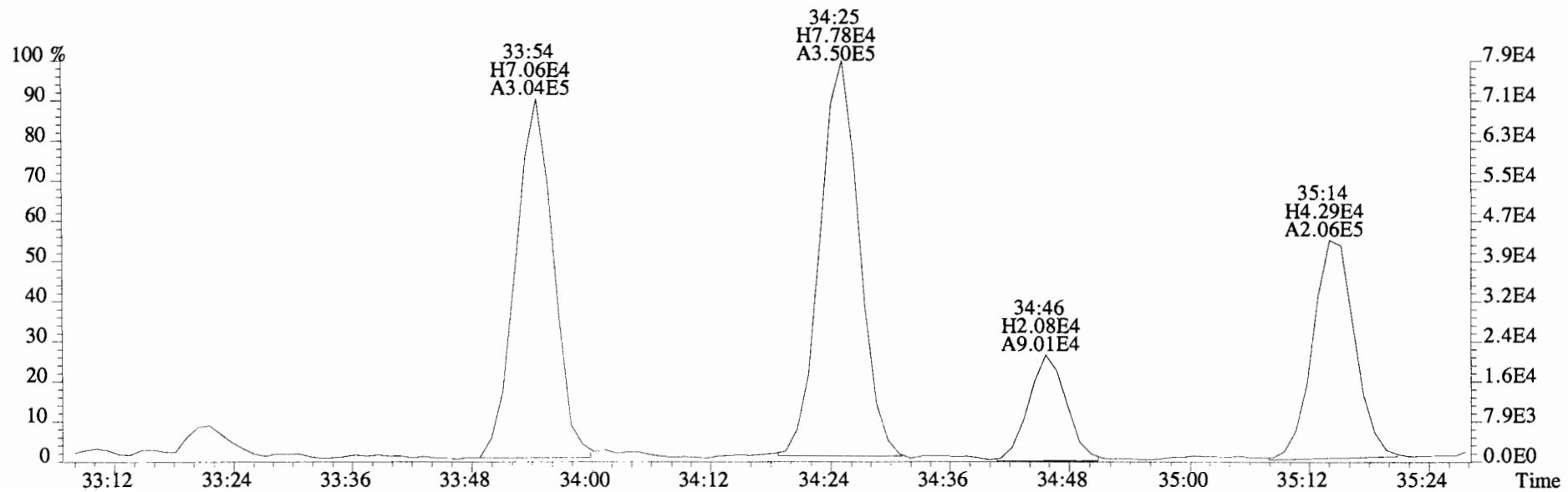
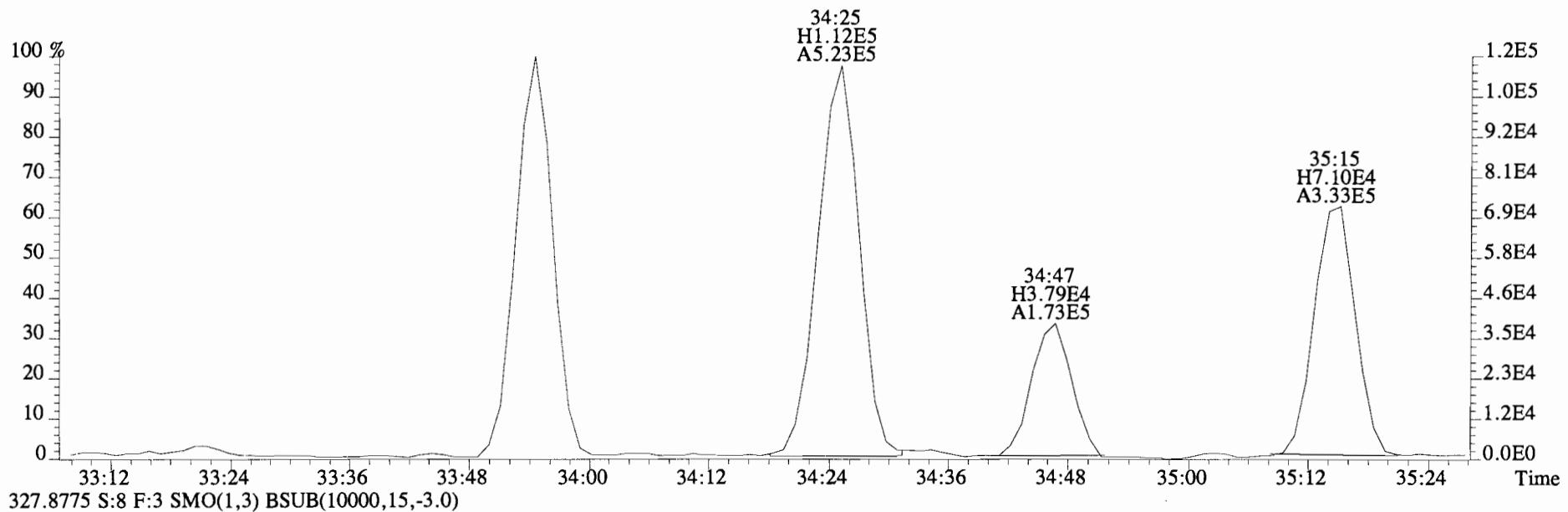
337.9207 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2180.0,0.00%,F,F)



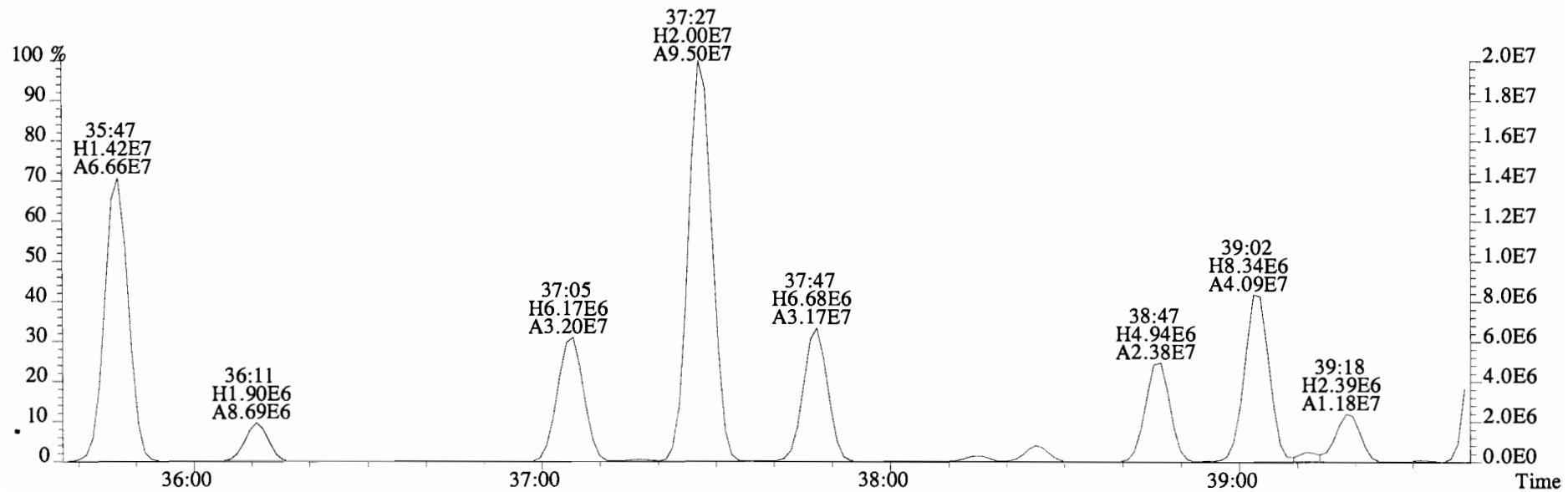
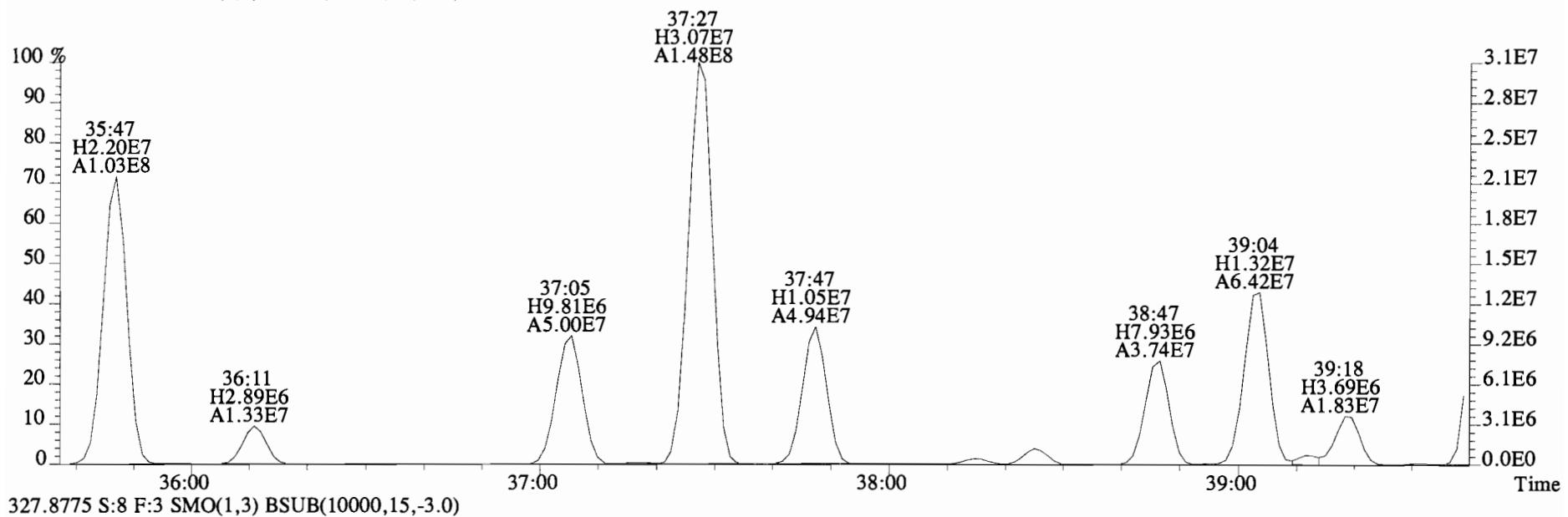
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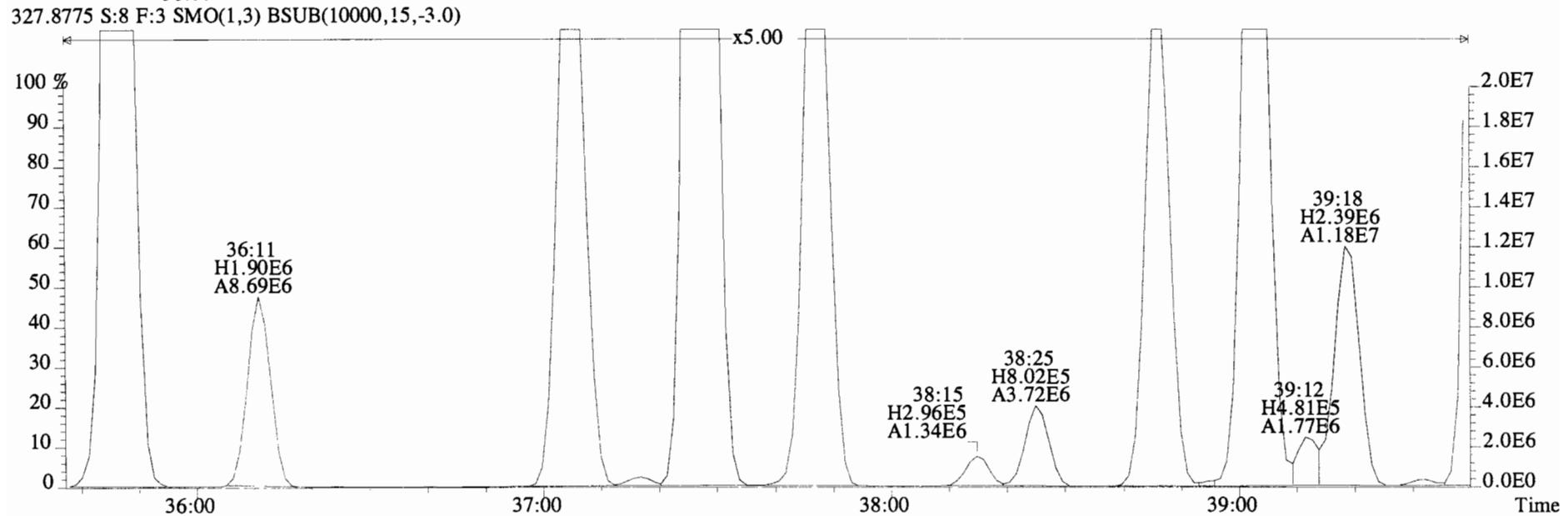
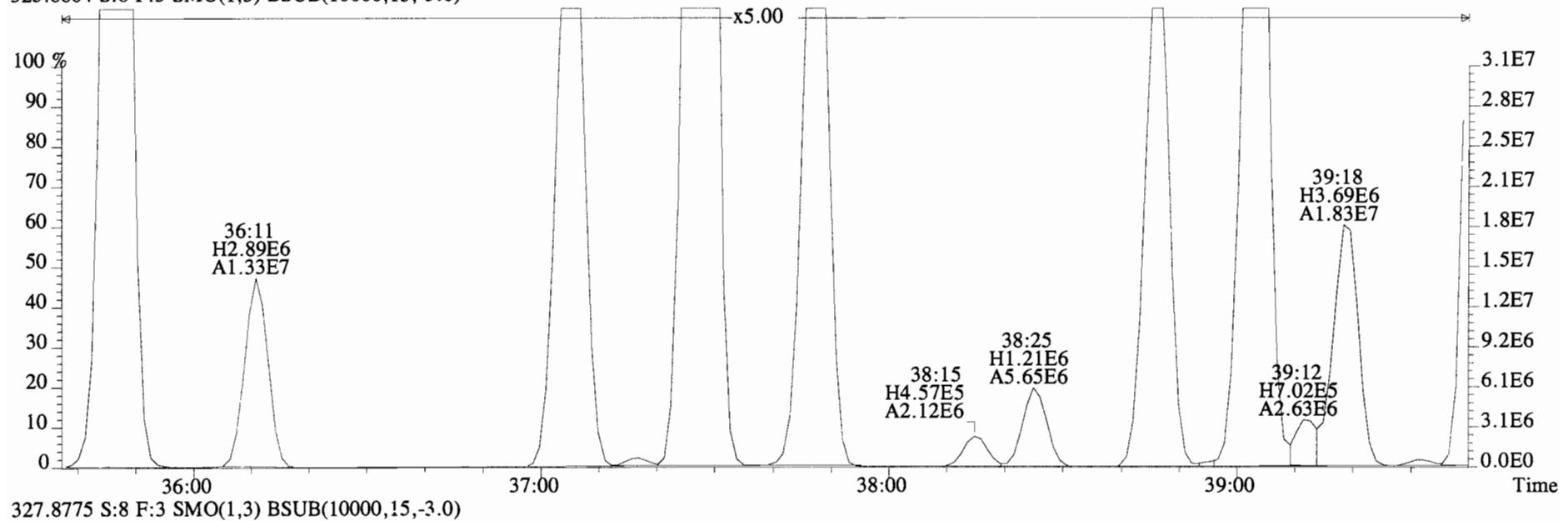
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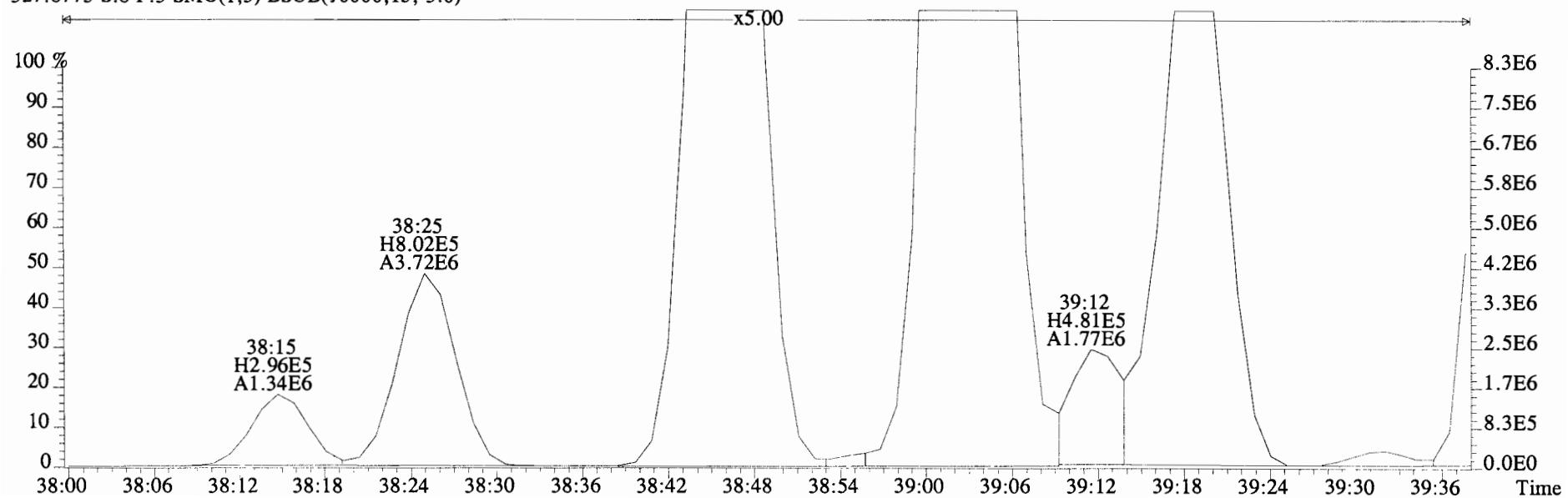
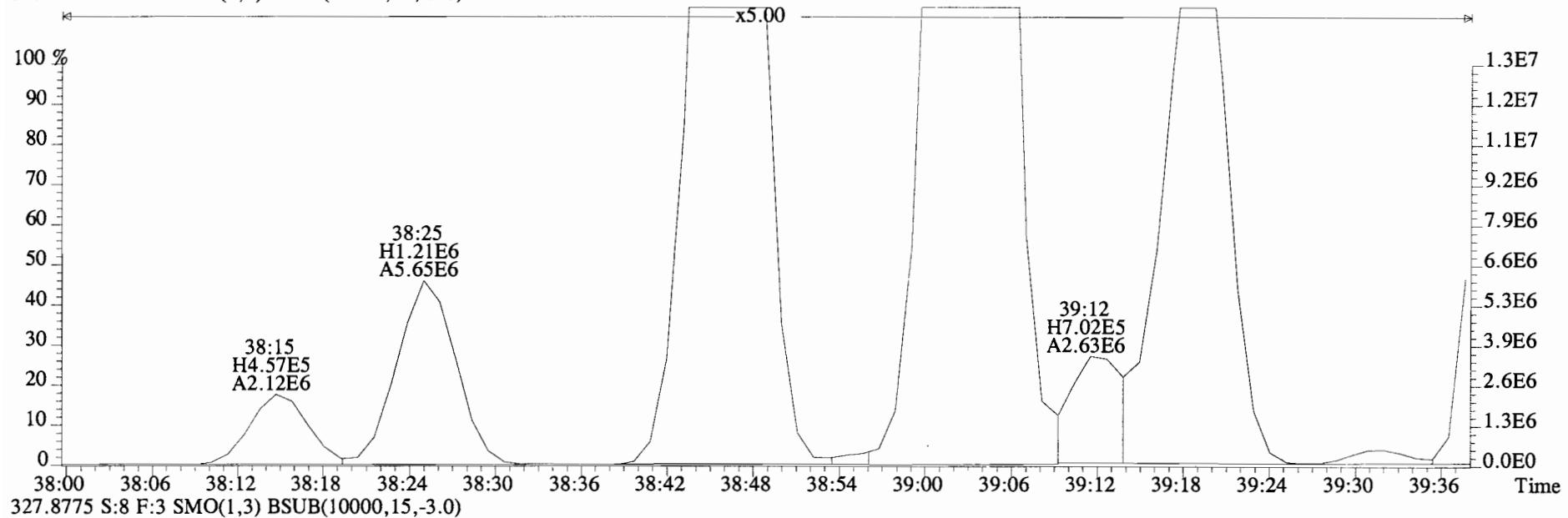
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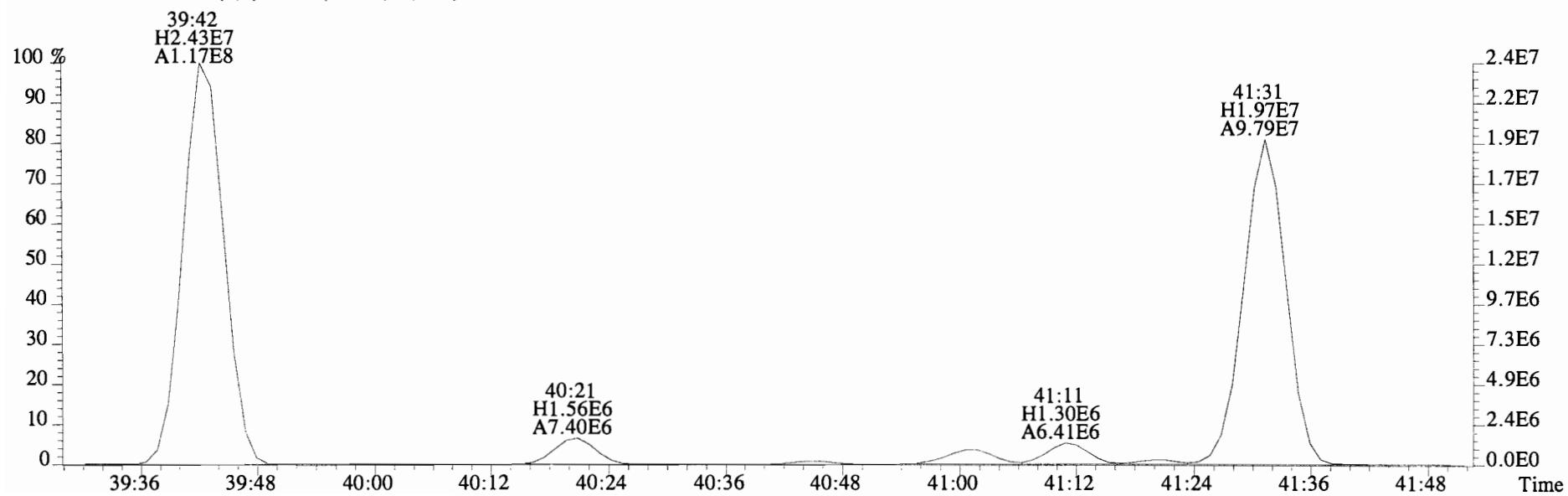
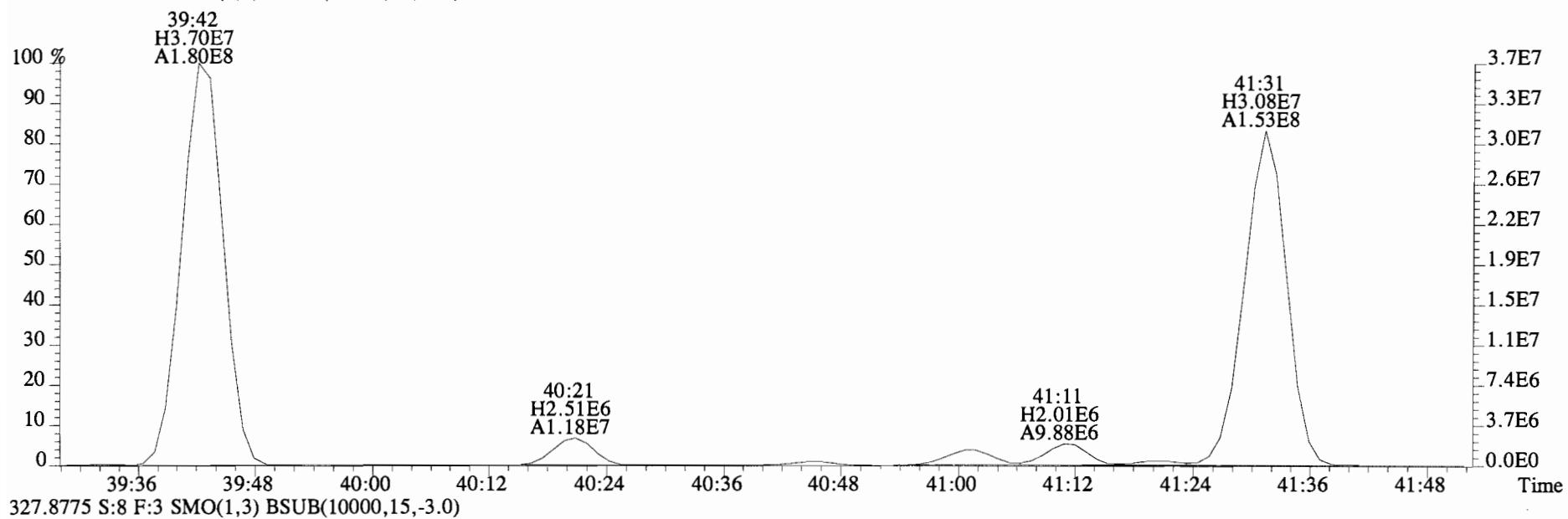
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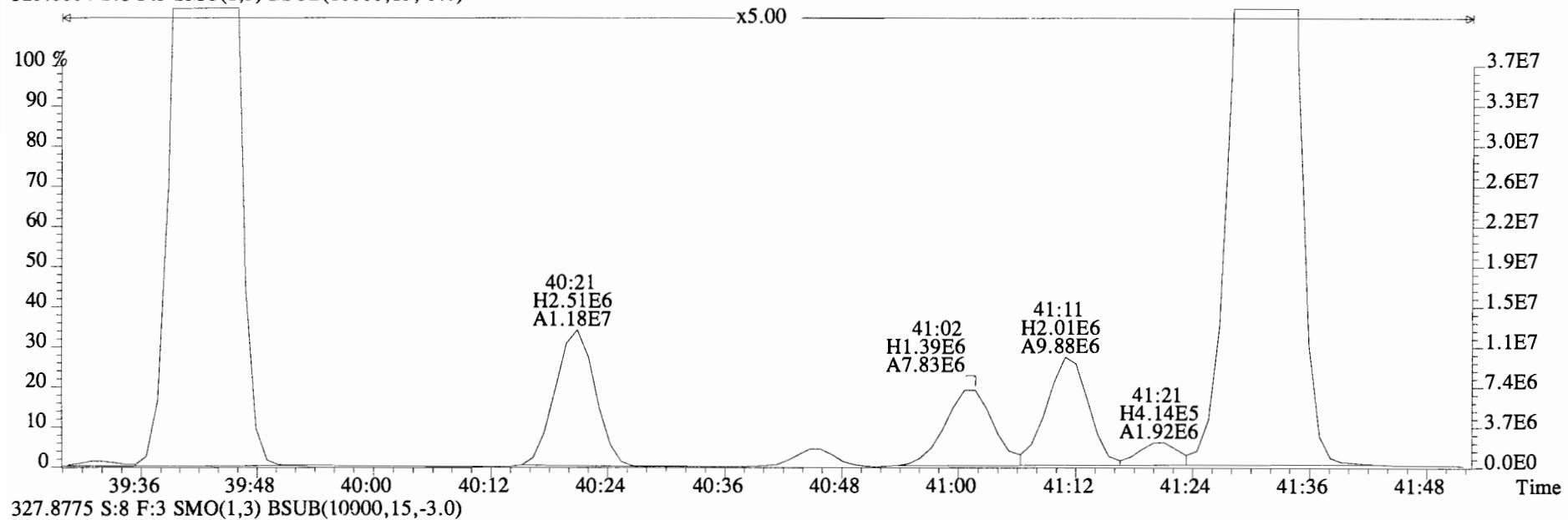
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325.8804 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



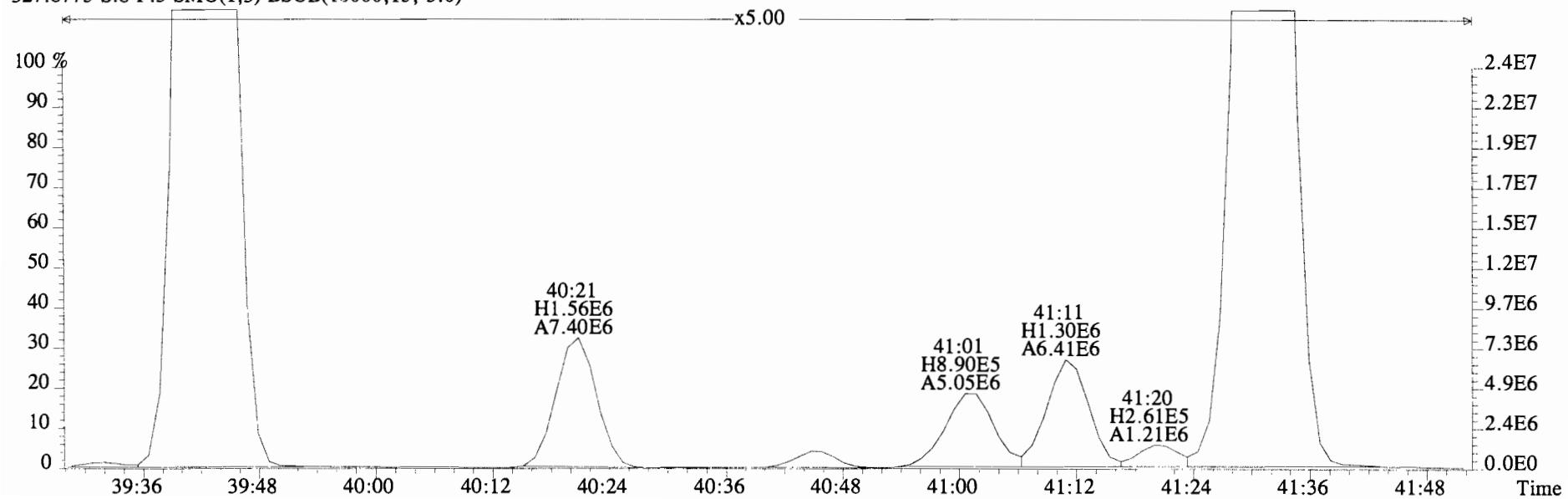
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325.8804 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



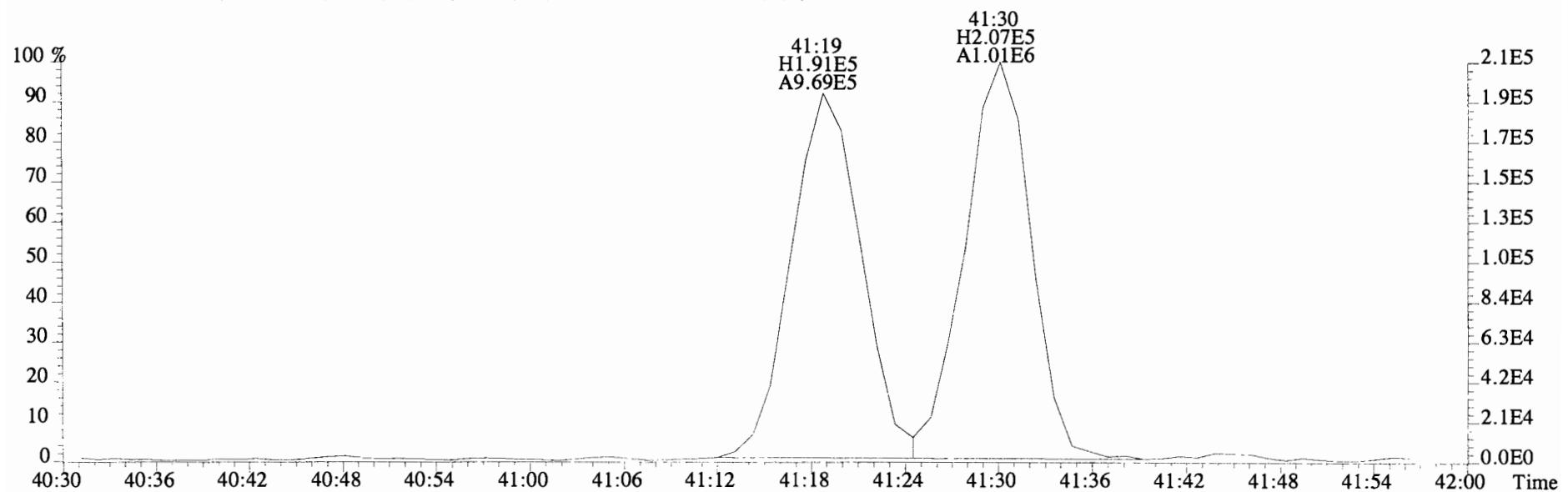
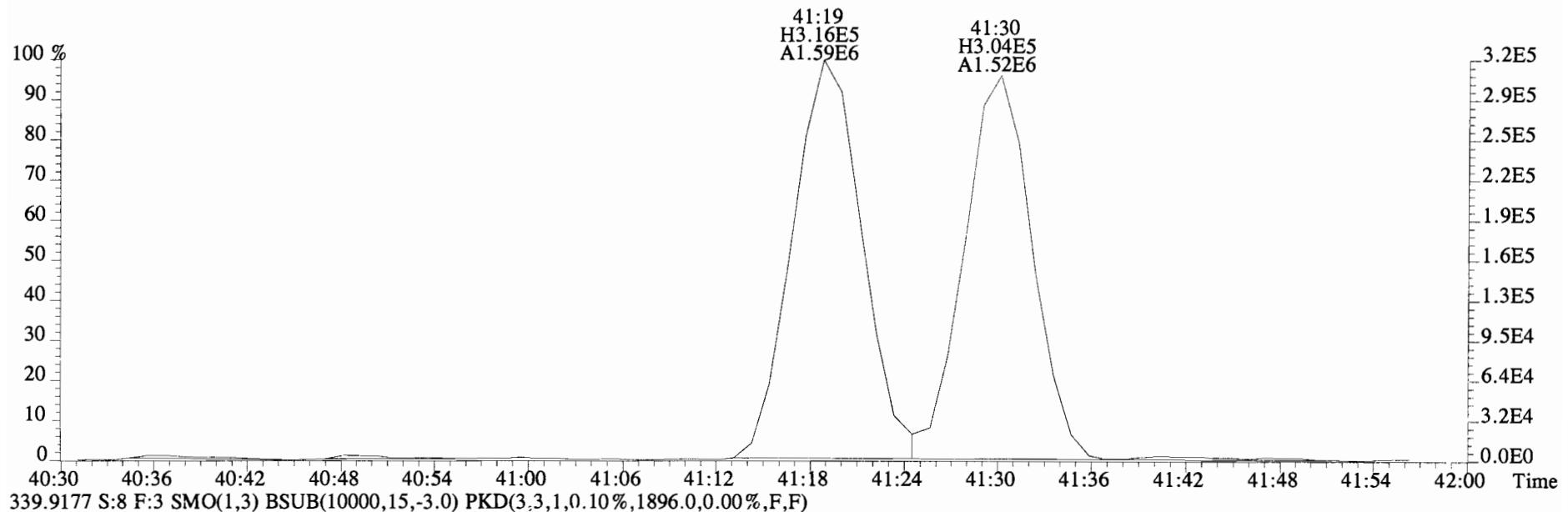
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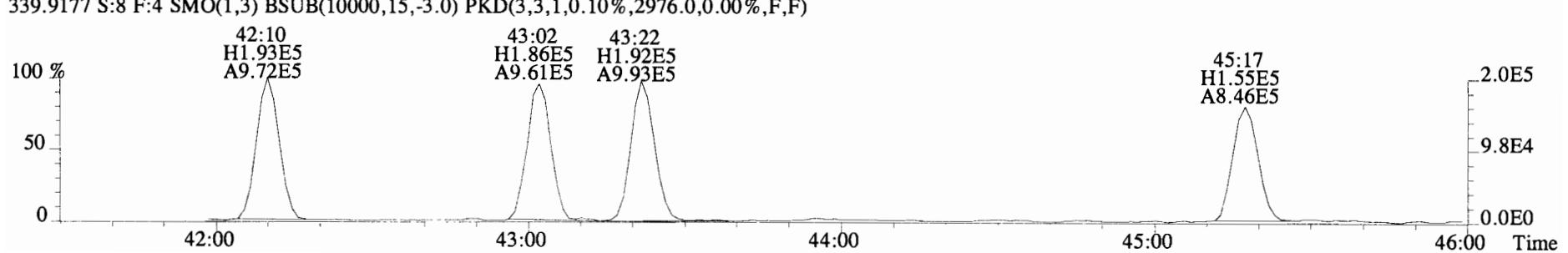
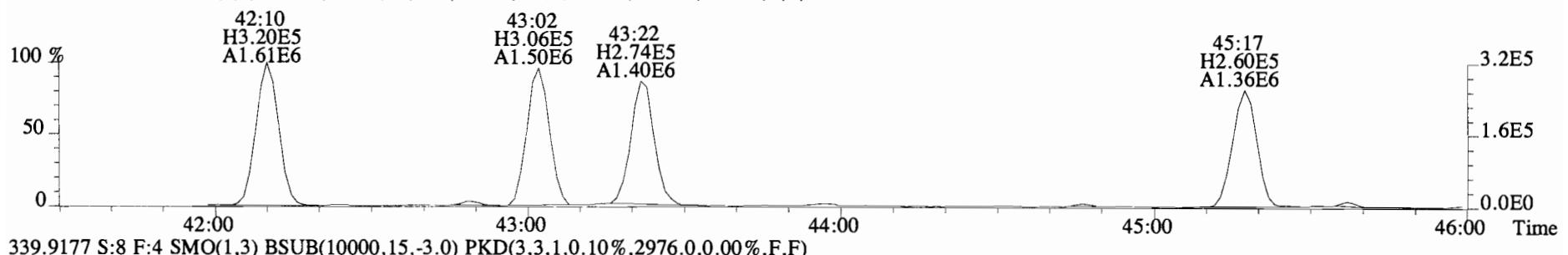
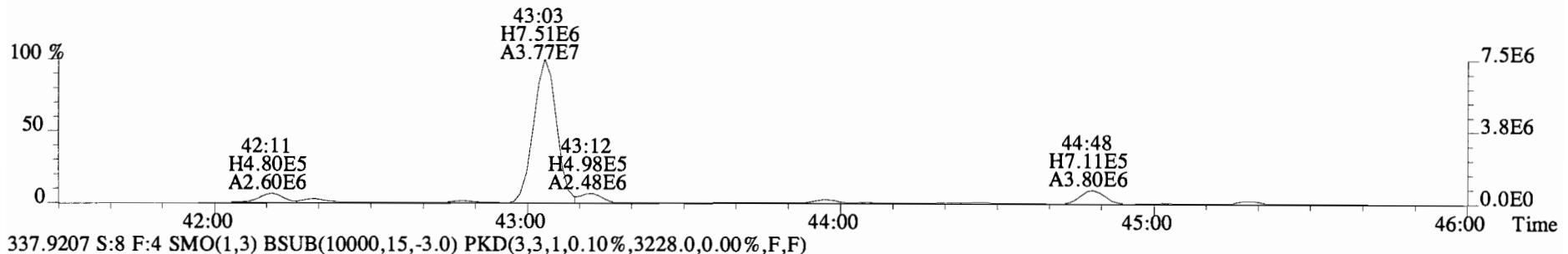
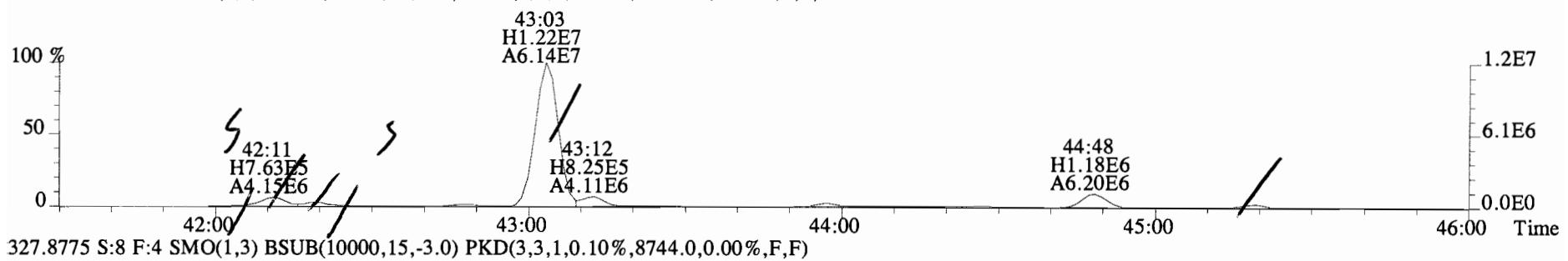
327.8775 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



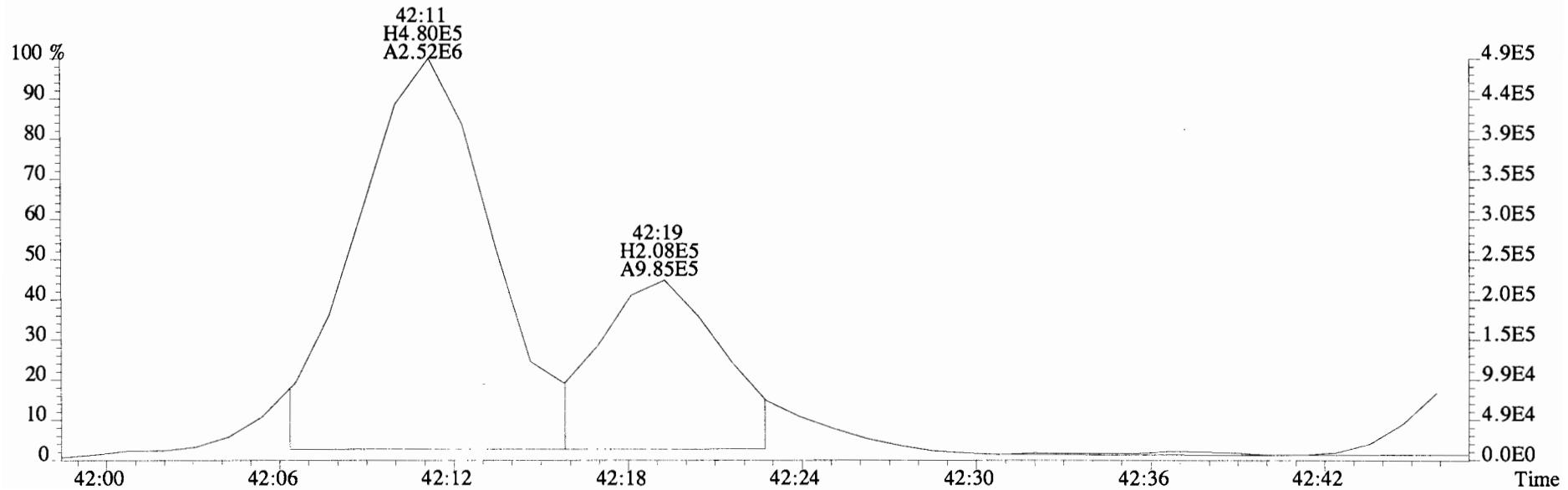
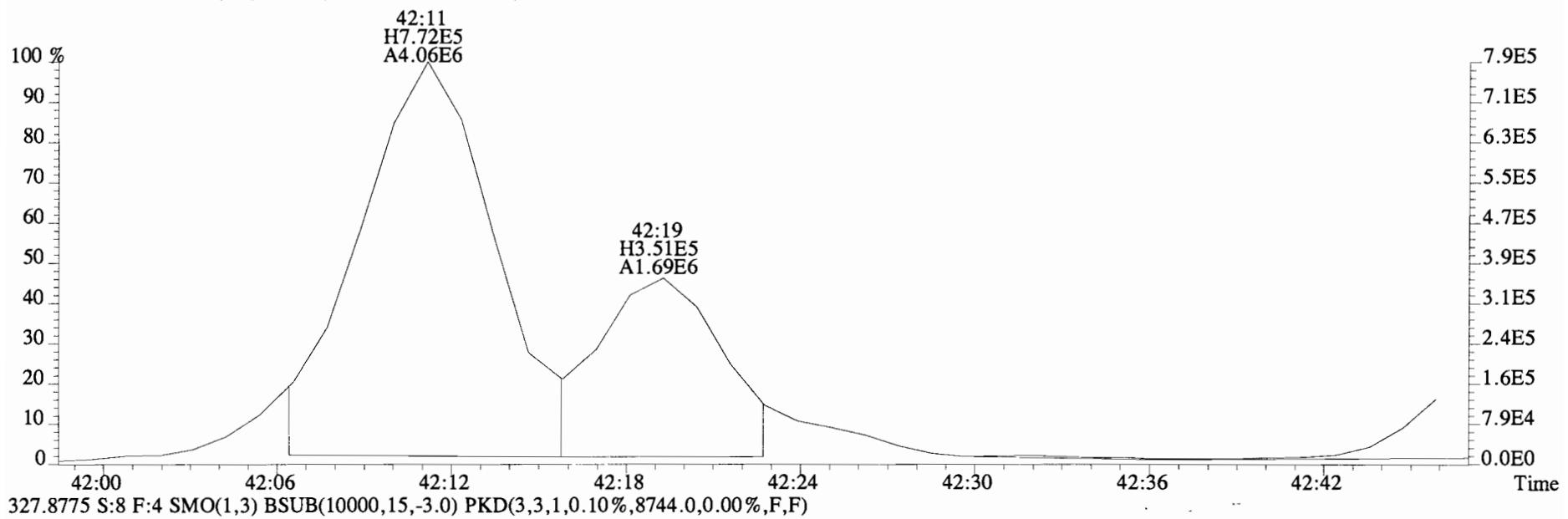
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-04@20X CC-CB-04-20141013-S Exp:PCB_ZB1
337.9207 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2180.0,0.00%,F,F)



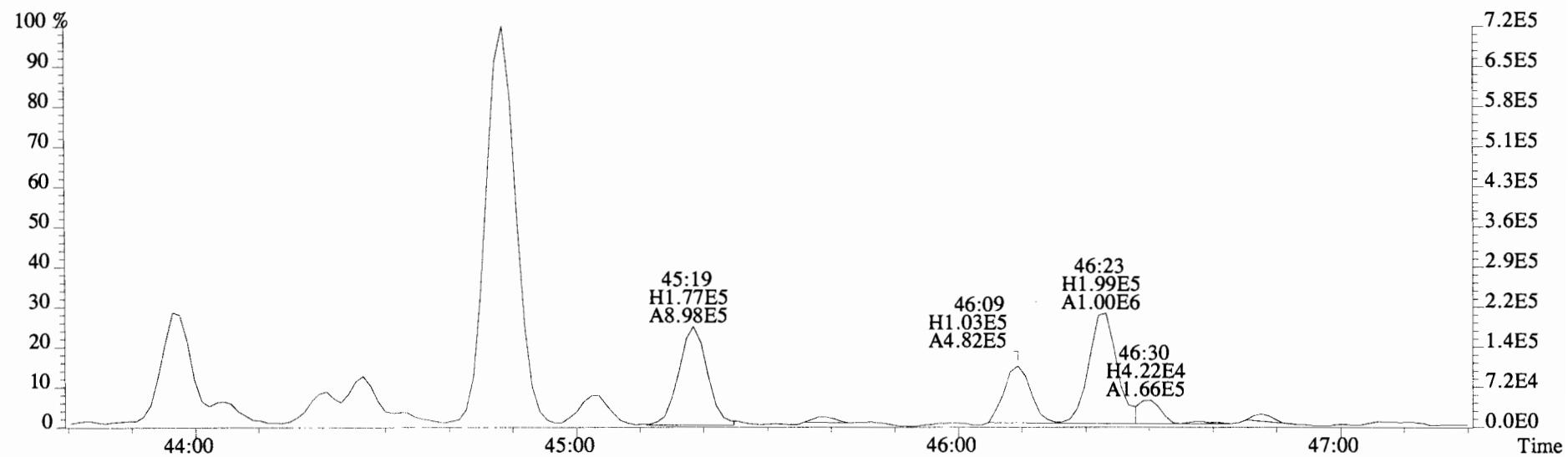
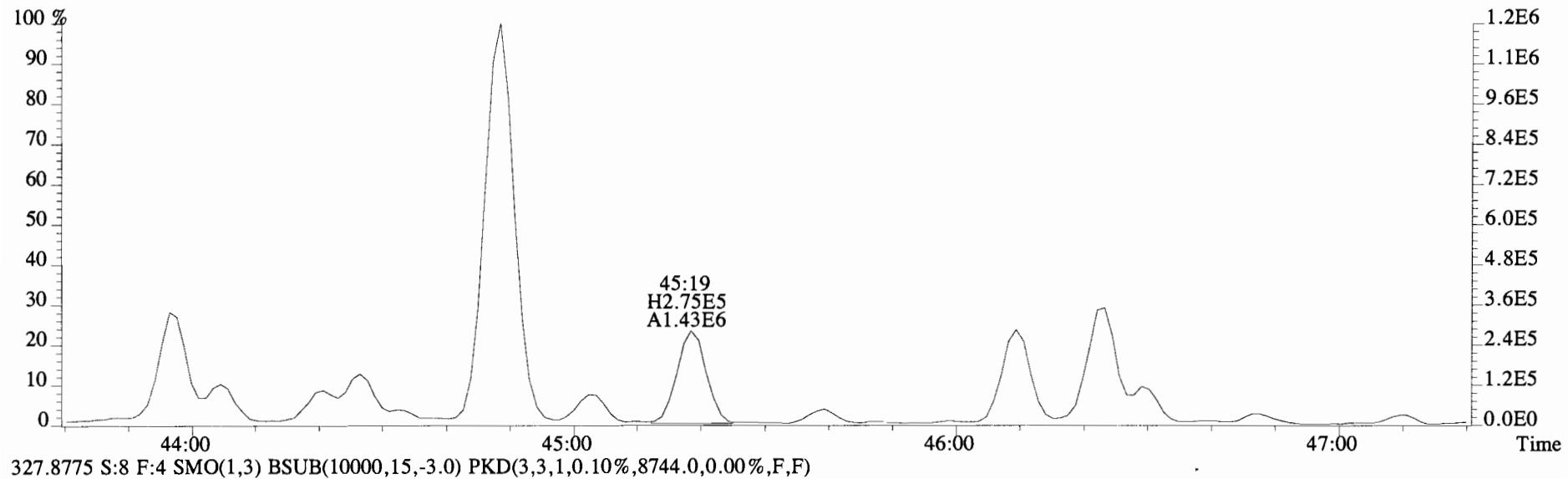
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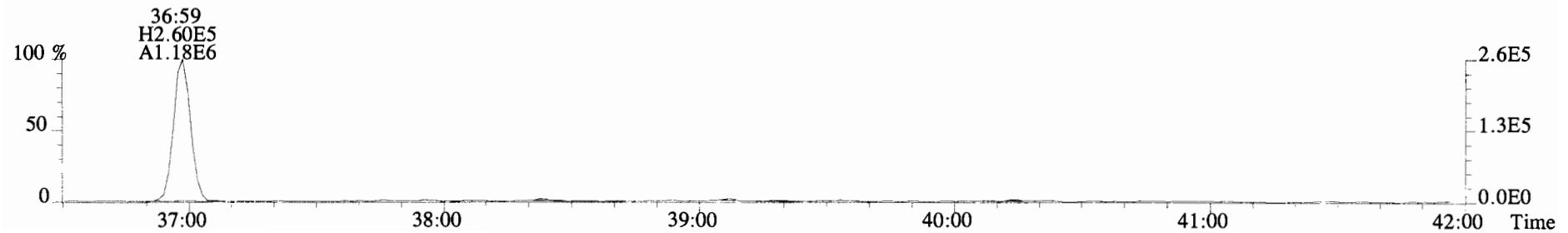
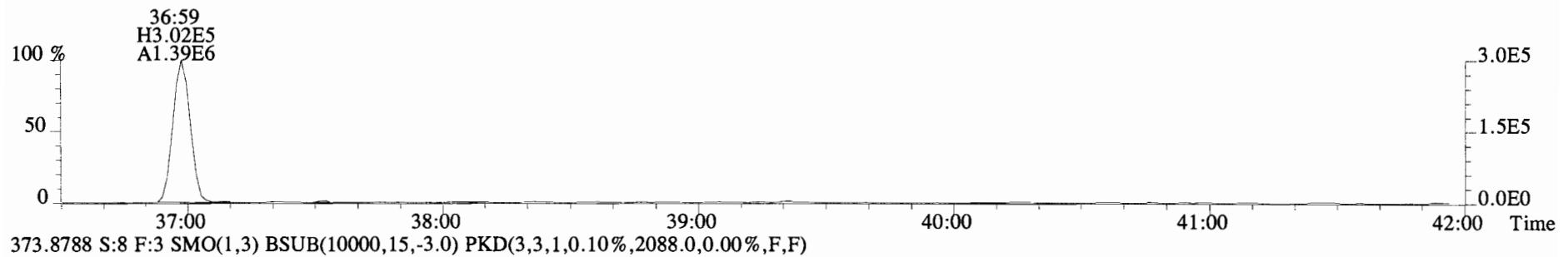
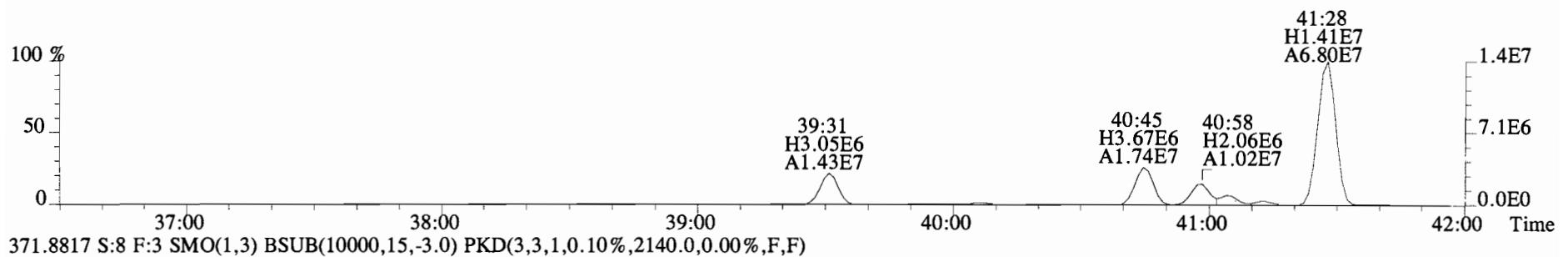
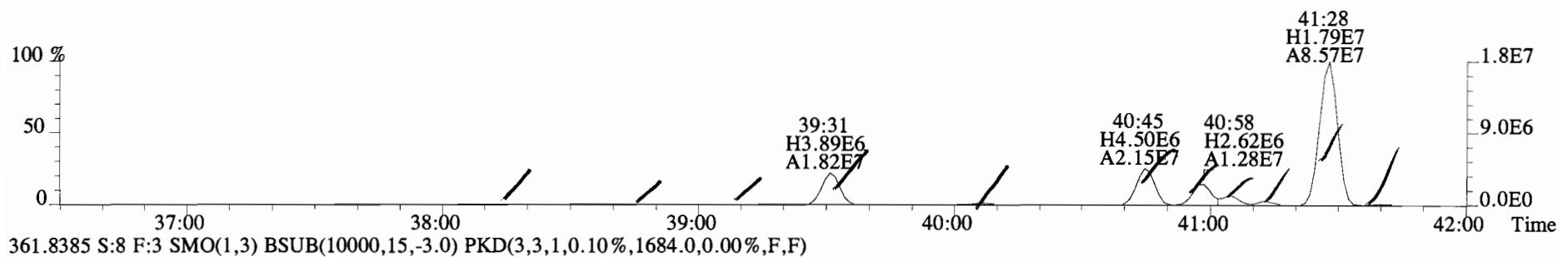
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325.8804 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13392.0,0.00%,F,F)



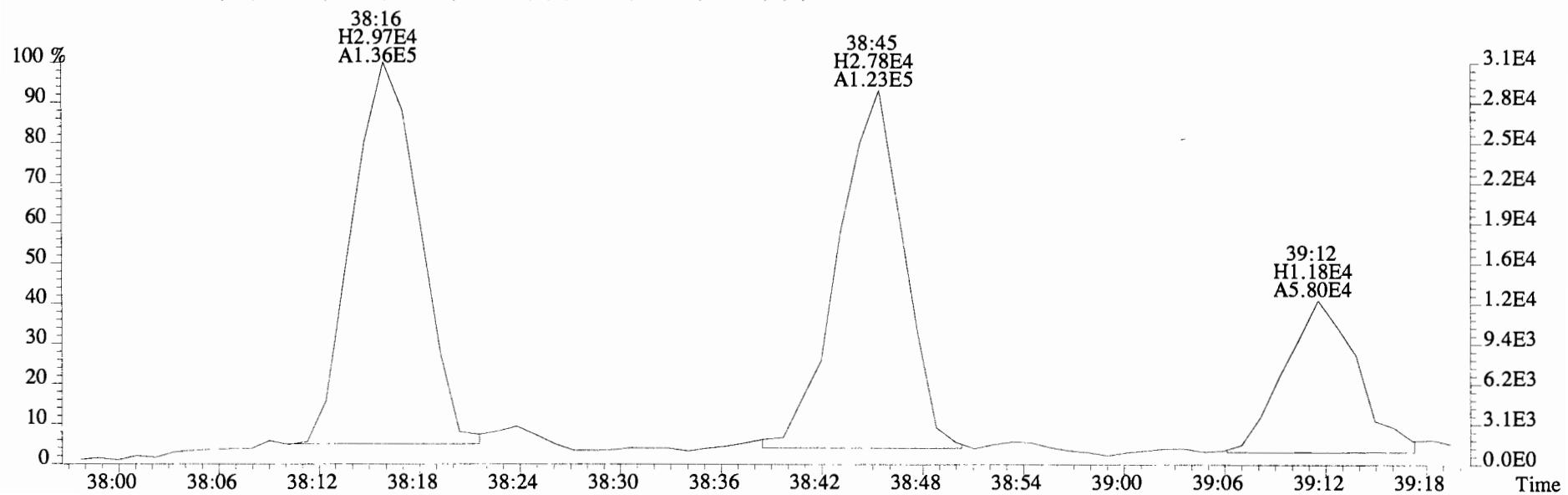
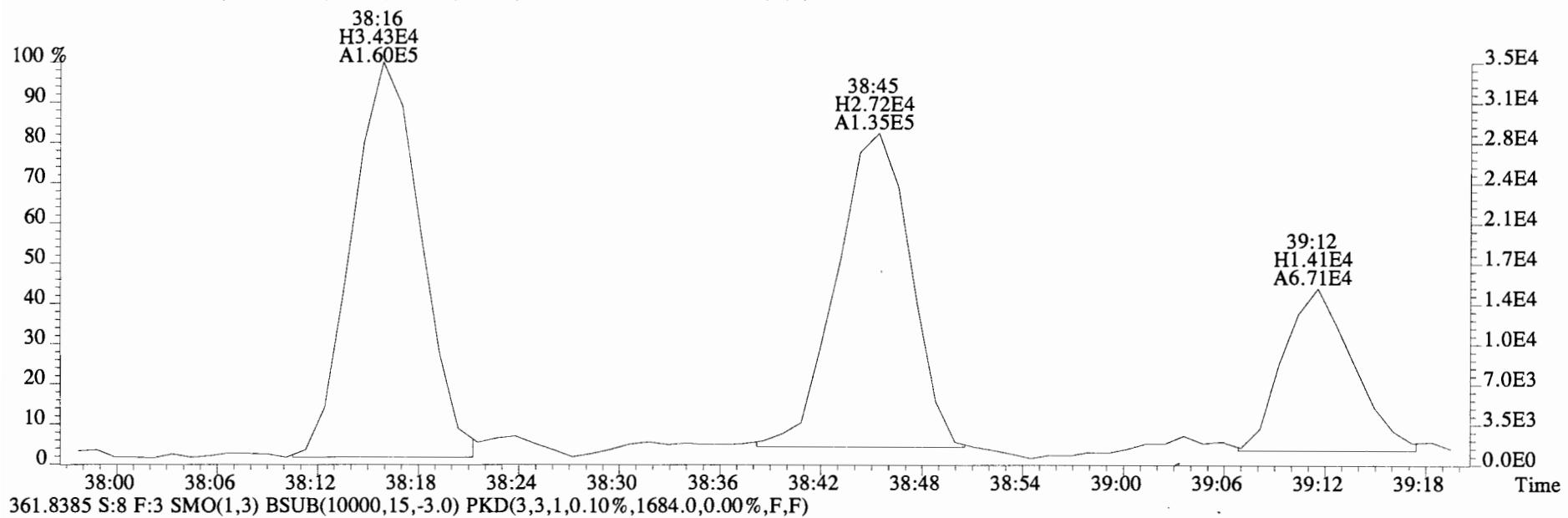
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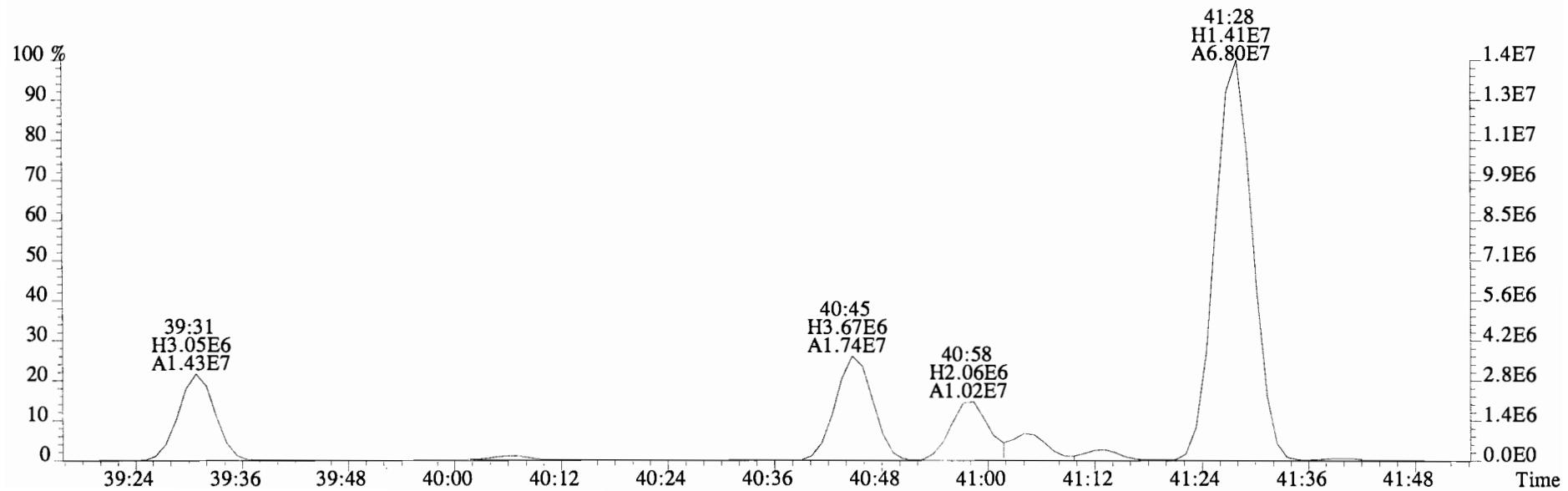
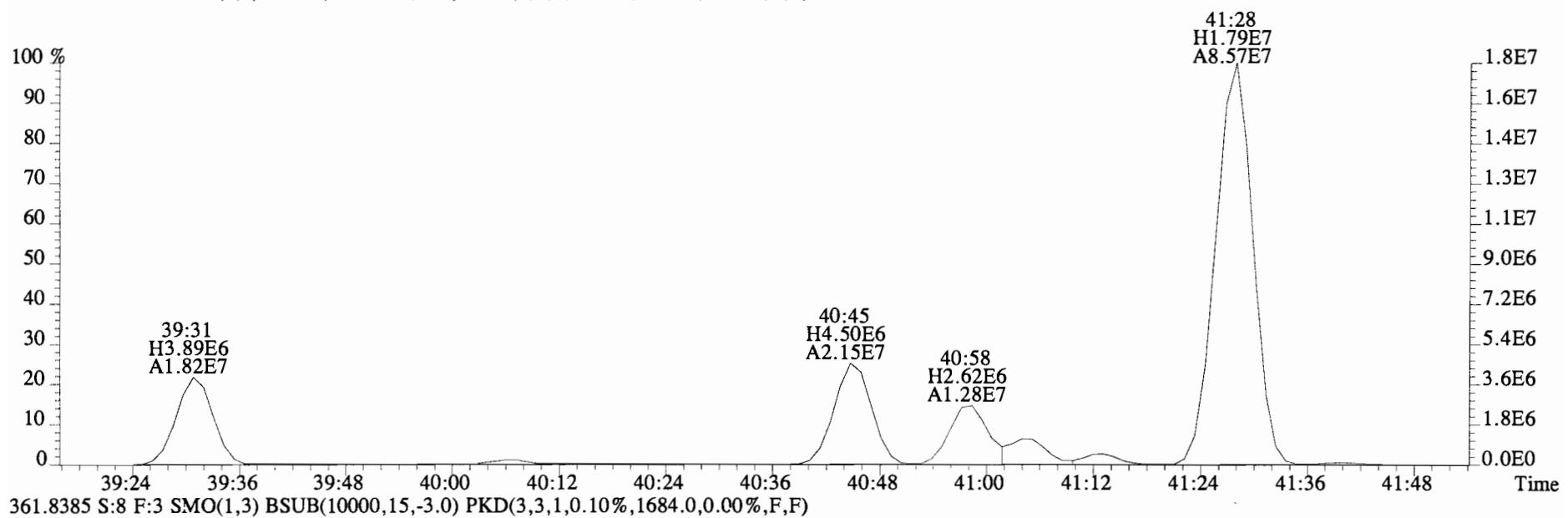
File:141024E2 #1-761 Acq:25-OCT-2014 09:35:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-04@20X CC-CB-04-20141013-S Exp:PCB_ZB1
359.8415 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1772.0,0.00%,F,F)



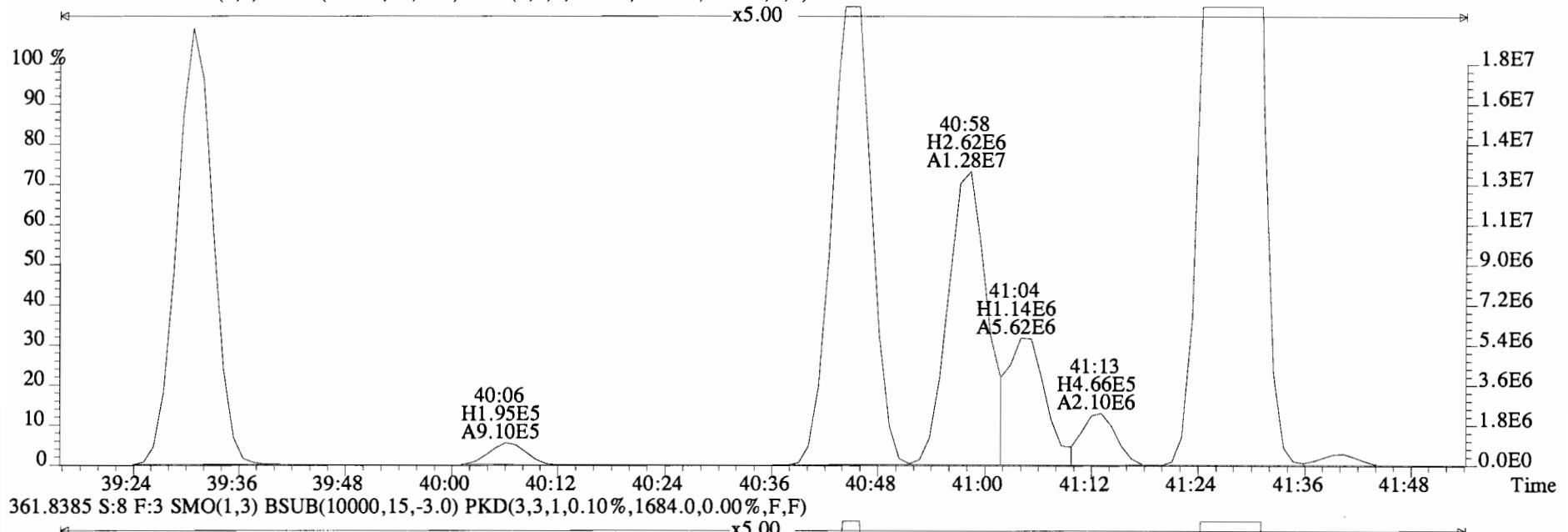
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-04@20X CC-CB-04-20141013-S Exp:PCB_ZB1
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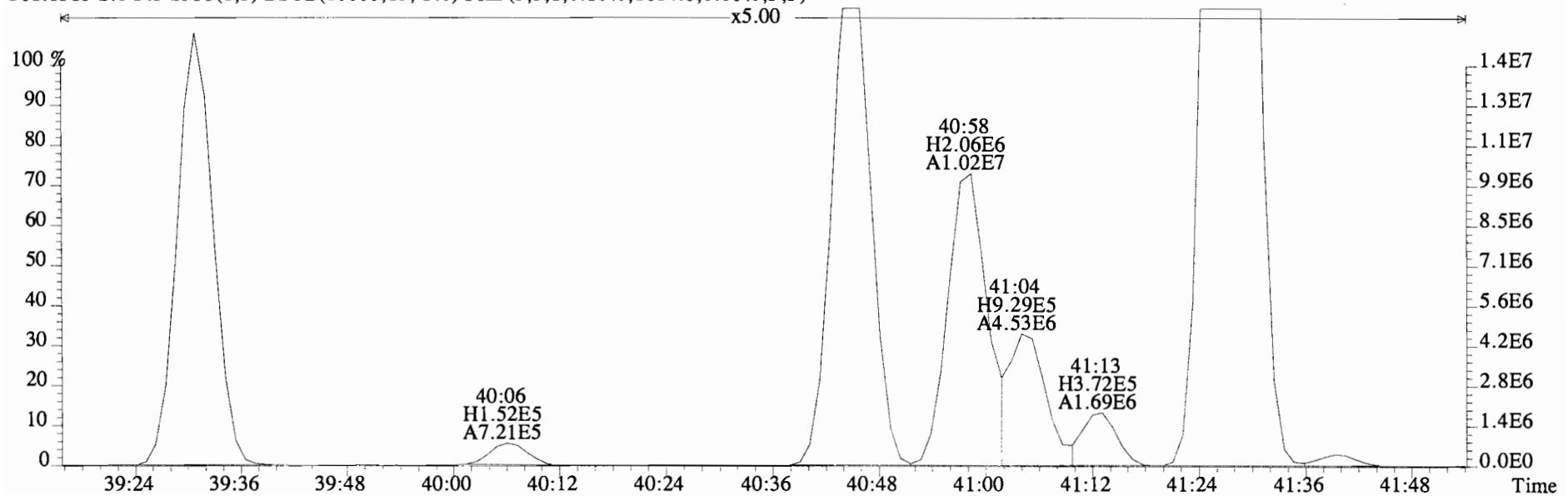
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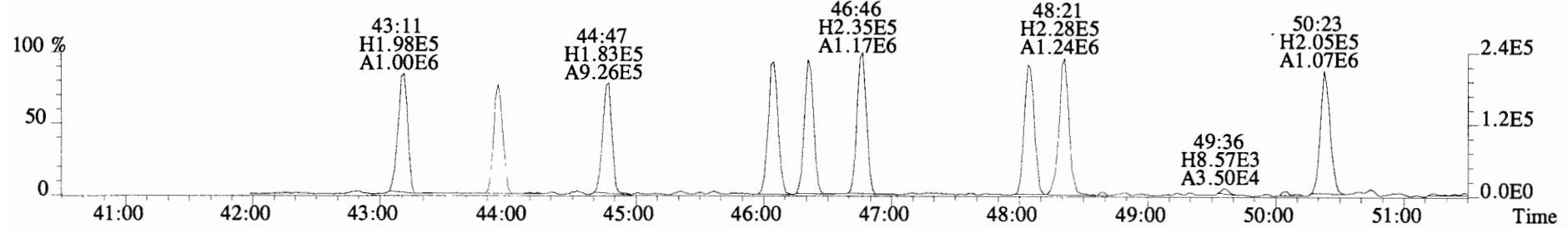
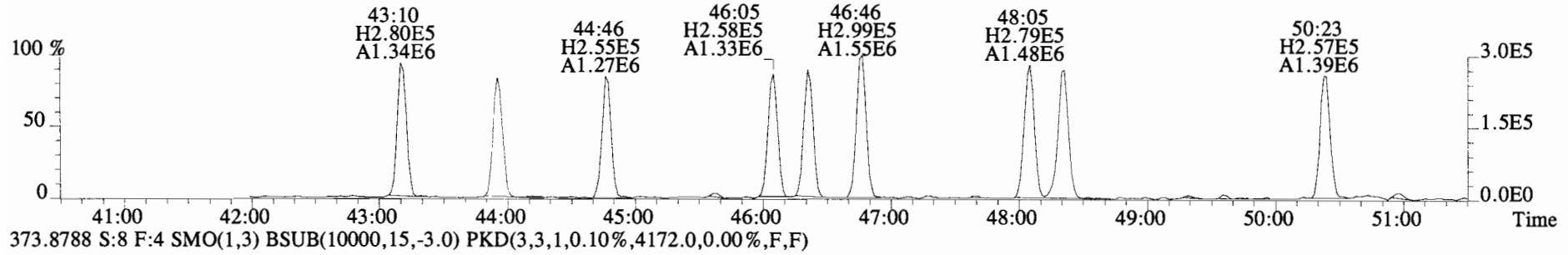
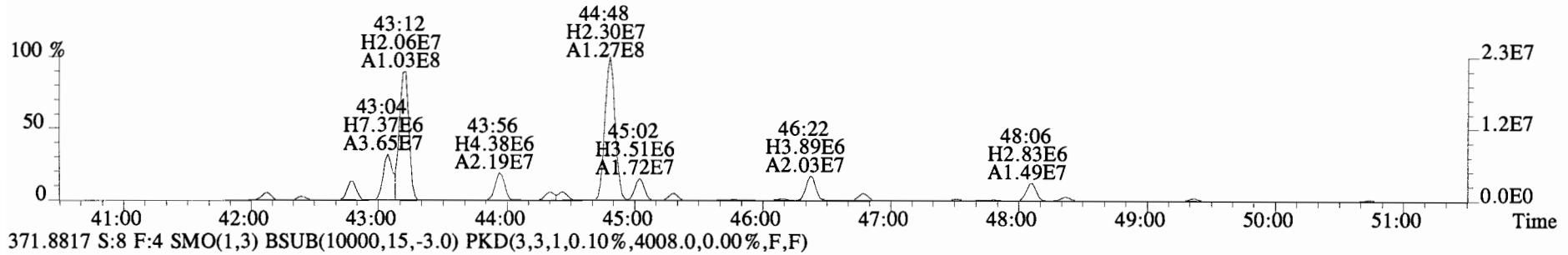
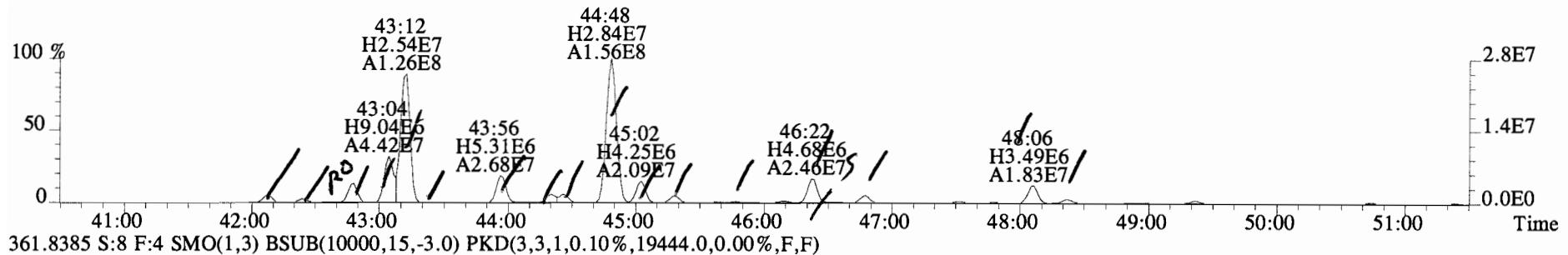
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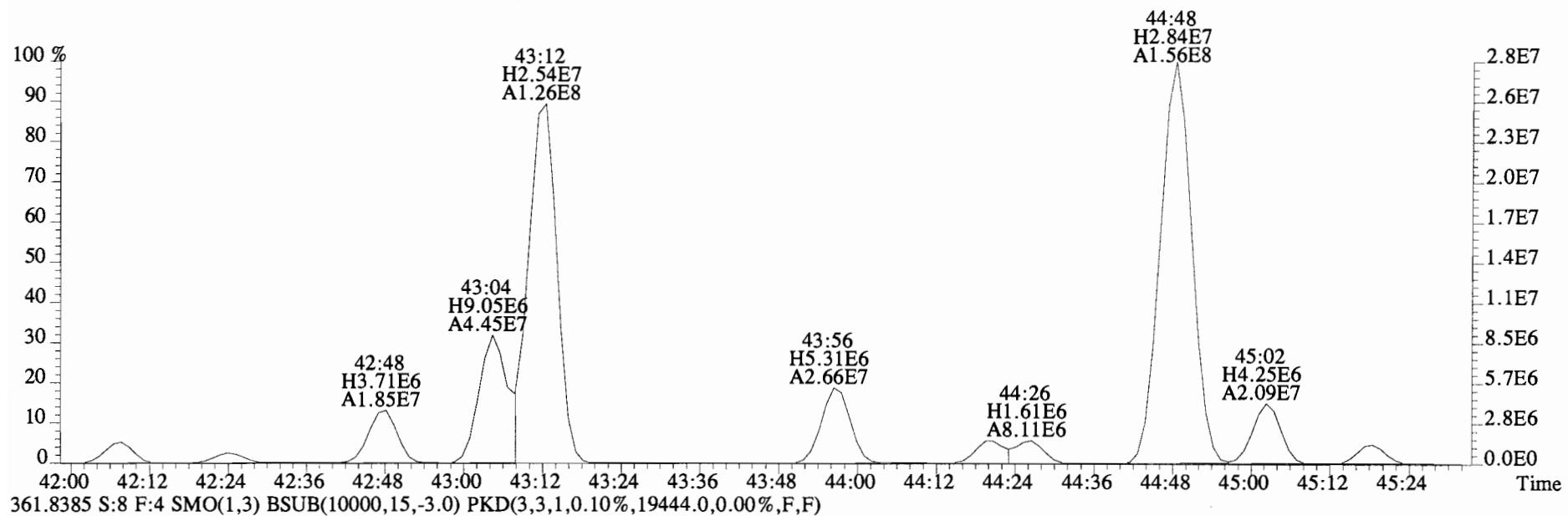
361.8385 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1684.0,0.00%,F,F)



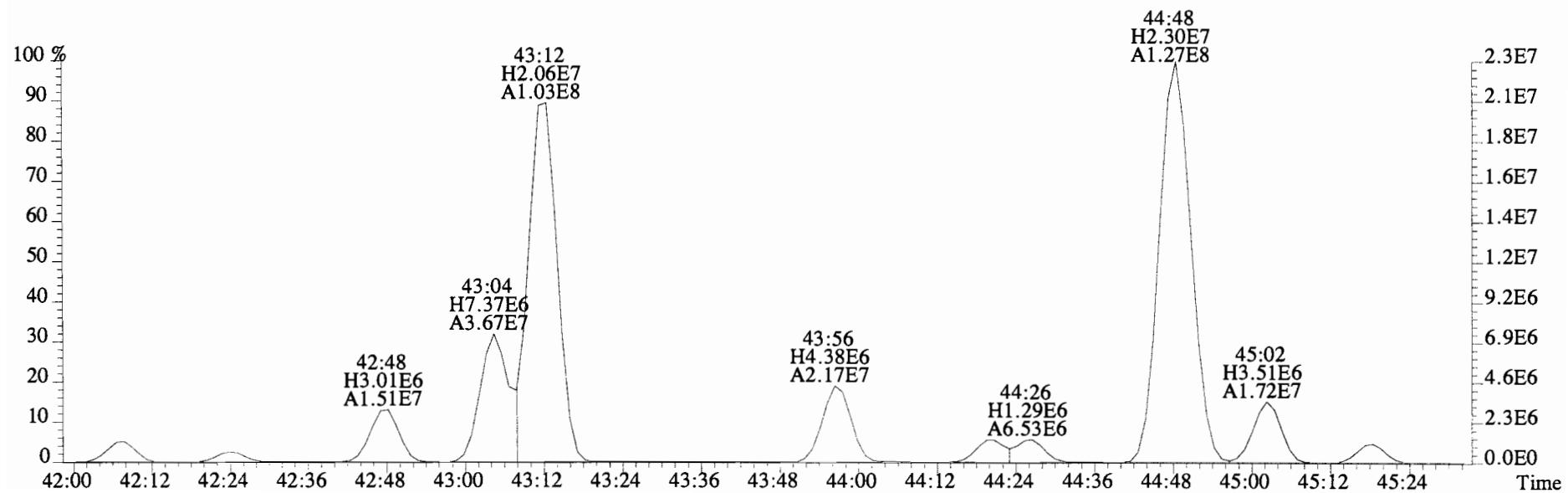
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 359.8415 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,20644.0,0.00%,F,F)



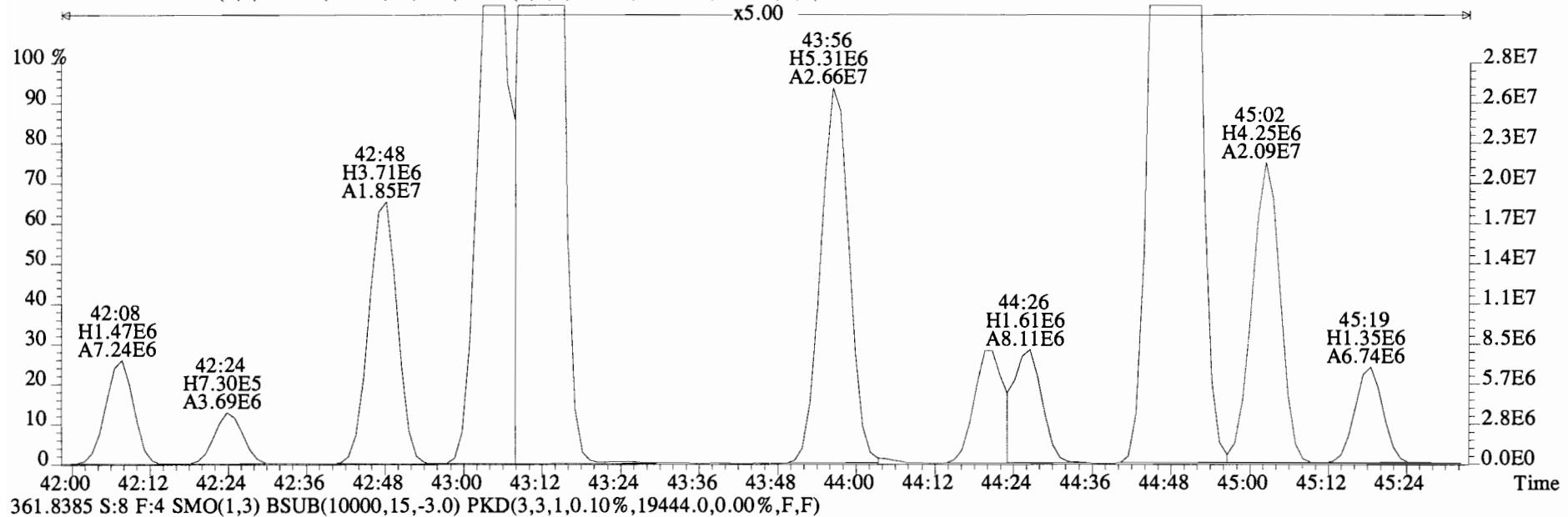
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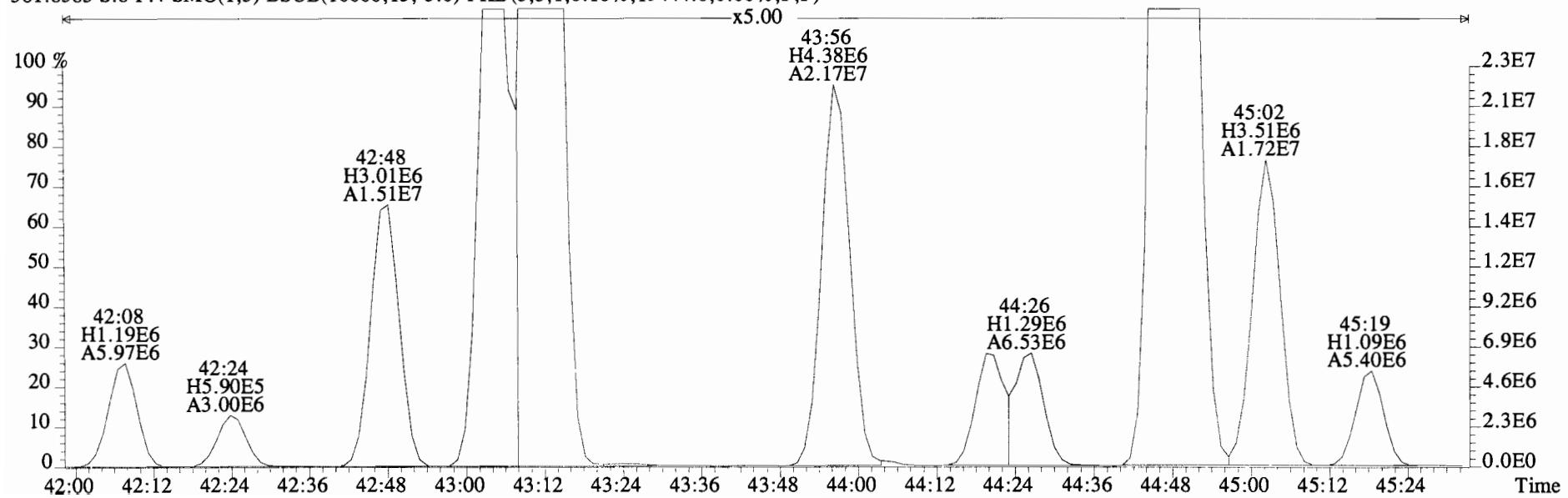
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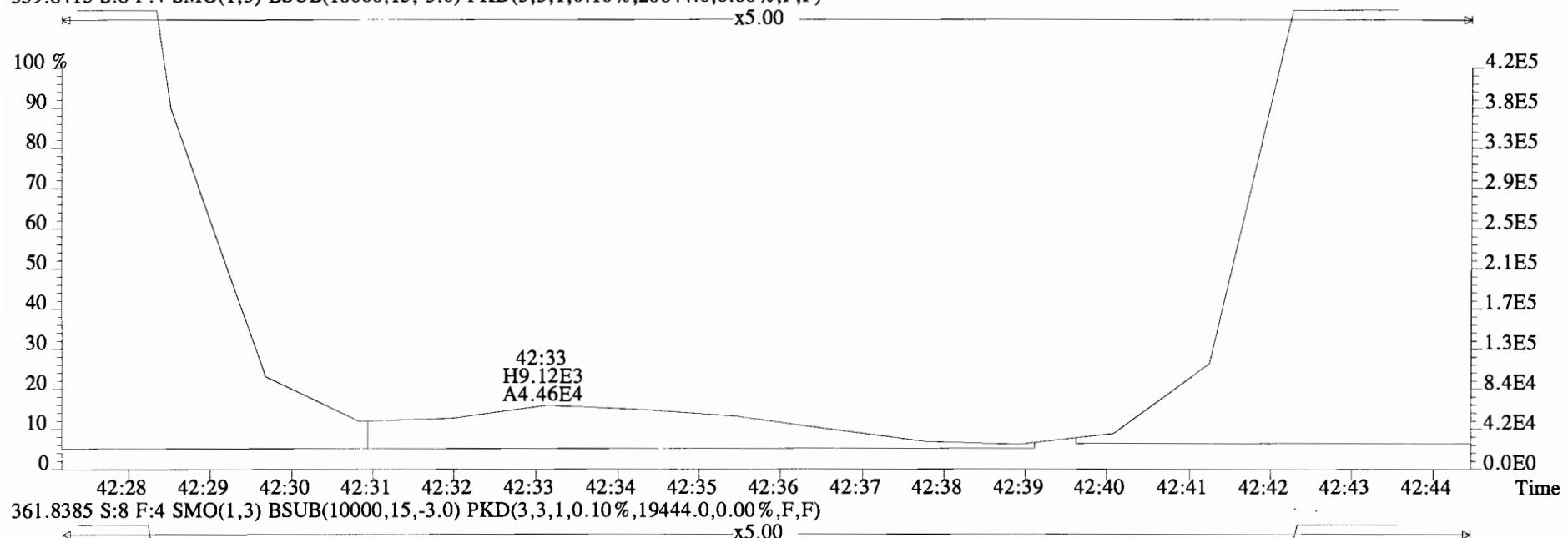
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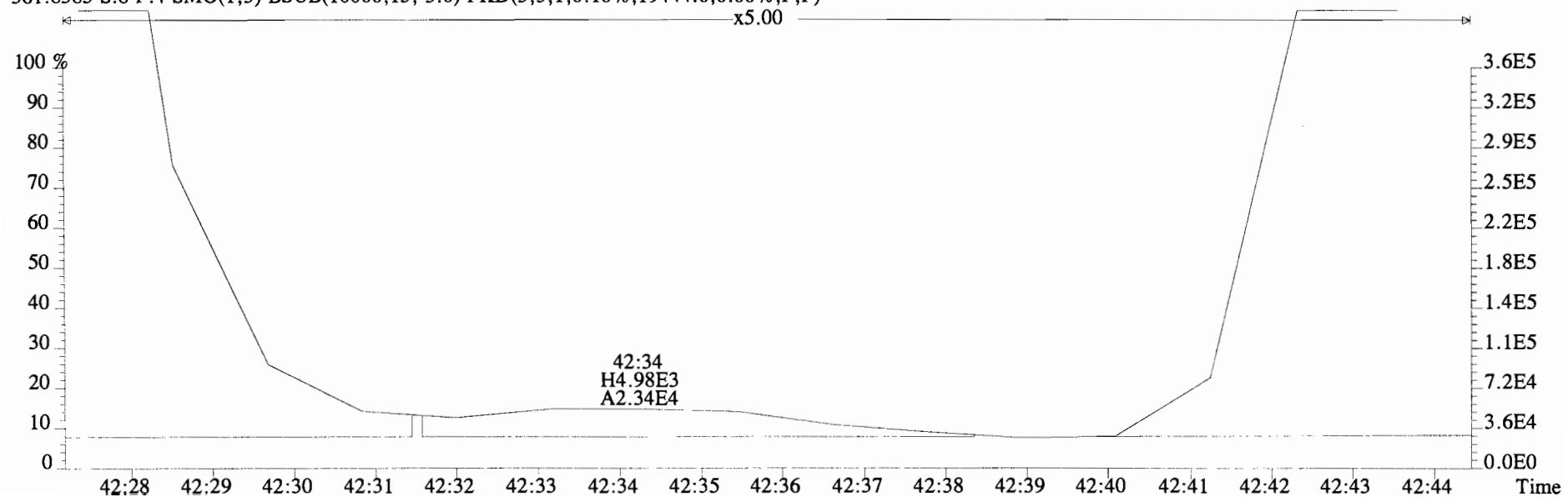
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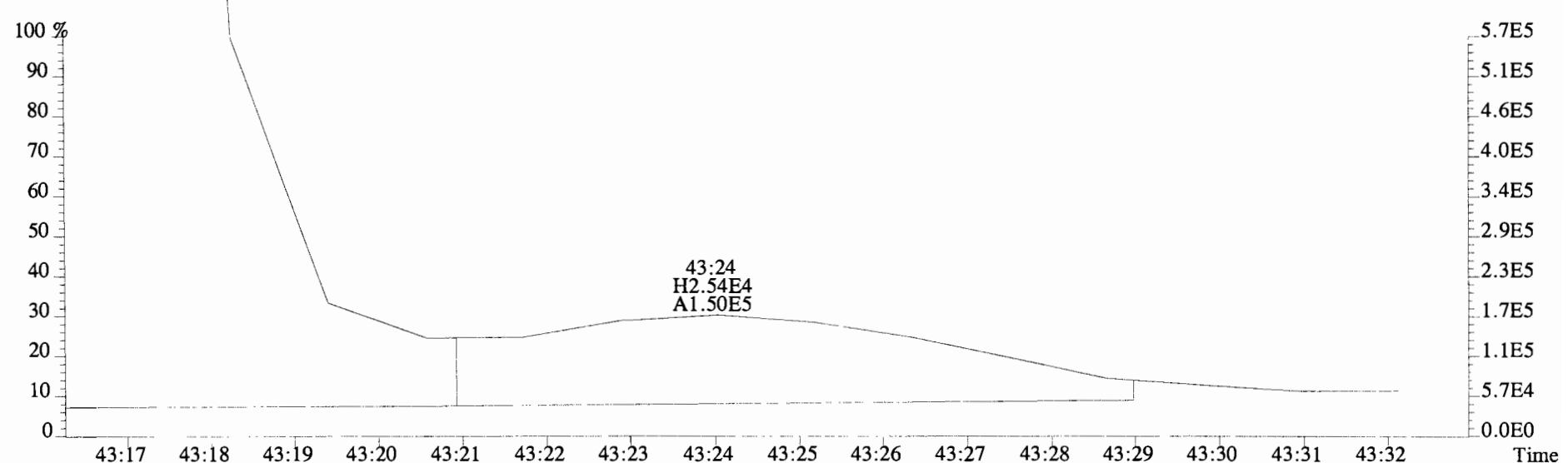
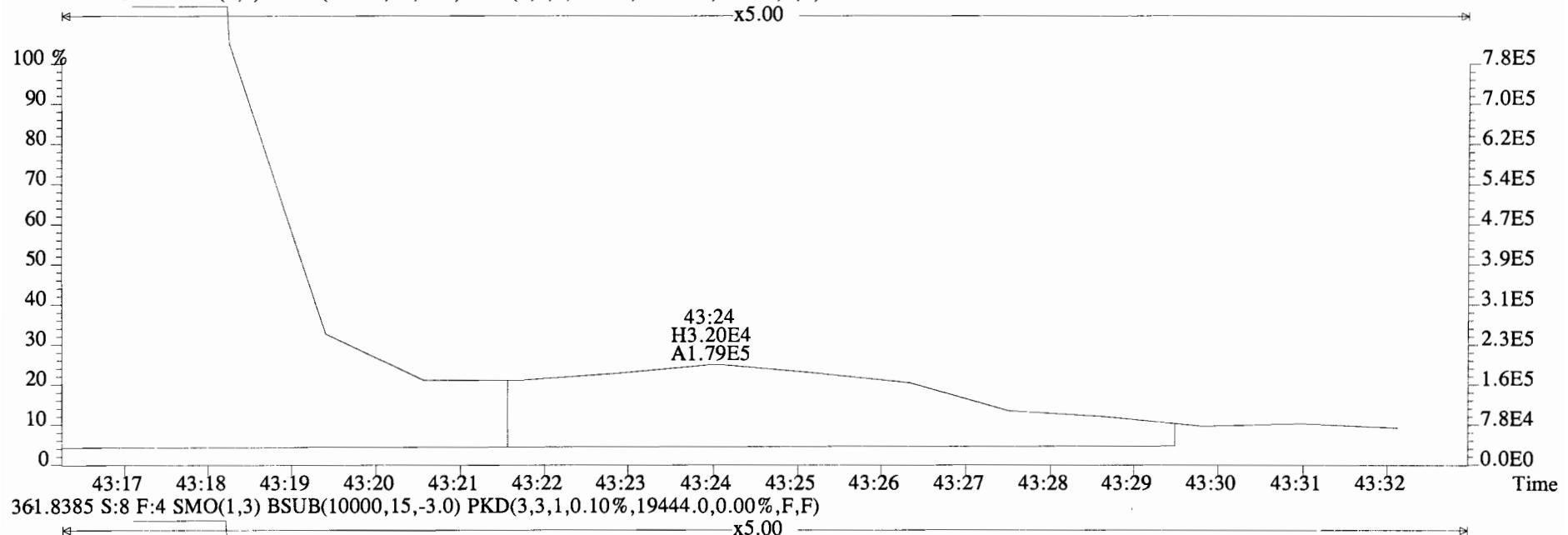
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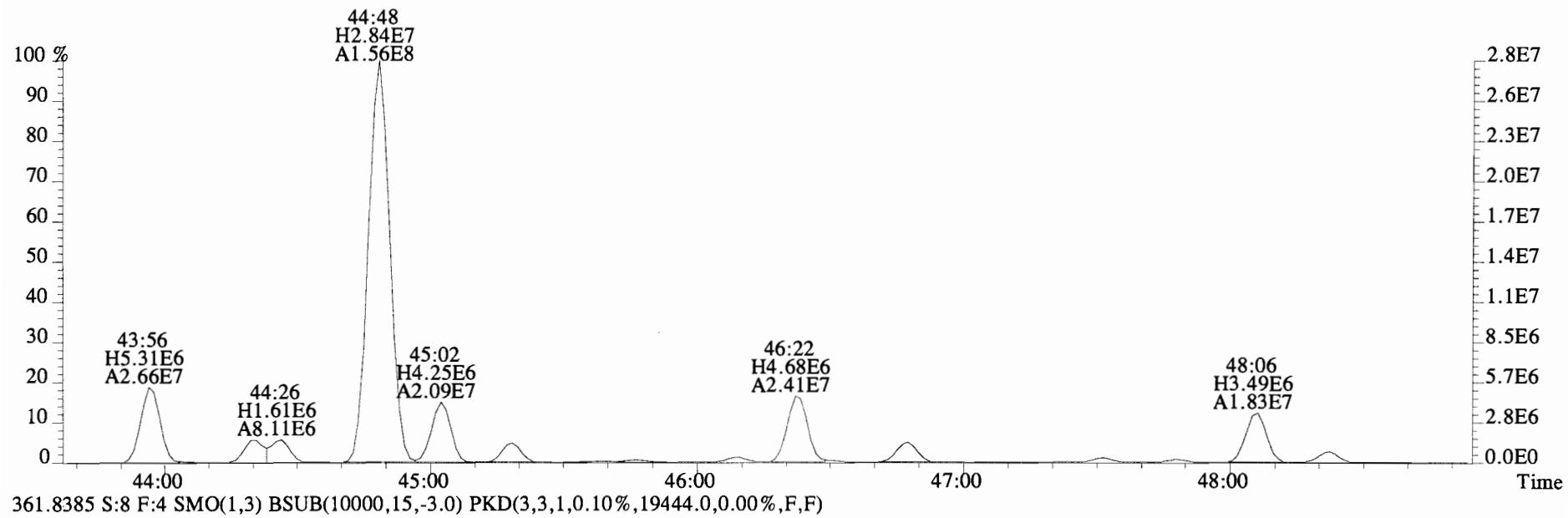
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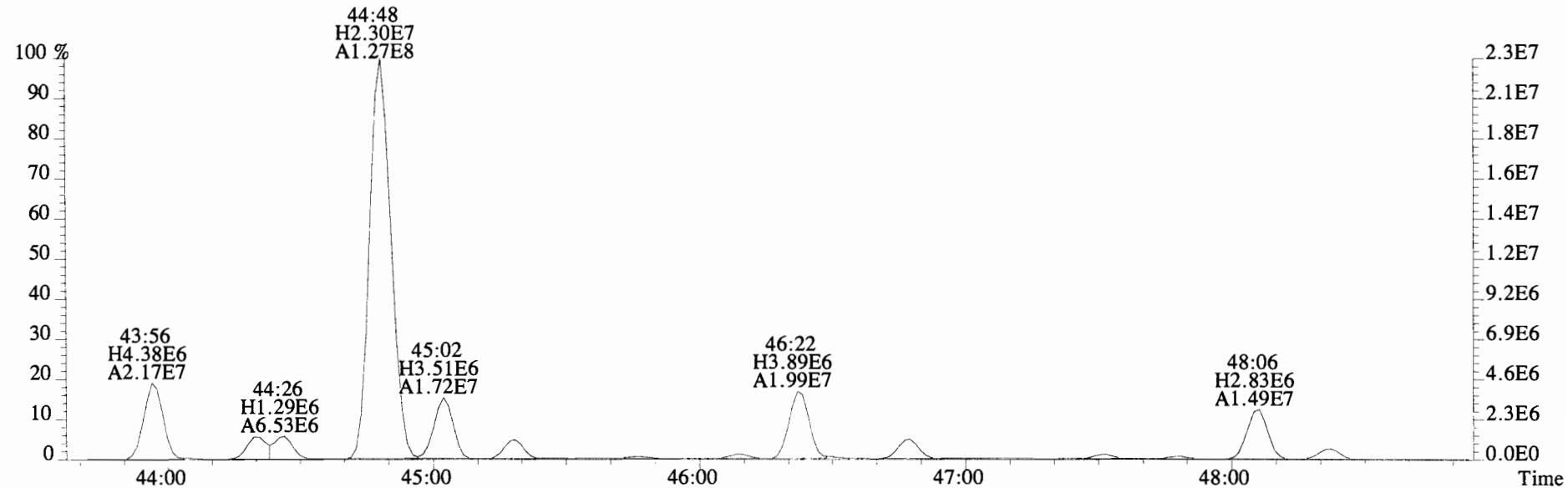
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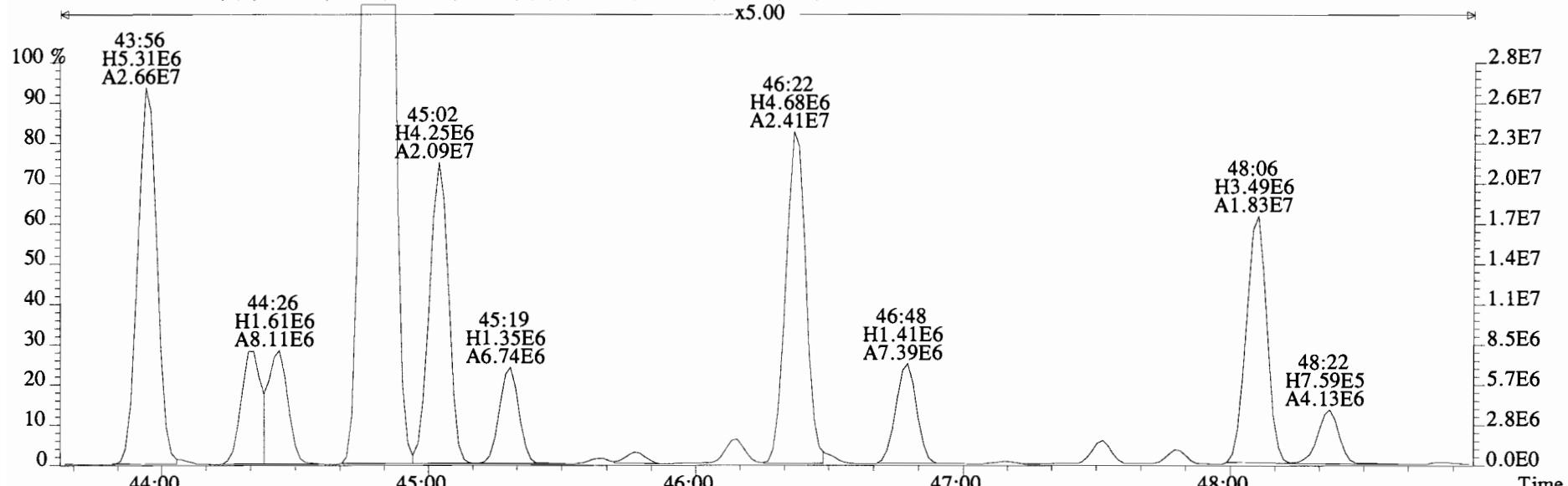
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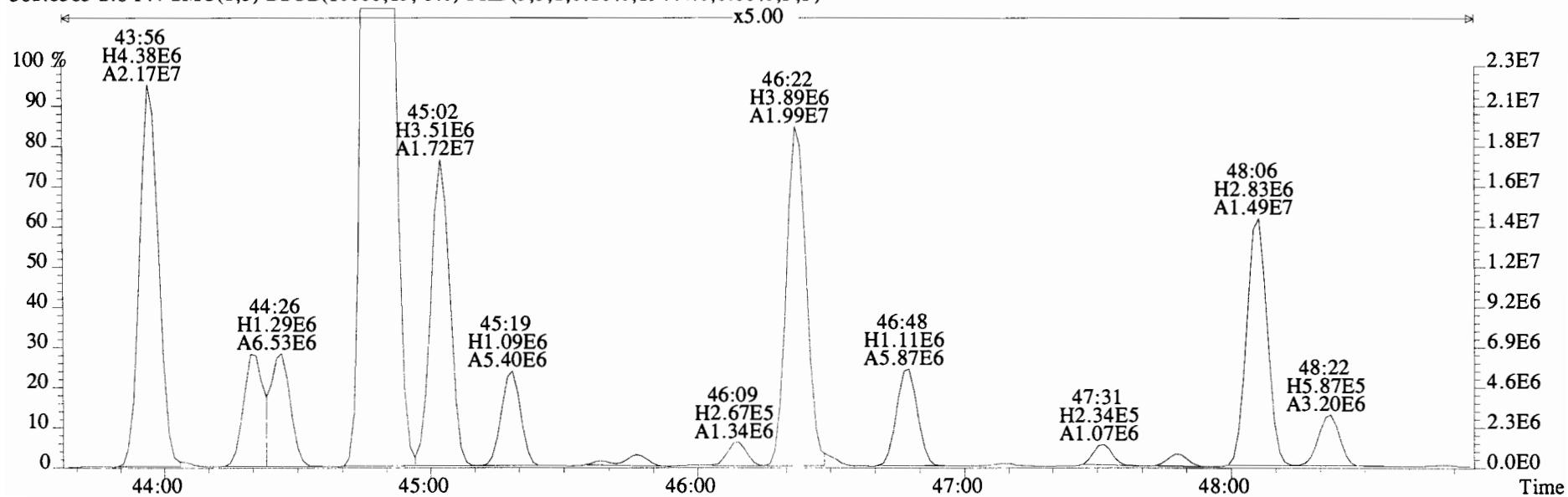
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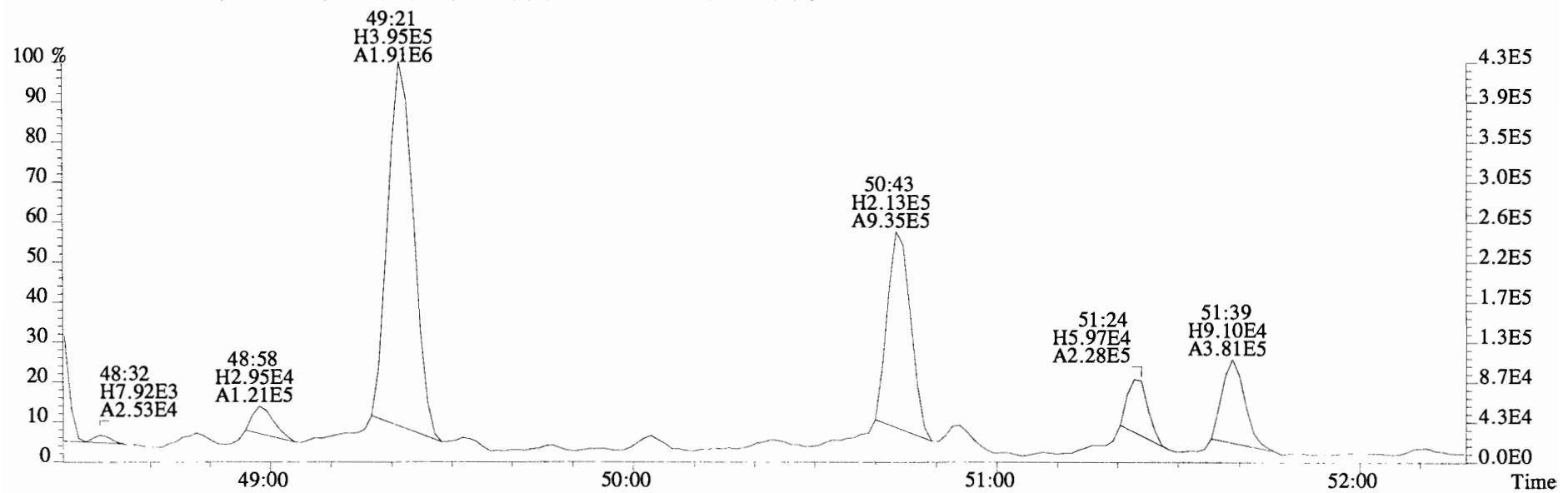
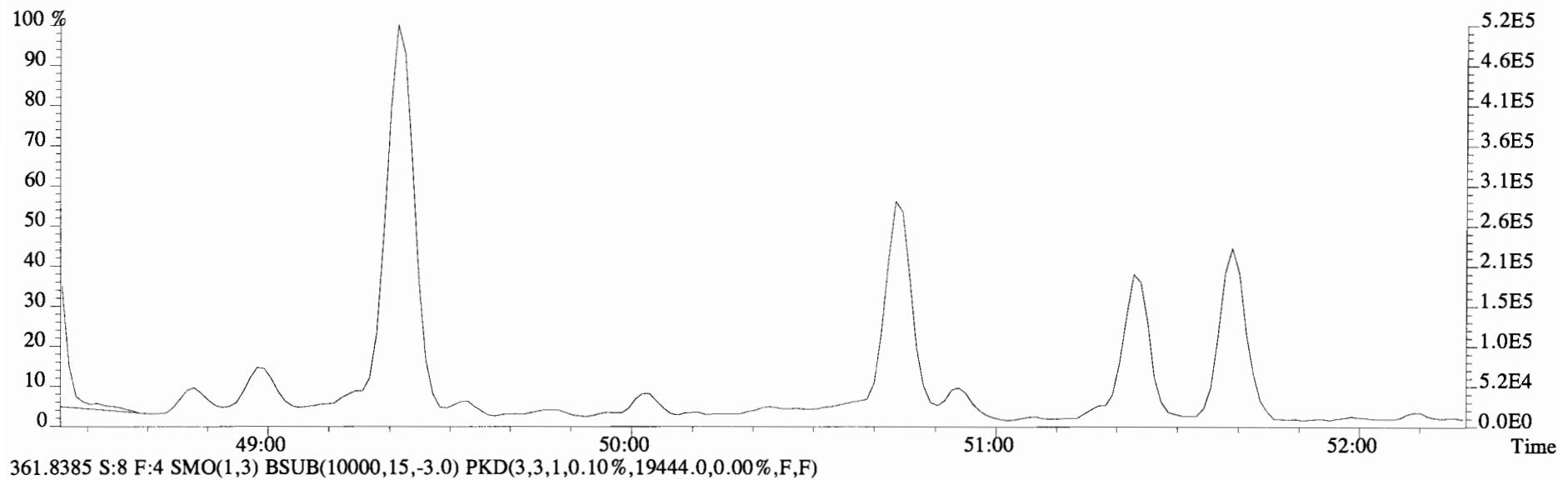
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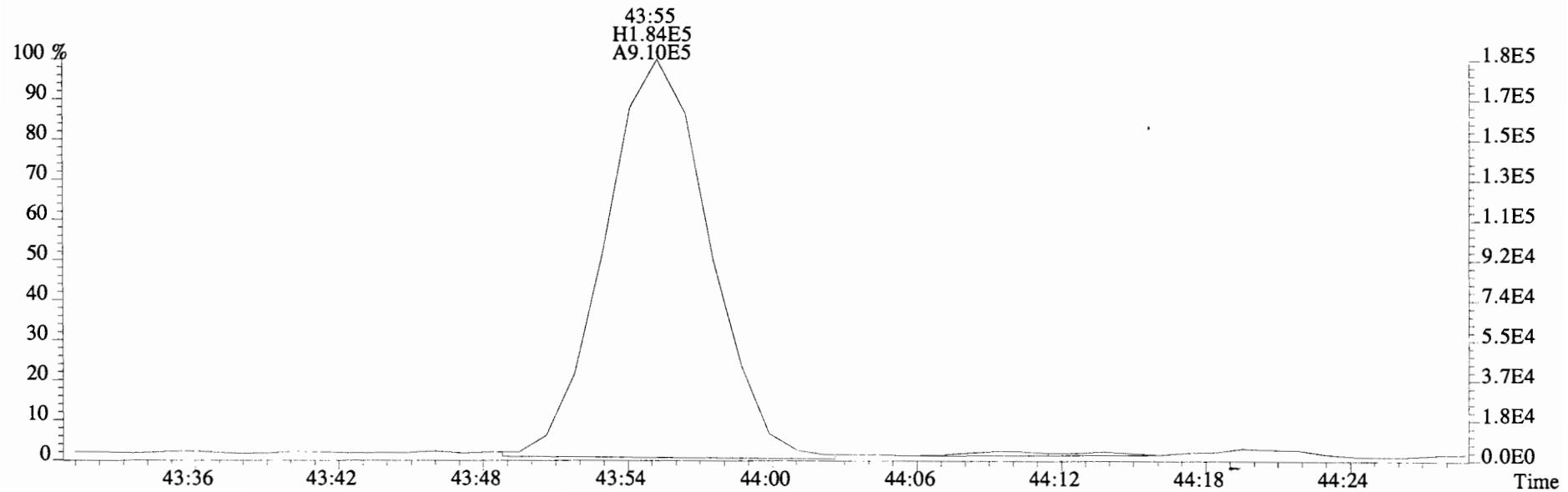
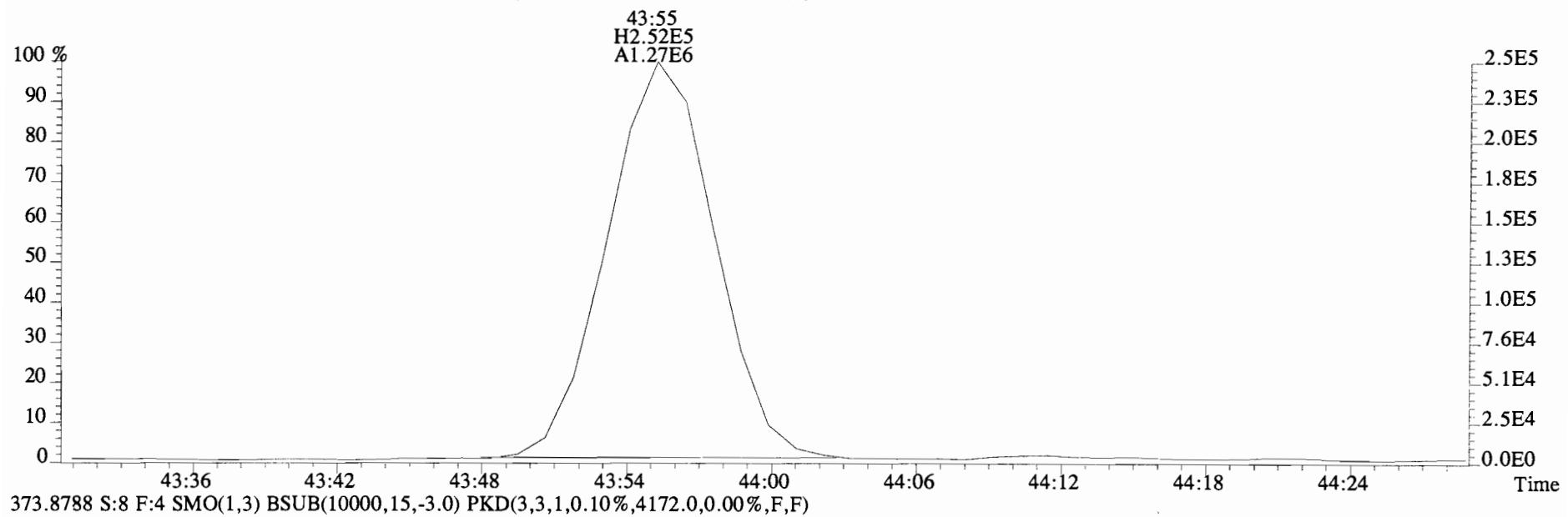
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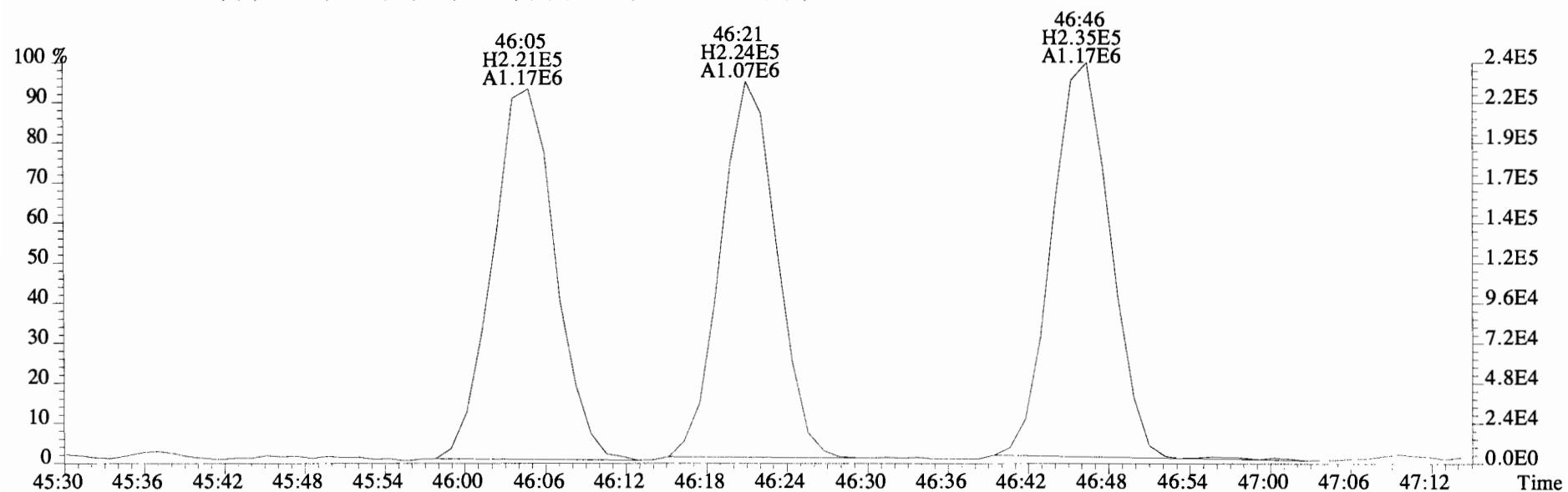
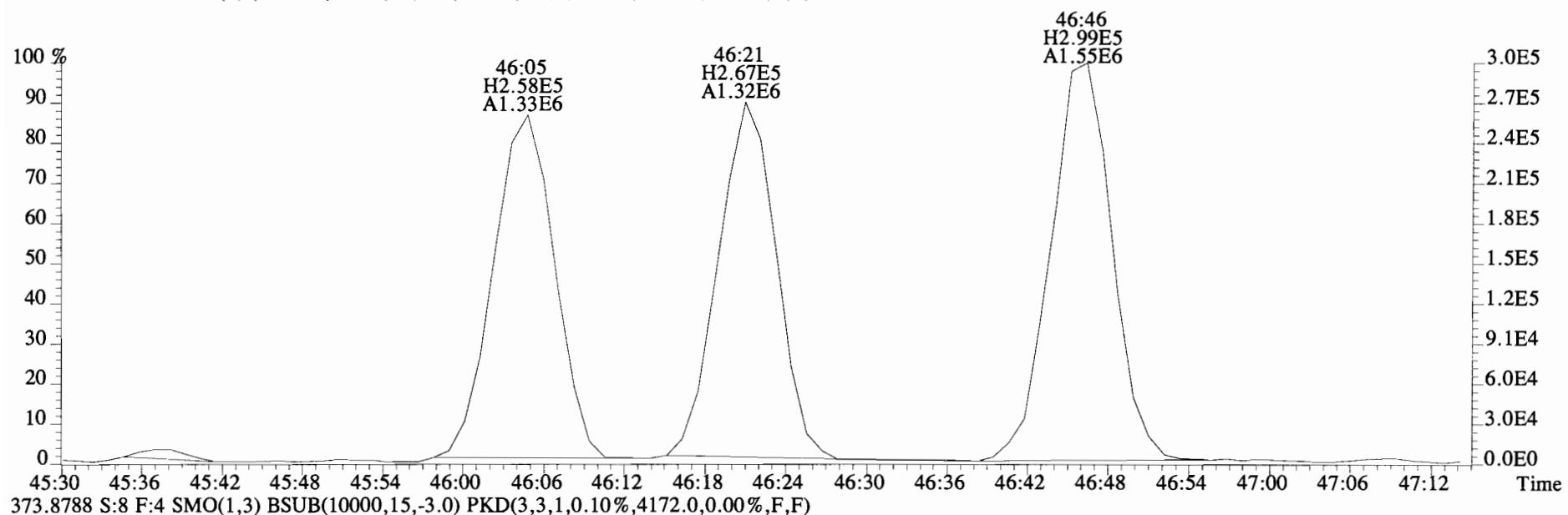
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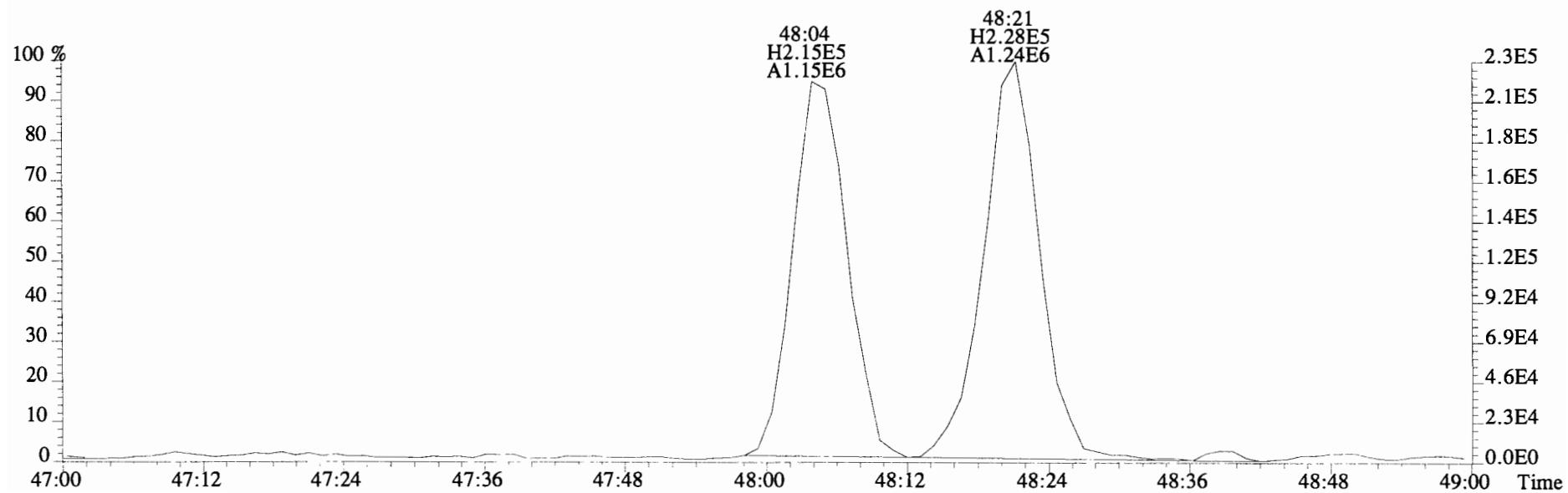
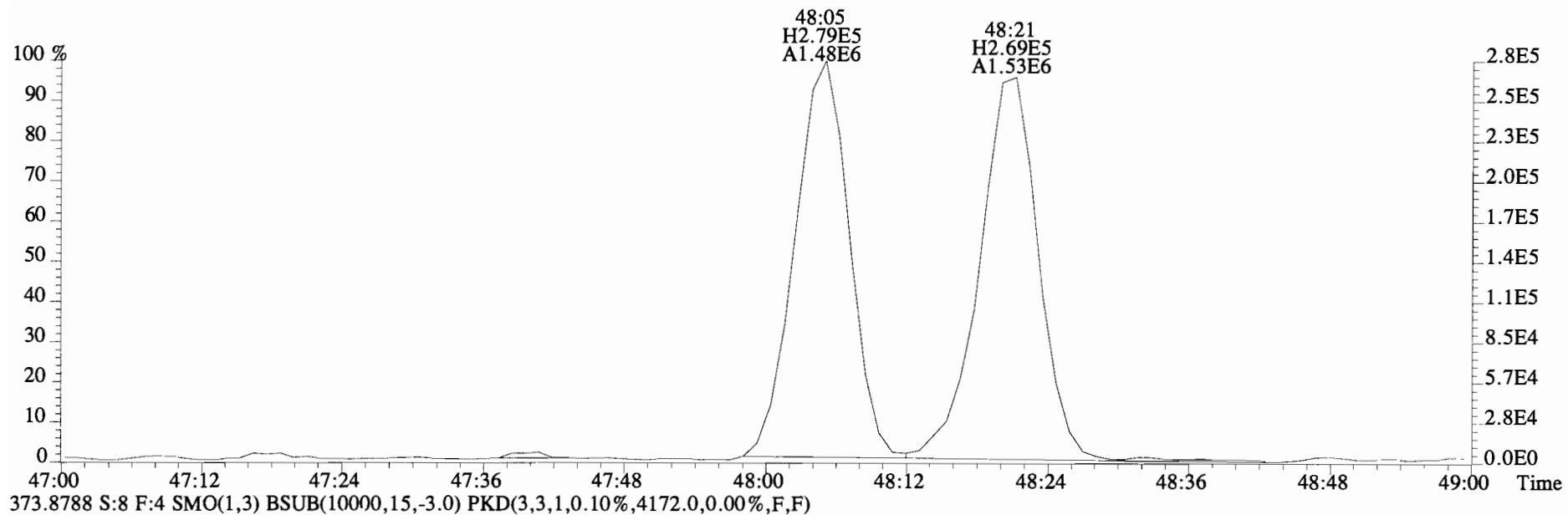
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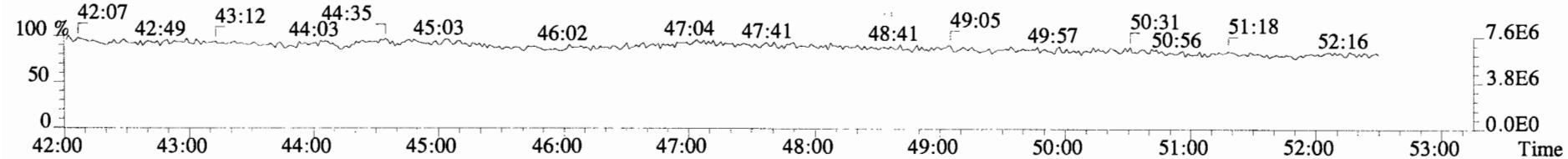
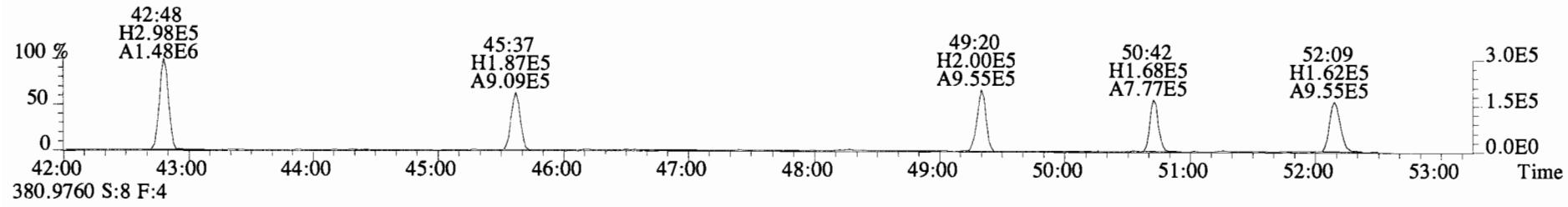
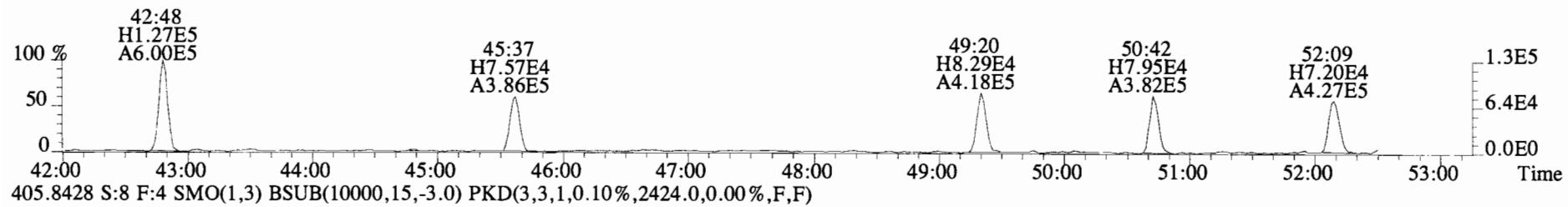
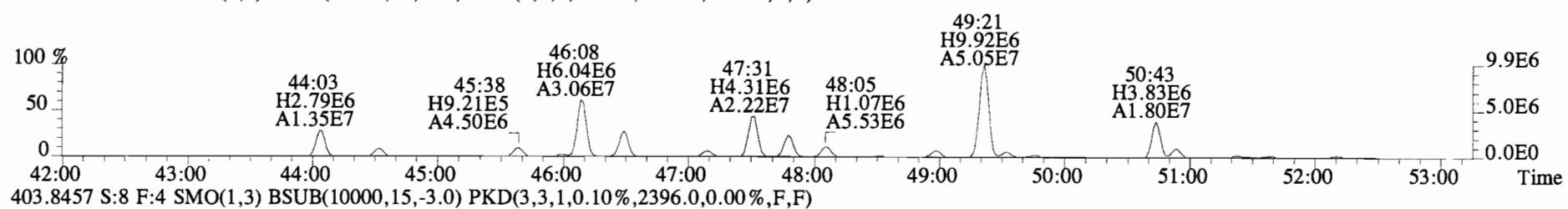
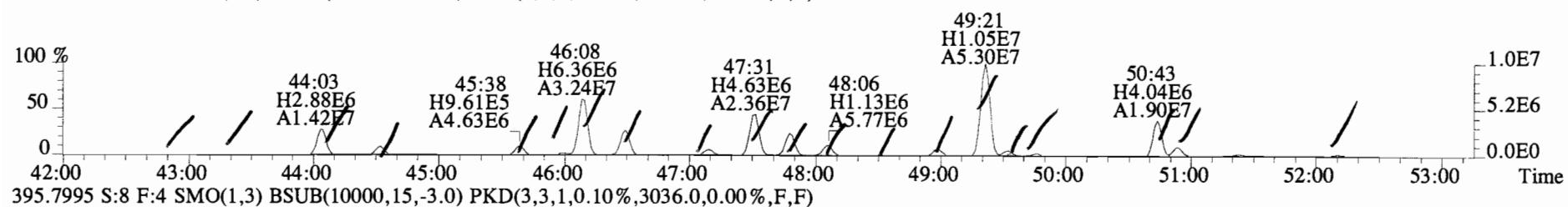
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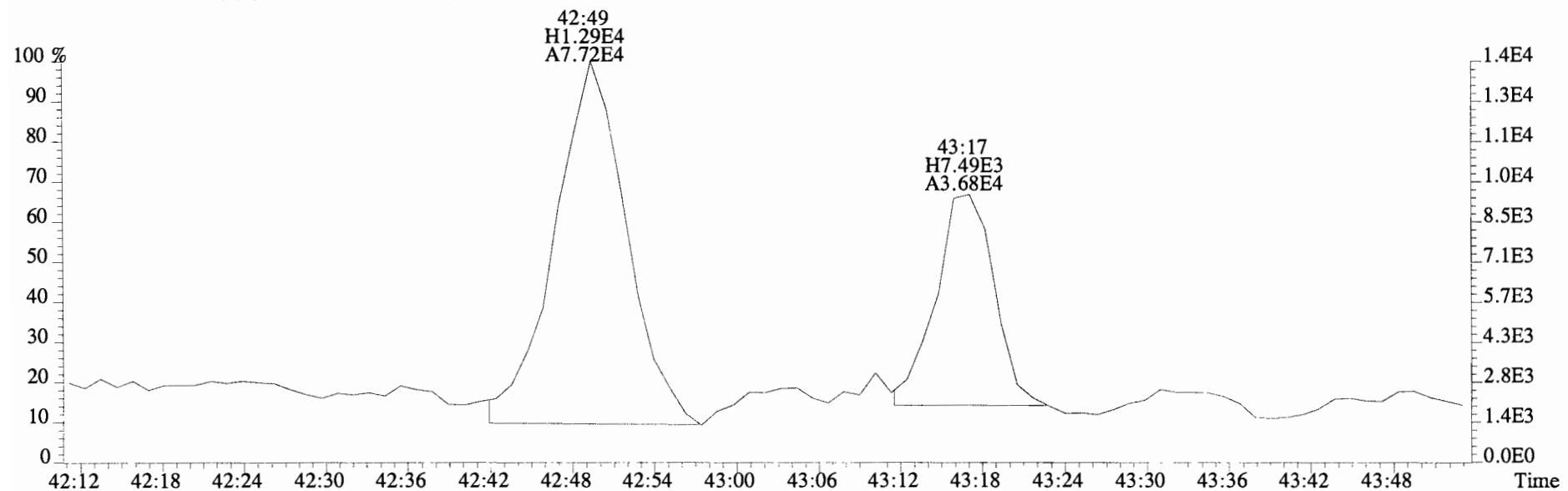
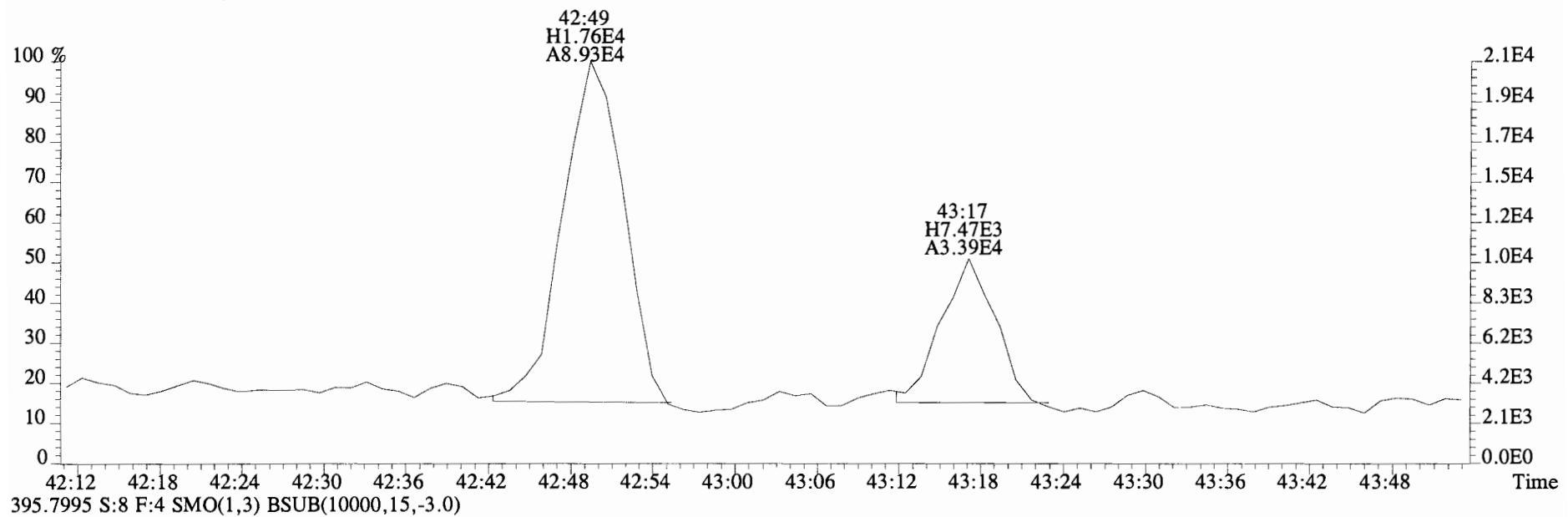
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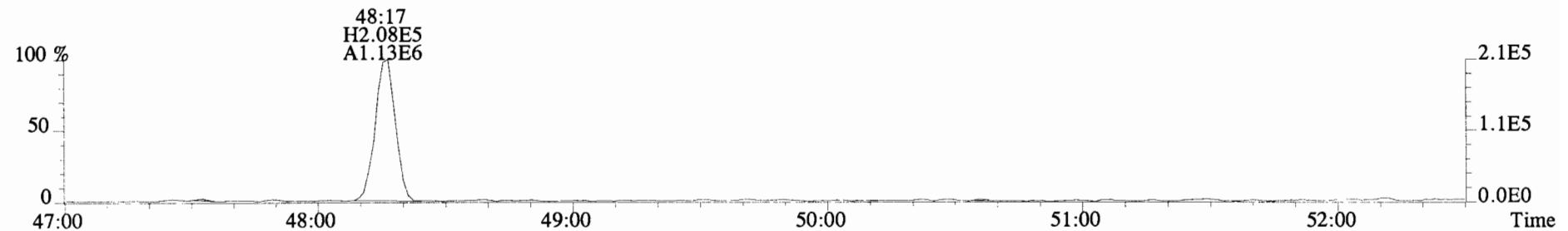
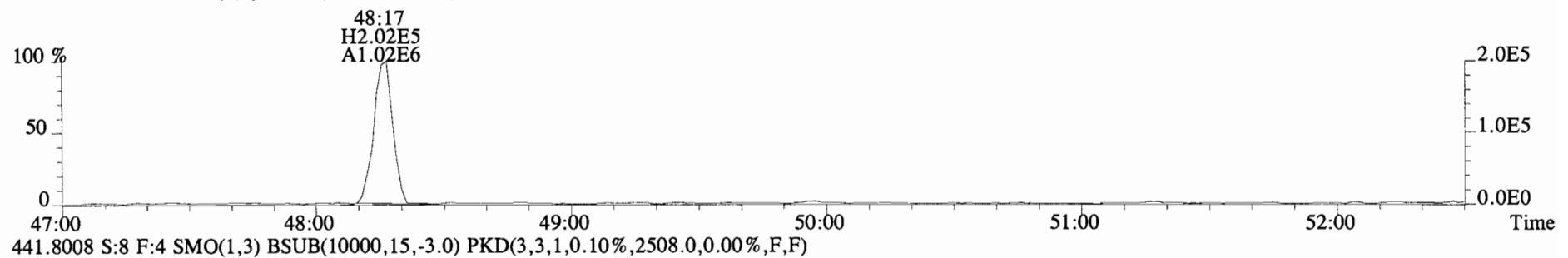
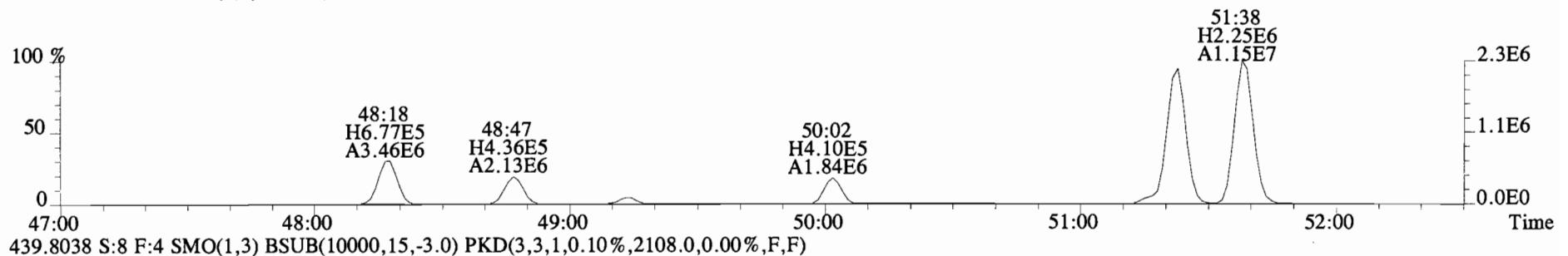
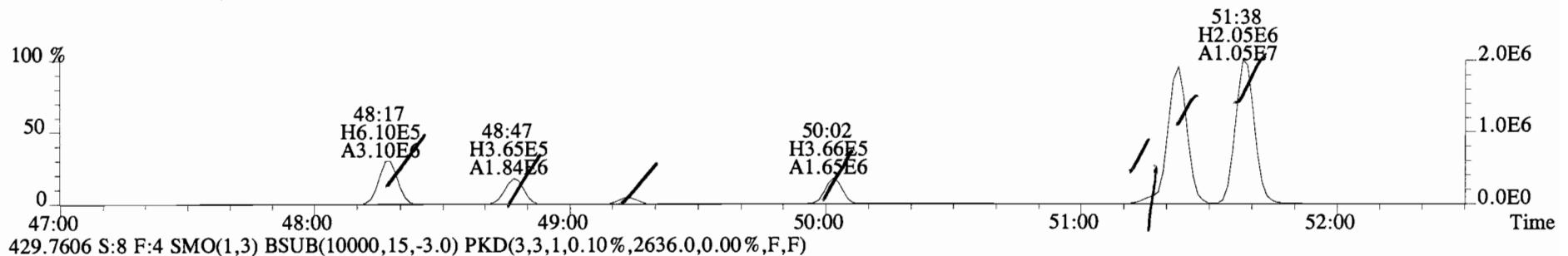
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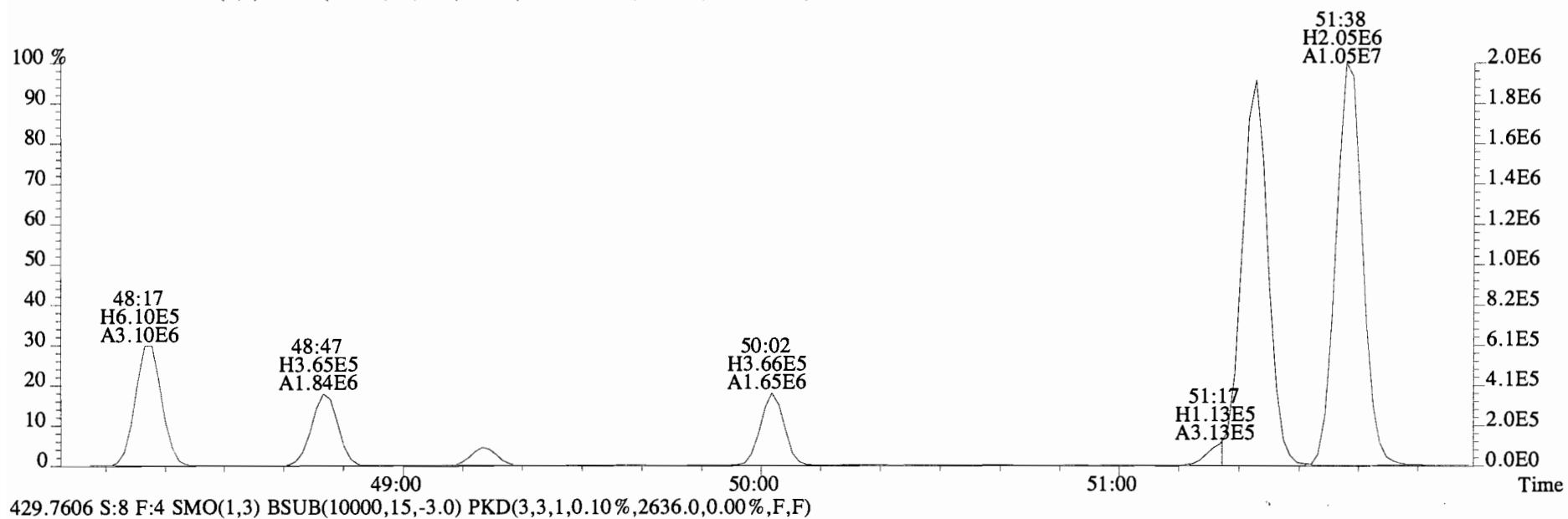
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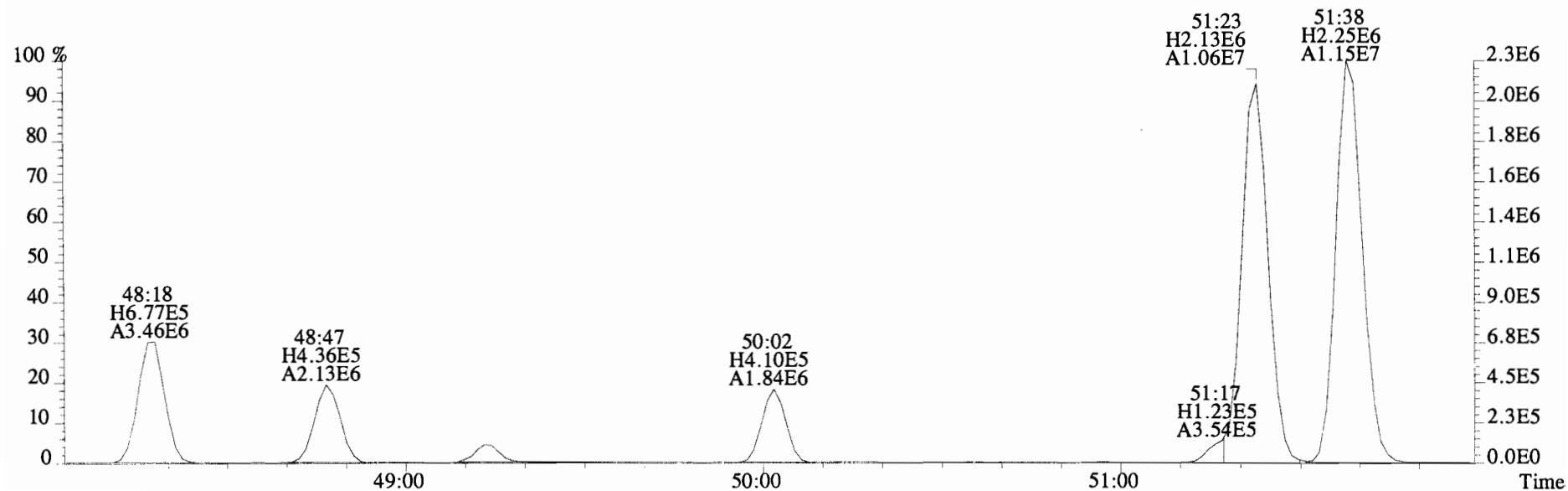
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-04@20X CC-CB-04-20141013-S Exp:PCB_ZB1
427.7635 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2108.0,0.00%,F,F)



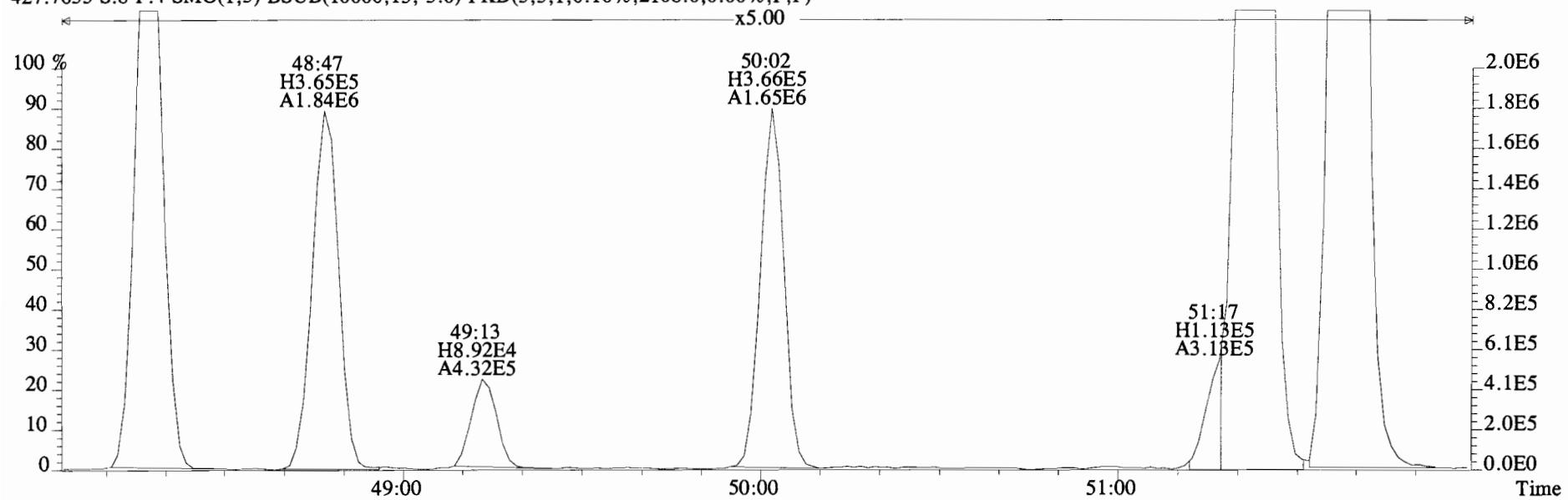
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-04@20X CC-CB-04-20141013-S Exp:PCB_ZB1
427.7635 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2108.0,0.00%,F,F)



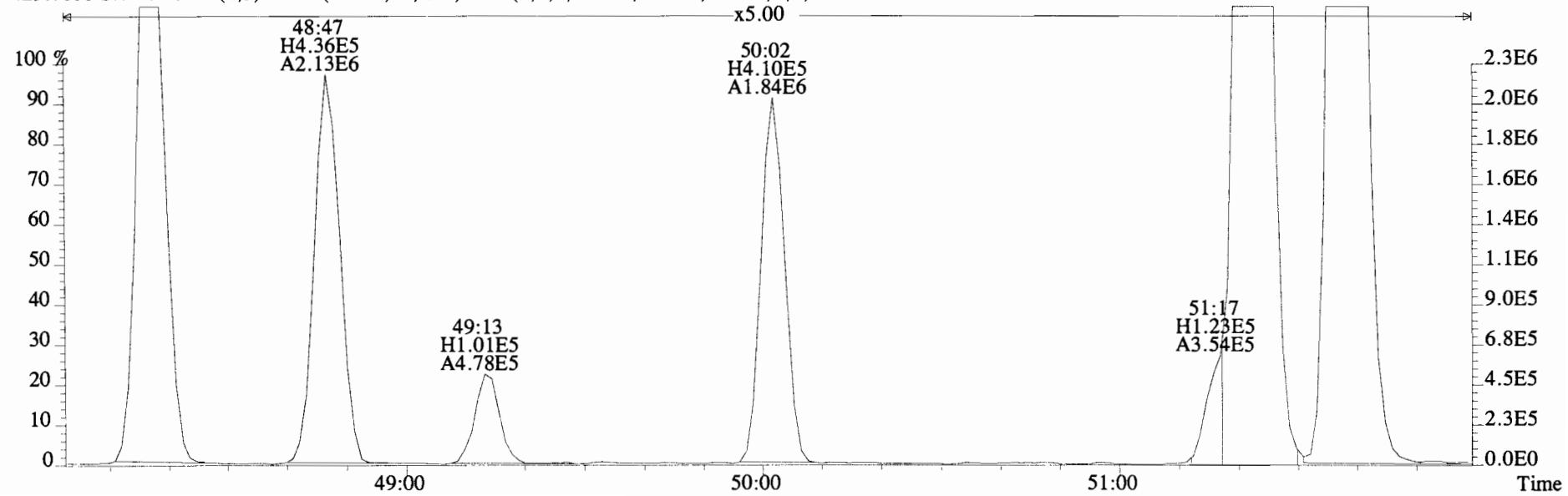
429.7606 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2636.0,0.00%,F,F)



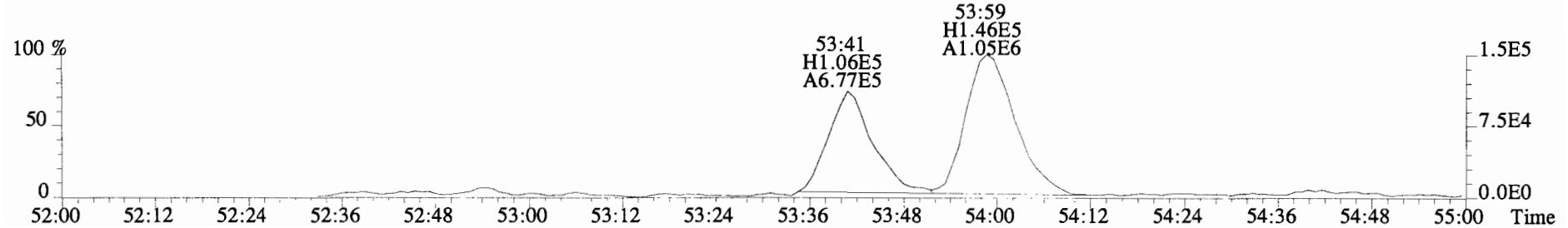
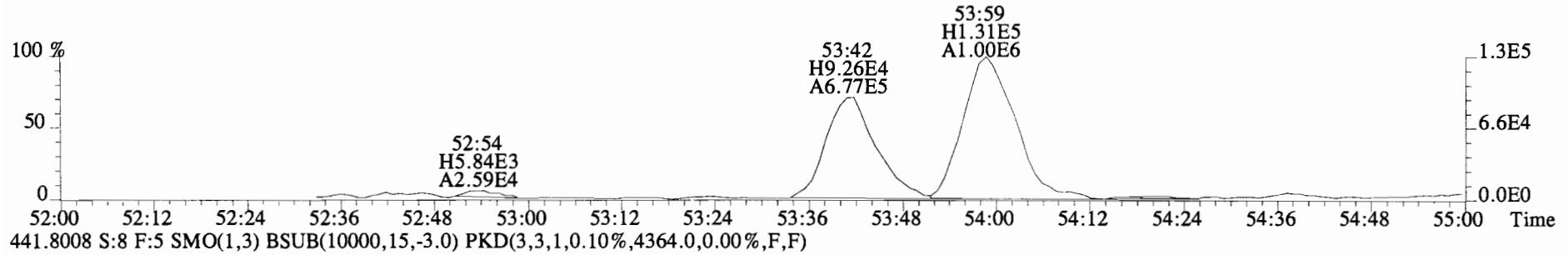
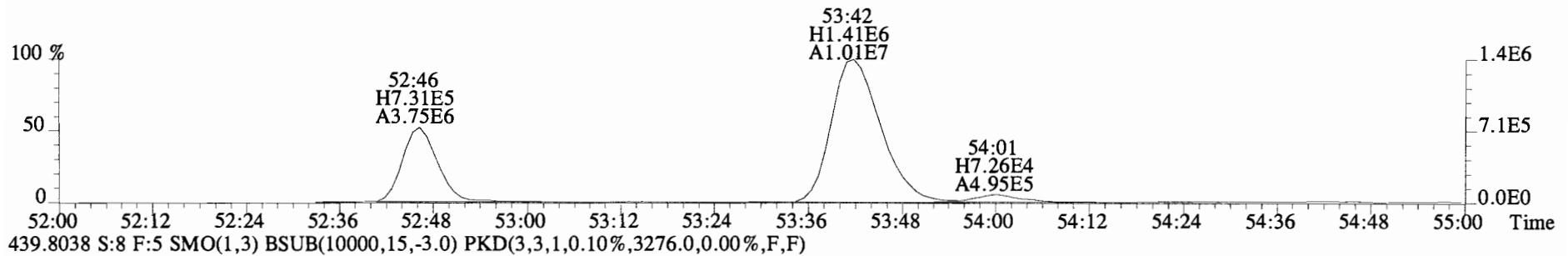
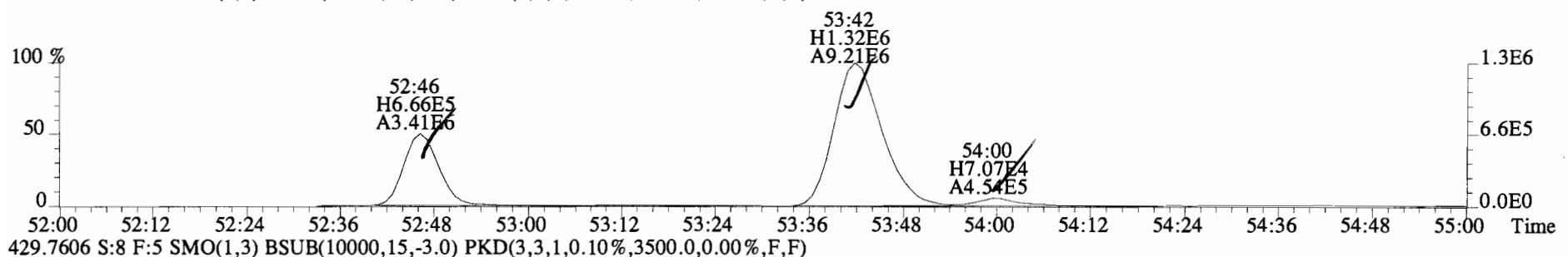
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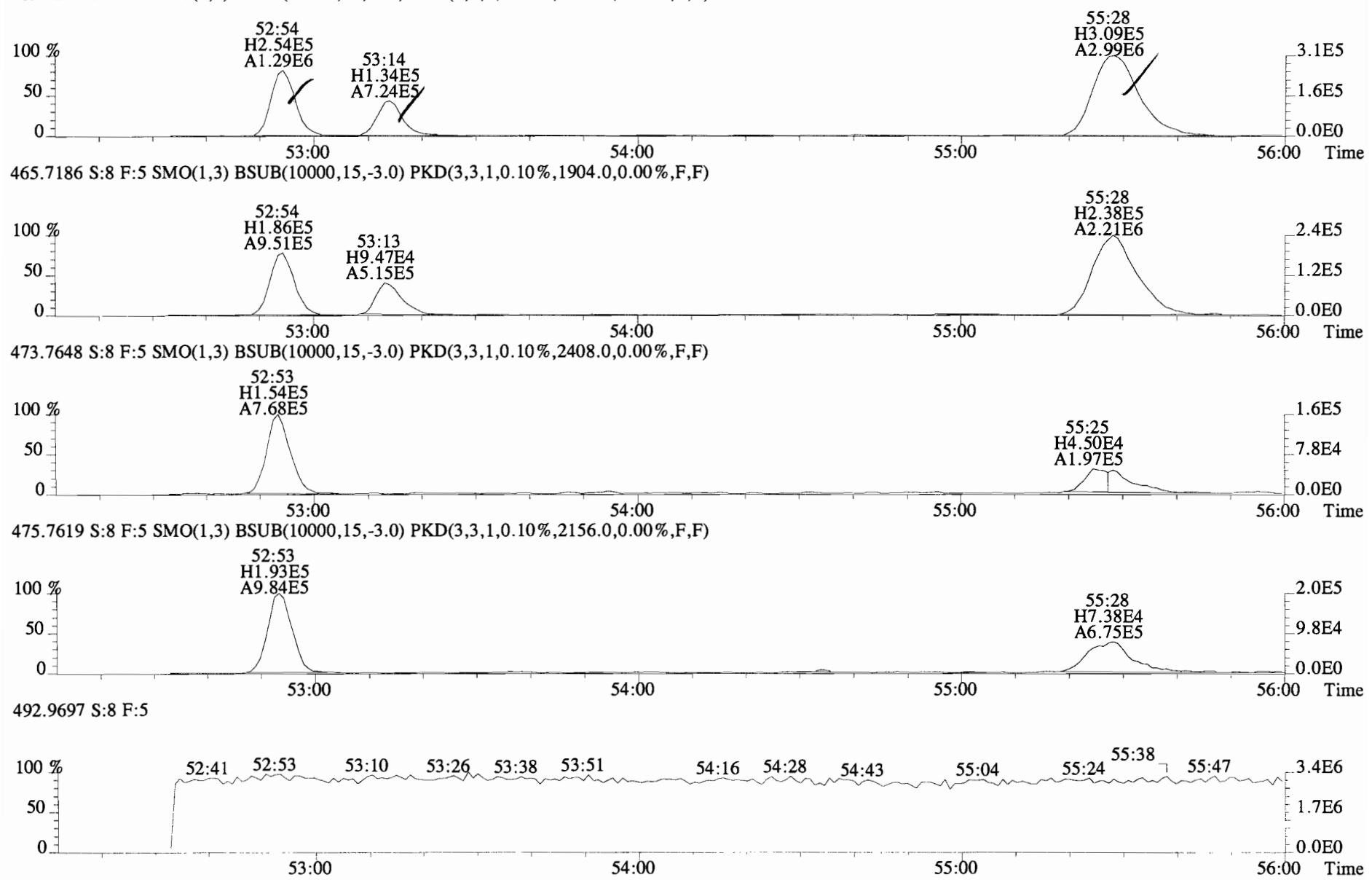
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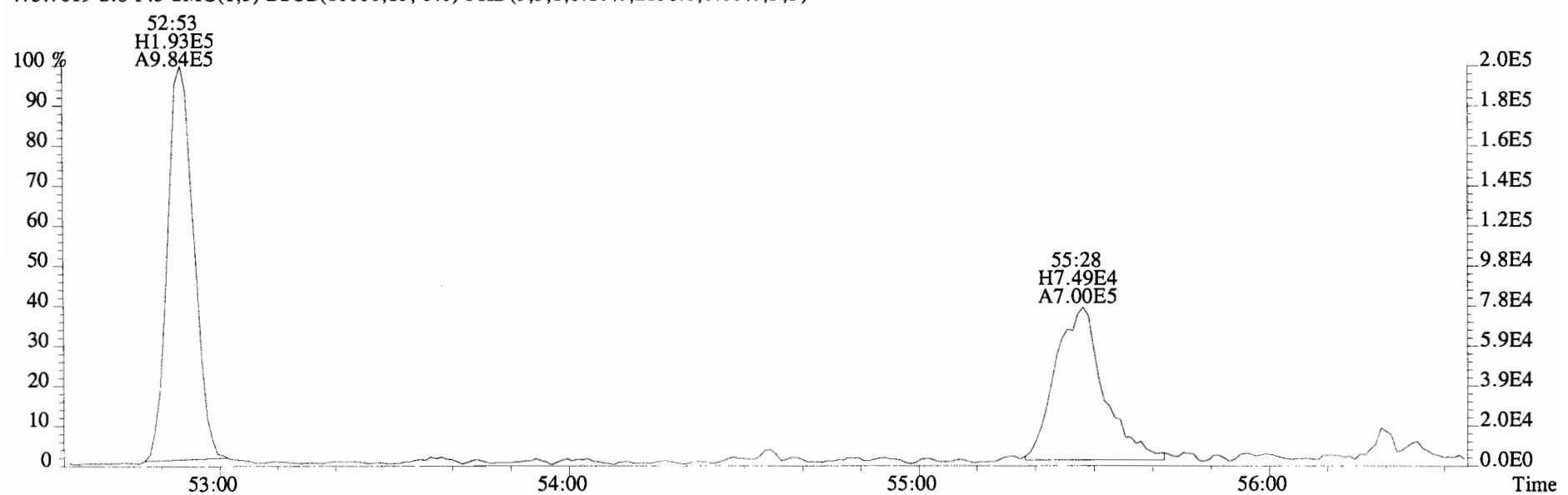
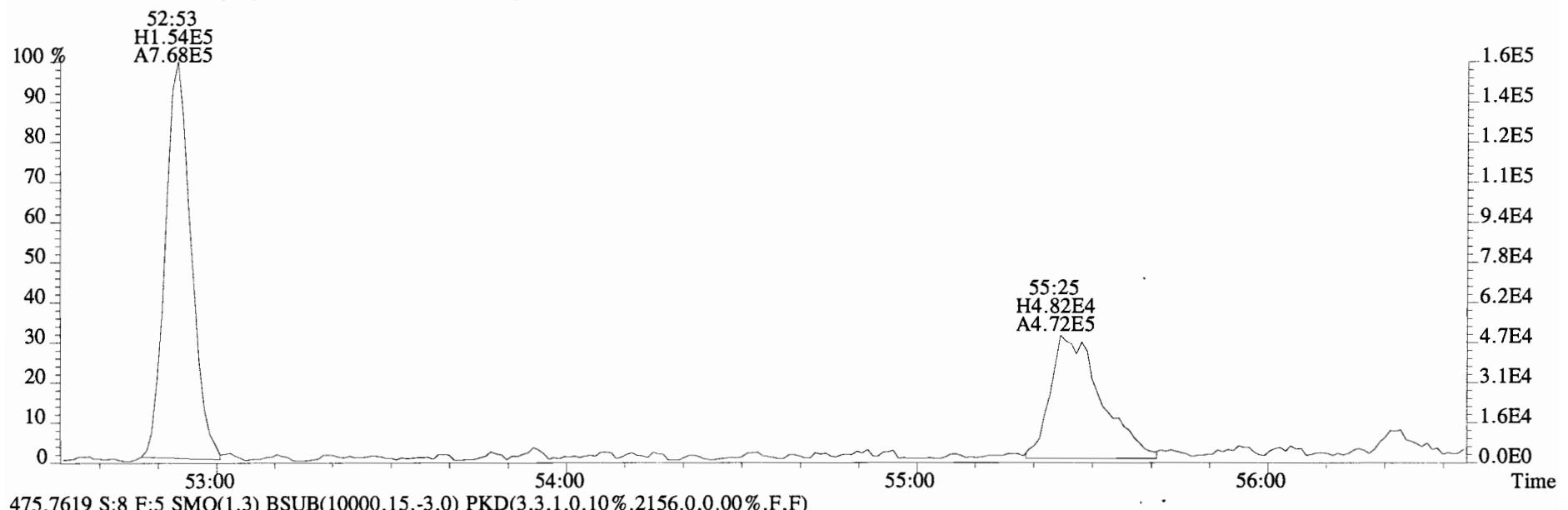
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 427.7635 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4160.0,0.00%,F,F)



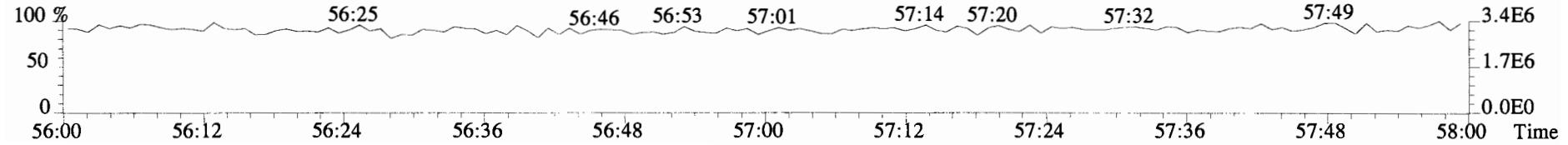
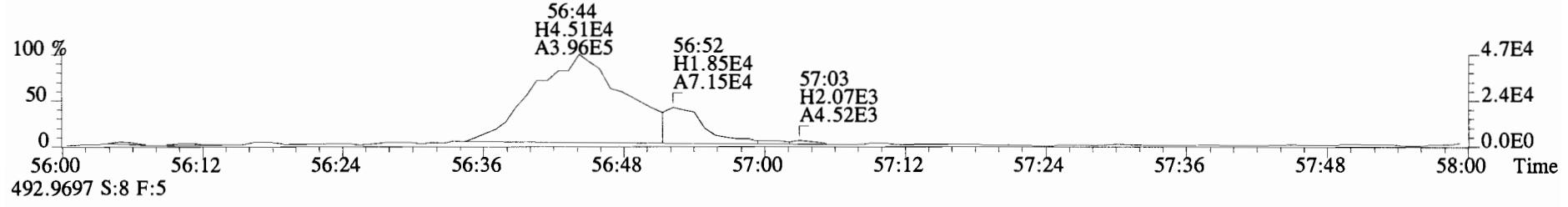
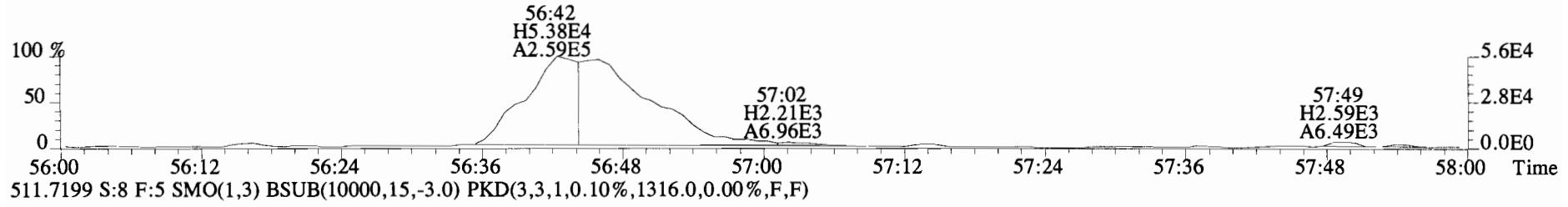
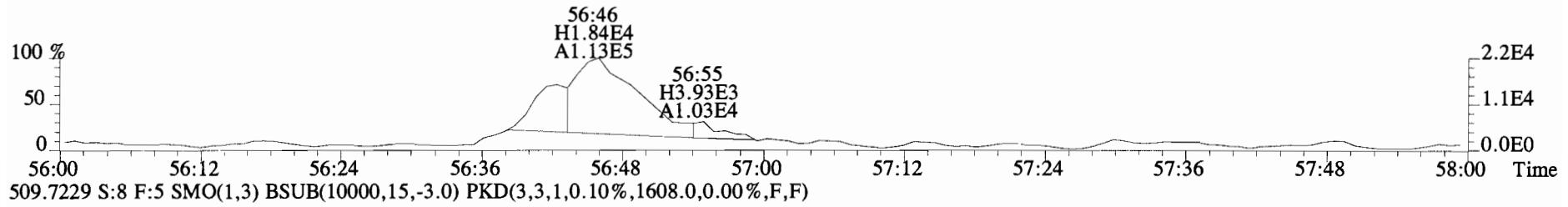
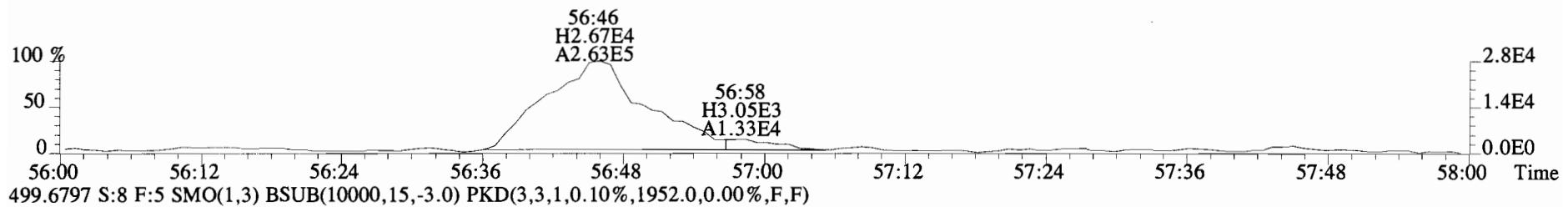
File:141024E2 #1-434 Acq:25-OCT-2014 09:35:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-04@20X CC-CB-04-20141013-S Exp:PCB_ZB1
 463.7216 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1732.0,0.00%,F,F)



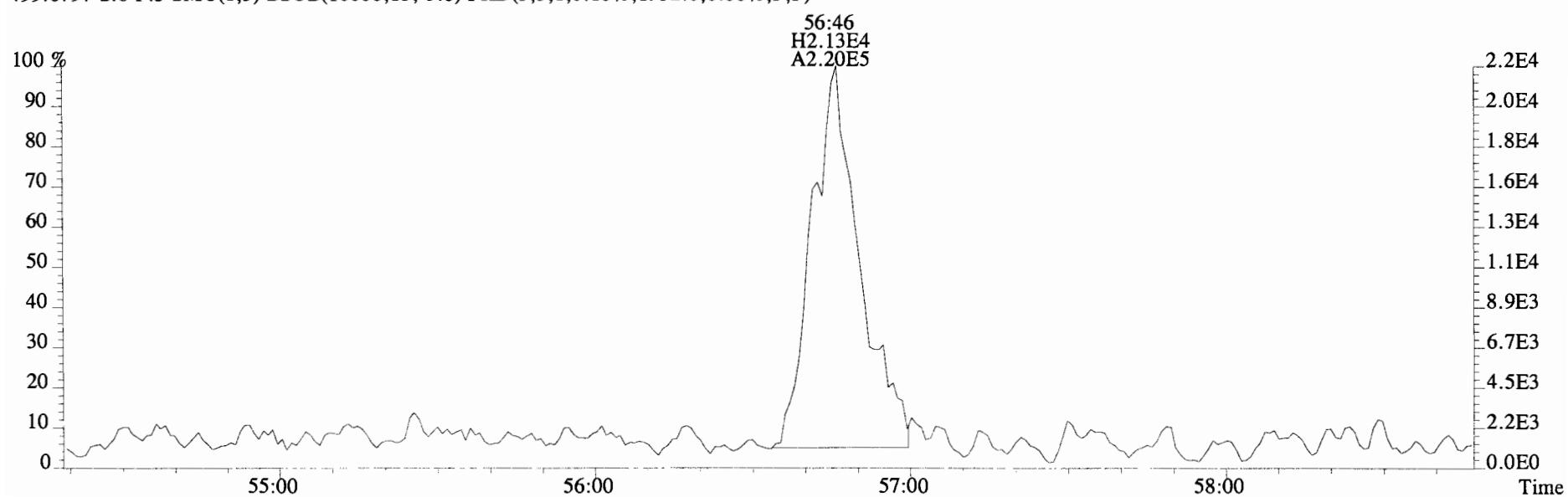
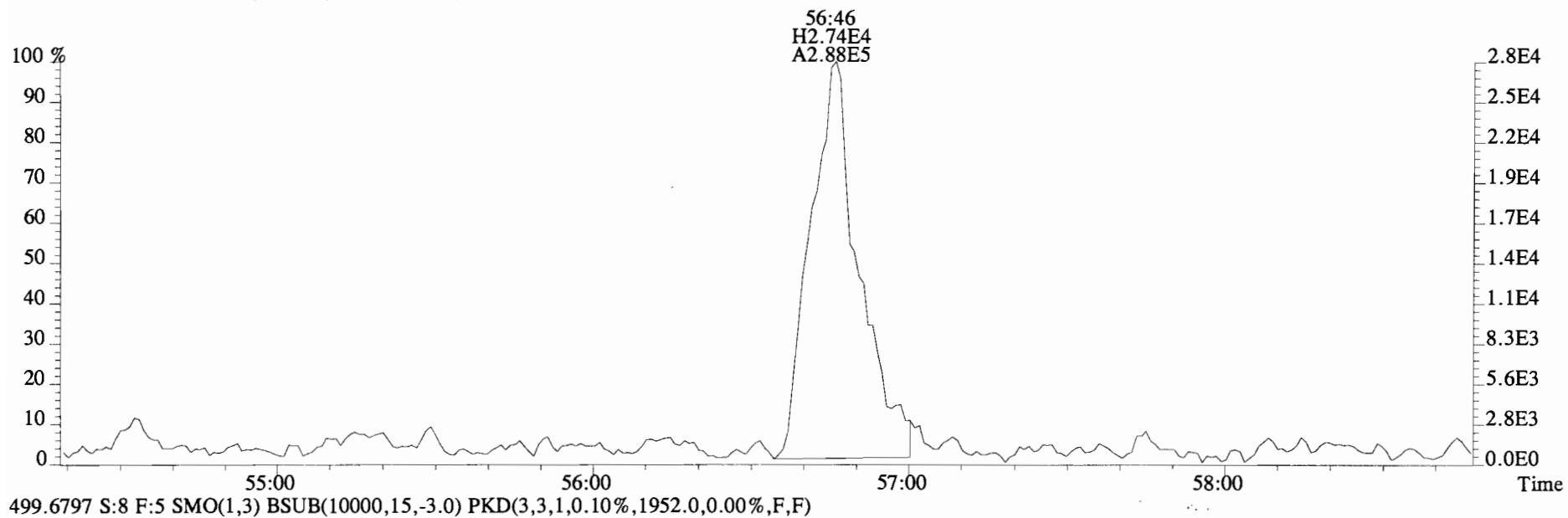
File:141024E2 #1-434 Acq:25-OCT-2014 09:35:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-04@20X CC-CB-04-20141013-S Exp:PCB_ZB1
473.7648 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2408.0,0.00%,F,F)



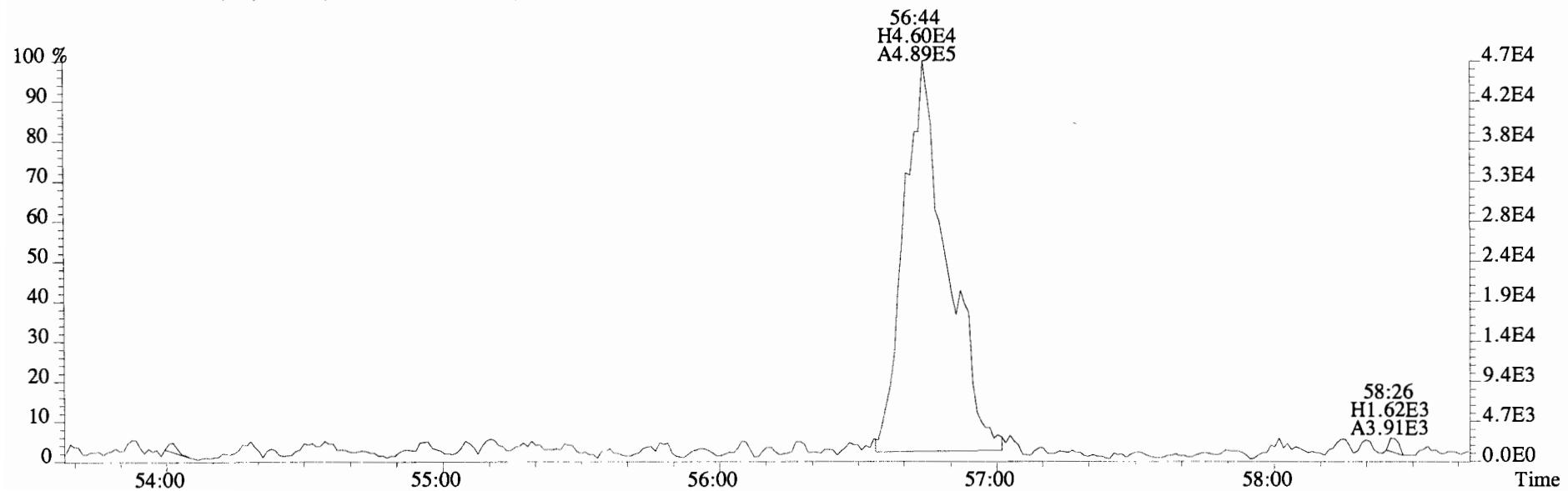
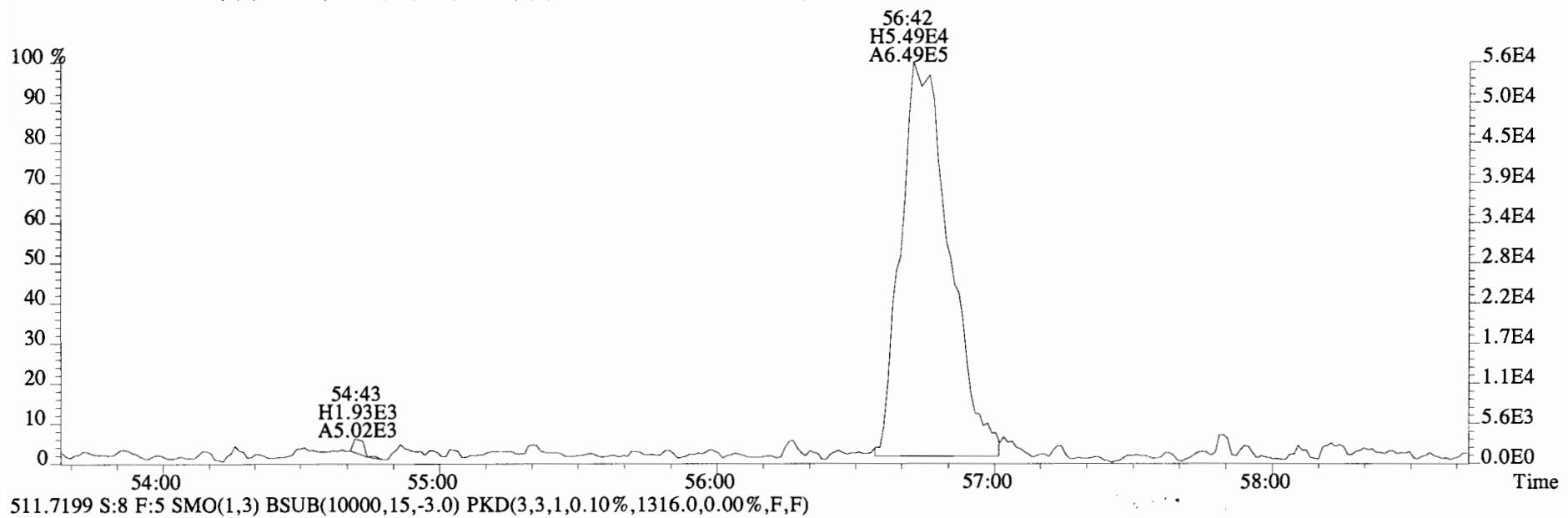
File:141024E2 #1-434 Acq:25-OCT-2014 09:35:32 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-04@20X CC-CB-04-20141013-S Exp:PCB_ZB1
 497.6826 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1380.0,0.00%,F,F)



File:141024E2 #1-434 Acq:25-OCT-2014 09:35:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-04@20X CC-CB-04-20141013-S Exp:PCB_ZB1
497.6826 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1380.0,0.00%,F,F)



File:141024E2 #1-434 Acq:25-OCT-2014 09:35:32 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400762-04@20X CC-CB-04-20141013-S Exp:PCB_ZB1
509.7229 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1608.0,0.00%,F,F)



Client ID: CC-CB-22-20141013-S Filename: 141024E2 S:9 Acq: 25-OCT-14 10:39:00
 Lab ID: 1400762-05@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 9.990 ConCal: ST141024E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	6.93e+05	2.91	y 16:29	1.19	79.0	*	2.5	*	1.001	0.996-1.006		
Mono	PCB-2	5.10e+05	3.10	y 18:46	1.18	54.9	*	2.5	*	0.989	0.984-0.994		
Mono	PCB-3	1.06e+06	2.92	y 18:59	1.43	94.4	*	2.5	*	1.001	0.996-1.006		
Di	PCB-4/10	7.70e+05	1.44	y 20:17	1.57	135	*	2.5	*	1.002	0.997-1.007		
Di	PCB-7/9	3.68e-05	1.28	n 22:02	1.21	49.6	R	*	2.5	*	0.871	0.866-0.874	
Di	PCB-6	6.42e+05	1.45	y 22:40	1.30	80.2	*	2.5	*	0.897	0.890-0.899		
Di	PCB-5/8	2.62e+06	1.61	y 23:02	1.15	371	*	2.5	*	0.911	0.907-0.917		
Di	PCB-14	*	*	n NotF	1.11	*	25600	2.5	93.5	*	0.949-0.959		
Di	PCB-11	1.90e+07	1.65	y 25:18	1.09	2760	*	2.5	*	1.001	0.995-1.005		
Di	PCB-12/13	5.07e+05	1.60	y 25:39	1.19	67.2	*	2.5	*	1.015	1.011-1.021		
Di	PCB-15	4.43e+06	1.64	y 26:00	1.28	546	*	2.5	*	1.028	1.023-1.033		
Tri	PCB-19	4.40e+05	1.12	y 24:19	1.04	104	*	2.5	*	1.001	0.996-1.006		
Tri	PCB-30	*	*	n NotF	1.71	*	2220	2.5	6.64	*	1.032-1.042		
Tri	PCB-18	3.34e+06	1.04	y 25:55	0.78	674	*	2.5	*	0.955	0.949-0.959		
Tri	PCB-17	1.13e+06	1.04	y 26:05	0.92	193	*	2.5	*	0.961	0.956-0.966		
Tri	PCB-24/27	4.72e+05	1.14	y 26:38	1.19	62.5	*	2.5	*	0.981	0.977-0.987		
Tri	PCB-16/32	2.52e+06	1.10	y 27:09	0.94	422	*	2.5	*	1.000	0.995-1.005		
Tri	PCB-34	*	*	n NotF	1.14	*	6140	2.5	26.6	*	0.955-0.965		
Tri	PCB-23	*	*	n NotF	1.28	*	6140	2.5	23.7	*	0.959-0.969		
Tri	PCB-29	5.18e+04	1.09	y 28:16	1.08	10.2	*	2.5	*	0.972	0.967-0.977		
Tri	PCB-26	9.44e+05	0.88	y 28:28	1.21	166	*	2.5	*	0.979	0.974-0.984		
Tri	PCB-25	3.27e+05	1.04	y 28:38	1.26	55.0	*	2.5	*	0.985	0.979-0.989		
Tri	PCB-31	4.57e+06	1.04	y 28:59	1.28	755	*	2.5	*	0.997	0.992-1.002		
Tri	PCB-28	3.96e+06	1.10	y 29:05	1.71	491	*	2.5	*	1.001	0.995-1.005		
Tri	PCB-20/21/33	2.44e+06	1.05	y 29:44	1.08	478	*	2.5	*	1.023	1.017-1.027		
Tri	PCB-22	1.61e+06	1.12	y 30:09	1.21	284	*	2.5	*	1.037	1.032-1.042		
Tri	PCB-36	2.78e+05	1.03	y 30:44	1.14	58.7	*	2.5	*	0.933	0.928-0.938		
Tri	PCB-39	*	*	n NotF	1.12	*	6140	2.5	32.3	*	0.943-0.953		
Tri	PCB-38	1.88e+05	0.88	y 31:59	1.20	37.7	*	2.5	*	0.971	0.966-0.976		
Tri	PCB-35	8.69e+05	0.97	y 32:30	1.23	170	*	2.5	*	0.987	0.982-0.992		
Tri	PCB-37	3.68e+06	1.04	y 32:57	1.23	721	*	2.5	*	1.001	0.995-1.005		
Tetra	PCB-54	4.01e+04	0.68	y 28:01	1.10	7.35	*	2.5	*	1.001	0.996-1.006	Integrations by:	
Tetra	PCB-50	2.77e+04	0.71	y 29:09	0.88	6.35	*	2.5	*	1.042	1.037-1.047	Analyst: <u>DMS</u>	
Tetra	PCB-53	4.65e+06	0.72	y 29:46	1.06	1040	*	2.5	*	0.946	0.942-0.952		
Tetra	PCB-51	6.10e+05	0.79	y 30:07	0.99	147	*	2.5	*	0.958	0.952-0.962		
Tetra	PCB-45	1.60e+06	0.80	y 30:33	0.86	443	*	2.5	*	0.971	0.966-0.976	Date: <u>10/30/14</u>	
Tetra	PCB-46	7.91e+05	0.77	y 31:02	0.85	224	*	2.5	*	0.987	0.981-0.991		

Reviewed by: MFZ Date: 10/30/14

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	1.94e+08	0.74	y 31:29	1.28	36200	*	2.5	*	1.001	0.996-1.006		
Tetra	PCB-73	*	*	n NotF _g	1.35	*	10400	2.5	38.6	*	1.000-1.010		
Tetra	PCB-43/49	3.06e+07	0.73	y 31:47	0.99	7360	*	2.5	*	1.011	1.005-1.015		
Tetra	PCB-47	3.89e+06	0.73	y 31:59	1.06	864	*	2.5	*	1.001	0.996-1.006		
Tetra	PCB-48/75	2.30e+06	0.76	y 32:06	1.23	440	*	2.5	*	1.004	0.999-1.009		
Tetra	PCB-65	*	*	n NotF _g	1.22	*	10400	2.5	40.6	*	1.008-1.018		
Tetra	PCB-62	*	*	n NotF _g	1.22	*	10400	2.5	40.7	*	1.011-1.021		
Tetra	PCB-44	5.73e+07	0.73	y 32:47	0.86	15600	*	2.5	*	1.026	1.021-1.031		
Tetra	PCB-42/59	4.94e+06	0.72	y 33:01	1.14	1020	*	2.5	*	1.033	1.028-1.038		
Tetra	PCB-41/64/71/72	3.01e+07	0.74	y 33:36	1.21	5870	*	2.5	*	1.051	1.046-1.056		
Tetra	PCB-68	*	*	n NotF _g	1.35	*	10400	2.5	36.9	*	1.054-1.064		
Tetra	PCB-40	3.00e+06	0.76	y 34:04	0.70	1010	*	2.5	*	1.066	1.061-1.071		
Tetra	PCB-57	*	*	n NotF _g	0.98	*	10400	2.5	38.4	*	0.965-0.975		
Tetra	PCB-67	6.90e+05	0.70	y 34:43	1.11	112	*	2.5	*	0.979	0.974-0.984		
Tetra	PCB-58	*	*	n NotF _g	0.93	*	10400	2.5	40.6	*	0.977-0.987		
Tetra	PCB-63	1.26e+06	0.77	y 35:00	0.95	237	*	2.5	*	0.987	0.982-0.992		
Tetra	PCB-74	2.50e+07	0.72	y 35:17	1.24	3600	*	2.5	*	0.995	0.990-1.000		
Tetra	PCB-61/70	1.17e+08	0.73	y 35:29	0.95	22000	*	2.5	*	1.000	0.995-1.005		
Tetra	PCB-76/66	3.23e+07	0.72	y 35:42	1.04	5540	*	2.5	*	1.007	1.001-1.011		
Tetra	PCB-80	*	*	n NotF _g	1.19	*	10400	2.5	31.6	*	0.996-1.006		
Tetra	PCB-55	4.17e+06	0.78	y 36:11	1.04	718	*	2.5	*	1.008	1.005-1.015		
Tetra	PCB-56/60	1.84e+07	0.73	y 36:43	1.01	3280	*	2.5	*	1.023	1.019-1.029		
Tetra	PCB-79	8.49e+06	0.77	y 37:48	1.08	1410	*	2.5	*	1.053	1.048-1.058		
Tetra	PCB-78	*	*	n NotF _g	1.27	*	10400	2.5	37.2	*	0.982-0.992		
Tetra	PCB-81	3.48e+06	0.84	y 39:01	1.33	583	*	2.5	*	1.000	0.995-1.005		
Tetra	PCB-77	2.54e+07	0.77	y 39:37	1.10	4990	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-104	*	*	n NotF _g	1.18	*	1860	2.5	10.7	*	0.996-1.006		
Penta	PCB-96	3.20e+06	1.50	y 33:54	1.14	672	*	2.5	*	1.039	1.034-1.044		
Penta	PCB-103	2.34e+06	1.53	y 34:26	0.96	586	*	2.5	*	1.055	1.050-1.060		
Penta	PCB-100	8.24e+05	1.57	y 34:46	0.94	210	*	2.5	*	1.065	1.061-1.071		
Penta	PCB-94	1.55e+06	1.60	y 35:15	1.06	478	*	2.5	*	0.986	0.980-0.990		
Penta	PCB-95/98/102	4.96e+08	1.56	y 35:48	1.22	132000	*	2.5	*	1.001	0.995-1.005		
Penta	PCB-93	*	*	n NotF _g	0.84	*	1860	2.5	20.9	*	0.997-1.007		
Penta	PCB-88/91	6.16e+07	1.56	y 36:11	1.12	18000	*	2.5	*	1.012	1.005-1.015		
Penta	PCB-121	*	*	n NotF _g	1.62	*	1860	2.5	10.9	*	1.009-1.019		
Penta	PCB-84/92	2.32e+08	1.56	y 37:06	1.05	65800	*	2.5	*	0.991	0.985-0.995		
Penta	PCB-89	2.36e+06	1.59	y 37:17	1.13	619	*	2.5	*	0.996	0.991-1.001		

Analyst: DMSDate: 10/30/14

Client ID: CC-CB-22-20141013-S
 Lab ID: 1400762-05@20X

Filename: 141024E2 S:9 Acq:25-OCT-14 10:39:00
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 9.990

ConCal: ST141024E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	5.97e+08	1.57	y 37:28	1.10	161000	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-113	*	*	n NotFq	1.41		*	1860	2.5	12.1	*	1.002-1.012	
Penta	PCB-99	1.89e+08	1.57	y 37:48	1.34	42100	*	2.5	*	1.009	1.004-1.014		
Penta	PCB-119	8.63e+06	1.58	y 38:15	1.53	1860	*	2.5	*	0.987	0.982-0.992		
Penta	PCB-108/112	2.58e+07	1.54	y 38:26	1.28	6680	*	2.5	*	0.991	0.986-0.996		
Penta	PCB-83	*	*	n NotFq	1.52		*	1860	2.5	11.7	*	0.990-1.000	
Penta	PCB-97	1.50e+08	1.56	y 38:46	1.18	42000	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-86	*	*	n NotFq	0.84		*	1860	2.5	21.1	*	0.999-1.009	
Penta	PCB-87/117/125	2.43e+08	1.56	y 39:03	1.55	51800	*	2.5	*	1.007	1.002-1.012		
Penta	PCB-111/115	1.16e+07	1.44	y 39:12	1.63	2350	*	2.5	*	1.011	1.006-1.016		
Penta	PCB-85/116	6.90e+07	1.59	y 39:19	1.30	17500	*	2.5	*	1.014	1.010-1.020		
Penta	PCB-120	2.90e+06	1.62	y 39:33	1.68	571	*	2.5	*	1.020	1.016-1.026		
Penta	PCB-110	7.97e+08	1.56	y 39:43	1.56	169000	*	2.5	*	1.025	1.020-1.030		
Penta	PCB-82	4.61e+07	1.60	y 40:21	0.76	15700	*	2.5	*	0.976	0.971-0.981		
Penta	PCB-124	3.09e+07	1.54	y 41:01	1.47	5430	*	2.5	*	0.992	0.988-0.998		
Penta	PCB-107/109	3.74e+07	1.52	y 41:11	1.32	7290	*	2.5	*	0.996	0.991-1.001		
Penta	PCB-123	6.64e+06	1.48	y 41:21	1.17	1470	*	2.5	*	1.000	0.996-1.006		
Penta	PCB-106/118	4.98e+08	1.56	y 41:32	1.17	107000	*	2.5	*	1.000	0.996-1.006		
Penta	PCB-114	1.34e+07	1.68	y 42:11	1.30	2680	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-122	6.36e+06	1.65	y 42:20	1.12	1470	*	2.5	*	1.004	0.999-1.009		
Penta	PCB-105	2.00e+08	1.63	y 43:04	1.30	40900	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-127	*	*	n NotFq	1.33		*	15100	2.5	93.5	*	0.996-1.006	
Penta	PCB-126	8.45e+06	1.63	y 45:19	1.18	2240	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-155	*	*	n NotFq	1.11	*	1560	2.5	9.74	*	0.966-1.006		
Hexa	PCB-150	1.06e+06	1.30	y 38:16	1.00	290	*	2.5	*	1.035	1.030-1.040		
Hexa	PCB-152	8.59e+05	1.26	y 38:46	1.12	211	*	2.5	*	1.048	1.043-1.053		
Hexa	PCB-145	3.53e+05	1.32	y 39:12	1.20	80.4	*	2.5	*	1.060	1.055-1.065		
Hexa	PCB-136	1.30e+08	1.25	y 39:31	1.18	30200	*	2.5	*	1.068	1.064-1.074		
Hexa	PCB-148	*	*	n NotFq	0.74	*	1560	2.5	14.6	*	1.066-1.076		
Hexa	PCB-154	5.50e+06	1.20	y 40:07	0.86	1750	*	2.5	*	1.085	1.080-1.090		
Hexa	PCB-151	1.52e+08	1.25	y 40:45	0.75	55800	*	2.5	*	1.102	1.097-1.107		
Hexa	PCB-135	8.79e+07	1.32	y 40:59	0.79	30300	*	2.5	*	1.108	1.103-1.113		
Hexa	PCB-144	3.55e+07	1.08	y 41:06	0.76	12700	*	2.5	*	1.111	1.105-1.117		
Hexa	PCB-147	1.31e+07	1.31	y 41:14	0.82	4370	*	2.5	*	1.115	1.109-1.121		
Hexa	PCB-139/149	5.54e+08	1.26	y 41:29	0.76	199000	*	2.5	*	1.122	1.116-1.128		
Hexa	PCB-140	3.04e+06	1.30	y 41:40	0.72	1150	*	2.5	*	1.127	1.121-1.133		
Hexa	PCB-134/143	4.55e+07	1.22	y 42:08	0.92	13200	*	2.5	*	0.975	0.970-0.980		

Analyst: *DMS*

Date: *10/30/14*

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	2.30e+07	1.24	y 42:25	0.82	7480	*	2.5	*	0.982	0.977-0.987		
Hexa	PCB-131	*	*	n NotF ₁	0.91	*	23600	2.5	190	*	0.981-0.991		
Hexa	PCB-146/165	1.18e+08	1.21	y 42:48	1.25	25200	*	2.5	*	0.991	0.986-0.996		
Hexa	PCB-132/161	2.56e+08	1.18	y 43:05	1.10	61600	*	2.5	*	0.997	0.992-1.002		
Hexa	PCB-153	7.99e+08	1.24	y 43:12	1.25	170000	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-168	1.15e+06	1.34	y 43:26	1.45	211	*	2.5	*	1.005	1.001-1.011		
Hexa	PCB-141	1.72e+08	1.24	y 43:57	1.09	47400	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-137	3.98e+07	1.20	y 44:20	1.06	11200	*	2.5	*	1.009	1.004-1.014		
Hexa	PCB-130	5.21e+07	1.24	y 44:27	0.96	16100	*	2.5	*	1.011	1.006-1.016		
Hexa	PCB-138/163/164	9.44e+08	1.23	y 44:49	1.29	216000	*	2.5	*	1.000	0.996-1.006		
Hexa	PCB-158/160	1.22e+08	1.23	y 45:03	1.34	27000	*	2.5	*	1.006	1.001-1.011		
Hexa	PCB-129	3.76e+07	1.20	y 45:19	0.85	13000	*	2.5	*	1.012	1.007-1.017		
Hexa	PCB-166	4.36e+06	1.24	y 45:47	1.19	944	*	2.5	*	0.993	0.988-0.998		
Hexa	PCB-159	*	*	n NotF ₁	1.11	*	46600	2.5	316	*	0.996-1.006		
Hexa	PCB-128/162	1.40e+08	1.22	y 46:23	1.05	34200	*	2.5	*	1.007	1.002-1.012		
Hexa	PCB-167	4.24e+07	1.21	y 46:47	1.20	8580	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-156	9.41e+07	1.22	y 48:07	1.14	19500	*	2.5	*	1.000	0.996-1.006		
Hexa	PCB-157	2.28e+07	1.28	y 48:22	1.16	4620	*	2.5	*	1.000	0.995-1.005		
Hexa	PCB-169	5.09e+05	1.30	y 50:24	1.12	125	*	2.5	*	1.000	0.995-1.005		
Hepta	PCB-188	3.95e+05	0.96	y 42:50	1.58	77.4	*	2.5	*	1.000	0.996-1.006		
Hepta	PCB-184	2.16e+05	0.93	y 43:17	1.63	41.0	*	2.5	*	1.011	1.006-1.016		
Hepta	PCB-179	1.34e+06	1.05	y 44:04	1.30	31900	*	2.5	*	1.029	1.024-1.034		
Hepta	PCB-176	3.95e+07	1.05	y 44:33	1.48	8300	*	2.5	*	1.040	1.035-1.045		
Hepta	PCB-186	*	*	n NotF ₁	1.45	*	10800	2.5	38.7	*	1.050-1.060		
Hepta	PCB-178	4.60e+07	1.05	y 45:39	1.03	13800	*	2.5	*	1.066	1.061-1.071		
Hepta	PCB-175	9.20e+06	1.04	y 46:00	1.01	2820	*	2.5	*	1.074	1.069-1.079		
Hepta	PCB-182/187	2.88e+08	1.05	y 46:09	1.25	71400	*	2.5	*	1.078	1.073-1.083		
Hepta	PCB-183	1.30e+08	1.05	y 46:30	1.21	33400	*	2.5	*	1.086	1.081-1.091		
Hepta	PCB-185	*	*	n NotF ₁	1.80	*	*	2.5	*	*	0.951-0.961		
Hepta	PCB-174	*	*	n NotF ₁	1.38	*	*	2.5	*	*	0.958-0.968		
Hepta	PCB-181	*	*	n NotF ₁	1.38	*	*	2.5	*	*	0.960-0.970		
Hepta	PCB-177	*	*	n NotF ₁	1.26	*	*	2.5	*	*	0.963-0.973		
Hepta	PCB-171	*	*	n NotF ₁	1.58	*	*	2.5	*	*	0.970-0.980		
Hepta	PCB-173	*	*	n NotF ₁	1.11	*	*	2.5	*	*	0.978-0.988		
Hepta	PCB-172	*	*	n NotF ₁	1.63	*	*	2.5	*	*	0.987-0.997		
Hepta	PCB-192	*	*	n NotF ₁	1.74	*	*	2.5	*	*	0.991-1.001		
Hepta	PCB-180	*	*	n NotF ₁	1.34	*	*	2.5	*	*	0.995-1.005		

* = See Re-injection

Analyst: DMS

Date: 10/30/14

Client ID: CC-CB-22-20141013-S Filename: 141024E2 S:9 Acq:25-OCT-14 10:39:00
 Lab ID: 1400762-05@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 9.990

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ConCal: ST141024E2-1

EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	*	*	n NotFq	1.72	*	* see at Reinject	*	2.5	*	*	0.999-1.009	
Hepta	PCB-191	*	*	n NotFq	1.69	*	*	*	2.5	*	*	1.004-1.014	
Hepta	PCB-170	1.68e+08	1.06	y 50:44	1.60	53600	*	*	2.5	*	1.000	0.995-1.005	
Hepta	PCB-190	4.72e+07	1.06	y 50:54	2.21	10900	*	*	2.5	*	1.004	0.998-1.008	
Hepta	PCB-189	7.72e+06	1.06	y 52:11	1.55	2250	*	*	2.5	*	1.000	0.995-1.005	
Octa	PCB-202	2.09e+07	0.90	y 48:18	1.08	6130	*	*	2.5	*	1.000	0.995-1.005	
Octa	PCB-201	1.57e+07	0.87	y 48:47	1.15	4340	*	*	2.5	*	1.010	1.005-1.015	
Octa	PCB-204	*	*	n NotFq	1.14	*	2060	2.5	13.1	*	*	1.008-1.018	
Octa	PCB-197	4.53e+06	0.91	y 49:14	1.07	1340	*	*	2.5	*	1.020	1.015-1.025	
Octa	PCB-200	1.41e+07	0.91	y 50:02	1.06	4210	*	*	2.5	*	1.036	1.032-1.044	
Octa	PCB-198	3.12e+06	0.93	y 51:16	0.76	1310	*	*	2.5	*	1.062	1.059-1.069	
Octa	PCB-199	8.20e+07	0.90	y 51:23	0.80	32600	*	*	2.5	*	1.064	1.061-1.071	
Octa	PCB-196/203	8.99e+07	0.91	y 51:40	0.80	35600	*	*	2.5	*	1.070	1.066-1.076	
Octa	PCB-195	3.67e+07	0.91	y 52:48	1.23	14600	*	*	2.5	*	0.983	0.979-0.989	
Octa	PCB-194	9.01e+07	0.91	y 53:43	1.21	36200	*	*	2.5	*	1.000	0.995-1.005	
Octa	PCB-205	5.41e+06	0.93	y 54:02	1.54	1710	*	*	2.5	*	1.006	1.001-1.011	
Nonna	PCB-208	3.91e+06	1.37	y 52:56	0.93	1510	*	*	2.5	*	1.000	0.995-1.005	
Nonna	PCB-207	2.91e+06	1.33	y 53:15	1.08	963	*	*	2.5	*	1.006	1.001-1.011	
Nonna	PCB-206	1.26e+07	1.33	y 55:31	1.02	6990	*	*	2.5	*	1.001	0.995-1.005	
Deca	PCB-209	6.23e+05	1.19	y 56:48	1.17	370	*	*	2.5	*	1.000	0.995-1.005	

Analyst: DMS

Date: 10/30/14

Client ID: CC-CB-22-20141013-S
Lab ID: 1400762-05@20X

Filename: 141024E2 S:9 Acq:25-OCT-14 10:39:00 ConCal: ST141024E2-1
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 9.9901 EndCAL: NA

Page 7 of

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	2.26e+06	2.91	y	16:29	1.27 228.421
Total Di-PCB	2.80e+07	1.44	y	20:17	1.21 3964.44
Total Tri-PCB	7.91e+06	1.12	y	24:19	1.10 1455.19
Total Tri-PCB	1.89e+07	1.09	y	28:16	1.21 3226.40 Sum:4681.59
Total Tetra-PCB	5.70e+08	0.68	y	28:01	1.09 112711
Total Penta-PCB	3.51e+09	1.50	y	33:54	1.18 850704
Total Penta-PCB	2.28e+08	1.68	y	42:11	1.25 47326.4 Sum:898030
Total Hexa-PCB	9.83e+08	1.30	y	38:16	0.90 335692
Total Hexa-PCB	2.91e+09	1.22	y	42:08	1.11 676740 Sum:1012430
Total Hepta-PCB	8.71e+08	0.96	y	42:50	1.42 228395 + 278915 = 507310
Total Octa-PCB	2.30e+08	0.90	y	48:18	0.96 85558.9
Total Octa-PCB	1.32e+08	0.91	y	52:48	1.33 52431.8 Sum:137991
Total Nona-PCB	1.94e+07	1.37	y	52:56	1.01 9462.13
Total Deca-PCB	*	*	n	Not Fnd	1.17 570*

* See re-injection

Total PCB Conc:2408314.74448

* 278915 = 2687229

Integrations
by
Analyst: DMS
Date: 10/30/14

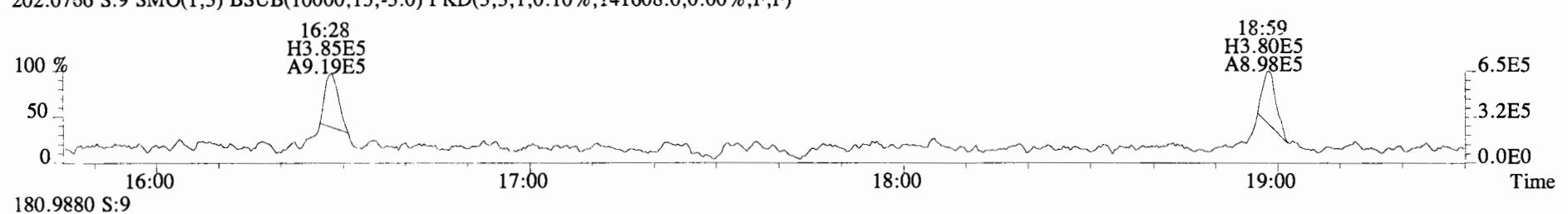
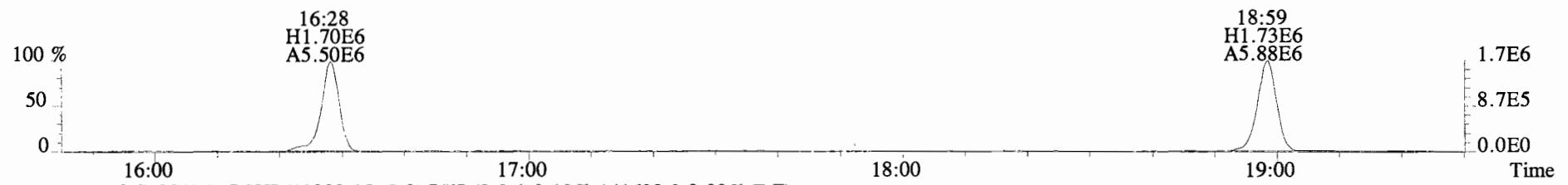
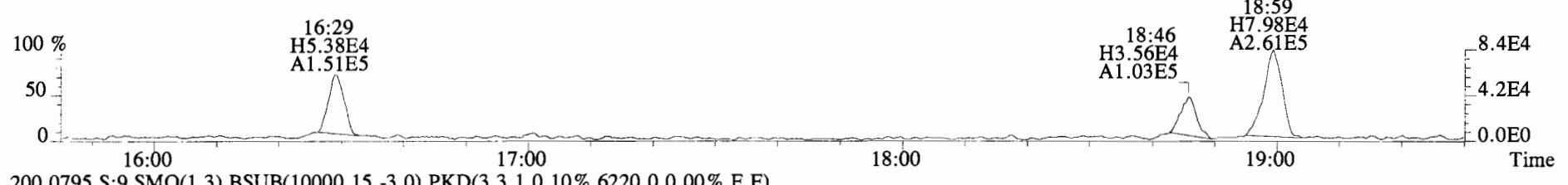
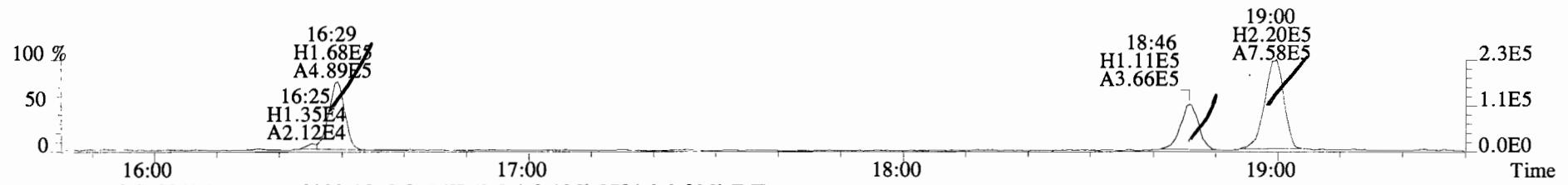
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13C-PCB-1	7.36e+06	2.96	y	0.87	16:28	0.634	0.629-0.635	1200	120	13C-PCB-79	4.84e+06	0.76	y	1.02	37:47	1.029	1.023-1.034	875	87.4		
13C-PCB-3	7.85e+06	2.99	y	0.91	18:58	0.730	0.725-0.733	1220	122	13C-PCB-178	1.95e+06	0.44	y	0.61	45:38	0.984	0.979-0.990	887	88.7		
13C-PCB-4	3.65e+06	1.59	y	0.59	20:15	0.779	0.775-0.783	882	88.1												
13C-PCB-9	6.14e+06	1.64	y	0.90	21:59	0.846	0.842-0.850	972	97.1												
13C-PCB-11	6.33e+06	1.60	y	0.94	25:17	0.973	0.968-0.978	958	95.7	PS vs. IS											
13C-PCB-19	4.07e+06	1.13	y	0.53	24:18	0.935	0.930-0.940	1090	108	13C-PCB-79	4.84e+06	0.76	y	1.10	37:47	0.968	0.964-0.974	978	97.7		
13C-PCB-28	4.72e+06	1.03	y	0.93	29:04	1.004	0.999-1.009	918	91.7	13C-PCB-178	1.95e+06	0.44	y	0.90	45:38	0.925	0.920-0.930	947	94.6		
13C-PCB-32	6.36e+06	1.08	y	0.80	27:09	1.045	1.040-1.050	1130	113												
13C-PCB-37	4.16e+06	0.99	y	0.84	32:56	1.138	1.131-1.143	898	89.7												
13C-PCB-47	4.26e+06	0.81	y	0.81	31:58	0.871	0.866-0.874	963	96.2												
13C-PCB-52	4.19e+06	0.87	y	0.77	31:27	0.857	0.853-0.861	997	99.6												
13C-PCB-54	4.95e+06	0.78	y	0.97	27:59	0.762	0.758-0.766	938	93.7												
13C-PCB-70	5.58e+06	0.77	y	1.00	35:28	0.966	0.961-0.971	1030	103												
13C-PCB-77	4.64e+06	0.76	y	0.94	39:37	1.079	1.073-1.083	904	90.4												
13C-PCB-80	5.57e+06	0.73	y	1.03	35:53	0.977	0.972-0.982	992	99.1												
13C-PCB-81	4.49e+06	0.74	y	0.92	39:01	1.063	1.057-1.067	895	89.4												
13C-PCB-95	3.07e+06	1.55	y	0.74	35:46	0.913	0.908-0.918	922	92.1	RS											
13C-PCB-97	3.03e+06	1.55	y	0.70	38:46	0.989	0.984-0.994	954	95.3	13C-PCB-15	7.05e+06	1.54	y	1.00	25:59	1000					
13C-PCB-101	3.37e+06	1.58	y	0.78	37:27	0.956	0.951-0.961	956	95.5	13C-PCB-31	5.51e+06	0.98	y	1.00	28:57	1000					
13C-PCB-104	4.18e+06	1.55	y	1.00	32:38	0.833	0.828-0.836	928	92.8	13C-PCB-60	5.45e+06	0.77	y	1.00	36:43	1000					
13C-PCB-105	3.76e+06	1.71	y	1.37	43:03	0.928	0.924-0.934	770	76.9	13C-PCB-111	4.50e+06	1.55	y	1.00	39:11	1000					
13C-PCB-114	3.86e+06	1.60	y	1.36	42:11	0.910	0.905-0.915	791	79.1	13C-PCB-128	3.58e+06	1.28	y	1.00	46:22	1000					
13C-PCB-118	3.98e+06	1.49	y	0.96	41:31	1.060	1.054-1.064	922	92.1	13C-PCB-205	2.49e+06	0.81	y	1.00	54:01	1000					
13C-PCB-123	3.88e+06	1.55	y	0.89	41:20	1.055	1.050-1.060	965	96.4												
13C-PCB-126	3.20e+06	1.57	y	1.31	45:19	0.977	0.972-0.982	685	68.4												
13C-PCB-127	3.96e+06	1.65	y	1.47	43:23	0.936	0.931-0.941	752	75.1												
13C-PCB-138	3.38e+06	1.27	y	1.10	44:48	0.966	0.961-0.971	860	85.9												
13C-PCB-141	3.35e+06	1.21	y	1.07	43:57	0.948	0.943-0.953	873	87.2												
13C-PCB-153	3.76e+06	1.25	y	1.15	43:12	0.932	0.927-0.937	918	91.7												
13C-PCB-155	3.66e+06	1.18	y	0.84	36:59	0.944	0.939-0.949	969	96.8												
13C-PCB-156	4.25e+06	1.24	y	1.30	48:06	1.037	1.032-1.042	916	91.5												
13C-PCB-157	4.25e+06	1.29	y	1.36	48:22	1.043	1.038-1.048	875	87.4												
13C-PCB-159	3.90e+06	1.38	y	1.25	46:05	0.994	0.989-0.999	875	87.4												
13C-PCB-167	4.12e+06	1.27	y	1.35	46:47	1.009	1.004-1.014	853	85.2												
13C-PCB-169	3.64e+06	1.39	y	1.29	50:24	1.087	1.083-1.093	791	79.0												
13C-PCB-170	1.97e+06	0.45	y	0.54	50:43	1.094	1.089-1.101	1010	101												
13C-PCB-180	2.29e+06	0.56	n	0.68	49:21	1.064	1.060-1.070	937	83.6												
13C-PCB-188	3.23e+06	0.44	y	0.92	42:49	0.923	0.919-0.929	985	98.4												
13C-PCB-189	2.21e+06	0.45	y	0.72	52:11	1.125	1.120-1.132	864	86.3												
13C-PCB-194	2.06e+06	0.93	y	0.80	53:43	0.994	0.990-1.000	1040	104												
13C-PCB-202	3.15e+06	0.88	y	0.84	48:17	1.041	1.036-1.046	1050	105												
13C-PCB-206	1.76e+06	0.83	y	0.65	55:29	1.027	1.021-1.031	1090	109												
13C-PCB-208	2.79e+06	0.74	y	1.08	52:55	0.980	0.976-0.986	1040	104												
13C-PCB-209	1.44e+06	1.07	y	0.61	56:47	1.051	1.045-1.055	947	94.6												

*122 * see re-injection*

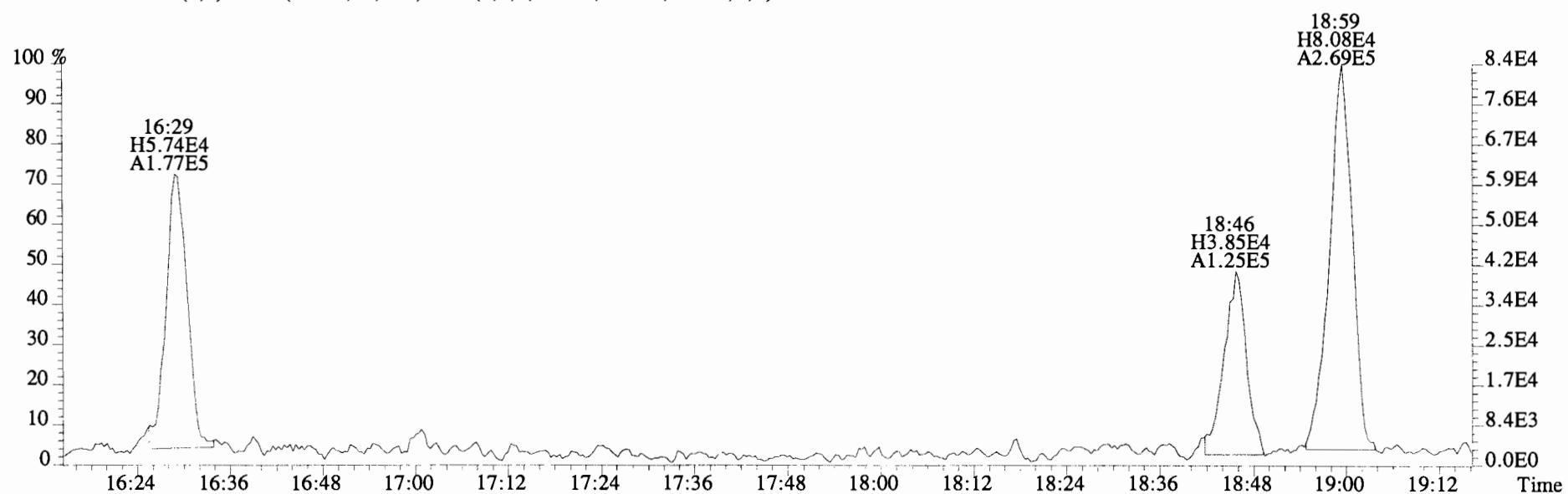
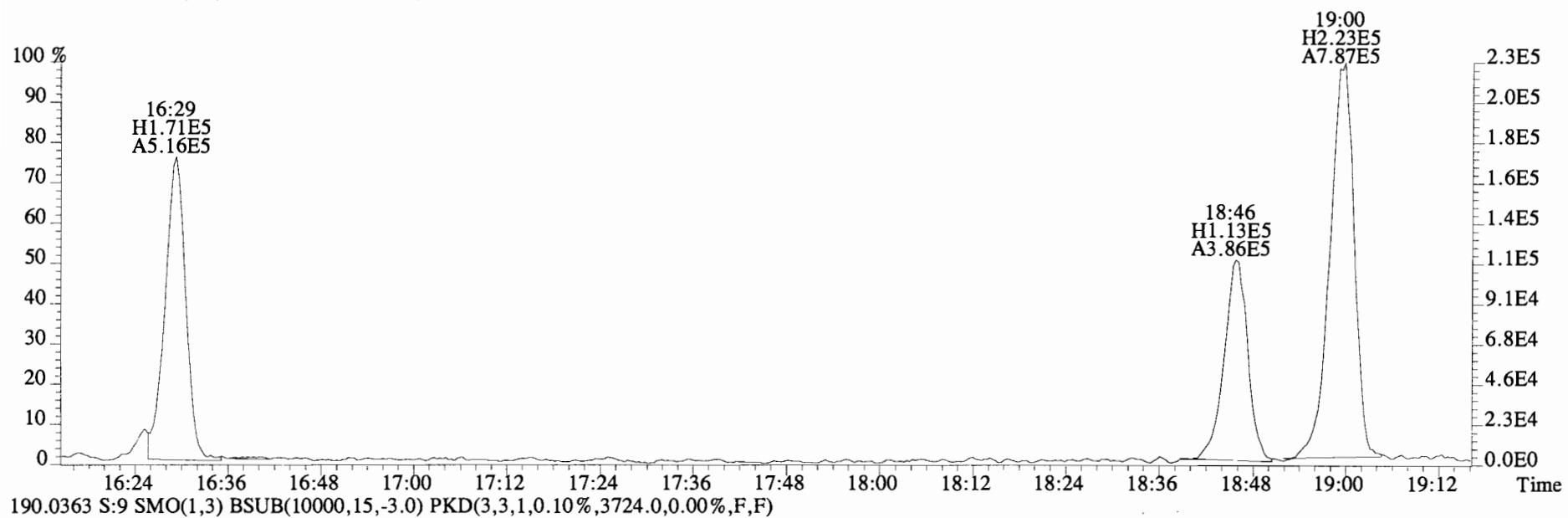
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Date: 10/30/17

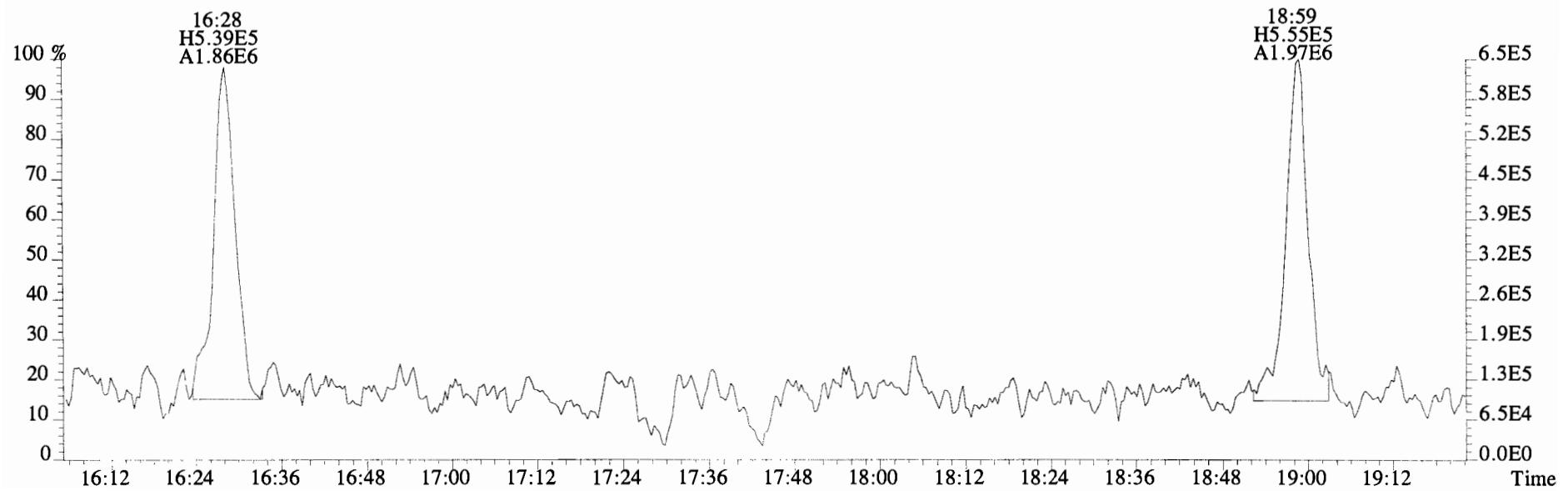
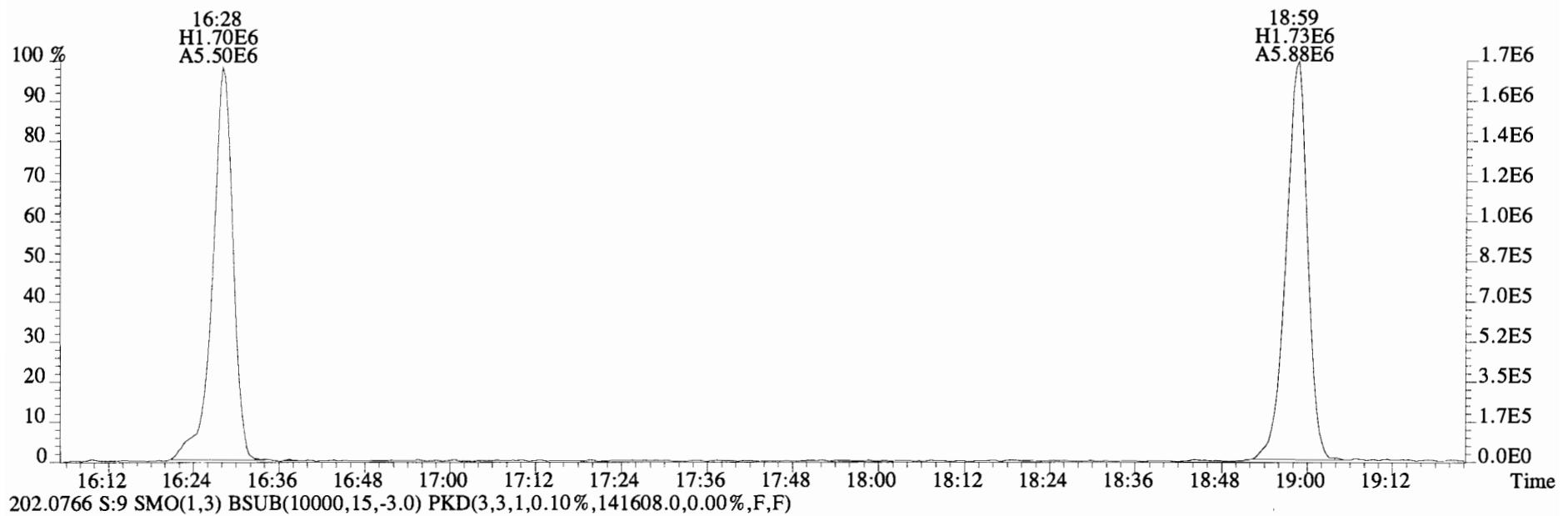
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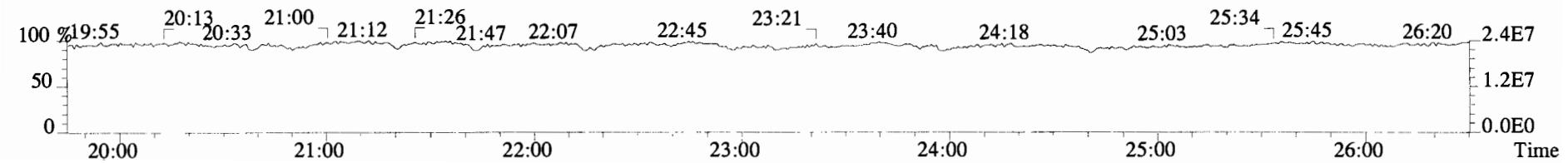
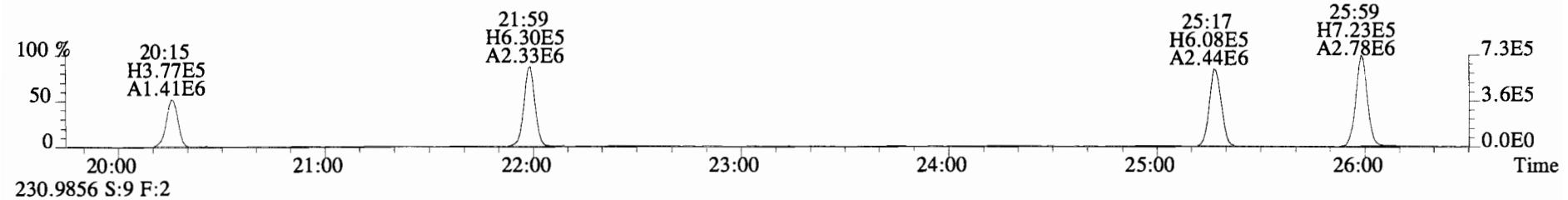
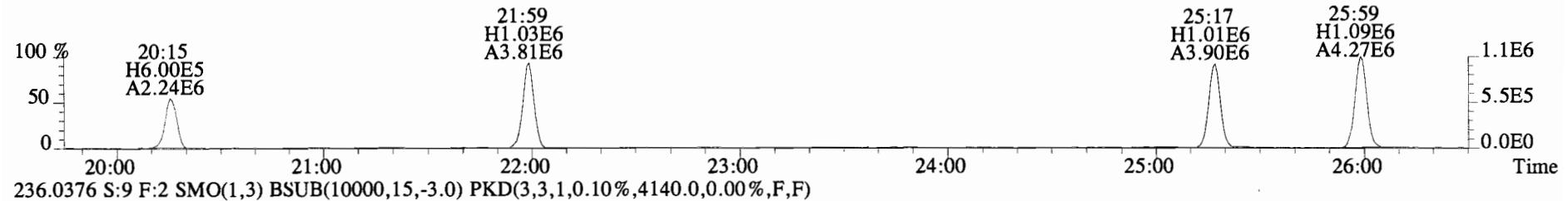
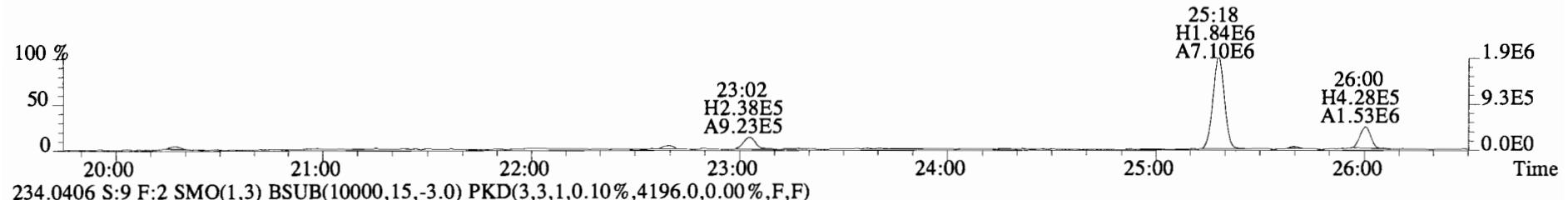
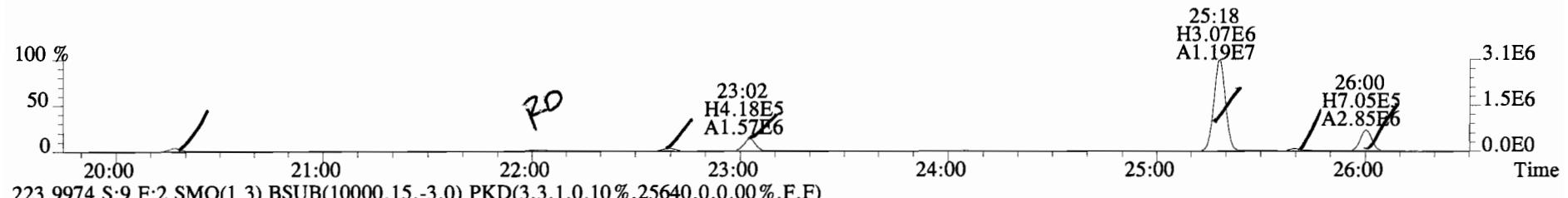
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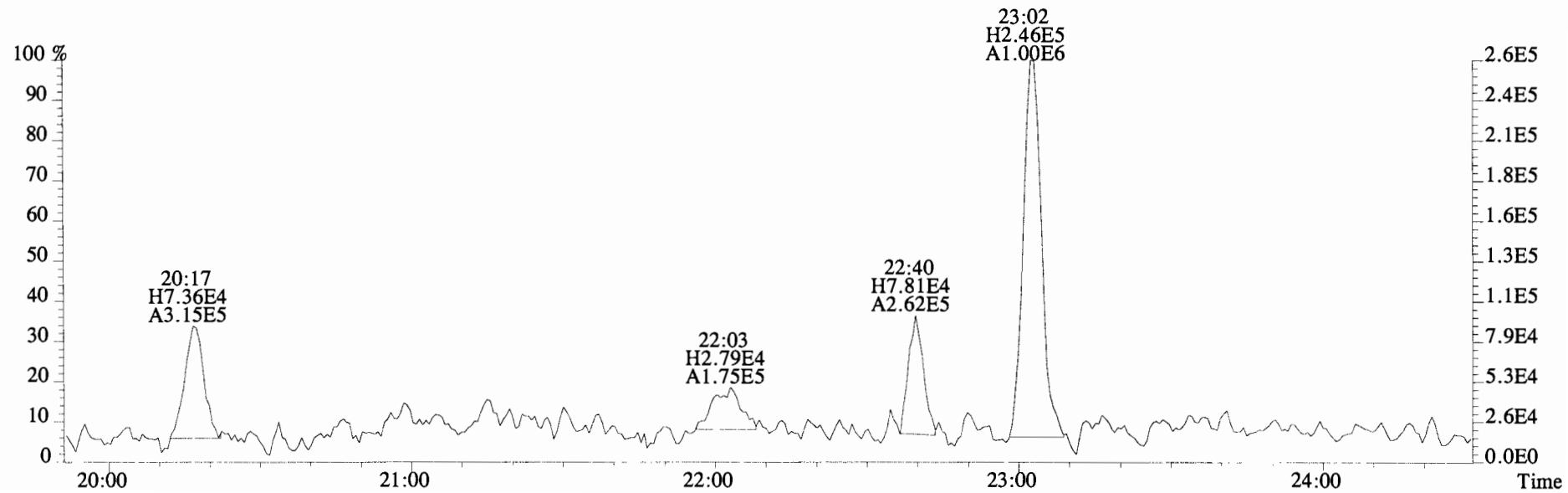
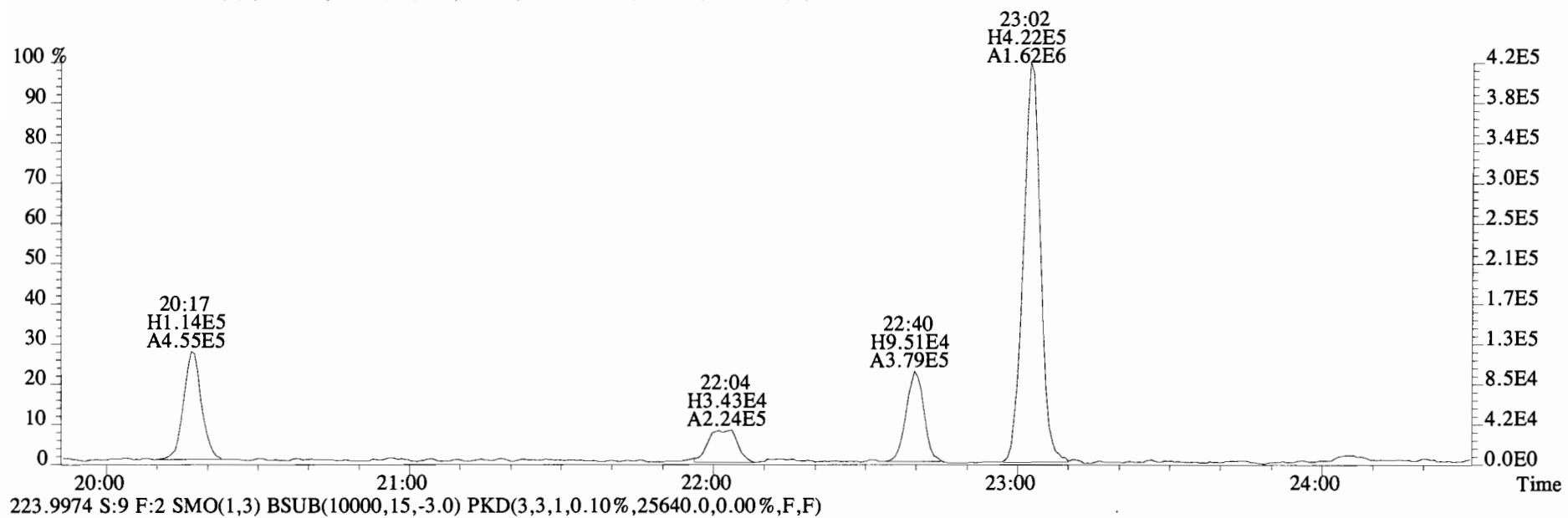
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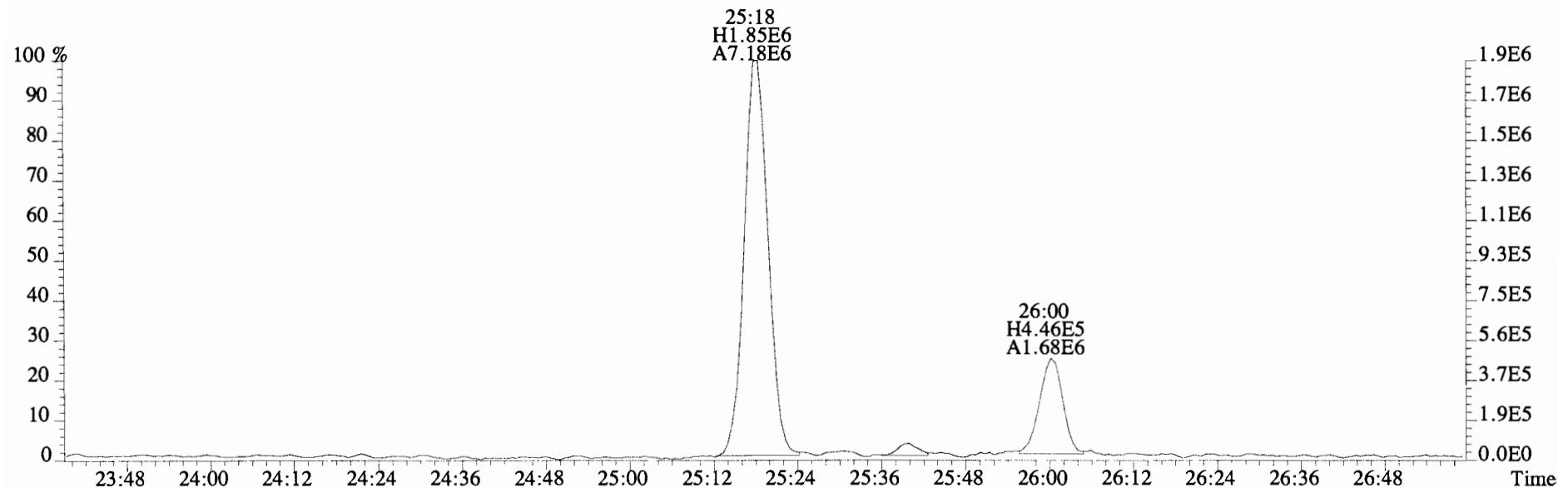
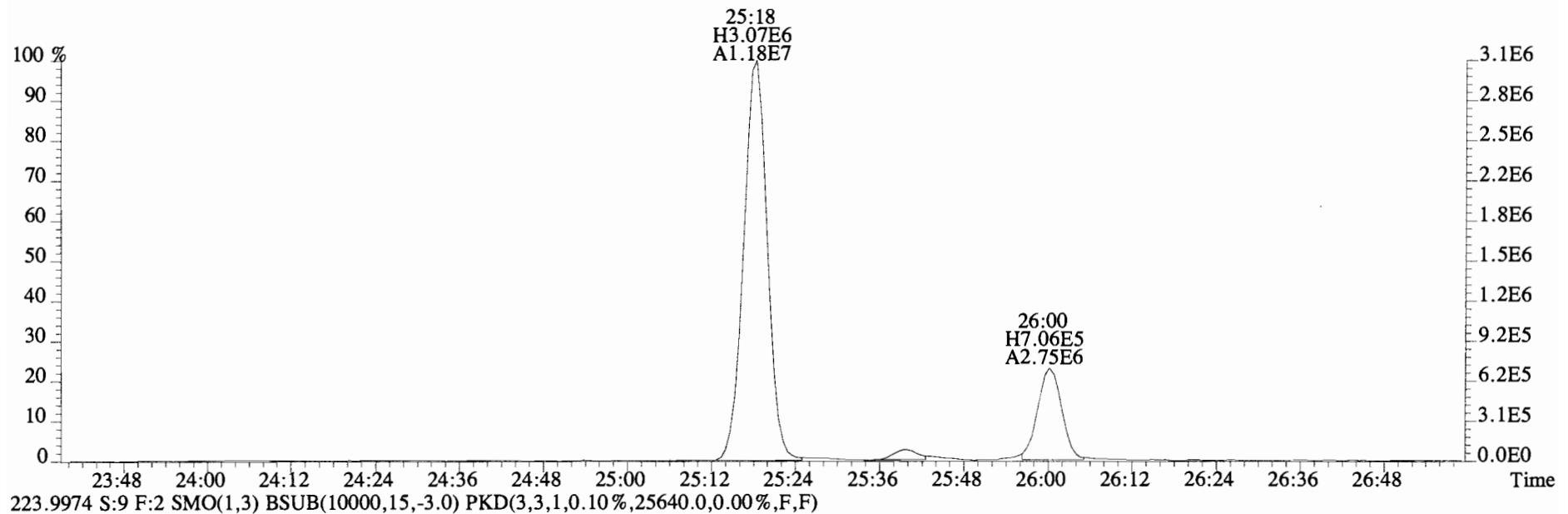
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222.0003 S:9 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5740.0,0.00%,F,F)



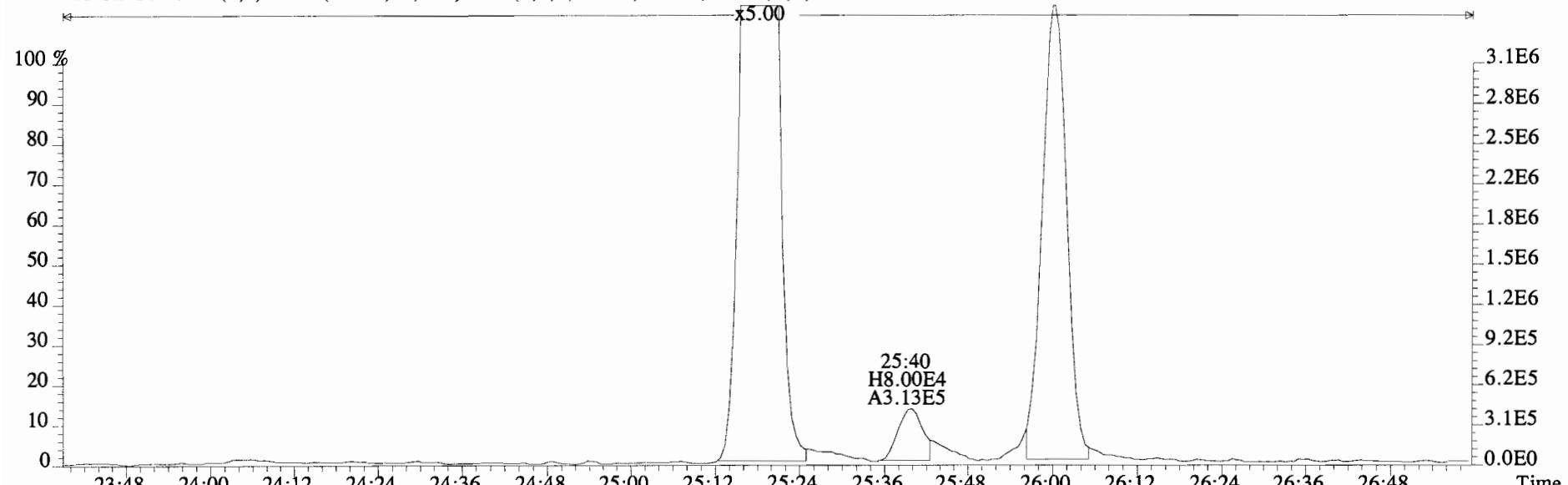
File:141024E2 #1-757 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
222.0003 S:9 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5740.0,0.00%,F,F)



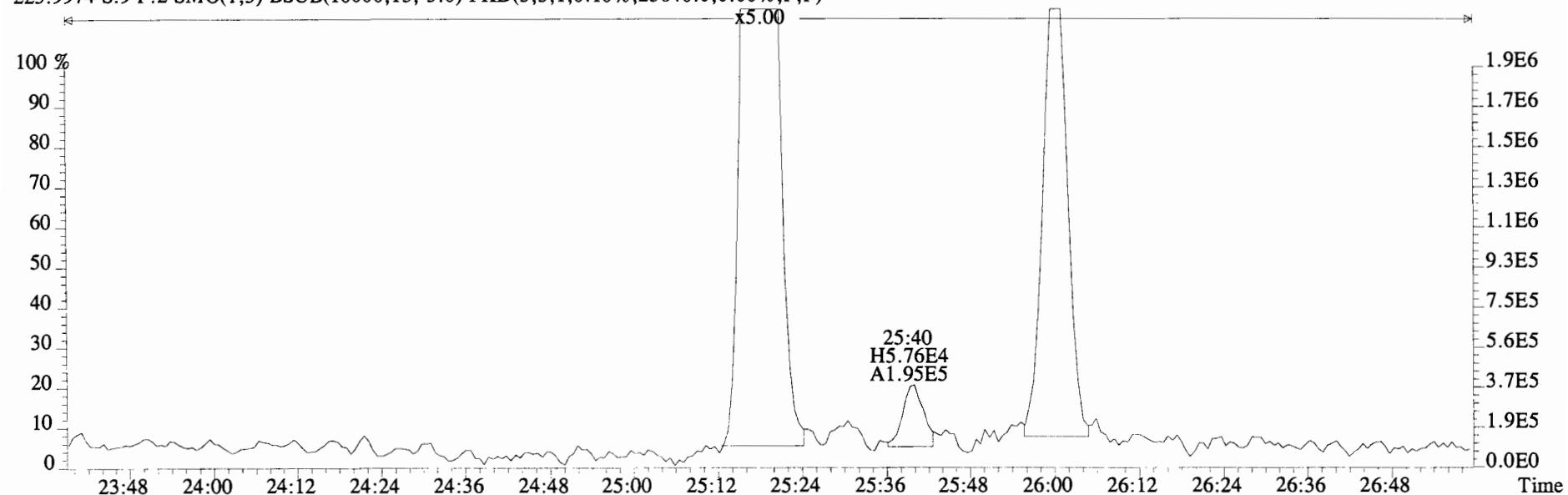
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
222.0003 S:9 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5740.0,0.00%,F,F)



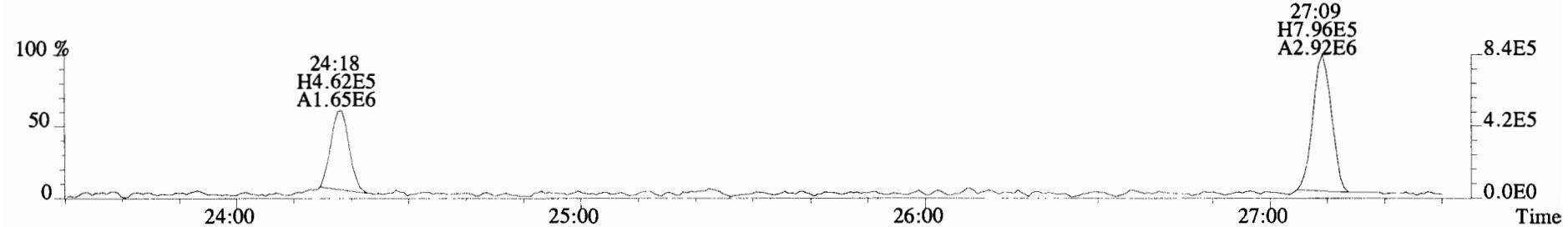
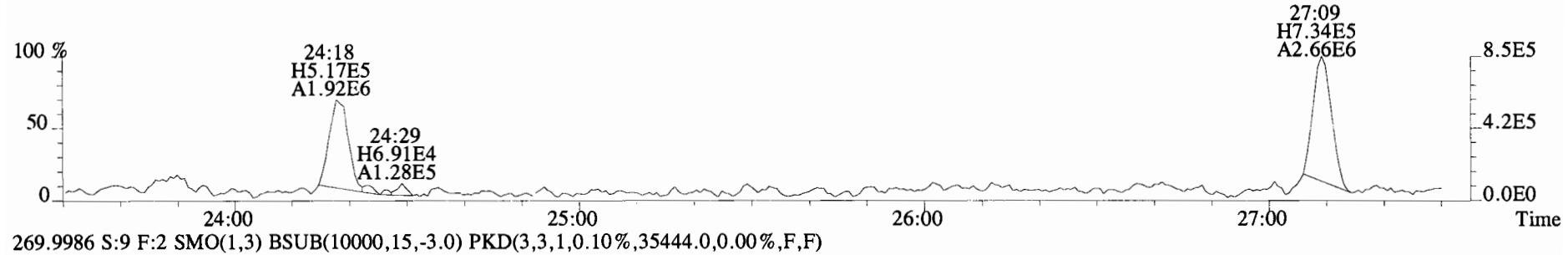
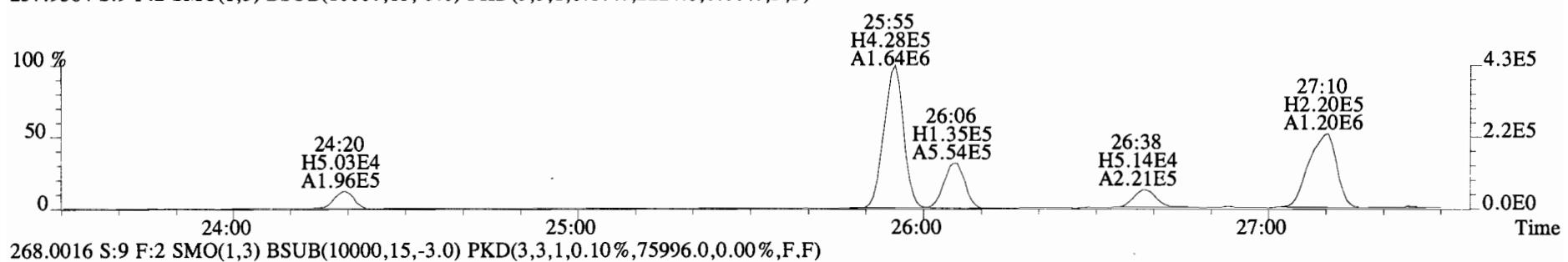
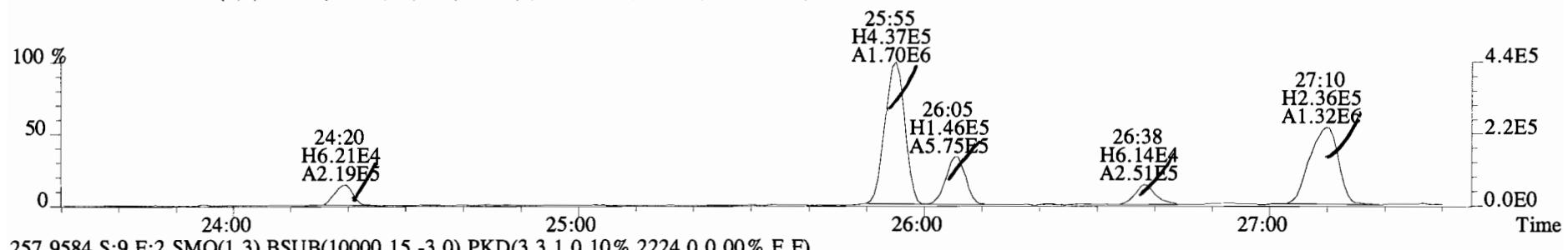
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
222.0003 S:9 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5740.0,0.00%,F,F)



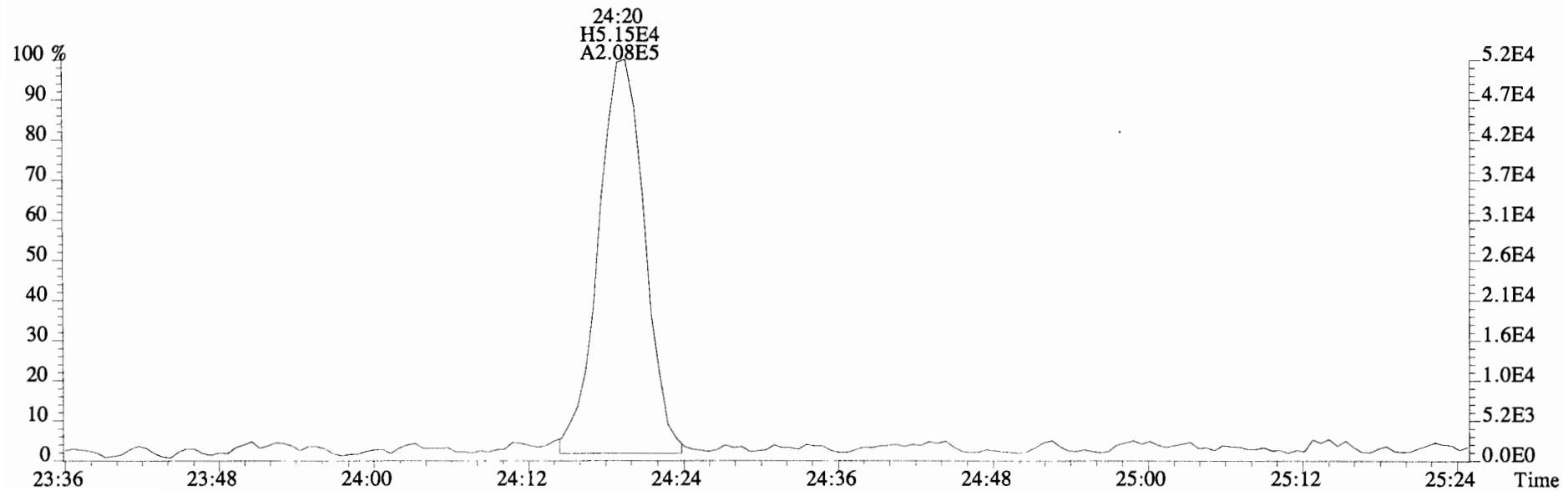
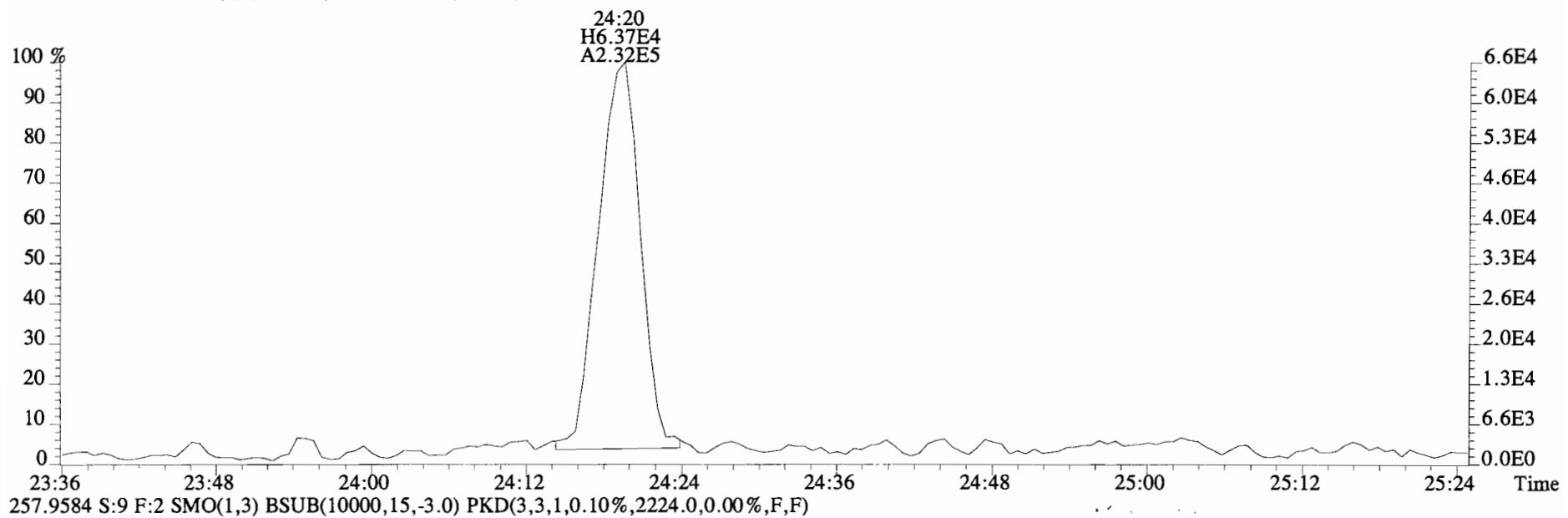
223.9974 S:9 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25640.0,0.00%,F,F)



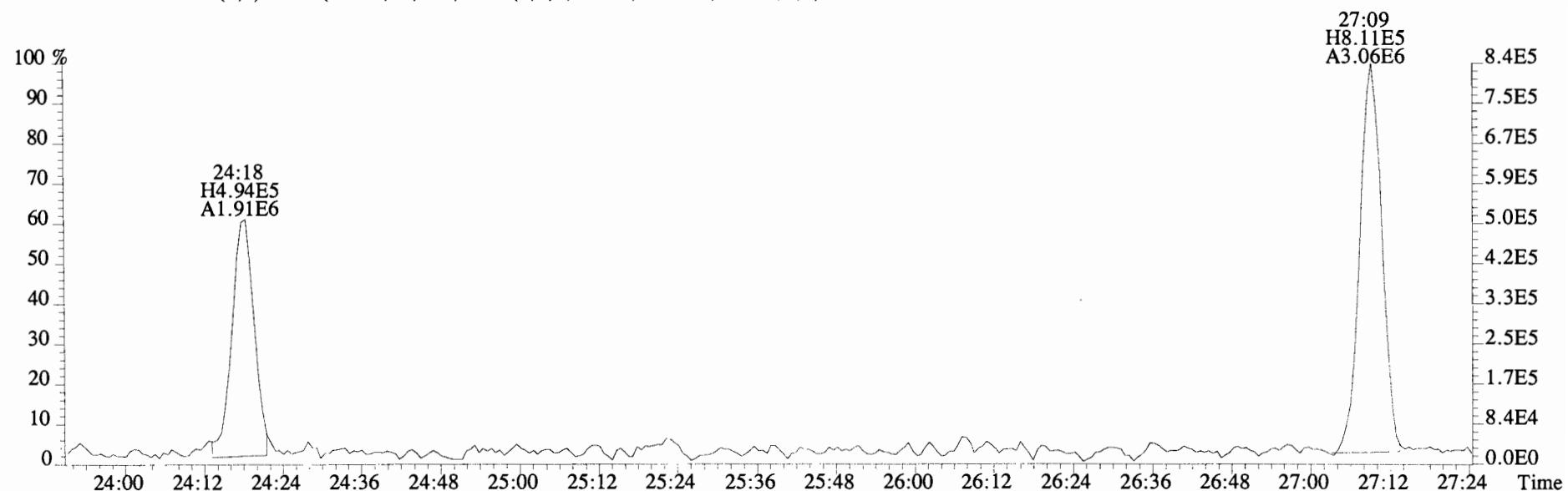
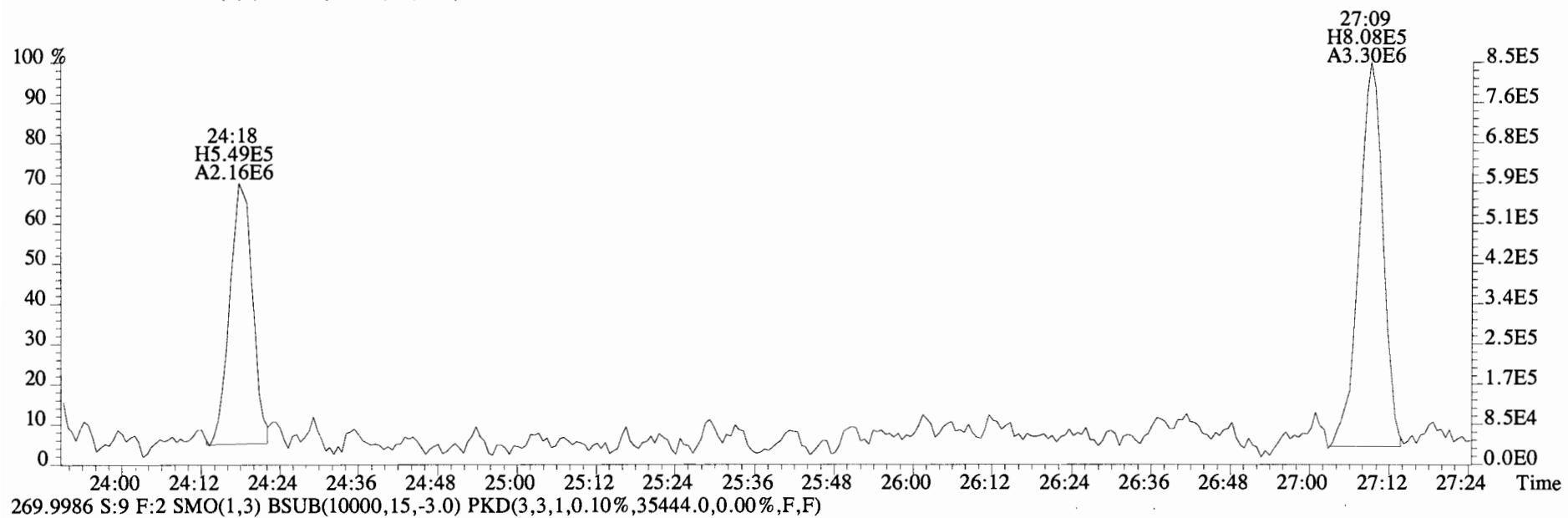
File:141024E2 #1-757 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 255.9613 S:9 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3416.0,0.00%,F,F)



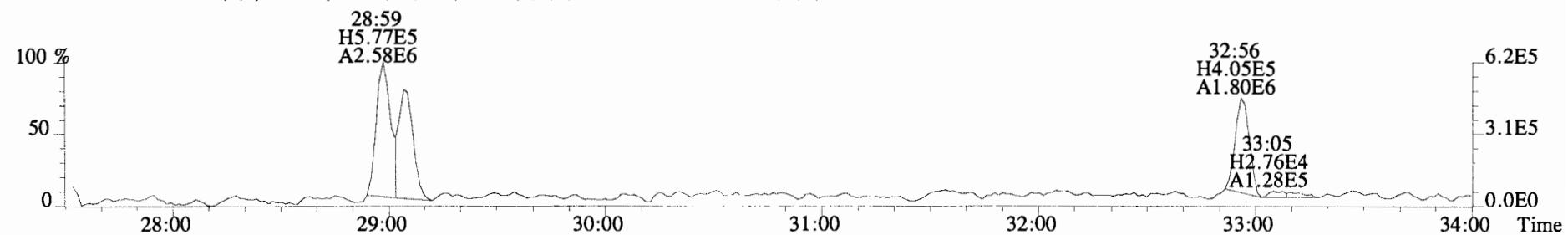
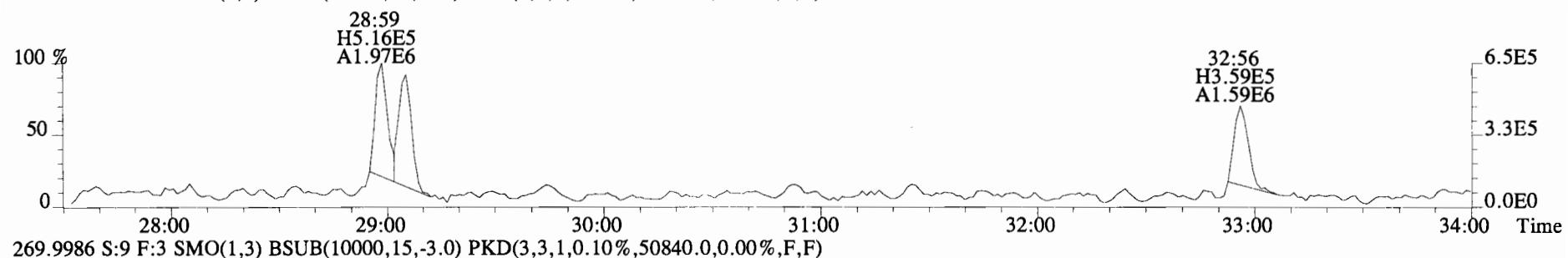
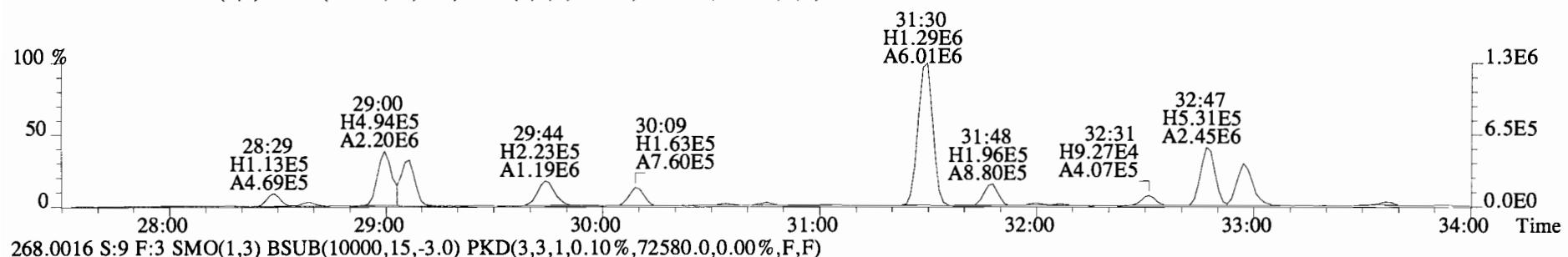
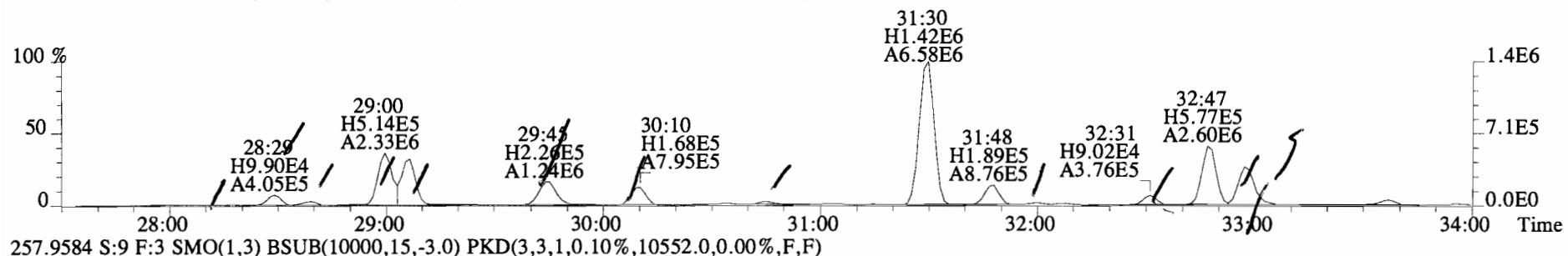
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
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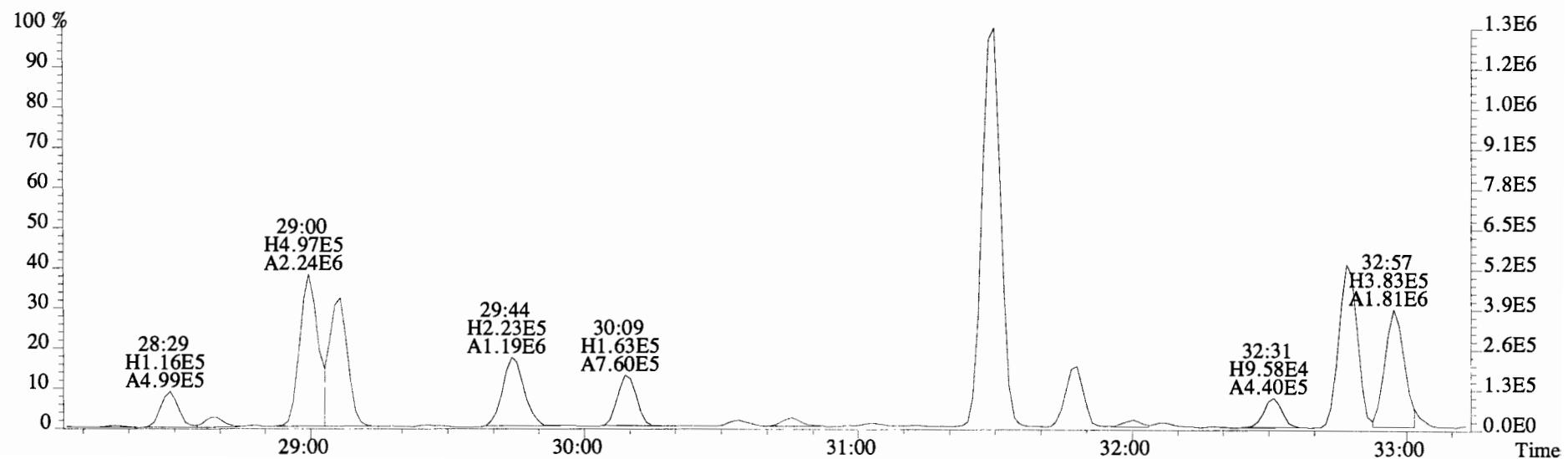
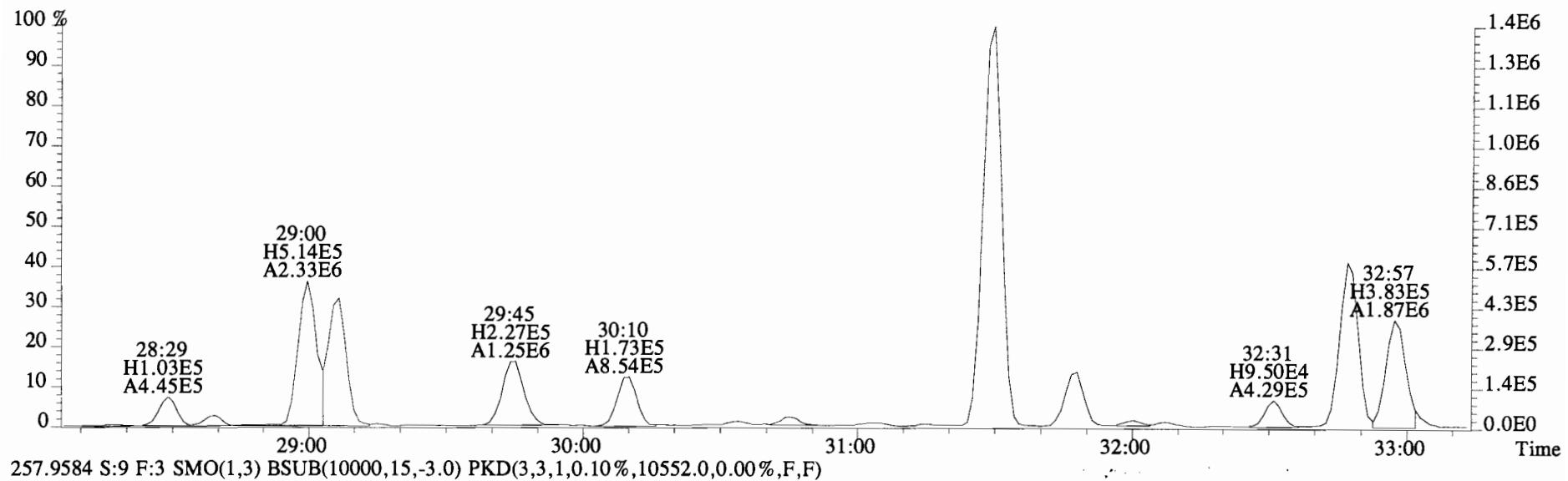
File:141024E2 #1-757 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
268.0016 S:9 F:2 SMO(1,3) BSUB(10000,15,-3.0)



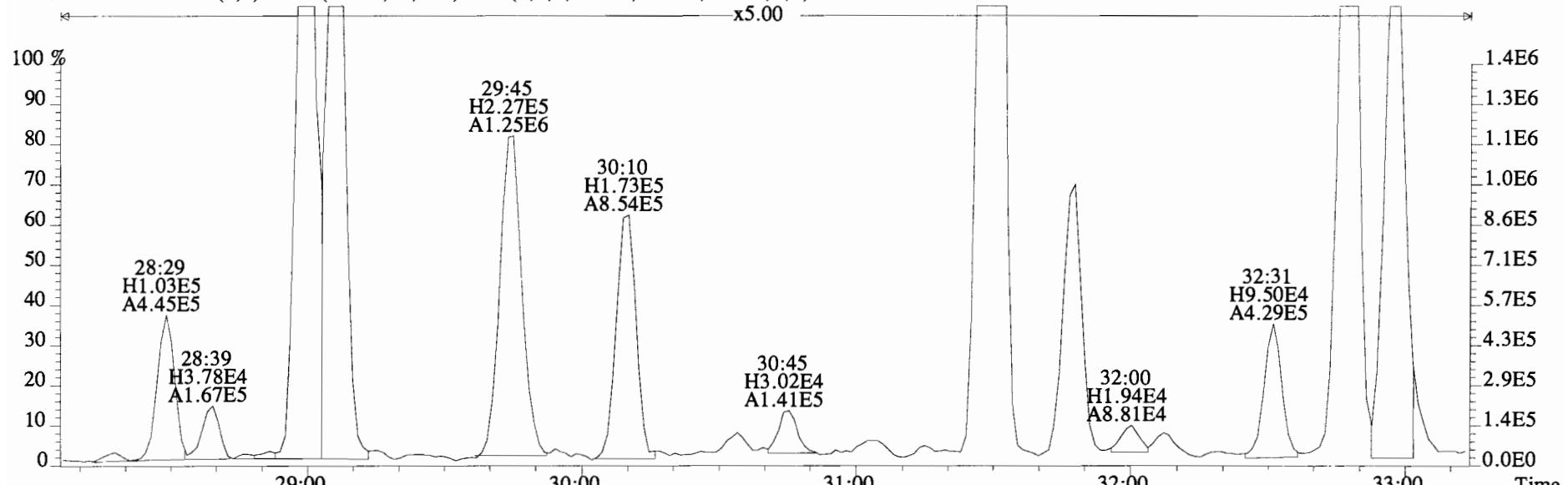
File:141024E2 #1-762 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 255.9613 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9408.0,0.00%,F,F)



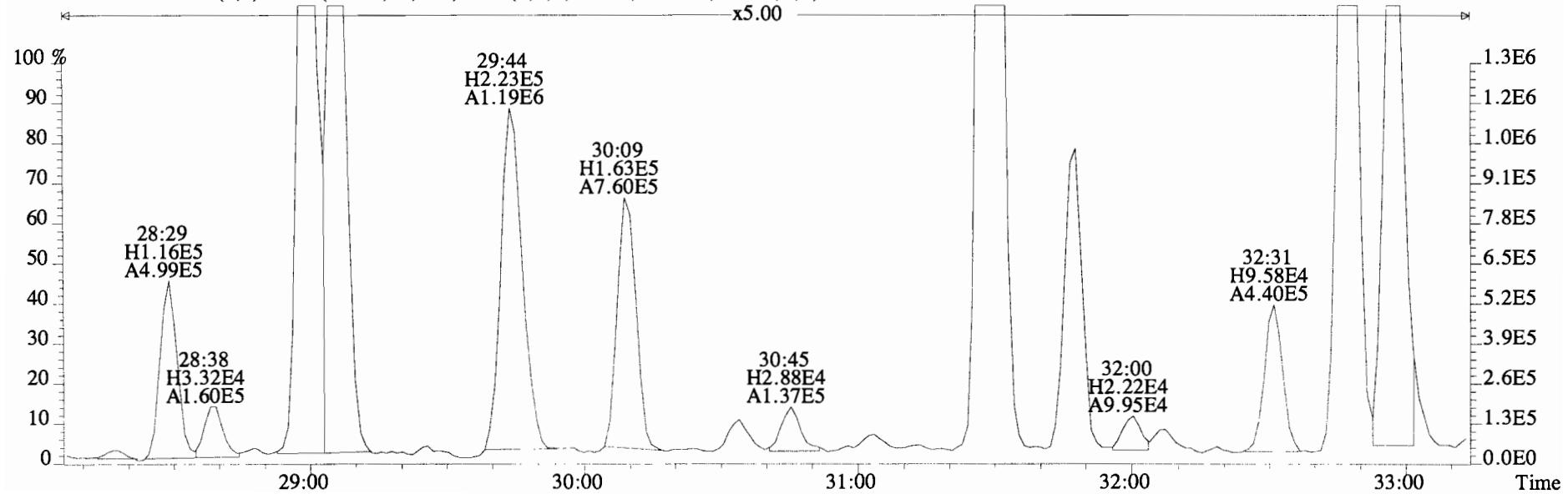
File:141024E2 #1-762 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
255.9613 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9408.0,0.00%,F,F)



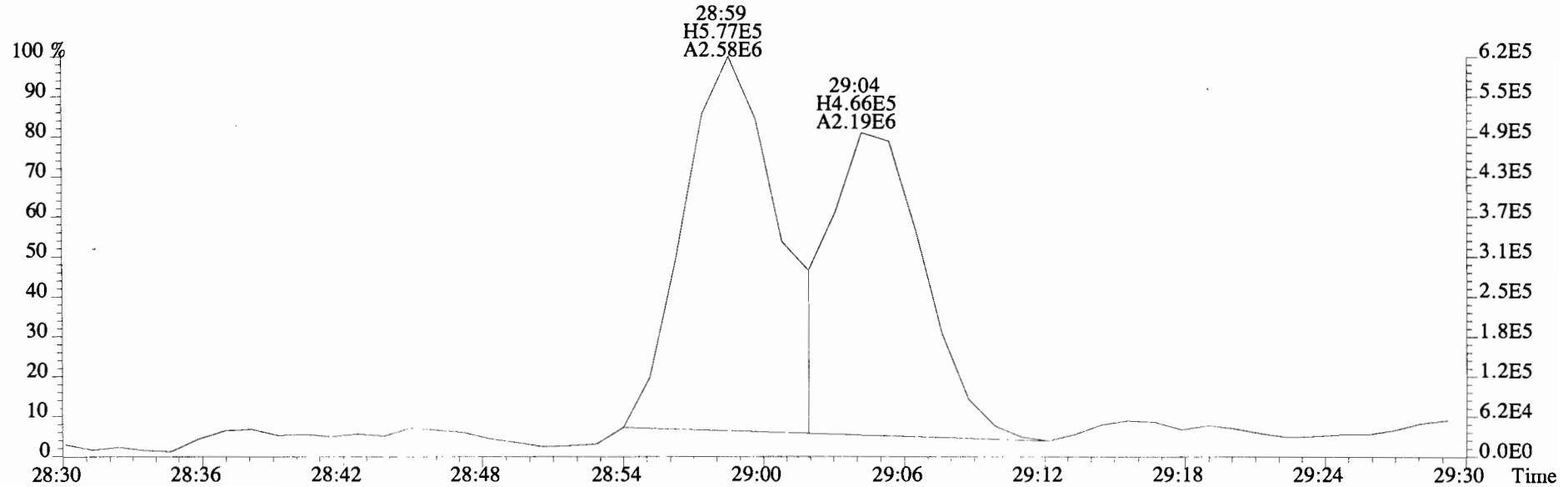
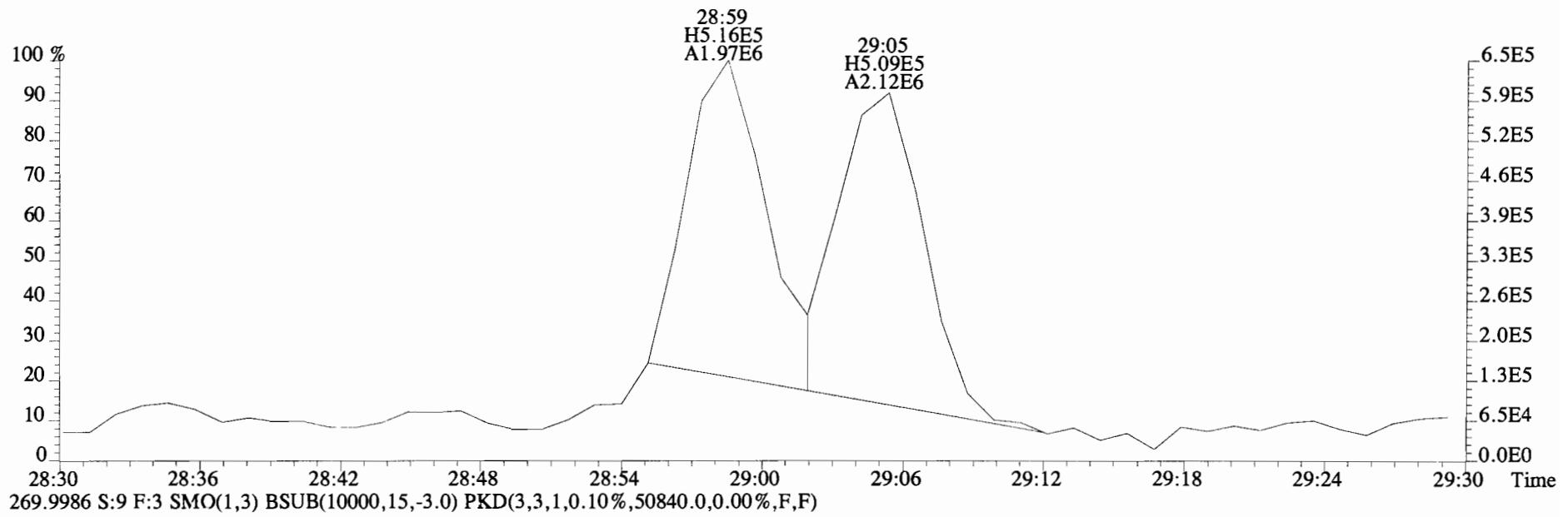
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
255.9613 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9408.0,0.00%,F,F)



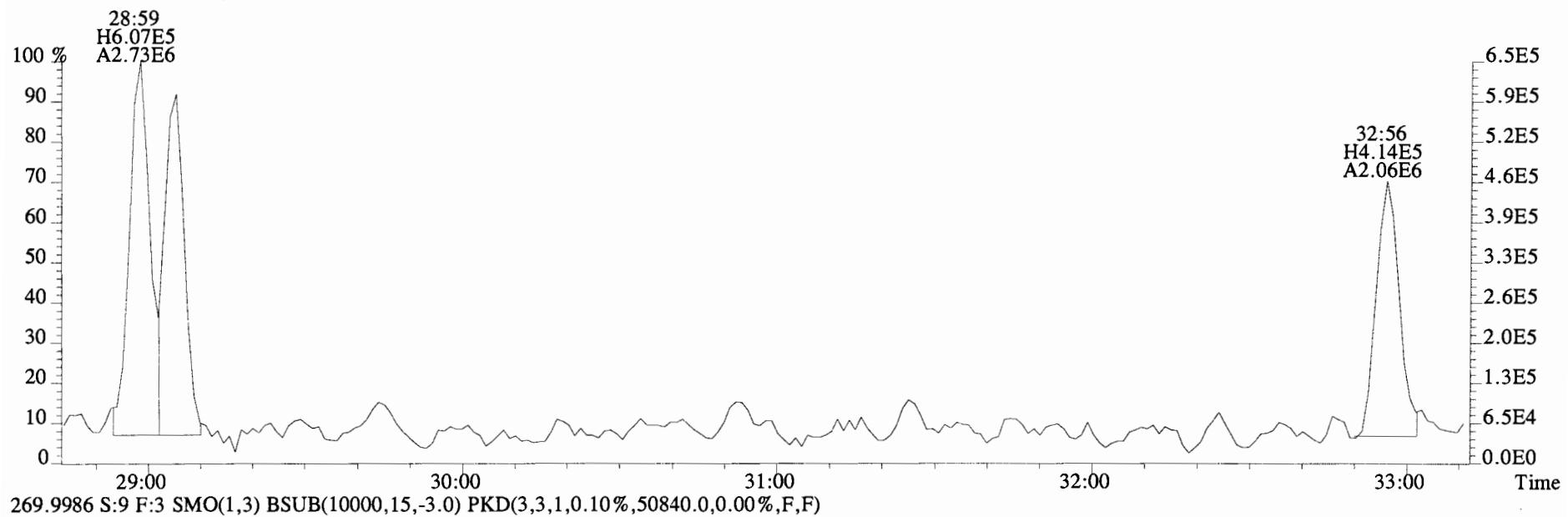
257.9584 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10552.0,0.00%,F,F)



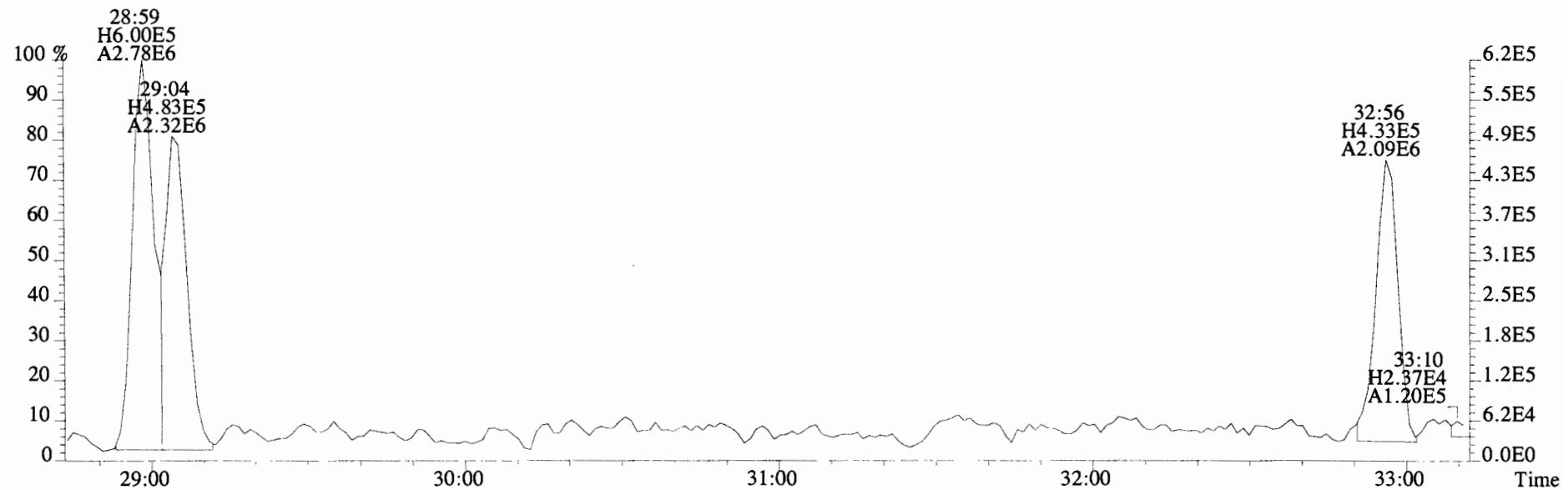
File:141024E2 #1-762 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
268.0016 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,72580.0,0.00%,F,F)



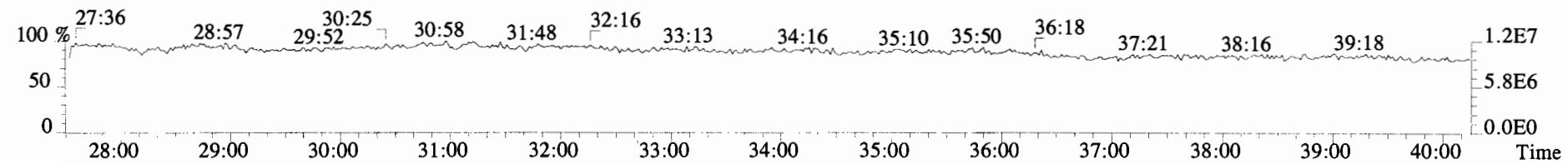
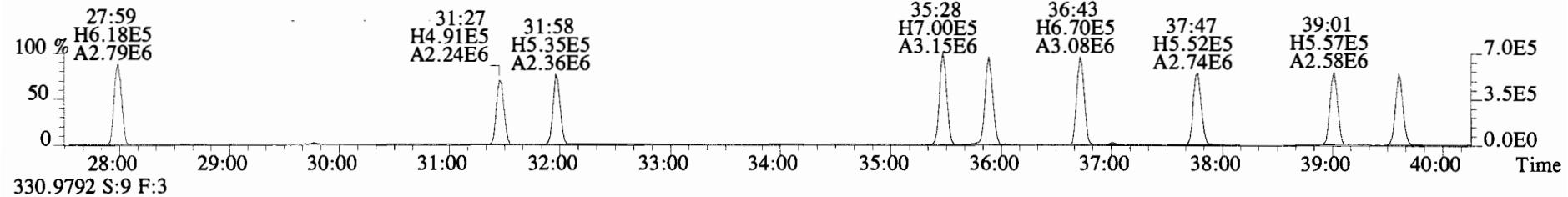
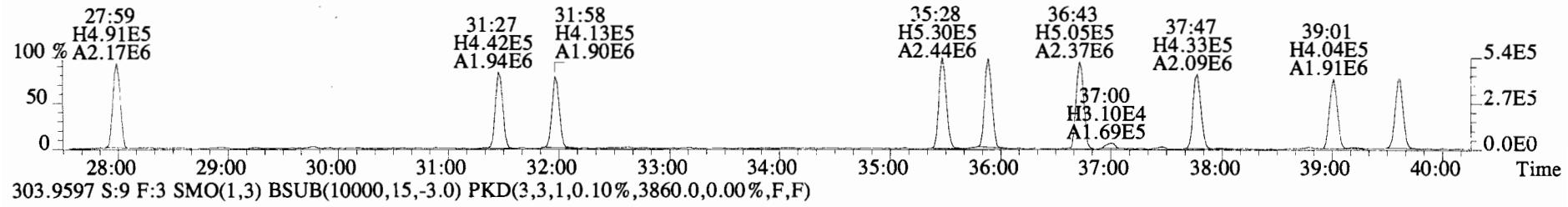
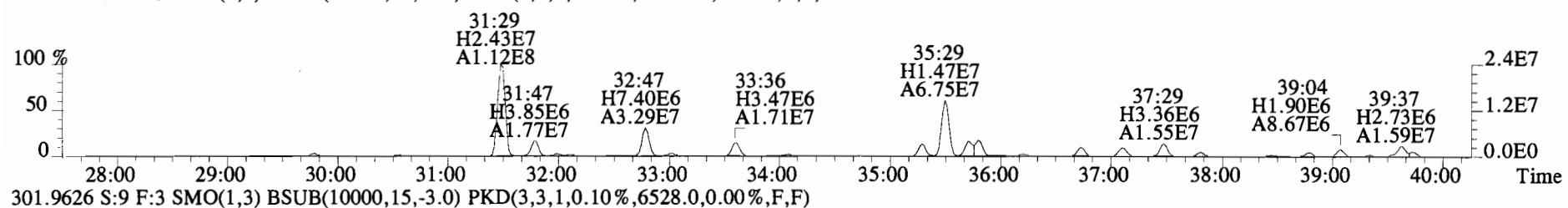
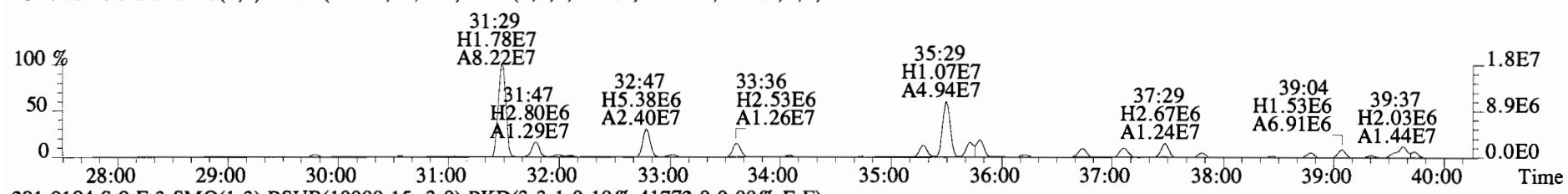
File:141024E2 #1-762 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
268.0016 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,72580.0,0.00%,F,F)



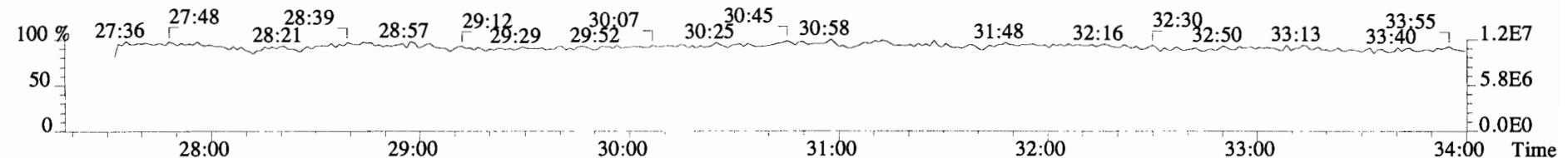
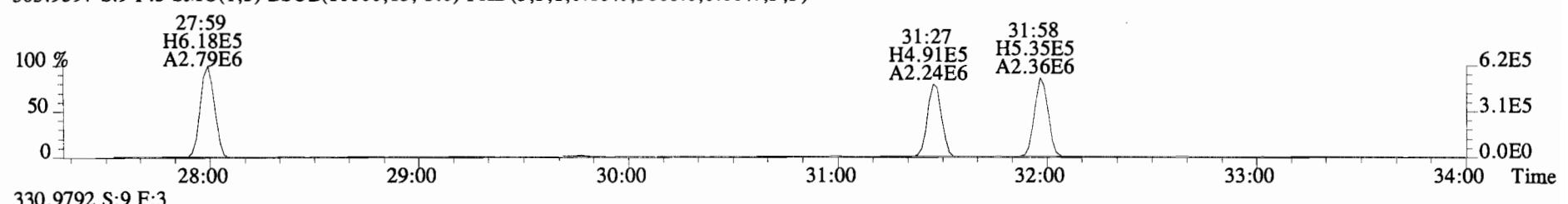
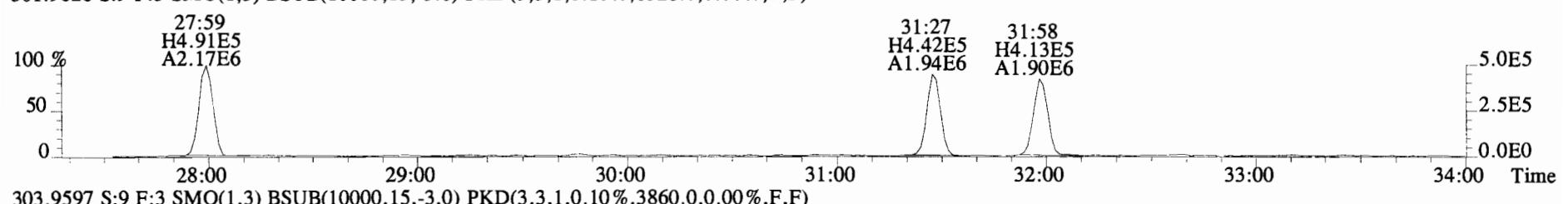
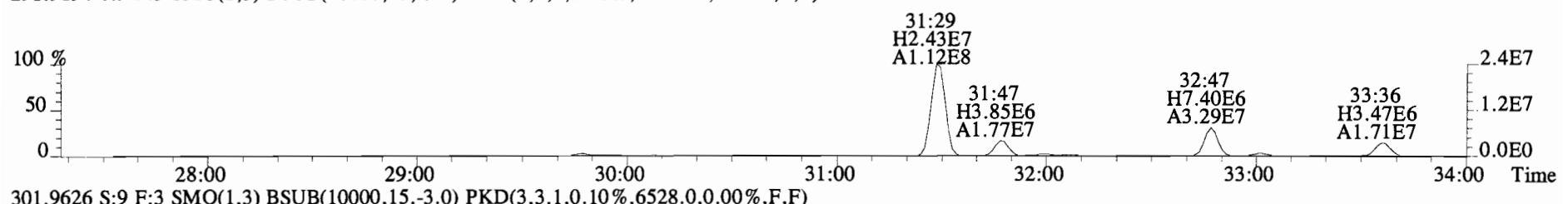
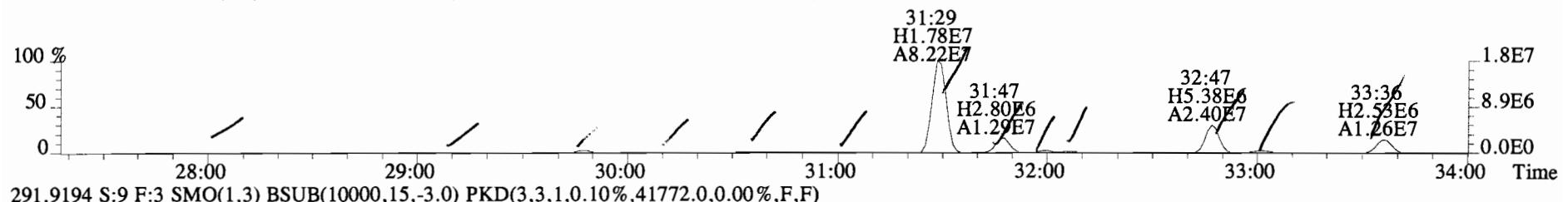
269.9986 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,50840.0,0.00%,F,F)



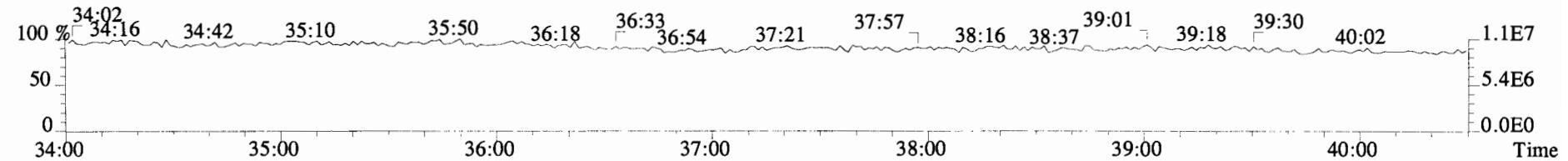
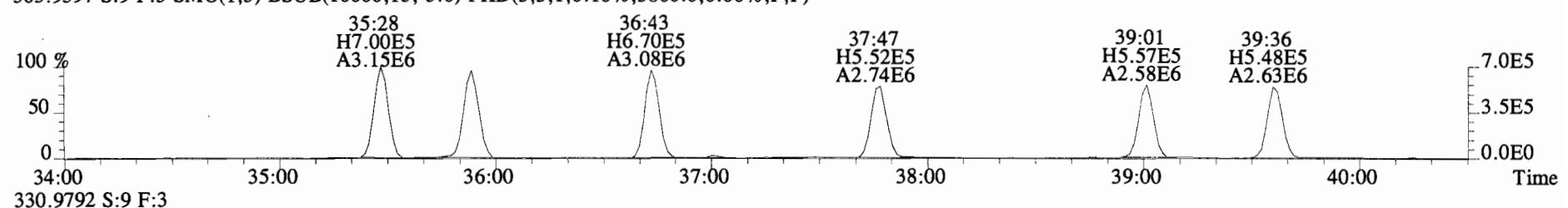
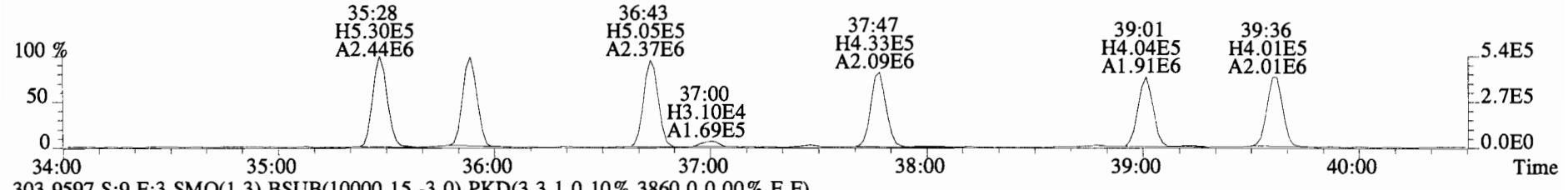
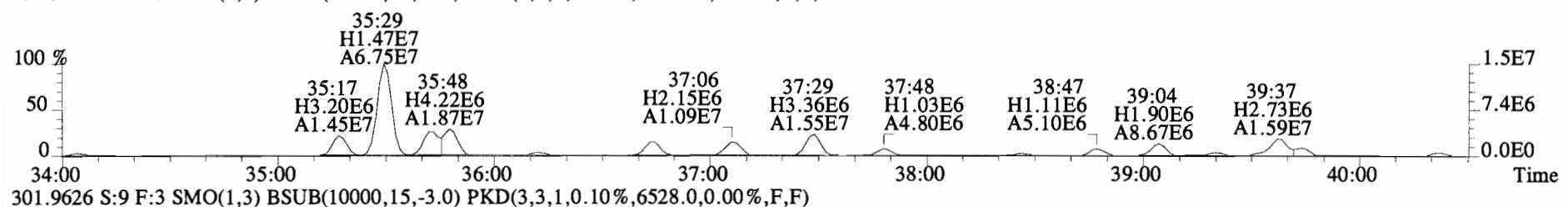
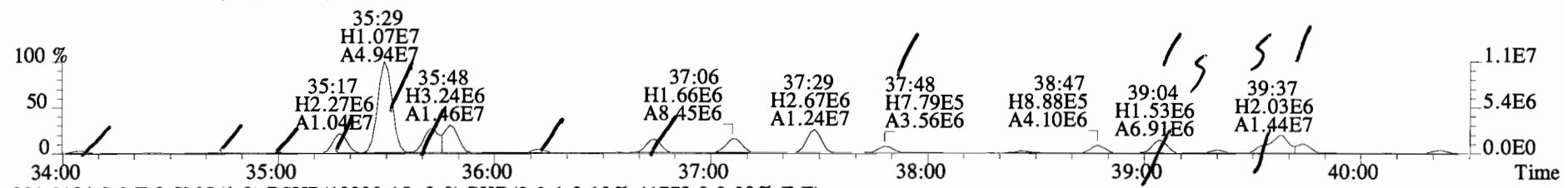
File:141024E2 #1-762 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 289.9224 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30808.0,0.00%,F,F)



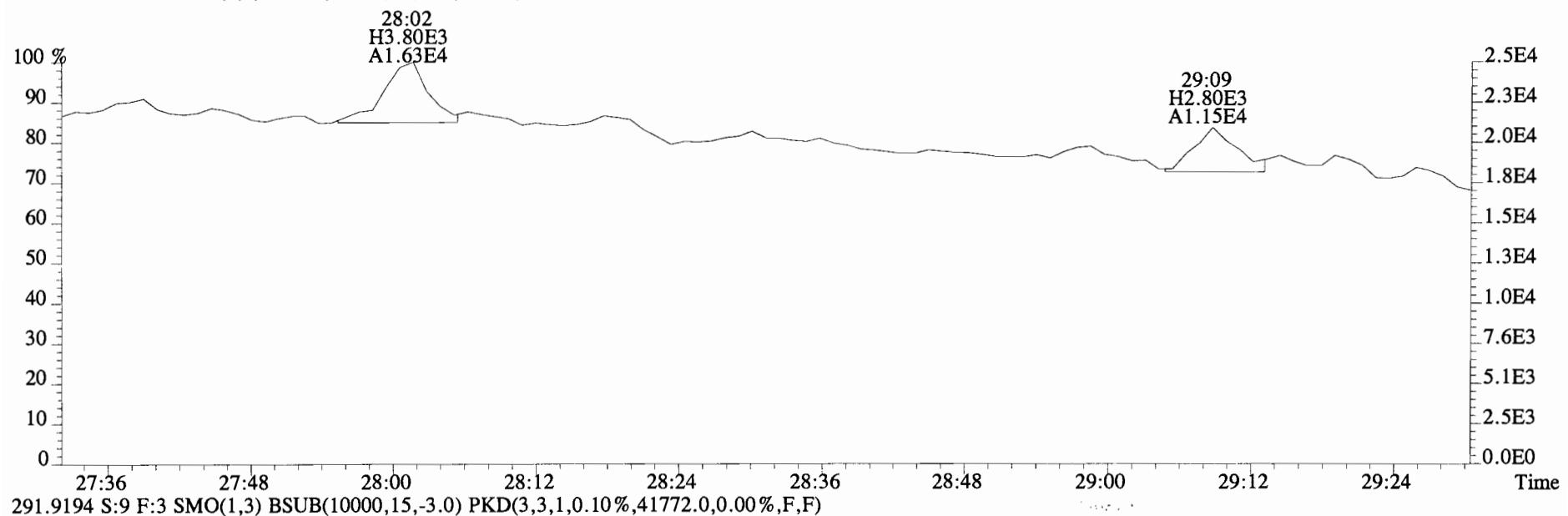
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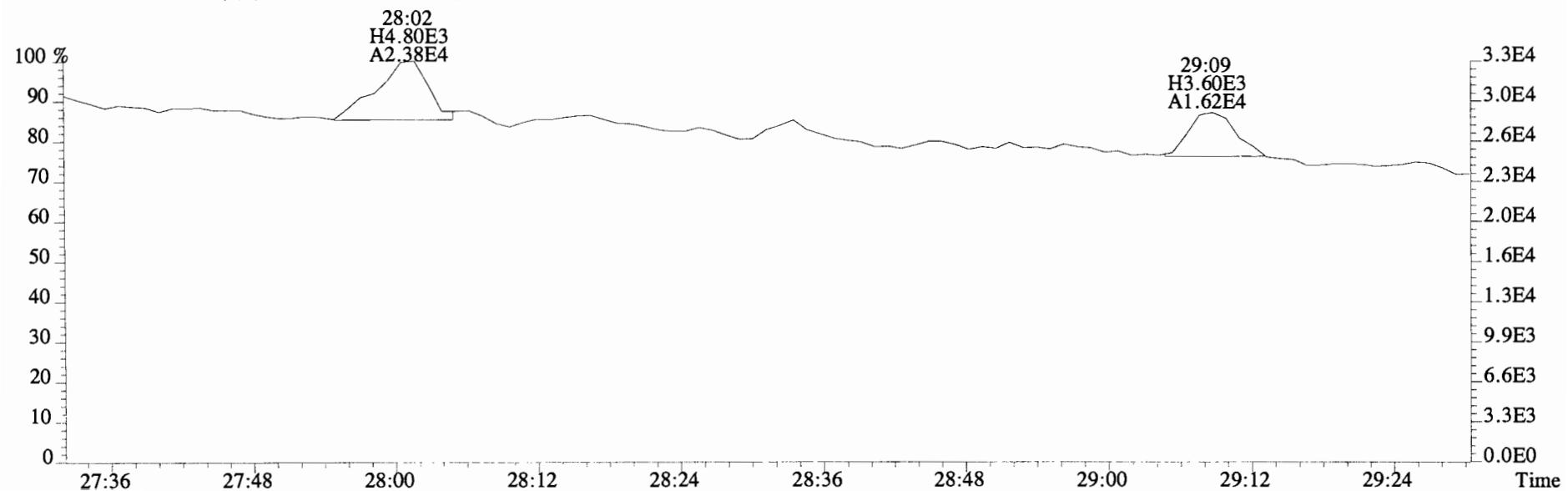
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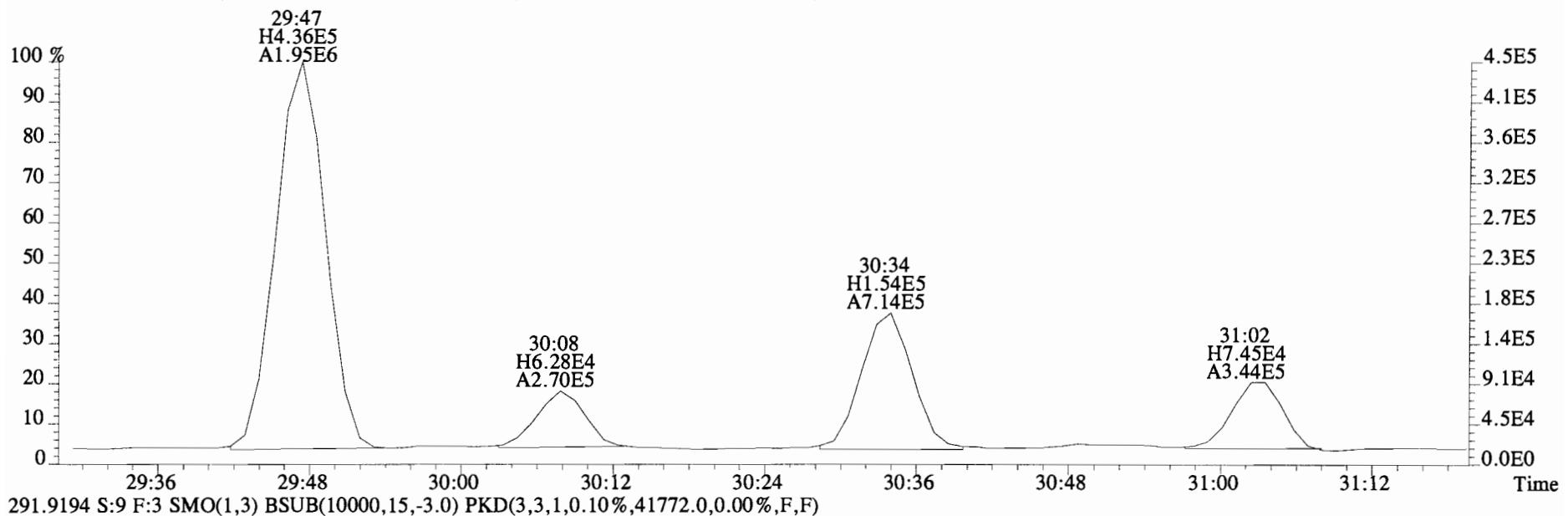
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
289.9224 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30808.0,0.00%,F,F)



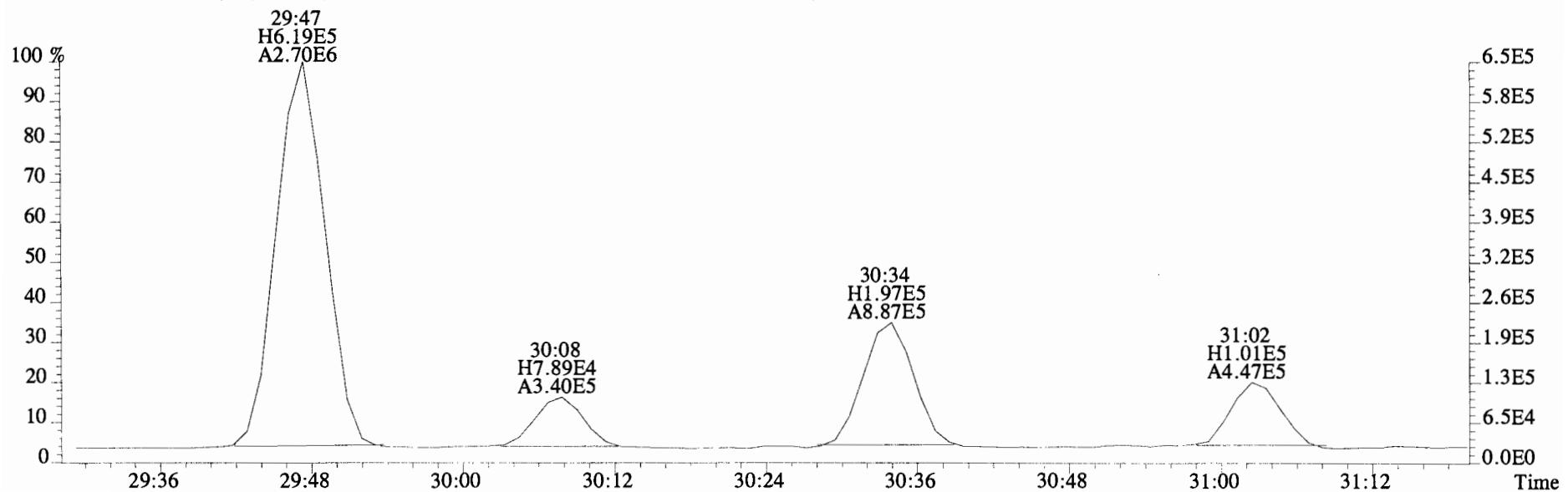
291.9194 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,41772.0,0.00%,F,F)



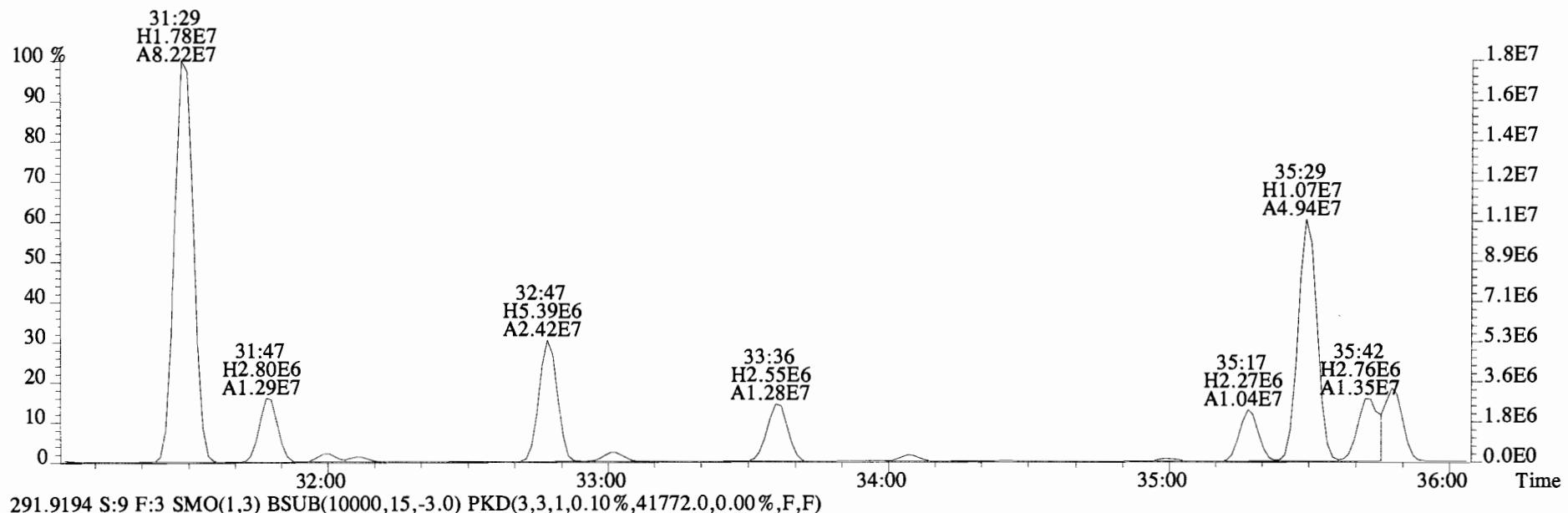
File:141024E2 #1-762 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
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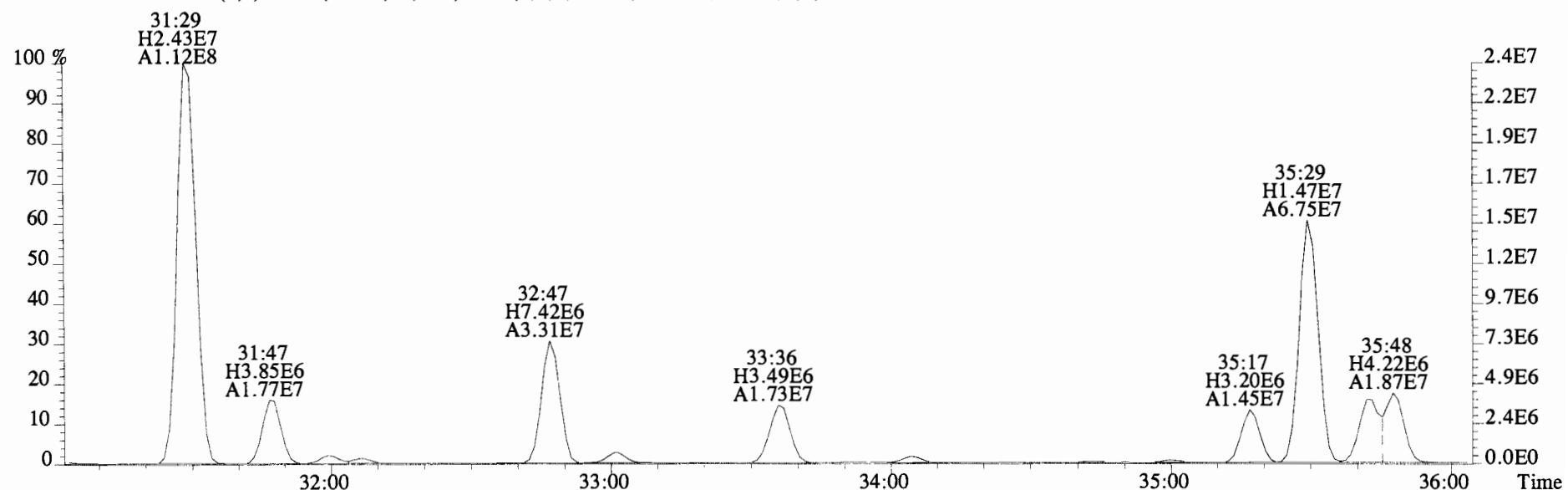
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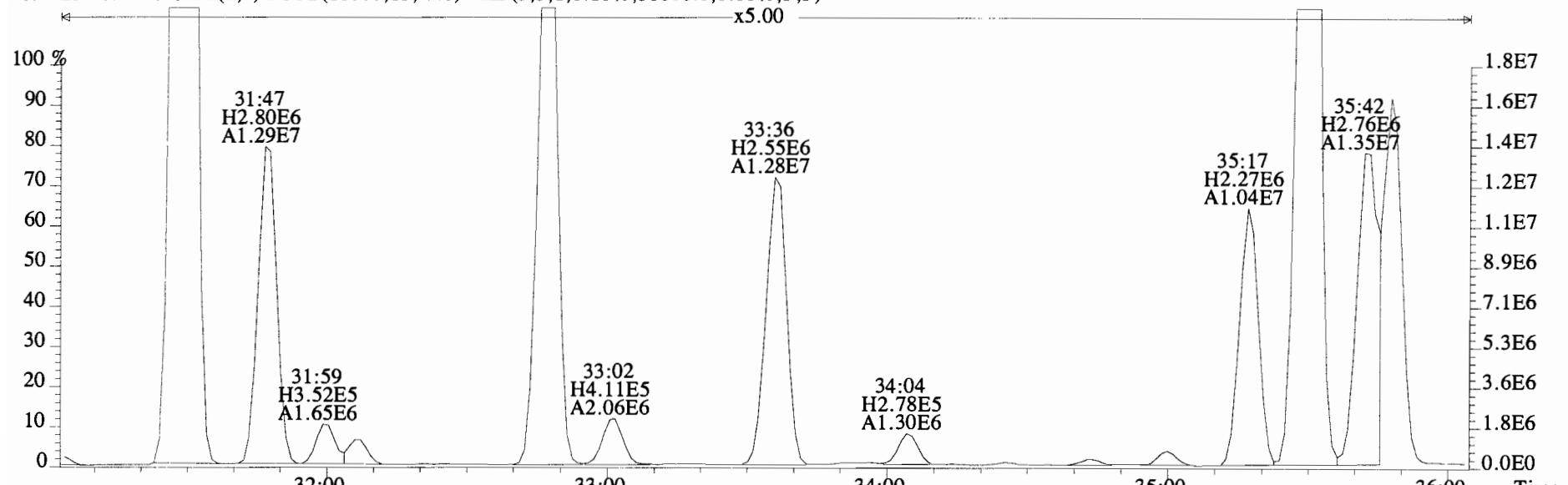
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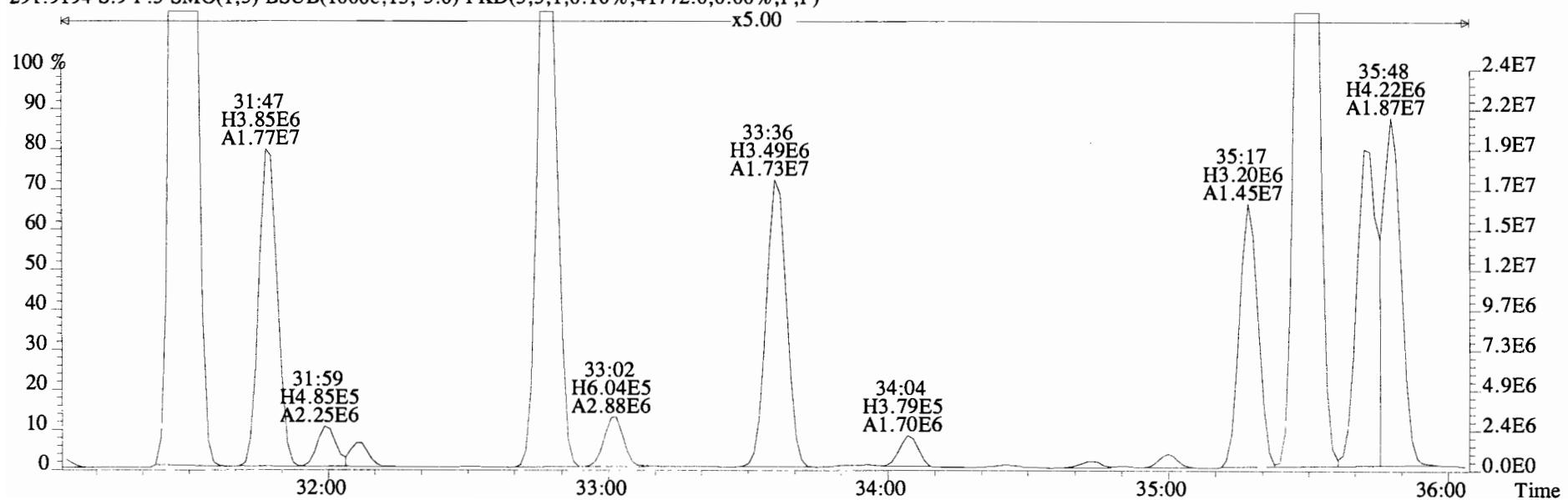
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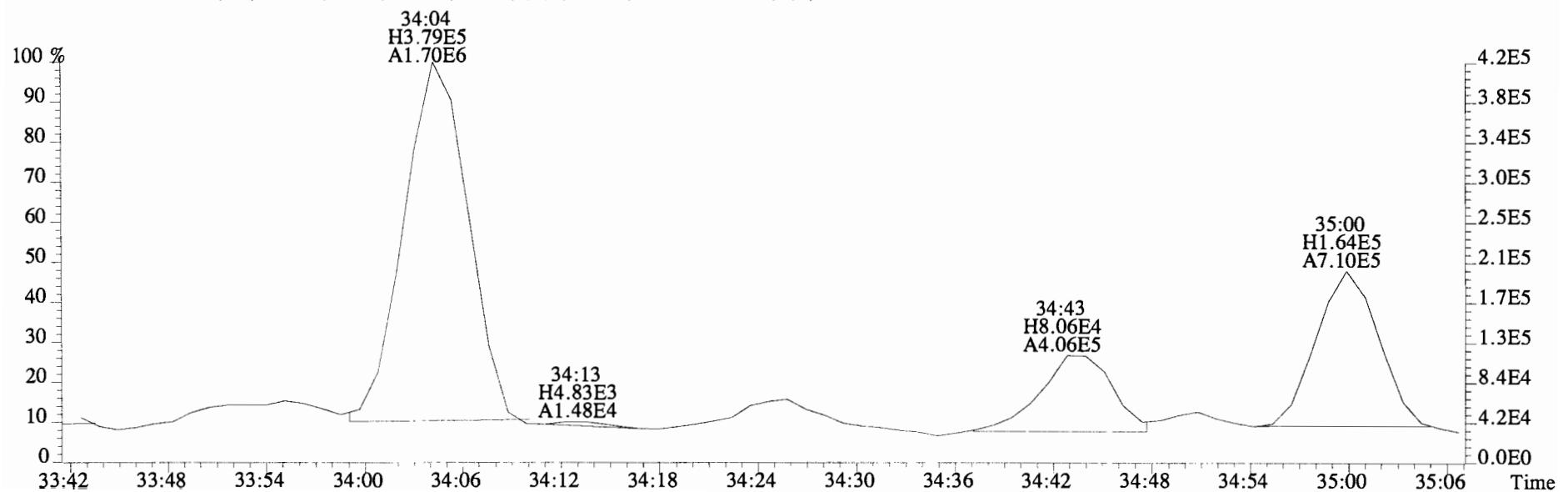
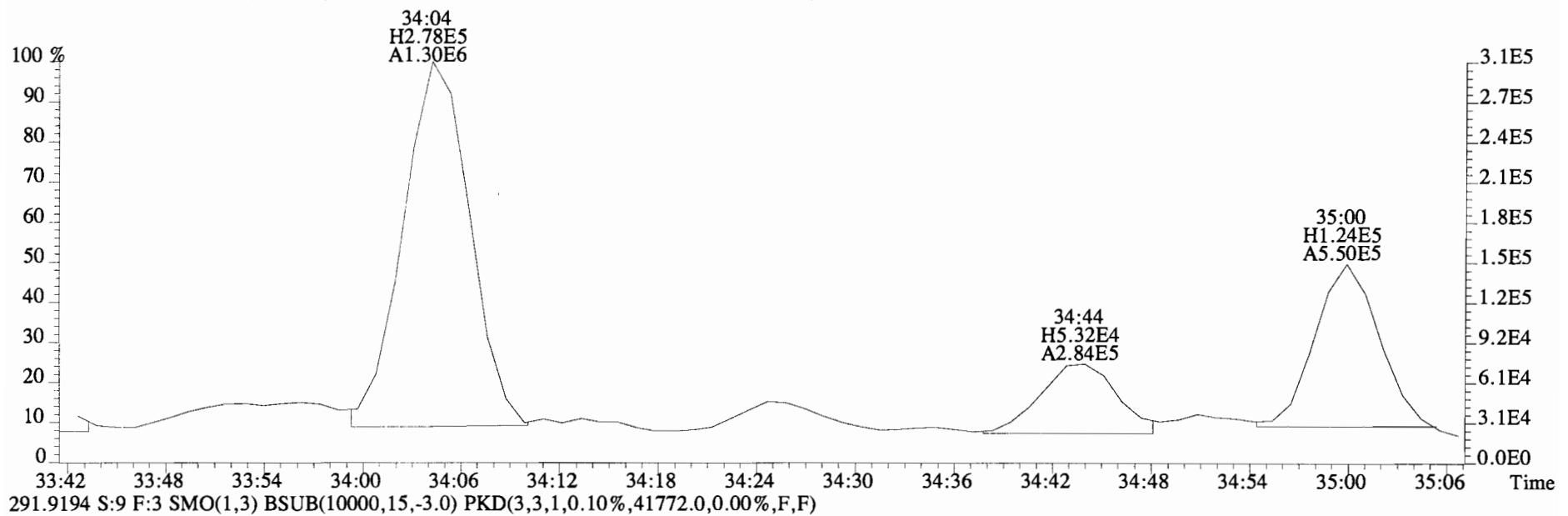
File:141024E2 #1-762 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
289.9224 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30808.0,0.00%,F,F)



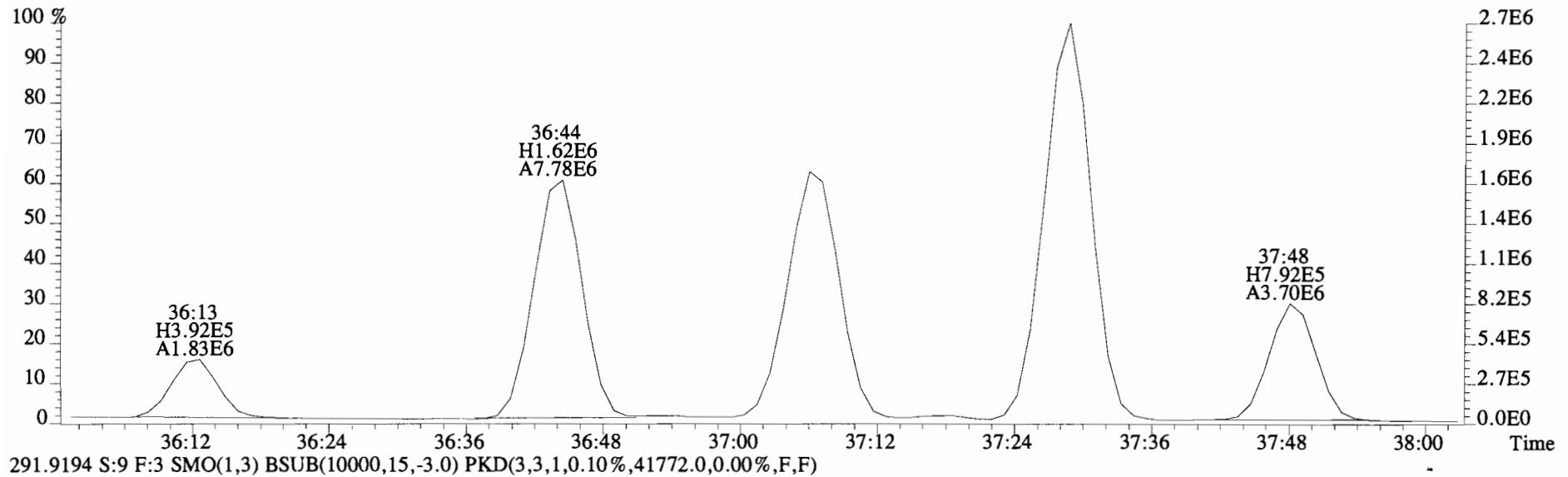
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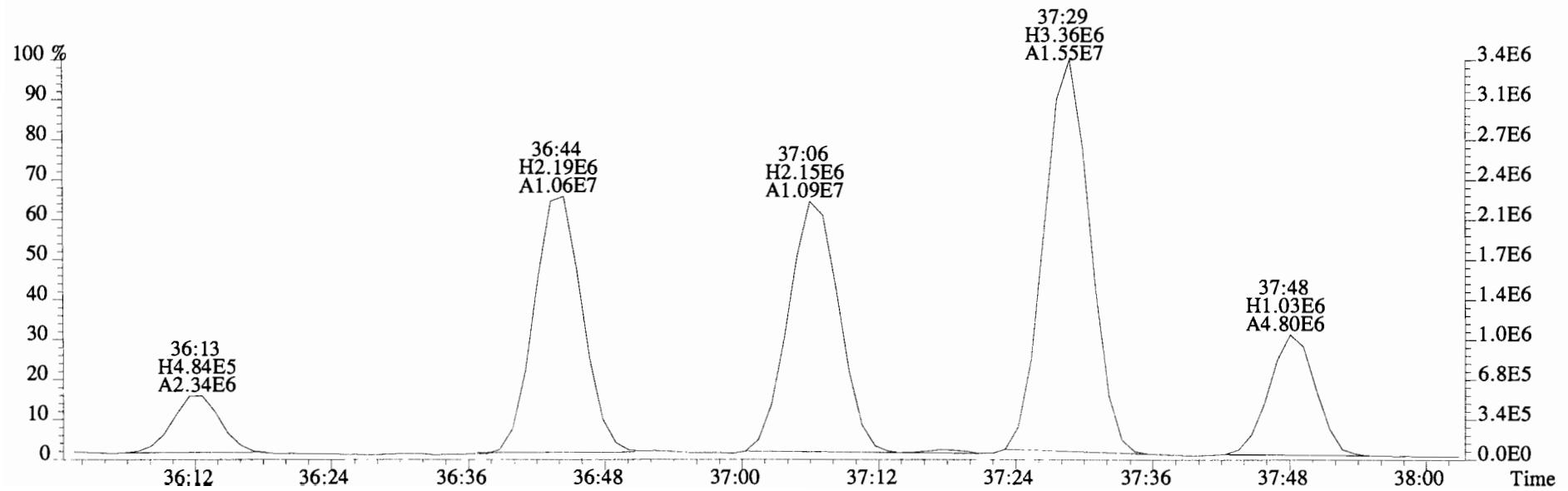
File:141024E2 #1-762 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
289.9224 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30808.0,0.00%,F,F)



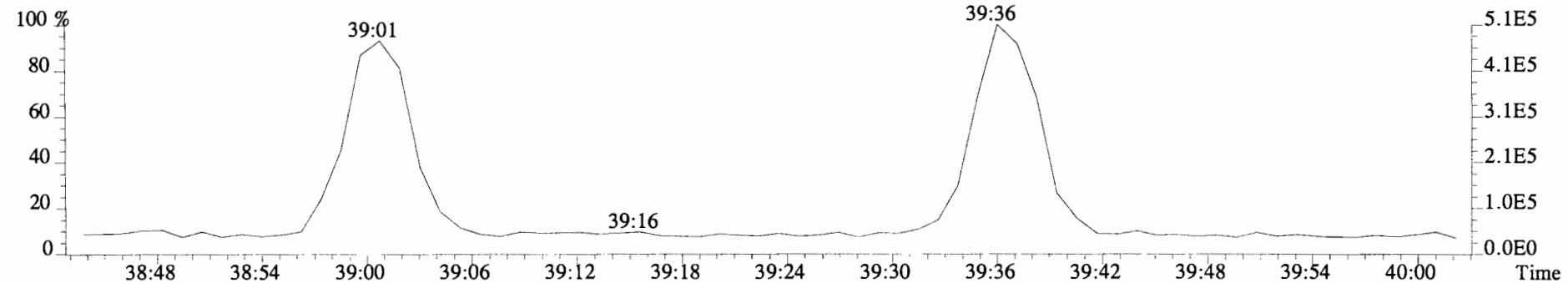
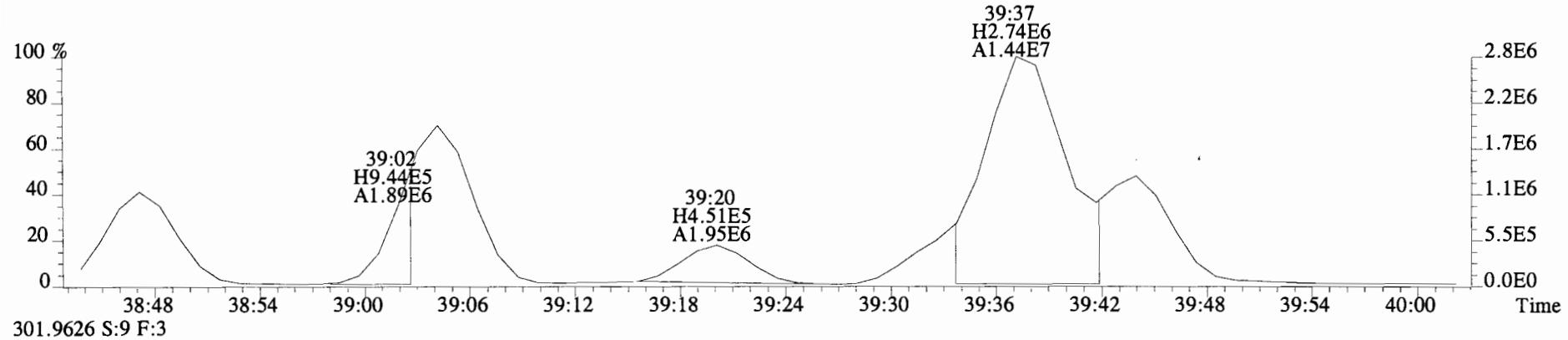
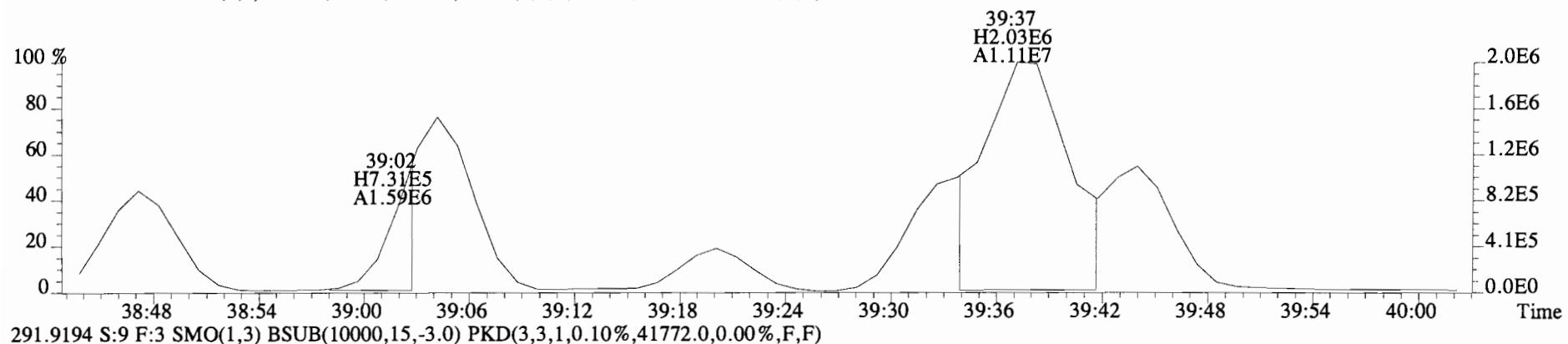
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
289.9224 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30808.0,0.00%,F,F)



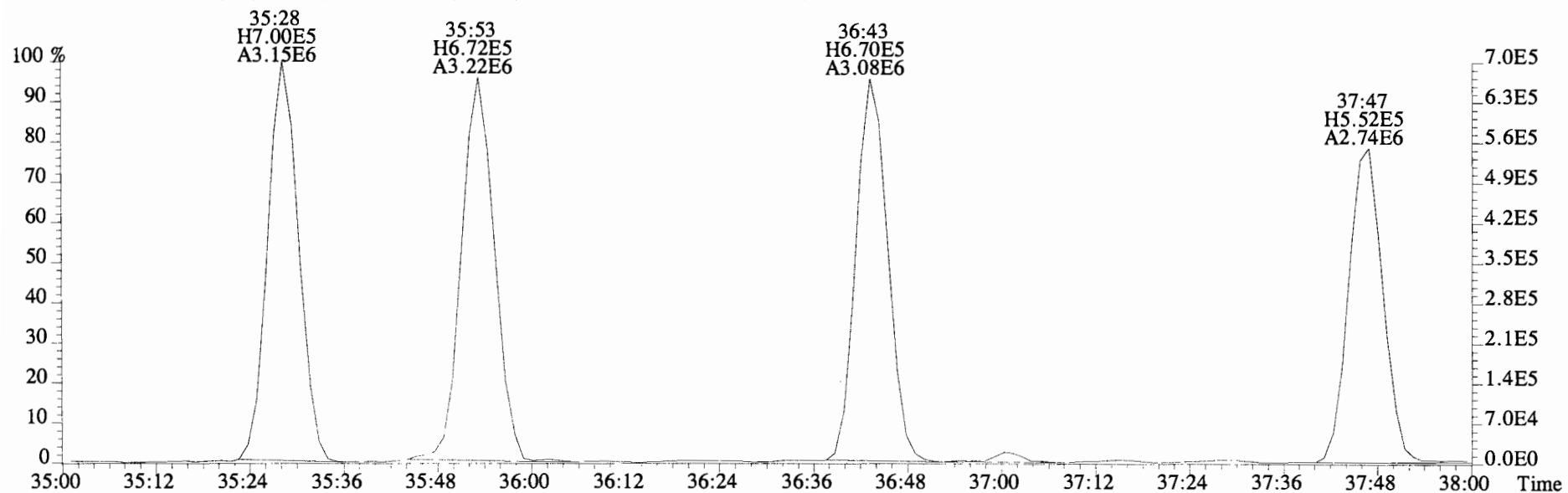
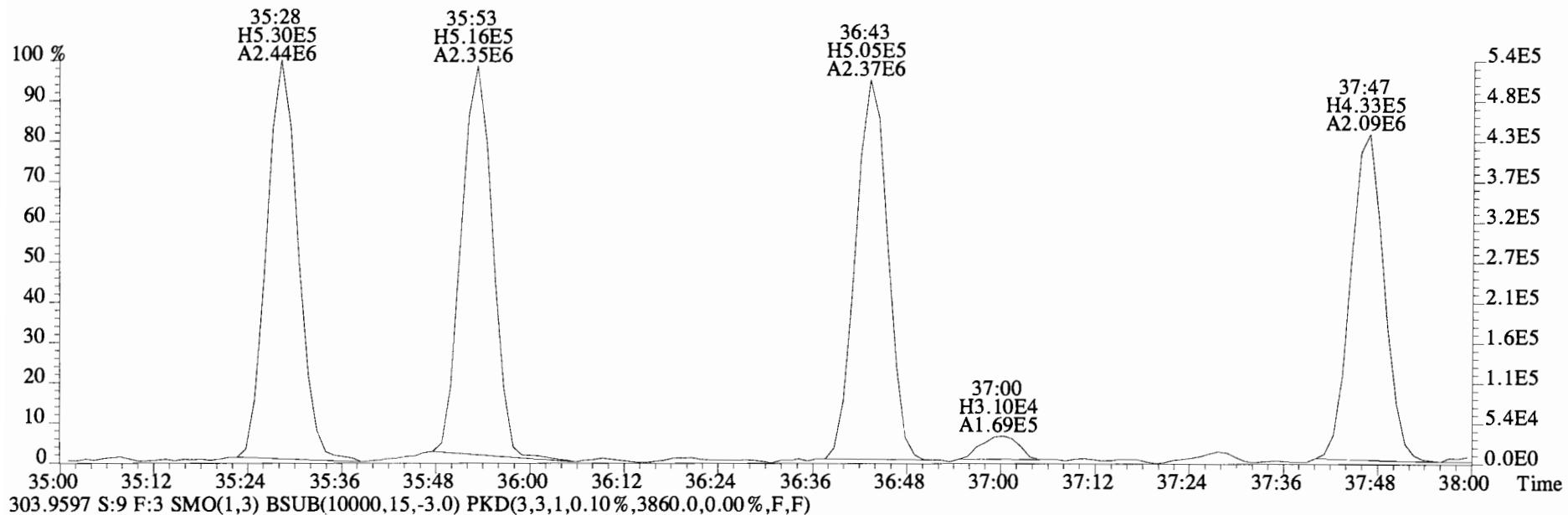
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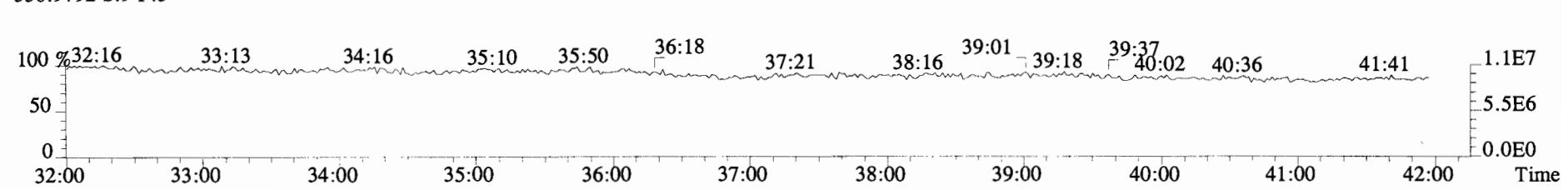
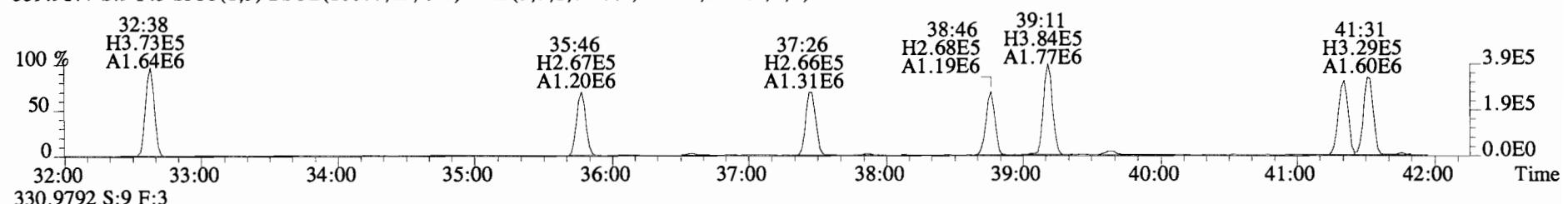
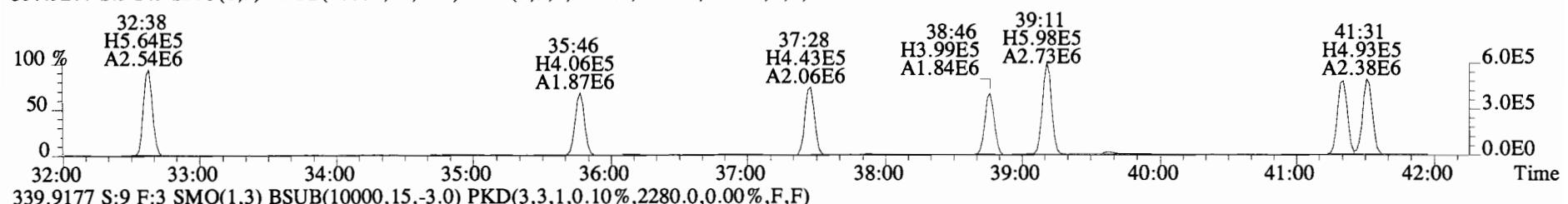
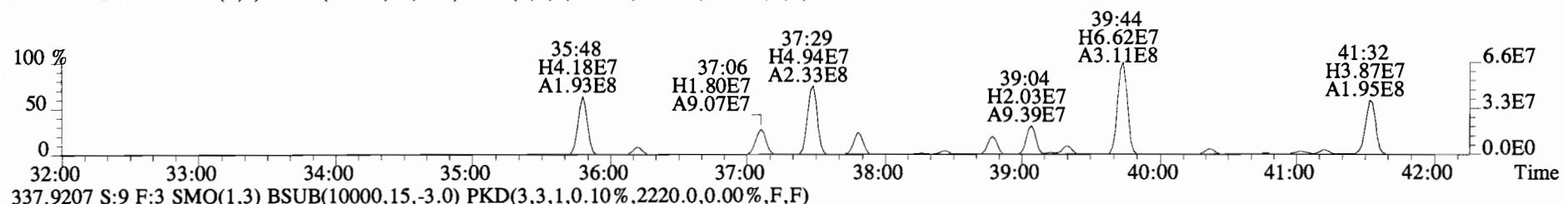
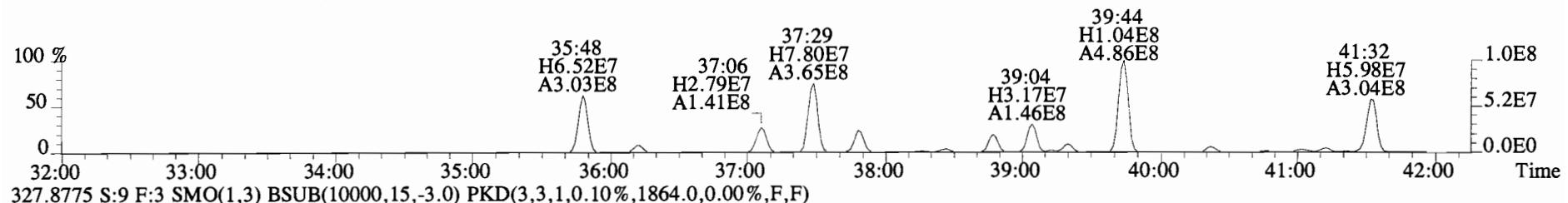
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289.9224 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30808.0,0.00%,F,F)



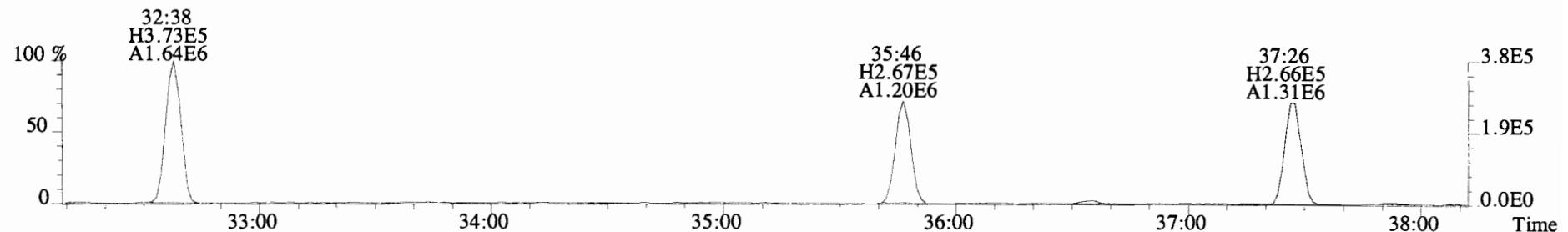
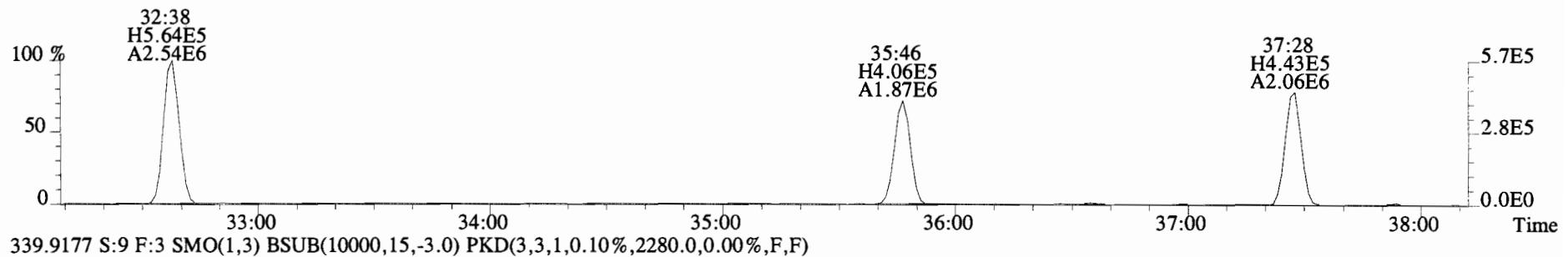
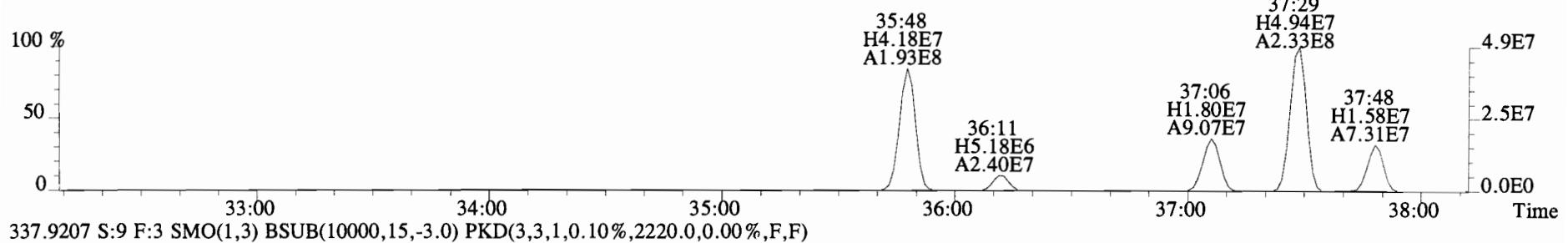
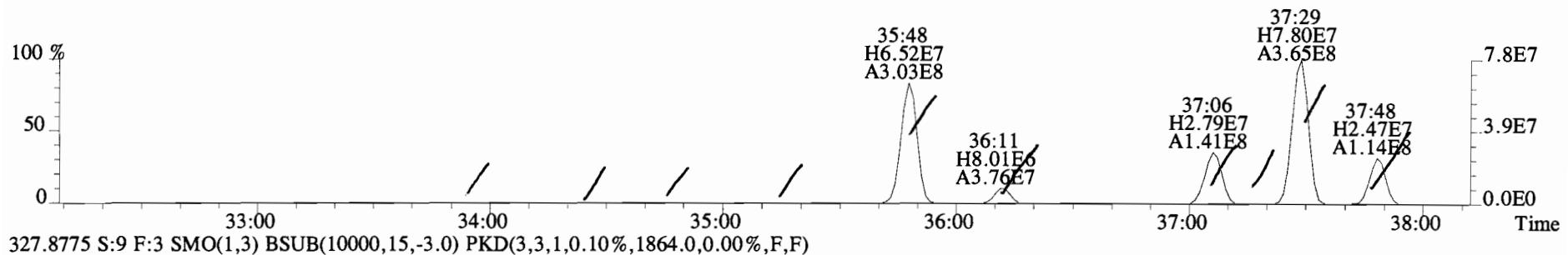
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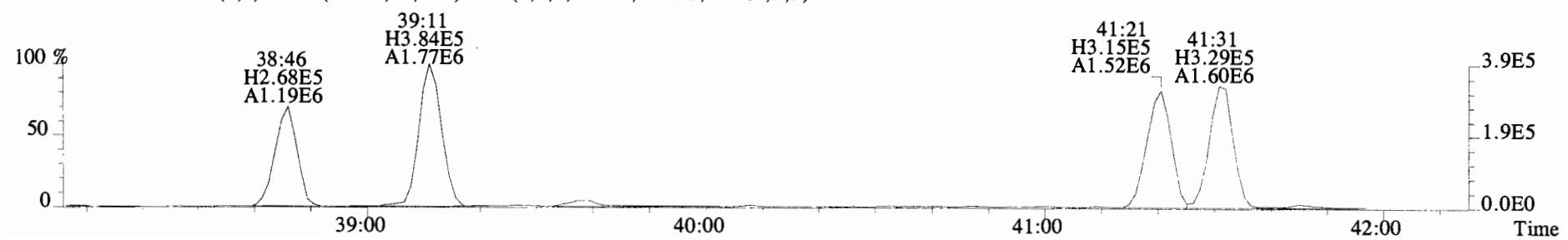
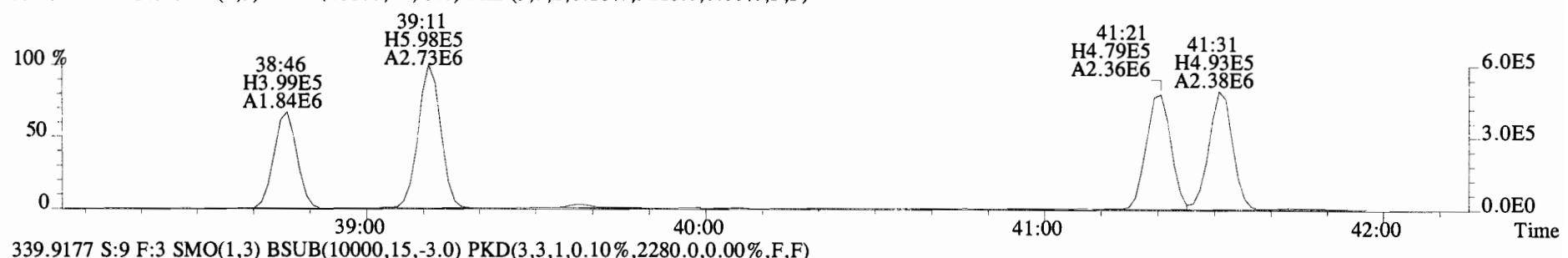
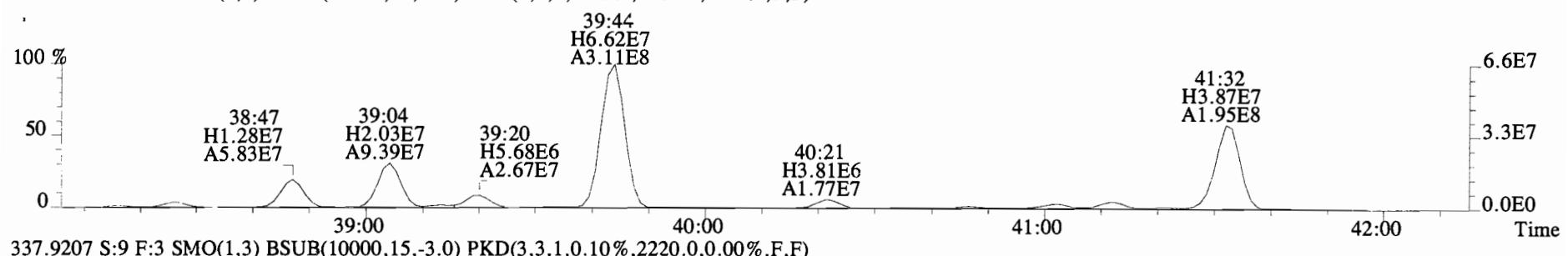
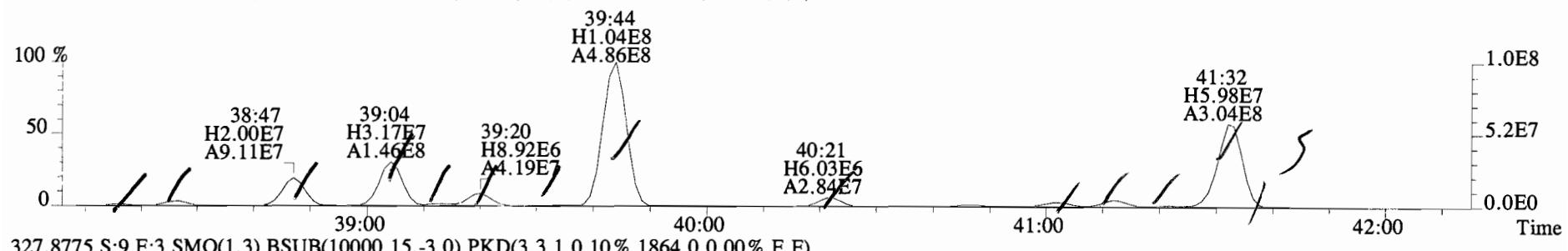
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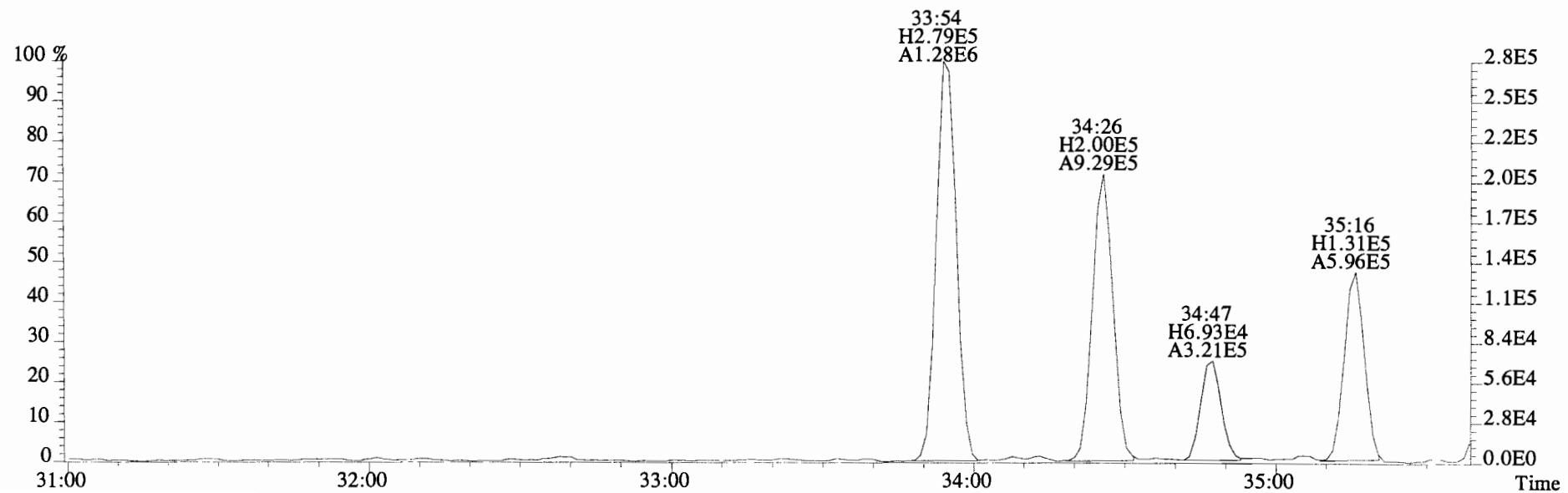
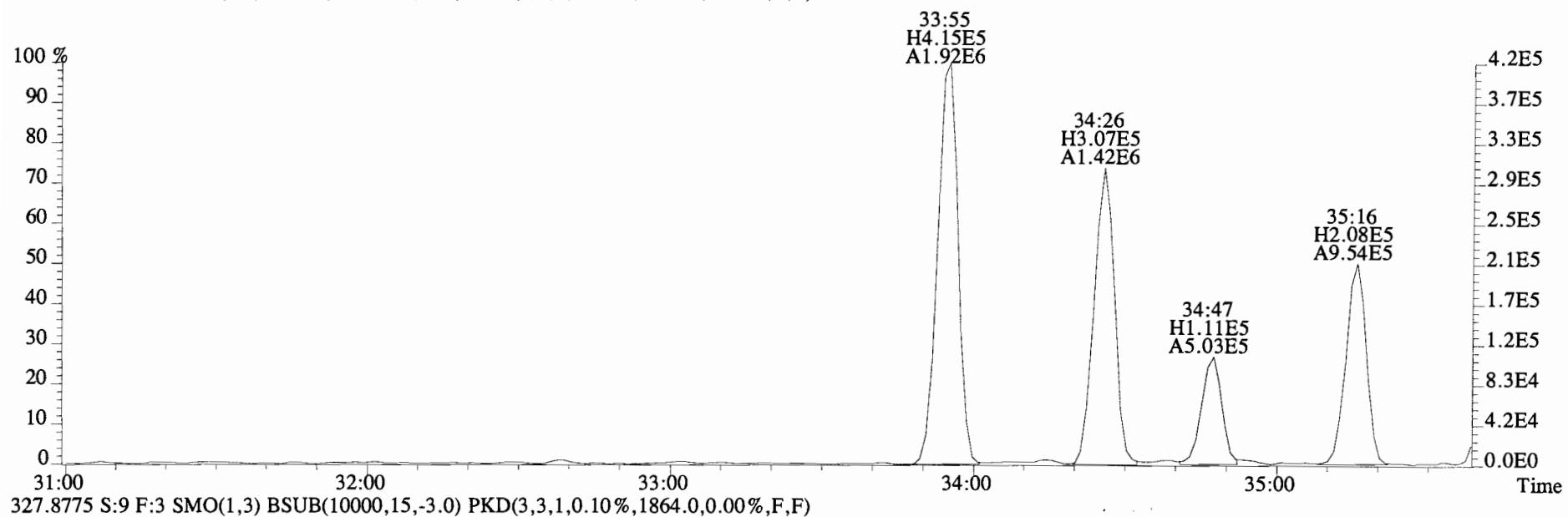
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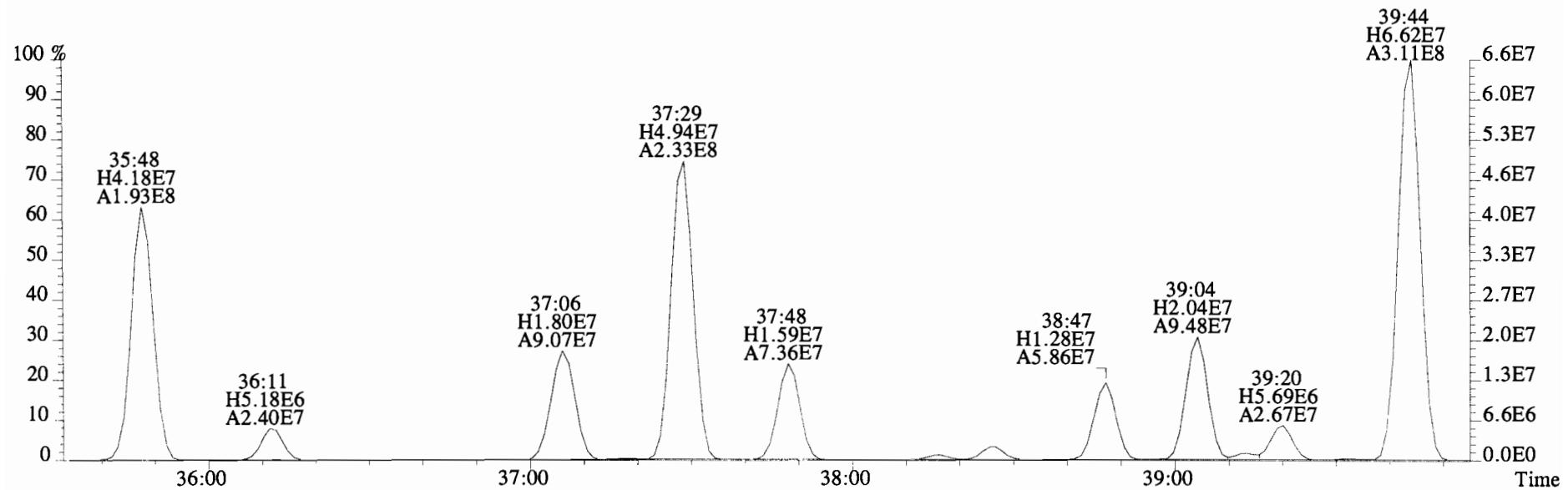
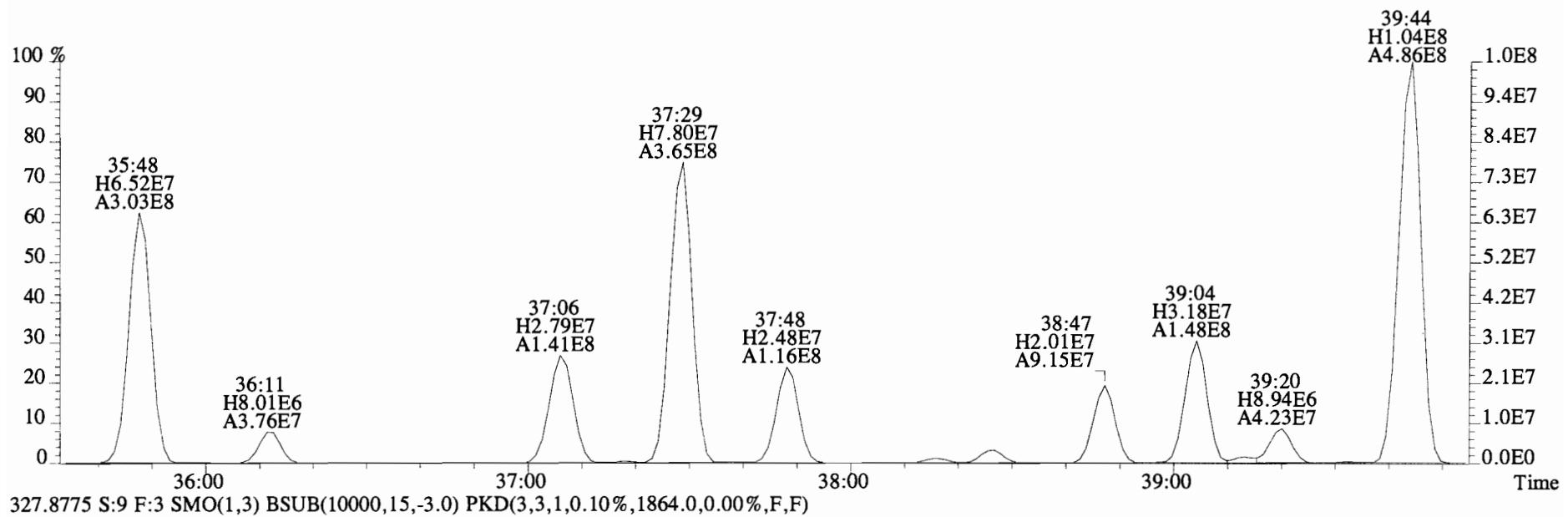
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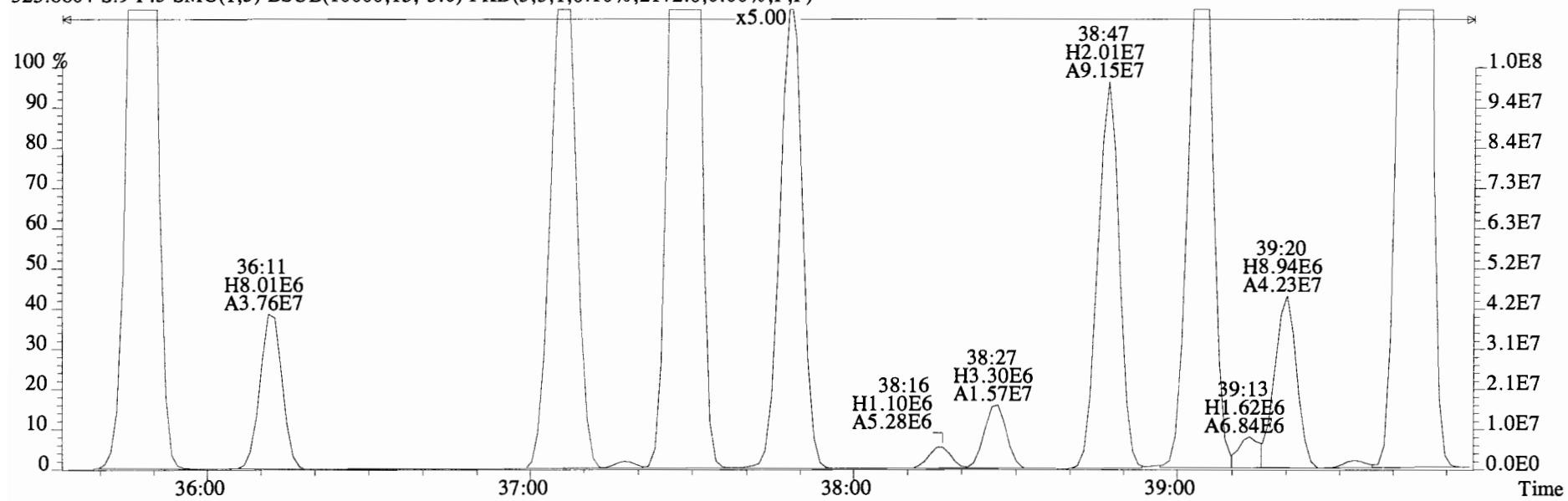
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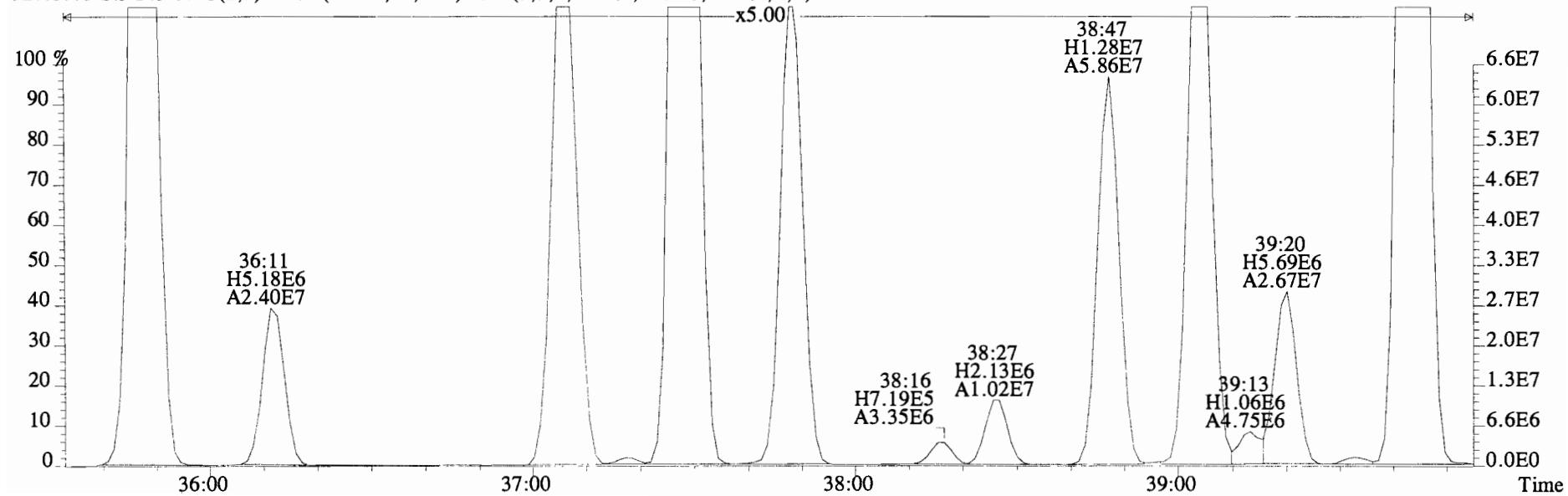
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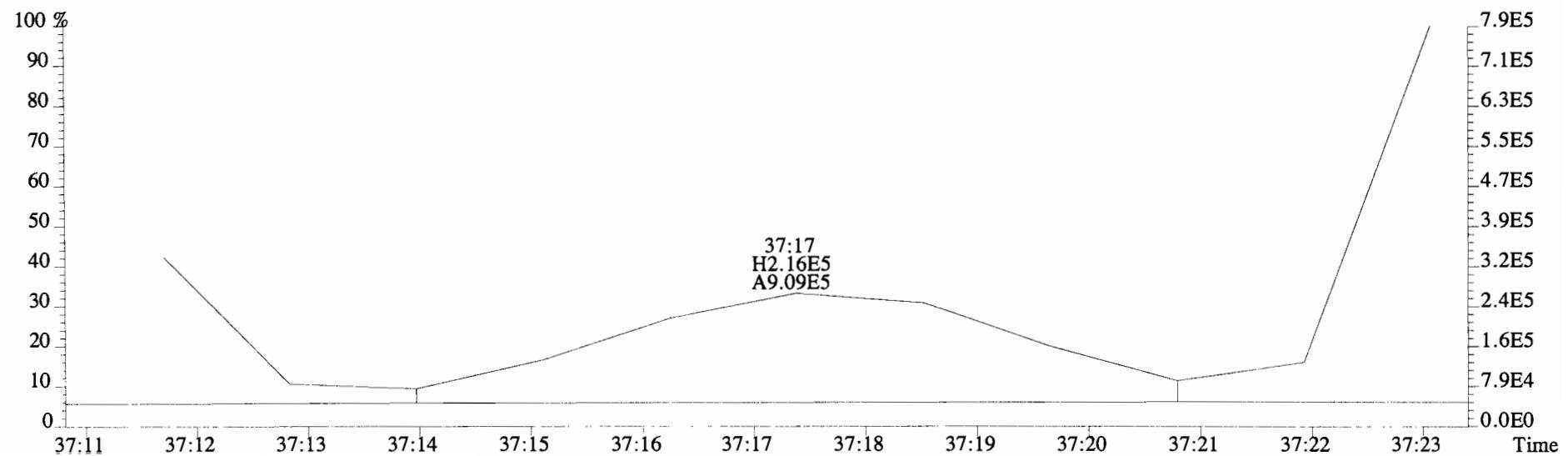
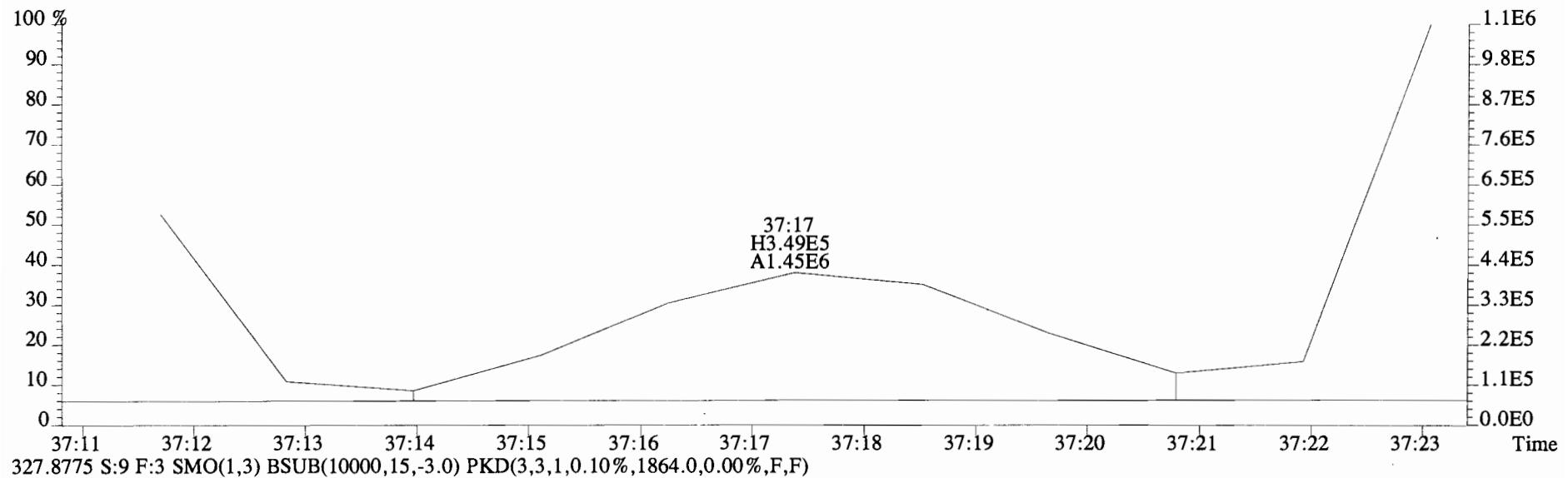
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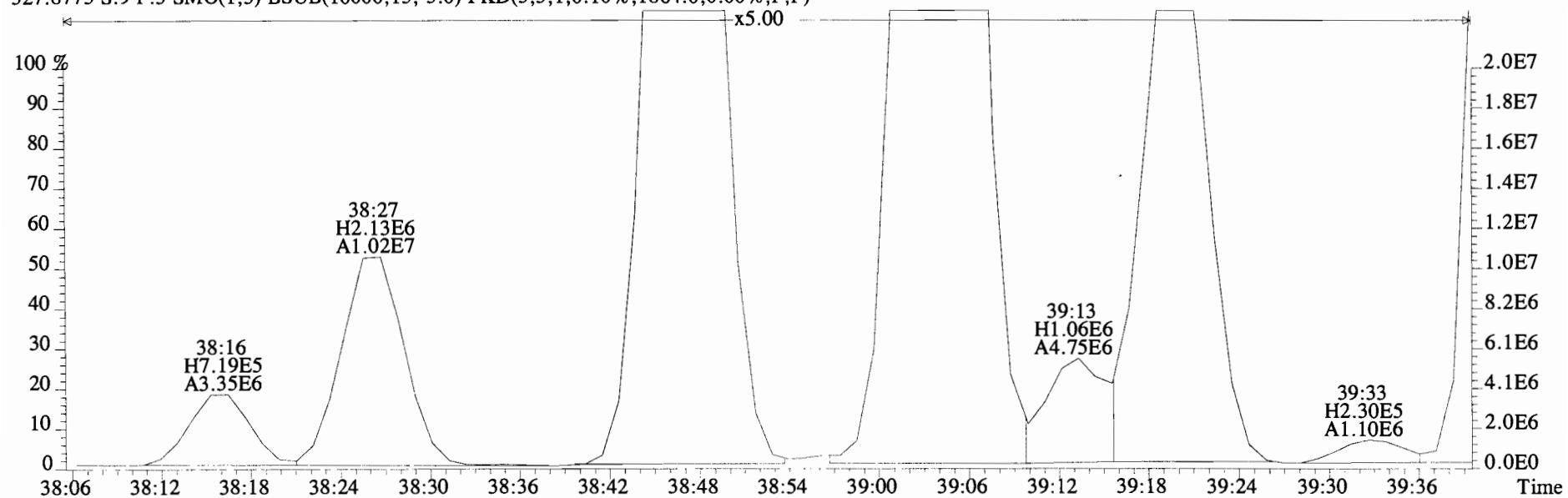
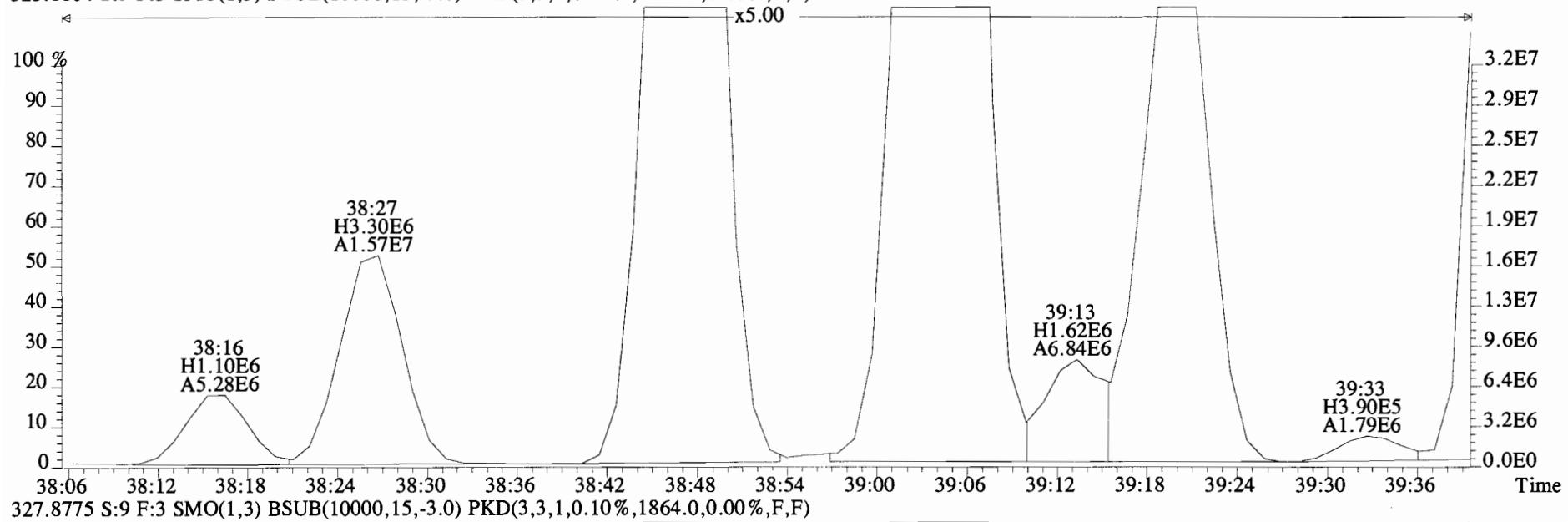
327.8775 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1864.0,0.00%,F,F)



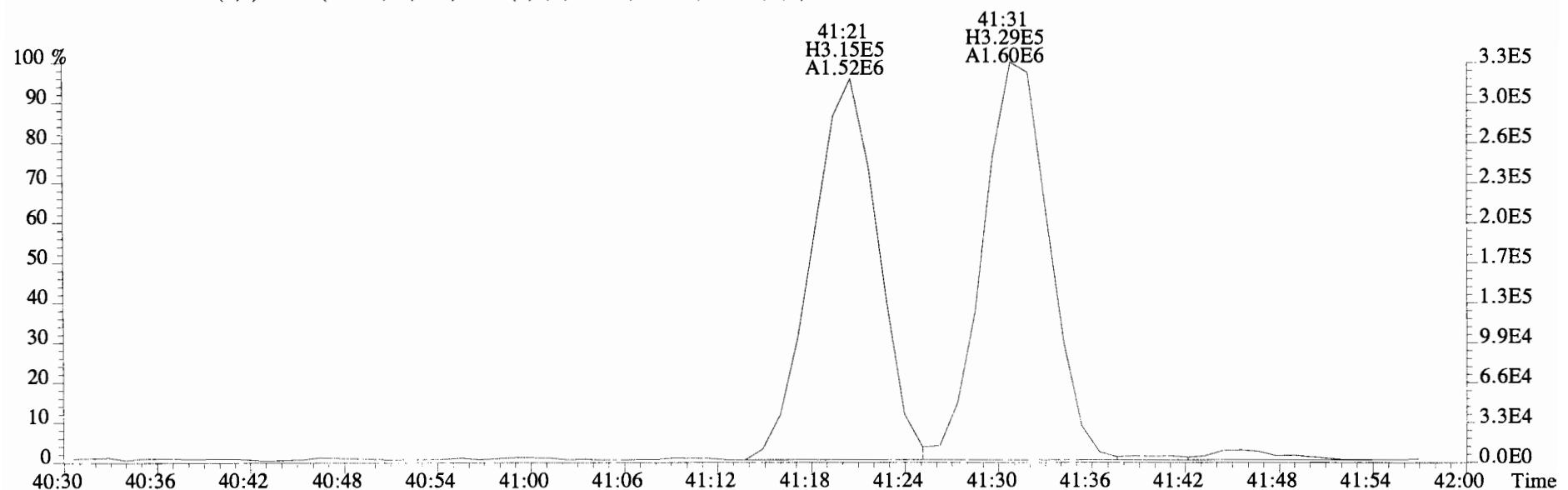
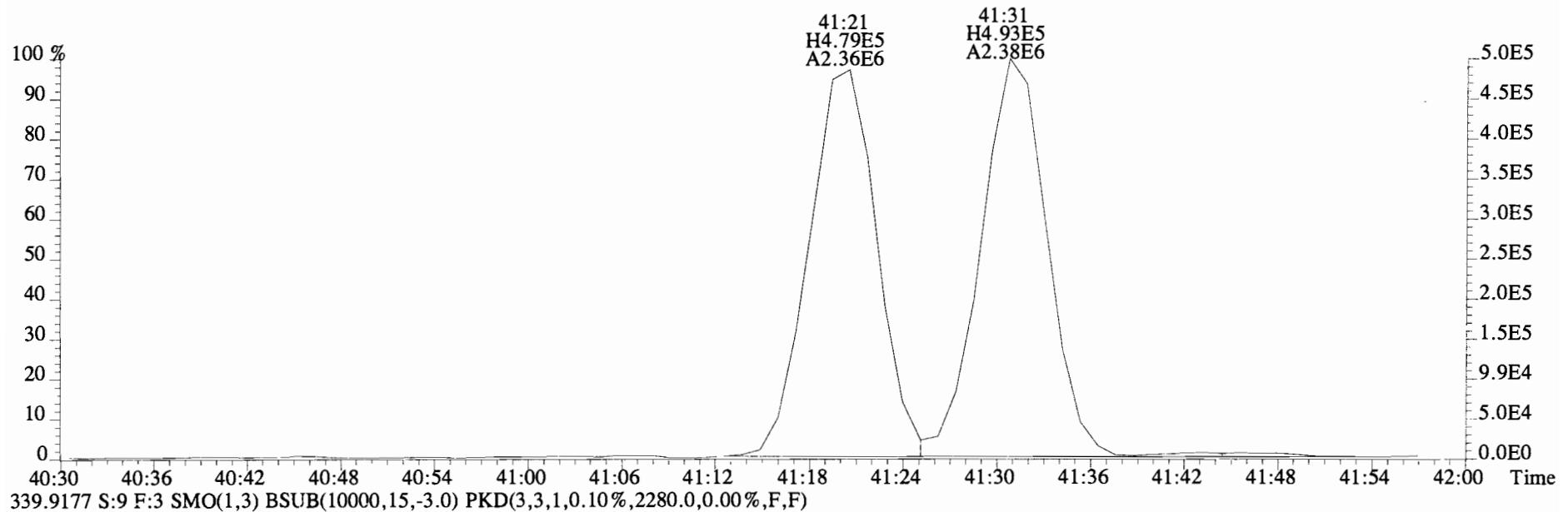
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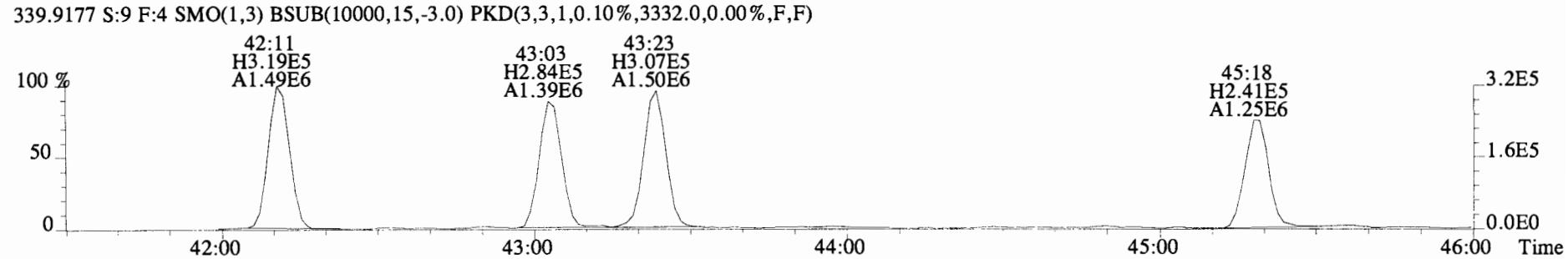
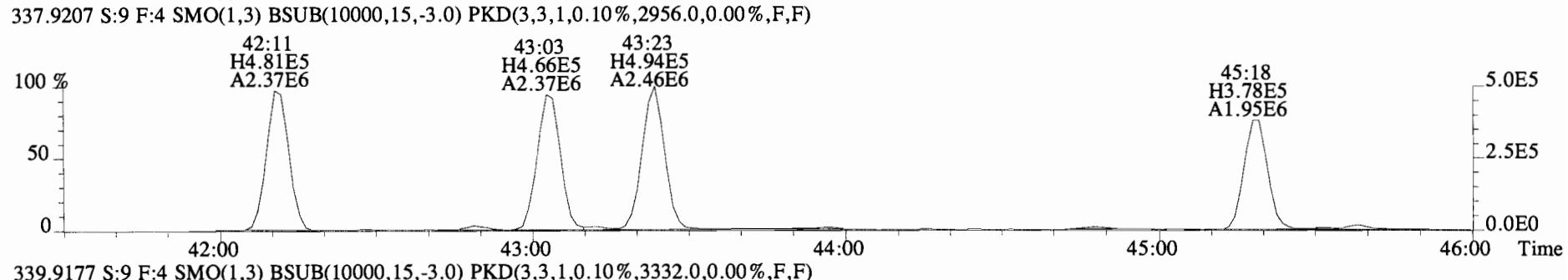
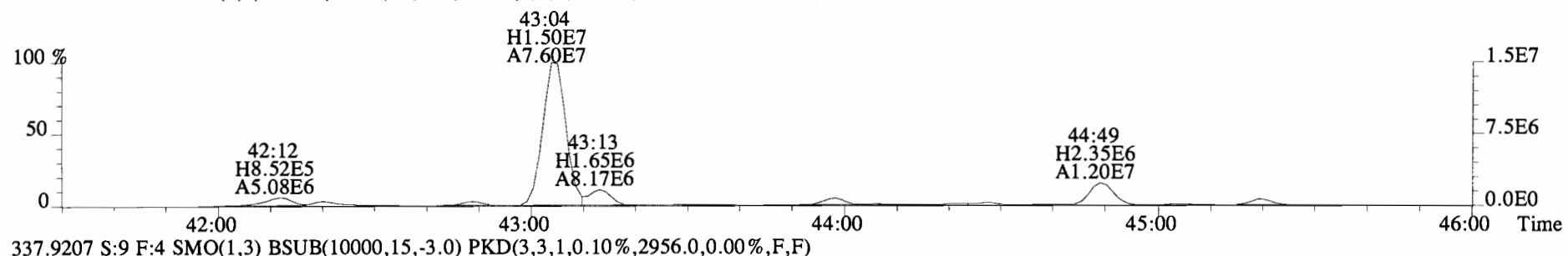
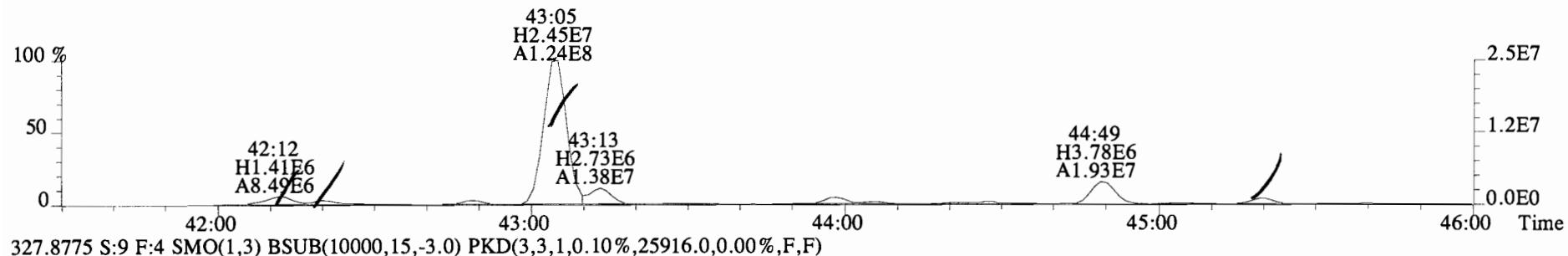
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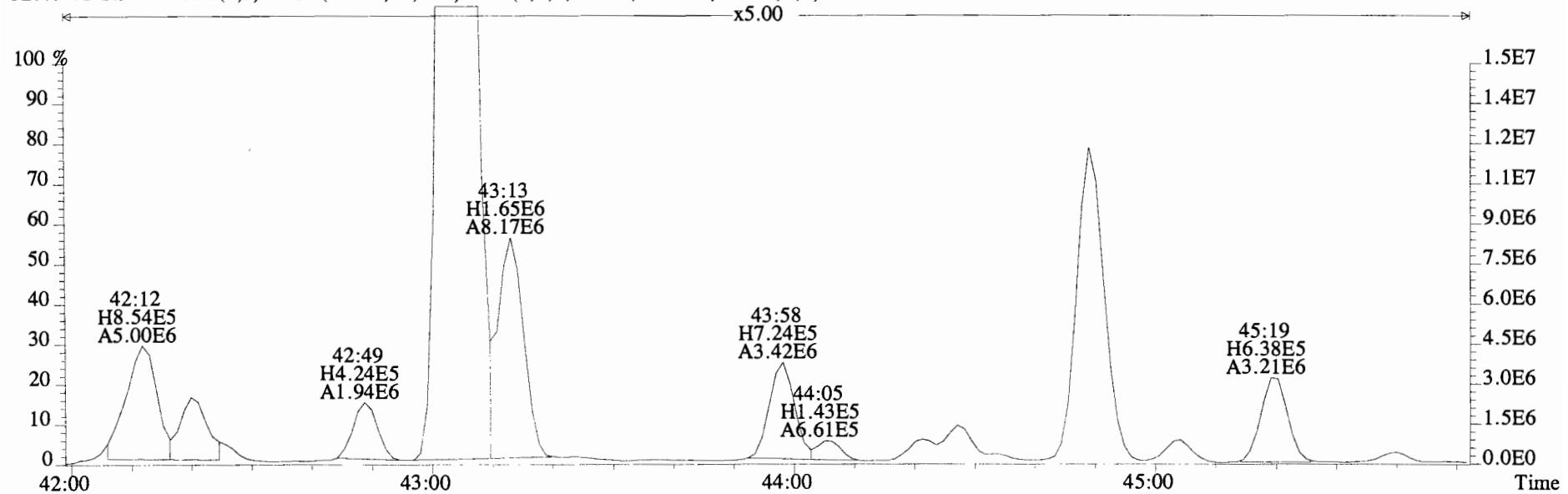
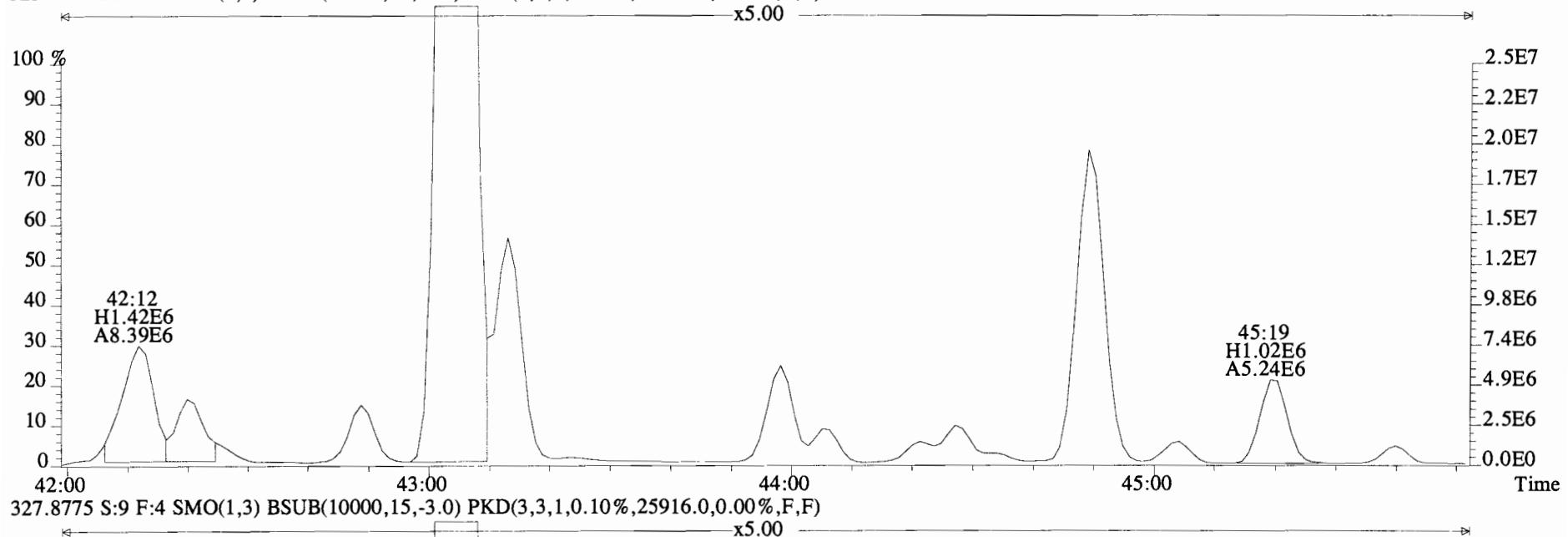
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337.9207 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2220.0,0.00%,F,F)



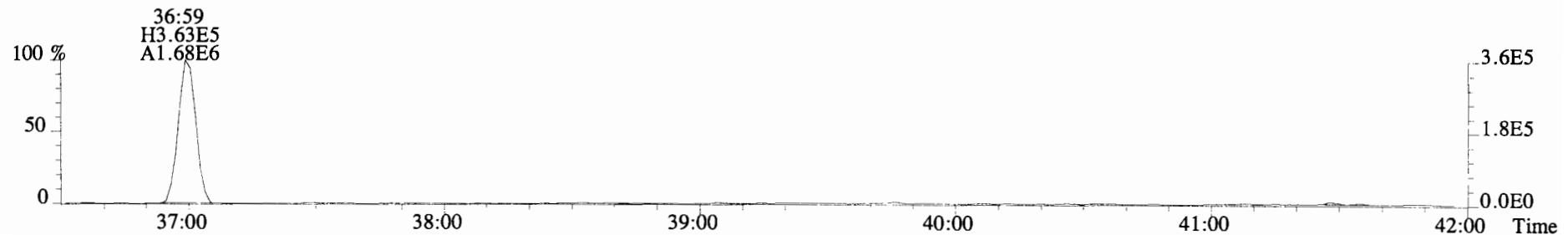
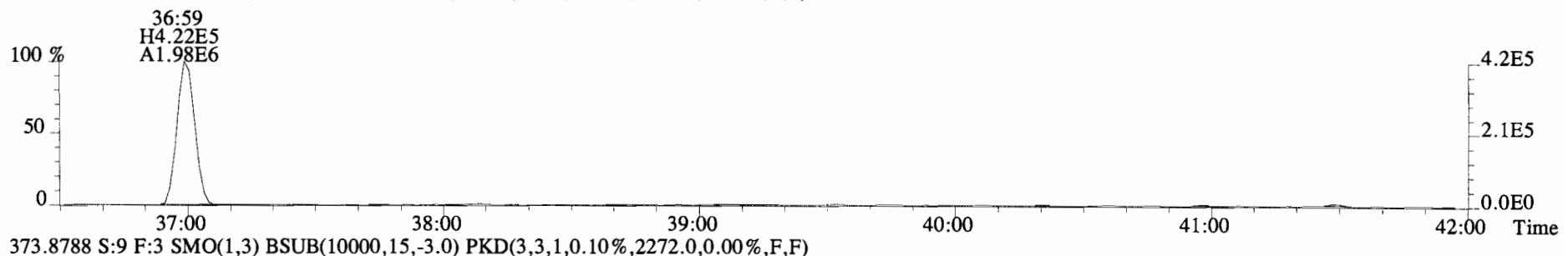
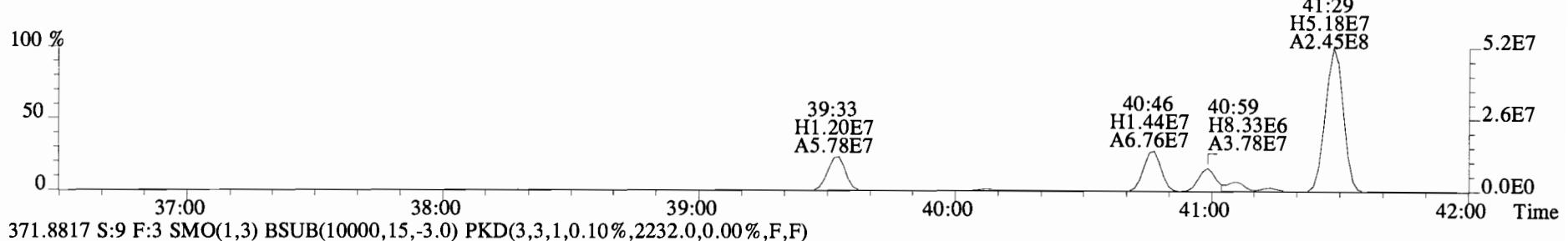
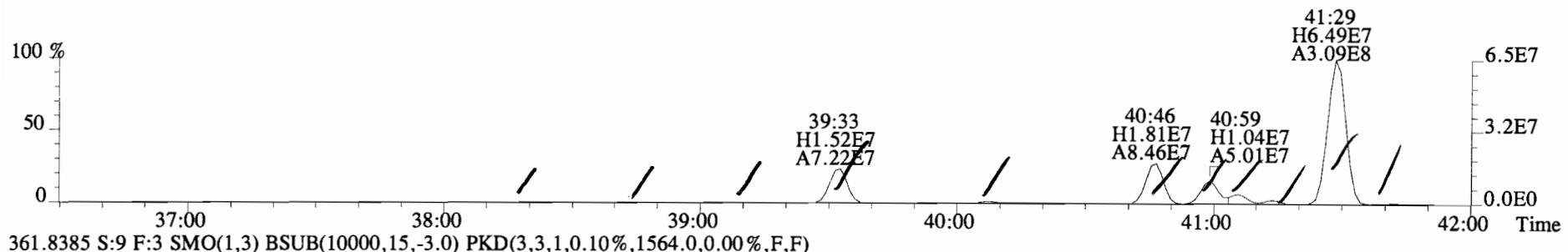
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
325.8804 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,41000.0,0.00%,F,F)



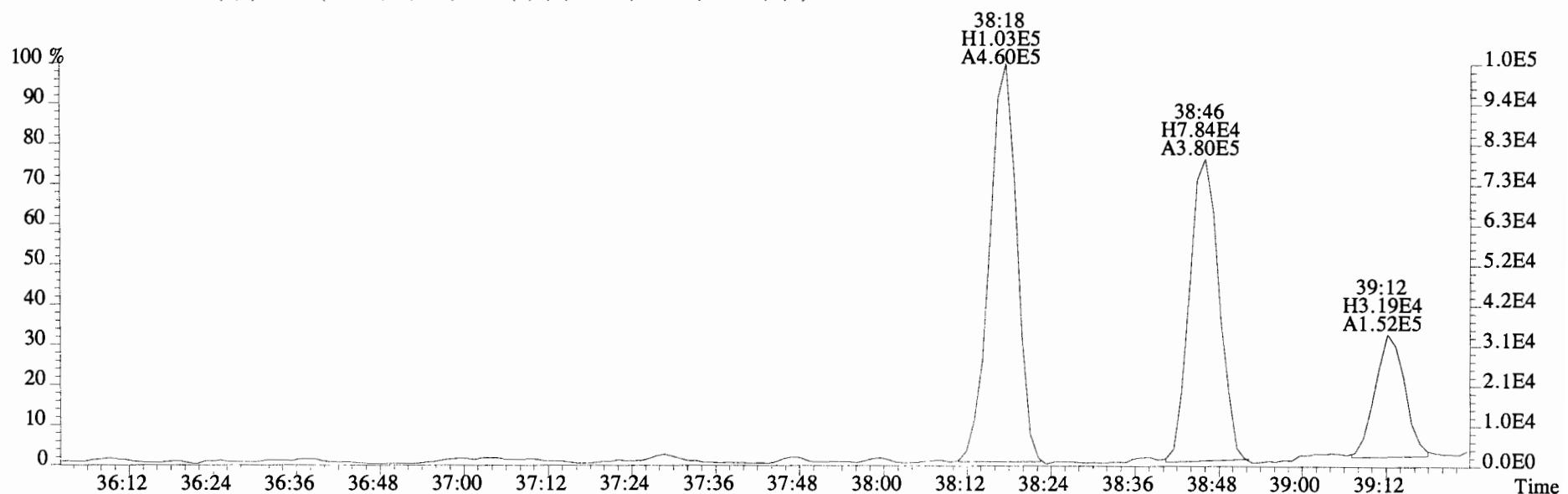
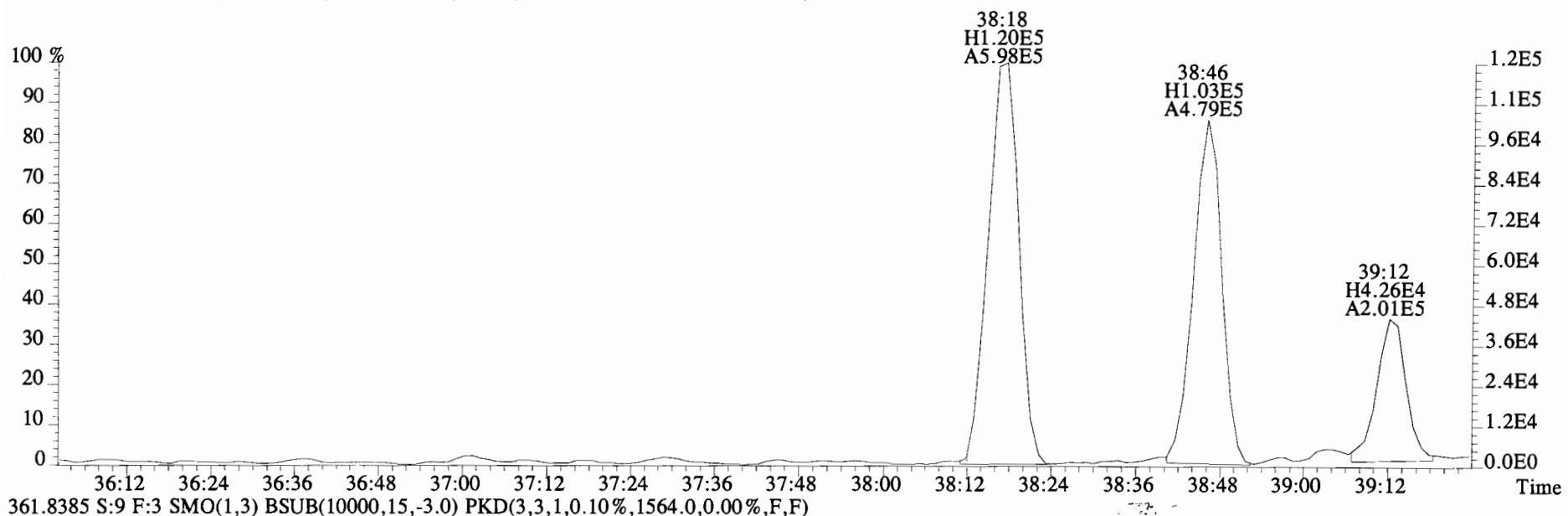
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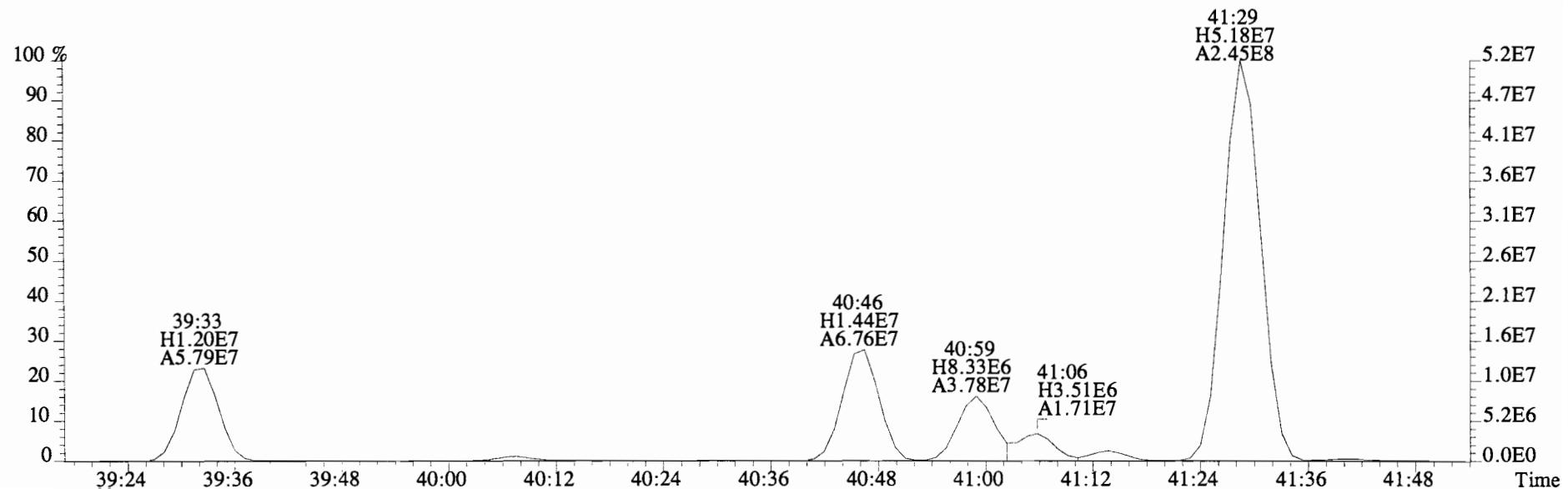
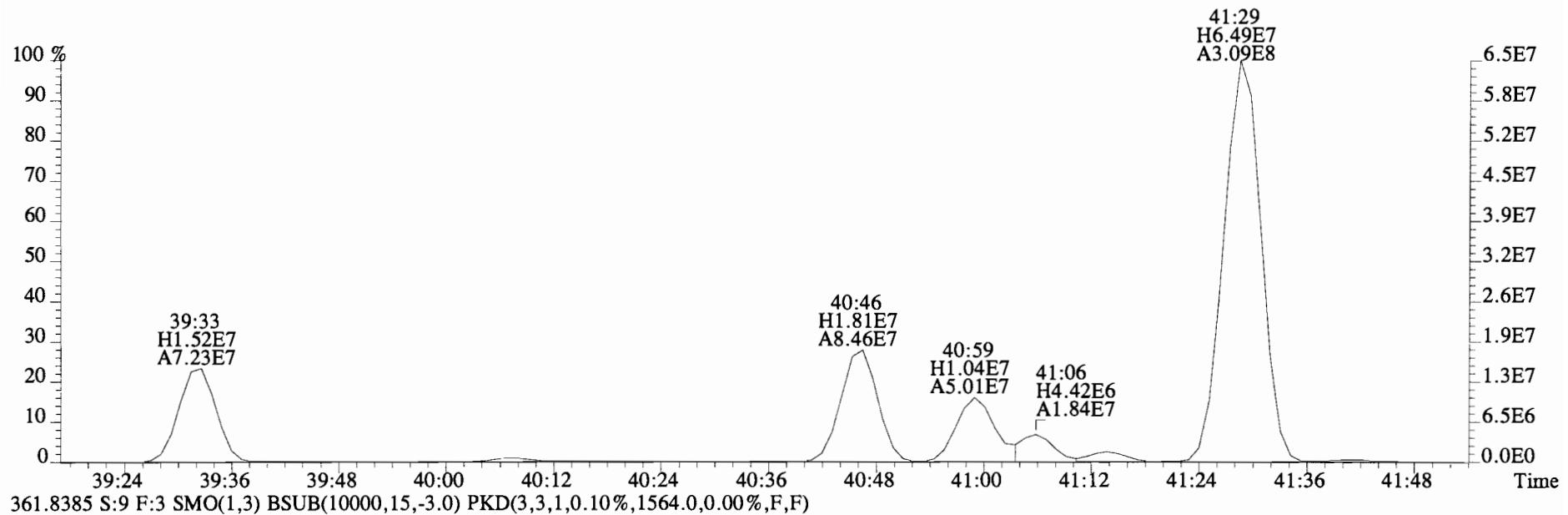
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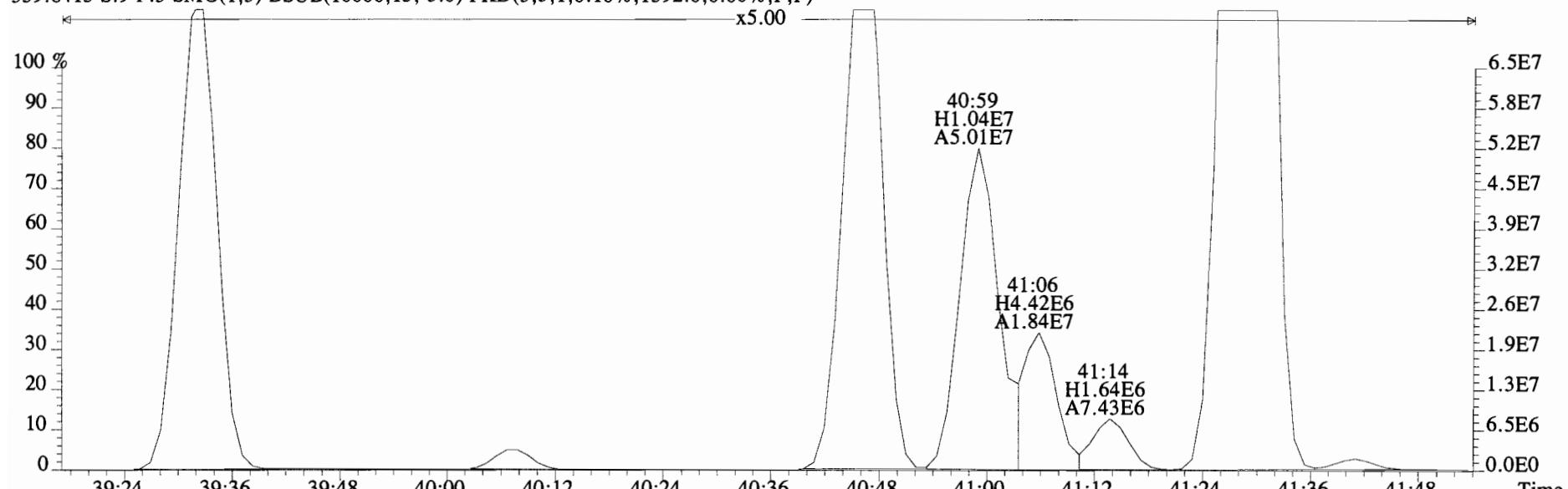
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
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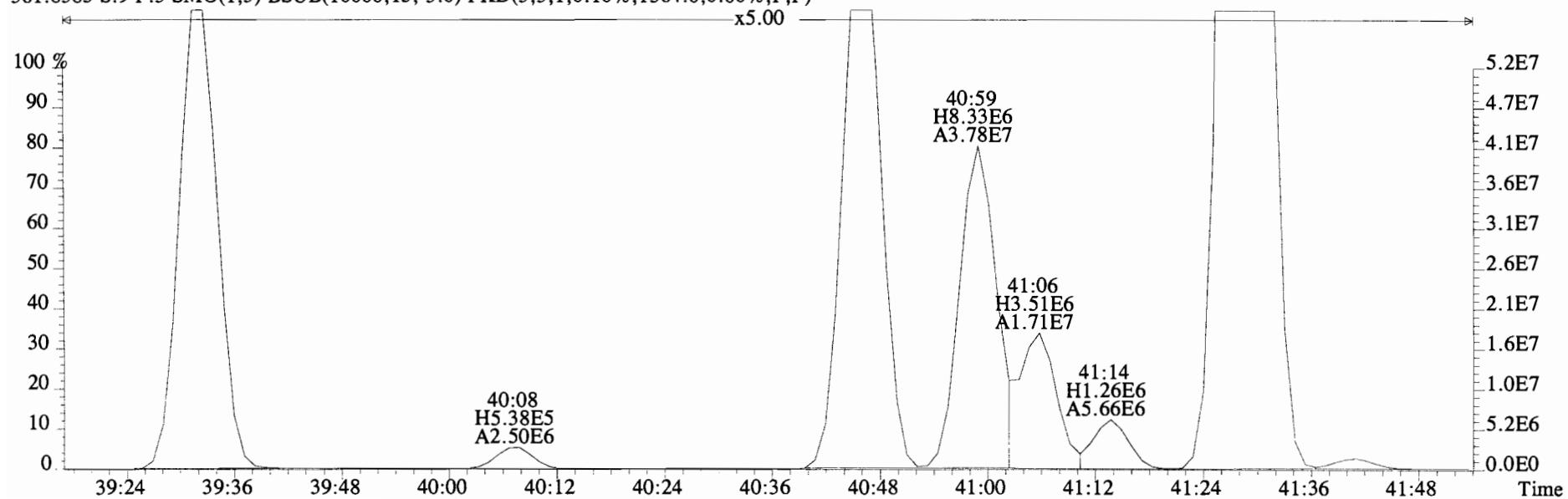
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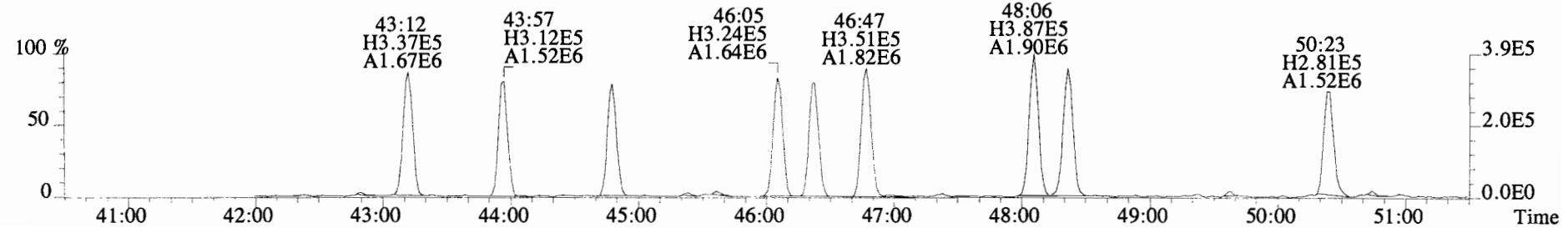
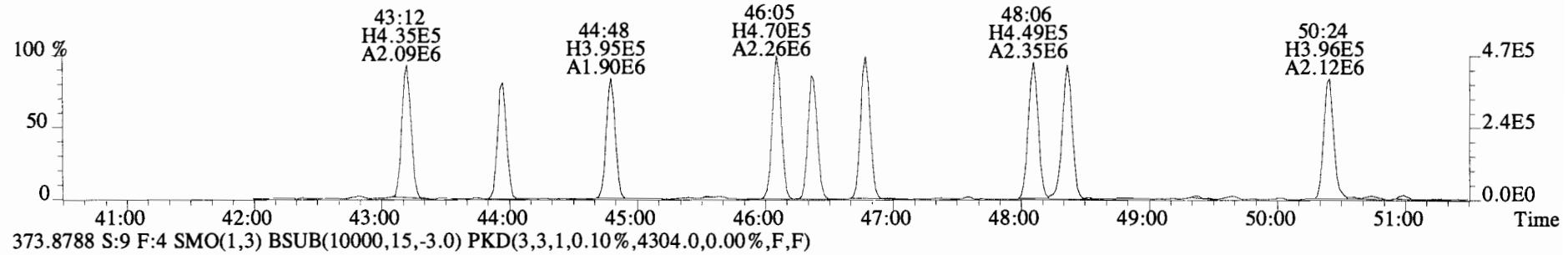
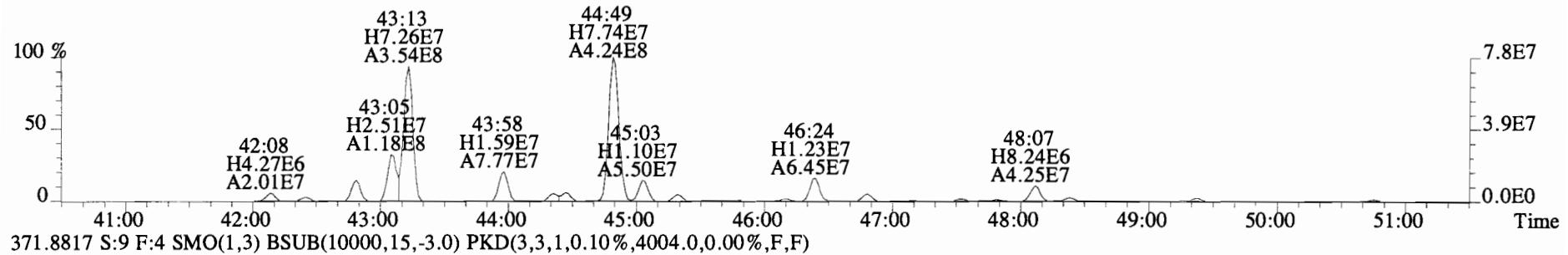
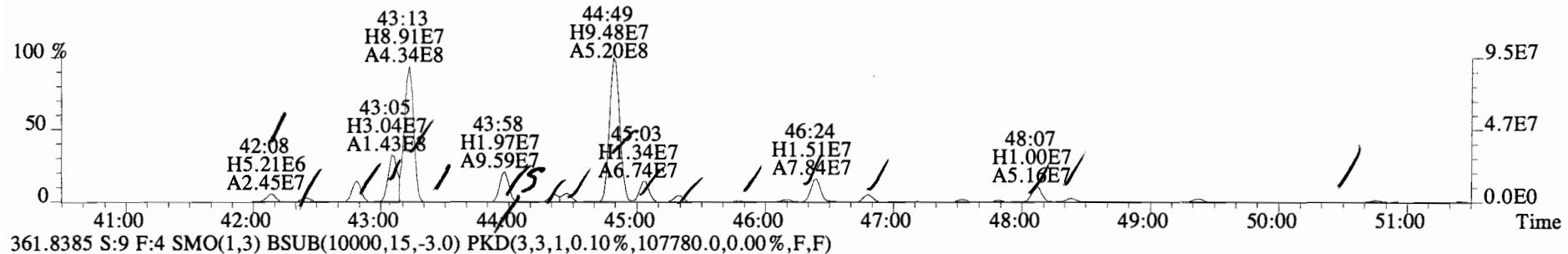
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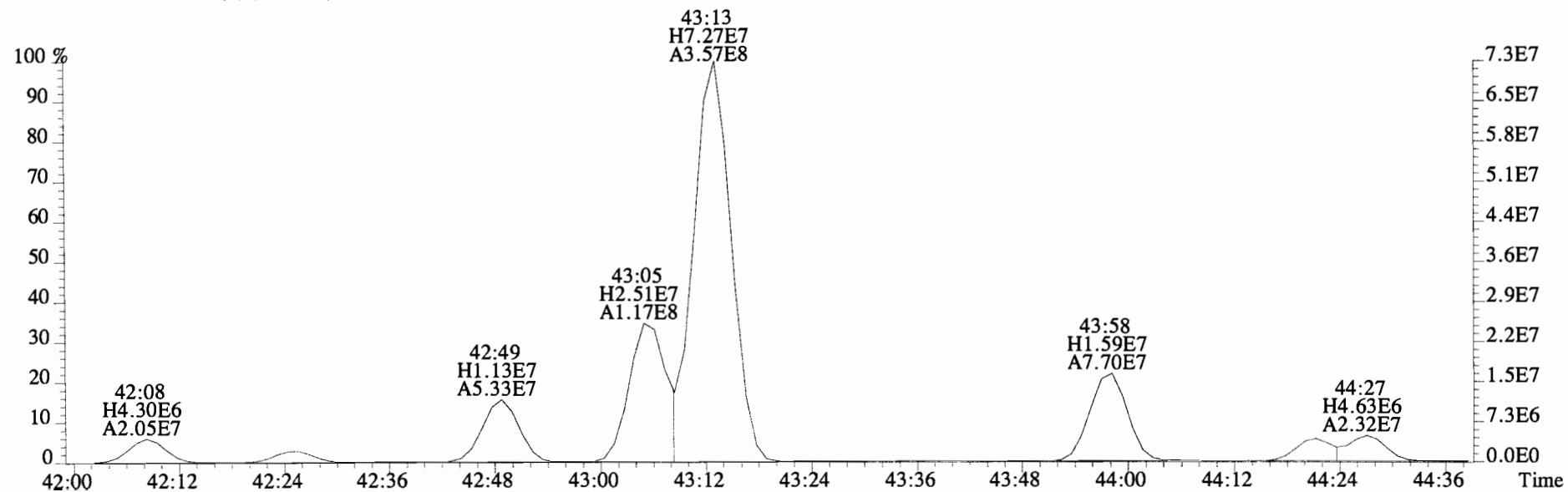
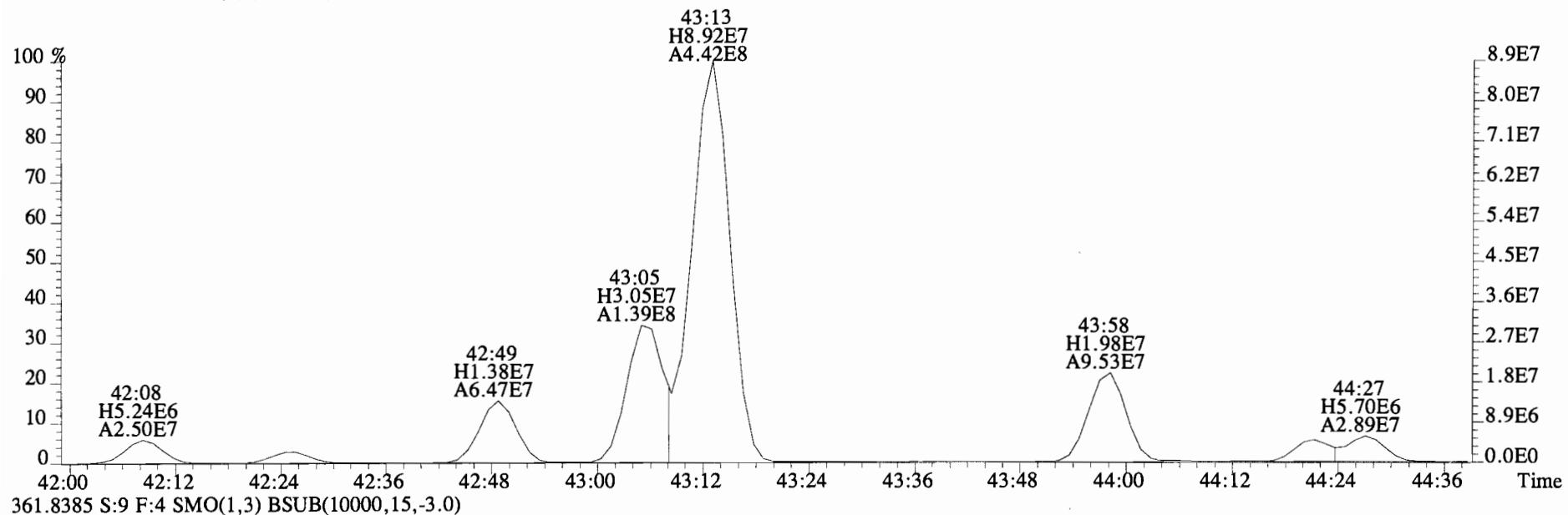
361.8385 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1564.0,0.00%,F,F)



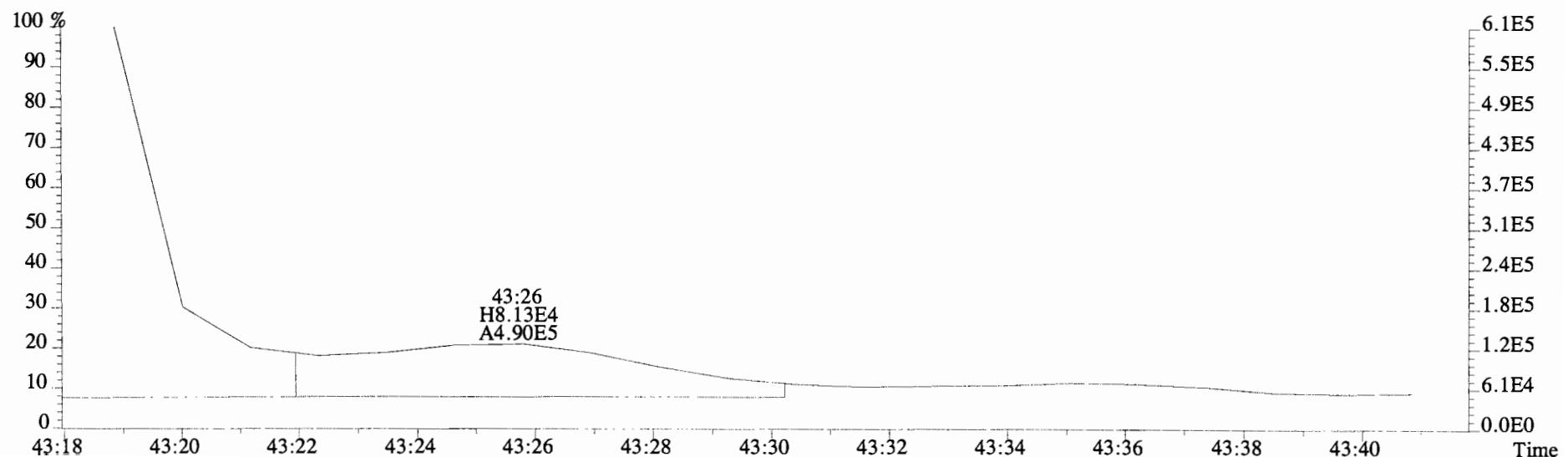
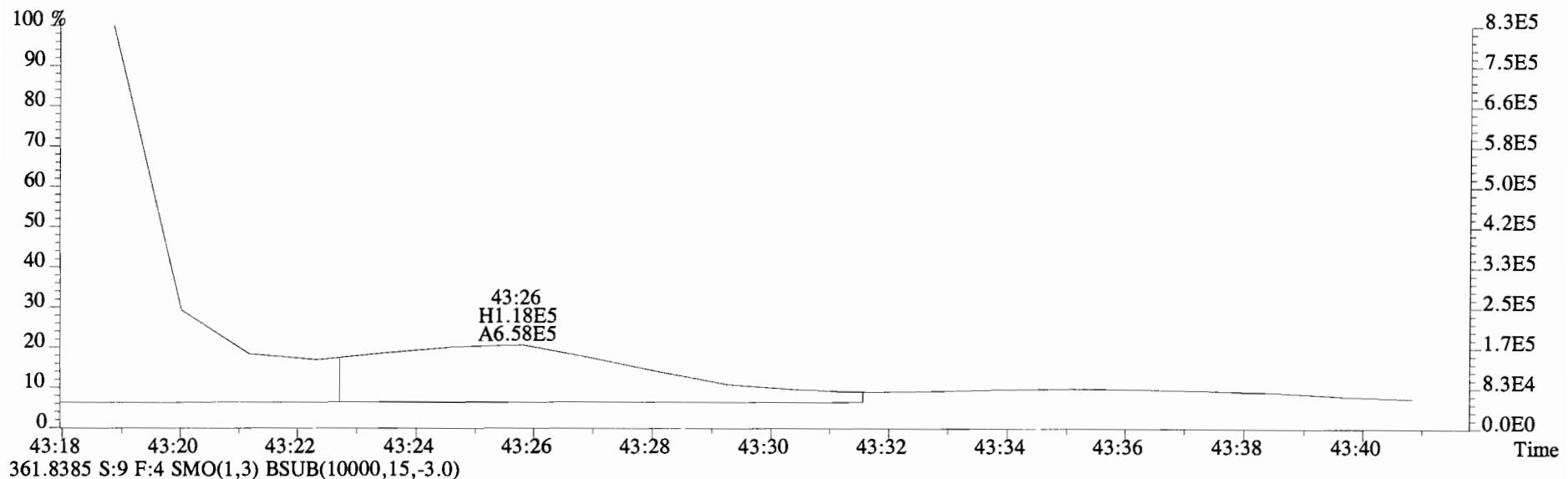
File:141024E2 #1-546 Acq:25-OCT-2014 10:39:00 GC EI + Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 359.8415 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,126388.0,0.00%,F,F)



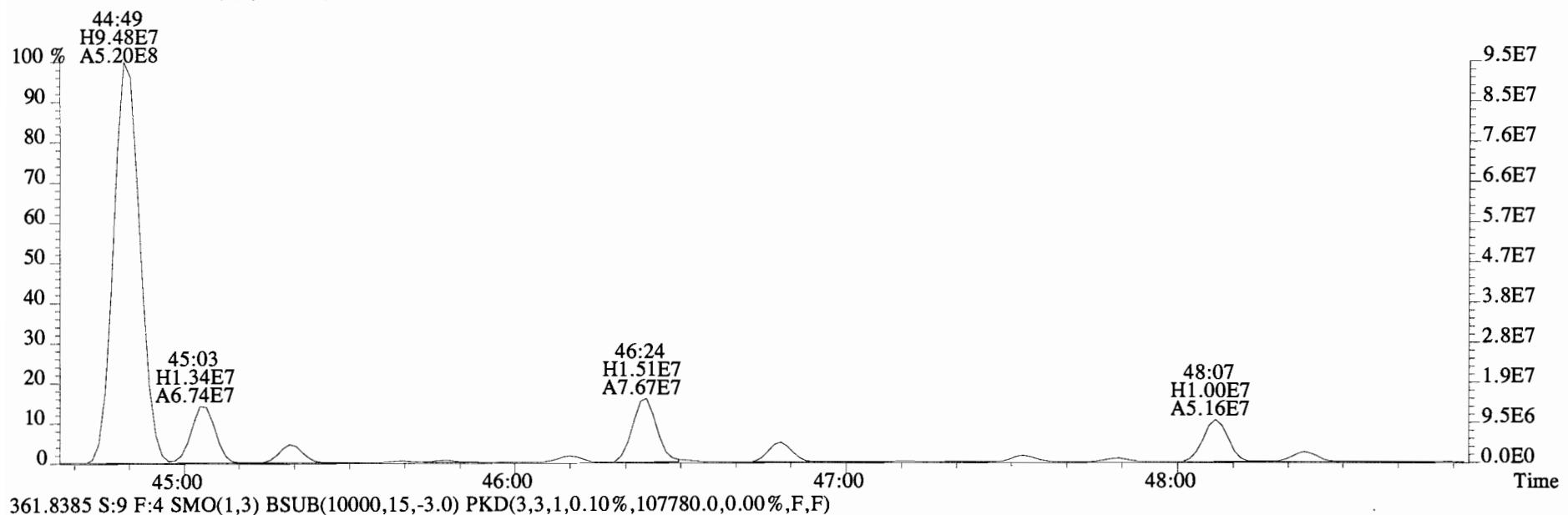
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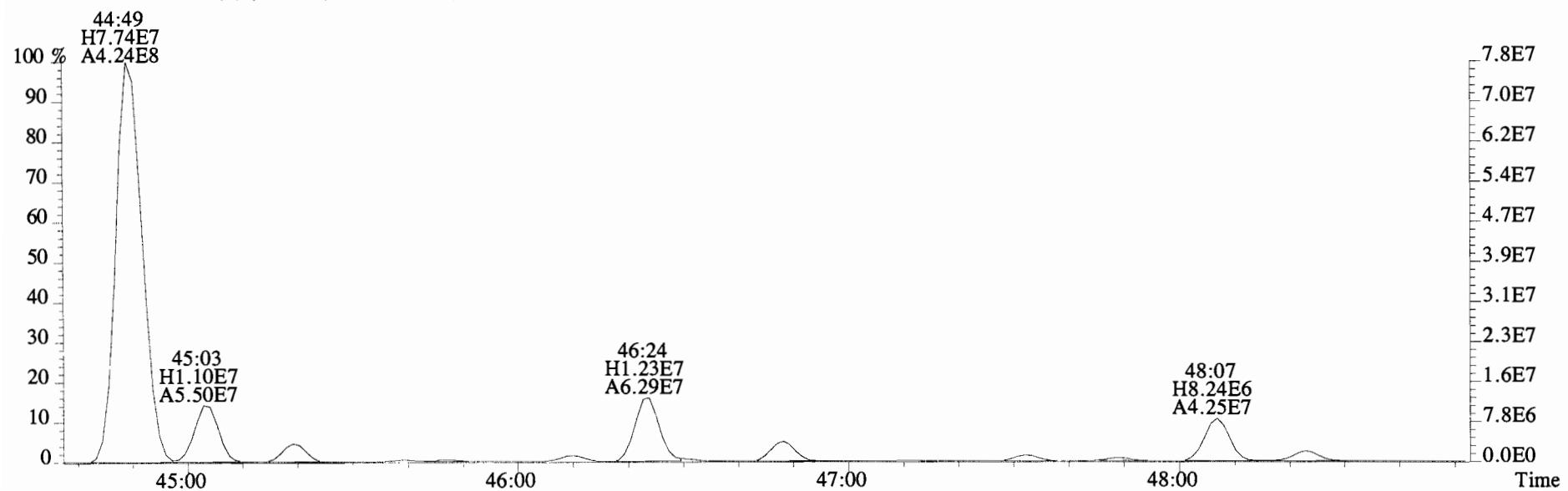
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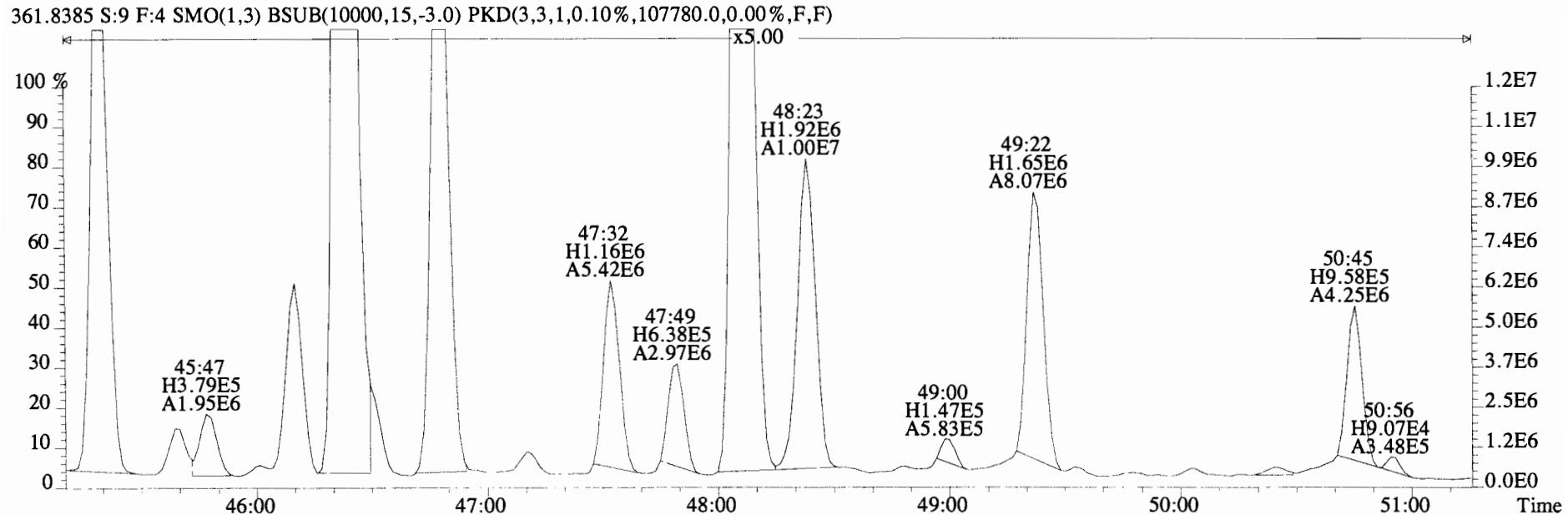
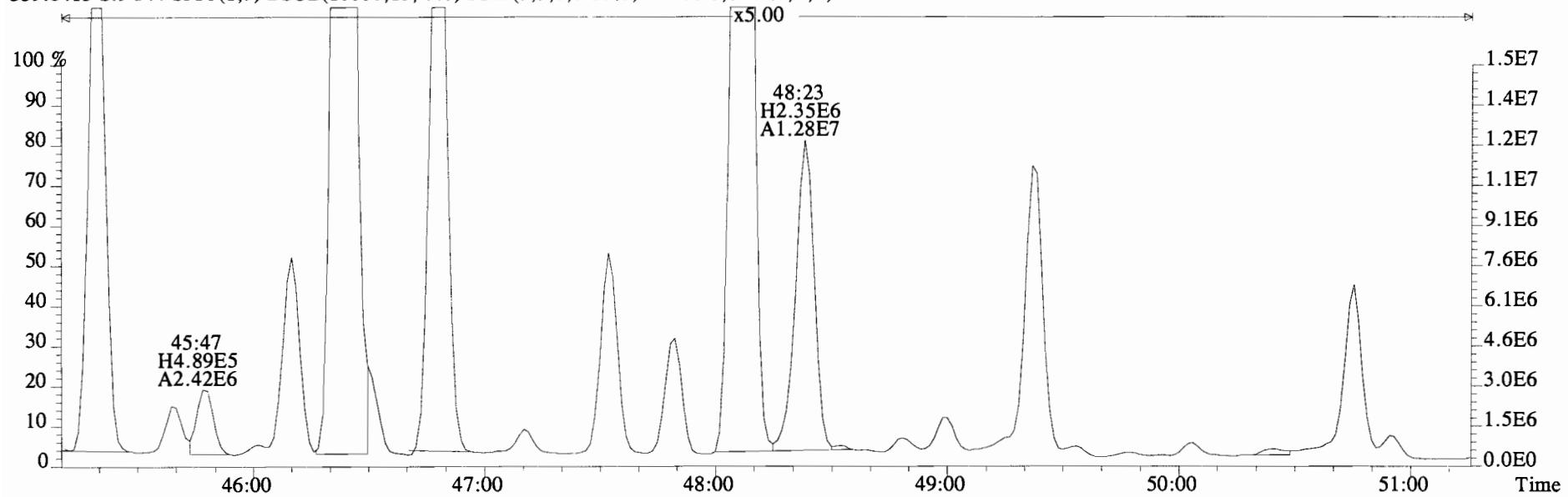
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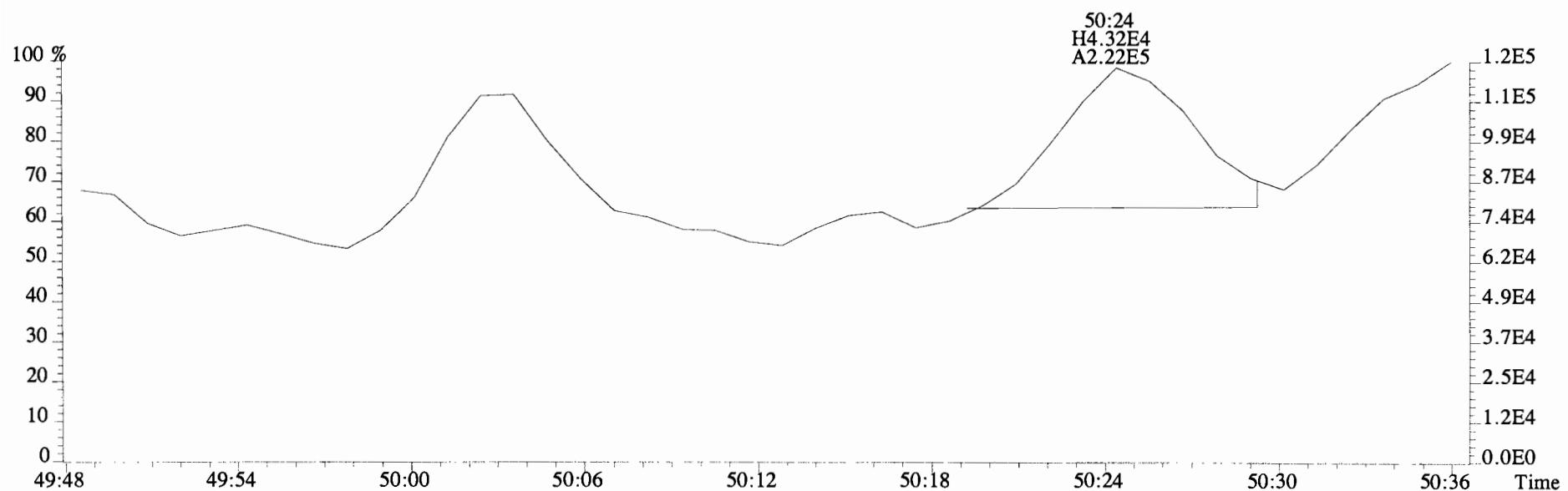
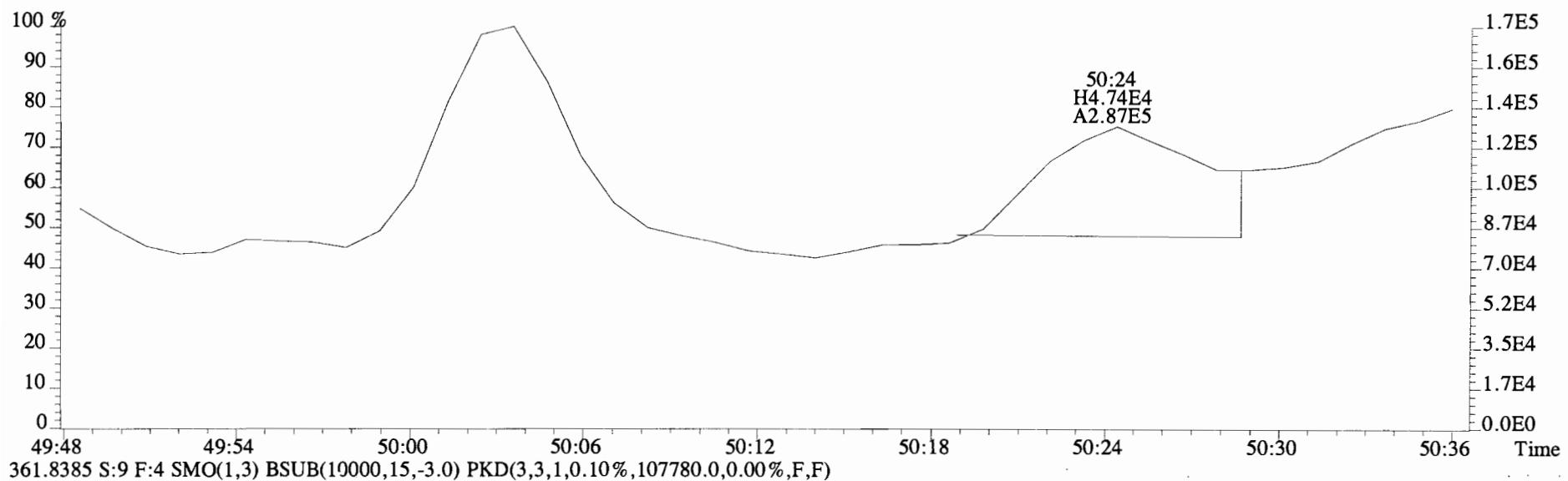
361.8385 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,107780.0,0.00%,F,F)



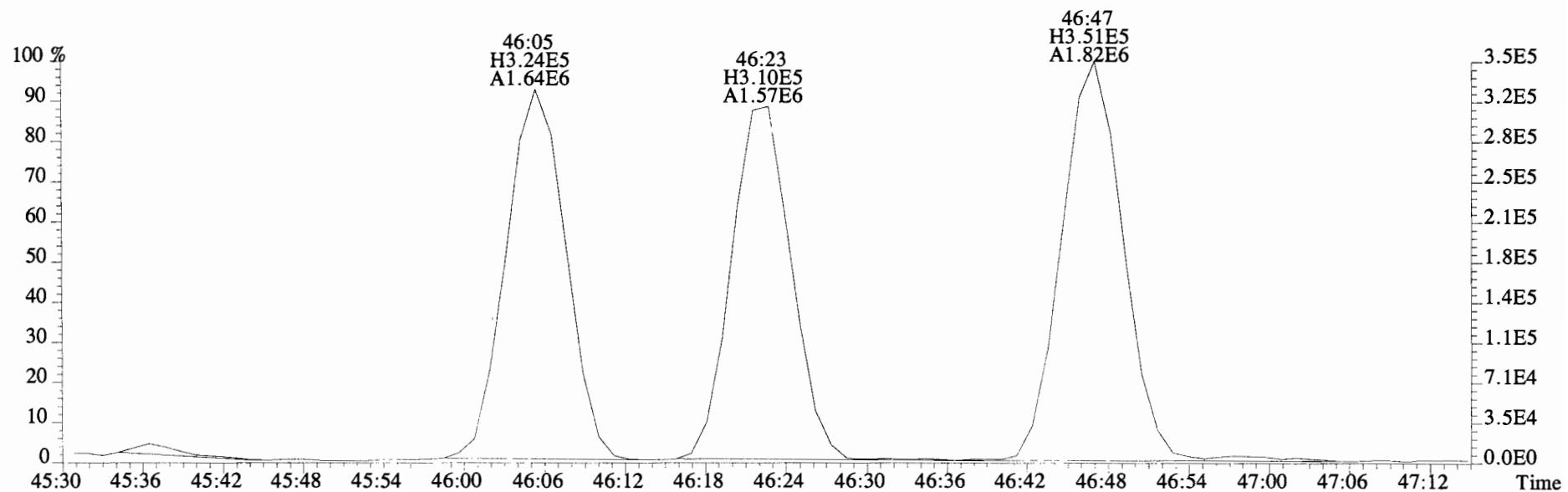
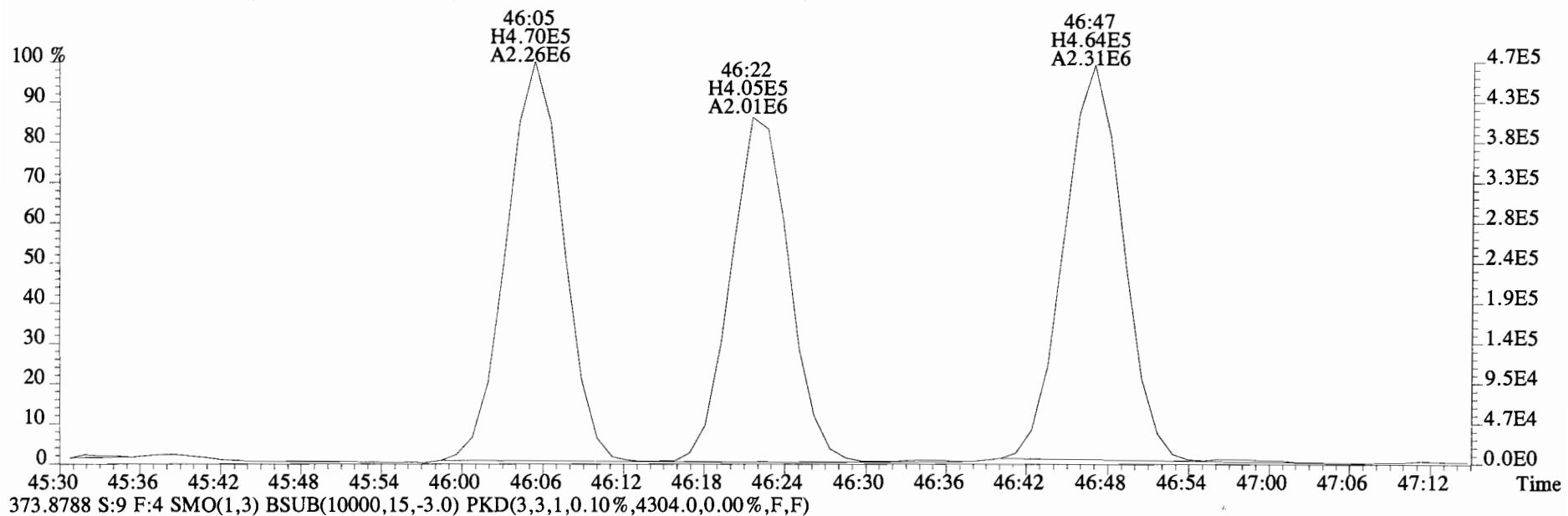
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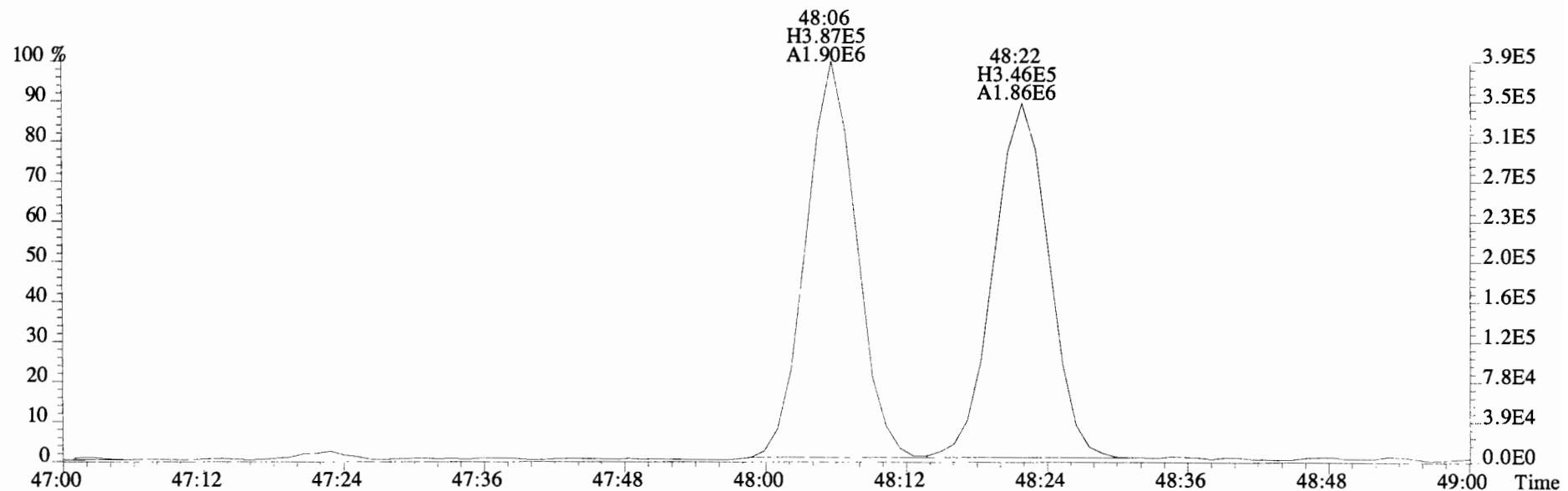
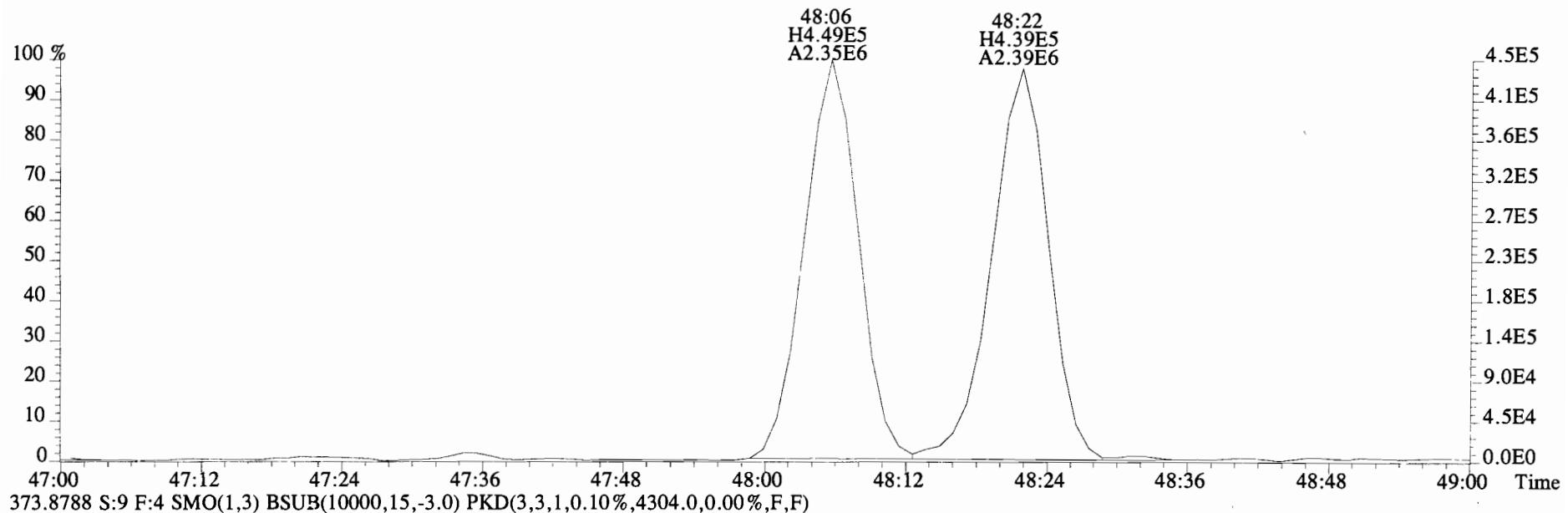
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
359.8415 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,126388.0,0.00%,F,F)



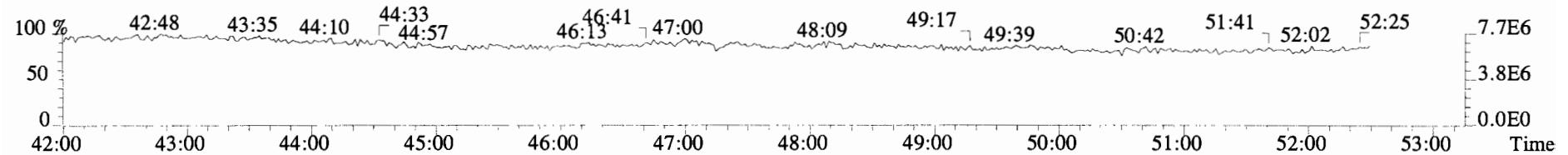
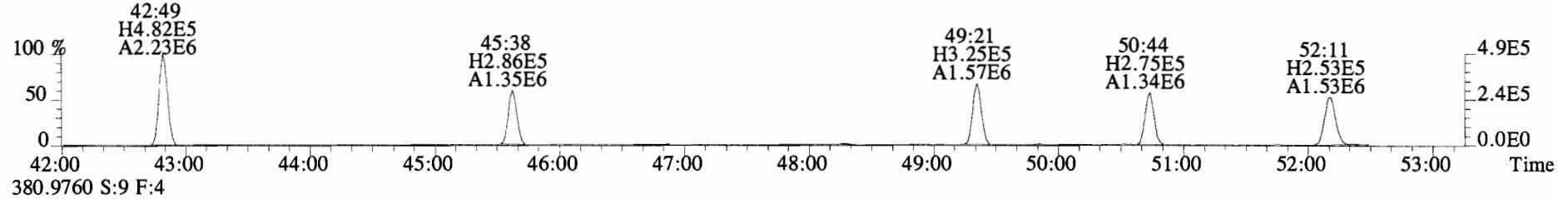
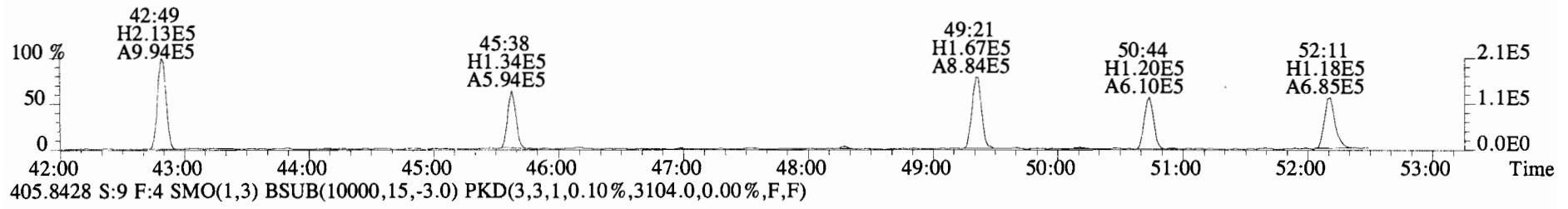
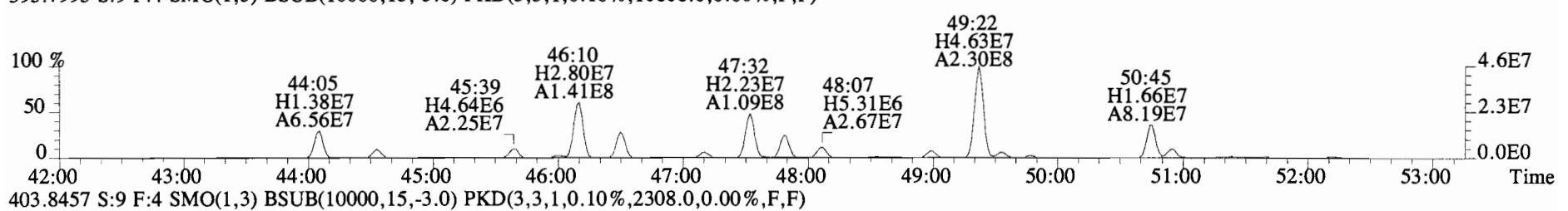
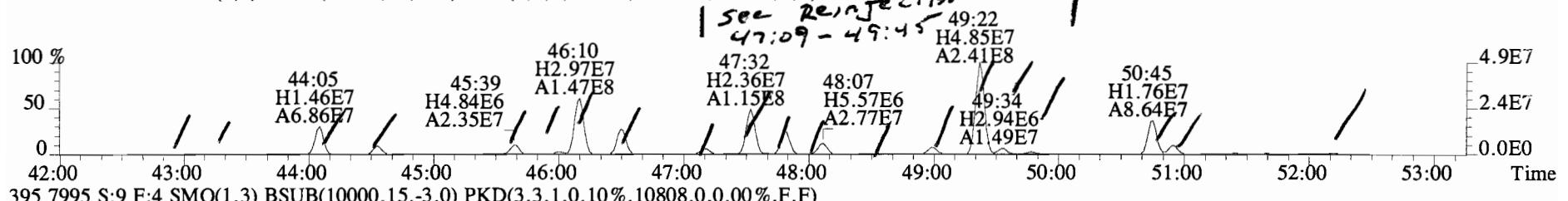
File:141024E2 #1-546 Acq:25-OCT-2014 10:39:00 GC EI + Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
371.8817 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4004.0,0.00%,F,F)



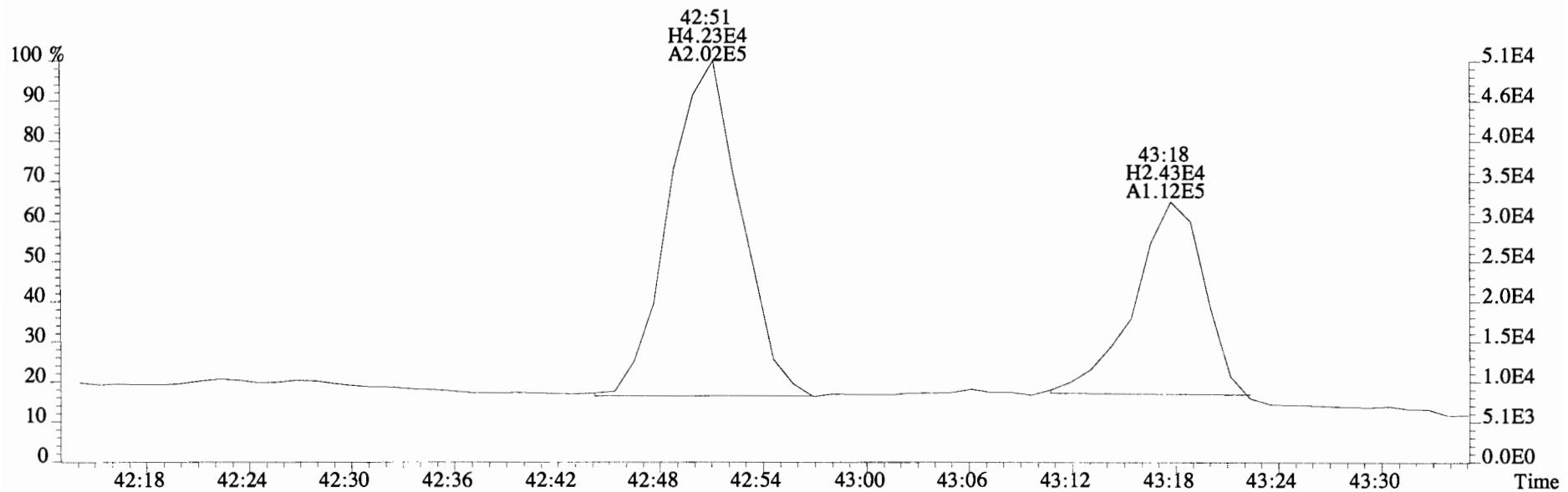
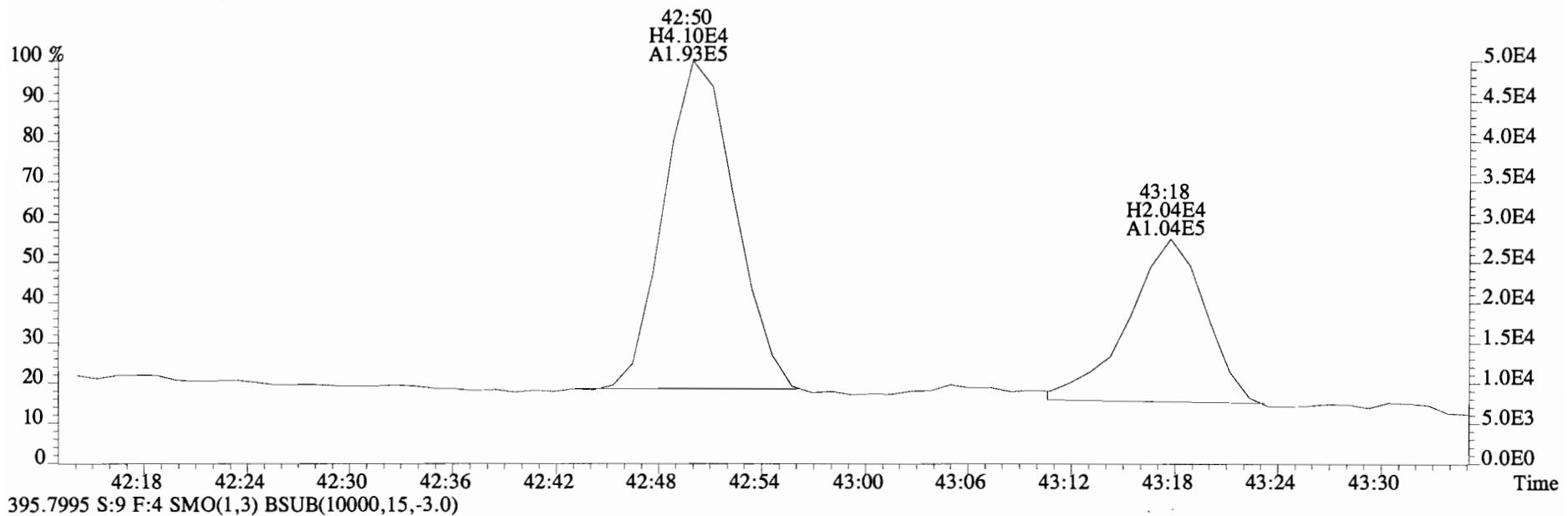
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
371.8817 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4004.0,0.00%,F,F)



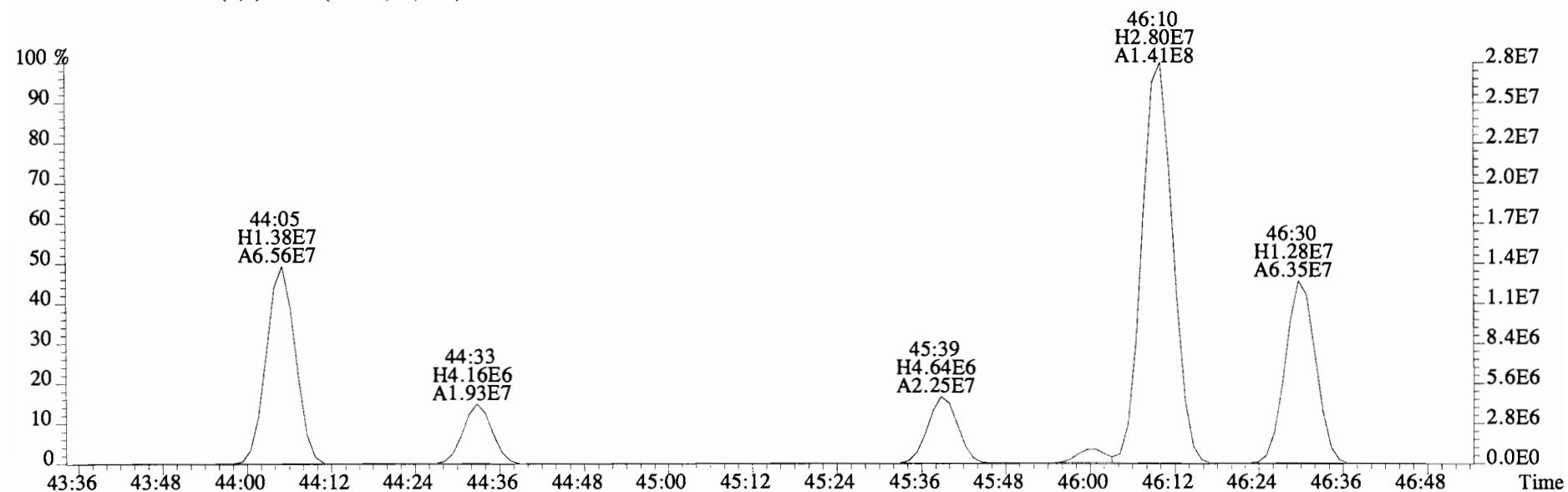
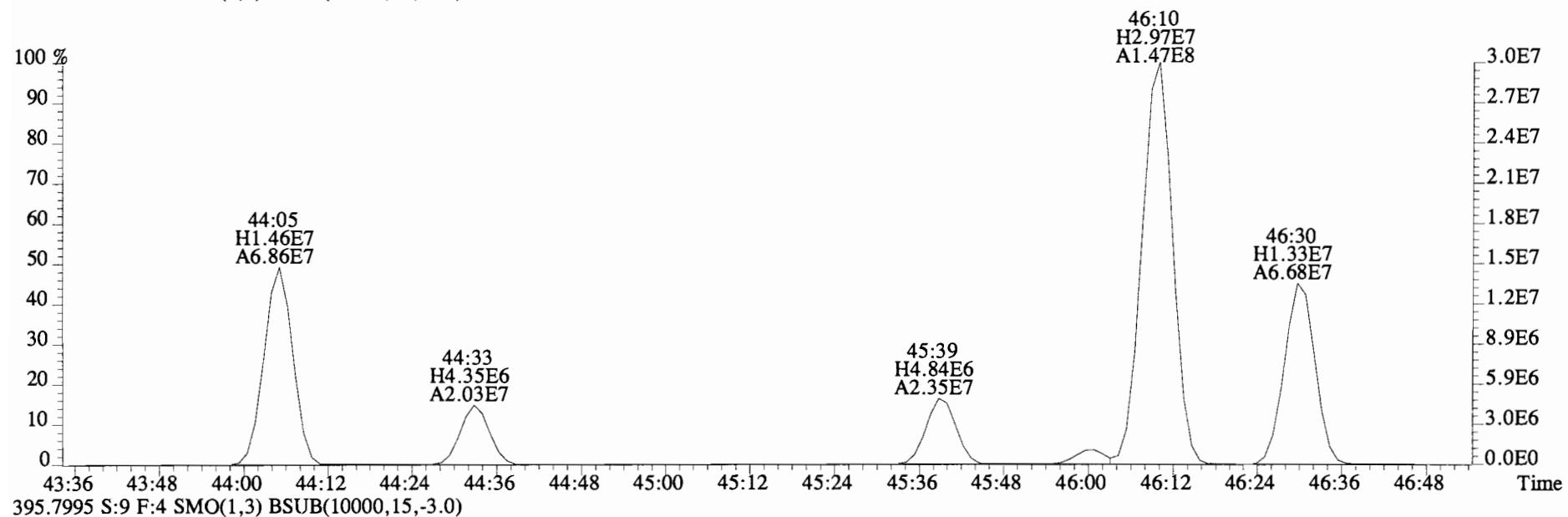
File:141024E2 #1-546 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 393.8025 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11436.0,0.00%,F,F)



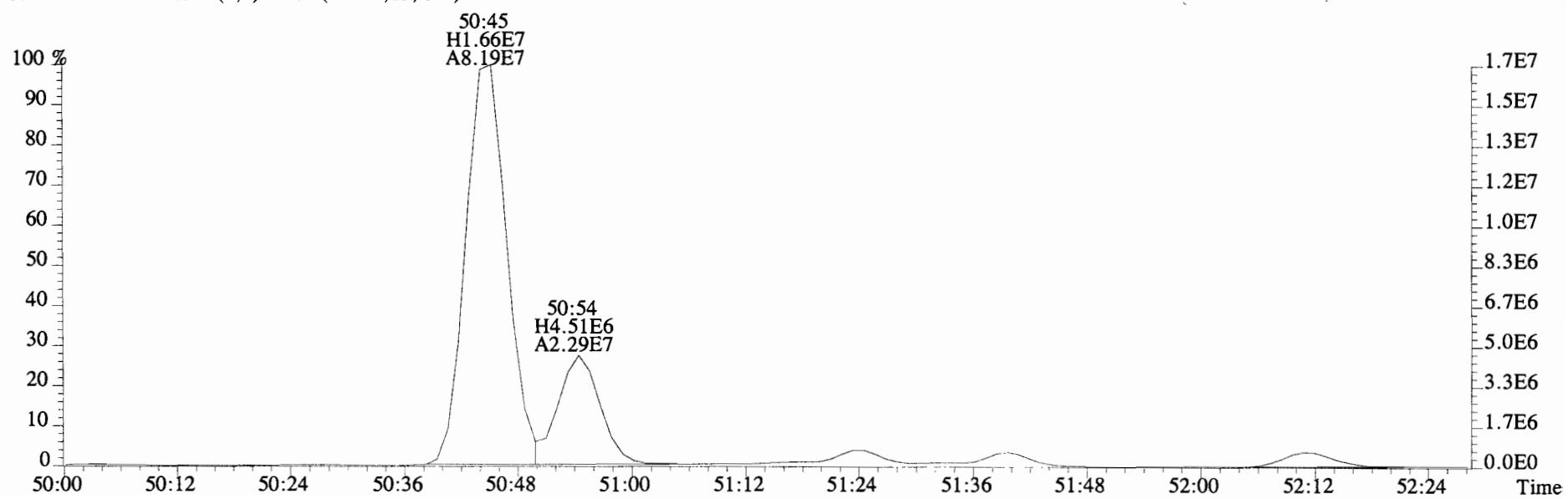
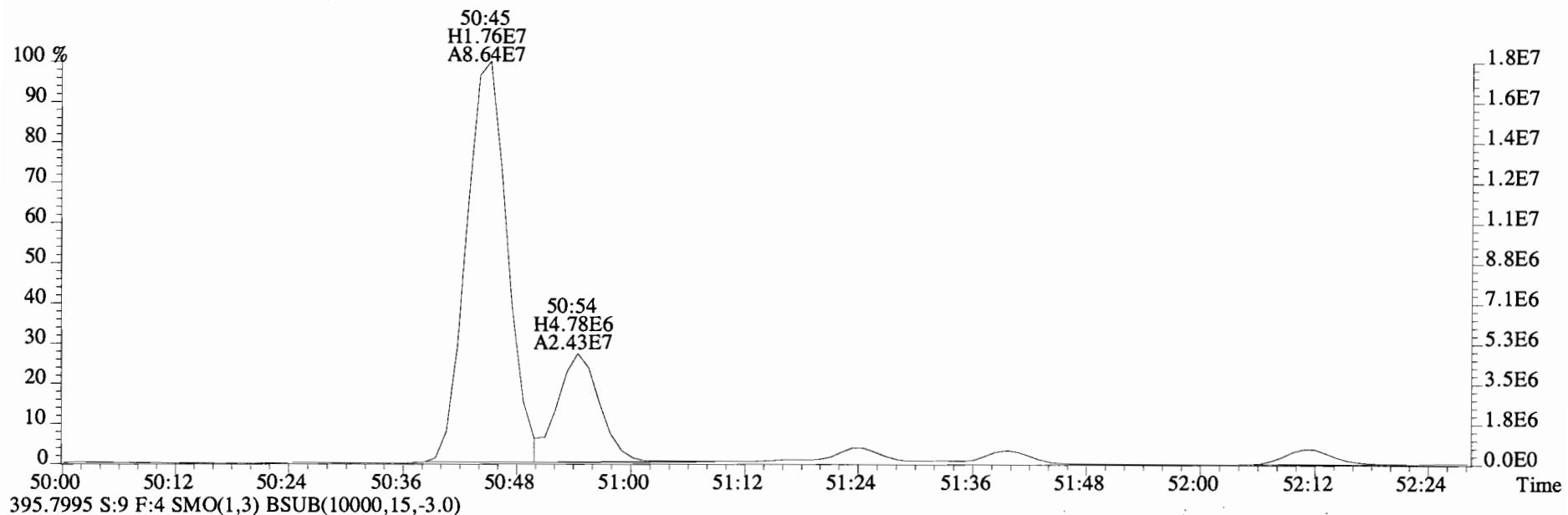
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
393.8025 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0)



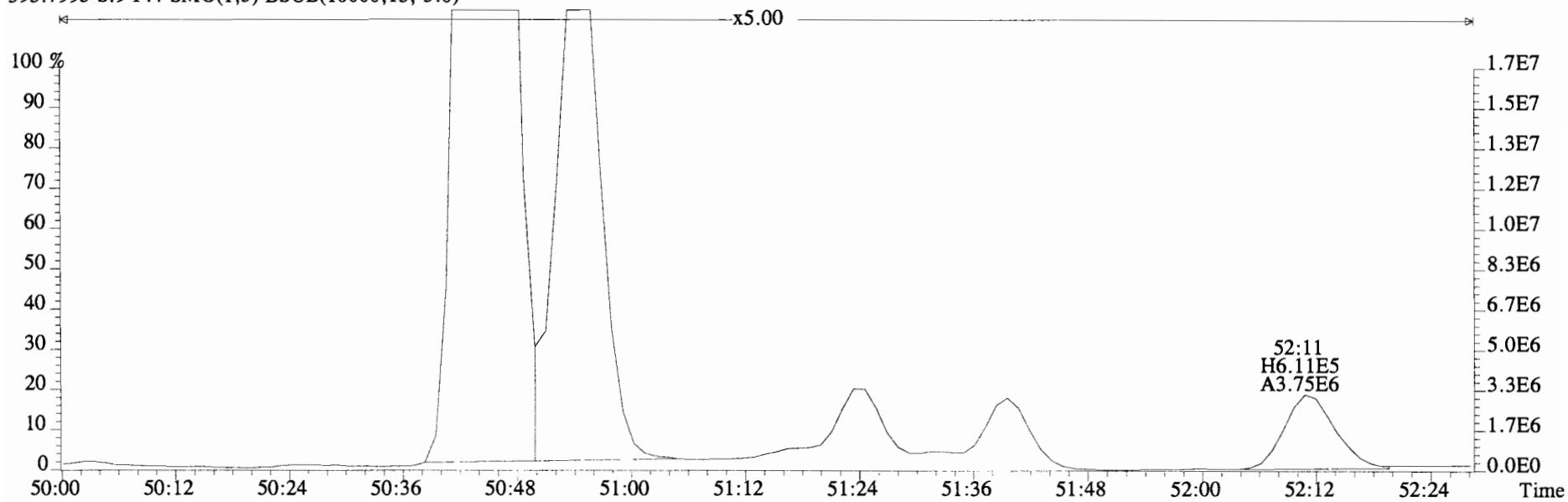
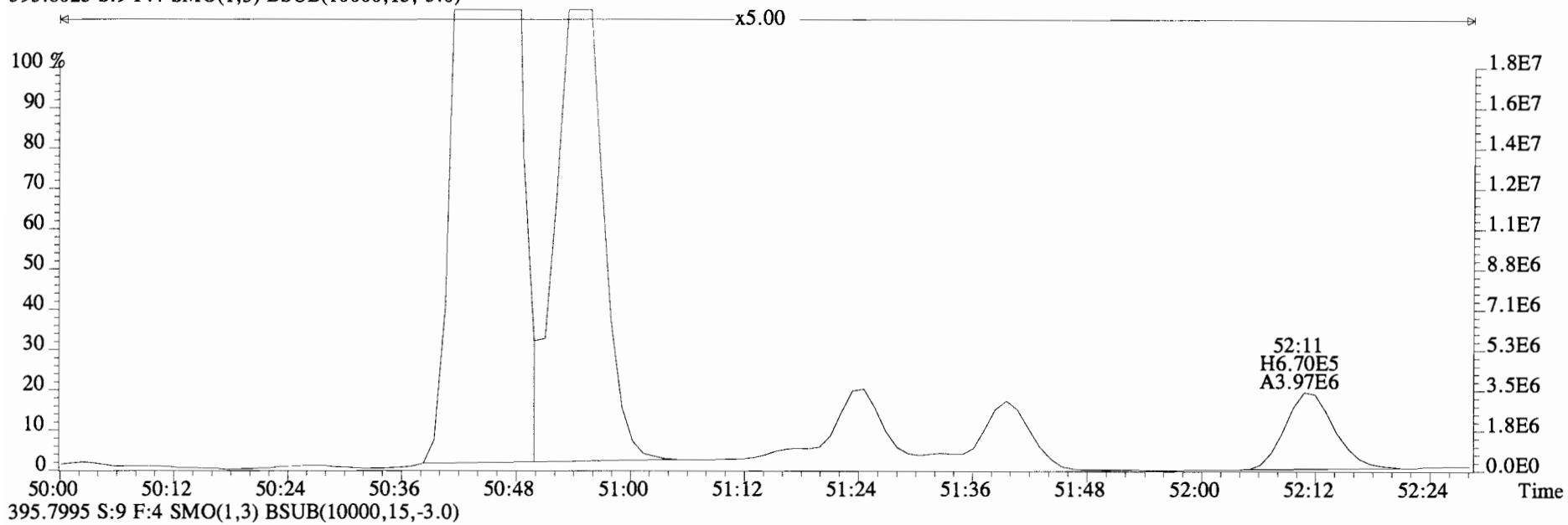
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
393.8025 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0)



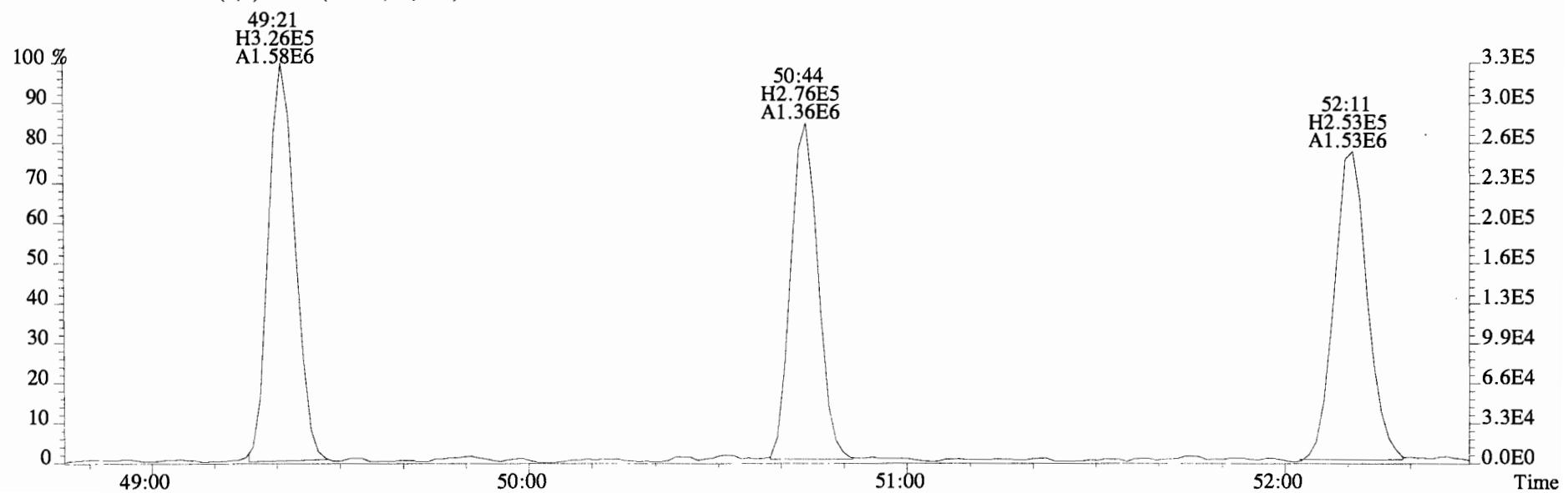
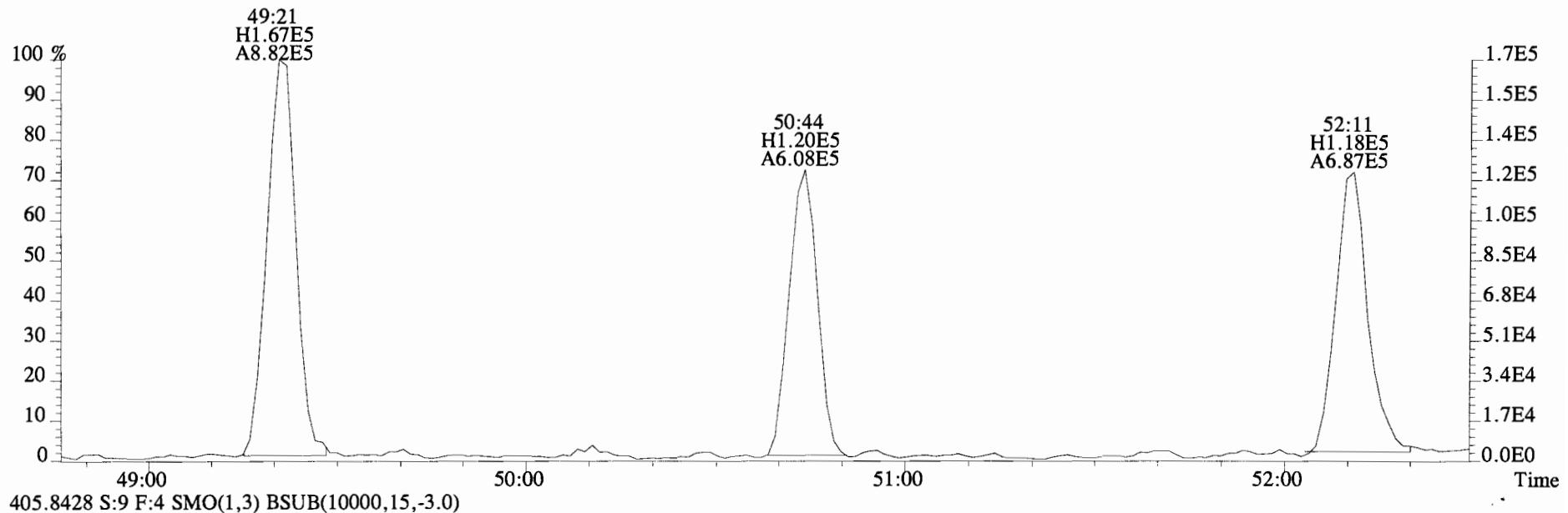
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
393.8025 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0)



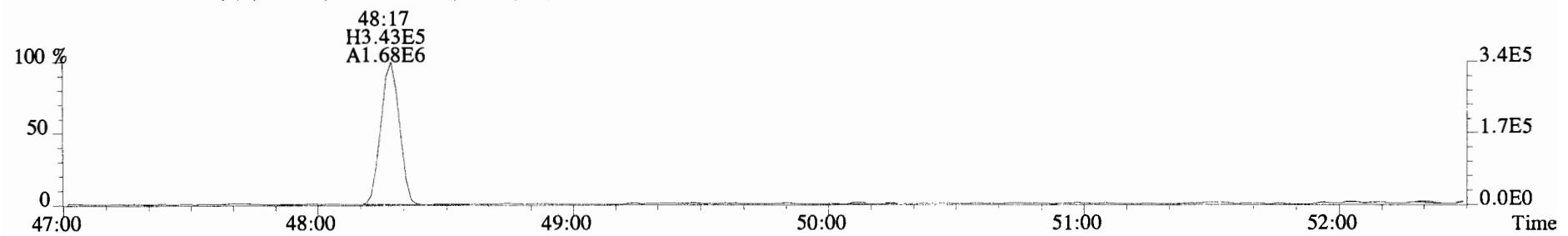
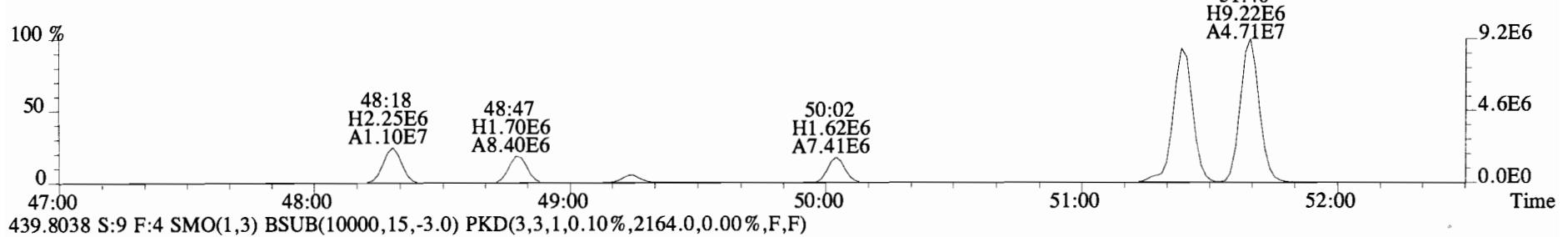
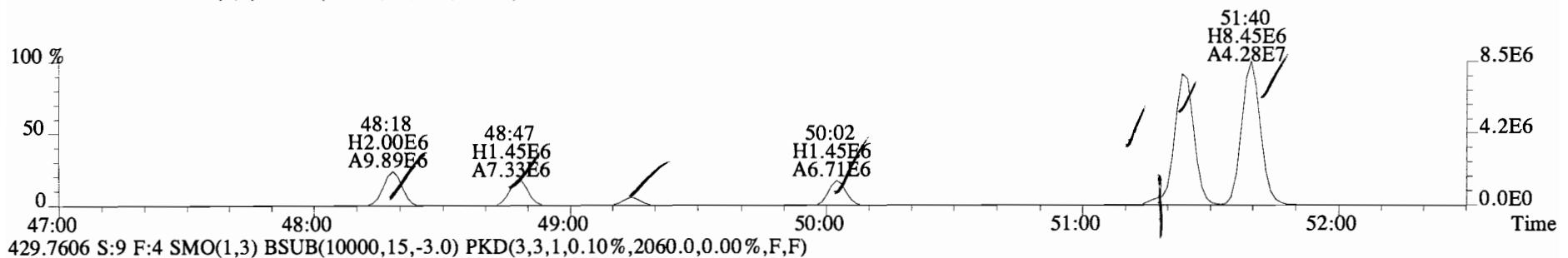
File:141024E2 #1-546 Acq:25-OCT-2014 10:39:00 GC EI + Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
393.8025 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0)



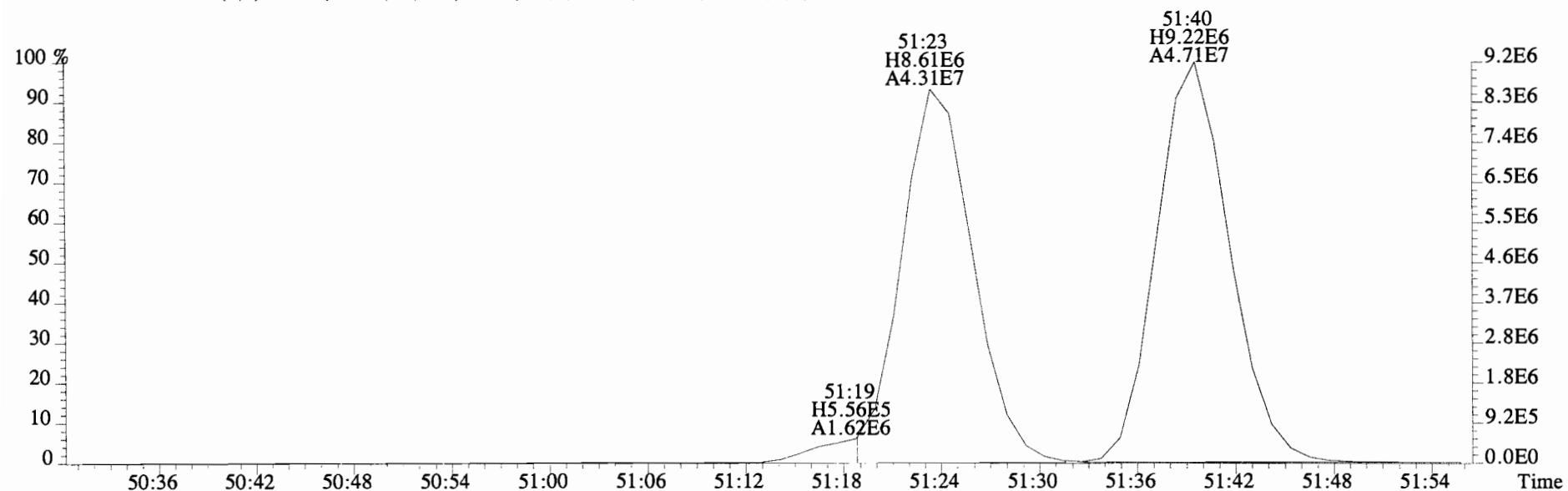
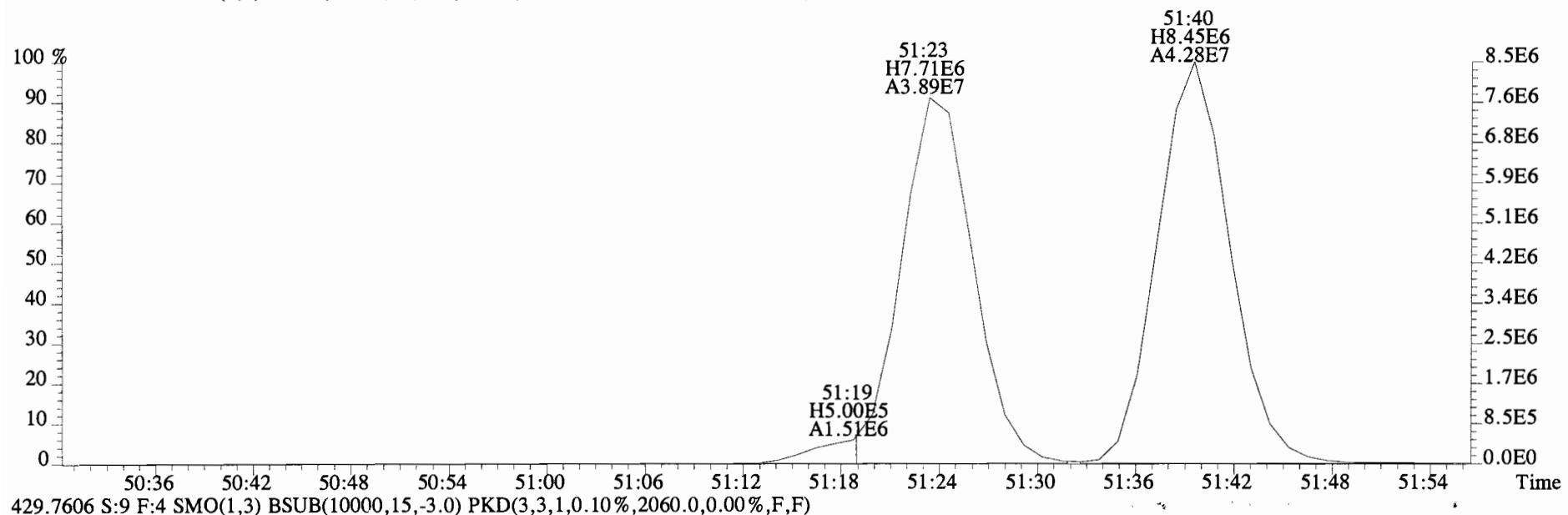
File:141024E2 #1-546 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
403.8457 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0)



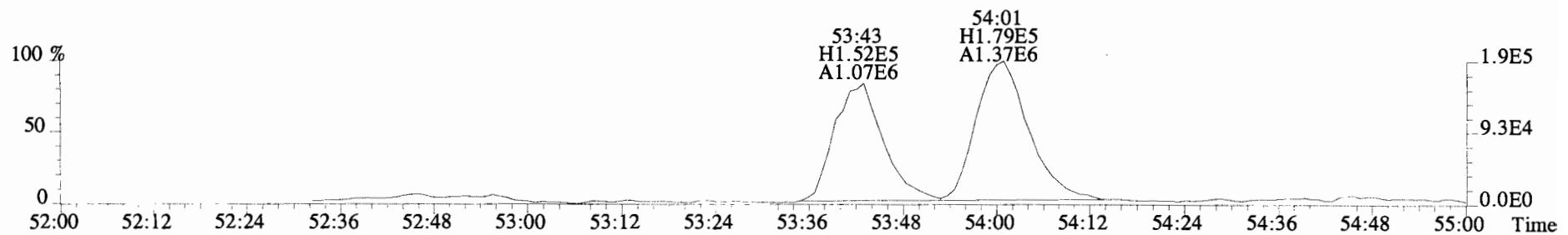
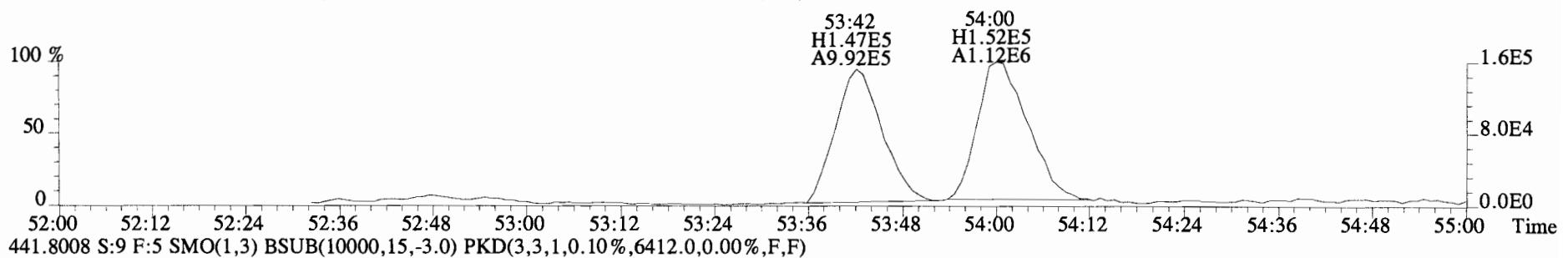
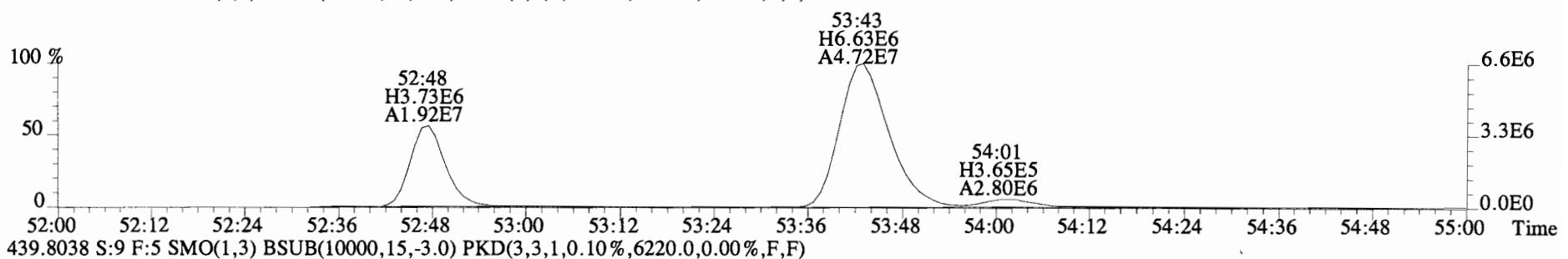
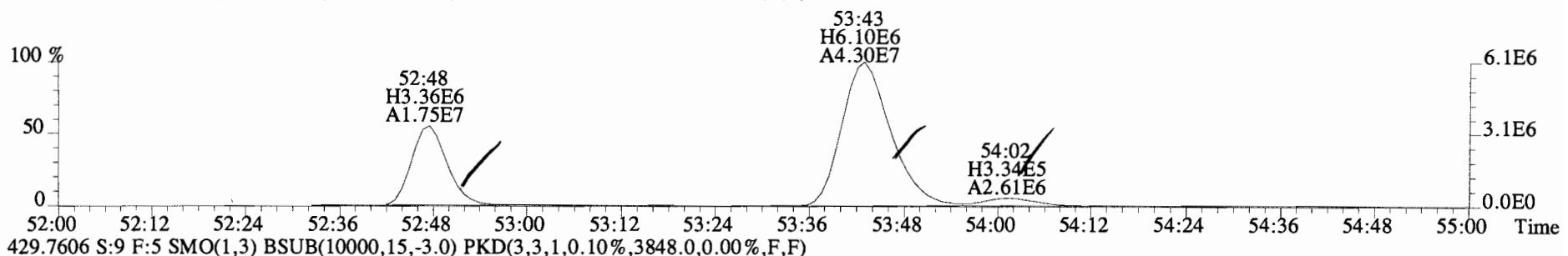
File:141024E2 #1-546 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
427.7635 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2364.0,0.00%,F,F)



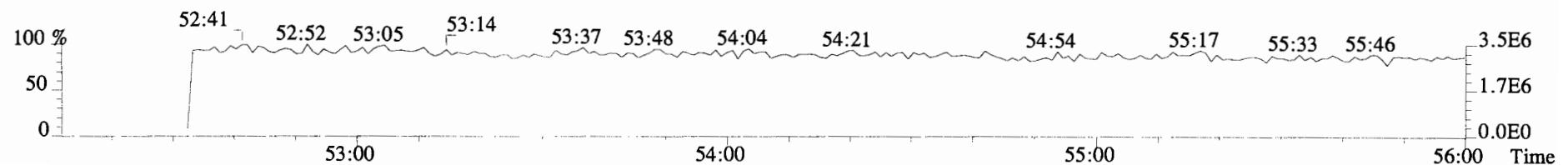
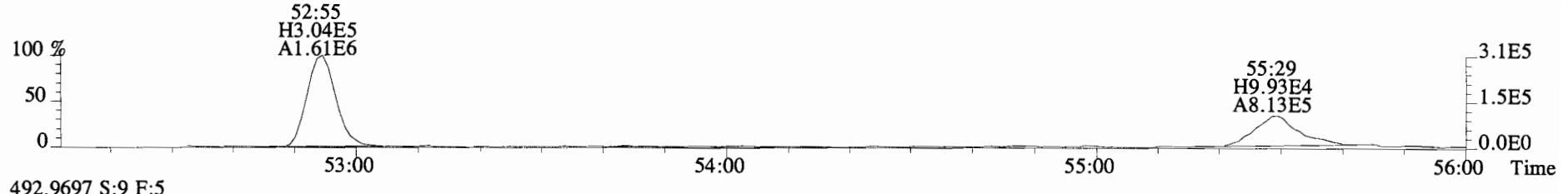
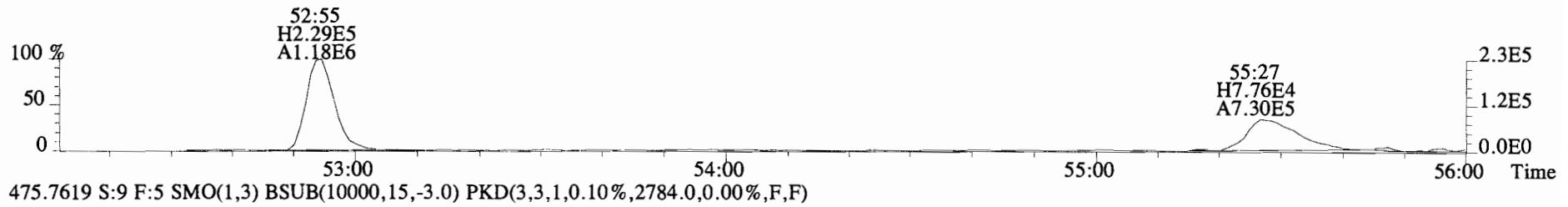
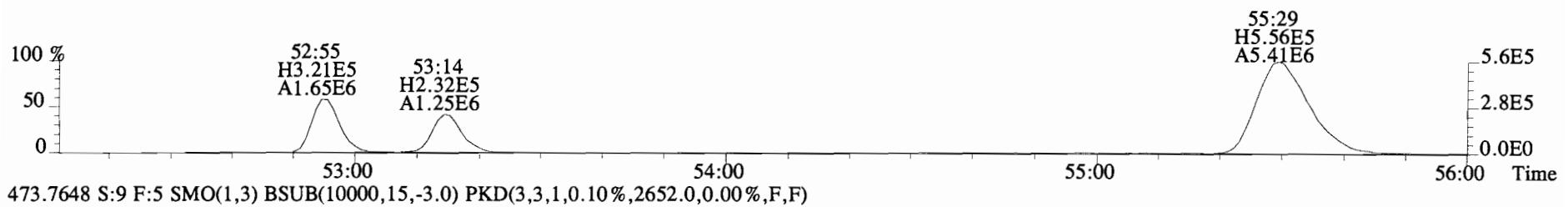
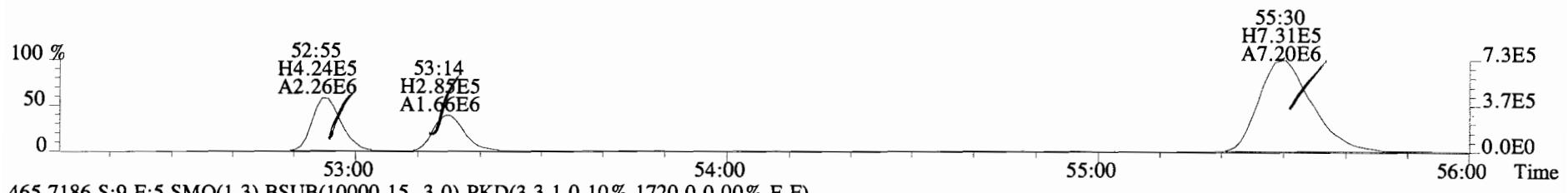
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
427.7635 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2364.0,0.00%,F,F)



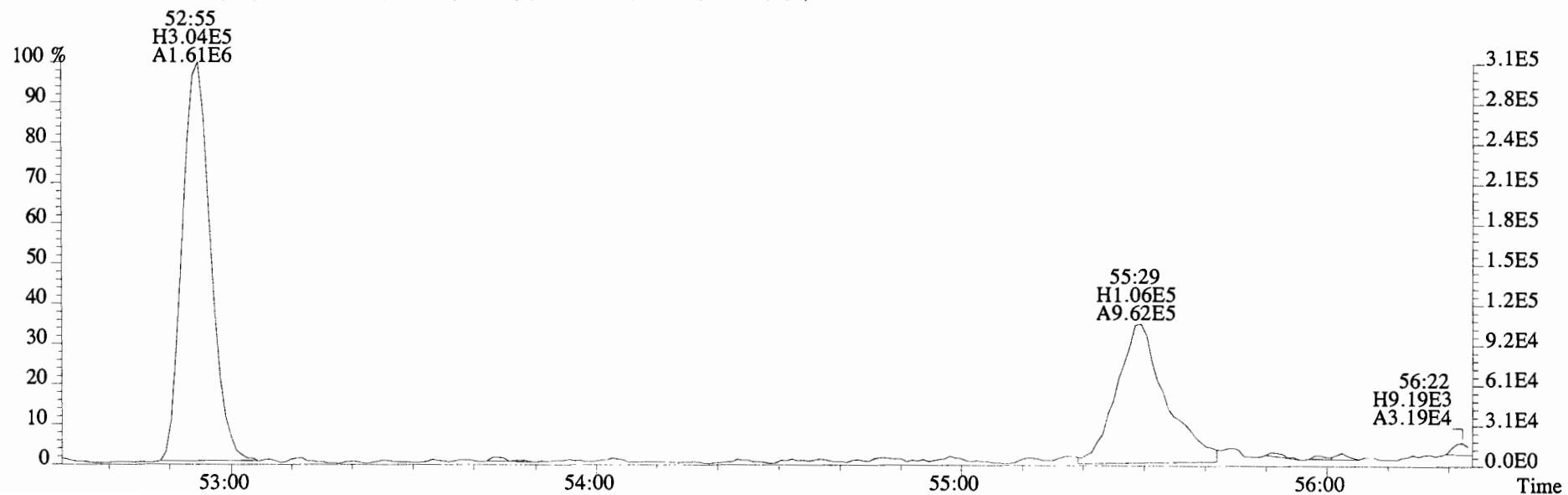
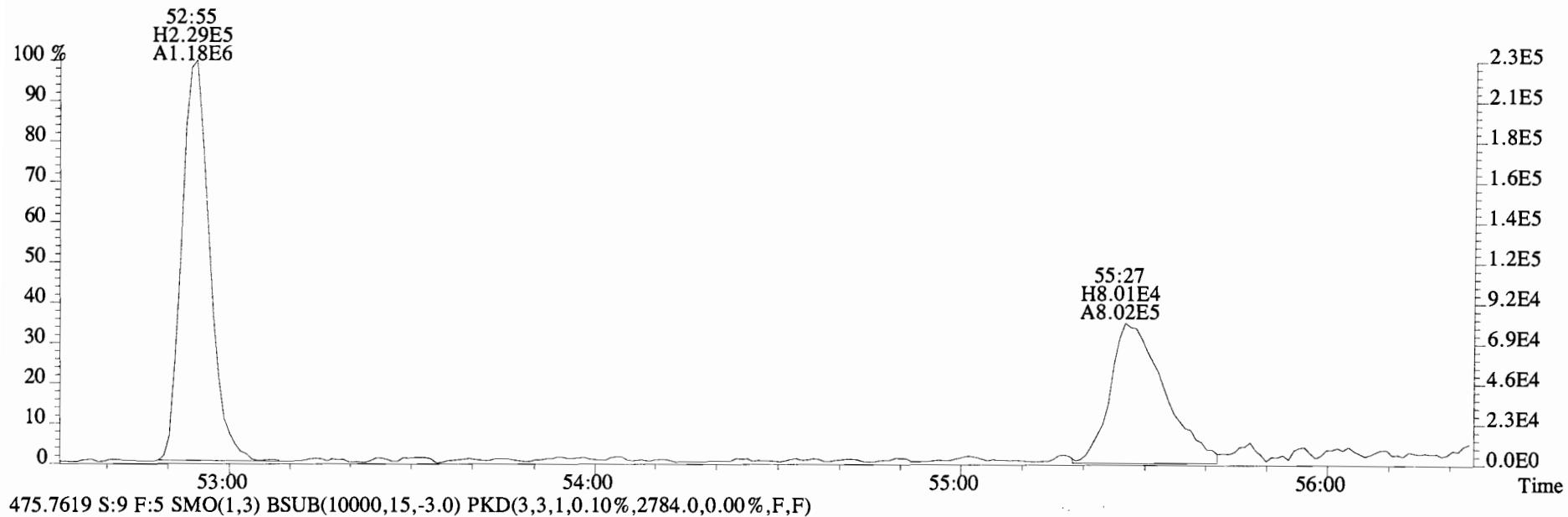
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 Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 427.7635 S:9 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3092.0,0.00%,F,F)



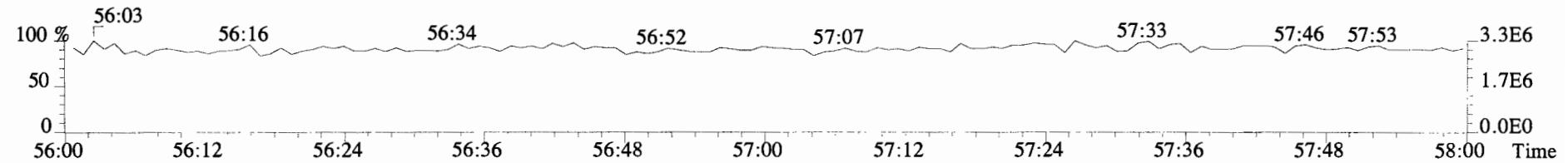
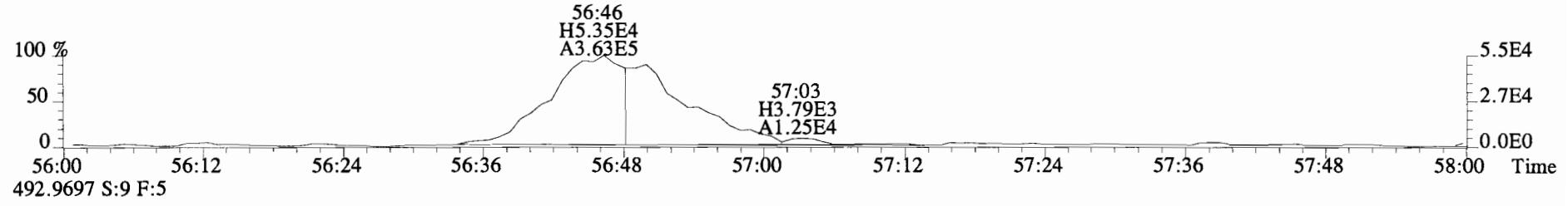
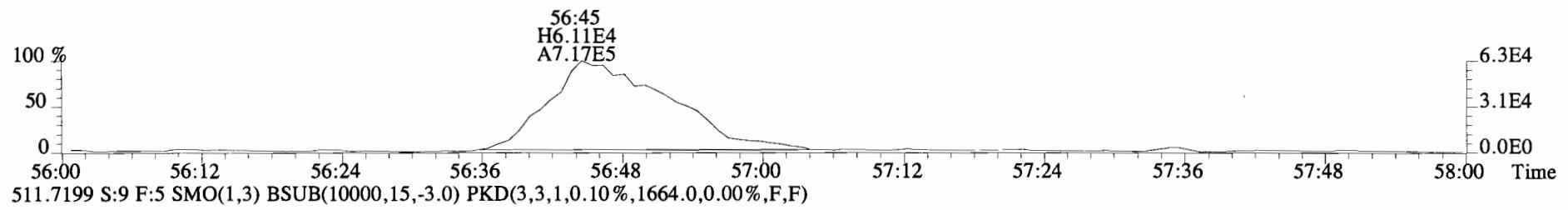
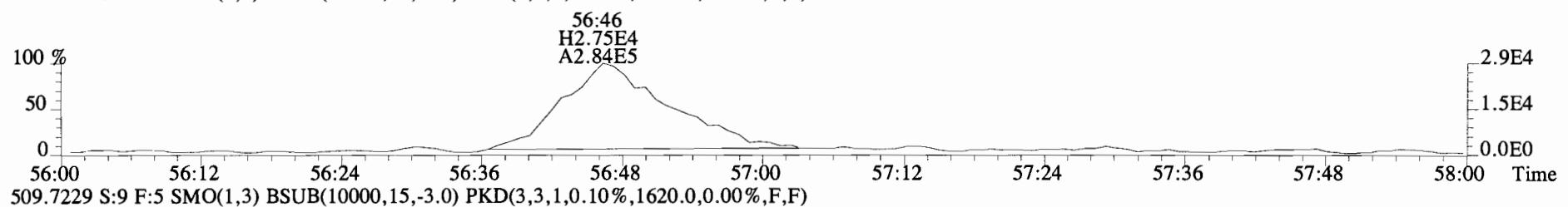
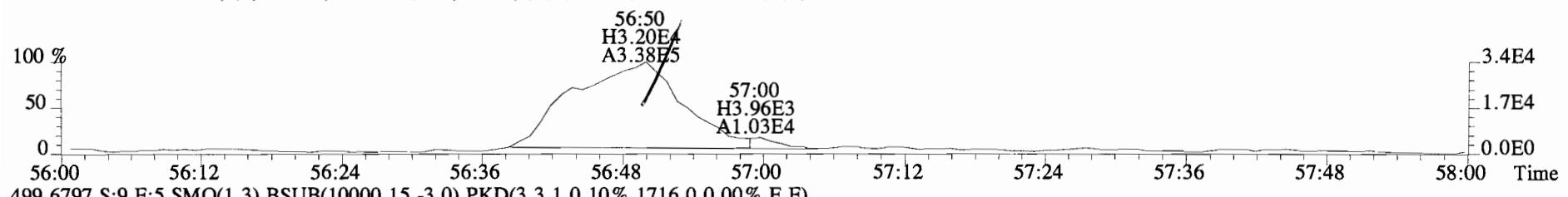
File:141024E2 #1-435 Acq:25-OCT-2014 10:39:00 GC EI + Voltage SIR Autospec-UltimaE
 Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
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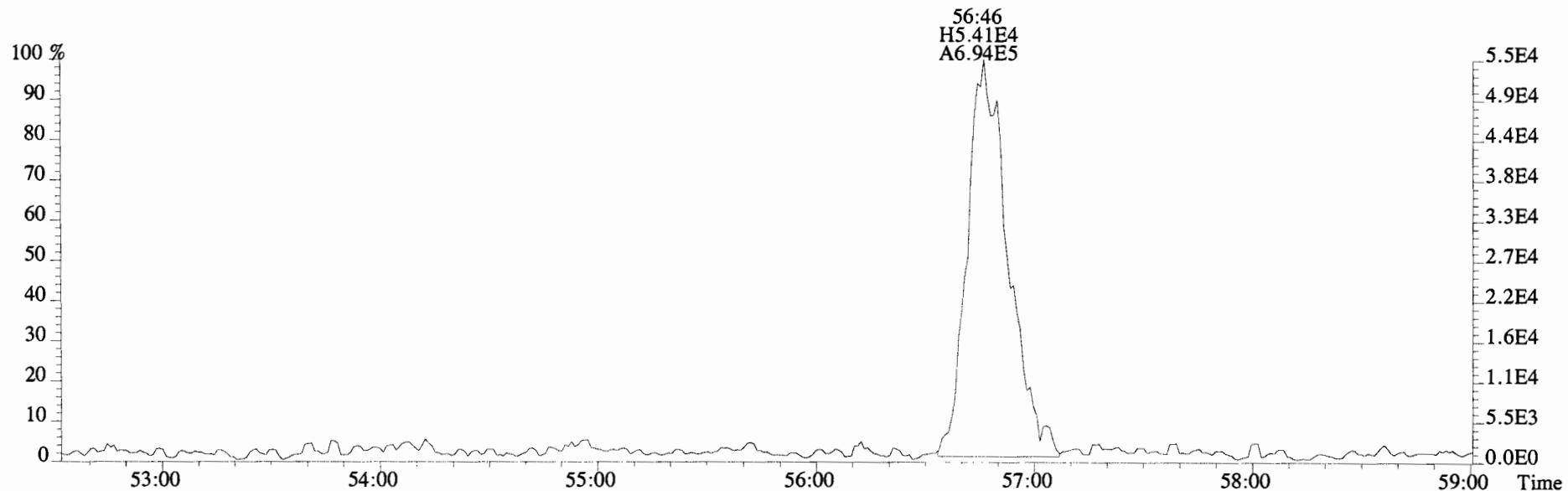
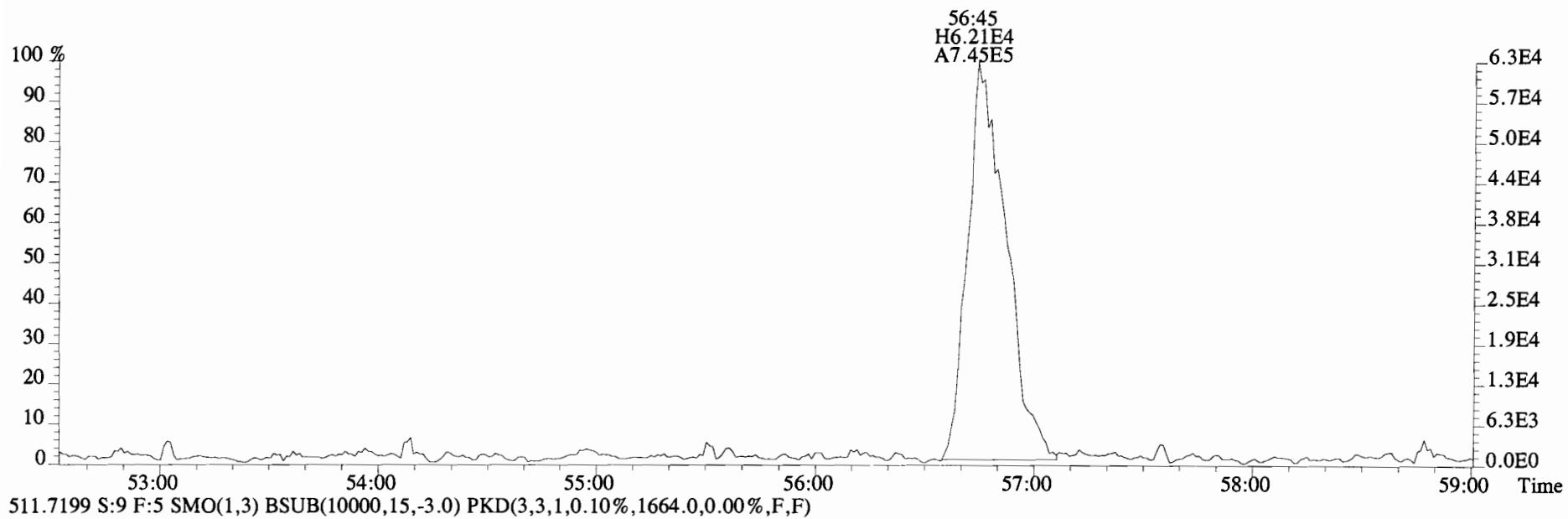
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
473.7648 S:9 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2652.0,0.00%,F,F)



File:141024E2 #1-435 Acq:25-OCT-2014 10:39:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
497.6826 S:9 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1664.0,0.00%,F,F)



File:141024E2 #1-435 Acq:25-OCT-2014 10:39:00 GC EI + Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
509.7229 S:9 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1620.0,0.00%,F,F)



Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	*	*	n NotF ₁₁	0.82	*		*	2.5	*	*	0.977-0.987	
Hexa	PCB-131	*	*	n NotF ₁₁	0.91	*		*	2.5	*	*	0.981-0.991	
Hexa	PCB-146/165	*	*	n NotF ₁₁	1.25	*		*	2.5	*	*	0.986-0.996	
Hexa	PCB-132/161	*	*	n NotF ₁₁	1.10	*		*	2.5	*	*	0.992-1.002	
Hexa	PCB-153	*	*	n NotF ₁₁	1.25	*		*	2.5	*	*	0.995-1.005	
Hexa	PCB-168	*	*	n NotF ₁₁	1.45	*		*	2.5	*	*	1.001-1.011	
Hexa	PCB-141	*	*	n NotF ₁₁	1.09	*		*	2.5	*	*	0.995-1.005	
Hexa	PCB-137	*	*	n NotF ₁₁	1.06	*		*	2.5	*	*	1.004-1.014	
Hexa	PCB-130	*	*	n NotF ₁₁	0.96	*		*	2.5	*	*	1.006-1.016	
Hexa	PCB-138/163/164	*	*	n NotF ₁₁	1.29	*		*	2.5	*	*	0.996-1.006	
Hexa	PCB-158/160	*	*	n NotF ₁₁	1.34	*		*	2.5	*	*	1.001-1.011	
Hexa	PCB-129	*	*	n NotF ₁₁	0.85	*		*	2.5	*	*	1.007-1.017	
Hexa	PCB-166	*	*	n NotF ₁₁	1.19	*		*	2.5	*	*	0.988-0.998	
Hexa	PCB-159	*	*	n NotF ₁₁	1.11	*		*	2.5	*	*	0.996-1.006	
Hexa	PCB-128/162	*	*	n NotF ₁₁	1.05	*		*	2.5	*	*	1.002-1.012	
Hexa	PCB-167	*	*	n NotF ₁₁	1.20	*		*	2.5	*	*	0.995-1.005	
Hexa	PCB-156	*	*	n NotF ₁₁	1.14	*		*	2.5	*	*	0.996-1.006	
Hexa	PCB-157	*	*	n NotF ₁₁	1.16	*		*	2.5	*	*	0.995-1.005	
Hexa	PCB-169	*	*	n NotF ₁₁	1.12	*		*	2.5	*	*	0.995-1.005	
Hepta	PCB-188	*	*	n NotF ₁₁	1.58	*		*	2.5	*	*	0.996-1.006	
Hepta	PCB-184	*	*	n NotF ₁₁	1.63	*		*	2.5	*	*	1.006-1.016	
Hepta	PCB-179	*	*	n NotF ₁₁	1.30	*		*	2.5	*	*	1.024-1.034	
Hepta	PCB-176	*	*	n NotF ₁₁	1.48	*		*	2.5	*	*	1.035-1.045	
Hepta	PCB-186	*	*	n NotF ₁₁	1.45	*		*	2.5	*	*	1.050-1.060	
Hepta	PCB-178	*	*	n NotF ₁₁	1.03	*		*	2.5	*	*	1.061-1.071	
Hepta	PCB-175	*	*	n NotF ₁₁	1.01	*		*	2.5	*	*	1.069-1.079	
Hepta	PCB-182/187	*	*	n NotF ₁₁	1.25	*		*	2.5	*	*	1.073-1.083	
Hepta	PCB-183	*	*	n NotF ₁₁	1.21	*		*	2.5	*	*	1.081-1.091	
Hepta	PCB-185	1.08e+07	1.05	y 47:10	1.80	5760		*	2.5	*	0.956	0.951-0.961	
Hepta	PCB-174	9.40e+07	1.03	y 47:30	1.38	65300		*	2.5	*	0.962	0.958-0.968	
Hepta	PCB-181	*	*	n NotF ₁₁	1.38	*	5520	2.5	73.4	*	0.960-0.970		
Hepta	PCB-177	4.92e+07	1.02	y 47:48	1.26	37500		*	2.5	*	0.968	0.963-0.973	
Hepta	PCB-171	2.26e+07	1.04	y 48:05	1.58	13700		*	2.5	*	0.974	0.970-0.980	
Hepta	PCB-173	1.80e+06	1.05	y 48:32	1.11	1550		*	2.5	*	0.983	0.978-0.988	
Hepta	PCB-172	1.50e+07	1.04	y 48:58	1.63	8760		*	2.5	*	0.992	0.987-0.997	
Hepta	PCB-192	*	*	n NotF ₁₁	1.74	*	5520	2.5	58.2	*	0.991-1.001		
Hepta	PCB-180	1.93e+08	1.03	y 49:21	1.34	138000		*	2.5	*	1.000	0.995-1.005	

Analyst: DME

Date: 10/30/17

YR
10/30/17

Client ID: CC-CB-22-20141013-S
Lab ID: 1400762-05@20X

Filename: 141027E1 S:7 Acq:27-OCT-14 16:54:17
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 9.990

ConCal: ST141027E1-1
EndCAL: NA

Page 2 of

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	1.15e+07	1.03	y	49:33	1.72	6400		5520	2.5	59.0	1.004	0.999-1.009
Hepta	PCB-191	4.06e+06	0.98	y	49:47	1.69	2300		5520	2.5	59.8	1.009	1.004-1.014
Hepta	PCB-170	*	*	n	NotFq	1.60	*		*	2.5	*	*	0.995-1.005
Hepta	PCB-190	*	*	n	NotFq	2.21	*		*	2.5	*	*	0.998-1.008
Hepta	PCB-189	*	*	n	NotFq	1.55	*		*	2.5	*	*	0.995-1.005
Octa	PCB-202	*	*	n	NotFq	1.08	*		*	2.5	*	*	0.995-1.005
Octa	PCB-201	*	*	n	NotFq	1.15	*		*	2.5	*	*	1.005-1.015
Octa	PCB-204	*	*	n	NotFq	1.14	*		*	2.5	*	*	1.008-1.018
Octa	PCB-197	*	*	n	NotFq	1.07	*		*	2.5	*	*	1.015-1.025
Octa	PCB-200	*	*	n	NotFq	1.06	*		*	2.5	*	*	1.032-1.044
Octa	PCB-198	*	*	n	NotFq	0.76	*		*	2.5	*	*	1.059-1.069
Octa	PCB-199	*	*	n	NotFq	0.80	*		*	2.5	*	*	1.061-1.071
Octa	PCB-196/203	*	*	n	NotFq	0.80	*		*	2.5	*	*	1.066-1.076
Octa	PCB-195	*	*	n	NotFq	1.23	*		*	2.5	*	*	0.979-0.989
Octa	PCB-194	*	*	n	NotFq	1.21	*		*	2.5	*	*	0.995-1.005
Octa	PCB-205	*	*	n	NotFq	1.54	*		*	2.5	*	*	1.001-1.011
Nonna	PCB-208	*	*	n	NotFq	0.93	*		*	2.5	*	*	0.995-1.005
Nonna	PCB-207	*	*	n	NotFq	1.08	*		*	2.5	*	*	1.001-1.011
Nonna	PCB-206	*	*	n	NotFq	1.02	*		*	2.5	*	*	0.995-1.005
Deca	PCB-209	*	*	n	NotFq	1.17	*		*	2.5	*	*	0.995-1.005

Analyst: DmS

Date: 10/31/14

Client ID: CC-CB-22-20141013-S
Lab ID: 1400762-05@20X

Filename: 141027E1 S:7 Acq:27-OCT-14 16:54:17 ConCal: ST141027E1-1
GC Column ID: ZB-1 ICal: PCVG8-6-23-14 wt/vol: 9.9901 EndCAL: NA

Page 2 of

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	*	*	n	NotFnd	1.27 *
Total Di-PCB	*	*	n	NotFnd	1.21 *
Total Tri-PCB	*	*	n	NotFnd	1.10 *
Total Tri-PCB	*	*	n	NotFnd	1.21 * Sum:0.00000
Total Tetra-PCB	*	*	n	NotFnd	1.09 *
Total Penta-PCB	*	*	n	NotFnd	1.18 *
Total Penta-PCB	*	*	n	NotFnd	1.25 * Sum:0.00000
Total Hexa-PCB	*	*	n	NotFnd	0.90 *
Total Hexa-PCB	*	*	n	NotFnd	1.11 * Sum:0.00000
Total Hepta-PCB	4.02e+08	1.05	y	47:10	1.42 278915
Total Octa-PCB	*	*	n	NotFnd	0.96 *
Total Octa-PCB	*	*	n	NotFnd	1.33 * Sum:0.00000
Total Nona-PCB	*	*	n	NotFnd	1.01 *
Total Deca-PCB	*	*	n	NotFnd	1.17 *

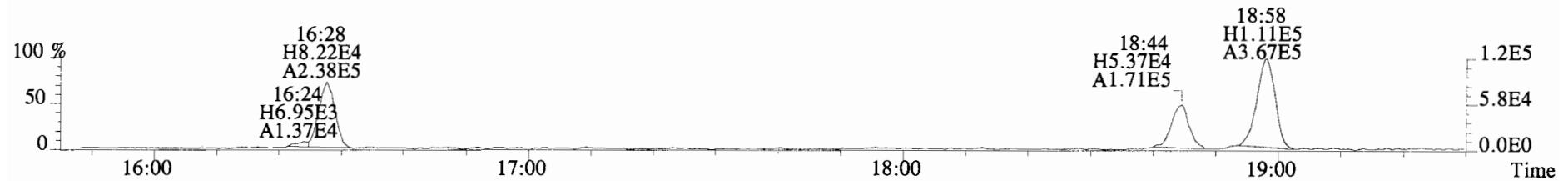
Total PCB Conc:278914.535912

Integrations
by _____
Analyst: DMS
Date: 10/31/14

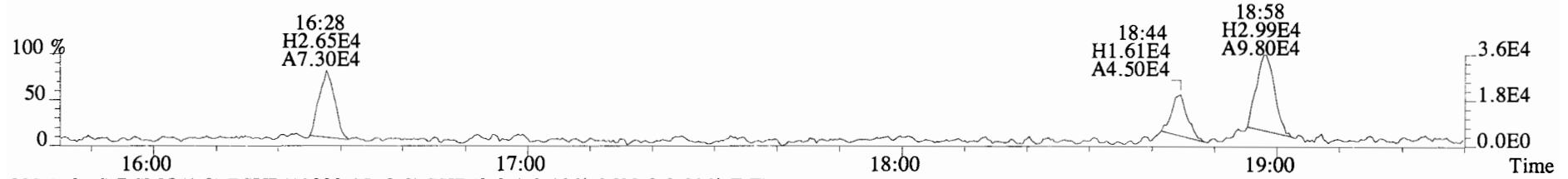
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS										
	*	*	n	0.87	NotFnd	*	0.629-0.635	*	*	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	
13C-PCB-1	*	*	n	0.87	NotFnd	*	0.629-0.635	*	*	13C-PCB-79	1.64e+06	0.69	y	1.02	37:45	1.029	1.023-1.034	827	82.7	
13C-PCB-3	7.63e+05	10.23	n	0.91	18:57	0.730	0.725-0.733	254	25.4	13C-PCB-178	8.89e+05	0.44	y	0.61	45:37	0.984	0.979-0.990	1160	115	
13C-PCB-4	1.70e+06	1.63	y	0.59	20:14	0.779	0.775-0.783	880	87.9	13C-PCB-178	8.89e+05	0.44	y	0.61	45:37	0.984	0.979-0.990	1160	115	
13C-PCB-9	2.76e+06	1.61	y	0.90	21:57	0.846	0.842-0.850	935	93.4											
13C-PCB-11	2.87e+06	1.61	y	0.94	25:16	0.973	0.968-0.978	931	93.0	PS vs. IS										
13C-PCB-19	1.10e+06	0.99	y	0.53	24:17	0.935	0.930-0.940	628	62.7	13C-PCB-79	1.64e+06	0.69	y	1.10	37:45	0.968	0.964-0.974	911	91.0	
13C-PCB-28	*	*	n	0.93	NotFnd	*	0.999-1.009	*	*	13C-PCB-178	8.89e+05	0.44	y	0.90	45:37	0.924	0.920-0.930	948	94.7	
13C-PCB-32	1.71e+06	1.04	y	0.80	27:08	1.045	1.040-1.050	650	65.0	13C-PCB-178	8.89e+05	0.44	y	0.90	45:37	0.924	0.920-0.930	948	94.7	
13C-PCB-37	*	*	n	0.84	NotFnd	*	1.131-1.143	*	*											
13C-PCB-47	1.55e+06	0.72	y	0.81	31:57	0.871	0.866-0.874	974	97.3											
13C-PCB-52	1.44e+06	0.70	y	0.77	31:27	0.857	0.853-0.861	956	95.5											
13C-PCB-54	1.78e+06	0.72	y	0.97	27:58	0.762	0.758-0.766	936	93.6											
13C-PCB-70	1.96e+06	0.75	y	1.00	35:27	0.966	0.961-0.971	1000	100											
13C-PCB-77	1.84e+06	0.75	y	0.94	39:35	1.079	1.073-1.083	998	99.7											
13C-PCB-80	1.97e+06	0.82	y	1.03	35:52	0.977	0.972-0.982	977	97.6											
13C-PCB-81	1.64e+06	0.83	y	0.92	38:60	1.062	1.057-1.067	909	90.8											
13C-PCB-95	1.45e+06	1.60	y	0.74	35:45	0.913	0.908-0.918	1010	101	RS										
13C-PCB-97	1.29e+06	1.74	y	0.70	38:44	0.989	0.984-0.994	949	94.8	13C-PCB-15	3.29e+06	1.60	y	1.00	25:58	1000				
13C-PCB-101	1.34e+06	1.53	y	0.78	37:26	0.955	0.951-0.961	885	88.4	13C-PCB-31	*	*	n	1.00	NotFnd	*				
13C-PCB-104	1.96e+06	1.60	y	1.00	32:36	0.832	0.828-0.836	1020	101	13C-PCB-60	1.96e+06	0.75	y	1.00	36:42	1000				
13C-PCB-105	1.08e+06	1.35	y	1.37	43:02	0.928	0.924-0.934	629	62.8	13C-PCB-111	1.93e+06	1.54	y	1.00	39:10	1000				
13C-PCB-114	1.06e+06	1.53	y	1.36	42:10	0.910	0.905-0.915	623	62.3	13C-PCB-128	1.25e+06	1.30	y	1:00	46:21	1000				
13C-PCB-118	1.89e+06	1.63	y	0.96	41:30	1.059	1.054-1.064	1020	102	13C-PCB-205	6.14e+05	0.95	y	1.00	53:45	1000				
13C-PCB-123	1.75e+06	1.49	y	0.89	41:19	1.055	1.050-1.060	1010	101											
13C-PCB-126	8.70e+05	1.44	y	1.31	45:17	0.977	0.972-0.982	531	53.0											
13C-PCB-127	1.10e+06	1.49	y	1.47	43:23	0.936	0.931-0.941	596	59.6											
13C-PCB-138	1.27e+06	1.23	y	1.10	44:46	0.966	0.961-0.971	919	91.8											
13C-PCB-141	1.26e+06	1.28	y	1.07	43:55	0.948	0.943-0.953	935	93.4											
13C-PCB-153	1.49e+06	1.20	y	1.15	43:11	0.932	0.927-0.937	1040	104											
13C-PCB-155	1.63e+06	1.42	y	0.84	36:58	0.944	0.939-0.949	1000	100											
13C-PCB-156	1.51e+06	1.28	y	1.30	48:05	1.037	1.032-1.042	928	92.7											
13C-PCB-157	1.61e+06	1.45	n	1.36	48:21	1.043	1.038-1.048	944	94.3											
13C-PCB-159	1.43e+06	1.42	y	1.25	46:05	0.994	0.989-0.999	912	91.1											
13C-PCB-167	1.62e+06	1.39	y	1.35	46:46	1.009	1.004-1.014	954	95.3											
13C-PCB-169	1.41e+06	1.11	y	1.29	50:25	1.088	1.083-1.093	874	87.3											
13C-PCB-170	6.76e+05	0.55	n	0.54	50:44	1.095	1.089-1.101	995	99.4	<i>useo only</i>										
13C-PCB-180	1.04e+06	0.44	y	0.68	49:21	1.065	1.060-1.070	1220	122											
13C-PCB-188	1.39e+06	0.42	y	0.92	42:48	0.923	0.919-0.929	1210	121											
13C-PCB-189	8.58e+05	0.47	y	0.72	52:13	1.126	1.120-1.132	956	95.5											
13C-PCB-194	*	*	n	0.80	NotFnd	*	0.990-1.000	*	*											
13C-PCB-202	1.45e+06	0.94	y	0.84	48:16	1.041	1.036-1.046	1380	138											
13C-PCB-206	*	*	n	0.65	NotFnd	*	1.021-1.031	*	*											
13C-PCB-208	*	*	n	1.08	NotFnd	*	0.976-0.986	*	*											
13C-PCB-209	*	*	n	0.61	NotFnd	*	1.045-1.055	*	*											

Analyst: Dms
 Date: 10/30/17

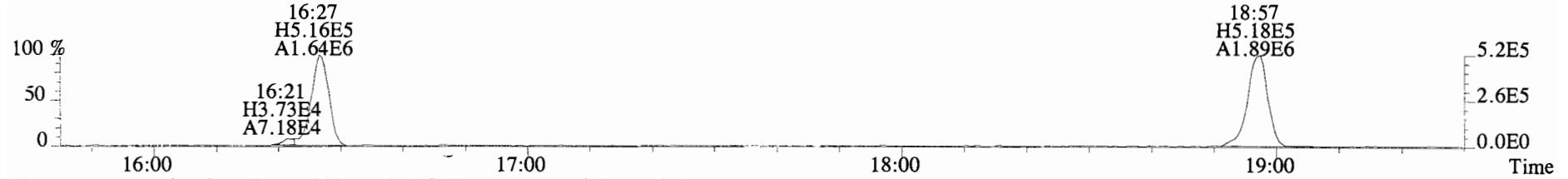
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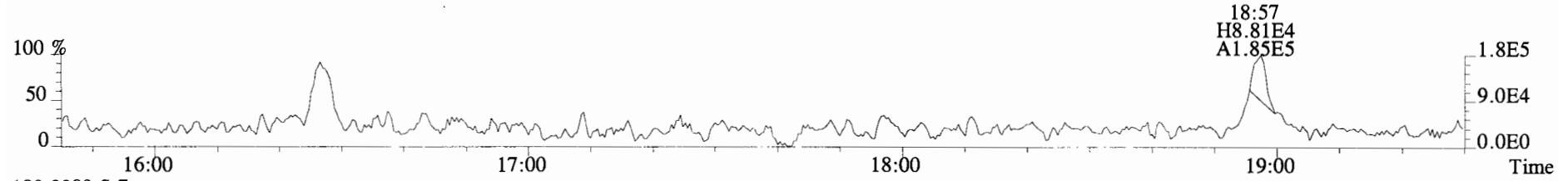
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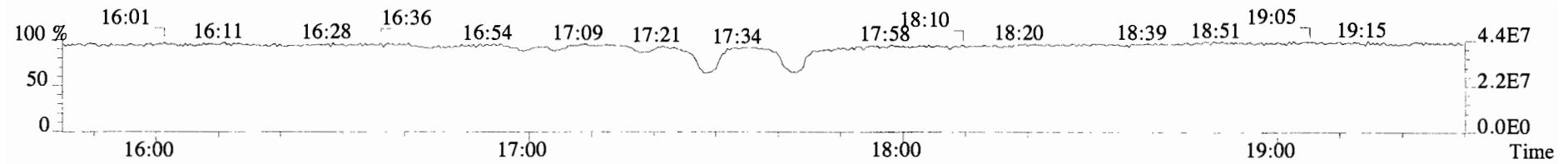
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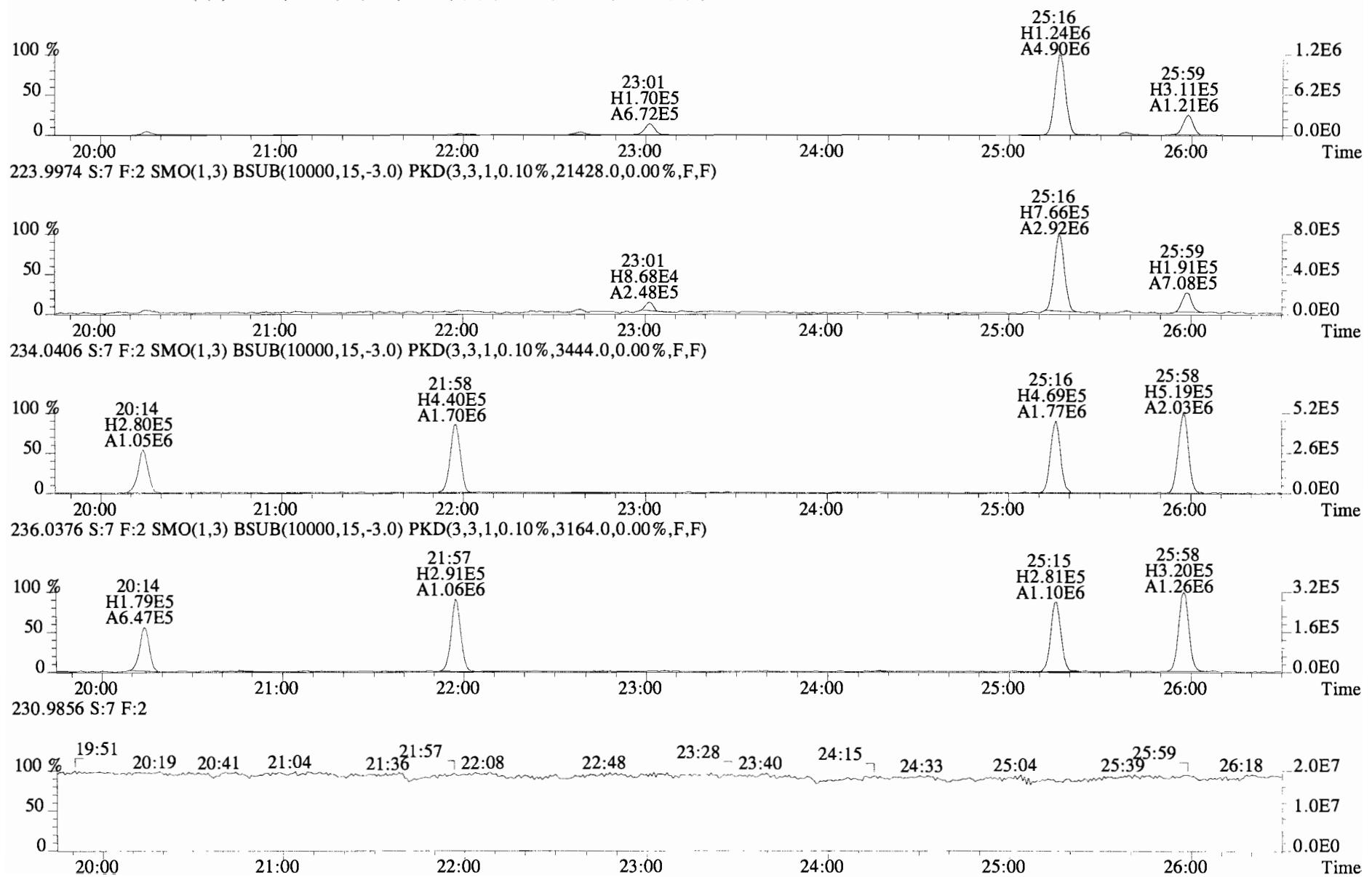
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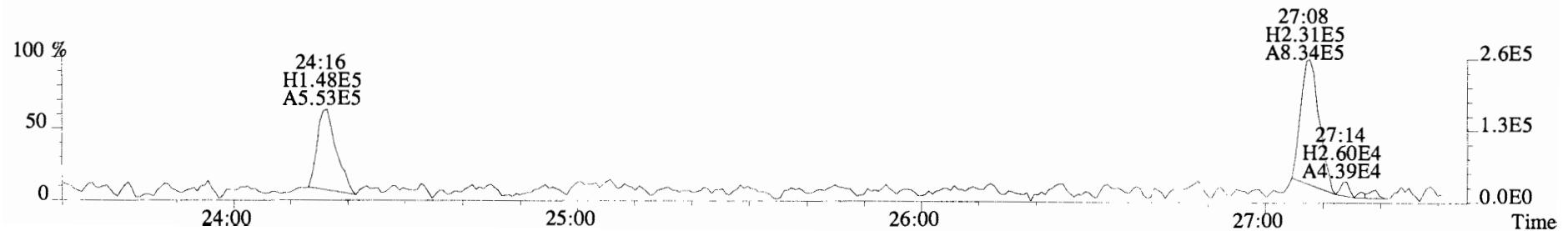
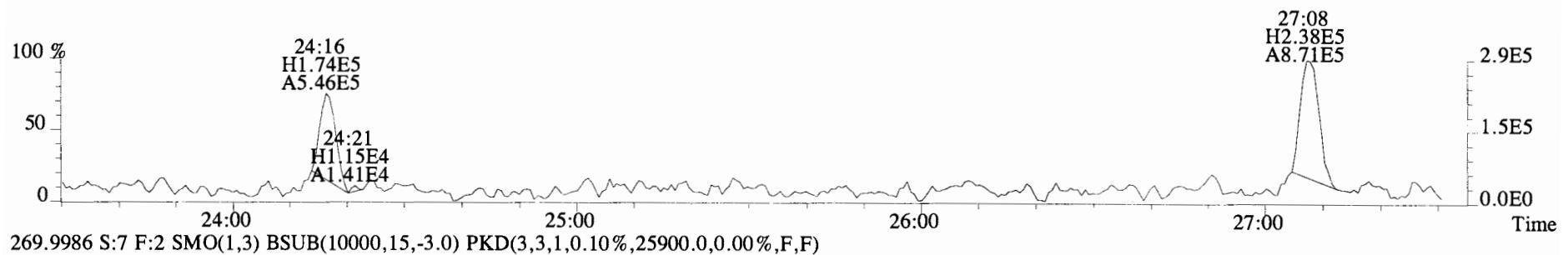
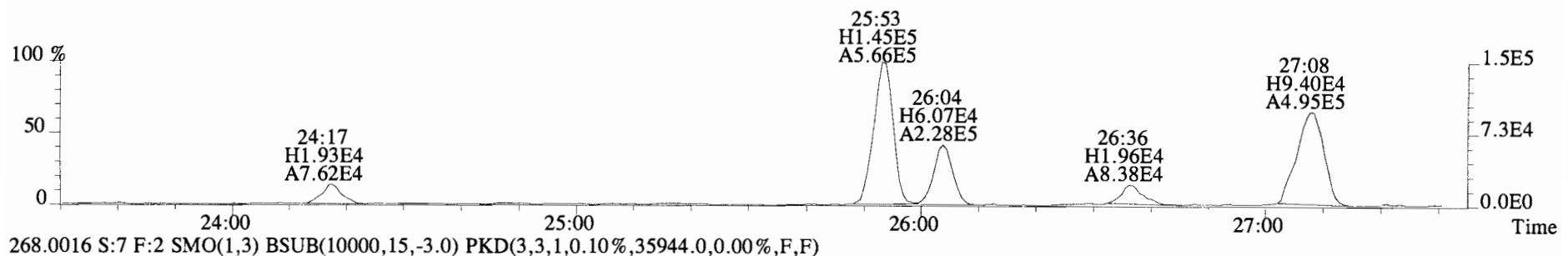
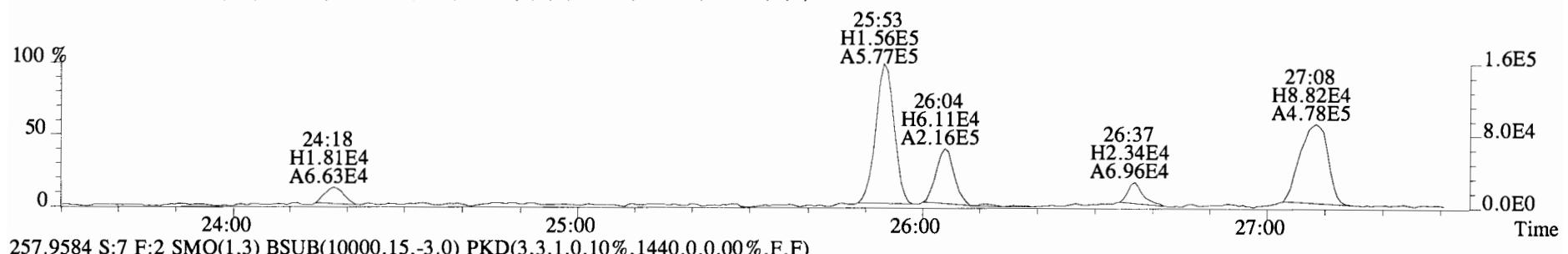
180.9880 S:7



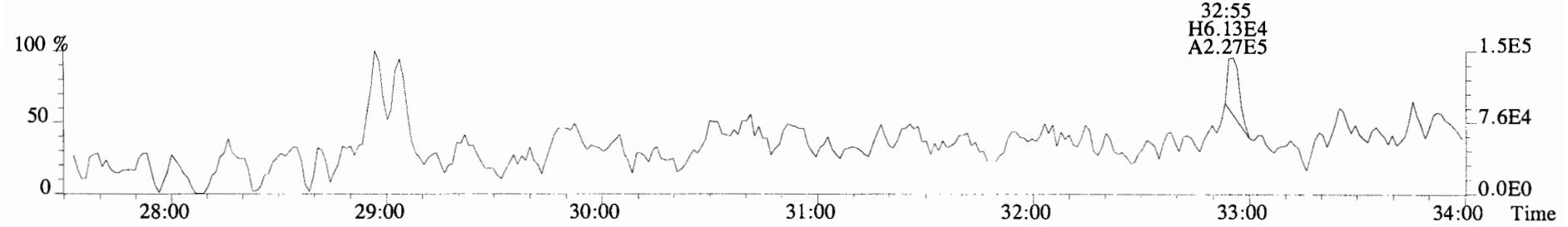
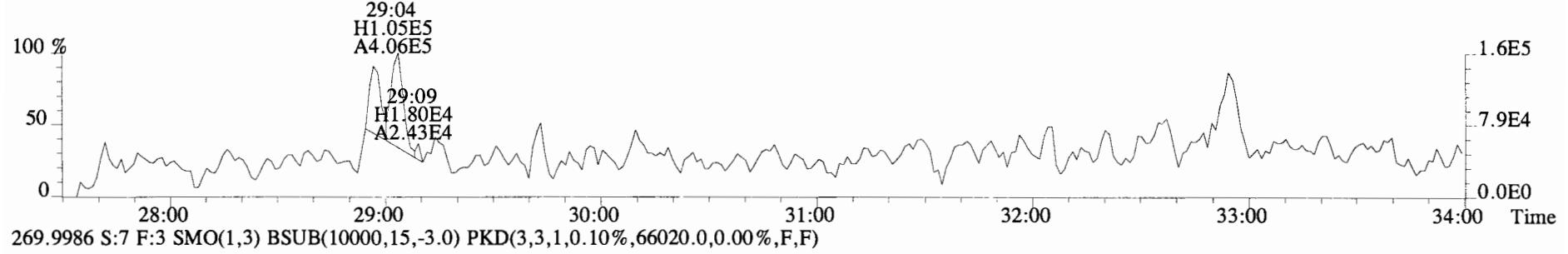
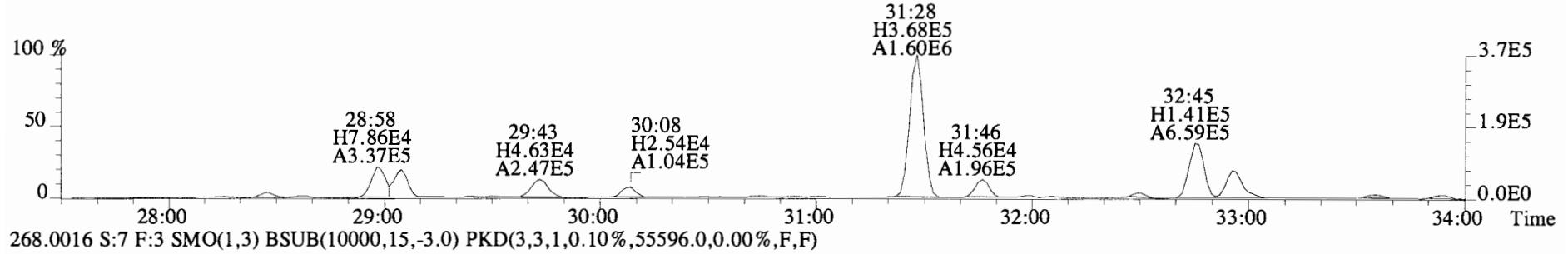
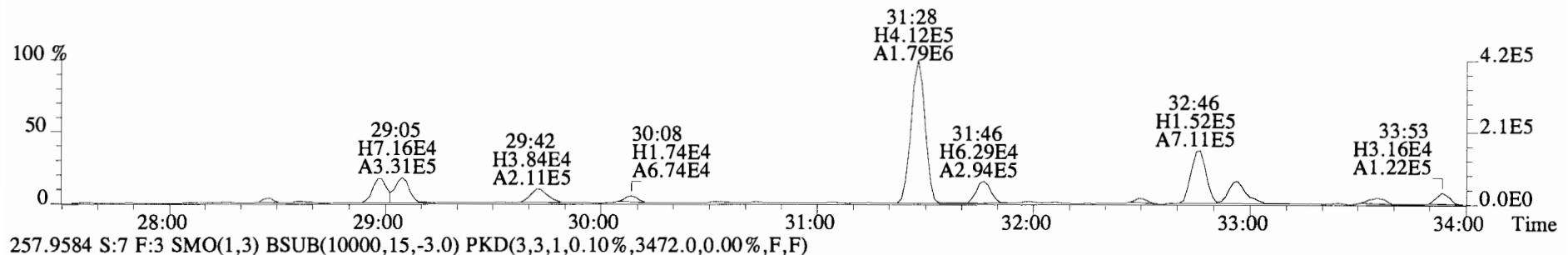
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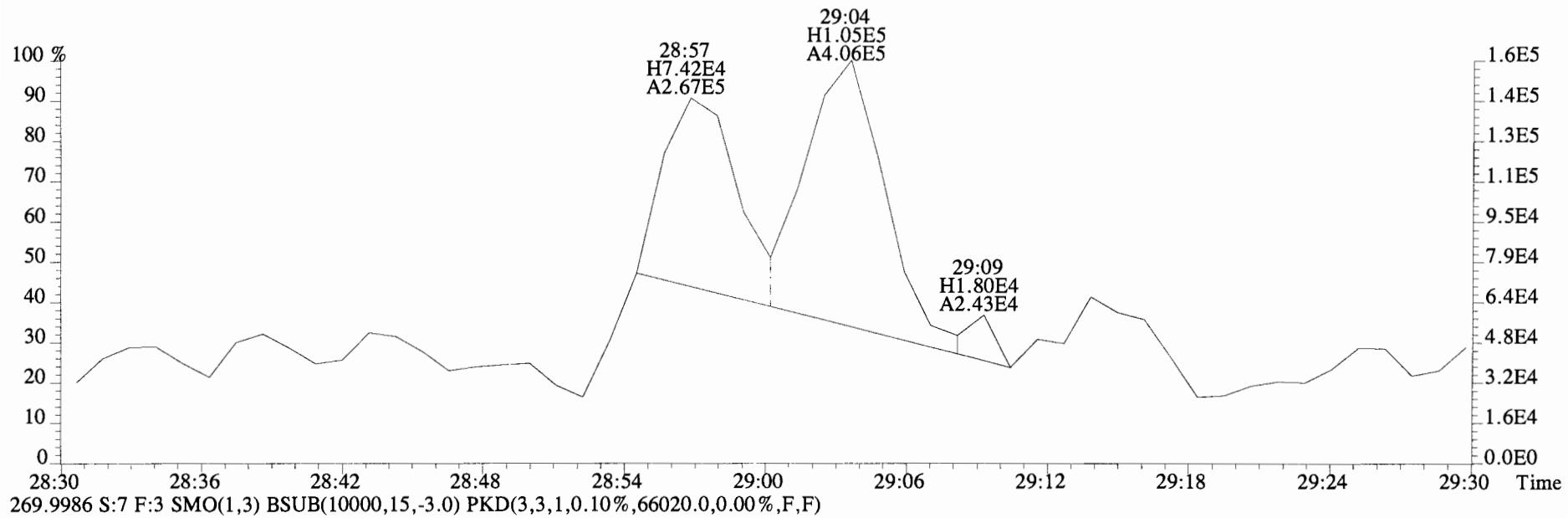
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 255.9613 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3756.0,0.00%,F,F)



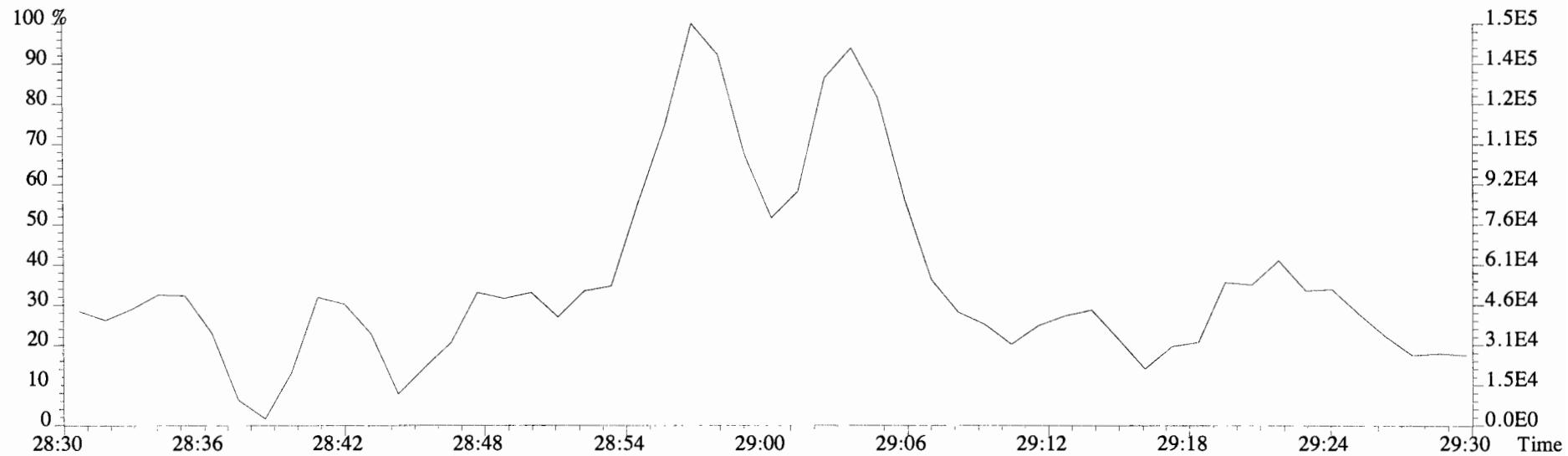
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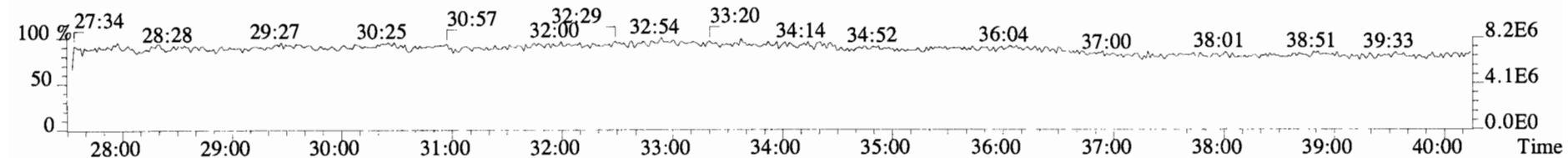
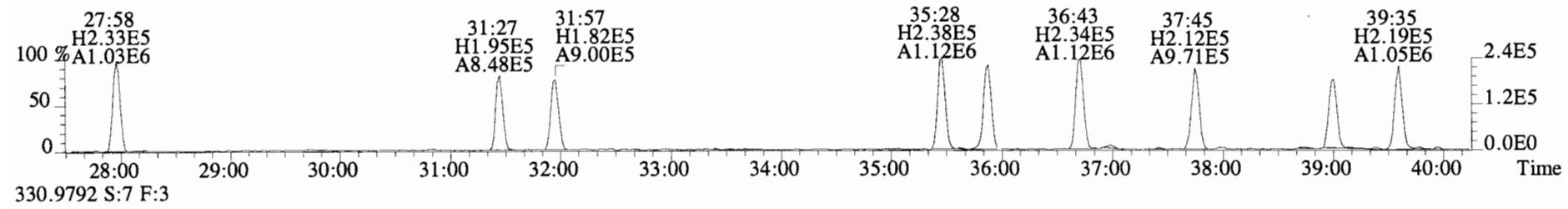
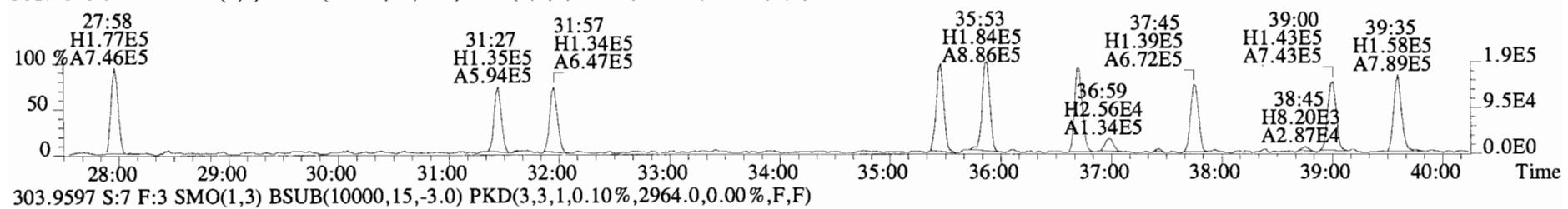
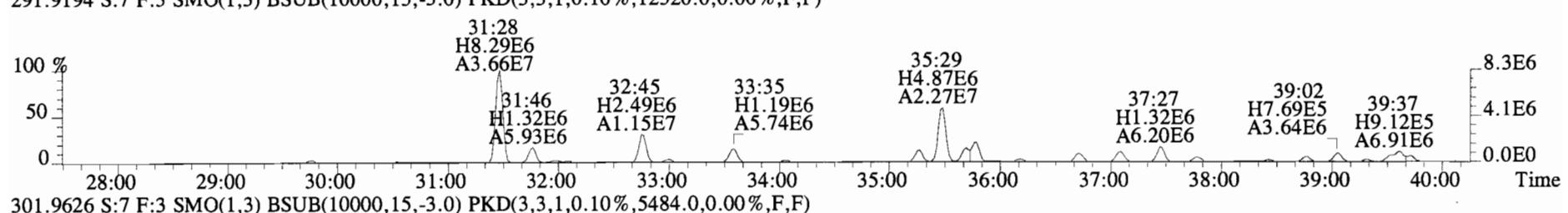
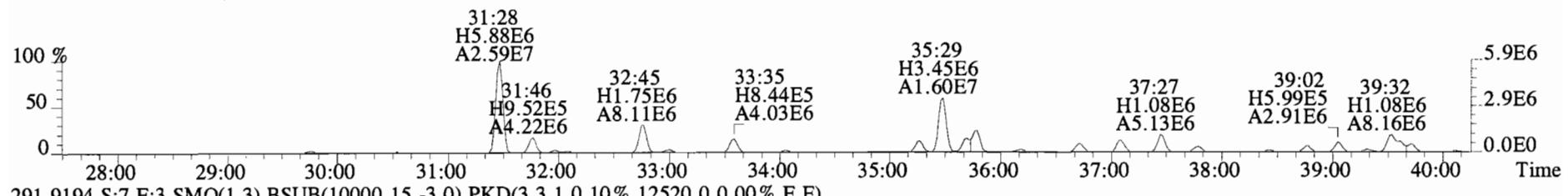
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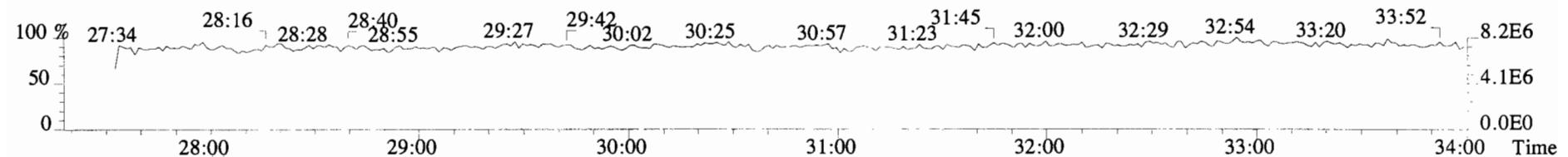
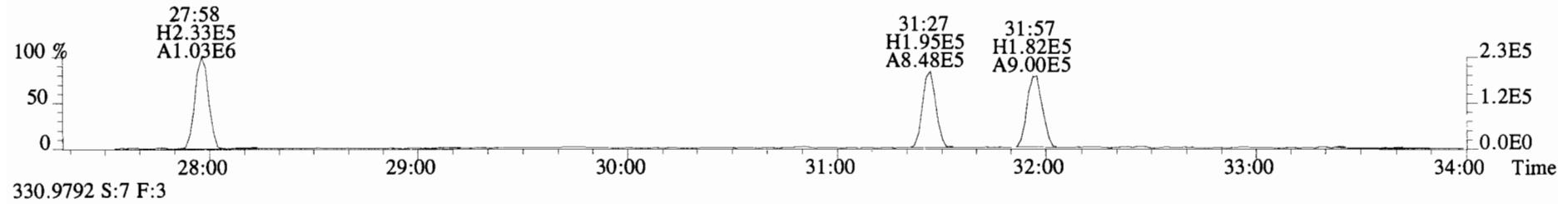
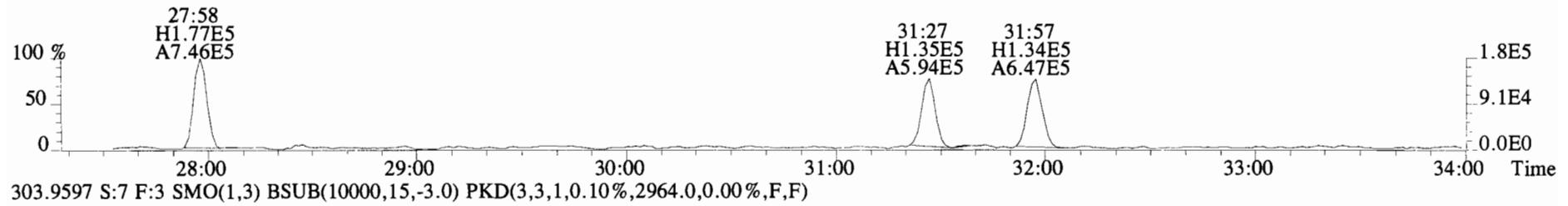
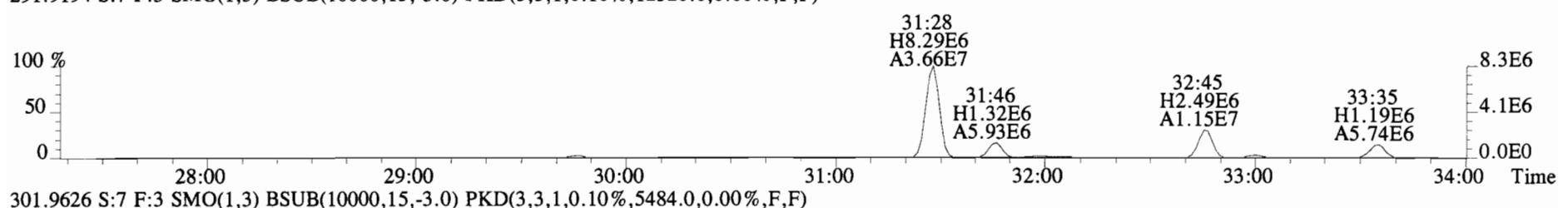
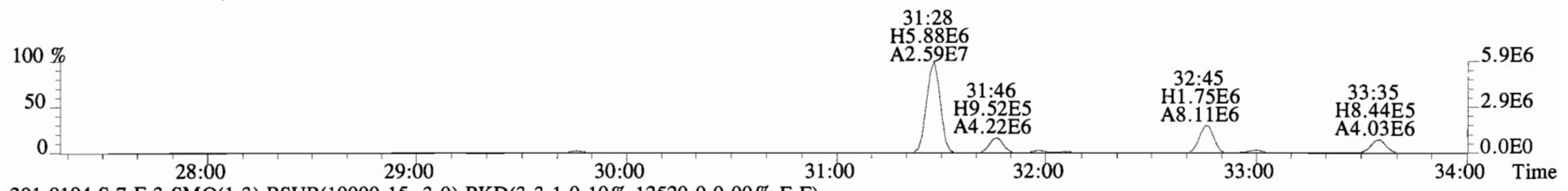
269.9986 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,66020.0,0.00%,F,F)



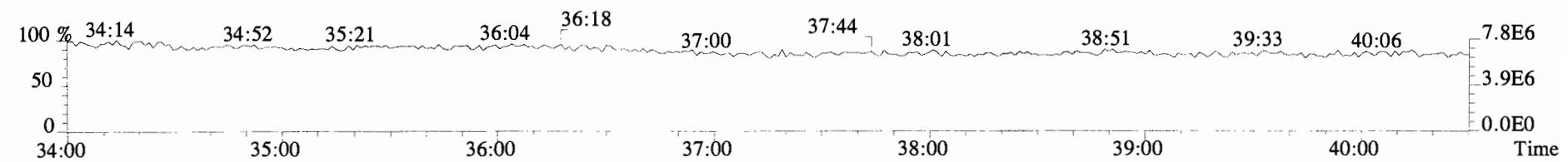
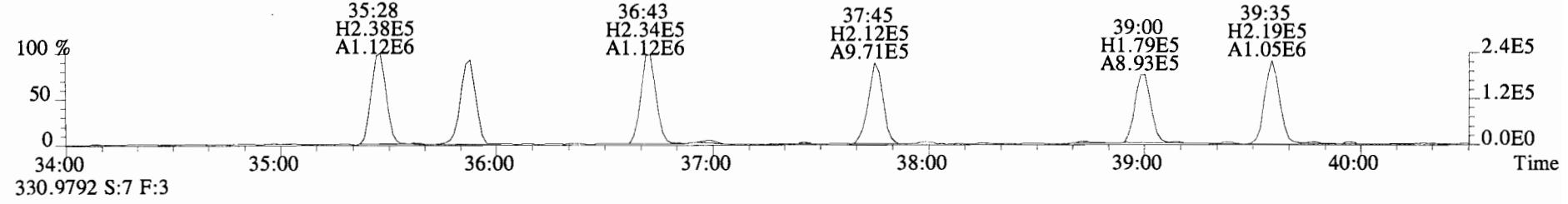
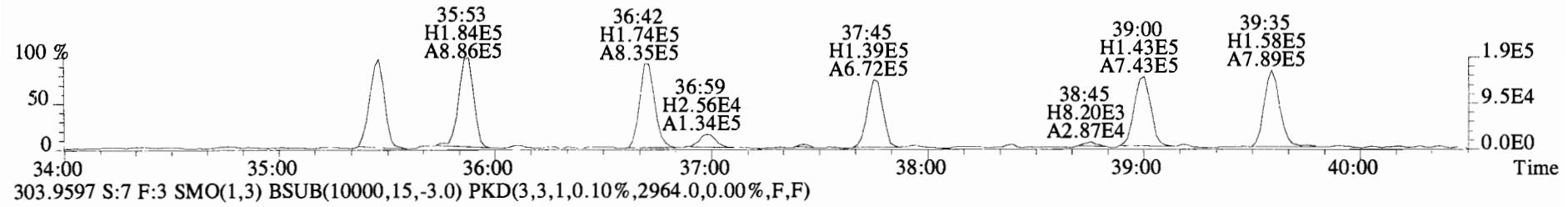
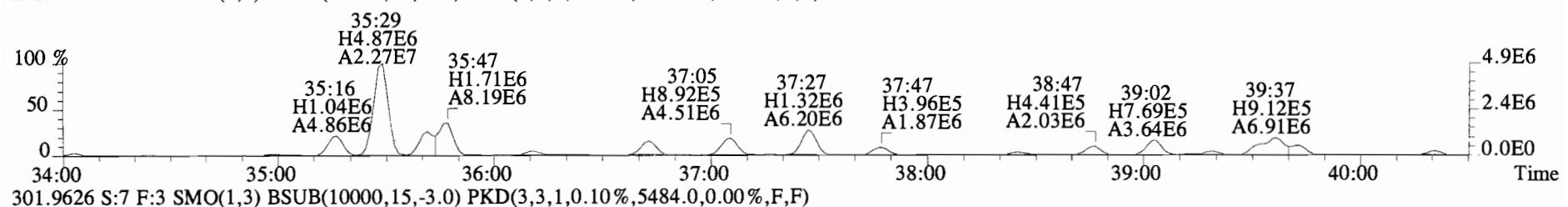
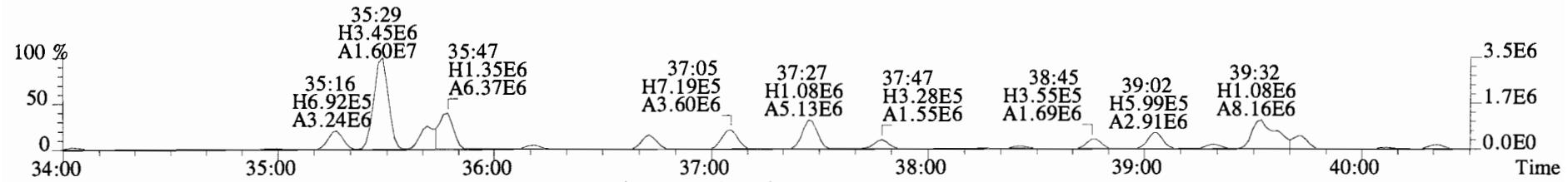
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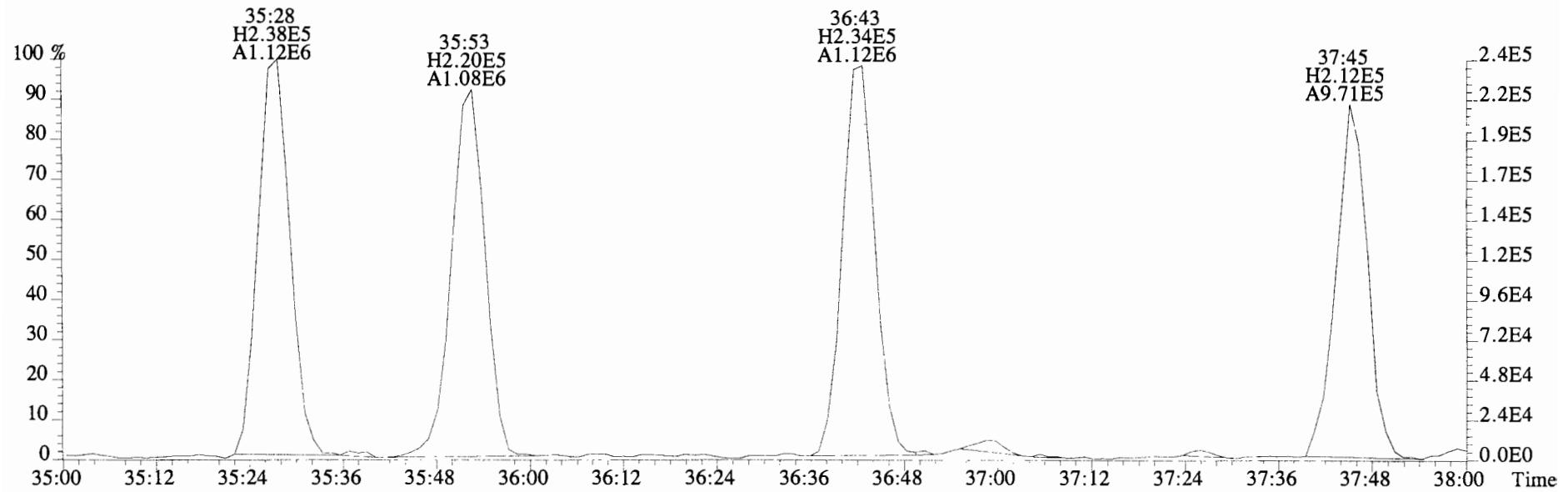
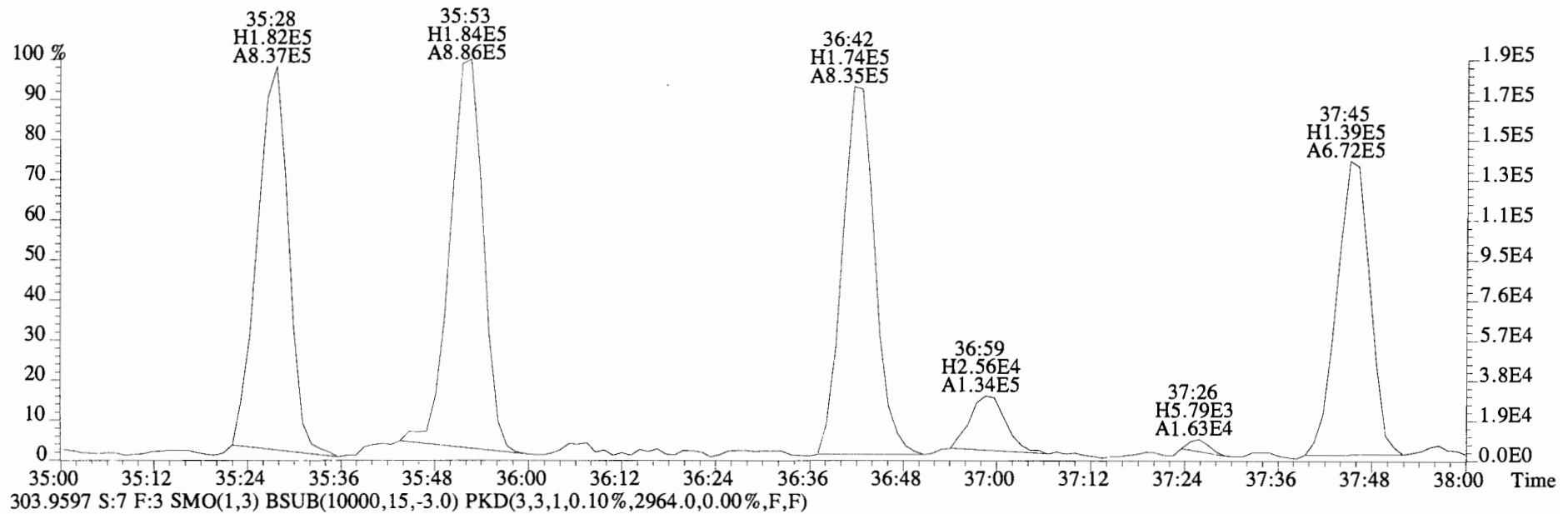
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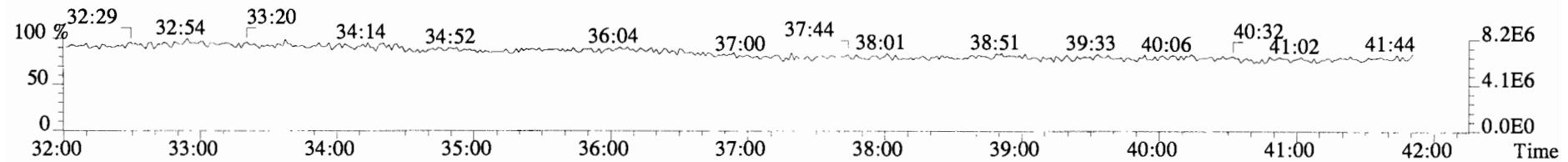
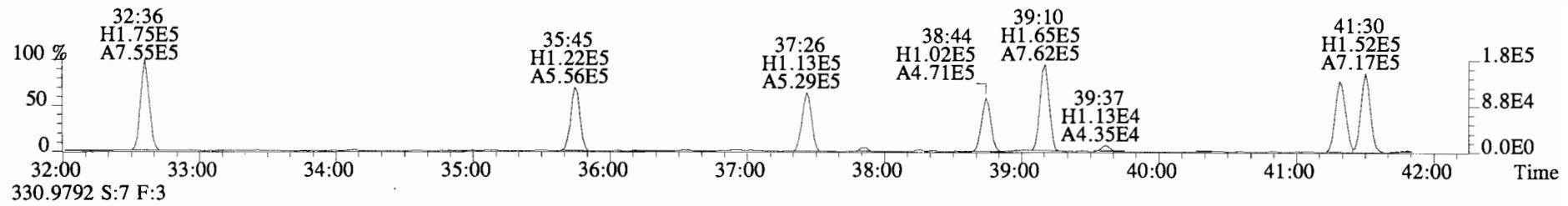
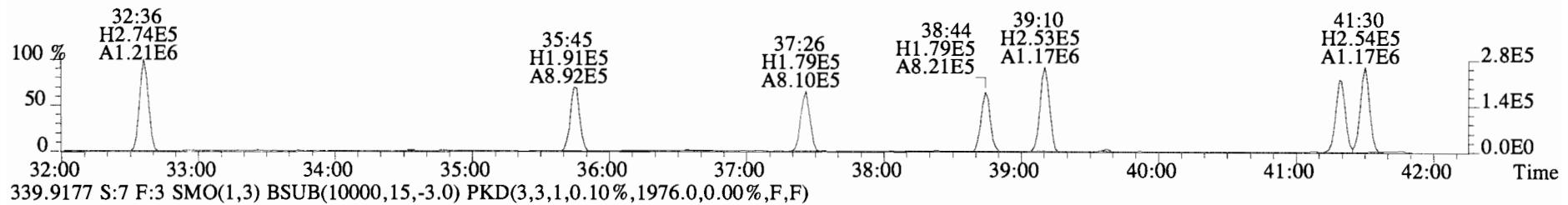
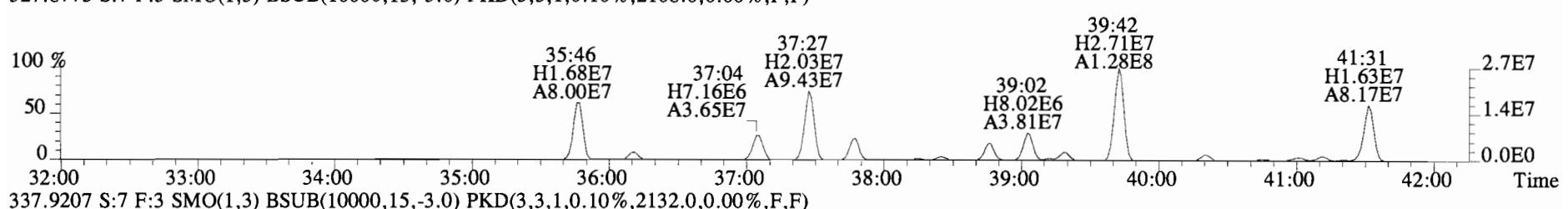
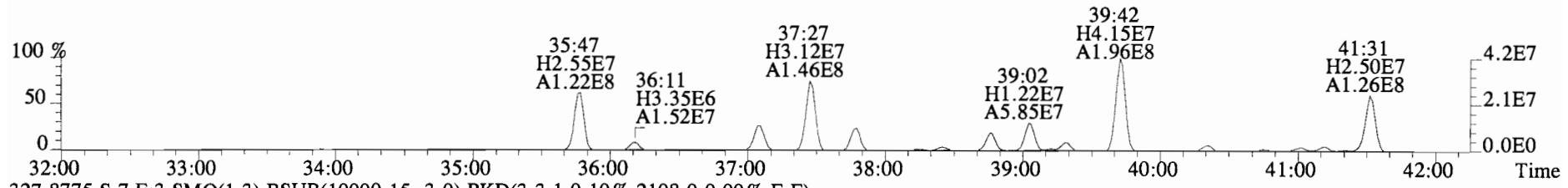
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 Sample#7 File Text: Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7668.0,0.00%,F,F)



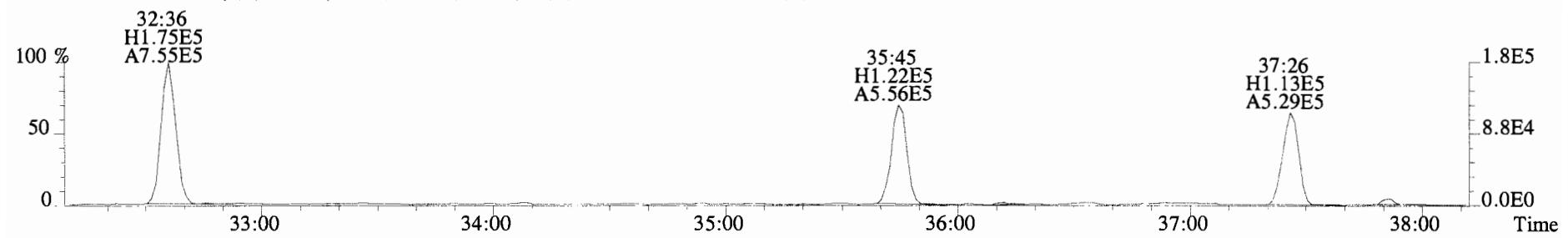
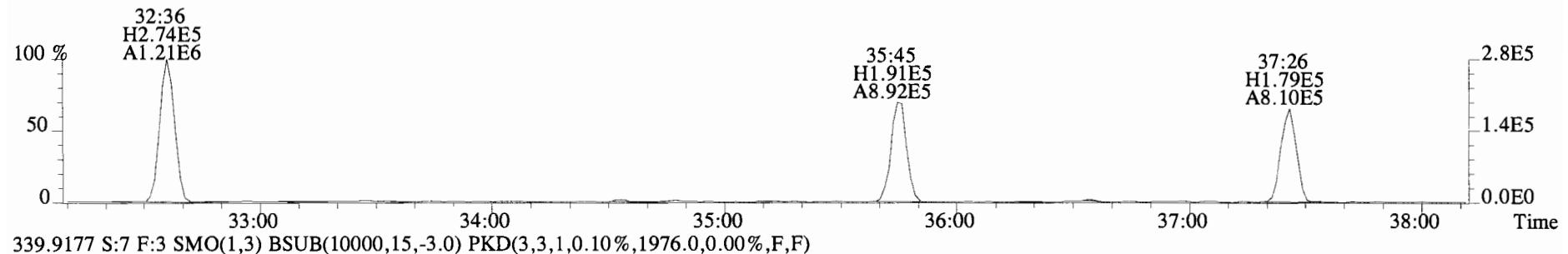
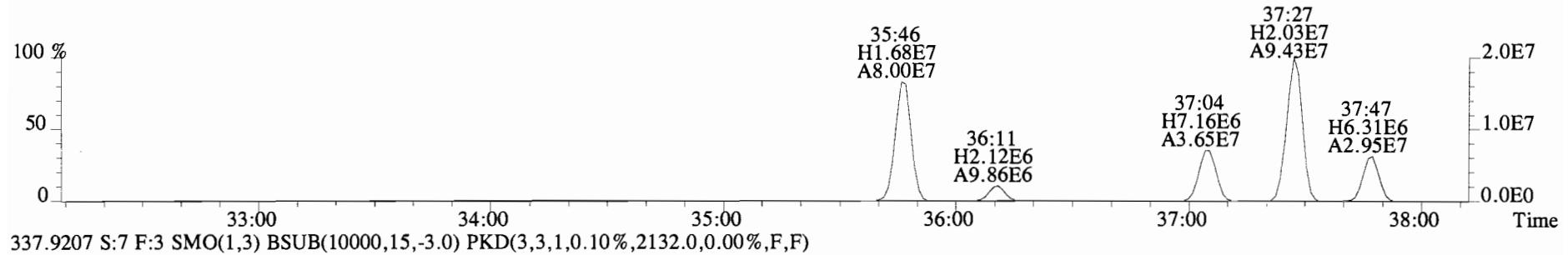
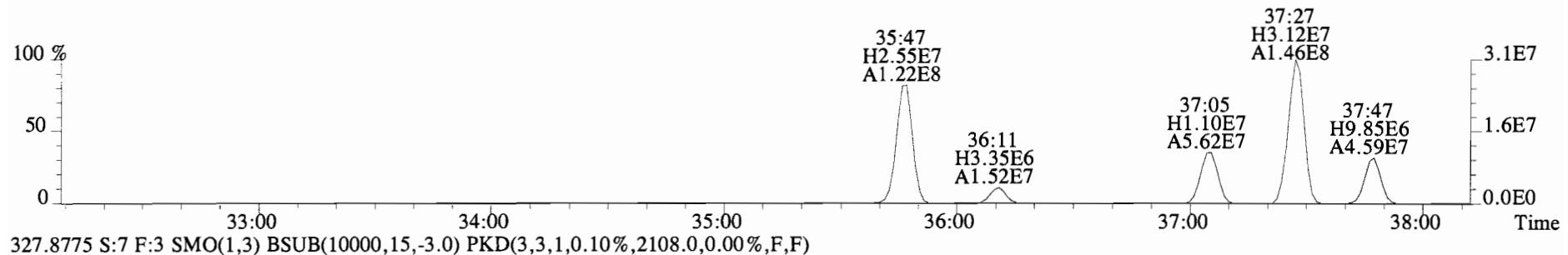
File:141027E1 #1-756 Acq:27-OCT-2014 16:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
301.9626 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5484.0,0.00%,F,F)



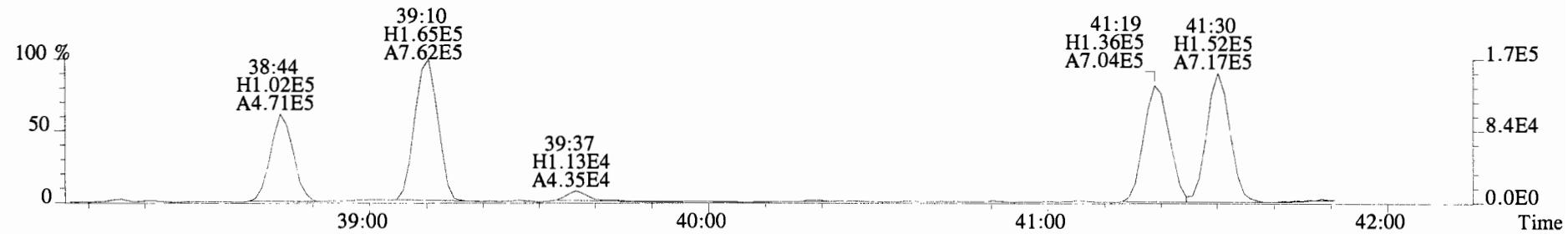
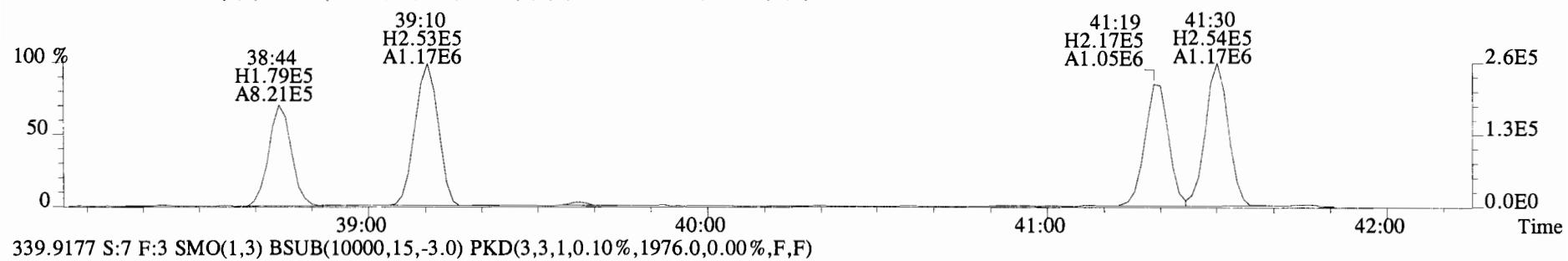
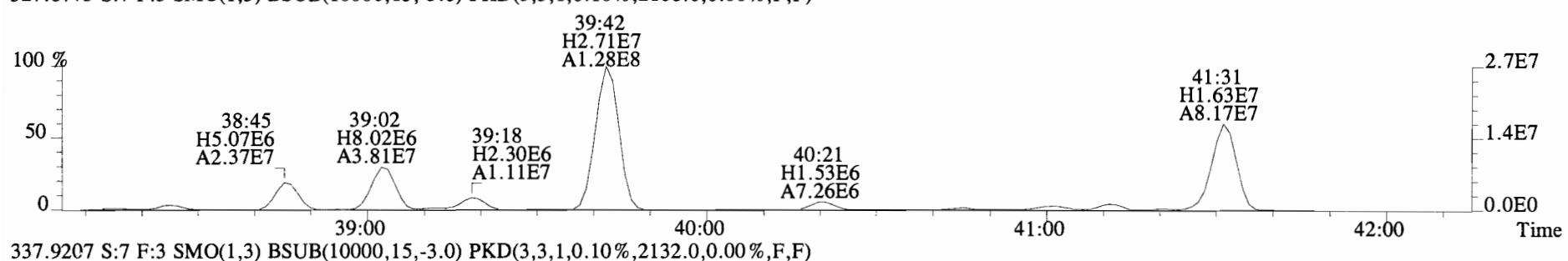
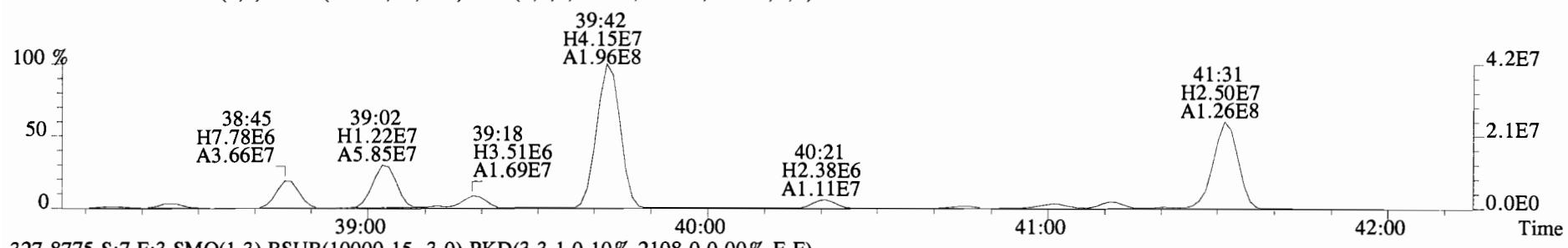
File:141027E1 #1-756 Acq:27-OCT-2014 16:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2412.0,0.00%,F,F)



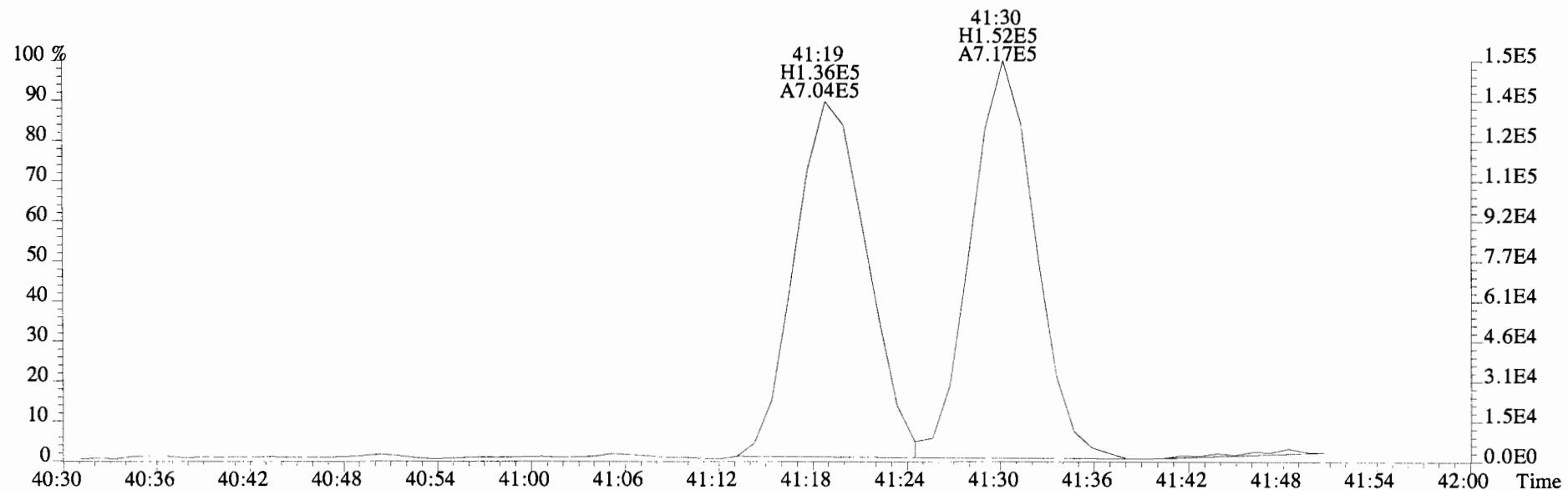
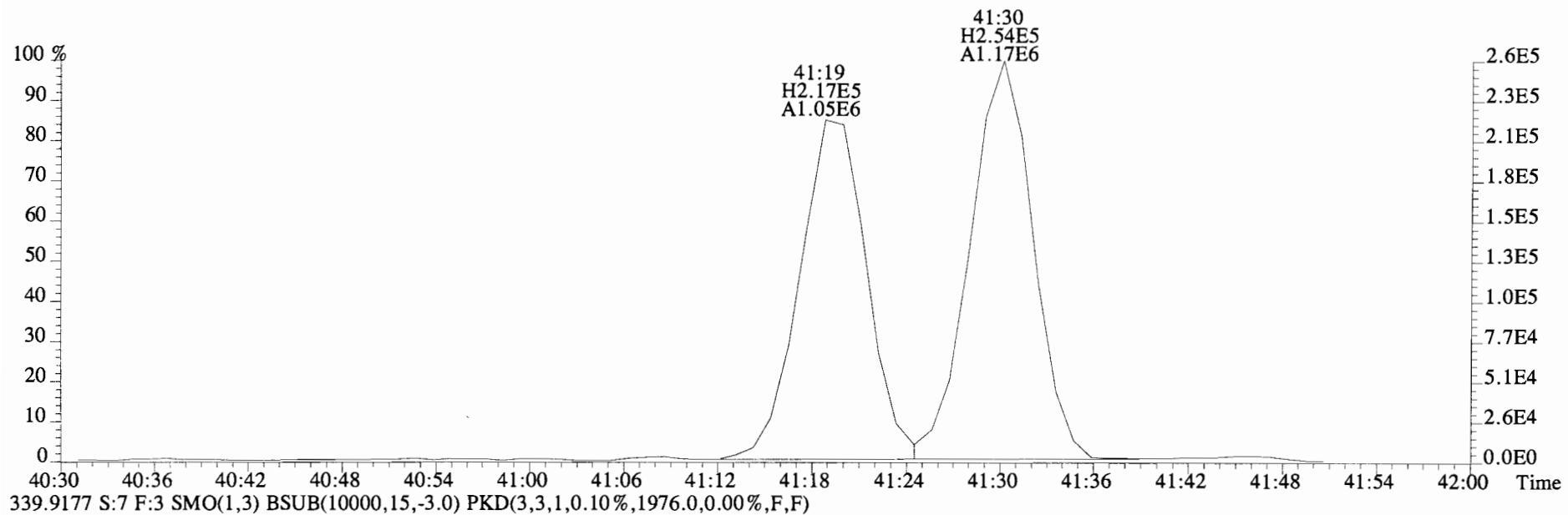
File:141027E1 #1-756 Acq:27-OCT-2014 16:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2412.0,0.00%,F,F)



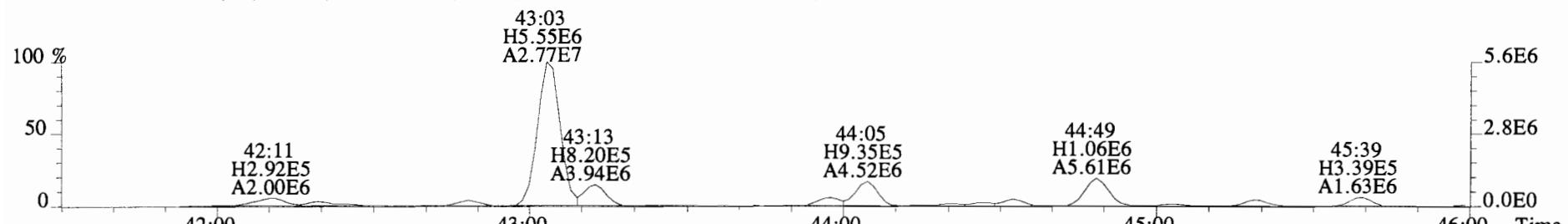
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 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2412.0,0.00%,F,F)



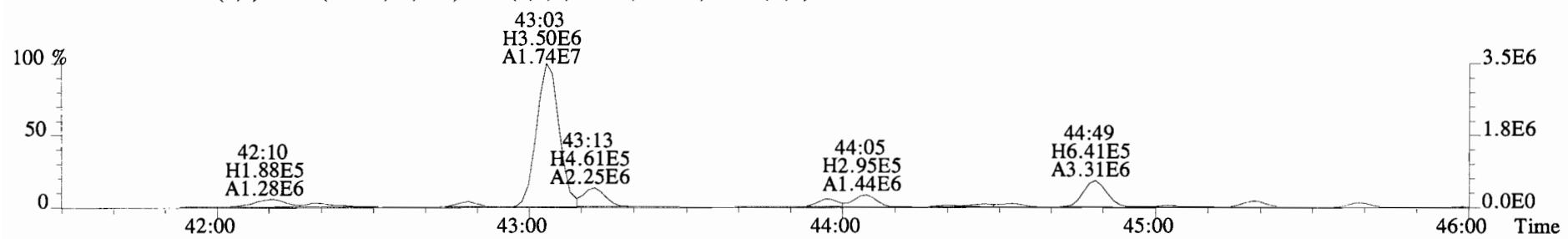
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2132.0,0.00%,F,F)



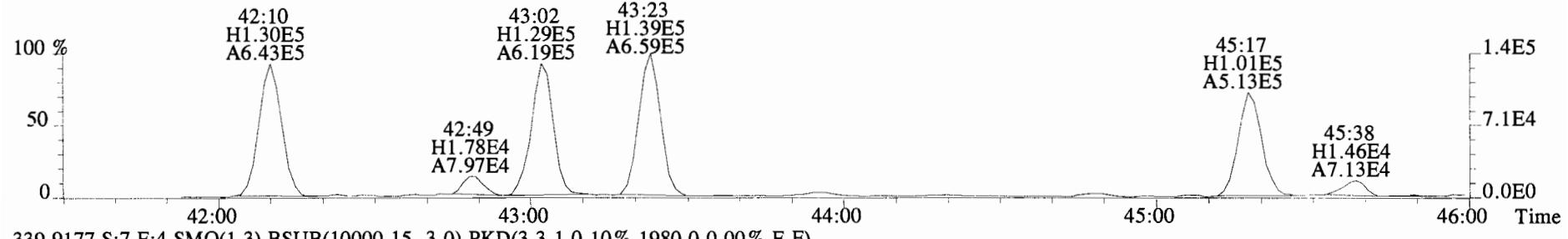
File:141027E1 #1-552 Acq:27-OCT-2014 16:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 325.8804 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,14200.0,0.00%,F,F)



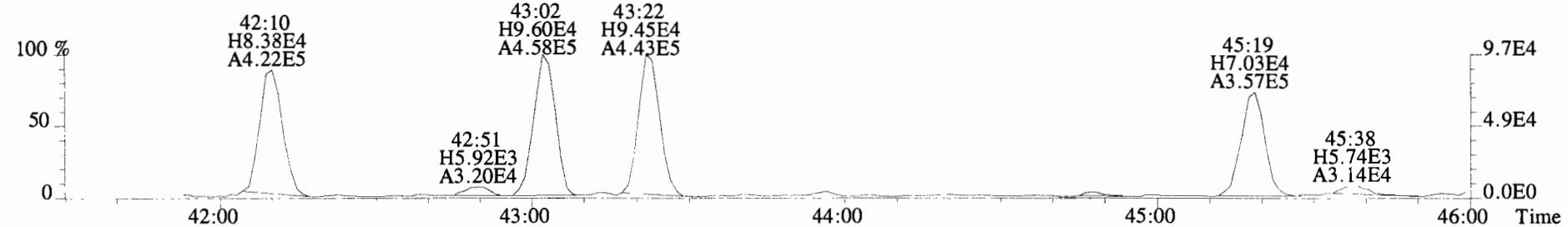
327.8775 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8108.0,0.00%,F,F)



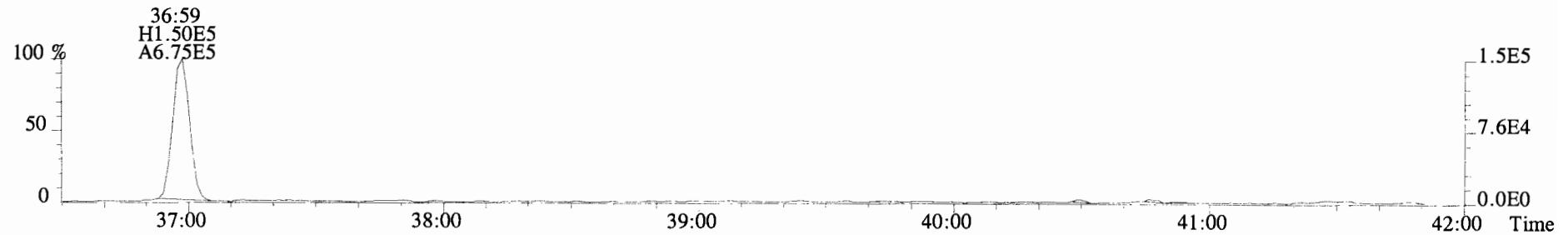
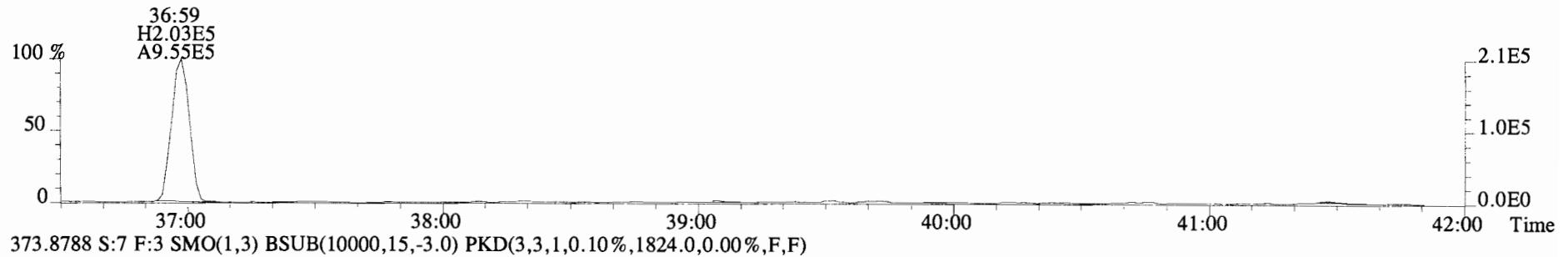
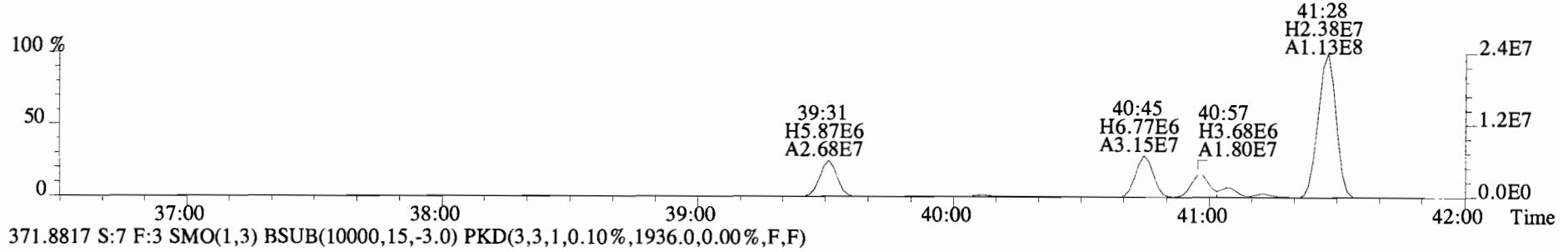
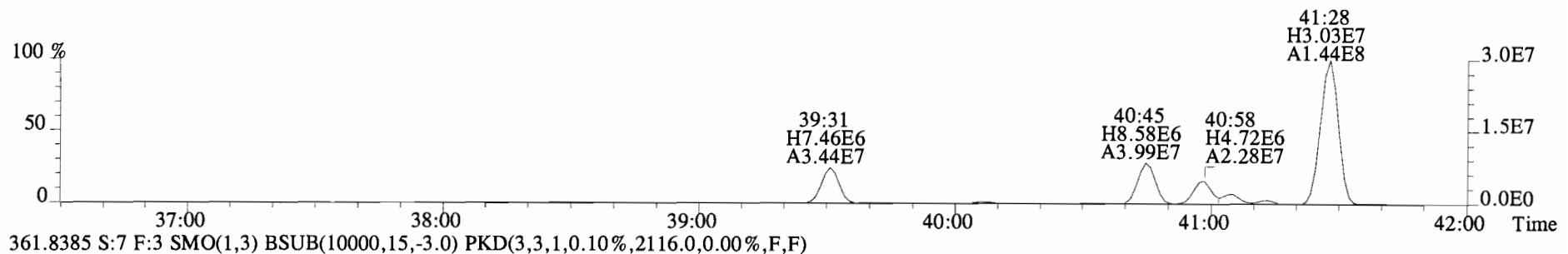
337.9207 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2152.0,0.00%,F,F)



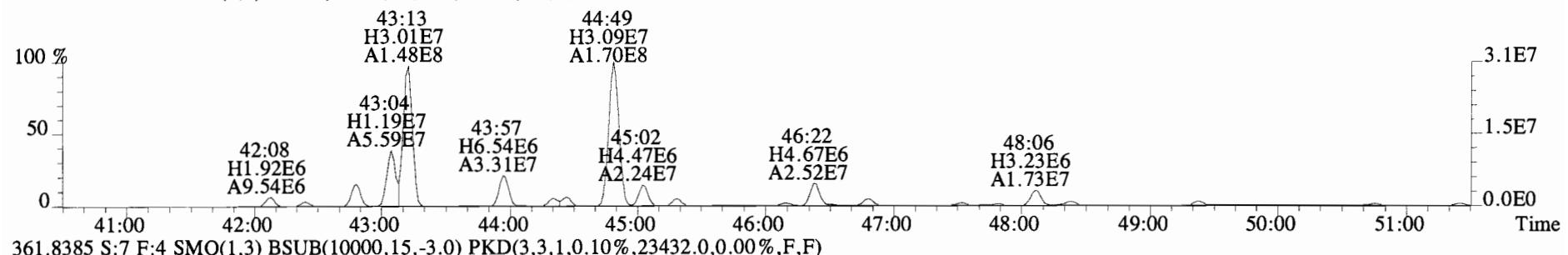
339.9177 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1980.0,0.00%,F,F)



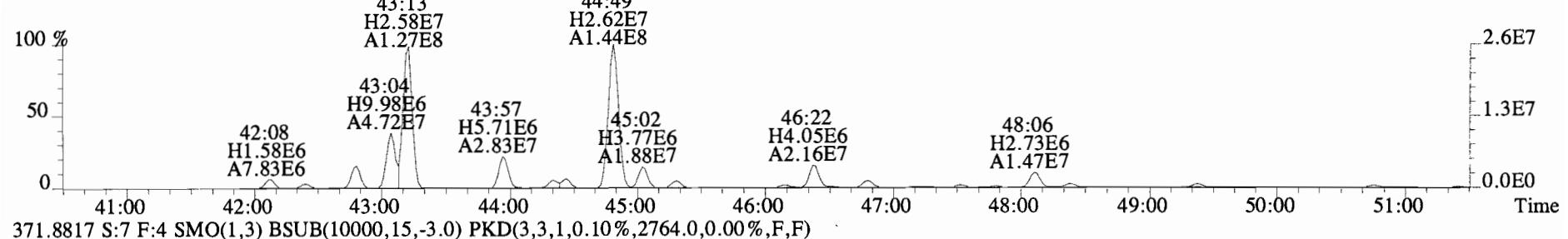
File:141027E1 #1-756 Acq:27-OCT-2014 16:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
359.8415 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1940.0,0.00%,F,F)



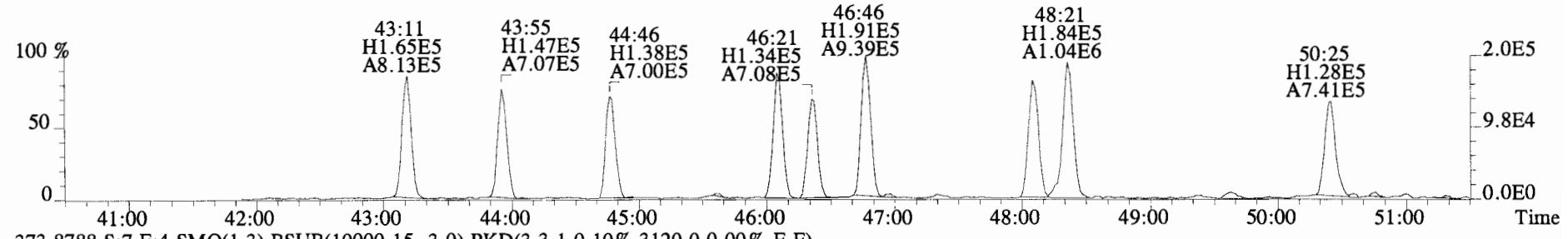
File:141027E1 #1-552 Acq:27-OCT-2014 16:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 359.8415 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25928.0,0.00%,F,F)



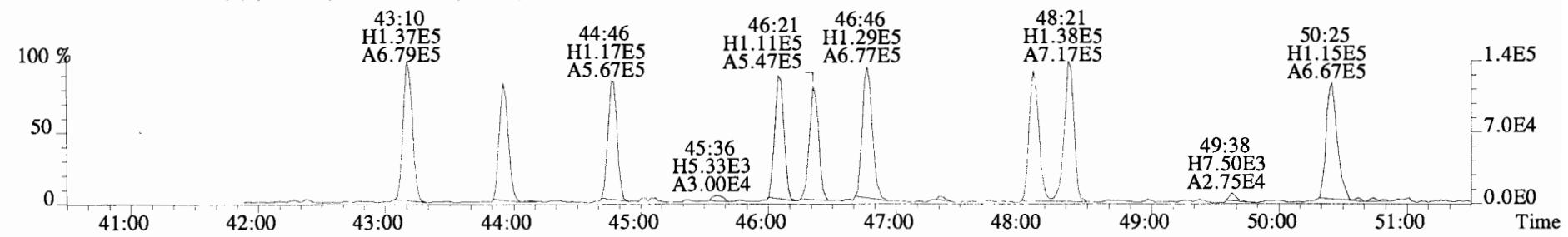
361.8385 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,23432.0,0.00%,F,F)



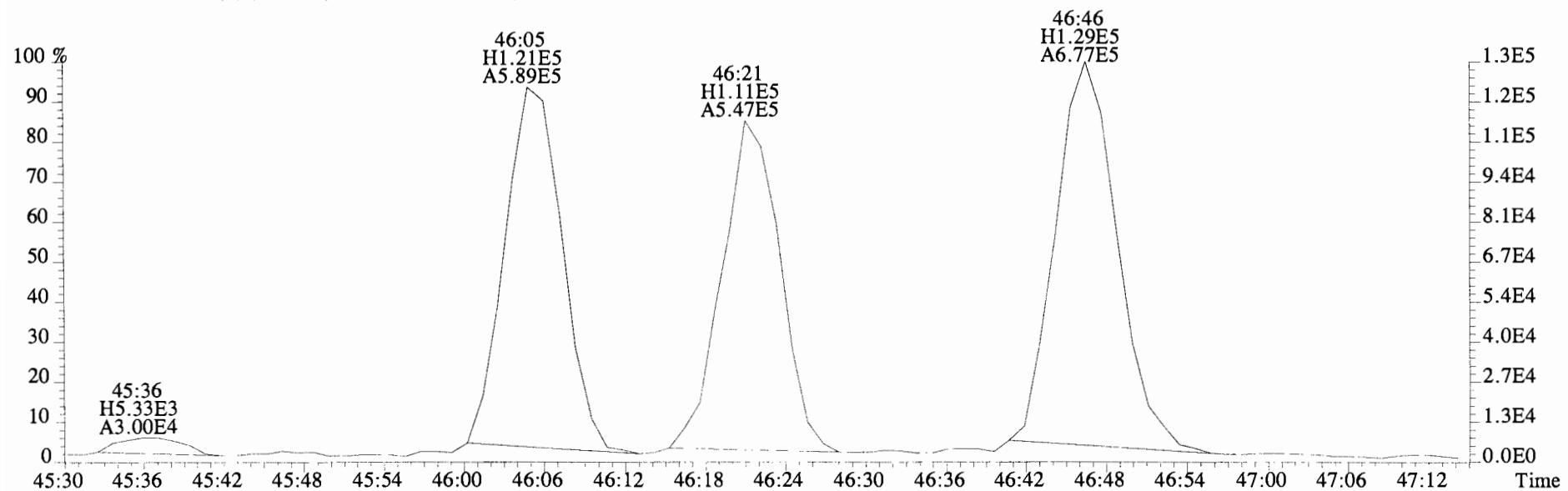
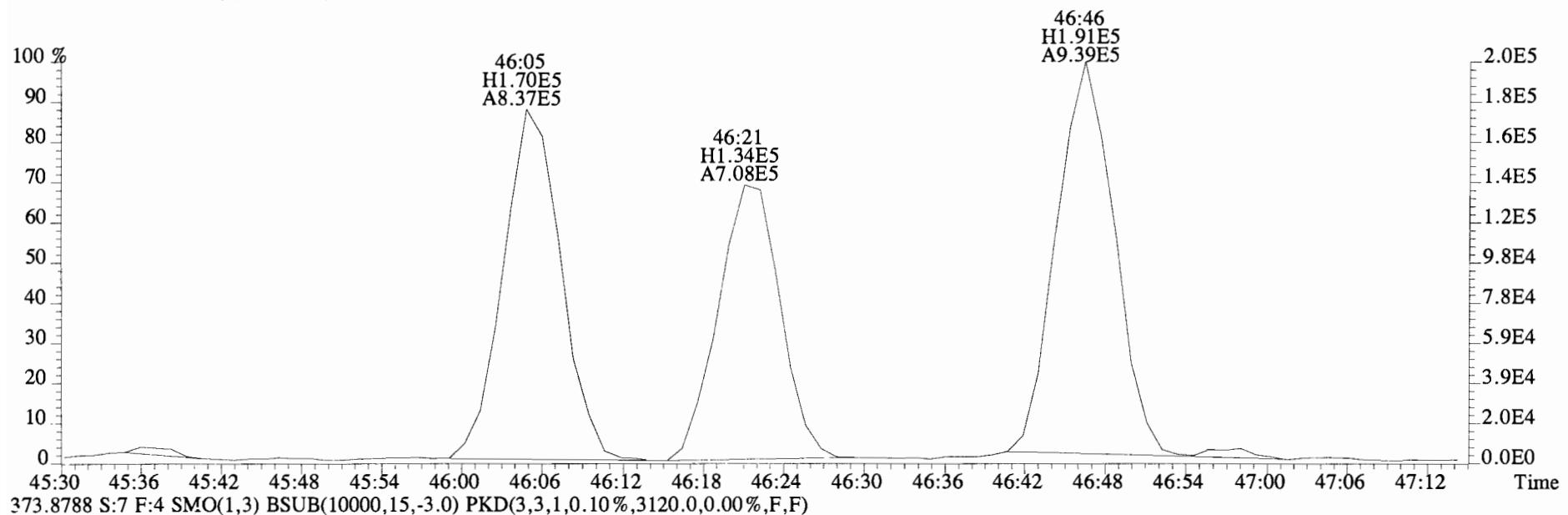
371.8817 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2764.0,0.00%,F,F)



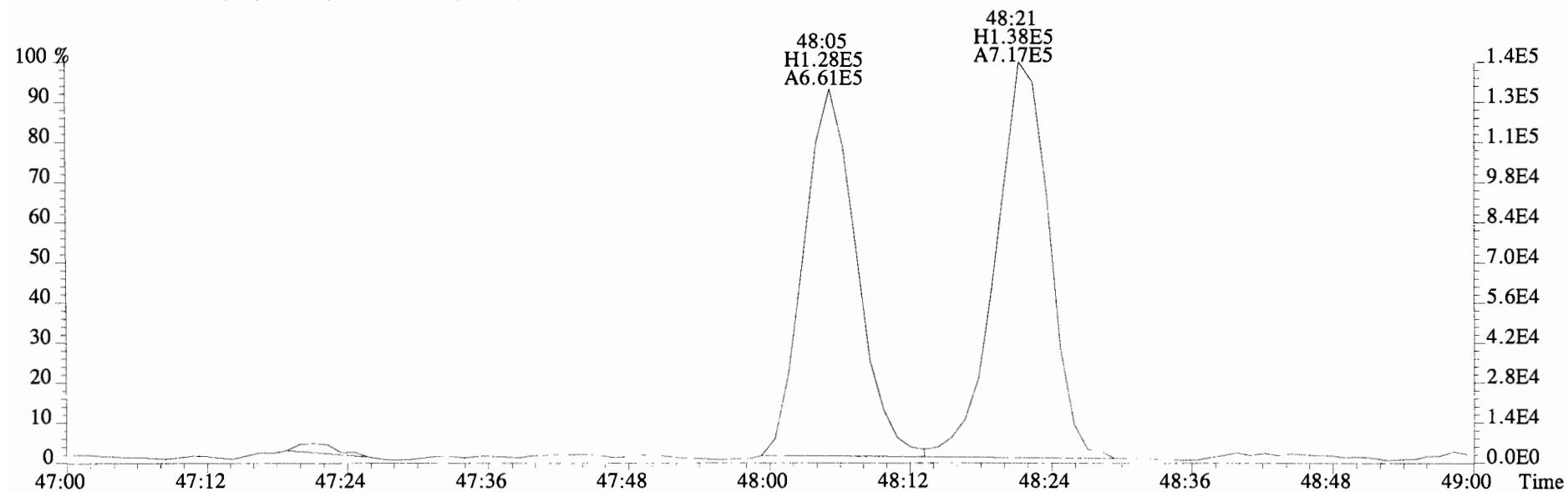
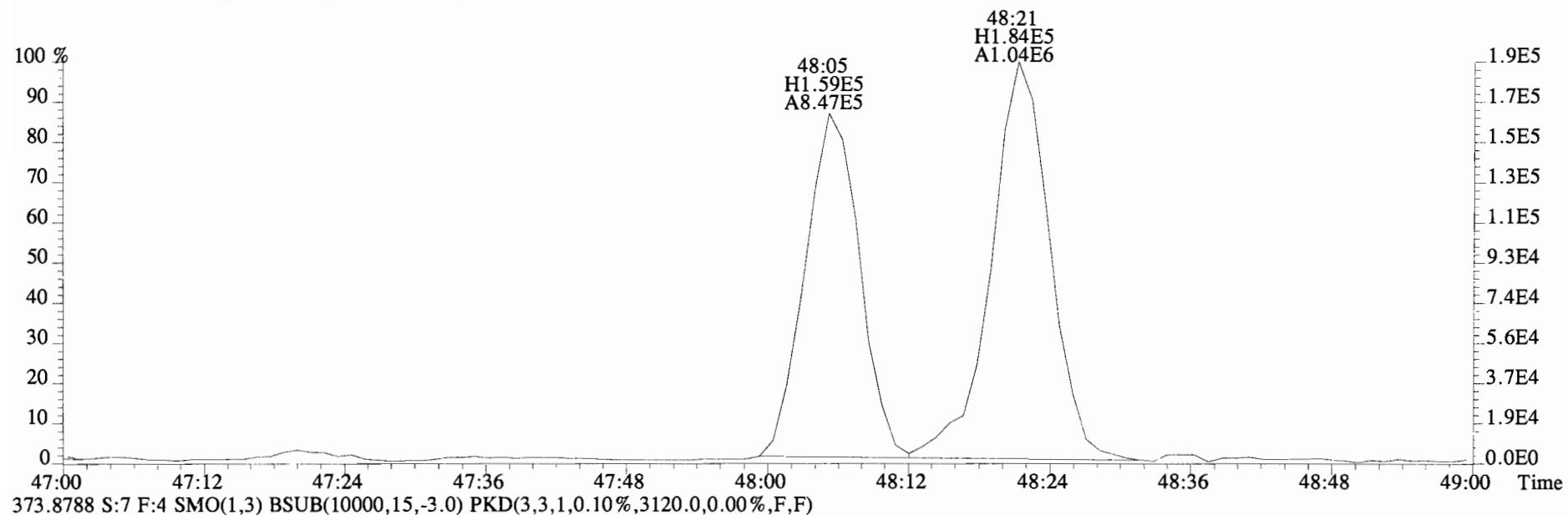
373.8788 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3120.0,0.00%,F,F)



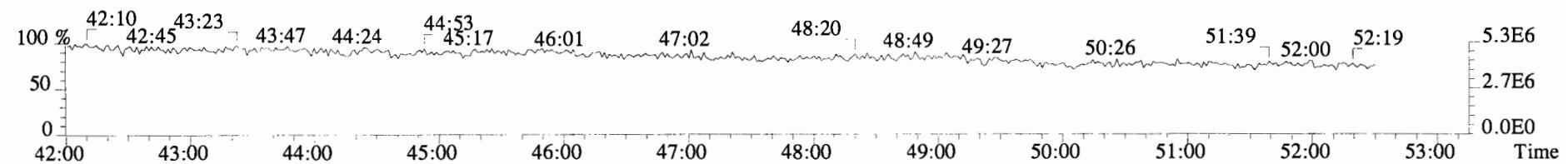
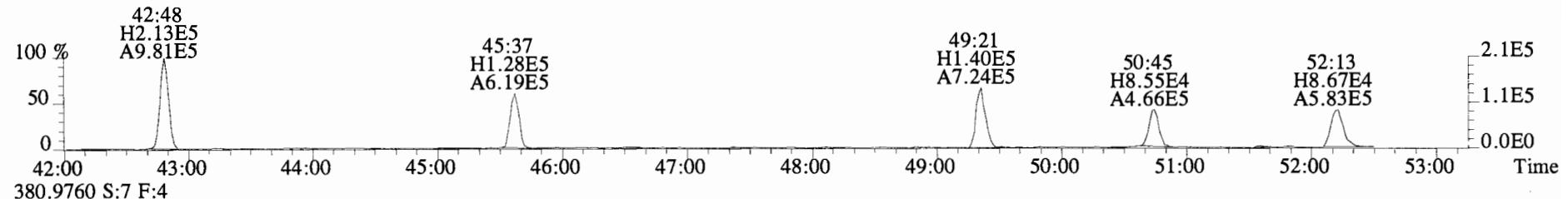
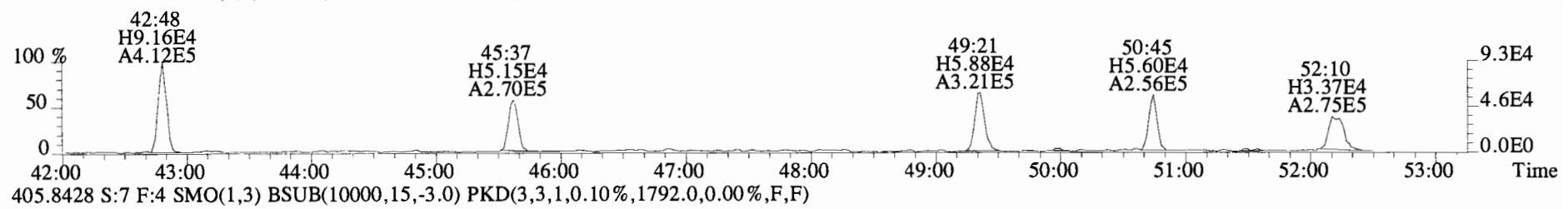
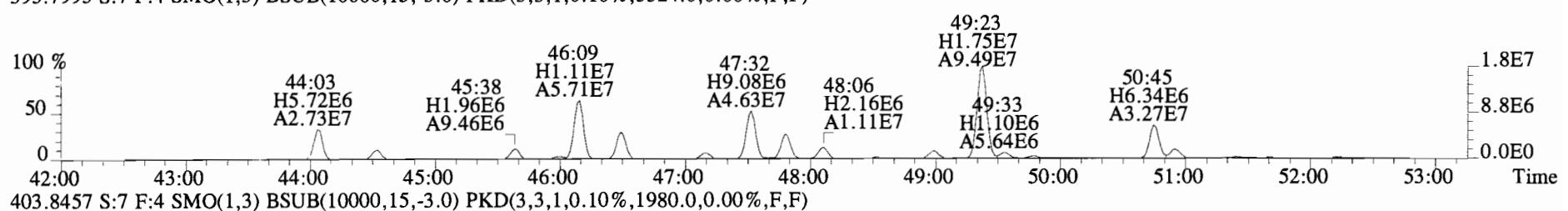
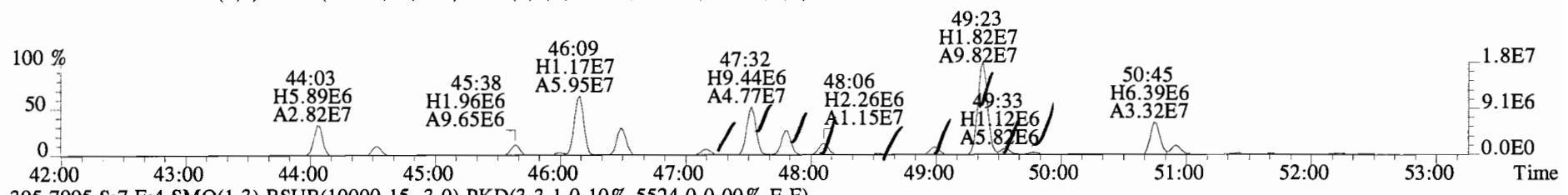
File:141027E1 #1-552 Acq:27-OCT-2014 16:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
371.8817 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2764.0,0.00%,F,F)



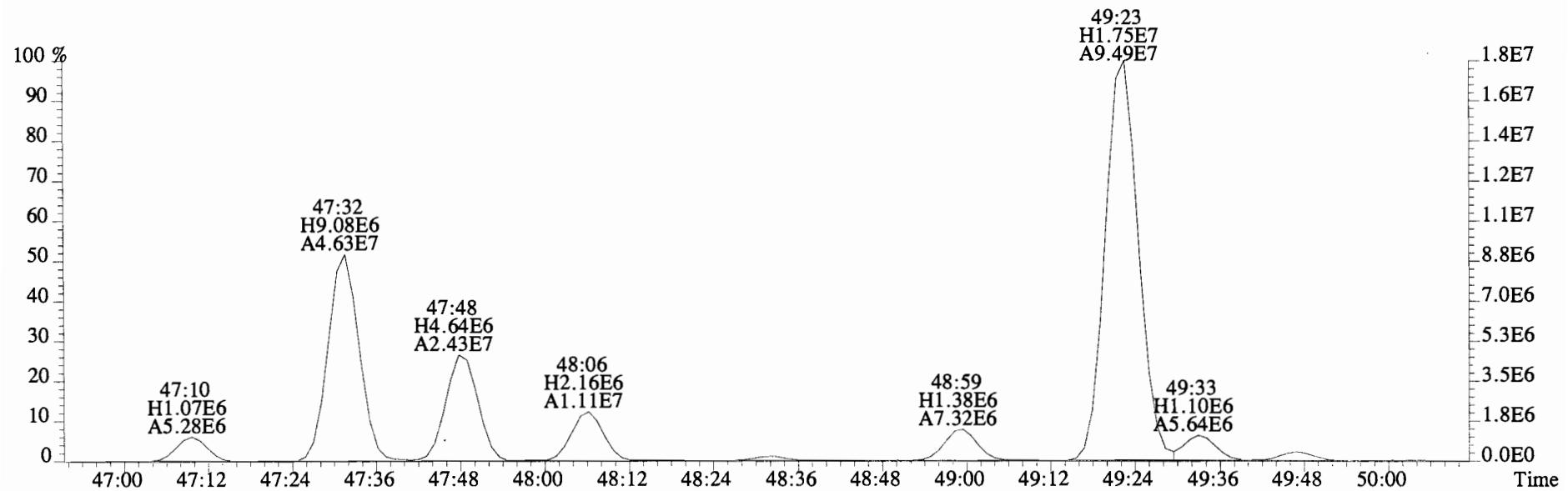
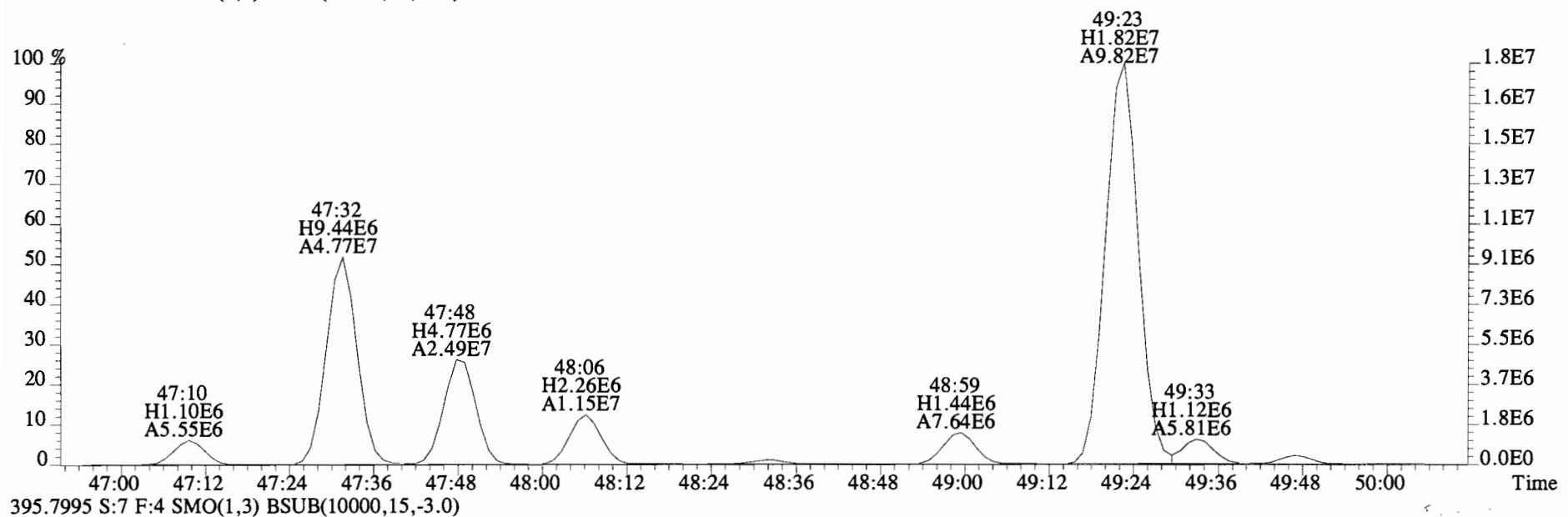
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371.8817 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2764.0,0.00%,F,F)



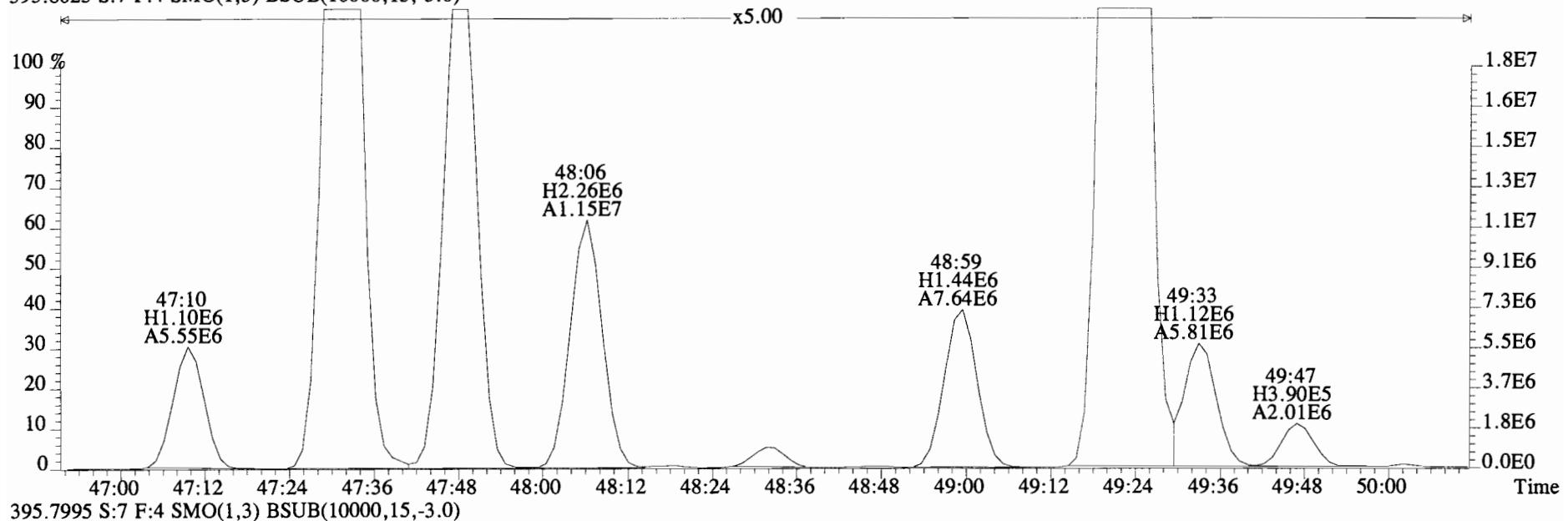
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 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4156.0,0.00%,F,F)



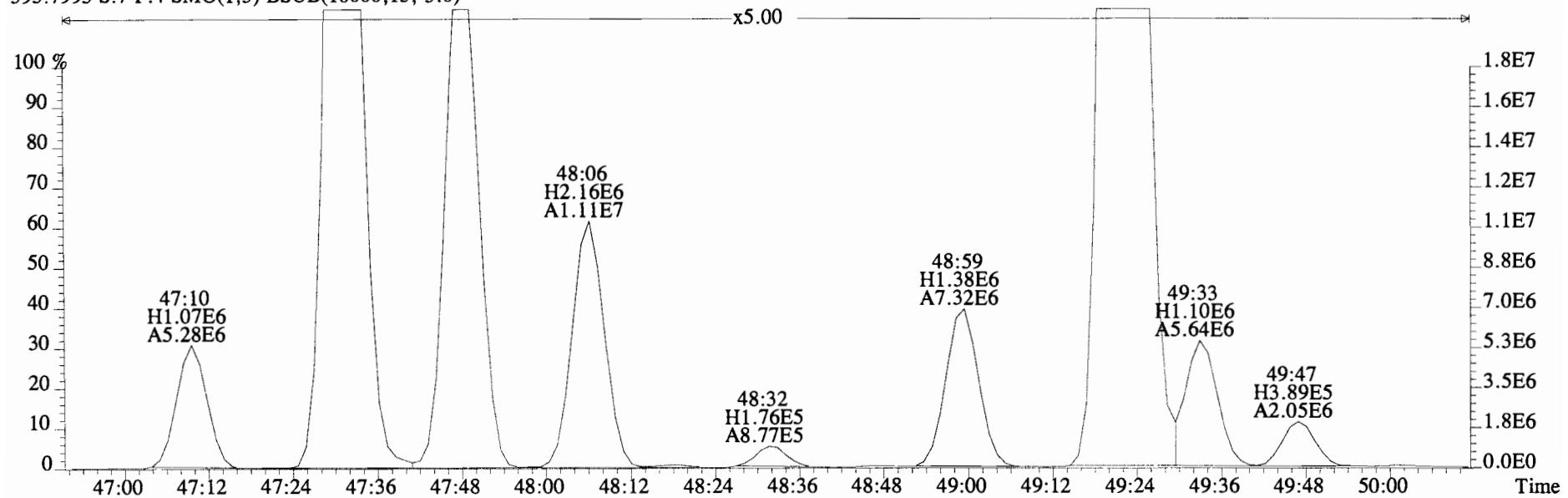
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



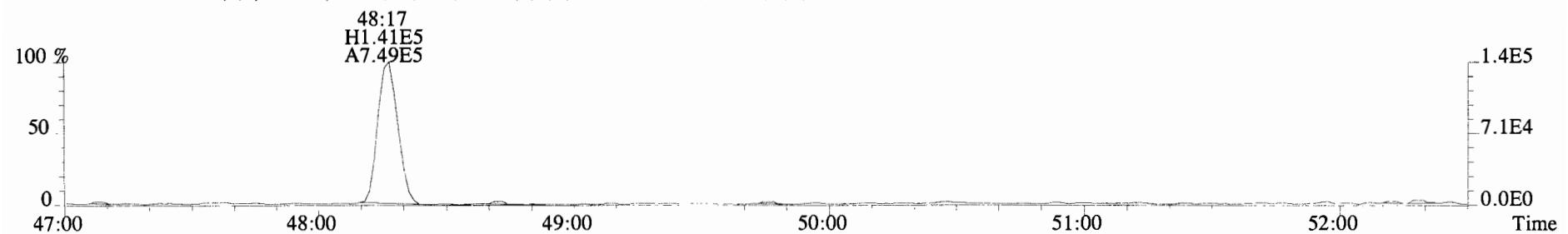
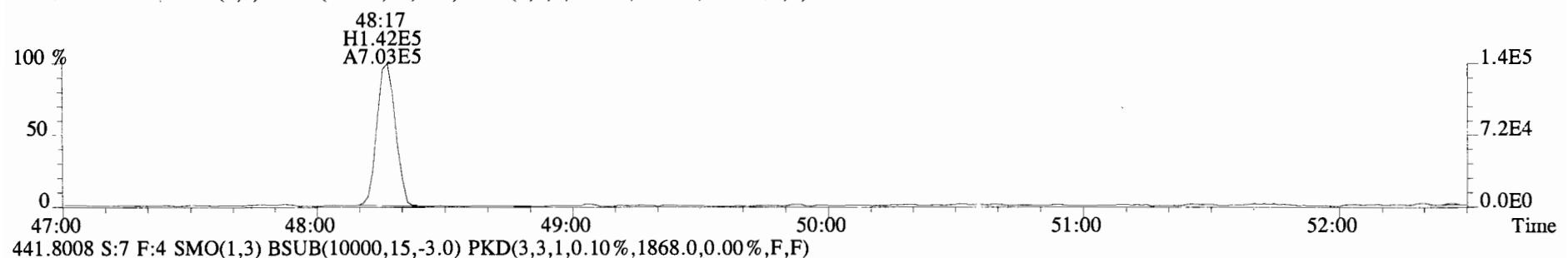
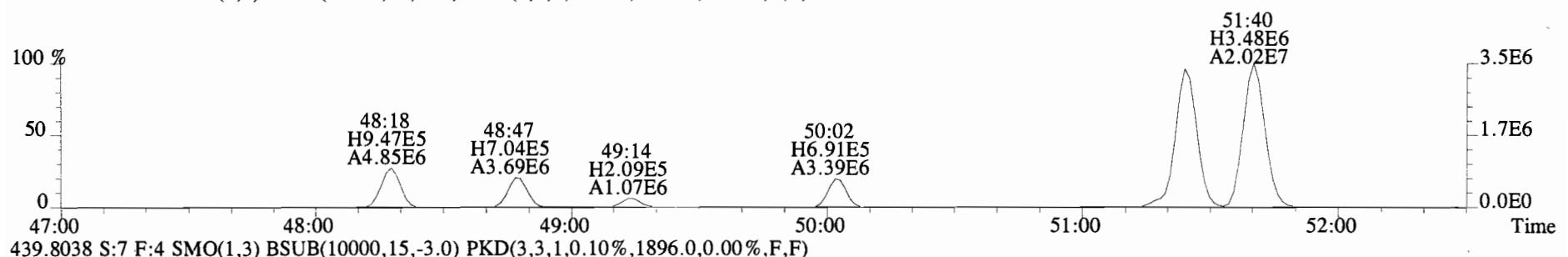
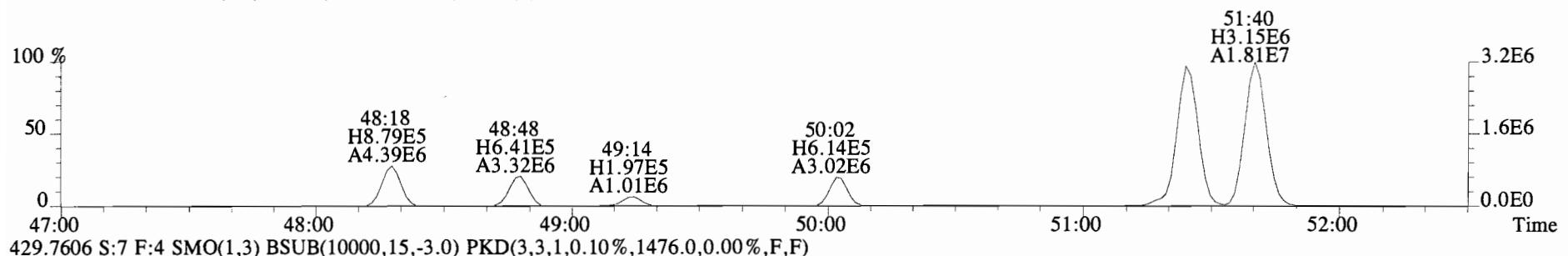
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



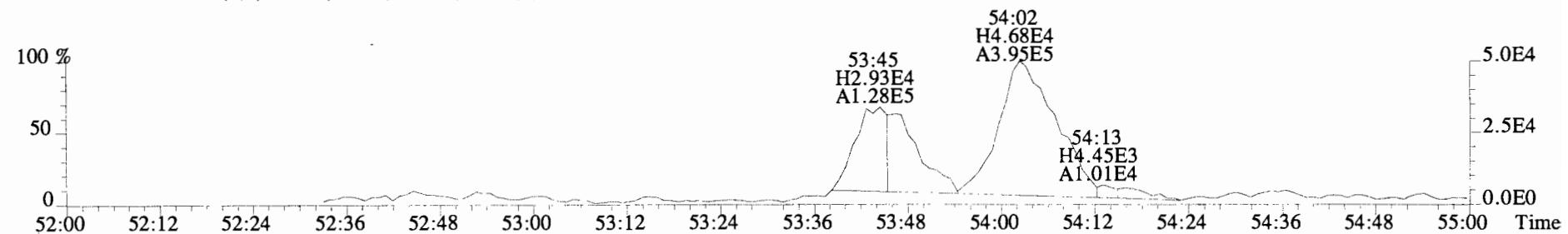
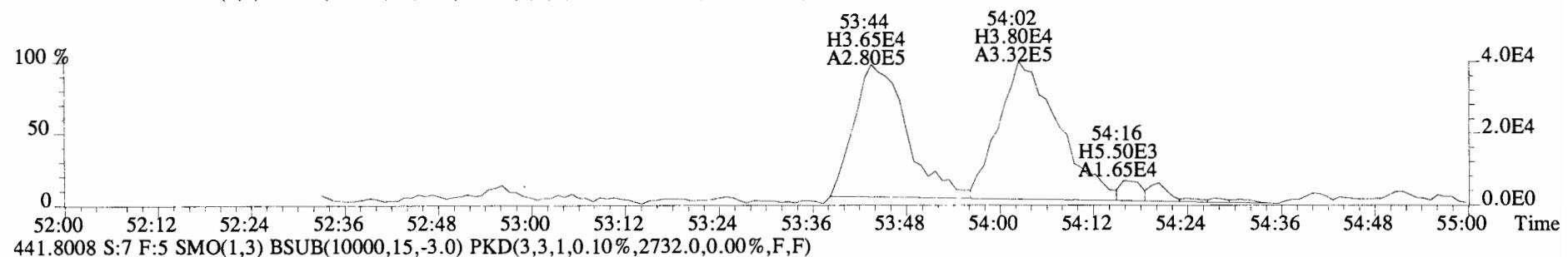
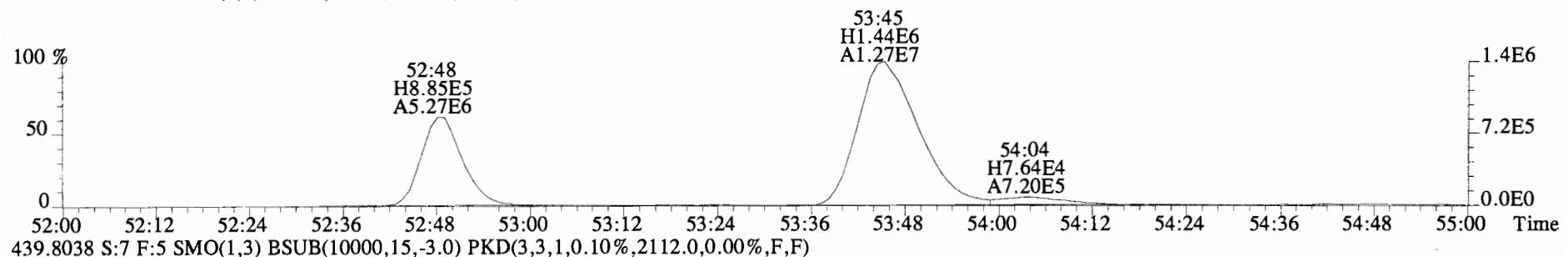
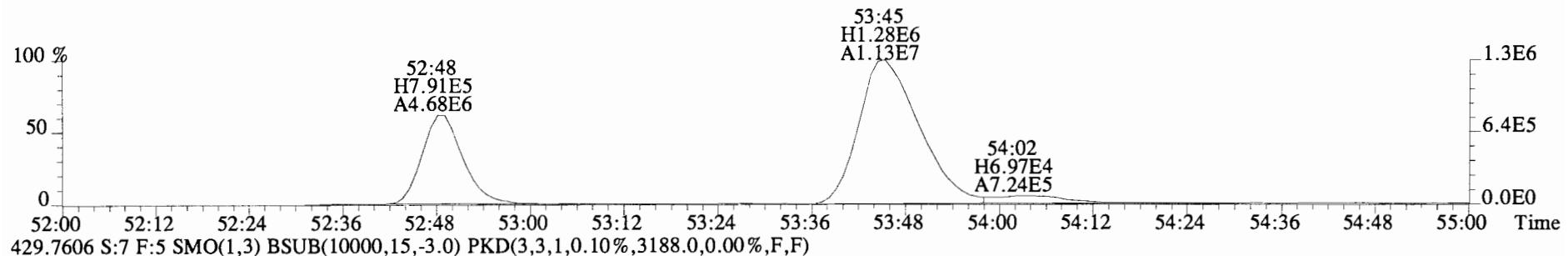
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



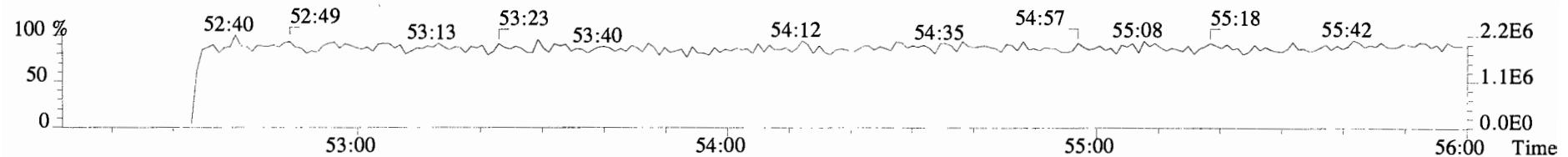
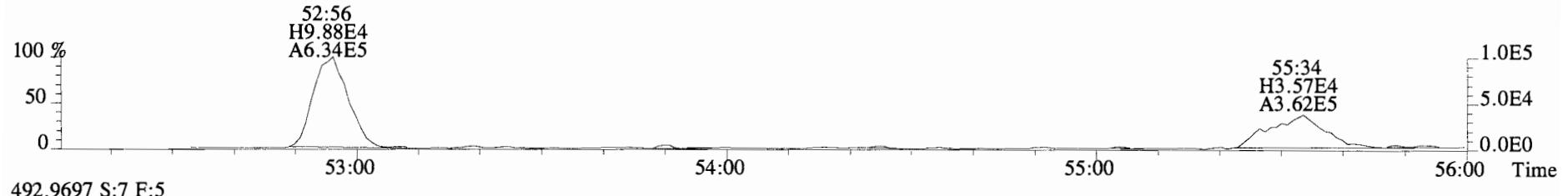
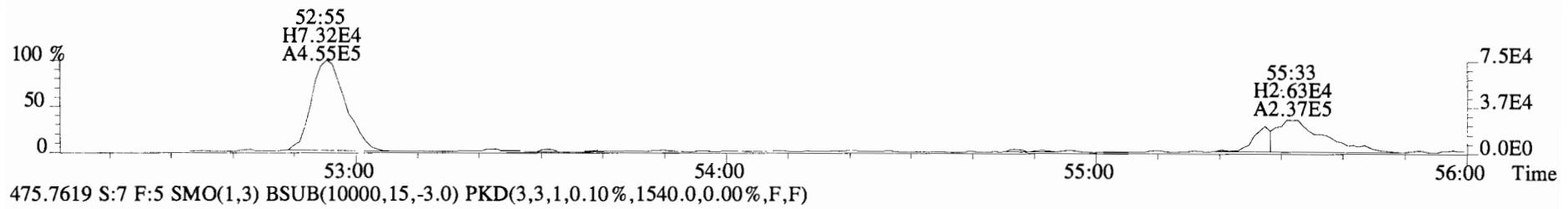
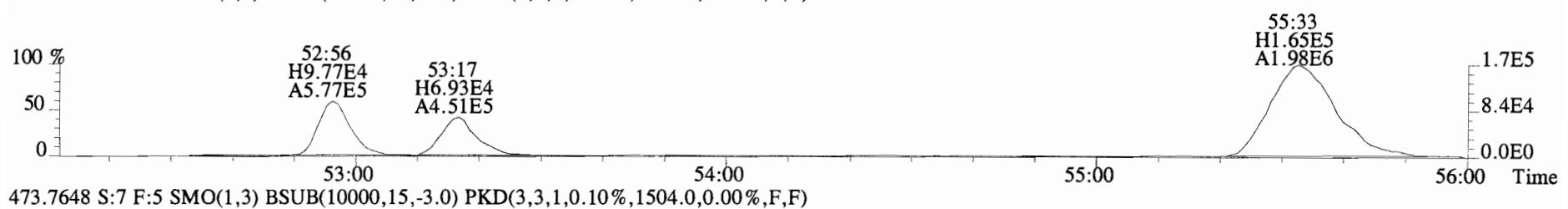
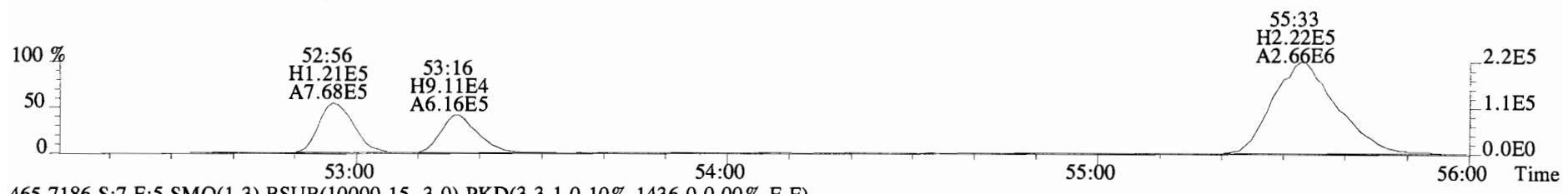
File:141027E1 #1-552 Acq:27-OCT-2014 16:54:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
427.7635 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1620.0,0.00%,F,F)



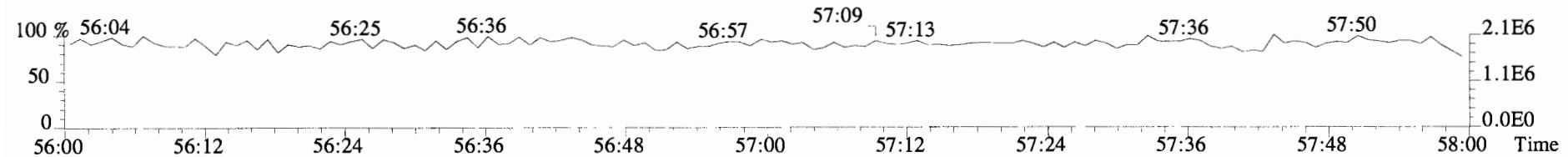
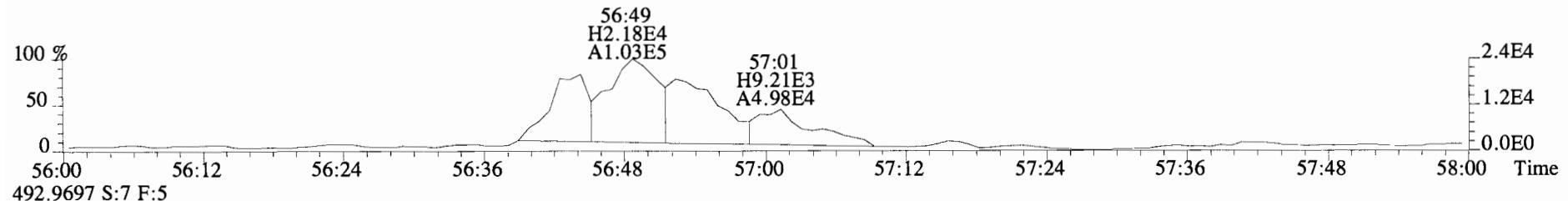
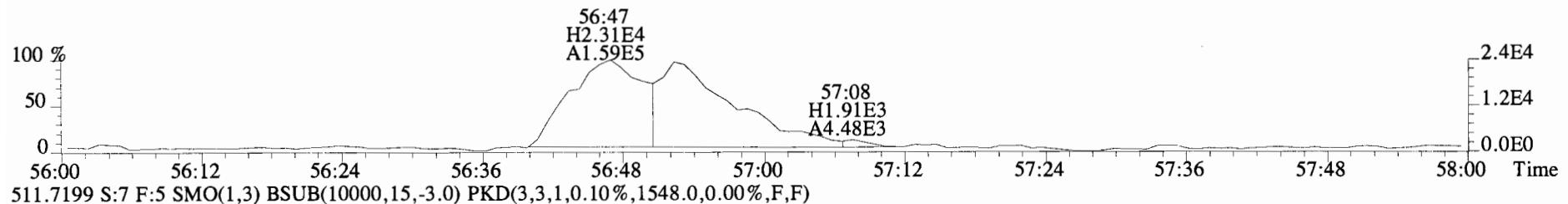
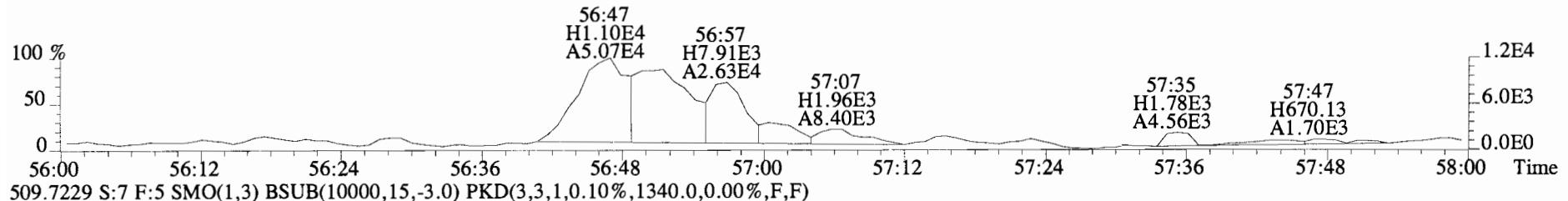
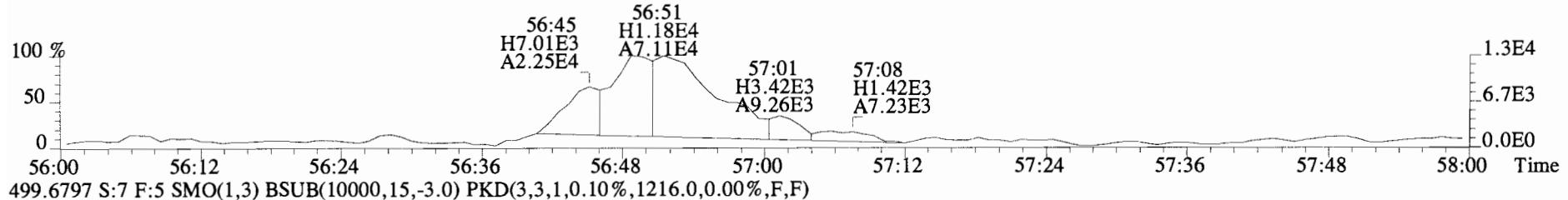
File:141027E1 #1-434 Acq:27-OCT-2014 16:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 427.7635 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2900.0,0.00%,F,F)



File:141027E1 #1-434 Acq:27-OCT-2014 16:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 463.7216 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1452.0,0.00%,F,F)



File:141027E1 #1-434 Acq:27-OCT-2014 16:54:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400762-05@20X CC-CB-22-20141013-S Exp:PCB_ZB1
 497.6826 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1296.0,0.00%,F,F)



CONFIRMATION

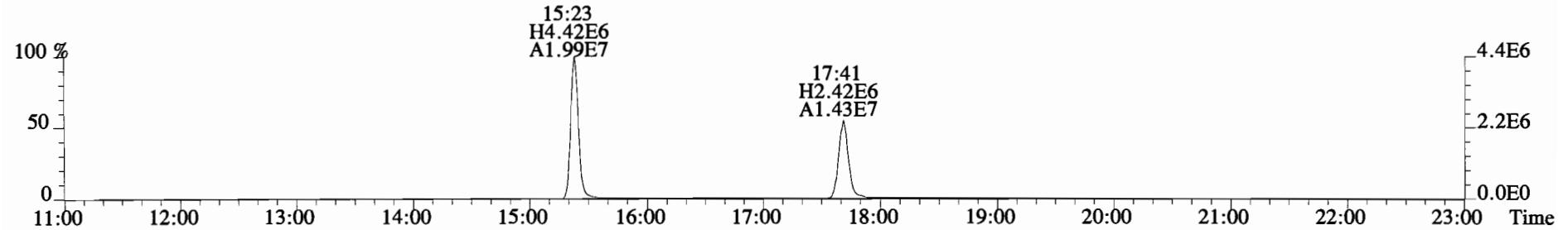
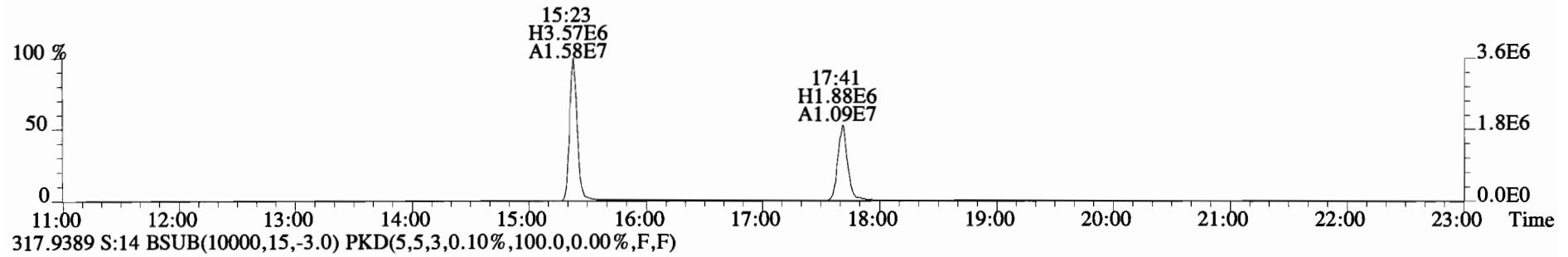
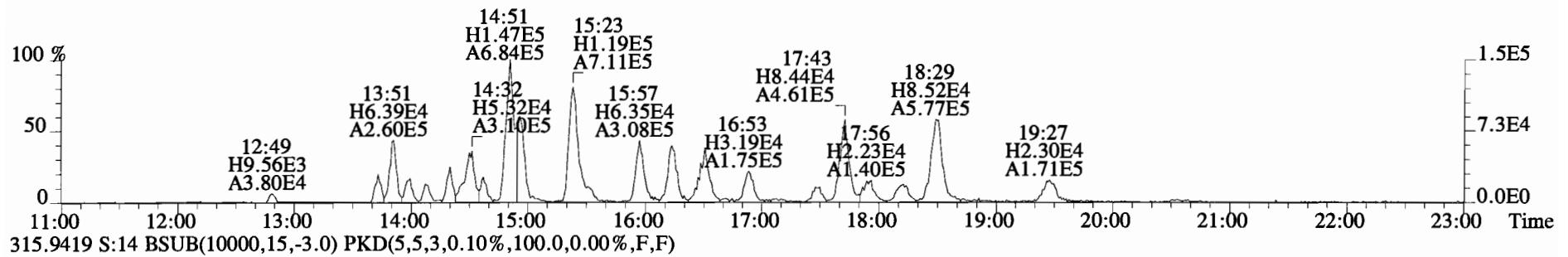
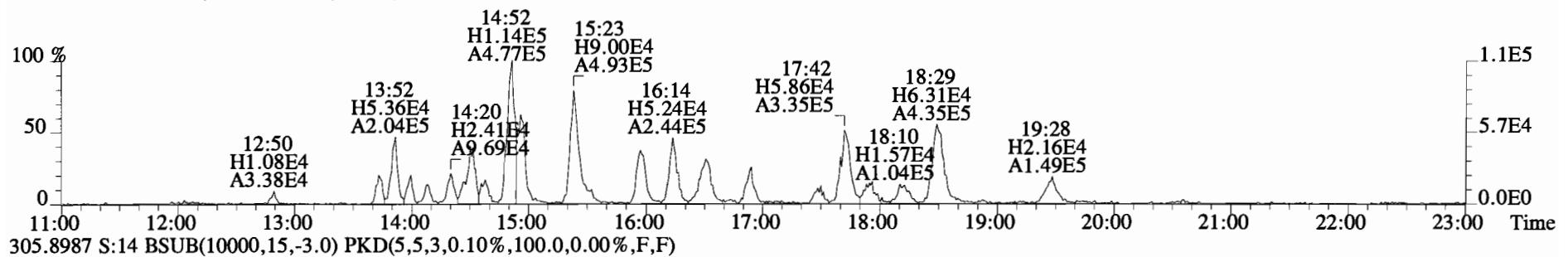
Name	Resp	RA	RT	RRF	Conc	Rec
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13C-2,3,7,8-TCDF	2.52e+07	0.77	y	17:42	0.89	158.1
2,3,7,8-TCDF	7.97e+05	0.73	y	17:43	0.92	6.877

Integrations
by
Analyst: MJ

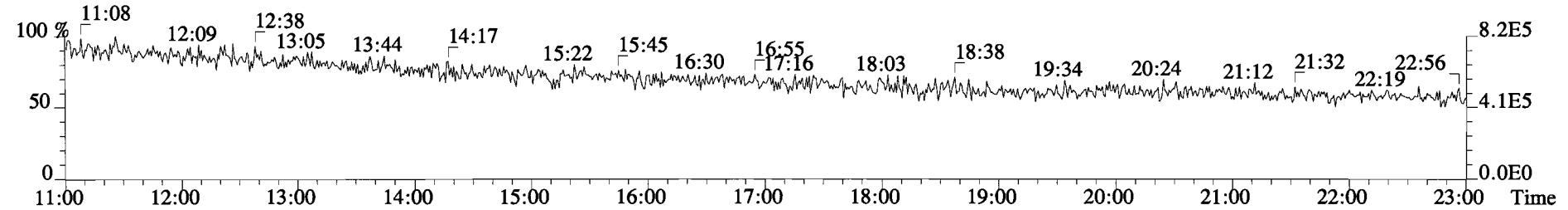
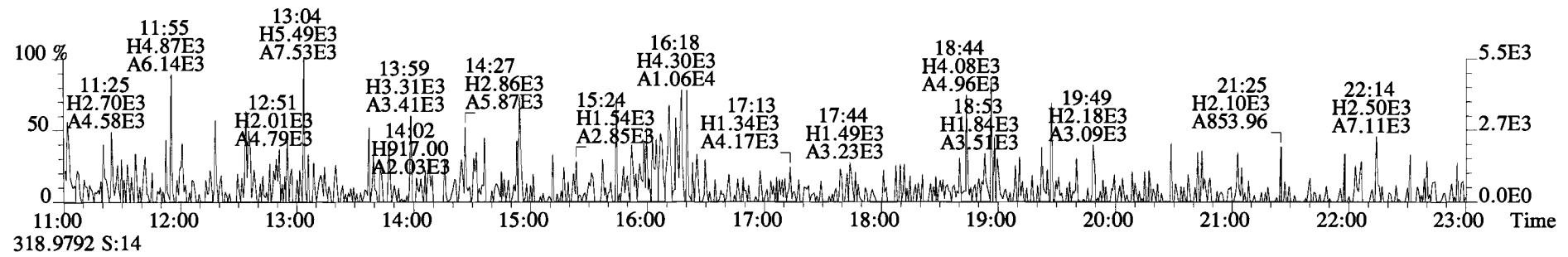
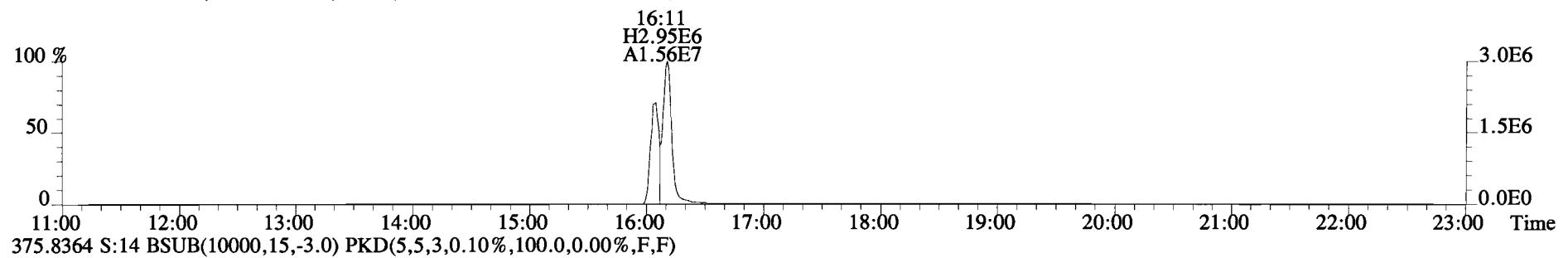
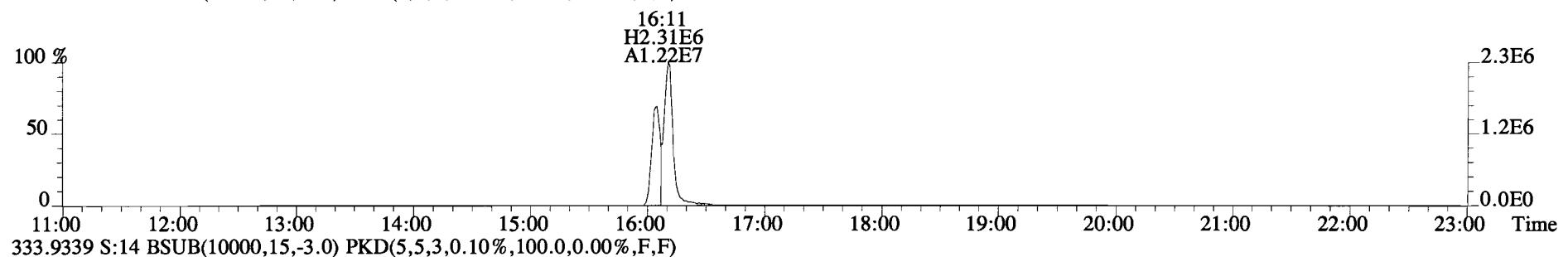
Reviewed
by
Analyst: EC

Date: 10/29/14 Date: 10/29/17

File:141028D1 #1-1684 Acq:28-OCT-2014 17:44:46 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03RE1 CC-A-01-20141013-S 17.04 Exp:TCDF_DB225
 303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141028D1 #1-1684 Acq:28-OCT-2014 17:44:46 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1400762-03RE1 CC-A-01-20141013-S 17.04 Exp:TCDF_DB225
 331.9368 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



	Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF		4.46e+07	0.76	y	15:23	1.00	199.8
13C-2,3,7,8-TCDF		3.16e+07	0.77	y	17:41	0.89	158.6
	2,3,7,8-TCDF	1.07e+06	0.77	y	17:42	0.92	7.356

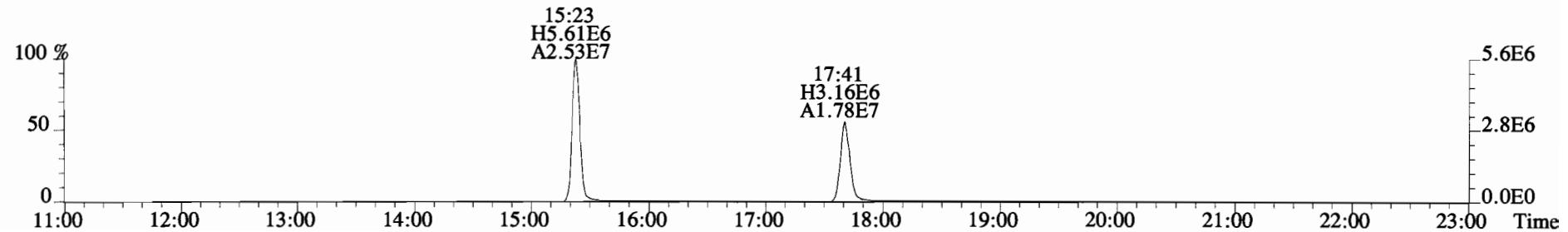
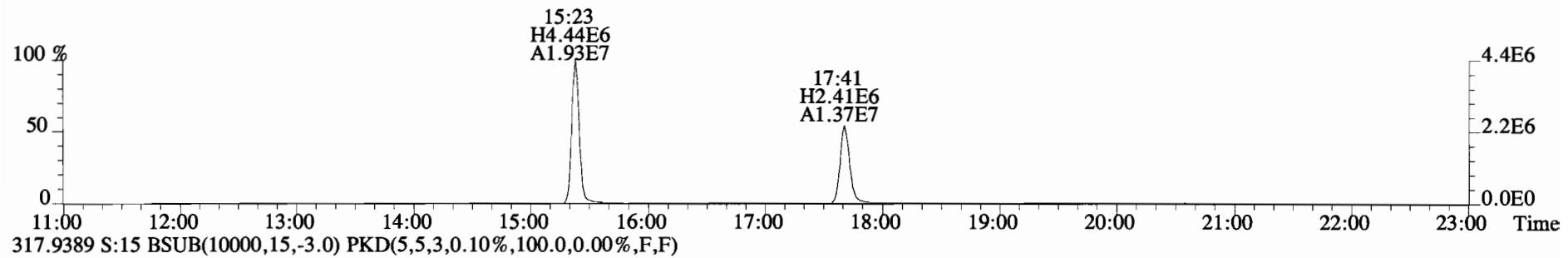
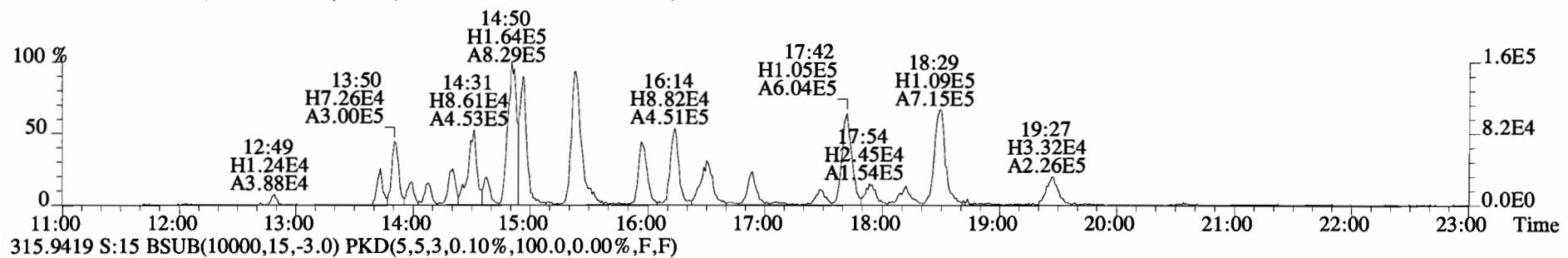
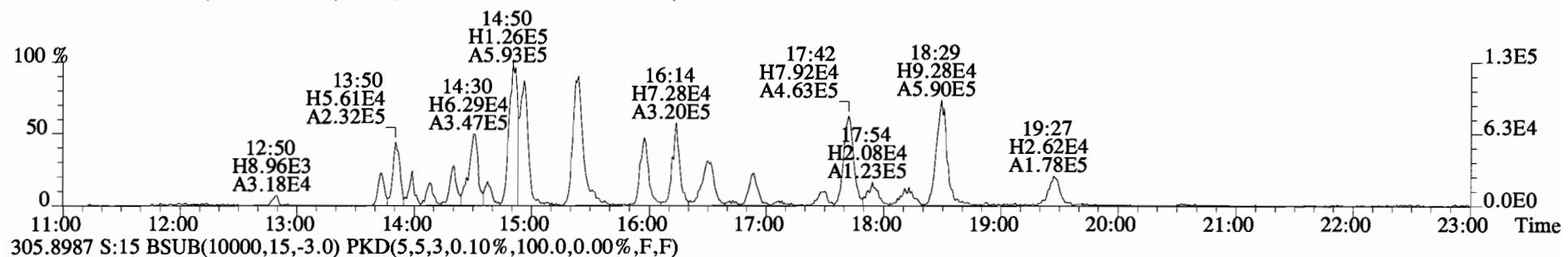
Integrations
by _____
Analyst: MJ

Date: 10/29/14

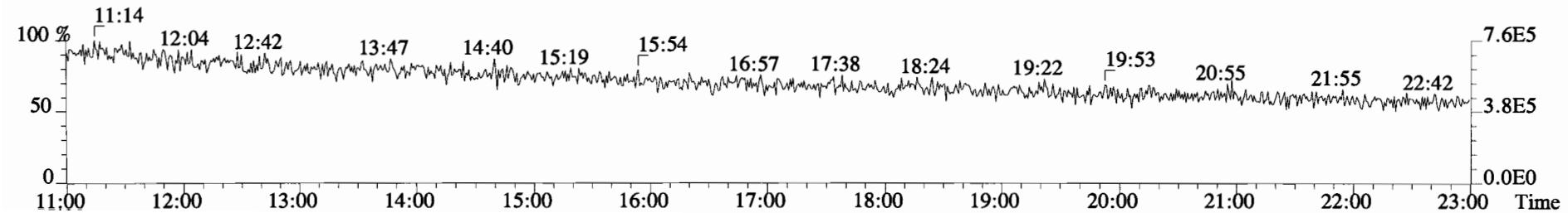
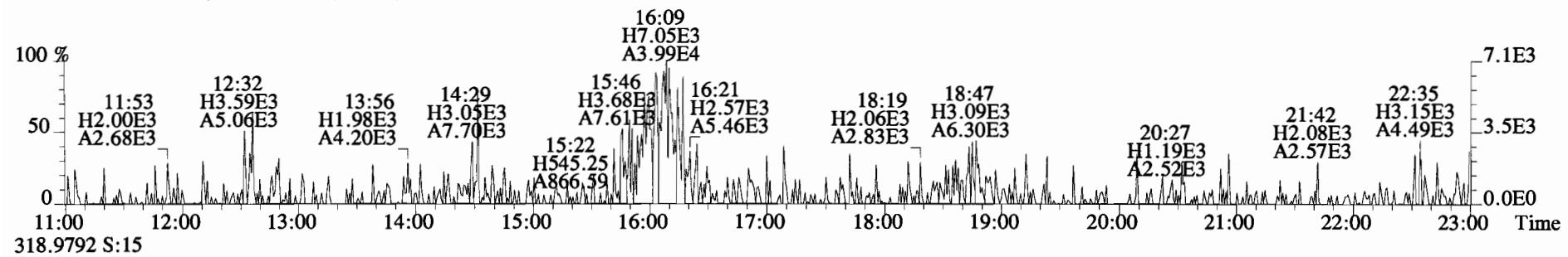
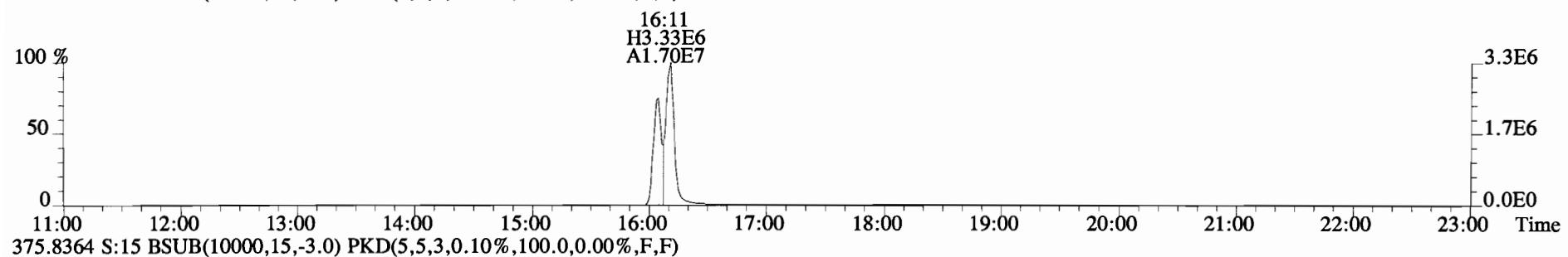
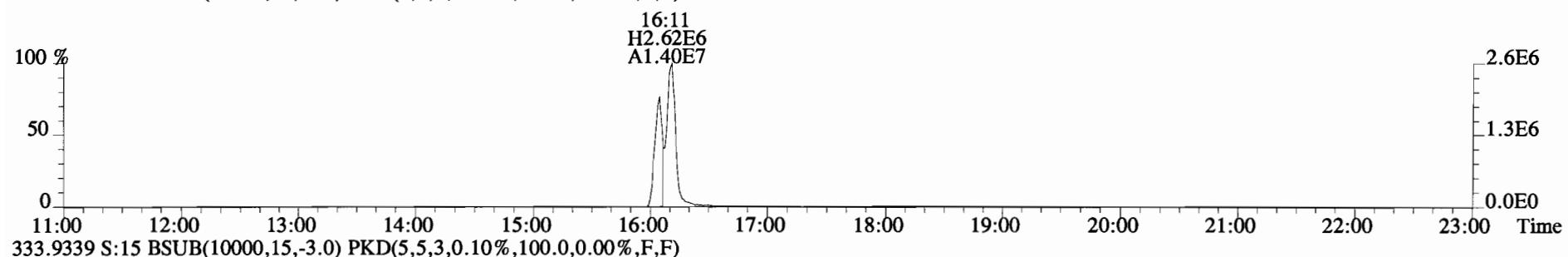
Reviewed
by _____
Analyst: MJ

Date: 10/24/14

File:141028D1 #1-1683 Acq:28-OCT-2014 18:16:50 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04RE1 CC-CB-04-20141013-S 17.37 Exp:TCDF_DB225
 303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141028D1 #1-1683 Acq:28-OCT-2014 18:16:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1400762-04RE1 CC-CB-04-20141013-S 17.37 Exp:TCDF_DB225
331.9368 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: CC-CB-22-20141013-S
Lab ID: 1400762-05RE1

Filename: 141028D1 S:16 Acq:28-OCT-14 18:48:55
GC Column ID: DB-225 ICal: 1613TCDFVG7-10-28-14 wt/vol:10.018

ConCal: ST141028D1-4
EndCAL: NA

Page 7 of 11

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	4.27e+07	0.78	y	15:23	1.00	199.6
13C-2,3,7,8-TCDF	3.40e+07	0.78	y	17:42	0.89	178.2
2,3,7,8-TCDF	2.89e+06	0.76	y	17:43	0.92	18.51

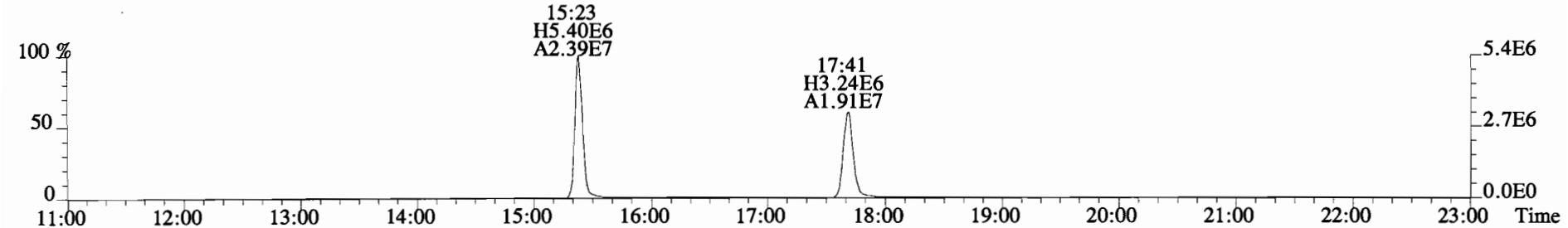
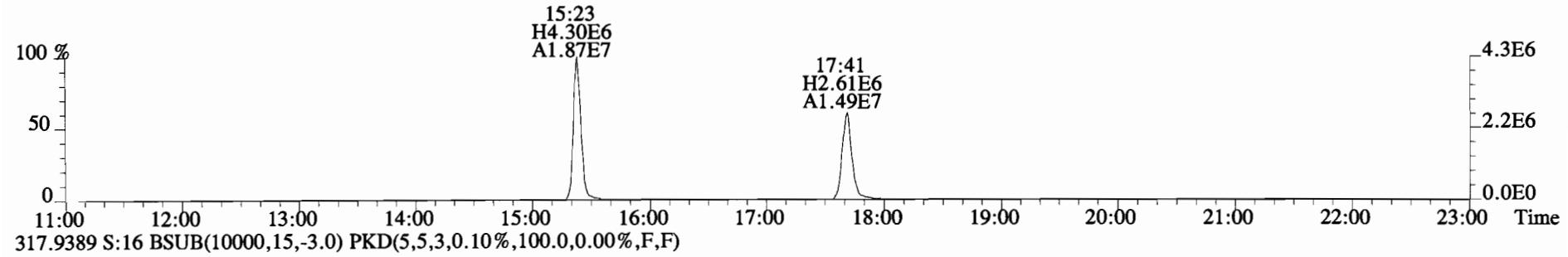
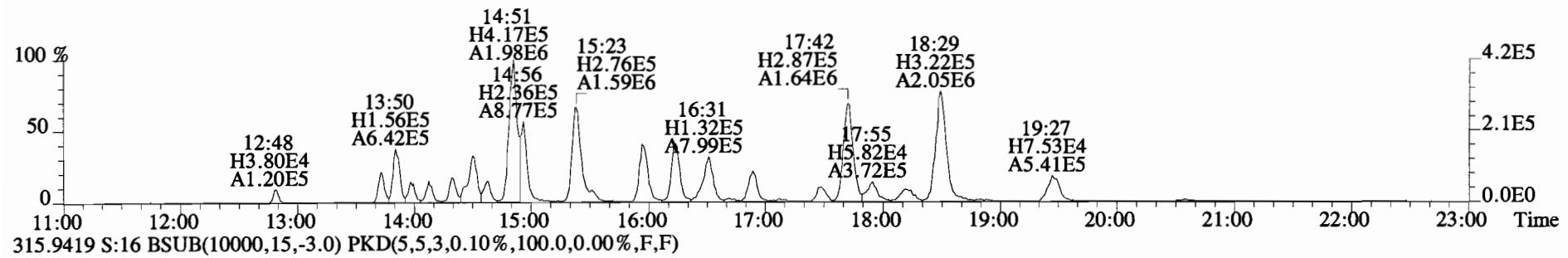
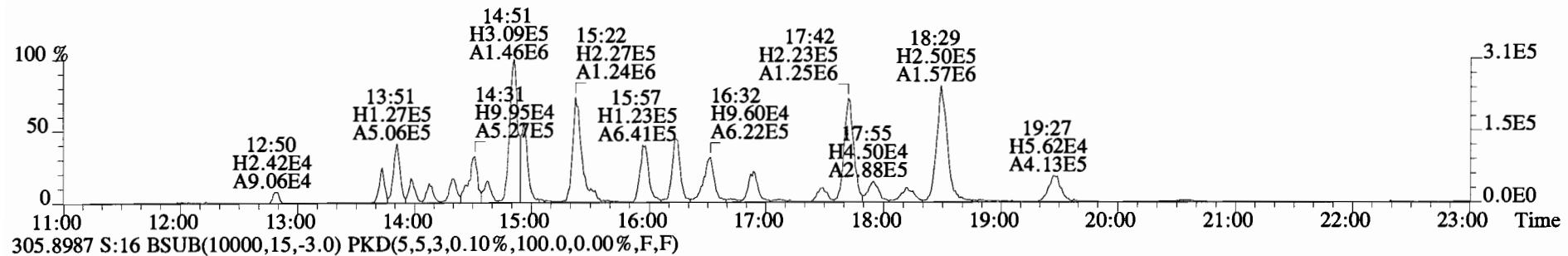
Integrations
by _____
Analyst: M

Date: 10/29/14

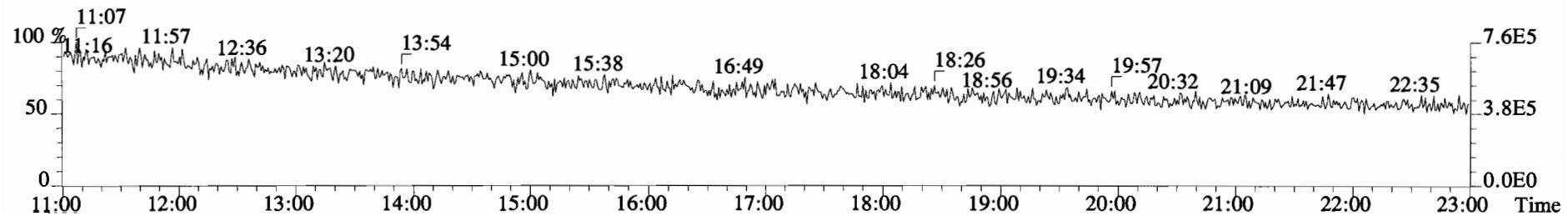
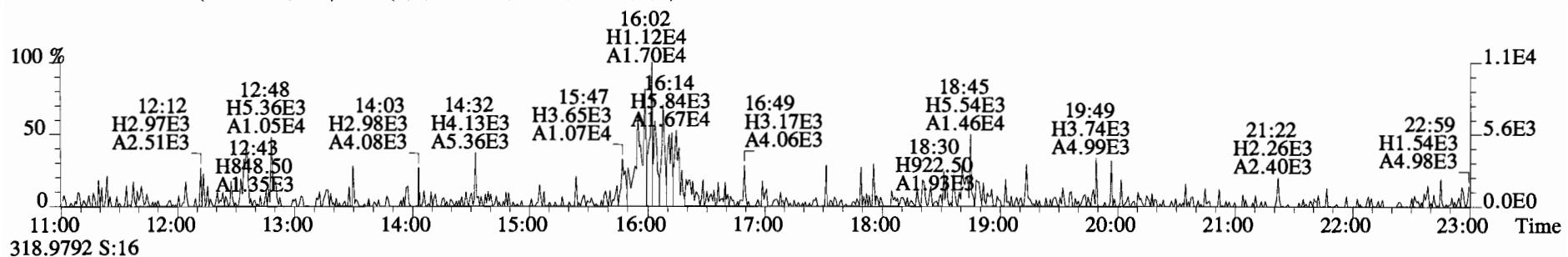
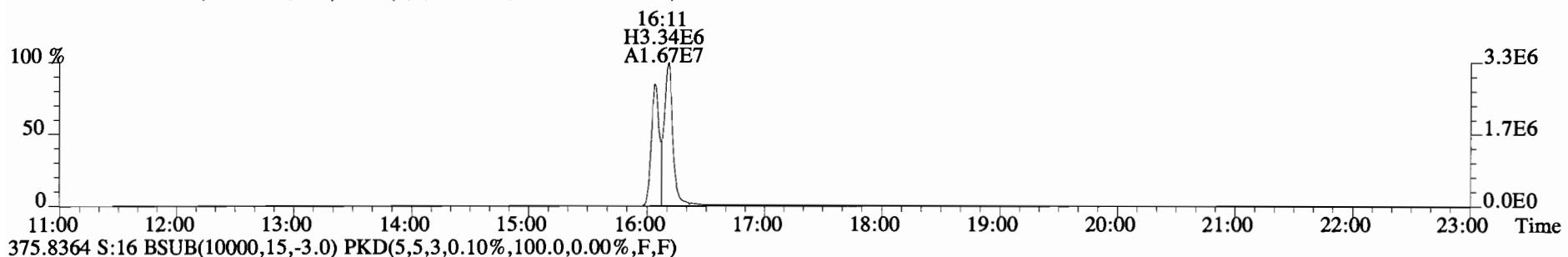
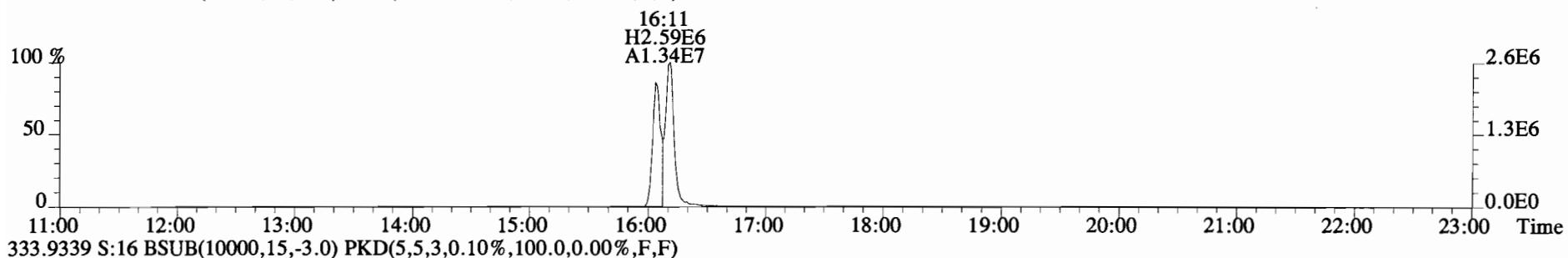
Reviewed
by _____
Analyst: [Signature]

Date: 10/29/14

File:141028D1 #1-1683 Acq:28-OCT-2014 18:48:55 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#16 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05RE1 CC-CB-22-20141013-S 18.54 Exp:TCDF_DB225
 303.9016 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141028D1 #1-1683 Acq:28-OCT-2014 18:48:55 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#16 File Text:Vista Analytical Laboratory VG-7 Text:1400762-05RE1 CC-CB-22-20141013-S 18.54 Exp:TCDF_DB225
 331.9368 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



CONTINUING CALIBRATION

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST141021D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141021D1 S#1 Analysis Date: 21-OCT-14 Time: 13:45:24

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. CONC. FOUND	CONC. RANGE (3) (ng/mL)	
NATIVE ANALYTES							
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	9.41	7.8 - 12.9 8.2 - 12.3 (4)	(1) See Table 8, Method 1613, for m/z specifications.
1,2,3,7,8-PeCDD	M/M+2	0.59	0.54-0.72	y	49.1	39.0 - 65.0	(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	52.4	39.0 - 64.0	(3) Contract-required concentration range as specified in Table 6, Method 1613.
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	51.9	39.0 - 64.0	
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	y	51.8	41.0 - 61.0	
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	50.5	43.0 - 58.0	(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.
OCDD	M+2/M+4	0.89	0.76-1.02	y	103	79.0 - 126.0	
2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	y	9.10	8.4 - 12.0 8.6 - 11.6 (4)	
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	48.2	41.0 - 60.0	
2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	50.2	41.0 - 61.0	
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	46.5	45.0 - 56.0	
1,2,3,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	49.2	44.0 - 57.0	
2,3,4,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	48.3	44.0 - 57.0	
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	y	49.4	45.0 - 56.0	
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.09	0.88-1.20	y	50.3	45.0 - 55.0	Analyst: <u>M</u>
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.08	0.88-1.20	y	51.6	43.0 - 58.0	Date: <u>10/24/14</u>
OCDF	M+2/M+4	0.92	0.76-1.02	y	100	63.0 - 159.0	

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141021D1 S#1 Analysis Date: 21-OCT-14 Time: 13:45:24

Labeled Compounds	M/Z'S FORMING	ION ABUND.	QC LIMITS	Pass	CONC.	RANGE
	RATIO (1)	RATIO	(2)		FOUND	(ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	Y	95.1	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	Y	77.9	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	Y	91.6	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	Y	93.1	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	Y	93.2	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	Y	98.0	72.0 - 138.0
13C-OCDD	M/M+2	0.87	0.76-1.02	Y	167	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.73	0.65-0.89	Y	98.6	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	Y	85.3	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	Y	80.6	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	Y	92.6	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	Y	94.7	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	Y	92.9	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	Y	93.0	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	Y	98.1	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.44	0.37-0.51	Y	87.7	77.0 - 129.0
13C-OCDF	M+2/M+4	0.90	0.76-1.02	Y	173	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.78	7.9 - 12.7

Analyst: m

Date: 10/21/14

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-16-14

RT Window Data Filename: 141021D1 S#1 Analysis Date: 21-OCT-14 Time: 13:45:24

ZB-5MS IS Data Filename: 141021D1 S#1 Analysis Date: 21-OCT-14 Time: 13:45:24

DB_225 IS Data Filename: Analysis Date: Time:

ZB-5MS RT WINDOW DEFINING STANDARDS RESULTS

ABSOLUTE		ABSOLUTE	
ISOMERS	RT	ISOMERS	RT
1,3,6,8-TCDD (F)	23:33	1,3,6,8-TCDF (F)	21:23
1,2,8,9-TCDD (L)	27:50	1,2,8,9-TCDF (L)	27:59
1,2,4,7,9-PeCDD (F)	29:26	1,3,4,6,8-PeCDF (F)	27:56
1,2,3,8,9-PeCDD (L)	31:51	1,2,3,8,9-PeCDF (L)	32:06
1,2,4,6,7,9-HxCDD (F)	33:16	1,2,3,4,6,8-HxCDF (F)	32:43
1,2,3,7,8,9-HxCDD (L)	35:14	1,2,3,7,8,9-HxCDF (L)	35:38
1,2,3,4,6,7,9-HpCDD (F)	37:51	1,2,3,4,6,7,8-HpCDF (F)	37:29
1,2,3,4,6,7,8-HpCDD (L)	38:42	1,2,3,4,7,8,9-HpCDF (L)	39:15

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

Analyst: M

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Date: 10/22/14

FORM 6A

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Episode No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141021D1 S#1 Analysis Date: 21-OCT-14 Time: 13:45:24

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME	RRT	
	REFERENCE	RRT	QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

LABELED COMPOUNDS

13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.021	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.193	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.992	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.148	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.182	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052

三

Date: 10/21/14

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141021D1 S#1 Analysis Date: 21-OCT-14 Time: 13:45:24

NATIVE ANALYTES	RETENTION TIME	RRT	
	REFERENCE	RRT	QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001

LABELED COMPOUNDS

13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.988	0.975-1.001
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.991	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.009	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.038	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.026	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.091	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.143	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.127	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.224	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.230	1.091-1.371

Analyst: M

Date: 10/21/14

Client ID: 1613 CS3 14I1102
 Lab ID: ST141021D1-1

Filename: 141021D1 S:1 Acq:21-OCT-14 13:45:24
 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000

ConCal: ST141021D1-1
 EndCAL: NA

Page 1 of 1

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	2.47e+06	0.77 y	1.18	26:58	1.001	9.4141	*	2.5	*		Total Tetra-Dioxins	54.4	54.7	*	*	
	1,2,3,7,8-PeCDD	9.44e+06	0.59 y	0.92	31:30	1.001	49.134	*	2.5	*		Total Penta-Dioxins	156	156	*	*	
	1,2,3,4,7,8-HxCDD	8.84e+06	1.24 y	1.09	34:50	1.001	52.449	*	2.5	*		Total Hexa-Dioxins	205	205	*	*	
	1,2,3,6,7,8-HxCDD	8.85e+06	1.26 y	1.07	34:57	1.001	51.880	*	2.5	*		Total Hepta-Dioxins	125	126	*	*	
	1,2,3,7,8,9-HxCDD	8.97e+06	1.25 y	0.93	35:14	1.000	51.788	*	2.5	*		Total Tetra-Furans	28.5	28.9	*	*	
	1,2,3,4,6,7,8-HpCDD	8.30e+06	1.04 y	1.12	38:42	1.000	50.542	*	2.5	*		Total Penta-Furans	206.39	207.87	*	*	
	OCDD	1.50e+07	0.89 y	0.95	42:02	1.000	102.91	*	2.5	*		Total Hexa-Furans	240	242	*	*	
												Total Hepta-Furans	102	103	*	*	
	2,3,7,8-TCDF	3.14e+06	0.80 y	1.08	26:12	1.001	9.0964	*	2.5	*							
	1,2,3,7,8-PeCDF	1.50e+07	1.58 y	1.09	30:19	1.000	48.188	*	2.5	*							
	2,3,4,7,8-PeCDF	1.44e+07	1.57 y	1.04	31:13	1.000	50.229	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.38e+07	1.28 y	1.39	33:55	1.000	46.528	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.51e+07	1.29 y	1.26	34:04	1.000	49.206	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.40e+07	1.27 y	1.30	34:40	1.000	48.343	*	2.5	*							
	1,2,3,7,8,9-HxCDF	1.10e+07	1.25 y	1.19	35:38	1.000	49.400	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.33e+07	1.09 y	1.62	37:29	1.000	50.267	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	1.14e+07	1.08 y	1.53	39:15	1.000	51.636	*	2.5	*							
	OCDF	1.95e+07	0.92 y	1.10	42:15	1.000	100.43	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	2.21e+07	0.79 y	1.07	26:57	1.021	95.075					95.1					
IS	13C-1,2,3,7,8-PeCDD	2.09e+07	0.63 y	1.24	31:29	1.193	77.858					77.9					
IS	13C-1,2,3,4,7,8-HxCDD	1.55e+07	1.28 y	0.72	34:49	1.014	91.632					91.6					
IS	13C-1,2,3,6,7,8-HxCDD	1.60e+07	1.28 y	0.74	34:55	1.017	93.055					93.1					
IS	13C-1,2,3,7,8,9-HxCDD	1.86e+07	1.25 y	0.86	35:13	1.026	93.179					93.2					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.47e+07	1.07 y	0.64	38:41	1.127	97.957					98.0					
IS	13C-OCDD	3.06e+07	0.87 y	0.78	42:01	1.224	167.50					83.7					
IS	13C-2,3,7,8-TCDF	3.20e+07	0.73 y	0.92	26:11	0.992	98.618					98.6					
IS	13C-1,2,3,7,8-PeCDF	2.85e+07	1.59 y	0.95	30:18	1.148	85.319					85.3					
IS	13C-2,3,4,7,8-PeCDF	2.75e+07	1.61 y	0.97	31:12	1.182	80.621					80.6					
IS	13C-1,2,3,4,7,8-HxCDF	2.14e+07	0.51 y	0.99	33:55	0.988	92.574					92.6					
IS	13C-1,2,3,6,7,8-HxCDF	2.43e+07	0.52 y	1.10	34:03	0.991	94.710					94.7					
IS	13C-2,3,4,6,7,8-HxCDF	2.24e+07	0.53 y	1.03	34:39	1.009	92.900					92.9					
IS	13C-1,2,3,7,8,9-HxCDF	1.86e+07	0.52 y	0.86	35:37	1.038	93.004					93.0					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.63e+07	0.44 y	0.71	37:28	1.091	98.092					98.1					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.45e+07	0.44 y	0.71	39:14	1.143	87.706					87.7					
IS	13C-OCDF	3.53e+07	0.90 y	0.87	42:15	1.230	172.88					86.4					
C/Up	37Cl-2,3,7,8-TCDD	2.57e+06		1.21	26:58	1.022	9.7791					24.4	Integrations by		Reviewed by		
RS/RT	13C-1,2,3,4-TCDD	2.17e+07	0.79 y	1.00	26:23	*	100.00						Analyst: <u>M</u>		Analyst: <u>M</u>		
RS	13C-1,2,3,4-TCDF	3.51e+07	0.76 y	1.00	24:56	*	100.00										
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.33e+07	0.52 y	1.00	34:20	*	100.00						Date: <u>10/21/14</u>		Date: <u>10/21/14</u>		

Vista Analytical Laboratory - Injection Log Run file: 141021D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141021D1	1	ST141021D1-1	MAS	21-OCT-14	13:45:24	ST141021D1-1	NA
141021D1	2	ST141021D1-2	MAS	21-OCT-14	14:33:44	ST141021D1-2	NA
141021D1	3	SOLVENT BLANK	MAS	21-OCT-14	15:22:05	ST141021D1-1	NA
141021D1	4	SOLVENT BLANK	MAS	21-OCT-14	16:10:31	ST141021D1-1	NA
141021D1	5	B4J0104-BS1	MAS	21-OCT-14	16:58:57	ST141021D1-1	NA
141021D1	6	B4J0108-BS1	MAS	21-OCT-14	17:47:18	ST141021D1-1	NA
141021D1	7	SOLVENT BLANK	MAS	21-OCT-14	18:35:44	ST141021D1-1	NA
141021D1	8	B4J0104-BLK1	MAS	21-OCT-14	19:24:11	ST141021D1-1	NA
141021D1	9	B4J0108-BLK1	MAS	21-OCT-14	20:12:31	ST141021D1-1	NA
141021D1	10	1400766-01	MAS	21-OCT-14	21:00:57	ST141021D1-1	NA
141021D1	11	1400775-01	MAS	21-OCT-14	21:49:23	ST141021D1-1	NA
141021D1	12	1400759-01	MAS	21-OCT-14	22:37:49	ST141021D1-1	NA
141021D1	13	1400760-01	MAS	21-OCT-14	23:26:09	ST141021D1-1	NA
141021D1	14	1400761-01	MAS	22-OCT-14	00:14:33	ST141021D1-1	NA
141021D1	15	1400770-01	MAS	22-OCT-14	01:02:58	ST141021D1-1	NA
141021D1	16	1400673-06 1:40	MAS	22-OCT-14	01:51:18	ST141021D1-2	NA
141021D1	17	SOLVENT BLANK	MAS	22-OCT-14	02:39:38	ST141021D1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST



Beg. Calibration ID: ST 141021D1-1

End Calibration ID: NA

Ion abundance within QC limits?

Beg. End

Concentration within range?

Beg. End

First and last eluters present?

Beg. End

Retention Times within criteria?

Beg. End

Verification Std. named correctly?
(ST-Year-Month-Day-VG ID)

Beg. End

Forms signed and dated?

Beg. End

Correct ICAL referenced?

Beg. End

Run Log:

Beg. End

-Data file matches Conc Cal ID?

Beg. End

-Correct instrument listed?

Beg. End

-Samples within 12-hour clock?

Beg. End

y n

Reviewed by: mhf 10/22/14
Initials & Date

Mass resolution > 10,000?

- Method 1614 > 5,000; CARB 429 > 8,000

TCDD/TCDF valleys < 25%?

Beg. End

Peaks integrated correctly?

Beg. End

Manual integrations included?

Beg. End

8280 CS1 Ending Standard

Beg. End

-Ratios within limits

Beg. End

-S/N > 2.5:1

Beg. End

-CS1 within 12-hour clock

Beg. End

Comments:

Beg. End

Beg. End

Beg. End

Beg. End

Beg. End

* Ending standard criteria applicable to 8290 only.

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 rmh

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST141023D2-1

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141023D2 S#1 Analysis Date: 23-OCT-14 Time: 18:29:38

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	QC Pass	CONC. CONC. FOUND	CONC. RANGE (3) (ng/mL)	
NATIVE ANALYTES							
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	9.59	7.8 - 12.9 8.2 - 12.3 (4)	(1) See Table 8, Method 1613, for m/z specifications.
1,2,3,7,8-PeCDD	M/M+2	0.59	0.54-0.72	y	51.6	39.0 - 65.0	(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	50.8	39.0 - 64.0	(3) Contract-required concentration range as specified in Table 6, Method 1613.
1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	53.1	39.0 - 64.0	
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	51.6	41.0 - 61.0	
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.01	0.88-1.20	y	49.1	43.0 - 58.0	(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.
OCDD	M+2/M+4	0.90	0.76-1.02	y	103	79.0 - 126.0	
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	9.40	8.4 - 12.0 8.6 - 11.6 (4)	
1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	49.6	41.0 - 60.0	
2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	51.3	41.0 - 61.0	
1,2,3,4,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43	y	48.6	45.0 - 56.0	
1,2,3,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	49.0	44.0 - 57.0	
2,3,4,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	48.0	44.0 - 57.0	
1,2,3,7,8,9-HxCDF	M+2/M+4	1.30	1.05-1.43	y	49.4	45.0 - 56.0	
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.11	0.88-1.20	y	51.8	45.0 - 55.0	Analyst: <u>m</u>
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.10	0.88-1.20	y	52.4	43.0 - 58.0	Date: <u>10/24/14</u>
OCDF	M+2/M+4	0.91	0.76-1.02	y	102	63.0 - 159.0	

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141023D2 S#1 Analysis Date: 23-OCT-14 Time: 18:29:38

LABELED COMPOUNDS	M/Z'S FORMING	ION RATIO (1)	QC ABUND.	LIMITS (2)	Pass	CONC.	RANGE
			RATIO	(2)	Pass	FOUND	(ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y		96.1	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y		86.2	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y		90.5	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y		90.8	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y		91.2	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y		97.3	72.0 - 138.0
13C-OCDD	M/M+2	0.88	0.76-1.02	y		171	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.77	0.65-0.89	y		94.1	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y		88.0	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y		86.3	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y		96.3	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y		96.4	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y		93.9	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43-0.59	y		95.0	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	y		91.2	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.42	0.37-0.51	y		84.5	77.0 - 129.0
13C-OCDF	M+2/M+4	0.88	0.76-1.02	y		174	96.0 - 415.0
CLEANUP STANDARD (3)						10.4	7.9 - 12.7
37Cl-2,3,7,8-TCDD							

Analyst: M)

Date: 10/24/14

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-16-14

RT Window Data Filename: 141023D2 S#1 Analysis Date: 23-OCT-14 Time: 18:29:38

ZB-5MS IS Data Filename: 141023D2 S#1 Analysis Date: 23-OCT-14 Time: 18:29:38

DB_225 IS Data Filename: Analysis Date: Time:

ZB-5MS RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	RT	ISOMERS	RT
1,3,6,8-TCDD (F)	23:34	1,3,6,8-TCDF (F)	21:24
1,2,8,9-TCDD (L)	27:50	1,2,8,9-TCDF (L)	27:59
1,2,4,7,9-PeCDD (F)	29:26	1,3,4,6,8-PeCDF (F)	27:56
1,2,3,8,9-PeCDD (L)	31:51	1,2,3,8,9-PeCDF (L)	32:06
1,2,4,6,7,9-HxCDD (F)	33:16	1,2,3,4,6,8-HxCDF (F)	32:43
1,2,3,7,8,9-HxCDD (L)	35:14	1,2,3,7,8,9-HxCDF (L)	35:38
1,2,3,4,6,7,9-HpCDD (F)	37:51	1,2,3,4,6,7,8-HpCDF (F)	37:29
1,2,3,4,6,7,8-HpCDD (L)	38:42	1,2,3,4,7,8,9-HpCDF (L)	39:15

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

Analyst: M)

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Date: 10/24/14

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Episode No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141023D2 S#1 Analysis Date: 23-OCT-14 Time: 18:29:38

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME	RRT	
	REFERENCE	RRT	QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002

LABELED COMPOUNDS

13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.021	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.193	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.992	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.148	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.182	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

Analyst: (m)

Date: 10/24/14

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141023D2 S#1 Analysis Date: 23-OCT-14 Time: 18:29:38

NATIVE ANALYTES	RETENTION TIME	RRT	
	REFERENCE	RRT	QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001

LABELED COMPOUNDS

13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.988	0.975-1.001
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.992	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.009	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.038	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.026	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.091	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.143	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.127	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.224	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.231	1.091-1.371

Analyst: MJ

Date: 10/24/14

Client ID: 1613 CS3 14I1102
 Lab ID: ST141023D2-1

Filename: 141023D2 S:1 Acq:23-OCT-14 18:29:38
 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000

ConCal: ST141023D2-1
 EndCAL: NA

Page 1 of 1

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	1.88e+06	0.77 y	1.18	26:59	1.001	9.5879	*	2.5	*		Total Tetra-Dioxins	55.2	55.5	*	*	
	1,2,3,7,8-PeCDD	8.13e+06	0.59 y	0.92	31:29	1.001	51.595	*	2.5	*		Total Penta-Dioxins	160	160	*	*	
	1,2,3,4,7,8-HxCDD	7.20e+06	1.25 y	1.09	34:49	1.000	50.833	*	2.5	*		Total Hexa-Dioxins	204	205	*	*	
	1,2,3,6,7,8-HxCDD	7.51e+06	1.27 y	1.07	34:56	1.000	53.067	*	2.5	*		Total Hepta-Dioxins	120	121	*	*	
	1,2,3,7,8,9-HxCDD	7.44e+06	1.27 y	0.93	35:14	1.000	51.613	*	2.5	*		Total Tetra-Furans	30.8	31.1	*	*	
	1,2,3,4,6,7,8-HpCDD	6.82e+06	1.01 y	1.12	38:42	1.000	49.143	*	2.5	*		Total Penta-Furans	208.44	209.28	*	*	
	OCDD	1.30e+07	0.90 y	0.95	42:01	1.000	102.62	*	2.5	*		Total Hexa-Furans	243	245	*	*	
												Total Hepta-Furans	105	106	*	*	
	2,3,7,8-TCDF	2.56e+06	0.77 y	1.08	26:12	1.001	9.3967	*	2.5	*							
	1,2,3,7,8-PeCDF	1.31e+07	1.62 y	1.09	30:19	1.001	49.586	*	2.5	*							
	2,3,4,7,8-PeCDF	1.30e+07	1.60 y	1.04	31:13	1.000	51.309	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.28e+07	1.30 y	1.39	33:55	1.000	48.639	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.30e+07	1.27 y	1.26	34:03	1.001	48.990	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.20e+07	1.29 y	1.30	34:40	1.001	48.044	*	2.5	*							
	1,2,3,7,8,9-HxCDF	9.52e+06	1.30 y	1.19	35:38	1.000	49.378	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.08e+07	1.11 y	1.62	37:29	1.000	51.832	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	9.50e+06	1.10 y	1.53	39:15	1.000	52.420	*	2.5	*							
	OCDF	1.69e+07	0.91 y	1.10	42:15	1.000	101.54	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.66e+07	0.79 y	1.07	26:57	1.021	96.087					96.1					
IS	13C-1,2,3,7,8-PeCDD	1.72e+07	0.63 y	1.24	31:28	1.193	86.228					86.2					
IS	13C-1,2,3,4,7,8-HxCDD	1.30e+07	1.29 y	0.72	34:49	1.014	90.522					90.5					
IS	13C-1,2,3,6,7,8-HxCDD	1.33e+07	1.31 y	0.74	34:55	1.017	90.795					90.8					
IS	13C-1,2,3,7,8,9-HxCDD	1.55e+07	1.26 y	0.86	35:13	1.026	91.163					91.2					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.24e+07	1.05 y	0.64	38:41	1.127	97.254					97.3					
IS	13C-OCDD	2.66e+07	0.88 y	0.78	42:00	1.224	171.28					85.6					
IS	13C-2,3,7,8-TCDF	2.53e+07	0.77 y	0.92	26:11	0.992	94.068					94.1					
IS	13C-1,2,3,7,8-PeCDF	2.43e+07	1.59 y	0.95	30:18	1.148	88.029					88.0					
IS	13C-2,3,4,7,8-PeCDF	2.44e+07	1.61 y	0.97	31:12	1.182	86.324					86.3					
IS	13C-1,2,3,4,7,8-HxCDF	1.90e+07	0.52 y	0.99	33:54	0.988	96.320					96.3					
IS	13C-1,2,3,6,7,8-HxCDF	2.10e+07	0.52 y	1.10	34:02	0.992	96.394					96.4					
IS	13C-2,3,4,6,7,8-HxCDF	1.92e+07	0.52 y	1.03	34:38	1.009	93.881					93.9					
IS	13C-1,2,3,7,8,9-HxCDF	1.62e+07	0.54 y	0.86	35:37	1.038	94.978					95.0					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.29e+07	0.44 y	0.71	37:28	1.091	91.177					91.2					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.19e+07	0.42 y	0.71	39:14	1.143	84.469					84.5					
IS	13C-OCDF	3.02e+07	0.88 y	0.87	42:14	1.231	173.73					86.9					
C/Up	37Cl-2,3,7,8-TCDD	2.02e+06		1.21	26:58	1.022	10.386					26.0	Integrations by <i>MJ</i>	Reviewed by <i>MJ</i>			
RS/RT	13C-1,2,3,4-TCDD	1.61e+07	0.80 y	1.00	26:23	*	100.00						Analyst: <i>MJ</i>	Analyst: <i>MJ</i>			
RS	13C-1,2,3,4-TCDF	2.91e+07	0.77 y	1.00	24:57	*	100.00										
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.99e+07	0.52 y	1.00	34:20	*	100.00						Date: <i>10/24/14</i>	Date: <i>10/24/14</i>			

Vista Analytical Laboratory - Injection Log Run file: 141023D2 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141023D2	1	ST141023D2-1	MAS	23-OCT-14	18:29:38	ST141023D2-1	NA
141023D2	2	B4J0118-BS1	MAS	23-OCT-14	19:17:58	ST141023D2-1	NA
141023D2	3	B4J0121-BS1	MAS	23-OCT-14	20:06:19	ST141023D2-1	NA
141023D2	4	SOLVENT BLANK	MAS	23-OCT-14	20:54:39	ST141023D2-1	NA
141023D2	5	B4J0118-BLK1	MAS	23-OCT-14	21:43:05	ST141023D2-1	NA
141023D2	6	B4J0121-BLK1	MAS	23-OCT-14	22:31:25	ST141023D2-1	NA
141023D2	7	1400762-03 1:5	MAS	23-OCT-14	23:19:49	ST141023D2-1	NA
141023D2	8	1400762-04 1:5	MAS	24-OCT-14	00:08:09	ST141023D2-1	NA
141023D2	9	1400762-05 1:5	MAS	24-OCT-14	00:56:33	ST141023D2-1	NA
141023D2	10	1400763-01 1:10	MAS	24-OCT-14	01:44:58	ST141023D2-1	NA
141023D2	11	1400763-02 1:10	MAS	24-OCT-14	02:33:18	ST141023D2-1	NA
141023D2	12	1400763-03 1:10	MAS	24-OCT-14	03:21:41	ST141023D2-1	NA
141023D2	13	SOLVENT BLANK	MAS	24-OCT-14	04:10:09	ST141023D2-1	NA
141023D2	14	SOLVENT BLANK	MAS	24-OCT-14	04:58:33	ST141023D2-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST



Beg. Calibration ID: ST141023D2-1

End Calibration ID: NA

Ion abundance within QC limits?

Beg. End

 NA

Concentration within range?

Beg. End

First and last eluters present?

Beg. End

Retention Times within criteria?

Beg. End

Verification Std. named correctly?
(ST-Year-Month-Day-VG ID)

Beg. End

Forms signed and dated?

Beg. End

Correct ICAL referenced?

Beg. End

Run Log:

-Data file matches Conc Cal ID?

Beg. End

-Correct instrument listed?

Beg. End

-Samples within 12-hour clock?

Beg. End

 Y N

Reviewed by: APC 10/24/13
Initials & Date

Mass resolution $> 10,000$?

- Method 1614 $> 5,000$; CARB 429 $> 8,000$

TCD/TCDF valleys $< 25\%$?

Peaks integrated correctly?

Manual integrations included?

8280 CS1 Ending Standard

-Ratios within limits

-S/N $> 2.5:1$

-CS1 within 12-hour clock

Beg. End

 NA

Comments:

* Ending standard criteria applicable to 8290 only.

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 rmh

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST141027D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. Pass	CONC. FOUND	RANGE (3) (ng/mL)
NATIVE ANALYTES					
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89 Y	9.47	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M/M+2	0.61	0.54-0.72 Y	48.0	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43 Y	48.4	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43 Y	50.8	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43 Y	49.8	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20 Y	50.6	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02 Y	99.0	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89 Y	8.74	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78 Y	47.8	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78 Y	49.3	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43 Y	47.1	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43 Y	49.5	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.31	1.05-1.43 Y	47.0	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.30	1.05-1.43 Y	48.0	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.08	0.88-1.20 Y	47.8	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.11	0.88-1.20 Y	48.5	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02 Y	98.0	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: M)

Date: 10/27/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

Labeled Compounds	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE
	(ng/mL)					
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	Y	93.6	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.64	0.54-0.72	Y	71.5	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	Y	97.2	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	Y	99.3	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	Y	101	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	Y	98.3	72.0 - 138.0
13C-OCDD	M/M+2	0.87	0.76-1.02	Y	168	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.78	0.65-0.89	Y	100	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	Y	78.9	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	Y	77.2	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	Y	88.5	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	Y	92.3	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	Y	93.6	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	Y	95.1	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	Y	97.6	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.44	0.37-0.51	Y	91.9	77.0 - 129.0
13C-OCDF	M+2/M+4	0.90	0.76-1.02	Y	166	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.83	7.9 - 12.7

Analyst: MJ

Date: 10/27/14

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST141027D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	CONC. FOUND	CONC. RANGE (ng/mL)
Pass					
NATIVE ANALYTES					
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89 Y	9.47	8.00 - 12.0
1,2,3,7,8-PeCDD	M/M+2	0.61	0.54-0.72 Y	48.0	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43 Y	48.4	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43 Y	50.8	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43 Y	49.8	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20 Y	50.6	40.0 - 60.0
OCDD	M+2/M+4	0.89	0.76-1.02 Y	99.0	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89 Y	8.74	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78 Y	47.8	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78 Y	49.3	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43 Y	47.1	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43 Y	49.5	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.31	1.05-1.43 Y	47.0	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.30	1.05-1.43 Y	48.0	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.08	0.88-1.20 Y	47.8	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.11	0.88-1.20 Y	48.5	40.0 - 60.0
OCDF	M+2/M+4	0.91	0.76-1.02 Y	98.0	80.0 - 120

Analyst: MDate: 10/27/14

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

Labeled Compounds	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE
						(ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	93.6	70.0 - 130
13C-1,2,3,7,8-PeCDD	M/M+2	0.64	0.54-0.72	y	71.5	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	97.2	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	99.3	70.0 - 130
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	101	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	98.3	70.0 - 130
13C-OCDD	M+2/M+4	0.87	0.76-1.02	y	168	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	100	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	78.9	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	77.2	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	88.5	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	92.3	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	93.6	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	95.1	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	97.6	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	91.9	70.0 - 130
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	166	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					9.83	7.00 - 13.0

Analyst: m)Date: 10/27/14

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-16-14

RT Window Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

ZB-5MS IS Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

DB_225 IS Data Filename: Analysis Date: Time:

ZB-5MS RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE		ABSOLUTE	
	RT	ISOMERS	RT	ISOMERS
1,3,6,8-TCDD (F)	23:37	1,3,6,8-TCDF (F)	21:26	
1,2,8,9-TCDD (L)	27:54	1,2,8,9-TCDF (L)	28:03	
1,2,4,7,9-PeCDD (F)	29:30	1,3,4,6,8-PeCDF (F)	27:60	
1,2,3,8,9-PeCDD (L)	31:56	1,2,3,8,9-PeCDF (L)	32:11	
1,2,4,6,7,9-HxCDD (F)	33:21	1,2,3,4,6,8-HxCDF (F)	32:48	
1,2,3,7,8,9-HxCDD (L)	35:19	1,2,3,7,8,9-HxCDF (L)	35:43	
1,2,3,4,6,7,9-HpCDD (F)	37:56	1,2,3,4,6,7,8-HpCDF (F)	37:33	
1,2,3,4,6,7,8-HpCDD (L)	38:47	1,2,3,4,7,8,9-HpCDF (L)	39:20	

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

=====

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

Analyst: M

Date: 10/24/14

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Episode No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

Compounds Using ¹³C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME	RRT	
	REFERENCE	RRT	QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002

LABELED COMPOUNDS

13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.193	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.992	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.148	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.183	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

Analyst: M)

Date: 10/27/14

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

NATIVE ANALYTES	RETENTION TIME	RRT	
	REFERENCE	RRT	QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001

LABELED COMPOUNDS

13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.988	0.975-1.001
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.992	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.009	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.037	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.026	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.091	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.143	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.127	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.223	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.230	1.091-1.371

Analyst: M

Date: 10/27/14

Client ID: 1613 CS3 14I1102
 Lab ID: ST141027D1-1

Filename: 141027D1 S:1 Acq:27-OCT-14 14:31:19
 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000

ConCal: ST141027D1-1
 EndCAL: ST141027D1-2

Page 1 of 1

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	2.24e+06	0.77 y	1.18	27:03	1.001	9.4703	*	2.5	*		Total Tetra-Dioxins	56.7	57.2	*	*	
	1,2,3,7,8-PeCDD	7.78e+06	0.61 y	0.92	31:34	1.000	48.006	*	2.5	*		Total Penta-Dioxins	158	158	*	*	
	1,2,3,4,7,8-HxCDD	7.02e+06	1.25 y	1.09	34:54	1.000	48.419	*	2.5	*		Total Hexa-Dioxins	195	196	*	*	
	1,2,3,6,7,8-HxCDD	7.50e+06	1.27 y	1.07	35:01	1.000	50.777	*	2.5	*		Total Hepta-Dioxins	124	125	*	*	
	1,2,3,7,8,9-HxCDD	7.55e+06	1.27 y	0.93	35:19	1.000	49.781	*	2.5	*		Total Tetra-Furans	28.1	28.6	*	*	
	1,2,3,4,6,7,8-HpCDD	6.76e+06	1.04 y	1.12	38:47	1.001	50.608	*	2.5	*		Total Penta-Furans	208.15	209.59	*	*	
	OCDD	1.17e+07	0.89 y	0.95	42:06	1.000	98.955	*	2.5	*		Total Hexa-Furans	240	241	*	*	
												Total Hepta-Furans	97.4	98.8	*	*	
	2,3,7,8-TCDF	2.70e+06	0.76 y	1.08	26:15	1.001	8.7370	*	2.5	*							
	1,2,3,7,8-PeCDF	1.21e+07	1.58 y	1.09	30:23	1.000	47.809	*	2.5	*							
	2,3,4,7,8-PeCDF	1.19e+07	1.61 y	1.04	31:17	1.000	49.317	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.09e+07	1.28 y	1.39	34:00	1.000	47.058	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.20e+07	1.29 y	1.26	34:08	1.001	49.530	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.12e+07	1.31 y	1.30	34:44	1.001	46.965	*	2.5	*							
	1,2,3,7,8,9-HxCDF	8.84e+06	1.30 y	1.19	35:43	1.001	48.024	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.02e+07	1.08 y	1.62	37:33	1.000	47.839	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	9.12e+06	1.11 y	1.53	39:20	1.000	48.511	*	2.5	*							
	OCDF	1.48e+07	0.91 y	1.10	42:20	1.000	98.037	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	2.00e+07	0.79 y	1.07	27:01	1.022	93.556					93.6					
IS	13C-1,2,3,7,8-PeCDD	1.76e+07	0.64 y	1.24	31:33	1.193	71.549					71.5					
IS	13C-1,2,3,4,7,8-HxCDD	1.33e+07	1.26 y	0.72	34:53	1.014	97.223					97.2					
IS	13C-1,2,3,6,7,8-HxCDD	1.38e+07	1.23 y	0.74	35:00	1.017	99.332					99.3					
IS	13C-1,2,3,7,8,9-HxCDD	1.63e+07	1.24 y	0.86	35:18	1.026	100.65					101					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.20e+07	1.05 y	0.64	38:46	1.127	98.283					98.3					
IS	13C-OCDD	2.49e+07	0.87 y	0.78	42:05	1.223	168.09					84.0					
IS	13C-2,3,7,8-TCDF	2.87e+07	0.78 y	0.92	26:14	0.992	100.29					100					
IS	13C-1,2,3,7,8-PeCDF	2.32e+07	1.62 y	0.95	30:22	1.148	78.935					78.9					
IS	13C-2,3,4,7,8-PeCDF	2.32e+07	1.57 y	0.97	31:17	1.183	77.209					77.2					
IS	13C-1,2,3,4,7,8-HxCDF	1.66e+07	0.51 y	0.99	33:59	0.988	88.520					88.5					
IS	13C-1,2,3,6,7,8-HxCDF	1.92e+07	0.52 y	1.10	34:07	0.992	92.287					92.3					
IS	13C-2,3,4,6,7,8-HxCDF	1.83e+07	0.51 y	1.03	34:43	1.009	93.619					93.6					
IS	13C-1,2,3,7,8,9-HxCDF	1.55e+07	0.52 y	0.86	35:42	1.037	95.100					95.1					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.32e+07	0.44 y	0.71	37:32	1.091	97.634					97.6					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.23e+07	0.44 y	0.71	39:19	1.143	91.928					91.9					
IS	13C-OCDF	2.75e+07	0.90 y	0.87	42:19	1.230	166.00					83.0					
C/Up	37Cl-2,3,7,8-TCDD	2.37e+06		1.21	27:02	1.022	9.8276					24.6	Integrations by Analyst: <u>MJ</u>	Reviewed by Analyst: <u>[Signature]</u>			
RS/RT	13C-1,2,3,4-TCDD	1.99e+07	0.80 y	1.00	26:27	*	100.00										
RS	13C-1,2,3,4-TCDF	3.10e+07	0.76 y	1.00	24:59	*	100.00										
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.89e+07	0.52 y	1.00	34:24	*	100.00						Date: <u>10/27/14</u>	Date: <u>10/27/14</u>			

Vista Analytical Laboratory - Injection Log Run file: 141027D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141027D1	1	ST141027D1-1	MAS	27-OCT-14	14:31:19	ST141027D1-1	ST141027D1-2
141027D1	2	B4J0130-BS1	MAS	27-OCT-14	15:19:49	ST141027D1-1	NA
141027D1	3	B4J0127-BS1	MAS	27-OCT-14	16:08:20	ST141027D1-1	NA
141027D1	4	B4J0128-BS1	MAS	27-OCT-14	16:56:49	ST141027D1-1	ST141027D1-2
141027D1	5	SOLVENT BLANK	MAS	27-OCT-14	17:45:20	NA	NA
141027D1	6	B4J0130-BLK1	MAS	27-OCT-14	18:33:50	ST141027D1-1	NA
141027D1	7	B4J0127-BLK1	MAS	27-OCT-14	19:22:20	ST141027D1-1	NA
141027D1	8	B4J0128-BLK1	MAS	27-OCT-14	20:10:51	ST141027D1-1	ST141027D1-2
141027D1	9	1400777-24	MAS	27-OCT-14	20:59:20	ST141027D1-1	NA
141027D1	10	1400760-01RE1	MAS	27-OCT-14	21:47:50	ST141027D1-1	NA
141027D1	11	1400761-01RE1	MAS	27-OCT-14	22:36:18	ST141027D1-1	NA
141027D1	12	1400712-01RE2	MAS	27-OCT-14	23:24:45	ST141027D1-1	ST141027D1-2
141027D1	13	1400762-03	MAS	28-OCT-14	00:13:15	ST141027D1-1	NA
141027D1	14	1400762-04	MAS	28-OCT-14	01:01:43	ST141027D1-1	NA
141027D1	15	1400762-05	MAS	28-OCT-14	01:50:12	ST141027D1-1	NA
141027D1	16	SOLVENT BLANK	MAS	28-OCT-14	02:38:45	NA	NA
141027D1	17	SOLVENT BLANK	MAS	28-OCT-14	03:27:15	NA	NA
141027D1	18	ST141027D1-2	MAS	28-OCT-14	04:15:46	ST141027D1-1	ST141027D1-2

CALIBRATION STANDARDS REVIEW CHECKLIST



Beg. Calibration ID: ST141027D1-1

End Calibration ID: ST141027D1-2

Ion abundance within QC limits?

Beg. End

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	-------------------------------------

Concentration within range?

Beg. End

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	-------------------------------------

First and last eluters present?

Beg. End

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	-------------------------------------

Retention Times within criteria?

Beg. End

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	-------------------------------------

Verification Std. named correctly?

(ST-Year-Month-Day-VG ID)

Beg. End

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	-------------------------------------

Forms signed and dated?

Beg. End

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	-------------------------------------

Correct ICAL referenced?

Beg. End

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	-------------------------------------

Run Log:

-Data file matches Conc Cal ID?

Beg. End

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	-------------------------------------

-Correct instrument listed?

Beg. End

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	-------------------------------------

-Samples within 12-hour clock?

Beg. End

y	n
----------	----------

Reviewed by: JK 10/28/14
Initials & Date

Mass resolution > 10,000?

- Method 1614 > 5,000; CARB 429 > 8,000

TCDD/TCDF valleys < 25%?

Peaks integrated correctly?

Manual integrations included?

8280 CS1 Ending Standard

-Ratios within limits

-S/N > 2.5:1

-CS1 within 12-hour clock

Comments:

* Ending standard criteria applicable to 8290 only.

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 rmh

FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory

CCAL ID: ST141028D1-4

Initial Calibration Date: 10-28-14

Instrument ID: VG-7 GC Column ID: DB-225

VER Data Filename: 141028D1 S#6 Analysis Date: 28-OCT-14 Time: 13:28:00

M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. CONC.	CONC. RANGE 1613 (ng/mL)	CONC. RANGE 8290 (ng/mL)
ANALYTES					
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	9.8 8.4 - 12.0 (3) 8.6 - 11.6 (4)	8.0 - 12.0
13C-2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	103.0 71.0 - 140.0 (3) 76.0 - 131.0 (4)	70.0 - 130.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6a, Method 1613, under VER.

(4) Contract required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: MJDate: 10/29/14

Client ID: 1613 CS3 14II1102
Lab ID: ST141028D1-4

Filename: 141028D1 S:6 Acq:28-OCT-14 13:28:00
GC Column ID: DB-225 ICal: 1613TCDFVG7-10-28-14 wt/vol: 1.000 ConCal: ST141028D1-4
EndCAL: ST141028D1-7

Page 1 of 1

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	3.61e+07	0.79	y	15:24	1.00	100.0
13C-2,3,7,8-TCDF	3.32e+07	0.77	y	17:42	0.89	103.0
2,3,7,8-TCDF	3.00e+06	0.76	y	17:43	0.92	9.830

Integrations
by
Analyst: M

Date: 10/29/14

Reviewed
by
Analyst: JH

Date: 10/29/14

Vista Analytical Laboratory - Injection Log Run file: 141028D1

Instrument ID: VG-7 GC Column ID: DB-225

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141028D1	1	CP141028D1-1	MAS	28-OCT-14	10:47:37	ST141028D1-4	NA
141028D1	2	SOLVENT BLANK	MAS	28-OCT-14	11:19:38	NA	NA
141028D1	3	ST141028D1-1	MAS	28-OCT-14	11:51:43	ST141028D1-4	NA
141028D1	4	ST141028D1-2	MAS	28-OCT-14	12:23:49	ST141028D1-4	NA
141028D1	5	ST141028D1-3	MAS	28-OCT-14	12:55:55	ST141028D1-4	NA
141028D1	6	ST141028D1-4	MAS	28-OCT-14	13:28:00	ST141028D1-4	ST141028D1-7
141028D1	7	ST141028D1-5	MAS	28-OCT-14	14:00:05	ST141028D1-4	NA
141028D1	8	ST141028D1-6	MAS	28-OCT-14	14:32:11	ST141028D1-4	NA
141028D1	9	SOLVENT BLANK	MAS	28-OCT-14	15:04:18	NA	NA
141028D1	10	SOLVENT BLANK	MAS	28-OCT-14	15:36:25	NA	NA
141028D1	11	SS141028D1-1	MAS	28-OCT-14	16:08:31	ST141028D1-4	NA
141028D1	12	SOLVENT BLANK	MAS	28-OCT-14	16:40:40	NA	NA
141028D1	13	1400757-03RE1	MAS	28-OCT-14	17:12:41	ST141028D1-4	NA
141028D1	14	1400762-03RE1	MAS	28-OCT-14	17:44:46	ST141028D1-4	NA
141028D1	15	1400762-04RE1	MAS	28-OCT-14	18:16:50	ST141028D1-4	NA
141028D1	16	1400762-05RE1	MAS	28-OCT-14	18:48:55	ST141028D1-4	NA
141028D1	17	1400763-01RE1	MAS	28-OCT-14	19:20:59	ST141028D1-4	NA
141028D1	18	1400763-02RE1	MAS	28-OCT-14	19:53:07	ST141028D1-4	NA
141028D1	19	1400763-03RE1	MAS	28-OCT-14	20:25:15	ST141028D1-4	NA
141028D1	20	1400752-01RE1	MAS	28-OCT-14	20:57:24	ST141028D1-4	ST141028D1-7
141028D1	21	SOLVENT BLANK	MAS	28-OCT-14	21:29:31	NA	NA
141028D1	22	ST141028D1-7	MAS	28-OCT-14	22:01:36	ST141028D1-4	ST141028D1-7



CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST14102801-4

End Calibration ID: ST14102801-7

	<u>Beg.</u>	<u>End</u>		<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Mass resolution > 10,000?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concentration within range?	<input type="checkbox"/>	<input type="checkbox"/>	■ Method 1614 > 5,000; CARB 429 > 8,000	<input type="checkbox"/>	<input type="checkbox"/>
First and last eluters present?	<input type="checkbox"/>	<input type="checkbox"/>	TCDD/TCDF valleys < 25%?	<input type="checkbox"/>	<input type="checkbox"/>
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Peaks integrated correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input type="checkbox"/>	<input type="checkbox"/>	Manual integrations included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forms signed and dated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8280 CS1 Ending Standard	<input type="checkbox"/>	<input type="checkbox"/>
Correct ICAL referenced?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-Ratios within limits	<input type="checkbox"/>	<input type="checkbox"/>
Run Log:			-S/N > 2.5:1	<input type="checkbox"/>	<input type="checkbox"/>
-Data file matches Conc Cal ID?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-CS1 within 12-hour clock	<input type="checkbox"/>	<input type="checkbox"/>
-Correct instrument listed?	<input type="checkbox"/>	<input type="checkbox"/>			
-Samples within 12-hour clock?	<input type="checkbox"/>	<input type="checkbox"/>			
	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
	<input type="checkbox"/>	<input type="checkbox"/>			
	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

Reviewed by: MZ 10/19/14
Initials & Date

Comments:

* Ending standard criteria applicable to 8290 only.

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 rmh

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 10 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST141021E2-1

Instrument ID: VG-8

Initial Calibration Date: 6-20-14

ICal ID: PCBVG8-6-20-14

GC Column ID: ZB-1

VER Data Filename: 141021E2 S#1 Analysis Date: 21-OCT-14 Time: 20:12:38

ANALYTES	ION	QC	CONC.				ION	QC	CONC.			
	ABUND.	LIMITS	CONC.	RANGE		ANALYTES	ABUND.	LIMITS	CONC.	RANGE		
	RATIO	PASS		FOUND	(ng/mL)		RATIO	PASS		FOUND	(ng/mL)	
PCB-1	2.94	2.66-3.60	y	42.5	37.5-62.5	PCB-52/69	0.74	0.65-0.89	y	96.1	75.0-125	
PCB-2	2.99	2.66-3.60	y	43.7	37.5-62.5	PCB-73	0.76	0.65-0.89	y	51.6	37.5-62.5	
PCB-3	2.95	2.66-3.60	y	43.0	37.5-62.5	PCB-43/49	0.76	0.65-0.89	y	96.5	75.0-125	
PCB-4/10	1.62	1.33-1.79	y	201.9	150-250	PCB-47	0.74	0.65-0.89	y	47.2	37.5-62.5	
PCB-7/9	1.62	1.33-1.79	y	198.0	150-250	PCB-48/75	0.76	0.65-0.89	y	99.5	75.0-125	
PCB-6	1.62	1.33-1.79	y	94.9	75.0-125	PCB-65	0.75	0.65-0.89	y	47.3	37.5-62.5	
PCB-5/8	1.61	1.33-1.79	y	199.6	150-250	PCB-62	0.76	0.65-0.89	y	47.1	37.5-62.5	
PCB-14	1.62	1.33-1.79	y	99.0	75.0-125	PCB-44	0.74	0.65-0.89	y	46.2	37.5-62.5	
PCB-11	1.63	1.33-1.79	y	99.3	75.0-125	PCB-42/59	0.75	0.65-0.89	y	94.0	75.0-125	
PCB-12/13	1.60	1.33-1.79	y	200.5	150-250	PCB-41/64/71/72	0.76	0.65-0.89	y	193.3	150-250	
PCB-15	1.60	1.33-1.79	y	97.3	75.0-125	PCB-68	0.76	0.65-0.89	y	49.9	37.5-62.5	
PCB-19	1.06	0.88-1.20	y	48.3	37.5-62.5	PCB-40	0.75	0.65-0.89	y	47.7	37.5-62.5	
PCB-30	1.05	0.88-1.20	y	51.3	37.5-62.5	PCB-57	0.76	0.65-0.89	y	50.8	37.5-62.5	
PCB-18	1.04	0.88-1.20	y	48.4	37.5-62.5	PCB-67	0.74	0.65-0.89	y	48.7	37.5-62.5	
PCB-17	1.05	0.88-1.20	y	48.9	37.5-62.5	PCB-58	0.76	0.65-0.89	y	46.2	37.5-62.5	
PCB-24/27	1.05	0.88-1.20	y	100.5	75.0-125	PCB-63	0.75	0.65-0.89	y	48.2	37.5-62.5	
PCB-16/32	1.05	0.88-1.20	y	97.1	75.0-125	PCB-74	0.75	0.65-0.89	y	47.8	37.5-62.5	
PCB-34	1.04	0.88-1.20	y	48.4	37.5-62.5	PCB-61/70	0.75	0.65-0.89	y	96.6	75.0-125	
PCB-23	1.04	0.88-1.20	y	47.1	37.5-62.5	PCB-76/66	0.76	0.65-0.89	y	98.2	75.0-125	
PCB-29	1.04	0.88-1.20	y	47.2	37.5-62.5	PCB-80	0.76	0.65-0.89	y	47.9	37.5-62.5	
PCB-26	1.04	0.88-1.20	y	47.4	37.5-62.5	PCB-55	0.76	0.65-0.89	y	49.2	37.5-62.5	
PCB-25	1.05	0.88-1.20	y	48.1	37.5-62.5	PCB-56/60	0.75	0.65-0.89	y	94.8	75.0-125	
PCB-31	1.01	0.88-1.20	y	43.8	37.5-62.5	PCB-79	0.76	0.65-0.89	y	48.8	37.5-62.5	
PCB-28	1.05	0.88-1.20	y	47.5	37.5-62.5	PCB-78	0.75	0.65-0.89	y	48.9	37.5-62.5	
PCB-20/21/33	1.03	0.88-1.20	y	133.7	112.5-225	PCB-81	0.76	0.65-0.89	y	48.4	37.5-62.5	
PCB-22	1.04	0.88-1.20	y	46.9	37.5-62.5	PCB-77	0.76	0.65-0.89	y	47.9	37.5-62.5	
PCB-36	1.04	0.88-1.20	y	48.4	37.5-62.5	PCB-104	1.56	1.32-1.78	y	48.1	37.5-62.5	
PCB-39	1.03	0.88-1.20	y	46.0	37.5-62.5	PCB-96	1.58	1.32-1.78	y	50.0	37.5-62.5	
PCB-38	1.04	0.88-1.20	y	48.5	37.5-62.5	PCB-103	1.58	1.32-1.78	y	52.5	37.5-62.5	
PCB-35	1.03	0.88-1.20	y	45.5	37.5-62.5	PCB-100	1.57	1.32-1.78	y	50.0	37.5-62.5	
PCB-37	1.02	0.88-1.20	y	46.8	37.5-62.5	PCB-94	1.56	1.32-1.78	y	49.6	37.5-62.5	
PCB-54	0.75	0.65-0.89	y	48.9	37.5-62.5	PCB-95/98/102	1.56	1.32-1.78	y	151.3	112.5-225	Analyst: <u>DMS</u>
PCB-50	0.76	0.65-0.89	y	46.7	37.5-62.5	PCB-93	1.59	1.32-1.78	y	48.2	37.5-62.5	
PCB-53	0.75	0.65-0.89	y	46.7	37.5-62.5	PCB-88/91	1.54	1.32-1.78	y	107.8	75.0-125	
PCB-51	0.75	0.65-0.89	y	48.6	37.5-62.5	PCB-121	1.63	1.32-1.78	y	47.4	37.5-62.5	Date: <u>10/22/14</u>
PCB-45	0.76	0.65-0.89	y	48.8	37.5-62.5							
PCB-46	0.76	0.65-0.89	y	44.3	37.5-62.5							

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 10 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST141021E2-1

Instrument ID: VG-8

Initial Calibration Date: 6-20-14

ICal ID: PCBVG8-6-20-14

GC Column ID: ZB-1

VER Data Filename: 141021E2 S#1 Analysis Date: 21-OCT-14 Time: 20:12:38

ANALYTES	ION	QC	CONC.			ANALYTES	ION	QC	CONC.		
	ABUND.	LIMITS	CONC.	RANGE	ABUND.	LIMITS	CONC.	RANGE	ABUND.	LIMITS	CONC.
	RATIO	PASS	FOUND	(ng/mL)	RATIO	PASS	FOUND	(ng/mL)	RATIO	PASS	FOUND
PCB-84/92	1.58	1.32-1.78	y	100.6	75.0-125	PCB-140	1.27	1.05-1.43	y	50.9	37.5-62.5
PCB-89	1.54	1.32-1.78	y	48.0	37.5-62.5	PCB-134/143	1.23	1.05-1.43	y	101.8	75.0-125
PCB-90/101	1.57	1.32-1.78	y	97.2	75.0-125	PCB-133/142	1.22	1.05-1.43	y	97.9	75.0-125
PCB-113	1.58	1.32-1.78	y	53.5	37.5-62.5	PCB-131	1.21	1.05-1.43	y	49.2	37.5-62.5
PCB-99	1.58	1.32-1.78	y	48.6	37.5-62.5	PCB-146/165	1.22	1.05-1.43	y	102.7	75.0-125
PCB-119	1.57	1.32-1.78	y	51.3	37.5-62.5	PCB-132/161	1.23	1.05-1.43	y	99.2	75.0-125
PCB-108/112	1.57	1.32-1.78	y	100.9	75.0-125	PCB-153	1.22	1.05-1.43	y	53.0	37.5-62.5
PCB-83	1.57	1.32-1.78	y	52.3	37.5-62.5	PCB-168	1.23	1.05-1.43	y	50.3	37.5-62.5
PCB-97	1.55	1.32-1.78	y	49.6	37.5-62.5	PCB-141	1.24	1.05-1.43	y	52.1	37.5-62.5
PCB-86	1.56	1.32-1.78	y	49.2	37.5-62.5	PCB-137	1.24	1.05-1.43	y	50.6	37.5-62.5
PCB-87/117/125	1.57	1.32-1.78	y	151.1	112.5-225	PCB-130	1.23	1.05-1.43	y	56.9	37.5-62.5
PCB-111/115	1.56	1.32-1.78	y	97.4	75.0-125	PCB-138/163/164	1.24	1.05-1.43	y	159.3	112.5-225
PCB-85/116	1.57	1.32-1.78	y	104.8	75.0-125	PCB-158/160	1.24	1.05-1.43	y	106.0	75.0-125
PCB-120	1.58	1.32-1.78	y	50.4	37.5-62.5	PCB-129	1.24	1.05-1.43	y	50.2	37.5-62.5
PCB-110	1.57	1.32-1.78	y	49.8	37.5-62.5	PCB-166	1.25	1.05-1.43	y	51.9	37.5-62.5
PCB-82	1.58	1.32-1.78	y	48.0	37.5-62.5	PCB-159	1.22	1.05-1.43	y	52.1	37.5-62.5
PCB-124	1.56	1.32-1.78	y	50.4	37.5-62.5	PCB-128/162	1.23	1.05-1.43	y	104.9	75.0-125
PCB-107/109	1.58	1.32-1.78	y	100.1	75.0-125	PCB-167	1.21	1.05-1.43	y	52.2	37.5-62.5
PCB-123	1.56	1.32-1.78	y	50.7	37.5-62.5	PCB-156	1.24	1.05-1.43	y	51.9	37.5-62.5
PCB-106/118	1.58	1.32-1.78	y	98.2	75.0-125	PCB-157	1.25	1.05-1.43	y	52.5	37.5-62.5
PCB-114	1.62	1.32-1.78	y	52.2	37.5-62.5	PCB-169	1.25	1.05-1.43	y	52.5	37.5-62.5
PCB-122	1.63	1.32-1.78	y	50.1	37.5-62.5	PCB-188	1.05	0.89-1.21	y	51.6	37.5-62.5
PCB-105	1.61	1.32-1.78	y	52.5	37.5-62.5	PCB-184	1.05	0.89-1.21	y	51.6	37.5-62.5
PCB-127	1.65	1.32-1.78	y	51.1	37.5-62.5	PCB-179	1.05	0.89-1.21	y	51.3	37.5-62.5
PCB-126	1.64	1.32-1.78	y	51.4	37.5-62.5	PCB-176	1.07	0.89-1.21	y	51.2	37.5-62.5
PCB-155	1.27	1.05-1.43	y	54.0	37.5-62.5	PCB-186	1.06	0.89-1.21	y	51.5	37.5-62.5
PCB-150	1.27	1.05-1.43	y	53.2	37.5-62.5	PCB-178	1.06	0.89-1.21	y	52.6	37.5-62.5
PCB-152	1.26	1.05-1.43	y	52.0	37.5-62.5	PCB-175	1.06	0.89-1.21	y	53.4	37.5-62.5
PCB-145	1.27	1.05-1.43	y	51.3	37.5-62.5	PCB-182/187	1.06	0.89-1.21	y	108.4	75.0-125
PCB-136	1.26	1.05-1.43	y	54.5	37.5-62.5	PCB-183	1.06	0.89-1.21	y	50.3	37.5-62.5
PCB-148	1.28	1.05-1.43	y	49.3	37.5-62.5	PCB-185	1.06	0.89-1.21	y	51.4	37.5-62.5
PCB-154	1.25	1.05-1.43	y	52.8	37.5-62.5	PCB-174	1.05	0.89-1.21	y	48.1	37.5-62.5
PCB-151	1.28	1.05-1.43	y	50.2	37.5-62.5	PCB-181	1.05	0.89-1.21	y	55.7	37.5-62.5
PCB-135	1.25	1.05-1.43	y	48.7	37.5-62.5	PCB-177	1.06	0.89-1.21	y	51.6	37.5-62.5
PCB-144	1.35	1.05-1.43	y	52.6	37.5-62.5	PCB-171	1.04	0.89-1.21	y	51.3	37.5-62.5
PCB-147	1.21	1.05-1.43	y	49.9	37.5-62.5	PCB-173	1.06	0.89-1.21	y	50.8	37.5-62.5
PCB-139/149	1.26	1.05-1.43	y	104.0	75.0-125	PCB-172	1.06	0.89-1.21	y	51.5	37.5-62.5

Analyst: DmsDate: 10/22/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 10 of

Lab Name: Vista Analytical Laboratory Lab ID: ST141021E2-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141021E2 S#1 Analysis Date: 21-OCT-14 Time: 20:12:38

ANALYTES	ION	QC	CONC.		
	ABUND.	LIMITS	CONC.	RANGE	(ng/mL)
	RATIO	PASS	FOUND		
PCB-192	1.06	0.89-1.21	y	54.4	37.5-62.5
PCB-180	1.05	0.89-1.21	y	50.6	37.5-62.5
PCB-193	1.05	0.89-1.21	y	52.6	37.5-62.5
PCB-191	1.05	0.89-1.21	y	55.8	37.5-62.5
PCB-170	1.05	0.89-1.21	y	51.7	37.5-62.5
PCB-190	1.06	0.89-1.21	y	54.2	37.5-62.5
PCB-189	1.06	0.89-1.21	y	53.6	37.5-62.5
PCB-202	0.91	0.76-1.02	y	49.4	37.5-62.5
PCB-201	0.91	0.76-1.02	y	49.2	37.5-62.5
PCB-204	0.91	0.76-1.02	y	51.2	37.5-62.5
PCB-197	0.90	0.76-1.02	y	49.9	37.5-62.5
PCB-200	0.91	0.76-1.02	y	51.6	37.5-62.5
PCB-198	0.89	0.76-1.02	y	45.6	37.5-62.5
PCB-199	0.90	0.76-1.02	y	53.4	37.5-62.5
PCB-196/203	0.90	0.76-1.02	y	101.0	75.0-125
PCB-195	0.91	0.76-1.02	y	54.6	37.5-62.5
PCB-194	0.86	0.76-1.02	y	49.6	37.5-62.5
PCB-205	0.89	0.76-1.02	y	50.6	37.5-62.5
PCB-208	1.32	1.14-1.54	y	49.4	37.5-62.5
PCB-207	1.32	1.14-1.54	y	50.7	37.5-62.5
PCB-206	1.33	1.14-1.54	y	50.1	37.5-62.5
PCB-209	1.16	0.99-1.33	y	51.2	37.5-62.5

Analyst: DMSDate: 10/22/14

LABELED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory

Lab ID: ST141021E2-1

Instrument ID: VG-8

Initial Calibration Date: 6-20-14

ICal ID: PCBVG8-6-20-14

GC Column ID: ZB-1

VER Data Filename: 141021E2 S#1 Analysis Date: 21-OCT-14 Time: 20:12:38

LABELED IS	ION				CONC.		ION				CONC.	
	ABUND.	QC	CONC.	RANGE	LABELD IS	ABUND.	QC	CONC.	RANGE			
	RATIO	LIMITS	PASS	FOUND	(ng/mL)		RATIO	LIMITS	PASS	FOUND	(ng/mL)	
13C-PCB-1	3.15	2.66-3.60	Y	135.3	50.0-145	13C-PCB-169	1.28	1.05-1.43	Y	99.7	50 - 145	
13C-PCB-3	3.20	2.66-3.60	Y	132.8	50.0-145	13C-PCB-188	0.46	0.38-0.52	Y	100.4	50 - 145	
13C-PCB-4	1.57	1.33-1.79	Y	97.7	50.0-145	13C-PCB-180	0.46	0.38-0.52	Y	101.0	50 - 145	
13C-PCB-9	1.56	1.33-1.79	Y	100.8	50.0-145	13C-PCB-170	0.46	0.38-0.52	Y	100.1	50 - 145	
13C-PCB-11	1.55	1.33-1.79	Y	100.5	50.0-145	13C-PCB-189	0.46	0.38-0.52	Y	103.9	50 - 145	
13C-PCB-19	1.07	0.88-1.20	Y	115.3	50.0-145	13C-PCB-202	0.92	0.76-1.02	Y	103.8	50 - 145	
13C-PCB-32	1.07	0.88-1.20	Y	117.0	50.0-145	13C-PCB-194	0.91	0.76-1.02	Y	100.4	50 - 145	
13C-PCB-28	1.04	0.88-1.20	Y	99.3	50.0-145	13C-PCB-208	0.78	0.65-0.89	Y	103.1	50 - 145	
13C-PCB-37	1.06	0.88-1.20	Y	99.3	50.0-145	13C-PCB-206	0.79	0.65-0.89	Y	98.0	50 - 145	
13C-PCB-54	0.79	0.65-0.89	Y	94.7	50.0-145	13C-PCB-209	1.19	0.99-1.33	Y	107.1	50 - 145	
13C-PCB-52	0.80	0.65-0.89	Y	93.5	50.0-145							
13C-PCB-47	0.79	0.65-0.89	Y	94.3	50.0-145							
13C-PCB-70	0.79	0.65-0.89	Y	96.7	50.0-145							
13C-PCB-80	0.79	0.65-0.89	Y	99.2	50.0-145							
13C-PCB-81	0.80	0.65-0.89	Y	100.7	50.0-145							
13C-PCB-77	0.79	0.65-0.89	Y	100.1	50.0-145							
13C-PCB-104	1.61	1.32-1.78	Y	93.0	50.0-145							
13C-PCB-95	1.61	1.32-1.78	Y	93.4	50.0-145							
13C-PCB-101	1.65	1.32-1.78	Y	93.4	50.0-145	CRS vs. RS						
13C-PCB-97	1.63	1.32-1.78	Y	97.0	50.0-145							
13C-PCB-123	1.64	1.32-1.78	Y	95.9	50.0-145	13C-PCB-79	0.79	0.65-0.89	Y	100.0	75 - 125	
13C-PCB-118	1.62	1.32-1.78	Y	98.4	50.0-145	13C-PCB-178	0.46	0.38-0.52	Y	102.1	75 - 125	
13C-PCB-114	1.58	1.32-1.78	Y	95.0	50.0-145							
13C-PCB-105	1.58	1.32-1.78	Y	93.8	50.0-145							
13C-PCB-127	1.56	1.32-1.78	Y	94.5	50.0-145							
13C-PCB-126	1.56	1.32-1.78	Y	97.4	50.0-145							
13C-PCB-155	1.28	1.05-1.43	Y	93.4	50.0-145							
13C-PCB-153	1.29	1.05-1.43	Y	97.4	50.0-145							
13C-PCB-141	1.29	1.05-1.43	Y	95.7	50.0-145							
13C-PCB-138	1.26	1.05-1.43	Y	98.6	50.0-145							
13C-PCB-159	1.29	1.05-1.43	Y	101.6	50.0-145							
13C-PCB-167	1.27	1.05-1.43	Y	101.2	50.0-145							
13C-PCB-156	1.28	1.05-1.43	Y	100.9	50.0-145							
13C-PCB-157	1.27	1.05-1.43	Y	98.8	50.0-145							

Analyst: DMSDate: 10/22/14

Client ID: PCB CS3 14I1807
 Lab ID: ST141021E2-1

Filename: 141021E2 S:1 Acq:21-OCT-14 20:12:38 ConCal: ST141021E2-1
 GC Column ID: ZB-1 ICal: PCVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	3.31e+08	2.94	y	1.25	16:28	1.001	0.996-1.006	42.4607
PCB-2	3.28e+08	2.99	y	1.18	18:45	0.989	0.983-0.993	43.6640
PCB-3	3.33e+08	2.95	y	1.22	18:59	1.001	0.996-1.006	43.0096
PCB-4/10	8.66e+08	1.62	y	1.55	20:19	1.003	0.998-1.008	201.884
PCB-7/9	1.08e+09	1.62	y	1.27	22:01	0.871	0.865-0.873	198.045
PCB-6	5.14e+08	1.62	y	1.26	22:40	0.896	0.890-0.899	94.9039
PCB-5/8	1.06e+09	1.61	y	1.23	23:04	0.912	0.906-0.916	199.609
PCB-14	5.93e+08	1.62	y	1.23	24:08	0.954	0.949-0.959	99.0186
PCB-11	5.60e+08	1.63	y	1.16	25:18	1.001	0.996-1.006	99.3230
PCB-12/13	1.07e+09	1.60	y	1.10	25:42	1.016	1.010-1.020	200.508
PCB-15	5.72e+08	1.60	y	1.21	26:00	1.028	1.024-1.034	97.3232
PCB-19	1.98e+08	1.06	y	1.30	24:20	1.001	0.996-1.006	48.2974
PCB-30	2.98e+08	1.05	y	1.83	25:11	1.036	1.032-1.042	51.3436
PCB-18	2.04e+08	1.04	y	0.86	25:55	0.954	0.949-0.959	48.3895
PCB-17	2.16e+08	1.05	y	0.90	26:06	0.961	0.955-0.965	48.8558
PCB-24/27	5.81e+08	1.05	y	1.18	26:40	0.982	0.976-0.986	100.501
- PCB-16/32	4.92e+08	1.05	y	1.03	27:10	1.000	0.995-1.005	97.1358
PCB-34	2.48e+08	1.04	y	1.26	27:56	0.960	0.956-0.966	48.3664
PCB-23	2.51e+08	1.04	y	1.31	28:02	0.964	0.959-0.969	47.0895
PCB-29	2.55e+08	1.04	y	1.33	28:17	0.972	0.967-0.977	47.2233
PCB-26	2.48e+08	1.04	y	1.29	28:23	0.979	0.974-0.984	47.3626
PCB-25	2.62e+08	1.05	y	1.34	28:38	0.984	0.980-0.990	48.0637
PCB-31	2.52e+08	1.01	y	1.42	29:00	0.997	0.992-1.002	43.7588
PCB-28	2.66e+08	1.05	y	1.38	29:07	1.001	0.996-1.006	47.5185
PCB-20/21/33	7.12e+08	1.03	y	1.31	29:43	1.022	1.017-1.027	133.742
PCB-22	2.52e+08	1.04	y	1.32	30:09	1.036	1.032-1.042	46.9323
PCB-36	2.53e+08	1.04	y	1.38	30:44	0.933	0.929-0.939	48.3897
PCB-39	2.48e+08	1.03	y	1.42	31:13	0.948	0.943-0.953	46.0284
PCB-38	2.49e+08	1.04	y	1.35	32:01	0.972	0.967-0.976	48.4606
PCB-35	2.38e+08	1.03	y	1.38	32:31	0.987	0.982-0.992	45.5127
PCB-37	2.48e+08	1.02	y	1.39	32:57	1.000	0.996-1.006	46.8426
PCB-54	2.18e+08	0.75	y	1.20	28:02	1.001	0.996-1.006	48.8608
PCB-50	1.69e+08	0.76	y	0.97	29:10	1.041	1.037-1.047	46.7477
PCB-53	1.70e+08	0.75	y	1.19	29:48	0.947	0.941-0.951	46.6705
PCB-51	1.72e+08	0.75	y	1.15	30:08	0.957	0.952-0.962	48.6145
PCB-45	1.45e+08	0.76	y	0.97	30:34	0.971	0.966-0.976	48.8222
PCB-46	1.29e+08	0.76	y	0.95	31:04	0.987	0.982-0.992	44.2677

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	3.77e+08	0.74	y	1.28	31:31	1.001	0.996-1.006	96.0882
PCB-73	2.18e+08	0.76	y	1.37	31:38	1.005	1.000-1.010	51.6348
PCB-43/49	3.30e+08	0.76	y	1.11	31:48	1.010	1.005-1.015	96.4755
PCB-47	1.74e+08	0.74	y	1.13	31:60	1.001	0.996-1.006	47.1872
PCB-48/75	4.22e+08	0.76	y	1.30	32:06	1.004	0.999-1.009	99.4967
PCB-65	2.05e+08	0.75	y	1.33	32:23	1.013	1.007-1.017	47.2892
PCB-62	1.98e+08	0.76	y	1.29	32:30	1.016	1.011-1.021	47.0768
PCB-44	1.41e+08	0.74	y	0.94	32:48	1.026	1.020-1.030	46.2236
PCB-42/59	3.72e+08	0.75	y	1.22	33:01	1.033	1.028-1.038	94.0443
PCB-41/64/71/72	8.25e+08	0.76	y	1.31	33:36	1.051	1.046-1.056	193.314
PCB-68	2.41e+08	0.76	y	1.49	33:51	1.058	1.054-1.064	49.9301
PCB-40	1.27e+08	0.75	y	0.82	34:05	1.066	1.061-1.071	47.7463
PCB-57	2.40e+08	0.76	y	1.11	34:26	0.970	0.965-0.975	50.7989
PCB-67	2.21e+08	0.74	y	1.07	34:44	0.979	0.974-0.984	48.6663
PCB-58	2.16e+08	0.76	y	1.10	34:51	0.982	0.977-0.987	46.2291
PCB-63	2.28e+08	0.75	y	1.12	35:00	0.987	0.982-0.992	48.1602
PCB-74	2.43e+08	0.75	y	1.20	35:17	0.995	0.990-1.000	47.7662
PCB-61/70	4.42e+08	0.75	y	1.08	35:28	1.000	0.994-1.004	96.6167
PCB-76/66	4.73e+08	0.76	y	1.14	35:41	1.006	1.001-1.011	98.2215
PCB-80	2.71e+08	0.76	y	1.28	35:54	1.001	0.996-1.006	47.9398
PCB-55	2.42e+08	0.76	y	1.11	36:15	1.010	1.005-1.015	49.2174
PCB-56/60	4.56e+08	0.75	y	1.09	36:45	1.024	1.018-1.028	94.7709
PCB-79	2.43e+08	0.76	y	1.12	37:48	1.053	1.048-1.058	48.8263
PCB-78	2.37e+08	0.75	y	1.24	38:30	0.987	0.982-0.992	48.8564
PCB-81	2.62e+08	0.76	y	1.38	39:02	1.000	0.995-1.005	48.3858
PCB-77	2.40e+08	0.76	y	1.21	39:37	1.000	0.995-1.005	47.9399
PCB-104	1.70e+08	1.56	y	1.26	32:39	1.001	0.996-1.006	48.0706
PCB-96	1.54e+08	1.58	y	1.09	33:55	1.039	1.034-1.044	50.0305
PCB-103	1.38e+08	1.58	y	0.93	34:26	1.055	1.050-1.060	52.5487
PCB-100	1.41e+08	1.57	y	1.00	34:48	1.066	1.061-1.071	50.0250
PCB-94	1.16e+08	1.56	y	1.11	35:16	0.986	0.981-0.991	49.5983
PCB-95/98/102	3.89e+08	1.56	y	1.21	35:44	0.999	0.994-1.004	151.261
PCB-93	1.15e+08	1.59	y	1.13	35:53	1.003	0.998-1.008	48.2150
PCB-88/91	2.33e+08	1.54	y	1.02	36:11	1.011	1.006-1.016	107.846
PCB-121	1.91e+08	1.63	y	1.90	36:16	1.014	1.009-1.019	47.4225
PCB-84/92	2.37e+08	1.58	y	1.05	37:06	0.990	0.986-0.996	100.570
PCB-89	1.09e+08	1.54	y	1.02	37:18	0.996	0.991-1.001	48.0250

Integrations

by
 Analyst: DMS

Date: 10/22/14

Reviewed

by
 Analyst: CG

Date: 10/22/14

Client ID: PCB CS3 14I1807
 Lab ID: ST141021E2-1

Filename: 141021E2 S:1 Acq:21-OCT-14 20:12:38 ConCal: ST141021E2-1
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-90/101	2.59e+08	1.57	y	1.19	37:28	1.000	0.996-1.006	97.1691
PCB-113	1.62e+08	1.58	y	1.35	37:43	1.007	1.002-1.012	53.4601
PCB-99	1.40e+08	1.58	y	1.29	37:48	1.009	1.005-1.015	48.6401
PCB-119	1.80e+08	1.57	y	1.72	38:16	0.987	0.982-0.992	51.3380
PCB-108/112	2.65e+08	1.57	y	1.29	38:26	0.991	0.986-0.996	100.902
PCB-83	1.62e+08	1.57	y	1.52	38:35	0.995	0.991-1.001	52.2933
PCB-97	1.26e+08	1.55	y	1.25	38:47	1.000	0.996-1.006	49.6117
PCB-86	1.03e+08	1.56	y	1.02	38:55	1.004	1.000-1.010	49.2146
B-87/117/125	4.80e+08	1.57	y	1.56	39:03	1.007	1.002-1.012	151.150
PCB-111/115	3.48e+08	1.56	y	1.75	39:12	1.011	1.007-1.017	97.3616
PCB-85/116	2.78e+08	1.57	y	1.30	39:20	1.015	1.010-1.020	104.817
PCB-120	1.83e+08	1.58	y	1.78	39:34	1.021	1.016-1.026	50.4275
PCB-110	1.71e+08	1.57	y	1.68	39:43	1.024	1.020-1.030	49.7759
PCB-82	9.84e+07	1.58	y	0.74	40:22	0.977	0.972-0.982	48.0095
PCB-124	1.85e+08	1.56	y	1.32	41:01	0.992	0.988-0.998	50.4367
PCB-107/109	3.40e+08	1.58	y	1.22	41:11	0.997	0.991-1.001	100.133
PCB-123	1.71e+08	1.56	y	1.22	41:21	1.001	0.995-1.005	50.6683
- PCB-106/118	3.56e+08	1.58	y	1.22	41:33	1.001	0.996-1.006	98.1925
- PCB-114	1.95e+08	1.62	y	1.36	42:12	1.000	0.995-1.005	52.2108
PCB-122	1.71e+08	1.63	y	1.24	42:20	1.004	0.999-1.009	50.1086
PCB-105	1.88e+08	1.61	y	1.28	43:04	1.000	0.995-1.005	52.5430
PCB-127	1.78e+08	1.65	y	1.14	43:23	1.000	0.995-1.005	51.1329
PCB-126	1.80e+08	1.64	y	1.28	45:18	1.000	0.995-1.005	51.4461
PCB-155	1.45e+08	1.27	y	1.14	37:01	1.001	0.966-1.006	53.9789
PCB-150	1.34e+08	1.27	y	1.06	38:18	1.035	1.030-1.040	53.1600
PCB-152	1.35e+08	1.26	y	1.10	38:47	1.048	1.043-1.053	51.9798
PCB-145	1.33e+08	1.27	y	1.09	39:13	1.060	1.055-1.065	51.3004
PCB-136	1.40e+08	1.26	y	1.08	39:33	1.069	1.064-1.074	54.4642
PCB-148	8.66e+07	1.28	y	0.74	39:38	1.071	1.066-1.076	49.2965
PCB-154	1.11e+08	1.25	y	0.88	40:08	1.084	1.079-1.089	52.7737
PCB-151	9.63e+07	1.28	y	0.81	40:46	1.102	1.097-1.107	50.2444
PCB-135	8.99e+07	1.25	y	0.78	40:59	1.108	1.101-1.113	48.6668
PCB-144	1.02e+08	1.35	y	0.82	41:06	1.111	1.105-1.116	52.5762
PCB-147	9.81e+07	1.21	y	0.83	41:14	1.114	1.011-1.120	49.9281
PCB-139/149	2.08e+08	1.26	y	0.84	41:30	1.121	1.115-1.127	103.961
- PCB-140	9.48e+07	1.27	y	0.79	41:41	1.127	1.120-1.132	50.9391
- PCB-134/143	2.46e+08	1.23	y	0.93	42:07	0.975	0.970-0.980	101.771

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	2.41e+08	1.22	y	0.95	42:25	0.982	0.977-0.987	97.9216
PCB-131	1.17e+08	1.21	y	0.91	42:35	0.986	0.981-0.991	49.1727
PCB-146/165	3.09e+08	1.22	y	1.16	42:47	0.991	0.986-0.996	102.746
PCB-132/161	2.88e+08	1.23	y	1.11	43:03	0.997	0.992-1.002	99.1912
PCB-153	1.63e+08	1.22	y	1.18	43:12	1.000	0.995-1.005	53.0164
PCB-168	1.80e+08	1.23	y	1.37	43:25	1.005	1.000-1.010	50.3460
PCB-141	1.25e+08	1.24	y	0.97	43:57	1.000	0.996-1.005	52.1452
PCB-137	1.34e+08	1.24	y	1.07	44:20	1.009	1.004-1.014	50.6287
PCB-130	1.19e+08	1.23	y	0.85	44:26	1.011	1.007-1.017	56.8665
PCB-138/163/164	4.82e+08	1.24	y	1.23	44:49	1.001	0.996-1.006	159.275
PCB-158/160	3.38e+08	1.24	y	1.29	45:04	1.006	1.001-1.011	105.999
PCB-129	1.15e+08	1.24	y	0.92	45:18	1.012	1.007-1.017	50.1557
PCB-166	1.70e+08	1.25	y	1.12	45:46	0.993	0.988-0.998	51.9307
PCB-159	1.78e+08	1.22	y	1.16	46:06	1.001	0.995-1.005	52.1329
PCB-128/162	3.13e+08	1.23	y	1.02	46:23	1.007	1.002-1.012	104.875
PCB-167	1.78e+08	1.21	y	1.06	46:46	1.000	0.995-1.005	52.2020
PCB-156	1.85e+08	1.24	y	1.18	48:06	1.000	0.995-1.005	51.8554
PCB-157	1.77e+08	1.25	y	1.08	48:22	1.000	0.995-1.005	52.5369
PCB-169	1.69e+08	1.25	y	1.11	50:23	1.000	0.995-1.005	52.5054
PCB-188	1.64e+08	1.05	y	1.40	42:51	1.001	0.995-1.005	51.6471
PCB-184	1.44e+08	1.05	y	1.24	43:18	1.011	1.006-1.016	51.5854
PCB-179	1.51e+08	1.05	y	1.30	44:05	1.030	1.024-1.034	51.3421
PCB-176	1.57e+08	1.07	y	1.36	44:33	1.041	1.035-1.045	51.1744
PCB-186	1.48e+08	1.06	y	1.28	45:10	1.055	1.049-1.059	51.5006
PCB-178	1.11e+08	1.06	y	0.94	45:39	1.066	1.061-1.071	52.5769
PCB-175	1.17e+08	1.06	y	0.97	45:60	1.074	1.069-1.079	53.4330
PCB-182/187	2.48e+08	1.06	y	1.01	46:10	1.078	1.073-1.083	108.352
PCB-183	1.23e+08	1.06	y	1.08	46:30	1.086	1.080-1.090	50.2699
PCB-185	1.13e+08	1.06	y	1.34	47:10	0.956	0.951-0.961	51.4059
PCB-174	1.05e+08	1.05	y	1.34	47:31	0.963	0.958-0.968	48.1276
PCB-181	1.24e+08	1.05	y	1.36	47:38	0.966	0.961-0.971	55.6936
PCB-177	1.05e+08	1.06	y	1.24	47:48	0.969	0.964-0.974	51.6270
PCB-171	1.10e+08	1.04	y	1.31	48:06	0.975	0.970-0.980	51.2813
PCB-173	9.63e+07	1.06	y	1.16	48:32	0.984	0.979-0.989	50.7714
PCB-172	1.03e+08	1.06	y	1.22	48:59	0.993	0.988-0.998	51.5233
PCB-192	1.36e+08	1.06	y	1.53	49:09	0.996	0.991-1.001	54.3754
PCB-180	1.18e+08	1.05	y	1.43	49:21	1.000	0.995-1.005	50.6390

Integrations

by

RL: MONO, TRI - DECA: _____

Analyst: *DMS*

Date: *10/22/14*

Client ID: PCB CS3 14I1807
Lab ID: ST141021E2-1

Filename: 141021E2 S:1 Acq:21-OCT-14 20:12:38
GC Column ID: ZB-1 ICal: PCVG8-6-20-14 wt/vol: 1.0000 ConCal: ST141021E2-1
EndCAL: NA

Page 10 of

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-193	1.42e+08	1.05	y	1.65	49:32	1.004	0.999-1.009	52.6017
PCB-191	1.53e+08	1.05	y	1.67	49:46	1.009	1.004-1.014	55.7771
PCB-170	9.99e+07	1.05	y	1.50	50:44	1.000	0.995-1.005	51.7338
PCB-190	1.41e+08	1.06	y	2.02	50:54	1.003	0.998-1.008	54.1520
PCB-189	1.48e+08	1.06	y	1.54	52:10	1.000	0.995-1.005	53.6227
PCB-202	1.07e+08	0.91	y	1.04	48:18	1.000	0.995-1.005	49.4278
PCB-201	1.13e+08	0.91	y	1.10	48:47	1.010	1.006-1.016	49.2105
PCB-204	1.06e+08	0.91	y	0.99	48:57	1.014	1.009-1.019	51.2407
PCB-197	1.11e+08	0.90	y	1.07	49:14	1.020	1.015-1.025	49.9352
PCB-200	1.09e+08	0.91	y	1.02	50:03	1.036	1.032-1.044	51.5656
PCB-198	7.05e+07	0.89	y	0.74	51:17	1.062	1.058-1.068	45.6435
PCB-199	8.08e+07	0.90	y	0.73	51:23	1.064	1.060-1.070	53.4057
- PCB-196/203	1.62e+08	0.90	y	0.77	51:39	1.070	1.066-1.076	100.976
- PCB-195	9.45e+07	0.91	y	1.20	52:47	0.983	0.979-0.989	54.6449
PCB-194	8.91e+07	0.86	y	1.25	53:41	1.000	0.995-1.005	49.5738
PCB-205	1.03e+08	0.89	y	1.41	53:59	1.006	1.001-1.011	50.6102
PCB-208	9.76e+07	1.32	y	0.96	52:55	1.000	0.995-1.005	49.3726
PCB-207	9.55e+07	1.32	y	0.92	53:14	1.006	1.001-1.011	50.7399
PCB-206	5.89e+07	1.33	y	1.03	55:26	1.000	0.995-1.005	50.1278
PCB-209	7.01e+07	1.16	y	1.18	56:43	1.000	0.995-1.005	51.1935

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	9.92e+08	2.94	y	16:28	1.22
Total Di-PCB	6.33e+09	1.62	y	20:19	1.21
Total Tri-PCB	1.99e+09	1.06	y	24:20	1.16
Total Tri-PCB	4.04e+09	1.04	y	27:56	1.35
Total Tetra-PCB	8.73e+09	0.75	y	28:02	1.17
Total Penta-PCB	6.02e+09	1.56	y	32:39	1.21
Total Penta-PCB	9.78e+08	1.62	y	42:12	1.26
Total Hexa-PCB	1.57e+09	1.27	y	37:01	0.92
Total Hexa-PCB	4.29e+09	1.23	y	42:07	1.08
Total Hepta-PCB	3.09e+09	1.05	y	42:51	1.27
Total Octa-PCB	8.59e+08	0.91	y	48:18	0.92
Total Octa-PCB	2.87e+08	0.91	y	52:47	1.29
Total Nona-PCB	2.55e+08	1.32	y	52:55	0.96
Total Deca-PCB	7.01e+07	1.16	y	56:43	1.18

Total PCB Conc:11030.5253640

RL: MONO, TRI - DECA:

Integrations
by
Analyst: DMS

Date: 10/22/14

Client ID: PCB CS3 14I1807
 Lab ID: ST141021E2-1

Filename: 141021E2 S:1 Acq:21-OCT-14 20:12:38
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:1.0000
 ConCal: ST141021E2-1
 EndCAL: NA

Page 10 of

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS		Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	6.21e+08	3.15	y	0.89	16:27	0.633	0.622-0.628	*	135	135											
13C-PCB-3	6.35e+08	3.20	y	0.93	18:58	0.730	0.721-0.729	↓	133	133	13C-PCB-79	4.66e+08	0.79	y	1.01	37:47	1.029	1.023-1.033	100	100	
13C-PCB-4	2.76e+08	1.57	y	0.55	20:16	0.780	0.772-0.780		97.7	97.7	13C-PCB-178	1.55e+08	0.46	y	0.63	45:38	0.984	0.979-0.989	102	102	
13C-PCB-9	4.30e+08	1.56	y	0.83	21:59	0.846	0.840-0.848		101	101											
13C-PCB-11	4.86e+08	1.55	y	0.94	25:17	0.973	0.968-0.978		101	101	PS vs. IS										
13C-PCB-19	3.17e+08	1.07	y	0.53	24:18	0.935	0.929-0.939		115	115	13C-PCB-79	4.66e+08	0.79	y	1.20	37:47	0.968	0.963-0.973	99.3	99.3	
13C-PCB-28	4.06e+08	1.04	y	0.89	29:05	1.004	0.999-1.009		99.3	99.3	13C-PCB-178	1.55e+08	0.46	y	0.94	45:38	0.925	0.920-0.930	101	101	
13C-PCB-32	4.92e+08	1.07	y	0.81	27:10	1.045	1.041-1.051		117	117											
13C-PCB-37	3.80e+08	1.06	y	0.83	32:56	1.137	1.131-1.143		99.3	99.3											
13C-PCB-47	3.25e+08	0.79	y	0.74	31:59	0.871	0.867-0.875		94.3	94.3											
13C-PCB-52	3.07e+08	0.80	y	0.71	31:28	0.857	0.853-0.861		93.5	93.5											
13C-PCB-54	3.73e+08	0.79	y	0.85	28:00	0.763	0.758-0.766		94.7	94.7											
13C-PCB-70	4.23e+08	0.79	y	0.94	35:28	0.966	0.961-0.971		96.7	96.7											
13C-PCB-77	4.15e+08	0.79	y	0.89	39:36	1.078	1.073-1.083		100	100											
13C-PCB-80	4.43e+08	0.79	y	0.96	35:53	0.977	0.972-0.982		99.2	99.2											
13C-PCB-81	3.92e+08	0.80	y	0.84	39:01	1.062	1.057-1.067		101	101											
13C-PCB-95	2.12e+08	1.61	y	0.74	35:47	0.913	0.908-0.918		93.4	93.4	RS										
13C-PCB-97	2.04e+08	1.63	y	0.69	38:46	0.989	0.984-0.994		97.0	97.0	13C-PCB-15	5.17e+08	1.56	y	1.00	25:59					
13C-PCB-101	2.24e+08	1.65	y	0.79	37:27	0.956	0.951-0.961		93.4	93.4	13C-PCB-31	4.60e+08	1.05	y	1.00	28:59					
13C-PCB-104	2.82e+08	1.61	y	1.00	32:38	0.833	0.829-0.837		93.0	93.0	13C-PCB-60	4.64e+08	0.80	y	1.00	36:43					
13C-PCB-105	2.79e+08	1.58	y	1.24	43:03	0.928	0.924-0.934		93.8	93.8	13C-PCB-111	3.05e+08	1.61	y	1.00	39:11					
13C-PCB-114	2.75e+08	1.58	y	1.21	42:11	0.910	0.905-0.915		95.0	95.0	13C-PCB-128	2.40e+08	1.28	y	1.00	46:22					
13C-PCB-118	2.96e+08	1.62	y	0.98	41:31	1.059	1.054-1.064		98.4	98.4	13C-PCB-205	1.77e+08	0.90	y	1.00	53:58					
13C-PCB-123	2.78e+08	1.64	y	0.95	41:20	1.055	1.049-1.059		95.9	95.9											
13C-PCB-126	2.72e+08	1.56	y	1.16	45:18	0.977	0.972-0.982		97.4	97.4	K = RRT limits used for DATA processing only. RRT within method 1668A & C limits. DMS 10/22/14										
13C-PCB-127	3.05e+08	1.56	y	1.34	43:22	0.935	0.931-0.941		94.5	94.5											
13C-PCB-138	2.47e+08	1.26	y	1.04	44:47	0.966	0.961-0.971		98.6	98.6											
13C-PCB-141	2.46e+08	1.29	y	1.07	43:56	0.948	0.943-0.953		95.7	95.7											
13C-PCB-153	2.61e+08	1.29	y	1.11	43:11	0.931	0.927-0.937		97.4	97.4											
13C-PCB-155	2.37e+08	1.28	y	0.83	37:00	0.944	0.939-0.949		93.4	93.4											
13C-PCB-156	3.02e+08	1.28	y	1.24	48:05	1.037	1.032-1.042		101	101											
13C-PCB-157	3.11e+08	1.27	y	1.31	48:21	1.043	1.037-1.047		98.8	98.8											
13C-PCB-159	2.93e+08	1.29	y	1.20	46:04	0.994	0.989-0.999		102	102											
13C-PCB-167	3.21e+08	1.27	y	1.32	46:46	1.009	1.004-1.014		101	101											
13C-PCB-169	2.91e+08	1.28	y	1.22	50:23	1.087	1.082-1.092		99.7	99.7											
13C-PCB-170	1.29e+08	0.46	y	0.54	50:43	1.094	1.089-1.101		100	100											
13C-PCB-180	1.64e+08	0.46	y	0.67	49:20	1.064	1.059-1.069		101	101											
13C-PCB-188	2.26e+08	0.46	y	0.94	42:49	0.924	0.919-0.929		100	100											
13C-PCB-189	1.79e+08	0.46	y	0.72	52:09	1.125	1.120-1.132		104	104											
13C-PCB-194	1.44e+08	0.91	y	0.81	53:41	0.994	0.990-1.000		100	100											
13C-PCB-202	2.08e+08	0.92	y	0.83	48:17	1.041	1.036-1.046		104	104											
13C-PCB-206	1.14e+08	0.79	y	0.66	55:26	1.027	1.021-1.031		98.0	98.0											
13C-PCB-208	2.05e+08	0.78	y	1.12	52:54	0.980	0.976-0.986		103	103											
13C-PCB-209	1.16e+08	1.19	y	0.61	56:42	1.051	1.044-1.054		107	107											

Analyst: *DMS*

Date: *10/22/14*

Vista Analytical Laboratory - Injection Log Run file: 141021E2 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141021E2	1	ST141021E2-1	DMS	21-OCT-14	20:12:38	ST141021E2-1	NA
141021E2	2	B4J0110-BS3	DMS	21-OCT-14	21:16:06	ST141021E2-1	NA
141021E2	3	B4J0110-BS2	DMS	21-OCT-14	22:19:35	ST141021E2-1	NA
141021E2	4	B4J0110-BS1	DMS	21-OCT-14	23:23:06	ST141021E2-1	NA
141021E2	5	SOLVENT BLANK	DMS	22-OCT-14	00:26:40	ST141021E2-1	NA
141021E2	6	B4J0110-BLK1	DMS	22-OCT-14	01:30:11	ST141021E2-1	NA
141021E2	7	1400762-01	DMS	22-OCT-14	02:33:44	ST141021E2-1	NA
141021E2	8	1400762-02	DMS	22-OCT-14	03:37:15	ST141021E2-1	NA
141021E2	9	1400774-01	DMS	22-OCT-14	04:40:43	ST141021E2-1	NA
141021E2	10	SOLVENT BLANK	DMS	22-OCT-14	05:44:13	ST141021E2-1	NA
141021E2	11	SOLVENT BLANK	DMS	22-OCT-14	06:47:46	ST141021E2-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST



Beg. Calibration ID: ST141021E2 - 1

End Calibration ID: NA

Ion abundance within QC limits?

Beg. End

<input checked="" type="checkbox"/>	<input type="checkbox"/> NA
-------------------------------------	-----------------------------

Concentration within range?

Beg. End

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

First and last eluters present?

NA ~~10/21/14~~

Beg. End

<input checked="" type="checkbox"/> Del 10/21/14	<input type="checkbox"/>
--	--------------------------

Retention Times within criteria?

Beg. End

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

Verification Std. named correctly?
(ST-Year-Month-Day-VG ID)

Beg. End

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

Forms signed and dated?

Beg. End

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

Correct ICAL referenced?

Beg. End

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

Run Log:

Beg. End

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

-Data file matches Conc Cal ID?

Beg. End

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

-Correct instrument listed?

Beg. End

<input checked="" type="checkbox"/> y	<input type="checkbox"/> n
---------------------------------------	----------------------------

-Samples within 12-hour clock?

Mass resolution > 10,000?

- Method 1614 > 5,000; CARB 429 > 8,000

Beg. End

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
-------------------------------------	-------------------------------------

TCDD/TCDF valleys < 25%?

Beg. End

<input type="checkbox"/> NA	<input type="checkbox"/> NA
-----------------------------	-----------------------------

Peaks integrated correctly?

Beg. End

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

Manual integrations included?

Beg. End

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

8280 CS1 Ending Standard

-Ratios within limits

Beg. End

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

-S/N > 2.5:1

Beg. End

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

-CS1 within 12-hour clock

Comments:

Reviewed by: CG

Initials & Date

* Ending standard criteria applicable to 8290 only.

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 rmh

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 2 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST141024E2-1

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 141024E2 S#1 Analysis Date: 25-OCT-14 Time: 02:10:53

ANALYTES	ION	QC	CONC.				ION	QC	CONC.			
	ABUND.	LIMITS	PASS	CONC.	RANGE	ANALYTES	ABUND.	LIMITS	PASS	CONC.	RANGE	
	RATIO			FOUND	(ng/mL)		RATIO			FOUND	(ng/mL)	
PCB-1	2.91	2.66-3.60	y	37.6	37.5-62.5	PCB-52/69	0.73	0.65-0.89	y	96.0	75.0-125	
PCB-2	2.94	2.66-3.60	y	38.1	37.5-62.5	PCB-73	0.75	0.65-0.89	y	43.6	37.5-62.5	
PCB-3	2.92	2.66-3.60	y	38.1	37.5-62.5	PCB-43/49	0.74	0.65-0.89	y	92.1	75.0-125	
PCB-4/10	1.61	1.33-1.79	y	195.5	150-250	PCB-47	0.73	0.65-0.89	y	42.9	37.5-62.5	
PCB-7/9	1.63	1.33-1.79	y	193.7	150-250	PCB-48/75	0.74	0.65-0.89	y	94.1	75.0-125	
PCB-6	1.64	1.33-1.79	y	93.6	75.0-125	PCB-65	0.73	0.65-0.89	y	46.2	37.5-62.5	
PCB-5/8	1.63	1.33-1.79	y	195.7	150-250	PCB-62	0.75	0.65-0.89	y	47.1	37.5-62.5	
PCB-14	1.62	1.33-1.79	y	98.6	75.0-125	PCB-44	0.73	0.65-0.89	y	45.6	37.5-62.5	
PCB-11	1.63	1.33-1.79	y	97.0	75.0-125	PCB-42/59	0.74	0.65-0.89	y	89.3	75.0-125	
PCB-12/13	1.63	1.33-1.79	y	192.7	150-250	PCB-41/64/71/72	0.74	0.65-0.89	y	180.0	150-250	
PCB-15	1.65	1.33-1.79	y	97.7	75.0-125	PCB-68	0.73	0.65-0.89	y	46.6	37.5-62.5	
PCB-19	1.05	0.88-1.20	y	46.5	37.5-62.5	PCB-40	0.73	0.65-0.89	y	47.1	37.5-62.5	
PCB-30	1.05	0.88-1.20	y	47.2	37.5-62.5	PCB-57	0.73	0.65-0.89	y	46.7	37.5-62.5	
PCB-18	1.05	0.88-1.20	y	47.4	37.5-62.5	PCB-67	0.73	0.65-0.89	y	44.0	37.5-62.5	
PCB-17	1.05	0.88-1.20	y	46.9	37.5-62.5	PCB-58	0.74	0.65-0.89	y	47.4	37.5-62.5	
PCB-24/27	1.06	0.88-1.20	y	94.3	75.0-125	PCB-63	0.75	0.65-0.89	y	45.6	37.5-62.5	
PCB-16/32	1.04	0.88-1.20	y	92.4	75.0-125	PCB-74	0.74	0.65-0.89	y	44.8	37.5-62.5	
PCB-34	1.04	0.88-1.20	y	46.8	37.5-62.5	PCB-61/70	0.74	0.65-0.89	y	94.5	75.0-125	
PCB-23	1.06	0.88-1.20	y	52.3	37.5-62.5	PCB-76/66	0.74	0.65-0.89	y	91.8	75.0-125	
PCB-29	1.05	0.88-1.20	y	51.0	37.5-62.5	PCB-80	0.75	0.65-0.89	y	46.9	37.5-62.5	
PCB-26	1.05	0.88-1.20	y	51.1	37.5-62.5	PCB-55	0.74	0.65-0.89	y	45.9	37.5-62.5	
PCB-25	1.04	0.88-1.20	y	49.7	37.5-62.5	PCB-56/60	0.73	0.65-0.89	y	91.1	75.0-125	
PCB-31	1.03	0.88-1.20	y	45.6	37.5-62.5	PCB-79	0.75	0.65-0.89	y	45.1	37.5-62.5	
PCB-28	1.04	0.88-1.20	y	50.6	37.5-62.5	PCB-78	0.73	0.65-0.89	y	44.1	37.5-62.5	
PCB-20/21/33	1.06	0.88-1.20	y	154.8	112.5-225	PCB-81	0.75	0.65-0.89	y	44.5	37.5-62.5	
PCB-22	1.05	0.88-1.20	y	48.3	37.5-62.5	PCB-77	0.76	0.65-0.89	y	46.0	37.5-62.5	
PCB-36	1.05	0.88-1.20	y	52.6	37.5-62.5	PCB-104	1.60	1.32-1.78	y	50.4	37.5-62.5	
PCB-39	1.06	0.88-1.20	y	53.0	37.5-62.5	PCB-96	1.57	1.32-1.78	y	49.3	37.5-62.5	
PCB-38	1.05	0.88-1.20	y	52.8	37.5-62.5	PCB-103	1.57	1.32-1.78	y	49.7	37.5-62.5	
PCB-35	1.05	0.88-1.20	y	57.9	37.5-62.5	PCB-100	1.57	1.32-1.78	y	50.6	37.5-62.5	
PCB-37	1.08	0.88-1.20	y	51.8	37.5-62.5	PCB-94	1.57	1.32-1.78	y	47.4	37.5-62.5	
PCB-54	0.75	0.65-0.89	y	45.6	37.5-62.5	PCB-95/98/102	1.57	1.32-1.78	y	153.1	112.5-225	
PCB-50	0.74	0.65-0.89	y	45.7	37.5-62.5	PCB-93	1.61	1.32-1.78	y	45.0	37.5-62.5	
PCB-53	0.75	0.65-0.89	y	46.0	37.5-62.5	PCB-88/91	1.56	1.32-1.78	y	109.4	75.0-125	
PCB-51	0.74	0.65-0.89	y	44.6	37.5-62.5	PCB-121	1.61	1.32-1.78	y	45.5	37.5-62.5	
PCB-45	0.74	0.65-0.89	y	46.3	37.5-62.5							
PCB-46	0.73	0.65-0.89	y	45.6	37.5-62.5							

Analyst: DMSDate: 10/28/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 2 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST141024E2-1

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 141024E2 S#1 Analysis Date: 25-OCT-14 Time: 02:10:53

ANALYTES	ION	QC	CONC.			ANALYTES	ION	QC	CONC.		
	ABUND.	LIMITS	CONC.	RANGE	ABUND.	LIMITS	CONC.	RANGE	ABUND.	LIMITS	CONC.
	RATIO	PASS	FOUND	(ng/mL)	RATIO	PASS	FOUND	(ng/mL)	RATIO	PASS	FOUND
PCB-84/92	1.56	1.32-1.78	y	97.3	75.0-125	PCB-140	1.24	1.05-1.43	y	52.3	37.5-62.5
PCB-89	1.55	1.32-1.78	y	48.7	37.5-62.5	PCB-134/143	1.23	1.05-1.43	y	89.0	75.0-125
PCB-90/101	1.57	1.32-1.78	y	97.9	75.0-125	PCB-133/142	1.23	1.05-1.43	y	88.9	75.0-125
PCB-113	1.54	1.32-1.78	y	49.6	37.5-62.5	PCB-131	1.23	1.05-1.43	y	44.7	37.5-62.5
PCB-99	1.57	1.32-1.78	y	49.3	37.5-62.5	PCB-146/165	1.23	1.05-1.43	y	88.6	75.0-125
PCB-119	1.57	1.32-1.78	y	49.7	37.5-62.5	PCB-132/161	1.22	1.05-1.43	y	87.3	75.0-125
PCB-108/112	1.56	1.32-1.78	y	96.4	75.0-125	PCB-153	1.26	1.05-1.43	y	46.1	37.5-62.5
PCB-83	1.62	1.32-1.78	y	47.5	37.5-62.5	PCB-168	1.22	1.05-1.43	y	45.2	37.5-62.5
PCB-97	1.55	1.32-1.78	y	48.4	37.5-62.5	PCB-141	1.23	1.05-1.43	y	45.0	37.5-62.5
PCB-86	1.55	1.32-1.78	y	53.6	37.5-62.5	PCB-137	1.21	1.05-1.43	y	45.7	37.5-62.5
PCB-87/117/125	1.57	1.32-1.78	y	148.0	112.5-225	PCB-130	1.23	1.05-1.43	y	46.2	37.5-62.5
PCB-111/115	1.57	1.32-1.78	y	94.7	75.0-125	PCB-138/163/164	1.23	1.05-1.43	y	134.0	112.5-225
PCB-85/116	1.56	1.32-1.78	y	102.6	75.0-125	PCB-158/160	1.21	1.05-1.43	y	92.1	75.0-125
PCB-120	1.60	1.32-1.78	y	50.4	37.5-62.5	PCB-129	1.21	1.05-1.43	y	45.5	37.5-62.5
PCB-110	1.60	1.32-1.78	y	48.7	37.5-62.5	PCB-166	1.21	1.05-1.43	y	44.6	37.5-62.5
PCB-82	1.55	1.32-1.78	y	49.0	37.5-62.5	PCB-159	1.24	1.05-1.43	y	46.0	37.5-62.5
PCB-124	1.57	1.32-1.78	y	49.5	37.5-62.5	PCB-128/162	1.21	1.05-1.43	y	89.4	75.0-125
PCB-107/109	1.56	1.32-1.78	y	94.5	75.0-125	PCB-167	1.21	1.05-1.43	y	45.7	37.5-62.5
PCB-123	1.55	1.32-1.78	y	49.0	37.5-62.5	PCB-156	1.22	1.05-1.43	y	46.1	37.5-62.5
PCB-106/118	1.58	1.32-1.78	y	97.6	75.0-125	PCB-157	1.24	1.05-1.43	y	44.2	37.5-62.5
PCB-114	1.61	1.32-1.78	y	51.0	37.5-62.5	PCB-169	1.21	1.05-1.43	y	43.2	37.5-62.5
PCB-122	1.63	1.32-1.78	y	52.6	37.5-62.5	PCB-188	1.05	0.89-1.21	y	47.4	37.5-62.5
PCB-105	1.60	1.32-1.78	y	50.7	37.5-62.5	PCB-184	1.05	0.89-1.21	y	47.6	37.5-62.5
PCB-127	1.64	1.32-1.78	y	50.6	37.5-62.5	PCB-179	1.05	0.89-1.21	y	47.5	37.5-62.5
PCB-126	1.63	1.32-1.78	y	51.4	37.5-62.5	PCB-176	1.05	0.89-1.21	y	47.2	37.5-62.5
PCB-155	1.25	1.05-1.43	y	48.3	37.5-62.5	PCB-186	1.06	0.89-1.21	y	48.3	37.5-62.5
PCB-150	1.25	1.05-1.43	y	49.0	37.5-62.5	PCB-178	1.04	0.89-1.21	y	48.3	37.5-62.5
PCB-152	1.25	1.05-1.43	y	48.4	37.5-62.5	PCB-175	1.05	0.89-1.21	y	49.4	37.5-62.5
PCB-145	1.25	1.05-1.43	y	48.4	37.5-62.5	PCB-182/187	1.04	0.89-1.21	y	97.3	75.0-125
PCB-136	1.27	1.05-1.43	y	52.6	37.5-62.5	PCB-183	1.05	0.89-1.21	y	48.1	37.5-62.5
PCB-148	1.24	1.05-1.43	y	44.1	37.5-62.5	PCB-185	1.04	0.89-1.21	y	46.3	37.5-62.5
PCB-154	1.25	1.05-1.43	y	51.0	37.5-62.5	PCB-174	1.05	0.89-1.21	y	46.3	37.5-62.5
PCB-151	1.25	1.05-1.43	y	50.1	37.5-62.5	PCB-181	1.07	0.89-1.21	y	49.9	37.5-62.5
PCB-135	1.24	1.05-1.43	y	49.2	37.5-62.5	PCB-177	1.02	0.89-1.21	y	48.0	37.5-62.5
PCB-144	1.26	1.05-1.43	y	50.7	37.5-62.5	PCB-171	1.06	0.89-1.21	y	47.9	37.5-62.5
PCB-147	1.25	1.05-1.43	y	53.4	37.5-62.5	PCB-173	1.05	0.89-1.21	y	48.7	37.5-62.5
PCB-139/149	1.25	1.05-1.43	y	102.6	75.0-125	PCB-172	1.05	0.89-1.21	y	49.0	37.5-62.5

Analyst: DmzDate: 10/28/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 2 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST141024E2-1

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 141024E2 S#1 Analysis Date: 25-OCT-14 Time: 02:10:53

ANALYTES	ION	QC	CONC.		
	ABUND.	LIMITS	CONC.	RANGE	
	RATIO	PASS		FOUND	(ng/mL)
PCB-192	1.06	0.89-1.21	Y	49.6	37.5-62.5
PCB-180	1.06	0.89-1.21	Y	48.3	37.5-62.5
PCB-193	1.04	0.89-1.21	Y	47.5	37.5-62.5
PCB-191	1.04	0.89-1.21	Y	48.1	37.5-62.5
PCB-170	1.02	0.89-1.21	Y	48.0	37.5-62.5
PCB-190	1.04	0.89-1.21	Y	47.8	37.5-62.5
PCB-189	1.05	0.89-1.21	Y	47.4	37.5-62.5
PCB-202	0.91	0.76-1.02	Y	47.4	37.5-62.5
PCB-201	0.89	0.76-1.02	Y	47.9	37.5-62.5
PCB-204	0.91	0.76-1.02	Y	47.0	37.5-62.5
PCB-197	0.91	0.76-1.02	Y	47.2	37.5-62.5
PCB-200	0.90	0.76-1.02	Y	47.4	37.5-62.5
PCB-198	0.90	0.76-1.02	Y	46.2	37.5-62.5
PCB-199	0.91	0.76-1.02	Y	48.8	37.5-62.5
PCB-196/203	0.91	0.76-1.02	Y	96.4	75.0-125
PCB-195	0.91	0.76-1.02	Y	52.5	37.5-62.5
PCB-194	0.90	0.76-1.02	Y	47.8	37.5-62.5
PCB-205	0.90	0.76-1.02	Y	46.4	37.5-62.5
PCB-208	1.34	1.14-1.54	Y	49.5	37.5-62.5
PCB-207	1.34	1.14-1.54	Y	49.3	37.5-62.5
PCB-206	1.32	1.14-1.54	Y	49.0	37.5-62.5
PCB-209	1.16	0.99-1.33	Y	48.9	37.5-62.5

Analyst: DmsDate: 10/28/14

LABELED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory

Lab ID: ST141024E2-1

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 141024E2 S#1 Analysis Date: 25-OCT-14 Time: 02:10:53

Labeled IS	ION				ION						
	ABUND.	QC	CONC.	CONC.	ABUND.	QC	CONC.	CONC.			
	RATIO	LIMITS	PASS	FOUND	(ng/mL)	Labeled IS	RATIO	LIMITS	PASS	FOUND	(ng/mL)
13C-PCB-1	3.21	2.66-3.60	y	141.7	50.0-145	13C-PCB-169	1.27	1.05-1.43	y	98.3	50 - 145
13C-PCB-3	3.18	2.66-3.60	y	139.2	50.0-145	13C-PCB-188	0.46	0.38-0.52	y	105.8	50 - 145
13C-PCB-4	1.58	1.33-1.79	y	97.8	50.0-145	13C-PCB-180	0.46	0.38-0.52	y	111.1	50 - 145
13C-PCB-9	1.59	1.33-1.79	y	98.8	50.0-145	13C-PCB-170	0.46	0.38-0.52	y	111.0	50 - 145
13C-PCB-11	1.55	1.33-1.79	y	99.5	50.0-145	13C-PCB-189	0.46	0.38-0.52	y	111.0	50 - 145
13C-PCB-19	1.09	0.88-1.20	y	123.4	50.0-145	13C-PCB-202	0.91	0.76-1.02	y	122.4	50 - 145
13C-PCB-32	1.10	0.88-1.20	y	124.6	50.0-145	13C-PCB-194	0.92	0.76-1.02	y	101.1	50 - 145
13C-PCB-28	1.05	0.88-1.20	y	110.9	50.0-145	13C-PCB-208	0.78	0.65-0.89	y	100.8	50 - 145
13C-PCB-37	1.07	0.88-1.20	y	104.4	50.0-145	13C-PCB-206	0.78	0.65-0.89	y	94.1	50 - 145
13C-PCB-54	0.80	0.65-0.89	y	88.7	50.0-145	13C-PCB-209	1.19	0.99-1.33	y	101.3	50 - 145
13C-PCB-52	0.78	0.65-0.89	y	92.5	50.0-145						
13C-PCB-47	0.77	0.65-0.89	y	95.5	50.0-145						
13C-PCB-70	0.79	0.65-0.89	y	98.0	50.0-145						
13C-PCB-80	0.78	0.65-0.89	y	99.9	50.0-145						
13C-PCB-81	0.77	0.65-0.89	y	100.2	50.0-145						
13C-PCB-77	0.80	0.65-0.89	y	97.2	50.0-145	CRS vs. RS					
13C-PCB-104	1.61	1.32-1.78	y	91.3	50.0-145						
13C-PCB-95	1.61	1.32-1.78	y	94.6	50.0-145						
13C-PCB-101	1.60	1.32-1.78	y	96.6	50.0-145						
13C-PCB-97	1.61	1.32-1.78	y	98.4	50.0-145						
13C-PCB-123	1.61	1.32-1.78	y	103.1	50.0-145	13C-PCB-79	0.77	0.65-0.89	y	98.5	75 - 125
13C-PCB-118	1.63	1.32-1.78	y	100.7	50.0-145	13C-PCB-178	0.46	0.38-0.52	y	106.5	75 - 125
13C-PCB-114	1.61	1.32-1.78	y	79.0	50.0-145						
13C-PCB-105	1.58	1.32-1.78	y	79.5	50.0-145						
13C-PCB-127	1.57	1.32-1.78	y	78.3	50.0-145						
13C-PCB-126	1.55	1.32-1.78	y	79.8	50.0-145						
13C-PCB-155	1.27	1.05-1.43	y	104.9	50.0-145						
13C-PCB-153	1.29	1.05-1.43	y	94.1	50.0-145						
13C-PCB-141	1.28	1.05-1.43	y	91.8	50.0-145						
13C-PCB-138	1.28	1.05-1.43	y	94.3	50.0-145						
13C-PCB-159	1.29	1.05-1.43	y	96.3	50.0-145						
13C-PCB-167	1.27	1.05-1.43	y	96.5	50.0-145						
13C-PCB-156	1.28	1.05-1.43	y	97.7	50.0-145						
13C-PCB-157	1.28	1.05-1.43	y	98.5	50.0-145						

Analyst: Dm5Date: 10/28/14

Client ID: PCB CS3 14F1302
 Lab ID: ST141024E2-1

Filename: 141024E2 S:1 Acq:25-OCT-14 02:10:53 ConCal: ST141024E2-1
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

Page 2 of

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	1.27e+08	2.91	y	1.19	16:26	1.002	0.996-1.006	37.5560
PCB-2	1.31e+08	2.94	y	1.18	18:42	0.989	0.984-0.994	38.0598
PCB-3	1.57e+08	2.92	y	1.43	18:56	1.001	0.996-1.006	38.1125
PCB-4/10	4.02e+08	1.61	y	1.57	20:15	1.002	0.997-1.007	195.541
PCB-7/9	4.74e+08	1.63	y	1.21	21:59	0.871	0.866-0.874	193.676
PCB-6	2.47e+08	1.64	y	1.30	22:36	0.896	0.890-0.899	93.5801
PCB-5/8	4.54e+08	1.63	y	1.15	23:01	0.912	0.907-0.917	195.650
PCB-14	2.33e+08	1.62	y	1.11	24:04	0.954	0.949-0.959	98.5813
PCB-11	2.25e+08	1.63	y	1.09	25:15	1.001	0.995-1.005	97.0310
PCB-12/13	4.90e+08	1.63	y	1.19	25:38	1.016	1.011-1.021	192.732
PCB-15	2.67e+08	1.65	y	1.28	25:57	1.029	1.023-1.033	97.6890
PCB-19	7.26e+07	1.05	y	1.04	24:16	1.001	0.996-1.006	46.4946
PCB-30	1.21e+08	1.05	y	1.71	25:08	1.036	1.032-1.042	47.2276
PCB-18	8.40e+07	1.05	y	0.78	25:52	0.954	0.949-0.959	47.4498
PCB-17	9.80e+07	1.05	y	0.92	26:02	0.961	0.956-0.966	46.8943
PCB-24/27	2.54e+08	1.06	y	1.19	26:36	0.982	0.977-0.987	94.3006
PCB-16/32	1.97e+08	1.04	y	0.94	27:07	1.000	0.995-1.005	92.3643
PCB-34	1.03e+08	1.04	y	1.14	27:52	0.960	0.955-0.965	46.8330
PCB-23	1.29e+08	1.06	y	1.28	27:58	0.964	0.959-0.969	52.3140
PCB-29	1.06e+08	1.05	y	1.08	28:14	0.973	0.967-0.977	50.9693
PCB-26	1.19e+08	1.05	y	1.21	28:25	0.979	0.974-0.984	51.1001
PCB-25	1.21e+08	1.04	y	1.26	28:35	0.985	0.979-0.989	49.6884
PCB-31	1.13e+08	1.03	y	1.28	28:56	0.997	0.992-1.002	45.6092
PCB-28	1.68e+08	1.04	y	1.71	29:03	1.001	0.995-1.005	50.6097
PCB-20/21/33	3.24e+08	1.06	y	1.08	29:39	1.022	1.017-1.027	154.804
PCB-22	1.13e+08	1.05	y	1.21	30:06	1.037	1.032-1.042	48.2518
PCB-36	9.85e+07	1.05	y	1.14	30:41	0.933	0.928-0.938	52.6085
PCB-39	9.70e+07	1.06	y	1.12	31:10	0.948	0.943-0.953	53.0287
PCB-38	1.04e+08	1.05	y	1.20	31:56	0.971	0.966-0.976	52.8141
PCB-35	1.17e+08	1.05	y	1.23	32:27	0.987	0.982-0.992	57.9125
PCB-37	1.04e+08	1.08	y	1.23	32:53	1.000	0.995-1.005	51.8061
PCB-54	9.27e+07	0.75	y	1.10	27:58	1.001	0.996-1.006	45.5906
PCB-50	7.43e+07	0.74	y	0.88	29:06	1.041	1.037-1.047	45.7152
PCB-53	7.49e+07	0.75	y	1.06	29:44	0.947	0.942-0.952	46.0396
PCB-51	6.75e+07	0.74	y	0.99	30:05	0.958	0.952-0.962	44.5653
PCB-45	6.11e+07	0.74	y	0.86	30:31	0.971	0.966-0.976	46.2643
PCB-46	5.90e+07	0.73	y	0.85	30:60	0.987	0.981-0.991	45.6174

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	1.88e+08	0.73	y	1.28	31:27	1.001	0.996-1.006	96.0310
PCB-73	9.02e+07	0.75	y	1.35	31:34	1.005	1.000-1.010	43.5716
PCB-43/49	1.40e+08	0.74	y	0.99	31:44	1.010	1.005-1.015	92.1284
PCB-47	7.54e+07	0.73	y	1.06	31:56	1.001	0.996-1.006	42.8971
PCB-48/75	1.92e+08	0.74	y	1.23	32:03	1.004	0.999-1.009	94.0968
PCB-65	9.40e+07	0.73	y	1.22	32:19	1.013	1.008-1.018	46.2025
PCB-62	9.55e+07	0.75	y	1.22	32:26	1.016	1.011-1.021	47.0642
PCB-44	6.52e+07	0.73	y	0.86	32:44	1.026	1.021-1.031	45.6073
PCB-42/59	1.69e+08	0.74	y	1.14	32:58	1.033	1.028-1.038	89.2991
PCB-41/64/71/72	3.61e+08	0.74	y	1.21	33:32	1.051	1.046-1.056	180.018
PCB-68	1.04e+08	0.73	y	1.35	33:47	1.058	1.054-1.064	46.5657
PCB-40	5.49e+07	0.73	y	0.70	34:01	1.066	1.061-1.071	47.1008
PCB-57	9.58e+07	0.73	y	0.98	34:22	0.970	0.965-0.975	46.6720
PCB-67	1.02e+08	0.73	y	1.11	34:40	0.979	0.974-0.984	44.0257
PCB-58	9.21e+07	0.74	y	0.93	34:47	0.982	0.977-0.987	47.4042
PCB-63	9.10e+07	0.75	y	0.95	34:56	0.987	0.982-0.992	45.5721
PCB-74	1.17e+08	0.74	y	1.24	35:13	0.995	0.990-1.000	44.7942
PCB-61/70	1.89e+08	0.74	y	0.95	35:24	1.000	0.995-1.005	94.4738
PCB-76/66	2.01e+08	0.74	y	1.04	35:37	1.006	1.001-1.011	91.8108
PCB-80	1.24e+08	0.75	y	1.19	35:50	1.001	0.996-1.006	46.9276
PCB-55	1.06e+08	0.74	y	1.04	36:11	1.010	1.005-1.015	45.8525
PCB-56/60	2.03e+08	0.73	y	1.01	36:40	1.024	1.019-1.029	91.1220
PCB-79	1.08e+08	0.75	y	1.08	37:44	1.053	1.048-1.058	45.1118
PCB-78	1.11e+08	0.73	y	1.27	38:26	0.987	0.982-0.992	44.0655
PCB-81	1.17e+08	0.75	y	1.33	38:58	1.000	0.995-1.005	44.5309
PCB-77	9.93e+07	0.76	y	1.10	39:33	1.000	0.995-1.005	45.9516

Integrations
 by _____
 Analyst: *DMS*
 Date: *10/28/17*
 Reviewed
 by _____
 Analyst: _____
 Date: _____

Client ID: PCB CS3 14F1302

Lab ID: ST141024E2-1

Filename: 141024E2 S:1 Acq:25-OCT-14 02:10:53 ConCal: ST141024E2-1
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

Page 2 of

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-90/101	1.39e+08	1.57	y	1.10	37:24	1.000	0.995-1.005	97.8589
PCB-113	9.04e+07	1.54	y	1.41	37:38	1.007	1.002-1.012	49.5817
PCB-99	8.51e+07	1.57	y	1.34	37:44	1.009	1.004-1.014	49.3203
PCB-119	9.02e+07	1.57	y	1.53	38:11	0.987	0.982-0.992	49.7321
PCB-108/112	1.46e+08	1.56	y	1.28	38:22	0.991	0.986-0.996	96.3713
PCB-83	8.54e+07	1.62	y	1.52	38:31	0.995	0.990-1.000	47.5464
PCB-97	6.77e+07	1.55	y	1.18	38:43	1.000	0.995-1.005	48.4112
PCB-86	5.34e+07	1.55	y	0.84	38:51	1.004	0.999-1.009	53.5570
B-87/117/125	2.71e+08	1.57	y	1.55	38:59	1.007	1.002-1.012	148.035
PCB-111/115	1.83e+08	1.57	y	1.63	39:08	1.011	1.006-1.016	94.6986
PCB-85/116	1.58e+08	1.56	y	1.30	39:16	1.015	1.010-1.020	102.628
PCB-120	9.99e+07	1.60	y	1.68	39:30	1.021	1.016-1.026	50.3553
PCB-110	8.96e+07	1.60	y	1.56	39:40	1.025	1.020-1.030	48.6725
PCB-82	5.86e+07	1.55	y	0.76	40:18	0.977	0.971-0.981	49.0106
PCB-124	1.15e+08	1.57	y	1.47	40:57	0.993	0.988-0.998	49.5273
PCB-107/109	1.97e+08	1.56	y	1.32	41:06	0.996	0.991-1.001	94.5424
PCB-123	9.02e+07	1.55	y	1.17	41:17	1.001	0.996-1.006	49.0395
- PCB-106/118	1.89e+08	1.58	y	1.17	41:29	1.001	0.996-1.006	97.5678
- PCB-114	9.71e+07	1.61	y	1.30	42:08	1.001	0.995-1.005	50.9798
PCB-122	8.66e+07	1.63	y	1.12	42:16	1.004	0.999-1.009	52.5750
PCB-105	9.76e+07	1.60	y	1.30	43:00	1.001	0.995-1.005	50.7163
PCB-127	1.06e+08	1.64	y	1.33	43:18	1.000	0.996-1.006	50.5820
PCB-126	8.65e+07	1.63	y	1.18	45:14	1.000	0.995-1.005	51.3578
PCB-155	8.09e+07	1.25	y	1.11	36:56	1.000	0.966-1.006	48.3200
PCB-150	7.35e+07	1.25	y	1.00	38:14	1.035	1.030-1.040	48.9806
PCB-152	8.12e+07	1.25	y	1.12	38:42	1.048	1.043-1.053	48.3898
PCB-145	8.73e+07	1.25	y	1.20	39:09	1.060	1.055-1.065	48.3558
PCB-136	9.31e+07	1.27	y	1.18	39:29	1.069	1.064-1.074	52.5663
PCB-148	4.93e+07	1.24	y	0.74	39:33	1.071	1.066-1.076	44.0880
PCB-154	6.58e+07	1.25	y	0.86	40:03	1.084	1.080-1.090	51.0375
PCB-151	5.63e+07	1.25	y	0.75	40:41	1.102	1.097-1.107	50.1347
PCB-135	5.86e+07	1.24	y	0.79	40:55	1.108	1.103-1.113	49.2062
PCB-144	5.81e+07	1.26	y	0.76	41:01	1.111	1.105-1.117	50.7394
PCB-147	6.58e+07	1.25	y	0.82	41:09	1.114	1.109-1.121	53.4040
PCB-139/149	1.18e+08	1.25	y	0.76	41:25	1.121	1.116-1.128	102.643
- PCB-140	5.68e+07	1.24	y	0.72	41:36	1.126	1.121-1.133	52.3486
- PCB-134/143	1.20e+08	1.23	y	0.92	42:03	0.975	0.970-0.980	89.0371

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	1.07e+08	1.23	y	0.82	42:21	0.982	0.977-0.987	88.9252
PCB-131	5.98e+07	1.23	y	0.91	42:31	0.986	0.981-0.991	44.6629
PCB-146/165	1.63e+08	1.23	y	1.25	42:43	0.991	0.986-0.996	88.5644
PCB-132/161	1.42e+08	1.22	y	1.10	42:59	0.997	0.992-1.002	87.3086
PCB-153	8.49e+07	1.26	y	1.25	43:08	1.000	0.995-1.005	46.1223
PCB-168	9.65e+07	1.22	y	1.45	43:21	1.005	1.001-1.011	45.1602
PCB-141	6.58e+07	1.23	y	1.09	43:53	1.000	0.995-1.005	45.0183
PCB-137	6.54e+07	1.21	y	1.06	44:16	1.009	1.004-1.014	45.7400
PCB-130	6.01e+07	1.23	y	0.96	44:22	1.011	1.006-1.016	46.2187
PCB-138/163/164	2.45e+08	1.23	y	1.29	44:45	1.001	0.996-1.006	134.040
PCB-158/160	1.75e+08	1.21	y	1.34	45:00	1.006	1.001-1.011	92.1325
PCB-129	5.49e+07	1.21	y	0.85	45:14	1.012	1.007-1.017	45.4542
PCB-166	8.68e+07	1.21	y	1.19	45:42	0.993	0.988-0.998	44.6079
PCB-159	8.40e+07	1.24	y	1.11	46:00	1.000	0.996-1.006	46.0022
PCB-128/162	1.54e+08	1.21	y	1.05	46:19	1.007	1.002-1.012	89.3895
PCB-167	9.78e+07	1.21	y	1.20	46:42	1.000	0.995-1.005	45.7494
PCB-156	9.05e+07	1.22	y	1.14	48:01	1.000	0.996-1.006	46.0912
PCB-157	9.39e+07	1.24	y	1.16	48:17	1.000	0.995-1.005	44.1887
PCB-169	8.34e+07	1.21	y	1.12	50:18	1.000	0.995-1.005	43.2113
PCB-188	9.93e+07	1.05	y	1.58	42:47	1.001	0.996-1.006	47.3975
PCB-184	1.03e+08	1.05	y	1.63	43:14	1.011	1.006-1.016	47.5503
PCB-179	8.21e+07	1.05	y	1.30	44:01	1.030	1.024-1.034	47.4881
PCB-176	9.24e+07	1.05	y	1.48	44:29	1.041	1.035-1.045	47.2148
PCB-186	9.31e+07	1.06	y	1.45	45:06	1.055	1.050-1.060	48.3298
PCB-178	6.63e+07	1.04	y	1.03	45:35	1.066	1.061-1.071	48.3382
PCB-175	6.63e+07	1.05	y	1.01	45:56	1.074	1.069-1.079	49.3515
PCB-182/187	1.61e+08	1.04	y	1.25	46:06	1.078	1.073-1.083	97.2997
PCB-183	7.70e+07	1.05	y	1.21	46:25	1.086	1.081-1.091	48.0724
PCB-185	8.65e+07	1.04	y	1.80	47:05	0.956	0.951-0.961	46.2610
PCB-174	6.63e+07	1.05	y	1.38	47:27	0.963	0.958-0.968	46.3493
PCB-181	7.15e+07	1.07	y	1.38	47:34	0.966	0.960-0.970	49.9030
PCB-177	6.26e+07	1.02	y	1.26	47:44	0.969	0.963-0.973	48.0403
PCB-171	7.86e+07	1.06	y	1.58	48:02	0.975	0.970-0.980	47.8529
PCB-173	5.61e+07	1.05	y	1.11	48:28	0.984	0.978-0.988	48.6891
PCB-172	8.31e+07	1.05	y	1.63	48:54	0.993	0.987-0.997	48.9793
PCB-192	8.96e+07	1.06	y	1.74	49:05	0.996	0.991-1.001	49.5981
PCB-180	6.74e+07	1.06	y	1.34	49:17	1.000	0.995-1.005	48.2699

Integrations

by

Analyst: DmsDate: 10/28/14

Client ID: PCB CS3 14F1302
Lab ID: ST141024E2-1

Filename: 141024E2 S:1 Acq:25-OCT-14 02:10:53
GC Column ID: ZB-1 ICal: PCVG8-6-23-14 wt/vol: 1.0000 ConCal: ST141024E2-1
EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-193	8.46e+07	1.04	y	1.72	49:28	1.004	0.999-1.009	47.4948
PCB-191	8.45e+07	1.04	y	1.69	49:42	1.009	1.004-1.014	48.0619
PCB-170	6.31e+07	1.02	y	1.60	50:40	1.000	0.995-1.005	48.0167
PCB-190	8.69e+07	1.04	y	2.21	50:49	1.003	0.998-1.008	47.8263
PCB-189	7.98e+07	1.05	y	1.55	52:06	1.000	0.995-1.005	47.4092
PCB-202	7.20e+07	0.91	y	1.08	48:14	1.001	0.995-1.005	47.4395
PCB-201	7.73e+07	0.89	y	1.15	48:43	1.011	1.005-1.015	47.9453
PCB-204	7.50e+07	0.91	y	1.14	48:52	1.014	1.008-1.018	46.9944
PCB-197	7.10e+07	0.91	y	1.07	49:10	1.020	1.015-1.025	47.1618
PCB-200	7.06e+07	0.90	y	1.06	49:58	1.037	1.032-1.044	47.3552
PCB-198	4.89e+07	0.90	y	0.76	51:12	1.062	1.059-1.069	46.1882
PCB-199	5.45e+07	0.91	y	0.80	51:19	1.065	1.061-1.071	48.7737
- PCB-196/203	1.08e+08	0.91	y	0.80	51:34	1.070	1.066-1.076	96.3549
- PCB-195	5.73e+07	0.91	y	1.23	52:43	0.983	0.979-0.989	52.4578
PCB-194	5.16e+07	0.90	y	1.21	53:37	1.000	0.995-1.005	47.8322
PCB-205	6.37e+07	0.90	y	1.54	53:55	1.006	1.001-1.011	46.3809
PCB-208	5.55e+07	1.34	y	0.93	52:51	1.000	0.995-1.005	49.5407
PCB-207	6.42e+07	1.34	y	1.08	53:11	1.006	1.001-1.011	49.2928
PCB-206	3.38e+07	1.32	y	1.02	55:21	1.000	0.995-1.005	48.9594
PCB-209	3.91e+07	1.16	y	1.17	56:37	1.000	0.995-1.005	48.9132

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	4.08e+08	2.91	y	16:26	1.27
Total Di-PCB	2.80e+09	1.61	y	20:15	1.21
Total Tri-PCB	8.26e+08	1.05	y	24:16	1.10
Total Tri-PCB	1.85e+09	1.04	y	27:52	1.21
Total Tetra-PCB	3.84e+09	0.75	y	27:58	1.09
Total Penta-PCB	3.31e+09	1.60	y	32:35	1.18
Total Penta-PCB	5.08e+08	1.61	y	42:08	1.25
Total Hexa-PCB	9.45e+08	1.25	y	36:56	0.90
Total Hexa-PCB	2.16e+09	1.23	y	42:03	1.11
Total Hepta-PCB	1.93e+09	1.05	y	42:47	1.42
Total Octa-PCB	5.77e+08	0.91	y	48:14	0.96
Total Octa-PCB	1.74e+08	0.91	y	52:43	1.33
Total Nona-PCB	1.54e+08	1.34	y	52:51	1.01
Total Deca-PCB	3.91e+07	1.16	y	56:37	1.17

Total PCB Conc:10553.0318230

Integrations
by
Analyst: Dm's
Date: 10/28/14

Client ID: PCB CS3 14F1302
 Lab ID: ST141024E2-1

Filename: 141024E2 S:1 Acq:25-OCT-14 02:10:53
 GC Column ID: ZB-1 ICal: PCVG8-6-23-14 wt/vol:1.0000 ConCal: ST141024E2-1
 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS		Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	2.85e+08	3.22	y	0.87	16:25	0.633	0.629-0.635	143	143	13C-PCB-79	2.14e+08	0.77	y	1.02	37:42	1.028	1.023-1.034	98.5	98.5		
13C-PCB-3	2.95e+08	3.26	y	0.91	18:55	0.729	0.725-0.733	141	141	13C-PCB-178	8.92e+07	0.46	y	0.61	45:33	0.984	0.979-0.990	106	106		
13C-PCB-4	1.31e+08	1.58	y	0.59	20:13	0.779	0.775-0.783	97.8	97.8	13C-PCB-79	2.14e+08	0.77	y	1.02	37:42	1.028	1.023-1.034	98.5	98.5		
13C-PCB-9	2.02e+08	1.59	y	0.90	21:56	0.846	0.842-0.850	98.8	98.8	13C-PCB-178	8.92e+07	0.46	y	0.61	45:33	0.984	0.979-0.990	106	106		
13C-PCB-11	2.13e+08	1.55	y	0.94	25:14	0.973	0.968-0.978	99.5	99.5	PS vs. IS											
13C-PCB-19	1.50e+08	1.09	y	0.53	24:15	0.935	0.930-0.940	123	123	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-28	1.93e+08	1.05	y	0.93	29:01	1.004	0.999-1.009	111	111	13C-PCB-178	8.92e+07	0.46	y	0.90	45:33	0.925	0.920-0.930	95.7	95.7		
13C-PCB-32	2.27e+08	1.10	y	0.80	27:06	1.045	1.040-1.050	125	125	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-37	1.64e+08	1.07	y	0.84	32:53	1.137	1.131-1.143	104	104	13C-PCB-178	8.92e+07	0.46	y	0.90	45:33	0.925	0.920-0.930	95.7	95.7		
13C-PCB-47	1.66e+08	0.77	y	0.81	31:55	0.870	0.866-0.874	95.5	95.5	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-52	1.53e+08	0.78	y	0.77	31:25	0.857	0.853-0.861	92.5	92.5	13C-PCB-178	8.92e+07	0.46	y	0.90	45:33	0.925	0.920-0.930	95.7	95.7		
13C-PCB-54	1.84e+08	0.80	y	0.97	27:57	0.762	0.758-0.766	88.7	88.7	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-70	2.10e+08	0.79	y	1.00	35:24	0.966	0.961-0.971	98.0	98.0	13C-PCB-178	8.92e+07	0.46	y	0.90	45:33	0.925	0.920-0.930	95.7	95.7		
13C-PCB-77	1.96e+08	0.80	y	0.94	39:32	1.078	1.073-1.083	97.2	97.2	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-80	2.21e+08	0.78	y	1.03	35:49	0.977	0.972-0.982	99.9	99.9	13C-PCB-178	8.92e+07	0.46	y	0.90	45:33	0.925	0.920-0.930	95.7	95.7		
13C-PCB-81	1.98e+08	0.77	y	0.92	38:57	1.062	1.057-1.067	100	100	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-95	1.20e+08	1.61	y	0.74	35:43	0.913	0.908-0.918	94.6	94.6	13C-PCB-178	8.92e+07	0.46	y	0.90	45:33	0.925	0.920-0.930	95.7	95.7		
13C-PCB-97	1.18e+08	1.61	y	0.70	38:42	0.989	0.984-0.994	98.4	98.4	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-101	1.29e+08	1.60	y	0.78	37:23	0.956	0.951-0.961	96.6	96.6	13C-PCB-15	2.28e+08	1.59	y	1.00	25:56	100					
13C-PCB-104	1.56e+08	1.61	y	1.00	32:35	0.833	0.828-0.836	91.3	91.3	13C-PCB-31	1.87e+08	1.04	y	1.00	28:55	100					
13C-PCB-105	1.48e+08	1.58	y	1.37	42:59	0.928	0.924-0.934	79.5	79.5	13C-PCB-60	2.14e+08	0.79	y	1.00	36:40	100					
13C-PCB-114	1.47e+08	1.61	y	1.36	42:07	0.910	0.905-0.915	79.0	79.0	13C-PCB-111	1.71e+08	1.61	y	1.00	39:07	100					
13C-PCB-118	1.65e+08	1.63	y	0.96	41:27	1.060	1.054-1.064	101	101	13C-PCB-128	1.37e+08	1.26	y	1.00	46:18	100					
13C-PCB-123	1.58e+08	1.61	y	0.89	41:15	1.055	1.050-1.060	103	103	13C-PCB-205	1.10e+08	0.92	y	1.00	53:54	100					
13C-PCB-126	1.43e+08	1.55	y	1.31	45:13	0.977	0.972-0.982	79.8	79.8	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-127	1.58e+08	1.57	y	1.47	43:18	0.935	0.931-0.941	78.3	78.3	13C-PCB-178	8.92e+07	0.46	y	0.90	45:33	0.925	0.920-0.930	95.7	95.7		
13C-PCB-138	1.42e+08	1.28	y	1.10	44:43	0.966	0.961-0.971	94.3	94.3	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-141	1.35e+08	1.28	y	1.07	43:52	0.948	0.943-0.953	91.8	91.8	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-153	1.47e+08	1.29	y	1.15	43:07	0.931	0.927-0.937	94.1	94.1	13C-PCB-178	8.92e+07	0.46	y	0.90	45:33	0.925	0.920-0.930	95.7	95.7		
13C-PCB-155	1.50e+08	1.27	y	0.84	36:56	0.944	0.939-0.949	105	105	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-156	1.73e+08	1.28	y	1.30	48:00	1.037	1.032-1.042	97.7	97.7	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-157	1.83e+08	1.28	y	1.36	48:16	1.043	1.038-1.048	98.5	98.5	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-159	1.64e+08	1.29	y	1.25	45:60	0.994	0.989-0.999	96.3	96.3	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-167	1.78e+08	1.27	y	1.35	46:41	1.008	1.004-1.014	96.5	96.5	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-169	1.73e+08	1.27	y	1.29	50:18	1.087	1.083-1.093	98.3	98.3	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-170	8.22e+07	0.46	y	0.54	50:39	1.094	1.089-1.101	111	111	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-180	1.04e+08	0.46	y	0.68	49:16	1.064	1.060-1.070	111	111	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-188	1.32e+08	0.46	y	0.92	42:45	0.923	0.919-0.929	106	106	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-189	1.09e+08	0.46	y	0.72	52:05	1.125	1.120-1.132	111	111	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-194	8.91e+07	0.92	y	0.80	53:36	0.994	0.990-1.000	101	101	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-202	1.40e+08	0.91	y	0.84	48:12	1.041	1.036-1.046	122	122	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-206	6.75e+07	0.78	y	0.65	55:20	1.027	1.021-1.031	94.1	94.1	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-208	1.20e+08	0.78	y	1.08	52:50	0.980	0.976-0.986	101	101	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		
13C-PCB-209	6.83e+07	1.19	y	0.61	56:36	1.050	1.045-1.055	101	101	13C-PCB-79	2.14e+08	0.77	y	1.10	37:42	0.968	0.964-0.974	98.2	98.2		

Analyst: DMS
 Date: 10/28/14

Vista Analytical Laboratory - Injection Log Run file: 141024E2 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141024E2	1	ST141024E2-1	DMS	25-OCT-14	02:10:53	ST141024E2-1	NA
141024E2	2	B4J0119-BS1	DMS	25-OCT-14	03:14:20	ST141024E2-1	NA
141024E2	3	B4J0122-BS1	DMS	25-OCT-14	04:17:54	ST141024E2-1	NA
141024E2	4	SOLVENT BLANK	DMS	25-OCT-14	05:21:22	ST141024E2-1	NA
141024E2	5	B4J0119-BLK1	DMS	25-OCT-14	06:24:56	ST141024E2-1	NA
141024E2	6	B4J0122-BLK1	DMS	25-OCT-14	07:28:25	ST141024E2-1	NA
141024E2	7	1400762-03@20X	DMS	25-OCT-14	08:31:59	ST141024E2-1	NA
141024E2	8	1400762-04@20X	DMS	25-OCT-14	09:35:32	ST141024E2-1	NA
141024E2	9	1400762-05@20X	DMS	25-OCT-14	10:39:00	ST141024E2-1	NA
141024E2	10	1400763-01@20X	DMS	25-OCT-14	11:42:27	ST141024E2-1	NA
141024E2	11	1400763-02@20X	DMS	25-OCT-14	12:45:54	ST141024E2-1	NA
141024E2	12	SOLVENT BLANK	DMS	25-OCT-14	13:49:23	ST141024E2-1	NA
141024E2	13	SOLVENT BLANK	DMS	25-OCT-14	14:52:52	ST141024E2-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST



Beg. Calibration ID: ST141024E2-1

End Calibration ID: NA

Ion abundance within QC limits?

Beg. End

<input type="checkbox"/>	<input checked="" type="checkbox"/> NA
--------------------------	--

Concentration within range?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

First and last eluters present?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Retention Times within criteria?

*ADM
10/24/14*

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Verification Std. named correctly?
(ST-Year-Month-Day-VG ID)

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Forms signed and dated?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Correct ICAL referenced?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Run Log:

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

-Data file matches Conc Cal ID?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

-Correct instrument listed?

<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	-------------------------------------

-Samples within 12-hour clock?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input checked="" type="checkbox"/> y	<input type="checkbox"/> n
---------------------------------------	----------------------------

Reviewed by: MM 10/28/14
Initials & Date

Mass resolution > 10,000?

- Method 1614 > 5,000; CARB 429 > 8,000

Beg. End

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

TCDD/TCDF valleys < 25%?

<input checked="" type="checkbox"/> NA	<input checked="" type="checkbox"/> NA
--	--

Peaks integrated correctly?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Manual integrations included?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

8280 CS1 Ending Standard

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

-Ratios within limits

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

-S/N > 2.5:1

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

-CS1 within 12-hour clock

<input type="checkbox"/>	<input checked="" type="checkbox"/> 4
--------------------------	---------------------------------------

Comments:

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 14 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST141027E1-1

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 141027E1 S#1 Analysis Date: 27-OCT-14 Time: 10:33:19

ANALYTES	ION	QC	CONC.				ION	QC	CONC.			
	ABUND.	LIMITS	CONC.	RANGE	ANALYTES	ABUND.	LIMITS	CONC.	RANGE			
	RATIO	PASS	FOUND	(ng/mL)		RATIO	PASS	FOUND	(ng/mL)			
PCB-1	2.97	2.66-3.60	y	45.5	37.5-62.5	PCB-52/69	0.75	0.65-0.89	y	99.9	75.0-125	
PCB-2	2.99	2.66-3.60	y	44.5	37.5-62.5	PCB-73	0.76	0.65-0.89	y	49.4	37.5-62.5	
PCB-3	2.97	2.66-3.60	y	44.2	37.5-62.5	PCB-43/49	0.76	0.65-0.89	y	98.5	75.0-125	
PCB-4/10	1.58	1.33-1.79	y	181.4	150-250	PCB-47	0.74	0.65-0.89	y	49.9	37.5-62.5	
PCB-7/9	1.60	1.33-1.79	y	185.6	150-250	PCB-48/75	0.75	0.65-0.89	y	98.8	75.0-125	
PCB-6	1.60	1.33-1.79	y	88.4	75.0-125	PCB-65	0.75	0.65-0.89	y	53.5	37.5-62.5	
PCB-5/8	1.60	1.33-1.79	y	190.1	150-250	PCB-62	0.78	0.65-0.89	y	49.0	37.5-62.5	
PCB-14	1.62	1.33-1.79	y	93.6	75.0-125	PCB-44	0.76	0.65-0.89	y	51.1	37.5-62.5	
PCB-11	1.61	1.33-1.79	y	92.7	75.0-125	PCB-42/59	0.76	0.65-0.89	y	103.8	75.0-125	
PCB-12/13	1.60	1.33-1.79	y	184.9	150-250	PCB-41/64/71/72	0.76	0.65-0.89	y	203.1	150-250	
PCB-15	1.61	1.33-1.79	y	91.9	75.0-125	PCB-68	0.76	0.65-0.89	y	52.9	37.5-62.5	
PCB-19	1.03	0.88-1.20	y	45.4	37.5-62.5	PCB-40	0.74	0.65-0.89	y	53.4	37.5-62.5	
PCB-30	1.04	0.88-1.20	y	48.5	37.5-62.5	PCB-57	0.76	0.65-0.89	y	52.6	37.5-62.5	
PCB-18	1.04	0.88-1.20	y	45.8	37.5-62.5	PCB-67	0.75	0.65-0.89	y	52.2	37.5-62.5	
PCB-17	1.04	0.88-1.20	y	45.1	37.5-62.5	PCB-58	0.76	0.65-0.89	y	51.2	37.5-62.5	
PCB-24/27	1.04	0.88-1.20	y	89.2	75.0-125	PCB-63	0.76	0.65-0.89	y	50.3	37.5-62.5	
PCB-16/32	1.03	0.88-1.20	y	90.6	75.0-125	PCB-74	0.75	0.65-0.89	y	47.9	37.5-62.5	
PCB-34	1.06	0.88-1.20	y	58.5	37.5-62.5	PCB-61/70	0.76	0.65-0.89	y	100.7	75.0-125	
PCB-23	1.06	0.88-1.20	y	53.8	37.5-62.5	PCB-76/66	0.76	0.65-0.89	y	98.2	75.0-125	
PCB-29	1.05	0.88-1.20	y	56.3	37.5-62.5	PCB-80	0.77	0.65-0.89	y	51.0	37.5-62.5	
PCB-26	1.05	0.88-1.20	y	53.0	37.5-62.5	PCB-55	0.76	0.65-0.89	y	50.6	37.5-62.5	
PCB-25	1.06	0.88-1.20	y	58.7	37.5-62.5	PCB-56/60	0.76	0.65-0.89	y	99.3	75.0-125	
PCB-31	1.04	0.88-1.20	y	54.2	37.5-62.5	PCB-79	0.76	0.65-0.89	y	51.0	37.5-62.5	
PCB-28	1.05	0.88-1.20	y	49.7	37.5-62.5	PCB-78	0.76	0.65-0.89	y	48.6	37.5-62.5	
PCB-20/21/33	1.05	0.88-1.20	y	171.7	112.5-225	PCB-81	0.77	0.65-0.89	y	47.2	37.5-62.5	
PCB-22	1.03	0.88-1.20	y	52.4	37.5-62.5	PCB-77	0.79	0.65-0.89	y	49.7	37.5-62.5	
PCB-36	1.03	0.88-1.20	y	44.9	37.5-62.5	PCB-104	1.55	1.32-1.78	y	46.9	37.5-62.5	
PCB-39	1.03	0.88-1.20	y	45.7	37.5-62.5	PCB-96	1.56	1.32-1.78	y	47.1	37.5-62.5	
PCB-38	1.06	0.88-1.20	y	46.1	37.5-62.5	PCB-103	1.53	1.32-1.78	y	48.5	37.5-62.5	
PCB-35	1.06	0.88-1.20	y	56.7	37.5-62.5	PCB-100	1.57	1.32-1.78	y	48.9	37.5-62.5	
PCB-37	1.07	0.88-1.20	y	52.6	37.5-62.5	PCB-94	1.55	1.32-1.78	y	43.6	37.5-62.5	
PCB-54	0.75	0.65-0.89	y	47.8	37.5-62.5	PCB-95/98/102	1.58	1.32-1.78	y	139.1	112.5-225	Analyst: <u>DMS</u>
PCB-50	0.76	0.65-0.89	y	47.7	37.5-62.5	PCB-93	1.50	1.32-1.78	y	47.7	37.5-62.5	
PCB-53	0.75	0.65-0.89	y	48.9	37.5-62.5	PCB-88/91	1.58	1.32-1.78	y	97.6	75.0-125	
PCB-51	0.75	0.65-0.89	y	46.9	37.5-62.5	PCB-121	1.52	1.32-1.78	y	47.2	37.5-62.5	Date: <u>10/27/14</u>
PCB-45	0.77	0.65-0.89	y	46.9	37.5-62.5							
PCB-46	0.74	0.65-0.89	y	47.0	37.5-62.5							

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 14 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST141027E1-1

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 141027E1 S#1 Analysis Date: 27-OCT-14 Time: 10:33:19

ANALYTES	ION	QC	CONC.		ANALYTES	ION	QC	CONC.			
	ABUND.	LIMITS	CONC.	RANGE		ABUND.	LIMITS	CONC.	RANGE		
	RATIO	PASS	FOUND	(ng/mL)		RATIO	PASS	FOUND	(ng/mL)		
PCB-84/92	1.58	1.32-1.78	y	90.7	75.0-125	PCB-140	1.25	1.05-1.43	y	51.9	37.5-62.5
PCB-89	1.56	1.32-1.78	y	45.2	37.5-62.5	PCB-134/143	1.23	1.05-1.43	y	97.3	75.0-125
PCB-90/101	1.54	1.32-1.78	y	93.1	75.0-125	PCB-133/142	1.22	1.05-1.43	y	94.5	75.0-125
PCB-113	1.54	1.32-1.78	y	44.8	37.5-62.5	PCB-131	1.21	1.05-1.43	y	47.7	37.5-62.5
PCB-99	1.60	1.32-1.78	y	49.5	37.5-62.5	PCB-146/165	1.23	1.05-1.43	y	95.3	75.0-125
PCB-119	1.55	1.32-1.78	y	46.2	37.5-62.5	PCB-132/161	1.21	1.05-1.43	y	91.7	75.0-125
PCB-108/112	1.56	1.32-1.78	y	91.3	75.0-125	PCB-153	1.21	1.05-1.43	y	44.7	37.5-62.5
PCB-83	1.57	1.32-1.78	y	45.9	37.5-62.5	PCB-168	1.21	1.05-1.43	y	45.6	37.5-62.5
PCB-97	1.57	1.32-1.78	y	45.5	37.5-62.5	PCB-141	1.21	1.05-1.43	y	45.7	37.5-62.5
PCB-86	1.55	1.32-1.78	y	44.5	37.5-62.5	PCB-137	1.20	1.05-1.43	y	46.7	37.5-62.5
PCB-87/117/125	1.56	1.32-1.78	y	137.2	112.5-225	PCB-130	1.26	1.05-1.43	y	50.8	37.5-62.5
PCB-111/115	1.56	1.32-1.78	y	92.3	75.0-125	PCB-138/163/164	1.21	1.05-1.43	y	136.5	112.5-225
PCB-85/116	1.57	1.32-1.78	y	92.6	75.0-125	PCB-158/160	1.21	1.05-1.43	y	95.7	75.0-125
PCB-120	1.57	1.32-1.78	y	46.2	37.5-62.5	PCB-129	1.21	1.05-1.43	y	47.2	37.5-62.5
PCB-110	1.56	1.32-1.78	y	45.8	37.5-62.5	PCB-166	1.21	1.05-1.43	y	44.3	37.5-62.5
PCB-82	1.55	1.32-1.78	y	46.1	37.5-62.5	PCB-159	1.21	1.05-1.43	y	46.8	37.5-62.5
PCB-124	1.55	1.32-1.78	y	44.9	37.5-62.5	PCB-128/162	1.22	1.05-1.43	y	88.5	75.0-125
PCB-107/109	1.56	1.32-1.78	y	91.8	75.0-125	PCB-167	1.22	1.05-1.43	y	46.4	37.5-62.5
PCB-123	1.59	1.32-1.78	y	45.8	37.5-62.5	PCB-156	1.23	1.05-1.43	y	47.4	37.5-62.5
PCB-106/118	1.58	1.32-1.78	y	91.6	75.0-125	PCB-157	1.24	1.05-1.43	y	46.3	37.5-62.5
PCB-114	1.59	1.32-1.78	y	45.1	37.5-62.5	PCB-169	1.23	1.05-1.43	y	44.7	37.5-62.5
PCB-122	1.63	1.32-1.78	y	45.1	37.5-62.5	PCB-188	1.05	0.89-1.21	y	46.2	37.5-62.5
PCB-105	1.60	1.32-1.78	y	44.5	37.5-62.5	PCB-184	1.06	0.89-1.21	y	46.3	37.5-62.5
PCB-127	1.63	1.32-1.78	y	44.6	37.5-62.5	PCB-179	1.05	0.89-1.21	y	45.2	37.5-62.5
PCB-126	1.63	1.32-1.78	y	44.9	37.5-62.5	PCB-176	1.05	0.89-1.21	y	46.1	37.5-62.5
PCB-155	1.28	1.05-1.43	y	47.2	37.5-62.5	PCB-186	1.03	0.89-1.21	y	46.4	37.5-62.5
PCB-150	1.27	1.05-1.43	y	48.8	37.5-62.5	PCB-178	1.02	0.89-1.21	y	45.2	37.5-62.5
PCB-152	1.25	1.05-1.43	y	47.9	37.5-62.5	PCB-175	1.03	0.89-1.21	y	47.0	37.5-62.5
PCB-145	1.27	1.05-1.43	y	47.8	37.5-62.5	PCB-182/187	1.04	0.89-1.21	y	92.4	75.0-125
PCB-136	1.26	1.05-1.43	y	51.5	37.5-62.5	PCB-183	1.03	0.89-1.21	y	45.8	37.5-62.5
PCB-148	1.26	1.05-1.43	y	44.0	37.5-62.5	PCB-185	1.03	0.89-1.21	y	45.6	37.5-62.5
PCB-154	1.25	1.05-1.43	y	51.3	37.5-62.5	PCB-174	1.02	0.89-1.21	y	44.8	37.5-62.5
PCB-151	1.26	1.05-1.43	y	49.9	37.5-62.5	PCB-181	1.03	0.89-1.21	y	50.1	37.5-62.5
PCB-135	1.26	1.05-1.43	y	51.8	37.5-62.5	PCB-177	1.03	0.89-1.21	y	47.2	37.5-62.5
PCB-144	1.26	1.05-1.43	y	49.4	37.5-62.5	PCB-171	1.06	0.89-1.21	y	46.8	37.5-62.5
PCB-147	1.26	1.05-1.43	y	51.3	37.5-62.5	PCB-173	1.05	0.89-1.21	y	47.2	37.5-62.5
PCB-139/149	1.26	1.05-1.43	y	101.6	75.0-125	PCB-172	1.04	0.89-1.21	y	47.2	37.5-62.5

Analyst DMSDate: 10/27/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 14 of

Lab Name: Vista Analytical Laboratory Lab ID: ST141027E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 141027E1 S#1 Analysis Date: 27-OCT-14 Time: 10:33:19

ANALYTES	ION	QC	CONC.		
	ABUND.	LIMITS	CONC.	RANGE	
	RATIO	PASS	FOUND	(ng/mL)	
PCB-192	1.04	0.89-1.21	y	48.3	37.5-62.5
PCB-180	1.04	0.89-1.21	y	46.7	37.5-62.5
PCB-193	1.05	0.89-1.21	y	45.7	37.5-62.5
PCB-191	1.05	0.89-1.21	y	46.5	37.5-62.5
PCB-170	1.02	0.89-1.21	y	45.2	37.5-62.5
PCB-190	1.04	0.89-1.21	y	46.5	37.5-62.5
PCB-189	1.03	0.89-1.21	y	45.6	37.5-62.5
PCB-202	0.90	0.76-1.02	y	46.2	37.5-62.5
PCB-201	0.89	0.76-1.02	y	46.7	37.5-62.5
PCB-204	0.91	0.76-1.02	y	46.2	37.5-62.5
PCB-197	0.90	0.76-1.02	y	45.7	37.5-62.5
PCB-200	0.90	0.76-1.02	y	46.9	37.5-62.5
PCB-198	0.89	0.76-1.02	y	46.6	37.5-62.5
PCB-199	0.89	0.76-1.02	y	48.9	37.5-62.5
PCB-196/203	0.89	0.76-1.02	y	96.8	75.0-125
PCB-195	0.90	0.76-1.02	y	53.8	37.5-62.5
PCB-194	0.90	0.76-1.02	y	47.3	37.5-62.5
PCB-205	0.91	0.76-1.02	y	47.7	37.5-62.5
PCB-208	1.31	1.14-1.54	y	47.7	37.5-62.5
PCB-207	1.31	1.14-1.54	y	48.1	37.5-62.5
PCB-206	1.27	1.14-1.54	y	46.7	37.5-62.5
PCB-209	1.17	0.99-1.33	y	48.2	37.5-62.5

Analyst: DmSDate: 10/27/14

LABELED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory

Lab ID: ST141027E1-1

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 141027E1 S#1 Analysis Date: 27-OCT-14 Time: 10:33:19

LABELED IS	ION				CONC.				ION				CONC.				
	ABUND.	QC	CONC.	RANGE	ABUND.	QC	CONC.	RANGE	ABUND.	QC	CONC.	RANGE	ABUND.	QC	CONC.	RANGE	
	RATIO	LIMITS	PASS	FOUND	(ng/mL)	LABELED IS	RATIO	LIMITS	PASS	FOUND	(ng/mL)	LABELED IS	RATIO	LIMITS	PASS	FOUND	(ng/mL)
13C-PCB-1	3.37	2.66-3.60	Y	117.7	50.0-145	13C-PCB-169	1.26	1.05-1.43	Y	103.9	50 - 145	13C-PCB-1	0.78	0.65-0.89	Y	89.6	50.0-145
13C-PCB-3	3.39	2.66-3.60	Y	123.7	50.0-145	13C-PCB-188	0.46	0.38-0.52	Y	105.7	50 - 145	13C-PCB-3	0.77	0.65-0.89	Y	91.4	50.0-145
13C-PCB-4	1.57	1.33-1.79	Y	91.8	50.0-145	13C-PCB-180	0.47	0.38-0.52	Y	110.4	50 - 145	13C-PCB-4	0.79	0.65-0.89	Y	95.2	50.0-145
13C-PCB-9	1.58	1.33-1.79	Y	95.2	50.0-145	13C-PCB-170	0.47	0.38-0.52	Y	114.9	50 - 145	13C-PCB-9	0.79	0.65-0.89	Y	98.8	50.0-145
13C-PCB-11	1.56	1.33-1.79	Y	98.8	50.0-145	13C-PCB-189	0.46	0.38-0.52	Y	115.6	50 - 145	13C-PCB-11	0.79	0.65-0.89	Y	109.8	50.0-145
13C-PCB-19	1.09	0.88-1.20	Y	109.8	50.0-145	13C-PCB-202	0.90	0.76-1.02	Y	125.1	50 - 145	13C-PCB-19	0.79	0.65-0.89	Y	117.0	50.0-145
13C-PCB-32	1.07	0.88-1.20	Y	117.0	50.0-145	13C-PCB-194	0.90	0.76-1.02	Y	100.5	50 - 145	13C-PCB-32	0.79	0.65-0.89	Y	93.2	50.0-145
13C-PCB-28	1.02	0.88-1.20	Y	93.2	50.0-145	13C-PCB-208	0.77	0.65-0.89	Y	115.0	50 - 145	13C-PCB-28	0.79	0.65-0.89	Y	106.9	50.0-145
13C-PCB-37	1.04	0.88-1.20	Y	106.9	50.0-145	13C-PCB-206	0.79	0.65-0.89	Y	111.2	50 - 145	13C-PCB-37	0.79	0.65-0.89	Y	86.7	50.0-145
13C-PCB-54	0.79	0.65-0.89	Y	86.7	50.0-145	13C-PCB-209	1.19	0.99-1.33	Y	120.6	50 - 145	13C-PCB-54	0.78	0.65-0.89	Y	100.3	50.0-145
13C-PCB-52	0.78	0.65-0.89	Y	89.6	50.0-145	13C-PCB-77	0.79	0.65-0.89	Y	103.0	75 - 125	13C-PCB-52	0.79	0.65-0.89	Y	95.5	50.0-145
13C-PCB-47	0.77	0.65-0.89	Y	91.4	50.0-145	13C-PCB-70	0.79	0.65-0.89	Y	104.6	75 - 125	13C-PCB-47	0.79	0.65-0.89	Y	97.8	50.0-145
13C-PCB-70	0.79	0.65-0.89	Y	95.5	50.0-145	13C-PCB-80	0.79	0.65-0.89	Y	104.6	75 - 125	13C-PCB-70	0.78	0.65-0.89	Y	101.8	50.0-145
13C-PCB-80	0.79	0.65-0.89	Y	97.8	50.0-145	13C-PCB-81	0.78	0.65-0.89	Y	101.8	50.0-145	13C-PCB-80	0.79	0.65-0.89	Y	100.3	50.0-145
13C-PCB-81	0.78	0.65-0.89	Y	101.8	50.0-145	13C-PCB-77	0.79	0.65-0.89	Y	103.0	75 - 125	13C-PCB-81	0.79	0.65-0.89	Y	99.2	50.0-145
13C-PCB-77	0.79	0.65-0.89	Y	100.3	50.0-145	13C-PCB-104	1.59	1.32-1.78	Y	89.2	50.0-145	13C-PCB-77	0.79	0.65-0.89	Y	92.0	50.0-145
13C-PCB-104	1.59	1.32-1.78	Y	89.2	50.0-145	13C-PCB-95	1.60	1.32-1.78	Y	92.0	50.0-145	13C-PCB-104	1.57	1.32-1.78	Y	95.7	50.0-145
13C-PCB-95	1.60	1.32-1.78	Y	92.0	50.0-145	13C-PCB-101	1.57	1.32-1.78	Y	95.7	50.0-145	13C-PCB-95	1.60	1.32-1.78	Y	100.3	50.0-145
13C-PCB-101	1.57	1.32-1.78	Y	95.7	50.0-145	13C-PCB-97	1.61	1.32-1.78	Y	98.4	50.0-145	13C-PCB-101	1.57	1.32-1.78	Y	104.4	50.0-145
13C-PCB-97	1.61	1.32-1.78	Y	98.4	50.0-145	13C-PCB-123	1.56	1.32-1.78	Y	104.4	50.0-145	13C-PCB-97	1.61	1.32-1.78	Y	102.7	50.0-145
13C-PCB-123	1.56	1.32-1.78	Y	104.4	50.0-145	13C-PCB-118	1.60	1.32-1.78	Y	102.7	50.0-145	13C-PCB-123	1.56	1.32-1.78	Y	81.9	50.0-145
13C-PCB-118	1.60	1.32-1.78	Y	102.7	50.0-145	13C-PCB-114	1.53	1.32-1.78	Y	81.9	50.0-145	13C-PCB-118	1.60	1.32-1.78	Y	73.0	50.0-145
13C-PCB-114	1.53	1.32-1.78	Y	81.9	50.0-145	13C-PCB-105	1.51	1.32-1.78	Y	73.0	50.0-145	13C-PCB-114	1.53	1.32-1.78	Y	73.3	50.0-145
13C-PCB-105	1.51	1.32-1.78	Y	73.0	50.0-145	13C-PCB-127	1.51	1.32-1.78	Y	73.3	50.0-145	13C-PCB-105	1.51	1.32-1.78	Y	77.7	50.0-145
13C-PCB-127	1.51	1.32-1.78	Y	73.3	50.0-145	13C-PCB-126	1.51	1.32-1.78	Y	77.7	50.0-145	13C-PCB-127	1.51	1.32-1.78	Y	107.6	50.0-145
13C-PCB-126	1.51	1.32-1.78	Y	77.7	50.0-145	13C-PCB-155	1.28	1.05-1.43	Y	96.5	50.0-145	13C-PCB-126	1.51	1.32-1.78	Y	92.8	50.0-145
13C-PCB-155	1.28	1.05-1.43	Y	107.6	50.0-145	13C-PCB-153	1.29	1.05-1.43	Y	96.5	50.0-145	13C-PCB-155	1.28	1.05-1.43	Y	95.9	50.0-145
13C-PCB-153	1.29	1.05-1.43	Y	96.5	50.0-145	13C-PCB-141	1.27	1.05-1.43	Y	92.8	50.0-145	13C-PCB-153	1.29	1.05-1.43	Y	99.2	50.0-145
13C-PCB-141	1.27	1.05-1.43	Y	92.8	50.0-145	13C-PCB-138	1.27	1.05-1.43	Y	95.9	50.0-145	13C-PCB-141	1.27	1.05-1.43	Y	100.4	50.0-145
13C-PCB-138	1.27	1.05-1.43	Y	95.9	50.0-145	13C-PCB-159	1.25	1.05-1.43	Y	99.2	50.0-145	13C-PCB-138	1.27	1.05-1.43	Y	102.7	50.0-145
13C-PCB-159	1.25	1.05-1.43	Y	99.2	50.0-145	13C-PCB-167	1.26	1.05-1.43	Y	100.4	50.0-145	13C-PCB-159	1.25	1.05-1.43	Y	102.5	50.0-145
13C-PCB-167	1.26	1.05-1.43	Y	100.4	50.0-145	13C-PCB-156	1.27	1.05-1.43	Y	102.7	50.0-145	13C-PCB-167	1.26	1.05-1.43	Y	102.5	50.0-145
13C-PCB-156	1.27	1.05-1.43	Y	102.7	50.0-145	13C-PCB-157	1.28	1.05-1.43	Y	102.5	50.0-145	13C-PCB-156	1.27	1.05-1.43	Y	102.5	50.0-145

Analyst: Dmrs
 Date: 10/27/14

Client ID: PCB CS3 14F1302
Lab ID: ST141027E1-1

Filename: 141027E1 S:1 Acq:27-OCT-14 10:33:19 ConCal: ST141027E1-1
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	9.54e+07	2.97	y	1.19	16:26	1.001	0.996-1.006	45.5421	PCB-52/69	1.30e+08	0.75	y	1.28	31:27	1.002	0.996-1.006	99.8647
PCB-2	1.02e+08	2.99	y	1.18	18:42	0.989	0.984-0.994	44.4769	PCB-73	6.78e+07	0.76	y	1.35	31:34	1.005	1.000-1.010	49.4036
PCB-3	1.21e+08	2.97	y	1.43	18:56	1.001	0.996-1.006	44.1532	PCB-43/49	9.94e+07	0.76	y	0.99	31:43	1.010	1.005-1.015	98.5127
PCB-4/10	2.62e+08	1.58	y	1.57	20:15	1.002	0.997-1.007	181.351	PCB-47	5.75e+07	0.74	y	1.06	31:56	1.001	0.996-1.006	49.8623
PCB-7/9	3.28e+08	1.60	y	1.21	21:59	0.872	0.866-0.874	185.586	PCB-48/75	1.32e+08	0.75	y	1.23	32:03	1.004	0.999-1.009	98.8078
PCB-6	1.68e+08	1.60	y	1.30	22:37	0.897	0.890-0.899	88.4367	PCB-65	7.14e+07	0.75	y	1.22	32:20	1.013	1.008-1.018	53.5357
PCB-5/8	3.19e+08	1.60	y	1.15	23:01	0.912	0.907-0.917	190.144	PCB-62	6.53e+07	0.78	y	1.22	32:26	1.016	1.011-1.021	49.0394
PCB-14	1.64e+08	1.62	y	1.11	24:04	0.954	0.949-0.959	93.5841	PCB-44	4.79e+07	0.76	y	0.86	32:44	1.026	1.021-1.031	51.0559
PCB-11	1.60e+08	1.61	y	1.09	25:15	1.001	0.995-1.005	92.7243	PCB-42/59	1.29e+08	0.76	y	1.14	32:57	1.033	1.028-1.038	103.750
PCB-12/13	3.49e+08	1.60	y	1.19	25:38	1.016	1.011-1.021	184.909	PCB-41/64/71/72	2.67e+08	0.76	y	1.21	33:32	1.051	1.046-1.056	203.143
PCB-15	1.87e+08	1.61	y	1.28	25:56	1.028	1.023-1.033	91.9170	PCB-68	7.77e+07	0.76	y	1.35	33:47	1.059	1.054-1.064	52.8887
PCB-19	4.73e+07	1.03	y	1.04	24:16	1.001	0.996-1.006	45.4129	PCB-40	4.08e+07	0.74	y	0.70	34:01	1.066	1.061-1.071	53.4285
PCB-30	8.28e+07	1.04	y	1.71	25:08	1.036	1.032-1.042	48.5127	PCB-57	7.20e+07	0.76	y	0.98	34:21	0.970	0.965-0.975	52.5613
PCB-18	5.70e+07	1.04	y	0.78	25:52	0.954	0.949-0.959	45.8006	PCB-67	8.08e+07	0.75	y	1.11	34:40	0.979	0.974-0.984	52.2172
PCB-17	6.62e+07	1.04	y	0.92	26:02	0.961	0.956-0.966	45.0891	PCB-58	6.63e+07	0.76	y	0.93	34:47	0.982	0.977-0.987	51.1618
PCB-24/27	1.69e+08	1.04	y	1.19	26:36	0.982	0.977-0.987	89.2282	PCB-63	6.70e+07	0.76	y	0.95	34:56	0.987	0.982-0.992	50.3282
- PCB-16/32	1.36e+08	1.03	y	0.94	27:06	1.000	0.995-1.005	90.6249	PCB-74	8.33e+07	0.75	y	1.24	35:14	0.995	0.990-1.000	47.9208
- PCB-34	7.55e+07	1.06	y	1.14	27:53	0.961	0.955-0.965	58.4587	PCB-61/70	1.34e+08	0.76	y	0.95	35:24	1.000	0.995-1.005	100.726
PCB-23	7.82e+07	1.06	y	1.28	27:58	0.964	0.959-0.969	53.8446	PCB-76/66	1.43e+08	0.76	y	1.04	35:37	1.006	1.001-1.011	98.1938
PCB-29	6.91e+07	1.05	y	1.08	28:13	0.972	0.967-0.977	56.3284	PCB-80	9.00e+07	0.77	y	1.19	35:50	1.001	0.996-1.006	50.9551
PCB-26	7.26e+07	1.05	y	1.21	28:26	0.980	0.974-0.984	52.9734	PCB-55	7.81e+07	0.76	y	1.04	36:10	1.010	1.005-1.015	50.5999
PCB-25	8.41e+07	1.06	y	1.26	28:35	0.985	0.979-0.989	58.6523	PCB-56/60	1.49e+08	0.76	y	1.01	36:41	1.024	1.019-1.029	99.3411
PCB-31	7.92e+07	1.04	y	1.28	28:56	0.997	0.992-1.002	54.2313	PCB-79	8.16e+07	0.76	y	1.08	37:44	1.053	1.048-1.058	51.0074
PCB-28	9.67e+07	1.05	y	1.71	29:02	1.001	0.995-1.005	49.6922	PCB-78	8.50e+07	0.76	y	1.27	38:26	0.987	0.982-0.992	48.5778
PCB-20/21/33	2.11e+08	1.05	y	1.08	29:40	1.022	1.017-1.027	171.720	PCB-81	8.65e+07	0.77	y	1.33	38:57	1.000	0.995-1.005	47.1968
PCB-22	7.20e+07	1.03	y	1.21	30:06	1.037	1.032-1.042	52.4009	PCB-77	7.59e+07	0.79	y	1.10	39:34	1.000	0.995-1.005	49.7255
PCB-36	6.03e+07	1.03	y	1.14	30:41	0.933	0.928-0.938	44.9439	PCB-104	5.97e+07	1.55	y	1.18	32:36	1.001	0.996-1.006	46.8679
PCB-39	5.99e+07	1.03	y	1.12	31:09	0.947	0.943-0.953	45.7309	PCB-96	5.77e+07	1.56	y	1.14	33:51	1.039	1.034-1.044	47.1241
PCB-38	6.49e+07	1.06	y	1.20	31:56	0.971	0.966-0.976	46.0860	PCB-103	4.99e+07	1.53	y	0.96	34:21	1.055	1.050-1.060	48.5026
PCB-35	8.20e+07	1.06	y	1.23	32:27	0.987	0.982-0.992	56.6782	PCB-100	4.93e+07	1.57	y	0.94	34:43	1.066	1.061-1.071	48.8657
PCB-37	7.60e+07	1.07	y	1.23	32:54	1.001	0.995-1.005	52.6252	PCB-94	3.78e+07	1.55	y	1.06	35:11	0.985	0.980-0.990	43.6410
PCB-54	6.51e+07	0.75	y	1.10	27:57	1.001	0.996-1.006	47.7780	PCB-95/98/102	1.40e+08	1.58	y	1.22	35:41	0.999	0.995-1.005	139.069
PCB-50	5.19e+07	0.76	y	0.88	29:05	1.041	1.037-1.047	47.7378	PCB-93	3.30e+07	1.50	y	0.84	35:50	1.003	0.997-1.007	47.6818
PCB-53	5.27e+07	0.75	y	1.06	29:44	0.947	0.942-0.952	48.8932	PCB-88/91	8.94e+07	1.58	y	1.12	36:06	1.011	1.005-1.015	97.6382
PCB-51	4.72e+07	0.75	y	0.99	30:05	0.958	0.952-0.962	46.9384	PCB-121	6.26e+07	1.52	y	1.62	36:12	1.013	1.009-1.019	47.2499
PCB-45	4.11e+07	0.77	y	0.86	30:31	0.972	0.966-0.976	46.9048	PCB-84/92	8.56e+07	1.58	y	1.05	37:02	0.991	0.985-0.995	90.6826
PCB-46	4.03e+07	0.74	y	0.85	30:60	0.987	0.981-0.991	46.9573	PCB-89	4.61e+07	1.56	y	1.13	37:14	0.996	0.991-1.001	45.2266

RL: MONO, TRI - DECA: _____

RL: DI : _____

Integrations
by
Analyst: DMS

Date: 10/27/14

Reviewed
by
Analyst: _____

Date: _____

Client ID: PCB CS3 14F1302
Lab ID: ST141027E1-1

Filename: 141027E1 S:1 Acq:27-OCT-14 10:33:19 ConCal: ST141027E1-1
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-90/101	9.25e+07	1.54	y	1.10	37:23	1.000	0.995-1.005	93.1033
PCB-113	5.70e+07	1.54	y	1.41	37:38	1.007	1.002-1.012	44.8242
PCB-99	5.96e+07	1.60	y	1.34	37:44	1.009	1.004-1.014	49.4512
PCB-119	5.92e+07	1.55	y	1.53	38:12	0.987	0.982-0.992	46.2334
PCB-108/112	9.76e+07	1.56	y	1.28	38:21	0.991	0.986-0.996	91.3106
PCB-83	5.82e+07	1.57	y	1.52	38:31	0.995	0.990-1.000	45.9050
PCB-97	4.49e+07	1.57	y	1.18	38:43	1.001	0.995-1.005	45.4820
PCB-86	3.13e+07	1.55	y	0.84	38:52	1.004	0.999-1.009	44.4925
B-87/117/125	1.78e+08	1.56	y	1.55	38:59	1.008	1.002-1.012	137.248
PCB-111/115	1.26e+08	1.56	y	1.63	39:08	1.011	1.006-1.016	92.2784
PCB-85/116	1.01e+08	1.57	y	1.30	39:17	1.015	1.010-1.020	92.6094
PCB-120	6.47e+07	1.57	y	1.68	39:29	1.020	1.016-1.026	46.2328
PCB-110	5.95e+07	1.56	y	1.56	39:40	1.025	1.020-1.030	45.8132
PCB-82	3.94e+07	1.55	y	0.76	40:18	0.977	0.971-0.981	46.1367
PCB-124	7.42e+07	1.55	y	1.47	40:57	0.992	0.988-0.998	44.9028
PCB-107/109	1.36e+08	1.56	y	1.32	41:06	0.996	0.991-1.001	91.8094
PCB-123	6.02e+07	1.59	y	1.17	41:17	1.000	0.996-1.006	45.8112
- PCB-106/118	1.27e+08	1.58	y	1.17	41:29	1.001	0.996-1.006	91.5597
- PCB-114	6.03e+07	1.59	y	1.30	42:07	1.000	0.995-1.005	45.1360
PCB-122	5.20e+07	1.63	y	1.12	42:15	1.003	0.999-1.009	45.0503
PCB-105	5.31e+07	1.60	y	1.30	42:59	1.000	0.995-1.005	44.4838
PCB-127	5.92e+07	1.63	y	1.33	43:18	1.000	0.996-1.006	44.5857
PCB-126	4.97e+07	1.63	y	1.18	45:14	1.000	0.995-1.005	44.8921
PCB-155	5.72e+07	1.28	y	1.11	36:57	1.001	0.966-1.006	47.2451
PCB-150	5.30e+07	1.27	y	1.00	38:13	1.035	1.030-1.040	48.7587
PCB-152	5.81e+07	1.25	y	1.12	38:42	1.048	1.043-1.053	47.8779
PCB-145	6.24e+07	1.27	y	1.20	39:09	1.060	1.055-1.065	47.7574
PCB-136	6.60e+07	1.26	y	1.18	39:28	1.069	1.064-1.074	51.5001
PCB-148	3.57e+07	1.26	y	0.74	39:34	1.071	1.066-1.076	44.0447
PCB-154	4.79e+07	1.25	y	0.86	40:02	1.084	1.080-1.090	51.3454
PCB-151	4.05e+07	1.26	y	0.75	40:42	1.102	1.097-1.107	49.8512
PCB-135	4.47e+07	1.26	y	0.79	40:55	1.108	1.103-1.113	51.8055
PCB-144	4.09e+07	1.26	y	0.76	41:01	1.111	1.105-1.117	49.3820
PCB-147	4.57e+07	1.26	y	0.82	41:09	1.114	1.109-1.121	51.2505
PCB-139/149	8.43e+07	1.26	y	0.76	41:25	1.121	1.116-1.128	101.649
- PCB-140	4.08e+07	1.25	y	0.72	41:37	1.127	1.121-1.133	51.9268
- PCB-134/143	9.11e+07	1.23	y	0.92	42:03	0.975	0.970-0.980	97.3096

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	7.90e+07	1.22	y	0.82	42:20	0.982	0.977-0.987	94.4706
PCB-131	4.43e+07	1.21	y	0.91	42:31	0.986	0.981-0.991	47.7260
PCB-146/165	1.21e+08	1.23	y	1.25	42:43	0.991	0.986-0.996	95.3254
PCB-132/161	1.04e+08	1.21	y	1.10	42:58	0.997	0.992-1.002	91.7059
PCB-153	5.70e+07	1.21	y	1.25	43:08	1.000	0.995-1.005	44.6538
PCB-168	6.76e+07	1.21	y	1.45	43:20	1.005	1.001-1.011	45.6386
PCB-141	4.57e+07	1.21	y	1.09	43:53	1.001	0.995-1.005	45.7125
PCB-137	4.57e+07	1.20	y	1.06	44:16	1.009	1.004-1.014	46.7024
PCB-130	4.51e+07	1.26	y	0.96	44:22	1.012	1.006-1.016	50.8054
PCB-138/163/164	1.72e+08	1.21	y	1.29	44:45	1.001	0.996-1.006	136.481
PCB-158/160	1.25e+08	1.21	y	1.34	45:00	1.007	1.001-1.011	95.7086
PCB-129	3.92e+07	1.21	y	0.85	45:14	1.012	1.007-1.017	47.1992
PCB-166	6.00e+07	1.21	y	1.19	45:41	0.993	0.988-0.998	44.2803
PCB-159	5.95e+07	1.21	y	1.11	46:01	1.000	0.996-1.006	46.8066
PCB-128/162	1.06e+08	1.22	y	1.05	46:18	1.007	1.002-1.012	88.4554
PCB-167	6.98e+07	1.22	y	1.20	46:41	1.000	0.995-1.005	46.4468
PCB-156	6.62e+07	1.23	y	1.14	48:00	1.000	0.996-1.006	47.3960
PCB-157	6.91e+07	1.24	y	1.16	48:17	1.000	0.995-1.005	46.2554
PCB-169	6.16e+07	1.23	y	1.12	50:19	1.000	0.995-1.005	44.6567
PCB-188	6.54e+07	1.05	y	1.58	42:47	1.001	0.996-1.006	46.1634
PCB-184	6.77e+07	1.06	y	1.63	43:13	1.011	1.006-1.016	46.3013
PCB-179	5.28e+07	1.05	y	1.30	44:01	1.029	1.024-1.034	45.1895
PCB-176	6.10e+07	1.05	y	1.48	44:28	1.040	1.035-1.045	46.1197
PCB-186	6.04e+07	1.03	y	1.45	45:05	1.055	1.050-1.060	46.4290
PCB-178	4.19e+07	1.02	y	1.03	45:34	1.066	1.061-1.071	45.2005
PCB-175	4.26e+07	1.03	y	1.01	45:55	1.074	1.069-1.079	46.9702
PCB-182/187	1.04e+08	1.04	y	1.25	46:06	1.078	1.073-1.083	92.3597
PCB-183	4.96e+07	1.03	y	1.21	46:25	1.086	1.081-1.091	45.8192
PCB-185	5.72e+07	1.03	y	1.80	47:05	0.956	0.951-0.961	45.5501
PCB-174	4.31e+07	1.02	y	1.38	47:27	0.963	0.958-0.968	44.8421
PCB-181	4.82e+07	1.03	y	1.38	47:33	0.966	0.960-0.970	50.1444
PCB-177	4.13e+07	1.03	y	1.26	47:44	0.969	0.963-0.973	47.1568
PCB-171	5.16e+07	1.06	y	1.58	48:01	0.975	0.970-0.980	46.8288
PCB-173	3.65e+07	1.05	y	1.11	48:28	0.984	0.978-0.988	47.2049
PCB-172	5.37e+07	1.04	y	1.63	48:53	0.993	0.987-0.997	47.1534
PCB-192	5.86e+07	1.04	y	1.74	49:05	0.996	0.991-1.001	48.2884
PCB-180	4.38e+07	1.04	y	1.34	49:16	1.000	0.995-1.005	46.7451

Integrations

by

Analyst: DMS

Date: 10/27/14

Client ID: PCB CS3 14F1302
Lab ID: ST141027E1-1

Filename: 141027E1 S:1 Acq:27-OCT-14 10:33:19 ConCal: ST141027E1-1
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-193	5.47e+07	1.05	y	1.72	49:28	1.004	0.999-1.009	45.7213
PCB-191	5.49e+07	1.05	y	1.69	49:42	1.009	1.004-1.014	46.4938
PCB-170	4.16e+07	1.02	y	1.60	50:40	1.000	0.995-1.005	45.2495
PCB-190	5.91e+07	1.04	y	2.21	50:49	1.003	0.998-1.008	46.5302
PCB-189	5.40e+07	1.03	y	1.55	52:05	1.000	0.995-1.005	45.6107
PCB-202	4.84e+07	0.90	y	1.08	48:14	1.000	0.995-1.005	46.1800
PCB-201	5.20e+07	0.89	y	1.15	48:43	1.011	1.005-1.015	46.7038
PCB-204	5.09e+07	0.91	y	1.14	48:52	1.014	1.008-1.018	46.2160
PCB-197	4.74e+07	0.90	y	1.07	49:09	1.020	1.015-1.025	45.6596
PCB-200	4.83e+07	0.90	y	1.06	49:58	1.037	1.032-1.044	46.9142
PCB-198	3.41e+07	0.89	y	0.76	51:12	1.062	1.059-1.069	46.6134
PCB-199	3.77e+07	0.89	y	0.80	51:19	1.064	1.061-1.071	48.8764
- PCB-196/203	7.51e+07	0.89	y	0.80	51:34	1.070	1.066-1.076	96.7869
- PCB-195	3.96e+07	0.90	y	1.23	52:42	0.983	0.979-0.989	53.7839
PCB-194	3.44e+07	0.90	y	1.21	53:37	1.000	0.995-1.005	47.2653
PCB-205	4.42e+07	0.91	y	1.54	53:54	1.006	1.001-1.011	47.6629
PCB-208	4.14e+07	1.31	y	0.93	52:50	1.000	0.995-1.005	47.7344
PCB-207	4.86e+07	1.31	y	1.08	53:10	1.006	1.001-1.011	48.0687
PCB-206	2.59e+07	1.27	y	1.02	55:20	1.000	0.995-1.005	46.6886
PCB-209	3.11e+07	1.17	y	1.17	56:36	1.000	0.995-1.005	48.1501

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	3.18e+08	2.97	y	16:26	1.27
Total Di-PCB	1.94e+09	1.58	y	20:15	1.21
Total Tri-PCB	5.58e+08	1.03	y	24:16	1.10
Total Tri-PCB	1.20e+09	1.06	y	27:53	1.21
Total Tetra-PCB	2.80e+09	0.75	y	27:57	1.09
Total Penta-PCB	2.18e+09	1.55	y	32:36	1.18
Total Penta-PCB	2.96e+08	1.59	y	42:07	1.25
Total Hexa-PCB	6.77e+08	1.28	y	36:57	0.90
Total Hexa-PCB	1.55e+09	1.23	y	42:03	1.11
Total Hepta-PCB	1.25e+09	1.05	y	42:47	1.42
Total Octa-PCB	3.94e+08	0.90	y	48:14	0.96
Total Octa-PCB	1.24e+08	0.90	y	52:42	1.33
Total Nona-PCB	1.19e+08	1.31	y	52:50	1.01
Total Deca-PCB	3.11e+07	1.17	y	56:36	1.17

Total PCB Conc:10558.2821620

RL: MONO, TRI - DECA: _____

Integrations
by
Analyst: Dms

Date: 10/27/14

Client ID: PCB CS3 14F1302
 Lab ID: ST141027E1-1

Filename: 141027E1 S:1 Acq:27-OCT-14 10:33:19
 GC Column ID: ZB-1 ICal: PCVG8-6-23-14 wt/vol:1.0000
 ConCal: ST141027E1-1
 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS		Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	
13C-PCB-1	1.76e+08	3.37	y	0.87	16:25	0.633	0.629-0.635	118	118	13C-PCB-79	1.54e+08	0.78	y	1.02	37:42	1.028	1.023-1.034	103	103			
13C-PCB-3	1.93e+08	3.39	y	0.91	18:55	0.730	0.725-0.733	124	124	13C-PCB-178	5.93e+07	0.45	y	0.61	45:33	0.984	0.979-0.990	105	105			
13C-PCB-4	9.21e+07	1.57	y	0.59	20:12	0.779	0.775-0.783	91.8	91.8	PS vs. IS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-9	1.46e+08	1.58	y	0.90	21:55	0.846	0.842-0.850	95.2	95.2	13C-PCB-79	1.54e+08	0.78	y	1.02	37:42	1.028	1.023-1.034	103	103			
13C-PCB-11	1.58e+08	1.56	y	0.94	25:13	0.973	0.968-0.978	98.8	98.8	13C-PCB-178	5.93e+07	0.45	y	0.61	45:33	0.984	0.979-0.990	105	105			
13C-PCB-19	9.98e+07	1.09	y	0.53	24:15	0.935	0.930-0.940	110	110	13C-PCB-79	1.54e+08	0.78	y	1.10	37:42	0.968	0.964-0.974	101	101			
13C-PCB-28	1.14e+08	1.02	y	0.93	29:01	1.003	0.999-1.009	93.2	93.2	13C-PCB-178	5.93e+07	0.45	y	0.90	45:33	0.925	0.920-0.930	94.7	94.7			
13C-PCB-32	1.59e+08	1.07	y	0.80	27:06	1.045	1.040-1.050	117	117	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-37	1.17e+08	1.04	y	0.84	32:53	1.137	1.131-1.143	107	107	13C-PCB-79	1.54e+08	0.78	y	1.10	37:42	0.968	0.964-0.974	101	101			
13C-PCB-47	1.09e+08	0.77	y	0.81	31:55	0.870	0.866-0.874	91.4	91.4	13C-PCB-178	5.93e+07	0.45	y	0.90	45:33	0.925	0.920-0.930	94.7	94.7			
13C-PCB-52	1.01e+08	0.78	y	0.77	31:24	0.856	0.853-0.861	89.6	89.6	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-54	1.23e+08	0.79	y	0.97	27:56	0.762	0.758-0.766	86.7	86.7	13C-PCB-79	1.54e+08	0.78	y	1.10	37:42	0.968	0.964-0.974	101	101			
13C-PCB-70	1.40e+08	0.79	y	1.00	35:25	0.966	0.961-0.971	95.5	95.5	13C-PCB-178	5.93e+07	0.45	y	0.90	45:33	0.925	0.920-0.930	94.7	94.7			
13C-PCB-77	1.39e+08	0.79	y	0.94	39:32	1.078	1.073-1.083	100	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-80	1.48e+08	0.79	y	1.03	35:49	0.977	0.972-0.982	97.8	97.8	13C-PCB-79	1.54e+08	0.78	y	1.10	37:42	0.968	0.964-0.974	101	101			
13C-PCB-81	1.38e+08	0.78	y	0.92	38:56	1.062	1.057-1.067	102	102	13C-PCB-178	5.93e+07	0.45	y	0.90	45:33	0.925	0.920-0.930	94.7	94.7			
13C-PCB-95	8.20e+07	1.60	y	0.74	35:43	0.913	0.908-0.918	92.0	92.0	13C-PCB-79	1.54e+08	0.78	y	1.10	37:42	0.968	0.964-0.974	101	101			
13C-PCB-97	8.35e+07	1.61	y	0.70	38:42	0.989	0.984-0.994	98.4	98.4	13C-PCB-15	1.71e+08	1.56	y	1.00	25:56	100	100	100	100			
13C-PCB-101	9.03e+07	1.57	y	0.78	37:23	0.956	0.951-0.961	95.7	95.7	13C-PCB-31	1.31e+08	1.01	y	1.00	28:55	100	100	100	100			
13C-PCB-104	1.08e+08	1.59	y	1.00	32:34	0.833	0.828-0.836	89.2	89.2	13C-PCB-60	1.47e+08	0.77	y	1.00	36:40	100	100	100	100			
13C-PCB-105	9.20e+07	1.51	y	1.37	42:58	0.928	0.924-0.934	73.0	73.0	13C-PCB-111	1.20e+08	1.61	y	1.00	39:07	100	100	100	100			
13C-PCB-114	1.03e+08	1.53	y	1.36	42:06	0.910	0.905-0.915	81.9	81.9	13C-PCB-128	9.23e+07	1.24	y	1.00	46:17	100	100	100	100			
13C-PCB-118	1.19e+08	1.60	y	0.96	41:26	1.060	1.054-1.064	103	103	13C-PCB-205	7.50e+07	0.89	y	1.00	53:54	100	100	100	100			
13C-PCB-123	1.12e+08	1.56	y	0.89	41:16	1.055	1.050-1.060	104	104	13C-PCB-126	9.37e+07	1.31	45:13	0.977	0.972-0.982	77.7	77.7	100	100			
13C-PCB-127	9.97e+07	1.51	y	1.47	43:18	0.935	0.931-0.941	73.3	73.3	13C-PCB-138	9.74e+07	1.27	y	1.10	44:42	0.966	0.961-0.971	95.9	95.9	100	100	
13C-PCB-141	9.21e+07	1.27	y	1.07	43:51	0.948	0.943-0.953	92.8	92.8	13C-PCB-141	9.21e+07	1.27	y	1.07	43:51	0.948	0.943-0.953	92.8	92.8	100	100	
13C-PCB-153	1.02e+08	1.29	y	1.15	43:07	0.932	0.927-0.937	96.5	96.5	13C-PCB-153	1.02e+08	1.29	y	1.15	43:07	0.932	0.927-0.937	96.5	96.5	100	100	
13C-PCB-155	1.09e+08	1.28	y	0.84	36:56	0.944	0.939-0.949	108	108	13C-PCB-155	1.09e+08	1.28	y	0.84	36:56	0.944	0.939-0.949	108	108	100	100	
13C-PCB-156	1.23e+08	1.27	y	1.30	47:60	1.037	1.032-1.042	103	103	13C-PCB-156	1.23e+08	1.27	y	1.30	47:60	1.037	1.032-1.042	103	103	100	100	
13C-PCB-157	1.29e+08	1.28	y	1.36	48:16	1.043	1.038-1.048	103	103	13C-PCB-157	1.29e+08	1.28	y	1.36	48:16	1.043	1.038-1.048	103	103	100	100	
13C-PCB-159	1.14e+08	1.25	y	1.25	45:60	0.994	0.989-0.999	99.2	99.2	13C-PCB-159	1.14e+08	1.25	y	1.25	45:60	0.994	0.989-0.999	99.2	99.2	100	100	
13C-PCB-167	1.25e+08	1.26	y	1.35	46:41	1.009	1.004-1.014	100	100	13C-PCB-167	1.25e+08	1.26	y	1.35	46:41	1.009	1.004-1.014	100	100	100	100	
13C-PCB-169	1.23e+08	1.26	y	1.29	50:18	1.087	1.083-1.093	104	104	13C-PCB-169	1.23e+08	1.26	y	1.29	50:18	1.087	1.083-1.093	104	104	100	100	
13C-PCB-170	5.75e+07	0.47	y	0.54	50:39	1.094	1.089-1.101	115	115	13C-PCB-170	5.75e+07	0.47	y	0.54	50:39	1.094	1.089-1.101	115	115	100	100	
13C-PCB-180	6.97e+07	0.47	y	0.68	49:15	1.064	1.060-1.070	110	110	13C-PCB-180	6.97e+07	0.47	y	0.68	49:15	1.064	1.060-1.070	110	110	100	100	
13C-PCB-188	8.95e+07	0.46	y	0.92	42:45	0.924	0.919-0.929	106	106	13C-PCB-188	8.95e+07	0.46	y	0.92	42:45	0.924	0.919-0.929	106	106	100	100	
13C-PCB-189	7.64e+07	0.46	y	0.72	52:04	1.125	1.120-1.132	116	116	13C-PCB-189	7.64e+07	0.46	y	0.72	52:04	1.125	1.120-1.132	116	116	100	100	
13C-PCB-194	6.01e+07	0.90	y	0.80	53:36	0.995	0.990-1.000	100	100	13C-PCB-194	6.01e+07	0.90	y	0.80	53:36	0.995	0.990-1.000	100	100	100	100	
13C-PCB-202	9.67e+07	0.90	y	0.84	48:12	1.041	1.036-1.046	125	125	13C-PCB-202	9.67e+07	0.90	y	0.84	48:12	1.041	1.036-1.046	125	125	100	100	
13C-PCB-206	5.42e+07	0.79	y	0.65	55:20	1.027	1.021-1.031	111	111	13C-PCB-206	5.42e+07	0.79	y	0.65	55:20	1.027	1.021-1.031	111	111	100	100	
13C-PCB-208	9.33e+07	0.77	y	1.08	52:50	0.980	0.976-0.986	115	115	13C-PCB-208	9.33e+07	0.77	y	1.08	52:50	0.980	0.976-0.986	115	115	100	100	
13C-PCB-209	5.52e+07	1.19	y	0.61	56:35	1.050	1.045-1.055	121	121	13C-PCB-209	5.52e+07	1.19	y	0.61	56:35	1.050	1.045-1.055	121	121	100	100	

Analyst: DMS
 Date: 10/27/14

Vista Analytical Laboratory - Injection Log Run file: 141027E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141027E1	1	ST141027E1-1	DMS	27-OCT-14	10:33:19	ST141027E1-1	NA
141027E1	2	B4J0119-BS1	DMS	27-OCT-14	11:36:47	ST141027E1-1	NA
141027E1	3	SOLVENT BLANK	DMS	27-OCT-14	12:40:21	ST141027E1-1	NA
141027E1	4	B4J0119-BLK1	DMS	27-OCT-14	13:43:50	ST141027E1-1	NA
141027E1	5	1400762-03@20X	DMS	27-OCT-14	14:47:19	ST141027E1-1	NA
141027E1	6	1400762-04@20X	DMS	27-OCT-14	15:50:47	ST141027E1-1	NA
141027E1	7	1400762-05@20X	DMS	27-OCT-14	16:54:17	ST141027E1-1	NA
141027E1	8	SOLVENT BLANK	DMS	27-OCT-14	17:57:45	ST141027E1-1	NA
141027E1	9	SOLVENT BLANK	DMS	27-OCT-14	19:01:19	ST141027E1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST



Beg. Calibration ID: ST141027E 1-1

End Calibration ID: NA

	<u>Beg.</u>	<u>End</u>	<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	NA		
Concentration within range?	<input checked="" type="checkbox"/>			
First and last eluters present?	<input checked="" type="checkbox"/>			
Retention Times within criteria? <i>(DMS 10/28/14)</i>	<input checked="" type="checkbox"/>			
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>			
Forms signed and dated?	<input checked="" type="checkbox"/>			
Correct ICAL referenced?	<input checked="" type="checkbox"/>			
Run Log:				
-Data file matches Conc Cal ID?	<input checked="" type="checkbox"/>			
-Correct instrument listed?	<input checked="" type="checkbox"/>	Y		
-Samples within 12-hour clock?		N		

Reviewed by: MJ / 10/25/14
Initials & Date

* Ending standard criteria applicable to 8290 only.

Comments: 105T 5105 connection.
Only 1st. C/JL res. check printed.
Used for "mono PCB" only.
DMS 10/28/14

INITIAL CALIBRATION

Initial Calibration RRF Summary (ICAL)		Vista Analytical Laboratory						
Run:	141016D1	Analyte:	Cal: 1613VG7-10-16-14		Inst. ID. VG-7			
Data filename: 141016D1			Samp# 1	Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 7
			10	0.25	0.50	2.0	40	200
Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
2,3,7,8-TCDD	1.18	8.84 %	1.11	1.36	1.22	1.06	1.16	1.20
1,2,3,7,8-PeCDD	0.92	4.24 %	0.93	0.94	0.93	0.84	0.93	0.95
1,2,3,4,7,8-HxCDD	1.09	5.48 %	1.08	1.18	1.07	1.00	1.08	1.12
1,2,3,6,7,8-HxCDD	1.07	5.59 %	1.06	1.06	1.07	0.96	1.13	1.12
1,2,3,7,8,9-HxCDD	0.93	4.12 %	0.92	0.98	0.95	0.86	0.93	0.94
1,2,3,4,6,7,8-HpCDD	1.12	4.25 %	1.12	1.04	1.14	1.07	1.14	1.17
OCDD	0.95	4.99 %	0.97	0.96	0.97	0.85	0.97	0.98
2,3,7,8-TCDF	1.08	6.64 %	1.00	1.16	1.15	0.99	1.08	1.08
1,2,3,7,8-PeCDF	1.09	5.09 %	1.10	1.13	1.05	1.00	1.11	1.14
2,3,4,7,8-PeCDF	1.04	3.90 %	1.05	1.04	1.06	0.96	1.07	1.08
1,2,3,4,7,8-HxCDF	1.39	3.27 %	1.40	1.42	1.37	1.31	1.42	1.42
1,2,3,6,7,8-HxCDF	1.26	5.39 %	1.26	1.34	1.29	1.14	1.26	1.30
2,3,4,6,7,8-HxCDF	1.30	4.20 %	1.28	1.30	1.33	1.20	1.34	1.35
1,2,3,7,8,9-HxCDF	1.19	3.60 %	1.16	1.25	1.18	1.13	1.20	1.23
1,2,3,4,6,7,8-HpCDF	1.62	4.07 %	1.59	1.67	1.66	1.49	1.64	1.64
1,2,3,4,7,8,9-HpCDF	1.53	4.58 %	1.54	1.58	1.55	1.39	1.53	1.57
OCDF	1.10	4.20 %	1.11	1.09	1.13	1.01	1.13	1.14
13C-2,3,7,8-TCDD	1.07	5.97 %	1.05	1.00	1.07	1.04	1.10	1.18
13C-1,2,3,7,8-PeCDD	1.24	12.79 %	1.06	1.09	1.23	1.23	1.34	1.49
13C-1,2,3,4,7,8-HxCDD	0.72	7.50 %	0.70	0.69	0.70	0.70	0.73	0.83
13C-1,2,3,6,7,8-HxCDD	0.74	6.26 %	0.72	0.71	0.71	0.71	0.73	0.83
13C-1,2,3,7,8,9-HxCDD	0.86	6.66 %	0.83	0.81	0.83	0.83	0.86	0.97
13C-1,2,3,4,6,7,8-HpCDD	0.64	7.66 %	0.63	0.61	0.61	0.62	0.66	0.74
13C-OCDD	0.78	10.54 %	0.70	0.73	0.76	0.77	0.79	0.94
13C-2,3,7,8-TCDF	0.92	3.07 %	0.93	0.89	0.91	0.91	0.94	0.97
13C-1,2,3,7,8-PeCDF	0.95	10.44 %	0.86	0.87	0.90	0.95	1.01	1.12
13C-2,3,4,7,8-PeCDF	0.97	10.58 %	0.89	0.89	0.91	0.96	1.02	1.15
13C-1,2,3,4,7,8-HxCDF	0.99	7.56 %	0.92	0.94	0.96	0.98	1.01	1.13
13C-1,2,3,6,7,8-HxCDF	1.10	7.86 %	1.07	1.00	1.05	1.09	1.12	1.25
13C-2,3,4,6,7,8-HxCDF	1.03	5.39 %	0.97	1.00	1.02	1.01	1.04	1.13
13C-1,2,3,7,8,9-HxCDF	0.86	7.21 %	0.84	0.82	0.82	0.83	0.87	0.98
13C-1,2,3,4,6,7,8-HpCDF	0.71	7.44 %	0.70	0.69	0.67	0.69	0.72	0.82
13C-1,2,3,4,7,8,9-HpCDF	0.71	9.22 %	0.65	0.69	0.67	0.67	0.74	0.83
13C-OCDF	0.87	11.25 %	0.82	0.80	0.83	0.85	0.88	1.06
37Cl-2,3,7,8-TCDD	1.21	11.67 %	1.22	1.08	1.03	1.24	1.27	1.43
13C-1,2,3,4-TCDD	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	
13C-1,2,3,4-TCDF	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	
13C-1,2,3,4,6,9-HxCDF	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	

ms 10/17/14
CJ 10/17/14

Filename: 141016D1 S: 1 Acquired: 16-OCT-14 11:05:57
 Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
 Sample text: ST141016D1-1 1613 CS3 14I1102

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	10.00	2.08e+06	0.73 y	26:60	-	1.11
2	Unk	1,2,3,7,8-PeCDD	50.00	8.78e+06	0.61 y	31:30	-	0.93
3	Unk	1,2,3,4,7,8-HxCDD	50.00	7.82e+06	1.26 y	34:50	-	1.08
4	Unk	1,2,3,6,7,8-HxCDD	50.00	7.94e+06	1.25 y	34:57	-	1.06
5	Unk	1,2,3,7,8,9-HxCDD	50.00	7.97e+06	1.24 y	35:15	-	0.92
6	Unk	1,2,3,4,6,7,8-HpCDD	50.00	7.29e+06	1.04 y	38:42	-	1.12
7	Unk	OCDD	100.00	1.40e+07	0.89 y	42:02	-	0.97
8	Unk	2,3,7,8-TCDF	10.00	2.78e+06	0.80 y	26:13	-	1.00
9	Unk	1,2,3,7,8-PeCDF	50.00	1.40e+07	1.59 y	30:20	-	1.10
10	Unk	2,3,4,7,8-PeCDF	50.00	1.38e+07	1.59 y	31:14	-	1.05
11	Unk	1,2,3,4,7,8-HxCDF	50.00	1.34e+07	1.29 y	33:56	-	1.40
12	Unk	1,2,3,6,7,8-HxCDF	50.00	1.40e+07	1.29 y	34:04	-	1.26
13	Unk	2,3,4,6,7,8-HxCDF	50.00	1.29e+07	1.31 y	34:40	-	1.28
14	Unk	1,2,3,7,8,9-HxCDF	50.00	1.01e+07	1.27 y	35:39	-	1.16
15	Unk	1,2,3,4,6,7,8-HpCDF	50.00	1.16e+07	1.08 y	37:30	-	1.59
16	Unk	1,2,3,4,7,8,9-HpCDF	50.00	1.04e+07	1.07 y	39:16	-	1.54
17	Unk	OCDF	100.00	1.88e+07	0.91 y	42:16	-	1.11
36	IS	13C-2,3,7,8-TCDD	100.00	1.87e+07	0.79 y	26:58	-	1.05
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.90e+07	0.63 y	31:29	-	1.06
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.44e+07	1.25 y	34:49	-	0.70
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.50e+07	1.25 y	34:56	-	0.72
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	1.72e+07	1.23 y	35:14	-	0.83
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.30e+07	1.07 y	38:42	-	0.63
42	IS	13C-OCDD	200.00	2.89e+07	0.89 y	42:02	-	0.70
43	IS	13C-2,3,7,8-TCDF	100.00	2.77e+07	0.74 y	26:12	-	0.93
44	IS	13C-1,2,3,7,8-PeCDF	100.00	2.54e+07	1.55 y	30:19	-	0.86
45	IS	13C-2,3,4,7,8-PeCDF	100.00	2.63e+07	1.61 y	31:13	-	0.89
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.92e+07	0.51 y	33:55	-	0.92
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	2.23e+07	0.50 y	34:03	-	1.07
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	2.02e+07	0.52 y	34:39	-	0.97
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.73e+07	0.51 y	35:38	-	0.84
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.46e+07	0.43 y	37:29	-	0.70
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.35e+07	0.45 y	39:15	-	0.65
52	IS	13C-OCDF	200.00	3.39e+07	0.92 y	42:15	-	0.82
53	C/Up	37Cl-2,3,7,8-TCDD	10.00	2.18e+06		26:59	-	1.22
54	RS/RT	13C-1,2,3,4-TCDD	100.00	1.79e+07	0.80 y	26:24	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	2.97e+07	0.78 y	24:58	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	2.08e+07	0.51 y	34:21	-	1.00

Filename: 141016D1 S: 3 Acquired: 16-OCT-14 12:42:43
 Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
 Sample text: ST141016D1-2 1613 CS0 14I1819

Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk 2,3,7,8-TCDD	0.25	5.01e+04	0.71 y	27:03	-	1.36
2	Unk 1,2,3,7,8-PeCDD	1.25	1.89e+05	0.58 y	31:32	-	0.94
3	Unk 1,2,3,4,7,8-HxCDD	1.25	1.80e+05	1.38 y	34:52	-	1.18
4	Unk 1,2,3,6,7,8-HxCDD	1.25	1.66e+05	1.38 y	34:59	-	1.06
5	Unk 1,2,3,7,8,9-HxCDD	1.25	1.76e+05	1.42 y	35:17	-	0.98
6	Unk 1,2,3,4,6,7,8-HpCDD	1.25	1.40e+05	0.92 y	38:44	-	1.04
7	Unk OCDD	2.50	3.13e+05	0.92 y	42:04	-	0.96
8	Unk 2,3,7,8-TCDF	0.25	6.52e+04	0.82 y	26:17	-	1.16
9	Unk 1,2,3,7,8-PeCDF	1.25	3.11e+05	1.49 y	30:22	-	1.13
10	Unk 2,3,4,7,8-PeCDF	1.25	2.91e+05	1.54 y	31:15	-	1.04
11	Unk 1,2,3,4,7,8-HxCDF	1.25	2.95e+05	1.36 y	33:58	-	1.42
12	Unk 1,2,3,6,7,8-HxCDF	1.25	2.95e+05	1.26 y	34:06	-	1.34
13	Unk 2,3,4,6,7,8-HxCDF	1.25	2.89e+05	1.31 y	34:43	-	1.30
14	Unk 1,2,3,7,8,9-HxCDF	1.25	2.25e+05	1.36 y	35:41	-	1.25
15	Unk 1,2,3,4,6,7,8-HpCDF	1.25	2.54e+05	1.14 y	37:32	-	1.67
16	Unk 1,2,3,4,7,8,9-HpCDF	1.25	2.39e+05	1.08 y	39:18	-	1.58
17	Unk OCDF	2.50	3.84e+05	0.91 y	42:18	-	1.09
36	IS 13C-2,3,7,8-TCDD	100.00	1.47e+07	0.79 y	27:02	-	1.00
37	IS 13C-1,2,3,7,8-PeCDD	100.00	1.61e+07	0.64 y	31:32	-	1.09
38	IS 13C-1,2,3,4,7,8-HxCDD	100.00	1.22e+07	1.24 y	34:51	-	0.69
39	IS 13C-1,2,3,6,7,8-HxCDD	100.00	1.25e+07	1.31 y	34:58	-	0.71
40	IS 13C-1,2,3,7,8,9-HxCDD	100.00	1.44e+07	1.29 y	35:16	-	0.81
41	IS 13C-1,2,3,4,6,7,8-HpCDD	100.00	1.07e+07	1.03 y	38:43	-	0.61
42	IS 13C-OCDD	200.00	2.60e+07	0.89 y	42:03	-	0.73
43	IS 13C-2,3,7,8-TCDF	100.00	2.24e+07	0.75 y	26:16	-	0.89
44	IS 13C-1,2,3,7,8-PeCDF	100.00	2.20e+07	1.59 y	30:21	-	0.87
45	IS 13C-2,3,4,7,8-PeCDF	100.00	2.24e+07	1.61 y	31:15	-	0.89
46	IS 13C-1,2,3,4,7,8-HxCDF	100.00	1.66e+07	0.52 y	33:57	-	0.94
47	IS 13C-1,2,3,6,7,8-HxCDF	100.00	1.77e+07	0.51 y	34:05	-	1.00
48	IS 13C-2,3,4,6,7,8-HxCDF	100.00	1.77e+07	0.51 y	34:42	-	1.00
49	IS 13C-1,2,3,7,8,9-HxCDF	100.00	1.45e+07	0.52 y	35:40	-	0.82
50	IS 13C-1,2,3,4,6,7,8-HpCDF	100.00	1.22e+07	0.44 y	37:31	-	0.69
51	IS 13C-1,2,3,4,7,8,9-HpCDF	100.00	1.21e+07	0.43 y	39:17	-	0.69
52	IS 13C-OCDF	200.00	2.81e+07	0.92 y	42:17	-	0.80
53	C/Up 37Cl-2,3,7,8-TCDD	0.25	4.00e+04		27:03	-	1.08
54	RS/RT 13C-1,2,3,4-TCDD	100.00	1.48e+07	0.80 y	26:28	-	1.00
55	RS 13C-1,2,3,4-TCDF	100.00	2.52e+07	0.78 y	25:03	-	1.00
56	RS/RT 13C-1,2,3,4,6,9-HxCDF	100.00	1.77e+07	0.53 y	34:23	-	1.00

Filename: 141016D1 S: 4 Acquired: 16-OCT-14 13:31:08
 Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
 Sample text: ST141016D1-3 1613 CS1 14I1820

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	0.50	9.47e+04	0.71 y	27:03	-	1.22
2	Unk	1,2,3,7,8-PeCDD	2.50	4.17e+05	0.58 y	31:32	-	0.93
3	Unk	1,2,3,4,7,8-HxCDD	2.50	3.52e+05	1.23 y	34:52	-	1.07
4	Unk	1,2,3,6,7,8-HxCDD	2.50	3.60e+05	1.19 y	34:59	-	1.07
5	Unk	1,2,3,7,8,9-HxCDD	2.50	3.72e+05	1.18 y	35:16	-	0.95
6	Unk	1,2,3,4,6,7,8-HpCDD	2.50	3.28e+05	1.04 y	38:44	-	1.14
7	Unk	OCDD	5.00	7.00e+05	0.91 y	42:03	-	0.97
8	Unk	2,3,7,8-TCDF	0.50	1.35e+05	0.76 y	26:17	-	1.15
9	Unk	1,2,3,7,8-PeCDF	2.50	6.14e+05	1.75 y	30:22	-	1.05
10	Unk	2,3,4,7,8-PeCDF	2.50	6.26e+05	1.44 y	31:15	-	1.06
11	Unk	1,2,3,4,7,8-HxCDF	2.50	6.24e+05	1.23 y	33:58	-	1.37
12	Unk	1,2,3,6,7,8-HxCDF	2.50	6.42e+05	1.32 y	34:06	-	1.29
13	Unk	2,3,4,6,7,8-HxCDF	2.50	6.41e+05	1.24 y	34:42	-	1.33
14	Unk	1,2,3,7,8,9-HxCDF	2.50	4.56e+05	1.22 y	35:40	-	1.18
15	Unk	1,2,3,4,6,7,8-HpCDF	2.50	5.24e+05	1.07 y	37:32	-	1.66
16	Unk	1,2,3,4,7,8,9-HpCDF	2.50	4.91e+05	1.14 y	39:17	-	1.55
17	Unk	OCDF	5.00	8.91e+05	0.93 y	42:17	-	1.13
36	IS	13C-2,3,7,8-TCDD	100.00	1.56e+07	0.78 y	27:02	-	1.07
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.79e+07	0.63 y	31:31	-	1.23
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.32e+07	1.27 y	34:51	-	0.70
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.35e+07	1.26 y	34:58	-	0.71
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	1.56e+07	1.27 y	35:16	-	0.83
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.15e+07	1.05 y	38:43	-	0.61
42	IS	13C-OCDD	200.00	2.89e+07	0.89 y	42:03	-	0.76
43	IS	13C-2,3,7,8-TCDF	100.00	2.36e+07	0.78 y	26:16	-	0.91
44	IS	13C-1,2,3,7,8-PeCDF	100.00	2.34e+07	1.58 y	30:21	-	0.90
45	IS	13C-2,3,4,7,8-PeCDF	100.00	2.37e+07	1.54 y	31:14	-	0.91
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.82e+07	0.52 y	33:57	-	0.96
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.99e+07	0.52 y	34:05	-	1.05
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.93e+07	0.52 y	34:41	-	1.02
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.55e+07	0.53 y	35:40	-	0.82
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.26e+07	0.43 y	37:31	-	0.67
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.27e+07	0.44 y	39:16	-	0.67
52	IS	13C-OCDF	200.00	3.15e+07	0.89 y	42:17	-	0.83
53	C/Up	37Cl-2,3,7,8-TCDD	0.50	7.54e+04		27:03	-	1.03
54	RS/RT	13C-1,2,3,4-TCDD	100.00	1.46e+07	0.79 y	26:28	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	2.60e+07	0.77 y	25:03	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	1.89e+07	0.52 y	34:22	-	1.00

Filename: 141016D1 S: 5 Acquired: 16-OCT-14 14:19:34
 Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
 Sample text: ST141016D1-4 1613 CS2 14I1821

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	2.00	3.13e+05	0.82 y	27:03	-	1.06
2	Unk	1,2,3,7,8-PeCDD	10.00	1.47e+06	0.59 y	31:32	-	0.84
3	Unk	1,2,3,4,7,8-HxCDD	10.00	1.26e+06	1.28 y	34:52	-	1.00
4	Unk	1,2,3,6,7,8-HxCDD	10.00	1.24e+06	1.26 y	34:59	-	0.96
5	Unk	1,2,3,7,8,9-HxCDD	10.00	1.30e+06	1.28 y	35:17	-	0.86
6	Unk	1,2,3,4,6,7,8-HpCDD	10.00	1.21e+06	1.04 y	38:44	-	1.07
7	Unk	OCDD	20.00	2.38e+06	0.87 y	42:03	-	0.85
8	Unk	2,3,7,8-TCDF	2.00	4.47e+05	0.78 y	26:17	-	0.99
9	Unk	1,2,3,7,8-PeCDF	10.00	2.35e+06	1.55 y	30:22	-	1.00
10	Unk	2,3,4,7,8-PeCDF	10.00	2.32e+06	1.57 y	31:15	-	0.96
11	Unk	1,2,3,4,7,8-HxCDF	10.00	2.31e+06	1.29 y	33:58	-	1.31
12	Unk	1,2,3,6,7,8-HxCDF	10.00	2.24e+06	1.28 y	34:06	-	1.14
13	Unk	2,3,4,6,7,8-HxCDF	10.00	2.19e+06	1.30 y	34:42	-	1.20
14	Unk	1,2,3,7,8,9-HxCDF	10.00	1.69e+06	1.33 y	35:41	-	1.13
15	Unk	1,2,3,4,6,7,8-HpCDF	10.00	1.86e+06	1.10 y	37:32	-	1.49
16	Unk	1,2,3,4,7,8,9-HpCDF	10.00	1.69e+06	1.09 y	39:17	-	1.39
17	Unk	OCDF	20.00	3.11e+06	0.93 y	42:17	-	1.01
36	IS	13C-2,3,7,8-TCDD	100.00	1.47e+07	0.79 y	27:02	-	1.04
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.74e+07	0.63 y	31:31	-	1.23
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.26e+07	1.28 y	34:51	-	0.70
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.29e+07	1.24 y	34:58	-	0.71
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	1.51e+07	1.23 y	35:16	-	0.83
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.13e+07	1.05 y	38:43	-	0.62
42	IS	13C-OCDD	200.00	2.79e+07	0.88 y	42:03	-	0.77
43	IS	13C-2,3,7,8-TCDF	100.00	2.26e+07	0.77 y	26:16	-	0.91
44	IS	13C-1,2,3,7,8-PeCDF	100.00	2.36e+07	1.54 y	30:21	-	0.95
45	IS	13C-2,3,4,7,8-PeCDF	100.00	2.40e+07	1.57 y	31:14	-	0.96
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.77e+07	0.50 y	33:57	-	0.98
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.97e+07	0.51 y	34:05	-	1.09
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.83e+07	0.52 y	34:41	-	1.01
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.50e+07	0.52 y	35:40	-	0.83
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.24e+07	0.43 y	37:31	-	0.69
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.22e+07	0.43 y	39:16	-	0.67
52	IS	13C-OCDF	200.00	3.07e+07	0.90 y	42:17	-	0.85
53	C/Up	37Cl-2,3,7,8-TCDD	2.00	3.51e+05		27:03	-	1.24
54	RS/RT	13C-1,2,3,4-TCDD	100.00	1.41e+07	0.80 y	26:28	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	2.49e+07	0.77 y	25:03	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	1.80e+07	0.52 y	34:22	-	1.00

Filename: 141016D1 S: 6 Acquired: 16-OCT-14 15:08:00
 Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
 Sample text: ST141016D1-5 1613 CS4 14I1822

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	40.00	6.36e+06	0.79 y	27:03	-	1.16
2	Unk	1,2,3,7,8-PeCDD	200.00	3.08e+07	0.61 y	31:32	-	0.93
3	Unk	1,2,3,4,7,8-HxCDD	200.00	2.57e+07	1.25 y	34:52	-	1.08
4	Unk	1,2,3,6,7,8-HxCDD	200.00	2.66e+07	1.26 y	34:59	-	1.13
5	Unk	1,2,3,7,8,9-HxCDD	200.00	2.59e+07	1.24 y	35:17	-	0.93
6	Unk	1,2,3,4,6,7,8-HpCDD	200.00	2.46e+07	1.04 y	38:44	-	1.14
7	Unk	OCDD	400.00	5.00e+07	0.89 y	42:03	-	0.97
8	Unk	2,3,7,8-TCDF	40.00	8.92e+06	0.77 y	26:17	-	1.08
9	Unk	1,2,3,7,8-PeCDF	200.00	4.90e+07	1.58 y	30:22	-	1.11
10	Unk	2,3,4,7,8-PeCDF	200.00	4.76e+07	1.60 y	31:15	-	1.07
11	Unk	1,2,3,4,7,8-HxCDF	200.00	4.66e+07	1.28 y	33:58	-	1.42
12	Unk	1,2,3,6,7,8-HxCDF	200.00	4.56e+07	1.28 y	34:06	-	1.26
13	Unk	2,3,4,6,7,8-HxCDF	200.00	4.54e+07	1.26 y	34:42	-	1.34
14	Unk	1,2,3,7,8,9-HxCDF	200.00	3.40e+07	1.28 y	35:40	-	1.20
15	Unk	1,2,3,4,6,7,8-HpCDF	200.00	3.84e+07	1.09 y	37:32	-	1.64
16	Unk	1,2,3,4,7,8,9-HpCDF	200.00	3.69e+07	1.08 y	39:17	-	1.53
17	Unk	OCDF	400.00	6.50e+07	0.92 y	42:18	-	1.13
36	IS	13C-2,3,7,8-TCDD	100.00	1.37e+07	0.81 y	27:02	-	1.10
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.66e+07	0.63 y	31:31	-	1.34
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.19e+07	1.25 y	34:51	-	0.73
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.18e+07	1.26 y	34:58	-	0.73
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	1.40e+07	1.24 y	35:16	-	0.86
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.08e+07	1.07 y	38:43	-	0.66
42	IS	13C-OCDD	200.00	2.58e+07	0.89 y	42:03	-	0.79
43	IS	13C-2,3,7,8-TCDF	100.00	2.07e+07	0.77 y	26:16	-	0.94
44	IS	13C-1,2,3,7,8-PeCDF	100.00	2.21e+07	1.61 y	30:21	-	1.01
45	IS	13C-2,3,4,7,8-PeCDF	100.00	2.23e+07	1.57 y	31:14	-	1.02
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.64e+07	0.51 y	33:57	-	1.01
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.82e+07	0.50 y	34:05	-	1.12
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.69e+07	0.51 y	34:41	-	1.04
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.41e+07	0.52 y	35:40	-	0.87
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.17e+07	0.45 y	37:31	-	0.72
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.20e+07	0.44 y	39:16	-	0.74
52	IS	13C-OCDF	200.00	2.87e+07	0.89 y	42:17	-	0.88
53	C/Up	37Cl-2,3,7,8-TCDD	40.00	6.31e+06		27:03	-	1.27
54	RS/RT	13C-1,2,3,4-TCDD	100.00	1.24e+07	0.82 y	26:28	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	2.19e+07	0.79 y	25:03	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	1.63e+07	0.51 y	34:22	-	1.00

Filename: 141016D1 S: 7 Acquired: 16-OCT-14 15:56:26
 Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
 Sample text: ST141016D1-6 1613 CSS5 14I1823

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	200.00	3.39e+07	0.77 y	27:03	-	1.20
2	Unk	1,2,3,7,8-PeCDD	1000.00	1.69e+08	0.62 y	31:32	-	0.95
3	Unk	1,2,3,4,7,8-HxCDD	1000.00	1.51e+08	1.26 y	34:52	-	1.12
4	Unk	1,2,3,6,7,8-HxCDD	1000.00	1.51e+08	1.26 y	34:59	-	1.12
5	Unk	1,2,3,7,8,9-HxCDD	1000.00	1.48e+08	1.26 y	35:17	-	0.94
6	Unk	1,2,3,4,6,7,8-HpCDD	1000.00	1.39e+08	1.04 y	38:43	-	1.17
7	Unk	OCDD	2000.00	2.98e+08	0.90 y	42:03	-	0.98
8	Unk	2,3,7,8-TCDF	200.00	4.44e+07	0.78 y	26:17	-	1.08
9	Unk	1,2,3,7,8-PeCDF	1000.00	2.73e+08	1.58 y	30:22	-	1.14
10	Unk	2,3,4,7,8-PeCDF	1000.00	2.66e+08	1.60 y	31:15	-	1.08
11	Unk	1,2,3,4,7,8-HxCDF	1000.00	2.60e+08	1.27 y	33:58	-	1.42
12	Unk	1,2,3,6,7,8-HxCDF	1000.00	2.64e+08	1.27 y	34:06	-	1.30
13	Unk	2,3,4,6,7,8-HxCDF	1000.00	2.48e+08	1.29 y	34:42	-	1.35
14	Unk	1,2,3,7,8,9-HxCDF	1000.00	1.95e+08	1.28 y	35:40	-	1.23
15	Unk	1,2,3,4,6,7,8-HpCDF	1000.00	2.17e+08	1.09 y	37:32	-	1.64
16	Unk	1,2,3,4,7,8,9-HpCDF	1000.00	2.10e+08	1.10 y	39:17	-	1.57
17	Unk	OCDF	2000.00	3.92e+08	0.91 y	42:17	-	1.14
36	IS	13C-2,3,7,8-TCDD	100.00	1.41e+07	0.77 y	27:02	-	1.18
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.78e+07	0.65 y	31:31	-	1.49
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.35e+07	1.26 y	34:51	-	0.83
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.34e+07	1.26 y	34:58	-	0.83
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	1.57e+07	1.27 y	35:15	-	0.97
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.19e+07	1.05 y	38:43	-	0.74
42	IS	13C-OCDD	200.00	3.03e+07	0.87 y	42:03	-	0.94
43	IS	13C-2,3,7,8-TCDF	100.00	2.06e+07	0.74 y	26:15	-	0.97
44	IS	13C-1,2,3,7,8-PeCDF	100.00	2.39e+07	1.59 y	30:21	-	1.12
45	IS	13C-2,3,4,7,8-PeCDF	100.00	2.46e+07	1.62 y	31:14	-	1.15
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.83e+07	0.52 y	33:57	-	1.13
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	2.03e+07	0.52 y	34:05	-	1.25
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.84e+07	0.51 y	34:41	-	1.13
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.59e+07	0.51 y	35:39	-	0.98
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.32e+07	0.43 y	37:31	-	0.82
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.34e+07	0.44 y	39:16	-	0.83
52	IS	13C-OCDF	200.00	3.45e+07	0.89 y	42:17	-	1.06
53	C/Up	37Cl-2,3,7,8-TCDD	200.00	3.41e+07		27:03	-	1.43
54	RS/RT	13C-1,2,3,4-TCDD	100.00	1.19e+07	0.82 y	26:28	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	2.14e+07	0.76 y	25:03	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	1.62e+07	0.52 y	34:22	-	1.00

Initial Calibration RRF Summary (ICAL)

Run: 141016D1

Vista Analytical Laboratory

Cal: 1613VG7-10-16-14

Page 1 of 1

Analyte:

Inst. ID. VG-7

Data filename: 141016D1

	Samp# 1	Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 7
	10	0.25	0.50	2.0	40	200

RRT Limits

Name	Lower	Upper	RRT#1	RRT#2	RRT#3	RRT#4	RRT#5	RRT#6
2,3,7,8-TCDD	0.999	-1.002	1.001	1.001	1.001	1.001	1.001	1.001
1,2,3,7,8-PeCDD	0.999	-1.002	1.000	1.000	1.000	1.000	1.000	1.000
1,2,3,4,7,8-HxCDD	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
1,2,3,6,7,8-HxCDD	0.998	-1.004	1.001	1.000	1.000	1.000	1.000	1.000
1,2,3,7,8,9-HxCDD	0.998	-1.004	1.000	1.000	1.000	1.000	1.000	1.001
1,2,3,4,6,7,8-HpCDD	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
OCDD	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
2,3,7,8-TCDF	0.999	-1.003	1.001	1.001	1.001	1.001	1.001	1.001
1,2,3,7,8-PeCDF	0.999	-1.002	1.000	1.001	1.000	1.000	1.000	1.000
2,3,4,7,8-PeCDF	0.999	-1.002	1.000	1.000	1.000	1.000	1.000	1.000
1,2,3,4,7,8-HxCDF	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.001
1,2,3,6,7,8-HxCDF	0.997	-1.005	1.001	1.000	1.001	1.001	1.001	1.000
2,3,4,6,7,8-HxCDF	0.999	-1.001	1.001	1.000	1.000	1.001	1.001	1.000
1,2,3,7,8,9-HxCDF	0.999	-1.001	1.000	1.000	1.000	1.001	1.000	1.000
1,2,3,4,6,7,8-HpCDF	0.999	-1.001	1.000	1.001	1.000	1.000	1.000	1.000
1,2,3,4,7,8,9-HpCDF	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
OCDF	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
13C-2,3,7,8-TCDD	0.976	-1.043	1.021	1.021	1.021	1.021	1.021	1.021
13C-1,2,3,7,8-PeCDD	1.000	-1.567	1.192	1.191	1.191	1.191	1.191	1.191
13C-1,2,3,4,7,8-HxCDD	1.002	-1.026	1.014	1.014	1.014	1.014	1.014	1.014
13C-1,2,3,6,7,8-HxCDD	1.007	-1.029	1.017	1.017	1.017	1.017	1.017	1.017
13C-1,2,3,7,8,9-HxCDD	1.014	-1.038	1.026	1.026	1.026	1.026	1.026	1.026
13C-1,2,3,4,6,7,8-HpCDD	1.117	-1.141	1.127	1.126	1.126	1.126	1.126	1.126
13C-OCDD	1.085	-1.365	1.224	1.223	1.223	1.223	1.223	1.223
13C-2,3,7,8-TCDF	0.923	-1.103	0.992	0.992	0.992	0.992	0.992	0.992
13C-1,2,3,7,8-PeCDF	1.000	-1.425	1.148	1.147	1.147	1.147	1.147	1.147
13C-2,3,4,7,8-PeCDF	1.011	-1.526	1.182	1.181	1.180	1.180	1.180	1.181
13C-1,2,3,4,7,8-HxCDF	0.975	-1.001	0.988	0.988	0.988	0.988	0.988	0.988
13C-1,2,3,6,7,8-HxCDF	0.979	-1.005	0.991	0.991	0.992	0.992	0.992	0.992
13C-2,3,4,6,7,8-HxCDF	1.001	-1.020	1.009	1.009	1.009	1.009	1.009	1.009
13C-1,2,3,7,8,9-HxCDF	1.002	-1.072	1.037	1.037	1.038	1.038	1.037	1.037
13C-1,2,3,4,6,7,8-HpCDF	1.069	-1.111	1.091	1.091	1.091	1.091	1.091	1.091
13C-1,2,3,4,7,8,9-HpCDF	1.098	-1.192	1.143	1.142	1.143	1.143	1.143	1.142
13C-OCDF	1.091	-1.371	1.230	1.230	1.230	1.230	1.230	1.230
37Cl-2,3,7,8-TCDD	0.989	-1.052	1.022	1.022	1.022	1.022	1.022	1.022
13C-1,2,3,4-TCDD	0.000	-0.000	*	*	*	*	*	*
13C-1,2,3,4-TCDF	0.000	-0.000	*	*	*	*	*	*
13C-1,2,3,4,6,9-HxCDF	0.000	-0.000	*	*	*	*	*	*

Filename: 141016D1 S: 1 Acquired: 16-OCT-14 11:05:57

Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14

Results:

Sample text: ST141016D1-1 1613 CS3 14I1102

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.11
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.11
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.93
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	0.93
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.02
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.02
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.12
25	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.12
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.00
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.00
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	1.07
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	1.07
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	1.07
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	1.07
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.28
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.28
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.57
35	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.57

Filename: 141016D1 S: 3 Acquired: 16-OCT-14 12:42:43

Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14

Results:

Sample text: ST141016D1-2 1613 CS0 14II1819

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.36
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.36
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.94
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	0.94
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.07
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.07
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.04
25	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.04
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.16
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.16
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	1.08
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	1.08
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	1.08
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	1.08
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.33
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.33
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.62
35	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.62

Filename: 141016D1 S: 4 Acquired: 16-OCT-14 13:31:08

Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14

Results:

Sample text: ST141016D1-3 1613 CS1 14I1820

Typ	Name	Amount	Resp	RA	RT	RF	RRF
18 Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.22
19 Tot	TCDD EMPC	0.00	-	- n	-	-	1.22
20 Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.93
21 Tot	PeCDD EMPC	0.00	-	- n	-	-	0.93
22 Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.03
23 Tot	HxCDD EMPC	0.00	-	- n	-	-	1.03
24 Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.14
25 Tot	HxCDD EMPC	0.00	-	- n	-	-	1.14
26 Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.15
27 Tot	TCDF EMPC	0.00	-	- n	-	-	1.15
28 Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	1.05
29 Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	1.05
30 Tot	Total Penta-Furans	0.00	-	- n	-	-	1.05
31 Tot	PeCDF EMPC	0.00	-	- n	-	-	1.05
32 Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.30
33 Tot	HxCDF EMPC	0.00	-	- n	-	-	1.30
34 Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.60
35 Tot	HxCDF EMPC	0.00	-	- n	-	-	1.60

Filename: 141016D1 S: 5 Acquired: 16-OCT-14 14:19:34

Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14

Sample text: ST141016D1-4 1613 CS2 14I1821

Results:

Typ	Name	Amount	Resp	RA	RT	RF	RRF
18 Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.06
19 Tot	TCDD EMPC	0.00	-	- n	-	-	1.06
20 Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.84
21 Tot	PeCDD EMPC	0.00	-	- n	-	-	0.84
22 Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.94
23 Tot	HxCDD EMPC	0.00	-	- n	-	-	0.94
24 Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.07
25 Tot	HxCDD EMPC	0.00	-	- n	-	-	1.07
26 Tot	Total Tetra-Furans	0.00	-	- n	-	-	0.99
27 Tot	TCD/F EMPC	0.00	-	- n	-	-	0.99
28 Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	0.98
29 Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	0.98
30 Tot	Total Penta-Furans	0.00	-	- n	-	-	0.98
31 Tot	PeCDF EMPC	0.00	-	- n	-	-	0.98
32 Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.19
33 Tot	HxCDF EMPC	0.00	-	- n	-	-	1.19
34 Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.44
35 Tot	HxCDF EMPC	0.00	-	- n	-	-	1.44

Filename: 141016D1 S: 6 Acquired: 16-OCT-14 15:08:00

Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14

Results:

Sample text: ST141016D1-5 1613 CS4 14I1822

Typ	Name	Amount	Resp	RA	RT	RF	RRF
18 Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.16
19 Tot	TCDD EMPC	0.00	-	- n	-	-	1.16
20 Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.93
21 Tot	PeCDD EMPC	0.00	-	- n	-	-	0.93
22 Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.04
23 Tot	HxCDD EMPC	0.00	-	- n	-	-	1.04
24 Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.14
25 Tot	HxCDD EMPC	0.00	-	- n	-	-	1.14
26 Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.08
27 Tot	TCDF EMPC	0.00	-	- n	-	-	1.08
28 Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	1.09
29 Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	1.09
30 Tot	Total Penta-Furans	0.00	-	- n	-	-	1.09
31 Tot	PeCDF EMPC	0.00	-	- n	-	-	1.09
32 Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.31
33 Tot	HxCDF EMPC	0.00	-	- n	-	-	1.31
34 Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.59
35 Tot	HxCDF EMPC	0.00	-	- n	-	-	1.59

Filename: 141016D1 S: 7 Acquired: 16-OCT-14 15:56:26

Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14

Sample text: ST141016D1-6 1613 CS5 14I1823

Results:

Typ	Name	Amount	Resp	RA	RT	RF	RRF
18 Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.20
19 Tot	TCDD EMPC	0.00	-	- n	-	-	1.20
20 Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.95
21 Tot	PeCDD EMPC	0.00	-	- n	-	-	0.95
22 Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.06
23 Tot	HxCDD EMPC	0.00	-	- n	-	-	1.06
24 Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.17
25 Tot	HxCDD EMPC	0.00	-	- n	-	-	1.17
26 Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.08
27 Tot	TCDF EMPC	0.00	-	- n	-	-	1.08
28 Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	1.11
29 Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	1.11
30 Tot	Total Penta-Furans	0.00	-	- n	-	-	1.11
31 Tot	PeCDF EMPC	0.00	-	- n	-	-	1.11
32 Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.32
33 Tot	HxCDF EMPC	0.00	-	- n	-	-	1.32
34 Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.60
35 Tot	HxCDF EMPC	0.00	-	- n	-	-	1.60

Run: 141016D1

Analyte:

Cal: 1613VG7-10-16-7

Inst. ID. VG-7

Data filename: 141016D1

	Samp# 1 10	Samp# 3 0.25	Samp# 4 0.50	Samp# 5 2.0	Samp# 6 40	Samp# 7 200
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Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
Total Tetra-Dioxins	1.18	8.84 %	1.11	1.36	1.22	1.06	1.16	1.20
TCDD EMPC	1.18	8.84 %	1.11	1.36	1.22	1.06	1.16	1.20
Total Penta-Dioxins	0.92	4.24 %	0.93	0.94	0.93	0.84	0.93	0.95
PeCDD EMPC	0.92	4.24 %	0.93	0.94	0.93	0.84	0.93	0.95
Total Hexa-Dioxins	1.02	4.51 %	1.02	1.07	1.03	0.94	1.04	1.06
HxCDD EMPC	1.02	4.51 %	1.02	1.07	1.03	0.94	1.04	1.06
Total Hepta-Dioxins	1.12	4.25 %	1.12	1.04	1.14	1.07	1.14	1.17
HxCDD EMPC	1.12	4.25 %	1.12	1.04	1.14	1.07	1.14	1.17
Total Tetra-Furans	1.08	6.64 %	1.00	1.16	1.15	0.99	1.08	1.08
TCDF EMPC	1.08	6.64 %	1.00	1.16	1.15	0.99	1.08	1.08
1st Func. Penta-Furans	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
1st Func. PeCDF EMPC	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
Total Penta-Furans	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
PeCDF EMPC	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
Total Hexa-Furans	1.29	3.86 %	1.28	1.33	1.30	1.19	1.31	1.32
HxCDF EMPC	1.29	3.86 %	1.28	1.33	1.30	1.19	1.31	1.32
Total Hepta-Furans	1.57	4.23 %	1.57	1.62	1.60	1.44	1.59	1.60
HxCDF EMPC	1.57	4.23 %	1.57	1.62	1.60	1.44	1.59	1.60

Vista Analytical Laboratory - Injection Log Run file: 141016D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141016D1	1	ST141016D1-1	MAS	16-OCT-14	11:05:57	ST141016D1-1	NA
141016D1	2	SOLVENT BLANK	MAS	16-OCT-14	11:54:17	ST141016D1-1	NA
141016D1	3	ST141016D1-2	MAS	16-OCT-14	12:42:43	ST141016D1-1	NA
141016D1	4	ST141016D1-3	MAS	16-OCT-14	13:31:08	ST141016D1-1	NA
141016D1	5	ST141016D1-4	MAS	16-OCT-14	14:19:34	ST141016D1-1	NA
141016D1	6	ST141016D1-5	MAS	16-OCT-14	15:08:00	ST141016D1-1	NA
141016D1	7	ST141016D1-6	MAS	16-OCT-14	15:56:26	ST141016D1-1	NA
141016D1	8	SOLVENT BLANK	MAS	16-OCT-14	16:44:52	ST141016D1-1	NA
141016D1	9	SS141016D1-1	MAS	16-OCT-14	17:33:17	ST141016D1-1	NA
141016D1	10	SOLVENT BLANK	MAS	16-OCT-14	18:21:38	ST141016D1-1	NA

Initial Calibration RRF Summary (ICAL) Vista Analytical Laboratory
Run: Analyte: Cal: 1613TCDFVG7-10-28-14 Inst. ID. VG-7

Data filename: 141028D1 Samp# 3 Samp# 4 Samp# 5 Samp# 6 Samp# 7 Samp# 8
0.25 0.50 2.0 10 40 200

Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
13C-1, 2, 3, 4-TCDF	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-2, 3, 7, 8-TCDF	0.89	2.32 %	0.89	0.89	0.89	0.92	0.86	0.91
2, 3, 7, 8-TCDF	0.92	5.92 %	0.96	0.97	0.88	0.90	0.84	0.96

ms 10/29/14

W. H. 10/29/14

Filename: 141028D1 S: 3 Acquired: 28-OCT-14 11:51:43
Run: Analyte: Cal: 1613TCDFVG7-10-28-1Results:
Sample text: ST141028D1-1 1613 CS0 14I1819

Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF	0.250	3.76e+07	0.79 y	15:23	-	1.00
13C-2,3,7,8-TCDF	100	3.33e+07	0.78 y	17:42	-	0.89
2,3,7,8-TCDF	0.250	8.02e+04	0.71 y	17:43	-	0.96

Filename: 141028D1 S: 4 Acquired: 28-OCT-14 12:23:49
Run: Analyte: Cal: 1613TCDFVG7-10-28-1Results:
Sample text: ST141028D1-2 1613 CS1 14T1820

Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF	0.500	3.90e+07	0.78 y	15:23	-	1.00
13C-2,3,7,8-TCDF	100	3.46e+07	0.77 y	17:41	-	0.89
2,3,7,8-TCDF	0.500	1.67e+05	0.70 y	17:43	-	0.97

Filename: 141028D1 S: 5 Acquired: 28-OCT-14 12:55:55
Run: Analyte: Cal: 1613TCDFVG7-10-28-1Results:
Sample text: ST141028D1-3 1613 CS2 14I1821

Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF	2.00	3.83e+07	0.77 y	15:23	-	1.00
13C-2,3,7,8-TCDF	100	3.41e+07	0.77 y	17:42	-	0.89
2,3,7,8-TCDF	2.00	5.99e+05	0.80 y	17:42	-	0.88

Filename: 141028D1 S: 6 Acquired: 28-OCT-14 13:28:00
Run: Analyte: Cal: 1613TCDFVG7-10-28-1Results:
Sample text: ST141028D1-4 1613 CS3 14I1102

Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF	10.0	3.61e+07	0.79 y	15:24	-	1.00
13C-2,3,7,8-TCDF	100	3.32e+07	0.77 y	17:42	-	0.92
2,3,7,8-TCDF	10.0	3.00e+06	0.76 y	17:43	-	0.90

Filename: 141028D1 S: 7 Acquired: 28-OCT-14 14:00:05

Run: Analyte: Cal: 1613TCDFVG7-10-28-1Results:

Sample text: ST141028D1-5 1613 CS4 14II1822

Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF	40.0	3.75e+07	0.78 y	15:23	-	1.00
13C-2,3,7,8-TCDF	100	3.22e+07	0.78 y	17:42	-	0.86
2,3,7,8-TCDF	40.0	1.08e+07	0.77 y	17:43	-	0.84

Filename: 141028D1 S: 8 Acquired: 28-OCT-14 14:32:11
Run: Analyte: Cal: 1613TCDFVG7-10-28-1Results:
Sample text: ST141028D1-6 1613 CS5 14I1823

	Name	Amount	Resp	RA	RT	RF	RRF
13C-1,2,3,4-TCDF		200	3.81e+07	0.78 y	15:23	-	1.00
13C-2,3,7,8-TCDF		100	3.47e+07	0.76 y	17:42	-	0.91
2,3,7,8-TCDF		200	6.65e+07	0.77 y	17:43	-	0.96

FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory

CCAL ID: ST141028D1-4

Initial Calibration Date: 10-28-14

Instrument ID: VG-7

GC Column ID: DB-225

VER Data Filename: 141028D1 S#6 Analysis Date: 28-OCT-14 Time: 13:28:00

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE 1613 (ng/mL)	CONC. RANGE 8290 (ng/mL)
ANALYTES						
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	9.8	8.4 - 12.0 (3) 8.6 - 11.6 (4)	8.0 - 12.0
13C-2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	103.0	71.0 - 140.0 (3) 76.0 - 131.0 (4)	70.0 - 130.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6a, Method 1613, under VER.

(4) Contract required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: MJDate: 10/26/14

Client ID: 1613 CS3 14I1102
Lab ID: ST141028D1-4

Filename: 141028D1 S:6 Acq:28-OCT-14 13:28:00
GC Column ID: DB-225 ICal: 1613TCDFVG7-10-28-14 wt/vol: 1.000 ConCal: NA
EndCAL: NA

Page 1 of 1

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	3.61e+07	0.79	y	15:24	1.00	100.0
13C-2,3,7,8-TCDF	3.32e+07	0.77	y	17:42	0.89	103.0
2,3,7,8-TCDF	3.00e+06	0.76	y	17:43	0.92	9.830

Integrations
by
Analyst: M

Date: 10/29/14

Reviewed
by
Analyst: JR

Date: 10/29/14

Vista Analytical Laboratory - Injection Log Run file: 141028D1 Instrument ID: VG-7 GC Column ID: DB-225

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141028D1	1	CP141028D1-1	MAS	28-OCT-14	10:47:37	NA	NA
141028D1	2	SOLVENT BLANK	MAS	28-OCT-14	11:19:38	NA	NA
141028D1	3	ST141028D1-1	MAS	28-OCT-14	11:51:43	NA	NA
141028D1	4	ST141028D1-2	MAS	28-OCT-14	12:23:49	NA	NA
141028D1	5	ST141028D1-3	MAS	28-OCT-14	12:55:55	NA	NA
141028D1	6	ST141028D1-4	MAS	28-OCT-14	13:28:00	NA	NA
141028D1	7	ST141028D1-5	MAS	28-OCT-14	14:00:05	NA	NA
141028D1	8	ST141028D1-6	MAS	28-OCT-14	14:32:11	NA	NA
141028D1	9	SOLVENT BLANK	MAS	28-OCT-14	15:04:18	NA	NA
141028D1	10	SOLVENT BLANK	MAS	28-OCT-14	15:36:25	NA	NA
141028D1	11	SS141028D1-1	MAS	28-OCT-14	16:08:31	NA	NA
141028D1	12	SOLVENT BLANK	MAS	28-OCT-14	16:40:40	NA	NA

Run: 140620E1

Analyte:

Cal: PCBVG8-6-20-14

Inst. ID. VG-8

Data filename: 140620E1

	Samp# 1 0.25	Samp# 2 1.0	Samp# 3 2.5	Samp# 4 50	Samp# 5 400	Samp# 6 750
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Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
PCB-1	1.25	8.70 %	1.37	1.26	1.26	1.31	1.05	1.27
PCB-2	1.18	8.61 %	1.27	1.26	1.14	1.24	1.00	1.18
PCB-3	1.22	8.48 %	1.31	1.29	1.23	1.26	1.02	1.20
PCB-4/10	1.55	8.01 %	1.67	1.64	1.55	1.61	1.32	1.54
PCB-7/9	1.27	8.90 %	1.43	1.30	1.26	1.30	1.08	1.25
PCB-6	1.26	11.24 %	1.49	1.29	1.26	1.26	1.06	1.20
PCB-5/8	1.23	6.34 %	1.29	1.29	1.23	1.28	1.08	1.23
PCB-14	1.23	11.07 %	1.45	1.24	1.21	1.27	1.03	1.20
PCB-11	1.16	9.82 %	1.33	1.19	1.16	1.18	0.97	1.13
PCB-12/13	1.10	7.82 %	1.20	1.12	1.10	1.14	0.94	1.09
PCB-15	1.21	10.03 %	1.40	1.19	1.22	1.24	1.02	1.18
PCB-19	1.30	14.66 %	1.63	1.31	1.26	1.28	1.05	1.23
PCB-30	1.83	9.12 %	2.06	1.88	1.82	1.87	1.54	1.82
PCB-18	0.86	12.65 %	1.03	0.90	0.85	0.87	0.70	0.81
PCB-17	0.90	11.34 %	1.04	0.96	0.89	0.92	0.74	0.86
PCB-24/27	1.18	9.77 %	1.33	1.20	1.18	1.22	0.98	1.15
PCB-16/32	1.03	12.28 %	1.23	1.08	1.02	1.03	0.84	0.98
PCB-34	1.26	11.67 %	1.47	1.39	1.25	1.23	1.07	1.16
PCB-23	1.31	14.20 %	1.54	1.27	1.41	1.44	1.02	1.19
PCB-29	1.33	17.31 %	1.74	1.32	1.32	1.36	1.06	1.18
PCB-26	1.29	15.40 %	1.62	1.31	1.32	1.31	1.03	1.16
PCB-25	1.34	13.58 %	1.63	1.37	1.36	1.38	1.09	1.21
PCB-31	1.42	18.76 %	1.87	1.40	1.46	1.41	1.05	1.32
PCB-28	1.38	11.74 %	1.60	1.43	1.41	1.45	1.18	1.20
PCB-20/21/33	1.31	12.96 %	1.59	1.33	1.32	1.34	1.08	1.21
PCB-22	1.32	10.73 %	1.50	1.38	1.35	1.39	1.09	1.23
PCB-36	1.38	8.85 %	1.47	1.49	1.38	1.43	1.16	1.32
PCB-39	1.42	9.22 %	1.58	1.49	1.41	1.46	1.19	1.39
PCB-38	1.35	7.47 %	1.39	1.45	1.36	1.41	1.16	1.35
PCB-35	1.38	8.01 %	1.52	1.38	1.35	1.44	1.19	1.38
PCB-37	1.39	9.07 %	1.58	1.40	1.39	1.41	1.18	1.39
PCB-54	1.20	8.53 %	1.29	1.28	1.18	1.24	1.01	1.18
PCB-50	0.97	9.30 %	1.08	1.01	0.96	0.99	0.81	0.95
PCB-53	1.19	11.55 %	1.42	1.24	1.14	1.19	1.00	1.14
PCB-51	1.15	7.40 %	1.21	1.18	1.17	1.23	0.99	1.14
PCB-45	0.97	8.59 %	1.04	0.99	1.00	1.02	0.81	0.93
PCB-46	0.95	15.50 %	1.21	0.98	0.90	0.95	0.77	0.88
PCB-52/69	1.28	8.47 %	1.35	1.33	1.33	1.35	1.07	1.23
PCB-73	1.37	6.52 %	1.42	1.39	1.31	1.43	1.22	1.45
PCB-43/49	1.11	10.59 %	1.30	1.13	1.10	1.13	0.94	1.08
PCB-47	1.13	11.84 %	1.34	1.18	1.04	1.20	0.96	1.07

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PCB-48/75	1.30	10.70 %	1.52	1.28	1.33	1.31	1.08	1.30
PCB-65	1.33	13.12 %	1.67	1.30	1.28	1.32	1.15	1.30
PCB-62	1.29	10.74 %	1.39	1.40	1.30	1.38	1.03	1.25
PCB-44	0.94	10.79 %	1.08	0.90	0.98	0.98	0.78	0.92
PCB-42/59	1.22	9.45 %	1.36	1.25	1.21	1.26	1.01	1.21
PCB-41/64/71/72	1.31	8.83 %	1.48	1.32	1.28	1.35	1.12	1.33
PCB-68	1.49	9.40 %	1.63	1.59	1.48	1.51	1.23	1.46
PCB-40	0.82	12.75 %	0.99	0.83	0.82	0.83	0.67	0.78
PCB-57	1.11	10.20 %	1.26	1.18	1.11	1.15	0.92	1.07
PCB-67	1.07	9.89 %	1.05	1.20	1.12	1.15	0.90	1.03
PCB-58	1.10	11.05 %	1.29	1.13	1.12	1.09	0.91	1.07

PCB-63	1.12	7.49 %	1.17	1.17	1.14	1.16	0.95	1.12
PCB-74	1.20	8.89 %	1.31	1.27	1.22	1.25	1.00	1.18
PCB-61/70	1.08	8.22 %	1.18	1.13	1.08	1.10	0.92	1.06
PCB-76/66	1.14	10.54 %	1.31	1.18	1.12	1.17	0.94	1.10
PCB-80	1.28	9.96 %	1.46	1.33	1.28	1.28	1.07	1.24
PCB-55	1.11	7.19 %	1.16	1.17	1.10	1.14	0.96	1.12
PCB-56/60	1.09	10.58 %	1.26	1.12	1.07	1.09	0.91	1.07
PCB-79	1.12	8.90 %	1.26	1.11	1.12	1.15	0.95	1.13
PCB-78	1.24	11.08 %	1.43	1.32	1.20	1.27	1.02	1.18
PCB-81	1.38	9.94 %	1.51	1.50	1.41	1.41	1.14	1.31
PCB-77	1.21	8.98 %	1.33	1.26	1.22	1.25	1.02	1.17
PCB-104	1.26	10.21 %	1.42	1.31	1.28	1.27	1.03	1.22
PCB-96	1.09	9.49 %	1.24	1.12	1.08	1.10	0.92	1.10
PCB-103	0.93	8.17 %	1.00	0.98	0.89	0.95	0.80	0.98
PCB-100	1.00	7.45 %	1.03	1.08	0.97	1.01	0.87	1.05
PCB-94	1.11	11.35 %	1.31	1.11	1.11	1.13	0.91	1.08
PCB-95/98/102	1.21	9.28 %	1.36	1.25	1.18	1.30	1.04	1.17
PCB-93	1.13	18.48 %	1.36	1.34	1.21	0.95	0.84	1.08
PCB-88/91	1.02	8.29 %	1.00	1.06	1.02	1.15	0.89	1.00
PCB-121	1.90	16.11 %	2.27	2.21	1.94	1.69	1.46	1.85
PCB-84/92	1.05	9.56 %	1.15	1.13	1.05	1.09	0.87	1.02
PCB-89	1.02	10.73 %	1.15	1.04	1.02	1.08	0.83	0.98
PCB-90/101	1.19	9.91 %	1.34	1.26	1.19	1.21	0.99	1.15
PCB-113	1.35	10.72 %	1.54	1.26	1.32	1.51	1.16	1.33
PCB-99	1.29	12.88 %	1.43	1.48	1.35	1.20	1.03	1.24
PCB-119	1.72	7.60 %	1.78	1.88	1.72	1.73	1.48	1.73
PCB-108/112	1.29	7.44 %	1.31	1.39	1.29	1.33	1.10	1.30
PCB-83	1.52	7.96 %	1.66	1.53	1.51	1.58	1.30	1.54
PCB-97	1.25	8.07 %	1.35	1.26	1.27	1.32	1.06	1.23
PCB-86	1.02	10.03 %	1.19	0.96	1.05	0.98	0.90	1.06
PCB-87/117/125	1.56	6.32 %	1.67	1.60	1.55	1.59	1.37	1.57
PCB-111/115	1.75	13.48 %	2.16	1.80	1.69	1.76	1.43	1.66
PCB-85/116	1.30	6.67 %	1.30	1.35	1.33	1.34	1.13	1.35
PCB-120	1.78	10.02 %	2.08	1.80	1.76	1.75	1.52	1.77
PCB-110	1.68	10.37 %	1.90	1.78	1.65	1.72	1.38	1.64
PCB-82	0.74	11.58 %	0.83	0.83	0.73	0.73	0.60	0.71
PCB-124	1.32	11.30 %	1.54	1.34	1.33	1.32	1.07	1.33
PCB-107/109	1.22	8.01 %	1.35	1.31	1.18	1.24	1.08	1.17
PCB-123	1.22	9.00 %	1.30	1.30	1.23	1.28	1.01	1.20
PCB-106/118	1.22	9.57 %	1.37	1.27	1.25	1.26	1.01	1.19
PCB-114	1.36	10.69 %	1.57	1.37	1.36	1.37	1.11	1.35
PCB-122	1.24	10.69 %	1.41	1.32	1.20	1.25	1.02	1.22
PCB-105	1.28	7.83 %	1.36	1.29	1.33	1.34	1.09	1.28
PCB-127	1.14	11.20 %	1.33	1.18	1.14	1.16	0.94	1.09
PCB-126	1.28	9.08 %	1.46	1.28	1.28	1.32	1.10	1.27
PCB-155	1.14	7.40 %	1.11	1.20	1.18	1.20	0.98	1.15
PCB-150	1.06	7.11 %	1.15	1.04	1.05	1.11	0.94	1.10
PCB-152	1.10	11.78 %	1.32	1.08	1.06	1.12	0.92	1.09
PCB-145	1.09	12.69 %	1.35	1.06	1.05	1.11	0.92	1.08
PCB-136	1.08	11.65 %	1.25	1.02	1.08	1.14	0.88	1.14

PCB-148	0.74	7.71 %	0.84	0.75	0.68	0.75	0.70	0.72
PCB-154	0.88	8.65 %	0.96	0.88	0.88	0.93	0.74	0.91
PCB-151	0.81	9.63 %	0.91	0.82	0.78	0.86	0.68	0.81
PCB-135	0.78	6.32 %	0.83	0.75	0.76	0.81	0.70	0.82
PCB-144	0.82	10.98 %	0.93	0.81	0.78	0.90	0.68	0.82
PCB 147	0.83	12.38 %	1.00	0.76	0.78	0.88	0.70	0.85
PCB-139/149	0.84	7.77 %	0.91	0.82	0.83	0.91	0.73	0.86
PCB-140	0.79	11.18 %	0.91	0.73	0.76	0.86	0.66	0.80
PCB-134/143	0.93	12.49 %	1.13	0.94	0.90	0.94	0.78	0.87
PCB-133/142	0.95	11.69 %	1.12	0.98	0.91	0.96	0.79	0.90
PCB-131	0.91	13.39 %	1.11	0.96	0.90	0.90	0.74	0.87

PCB-146/165	1.16	9.91 %	1.33	1.19	1.14	1.16	0.97	1.13
PCB-132/161	1.11	10.87 %	1.31	1.14	1.09	1.13	0.93	1.07
PCB-153	1.18	8.19 %	1.21	1.24	1.26	1.18	0.99	1.18
PCB-168	1.37	10.18 %	1.56	1.44	1.37	1.37	1.14	1.35
PCB-141	0.97	8.49 %	1.08	1.00	0.97	0.99	0.83	0.99
PCB-137	1.07	6.76 %	1.12	1.16	1.05	1.03	0.96	1.11
PCB-130	0.85	9.16 %	0.85	0.83	0.87	0.94	0.71	0.89
PCB-138/163/164	1.23	7.23 %	1.30	1.28	1.22	1.26	1.05	1.24
PCB-158/160	1.29	7.06 %	1.37	1.33	1.29	1.34	1.11	1.29
PCB-129	0.92	10.90 %	1.06	0.98	0.93	0.93	0.76	0.88
PCB-166	1.12	8.09 %	1.17	1.21	1.11	1.13	0.94	1.13
PCB-159	1.16	9.05 %	1.24	1.24	1.18	1.17	0.96	1.20
PCB-128/162	1.02	8.78 %	1.10	1.03	1.04	1.07	0.85	1.03
PCB-167	1.06	9.67 %	1.20	1.04	1.10	1.09	0.88	1.05
PCB-156	1.18	12.60 %	1.44	1.20	1.18	1.17	0.98	1.12
PCB-157	1.08	8.46 %	1.17	1.12	1.13	1.11	0.91	1.06
PCB-169	1.11	8.78 %	1.24	1.15	1.12	1.11	0.94	1.09
PCB-188	1.40	9.77 %	1.59	1.44	1.43	1.43	1.17	1.37
PCB-184	1.24	9.34 %	1.35	1.30	1.25	1.28	1.02	1.23
PCB-179	1.30	11.40 %	1.50	1.37	1.32	1.31	1.05	1.28
PCB-176	1.36	12.01 %	1.55	1.47	1.35	1.38	1.07	1.34
PCB-186	1.28	10.58 %	1.46	1.30	1.25	1.31	1.05	1.29
PCB-178	0.94	10.89 %	0.99	1.05	0.96	0.96	0.75	0.92
PCB-175	0.97	9.63 %	1.03	1.01	0.98	1.02	0.78	0.99
PCB-182/187	1.01	8.25 %	1.07	1.03	1.01	1.06	0.85	1.07
PCB-183	1.08	11.32 %	1.18	1.17	1.08	1.10	0.85	1.12
PCB-185	1.34	11.43 %	1.58	1.37	1.30	1.36	1.10	1.35
PCB-174	1.34	6.35 %	1.41	1.36	1.36	1.32	1.18	1.40
PCB-181	1.36	12.64 %	1.56	1.48	1.28	1.43	1.08	1.33
PCB-177	1.24	12.38 %	1.50	1.23	1.20	1.28	1.03	1.21
PCB-171	1.31	10.27 %	1.52	1.33	1.34	1.31	1.10	1.28
PCB-173	1.16	12.99 %	1.43	1.13	1.15	1.17	0.97	1.11
PCB-172	1.22	11.23 %	1.47	1.18	1.22	1.24	1.05	1.18
PCB-192	1.53	7.91 %	1.69	1.58	1.49	1.56	1.33	1.51
PCB-180	1.43	12.38 %	1.72	1.48	1.44	1.42	1.18	1.34
PCB-193	1.65	9.91 %	1.90	1.71	1.65	1.68	1.40	1.59
PCB-191	1.67	12.03 %	2.04	1.63	1.65	1.68	1.43	1.61
PCB-170	1.50	10.78 %	1.66	1.67	1.51	1.50	1.23	1.44
PCB-190	2.02	10.04 %	2.33	2.09	1.97	2.04	1.70	1.98
PCB-189	1.54	8.43 %	1.70	1.58	1.55	1.59	1.30	1.54
PCB-202	1.04	12.36 %	1.24	1.11	1.01	1.04	0.85	0.99
PCB-201	1.10	11.84 %	1.33	1.11	1.06	1.11	0.92	1.09
PCB-204	0.99	8.55 %	1.10	0.99	0.99	1.04	0.84	1.00
PCB-197	1.07	11.41 %	1.28	1.04	1.04	1.12	0.90	1.06
PCB-200	1.02	8.06 %	1.11	1.02	1.02	1.07	0.87	1.02
PCB-198	0.74	13.95 %	0.90	0.81	0.69	0.77	0.60	0.70
PCB-199	0.73	6.67 %	0.75	0.75	0.73	0.77	0.63	0.74
PCB-196/203	0.77	7.49 %	0.82	0.80	0.75	0.81	0.67	0.79
PCB-195	1.20	7.95 %	1.32	1.23	1.17	1.25	1.04	1.19
PCB-194	1.25	15.62 %	1.61	1.21	1.22	1.24	1.02	1.17

PCB-205	1.41	12.03 %	1.70	1.44	1.41	1.41	1.17	1.36
PCB-208	0.96	16.01 %	1.25	0.95	0.93	0.95	0.78	0.91
PCB-207	0.92	8.32 %	0.99	0.97	0.91	0.93	0.78	0.91
PCB-206	1.03	12.39 %	1.24	1.05	1.03	1.02	0.84	0.98
PCB-209	1.18	8.31 %	1.27	1.19	1.21	1.23	0.99	1.16
Total Mono-PCB	1.22	8.44 %	1.32	1.27	1.21	1.27	1.02	1.22
Total Di-PCB	1.21	8.72 %	1.35	1.24	1.21	1.25	1.03	1.19
Total Tri-PCB	1.16	11.17 %	1.36	1.20	1.15	1.18	0.96	1.12

Total Tri-PCB	1.35	11.56 %	1.58	1.38	1.36	1.39	1.11	1.26
Total Tetra-PCB	1.17	9.20 %	1.32	1.21	1.17	1.21	0.99	1.15
Total Penta-PCB	1.21	8.50 %	1.33	1.27	1.21	1.24	1.03	1.21
Total Penta-PCB	1.26	9.64 %	1.42	1.29	1.26	1.29	1.05	1.24
Total Hexa-PCB	0.92	8.86 %	1.03	0.90	0.89	0.96	0.78	0.93
Total Hexa-PCB	1.08	8.82 %	1.20	1.12	1.08	1.10	0.91	1.07
Total Hepta-PCB	1.27	10.02 %	1.44	1.31	1.27	1.30	1.05	1.26
Total Octa-PCB	0.92	9.46 %	1.04	0.94	0.89	0.95	0.77	0.91
Total Octa-PCB	1.29	11.68 %	1.54	1.29	1.26	1.30	1.08	1.24
Total Nona-PCB	0.96	11.85 %	1.15	0.98	0.94	0.96	0.79	0.93
Total Deca-PCB	1.18	8.31 %	1.27	1.19	1.21	1.23	0.99	1.16
13C-PCB-1	0.89	8.16 %	0.97	0.94	0.91	0.88	0.88	0.76
13C-PCB-3	0.93	4.27 %	0.98	0.94	0.94	0.93	0.91	0.86
13C-PCB-4	0.55	3.55 %	0.56	0.57	0.56	0.55	0.53	0.52
13C-PCB-9	0.83	2.91 %	0.84	0.85	0.84	0.82	0.80	0.79
13C-PCB-11	0.94	1.99 %	0.94	0.96	0.96	0.92	0.93	0.91
13C-PCB-19	0.53	4.01 %	0.55	0.55	0.55	0.53	0.52	0.50
13C-PCB-32	0.81	1.81 %	0.83	0.82	0.83	0.81	0.81	0.79
13C-PCB-28	0.89	8.44 %	0.79	0.91	0.83	0.85	0.96	0.98
13C-PCB-37	0.83	4.85 %	0.80	0.83	0.80	0.80	0.87	0.89
13C-PCB-54	0.85	5.64 %	0.86	0.89	0.91	0.84	0.83	0.77
13C-PCB-52	0.71	4.89 %	0.72	0.74	0.75	0.70	0.68	0.66
13C-PCB-47	0.74	4.31 %	0.74	0.78	0.78	0.73	0.73	0.70
13C-PCB-70	0.94	2.25 %	0.96	0.97	0.96	0.93	0.94	0.91
13C-PCB-80	0.96	2.89 %	0.96	1.00	0.99	0.95	0.95	0.92
13C-PCB-81	0.84	2.20 %	0.83	0.82	0.84	0.82	0.86	0.86
13C-PCB-77	0.89	1.89 %	0.88	0.87	0.90	0.88	0.91	0.91
13C-PCB-104	1.00	6.42 %	0.99	1.06	1.07	0.98	0.96	0.90
13C-PCB-95	0.74	2.70 %	0.74	0.78	0.75	0.73	0.74	0.72
13C-PCB-101	0.79	2.14 %	0.79	0.81	0.79	0.77	0.78	0.77
13C-PCB-97	0.69	1.41 %	0.70	0.69	0.70	0.69	0.69	0.67
13C-PCB-123	0.95	4.62 %	0.88	0.92	0.98	1.00	0.95	0.97
13C-PCB-118	0.98	3.93 %	0.92	0.95	0.99	1.03	1.01	0.99
13C-PCB-114	1.21	3.28 %	1.26	1.20	1.21	1.18	1.25	1.15
13C-PCB-105	1.24	3.05 %	1.26	1.24	1.25	1.20	1.29	1.19
13C-PCB-127	1.34	2.73 %	1.37	1.34	1.38	1.29	1.36	1.30
13C-PCB-126	1.16	2.72 %	1.16	1.17	1.20	1.12	1.19	1.14
13C-PCB-155	0.83	3.93 %	0.86	0.87	0.84	0.83	0.81	0.78
13C-PCB-153	1.11	2.81 %	1.14	1.11	1.13	1.10	1.15	1.06
13C-PCB-141	1.07	3.72 %	1.13	1.09	1.09	1.06	1.06	1.01
13C-PCB-138	1.04	2.24 %	1.06	1.05	1.06	1.02	1.06	1.01
13C-PCB-159	1.20	1.72 %	1.21	1.19	1.22	1.17	1.22	1.19
13C-PCB-167	1.32	1.88 %	1.32	1.33	1.36	1.29	1.32	1.31
13C-PCB-156	1.24	1.98 %	1.23	1.25	1.28	1.21	1.26	1.24
13C-PCB-157	1.31	1.61 %	1.31	1.31	1.34	1.28	1.33	1.29
13C-PCB-169	1.22	1.81 %	1.22	1.21	1.25	1.19	1.22	1.20
13C-PCB-188	0.94	3.81 %	0.97	0.93	0.93	0.93	0.98	0.88
13C-PCB-180	0.67	2.62 %	0.71	0.67	0.67	0.67	0.67	0.65
13C-PCB-170	0.54	1.49 %	0.55	0.54	0.54	0.53	0.54	0.52
13C-PCB-189	0.72	1.73 %	0.72	0.70	0.73	0.73	0.71	0.70
13C-PCB-202	0.83	2.31 %	0.86	0.83	0.83	0.84	0.84	0.80

13C-PCB-194	0.81	1.33 %	0.82	0.82	0.82	0.80	0.81	0.79
13C-PCB-208	1.12	2.11 %	1.10	1.14	1.13	1.14	1.14	1.09
13C-PCB-206	0.66	3.31 %	0.63	0.65	0.66	0.70	0.65	0.65
13C-PCB-209	0.61	2.62 %	0.59	0.60	0.62	0.64	0.61	0.62
13C-PCB-15	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-31	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-60	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-111	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-128	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-205	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00

13C-PCB-79	1.01	4.78 %	0.97	0.97	0.99	1.09	0.99	1.02
13C-PCB-178	0.63	4.30 %	0.62	0.61	0.62	0.69	0.62	0.62
13C-PCB-79	1.20	5.38 %	1.18	1.18	1.17	1.33	1.15	1.19
13C-PCB-178	0.94	5.01 %	0.88	0.91	0.92	1.02	0.93	0.96

Filename: 140620E1 S: 1 Acquired: 20-JUN-14 09:31:44

Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14

Results:

Sample text: ST140620E1-1 PCB CS0 13H1202

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	0.25	4.35e+05	2.82 y	16:14	-	1.37
2	Mono	PCB-2	0.25	4.10e+05	3.17 y	18:35	-	1.27
3	Mono	PCB-3	0.25	4.22e+05	2.92 y	18:49	-	1.31
4	Di	PCB-4/10	1.00	1.23e+06	1.61 y	20:10	-	1.67
5	Di	PCB-7/9	1.00	1.58e+06	1.70 y	21:56	-	1.43
6	Di	PCB-6	0.50	8.23e+05	1.36 y	22:35	-	1.49
7	Di	PCB-5/8	1.00	1.42e+06	1.76 y	23:00	-	1.29
8	Di	PCB-14	0.50	8.96e+05	1.59 y	24:05	-	1.45
9	Di	PCB-11	0.50	8.18e+05	1.39 y	25:16	--	1.33
10	Di	PCB-12/13	1.00	1.48e+06	1.71 y	25:40	-	1.20
11	Di	PCB-15	0.50	8.65e+05	1.43 y	25:58	-	1.40
12	Tri	PCB-19	0.25	2.94e+05	1.11 y	24:16	-	1.63
13	Tri	PCB-30	0.25	3.70e+05	0.89 y	25:09	-	2.06
14	Tri	PCB-18	0.25	2.78e+05	1.19 y	25:54	-	1.03
15	Tri	PCB-17	0.25	2.82e+05	0.94 y	26:04	-	1.04
16	Tri	PCB-24/27	0.50	7.21e+05	1.01 y	26:38	-	1.33
17	Tri	PCB-16/32	0.50	6.64e+05	1.06 y	27:09	-	1.23
18	Tri	PCB-34	0.25	3.70e+05	1.06 y	27:56	-	1.47
19	Tri	PCB-23	0.25	3.85e+05	1.19 y	28:02	-	1.54
20	Tri	PCB-29	0.25	4.36e+05	1.18 y	28:17	-	1.74
21	Tri	PCB-26	0.25	4.07e+05	0.97 y	28:29	-	1.62
22	Tri	PCB-25	0.25	4.10e+05	1.07 y	28:39	-	1.63
23	Tri	PCB-31	0.25	4.70e+05	1.15 y	29:00	-	1.87
24	Tri	PCB-28	0.25	4.03e+05	1.12 y	29:07	-	1.60
25	Tri	PCB-20/21/33	0.75	1.20e+06	1.11 y	29:43	-	1.59
26	Tri	PCB-22	0.25	3.76e+05	1.05 y	30:10	-	1.50
27	Tri	PCB-36	0.25	3.74e+05	1.12 y	30:47	-	1.47
28	Tri	PCB-39	0.25	3.99e+05	1.02 y	31:14	-	1.58
29	Tri	PCB-38	0.25	3.51e+05	1.20 y	32:00	-	1.39
30	Tri	PCB-35	0.25	3.85e+05	1.07 y	32:32	-	1.52
31	Tri	PCB-37	0.25	4.00e+05	0.99 y	32:58	-	1.58
32	Tetra	PCB-54	0.25	3.02e+05	0.84 y	27:59	-	1.29
33	Tetra	PCB-50	0.25	2.51e+05	0.85 y	29:09	-	1.08
34	Tetra	PCB-53	0.25	2.75e+05	0.70 y	29:47	-	1.42
35	Tetra	PCB-51	0.25	2.35e+05	0.68 y	30:08	-	1.21
36	Tetra	PCB-45	0.25	2.02e+05	0.82 y	30:34	-	1.04
37	Tetra	PCB-46	0.25	2.36e+05	0.75 y	31:04	-	1.21
38	Tetra	PCB-52/69	0.50	5.24e+05	0.82 y	31:32	-	1.35
39	Tetra	PCB-73	0.25	2.76e+05	0.88 y	31:39	-	1.42
40	Tetra	PCB-43/49	0.50	5.07e+05	0.72 y	31:49	-	1.30

41	Tetra	PCB-47	0.25	2.69e+05	0.78	y	32:00	-	1.34
42	Tetra	PCB-48/75	0.50	6.11e+05	0.75	y	32:07	-	1.52
43	Tetra	PCB-65	0.25	3.35e+05	0.81	y	32:23	-	1.67
44	Tetra	PCB-62	0.25	2.78e+05	0.66	y	32:30	-	1.39
45	Tetra	PCB-44	0.25	2.18e+05	0.67	y	32:48	-	1.08
46	Tetra	PCB-42/59	0.50	5.48e+05	0.72	y	33:02	-	1.36
47	Tetra	PCB-41/64/71/72	1.00	1.19e+06	0.71	y	33:37	-	1.48
48	Tetra	PCB-68	0.25	3.28e+05	0.80	y	33:52	-	1.63
49	Tetra	PCB-40	0.25	1.99e+05	0.82	y	34:05	-	0.99
50	Tetra	PCB-57	0.25	3.26e+05	0.66	y	34:27	-	1.26
51	Tetra	PCB-67	0.25	2.73e+05	0.74	y	34:45	-	1.05

52	Tetra	PCB-58	0.25	3.35e+05	0.79 y	34:52	-	1.29
53	Tetra	PCB-63	0.25	3.04e+05	0.78 y	35:01	-	1.17
54	Tetra	PCB-74	0.25	3.39e+05	0.76 y	35:18	-	1.31
55	Tetra	PCB-61/70	0.50	6.13e+05	0.75 y	35:29	-	1.18
56	Tetra	PCB-76/66	0.50	6.79e+05	0.81 y	35:42	-	1.31
57	Tetra	PCB-80	0.25	3.81e+05	0.73 y	35:56	-	1.46
58	Tetra	PCB-55	0.25	3.04e+05	0.81 y	36:16	-	1.16
59	Tetra	PCB-56/60	0.50	6.61e+05	0.75 y	36:46	-	1.26
60	Tetra	PCB-79	0.25	3.31e+05	0.86 y	37:48	-	1.26
61	Tetra	PCB-78	0.25	3.20e+05	0.80 y	38:30	-	1.43
62	Tetra	PCB-81	0.25	3.39e+05	0.75 y	39:02	-	1.51
63	Tetra	PCB-77	0.25	3.19e+05	0.68 y	39:38	-	1.33
64	Penta	PCB-104	0.25	2.39e+05	1.52 y	32:40	-	1.42
65	Penta	PCB-96	0.25	2.08e+05	1.62 y	33:56	-	1.24
66	Penta	PCB-103	0.25	1.68e+05	1.38 y	34:27	-	1.00
67	Penta	PCB-100	0.25	1.73e+05	1.61 y	34:49	-	1.03
68	Penta	PCB-94	0.25	1.64e+05	1.42 y	35:17	-	1.31
69	Penta	PCB-95/98/102	0.75	5.11e+05	1.73 y	35:45	-	1.36
70	Penta	PCB-93	0.25	1.71e+05	1.64 y	35:54	-	1.36
71	Penta	PCB-88/91	0.50	2.51e+05	1.76 y	36:10	-	1.00
72	Penta	PCB-121	0.25	2.86e+05	1.39 y	36:17	-	2.27
73	Penta	PCB-84/92	0.50	3.08e+05	1.45 y	37:07	-	1.15
74	Penta	PCB-89	0.25	1.54e+05	1.32 y	37:19	-	1.15
75	Penta	PCB-90/101	0.50	3.59e+05	1.43 y	37:29	-	1.34
76	Penta	PCB-113	0.25	2.06e+05	1.63 y	37:44	-	1.54
77	Penta	PCB-99	0.25	1.92e+05	1.34 y	37:49	-	1.43
78	Penta	PCB-119	0.25	2.11e+05	1.49 y	38:18	-	1.78
79	Penta	PCB-108/112	0.50	3.11e+05	1.68 y	38:27	-	1.31
80	Penta	PCB-83	0.25	1.96e+05	1.33 y	38:37	-	1.66
81	Penta	PCB-97	0.25	1.60e+05	1.69 y	38:48	-	1.35
82	Penta	PCB-86	0.25	1.41e+05	1.52 y	38:56	-	1.19
83	Penta	PCB-87/117/125	0.75	5.92e+05	1.55 y	39:04	-	1.67
84	Penta	PCB-111/115	0.50	5.11e+05	1.55 y	39:14	-	2.16
85	Penta	PCB-85/116	0.50	3.09e+05	1.69 y	39:22	-	1.30
86	Penta	PCB-120	0.25	2.47e+05	1.58 y	39:35	-	2.08
87	Penta	PCB-110	0.25	2.26e+05	1.34 y	39:44	-	1.90
88	Penta	PCB-82	0.25	1.23e+05	1.66 y	40:23	-	0.83
89	Penta	PCB-124	0.25	2.30e+05	1.74 y	41:02	-	1.54
90	Penta	PCB-107/109	0.50	4.02e+05	1.57 y	41:12	-	1.35
91	Penta	PCB-123	0.25	1.93e+05	1.66 y	41:22	-	1.30
92	Penta	PCB-106/118	0.50	4.29e+05	1.45 y	41:33	-	1.37
93	Penta	PCB-114	0.25	2.76e+05	1.56 y	42:12	-	1.57
94	Penta	PCB-122	0.25	2.48e+05	1.55 y	42:20	-	1.41
95	Penta	PCB-105	0.25	2.42e+05	1.73 y	43:04	-	1.36
96	Penta	PCB-127	0.25	2.56e+05	1.65 y	43:24	-	1.33
97	Penta	PCB-126	0.25	2.38e+05	1.59 y	45:17	-	1.46
98	Hexa	PCB-155	0.25	1.62e+05	1.06 y	37:03	-	1.11
99	Hexa	PCB-150	0.25	1.67e+05	1.15 y	38:19	-	1.15
100	Hexa	PCB-152	0.25	1.92e+05	1.35 y	38:47	-	1.32
101	Hexa	PCB-145	0.25	1.95e+05	1.19 y	39:13	-	1.35

102	Hexa	PCB-136	0.25	1.82e+05	1.10	y	39:34	-	1.25
103	Hexa	PCB-148	0.25	1.22e+05	1.18	y	39:39	-	0.84
104	Hexa	PCB-154	0.25	1.40e+05	1.29	y	40:09	-	0.96
105	Hexa	PCB-151	0.25	1.32e+05	1.38	y	40:47	-	0.91
106	Hexa	PCB-135	0.25	1.21e+05	1.08	y	40:59	-	0.83
107	Hexa	PCB-144	0.25	1.35e+05	1.36	y	41:07	-	0.93
108	Hexa	PCB-147	0.25	1.45e+05	1.24	y	41:14	-	1.00
109	Hexa	PCB-139/149	0.50	2.63e+05	1.42	y	41:30	-	0.91
110	Hexa	PCB-140	0.25	1.32e+05	1.26	y	41:41	-	0.91
111	Hexa	PCB-134/143	0.50	3.60e+05	1.29	y	42:07	-	1.13
112	Hexa	PCB-133/142	0.50	3.59e+05	1.27	y	42:25	-	1.12

113	Hexa	PCB-131	0.25	1.78e+05	1.22	y	42:35	-	1.11
114	Hexa	PCB-146/165	0.50	4.25e+05	1.38	y	42:48	-	1.33
115	Hexa	PCB-132/161	0.50	4.18e+05	1.33	y	43:03	-	1.31
116	Hexa	PCB-153	0.25	1.94e+05	1.33	y	43:13	-	1.21
117	Hexa	PCB-168	0.25	2.50e+05	1.10	y	43:25	-	1.56
118	Hexa	PCB-141	0.25	1.70e+05	1.16	y	43:57	-	1.08
119	Hexa	PCB-137	0.25	1.76e+05	1.34	y	44:20	-	1.12
120	Hexa	PCB-130	0.25	1.34e+05	1.41	y	44:26	-	0.85
121	Hexa	PCB-138/163/164	0.75	5.80e+05	1.22	y	44:49	-	1.30
122	Hexa	PCB-158/160	0.50	4.07e+05	1.26	y	45:04	-	1.37
123	Hexa	PCB-129	0.25	1.58e+05	1.11	y	45:18	-	1.06
124	Hexa	PCB-166	0.25	1.98e+05	1.26	y	45:46	-	1.17
125	Hexa	PCB-159	0.25	2.11e+05	1.18	y	46:04	-	1.24
126	Hexa	PCB-128/162	0.50	3.74e+05	1.26	y	46:22	-	1.10
127	Hexa	PCB-167	0.25	2.22e+05	1.41	y	46:46	-	1.20
128	Hexa	PCB-156	0.25	2.47e+05	1.24	y	48:03	-	1.44
129	Hexa	PCB-157	0.25	2.16e+05	1.36	y	48:20	-	1.17
130	Hexa	PCB-169	0.25	2.12e+05	1.07	y	50:23	-	1.24
131	Hepta	PCB-188	0.25	2.17e+05	1.02	y	42:51	-	1.59
132	Hepta	PCB-184	0.25	1.84e+05	0.94	y	43:18	-	1.35
133	Hepta	PCB-179	0.25	2.05e+05	1.05	y	44:04	-	1.50
134	Hepta	PCB-176	0.25	2.12e+05	1.04	y	44:32	-	1.55
135	Hepta	PCB-186	0.25	2.00e+05	0.97	y	45:09	-	1.46
136	Hepta	PCB-178	0.25	1.35e+05	0.98	y	45:38	-	0.99
137	Hepta	PCB-175	0.25	1.41e+05	1.08	y	45:58	-	1.03
138	Hepta	PCB-182/187	0.50	2.91e+05	0.90	y	46:09	-	1.07
139	Hepta	PCB-183	0.25	1.61e+05	0.95	y	46:29	-	1.18
140	Hepta	PCB-185	0.25	1.56e+05	0.97	y	47:08	-	1.58
141	Hepta	PCB-174	0.25	1.40e+05	1.03	y	47:30	-	1.41
142	Hepta	PCB-181	0.25	1.55e+05	1.17	y	47:37	-	1.56
143	Hepta	PCB-177	0.25	1.49e+05	1.09	y	47:46	-	1.50
144	Hepta	PCB-171	0.25	1.51e+05	0.93	y	48:05	-	1.52
145	Hepta	PCB-173	0.25	1.42e+05	0.96	y	48:30	-	1.43
146	Hepta	PCB-172	0.25	1.45e+05	1.13	y	48:55	-	1.47
147	Hepta	PCB-192	0.25	1.68e+05	0.90	y	49:08	-	1.69
148	Hepta	PCB-180	0.25	1.70e+05	0.97	y	49:20	-	1.72
149	Hepta	PCB-193	0.25	1.88e+05	1.13	y	49:31	-	1.90
150	Hepta	PCB-191	0.25	2.02e+05	1.05	y	49:45	-	2.04
151	Hepta	PCB-170	0.25	1.27e+05	1.19	y	50:44	-	1.66
152	Hepta	PCB-190	0.25	1.78e+05	0.91	y	50:55	-	2.33
153	Hepta	PCB-189	0.25	1.70e+05	1.20	y	52:11	-	1.70
154	Octa	PCB-202	0.25	1.49e+05	0.98	y	48:16	-	1.24
155	Octa	PCB-201	0.25	1.60e+05	1.02	y	48:45	-	1.33
156	Octa	PCB-204	0.25	1.33e+05	0.77	y	48:54	-	1.10
157	Octa	PCB-197	0.25	1.54e+05	0.92	y	49:13	-	1.28
158	Octa	PCB-200	0.25	1.34e+05	1.01	y	50:02	-	1.11
159	Octa	PCB-198	0.25	1.08e+05	0.88	y	51:19	-	0.90
160	Octa	PCB-199	0.25	9.08e+04	0.94	y	51:25	-	0.75
161	Octa	PCB-196/203	0.50	1.98e+05	0.81	y	51:40	-	0.82
162	Octa	PCB-195	0.25	1.39e+05	0.81	y	52:48	-	1.32

163	Octa	PCB-194	0.25	1.70e+05	0.85	y	53:40	-	1.61
164	Octa	PCB-205	0.25	1.79e+05	0.98	y	53:57	-	1.70
165	Nona	PCB-208	0.25	1.78e+05	1.17	y	52:57	-	1.25
166	Nona	PCB-207	0.25	1.41e+05	1.37	y	53:14	-	0.99
167	Nona	PCB-206	0.25	1.02e+05	1.41	y	55:20	-	1.24
168	Deca	PCB-209	0.25	9.69e+04	1.15	y	56:37	-	1.27
169	Tot ䷂	Total Mono-PCB	0.00	-	-	n	-	-	1.32
170	Tot ䷂	Total Di-PCB	0.00	-	-	n	-	-	1.35

171	Tot ䷂	Total Tri-PCB	0.00	-	- n	-	-	1.36
172	Tot ䷂	Total Tri-PCB	0.00	-	- n	-	-	1.58
173	Tot ䷂	Total Tetra-PCB	0.00	-	- n	-	-	1.32
174	Tot ䷂	Total Penta-PCB	0.00	-	- n	-	-	1.33
175	Tot ䷂	Total Penta-PCB	0.00	-	- n	-	-	1.42
176	Tot ䷂	Total Hexa-PCB	0.00	-	- n	-	-	1.03
177	Tot ䷂	Total Hexa-PCB	0.00	-	- n	-	-	1.20
178	Tot ䷂	Total Hepta-PCB	0.00	-	- n	-	-	1.44
179	Tot ䷂	Total Octa-PCB	0.00	-	- n	-	-	1.04
180	Tot ䷂	Total Octa-PCB	0.00	-	- n	-	-	1.54
181	Tot ䷂	Total Nona-PCB	0.00	-	- n	-	-	1.15
182	Tot ䷂	Total Deca-PCB	0.25	9.69e+04	1.15 y	56:37	-	1.27
183	Mono䷂	13C-PCB-1	100.00	1.27e+08	3.28 y	16:13	-	0.97
184	Mono䷂	13C-PCB-3	100.00	1.29e+08	3.32 y	18:48	-	0.98
185	Di-IS	13C-PCB-4	100.00	7.37e+07	1.59 y	20:07	-	0.56
186	Di-IS	13C-PCB-9	100.00	1.10e+08	1.57 y	21:53	-	0.84
187	Di-1S	13C-PCB-11	100.00	1.24e+08	1.57 y	25:15	-	0.94
188	Tri-䷂	13C-PCB-19	100.00	7.18e+07	1.06 y	24:15	-	0.55
189	Tri-䷂	13C-PCB-32	100.00	1.08e+08	1.08 y	27:09	-	0.83
190	Tri-䷂	13C-PCB-28	100.00	1.00e+08	1.05 y	29:05	-	0.79
191	Tri-䷂	13C-PCB-37	100.00	1.01e+08	1.07 y	32:57	-	0.80
192	Tetr䷂	13C-PCB-54	100.00	9.33e+07	0.80 y	27:59	-	0.86
193	Tetr䷂	13C-PCB-52	100.00	7.77e+07	0.81 y	31:30	-	0.72
194	Tetr䷂	13C-PCB-47	100.00	8.03e+07	0.78 y	32:00	-	0.74
195	Tetr䷂	13C-PCB-70	100.00	1.04e+08	0.80 y	35:31	-	0.96
196	Tetr䷂	13C-PCB-80	100.00	1.05e+08	0.80 y	35:55	-	0.96
197	Tetr䷂	13C-PCB-81	100.00	8.95e+07	0.80 y	39:02	-	0.83
198	Tetr䷂	13C-PCB-77	100.00	9.58e+07	0.80 y	39:37	-	0.88
199	Pent䷂	13C-PCB-104	100.00	6.72e+07	1.63 y	32:39	-	0.99
200	Pent䷂	13C-PCB-95	100.00	5.03e+07	1.61 y	35:49	-	0.74
201	Pent䷂	13C-PCB-101	100.00	5.37e+07	1.61 y	37:29	-	0.79
202	Pent䷂	13C-PCB-97	100.00	4.74e+07	1.63 y	38:47	-	0.70
203	Pent䷂	13C-PCB-123	100.00	5.97e+07	1.63 y	41:21	-	0.88
204	Pent䷂	13C-PCB-118	100.00	6.28e+07	1.61 y	41:32	-	0.92
205	Pent䷂	13C-PCB-114	100.00	7.04e+07	1.59 y	42:11	-	1.26
206	Pent䷂	13C-PCB-105	100.00	7.09e+07	1.60 y	43:03	-	1.26
207	Pent䷂	13C-PCB-127	100.00	7.69e+07	1.57 y	43:22	-	1.37
208	Pent䷂	13C-PCB-126	100.00	6.51e+07	1.55 y	45:17	-	1.16
209	Hexa䷂	13C-PCB-155	100.00	5.81e+07	1.27 y	37:02	-	0.86
210	Hexa䷂	13C-PCB-153	100.00	6.40e+07	1.30 y	43:12	-	1.14
211	Hexa䷂	13C-PCB-141	100.00	6.31e+07	1.28 y	43:56	-	1.13
212	Hexa	13C-PCB-138	100.00	5.96e+07	1.29 y	44:47	-	1.06
213	Hexa䷂	13C-PCB-159	100.00	6.79e+07	1.28 y	46:04	-	1.21
214	Hexa䷂	13C-PCB-167	100.00	7.42e+07	1.28 y	46:45	-	1.32
215	Hexa䷂	13C-PCB-156	100.00	6.87e+07	1.28 y	48:02	-	1.23
216	Hexa䷂	13C-PCB-157	100.00	7.37e+07	1.28 y	48:18	-	1.31
217	Hexa䷂	13C-PCB-169	100.00	6.83e+07	1.27 y	50:23	-	1.22
218	Hepta䷂	13C-PCB-188	100.00	5.45e+07	0.46 y	42:50	-	0.97
219	Hepta䷂	13C-PCB-180	100.00	3.96e+07	0.47 y	49:19	-	0.71
220	Hepta䷂	13C-PCB-170	100.00	3.06e+07	0.46 y	50:44	-	0.55
221	Hepta䷂	13C-PCB-189	100.00	4.02e+07	0.46 y	52:11	-	0.72

222	Octa _q	13C-PCB-202	100.00	4.83e+07	0.91	y	48:15	-	0.86
223	Octa _q	13C-PCB-194	100.00	4.22e+07	0.90	y	53:39	-	0.82
224	Nona _q	13C-PCB-208	100.00	5.69e+07	0.78	y	52:56	-	1.10
225	Nona _q	13C-PCB-206	100.00	3.28e+07	0.79	y	55:19	-	0.63
226	Deca _q	13C-PCB-209	100.00	3.05e+07	1.17	y	56:36	-	0.59
227	DI-RS	13C-PCB-15	100.00	1.31e+08	1.57	y	25:58	-	1.00
228	Tri- _q	13C-PCB-31	100.00	1.27e+08	1.06	y	28:59	-	1.00
229	Tetr _q	13C-PCB-60	100.00	1.09e+08	0.78	y	36:45	-	1.00
230	Penta	13C-PCB-111	100.00	6.79e+07	1.58	y	39:12	-	1.00
231	Hexa _q	13C-PCB-128	100.00	5.60e+07	1.28	y	46:20	-	1.00

232	Octa [¶]	13C-PCB-205	100.00	5.17e+07	0.93	y	53:56	-	1.00
233	CRS	13C-PCB-79	100.00	1.05e+08	0.80	y	37:48	-	0.97
234	CRS	13C-PCB-178	100.00	3.50e+07	0.45	y	45:37	-	0.62
235	PS	13C-PCB-79	100.00	1.05e+08	0.80	y	37:48	-	1.18
236	PS	13C-PCB-178	100.00	3.50e+07	0.45	y	45:37	-	0.88

Filename: 140620E1 S: 2 Acquired: 20-JUN-14 10:35:42

Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14

Sample text: ST140620E1-2 PCB CS1 13H1204

	TYP	Name	Amount	Resp	RA	RT	RF	RRF	
1	Mono	PCB-1	1.00	1.98e+06	3.08	y	16:16	-	1.26
2	Mono	PCB-2	1.00	1.97e+06	2.92	y	18:37	-	1.26
3	Mono	PCB-3	1.00	2.01e+06	3.12	y	18:51	-	1.29
4	Di	PCB-4/10	4.00	6.16e+06	1.55	y	20:12	-	1.64
5	Di	PCB-7/9	4.00	7.32e+06	1.64	y	21:57	-	1.30
6	Di	PCB-6	2.00	3.65e+06	1.60	y	22:37	-	1.29
7	Di	PCB-5/8	4.00	7.27e+06	1.61	y	23:01	-	1.29
8	Di	PCB-14	2.00	3.94e+06	1.66	y	24:06	-	1.24
9	Di	PCB-11	2.00	3.77e+06	1.68	y	25:17	-	1.19
10	Di	PCB-12/13	4.00	7.13e+06	1.61	y	25:41	-	1.12
11	Di	PCB-15	2.00	3.79e+06	1.72	y	26:00	-	1.19
12	Tri	PCB-19	1.00	1.20e+06	1.12	y	24:17	-	1.31
13	Tri	PCB-30	1.00	1.72e+06	1.12	y	25:10	-	1.88
14	Tri	PCB-18	1.00	1.24e+06	1.05	y	25:55	-	0.90
15	Tri	PCB-17	1.00	1.31e+06	1.07	y	26:05	-	0.96
16	Tri	PCB-24/27	2.00	3.29e+06	1.07	y	26:40	-	1.20
17	Tri	PCB-16/32	2.00	2.95e+06	1.04	y	27:10	-	1.08
18	Tri	PCB-34	1.00	1.94e+06	1.06	y	27:58	-	1.39
19	Tri	PCB-23	1.00	1.78e+06	1.00	y	28:04	-	1.27
20	Tri	PCB-29	1.00	1.84e+06	1.07	y	28:18	-	1.32
21	Tri	PCB-26	1.00	1.83e+06	1.06	y	28:31	-	1.31
22	Tri	PCB-25	1.00	1.92e+06	1.07	y	28:40	-	1.37
23	Tri	PCB-31	1.00	1.96e+06	1.10	y	29:02	-	1.40
24	Tri	PCB-28	1.00	2.00e+06	1.03	y	29:07	-	1.43
25	Tri	PCB-20/21/33	3.00	5.56e+06	1.09	y	29:45	-	1.33
26	Tri	PCB-22	1.00	1.93e+06	1.07	y	30:11	-	1.38
27	Tri	PCB-36	1.00	1.90e+06	1.15	y	30:47	-	1.49
28	Tri	PCB-39	1.00	1.91e+06	1.10	y	31:16	-	1.49
29	Tri	PCB-38	1.00	1.86e+06	1.05	y	32:02	-	1.45
30	Tri	PCB-35	1.00	1.77e+06	1.19	y	32:33	-	1.38
31	Tri	PCB-37	1.00	1.80e+06	1.09	y	32:59	-	1.40
32	Tetra	PCB-54	1.00	1.51e+06	0.77	y	28:01	-	1.28
33	Tetra	PCB-50	1.00	1.19e+06	0.86	y	29:11	-	1.01
34	Tetra	PCB-53	1.00	1.21e+06	0.82	y	29:49	-	1.24
35	Tetra	PCB-51	1.00	1.15e+06	0.86	y	30:10	-	1.18
36	Tetra	PCB-45	1.00	9.70e+05	0.76	y	30:36	-	0.99
37	Tetra	PCB-46	1.00	9.57e+05	0.75	y	31:05	-	0.98
38	Tetra	PCB-52/69	2.00	2.60e+06	0.79	y	31:33	-	1.33
39	Tetra	PCB-73	1.00	1.36e+06	0.84	y	31:40	-	1.39
40	Tetra	PCB-43/49	2.00	2.21e+06	0.81	y	31:50	-	1.13
41	Tetra	PCB-47	1.00	1.22e+06	0.72	y	32:02	-	1.18

42	Tetra	PCB-48/75	2.00	2.64e+06	0.76	y	32:09	-	1.28
43	Tetra	PCB-65	1.00	1.34e+06	0.76	y	32:25	-	1.30
44	Tetra	PCB-62	1.00	1.44e+06	0.77	y	32:32	-	1.40
45	Tetra	PCB-44	1.00	9.24e+05	0.78	y	32:50	-	0.90
46	Tetra	PCB-42/59	2.00	2.58e+06	0.75	y	33:04	-	1.25
47	Tetra	PCB-41/64/71/72	4.00	5.45e+06	0.78	y	33:39	-	1.32
48	Tetra	PCB-68	1.00	1.64e+06	0.79	y	33:54	-	1.59
49	Tetra	PCB-40	1.00	8.54e+05	0.76	y	34:07	-	0.83
50	Tetra	PCB-57	1.00	1.51e+06	0.73	y	34:29	-	1.18
51	Tetra	PCB-67	1.00	1.53e+06	0.78	y	34:47	-	1.20
52	Tetra	PCB-58	1.00	1.45e+06	0.75	y	34:54	-	1.13

53	Tetra	PCB-63	1.00	1.51e+06	0.75	y	35:03	-	1.17
54	Tetra	PCB-74	1.00	1.62e+06	0.77	y	35:20	-	1.27
55	Tetra	PCB-61/70	2.00	2.91e+06	0.80	y	35:31	-	1.13
56	Tetra	PCB-76/66	2.00	3.02e+06	0.75	y	35:44	-	1.18
57	Tetra	PCB-80	1.00	1.75e+06	0.82	y	35:57	-	1.33
58	Tetra	PCB-55	1.00	1.55e+06	0.78	y	36:17	-	1.17
59	Tetra	PCB-56/60	2.00	2.96e+06	0.79	y	36:47	-	1.12
60	Tetra	PCB-79	1.00	1.47e+06	0.75	y	37:50	-	1.11
61	Tetra	PCB-78	1.00	1.43e+06	0.78	y	38:32	-	1.32
62	Tetra	PCB-81	1.00	1.62e+06	0.82	y	39:04	-	1.50
63	Tetra	PCB-77	1.00	1.46e+06	0.80	y	39:40	-	1.26
64	Penta	PCB-104	1.00	1.12e+06	1.57	y	32:42	-	1.31
65	Penta	PCB-96	1.00	9.56e+05	1.70	y	33:57	-	1.12
66	Penta	PCB-103	1.00	8.44e+05	1.51	y	34:29	-	0.98
67	Penta	PCB-100	1.00	9.21e+05	1.69	y	34:50	-	1.08
68	Penta	PCB-94	1.00	6.94e+05	1.57	y	35:18	-	1.11
69	Penta	PCB-95/98/102	3.00	2.34e+06	1.61	y	35:47	-	1.25
70	Penta	PCB-93	1.00	8.35e+05	1.78	y	35:55	-	1.34
71	Penta	PCB-88/91	2.00	1.32e+06	1.53	y	36:12	-	1.06
72	Penta	PCB-121	1.00	1.38e+06	1.59	y	36:18	-	2.21
73	Penta	PCB-84/92	2.00	1.48e+06	1.69	y	37:09	-	1.13
74	Penta	PCB-89	1.00	6.78e+05	1.51	y	37:20	-	1.04
75	Penta	PCB-90/101	2.00	1.64e+06	1.61	y	37:31	-	1.26
76	Penta	PCB-113	1.00	8.19e+05	1.58	y	37:44	-	1.26
77	Penta	PCB-99	1.00	9.67e+05	1.59	y	37:50	-	1.48
78	Penta	PCB-119	1.00	1.04e+06	1.76	y	38:18	-	1.88
79	Penta	PCB-108/112	2.00	1.54e+06	1.59	y	38:27	-	1.39
80	Penta	PCB-83	1.00	8.48e+05	1.61	y	38:38	-	1.53
81	Penta	PCB-97	1.00	7.01e+05	1.71	y	38:49	-	1.26
82	Penta	PCB-86	1.00	5.31e+05	1.42	y	38:58	-	0.96
83	Penta	PCB-87/117/125	3.00	2.66e+06	1.67	y	39:05	-	1.60
84	Penta	PCB-111/115	2.00	2.00e+06	1.53	y	39:15	-	1.80
85	Penta	PCB-85/116	2.00	1.50e+06	1.61	y	39:23	-	1.35
86	Penta	PCB-120	1.00	1.00e+06	1.51	y	39:37	-	1.80
87	Penta	PCB-110	1.00	9.88e+05	1.74	y	39:46	-	1.78
88	Penta	PCB-82	1.00	6.18e+05	1.61	y	40:23	-	0.83
89	Penta	PCB-124	1.00	9.98e+05	1.74	y	41:03	-	1.34
90	Penta	PCB-107/109	2.00	1.94e+06	1.58	y	41:12	-	1.31
91	Penta	PCB-123	1.00	9.67e+05	1.61	y	41:22	-	1.30
92	Penta	PCB-106/118	2.00	1.95e+06	1.71	y	41:35	-	1.27
93	Penta	PCB-114	1.00	1.19e+06	1.64	y	42:13	-	1.37
94	Penta	PCB-122	1.00	1.14e+06	1.68	y	42:21	-	1.32
95	Penta	PCB-105	1.00	1.16e+06	1.68	y	43:05	-	1.29
96	Penta	PCB-127	1.00	1.14e+06	1.58	y	43:24	-	1.18
97	Penta	PCB-126	1.00	1.08e+06	1.48	y	45:19	-	1.28
98	Hexa	PCB-155	1.00	8.43e+05	1.23	y	37:03	-	1.20
99	Hexa	PCB-150	1.00	7.33e+05	1.34	y	38:20	-	1.04
100	Hexa	PCB-152	1.00	7.58e+05	1.20	y	38:48	-	1.08
101	Hexa	PCB-145	1.00	7.48e+05	1.15	y	39:15	-	1.06
102	Hexa	PCB-136	1.00	7.19e+05	1.34	y	39:33	-	1.02

103	Hexa	PCB-148	1.00	5.31e-05	1.18	y	39:40	-	0.75
104	Hexa	PCB-154	1.00	6.17e+05	1.37	y	40:10	-	0.88
105	Hexa	PCB-151	1.00	5.78e+05	1.33	y	40:48	-	0.82
106	Hexa	PCB-135	1.00	5.29e+05	1.36	y	41:01	-	0.75
107	Hexa	PCB-144	1.00	5.73e+05	1.29	y	41:08	-	0.81
108	Hexa	PCB-147	1.00	5.38e+05	1.32	y	41:16	-	0.76
109	Hexa	PCB-139/149	2.00	1.16e+06	1.33	y	41:30	-	0.82
110	Hexa	PCB-140	1.00	5.12e+05	1.26	y	41:42	-	0.73
111	Hexa	PCB-134/143	2.00	1.51e+06	1.24	y	42:09	-	0.94
112	Hexa	PCB-133/142	2.00	1.57e+06	1.37	y	42:26	-	0.98
113	Hexa	PCB-131	1.00	7.67e+05	1.32	y	42:36	-	0.96

114	Hexa	PCB-146/165	2.00	1.91e+06	1.21	y	42:48	-	1.19
115	Hexa	PCB-132/161	2.00	1.82e+06	1.22	y	43:03	-	1.14
116	Hexa	PCB-153	1.00	9.94e+05	1.17	y	43:14	-	1.24
117	Hexa	PCB-168	1.00	1.15e+06	1.10	y	43:27	-	1.44
118	Hexa	PCB-141	1.00	7.87e+05	1.28	y	43:58	-	1.00
119	Hexa	PCB-137	1.00	9.10e+05	1.29	y	44:21	-	1.16
120	Hexa	PCB-130	1.00	6.47e+05	1.23	y	44:28	-	0.83
121	Hexa	PCB-138/163/164	3.00	2.92e+06	1.18	y	44:50	-	1.28
122	Hexa	PCB-158/160	2.00	2.01e+06	1.38	y	45:05	-	1.33
123	Hexa	PCB-129	1.00	7.44e+05	1.17	y	45:19	-	0.98
124	Hexa	PCB-166	1.00	1.04e+06	1.28	y	45:46	-	1.21
125	Hexa	PCB-159	1.00	1.07e+06	1.23	y	46:05	-	1.24
126	Hexa	PCB-128/162	2.00	1.76e+06	1.16	y	46:22	-	1.03
127	Hexa	PCB-167	1.00	1.00e+06	1.19	y	46:47	-	1.04
128	Hexa	PCB-156	1.00	1.09e+06	1.12	y	48:04	-	1.20
129	Hexa	PCB-157	1.00	1.06e+06	1.22	y	48:20	-	1.12
130	Hexa	PCB-169	1.00	1.01e+06	1.16	y	50:24	-	1.15
131	Hepta	PCB-188	1.00	9.64e+05	1.15	y	42:52	-	1.44
132	Hepta	PCB-184	1.00	8.74e+05	0.93	y	43:18	-	1.30
133	Hepta	PCB-179	1.00	9.19e+05	1.16	y	44:06	-	1.37
134	Hepta	PCB-176	1.00	9.89e+05	1.02	y	44:34	-	1.47
135	Hepta	PCB-186	1.00	8.74e+05	1.12	y	45:09	-	1.30
136	Hepta	PCB-178	1.00	7.05e+05	1.02	y	45:38	-	1.05
137	Hepta	PCB-175	1.00	6.78e+05	0.95	y	45:59	-	1.01
138	Hepta	PCB-182/187	2.00	1.38e+06	0.98	y	46:11	-	1.03
139	Hepta	PCB-183	1.00	7.83e+05	1.07	y	46:29	-	1.17
140	Hepta	PCB-185	1.00	6.66e+05	0.96	y	47:09	-	1.37
141	Hepta	PCB-174	1.00	6.57e+05	1.07	y	47:31	-	1.36
142	Hepta	PCB-181	1.00	7.19e+05	0.90	y	47:36	-	1.48
143	Hepta	PCB-177	1.00	5.95e+05	0.98	y	47:47	-	1.23
144	Hepta	PCB-171	1.00	6.43e+05	1.06	y	48:04	-	1.33
145	Hepta	PCB-173	1.00	5.49e+05	1.09	y	48:31	-	1.13
146	Hepta	PCB-172	1.00	5.72e+05	1.17	y	48:57	-	1.18
147	Hepta	PCB-192	1.00	7.66e+05	1.07	y	49:09	-	1.58
148	Hepta	PCB-180	1.00	7.16e+05	1.13	y	49:20	-	1.48
149	Hepta	PCB-193	1.00	8.30e+05	1.09	y	49:32	-	1.71
150	Hepta	PCB-191	1.00	7.89e+05	1.14	y	49:46	-	1.63
151	Hepta	PCB-170	1.00	6.49e+05	1.09	y	50:45	-	1.67
152	Hepta	PCB-190	1.00	8.09e+05	1.12	y	50:55	-	2.09
153	Hepta	PCB-189	1.00	8.02e+05	1.19	y	52:12	-	1.58
154	Octa	PCB-202	1.00	6.64e+05	0.98	y	48:17	-	1.11
155	Octa	PCB-201	1.00	6.64e+05	0.96	y	48:46	-	1.11
156	Octa	PCB-204	1.00	5.92e+05	0.96	y	48:55	-	0.99
157	Octa	PCB-197	1.00	6.20e+05	0.87	y	49:13	-	1.04
158	Octa	PCB-200	1.00	6.09e+05	0.92	y	50:03	-	1.02
159	Octa	PCB-198	1.00	4.81e+05	0.77	y	51:20	-	0.81
160	Octa	PCB-199	1.00	4.49e+05	0.78	y	51:25	-	0.75
161	Octa	PCB-196/203	2.00	9.60e+05	0.87	y	51:40	-	0.80
162	Octa	PCB-195	1.00	6.50e+05	0.91	y	52:49	-	1.23
163	Octa	PCB-194	1.00	6.42e+05	1.01	y	53:40	-	1.21

164	Octa	PCB-205	1.00	7.63e+05	0.88	y	53:57	-	1.44
165	Nona	PCB-208	1.00	7.07e+05	1.32	y	52:57	-	0.95
166	Nona	PCB-207	1.00	7.22e+05	1.40	y	53:16	-	0.97
167	Nona	PCB-206	1.00	4.47e+05	1.26	y	55:21	-	1.05
168	Deca	PCB-209	1.00	4.65e+05	1.13	y	56:37	-	1.19
169	Tot Σ	Total Mono-PCB	0.00	-	-	n	-	-	1.27
170	Tot Σ	Total Di-PCB	0.00	-	-	n	-	-	1.24
171	Tot Σ	Total Tri-PCB	0.00	-	-	n	-	-	1.20

172	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.38
173	Tot Σ	Total Tetra-PCB	0.00	-	- n	-	-	1.21
174	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.27
175	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.29
176	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	0.90
177	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	1.12
178	Tot Σ	Total Hepta-PCB	0.00	-	- n	-	-	1.31
179	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	0.94
180	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	1.29
181	Tot Σ	Total Nona-PCB	0.00	-	- n	-	-	0.98
182	Tot Σ	Total Deca-PCB	1.00	4.65e+05	1.13 y	56:37	-	1.19
183	MonoΣ	13C-PCB-1	100.00	1.56e+08	3.23 y	16:15	-	0.94
184	MonoΣ	13C-PCB-3	100.00	1.56e+08	3.29 y	18:50	-	0.94
185	Di-IS	13C-PCB-4	100.00	9.40e+07	1.58 y	20:09	-	0.57
186	Di-IS	13C-PCB-9	100.00	1.41e+08	1.60 y	21:55	-	0.85
187	Di-IS	13C-PCB-11	100.00	1.59e+08	1.57 y	25:17	-	0.96
188	Tri-Σ	13C-PCB-19	100.00	9.18e+07	1.06 y	24:16	-	0.55
189	Tri-Σ	13C-PCB-32	100.00	1.37e+08	1.08 y	27:10	-	0.82
190	Tri-Σ	13C-PCB-28	100.00	1.40e+08	1.05 y	29:07	-	0.91
191	Tri-Σ	13C-PCB-37	100.00	1.28e+08	1.06 y	32:59	-	0.83
192	Tetr-Σ	13C-PCB-54	100.00	1.18e+08	0.81 y	28:00	-	0.89
193	Tetr-Σ	13C-PCB-52	100.00	9.78e+07	0.79 y	31:30	-	0.74
194	Tetr-Σ	13C-PCB-47	100.00	1.03e+08	0.79 y	32:01	-	0.78
195	Tetr-Σ	13C-PCB-70	100.00	1.28e+08	0.80 y	35:31	-	0.97
196	Tetr-Σ	13C-PCB-80	100.00	1.32e+08	0.81 y	35:56	-	1.00
197	Tetr-Σ	13C-PCB-81	100.00	1.09e+08	0.81 y	39:03	-	0.82
198	Tetr-Σ	13C-PCB-77	100.00	1.16e+08	0.80 y	39:38	-	0.87
199	Pent-Σ	13C-PCB-104	100.00	8.57e+07	1.62 y	32:41	-	1.06
200	Pent-Σ	13C-PCB-95	100.00	6.25e+07	1.56 y	35:50	-	0.78
201	Pent-Σ	13C-PCB-101	100.00	6.52e+07	1.58 y	37:30	-	0.81
202	Pent-Σ	13C-PCB-97	100.00	5.55e+07	1.65 y	38:48	-	0.69
203	Pent-Σ	13C-PCB-123	100.00	7.42e+07	1.57 y	41:21	-	0.92
204	Pent-Σ	13C-PCB-118	100.00	7.69e+07	1.66 y	41:33	-	0.95
205	Pent-Σ	13C-PCB-114	100.00	8.65e+07	1.61 y	42:12	-	1.20
206	Pent-Σ	13C-PCB-105	100.00	8.97e+07	1.59 y	43:03	-	1.24
207	Pent-Σ	13C-PCB-127	100.00	9.70e+07	1.57 y	43:23	-	1.34
208	Pent-Σ	13C-PCB-126	100.00	8.43e+07	1.60 y	45:18	-	1.17
209	Hexa-Σ	13C-PCB-155	100.00	7.04e+07	1.28 y	37:03	-	0.87
210	Hexa-Σ	13C-PCB-153	100.00	8.00e+07	1.28 y	43:13	-	1.11
211	Hexa-Σ	13C-PCB-141	100.00	7.84e+07	1.29 y	43:57	-	1.09
212	Hexa	13C-PCB-138	100.00	7.60e+07	1.27 y	44:48	-	1.05
213	Hexa-Σ	13C-PCB-159	100.00	8.60e+07	1.28 y	46:05	-	1.19
214	Hexa-Σ	13C-PCB-167	100.00	9.61e+07	1.31 y	46:45	-	1.33
215	Hexa-Σ	13C-PCB-156	100.00	9.01e+07	1.28 y	48:03	-	1.25
216	Hexa-Σ	13C-PCB-157	100.00	9.47e+07	1.27 y	48:19	-	1.31
217	Hexa-Σ	13C-PCB-169	100.00	8.76e+07	1.27 y	50:24	-	1.21
218	Hept-Σ	13C-PCB-188	100.00	6.71e+07	0.47 y	42:51	-	0.93
219	Hept-Σ	13C-PCB-180	100.00	4.84e+07	0.47 y	49:19	-	0.67
220	Hept-Σ	13C-PCB-170	100.00	3.88e+07	0.48 y	50:45	-	0.54
221	Hept-Σ	13C-PCB-189	100.00	5.08e+07	0.46 y	52:10	-	0.70
222	Octa-Σ	13C-PCB-202	100.00	5.96e+07	0.91 y	48:16	-	0.83

223	Octa ₇	13C-PCB-194	100.00	5.30e+07	0.91	y	53:40	-	0.82
224	Nona ₇	13C-PCB-208	100.00	7.41e+07	0.77	y	52:56	-	1.14
225	Nona ₇	13C-PCB-206	100.00	4.24e+07	0.79	y	55:20	-	0.65
226	Deca ₇	13C-PCB-209	100.00	3.91e+07	1.19	y	56:37	-	0.60
227	DI-RS	13C-PCB-15	100.00	1.66e+08	1.58	y	25:59	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.54e+08	1.06	y	29:00	-	1.00
229	Tetra ₇	13C-PCB-60	100.00	1.33e+08	0.79	y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	8.06e+07	1.63	y	39:14	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	7.22e+07	1.30	y	46:21	-	1.00
232	Octa ₇	13C-PCB-205	100.00	6.47e+07	0.91	y	53:57	-	1.00

233	CRS	13C-PCB-79	100.00	1.28e+08	0.81	y	37:49	-	0.97
234	CRS	13C-PCB-178	100.00	4.42e+07	0.46	y	45:38	-	0.61
235	PS	13C-PCB-79	100.00	1.28e+08	0.81	y	37:49	-	1.18
236	PS	13C-PCB-178	100.00	4.42e+07	0.46	y	45:38	-	0.91

Filename: 140620E1 S: 3 Acquired: 20-JUN-14 11:39:47

Run: 140620E1 Analyte: ICAL: PCBVG8-6-20-14

Results:

Sample text: ST140620E1-3 PCB CS2 13H1205

	TYP	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	2.50	1.09e+07	2.94 y	16:15	-	1.26
2	Mono	PCB-2	2.50	1.01e+07	3.00 y	18:37	-	1.14
3	Mono	PCB-3	2.50	1.09e+07	3.06 y	18:51	-	1.23
4	Di	PCB-4/10	10.00	3.30e+07	1.63 y	20:12	-	1.55
5	Di	PCB-7/9	10.00	4.03e+07	1.63 y	21:58	-	1.26
6	Di	PCB-6	5.00	2.02e+07	1.66 y	22:36	-	1.26
7	Di	PCB-5/8	10.00	3.95e+07	1.65 y	23:01	-	1.23
8	Di	PCB-14	5.00	2.20e+07	1.65 y	24:06	-	1.21
9	Di	PCB-11	5.00	2.10e+07	1.68 y	25:18	-	1.16
10	Di	PCB-12/13	10.00	3.98e+07	1.61 y	25:41	-	1.10
11	Di	PCB-15	5.00	2.21e+07	1.67 y	25:59	-	1.22
12	Tri	PCB-19	2.50	6.55e+06	1.07 y	24:18	-	1.26
13	Tri	PCB-30	2.50	9.41e+06	1.06 y	25:11	-	1.82
14	Tri	PCB-18	2.50	6.63e+06	1.06 y	25:55	-	0.85
15	Tri	PCB-17	2.50	6.98e+06	1.08 y	26:06	-	0.89
16	Tri	PCB-24/27	5.00	1.85e+07	1.06 y	26:40	-	1.18
17	Tri	PCB-16/32	5.00	1.59e+07	1.07 y	27:10	-	1.02
18	Tri	PCB-34	2.50	9.58e+06	1.09 y	27:57	-	1.25
19	Tri	PCB-23	2.50	1.08e+07	1.09 y	28:03	-	1.41
20	Tri	PCB-29	2.50	1.02e+07	1.10 y	28:18	-	1.32
21	Tri	PCB-26	2.50	1.02e+07	1.06 y	28:30	-	1.32
22	Tri	PCB-25	2.50	1.04e+07	1.14 y	28:40	-	1.36
23	Tri	PCB-31	2.50	1.12e+07	1.09 y	29:02	-	1.46
24	Tri	PCB-28	2.50	1.08e+07	1.11 y	29:08	-	1.41
25	Tri	PCB-20/21/33	7.50	3.04e+07	1.09 y	29:45	-	1.32
26	Tri	PCB-22	2.50	1.03e+07	1.06 y	30:11	-	1.35
27	Tri	PCB-36	2.50	1.02e+07	1.08 y	30:48	-	1.38
28	Tri	PCB-39	2.50	1.04e+07	1.08 y	31:16	-	1.41
29	Tri	PCB-38	2.50	1.00e+07	1.09 y	32:03	-	1.36
30	Tri	PCB-35	2.50	9.94e+06	1.07 y	32:33	-	1.35
31	Tri	PCB-37	2.50	1.02e+07	1.12 y	32:59	-	1.39
32	Tetra	PCB-54	2.50	7.98e+06	0.79 y	28:02	-	1.18
33	Tetra	PCB-50	2.50	6.47e+06	0.77 y	29:11	-	0.96
34	Tetra	PCB-53	2.50	6.40e+06	0.77 y	29:50	-	1.14
35	Tetra	PCB-51	2.50	6.58e+06	0.81 y	30:10	-	1.17
36	Tetra	PCB-45	2.50	5.60e+06	0.78 y	30:36	-	1.00
37	Tetra	PCB-46	2.50	5.09e+06	0.75 y	31:05	-	0.90
38	Tetra	PCB-52/69	5.00	1.50e+07	0.79 y	31:33	-	1.33
39	Tetra	PCB-73	2.50	7.36e+06	0.75 y	31:40	-	1.31
40	Tetra	PCB-43/49	5.00	1.23e+07	0.78 y	31:50	-	1.10
41	Tetra	PCB-47	2.50	6.07e+06	0.76 y	32:02	-	1.04

42	Tetra	PCB-48/75	5.00	1.55e+07	0.77	y	32:09	-	1.33
43	Tetra	PCB-65	2.50	7.45e+06	0.79	y	32:25	-	1.28
44	Tetra	PCB-62	2.50	7.60e+06	0.79	y	32:32	-	1.30
45	Tetra	PCB-44	2.50	5.73e+06	0.74	y	32:50	-	0.98
46	Tetra	PCB-42/59	5.00	1.41e+07	0.77	y	33:04	-	1.21
47	Tetra	PCB-41/64/71/72	10.00	2.98e+07	0.78	y	33:39	-	1.28
48	Tetra	PCB-68	2.50	8.64e+06	0.79	y	33:54	-	1.48
49	Tetra	PCB-40	2.50	4.77e+06	0.77	y	34:07	-	0.82
50	Tetra	PCB-57	2.50	7.93e+06	0.79	y	34:28	-	1.11
51	Tetra	PCB-67	2.50	8.04e+06	0.68	y	34:46	-	1.12
52	Tetra	PCB-58	2.50	8.03e+06	0.88	y	34:53	-	1.12

53	Tetra	PCB-63	2.50	8.15e+06	0.80	y	35:03	-	1.14
54	Tetra	PCB-74	2.50	8.76e+06	0.78	y	35:20	-	1.22
55	Tetra	PCB-61/70	5.00	1.56e+07	0.76	y	35:31	-	1.08
56	Tetra	PCB-76/66	5.00	1.60e+07	0.79	y	35:44	-	1.12
57	Tetra	PCB-80	2.50	9.48e+06	0.78	y	35:58	-	1.28
58	Tetra	PCB-55	2.50	8.11e+06	0.77	y	36:17	-	1.10
59	Tetra	PCB-56/60	5.00	1.58e+07	0.77	y	36:47	-	1.07
60	Tetra	PCB-79	2.50	8.31e+06	0.75	y	37:50	-	1.12
61	Tetra	PCB-78	2.50	7.55e+06	0.77	y	38:32	-	1.20
62	Tetra	PCB-81	2.50	8.89e+06	0.79	y	39:04	-	1.41
63	Tetra	PCB-77	2.50	8.13e+06	0.82	y	39:39	-	1.22
64	Penta	PCB-104	2.50	6.23e+06	1.51	y	32:41	-	1.28
65	Penta	PCB-96	2.50	5.23e+06	1.55	y	33:57	-	1.08
66	Penta	PCB-103	2.50	4.30e+06	1.55	y	34:29	-	0.89
67	Penta	PCB-100	2.50	4.69e+06	1.55	y	34:50	-	0.97
68	Penta	PCB-94	2.50	3.79e+06	1.67	y	35:18	-	1.11
69	Penta	PCB-95/98/102	7.50	1.21e+07	1.60	y	35:48	-	1.18
70	Penta	PCB-93	2.50	4.14e+06	1.71	y	35:56	-	1.21
71	Penta	PCB-88/91	5.00	6.98e+06	1.52	y	36:13	-	1.02
72	Penta	PCB-121	2.50	6.62e+06	1.66	y	36:18	-	1.94
73	Penta	PCB-84/92	5.00	7.58e+06	1.59	y	37:08	-	1.05
74	Penta	PCB-89	2.50	3.69e+06	1.55	y	37:20	-	1.02
75	Penta	PCB-90/101	5.00	8.58e+06	1.58	y	37:30	-	1.19
76	Penta	PCB-113	2.50	4.74e+06	1.59	y	37:45	-	1.32
77	Penta	PCB-99	2.50	4.85e+06	1.65	y	37:50	-	1.35
78	Penta	PCB-119	2.50	5.47e+06	1.52	y	38:19	-	1.72
79	Penta	PCB-108/112	5.00	8.21e+06	1.65	y	38:28	-	1.29
80	Penta	PCB-83	2.50	4.81e+06	1.57	y	38:38	-	1.51
81	Penta	PCB-97	2.50	4.05e+06	1.59	y	38:49	-	1.27
82	Penta	PCB-86	2.50	3.35e+06	1.53	y	38:57	-	1.05
83	Penta	PCB-87/117/125	7.50	1.48e+07	1.59	y	39:05	-	1.55
84	Penta	PCB-111/115	5.00	1.08e+07	1.58	y	39:14	-	1.69
85	Penta	PCB-85/116	5.00	8.48e+06	1.60	y	39:22	-	1.33
86	Penta	PCB-120	2.50	5.59e+06	1.63	y	39:37	-	1.76
87	Penta	PCB-110	2.50	5.26e+06	1.59	y	39:45	-	1.65
88	Penta	PCB-82	2.50	3.23e+06	1.69	y	40:24	-	0.73
89	Penta	PCB-124	2.50	5.89e+06	1.57	y	41:04	-	1.33
90	Penta	PCB-107/109	5.00	1.04e+07	1.65	y	41:13	-	1.18
91	Penta	PCB-123	2.50	5.43e+06	1.52	y	41:23	-	1.23
92	Penta	PCB-106/118	5.00	1.13e+07	1.59	y	41:34	-	1.25
93	Penta	PCB-114	2.50	6.81e+06	1.68	y	42:13	-	1.36
94	Penta	PCB-122	2.50	6.01e+06	1.59	y	42:21	-	1.20
95	Penta	PCB-105	2.50	6.91e+06	1.69	y	43:05	-	1.33
96	Penta	PCB-127	2.50	6.53e+06	1.64	y	43:25	-	1.14
97	Penta	PCB-126	2.50	6.39e+06	1.68	y	45:18	-	1.28
98	Hexa	PCB-155	2.50	4.51e+06	1.22	y	37:04	-	1.18
99	Hexa	PCB-150	2.50	4.00e+06	1.22	y	38:20	-	1.05
100	Hexa	PCB-152	2.50	4.04e+06	1.22	y	38:48	-	1.06
101	Hexa	PCB-145	2.50	4.00e+06	1.28	y	39:14	-	1.05
102	Hexa	PCB-136	2.50	4.13e+06	1.32	y	39:34	-	1.08

103	Hexa	PCB-148	2.50	2.58e+06	1.36	y	39:41	-	0.68
104	Hexa	PCB-154	2.50	3.37e+06	1.28	y	40:09	-	0.88
105	Hexa	PCB-151	2.50	2.97e+06	1.35	y	40:48	-	0.78
106	Hexa	PCB-135	2.50	2.92e+06	1.29	y	41:00	-	0.76
107	Hexa	PCB-144	2.50	2.97e+06	1.28	y	41:07	-	0.78
108	Hexa	PCB-147	2.50	2.99e+06	1.23	y	41:15	-	0.78
109	Hexa	PCB-139/149	5.00	6.36e+06	1.23	y	41:31	-	0.83
110	Hexa	PCB-140	2.50	2.90e+06	1.28	y	41:42	-	0.76
111	Hexa	PCB-134/143	5.00	8.39e+06	1.23	y	42:08	-	0.90
112	Hexa	PCB-133/142	5.00	8.52e+06	1.22	y	42:26	-	0.91
113	Hexa	PCB-131	2.50	4.20e+06	1.24	y	42:36	-	0.90

114	Hexa	PCB-146/165	5.00	1.07e+07	1.23	y	42:49	-	1.14
115	Hexa	PCB-132/161	5.00	1.02e+07	1.22	y	43:04	-	1.09
116	Hexa	PCB-153	2.50	5.91e+06	1.25	y	43:13	-	1.26
117	Hexa	PCB-168	2.50	6.38e+06	1.17	y	43:26	-	1.37
118	Hexa	PCB-141	2.50	4.37e+06	1.21	y	43:58	-	0.97
119	Hexa	PCB-137	2.50	4.74e+06	1.24	y	44:21	-	1.05
120	Hexa	PCB-130	2.50	3.95e+06	1.26	y	44:27	-	0.87
121	Hexa	PCB-138/163/164	7.50	1.61e+07	1.23	y	44:50	-	1.22
122	Hexa	PCB-158/160	5.00	1.14e+07	1.26	y	45:04	-	1.29
123	Hexa	PCB-129	2.50	4.07e+06	1.27	y	45:19	-	0.93
124	Hexa	PCB-166	2.50	5.65e+06	1.19	y	45:46	-	1.11
125	Hexa	PCB-159	2.50	5.99e+06	1.25	y	46:05	-	1.18
126	Hexa	PCB-128/162	5.00	1.06e+07	1.20	y	46:23	-	1.04
127	Hexa	PCB-167	2.50	6.20e+06	1.24	y	46:46	-	1.10
128	Hexa	PCB-156	2.50	6.26e+06	1.23	y	48:04	-	1.18
129	Hexa	PCB-157	2.50	6.28e+06	1.27	y	48:20	-	1.13
130	Hexa	PCB-169	2.50	5.82e+06	1.20	y	50:24	-	1.12
131	Hepta	PCB-188	2.50	5.50e+06	1.08	y	42:52	-	1.43
132	Hepta	PCB-184	2.50	4.81e+06	1.08	y	43:19	-	1.25
133	Hepta	PCB-179	2.50	5.06e+06	1.03	y	44:06	-	1.32
134	Hepta	PCB-176	2.50	5.19e+06	1.06	y	44:34	-	1.35
135	Hepta	PCB-186	2.50	4.80e+06	1.01	y	45:11	-	1.25
136	Hepta	PCB-178	2.50	3.68e+06	1.04	y	45:40	-	0.96
137	Hepta	PCB-175	2.50	3.76e+06	1.07	y	46:00	-	0.98
138	Hepta	PCB-182/187	5.00	7.80e+06	1.03	y	46:11	-	1.01
139	Hepta	PCB-183	2.50	4.14e+06	1.08	y	46:30	-	1.08
140	Hepta	PCB-185	2.50	3.61e+06	1.06	y	47:09	-	1.30
141	Hepta	PCB-174	2.50	3.80e+06	1.05	y	47:31	-	1.36
142	Hepta	PCB-181	2.50	3.56e+06	1.02	y	47:38	-	1.28
143	Hepta	PCB-177	2.50	3.33e+06	1.02	y	47:47	-	1.20
144	Hepta	PCB-171	2.50	3.72e+06	1.05	y	48:04	-	1.34
145	Hepta	PCB-173	2.50	3.21e+06	1.03	y	48:31	-	1.15
146	Hepta	PCB-172	2.50	3.40e+06	1.05	y	48:57	-	1.22
147	Hepta	PCB-192	2.50	4.16e+06	1.05	y	49:09	-	1.49
148	Hepta	PCB-180	2.50	4.01e+06	1.10	y	49:21	-	1.44
149	Hepta	PCB-193	2.50	4.60e+06	1.04	y	49:32	-	1.65
150	Hepta	PCB-191	2.50	4.58e+06	1.05	y	49:46	-	1.65
151	Hepta	PCB-170	2.50	3.36e+06	1.02	y	50:45	-	1.51
152	Hepta	PCB-190	2.50	4.37e+06	1.06	y	50:55	-	1.97
153	Hepta	PCB-189	2.50	4.66e+06	1.06	y	52:12	-	1.55
154	Octa	PCB-202	2.50	3.48e+06	0.98	y	48:17	-	1.01
155	Octa	PCB-201	2.50	3.65e+06	0.94	y	48:46	-	1.06
156	Octa	PCB-204	2.50	3.41e+06	0.91	y	48:55	-	0.99
157	Octa	PCB-197	2.50	3.58e+06	0.96	y	49:14	-	1.04
158	Octa	PCB-200	2.50	3.52e+06	0.95	y	50:03	-	1.02
159	Octa	PCB-198	2.50	2.39e+06	0.96	y	51:19	-	0.69
160	Octa	PCB-199	2.50	2.50e+06	0.94	y	51:25	-	0.73
161	Octa	PCB-196/203	5.00	5.16e+06	0.89	y	51:41	-	0.75
162	Octa	PCB-195	2.50	3.62e+06	0.88	y	52:48	-	1.17
163	Octa	PCB-194	2.50	3.77e+06	0.94	y	53:40	-	1.22

164	Octa	PCB-205	2.50	4.34e+06	0.90	y	53:57	-	1.41
165	Nona	PCB-208	2.50	3.94e+06	1.36	y	52:56	-	0.93
166	Nona	PCB-207	2.50	3.87e+06	1.29	y	53:15	-	0.91
167	Nona	PCB-206	2.50	2.57e+06	1.40	y	55:20	-	1.03
168	Deca	PCB-209	2.50	2.82e+06	1.17	y	56:37	-	1.21
169	Tot Σ	Total Mono-PCB	0.00	-	-	n	-	-	1.21
170	Tot Σ	Total Di-PCB	0.00	-	-	n	-	-	1.21
171	Tot Σ	Total Tri-PCB	0.00	-	-	n	-	-	1.15

172	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.36
173	Tot Σ	Total Tetra-PCB	0.00	-	- n	-	-	1.17
174	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.21
175	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.26
176	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	0.89
177	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	1.08
178	Tot Σ	Total Hepta-PCB	0.00	-	- n	-	-	1.27
179	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	0.89
180	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	1.26
181	Tot Σ	Total Nona-PCB	0.00	-	- n	-	-	0.94
182	Tot Σ	Total Deca-PCB	2.50	2.82e+06	1.17 y	56:37	-	1.21
183	Mono Σ	13C-PCB-1	100.00	3.46e+08	3.25 y	16:14	-	0.91
184	Mono Σ	13C-PCB-3	100.00	3.56e+08	3.24 y	18:50	-	0.94
185	Di-IS	13C-PCB-4	100.00	2.13e+08	1.57 y	20:09	-	0.56
186	Di-IS	13C-PCB-9	100.00	3.20e+08	1.57 y	21:55	-	0.84
187	Di-IS	13C-PCB-11	100.00	3.64e+08	1.57 y	25:16	-	0.96
188	Tri- Σ	13C-PCB-19	100.00	2.07e+08	1.06 y	24:16	-	0.55
189	Tri- Σ	13C-PCB-32	100.00	3.14e+08	1.08 y	27:10	-	0.83
190	Tri- Σ	13C-PCB-28	100.00	3.07e+08	1.06 y	29:07	-	0.83
191	Tri- Σ	13C-PCB-37	100.00	2.95e+08	1.07 y	32:58	-	0.80
192	Tetr Σ	13C-PCB-54	100.00	2.71e+08	0.81 y	28:00	-	0.91
193	Tetr Σ	13C-PCB-52	100.00	2.25e+08	0.80 y	31:31	-	0.75
194	Tetr Σ	13C-PCB-47	100.00	2.33e+08	0.79 y	32:01	-	0.78
195	Tetr Σ	13C-PCB-70	100.00	2.87e+08	0.80 y	35:32	-	0.96
196	Tetr Σ	13C-PCB-80	100.00	2.96e+08	0.81 y	35:56	-	0.99
197	Tetr Σ	13C-PCB-81	100.00	2.52e+08	0.80 y	39:03	-	0.84
198	Tetr Σ	13C-PCB-77	100.00	2.67e+08	0.80 y	39:38	-	0.90
199	Pent Σ	13C-PCB-104	100.00	1.94e+08	1.60 y	32:40	-	1.07
200	Pent Σ	13C-PCB-95	100.00	1.37e+08	1.60 y	35:50	-	0.75
201	Pent Σ	13C-PCB-101	100.00	1.44e+08	1.61 y	37:30	-	0.79
202	Pent Σ	13C-PCB-97	100.00	1.27e+08	1.61 y	38:48	-	0.70
203	Pent Σ	13C-PCB-123	100.00	1.77e+08	1.58 y	41:22	-	0.98
204	Pent Σ	13C-PCB-118	100.00	1.80e+08	1.61 y	41:33	-	0.99
205	Pent Σ	13C-PCB-114	100.00	2.01e+08	1.59 y	42:12	-	1.21
206	Pent Σ	13C-PCB-105	100.00	2.08e+08	1.59 y	43:04	-	1.25
207	Pent Σ	13C-PCB-127	100.00	2.30e+08	1.60 y	43:23	-	1.38
208	Pent Σ	13C-PCB-126	100.00	2.00e+08	1.58 y	45:18	-	1.20
209	Hexa Σ	13C-PCB-155	100.00	1.53e+08	1.28 y	37:03	-	0.84
210	Hexa Σ	13C-PCB-153	100.00	1.87e+08	1.28 y	43:13	-	1.13
211	Hexa Σ	13C-PCB-141	100.00	1.81e+08	1.27 y	43:57	-	1.09
212	Hexa Σ	13C-PCB-138	100.00	1.75e+08	1.26 y	44:48	-	1.06
213	Hexa Σ	13C-PCB-159	100.00	2.03e+08	1.26 y	46:04	-	1.22
214	Hexa Σ	13C-PCB-167	100.00	2.26e+08	1.29 y	46:46	-	1.36
215	Hexa Σ	13C-PCB-156	100.00	2.13e+08	1.27 y	48:03	-	1.28
216	Hexa Σ	13C-PCB-157	100.00	2.22e+08	1.29 y	48:20	-	1.34
217	Hexa Σ	13C-PCB-169	100.00	2.08e+08	1.29 y	50:23	-	1.25
218	Hepta Σ	13C-PCB-188	100.00	1.54e+08	0.47 y	42:51	-	0.93
219	Hepta Σ	13C-PCB-180	100.00	1.11e+08	0.47 y	49:20	-	0.67
220	Hepta Σ	13C-PCB-170	100.00	8.90e+07	0.47 y	50:44	-	0.54
221	Hepta Σ	13C-PCB-189	100.00	1.21e+08	0.46 y	52:11	-	0.73
222	Octa Σ	13C-PCB-202	100.00	1.38e+08	0.91 y	48:16	-	0.83

223	Octa χ	13C-PCB-194	100.00	1.24e+08	0.92 y	53:39	-	0.82
224	Nona χ	13C-PCB-208	100.00	1.70e+08	0.78 y	52:56	-	1.13
225	Nona χ	13C-PCB-206	100.00	1.00e+08	0.81 y	55:19	-	0.66
226	Deca χ	13C-PCB-209	100.00	9.32e+07	1.21 y	56:36	-	0.62
227	DI-RS	13C-PCB-15	100.00	3.79e+08	1.56 y	25:59	-	1.00
228	Tri- χ	13C-PCB-31	100.00	3.70e+08	1.06 y	29:01	-	1.00
229	Tetr χ	13C-PCB-60	100.00	2.98e+08	0.79 y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	1.81e+08	1.61 y	39:13	-	1.00
231	Hexa χ	13C-PCB-128	100.00	1.66e+08	1.28 y	46:22	-	1.00
232	Octa χ	13C-PCB-205	100.00	1.51e+08	0.90 y	53:56	-	1.00

233	CRS	13C-PCB-79	100.00	2.94e+08	0.79	y	37:49	-	0.99
234	CRS	13C-PCB-178	100.00	1.02e+08	0.47	y	45:38	-	0.62
235	PS	13C-PCB-79	100.00	2.94e+08	0.79	y	37:49	-	1.17
236	PS	13C-PCB-178	100.00	1.02e+08	0.47	y	45:38	-	0.92

Filename: 140620E1 S: 4 Acquired: 20-JUN-14 12:43:46

Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14

Results:

Sample text: ST140620E1-4 PCB CS3 14F1901

	TYP	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	50.00	7.81e+07	2.96 y	16:15	-	1.31
2	Mono	PCB-2	50.00	7.76e+07	2.98 y	18:36	-	1.24
3	Mono	PCB-3	50.00	7.92e+07	2.99 y	18:50	-	1.26
4	Di	PCB-4/10	200.00	2.38e+08	1.63 y	20:12	-	1.61
5	Di	PCB-7/9	200.00	2.89e+08	1.64 y	21:57	-	1.30
6	Di	PCB-6	100.00	1.40e+08	1.64 y	22:36	-	1.26
7	Di	PCB-5/8	200.00	2.85e+08	1.64 y	23:01	-	1.28
8	Di	PCB-14	100.00	1.58e+08	1.64 y	24:06	-	1.27
9	Di	PCB-11	100.00	1.47e+08	1.66 y	25:17	-	1.18
10	Di	PCB-12/13	200.00	2.83e+08	1.65 y	25:41	-	1.14
11	Di	PCB-15	100.00	1.54e+08	1.67 y	26:00	-	1.24
12	Tri	PCB-19	50.00	4.61e+07	1.05 y	24:17	-	1.28
13	Tri	PCB-30	50.00	6.74e+07	1.06 y	25:10	-	1.87
14	Tri	PCB-18	50.00	4.73e+07	1.06 y	25:55	-	0.87
15	Tri	PCB-17	50.00	4.99e+07	1.05 y	26:05	-	0.92
16	Tri	PCB-24/27	100.00	1.33e+08	1.06 y	26:40	-	1.22
17	Tri	PCB-16/32	100.00	1.13e+08	1.05 y	27:10	-	1.03
18	Tri	PCB-34	50.00	6.57e+07	1.09 y	27:57	-	1.23
19	Tri	PCB-23	50.00	7.68e+07	1.09 y	28:02	-	1.44
20	Tri	PCB-29	50.00	7.27e+07	1.09 y	28:18	-	1.36
21	Tri	PCB-26	50.00	7.01e+07	1.08 y	28:30	-	1.31
22	Tri	PCB-25	50.00	7.40e+07	1.09 y	28:40	-	1.38
23	Tri	PCB-31	50.00	7.56e+07	1.08 y	29:02	-	1.41
24	Tri	PCB-28	50.00	7.73e+07	1.11 y	29:07	-	1.45
25	Tri	PCB-20/21/33	150.00	2.14e+08	1.09 y	29:45	-	1.34
26	Tri	PCB-22	50.00	7.44e+07	1.09 y	30:11	-	1.39
27	Tri	PCB-36	50.00	7.19e+07	1.09 y	30:47	-	1.43
28	Tri	PCB-39	50.00	7.33e+07	1.08 y	31:16	-	1.46
29	Tri	PCB-38	50.00	7.08e+07	1.08 y	32:02	-	1.41
30	Tri	PCB-35	50.00	7.21e+07	1.11 y	32:33	-	1.44
31	Tri	PCB-37	50.00	7.05e+07	1.09 y	32:59	-	1.41
32	Tetra	PCB-54	50.00	5.75e+07	0.77 y	28:01	-	1.24
33	Tetra	PCB-50	50.00	4.62e+07	0.77 y	29:11	-	0.99
34	Tetra	PCB-53	50.00	4.60e+07	0.78 y	29:49	-	1.19
35	Tetra	PCB-51	50.00	4.72e+07	0.78 y	30:10	-	1.23
36	Tetra	PCB-45	50.00	3.93e+07	0.78 y	30:36	-	1.02
37	Tetra	PCB-46	50.00	3.68e+07	0.76 y	31:04	-	0.95
38	Tetra	PCB-52/69	100.00	1.04e+08	0.77 y	31:33	-	1.35
39	Tetra	PCB-73	50.00	5.52e+07	0.77 y	31:39	-	1.43
40	Tetra	PCB-43/49	100.00	8.70e+07	0.78 y	31:50	-	1.13
41	Tetra	PCB-47	50.00	4.87e+07	0.76 y	32:02	-	1.20

42	Tetra	PCB-48/75	100.00	1.06e-08	0.78	y	32:09	-	1.31
43	Tetra	PCB-65	50.00	5.35e-07	0.77	y	32:25	-	1.32
44	Tetra	PCB-62	50.00	5.60e+07	0.77	y	32:32	-	1.38
45	Tetra	PCB-44	50.00	3.98e+07	0.78	y	32:49	-	0.98
46	Tetra	PCB-42/59	100.00	1.02e+08	0.77	y	33:02	-	1.26
47	Tetra	PCB-41/64/71/72	200.00	2.19e+08	0.78	y	33:38	-	1.35
48	Tetra	PCB-68	50.00	6.14e+07	0.78	y	33:54	-	1.51
49	Tetra	PCB-40	50.00	3.36e+07	0.77	y	34:06	-	0.83
50	Tetra	PCB-57	50.00	5.91e+07	0.77	y	34:28	-	1.15
51	Tetra	PCB-67	50.00	5.87e+07	0.78	y	34:46	-	1.15
52	Tetra	PCB-58	50.00	5.57e+07	0.78	y	34:53	-	1.09

53	Tetra	PCB-63	50.00	5.92e+07	0.76 y	35:03	-	1.16
54	Tetra	PCB-74	50.00	6.39e+07	0.77 y	35:20	-	1.25
55	Tetra	PCB-61/70	100.00	1.13e+08	0.78 y	35:30	-	1.10
56	Tetra	PCB-76/66	100.00	1.20e+08	0.77 y	35:43	-	1.17
57	Tetra	PCB-80	50.00	6.75e+07	0.78 y	35:56	-	1.28
58	Tetra	PCB-55	50.00	6.01e+07	0.77 y	36:17	-	1.14
59	Tetra	PCB-56/60	100.00	1.15e+08	0.77 y	36:46	-	1.09
60	Tetra	PCB-79	50.00	6.07e+07	0.78 y	37:50	-	1.15
61	Tetra	PCB-78	50.00	5.78e+07	0.78 y	38:32	-	1.27
62	Tetra	PCB-81	50.00	6.42e+07	0.78 y	39:03	-	1.41
63	Tetra	PCB-77	50.00	6.12e+07	0.79 y	39:39	-	1.25
64	Penta	PCB-104	50.00	4.42e+07	1.62 y	32:41	-	1.27
65	Penta	PCB-96	50.00	3.85e+07	1.59 y	33:57	-	1.10
66	Penta	PCB-103	50.00	3.30e+07	1.58 y	34:29	-	0.95
67	Penta	PCB-100	50.00	3.53e+07	1.61 y	34:49	-	1.01
68	Penta	PCB-94	50.00	2.93e+07	1.58 y	35:18	-	1.13
69	Penta	PCB-95/98/102	150.00	1.01e+08	1.60 y	35:47	-	1.30
70	Penta	PCB-93	50.00	2.46e+07	1.63 y	35:56	-	0.95
71	Penta	PCB-88/91	100.00	5.97e+07	1.61 y	36:12	-	1.15
72	Penta	PCB-121	50.00	4.37e+07	1.56 y	36:19	-	1.69
73	Penta	PCB-84/92	100.00	5.90e+07	1.59 y	37:08	-	1.09
74	Penta	PCB-89	50.00	2.93e+07	1.61 y	37:19	-	1.08
75	Penta	PCB-90/101	100.00	6.59e+07	1.60 y	37:31	-	1.21
76	Penta	PCB-113	50.00	4.09e+07	1.59 y	37:45	-	1.51
77	Penta	PCB-99	50.00	3.25e+07	1.60 y	37:51	-	1.20
78	Penta	PCB-119	50.00	4.22e+07	1.61 y	38:18	-	1.73
79	Penta	PCB-108/112	100.00	6.46e+07	1.63 y	38:27	-	1.33
80	Penta	PCB-83	50.00	3.86e+07	1.62 y	38:38	-	1.58
81	Penta	PCB-97	50.00	3.20e+07	1.59 y	38:49	-	1.32
82	Penta	PCB-86	50.00	2.38e+07	1.53 y	38:58	-	0.98
83	Penta	PCB-87/117/125	150.00	1.16e+08	1.58 y	39:05	-	1.59
84	Penta	PCB-111/115	100.00	8.59e+07	1.72 y	39:15	-	1.76
85	Penta	PCB-85/116	100.00	6.54e+07	1.46 y	39:23	-	1.34
86	Penta	PCB-120	50.00	4.27e+07	1.57 y	39:37	-	1.75
87	Penta	PCB-110	50.00	4.19e+07	1.60 y	39:46	-	1.72
88	Penta	PCB-82	50.00	2.58e+07	1.60 y	40:23	-	0.73
89	Penta	PCB-124	50.00	4.68e+07	1.60 y	41:03	-	1.32
90	Penta	PCB-107/109	100.00	8.79e+07	1.59 y	41:12	-	1.24
91	Penta	PCB-123	50.00	4.52e+07	1.59 y	41:22	-	1.28
92	Penta	PCB-106/118	100.00	9.20e+07	1.60 y	41:35	-	1.26
93	Penta	PCB-114	50.00	5.39e+07	1.62 y	42:13	-	1.37
94	Penta	PCB-122	50.00	4.95e+07	1.62 y	42:21	-	1.25
95	Penta	PCB-105	50.00	5.39e+07	1.63 y	43:05	-	1.34
96	Penta	PCB-127	50.00	5.03e+07	1.65 y	43:24	-	1.16
97	Penta	PCB-126	50.00	4.94e+07	1.62 y	45:19	-	1.32
98	Hexa	PCB-155	50.00	3.50e+07	1.27 y	37:03	-	1.20
99	Hexa	PCB-150	50.00	3.24e+07	1.28 y	38:20	-	1.11
100	Hexa	PCB-152	50.00	3.29e+07	1.26 y	38:48	-	1.12
101	Hexa	PCB-145	50.00	3.24e+07	1.26 y	39:15	-	1.11
102	Hexa	PCB-136	50.00	3.34e+07	1.27 y	39:35	-	1.14

103	Hexa	PCB-148	50.00	2.20e-07	1.30	y	39:40	-	0.75
104	Hexa	PCB-154	50.00	2.71e+07	1.26	y	40:10	-	0.93
105	Hexa	PCB-151	50.00	2.51e+07	1.30	y	40:47	-	0.86
106	Hexa	PCB-135	50.00	2.36e+07	1.28	y	41:01	-	0.81
107	Hexa	PCB-144	50.00	2.64e+07	1.36	y	41:08	-	0.90
108	Hexa	PCB-147	50.00	2.56e+07	1.18	y	41:16	-	0.88
109	Hexa	PCB-139/149	100.00	5.31e+07	1.27	y	41:30	-	0.91
110	Hexa	PCB-140	50.00	2.51e+07	1.27	y	41:42	-	0.86
111	Hexa	PCB-134/143	100.00	6.92e+07	1.24	y	42:08	-	0.94
112	Hexa	PCB-133/142	100.00	7.07e+07	1.23	y	42:26	-	0.96
113	Hexa	PCB-131	50.00	3.31e+07	1.22	y	42:36	-	0.90

114	Hexa	PCB-146/165	100.00	8.55e+07	1.24 y	42:48	-	1.16
115	Hexa	PCB-132/161	100.00	8.32e+07	1.22 y	43:03	-	1.13
116	Hexa	PCB-153	50.00	4.33e+07	1.22 y	43:14	-	1.18
117	Hexa	PCB-168	50.00	5.02e+07	1.21 y	43:27	-	1.37
118	Hexa	PCB-141	50.00	3.51e+07	1.21 y	43:58	-	0.99
119	Hexa	PCB-137	50.00	3.65e+07	1.26 y	44:21	-	1.03
120	Hexa	PCB-130	50.00	3.32e+07	1.23 y	44:27	-	0.94
121	Hexa	PCB-138/163/164	150.00	1.29e+08	1.23 y	44:50	-	1.26
122	Hexa	PCB-158/160	100.00	9.17e+07	1.23 y	45:05	-	1.34
123	Hexa	PCB-129	50.00	3.18e+07	1.24 y	45:19	-	0.93
124	Hexa	PCB-166	50.00	4.43e+07	1.22 y	45:46	-	1.13
125	Hexa	PCB-159	50.00	4.56e+07	1.22 y	46:05	-	1.17
126	Hexa	PCB-128/162	100.00	8.34e+07	1.23 y	46:22	-	1.07
127	Hexa	PCB-167	50.00	4.70e+07	1.21 y	46:47	-	1.09
128	Hexa	PCB-156	50.00	4.75e+07	1.22 y	48:04	-	1.17
129	Hexa	PCB-157	50.00	4.75e+07	1.22 y	48:20	-	1.11
130	Hexa	PCB-169	50.00	4.39e+07	1.23 y	50:24	-	1.11
131	Hepta	PCB-188	50.00	4.42e+07	1.02 y	42:52	-	1.43
132	Hepta	PCB-184	50.00	3.95e+07	1.05 y	43:18	-	1.28
133	Hepta	PCB-179	50.00	4.06e+07	1.05 y	44:06	-	1.31
134	Hepta	PCB-176	50.00	4.27e+07	1.05 y	44:34	-	1.38
135	Hepta	PCB-186	50.00	4.05e+07	1.04 y	45:10	-	1.31
136	Hepta	PCB-178	50.00	2.95e+07	1.05 y	45:39	-	0.96
137	Hepta	PCB-175	50.00	3.17e+07	1.05 y	46:00	-	1.02
138	Hepta	PCB-182/187	100.00	6.54e+07	1.04 y	46:11	-	1.06
139	Hepta	PCB-183	50.00	3.41e+07	1.05 y	46:29	-	1.10
140	Hepta	PCB-185	50.00	3.05e+07	1.05 y	47:09	-	1.36
141	Hepta	PCB-174	50.00	2.96e+07	1.04 y	47:31	-	1.32
142	Hepta	PCB-181	50.00	3.21e+07	1.07 y	47:37	-	1.43
143	Hepta	PCB-177	50.00	2.87e+07	1.06 y	47:48	-	1.28
144	Hepta	PCB-171	50.00	2.95e+07	1.04 y	48:05	-	1.31
145	Hepta	PCB-173	50.00	2.63e+07	1.05 y	48:31	-	1.17
146	Hepta	PCB-172	50.00	2.77e+07	1.03 y	48:57	-	1.24
147	Hepta	PCB-192	50.00	3.49e+07	1.05 y	49:09	-	1.56
148	Hepta	PCB-180	50.00	3.18e+07	1.04 y	49:20	-	1.42
149	Hepta	PCB-193	50.00	3.77e+07	1.05 y	49:32	-	1.68
150	Hepta	PCB-191	50.00	3.78e+07	1.05 y	49:47	-	1.68
151	Hepta	PCB-170	50.00	2.67e+07	1.04 y	50:46	-	1.50
152	Hepta	PCB-190	50.00	3.64e+07	1.03 y	50:55	-	2.04
153	Hepta	PCB-189	50.00	3.89e+07	1.04 y	52:12	-	1.59
154	Octa	PCB-202	50.00	2.93e+07	0.91 y	48:17	-	1.04
155	Octa	PCB-201	50.00	3.13e+07	0.93 y	48:46	-	1.11
156	Octa	PCB-204	50.00	2.91e+07	0.88 y	48:56	-	1.04
157	Octa	PCB-197	50.00	3.14e+07	0.91 y	49:13	-	1.12
158	Octa	PCB-200	50.00	3.00e+07	0.91 y	50:03	-	1.07
159	Octa	PCB-198	50.00	2.15e+07	0.90 y	51:20	-	0.77
160	Octa	PCB-199	50.00	2.15e+07	0.89 y	51:25	-	0.77
161	Octa	PCB-196/203	100.00	4.56e+07	0.90 y	51:41	-	0.81
162	Octa	PCB-195	50.00	2.93e+07	0.91 y	52:49	-	1.25
163	Octa	PCB-194	50.00	2.92e+07	0.90 y	53:41	-	1.24

164	Octa	PCB-205	50.00	3.30e+07	0.92	y	53:58	-	1.41
165	Nona	PCB-208	50.00	3.17e+07	1.33	y	52:57	-	0.95
166	Nona	PCB-207	50.00	3.11e+07	1.32	y	53:16	-	0.93
167	Nona	PCB-206	50.00	2.08e+07	1.33	y	55:21	-	1.02
168	Deca	PCB-209	50.00	2.28e+07	1.19	y	56:38	-	1.23
169	Tot Σ	Total Mono-PCB	0.00	-	-	n	-	-	1.27
170	Tot Σ	Total Di-PCB	0.00	-	-	n	-	-	1.25
171	Tot Σ	Total Tri-PCB	0.00	-	-	n	-	-	1.18

172	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.39
173	Tot Σ	Total Tetra-PCB	0.00	-	- n	-	-	1.21
174	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.24
175	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.29
176	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	0.96
177	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	1.10
178	Tot Σ	Total Hepta-PCB	0.00	-	- n	-	-	1.30
179	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	0.95
180	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	1.30
181	Tot Σ	Total Nona-PCB	0.00	-	- n	-	-	0.96
182	Tot Σ	Total Deca-PCB	50.00	2.28e+07	1.19 y	56:38	-	1.23
183	Mono Σ	13C-PCB-1	100.00	1.19e+08	3.24 y	16:14	-	0.88
184	Mono Σ	13C-PCB-3	100.00	1.26e+08	3.30 y	18:49	-	0.93
185	Di-IS	13C-PCB-4	100.00	7.38e+07	1.60 y	20:09	-	0.55
186	Di-IS	13C-PCB-9	100.00	1.12e+08	1.59 y	21:55	-	0.82
187	Di-IS	13C-PCB-11	100.00	1.24e+08	1.58 y	25:16	-	0.92
188	Tri- Σ	13C-PCB-19	100.00	7.23e+07	1.06 y	24:16	-	0.53
189	Tri- Σ	13C-PCB-32	100.00	1.09e+08	1.07 y	27:10	-	0.81
190	Tri- Σ	13C-PCB-28	100.00	1.07e+08	1.05 y	29:07	-	0.85
191	Tri- Σ	13C-PCB-37	100.00	1.00e+08	1.07 y	32:59	-	0.80
192	Tetr Σ	13C-PCB-54	100.00	9.29e+07	0.81 y	28:00	-	0.84
193	Tetr Σ	13C-PCB-52	100.00	7.70e+07	0.79 y	31:30	-	0.70
194	Tetr Σ	13C-PCB-47	100.00	8.12e+07	0.80 y	32:01	-	0.73
195	Tetr Σ	13C-PCB-70	100.00	1.02e+08	0.79 y	35:31	-	0.93
196	Tetr Σ	13C-PCB-80	100.00	1.05e+08	0.80 y	35:56	-	0.95
197	Tetr Σ	13C-PCB-81	100.00	9.11e+07	0.80 y	39:03	-	0.82
198	Tetr Σ	13C-PCB-77	100.00	9.78e+07	0.81 y	39:38	-	0.88
199	Pent Σ	13C-PCB-104	100.00	6.97e+07	1.58 y	32:40	-	0.98
200	Pent Σ	13C-PCB-95	100.00	5.18e+07	1.63 y	35:49	-	0.73
201	Pent Σ	13C-PCB-101	100.00	5.42e+07	1.60 y	37:30	-	0.77
202	Pent Σ	13C-PCB-97	100.00	4.87e+07	1.60 y	38:48	-	0.69
203	Pent Σ	13C-PCB-123	100.00	7.09e+07	1.58 y	41:21	-	1.00
204	Pent Σ	13C-PCB-118	100.00	7.31e+07	1.59 y	41:32	-	1.03
205	Pent Σ	13C-PCB-114	100.00	7.90e+07	1.61 y	42:12	-	1.18
206	Pent Σ	13C-PCB-105	100.00	8.02e+07	1.61 y	43:03	-	1.20
207	Pent Σ	13C-PCB-127	100.00	8.65e+07	1.59 y	43:23	-	1.29
208	Pent Σ	13C-PCB-126	100.00	7.48e+07	1.61 y	45:18	-	1.12
209	Hexa Σ	13C-PCB-155	100.00	5.86e+07	1.27 y	37:02	-	0.83
210	Hexa Σ	13C-PCB-153	100.00	7.35e+07	1.25 y	43:13	-	1.10
211	Hexa Σ	13C-PCB-141	100.00	7.09e+07	1.28 y	43:57	-	1.06
212	Hexa	13C-PCB-138	100.00	6.83e+07	1.26 y	44:48	-	1.02
213	Hexa Σ	13C-PCB-159	100.00	7.82e+07	1.30 y	46:05	-	1.17
214	Hexa Σ	13C-PCB-167	100.00	8.59e+07	1.26 y	46:45	-	1.29
215	Hexa Σ	13C-PCB-156	100.00	8.11e+07	1.27 y	48:03	-	1.21
216	Hexa Σ	13C-PCB-157	100.00	8.59e+07	1.29 y	48:19	-	1.28
217	Hexa Σ	13C-PCB-169	100.00	7.93e+07	1.27 y	50:24	-	1.19
218	Hepta Σ	13C-PCB-188	100.00	6.19e+07	0.46 y	42:51	-	0.93
219	Hepta Σ	13C-PCB-180	100.00	4.49e+07	0.47 y	49:19	-	0.67
220	Hepta Σ	13C-PCB-170	100.00	3.58e+07	0.45 y	50:45	-	0.53
221	Hepta Σ	13C-PCB-189	100.00	4.91e+07	0.46 y	52:11	-	0.73
222	Octa Σ	13C-PCB-202	100.00	5.62e+07	0.92 y	48:16	-	0.84

223	Octa ₇	13C-PCB-194	100.00	4.69e+07	0.91	y	53:40	-	0.80
224	Nona ₇	13C-PCB-208	100.00	6.66e+07	0.78	y	52:56	-	1.14
225	Nona ₇	13C-PCB-206	100.00	4.07e+07	0.77	y	55:20	-	0.70
226	Deca ₇	13C-PCB-209	100.00	3.70e+07	1.21	y	56:37	-	0.64
227	DI-RS	13C-PCB-15	100.00	1.35e+08	1.56	y	25:58	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.25e+08	1.06	y	29:00	-	1.00
229	Tetra ₇	13C-PCB-60	100.00	1.11e+08	0.80	y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	7.09e+07	1.59	y	39:14	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	6.69e+07	1.26	y	46:21	-	1.00
232	Octa ₇	13C-PCB-205	100.00	5.82e+07	0.91	y	53:57	-	1.00

233	CRS	13C-PCB-79	100.00	1.21e+08	0.80	y	37:49	-	1.09
234	CRS	13C-PCB-178	100.00	4.58e+07	0.46	y	45:38	-	0.69
235	PS	13C-PCB-79	100.00	1.21e+08	0.80	y	37:49	-	1.33
236	PS	13C-PCB-178	100.00	4.58e+07	0.46	y	45:38	-	1.02

Filename: 140620E1 S: 5 Acquired: 20-JUN-14 13:47:50

Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14

Results:

Sample text: ST140620E1-5 PCB CS4 13H1206

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	400.00	6.95e+08	2.97 y	16:15	-	1.05
2	Mono	PCB-2	400.00	6.84e+08	2.99 y	18:36	-	1.00
3	Mono	PCB-3	400.00	7.00e+08	3.00 y	18:50	-	1.02
4	Di	PCB-4/10	1600.00	2.12e+09	1.63 y	20:12	-	1.32
5	Di	PCB-7/9	1600.00	2.61e+09	1.63 y	21:57	-	1.08
6	Di	PCB-6	800.00	1.28e+09	1.64 y	22:36	-	1.06
7	Di	PCB-5/8	1600.00	2.62e+09	1.64 y	23:01	-	1.08
8	Di	PCB-14	800.00	1.44e+09	1.64 y	24:06	-	1.03
9	Di	PCB-11	800.00	1.36e+09	1.65 y	25:17	-	0.97
10	Di	PCB-12/13	1600.00	2.65e+09	1.64 y	25:41	-	0.94
11	Di	PCB-15	800.00	1.43e+09	1.63 y	26:00	-	1.02
12	Tri	PCB-19	400.00	4.09e+08	1.05 y	24:17	-	1.05
13	Tri	PCB-30	400.00	5.99e+08	1.06 y	25:10	-	1.54
14	Tri	PCB-18	400.00	4.25e+08	1.06 y	25:55	-	0.70
15	Tri	PCB-17	400.00	4.49e+08	1.05 y	26:05	-	0.74
16	Tri	PCB-24/27	800.00	1.19e+09	1.05 y	26:39	-	0.98
17	Tri	PCB-16/32	800.00	1.02e+09	1.06 y	27:10	-	0.84
18	Tri	PCB-34	400.00	6.61e+08	1.09 y	27:57	-	1.07
19	Tri	PCB-23	400.00	6.32e+08	1.10 y	28:03	-	1.02
20	Tri	PCB-29	400.00	6.52e+08	1.09 y	28:18	-	1.06
21	Tri	PCB-26	400.00	6.34e+08	1.11 y	28:30	-	1.03
22	Tri	PCB-25	400.00	6.76e+08	1.08 y	28:39	-	1.09
23	Tri	PCB-31	400.00	6.48e+08	1.08 y	29:01	-	1.05
24	Tri	PCB-28	400.00	7.30e+08	1.09 y	29:08	-	1.18
25	Tri	PCB-20/21/33	1200.00	2.00e+09	1.09 y	29:44	-	1.08
26	Tri	PCB-22	400.00	6.74e+08	1.09 y	30:10	-	1.09
27	Tri	PCB-36	400.00	6.53e+08	1.09 y	30:47	-	1.16
28	Tri	PCB-39	400.00	6.69e+08	1.09 y	31:15	-	1.19
29	Tri	PCB-38	400.00	6.54e+08	1.09 y	32:02	-	1.16
30	Tri	PCB-35	400.00	6.68e+08	1.09 y	32:32	-	1.19
31	Tri	PCB-37	400.00	6.65e+08	1.09 y	33:00	-	1.18
32	Tetra	PCB-54	400.00	5.24e+08	0.78 y	28:01	-	1.01
33	Tetra	PCB-50	400.00	4.18e+08	0.77 y	29:10	-	0.81
34	Tetra	PCB-53	400.00	4.29e+08	0.78 y	29:49	-	1.00
35	Tetra	PCB-51	400.00	4.24e+08	0.77 y	30:09	-	0.99
36	Tetra	PCB-45	400.00	3.49e+08	0.77 y	30:35	-	0.81
37	Tetra	PCB-46	400.00	3.30e+08	0.78 y	31:05	-	0.77
38	Tetra	PCB-52/69	800.00	9.21e+08	0.77 y	31:32	-	1.07
39	Tetra	PCB-73	400.00	5.23e+08	0.78 y	31:39	-	1.22
40	Tetra	PCB-43/49	800.00	8.03e+08	0.77 y	31:49	-	0.94
41	Tetra	PCB-47	400.00	4.43e+08	0.77 y	32:02	-	0.96

42	Tetra	PCB-48/75	800.00	9.95e+08	0.78	y	32:08	-	1.08
43	Tetra	PCB-65	400.00	5.26e+08	0.77	y	32:24	-	1.15
44	Tetra	PCB-62	400.00	4.75e+08	0.78	y	32:31	-	1.03
45	Tetra	PCB-44	400.00	3.59e+08	0.78	y	32:49	-	0.78
46	Tetra	PCB-42/59	800.00	9.31e+08	0.78	y	33:03	-	1.01
47	Tetra	PCB-41/64/71/72	1600.00	2.06e+09	0.78	y	33:38	-	1.12
48	Tetra	PCB-68	400.00	5.66e+08	0.78	y	33:53	-	1.23
49	Tetra	PCB-40	400.00	3.06e+08	0.78	y	34:07	-	0.67
50	Tetra	PCB-57	400.00	5.45e+08	0.78	y	34:27	-	0.92
51	Tetra	PCB-67	400.00	5.29e+08	0.77	y	34:45	-	0.90
52	Tetra	PCB-58	400.00	5.39e+08	0.78	y	34:53	-	0.91

53	Tetra	PCB-63	400.00	5.63e+08	0.78	y	35:02	-	0.95
54	Tetra	PCB-74	400.00	5.92e+08	0.78	y	35:19	-	1.00
55	Tetra	PCB-61/70	800.00	1.09e+09	0.78	y	35:30	-	0.92
56	Tetra	PCB-76/66	800.00	1.11e+09	0.78	y	35:43	-	0.94
57	Tetra	PCB-80	400.00	6.36e+08	0.78	y	35:57	-	1.07
58	Tetra	PCB-55	400.00	5.70e+08	0.78	y	36:16	-	0.96
59	Tetra	PCB-56/60	800.00	1.08e+09	0.77	y	36:46	-	0.91
60	Tetra	PCB-79	400.00	5.68e+08	0.78	y	37:49	-	0.95
61	Tetra	PCB-78	400.00	5.53e+08	0.77	y	38:31	-	1.02
62	Tetra	PCB-81	400.00	6.17e+08	0.77	y	39:03	-	1.14
63	Tetra	PCB-77	400.00	5.82e+08	0.80	y	39:38	-	1.02
64	Penta	PCB-104	400.00	3.92e+08	1.60	y	32:41	-	1.03
65	Penta	PCB-96	400.00	3.47e+08	1.59	y	33:56	-	0.92
66	Penta	PCB-103	400.00	3.03e+08	1.60	y	34:28	-	0.80
67	Penta	PCB-100	400.00	3.29e+08	1.60	y	34:50	-	0.87
68	Penta	PCB-94	400.00	2.68e+08	1.60	y	35:18	-	0.91
69	Penta	PCB-95/98/102	1200.00	9.09e+08	1.60	y	35:47	-	1.04
70	Penta	PCB-93	400.00	2.47e+08	1.60	y	35:56	-	0.84
71	Penta	PCB-88/91	800.00	5.23e+08	1.56	y	36:12	-	0.89
72	Penta	PCB-121	400.00	4.29e+08	1.64	y	36:18	-	1.46
73	Penta	PCB-84/92	800.00	5.39e+08	1.60	y	37:08	-	0.87
74	Penta	PCB-89	400.00	2.55e+08	1.60	y	37:20	-	0.83
75	Penta	PCB-90/101	800.00	6.11e+08	1.59	y	37:30	-	0.99
76	Penta	PCB-113	400.00	3.59e+08	1.58	y	37:45	-	1.16
77	Penta	PCB-99	400.00	3.19e+08	1.61	y	37:50	-	1.03
78	Penta	PCB-119	400.00	4.01e+08	1.59	y	38:18	-	1.48
79	Penta	PCB-108/112	800.00	5.97e+08	1.60	y	38:28	-	1.10
80	Penta	PCB-83	400.00	3.51e+08	1.60	y	38:37	-	1.30
81	Penta	PCB-97	400.00	2.87e+08	1.60	y	38:48	-	1.06
82	Penta	PCB-86	400.00	2.42e+08	1.63	y	38:58	-	0.90
83	Penta	PCB-87/117/125	1200.00	1.11e+09	1.59	y	39:05	-	1.37
84	Penta	PCB-111/115	800.00	7.75e+08	1.58	y	39:15	-	1.43
85	Penta	PCB-85/116	800.00	6.10e+08	1.63	y	39:23	-	1.13
86	Penta	PCB-120	400.00	4.12e+08	1.59	y	39:36	-	1.52
87	Penta	PCB-110	400.00	3.74e+08	1.60	y	39:45	-	1.38
88	Penta	PCB-82	400.00	2.25e+08	1.60	y	40:23	-	0.60
89	Penta	PCB-124	400.00	4.01e+08	1.59	y	41:04	-	1.07
90	Penta	PCB-107/109	800.00	8.08e+08	1.60	y	41:12	-	1.08
91	Penta	PCB-123	400.00	3.78e+08	1.60	y	41:22	-	1.01
92	Penta	PCB-106/118	800.00	8.07e+08	1.60	y	41:34	-	1.01
93	Penta	PCB-114	400.00	4.81e+08	1.63	y	42:13	-	1.11
94	Penta	PCB-122	400.00	4.40e+08	1.59	y	42:21	-	1.02
95	Penta	PCB-105	400.00	4.86e+08	1.61	y	43:04	-	1.09
96	Penta	PCB-127	400.00	4.44e+08	1.65	y	43:24	-	0.94
97	Penta	PCB-126	400.00	4.53e+08	1.69	y	45:18	-	1.10
98	Hexa	PCB-155	400.00	3.12e+08	1.27	y	37:04	-	0.98
99	Hexa	PCB-150	400.00	2.99e+08	1.28	y	38:19	-	0.94
100	Hexa	PCB-152	400.00	2.95e+08	1.28	y	38:47	-	0.92
101	Hexa	PCB-145	400.00	2.95e+08	1.27	y	39:15	-	0.92
102	Hexa	PCB-136	400.00	2.81e+08	1.31	y	39:34	-	0.88

103	Hexa	PCB-148	400.00	2.24e+08	1.24	y	39:40	-	0.70
104	Hexa	PCB-154	400.00	2.37e+08	1.27	y	40:09	-	0.74
105	Hexa	PCB-151	400.00	2.17e+08	1.27	y	40:48	-	0.68
106	Hexa	PCB-135	400.00	2.24e+08	1.25	y	41:00	-	0.70
107	Hexa	PCB-144	400.00	2.17e+08	1.28	y	41:07	-	0.68
108	Hexa	PCB-147	400.00	2.25e+08	1.29	y	41:15	-	0.70
109	Hexa	PCB-139/149	800.00	4.68e+08	1.28	y	41:31	-	0.73
110	Hexa	PCB-140	400.00	2.12e+08	1.27	y	41:42	-	0.66
111	Hexa	PCB-134/143	800.00	6.17e+08	1.24	y	42:08	-	0.78
112	Hexa	PCB-133/142	800.00	6.26e+08	1.23	y	42:26	-	0.79
113	Hexa	PCB-131	400.00	2.95e+08	1.25	y	42:36	-	0.74

114	Hexa	PCB-146/165	800.00	7.73e+08	1.24 y	42:49	-	0.97
115	Hexa	PCB-132/161	800.00	7.41e+08	1.23 y	43:04	-	0.93
116	Hexa	PCB-153	400.00	3.95e+08	1.23 y	43:13	-	0.99
117	Hexa	PCB-168	400.00	4.52e+08	1.23 y	43:26	-	1.14
118	Hexa	PCB-141	400.00	3.03e+08	1.23 y	43:57	-	0.83
119	Hexa	PCB-137	400.00	3.53e+08	1.24 y	44:20	-	0.96
120	Hexa	PCB-130	400.00	2.61e+08	1.22 y	44:27	-	0.71
121	Hexa	PCB-138/163/164	1200.00	1.16e+09	1.23 y	44:49	-	1.05
122	Hexa	PCB-158/160	800.00	8.21e+08	1.23 y	45:04	-	1.11
123	Hexa	PCB-129	400.00	2.80e+08	1.23 y	45:18	-	0.76
124	Hexa	PCB-166	400.00	3.99e+08	1.23 y	45:46	-	0.94
125	Hexa	PCB-159	400.00	4.06e+08	1.26 y	46:06	-	0.96
126	Hexa	PCB-128/162	800.00	7.15e+08	1.23 y	46:23	-	0.85
127	Hexa	PCB-167	400.00	4.05e+08	1.22 y	46:46	-	0.88
128	Hexa	PCB-156	400.00	4.28e+08	1.23 y	48:03	-	0.98
129	Hexa	PCB-157	400.00	4.21e+08	1.24 y	48:20	-	0.91
130	Hexa	PCB-169	400.00	3.99e+08	1.23 y	50:23	-	0.94
131	Hepta	PCB-188	400.00	3.97e+08	1.04 y	42:51	-	1.17
132	Hepta	PCB-184	400.00	3.45e+08	1.05 y	43:18	-	1.02
133	Hepta	PCB-179	400.00	3.55e+08	1.05 y	44:05	-	1.05
134	Hepta	PCB-176	400.00	3.64e+08	1.05 y	44:33	-	1.07
135	Hepta	PCB-186	400.00	3.55e+08	1.05 y	45:10	-	1.05
136	Hepta	PCB-178	400.00	2.55e+08	1.05 y	45:39	-	0.75
137	Hepta	PCB-175	400.00	2.66e+08	1.05 y	46:00	-	0.78
138	Hepta	PCB-182/187	800.00	5.78e+08	1.06 y	46:10	-	0.85
139	Hepta	PCB-183	400.00	2.87e+08	1.05 y	46:29	-	0.85
140	Hepta	PCB-185	400.00	2.56e+08	1.05 y	47:09	-	1.10
141	Hepta	PCB-174	400.00	2.74e+08	1.04 y	47:30	-	1.18
142	Hepta	PCB-181	400.00	2.51e+08	1.05 y	47:37	-	1.08
143	Hepta	PCB-177	400.00	2.40e+08	1.05 y	47:47	-	1.03
144	Hepta	PCB-171	400.00	2.57e+08	1.05 y	48:05	-	1.10
145	Hepta	PCB-173	400.00	2.26e+08	1.05 y	48:30	-	0.97
146	Hepta	PCB-172	400.00	2.44e+08	1.05 y	48:57	-	1.05
147	Hepta	PCB-192	400.00	3.09e+08	1.05 y	49:08	-	1.33
148	Hepta	PCB-180	400.00	2.75e+08	1.05 y	49:20	-	1.18
149	Hepta	PCB-193	400.00	3.25e+08	1.06 y	49:31	-	1.40
150	Hepta	PCB-191	400.00	3.32e+08	1.05 y	49:46	-	1.43
151	Hepta	PCB-170	400.00	2.30e+08	1.05 y	50:45	-	1.23
152	Hepta	PCB-190	400.00	3.17e+08	1.05 y	50:55	-	1.70
153	Hepta	PCB-189	400.00	3.22e+08	1.05 y	52:11	-	1.30
154	Octa	PCB-202	400.00	2.47e+08	0.91 y	48:16	-	0.85
155	Octa	PCB-201	400.00	2.67e+08	0.90 y	48:45	-	0.92
156	Octa	PCB-204	400.00	2.45e+08	0.91 y	48:54	-	0.84
157	Octa	PCB-197	400.00	2.62e+08	0.91 y	49:13	-	0.90
158	Octa	PCB-200	400.00	2.51e+08	0.91 y	50:03	-	0.87
159	Octa	PCB-198	400.00	1.73e+08	0.90 y	51:19	-	0.60
160	Octa	PCB-199	400.00	1.84e+08	0.91 y	51:25	-	0.63
161	Octa	PCB-196/203	800.00	3.87e+08	0.90 y	51:41	-	0.67
162	Octa	PCB-195	400.00	2.55e+08	0.91 y	52:49	-	1.04
163	Octa	PCB-194	400.00	2.51e+08	0.92 y	53:40	-	1.02

164	Octa	PCB-205	400.00	2.86e+08	0.92	y	53:57	-	1.17
165	Nona	PCB-208	400.00	2.69e+08	1.32	y	52:57	-	0.78
166	Nona	PCB-207	400.00	2.66e+08	1.33	y	53:15	-	0.78
167	Nona	PCB-206	400.00	1.66e+08	1.33	y	55:21	-	0.84
168	Deca	PCB-209	400.00	1.83e+08	1.19	y	56:38	-	0.99
169	Tot Σ	Total Mono-PCB	0.00	-	-	n	-	-	1.02
170	Tot Σ	Total Di-PCB	0.00	-	-	n	-	-	1.03
171	Tot Σ	Total Tri-PCB	0.00	-	-	n	-	-	0.96

172	Tot 7	Total Tri-PCB	0.00	-	- n	-	-	1.11
173	Tot 7	Total Tetra-PCB	0.00	-	- n	-	-	0.99
174	Tot 7	Total Penta-PCB	0.00	-	- n	-	-	1.03
175	Tot 7	Total Penta-PCB	0.00	-	- n	-	-	1.05
176	Tot 7	Total Hexa-PCB	0.00	-	- n	-	-	0.78
177	Tot 7	Total Hexa-PCB	0.00	-	- n	-	-	0.91
178	Tot 7	Total Hepta-PCB	0.00	-	- n	-	-	1.05
179	Tot 7	Total Octa-PCB	0.00	-	- n	-	-	0.77
180	Tot 7	Total Octa-PCB	0.00	-	- n	-	-	1.08
181	Tot 7	Total Nona-PCB	0.00	-	- n	-	-	0.79
182	Tot 7	Total Deca-PCB	400.00	1.83e+08	1.19 y	56:38	-	0.99
183	Mono7	13C-PCB-1	100.00	1.66e+08	3.23 y	16:14	-	0.88
184	Mono7	13C-PCB-3	100.00	1.71e+08	3.33 y	18:49	-	0.91
185	Di-7S	13C-PCB-4	100.00	1.00e+08	1.57 y	20:08	-	0.53
186	Di-7S	13C-PCB-9	100.00	1.51e+08	1.58 y	21:55	-	0.80
187	Di-7S	13C-PCB-11	100.00	1.75e+08	1.57 y	25:16	-	0.93
188	Tri-7	13C-PCB-19	100.00	9.71e+07	1.07 y	24:16	-	0.52
189	Tri-7	13C-PCB-32	100.00	1.52e+08	1.07 y	27:10	-	0.81
190	Tri-7	13C-PCB-28	100.00	1.54e+08	1.06 y	29:06	-	0.96
191	Tri-7	13C-PCB-37	100.00	1.41e+08	1.06 y	32:58	-	0.87
192	Tetr7	13C-PCB-54	100.00	1.29e+08	0.81 y	27:60	-	0.83
193	Tetr7	13C-PCB-52	100.00	1.07e+08	0.80 y	31:31	-	0.68
194	Tetr7	13C-PCB-47	100.00	1.15e+08	0.80 y	32:00	-	0.73
195	Tetr7	13C-PCB-70	100.00	1.48e+08	0.80 y	35:31	-	0.94
196	Tetr7	13C-PCB-80	100.00	1.49e+08	0.80 y	35:56	-	0.95
197	Tetr7	13C-PCB-81	100.00	1.35e+08	0.82 y	39:03	-	0.86
198	Tetr7	13C-PCB-77	100.00	1.43e+08	0.81 y	39:38	-	0.91
199	Pent7	13C-PCB-104	100.00	9.47e+07	1.61 y	32:40	-	0.96
200	Pent7	13C-PCB-95	100.00	7.32e+07	1.57 y	35:49	-	0.74
201	Pent7	13C-PCB-101	100.00	7.72e+07	1.62 y	37:30	-	0.78
202	Pent7	13C-PCB-97	100.00	6.76e+07	1.59 y	38:48	-	0.69
203	Pent7	13C-PCB-123	100.00	9.35e+07	1.62 y	41:21	-	0.95
204	Pent7	13C-PCB-118	100.00	9.95e+07	1.59 y	41:32	-	1.01
205	Pent7	13C-PCB-114	100.00	1.08e+08	1.58 y	42:12	-	1.25
206	Pent7	13C-PCB-105	100.00	1.12e+08	1.60 y	43:04	-	1.29
207	Pent7	13C-PCB-127	100.00	1.18e+08	1.58 y	43:23	-	1.36
208	Pent7	13C-PCB-126	100.00	1.03e+08	1.56 y	45:18	-	1.19
209	Hexa7	13C-PCB-155	100.00	7.98e+07	1.30 y	37:03	-	0.81
210	Hexa7	13C-PCB-153	100.00	9.94e+07	1.27 y	43:12	-	1.15
211	Hexa7	13C-PCB-141	100.00	9.18e+07	1.28 y	43:57	-	1.06
212	Hexa	13C-PCB-138	100.00	9.22e+07	1.27 y	44:48	-	1.06
213	Hexa7	13C-PCB-159	100.00	1.06e+08	1.27 y	46:04	-	1.22
214	Hexa7	13C-PCB-167	100.00	1.14e+08	1.27 y	46:45	-	1.32
215	Hexa7	13C-PCB-156	100.00	1.09e+08	1.27 y	48:03	-	1.26
216	Hexa7	13C-PCB-157	100.00	1.15e+08	1.31 y	48:19	-	1.33
217	Hexa7	13C-PCB-169	100.00	1.06e+08	1.26 y	50:23	-	1.22
218	Hepta7	13C-PCB-188	100.00	8.49e+07	0.47 y	42:50	-	0.98
219	Hepta7	13C-PCB-180	100.00	5.82e+07	0.47 y	49:20	-	0.67
220	Hepta7	13C-PCB-170	100.00	4.66e+07	0.46 y	50:44	-	0.54
221	Hepta7	13C-PCB-189	100.00	6.18e+07	0.46 y	52:11	-	0.71
222	Octa7	13C-PCB-202	100.00	7.25e+07	0.90 y	48:16	-	0.84

223	Octa ₇	13C-PCB-194	100.00	6.13e+07	0.91	y	53:40	-	0.81
224	Nona ₇	13C-PCB-208	100.00	8.58e+07	0.78	y	52:56	-	1.14
225	Nona ₇	13C-PCB-206	100.00	4.92e+07	0.81	y	55:20	-	0.65
226	Deca ₇	13C-PCB-209	100.00	4.62e+07	1.22	y	56:37	-	0.61
227	DI-RS	13C-PCB-15	100.00	1.89e+08	1.58	y	25:58	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.61e+08	1.07	y	28:60	-	1.00
229	Tetr ₇	13C-PCB-60	100.00	1.57e+08	0.80	y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	9.86e+07	1.61	y	39:13	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	8.68e+07	1.28	y	46:21	-	1.00
232	Octa ₇	13C-PCB-205	100.00	7.56e+07	0.92	y	53:57	-	1.00

233	CRS	13C-PCB-79	100.00	1.55e+08	0.79	y	37:49	-	0.99
234	CRS	13C-PCB-178	100.00	5.41e+07	0.47	y	45:38	-	0.62
235	PS	13C-PCB-79	100.00	1.55e+08	0.79	y	37:49	-	1.15
236	PS	13C-PCB-178	100.00	5.41e+07	0.47	y	45:38	-	0.93

Filename: 140620E1 S: 6 Acquired: 20-JUN-14 14:51:49

Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14

Results:

Sample text: ST140620E1-6 PCB CS5 13H1207

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	750.00	1.43e+09	2.96 y	16:15	-	1.27
2	Mono	PCB-2	750.00	1.51e+09	2.98 y	18:36	-	1.18
3	Mono	PCB-3	750.00	1.54e+09	2.98 y	18:50	-	1.20
4	Di	PCB-4/10	3000.00	4.71e+09	1.64 y	20:12	-	1.54
5	Di	PCB-7/9	3000.00	5.85e+09	1.64 y	21:57	-	1.25
6	Di	PCB-6	1500.00	2.81e+09	1.64 y	22:36	-	1.20
7	Di	PCB-5/8	3000.00	5.77e+09	1.64 y	23:01	-	1.23
8	Di	PCB-14	1500.00	3.24e+09	1.64 y	24:06	-	1.20
9	Di	PCB-11	1500.00	3.05e+09	1.65 y	25:17	-	1.13
10	Di	PCB-12/13	3000.00	5.91e+09	1.64 y	25:41	-	1.09
11	Di	PCB-15	1500.00	3.20e+09	1.64 y	26:00	-	1.18
12	Tri	PCB-19	750.00	9.08e+08	1.05 y	24:17	-	1.23
13	Tri	PCB-30	750.00	1.34e+09	1.06 y	25:10	-	1.82
14	Tri	PCB-18	750.00	9.50e+08	1.05 y	25:55	-	0.81
15	Tri	PCB-17	750.00	1.00e+09	1.05 y	26:05	-	0.86
16	Tri	PCB-24/27	1500.00	2.69e+09	1.05 y	26:40	-	1.15
17	Tri	PCB-16/32	1500.00	2.29e+09	1.06 y	27:10	-	0.98
18	Tri	PCB-34	750.00	1.45e+09	1.09 y	27:57	-	1.16
19	Tri	PCB-23	750.00	1.49e+09	1.09 y	28:03	-	1.19
20	Tri	PCB-29	750.00	1.47e+09	1.09 y	28:18	-	1.18
21	Tri	PCB-26	750.00	1.45e+09	1.10 y	28:30	-	1.16
22	Tri	PCB-25	750.00	1.51e+09	1.09 y	28:40	-	1.21
23	Tri	PCB-31	750.00	1.64e+09	1.06 y	29:01	-	1.32
24	Tri	PCB-28	750.00	1.49e+09	1.12 y	29:08	-	1.20
25	Tri	PCB-20/21/33	2250.00	4.54e+09	1.09 y	29:44	-	1.21
26	Tri	PCB-22	750.00	1.53e+09	1.09 y	30:11	-	1.23
27	Tri	PCB-36	750.00	1.49e+09	1.09 y	30:47	-	1.32
28	Tri	PCB-39	750.00	1.57e+09	1.09 y	31:15	-	1.39
29	Tri	PCB-38	750.00	1.52e+09	1.09 y	32:03	-	1.35
30	Tri	PCB-35	750.00	1.55e+09	1.09 y	32:33	-	1.38
31	Tri	PCB-37	750.00	1.56e+09	1.09 y	32:59	-	1.39
32	Tetra	PCB-54	750.00	1.18e+09	0.78 y	28:01	-	1.18
33	Tetra	PCB-50	750.00	9.47e+08	0.78 y	29:11	-	0.95
34	Tetra	PCB-53	750.00	9.66e+08	0.78 y	29:49	-	1.14
35	Tetra	PCB-51	750.00	9.67e+08	0.77 y	30:10	-	1.14
36	Tetra	PCB-45	750.00	7.90e+08	0.77 y	30:35	-	0.93
37	Tetra	PCB-46	750.00	7.50e+08	0.77 y	31:05	-	0.88
38	Tetra	PCB-52/69	1500.00	2.10e+09	0.77 y	31:33	-	1.23
39	Tetra	PCB-73	750.00	1.23e+09	0.78 y	31:40	-	1.45
40	Tetra	PCB-43/49	1500.00	1.83e+09	0.78 y	31:50	-	1.08
41	Tetra	PCB-47	750.00	9.58e+08	0.77 y	32:02	-	1.07

42	Tetra	PCB-48/75	1500.00	2.33e+09	0.78	y	32:09	-	1.30
43	Tetra	PCB-65	750.00	1.16e+09	0.77	y	32:25	-	1.30
44	Tetra	PCB-62	750.00	1.12e+09	0.78	y	32:32	-	1.25
45	Tetra	PCB-44	750.00	8.19e+08	0.78	y	32:49	-	0.92
46	Tetra	PCB-42/59	1500.00	2.16e+09	0.77	y	33:03	-	1.21
47	Tetra	PCB-41/64/71/72	3000.00	4.74e+09	0.78	y	33:38	-	1.33
48	Tetra	PCB-68	750.00	1.31e+09	0.78	y	33:54	-	1.46
49	Tetra	PCB-40	750.00	6.99e+08	0.78	y	34:07	-	0.78
50	Tetra	PCB-57	750.00	1.25e+09	0.77	y	34:28	-	1.07
51	Tetra	PCB-67	750.00	1.21e+09	0.77	y	34:46	-	1.03
52	Tetra	PCB-58	750.00	1.25e+09	0.78	y	34:53	-	1.07

53	Tetra	PCB-63	750.00	1.31e+09	0.77 y	35:03	-	1.12
54	Tetra	PCB-74	750.00	1.38e+09	0.81 y	35:20	-	1.18
55	Tetra	PCB-61/70	1500.00	2.48e+09	0.75 y	35:31	-	1.06
56	Tetra	PCB-76/66	1500.00	2.59e+09	0.78 y	35:44	-	1.10
57	Tetra	PCB-80	750.00	1.47e+09	0.78 y	35:57	-	1.24
58	Tetra	PCB-55	750.00	1.33e+09	0.78 y	36:17	-	1.12
59	Tetra	PCB-56/60	1500.00	2.53e+09	0.78 y	36:47	-	1.07
60	Tetra	PCB-79	750.00	1.34e+09	0.78 y	37:50	-	1.13
61	Tetra	PCB-78	750.00	1.30e+09	0.78 y	38:32	-	1.18
62	Tetra	PCB-81	750.00	1.44e+09	0.77 y	39:04	-	1.31
63	Tetra	PCB-77	750.00	1.37e+09	0.79 y	39:39	-	1.17
64	Penta	PCB-104	750.00	8.87e+08	1.60 y	32:41	-	1.22
65	Penta	PCB-96	750.00	7.97e+08	1.60 y	33:56	-	1.10
66	Penta	PCB-103	750.00	7.09e+08	1.60 y	34:28	-	0.98
67	Penta	PCB-100	750.00	7.64e+08	1.60 y	34:50	-	1.05
68	Penta	PCB-94	750.00	6.22e+08	1.59 y	35:18	-	1.08
69	Penta	PCB-95/98/102	2250.00	2.03e+09	1.58 y	35:47	-	1.17
70	Penta	PCB-93	750.00	6.23e+08	1.66 y	35:56	-	1.08
71	Penta	PCB-88/91	1500.00	1.15e+09	1.55 y	36:12	-	1.00
72	Penta	PCB-121	750.00	1.07e+09	1.65 y	36:18	-	1.85
73	Penta	PCB-84/92	1500.00	1.26e+09	1.59 y	37:08	-	1.02
74	Penta	PCB-89	750.00	6.06e+08	1.66 y	37:20	-	0.98
75	Penta	PCB-90/101	1500.00	1.42e+09	1.58 y	37:30	-	1.15
76	Penta	PCB-113	750.00	8.20e+08	1.61 y	37:45	-	1.33
77	Penta	PCB-99	750.00	7.64e+08	1.59 y	37:50	-	1.24
78	Penta	PCB-119	750.00	9.38e+08	1.60 y	38:18	-	1.73
79	Penta	PCB-108/112	1500.00	1.41e+09	1.59 y	38:28	-	1.30
80	Penta	PCB-83	750.00	8.35e+08	1.61 y	38:37	-	1.54
81	Penta	PCB-97	750.00	6.67e+08	1.59 y	38:49	-	1.23
82	Penta	PCB-86	750.00	5.75e+08	1.59 y	38:57	-	1.06
83	Penta	PCB-87/117/125	2250.00	2.55e+09	1.60 y	39:05	-	1.57
84	Penta	PCB-111/115	1500.00	1.80e+09	1.61 y	39:14	-	1.66
85	Penta	PCB-85/116	1500.00	1.47e+09	1.60 y	39:22	-	1.35
86	Penta	PCB-120	750.00	9.60e+08	1.60 y	39:36	-	1.77
87	Penta	PCB-110	750.00	8.91e+08	1.60 y	39:45	-	1.64
88	Penta	PCB-82	750.00	5.54e+08	1.60 y	40:23	-	0.71
89	Penta	PCB-124	750.00	1.04e+09	1.59 y	41:04	-	1.33
90	Penta	PCB-107/109	1500.00	1.83e+09	1.60 y	41:12	-	1.17
91	Penta	PCB-123	750.00	9.32e+08	1.60 y	41:23	-	1.20
92	Penta	PCB-106/118	1500.00	1.91e+09	1.60 y	41:34	-	1.19
93	Penta	PCB-114	750.00	1.21e+09	1.60 y	42:13	-	1.35
94	Penta	PCB-122	750.00	1.09e+09	1.62 y	42:22	-	1.22
95	Penta	PCB-105	750.00	1.17e+09	1.61 y	43:05	-	1.28
96	Penta	PCB-127	750.00	1.10e+09	1.63 y	43:25	-	1.09
97	Penta	PCB-126	750.00	1.11e+09	1.70 y	45:18	-	1.27
98	Hexa	PCB-155	750.00	7.23e+08	1.27 y	37:04	-	1.15
99	Hexa	PCB-150	750.00	6.95e+08	1.28 y	38:19	-	1.10
100	Hexa	PCB-152	750.00	6.85e+08	1.28 y	38:48	-	1.09
101	Hexa	PCB-145	750.00	6.77e+08	1.27 y	39:14	-	1.08
102	Hexa	PCB-136	750.00	7.15e+08	1.29 y	39:34	-	1.14

103	Hexa	PCB-148	750.00	4.56e+08	1.26	y	39:41	-	0.72
104	Hexa	PCB-154	750.00	5.75e+08	1.28	y	40:09	-	0.91
105	Hexa	PCB-151	750.00	5.08e+08	1.28	y	40:48	-	0.81
106	Hexa	PCB-135	750.00	5.16e+08	1.27	y	41:00	-	0.82
107	Hexa	PCB-144	750.00	5.14e+08	1.29	y	41:07	-	0.82
108	Hexa	PCB-147	750.00	5.36e-08	1.28	y	41:15	-	0.85
109	Hexa	PCB-139/149	1500.00	1.09e+09	1.28	y	41:31	-	0.86
110	Hexa	PCB-140	750.00	5.03e+08	1.28	y	41:42	-	0.80
111	Hexa	PCB-134/143	1500.00	1.43e+09	1.24	y	42:09	-	0.87
112	Hexa	PCB-133/142	1500.00	1.48e+09	1.23	y	42:26	-	0.90
113	Hexa	PCB-131	750.00	7.12e+08	1.24	y	42:36	-	0.87

114	Hexa	PCB-146/165	1500.00	1.86e+09	1.24 y	42:49	-	1.13
115	Hexa	PCB-132/161	1500.00	1.76e+09	1.23 y	43:04	-	1.07
116	Hexa	PCB-153	750.00	9.65e+08	1.23 y	43:14	-	1.18
117	Hexa	PCB-168	750.00	1.10e+09	1.23 y	43:27	-	1.35
118	Hexa	PCB-141	750.00	7.68e+08	1.23 y	43:58	-	0.99
119	Hexa	PCB-137	750.00	8.69e+08	1.22 y	44:21	-	1.11
120	Hexa	PCB-130	750.00	6.96e+08	1.25 y	44:28	-	0.89
121	Hexa	PCB-138/163/164	2250.00	2.89e+09	1.23 y	44:50	-	1.24
122	Hexa	PCB-158/160	1500.00	2.02e+09	1.23 y	45:05	-	1.29
123	Hexa	PCB-129	750.00	6.88e+08	1.23 y	45:19	-	0.88
124	Hexa	PCB-166	750.00	1.04e+09	1.22 y	45:46	-	1.13
125	Hexa	PCB-159	750.00	1.10e+09	1.22 y	46:05	-	1.20
126	Hexa	PCB-128/162	1500.00	1.89e+09	1.23 y	46:23	-	1.03
127	Hexa	PCB-167	750.00	1.07e+09	1.23 y	46:47	-	1.05
128	Hexa	PCB-156	750.00	1.08e+09	1.23 y	48:04	-	1.12
129	Hexa	PCB-157	750.00	1.06e+09	1.24 y	48:21	-	1.06
130	Hexa	PCB-169	750.00	1.01e+09	1.24 y	50:24	-	1.09
131	Hepta	PCB-188	750.00	9.34e+08	1.05 y	42:52	-	1.37
132	Hepta	PCB-184	750.00	8.40e+08	1.05 y	43:19	-	1.23
133	Hepta	PCB-179	750.00	8.75e+08	1.05 y	44:05	-	1.28
134	Hepta	PCB-176	750.00	9.17e+08	1.06 y	44:33	-	1.34
135	Hepta	PCB-186	750.00	8.77e+08	1.05 y	45:10	-	1.29
136	Hepta	PCB-178	750.00	6.27e+08	1.05 y	45:39	-	0.92
137	Hepta	PCB-175	750.00	6.73e+08	1.05 y	45:60	-	0.99
138	Hepta	PCB-182/187	1500.00	1.46e+09	1.05 y	46:10	-	1.07
139	Hepta	PCB-183	750.00	7.62e+08	1.05 y	46:29	-	1.12
140	Hepta	PCB-185	750.00	6.80e+08	1.05 y	47:09	-	1.35
141	Hepta	PCB-174	750.00	7.07e+08	1.04 y	47:31	-	1.40
142	Hepta	PCB-181	750.00	6.72e+08	1.06 y	47:38	-	1.33
143	Hepta	PCB-177	750.00	6.12e+08	1.05 y	47:47	-	1.21
144	Hepta	PCB-171	750.00	6.44e+08	1.05 y	48:05	-	1.28
145	Hepta	PCB-173	750.00	5.59e+08	1.05 y	48:31	-	1.11
146	Hepta	PCB-172	750.00	5.96e+08	1.04 y	48:57	-	1.18
147	Hepta	PCB-192	750.00	7.62e+08	1.05 y	49:09	-	1.51
148	Hepta	PCB-180	750.00	6.75e+08	1.05 y	49:21	-	1.34
149	Hepta	PCB-193	750.00	8.02e+08	1.05 y	49:32	-	1.59
150	Hepta	PCB-191	750.00	8.11e+08	1.05 y	49:46	-	1.61
151	Hepta	PCB-170	750.00	5.79e+08	1.05 y	50:45	-	1.44
152	Hepta	PCB-190	750.00	7.99e+08	1.05 y	50:55	-	1.98
153	Hepta	PCB-189	750.00	8.34e+08	1.05 y	52:11	-	1.54
154	Octa	PCB-202	750.00	6.16e+08	0.91 y	48:17	-	0.99
155	Octa	PCB-201	750.00	6.74e+08	0.90 y	48:46	-	1.09
156	Octa	PCB-204	750.00	6.20e+08	0.90 y	48:55	-	1.00
157	Octa	PCB-197	750.00	6.60e+08	0.90 y	49:13	-	1.06
158	Octa	PCB-200	750.00	6.36e+08	0.90 y	50:03	-	1.02
159	Octa	PCB-198	750.00	4.35e+08	0.90 y	51:19	-	0.70
160	Octa	PCB-199	750.00	4.62e+08	0.92 y	51:25	-	0.74
161	Octa	PCB-196/203	1500.00	9.78e+08	0.91 y	51:41	-	0.79
162	Octa	PCB-195	750.00	6.36e+08	0.92 y	52:48	-	1.19
163	Octa	PCB-194	750.00	6.26e+08	0.92 y	53:40	-	1.17

164	Octa	PCB-205	750.00	7.28e+08	0.91	y	53:57	-	1.36
165	Nona	PCB-208	750.00	6.70e+08	1.33	y	52:57	-	0.91
166	Nona	PCB-207	750.00	6.71e+08	1.33	y	53:15	-	0.91
167	Nona	PCB-206	750.00	4.30e+08	1.34	y	55:19	-	0.98
168	Deca	PCB-209	750.00	4.91e+08	1.19	y	56:35	-	1.16
169	Tot ↴	Total Mono-PCB	0.00	-	-	n	-	-	1.22
170	Tot ↴	Total Di-PCB	0.00	-	-	n	-	-	1.19
171	Tot ↴	Total Tri-PCB	0.00	-	-	n	-	-	1.12

172	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.26
173	Tot Σ	Total Tetra-PCB	0.00	-	- n	-	-	1.15
174	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.21
175	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.24
176	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	0.93
177	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	1.07
178	Tot Σ	Total Hepta-PCB	0.00	-	- n	-	-	1.26
179	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	0.91
180	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	1.24
181	Tot Σ	Total Nona-PCB	0.00	-	- n	-	-	0.93
182	Tot Σ	Total Deca-PCB	750.00	4.91e+08	1.19 y	56:35	-	1.16
183	Mono Σ	13C-PCB-1	100.00	1.50e+08	3.31 y	16:14	-	0.76
184	Mono Σ	13C-PCB-3	100.00	1.70e+08	3.29 y	18:49	-	0.86
185	Di-IS	13C-PCB-4	100.00	1.02e+08	1.58 y	20:08	-	0.52
186	Di-IS	13C-PCB-9	100.00	1.56e+08	1.60 y	21:55	-	0.79
187	Di-IS	13C-PCB-11	100.00	1.80e+08	1.58 y	25:16	-	0.91
188	Tri- Σ	13C-PCB-19	100.00	9.83e+07	1.04 y	24:16	-	0.50
189	Tri- Σ	13C-PCB-32	100.00	1.56e+08	1.07 y	27:10	-	0.79
190	Tri- Σ	13C-PCB-28	100.00	1.66e+08	1.06 y	29:07	-	0.98
191	Tri- Σ	13C-PCB-37	100.00	1.50e+08	1.08 y	32:58	-	0.89
192	Tetr Σ	13C-PCB-54	100.00	1.33e+08	0.80 y	27:59	-	0.77
193	Tetr Σ	13C-PCB-52	100.00	1.13e+08	0.80 y	31:31	-	0.66
194	Tetr Σ	13C-PCB-47	100.00	1.19e+08	0.80 y	32:01	-	0.70
195	Tetr Σ	13C-PCB-70	100.00	1.56e+08	0.81 y	35:31	-	0.91
196	Tetr Σ	13C-PCB-80	100.00	1.58e+08	0.80 y	35:56	-	0.92
197	Tetr Σ	13C-PCB-81	100.00	1.47e+08	0.81 y	39:03	-	0.86
198	Tetr Σ	13C-PCB-77	100.00	1.56e+08	0.81 y	39:38	-	0.91
199	Pent Σ	13C-PCB-104	100.00	9.67e+07	1.59 y	32:40	-	0.90
200	Pent Σ	13C-PCB-95	100.00	7.69e+07	1.59 y	35:49	-	0.72
201	Pent Σ	13C-PCB-101	100.00	8.24e+07	1.61 y	37:30	-	0.77
202	Pent Σ	13C-PCB-97	100.00	7.23e+07	1.63 y	38:48	-	0.67
203	Pent Σ	13C-PCB-123	100.00	1.04e+08	1.60 y	41:22	-	0.97
204	Pent Σ	13C-PCB-118	100.00	1.07e+08	1.61 y	41:33	-	0.99
205	Pent Σ	13C-PCB-114	100.00	1.19e+08	1.61 y	42:12	-	1.15
206	Pent Σ	13C-PCB-105	100.00	1.23e+08	1.59 y	43:04	-	1.19
207	Pent Σ	13C-PCB-127	100.00	1.34e+08	1.58 y	43:23	-	1.30
208	Pent Σ	13C-PCB-126	100.00	1.17e+08	1.57 y	45:18	-	1.14
209	Hexa Σ	13C-PCB-155	100.00	8.39e+07	1.28 y	37:03	-	0.78
210	Hexa Σ	13C-PCB-153	100.00	1.09e+08	1.28 y	43:13	-	1.06
211	Hexa Σ	13C-PCB-141	100.00	1.04e+08	1.29 y	43:57	-	1.01
212	Hexa	13C-PCB-138	100.00	1.04e+08	1.28 y	44:48	-	1.01
213	Hexa Σ	13C-PCB-159	100.00	1.22e+08	1.26 y	46:04	-	1.19
214	Hexa Σ	13C-PCB-167	100.00	1.35e+08	1.27 y	46:45	-	1.31
215	Hexa Σ	13C-PCB-156	100.00	1.28e+08	1.27 y	48:03	-	1.24
216	Hexa Σ	13C-PCB-157	100.00	1.33e+08	1.28 y	48:19	-	1.29
217	Hexa Σ	13C-PCB-169	100.00	1.24e+08	1.28 y	50:23	-	1.20
218	Hept Σ	13C-PCB-188	100.00	9.09e+07	0.46 y	42:51	-	0.88
219	Hept Σ	13C-PCB-180	100.00	6.73e+07	0.47 y	49:20	-	0.65
220	Hept Σ	13C-PCB-170	100.00	5.38e+07	0.46 y	50:44	-	0.52
221	Hept Σ	13C-PCB-189	100.00	7.24e+07	0.47 y	52:11	-	0.70
222	Octa Σ	13C-PCB-202	100.00	8.28e+07	0.92 y	48:16	-	0.80

223	Octa ₇	13C-PCB-194	100.00	7.14e+07	0.92	y	53:39	-	0.79
224	Nona ₇	13C-PCB-208	100.00	9.82e+07	0.76	y	52:56	-	1.09
225	Nona ₇	13C-PCB-206	100.00	5.84e+07	0.80	y	55:19	-	0.65
226	Deca ₇	13C-PCB-209	100.00	5.63e+07	1.21	y	56:35	-	0.62
227	DI-RS	13C-PCB-15	100.00	1.97e+08	1.56	y	25:59	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.69e+08	1.06	y	28:60	-	1.00
229	Tetr ₇	13C-PCB-60	100.00	1.71e+08	0.80	y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	1.07e+08	1.60	y	39:13	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	1.03e+08	1.28	y	46:21	-	1.00
232	Octa ₇	13C-PCB-205	100.00	9.02e+07	0.91	y	53:56	-	1.00

233	CRS	13C-PCB-79	100.00	1.75e+08	0.80	y	37:49	-	1.02
234	CRS	13C-PCB-178	100.00	6.43e+07	0.47	y	45:38	-	0.62
235	PS	13C-PCB-79	100.00	1.75e+08	0.80	y	37:49	-	1.19
236	PS	13C-PCB-178	100.00	6.43e+07	0.47	y	45:38	-	0.96

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST140620E1-4

Instrument ID: VG-8

Initial Calibration Date: 6-20-14

ICal ID: PCBVG8-6-20-14

GC Column ID: ZB-1

VER Data Filename: 140620E1 S#4 Analysis Date: 20-JUN-14 Time: 12:43:46

ANALYTES	ION QC CONC.					ION QC CONC.					
	ABUND.	LIMITS	CONC.	RANGE		ABUND.	LIMITS	CONC.	RANGE		
	RATIO	PASS	FOUND	(ng/mL)	ANALYTES	RATIO	PASS	FOUND	(ng/mL)		
PCB-1	2.96	2.66-3.60	y	52.3	37.5-62.5	PCB-52/69	0.77	0.65-0.89	y	105.4	75.0-125
PCB-2	2.98	2.66-3.60	y	52.3	37.5-62.5	PCB-73	0.77	0.65-0.89	y	52.2	37.5-62.5
PCB-3	2.98	2.66-3.60	y	51.7	37.5-62.5	PCB-43/49	0.77	0.65-0.89	y	101.6	75.0-125
PCB-4/10	1.64	1.33-1.79	y	206.7	150-250	PCB-47	0.76	0.65-0.89	y	53.7	37.5-62.5
PCB-7/9	1.64	1.33-1.79	y	204.6	150-250	PCB-48/75	0.77	0.65-0.89	y	99.8	75.0-125
PCB-6	1.64	1.33-1.79	y	99.9	75.0-125	PCB-65	0.77	0.65-0.89	y	49.4	37.5-62.5
PCB-5/8	1.64	1.33-1.79	y	206.9	150-250	PCB-62	0.77	0.65-0.89	y	53.4	37.5-62.5
PCB-14	1.65	1.33-1.79	y	102.3	75.0-125	PCB-44	0.78	0.65-0.89	y	51.3	37.5-62.5
PCB-11	1.66	1.33-1.79	y	101.6	75.0-125	PCB-42/59	0.77	0.65-0.89	y	103.4	75.0-125
PCB-12/13	1.63	1.33-1.79	y	205.7	150-250	PCB-41/64/71/72	0.78	0.65-0.89	y	205.8	150-250
PCB-15	1.66	1.33-1.79	y	101.1	75.0-125	PCB-68	0.78	0.65-0.89	y	50.9	37.5-62.5
PCB-19	1.05	0.88-1.20	y	49.4	37.5-62.5	PCB-40	0.77	0.65-0.89	y	50.7	37.5-62.5
PCB-30	1.06	0.88-1.20	y	51.2	37.5-62.5	PCB-57	0.77	0.65-0.89	y	51.8	37.5-62.5
PCB-18	1.05	0.88-1.20	y	50.4	37.5-62.5	PCB-67	0.77	0.65-0.89	y	53.3	37.5-62.5
PCB-17	1.05	0.88-1.20	y	51.0	37.5-62.5	PCB-58	0.78	0.65-0.89	y	49.3	37.5-62.5
PCB-24/27	1.06	0.88-1.20	y	103.5	75.0-125	PCB-63	0.76	0.65-0.89	y	51.7	37.5-62.5
PCB-16/32	1.05	0.88-1.20	y	100.5	75.0-125	PCB-74	0.77	0.65-0.89	y	51.8	37.5-62.5
PCB-34	1.08	0.88-1.20	y	57.4	37.5-62.5	PCB-61/70	0.78	0.65-0.89	y	101.8	75.0-125
PCB-23	1.11	0.88-1.20	y	46.4	37.5-62.5	PCB-76/66	0.77	0.65-0.89	y	103.1	75.0-125
PCB-29	1.09	0.88-1.20	y	51.1	37.5-62.5	PCB-80	0.78	0.65-0.89	y	50.2	37.5-62.5
PCB-26	1.08	0.88-1.20	y	50.7	37.5-62.5	PCB-55	0.77	0.65-0.89	y	51.5	37.5-62.5
PCB-25	1.09	0.88-1.20	y	51.5	37.5-62.5	PCB-56/60	0.77	0.65-0.89	y	100.3	75.0-125
PCB-31	1.08	0.88-1.20	y	49.7	37.5-62.5	PCB-79	0.78	0.65-0.89	y	51.2	37.5-62.5
PCB-28	1.11	0.88-1.20	y	52.5	37.5-62.5	PCB-78	0.78	0.65-0.89	y	51.1	37.5-62.5
PCB-20/21/33	1.09	0.88-1.20	y	152.7	112.5-225	PCB-81	0.78	0.65-0.89	y	50.9	37.5-62.5
PCB-22	1.08	0.88-1.20	y	52.6	37.5-62.5	PCB-77	0.79	0.65-0.89	y	52.0	37.5-62.5
PCB-36	1.09	0.88-1.20	y	52.3	37.5-62.5	PCB-104	1.61	1.32-1.78	y	50.4	37.5-62.5
PCB-39	1.08	0.88-1.20	y	51.7	37.5-62.5	PCB-96	1.59	1.32-1.78	y	50.5	37.5-62.5
PCB-38	1.10	0.88-1.20	y	52.4	37.5-62.5	PCB-103	1.58	1.32-1.78	y	50.8	37.5-62.5
PCB-35	1.11	0.88-1.20	y	52.7	37.5-62.5	PCB-100	1.61	1.32-1.78	y	50.5	37.5-62.5
PCB-37	1.09	0.88-1.20	y	51.2	37.5-62.5	PCB-94	1.58	1.32-1.78	y	50.8	37.5-62.5
PCB-54	0.76	0.65-0.89	y	51.7	37.5-62.5	PCB-95/98/102	1.60	1.32-1.78	y	160.1	112.5-225
PCB-50	0.77	0.65-0.89	y	51.4	37.5-62.5	PCB-93	1.63	1.32-1.78	y	42.1	37.5-62.5
PCB-53	0.78	0.65-0.89	y	50.2	37.5-62.5	PCB-88/91	1.59	1.32-1.78	y	114.0	75.0-125
PCB-51	0.78	0.65-0.89	y	53.2	37.5-62.5	PCB-121	1.59	1.32-1.78	y	43.7	37.5-62.5
PCB-45	0.78	0.65-0.89	y	52.8	37.5-62.5						
PCB-46	0.76	0.65-0.89	y	50.1	37.5-62.5						

Analyst: DmzDate: 6/23/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST140620E1-4

Instrument ID: VG-8

Initial Calibration Date: 6-20-14

ICal ID: PCBVG8-6-20-14

GC Column ID: ZB-1

VER Data Filename: 140620E1 S#4 Analysis Date: 20-JUN-14 Time: 12:43:46

ANALYTES	ION	QC	CONC.		ANALYTES	ION	QC	CONC.			
	ABUND.	LIMITS	CONC.	RANGE		ABUND.	LIMITS	CONC.	RANGE		
	RATIO		PASS	FOUND (ng/mL)		RATIO		PASS	FOUND (ng/mL)		
PCB-84/92	1.59	1.32-1.78	y	103.4	75.0-125	PCB-140	1.28	1.05-1.43	y	54.6	37.5-62.5
PCB-89	1.61	1.32-1.78	y	53.1	37.5-62.5	PCB-134/143	1.24	1.05-1.43	y	102.9	75.0-125
PCB-90/101	1.60	1.32-1.78	y	102.1	75.0-125	PCB-133/142	1.23	1.05-1.43	y	102.0	75.0-125
PCB-113	1.58	1.32-1.78	y	56.1	37.5-62.5	PCB-131	1.22	1.05-1.43	y	49.4	37.5-62.5
PCB-99	1.64	1.32-1.78	y	46.1	37.5-62.5	PCB-146/165	1.24	1.05-1.43	y	100.9	75.0-125
PCB-119	1.61	1.32-1.78	y	50.3	37.5-62.5	PCB-132/161	1.22	1.05-1.43	y	102.0	75.0-125
PCB-108/112	1.63	1.32-1.78	y	103.0	75.0-125	PCB-153	1.22	1.05-1.43	y	50.2	37.5-62.5
PCB-83	1.62	1.32-1.78	y	52.1	37.5-62.5	PCB-168	1.21	1.05-1.43	y	50.2	37.5-62.5
PCB-97	1.60	1.32-1.78	y	52.6	37.5-62.5	PCB-141	1.21	1.05-1.43	y	50.4	37.5-62.5
PCB-86	1.58	1.32-1.78	y	48.0	37.5-62.5	PCB-137	1.24	1.05-1.43	y	48.3	37.5-62.5
PCB-87/117/125	1.60	1.32-1.78	y	154.2	112.5-225	PCB-130	1.26	1.05-1.43	y	54.3	37.5-62.5
PCB-111/115	1.68	1.32-1.78	y	102.0	75.0-125	PCB-138/163/164	1.23	1.05-1.43	y	154.4	112.5-225
PCB-85/116	1.48	1.32-1.78	y	101.9	75.0-125	PCB-158/160	1.23	1.05-1.43	y	104.2	75.0-125
PCB-120	1.57	1.32-1.78	y	49.2	37.5-62.5	PCB-129	1.25	1.05-1.43	y	50.6	37.5-62.5
PCB-110	1.61	1.32-1.78	y	51.1	37.5-62.5	PCB-166	1.22	1.05-1.43	y	51.1	37.5-62.5
PCB-82	1.59	1.32-1.78	y	49.3	37.5-62.5	PCB-159	1.23	1.05-1.43	y	52.7	37.5-62.5
PCB-124	1.60	1.32-1.78	y	49.9	37.5-62.5	PCB-128/162	1.22	1.05-1.43	y	104.6	75.0-125
PCB-107/109	1.59	1.32-1.78	y	101.7	75.0-125	PCB-167	1.21	1.05-1.43	y	51.6	37.5-62.5
PCB-123	1.59	1.32-1.78	y	52.4	37.5-62.5	PCB-156	1.22	1.05-1.43	y	49.4	37.5-62.5
PCB-106/118	1.62	1.32-1.78	y	104.7	75.0-125	PCB-157	1.22	1.05-1.43	y	51.2	37.5-62.5
PCB-114	1.64	1.32-1.78	y	50.7	37.5-62.5	PCB-169	1.22	1.05-1.43	y	49.9	37.5-62.5
PCB-122	1.64	1.32-1.78	y	51.0	37.5-62.5	PCB-188	1.02	0.89-1.21	y	50.8	37.5-62.5
PCB-105	1.62	1.32-1.78	y	51.4	37.5-62.5	PCB-184	1.04	0.89-1.21	y	51.3	37.5-62.5
PCB-127	1.64	1.32-1.78	y	51.1	37.5-62.5	PCB-179	1.04	0.89-1.21	y	50.2	37.5-62.5
PCB-126	1.62	1.32-1.78	y	51.1	37.5-62.5	PCB-176	1.04	0.89-1.21	y	50.5	37.5-62.5
PCB-155	1.27	1.05-1.43	y	52.7	37.5-62.5	PCB-186	1.04	0.89-1.21	y	51.2	37.5-62.5
PCB-150	1.28	1.05-1.43	y	51.9	37.5-62.5	PCB-178	1.04	0.89-1.21	y	50.8	37.5-62.5
PCB-152	1.27	1.05-1.43	y	51.1	37.5-62.5	PCB-175	1.04	0.89-1.21	y	52.7	37.5-62.5
PCB-145	1.26	1.05-1.43	y	50.6	37.5-62.5	PCB-182/187	1.04	0.89-1.21	y	104.2	75.0-125
PCB-136	1.27	1.05-1.43	y	52.1	37.5-62.5	PCB-183	1.04	0.89-1.21	y	50.9	37.5-62.5
PCB-148	1.30	1.05-1.43	y	51.3	37.5-62.5	PCB-185	1.04	0.89-1.21	y	50.3	37.5-62.5
PCB-154	1.25	1.05-1.43	y	52.4	37.5-62.5	PCB-174	1.03	0.89-1.21	y	49.1	37.5-62.5
PCB-151	1.30	1.05-1.43	y	52.9	37.5-62.5	PCB-181	1.06	0.89-1.21	y	52.4	37.5-62.5
PCB-135	1.28	1.05-1.43	y	51.8	37.5-62.5	PCB-177	1.05	0.89-1.21	y	51.2	37.5-62.5
PCB-144	1.36	1.05-1.43	y	55.0	37.5-62.5	PCB-171	1.04	0.89-1.21	y	49.7	37.5-62.5
PCB-147	1.18	1.05-1.43	y	52.9	37.5-62.5	PCB-173	1.05	0.89-1.21	y	49.7	37.5-62.5
PCB-139/149	1.27	1.05-1.43	y	107.6	75.0-125	PCB-172	1.02	0.89-1.21	y	49.8	37.5-62.5

Analyst: DMSDate: 6/23/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory Lab ID: ST140620E1-4 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICAL ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 140620E1 S#4 Analysis Date: 20-JUN-14 Time: 12:43:46

ANALYTES	ION	QC	CONC.		(ng/mL)
	ABUND.	LIMITS	CONC	RANGE	
	RATIO	PASS	FOUND		
PCB-192	1.05	0.89-1.21	Y	50.5	37.5-62.5
PCB-180	1.04	0.89-1.21	Y	49.1	37.5-62.5
PCB-193	1.05	0.89-1.21	Y	50.4	37.5-62.5
PCB-191	1.06	0.89-1.21	Y	50.0	37.5-62.5
PCB-170	1.03	0.89-1.21	Y	49.6	37.5-62.5
PCB-190	1.02	0.89-1.21	Y	50.5	37.5-62.5
PCB-189	1.04	0.89-1.21	Y	51.7	37.5-62.5
PCB-202	0.91	0.76-1.02	Y	50.0	37.5-62.5
PCB-201	0.93	0.76-1.02	Y	50.4	37.5-62.5
PCB-204	0.88	0.76-1.02	Y	52.0	37.5-62.5
PCB-197	0.91	0.76-1.02	Y	52.0	37.5-62.5
PCB-200	0.91	0.76-1.02	Y	52.4	37.5-62.5
PCB-198	0.90	0.76-1.02	Y	51.5	37.5-62.5
PCB-199	0.89	0.76-1.02	Y	52.5	37.5-62.5
PCB-196/203	0.90	0.76-1.02	Y	104.9	75.0-125
PCB-195	0.90	0.76-1.02	Y	51.9	37.5-62.5
PCB-194	0.90	0.76-1.02	Y	49.9	37.5-62.5
PCB-205	0.91	0.76-1.02	Y	49.6	37.5-62.5
PCB-208	1.33	1.14-1.54	Y	49.5	37.5-62.5
PCB-207	1.32	1.14-1.54	Y	50.8	37.5-62.5
PCB-206	1.33	1.14-1.54	Y	49.7	37.5-62.5
PCB-209	1.19	0.99-1.33	Y	52.5	37.5-62.5

Analyst: DMSDate: 6/23/14

Client ID: PCB CS3 14F1901
 Lab ID: ST140620E1-4

Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46 ConCal: ST140620E1-4
 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: ST140620E1-8

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	7.79e+07	2.96	y	1.25	16:15	1.001	0.996-1.006	52.3077	PCB-52/69	1.04e+08	0.77	y	1.28	31:33	1.001	0.996-1.006	105.426
PCB-2	7.75e+07	2.98	y	1.18	18:36	0.988	0.983-0.993	52.2846	PCB-73	5.51e+07	0.77	y	1.37	31:39	1.005	1.000-1.010	52.1810
PCB-3	7.90e+07	2.98	y	1.22	18:50	1.001	0.996-1.006	51.6788	PCB-43/49	8.70e+07	0.77	y	1.11	31:50	1.010	1.005-1.015	101.562
PCB-4/10	2.37e+08	1.64	y	1.55	20:12	1.003	0.998-1.008	206.748	PCB-47	4.93e+07	0.76	y	1.13	32:02	1.000	0.996-1.006	53.6979
PCB-7/9	2.89e+08	1.64	y	1.27	21:57	0.869	0.865-0.873	204.628	PCB-48/75	1.06e+08	0.77	y	1.30	32:09	1.004	0.999-1.009	99.7567
PCB-6	1.40e+08	1.64	y	1.26	22:36	0.894	0.890-0.899	99.9095	PCB-65	5.34e+07	0.77	y	1.33	32:25	1.012	1.007-1.017	49.3948
PCB-5/8	2.84e+08	1.64	y	1.23	23:01	0.911	0.906-0.916	206.862	PCB-62	5.60e+07	0.77	y	1.29	32:32	1.016	1.011-1.021	53.4188
PCB-14	1.57e+08	1.65	y	1.23	24:06	0.954	0.949-0.959	102.294	PCB-44	3.91e+07	0.78	y	0.94	32:50	1.025	1.020-1.030	51.2578
PCB-11	1.47e+08	1.66	y	1.16	25:17	1.000	0.996-1.006	101.627	PCB-42/59	1.02e+08	0.77	y	1.22	33:02	1.032	1.028-1.038	103.394
PCB-12/13	2.82e+08	1.63	y	1.10	25:41	1.016	1.010-1.020	205.694	PCB-41/64/71/72	2.19e+08	0.78	y	1.31	33:38	1.050	1.046-1.056	205.816
PCB-15	1.52e+08	1.66	y	1.21	26:00	1.029	1.024-1.034	101.148	PCB-68	6.14e+07	0.78	y	1.49	33:54	1.059	1.054-1.064	50.9457
PCB-19	4.60e+07	1.05	y	1.30	24:17	1.001	0.996-1.006	49.3886	PCB-40	3.37e+07	0.77	y	0.82	34:06	1.065	1.061-1.071	50.7163
PCB-30	6.73e+07	1.06	y	1.83	25:10	1.037	1.032-1.042	51.1589	PCB-57	5.90e+07	0.77	y	1.11	34:28	0.970	0.965-0.975	51.7966
PCB-18	4.72e+07	1.05	y	0.86	25:55	0.954	0.949-0.959	50.4475	PCB-67	5.86e+07	0.77	y	1.07	34:46	0.979	0.974-0.984	53.3170
PCB-17	5.00e+07	1.05	y	0.90	26:05	0.960	0.955-0.965	50.9703	PCB-58	5.56e+07	0.78	y	1.10	34:53	0.982	0.977-0.987	49.2975
PCB-24/27	1.33e+08	1.06	y	1.18	26:40	0.981	0.976-0.986	103.472	PCB-63	5.91e+07	0.76	y	1.12	35:03	0.987	0.982-0.992	51.7181
PCB-16/32	1.13e+08	1.05	y	1.03	27:10	1.000	0.995-1.005	100.505	PCB-74	6.38e+07	0.77	y	1.20	35:20	0.995	0.990-1.000	51.8367
PCB-34	7.74e+07	1.08	y	1.26	27:58	0.961	0.956-0.966	57.3995	PCB-61/70	1.12e+08	0.78	y	1.08	35:30	0.999	0.994-1.004	101.842
PCB-23	6.51e+07	1.11	y	1.31	28:04	0.964	0.959-0.969	46.4036	PCB-76/66	1.20e+08	0.77	y	1.14	35:43	1.005	1.001-1.011	103.088
PCB-29	7.26e+07	1.09	y	1.33	28:18	0.972	0.967-0.977	51.0903	PCB-80	6.74e+07	0.78	y	1.28	35:56	1.000	0.996-1.006	50.2410
PCB-26	7.01e+07	1.08	y	1.29	28:30	0.979	0.974-0.984	50.7150	PCB-55	6.01e+07	0.77	y	1.11	36:17	1.010	1.005-1.015	51.5207
PCB-25	7.40e+07	1.09	y	1.34	28:40	0.985	0.980-0.990	51.5314	PCB-56/60	1.15e+08	0.77	y	1.09	36:46	1.023	1.018-1.028	100.313
PCB-31	7.55e+07	1.08	y	1.42	29:02	0.997	0.992-1.002	49.7377	PCB-79	6.04e+07	0.78	y	1.12	37:50	1.053	1.048-1.058	51.1728
PCB-28	7.73e+07	1.11	y	1.38	29:07	1.000	0.996-1.006	52.4521	PCB-78	5.76e+07	0.78	y	1.24	38:32	0.987	0.982-0.992	51.0794
PCB-20/21/33	2.14e+08	1.09	y	1.31	29:45	1.022	1.017-1.027	152.731	PCB-81	6.41e+07	0.78	y	1.38	39:03	1.000	0.995-1.005	50.9258
PCB-22	7.44e+07	1.08	y	1.32	30:11	1.037	1.032-1.042	52.6344	PCB-77	6.12e+07	0.79	y	1.21	39:39	1.000	0.995-1.005	51.9669
PCB-36	7.16e+07	1.09	y	1.38	30:47	0.933	0.929-0.939	52.3141	PCB-104	4.41e+07	1.61	y	1.26	32:41	1.000	0.996-1.006	50.3835
PCB-39	7.29e+07	1.08	y	1.42	31:16	0.948	0.943-0.953	51.6606	PCB-96	3.84e+07	1.59	y	1.09	33:57	1.039	1.034-1.044	50.4976
PCB-38	7.06e+07	1.10	y	1.35	32:02	0.971	0.967-0.976	52.4183	PCB-103	3.30e+07	1.58	y	0.93	34:29	1.055	1.050-1.060	50.7622
PCB-35	7.21e+07	1.11	y	1.38	32:33	0.987	0.982-0.992	52.6668	PCB-100	3.52e+07	1.61	y	1.00	34:49	1.066	1.061-1.071	50.4670
PCB-37	7.08e+07	1.09	y	1.39	32:59	1.000	0.996-1.006	51.1869	PCB-94	2.91e+07	1.58	y	1.11	35:18	0.985	0.981-0.991	50.7908
PCB-54	5.75e+07	0.76	y	1.20	28:01	1.001	0.996-1.006	51.7229	PCB-95/98/102	1.01e+08	1.60	y	1.21	35:47	0.999	0.994-1.004	160.143
PCB-50	4.61e+07	0.77	y	0.97	29:11	1.042	1.037-1.047	51.4094	PCB-93	2.46e+07	1.63	y	1.13	35:56	1.003	0.998-1.008	42.0683
PCB-53	4.59e+07	0.78	y	1.19	29:49	0.946	0.941-0.951	50.2276	PCB-88/91	6.02e+07	1.59	y	1.02	36:12	1.010	1.006-1.016	114.032
PCB-51	4.72e+07	0.78	y	1.15	30:10	0.957	0.952-0.962	53.1558	PCB-121	4.31e+07	1.59	y	1.90	36:19	1.014	1.009-1.019	43.6820
PCB-45	3.92e+07	0.78	y	0.97	30:35	0.971	0.966-0.976	52.7585	PCB-84/92	5.90e+07	1.59	y	1.05	37:08	0.990	0.986-0.996	103.399
PCB-46	3.67e+07	0.76	y	0.95	31:04	0.986	0.982-0.992	50.0611	PCB-89	2.93e+07	1.61	y	1.02	37:19	0.995	0.991-1.001	53.0820

Integrations
by

Reviewed
by
Analyst: DMS
Date: 6/23/14

Analyst:

Date:

Client ID: PCB CS3 14F1901
Lab ID: ST140620E1-4

Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46 ConCal: ST140620E1-4
GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: ST140620E1-8

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-90/101	6.59e+07	1.60	y	1.19	37:31	1.001	0.996-1.006	102.056
PCB-113	4.11e+07	1.58	y	1.35	37:45	1.007	1.002-1.012	56.0520
PCB-99	3.22e+07	1.64	y	1.29	37:51	1.010	1.005-1.015	46.1415
PCB-119	4.21e+07	1.61	y	1.72	38:18	0.987	0.982-0.992	50.2990
PCB-108/112	6.45e+07	1.63	y	1.29	38:27	0.991	0.986-0.996	102.978
PCB-83	3.85e+07	1.62	y	1.52	38:38	0.996	0.991-1.001	52.0737
PCB-97	3.19e+07	1.60	y	1.25	38:49	1.000	0.996-1.006	52.5654
PCB-86	2.39e+07	1.58	y	1.02	38:58	1.004	1.000-1.010	48.0340
B-87/117/125	1.17e+08	1.60	y	1.56	39:05	1.007	1.002-1.012	154.194
PCB-111/115	8.69e+07	1.68	y	1.75	39:15	1.012	1.007-1.017	101.981
PCB-85/116	6.45e+07	1.48	y	1.30	39:23	1.015	1.010-1.020	101.910
PCB-120	4.26e+07	1.57	y	1.78	39:37	1.021	1.016-1.026	49.1740
PCB-110	4.18e+07	1.61	y	1.68	39:46	1.025	1.020-1.030	51.1450
PCB-82	2.58e+07	1.59	y	0.74	40:23	0.976	0.972-0.982	49.2945
PCB-124	4.68e+07	1.60	y	1.32	41:03	0.993	0.988-0.998	49.9220
PCB-107/109	8.79e+07	1.59	y	1.22	41:12	0.996	0.991-1.001	101.669
PCB-123	4.52e+07	1.59	y	1.22	41:22	1.000	0.995-1.005	52.4448
- PCB-106/118	9.37e+07	1.62	y	1.22	41:35	1.001	0.996-1.006	104.679
- PCB-114	5.41e+07	1.64	y	1.36	42:13	1.000	0.995-1.005	50.6622
PCB-122	4.97e+07	1.64	y	1.24	42:21	1.004	0.999-1.009	50.9693
PCB-105	5.28e+07	1.62	y	1.28	43:05	1.001	0.995-1.005	51.3611
PCB-127	5.04e+07	1.64	y	1.14	43:24	1.000	0.995-1.005	51.1125
PCB-126	4.91e+07	1.62	y	1.28	45:19	1.001	0.995-1.005	51.0683
PCB-155	3.50e+07	1.27	y	1.14	37:04	1.001	0.966-1.006	52.6727
PCB-150	3.23e+07	1.28	y	1.06	38:20	1.035	1.030-1.040	51.8920
PCB-152	3.28e+07	1.27	y	1.10	38:49	1.048	1.043-1.053	51.0615
PCB-145	3.24e+07	1.26	y	1.09	39:15	1.060	1.055-1.065	50.6281
PCB-136	3.31e+07	1.27	y	1.08	39:35	1.069	1.064-1.074	52.0720
PCB-148	2.22e+07	1.30	y	0.74	39:40	1.071	1.066-1.076	51.2670
PCB-154	2.71e+07	1.25	y	0.88	40:10	1.084	1.079-1.089	52.4052
PCB-151	2.51e+07	1.30	y	0.81	40:48	1.102	1.097-1.107	52.9183
PCB-135	2.36e+07	1.28	y	0.78	41:01	1.107	1.101-1.113	51.8361
PCB-144	2.64e+07	1.36	y	0.82	41:08	1.110	1.105-1.116	54.9912
PCB-147	2.56e+07	1.18	y	0.83	41:16	1.114	1.011-1.120	52.8823
PCB-139/149	5.32e+07	1.27	y	0.84	41:31	1.121	1.115-1.127	107.613
- PCB-140	2.51e+07	1.28	y	0.79	41:43	1.126	1.120-1.132	54.6052
- PCB-134/143	7.01e+07	1.24	y	0.93	42:08	0.975	0.970-0.980	102.949

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	7.08e+07	1.23	y	0.95	42:26	0.982	0.977-0.987	102.037
PCB-131	3.32e+07	1.22	y	0.91	42:36	0.986	0.981-0.991	49.4221
PCB-146/165	8.56e+07	1.24	y	1.16	42:48	0.991	0.986-0.996	100.884
PCB-132/161	8.34e+07	1.22	y	1.11	43:03	0.996	0.992-1.002	102.031
PCB-153	4.34e+07	1.22	y	1.18	43:14	1.001	0.995-1.005	50.1872
PCB-168	5.04e+07	1.21	y	1.37	43:27	1.006	1.000-1.010	50.1556
PCB-141	3.48e+07	1.21	y	0.97	43:58	1.001	0.996-1.005	50.4291
PCB-137	3.66e+07	1.24	y	1.07	44:21	1.009	1.004-1.014	48.2814
PCB-130	3.25e+07	1.26	y	0.85	44:27	1.012	1.007-1.017	54.2556
PCB-138/163/164	1.29e+08	1.23	y	1.23	44:50	1.001	0.996-1.006	154.435
PCB-158/160	9.17e+07	1.23	y	1.29	45:05	1.007	1.001-1.011	104.238
PCB-129	3.19e+07	1.25	y	0.92	45:19	1.012	1.007-1.017	50.5660
PCB-166	4.45e+07	1.22	y	1.12	45:46	0.993	0.988-0.998	51.1070
PCB-159	4.79e+07	1.23	y	1.16	46:05	1.000	0.995-1.005	52.6640
PCB-128/162	8.32e+07	1.22	y	1.02	46:22	1.006	1.002-1.012	104.591
PCB-167	4.69e+07	1.21	y	1.06	46:47	1.001	0.995-1.005	51.5594
PCB-156	4.73e+07	1.22	y	1.18	48:04	1.000	0.995-1.005	49.4312
PCB-157	4.74e+07	1.22	y	1.08	48:20	1.000	0.995-1.005	51.2216
PCB-169	4.38e+07	1.22	y	1.11	50:24	1.000	0.995-1.005	49.8867
PCB-188	4.41e+07	1.02	y	1.40	42:52	1.000	0.995-1.005	50.7803
PCB-184	3.92e+07	1.04	y	1.24	43:18	1.011	1.006-1.016	51.2869
PCB-179	4.05e+07	1.04	y	1.30	44:06	1.029	1.024-1.034	50.2126
PCB-176	4.26e+07	1.04	y	1.36	44:34	1.040	1.035-1.045	50.5434
PCB-186	4.04e+07	1.04	y	1.28	45:10	1.054	1.049-1.059	51.1676
PCB-178	2.94e+07	1.04	y	0.94	45:39	1.066	1.061-1.071	50.8281
PCB-175	3.16e+07	1.04	y	0.97	46:00	1.074	1.069-1.079	52.7165
PCB-182/187	6.54e+07	1.04	y	1.01	46:11	1.078	1.073-1.083	104.234
PCB-183	3.41e+07	1.04	y	1.08	46:29	1.085	1.080-1.090	50.9232
PCB-185	3.03e+07	1.04	y	1.34	47:09	0.956	0.951-0.961	50.2993
PCB-174	2.95e+07	1.03	y	1.34	47:31	0.963	0.958-0.968	49.0649
PCB-181	3.20e+07	1.06	y	1.36	47:37	0.966	0.961-0.971	52.3684
PCB-177	2.85e+07	1.05	y	1.24	47:48	0.969	0.964-0.974	51.2147
PCB-171	2.93e+07	1.04	y	1.31	48:05	0.975	0.970-0.980	49.7433
PCB-173	2.59e+07	1.05	y	1.16	48:31	0.984	0.979-0.989	49.7232
PCB-172	2.73e+07	1.02	y	1.22	48:57	0.993	0.988-0.998	49.7746
PCB-192	3.46e+07	1.05	y	1.53	49:09	0.996	0.991-1.001	50.4921
PCB-180	3.15e+07	1.04	y	1.43	49:20	1.000	0.995-1.005	49.0865

Integrations
by
RL: MONO, TRI - DECA: _____ Analyst: DMS
Date: 6/23/14

Client ID: PCB CS3 14F1901
Lab ID: ST140620E1-4

Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46
GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 ConCal: ST140620E1-4
EndCAL: ST140620E1-8

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-193	3.74e+07	1.05	y	1.65	49:32	1.004	0.999-1.009	50.3769
PCB-191	3.75e+07	1.06	y	1.67	49:47	1.009	1.004-1.014	49.9945
PCB-170	2.66e+07	1.03	y	1.50	50:46	1.000	0.995-1.005	49.6074
PCB-190	3.64e+07	1.02	y	2.02	50:55	1.003	0.998-1.008	50.4804
PCB-189	3.90e+07	1.04	y	1.54	52:12	1.000	0.995-1.005	51.6684
PCB-202	2.92e+07	0.91	y	1.04	48:17	1.000	0.995-1.005	49.9695
PCB-201	3.12e+07	0.93	y	1.10	48:46	1.011	1.006-1.016	50.3688
PCB-204	2.91e+07	0.88	y	0.99	48:56	1.014	1.009-1.019	52.0459
PCB-197	3.14e+07	0.91	y	1.07	49:13	1.020	1.015-1.025	51.9828
PCB-200	3.00e+07	0.91	y	1.02	50:03	1.037	1.032-1.044	52.4432
PCB-198	2.15e+07	0.90	y	0.74	51:20	1.063	1.058-1.068	51.5297
PCB-199	2.15e+07	0.89	y	0.73	51:25	1.065	1.060-1.070	52.5143
- PCB-196/203	4.56e+07	0.90	y	0.77	51:41	1.071	1.066-1.076	104.918
- PCB-195	2.91e+07	0.90	y	1.20	52:49	0.984	0.979-0.989	51.8965
PCB-194	2.91e+07	0.90	y	1.25	53:41	1.000	0.995-1.005	49.8808
PCB-205	3.28e+07	0.91	y	1.41	53:58	1.006	1.001-1.011	49.5944
PCB-208	3.18e+07	1.33	y	0.96	52:57	1.000	0.995-1.005	49.4830
PCB-207	3.10e+07	1.32	y	0.92	53:16	1.006	1.001-1.011	50.7809
PCB-206	2.07e+07	1.33	y	1.03	55:21	1.000	0.995-1.005	49.7349
PCB-209	2.28e+07	1.19	y	1.18	56:38	1.000	0.995-1.005	52.4674

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	2.34e+08	2.96	y	16:15	1.22
Total Di-PCB	1.69e+09	1.64	y	20:12	1.21
Total Tri-PCB	4.56e+08	1.05	y	24:17	1.16
Total Tri-PCB	1.17e+09	1.08	y	27:58	1.35
Total Tetra-PCB	2.26e+09	0.76	y	28:01	1.17
Total Penta-PCB	1.49e+09	1.61	y	32:41	1.21
Total Penta-PCB	2.69e+08	1.64	y	42:13	1.26
Total Hexa-PCB	3.94e+08	1.27	y	37:04	0.92
Total Hexa-PCB	1.17e+09	1.24	y	42:08	1.08
Total Hepta-PCB	8.19e+08	1.02	y	42:52	1.27
Total Octa-PCB	2.40e+08	0.91	y	48:17	0.92
Total Octa-PCB	9.28e+07	0.90	y	52:49	1.29
Total Nona-PCB	8.35e+07	1.33	y	52:57	0.96
Total Deca-PCB	2.28e+07	1.19	y	56:38	1.18
Total PCB Conc:11327.5526340					

Integrations
by _____
Analyst: DMS
Date: 6/23/14

RL: MONO, TRI - DECA: _____

Client ID: PCB CS3 14F1901
 Lab ID: ST140620E1-4

Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46
 GC Column ID: ZB-1 ICAL: PCBVG8-6-20-14 wt/vol: 1.000 ConCal: ST140620E1-4
 EndCAL: ST140620E1-8

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS		Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.19e+08	3.24	y	0.89	16:14	0.625	0.622-0.628	98.9	98.9			13C-PCB-79	1.21e+08	0.80	y	1.01	37:49	1.028	1.023-1.033	109	109
13C-PCB-3	1.25e+08	3.32	y	0.93	18:49	0.725	0.721-0.729	100	100			13C-PCB-178	4.58e+07	0.46	y	0.63	45:38	0.984	0.979-0.989	109	109
13C-PCB-4	7.38e+07	1.60	y	0.55	20:09	0.776	0.772-0.780	99.9	99.9			13C-PCB-19	7.19e+07	1.04	y	0.53	24:16	0.934	0.929-0.939	100	100
13C-PCB-9	1.11e+08	1.59	y	0.83	21:55	0.844	0.840-0.848	100.0	100.0			13C-PCB-28	1.07e+08	1.05	y	0.89	29:07	1.004	0.999-1.009	96.1	96.1
13C-PCB-11	1.25e+08	1.58	y	0.94	25:16	0.973	0.968-0.978	98.6	98.6	PS vs. IS		13C-PCB-32	1.09e+08	1.07	y	0.81	27:10	1.046	1.041-1.051	99.3	99.3
13C-PCB-19	7.19e+07	1.04	y	0.53	24:16	0.934	0.929-0.939	100	100			13C-PCB-37	9.94e+07	1.06	y	0.83	32:59	1.137	1.131-1.143	95.3	95.3
13C-PCB-28	1.07e+08	1.05	y	0.89	29:07	1.004	0.999-1.009	96.1	96.1			13C-PCB-47	8.11e+07	0.81	y	0.74	32:01	0.871	0.867-0.875	98.7	98.7
13C-PCB-32	1.09e+08	1.07	y	0.81	27:10	1.046	1.041-1.051	99.3	99.3			13C-PCB-52	7.70e+07	0.79	y	0.71	31:30	0.857	0.853-0.861	98.5	98.5
13C-PCB-37	9.94e+07	1.06	y	0.83	32:59	1.137	1.131-1.143	95.3	95.3			13C-PCB-54	9.29e+07	0.81	y	0.85	28:00	0.762	0.758-0.766	99.0	99.0
13C-PCB-47	8.11e+07	0.81	y	0.74	32:01	0.871	0.867-0.875	98.7	98.7			13C-PCB-70	1.02e+08	0.79	y	0.94	35:31	0.966	0.961-0.971	98.1	98.1
13C-PCB-52	7.70e+07	0.79	y	0.71	31:30	0.857	0.853-0.861	98.5	98.5			13C-PCB-77	9.74e+07	0.81	y	0.89	39:38	1.078	1.073-1.083	98.7	98.7
13C-PCB-54	9.29e+07	0.81	y	0.85	28:00	0.762	0.758-0.766	99.0	99.0			13C-PCB-80	1.05e+08	0.80	y	0.96	35:56	0.977	0.972-0.982	99.0	99.0
13C-PCB-70	1.02e+08	0.79	y	0.94	35:31	0.966	0.961-0.971	98.1	98.1			13C-PCB-80	1.05e+08	0.80	y	0.84	39:03	1.062	1.057-1.067	98.4	98.4
13C-PCB-77	9.74e+07	0.81	y	0.89	39:38	1.078	1.073-1.083	98.7	98.7			13C-PCB-81	9.10e+07	0.80	y	0.84	39:03	1.062	1.057-1.067	98.4	98.4
13C-PCB-80	1.05e+08	0.80	y	0.84	39:03	1.062	1.057-1.067	98.4	98.4	RS		13C-PCB-95	5.18e+07	1.63	y	0.74	35:49	0.913	0.908-0.918	98.4	98.4
13C-PCB-81	9.10e+07	0.80	y	0.84	39:03	1.062	1.057-1.067	98.4	98.4			13C-PCB-97	4.86e+07	1.60	y	0.69	38:48	0.989	0.984-0.994	99.7	99.7
13C-PCB-95	5.18e+07	1.63	y	0.74	35:49	0.913	0.908-0.918	98.4	98.4			13C-PCB-97	4.86e+07	1.60	y	0.69	38:48	0.989	0.984-0.994	99.7	99.7
13C-PCB-101	5.42e+07	1.60	y	0.79	37:30	0.956	0.951-0.961	97.6	97.6	Name		13C-PCB-104	6.97e+07	1.58	y	1.00	32:40	0.833	0.829-0.837	99.0	99.0
13C-PCB-104	6.97e+07	1.58	y	1.00	32:40	0.833	0.829-0.837	99.0	99.0	Name		13C-PCB-105	8.01e+07	1.61	y	1.24	43:03	0.929	0.924-0.934	96.7	96.7
13C-PCB-105	8.01e+07	1.61	y	1.24	43:03	0.929	0.924-0.934	96.7	96.7	Name		13C-PCB-114	7.88e+07	1.61	y	1.21	42:12	0.910	0.905-0.915	97.6	97.6
13C-PCB-114	7.88e+07	1.61	y	1.21	42:12	0.910	0.905-0.915	97.6	97.6	Name		13C-PCB-118	7.31e+07	1.59	y	0.98	41:32	1.059	1.054-1.064	105	105
13C-PCB-118	7.31e+07	1.59	y	0.98	41:32	1.059	1.054-1.064	105	105	Name		13C-PCB-123	7.08e+07	1.58	y	0.95	41:21	1.054	1.049-1.059	105	105
13C-PCB-123	7.08e+07	1.58	y	0.95	41:21	1.054	1.049-1.059	105	105	Name		13C-PCB-126	7.48e+07	1.61	y	1.16	45:18	0.977	0.972-0.982	96.2	96.2
13C-PCB-126	7.48e+07	1.61	y	1.16	45:18	0.977	0.972-0.982	96.2	96.2	Name		13C-PCB-127	8.64e+07	1.59	y	1.34	43:23	0.936	0.931-0.941	96.3	96.3
13C-PCB-127	8.64e+07	1.59	y	1.34	43:23	0.936	0.931-0.941	96.3	96.3	Name		13C-PCB-138	6.82e+07	1.26	y	1.04	44:48	0.966	0.961-0.971	97.7	97.7
13C-PCB-138	6.82e+07	1.26	y	1.04	44:48	0.966	0.961-0.971	97.7	97.7	Name		13C-PCB-141	7.08e+07	1.28	y	1.07	43:57	0.948	0.943-0.953	98.8	98.8
13C-PCB-141	7.08e+07	1.28	y	1.07	43:57	0.948	0.943-0.953	98.8	98.8	Name		13C-PCB-153	7.34e+07	1.25	y	1.11	43:13	0.932	0.927-0.937	98.6	98.6
13C-PCB-153	7.34e+07	1.25	y	1.11	43:13	0.932	0.927-0.937	98.6	98.6	Name		13C-PCB-155	5.85e+07	1.27	y	0.83	37:02	0.944	0.939-0.949	99.4	99.4
13C-PCB-155	5.85e+07	1.27	y	0.83	37:02	0.944	0.939-0.949	99.4	99.4	Name		13C-PCB-156	8.09e+07	1.27	y	1.24	48:03	1.037	1.032-1.042	97.2	97.2
13C-PCB-156	8.09e+07	1.27	y	1.24	48:03	1.037	1.032-1.042	97.2	97.2	Name		13C-PCB-157	8.55e+07	1.28	y	1.31	48:19	1.042	1.037-1.047	97.5	97.5
13C-PCB-157	8.55e+07	1.28	y	1.31	48:19	1.042	1.037-1.047	97.5	97.5	Name		13C-PCB-159	7.80e+07	1.30	y	1.20	46:05	0.994	0.989-0.999	97.3	97.3
13C-PCB-159	7.80e+07	1.30	y	1.20	46:05	0.994	0.989-0.999	97.3	97.3	Name		13C-PCB-167	8.57e+07	1.25	y	1.32	46:45	1.009	1.004-1.014	97.0	97.0
13C-PCB-167	8.57e+07	1.25	y	1.32	46:45	1.009	1.004-1.014	97.0	97.0	Name		13C-PCB-169	7.92e+07	1.27	y	1.22	50:24	1.087	1.082-1.092	97.5	97.5
13C-PCB-169	7.92e+07	1.27	y	1.22	50:24	1.087	1.082-1.092	97.5	97.5	Name		13C-PCB-170	3.58e+07	0.46	y	0.54	50:45	1.095	1.089-1.101	99.9	99.9
13C-PCB-170	3.58e+07	0.46	y	0.54	50:45	1.095	1.089-1.101	99.9	99.9	Name		13C-PCB-180	4.49e+07	0.47	y	0.67	49:19	1.064	1.059-1.069	99.6	99.6
13C-PCB-180	4.49e+07	0.47	y	0.67	49:19	1.064	1.059-1.069	99.6	99.6	Name		13C-PCB-188	6.18e+07	0.46	y	0.94	42:51	0.924	0.919-0.929	98.8	98.8
13C-PCB-188	6.18e+07	0.46	y	0.94	42:51	0.924	0.919-0.929	98.8	98.8	Name		13C-PCB-189	4.90e+07	0.46	y	0.72	52:11	1.126	1.120-1.132	102	102
13C-PCB-189	4.90e+07	0.46	y	0.72	52:11	1.126	1.120-1.132	102	102	Name		13C-PCB-194	4.68e+07	0.91	y	0.81	53:40	0.995	0.990-1.000	99.2	99.2
13C-PCB-194	4.68e+07	0.91	y	0.81	53:40	0.995	0.990-1.000	99.2	99.2	Name		13C-PCB-202	5.62e+07	0.92	y	0.83	48:16	1.041	1.036-1.046	101	101
13C-PCB-202	5.62e+07	0.92	y	0.83	48:16	1.041	1.036-1.046	101	101	Name		13C-PCB-206	4.05e+07	0.78	y	0.66	55:20	1.026	1.021-1.031	106	106
13C-PCB-206	4.05e+07	0.78	y	0.66	55:20	1.026	1.021-1.031	106	106	Name		13C-PCB-208	6.67e+07	0.78	y	1.12	52:56	0.981	0.976-0.986	102	102
13C-PCB-208	6.67e+07	0.78	y	1.12	52:56	0.981	0.976-0.986	102	102	Name		13C-PCB-209	3.70e+07	1.21	y	0.61	56:37	1.049	1.044-1.054	103	103

Analyst: DMS
 Date: 6/23/14

Vista Analytical Laboratory - Injection Log Run file: 140620E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	Ecal
140620E1	1	ST140620E1-1	DMS	20-JUN-14	09:31:44	NA	NA
140620E1	2	ST140620E1-2	DMS	20-JUN-14	10:35:42	NA	NA
140620E1	3	ST140620E1-3	DMS	20-JUN-14	11:39:47	NA	NA
140620E1	4	ST140620E1-4	DMS	20-JUN-14	12:43:46	ST140620E1-4	ST140620E1-8
140620E1	5	ST140620E1-5	DMS	20-JUN-14	13:47:50	NA	NA
140620E1	6	ST140620E1-6	DMS	20-JUN-14	14:51:49	NA	NA
140620E1	8	ST140620E1-7	DMS	20-JUN-14	15:57:15	NA	NA
140620E1	9	B4F0047-BS1	DMS	20-JUN-14	17:01:12	ST140620E1-4	ST140620E1-8
140620E1	10	SOLVENT BLANK	DMS	20-JUN-14	18:05:10	NA	NA
140620E1	11	B4F0047-BLK1	DMS	20-JUN-14	19:09:06	ST140620E1-4	ST140620E1-8
140620E1	12	1400406-01	DMS	20-JUN-14	20:13:09	ST140620E1-4	ST140620E1-8
140620E1	13	1400434-01	DMS	20-JUN-14	21:17:10	ST140620E1-4	NA
140620E1	14	1400434-02	DMS	20-JUN-14	22:21:13	ST140620E1-4	NA
140620E1	15	1400434-03	DMS	20-JUN-14	23:25:09	ST140620E1-4	NA
140620E1	16	SOLVENT BLANK	DMS	21-JUN-14	00:29:07	ST140620E1-4	NA
140620E1	17	ST140620E1-8	DMS	21-JUN-14	01:33:10	ST140620E1-4	ST140620E1-8

Initial Calibration RRF Summary (ICAL)
Run: 140623E2

Vista Analytical Laboratory
Analyte: PCBNEW
Cal: PCBVG8-6-23-14

Inst. ID. VG 8

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Data filename: 140623E2

	Samp# 1	Samp# 2	Samp# 3	Samp# 4	Samp# 5	Samp# 6
	0.25	1.0	2.5	50	400	750

Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
PCB-1	1.19	8.06 %	1.04	1.13	1.18	1.23	1.29	1.29
PCB-2	1.18	7.35 %	1.05	1.12	1.16	1.23	1.28	1.26
PCB-3	1.43	5.11 %	1.34	1.37	1.37	1.46	1.49	1.51
PCB-4/10	1.57	2.14 %	1.53	1.54	1.55	1.57	1.60	1.62
PCB-7/9	1.21	2.44 %	1.22	1.17	1.19	1.21	1.22	1.26
PCB-6	1.30	2.87 %	1.25	1.28	1.31	1.31	1.34	1.35
PCB-5/8	1.15	2.31 %	1.13	1.12	1.15	1.15	1.16	1.19
PCB-14	1.11	3.28 %	1.05	1.09	1.11	1.14	1.12	1.15
PCB-11	1.09	2.23 %	1.05	1.09	1.07	1.10	1.09	1.12
PCB-12/13	1.19	2.18 %	1.17	1.17	1.18	1.20	1.20	1.24
PCB-15	1.28	3.09 %	1.29	1.22	1.26	1.28	1.30	1.34
PCB-19	1.04	3.02 %	1.04	1.01	1.01	1.04	1.07	1.09
PCB-30	1.71	4.54 %	1.67	1.64	1.66	1.69	1.79	1.83
PCB-18	0.78	5.11 %	0.71	0.79	0.79	0.80	0.78	0.82
PCB-17	0.92	2.36 %	0.90	0.90	0.94	0.93	0.91	0.95
PCB-24/27	1.19	3.36 %	1.13	1.17	1.19	1.20	1.18	1.25
PCB-16/32	0.94	1.56 %	0.92	0.93	0.94	0.94	0.94	0.96
PCB-34	1.14	3.58 %	1.15	1.19	1.13	1.09	1.16	1.09
PCB-23	1.28	4.96 %	1.38	1.28	1.22	1.23	1.24	1.33
PCB-29	1.08	3.94 %	1.11	1.13	1.09	1.06	1.01	1.06
PCB-26	1.21	4.37 %	1.25	1.23	1.27	1.18	1.12	1.19
PCB-25	1.26	7.07 %	1.39	1.25	1.30	1.27	1.25	1.11
PCB-31	1.28	11.62 %	1.50	1.29	1.36	1.24	1.27	1.05
PCB-28	1.71	5.40 %	1.81	1.76	1.78	1.70	1.63	1.57
PCB-20/21/33	1.08	5.41 %	1.15	1.07	1.11	1.08	1.11	0.98
PCB-22	1.21	8.00 %	1.36	1.24	1.17	1.23	1.06	1.18
PCB-36	1.14	11.01 %	1.36	1.16	1.11	1.18	1.05	0.99
PCB-39	1.12	11.88 %	1.31	1.12	1.09	1.20	0.92	1.05
PCB-38	1.20	13.44 %	1.44	1.25	1.24	1.23	1.03	1.00
PCB-35	1.23	8.27 %	1.40	1.18	1.31	1.18	1.15	1.17
PCB-37	1.23	8.23 %	1.38	1.30	1.25	1.19	1.12	1.13
PCB-54	1.10	3.74 %	1.18	1.06	1.10	1.10	1.09	1.09
PCB-50	0.88	6.30 %	0.97	0.83	0.92	0.88	0.86	0.83
PCB-53	1.06	1.53 %	1.06	1.05	1.06	1.08	1.09	1.05
PCB-51	0.99	4.28 %	0.95	1.06	0.97	0.98	0.96	1.02
PCB-45	0.86	5.46 %	0.95	0.85	0.83	0.89	0.84	0.82
PCB-46	0.85	4.52 %	0.90	0.89	0.82	0.83	0.83	0.81
PCB-52/69	1.28	3.90 %	1.23	1.29	1.27	1.28	1.25	1.37
PCB-73	1.35	5.47 %	1.44	1.30	1.43	1.38	1.30	1.27
PCB-43/49	0.99	4.35 %	1.07	1.01	0.96	0.97	0.95	1.02
PCB-47	1.06	4.72 %	1.12	1.10	1.07	1.04	1.04	0.98

Dms 6/24/14

MS 6/25/14

PCB-48/75	1.23	5.03 %	1.34	1.24	1.21	1.17	1.17	1.24
PCB-65	1.22	5.52 %	1.22	1.30	1.29	1.23	1.12	1.19
PCB-62	1.22	11.22 %	1.47	1.10	1.25	1.09	1.22	1.19
PCB-44	0.86	9.00 %	1.00	0.90	0.84	0.80	0.79	0.83
PCB-42/59	1.14	4.85 %	1.20	1.19	1.08	1.08	1.11	1.17
PCB-41/64/71/72	1.21	4.49 %	1.24	1.25	1.16	1.13	1.19	1.26
PCB-68	1.35	3.60 %	1.42	1.35	1.32	1.29	1.31	1.38
PCB-40	0.70	2.83 %	0.69	0.73	0.70	0.68	0.69	0.71
PCB-57	0.98	1.87 %	0.97	0.96	1.00	0.99	0.96	0.99
PCB-67	1.11	4.07 %	1.19	1.11	1.11	1.09	1.09	1.05
PCB-58	0.93	3.04 %	0.90	0.95	0.94	0.93	0.88	0.96

PCB-63	0.95	8.80 %	1.12	0.95	0.91	0.93	0.88	0.92
PCB-74	1.24	4.15 %	1.34	1.21	1.25	1.20	1.23	1.23
PCB-61/70	0.95	2.14 %	0.96	0.96	0.98	0.95	0.92	0.94
PCB-76/66	1.04	3.20 %	1.11	1.04	1.04	1.03	1.03	1.02
PCB-80	1.19	2.93 %	1.13	1.22	1.22	1.22	1.18	1.18
PCB-55	1.04	3.47 %	1.00	0.99	1.07	1.08	1.05	1.06
PCB-56/60	1.01	3.48 %	1.01	1.06	1.05	1.00	0.97	0.98
PCB-79	1.08	3.24 %	1.12	1.07	1.13	1.07	1.04	1.06
PCB-78	1.27	5.24 %	1.40	1.26	1.27	1.25	1.20	1.24
PCB-81	1.33	5.94 %	1.49	1.32	1.29	1.29	1.27	1.33
PCB-77	1.10	4.03 %	1.19	1.07	1.11	1.08	1.07	1.09
PCB-104	1.18	2.54 %	1.13	1.18	1.20	1.20	1.19	1.21
PCB-96	1.14	2.81 %	1.10	1.15	1.11	1.13	1.16	1.19
PCB-103	0.96	4.05 %	0.99	0.93	0.92	0.93	0.95	1.02
PCB-100	0.94	4.52 %	0.97	0.90	0.89	0.92	0.95	1.00
PCB-94	1.06	5.71 %	1.17	1.08	1.03	1.02	1.00	1.05
PCB-95/98/102	1.22	0.35 %	1.23	1.23	1.22	1.22	1.23	1.23
PCB-93	0.84	6.35 %	0.80	0.85	0.86	0.85	0.77	0.93
PCB-88/91	1.12	3.65 %	1.05	1.11	1.15	1.12	1.16	1.10
PCB-121	1.62	5.39 %	1.66	1.53	1.61	1.62	1.52	1.75
PCB-84/92	1.05	3.37 %	1.10	1.00	1.04	1.04	1.04	1.06
PCB-89	1.13	4.67 %	1.23	1.07	1.13	1.14	1.11	1.10
PCB-90/101	1.10	1.29 %	1.11	1.08	1.12	1.10	1.08	1.11
PCB-113	1.41	6.93 %	1.52	1.30	1.46	1.49	1.29	1.41
PCB-99	1.34	8.14 %	1.19	1.49	1.27	1.27	1.42	1.36
PCB-119	1.53	3.61 %	1.51	1.46	1.54	1.52	1.53	1.63
PCB-108/112	1.28	3.29 %	1.26	1.25	1.25	1.28	1.29	1.36
PCB-83	1.52	3.93 %	1.64	1.49	1.52	1.49	1.48	1.49
PCB-97	1.18	4.68 %	1.29	1.13	1.14	1.17	1.17	1.19
PCB-86	0.84	7.14 %	0.84	0.82	0.81	0.80	0.83	0.96
PCB-87/117/125	1.55	5.06 %	1.46	1.50	1.49	1.59	1.59	1.66
PCB-111/115	1.63	1.45 %	1.61	1.64	1.61	1.61	1.65	1.67
PCB-85/116	1.30	4.51 %	1.35	1.21	1.27	1.31	1.31	1.37
PCB-120	1.68	3.52 %	1.67	1.69	1.60	1.63	1.70	1.77
PCB-110	1.56	2.67 %	1.63	1.50	1.56	1.56	1.54	1.55
PCB-82	0.76	2.07 %	0.78	0.75	0.74	0.76	0.76	0.76
PCB-124	1.47	4.97 %	1.43	1.40	1.45	1.43	1.51	1.60
PCB-107/109	1.32	3.64 %	1.31	1.24	1.29	1.35	1.37	1.36
PCB-123	1.17	1.49 %	1.14	1.16	1.18	1.18	1.16	1.19
PCB-106/118	1.17	2.46 %	1.20	1.13	1.19	1.17	1.15	1.20
PCB-114	1.30	1.22 %	1.29	1.31	1.31	1.31	1.28	1.28
PCB-122	1.12	0.66 %	1.13	1.12	1.12	1.11	1.11	1.12
PCB-105	1.30	1.61 %	1.32	1.28	1.31	1.28	1.28	1.33
PCB-127	1.33	5.30 %	1.46	1.31	1.37	1.27	1.28	1.32
PCB-126	1.18	1.24 %	1.18	1.16	1.19	1.17	1.18	1.21
PCB-155	1.11	2.06 %	1.10	1.11	1.10	1.11	1.11	1.16
PCB-150	1.00	4.51 %	0.93	0.99	0.98	1.00	1.03	1.06
PCB-152	1.12	4.70 %	1.15	1.02	1.12	1.10	1.12	1.18
PCB-145	1.20	4.85 %	1.17	1.13	1.18	1.19	1.23	1.30
PCB-136	1.18	1.51 %	1.17	1.17	1.17	1.15	1.21	1.19

PCB-148	0.74	7.90 %	0.70	0.72	0.74	0.74	0.72	0.86
PCB-154	0.86	3.14 %	0.85	0.86	0.88	0.83	0.83	0.90
PCB-151	0.75	8.09 %	0.86	0.69	0.73	0.71	0.71	0.77
PCB-135	0.79	9.11 %	0.89	0.82	0.70	0.77	0.73	0.84
PCB-144	0.76	6.76 %	0.70	0.75	0.76	0.71	0.82	0.82
PCB-147	0.82	6.64 %	0.80	0.80	0.78	0.79	0.83	0.93
PCB-139/149	0.76	6.06 %	0.79	0.71	0.73	0.74	0.77	0.84
PCB-140	0.72	3.18 %	0.70	0.73	0.73	0.70	0.71	0.76
PCB-134/143	0.92	3.43 %	0.95	0.89	0.89	0.89	0.94	0.95
PCB-133/142	0.82	3.97 %	0.86	0.78	0.79	0.80	0.83	0.85
PCB-131	0.91	1.88 %	0.92	0.93	0.90	0.89	0.90	0.90

PCB-146/165	1.25	4.47 %	1.32	1.16	1.22	1.23	1.26	1.29
PCB-132/161	1.10	4.39 %	1.19	1.06	1.07	1.08	1.09	1.14
PCB-153	1.25	3.90 %	1.19	1.33	1.24	1.23	1.27	1.24
PCB-168	1.45	3.18 %	1.40	1.41	1.43	1.45	1.48	1.52
PCB-141	1.09	4.31 %	1.16	1.12	1.04	1.06	1.05	1.09
PCB-137	1.06	4.15 %	1.07	1.02	1.03	1.05	1.06	1.14
PCB-130	0.96	5.65 %	1.06	0.91	0.99	0.97	0.96	0.90
PCB-138/163/164	1.29	4.03 %	1.26	1.23	1.30	1.27	1.31	1.38
PCB-158/160	1.34	4.62 %	1.24	1.30	1.39	1.34	1.37	1.41
PCB-129	0.85	2.93 %	0.85	0.82	0.87	0.84	0.86	0.89
PCB-166	1.19	1.02 %	1.19	1.18	1.18	1.17	1.18	1.21
PCB-159	1.11	2.18 %	1.10	1.09	1.11	1.11	1.10	1.16
PCB-128/162	1.05	3.89 %	1.12	1.04	1.00	1.02	1.03	1.07
PCB-167	1.20	2.55 %	1.15	1.21	1.21	1.20	1.19	1.24
PCB-156	1.14	4.58 %	1.06	1.09	1.18	1.14	1.16	1.19
PCB-157	1.16	5.07 %	1.28	1.16	1.14	1.13	1.12	1.15
PCB-169	1.12	7.20 %	1.28	1.07	1.09	1.08	1.07	1.12
PCB-188	1.58	3.04 %	1.58	1.66	1.55	1.56	1.52	1.61
PCB-184	1.63	2.34 %	1.61	1.66	1.69	1.60	1.60	1.64
PCB-179	1.30	4.28 %	1.27	1.41	1.29	1.30	1.26	1.29
PCB-176	1.48	4.46 %	1.61	1.46	1.45	1.46	1.45	1.44
PCB-186	1.45	8.39 %	1.69	1.34	1.36	1.45	1.46	1.43
PCB-178	1.03	3.35 %	1.03	1.05	1.10	1.02	1.00	1.00
PCB-175	1.01	1.89 %	1.05	1.02	1.00	1.01	0.99	1.01
PCB-182/187	1.25	2.08 %	1.28	1.25	1.24	1.21	1.26	1.28
PCB-183	1.21	5.09 %	1.33	1.19	1.21	1.15	1.18	1.19
PCB-185	1.80	4.35 %	1.77	1.68	1.87	1.78	1.82	1.89
PCB-174	1.38	4.65 %	1.34	1.30	1.33	1.42	1.47	1.40
PCB-181	1.38	7.65 %	1.25	1.33	1.44	1.36	1.35	1.56
PCB-177	1.26	3.80 %	1.18	1.23	1.28	1.26	1.28	1.32
PCB-171	1.58	6.45 %	1.43	1.54	1.57	1.59	1.61	1.74
PCB-173	1.11	6.27 %	0.97	1.11	1.14	1.13	1.13	1.17
PCB-172	1.63	10.65 %	1.31	1.67	1.66	1.64	1.70	1.83
PCB-192	1.74	6.94 %	1.52	1.71	1.77	1.78	1.79	1.87
PCB-180	1.34	3.01 %	1.35	1.27	1.37	1.35	1.34	1.39
PCB-193	1.72	3.48 %	1.81	1.65	1.67	1.72	1.69	1.76
PCB-191	1.69	2.79 %	1.73	1.62	1.71	1.68	1.67	1.75
PCB-170	1.60	3.31 %	1.54	1.53	1.63	1.62	1.61	1.66
PCB-190	2.21	4.63 %	2.14	2.04	2.28	2.23	2.23	2.33
PCB-189	1.55	1.89 %	1.58	1.50	1.54	1.55	1.55	1.58
PCB-202	1.08	3.14 %	1.09	1.05	1.05	1.06	1.10	1.14
PCB-201	1.15	2.55 %	1.11	1.14	1.16	1.13	1.16	1.20
PCB-204	1.14	6.76 %	1.02	1.10	1.14	1.14	1.18	1.25
PCB-197	1.07	2.46 %	1.09	1.04	1.05	1.07	1.09	1.11
PCB-200	1.06	2.80 %	1.08	1.01	1.05	1.06	1.09	1.09
PCB-198	0.76	5.28 %	0.74	0.69	0.76	0.77	0.76	0.81
PCB-199	0.80	5.91 %	0.76	0.86	0.75	0.76	0.82	0.83
PCB-196/203	0.80	9.29 %	0.71	0.75	0.77	0.80	0.86	0.91
PCB-195	1.23	4.42 %	1.15	1.18	1.24	1.24	1.25	1.30
PCB-194	1.21	4.43 %	1.32	1.19	1.18	1.19	1.18	1.20

PCB-205	1.54	2.37 %	1.51	1.58	1.53	1.52	1.51	1.60
PCB-208	0.93	1.86 %	0.95	0.92	0.91	0.92	0.94	0.94
PCB-207	1.08	2.65 %	1.07	1.07	1.05	1.08	1.12	1.12
PCB-206	1.02	4.52 %	1.11	1.03	0.99	1.01	0.97	1.03
PCB-209	1.17	3.05 %	1.15	1.12	1.17	1.20	1.17	1.22
Total Mono-PCB	1.27	6.66 %	1.15	1.21	1.24	1.31	1.35	1.36
Total Di-PCB	1.21	2.10 %	1.19	1.18	1.20	1.21	1.22	1.25
Total Tri-PCB	1.10	2.76 %	1.06	1.08	1.09	1.10	1.10	1.15

Total Tri-PCB	1.21	6.05 %	1.33	1.23	1.24	1.21	1.15	1.12
Total Tetra-PCB	1.09	2.96 %	1.14	1.10	1.08	1.06	1.06	1.09
Total Penta-PCB	1.18	1.93 %	1.18	1.16	1.17	1.18	1.18	1.23
Total Penta-PCB	1.25	1.50 %	1.28	1.24	1.26	1.23	1.23	1.25
Total Hexa-PCB	0.90	3.60 %	0.90	0.87	0.88	0.88	0.90	0.96
Total Hexa-PCB	1.11	2.03 %	1.13	1.08	1.10	1.09	1.11	1.14
Total Hepta-PCB	1.42	1.47 %	1.41	1.40	1.42	1.41	1.41	1.46
Total Octa-PCB	0.96	4.13 %	0.92	0.93	0.95	0.96	0.99	1.03
Total Octa-PCB	1.33	1.46 %	1.33	1.31	1.32	1.32	1.32	1.36
Total Nona-PCB	1.01	1.96 %	1.03	1.00	0.98	1.00	1.02	1.03
Total Deca-PCB	1.17	3.05 %	1.15	1.12	1.17	1.20	1.17	1.22
13C-PCB-1	0.87	10.59 %	1.00	0.92	0.91	0.86	0.77	0.77
13C-PCB-3	0.91	9.90 %	1.04	0.97	0.96	0.86	0.81	0.83
13C-PCB-4	0.59	1.89 %	0.60	0.60	0.60	0.59	0.57	0.57
13C-PCB-9	0.90	1.45 %	0.90	0.91	0.91	0.89	0.88	0.88
13C-PCB-11	0.94	1.14 %	0.95	0.94	0.95	0.92	0.93	0.94
13C-PCB-19	0.53	8.18 %	0.58	0.56	0.56	0.53	0.48	0.48
13C-PCB-32	0.80	5.62 %	0.87	0.82	0.80	0.78	0.77	0.74
13C-PCB-28	0.93	4.96 %	0.92	0.91	0.93	0.92	0.89	1.02
13C-PCB-37	0.84	6.29 %	0.87	0.84	0.79	0.79	0.82	0.93
13C-PCB-54	0.97	0.69 %	0.96	0.96	0.97	0.98	0.97	0.98
13C-PCB-52	0.77	2.27 %	0.80	0.77	0.77	0.78	0.76	0.75
13C-PCB-47	0.81	2.56 %	0.85	0.80	0.81	0.82	0.81	0.78
13C-PCB-70	1.00	1.92 %	1.03	0.99	0.99	0.98	1.00	1.02
13C-PCB-80	1.03	1.60 %	1.05	1.02	1.02	1.01	1.04	1.05
13C-PCB-81	0.92	3.24 %	0.91	0.91	0.92	0.89	0.93	0.98
13C-PCB-77	0.94	2.93 %	0.95	0.93	0.92	0.91	0.98	0.97
13C-PCB-104	1.00	2.32 %	1.02	1.02	1.01	1.00	1.00	0.96
13C-PCB-95	0.74	1.65 %	0.74	0.73	0.73	0.74	0.77	0.74
13C-PCB-101	0.78	1.28 %	0.79	0.79	0.77	0.77	0.80	0.79
13C-PCB-97	0.70	1.19 %	0.72	0.71	0.71	0.69	0.71	0.70
13C-PCB-123	0.89	2.20 %	0.92	0.90	0.90	0.87	0.88	0.89
13C-PCB-118	0.96	2.66 %	0.96	0.97	0.95	0.92	0.98	0.99
13C-PCB-114	1.36	3.25 %	1.33	1.33	1.35	1.35	1.37	1.45
13C-PCB-105	1.37	3.32 %	1.34	1.34	1.36	1.32	1.38	1.45
13C-PCB-127	1.47	2.80 %	1.42	1.48	1.48	1.45	1.48	1.54
13C-PCB-126	1.31	1.41 %	1.29	1.30	1.31	1.31	1.30	1.34
13C-PCB-155	0.84	3.94 %	0.89	0.85	0.84	0.83	0.83	0.79
13C-PCB-153	1.15	1.31 %	1.15	1.16	1.15	1.14	1.12	1.15
13C-PCB-141	1.07	1.13 %	1.07	1.09	1.09	1.07	1.06	1.07
13C-PCB-138	1.10	0.94 %	1.10	1.11	1.09	1.11	1.09	1.09
13C-PCB-159	1.25	1.27 %	1.26	1.27	1.25	1.22	1.24	1.25
13C-PCB-167	1.35	1.38 %	1.36	1.37	1.35	1.33	1.37	1.33
13C-PCB-156	1.30	1.09 %	1.30	1.30	1.29	1.28	1.30	1.32
13C-PCB-157	1.36	1.30 %	1.37	1.36	1.35	1.33	1.36	1.38
13C-PCB-169	1.29	2.02 %	1.32	1.28	1.29	1.24	1.28	1.29
13C-PCB-188	0.92	2.20 %	0.95	0.90	0.91	0.92	0.91	0.91
13C-PCB-180	0.68	5.20 %	0.75	0.70	0.67	0.67	0.67	0.65
13C-PCB-170	0.54	5.16 %	0.59	0.56	0.53	0.53	0.53	0.52
13C-PCB-189	0.72	4.14 %	0.77	0.74	0.71	0.69	0.69	0.70
13C-PCB-202	0.84	6.77 %	0.94	0.87	0.83	0.81	0.80	0.78

13C-PCB-194	0.80	1.04 %	0.79	0.81	0.80	0.79	0.80	0.79
13C-PCB-208	1.08	1.09 %	1.09	1.09	1.09	1.08	1.07	1.07
13C-PCB-206	0.65	2.52 %	0.65	0.66	0.65	0.65	0.67	0.62
13C-PCB-209	0.61	3.41 %	0.62	0.62	0.63	0.59	0.63	0.58
13C-PCB-15	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-31	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-60	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-111	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-128	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-205	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00

13C-PCB-79	1.02	1.30 %	1.02	1.02	1.02	1.00	1.01	1.04
13C-PCB-178	0.61	3.59 %	0.64	0.63	0.61	0.62	0.60	0.58
13C-PCB-79	1.10	2.04 %	1.11	1.12	1.11	1.12	1.09	1.06
13C-PCB-178	0.90	2.70 %	0.86	0.90	0.92	0.93	0.89	0.90

Filename: 140623E2 S: 1 Acquired: 23-JUN-14 11:41:57
 Run: 140623E2 Analyte: ICAL: PCBVG8-6-23-14 Results: 140623E2
 Sample text: ST140623E2-1 PCB CS0 14F1602

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	0.25	4.81e+05	2.67 y	16:24	-	1.04
2	Mono	PCB-2	0.25	5.03e+05	3.50 y	18:40	-	1.05
3	Mono	PCB-3	0.25	6.38e+05	2.83 y	18:54	-	1.34
4	Di	PCB-4/10	1.00	1.68e+06	1.64 y	20:13	-	1.53
5	Di	PCB-7/9	1.00	2.03e+06	1.59 y	21:57	-	1.22
6	Di	PCB-6	0.50	1.04e+06	1.77 y	22:34	-	1.25
7	Di	PCB-5/8	1.00	1.87e+06	1.60 y	22:59	-	1.13
8	Di	PCB-14	0.50	9.15e+05	1.73 y	24:03	-	1.05
9	Di	PCB-11	0.50	9.14e+05	1.60 y	25:13	-	1.05
10	Di	PCB-12/13	1.00	2.03e+06	1.71 y	25:37	-	1.17
11	Di	PCB-15	0.50	1.13e+06	1.70 y	25:55	-	1.29
12	Tri	PCB-19	0.25	2.77e+05	1.03 y	24:14	-	1.04
13	Tri	PCB-30	0.25	4.46e+05	1.08 y	25:06	-	1.67
14	Tri	PCB-18	0.25	2.82e+05	1.17 y	25:50	-	0.71
15	Tri	PCB-17	0.25	3.59e+05	0.95 y	26:01	-	0.90
16	Tri	PCB-24/27	0.50	9.03e+05	1.12 y	26:35	-	1.13
17	Tri	PCB-16/32	0.50	7.35e+05	1.02 y	27:05	-	0.92
18	Tri	PCB-34	0.25	4.46e+05	1.14 y	27:51	-	1.15
19	Tri	PCB-23	0.25	5.33e+05	1.13 y	27:57	-	1.38
20	Tri	PCB-29	0.25	4.32e+05	1.02 y	28:12	-	1.11
21	Tri	PCB-26	0.25	4.83e+05	0.94 y	28:24	-	1.25
22	Tri	PCB-25	0.25	5.38e+05	0.92 y	28:33	-	1.39
23	Tri	PCB-31	0.25	5.81e+05	0.96 y	28:55	-	1.50
24	Tri	PCB-28	0.25	7.03e+05	1.16 y	29:01	-	1.81
25	Tri	PCB-20/21/33	0.75	1.33e+06	1.03 y	29:38	-	1.15
26	Tri	PCB-22	0.25	5.26e+05	1.01 y	30:04	-	1.36
27	Tri	PCB-36	0.25	4.96e+05	1.00 y	30:41	-	1.36
28	Tri	PCB-39	0.25	4.79e+05	1.13 y	31:08	-	1.31
29	Tri	PCB-38	0.25	5.28e+05	1.17 y	31:55	-	1.44
30	Tri	PCB-35	0.25	5.13e+05	0.95 y	32:25	-	1.40
31	Tri	PCB-37	0.25	5.06e+05	1.03 y	32:51	-	1.38
32	Tetra	PCB-54	0.25	3.83e+05	0.67 y	27:55	-	1.18
33	Tetra	PCB-50	0.25	3.14e+05	0.72 y	29:04	-	0.97
34	Tetra	PCB-53	0.25	2.86e+05	0.85 y	29:42	-	1.06
35	Tetra	PCB-51	0.25	2.57e+05	0.85 y	30:03	-	0.95
36	Tetra	PCB-45	0.25	2.55e+05	0.84 y	30:28	-	0.95
37	Tetra	PCB-46	0.25	2.42e+05	0.82 y	30:58	-	0.90
38	Tetra	PCB-52/69	0.50	6.62e+05	0.73 y	31:25	-	1.23
39	Tetra	PCB-73	0.25	3.88e+05	0.72 y	31:32	-	1.44
40	Tetra	PCB-43/49	0.50	5.73e+05	0.83 y	31:42	-	1.07

41	Tetra	PCB-47	0.25	3.18e+05	0.79	y	31:55	-	1.12
42	Tetra	PCB-48/75	0.50	7.61e+05	0.81	y	32:01	-	1.34
43	Tetra	PCB-65	0.25	3.48e+05	0.88	y	32:17	-	1.22
44	Tetra	PCB-62	0.25	4.17e+05	0.79	y	32:24	-	1.47
45	Tetra	PCB-44	0.25	2.83e+05	0.73	y	32:42	-	1.00
46	Tetra	PCB-42/59	0.50	6.84e+05	0.76	y	32:55	-	1.20
47	Tetra	PCB-41/64/71/72	1.00	1.41e+06	0.76	y	33:30	-	1.24
48	Tetra	PCB-68	0.25	4.05e+05	0.81	y	33:46	-	1.42
49	Tetra	PCB-40	0.25	1.96e+05	0.70	y	34:00	-	0.69
50	Tetra	PCB-57	0.25	3.33e+05	0.87	y	34:20	-	0.97
51	Tetra	PCB-67	0.25	4.09e+05	0.84	y	34:38	-	1.19

52	Tetra	PCB-58	0.25	3.10e+05	0.67 y	34:45	-	0.90
53	Tetra	PCB-63	0.25	3.84e+05	0.79 y	34:55	-	1.12
54	Tetra	PCB-74	0.25	4.62e+05	0.82 y	35:12	-	1.34
55	Tetra	PCB-61/70	0.50	6.62e+05	0.77 y	35:23	-	0.96
56	Tetra	PCB-76/66	0.50	7.64e+05	0.73 y	35:35	-	1.11
57	Tetra	PCB-80	0.25	4.01e+05	0.75 y	35:49	-	1.13
58	Tetra	PCB-55	0.25	3.54e+05	0.77 y	36:09	-	1.00
59	Tetra	PCB-56/60	0.50	7.14e+05	0.78 y	36:39	-	1.01
60	Tetra	PCB-79	0.25	3.94e+05	0.76 y	37:42	-	1.12
61	Tetra	PCB-78	0.25	4.28e+05	0.69 y	38:24	-	1.40
62	Tetra	PCB-81	0.25	4.55e+05	0.75 y	38:56	-	1.49
63	Tetra	PCB-77	0.25	3.79e+05	0.71 y	39:31	-	1.19
64	Penta	PCB-104	0.25	2.69e+05	1.51 y	32:34	-	1.13
65	Penta	PCB-96	0.25	2.62e+05	1.46 y	33:49	-	1.10
66	Penta	PCB-103	0.25	2.37e+05	1.63 y	34:21	-	0.99
67	Penta	PCB-100	0.25	2.32e+05	1.75 y	34:43	-	0.97
68	Penta	PCB-94	0.25	2.02e+05	1.62 y	35:10	-	1.17
69	Penta	PCB-95/98/102	0.75	6.38e+05	1.53 y	35:40	-	1.23
70	Penta	PCB-93	0.25	1.38e+05	1.68 y	35:48	-	0.80
71	Penta	PCB-88/91	0.50	3.63e+05	1.40 y	36:05	-	1.05
72	Penta	PCB-121	0.25	2.89e+05	1.74 y	36:10	-	1.66
73	Penta	PCB-84/92	0.50	4.09e+05	1.74 y	37:00	-	1.10
74	Penta	PCB-89	0.25	2.28e+05	1.35 y	37:12	-	1.23
75	Penta	PCB-90/101	0.50	4.11e+05	1.60 y	37:22	-	1.11
76	Penta	PCB-113	0.25	2.82e+05	1.48 y	37:38	-	1.52
77	Penta	PCB-99	0.25	2.22e+05	1.49 y	37:43	-	1.19
78	Penta	PCB-119	0.25	2.54e+05	1.74 y	38:11	-	1.51
79	Penta	PCB-108/112	0.50	4.22e+05	1.43 y	38:20	-	1.26
80	Penta	PCB-83	0.25	2.75e+05	1.61 y	38:30	-	1.64
81	Penta	PCB-97	0.25	2.16e+05	1.33 y	38:41	-	1.29
82	Penta	PCB-86	0.25	1.41e+05	1.33 y	38:50	-	0.84
83	Penta	PCB-87/117/125	0.75	7.34e+05	1.43 y	38:57	-	1.46
84	Penta	PCB-111/115	0.50	5.41e+05	1.52 y	39:08	-	1.61
85	Penta	PCB-85/116	0.50	4.52e+05	1.76 y	39:15	-	1.35
86	Penta	PCB-120	0.25	2.81e+05	1.77 y	39:29	-	1.67
87	Penta	PCB-110	0.25	2.74e+05	1.56 y	39:38	-	1.63
88	Penta	PCB-82	0.25	1.70e+05	1.65 y	40:16	-	0.78
89	Penta	PCB-124	0.25	3.10e+05	1.57 y	40:57	-	1.43
90	Penta	PCB-107/109	0.50	5.68e+05	1.59 y	41:05	-	1.31
91	Penta	PCB-123	0.25	2.47e+05	1.58 y	41:16	-	1.14
92	Penta	PCB-106/118	0.50	5.38e+05	1.47 y	41:27	-	1.20
93	Penta	PCB-114	0.25	3.15e+05	1.48 y	42:06	-	1.29
94	Penta	PCB-122	0.25	2.77e+05	1.67 y	42:14	-	1.13
95	Penta	PCB-105	0.25	3.23e+05	1.61 y	42:58	-	1.32
96	Penta	PCB-127	0.25	3.79e+05	1.59 y	43:18	-	1.46
97	Penta	PCB-126	0.25	2.78e+05	1.58 y	45:12	-	1.18
98	Hexa	PCB-155	0.25	2.29e+05	1.14 y	36:56	-	1.10
99	Hexa	PCB-150	0.25	1.94e+05	1.23 y	38:12	-	0.93
100	Hexa	PCB-152	0.25	2.40e+05	1.08 y	38:40	-	1.15
101	Hexa	PCB-145	0.25	2.45e+05	1.20 y	39:08	-	1.17

102	Hexa	PCB-136	0.25	2.45e+05	1.20	y	39:27	-	1.17
103	Hexa	PCB-148	0.25	1.45e+05	1.15	y	39:33	-	0.70
104	Hexa	PCB-154	0.25	1.77e+05	1.37	y	40:02	-	0.85
105	Hexa	PCB-151	0.25	1.79e+05	1.18	y	40:41	-	0.86
106	Hexa	PCB-135	0.25	1.86e+05	1.13	y	40:54	-	0.89
107	Hexa	PCB-144	0.25	1.47e+05	1.40	y	41:00	-	0.70
108	Hexa	PCB-147	0.25	1.67e+05	1.07	y	41:08	-	0.80
109	Hexa	PCB-139/149	0.50	3.29e+05	1.16	y	41:24	-	0.79
110	Hexa	PCB-140	0.25	1.47e+05	1.10	y	41:35	-	0.70
111	Hexa	PCB-134/143	0.50	4.01e+05	1.40	y	42:01	-	0.95
112	Hexa	PCB-133/142	0.50	3.65e+05	1.40	y	42:19	-	0.86

113	Hexa	PCB-131	0.25	1.96e+05	1.21	y	42:29	-	0.92
114	Hexa	PCB-146/165	0.50	5.59e+05	1.30	y	42:42	-	1.32
115	Hexa	PCB-132/161	0.50	5.02e+05	1.30	y	42:57	-	1.19
116	Hexa	PCB-153	0.25	2.51e+05	1.25	y	43:06	-	1.19
117	Hexa	PCB-168	0.25	2.97e+05	1.27	y	43:20	-	1.40
118	Hexa	PCB-141	0.25	2.26e+05	1.36	y	43:51	-	1.16
119	Hexa	PCB-137	0.25	2.10e+05	1.21	y	44:14	-	1.07
120	Hexa	PCB-130	0.25	2.06e+05	1.15	y	44:20	-	1.06
121	Hexa	PCB-138/163/164	0.75	7.59e+05	1.25	y	44:43	-	1.26
122	Hexa	PCB-158/160	0.50	5.00e+05	1.32	y	44:58	-	1.24
123	Hexa	PCB-129	0.25	1.71e+05	1.19	y	45:12	-	0.85
124	Hexa	PCB-166	0.25	2.74e+05	1.28	y	45:40	-	1.19
125	Hexa	PCB-159	0.25	2.53e+05	1.29	y	46:00	-	1.10
126	Hexa	PCB-128/162	0.50	5.15e+05	1.18	y	46:17	-	1.12
127	Hexa	PCB-167	0.25	2.86e+05	1.19	y	46:40	-	1.15
128	Hexa	PCB-156	0.25	2.51e+05	1.34	y	47:59	-	1.06
129	Hexa	PCB-157	0.25	3.21e+05	1.29	y	48:15	-	1.28
130	Hexa	PCB-169	0.25	3.10e+05	1.35	y	50:19	-	1.28
131	Hepta	PCB-188	0.25	2.77e+05	1.01	y	42:45	-	1.58
132	Hepta	PCB-184	0.25	2.81e+05	1.07	y	43:12	-	1.61
133	Hepta	PCB-179	0.25	2.22e+05	0.95	y	43:58	-	1.27
134	Hepta	PCB-176	0.25	2.82e+05	1.14	y	44:27	-	1.61
135	Hepta	PCB-186	0.25	2.95e+05	1.09	y	45:04	-	1.69
136	Hepta	PCB-178	0.25	1.81e+05	0.95	y	45:33	-	1.03
137	Hepta	PCB-175	0.25	1.83e+05	1.03	y	45:54	-	1.05
138	Hepta	PCB-182/187	0.50	4.48e+05	0.94	y	46:04	-	1.28
139	Hepta	PCB-183	0.25	2.33e+05	1.14	y	46:23	-	1.33
140	Hepta	PCB-185	0.25	2.42e+05	0.91	y	47:03	-	1.77
141	Hepta	PCB-174	0.25	1.84e+05	0.97	y	47:25	-	1.34
142	Hepta	PCB-181	0.25	1.71e+05	0.89	y	47:31	-	1.25
143	Hepta	PCB-177	0.25	1.62e+05	1.15	y	47:41	-	1.18
144	Hepta	PCB-171	0.25	1.96e+05	0.95	y	48:00	-	1.43
145	Hepta	PCB-173	0.25	1.34e+05	1.04	y	48:25	-	0.97
146	Hepta	PCB-172	0.25	1.79e+05	1.06	y	48:52	-	1.31
147	Hepta	PCB-192	0.25	2.08e+05	1.05	y	49:03	-	1.52
148	Hepta	PCB-180	0.25	1.86e+05	1.04	y	49:15	-	1.35
149	Hepta	PCB-193	0.25	2.48e+05	1.20	y	49:27	-	1.81
150	Hepta	PCB-191	0.25	2.37e+05	0.93	y	49:42	-	1.73
151	Hepta	PCB-170	0.25	1.67e+05	1.00	y	50:41	-	1.54
152	Hepta	PCB-190	0.25	2.32e+05	1.20	y	50:51	-	2.14
153	Hepta	PCB-189	0.25	2.21e+05	0.99	y	52:07	-	1.58
154	Octa	PCB-202	0.25	1.87e+05	0.90	y	48:11	-	1.09
155	Octa	PCB-201	0.25	1.91e+05	0.96	y	48:40	-	1.11
156	Octa	PCB-204	0.25	1.75e+05	0.89	y	48:50	-	1.02
157	Octa	PCB-197	0.25	1.86e+05	1.01	y	49:08	-	1.09
158	Octa	PCB-200	0.25	1.85e+05	1.02	y	49:59	-	1.08
159	Octa	PCB-198	0.25	1.27e+05	0.92	y	51:14	-	0.74
160	Octa	PCB-199	0.25	1.30e+05	0.87	y	51:21	-	0.76
161	Octa	PCB-196/203	0.50	2.45e+05	0.96	y	51:36	-	0.71
162	Octa	PCB-195	0.25	1.54e+05	0.94	y	52:45	-	1.15

163	Octa	PCB-194	0.25	1.77e+05	0.95	y	53:38	-	1.32
164	Octa	PCB-205	0.25	2.02e+05	0.89	y	53:56	-	1.51
165	Nona	PCB-208	0.25	1.76e+05	1.45	y	52:54	-	0.95
166	Nona	PCB-207	0.25	1.98e+05	1.16	y	53:13	-	1.07
167	Nona	PCB-206	0.25	1.21e+05	1.45	y	55:20	-	1.11
168	Deca	PCB-209	0.25	1.20e+05	1.18	y	56:37	-	1.15
169	Tot Σ	Total Mono-PCB	0.00	-	-	n	-	-	1.15
170	Tot Σ	Total Di-PCB	0.00	-	-	n	-	-	1.19

171	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.06
172	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.33
173	Tot Σ	Total Tetra-PCB	0.00	-	- n	-	-	1.14
174	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.18
175	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.28
176	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	0.90
177	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	1.13
178	Tot Σ	Total Hepta-PCB	0.00	-	- n	-	-	1.41
179	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	0.92
180	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	1.33
181	Tot Σ	Total Nona-PCB	0.00	-	- n	-	-	1.03
182	Tot Σ	Total Deca-PCB	0.25	1.20e+05	1.18 y	56:37	-	1.15
183	Mono Σ	13C-PCB-1	100.00	1.84e+08	3.30 y	16:23	-	1.00
184	Mono Σ	13C-PCB-3	100.00	1.91e+08	3.30 y	18:53	-	1.04
185	Di- Σ	13C-PCB-4	100.00	1.10e+08	1.58 y	20:10	-	0.60
186	Di- Σ	13C-PCB-9	100.00	1.66e+08	1.58 y	21:54	-	0.90
187	Di- Σ	13C-PCB-11	100.00	1.74e+08	1.56 y	25:12	-	0.95
188	Tri- Σ	13C-PCB-19	100.00	1.07e+08	1.08 y	24:13	-	0.58
189	Tri- Σ	13C-PCB-32	100.00	1.60e+08	1.07 y	27:05	-	0.87
190	Tri- Σ	13C-PCB-28	100.00	1.55e+08	1.06 y	29:00	-	0.92
191	Tri- Σ	13C-PCB-37	100.00	1.46e+08	1.07 y	32:51	-	0.87
192	Tetra Σ	13C-PCB-54	100.00	1.29e+08	0.80 y	27:54	-	0.96
193	Tetra Σ	13C-PCB-52	100.00	1.08e+08	0.80 y	31:23	-	0.80
194	Tetra Σ	13C-PCB-47	100.00	1.14e+08	0.80 y	31:53	-	0.85
195	Tetra Σ	13C-PCB-70	100.00	1.38e+08	0.80 y	35:24	-	1.03
196	Tetra Σ	13C-PCB-80	100.00	1.41e+08	0.80 y	35:48	-	1.05
197	Tetra Σ	13C-PCB-81	100.00	1.22e+08	0.80 y	38:55	-	0.91
198	Tetra Σ	13C-PCB-77	100.00	1.28e+08	0.80 y	39:31	-	0.95
199	Penta Σ	13C-PCB-104	100.00	9.53e+07	1.55 y	32:33	-	1.02
200	Penta Σ	13C-PCB-95	100.00	6.94e+07	1.58 y	35:42	-	0.74
201	Penta Σ	13C-PCB-101	100.00	7.42e+07	1.61 y	37:22	-	0.79
202	Penta Σ	13C-PCB-97	100.00	6.72e+07	1.62 y	38:40	-	0.72
203	Penta Σ	13C-PCB-123	100.00	8.66e+07	1.59 y	41:15	-	0.92
204	Penta Σ	13C-PCB-118	100.00	9.00e+07	1.59 y	41:25	-	0.96
205	Penta Σ	13C-PCB-114	100.00	9.79e+07	1.62 y	42:05	-	1.33
206	Penta Σ	13C-PCB-105	100.00	9.84e+07	1.62 y	42:57	-	1.34
207	Penta Σ	13C-PCB-127	100.00	1.04e+08	1.60 y	43:17	-	1.42
208	Penta Σ	13C-PCB-126	100.00	9.44e+07	1.59 y	45:11	-	1.29
209	Hexa Σ	13C-PCB-155	100.00	8.36e+07	1.29 y	36:55	-	0.89
210	Hexa Σ	13C-PCB-153	100.00	8.47e+07	1.26 y	43:06	-	1.15
211	Hexa Σ	13C-PCB-141	100.00	7.81e+07	1.26 y	43:50	-	1.07
212	Hexa	13C-PCB-138	100.00	8.05e+07	1.27 y	44:41	-	1.10
213	Hexa Σ	13C-PCB-159	100.00	9.21e+07	1.27 y	45:58	-	1.26
214	Hexa Σ	13C-PCB-167	100.00	9.97e+07	1.26 y	46:40	-	1.36
215	Hexa Σ	13C-PCB-156	100.00	9.50e+07	1.29 y	47:58	-	1.30
216	Hexa Σ	13C-PCB-157	100.00	1.00e+08	1.32 y	48:14	-	1.37
217	Hexa Σ	13C-PCB-169	100.00	9.71e+07	1.27 y	50:19	-	1.32
218	Hepta Σ	13C-PCB-188	100.00	7.00e+07	0.47 y	42:44	-	0.95
219	Hepta Σ	13C-PCB-180	100.00	5.49e+07	0.46 y	49:15	-	0.75
220	Hepta Σ	13C-PCB-170	100.00	4.33e+07	0.46 y	50:40	-	0.59
221	Hepta Σ	13C-PCB-189	100.00	5.61e+07	0.46 y	52:07	-	0.77

222	Octa _q	13C-PCB-202	100.00	6.86e+07	0.93	y	48:10	-	0.94
223	Octa _q	13C-PCB-194	100.00	5.37e+07	0.93	y	53:37	-	0.79
224	Nona _q	13C-PCB-208	100.00	7.40e+07	0.78	y	52:53	-	1.09
225	Nona _q	13C-PCB-206	100.00	4.38e+07	0.78	y	55:20	-	0.65
226	Deca _q	13C-PCB-209	100.00	4.18e+07	1.19	y	56:37	-	0.62
227	DI-RS	13C-PCB-15	100.00	1.84e+08	1.59	y	25:54	-	1.00
228	Tri- _q	13C-PCB-31	100.00	1.69e+08	1.07	y	28:54	-	1.00
229	Tetra _q	13C-PCB-60	100.00	1.34e+08	0.80	y	36:38	-	1.00
230	Penta	13C-PCB-111	100.00	9.38e+07	1.57	y	39:06	-	1.00
231	Hexa _q	13C-PCB-128	100.00	7.33e+07	1.25	y	46:16	-	1.00

232	Octa ₇	13C-PCB-205	100.00	6.77e+07	0.90	y	53:55	-	1.00
233	CRS	13C-PCB-79	100.00	1.36e+08	0.80	y	37:41	-	1.02
234	CRS	13C-PCB-178	100.00	4.71e+07	0.46	y	45:32	-	0.64
235	PS	13C-PCB-79	100.00	1.36e+08	0.80	y	37:41	-	1.11
236	PS	13C-PCB-178	100.00	4.71e+07	0.46	y	45:32	-	0.86

Filename: 140623E2 S: 2 Acquired: 23-JUN-14 12:45:53
 Run: 140623E2 Analyte: ICal: PCBVG8-6-23-14 Results: 140623E2
 Sample text: ST140623E2-2 PCB CS1 14F1603

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Mono	PCB-1	1.00	1.92e+06	3.07	y	16:24	-	1.13
2	Mono	PCB-2	1.00	2.00e+06	3.10	y	18:41	-	1.12
3	Mono	PCB-3	1.00	2.45e+06	2.99	y	18:54	-	1.37
4	Di	PCB-4/10	4.00	6.76e+06	1.61	y	20:14	-	1.54
5	Di	PCB-7/9	4.00	7.85e+06	1.66	y	21:57	-	1.17
6	Di	PCB-6	2.00	4.27e+06	1.72	y	22:35	-	1.28
7	Di	PCB-5/8	4.00	7.47e+06	1.65	y	22:59	-	1.12
8	Di	PCB-14	2.00	3.76e+06	1.62	y	24:03	-	1.09
9	Di	PCB-11	2.00	3.76e+06	1.61	y	25:13	-	1.09
10	Di	PCB-12/13	4.00	8.12e+06	1.62	y	25:37	-	1.17
11	Di	PCB-15	2.00	4.22e+06	1.64	y	25:55	-	1.22
12	Tri	PCB-19	1.00	1.05e+06	1.10	y	24:15	-	1.01
13	Tri	PCB-30	1.00	1.69e+06	1.10	y	25:06	-	1.64
14	Tri	PCB-18	1.00	1.19e+06	1.03	y	25:51	-	0.79
15	Tri	PCB-17	1.00	1.36e+06	1.06	y	26:01	-	0.90
16	Tri	PCB-24/27	2.00	3.54e+06	1.03	y	26:35	-	1.17
17	Tri	PCB-16/32	2.00	2.81e+06	1.04	y	27:05	-	0.93
18	Tri	PCB-34	1.00	1.77e+06	1.02	y	27:52	-	1.19
19	Tri	PCB-23	1.00	1.91e+06	1.05	y	27:58	-	1.28
20	Tri	PCB-29	1.00	1.69e+06	1.03	y	28:13	-	1.13
21	Tri	PCB-26	1.00	1.83e+06	1.06	y	28:25	-	1.23
22	Tri	PCB-25	1.00	1.86e+06	1.03	y	28:35	-	1.25
23	Tri	PCB-31	1.00	1.92e+06	1.03	y	28:55	-	1.29
24	Tri	PCB-28	1.00	2.63e+06	1.05	y	29:02	-	1.76
25	Tri	PCB-20/21/33	3.00	4.78e+06	1.06	y	29:38	-	1.07
26	Tri	PCB-22	1.00	1.85e+06	1.03	y	30:05	-	1.24
27	Tri	PCB-36	1.00	1.58e+06	0.96	y	30:41	-	1.16
28	Tri	PCB-39	1.00	1.53e+06	1.03	y	31:09	-	1.12
29	Tri	PCB-38	1.00	1.71e+06	0.96	y	31:56	-	1.25
30	Tri	PCB-35	1.00	1.61e+06	1.02	y	32:27	-	1.18
31	Tri	PCB-37	1.00	1.78e+06	0.99	y	32:53	-	1.30
32	Tetra	PCB-54	1.00	1.33e+06	0.85	y	27:56	-	1.06
33	Tetra	PCB-50	1.00	1.04e+06	0.83	y	29:04	-	0.83
34	Tetra	PCB-53	1.00	1.06e+06	0.75	y	29:43	-	1.05
35	Tetra	PCB-51	1.00	1.07e+06	0.77	y	30:03	-	1.06
36	Tetra	PCB-45	1.00	8.56e+05	0.81	y	30:29	-	0.85
37	Tetra	PCB-46	1.00	8.89e+05	0.82	y	30:58	-	0.89
38	Tetra	PCB-52/69	2.00	2.58e+06	0.75	y	31:26	-	1.29
39	Tetra	PCB-73	1.00	1.30e+06	0.82	y	31:33	-	1.30
40	Tetra	PCB-43/49	2.00	2.01e+06	0.79	y	31:43	-	1.01
41	Tetra	PCB-47	1.00	1.15e+06	0.76	y	31:55	-	1.10

42	Tetra	PCB-48/75	2.00	2.58e+06	0.79	y	32:02	-	1.24
43	Tetra	PCB-65	1.00	1.36e+06	0.70	y	32:18	-	1.30
44	Tetra	PCB-62	1.00	1.15e+06	0.75	y	32:25	-	1.10
45	Tetra	PCB-44	1.00	9.43e+05	0.71	y	32:42	-	0.90
46	Tetra	PCB-42/59	2.00	2.48e+06	0.73	y	32:56	-	1.19
47	Tetra	PCB-41/64/71/72	4.00	5.23e+06	0.81	y	33:31	-	1.25
48	Tetra	PCB-68	1.00	1.41e+06	0.83	y	33:46	-	1.35
49	Tetra	PCB-40	1.00	7.66e+05	0.68	y	34:00	-	0.73
50	Tetra	PCB-57	1.00	1.23e+06	0.73	y	34:21	-	0.96
51	Tetra	PCB-67	1.00	1.43e+06	0.70	y	34:39	-	1.11
52	Tetra	PCB-58	1.00	1.22e+06	0.81	y	34:46	-	0.95

53	Tetra	PCB-63	1.00	1.23e+06	0.72	y	34:55	-	0.95
54	Tetra	PCB-74	1.00	1.56e+06	0.79	y	35:12	-	1.21
55	Tetra	PCB-61/70	2.00	2.47e+06	0.75	y	35:23	-	0.96
56	Tetra	PCB-76/66	2.00	2.68e+06	0.76	y	35:36	-	1.04
57	Tetra	PCB-80	1.00	1.62e+06	0.71	y	35:50	-	1.22
58	Tetra	PCB-55	1.00	1.32e+06	0.77	y	36:09	-	0.99
59	Tetra	PCB-56/60	2.00	2.80e+06	0.73	y	36:39	-	1.06
60	Tetra	PCB-79	1.00	1.42e+06	0.79	y	37:42	-	1.07
61	Tetra	PCB-78	1.00	1.49e+06	0.78	y	38:25	-	1.26
62	Tetra	PCB-81	1.00	1.56e+06	0.81	y	38:56	-	1.32
63	Tetra	PCB-77	1.00	1.28e+06	0.77	y	39:32	-	1.07
64	Penta	PCB-104	1.00	1.07e+06	1.55	y	32:35	-	1.18
65	Penta	PCB-96	1.00	1.05e+06	1.49	y	33:50	-	1.15
66	Penta	PCB-103	1.00	8.47e+05	1.59	y	34:21	-	0.93
67	Penta	PCB-100	1.00	8.14e+05	1.70	y	34:42	-	0.90
68	Penta	PCB-94	1.00	7.01e+05	1.52	y	35:10	-	1.08
69	Penta	PCB-95/98/102	3.00	2.40e+06	1.45	y	35:40	-	1.23
70	Penta	PCB-93	1.00	5.56e+05	1.74	y	35:48	-	0.85
71	Penta	PCB-88/91	2.00	1.45e+06	1.50	y	36:05	-	1.11
72	Penta	PCB-121	1.00	9.97e+05	1.56	y	36:12	-	1.53
73	Penta	PCB-84/92	2.00	1.39e+06	1.53	y	37:00	-	1.00
74	Penta	PCB-89	1.00	7.51e+05	1.52	y	37:13	-	1.07
75	Penta	PCB-90/101	2.00	1.52e+06	1.60	y	37:23	-	1.08
76	Penta	PCB-113	1.00	9.10e+05	1.52	y	37:37	-	1.30
77	Penta	PCB-99	1.00	1.04e+06	1.45	y	37:42	-	1.49
78	Penta	PCB-119	1.00	9.16e+05	1.51	y	38:11	-	1.46
79	Penta	PCB-108/112	2.00	1.56e+06	1.62	y	38:20	-	1.25
80	Penta	PCB-83	1.00	9.33e+05	1.71	y	38:30	-	1.49
81	Penta	PCB-97	1.00	7.11e+05	1.49	y	38:42	-	1.13
82	Penta	PCB-86	1.00	5.14e+05	1.35	y	38:51	-	0.82
83	Penta	PCB-87/117/125	3.00	2.83e+06	1.57	y	38:57	-	1.50
84	Penta	PCB-111/115	2.00	2.06e+06	1.59	y	39:08	-	1.64
85	Penta	PCB-85/116	2.00	1.52e+06	1.65	y	39:16	-	1.21
86	Penta	PCB-120	1.00	1.06e+06	1.54	y	39:29	-	1.69
87	Penta	PCB-110	1.00	9.43e+05	1.47	y	39:38	-	1.50
88	Penta	PCB-82	1.00	6.04e+05	1.60	y	40:16	-	0.75
89	Penta	PCB-124	1.00	1.13e+06	1.50	y	40:56	-	1.40
90	Penta	PCB-107/109	2.00	2.00e+06	1.63	y	41:05	-	1.24
91	Penta	PCB-123	1.00	9.34e+05	1.64	y	41:15	-	1.16
92	Penta	PCB-106/118	2.00	1.94e+06	1.53	y	41:27	-	1.13
93	Penta	PCB-114	1.00	1.25e+06	1.49	y	42:06	-	1.31
94	Penta	PCB-122	1.00	1.07e+06	1.65	y	42:14	-	1.12
95	Penta	PCB-105	1.00	1.23e+06	1.59	y	42:58	-	1.28
96	Penta	PCB-127	1.00	1.38e+06	1.64	y	43:18	-	1.31
97	Penta	PCB-126	1.00	1.08e+06	1.55	y	45:12	-	1.16
98	Hexa	PCB-155	1.00	8.37e+05	1.10	y	36:56	-	1.11
99	Hexa	PCB-150	1.00	7.52e+05	1.14	y	38:12	-	0.99
100	Hexa	PCB-152	1.00	7.75e+05	1.29	y	38:40	-	1.02
101	Hexa	PCB-145	1.00	8.56e+05	1.22	y	39:08	-	1.13
102	Hexa	PCB-136	1.00	8.87e+05	1.27	y	39:27	-	1.17

103	Hexa	PCB-148	1.00	5.42e+05	1.31	y	39:33	-	0.72
104	Hexa	PCB-154	1.00	6.51e+05	1.13	y	40:02	-	0.86
105	Hexa	PCB-151	1.00	5.25e+05	1.34	y	40:41	-	0.69
106	Hexa	PCB-135	1.00	6.20e+05	1.16	y	40:53	-	0.82
107	Hexa	PCB-144	1.00	5.68e+05	1.14	y	41:00	-	0.75
108	Hexa	PCB-147	1.00	6.03e+05	1.39	y	41:08	-	0.80
109	Hexa	PCB-139/149	2.00	1.07e+06	1.35	y	41:24	-	0.71
110	Hexa	PCB-140	1.00	5.54e+05	1.12	y	41:35	-	0.73
111	Hexa	PCB-134/143	2.00	1.48e+06	1.32	y	42:02	-	0.89
112	Hexa	PCB-133/142	2.00	1.31e+06	1.23	y	42:19	-	0.78
113	Hexa	PCB-131	1.00	7.77e+05	1.25	y	42:29	-	0.93

114	Hexa	PCB-146/165	2.00	1.94e+06	1.26 y	42:42	-	1.16
115	Hexa	PCB-132/161	2.00	1.76e+06	1.27 y	42:57	-	1.06
116	Hexa	PCB-153	1.00	1.11e+06	1.29 y	43:06	-	1.33
117	Hexa	PCB-168	1.00	1.18e+06	1.25 y	43:19	-	1.41
118	Hexa	PCB-141	1.00	8.76e+05	1.23 y	43:51	-	1.12
119	Hexa	PCB-137	1.00	7.99e+05	1.23 y	44:15	-	1.02
120	Hexa	PCB-130	1.00	7.15e+05	1.22 y	44:20	-	0.91
121	Hexa	PCB-138/163/164	3.00	2.94e+06	1.28 y	44:43	-	1.23
122	Hexa	PCB-158/160	2.00	2.07e+06	1.39 y	44:58	-	1.30
123	Hexa	PCB-129	1.00	6.52e+05	1.17 y	45:12	-	0.82
124	Hexa	PCB-166	1.00	1.08e+06	1.25 y	45:40	-	1.18
125	Hexa	PCB-159	1.00	9.95e+05	1.26 y	46:00	-	1.09
126	Hexa	PCB-128/162	2.00	1.90e+06	1.35 y	46:17	-	1.04
127	Hexa	PCB-167	1.00	1.19e+06	1.26 y	46:40	-	1.21
128	Hexa	PCB-156	1.00	1.01e+06	1.15 y	47:59	-	1.09
129	Hexa	PCB-157	1.00	1.13e+06	1.24 y	48:15	-	1.16
130	Hexa	PCB-169	1.00	9.84e+05	1.29 y	50:19	-	1.07
131	Hepta	PCB-188	1.00	1.07e+06	1.08 y	42:44	-	1.66
132	Hepta	PCB-184	1.00	1.07e+06	1.01 y	43:12	-	1.66
133	Hepta	PCB-179	1.00	9.11e+05	1.11 y	43:58	-	1.41
134	Hepta	PCB-176	1.00	9.38e+05	1.19 y	44:27	-	1.46
135	Hepta	PCB-186	1.00	8.65e+05	1.07 y	45:04	-	1.34
136	Hepta	PCB-178	1.00	6.76e+05	1.13 y	45:32	-	1.05
137	Hepta	PCB-175	1.00	6.57e+05	1.07 y	45:54	-	1.02
138	Hepta	PCB-182/187	2.00	1.61e+06	1.10 y	46:04	-	1.25
139	Hepta	PCB-183	1.00	7.65e+05	1.02 y	46:23	-	1.19
140	Hepta	PCB-185	1.00	8.43e+05	0.96 y	47:03	-	1.68
141	Hepta	PCB-174	1.00	6.52e+05	1.02 y	47:25	-	1.30
142	Hepta	PCB-181	1.00	6.66e+05	1.08 y	47:31	-	1.33
143	Hepta	PCB-177	1.00	6.16e+05	1.08 y	47:42	-	1.23
144	Hepta	PCB-171	1.00	7.73e+05	0.96 y	47:59	-	1.54
145	Hepta	PCB-173	1.00	5.56e+05	0.90 y	48:25	-	1.11
146	Hepta	PCB-172	1.00	8.39e+05	1.07 y	48:52	-	1.67
147	Hepta	PCB-192	1.00	8.60e+05	1.06 y	49:04	-	1.71
148	Hepta	PCB-180	1.00	6.37e+05	0.90 y	49:15	-	1.27
149	Hepta	PCB-193	1.00	8.28e+05	1.14 y	49:27	-	1.65
150	Hepta	PCB-191	1.00	8.11e+05	1.07 y	49:42	-	1.62
151	Hepta	PCB-170	1.00	6.14e+05	0.96 y	50:41	-	1.53
152	Hepta	PCB-190	1.00	8.22e+05	1.03 y	50:50	-	2.04
153	Hepta	PCB-189	1.00	7.94e+05	1.03 y	52:07	-	1.50
154	Octa	PCB-202	1.00	6.55e+05	1.00 y	48:12	-	1.05
155	Octa	PCB-201	1.00	7.12e+05	0.86 y	48:42	-	1.14
156	Octa	PCB-204	1.00	6.82e+05	0.95 y	48:50	-	1.10
157	Octa	PCB-197	1.00	6.44e+05	0.88 y	49:08	-	1.04
158	Octa	PCB-200	1.00	6.28e+05	0.92 y	49:59	-	1.01
159	Octa	PCB-198	1.00	4.28e+05	0.78 y	51:15	-	0.69
160	Octa	PCB-199	1.00	5.35e+05	0.89 y	51:21	-	0.86
161	Octa	PCB-196/203	2.00	9.29e+05	0.93 y	51:37	-	0.75
162	Octa	PCB-195	1.00	6.48e+05	0.85 y	52:45	-	1.18
163	Octa	PCB-194	1.00	6.56e+05	0.96 y	53:38	-	1.19

164	Octa	PCB-205	1.00	8.69e+05	0.98	y	53:56	-	1.58
165	Nona	PCB-208	1.00	6.83e+05	1.14	y	52:54	-	0.92
166	Nona	PCB-207	1.00	7.94e+05	1.46	y	53:12	-	1.07
167	Nona	PCB-206	1.00	4.60e+05	1.50	y	55:20	-	1.03
168	Deca	PCB-209	1.00	4.74e+05	1.30	y	56:37	-	1.12
169	Tot Σ	Total Mono-PCB	0.00	-	-	n	-	-	1.21
170	Tot Σ	Total Di-PCB	0.00	-	-	n	-	-	1.18
171	Tot Σ	Total Tri-PCB	0.00	-	-	n	-	-	1.08

172	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.23
173	Tot Σ	Total Tetra-PCB	0.00	-	- n	-	-	1.10
174	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.16
175	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.24
176	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	0.87
177	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	1.08
178	Tot Σ	Total Hepta-PCB	0.00	-	- n	-	-	1.40
179	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	0.93
180	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	1.31
181	Tot Σ	Total Nona-PCB	0.00	-	- n	-	-	1.00
182	Tot Σ	Total Deca-PCB	1.00	4.74e+05	1.30 y	56:37	-	1.12
183	MonoΣ	13C-PCB-1	100.00	1.69e+08	3.26 y	16:23	-	0.92
184	MonoΣ	13C-PCB-3	100.00	1.78e+08	3.34 y	18:53	-	0.97
185	Di-IS	13C-PCB-4	100.00	1.10e+08	1.59 y	20:11	-	0.60
186	Di-IS	13C-PCB-9	100.00	1.67e+08	1.58 y	21:54	-	0.91
187	Di-IS	13C-PCB-11	100.00	1.73e+08	1.56 y	25:13	-	0.94
188	Tri-Σ	13C-PCB-19	100.00	1.03e+08	1.08 y	24:13	-	0.56
189	Tri-Σ	13C-PCB-32	100.00	1.51e+08	1.08 y	27:05	-	0.82
190	Tri-Σ	13C-PCB-28	100.00	1.49e+08	1.05 y	29:01	-	0.91
191	Tri-Σ	13C-PCB-37	100.00	1.36e+08	1.07 y	32:51	-	0.84
192	TetrΣ	13C-PCB-54	100.00	1.25e+08	0.80 y	27:55	-	0.96
193	TetrΣ	13C-PCB-52	100.00	1.00e+08	0.79 y	31:24	-	0.77
194	TetrΣ	13C-PCB-47	100.00	1.04e+08	0.79 y	31:54	-	0.80
195	TetrΣ	13C-PCB-70	100.00	1.29e+08	0.80 y	35:24	-	0.99
196	TetrΣ	13C-PCB-80	100.00	1.33e+08	0.79 y	35:49	-	1.02
197	TetrΣ	13C-PCB-81	100.00	1.18e+08	0.79 y	38:55	-	0.91
198	TetrΣ	13C-PCB-77	100.00	1.20e+08	0.79 y	39:30	-	0.93
199	PentΣ	13C-PCB-104	100.00	9.09e+07	1.57 y	32:33	-	1.02
200	PentΣ	13C-PCB-95	100.00	6.52e+07	1.56 y	35:42	-	0.73
201	PentΣ	13C-PCB-101	100.00	7.00e+07	1.57 y	37:22	-	0.79
202	PentΣ	13C-PCB-97	100.00	6.28e+07	1.60 y	38:40	-	0.71
203	PentΣ	13C-PCB-123	100.00	8.04e+07	1.57 y	41:15	-	0.90
204	PentΣ	13C-PCB-118	100.00	8.60e+07	1.62 y	41:25	-	0.97
205	PentΣ	13C-PCB-114	100.00	9.51e+07	1.64 y	42:05	-	1.33
206	PentΣ	13C-PCB-105	100.00	9.62e+07	1.60 y	42:57	-	1.34
207	PentΣ	13C-PCB-127	100.00	1.06e+08	1.61 y	43:17	-	1.48
208	PentΣ	13C-PCB-126	100.00	9.30e+07	1.60 y	45:11	-	1.30
209	HexaΣ	13C-PCB-155	100.00	7.57e+07	1.27 y	36:55	-	0.85
210	HexaΣ	13C-PCB-153	100.00	8.33e+07	1.30 y	43:06	-	1.16
211	HexaΣ	13C-PCB-141	100.00	7.82e+07	1.28 y	43:50	-	1.09
212	Hexa	13C-PCB-138	100.00	7.98e+07	1.28 y	44:41	-	1.11
213	HexaΣ	13C-PCB-159	100.00	9.11e+07	1.28 y	45:59	-	1.27
214	HexaΣ	13C-PCB-167	100.00	9.84e+07	1.27 y	46:40	-	1.37
215	HexaΣ	13C-PCB-156	100.00	9.34e+07	1.28 y	47:58	-	1.30
216	HexaΣ	13C-PCB-157	100.00	9.73e+07	1.29 y	48:14	-	1.36
217	HexaΣ	13C-PCB-169	100.00	9.18e+07	1.27 y	50:19	-	1.28
218	HeptΣ	13C-PCB-188	100.00	6.44e+07	0.46 y	42:44	-	0.90
219	HeptΣ	13C-PCB-180	100.00	5.02e+07	0.46 y	49:15	-	0.70
220	HeptΣ	13C-PCB-170	100.00	4.02e+07	0.48 y	50:40	-	0.56
221	HeptΣ	13C-PCB-189	100.00	5.29e+07	0.47 y	52:06	-	0.74
222	OctaΣ	13C-PCB-202	100.00	6.22e+07	0.90 y	48:10	-	0.87

223	Octa ₇	13C-PCB-194	100.00	5.51e+07	0.92 y	53:37	-	0.81
224	Nona ₇	13C-PCB-208	100.00	7.43e+07	0.77 y	52:53	-	1.09
225	Nona ₇	13C-PCB-206	100.00	4.47e+07	0.79 y	55:19	-	0.66
226	Deca ₇	13C-PCB-209	100.00	4.24e+07	1.24 y	56:36	-	0.62
227	DI-RS	13C-PCB-15	100.00	1.84e+08	1.57 y	25:54	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.63e+08	1.05 y	28:54	-	1.00
229	Tetra ₇	13C-PCB-60	100.00	1.30e+08	0.80 y	36:39	-	1.00
230	Penta	13C-PCB-111	100.00	8.89e+07	1.60 y	39:06	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	7.17e+07	1.30 y	46:16	-	1.00
232	Octa ₇	13C-PCB-205	100.00	6.82e+07	0.91 y	53:55	-	1.00

233	CRS	13C-PCB-79	100.00	1.32e+08	0.79	y	37:41	-	1.02
234	CRS	13C-PCB-178	100.00	4.49e+07	0.45	y	45:32	-	0.63
235	PS	13C-PCB-79	100.00	1.32e+08	0.79	y	37:41	-	1.12
236	PS	13C-PCB-178	100.00	4.49e+07	0.45	y	45:32	-	0.90

Filename: 140623E2 S: 3 Acquired: 23-JUN-14 13:49:52
 Run: 140623E2 Analyte: ICal: PCBVG8-6-23-14 Results: 140623E2
 Sample text: ST140623E2-3 PCB CS2 14F1604

Typ	Name	Amount	Resp	RA	RT	RF	RRF
1 Mono	PCB-1	2.50	4.75e+06	3.02 y	16:24	-	1.18
2 Mono	PCB-2	2.50	4.92e+06	2.98 y	18:41	-	1.16
3 Mono	PCB-3	2.50	5.82e+06	3.06 y	18:54	-	1.37
4 Di	PCB-4/10	10.00	1.63e+07	1.69 y	20:13	-	1.55
5 Di	PCB-7/9	10.00	1.91e+07	1.66 y	21:57	-	1.19
6 Di	PCB-6	5.00	1.05e+07	1.63 y	22:35	-	1.31
7 Di	PCB-5/8	10.00	1.85e+07	1.65 y	22:59	-	1.15
8 Di	PCB-14	5.00	9.28e+06	1.67 y	24:03	-	1.11
9 Di	PCB-11	5.00	8.97e+06	1.69 y	25:13	-	1.07
10 Di	PCB-12/13	10.00	1.98e+07	1.68 y	25:37	-	1.18
11 Di	PCB-15	5.00	1.05e+07	1.70 y	25:55	-	1.26
12 Tri	PCB-19	2.50	2.48e+06	1.07 y	24:14	-	1.01
13 Tri	PCB-30	2.50	4.07e+06	1.08 y	25:06	-	1.66
14 Tri	PCB-18	2.50	2.77e+06	1.08 y	25:50	-	0.79
15 Tri	PCB-17	2.50	3.32e+06	1.02 y	26:01	-	0.94
16 Tri	PCB-24/27	5.00	8.36e+06	1.04 y	26:35	-	1.19
17 Tri	PCB-16/32	5.00	6.64e+06	1.06 y	27:05	-	0.94
18 Tri	PCB-34	2.50	4.10e+06	1.00 y	27:52	-	1.13
19 Tri	PCB-23	2.50	4.41e+06	1.05 y	27:58	-	1.22
20 Tri	PCB-29	2.50	3.95e+06	1.06 y	28:13	-	1.09
21 Tri	PCB-26	2.50	4.58e+06	1.04 y	28:24	-	1.27
22 Tri	PCB-25	2.50	4.69e+06	1.09 y	28:35	-	1.30
23 Tri	PCB-31	2.50	4.94e+06	1.06 y	28:55	-	1.36
24 Tri	PCB-28	2.50	6.44e+06	1.05 y	29:02	-	1.78
25 Tri	PCB-20/21/33	7.50	1.21e+07	1.07 y	29:38	-	1.11
26 Tri	PCB-22	2.50	4.25e+06	1.06 y	30:04	-	1.17
27 Tri	PCB-36	2.50	3.41e+06	1.03 y	30:41	-	1.11
28 Tri	PCB-39	2.50	3.35e+06	1.04 y	31:09	-	1.09
29 Tri	PCB-38	2.50	3.81e+06	1.11 y	31:56	-	1.24
30 Tri	PCB-35	2.50	4.04e+06	1.02 y	32:26	-	1.31
31 Tri	PCB-37	2.50	3.84e+06	0.98 y	32:53	-	1.25
32 Tetra	PCB-54	2.50	3.28e+06	0.79 y	27:56	-	1.10
33 Tetra	PCB-50	2.50	2.75e+06	0.77 y	29:04	-	0.92
34 Tetra	PCB-53	2.50	2.52e+06	0.76 y	29:43	-	1.06
35 Tetra	PCB-51	2.50	2.31e+06	0.79 y	30:03	-	0.97
36 Tetra	PCB-45	2.50	1.97e+06	0.72 y	30:29	-	0.83
37 Tetra	PCB-46	2.50	1.95e+06	0.75 y	30:58	-	0.82
38 Tetra	PCB-52/69	5.00	6.07e+06	0.78 y	31:26	-	1.27
39 Tetra	PCB-73	2.50	3.40e+06	0.77 y	31:33	-	1.43
40 Tetra	PCB-43/49	5.00	4.57e+06	0.77 y	31:43	-	0.96
41 Tetra	PCB-47	2.50	2.67e+06	0.72 y	31:55	-	1.07

42	Tetra	PCB-48/75	5.00	6.04e+06	0.80	y	32:01	-	1.21
43	Tetra	PCB-65	2.50	3.21e+06	0.86	y	32:18	-	1.29
44	Tetra	PCB-62	2.50	3.13e+06	0.70	y	32:25	-	1.25
45	Tetra	PCB-44	2.50	2.09e+06	0.75	y	32:42	-	0.84
46	Tetra	PCB-42/59	5.00	5.38e+06	0.76	y	32:56	-	1.08
47	Tetra	PCB-41/64/71/72	10.00	1.16e+07	0.76	y	33:31	-	1.16
48	Tetra	PCB-68	2.50	3.30e+06	0.76	y	33:46	-	1.32
49	Tetra	PCB-40	2.50	1.74e+06	0.77	y	34:00	-	0.70
50	Tetra	PCB-57	2.50	3.04e+06	0.75	y	34:21	-	1.00
51	Tetra	PCB-67	2.50	3.37e+06	0.81	y	34:39	-	1.11
52	Tetra	PCB-58	2.50	2.87e+06	0.75	y	34:46	-	0.94

53	Tetra	PCB-63	2.50	2.77e+06	0.73	y	34:55	-	0.91
54	Tetra	PCB-74	2.50	3.80e+06	0.75	y	35:12	-	1.25
55	Tetra	PCB-61/70	5.00	5.98e+06	0.74	y	35:23	-	0.98
56	Tetra	PCB-76/66	5.00	6.31e+06	0.76	y	35:36	-	1.04
57	Tetra	PCB-80	2.50	3.85e+06	0.79	y	35:50	-	1.22
58	Tetra	PCB-55	2.50	3.37e+06	0.77	y	36:09	-	1.07
59	Tetra	PCB-56/60	5.00	6.58e+06	0.79	y	36:39	-	1.05
60	Tetra	PCB-79	2.50	3.55e+06	0.78	y	37:42	-	1.13
61	Tetra	PCB-78	2.50	3.58e+06	0.75	y	38:24	-	1.27
62	Tetra	PCB-81	2.50	3.64e+06	0.71	y	38:56	-	1.29
63	Tetra	PCB-77	2.50	3.13e+06	0.84	y	39:32	-	1.11
64	Penta	PCB-104	2.50	2.54e+06	1.55	y	32:34	-	1.20
65	Penta	PCB-96	2.50	2.37e+06	1.57	y	33:49	-	1.11
66	Penta	PCB-103	2.50	1.95e+06	1.62	y	34:21	-	0.92
67	Penta	PCB-100	2.50	1.89e+06	1.58	y	34:42	-	0.89
68	Penta	PCB-94	2.50	1.59e+06	1.56	y	35:10	-	1.03
69	Penta	PCB-95/98/102	7.50	5.65e+06	1.58	y	35:40	-	1.22
70	Penta	PCB-93	2.50	1.33e+06	1.59	y	35:48	-	0.86
71	Penta	PCB-88/91	5.00	3.54e+06	1.56	y	36:05	-	1.15
72	Penta	PCB-121	2.50	2.47e+06	1.61	y	36:11	-	1.61
73	Penta	PCB-84/92	5.00	3.35e+06	1.58	y	37:00	-	1.04
74	Penta	PCB-89	2.50	1.82e+06	1.44	y	37:13	-	1.13
75	Penta	PCB-90/101	5.00	3.61e+06	1.57	y	37:23	-	1.12
76	Penta	PCB-113	2.50	2.36e+06	1.55	y	37:38	-	1.46
77	Penta	PCB-99	2.50	2.05e+06	1.54	y	37:43	-	1.27
78	Penta	PCB-119	2.50	2.29e+06	1.50	y	38:11	-	1.54
79	Penta	PCB-108/112	5.00	3.72e+06	1.60	y	38:20	-	1.25
80	Penta	PCB-83	2.50	2.26e+06	1.63	y	38:30	-	1.52
81	Penta	PCB-97	2.50	1.70e+06	1.65	y	38:41	-	1.14
82	Penta	PCB-86	2.50	1.20e+06	1.61	y	38:50	-	0.81
83	Penta	PCB-87/117/125	7.50	6.65e+06	1.64	y	38:57	-	1.49
84	Penta	PCB-111/115	5.00	4.80e+06	1.62	y	39:08	-	1.61
85	Penta	PCB-85/116	5.00	3.77e+06	1.61	y	39:15	-	1.27
86	Penta	PCB-120	2.50	2.37e+06	1.56	y	39:29	-	1.60
87	Penta	PCB-110	2.50	2.32e+06	1.42	y	39:38	-	1.56
88	Penta	PCB-82	2.50	1.39e+06	1.53	y	40:16	-	0.74
89	Penta	PCB-124	2.50	2.74e+06	1.58	y	40:57	-	1.45
90	Penta	PCB-107/109	5.00	4.89e+06	1.55	y	41:05	-	1.29
91	Penta	PCB-123	2.50	2.23e+06	1.54	y	41:15	-	1.18
92	Penta	PCB-106/118	5.00	4.74e+06	1.58	y	41:27	-	1.19
93	Penta	PCB-114	2.50	3.01e+06	1.74	y	42:06	-	1.31
94	Penta	PCB-122	2.50	2.58e+06	1.66	y	42:14	-	1.12
95	Penta	PCB-105	2.50	3.03e+06	1.56	y	42:58	-	1.31
96	Penta	PCB-127	2.50	3.44e+06	1.56	y	43:18	-	1.37
97	Penta	PCB-126	2.50	2.65e+06	1.69	y	45:12	-	1.19
98	Hexa	PCB-155	2.50	1.95e+06	1.25	y	36:56	-	1.10
99	Hexa	PCB-150	2.50	1.74e+06	1.30	y	38:12	-	0.98
100	Hexa	PCB-152	2.50	1.99e+06	1.35	y	38:40	-	1.12
101	Hexa	PCB-145	2.50	2.09e+06	1.25	y	39:08	-	1.18
102	Hexa	PCB-136	2.50	2.08e+06	1.27	y	39:27	-	1.17

103	Hexa	PCB-148	2.50	1.31e+06	1.34	y	39:33	-	0.74
104	Hexa	PCB-154	2.50	1.55e+06	1.20	y	40:02	-	0.88
105	Hexa	PCB-151	2.50	1.29e+06	1.35	y	40:41	-	0.73
106	Hexa	PCB-135	2.50	1.24e+06	1.27	y	40:53	-	0.70
107	Hexa	PCB-144	2.50	1.35e+06	1.29	y	41:00	-	0.76
108	Hexa	PCB-147	2.50	1.38e+06	1.27	y	41:08	-	0.78
109	Hexa	PCB-139/149	5.00	2.58e+06	1.32	y	41:24	-	0.73
110	Hexa	PCB-140	2.50	1.29e+06	1.21	y	41:35	-	0.73
111	Hexa	PCB-134/143	5.00	3.48e+06	1.21	y	42:01	-	0.89
112	Hexa	PCB-133/142	5.00	3.10e+06	1.24	y	42:19	-	0.79
113	Hexa	PCB-131	2.50	1.76e+06	1.30	y	42:29	-	0.90

114	Hexa	PCB-146/165	5.00	4.77e+06	1.25 y	42:42	-	1.22
115	Hexa	PCB-132/161	5.00	4.19e+06	1.28 y	42:57	-	1.07
116	Hexa	PCB-153	2.50	2.42e+06	1.18 y	43:07	-	1.24
117	Hexa	PCB-168	2.50	2.79e+06	1.31 y	43:20	-	1.43
118	Hexa	PCB-141	2.50	1.92e+06	1.24 y	43:51	-	1.04
119	Hexa	PCB-137	2.50	1.90e+06	1.26 y	44:14	-	1.03
120	Hexa	PCB-130	2.50	1.82e+06	1.20 y	44:20	-	0.99
121	Hexa	PCB-138/163/164	7.50	7.26e+06	1.17 y	44:43	-	1.30
122	Hexa	PCB-158/160	5.00	5.17e+06	1.21 y	44:58	-	1.39
123	Hexa	PCB-129	2.50	1.61e+06	1.27 y	45:12	-	0.87
124	Hexa	PCB-166	2.50	2.51e+06	1.17 y	45:40	-	1.18
125	Hexa	PCB-159	2.50	2.37e+06	1.27 y	46:00	-	1.11
126	Hexa	PCB-128/162	5.00	4.28e+06	1.21 y	46:17	-	1.00
127	Hexa	PCB-167	2.50	2.79e+06	1.21 y	46:40	-	1.21
128	Hexa	PCB-156	2.50	2.59e+06	1.29 y	47:59	-	1.18
129	Hexa	PCB-157	2.50	2.63e+06	1.28 y	48:15	-	1.14
130	Hexa	PCB-169	2.50	2.41e+06	1.20 y	50:20	-	1.09
131	Hepta	PCB-188	2.50	2.41e+06	0.99 y	42:44	-	1.55
132	Hepta	PCB-184	2.50	2.63e+06	1.06 y	43:12	-	1.69
133	Hepta	PCB-179	2.50	2.01e+06	1.01 y	43:59	-	1.29
134	Hepta	PCB-176	2.50	2.25e+06	1.03 y	44:27	-	1.45
135	Hepta	PCB-186	2.50	2.12e+06	0.99 y	45:04	-	1.36
136	Hepta	PCB-178	2.50	1.70e+06	1.03 y	45:33	-	1.10
137	Hepta	PCB-175	2.50	1.56e+06	1.13 y	45:54	-	1.00
138	Hepta	PCB-182/187	5.00	3.83e+06	1.06 y	46:04	-	1.24
139	Hepta	PCB-183	2.50	1.88e+06	0.99 y	46:23	-	1.21
140	Hepta	PCB-185	2.50	2.14e+06	1.08 y	47:03	-	1.87
141	Hepta	PCB-174	2.50	1.52e+06	1.09 y	47:25	-	1.33
142	Hepta	PCB-181	2.50	1.64e+06	1.06 y	47:31	-	1.44
143	Hepta	PCB-177	2.50	1.46e+06	1.12 y	47:41	-	1.28
144	Hepta	PCB-171	2.50	1.80e+06	1.10 y	47:59	-	1.57
145	Hepta	PCB-173	2.50	1.30e+06	1.02 y	48:25	-	1.14
146	Hepta	PCB-172	2.50	1.89e+06	1.10 y	48:52	-	1.66
147	Hepta	PCB-192	2.50	2.02e+06	1.05 y	49:03	-	1.77
148	Hepta	PCB-180	2.50	1.56e+06	1.03 y	49:15	-	1.37
149	Hepta	PCB-193	2.50	1.90e+06	1.14 y	49:27	-	1.67
150	Hepta	PCB-191	2.50	1.95e+06	1.08 y	49:42	-	1.71
151	Hepta	PCB-170	2.50	1.48e+06	1.03 y	50:41	-	1.63
152	Hepta	PCB-190	2.50	2.08e+06	1.01 y	50:51	-	2.28
153	Hepta	PCB-189	2.50	1.87e+06	1.06 y	52:07	-	1.54
154	Octa	PCB-202	2.50	1.49e+06	0.93 y	48:11	-	1.05
155	Octa	PCB-201	2.50	1.64e+06	0.88 y	48:41	-	1.16
156	Octa	PCB-204	2.50	1.62e+06	0.92 y	48:51	-	1.14
157	Octa	PCB-197	2.50	1.49e+06	0.97 y	49:09	-	1.05
158	Octa	PCB-200	2.50	1.49e+06	0.95 y	49:59	-	1.05
159	Octa	PCB-198	2.50	1.08e+06	0.86 y	51:15	-	0.76
160	Octa	PCB-199	2.50	1.06e+06	0.98 y	51:22	-	0.75
161	Octa	PCB-196/203	5.00	2.18e+06	0.94 y	51:37	-	0.77
162	Octa	PCB-195	2.50	1.58e+06	0.94 y	52:46	-	1.24
163	Octa	PCB-194	2.50	1.51e+06	0.87 y	53:39	-	1.18

164	Octa	PCB-205	2.50	1.95e+06	0.91	y	53:56	-	1.53
165	Nona	PCB-208	2.50	1.57e+06	1.28	y	52:54	-	0.91
166	Nona	PCB-207	2.50	1.82e+06	1.42	y	53:13	-	1.05
167	Nona	PCB-206	2.50	1.03e+06	1.32	y	55:21	-	0.99
168	Deca	PCB-209	2.50	1.17e+06	1.22	y	56:39	-	1.17
169	Tot က	Total Mono-PCB	0.00	-	-	n	-	-	1.24
170	Tot က	Total Di-PCB	0.00	-	-	n	-	-	1.20
171	Tot က	Total Tri-PCB	0.00	-	-	n	-	-	1.09

172	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.24
173	Tot Σ	Total Tetra-PCB	0.00	-	- n	-	-	1.08
174	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.17
175	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.26
176	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	0.88
177	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	1.10
178	Tot Σ	Total Hepta-PCB	0.00	-	- n	-	-	1.42
179	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	0.95
180	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	1.32
181	Tot Σ	Total Nona-PCB	0.00	-	- n	-	-	0.98
182	Tot Σ	Total Deca-PCB	2.50	1.17e+06	1.22 y	56:39	-	1.17
183	Mono Σ	13C-PCB-1	100.00	1.61e+08	3.34 y	16:23	-	0.91
184	Mono Σ	13C-PCB-3	100.00	1.70e+08	3.41 y	18:53	-	0.96
185	Di- Σ	13C-PCB-4	100.00	1.05e+08	1.60 y	20:11	-	0.60
186	Di- Σ	13C-PCB-9	100.00	1.61e+08	1.58 y	21:54	-	0.91
187	Di- Σ	13C-PCB-11	100.00	1.68e+08	1.55 y	25:12	-	0.95
188	Tri- Σ	13C-PCB-19	100.00	9.81e+07	1.09 y	24:13	-	0.56
189	Tri- Σ	13C-PCB-32	100.00	1.41e+08	1.10 y	27:05	-	0.80
190	Tri- Σ	13C-PCB-28	100.00	1.45e+08	1.05 y	29:00	-	0.93
191	Tri- Σ	13C-PCB-37	100.00	1.23e+08	1.05 y	32:51	-	0.79
192	Tetra Σ	13C-PCB-54	100.00	1.19e+08	0.80 y	27:55	-	0.97
193	Tetra Σ	13C-PCB-52	100.00	9.54e+07	0.79 y	31:24	-	0.77
194	Tetra Σ	13C-PCB-47	100.00	9.99e+07	0.78 y	31:53	-	0.81
195	Tetra Σ	13C-PCB-70	100.00	1.22e+08	0.79 y	35:24	-	0.99
196	Tetra Σ	13C-PCB-80	100.00	1.26e+08	0.79 y	35:48	-	1.02
197	Tetra Σ	13C-PCB-81	100.00	1.13e+08	0.80 y	38:55	-	0.92
198	Tetra Σ	13C-PCB-77	100.00	1.13e+08	0.81 y	39:31	-	0.92
199	Penta Σ	13C-PCB-104	100.00	8.51e+07	1.58 y	32:33	-	1.01
200	Penta Σ	13C-PCB-95	100.00	6.16e+07	1.60 y	35:42	-	0.73
201	Penta Σ	13C-PCB-101	100.00	6.46e+07	1.61 y	37:22	-	0.77
202	Penta Σ	13C-PCB-97	100.00	5.95e+07	1.56 y	38:40	-	0.71
203	Penta Σ	13C-PCB-123	100.00	7.57e+07	1.60 y	41:14	-	0.90
204	Penta Σ	13C-PCB-118	100.00	7.96e+07	1.58 y	41:25	-	0.95
205	Penta Σ	13C-PCB-114	100.00	9.23e+07	1.63 y	42:05	-	1.35
206	Penta Σ	13C-PCB-105	100.00	9.25e+07	1.61 y	42:57	-	1.36
207	Penta Σ	13C-PCB-127	100.00	1.01e+08	1.61 y	43:17	-	1.48
208	Penta Σ	13C-PCB-126	100.00	8.91e+07	1.60 y	45:11	-	1.31
209	Hexa Σ	13C-PCB-155	100.00	7.08e+07	1.28 y	36:55	-	0.84
210	Hexa Σ	13C-PCB-153	100.00	7.84e+07	1.29 y	43:06	-	1.15
211	Hexa Σ	13C-PCB-141	100.00	7.40e+07	1.27 y	43:50	-	1.09
212	Hexa	13C-PCB-138	100.00	7.43e+07	1.26 y	44:41	-	1.09
213	Hexa Σ	13C-PCB-159	100.00	8.52e+07	1.28 y	45:58	-	1.25
214	Hexa Σ	13C-PCB-167	100.00	9.23e+07	1.29 y	46:40	-	1.35
215	Hexa Σ	13C-PCB-156	100.00	8.80e+07	1.30 y	47:58	-	1.29
216	Hexa Σ	13C-PCB-157	100.00	9.23e+07	1.29 y	48:14	-	1.35
217	Hexa Σ	13C-PCB-169	100.00	8.83e+07	1.28 y	50:19	-	1.29
218	Hepta Σ	13C-PCB-188	100.00	6.20e+07	0.47 y	42:44	-	0.91
219	Hepta Σ	13C-PCB-180	100.00	4.56e+07	0.47 y	49:15	-	0.67
220	Hepta Σ	13C-PCB-170	100.00	3.64e+07	0.46 y	50:40	-	0.53
221	Hepta Σ	13C-PCB-189	100.00	4.86e+07	0.48 y	52:07	-	0.71
222	Octa Σ	13C-PCB-202	100.00	5.66e+07	0.90 y	48:10	-	0.83

223	Octa ₇	13C-PCB-194	100.00	5.12e+07	0.92	y	53:38	-	0.80
224	Nona ₇	13C-PCB-208	100.00	6.94e+07	0.78	y	52:53	-	1.09
225	Nona ₇	13C-PCB-206	100.00	4.16e+07	0.79	y	55:20	-	0.65
226	Deca ₇	13C-PCB-209	100.00	3.99e+07	1.19	y	56:38	-	0.63
227	DI-RS	13C-PCB-15	100.00	1.76e+08	1.60	y	25:54	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.55e+08	1.05	y	28:54	-	1.00
229	Tetra ₇	13C-PCB-60	100.00	1.23e+08	0.79	y	36:38	-	1.00
230	Penta	13C-PCB-111	100.00	8.39e+07	1.60	y	39:06	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	6.82e+07	1.27	y	46:16	-	1.00
232	Octa ₇	13C-PCB-205	100.00	6.36e+07	0.91	y	53:55	-	1.00

233	CRS	13C-PCB-79	100.00	1.25e+08	0.79	Y	37:41	-	1.02
234	CRS	13C-PCB-178	100.00	4.19e+07	0.47	Y	45:32	-	0.61
235	PS	13C-PCB-79	100.00	1.25e+08	0.79	Y	37:41	-	1.11
236	PS	13C-PCB-178	100.00	4.19e+07	0.47	Y	45:32	-	0.92

Filename: 140623E2 S: 4 Acquired: 23-JUN-14 14:53:49
 Run: 140623E2 Analyte: ICal: PCBVG8-6-23-14 Results: 140623E2
 Sample text: ST140623E2-4 PCB CS3 14F1302

	TYP	Name	Amount	Resp	RA	RT	RF	RRF	
1	Mono	PCB-1	50.00	9.40e+07	3.00	y	16:25	-	1.23
2	Mono	PCB-2	50.00	9.45e+07	3.01	y	18:41	-	1.23
3	Mono	PCB-3	50.00	1.13e+08	3.01	y	18:55	-	1.46
4	Di	PCB-4/10	200.00	3.27e+08	1.65	y	20:14	-	1.57
5	Di	PCB-7/9	200.00	3.82e+08	1.65	y	21:57	-	1.21
6	Di	PCB-6	100.00	2.07e+08	1.56	y	22:35	-	1.31
7	Di	PCB-5/8	200.00	3.65e+08	1.64	y	23:00	-	1.15
8	Di	PCB-14	100.00	1.87e+08	1.66	y	24:04	-	1.14
9	Di	PCB-11	100.00	1.81e+08	1.65	y	25:14	-	1.10
10	Di	PCB-12/13	200.00	3.92e+08	1.65	y	25:38	-	1.20
11	Di	PCB-15	100.00	2.11e+08	1.66	y	25:56	-	1.28
12	Tri	PCB-19	50.00	4.92e+07	1.05	y	24:15	-	1.04
13	Tri	PCB-30	50.00	7.99e+07	1.06	y	25:07	-	1.69
14	Tri	PCB-18	50.00	5.58e+07	1.05	y	25:51	-	0.80
15	Tri	PCB-17	50.00	6.48e+07	1.05	y	26:02	-	0.93
16	Tri	PCB-24/27	100.00	1.68e+08	1.05	y	26:36	-	1.20
17	Tri	PCB-16/32	100.00	1.31e+08	1.06	y	27:06	-	0.94
18	Tri	PCB-34	50.00	7.59e+07	1.03	y	27:52	-	1.09
19	Tri	PCB-23	50.00	8.55e+07	1.06	y	27:58	-	1.23
20	Tri	PCB-29	50.00	7.42e+07	1.04	y	28:13	-	1.06
21	Tri	PCB-26	50.00	8.24e+07	1.04	y	28:25	-	1.18
22	Tri	PCB-25	50.00	8.85e+07	1.06	y	28:34	-	1.27
23	Tri	PCB-31	50.00	8.65e+07	1.02	y	28:56	-	1.24
24	Tri	PCB-28	50.00	1.19e+08	1.04	y	29:02	-	1.70
25	Tri	PCB-20/21/33	150.00	2.26e+08	1.03	y	29:39	-	1.08
26	Tri	PCB-22	50.00	8.60e+07	1.04	y	30:05	-	1.23
27	Tri	PCB-36	50.00	7.12e+07	1.03	y	30:40	-	1.18
28	Tri	PCB-39	50.00	7.20e+07	1.02	y	31:09	-	1.20
29	Tri	PCB-38	50.00	7.37e+07	1.03	y	31:55	-	1.23
30	Tri	PCB-35	50.00	7.10e+07	1.03	y	32:26	-	1.18
31	Tri	PCB-37	50.00	7.16e+07	1.02	y	32:53	-	1.19
32	Tetra	PCB-54	50.00	6.73e+07	0.78	y	27:57	-	1.10
33	Tetra	PCB-50	50.00	5.38e+07	0.77	y	29:05	-	0.88
34	Tetra	PCB-53	50.00	5.23e+07	0.75	y	29:44	-	1.08
35	Tetra	PCB-51	50.00	4.77e+07	0.77	y	30:04	-	0.98
36	Tetra	PCB-45	50.00	4.32e+07	0.77	y	30:30	-	0.89
37	Tetra	PCB-46	50.00	4.05e+07	0.76	y	30:59	-	0.83
38	Tetra	PCB-52/69	100.00	1.24e+08	0.76	y	31:27	-	1.28
39	Tetra	PCB-73	50.00	6.71e+07	0.78	y	31:34	-	1.38
40	Tetra	PCB-43/49	100.00	9.43e+07	0.76	y	31:44	-	0.97
41	Tetra	PCB-47	50.00	5.35e+07	0.76	y	31:55	-	1.04

42	Tetra	PCB-48/75	100.00	1.20e+08	0.77	y	32:02	-	1.17
43	Tetra	PCB-65	50.00	6.30e+07	0.76	y	32:19	-	1.23
44	Tetra	PCB-62	50.00	5.58e+07	0.76	y	32:26	-	1.09
45	Tetra	PCB-44	50.00	4.12e+07	0.77	y	32:43	-	0.80
46	Tetra	PCB-42/59	100.00	1.11e+08	0.76	y	32:57	-	1.08
47	Tetra	PCB-41/64/71/72	200.00	2.33e+08	0.77	y	33:32	-	1.13
48	Tetra	PCB-68	50.00	6.63e+07	0.76	y	33:47	-	1.29
49	Tetra	PCB-40	50.00	3.48e+07	0.77	y	34:00	-	0.68
50	Tetra	PCB-57	50.00	6.06e+07	0.76	y	34:22	-	0.99
51	Tetra	PCB-67	50.00	6.65e+07	0.76	y	34:40	-	1.09
52	Tetra	PCB-58	50.00	5.67e+07	0.79	y	34:47	-	0.93

53	Tetra	PCB-63	50.00	5.70e+07	0.76	y	34:56	-	0.93
54	Tetra	PCB-74	50.00	7.34e+07	0.77	y	35:13	-	1.20
55	Tetra	PCB-61/70	100.00	1.16e+08	0.77	y	35:24	-	0.95
56	Tetra	PCB-76/66	100.00	1.26e+08	0.77	y	35:37	-	1.03
57	Tetra	PCB-80	50.00	7.72e+07	0.77	y	35:50	-	1.22
58	Tetra	PCB-55	50.00	6.84e+07	0.77	y	36:10	-	1.08
59	Tetra	PCB-56/60	100.00	1.27e+08	0.77	y	36:40	-	1.00
60	Tetra	PCB-79	50.00	6.79e+07	0.78	y	37:43	-	1.07
61	Tetra	PCB-78	50.00	6.97e+07	0.77	y	38:25	-	1.25
62	Tetra	PCB-81	50.00	7.20e+07	0.78	y	38:57	-	1.29
63	Tetra	PCB-77	50.00	6.19e+07	0.79	y	39:33	-	1.08
64	Penta	PCB-104	50.00	5.11e+07	1.57	y	32:35	-	1.20
65	Penta	PCB-96	50.00	4.80e+07	1.56	y	33:50	-	1.13
66	Penta	PCB-103	50.00	3.98e+07	1.56	y	34:22	-	0.93
67	Penta	PCB-100	50.00	3.93e+07	1.58	y	34:42	-	0.92
68	Penta	PCB-94	50.00	3.18e+07	1.55	y	35:11	-	1.02
69	Penta	PCB-95/98/102	150.00	1.14e+08	1.55	y	35:42	-	1.22
70	Penta	PCB-93	50.00	2.65e+07	1.58	y	35:48	-	0.85
71	Penta	PCB-88/91	100.00	7.03e+07	1.58	y	36:05	-	1.12
72	Penta	PCB-121	50.00	5.08e+07	1.60	y	36:12	-	1.62
73	Penta	PCB-84/92	100.00	6.82e+07	1.56	y	37:01	-	1.04
74	Penta	PCB-89	50.00	3.73e+07	1.58	y	37:14	-	1.14
75	Penta	PCB-90/101	100.00	7.26e+07	1.56	y	37:24	-	1.10
76	Penta	PCB-113	50.00	4.88e+07	1.57	y	37:39	-	1.49
77	Penta	PCB-99	50.00	4.19e+07	1.60	y	37:44	-	1.27
78	Penta	PCB-119	50.00	4.49e+07	1.56	y	38:12	-	1.52
79	Penta	PCB-108/112	100.00	7.56e+07	1.58	y	38:21	-	1.28
80	Penta	PCB-83	50.00	4.40e+07	1.57	y	38:31	-	1.49
81	Penta	PCB-97	50.00	3.44e+07	1.55	y	38:42	-	1.17
82	Penta	PCB-86	50.00	2.35e+07	1.55	y	38:51	-	0.80
83	Penta	PCB-87/117/125	150.00	1.40e+08	1.62	y	38:58	-	1.59
84	Penta	PCB-111/115	100.00	9.49e+07	1.51	y	39:08	-	1.61
85	Penta	PCB-85/116	100.00	7.71e+07	1.58	y	39:16	-	1.31
86	Penta	PCB-120	50.00	4.81e+07	1.59	y	39:30	-	1.63
87	Penta	PCB-110	50.00	4.58e+07	1.57	y	39:39	-	1.56
88	Penta	PCB-82	50.00	2.78e+07	1.55	y	40:17	-	0.76
89	Penta	PCB-124	50.00	5.28e+07	1.58	y	40:57	-	1.43
90	Penta	PCB-107/109	100.00	9.93e+07	1.59	y	41:05	-	1.35
91	Penta	PCB-123	50.00	4.35e+07	1.59	y	41:17	-	1.18
92	Penta	PCB-106/118	100.00	9.15e+07	1.59	y	41:28	-	1.17
93	Penta	PCB-114	50.00	6.12e+07	1.65	y	42:07	-	1.31
94	Penta	PCB-122	50.00	5.19e+07	1.66	y	42:15	-	1.11
95	Penta	PCB-105	50.00	5.88e+07	1.64	y	42:59	-	1.28
96	Penta	PCB-127	50.00	6.36e+07	1.67	y	43:19	-	1.27
97	Penta	PCB-126	50.00	5.32e+07	1.63	y	45:13	-	1.17
98	Hexa	PCB-155	50.00	3.92e+07	1.27	y	36:57	-	1.11
99	Hexa	PCB-150	50.00	3.54e+07	1.29	y	38:13	-	1.00
100	Hexa	PCB-152	50.00	3.90e+07	1.30	y	38:42	-	1.10
101	Hexa	PCB-145	50.00	4.21e+07	1.28	y	39:08	-	1.19
102	Hexa	PCB-136	50.00	4.09e+07	1.29	y	39:28	-	1.15

103	Hexa	PCB-148	50.00	2.62e+07	1.30	y	39:33	-	0.74
104	Hexa	PCB-154	50.00	2.94e+07	1.28	y	40:03	-	0.83
105	Hexa	PCB-151	50.00	2.53e+07	1.29	y	40:42	-	0.71
106	Hexa	PCB-135	50.00	2.73e+07	1.26	y	40:55	-	0.77
107	Hexa	PCB-144	50.00	2.52e+07	1.30	y	41:02	-	0.71
108	Hexa	PCB-147	50.00	2.80e+07	1.30	y	41:09	-	0.79
109	Hexa	PCB-139/149	100.00	5.22e+07	1.28	y	41:25	-	0.74
110	Hexa	PCB-140	50.00	2.47e+07	1.27	y	41:36	-	0.70
111	Hexa	PCB-134/143	100.00	7.05e+07	1.25	y	42:02	-	0.89
112	Hexa	PCB-133/142	100.00	6.32e+07	1.24	y	42:20	-	0.80
113	Hexa	PCB-131	50.00	3.53e+07	1.23	y	42:30	-	0.89

114	Hexa	PCB-146/165	100.00	9.72e+07	1.25	y	42:43	-	1.23
115	Hexa	PCB-132/161	100.00	8.58e+07	1.31	y	42:58	-	1.08
116	Hexa	PCB-153	50.00	4.86e+07	1.16	y	43:08	-	1.23
117	Hexa	PCB-168	50.00	5.75e+07	1.25	y	43:21	-	1.45
118	Hexa	PCB-141	50.00	3.94e+07	1.24	y	43:52	-	1.06
119	Hexa	PCB-137	50.00	3.90e+07	1.23	y	44:15	-	1.05
120	Hexa	PCB-130	50.00	3.61e+07	1.23	y	44:21	-	0.97
121	Hexa	PCB-138/163/164	150.00	1.47e+08	1.24	y	44:44	-	1.27
122	Hexa	PCB-158/160	100.00	1.03e+08	1.23	y	44:59	-	1.34
123	Hexa	PCB-129	50.00	3.23e+07	1.24	y	45:13	-	0.84
124	Hexa	PCB-166	50.00	4.98e+07	1.24	y	45:41	-	1.17
125	Hexa	PCB-159	50.00	4.70e+07	1.23	y	46:01	-	1.11
126	Hexa	PCB-128/162	100.00	8.65e+07	1.23	y	46:18	-	1.02
127	Hexa	PCB-167	50.00	5.55e+07	1.22	y	46:41	-	1.20
128	Hexa	PCB-156	50.00	5.05e+07	1.25	y	48:00	-	1.14
129	Hexa	PCB-157	50.00	5.18e+07	1.24	y	48:16	-	1.13
130	Hexa	PCB-169	50.00	4.66e+07	1.27	y	50:20	-	1.08
131	Hepta	PCB-188	50.00	4.99e+07	1.05	y	42:46	-	1.56
132	Hepta	PCB-184	50.00	5.13e+07	1.06	y	43:13	-	1.60
133	Hepta	PCB-179	50.00	4.15e+07	1.06	y	44:00	-	1.30
134	Hepta	PCB-176	50.00	4.68e+07	1.04	y	44:28	-	1.46
135	Hepta	PCB-186	50.00	4.64e+07	1.05	y	45:05	-	1.45
136	Hepta	PCB-178	50.00	3.27e+07	1.05	y	45:34	-	1.02
137	Hepta	PCB-175	50.00	3.22e+07	1.05	y	45:55	-	1.01
138	Hepta	PCB-182/187	100.00	7.77e+07	1.05	y	46:05	-	1.21
139	Hepta	PCB-183	50.00	3.68e+07	1.05	y	46:24	-	1.15
140	Hepta	PCB-185	50.00	4.12e+07	1.07	y	47:04	-	1.78
141	Hepta	PCB-174	50.00	3.30e+07	1.02	y	47:26	-	1.42
142	Hepta	PCB-181	50.00	3.14e+07	1.06	y	47:33	-	1.36
143	Hepta	PCB-177	50.00	2.91e+07	1.05	y	47:42	-	1.26
144	Hepta	PCB-171	50.00	3.69e+07	1.07	y	48:00	-	1.59
145	Hepta	PCB-173	50.00	2.61e+07	1.04	y	48:26	-	1.13
146	Hepta	PCB-172	50.00	3.80e+07	1.07	y	48:53	-	1.64
147	Hepta	PCB-192	50.00	4.11e+07	1.06	y	49:04	-	1.78
148	Hepta	PCB-180	50.00	3.12e+07	1.05	y	49:17	-	1.35
149	Hepta	PCB-193	50.00	3.98e+07	1.07	y	49:27	-	1.72
150	Hepta	PCB-191	50.00	3.90e+07	1.07	y	49:42	-	1.68
151	Hepta	PCB-170	50.00	2.97e+07	1.05	y	50:41	-	1.62
152	Hepta	PCB-190	50.00	4.08e+07	1.06	y	50:51	-	2.23
153	Hepta	PCB-189	50.00	3.71e+07	1.05	y	52:08	-	1.55
154	Octa	PCB-202	50.00	3.01e+07	0.94	y	48:12	-	1.06
155	Octa	PCB-201	50.00	3.19e+07	0.91	y	48:41	-	1.13
156	Octa	PCB-204	50.00	3.22e+07	0.91	y	48:50	-	1.14
157	Octa	PCB-197	50.00	3.03e+07	0.91	y	49:09	-	1.07
158	Octa	PCB-200	50.00	3.01e+07	0.90	y	49:59	-	1.06
159	Octa	PCB-198	50.00	2.18e+07	0.92	y	51:15	-	0.77
160	Octa	PCB-199	50.00	2.16e+07	0.91	y	51:21	-	0.76
161	Octa	PCB-196/203	100.00	4.53e+07	0.92	y	51:36	-	0.80
162	Octa	PCB-195	50.00	3.20e+07	0.89	y	52:45	-	1.24
163	Octa	PCB-194	50.00	3.08e+07	0.92	y	53:37	-	1.19

164	Octa	PCB-205	50.00	3.93e+07	0.92	y	53:55	-	1.52
165	Nona	PCB-208	50.00	3.24e+07	1.34	y	52:53	-	0.92
166	Nona	PCB-207	50.00	3.78e+07	1.32	y	53:12	-	1.08
167	Nona	PCB-206	50.00	2.13e+07	1.36	y	55:20	-	1.01
168	Deca	PCB-209	50.00	2.30e+07	1.21	y	56:38	-	1.20
169	Tot Σ	Total Mono-PCB	0.00	-	-	n	-	-	1.31
170	Tot Σ	Total Di-PCB	0.00	-	-	n	-	-	1.21
171	Tot Σ	Total Tri-PCB	0.00	-	-	n	-	-	1.10

172	Tot η	Total Tri-PCB	0.00	-	- n	-	-	1.21
173	Tot η	Total Tetra-PCB	0.00	-	- n	-	-	1.06
174	Tot η	Total Penta-PCB	0.00	-	- n	-	-	1.18
175	Tot η	Total Penta-PCB	0.00	-	- n	-	-	1.23
176	Tot η	Total Hexa-PCB	0.00	-	- n	-	-	0.88
177	Tot η	Total Hexa-PCB	0.00	-	- n	-	-	1.09
178	Tot η	Total Hepta-PCB	0.00	-	- n	-	-	1.41
179	Tot η	Total Octa-PCB	0.00	-	- n	-	-	0.96
180	Tot η	Total Octa-PCB	0.00	-	- n	-	-	1.32
181	Tot η	Total Nona-PCB	0.00	-	- n	-	-	1.00
182	Tot η	Total Deca-PCB	50.00	2.30e+07	1.21 y	56:38	-	1.20
183	Monoη	13C-PCB-1	100.00	1.53e+08	3.37 y	16:24	-	0.86
184	Monoη	13C-PCB-3	100.00	1.54e+08	3.41 y	18:54	-	0.86
185	Di-IS	13C-PCB-4	100.00	1.04e+08	1.58 y	20:11	-	0.59
186	Di-IS	13C-PCB-9	100.00	1.59e+08	1.59 y	21:55	-	0.89
187	Di-IS	13C-PCB-11	100.00	1.64e+08	1.57 y	25:13	-	0.92
188	Tri-η	13C-PCB-19	100.00	9.46e+07	1.07 y	24:14	-	0.53
189	Tri-η	13C-PCB-32	100.00	1.39e+08	1.09 y	27:06	-	0.78
190	Tri-η	13C-PCB-28	100.00	1.40e+08	1.06 y	29:01	-	0.92
191	Tri-η	13C-PCB-37	100.00	1.20e+08	1.07 y	32:52	-	0.79
192	Tetrη	13C-PCB-54	100.00	1.23e+08	0.81 y	27:55	-	0.98
193	Tetrη	13C-PCB-52	100.00	9.72e+07	0.80 y	31:24	-	0.78
194	Tetrη	13C-PCB-47	100.00	1.02e+08	0.79 y	31:54	-	0.82
195	Tetrη	13C-PCB-70	100.00	1.22e+08	0.78 y	35:25	-	0.98
196	Tetrη	13C-PCB-80	100.00	1.27e+08	0.80 y	35:49	-	1.01
197	Tetrη	13C-PCB-81	100.00	1.12e+08	0.79 y	38:56	-	0.89
198	Tetrη	13C-PCB-77	100.00	1.14e+08	0.78 y	39:32	-	0.91
199	Pentη	13C-PCB-104	100.00	8.52e+07	1.57 y	32:34	-	1.00
200	Pentη	13C-PCB-95	100.00	6.27e+07	1.59 y	35:43	-	0.74
201	Pentη	13C-PCB-101	100.00	6.57e+07	1.54 y	37:23	-	0.77
202	Pentη	13C-PCB-97	100.00	5.89e+07	1.59 y	38:42	-	0.69
203	Pentη	13C-PCB-123	100.00	7.37e+07	1.61 y	41:15	-	0.87
204	Pentη	13C-PCB-118	100.00	7.79e+07	1.58 y	41:26	-	0.92
205	Pentη	13C-PCB-114	100.00	9.33e+07	1.60 y	42:06	-	1.35
206	Pentη	13C-PCB-105	100.00	9.17e+07	1.60 y	42:58	-	1.32
207	Pentη	13C-PCB-127	100.00	1.00e+08	1.57 y	43:17	-	1.45
208	Pentη	13C-PCB-126	100.00	9.05e+07	1.58 y	45:12	-	1.31
209	Hexaη	13C-PCB-155	100.00	7.08e+07	1.29 y	36:55	-	0.83
210	Hexaη	13C-PCB-153	100.00	7.92e+07	1.29 y	43:07	-	1.14
211	Hexaη	13C-PCB-141	100.00	7.45e+07	1.28 y	43:51	-	1.07
212	Hexa	13C-PCB-138	100.00	7.71e+07	1.29 y	44:42	-	1.11
213	Hexaη	13C-PCB-159	100.00	8.48e+07	1.27 y	45:59	-	1.22
214	Hexaη	13C-PCB-167	100.00	9.22e+07	1.30 y	46:40	-	1.33
215	Hexaη	13C-PCB-156	100.00	8.85e+07	1.29 y	47:58	-	1.28
216	Hexaη	13C-PCB-157	100.00	9.20e+07	1.29 y	48:15	-	1.33
217	Hexaη	13C-PCB-169	100.00	8.62e+07	1.27 y	50:19	-	1.24
218	Heptη	13C-PCB-188	100.00	6.40e+07	0.46 y	42:45	-	0.92
219	Heptη	13C-PCB-180	100.00	4.63e+07	0.47 y	49:15	-	0.67
220	Heptη	13C-PCB-170	100.00	3.66e+07	0.47 y	50:40	-	0.53
221	Heptη	13C-PCB-189	100.00	4.78e+07	0.47 y	52:07	-	0.69
222	Octaη	13C-PCB-202	100.00	5.65e+07	0.94 y	48:11	-	0.81

223	Octa ₇	13C-PCB-194	100.00	5.16e+07	0.92	y	53:36	-	0.79
224	Nona ₇	13C-PCB-208	100.00	7.00e+07	0.78	y	52:53	-	1.08
225	Nona ₇	13C-PCB-206	100.00	4.23e+07	0.78	y	55:19	-	0.65
226	Deca ₇	13C-PCB-209	100.00	3.85e+07	1.23	y	56:37	-	0.59
227	DI-RS	13C-PCB-15	100.00	1.78e+08	1.59	y	25:55	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.52e+08	1.05	y	28:55	-	1.00
229	Tetr ₇	13C-PCB-60	100.00	1.25e+08	0.79	y	36:39	-	1.00
230	Penta	13C-PCB-111	100.00	8.51e+07	1.57	y	39:07	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	6.93e+07	1.27	y	46:16	-	1.00
232	Octa ₇	13C-PCB-205	100.00	6.51e+07	0.91	y	53:54	-	1.00

233	CRS	13C-PCB-79	100.00	1.25e+08	0.79	y	37:42	-	1.00
234	CRS	13C-PCB-178	100.00	4.30e+07	0.46	y	45:33	-	0.62
235	PS	13C-PCB-79	100.00	1.25e+08	0.79	y	37:42	-	1.12
236	PS	13C-PCB-178	100.00	4.30e+07	0.46	y	45:33	-	0.93

Filename: 140623E2 S: 5 Acquired: 23-JUN-14 15:57:45
 Run: 140623E2 Analyte: ICal: PCBVG8-6-23-14 Results: 140623E2
 Sample text: ST140623E2-5 PCB CS4 14F1605

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	400.00	7.39e+08	3.02 y	16:25	-	1.29
2	Mono	PCB-2	400.00	7.73e+08	3.00 y	18:41	-	1.28
3	Mono	PCB-3	400.00	9.04e+08	3.01 y	18:55	-	1.49
4	Di	PCB-4/10	1600.00	2.74e+09	1.64 y	20:14	-	1.60
5	Di	PCB-7/9	1600.00	3.22e+09	1.65 y	21:58	-	1.22
6	Di	PCB-6	800.00	1.77e+09	1.65 y	22:36	-	1.34
7	Di	PCB-5/8	1600.00	3.07e+09	1.65 y	23:01	-	1.16
8	Di	PCB-14	800.00	1.56e+09	1.66 y	24:04	-	1.12
9	Di	PCB-11	800.00	1.52e+09	1.66 y	25:15	-	1.09
10	Di	PCB-12/13	1600.00	3.35e+09	1.64 y	25:37	-	1.20
11	Di	PCB-15	800.00	1.81e+09	1.65 y	25:56	-	1.30
12	Tri	PCB-19	400.00	3.88e+08	1.06 y	24:15	-	1.07
13	Tri	PCB-30	400.00	6.46e+08	1.07 y	25:08	-	1.79
14	Tri	PCB-18	400.00	4.49e+08	1.07 y	25:51	-	0.78
15	Tri	PCB-17	400.00	5.20e+08	1.07 y	26:02	-	0.91
16	Tri	PCB-24/27	800.00	1.36e+09	1.07 y	26:36	-	1.18
17	Tri	PCB-16/32	800.00	1.07e+09	1.06 y	27:06	-	0.94
18	Tri	PCB-34	400.00	6.31e+08	1.04 y	27:53	-	1.16
19	Tri	PCB-23	400.00	6.73e+08	1.03 y	27:58	-	1.24
20	Tri	PCB-29	400.00	5.51e+08	1.00 y	28:13	-	1.01
21	Tri	PCB-26	400.00	6.09e+08	1.01 y	28:26	-	1.12
22	Tri	PCB-25	400.00	6.81e+08	1.01 y	28:35	-	1.25
23	Tri	PCB-31	400.00	6.90e+08	1.00 y	28:56	-	1.27
24	Tri	PCB-28	400.00	8.88e+08	1.03 y	29:02	-	1.63
25	Tri	PCB-20/21/33	1200.00	1.80e+09	1.00 y	29:38	-	1.11
26	Tri	PCB-22	400.00	5.78e+08	1.01 y	30:06	-	1.06
27	Tri	PCB-36	400.00	5.30e+08	1.01 y	30:41	-	1.05
28	Tri	PCB-39	400.00	4.63e+08	0.99 y	31:09	-	0.92
29	Tri	PCB-38	400.00	5.20e+08	1.00 y	31:56	-	1.03
30	Tri	PCB-35	400.00	5.75e+08	0.99 y	32:27	-	1.15
31	Tri	PCB-37	400.00	5.64e+08	1.01 y	32:53	-	1.12
32	Tetra	PCB-54	400.00	5.49e+08	0.77 y	27:57	-	1.09
33	Tetra	PCB-50	400.00	4.32e+08	0.76 y	29:05	-	0.86
34	Tetra	PCB-53	400.00	4.28e-08	0.76 y	29:44	-	1.09
35	Tetra	PCB-51	400.00	3.77e-08	0.76 y	30:04	-	0.96
36	Tetra	PCB-45	400.00	3.32e+08	0.76 y	30:30	-	0.84
37	Tetra	PCB-46	400.00	3.25e+08	0.77 y	30:59	-	0.83
38	Tetra	PCB-52/69	800.00	9.79e+08	0.75 y	31:27	-	1.25
39	Tetra	PCB-73	400.00	5.09e+08	0.76 y	31:34	-	1.30
40	Tetra	PCB-43/49	800.00	7.49e+08	0.75 y	31:43	-	0.95
41	Tetra	PCB-47	400.00	4.38e+08	0.76 y	31:56	-	1.04

42	Tetra	PCB-48/75	800.00	9.87e+08	0.76	y	32:03	-	1.17
43	Tetra	PCB-65	400.00	4.70e+08	0.75	y	32:19	-	1.12
44	Tetra	PCB-62	400.00	5.15e+08	0.76	y	32:25	-	1.22
45	Tetra	PCB-44	400.00	3.32e+08	0.76	y	32:44	-	0.79
46	Tetra	PCB-42/59	800.00	9.34e+08	0.76	y	32:57	-	1.11
47	Tetra	PCB-41/64/71/72	1600.00	2.01e+09	0.77	y	33:32	-	1.19
48	Tetra	PCB-68	400.00	5.53e+08	0.76	y	33:47	-	1.31
49	Tetra	PCB-40	400.00	2.93e+08	0.77	y	34:01	-	0.69
50	Tetra	PCB-57	400.00	4.98e+08	0.76	y	34:21	-	0.96
51	Tetra	PCB-67	400.00	5.63e+08	0.76	y	34:40	-	1.09
52	Tetra	PCB-58	400.00	4.58e+08	0.78	y	34:47	-	0.88

53	Tetra	PCB-63	400.00	4.57e+08	0.76	y	34:56	-	0.88
54	Tetra	PCB-74	400.00	6.33e+08	0.76	y	35:14	-	1.23
55	Tetra	PCB-61/70	800.00	9.54e+08	0.76	y	35:24	-	0.92
56	Tetra	PCB-76/66	800.00	1.06e+09	0.77	y	35:37	-	1.03
57	Tetra	PCB-80	400.00	6.36e+08	0.77	y	35:51	-	1.18
58	Tetra	PCB-55	400.00	5.68e+08	0.76	y	36:10	-	1.05
59	Tetra	PCB-56/60	800.00	1.04e+09	0.76	y	36:40	-	0.97
60	Tetra	PCB-79	400.00	5.59e+08	0.77	y	37:44	-	1.04
61	Tetra	PCB-78	400.00	5.77e+08	0.76	y	38:26	-	1.20
62	Tetra	PCB-81	400.00	6.11e+08	0.76	y	38:58	-	1.27
63	Tetra	PCB-77	400.00	5.41e+08	0.79	y	39:33	-	1.07
64	Penta	PCB-104	400.00	4.22e+08	1.58	y	32:35	-	1.19
65	Penta	PCB-96	400.00	4.08e+08	1.59	y	33:51	-	1.16
66	Penta	PCB-103	400.00	3.36e+08	1.56	y	34:23	-	0.95
67	Penta	PCB-100	400.00	3.34e+08	1.58	y	34:43	-	0.95
68	Penta	PCB-94	400.00	2.70e+08	1.58	y	35:11	-	1.00
69	Penta	PCB-95/98/102	1200.00	9.97e+08	1.58	y	35:41	-	1.23
70	Penta	PCB-93	400.00	2.10e+08	1.55	y	35:49	-	0.77
71	Penta	PCB-88/91	800.00	6.29e+08	1.54	y	36:06	-	1.16
72	Penta	PCB-121	400.00	4.11e+08	1.62	y	36:13	-	1.52
73	Penta	PCB-84/92	800.00	5.85e+08	1.57	y	37:02	-	1.04
74	Penta	PCB-89	400.00	3.12e+08	1.58	y	37:13	-	1.11
75	Penta	PCB-90/101	800.00	6.09e+08	1.57	y	37:23	-	1.08
76	Penta	PCB-113	400.00	3.62e+08	1.56	y	37:38	-	1.29
77	Penta	PCB-99	400.00	4.00e+08	1.57	y	37:44	-	1.42
78	Penta	PCB-119	400.00	3.82e+08	1.57	y	38:12	-	1.53
79	Penta	PCB-108/112	800.00	6.45e+08	1.57	y	38:21	-	1.29
80	Penta	PCB-83	400.00	3.69e+08	1.56	y	38:31	-	1.48
81	Penta	PCB-97	400.00	2.93e+08	1.58	y	38:43	-	1.17
82	Penta	PCB-86	400.00	2.07e+08	1.53	y	38:52	-	0.83
83	Penta	PCB-87/117/125	1200.00	1.19e+09	1.57	y	38:59	-	1.59
84	Penta	PCB-111/115	800.00	8.24e+08	1.65	y	39:09	-	1.65
85	Penta	PCB-85/116	800.00	6.56e+08	1.48	y	39:17	-	1.31
86	Penta	PCB-120	400.00	4.25e+08	1.57	y	39:30	-	1.70
87	Penta	PCB-110	400.00	3.85e+08	1.58	y	39:40	-	1.54
88	Penta	PCB-82	400.00	2.39e+08	1.57	y	40:17	-	0.76
89	Penta	PCB-124	400.00	4.72e+08	1.57	y	40:57	-	1.51
90	Penta	PCB-107/109	800.00	8.57e+08	1.57	y	41:06	-	1.37
91	Penta	PCB-123	400.00	3.63e+08	1.58	y	41:16	-	1.16
92	Penta	PCB-106/118	800.00	7.95e+08	1.58	y	41:29	-	1.15
93	Penta	PCB-114	400.00	5.21e+08	1.63	y	42:07	-	1.28
94	Penta	PCB-122	400.00	4.51e+08	1.65	y	42:16	-	1.11
95	Penta	PCB-105	400.00	5.21e+08	1.62	y	42:59	-	1.28
96	Penta	PCB-127	400.00	5.57e+08	1.64	y	43:19	-	1.28
97	Penta	PCB-126	400.00	4.53e+08	1.65	y	45:14	-	1.18
98	Hexa	PCB-155	400.00	3.27e+08	1.28	y	36:57	-	1.11
99	Hexa	PCB-150	400.00	3.03e+08	1.28	y	38:13	-	1.03
100	Hexa	PCB-152	400.00	3.29e+08	1.27	y	38:42	-	1.12
101	Hexa	PCB-145	400.00	3.63e+08	1.28	y	39:09	-	1.23
102	Hexa	PCB-136	400.00	3.55e+08	1.28	y	39:28	-	1.21

103	Hexa	PCB-148	400.00	2.11e+08	1.30	y	39:34	-	0.72
104	Hexa	PCB-154	400.00	2.46e+08	1.28	y	40:03	-	0.83
105	Hexa	PCB-151	400.00	2.09e+08	1.29	y	40:42	-	0.71
106	Hexa	PCB-135	400.00	2.14e+08	1.26	y	40:55	-	0.73
107	Hexa	PCB-144	400.00	2.42e+08	1.27	y	41:01	-	0.82
108	Hexa	PCB-147	400.00	2.44e+08	1.29	y	41:09	-	0.83
109	Hexa	PCB-139/149	800.00	4.56e+08	1.27	y	41:25	-	0.77
110	Hexa	PCB-140	400.00	2.10e+08	1.30	y	41:37	-	0.71
111	Hexa	PCB-134/143	800.00	6.18e+08	1.24	y	42:03	-	0.94
112	Hexa	PCB-133/142	800.00	5.46e+08	1.24	y	42:20	-	0.83
113	Hexa	PCB-131	400.00	2.97e+08	1.24	y	42:31	-	0.90

114	Hexa	PCB-146/165	800.00	8.31e+08	1.24	y	42:43	-	1.26
115	Hexa	PCB-132/161	800.00	7.22e+08	1.24	y	42:58	-	1.09
116	Hexa	PCB-153	400.00	4.21e+08	1.25	y	43:08	-	1.27
117	Hexa	PCB-168	400.00	4.88e+08	1.24	y	43:20	-	1.48
118	Hexa	PCB-141	400.00	3.29e+08	1.24	y	43:53	-	1.05
119	Hexa	PCB-137	400.00	3.31e+08	1.24	y	44:16	-	1.06
120	Hexa	PCB-130	400.00	3.00e+08	1.24	y	44:22	-	0.96
121	Hexa	PCB-138/163/164	1200.00	1.27e+09	1.25	y	44:45	-	1.31
122	Hexa	PCB-158/160	800.00	8.83e+08	1.24	y	45:00	-	1.37
123	Hexa	PCB-129	400.00	2.76e+08	1.24	y	45:14	-	0.86
124	Hexa	PCB-166	400.00	4.30e+08	1.24	y	45:41	-	1.18
125	Hexa	PCB-159	400.00	4.02e+08	1.27	y	46:00	-	1.10
126	Hexa	PCB-128/162	800.00	7.56e+08	1.24	y	46:18	-	1.03
127	Hexa	PCB-167	400.00	4.81e+08	1.24	y	46:41	-	1.19
128	Hexa	PCB-156	400.00	4.44e+08	1.24	y	47:59	-	1.16
129	Hexa	PCB-157	400.00	4.52e+08	1.25	y	48:16	-	1.12
130	Hexa	PCB-169	400.00	4.05e+08	1.24	y	50:20	-	1.07
131	Hepta	PCB-188	400.00	4.10e+08	1.06	y	42:46	-	1.52
132	Hepta	PCB-184	400.00	4.29e+08	1.05	y	43:13	-	1.60
133	Hepta	PCB-179	400.00	3.39e+08	1.06	y	44:01	-	1.26
134	Hepta	PCB-176	400.00	3.89e+08	1.05	y	44:28	-	1.45
135	Hepta	PCB-186	400.00	3.92e+08	1.05	y	45:05	-	1.46
136	Hepta	PCB-178	400.00	2.70e+08	1.06	y	45:34	-	1.00
137	Hepta	PCB-175	400.00	2.66e+08	1.05	y	45:55	-	0.99
138	Hepta	PCB-182/187	800.00	6.75e+08	1.05	y	46:06	-	1.26
139	Hepta	PCB-183	400.00	3.18e+08	1.06	y	46:24	-	1.18
140	Hepta	PCB-185	400.00	3.60e+08	1.05	y	47:05	-	1.82
141	Hepta	PCB-174	400.00	2.91e+08	1.05	y	47:26	-	1.47
142	Hepta	PCB-181	400.00	2.68e+08	1.07	y	47:33	-	1.35
143	Hepta	PCB-177	400.00	2.53e+08	1.05	y	47:43	-	1.28
144	Hepta	PCB-171	400.00	3.19e+08	1.05	y	48:00	-	1.61
145	Hepta	PCB-173	400.00	2.24e+08	1.05	y	48:27	-	1.13
146	Hepta	PCB-172	400.00	3.36e+08	1.06	y	48:53	-	1.70
147	Hepta	PCB-192	400.00	3.55e+08	1.05	y	49:05	-	1.79
148	Hepta	PCB-180	400.00	2.65e+08	1.05	y	49:16	-	1.34
149	Hepta	PCB-193	400.00	3.34e+08	1.06	y	49:28	-	1.69
150	Hepta	PCB-191	400.00	3.32e+08	1.06	y	49:42	-	1.67
151	Hepta	PCB-170	400.00	2.49e+08	1.04	y	50:42	-	1.61
152	Hepta	PCB-190	400.00	3.45e+08	1.05	y	50:51	-	2.23
153	Hepta	PCB-189	400.00	3.17e+08	1.06	y	52:08	-	1.55
154	Octa	PCB-202	400.00	2.60e+08	0.91	y	48:13	-	1.10
155	Octa	PCB-201	400.00	2.75e+08	0.90	y	48:42	-	1.16
156	Octa	PCB-204	400.00	2.80e+08	0.91	y	48:51	-	1.18
157	Octa	PCB-197	400.00	2.59e+08	0.92	y	49:09	-	1.09
158	Octa	PCB-200	400.00	2.59e+08	0.91	y	49:59	-	1.09
159	Octa	PCB-198	400.00	1.81e+08	1.01	y	51:16	-	0.76
160	Octa	PCB-199	400.00	1.96e+08	0.84	y	51:21	-	0.82
161	Octa	PCB-196/203	800.00	4.10e+08	0.91	y	51:37	-	0.86
162	Octa	PCB-195	400.00	2.74e+08	0.91	y	52:46	-	1.25
163	Octa	PCB-194	400.00	2.60e+08	0.92	y	53:38	-	1.18

164	Octa	PCB-205	400.00	$3.32e+08$	0.92	y	53:55	-	1.51
165	Nona	PCB-208	400.00	$2.75e+08$	1.33	y	52:54	-	0.94
166	Nona	PCB-207	400.00	$3.26e+08$	1.32	y	53:12	-	1.12
167	Nona	PCB-206	400.00	$1.78e+08$	1.32	y	55:19	-	0.97
168	Deca	PCB-209	400.00	$2.00e+08$	1.19	y	56:35	-	1.17
169	Tot Σ	Total Mono-PCB	0.00	-	-	n	-	-	1.35
170	Tot Σ	Total Di-PCB	0.00	-	-	n	-	-	1.22
171	Tot Σ	Total Tri-PCB	0.00	-	-	n	-	-	1.10

172	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.15
173	Tot Σ	Total Tetra-PCB	0.00	-	- n	-	-	1.06
174	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.18
175	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.23
176	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	0.90
177	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	1.11
178	Tot Σ	Total Hepta-PCB	0.00	-	- n	-	-	1.41
179	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	0.99
180	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	1.32
181	Tot Σ	Total Nona-PCB	0.00	-	- n	-	-	1.02
182	Tot Σ	Total Deca-PCB	400.00	2.00e+08	1.19 y	56:35	-	1.17
183	Mono Σ	13C-PCB-1	100.00	1.43e+08	3.35 y	16:24	-	0.77
184	Mono Σ	13C-PCB-3	100.00	1.51e+08	3.41 y	18:54	-	0.81
185	Di-IS	13C-PCB-4	100.00	1.07e+08	1.60 y	20:12	-	0.57
186	Di-IS	13C-PCB-9	100.00	1.65e+08	1.57 y	21:55	-	0.88
187	Di-IS	13C-PCB-11	100.00	1.74e+08	1.58 y	25:13	-	0.93
188	Tri- Σ	13C-PCB-19	100.00	9.04e+07	1.10 y	24:14	-	0.48
189	Tri- Σ	13C-PCB-32	100.00	1.43e+08	1.10 y	27:06	-	0.77
190	Tri- Σ	13C-PCB-28	100.00	1.36e+08	1.05 y	29:02	-	0.89
191	Tri- Σ	13C-PCB-37	100.00	1.26e+08	1.06 y	32:52	-	0.82
192	Tetr Σ	13C-PCB-54	100.00	1.26e+08	0.81 y	27:55	-	0.97
193	Tetr Σ	13C-PCB-52	100.00	9.82e+07	0.78 y	31:24	-	0.76
194	Tetr Σ	13C-PCB-47	100.00	1.05e+08	0.77 y	31:55	-	0.81
195	Tetr Σ	13C-PCB-70	100.00	1.29e+08	0.79 y	35:25	-	1.00
196	Tetr Σ	13C-PCB-80	100.00	1.35e+08	0.80 y	35:50	-	1.04
197	Tetr Σ	13C-PCB-81	100.00	1.20e+08	0.78 y	38:56	-	0.93
198	Tetr Σ	13C-PCB-77	100.00	1.27e+08	0.80 y	39:32	-	0.98
199	Pent Σ	13C-PCB-104	100.00	8.83e+07	1.55 y	32:34	-	1.00
200	Pent Σ	13C-PCB-95	100.00	6.77e+07	1.62 y	35:43	-	0.77
201	Pent Σ	13C-PCB-101	100.00	7.03e+07	1.56 y	37:23	-	0.80
202	Pent Σ	13C-PCB-97	100.00	6.24e+07	1.61 y	38:42	-	0.71
203	Pent Σ	13C-PCB-123	100.00	7.82e+07	1.58 y	41:16	-	0.88
204	Pent Σ	13C-PCB-118	100.00	8.64e+07	1.60 y	41:26	-	0.98
205	Pent Σ	13C-PCB-114	100.00	1.01e+08	1.61 y	42:06	-	1.37
206	Pent Σ	13C-PCB-105	100.00	1.02e+08	1.58 y	42:58	-	1.38
207	Pent Σ	13C-PCB-127	100.00	1.09e+08	1.60 y	43:18	-	1.48
208	Pent Σ	13C-PCB-126	100.00	9.62e+07	1.57 y	45:12	-	1.30
209	Hexa Σ	13C-PCB-155	100.00	7.37e+07	1.30 y	36:56	-	0.83
210	Hexa Σ	13C-PCB-153	100.00	8.26e+07	1.29 y	43:07	-	1.12
211	Hexa Σ	13C-PCB-141	100.00	7.81e+07	1.29 y	43:51	-	1.06
212	Hexa	13C-PCB-138	100.00	8.07e+07	1.29 y	44:42	-	1.09
213	Hexa Σ	13C-PCB-159	100.00	9.15e+07	1.26 y	46:00	-	1.24
214	Hexa Σ	13C-PCB-167	100.00	1.01e+08	1.25 y	46:40	-	1.37
215	Hexa Σ	13C-PCB-156	100.00	9.58e+07	1.27 y	47:59	-	1.30
216	Hexa Σ	13C-PCB-157	100.00	1.01e+08	1.31 y	48:15	-	1.36
217	Hexa Σ	13C-PCB-169	100.00	9.47e+07	1.29 y	50:19	-	1.28
218	Hept Σ	13C-PCB-188	100.00	6.72e+07	0.46 y	42:45	-	0.91
219	Hept Σ	13C-PCB-180	100.00	4.95e+07	0.46 y	49:15	-	0.67
220	Hept Σ	13C-PCB-170	100.00	3.88e+07	0.47 y	50:41	-	0.53
221	Hept Σ	13C-PCB-189	100.00	5.10e+07	0.48 y	52:07	-	0.69
222	Octa Σ	13C-PCB-202	100.00	5.93e+07	0.90 y	48:11	-	0.80

223	Octa ₇	13C-PCB-194	100.00	5.48e+07	0.91	y	53:37	-	0.80
224	Nona ₇	13C-PCB-208	100.00	7.31e+07	0.78	y	52:53	-	1.07
225	Nona ₇	13C-PCB-206	100.00	4.59e+07	0.80	y	55:18	-	0.67
226	Deca ₇	13C-PCB-209	100.00	4.28e+07	1.18	y	56:34	-	0.63
227	DI-RS	13C-PCB-15	100.00	1.87e+08	1.59	y	25:55	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.53e+08	1.05	y	28:55	-	1.00
229	Tetr- ₇	13C-PCB-60	100.00	1.30e+08	0.78	y	36:40	-	1.00
230	Penta	13C-PCB-111	100.00	8.84e+07	1.58	y	39:07	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	7.38e+07	1.22	y	46:17	-	1.00
232	Octa ₇	13C-PCB-205	100.00	6.83e+07	0.90	y	53:54	-	1.00

233	CR\$	13C-PCB-79	100.00	1.31e+08	0.78	y	37:43	-	1.01
234	CR\$	13C-PCB-178	100.00	4.40e+07	0.47	y	45:33	-	0.60
235	PS	13C-PCB-79	100.00	1.31e+08	0.78	y	37:43	-	1.09
236	PS	13C-PCB-178	100.00	4.40e+07	0.47	y	45:33	-	0.89

Filename: 140623E2 S: 6 Acquired: 23-JUN-14 17:01:39

Run: 140623E2 Analyte: ICal: PCBVG8-6-23-14

Results: 140623E2

Sample text: ST140623E2-6 PCB CS5 14F1606

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	750.00	1.47e+09	3.03 y	16:25	-	1.29
2	Mono	PCB-2	750.00	1.54e+09	3.03 y	18:42	-	1.26
3	Mono	PCB-3	750.00	1.85e+09	3.03 y	18:55	-	1.51
4	Di	PCB-4/10	3000.00	5.45e+09	1.65 y	20:15	-	1.62
5	Di	PCB-7/9	3000.00	6.53e+09	1.65 y	21:58	-	1.26
6	Di	PCB-6	1500.00	3.51e+09	1.66 y	22:36	-	1.35
7	Di	PCB-5/8	3000.00	6.19e+09	1.65 y	23:01	-	1.19
8	Di	PCB-14	1500.00	3.16e+09	1.66 y	24:04	-	1.15
9	Di	PCB-11	1500.00	3.07e+09	1.65 y	25:14	-	1.12
10	Di	PCB-12/13	3000.00	6.82e+09	1.65 y	25:38	-	1.24
11	Di	PCB-15	1500.00	3.68e+09	1.66 y	25:56	-	1.34
12	Tri	PCB-19	750.00	7.61e+08	1.06 y	24:15	-	1.09
13	Tri	PCB-30	750.00	1.28e+09	1.06 y	25:08	-	1.83
14	Tri	PCB-18	750.00	8.96e+08	1.06 y	25:51	-	0.82
15	Tri	PCB-17	750.00	1.03e+09	1.07 y	26:02	-	0.95
16	Tri	PCB-24/27	1500.00	2.73e+09	1.07 y	26:36	-	1.25
17	Tri	PCB-16/32	1500.00	2.10e+09	1.07 y	27:06	-	0.96
18	Tri	PCB-34	750.00	1.12e+09	1.02 y	27:52	-	1.09
19	Tri	PCB-23	750.00	1.37e+09	1.02 y	27:58	-	1.33
20	Tri	PCB-29	750.00	1.10e+09	1.00 y	28:13	-	1.06
21	Tri	PCB-26	750.00	1.23e+09	1.02 y	28:25	-	1.19
22	Tri	PCB-25	750.00	1.15e+09	0.98 y	28:35	-	1.11
23	Tri	PCB-31	750.00	1.08e+09	0.96 y	28:56	-	1.05
24	Tri	PCB-28	750.00	1.62e+09	1.02 y	29:03	-	1.57
25	Tri	PCB-20/21/33	2250.00	3.02e+09	0.99 y	29:39	-	0.98
26	Tri	PCB-22	750.00	1.22e+09	1.01 y	30:05	-	1.18
27	Tri	PCB-36	750.00	9.30e+08	0.97 y	30:41	-	0.99
28	Tri	PCB-39	750.00	9.84e+08	1.03 y	31:10	-	1.05
29	Tri	PCB-38	750.00	9.41e+08	0.97 y	31:56	-	1.00
30	Tri	PCB-35	750.00	1.09e+09	0.98 y	32:27	-	1.17
31	Tri	PCB-37	750.00	1.06e+09	0.97 y	32:53	-	1.13
32	Tetra	PCB-54	750.00	1.06e+09	0.76 y	27:57	-	1.09
33	Tetra	PCB-50	750.00	8.12e+08	0.76 y	29:06	-	0.83
34	Tetra	PCB-53	750.00	7.83e+08	0.75 y	29:44	-	1.05
35	Tetra	PCB-51	750.00	7.61e+08	0.75 y	30:04	-	1.02
36	Tetra	PCB-45	750.00	6.16e+08	0.75 y	30:30	-	0.82
37	Tetra	PCB-46	750.00	6.05e+08	0.76 y	30:59	-	0.81
38	Tetra	PCB-52/69	1500.00	2.06e+09	0.76 y	31:27	-	1.37
39	Tetra	PCB-73	750.00	9.51e+08	0.78 y	31:34	-	1.27
40	Tetra	PCB-43/49	1500.00	1.52e+09	0.76 y	31:44	-	1.02
41	Tetra	PCB-47	750.00	7.65e+08	0.74 y	31:56	-	0.98

42	Tetra	PCB-48/75	1500.00	1.93e+09	0.76	y	32:03	-	1.24
43	Tetra	PCB-65	750.00	9.32e+08	0.75	y	32:19	-	1.19
44	Tetra	PCB-62	750.00	9.33e+08	0.76	y	32:26	-	1.19
45	Tetra	PCB-44	750.00	6.53e+08	0.76	y	32:44	-	0.83
46	Tetra	PCB-42/59	1500.00	1.82e+09	0.76	y	32:57	-	1.17
47	Tetra	PCB-41/64/71/72	3000.00	3.95e+09	0.77	y	33:32	-	1.26
48	Tetra	PCB-68	750.00	1.08e+09	0.76	y	33:47	-	1.38
49	Tetra	PCB-40	750.00	5.59e+08	0.77	y	34:00	-	0.71
50	Tetra	PCB-57	750.00	1.01e+09	0.77	y	34:22	-	0.99
51	Tetra	PCB-67	750.00	1.07e+09	0.76	y	34:40	-	1.05
52	Tetra	PCB-58	750.00	9.72e+08	0.77	y	34:47	-	0.96

53	Tetra	PCB-63	750.00	9.30e+08	0.77	y	34:56	-	0.92
54	Tetra	PCB-74	750.00	1.25e+09	0.76	y	35:13	-	1.23
55	Tetra	PCB-61/70	1500.00	1.91e+09	0.76	y	35:24	-	0.94
56	Tetra	PCB-76/66	1500.00	2.06e+09	0.76	y	35:37	-	1.02
57	Tetra	PCB-80	750.00	1.23e+09	0.76	y	35:51	-	1.18
58	Tetra	PCB-55	750.00	1.10e+09	0.75	y	36:10	-	1.06
59	Tetra	PCB-56/60	1500.00	2.06e+09	0.76	y	36:40	-	0.98
60	Tetra	PCB-79	750.00	1.10e+09	0.77	y	37:44	-	1.06
61	Tetra	PCB-78	750.00	1.22e+09	0.77	y	38:26	-	1.24
62	Tetra	PCB-81	750.00	1.30e+09	0.78	y	38:58	-	1.33
63	Tetra	PCB-77	750.00	1.06e+09	0.79	y	39:33	-	1.09
64	Penta	PCB-104	750.00	8.02e+08	1.57	y	32:35	-	1.21
65	Penta	PCB-96	750.00	7.85e+08	1.58	y	33:50	-	1.19
66	Penta	PCB-103	750.00	6.73e+08	1.58	y	34:22	-	1.02
67	Penta	PCB-100	750.00	6.59e+08	1.58	y	34:44	-	1.00
68	Penta	PCB-94	750.00	5.35e+08	1.58	y	35:12	-	1.05
69	Penta	PCB-95/98/102	2250.00	1.88e+09	1.56	y	35:41	-	1.23
70	Penta	PCB-93	750.00	4.72e+08	1.58	y	35:49	-	0.93
71	Penta	PCB-88/91	1500.00	1.12e+09	1.56	y	36:05	-	1.10
72	Penta	PCB-121	750.00	8.92e+08	1.59	y	36:12	-	1.75
73	Penta	PCB-84/92	1500.00	1.15e+09	1.58	y	37:02	-	1.06
74	Penta	PCB-89	750.00	5.99e+08	1.56	y	37:14	-	1.10
75	Penta	PCB-90/101	1500.00	1.20e+09	1.56	y	37:24	-	1.11
76	Penta	PCB-113	750.00	7.64e+08	1.55	y	37:39	-	1.41
77	Penta	PCB-99	750.00	7.39e+08	1.58	y	37:44	-	1.36
78	Penta	PCB-119	750.00	7.86e+08	1.58	y	38:11	-	1.63
79	Penta	PCB-108/112	1500.00	1.31e+09	1.58	y	38:22	-	1.36
80	Penta	PCB-83	750.00	7.22e+08	1.58	y	38:31	-	1.49
81	Penta	PCB-97	750.00	5.75e+08	1.58	y	38:43	-	1.19
82	Penta	PCB-86	750.00	4.64e+08	1.55	y	38:51	-	0.96
83	Penta	PCB-87/117/125	2250.00	2.41e+09	1.59	y	38:59	-	1.66
84	Penta	PCB-111/115	1500.00	1.61e+09	1.57	y	39:08	-	1.67
85	Penta	PCB-85/116	1500.00	1.32e+09	1.57	y	39:16	-	1.37
86	Penta	PCB-120	750.00	8.54e+08	1.57	y	39:30	-	1.77
87	Penta	PCB-110	750.00	7.47e+08	1.59	y	39:39	-	1.55
88	Penta	PCB-82	750.00	4.68e+08	1.56	y	40:16	-	0.76
89	Penta	PCB-124	750.00	9.82e+08	1.56	y	40:57	-	1.60
90	Penta	PCB-107/109	1500.00	1.67e+09	1.57	y	41:06	-	1.36
91	Penta	PCB-123	750.00	7.28e+08	1.57	y	41:17	-	1.19
92	Penta	PCB-106/118	1500.00	1.64e+09	1.59	y	41:29	-	1.20
93	Penta	PCB-114	750.00	1.06e+09	1.62	y	42:07	-	1.28
94	Penta	PCB-122	750.00	9.29e+08	1.66	y	42:15	-	1.12
95	Penta	PCB-105	750.00	1.10e+09	1.63	y	42:59	-	1.33
96	Penta	PCB-127	750.00	1.16e+09	1.65	y	43:18	-	1.32
97	Penta	PCB-126	750.00	9.26e+08	1.64	y	45:13	-	1.21
98	Hexa	PCB-155	750.00	6.31e+08	1.29	y	36:58	-	1.16
99	Hexa	PCB-150	750.00	5.78e+08	1.28	y	38:13	-	1.06
100	Hexa	PCB-152	750.00	6.42e+08	1.29	y	38:42	-	1.18
101	Hexa	PCB-145	750.00	7.08e+08	1.29	y	39:09	-	1.30
102	Hexa	PCB-136	750.00	6.49e+08	1.27	y	39:28	-	1.19

103	Hexa	PCB-148	750.00	4.68e+08	1.28	y	39:34	-	0.86
104	Hexa	PCB-154	750.00	4.91e+08	1.28	y	40:03	-	0.90
105	Hexa	PCB-151	750.00	4.20e+08	1.28	y	40:42	-	0.77
106	Hexa	PCB-135	750.00	4.60e+08	1.27	y	40:55	-	0.84
107	Hexa	PCB-144	750.00	4.48e+08	1.29	y	41:02	-	0.82
108	Hexa	PCB-147	750.00	5.04e+08	1.28	y	41:10	-	0.93
109	Hexa	PCB-139/149	1500.00	9.10e+08	1.28	y	41:26	-	0.84
110	Hexa	PCB-140	750.00	4.13e+08	1.28	y	41:37	-	0.76
111	Hexa	PCB-134/143	1500.00	1.26e+09	1.24	y	42:02	-	0.95
112	Hexa	PCB-133/142	1500.00	1.12e+09	1.25	y	42:21	-	0.85
113	Hexa	PCB-131	750.00	5.92e+08	1.24	y	42:30	-	0.90

114	Hexa	PCB-146/165	1500.00	1.70e+09	1.24	y	42:43	-	1.29
115	Hexa	PCB-132/161	1500.00	1.50e+09	1.24	y	42:58	-	1.14
116	Hexa	PCB-153	750.00	8.18e+08	1.25	y	43:08	-	1.24
117	Hexa	PCB-168	750.00	1.00e+09	1.24	y	43:21	-	1.52
118	Hexa	PCB-141	750.00	6.67e+08	1.24	y	43:52	-	1.09
119	Hexa	PCB-137	750.00	7.01e+08	1.23	y	44:15	-	1.14
120	Hexa	PCB-130	750.00	5.55e+08	1.25	y	44:22	-	0.90
121	Hexa	PCB-138/163/164	2250.00	2.58e+09	1.24	y	44:44	-	1.38
122	Hexa	PCB-158/160	1500.00	1.76e+09	1.24	y	44:59	-	1.41
123	Hexa	PCB-129	750.00	5.55e+08	1.24	y	45:14	-	0.89
124	Hexa	PCB-166	750.00	8.60e+08	1.24	y	45:41	-	1.21
125	Hexa	PCB-159	750.00	8.27e+08	1.24	y	46:00	-	1.16
126	Hexa	PCB-128/162	1500.00	1.52e+09	1.24	y	46:18	-	1.07
127	Hexa	PCB-167	750.00	9.41e+08	1.24	y	46:42	-	1.24
128	Hexa	PCB-156	750.00	8.95e+08	1.24	y	47:59	-	1.19
129	Hexa	PCB-157	750.00	9.06e+08	1.25	y	48:16	-	1.15
130	Hexa	PCB-169	750.00	8.21e+08	1.25	y	50:21	-	1.12
131	Hepta	PCB-188	750.00	8.34e+08	1.05	y	42:46	-	1.61
132	Hepta	PCB-184	750.00	8.48e+08	1.06	y	43:13	-	1.64
133	Hepta	PCB-179	750.00	6.69e+08	1.06	y	44:00	-	1.29
134	Hepta	PCB-176	750.00	7.45e+08	1.06	y	44:28	-	1.44
135	Hepta	PCB-186	750.00	7.39e+08	1.05	y	45:05	-	1.43
136	Hepta	PCB-178	750.00	5.20e+08	1.06	y	45:34	-	1.00
137	Hepta	PCB-175	750.00	5.24e+08	1.06	y	45:55	-	1.01
138	Hepta	PCB-182/187	1500.00	1.33e+09	1.05	y	46:05	-	1.28
139	Hepta	PCB-183	750.00	6.17e+08	1.06	y	46:25	-	1.19
140	Hepta	PCB-185	750.00	7.01e+08	1.06	y	47:04	-	1.89
141	Hepta	PCB-174	750.00	5.17e+08	1.05	y	47:26	-	1.40
142	Hepta	PCB-181	750.00	5.76e+08	1.06	y	47:33	-	1.56
143	Hepta	PCB-177	750.00	4.88e+08	1.06	y	47:42	-	1.32
144	Hepta	PCB-171	750.00	6.45e+08	1.06	y	48:01	-	1.74
145	Hepta	PCB-173	750.00	4.34e+08	1.05	y	48:26	-	1.17
146	Hepta	PCB-172	750.00	6.78e+08	1.06	y	48:53	-	1.83
147	Hepta	PCB-192	750.00	6.93e+08	1.05	y	49:04	-	1.87
148	Hepta	PCB-180	750.00	5.13e+08	1.05	y	49:17	-	1.39
149	Hepta	PCB-193	750.00	6.52e+08	1.06	y	49:29	-	1.76
150	Hepta	PCB-191	750.00	6.47e+08	1.05	y	49:42	-	1.75
151	Hepta	PCB-170	750.00	4.90e+08	1.06	y	50:41	-	1.66
152	Hepta	PCB-190	750.00	6.88e+08	1.05	y	50:52	-	2.33
153	Hepta	PCB-189	750.00	6.33e+08	1.05	y	52:08	-	1.58
154	Octa	PCB-202	750.00	5.06e+08	0.91	y	48:13	-	1.14
155	Octa	PCB-201	750.00	5.32e+08	0.91	y	48:42	-	1.20
156	Octa	PCB-204	750.00	5.54e+08	0.92	y	48:52	-	1.25
157	Octa	PCB-197	750.00	4.91e+08	0.92	y	49:10	-	1.11
158	Octa	PCB-200	750.00	4.81e+08	0.92	y	50:00	-	1.09
159	Octa	PCB-198	750.00	3.58e+08	0.91	y	51:16	-	0.81
160	Octa	PCB-199	750.00	3.69e+08	0.92	y	51:23	-	0.83
161	Octa	PCB-196/203	1500.00	8.08e+08	0.92	y	51:38	-	0.91
162	Octa	PCB-195	750.00	5.64e+08	0.92	y	52:47	-	1.30
163	Octa	PCB-194	750.00	5.18e+08	0.92	y	53:40	-	1.20

164	Octa	PCB-205	750.00	6.92e+08	0.92 y	53:57	-	1.60
165	Nona	PCB-208	750.00	5.53e+08	1.33 y	52:55	-	0.94
166	Nona	PCB-207	750.00	6.58e+08	1.33 y	53:14	-	1.12
167	Nona	PCB-206	750.00	3.54e+08	1.32 y	55:22	-	1.03
168	Deca	PCB-209	750.00	3.89e+08	1.19 y	56:40	-	1.22
169	Tot Σ	Total Mono-PCB	0.00	-	- n	-	-	1.36
170	Tot Σ	Total Di-PCB	0.00	-	- n	-	-	1.25
171	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.15

172	Tot 7	Total Tri-PCB	0.00	-	- n	-	-	1.12
173	Tot 7	Total Tetra-PCB	0.00	-	- n	-	-	1.09
174	Tot 7	Total Penta-PCB	0.00	-	- n	-	-	1.23
175	Tot 7	Total Penta-PCB	0.00	-	- n	-	-	1.25
176	Tot 7	Total Hexa-PCB	0.00	-	- n	-	-	0.96
177	Tot 7	Total Hexa-PCB	0.00	-	- n	-	-	1.14
178	Tot 7	Total Hepta-PCB	0.00	-	- n	-	-	1.46
179	Tot 7	Total Octa-PCB	0.00	-	- n	-	-	1.03
180	Tot 7	Total Octa-PCB	0.00	-	- n	-	-	1.36
181	Tot 7	Total Nona-PCB	0.00	-	- n	-	-	1.03
182	Tot 7	Total Deca-PCB	750.00	3.89e+08	1.19 y	56:40	-	1.22
183	Mono ₇	13C-PCB-1	100.00	1.51e+08	3.37 y	16:24	-	0.77
184	Mono ₇	13C-PCB-3	100.00	1.63e+08	3.42 y	18:54	-	0.83
185	Di-IS	13C-PCB-4	100.00	1.12e+08	1.60 y	20:12	-	0.57
186	Di-IS	13C-PCB-9	100.00	1.73e+08	1.58 y	21:55	-	0.88
187	Di-IS	13C-PCB-11	100.00	1.84e+08	1.56 y	25:13	-	0.94
188	Tri- ₇	13C-PCB-19	100.00	9.33e+07	1.09 y	24:14	-	0.48
189	Tri- ₇	13C-PCB-32	100.00	1.45e+08	1.09 y	27:05	-	0.74
190	Tri- ₇	13C-PCB-28	100.00	1.37e+08	1.03 y	29:01	-	1.02
191	Tri- ₇	13C-PCB-37	100.00	1.25e+08	1.07 y	32:52	-	0.93
192	Tetr ₇	13C-PCB-54	100.00	1.30e+08	0.80 y	27:56	-	0.98
193	Tetr ₇	13C-PCB-52	100.00	9.99e+07	0.80 y	31:25	-	0.75
194	Tetr ₇	13C-PCB-47	100.00	1.04e+08	0.77 y	31:55	-	0.78
195	Tetr ₇	13C-PCB-70	100.00	1.35e+08	0.78 y	35:24	-	1.02
196	Tetr ₇	13C-PCB-80	100.00	1.39e+08	0.80 y	35:49	-	1.05
197	Tetr ₇	13C-PCB-81	100.00	1.30e+08	0.79 y	38:56	-	0.98
198	Tetr ₇	13C-PCB-77	100.00	1.29e+08	0.80 y	39:32	-	0.97
199	Pent ₇	13C-PCB-104	100.00	8.83e+07	1.59 y	32:34	-	0.96
200	Pent ₇	13C-PCB-95	100.00	6.79e+07	1.55 y	35:43	-	0.74
201	Pent ₇	13C-PCB-101	100.00	7.25e+07	1.55 y	37:23	-	0.79
202	Pent ₇	13C-PCB-97	100.00	6.44e+07	1.57 y	38:42	-	0.70
203	Pent ₇	13C-PCB-123	100.00	8.18e+07	1.58 y	41:16	-	0.89
204	Pent ₇	13C-PCB-118	100.00	9.11e+07	1.59 y	41:27	-	0.99
205	Pent ₇	13C-PCB-114	100.00	1.10e+08	1.61 y	42:06	-	1.45
206	Pent ₇	13C-PCB-105	100.00	1.10e+08	1.59 y	42:58	-	1.45
207	Pent ₇	13C-PCB-127	100.00	1.18e+08	1.61 y	43:18	-	1.54
208	Pent ₇	13C-PCB-126	100.00	1.02e+08	1.57 y	45:13	-	1.34
209	Hexa ₇	13C-PCB-155	100.00	7.27e+07	1.27 y	36:56	-	0.79
210	Hexa ₇	13C-PCB-153	100.00	8.79e+07	1.29 y	43:07	-	1.15
211	Hexa ₇	13C-PCB-141	100.00	8.18e+07	1.28 y	43:52	-	1.07
212	Hexa	13C-PCB-138	100.00	8.32e+07	1.27 y	44:43	-	1.09
213	Hexa ₇	13C-PCB-159	100.00	9.51e+07	1.28 y	45:59	-	1.25
214	Hexa ₇	13C-PCB-167	100.00	1.01e+08	1.26 y	46:41	-	1.33
215	Hexa ₇	13C-PCB-156	100.00	1.01e+08	1.27 y	47:59	-	1.32
216	Hexa ₇	13C-PCB-157	100.00	1.05e+08	1.31 y	48:15	-	1.38
217	Hexa ₇	13C-PCB-169	100.00	9.82e+07	1.28 y	50:20	-	1.29
218	Hepta ₇	13C-PCB-188	100.00	6.91e+07	0.47 y	42:45	-	0.91
219	Hepta ₇	13C-PCB-180	100.00	4.94e+07	0.48 y	49:16	-	0.65
220	Hepta ₇	13C-PCB-170	100.00	3.94e+07	0.46 y	50:41	-	0.52
221	Hepta ₇	13C-PCB-189	100.00	5.34e+07	0.46 y	52:08	-	0.70
222	Octa ₇	13C-PCB-202	100.00	5.91e+07	0.90 y	48:12	-	0.78

223	Octa ₇	13C-PCB-194	100.00	5.78e+07	0.93	y	53:39	-	0.79
224	Nona ₇	13C-PCB-208	100.00	7.83e+07	0.77	y	52:54	-	1.07
225	Nona ₇	13C-PCB-206	100.00	4.57e+07	0.77	y	55:21	-	0.62
226	Deca ₇	13C-PCB-209	100.00	4.25e+07	1.20	y	56:39	-	0.58
227	DI-RS	13C-PCB-15	100.00	1.96e+08	1.59	y	25:55	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.34e+08	1.04	y	28:55	-	1.00
229	Tetr ₇	13C-PCB-60	100.00	1.33e+08	0.78	y	36:39	-	1.00
230	Penta	13C-PCB-111	100.00	9.21e+07	1.57	y	39:07	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	7.63e+07	1.27	y	46:17	-	1.00
232	Octa ₇	13C-PCB-205	100.00	7.35e+07	0.92	y	53:56	-	1.00

233	CRS	13C-PCB-79	100.00	1.38e+08	0.77	y	37:43	-	1.04
234	CRS	13C-PCB-178	100.00	4.43e+07	0.45	y	45:33	-	0.58
235	PS	13C-PCB-79	100.00	1.38e+08	0.77	y	37:43	-	1.06
236	PS	13C-PCB-178	100.00	4.43e+07	0.45	y	45:33	-	0.90

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST140623E2-4

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 140623E2 S#4 Analysis Date: 23-JUN-14 Time: 14:53:49

ANALYTES	ION QC				CONC.				ION QC				CONC.			
	ABUND.	LIMITS	CONC.	RANGE	ABUND.	LIMITS	CONC.	RANGE	ABUND.	LIMITS	CONC.	RANGE	ABUND.	LIMITS	CONC.	RANGE
	RATIO		PASS	FOUND	(ng/mL)	ANALYTES	RATIO		PASS	FOUND	(ng/mL)					
PCB-1	3.00	2.66-3.60	y	51.3	37.5-62.5	PCB-52/69	0.76	0.65-0.89	y	99.8	75.0-125					
PCB-2	3.01	2.66-3.60	y	51.8	37.5-62.5	PCB-73	0.78	0.65-0.89	y	51.0	37.5-62.5					
PCB-3	3.01	2.66-3.60	y	51.3	37.5-62.5	PCB-43/49	0.76	0.65-0.89	y	97.5	75.0-125					
PCB-4/10	1.65	1.33-1.79	y	200.1	150-250	PCB-47	0.76	0.65-0.89	y	49.3	37.5-62.5					
PCB-7/9	1.65	1.33-1.79	y	199.3	150-250	PCB-48/75	0.77	0.65-0.89	y	95.6	75.0-125					
PCB-6	1.66	1.33-1.79	y	100.0	75.0-125	PCB-65	0.76	0.65-0.89	y	50.2	37.5-62.5					
PCB-5/8	1.64	1.33-1.79	y	200.2	150-250	PCB-62	0.76	0.65-0.89	y	44.6	37.5-62.5					
PCB-14	1.66	1.33-1.79	y	102.7	75.0-125	PCB-44	0.77	0.65-0.89	y	46.7	37.5-62.5					
PCB-11	1.65	1.33-1.79	y	101.7	75.0-125	PCB-42/59	0.76	0.65-0.89	y	95.3	75.0-125					
PCB-12/13	1.65	1.33-1.79	y	200.4	150-250	PCB-41/64/71/72	0.77	0.65-0.89	y	187.9	150-250					
PCB-15	1.66	1.33-1.79	y	100.2	75.0-125	PCB-68	0.76	0.65-0.89	y	48.0	37.5-62.5					
PCB-19	1.05	0.88-1.20	y	49.8	37.5-62.5	PCB-40	0.77	0.65-0.89	y	48.5	37.5-62.5					
PCB-30	1.06	0.88-1.20	y	49.4	37.5-62.5	PCB-57	0.76	0.65-0.89	y	50.7	37.5-62.5					
PCB-18	1.05	0.88-1.20	y	51.3	37.5-62.5	PCB-67	0.76	0.65-0.89	y	49.2	37.5-62.5					
PCB-17	1.05	0.88-1.20	y	50.5	37.5-62.5	PCB-58	0.79	0.65-0.89	y	50.1	37.5-62.5					
PCB-24/27	1.05	0.88-1.20	y	101.3	75.0-125	PCB-63	0.76	0.65-0.89	y	49.0	37.5-62.5					
PCB-16/32	1.06	0.88-1.20	y	100.2	75.0-125	PCB-74	0.77	0.65-0.89	y	48.3	37.5-62.5					
PCB-34	1.03	0.88-1.20	y	47.9	37.5-62.5	PCB-61/70	0.77	0.65-0.89	y	99.9	75.0-125					
PCB-23	1.06	0.88-1.20	y	47.9	37.5-62.5	PCB-76/66	0.77	0.65-0.89	y	99.0	75.0-125					
PCB-29	1.04	0.88-1.20	y	49.2	37.5-62.5	PCB-80	0.77	0.65-0.89	y	51.1	37.5-62.5					
PCB-26	1.04	0.88-1.20	y	48.9	37.5-62.5	PCB-55	0.77	0.65-0.89	y	51.8	37.5-62.5					
PCB-25	1.06	0.88-1.20	y	50.3	37.5-62.5	PCB-56/60	0.77	0.65-0.89	y	98.9	75.0-125					
PCB-31	1.02	0.88-1.20	y	48.2	37.5-62.5	PCB-79	0.78	0.65-0.89	y	49.6	37.5-62.5					
PCB-28	1.04	0.88-1.20	y	49.8	37.5-62.5	PCB-78	0.77	0.65-0.89	y	49.1	37.5-62.5					
PCB-20/21/33	1.03	0.88-1.20	y	149.6	112.5-225	PCB-81	0.78	0.65-0.89	y	48.4	37.5-62.5					
PCB-22	1.04	0.88-1.20	y	50.9	37.5-62.5	PCB-77	0.79	0.65-0.89	y	49.2	37.5-62.5					
PCB-36	1.03	0.88-1.20	y	51.8	37.5-62.5	PCB-104	1.57	1.32-1.78	y	50.6	37.5-62.5					
PCB-39	1.02	0.88-1.20	y	53.7	37.5-62.5	PCB-96	1.56	1.32-1.78	y	49.5	37.5-62.5					
PCB-38	1.03	0.88-1.20	y	51.1	37.5-62.5	PCB-103	1.56	1.32-1.78	y	48.8	37.5-62.5					
PCB-35	1.03	0.88-1.20	y	47.9	37.5-62.5	PCB-100	1.58	1.32-1.78	y	49.2	37.5-62.5					
PCB-37	1.02	0.88-1.20	y	48.4	37.5-62.5	PCB-94	1.55	1.32-1.78	y	48.1	37.5-62.5					
PCB-54	0.78	0.65-0.89	y	49.7	37.5-62.5	PCB-95/98/102	1.55	1.32-1.78	y	149.1	112.5-225	Analyst: <i>DMS</i>				
PCB-50	0.77	0.65-0.89	y	49.7	37.5-62.5	PCB-93	1.58	1.32-1.78	y	50.1	37.5-62.5					
PCB-53	0.75	0.65-0.89	y	50.5	37.5-62.5	PCB-88/91	1.58	1.32-1.78	y	100.5	75.0-125					
PCB-51	0.77	0.65-0.89	y	49.6	37.5-62.5	PCB-121	1.60	1.32-1.78	y	50.2	37.5-62.5	Date: <i>6/24/14</i>				
PCB-45	0.77	0.65-0.89	y	51.4	37.5-62.5											
PCB-46	0.76	0.65-0.89	y	49.3	37.5-62.5											

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST140623E2-4

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 140623E2 S#4 Analysis Date: 23-JUN-14 Time: 14:53:49

ANALYTES	ION QC				CONC.				ION QC				CONC.				
	ABUND.	LIMITS	CONC.	RANGE	ABUND.	LIMITS	CONC.	RANGE	ABUND.	LIMITS	CONC.	RANGE	ABUND.	LIMITS	CONC.	RANGE	
	RATIO	PASS	FOUND	(ng/mL)	ANALYTES	RATIO	PASS	FOUND	(ng/mL)	ANALYTES	RATIO	PASS	FOUND	(ng/mL)	ANALYTES	RATIO	PASS
PCB-84/92	1.56	1.32-1.78	y	99.2	75.0-125	PCB-140	1.27	1.05-1.43	y	48.3	37.5-62.5	PCB-134/143	1.25	1.05-1.43	y	97.1	75.0-125
PCB-89	1.58	1.32-1.78	y	50.3	37.5-62.5	PCB-133/142	1.24	1.05-1.43	y	97.4	75.0-125	PCB-131	1.23	1.05-1.43	y	49.1	37.5-62.5
PCB-90/101	1.56	1.32-1.78	y	100.3	75.0-125	PCB-146/165	1.25	1.05-1.43	y	98.5	75.0-125	PCB-132/161	1.31	1.05-1.43	y	98.0	75.0-125
PCB-113	1.57	1.32-1.78	y	52.7	37.5-62.5	PCB-153	1.16	1.05-1.43	y	49.2	37.5-62.5	PCB-158	1.25	1.05-1.43	y	50.1	37.5-62.5
PCB-99	1.60	1.32-1.78	y	47.7	37.5-62.5	PCB-141	1.24	1.05-1.43	y	48.7	37.5-62.5	PCB-137	1.23	1.05-1.43	y	49.3	37.5-62.5
PCB-119	1.56	1.32-1.78	y	49.8	37.5-62.5	PCB-130	1.23	1.05-1.43	y	50.2	37.5-62.5	PCB-138/163/164	1.24	1.05-1.43	y	147.8	112.5-225
PCB-108/112	1.58	1.32-1.78	y	100.2	75.0-125	PCB-158/160	1.23	1.05-1.43	y	99.9	75.0-125	PCB-159	1.23	1.05-1.43	y	49.9	37.5-62.5
PCB-83	1.57	1.32-1.78	y	49.2	37.5-62.5	PCB-129	1.24	1.05-1.43	y	49.1	37.5-62.5	PCB-128/162	1.23	1.05-1.43	y	97.4	75.0-125
PCB-97	1.55	1.32-1.78	y	49.4	37.5-62.5	PCB-166	1.24	1.05-1.43	y	49.5	37.5-62.5	PCB-167	1.22	1.05-1.43	y	50.2	37.5-62.5
PCB-86	1.55	1.32-1.78	y	47.3	37.5-62.5	PCB-156	1.25	1.05-1.43	y	50.3	37.5-62.5	PCB-157	1.24	1.05-1.43	y	48.4	37.5-62.5
PCB-87/117/125	1.62	1.32-1.78	y	153.7	112.5-225	PCB-158	1.23	1.05-1.43	y	48.4	37.5-62.5	PCB-168	1.05	0.89-1.21	y	49.3	37.5-62.5
PCB-111/115	1.51	1.32-1.78	y	98.7	75.0-125	PCB-156	1.25	1.05-1.43	y	50.3	37.5-62.5	PCB-159	1.27	1.05-1.43	y	48.4	37.5-62.5
PCB-85/116	1.58	1.32-1.78	y	100.6	75.0-125	PCB-157	1.24	1.05-1.43	y	48.4	37.5-62.5	PCB-169	1.05	0.89-1.21	y	49.3	37.5-62.5
PCB-120	1.59	1.32-1.78	y	48.7	37.5-62.5	PCB-188	1.06	0.89-1.21	y	49.1	37.5-62.5	PCB-184	1.06	0.89-1.21	y	49.1	37.5-62.5
PCB-110	1.57	1.32-1.78	y	50.0	37.5-62.5	PCB-179	1.06	0.89-1.21	y	49.7	37.5-62.5	PCB-176	1.04	0.89-1.21	y	49.5	37.5-62.5
PCB-82	1.55	1.32-1.78	y	49.8	37.5-62.5	PCB-186	1.05	0.89-1.21	y	49.8	37.5-62.5	PCB-178	1.05	0.89-1.21	y	49.4	37.5-62.5
PCB-124	1.58	1.32-1.78	y	48.7	37.5-62.5	PCB-184	1.06	0.89-1.21	y	49.1	37.5-62.5	PCB-175	1.05	0.89-1.21	y	49.6	37.5-62.5
PCB-107/109	1.59	1.32-1.78	y	102.0	75.0-125	PCB-179	1.06	0.89-1.21	y	49.7	37.5-62.5	PCB-176	1.05	0.89-1.21	y	48.4	37.5-62.5
PCB-123	1.59	1.32-1.78	y	50.6	37.5-62.5	PCB-182/187	1.05	0.89-1.21	y	48.4	37.5-62.5	PCB-186	1.05	0.89-1.21	y	48.4	37.5-62.5
PCB-106/118	1.59	1.32-1.78	y	100.2	75.0-125	PCB-184	1.06	0.89-1.21	y	49.1	37.5-62.5	PCB-182/187	1.05	0.89-1.21	y	48.4	37.5-62.5
PCB-114	1.65	1.32-1.78	y	50.6	37.5-62.5	PCB-176	1.05	0.89-1.21	y	48.4	37.5-62.5	PCB-183	1.05	0.89-1.21	y	47.6	37.5-62.5
PCB-122	1.66	1.32-1.78	y	49.6	37.5-62.5	PCB-185	1.07	0.89-1.21	y	49.3	37.5-62.5	PCB-181	1.06	0.89-1.21	y	49.2	37.5-62.5
PCB-105	1.64	1.32-1.78	y	49.4	37.5-62.5	PCB-174	1.02	0.89-1.21	y	51.7	37.5-62.5	PCB-177	1.05	0.89-1.21	y	50.0	37.5-62.5
PCB-127	1.67	1.32-1.78	y	47.6	37.5-62.5	PCB-171	1.07	0.89-1.21	y	50.3	37.5-62.5	PCB-173	1.04	0.89-1.21	y	50.8	37.5-62.5
PCB-126	1.63	1.32-1.78	y	49.7	37.5-62.5	PCB-172	1.07	0.89-1.21	y	50.2	37.5-62.5	PCB-172	1.07	0.89-1.21	y	50.2	37.5-62.5
PCB-155	1.27	1.05-1.43	y	49.7	37.5-62.5	Analyst: <i>DMS</i>						Date: <i>6/24/14</i>					
PCB-150	1.29	1.05-1.43	y	50.1	37.5-62.5												
PCB-152	1.30	1.05-1.43	y	49.4	37.5-62.5												
PCB-145	1.28	1.05-1.43	y	49.5	37.5-62.5												
PCB-136	1.29	1.05-1.43	y	49.0	37.5-62.5												
PCB-148	1.30	1.05-1.43	y	49.6	37.5-62.5												
PCB-154	1.28	1.05-1.43	y	48.4	37.5-62.5												
PCB-151	1.29	1.05-1.43	y	47.9	37.5-62.5												
PCB-135	1.26	1.05-1.43	y	48.7	37.5-62.5												
PCB-144	1.30	1.05-1.43	y	46.6	37.5-62.5												
PCB-147	1.30	1.05-1.43	y	48.2	37.5-62.5												
PCB-139/149	1.28	1.05-1.43	y	96.8	75.0-125												

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory Lab ID: ST140623E2-4 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 140623E2 S#4 Analysis Date: 23-JUN-14 Time: 14:53:49

ANALYTES	ION	QC	CONC.		
	ABUND.	LIMITS	CONC.	RANGE	(ng/mL)
	RATIO	PASS	FOUND		
PCB-192	1.06	0.89-1.21	y	51.0	37.5-62.5
PCB-180	1.05	0.89-1.21	y	50.1	37.5-62.5
PCB-193	1.07	0.89-1.21	y	50.1	37.5-62.5
PCB-191	1.07	0.89-1.21	y	49.6	37.5-62.5
PCB-170	1.05	0.89-1.21	y	50.8	37.5-62.5
PCB-190	1.06	0.89-1.21	y	50.5	37.5-62.5
PCB-189	1.05	0.89-1.21	y	50.0	37.5-62.5
PCB-202	0.94	0.76-1.02	y	49.2	37.5-62.5
PCB-201	0.91	0.76-1.02	y	49.1	37.5-62.5
PCB-204	0.91	0.76-1.02	y	50.1	37.5-62.5
PCB-197	0.91	0.76-1.02	y	49.9	37.5-62.5
PCB-200	0.90	0.76-1.02	y	50.1	37.5-62.5
PCB-198	0.92	0.76-1.02	y	51.1	37.5-62.5
PCB-199	0.91	0.76-1.02	y	47.9	37.5-62.5
PCB-196/203	0.92	0.76-1.02	y	100.1	75.0-125
PCB-195	0.89	0.76-1.02	y	50.7	37.5-62.5
PCB-194	0.92	0.76-1.02	y	49.2	37.5-62.5
PCB-205	0.92	0.76-1.02	y	49.4	37.5-62.5
PCB-208	1.34	1.14-1.54	y	49.7	37.5-62.5
PCB-207	1.32	1.14-1.54	y	49.8	37.5-62.5
PCB-206	1.36	1.14-1.54	y	49.3	37.5-62.5
PCB-209	1.21	0.99-1.33	y	51.1	37.5-62.5

Analyst: DMSDate: 6/24/14

LABLED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory

Lab ID: ST140623E2-4

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 140623E2 S#4 Analysis Date: 23-JUN-14 Time: 14:53:49

LABLED IS	ION				CONC.		ION				CONC.	
	ABUND.	QC	CONC.	RANGE	LABELD IS	ABUND.	QC	CONC.	RANGE	LABELD IS	RATIO	LIMITS
	RATIO	LIMITS	PASS	FOUND	(ng/mL)	LABELD IS	RATIO	LIMITS	PASS	FOUND	(ng/mL)	
13C-PCB-1	3.37	2.66-3.60	Y	98.7	50.0-145	13C-PCB-169	1.27	1.05-1.43	Y	96.7	50 - 145	
13C-PCB-3	3.41	2.66-3.60	Y	94.8	50.0-145	13C-PCB-188	0.46	0.38-0.52	Y	100.6	50 - 145	
13C-PCB-4	1.58	1.33-1.79	Y	99.7	50.0-145	13C-PCB-180	0.47	0.38-0.52	Y	97.7	50 - 145	
13C-PCB-9	1.59	1.33-1.79	Y	99.2	50.0-145	13C-PCB-170	0.47	0.38-0.52	Y	97.2	50 - 145	
13C-PCB-11	1.57	1.33-1.79	Y	98.2	50.0-145	13C-PCB-189	0.47	0.38-0.52	Y	96.3	50 - 145	
13C-PCB-19	1.07	0.88-1.20	Y	99.8	50.0-145	13C-PCB-202	0.94	0.76-1.02	Y	97.2	50 - 145	
13C-PCB-32	1.09	0.88-1.20	Y	98.2	50.0-145	13C-PCB-194	0.92	0.76-1.02	Y	99.4	50 - 145	
13C-PCB-28	1.06	0.88-1.20	Y	98.7	50.0-145	13C-PCB-208	0.78	0.65-0.89	Y	99.5	50 - 145	
13C-PCB-37	1.07	0.88-1.20	Y	94.4	50.0-145	13C-PCB-206	0.78	0.65-0.89	Y	100.0	50 - 145	
13C-PCB-54	0.81	0.65-0.89	Y	100.9	50.0-145	13C-PCB-209	1.23	0.99-1.33	Y	96.9	50 - 145	
13C-PCB-52	0.80	0.65-0.89	Y	100.5	50.0-145							
13C-PCB-47	0.79	0.65-0.89	Y	100.7	50.0-145							
13C-PCB-70	0.78	0.65-0.89	Y	97.6	50.0-145							
13C-PCB-80	0.80	0.65-0.89	Y	98.0	50.0-145							
13C-PCB-81	0.79	0.65-0.89	Y	96.6	50.0-145							
13C-PCB-77	0.78	0.65-0.89	Y	96.6	50.0-145							
13C-PCB-104	1.57	1.32-1.78	Y	100.0	50.0-145							
13C-PCB-95	1.59	1.32-1.78	Y	99.4	50.0-145							
13C-PCB-101	1.54	1.32-1.78	Y	98.6	50.0-145	CRS vs. RS						
13C-PCB-97	1.59	1.32-1.78	Y	98.2	50.0-145							
13C-PCB-123	1.61	1.32-1.78	Y	96.8	50.0-145	13C-PCB-79	0.79	0.65-0.89	Y	98.3	75 - 125	
13C-PCB-118	1.58	1.32-1.78	Y	95.4	50.0-145	13C-PCB-178	0.46	0.38-0.52	Y	101.1	75 - 125	
13C-PCB-114	1.60	1.32-1.78	Y	98.7	50.0-145							
13C-PCB-105	1.60	1.32-1.78	Y	96.9	50.0-145							
13C-PCB-127	1.57	1.32-1.78	Y	98.2	50.0-145							
13C-PCB-126	1.58	1.32-1.78	Y	99.9	50.0-145							
13C-PCB-155	1.29	1.05-1.43	Y	99.1	50.0-145							
13C-PCB-153	1.29	1.05-1.43	Y	99.7	50.0-145							
13C-PCB-141	1.28	1.05-1.43	Y	100.0	50.0-145							
13C-PCB-138	1.29	1.05-1.43	Y	101.1	50.0-145							
13C-PCB-159	1.27	1.05-1.43	Y	98.0	50.0-145							
13C-PCB-167	1.30	1.05-1.43	Y	98.4	50.0-145							
13C-PCB-156	1.29	1.05-1.43	Y	98.4	50.0-145							
13C-PCB-157	1.29	1.05-1.43	Y	97.7	50.0-145							

Analyst: DMSDate: 8/24/14

Client ID: PCB CS3 14F1302
Lab ID: ST140623E2-4

Filename: 140623E2 S:4 Acq:23-JUN-14 14:53:49 ConCal: NA
GC Column ID: ZB-1 ICal: PCBVCG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

Page 1 of

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	9.40e+07	3.00	y	1.19	16:25	1.001	0.996-1.006	51.3300	PCB-52/69	1.24e+08	0.76	y	1.28	31:27	1.001	0.996-1.006	99.8332
PCB-2	9.45e+07	3.01	y	1.18	18:41	0.989	0.984-0.994	51.8481	PCB-73	6.71e+07	0.78	y	1.35	31:34	1.005	1.000-1.010	51.0170
PCB-3	1.13e+08	3.01	y	1.43	18:55	1.001	0.996-1.006	51.3028	PCB-43/49	9.43e+07	0.76	y	0.99	31:44	1.010	1.005-1.015	97.5221
PCB-4/10	3.27e+08	1.65	y	1.57	20:14	1.002	0.997-1.007	200.078	PCB-47	5.35e+07	0.76	y	1.06	31:55	1.001	0.996-1.006	49.2976
PCB-7/9	3.82e+08	1.65	y	1.21	21:57	0.870	0.866-0.874	199.310	PCB-48/75	1.20e+08	0.77	y	1.23	32:02	1.004	0.999-1.009	95.5705
PCB-6	2.07e+08	1.66	y	1.30	22:35	0.895	0.890-0.899	100.033	PCB-65	6.30e+07	0.76	y	1.22	32:19	1.013	1.008-1.018	50.1860
PCB-5/8	3.65e+08	1.64	y	1.15	23:00	0.912	0.907-0.917	200.175	PCB-62	5.58e+07	0.76	y	1.22	32:26	1.016	1.011-1.021	44.5973
PCB-14	1.87e+08	1.66	y	1.11	24:04	0.954	0.949-0.959	102.750	PCB-44	4.12e+07	0.77	y	0.86	32:43	1.026	1.021-1.031	46.6811
PCB-11	1.81e+08	1.65	y	1.09	25:14	1.000	0.995-1.005	101.723	PCB-42/59	1.11e+08	0.76	y	1.14	32:57	1.033	1.028-1.038	95.2591
PCB-12/13	3.92e+08	1.65	y	1.19	25:38	1.016	1.011-1.021	200.431	PCB-41/64/71/72	2.33e+08	0.77	y	1.21	33:32	1.051	1.046-1.056	187.913
PCB-15	2.11e+08	1.66	y	1.28	25:56	1.028	1.023-1.033	100.196	PCB-68	6.63e+07	0.76	y	1.35	33:47	1.059	1.054-1.064	47.9757
									PCB-40	3.48e+07	0.77	y	0.70	34:00	1.066	1.061-1.071	48.4517
									PCB-57	6.06e+07	0.76	y	0.98	34:22	0.970	0.965-0.975	50.6920
PCB-19	4.92e+07	1.05	y	1.04	24:15	1.001	0.996-1.006	49.8495	PCB-67	6.65e+07	0.76	y	1.11	34:40	0.979	0.974-0.984	49.1755
PCB-30	7.99e+07	1.06	y	1.71	25:07	1.037	1.032-1.042	49.3635	PCB-58	5.67e+07	0.79	y	0.93	34:47	0.982	0.977-0.987	50.1141
PCB-18	5.58e+07	1.05	y	0.78	25:51	0.954	0.949-0.959	51.2756	PCB-63	5.70e+07	0.76	y	0.95	34:56	0.987	0.982-0.992	48.9977
PCB-17	6.48e+07	1.05	y	0.92	26:02	0.961	0.956-0.966	50.4844	PCB-74	7.34e+07	0.77	y	1.24	35:13	0.995	0.990-1.000	48.3011
PCB-24/27	1.68e+08	1.05	y	1.19	26:36	0.982	0.977-0.987	101.312	PCB-61/70	1.16e+08	0.77	y	0.95	35:24	1.000	0.995-1.005	99.8888
- PCB-16/32	1.31e+08	1.06	y	0.94	27:06	1.000	0.995-1.005	100.158	PCB-76/66	1.26e+08	0.77	y	1.04	35:37	1.006	1.001-1.011	99.0361
- PCB-34	7.59e+07	1.03	y	1.14	27:52	0.960	0.955-0.965	47.8540	PCB-80	7.72e+07	0.77	y	1.19	35:50	1.001	0.996-1.006	51.1089
PCB-23	8.55e+07	1.06	y	1.28	27:58	0.964	0.959-0.969	47.9079	PCB-55	6.84e+07	0.77	y	1.04	36:10	1.010	1.005-1.015	51.7926
PCB-29	7.42e+07	1.04	y	1.08	28:13	0.972	0.967-0.977	49.2142	PCB-56/60	1.27e+08	0.77	y	1.01	36:40	1.024	1.019-1.029	98.8614
PCB-26	8.24e+07	1.04	y	1.21	28:25	0.979	0.974-0.984	48.9217	PCB-79	6.79e+07	0.78	y	1.08	37:43	1.053	1.048-1.058	49.6313
PCB-25	8.85e+07	1.06	y	1.26	28:34	0.984	0.979-0.989	50.2567	PCB-78	6.97e+07	0.77	y	1.27	38:25	0.987	0.982-0.992	49.0861
PCB-31	8.64e+07	1.02	y	1.28	28:56	0.997	0.992-1.002	48.1924	PCB-81	7.20e+07	0.78	y	1.33	38:57	1.000	0.995-1.005	48.4278
PCB-28	1.19e+08	1.04	y	1.71	29:02	1.000	0.995-1.005	49.7990	PCB-77	6.19e+07	0.79	y	1.10	39:33	1.000	0.995-1.005	49.2464
PCB-20/21/33	2.26e+08	1.03	y	1.08	29:39	1.022	1.017-1.027	149.601	PCB-104	5.11e+07	1.57	y	1.18	32:35	1.001	0.996-1.006	50.6145
PCB-22	8.60e+07	1.04	y	1.21	30:05	1.037	1.032-1.042	50.9455	PCB-96	4.80e+07	1.56	y	1.14	33:50	1.039	1.034-1.044	49.4868
PCB-36	7.12e+07	1.03	y	1.14	30:40	0.933	0.928-0.938	51.8469	PCB-103	3.98e+07	1.56	y	0.96	34:22	1.055	1.050-1.060	48.8016
PCB-39	7.20e+07	1.02	y	1.12	31:09	0.948	0.943-0.953	53.6838	PCB-100	3.93e+07	1.58	y	0.94	34:42	1.066	1.061-1.071	49.1824
PCB-38	7.37e+07	1.03	y	1.20	31:55	0.971	0.966-0.976	51.1156	PCB-94	3.18e+07	1.55	y	1.06	35:11	0.985	0.980-0.990	48.0705
PCB-35	7.10e+07	1.03	y	1.23	32:26	0.987	0.982-0.992	47.9376	PCB-95/98/102	1.14e+08	1.55	y	1.22	35:42	1.000	0.995-1.005	149.073
PCB-37	7.16e+07	1.02	y	1.23	32:53	1.000	0.995-1.005	48.3854	PCB-93	2.65e+07	1.58	y	0.84	35:48	1.002	0.997-1.007	50.1439
PCB-54	6.73e+07	0.78	y	1.10	27:57	1.001	0.996-1.006	49.6981	PCB-88/91	7.03e+07	1.58	y	1.12	36:05	1.010	1.005-1.015	100.5229
PCB-50	5.38e+07	0.77	y	0.88	29:05	1.042	1.037-1.047	49.7280	PCB-121	5.08e+07	1.60	y	1.62	36:12	1.014	1.009-1.019	50.2163
PCB-53	5.23e+07	0.75	y	1.06	29:44	0.947	0.942-0.952	50.5493	PCB-84/92	6.82e+07	1.56	y	1.05	37:01	0.990	0.985-0.995	99.2072
PCB-51	4.77e+07	0.77	y	0.99	30:04	0.957	0.952-0.962	49.5846	PCB-89	3.73e+07	1.58	y	1.13	37:14	0.996	0.991-1.001	50.2710
PCB-45	4.32e+07	0.77	y	0.86	30:30	0.971	0.966-0.976	51.4204									
PCB-46	4.05e+07	0.76	y	0.85	30:59	0.986	0.981-0.991	49.2764									

RL: MONO, TRI - DECA: _____

RL: DI : _____

Integrations
by
Analyst: DMS

Date: 6/24/14

Reviewed
by
Analyst: _____

Date: _____

Client ID: PCB CS3 14F1302
Lab ID: ST140623E2-4

Filename: 140623E2 S:4 Acq:23-JUN-14 14:53:49 ConCal: NA
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

Page 1 of

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-90/101	7.26e+07	1.56	y	1.10	37:24	1.000	0.995-1.005	100.338	PCB-133/142	6.32e+07	1.24	y	0.82	42:20	0.982	0.977-0.987	97.4225
PCB-113	4.88e+07	1.57	y	1.41	37:39	1.007	1.002-1.012	52.6770	PCB-131	3.53e+07	1.23	y	0.91	42:30	0.986	0.981-0.991	49.1208
PCB-99	4.19e+07	1.60	y	1.34	37:44	1.009	1.004-1.014	47.7406	PCB-146/165	9.72e+07	1.25	y	1.25	42:43	0.991	0.986-0.996	98.5088
PCB-119	4.49e+07	1.56	y	1.53	38:12	0.987	0.982-0.992	49.7646	PCB-132/161	8.58e+07	1.31	y	1.10	42:58	0.997	0.992-1.002	98.0024
PCB-108/112	7.56e+07	1.58	y	1.28	38:21	0.991	0.986-0.996	100.241	PCB-153	4.86e+07	1.16	y	1.25	43:08	1.000	0.995-1.005	49.1545
PCB-83	4.40e+07	1.57	y	1.52	38:31	0.995	0.990-1.000	49.2175	PCB-168	5.75e+07	1.25	y	1.45	43:21	1.006	1.001-1.011	50.0689
PCB-97	3.44e+07	1.55	y	1.18	38:42	1.000	0.995-1.005	49.3584	PCB-141	3.94e+07	1.24	y	1.09	43:52	1.000	0.995-1.005	48.7397
PCB-86	2.35e+07	1.55	y	0.84	38:51	1.004	0.999-1.009	47.2868	PCB-137	3.90e+07	1.23	y	1.06	44:15	1.009	1.004-1.014	49.2894
B-87/117/125	1.40e+08	1.62	y	1.55	38:58	1.007	1.002-1.012	153.661	PCB-130	3.61e+07	1.23	y	0.96	44:21	1.011	1.006-1.016	50.1859
PCB-111/115	9.49e+07	1.51	y	1.63	39:08	1.011	1.006-1.016	98.7316	PCB-138/163/164	1.47e+08	1.24	y	1.29	44:44	1.001	0.996-1.006	147.764
PCB-85/116	7.71e+07	1.58	y	1.30	39:16	1.015	1.010-1.020	100.601	PCB-158/160	1.03e+08	1.23	y	1.34	44:59	1.006	1.001-1.011	99.9483
PCB-120	4.81e+07	1.59	y	1.68	39:30	1.021	1.016-1.026	48.6800	PCB-129	3.23e+07	1.24	y	0.85	45:13	1.012	1.007-1.017	49.1140
PCB-110	4.58e+07	1.57	y	1.56	39:39	1.025	1.020-1.030	50.0059	PCB-166	4.98e+07	1.24	y	1.19	45:41	0.993	0.988-0.998	49.5492
PCB-82	2.78e+07	1.55	y	0.76	40:17	0.976	0.971-0.981	49.7616	PCB-159	4.70e+07	1.23	y	1.11	46:01	1.001	0.996-1.006	49.8539
PCB-124	5.28e+07	1.58	y	1.47	40:57	0.993	0.988-0.998	48.7175	PCB-128/162	8.65e+07	1.23	y	1.05	46:18	1.007	1.002-1.012	97.4214
PCB-107/109	9.93e+07	1.59	y	1.32	41:05	0.996	0.991-1.001	102.042	PCB-167	5.55e+07	1.22	y	1.20	46:41	1.000	0.995-1.005	50.1954
PCB-123	4.35e+07	1.59	y	1.17	41:17	1.001	0.996-1.006	50.5524	PCB-156	5.05e+07	1.25	y	1.14	48:00	1.001	0.996-1.006	50.3349
- PCB-106/118	9.15e+07	1.59	y	1.17	41:28	1.001	0.996-1.006	100.161	PCB-157	5.18e+07	1.24	y	1.16	48:16	1.000	0.995-1.005	48.3867
- PCB-114	6.12e+07	1.65	y	1.30	42:07	1.000	0.995-1.005	50.6258	PCB-169	4.66e+07	1.27	y	1.12	50:20	1.000	0.995-1.005	48.3941
PCB-122	5.19e+07	1.66	y	1.12	42:15	1.004	0.999-1.009	49.6469	PCB-188	4.99e+07	1.05	y	1.58	42:46	1.001	0.996-1.006	49.3061
PCB-105	5.88e+07	1.64	y	1.30	42:59	1.000	0.995-1.005	49.4039	PCB-184	5.13e+07	1.06	y	1.63	43:13	1.011	1.006-1.016	49.1029
PCB-127	6.36e+07	1.67	y	1.33	43:19	1.001	0.996-1.006	47.5787	PCB-179	4.15e+07	1.06	y	1.30	44:00	1.029	1.024-1.034	49.7059
PCB-126	5.32e+07	1.63	y	1.18	45:13	1.000	0.995-1.005	49.7195	PCB-176	4.68e+07	1.04	y	1.48	44:28	1.040	1.035-1.045	49.4886
PCB-155	3.92e+07	1.27	y	1.11	36:57	1.001	0.966-1.006	49.6608	PCB-186	4.64e+07	1.05	y	1.45	45:05	1.055	1.050-1.060	49.8177
PCB-150	3.54e+07	1.29	y	1.00	38:13	1.035	1.030-1.040	50.0537	PCB-178	3.27e+07	1.05	y	1.03	45:34	1.066	1.061-1.071	49.3595
PCB-152	3.90e+07	1.30	y	1.12	38:42	1.048	1.043-1.053	49.3510	PCB-175	3.22e+07	1.05	y	1.01	45:55	1.074	1.069-1.079	49.6213
PCB-145	4.21e+07	1.28	y	1.20	39:08	1.060	1.055-1.065	49.5203	PCB-182/187	7.77e+07	1.05	y	1.25	46:05	1.078	1.073-1.083	96.9439
PCB-136	4.09e+07	1.29	y	1.18	39:28	1.069	1.064-1.074	48.9891	PCB-183	3.68e+07	1.05	y	1.21	46:24	1.086	1.081-1.091	47.6012
PCB-148	2.62e+07	1.30	y	0.74	39:33	1.071	1.066-1.076	49.6483	PCB-185	4.12e+07	1.07	y	1.80	47:04	0.956	0.951-0.961	49.3457
PCB-154	2.94e+07	1.28	y	0.86	40:03	1.085	1.080-1.090	48.3589	PCB-174	3.30e+07	1.02	y	1.38	47:26	0.963	0.958-0.968	51.6599
PCB-151	2.53e+07	1.29	y	0.75	40:42	1.102	1.097-1.107	47.8747	PCB-181	3.14e+07	1.06	y	1.38	47:33	0.965	0.960-0.970	49.1713
PCB-135	2.73e+07	1.26	y	0.79	40:55	1.108	1.103-1.113	48.6888	PCB-177	2.91e+07	1.05	y	1.26	47:42	0.968	0.963-0.973	50.0451
PCB-144	2.52e+07	1.30	y	0.76	41:02	1.111	1.105-1.117	46.6300	PCB-171	3.69e+07	1.07	y	1.58	48:00	0.975	0.970-0.980	50.3499
PCB-147	2.80e+07	1.30	y	0.82	41:09	1.115	1.109-1.121	48.1949	PCB-173	2.61e+07	1.04	y	1.11	48:26	0.983	0.978-0.988	50.8218
PCB-139/149	5.22e+07	1.28	y	0.76	41:25	1.122	1.116-1.128	96.7904	PCB-172	3.80e+07	1.07	y	1.63	48:53	0.992	0.987-0.997	50.2115
- PCB-140	2.47e+07	1.27	y	0.72	41:36	1.127	1.121-1.133	48.2707	PCB-192	4.11e+07	1.06	y	1.74	49:04	0.996	0.991-1.001	51.0155
- PCB-134/143	7.05e+07	1.25	y	0.92	42:02	0.975	0.970-0.980	97.1084	PCB-180	3.12e+07	1.05	y	1.34	49:17	1.000	0.995-1.005	50.1142

Integrations

by

Analyst: DMS

Date: 6/24/14

Client ID: PCB CS3 14F1302
Lab ID: ST140623E2-4

Filename: 140623E2 S:4 Acq:23-JUN-14 14:53:49
GC Column ID: ZB-1 ICal: PCVG8-6-23-14 wt/vol: 1.00000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-193	3.98e+07	1.07	y	1.72	49:27	1.004	0.999-1.009	50.0826
PCB-191	3.90e+07	1.07	y	1.69	49:42	1.009	1.004-1.014	49.6416
PCB-170	2.97e+07	1.05	y	1.60	50:41	1.000	0.995-1.005	50.7863
PCB-190	4.08e+07	1.06	y	2.21	50:51	1.003	0.998-1.008	50.4671
PCB-189	3.71e+07	1.05	y	1.55	52:08	1.000	0.995-1.005	50.0142
PCB-202	3.01e+07	0.94	y	1.08	48:12	1.000	0.995-1.005	49.1569
PCB-201	3.19e+07	0.91	y	1.15	48:41	1.010	1.005-1.015	49.1361
PCB-204	3.22e+07	0.91	y	1.14	48:50	1.014	1.008-1.018	50.0554
PCB-197	3.03e+07	0.91	y	1.07	49:09	1.020	1.015-1.025	49.8625
PCB-200	3.01e+07	0.90	y	1.06	49:59	1.037	1.032-1.044	50.0631
PCB-198	2.18e+07	0.92	y	0.76	51:15	1.064	1.059-1.069	51.1487
PCB-199	2.16e+07	0.91	y	0.80	51:21	1.066	1.061-1.071	47.8578
- PCB-196/203	4.53e+07	0.92	y	0.80	51:37	1.071	1.066-1.076	100.108
- PCB-195	3.20e+07	0.89	y	1.23	52:45	0.984	0.979-0.989	50.6536
PCB-194	3.08e+07	0.92	y	1.21	53:37	1.000	0.995-1.005	49.2456
PCB-205	3.93e+07	0.92	y	1.54	53:55	1.006	1.001-1.011	49.3837
PCB-208	3.24e+07	1.34	y	0.93	52:53	1.000	0.995-1.005	49.6730
PCB-207	3.78e+07	1.32	y	1.08	53:12	1.006	1.001-1.011	49.8284
PCB-206	2.13e+07	1.36	y	1.02	55:20	1.000	0.995-1.005	49.3149
PCB-209	2.30e+07	1.21	y	1.17	56:38	1.000	0.995-1.005	51.1001

Name	Resp	RA	RT	RRF	Conc	
Total Mono-PCB	3.01e+08	3.00	y	16:25	1.27	154.481
Total Di-PCB	2.26e+09	1.65	y	20:14	1.21	1208.89
Total Tri-PCB	5.48e+08	1.05	y	24:15	1.10	402.442
Total Tetra-PCB	1.30e+09	1.03	y	27:52	1.21	807.063
Total Penta-PCB	2.49e+09	0.78	y	27:57	1.09	2080.43
Total Hexa-PCB	1.69e+09	1.57	y	32:35	1.18	2047.61
Total Hepta-PCB	3.13e+08	1.65	y	42:07	1.25	268.155
Total Octa-PCB	4.35e+08	1.27	y	36:57	0.90	682.032
Total Nona-PCB	1.26e+09	1.25	y	42:02	1.11	1398.33
Total Deca-PCB	9.18e+08	1.05	y	42:46	1.42	1205.33
Total Octa-PCB	2.43e+08	0.94	y	48:12	0.96	447.388
Total Nona-PCB	1.04e+08	0.89	y	52:45	1.33	151.653
Total Deca-PCB	9.23e+07	1.34	y	52:53	1.01	150.101
Total PCB Conc:	2.30e+07	1.21	y	56:38	1.17	51.1001

Total PCB Conc:10960.1670500

Integrations
by
Analyst: DMS
Date: 6/24/14

RL: MONO, TRI - DECA: _____

Client ID: PCB CS3 14F1302
Lab ID: ST140623E2-4

Filename: 140623E2 S:4 Acq:23-JUN-14 14:53:49
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.000 ConCal: NA
EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS		Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec		
13C-PCB-1	1.53e+08	3.37	y	0.87	16:24	0.632	0.629-0.635	98.7	98.7	13C-PCB-79	1.25e+08	0.79	y	1.02	37:42	1.028	1.023-1.034	98.3	98.3				
13C-PCB-3	1.54e+08	3.41	y	0.91	18:54	0.729	0.725-0.733	94.8	94.8	13C-PCB-178	4.30e+07	0.46	y	0.61	45:33	0.984	0.979-0.990	101	101				
13C-PCB-4	1.04e+08	1.58	y	0.59	20:11	0.779	0.775-0.783	99.7	99.7	13C-PCB-11	1.64e+08	0.973	0.968-0.978	98.2	98.2	PS vs. IS	1.028	1.023-1.034	98.3	98.3			
13C-PCB-9	1.59e+08	1.59	y	0.90	21:55	0.846	0.842-0.850	99.2	99.2	13C-PCB-19	9.46e+07	0.53	24:14	0.935	0.930-0.940	99.8	99.8	1.028	1.023-1.034	98.3	98.3		
13C-PCB-11	1.64e+08	1.57	y	0.94	25:13	0.973	0.968-0.978	98.2	98.2	13C-PCB-28	1.40e+08	1.06	y	0.93	29:01	1.004	0.999-1.009	98.7	98.7	1.028	1.023-1.034	98.3	98.3
13C-PCB-19	9.46e+07	1.07	y	0.53	24:14	0.935	0.930-0.940	99.8	99.8	13C-PCB-32	1.39e+08	1.09	y	0.80	27:06	1.045	1.040-1.050	98.2	98.2	1.028	1.023-1.034	98.3	98.3
13C-PCB-28	1.40e+08	1.06	y	0.93	29:01	1.004	0.999-1.009	98.7	98.7	13C-PCB-37	1.20e+08	1.07	y	0.84	32:52	1.137	1.131-1.143	94.4	94.4	1.028	1.023-1.034	98.3	98.3
13C-PCB-32	1.39e+08	1.09	y	0.80	27:06	1.045	1.040-1.050	98.2	98.2	13C-PCB-47	1.02e+08	0.79	y	0.81	31:54	0.870	0.866-0.874	101	101	1.028	1.023-1.034	98.3	98.3
13C-PCB-37	1.20e+08	1.07	y	0.84	32:52	1.137	1.131-1.143	94.4	94.4	13C-PCB-52	9.72e+07	0.80	y	0.77	31:24	0.857	0.853-0.861	101	101	1.028	1.023-1.034	98.3	98.3
13C-PCB-47	1.02e+08	0.79	y	0.81	31:54	0.870	0.866-0.874	101	101	13C-PCB-54	1.23e+08	0.81	y	0.97	27:55	0.762	0.758-0.766	101	101	1.028	1.023-1.034	98.3	98.3
13C-PCB-52	9.72e+07	0.80	y	0.77	31:24	0.857	0.853-0.861	101	101	13C-PCB-70	1.22e+08	0.78	y	1.00	35:25	0.966	0.961-0.971	97.6	97.6	1.028	1.023-1.034	98.3	98.3
13C-PCB-54	1.23e+08	0.81	y	0.97	27:55	0.762	0.758-0.766	101	101	13C-PCB-77	1.14e+08	0.78	y	0.94	39:32	1.078	1.073-1.083	96.6	96.6	1.028	1.023-1.034	98.3	98.3
13C-PCB-70	1.22e+08	0.78	y	1.00	35:25	0.966	0.961-0.971	97.6	97.6	13C-PCB-80	1.27e+08	0.80	y	1.03	35:49	0.977	0.972-0.982	98.0	98.0	1.028	1.023-1.034	98.3	98.3
13C-PCB-77	1.14e+08	0.78	y	0.94	39:32	1.078	1.073-1.083	96.6	96.6	13C-PCB-80	1.27e+08	0.80	y	1.03	35:49	0.977	0.972-0.982	98.0	98.0	1.028	1.023-1.034	98.3	98.3
13C-PCB-80	1.27e+08	0.80	y	1.03	35:49	0.977	0.972-0.982	98.0	98.0	13C-PCB-81	1.12e+08	0.79	y	0.92	38:56	1.062	1.057-1.067	96.6	96.6	1.028	1.023-1.034	98.3	98.3
13C-PCB-81	1.12e+08	0.79	y	0.92	38:56	1.062	1.057-1.067	96.6	96.6	13C-PCB-85	6.27e+07	1.59	y	0.74	35:43	0.913	0.908-0.918	99.4	99.4	1.028	1.023-1.034	98.3	98.3
13C-PCB-85	6.27e+07	1.59	y	0.74	35:43	0.913	0.908-0.918	99.4	99.4	13C-PCB-97	5.89e+07	1.59	y	0.70	38:42	0.989	0.984-0.994	98.2	98.2	1.028	1.023-1.034	98.3	98.3
13C-PCB-97	5.89e+07	1.59	y	0.70	38:42	0.989	0.984-0.994	98.2	98.2	13C-PCB-101	6.57e+07	1.54	y	0.78	37:23	0.956	0.951-0.961	98.6	98.6	1.028	1.023-1.034	98.3	98.3
13C-PCB-101	6.57e+07	1.54	y	0.78	37:23	0.956	0.951-0.961	98.6	98.6	13C-PCB-104	8.52e+07	1.57	y	1.00	32:34	0.832	0.828-0.836	100.0	100.0	1.028	1.023-1.034	98.3	98.3
13C-PCB-104	8.52e+07	1.57	y	1.00	32:34	0.832	0.828-0.836	100.0	100.0	13C-PCB-105	9.17e+07	1.60	y	1.37	42:58	0.929	0.924-0.934	96.9	96.9	1.028	1.023-1.034	98.3	98.3
13C-PCB-105	9.17e+07	1.60	y	1.37	42:58	0.929	0.924-0.934	96.9	96.9	13C-PCB-114	9.33e+07	1.60	y	1.36	42:06	0.910	0.905-0.915	98.7	98.7	1.028	1.023-1.034	98.3	98.3
13C-PCB-114	9.33e+07	1.60	y	1.36	42:06	0.910	0.905-0.915	98.7	98.7	13C-PCB-118	7.79e+07	1.58	y	0.96	41:26	1.059	1.054-1.064	95.4	95.4	1.028	1.023-1.034	98.3	98.3
13C-PCB-118	7.79e+07	1.58	y	0.96	41:26	1.059	1.054-1.064	95.4	95.4	13C-PCB-123	7.37e+07	1.61	y	0.89	41:15	1.055	1.050-1.060	96.8	96.8	1.028	1.023-1.034	98.3	98.3
13C-PCB-123	7.37e+07	1.61	y	0.89	41:15	1.055	1.050-1.060	96.8	96.8	13C-PCB-126	9.05e+07	1.58	y	1.31	45:12	0.977	0.972-0.982	99.9	99.9	1.028	1.023-1.034	98.3	98.3
13C-PCB-126	9.05e+07	1.58	y	1.31	45:12	0.977	0.972-0.982	99.9	99.9	13C-PCB-127	1.00e+08	1.57	y	1.47	43:17	0.936	0.931-0.941	98.2	98.2	1.028	1.023-1.034	98.3	98.3
13C-PCB-127	1.00e+08	1.57	y	1.47	43:17	0.936	0.931-0.941	98.2	98.2	13C-PCB-138	7.71e+07	1.29	y	1.10	44:42	0.966	0.961-0.971	101	101	1.028	1.023-1.034	98.3	98.3
13C-PCB-138	7.71e+07	1.29	y	1.10	44:42	0.966	0.961-0.971	101	101	13C-PCB-141	7.45e+07	1.28	y	1.07	43:51	0.948	0.943-0.953	100.0	100.0	1.028	1.023-1.034	98.3	98.3
13C-PCB-141	7.45e+07	1.28	y	1.07	43:51	0.948	0.943-0.953	100.0	100.0	13C-PCB-153	7.92e+07	1.29	y	1.15	43:07	0.932	0.927-0.937	99.7	99.7	1.028	1.023-1.034	98.3	98.3
13C-PCB-153	7.92e+07	1.29	y	1.15	43:07	0.932	0.927-0.937	99.7	99.7	13C-PCB-155	7.08e+07	1.29	y	0.84	36:55	0.944	0.939-0.949	99.1	99.1	1.028	1.023-1.034	98.3	98.3
13C-PCB-155	7.08e+07	1.29	y	0.84	36:55	0.944	0.939-0.949	99.1	99.1	13C-PCB-156	8.85e+07	1.29	y	1.30	47:58	1.037	1.032-1.042	98.4	98.4	1.028	1.023-1.034	98.3	98.3
13C-PCB-156	8.85e+07	1.29	y	1.30	47:58	1.037	1.032-1.042	98.4	98.4	13C-PCB-157	9.20e+07	1.29	y	1.36	48:15	1.043	1.038-1.048	97.7	97.7	1.028	1.023-1.034	98.3	98.3
13C-PCB-157	9.20e+07	1.29	y	1.36	48:15	1.043	1.038-1.048	97.7	97.7	13C-PCB-159	8.48e+07	1.27	y	1.25	45:59	0.994	0.989-0.999	98.0	98.0	1.028	1.023-1.034	98.3	98.3
13C-PCB-159	8.48e+07	1.27	y	1.25	45:59	0.994	0.989-0.999	98.0	98.0	13C-PCB-167	9.22e+07	1.30	y	1.35	46:40	1.009	1.004-1.014	98.4	98.4	1.028	1.023-1.034	98.3	98.3
13C-PCB-167	9.22e+07	1.30	y	1.35	46:40	1.009	1.004-1.014	98.4	98.4	13C-PCB-169	8.62e+07	1.27	y	1.29	50:19	1.088	1.083-1.093	96.7	96.7	1.028	1.023-1.034	98.3	98.3
13C-PCB-169	8.62e+07	1.27	y	1.29	50:19	1.088	1.083-1.093	96.7	96.7	13C-PCB-170	3.66e+07	0.47	y	0.54	50:40	1.095	1.089-1.101	97.2	97.2	1.028	1.023-1.034	98.3	98.3
13C-PCB-170	3.66e+07	0.47	y	0.54	50:40	1.095	1.089-1.101	97.2	97.2	13C-PCB-180	4.63e+07	0.47	y	0.68	49:15	1.065	1.060-1.070	97.7	97.7	1.028	1.023-1.034	98.3	98.3
13C-PCB-180	4.63e+07	0.47	y	0.68	49:15	1.065	1.060-1.070	97.7	97.7	13C-PCB-188	6.40e+07	0.46	y	0.92	42:45	0.924	0.919-0.929	101	101	1.028	1.023-1.034	98.3	98.3
13C-PCB-188	6.40e+07	0.46	y	0.92	42:45	0.924	0.919-0.929	101	101	13C-PCB-189	4.78e+07	0.47	y	0.72	52:07	1.126	1.120-1.132	96.3	96.3	1.028	1.023-1.034	98.3	98.3
13C-PCB-189	4.78e+07	0.47	y	0.72	52:07	1.126	1.120-1.132	96.3	96.3	13C-PCB-194	5.16e+07	0.92	y	0.80	53:36	0.995	0.990-1.000	99.4	99.4	1.028	1.023-1.034	98.3	98.3
13C-PCB-194	5.16e+07	0.92	y	0.80	53:36	0.995	0.990-1.000	99.4	99.4	13C-PCB-202	5.65e+07	0.94	y	0.84	48:11	1.041	1.036-1.046	97.2	97.2	1.028	1.023-1.034	98.3	98.3
13C-PCB-202	5.65e+07	0.94	y	0.84	48:11	1.041	1.036-1.046	97.2	97.2	13C-PCB-206	4.23e+07	0.78	y	0.65	55:19	1.026	1.021-1.031	100.0	100.0	1.028	1.023-1.034	98.3	98.3
13C-PCB-206	4.23e+07	0.78	y	0.65	55:19	1.026	1.021-1.031	100.0	100.0	13C-PCB-208	7.00e+07	0.78	y	1.08	52:53	0.981	0.976-0.986	99.5	99.5	1.028	1.023-1.034	98.3	98.3

Vista Analytical Laboratory - Injection Log Run file: 140623E2 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
140623E2	1	ST140623E2-1	DMS	23-JUN-14	11:41:57	NA	NA
140623E2	2	ST140623E2-2	DMS	23-JUN-14	12:45:53	NA	NA
140623E2	3	ST140623E2-3	DMS	23-JUN-14	13:49:52	NA	NA
140623E2	4	ST140623E2-4	DMS	23-JUN-14	14:53:49	NA	NA
140623E2	5	ST140623E2-5	DMS	23-JUN-14	15:57:45	NA	NA
140623E2	6	ST140623E2-6	DMS	23-JUN-14	17:01:39	NA	NA
140623E2	7	SOLVENT BLANK	DMS	23-JUN-14	18:05:37	NA	NA
140623E2	8	ST140623E2-7	DMS	23-JUN-14	19:09:28	NA	NA
140623E2	9	B4F0051-BS1	DMS	23-JUN-14	20:13:23	ST140623E2-4	NA
140623E2	10	SOLVENT BLANK	DMS	23-JUN-14	21:17:15	NA	NA
140623E2	11	B4F0051-BLK1	DMS	23-JUN-14	22:21:11	ST140623E2-4	NA
140623E2	12	1400418-01 1:10	DMS	23-JUN-14	23:25:05	ST140623E2-4	NA
140623E2	13	1400418-02 1:10	DMS	24-JUN-14	00:29:00	ST140623E2-4	NA
140623E2	14	1400418-03 1:10	DMS	24-JUN-14	01:32:54	ST140623E2-4	NA
140623E2	15	SOLVENT BLANK	DMS	24-JUN-14	02:36:47	NA	NA