

Lower Duwamish Waterway

NPDES Inspection Sampling Support 2014/2015

Prepared for



Toxics Cleanup Program
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Appendix W

Waste Management 8th Avenue S

Limitation of Use: Leidos' project activities were restricted to collection and analysis of a limited number of environmental samples and visual observations obtained during the physical site visit, and from records made available by Ecology or third parties during the project. In preparing this report, Leidos has relied on verbal and written information provided by secondary sources and interviews, including information provided by the customer. Leidos has made no independent investigations concerning the accuracy or completeness of the information relied upon. Because the project activities consisted of collecting and evaluating a limited supply of information, Leidos may not have identified all potential items of concern and, therefore, Leidos warrants only that the project activities under this contract have been performed within the parameters and scope communicated by Ecology and reflected in the contract. Maps presented in this report were accurate based on the information available to Leidos at the time that the facility inspections were conducted.

This report is intended to be used in its entirety. Taking or using in any way excerpts from this report are not permitted and any party doing so does so at its own risk.

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W-1 Introduction and Background

Facility Name	Waste Management 8th Avenue S
Facility/Site ID	1940187
Address	7400 8 th Avenue South Seattle, WA 98104
NPDES Permit Type	Industrial Stormwater General Permit
NPDES Permit No.	WAR302034
Permit Monitoring Requirements	Turbidity, pH, total zinc, total copper, petroleum-oil, grease, PCBs
SIC Code	4953: Refuse Systems 4225: General Warehousing and Storage
Inspection Date	February 3, 2015
Grab Samples	1 water sample; 3 solids samples
Sample ID(s)	WM-CB-11-20150203-W WM-MH-61-20150203-S WM-CB-52-20150203-S WM-CB-21-20150203-S
Water Sample Analytes	Total metals, mercury, PCB congeners, dioxins/furans, SVOCs, alkalinity/carbonate/bicarbonate, anions, specific conductance, pH, TOC, DOC, TSS
Solids Sample Analytes	Total metals, mercury, PCB Aroclors, PCB congeners, dioxins/furans, SVOCs, VOCs (WM-CB-52 only), TPH-diesel/motor oil, TPH-gasoline (WM-CB-52 only), grain size, TOC
Split Samples with Facility	Yes

Waste Management 8th Avenue S is located on the north side of Slip 4 of the Lower Duwamish Waterway (LDW). The facility occupies an approximately 16-acre site that is currently being used as a transfer facility for sediment offloading in support of sediment cleanup in the LDW. The facility is also covered under a Construction Stormwater General Permit. Waste Management is responsible for the industrial activities at the site and DeNovo Seattle LLC (DeNovo) is responsible for construction activities. An overview of the facility is presented in Figure W-1.

The property is also undergoing an Interim Action cleanup under an Agreed Order with Ecology. Contamination at the site is a result of heavy industrial use since the 1920s and includes heavy metals and carcinogenic polycyclic aromatic hydrocarbons (cPAHs) in soil and groundwater, and polychlorinated biphenyls (PCBs) and cPAHs in sediments. Listed parties under the Agreed Order include Crowley Marine Services and DeNovo (who purchased the property in April 2014) (Ecology 2014a).

W-1.1 Stormwater Conveyance

Based on a drainage map provided by Waste Management, stormwater is collected in catch basins offset from the six drainage lines at the facility. Two of the drainage lines discharge to the LDW via Outfalls No. 1 and No. 2, and four drainage lines discharge to Slip 4 via Outfalls No. 3 through 6. Outfalls No. 1 through 5 receive stormwater from drainage lines that run from north to south. Outfall No. 6 receives stormwater from three branch lines that drain the northern portion of the facility (Anchor QEA 2013).

W-1.2 Recent Compliance History

Ecology conducted a stormwater compliance inspection at the 8th Avenue S facility on November 18, 2014. At the time of the inspection, the facility had exceeded total suspended solids (TSS) effluent limits during two different sampling events. The facility was storing sacks of contaminated soils with concentrations of metals, PCBs, and PAHs that may be a threat to water quality. Ecology observed sacks that were torn and appeared to spill onto the ground surrounding in the storage area. As a result of the inspection, Ecology identified the following corrective actions (Ecology 2014b):

- Update the Stormwater Pollution Prevention Plan and site map to accurately reflect any and all industrial activities at the facility.
- Prevent the spillage of contaminated soils onto the pavement or store within containment under cover.
- Prohibit discharge of wheel wash water to surface waters or storm drains.

Based on available discharge monitoring reports, the 8th Avenue S facility exceeded benchmarks for turbidity at Outfalls No. 1 and No. 2; copper, turbidity, and zinc at Outfall No. 3; and copper and turbidity at Outfall No. 4 during the 4th quarter of 2014. The facility violated effluent limits for TSS at Outfalls No. 3 and No. 4 during the 4th quarter of 2014. During the 1st quarter of 2014, the facility exceeded benchmarks for turbidity at Outfalls No. 3, No. 5, and No. 6 (Ecology 2015).

W-2 Inspection and Sampling

W-2.1 February 2015 Stormwater Compliance Inspection

On February 3, 2015, Ecology conducted a stormwater compliance inspection at Waste Management 8th Avenue S. 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 W-2 using geographic information system software. An inspection photographic log and field documentation are presented in Attachments W-1 and W-2, respectively.

The field team inspected the following stormwater conveyance structures at Waste Management 8th Avenue S, as shown on Figure W-2 (locations where samples were collected are shown in bold font):

- **Manhole 61 (WM-MH-61)**
- **Catch basin 52 (WM-CB-52)**
- Catch basin 53 (WM-CB-53)
- **Catch basin 21 (WM-CB-21)**
- **Catch basin 11 (WM-CB-11)**

Locations WM-MH-61, WM-CB-52, and WM-CB-21 contained sufficient sampleable material and were representative of storm drain solids at the facility. The location WM-MH-11 contained sufficient water to collect a water grab sample. Storm drain structure inspection locations are presented in Figure W-2.

W-2.2 Stormwater Conveyance System Sampling

Ecology collected one water sample and three solids samples from the stormwater conveyance system at Waste Management 8th Avenue S. Sample locations, analytes, and analytical methods are listed on Table W-1. Results for the water sample are presented in Tables W-2 through W-6. Results for solids samples are presented in Tables W-7 through W-9. Chain of custody forms and the laboratory reports are provided as Attachments W-3 and W-4, respectively.

W-2.2.1 Water Sample

Water sample WM-CB-11-20150203-W was collected from location WM-CB-11 (Figure W-2), located at the southwest corner of the property. The catch basin is offset from the drainage line that discharges to the LDW via Outfall No. 1. The sample was collected from above the catch basin filter sock and had high turbidity of 479 NTU.

W-2.2.2 Solids Samples

Solids sample WM-MH-61-20150203-S was collected from location WM-MH-61 (Figure W-2 and Attachment W-1), which is located at the northeastern portion of the facility. The manhole receives stormwater from drainage lines in the north central portion of the facility and discharges to Slip 4 via Outfall No. 6. The sample consisted of medium to fine-grained silty sand and contained debris and cobble. A slight petroleum odor was detected during sample collection.

Solids sample WM-CB-52-20150203-S was collected from a sediment sock located in catch basin CB-52 (Figure W-2 and Attachment W-1), which is located at the eastern portion of the facility. The catch basin is offset from the drainage line that discharges to Slip 4 via Outfall No. 5. The Waste Management representative indicated that the filter sock was left over from a previous site operator and was not installed by Waste Management. Following removal of the filter sock, sampleable solids were not detected in the catch basin.

Solids sample WM-CB-21-20150203-S was collected from catch basin CB-21 (Figure W-2), located at the southern area of the facility. The catch basin is offset from the drainage line that discharges to the LDW via Outfall No. 2.

W-3 Results

W-3.1 Chemical Analysis

Ecology collected one water sample and three solids samples during February 3, 2015 stormwater compliance inspection at Waste Management 8th Avenue S. Analytical methods, chemical results, and regulatory criteria are presented in Tables W-1 through W-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).

The water sample collected at this property contained metals (cadmium, copper, lead, nickel, zinc), total PCB congeners, and bis(2-ethylhexyl)phthalate at concentrations above one or more screening levels (Table W-4).

Concentrations of the following chemicals exceeded a screening level in one or more solids samples (Table W-8).

- Metals: zinc;
- PCBs: total PCB Aroclors, total PCB congeners;
- Dioxin/furan TEQ;
- PAHs: chrysene, fluoranthene, phenanthrene, pyrene;
- Phthalates: bis(2-ethylhexyl)phthalate, butylbenzylphthalate, dimethylphthalate;
- Other SVOCs: benzyl alcohol and n-nitrosodiphenylamine;
- TPH: gasoline-, diesel-, and motor oil-range hydrocarbons.

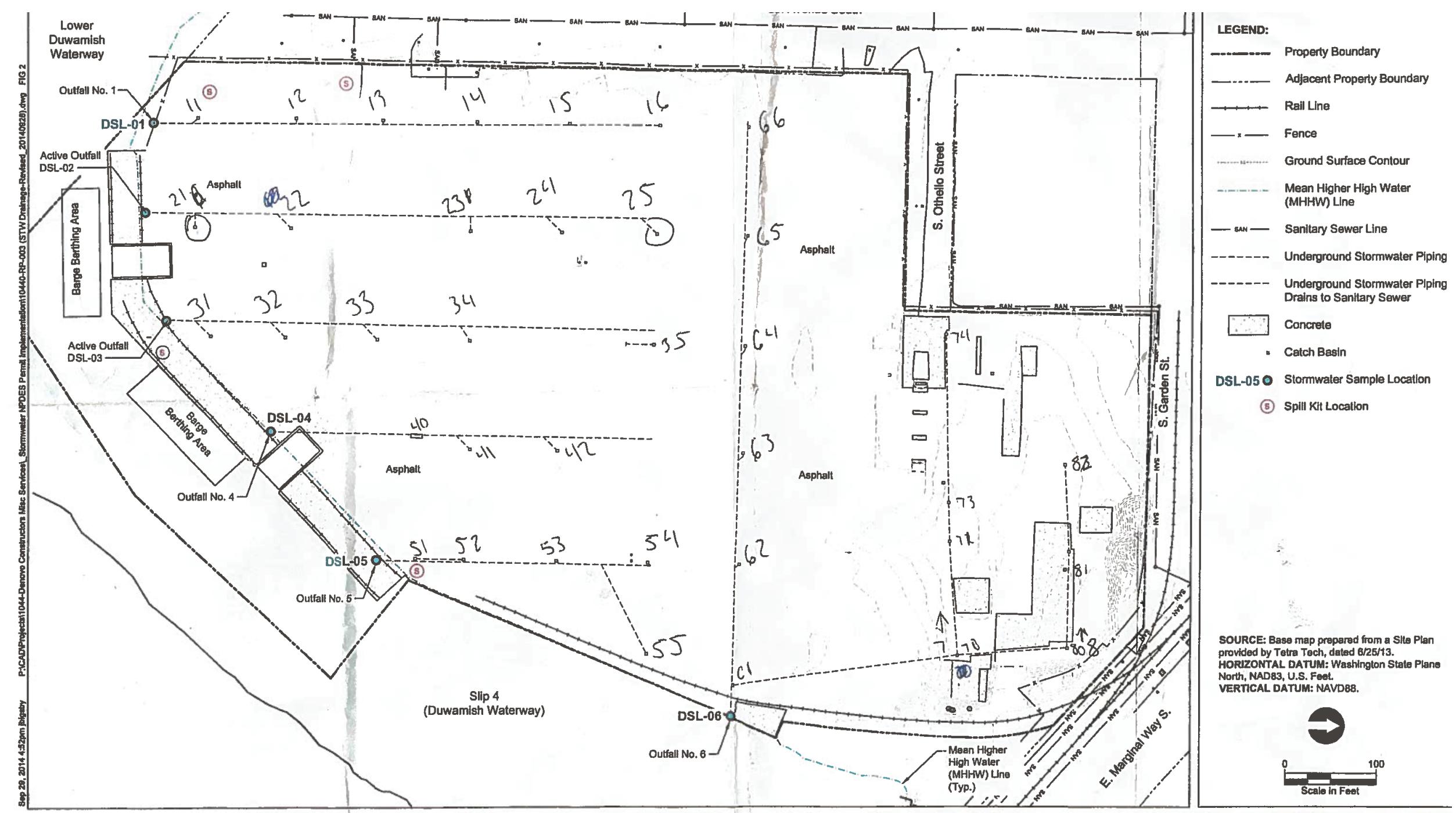
W-3.2 Inspection Results and Permit Compliance Requirements

The Ecology inspection report was not available for review.

W-4 References

- Anchor QEA. 2013. Draft Stormwater Drainage Map, Stormwater Pollution Prevention Plan, 7400 8th Avenue Facility. 2014.
- Ecology (Washington State Department of Ecology). 2014a. Crowley Marine Services 8th Ave. South Fact Sheet, Interim Action Work Plan and Amended Agreed Order Available for Public Comment. August 2014.
- Ecology. 2014b. Stormwater Compliance Inspection Report, Waste Management, 8th Avenue Transloading Facility, 7400 8th Avenue S, Seattle, WA 98108. December 19, 2014.
- Ecology. 2015. Water Quality Permitting and Reporting Information System, Summary Information, 8th Avenue General Storage. Online database, accessed May 9, 2015.
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- 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

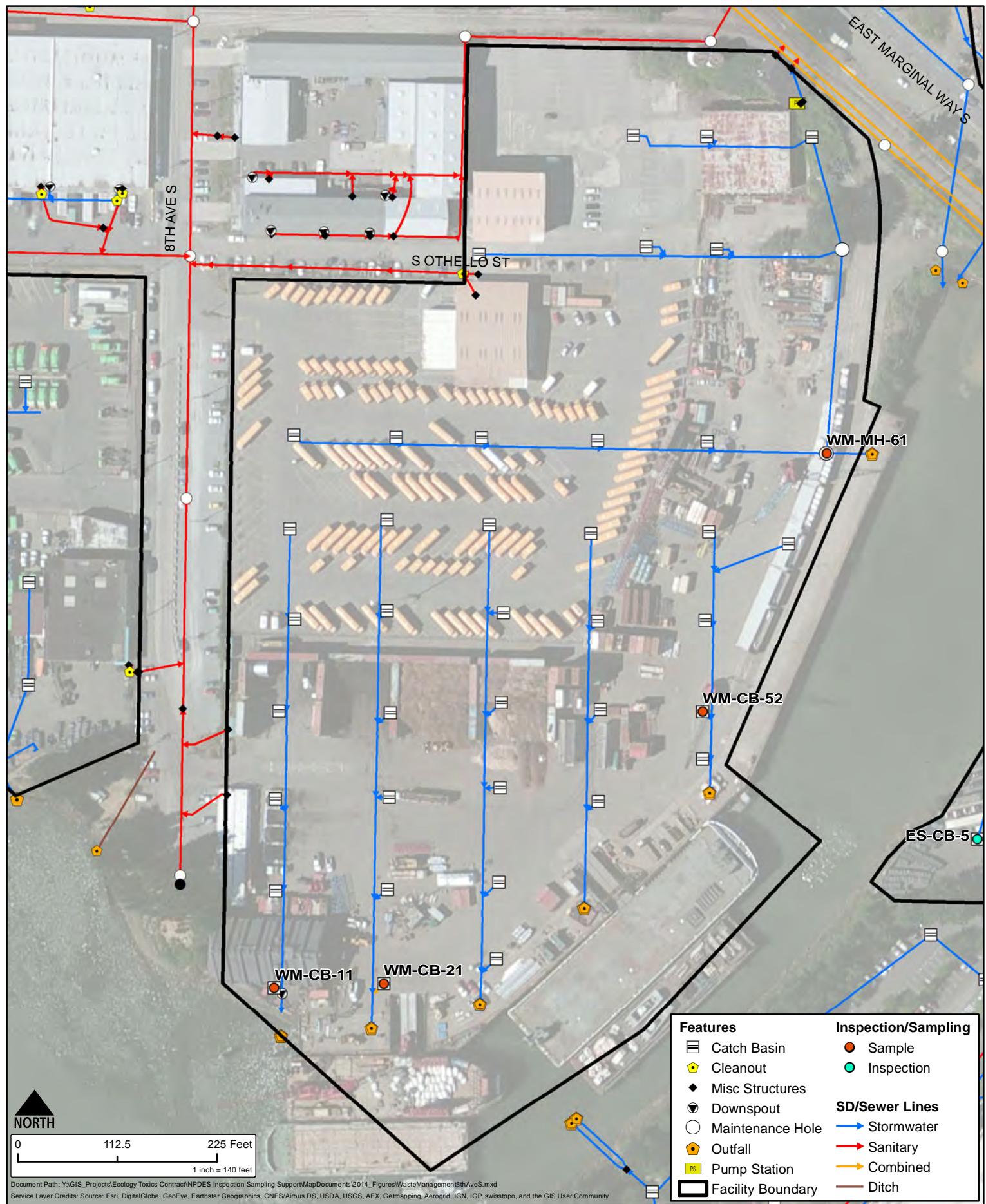


WM-MH-61-20150203-S
1030
WM-MH-52-20150203-S
CB
1200

WM-CB-21-20150203-S
1415
wm-CB-11-20150203-W
1430

Figure
Stormwater Drainage Ma
Stormwater Pollution Prevention Pla
7400 8th Avenue Facilit

Source: Anchor QEA 2013



**Figure W-2. Waste Management 8th Avenue S
Inspection and Sampling 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 W-1
Sampling Locations and Analytical Methods
Waste Management 8th Avenue S

Analyte	Method	Sample Location / Collection Date			
		WM-CB-11 2/3/2015	WM-CB-21 2/3/2015	WM-CB-52 2/3/2015	WM-MH-61 2/3/2015
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/Bicarbonate/Carbonate	SM2320B	●			
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 W-2. Water Quality Data - Field Measurements
Waste Management 8th Avenue S

Location ID		WM-CB-11	
Collection Date		2/3/2015	
Analyte	ISGP Benchmark	Units	Result
Field Parameters			
Flow	--	Yes/No	No
pH	5.0 to 9.0	std units	6.5
Conductivity	--	mS/cm	0.09
Temperature	--	degrees C	9.3
Total Dissolved Solids	--	mg/L	na
Turbidity	25	NTU	479
Oil & Grease	No visible sheen	Yes/No	No
Dissolved Oxygen	--	mg/L	11
ORP	--	mV	na

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

Table W-3. Water Sample Results
Waste Management 8th Avenue S

Analyte	ISGP Benchmark	Location ID				WM-CB-11	
		Collection Date				2/3/2015	
		WA WQC		NTR WQC	NR WQC	Result	
Analyte		Marine	HHO	Hho	Hho		
Chronic		Chronic	Acute				
Total Metals (µg/L)							
Antimony	--	--	--	--	--	2.5	
Arsenic	150	36	69	--	--	4.2	
Beryllium	--	--	--	--	--	0.15 J	
Cadmium	2.1	9.4	42	--	--	2.3	
Chromium	--	--	--	--	--	30	
Chromium, hexavalent	--	--	--	--	--	na	
Copper	14	3.7	5.8	--	--	140	
Lead	81.6	8.5	221	--	--	53	
Mercury	1.4	0.025	2.1	--	--	< 0.20 U	
Nickel	--	8.3	75	--	--	27	
Selenium	5	71	291	--	--	0.55 J	
Silver	3.8	--	2.2	--	--	0.15 J	
Thallium	--	--	--	--	--	< 1.0 U	
Zinc	117	86	95	--	--	640	
PCB Congeners (µg/L)^a							
Total PCB Congeners	--	0.03	10	1.70E-04	6.40E-05	0.034 J	
PCB TEQ, nd SDL*0	--	0.03	10	--	--	8.48E-08 J	
PCB TEQ, nd SDL*0.5	--	0.03	10	--	--	2.99E-06 J	
PCB TEQ, nd SDL*1	--	0.03	10	--	--	5.90E-06 J	
Dioxins and Furans (pg/L)^a							
2,3,7,8-TCDD	--	--	--	0.014	0.0051	< 1.40 U	
1,2,3,7,8-PeCDD	--	--	--	--	--	< 1.90 U	
1,2,3,4,7,8-HxCDD	--	--	--	--	--	< 2.90 U	
1,2,3,6,7,8-HxCDD	--	--	--	--	--	4.67 J	
1,2,3,7,8,9-HxCDD	--	--	--	--	--	3.22 J	
1,2,3,4,6,7,8-HpCDD	--	--	--	--	--	84.6	
OCDD	--	--	--	--	--	694	
2,3,7,8-TCDF	--	--	--	--	--	< 1.69 U	
1,2,3,7,8-PeCDF	--	--	--	--	--	< 1.53 U	
2,3,4,7,8-PeCDF	--	--	--	--	--	< 1.40 U	
1,2,3,4,7,8-HxCDF	--	--	--	--	--	1.55 J	
1,2,3,6,7,8-HxCDF	--	--	--	--	--	< 1.36 U*	
1,2,3,7,8,9-HxCDF	--	--	--	--	--	< 1.16 U	
2,3,4,6,7,8-HxCDF	--	--	--	--	--	1.87 J	
1,2,3,4,6,7,8-HpCDF	--	--	--	--	--	19.5 J	
1,2,3,4,7,8,9-HpCDF	--	--	--	--	--	< 1.88 U*	
OCDF	--	--	--	--	--	35.4 J	
Total TCDD	--	--	--	--	--	< 1.40 U	
Total PeCDD	--	--	--	--	--	1.73	
Total HxCDD	--	--	--	--	--	35.3 J	
Total HpCDD	--	--	--	--	--	199	
Total TCDF	--	--	--	--	--	< 1.69 U	
Total PeCDF	--	--	--	--	--	10.8 J	
Total HxCDF	--	--	--	--	--	27.6 J	
Total HpCDF	--	--	--	--	--	44.8 J	
Dioxin/Furan TEQ, nd SDL*0	--	--	--	--	--	2.39 J	
Dioxin/Furan TEQ, nd SDL*0.5	--	--	--	--	--	4.64 J	
Dioxin/Furan TEQ, nd SDL*1	--	--	--	--	--	6.89 J	

Table W-3. Water Sample Results
Waste Management 8th Avenue S

Analyte	ISGP Benchmark	Location ID				WM-CB-11		
		Collection Date				2/3/2015		
		WA WQC		NTR WQC	NR WQC	Result		
Analyte		Marine	Chronic	Acute	HHO			
PAHs ($\mu\text{g/L}$)								
1-Methylnaphthalene	--	--	--	--	--	< 0.057	U	
2-Chloronaphthalene	--	--	--	--	1,600	< 0.057	U	
2-Methylnaphthalene	--	--	--	--	--	< 0.19	U	
Acenaphthene	--	--	--	--	990	< 0.10	U	
Acenaphthylene	--	--	--	--	--	< 0.076	U	
Anthracene	--	--	--	110,000	40,000	< 0.038	U	
Benzo(a)anthracene	--	--	--	0.031	0.018	< 0.057	U	
Benzo(a)pyrene	--	--	--	0.031	0.018	< 0.038	U	
Benzo(b)fluoranthene	--	--	--	0.031	0.018	< 0.076	U	
Benzo(g,h,i)perylene	--	--	--	--	--	< 0.057	U	
Benzo(k)fluoranthene	--	--	--	0.031	0.018	< 0.057	U	
Chrysene	--	--	--	0.031	0.018	< 0.038	U	
Dibenz(a,h)anthracene	--	--	--	0.031	0.018	< 0.057	U	
Dibenzofuran	--	--	--	--	--	< 0.38	U	
Fluoranthene	--	--	--	370	140	0.14		
Fluorene	--	--	--	14,000	5,300	< 0.057	U	
Indeno(1,2,3-cd)pyrene	--	--	--	0.031	0.018	< 0.057	U	
Naphthalene	--	--	--	--	--	< 0.38	U	
Phenanthrene	--	--	--	--	--	< 0.076	U	
Pyrene	--	--	--	11,000	4,000	0.13		
Total Benzofluoranthenes	--	--	--	--	--	< 0.076	U	
Total HPAHs	--	--	--	--	--	0.27		
Total LPAHs	--	--	--	--	--	< 0.38	U	
Total PAHs	--	--	--	--	--	0.27		
cPAHs, nd RL*0	--	--	--	--	--	< 0	U	
cPAHs, nd RL*0.5	--	--	--	--	--	< 0.034	U	
cPAHs, nd RL*1	--	--	--	--	--	< 0.069	U	
Phthalates ($\mu\text{g/L}$)								
bis(2-Ethylhexyl)phthalate	--	--	--	5.9	2.2	6.3	J	
Butylbenzylphthalate	--	--	--	--	1,900	< 0.57	U	
Di-n-Butylphthalate	--	--	--	12,000	4,500	< 0.38	U	
Diethylphthalate	--	--	--	120,000	44,000	< 0.31	U	
Dimethylphthalate	--	--	--	2,900,000	1,100,000	< 0.38	U	
Di-n-Octyl phthalate	--	--	--	--	--	< 0.38	U	
Phenols ($\mu\text{g/L}$)								
2,3,4,6-Tetrachlorophenol	--	--	--	--	--	< 0.66	U	
2,4,5-Trichlorophenol	--	--	--	--	3,600	< 0.38	U	
2,4,6-Trichlorophenol	--	--	--	6.5	2.4	< 0.57	U	
2,4-Dichlorophenol	--	--	--	790	290	< 0.38	U	
2,4-Dimethylphenol	--	--	--	--	850	< 1.9	U	
2,4-Dinitrophenol	--	--	--	14,000	5,300	< 4.7	U	
2-Chlorophenol	--	--	--	--	150	< 0.38	U	
2-Methylphenol	--	--	--	--	--	< 0.38	U	
2-Nitrophenol	--	--	--	--	--	< 0.38	U	
4,6-Dinitro-2-Methylphenol	--	--	--	765	280	< 3.8	UJ	
4-Chloro-3-methylphenol	--	--	--	--	--	< 0.38	U	
4-Methylphenol	--	--	--	--	--	< 0.76	U	
4-Nitrophenol	--	--	--	--	--	< 2.8	U	

Table W-3. Water Sample Results
Waste Management 8th Avenue S

Analyte	ISGP Benchmark	Location ID				WM-CB-11	
		Collection Date				2/3/2015	
		WA WQC		NTR WQC	NR WQC	Result	
Chronic	Acute	HHO	HHO				
Pentachlorophenol	--	7.9	13	8.2	3.0	< 0.66	U
Phenol	--	--	--	4,600,000	860,000	0.15	J
Other SVOCs (µg/L)							
1,2,4-Trichlorobenzene	--	--	--	--	70	< 0.38	U
1,2-Dichlorobenzene	--	--	--	17,000	1,300	< 0.38	U
1,3-Dichlorobenzene	--	--	--	2,600	960	< 0.38	U
1,4-Dichlorobenzene	--	--	--	2,600	190	< 0.38	U
2,4-Dinitrotoluene	--	--	--	9.1	3.4	< 0.38	U
2,6-Dinitrotoluene	--	--	--	--	--	0.17	J
2-Nitroaniline	--	--	--	--	--	< 0.38	U
3,3'-Dichlorobenzidine	--	--	--	0.077	0.028	< 1.9	U
3-Nitroaniline	--	--	--	--	--	< 0.38	U
4-Bromophenyl-phenylether	--	--	--	--	--	< 0.38	U
4-Chloroaniline	--	--	--	--	--	0.38	R
4-Chlorophenyl-phenylether	--	--	--	--	--	< 0.38	U
4-Nitroaniline	--	--	--	--	--	< 0.57	U
Benzoic Acid	--	--	--	--	--	0.95	J
Benzyl Alcohol	--	--	--	--	--	0.17	J
2,2'-Oxybis(1-Chloropropane)	--	--	--	170,000	65,000	< 0.38	U
bis(2-Chloroethoxy) Methane	--	--	--	--	--	< 0.38	U
Bis-(2-Chloroethyl) Ether	--	--	--	1.4	0.53	< 0.38	U
Carbazole	--	--	--	--	--	< 0.38	U
Hexachlorobenzene	--	--	--	0.00077	0.00029	< 0.38	U
Hexachlorobutadiene	--	--	--	50	18	< 0.57	U
Hexachlorocyclopentadiene	--	--	--	17,000	1,100	< 1.9	U
Hexachloroethane	--	--	--	8.9	3.3	< 0.57	U
Isophorone	--	--	--	600	960	< 0.38	U
Nitrobenzene	--	--	--	1,900	690	< 0.38	U
N-Nitrosodimethylamine	--	--	--	8.1	3.0	< 1.9	U
N-Nitroso-Di-N-Propylamine	--	--	--	--	0.51	0.30	J
N-Nitrosodiphenylamine	--	--	--	16	6.0	< 0.38	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 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.

**Table W-4. Water Sample Results Compared to Criteria
Waste Management 8th Avenue S**

Location ID	WM-CB-11				
Collection Date	2/3/2015				
	Exceedance Factor				
Analyte	ISGP Benchmark	WA Marine Chronic	WA Marine Acute	NTR Human Health - Organisms	NR Human Health - Organisms
Total Metals					
Cadmium	1.1				
Copper	10	37	24		
Lead		6.2			
Nickel		3.3			
Zinc	5.5	7.5	6.7		
PCB Congeners					
Total PCB Congeners		1.2		202	538
Phthalates					
bis(2-Ethylhexyl)phthalate				1.1	2.9

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 W-5. Water Sample Results - PCB Congeners
Waste Management 8th Avenue S

Location ID	WM-CB-11
Collection Date	2/3/2015
Analyte	Result
Total PCB Congeners (µg/L)	0.0344 J
Total PCB Congeners (pg/L)	34,400 J
Total Mono-CB (pg/L)	82.9
PCB-1	< 27.6 U
PCB-2	82.9
PCB-3	< 23.9 U
Total Di-CB (pg/L)	1,330 J
PCB-4/10	< 92.4 U
PCB-5/8	90.5 J
PCB-6	< 75.4 U
PCB-7/9	< 74.5 U
PCB-11	1,110
PCB-12/13	< 72.6 U
PCB-14	< 62.5 U
PCB-15	130
Total Tri-CB (pg/L)	3,270 J
PCB-16/32	329
PCB-17	194
PCB-18	499
PCB-19	47.9 J
PCB-20/21/33	277
PCB-22	220
PCB-23	< 17.9 U
PCB-24/27	48.5 J
PCB-25	73.2
PCB-26	122
PCB-28	610
PCB-29	< 17.9 U
PCB-30	< 13.3 U
PCB-31	514
PCB-34	< 16.6 U
PCB-35	60.9
PCB-36	33.9 J
PCB-37	245
PCB-38	< 20.3 U
PCB-39	< 20.0 U
Total Tetra-CB (pg/L)	5,640 J
PCB-40	< 104 U*
PCB-41/64/71/72	541
PCB-42/59	201
PCB-43/49	500
PCB-44	747
PCB-45	75.1
PCB-46	41.7 J
PCB-47	150
PCB-48/75	115
PCB-50	< 22.8 U
PCB-51	21.5 J
PCB-52/69	820
PCB-53	94.5
PCB-54	< 17.4 U
PCB-55	17.5 J

Table W-5. Water Sample Results - PCB Congeners
Waste Management 8th Avenue S

Location ID	WM-CB-11
Collection Date	2/3/2015
Analyte	Result
PCB-56/60	410
PCB-57	< 16.4 U
PCB-58	< 16.1 U
PCB-61/70	909
PCB-62	< 16.5 U
PCB-63	< 32.8 U*
PCB-65	< 17.0 U
PCB-67	36.3 J
PCB-68	< 13.9 U
PCB-73	< 16.8 U
PCB-74	323
PCB-76/66	552
PCB-77	83.5
PCB-78	< 16.1 U
PCB-79	< 19.4 U*
PCB-80	< 13.9 U
PCB-81	< 14.7 U
Total Penta-CB (pg/L)	10,900 J
PCB-82	243
PCB-83	< 29.9 U
PCB-84/92	764
PCB-85/116	273
PCB-86	< 48.0 U
PCB-87/117/125	705
PCB-88/91	259
PCB-89	23.8 J
PCB-90/101	1,710
PCB-93	< 45.5 U
PCB-94	< 42.8 U
PCB-95/98/102	1,210
PCB-96	< 30.5 U
PCB-97	521
PCB-99	685
PCB-100	< 34.6 U
PCB-103	< 34.4 U
PCB-104	< 26.4 U
PCB-105	590
PCB-106/118	1,620
PCB-107/109	128
PCB-108/112	88.4 J
PCB-110	2,100
PCB-111/115	< 26.1 U*
PCB-113	< 31.4 U
PCB-114	< 27.1 U*
PCB-119	< 37.5 U*
PCB-120	< 25.0 U
PCB-121	< 27.4 U
PCB-122	< 15.1 U*
PCB-123	29.2 J
PCB-124	< 66.3 U*
PCB-126	< 47.8 U
PCB-127	< 44.4 U

Table W-5. Water Sample Results - PCB Congeners
Waste Management 8th Avenue S

Location ID	WM-CB-11
Collection Date	2/3/2015
Analyte	Result
Total Hexa-CB (pg/L)	7,560 J
PCB-128/162	340
PCB-129	< 98.2 U*
PCB-130	167
PCB-131	< 42.4 U
PCB-132/161	518
PCB-133/142	< 61.9 U*
PCB-134/143	< 95.6 U*
PCB-135	< 213 U*
PCB-136	220
PCB-137	92.2
PCB-138/163/164	1,820
PCB-139/149	1,330
PCB-140	28.7 J
PCB-141	351
PCB-144	102
PCB-145	< 30.9 U
PCB-146/165	275
PCB-147	58.0
PCB-148	< 41.3 U
PCB-150	< 30.0 U
PCB-151	345
PCB-152	< 28.9 U
PCB-153	1,530
PCB-154	38.9 J
PCB-155	< 28.2 U
PCB-156	220
PCB-157	< 46.5 U*
PCB-158/160	< 208 U*
PCB-159	36.1 J
PCB-166	< 31.2 U
PCB-167	89.4
PCB-168	< 26.4 U
PCB-169	< 34.3 U
Total Hepta-CB (pg/L)	4,020 J
PCB-170	464
PCB-171	146
PCB-172	105
PCB-173	< 31.2 U
PCB-174	558
PCB-175	24.3 J
PCB-176	55.4
PCB-177	304
PCB-178	< 89.9 U*
PCB-179	207
PCB-180	1,150
PCB-181	< 25.5 U
PCB-182/187	600
PCB-183	260
PCB-184	< 17.3 U
PCB-185	< 54.2 U*
PCB-186	< 15.9 U

Table W-5. Water Sample Results - PCB Congeners
Waste Management 8th Avenue S

Location ID	WM-CB-11
Collection Date	2/3/2015
Analyte	Result
PCB-188	< 15.2 U
PCB-189	< 17.5 U
PCB-190	101
PCB-191	< 18.5 U
PCB-192	< 19.8 U
PCB-193	48.9 J
Total Octa-CB (pg/L)	1,300 J
PCB-194	276
PCB-195	105
PCB-196/203	399
PCB-197	< 30.4 U
PCB-198	< 47.0 U
PCB-199	378
PCB-200	57.2
PCB-201	< 52.7 U*
PCB-202	84.1
PCB-204	< 33.0 U
PCB-205	< 21.6 U
Total Nona-CB (pg/L)	193
PCB-206	139
PCB-207	< 15.6 U
PCB-208	53.7
Deca-CB (pg/L)	< 37.3 U
PCB-209	< 37.3 U*
PCB TEQ, nd SDL*0	0.0848 J
PCB TEQ, nd SDL*0.5	2.99 J
PCB TEQ, nd SDL*1	5.90 J

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

**Table W-6. Water Sample Results - Conventional
Waste Management 8th Avenue S**

Location ID		WM-CB-11		
Collection		2/3/2015		
Analyte	ISGP Benchmark	Units	Result	
Conventional				
Alkalinity	--	mg/L	28	
Bicarbonate	--	mg/L CaCO ₃	28	
Carbonate	--	mg/L CaCO ₃	< 5	U
Chloride	--	mg/L	7.1	J
Specific Conductance	--	µmhos/cm	120,000	
Hydroxide	--	mg/L CaCO ₃	na	
Nitrate	--	mg/L	< 0.9	U
pH	5-9	std units	6.83	J
Salinity	--	mg/L	na	
Sulfate	--	mg/L	14	J
Dissolved Organic Carbon	--	mg/L	7.1	J
Total Organic Carbon	--	mg/L	9.4	
Total Suspended Solids ^a	30	mg/L	330	
Turbidity	25	NTU	na	
Oil & Grease	--	mg/L	na	
Oil & Grease - Polar	--	mg/L	na	
Oil & Grease - Silica Gel Treated	--	mg/L	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 W-7. Solids Sample Results
Waste Management 8th Avenue S

Location ID			WM-CB-21	WM-CB-52	WM-MH-61	
Collection Date			2/3/2015	2/3/2015	2/3/2015	
Analyte	SMS Criteria		Unit	Result	Result	Result
	SCO/ LAET ^a	CSL/ 2LAET				
Metals (Total) (mg/kg)						
Antimony	--	--	mg/kg	13	7.3	8.6
Arsenic	57	93	mg/kg	34	28	11
Beryllium	--	--	mg/kg	0.35 J	0.34 J	0.23 J
Cadmium	5.1	6.7	mg/kg	2.2	4.2	1.0
Chromium	260	270	mg/kg	180	160	51
Copper	390	390	mg/kg	320	290	97
Lead	450	530	mg/kg	160	200	170
Mercury	0.41	0.59	mg/kg	0.13	0.098	0.10
Nickel	--	--	mg/kg	110	99	31
Selenium	--	--	mg/kg	1.3 J	1.2 J	0.8 J
Silver	6.1	6.1	mg/kg	0.34 J	0.32 J	0.19 J
Thallium	--	--	mg/kg	< 1.0 U	< 0.71 U	< 0.6 U
Zinc	410	960	mg/kg	1,500	1,800	630
PCB Aroclors (µg/kg)						
Aroclor 1016	--	--	µg/kg	< 26 U	< 21 U	< 19 U
Aroclor 1221	--	--	µg/kg	< 28 U	< 23 U	< 21 U
Aroclor 1232	--	--	µg/kg	< 28 U	< 23 U	< 21 U
Aroclor 1242	--	--	µg/kg	< 26 U	< 21 U	< 19 U
Aroclor 1248	--	--	µg/kg	< 26 U	< 21 U	< 19 U
Aroclor 1254	--	--	µg/kg	150	17	360
Aroclor 1260	--	--	µg/kg	< 26 U	< 21 U	< 19 U
Total PCB Aroclors	130	1,000	µg/kg	150	170	360
PCB Congeners (µg/kg)^b						
Total PCB Congeners	130	1,000	µg/kg	292 J	320 J	2,430 J
PCB TEQ, nd SDL*0	--	--	µg/kg	0.015 J	0.018 J	0.075
PCB TEQ, nd SDL*0.5	--	--	µg/kg	0.015 J	0.020 J	0.075
PCB TEQ, nd SDL*1	--	--	µg/kg	0.016 J	0.022 J	0.076
Dioxins and Furans (ng/kg)						
2,3,7,8-TCDD	--	--	ng/kg	< 0.375 U*	< 1.06 U*	< 0.852 U*
1,2,3,7,8-PeCDD	--	--	ng/kg	2.78	7.87	5.05
1,2,3,4,7,8-HxCDD	--	--	ng/kg	7.45	10.2	9.96
1,2,3,6,7,8-HxCDD	--	--	ng/kg	21.5	99.3	31.6
1,2,3,7,8,9-HxCDD	--	--	ng/kg	9.71	41.6	16.7
1,2,3,4,6,7,8-HpCDD	--	--	ng/kg	861	895	900
OCDD	--	--	ng/kg	6,520 J	5,120	8,760 J
2,3,7,8-TCDF	--	--	ng/kg	1.42	3.97	6.63
1,2,3,7,8-PeCDF	--	--	ng/kg	1.5 J	3.78	4.66
2,3,4,7,8-PeCDF	--	--	ng/kg	2.16 J	4.53	8.22
1,2,3,4,7,8-HxCDF	--	--	ng/kg	4.35	8.43	14
1,2,3,6,7,8-HxCDF	--	--	ng/kg	4.12	8.77	9.29
1,2,3,7,8,9-HxCDF	--	--	ng/kg	0.745 J	0.872 J	0.577 J
2,3,4,6,7,8-HxCDF	--	--	ng/kg	6.07	12.5	12.3
1,2,3,4,6,7,8-HpCDF	--	--	ng/kg	68.3	110	189
1,2,3,4,7,8,9-HpCDF	--	--	ng/kg	4.55	7.65	11.7
OCDF	--	--	ng/kg	146	180	771
Dioxin/Furan TEQ, nd SDL*0	25	--	ng/kg	20.3 J	39.6 J	31.6 J
Dioxin/Furan TEQ, nd SDL*0.5	25	--	ng/kg	20.5 J	40.2 J	32.1 J
Dioxin/Furan TEQ, nd SDL*1	25	--	ng/kg	20.7 J	40.7 J	32.5 J

Table W-7. Solids Sample Results
Waste Management 8th Avenue S

Location ID			WM-CB-21	WM-CB-52	WM-MH-61	
Collection Date			2/3/2015	2/3/2015	2/3/2015	
Analyte	SMS Criteria		Unit	Result	Result	Result
	SCO/ LAET ^a	CSL/ 2LAET				
Total TCDD	--	--	ng/kg	8.3 J	33.3 J	19.1 J
Total TCDF	--	--	ng/kg	37.8 J	109 J	118 J
Total PeCDD	--	--	ng/kg	32	85.7	51.7
Total PeCDF	--	--	ng/kg	54.3 J	121	127
Total HxCDD	--	--	ng/kg	505	880	414
Total HxCDF	--	--	ng/kg	115	196	259
Total HpCDD	--	--	ng/kg	3,860	2,470	3,090
Total HpCDF	--	--	ng/kg	183	271	706
PAHs (µg/kg)						
1-Methylnaphthalene	--	--	µg/kg	49 J	150	190
2-Chloronaphthalene	--	--	µg/kg	< 53 UJ	< 43 UJ	< 38 UJ
2-Methylnaphthalene	670	1,400	µg/kg	60	220	280
Acenaphthene	500	730	µg/kg	100 J	76 J	260 J
Acenaphthylene	1,300	1,300	µg/kg	54 J	54 J	47 J
Anthracene	960	4,400	µg/kg	390	240	530
Benzo(a)anthracene	1,300	1,600	µg/kg	530	410	820
Benzo(a)pyrene	1,600	3,000	µg/kg	390	350	530
Benzo(g,h,i)perylene	670	720	µg/kg	190	170	210
Chrysene	1,400	2,800	µg/kg	1,600	1,400	1,300
Dibenz(a,h)anthracene	230	540	µg/kg	< 110 U	80 J	100
Dibenzofuran	540	700	µg/kg	140 J	100 J	220 J
Fluoranthene	1,700	2,500	µg/kg	3,900	2,100	3,100
Fluorene	540	1,000	µg/kg	250	270	400
Indeno(1,2,3-cd)pyrene	600	690	µg/kg	220	160	300
Naphthalene	2,100	2,400	µg/kg	62	110	210
Phenanthrene	1,500	5,400	µg/kg	2,400	1,400	2,700
Pyrene	2,600	3,300	µg/kg	2,900	2,300	2,400
Total Benzofluoranthenes	3,200	3,600	µg/kg	1,400	1,200	1,300
Total HPAHs	12,000	17,000	µg/kg	11,000	8,200 J	10,000
Total LPAHs	5,200	13,000	µg/kg	3,000 J	2,200 J	4,200 J
cPAHs, nd RL*0	1,000	--	µg/kg	620	550 J	800
cPAHs, nd RL*0.5	1,000	--	µg/kg	630	550 J	800
cPAHs, nd RL*1	1,000	--	µg/kg	630	550 J	800
Phthalates (µg/kg)						
bis(2-Ethylhexyl)phthalate	1,300	1,900	µg/kg	31,000	61,000	34,000
Butylbenzylphthalate	63	900	µg/kg	1,700	< 850 U	< 1000 U
Di-n-Butylphthalate	1,400	5,100	µg/kg	< 1,300 U	< 1,100 U	< 950 U
Diethylphthalate	200	1,200	µg/kg	1,700	1,400	< 390 U
Dimethylphthalate	71	160	µg/kg	130 J	91 J	45 J
Di-n-Octyl phthalate	6,200	--	µg/kg	1,900	1,900	1,700
Phenols (µg/kg)						
2,4,5-Trichlorophenol	--	--	µg/kg	< 260 U	< 210 U	< 190 U
2,4,6-Trichlorophenol	--	--	µg/kg	< 400 U	< 320 U	< 280 U
2,4-Dichlorophenol	--	--	µg/kg	< 260 U	< 210 U	< 190 U
2,4-Dimethylphenol	29	29	µg/kg	< 260 U	< 210 U	< 190 U
2,4-Dinitrophenol	--	--	µg/kg	< 2,600 U	< 2,100 U	< 1,900 U
2-Chlorophenol	--	--	µg/kg	< 260 UJ	< 210 UJ	< 190 UJ
2-Methylphenol	63	63	µg/kg	< 260 UJ	< 210 UJ	< 190 UJ
2-Nitrophenol	--	--	µg/kg	< 260 U	< 210 U	< 190 U

Table W-7. Solids Sample Results
Waste Management 8th Avenue S

Location ID			WM-CB-21	WM-CB-52	WM-MH-61	
Collection Date		2/3/2015	2/3/2015	2/3/2015		
Analyte	SMS Criteria		Unit	Result	Result	Result
	SCO/ LAET ^a	CSL/ 2LAET				
4,6-Dinitro-2-Methylphenol	--	--	µg/kg	< 2,600 U	< 2,100 U	< 1,900 U
4-Chloro-3-methylphenol	--	--	µg/kg	< 260 U	< 210 U	< 190 U
4-Methylphenol	670	670	µg/kg	500 J	320 J	640
4-Nitrophenol	--	--	µg/kg	< 2,600 U	< 2,100 U	< 1,900 U
Pentachlorophenol	360	690	µg/kg	< 530 U	< 430 U	180 J
Phenol	420	1,200	µg/kg	130 J	170 J	170 J
Other SVOCs (µg/kg)						
1,2,4-Trichlorobenzene	31	51	µg/kg	< 130 UJ	< 110 UJ	< 95 UJ
1,2-Dichlorobenzene	35	50	µg/kg	< 150 U	< 120 U	< 100 U
1,3-Dichlorobenzene	--	--	µg/kg	< 130 U	< 110 U	< 95 U
1,4-Dichlorobenzene	110	120	µg/kg	< 130 U	< 110 U	< 95 U
2,4-Dinitrotoluene	--	--	µg/kg	< 260 U	< 210 U	< 190 U
2,6-Dinitrotoluene	--	--	µg/kg	< 260 U	< 210 U	< 190 U
2-Nitroaniline	--	--	µg/kg	< 260 U	< 210 U	< 190 U
3,3'-Dichlorobenzidine	--	--	µg/kg	< 530 U	< 430 U	< 380 U
3-Nitroaniline	--	--	µg/kg	< 260 U	< 210 U	< 190 U
4-Bromophenyl-phenylether	--	--	µg/kg	< 260 U	< 210 U	< 190 U
4-Chloroaniline	--	--	µg/kg	< 260 U	< 210 U	< 190 U
4-Chlorophenyl-phenylether	--	--	µg/kg	< 260 UJ	< 210 UJ	< 190 UJ
4-Nitroaniline	--	--	µg/kg	< 260 U	< 210 U	< 190 U
Benzoic Acid	650	650	µg/kg	< 6,600 U	< 5,400 U	< 4,700 U
Benzyl Alcohol	57	73	µg/kg	150 J	< 210 U	450
2,2'-Oxybis(1-Chloropropane)	--	--	µg/kg	< 660 U	< 540 U	< 470 U
bis(2-Chloroethoxy) Methane	--	--	µg/kg	< 260 UJ	< 210 UJ	< 190 UJ
Bis-(2-Chloroethyl) Ether	--	--	µg/kg	< 260 UJ	< 210 UJ	< 190 UJ
Carbazole	--	--	µg/kg	260	180 J	330
Hexachlorobenzene	22	70	µg/kg	< 130 U	< 110 U	< 95 U
Hexachlorobutadiene	11	120	µg/kg	< 130 UJ	< 110 UJ	< 95 UJ
Hexachlorocyclopentadiene	--	--	µg/kg	< 260 U	< 210 U	< 190 U
Hexachloroethane	--	--	µg/kg	< 260 UJ	< 210 UJ	< 190 UJ
Isophorone	--	--	µg/kg	< 260 UJ	< 210 UJ	< 190 UJ
Nitrobenzene	--	--	µg/kg	< 260 UJ	< 210 UJ	< 190 UJ
N-Nitrosodimethylamine	--	--	µg/kg	< 2,600 U	< 2,100 U	< 1,900 U
N-Nitroso-Di-N-Propylamine	--	--	µg/kg	170 J	< 210 U	< 190 U
N-Nitrosodiphenylamine	28	40	µg/kg	110 J	< 110 U	< 95 U
VOCs (µg/kg)						
1,1,1,2-Tetrachloroethane	--	--	µg/kg	na	< 4.0 UJ	na
1,1,1-Trichloroethane	--	--	µg/kg	na	< 4.0 UJ	na
1,1,2,2-Tetrachloroethane	--	--	µg/kg	na	< 8.0 UJ	na
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	µg/kg	na	< 4.0 UJ	na
1,1,2-Trichloroethane	--	--	µg/kg	na	< 8.0 UJ	na
1,1-Dichloroethane	--	--	µg/kg	na	< 4.0 UJ	na
1,1-Dichloroethene	--	--	µg/kg	na	< 20 UJ	na
1,1-Dichloropropene	--	--	µg/kg	na	< 4.0 UJ	na
1,2,3-Trichlorobenzene	--	--	µg/kg	na	< 8.0 UJ	na
1,2,3-Trichloropropane	--	--	µg/kg	na	< 4.0 UJ	na
1,2,4-Trimethylbenzene	--	--	µg/kg	na	200 J	na
1,2-Dibromo-3-chloropropane	--	--	µg/kg	na	< 8.0 UJ	na
1,2-Dibromoethane	--	--	µg/kg	na	< 4.0 UJ	na

Table W-7. Solids Sample Results
Waste Management 8th Avenue S

Analyte	Location ID		WM-CB-21	WM-CB-52	WM-MH-61
	Collection Date		2/3/2015	2/3/2015	2/3/2015
	SMS Criteria	Unit	Result	Result	Result
SCO/ LAET ^a	CSL/ 2LAET				
1,2-Dichloroethane	--	µg/kg	na	< 4.0 UJ	na
1,2-Dichloropropane	--	µg/kg	na	< 4.0 UJ	na
1,3,5-Trimethylbenzene	--	µg/kg	na	120 J	na
1,3-Dichloropropane	--	µg/kg	na	< 8.0 UJ	na
2,2-Dichloropropane	--	µg/kg	na	< 20 UJ	na
2-Chloroethylvinylether	--	µg/kg	na	< 20 UJ	na
2-Chlorotoluene	--	µg/kg	na	< 8.0 UJ	na
2-Hexanone	--	µg/kg	na	< 20 UJ	na
4-Chlorotoluene	--	µg/kg	na	< 8.0 UJ	na
Acetone	--	µg/kg	na	650 J	na
Acrolein	--	µg/kg	na	< 120 UJ	na
Acrylonitrile	--	µg/kg	na	< 40 UJ	na
Benzene	--	µg/kg	na	2.1 J	na
Bromobenzene	--	µg/kg	na	< 8.0 UJ	na
Bromochloromethane	--	µg/kg	na	< 8.0 UJ	na
Bromoform	--	µg/kg	na	< 4.0 UJ	na
Bromomethane	--	µg/kg	na	< 4.0 UJ	na
Carbon Disulfide	--	µg/kg	na	15 J	na
Carbon Tetrachloride	--	µg/kg	na	< 4.0 UJ	na
Chlorobenzene	--	µg/kg	na	< 4.0 UJ	na
Dibromochloromethane	--	µg/kg	na	< 4.0 UJ	na
Chloroethane	--	µg/kg	na	< 4.0 UJ	na
Chloroform	--	µg/kg	na	< 4.0 UJ	na
Chloromethane	--	µg/kg	na	< 4.0 UJ	na
cis-1,2-Dichloroethene	--	µg/kg	na	< 4.0 UJ	na
cis-1,3-Dichloropropene	--	µg/kg	na	< 4.0 UJ	na
Dibromomethane	--	µg/kg	na	< 4.0 UJ	na
Bromodichloromethane	--	µg/kg	na	< 4.0 UJ	na
Dichlorodifluoromethane	--	µg/kg	na	< 4.0 UJ	na
Ethylbenzene	--	µg/kg	na	12 J	na
Isopropylbenzene	--	µg/kg	na	8.7 J	na
m,p-Xylene	--	µg/kg	na	43 J	na
2-Butanone	--	µg/kg	na	< 40 UJ	na
Iodomethane	--	µg/kg	na	< 60 UJ	na
4-Methyl-2-Pentanone (MIBK)	--	µg/kg	na	22 J	na
Methyl tert-Butyl Ether	--	µg/kg	na	< 4.0 UJ	na
Methylene Chloride	--	µg/kg	na	< 60 UJ	na
n-Butylbenzene	--	µg/kg	na	< 8.0 UJ	na
n-Propylbenzene	--	µg/kg	na	< 8.0 UJ	na
o-Xylene	--	µg/kg	na	50 J	na
4-Isopropyltoluene	--	µg/kg	na	130 J	na
sec-Butylbenzene	--	µg/kg	na	8 J	na
Styrene	--	µg/kg	na	< 8 UJ	na
tert-Butylbenzene	--	µg/kg	na	< 8 UJ	na
Tetrachloroethene	--	µg/kg	na	< 4 UJ	na
Toluene	--	µg/kg	na	19 J	na
Total Xylenes	--	µg/kg	na	93 J	na
trans-1,2-Dichloroethene	--	µg/kg	na	< 4.0 UJ	na
trans-1,3-Dichloropropene	--	µg/kg	na	< 4.0 UJ	na
trans-1,4-Dichloro-2-butene	--	µg/kg	na	< 20 UJ	na

Table W-7. Solids Sample Results
Waste Management 8th Avenue S

Location ID			WM-CB-21	WM-CB-52	WM-MH-61	
Collection Date			2/3/2015	2/3/2015	2/3/2015	
Analyte	SMS Criteria		Unit	Result	Result	Result
	SCO/ LAET ^a	CSL/ 2LAET				
Trichloroethene	--	--	µg/kg	na	< 4.0 UJ	na
Trichlorofluoromethane	--	--	µg/kg	na	< 4.0 UJ	na
Vinyl Acetate	--	--	µg/kg	na	< 20 UJ	na
Vinyl Chloride	--	--	µg/kg	na	< 4.0 UJ	na
TPH (mg/kg)						
Gasoline-Range Hydrocarbons	30/100	--	mg/kg	na	56	na
Diesel-Range Hydrocarbons	2,000	--	mg/kg	2,100 J	3,600 J	1,100 J
Motor Oil-Range Hydrocarbons	2,000	--	mg/kg	14,000 J	20,000 J	5,900 J
Grain size (%)						
Clay	--	--	%	3.0	3.5	1.7
Silt	--	--	%	43	60	33
Sand	--	--	%	50	35	61
Gravel	--	--	%	4.3	1.5	4.5
Cobbles	--	--	%	0.0	0.0	0.0
Conventionals (%)						
Total Organic Carbon	--	--	%	14	14	8.2
Total Solids	--	--	%	37.9	45.9	52.2

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 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.

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 W-8. Solids Sample Results Compared to Dry Weight Criteria
Waste Management 8th Avenue S**

Location ID	WM-CB-21		WM-CB-52		WM-MH-61	
Collection Date	2/3/2015		2/3/2015		2/3/2015	
Analyte	Exceedance Factor		Exceedance Factor		Exceedance Factor	
	SCO/ LAET	CSL/ 2LAET	SCO/ LAET	CSL/ 2LAET	SCO/ LAET	CSL/ 2LAET
Metals (Total)						
Zinc	3.7	1.6	4.4	1.9	1.5	
PCBs						
Total PCB Aroclors	1.2		1.3		2.8	
Total PCB Congeners	2.2		2.5		19	2.4
Dioxins and Furans						
Dioxin/Furan TEQ, nd SDL*0			1.6		1.3	
Dioxin/Furan TEQ, nd SDL*0.5			1.6		1.3	
Dioxin/Furan TEQ, nd SDL*1			1.6		1.3	
PAHs						
Chrysene	1.1					
Fluoranthene	2.3	1.6	1.2		1.8	1.2
Phenanthrene	1.6				1.8	
Pyrene	1.1					
Phthalates						
bis(2-Ethylhexyl)phthalate	24	16	47	32	26	18
Butylbenzylphthalate	27	1.9				
Diethylphthalate	8.5	1.4	7.0	1.2		
Dimethylphthalate	1.8		1.3			
Other SVOCs						
Benzyl Alcohol	2.6	2.1			7.9	6.2
N-Nitrosodiphenylamine	3.9	2.8				
TPH						
Gasoline-Range Hydrocarbons			1.9			
Diesel-Range Hydrocarbons	1.1		1.8			
Motor Oil-Range Hydrocarbons	7.0		10		3.0	

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 W-9. Solids Sample Results - PCB Congeners
Waste Management 8th Avenue S

Location ID	WM-CB-21	WM-CB-52	WM-MH-61
Collection Date	2/3/2015	2/3/2015	2/3/2015
Analyte	Result	Result	Result
Total PCB Congeners (ng/kg) ^a	292,000 J	320,000 J	2,430,000 J
Total Monochlorobiphenyl (ng/kg)^a	512 J	399 J	926
PCB-1	237	115 J	494
PCB-2	85.8 J	142	151
PCB-3	189	142	281
Total Dichlorobiphenyl (ng/kg)^a	10,500 J	6,860 J	14,400
PCB-4/10	582	389	2,060
PCB-5/8	1,960	1,440	5,670
PCB-6	552	296	942
PCB-7/9	190 J	< 130 U	339
PCB-11	5,720	3,230	1,630
PCB-12/13	254	232 J	307
PCB-14	< 140 U	< 153 U	< 148 U
PCB-15	1,210	1,270	3,470
Total Trichlorobiphenyl (ng/kg)^a	22,700	24,000 J	77,400 J
PCB-16/32	2,490	2,460	8,930
PCB-17	1,350	1,170	4,790
PCB-18	4,080	3,390	15,400
PCB-19	507	368	1,760
PCB-20/21/33	2,590	3,410	10,100
PCB-22	1,150	1,820	4,650
PCB-23	< 43.3 U	< 33.4 U	< 49.3 U
PCB-24/27	474	291	1,110
PCB-25	678	369	942
PCB-26	1,350	865	2,650
PCB-28	2,650	2,990	8,860
PCB-29	< 51.2 U	< 41.9 U*	113 J
PCB-30	< 35.9 U	< 23.0 U	< 30.3 U
PCB-31	3,660	4,080	13,100
PCB-34	< 48.7 U	< 37.6 U	< 55.5 U
PCB-35	245	229	325
PCB-36	< 58.2 U	66.4 J	< 47.3 U
PCB-37	1,470	2,520	4,710
PCB-38	< 55.4 U	< 41.6 U	< 45.1 U
PCB-39	< 59.6 U	< 44.7 U	< 48.5 U
Total Tetrachlorobiphenyl (ng/kg)^a	49,500 J	68,200 J	373,000 J
PCB-40	1,030	1,570	4,830
PCB-41/64/71/72	4,670	6,150	23,200
PCB-42/59	1,600	1,990	5,460
PCB-43/49	5,590	5,230	28,900
PCB-44	5,450	7,520	54,600
PCB-45	837	1,100	2,870
PCB-46	417	472	1,260
PCB-47	1,370	1,380	4,180
PCB-48/75	823	1,110	3,070
PCB-50	< 58.8 U	< 59.9 U	48.6 J
PCB-51	440	342	746
PCB-52/69	8,250	9,850	98,000
PCB-53	1,150	870	3,600
PCB-54	< 47.0 U	< 47.8 U	< 42.3 U*
PCB-55	167	229	879
PCB-56/60	2,630	5,800	14,900

Table W-9. Solids Sample Results - PCB Congeners
Waste Management 8th Avenue S

Location ID	WM-CB-21		WM-CB-52		WM-MH-61	
Collection Date	2/3/2015		2/3/2015		2/3/2015	
Analyte	Result		Result		Result	
PCB-57	47.3	J	<	60.4 U*	83.1	J
PCB-58	<	62.1 U	<	68.9 U	46.5	J
PCB-61/70	7,480		12,100		82,100	
PCB-62	<	62.7 U	<	56.2 U	<	94.7 U
PCB-63	209		273		1,030	
PCB-65	<	62.5 U	<	56.0 U	<	94.4 U
PCB-67	221		< 253 U*		501	
PCB-68	96.5	J	49.0	J	31.1	J
PCB-73	<	57.1 U	<	52.9 U	<	86.3 U
PCB-74	1,850		3,200		14,400	
PCB-76/66	4,290		7,370		24,200	
PCB-77	623		1,340		2,250	
PCB-78	<	56.3 U	<	62.5 U	<	79.2 U
PCB-79	242		193		1,320	
PCB-80	<	51.4 U	<	56.1 U	<	69.7 U
PCB-81	56.9	J	96.4	J	357	
Total Pentachlorobiphenyl (ng/kg)^a	92,800	J	106,000	J	1,130,000	J
PCB-82	1,950		2,440		21,200	
PCB-83	<	71.5 U	<	70.3 U	<	75.4 U
PCB-84/92	6,210		7,240		83,200	
PCB-85/116	2,010		2,630		24,300	
PCB-86	<	129 U	<	127 U	338	
PCB-87/117/125	5,500		6,420		70,600	
PCB-88/91	2,210		2,190		21,900	
PCB-89	89.4	J	< 126 U*		945	
PCB-90/101	15,300		17,500		197,000	
PCB-93	<	124 U	<	110 U	<	119 U
PCB-94	<	99.2 U	<	87.8 U	612	
PCB-95/98/102	10,800		12,300		147,000	
PCB-96	<	60.6 U*	<	107 U*	575	
PCB-97	4,440		5,070		53,800	
PCB-99	5,190		5,670		59,300	
PCB-100	<	85.5 U	<	58.9 U*	<	215 U*
PCB-103	148		92.7	J	719	
PCB-104	<	67.7 U	<	56.3 U	<	70.6 U
PCB-105	4,880		6,740		55,700	
PCB-106/118	13,900		16,400		155,000	
PCB-107/109	979		991		8,630	
PCB-108/112	649		772		8,000	
PCB-110	16,700		17,900		203,000	
PCB-111/115	215	J	< 248 U*		2,850	
PCB-113	<	67.0 U	<	68.6 U	<	77.7 U
PCB-114	265		324		3,080	
PCB-119	352		248		2,130	
PCB-120	<	64.8 U	<	37.4 U	287	
PCB-121	<	64.9 U	<	57.5 U	<	62.0 U
PCB-122	139		164		1,520	
PCB-123	203		< 90.8 U		1,950	
PCB-124	559		592		6,040	
PCB-126	137		174		668	
PCB-127	<	27.4 U	<	98.3 U	<	74.2 U

Table W-9. Solids Sample Results - PCB Congeners
Waste Management 8th Avenue S

Location ID	WM-CB-21	WM-CB-52	WM-MH-61
Collection Date	2/3/2015	2/3/2015	2/3/2015
Analyte	Result	Result	Result
Total Hexachlorobiphenyl (ng/kg)^a	71,700 J	74,400 J	673,000 J
PCB-128/162	2,830	3,440	31,800
PCB-129	1,070	1,190	11,900
PCB-130	1,170	1,130	10,500
PCB-131	< 42.1 U	< 195 U	< 63.3 U
PCB-132/161	5,190	5,630	53,000
PCB-133/142	684	615	6,050
PCB-134/143	1,110	1,130	11,100
PCB-135	1,950	1,710	17,600
PCB-136	1,690	1,500	17,000
PCB-137	1,020	1,350	11,800
PCB-138/163/164	15,800	18,400	154,000
PCB-139/149	12,500	10,600	111,000
PCB-140	< 92.2 U	< 85.8 U*	877
PCB-141	3,120	3,600	26,800
PCB-144	< 642 U*	481	6,170
PCB-145	< 55.4 U	< 85.5 U	73.2 J
PCB-146/165	2,090	2,110	16,800
PCB-147	384	< 165 U*	3,290
PCB-148	< 89.5 U	< 138 U	< 81.4 U
PCB-150	< 66.7 U	< 103 U	168
PCB-151	3,220	2,340	21,700
PCB-152	< 59.7 U	< 92.1 U	< 154 U*
PCB-153	12,800	13,400	110,000
PCB-154	< 250 U*	171	1,150
PCB-155	< 59.8 U	< 92.3 U	< 54.4 U
PCB-156	1,890	2,150	19,100
PCB-157	437	444	4,090
PCB-158/160	1,990	2,100	20,000
PCB-159	< 34.7 U	< 96.9 U	< 49.2 U
PCB-166	< 32.5 U	< 90.9 U	850
PCB-167	691	854	6,140
PCB-168	< 26.3 U	< 71.6 U	152
PCB-169	< 39.9 U	< 129 U	< 45.4 U
Total Heptachlorobiphenyl (ng/kg)^a	31,000 J	30,700	140,000 J
PCB-170	3,460	3,710	20,400
PCB-171	799	977	5,030
PCB-172	493	626	2,590
PCB-173	< 101 U	< 122 U	601
PCB-174	3,640	4,140	16,700
PCB-175	< 148 U*	170	726
PCB-176	433	387	2,080
PCB-177	2,070	2,480	10,600
PCB-178	810	679	2,850
PCB-179	1,870	1,330	6,420
PCB-180	9,310	9,240	39,300
PCB-181	< 81.1 U	< 98.3 U	293
PCB-182/187	4,700	3,570	14,800
PCB-183	2,180	1,720	9,340
PCB-184	< 48.8 U	< 46.3 U	< 30.6 U
PCB-185	< 328 U*	382	1,180
PCB-186	< 54.8 U	< 51.9 U	< 34.3 U

Table W-9. Solids Sample Results - PCB Congeners
Waste Management 8th Avenue S

Location ID	WM-CB-21		WM-CB-52		WM-MH-61	
Collection Date	2/3/2015		2/3/2015		2/3/2015	
Analyte	Result		Result		Result	
PCB-188	<	50.4 U	<	47.8 U	<	40.4 U*
PCB-189		198		147		980
PCB-190		605		562		3,500
PCB-191	<	140 U*		174		868
PCB-192	<	64.3 U	<	78.0 U	<	37.2 U
PCB-193		411		367		1,690
Total Octachlorobiphenyl (ng/kg)^a	9,940	J	6,760	J	19,900	J
PCB-194		2,120		1,770		5,010
PCB-195		710		689		2,050
PCB-196/203		3,000		1,970		5,830
PCB-197		133	<	99.9 U		210
PCB-198	<	156 U	<	113 U*		202
PCB-199		2,820		1,580		4,940
PCB-200		399	<	134 U*		635
PCB-201	<	377 U*		269	<	549 U*
PCB-202		759		480		837
PCB-204	<	103 U	<	94.4 U	<	60.4 U
PCB-205	<	96.5 U	<	131 U		202
Total Nonachlorobiphenyl (ng/kg)^a	2,080		1,960	J	3,330	
PCB-206		1,470		1,440		2,430
PCB-207		228	<	160 U*		230
PCB-208		382		519		672
Decachlorobiphenyl (ng/kg)	1,290		540		751	
PCB-209		1,290		540		751
PCB TEQ, nd SDL*0	14.5	J	18.4	J	74.5	
PCB TEQ, nd SDL*0.5	15.1	J	20.3	J	75.2	
PCB TEQ, nd SDL*1	15.7	J	22.2	J	75.9	

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 W-1

Inspection Photographic Log

Conveyance Structure Information	
Structure Identification Number: WM-MH-61	N◀ 
Structure Type: Manhole	
General Location: Southeast area of facility	
Characteristics: 10' to bottom of structure, 8' to depth of water, 3-4" solids	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Manhole Grate	
Volume Gauge: --	
Sample ID: WM-MH-61-20150203-S	
Drainage Information:	
MH-61 is located at the central east area of the Waste Management facility, just west of Slip 4 of the LDW. MH-61 receives stormwater from northern half of the property that drains a paved area. Stormwater is conveyed east and discharges to the LDW from outfall No. 6.	NR 

Conveyance Structure Information	
Structure Identification Number: WM-CB-52	N
Structure Type: Catch Basin	
General Location: South central area of facility	
Characteristics: Sediment Sock	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Catch Basin Drain Grate	
Volume Gauge: --	
Sample ID: WM-CB-52-20150203-S	
Drainage Information:	
Catch basin CB-52 is located at the south east area of the property just west of Slip 4. Active stockpile management occurred around the area of CB-52. The solids sample was collected from the filter sock located in CB-52; no sampleable solids were detected once the filter sock was removed.	N

Attachment W-2

Field Documentation

Location 7400 8th Avenue / First Student CW Date 2/3/15
Project / Client Ecology

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- 0640 C. Wilson stop for ice
- 0700 C. Wilson arrive at storage unit
- 0730 C. Nancarrow arr J. Green at storage unit
- 0830 Completed loading field vehicle and departed storage unit
- 0930 Arrive on site at 8th Avenue General Storage and meet M. Alvin and B. Wright at facility, First Student and Organic Fuel Processors no longer operating at facility Southern portion of facility used as operation for Slip 4 clean up.
- Property now owned by Danovo for remedial operations. B. Wright indicated Waste Management leases the property and is responsible for stormwater and construction permitting.
- Construction + Industrial Stormwater permit footprints overlap. Large Stockpiles of backfill stored onsite to bulkfill dredging being conducted in Slip 4.
- 0840 Meet w/ Nick from Envirocon Waste Management and discuss site activities, sampling operations

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Location 7400 8th Avenue

Date 2/3/15

Project / Client Ecology

0910 Facility operators monitor all 6 outfalls on a quarterly basis. Locations 80-82 on Anchor Qea facility map were filled in by Waste Management and are no longer operational. Area around drainage lines 7 and 8 are pervious surfaces. Majority of site is impervious.

0930 Depart office and drive to area of outfall 6

1000 Set up to sample at location

WM-MH-6 located at Southeast corner of the facility. Munkie receiver stormwater from drainage lines 8, 7, and 6 as observed on Anchor Qea map. Stormwater from location discharges to Slip 4 directly to the south.

1030 Collect solids sample WM-MH-61-20150203-S at this location. Collected split sample for Waste Management. Unable to collect VOCs due to consistency of solids.

Location 7400 8th Avenue Date 2/3/2015
Project / Client Ecology

1115 Inspected CB-57; Location contained filter sock and absorbent media. No sampleable solids in catch basin.

1130 Inspected CB-52; Location contained an old filter unit that Nick (WM) indicated was from prior to Waste Management + operators at facility. No sampleable solids were located in the catch basin. Sampleable solids were found in the sample sock and will be collected. Location ID WM-CB-52-20150203-S

1230 Finished collecting WM-CB-52-20150203-S C. Wilson offsite.

1315 Broke for lunch

1345 Set up on Catch basin 21.

1415 Collect solids sample WM-CB-21-20150203-S at this location. Collected split sample for WM. Unable to collect VOCs due to consistency of solids. UV/MA MDR to Catch basin 11 located partially beneath metal platforms. Collect water sample WM-MH-11-20150203-W at CB-11 above CB filter. Collected split

Sample for WM. Adequate volume for (2) complete sets of bottles.

Water Quality Parameters

TURBIDITY	479 NTU	Hach 2100Q
Temp	9.3°C	YSI multi-meter
DO %	93.2	
DO mg/L	10.54	
Dissolved	10.54	
C $\frac{as}{cm}$	86.9	
pH	6.57	
ORP mV	263.8	
ORP mV	76.8	

1630 Finished sampling and paperwork for CB-21 and YB-11. Dropped off samples and COCs with Nick Harbert of Waste Management.

1700 Left site for storage unit to drop off supplies.

1730 J. Green and C. Nancarrow leave storage locker after securing it.
J. Green en route to drop off samples at the office.

J. Green

2/3/15



Sediment Collection Form

Project: NPDES Sampling Support

Location ID: WM-MH-61

Facility Name:

Sample ID: WM-MH-61-20150203-5

Sampled By: Ja Ch

Date: 2/13/2014 Time: 10:30

Structure Type: Manhole	Dimensions: W 15' L 2'	Standing Water: <input checked="" type="checkbox"/> Y/N	Flow: <input checked="" type="checkbox"/> Y/N
Conveyance System Sketch			

Depth to Bottom: 10 ft	Depth to Water: 8 ft	Depth of Sediment: 3-4 in	Sampled <input checked="" type="checkbox"/> Y/N Discrete / Composite (circle one)
<u>Sediment type:</u> Cobble Gravel Sand C M F Silt/clay Organic matter Debris	<u>Sediment color:</u> Drab olive Brown Brown surface Gray Black Tan	<u>Sediment Odor:</u> None Slight Moderate Strong Overwhelming H ₂ S Petroleum	<u>Comments:</u> Slight sheen on water and sample Photo ID(s): GPS ID:

NOTES: Location receives SW from Southeast area of
the site and discharges south to Slip 4

Recorded By/Date: 2/13/15 Reviewed By/Date: _____
Version2 -030311 2/13/15



SURFACE WATER SAMPLING FORM

Client: Department of Ecology

Site: 7400 8th Ave

Job #: 309382

Sample Date: _____ / ____ /2014

Attachment W-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.

47345

Regulatory Program: DW NPDES RCRA Other

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.

Client Contact		Project Manager: Christine Nancarrow			Site Contact: Melissa Ivancevich		Date: 2.3.2015		COC No:									
Leidos 18912 N Creek Pkwy, Ste. 101 Bothell, WA 98011		Tel/Fax: 206.300.2144			Lab Contact: Kris Allen		Carrier: Courier		2 of 2 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 <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day							Lab Sampling:									
									Job / SDG No.:									
									Sample Specific Notes:									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PCB Aroclors (Method 8082)	SVOC (Method 8270D/8270D-SIM)	TPH-Diesel (NWTPH-Dx)	Metals (Method 6020/7471A)	Total Solids (Method SM2540B)	TPH-Gasoline (NWTPH-Gx)	VOCs (EPA 8260B)	TOC (Plumb1981/9060)	Particle Size (PSEP_Plumb1981)	
WM-MH-61-20150203-S		2.3.15	1030	C	Sed	✓ ✓ ✓ ✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	-2	
WM-CB-52-20150203-S		2.3.15	1200	C	Sed	✓ ✓ ✓ ✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	-3	
WM-CB-21-20150203-S		2.3.15	1415	C	Sed	✓ ✓ ✓ ✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	✓✓✓✓✓✓	-4	
Preservation Used: 1=Ice 2=HCl 3=H2SO4 4=HNO3 5=NaOH 6=Other MeOH										6								
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 checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months								
Special Instructions/QC Requirements & Comments:																		
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: 242391			Cooler Temp. (°C): Obs'd: _____			Corr'd: _____			Therm ID No.: _____							
Relinquished by: <i>Samalyn Aggeli</i>		Company: Leidos			Date/Time: 2/4/15 1200		Received by: <i>Z. J. O.</i>			Company: TA SEA		Date/Time: 2/4/15 1216						
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

Laboratory Project ID: 1500147
Storage ID: WR-2

Storage Secured Yes No
Temp 0.5 °C

Project I.D.: NPDES Sampling Support P.O.# N/A Sampler: C.WILSON
(Name)

TAT: (Check One):

Standard: 21 Days

Rush (surcharge may apply):

14 days 7 days Specify: _____

Invoice to: Name C.NANCARROW Company LEIDAS Address 18912 N Creek Pkwy Ste101 City Bothell State WA Zip 98011 Ph# 425.318.2101 Fax# 425.485.5366

Relinquished by: (Signature and Printed Name) Jamelyn Teynei Jamelyn Agyei Date: 2/4/15 Time: 1230 Received by: (Signature and Printed Name) Bethin Benedict B.Benedict Date: 2/5/15 Time: 0844

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

ATTN: Sample Receiving

Method of Shipment:
Fed Ex

Tracking No.: _____

Add Analysis(es) Requested

Container(s)

Quantity

Type

Matrix

EPA1613

EPA8290

EPA8280

EPA1668

EPA1614

CARB429

2378-TCDD

PCDD/PCDF

2378-TCDD/TCDF

PCDD/PCDF

2378-TCDD/PCDF

PCDD/PCDF

2378-TCDD/TCDF

PCDD/PCDF

TOTALS

COPLANAR PCB's

209 CONGENERS

PFDE

PAH

WHO-29

Sample ID	Date	Time	Location/Sample Description
WM-CB-11-20150203-W	2.3.15	1430	CB-11
WM-MH-61-20150203-S		1030	MH-61
WM-CB-52-20150203-S		1200	CB-52
WM-CB-21-20150203-S		1415	CB-21

Special Instructions/Comments: Refer to contract agreement for confirmation of all analysis.
Please contact Pm before disposal of any samples.

Container Types: A = 1 Liter Amber, G = Glass Jar
P = PUF, T = MM5 Train, O = Other _____

*Bottle Preservative Type: T = Thiosulfate,
O = Other _____

SEND
DOCUMENTATION
AND RESULTS TO:

Name: CHRISTINE NANCARROW
Company: LEIDAS
Address: 18912 N Creek Pkwy Ste101
City: Bothell State: WA Zip: 98011
Phone: 206.300.2144 Fax: 425.485.5366
Email: NANCARROW.C@leidas.com
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 _____

Attachment W-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: 580-47345-1

Client Project/Site: NPDES INSPECTION SAMPLING

For:

Leidos, Inc.

18912 North Creek Parkway, Suite 101

Bothell, Washington 98011

Attn: Christine Nancarrow

Kristine D. Allen

Authorized for release by:

3/4/2015 5:42:39 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 INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Job ID: 580-47345-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative 580-47345-1

Comments

No additional comments.

Receipt

The samples were received on 2/4/2015 12:16 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6° C.

GC/MS VOA

Method(s) NWTPH-Gx: The method blank for batch 181900 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.

Method(s) 8260B: Internal standard and Surrogate responses were outside of acceptance limits for the following sample(s): WM-CB-52-20150203-S (580-47345-3). The sample(s) shows evidence of matrix interference. Sample was analyzed in AB 182013 with same results, only this batch has been reported.

Method(s) 8260B: The laboratory control sample (LCS) for batch 182043 recovered outside control limits for the following analytes: 1,2,3-Trichloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for batch 182043 recovered outside control limits for the following analytes: 1,2,3-Trichloropropane, 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

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) 8270C, 8270D: The method blank for batch 182087 contained Diethyl phthalate 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 warranted.

Method(s) 8270D: The following analytes recovered outside control limits for the LCS and/or LCSD associated with batch 182087: 3,3'-Dichlorobenzidine (low in LCS), 4,6-Dinitro-2-methylphenol (low in LCS and LCSD), 4-Chloroaniline (low in LCS and LCSD), and Bis(2-ethylhexyl)phthalate (high in LCS and LCSD). These random marginal exceedances do not indicate a systematic control problem. The method and lab SOP allow four marginal exceedances when a full list spike is evaluated. Qualified results have been reported.

Method(s) 8270D: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 182087 recovered outside control limits for 3,3'-Dichlorobenzidine, Hexachlorocyclopentadiene, Hexachlorobutadiene, 4,6-Dinitro-2-methylphenol, 3-Nitroaniline, Bis(2-ethylhexyl)phthalate, and 4-Chloroaniline. The LCS and LCSD had passing recovery criteria within allowed marginal exceedances.

Method(s) 8270C, 8270D: The continuing calibration verification (CCV) associated with batch 182345 recovered above the upper control limit for 2,4-Dichlorophenol and Diethylphthalate. The samples associated with this CCV were below the reporting limit (RL) for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCVIS 580-182345/3), (LCS 580-182087/2-A), (LCSD 580-182087/3-A), (MB 580-182087/1-A), WM-CB-11-20150203-W (580-47345-1).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 182345 recovered outside acceptance criteria, low relative response factor (RRF), for 2,4-Dimethylphenol, Bis(2-chloroethoxy)methane, Isophorone, Nitrobenzene and N-Nitrosodi-n-propylamine. These targets have been identified as poor performers for the 8270D method on this instrument based on historical RRF values in CCVs and calibration standards. However, these targets have passing CCV results and otherwise perform predictably. A reporting limit (RL) standard was analyzed and the target analytes were detected, proving instrument sensitivity. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 182732 failed RF criteria, for

Case Narrative

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Job ID: 580-47345-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

4-Chloro-3-methylphenol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Isophorone, Nitrobenzene, and N-nitrosodi-n-propylamine. A reporting limit (RL) standard was analyzed, and the target analyte was detected.

Method(s) 8270D: The method blank for batch 182776 contained Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate and Diethyl phthalate 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.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 182776 recovered above the upper control limit for 2, 4-Dinitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (580-47345-3 MS), (580-47345-3 MSD), (CCVIS 580-182776/3), WM-CB-21-20150203-S (580-47345-4), WM-CB-52-20150203-S (580-47345-3), WM-MH-61-20150203-S (580-47345-2).

Method(s) 8270D: Multiple analyte(s) recovered outside control limits for the LCS/LCSD associated with prep batch 182433. 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 qualified and reported. Affected samples: (580-47345-3 MS), (580-47345-3 MSD), (LCS 580-182433/2-A), (LCSD 580-182433/3-A), WM-CB-21-20150203-S (580-47345-4), WM-CB-52-20150203-S (580-47345-3), WM-MH-61-20150203-S (580-47345-2)

Method(s) 8270D: The continuing calibration verification (CCV) associated with analytical batch 183363 recovered above the upper control limit for 4-Chloroaniline. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. Affected samples: (580-47345-4 MS), (580-47345-4 MSD), (CCVIS 580-183363/3), (LCS 580-183304/2-A), (LCSD 580-183304/3-A), (MB 580-183304/1-A), WM-CB-21-20150203-S (580-47345-4), WM-CB-52-20150203-S (580-47345-3), WM-MH-61-20150203-S (580-47345-2)

Method(s) 8270D: The continuing calibration verification (CCV) associated with analytical batch 183363 failed RF criteria for Nitrobenzene, Isophorone, 4-Chloro-3-methylphenol, N-Nitrosodi-n-propylamine and Bis(2-chloroethoxy)methane. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analytes, the data have been reported.

Method(s) 8270D: The method blank for prep batch 183304 contained Diethyl phthalate 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.

Method(s) 8270D: Phenanthrene recovered outside control limits for the LCS associated with prep batch 183304. In addition, the LCSD exceeded the control limits for Benzoic acid and Chrysene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

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

HPLC/IC

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

GC Semi VOA

Method(s) NWTPH-Dx: In analysis batch 182253, for the following sample(s) from preparation batch 182210: The following sample(s) 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: WM-CB-21-20150203-S (580-47345-4), WM-CB-52-20150203-S (580-47345-3), WM-MH-61-20150203-S (580-47345-2).

Method(s) NWTPH-Dx: In analysis batch 182253, for the following sample(s) from preparation batch 182210: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method(s) 8082: The following sample(s) required a copper clean-up to reduce matrix interferences caused by sulfur: (580-47345-2 MS), (580-47345-2 MSD), (LCS 580-181962/4-A), (LCSD 580-181962/5-A), (MB 580-181962/1-A), WM-CB-21-20150203-S (580-47345-4), WM-CB-52-20150203-S (580-47345-3), WM-MH-61-20150203-S (580-47345-2). Lot# H25604.

Case Narrative

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Job ID: 580-47345-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

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

Metals

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

General Chemistry

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

Geotechnical

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

Definitions/Glossary

Client: Leidos, Inc.
Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
*	LCS or LCSD exceeds the control limits
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
H	Sample was prepped or analyzed beyond the specified holding time
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

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
Y	The chromatographic response resembles a typical fuel pattern.
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

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.
F1	MS and/or MSD Recovery exceeds the 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.

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)
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

TestAmerica Seattle

Definitions/Glossary

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Glossary (Continued)

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

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-CB-11-20150203-W

Lab Sample ID: 580-47345-1

Matrix: Water

Date Collected: 02/03/15 14:30

Date Received: 02/04/15 12:16

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
1,2-Dichlorobenzene	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
1,3-Dichlorobenzene	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
1,4-Dichlorobenzene	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
1-Methylnaphthalene	ND		0.057	0.028	ug/L		02/09/15 14:34	02/12/15 19:33	1
2,2'-oxybis[1-chloropropane]	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
2,4,5-Trichlorophenol	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
2,4,6-Trichlorophenol	ND		0.57	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
2,4-Dichlorophenol	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
2,4-Dimethylphenol	ND *		1.9	0.28	ug/L		02/09/15 14:34	02/12/15 19:33	1
2,4-Dinitrophenol	ND		4.7	0.95	ug/L		02/09/15 14:34	02/12/15 19:33	1
2,4-Dinitrotoluene	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
2,6-Dinitrotoluene	0.17 J		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
2-Chloronaphthalene	ND		0.057	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
2-Chlorophenol	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
2-Methylphenol	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
2-Nitroaniline	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
2-Nitrophenol	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
3 & 4 Methylphenol	ND		0.76	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
3,3'-Dichlorobenzidine	ND *		1.9	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
3-Nitroaniline	ND *		0.38	0.11	ug/L		02/09/15 14:34	02/12/15 19:33	1
4,6-Dinitro-2-methylphenol	ND *		3.8	0.95	ug/L		02/09/15 14:34	02/12/15 19:33	1
4-Bromophenyl phenyl ether	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
4-Chloro-3-methylphenol	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
4-Chloroaniline	ND *		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
4-Chlorophenyl phenyl ether	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
4-Nitroaniline	ND		0.57	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
4-Nitrophenol	ND		2.8	0.95	ug/L		02/09/15 14:34	02/12/15 19:33	1
Acenaphthene	ND		0.095	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
Acenaphthylene	ND		0.076	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
Anthracene	ND		0.038	0.0095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Benzo[a]anthracene	ND		0.057	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
Benzo[a]pyrene	ND		0.038	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
Benzo[b]fluoranthene	ND		0.076	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
Benzo[g,h,i]perylene	ND		0.057	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
Benzo[k]fluoranthene	ND		0.057	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
Benzoic acid	0.95 J		2.8	0.57	ug/L		02/09/15 14:34	02/12/15 19:33	1
Benzyl alcohol	0.17 J		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Bis(2-chloroethoxy)methane	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Bis(2-chloroethyl)ether	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Bis(2-ethylhexyl) phthalate	6.3 *		2.8	1.1	ug/L		02/09/15 14:34	02/12/15 19:33	1
Butyl benzyl phthalate	ND		0.57	0.19	ug/L		02/09/15 14:34	02/12/15 19:33	1
Carbazole	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Chrysene	ND		0.038	0.012	ug/L		02/09/15 14:34	02/12/15 19:33	1
Dibenz(a,h)anthracene	ND		0.057	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
Dibenzofuran	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Diethyl phthalate	0.31 J B		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Dimethyl phthalate	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-CB-11-20150203-W

Lab Sample ID: 580-47345-1

Date Collected: 02/03/15 14:30

Matrix: Water

Date Received: 02/04/15 12:16

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		0.38	0.12	ug/L		02/09/15 14:34	02/12/15 19:33	1
Di-n-octyl phthalate	ND		0.38	0.17	ug/L		02/09/15 14:34	02/12/15 19:33	1
Fluoranthene	0.14		0.047	0.012	ug/L		02/09/15 14:34	02/12/15 19:33	1
Fluorene	ND		0.057	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
Hexachlorobenzene	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Hexachlorobutadiene	ND *		0.57	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Hexachlorocyclopentadiene	ND *		1.9	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Hexachloroethane	ND		0.57	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Indeno[1,2,3-cd]pyrene	ND		0.057	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
Isophorone	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Naphthalene	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Nitrobenzene	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
N-Nitrosodimethylamine	ND		1.9	0.19	ug/L		02/09/15 14:34	02/12/15 19:33	1
N-Nitrosodi-n-propylamine	0.30 J		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
N-Nitrosodiphenylamine	ND		0.38	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Pentachlorophenol	ND		0.66	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Phenanthrene	ND		0.076	0.019	ug/L		02/09/15 14:34	02/12/15 19:33	1
Phenol	0.15 J		0.57	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Pyrene	0.13		0.057	0.012	ug/L		02/09/15 14:34	02/12/15 19:33	1
2,3,4,6-Tetrachlorophenol	ND		0.66	0.095	ug/L		02/09/15 14:34	02/12/15 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	92		44 - 125				02/09/15 14:34	02/12/15 19:33	1
2-Fluorobiphenyl	78		50 - 120				02/09/15 14:34	02/12/15 19:33	1
2-Fluorophenol	84		30 - 134				02/09/15 14:34	02/12/15 19:33	1
Nitrobenzene-d5	82		59 - 120				02/09/15 14:34	02/12/15 19:33	1
Phenol-d5	91		52 - 120				02/09/15 14:34	02/12/15 19:33	1
Terphenyl-d14	88		64 - 150				02/09/15 14:34	02/12/15 19:33	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.1		1.0	0.70	mg/L			02/28/15 12:13	1
Sulfate	14		1.0	0.60	mg/L			02/28/15 12:13	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0042		0.0010	0.00027	mg/L		02/17/15 10:45	02/18/15 15:22	1
Antimony	0.0035		0.00040	0.000080	mg/L		02/17/15 10:45	02/18/15 15:22	1
Beryllium	0.00015 J		0.00040	0.00010	mg/L		02/17/15 10:45	02/18/15 15:22	1
Cadmium	0.0023		0.00040	0.000028	mg/L		02/17/15 10:45	02/18/15 15:22	1
Chromium	0.030		0.00040	0.00014	mg/L		02/17/15 10:45	02/18/15 15:22	1
Copper	0.14		0.0020	0.00060	mg/L		02/17/15 10:45	02/18/15 15:22	1
Lead	0.053		0.00040	0.000034	mg/L		02/17/15 10:45	02/18/15 15:22	1
Nickel	0.027		0.0030	0.00040	mg/L		02/17/15 10:45	02/18/15 15:22	1
Selenium	0.00055 J		0.0010	0.00030	mg/L		02/17/15 10:45	02/18/15 15:22	1
Silver	0.00015 J		0.00040	0.000030	mg/L		02/17/15 10:45	02/18/15 15:22	1
Thallium	ND		0.0010	0.00014	mg/L		02/17/15 10:45	02/18/15 15:22	1
Zinc	0.64		0.0070	0.0019	mg/L		02/17/15 10:45	02/18/15 15:22	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-CB-11-20150203-W

Lab Sample ID: 580-47345-1

Matrix: Water

Date Collected: 02/03/15 14:30

Date Received: 02/04/15 12:16

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000041	mg/L		02/09/15 14:55	02/10/15 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	120000		10	10	umhos/cm		02/09/15 14:04		1
Nitrate as N	ND		0.90	0.20	mg/L		02/05/15 09:58		1
Alkalinity	28		5.0	5.0	mg/L		02/13/15 12:30		1
Bicarbonate Alkalinity as CaCO ₃	28		5.0	5.0	mg/L		02/13/15 12:30		1
Carbonate Alkalinity as CaCO ₃	ND		5.0	5.0	mg/L		02/13/15 12:30		1
Total Suspended Solids	330		33	33	mg/L		02/05/15 09:13		1
pH	6.83 HF		0.0100	0.0100	SU		02/04/15 17:52		1
Total Organic Carbon	9.4		1.0	0.33	mg/L		02/05/15 12:10		1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	8.4		1.0	0.33	mg/L		02/05/15 12:10		1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-MH-61-20150203-S

Lab Sample ID: 580-47345-2

Date Collected: 02/03/15 10:30

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 52.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	*	95	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
1,2-Dichlorobenzene	ND	*	100	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
1,3-Dichlorobenzene	ND	*	95	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
1,4-Dichlorobenzene	ND	*	95	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
1-Methylnaphthalene	190	*	57	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2,2'-oxybis[1-chloropropane]	ND		470	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2,4,5-Trichlorophenol	ND		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2,4,6-Trichlorophenol	ND		280	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2,4-Dichlorophenol	ND		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2,4-Dimethylphenol	ND		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2,4-Dinitrophenol	ND	^	1900	380	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2,4-Dinitrotoluene	ND		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2,6-Dinitrotoluene	ND		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2-Chloronaphthalene	ND	*	38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2-Chlorophenol	ND	*	190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2-Methylnaphthalene	280	*	38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2-Methylphenol	ND	*	190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2-Nitroaniline	ND		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
2-Nitrophenol	ND	*	190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
3 & 4 Methylphenol	640	*	380	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
3,3'-Dichlorobenzidine	ND		380	57	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
3-Nitroaniline	ND		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
4,6-Dinitro-2-methylphenol	ND		1900	190	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
4-Bromophenyl phenyl ether	ND		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
4-Chloro-3-methylphenol	ND		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
4-Chloroaniline	ND		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
4-Chlorophenyl phenyl ether	ND	*	190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
4-Nitroaniline	ND		190	38	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
4-Nitrophenol	ND		1900	470	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Acenaphthene	260	*	38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Acenaphthylene	47	*	38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Anthracene	530		38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Benzo[a]anthracene	820		38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Benzo[a]pyrene	530		57	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Benzo[b]fluoranthene	1000		38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Benzo[g,h,i]perylene	210		47	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Benzo[k]fluoranthene	330		47	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Benzoic acid	ND		4700	1400	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Benzyl alcohol	450		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Bis(2-chloroethoxy)methane	ND	*	190	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Bis(2-chloroethyl)ether	ND	*	190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Butyl benzyl phthalate	1000	B	380	95	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Carbazole	330		190	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Chrysene	1300		47	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Dibenz(a,h)anthracene	100		76	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Dibenzofuran	220	*	190	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Diethyl phthalate	390	B	380	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Dimethyl phthalate	45	J *	190	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Di-n-butyl phthalate	ND		950	95	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-MH-61-20150203-S**Lab Sample ID: 580-47345-2**

Date Collected: 02/03/15 10:30

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 52.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	1700		950	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Fluoranthene	3100		38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Fluorene	400 *		38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Hexachlorobenzene	ND		95	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Hexachlorobutadiene	ND *		95	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Hexachlorocyclopentadiene	ND		190	19	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Hexachloroethane	ND *		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Indeno[1,2,3-cd]pyrene	300		76	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Isophorone	ND *		190	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Naphthalene	210		38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Nitrobenzene	ND *		190	65	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
N-Nitrosodimethylamine	ND		1900	470	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
N-Nitrosodi-n-propylamine	ND		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
N-Nitrosodiphenylamine	ND		95	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Pentachlorophenol	180 J		380	38	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Phenanthrene	2700		38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Phenol	170 J *		190	28	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Pyrene	2400		38	9.5	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:11	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	102		28 - 143				02/13/15 08:23	02/19/15 16:11	10
2-Fluorobiphenyl	95		42 - 140				02/13/15 08:23	02/19/15 16:11	10
2-Fluorophenol	81		36 - 145				02/13/15 08:23	02/19/15 16:11	10
Nitrobenzene-d5	94		38 - 141				02/13/15 08:23	02/19/15 16:11	10
Phenol-d5	89		38 - 149				02/13/15 08:23	02/19/15 16:11	10
Terphenyl-d14	108		42 - 151				02/13/15 08:23	02/19/15 16:11	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	34000	B	11000	950	ug/Kg	⊗	02/13/15 08:23	02/19/15 13:59	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND H		94	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
1,2-Dichlorobenzene	ND H		100	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
1,3-Dichlorobenzene	ND H		94	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
1,4-Dichlorobenzene	ND H		94	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
1-Methylnaphthalene	210 H		56	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2,2'-oxybis[1-chloropropane]	ND H		470	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2,4,5-Trichlorophenol	ND H		190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2,4,6-Trichlorophenol	ND H		280	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2,4-Dichlorophenol	ND H		190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2,4-Dimethylphenol	ND H		190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2,4-Dinitrophenol	ND H		1900	370	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2,4-Dinitrotoluene	ND H		190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2,6-Dinitrotoluene	ND H		190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2-Chloronaphthalene	ND H		37	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2-Chlorophenol	ND H		190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2-Methylnaphthalene	310 H		37	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2-Methylphenol	47 J H		190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-MH-61-20150203-S

Lab Sample ID: 580-47345-2

Date Collected: 02/03/15 10:30

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 52.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND	H	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
2-Nitrophenol	ND	H	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
3 & 4 Methylphenol	1500	H	370	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
3,3'-Dichlorobenzidine	ND	H	370	56	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
3-Nitroaniline	ND	H	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
4,6-Dinitro-2-methylphenol	ND	H	1900	190	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
4-Bromophenyl phenyl ether	ND	H	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
4-Chloro-3-methylphenol	ND	H	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
4-Chloroaniline	ND	H ^	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
4-Chlorophenyl phenyl ether	ND	H	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
4-Nitroaniline	ND	H	190	37	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
4-Nitrophenol	ND	H	1900	470	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Acenaphthene	280	H	37	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Acenaphthylene	40	H	37	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Anthracene	600	H	37	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Benzo[a]anthracene	830	H	37	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Benzo[a]pyrene	550	H	56	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Benzo[b]fluoranthene	1000	H	37	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Benzo[g,h,i]perylene	210	H	47	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Benzo[k]fluoranthene	310	H	47	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Benzoic acid	ND	H *	4700	1400	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Benzyl alcohol	ND	H	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Bis(2-chloroethoxy)methane	ND	H	190	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Bis(2-chloroethyl)ether	ND	H	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Butyl benzyl phthalate	970	H	370	94	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Carbazole	350	H	190	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Chrysene	1500	* H	47	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Dibenz(a,h)anthracene	88	H	75	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Dibenzofuran	280	H	190	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Diethyl phthalate	280	J H B	370	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Dimethyl phthalate	32	J H	190	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Di-n-butyl phthalate	ND	H	940	94	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Di-n-octyl phthalate	200	J H	940	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Fluoranthene	3300	H	37	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Fluorene	490	H	37	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Hexachlorobenzene	ND	H	94	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Hexachlorobutadiene	ND	H	94	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Hexachlorocyclopentadiene	ND	H	190	19	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Hexachloroethane	ND	H	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Indeno[1,2,3-cd]pyrene	250	H	75	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Isophorone	ND	H	190	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Naphthalene	250	H	37	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Nitrobenzene	ND	H	190	64	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
N-Nitrosodimethylamine	ND	H	1900	470	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
N-Nitrosodi-n-propylamine	ND	H	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
N-Nitrosodiphenylamine	ND	H	94	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Pentachlorophenol	200	J H	370	37	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Phenanthrene	3200	H *	37	9.4	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10
Phenol	220	H	190	28	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:12	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Client Sample ID: WM-MH-61-20150203-S

Lab Sample ID: 580-47345-2

Date Collected: 02/03/15 10:30

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 52.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	2500	H	37	9.4	ug/Kg	☀	02/26/15 14:48	02/27/15 13:12	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	115		28 - 143				02/26/15 14:48	02/27/15 13:12	10
2-Fluorobiphenyl	107		42 - 140				02/26/15 14:48	02/27/15 13:12	10
2-Fluorophenol	99		36 - 145				02/26/15 14:48	02/27/15 13:12	10
Nitrobenzene-d5	87		38 - 141				02/26/15 14:48	02/27/15 13:12	10
Phenol-d5	97		38 - 149				02/26/15 14:48	02/27/15 13:12	10
Terphenyl-d14	102		42 - 151				02/26/15 14:48	02/27/15 13:12	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	28000	H	11000	940	ug/Kg	☀	02/26/15 14:48	02/27/15 15:24	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.019	0.0061	mg/Kg	☀	02/09/15 06:30	02/10/15 17:25	1
Arochlor 1221	ND		0.021	0.015	mg/Kg	☀	02/09/15 06:30	02/10/15 17:25	1
Arochlor 1232	ND		0.021	0.013	mg/Kg	☀	02/09/15 06:30	02/10/15 17:25	1
Arochlor 1242	ND		0.019	0.0040	mg/Kg	☀	02/09/15 06:30	02/10/15 17:25	1
Arochlor 1248	ND		0.019	0.0057	mg/Kg	☀	02/09/15 06:30	02/10/15 17:25	1
Arochlor 1254	0.36		0.019	0.0040	mg/Kg	☀	02/09/15 06:30	02/10/15 17:25	1
Arochlor 1260	ND		0.019	0.0057	mg/Kg	☀	02/09/15 06:30	02/10/15 17:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		45 - 135				02/09/15 06:30	02/10/15 17:25	1
DCB Decachlorobiphenyl	71		50 - 140				02/09/15 06:30	02/10/15 17:25	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)	1100	Y	47	11	mg/Kg	☀	02/11/15 08:27	02/11/15 16:05	1
Motor Oil (>C24-C36)	5900	Y	94	17	mg/Kg	☀	02/11/15 08:27	02/11/15 16:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	76		50 - 150				02/11/15 08:27	02/11/15 16:05	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11		0.74	0.27	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10
Lead	170		0.74	0.072	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10
Antimony	8.6		0.30	0.063	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10
Beryllium	0.23	J	0.30	0.052	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10
Cadmium	1.0		0.30	0.028	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10
Chromium	51		0.74	0.094	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10
Copper	97		0.60	0.15	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10
Nickel	31		0.74	0.12	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10
Selenium	0.78	J	1.5	0.30	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10
Silver	0.19	J	0.30	0.018	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10
Thallium	ND		0.60	0.19	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10
Zinc	630		7.4	1.7	mg/Kg	☀	02/12/15 11:35	02/12/15 15:00	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-MH-61-20150203-S

Lab Sample ID: 580-47345-2

Date Collected: 02/03/15 10:30

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 52.2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.034	0.010	mg/Kg	☀	02/05/15 16:28	02/06/15 09:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	52		0.10	0.10	%			02/06/15 12:09	1
Total Organic Carbon	82000		2000	250	mg/Kg			02/06/15 16:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobbles	0.00				%			02/09/15 09:58	1
Gravel	4.5				%			02/09/15 09:58	1
Sand	61				%			02/09/15 09:58	1
Silt	33				%			02/09/15 09:58	1
Clay	1.7				%			02/09/15 09:58	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-CB-52-20150203-S

Lab Sample ID: 580-47345-3

Date Collected: 02/03/15 12:00

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 45.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*	4.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,1,1-Trichloroethane	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,1,2,2-Tetrachloroethane	ND	*	8.0	3.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,1,2-Trichloroethane	ND	*	8.0	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,1-Dichloroethane	ND		4.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,1-Dichloroethene	ND		20	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,1-Dichloropropene	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,2,3-Trichlorobenzene	ND	*	8.0	2.4	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,2,3-Trichloropropane	ND	*	4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,2,4-Trichlorobenzene	ND	*	8.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,2,4-Trimethylbenzene	200	*	8.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,2-Dibromo-3-Chloropropane	ND	*	8.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,2-Dibromoethane	ND	*	4.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,2-Dichlorobenzene	ND	*	8.0	2.4	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,2-Dichloroethane	ND		4.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,2-Dichloropropane	ND		4.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,3,5-Trimethylbenzene	120	*	20	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,3-Dichlorobenzene	ND	*	8.0	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,3-Dichloropropane	ND	*	8.0	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
1,4-Dichlorobenzene	ND	*	4.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
2,2-Dichloropropane	ND		20	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
2-Butanone	ND		40	12	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
2-Chloroethyl vinyl ether	ND	*	20	5.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
2-Chlorotoluene	ND	*	8.0	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
2-Hexanone	ND	*	20	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
4-Chlorotoluene	ND	*	8.0	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
4-Isopropyltoluene	130	*	8.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
4-Methyl-2-pentanone	22	*	20	6.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Acetone	650		60	9.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Acrolein	ND		120	33	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Acrylonitrile	ND		40	11	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Benzene	2.1	J	4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Bromobenzene	ND	*	8.0	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Bromochloromethane	ND		8.0	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Bromodichloromethane	ND		4.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Bromoform	ND	*	4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Bromomethane	ND		4.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Carbon disulfide	15		4.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Carbon tetrachloride	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Chlorobenzene	ND	*	4.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Chlorodibromomethane	ND	*	8.0	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Chloroethane	ND		4.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Chloroform	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Chloromethane	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
cis-1,2-Dichloroethene	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
cis-1,3-Dichloropropene	ND	*	4.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Dibromomethane	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Dichlorodifluoromethane	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-CB-52-20150203-S**Lab Sample ID: 580-47345-3**

Date Collected: 02/03/15 12:00

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 45.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	12 *		4.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Hexachloro-1,3-butadiene	ND *		8.0	2.4	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Iodomethane	ND		60	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Isopropylbenzene	8.7 *		8.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Methyl tert-butyl ether	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Methylene Chloride	ND		60	12	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
m-Xylene & p-Xylene	43 *		8.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Naphthalene	11 J*		20	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
n-Butylbenzene	ND *		8.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
N-Propylbenzene	ND *		8.0	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
o-Xylene	50 *		8.0	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
sec-Butylbenzene	8.0 *		8.0	2.0	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Styrene	ND *		8.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
tert-Butylbenzene	ND *		8.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Tetrachloroethene	ND *		4.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Toluene	19 *		8.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
trans-1,2-Dichloroethene	ND		4.0	1.6	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
trans-1,3-Dichloropropene	ND *		4.0	0.80	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
trans-1,4-Dichloro-2-butene	ND *		20	6.8	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Trichloroethene	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Trichlorofluoromethane	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Vinyl acetate	ND		20	2.4	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Vinyl chloride	ND		4.0	1.2	ug/Kg	⊗	02/04/15 13:45	02/09/15 13:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	135		71 - 136				02/04/15 13:45	02/09/15 13:45	1
4-Bromofluorobenzene (Surr)	138	X *	70 - 120				02/04/15 13:45	02/09/15 13:45	1
Dibromofluoromethane (Surr)	117		75 - 132				02/04/15 13:45	02/09/15 13:45	1
Toluene-d8 (Surr)	117	*	80 - 120				02/04/15 13:45	02/09/15 13:45	1
Trifluorotoluene (Surr)	64	X	65 - 140				02/04/15 13:45	02/09/15 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND *		110	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
1,2-Dichlorobenzene	ND *		120	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
1,3-Dichlorobenzene	ND *		110	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
1,4-Dichlorobenzene	ND *		110	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
1-Methylnaphthalene	150 *		64	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2,2'-oxybis[1-chloropropane]	ND		540	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2,4,5-Trichlorophenol	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2,4,6-Trichlorophenol	ND		320	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2,4-Dichlorophenol	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2,4-Dimethylphenol	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2,4-Dinitrophenol	ND ^		2100	430	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2,4-Dinitrotoluene	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2,6-Dinitrotoluene	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2-Chloronaphthalene	ND *		43	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2-Chlorophenol	ND *		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2-Methylnaphthalene	220 *		43	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2-Methylphenol	ND *		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-CB-52-20150203-S

Lab Sample ID: 580-47345-3

Date Collected: 02/03/15 12:00

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 45.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
2-Nitrophenol	ND *		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
3 & 4 Methylphenol	320 J *		430	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
3,3'-Dichlorobenzidine	ND		430	64	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
3-Nitroaniline	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
4,6-Dinitro-2-methylphenol	ND		2100	210	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
4-Bromophenyl phenyl ether	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
4-Chloro-3-methylphenol	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
4-Chloroaniline	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
4-Chlorophenyl phenyl ether	ND *		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
4-Nitroaniline	ND		210	43	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
4-Nitrophenol	ND		2100	540	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Acenaphthene	76 *		43	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Acenaphthylene	54 *		43	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Anthracene	240		43	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Benzo[a]anthracene	410		43	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Benzo[a]pyrene	350		64	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Benzo[b]fluoranthene	920		43	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Benzo[g,h,i]perylene	170		54	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Benzo[k]fluoranthene	320		54	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Benzoic acid	ND		5400	1600	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Benzyl alcohol	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Bis(2-chloroethoxy)methane	ND *		210	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Bis(2-chloroethyl)ether	ND *		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Butyl benzyl phthalate	850 B		430	110	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Carbazole	180 J		210	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Chrysene	1400		54	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Dibenz(a,h)anthracene	80 J		86	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Dibenzofuran	100 J *		210	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Diethyl phthalate	1400 B		430	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Dimethyl phthalate	91 J *		210	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Di-n-butyl phthalate	ND		1100	110	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Di-n-octyl phthalate	1900		1100	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Fluoranthene	2100		43	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Fluorene	270 *		43	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Hexachlorobenzene	ND		110	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Hexachlorobutadiene	ND *		110	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Hexachlorocyclopentadiene	ND		210	21	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Hexachloroethane	ND *		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Indeno[1,2,3-cd]pyrene	160		86	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Isophorone	ND *		210	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Naphthalene	110		43	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Nitrobenzene	ND *		210	73	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
N-Nitrosodimethylamine	ND		2100	540	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
N-Nitrosodi-n-propylamine	ND		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
N-Nitrosodiphenylamine	ND		110	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Pentachlorophenol	ND		430	43	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Phenanthrene	1400		43	11	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10
Phenol	170 J *		210	32	ug/Kg	⊗	02/13/15 08:23	02/19/15 16:37	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Client Sample ID: WM-CB-52-20150203-S

Lab Sample ID: 580-47345-3

Date Collected: 02/03/15 12:00

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 45.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	2300		43	11	ug/Kg	☀	02/13/15 08:23	02/19/15 16:37	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	102		28 - 143				02/13/15 08:23	02/19/15 16:37	10
2-Fluorobiphenyl	99		42 - 140				02/13/15 08:23	02/19/15 16:37	10
2-Fluorophenol	87		36 - 145				02/13/15 08:23	02/19/15 16:37	10
Nitrobenzene-d5	73		38 - 141				02/13/15 08:23	02/19/15 16:37	10
Phenol-d5	95		38 - 149				02/13/15 08:23	02/19/15 16:37	10
Terphenyl-d14	137		42 - 151				02/13/15 08:23	02/19/15 16:37	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	61000	B	13000	1100	ug/Kg	☀	02/13/15 08:23	02/19/15 14:25	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	H	100	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
1,2-Dichlorobenzene	ND	H	110	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
1,3-Dichlorobenzene	ND	H	100	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
1,4-Dichlorobenzene	ND	H	100	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
1-Methylnaphthalene	170	H	63	10	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2,2'-oxybis[1-chloropropane]	ND	H	520	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2,4,5-Trichlorophenol	ND	H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2,4,6-Trichlorophenol	ND	H	310	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2,4-Dichlorophenol	ND	H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2,4-Dimethylphenol	ND	H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2,4-Dinitrophenol	ND	H	2100	420	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2,4-Dinitrotoluene	ND	H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2-Chloronaphthalene	ND	H	42	10	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2-Chlorophenol	ND	H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2-Methylnaphthalene	240	H	42	10	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2-Methylphenol	36	J H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2-Nitroaniline	ND	H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
2-Nitrophenol	ND	H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
3 & 4 Methylphenol	270	J H	420	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
3,3'-Dichlorobenzidine	ND	H	420	63	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
3-Nitroaniline	ND	H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
4,6-Dinitro-2-methylphenol	ND	H	2100	210	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
4-Bromophenyl phenyl ether	ND	H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
4-Chloro-3-methylphenol	ND	H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
4-Chloroaniline	ND	H ^	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
4-Chlorophenyl phenyl ether	ND	H	210	31	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
4-Nitroaniline	ND	H	210	42	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
4-Nitrophenol	ND	H	2100	520	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
Acenaphthene	100	H	42	10	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
Acenaphthylene	ND	H	42	10	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
Anthracene	230	H	42	10	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
Benzo[a]anthracene	520	H	42	10	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10
Benzo[a]pyrene	320	H	63	10	ug/Kg	☀	02/26/15 14:48	02/27/15 13:39	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-CB-52-20150203-S**Lab Sample ID: 580-47345-3**

Date Collected: 02/03/15 12:00

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 45.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	980	H	42	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Benzo[g,h,i]perylene	170	H	52	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Benzo[k]fluoranthene	310	H	52	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Benzoic acid	ND	H *	5200	1600	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Benzyl alcohol	ND	H	210	31	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Bis(2-chloroethoxy)methane	ND	H	210	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Bis(2-chloroethyl)ether	ND	H	210	31	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Butyl benzyl phthalate	700	H	420	100	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Carbazole	200	J H	210	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Chrysene	1500	* H	52	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Dibenz(a,h)anthracene	ND	H	84	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Dibenzo-furan	96	J H	210	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Diethyl phthalate	1600	H B	420	31	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Dimethyl phthalate	ND	H	210	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Di-n-butyl phthalate	ND	H	1000	100	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Di-n-octyl phthalate	950	J H	1000	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Fluoranthene	2200	H	42	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Fluorene	260	H	42	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Hexachlorobenzene	ND	H	100	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Hexachlorobutadiene	ND	H	100	31	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Hexachlorocyclopentadiene	ND	H	210	21	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Hexachloroethane	ND	H	210	31	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Indeno[1,2,3-cd]pyrene	190	H	84	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Iso-phorone	ND	H	210	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Naphthalene	73	H	42	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Nitrobenzene	ND	H	210	71	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
N-Nitrosodimethylamine	ND	H	2100	520	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
N-Nitrosodi-n-propylamine	ND	H	210	31	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
N-Nitrosodiphenylamine	360	H	100	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Pentachlorophenol	ND	H	420	42	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Phenanthrene	1600	H *	42	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Phenol	210	H	210	31	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Pyrene	2500	H	42	10	ug/Kg	⊗	02/26/15 14:48	02/27/15 13:39	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	110		28 - 143				02/26/15 14:48	02/27/15 13:39	10
2-Fluorobiphenyl	100		42 - 140				02/26/15 14:48	02/27/15 13:39	10
2-Fluorophenol	110		36 - 145				02/26/15 14:48	02/27/15 13:39	10
Nitrobenzene-d5	120		38 - 141				02/26/15 14:48	02/27/15 13:39	10
Phenol-d5	98		38 - 149				02/26/15 14:48	02/27/15 13:39	10
Terphenyl-d14	140		42 - 151				02/26/15 14:48	02/27/15 13:39	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	56000	H	13000	1000	ug/Kg	⊗	02/26/15 14:48	02/27/15 15:51	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	56	B	24	3.0	mg/Kg	⊗	02/06/15 15:38	02/06/15 23:06	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Client Sample ID: WM-CB-52-20150203-S

Lab Sample ID: 580-47345-3

Date Collected: 02/03/15 12:00

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 45.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		50 - 150	02/06/15 15:38	02/06/15 23:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.021	0.0066	mg/Kg	⊗	02/09/15 06:30	02/10/15 18:14	1
Arochlor 1221	ND		0.023	0.017	mg/Kg	⊗	02/09/15 06:30	02/10/15 18:14	1
Arochlor 1232	ND		0.023	0.014	mg/Kg	⊗	02/09/15 06:30	02/10/15 18:14	1
Arochlor 1242	ND		0.021	0.0043	mg/Kg	⊗	02/09/15 06:30	02/10/15 18:14	1
Arochlor 1248	ND		0.021	0.0062	mg/Kg	⊗	02/09/15 06:30	02/10/15 18:14	1
Arochlor 1254	0.17		0.021	0.0043	mg/Kg	⊗	02/09/15 06:30	02/10/15 18:14	1
Arochlor 1260	ND		0.021	0.0062	mg/Kg	⊗	02/09/15 06:30	02/10/15 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	63		45 - 135	02/09/15 06:30	02/10/15 18:14	1
DCB Decachlorobiphenyl	75		50 - 140	02/09/15 06:30	02/10/15 18:14	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)	3600	Y	54	12	mg/Kg	⊗	02/11/15 08:27	02/11/15 17:01	1
Motor Oil (>C24-C36)	20000	Y	110	20	mg/Kg	⊗	02/11/15 08:27	02/11/15 17:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	76		50 - 150				02/11/15 08:27	02/11/15 17:01	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	28		0.89	0.32	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10
Lead	200		0.89	0.086	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10
Antimony	7.3		0.36	0.075	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10
Beryllium	0.34	J	0.36	0.062	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10
Cadmium	4.2		0.36	0.034	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10
Chromium	160		0.89	0.11	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10
Copper	290		0.71	0.17	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10
Nickel	99		0.89	0.14	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10
Selenium	1.2	J	1.8	0.36	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10
Silver	0.32	J	0.36	0.021	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10
Thallium	ND		0.71	0.23	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10
Zinc	1800		8.9	2.0	mg/Kg	⊗	02/12/15 11:35	02/12/15 15:04	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.098		0.041	0.012	mg/Kg	⊗	02/05/15 16:28	02/06/15 09:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	46		0.10	0.10	%			02/06/15 12:09	1
Total Organic Carbon	140000		2000	250	mg/Kg			02/06/15 16:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobbles	0.00			%				02/09/15 09:58	1
Gravel	1.5			%				02/09/15 09:58	1

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Client Sample ID: WM-CB-52-20150203-S

Lab Sample ID: 580-47345-3

Date Collected: 02/03/15 12:00

Matrix: Solid

Date Received: 02/04/15 12:16

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sand	35				%			02/09/15 09:58	1
Silt	60				%			02/09/15 09:58	1
Clay	3.5				%			02/09/15 09:58	1

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-CB-21-20150203-S

Lab Sample ID: 580-47345-4

Date Collected: 02/03/15 14:15

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 37.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	*	130	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
1,2-Dichlorobenzene	ND	*	150	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
1,3-Dichlorobenzene	ND	*	130	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
1,4-Dichlorobenzene	ND	*	130	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
1-Methylnaphthalene	49	J *	79	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2,2'-oxybis[1-chloropropane]	ND		660	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2,4,5-Trichlorophenol	ND		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2,4,6-Trichlorophenol	ND		400	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2,4-Dichlorophenol	ND		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2,4-Dimethylphenol	ND		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2,4-Dinitrophenol	ND	^	2600	530	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2,4-Dinitrotoluene	ND		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2,6-Dinitrotoluene	ND		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2-Chloronaphthalene	ND	*	53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2-Chlorophenol	ND	*	260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2-Methylnaphthalene	60	*	53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2-Methylphenol	ND	*	260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2-Nitroaniline	ND		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
2-Nitrophenol	ND	*	260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
3 & 4 Methylphenol	500	J *	530	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
3,3'-Dichlorobenzidine	ND		530	79	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
3-Nitroaniline	ND		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
4,6-Dinitro-2-methylphenol	ND		2600	260	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
4-Bromophenyl phenyl ether	ND		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
4-Chloro-3-methylphenol	ND		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
4-Chloroaniline	ND		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
4-Chlorophenyl phenyl ether	ND	*	260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
4-Nitroaniline	ND		260	53	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
4-Nitrophenol	ND		2600	660	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Acenaphthene	100	*	53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Acenaphthylene	54	*	53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Anthracene	390		53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Benzo[a]anthracene	530		53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Benzo[a]pyrene	390		79	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Benzo[b]fluoranthene	1000		53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Benzo[g,h,i]perylene	190		66	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Benzo[k]fluoranthene	410		66	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Benzoic acid	ND		6600	2000	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Benzyl alcohol	150	J	260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Bis(2-chloroethoxy)methane	ND	*	260	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Bis(2-chloroethyl)ether	ND	*	260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Butyl benzyl phthalate	1700	B	530	130	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Carbazole	260		260	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Chrysene	1600		66	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Dibenz(a,h)anthracene	ND		110	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Dibenzofuran	140	J *	260	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Diethyl phthalate	1700	B	530	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Dimethyl phthalate	130	J *	260	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Di-n-butyl phthalate	ND		1300	130	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Client Sample ID: WM-CB-21-20150203-S

Lab Sample ID: 580-47345-4

Date Collected: 02/03/15 14:15

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 37.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	1900		1300	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Fluoranthene	3900		53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Fluorene	250 *		53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Hexachlorobenzene	ND		130	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Hexachlorobutadiene	ND *		130	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Hexachlorocyclopentadiene	ND		260	26	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Hexachloroethane	ND *		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Indeno[1,2,3-cd]pyrene	220		110	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Isophorone	ND *		260	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Naphthalene	62		53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Nitrobenzene	ND *		260	90	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
N-Nitrosodimethylamine	ND		2600	660	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
N-Nitrosodi-n-propylamine	170 J		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
N-Nitrosodiphenylamine	110 J		130	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Pentachlorophenol	ND		530	53	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Phenanthrene	2400		53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Phenol	130 J *		260	40	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Pyrene	2900		53	13	ug/Kg	⊗	02/13/15 08:28	02/19/15 17:56	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	117		28 - 143				02/13/15 08:28	02/19/15 17:56	10
2-Fluorobiphenyl	101		42 - 140				02/13/15 08:28	02/19/15 17:56	10
2-Fluorophenol	91		36 - 145				02/13/15 08:28	02/19/15 17:56	10
Nitrobenzene-d5	73		38 - 141				02/13/15 08:28	02/19/15 17:56	10
Phenol-d5	76		38 - 149				02/13/15 08:28	02/19/15 17:56	10
Terphenyl-d14	105		42 - 151				02/13/15 08:28	02/19/15 17:56	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	31000	B	16000	1300	ug/Kg	⊗	02/13/15 08:28	02/19/15 15:44	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND H		130	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
1,2-Dichlorobenzene	ND H		140	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
1,3-Dichlorobenzene	ND H		130	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
1,4-Dichlorobenzene	ND H		130	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
1-Methylnaphthalene	50 J H		77	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2,2'-oxybis[1-chloropropane]	ND H		640	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2,4,5-Trichlorophenol	ND H		260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2,4,6-Trichlorophenol	ND H		380	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2,4-Dichlorophenol	ND H		260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2,4-Dimethylphenol	ND H		260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2,4-Dinitrophenol	ND H		2600	510	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2,4-Dinitrotoluene	ND H		260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2,6-Dinitrotoluene	ND H		260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2-Chloronaphthalene	ND H		51	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2-Chlorophenol	ND H		260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2-Methylnaphthalene	62 H		51	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2-Methylphenol	ND H		260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-CB-21-20150203-S

Lab Sample ID: 580-47345-4

Date Collected: 02/03/15 14:15

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 37.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND	H	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
2-Nitrophenol	ND	H	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
3 & 4 Methylphenol	1200	H	510	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
3,3'-Dichlorobenzidine	ND	H	510	77	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
3-Nitroaniline	ND	H	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
4,6-Dinitro-2-methylphenol	ND	H	2600	260	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
4-Bromophenyl phenyl ether	ND	H	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
4-Chloro-3-methylphenol	ND	H	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
4-Chloroaniline	ND	H ^	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
4-Chlorophenyl phenyl ether	ND	H	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
4-Nitroaniline	ND	H	260	51	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
4-Nitrophenol	ND	H	2600	640	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Acenaphthene	150	H	51	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Acenaphthylene	58	H	51	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Anthracene	430	H	51	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Benzo[a]anthracene	570	H	51	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Benzo[a]pyrene	320	H	77	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Benzo[b]fluoranthene	1100	H	51	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Benzo[g,h,i]perylene	170	H	64	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Benzo[k]fluoranthene	240	H	64	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Benzoic acid	ND	H *	6400	1900	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Benzyl alcohol	160	J H	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Bis(2-chloroethoxy)methane	ND	H	260	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Bis(2-chloroethyl)ether	ND	H	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Butyl benzyl phthalate	1400	H	510	130	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Carbazole	310	H	260	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Chrysene	1500	* H	64	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Dibenz(a,h)anthracene	ND	H	100	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Dibenzo furan	170	J H	260	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Diethyl phthalate	940	H B	510	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Dimethyl phthalate	7000	H	260	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Di-n-butyl phthalate	160	J H	1300	130	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Di-n-octyl phthalate	1700	H	1300	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Fluoranthene	4100	H	51	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Fluorene	440	H	51	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Hexachlorobenzene	ND	H	130	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Hexachlorobutadiene	ND	H	130	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Hexachlorocyclopentadiene	ND	H	260	26	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Hexachloroethane	ND	H	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Indeno[1,2,3-cd]pyrene	130	H	100	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Isophorone	ND	H	260	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Naphthalene	89	H	51	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Nitrobenzene	ND	H	260	87	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
N-Nitrosodimethylamine	ND	H	2600	640	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
N-Nitrosodi-n-propylamine	ND	H	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
N-Nitrosodiphenylamine	56	J H	130	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Pentachlorophenol	ND	H	510	51	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Phenanthrene	3700	H *	51	13	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10
Phenol	190	J H	260	38	ug/Kg	⊗	02/26/15 14:48	02/27/15 14:05	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Client Sample ID: WM-CB-21-20150203-S

Lab Sample ID: 580-47345-4

Date Collected: 02/03/15 14:15

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 37.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	3100	H	51	13	ug/Kg	☀	02/26/15 14:48	02/27/15 14:05	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	99		28 - 143				02/26/15 14:48	02/27/15 14:05	10
2-Fluorobiphenyl	111		42 - 140				02/26/15 14:48	02/27/15 14:05	10
2-Fluorophenol	91		36 - 145				02/26/15 14:48	02/27/15 14:05	10
Nitrobenzene-d5	90		38 - 141				02/26/15 14:48	02/27/15 14:05	10
Phenol-d5	89		38 - 149				02/26/15 14:48	02/27/15 14:05	10
Terphenyl-d14	126		42 - 151				02/26/15 14:48	02/27/15 14:05	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	24000	H	15000	1300	ug/Kg	☀	02/26/15 14:48	02/27/15 16:17	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.026	0.0082	mg/Kg	☀	02/09/15 06:30	02/10/15 18:31	1
Arochlor 1221	ND		0.028	0.021	mg/Kg	☀	02/09/15 06:30	02/10/15 18:31	1
Arochlor 1232	ND		0.028	0.018	mg/Kg	☀	02/09/15 06:30	02/10/15 18:31	1
Arochlor 1242	ND		0.026	0.0054	mg/Kg	☀	02/09/15 06:30	02/10/15 18:31	1
Arochlor 1248	ND		0.026	0.0077	mg/Kg	☀	02/09/15 06:30	02/10/15 18:31	1
Arochlor 1254	0.15		0.026	0.0054	mg/Kg	☀	02/09/15 06:30	02/10/15 18:31	1
Arochlor 1260	ND		0.026	0.0077	mg/Kg	☀	02/09/15 06:30	02/10/15 18:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	66		45 - 135				02/09/15 06:30	02/10/15 18:31	1
DCB Decachlorobiphenyl	69		50 - 140				02/09/15 06:30	02/10/15 18:31	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)	2100	Y	64	14	mg/Kg	☀	02/11/15 08:27	02/11/15 17:20	1
Motor Oil (>C24-C36)	14000	Y	130	23	mg/Kg	☀	02/11/15 08:27	02/11/15 17:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	66		50 - 150				02/11/15 08:27	02/11/15 17:20	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	34		1.3	0.45	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10
Lead	160		1.3	0.12	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10
Antimony	13		0.50	0.11	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10
Beryllium	0.35	J	0.50	0.088	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10
Cadmium	2.2		0.50	0.048	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10
Chromium	180		1.3	0.16	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10
Copper	320		1.0	0.25	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10
Nickel	110		1.3	0.20	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10
Selenium	1.3	J	2.5	0.51	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10
Silver	0.34	J	0.50	0.030	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10
Thallium	ND		1.0	0.33	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10
Zinc	1500		13	2.8	mg/Kg	☀	02/12/15 11:35	02/12/15 15:07	10

TestAmerica Seattle

Client Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Client Sample ID: WM-CB-21-20150203-S

Lab Sample ID: 580-47345-4

Date Collected: 02/03/15 14:15

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 37.9

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.049	0.015	mg/Kg	☀	02/05/15 16:28	02/06/15 09:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	38		0.10	0.10	%			02/06/15 12:09	1
Total Organic Carbon	140000		2000	250	mg/Kg			02/06/15 16:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobbles	0.00				%			02/09/15 09:58	1
Gravel	4.3				%			02/09/15 09:58	1
Sand	50				%			02/09/15 09:58	1
Silt	43				%			02/09/15 09:58	1
Clay	3.0				%			02/09/15 09:58	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: MB 580-182068/1-A

Matrix: Solid

Analysis Batch: 182043

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 182068

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.40	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.90	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.20	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,1,2-Trichloroethane	ND		2.0	0.50	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,1-Dichloroethane	ND		1.0	0.40	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,1-Dichloroethene	ND		5.0	0.20	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,1-Dichloropropene	ND		1.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,2,3-Trichlorobenzene	ND		2.0	0.60	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,2,3-Trichloropropane	ND		1.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,2,4-Trimethylbenzene	ND		2.0	0.40	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,2-Dibromoethane	ND		1.0	0.20	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,2-Dichlorobenzene	ND		2.0	0.60	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,2-Dichloroethane	ND		1.0	0.40	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,2-Dichloropropene	ND		1.0	0.40	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,3,5-Trimethylbenzene	ND		5.0	0.50	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,3-Dichlorobenzene	ND		2.0	0.50	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,3-Dichloropropane	ND		2.0	0.50	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
1,4-Dichlorobenzene	ND		1.0	0.20	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
2,2-Dichloropropane	ND		5.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
2-Butanone	ND		10	3.0	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
2-Chloroethyl vinyl ether	ND		5.0	1.4	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
2-Chlorotoluene	ND		2.0	0.50	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
2-Hexanone	ND		5.0	0.50	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
4-Chlorotoluene	ND		2.0	0.50	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
4-Isopropyltoluene	ND		2.0	0.40	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
4-Methyl-2-pentanone	ND		5.0	1.5	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Acetone	ND		15	2.4	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Acrolein	ND		30	8.2	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Acrylonitrile	ND		10	2.8	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Benzene	ND		1.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Bromobenzene	ND		2.0	0.50	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Bromochloromethane	ND		2.0	0.50	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Bromodichloromethane	ND		1.0	0.40	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Bromoform	ND		1.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Bromomethane	ND		1.0	0.40	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Carbon disulfide	ND		1.0	0.20	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Carbon tetrachloride	ND		1.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Chlorobenzene	ND		1.0	0.40	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Chlorodibromomethane	ND		2.0	0.50	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Chloroethane	ND		1.0	0.20	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Chloroform	ND		1.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Chloromethane	ND		1.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
cis-1,3-Dichloropropene	ND		1.0	0.20	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1
Dibromomethane	ND		1.0	0.30	ug/Kg	02/09/15 11:00	02/09/15 11:15	02/09/15 11:15	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: MB 580-182068/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 182043

Prep Batch: 182068

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND				1.0	0.30	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Ethylbenzene	ND				1.0	0.40	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Hexachloro-1,3-butadiene	ND				2.0	0.60	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Iodomethane	ND				15	0.20	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Isopropylbenzene	ND				2.0	0.20	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Methyl tert-butyl ether	ND				1.0	0.30	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Methylene Chloride	ND				15	3.0	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
m-Xylene & p-Xylene	ND				2.0	0.20	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Naphthalene	ND				5.0	0.50	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
n-Butylbenzene	ND				2.0	0.20	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
N-Propylbenzene	ND				2.0	0.50	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
o-Xylene	ND				2.0	0.50	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
sec-Butylbenzene	ND				2.0	0.50	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Styrene	ND				2.0	0.20	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
tert-Butylbenzene	ND				2.0	0.20	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Tetrachloroethene	ND				1.0	0.40	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Toluene	ND				2.0	0.30	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
trans-1,2-Dichloroethene	ND				1.0	0.40	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
trans-1,3-Dichloropropene	ND				1.0	0.20	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
trans-1,4-Dichloro-2-butene	ND				5.0	1.7	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Trichloroethene	ND				1.0	0.30	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Trichlorofluoromethane	ND				1.0	0.30	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Vinyl acetate	ND				5.0	0.60	ug/Kg		02/09/15 11:00	02/09/15 11:15	1
Vinyl chloride	ND				1.0	0.30	ug/Kg		02/09/15 11:00	02/09/15 11:15	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	107		107		71 - 136	02/09/15 11:00	02/09/15 11:15	1
4-Bromofluorobenzene (Surr)	99		99		70 - 120	02/09/15 11:00	02/09/15 11:15	1
Dibromofluoromethane (Surr)	103		103		75 - 132	02/09/15 11:00	02/09/15 11:15	1
Toluene-d8 (Surr)	99		99		80 - 120	02/09/15 11:00	02/09/15 11:15	1
Trifluorotoluene (Surr)	93		93		65 - 140	02/09/15 11:00	02/09/15 11:15	1

Lab Sample ID: LCS 580-182068/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 182043

Prep Batch: 182068

Analyte	Spike Added	LCS			D	%Rec	Limits
		Result	Qualifier	Unit			
1,1,1,2-Tetrachloroethane	40.0	45.9		ug/Kg		115	72 - 123
1,1,1-Trichloroethane	40.0	41.8		ug/Kg		105	63 - 135
1,1,2,2-Tetrachloroethane	40.0	47.6		ug/Kg		119	73 - 125
1,1,2-Trichloro-1,2,2-trifluoroetha ne	40.0	40.9		ug/Kg		102	66 - 163
1,1,2-Trichloroethane	40.0	44.3		ug/Kg		111	77 - 124
1,1-Dichloroethane	40.0	41.8		ug/Kg		105	70 - 128
1,1-Dichloroethene	40.0	40.5		ug/Kg		101	70 - 133
1,1-Dichloropropene	40.0	43.6		ug/Kg		109	77 - 125
1,2,3-Trichlorobenzene	40.0	49.0		ug/Kg		123	61 - 130
1,2,3-Trichloropropane	40.0	50.4 *		ug/Kg		126	77 - 123

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCS 580-182068/2-A

Matrix: Solid

Analysis Batch: 182043

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 182068

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
1,2,4-Trichlorobenzene	40.0	48.4		ug/Kg		121	61 - 130
1,2,4-Trimethylbenzene	40.0	44.9		ug/Kg		112	79 - 124
1,2-Dibromo-3-Chloropropane	40.0	51.8		ug/Kg		130	53 - 132
1,2-Dibromoethane	40.0	47.4		ug/Kg		119	69 - 126
1,2-Dichlorobenzene	40.0	45.8		ug/Kg		114	79 - 117
1,2-Dichloroethane	40.0	42.9		ug/Kg		107	71 - 128
1,2-Dichloropropane	40.0	45.7		ug/Kg		114	76 - 161
1,3,5-Trimethylbenzene	40.0	44.7		ug/Kg		112	80 - 125
1,3-Dichlorobenzene	40.0	44.5		ug/Kg		111	79 - 119
1,3-Dichloropropane	40.0	46.2		ug/Kg		116	77 - 123
1,4-Dichlorobenzene	40.0	42.9		ug/Kg		107	79 - 117
2,2-Dichloropropane	40.0	39.4		ug/Kg		98	56 - 144
2-Butanone	160	182		ug/Kg		114	30 - 160
2-Chloroethyl vinyl ether	40.0	42.3		ug/Kg		106	60 - 150
2-Chlorotoluene	40.0	43.6		ug/Kg		109	79 - 122
2-Hexanone	160	202		ug/Kg		126	45 - 145
4-Chlorotoluene	40.0	43.6		ug/Kg		109	80 - 122
4-Isopropyltoluene	40.0	43.7		ug/Kg		109	78 - 126
4-Methyl-2-pentanone	160	196		ug/Kg		123	45 - 145
Acetone	160	149		ug/Kg		93	20 - 160
Acrolein	237	277		ug/Kg		117	10 - 125
Acrylonitrile	400	423		ug/Kg		106	74 - 117
Benzene	40.0	41.9		ug/Kg		105	70 - 128
Bromobenzene	40.0	44.4		ug/Kg		111	80 - 120
Bromochloromethane	40.0	44.5		ug/Kg		111	78 - 123
Bromodichloromethane	40.0	49.6		ug/Kg		124	58 - 133
Bromoform	40.0	41.2		ug/Kg		103	50 - 124
Bromomethane	40.0	47.4		ug/Kg		119	57 - 148
Carbon disulfide	40.0	42.8		ug/Kg		107	45 - 160
Carbon tetrachloride	40.0	43.4		ug/Kg		108	59 - 145
Chlorobenzene	40.0	42.1		ug/Kg		105	75 - 120
Chlorodibromomethane	40.0	45.5		ug/Kg		114	42 - 129
Chloroethane	40.0	47.1		ug/Kg		118	48 - 167
Chloroform	40.0	44.0		ug/Kg		110	78 - 125
Chloromethane	40.0	44.5		ug/Kg		111	55 - 136
cis-1,2-Dichloroethene	40.0	42.2		ug/Kg		105	70 - 130
cis-1,3-Dichloropropene	40.0	45.1		ug/Kg		113	69 - 129
Dibromomethane	40.0	47.5		ug/Kg		119	78 - 126
Dichlorodifluoromethane	40.0	44.9		ug/Kg		112	38 - 150
Ethylbenzene	40.0	42.8		ug/Kg		107	78 - 126
Hexachloro-1,3-butadiene	40.0	42.9		ug/Kg		107	68 - 134
Iodomethane	40.0	42.2		ug/Kg		106	44 - 148
Isopropylbenzene	40.0	43.5		ug/Kg		109	79 - 127
Methyl tert-butyl ether	40.0	43.6		ug/Kg		109	65 - 125
Methylene Chloride	40.0	42.9		ug/Kg		107	57 - 146
m-Xylene & p-Xylene	40.0	43.4		ug/Kg		108	78 - 126
Naphthalene	40.0	51.2		ug/Kg		128	14 - 170
n-Butylbenzene	40.0	44.1		ug/Kg		110	78 - 128

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCS 580-182068/2-A

Matrix: Solid

Analysis Batch: 182043

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 182068

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
N-Propylbenzene	40.0	43.2		ug/Kg		108	81 - 127
o-Xylene	40.0	44.0		ug/Kg		110	77 - 127
sec-Butylbenzene	40.0	41.3		ug/Kg		103	78 - 128
Styrene	40.0	46.4		ug/Kg		116	79 - 127
tert-Butylbenzene	40.0	39.7		ug/Kg		99	71 - 136
Tetrachloroethene	40.0	37.5		ug/Kg		94	56 - 155
Toluene	40.0	41.4		ug/Kg		104	75 - 126
trans-1,2-Dichloroethene	40.0	40.7		ug/Kg		102	76 - 131
trans-1,3-Dichloropropene	40.0	46.1		ug/Kg		115	72 - 129
trans-1,4-Dichloro-2-butene	40.0	45.1		ug/Kg		113	42 - 160
Trichloroethene	40.0	44.3		ug/Kg		111	83 - 124
Trichlorofluoromethane	40.0	46.1		ug/Kg		115	47 - 165
Vinyl acetate	80.6	103		ug/Kg		127	19 - 144
Vinyl chloride	40.0	46.1		ug/Kg		115	67 - 131

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	107		71 - 136
4-Bromofluorobenzene (Surr)	101		70 - 120
Dibromofluoromethane (Surr)	102		75 - 132
Toluene-d8 (Surr)	98		80 - 120
Trifluorotoluene (Surr)	96		65 - 140

Lab Sample ID: LCSD 580-182068/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 182043

Prep Batch: 182068

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
1,1,1,2-Tetrachloroethane	40.0	47.2		ug/Kg		118	72 - 123	3	20
1,1,1-Trichloroethane	40.0	40.9		ug/Kg		102	63 - 135	2	20
1,1,2,2-Tetrachloroethane	40.0	49.0		ug/Kg		123	73 - 125	3	22
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	38.7		ug/Kg		97	66 - 163	6	30
1,1,2-Trichloroethane	40.0	44.1		ug/Kg		110	77 - 124	0	18
1,1-Dichloroethane	40.0	41.7		ug/Kg		104	70 - 128	0	21
1,1-Dichloroethene	40.0	39.2		ug/Kg		98	70 - 133	3	23
1,1-Dichloropropene	40.0	41.6		ug/Kg		104	77 - 125	5	16
1,2,3-Trichlorobenzene	40.0	47.7		ug/Kg		119	61 - 130	3	23
1,2,3-Trichloropropane	40.0	49.4 *		ug/Kg		124	77 - 123	2	23
1,2,4-Trichlorobenzene	40.0	47.6		ug/Kg		119	61 - 130	2	22
1,2,4-Trimethylbenzene	40.0	43.4		ug/Kg		108	79 - 124	3	18
1,2-Dibromo-3-Chloropropane	40.0	53.1 *		ug/Kg		133	53 - 132	2	27
1,2-Dibromoethane	40.0	45.7		ug/Kg		114	69 - 126	4	21
1,2-Dichlorobenzene	40.0	44.3		ug/Kg		111	79 - 117	3	17
1,2-Dichloroethane	40.0	42.9		ug/Kg		107	71 - 128	0	18
1,2-Dichloropropane	40.0	45.3		ug/Kg		113	76 - 161	1	15
1,3,5-Trimethylbenzene	40.0	42.8		ug/Kg		107	80 - 125	4	18
1,3-Dichlorobenzene	40.0	41.7		ug/Kg		104	79 - 119	6	17
1,3-Dichloropropane	40.0	44.4		ug/Kg		111	77 - 123	4	19

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCSD 580-182068/3-A

Matrix: Solid

Analysis Batch: 182043

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182068

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Added	Result	Qualifier							
1,4-Dichlorobenzene	40.0	41.4		ug/Kg		104	79 - 117	3	18	
2,2-Dichloropropane	40.0	40.4		ug/Kg		101	56 - 144	2	21	
2-Butanone	160	185		ug/Kg		116	30 - 160	1	30	
2-Chloroethyl vinyl ether	40.0	38.7		ug/Kg		97	60 - 150	9	30	
2-Chlorotoluene	40.0	41.1		ug/Kg		103	79 - 122	6	18	
2-Hexanone	160	202		ug/Kg		126	45 - 145	0	30	
4-Chlorotoluene	40.0	40.9		ug/Kg		102	80 - 122	6	18	
4-Isopropyltoluene	40.0	40.9		ug/Kg		102	78 - 126	7	18	
4-Methyl-2-pentanone	160	201		ug/Kg		126	45 - 145	3	30	
Acetone	160	167		ug/Kg		104	20 - 160	11	30	
Acrolein	237	288		ug/Kg		121	10 - 125	4	30	
Acrylonitrile	400	442		ug/Kg		110	74 - 117	4	30	
Benzene	40.0	41.3		ug/Kg		103	70 - 128	2	19	
Bromobenzene	40.0	43.3		ug/Kg		108	80 - 120	2	19	
Bromochloromethane	40.0	45.6		ug/Kg		114	78 - 123	2	19	
Bromodichloromethane	40.0	46.4		ug/Kg		116	58 - 133	7	19	
Bromoform	40.0	41.0		ug/Kg		103	50 - 124	0	25	
Bromomethane	40.0	46.3		ug/Kg		116	57 - 148	2	29	
Carbon disulfide	40.0	41.1		ug/Kg		103	45 - 160	4	30	
Carbon tetrachloride	40.0	41.3		ug/Kg		103	59 - 145	5	19	
Chlorobenzene	40.0	41.0		ug/Kg		103	75 - 120	3	21	
Chlorodibromomethane	40.0	45.9		ug/Kg		115	42 - 129	1	23	
Chloroethane	40.0	45.2		ug/Kg		113	48 - 167	4	53	
Chloroform	40.0	43.9		ug/Kg		110	78 - 125	0	17	
Chloromethane	40.0	43.9		ug/Kg		110	55 - 136	1	26	
cis-1,2-Dichloroethene	40.0	42.0		ug/Kg		105	70 - 130	0	19	
cis-1,3-Dichloropropene	40.0	43.9		ug/Kg		110	69 - 129	3	19	
Dibromomethane	40.0	48.6		ug/Kg		122	78 - 126	2	18	
Dichlorodifluoromethane	40.0	42.0		ug/Kg		105	38 - 150	7	26	
Ethylbenzene	40.0	41.6		ug/Kg		104	78 - 126	3	23	
Hexachloro-1,3-butadiene	40.0	40.0		ug/Kg		100	68 - 134	7	21	
Iodomethane	40.0	41.4		ug/Kg		104	44 - 148	2	30	
Isopropylbenzene	40.0	42.8		ug/Kg		107	79 - 127	2	20	
Methyl tert-butyl ether	40.0	45.9		ug/Kg		115	65 - 125	5	30	
Methylene Chloride	40.0	42.3		ug/Kg		106	57 - 146	1	21	
m-Xylene & p-Xylene	40.0	41.9		ug/Kg		105	78 - 126	3	23	
Naphthalene	40.0	51.7		ug/Kg		129	14 - 170	1	50	
n-Butylbenzene	40.0	41.1		ug/Kg		103	78 - 128	7	17	
N-Propylbenzene	40.0	42.0		ug/Kg		105	81 - 127	3	20	
o-Xylene	40.0	43.9		ug/Kg		110	77 - 127	0	22	
sec-Butylbenzene	40.0	39.2		ug/Kg		98	78 - 128	5	17	
Styrene	40.0	45.4		ug/Kg		114	79 - 127	2	21	
tert-Butylbenzene	40.0	37.4		ug/Kg		93	71 - 136	6	27	
Tetrachloroethene	40.0	36.2		ug/Kg		90	56 - 155	4	27	
Toluene	40.0	40.9		ug/Kg		102	75 - 126	1	19	
trans-1,2-Dichloroethene	40.0	40.1		ug/Kg		100	76 - 131	2	18	
trans-1,3-Dichloropropene	40.0	43.5		ug/Kg		109	72 - 129	6	20	
trans-1,4-Dichloro-2-butene	40.0	45.4		ug/Kg		113	42 - 160	1	30	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCSD 580-182068/3-A

Matrix: Solid

Analysis Batch: 182043

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182068

Analyte	Spike Added	LCSD		Unit	D	%Rec.		RPD	Limit
		Result	Qualifier			%Rec.	Limits		
Trichloroethene	40.0	42.2		ug/Kg		106	83 - 124	5	17
Trichlorofluoromethane	40.0	44.0		ug/Kg		110	47 - 165	5	54
Vinyl acetate	80.6	106		ug/Kg		131	19 - 144	3	30
Vinyl chloride	40.0	43.9		ug/Kg		110	67 - 131	5	22
Surrogate	LCSD %Recovery	LCSD		Limits					
		Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	110			71 - 136					
4-Bromofluorobenzene (Surr)	100			70 - 120					
Dibromofluoromethane (Surr)	105			75 - 132					
Toluene-d8 (Surr)	99			80 - 120					
Trifluorotoluene (Surr)	93			65 - 140					

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

Lab Sample ID: MB 580-182087/1-A

Matrix: Water

Analysis Batch: 182345

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 182087

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
1,2-Dichlorobenzene	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
1,3-Dichlorobenzene	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
1,4-Dichlorobenzene	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
1-Methylnaphthalene	ND		0.060	0.030	ug/L		02/09/15 14:34	02/12/15 16:28		1
2,2'-oxybis[1-chloropropane]	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
2,4,5-Trichlorophenol	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
2,4,6-Trichlorophenol	ND		0.60	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
2,4-Dichlorophenol	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
2,4-Dimethylphenol	ND		2.0	0.30	ug/L		02/09/15 14:34	02/12/15 16:28		1
2,4-Dinitrophenol	ND		5.0	1.0	ug/L		02/09/15 14:34	02/12/15 16:28		1
2,4-Dinitrotoluene	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
2,6-Dinitrotoluene	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
2-Chloronaphthalene	ND		0.060	0.020	ug/L		02/09/15 14:34	02/12/15 16:28		1
2-Chlorophenol	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		02/09/15 14:34	02/12/15 16:28		1
2-Methylphenol	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
2-Nitroaniline	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
2-Nitrophenol	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
3 & 4 Methylphenol	ND		0.80	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
3,3'-Dichlorobenzidine	ND		2.0	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
3-Nitroaniline	ND		0.40	0.12	ug/L		02/09/15 14:34	02/12/15 16:28		1
4,6-Dinitro-2-methylphenol	ND		4.0	1.0	ug/L		02/09/15 14:34	02/12/15 16:28		1
4-Bromophenyl phenyl ether	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
4-Chloro-3-methylphenol	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
4-Chloroaniline	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
4-Chlorophenyl phenyl ether	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
4-Nitroaniline	ND		0.60	0.10	ug/L		02/09/15 14:34	02/12/15 16:28		1
4-Nitrophenol	ND		3.0	1.0	ug/L		02/09/15 14:34	02/12/15 16:28		1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: MB 580-182087/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 182345

Prep Batch: 182087

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10	0.020	ug/L		02/09/15 14:34	02/12/15 16:28	1
Acenaphthylene	ND		0.080	0.020	ug/L		02/09/15 14:34	02/12/15 16:28	1
Anthracene	ND		0.040	0.010	ug/L		02/09/15 14:34	02/12/15 16:28	1
Benzo[a]anthracene	ND		0.060	0.020	ug/L		02/09/15 14:34	02/12/15 16:28	1
Benzo[a]pyrene	ND		0.040	0.020	ug/L		02/09/15 14:34	02/12/15 16:28	1
Benzo[b]fluoranthene	ND		0.080	0.020	ug/L		02/09/15 14:34	02/12/15 16:28	1
Benzo[g,h,i]perylene	ND		0.060	0.020	ug/L		02/09/15 14:34	02/12/15 16:28	1
Benzo[k]fluoranthene	ND		0.060	0.020	ug/L		02/09/15 14:34	02/12/15 16:28	1
Benzoic acid	ND		3.0	0.60	ug/L		02/09/15 14:34	02/12/15 16:28	1
Benzyl alcohol	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Bis(2-chloroethoxy)methane	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Bis(2-chloroethyl)ether	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Bis(2-ethylhexyl) phthalate	ND		3.0	1.2	ug/L		02/09/15 14:34	02/12/15 16:28	1
Butyl benzyl phthalate	ND		0.60	0.20	ug/L		02/09/15 14:34	02/12/15 16:28	1
Carbazole	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Chrysene	ND		0.040	0.013	ug/L		02/09/15 14:34	02/12/15 16:28	1
Dibenz(a,h)anthracene	ND		0.060	0.020	ug/L		02/09/15 14:34	02/12/15 16:28	1
Dibenzofuran	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Diethyl phthalate	0.234	J	0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Dimethyl phthalate	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Di-n-butyl phthalate	ND		0.40	0.13	ug/L		02/09/15 14:34	02/12/15 16:28	1
Di-n-octyl phthalate	ND		0.40	0.18	ug/L		02/09/15 14:34	02/12/15 16:28	1
Fluoranthene	ND		0.050	0.013	ug/L		02/09/15 14:34	02/12/15 16:28	1
Fluorene	ND		0.060	0.020	ug/L		02/09/15 14:34	02/12/15 16:28	1
Hexachlorobenzene	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Hexachlorobutadiene	ND		0.60	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Hexachlorocyclopentadiene	ND		2.0	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Hexachloroethane	ND		0.60	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Indeno[1,2,3-cd]pyrene	ND		0.060	0.020	ug/L		02/09/15 14:34	02/12/15 16:28	1
Isophorone	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Naphthalene	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Nitrobenzene	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
N-Nitrosodimethylamine	ND		2.0	0.20	ug/L		02/09/15 14:34	02/12/15 16:28	1
N-Nitrosodi-n-propylamine	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
N-Nitrosodiphenylamine	ND		0.40	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Pentachlorophenol	ND		0.70	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Phenanthrene	ND		0.080	0.020	ug/L		02/09/15 14:34	02/12/15 16:28	1
Phenol	ND		0.60	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1
Pyrene	ND		0.060	0.013	ug/L		02/09/15 14:34	02/12/15 16:28	1
2,3,4,6-Tetrachlorophenol	ND		0.70	0.10	ug/L		02/09/15 14:34	02/12/15 16:28	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		44 - 125	02/09/15 14:34	02/12/15 16:28	1
2-Fluorobiphenyl	77		50 - 120	02/09/15 14:34	02/12/15 16:28	1
2-Fluorophenol	80		30 - 134	02/09/15 14:34	02/12/15 16:28	1
Nitrobenzene-d5	77		59 - 120	02/09/15 14:34	02/12/15 16:28	1
Phenol-d5	82		52 - 120	02/09/15 14:34	02/12/15 16:28	1
Terphenyl-d14	98		64 - 150	02/09/15 14:34	02/12/15 16:28	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCS 580-182087/2-A

Matrix: Water

Analysis Batch: 182345

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 182087

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
1,2,4-Trichlorobenzene	2.00	1.54		ug/L	77	40 - 125		
1,2-Dichlorobenzene	2.00	1.58		ug/L	79	44 - 125		
1,3-Dichlorobenzene	2.00	1.53		ug/L	76	40 - 125		
1,4-Dichlorobenzene	2.00	1.56		ug/L	78	40 - 125		
1-Methylnaphthalene	2.00	1.78		ug/L	89	54 - 125		
2,2'-oxybis[1-chloropropane]	2.00	1.84		ug/L	92	44 - 130		
2,4,5-Trichlorophenol	2.00	2.01		ug/L	100	66 - 130		
2,4,6-Trichlorophenol	2.00	1.91		ug/L	95	55 - 140		
2,4-Dichlorophenol	2.00	1.99		ug/L	99	50 - 140		
2,4-Dimethylphenol	2.00	1.14 J		ug/L	57	30 - 135		
2,4-Dinitrophenol	4.00	ND		ug/L	25	24 - 146		
2,4-Dinitrotoluene	2.00	1.83		ug/L	91	73 - 126		
2,6-Dinitrotoluene	2.00	2.00		ug/L	100	67 - 134		
2-Chloronaphthalene	2.00	1.76		ug/L	88	55 - 125		
2-Chlorophenol	2.00	1.95		ug/L	98	57 - 125		
2-Methylnaphthalene	2.00	1.73		ug/L	87	56 - 125		
2-Methylphenol	2.00	1.69		ug/L	85	60 - 130		
2-Nitroaniline	2.00	1.79		ug/L	89	52 - 140		
2-Nitrophenol	2.00	1.74		ug/L	87	55 - 140		
3 & 4 Methylphenol	2.00	1.94		ug/L	97	60 - 130		
3,3'-Dichlorobenzidine	4.00	0.620 J *		ug/L	16	20 - 175		
3-Nitroaniline	2.00	1.09		ug/L	54	22 - 124		
4,6-Dinitro-2-methylphenol	4.00	ND *		ug/L	4	50 - 136		
4-Bromophenyl phenyl ether	2.00	2.05		ug/L	103	62 - 132		
4-Chloro-3-methylphenol	2.00	2.02		ug/L	101	65 - 145		
4-Chloroaniline	2.00	ND *		ug/L	0.7	20 - 150		
4-Chlorophenyl phenyl ether	2.00	1.86		ug/L	93	59 - 125		
4-Nitroaniline	2.00	1.89		ug/L	94	49 - 125		
4-Nitrophenol	4.00	3.96		ug/L	99	35 - 153		
Acenaphthene	2.00	1.86		ug/L	93	63 - 125		
Acenaphthylene	2.00	1.45		ug/L	73	62 - 125		
Anthracene	2.00	1.47		ug/L	74	50 - 125		
Benzo[a]anthracene	2.00	1.83		ug/L	92	65 - 125		
Benzo[a]pyrene	2.00	1.24		ug/L	62	45 - 125		
Benzo[b]fluoranthene	2.00	2.09		ug/L	104	70 - 129		
Benzo[g,h,i]perylene	2.00	1.89		ug/L	94	65 - 153		
Benzo[k]fluoranthene	2.00	2.06		ug/L	103	70 - 123		
Benzoic acid	4.00	4.42		ug/L	110	20 - 144		
Benzyl alcohol	2.00	1.88		ug/L	94	41 - 144		
Bis(2-chloroethoxy)methane	2.00	1.81		ug/L	91	59 - 125		
Bis(2-chloroethyl)ether	2.00	1.86		ug/L	93	55 - 125		
Bis(2-ethylhexyl) phthalate	2.00	5.01 *		ug/L	250	70 - 185		
Butyl benzyl phthalate	2.00	2.47		ug/L	124	60 - 167		
Carbazole	2.00	2.27		ug/L	113	75 - 142		
Chrysene	2.00	2.12		ug/L	106	70 - 125		
Dibenz(a,h)anthracene	2.00	2.29		ug/L	114	69 - 154		
Dibenzofuran	2.00	1.84		ug/L	92	60 - 125		
Diethyl phthalate	2.00	2.30		ug/L	115	60 - 150		

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCS 580-182087/2-A

Matrix: Water

Analysis Batch: 182345

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 182087

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
Dimethyl phthalate	2.00	1.98		ug/L		99	65 - 155	
Di-n-butyl phthalate	2.00	2.06		ug/L		103	55 - 167	
Di-n-octyl phthalate	2.00	2.17		ug/L		108	55 - 150	
Fluoranthene	2.00	2.08		ug/L		104	70 - 145	
Fluorene	2.00	1.92		ug/L		96	69 - 125	
Hexachlorobenzene	2.00	2.07		ug/L		103	61 - 125	
Hexachlorobutadiene	2.00	1.35		ug/L		67	25 - 125	
Hexachlorocyclopentadiene	2.00	0.449 J		ug/L		22	20 - 125	
Hexachloroethane	2.00	1.29		ug/L		65	30 - 125	
Indeno[1,2,3-cd]pyrene	2.00	2.21		ug/L		110	70 - 136	
Isophorone	2.00	2.05		ug/L		102	64 - 125	
Naphthalene	2.00	1.69		ug/L		84	56 - 125	
Nitrobenzene	2.00	1.78		ug/L		89	62 - 125	
N-Nitrosodimethylamine	2.00	1.66 J		ug/L		83	33 - 143	
N-Nitrosodi-n-propylamine	2.00	1.91		ug/L		96	60 - 120	
N-Nitrosodiphenylamine	2.00	1.51		ug/L		75	40 - 135	
Pentachlorophenol	4.00	3.11		ug/L		78	20 - 145	
Phenanthrene	2.00	2.03		ug/L		102	70 - 125	
Phenol	2.00	1.82		ug/L		91	53 - 130	
Pyrene	2.00	2.09		ug/L		104	70 - 133	
2,3,4,6-Tetrachlorophenol	2.00	1.87		ug/L		93	60 - 130	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	88		44 - 125
2-Fluorobiphenyl	80		50 - 120
2-Fluorophenol	86		30 - 134
Nitrobenzene-d5	85		59 - 120
Phenol-d5	86		52 - 120
Terphenyl-d14	99		64 - 150

Lab Sample ID: LCSD 580-182087/3-A

Matrix: Water

Analysis Batch: 182345

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182087

Analyte	Spike Added	LCSD		Unit	D	%Rec	Limits	RPD	RPD Limit
		Result	Qualifier						
1,2,4-Trichlorobenzene	2.00	1.78		ug/L		89	40 - 125	15	20
1,2-Dichlorobenzene	2.00	1.67		ug/L		83	44 - 125	5	20
1,3-Dichlorobenzene	2.00	1.66		ug/L		83	40 - 125	9	20
1,4-Dichlorobenzene	2.00	1.64		ug/L		82	40 - 125	5	20
1-Methylnaphthalene	2.00	1.89		ug/L		95	54 - 125	6	20
2,2'-oxybis[1-chloropropane]	2.00	1.78		ug/L		89	44 - 130	3	20
2,4,5-Trichlorophenol	2.00	2.17		ug/L		108	66 - 130	8	20
2,4,6-Trichlorophenol	2.00	1.93		ug/L		97	55 - 140	1	20
2,4-Dichlorophenol	2.00	2.10		ug/L		105	50 - 140	5	20
2,4-Dimethylphenol	2.00	1.41 J *		ug/L		71	30 - 135	21	20
2,4-Dinitrophenol	4.00	1.13 J		ug/L		28	24 - 146	12	20
2,4-Dinitrotoluene	2.00	2.03		ug/L		101	73 - 126	10	20
2,6-Dinitrotoluene	2.00	2.02		ug/L		101	67 - 134	1	20

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCSD 580-182087/3-A

Matrix: Water

Analysis Batch: 182345

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182087

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.		RPD	Limit
	Added	Result	Qualifier				Limits	RPD		
2-Chloronaphthalene	2.00	1.98		ug/L	99	55 - 125	12	20		
2-Chlorophenol	2.00	1.92		ug/L	96	57 - 125	1	20		
2-Methylnaphthalene	2.00	2.00		ug/L	100	56 - 125	14	20		
2-Methylphenol	2.00	1.73		ug/L	87	60 - 130	2	20		
2-Nitroaniline	2.00	2.00		ug/L	100	52 - 140	12	20		
2-Nitrophenol	2.00	1.85		ug/L	93	55 - 140	6	20		
3 & 4 Methylphenol	2.00	2.05		ug/L	103	60 - 130	6	20		
3,3'-Dichlorobenzidine	4.00	1.90	J *	ug/L	48	20 - 175	102	20		
3-Nitroaniline	2.00	1.44	*	ug/L	72	22 - 124	28	20		
4,6-Dinitro-2-methylphenol	4.00	1.35	J *	ug/L	34	50 - 136	157	20		
4-Bromophenyl phenyl ether	2.00	2.17		ug/L	108	62 - 132	5	20		
4-Chloro-3-methylphenol	2.00	2.13		ug/L	106	65 - 145	5	20		
4-Chloroaniline	2.00	ND *		ug/L	4	20 - 150	139	20		
4-Chlorophenyl phenyl ether	2.00	2.06		ug/L	103	59 - 125	10	20		
4-Nitroaniline	2.00	2.06		ug/L	103	49 - 125	9	20		
4-Nitrophenol	4.00	4.24		ug/L	106	35 - 153	7	20		
Acenaphthene	2.00	1.89		ug/L	95	63 - 125	2	20		
Acenaphthylene	2.00	1.62		ug/L	81	62 - 125	11	20		
Anthracene	2.00	1.47		ug/L	74	50 - 125	0	20		
Benzo[a]anthracene	2.00	1.97		ug/L	99	65 - 125	7	20		
Benzo[a]pyrene	2.00	1.38		ug/L	69	45 - 125	10	20		
Benzo[b]fluoranthene	2.00	1.88		ug/L	94	70 - 129	10	20		
Benzo[g,h,i]perylene	2.00	1.95		ug/L	98	65 - 153	3	20		
Benzo[k]fluoranthene	2.00	2.19		ug/L	109	70 - 123	6	20		
Benzoic acid	4.00	4.30		ug/L	107	20 - 144	3	20		
Benzyl alcohol	2.00	1.84		ug/L	92	41 - 144	2	20		
Bis(2-chloroethoxy)methane	2.00	1.85		ug/L	93	59 - 125	2	20		
Bis(2-chloroethyl)ether	2.00	1.74		ug/L	87	55 - 125	7	20		
Bis(2-ethylhexyl) phthalate	2.00	2.96	J *	ug/L	148	70 - 185	51	20		
Butyl benzyl phthalate	2.00	2.44		ug/L	122	60 - 167	1	20		
Carbazole	2.00	2.40		ug/L	120	75 - 142	5	20		
Chrysene	2.00	2.18		ug/L	109	70 - 125	3	20		
Dibenz(a,h)anthracene	2.00	2.15		ug/L	108	69 - 154	6	20		
Dibenzofuran	2.00	1.95		ug/L	97	60 - 125	6	20		
Diethyl phthalate	2.00	2.34		ug/L	117	60 - 150	1	20		
Dimethyl phthalate	2.00	2.04		ug/L	102	65 - 155	3	20		
Di-n-butyl phthalate	2.00	2.09		ug/L	104	55 - 167	1	20		
Di-n-octyl phthalate	2.00	2.18		ug/L	109	55 - 150	1	20		
Fluoranthene	2.00	2.18		ug/L	109	70 - 145	4	20		
Fluorene	2.00	2.05		ug/L	103	69 - 125	7	20		
Hexachlorobenzene	2.00	2.15		ug/L	108	61 - 125	4	20		
Hexachlorobutadiene	2.00	1.84	*	ug/L	92	25 - 125	31	20		
Hexachlorocyclopentadiene	2.00	0.570	J *	ug/L	28	20 - 125	24	20		
Hexachloroethane	2.00	1.55		ug/L	78	30 - 125	18	20		
Indeno[1,2,3-cd]pyrene	2.00	2.09		ug/L	104	70 - 136	6	20		
Isophorone	2.00	2.09		ug/L	105	64 - 125	2	20		
Naphthalene	2.00	1.93		ug/L	97	56 - 125	14	20		
Nitrobenzene	2.00	1.86		ug/L	93	62 - 125	4	20		

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCSD 580-182087/3-A

Matrix: Water

Analysis Batch: 182345

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182087

Analyte	Spike Added	LCSD		Unit	D	%Rec.		RPD	Limit
		Result	Qualifier			%Rec.	Limits		
N-Nitrosodimethylamine	2.00	1.67	J	ug/L	84	33 - 143	1	20	
N-Nitrosodi-n-propylamine	2.00	1.99		ug/L	100	60 - 120	4	20	
N-Nitrosodiphenylamine	2.00	1.63		ug/L	81	40 - 135	7	20	
Pentachlorophenol	4.00	3.38		ug/L	85	20 - 145	8	20	
Phenanthrene	2.00	2.12		ug/L	106	70 - 125	4	20	
Phenol	2.00	1.82		ug/L	91	53 - 130	0	20	
Pyrene	2.00	2.17		ug/L	108	70 - 133	4	20	
2,3,4,6-Tetrachlorophenol	2.00	1.95		ug/L	98	60 - 130	4	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	93		44 - 125
2-Fluorobiphenyl	81		50 - 120
2-Fluorophenol	83		30 - 134
Nitrobenzene-d5	88		59 - 120
Phenol-d5	86		52 - 120
Terphenyl-d14	105		64 - 150

Lab Sample ID: MB 580-182433/1-A

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 182433

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trichlorobenzene	ND		5.0	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
1,2-Dichlorobenzene	ND		5.5	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
1,3-Dichlorobenzene	ND		5.0	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
1,4-Dichlorobenzene	ND		5.0	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
1-Methylnaphthalene	ND		3.0	0.50	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2,2'-oxybis[1-chloropropane]	ND		25	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2,4,5-Trichlorophenol	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2,4,6-Trichlorophenol	ND		15	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2,4-Dichlorophenol	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2,4-Dimethylphenol	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2,4-Dinitrophenol	ND ^		100	20	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2,4-Dinitrotoluene	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2,6-Dinitrotoluene	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2-Chloronaphthalene	ND		2.0	0.50	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2-Chlorophenol	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2-Methylnaphthalene	ND		2.0	0.50	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2-Methylphenol	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2-Nitroaniline	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
2-Nitrophenol	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
3 & 4 Methylphenol	ND		20	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
3,3'-Dichlorobenzidine	ND		20	3.0	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
3-Nitroaniline	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
4,6-Dinitro-2-methylphenol	ND		100	10	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
4-Bromophenyl phenyl ether	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
4-Chloro-3-methylphenol	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1
4-Chloroaniline	ND		10	1.5	ug/Kg	02/13/15 08:23	02/19/15 10:56		1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: MB 580-182433/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 182776

Prep Batch: 182433

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	1.5	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
4-Nitroaniline	ND		10	2.0	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
4-Nitrophenol	ND		100	25	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Acenaphthene	ND		2.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Acenaphthylene	ND		2.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Anthracene	ND		2.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Benzo[a]anthracene	ND		2.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Benzo[a]pyrene	ND		3.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Benzo[b]fluoranthene	ND		2.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Benzo[g,h,i]perylene	ND		2.5	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Benzo[k]fluoranthene	ND		2.5	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Benzoic acid	ND		250	75	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Benzyl alcohol	ND		10	1.5	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Bis(2-chloroethoxy)methane	ND		10	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Bis(2-chloroethyl)ether	ND		10	1.5	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Bis(2-ethylhexyl) phthalate	5.78	J	60	5.0	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Butyl benzyl phthalate	10.3	J	20	5.0	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Carbazole	ND		10	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Chrysene	ND		2.5	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Dibenz(a,h)anthracene	ND		4.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Dibenzofuran	ND		10	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Diethyl phthalate	10.4	J	20	1.5	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Dimethyl phthalate	ND		10	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Di-n-butyl phthalate	ND		50	5.0	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Di-n-octyl phthalate	ND		50	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Fluoranthene	ND		2.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Fluorene	ND		2.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Hexachlorobenzene	ND		5.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Hexachlorobutadiene	ND		5.0	1.5	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Hexachlorocyclopentadiene	ND		10	1.0	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Hexachloroethane	ND		10	1.5	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Indeno[1,2,3-cd]pyrene	ND		4.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Isophorone	ND		10	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Naphthalene	ND		2.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Nitrobenzene	ND		10	3.4	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
N-Nitrosodimethylamine	ND		100	25	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
N-Nitrosodiphenylamine	ND		5.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Pentachlorophenol	ND		20	2.0	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Phenanthrene	ND		2.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Phenol	ND		10	1.5	ug/Kg		02/13/15 08:23	02/19/15 10:56	1
Pyrene	ND		2.0	0.50	ug/Kg		02/13/15 08:23	02/19/15 10:56	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		28 - 143	02/13/15 08:23	02/19/15 10:56	1
2-Fluorobiphenyl	77		42 - 140	02/13/15 08:23	02/19/15 10:56	1
2-Fluorophenol	82		36 - 145	02/13/15 08:23	02/19/15 10:56	1
Nitrobenzene-d5	70		38 - 141	02/13/15 08:23	02/19/15 10:56	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: MB 580-182433/1-A

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 182433

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5			84		38 - 149	02/13/15 08:23	02/19/15 10:56	1
Terphenyl-d14			102		42 - 151	02/13/15 08:23	02/19/15 10:56	1

Lab Sample ID: LCS 580-182433/2-A

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 182433

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
1,2,4-Trichlorobenzene	100	65.1	*	ug/Kg	65	66 - 115		
1,2-Dichlorobenzene	100	66.5		ug/Kg	67	64 - 112		
1,3-Dichlorobenzene	100	66.7		ug/Kg	67	64 - 111		
1,4-Dichlorobenzene	100	64.8		ug/Kg	65	65 - 110		
1-Methylnaphthalene	100	64.8		ug/Kg	65	62 - 118		
2,2'-oxybis[1-chloropropane]	100	60.0		ug/Kg	60	41 - 126		
2,4,5-Trichlorophenol	100	76.9		ug/Kg	77	57 - 133		
2,4,6-Trichlorophenol	100	73.6		ug/Kg	74	62 - 133		
2,4-Dichlorophenol	100	72.6		ug/Kg	73	68 - 125		
2,4-Dimethylphenol	100	73.3		ug/Kg	73	54 - 139		
2,4-Dinitrophenol	200	175	^	ug/Kg	87	20 - 141		
2,4-Dinitrotoluene	100	81.7		ug/Kg	82	68 - 121		
2,6-Dinitrotoluene	100	68.8		ug/Kg	69	66 - 123		
2-Chloronaphthalene	100	64.5	*	ug/Kg	65	68 - 112		
2-Chlorophenol	100	65.9	*	ug/Kg	66	68 - 117		
2-Methylnaphthalene	100	63.5		ug/Kg	64	64 - 119		
2-Methylphenol	100	66.0	*	ug/Kg	66	71 - 116		
2-Nitroaniline	100	75.9		ug/Kg	76	64 - 112		
2-Nitrophenol	100	66.6		ug/Kg	67	67 - 127		
3 & 4 Methylphenol	100	77.0		ug/Kg	77	70 - 116		
3,3'-Dichlorobenzidine	200	131		ug/Kg	65	20 - 103		
3-Nitroaniline	100	62.1		ug/Kg	62	27 - 103		
4,6-Dinitro-2-methylphenol	200	177		ug/Kg	89	48 - 130		
4-Bromophenyl phenyl ether	100	79.2		ug/Kg	79	68 - 122		
4-Chloro-3-methylphenol	100	84.6		ug/Kg	85	69 - 121		
4-Chloroaniline	100	33.3		ug/Kg	33	20 - 103		
4-Chlorophenyl phenyl ether	100	68.3	*	ug/Kg	68	75 - 108		
4-Nitroaniline	100	88.8		ug/Kg	89	58 - 108		
4-Nitrophenol	200	188		ug/Kg	94	20 - 165		
Acenaphthene	100	67.0	*	ug/Kg	67	68 - 116		
Acenaphthylene	100	62.8	*	ug/Kg	63	68 - 120		
Anthracene	100	82.8		ug/Kg	83	73 - 116		
Benzo[a]anthracene	100	78.6		ug/Kg	79	76 - 119		
Benzo[a]pyrene	100	92.1		ug/Kg	92	72 - 117		
Benzo[b]fluoranthene	100	90.2		ug/Kg	90	63 - 132		
Benzo[g,h,i]perylene	100	92.3		ug/Kg	92	55 - 139		
Benzo[k]fluoranthene	100	97.1		ug/Kg	97	63 - 119		
Benzoic acid	200	105	J	ug/Kg	53	29 - 158		
Benzyl alcohol	100	57.9		ug/Kg	58	55 - 123		
Bis(2-chloroethoxy)methane	100	59.8	*	ug/Kg	60	69 - 107		

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCS 580-182433/2-A

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 182433

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
Bis(2-chloroethyl)ether	100	59.0	*	ug/Kg		59	62 - 110	
Bis(2-ethylhexyl) phthalate	100	105		ug/Kg		105	62 - 144	
Butyl benzyl phthalate	100	107		ug/Kg		107	69 - 142	
Carbazole	100	99.2		ug/Kg		99	76 - 135	
Chrysene	100	98.9		ug/Kg		99	75 - 114	
Dibenz(a,h)anthracene	100	105		ug/Kg		105	56 - 134	
Dibenzofuran	100	64.3	*	ug/Kg		64	72 - 109	
Diethyl phthalate	100	94.3		ug/Kg		94	73 - 116	
Dimethyl phthalate	100	73.7	*	ug/Kg		74	78 - 117	
Di-n-butyl phthalate	100	90.7		ug/Kg		91	66 - 140	
Di-n-octyl phthalate	100	97.4		ug/Kg		97	65 - 141	
Fluoranthene	100	90.6		ug/Kg		91	73 - 125	
Fluorene	100	70.7		ug/Kg		71	70 - 121	
Hexachlorobenzene	100	80.0		ug/Kg		80	66 - 117	
Hexachlorobutadiene	100	61.4	*	ug/Kg		61	65 - 116	
Hexachlorocyclopentadiene	100	64.9		ug/Kg		65	46 - 131	
Hexachloroethane	100	58.5	*	ug/Kg		59	62 - 120	
Indeno[1,2,3-cd]pyrene	100	97.6		ug/Kg		98	56 - 127	
Isophorone	100	66.0	*	ug/Kg		66	67 - 119	
Naphthalene	100	64.4		ug/Kg		64	62 - 112	
Nitrobenzene	100	54.3	*	ug/Kg		54	64 - 118	
N-Nitrosodimethylamine	100	61.4	J	ug/Kg		61	38 - 133	
N-Nitrosodi-n-propylamine	100	66.6		ug/Kg		67	62 - 116	
N-Nitrosodiphenylamine	100	78.6		ug/Kg		79	73 - 115	
Pentachlorophenol	200	145		ug/Kg		73	45 - 117	
Phenanthrene	100	78.9		ug/Kg		79	73 - 106	
Phenol	100	62.9		ug/Kg		63	63 - 111	
Pyrene	100	91.3		ug/Kg		91	70 - 120	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	70		28 - 143
2-Fluorobiphenyl	72		42 - 140
2-Fluorophenol	77		36 - 145
Nitrobenzene-d5	69		38 - 141
Phenol-d5	78		38 - 149
Terphenyl-d14	92		42 - 151

Lab Sample ID: LCSD 580-182433/3-A

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182433

Analyte	Spike Added	LCSD		Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
1,2,4-Trichlorobenzene	100	61.2	*	ug/Kg		61	66 - 115	6	28
1,2-Dichlorobenzene	100	60.0	*	ug/Kg		60	64 - 112	10	30
1,3-Dichlorobenzene	100	60.9	*	ug/Kg		61	64 - 111	9	30
1,4-Dichlorobenzene	100	61.8	*	ug/Kg		62	65 - 110	5	30
1-Methylnaphthalene	100	61.0	*	ug/Kg		61	62 - 118	6	30
2,2'-oxybis[1-chloropropane]	100	55.3		ug/Kg		55	41 - 126	8	57

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCSD 580-182433/3-A

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182433

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Added	Result	Qualifier							
2,4,5-Trichlorophenol	100	84.7		ug/Kg		85	57 - 133	10	30	
2,4,6-Trichlorophenol	100	82.0		ug/Kg		82	62 - 133	11	30	
2,4-Dichlorophenol	100	70.2		ug/Kg		70	68 - 125	3	30	
2,4-Dimethylphenol	100	67.5		ug/Kg		68	54 - 139	8	30	
2,4-Dinitrophenol	200	141 ^		ug/Kg		70	20 - 141	21	36	
2,4-Dinitrotoluene	100	89.5		ug/Kg		90	68 - 121	9	30	
2,6-Dinitrotoluene	100	70.0		ug/Kg		70	66 - 123	2	30	
2-Chloronaphthalene	100	61.2 *		ug/Kg		61	68 - 112	5	25	
2-Chlorophenol	100	61.5 *		ug/Kg		61	68 - 117	7	27	
2-Methylnaphthalene	100	59.3 *		ug/Kg		59	64 - 119	7	27	
2-Methylphenol	100	58.3 *		ug/Kg		58	71 - 116	12	25	
2-Nitroaniline	100	83.1		ug/Kg		83	64 - 112	9	22	
2-Nitrophenol	100	66.1 *		ug/Kg		66	67 - 127	1	30	
3 & 4 Methylphenol	100	68.7 *		ug/Kg		69	70 - 116	11	27	
3,3'-Dichlorobenzidine	200	108		ug/Kg		54	20 - 103	20	60	
3-Nitroaniline	100	61.0		ug/Kg		61	27 - 103	2	33	
4,6-Dinitro-2-methylphenol	200	162		ug/Kg		81	48 - 130	9	22	
4-Bromophenyl phenyl ether	100	78.3		ug/Kg		78	68 - 122	1	30	
4-Chloro-3-methylphenol	100	77.0		ug/Kg		77	69 - 121	9	27	
4-Chloroaniline	100	25.4		ug/Kg		25	20 - 103	27	60	
4-Chlorophenyl phenyl ether	100	64.1 *		ug/Kg		64	75 - 108	6	30	
4-Nitroaniline	100	86.1		ug/Kg		86	58 - 108	3	32	
4-Nitrophenol	200	198		ug/Kg		99	20 - 165	5	30	
Acenaphthene	100	63.2 *		ug/Kg		63	68 - 116	6	27	
Acenaphthylene	100	59.4 *		ug/Kg		59	68 - 120	6	28	
Anthracene	100	79.2		ug/Kg		79	73 - 116	4	27	
Benzo[a]anthracene	100	85.0		ug/Kg		85	76 - 119	8	27	
Benzo[a]pyrene	100	86.3		ug/Kg		86	72 - 117	6	30	
Benzo[b]fluoranthene	100	93.5		ug/Kg		94	63 - 132	4	30	
Benzo[g,h,i]perylene	100	88.2		ug/Kg		88	55 - 139	5	28	
Benzo[k]fluoranthene	100	87.3		ug/Kg		87	63 - 119	11	30	
Benzoic acid	200	100 J		ug/Kg		50	29 - 158	5	28	
Benzyl alcohol	100	58.9		ug/Kg		59	55 - 123	2	60	
Bis(2-chloroethoxy)methane	100	58.5 *		ug/Kg		58	69 - 107	2	30	
Bis(2-chloroethyl)ether	100	53.9 *		ug/Kg		54	62 - 110	9	22	
Bis(2-ethylhexyl) phthalate	100	99.6		ug/Kg		100	62 - 144	5	30	
Butyl benzyl phthalate	100	111		ug/Kg		111	69 - 142	3	30	
Carbazole	100	96.1		ug/Kg		96	76 - 135	3	30	
Chrysene	100	98.6		ug/Kg		99	75 - 114	0	26	
Dibenz(a,h)anthracene	100	84.9		ug/Kg		85	56 - 134	21	30	
Dibenzofuran	100	62.5 *		ug/Kg		62	72 - 109	3	30	
Diethyl phthalate	100	96.3		ug/Kg		96	73 - 116	2	26	
Dimethyl phthalate	100	75.4 *		ug/Kg		75	78 - 117	2	30	
Di-n-butyl phthalate	100	88.0		ug/Kg		88	66 - 140	3	30	
Di-n-octyl phthalate	100	90.8		ug/Kg		91	65 - 141	7	30	
Fluoranthene	100	87.4		ug/Kg		87	73 - 125	4	30	
Fluorene	100	68.1 *		ug/Kg		68	70 - 121	4	30	
Hexachlorobenzene	100	76.8		ug/Kg		77	66 - 117	4	30	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCSD 580-182433/3-A

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182433

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	RPD	Limit
		Result	Qualifier				R	L			
Hexachlorobutadiene	100	61.0	*	ug/Kg		61	65 - 116	R	1	30	
Hexachlorocyclopentadiene	100	59.9		ug/Kg		60	46 - 131	R	8	29	
Hexachloroethane	100	58.7	*	ug/Kg		59	62 - 120	R	0	30	
Indeno[1,2,3-cd]pyrene	100	88.9		ug/Kg		89	56 - 127	R	9	29	
Isophorone	100	63.1	*	ug/Kg		63	67 - 119	R	4	30	
Naphthalene	100	61.9		ug/Kg		62	62 - 112	R	4	26	
Nitrobenzene	100	56.5	*	ug/Kg		56	64 - 118	R	4	30	
N-Nitrosodimethylamine	100	63.6	J	ug/Kg		64	38 - 133	R	4	30	
N-Nitrosodi-n-propylamine	100	63.6		ug/Kg		64	62 - 116	R	5	28	
N-Nitrosodiphenylamine	100	76.2		ug/Kg		76	73 - 115	R	3	30	
Pentachlorophenol	200	118		ug/Kg		59	45 - 117	R	21	23	
Phenanthrene	100	80.4		ug/Kg		80	73 - 106	R	2	28	
Phenol	100	62.4	*	ug/Kg		62	63 - 111	R	1	26	
Pyrene	100	88.3		ug/Kg		88	70 - 120	R	3	30	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	75		28 - 143
2-Fluorobiphenyl	71		42 - 140
2-Fluorophenol	73		36 - 145
Nitrobenzene-d5	69		38 - 141
Phenol-d5	75		38 - 149
Terphenyl-d14	91		42 - 151

Lab Sample ID: 580-47345-3 MS

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: WM-CB-52-20150203-S

Prep Type: Total/NA

Prep Batch: 182433

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				R	L
1,2,4-Trichlorobenzene	ND	*	216	188		ug/Kg	⊗	87	66 - 115	
1,2-Dichlorobenzene	ND	*	216	190		ug/Kg	⊗	88	64 - 112	
1,3-Dichlorobenzene	ND	*	216	168		ug/Kg	⊗	78	64 - 111	
1,4-Dichlorobenzene	ND	*	216	191		ug/Kg	⊗	88	65 - 110	
1-Methylnaphthalene	150	*	216	400		ug/Kg	⊗	115	62 - 118	
2,2'-oxybis[1-chloropropane]	ND		216	204	J	ug/Kg	⊗	95	41 - 126	
2,4,5-Trichlorophenol	ND		216	265		ug/Kg	⊗	123	57 - 133	
2,4,6-Trichlorophenol	ND		216	297	J F1	ug/Kg	⊗	138	62 - 133	
2,4-Dichlorophenol	ND		216	241		ug/Kg	⊗	112	68 - 125	
2,4-Dimethylphenol	ND		216	301	F1	ug/Kg	⊗	140	54 - 139	
2,4-Dinitrophenol	ND	^	432	ND	F1 ^	ug/Kg	⊗	0	20 - 141	
2,4-Dinitrotoluene	ND		216	268	F1	ug/Kg	⊗	124	68 - 121	
2,6-Dinitrotoluene	ND		216	411	F1	ug/Kg	⊗	191	66 - 123	
2-Chloronaphthalene	ND	*	216	213		ug/Kg	⊗	99	68 - 112	
2-Chlorophenol	ND	*	216	243		ug/Kg	⊗	113	68 - 117	
2-Methylnaphthalene	220	*	216	424		ug/Kg	⊗	93	64 - 119	
2-Methylphenol	ND	*	216	227		ug/Kg	⊗	105	71 - 116	
2-Nitroaniline	ND		216	306	F1	ug/Kg	⊗	142	64 - 112	
2-Nitrophenol	ND	*	216	272		ug/Kg	⊗	126	67 - 127	
3 & 4 Methylphenol	320	J *	216	513		ug/Kg	⊗	91	70 - 116	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: 580-47345-3 MS

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: WM-CB-52-20150203-S

Prep Type: Total/NA

Prep Batch: 182433

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	
3,3'-Dichlorobenzidine	ND		432	ND	F1	ug/Kg	⊗	0	20 - 103	
3-Nitroaniline	ND		216	ND	F1	ug/Kg	⊗	0	27 - 103	
4,6-Dinitro-2-methylphenol	ND		432	ND	F1	ug/Kg	⊗	0	48 - 130	
4-Bromophenyl phenyl ether	ND		216	161	J	ug/Kg	⊗	75	68 - 122	
4-Chloro-3-methylphenol	ND		216	440	F1	ug/Kg	⊗	204	69 - 121	
4-Chloroaniline	ND		216	ND	F1	ug/Kg	⊗	0	20 - 103	
4-Chlorophenyl phenyl ether	ND *		216	244	F1	ug/Kg	⊗	113	75 - 108	
4-Nitroaniline	ND		216	ND	F1	ug/Kg	⊗	0	58 - 108	
4-Nitrophenol	ND		432	ND		ug/Kg	⊗	NC	20 - 165	
Acenaphthene	76 *		216	339	F1	ug/Kg	⊗	121	68 - 116	
Acenaphthylene	54 *		216	264		ug/Kg	⊗	97	68 - 120	
Anthracene	240		216	445		ug/Kg	⊗	94	73 - 116	
Benzo[a]anthracene	410		216	773	F1	ug/Kg	⊗	167	76 - 119	
Benzo[a]pyrene	350		216	471	F1	ug/Kg	⊗	55	72 - 117	
Benzo[b]fluoranthene	920		216	1150	4	ug/Kg	⊗	109	63 - 132	
Benzo[g,h,i]perylene	170		216	272	F1	ug/Kg	⊗	48	55 - 139	
Benzo[k]fluoranthene	320		216	537		ug/Kg	⊗	99	63 - 119	
Benzoic acid	ND		432	ND		ug/Kg	⊗	NC	29 - 158	
Benzyl alcohol	ND		216	362	F1	ug/Kg	⊗	168	55 - 123	
Bis(2-chloroethoxy)methane	ND *		216	238	F1	ug/Kg	⊗	110	69 - 107	
Bis(2-chloroethyl)ether	ND *		216	159	J	ug/Kg	⊗	74	62 - 110	
Butyl benzyl phthalate	850 B		216	814	F1	ug/Kg	⊗	-17	69 - 142	
Carbazole	180 J		216	459		ug/Kg	⊗	131	76 - 135	
Chrysene	1400		216	1650	4	ug/Kg	⊗	110	75 - 114	
Dibenz(a,h)anthracene	80 J		216	202		ug/Kg	⊗	56	56 - 134	
Dibenzofuran	100 J *		216	287		ug/Kg	⊗	86	72 - 109	
Diethyl phthalate	1400 B		216	1290	4	ug/Kg	⊗	-38	73 - 116	
Dimethyl phthalate	91 J *		216	231	F1	ug/Kg	⊗	65	78 - 117	
Di-n-butyl phthalate	ND		216	204	J	ug/Kg	⊗	95	66 - 140	
Di-n-octyl phthalate	1900		216	1990	4	ug/Kg	⊗	56	65 - 141	
Fluoranthene	2100		216	2360	4	ug/Kg	⊗	141	73 - 125	
Fluorene	270 *		216	453		ug/Kg	⊗	86	70 - 121	
Hexachlorobenzene	ND		216	248		ug/Kg	⊗	115	66 - 117	
Hexachlorobutadiene	ND *		216	196		ug/Kg	⊗	91	65 - 116	
Hexachlorocyclopentadiene	ND		216	ND	F1	ug/Kg	⊗	0	46 - 131	
Hexachloroethane	ND *		216	232		ug/Kg	⊗	107	62 - 120	
Indeno[1,2,3-cd]pyrene	160		216	340		ug/Kg	⊗	85	56 - 127	
Isophorone	ND *		216	341	F1	ug/Kg	⊗	158	67 - 119	
Naphthalene	110		216	262		ug/Kg	⊗	72	62 - 112	
Nitrobenzene	ND *		216	179	J	ug/Kg	⊗	83	64 - 118	
N-Nitrosodimethylamine	ND		216	ND		ug/Kg	⊗	NC	38 - 133	
N-Nitrosodi-n-propylamine	ND		216	410	F1	ug/Kg	⊗	190	62 - 116	
N-Nitrosodiphenylamine	ND		216	484	F1	ug/Kg	⊗	224	73 - 115	
Pentachlorophenol	ND		432	666	F1	ug/Kg	⊗	154	45 - 117	
Phenanthrene	1400		216	1690	4	ug/Kg	⊗	132	73 - 106	
Phenol	170 J *		216	303		ug/Kg	⊗	63	63 - 111	
Pyrene	2300		216	2730	4	ug/Kg	⊗	187	70 - 120	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: 580-47345-3 MS

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: WM-CB-52-20150203-S

Prep Type: Total/NA

Prep Batch: 182433

Surrogate	MS	MS	%Recovery	Qualifier	Limits
2,4,6-Tribromophenol	112				28 - 143
2-Fluorobiphenyl	97				42 - 140
2-Fluorophenol	99				36 - 145
Nitrobenzene-d5	69				38 - 141
Phenol-d5	100				38 - 149
Terphenyl-d14	109				42 - 151

Lab Sample ID: 580-47345-3 MSD

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: WM-CB-52-20150203-S

Prep Type: Total/NA

Prep Batch: 182433

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1,2,4-Trichlorobenzene	ND	*	216	195		ug/Kg	⊗	90	66 - 115	3	28
1,2-Dichlorobenzene	ND	*	216	180		ug/Kg	⊗	84	64 - 112	5	60
1,3-Dichlorobenzene	ND	*	216	174		ug/Kg	⊗	81	64 - 111	3	60
1,4-Dichlorobenzene	ND	*	216	179		ug/Kg	⊗	83	65 - 110	7	32
1-Methylnaphthalene	150	*	216	351		ug/Kg	⊗	92	62 - 118	13	30
2,2'-oxybis[1-chloropropane]	ND		216	246	J	ug/Kg	⊗	114	41 - 126	19	60
2,4,5-Trichlorophenol	ND		216	271		ug/Kg	⊗	126	57 - 133	2	60
2,4,6-Trichlorophenol	ND		216	316	J F1	ug/Kg	⊗	146	62 - 133	6	60
2,4-Dichlorophenol	ND		216	287	F1	ug/Kg	⊗	133	68 - 125	17	60
2,4-Dimethylphenol	ND		216	357	F1	ug/Kg	⊗	166	54 - 139	17	60
2,4-Dinitrophenol	ND	^	431	ND	F1 ^	ug/Kg	⊗	0	20 - 141	NC	60
2,4-Dinitrotoluene	ND		216	467	F1 F2	ug/Kg	⊗	216	68 - 121	54	31
2,6-Dinitrotoluene	ND		216	ND	F1	ug/Kg	⊗	0	66 - 123	NC	60
2-Chloronaphthalene	ND	*	216	222		ug/Kg	⊗	103	68 - 112	4	25
2-Chlorophenol	ND	*	216	214	J	ug/Kg	⊗	99	68 - 117	12	27
2-Methylnaphthalene	220	*	216	443		ug/Kg	⊗	102	64 - 119	4	27
2-Methylphenol	ND	*	216	240		ug/Kg	⊗	111	71 - 116	5	25
2-Nitroaniline	ND		216	419	F1	ug/Kg	⊗	194	64 - 112	31	60
2-Nitrophenol	ND	*	216	235		ug/Kg	⊗	109	67 - 127	15	60
3 & 4 Methylphenol	320	J *	216	590	F1	ug/Kg	⊗	126	70 - 116	14	27
3,3'-Dichlorobenzidine	ND		431	ND	F1	ug/Kg	⊗	0	20 - 103	NC	60
3-Nitroaniline	ND		216	ND	F1	ug/Kg	⊗	0	27 - 103	NC	60
4,6-Dinitro-2-methylphenol	ND		431	ND	F1	ug/Kg	⊗	0	48 - 130	NC	60
4-Bromophenyl phenyl ether	ND		216	263		ug/Kg	⊗	122	68 - 122	48	60
4-Chloro-3-methylphenol	ND		216	655	F1 F2	ug/Kg	⊗	304	69 - 121	39	27
4-Chloroaniline	ND		216	ND	F1	ug/Kg	⊗	0	20 - 103	NC	60
4-Chlorophenyl phenyl ether	ND	*	216	240	F1	ug/Kg	⊗	111	75 - 108	2	60
4-Nitroaniline	ND		216	ND	F1	ug/Kg	⊗	0	58 - 108	NC	60
4-Nitrophenol	ND		431	ND		ug/Kg	⊗	NC	20 - 165	NC	33
Acenaphthene	76	*	216	321		ug/Kg	⊗	113	68 - 116	5	27
Acenaphthylene	54	*	216	278		ug/Kg	⊗	104	68 - 120	5	28
Anthracene	240		216	713	F1 F2	ug/Kg	⊗	218	73 - 116	46	27
Benzo[a]anthracene	410		216	1990	F1 F2	ug/Kg	⊗	732	76 - 119	88	27
Benzo[a]pyrene	350		216	1560	F1 F2	ug/Kg	⊗	562	72 - 117	107	30
Benzo[b]fluoranthene	920		216	3430	4 F2	ug/Kg	⊗	1166	63 - 132	99	31
Benzo[g,h,i]perylene	170		216	540	F1 F2	ug/Kg	⊗	173	55 - 139	66	28

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: 580-47345-3 MSD

Client Sample ID: WM-CB-52-20150203-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 182776

Prep Batch: 182433

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzo[k]fluoranthene	320		216	1270	F1 F2	ug/Kg	⊗	437	63 - 119	81	31
Benzoic acid	ND		431	ND		ug/Kg	⊗	NC	29 - 158	NC	60
Benzyl alcohol	ND		216	257		ug/Kg	⊗	119	55 - 123	34	60
Bis(2-chloroethoxy)methane	ND *		216	233	F1	ug/Kg	⊗	108	69 - 107	2	60
Bis(2-chloroethyl)ether	ND *		216	138	J	ug/Kg	⊗	64	62 - 110	14	60
Butyl benzyl phthalate	850	B	216	1070		ug/Kg	⊗	100	69 - 142	27	60
Carbazole	180	J	216	577	F1	ug/Kg	⊗	186	76 - 135	23	60
Chrysene	1400		216	3890	4 F2	ug/Kg	⊗	1148	75 - 114	81	26
Dibenz(a,h)anthracene	80	J	216	327	F2	ug/Kg	⊗	115	56 - 134	47	30
Dibenzofuran	100	J *	216	323		ug/Kg	⊗	103	72 - 109	12	60
Diethyl phthalate	1400	B	216	1530	4	ug/Kg	⊗	77	73 - 116	17	26
Dimethyl phthalate	91	J *	216	252	F1	ug/Kg	⊗	75	78 - 117	9	60
Di-n-butyl phthalate	ND		216	302	J	ug/Kg	⊗	140	66 - 140	39	60
Di-n-octyl phthalate	1900		216	2520	4	ug/Kg	⊗	299	65 - 141	23	31
Fluoranthene	2100		216	7250	4 F2	ug/Kg	⊗	2406	73 - 125	102	36
Fluorene	270 *		216	534	F1	ug/Kg	⊗	123	70 - 121	16	31
Hexachlorobenzene	ND		216	214		ug/Kg	⊗	99	66 - 117	15	60
Hexachlorobutadiene	ND *		216	207		ug/Kg	⊗	96	65 - 116	6	60
Hexachlorocyclopentadiene	ND		216	ND	F1	ug/Kg	⊗	0	46 - 131	NC	60
Hexachloroethane	ND *		216	136	J	ug/Kg	⊗	63	62 - 120	52	60
Indeno[1,2,3-cd]pyrene	160		216	692	F1 F2	ug/Kg	⊗	249	56 - 127	68	29
Isophorone	ND *		216	212	J	ug/Kg	⊗	98	67 - 119	47	60
Naphthalene	110		216	305		ug/Kg	⊗	92	62 - 112	15	26
Nitrobenzene	ND *		216	271	F1	ug/Kg	⊗	126	64 - 118	41	60
N-Nitrosodimethylamine	ND		216	ND		ug/Kg	⊗	NC	38 - 133	NC	60
N-Nitrosodi-n-propylamine	ND		216	338	F1	ug/Kg	⊗	157	62 - 116	19	28
N-Nitrosodiphenylamine	ND		216	441	F1	ug/Kg	⊗	205	73 - 115	9	60
Pentachlorophenol	ND		431	639	F1	ug/Kg	⊗	148	45 - 117	4	68
Phenanthrene	1400		216	3580	4 F2	ug/Kg	⊗	1009	73 - 106	72	28
Phenol	170	J *	216	344		ug/Kg	⊗	82	63 - 111	12	26
Pyrene	2300		216	7120	4 F2	ug/Kg	⊗	2222	70 - 120	89	31

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	113		28 - 143
2-Fluorobiphenyl	96		42 - 140
2-Fluorophenol	92		36 - 145
Nitrobenzene-d5	86		38 - 141
Phenol-d5	93		38 - 149
Terphenyl-d14	104		42 - 151

Lab Sample ID: MB 580-183304/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 183363

Prep Batch: 183304

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trichlorobenzene	ND		5.0	1.5	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
1,2-Dichlorobenzene	ND		5.5	1.5	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
1,3-Dichlorobenzene	ND		5.0	1.5	ug/Kg		02/26/15 14:48	02/27/15 11:00	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: MB 580-183304/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 183363

Prep Batch: 183304

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		5.0	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
1-Methylnaphthalene	ND		3.0	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2,2'-oxybis[1-chloropropane]	ND		25	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2,4,5-Trichlorophenol	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2,4,6-Trichlorophenol	ND		15	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2,4-Dichlorophenol	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2,4-Dimethylphenol	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2,4-Dinitrophenol	ND		100	20	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2,4-Dinitrotoluene	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2-Chloronaphthalene	ND		2.0	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2-Chlorophenol	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2-Methylnaphthalene	ND		2.0	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2-Methylphenol	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2-Nitroaniline	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
2-Nitrophenol	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
3 & 4 Methylphenol	ND		20	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
3,3'-Dichlorobenzidine	ND		20	3.0	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
3-Nitroaniline	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
4,6-Dinitro-2-methylphenol	ND		100	10	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
4-Bromophenyl phenyl ether	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
4-Chloro-3-methylphenol	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
4-Chloroaniline	ND ^		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
4-Chlorophenyl phenyl ether	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
4-Nitroaniline	ND		10	2.0	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
4-Nitrophenol	ND		100	25	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Acenaphthene	ND		2.0	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Acenaphthylene	ND		2.0	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Anthracene	ND		2.0	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Benzo[a]anthracene	ND		2.0	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Benzo[a]pyrene	ND		3.0	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Benzo[b]fluoranthene	ND		2.0	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Benzo[g,h,i]perylene	ND		2.5	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Benzo[k]fluoranthene	ND		2.5	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Benzoic acid	ND		250	75	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Benzyl alcohol	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Bis(2-chloroethoxy)methane	ND		10	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Bis(2-chloroethyl)ether	ND		10	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Bis(2-ethylhexyl) phthalate	ND		60	5.0	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Butyl benzyl phthalate	ND		20	5.0	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Carbazole	ND		10	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Chrysene	ND		2.5	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Dibenz(a,h)anthracene	ND		4.0	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Dibenzofuran	ND		10	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Diethyl phthalate	5.22 J		20	1.5	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Dimethyl phthalate	ND		10	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Di-n-butyl phthalate	ND		50	5.0	ug/Kg	02/26/15 14:48	02/27/15 11:00		1
Di-n-octyl phthalate	ND		50	0.50	ug/Kg	02/26/15 14:48	02/27/15 11:00		1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: MB 580-183304/1-A

Matrix: Solid

Analysis Batch: 183363

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 183304

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							Prepared	Analyzed	Dil Fac
Fluoranthene	ND				2.0	0.50	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Fluorene	ND				2.0	0.50	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Hexachlorobenzene	ND				5.0	0.50	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Hexachlorobutadiene	ND				5.0	1.5	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Hexachlorocyclopentadiene	ND				10	1.0	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Hexachloroethane	ND				10	1.5	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Indeno[1,2,3-cd]pyrene	ND				4.0	0.50	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Isophorone	ND				10	0.50	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Naphthalene	ND				2.0	0.50	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Nitrobenzene	ND				10	3.4	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
N-Nitrosodimethylamine	ND				100	25	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
N-Nitrosodi-n-propylamine	ND				10	1.5	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
N-Nitrosodiphenylamine	ND				5.0	0.50	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Pentachlorophenol	ND				20	2.0	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Phenanthrene	ND				2.0	0.50	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Phenol	ND				10	1.5	ug/Kg		02/26/15 14:48	02/27/15 11:00	1
Pyrene	ND				2.0	0.50	ug/Kg		02/26/15 14:48	02/27/15 11:00	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	76		28 - 143			02/26/15 14:48	02/27/15 11:00	1
2-Fluorobiphenyl	98		42 - 140			02/26/15 14:48	02/27/15 11:00	1
2-Fluorophenol	99		36 - 145			02/26/15 14:48	02/27/15 11:00	1
Nitrobenzene-d5	86		38 - 141			02/26/15 14:48	02/27/15 11:00	1
Phenol-d5	96		38 - 149			02/26/15 14:48	02/27/15 11:00	1
Terphenyl-d14	109		42 - 151			02/26/15 14:48	02/27/15 11:00	1

Lab Sample ID: LCS 580-183304/2-A

Matrix: Solid

Analysis Batch: 183363

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 183304

Analyte	Spike	LCS			Unit	D	%Rec	Limits
	Added	Result	Qualifier	Unit				
1,2,4-Trichlorobenzene	100	98.1		ug/Kg		98	66 - 115	
1,2-Dichlorobenzene	100	101		ug/Kg		101	64 - 112	
1,3-Dichlorobenzene	100	98.9		ug/Kg		99	64 - 111	
1,4-Dichlorobenzene	100	96.3		ug/Kg		96	65 - 110	
1-Methylnaphthalene	100	99.7		ug/Kg		100	62 - 118	
2,2'-oxybis[1-chloropropane]	100	89.0		ug/Kg		89	41 - 126	
2,4,5-Trichlorophenol	100	99.1		ug/Kg		99	57 - 133	
2,4,6-Trichlorophenol	100	99.6		ug/Kg		100	62 - 133	
2,4-Dichlorophenol	100	99.1		ug/Kg		99	68 - 125	
2,4-Dimethylphenol	100	92.8		ug/Kg		93	54 - 139	
2,4-Dinitrophenol	200	167		ug/Kg		83	20 - 141	
2,4-Dinitrotoluene	100	90.1		ug/Kg		90	68 - 121	
2,6-Dinitrotoluene	100	98.6		ug/Kg		99	66 - 123	
2-Chloronaphthalene	100	98.9		ug/Kg		99	68 - 112	
2-Chlorophenol	100	97.4		ug/Kg		97	68 - 117	
2-Methylnaphthalene	100	98.1		ug/Kg		98	64 - 119	
2-Methylphenol	100	89.7		ug/Kg		90	71 - 116	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCS 580-183304/2-A

Matrix: Solid

Analysis Batch: 183363

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 183304

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
2-Nitroaniline	100	97.0		ug/Kg		97	64 - 112	
2-Nitrophenol	100	93.8		ug/Kg		94	67 - 127	
3 & 4 Methylphenol	100	102		ug/Kg		102	70 - 116	
3,3'-Dichlorobenzidine	200	117		ug/Kg		58	20 - 103	
3-Nitroaniline	100	71.2		ug/Kg		71	27 - 103	
4,6-Dinitro-2-methylphenol	200	198		ug/Kg		99	48 - 130	
4-Bromophenyl phenyl ether	100	103		ug/Kg		103	68 - 122	
4-Chloro-3-methylphenol	100	105		ug/Kg		105	69 - 121	
4-Chloroaniline	100	45.3 ^		ug/Kg		45	20 - 103	
4-Chlorophenyl phenyl ether	100	97.3		ug/Kg		97	75 - 108	
4-Nitroaniline	100	96.4		ug/Kg		96	58 - 108	
4-Nitrophenol	200	198		ug/Kg		99	20 - 165	
Acenaphthene	100	99.6		ug/Kg		100	68 - 116	
Acenaphthylene	100	93.7		ug/Kg		94	68 - 120	
Anthracene	100	102		ug/Kg		102	73 - 116	
Benzo[a]anthracene	100	103		ug/Kg		103	76 - 119	
Benzo[a]pyrene	100	100		ug/Kg		100	72 - 117	
Benzo[b]fluoranthene	100	106		ug/Kg		106	63 - 132	
Benzo[g,h,i]perylene	100	103		ug/Kg		103	55 - 139	
Benzo[k]fluoranthene	100	118		ug/Kg		118	63 - 119	
Benzoic acid	200	ND		ug/Kg		29	29 - 158	
Benzyl alcohol	100	84.3		ug/Kg		84	55 - 123	
Bis(2-chloroethoxy)methane	100	88.4		ug/Kg		88	69 - 107	
Bis(2-chloroethyl)ether	100	89.2		ug/Kg		89	62 - 110	
Bis(2-ethylhexyl) phthalate	100	115		ug/Kg		115	62 - 144	
Butyl benzyl phthalate	100	120		ug/Kg		120	69 - 142	
Carbazole	100	117		ug/Kg		117	76 - 135	
Chrysene	100	113		ug/Kg		113	75 - 114	
Dibenz(a,h)anthracene	100	114		ug/Kg		114	56 - 134	
Dibenzofuran	100	93.6		ug/Kg		94	72 - 109	
Diethyl phthalate	100	105		ug/Kg		105	73 - 116	
Dimethyl phthalate	100	98.7		ug/Kg		99	78 - 117	
Di-n-butyl phthalate	100	95.6		ug/Kg		96	66 - 140	
Di-n-octyl phthalate	100	105		ug/Kg		105	65 - 141	
Fluoranthene	100	105		ug/Kg		105	73 - 125	
Fluorene	100	101		ug/Kg		101	70 - 121	
Hexachlorobenzene	100	110		ug/Kg		110	66 - 117	
Hexachlorobutadiene	100	94.4		ug/Kg		94	65 - 116	
Hexachlorocyclopentadiene	100	100		ug/Kg		100	46 - 131	
Hexachloroethane	100	96.9		ug/Kg		97	62 - 120	
Indeno[1,2,3-cd]pyrene	100	113		ug/Kg		113	56 - 127	
Isophorone	100	97.5		ug/Kg		98	67 - 119	
Naphthalene	100	102		ug/Kg		102	62 - 112	
Nitrobenzene	100	89.7		ug/Kg		90	64 - 118	
N-Nitrosodimethylamine	100	88.3 J		ug/Kg		88	38 - 133	
N-Nitrosodi-n-propylamine	100	93.7		ug/Kg		94	62 - 116	
N-Nitrosodiphenylamine	100	86.7		ug/Kg		87	73 - 115	
Pentachlorophenol	200	166		ug/Kg		83	45 - 117	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCS 580-183304/2-A

Matrix: Solid

Analysis Batch: 183363

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 183304

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
Phenanthrene	100	107	*	ug/Kg		107	73 - 106	
Phenol	100	96.2		ug/Kg		96	63 - 111	
Pyrene	100	103		ug/Kg		103	70 - 120	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
2,4,6-Tribromophenol	93		28 - 143					
2-Fluorobiphenyl	101		42 - 140					
2-Fluorophenol	105		36 - 145					
Nitrobenzene-d5	96		38 - 141					
Phenol-d5	99		38 - 149					
Terphenyl-d14	112		42 - 151					

Lab Sample ID: LCSD 580-183304/3-A

Matrix: Solid

Analysis Batch: 183363

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 183304

Analyte	Spike Added	LCSD		Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
1,2,4-Trichlorobenzene	100	96.6		ug/Kg		97	66 - 115	2	28
1,2-Dichlorobenzene	100	105		ug/Kg		105	64 - 112	4	30
1,3-Dichlorobenzene	100	101		ug/Kg		101	64 - 111	2	30
1,4-Dichlorobenzene	100	102		ug/Kg		102	65 - 110	6	30
1-Methylnaphthalene	100	99.3		ug/Kg		99	62 - 118	0	30
2,2'-oxybis[1-chloropropane]	100	94.7		ug/Kg		95	41 - 126	6	57
2,4,5-Trichlorophenol	100	102		ug/Kg		102	57 - 133	3	30
2,4,6-Trichlorophenol	100	87.5		ug/Kg		87	62 - 133	13	30
2,4-Dichlorophenol	100	107		ug/Kg		107	68 - 125	7	30
2,4-Dimethylphenol	100	93.4		ug/Kg		93	54 - 139	1	30
2,4-Dinitrophenol	200	150		ug/Kg		75	20 - 141	11	36
2,4-Dinitrotoluene	100	90.7		ug/Kg		91	68 - 121	1	30
2,6-Dinitrotoluene	100	96.0		ug/Kg		96	66 - 123	3	30
2-Chloronaphthalene	100	100		ug/Kg		100	68 - 112	1	25
2-Chlorophenol	100	107		ug/Kg		107	68 - 117	10	27
2-Methylnaphthalene	100	99.4		ug/Kg		99	64 - 119	1	27
2-Methylphenol	100	96.1		ug/Kg		96	71 - 116	7	25
2-Nitroaniline	100	88.5		ug/Kg		88	64 - 112	9	22
2-Nitrophenol	100	102		ug/Kg		102	67 - 127	8	30
3 & 4 Methylphenol	100	112		ug/Kg		112	70 - 116	10	27
3,3'-Dichlorobenzidine	200	113		ug/Kg		56	20 - 103	3	60
3-Nitroaniline	100	71.1		ug/Kg		71	27 - 103	0	33
4,6-Dinitro-2-methylphenol	200	196		ug/Kg		98	48 - 130	1	22
4-Bromophenyl phenyl ether	100	100		ug/Kg		100	68 - 122	3	30
4-Chloro-3-methylphenol	100	105		ug/Kg		105	69 - 121	0	27
4-Chloroaniline	100	48.3 ^		ug/Kg		48	20 - 103	6	60
4-Chlorophenyl phenyl ether	100	91.8		ug/Kg		92	75 - 108	6	30
4-Nitroaniline	100	86.3		ug/Kg		86	58 - 108	11	32
4-Nitrophenol	200	182		ug/Kg		91	20 - 165	9	30
Acenaphthene	100	98.3		ug/Kg		98	68 - 116	1	27
Acenaphthylene	100	94.9		ug/Kg		95	68 - 120	1	28

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCSD 580-183304/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 183363

Prep Batch: 183304

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD
	Added	Result	Qualifier						
Anthracene	100	103		ug/Kg		103	73 - 116	1	27
Benzo[a]anthracene	100	104		ug/Kg		104	76 - 119	0	27
Benzo[a]pyrene	100	100		ug/Kg		100	72 - 117	0	30
Benzo[b]fluoranthene	100	104		ug/Kg		104	63 - 132	2	30
Benzo[g,h,i]perylene	100	106		ug/Kg		106	55 - 139	2	28
Benzo[k]fluoranthene	100	117		ug/Kg		117	63 - 119	1	30
Benzoic acid	200	ND *		ug/Kg		26	29 - 158	13	28
Benzyl alcohol	100	93.2		ug/Kg		93	55 - 123	10	60
Bis(2-chloroethoxy)methane	100	87.1		ug/Kg		87	69 - 107	2	30
Bis(2-chloroethyl)ether	100	97.3		ug/Kg		97	62 - 110	9	22
Bis(2-ethylhexyl) phthalate	100	119		ug/Kg		119	62 - 144	3	30
Butyl benzyl phthalate	100	120		ug/Kg		120	69 - 142	0	30
Carbazole	100	111		ug/Kg		111	76 - 135	5	30
Chrysene	100	116 *		ug/Kg		116	75 - 114	2	26
Dibenz(a,h)anthracene	100	108		ug/Kg		108	56 - 134	5	30
Dibenzofuran	100	97.7		ug/Kg		98	72 - 109	4	30
Diethyl phthalate	100	105		ug/Kg		105	73 - 116	0	26
Dimethyl phthalate	100	96.1		ug/Kg		96	78 - 117	3	30
Di-n-butyl phthalate	100	96.8		ug/Kg		97	66 - 140	1	30
Di-n-octyl phthalate	100	105		ug/Kg		105	65 - 141	0	30
Fluoranthene	100	104		ug/Kg		104	73 - 125	1	30
Fluorene	100	95.6		ug/Kg		96	70 - 121	5	30
Hexachlorobenzene	100	107		ug/Kg		107	66 - 117	3	30
Hexachlorobutadiene	100	98.9		ug/Kg		99	65 - 116	5	30
Hexachlorocyclopentadiene	100	96.0		ug/Kg		96	46 - 131	4	29
Hexachloroethane	100	97.1		ug/Kg		97	62 - 120	0	30
Indeno[1,2,3-cd]pyrene	100	104		ug/Kg		104	56 - 127	8	29
Isophorone	100	94.5		ug/Kg		94	67 - 119	3	30
Naphthalene	100	103		ug/Kg		103	62 - 112	1	26
Nitrobenzene	100	85.2		ug/Kg		85	64 - 118	5	30
N-Nitrosodimethylamine	100	90.4 J		ug/Kg		90	38 - 133	2	30
N-Nitrosodi-n-propylamine	100	104		ug/Kg		104	62 - 116	10	28
N-Nitrosodiphenylamine	100	86.3		ug/Kg		86	73 - 115	0	30
Pentachlorophenol	200	169		ug/Kg		85	45 - 117	2	23
Phenanthrene	100	104		ug/Kg		104	73 - 106	2	28
Phenol	100	96.4		ug/Kg		96	63 - 111	0	26
Pyrene	100	102		ug/Kg		102	70 - 120	1	30

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	95		28 - 143
2-Fluorobiphenyl	98		42 - 140
2-Fluorophenol	110		36 - 145
Nitrobenzene-d5	94		38 - 141
Phenol-d5	103		38 - 149
Terphenyl-d14	106		42 - 151

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: 580-47345-3 MS

Matrix: Solid

Analysis Batch: 182776

Client Sample ID: WM-CB-52-20150203-S

Prep Type: Total/NA

Prep Batch: 182433

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Bis(2-ethylhexyl) phthalate - DL	61000	B	216	61700	4	ug/Kg	⊗	288	62 - 144

Lab Sample ID: 580-47345-3 MSD

Client Sample ID: WM-CB-52-20150203-S

Prep Type: Total/NA

Prep Batch: 182433

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Bis(2-ethylhexyl) phthalate - DL	61000	B	216	62500	4	ug/Kg	⊗	659	62 - 144

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

Lab Sample ID: 580-47345-4 MS

Client Sample ID: WM-CB-21-20150203-S

Prep Type: Total/NA

Prep Batch: 183304

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,2,4-Trichlorobenzene - RE	ND	H	261	227		ug/Kg	⊗	87	66 - 115
1,2-Dichlorobenzene - RE	ND	H	261	245		ug/Kg	⊗	94	64 - 112
1,3-Dichlorobenzene - RE	ND	H	261	242		ug/Kg	⊗	93	64 - 111
1,4-Dichlorobenzene - RE	ND	H	261	223		ug/Kg	⊗	85	65 - 110
1-Methylnaphthalene - RE	50	J H	261	305		ug/Kg	⊗	98	62 - 118
2,2'-oxybis[1-chloropropane] - RE	ND	H	261	251	J	ug/Kg	⊗	96	41 - 126
2,4,5-Trichlorophenol - RE	ND	H	261	304		ug/Kg	⊗	116	57 - 133
2,4,6-Trichlorophenol - RE	ND	H	261	331	J	ug/Kg	⊗	127	62 - 133
2,4-Dichlorophenol - RE	ND	H	261	302		ug/Kg	⊗	115	68 - 125
2,4-Dimethylphenol - RE	ND	H	261	349		ug/Kg	⊗	133	54 - 139
2,4-Dinitrophenol - RE	ND	H	522	ND	F1	ug/Kg	⊗	0	20 - 141
2,4-Dinitrotoluene - RE	ND	H	261	328	F1	ug/Kg	⊗	126	68 - 121
2,6-Dinitrotoluene - RE	ND	H	261	345	F1	ug/Kg	⊗	132	66 - 123
2-Chloronaphthalene - RE	ND	H	261	293		ug/Kg	⊗	112	68 - 112
2-Chlorophenol - RE	ND	H	261	296		ug/Kg	⊗	113	68 - 117
2-Methylnaphthalene - RE	62	H	261	332		ug/Kg	⊗	103	64 - 119
2-Methylphenol - RE	ND	H	261	290		ug/Kg	⊗	111	71 - 116
2-Nitroaniline - RE	ND	H	261	243	J	ug/Kg	⊗	93	64 - 112
2-Nitrophenol - RE	ND	H	261	248	J	ug/Kg	⊗	95	67 - 127
3 & 4 Methylphenol - RE	1200	H	261	1770	4	ug/Kg	⊗	208	70 - 116
3,3'-Dichlorobenzidine - RE	ND	H	522	120	J	ug/Kg	⊗	23	20 - 103
3-Nitroaniline - RE	ND	H	261	279	F1	ug/Kg	⊗	107	27 - 103
4,6-Dinitro-2-methylphenol - RE	ND	H	522	ND	F1	ug/Kg	⊗	0	48 - 130
4-Bromophenyl phenyl ether - RE	ND	H	261	266		ug/Kg	⊗	102	68 - 122
4-Chloro-3-methylphenol - RE	ND	H	261	426	F1	ug/Kg	⊗	163	69 - 121
4-Chloroaniline - RE	ND	H ^	261	ND	F1 ^	ug/Kg	⊗	0	20 - 103
4-Chlorophenyl phenyl ether - RE	ND	H	261	269		ug/Kg	⊗	103	75 - 108
4-Nitroaniline - RE	ND	H	261	79.3	J F1	ug/Kg	⊗	30	58 - 108
4-Nitrophenol - RE	ND	H	522	707	J	ug/Kg	⊗	NC	20 - 165
Acenaphthene - RE	150	H	261	403		ug/Kg	⊗	96	68 - 116
Acenaphthylene - RE	58	H	261	294		ug/Kg	⊗	90	68 - 120

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: 580-47345-4 MS

Matrix: Solid

Analysis Batch: 183363

Client Sample ID: WM-CB-21-20150203-S

Prep Type: Total/NA

Prep Batch: 183304

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier	Added	Result	Qualifier					
Anthracene - RE	430	H	261	793	F1	ug/Kg	⊗	139	73 - 116	
Benzo[a]anthracene - RE	570	H	261	914	F1	ug/Kg	⊗	132	76 - 119	
Benzo[a]pyrene - RE	320	H	261	772	F1	ug/Kg	⊗	173	72 - 117	
Benzo[b]fluoranthene - RE	1100	H	261	1560	4	ug/Kg	⊗	185	63 - 132	
Benzo[g,h,i]perylene - RE	170	H	261	293	F1	ug/Kg	⊗	46	55 - 139	
Benzo[k]fluoranthene - RE	240	H	261	732	F1	ug/Kg	⊗	186	63 - 119	
Benzoic acid - RE	ND	H *	522	2510	J	ug/Kg	⊗	NC	29 - 158	
Benzyl alcohol - RE	160	J H	261	267	F1	ug/Kg	⊗	41	55 - 123	
Bis(2-chloroethoxy)methane - RE	ND	H	261	181	J	ug/Kg	⊗	69	69 - 107	
Bis(2-chloroethyl)ether - RE	ND	H	261	235	J	ug/Kg	⊗	90	62 - 110	
Butyl benzyl phthalate - RE	1400	H	261	1450	4	ug/Kg	⊗	35	69 - 142	
Carbazole - RE	310	H	261	623		ug/Kg	⊗	120	76 - 135	
Chrysene - RE	1500	* H	261	2150	4	ug/Kg	⊗	260	75 - 114	
Dibenz(a,h)anthracene - RE	ND	H	261	222		ug/Kg	⊗	85	56 - 134	
Dibenzofuran - RE	170	J H	261	417		ug/Kg	⊗	94	72 - 109	
Diethyl phthalate - RE	940	H B	261	1230		ug/Kg	⊗	113	73 - 116	
Dimethyl phthalate - RE	7000	H	261	355	4	ug/Kg	⊗	-2552	78 - 117	
Di-n-butyl phthalate - RE	160	J H	261	247	J F1	ug/Kg	⊗	31	66 - 140	
Di-n-octyl phthalate - RE	1700	H	261	3480	4	ug/Kg	⊗	666	65 - 141	
Fluoranthene - RE	4100	H	261	5150	4	ug/Kg	⊗	410	73 - 125	
Fluorene - RE	440	H	261	666		ug/Kg	⊗	88	70 - 121	
Hexachlorobenzene - RE	ND	H	261	273		ug/Kg	⊗	104	66 - 117	
Hexachlorobutadiene - RE	ND	H	261	211		ug/Kg	⊗	81	65 - 116	
Hexachlorocyclopentadiene - RE	ND	H	261	ND	F1	ug/Kg	⊗	0	46 - 131	
Hexachloroethane - RE	ND	H	261	228	J	ug/Kg	⊗	87	62 - 120	
Indeno[1,2,3-cd]pyrene - RE	130	H	261	299		ug/Kg	⊗	64	56 - 127	
Isophorone - RE	ND	H	261	280		ug/Kg	⊗	107	67 - 119	
Naphthalene - RE	89	H	261	301		ug/Kg	⊗	81	62 - 112	
Nitrobenzene - RE	ND	H	261	249	J	ug/Kg	⊗	95	64 - 118	
N-Nitrosodimethylamine - RE	ND	H	261	ND		ug/Kg	⊗	NC	38 - 133	
N-Nitrosodi-n-propylamine - RE	ND	H	261	384	F1	ug/Kg	⊗	147	62 - 116	
N-Nitrosodiphenylamine - RE	56	J H	261	248		ug/Kg	⊗	73	73 - 115	
Pentachlorophenol - RE	ND	H	522	751	F1	ug/Kg	⊗	144	45 - 117	
Phenanthrene - RE	3700	H *	261	3860	4	ug/Kg	⊗	57	73 - 106	
Phenol - RE	190	J H	261	450		ug/Kg	⊗	98	63 - 111	
Pyrene - RE	3100	H	261	3850	4	ug/Kg	⊗	301	70 - 120	

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol - RE	102		28 - 143
2-Fluorobiphenyl - RE	110		42 - 140
2-Fluorophenol - RE	106		36 - 145
Nitrobenzene-d5 - RE	118		38 - 141
Phenol-d5 - RE	94		38 - 149
Terphenyl-d14 - RE	107		42 - 151

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: 580-47345-4 MSD

Client Sample ID: WM-CB-21-20150203-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 183363

Prep Batch: 183304

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
1,2,4-Trichlorobenzene - RE	ND	H	263	303	F2	ug/Kg	⊗	115	66 - 115	29	29	28
1,2-Dichlorobenzene - RE	ND	H	263	263	ug/Kg	⊗	100	64 - 112	7	60		
1,3-Dichlorobenzene - RE	ND	H	263	270	ug/Kg	⊗	103	64 - 111	11	60		
1,4-Dichlorobenzene - RE	ND	H	263	255	ug/Kg	⊗	97	65 - 110	14	32		
1-Methylnaphthalene - RE	50	J H	263	318	ug/Kg	⊗	102	62 - 118	4	30		
2,2'-oxybis[1-chloropropane] - RE	ND	H	263	281	J	ug/Kg	⊗	107	41 - 126	11	60	
2,4,5-Trichlorophenol - RE	ND	H	263	306	ug/Kg	⊗	116	57 - 133	1	60		
2,4,6-Trichlorophenol - RE	ND	H	263	354	J F1	ug/Kg	⊗	135	62 - 133	7	60	
2,4-Dichlorophenol - RE	ND	H	263	322	ug/Kg	⊗	122	68 - 125	6	60		
2,4-Dimethylphenol - RE	ND	H	263	318	ug/Kg	⊗	121	54 - 139	9	60		
2,4-Dinitrophenol - RE	ND	H	526	ND	ug/Kg	⊗	NC	20 - 141	NC	60		
2,4-Dinitrotoluene - RE	ND	H	263	245	J	ug/Kg	⊗	93	68 - 121	29	31	
2,6-Dinitrotoluene - RE	ND	H	263	258	J	ug/Kg	⊗	98	66 - 123	29	60	
2-Chloronaphthalene - RE	ND	H	263	300	F1	ug/Kg	⊗	114	68 - 112	2	25	
2-Chlorophenol - RE	ND	H	263	288	ug/Kg	⊗	110	68 - 117	2	27		
2-Methylnaphthalene - RE	62	H	263	325	ug/Kg	⊗	100	64 - 119	2	27		
2-Methylphenol - RE	ND	H	263	266	ug/Kg	⊗	101	71 - 116	9	25		
2-Nitroaniline - RE	ND	H	263	336	F1	ug/Kg	⊗	128	64 - 112	32	60	
2-Nitrophenol - RE	ND	H	263	334	ug/Kg	⊗	127	67 - 127	30	60		
3 & 4 Methylphenol - RE	1200	H	263	1760	4	ug/Kg	⊗	204	70 - 116	0	27	
3,3'-Dichlorobenzidine - RE	ND	H	526	117	J	ug/Kg	⊗	22	20 - 103	2	60	
3-Nitroaniline - RE	ND	H	263	87.2	J F2	ug/Kg	⊗	33	27 - 103	105	60	
4,6-Dinitro-2-methylphenol - RE	ND	H	526	ND	F1	ug/Kg	⊗	0	48 - 130	NC	60	
4-Bromophenyl phenyl ether - RE	ND	H	263	243	J	ug/Kg	⊗	93	68 - 122	9	60	
4-Chloro-3-methylphenol - RE	ND	H	263	418	F1	ug/Kg	⊗	159	69 - 121	2	27	
4-Chloroaniline - RE	ND	H ^	263	ND	^ F1	ug/Kg	⊗	0	20 - 103	NC	60	
4-Chlorophenyl phenyl ether - RE	ND	H	263	251	J	ug/Kg	⊗	95	75 - 108	7	60	
4-Nitroaniline - RE	ND	H	263	90.8	J F1	ug/Kg	⊗	35	58 - 108	13	60	
4-Nitrophenol - RE	ND	H	526	ND	ug/Kg	⊗	NC	20 - 165	NC	33		
Acenaphthene - RE	150	H	263	455	ug/Kg	⊗	114	68 - 116	12	27		
Acenaphthylene - RE	58	H	263	361	ug/Kg	⊗	115	68 - 120	20	28		
Anthracene - RE	430	H	263	980	F1	ug/Kg	⊗	209	73 - 116	21	27	
Benzo[a]anthracene - RE	570	H	263	1470	F1 F2	ug/Kg	⊗	344	76 - 119	47	27	
Benzo[a]pyrene - RE	320	H	263	835	F1	ug/Kg	⊗	196	72 - 117	8	30	
Benzo[b]fluoranthene - RE	1100	H	263	1910	4	ug/Kg	⊗	318	63 - 132	20	31	
Benzo[g,h,i]perylene - RE	170	H	263	269	F1	ug/Kg	⊗	37	55 - 139	8	28	
Benzo[k]fluoranthene - RE	240	H	263	924	F1	ug/Kg	⊗	258	63 - 119	23	31	
Benzoic acid - RE	ND	H *	526	2980	J	ug/Kg	⊗	NC	29 - 158	17	60	
Benzyl alcohol - RE	160	J H	263	418	ug/Kg	⊗	98	55 - 123	44	60		
Bis(2-chloroethoxy)methane - RE	ND	H	263	260	ug/Kg	⊗	99	69 - 107	36	60		
Bis(2-chloroethyl)ether - RE	ND	H	263	224	J	ug/Kg	⊗	85	62 - 110	5	60	
Butyl benzyl phthalate - RE	1400	H	263	1510	4	ug/Kg	⊗	58	69 - 142	4	60	
Carbazole - RE	310	H	263	738	F1	ug/Kg	⊗	163	76 - 135	17	60	
Chrysene - RE	1500	* H	263	2650	4	ug/Kg	⊗	450	75 - 114	21	26	
Dibenz(a,h)anthracene - RE	ND	H	263	253	ug/Kg	⊗	96	56 - 134	13	30		
Dibenzofuran - RE	170	J H	263	449	ug/Kg	⊗	106	72 - 109	7	60		
Diethyl phthalate - RE	940	H B	263	1310	F1	ug/Kg	⊗	143	73 - 116	6	26	

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: 580-47345-4 MSD

Matrix: Solid

Analysis Batch: 183363

Client Sample ID: WM-CB-21-20150203-S

Prep Type: Total/NA

Prep Batch: 183304

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Dimethyl phthalate - RE	7000	H	263	344	4	ug/Kg	⊗	-2538	78 - 117	3	60
Di-n-butyl phthalate - RE	160	J H	263	272	J F1	ug/Kg	⊗	41	66 - 140	10	60
Di-n-octyl phthalate - RE	1700	H	263	4420	4	ug/Kg	⊗	1020	65 - 141	24	31
Fluoranthene - RE	4100	H	263	7840	4 F2	ug/Kg	⊗	1430	73 - 125	41	36
Fluorene - RE	440	H	263	730		ug/Kg	⊗	112	70 - 121	9	31
Hexachlorobenzene - RE	ND	H	263	285		ug/Kg	⊗	108	66 - 117	4	60
Hexachlorobutadiene - RE	ND	H	263	261		ug/Kg	⊗	99	65 - 116	21	60
Hexachlorocyclopentadiene - RE	ND	H	263	ND	F1	ug/Kg	⊗	0	46 - 131	NC	60
Hexachloroethane - RE	ND	H	263	181	J	ug/Kg	⊗	69	62 - 120	23	60
Indeno[1,2,3-cd]pyrene - RE	130	H	263	390		ug/Kg	⊗	98	56 - 127	27	29
Isophorone - RE	ND	H	263	362	F1	ug/Kg	⊗	137	67 - 119	26	60
Naphthalene - RE	89	H	263	364		ug/Kg	⊗	104	62 - 112	19	26
Nitrobenzene - RE	ND	H	263	327	F1	ug/Kg	⊗	124	64 - 118	27	60
N-Nitrosodimethylamine - RE	ND	H	263	ND		ug/Kg	⊗	NC	38 - 133	NC	60
N-Nitrosodi-n-propylamine - RE	ND	H	263	337	F1	ug/Kg	⊗	128	62 - 116	13	28
N-Nitrosodiphenylamine - RE	56	J H	263	276		ug/Kg	⊗	84	73 - 115	11	60
Pentachlorophenol - RE	ND	H	526	793	F1	ug/Kg	⊗	151	45 - 117	5	68
Phenanthrene - RE	3700	H *	263	5020	4	ug/Kg	⊗	498	73 - 106	26	28
Phenol - RE	190	J H	263	448		ug/Kg	⊗	96	63 - 111	1	26
Pyrene - RE	3100	H	263	5870	4 F2	ug/Kg	⊗	1065	70 - 120	41	31
<hr/>											
Surrogate	MSD		MSD		Limits	D	%Recovery	Qualifier	Limits	RPD	Limit
	Surrogate	%Recovery	Surrogate	Surrogate							
2,4,6-Tribromophenol - RE	131				28 - 143						
2-Fluorobiphenyl - RE	104				42 - 140						
2-Fluorophenol - RE	103				36 - 145						
Nitrobenzene-d5 - RE	115				38 - 141						
Phenol-d5 - RE	95				38 - 149						
Terphenyl-d14 - RE	130				42 - 151						

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

Lab Sample ID: 580-47345-4 MS

Matrix: Solid

Analysis Batch: 183363

Client Sample ID: WM-CB-21-20150203-S

Prep Type: Total/NA

Prep Batch: 183304

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Bis(2-ethylhexyl) phthalate - REDL	24000	H	261	29400	4	ug/Kg	⊗	2130	62 - 144		

Lab Sample ID: 580-47345-4 MSD

Matrix: Solid

Analysis Batch: 183363

Client Sample ID: WM-CB-21-20150203-S

Prep Type: Total/NA

Prep Batch: 183304

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Bis(2-ethylhexyl) phthalate - REDL	24000	H	263	28700	4	ug/Kg	⊗	1862	62 - 144	2	60

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: MB 580-181968/1-A

Matrix: Solid

Analysis Batch: 181900

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 181968

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline	1.23	J	4.0	0.50	mg/Kg		02/06/15 15:38	02/06/15 15:49	1
Surrogate									
4-Bromofluorobenzene (Surr)	99		50 - 150				02/06/15 15:38	02/06/15 15:49	1
Trifluorotoluene (Surr)	118		50 - 150				02/06/15 15:38	02/06/15 15:49	1

Lab Sample ID: LCS 580-181968/2-A

Matrix: Solid

Analysis Batch: 181900

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 181968

Analyte	Spike		LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier	Unit	D	%Rec	Limits	%Rec.	RPD
Gasoline		40.0	41.3	mg/Kg		103	68 - 120		
Surrogate									
4-Bromofluorobenzene (Surr)	104		50 - 150						
Trifluorotoluene (Surr)	111		50 - 150						

Lab Sample ID: LCSD 580-181968/3-A

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 181968

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline		40.0	42.7	mg/Kg		107	68 - 120	3	25
Surrogate									
4-Bromofluorobenzene (Surr)	103		50 - 150						
Trifluorotoluene (Surr)	113		50 - 150						

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

Lab Sample ID: MB 580-181962/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 182185

Prep Batch: 181962

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arochlor 1016	ND		0.010	0.0032	mg/Kg		02/09/15 06:30	02/10/15 16:18	1
Arochlor 1221	ND		0.011	0.0080	mg/Kg		02/09/15 06:30	02/10/15 16:18	1
Arochlor 1232	ND		0.011	0.0070	mg/Kg		02/09/15 06:30	02/10/15 16:18	1
Arochlor 1242	ND		0.010	0.0021	mg/Kg		02/09/15 06:30	02/10/15 16:18	1
Arochlor 1248	ND		0.010	0.0030	mg/Kg		02/09/15 06:30	02/10/15 16:18	1
Arochlor 1254	ND		0.010	0.0021	mg/Kg		02/09/15 06:30	02/10/15 16:18	1
Arochlor 1260	ND		0.010	0.0030	mg/Kg		02/09/15 06:30	02/10/15 16:18	1
Surrogate									
Tetrachloro-m-xylene	83		45 - 135				02/09/15 06:30	02/10/15 16:18	1
DCB Decachlorobiphenyl	91		50 - 140				02/09/15 06:30	02/10/15 16:18	1

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: LCS 580-181962/4-A

Matrix: Solid

Analysis Batch: 182185

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec.	
		Result	Qualifier			%Rec.	Limits
Arochlor 1016	0.100	0.0719		mg/Kg	72	40 - 140	
Arochlor 1260	0.100	0.0838		mg/Kg	84	60 - 130	
Surrogate							
		LCS	LCS				
		%Recovery	Qualifier				
Tetrachloro-m-xylene	79		45 - 135				
DCB Decachlorobiphenyl	90		50 - 140				

Lab Sample ID: LCSD 580-181962/5-A

Matrix: Solid

Analysis Batch: 182185

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec.		RPD	Limit
		Result	Qualifier			%Rec.	Limits		
Arochlor 1016	0.100	0.0764		mg/Kg	76	40 - 140		6	20
Arochlor 1260	0.100	0.0853		mg/Kg	85	60 - 130		2	20
Surrogate									
		LCSD	LCSD						
		%Recovery	Qualifier						
Tetrachloro-m-xylene	83		45 - 135						
DCB Decachlorobiphenyl	93		50 - 140						

Lab Sample ID: 580-47345-2 MS

Matrix: Solid

Analysis Batch: 182185

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	
	Result	Qualifier	Added	Result	Qualifier			%Rec.	Limits
Arochlor 1016	ND		0.188	0.171		mg/Kg	⊗	91	40 - 140
Arochlor 1260	ND		0.188	0.191		mg/Kg	⊗	102	60 - 130
Surrogate									
		MS	MS						
		%Recovery	Qualifier						
Tetrachloro-m-xylene	60		45 - 135						
DCB Decachlorobiphenyl	61		50 - 140						

Lab Sample ID: 580-47345-2 MSD

Matrix: Solid

Analysis Batch: 182185

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier			%Rec.	Limits		
Arochlor 1016	ND		0.183	0.195		mg/Kg	⊗	106	40 - 140	13	20
Arochlor 1260	ND		0.183	0.259	F1 F2	mg/Kg	⊗	141	60 - 130	30	20
Surrogate											
		MSD	MSD								
		%Recovery	Qualifier								
Tetrachloro-m-xylene	68		45 - 135								
DCB Decachlorobiphenyl	64		50 - 140								

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: MB 580-182210/1-A

Matrix: Solid

Analysis Batch: 182253

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 182210

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		25	5.7	mg/Kg		02/11/15 08:00	02/11/15 15:08	1
Motor Oil (>C24-C36)	ND		50	9.1	mg/Kg		02/11/15 08:00	02/11/15 15:08	1
Surrogate									
<i>o-Terphenyl</i>	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	87		50 - 150				02/11/15 08:00	02/11/15 15:08	1

Lab Sample ID: LCS 580-182210/2-A

Matrix: Solid

Analysis Batch: 182253

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 182210

Analyte	Spike		LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier	Unit	D	%Rec	Limits	%Rec.	RPD
#2 Diesel (C10-C24)	500	497		mg/Kg		99	70 - 125		
Motor Oil (>C24-C36)	502	507		mg/Kg		101	64 - 127		
Surrogate									
<i>o-Terphenyl</i>	%Recovery	Qualifier	Limits						
	85		50 - 150						

Lab Sample ID: LCSD 580-182210/3-A

Matrix: Solid

Analysis Batch: 182253

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182210

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
#2 Diesel (C10-C24)	500	505		mg/Kg		101	70 - 125	2	16	
Motor Oil (>C24-C36)	502	510		mg/Kg		102	64 - 127	1	17	
Surrogate										
<i>o-Terphenyl</i>	%Recovery	Qualifier	Limits							
	85		50 - 150							

Lab Sample ID: 580-47345-2 MS

Matrix: Solid

Analysis Batch: 182253

Client Sample ID: WM-MH-61-20150203-S

Prep Type: Total/NA

Prep Batch: 182210

Analyte	Sample		Spike	MS		Unit	D	%Rec	Limits	RPD
	Result	Qualifier		Added	Result	Qualifier				
#2 Diesel (C10-C24)	1100	Y	936	2280	F1	mg/Kg	⊗	129	70 - 125	
Motor Oil (>C24-C36)	5900	Y	940	7310	4	mg/Kg	⊗	152	64 - 127	
Surrogate										
<i>o-Terphenyl</i>	%Recovery	Qualifier	Limits							
	74		50 - 150							

Lab Sample ID: 580-47345-2 MSD

Matrix: Solid

Analysis Batch: 182253

Client Sample ID: WM-MH-61-20150203-S

Prep Type: Total/NA

Prep Batch: 182210

Analyte	Sample		Spike	MSD		Unit	D	%Rec	Limits	RPD
	Result	Qualifier		Added	Result	Qualifier				
#2 Diesel (C10-C24)	1100	Y	944	1670	F1 F2	mg/Kg	⊗	64	70 - 125	31
Motor Oil (>C24-C36)	5900	Y	947	5880	4 F2	mg/Kg	⊗	0.04	64 - 127	22

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: 580-47345-2 MSD

Client Sample ID: WM-MH-61-20150203-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 182253

Prep Batch: 182210

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	74		50 - 150

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 490-230571/3

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 230571

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.70	mg/L			02/28/15 09:53	1
Sulfate	ND		1.0	0.60	mg/L			02/28/15 09:53	1

Lab Sample ID: LCS 490-230571/4

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 230571

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
Chloride		100	99.1		mg/L		99	90 - 110	
Sulfate		100	93.2		mg/L		93	90 - 110	

Lab Sample ID: LCSD 490-230571/5

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 230571

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
Chloride		100	99.5		mg/L		100	90 - 110	0	20
Sulfate		100	93.2		mg/L		93	90 - 110	0	20

Lab Sample ID: 580-47345-1 MS

Client Sample ID: WM-CB-11-20150203-W

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 230571

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
Chloride	7.1		100	98.9		mg/L		92	80 - 120	
Sulfate	14		100	99.9		mg/L		86	80 - 120	

Lab Sample ID: 580-47345-1 MSD

Client Sample ID: WM-CB-11-20150203-W

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 230571

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
Chloride	7.1		100	103		mg/L		96	80 - 120	4	20
Sulfate	14		100	104		mg/L		90	80 - 120	4	20

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-182605/22-A

Matrix: Water

Analysis Batch: 182767

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 182605

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Arsenic	ND				0.0010	0.00027	mg/L		02/17/15 10:45	02/18/15 15:18	1
Antimony	ND				0.00040	0.000080	mg/L		02/17/15 10:45	02/18/15 15:18	1
Beryllium	ND				0.00040	0.00010	mg/L		02/17/15 10:45	02/18/15 15:18	1
Cadmium	ND				0.00040	0.000028	mg/L		02/17/15 10:45	02/18/15 15:18	1
Chromium	ND				0.00040	0.00014	mg/L		02/17/15 10:45	02/18/15 15:18	1
Copper	ND				0.0020	0.00060	mg/L		02/17/15 10:45	02/18/15 15:18	1
Lead	ND				0.00040	0.000034	mg/L		02/17/15 10:45	02/18/15 15:18	1
Nickel	ND				0.0030	0.00040	mg/L		02/17/15 10:45	02/18/15 15:18	1
Selenium	ND				0.0010	0.00030	mg/L		02/17/15 10:45	02/18/15 15:18	1
Silver	ND				0.00040	0.000030	mg/L		02/17/15 10:45	02/18/15 15:18	1
Thallium	ND				0.0010	0.00014	mg/L		02/17/15 10:45	02/18/15 15:18	1
Zinc	ND				0.0070	0.0019	mg/L		02/17/15 10:45	02/18/15 15:18	1

Lab Sample ID: LCS 580-182605/23-A

Matrix: Water

Analysis Batch: 182767

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 182605

Analyte	Spike	LCS	LCS	%Rec.			
	Added	Result	Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.0941		mg/L		94	85 - 115
Antimony	0.100	0.0946		mg/L		95	85 - 115
Beryllium	0.100	0.0973		mg/L		97	85 - 115
Cadmium	0.100	0.0962		mg/L		96	85 - 115
Chromium	0.100	0.0974		mg/L		97	85 - 115
Copper	0.100	0.101		mg/L		101	85 - 115
Lead	0.100	0.0921		mg/L		92	85 - 115
Nickel	0.100	0.0941		mg/L		94	85 - 115
Selenium	0.100	0.0965		mg/L		97	85 - 115
Silver	0.100	0.0949		mg/L		95	85 - 115
Thallium	0.100	0.0961		mg/L		96	85 - 115
Zinc	0.100	0.0929		mg/L		93	85 - 115

Lab Sample ID: LCSD 580-182605/24-A

Matrix: Water

Analysis Batch: 182767

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182605

Analyte	Spike	LCSD	LCSD	%Rec.				RPD	
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	0.100	0.0961		mg/L		96	85 - 115	2	20
Antimony	0.100	0.0927		mg/L		93	85 - 115	2	20
Beryllium	0.100	0.0982		mg/L		98	85 - 115	1	20
Cadmium	0.100	0.0966		mg/L		97	85 - 115	0	20
Chromium	0.100	0.0986		mg/L		99	85 - 115	1	20
Copper	0.100	0.102		mg/L		102	85 - 115	1	20
Lead	0.100	0.0935		mg/L		94	85 - 115	2	20
Nickel	0.100	0.0958		mg/L		96	85 - 115	2	20
Selenium	0.100	0.0977		mg/L		98	85 - 115	1	20
Silver	0.100	0.0944		mg/L		94	85 - 115	1	20
Thallium	0.100	0.0975		mg/L		97	85 - 115	1	20
Zinc	0.100	0.0948		mg/L		95	85 - 115	2	20

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 580-182091/18-A

Matrix: Water

Analysis Batch: 182153

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 182091

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000041	mg/L		02/09/15 14:55	02/10/15 09:07	1

Lab Sample ID: LCS 580-182091/19-A

Matrix: Water

Analysis Batch: 182153

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 182091

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Mercury		0.00200	0.00192	mg/L		96	85 - 115

Lab Sample ID: LCSD 580-182091/20-A

Matrix: Water

Analysis Batch: 182153

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182091

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	Limit	
Mercury		0.00200	0.00190	mg/L		95	85 - 115	1	20

Lab Sample ID: 580-47345-1 MS

Matrix: Water

Analysis Batch: 182153

Client Sample ID: WM-CB-11-20150203-W

Prep Type: Total/NA

Prep Batch: 182091

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Mercury	ND		0.00200	0.00210		mg/L		105	70 - 130

Lab Sample ID: 580-47345-1 MSD

Matrix: Water

Analysis Batch: 182153

Client Sample ID: WM-CB-11-20150203-W

Prep Type: Total/NA

Prep Batch: 182091

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	Limit	
Mercury	ND		0.00200	0.00205		mg/L		103	70 - 130	2	20

Lab Sample ID: 580-47345-1 DU

Matrix: Water

Analysis Batch: 182153

Client Sample ID: WM-CB-11-20150203-W

Prep Type: Total/NA

Prep Batch: 182091

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	ND			0.000194	J	mg/L		NC	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-182357/14-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 182430

Prep Batch: 182357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50	0.18	mg/Kg		02/12/15 11:35	02/12/15 14:14	10
Lead	ND		0.50	0.048	mg/Kg		02/12/15 11:35	02/12/15 14:14	10
Antimony	ND		0.20	0.042	mg/Kg		02/12/15 11:35	02/12/15 14:14	10
Beryllium	ND		0.20	0.035	mg/Kg		02/12/15 11:35	02/12/15 14:14	10
Cadmium	ND		0.20	0.019	mg/Kg		02/12/15 11:35	02/12/15 14:14	10

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: MB 580-182357/14-A

Matrix: Solid

Analysis Batch: 182430

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 182357

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.50	0.063	mg/Kg		02/12/15 11:35	02/12/15 14:14	10
Copper	ND		0.40	0.098	mg/Kg		02/12/15 11:35	02/12/15 14:14	10
Nickel	ND		0.50	0.081	mg/Kg		02/12/15 11:35	02/12/15 14:14	10
Selenium	ND		1.0	0.20	mg/Kg		02/12/15 11:35	02/12/15 14:14	10
Silver	ND		0.20	0.012	mg/Kg		02/12/15 11:35	02/12/15 14:14	10
Thallium	ND		0.40	0.13	mg/Kg		02/12/15 11:35	02/12/15 14:14	10
Zinc	ND		5.0	1.1	mg/Kg		02/12/15 11:35	02/12/15 14:14	10

Lab Sample ID: LCS 580-182357/15-A

Matrix: Solid

Analysis Batch: 182430

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 182357

Analyte	Spike Added	LCS LCS			D	%Rec	Limits	%Rec.
		Result	Qualifier	Unit				
Arsenic	200	198		mg/Kg		99	80 - 120	
Lead	50.0	49.4		mg/Kg		99	80 - 120	
Antimony	150	146		mg/Kg		97	80 - 120	
Beryllium	5.00	4.66		mg/Kg		93	80 - 120	
Cadmium	5.00	4.88		mg/Kg		98	80 - 120	
Chromium	20.0	20.2		mg/Kg		101	80 - 120	
Copper	25.0	25.2		mg/Kg		101	80 - 120	
Nickel	50.0	51.1		mg/Kg		102	80 - 120	
Selenium	200	201		mg/Kg		101	80 - 120	
Silver	30.0	32.7		mg/Kg		109	80 - 120	
Thallium	200	195		mg/Kg		97	80 - 120	
Zinc	200	200		mg/Kg		100	80 - 120	

Lab Sample ID: LCSD 580-182357/16-A

Matrix: Solid

Analysis Batch: 182430

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 182357

Analyte	Spike Added	LCSD LCSD			D	%Rec	Limits	%Rec.	RPD	Limit
		Result	Qualifier	Unit						
Arsenic	200	200		mg/Kg		100	80 - 120		1	20
Lead	50.0	50.1		mg/Kg		100	80 - 120		1	20
Antimony	150	148		mg/Kg		99	80 - 120		2	20
Beryllium	5.00	4.89		mg/Kg		98	80 - 120		5	20
Cadmium	5.00	5.28		mg/Kg		106	80 - 120		8	20
Chromium	20.0	20.5		mg/Kg		102	80 - 120		1	20
Copper	25.0	25.1		mg/Kg		101	80 - 120		0	20
Nickel	50.0	51.4		mg/Kg		103	80 - 120		1	20
Selenium	200	202		mg/Kg		101	80 - 120		0	20
Silver	30.0	33.4		mg/Kg		111	80 - 120		2	20
Thallium	200	194		mg/Kg		97	80 - 120		0	20
Zinc	200	201		mg/Kg		101	80 - 120		1	20

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-181849/12-A

Matrix: Solid

Analysis Batch: 181939

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 181849

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	ND									

Lab Sample ID: LCS 580-181849/13-A

Matrix: Solid

Analysis Batch: 181939

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 181849

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Mercury	Added	0.167	0.152	mg/Kg	91	80 - 120	0	20		

Lab Sample ID: LCSD 580-181849/14-A

Matrix: Solid

Analysis Batch: 181939

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 181849

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Mercury	Added	0.167	0.152	mg/Kg	91	80 - 120	0	20		

Lab Sample ID: 580-47345-2 MS

Matrix: Solid

Analysis Batch: 181939

Client Sample ID: WM-MH-61-20150203-S

Prep Type: Total/NA

Prep Batch: 181849

Analyte	Sample	Sample	Spike	MS	MS	Result	Qualifier	Unit	D	%Rec	Limits
	Mercury	Result	Qualifier	Added	Result	0.10	0.269	F1	mg/Kg	80 - 120	

Lab Sample ID: 580-47345-2 MSD

Matrix: Solid

Analysis Batch: 181939

Client Sample ID: WM-MH-61-20150203-S

Prep Type: Total/NA

Prep Batch: 181849

Analyte	Sample	Sample	Spike	MSD	MSD	Result	Qualifier	Unit	D	%Rec	Limits
	Mercury	Result	Qualifier	Added	Result	0.10	0.262	F1	mg/Kg	80 - 120	

Lab Sample ID: 580-47345-2 DU

Matrix: Solid

Analysis Batch: 181939

Client Sample ID: WM-MH-61-20150203-S

Prep Type: Total/NA

Prep Batch: 181849

Analyte	Sample	Sample	Spike	DU	DU	Result	Qualifier	Unit	D	RPD	Limit
	Mercury	Result	Qualifier	Added	Result	0.10	0.118	F1	mg/Kg	80 - 120	

Method: 120.1 - Conductivity, Specific Conductance

Lab Sample ID: MB 580-182081/1

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 182081

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

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Method: 120.1 - Conductivity, Specific Conductance (Continued)

Lab Sample ID: LCS 580-182081/2

Matrix: Water

Analysis Batch: 182081

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec.	Limits
		Result	Qualifier				
Specific Conductance	500	524		umhos/cm		105	90 - 110

Method: 2540B - Percent Moisture

Lab Sample ID: 580-47345-2 DU

Client Sample ID: WM-MH-61-20150203-S

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 181945

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Percent Solids	52		43		%		20	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-181895/1

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 181895

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nitrate as N	ND		0.90	0.20	mg/L			02/05/15 08:49	1

Lab Sample ID: LCS 580-181895/2

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 181895

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Nitrate as N	1.80	1.80		mg/L		100	90 - 110

Lab Sample ID: LCSD 580-181895/3

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 181895

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier						
Nitrate as N	1.80	1.80		mg/L		100	90 - 110	0	15

Lab Sample ID: 580-47345-1 MS

Client Sample ID: WM-CB-11-20150203-W

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 181895

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Nitrate as N	ND		1.80	1.90		mg/L		106	90 - 110

Lab Sample ID: 580-47345-1 DU

Client Sample ID: WM-CB-11-20150203-W

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 181895

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Nitrate as N	ND		ND		mg/L		NC	10

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Method: 9060_PSEP - TOC (Puget Sound)

Lab Sample ID: MB 580-181976/3

Matrix: Solid

Analysis Batch: 181976

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		2000	250	mg/Kg			02/06/15 16:50	1

Lab Sample ID: LCS 580-181976/4

Matrix: Solid

Analysis Batch: 181976

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Organic Carbon	2850	3230		mg/Kg		113	27.8 - 170

Lab Sample ID: LCSD 580-181976/5

Matrix: Solid

Analysis Batch: 181976

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	Limit
Total Organic Carbon	2850	3120		mg/Kg		109	27.8 - 170	4

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 580-182507/2

Matrix: Water

Analysis Batch: 182507

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Alkalinity	100	102		mg/L		102	85 - 115

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

Lab Sample ID: MB 580-181791/1

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

Matrix: Water

Analysis Batch: 181791

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		2.0	2.0	mg/L			02/05/15 09:13	1

Lab Sample ID: LCS 580-181791/2

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

Matrix: Water

Analysis Batch: 181791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Suspended Solids	30.0	28.8		mg/L		96	70.6 - 120

TestAmerica Seattle

QC Sample Results

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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

Lab Sample ID: MB 580-182051/1

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 182051

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.33	mg/L			02/05/15 12:10	1

Lab Sample ID: LCS 580-182051/2

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 182051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits	
Total Organic Carbon	15.0	15.8		mg/L		106	85 - 115	

Lab Sample ID: LCSD 580-182051/3

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 182051

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
Total Organic Carbon	15.0	16.0		mg/L		107	85 - 115	1	20

TestAmerica Seattle

Lab Chronicle

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Client Sample ID: WM-CB-11-20150203-W

Lab Sample ID: 580-47345-1

Matrix: Water

Date Collected: 02/03/15 14:30

Date Received: 02/04/15 12:16

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			182087	02/09/15 14:34	ALC	TAL SEA
Total/NA	Analysis	8270D		1	182345	02/12/15 19:33	CGM	TAL SEA
Total/NA	Analysis	300.0		1	230571	02/28/15 12:13	JHS	TAL NSH
Total/NA	Prep	200.8			182605	02/17/15 10:45	PAB	TAL SEA
Total/NA	Analysis	200.8		1	182767	02/18/15 15:22	FCW	TAL SEA
Total/NA	Prep	245.1			182091	02/09/15 14:55	PAB	TAL SEA
Total/NA	Analysis	245.1		1	182153	02/10/15 10:06	FCW	TAL SEA
Total/NA	Analysis	120.1		1	182081	02/09/15 14:04	LKC	TAL SEA
Total/NA	Analysis	300.0		1	181895	02/05/15 09:58	RSB	TAL SEA
Total/NA	Analysis	SM 2320B		1	182507	02/13/15 12:30	JLS	TAL SEA
Total/NA	Analysis	SM 2540D		1	181791	02/05/15 09:13	LKC	TAL SEA
Total/NA	Analysis	SM 4500 H+ B		1	181756	02/04/15 17:52	LKC	TAL SEA
Dissolved	Analysis	SM 5310B		1	182051	02/05/15 12:10	RSB	TAL SEA
Total/NA	Analysis	SM 5310B		1	182051	02/05/15 12:10	RSB	TAL SEA

Client Sample ID: WM-MH-61-20150203-S

Lab Sample ID: 580-47345-2

Matrix: Solid

Percent Solids: 52.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B	DL		182433	02/13/15 08:23	RMB	TAL SEA
Total/NA	Analysis	8270D	DL	100	182776	02/19/15 13:59	ERZ	TAL SEA
Total/NA	Prep	3550B			182433	02/13/15 08:23	RMB	TAL SEA
Total/NA	Analysis	8270D		10	182776	02/19/15 16:11	ERZ	TAL SEA
Total/NA	Prep	3550B	RE		183304	02/26/15 14:48	EKK	TAL SEA
Total/NA	Analysis	8270D	RE	10	183363	02/27/15 13:12	AHP	TAL SEA
Total/NA	Prep	3550B	REDL		183304	02/26/15 14:48	EKK	TAL SEA
Total/NA	Analysis	8270D	REDL	100	183363	02/27/15 15:24	AHP	TAL SEA
Total/NA	Prep	3550B			181962	02/09/15 06:30	RMB	TAL SEA
Total/NA	Analysis	8082		1	182185	02/10/15 17:25	ALC	TAL SEA
Total/NA	Prep	3546			182210	02/11/15 08:27	RMB	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	182253	02/11/15 16:05	JJP	TAL SEA
Total/NA	Prep	3050B			182357	02/12/15 11:35	PAB	TAL SEA
Total/NA	Analysis	6020		10	182430	02/12/15 15:00	FCW	TAL SEA
Total/NA	Prep	7471A			181849	02/05/15 16:28	PAB	TAL SEA
Total/NA	Analysis	7471A		1	181939	02/06/15 09:38	FCW	TAL SEA
Total/NA	Analysis	2540B		1	181945	02/06/15 12:09	PAB	TAL SEA
Total/NA	Analysis	9060_PSEP		1	181976	02/06/15 16:50	LKC	TAL SEA
Total/NA	Analysis	PSEP Plumb 1981		1	182040	02/09/15 09:58	LKC	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Client Sample ID: WM-CB-52-20150203-S

Lab Sample ID: 580-47345-3

Date Collected: 02/03/15 12:00

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 45.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			182068	02/04/15 13:45	MMH	TAL SEA
Total/NA	Analysis	8260B		1	182043	02/09/15 13:45	CJ	TAL SEA
Total/NA	Prep	3550B	DL		182433	02/13/15 08:23	RMB	TAL SEA
Total/NA	Analysis	8270D	DL	100	182776	02/19/15 14:25	ERZ	TAL SEA
Total/NA	Prep	3550B			182433	02/13/15 08:23	RMB	TAL SEA
Total/NA	Analysis	8270D		10	182776	02/19/15 16:37	ERZ	TAL SEA
Total/NA	Prep	3550B	RE		183304	02/26/15 14:48	EKK	TAL SEA
Total/NA	Analysis	8270D	RE	10	183363	02/27/15 13:39	AHP	TAL SEA
Total/NA	Prep	3550B	REDL		183304	02/26/15 14:48	EKK	TAL SEA
Total/NA	Analysis	8270D	REDL	100	183363	02/27/15 15:51	AHP	TAL SEA
Total/NA	Prep	5035			181968	02/06/15 15:38	SOC	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	181900	02/06/15 23:06	TL1	TAL SEA
Total/NA	Prep	3550B			181962	02/09/15 06:30	RMB	TAL SEA
Total/NA	Analysis	8082		1	182185	02/10/15 18:14	ALC	TAL SEA
Total/NA	Prep	3546			182210	02/11/15 08:27	RMB	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	182253	02/11/15 17:01	JJP	TAL SEA
Total/NA	Prep	3050B			182357	02/12/15 11:35	PAB	TAL SEA
Total/NA	Analysis	6020		10	182430	02/12/15 15:04	FCW	TAL SEA
Total/NA	Prep	7471A			181849	02/05/15 16:28	PAB	TAL SEA
Total/NA	Analysis	7471A		1	181939	02/06/15 09:47	FCW	TAL SEA
Total/NA	Analysis	2540B		1	181945	02/06/15 12:09	PAB	TAL SEA
Total/NA	Analysis	9060_PSEP		1	181976	02/06/15 16:50	LKC	TAL SEA
Total/NA	Analysis	PSEP Plumb 1981		1	182040	02/09/15 09:58	LKC	TAL SEA

Client Sample ID: WM-CB-21-20150203-S

Lab Sample ID: 580-47345-4

Date Collected: 02/03/15 14:15

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 37.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B	DL		182433	02/13/15 08:28	RMB	TAL SEA
Total/NA	Analysis	8270D	DL	100	182776	02/19/15 15:44	ERZ	TAL SEA
Total/NA	Prep	3550B			182433	02/13/15 08:28	RMB	TAL SEA
Total/NA	Analysis	8270D		10	182776	02/19/15 17:56	ERZ	TAL SEA
Total/NA	Prep	3550B	RE		183304	02/26/15 14:48	EKK	TAL SEA
Total/NA	Analysis	8270D	RE	10	183363	02/27/15 14:05	AHP	TAL SEA
Total/NA	Prep	3550B	REDL		183304	02/26/15 14:48	EKK	TAL SEA
Total/NA	Analysis	8270D	REDL	100	183363	02/27/15 16:17	AHP	TAL SEA
Total/NA	Prep	3550B			181962	02/09/15 06:30	RMB	TAL SEA
Total/NA	Analysis	8082		1	182185	02/10/15 18:31	ALC	TAL SEA
Total/NA	Prep	3546			182210	02/11/15 08:27	RMB	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	182253	02/11/15 17:20	JJP	TAL SEA
Total/NA	Prep	3050B			182357	02/12/15 11:35	PAB	TAL SEA
Total/NA	Analysis	6020		10	182430	02/12/15 15:07	FCW	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Client Sample ID: WM-CB-21-20150203-S

Lab Sample ID: 580-47345-4

Date Collected: 02/03/15 14:15

Matrix: Solid

Date Received: 02/04/15 12:16

Percent Solids: 37.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			181849	02/05/15 16:28	PAB	TAL SEA
Total/NA	Analysis	7471A		1	181939	02/06/15 09:50	FCW	TAL SEA
Total/NA	Analysis	2540B		1	181945	02/06/15 12:09	PAB	TAL SEA
Total/NA	Analysis	9060_PSEP		1	181976	02/06/15 16:50	LKC	TAL SEA
Total/NA	Analysis	PSEP Plumb 1981		1	182040	02/09/15 09:58	LKC	TAL SEA

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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

Certification Summary

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

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	02-17-16 *

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-15
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	10-31-15
Arizona	State Program	9	AZ0473	05-05-15
Arkansas DEQ	State Program	6	88-0737	04-25-15
California	State Program	9	2938	10-31-16
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-15
Illinois	NELAP	5	200010	12-09-15
Iowa	State Program	7	131	04-01-16
Kansas	NELAP	7	E-10229	03-31-15 *
Kentucky (UST)	State Program	4	19	06-30-15
Kentucky (WW)	State Program	4	90038	12-31-15
Louisiana	NELAP	6	30613	06-30-15
Maryland	State Program	3	316	03-31-16
Massachusetts	State Program	1	M-TN032	06-30-15
Minnesota	NELAP	5	047-999-345	12-31-15
Mississippi	State Program	4	N/A	06-30-15
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-15
New Hampshire	NELAP	1	2963	10-09-15
New Jersey	NELAP	2	TN965	06-30-15
New York	NELAP	2	11342	03-31-15
North Carolina (WW/SW)	State Program	4	387	12-31-15
North Dakota	State Program	8	R-146	06-30-15
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-15
Oregon	NELAP	10	TN200001	04-29-15
Pennsylvania	NELAP	3	68-00585	06-30-15
Rhode Island	State Program	1	LAO00268	12-30-15
South Carolina	State Program	4	84009 (001)	02-28-15 *
South Carolina (DW)	State Program	4	84009 (002)	02-23-17
Tennessee	State Program	4	2008	02-23-17
Texas	NELAP	6	T104704077	08-31-15
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-15

* Certification renewal pending - certification considered valid.

TestAmerica Seattle

Certification Summary

Client: Leidos, Inc.

TestAmerica Job ID: 580-47345-1

Project/Site: NPDES INSPECTION SAMPLING

Laboratory: TestAmerica Nashville (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Virginia	NELAP	3	460152	06-14-15
Washington	State Program	10	C789	07-19-15
West Virginia DEP	State Program	3	219	02-28-15 *
Wisconsin	State Program	5	998020430	08-31-15
Wyoming (UST)	A2LA	8	453.07	12-31-15

* Certification renewal pending - certification considered valid.

TestAmerica Seattle

Sample Summary

Client: Leidos, Inc.

Project/Site: NPDES INSPECTION SAMPLING

TestAmerica Job ID: 580-47345-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-47345-1	WM-CB-11-20150203-W	Water	02/03/15 14:30	02/04/15 12:16
580-47345-2	WM-MH-61-20150203-S	Solid	02/03/15 10:30	02/04/15 12:16
580-47345-3	WM-CB-52-20150203-S	Solid	02/03/15 12:00	02/04/15 12:16
580-47345-4	WM-CB-21-20150203-S	Solid	02/03/15 14:15	02/04/15 12:16

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TestAmerica Seattle

TestAmerica Seattle
 5755 8th Street East
 Tacoma, WA 98424

Chain of Custody Record
TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

phone 253.922.2310 fax

 TestAmerica Laboratories, Inc.
 473/5

 Site Contact: M. J. Marzuk

 Date: 2/3/2015

COC No:

1 of 2 COCs

 Project Manager: C. N. ANTHONY

 Lab Contact: K. Allen

Sampler:

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For Lab Use Only:

Walk-in Client:

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Lab Sampling:

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Job / SDG No.:

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 Regulatory Program: DW NPDES RCRA other:

Sample Specific Notes:

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TestAmerica Seattle

5/55 8th Street East

Tacoma WA 98424

Chain of Custody Record

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica

phone 253.922.2310 fax

phone 253.922.2310

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 580-47345-1

Login Number: 47345

List Source: TestAmerica Seattle

List Number: 1

Creator: Abello, Andrea N

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	

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 580-47345-1

Login Number: 47345

List Source: TestAmerica Nashville

List Number: 2

List Creation: 02/24/15 02:41 PM

Creator: Ford, Easton

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True		1
The cooler's custody seal, if present, is intact.	True		2
Sample custody seals, if present, are intact.	True		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	True		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	True		11
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.	N/A		
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		



February 26, 2015

Vista Project I.D.: 1500147

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 February 05, 2015. This sample set was analyzed on a standard turn-around time, under your Project Name 'NPDES Sampling Support'.

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. 1500147**Case Narrative****Sample Condition on Receipt:**

One aqueous sample 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**

These 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 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.

EPA Method 1668C

These 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 18.6 pg/g in the Method Blank associated with the aqueous sample. 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
1500147-01	WM-CB-11-20150203-W	03-Feb-15 14:30	05-Feb-15 08:36	Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L Amber Glass NM Bottle, 1L
1500147-02	WM-MH-61-20150203-S	02-Feb-15 10:30	05-Feb-15 08:36	Glass Jar, 250mL
1500147-03	WM-CB-52-20150203-S	02-Feb-15 12:00	05-Feb-15 08:36	Glass Jar, 250mL
1500147-04	WM-CB-21-20150203-S	02-Feb-15 14:15	05-Feb-15 08:36	Glass Jar, 250mL

ANALYTICAL RESULTS

Sample ID: Method Blank							EPA Method 1613B			
Matrix:	Aqueous <th>QC Batch:</th> <td data-cs="3" data-kind="parent">B5B0055</td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <th>Lab Sample:</th> <td data-cs="3" data-kind="parent">B5B0055-BLK1</td> <td data-kind="ghost"></td> <td data-kind="ghost"></td>	QC Batch:	B5B0055			Lab Sample:	B5B0055-BLK1			
Sample Size:	1.00 L	Date Extracted:	12-Feb-2015 9:06			Date Analyzed :	17-Feb-15 14:47 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	1.40		0.943		IS 13C-2,3,7,8-TCDD	77.7	25 - 164	
1,2,3,7,8-PeCDD	ND	25.0	0.680		4.51		13C-1,2,3,7,8-PeCDD	82.2	25 - 181	
1,2,3,4,7,8-HxCDD	ND	25.0	1.61		2.21		13C-1,2,3,4,7,8-HxCDD	71.7	32 - 141	
1,2,3,6,7,8-HxCDD	ND	25.0	1.53		1.93		13C-1,2,3,6,7,8-HxCDD	70.5	28 - 130	
1,2,3,7,8,9-HxCDD	ND	25.0	1.57		2.02		13C-1,2,3,7,8,9-HxCDD	71.3	32 - 141	
1,2,3,4,6,7,8-HpCDD	ND	25.0	1.14		2.98		13C-1,2,3,4,6,7,8-HpCDD	76.2	23 - 140	
OCDD	ND	50.0	3.90		3.57		13C-OCDD	61.5	17 - 157	
2,3,7,8-TCDF	ND	5.00	0.729		0.984		13C-2,3,7,8-TCDF	81.6	24 - 169	
1,2,3,7,8-PeCDF	ND	25.0	0.720		2.50		13C-1,2,3,7,8-PeCDF	81.2	24 - 185	
2,3,4,7,8-PeCDF	ND	25.0	0.669		1.73		13C-2,3,4,7,8-PeCDF	90.3	21 - 178	
1,2,3,4,7,8-HxCDF	ND	25.0	0.585		1.36		13C-1,2,3,4,7,8-HxCDF	72.5	26 - 152	
1,2,3,6,7,8-HxCDF	ND	25.0	0.486		1.56		13C-1,2,3,6,7,8-HxCDF	83.2	26 - 123	
2,3,4,6,7,8-HxCDF	ND	25.0	0.621		2.05		13C-2,3,4,6,7,8-HxCDF	74.1	28 - 136	
1,2,3,7,8,9-HxCDF	ND	25.0	0.583		1.34		13C-1,2,3,7,8,9-HxCDF	75.1	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	25.0	0.463		1.46		13C-1,2,3,4,6,7,8-HpCDF	70.4	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	25.0	0.441		1.75		13C-1,2,3,4,7,8,9-HpCDF	73.7	26 - 138	
OCDF	ND	50.0	1.56		2.98		13C-OCDF	64.8	17 - 157	
						CRS	37Cl-2,3,7,8-TCDD	95.6	35 - 197	
							Toxic Equivalent Quotient (TEQ) Data			
							TEQMinWHO2005Dioxin	0.00		
TOTALS										
Total TCDD	ND	5.00	1.40							
Total PeCDD	ND	25.0	1.05							
Total HxCDD	ND	25.0	2.80							
Total HpCDD	ND	25.0	1.14							
Total TCDF	ND	5.00	0.729							
Total PeCDF	ND	25.0	1.15							
Total HxCDF	ND	25.0	0.781							
Total HpCDF	ND	25.0	0.760							

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>B5B0055</td> <th>Lab Sample:</th> <td>B5B0055-BS1</td> <th data-cs="2" data-kind="parent"></th> <th data-kind="ghost"></th>	QC Batch:	B5B0055	Lab Sample:	B5B0055-BS1			
Sample Size:	1.00 L	Date Extracted:	12-Feb-2015 9:06	Date Analyzed:	17-Feb-15 12:21	Column:	ZB-5MS Analyst: MAS	
Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL	
2,3,7,8-TCDD	183	200	91.7	67 - 158	IS	13C-2,3,7,8-TCDD	81.5	20 - 175
1,2,3,7,8-PeCDD	926	1000	92.6	70 - 142		13C-1,2,3,7,8-PeCDD	81.1	21 - 227
1,2,3,4,7,8-HxCDD	994	1000	99.4	70 - 164		13C-1,2,3,4,7,8-HxCDD	73.5	21 - 193
1,2,3,6,7,8-HxCDD	974	1000	97.4	76 - 134		13C-1,2,3,6,7,8-HxCDD	71.5	25 - 163
1,2,3,7,8,9-HxCDD	965	1000	96.5	64 - 162		13C-1,2,3,7,8,9-HxCDD	72.5	21 - 193
1,2,3,4,6,7,8-HpCDD	970	1000	97.0	70 - 140		13C-1,2,3,4,6,7,8-HpCDD	75.9	26 - 166
OCDD	1970	2000	98.3	78 - 144		13C-OCDD	60.7	13 - 199
2,3,7,8-TCDF	181	200	90.6	75 - 158		13C-2,3,7,8-TCDF	82.8	22 - 152
1,2,3,7,8-PeCDF	982	1000	98.2	80 - 134		13C-1,2,3,7,8-PeCDF	81.8	21 - 192
2,3,4,7,8-PeCDF	958	1000	95.8	68 - 160		13C-2,3,4,7,8-PeCDF	88.8	13 - 328
1,2,3,4,7,8-HxCDF	991	1000	99.1	72 - 134		13C-1,2,3,4,7,8-HxCDF	70.1	19 - 202
1,2,3,6,7,8-HxCDF	968	1000	96.8	84 - 130		13C-1,2,3,6,7,8-HxCDF	81.0	21 - 159
2,3,4,6,7,8-HxCDF	968	1000	96.8	70 - 156		13C-2,3,4,6,7,8-HxCDF	74.4	22 - 176
1,2,3,7,8,9-HxCDF	967	1000	96.7	78 - 130		13C-1,2,3,7,8,9-HxCDF	74.5	17 - 205
1,2,3,4,6,7,8-HpCDF	966	1000	96.6	82 - 122		13C-1,2,3,4,6,7,8-HpCDF	70.5	21 - 158
1,2,3,4,7,8,9-HpCDF	976	1000	97.6	78 - 138		13C-1,2,3,4,7,8,9-HpCDF	72.9	20 - 186
OCDF	1960	2000	98.0	63 - 170		13C-OCDF	63.4	13 - 199
					CRS	37Cl-2,3,7,8-TCDD	103	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: WM-CB-11-20150203-W							EPA Method 1613B			
Client Data		Sample Data			Laboratory Data					
Name:	Leidos	Matrix:	Aqueous		Lab Sample:	1500147-01	Date Received:	05-Feb-2015	8:36	
Project:	NPDES Sampling Support	Sample Size:	1.01 L		QC Batch:	B5B0055	Date Extracted:	12-Feb-2015	9:06	
Date Collected:	03-Feb-2015 14:30	Date Analyzed :	17-Feb-15 15:36		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	4.95	1.40		0.943		IS 13C-2,3,7,8-TCDD	71.4	25 - 164	
1,2,3,7,8-PeCDD	ND	24.7	1.90		4.51		13C-1,2,3,7,8-PeCDD	73.9	25 - 181	
1,2,3,4,7,8-HxCDD	ND	24.7	2.90		2.21		13C-1,2,3,4,7,8-HxCDD	62.8	32 - 141	
1,2,3,6,7,8-HxCDD	4.67	24.7			1.93	J	13C-1,2,3,6,7,8-HxCDD	60.4	28 - 130	
1,2,3,7,8,9-HxCDD	3.22	24.7			2.02	J	13C-1,2,3,7,8,9-HxCDD	62.1	32 - 141	
1,2,3,4,6,7,8-HpCDD	84.6	24.7			2.98		13C-1,2,3,4,6,7,8-HpCDD	66.1	23 - 140	
OCDD	694	49.5			3.57		13C-OCDD	49.0	17 - 157	
2,3,7,8-TCDF	ND	4.95	1.69		0.984		13C-2,3,7,8-TCDF	74.3	24 - 169	
1,2,3,7,8-PeCDF	ND	24.7	1.53		2.50		13C-1,2,3,7,8-PeCDF	72.6	24 - 185	
2,3,4,7,8-PeCDF	ND	24.7	1.40		1.73		13C-2,3,4,7,8-PeCDF	79.6	21 - 178	
1,2,3,4,7,8-HxCDF	1.55	24.7			1.36	J	13C-1,2,3,4,7,8-HxCDF	64.3	26 - 152	
1,2,3,6,7,8-HxCDF	ND	24.7		1.36	1.56		13C-1,2,3,6,7,8-HxCDF	67.7	26 - 123	
2,3,4,6,7,8-HxCDF	1.87	24.7			2.05	J	13C-2,3,4,6,7,8-HxCDF	63.7	28 - 136	
1,2,3,7,8,9-HxCDF	ND	24.7	1.16		1.34		13C-1,2,3,7,8,9-HxCDF	63.9	29 - 147	
1,2,3,4,6,7,8-HpCDF	19.5	24.7			1.46	J	13C-1,2,3,4,6,7,8-HpCDF	61.5	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	24.7		1.88	1.75		13C-1,2,3,4,7,8,9-HpCDF	64.0	26 - 138	
OCDF	35.4	49.5			2.98	J	13C-OCDF	52.8	17 - 157	
							CRS 37Cl-2,3,7,8-TCDD	107	35 - 197	
							Toxic Equivalent Quotient (TEQ) Data			
							TEQMinWHO2005Dioxin	2.39		
TOTALS										
Total TCDD	ND		1.40							
Total PeCDD	1.73									
Total HxCDD	35.3			37.6						
Total HpCDD	199									
Total TCDF	ND		1.69							
Total PeCDF	10.8			11.5						
Total HxCDF	27.6			28.9						
Total HpCDF	44.8			46.7						

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

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:	B5B0058	Date Extracted:	12-Feb-2015 9:57	Lab Sample:	B5B0058-BLK1					
Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers		
2,3,7,8-TCDD	ND	1.00	0.143		0.0778		IS 13C-2,3,7,8-TCDD	89.2	25 - 164			
1,2,3,7,8-PeCDD	ND	5.00	0.135		0.230		13C-1,2,3,7,8-PeCDD	89.2	25 - 181			
1,2,3,4,7,8-HxCDD	ND	5.00	0.225		0.231		13C-1,2,3,4,7,8-HxCDD	79.6	32 - 141			
1,2,3,6,7,8-HxCDD	ND	5.00	0.228		0.126		13C-1,2,3,6,7,8-HxCDD	76.1	28 - 130			
1,2,3,7,8,9-HxCDD	ND	5.00	0.238		0.173		13C-1,2,3,7,8,9-HxCDD	78.1	32 - 141			
1,2,3,4,6,7,8-HpCDD	0.190	5.00			0.263	J	13C-1,2,3,4,6,7,8-HpCDD	83.0	23 - 140			
OCDD	0.819	10.0			0.167	J	13C-OCDD	66.0	17 - 157			
2,3,7,8-TCDF	ND	1.00	0.0790		0.0289		13C-2,3,7,8-TCDF	88.7	24 - 169			
1,2,3,7,8-PeCDF	ND	5.00	0.174		0.254		13C-1,2,3,7,8-PeCDF	91.6	24 - 185			
2,3,4,7,8-PeCDF	ND	5.00	0.161		0.211		13C-2,3,4,7,8-PeCDF	97.8	21 - 178			
1,2,3,4,7,8-HxCDF	ND	5.00	0.104		0.154		13C-1,2,3,4,7,8-HxCDF	77.1	26 - 152			
1,2,3,6,7,8-HxCDF	ND	5.00	0.0830		0.195		13C-1,2,3,6,7,8-HxCDF	97.6	26 - 123			
2,3,4,6,7,8-HxCDF	ND	5.00	0.0592		0.0805		13C-2,3,4,6,7,8-HxCDF	81.7	28 - 136			
1,2,3,7,8,9-HxCDF	ND	5.00	0.0881		0.195		13C-1,2,3,7,8,9-HxCDF	79.3	29 - 147			
1,2,3,4,6,7,8-HpCDF	ND	5.00	0.149		0.230		13C-1,2,3,4,6,7,8-HpCDF	75.3	28 - 143			
1,2,3,4,7,8,9-HpCDF	ND	5.00	0.166		0.211		13C-1,2,3,4,7,8,9-HpCDF	77.8	26 - 138			
OCDF	ND	10.0	0.286		0.470		13C-OCDF	66.8	17 - 157			
							CRS 37Cl-2,3,7,8-TCDD	95.0	35 - 197			
							Toxic Equivalent Quotient (TEQ) Data					
							TEQMinWHO2005Dioxin	0.00215				
TOTALS												
Total TCDD	ND	0.143										
Total PeCDD	ND	0.257										
Total HxCDD	ND	0.336										
Total HpCDD	0.190											
Total TCDF	ND	0.0790										
Total PeCDF	ND	0.250										
Total HxCDF	ND	0.108										
Total HpCDF	ND	0.358										

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	QC Batch:	B5B0058	Lab Sample:	B5B0058-BS1			
Sample Size:	5.00 g	Date Extracted:	12-Feb-2015 9:57	Date Analyzed:	18-Feb-15 01:37	Column:	ZB-5MS Analyst: MAS	
Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL	
2,3,7,8-TCDD	35.8	40.0	89.4	67 - 158	IS	13C-2,3,7,8-TCDD	93.2	20 - 175
1,2,3,7,8-PeCDD	190	200	95.2	70 - 142		13C-1,2,3,7,8-PeCDD	96.6	21 - 227
1,2,3,4,7,8-HxCDD	200	200	100	70 - 164		13C-1,2,3,4,7,8-HxCDD	85.1	21 - 193
1,2,3,6,7,8-HxCDD	199	200	99.7	76 - 134		13C-1,2,3,6,7,8-HxCDD	82.0	25 - 163
1,2,3,7,8,9-HxCDD	194	200	97.0	64 - 162		13C-1,2,3,7,8,9-HxCDD	82.9	21 - 193
1,2,3,4,6,7,8-HpCDD	196	200	98.0	70 - 140		13C-1,2,3,4,6,7,8-HpCDD	86.4	26 - 166
OCDD	393	400	98.2	78 - 144		13C-OCDD	66.3	13 - 199
2,3,7,8-TCDF	37.8	40.0	94.4	75 - 158		13C-2,3,7,8-TCDF	94.4	22 - 152
1,2,3,7,8-PeCDF	198	200	99.2	80 - 134		13C-1,2,3,7,8-PeCDF	100	21 - 192
2,3,4,7,8-PeCDF	198	200	99.2	68 - 160		13C-2,3,4,7,8-PeCDF	107	13 - 328
1,2,3,4,7,8-HxCDF	199	200	99.6	72 - 134		13C-1,2,3,4,7,8-HxCDF	84.8	19 - 202
1,2,3,6,7,8-HxCDF	196	200	97.8	84 - 130		13C-1,2,3,6,7,8-HxCDF	98.9	21 - 159
2,3,4,6,7,8-HxCDF	195	200	97.5	70 - 156		13C-2,3,4,6,7,8-HxCDF	86.1	22 - 176
1,2,3,7,8,9-HxCDF	195	200	97.5	78 - 130		13C-1,2,3,7,8,9-HxCDF	86.2	17 - 205
1,2,3,4,6,7,8-HpCDF	194	200	97.0	82 - 122		13C-1,2,3,4,6,7,8-HpCDF	79.4	21 - 158
1,2,3,4,7,8,9-HpCDF	198	200	98.8	78 - 138		13C-1,2,3,4,7,8,9-HpCDF	84.3	20 - 186
OCDF	387	400	96.8	63 - 170		13C-OCDF	68.7	13 - 199
					CRS	37Cl-2,3,7,8-TCDD	101	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: WM-MH-61-20150203-S							EPA Method 1613B			
Client Data		Sample Data			Laboratory Data					
Name:	Leidos	Matrix:	Sediment			Lab Sample:	1500147-02	Date Received:	05-Feb-2015 8:36	
Project:	NPDES Sampling Support	Sample Size:	25.3 g			QC Batch:	B5B0058	Date Extracted:	12-Feb-2015 9:57	
Date Collected:	02-Feb-2015 10:30	% Solids:	39.6			Date Analyzed :	20-Feb-15 10:07	Column:	DB-225 Analyst: CVG	
					20-Feb-15 20:47 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	0.499		0.852	0.0778		IS 13C-2,3,7,8-TCDD	92.1	25 - 164	
1,2,3,7,8-PeCDD	5.05	2.50		0.230			13C-1,2,3,7,8-PeCDD	77.8	25 - 181	
1,2,3,4,7,8-HxCDD	9.96	2.50		0.231			13C-1,2,3,4,7,8-HxCDD	87.5	32 - 141	
1,2,3,6,7,8-HxCDD	31.6	2.50		0.126			13C-1,2,3,6,7,8-HxCDD	84.0	28 - 130	
1,2,3,7,8,9-HxCDD	16.7	2.50		0.173			13C-1,2,3,7,8,9-HxCDD	84.8	32 - 141	
1,2,3,4,6,7,8-HpCDD	900	2.50		0.263	B		13C-1,2,3,4,6,7,8-HpCDD	89.0	23 - 140	
OCDD	8760	4.99		0.167	B, E		13C-OCDD	56.3	17 - 157	
2,3,7,8-TCDF	6.63	0.499		0.0289			13C-2,3,7,8-TCDF	97.0	24 - 169	
1,2,3,7,8-PeCDF	4.66	2.50		0.254			13C-1,2,3,7,8-PeCDF	89.5	24 - 185	
2,3,4,7,8-PeCDF	8.22	2.50		0.211			13C-2,3,4,7,8-PeCDF	86.6	21 - 178	
1,2,3,4,7,8-HxCDF	14.0	2.50		0.154			13C-1,2,3,4,7,8-HxCDF	79.0	26 - 152	
1,2,3,6,7,8-HxCDF	9.29	2.50		0.195			13C-1,2,3,6,7,8-HxCDF	82.8	26 - 123	
2,3,4,6,7,8-HxCDF	12.3	2.50		0.0805			13C-2,3,4,6,7,8-HxCDF	79.2	28 - 136	
1,2,3,7,8,9-HxCDF	0.577	2.50		0.195	J		13C-1,2,3,7,8,9-HxCDF	85.8	29 - 147	
1,2,3,4,6,7,8-HpCDF	189	2.50		0.230			13C-1,2,3,4,6,7,8-HpCDF	86.4	28 - 143	
1,2,3,4,7,8,9-HpCDF	11.7	2.50		0.211			13C-1,2,3,4,7,8,9-HpCDF	82.3	26 - 138	
OCDF	771	4.99		0.470			13C-OCDF	62.3	17 - 157	
						CRS	37Cl-2,3,7,8-TCDD	98.6	35 - 197	
							Toxic Equivalent Quotient (TEQ) Data			
							TEQMinWHO2005Dioxin	31.6		
TOTALS										
Total TCDD	19.1		20.2							
Total PeCDD	51.7									
Total HxCDD	414									
Total HpCDD	3090				B					
Total TCDF	118		120							
Total PeCDF	127									
Total HxCDF	259									
Total HpCDF	706									

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: WM-CB-52-20150203-S							EPA Method 1613B			
Client Data		Sample Data			Laboratory Data					
Name:	Leidos	Matrix:	Sediment			Lab Sample:	1500147-03	Date Received:	05-Feb-2015 8:36	
Project:	NPDES Sampling Support	Sample Size:	20.8 g			QC Batch:	B5B0058	Date Extracted:	12-Feb-2015 9:57	
Date Collected:	02-Feb-2015 12:00	% Solids:	48.1			Date Analyzed :	20-Feb-15 10:39	Column:	DB-225 Analyst: CVG	
					20-Feb-15 21:36 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		1.06	0.0778		IS 13C-2,3,7,8-TCDD	83.4	25 - 164	
1,2,3,7,8-PeCDD	7.87	2.50			0.230		13C-1,2,3,7,8-PeCDD	69.9	25 - 181	
1,2,3,4,7,8-HxCDD	10.2	2.50			0.231		13C-1,2,3,4,7,8-HxCDD	85.3	32 - 141	
1,2,3,6,7,8-HxCDD	99.3	2.50			0.126		13C-1,2,3,6,7,8-HxCDD	81.5	28 - 130	
1,2,3,7,8,9-HxCDD	41.6	2.50			0.173		13C-1,2,3,7,8,9-HxCDD	84.6	32 - 141	
1,2,3,4,6,7,8-HpCDD	895	2.50			0.263	B	13C-1,2,3,4,6,7,8-HpCDD	87.6	23 - 140	
OCDD	5120	5.00			0.167	B	13C-OCDD	56.2	17 - 157	
2,3,7,8-TCDF	3.97	0.500			0.0289		13C-2,3,7,8-TCDF	86.8	24 - 169	
1,2,3,7,8-PeCDF	3.78	2.50			0.254		13C-1,2,3,7,8-PeCDF	78.1	24 - 185	
2,3,4,7,8-PeCDF	4.53	2.50			0.211		13C-2,3,4,7,8-PeCDF	76.2	21 - 178	
1,2,3,4,7,8-HxCDF	8.43	2.50			0.154		13C-1,2,3,4,7,8-HxCDF	75.5	26 - 152	
1,2,3,6,7,8-HxCDF	8.77	2.50			0.195		13C-1,2,3,6,7,8-HxCDF	77.6	26 - 123	
2,3,4,6,7,8-HxCDF	12.5	2.50			0.0805		13C-2,3,4,6,7,8-HxCDF	78.8	28 - 136	
1,2,3,7,8,9-HxCDF	0.872	2.50			0.195	J	13C-1,2,3,7,8,9-HxCDF	82.4	29 - 147	
1,2,3,4,6,7,8-HpCDF	110	2.50			0.230		13C-1,2,3,4,6,7,8-HpCDF	84.6	28 - 143	
1,2,3,4,7,8,9-HpCDF	7.65	2.50			0.211		13C-1,2,3,4,7,8,9-HpCDF	79.7	26 - 138	
OCDF	180	5.00			0.470		13C-OCDF	59.7	17 - 157	
							CRS 37Cl-2,3,7,8-TCDD	85.1	35 - 197	
							Toxic Equivalent Quotient (TEQ) Data			
							TEQMinWHO2005Dioxin	39.6		
TOTALS										
Total TCDD	33.3		35.1							
Total PeCDD	85.7									
Total HxCDD	880									
Total HpCDD	2470					B				
Total TCDF	109		110							
Total PeCDF	121									
Total HxCDF	196									
Total HpCDF	271									

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: WM-CB-21-20150203-S							EPA Method 1613B			
Client Data		Sample Data			Laboratory Data					
Name:	Leidos	Matrix:	Sediment			Lab Sample:	1500147-04	Date Received:	05-Feb-2015 8:36	
Project:	NPDES Sampling Support	Sample Size:	21.5 g			QC Batch:	B5B0058	Date Extracted:	12-Feb-2015 9:57	
Date Collected:	02-Feb-2015 14:15	% Solids:	46.6			Date Analyzed :	20-Feb-15 11:11	Column:	DB-225 Analyst: CVG	
								20-Feb-15 22:25	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	0.499		0.375	0.0778		IS 13C-2,3,7,8-TCDD	94.2	25 - 164	
1,2,3,7,8-PeCDD	2.78	2.50		0.230			13C-1,2,3,7,8-PeCDD	78.0	25 - 181	
1,2,3,4,7,8-HxCDD	7.45	2.50		0.231			13C-1,2,3,4,7,8-HxCDD	95.2	32 - 141	
1,2,3,6,7,8-HxCDD	21.5	2.50		0.126			13C-1,2,3,6,7,8-HxCDD	84.6	28 - 130	
1,2,3,7,8,9-HxCDD	9.71	2.50		0.173			13C-1,2,3,7,8,9-HxCDD	88.8	32 - 141	
1,2,3,4,6,7,8-HpCDD	861	2.50		0.263	B		13C-1,2,3,4,6,7,8-HpCDD	91.3	23 - 140	
OCDD	6520	4.99		0.167	B, E		13C-OCDD	55.9	17 - 157	
2,3,7,8-TCDF	1.42	0.499		0.0289			13C-2,3,7,8-TCDF	99.3	24 - 169	
1,2,3,7,8-PeCDF	1.50	2.50		0.254	J		13C-1,2,3,7,8-PeCDF	88.8	24 - 185	
2,3,4,7,8-PeCDF	2.16	2.50		0.211	J		13C-2,3,4,7,8-PeCDF	86.3	21 - 178	
1,2,3,4,7,8-HxCDF	4.35	2.50		0.154			13C-1,2,3,4,7,8-HxCDF	83.2	26 - 152	
1,2,3,6,7,8-HxCDF	4.12	2.50		0.195			13C-1,2,3,6,7,8-HxCDF	82.5	26 - 123	
2,3,4,6,7,8-HxCDF	6.07	2.50		0.0805			13C-2,3,4,6,7,8-HxCDF	83.5	28 - 136	
1,2,3,7,8,9-HxCDF	0.745	2.50		0.195	J		13C-1,2,3,7,8,9-HxCDF	88.4	29 - 147	
1,2,3,4,6,7,8-HpCDF	68.3	2.50		0.230			13C-1,2,3,4,6,7,8-HpCDF	91.3	28 - 143	
1,2,3,4,7,8,9-HpCDF	4.55	2.50		0.211			13C-1,2,3,4,7,8,9-HpCDF	81.8	26 - 138	
OCDF	146	4.99		0.470			13C-OCDF	62.0	17 - 157	
						CRS	37Cl-2,3,7,8-TCDD	96.8	35 - 197	
							Toxic Equivalent Quotient (TEQ) Data			
							TEQMinWHO2005Dioxin	20.3		
TOTALS										
Total TCDD	8.30		8.92			B				
Total PeCDD	32.0									
Total HxCDD	505									
Total HpCDD	3860									
Total TCDF	37.8		38.7							
Total PeCDF	54.3		54.4							
Total HxCDF	115									
Total HpCDF	183									

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: Method Blank							EPA Method 1668C						
Matrix: Aqueous Sample Size: 1.00 L		QC Batch: B5B0101 Date Extracted: 24-Feb-2015 13:29				Lab Sample: B5B0101-BLK1 Date Analyzed: 25-Feb-15 18:28 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	3.63		1.21		PCB-43/49	ND	10.0	3.19		3.38	
PCB-2	ND	5.00	3.57		1.75		PCB-44	ND	5.00	4.30		2.48	
PCB-3	ND	5.00	3.56		1.49		PCB-45	ND	5.00	3.49		1.96	
PCB-4/10	ND	10.0	14.1		5.64		PCB-46	ND	5.00	3.83		2.49	
PCB-5/8	ND	10.0	11.3		3.59		PCB-47	ND	5.00	3.13		4.42	
PCB-6	ND	5.00	11.6		3.10		PCB-48/75	ND	10.0	2.83		2.09	
PCB-7/9	ND	10.0	11.4		6.22		PCB-50	ND	5.00	3.76		1.40	
PCB-11	18.6	5.00			3.86		PCB-51	ND	5.00	3.13		1.42	
PCB-12/13	ND	10.0	10.7		5.01		PCB-52/69	ND	10.0	2.82		3.64	
PCB-14	ND	5.00	9.23		3.98		PCB-53	ND	5.00	3.20		1.12	
PCB-15	ND	5.00	9.42		2.53		PCB-54	ND	5.00	2.86		1.51	
PCB-16/32	ND	10.0	3.13		2.87		PCB-55	ND	5.00	2.12		1.19	
PCB-17	ND	5.00	2.45		1.37		PCB-56/60	ND	10.0	2.35		2.19	
PCB-18	ND	5.00	2.64		2.57		PCB-57	ND	5.00	2.40		0.857	
PCB-19	ND	5.00	2.89		2.38		PCB-58	ND	5.00	2.37		1.81	
PCB-20/21/33	ND	15.0	2.75		10.3		PCB-61/70	ND	10.0	2.39		2.40	
PCB-22	ND	5.00	2.73		3.17		PCB-62	ND	5.00	2.76		1.46	
PCB-23	ND	5.00	2.63		1.35		PCB-63	ND	5.00	2.32		0.696	
PCB-24/27	ND	10.0	1.80		3.16		PCB-65	ND	5.00	2.85		0.953	
PCB-25	ND	5.00	2.90		3.34		PCB-66/76	ND	10.0	2.28		2.82	
PCB-26	ND	5.00	2.57		2.19		PCB-67	ND	5.00	2.47		1.22	
PCB-28	ND	5.00	2.57		2.90		PCB-68	ND	5.00	2.33		1.24	
PCB-29	ND	5.00	2.63		1.60		PCB-73	ND	5.00	2.58		1.56	
PCB-30	ND	5.00	1.83		2.09		PCB-74	ND	5.00	2.22		1.53	
PCB-31	ND	5.00	2.54		4.29		PCB-77	ND	5.00	2.26		1.34	
PCB-34	ND	5.00	2.44		2.34		PCB-78	ND	5.00	2.40		0.990	
PCB-35	ND	5.00	2.36		1.65		PCB-79	ND	5.00	2.24		1.60	
PCB-36	ND	5.00	2.28		2.69		PCB-80	ND	5.00	1.97		1.98	
PCB-37	ND	5.00	2.20		1.92		PCB-81	ND	5.00	2.19		2.34	
PCB-38	ND	5.00	2.39		1.56		PCB-82	ND	5.00	8.14		1.69	
PCB-39	ND	5.00	2.35		2.60		PCB-83	ND	5.00	4.78		1.32	
PCB-40	ND	5.00	4.37		3.08		PCB-84/92	ND	10.0	6.63		3.38	
PCB-41/64/71/72	ND	20.0	2.80		5.57		PCB-85/116	ND	10.0	5.71		2.83	
PCB-42/59	ND	10.0	3.03		2.84		PCB-86	ND	5.00	7.69		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: B5B0101 Date Extracted: 24-Feb-2015 13:29				Lab Sample: B5B0101-BLK1 Date Analyzed: 25-Feb-15 18:28 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	4.99		3.79		PCB-133/142	ND	10.0	3.77		2.19	
PCB-88/91	ND	5.00	6.93		3.25		PCB-134/143	ND	10.0	3.68		2.40	
PCB-89	ND	5.00	7.13		1.84		PCB-135	ND	5.00	5.12		2.90	
PCB-90/101	6.89	10.0			1.92	J	PCB-136	ND	5.00	3.57		2.89	
PCB-93	ND	5.00	7.34		1.47		PCB-137	ND	5.00	3.40		2.08	
PCB-94	ND	5.00	6.89		1.91		PCB-138/163/164	ND	15.0	2.70		2.68	
PCB-95/98/102	4.85	15.0			6.58	J	PCB-139/149	8.24	10.0			7.87	J
PCB-96	ND	5.00	5.34		2.16		PCB-140	ND	5.00	5.25		3.52	
PCB-97	ND	5.00	6.12		1.24		PCB-141	ND	5.00	3.47		1.15	
PCB-99	ND	5.00	5.68		1.94		PCB-144	ND	5.00	4.77		3.22	
PCB-100	ND	5.00	6.05		2.03		PCB-145	ND	5.00	3.73		1.73	
PCB-103	ND	5.00	6.02		2.28		PCB-146/165	ND	10.0	3.17		1.91	
PCB-104	ND	5.00	4.61		0.931		PCB-147	ND	5.00	5.24		3.62	
PCB-105	ND	5.00	3.43		2.21		PCB-148	ND	5.00	4.99		1.68	
PCB-106/118	ND	10.0	4.60		2.44		PCB-150	ND	5.00	3.62		1.14	
PCB-107/109	ND	10.0	4.53		1.98		PCB-151	ND	5.00	4.99		3.59	
PCB-108/112	ND	10.0	5.65		1.86		PCB-152	ND	5.00	3.49		1.82	
PCB-110	ND	5.00	2.99		1.94		PCB-153	4.12	5.00			1.83	J
PCB-111/115	ND	10.0	4.28		0.768		PCB-154	ND	5.00	4.58		2.78	
PCB-113	ND	5.00	5.30		1.31		PCB-155	ND	5.00	3.41		1.45	
PCB-114	ND	5.00	3.34		1.81		PCB-156	ND	5.00	2.51		1.74	
PCB-119	ND	5.00	4.23		0.949		PCB-157	ND	5.00	2.61		1.17	
PCB-120	ND	5.00	4.00		1.01		PCB-158/160	ND	10.0	2.53		1.99	
PCB-121	ND	5.00	4.42		1.94		PCB-159	ND	5.00	2.60		1.20	
PCB-122	ND	5.00	3.98		1.84		PCB-166	ND	5.00	2.78		0.920	
PCB-123	ND	5.00	4.83		1.35		PCB-167	ND	5.00	2.54		1.65	
PCB-124	ND	5.00	4.64		1.79		PCB-168	ND	5.00	2.53		0.933	
PCB-126	ND	5.00	3.51		2.05		PCB-169	ND	5.00	2.91		1.12	
PCB-127	ND	5.00	3.82		0.808		PCB-170	ND	5.00	2.71		1.38	
PCB-128/162	ND	10.0	3.07		1.68		PCB-171	ND	5.00	2.74		1.61	
PCB-129	ND	5.00	3.77		1.11		PCB-172	ND	5.00	2.94		1.46	
PCB-130	ND	5.00	4.36		2.21		PCB-173	ND	5.00	3.61		1.49	
PCB-131	ND	5.00	4.05		1.46		PCB-174	ND	5.00	3.09		1.42	
PCB-132/161	ND	10.0	3.06		2.34		PCB-175	ND	5.00	3.17		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: B5B0101			Date Extracted: 24-Feb-2015 13:29			Lab Sample:	B5B0101-BLK1	Date Analyzed: 25-Feb-15 18:28 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	2.28		2.17		Total triCB	ND	5.00				J		
PCB-177	ND	5.00	3.15		1.34		Total tetraCB	ND	5.00	4.37					
PCB-178	ND	5.00	3.09		2.25		Total pentaCB	11.7	5.00						
PCB-179	ND	5.00	2.39		1.57		Total hexaCB	12.4	5.00						
PCB-180	ND	5.00	2.75		0.610		Total heptaCB	ND	5.00	3.61					
PCB-181	ND	5.00	2.95		1.01		Total octaCB	ND	5.00				J		
PCB-182/187	ND	10.0	2.92		6.20		Total nonaCB	ND	5.00	4.37					
PCB-183	ND	5.00	2.71		3.29		DecaCB	ND	5.00	2.48					
PCB-184	ND	5.00	2.48		1.25		Total PCB	42.7	5.00						
PCB-185	ND	5.00	2.84		1.47										
PCB-186	ND	5.00	2.28		2.43										
PCB-188	ND	5.00	2.18		1.08										
PCB-189	ND	5.00	2.00		1.49										
PCB-190	ND	5.00	2.01		1.70										
PCB-191	ND	5.00	2.14		1.96										
PCB-192	ND	5.00	2.29		1.69										
PCB-193	ND	5.00	2.15		1.46										
PCB-194	ND	5.00	2.73		1.71										
PCB-195	ND	5.00	3.36		1.47										
PCB-196/203	ND	10.0	4.14		6.35										
PCB-197	ND	5.00	2.94		1.80										
PCB-198	ND	5.00	4.55		3.78										
PCB-199	ND	5.00	4.63		4.05										
PCB-200	ND	5.00	3.32		1.75										
PCB-201	ND	5.00	3.13		1.02										
PCB-202	ND	5.00	3.37		1.55										
PCB-204	ND	5.00	3.19		1.48										
PCB-205	ND	5.00	2.37		1.53										
PCB-206	ND	5.00	4.37		1.32										
PCB-207	ND	5.00	2.14		1.51										
PCB-208	ND	5.00	2.17		1.34										
PCB-209	ND	5.00	2.48		1.86										
Total monoCB	ND	5.00	3.63												
Total diCB	18.6	5.00													

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: B5B0101 Date Extracted: 24-Feb-2015 13:29		Lab Sample: B5B0101-BLK1 Date Analyzed: 25-Feb-15 18:28 Column: ZB-1 Analyst: DMS			
Labeled Standard	%R	LCL-UCL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
IS 13C-PCB-1	81.5	5-145		13C-PCB-157	91.5	10-145	
13C-PCB-3	89.0	5-145		13C-PCB-159	92.6	10-145	
13C-PCB-4	72.3	5-145		13C-PCB-167	93.9	10-145	
13C-PCB-11	84.1	5-145		13C-PCB-169	86.0	10-145	
13C-PCB-9	75.6	5-145		13C-PCB-170	90.2	10-145	
13C-PCB-19	101	5-145		13C-PCB-180	90.7	10-145	
13C-PCB-28	84.1	5-145		13C-PCB-188	83.7	10-145	
13C-PCB-32	105	5-145		13C-PCB-189	86.8	10-145	
13C-PCB-37	105	5-145		13C-PCB-194	97.7	10-145	
13C-PCB-47	78.8	5-145		13C-PCB-202	85.3	10-145	
13C-PCB-52	85.6	5-145		13C-PCB-206	97.2	10-145	
13C-PCB-54	71.0	5-145		13C-PCB-208	105	10-145	
13C-PCB-70	88.8	5-145		13C-PCB-209	94.9	10-145	
13C-PCB-77	88.4	10-145		CRS 13C-PCB-79	95.4	10-145	
13C-PCB-80	91.0	10-145		13C-PCB-178	93.9	10-145	
13C-PCB-81	88.0	10-145					
13C-PCB-95	94.1	10-145					
13C-PCB-97	101	10-145					
13C-PCB-101	97.2	10-145					
13C-PCB-104	86.2	10-145					
13C-PCB-105	80.6	10-145					
13C-PCB-114	82.4	10-145					
13C-PCB-118	95.7	10-145					
13C-PCB-123	101	10-145					
13C-PCB-126	88.0	10-145					
13C-PCB-127	80.3	10-145					
13C-PCB-138	93.2	10-145					
13C-PCB-141	92.2	10-145					
13C-PCB-153	91.3	10-145					
13C-PCB-155	85.6	10-145					
13C-PCB-156	92.8	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

Sample ID: OPR					EPA Method 1668C			
Matrix:	Aqueous <th>QC Batch:</th> <td>B5B0101</td> <th></th> <th>Lab Sample:</th> <td>B5B0101-BS1</td> <th></th> <th></th>	QC Batch:	B5B0101		Lab Sample:	B5B0101-BS1		
Sample Size:	1.00 L	Date Extracted:	24-Feb-2015 13:29		Date Analyzed:	25-Feb-15 15:16	Column: ZB-1 Analyst: DMS	
Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL	
PCB-1	3020	4000	75.5	60 - 135	IS 13C-PCB-1	81.6	15 - 145	
PCB-3	3040	4000	75.9	60 - 135	IS 13C-PCB-3	92.0	15 - 145	
PCB-4/10	6410	8000	80.1	60 - 135	IS 13C-PCB-4	71.4	15 - 145	
PCB-15	3360	4000	84.0	60 - 135	IS 13C-PCB-11	81.1	15 - 145	
PCB-19	3750	4000	93.7	60 - 135	IS 13C-PCB-9	73.0	15 - 145	
PCB-37	3740	4000	93.5	60 - 135	IS 13C-PCB-19	97.4	15 - 145	
PCB-54	3870	4000	96.7	60 - 135	IS 13C-PCB-28	86.7	15 - 145	
PCB-77	3480	4000	87.1	60 - 135	IS 13C-PCB-32	99.7	15 - 145	
PCB-81	3450	4000	86.2	60 - 135	IS 13C-PCB-37	103	15 - 145	
PCB-104	3930	4000	98.2	60 - 135	IS 13C-PCB-47	81.3	15 - 145	
PCB-105	3240	4000	81.1	60 - 135	IS 13C-PCB-52	82.9	15 - 145	
PCB-106/118	7760	8000	97.0	60 - 135	IS 13C-PCB-54	70.7	15 - 145	
PCB-114	3230	4000	80.8	60 - 135	IS 13C-PCB-70	93.3	15 - 145	
PCB-123	3960	4000	99.0	60 - 135	IS 13C-PCB-77	84.8	40 - 145	
PCB-126	3410	4000	85.3	60 - 135	IS 13C-PCB-80	88.5	40 - 145	
PCB-155	3860	4000	96.4	60 - 135	IS 13C-PCB-81	85.9	40 - 145	
PCB-156	3730	4000	93.3	60 - 135	IS 13C-PCB-95	92.8	40 - 145	
PCB-157	3850	4000	96.2	60 - 135	IS 13C-PCB-97	101	40 - 145	
PCB-167	3790	4000	94.9	60 - 135	IS 13C-PCB-101	98.0	40 - 145	
PCB-169	3840	4000	96.1	60 - 135	IS 13C-PCB-104	89.9	40 - 145	
PCB-188	3820	4000	95.4	60 - 135	IS 13C-PCB-105	77.4	40 - 145	
PCB-189	3800	4000	95.0	60 - 135	IS 13C-PCB-114	74.6	40 - 145	
PCB-202	3920	4000	98.0	60 - 135	IS 13C-PCB-118	88.0	40 - 145	
PCB-205	3760	4000	93.9	60 - 135	IS 13C-PCB-123	93.1	40 - 145	
PCB-206	3940	4000	98.4	60 - 135	IS 13C-PCB-126	79.6	40 - 145	
PCB-208	3870	4000	96.9	60 - 135	IS 13C-PCB-127	76.2	40 - 145	
PCB-209	3640	4000	91.0	60 - 135	IS 13C-PCB-138	85.7	40 - 145	
					IS 13C-PCB-141	84.4	40 - 145	
					IS 13C-PCB-153	83.5	40 - 145	
					IS 13C-PCB-155	86.9	40 - 145	
					IS 13C-PCB-156	88.4	40 - 145	
					IS 13C-PCB-157	87.8	40 - 145	
					IS 13C-PCB-159	89.7	40 - 145	
					IS 13C-PCB-167	86.2	40 - 145	
					IS 13C-PCB-169	84.8	40 - 145	
					IS 13C-PCB-170	85.7	40 - 145	
					IS 13C-PCB-180	84.0	40 - 145	
					IS 13C-PCB-188	75.6	40 - 145	
					IS 13C-PCB-189	82.1	40 - 145	
					IS 13C-PCB-194	91.2	40 - 145	

Sample ID: OPR					EPA Method 1668C			
Matrix:	Aqueous <th>QC Batch:</th> <td>B5B0101<th>Lab Sample:</th><td>B5B0101-BS1<th data-cs="2" data-kind="parent"></th><th data-kind="ghost"></th></td></td>	QC Batch:	B5B0101 <th>Lab Sample:</th> <td>B5B0101-BS1<th data-cs="2" data-kind="parent"></th><th data-kind="ghost"></th></td>	Lab Sample:	B5B0101-BS1 <th data-cs="2" data-kind="parent"></th> <th data-kind="ghost"></th>			
Sample Size:	1.00 L	Date Extracted:	24-Feb-2015 13:29	Date Analyzed:	25-Feb-15 15:16	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	97.5	40 - 145	
					IS 13C-PCB-208	98.9	40 - 145	
					IS 13C-PCB-209	96.7	40 - 145	
					CRS 13C-PCB-79	93.8	40 - 145	
					CRS 13C-PCB-178	86.9	40 - 145	

LCL-UCL - Lower control limit - upper control limit

Sample ID: WM-CB-11-20150203-W

EPA Method 1668C

Client Data							Sample Data							Laboratory Data							
Name:	Leidos						Matrix:	Aqueous						Lab Sample:	1500147-01			Date Received:	05-Feb-2015 8:36		
Project:	NPDES Sampling Support						Sample Size:	0.995 L						QC Batch:	B5B0101			Date Extracted:	11-Feb-2015 8:16		
Date Collected:	03-Feb-2015 14:30						Date Analyzed : 25-Feb-15 22:45 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	50.2	27.6		1.21	D	PCB-44	747	50.2			2.48	D								
PCB-2	82.9	50.2			1.75	D	PCB-45	75.1	50.2			1.96	D								
PCB-3	ND	50.2	23.9		1.49	D	PCB-46	41.7	50.2			2.49	J, D								
PCB-4/10	ND	100	92.4		5.64	D	PCB-47	150	50.2			4.42	D								
PCB-5/8	90.5	100			3.59	J, D	PCB-48/75	115	100			2.09	D								
PCB-6	ND	50.2	75.4		3.10	D	PCB-50	ND	50.2	22.8		1.40	D								
PCB-7/9	ND	100	74.5		6.22	D	PCB-51	21.5	50.2			1.42	J, D								
PCB-11	1110	50.2			3.86	B, D	PCB-52/69	820	100			3.64	D								
PCB-12/13	ND	100	72.6		5.01	D	PCB-53	94.5	50.2			1.12	D								
PCB-14	ND	50.2	62.5		3.98	D	PCB-54	ND	50.2	17.4		1.51	D								
PCB-15	130	50.2			2.53	D	PCB-55	17.5	50.2			1.19	J, D								
PCB-16/32	329	100			2.87	D	PCB-56/60	410	100			2.19	D								
PCB-17	194	50.2			1.37	D	PCB-57	ND	50.2	16.4		0.857	D								
PCB-18	499	50.2			2.57	D	PCB-58	ND	50.2	16.1		1.81	D								
PCB-19	47.9	50.2			2.38	J, D	PCB-61/70	909	100			2.40	D								
PCB-20/21/33	277	151			10.3	D	PCB-62	ND	50.2	16.5		1.46	D								
PCB-22	220	50.2			3.17	D	PCB-63	ND	50.2		32.8	0.696	D								
PCB-23	ND	50.2	17.9		1.35	D	PCB-65	ND	50.2	17.0		0.953	D								
PCB-24/27	48.5	100			3.16	J, D	PCB-66/76	552	100			2.82	D								
PCB-25	73.2	50.2			3.34	D	PCB-67	36.3	50.2			1.22	J, D								
PCB-26	122	50.2			2.19	D	PCB-68	ND	50.2	13.9		1.24	D								
PCB-28	610	50.2			2.90	D	PCB-73	ND	50.2	16.8		1.56	D								
PCB-29	ND	50.2	17.9		1.60	D	PCB-74	323	50.2			1.53	D								
PCB-30	ND	50.2	13.3		2.09	D	PCB-77	83.5	50.2			1.34	D								
PCB-31	514	50.2			4.29	D	PCB-78	ND	50.2	16.1		0.990	D								
PCB-34	ND	50.2	16.6		2.34	D	PCB-79	ND	50.2		19.4	1.60	D								
PCB-35	60.9	50.2			1.65	D	PCB-80	ND	50.2	13.9		1.98	D								
PCB-36	33.9	50.2			2.69	J, D	PCB-81	ND	50.2	14.7		2.34	D								
PCB-37	245	50.2			1.92	D	PCB-82	243	50.2			1.69	D								
PCB-38	ND	50.2	20.3		1.56	D	PCB-83	ND	50.2	29.9		1.32	D								
PCB-39	ND	50.2	20.0		2.60	D	PCB-84/92	764	100			3.38	D								
PCB-40	ND	50.2		104	3.08	D	PCB-85/116	273	100			2.83	D								
PCB-41/64/71/72	541	201			5.57	D	PCB-86	ND	50.2	48.0		2.34	D								
PCB-42/59	201	100			2.84	D	PCB-87/117/125	705	151			3.79	D								
PCB-43/49	500	100			3.38	D	PCB-88/91	259	50.2			3.25	D								

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

Sample ID: WM-CB-11-20150203-W

EPA Method 1668C

Client Data							Sample Data							Laboratory Data							
Name:	Leidos						Matrix:	Aqueous						Lab Sample:	1500147-01			Date Received:	05-Feb-2015 8:36		
Project:	NPDES Sampling Support						Sample Size:	0.995 L						QC Batch:	B5B0101			Date Extracted:	11-Feb-2015 8:16		
Date Collected:	03-Feb-2015 14:30						Date Analyzed : 25-Feb-15 22:45 Column: ZB-1 Analyst: DMS														
Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers	
PCB-89	23.8	50.2			1.84	J, D	PCB-136	220	50.2			2.89	D	PCB-136	220	50.2			2.89	D	
PCB-90/101	1710	100			1.92	B, D	PCB-137	92.2	50.2			2.08	D	PCB-137	92.2	50.2			2.08	D	
PCB-93	ND	50.2	45.5		1.47	D	PCB-138/163/164	1820	151			2.68	D	PCB-138/163/164	1820	151			2.68	D	
PCB-94	ND	50.2	42.8		1.91	D	PCB-139/149	1330	100			7.87	B, D	PCB-139/149	1330	100			7.87	B, D	
PCB-95/98/102	1210	151			6.58	B, D	PCB-140	28.7	50.2			3.52	J, D	PCB-140	28.7	50.2			3.52	J, D	
PCB-96	ND	50.2	30.5		2.16	D	PCB-141	351	50.2			1.15	D	PCB-141	351	50.2			1.15	D	
PCB-97	521	50.2			1.24	D	PCB-144	102	50.2			3.22	D	PCB-144	102	50.2			3.22	D	
PCB-99	685	50.2			1.94	D	PCB-145	ND	50.2	30.9		1.73	D	PCB-145	ND	50.2	30.9		1.73	D	
PCB-100	ND	50.2	34.6		2.03	D	PCB-146/165	275	100			1.91	D	PCB-146/165	275	100			1.91	D	
PCB-103	ND	50.2	34.4		2.28	D	PCB-147	58.0	50.2			3.62	D	PCB-147	58.0	50.2			3.62	D	
PCB-104	ND	50.2	26.4		0.931	D	PCB-148	ND	50.2	41.3		1.68	D	PCB-148	ND	50.2	41.3		1.68	D	
PCB-105	590	50.2			2.21	D	PCB-150	ND	50.2	30.0		1.14	D	PCB-150	ND	50.2	30.0		1.14	D	
PCB-106/118	1620	100			2.44	D	PCB-151	345	50.2			3.59	D	PCB-151	345	50.2			3.59	D	
PCB-107/109	128	100			1.98	D	PCB-152	ND	50.2	28.9		1.82	D	PCB-152	ND	50.2	28.9		1.82	D	
PCB-108/112	88.4	100			1.86	J, D	PCB-153	1530	50.2			1.83	B, D	PCB-153	1530	50.2			1.83	B, D	
PCB-110	2100	50.2			1.94	D	PCB-154	38.9	50.2			2.78	J, D	PCB-154	38.9	50.2			2.78	J, D	
PCB-111/115	ND	100		26.1	0.768	D	PCB-155	ND	50.2	28.2		1.45	D	PCB-155	ND	50.2	28.2		1.45	D	
PCB-113	ND	50.2	31.4		1.31	D	PCB-156	220	50.2			1.74	D	PCB-156	220	50.2			1.74	D	
PCB-114	ND	50.2		27.1	1.81	D	PCB-157	ND	50.2		46.5	1.17	D	PCB-157	ND	50.2		46.5	1.17	D	
PCB-119	ND	50.2		37.5	0.949	D	PCB-158/160	ND	100		208	1.99	D	PCB-158/160	ND	100		208	1.99	D	
PCB-120	ND	50.2	25.0		1.01	D	PCB-159	36.1	50.2			1.20	J, D	PCB-159	36.1	50.2			1.20	J, D	
PCB-121	ND	50.2	27.4		1.94	D	PCB-166	ND	50.2	31.2		0.920	D	PCB-166	ND	50.2	31.2		0.920	D	
PCB-122	ND	50.2		15.1	1.84	D	PCB-167	89.4	50.2			1.65	D	PCB-167	89.4	50.2			1.65	D	
PCB-123	29.2	50.2			1.35	J, D	PCB-168	ND	50.2	26.4		0.933	D	PCB-168	ND	50.2	26.4		0.933	D	
PCB-124	ND	50.2		66.3	1.79	D	PCB-169	ND	50.2	34.3		1.12	D	PCB-169	ND	50.2	34.3		1.12	D	
PCB-126	ND	50.2	47.8		2.05	D	PCB-170	464	50.2			1.38	D	PCB-170	464	50.2			1.38	D	
PCB-127	ND	50.2	44.4		0.808	D	PCB-171	146	50.2			1.61	D	PCB-171	146	50.2			1.61	D	
PCB-128/162	340	100			1.68	D	PCB-172	105	50.2			1.46	D	PCB-172	105	50.2			1.46	D	
PCB-129	ND	50.2		98.2	1.11	D	PCB-173	ND	50.2	31.2		1.49	D	PCB-173	ND	50.2	31.2		1.49	D	
PCB-130	167	50.2			2.21	D	PCB-174	558	50.2			1.42	D	PCB-174	558	50.2			1.42	D	
PCB-131	ND	50.2	42.4		1.46	D	PCB-175	24.3	50.2			3.15	J, D	PCB-175	24.3	50.2			3.15	J, D	
PCB-132/161	518	100			2.34	D	PCB-176	55.4	50.2			2.17	D	PCB-176	55.4	50.2			2.17	D	
PCB-133/142	ND	100		61.9	2.19	D	PCB-177	304	50.2			1.34	D	PCB-177	304	50.2			1.34	D	
PCB-134/143	ND	100		95.6	2.40	D	PCB-178	ND	50.2		89.9	2.25	D	PCB-178	ND	50.2		89.9	2.25	D	
PCB-135	ND	50.2		213	2.90	D	PCB-179	207	50.2			1.57	D	PCB-179	207	50.2			1.57	D	

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

Sample ID: WM-CB-11-20150203-W

EPA Method 1668C

Client Data							Sample Data							Laboratory Data							
Name:	Leidos						Matrix:	Aqueous						Lab Sample:	1500147-01			Date Received:	05-Feb-2015 8:36		
Project:	NPDES Sampling Support						Sample Size:	0.995 L						QC Batch:	B5B0101			Date Extracted:	11-Feb-2015 8:16		
Date Collected: 03-Feb-2015 14:30															Date Analyzed : 25-Feb-15 22:45 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	1150	50.2			0.610	D	Total octaCB	1300	50.2			1350	B								
PCB-181	ND	50.2	25.5		1.01	D	Total nonaCB	193	50.2												
PCB-182/187	600	100			6.20	D	DecaCB	ND	50.2			37.3	J								
PCB-183	260	50.2			3.29	D	Total PCB	34400	50.2				B								
PCB-184	ND	50.2	17.3		1.25	D															
PCB-185	ND	50.2		54.2	1.47	D															
PCB-186	ND	50.2	15.9		2.43	D															
PCB-188	ND	50.2	15.2		1.08	D															
PCB-189	ND	50.2	17.5		1.49	D															
PCB-190	101	50.2			1.70	D															
PCB-191	ND	50.2	18.5		1.96	D															
PCB-192	ND	50.2	19.8		1.69	D															
PCB-193	48.9	50.2			1.46	J, D															
PCB-194	276	50.2			1.71	D															
PCB-195	105	50.2			1.47	D															
PCB-196/203	399	100			6.35	D															
PCB-197	ND	50.2	30.4		1.80	D															
PCB-198	ND	50.2	47.0		3.78	D															
PCB-199	378	50.2			4.05	D															
PCB-200	57.2	50.2			1.75	D															
PCB-201	ND	50.2	52.7		1.02	D															
PCB-202	84.1	50.2			1.55	D															
PCB-204	ND	50.2	33.0		1.48	D															
PCB-205	ND	50.2	21.6		1.53	D															
PCB-206	139	50.2			1.32	D															
PCB-207	ND	50.2	15.6		1.51	D															
PCB-208	53.7	50.2			1.34	D															
PCB-209	ND	50.2	37.3		1.86	D															
Total monoCB	82.9	50.2																			
Total diCB	1330	50.2				B															
Total triCB	3270	50.2				B															
Total tetraCB	5640	50.2	5790																		
Total pentaCB	10900	50.2	11100			B															
Total hexaCB	7570	50.2	8290			B															
Total heptaCB	4020	50.2	4170																		

RL - Reporting limit

EMPC - Estimated maximum possible concentration

MDL - Method detection limit

LCL-UCL- Lower control limit - upper control limit

Sample ID: WM-CB-11-20150203-W**EPA Method 1668C**

Client Data				Sample Data				Laboratory Data			
Name:		Leidos		Matrix:		Aqueous		Lab Sample:		Date Received:	
Project:		NPDES Sampling Support		Sample Size:		0.995 L		QC Batch:		05-Feb-2015 8:36	
Date Collected:		03-Feb-2015 14:30		Date Extracted:		11-Feb-2015 8:16		Date Analyzed :		25-Feb-15 22:45 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	100	5 -145	D	13C-PCB-170	95.7	10 -145	D	13C-PCB-3	117	5 -145	D
13C-PCB-3	93.2	5 -145	D	13C-PCB-180	93.6	10 -145	D	13C-PCB-4	109	5 -145	D
13C-PCB-4	101	5 -145	D	13C-PCB-188	104	10 -145	D	13C-PCB-11	101	5 -145	D
13C-PCB-11	130	5 -145	D	13C-PCB-189	88.6	10 -145	D	13C-PCB-9	114	5 -145	D
13C-PCB-9	114	5 -145	D	13C-PCB-194	120	10 -145	D	13C-PCB-19	129	5 -145	D
13C-PCB-19	114	5 -145	D	13C-PCB-202	95.2	10 -145	D	13C-PCB-28	110	5 -145	D
13C-PCB-28	112	5 -145	D	13C-PCB-206	130	10 -145	D	13C-PCB-32	114	5 -145	D
13C-PCB-32	114	5 -145	D	13C-PCB-208	130	10 -145	D	13C-PCB-37	114	5 -145	D
13C-PCB-37	110	5 -145	D	13C-PCB-209	125	10 -145	D	13C-PCB-47	96.9	5 -145	D
13C-PCB-47	112	5 -145	D	CRS 13C-PCB-79	113	10 -145	D	13C-PCB-52	107	5 -145	D
13C-PCB-52	107	5 -145	D	13C-PCB-178	101	10 -145	D	13C-PCB-54	110	10 -145	D
13C-PCB-54	107	10 -145	D					13C-PCB-70	109	10 -145	D
13C-PCB-70	107	10 -145	D					13C-PCB-77	108	10 -145	D
13C-PCB-77	107	10 -145	D					13C-PCB-80	106	10 -145	D
13C-PCB-80	109	10 -145	D					13C-PCB-81	103	10 -145	D
13C-PCB-81	113	10 -145	D					13C-PCB-95	109	10 -145	D
13C-PCB-95	112	10 -145	D					13C-PCB-97	108	10 -145	D
13C-PCB-97	111	10 -145	D					13C-PCB-101	106	10 -145	D
13C-PCB-101	111	10 -145	D					13C-PCB-104	103	10 -145	D
13C-PCB-104	108	10 -145	D					13C-PCB-105	108	10 -145	D
13C-PCB-105	106	10 -145	D					13C-PCB-114	106	10 -145	D
13C-PCB-114	103	10 -145	D					13C-PCB-118	101	10 -145	D
13C-PCB-118	108	10 -145	D					13C-PCB-123	101	10 -145	D
13C-PCB-123	111	10 -145	D					13C-PCB-126	109	10 -145	D
13C-PCB-126	98.3	10 -145	D					13C-PCB-127	105	10 -145	D
13C-PCB-127	101	10 -145	D					13C-PCB-138	106	10 -145	D
13C-PCB-138	109	10 -145	D					13C-PCB-141	105	10 -145	D
13C-PCB-141	110	10 -145	D					13C-PCB-153	103	10 -145	D
13C-PCB-153	106	10 -145	D					13C-PCB-155	101	10 -145	D
13C-PCB-155	101	10 -145	D					13C-PCB-156	99.7	10 -145	D
13C-PCB-156	103	10 -145	D					13C-PCB-157	104	10 -145	D
13C-PCB-157	108.4	10 -145	D					13C-PCB-159	102.2	10 -145	D
13C-PCB-159	98.4	10 -145	D					13C-PCB-167	92.2	10 -145	D
13C-PCB-167	92.2	10 -145	D					13C-PCB-169			

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: B5B0059			Date Extracted: 12-Feb-2015 10:59			Lab Sample:	B5B0059-BLK1	Date Analyzed: 19-Feb-15 18:23 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	12.5	3.78		0.320		PCB-43/49	ND	25.0	3.84		0.879		
PCB-2	ND	12.5	3.97		0.240		PCB-44	ND	12.5	4.12		0.745		
PCB-3	ND	12.5	3.30		0.323		PCB-45	ND	12.5	4.43		0.402		
PCB-4/10	ND	25.0	14.3		1.14		PCB-46	ND	12.5	4.52		0.537		
PCB-5/8	ND	25.0	13.1		1.76		PCB-47	ND	12.5	3.35		2.19		
PCB-6	ND	12.5	11.6		1.00		PCB-48/75	ND	25.0	2.89		0.983		
PCB-7/9	ND	25.0	12.5		1.34		PCB-50	ND	12.5	3.71		0.603		
PCB-11	ND	12.5	12.6		3.48		PCB-51	ND	12.5	3.86		0.789		
PCB-12/13	ND	25.0	11.5		1.37		PCB-52/69	ND	25.0	2.98		0.722		
PCB-14	ND	12.5	12.4		0.337		PCB-53	ND	12.5	3.59		0.331		
PCB-15	ND	12.5	10.7		0.634		PCB-54	ND	12.5	2.97		0.275		
PCB-16/32	ND	25.0	3.41		0.430		PCB-55	ND	12.5	2.54		0.416		
PCB-17	ND	12.5	3.47		0.658		PCB-56/60	ND	25.0	2.62		0.825		
PCB-18	ND	12.5	4.09		0.696		PCB-57	ND	12.5	2.76		0.354		
PCB-19	ND	12.5	4.50		0.612		PCB-58	ND	12.5	2.91		0.589		
PCB-20/21/33	ND	37.5	2.77		2.47		PCB-61/70	ND	25.0	2.83		1.20		
PCB-22	ND	12.5	2.48		0.964		PCB-62	ND	12.5	2.90		0.597		
PCB-23	ND	12.5	2.34		0.543		PCB-63	ND	12.5	2.84		0.524		
PCB-24/27	ND	25.0	2.69		0.742		PCB-65	ND	12.5	2.89		0.842		
PCB-25	ND	12.5	2.37		0.768		PCB-66/76	ND	25.0	2.58		1.31		
PCB-26	ND	12.5	2.48		0.766		PCB-67	ND	12.5	2.44		0.486		
PCB-28	ND	12.5	1.75		1.12		PCB-68	ND	12.5	2.63		0.658		
PCB-29	ND	12.5	2.77		0.949		PCB-73	ND	12.5	2.83		0.454		
PCB-30	ND	12.5	2.74		0.355		PCB-74	ND	12.5	2.17		0.781		
PCB-31	ND	12.5	2.33		0.809		PCB-77	ND	12.5	2.61		0.748		
PCB-34	ND	12.5	2.63		1.57		PCB-78	ND	12.5	2.24		0.385		
PCB-35	ND	12.5	2.39		0.565		PCB-79	ND	12.5	2.45		0.633		
PCB-36	ND	12.5	2.58		0.406		PCB-80	ND	12.5	2.22		0.336		
PCB-37	ND	12.5	2.40		0.389		PCB-81	ND	12.5	2.14		0.674		
PCB-38	ND	12.5	2.46		0.528		PCB-82	ND	12.5	9.99		0.981		
PCB-39	ND	12.5	2.64		0.461		PCB-83	ND	12.5	6.80		0.440		
PCB-40	ND	12.5	5.05		0.927		PCB-84/92	ND	25.0	8.91		1.01		
PCB-41/64/71/72	ND	50.0	2.93		1.70		PCB-85/116	ND	25.0	7.93		1.64		
PCB-42/59	ND	25.0	3.11		0.899		PCB-86	ND	12.5	12.3		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 Sample Size: 2.00 g		QC Batch: B5B0059 Date Extracted: 12-Feb-2015 10:59				Lab Sample: B5B0059-BLK1 Date Analyzed: 19-Feb-15 18:23 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	37.5	6.66		0.880		PCB-133/142	ND	25.0	4.61		1.04	
PCB-88/91	ND	25.0	8.84		1.25		PCB-134/143	ND	25.0	4.12		1.05	
PCB-89	ND	12.5	8.24		1.22		PCB-135	ND	12.5	8.89		1.47	
PCB-90/101	ND	25.0	8.48		1.19		PCB-136	ND	12.5	5.98		0.776	
PCB-93	ND	12.5	11.7		2.53		PCB-137	ND	12.5	3.81		0.541	
PCB-94	ND	12.5	9.34		0.874		PCB-138/163/164	ND	37.5	2.98		0.809	
PCB-95/98/102	ND	37.5	8.06		1.38		PCB-139/149	ND	25.0	9.25		1.49	
PCB-96	ND	12.5	6.64		0.588		PCB-140	ND	12.5	9.76		1.20	
PCB-97	ND	12.5	8.73		0.675		PCB-141	ND	12.5	3.73		0.678	
PCB-99	ND	12.5	6.97		0.474		PCB-144	ND	12.5	9.25		1.38	
PCB-100	ND	12.5	8.07		0.511		PCB-145	ND	12.5	5.87		1.05	
PCB-103	ND	12.5	7.90		0.428		PCB-146/165	ND	25.0	3.03		0.792	
PCB-104	ND	12.5	6.40		0.876		PCB-147	ND	12.5	8.60		5.26	
PCB-105	ND	12.5	3.87		0.462		PCB-148	ND	12.5	9.47		1.45	
PCB-106/118	ND	25.0	6.21		0.728		PCB-150	ND	12.5	7.06		0.801	
PCB-107/109	ND	25.0	5.74		0.631		PCB-151	ND	12.5	9.44		1.16	
PCB-108/112	ND	25.0	8.07		0.844		PCB-152	ND	12.5	6.32		0.744	
PCB-110	ND	12.5	6.64		0.555		PCB-153	ND	12.5	3.02		0.484	
PCB-111/115	ND	25.0	6.32		1.24		PCB-154	ND	12.5	8.22		0.837	
PCB-113	ND	12.5	6.61		0.495		PCB-155	ND	12.5	6.33		0.767	
PCB-114	ND	12.5	3.88		0.418		PCB-156	ND	12.5	2.92		0.534	
PCB-119	ND	12.5	6.74		0.383		PCB-157	ND	12.5	2.77		0.485	
PCB-120	ND	12.5	6.16		0.622		PCB-158/160	ND	25.0	2.87		0.915	
PCB-121	ND	12.5	6.11		0.978		PCB-159	ND	12.5	3.15		0.578	
PCB-122	ND	12.5	4.49		0.619		PCB-166	ND	12.5	2.96		0.425	
PCB-123	ND	12.5	6.49		0.494		PCB-167	ND	12.5	2.57		0.653	
PCB-124	ND	12.5	5.16		0.813		PCB-168	ND	12.5	2.60		0.502	
PCB-126	ND	12.5	4.51		0.543		PCB-169	ND	12.5	2.71		0.767	
PCB-127	ND	12.5	3.50		0.326		PCB-170	ND	12.5	3.33		0.758	
PCB-128/162	ND	25.0	3.35		1.08		PCB-171	ND	12.5	3.04		0.372	
PCB-129	ND	12.5	4.51		0.567		PCB-172	ND	12.5	2.94		0.857	
PCB-130	ND	12.5	4.20		0.798		PCB-173	ND	12.5	4.33		0.507	
PCB-131	ND	12.5	4.16		0.731		PCB-174	ND	12.5	3.49		0.797	
PCB-132/161	ND	25.0	3.42		1.05		PCB-175	ND	12.5	3.71		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: B5B0059			Lab Sample: B5B0059-BLK1			Sample Size:	2.00 g <th data-cs="3" data-kind="parent">Date Extracted: 12-Feb-2015 10:59</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <th data-cs="3" data-kind="parent">Date Analyzed: 19-Feb-15 18:23 Column: ZB-1 Analyst: DMS</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th>	Date Extracted: 12-Feb-2015 10:59			Date Analyzed: 19-Feb-15 18:23 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	12.5	2.55		0.729		Total triCB	ND	12.5	4.50					
PCB-177	ND	12.5	3.83		0.404		Total tetraCB	ND	12.5	5.05					
PCB-178	ND	12.5	3.64		0.610		Total pentaCB	ND	12.5	12.3					
PCB-179	ND	12.5	2.88		0.418		Total hexaCB	ND	12.5	9.76					
PCB-180	ND	12.5	3.58		0.420		Total heptaCB	ND	12.5	4.33					
PCB-181	ND	12.5	3.49		1.26		Total octaCB	ND	12.5	6.82					
PCB-182/187	ND	25.0	3.01		1.33		Total nonaCB	ND	12.5	2.36					
PCB-183	ND	12.5	3.11		0.638		DecaCB	ND	12.5	5.49	5.49				
PCB-184	ND	12.5	2.30		0.597		Total PCB	ND	12.5	5.49					
PCB-185	ND	12.5	2.67		0.557										
PCB-186	ND	12.5	2.59		0.421										
PCB-188	ND	12.5	2.38		0.759										
PCB-189	ND	12.5	2.38		0.483										
PCB-190	ND	12.5	2.41		0.686										
PCB-191	ND	12.5	2.84		0.447										
PCB-192	ND	12.5	2.76		0.528										
PCB-193	ND	12.5	2.80		0.836										
PCB-194	ND	12.5	2.63		0.645										
PCB-195	ND	12.5	2.60		0.722										
PCB-196/203	ND	25.0	6.42		0.983										
PCB-197	ND	12.5	4.79		0.794										
PCB-198	ND	12.5	6.82		0.792										
PCB-199	ND	12.5	6.45		0.615										
PCB-200	ND	12.5	4.84		0.795										
PCB-201	ND	12.5	4.48		0.317										
PCB-202	ND	12.5	4.75		0.759										
PCB-204	ND	12.5	4.52		0.543										
PCB-205	ND	12.5	2.07		0.471										
PCB-206	ND	12.5	2.36		0.852										
PCB-207	ND	12.5	1.33		0.402										
PCB-208	ND	12.5	1.54		0.441										
PCB-209	ND	12.5		5.49	1.10										
Total monoCB	ND	12.5	3.97												
Total diCB	ND	12.5	14.3												

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: 2.00 g		QC Batch: B5B0059 Date Extracted: 12-Feb-2015 10:59		Lab Sample: B5B0059-BLK1 Date Analyzed: 19-Feb-15 18:23 Column: ZB-1 Analyst: DMS					
Labeled Standard		%R	LCL-UCL	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	67.2	5-145			13C-PCB-157	91.1	10-145	
	13C-PCB-3	68.2	5-145			13C-PCB-159	87.2	10-145	
	13C-PCB-4	68.7	5-145			13C-PCB-167	89.6	10-145	
	13C-PCB-11	76.3	5-145			13C-PCB-169	92.4	10-145	
	13C-PCB-9	68.0	5-145			13C-PCB-170	83.3	10-145	
	13C-PCB-19	68.7	5-145			13C-PCB-180	79.5	10-145	
	13C-PCB-28	107	5-145			13C-PCB-188	77.5	10-145	
	13C-PCB-32	71.8	5-145			13C-PCB-189	83.5	10-145	
	13C-PCB-37	127	5-145			13C-PCB-194	88.2	10-145	
	13C-PCB-47	76.4	5-145			13C-PCB-202	70.0	10-145	
	13C-PCB-52	76.3	5-145			13C-PCB-206	98.9	10-145	
	13C-PCB-54	68.1	5-145			13C-PCB-208	89.5	10-145	
	13C-PCB-70	83.4	5-145			13C-PCB-209	104	10-145	
	13C-PCB-77	91.1	10-145			CRS	13C-PCB-79	90.9	10-145
	13C-PCB-80	83.6	10-145				13C-PCB-178	83.3	10-145
	13C-PCB-81	89.7	10-145						
	13C-PCB-95	82.3	10-145						
	13C-PCB-97	89.3	10-145						
	13C-PCB-101	86.3	10-145						
	13C-PCB-104	78.3	10-145						
	13C-PCB-105	91.3	10-145						
	13C-PCB-114	89.7	10-145						
	13C-PCB-118	92.1	10-145						
	13C-PCB-123	92.4	10-145						
	13C-PCB-126	91.7	10-145						
	13C-PCB-127	91.1	10-145						
	13C-PCB-138	87.9	10-145						
	13C-PCB-141	86.3	10-145						
	13C-PCB-153	88.1	10-145						
	13C-PCB-155	66.0	10-145						
	13C-PCB-156	90.6	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:	B5B0059		Lab Sample:	B5B0059-BS1		
Sample Size:	2.00 g	Date Extracted:	12-Feb-2015 10:59		Date Analyzed:	19-Feb-15 15:11 Column: ZB-1 Analyst: DMS		
Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL	
PCB-1	4880	5000	97.5	60 - 135	IS 13C-PCB-1	69.9	15 - 145	
PCB-3	4880	5000	97.6	60 - 135	IS 13C-PCB-3	71.5	15 - 145	
PCB-4/10	18400	20000	91.8	60 - 135	IS 13C-PCB-4	70.8	15 - 145	
PCB-15	9390	10000	93.9	60 - 135	IS 13C-PCB-11	77.1	15 - 145	
PCB-19	5410	5000	108	60 - 135	IS 13C-PCB-9	69.4	15 - 145	
PCB-37	5040	5000	101	60 - 135	IS 13C-PCB-19	70.5	15 - 145	
PCB-54	5440	5000	109	60 - 135	IS 13C-PCB-28	107	15 - 145	
PCB-77	5430	5000	109	60 - 135	IS 13C-PCB-32	72.1	15 - 145	
PCB-81	5270	5000	105	60 - 135	IS 13C-PCB-37	131	15 - 145	
PCB-104	5380	5000	108	60 - 135	IS 13C-PCB-47	77.5	15 - 145	
PCB-105	4880	5000	97.6	60 - 135	IS 13C-PCB-52	76.9	15 - 145	
PCB-106/118	10800	10000	108	60 - 135	IS 13C-PCB-54	70.2	15 - 145	
PCB-114	4770	5000	95.4	60 - 135	IS 13C-PCB-70	81.4	15 - 145	
PCB-123	5390	5000	108	60 - 135	IS 13C-PCB-77	87.7	40 - 145	
PCB-126	5050	5000	101	60 - 135	IS 13C-PCB-80	81.8	40 - 145	
PCB-155	5290	5000	106	60 - 135	IS 13C-PCB-81	85.3	40 - 145	
PCB-156	5410	5000	108	60 - 135	IS 13C-PCB-95	80.3	40 - 145	
PCB-157	5220	5000	104	60 - 135	IS 13C-PCB-97	84.4	40 - 145	
PCB-167	5350	5000	107	60 - 135	IS 13C-PCB-101	82.4	40 - 145	
PCB-169	5210	5000	104	60 - 135	IS 13C-PCB-104	78.1	40 - 145	
PCB-188	5360	5000	107	60 - 135	IS 13C-PCB-105	83.3	40 - 145	
PCB-189	5370	5000	107	60 - 135	IS 13C-PCB-114	81.9	40 - 145	
PCB-202	5120	5000	102	60 - 135	IS 13C-PCB-118	85.7	40 - 145	
PCB-205	4780	5000	95.6	60 - 135	IS 13C-PCB-123	86.9	40 - 145	
PCB-206	5100	5000	102	60 - 135	IS 13C-PCB-126	84.9	40 - 145	
PCB-208	5130	5000	103	60 - 135	IS 13C-PCB-127	84.3	40 - 145	
PCB-209	5300	5000	106	60 - 135	IS 13C-PCB-138	83.4	40 - 145	
					IS 13C-PCB-141	82.9	40 - 145	
					IS 13C-PCB-153	84.2	40 - 145	
					IS 13C-PCB-155	63.4	40 - 145	
					IS 13C-PCB-156	84.6	40 - 145	
					IS 13C-PCB-157	84.3	40 - 145	
					IS 13C-PCB-159	82.5	40 - 145	
					IS 13C-PCB-167	83.6	40 - 145	
					IS 13C-PCB-169	85.2	40 - 145	
					IS 13C-PCB-170	74.1	40 - 145	
					IS 13C-PCB-180	75.4	40 - 145	
					IS 13C-PCB-188	73.5	40 - 145	
					IS 13C-PCB-189	74.0	40 - 145	
					IS 13C-PCB-194	86.3	40 - 145	

Sample ID: OPR					EPA Method 1668C			
Matrix:	Solid	QC Batch:	B5B0059	Lab Sample:	B5B0059-BS1			
Sample Size:	2.00 g	Date Extracted:	12-Feb-2015 10:59	Date Analyzed:	19-Feb-15 15:11	Column:	ZB-1	Analyst: DMS
Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL	
					IS 13C-PCB-202	65.1	40 - 145	
					IS 13C-PCB-206	92.5	40 - 145	
					IS 13C-PCB-208	89.4	40 - 145	
					IS 13C-PCB-209	91.8	40 - 145	
					CRS 13C-PCB-79	88.2	40 - 145	
					CRS 13C-PCB-178	79.0	40 - 145	

LCL-UCL - Lower control limit - upper control limit

Sample ID: WM-MH-61-20150203-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data							
Name:	Leidos						Matrix:	Sediment						Lab Sample:	1500147-02			Date Received:	05-Feb-2015 8:36		
Project:	NPDES Sampling Support						Sample Size:	5.08 g						QC Batch:	B5B0059			Date Extracted:	12-Feb-2015 10:59		
Date Collected:	02-Feb-2015 10:30						% Solids:	39.6						Date Analyzed :	19-Feb-15 20:32 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-1	494	124			0.320	D	PCB-44	54600	124			0.745	D	PCB-45	2870	124			0.402	D	
PCB-2	151	124			0.240	D	PCB-46	1260	124			0.537	D	PCB-47	4180	124			2.19	D	
PCB-3	281	124			0.323	D	PCB-48/75	3070	249			0.983	D	PCB-50	48.6	124			0.603	J, D	
PCB-4/10	2060	249			1.14	D	PCB-51	746	124			0.789	D	PCB-52/69	98000	249			0.722	D	
PCB-5/8	5670	249			1.76	D	PCB-53	3600	124			0.331	D	PCB-54	ND	124	42.3	0.275	0.275	D	
PCB-6	942	124			1.00	D	PCB-55	879	124			0.416	D	PCB-56/60	14900	249			0.825	D	
PCB-7/9	339	249			1.34	D	PCB-57	83.1	124			0.354	J, D	PCB-58	46.5	124			0.589	J, D	
PCB-11	1630	124			3.48	D	PCB-61/70	82100	249			1.20	D	PCB-62	ND	124	94.7	0.597	0.597	D	
PCB-12/13	307	249			1.37	D	PCB-63	1030	124			0.524	D	PCB-65	ND	124	94.4	0.842	0.842	D	
PCB-14	ND	124	148		0.337	D	PCB-66/76	24200	249			1.31	D	PCB-67	501	124			0.486	D	
PCB-15	3470	124			0.634	D	PCB-68	31.1	124			0.658	J, D	PCB-73	ND	124	86.3	0.454	0.454	D	
PCB-16/32	8930	249			0.430	D	PCB-74	14400	124			0.781	D	PCB-77	2250	124			0.748	D	
PCB-17	4790	124			0.658	D	PCB-78	ND	124	79.2		0.385	D	PCB-79	1320	124			0.633	D	
PCB-18	15400	124			0.696	D	PCB-80	ND	124	69.7		0.336	D	PCB-81	357	124			0.674	D	
PCB-19	1760	124			0.612	D	PCB-82	21200	124			0.981	D	PCB-83	ND	124	75.4	0.440	0.440	D	
PCB-20/21/33	10100	373			2.47	D	PCB-84/92	83200	249			1.01	D	PCB-85/116	24300	249			1.64	D	
PCB-22	4650	124			0.964	D	PCB-86	338	124			1.79	D	PCB-87/117/125	70600	373			0.880	D	
PCB-23	ND	124	49.3		0.543	D	PCB-88/91	21900	249			1.25	D								
PCB-24/27	1110	249			0.742	D															
PCB-25	942	124			0.768	D															
PCB-26	2650	124			0.766	D															
PCB-28	8860	124			1.12	D															
PCB-29	113	124			0.949	J, D															
PCB-30	ND	124	30.3		0.355	D															
PCB-31	13100	124			0.809	D															
PCB-34	ND	124	55.5		1.57	D															
PCB-35	325	124			0.565	D															
PCB-36	ND	124	47.3		0.406	D															
PCB-37	4710	124			0.389	D															
PCB-38	ND	124	45.1		0.528	D															
PCB-39	ND	124	48.5		0.461	D															
PCB-40	4830	124			0.927	D															
PCB-41/64/71/72	23200	497			1.70	D															
PCB-42/59	5460	249			0.899	D															
PCB-43/49	28900	249			0.879	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: WM-MH-61-20150203-S**EPA Method 1668C**

Client Data							Sample Data							Laboratory Data											
Name:	Leidos						Matrix:	Sediment						Lab Sample:	1500147-02			Date Received:	05-Feb-2015 8:36						
Project:	NPDES Sampling Support						Sample Size:	5.08 g						QC Batch:	B5B0059			Date Extracted:	12-Feb-2015 10:59						
Date Collected:	02-Feb-2015 10:30						% Solids:	39.6						Date Analyzed :	19-Feb-15 20:32			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	945	124			1.22	D	PCB-136	17000	124			0.776	D												
PCB-90/101	197000	249			1.19	D	PCB-137	11800	124			0.541	D												
PCB-93	ND	124	119		2.53	D	PCB-138/163/164	154000	373			0.809	D												
PCB-94	612	124			0.874	D	PCB-139/149	111000	249			1.49	D												
PCB-95/98/102	147000	373			1.38	D	PCB-140	877	124			1.20	D												
PCB-96	575	124			0.588	D	PCB-141	26800	124			0.678	D												
PCB-97	53800	124			0.675	D	PCB-144	6170	124			1.38	D												
PCB-99	59300	124			0.474	D	PCB-145	73.2	124			1.05	J, D												
PCB-100	ND	124	215		0.511	D	PCB-146/165	16800	249			0.792	D												
PCB-103	719	124			0.428	D	PCB-147	3290	124			5.26	D												
PCB-104	ND	124	70.6		0.876	D	PCB-148	ND	124	81.4		1.45	D												
PCB-105	55700	124			0.462	D	PCB-150	168	124			0.801	D												
PCB-106/118	155000	249			0.728	D	PCB-151	21700	124			1.16	D												
PCB-107/109	8630	249			0.631	D	PCB-152	ND	124	154		0.744	D												
PCB-108/112	8000	249			0.844	D	PCB-153	110000	124			0.484	D												
PCB-110	203000	124			0.555	D	PCB-154	1150	124			0.837	D												
PCB-111/115	2850	249			1.24	D	PCB-155	ND	124	54.4		0.767	D												
PCB-113	ND	124	77.7		0.495	D	PCB-156	19100	124			0.534	D												
PCB-114	3080	124			0.418	D	PCB-157	4090	124			0.485	D												
PCB-119	2130	124			0.383	D	PCB-158/160	20000	249			0.915	D												
PCB-120	287	124			0.622	D	PCB-159	ND	124	49.2		0.578	D												
PCB-121	ND	124	62.0		0.978	D	PCB-166	850	124			0.425	D												
PCB-122	1520	124			0.619	D	PCB-167	6140	124			0.653	D												
PCB-123	1950	124			0.494	D	PCB-168	152	124			0.502	D												
PCB-124	6040	124			0.813	D	PCB-169	ND	124	45.4		0.767	D												
PCB-126	668	124			0.543	D	PCB-170	20400	124			0.758	D												
PCB-127	ND	124	74.2		0.326	D	PCB-171	5030	124			0.372	D												
PCB-128/162	31800	249			1.08	D	PCB-172	2590	124			0.857	D												
PCB-129	11900	124			0.567	D	PCB-173	601	124			0.507	D												
PCB-130	10500	124			0.798	D	PCB-174	16700	124			0.797	D												
PCB-131	ND	124	63.3		0.731	D	PCB-175	726	124			0.679	D												
PCB-132/161	53000	249			1.05	D	PCB-176	2080	124			0.729	D												
PCB-133/142	6050	249			1.04	D	PCB-177	10600	124			0.404	D												
PCB-134/143	11100	249			1.05	D	PCB-178	2850	124			0.610	D												
PCB-135	17600	124			1.47	D	PCB-179	6420	124			0.418	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: WM-MH-61-20150203-S**EPA Method 1668C**

Client Data							Sample Data							Laboratory Data							
Name:	Leidos						Matrix:	Sediment						Lab Sample:	1500147-02			Date Received:	05-Feb-2015 8:36		
Project:	NPDES Sampling Support						Sample Size:	5.08 g						QC Batch:	B5B0059			Date Extracted:	12-Feb-2015 10:59		
Date Collected:	02-Feb-2015 10:30						% Solids:	39.6						Date Analyzed :	19-Feb-15 20:32 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	39300	124			0.420	D	Total octaCB	19900	124			20500									
PCB-181	293	124			1.26	D	Total nonaCB	3330	124												
PCB-182/187	14800	249			1.33	D	DecaCB	751	124												
PCB-183	9340	124			0.638	D	Total PCB	2430000	124												
PCB-184	ND	124	30.6		0.597	D															
PCB-185	1180	124			0.557	D															
PCB-186	ND	124	34.3		0.421	D															
PCB-188	ND	124		40.4	0.759	D															
PCB-189	980	124			0.483	D															
PCB-190	3500	124			0.686	D															
PCB-191	868	124			0.447	D															
PCB-192	ND	124	37.2		0.528	D															
PCB-193	1690	124			0.836	D															
PCB-194	5010	124			0.645	D															
PCB-195	2050	124			0.722	D															
PCB-196/203	5830	249			0.983	D															
PCB-197	210	124			0.794	D															
PCB-198	202	124			0.792	D															
PCB-199	4940	124			0.615	D															
PCB-200	635	124			0.795	D															
PCB-201	ND	124	549		0.317	D															
PCB-202	837	124			0.759	D															
PCB-204	ND	124	60.4		0.543	D															
PCB-205	202	124			0.471	D															
PCB-206	2430	124			0.852	D															
PCB-207	230	124			0.402	D															
PCB-208	672	124			0.441	D															
PCB-209	751	124			1.10	D															
Total monoCB	926	124																			
Total diCB	14400	124																			
Total triCB	77400	124																			
Total tetraCB	373000	124																			
Total pentaCB	1130000	124																			
Total hexaCB	673000	124																			
Total heptaCB	140000	124																			

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: WM-MH-61-20150203-S**EPA Method 1668C**

Client Data				Sample Data				Laboratory Data			
Name:	Leidos	Matrix:	Sediment	Lab Sample:	1500147-02	Date Received:	05-Feb-2015 8:36				
Project:	NPDES Sampling Support	Sample Size:	5.08 g	QC Batch:	B5B0059	Date Extracted:	12-Feb-2015 10:59				
Date Collected:	02-Feb-2015 10:30 <th>% Solids:</th> <td>39.6<th>Date Analyzed :</th><td>19-Feb-15 20:32</td><th>Column:</th><td>ZB-1</td><th>Analyst:</th><td>DMS</td></td>	% Solids:	39.6 <th>Date Analyzed :</th> <td>19-Feb-15 20:32</td> <th>Column:</th> <td>ZB-1</td> <th>Analyst:</th> <td>DMS</td>	Date Analyzed :	19-Feb-15 20:32	Column:	ZB-1	Analyst:	DMS		
Labeled Standard	%R	LCL-UCL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers				
IS 13C-PCB-1	93.6	5 -145	D	13C-PCB-170	80.4	10 -145	D				
13C-PCB-3	87.5	5 -145	D	13C-PCB-180	78.2	10 -145	D				
13C-PCB-4	87.4	5 -145	D	13C-PCB-188	75.1	10 -145	D				
13C-PCB-11	91.0	5 -145	D	13C-PCB-189	71.5	10 -145	D				
13C-PCB-9	87.0	5 -145	D	13C-PCB-194	92.4	10 -145	D				
13C-PCB-19	84.3	5 -145	D	13C-PCB-202	68.1	10 -145	D				
13C-PCB-28	80.6	5 -145	D	13C-PCB-206	92.2	10 -145	D				
13C-PCB-32	82.7	5 -145	D	13C-PCB-208	90.1	10 -145	D				
13C-PCB-37	105	5 -145	D	13C-PCB-209	84.2	10 -145	D				
13C-PCB-47	91.5	5 -145	D	CRS 13C-PCB-79	93.1	10 -145	D				
13C-PCB-52	90.4	5 -145	D	13C-PCB-178	83.7	10 -145	D				
13C-PCB-54	85.0	5 -145	D								
13C-PCB-70	91.8	5 -145	D								
13C-PCB-77	89.5	10 -145	D								
13C-PCB-80	92.1	10 -145	D								
13C-PCB-81	86.8	10 -145	D								
13C-PCB-95	92.6	10 -145	D								
13C-PCB-97	94.2	10 -145	D								
13C-PCB-101	90.7	10 -145	D								
13C-PCB-104	92.5	10 -145	D								
13C-PCB-105	94.3	10 -145	D								
13C-PCB-114	95.8	10 -145	D								
13C-PCB-118	90.2	10 -145	D								
13C-PCB-123	97.6	10 -145	D								
13C-PCB-126	96.2	10 -145	D								
13C-PCB-127	93.2	10 -145	D								
13C-PCB-138	91.9	10 -145	D								
13C-PCB-141	91.5	10 -145	D								
13C-PCB-153	88.5	10 -145	D								
13C-PCB-155	71.0	10 -145	D								
13C-PCB-156	93.5	10 -145	D								
13C-PCB-157	90.4	10 -145	D								
13C-PCB-159	88.7	10 -145	D								
13C-PCB-167	91.0	10 -145	D								
13C-PCB-169	88.5	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: WM-CB-52-20150203-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data											
Name:	Leidos						Matrix:	Sediment						Lab Sample:	1500147-03			Date Received:	05-Feb-2015 8:36						
Project:	NPDES Sampling Support						Sample Size:	4.17 g						QC Batch:	B5B0059			Date Extracted:	12-Feb-2015 10:59						
Date Collected:	02-Feb-2015 12:00						% Solids:	48.1						Date Analyzed :	19-Feb-15 21:36			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	115	125			0.320	J, D	PCB-44	7520	125			0.745	D												
PCB-2	142	125			0.240	D	PCB-45	1100	125			0.402	D												
PCB-3	142	125			0.323	D	PCB-46	472	125			0.537	D												
PCB-4/10	389	249			1.14	D	PCB-47	1380	125			2.19	D												
PCB-5/8	1440	249			1.76	D	PCB-48/75	1110	249			0.983	D												
PCB-6	296	125			1.00	D	PCB-50	ND	125	59.9		0.603	D												
PCB-7/9	ND	249	130		1.34	D	PCB-51	342	125			0.789	D												
PCB-11	3230	125			3.48	D	PCB-52/69	9850	249			0.722	D												
PCB-12/13	232	249			1.37	J, D	PCB-53	870	125			0.331	D												
PCB-14	ND	125	153		0.337	D	PCB-54	ND	125	47.8		0.275	D												
PCB-15	1270	125			0.634	D	PCB-55	229	125			0.416	D												
PCB-16/32	2460	249			0.430	D	PCB-56/60	5800	249			0.825	D												
PCB-17	1170	125			0.658	D	PCB-57	ND	125	60.4		0.354	D												
PCB-18	3390	125			0.696	D	PCB-58	ND	125	68.9		0.589	D												
PCB-19	368	125			0.612	D	PCB-61/70	12100	249			1.20	D												
PCB-20/21/33	3410	374			2.47	D	PCB-62	ND	125	56.2		0.597	D												
PCB-22	1820	125			0.964	D	PCB-63	273	125			0.524	D												
PCB-23	ND	125	33.4		0.543	D	PCB-65	ND	125	56.0		0.842	D												
PCB-24/27	291	249			0.742	D	PCB-66/76	7370	249			1.31	D												
PCB-25	369	125			0.768	D	PCB-67	ND	125	253		0.486	D												
PCB-26	865	125			0.766	D	PCB-68	49.0	125			0.658	J, D												
PCB-28	2990	125			1.12	D	PCB-73	ND	125	52.9		0.454	D												
PCB-29	ND	125	41.9		0.949	D	PCB-74	3200	125			0.781	D												
PCB-30	ND	125	23.0		0.355	D	PCB-77	1340	125			0.748	D												
PCB-31	4080	125			0.809	D	PCB-78	ND	125	62.5		0.385	D												
PCB-34	ND	125	37.6		1.57	D	PCB-79	193	125			0.633	D												
PCB-35	229	125			0.565	D	PCB-80	ND	125	56.1		0.336	D												
PCB-36	66.4	125			0.406	J, D	PCB-81	96.4	125			0.674	J, D												
PCB-37	2520	125			0.389	D	PCB-82	2440	125			0.981	D												
PCB-38	ND	125	41.6		0.528	D	PCB-83	ND	125	70.3		0.440	D												
PCB-39	ND	125	44.7		0.461	D	PCB-84/92	7240	249			1.01	D												
PCB-40	1570	125			0.927	D	PCB-85/116	2630	249			1.64	D												
PCB-41/64/71/72	6150	498			1.70	D	PCB-86	ND	125	127		1.79	D												
PCB-42/59	1990	249			0.899	D	PCB-87/117/125	6420	374			0.880	D												
PCB-43/49	5230	249			0.879	D	PCB-88/91	2190	249			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: WM-CB-52-20150203-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data											
Name:	Leidos						Matrix:	Sediment						Lab Sample:	1500147-03			Date Received:	05-Feb-2015 8:36						
Project:	NPDES Sampling Support						Sample Size:	4.17 g						QC Batch:	B5B0059			Date Extracted:	12-Feb-2015 10:59						
Date Collected:	02-Feb-2015 12:00						% Solids:	48.1						Date Analyzed :	19-Feb-15 21:36			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	ND	125		126	1.22	D	PCB-136	1500	125				0.776	D											
PCB-90/101	17500	249			1.19	D	PCB-137	1350	125				0.541	D											
PCB-93	ND	125	110		2.53	D	PCB-138/163/164	18400	374				0.809	D											
PCB-94	ND	125	87.8		0.874	D	PCB-139/149	10600	249				1.49	D											
PCB-95/98/102	12300	374			1.38	D	PCB-140	ND	125		85.8		1.20	D											
PCB-96	ND	125		107	0.588	D	PCB-141	3600	125				0.678	D											
PCB-97	5070	125			0.675	D	PCB-144	481	125				1.38	D											
PCB-99	5670	125			0.474	D	PCB-145	ND	125	85.5			1.05	D											
PCB-100	ND	125		58.9	0.511	D	PCB-146/165	2110	249				0.792	D											
PCB-103	92.7	125			0.428	J, D	PCB-147	ND	125		165		5.26	D											
PCB-104	ND	125	56.3		0.876	D	PCB-148	ND	125	138			1.45	D											
PCB-105	6740	125			0.462	D	PCB-150	ND	125	103			0.801	D											
PCB-106/118	16400	249			0.728	D	PCB-151	2340	125				1.16	D											
PCB-107/109	991	249			0.631	D	PCB-152	ND	125	92.1			0.744	D											
PCB-108/112	772	249			0.844	D	PCB-153	13400	125				0.484	D											
PCB-110	17900	125			0.555	D	PCB-154	171	125				0.837	D											
PCB-111/115	ND	249		248	1.24	D	PCB-155	ND	125	92.3			0.767	D											
PCB-113	ND	125	68.6		0.495	D	PCB-156	2150	125				0.534	D											
PCB-114	324	125			0.418	D	PCB-157	444	125				0.485	D											
PCB-119	248	125			0.383	D	PCB-158/160	2100	249				0.915	D											
PCB-120	ND	125		37.4	0.622	D	PCB-159	ND	125	96.9			0.578	D											
PCB-121	ND	125	57.5		0.978	D	PCB-166	ND	125	90.9			0.425	D											
PCB-122	164	125			0.619	D	PCB-167	854	125				0.653	D											
PCB-123	ND	125	90.8		0.494	D	PCB-168	ND	125	71.6			0.502	D											
PCB-124	592	125			0.813	D	PCB-169	ND	125	129			0.767	D											
PCB-126	174	125			0.543	D	PCB-170	3710	125				0.758	D											
PCB-127	ND	125	98.3		0.326	D	PCB-171	977	125				0.372	D											
PCB-128/162	3440	249			1.08	D	PCB-172	626	125				0.857	D											
PCB-129	1190	125			0.567	D	PCB-173	ND	125	122			0.507	D											
PCB-130	1130	125			0.798	D	PCB-174	4140	125				0.797	D											
PCB-131	ND	125	195		0.731	D	PCB-175	170	125				0.679	D											
PCB-132/161	5630	249			1.05	D	PCB-176	387	125				0.729	D											
PCB-133/142	615	249			1.04	D	PCB-177	2480	125				0.404	D											
PCB-134/143	1130	249			1.05	D	PCB-178	679	125				0.610	D											
PCB-135	1710	125			1.47	D	PCB-179	1330	125				0.418	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: WM-CB-52-20150203-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data							
Name:	Leidos						Matrix:	Sediment						Lab Sample:	1500147-03			Date Received:	05-Feb-2015 8:36		
Project:	NPDES Sampling Support						Sample Size:	4.17 g						QC Batch:	B5B0059			Date Extracted:	12-Feb-2015 10:59		
Date Collected:	02-Feb-2015 12:00						% Solids:	48.1						Date Analyzed :	19-Feb-15 21:36 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	9240	125			0.420	D	Total octaCB	6750	125			7000									
PCB-181	ND	125	98.3		1.26	D	Total nonaCB	1960	125			2120									
PCB-182/187	3570	249			1.33	D	DecaCB	540	125												
PCB-183	1720	125			0.638	D	Total PCB	320000	125												
PCB-184	ND	125	46.3		0.597	D															
PCB-185	382	125			0.557	D															
PCB-186	ND	125	51.9		0.421	D															
PCB-188	ND	125	47.8		0.759	D															
PCB-189	147	125			0.483	D															
PCB-190	562	125			0.686	D															
PCB-191	174	125			0.447	D															
PCB-192	ND	125	78.0		0.528	D															
PCB-193	367	125			0.836	D															
PCB-194	1770	125			0.645	D															
PCB-195	689	125			0.722	D															
PCB-196/203	1970	249			0.983	D															
PCB-197	ND	125	99.9		0.794	D															
PCB-198	ND	125		113	0.792	D															
PCB-199	1580	125			0.615	D															
PCB-200	ND	125		134	0.795	D															
PCB-201	269	125			0.317	D															
PCB-202	480	125			0.759	D															
PCB-204	ND	125	94.4		0.543	D															
PCB-205	ND	125	131		0.471	D															
PCB-206	1440	125			0.852	D															
PCB-207	ND	125		160	0.402	D															
PCB-208	519	125			0.441	D															
PCB-209	540	125			1.10	D															
Total monoCB	399	125																			
Total diCB	6860	125																			
Total triCB	24000	125		24100																	
Total tetraCB	68300	125		68600																	
Total pentaCB	106000	125																			
Total hexaCB	74400	125		74600																	
Total heptaCB	30700	125																			

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: WM-CB-52-20150203-S**EPA Method 1668C**

Client Data				Sample Data				Laboratory Data			
Name:	Leidos	Matrix:	Sediment	Lab Sample:	1500147-03	Date Received:	05-Feb-2015 8:36				
Project:	NPDES Sampling Support	Sample Size:	4.17 g	QC Batch:	B5B0059	Date Extracted:	12-Feb-2015 10:59				
Date Collected:	02-Feb-2015 12:00 <th>% Solids:</th> <td>48.1<th>Date Analyzed :</th><td>19-Feb-15 21:36</td><th>Column:</th><td>ZB-1</td><th>Analyst:</th><td>DMS</td></td>	% Solids:	48.1 <th>Date Analyzed :</th> <td>19-Feb-15 21:36</td> <th>Column:</th> <td>ZB-1</td> <th>Analyst:</th> <td>DMS</td>	Date Analyzed :	19-Feb-15 21:36	Column:	ZB-1	Analyst:	DMS		
Labeled Standard	%R	LCL-UCL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers				
IS 13C-PCB-1	70.5	5 -145	D	13C-PCB-170	60.6	10 -145	D				
13C-PCB-3	74.9	5 -145	D	13C-PCB-180	65.2	10 -145	D				
13C-PCB-4	89.9	5 -145	D	13C-PCB-188	86.5	10 -145	D				
13C-PCB-11	89.7	5 -145	D	13C-PCB-189	47.0	10 -145	D				
13C-PCB-9	90.7	5 -145	D	13C-PCB-194	93.4	10 -145	D				
13C-PCB-19	84.8	5 -145	D	13C-PCB-202	63.8	10 -145	D				
13C-PCB-28	85.0	5 -145	D	13C-PCB-206	90.5	10 -145	D				
13C-PCB-32	83.0	5 -145	D	13C-PCB-208	86.4	10 -145	D				
13C-PCB-37	90.8	5 -145	D	13C-PCB-209	95.3	10 -145	D				
13C-PCB-47	99.1	5 -145	D	CRS 13C-PCB-79	94.3	10 -145	D				
13C-PCB-52	95.1	5 -145	D	13C-PCB-178	81.6	10 -145	D				
13C-PCB-54	95.0	5 -145	D								
13C-PCB-70	91.1	5 -145	D								
13C-PCB-77	80.4	10 -145	D								
13C-PCB-80	93.4	10 -145	D								
13C-PCB-81	84.5	10 -145	D								
13C-PCB-95	107	10 -145	D								
13C-PCB-97	99.3	10 -145	D								
13C-PCB-101	102	10 -145	D								
13C-PCB-104	108	10 -145	D								
13C-PCB-105	113	10 -145	D								
13C-PCB-114	126	10 -145	D								
13C-PCB-118	78.8	10 -145	D								
13C-PCB-123	89.6	10 -145	D								
13C-PCB-126	103	10 -145	D								
13C-PCB-127	109	10 -145	D								
13C-PCB-138	95.8	10 -145	D								
13C-PCB-141	97.3	10 -145	D								
13C-PCB-153	106	10 -145	D								
13C-PCB-155	80.8	10 -145	D								
13C-PCB-156	81.4	10 -145	D								
13C-PCB-157	84.3	10 -145	D								
13C-PCB-159	90.8	10 -145	D								
13C-PCB-167	82.9	10 -145	D								
13C-PCB-169	62.0	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: WM-CB-21-20150203-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data											
Name:	Leidos						Matrix:	Sediment						Lab Sample:	1500147-04			Date Received:	05-Feb-2015 8:36						
Project:	NPDES Sampling Support						Sample Size:	4.32 g						QC Batch:	B5B0059			Date Extracted:	12-Feb-2015 10:59						
Date Collected:	02-Feb-2015 14:15						% Solids:	46.6						Date Analyzed :	19-Feb-15 22:40			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	237	124			0.320	D	PCB-44	5450	124			0.745	D												
PCB-2	85.8	124			0.240	J, D	PCB-45	837	124			0.402	D												
PCB-3	189	124			0.323	D	PCB-46	417	124			0.537	D												
PCB-4/10	582	248			1.14	D	PCB-47	1370	124			2.19	D												
PCB-5/8	1960	248			1.76	D	PCB-48/75	823	248			0.983	D												
PCB-6	552	124			1.00	D	PCB-50	ND	124	58.8		0.603	D												
PCB-7/9	190	248			1.34	J, D	PCB-51	440	124			0.789	D												
PCB-11	5720	124			3.48	D	PCB-52/69	8250	248			0.722	D												
PCB-12/13	254	248			1.37	D	PCB-53	1150	124			0.331	D												
PCB-14	ND	124	140		0.337	D	PCB-54	ND	124	47.0		0.275	D												
PCB-15	1210	124			0.634	D	PCB-55	167	124			0.416	D												
PCB-16/32	2490	248			0.430	D	PCB-56/60	2630	248			0.825	D												
PCB-17	1350	124			0.658	D	PCB-57	47.3	124			0.354	J, D												
PCB-18	4080	124			0.696	D	PCB-58	ND	124	62.1		0.589	D												
PCB-19	507	124			0.612	D	PCB-61/70	7480	248			1.20	D												
PCB-20/21/33	2590	372			2.47	D	PCB-62	ND	124	62.7		0.597	D												
PCB-22	1150	124			0.964	D	PCB-63	209	124			0.524	D												
PCB-23	ND	124	43.3		0.543	D	PCB-65	ND	124	62.5		0.842	D												
PCB-24/27	474	248			0.742	D	PCB-66/76	4290	248			1.31	D												
PCB-25	678	124			0.768	D	PCB-67	221	124			0.486	D												
PCB-26	1350	124			0.766	D	PCB-68	96.5	124			0.658	J, D												
PCB-28	2650	124			1.12	D	PCB-73	ND	124	57.1		0.454	D												
PCB-29	ND	124	51.2		0.949	D	PCB-74	1850	124			0.781	D												
PCB-30	ND	124	35.9		0.355	D	PCB-77	623	124			0.748	D												
PCB-31	3660	124			0.809	D	PCB-78	ND	124	56.3		0.385	D												
PCB-34	ND	124	48.7		1.57	D	PCB-79	242	124			0.633	D												
PCB-35	245	124			0.565	D	PCB-80	ND	124	51.4		0.336	D												
PCB-36	ND	124	58.2		0.406	D	PCB-81	56.9	124			0.674	J, D												
PCB-37	1470	124			0.389	D	PCB-82	1950	124			0.981	D												
PCB-38	ND	124	55.4		0.528	D	PCB-83	ND	124	71.5		0.440	D												
PCB-39	ND	124	59.6		0.461	D	PCB-84/92	6210	248			1.01	D												
PCB-40	1030	124			0.927	D	PCB-85/116	2010	248			1.64	D												
PCB-41/64/71/72	4670	496			1.70	D	PCB-86	ND	124	129		1.79	D												
PCB-42/59	1600	248			0.899	D	PCB-87/117/125	5500	372			0.880	D												
PCB-43/49	5590	248			0.879	D	PCB-88/91	2210	248			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: WM-CB-21-20150203-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data											
Name:	Leidos						Matrix:	Sediment						Lab Sample:	1500147-04			Date Received:	05-Feb-2015 8:36						
Project:	NPDES Sampling Support						Sample Size:	4.32 g						QC Batch:	B5B0059			Date Extracted:	12-Feb-2015 10:59						
Date Collected:	02-Feb-2015 14:15						% Solids:	46.6						Date Analyzed :	19-Feb-15 22:40			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	89.4	124			1.22	J, D	PCB-136	1690	124			0.776	D												
PCB-90/101	15300	248			1.19	D	PCB-137	1020	124			0.541	D												
PCB-93	ND	124	124		2.53	D	PCB-138/163/164	15800	372			0.809	D												
PCB-94	ND	124	99.2		0.874	D	PCB-139/149	12500	248			1.49	D												
PCB-95/98/102	10800	372			1.38	D	PCB-140	ND	124	92.2		1.20	D												
PCB-96	ND	124		60.6	0.588	D	PCB-141	3120	124			0.678	D												
PCB-97	4440	124			0.675	D	PCB-144	ND	124		642	1.38	D												
PCB-99	5190	124			0.474	D	PCB-145	ND	124	55.4		1.05	D												
PCB-100	ND	124	85.5		0.511	D	PCB-146/165	2090	248			0.792	D												
PCB-103	148	124			0.428	D	PCB-147	384	124			5.26	D												
PCB-104	ND	124	67.7		0.876	D	PCB-148	ND	124	89.5		1.45	D												
PCB-105	4880	124			0.462	D	PCB-150	ND	124	66.7		0.801	D												
PCB-106/118	13900	248			0.728	D	PCB-151	3220	124			1.16	D												
PCB-107/109	979	248			0.631	D	PCB-152	ND	124	59.7		0.744	D												
PCB-108/112	649	248			0.844	D	PCB-153	12800	124			0.484	D												
PCB-110	16700	124			0.555	D	PCB-154	ND	124		250	0.837	D												
PCB-111/115	215	248			1.24	J, D	PCB-155	ND	124	59.8		0.767	D												
PCB-113	ND	124	67.0		0.495	D	PCB-156	1890	124			0.534	D												
PCB-114	265	124			0.418	D	PCB-157	437	124			0.485	D												
PCB-119	352	124			0.383	D	PCB-158/160	1990	248			0.915	D												
PCB-120	ND	124	64.8		0.622	D	PCB-159	ND	124	34.7		0.578	D												
PCB-121	ND	124	64.9		0.978	D	PCB-166	ND	124	32.5		0.425	D												
PCB-122	139	124			0.619	D	PCB-167	691	124			0.653	D												
PCB-123	203	124			0.494	D	PCB-168	ND	124	26.3		0.502	D												
PCB-124	559	124			0.813	D	PCB-169	ND	124	39.9		0.767	D												
PCB-126	137	124			0.543	D	PCB-170	3460	124			0.758	D												
PCB-127	ND	124	27.4		0.326	D	PCB-171	799	124			0.372	D												
PCB-128/162	2830	248			1.08	D	PCB-172	493	124			0.857	D												
PCB-129	1070	124			0.567	D	PCB-173	ND	124	101		0.507	D												
PCB-130	1170	124			0.798	D	PCB-174	3640	124			0.797	D												
PCB-131	ND	124	42.1		0.731	D	PCB-175	ND	124		148	0.679	D												
PCB-132/161	5190	248			1.05	D	PCB-176	433	124			0.729	D												
PCB-133/142	684	248			1.04	D	PCB-177	2070	124			0.404	D												
PCB-134/143	1110	248			1.05	D	PCB-178	810	124			0.610	D												
PCB-135	1950	124			1.47	D	PCB-179	1870	124			0.418	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: WM-CB-21-20150203-S

EPA Method 1668C

Client Data							Sample Data							Laboratory Data							
Name:	Leidos						Matrix:	Sediment						Lab Sample:	1500147-04			Date Received:	05-Feb-2015 8:36		
Project:	NPDES Sampling Support						Sample Size:	4.32 g						QC Batch:	B5B0059			Date Extracted:	12-Feb-2015 10:59		
Date Collected:	02-Feb-2015 14:15						% Solids:	46.6						Date Analyzed :	19-Feb-15 22:40 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	9310	124			0.420	D	Total octaCB	9940	124			10300									
PCB-181	ND	124	81.1		1.26	D	Total nonaCB	2080	124												
PCB-182/187	4700	248			1.33	D	DecaCB	1290	124												
PCB-183	2180	124			0.638	D	Total PCB	292000	124												
PCB-184	ND	124	48.8		0.597	D															
PCB-185	ND	124		328	0.557	D															
PCB-186	ND	124	54.8		0.421	D															
PCB-188	ND	124	50.4		0.759	D															
PCB-189	198	124			0.483	D															
PCB-190	605	124			0.686	D															
PCB-191	ND	124		140	0.447	D															
PCB-192	ND	124	64.3		0.528	D															
PCB-193	411	124			0.836	D															
PCB-194	2120	124			0.645	D															
PCB-195	710	124			0.722	D															
PCB-196/203	3000	248			0.983	D															
PCB-197	133	124			0.794	D															
PCB-198	ND	124	156		0.792	D															
PCB-199	2820	124			0.615	D															
PCB-200	399	124			0.795	D															
PCB-201	ND	124		377	0.317	D															
PCB-202	759	124			0.759	D															
PCB-204	ND	124	103		0.543	D															
PCB-205	ND	124	96.5		0.471	D															
PCB-206	1470	124			0.852	D															
PCB-207	228	124			0.402	D															
PCB-208	382	124			0.441	D															
PCB-209	1290	124			1.10	D															
Total monoCB	512	124																			
Total diCB	10500	124																			
Total triCB	22700	124																			
Total tetraCB	49500	124																			
Total pentaCB	92800	124																			
Total hexaCB	71700	124		72600																	
Total heptaCB	31000	124		31600																	

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: WM-CB-21-20150203-S**EPA Method 1668C**

Client Data				Sample Data				Laboratory Data			
Name:	Leidos	Matrix:	Sediment	Lab Sample:	1500147-04	Date Received:	05-Feb-2015 8:36				
Project:	NPDES Sampling Support	Sample Size:	4.32 g	QC Batch:	B5B0059	Date Extracted:	12-Feb-2015 10:59				
Date Collected:	02-Feb-2015 14:15 <th>% Solids:</th> <td>46.6<th>Date Analyzed :</th><td>19-Feb-15 22:40</td><th>Column:</th><td>ZB-1</td><th>Analyst:</th><td>DMS</td></td>	% Solids:	46.6 <th>Date Analyzed :</th> <td>19-Feb-15 22:40</td> <th>Column:</th> <td>ZB-1</td> <th>Analyst:</th> <td>DMS</td>	Date Analyzed :	19-Feb-15 22:40	Column:	ZB-1	Analyst:	DMS		
Labeled Standard	%R	LCL-UCL	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers				
IS 13C-PCB-1	67.6	5 -145	D	13C-PCB-170	64.9	10 -145	D				
13C-PCB-3	64.2	5 -145	D	13C-PCB-180	74.1	10 -145	D				
13C-PCB-4	90.4	5 -145	D	13C-PCB-188	77.0	10 -145	D				
13C-PCB-11	89.7	5 -145	D	13C-PCB-189	55.0	10 -145	D				
13C-PCB-9	92.0	5 -145	D	13C-PCB-194	99.7	10 -145	D				
13C-PCB-19	73.4	5 -145	D	13C-PCB-202	61.3	10 -145	D				
13C-PCB-28	86.8	5 -145	D	13C-PCB-206	113	10 -145	D				
13C-PCB-32	72.7	5 -145	D	13C-PCB-208	101	10 -145	D				
13C-PCB-37	78.5	5 -145	D	13C-PCB-209	111	10 -145	D				
13C-PCB-47	96.1	5 -145	D	CRS 13C-PCB-79	90.1	10 -145	D				
13C-PCB-52	95.5	5 -145	D	13C-PCB-178	82.5	10 -145	D				
13C-PCB-54	102	5 -145	D								
13C-PCB-70	92.9	5 -145	D								
13C-PCB-77	89.9	10 -145	D								
13C-PCB-80	91.8	10 -145	D								
13C-PCB-81	90.6	10 -145	D								
13C-PCB-95	96.4	10 -145	D								
13C-PCB-97	97.0	10 -145	D								
13C-PCB-101	97.9	10 -145	D								
13C-PCB-104	95.8	10 -145	D								
13C-PCB-105	101	10 -145	D								
13C-PCB-114	107	10 -145	D								
13C-PCB-118	89.4	10 -145	D								
13C-PCB-123	94.3	10 -145	D								
13C-PCB-126	94.5	10 -145	D								
13C-PCB-127	93.3	10 -145	D								
13C-PCB-138	92.5	10 -145	D								
13C-PCB-141	94.9	10 -145	D								
13C-PCB-153	95.2	10 -145	D								
13C-PCB-155	69.6	10 -145	D								
13C-PCB-156	83.2	10 -145	D								
13C-PCB-157	89.3	10 -145	D								
13C-PCB-159	89.3	10 -145	D								
13C-PCB-167	86.9	10 -145	D								
13C-PCB-169	72.6	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.

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
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	4042-003
Pennsylvania Department of Environmental Protection	011
South Carolina Department of Health	87002001
Tennessee Department of Environment & Conservation	TN02996
Texas Commission on Environmental Quality	T104704189-15-6
Virginia Department of General Services	3138
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160



CHAIN OF CUSTODY

FOR LABORATORY USE ONLY

Laboratory Project ID: 1500147
Storage ID: WR-2

Storage Secured Yes No
Temp 0.5 °C

Project I.D.: NPDES Sampling Support P.O.# N/A Sampler: C.WILSON
(Name)

TAT: (Check One):

Standard: 21 Days

Rush (surcharge may apply):

14 days 7 days Specify: _____

Invoice to: Name C.NANCARROW Company LEIDAS Address 18912 N Creek Pkwy Ste101 City Bothell State WA Zip 98011 Ph# 425.318.2101 Fax# 425.485.5566

Relinquished by: (Signature and Printed Name) Jamelyn Teynei Jamelyn Agyei Date: 2/4/15 Time: 1230 Received by: (Signature and Printed Name) Bethin Benedict B.Benedict Date: 2/5/15 Time: 0844

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

ATTN: Sample Receiving

Method of Shipment:
Fed Ex

Tracking No.: _____

Add Analysis(es) Requested

Container(s)

Quantity

Type

Matrix

EPA1613

EPA8290

EPA8280

EPA1668

EPA1614

CARB429

2378-TCDD

PCDD/PCDF

2378-TCDD/TCDF

PCDD/PCDF

2378-TCDD/PCDF

PCDD/PCDF

2378-TCDD/TCDF

PCDD/PCDF

TOTALS

COPLANAR PCB's

209 CONGENERS

PFDE

PAH

WHO-29

Sample ID	Date	Time	Location/Sample Description
WM-CB-11-20150203-W	2.3.15	1430	CB-11
WM-MH-61-20150203-S		1030	MH-61
WM-CB-52-20150203-S		1200	CB-52
WM-CB-21-20150203-S	↓	1415	CB-21

Special Instructions/Comments: Refer to contract agreement for confirmation of all analysis.
Please contact Pm before disposal of any samples.

Container Types: A = 1 Liter Amber, G = Glass Jar

P = PUF, T = MM5 Train, O = Other _____

*Bottle Preservative Type: T = Thiosulfate,

O = Other _____

SEND
DOCUMENTATION
AND RESULTS TO:

Name: CHRISTINE NANCARROW
Company: LEIDAS
Address: 18912 N Creek Pkwy Ste101
City: Bothell State: WA Zip: 98011
Phone: 206.300.2144 Fax: 425.485.5566
Email: NANCARROW.C@leidas.com
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 _____

SAMPLE LOG-IN CHECKLIST

Vista Project #: 1500147TAT Sfd

Samples Arrival:	Date/Time <u>02/05/15 0836</u>	Initials: <u>BJSB</u>	Location: WR-2			
Logged In:	Date/Time <u>02/05/15 1456</u>	Initials: <u>BJSB</u>	Location: WR-2			
Delivered By:	FedEx	UPS	On Trac	DHL	Hand Delivered	Other
Preservation:	Ice	Blue Ice	Dry Ice	None		
Temp °C:	<u>0.4</u> (uncorrected)	Time: <u>0843</u>		Thermometer ID: IR-1		
Temp °C:	<u>0.5</u> (corrected)					

	YES	NO	NA		
Adequate Sample Volume Received?	✓				
Holding Time Acceptable?	✓				
Shipping Container(s) Intact?	✓				
Shipping Custody Seals Intact?	✓				
Shipping Documentation Present?	✓				
Airbill Trk # <u>8064 5979 2323</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? <u>NA</u>	COC	Sample Container	None		
Shipping Container	Vista	Client	Retain	Return	Dispose

Comments:

EXTRACTION INFORMATION

Process Sheet

Workorder: **1500147**

Prep Expiration: 02/03/2016

Client: Leidos

Workorder Due: 26-Feb-15 00:00

TAT: 21

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

Client Matrix: Aqueous

Also run: **Percent Solids**Prep Batch: B5B0055

Prep Data Entered:

2/13/15

Date and Initials

Initial Sequence: S5B0017

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1500147-01 "A"	<input checked="" type="checkbox"/>	WM-CB-11-20150203-W	05-Feb-15 08:36	WR-2 A-2	

Vista PM:Martha Maier

Vial Box ID: Round BottomSample Reconciled By: B. Smith 2/13/15

Page 1 of 4

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B5B0054

Analyst: B.Smith

Test Code: %Moist/%Solids

Analyte:

Dried at 110°C +/- 5°C

Units: %

~~INST~~ HRMS-4

Date/Time IN: Date/Time OUT
2/12/15 09:50 2/13/15 11:30

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B5B0054

Analyst: BMS

Test Code: %Moist/%Solids

Analyte:

Dried at 110°C +/- 5°C

Units: %

INST HRMS-4

Date/Time IN: Date/Time OUT
2/12/15 9:50 2/13/15 11:30

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 1613 Full List

Method: 1613 TCDD Only

B5B0055

Chemist: M.T

Prep Date/Time: 12-Feb-15 09:06

Prepared using: HRMS - SPE Extraction

C	VISTA Sample ID	Bottle + Sample (mL)	Bottle Only (mL)	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"/>	B5B0055-BLK1	NA	NA	(1.000)	M.T 6/12/15	2/12/15 M.T 4/2/15	NA	M.T 2/13/15	M.T 2/13/15	M.T 2/13/15	M.T 4/2/15
<input type="checkbox"/>	B5B0055-BS1	↓	↓	↓	—	T	—	T	T	T	T
<input type="checkbox"/>	1500147-01	1508.06	497.55	1.01051	—	—	—	—	—	—	—
<input type="checkbox"/>	1500151-01	1527.30	504.42	1.02288	—	—	—	—	—	—	—
<input type="checkbox"/>	1500153-01	1455.17	490.79	0.96438	—	—	—	—	—	—	—
<input type="checkbox"/>	1500153-02	1455.87	490.36	0.96551	—	—	—	—	—	—	—
<input type="checkbox"/>	1500161-01	1272.31	388.15	0.88416	—	—	—	—	—	—	—
<input type="checkbox"/>	1500161-02 (A)	1303.95	388.39	0.91556	—	—	—	—	—	—	—
<input type="checkbox"/>	1500161-03	1319.15	387.97	0.93118	—	—	—	—	—	—	—
<input type="checkbox"/>	1500162-01	1519.78	504.18	1.0156	—	—	—	—	—	—	—
<input type="checkbox"/>	1500163-01	1520.56	498.71	1.02185	—	—	—	—	—	—	—

(A) Sample required 2 sets of filters. AC 2/12/15

IS Name PCDD/F	NS Name PCDD/F	CRS Name PCDD/F	RS Name PCDD/F	Cycle Time Start Date/Time Stop Date/Time	APP: SEFUN SOX SDS SOLV: T01 Other NA	Check Out: Chemist/Date: M.T 2/12/15
PCB	PCB	PCB	PCB	2/12/15 16:20 2/13/15 08:25	Final Volume(s) C14	Check In: Chemist/Date: Empty
PAH	PAH	PAH	PAH	2/13/15	Balance ID: HRMS-4	Comments:

Process Sheet

Workorder: **1500147**

Prep Expiration: 02/02/2016

Client: Leidos

Workorder Due: 26-Feb-15 00:00

TAT: 21

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

Client Matrix: Sediment

Also run: **Percent Solids**Prep Batch: BSB0058

Prep Data Entered:

2/15/15 RS
Date and InitialsInitial Sequence: SSB0017 SSB0023

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1500147-02	<input checked="" type="checkbox"/>	WM-MH-61-20150203-S	05-Feb-15 08:36	WR-2 F-6	
1500147-03	<input checked="" type="checkbox"/>	WM-CB-52-20150203-S	05-Feb-15 08:36	WR-2 F-6	
1500147-04	<input checked="" type="checkbox"/>	WM-CB-21-20150203-S	05-Feb-15 08:36	WR-2 F-6	

smaller mass if appropriate
 10g AC 2/10/15

Vista PM:Martha Maier

Vial Box ID: Round BottomSample Reconciled By: V.Ocdsmith 2/10/15

Page 3 of 4

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B5B0048

Analyst: V.Ordsmit

Test Code: %Moist/%Solids

Analyte:

Units: %

Dried at 110°C +/- 5°C

HRMS-2

Date/Time IN: Date/Time OUT

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B5B0048

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

INST HRMS-2

Date/Time IN: Date/Time OUT
2/10/15 11:31 2/11/15 16:50

Ⓐ sample contains rocks b 2/10/15

PREPARATION BENCH SHEET

Matrix: Solid

B5B0058

Chemist: E Schneider

Method: 1613 Full List
Method: 8290 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 12-Feb-15 09:57

C	VISTA Sample ID	G Eqv	Sample Amt. (g)	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
	E8 2/12/15 (500)	(5.00)	(5.00)							
<input type="checkbox"/> B5B0058-BLK1A	(10)	(10.00)	(10.00)	E8 BMS 2/12/15	E8 DR 2/13/15	E8 2/13/15	E8 2/13/15	E8 2/13/15	E8 2/13/15	E8 BMS 2/13/15
<input type="checkbox"/> B5B0058-BS1A	(1)	(1)	(1)							
<input type="checkbox"/> 1500142-01	1.00	1.01								
<input type="checkbox"/> 1500146-01	(E) (C) (3)	55.714	55.714							
<input type="checkbox"/> 1500147-02	(6) (D)	25.27	25.30							
<input type="checkbox"/> 1500147-03	(G)	20.77	20.77							
<input type="checkbox"/> 1500147-04	(E) (D)	21.45	21.48	↓	↓	↓	↓	↓	↓	↓

- (A) Large thimble & hydromatrix used. Lot # 00CE107610. E8 2/12/15
 (B) Used max. amount of sample possible. E8 2/12/15
 (C) Put through N2O4 to remove water. E8 2/13/15
 (D) Acid partitioned twice. E8 2/13/15
 (E) Small amount of precipitate present at F.V. E8 2/13/15

IS Name <input checked="" type="checkbox"/> PCDD/F 14H2704,10mL	NS Name <input checked="" type="checkbox"/> PCDD/F 13L1101,10mL	CRS Name <input checked="" type="checkbox"/> PCDD/F 14H2705,10mL	RS Name <input checked="" type="checkbox"/> PCDD/F 14H2706,10mL	Cycle Time	APP: SEFUN SOX <input checked="" type="checkbox"/> SDS	Check Out: Chemist/Date: <u>E8 2/12/15</u>
PCB _____	PCB _____	PCB _____	PCB _____	Start Date/Time: 2/12/15 15:35	SOLV: TOL	Check In: Chemist/Date: _____
PAH _____	PAH _____	PAH _____	PAH _____	Stop Date/Time: 2/13/15 7:45	Other: NIA	Balance ID: HRMS-2
Final Volume(s): 20mL C14						Comments: _____

Process Sheet

Workorder: 1500147

Prep Expiration: 02/02/2016

Client: Leidos

Workorder Due: 26-Feb-15 00:00

TAT: 21

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

Client Matrix: Sediment

Also run: **Percent Solids**Prep Batch: 15B0059Prep Data Entered: 2/19/15 es
Date and InitialsInitial Sequence: S5B0026E

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1500147-02	<input checked="" type="checkbox"/>	WM-MH-61-20150203-S	05-Feb-15 08:36	WR-2 F-6	
1500147-03	<input checked="" type="checkbox"/>	WM-CB-52-20150203-S	05-Feb-15 08:36	WR-2 F-6	
1500147-04	<input checked="" type="checkbox"/>	WM-CB-21-20150203-S	05-Feb-15 08:36	WR-2 F-6	

2g, 2x Spike ac 2/10/15
 smaller mass if appropriate

Vista PM:Martha Maier

Vial Box ID: AnneSample Reconciled By: V. Oldsmith 2/10/15
Page 4 of 4

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B5B0048

Analyst: V.Ordsmit

Test Code: %Moist/%Solids

Analyte:

Units: %

Dried at 110°C +/- 5°C

HRMS-2

Date/Time IN: Date/Time OUT
2/10/15 11:31 2/11/15 16:50

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B5B0048

Analyst: V.Ordsmith

Test Code: %Moist/%Solids

Analyte:

Dried at 110°C +/- 5°C

Units: %

INST HRMS-2

Date/Time IN: Date/Time OUT
2/10/15 11:31 2/11/15 16:50

Ⓐ sample contains rocks b 2/10/15

PREPARATION BENCH SHEET

Matrix: Solid

B5B0059

Chemist: E Schneider

Method: 1668C Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 12-Feb-15 10:59

CSB 2/19/15

C	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	PS CRS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
<input type="checkbox"/>	B5B0059-BLK1	(2.0)	(2.0)	ES BMS 2/12/15	ES SR 2/19/15	ES 2/19/15	ES 2/19/15	N/A	N/A	ES BR 2/19/15
<input type="checkbox"/>	B5B0059-BS1	↓	↓	—	—	—	—	—	—	—
<input type="checkbox"/>	1500147-02	(A) B	5.05	5.08	—	—	—	—	—	—
<input type="checkbox"/>	1500147-03	(C)	4.15	4.17	—	—	—	—	—	—
<input type="checkbox"/>	1500147-04	(B)	4.29	4.32	✓	✓	✓	✓	✓	✓

(A) 1:10 dilution made per request. ES 2/19/15

(B) Crystals formed at FV. ES 2/19/15.

(C) cloudy at FV. ES 2/19/15

IS Name <u>2X</u>	NS Name <u>2X</u>	PS CRS Name <u>2X</u>	RS Name <u>2X</u>	Cycle Time	APP: SEFUN SOX SDS	Check Out: Chemist/Date: <u>ES 2/12/15</u>
PCDD/F <u>①</u>	PCDD/F <u>②</u>	PCDD/F <u>①</u>	PCDD/F <u>②</u>	Start Date/Time	SOLV: <u>TOL</u>	Check In: Chemist/Date:
PCB <u>14D2903, 20μL</u>	PCB <u>14F1301, 20μL</u>	PCB <u>14D2903, 20μL</u>	PCB <u>14D2904, 20μL</u>	2/12/15 15:35	Other <u>N/A</u>	Balance ID: <u>HRMS-2</u>
PAH _____	PAH _____	PAH _____	PAH _____	Stop Date/Time	Final Volume(s) <u>100μL</u>	
_____	_____	_____	_____	2/13/15 7:45	C9	

Comments:

Process Sheet

Workorder: **1500147***RX2*

Prep Expiration: 02/03/2016

Client: Leidos

Workorder Due: 26-Feb-15 00:00

TAT: 21

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

Client Matrix: Aqueous

Also run: **Percent Solids**

Prep Batch:

BSB0101

Prep Data Entered:

2/25/15 8R

Date and Initials

Initial Sequence:

S5B0036E

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1500147-01	"B" <input checked="" type="checkbox"/>	WM-CB-11-20150203-W	05-Feb-15 08:36	WR-2 A-2	

WO Comments: **1L, 4X spike, 1/2 split prior to cleanup.**

Vista PM: Martha Maier

Vial Box ID: *Daisey*

Sample Reconciled By:

Page 2 of 4

*S. Roughton**2/24/2015*

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B5B0100

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

HRMS-4

Date/Time IN: 2/24/15 1355 Date/Time OUT: 2/25/15 10858

(A) Acid added in drops 8R 2/24/15

Percent Moisture/ Percent Solids

D2216-90

BATCH ID

B5B0100

Analyst: S.Roughton

Test Code: %Moist/%Solids

Analyte:

Units: %

Dried at 110°C +/- 5°C

HRMS-4

Date/Time IN: 2/24/15 1355 Date/Time OUT: 2/25/15 0858

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 1668C Full List

B5B0101

Chemist: S. Rongtorf

Prep Date/Time: 24-Feb-15 13:29

Prepared using: HRMS - Separatory Funnel

C	VISTA Sample ID	Bottle + Sample (mL)	Bottle Only (mL)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	CSB0087	CSB0088	N/A	N/A	RS CHEM/WIT DATE
							AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	
<input type="checkbox"/>	B5B0101-BLK1	(A) N/A	N/A	(1.00)	SR 2/24/15	SR 2/25/15	SR 2/25/15	SR 2/25/15	N/A	N/A	SR 2/25/15
<input type="checkbox"/>	B5B0101-BS1	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
<input type="checkbox"/>	1500147-01RE3	(B) 1494.48	499.29	0.99519	↓	↓	↓	↓	↓	↓	↓

(A) Sample and QCs split 1/2 after extraction before cleanup. SR 2/25/15

(B) 1:10, 1:20, 1:40 dilutions made SR 2/25/15

4x	4x	2x 4x SR 2/24/15	2x 4x SR 2/24/15	Cycle Time	APP: SEFUN SOX SDS	Check Out: Chemist/Date: SR 2/24/15
IS Name	NS Name	CRS Name	RS Name	Start Date/Time	SOLV: DCM	Check In: Chemist/Date:
PCDD/F	PCDD/F	PCDD/F	PCDD/F	N/A	N/A	Empty ↓
PCB 14L2202, 40ml	PCB 14L2204, 40ml	PCB 14L2201, 20ml	PCB 14L2203, 20ml	Other	Final Volume(s) 20ml	Balance ID: HRMS-4
PAH	PAH	PAH	PAH	Stop Date/Time	C9	Comments:

SAMPLE DATA

EPA Method 1613

Client ID: Method Blank
 Lab ID: B5B0055-BLK1

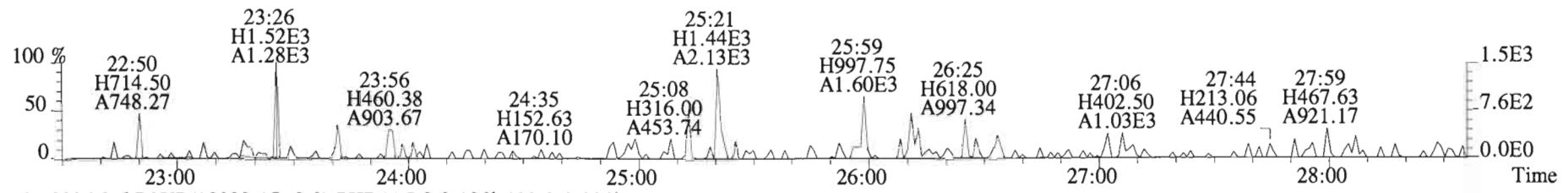
Filename: 150217D1 S:6 Acq:17-FEB-15 14:47:52
 GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol: 1.000

ConCal: ST150217D1-1
 EndCAL: NA

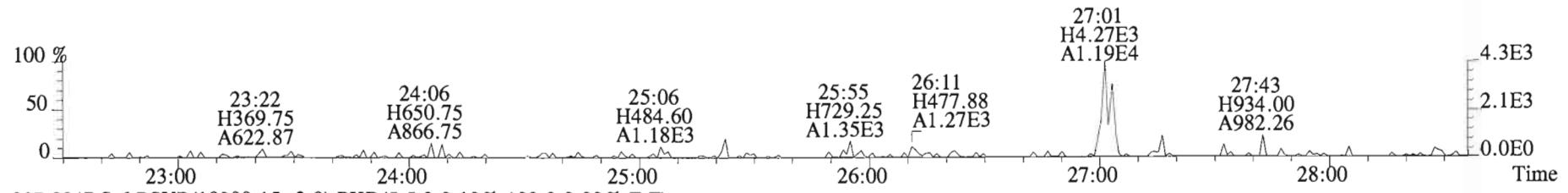
Page 5 of 5

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	*	* n	1.17	Not F _q	*		*	838	2.5	1.40	Total Tetra-Dioxins	*	*	838	1.40	
	1,2,3,7,8-PeCDD	*	* n	0.91	Not F _q	*		*	503	2.5	0.680	Total Penta-Dioxins	*	*	776	1.05	
	1,2,3,4,7,8-HxCDD	*	* n	1.08	Not F _q	*		*	525	2.5	1.61	Total Hexa-Dioxins	*	*	937	2.80	
	1,2,3,6,7,8-HxCDD	*	* n	1.06	Not F _q	*		*	525	2.5	1.53	Total Hepta-Dioxins	*	*	386	1.14	
	1,2,3,7,8,9-HxCDD	*	* n	0.93	Not F _q	*		*	525	2.5	1.57	Total Tetra-Furans	*	*	600	0.729	
	1,2,3,4,6,7,8-HpCDD	*	* n	1.10	Not F _q	*		*	386	2.5	1.14	Total Penta-Furans	0.0000	0.0000	892	1.15	
	OCDD	*	* n	0.95	Not F _q	*		*	1960	1.0	3.90	Total Hexa-Furans	*	*	689	0.781	
												Total Hepta-Furans	*	*	471	0.760	
	2,3,7,8-TCDF	*	* n	1.07	Not F _q	*		*	600	2.5	0.729						
	1,2,3,7,8-PeCDF	*	* n	1.07	Not F _q	*		*	536	2.5	0.720						
	2,3,4,7,8-PeCDF	*	* n	1.03	Not F _q	*		*	536	2.5	0.669						
	1,2,3,4,7,8-HxCDF	*	* n	1.38	Not F _q	*		*	545	2.5	0.585						
	1,2,3,6,7,8-HxCDF	*	* n	1.26	Not F _q	*		*	545	2.5	0.486						
	2,3,4,6,7,8-HxCDF	*	* n	1.29	Not F _q	*		*	545	2.5	0.621						
	1,2,3,7,8,9-HxCDF	*	* n	1.19	Not F _q	*		*	373	2.5	0.583						
	1,2,3,4,6,7,8-HpCDF	*	* n	1.61	Not F _q	*		*	280	2.5	0.463						
	1,2,3,4,7,8,9-HpCDF	*	* n	1.53	Not F _q	*		*	280	2.5	0.441						
	OCDF	*	* n	1.10	Not F _q	*		*	429	2.5	1.56						
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.77e+07	0.80	y	1.06	27:01	1.022		1554.5			77.7					
IS	13C-1,2,3,7,8-PeCDD	2.07e+07	0.63	y	1.18	31:39	1.197		1643.2			82.2					
IS	13C-1,2,3,4,7,8-HxCDD	1.41e+07	1.35	y	0.72	34:59	1.014		1434.3			71.7					
IS	13C-1,2,3,6,7,8-HxCDD	1.42e+07	1.18	y	0.74	35:06	1.017		1410.1			70.5					
IS	13C-1,2,3,7,8,9-HxCDD	1.66e+07	1.24	y	0.85	35:24	1.026		1426.8			71.3					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.36e+07	1.05	y	0.65	38:55	1.128		1524.5			76.2					
IS	13C-OCDD	2.57e+07	0.89	y	0.76	42:15	1.225		2460.8			61.5					
IS	13C-2,3,7,8-TCDF	2.75e+07	0.78	y	0.92	26:12	0.991		1631.6			81.6					
IS	13C-1,2,3,7,8-PeCDF	2.75e+07	1.60	y	0.92	30:26	1.151		1623.5			81.2					
IS	13C-2,3,4,7,8-PeCDF	3.09e+07	1.61	y	0.93	31:21	1.186		1805.1			90.3					
IS	13C-1,2,3,4,7,8-HxCDF	1.94e+07	0.51	y	0.98	34:06	0.988		1450.2			72.5					
IS	13C-1,2,3,6,7,8-HxCDF	2.46e+07	0.53	y	1.08	34:13	0.992		1663.7			83.2					
IS	13C-2,3,4,6,7,8-HxCDF	2.08e+07	0.51	y	1.03	34:49	1.009		1482.4			74.1					
IS	13C-1,2,3,7,8,9-HxCDF	1.77e+07	0.51	y	0.86	35:46	1.036		1502.2			75.1					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.39e+07	0.46	y	0.72	37:38	1.090		1408.7			70.4					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.40e+07	0.45	y	0.70	39:27	1.143		1473.6			73.7					
IS	13C-OCDF	3.01e+07	0.89	y	0.85	42:28	1.231		2592.5			64.8					
C/Up	37Cl-2,3,7,8-TCDD	9.17e+06			1.12	27:02	1.022		764.91			95.6	Integrations		Reviewed		
RS/RT	13C-1,2,3,4-TCDD	2.15e+07	0.79	y	1.00	26:27	*		2000.0				by		by		
RS	13C-1,2,3,4-TCDF	3.68e+07	0.77	y	1.00	24:57	*		2000.0				Analyst:	(M)	Analyst:		
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.73e+07	0.52	y	1.00	34:30	*		2000.0				Date:	2/19/15	Date:	4/19/13	

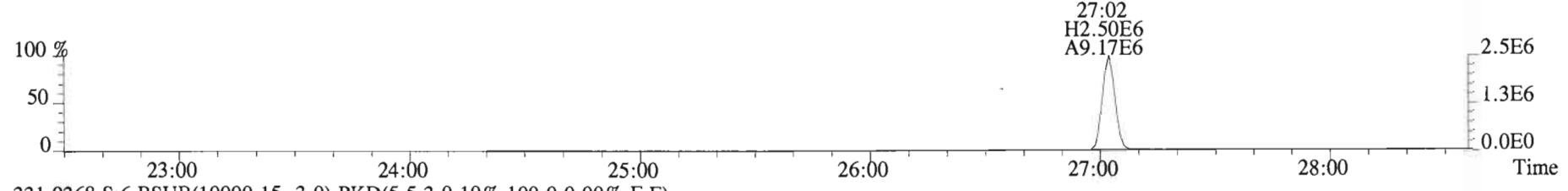
File:150217D1 #1-552 Acq:17-FEB-2015 14:47:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
 319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



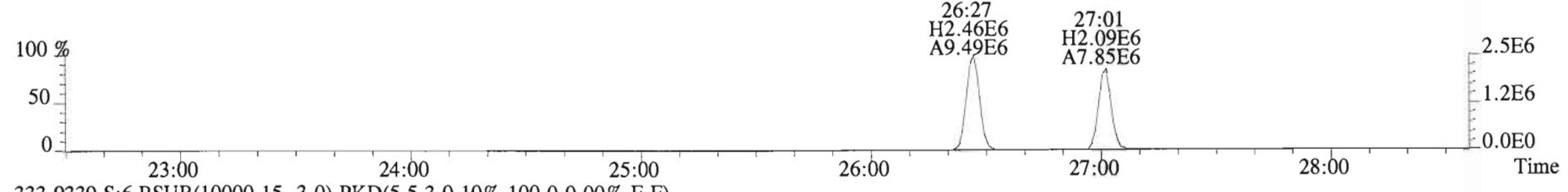
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



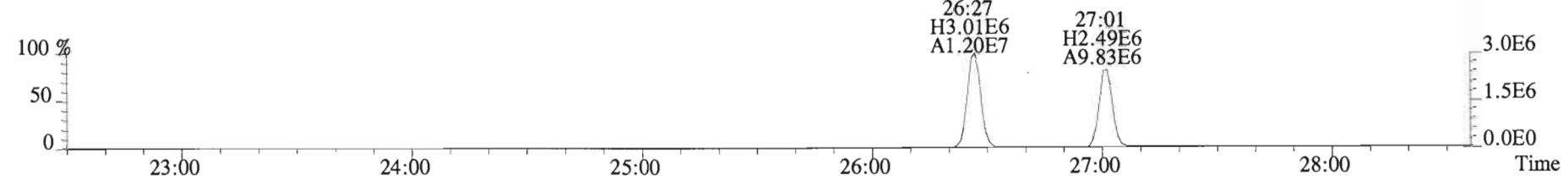
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



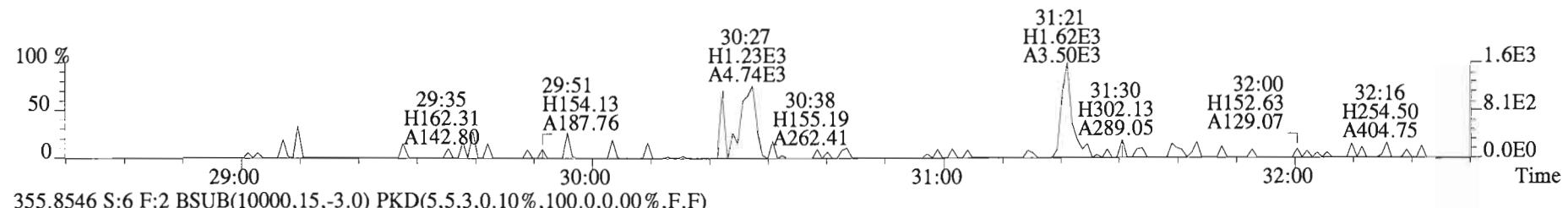
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



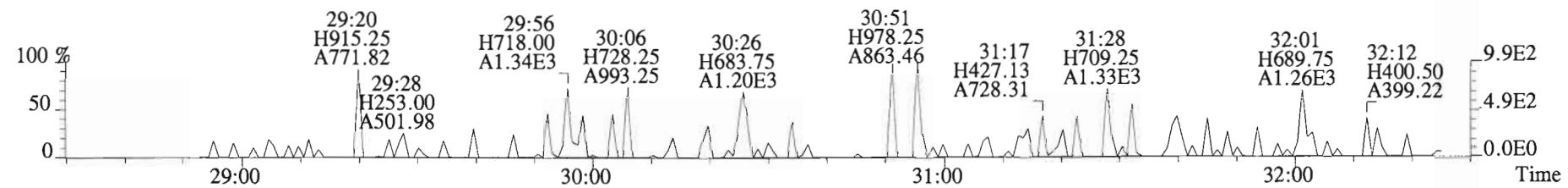
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



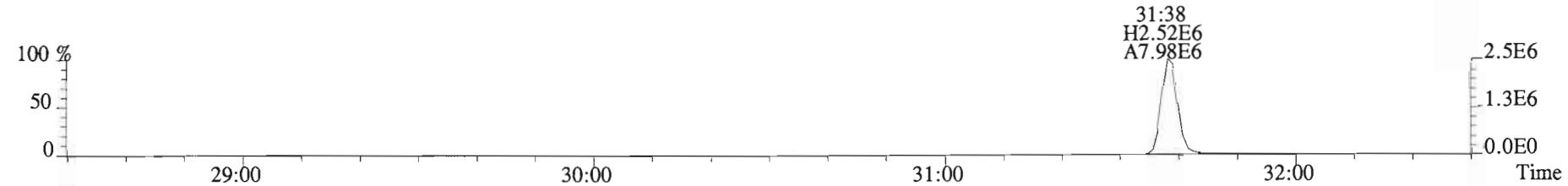
File:150217D1 #1-250 Acq:17-FEB-2015 14:47:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
 353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



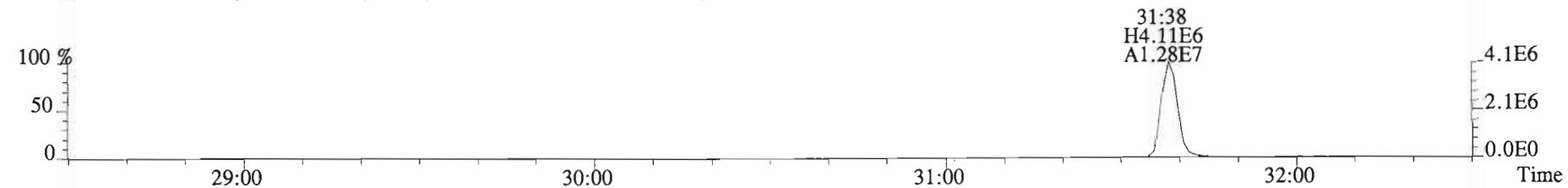
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



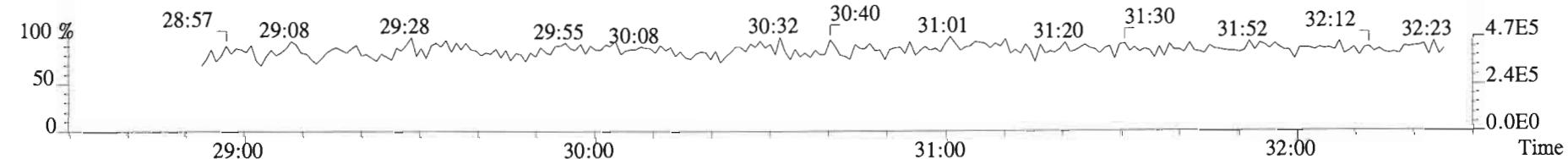
365.8978 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



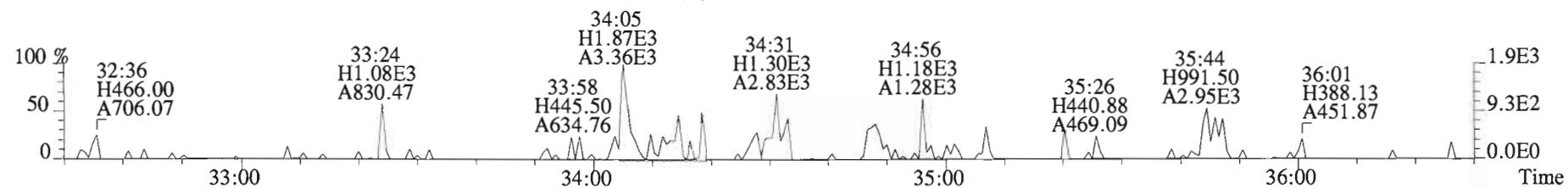
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



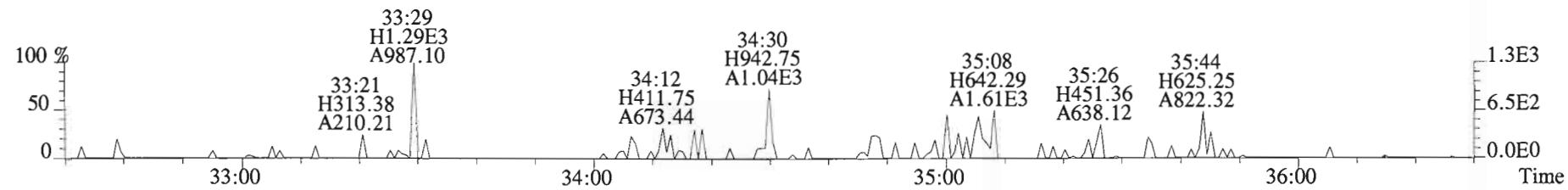
366.9792 S:6 F:2



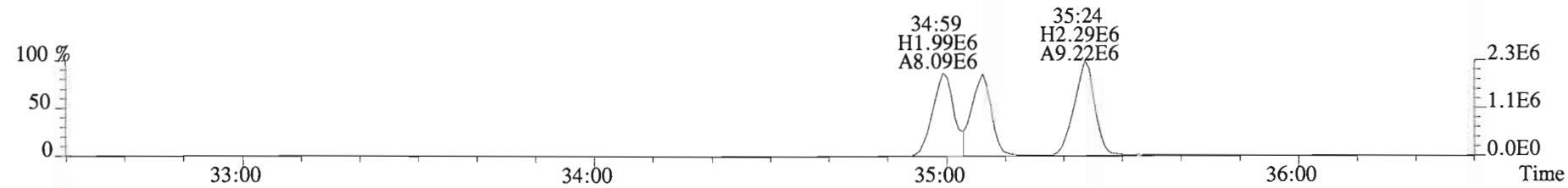
File:150217D1 #1-393 Acq:17-FEB-2015 14:47:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
 389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



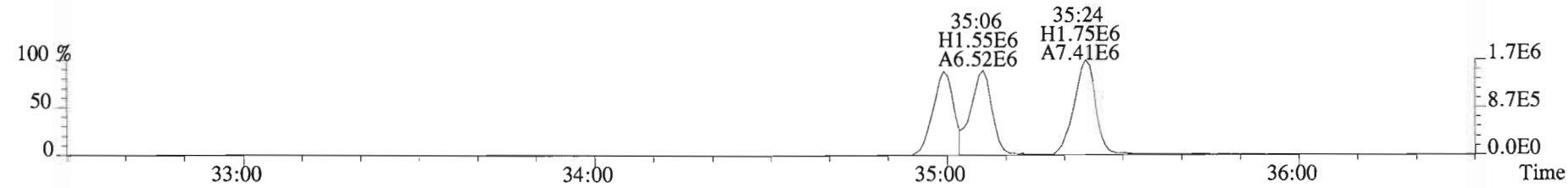
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



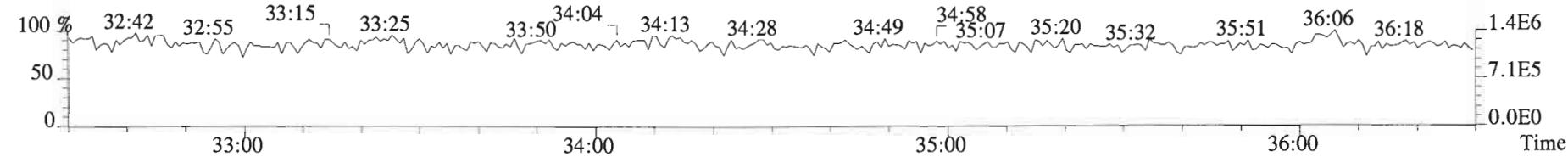
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



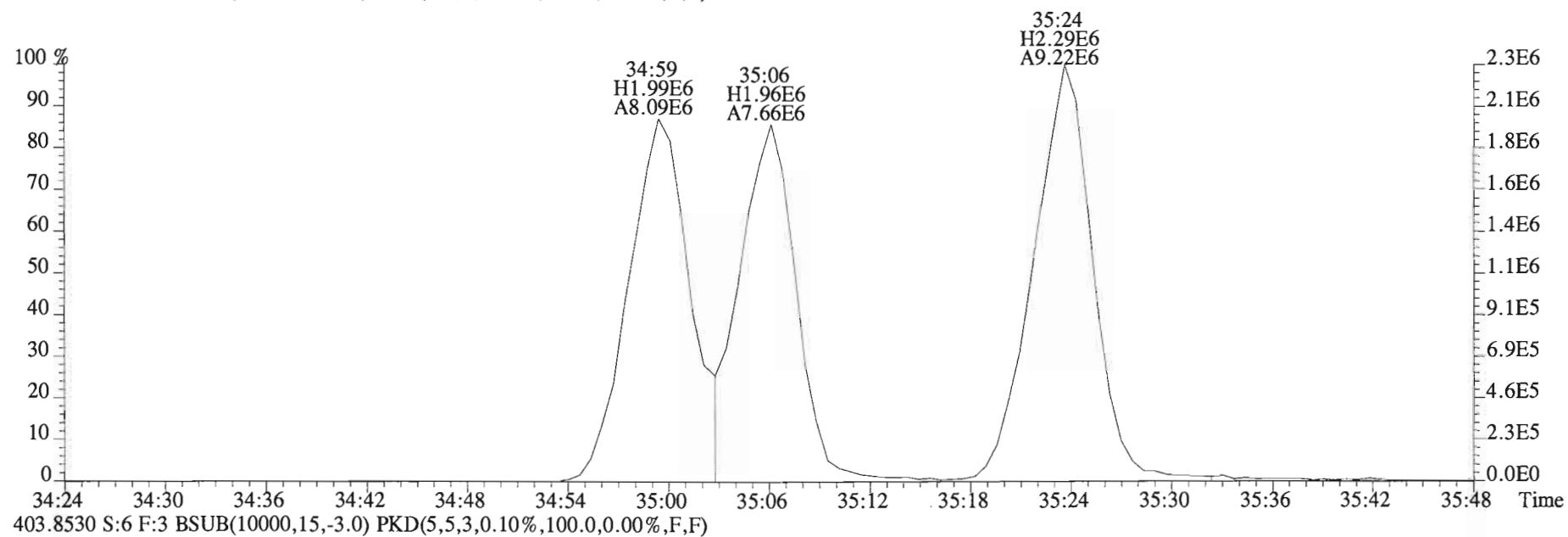
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



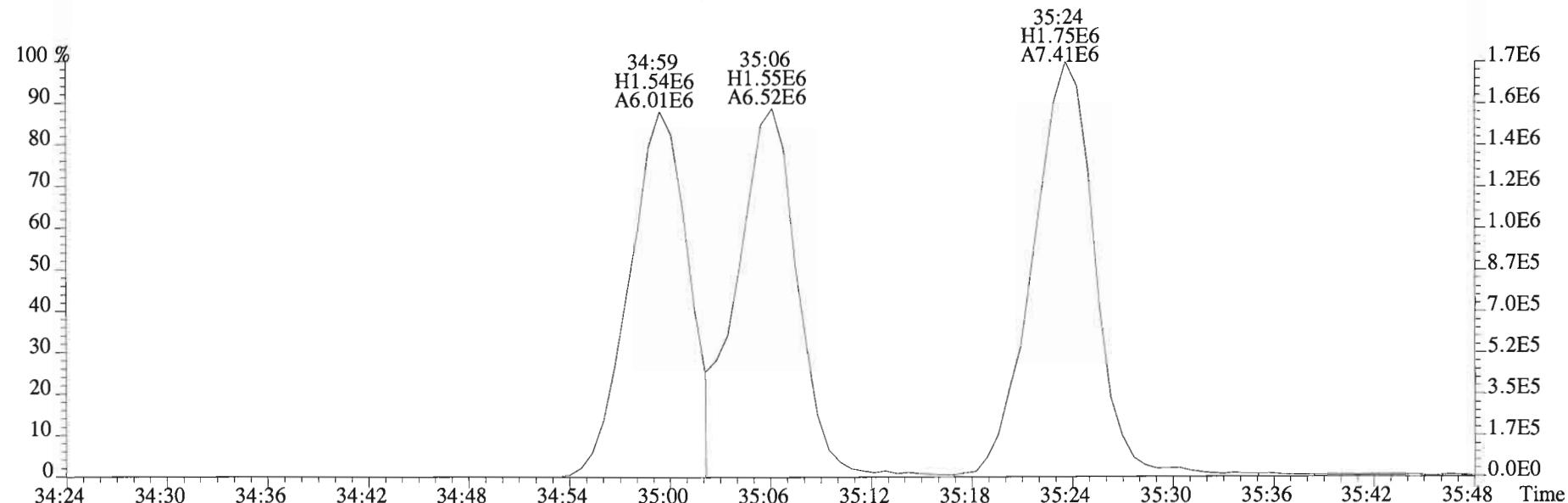
380.9760 S:6 F:3



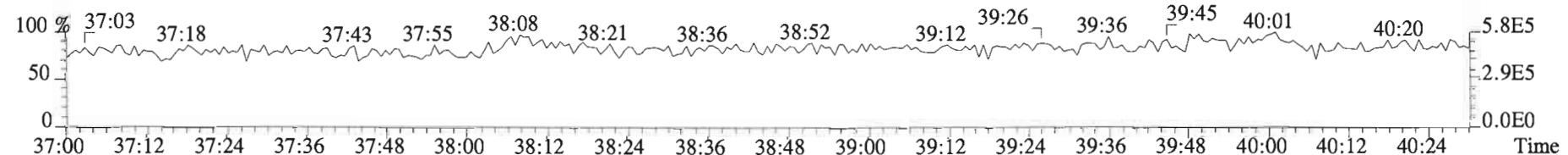
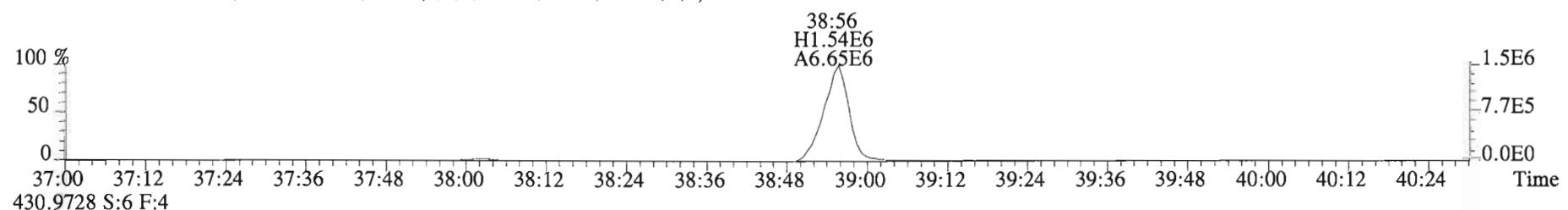
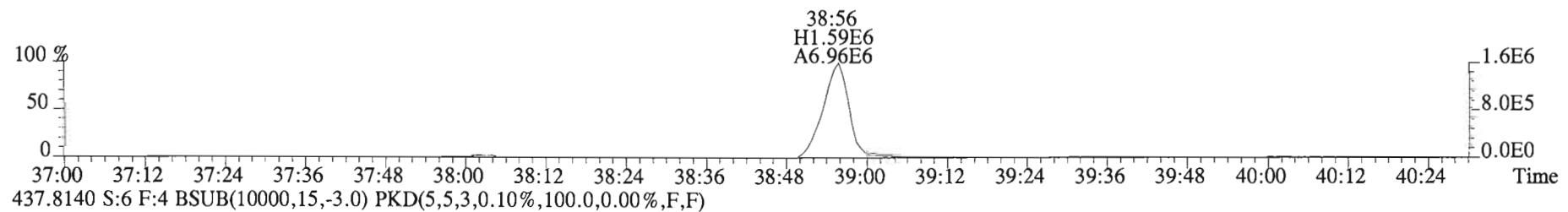
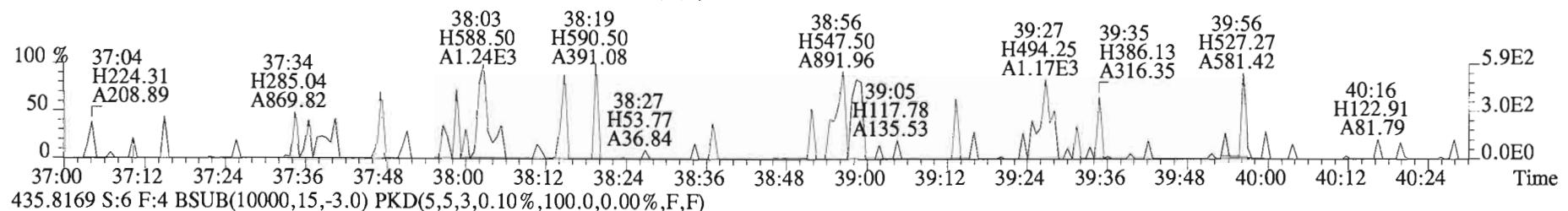
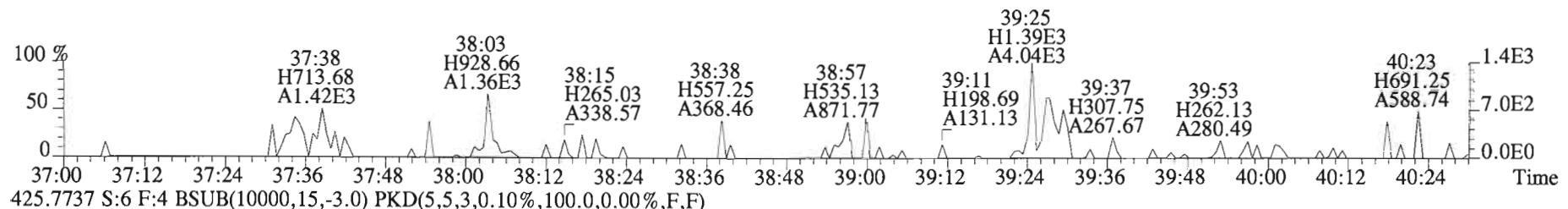
File:150217D1 #1-393 Acq:17-FEB-2015 14:47:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



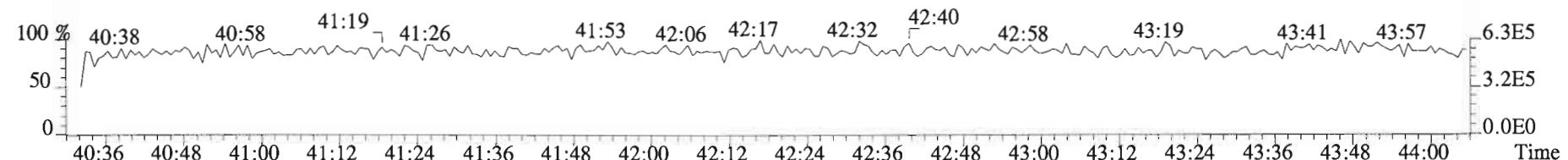
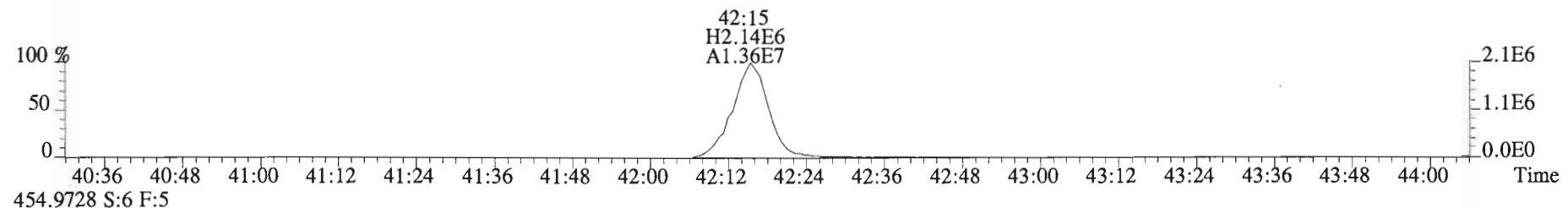
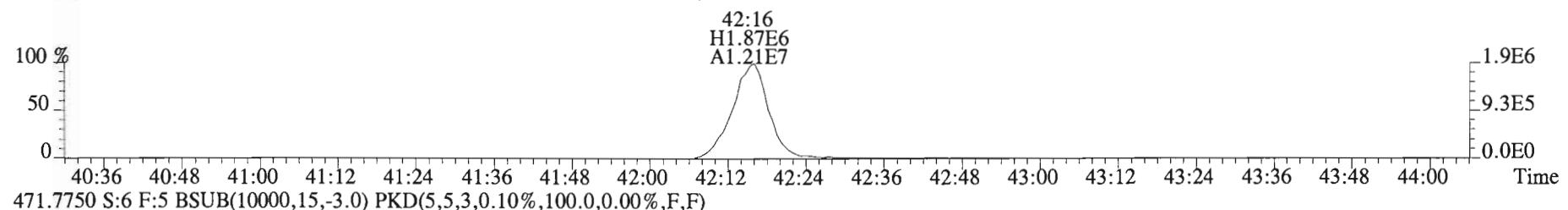
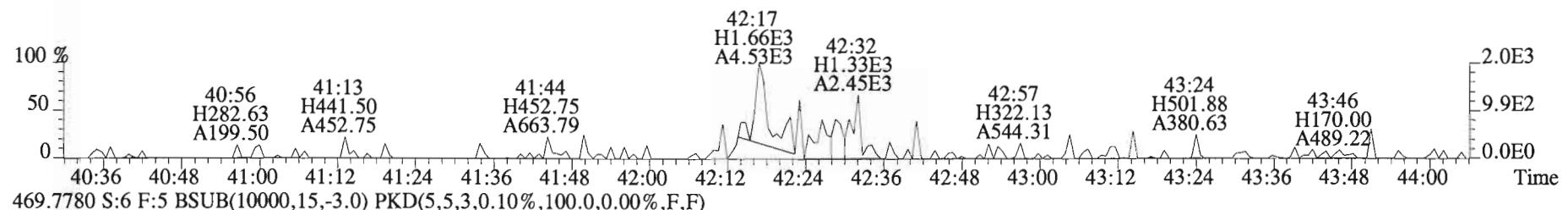
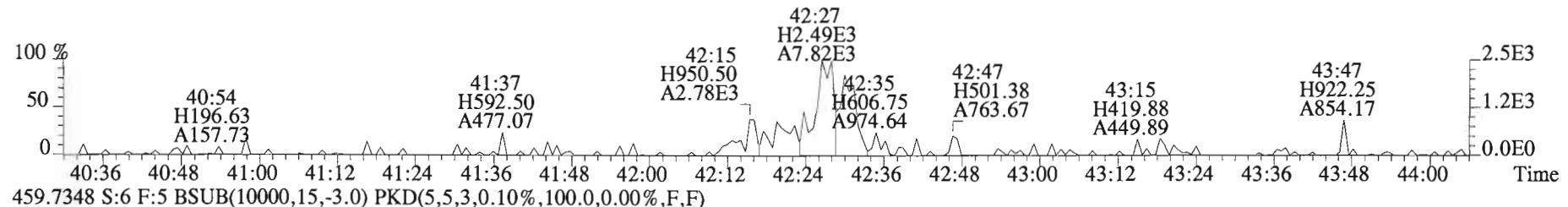
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



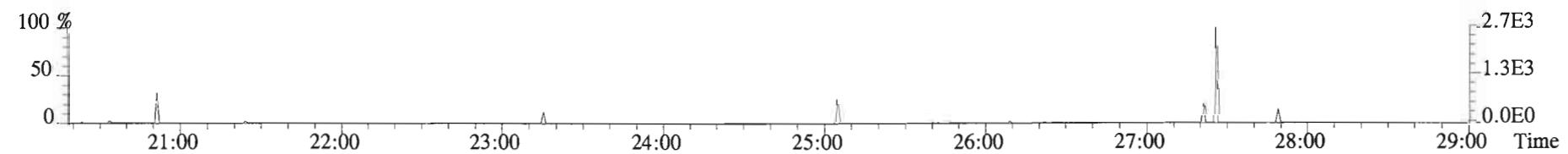
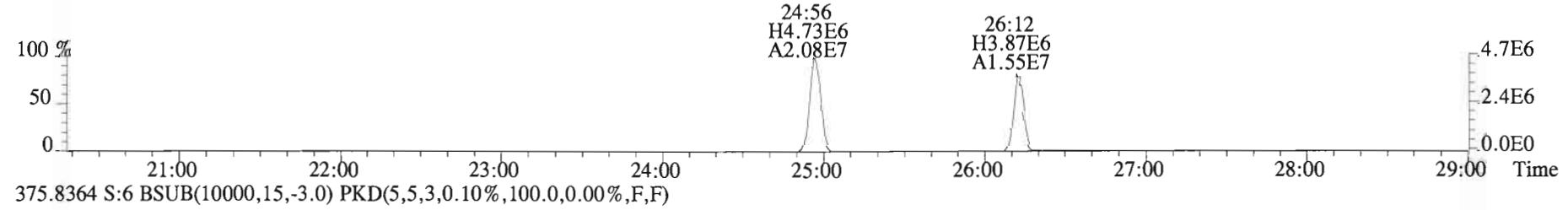
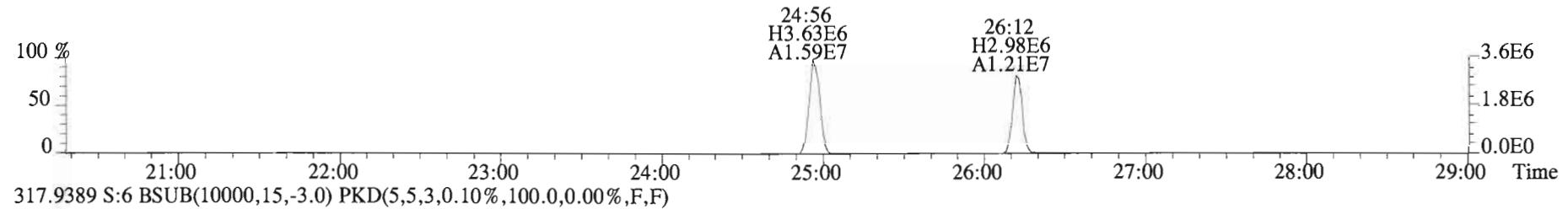
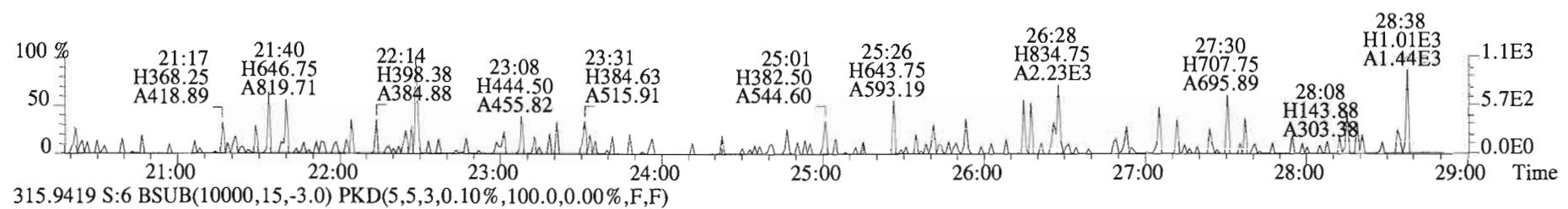
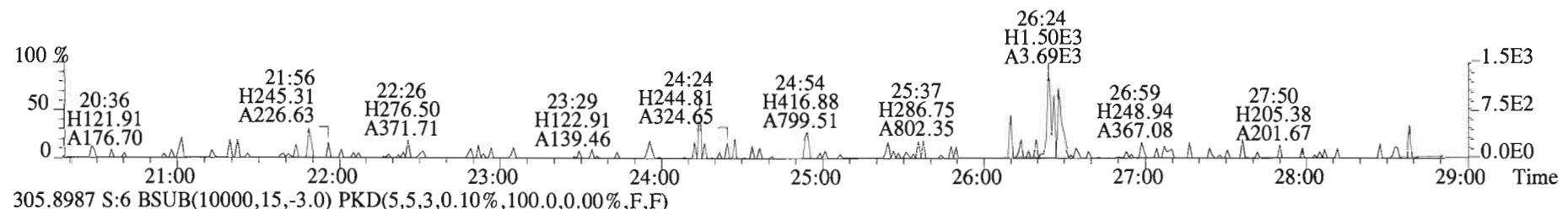
File:150217D1 #1-326 Acq:17-FEB-2015 14:47:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
 423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



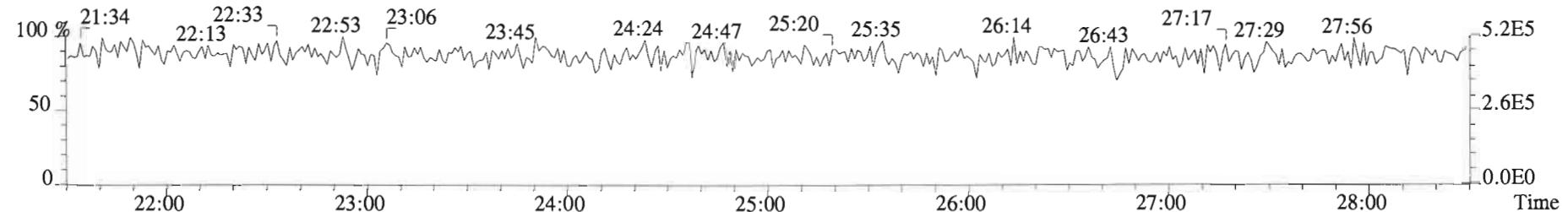
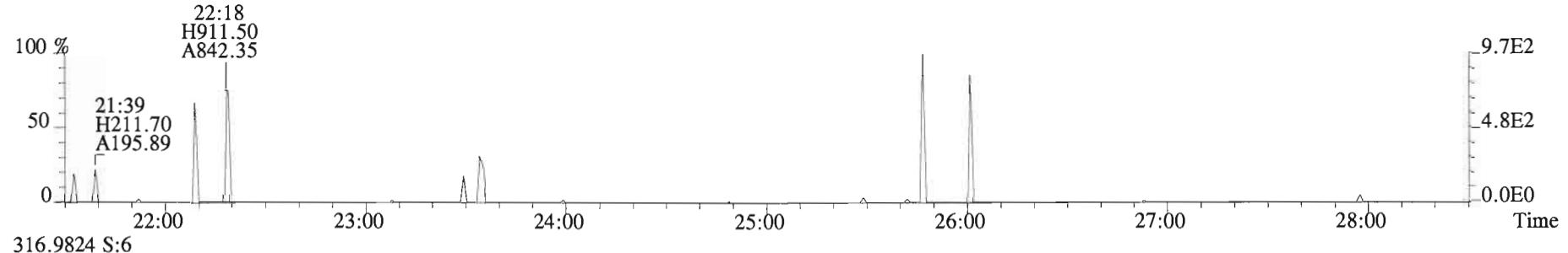
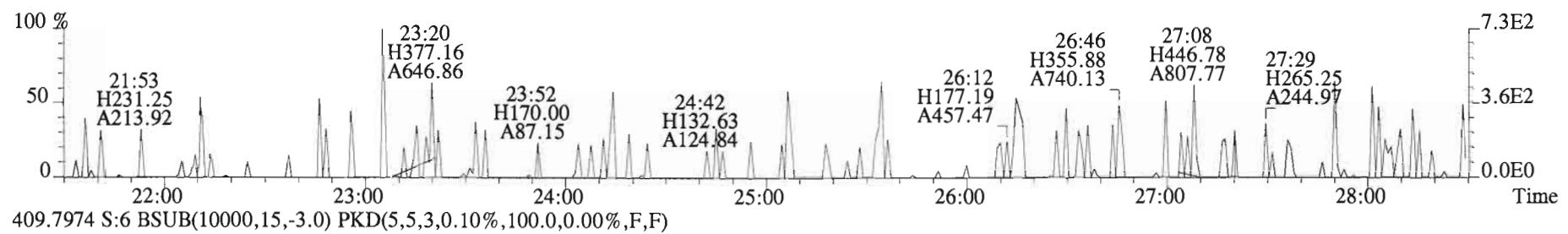
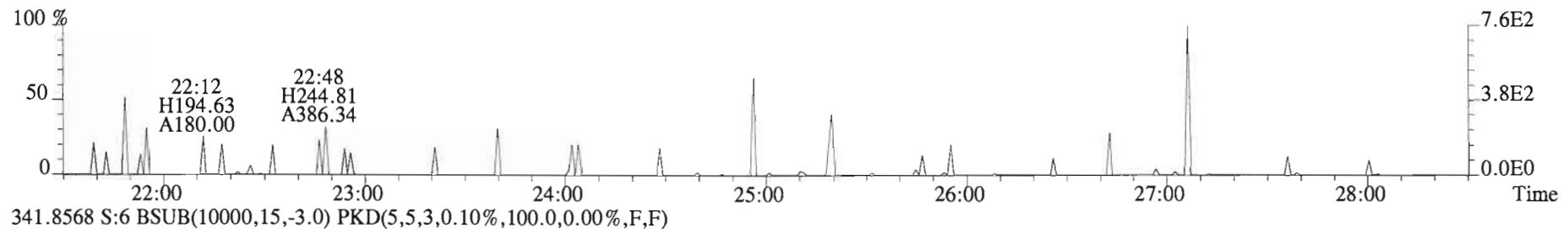
File:150217D1 #1-388 Acq:17-FEB-2015 14:47:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
 457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



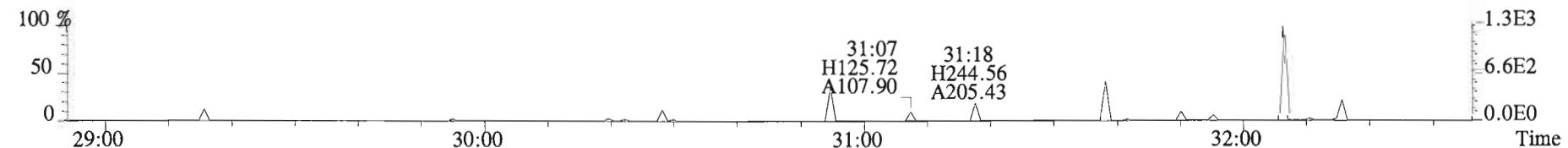
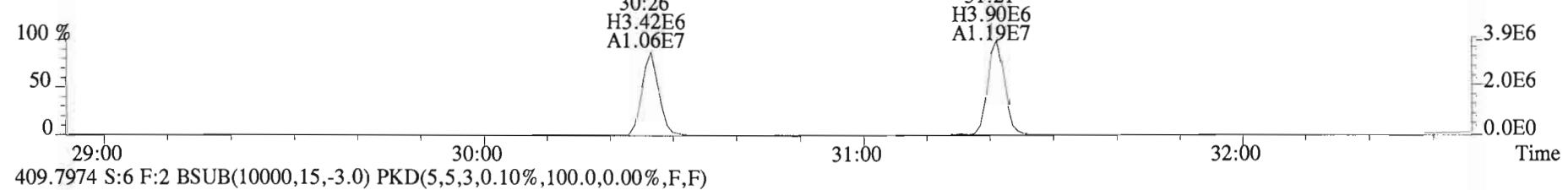
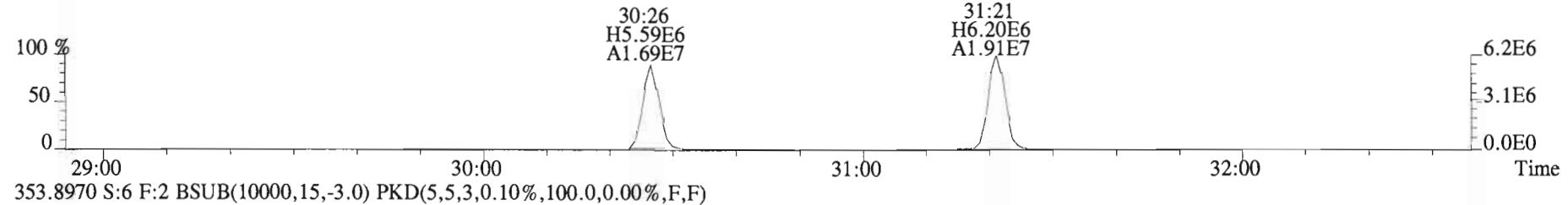
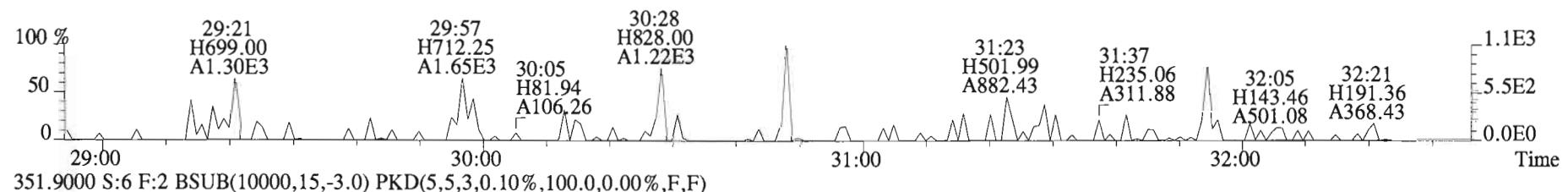
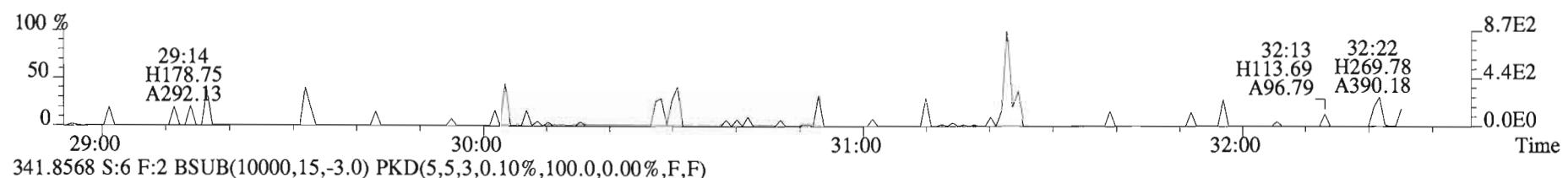
File:150217D1 #1-552 Acq:17-FEB-2015 14:47:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
 303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



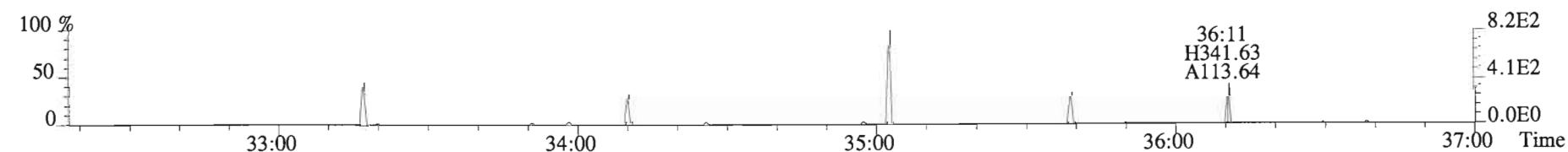
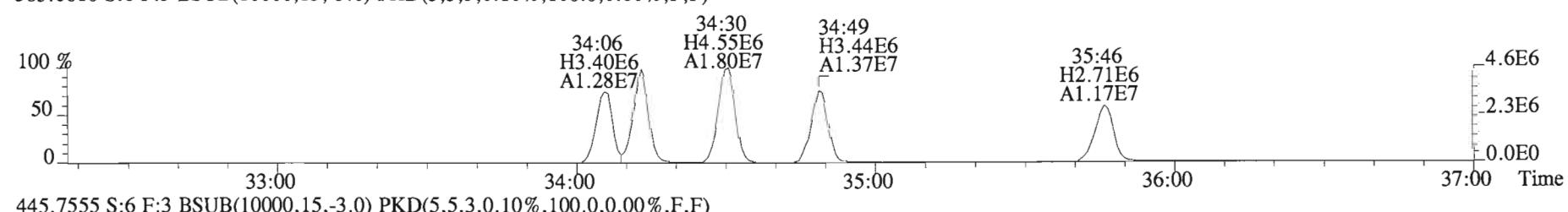
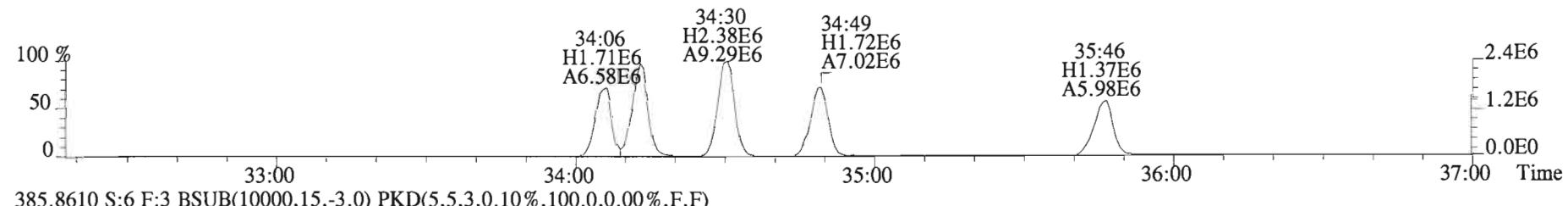
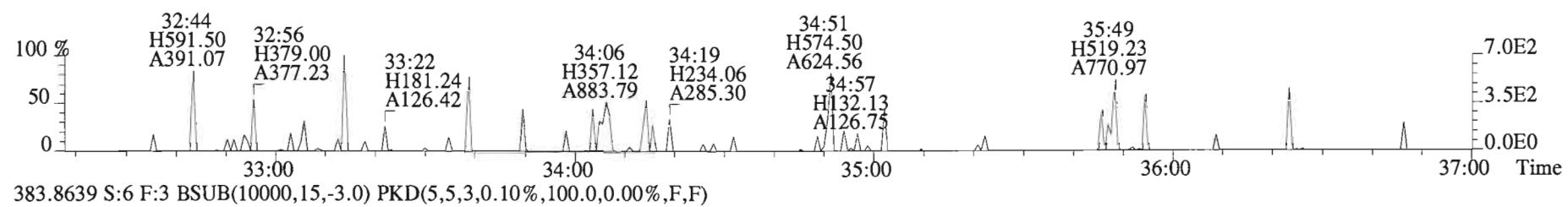
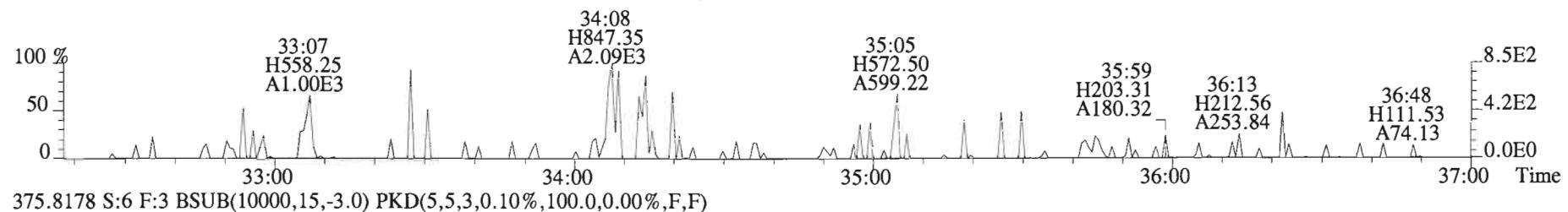
File:150217D1 #1-552 Acq:17-FEB-2015 14:47:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample# File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



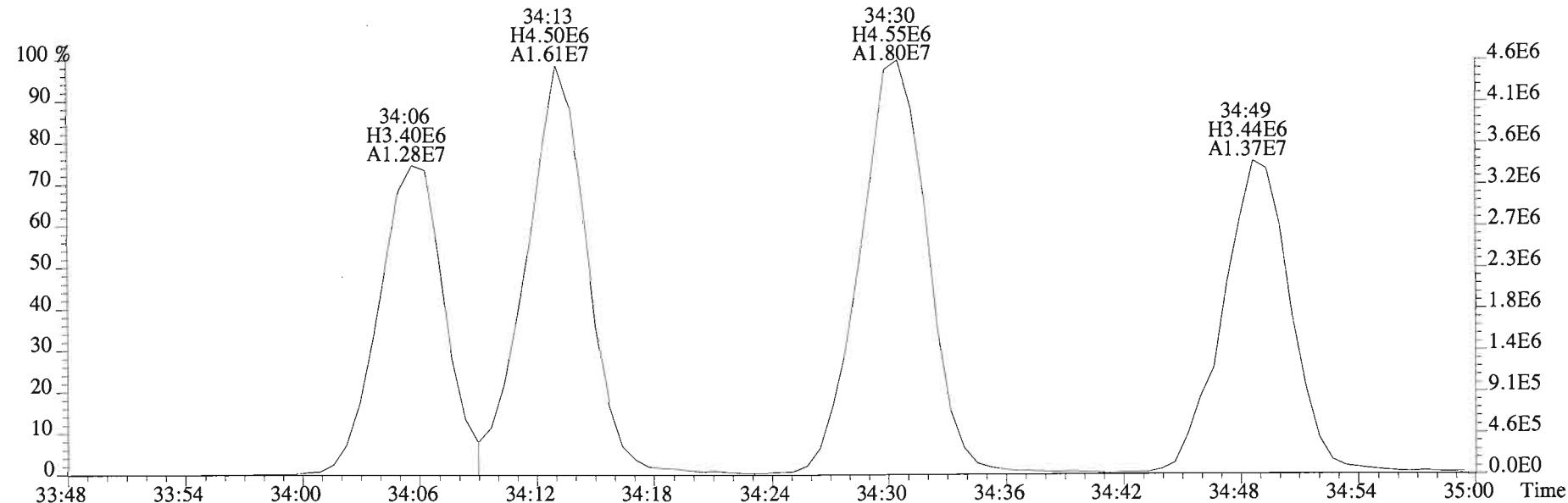
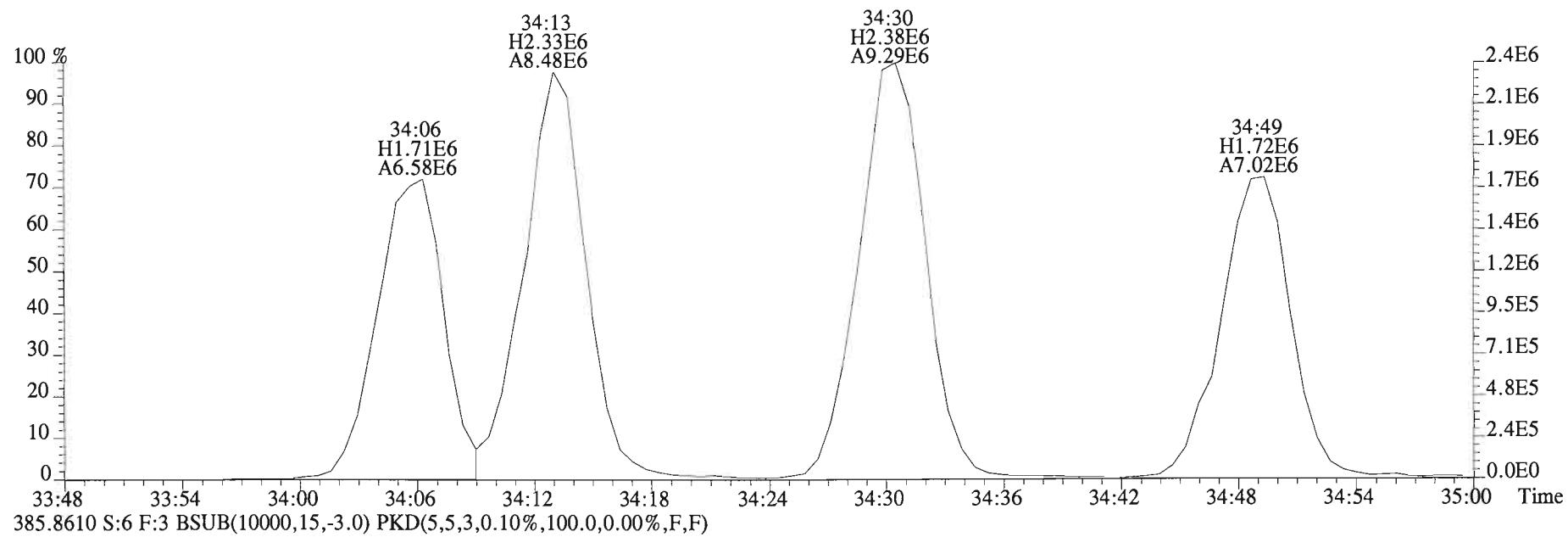
File:150217D1 #1-250 Acq:17-FEB-2015 14:47:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



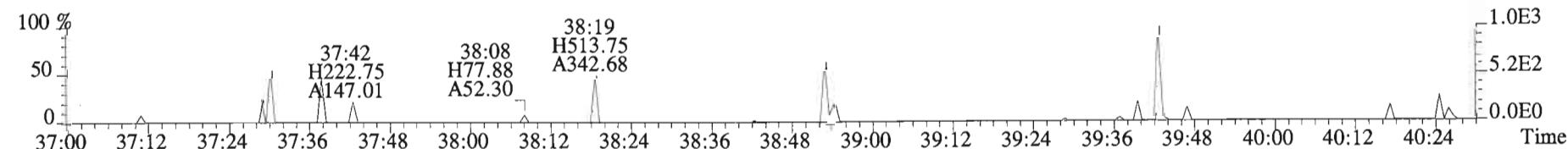
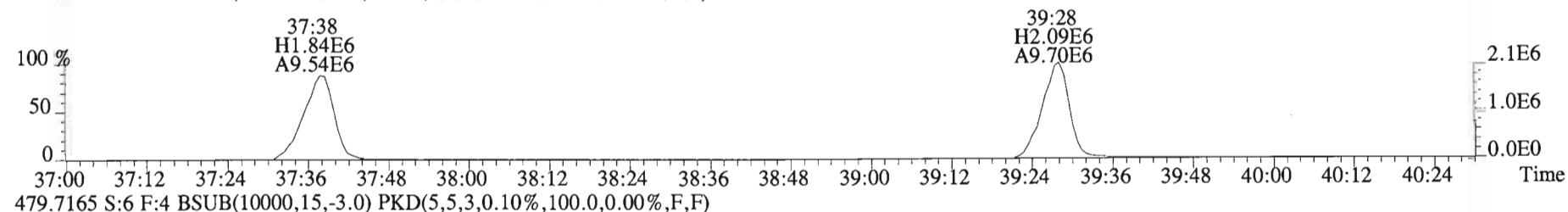
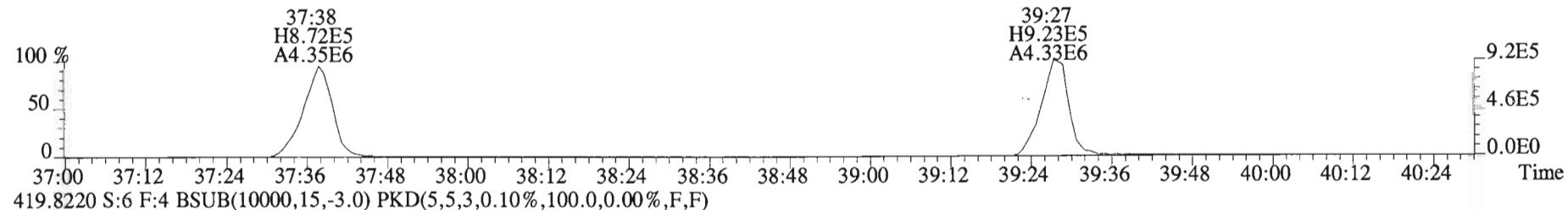
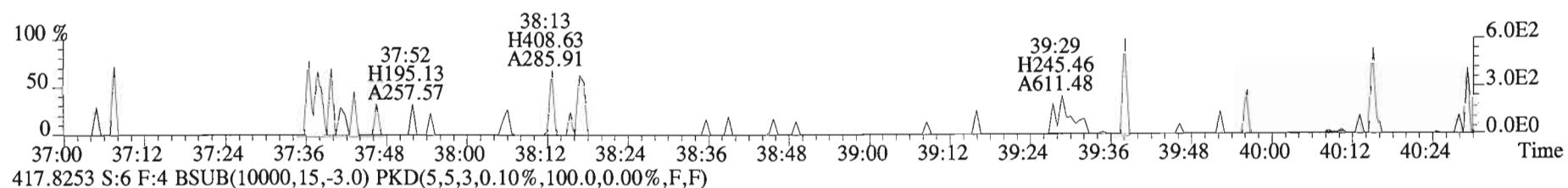
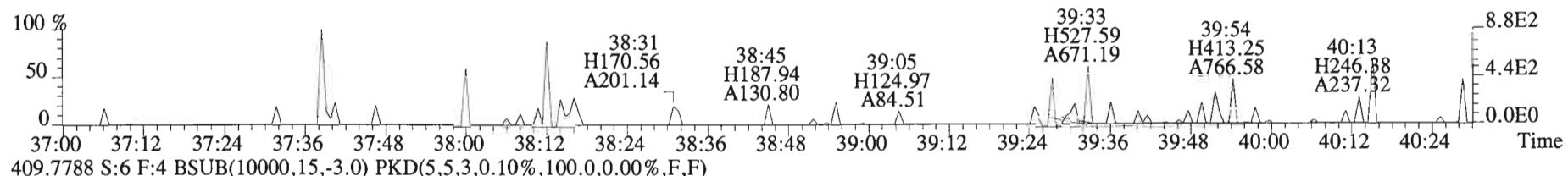
File:150217D1 #1-393 Acq:17-FEB-2015 14:47:52 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
 373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



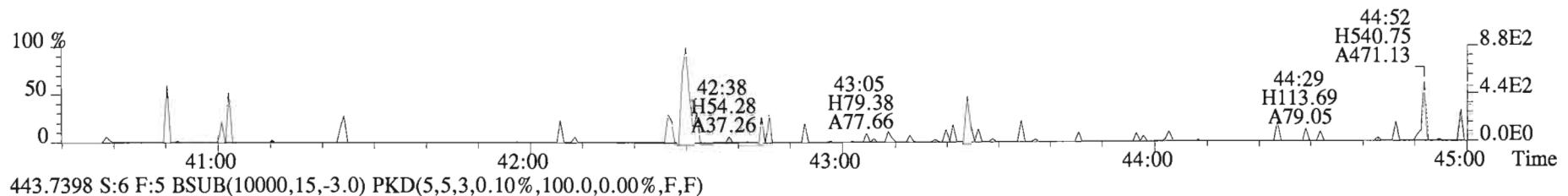
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Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



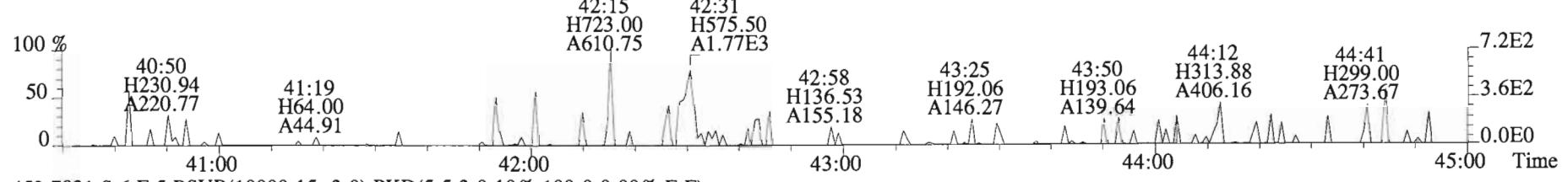
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 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
 407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



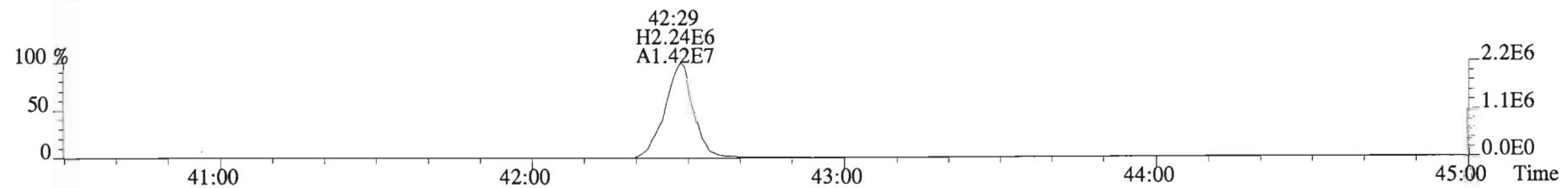
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 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BLK1 Method Blank 1 Exp:OCDD_DB5
 441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



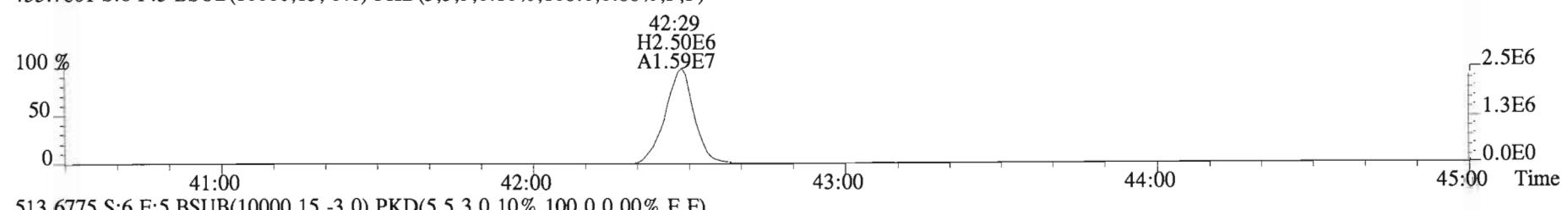
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



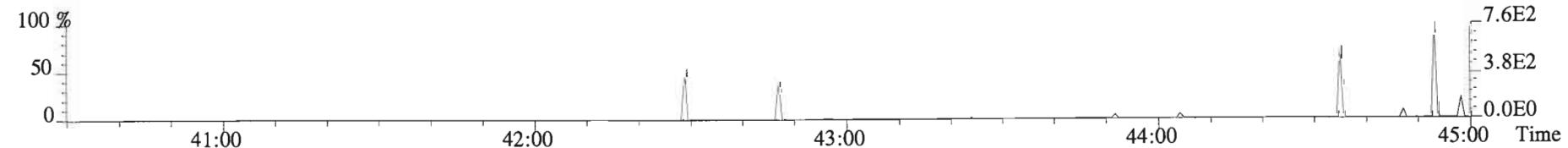
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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)



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

Lab Name: Vista Analytical Laboratory Extraction Batch: B5B0055-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): AQUEOUS OPR Data Filename: 150217D1-3

Ext. Date: 2-12-15 Shift: Day Analysis Date: 17-FEB-15 Time: 12:21:33

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	9.17	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	46.3	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	49.7	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	50	48.7	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	50	48.3	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	50	48.5	35.0 - 70.0	
OCDD	100	98.3	78.0 - 144.0	
2,3,7,8-TCDF	10	9.06	7.5 - 15.8 8.0 - 14.7 (2)	
1,2,3,7,8-PeCDF	50	49.1	40.0 - 67.0	
2,3,4,7,8-PeCDF	50	47.9	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	50	49.5	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	50	48.4	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	50	48.4	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	48.3	41.0 - 61.0	Analyst: <u>M</u>)
1,2,3,4,7,8,9-HpCDF	50	48.8	39.0 - 69.0	
OCDF	100	98.0	63.0 - 170.0	Date: <u>2/19/15</u>

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

Lab Name: Vista Analytical Laboratory Extraction Batch: B5B0055-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): AQUEOUS OPR Data Filename: 150217D1-3

Ext. Date: 2-12-15 Shift: Day Analysis Date: 17-FEB-15 Time: 12:21:33

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	81.5	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	81.1	21.0 - 227.0	
13C-1,2,3,4,7,8-HxCDD	100	73.5	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	71.5	25.0 - 163.0	
13C-1,2,3,7,8,9-HxCDD	100	72.5	21.0 - 193.0	
13C-1,2,3,4,6,7,8-HpCDD	100	75.9	26.0 - 166.0	
13C-OCDD	200	121	26.0 - 397.0	
13C-2,3,7,8-TCDF	100	82.8	22.0 - 152.0 26.0 - 126.0 (2)	
13C-1,2,3,7,8-PeCDF	100	81.8	21.0 - 192.0	
13C-2,3,4,7,8-PeCDF	100	88.8	13.0 - 328.0	
13C-1,2,3,4,7,8-HxCDF	100	70.1	19.0 - 202.0	
13C-1,2,3,6,7,8-HxCDF	100	81.0	21.0 - 159.0	
13C-2,3,4,6,7,8-HxCDF	100	74.4	22.0 - 176.0	
13C-1,2,3,7,8,9-HxCDF	100	74.5	17.0 - 205.0	
13C-1,2,3,4,6,7,8-HpCDF	100	70.5	21.0 - 158.0	
13C-1,2,3,4,7,8,9-HpCDF	100	72.9	20.0 - 186.0	
13C-OCDF	200	127	26.0 - 397.0	
CLEANUP STANDARD				Analyst: <u>M</u>
37Cl-2,3,7,8-TCDD	40	41.3	12.4 - 76.4	Date: <u>2/19/15</u>

Client ID: OPR
Lab ID: B5B0055-BS1

Filename: 150217D1 S:3 Acq:17-FEB-15 12:21:33
GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol: 1.000

ConCal: ST150217D1-1
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	1.90e+06	0.77 y	1.17	27:03	1.001	9.1726	*	2.5	*		Total Tetra-Dioxins	9.52	9.54	*	*	
	1,2,3,7,8-PeCDD	8.21e+06	0.62 y	0.91	31:40	1.001	46.323	*	2.5	*		Total Penta-Dioxins	46.5	46.5	*	*	
	1,2,3,4,7,8-HxCDD	7.48e+06	1.33 y	1.08	35:01	1.001	49.683	*	2.5	*		Total Hexa-Dioxins	147	147	*	*	
	1,2,3,6,7,8-HxCDD	7.19e+06	1.18 y	1.06	35:07	1.001	48.691	*	2.5	*		Total Hepta-Dioxins	49.2	49.6	*	*	
	1,2,3,7,8,9-HxCDD	7.33e+06	1.26 y	0.93	35:25	1.000	48.267	*	2.5	*		Total Tetra-Furans	9.25	9.39	*	*	
	1,2,3,4,6,7,8-HpCDD	7.00e+06	1.03 y	1.10	38:56	1.000	48.482	*	2.5	*		Total Penta-Furans	98.225	98.830	*	*	
	OCDD	1.14e+07	0.90 y	0.95	42:17	1.000	98.279	*	2.5	*		Total Hexa-Furans	195	196	*	*	
												Total Hepta-Furans	97.7	98.9	*	*	
	2,3,7,8-TCDF	2.57e+06	0.78 y	1.07	26:15	1.001	9.0578	*	2.5	*							
	1,2,3,7,8-PeCDF	1.38e+07	1.58 y	1.07	30:28	1.000	49.109	*	2.5	*							
	2,3,4,7,8-PeCDF	1.42e+07	1.61 y	1.03	31:23	1.000	47.880	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.24e+07	1.31 y	1.38	34:07	1.000	49.540	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.41e+07	1.29 y	1.26	34:14	1.000	48.409	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.26e+07	1.28 y	1.29	34:50	1.000	48.415	*	2.5	*							
	1,2,3,7,8,9-HxCDF	9.69e+06	1.27 y	1.19	35:47	1.000	48.334	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.05e+07	1.09 y	1.61	37:38	1.000	48.324	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	9.97e+06	1.07 y	1.53	39:28	1.000	48.817	*	2.5	*							
	OCDF	1.53e+07	0.92 y	1.10	42:29	1.000	98.004	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.76e+07	0.81 y	1.06	27:02	1.022	81.458					81.5					
IS	13C-1,2,3,7,8-PeCDD	1.95e+07	0.63 y	1.18	31:39	1.196	81.081					81.1					
IS	13C-1,2,3,4,7,8-HxCDD	1.40e+07	1.22 y	0.72	34:59	1.014	73.521					73.5					
IS	13C-1,2,3,6,7,8-HxCDD	1.39e+07	1.26 y	0.74	35:06	1.017	71.486					71.5					
IS	13C-1,2,3,7,8,9-HxCDD	1.63e+07	1.26 y	0.85	35:24	1.026	72.538					72.5					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.31e+07	1.06 y	0.65	38:56	1.128	75.895					75.9					
IS	13C-OCDD	2.44e+07	0.87 y	0.76	42:16	1.225	121.36					60.7					
IS	13C-2,3,7,8-TCDF	2.65e+07	0.75 y	0.92	26:13	0.991	82.781					82.8					
IS	13C-1,2,3,7,8-PeCDF	2.62e+07	1.60 y	0.92	30:27	1.151	81.766					81.8					
IS	13C-2,3,4,7,8-PeCDF	2.88e+07	1.52 y	0.93	31:22	1.185	88.769					88.8					
IS	13C-1,2,3,4,7,8-HxCDF	1.81e+07	0.51 y	0.98	34:06	0.988	70.129					70.1					
IS	13C-1,2,3,6,7,8-HxCDF	2.31e+07	0.52 y	1.08	34:14	0.992	80.996					81.0					
IS	13C-2,3,4,6,7,8-HxCDF	2.01e+07	0.51 y	1.03	34:49	1.009	74.447					74.4					
IS	13C-1,2,3,7,8,9-HxCDF	1.69e+07	0.52 y	0.86	35:46	1.037	74.494					74.5					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.34e+07	0.44 y	0.72	37:38*	1.090	70.542					70.5					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.34e+07	0.43 y	0.70	39:27	1.143	72.856					72.9					
IS	13C-OCDF	2.84e+07	0.90 y	0.85	42:29	1.231	126.80					63.4					
C/Up	37Cl-2,3,7,8-TCDD	9.43e+06		1.12	27:03	1.022	41.317				103	Integrations by	Reviewed by				
RS/RT	13C-1,2,3,4-TCDD	2.04e+07	0.82 y	1.00	26:28	*	100.00					Analyst: <u>MJ</u>	Analyst: <u>JZ</u>				
RS	13C-1,2,3,4-TCDF	3.48e+07	0.78 y	1.00	24:58	*	100.00										
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.64e+07	0.51 y	1.00	34:30	*	100.00					Date: <u>2/19/15</u>	Date: <u>2/19/15</u>				

Client ID: OPR
Lab ID: B5B0055-BS1

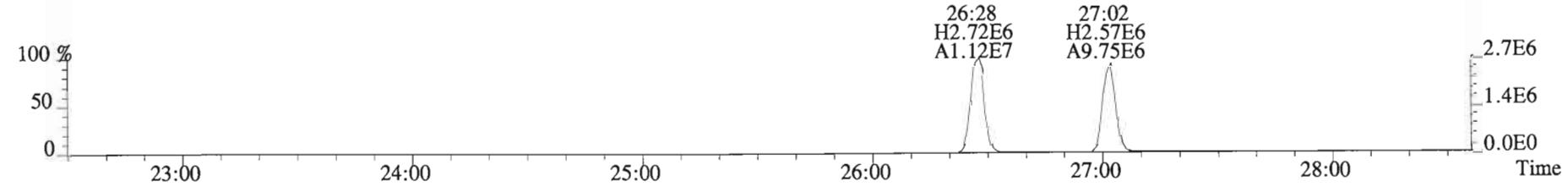
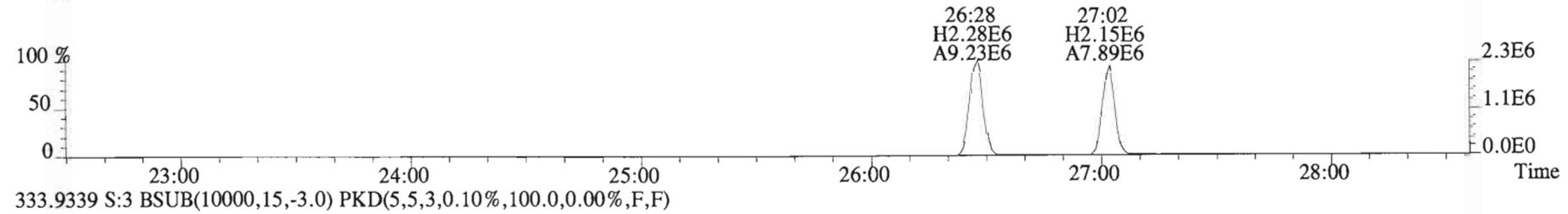
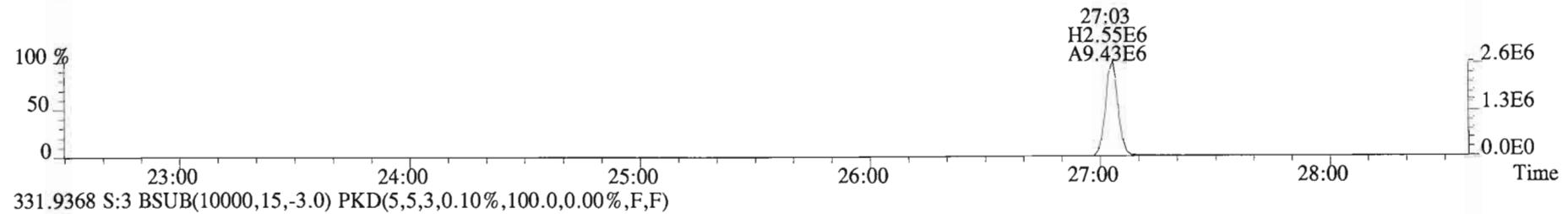
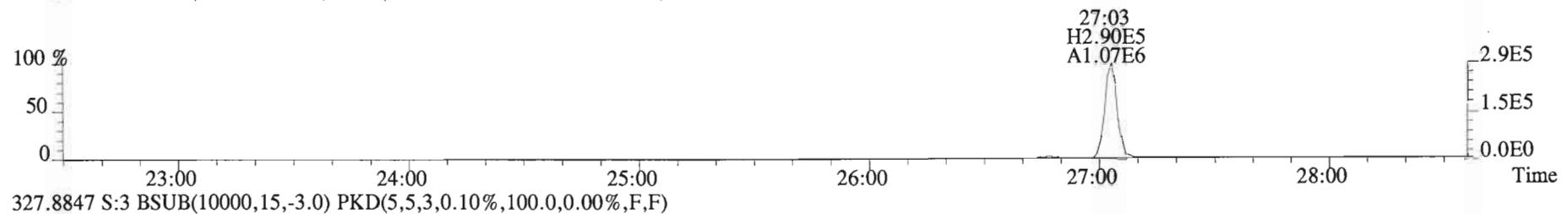
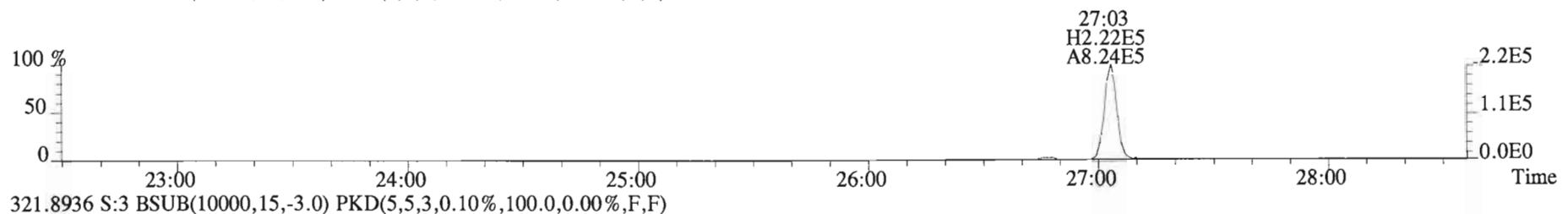
Filename: 150217D1 S:3 Acq:17-FEB-15 12:21:33
GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol: 1.000

ConCal: ST150217D1-1
EndCAL: NA

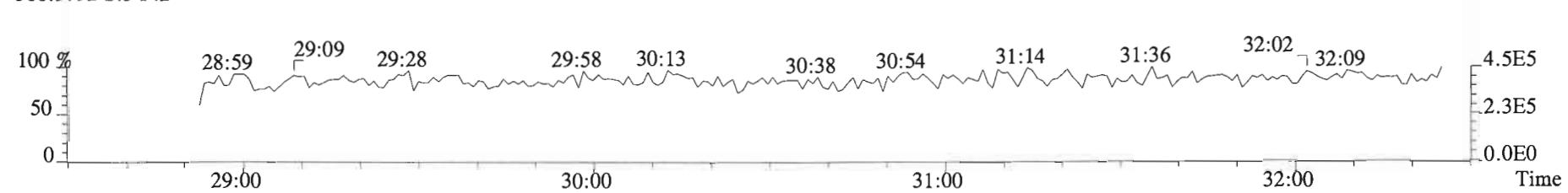
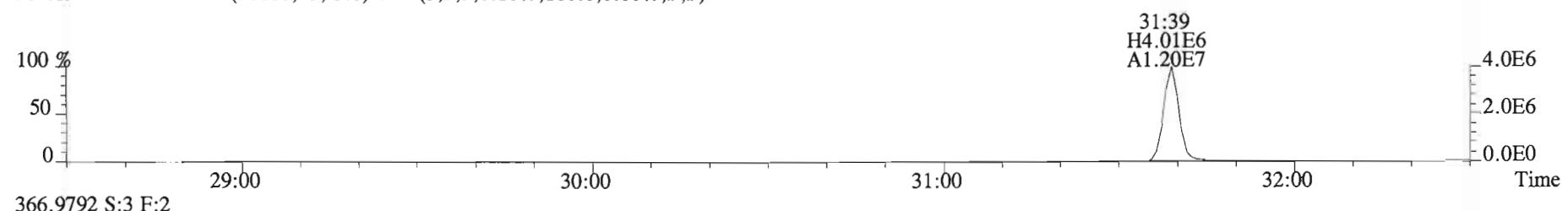
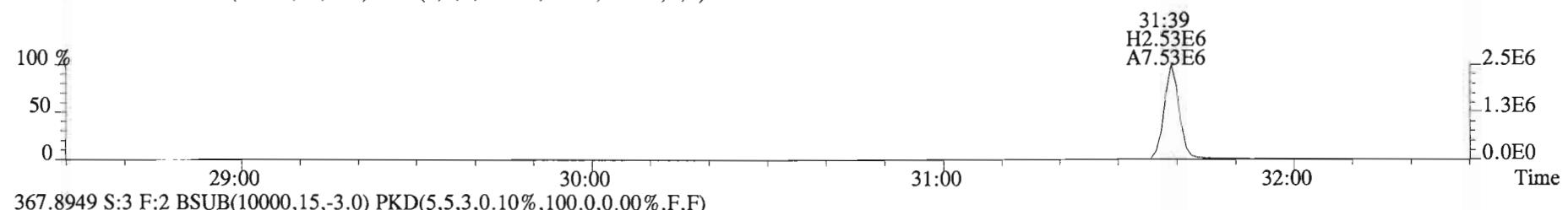
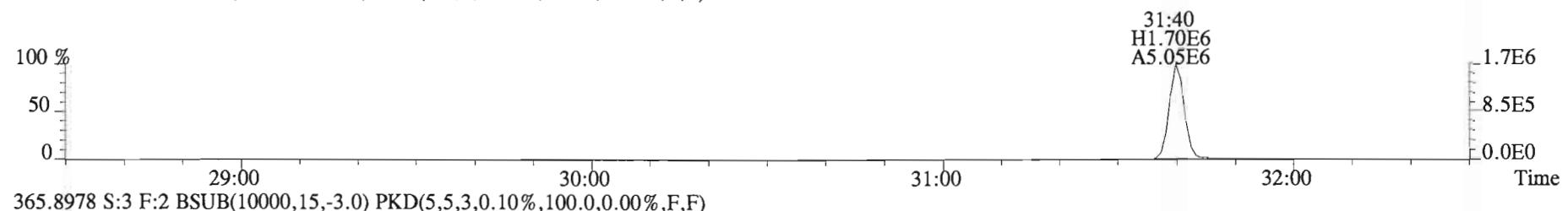
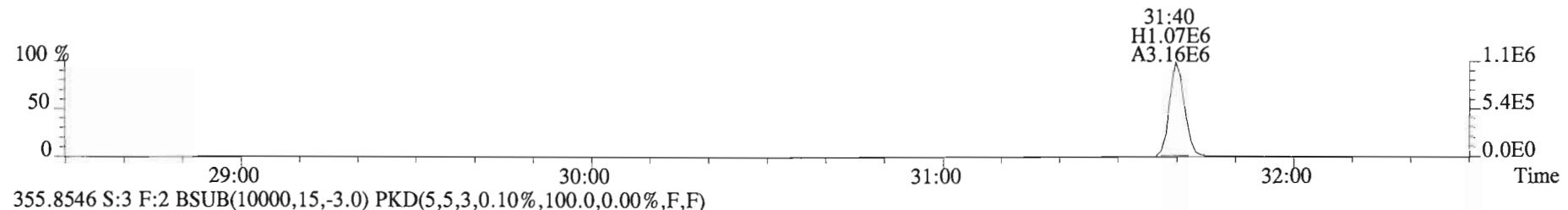
Page 3 of 4

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	1.90e+06	0.77 y	1.17	27:03	1.001	183.45	*	2.5	*		Total Tetra-Dioxins	190	191	*	*	
	1,2,3,7,8-PeCDD	8.21e+06	0.62 y	0.91	31:40	1.001	926.47	*	2.5	*		Total Penta-Dioxins	930	930	*	*	
	1,2,3,4,7,8-HxCDD	7.48e+06	1.33 y	1.08	35:01	1.001	993.65	*	2.5	*		Total Hexa-Dioxins	2940	2950	*	*	
	1,2,3,6,7,8-HxCDD	7.19e+06	1.18 y	1.06	35:07	1.001	973.83	*	2.5	*		Total Hepta-Dioxins	983	992	*	*	
	1,2,3,7,8,9-HxCDD	7.33e+06	1.26 y	0.93	35:25	1.000	965.35	*	2.5	*		Total Tetra-Furans	185	188	*	*	
	1,2,3,4,6,7,8-HpCDD	7.00e+06	1.03 y	1.10	38:56	1.000	969.65	*	2.5	*		Total Penta-Furans	1964.5	1976.6	*	*	
	OCDD	1.14e+07	0.90 y	0.95	42:17	1.000	1965.6	*	2.5	*		Total Hexa-Furans	3900	3910	*	*	
												Total Hepta-Furans	1950	1980	*	*	
	2,3,7,8-TCDF	2.57e+06	0.78 y	1.07	26:15	1.001	181.16	*	2.5	*							
	1,2,3,7,8-PeCDF	1.38e+07	1.58 y	1.07	30:28	1.000	982.19	*	2.5	*							
	2,3,4,7,8-PeCDF	1.42e+07	1.61 y	1.03	31:23	1.000	957.61	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.24e+07	1.31 y	1.38	34:07	1.000	990.79	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.41e+07	1.29 y	1.26	34:14	1.000	968.18	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.26e+07	1.28 y	1.29	34:50	1.000	968.30	*	2.5	*							
	1,2,3,7,8,9-HxCDF	9.69e+06	1.27 y	1.19	35:47	1.000	966.67	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.05e+07	1.09 y	1.61	37:38	1.000	966.47	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	9.97e+06	1.07 y	1.53	39:28	1.000	976.34	*	2.5	*							
	OCDF	1.53e+07	0.92 y	1.10	42:29	1.000	1960.1	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.76e+07	0.81 y	1.06	27:02	1.022	1629.2					81.5					
IS	13C-1,2,3,7,8-PeCDD	1.95e+07	0.63 y	1.18	31:39	1.196	1621.6					81.1					
IS	13C-1,2,3,4,7,8-HxCDD	1.40e+07	1.22 y	0.72	34:59	1.014	1470.4					73.5					
IS	13C-1,2,3,6,7,8-HxCDD	1.39e+07	1.26 y	0.74	35:06	1.017	1429.7					71.5					
IS	13C-1,2,3,7,8,9-HxCDD	1.63e+07	1.26 y	0.85	35:24	1.026	1450.8					72.5					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.31e+07	1.06 y	0.65	38:56	1.128	1517.9					75.9					
IS	13C-OCDD	2.44e+07	0.87 y	0.76	42:16	1.225	2427.3					60.7					
IS	13C-2,3,7,8-TCDF	2.65e+07	0.75 y	0.92	26:13	0.991	1655.6					82.8					
IS	13C-1,2,3,7,8-PeCDF	2.62e+07	1.60 y	0.92	30:27	1.151	1635.3					81.8					
IS	13C-2,3,4,7,8-PeCDF	2.88e+07	1.52 y	0.93	31:22	1.185	1775.4					88.8					
IS	13C-1,2,3,4,7,8-HxCDF	1.81e+07	0.51 y	0.98	34:06	0.988	1402.6					70.1					
IS	13C-1,2,3,6,7,8-HxCDF	2.31e+07	0.52 y	1.08	34:14	0.992	1619.9					81.0					
IS	13C-2,3,4,6,7,8-HxCDF	2.01e+07	0.51 y	1.03	34:49	1.009	1488.9					74.4					
IS	13C-1,2,3,7,8,9-HxCDF	1.69e+07	0.52 y	0.86	35:46	1.037	1489.9					74.5					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.34e+07	0.44 y	0.72	37:38	1.090	1410.8					70.5					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.34e+07	0.43 y	0.70	39:27	1.143	1457.1					72.9					
IS	13C-OCDF	2.84e+07	0.90 y	0.85	42:29	1.231	2536.0					63.4					
C/Up	37Cl-2,3,7,8-TCDD	9.43e+06		1.12	27:03	1.022	826.33					103	Integrations by Analyst:	M	Reviewed by Analyst:		
RS/RT	13C-1,2,3,4-TCDD	2.04e+07	0.82 y	1.00	26:28	*	2000.0										
RS	13C-1,2,3,4-TCDF	3.48e+07	0.78 y	1.00	24:58	*	2000.0										
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.64e+07	0.51 y	1.00	34:30	*	2000.0						Date: 2/19/15		Date:		

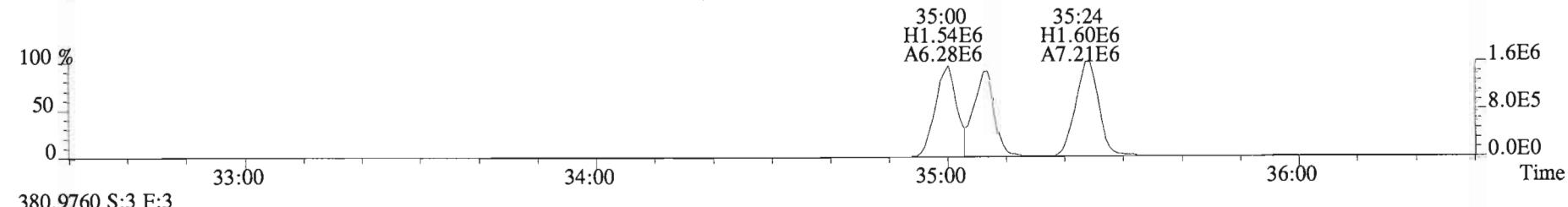
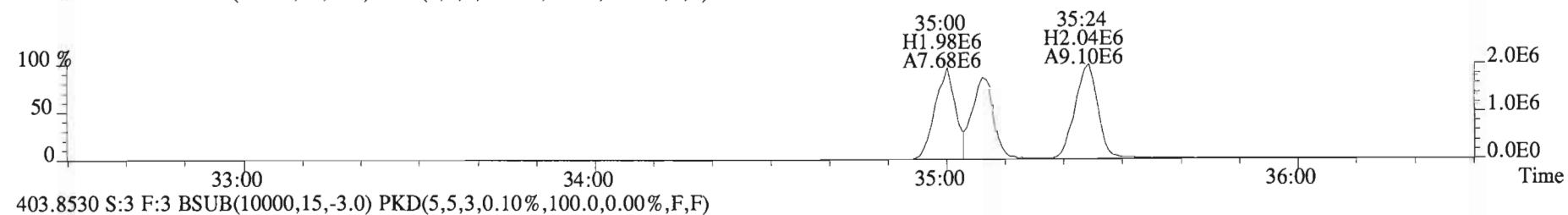
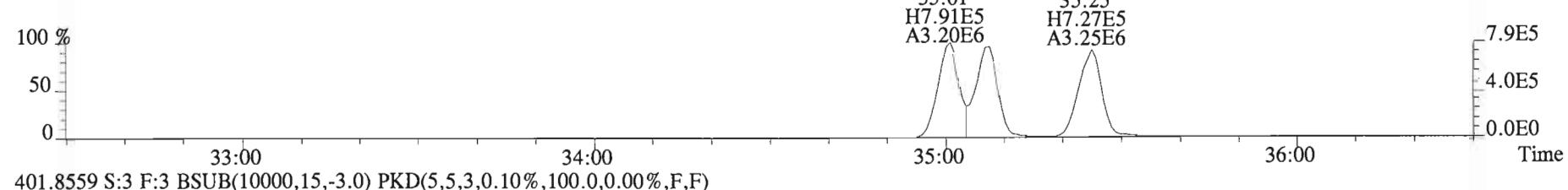
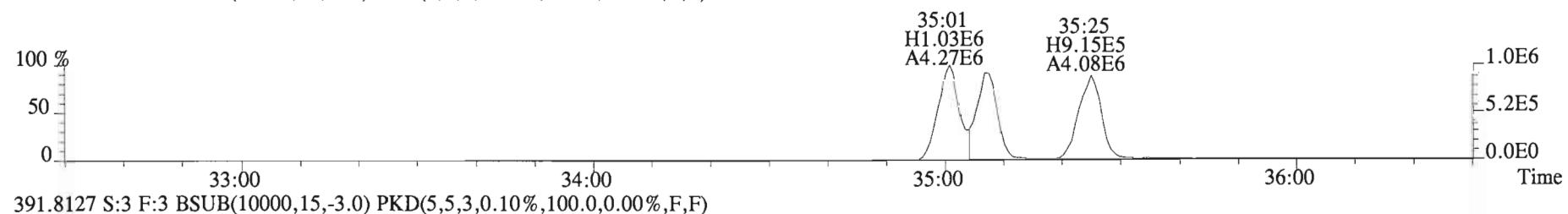
File:150217D1 #1-552 Acq:17-FEB-2015 12:21:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



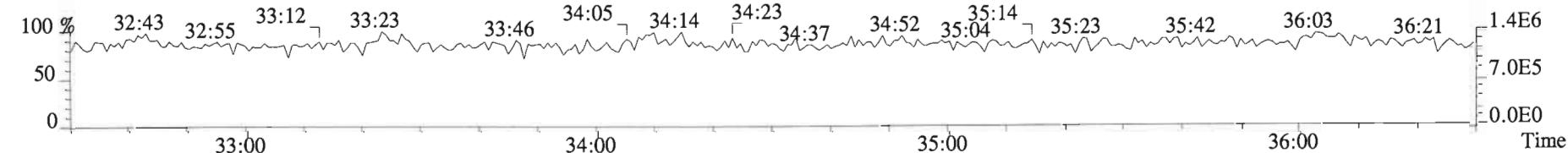
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Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
353.8576 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



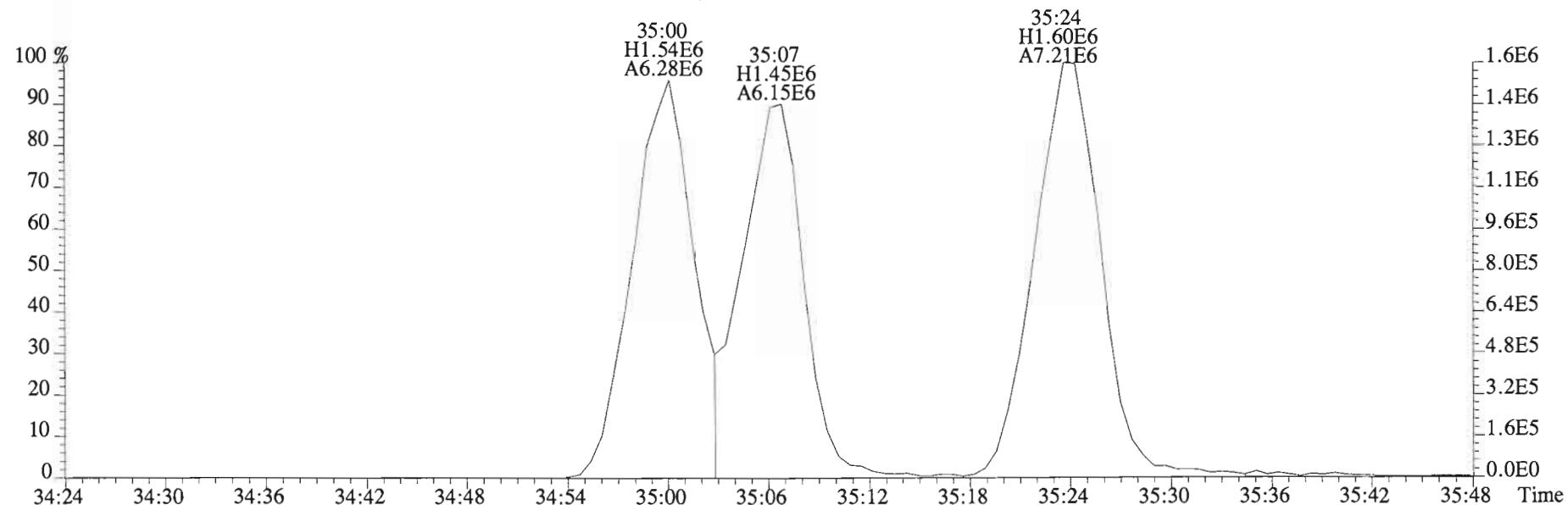
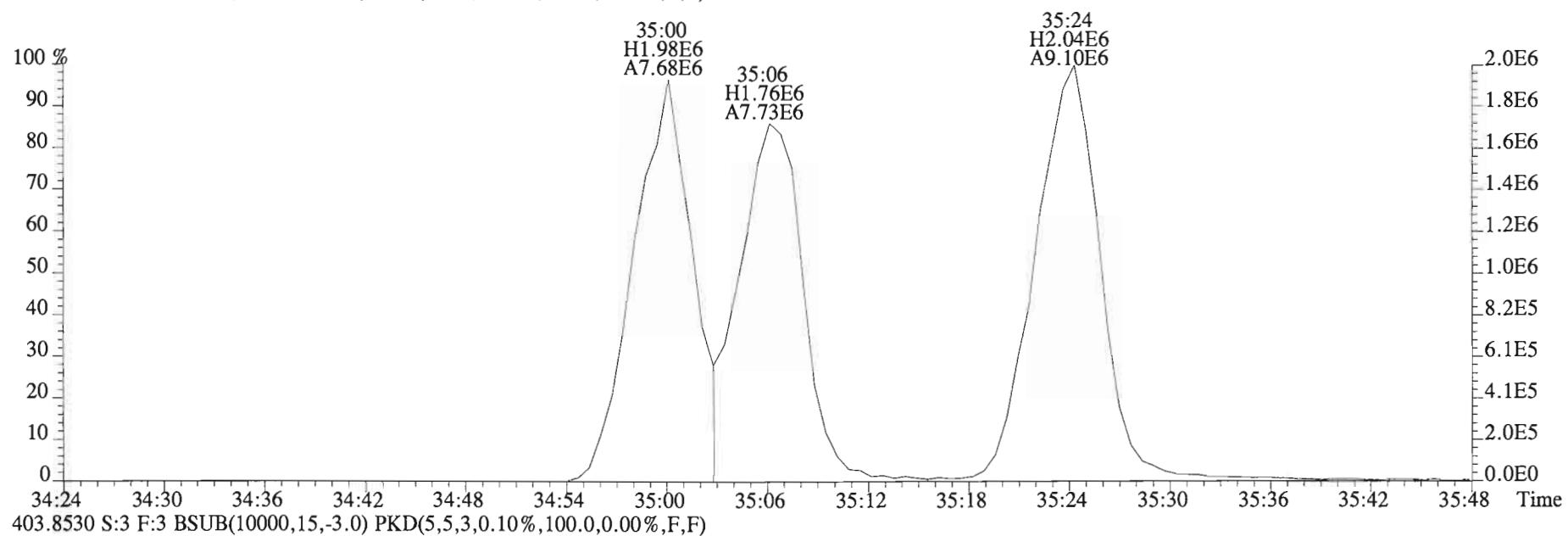
File:150217D1 #1-393 Acq:17-FEB-2015 12:21:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



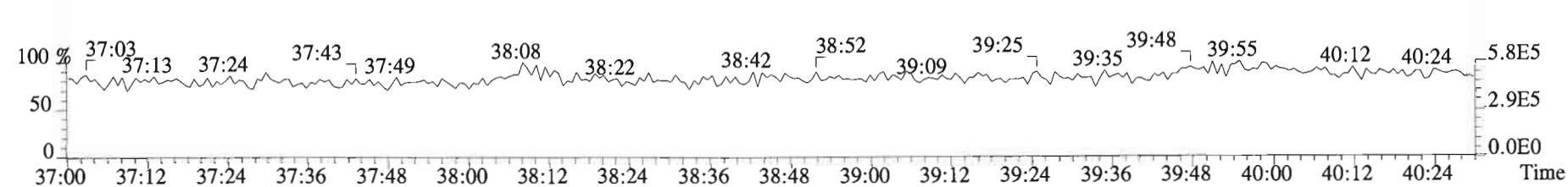
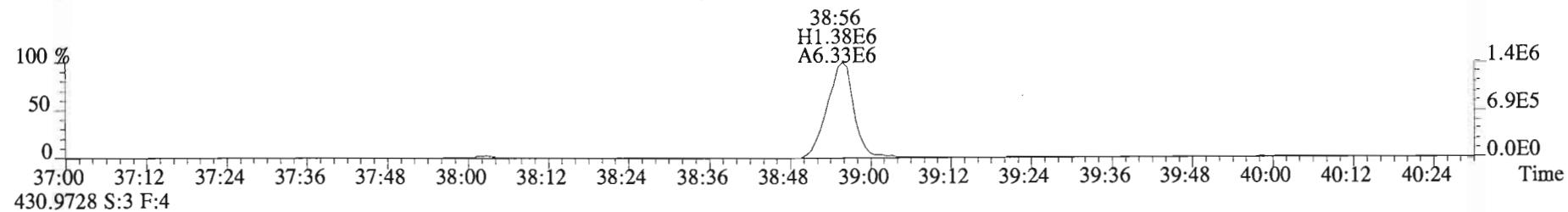
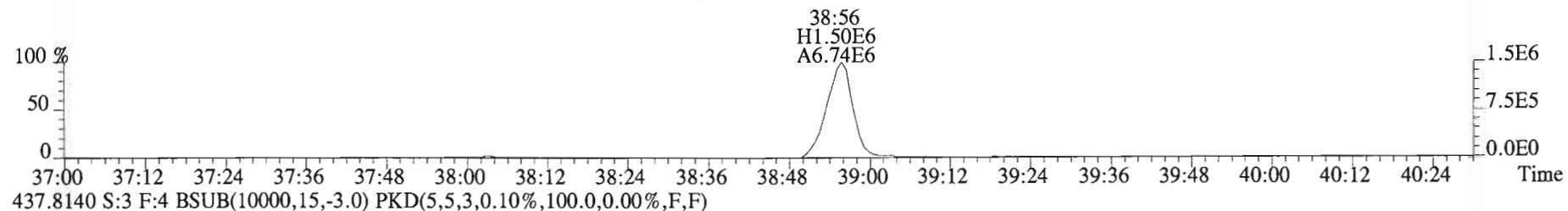
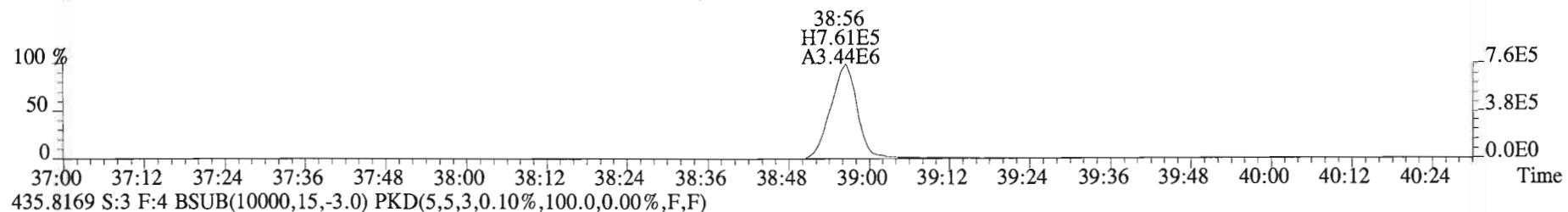
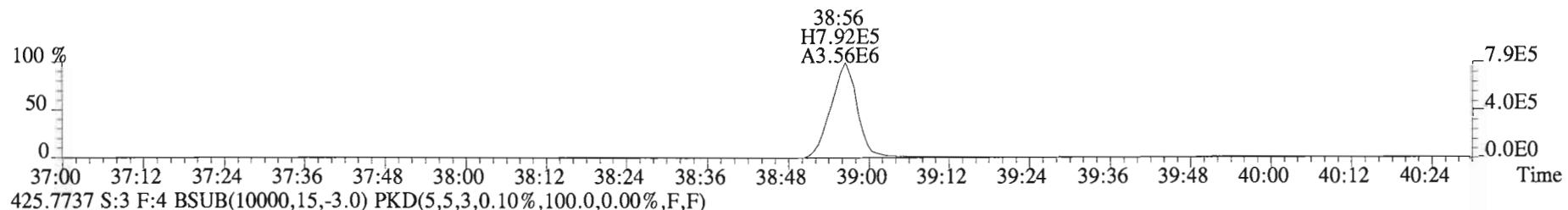
380.9760 S:3 F:3



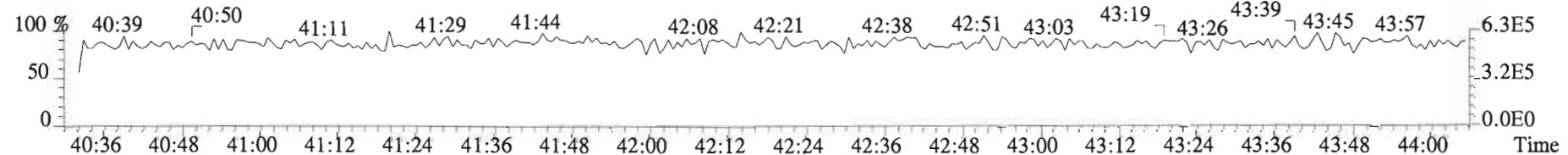
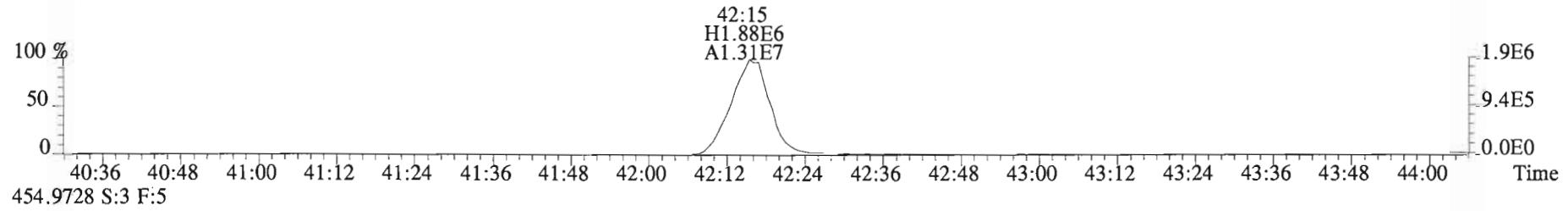
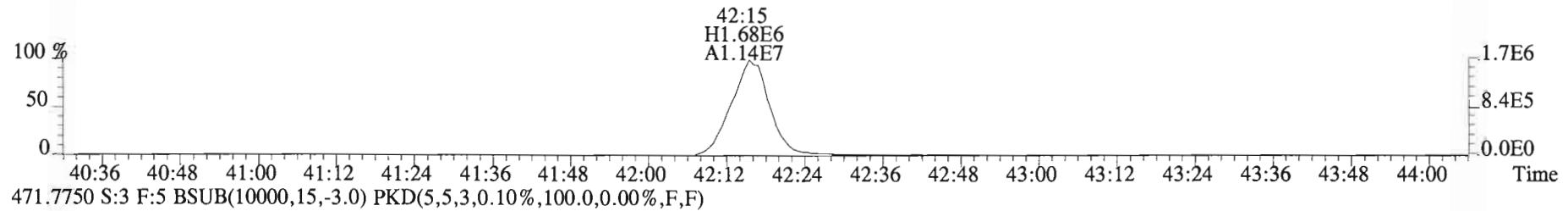
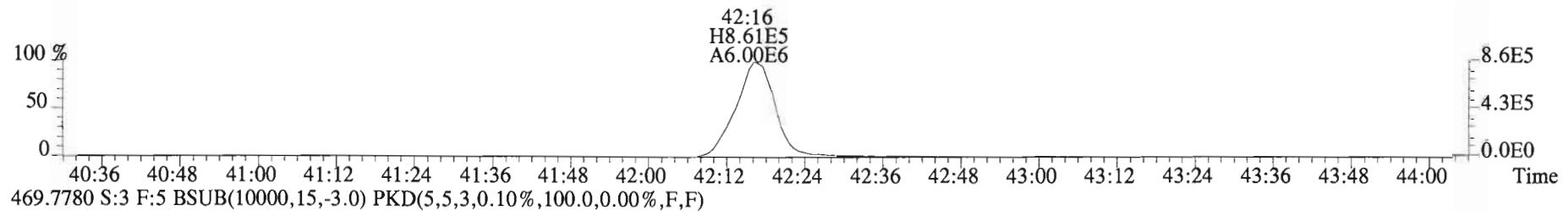
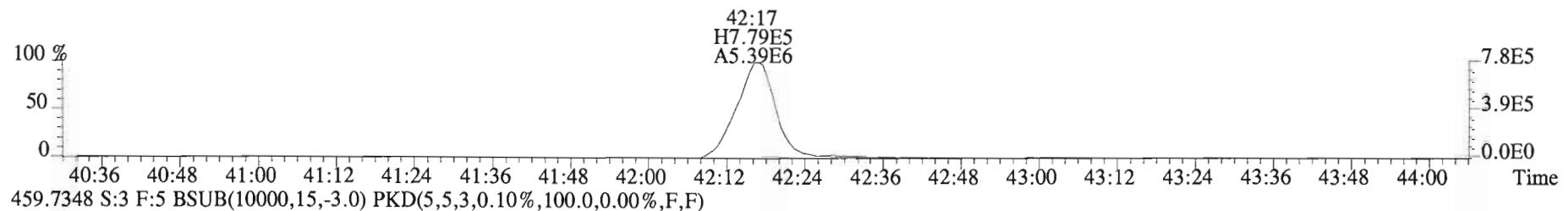
File:150217D1 #1-393 Acq:17-FEB-2015 12:21:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



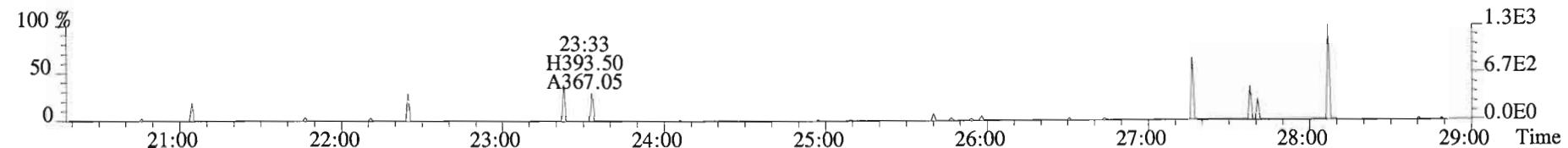
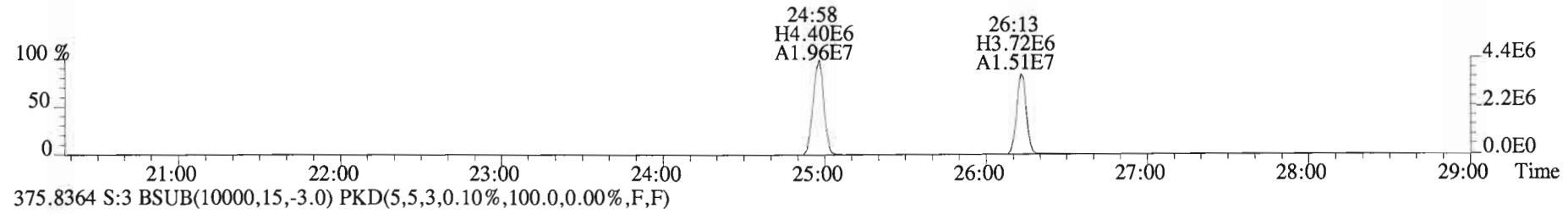
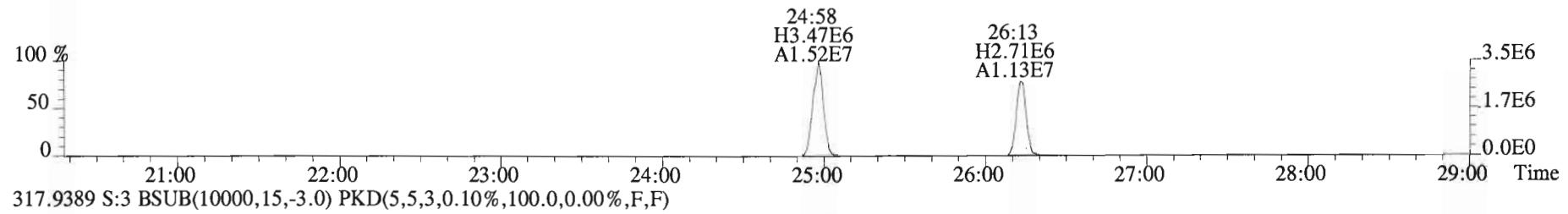
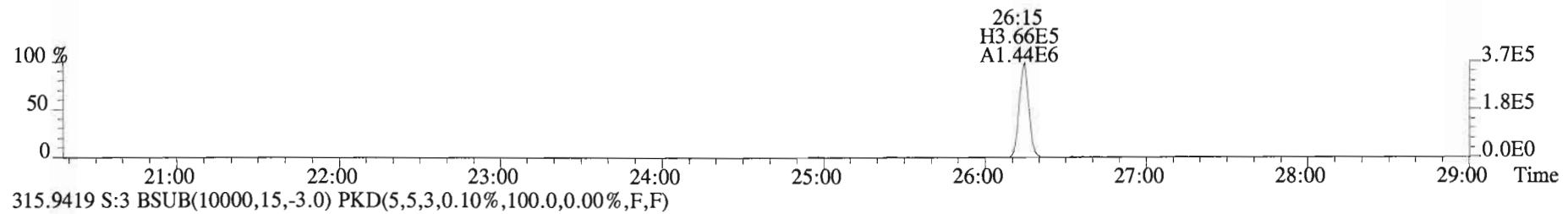
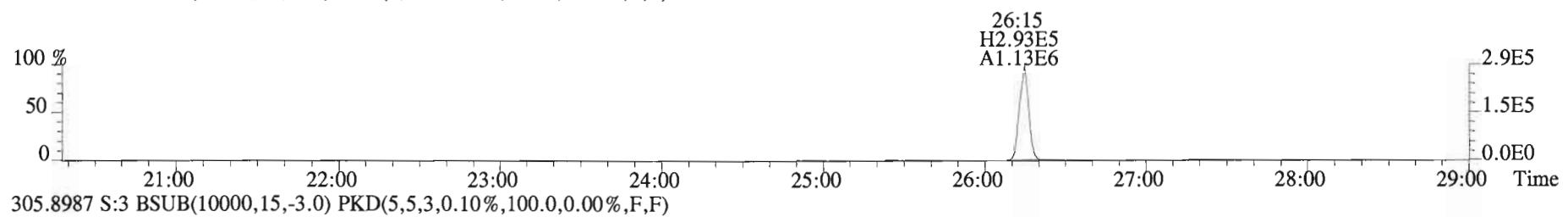
File:150217D1 #1-326 Acq:17-FEB-2015 12:21:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



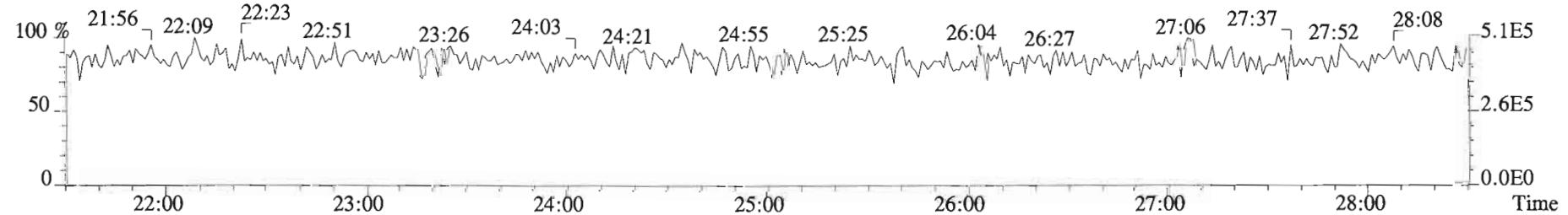
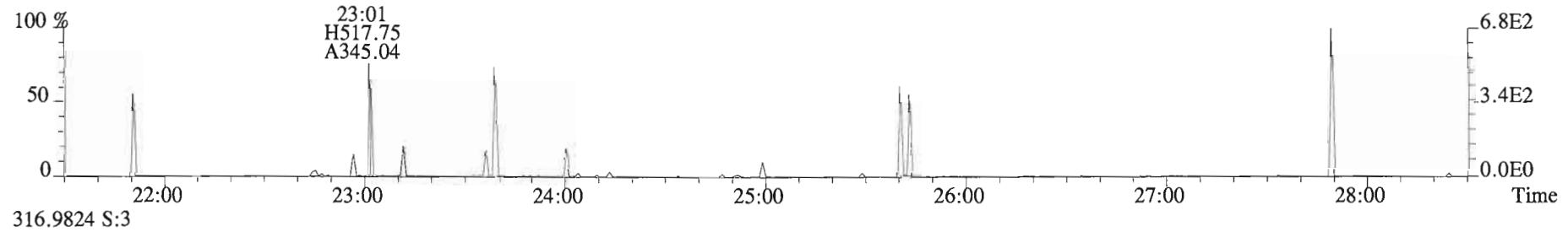
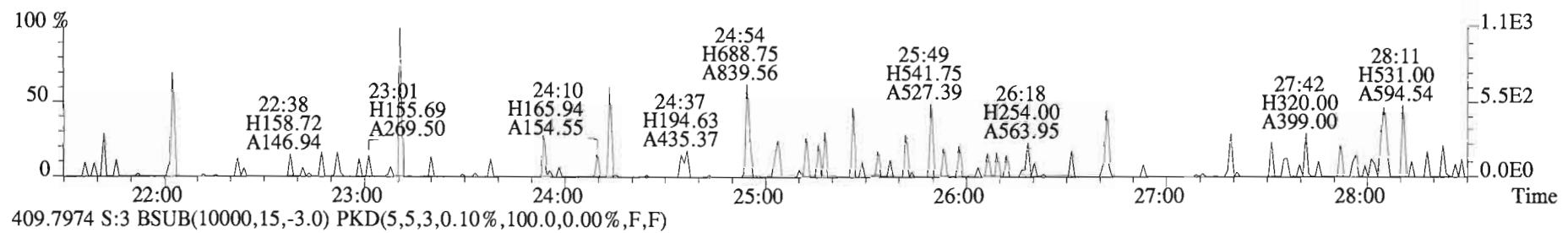
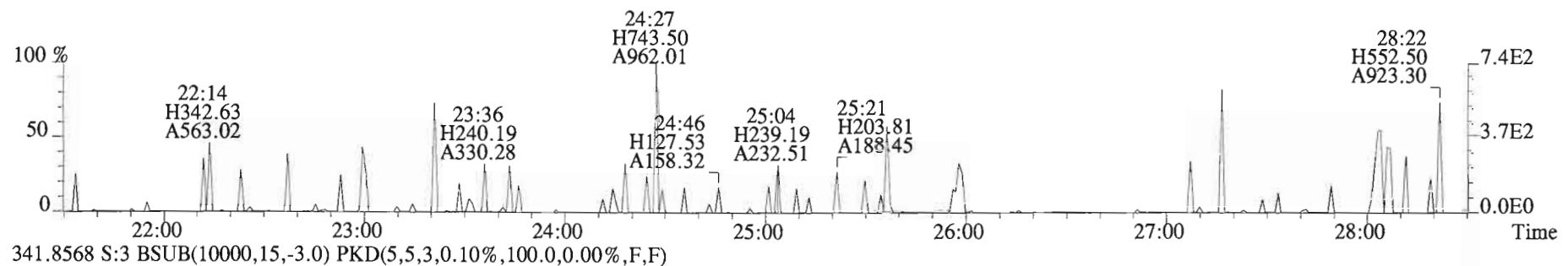
File:150217D1 #1-388 Acq:17-FEB-2015 12:21:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



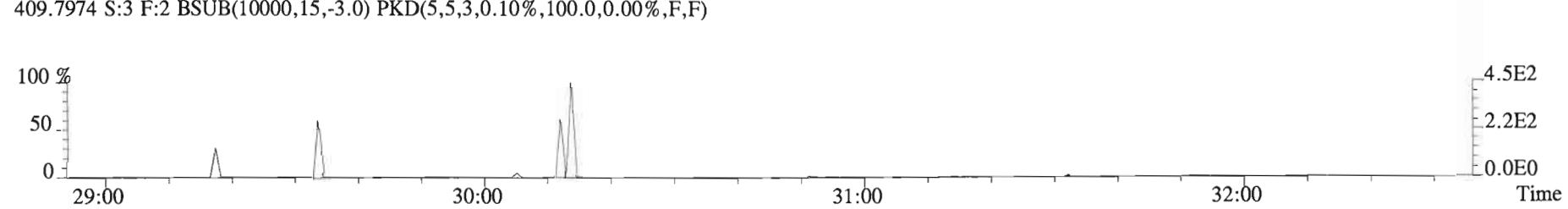
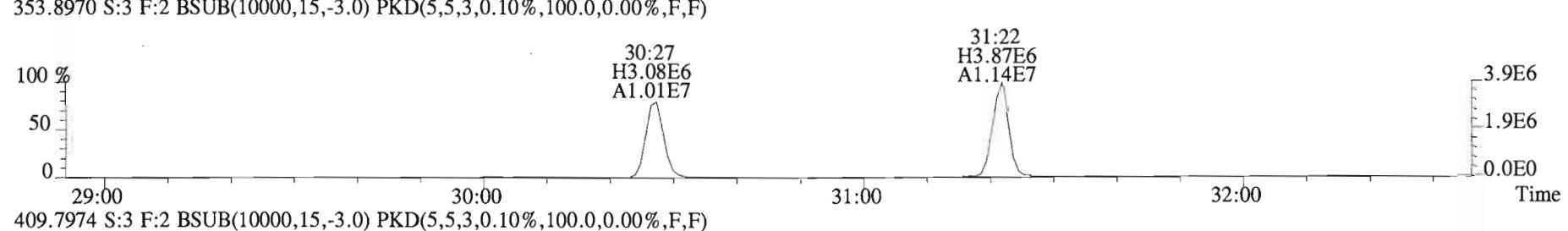
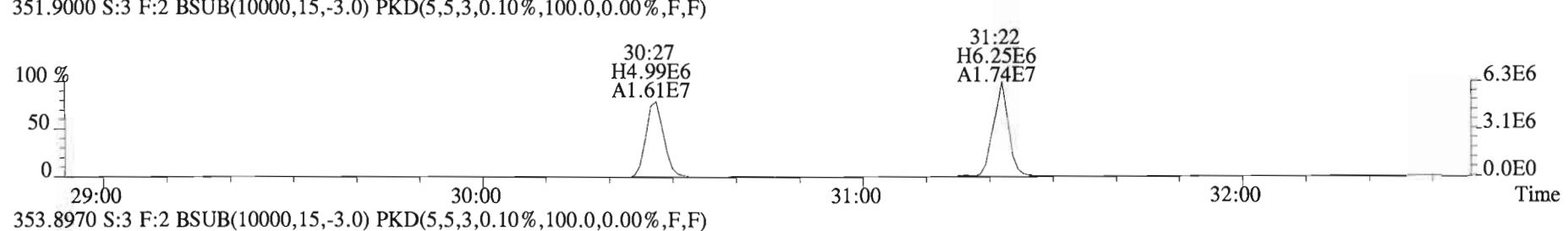
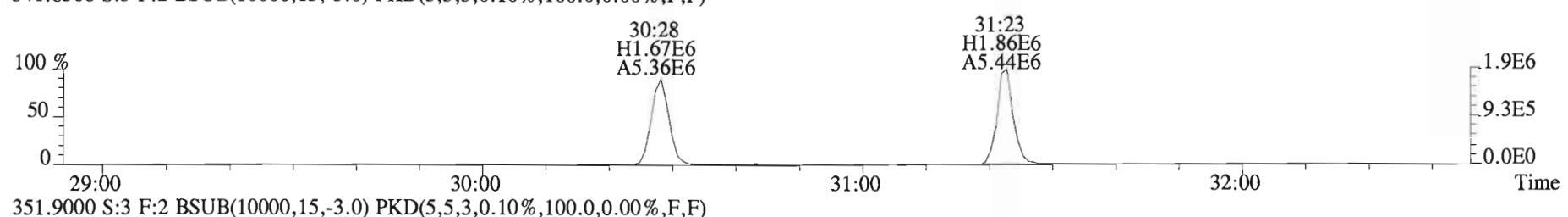
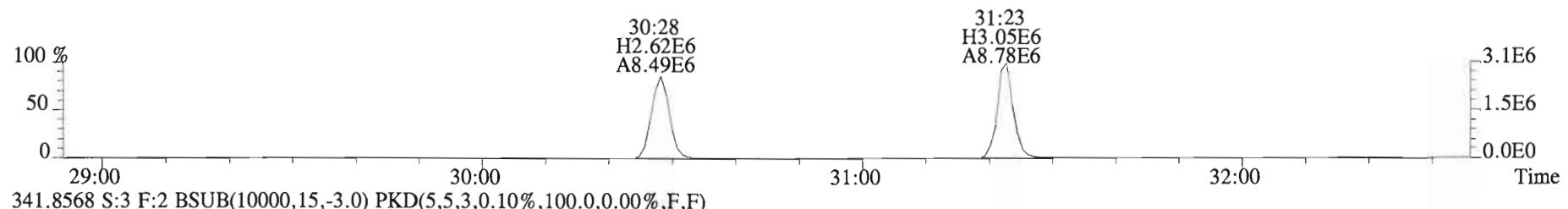
File:150217D1 #1-552 Acq:17-FEB-2015 12:21:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



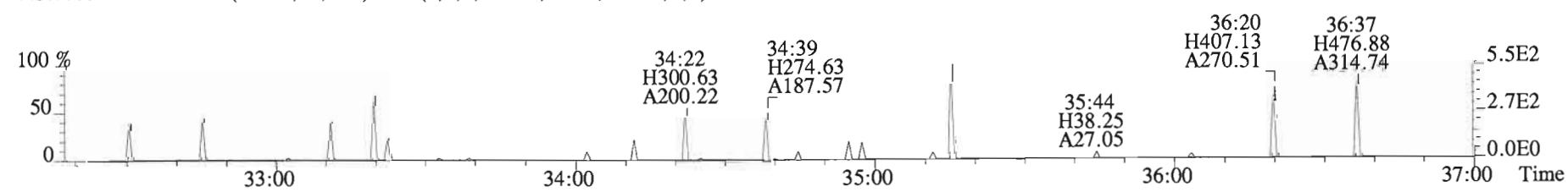
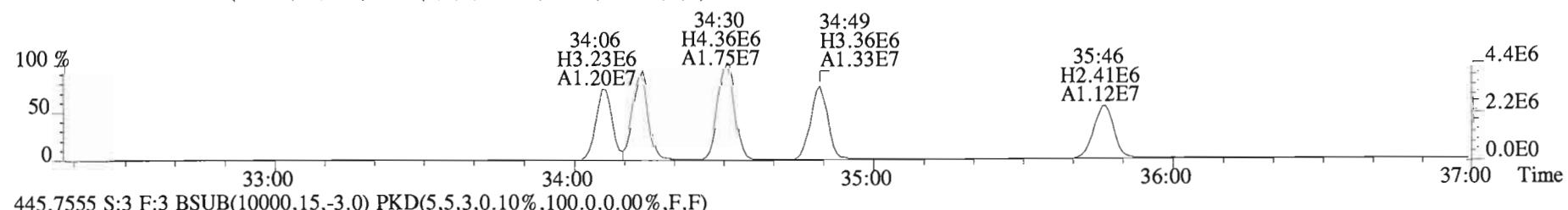
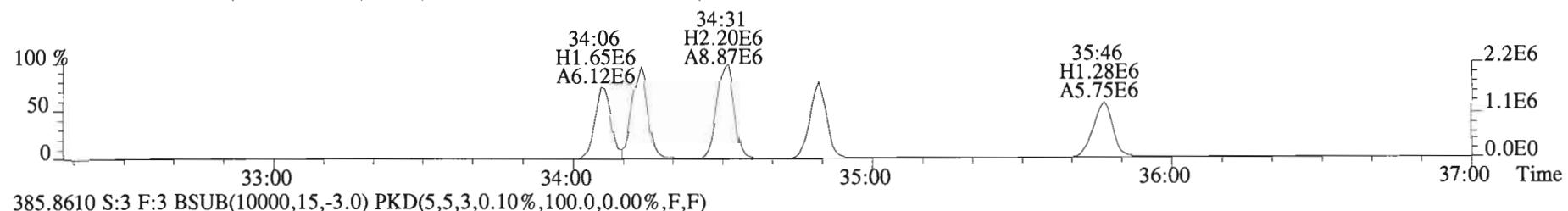
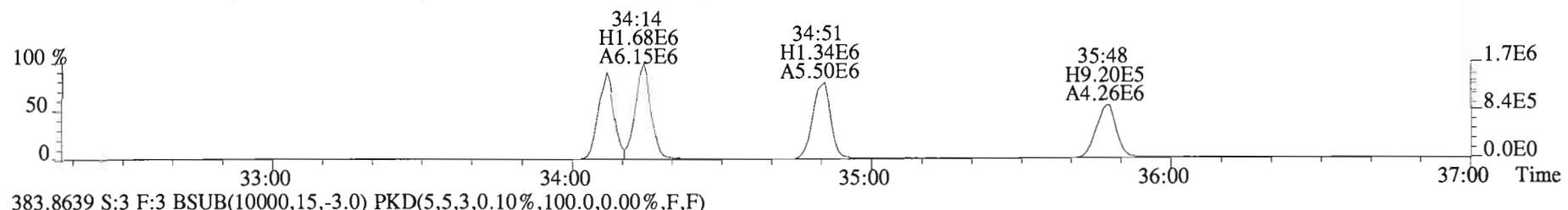
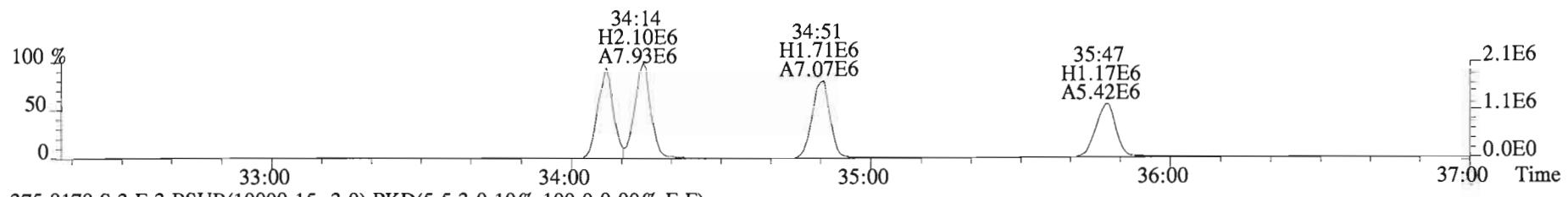
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Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



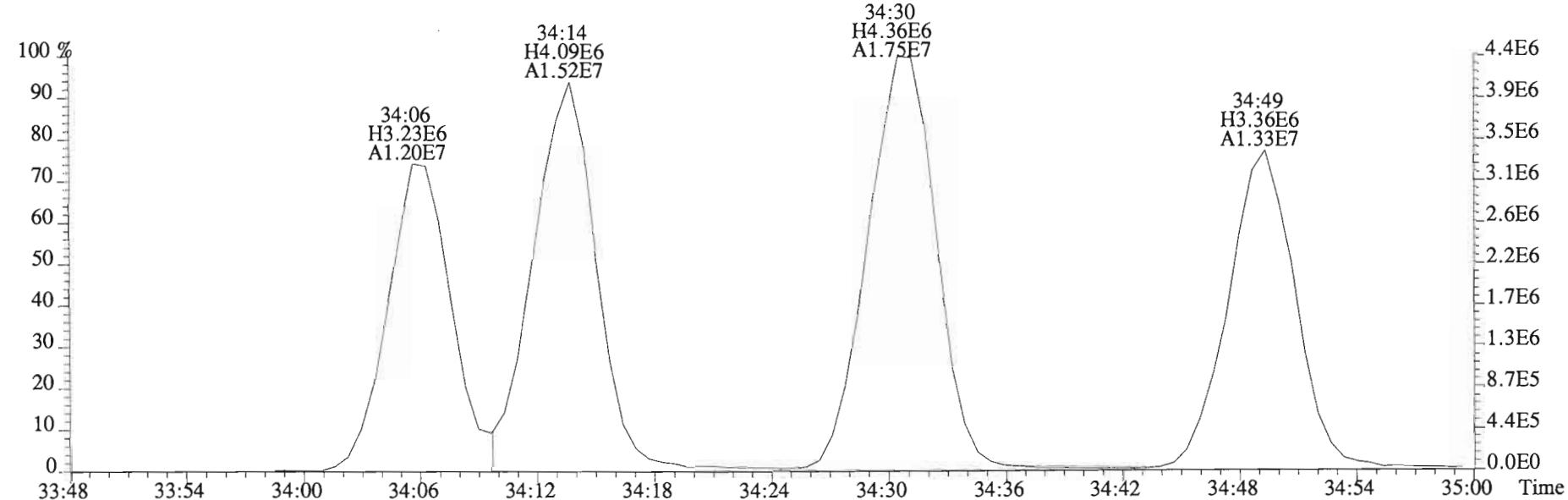
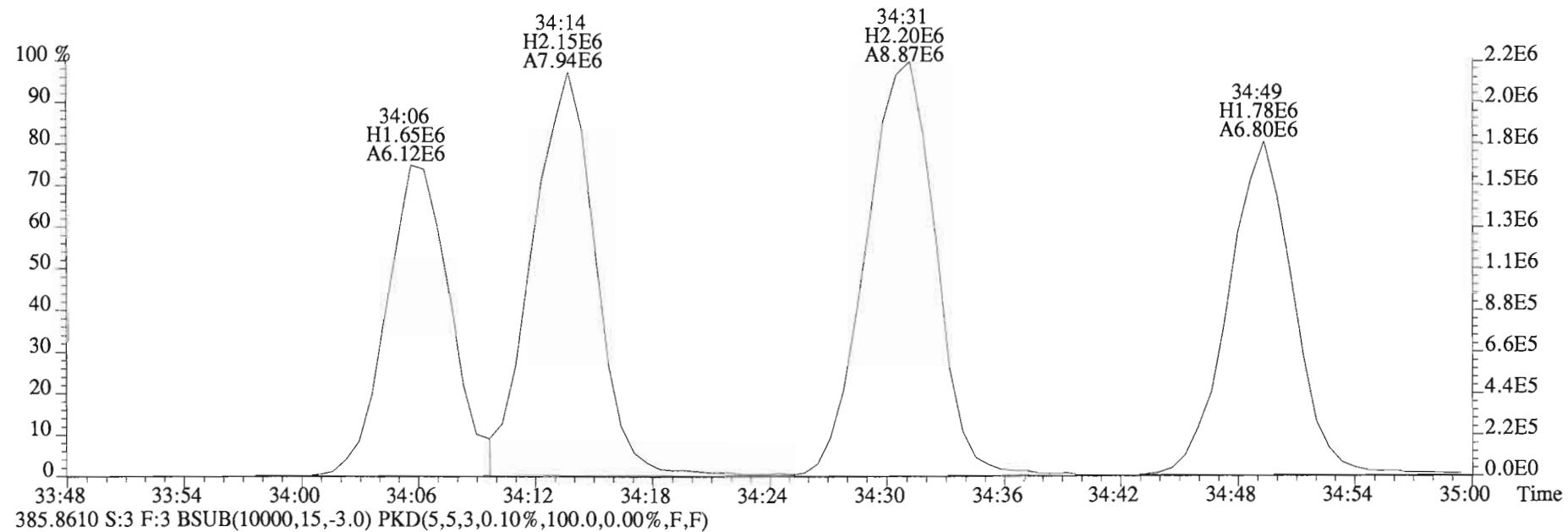
File:150217D1 #1-250 Acq:17-FEB-2015 12:21:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



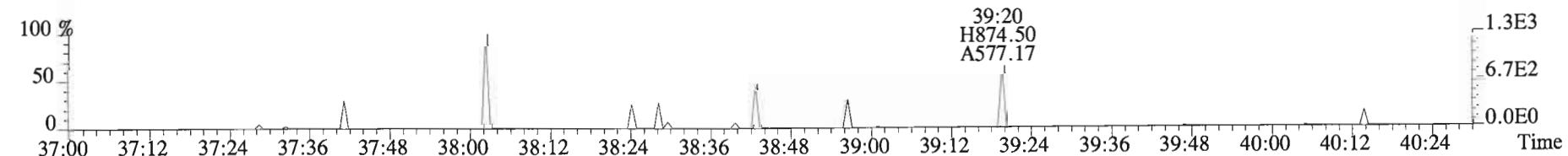
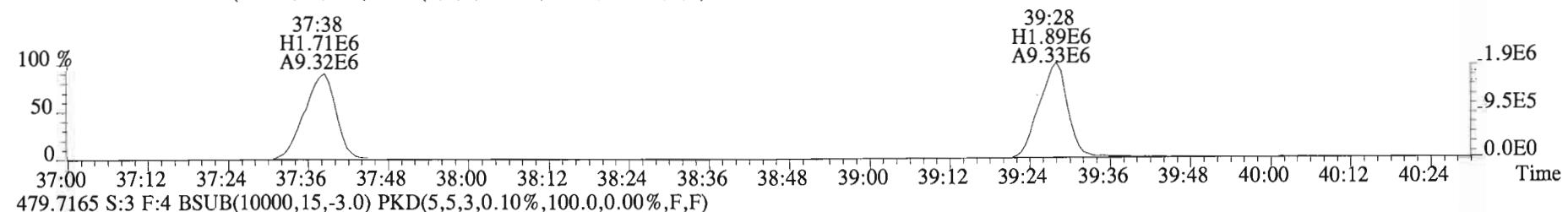
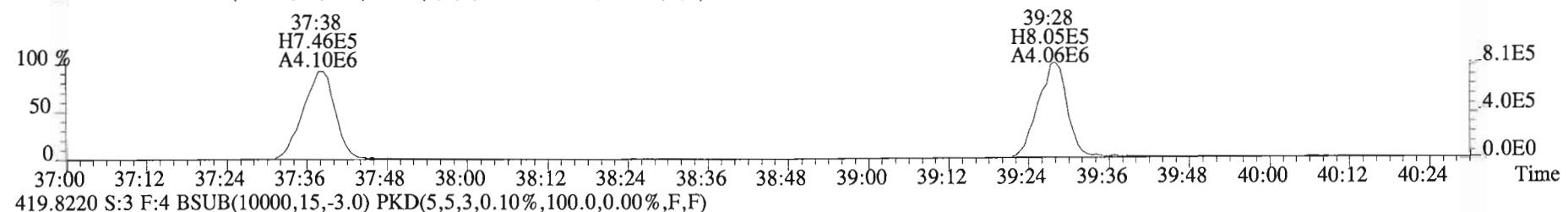
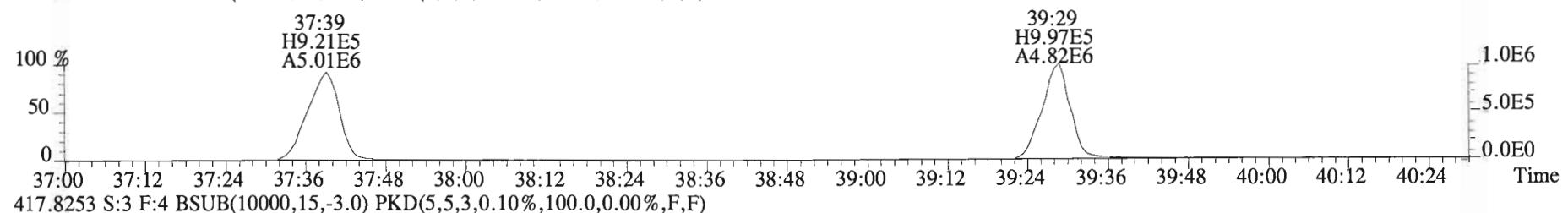
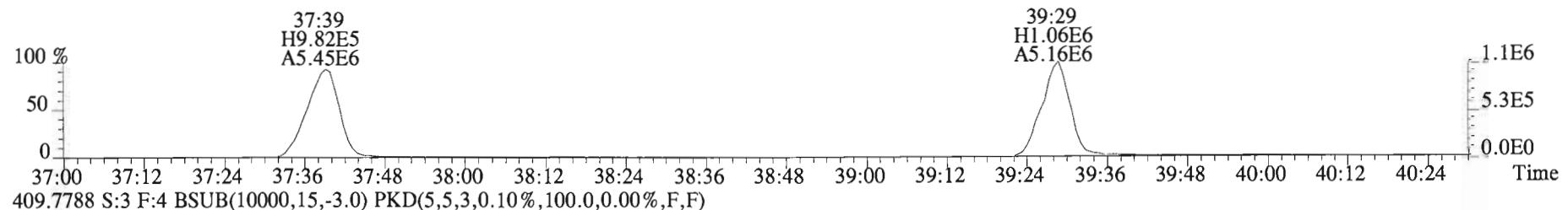
File:150217D1 #1-393 Acq:17-FEB-2015 12:21:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



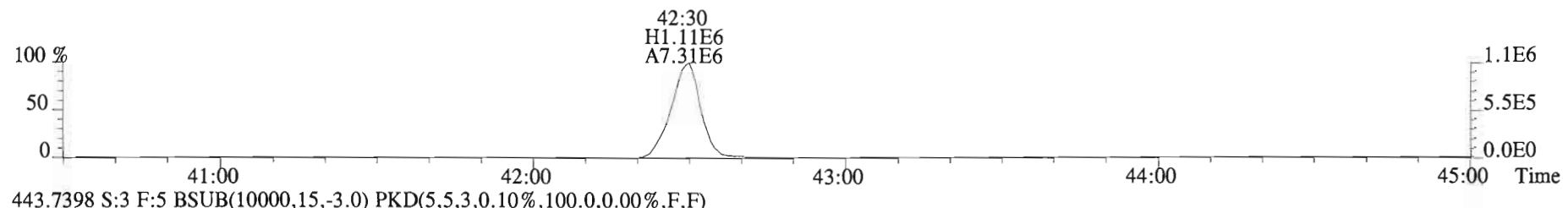
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Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



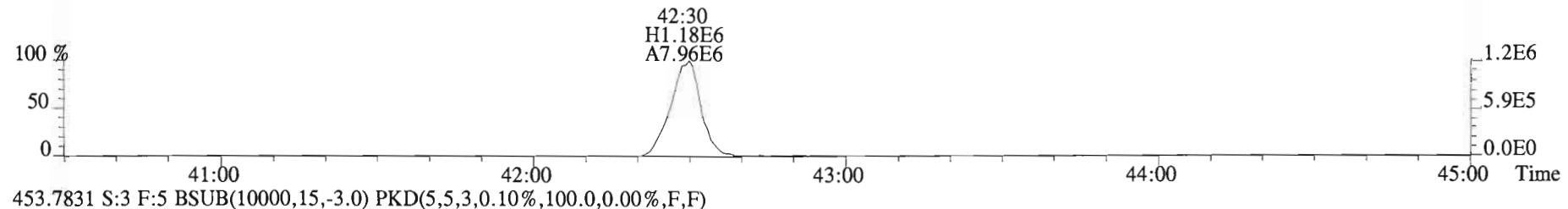
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 Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
 407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



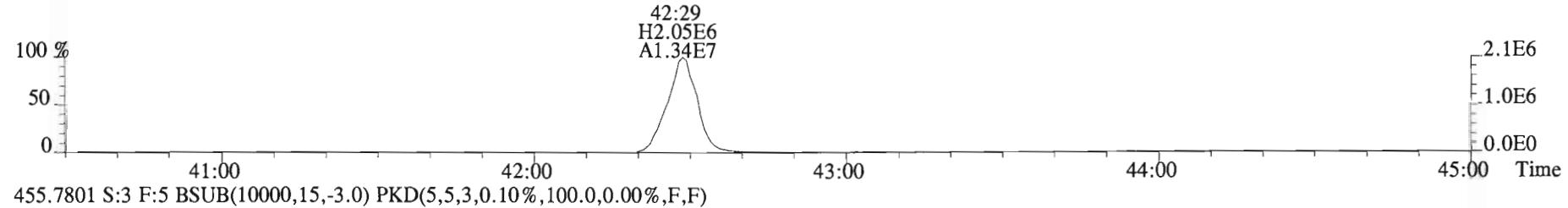
File:150217D1 #1-388 Acq:17-FEB-2015 12:21:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0055-BS1 OPR 1 Exp:OCDD_DB5
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



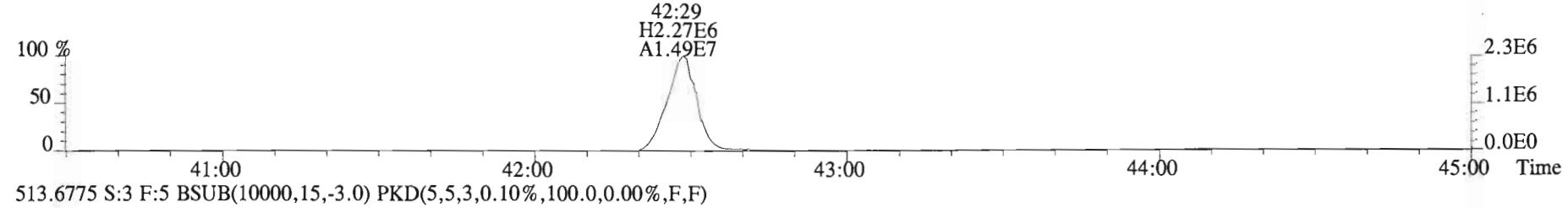
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



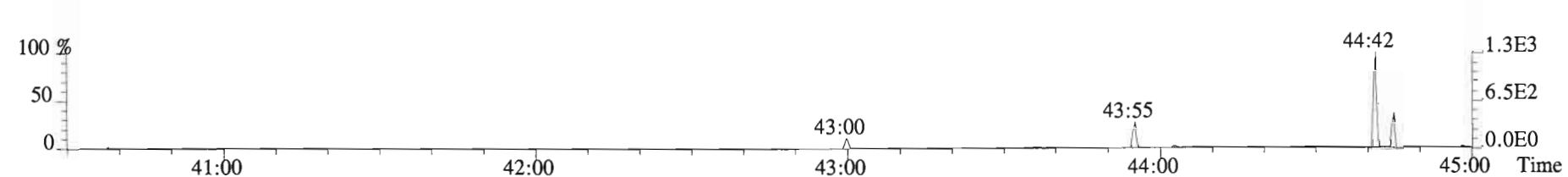
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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



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



Client ID: WM-CB-11-20150203-W
 Lab ID: 1500147-01

Filename: 150217D1 S:7 Acq:17-FEB-15 15:36:38
 GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol: 1.011

ConCal: ST150217D1-1
 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	*	* n	1.17	Not F _q	*	*		728	2.5	1.40	Total Tetra-Dioxins	*	*	728	1.40	
	1,2,3,7,8-PeCDD	*	* n	0.91	Not F _q	*	*		1230	2.5	1.90	Total Penta-Dioxins	1.73	1.73	*	*	
	1,2,3,4,7,8-HxCDD	*	* n	1.08	Not F _q	*	*		2060	1.0	2.90	Total Hexa-Dioxins	35.3	37.6	*	*	
	1,2,3,6,7,8-HxCDD	2.88e+04	1.39 y	1.06	35:06	1.000	4.6664	*	2.5	*		Total Hepta-Dioxins	199	199	*	*	
	1,2,3,7,8,9-HxCDD	2.07e+04	1.41 y	0.93	35:24	1.000	3.2209	*	2.5	*		Total Tetra-Furans	*	*	1180	1.69	
	1,2,3,4,6,7,8-HpCDD	5.27e+05	1.07 y	1.10	38:55	1.000	84.609	*	2.5	*		Total Penta-Furans	10.839	11.492	*	*	
	OCDD	3.21e+06	0.91 y	0.95	42:16	1.000	693.80	*	2.5	*		Total Hexa-Furans	27.6	28.9	*	*	
												Total Hepta-Furans	44.8	46.7	*	*	
	2,3,7,8-TCDF	*	* n	1.07	Not F _q	*	*		1180	2.5	1.69						
	1,2,3,7,8-PeCDF	*	* n	1.07	Not F _q	*	*		920	2.5	1.53						
	2,3,4,7,8-PeCDF	*	* n	1.03	Not F _q	*	*		920	2.5	1.40						
	1,2,3,4,7,8-HxCDF	1.77e+04	1.23 y	1.38	34:06	1.000	1.5520	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.64e+04	1.52 n	1.26	34:13	1.000	1.3640	*	2.5	*							
	2,3,4,6,7,8-HxCDF	2.06e+04	1.25 y	1.29	34:49	1.000	1.8708	*	2.5	*							
	1,2,3,7,8,9-HxCDF	*	* n	1.19	Not F _q	*	*		602	2.5	1.16						
	1,2,3,4,6,7,8-HpCDF	1.82e+05	1.19 y	1.61	37:38	1.000	19.511	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	1.67e+04	1.25 n	1.53	39:27	1.000	1.8832	*	2.5	*							
	OCDF	2.27e+05	0.97 y	1.10	42:29	1.000	35.366	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.49e+07	0.78 y	1.06	27:01	1.022	1413.4					71.4					
IS	13C-1,2,3,7,8-PeCDD	1.72e+07	0.62 y	1.18	31:38	1.196	1461.9					73.9					
IS	13C-1,2,3,4,7,8-HxCDD	1.17e+07	1.31 y	0.72	34:59	1.014	1243.3					62.8					
IS	13C-1,2,3,6,7,8-HxCDD	1.15e+07	1.22 y	0.74	35:06	1.017	1195.1					60.4					
IS	13C-1,2,3,7,8,9-HxCDD	1.37e+07	1.24 y	0.85	35:23	1.026	1228.3					62.1					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.11e+07	1.07 y	0.65	38:55	1.128	1309.1					66.1					
IS	13C-OCDD	1.93e+07	0.90 y	0.76	42:16	1.225	1939.6					49.0					
IS	13C-2,3,7,8-TCDF	2.32e+07	0.80 y	0.92	26:12	0.991	1471.5					74.3					
IS	13C-1,2,3,7,8-PeCDF	2.27e+07	1.62 y	0.92	30:27	1.151	1436.4					72.6					
IS	13C-2,3,4,7,8-PeCDF	2.52e+07	1.61 y	0.93	31:21	1.186	1574.6					79.6					
IS	13C-1,2,3,4,7,8-HxCDF	1.63e+07	0.52 y	0.98	34:05	0.988	1273.2					64.3					
IS	13C-1,2,3,6,7,8-HxCDF	1.89e+07	0.52 y	1.08	34:13	0.992	1340.1					67.7					
IS	13C-2,3,4,6,7,8-HxCDF	1.69e+07	0.51 y	1.03	34:49	1.009	1261.3					63.7					
IS	13C-1,2,3,7,8,9-HxCDF	1.42e+07	0.52 y	0.86	35:46	1.037	1265.1					63.9					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.14e+07	0.45 y	0.72	37:37	1.090	1216.5					61.5					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.15e+07	0.44 y	0.70	39:27	1.143	1267.6					64.0					
IS	13C-OCDF	2.31e+07	0.89 y	0.85	42:28	1.231	2088.9					52.8					
C/Up	37Cl-2,3,7,8-TCDD	9.45e+06		1.12	27:02	1.022	848.26					107	Integrations by Analyst:	MJ	Reviewed by Analyst:	MJ	
RS/RT	13C-1,2,3,4-TCDD	1.97e+07	0.81 y	1.00	26:27	*	1979.2										
RS	13C-1,2,3,4-TCDF	3.40e+07	0.77 y	1.00	24:56	*	1979.2										
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.58e+07	0.51 y	1.00	34:30	*	1979.2						Date: 2/19/15		Date: 2/19/15		

Totals class: PeCDD EMPC

Entry #: 21

Run: 12 File: 150217D1 S: 7 I: 1 F: 2
Acquired: 17-FEB-15 15:36:38 Processed: 18-FEB-15 08:01:17

Total Concentration: 1.7338 Unnamed Concentration: 1.734

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

29:34	5.346e+03		8.313e+03	0.64	y		1.366e+04		1.7338
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Totals class: HxCDD EMPC

Entry #: 23

Run: 12 File: 150217D1 S: 7 I: 1 F: 3
Acquired: 17-FEB-15 15:36:38 Processed: 18-FEB-15 08:01:17

Total Concentration: 37.571 Unnamed Concentration: 29.683

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
33:27	4.343e+04	3.061e+04	1.42	y	7.404e+04		11.717	
34:02	7.874e+03	7.933e+03	0.99	n	1.422e+04		2.2509	
34:17	5.837e+04	4.093e+04	1.43	y	9.930e+04		15.715	
35:06	1.673e+04	1.206e+04	1.39	y	2.879e+04	4.6664	1,2,3,6,7,8-HxCDD	
35:24	1.211e+04	8.589e+03	1.41	y	2.070e+04	3.2209	1,2,3,7,8,9-HxCDD	

Totals class: HpCDD EMPC

Entry #: 25

Run: 12 File: 150217D1 S: 7 I: 1 F: 4
Acquired: 17-FEB-15 15:36:38 Processed: 18-FEB-15 08:01:17

Total Concentration: 198.58 Unnamed Concentration: 113.974

RT	m1	Resp	m2	Resp	RA		Resp	Concentration	Name
38:02	3.627e+05		3.466e+05	1.05	y	7.094e+05		113.97	
38:55	2.719e+05		2.547e+05	1.07	y	5.266e+05		84.609	1,2,3,4,6,7,8-HpCDD

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

Run: 12 File: 150217D1 S: 7 I: 1 F: 1
Acquired: 17-FEB-15 15:36:38 Processed: 18-FEB-15 08:01:17

Total Concentration: 5.7304 Unnamed Concentration: 5.730

RT	m1 Resp	m2 Resp RA	Resp Concentration	Name
28:03	4.660e+04	2.645e+04	1.76	y 7.305e+04
				5.7304

Totals class: PeCDF EMPC

Entry #: 31

Run: 12 File: 150217D1 S: 7 I: 1 F: 2
Acquired: 17-FEB-15 15:36:38 Processed: 18-FEB-15 08:01:17

Total Concentration: 5.7620 Unnamed Concentration: 5.762

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
29:30	2.819e+04	1.741e+04	1.62	y	4.560e+04	3.5771
30:04	1.178e+04	7.744e+03	1.52	y	1.952e+04	1.5315
31:24	5.062e+03	4.767e+03	1.06	n	8.328e+03	0.65333

Totals class: HxCDF EMPC

Entry #: 33

Run: 12 File: 150217D1 S: 7 I: 1 F: 3
Acquired: 17-FEB-15 15:36:38 Processed: 18-FEB-15 08:01:17

Total Concentration: 28.948 Unnamed Concentration: 24.161

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
32:55	2.375e+04		1.757e+04	1.35	y	4.132e+04	3.8530	
33:04	8.037e+04		6.023e+04	1.33	y	1.406e+05	13.110	
33:37	4.342e+04		3.379e+04	1.29	y	7.720e+04	7.1986	
34:06	9.745e+03		7.924e+03	1.23	y	1.767e+04	1.5520	1,2,3,4,7,8-HxCDF
34:13	1.111e+04		7.318e+03	1.52	n	1.639e+04	1.3640	1,2,3,6,7,8-HxCDF
34:49	1.141e+04		9.151e+03	1.25	y	2.056e+04	1.8708	2,3,4,6,7,8-HxCDF

Totals class: HpCDF EMPC

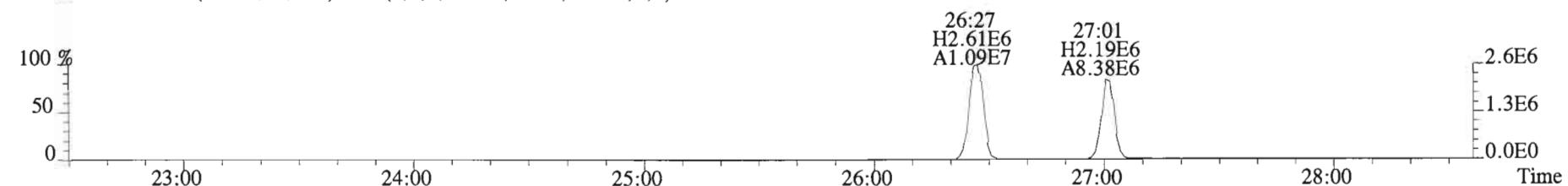
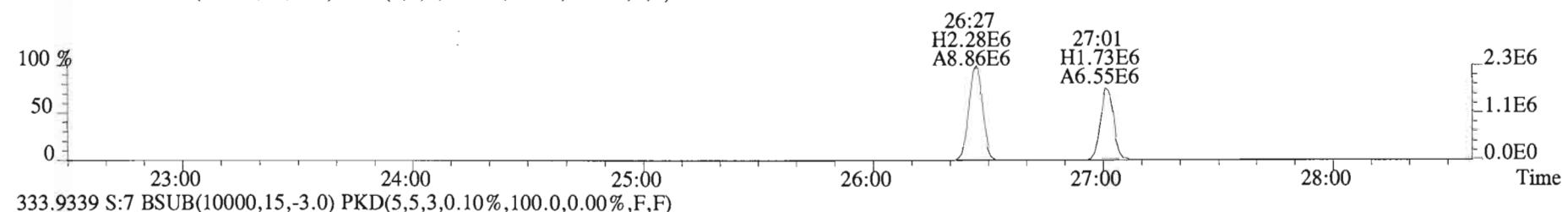
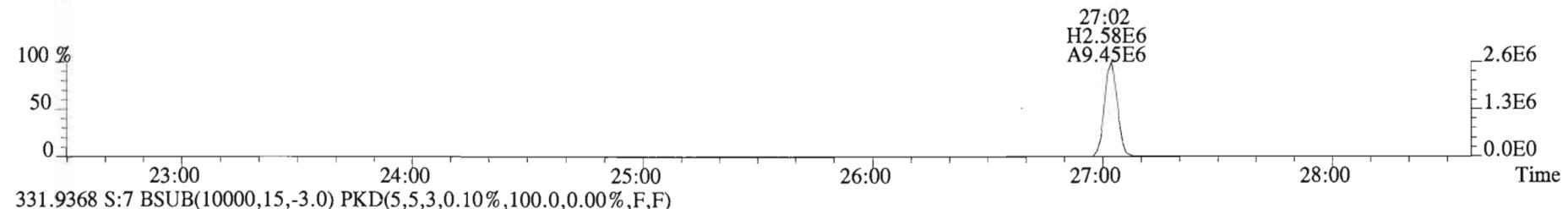
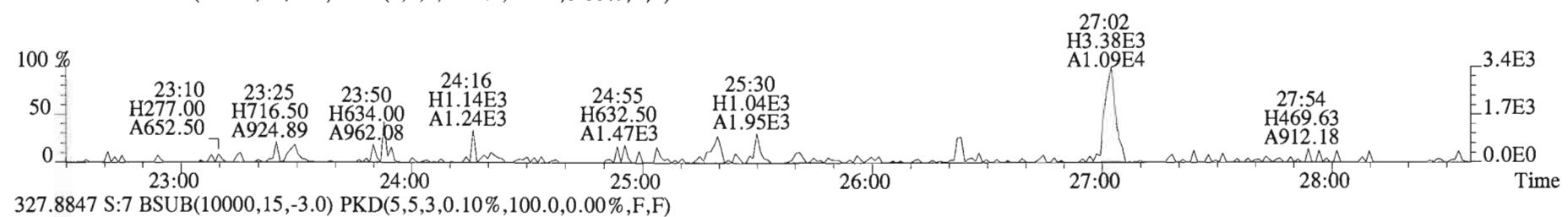
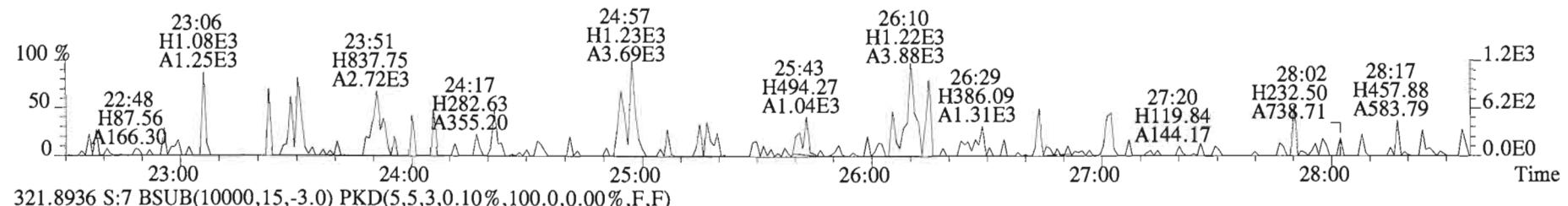
Entry #: 35

Run: 12 File: 150217D1 S: 7 I: 1 F: 4
Acquired: 17-FEB-15 15:36:38 Processed: 18-FEB-15 08:01:17

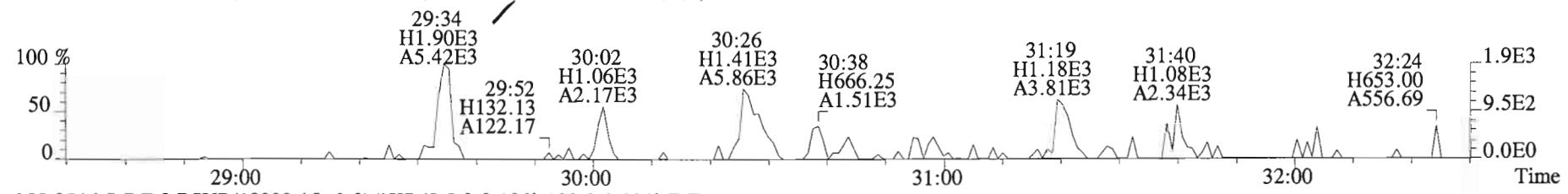
Total Concentration: 46.712 Unnamed Concentration: 25.318

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
37:38	9.893e+04	8.291e+04	1.19 y	1.818e+05	19.511 1,2,3,4,6,7,8-HpCDF
38:14	1.135e+05	1.170e+05	0.97 y	2.305e+05	25.318
39:27	1.021e+04	8.198e+03	1.25 n	1.672e+04	1.8832 1,2,3,4,7,8,9-HpCDF

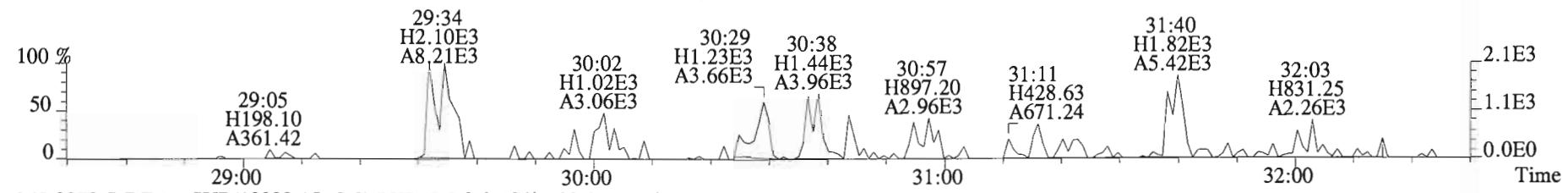
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 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
 319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



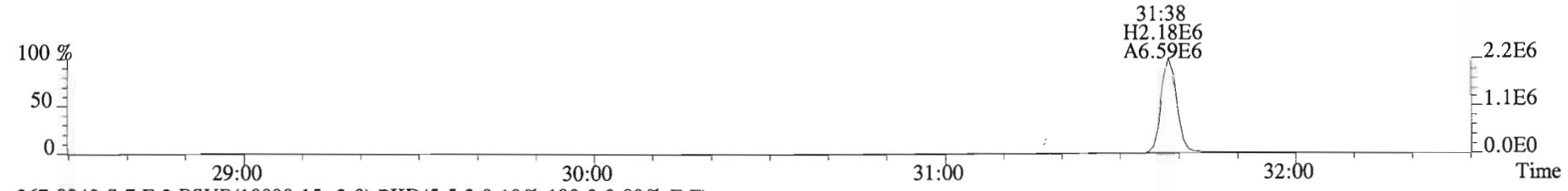
File:150217D1 #1-250 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
 353.8576 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



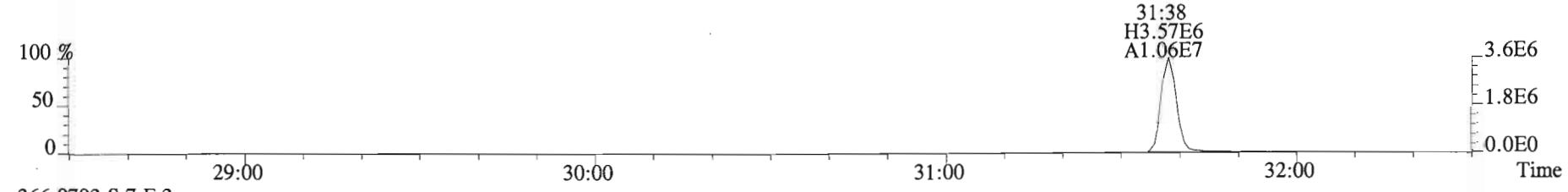
355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



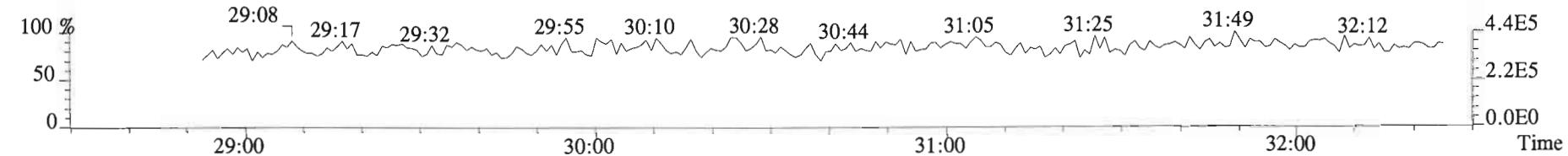
365.8978 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



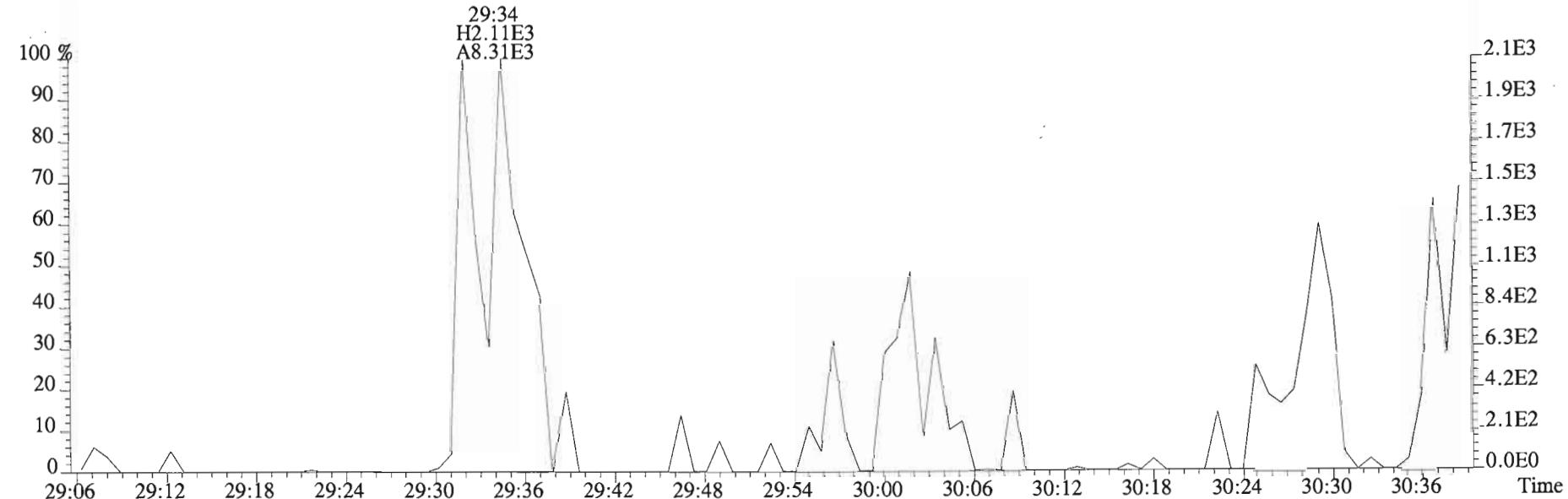
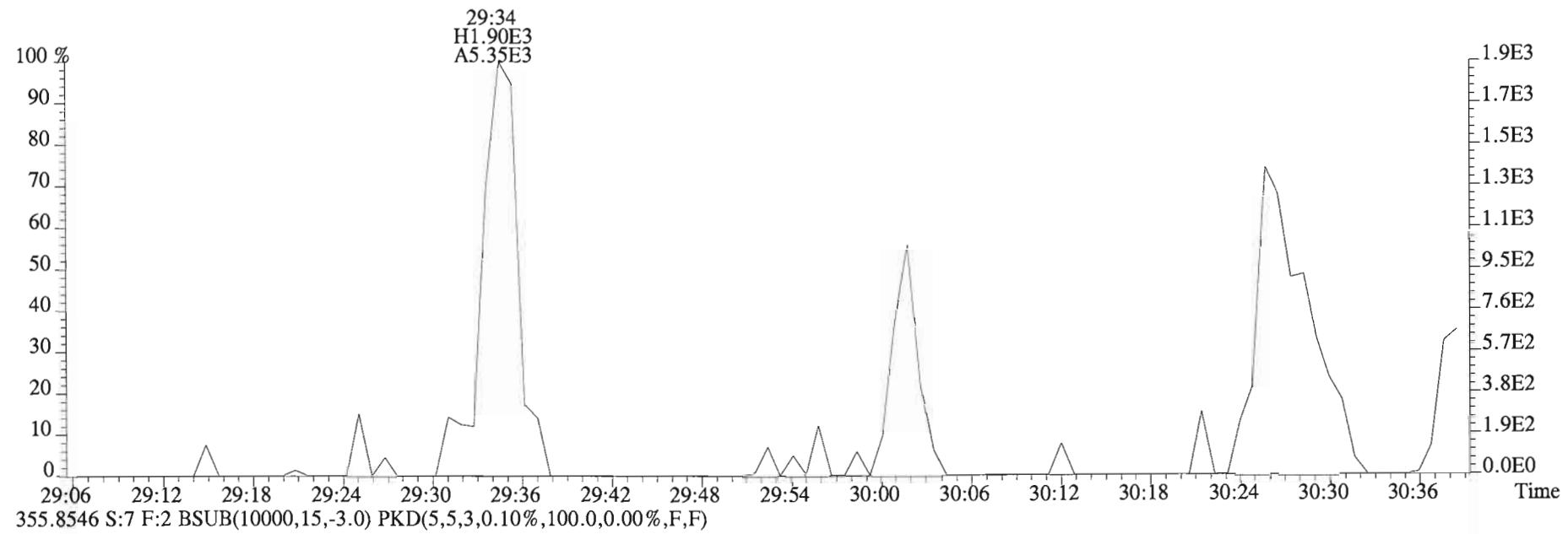
367.8949 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



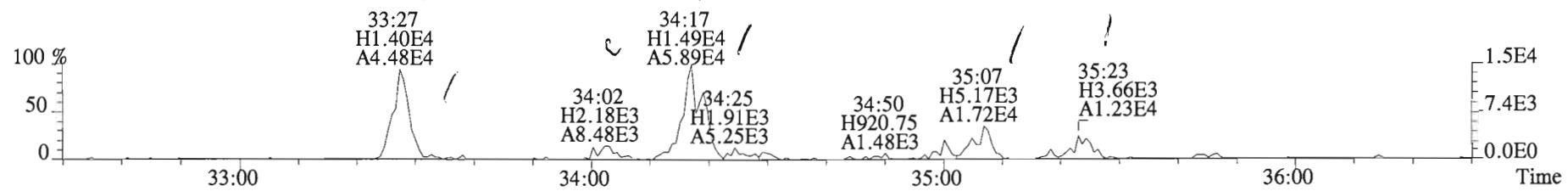
366.9792 S:7 F:2



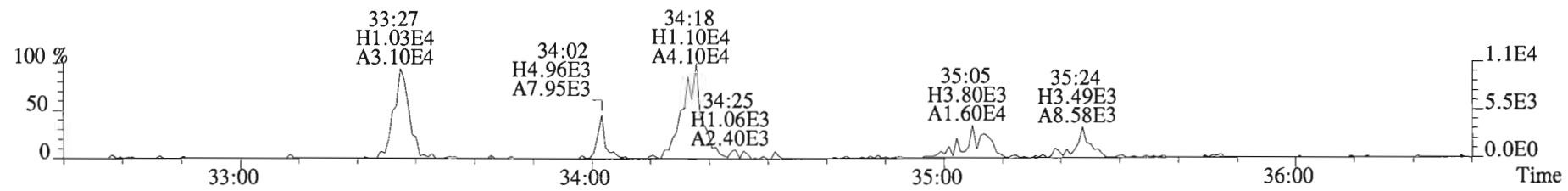
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353.8576 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



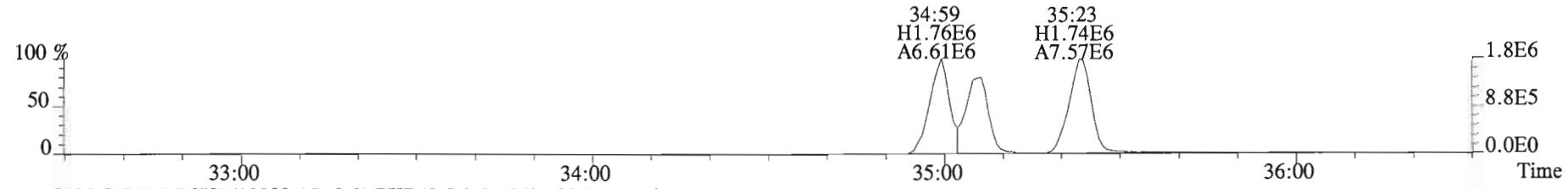
File:150217D1 #1-393 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
 389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



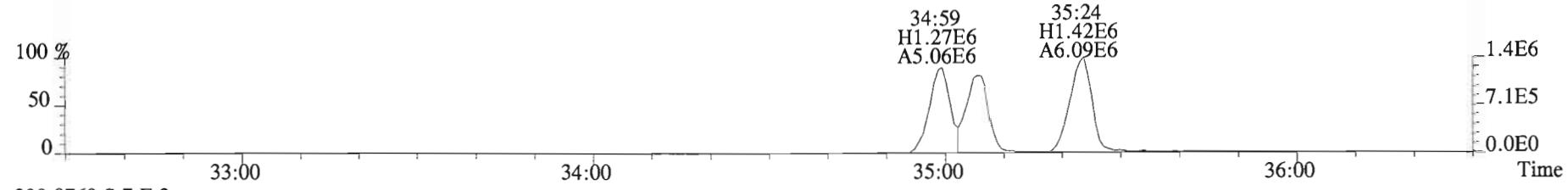
391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



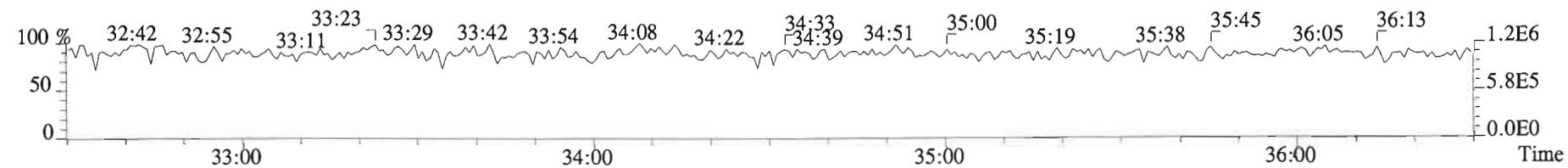
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



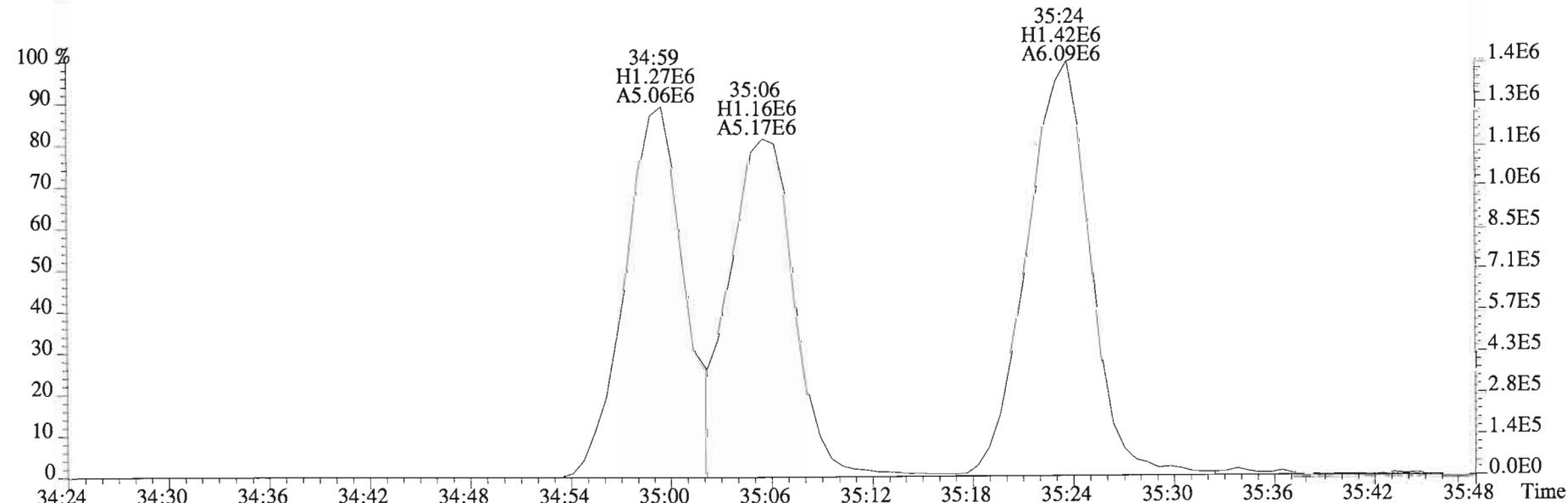
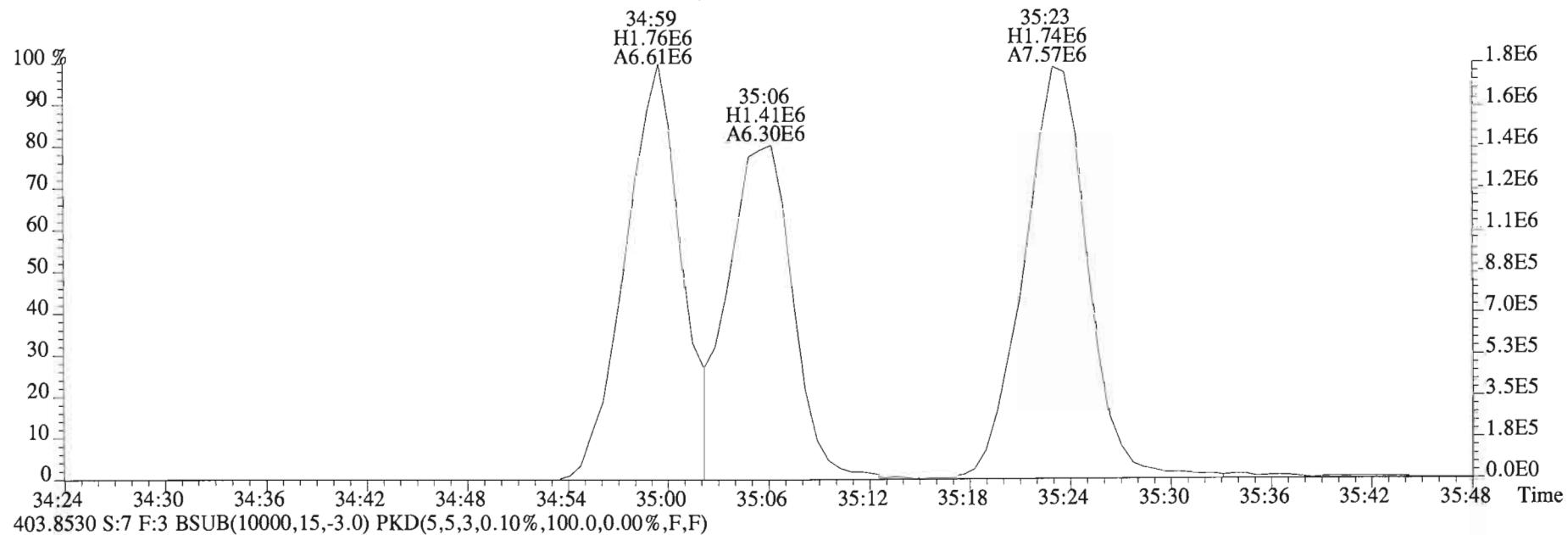
403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



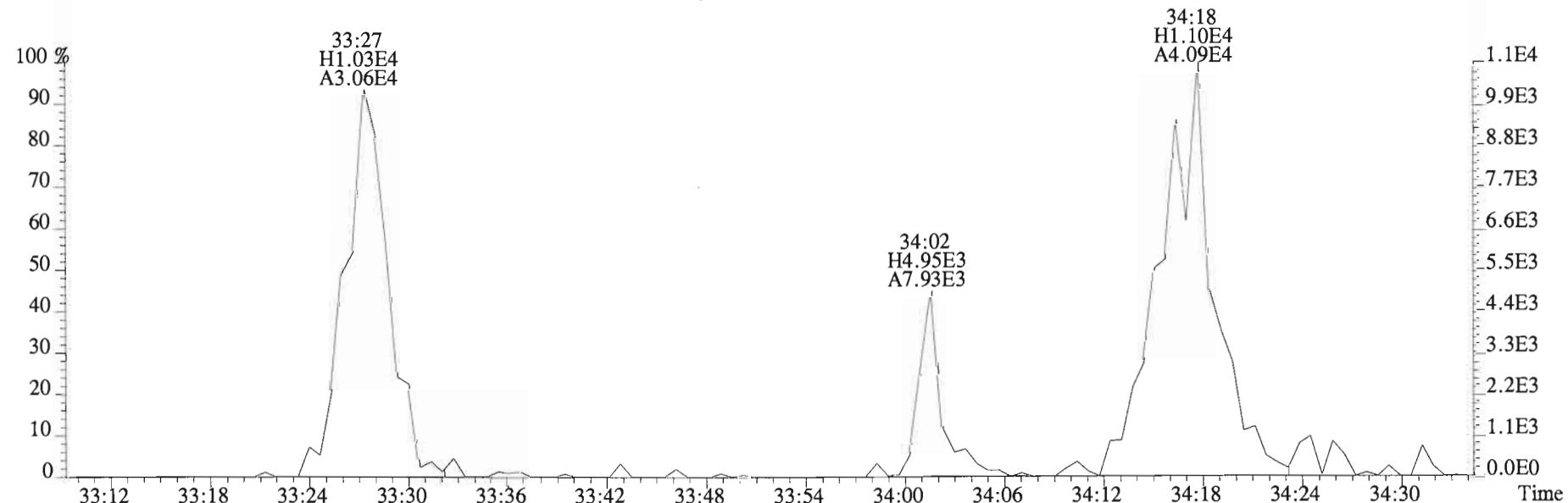
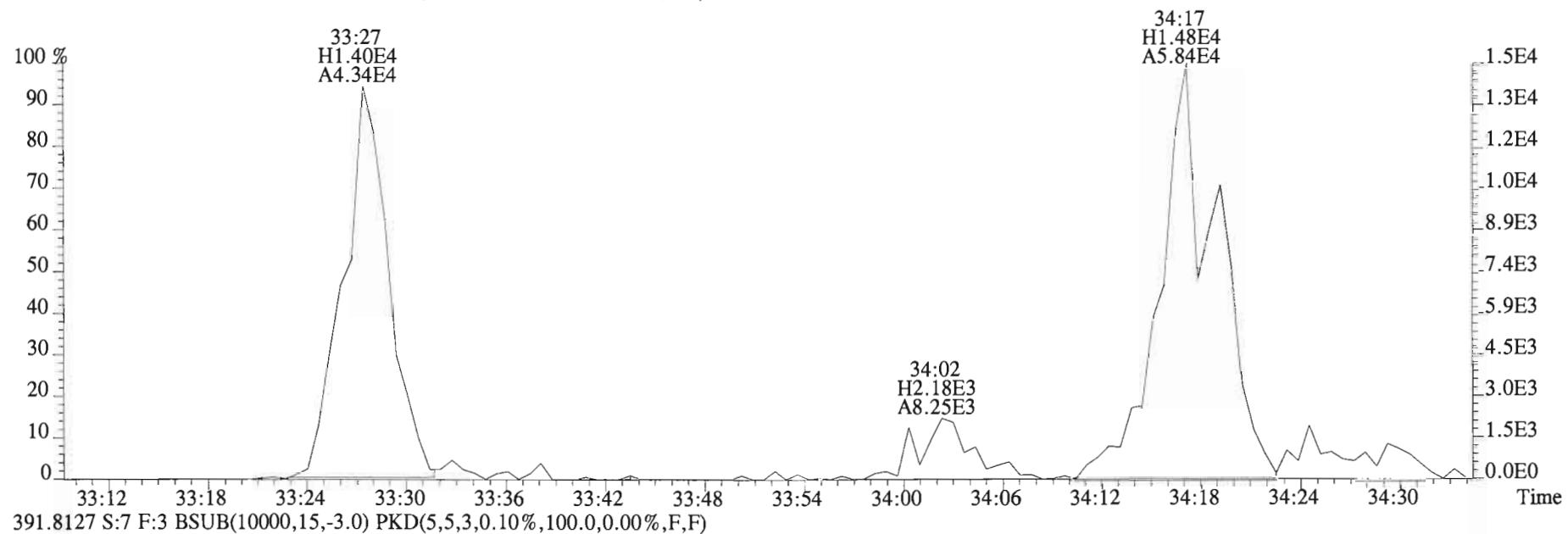
380.9760 S:7 F:3



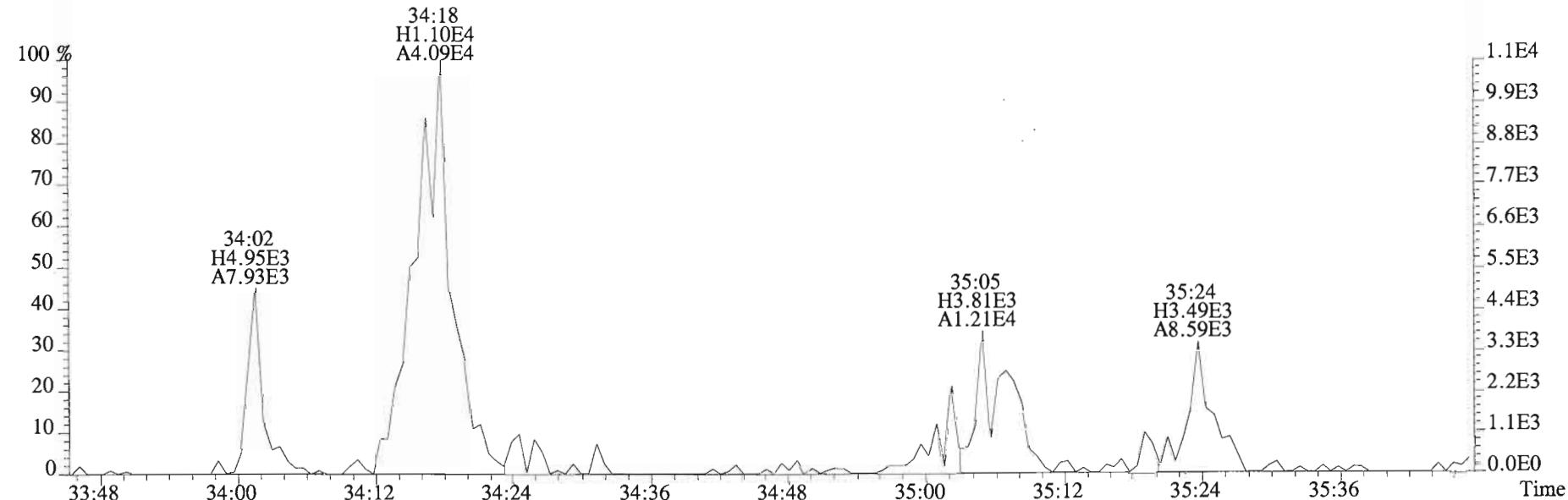
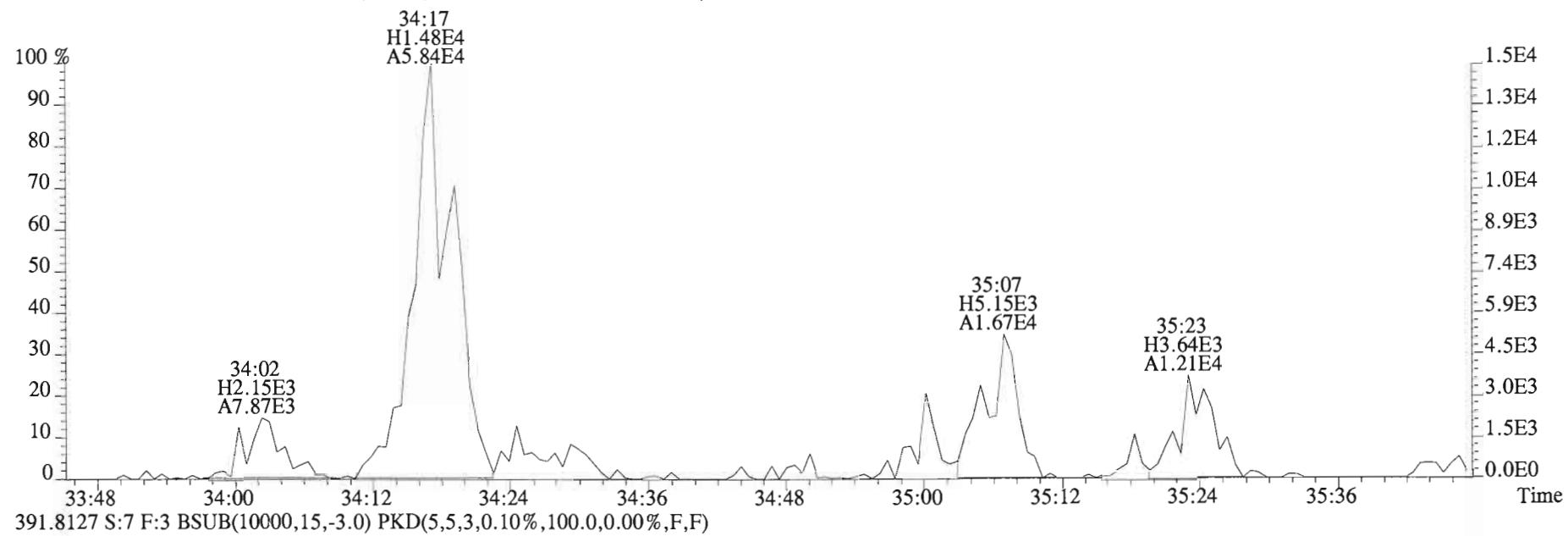
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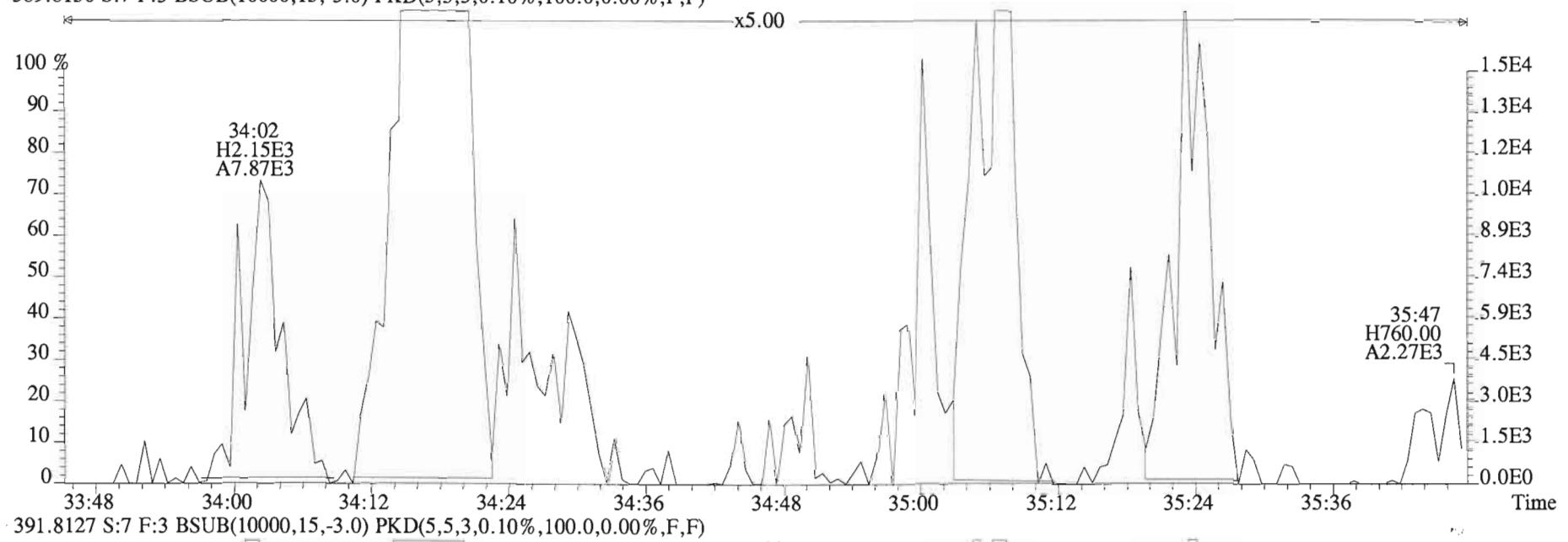
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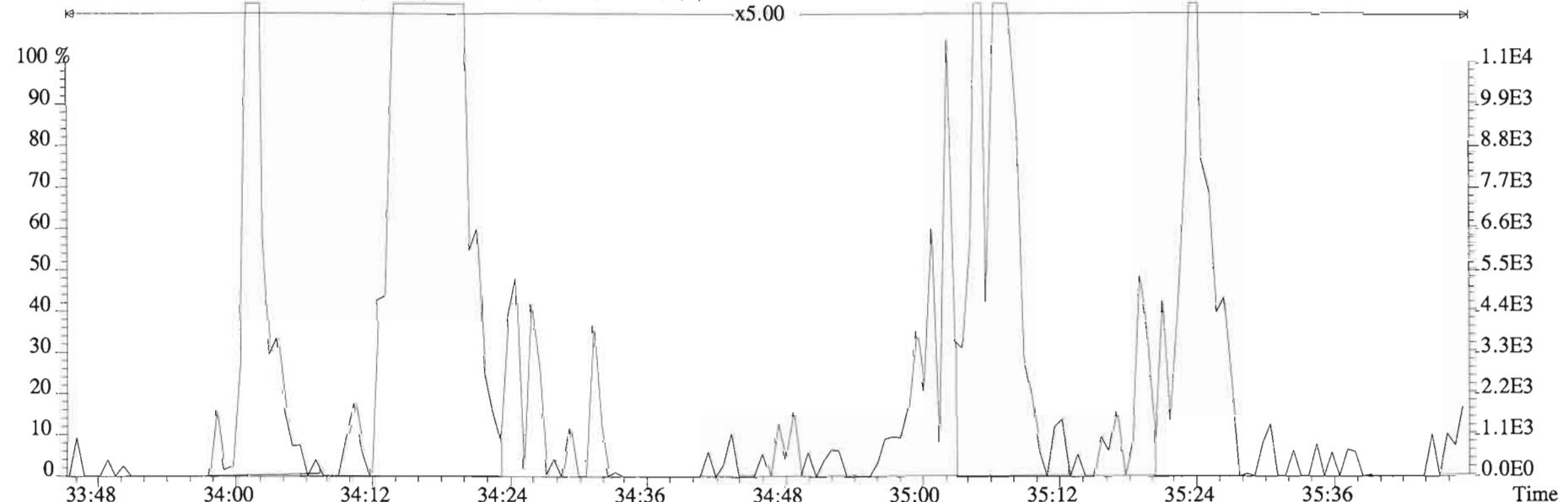
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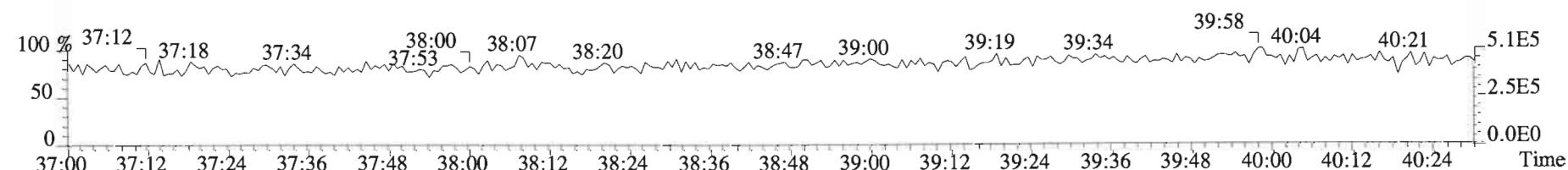
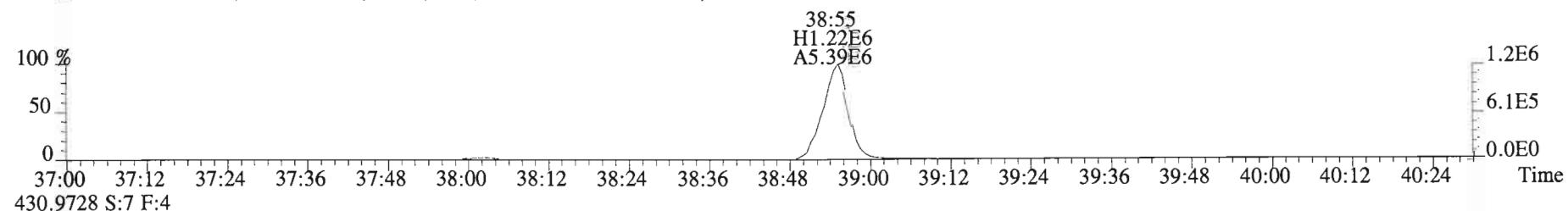
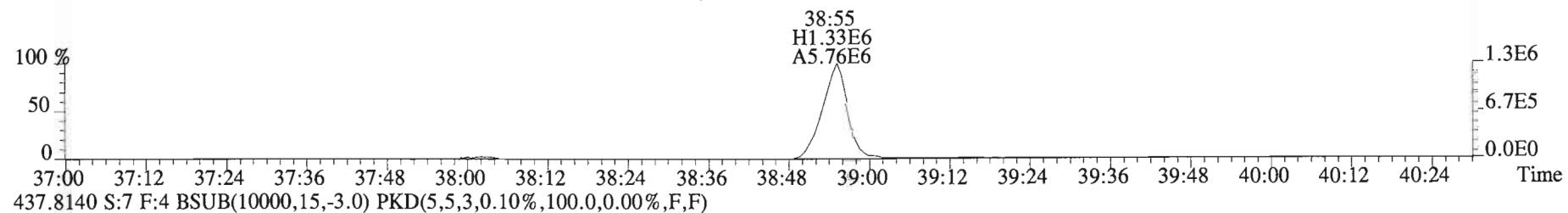
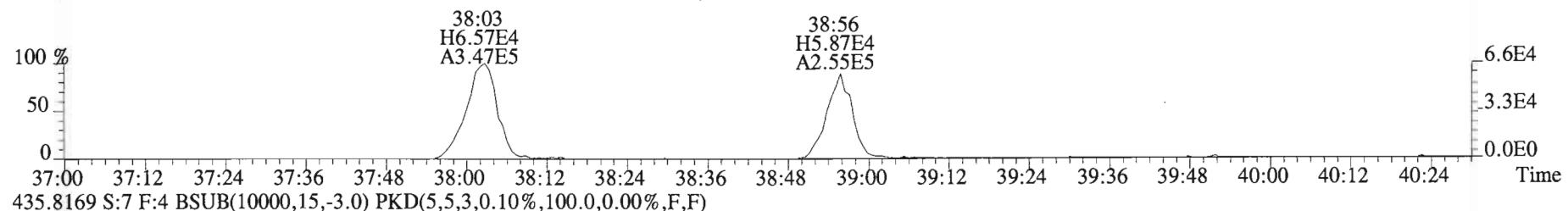
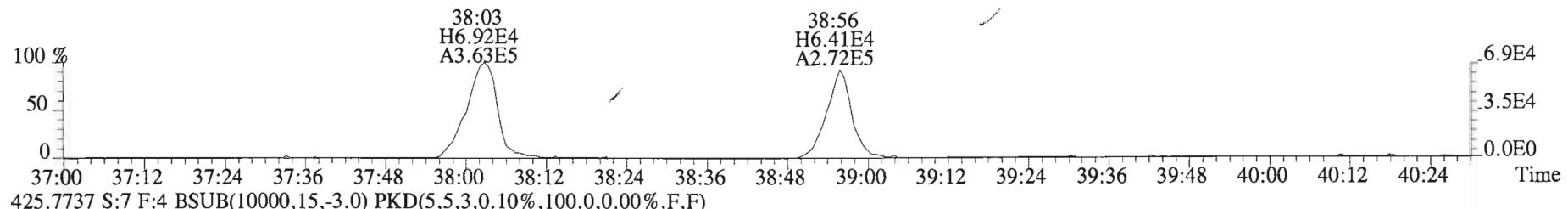
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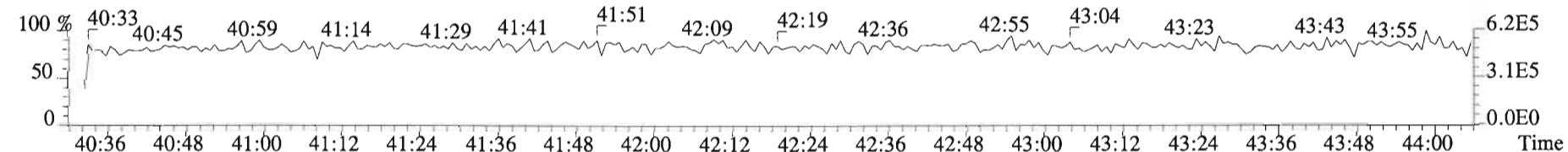
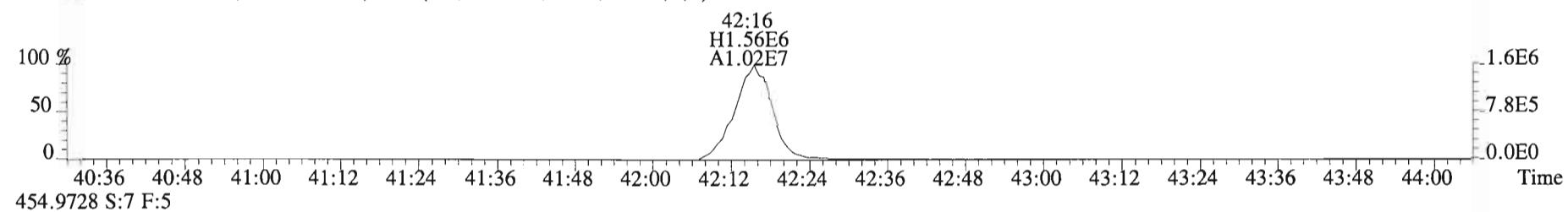
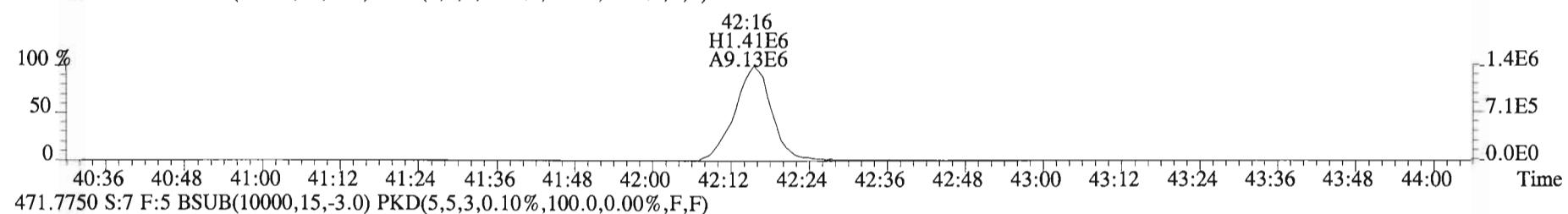
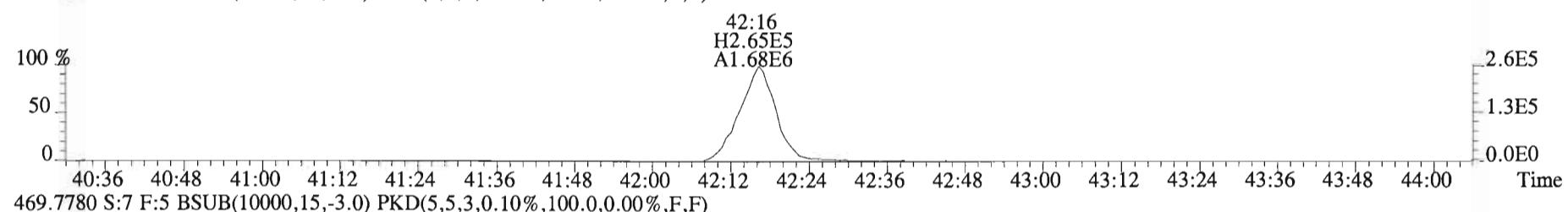
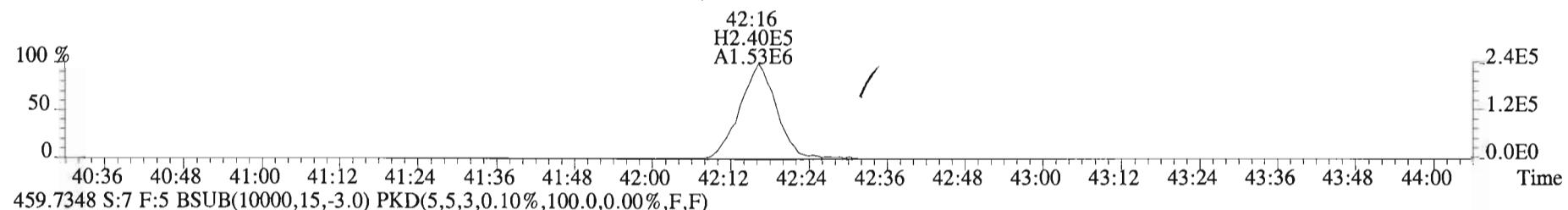
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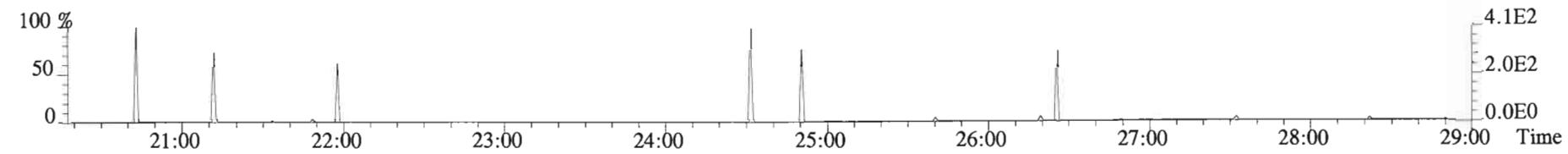
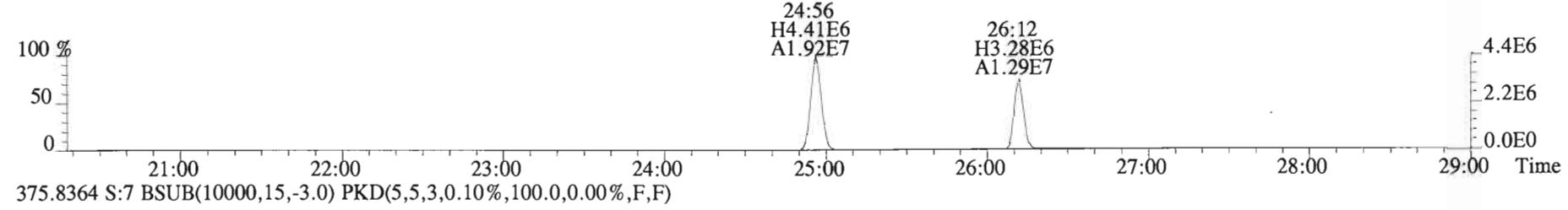
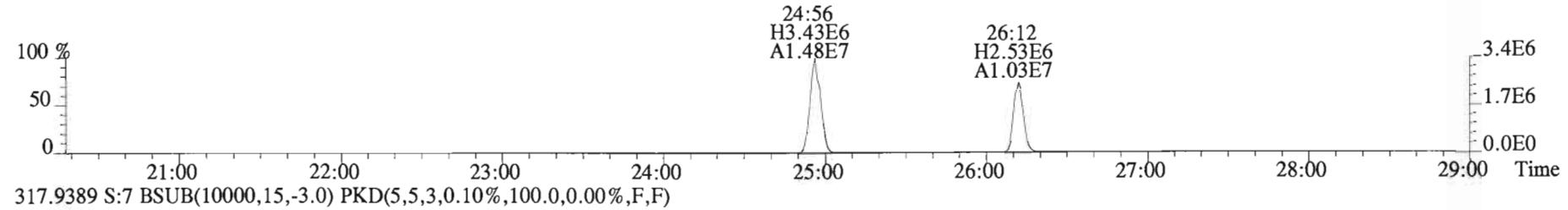
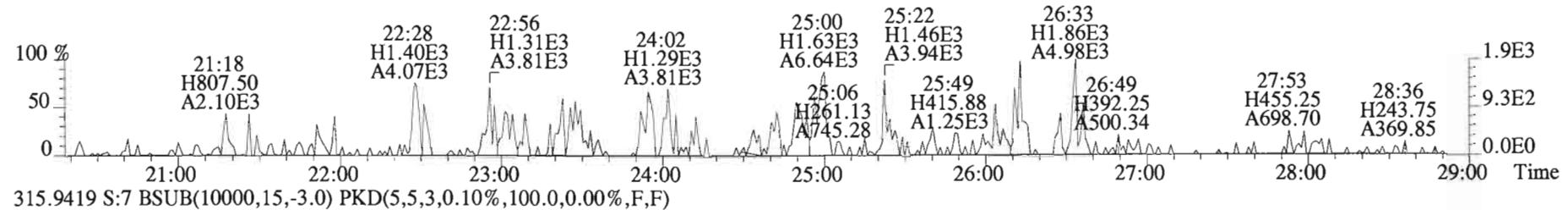
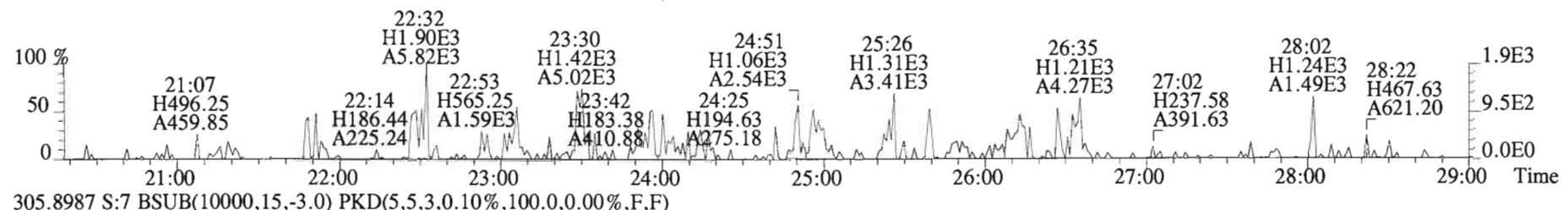
File:150217D1 #1-326 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
 423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



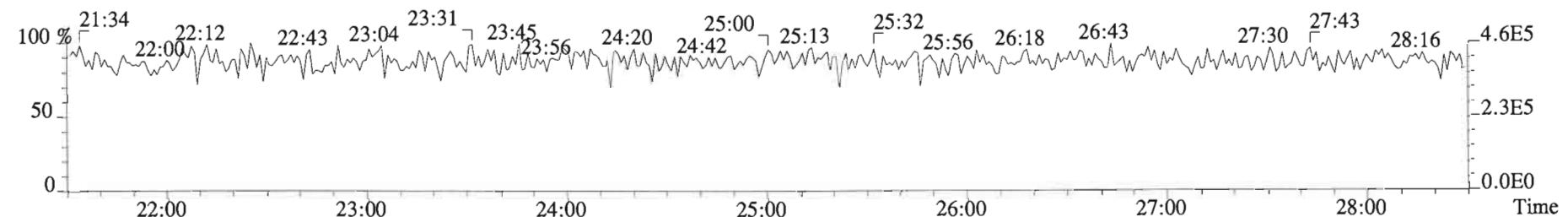
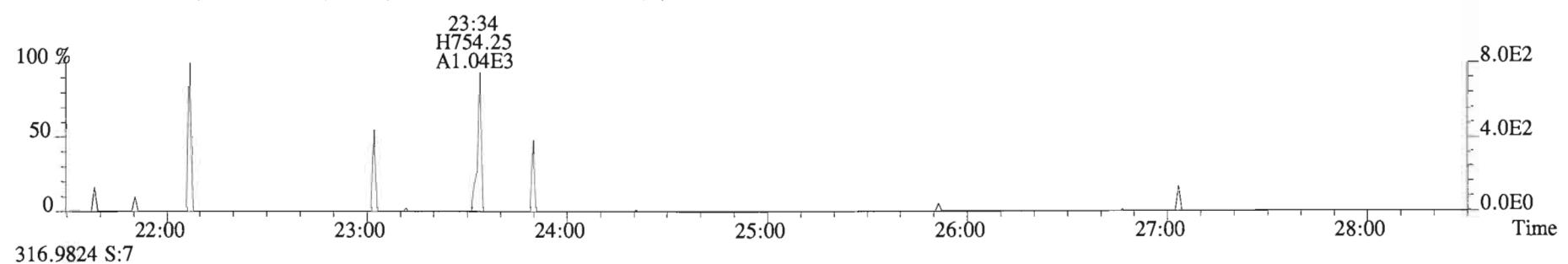
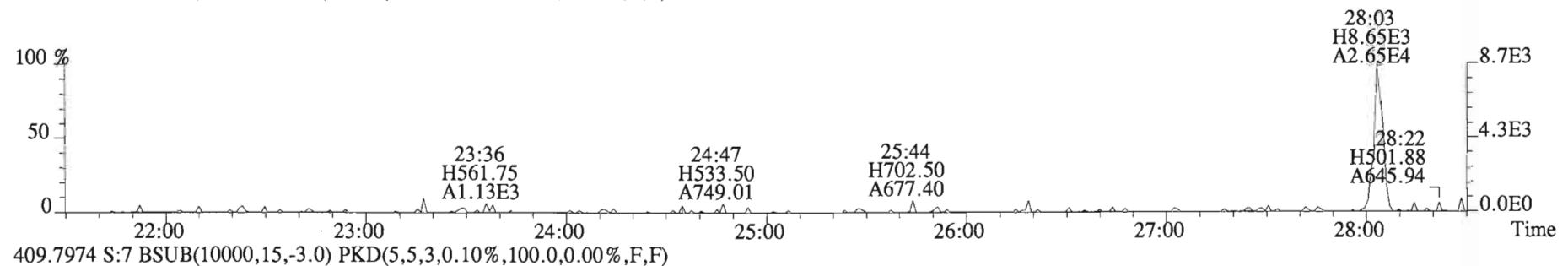
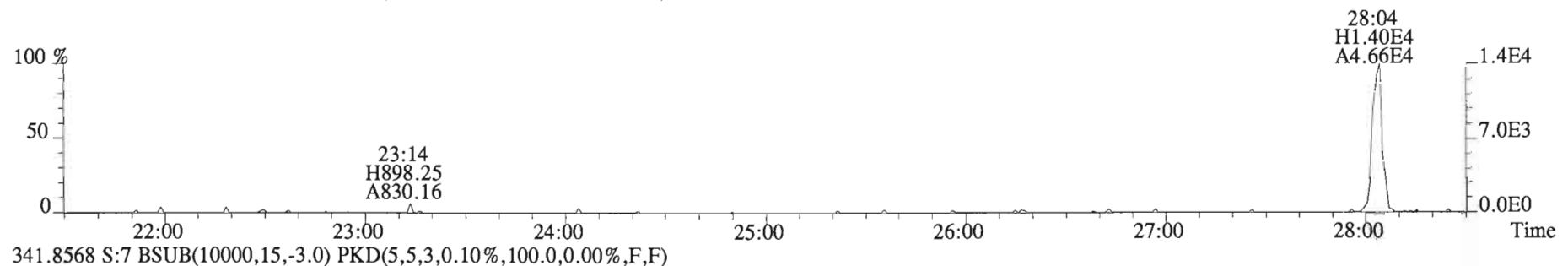
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 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
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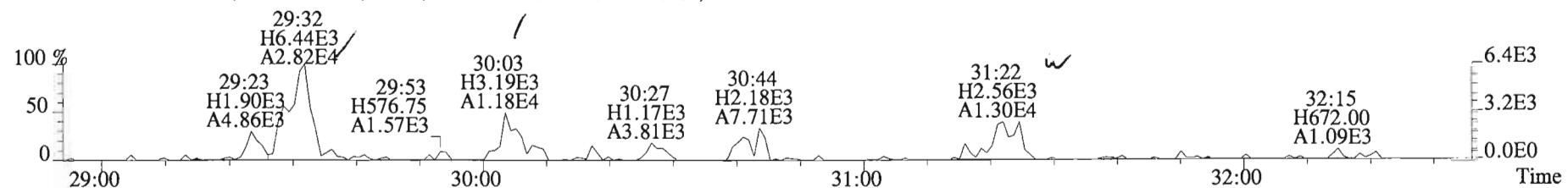
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 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
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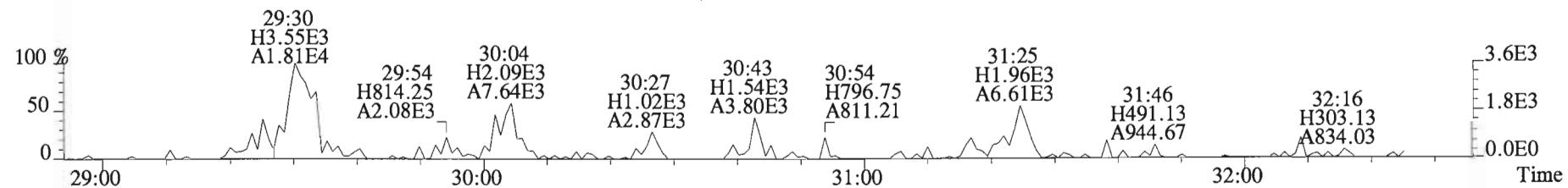
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 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
 339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



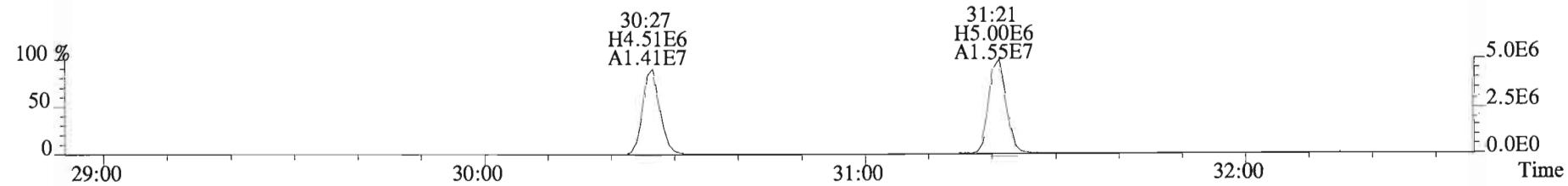
File:150217D1 #1-250 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
 339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



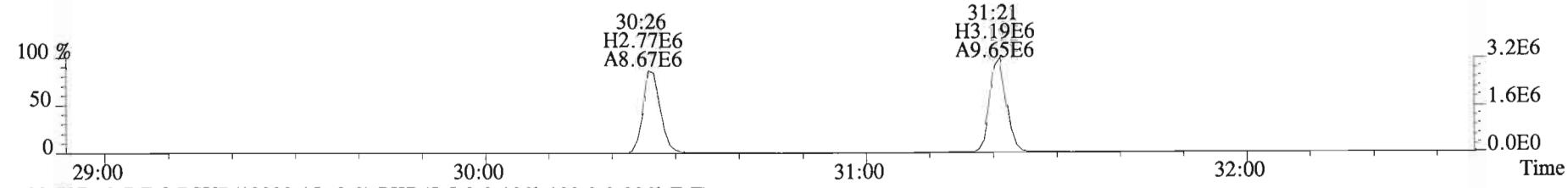
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



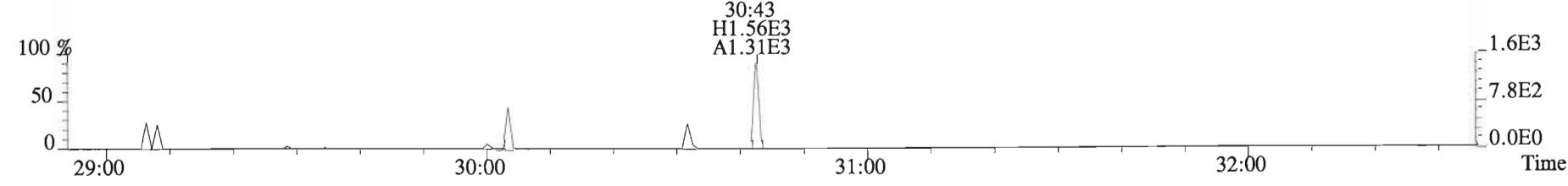
351.9000 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



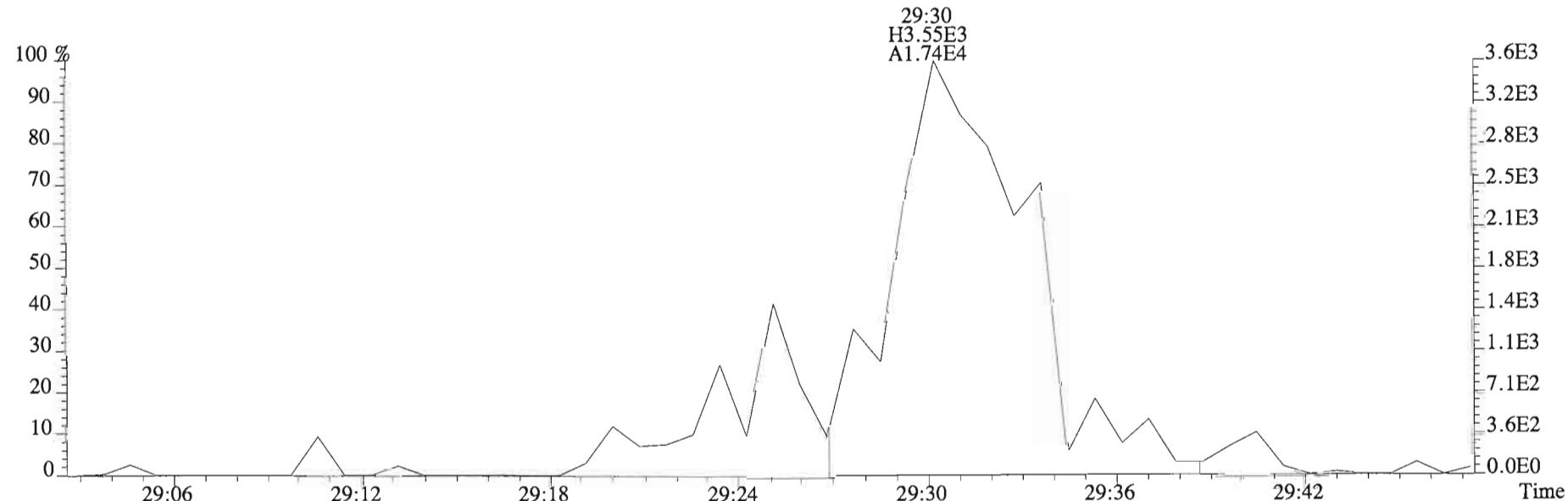
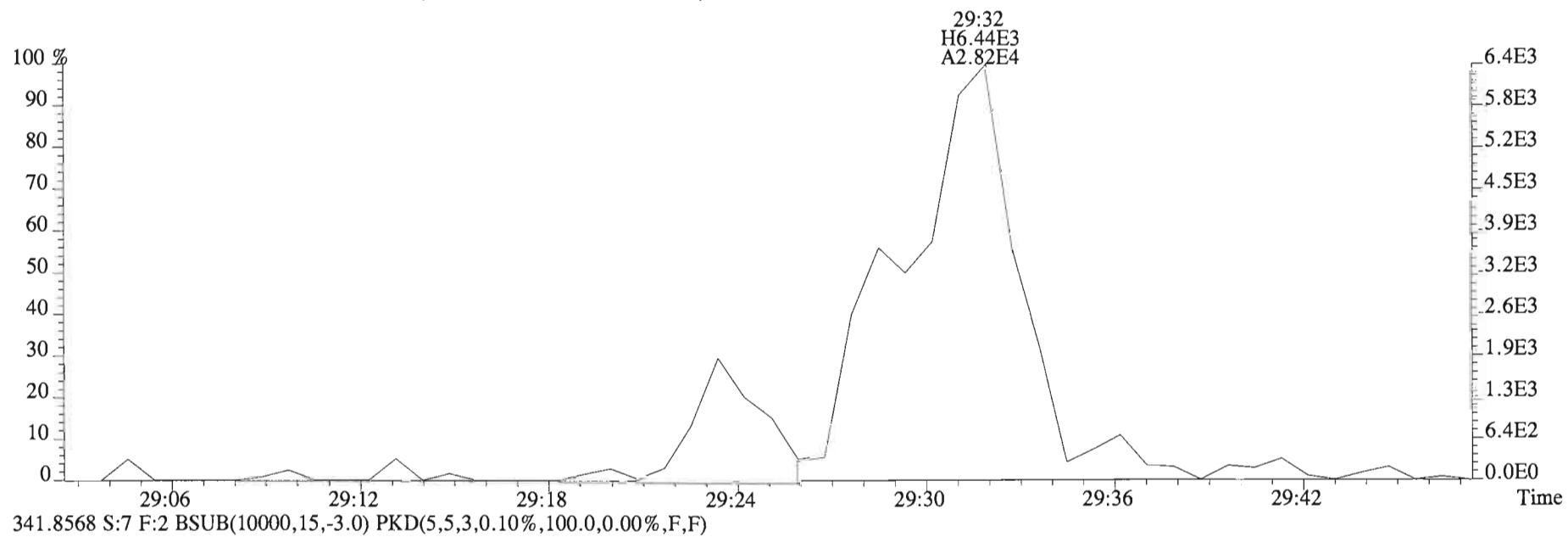
353.8970 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



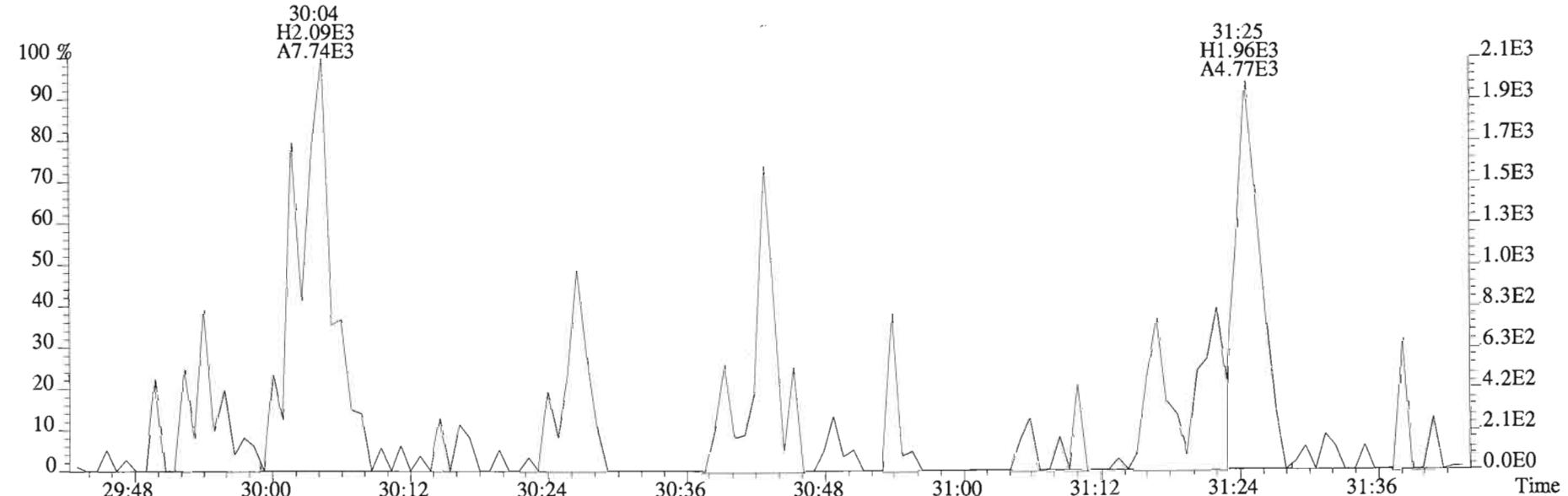
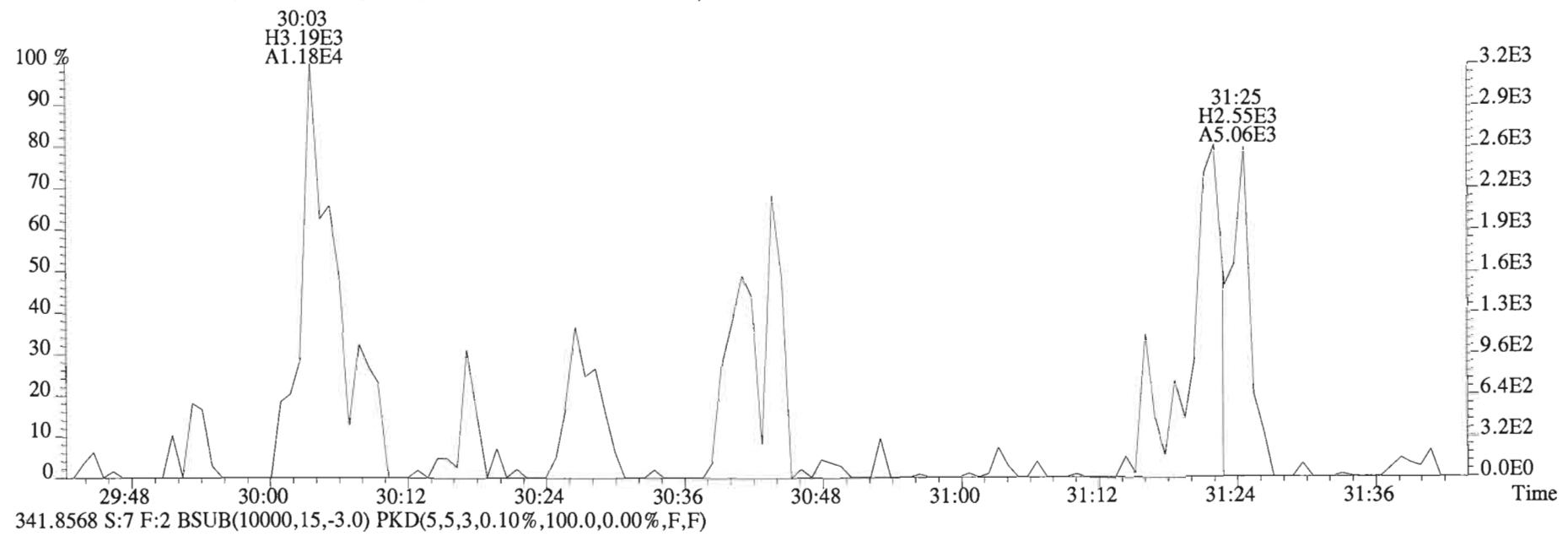
409.7974 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



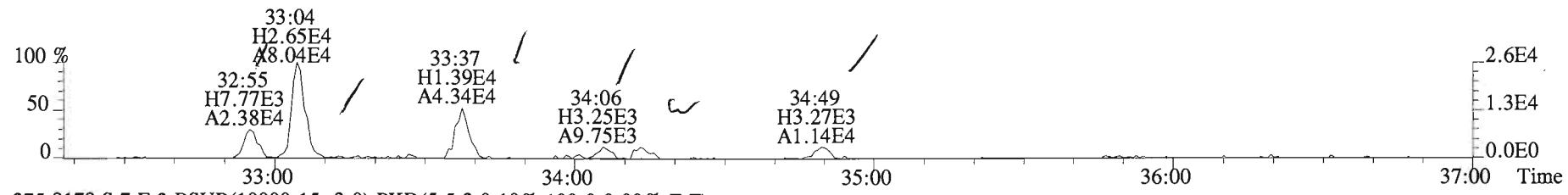
File:150217D1 #1-250 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



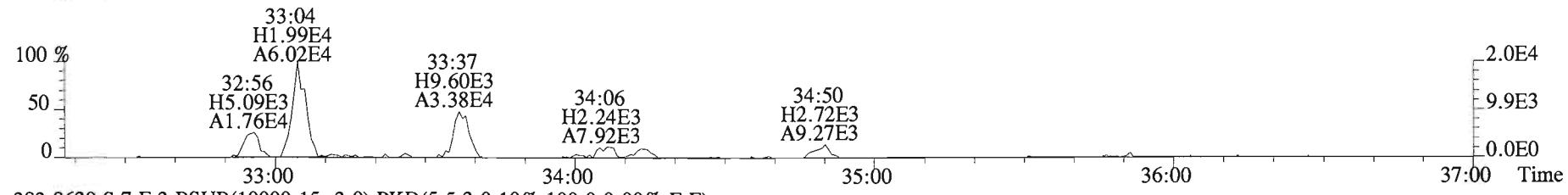
File:150217D1 #1-250 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



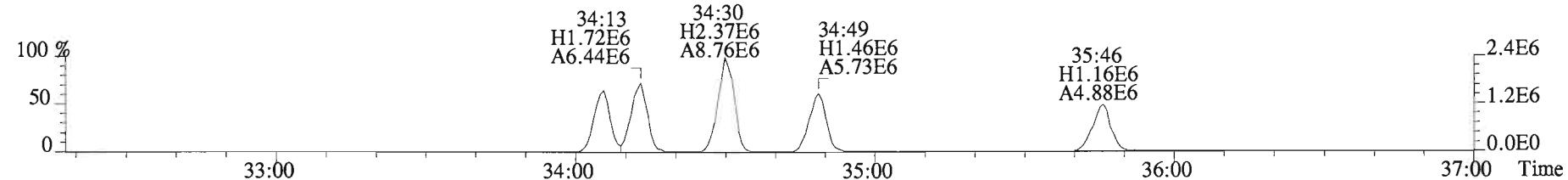
File:150217D1 #1-393 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
 373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



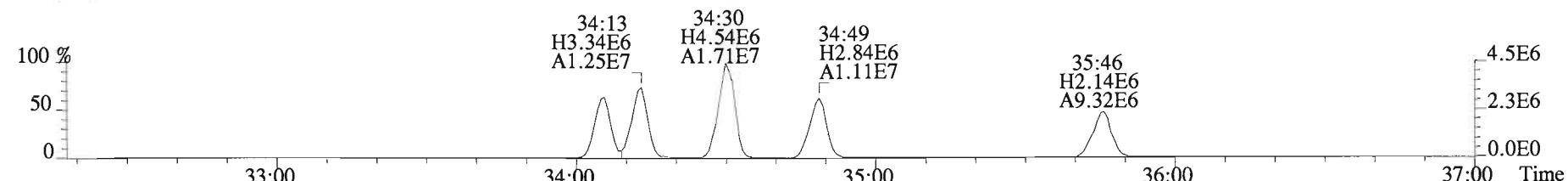
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



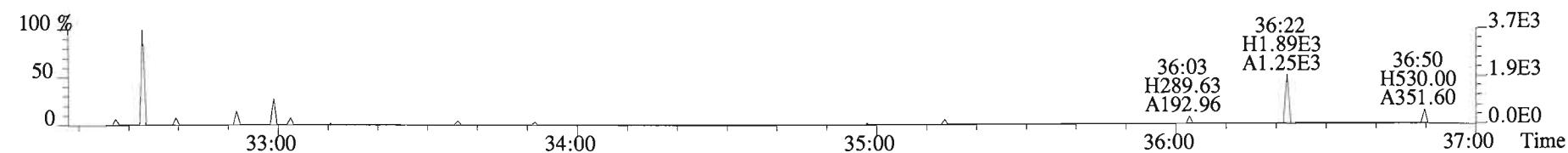
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



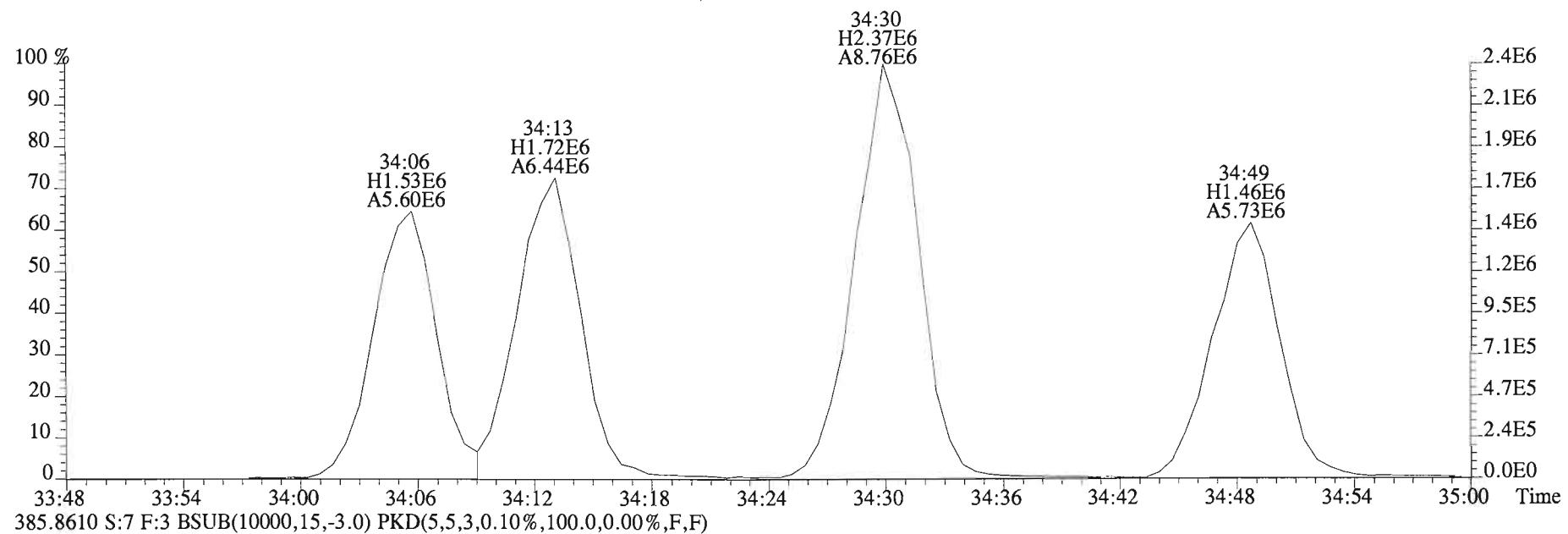
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



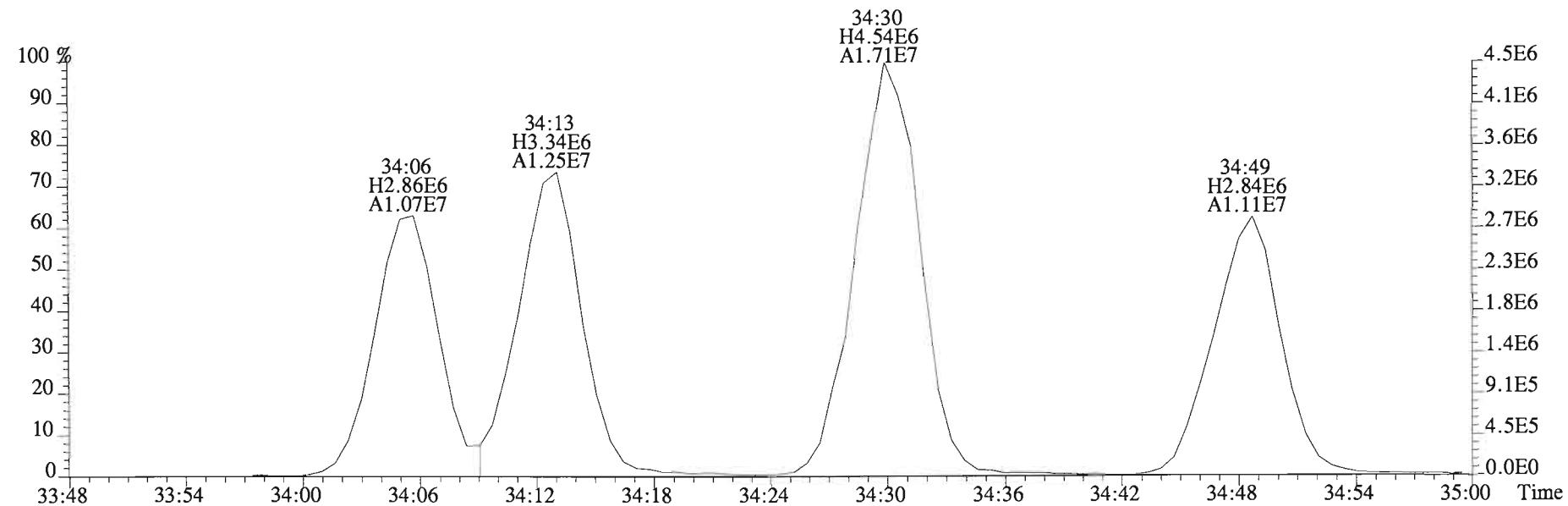
445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



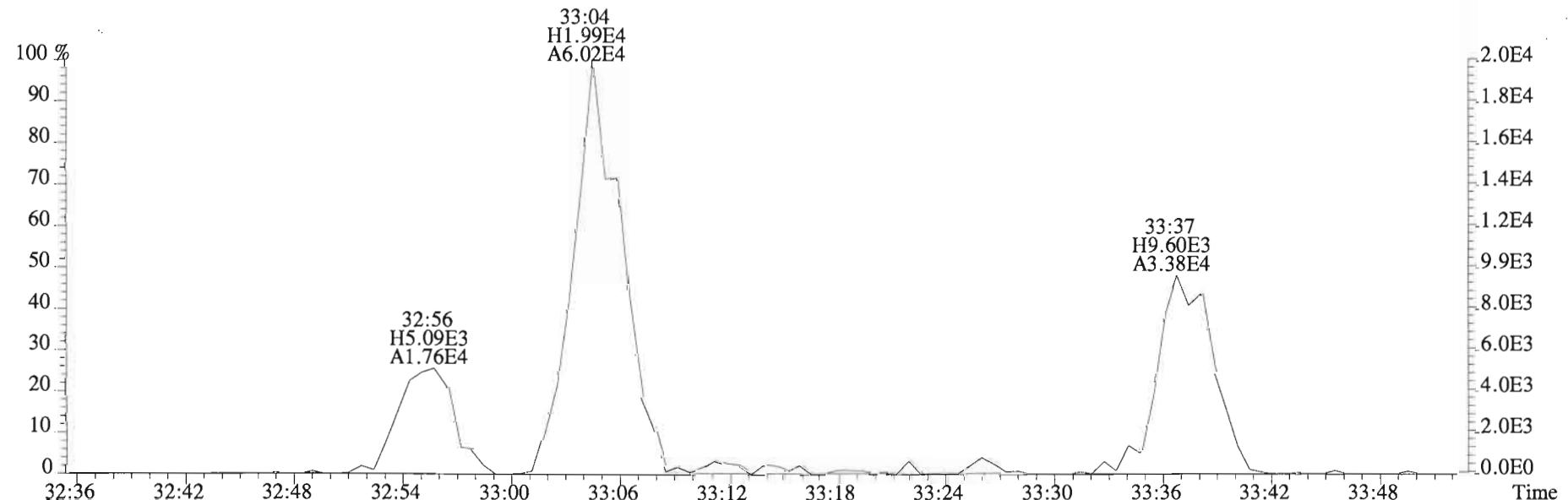
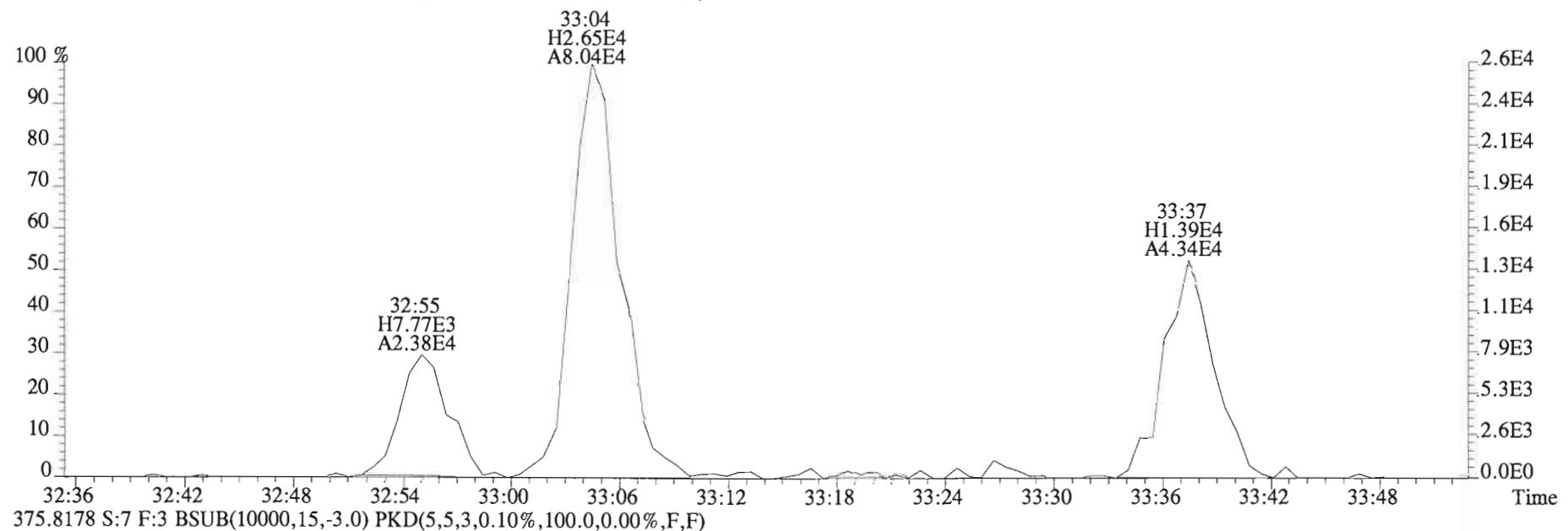
File:150217D1 #1-393 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



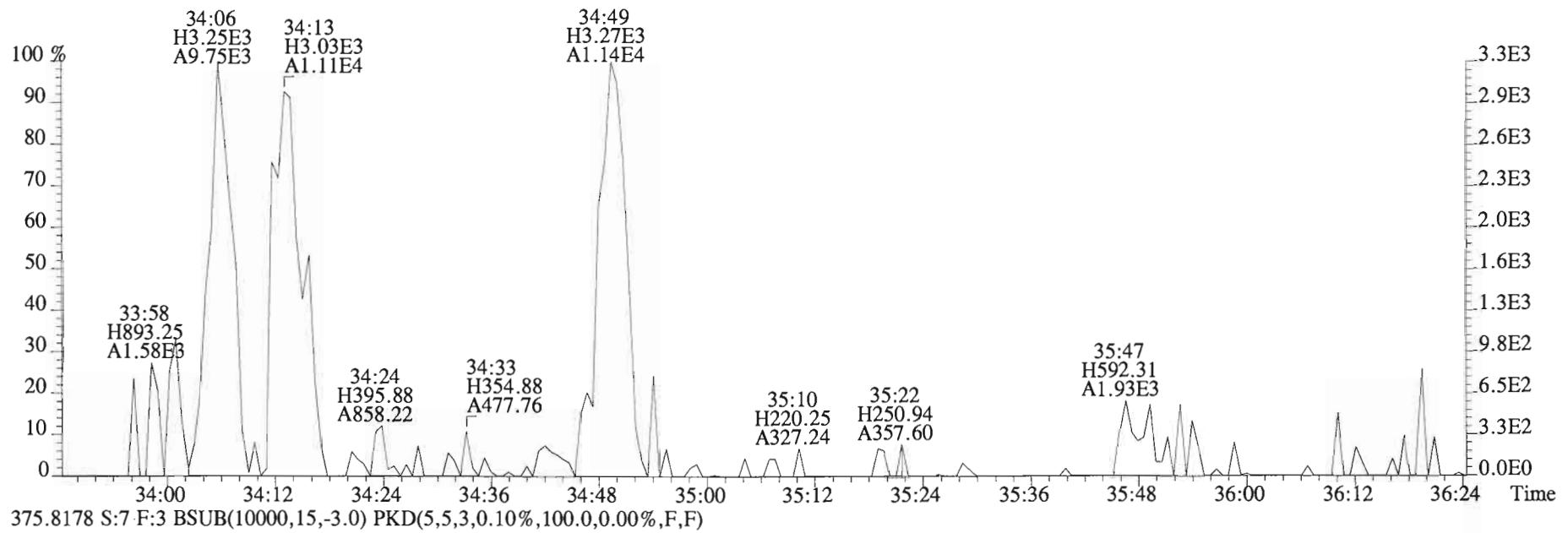
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



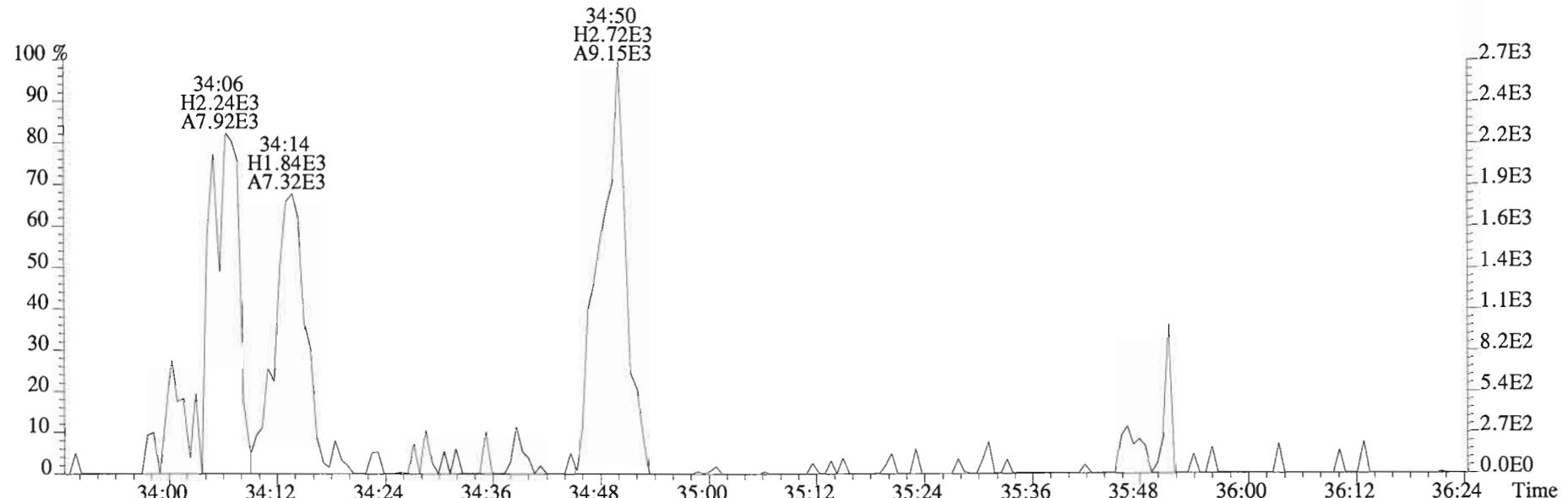
File:150217D1 #1-393 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
 373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



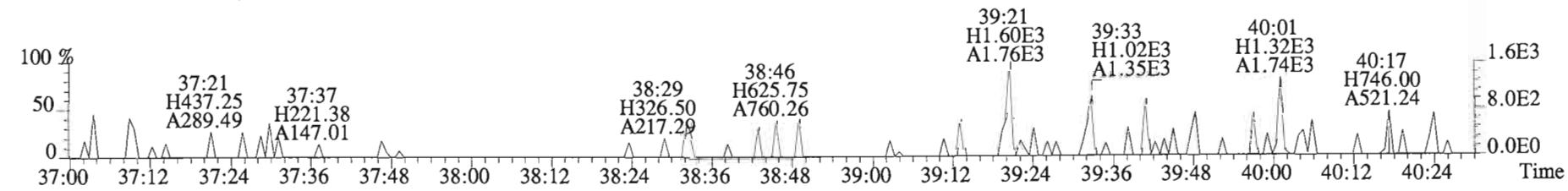
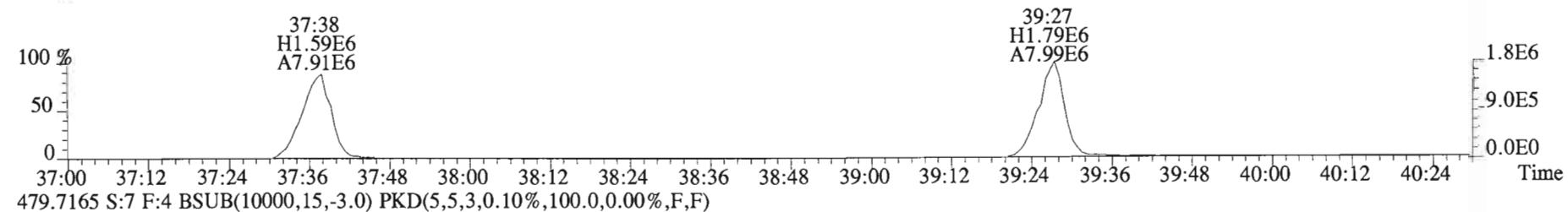
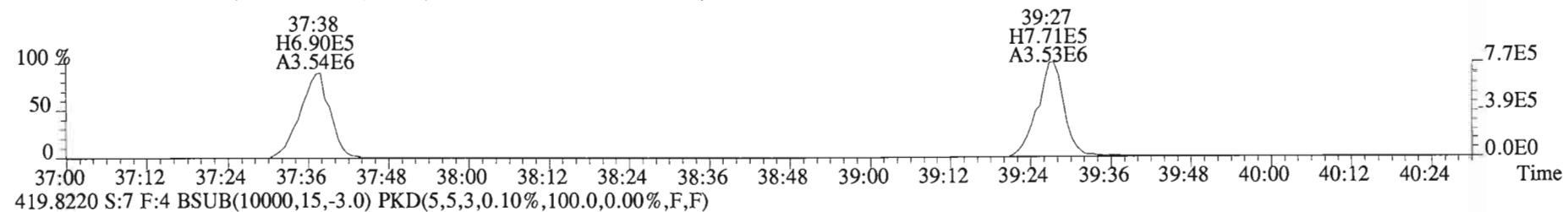
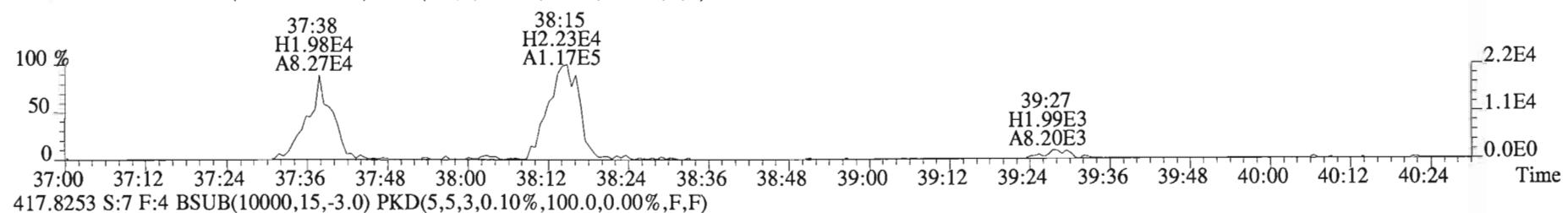
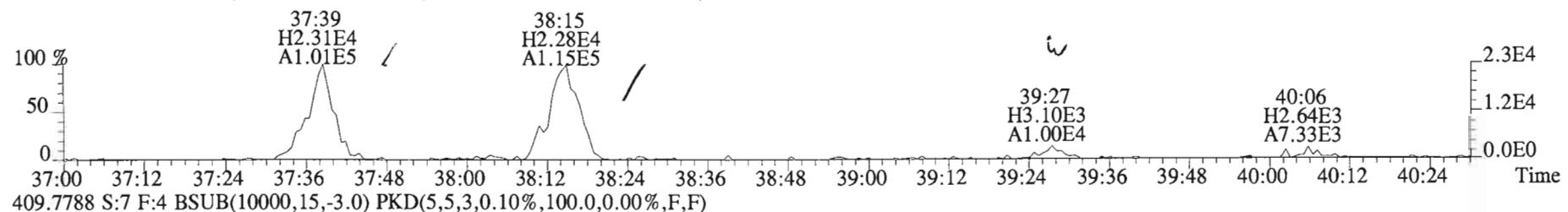
File:150217D1 #1-393 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
 373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



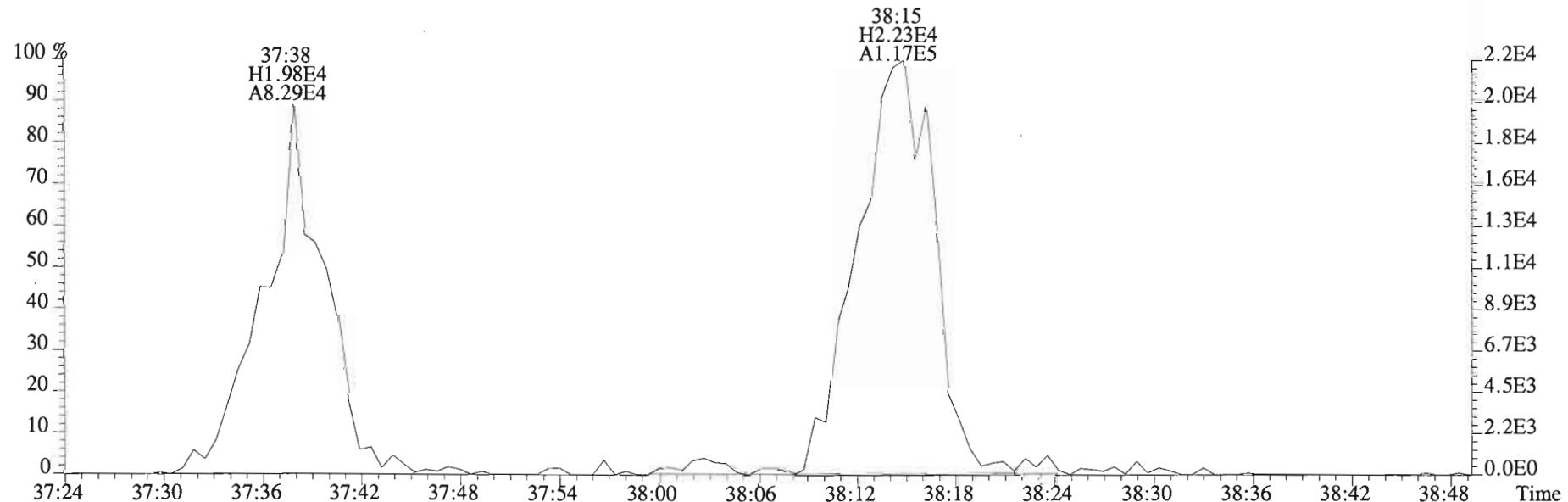
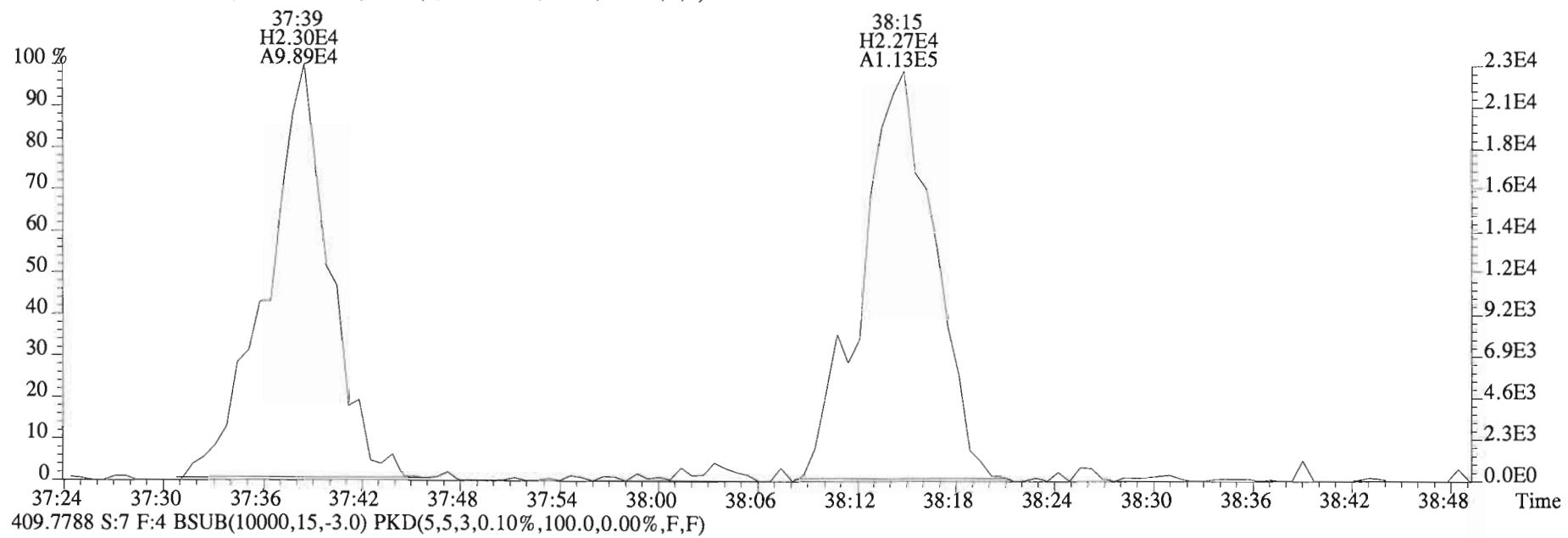
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



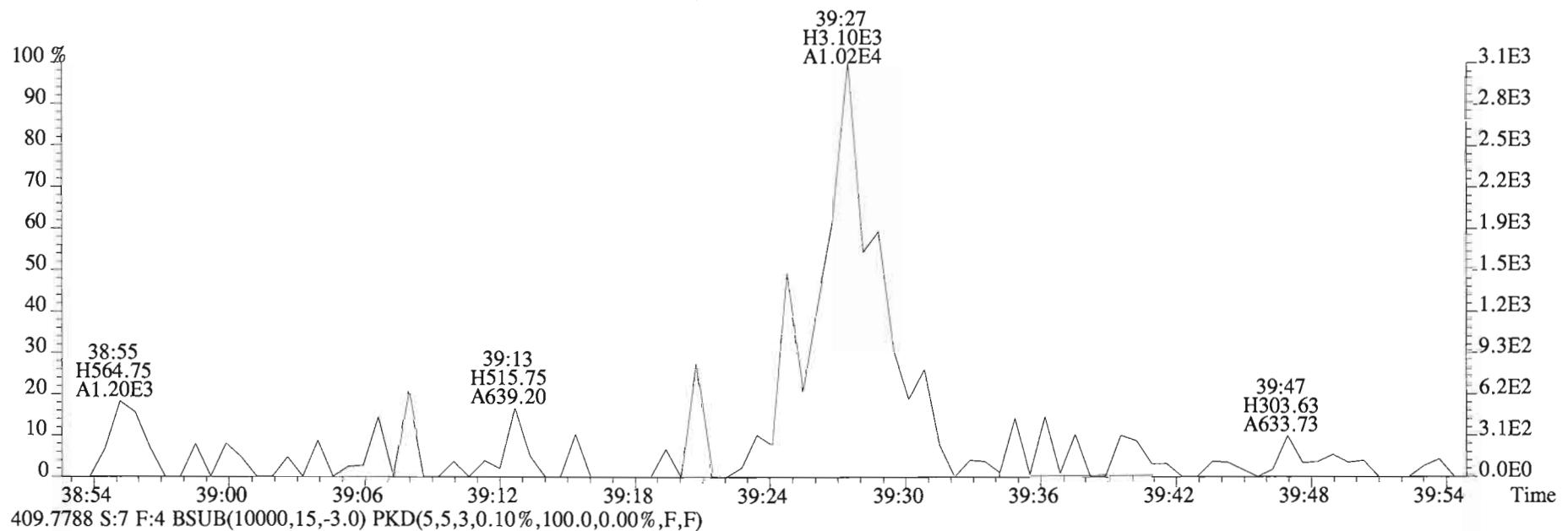
File:150217D1 #1-326 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
 407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



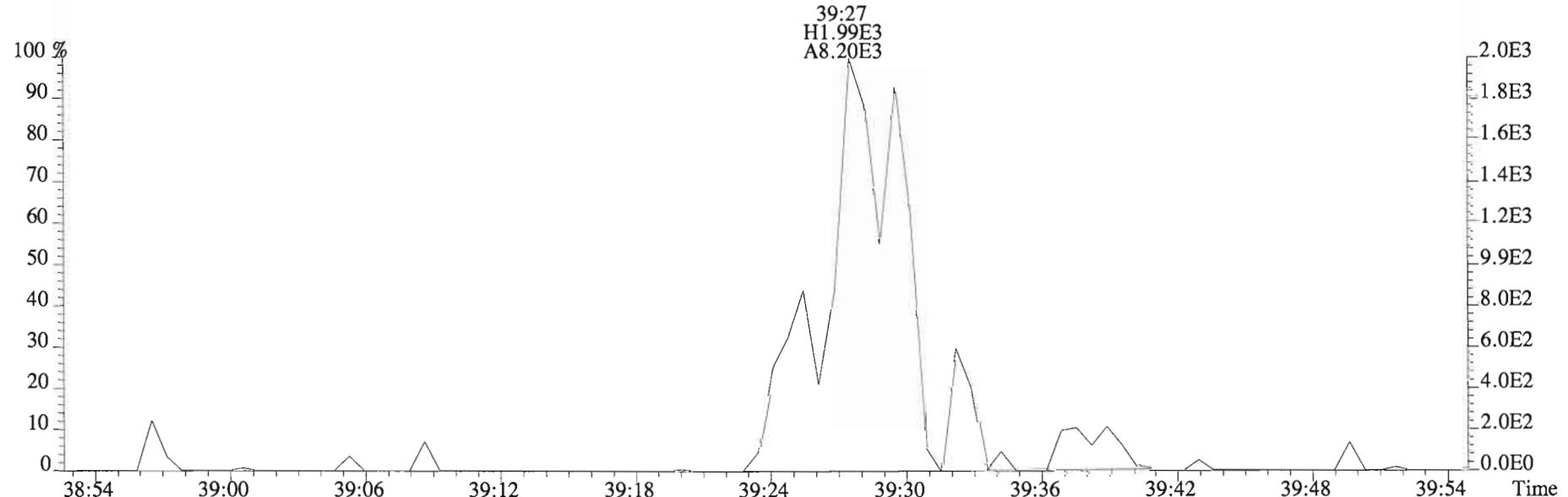
File:150217D1 #1-326 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



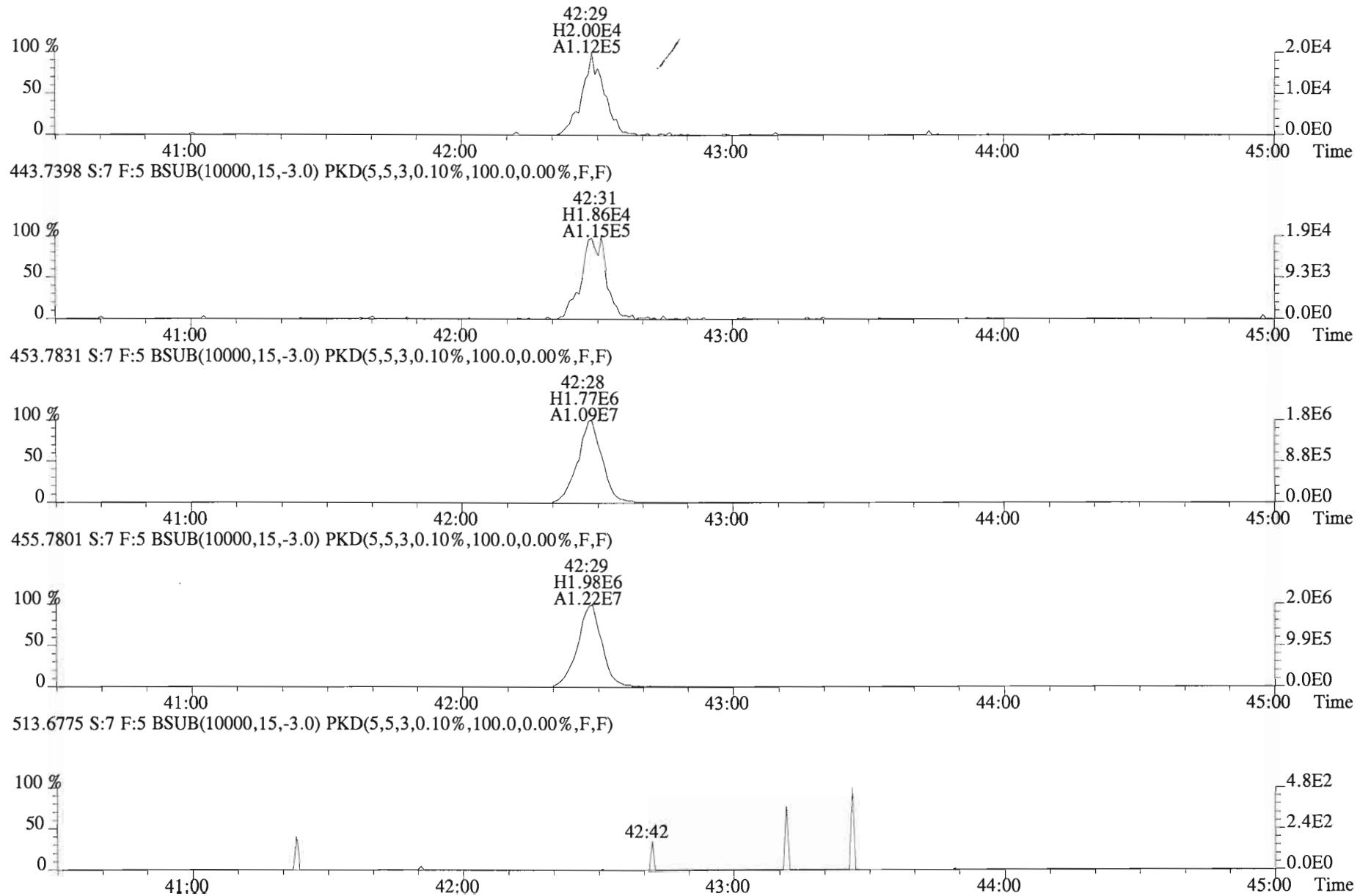
File:150217D1 #1-326 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:150217D1 #1-388 Acq:17-FEB-2015 15:36:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1500147-01 WM-CB-11-20150203-W 1.01051 Exp:OCDD_DB5
441.7428 S:7 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: B5B0058-BLK1

Filename: 150217D2 S:6 Acq:18-FEB-15 04:03:51
 GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol: 5.000

ConCal: ST150217D2-1
 EndCAL: ST150217D2-2

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	1.17	NotF _q	*	*		474	2.5	0.143	Total Tetra-Dioxins	*	*		474	0.143
	1,2,3,7,8-PeCDD	*	* n	0.91	NotF _q	*	*		505	2.5	0.125	Total Penta-Dioxins	*	*		963	0.257
	1,2,3,4,7,8-HxCDD	*	* n	1.08	NotF _q	*	*		493	2.5	0.225	Total Hexa-Dioxins	*	*		721	0.336
	1,2,3,6,7,8-HxCDD	*	* n	1.06	NotF _q	*	*		493	2.5	0.228	Total Hepta-Dioxins	0.190	0.190		*	*
	1,2,3,7,8,9-HxCDD	*	* n	0.93	NotF _q	*	*		493	2.5	0.238	Total Tetra-Furans	*	*		323	0.0790
	1,2,3,4,6,7,8-HpCDD	7.53e+03	0.91 y	1.10	38:55	1.000	0.19034	*	2.5	*		Total Penta-Furans	0.0000	0.0000		914	0.250
	OCDD	2.59e+04	1.02 y	0.95	42:16	1.000	0.81918	*	2.5	*		Total Hexa-Furans	*	*		612	0.108
												Total Hepta-Furans	*	*		1430	0.358
	2,3,7,8-TCDF	*	* n	1.07	NotF _q	*	*		323	2.5	0.0790						
	1,2,3,7,8-PeCDF	*	* n	1.07	NotF _q	*	*		615	2.5	0.174						
	2,3,4,7,8-PeCDF	*	* n	1.03	NotF _q	*	*		615	2.5	0.161						
	1,2,3,4,7,8-HxCDF	*	* n	1.38	NotF _q	*	*		612	2.5	0.104						
	1,2,3,6,7,8-HxCDF	*	* n	1.26	NotF _q	*	*		612	2.5	0.0830						
	2,3,4,6,7,8-HxCDF	*	* n	1.29	NotF _q	*	*		341	2.5	0.0592						
	1,2,3,7,8,9-HxCDF	*	* n	1.19	NotF _q	*	*		341	2.5	0.0881						
	1,2,3,4,6,7,8-HpCDF	*	* n	1.61	NotF _q	*	*		1430	1.0	0.149						
	1,2,3,4,7,8,9-HpCDF	*	* n	1.53	NotF _q	*	*		692	2.5	0.166						
	OCDF	*	* n	1.10	NotF _q	*	*		1190	1.0	0.286						
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.79e+07	0.77 y	1.06	26:60	1.022	356.82					89.2					
IS	13C-1,2,3,7,8-PeCDD	1.99e+07	0.62 y	1.18	31:37	1.197	356.63					89.2					
IS	13C-1,2,3,4,7,8-HxCDD	1.51e+07	1.29 y	0.72	34:59	1.014	318.33					79.6					
IS	13C-1,2,3,6,7,8-HxCDD	1.48e+07	1.16 y	0.74	35:05	1.017	304.26					76.1					
IS	13C-1,2,3,7,8,9-HxCDD	1.76e+07	1.22 y	0.85	35:23	1.026	312.46					78.1					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.43e+07	1.05 y	0.65	38:55	1.128	331.92					83.0					
IS	13C-OCDD	2.66e+07	0.87 y	0.76	42:15	1.225	527.60					66.0					
IS	13C-2,3,7,8-TCDF	2.65e+07	0.78 y	0.92	26:11	0.991	354.73					88.7					
IS	13C-1,2,3,7,8-PeCDF	2.75e+07	1.58 y	0.92	30:25	1.151	366.30					91.6					
IS	13C-2,3,4,7,8-PeCDF	2.97e+07	1.63 y	0.93	31:20	1.186	391.06					97.8					
IS	13C-1,2,3,4,7,8-HxCDF	2.00e+07	0.52 y	0.98	34:05	0.988	308.39					77.1					
IS	13C-1,2,3,6,7,8-HxCDF	2.79e+07	0.51 y	1.08	34:12	0.992	390.40					97.6					
IS	13C-2,3,4,6,7,8-HxCDF	2.21e+07	0.53 y	1.03	34:48	1.009	326.71					81.7					
IS	13C-1,2,3,7,8,9-HxCDF	1.80e+07	0.52 y	0.86	35:45	1.037	317.25					79.3					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.44e+07	0.44 y	0.72	37:37	1.091	301.25					75.3					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.43e+07	0.44 y	0.70	39:27	1.144	311.01					77.8					
IS	13C-OCDF	3.00e+07	0.89 y	0.85	42:28	1.231	534.47					66.8					
C/Up	37Cl-2,3,7,8-TCDD	8.05e+06		1.12	27:01	1.022	151.95					95.0	Integrations by Analyst:	M	Reviewed by Analyst:		
RS/RT	13C-1,2,3,4-TCDD	1.90e+07	0.79 y	1.00	26:25	*	400.00										
RS	13C-1,2,3,4-TCDF	3.26e+07	0.78 y	1.00	24:56	*	400.00										
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.64e+07	0.51 y	1.00	34:30	*	400.00						Date: 2/19/15		Date: 2/21/15		

Totals class: HpCDD EMPC

Entry #: 25

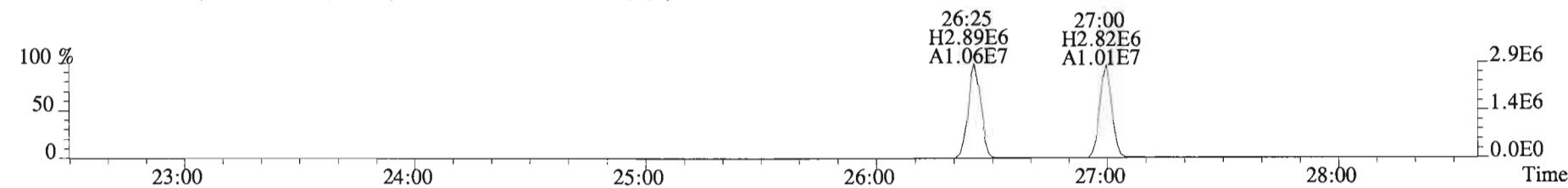
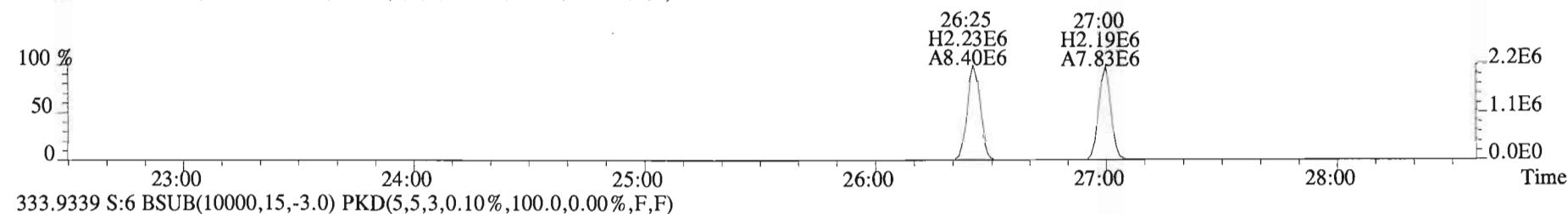
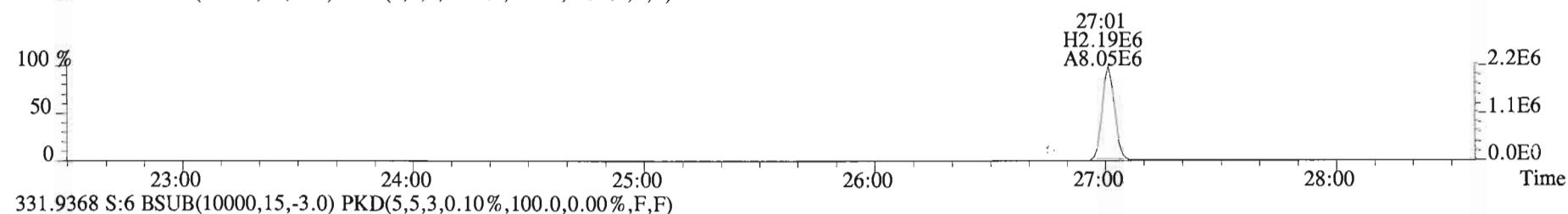
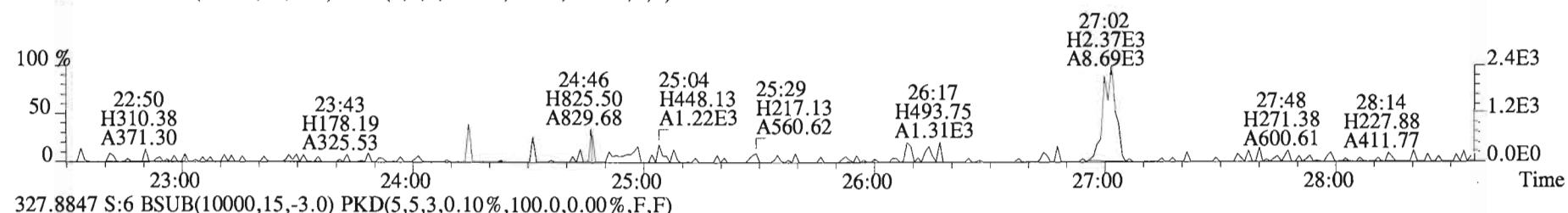
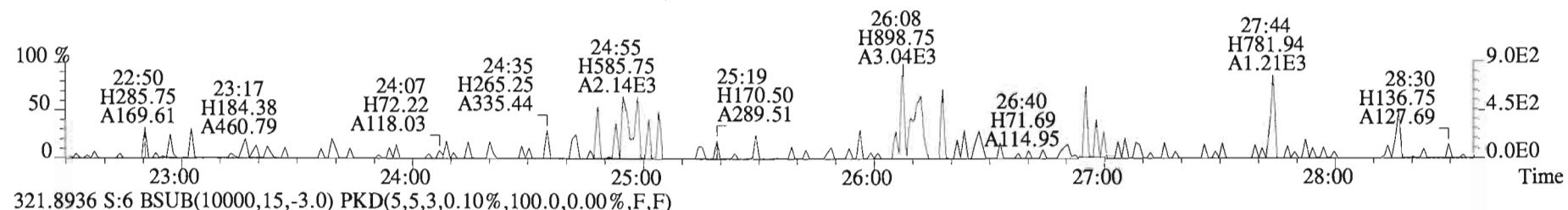
Run: 11 File: 150217D2 S: 6 I: 1 F: 4
Acquired: 18-FEB-15 04:03:51 Processed: 18-FEB-15 08:19:39

Total Concentration: 0.19034

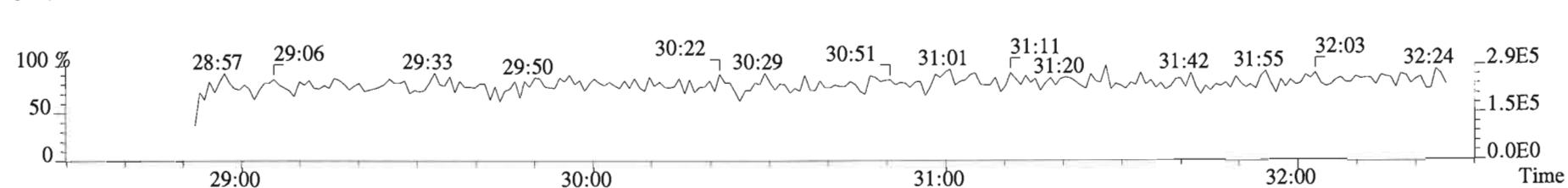
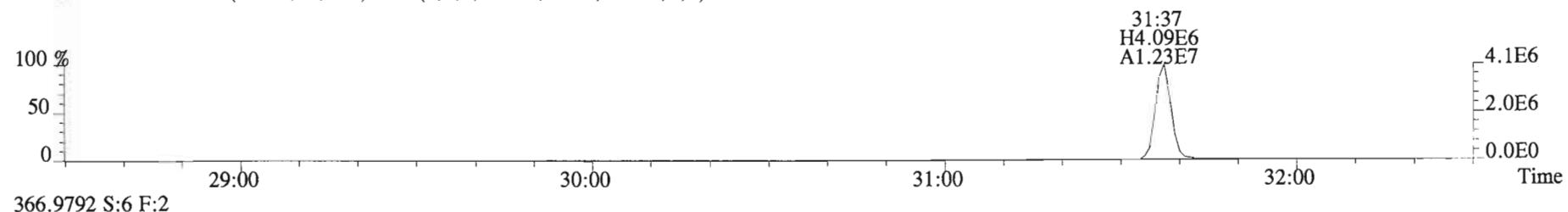
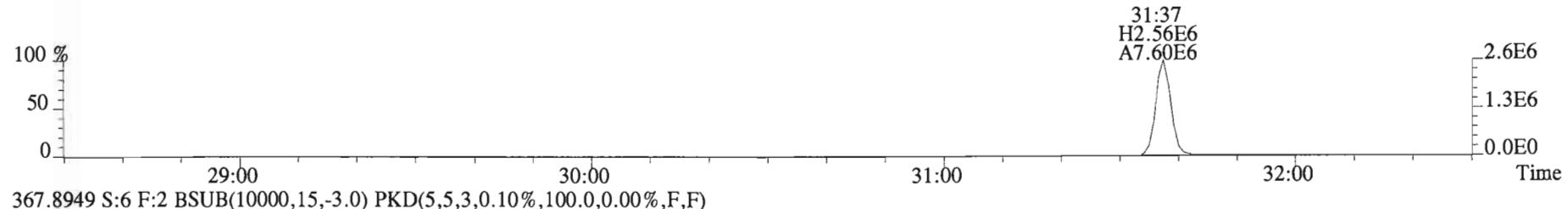
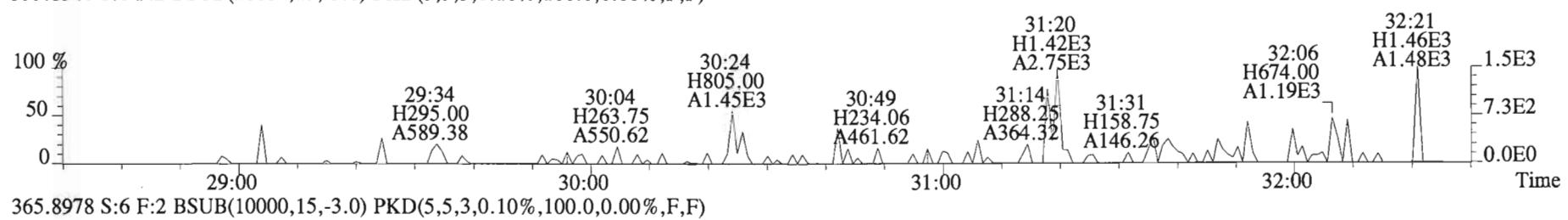
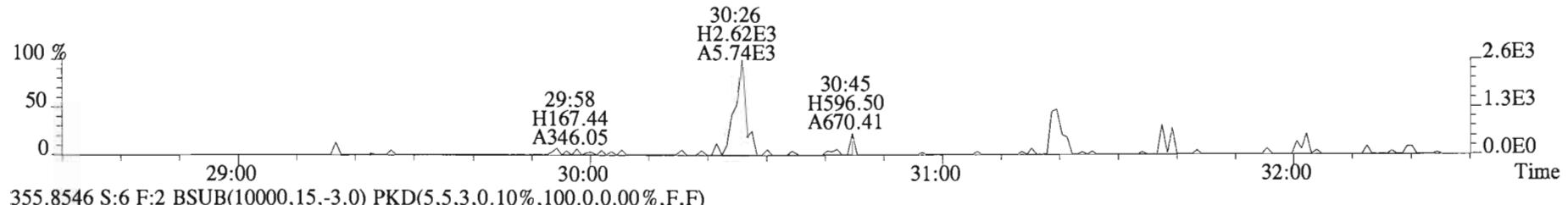
Unnamed Concentration: *

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
38:55	3.585e+03	3.945e+03	0.91	y	7.530e+03	0.19034
						1,2,3,4,6,7,8-HpCDD

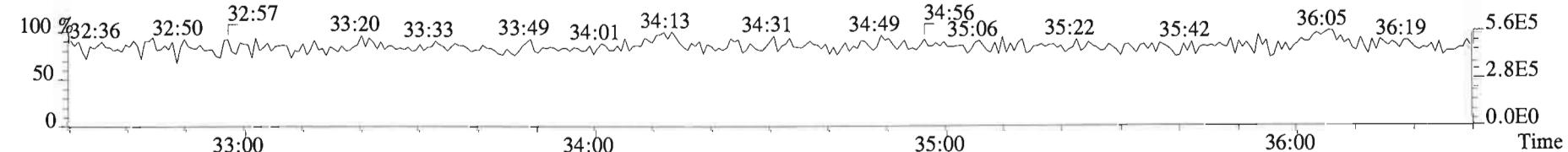
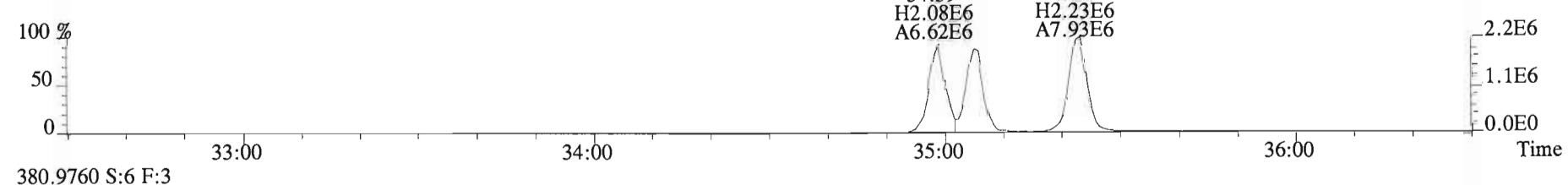
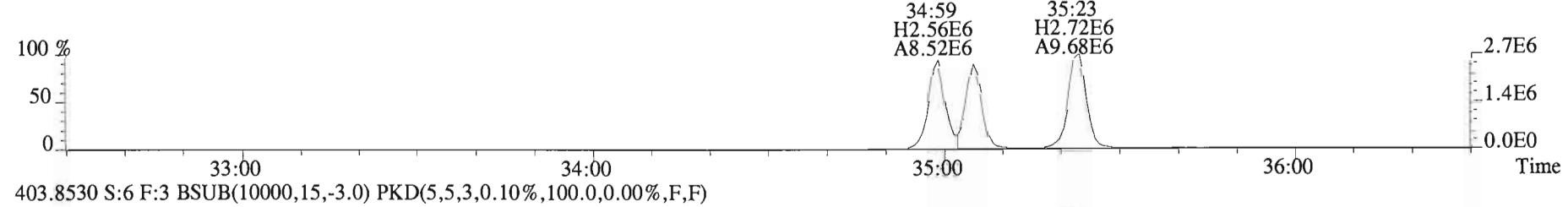
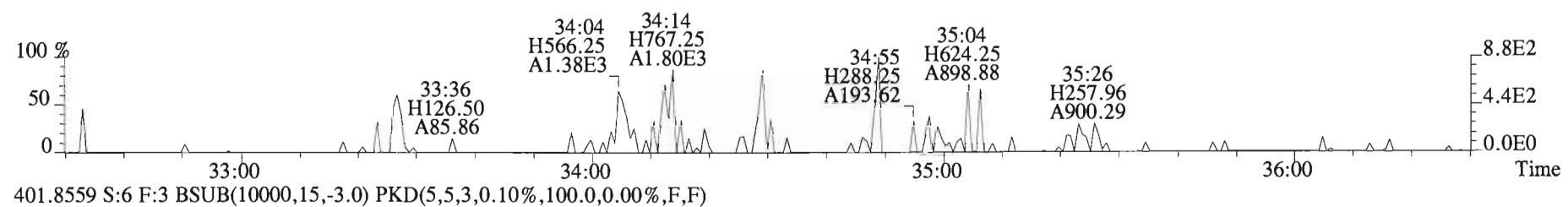
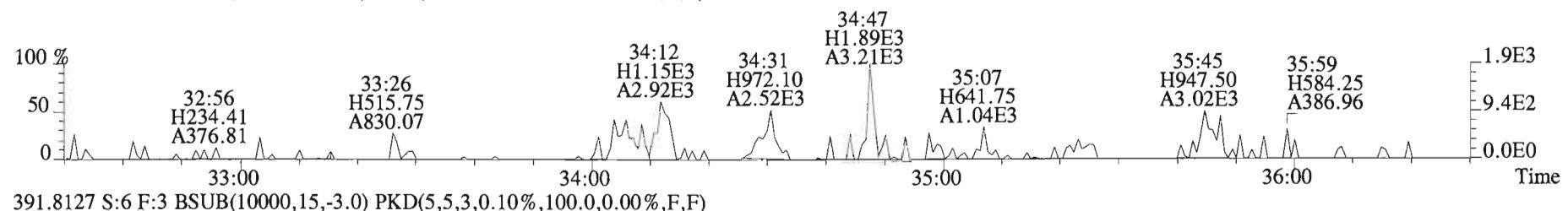
File:150217D2 #1-551 Acq:18-FEB-2015 04:03:51 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
 319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



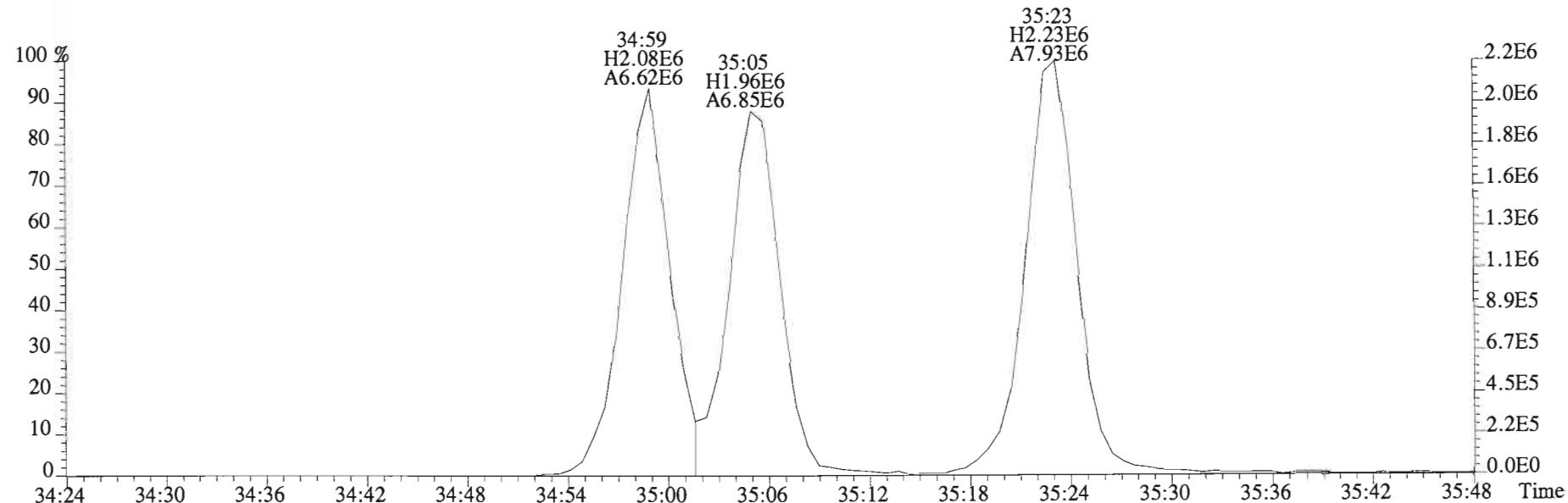
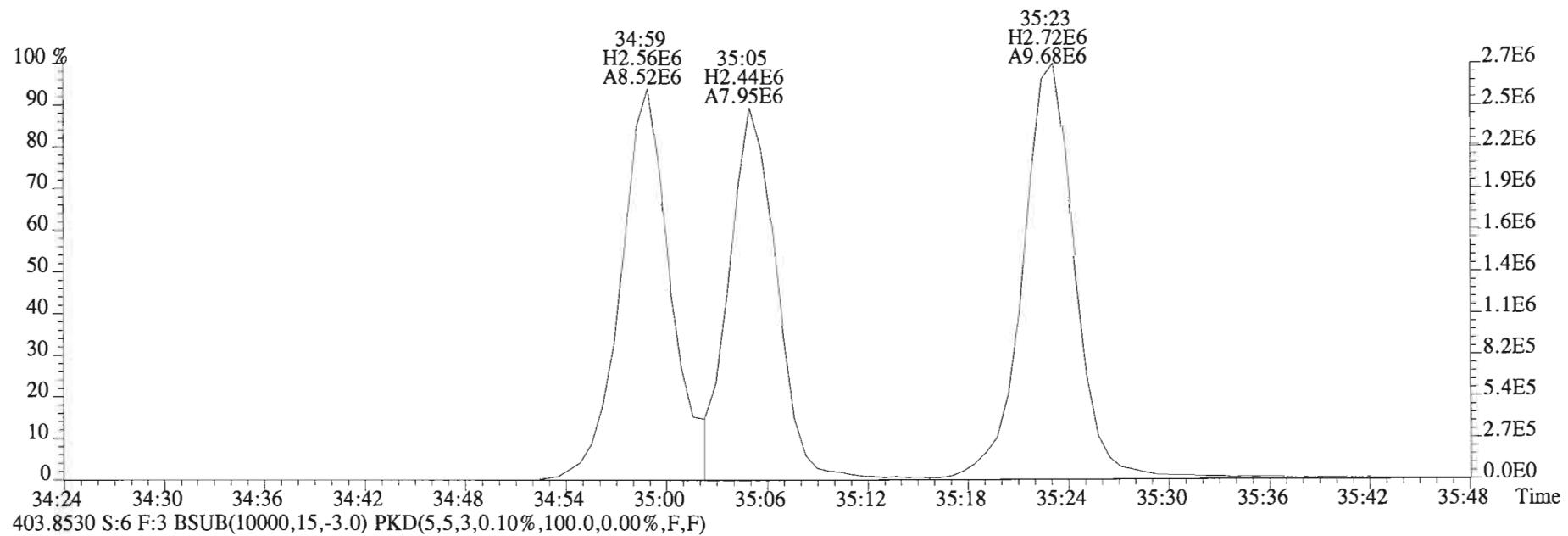
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Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



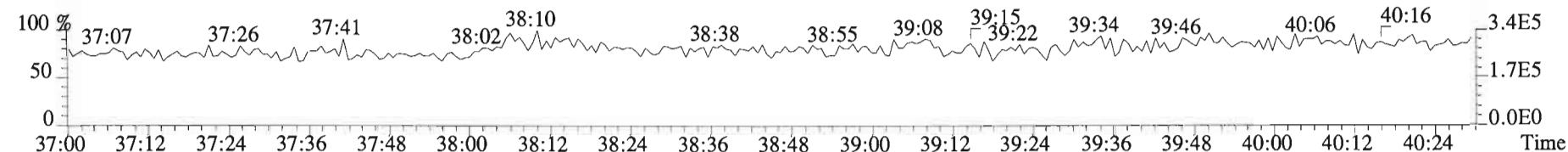
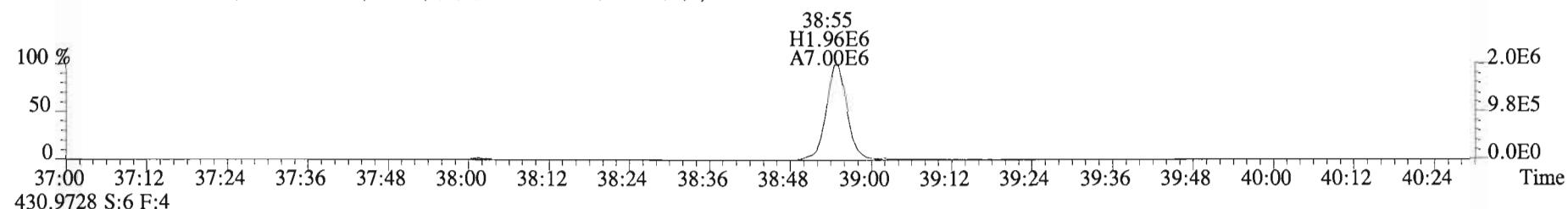
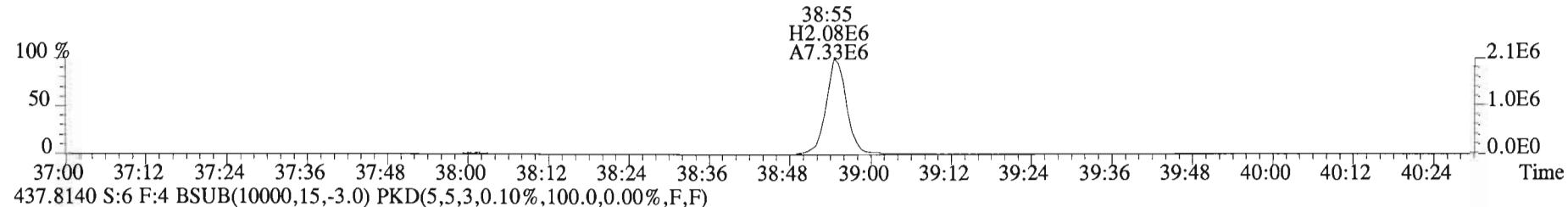
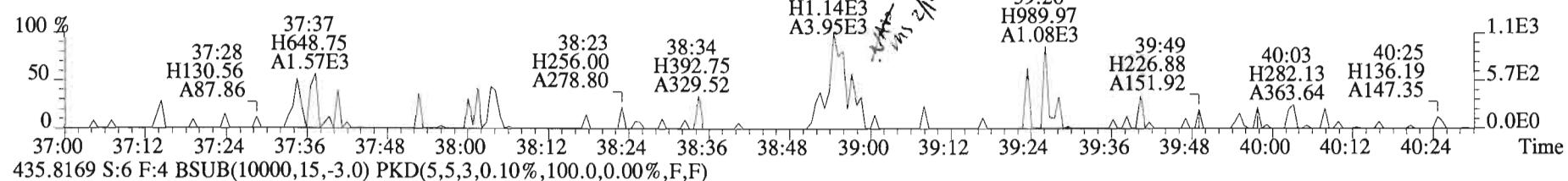
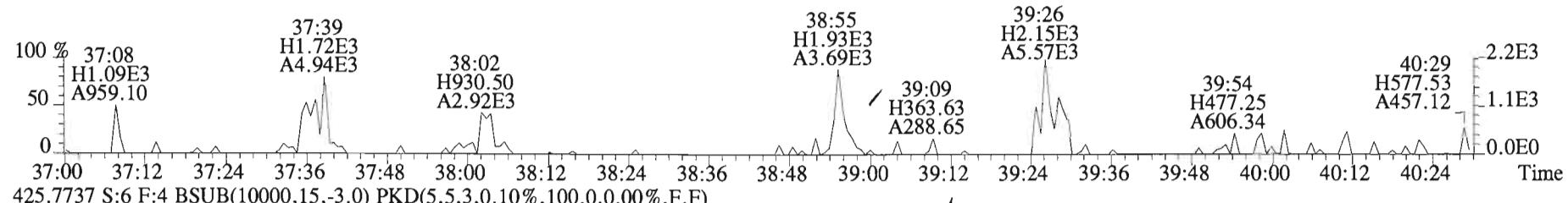
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 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
 389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



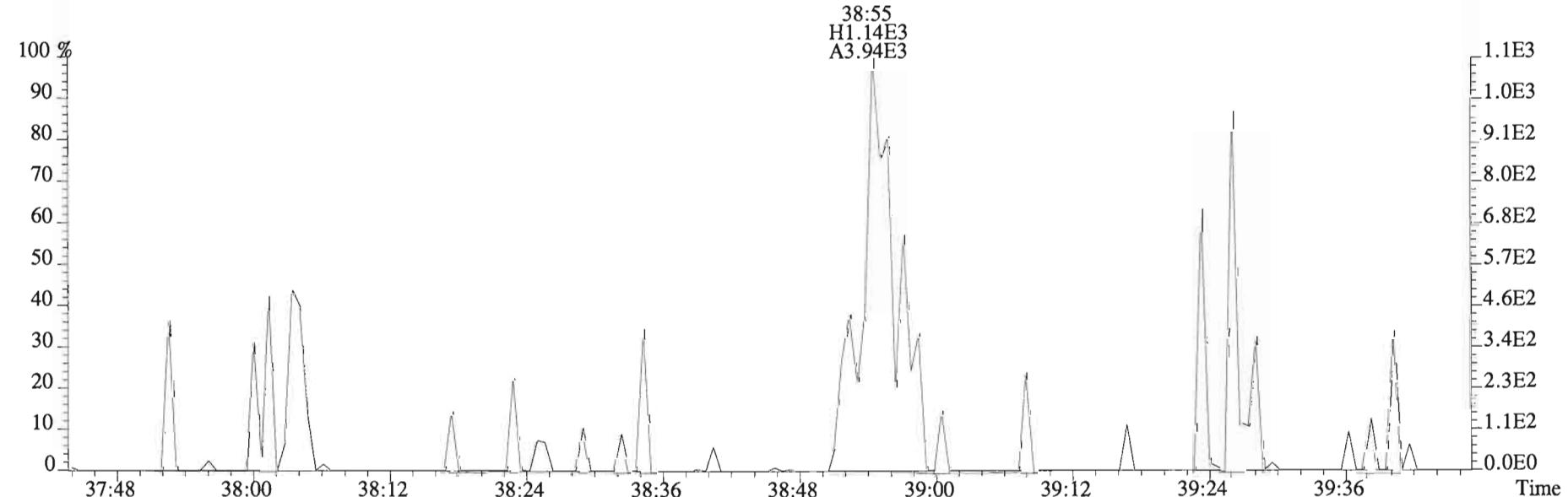
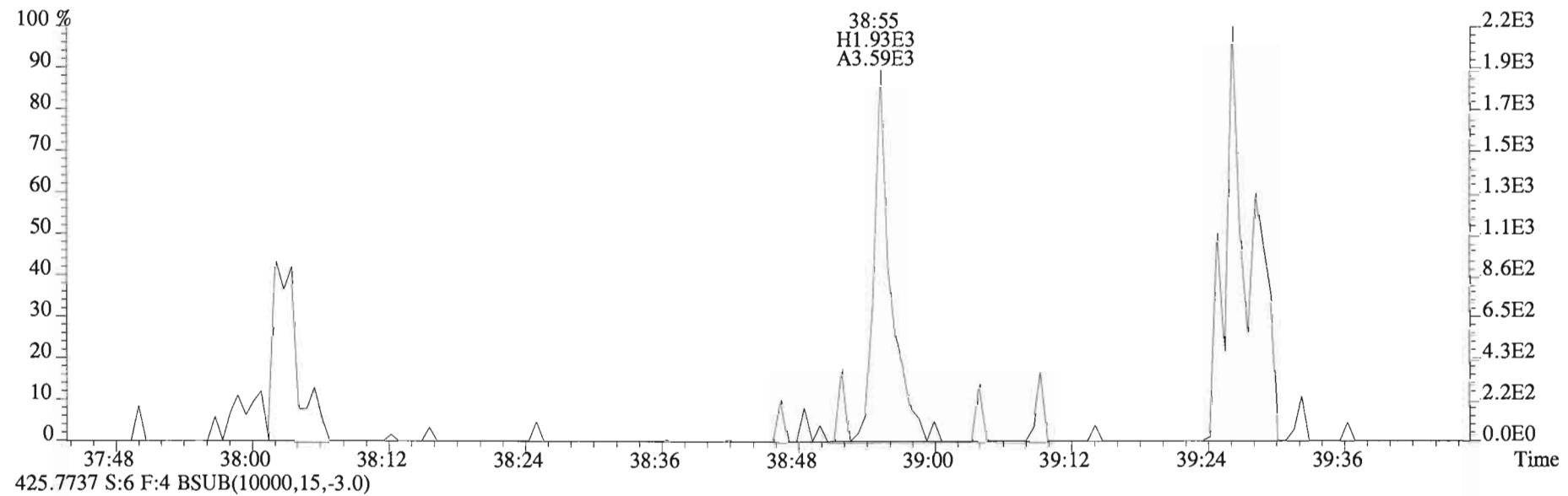
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Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



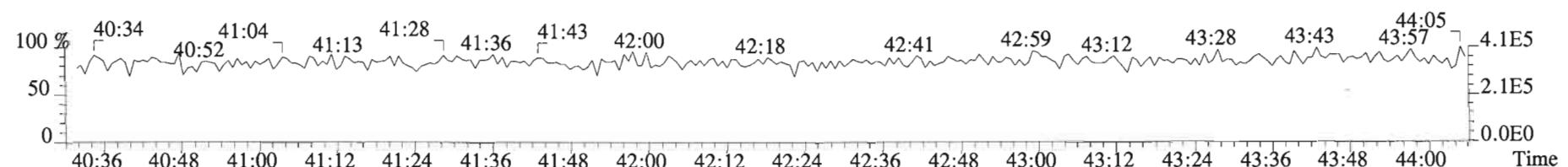
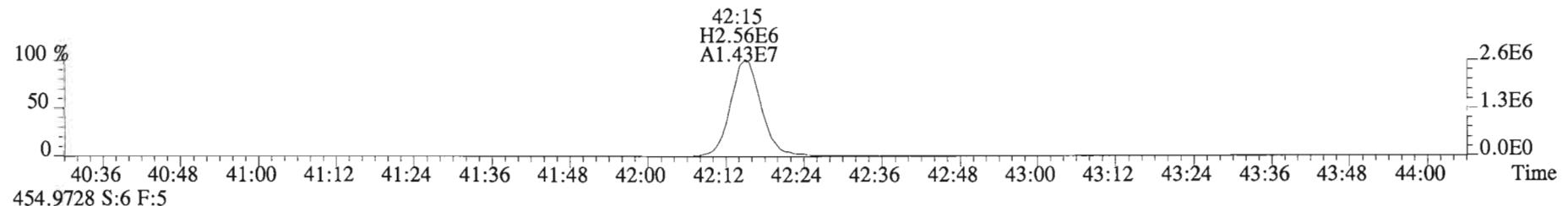
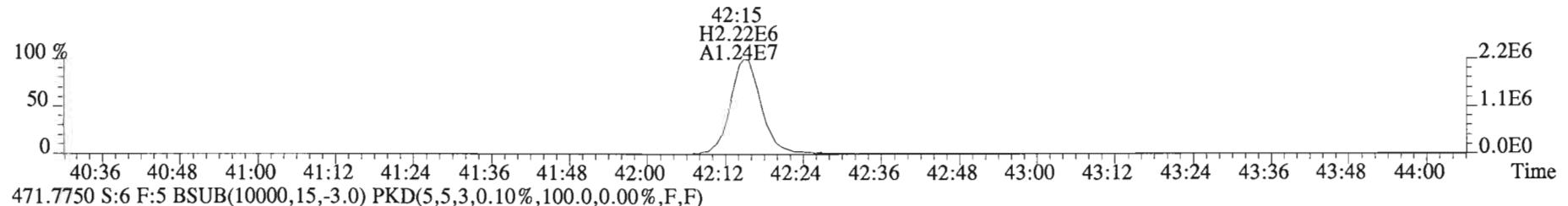
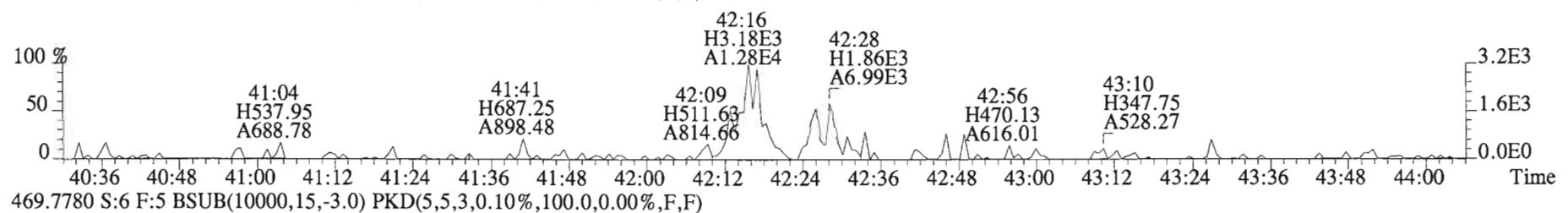
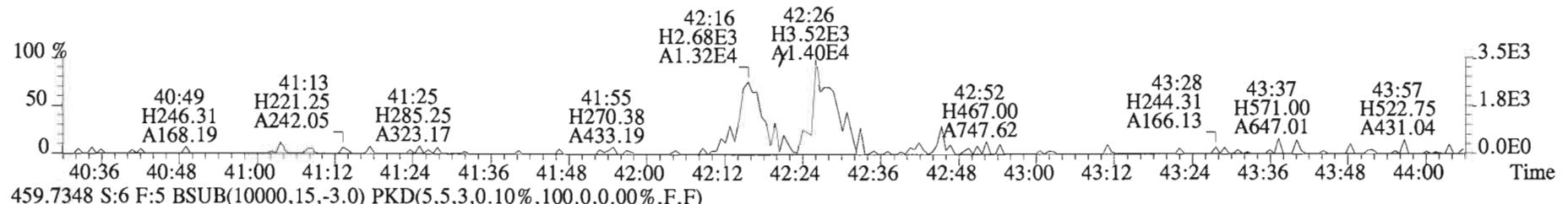
File:150217D2 #1-325 Acq:18-FEB-2015 04:03:51 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
 423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



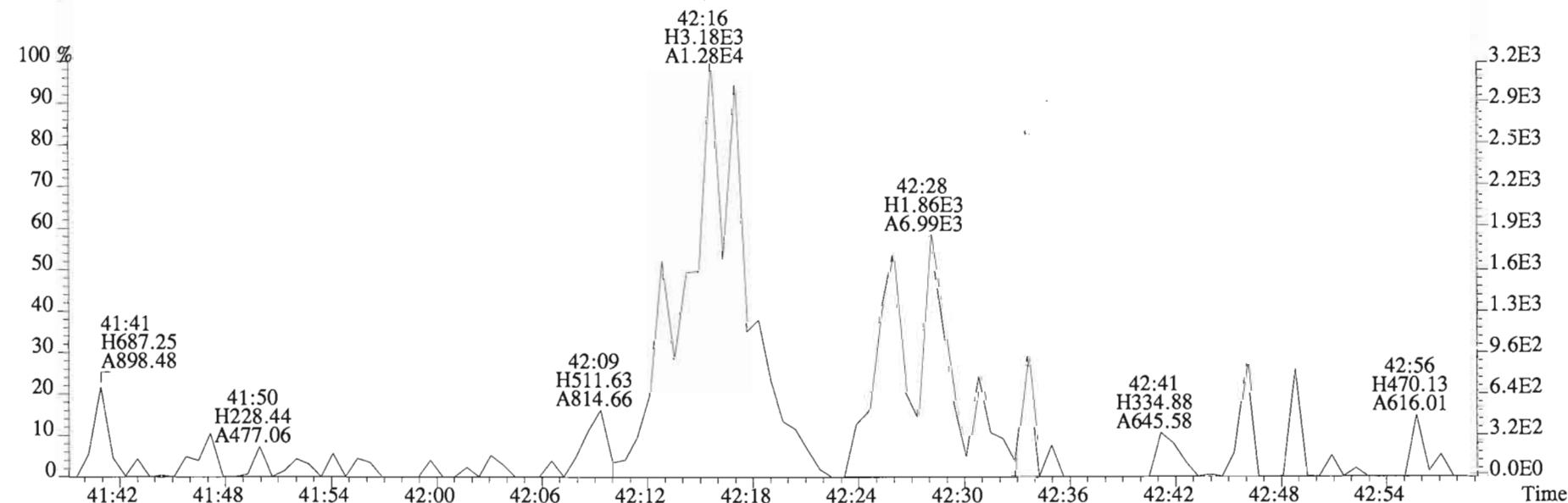
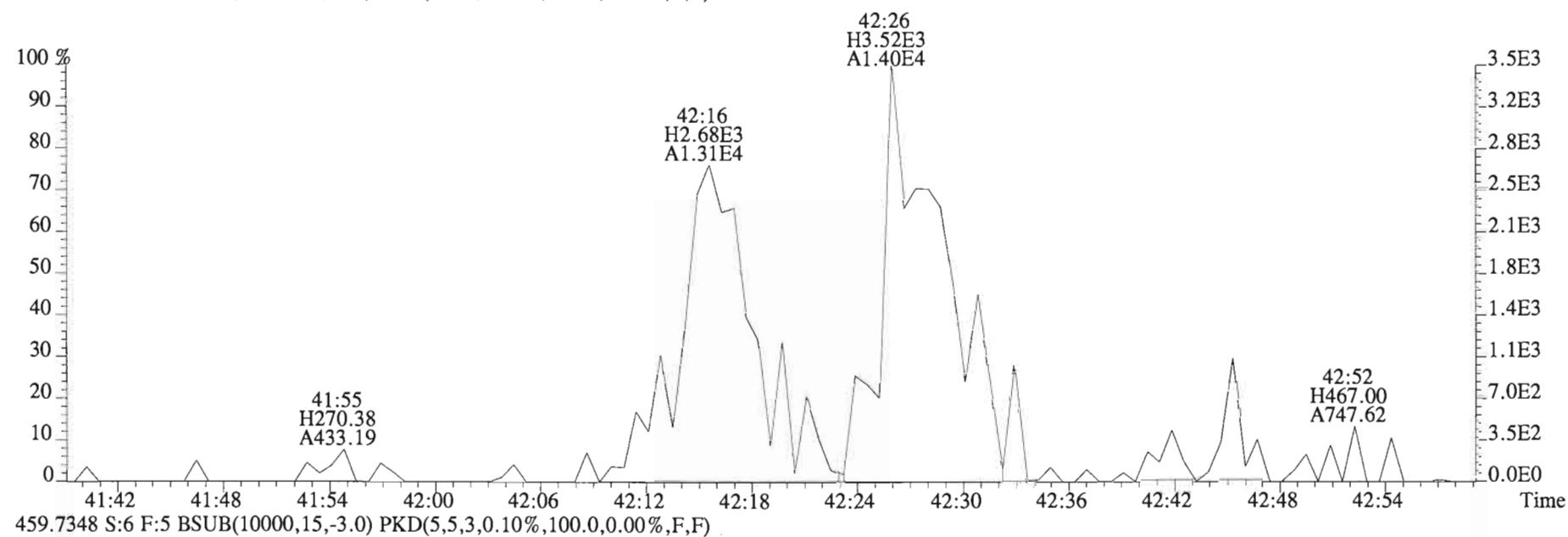
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Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
423.7767 S:6 F:4 BSUB(10000,15,-3.0)



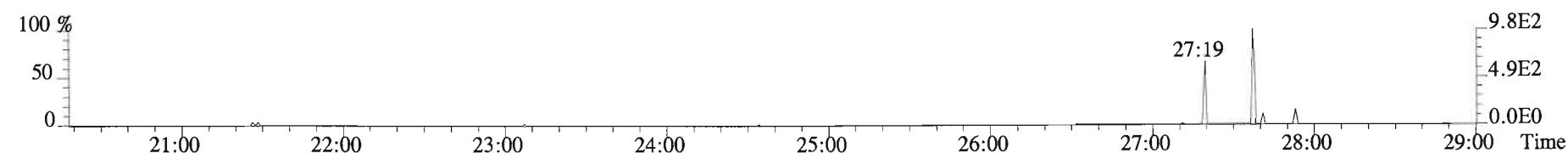
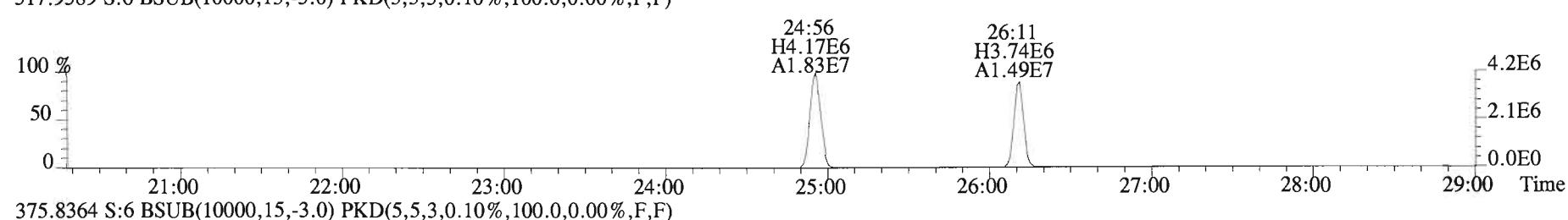
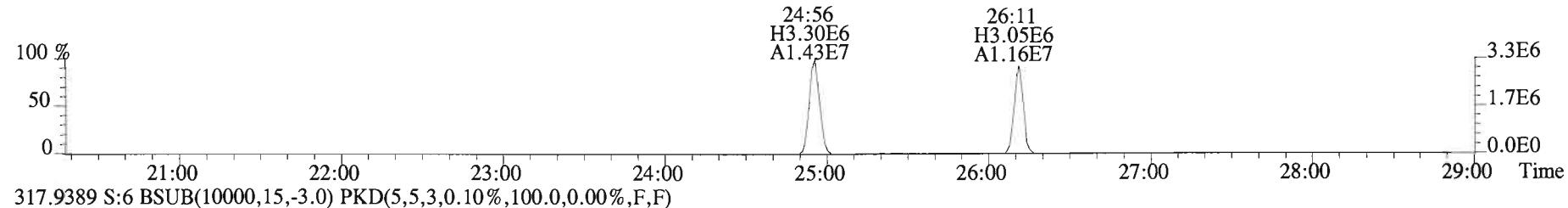
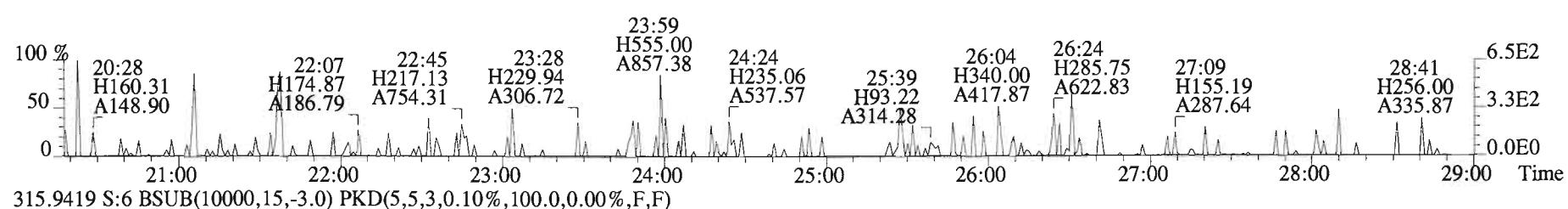
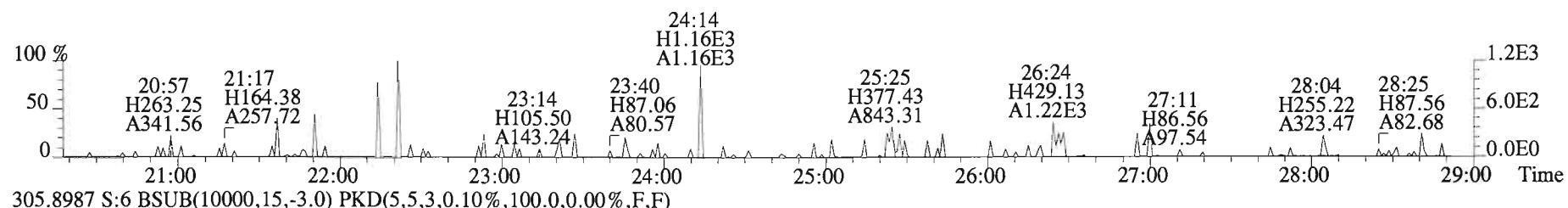
File:150217D2 #1-389 Acq:18-FEB-2015 04:03:51 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
 457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



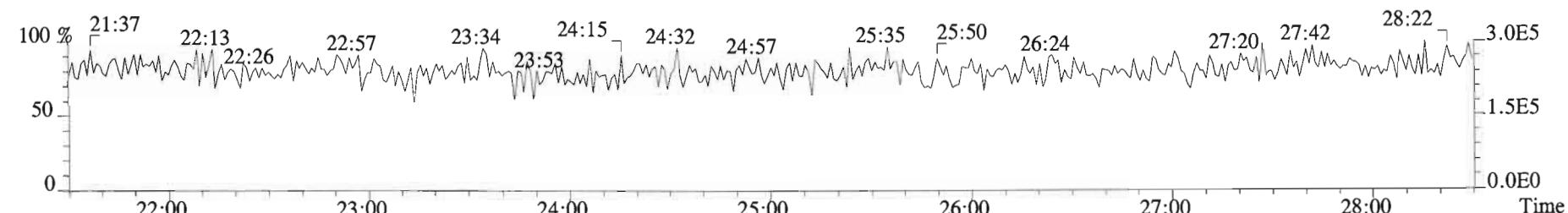
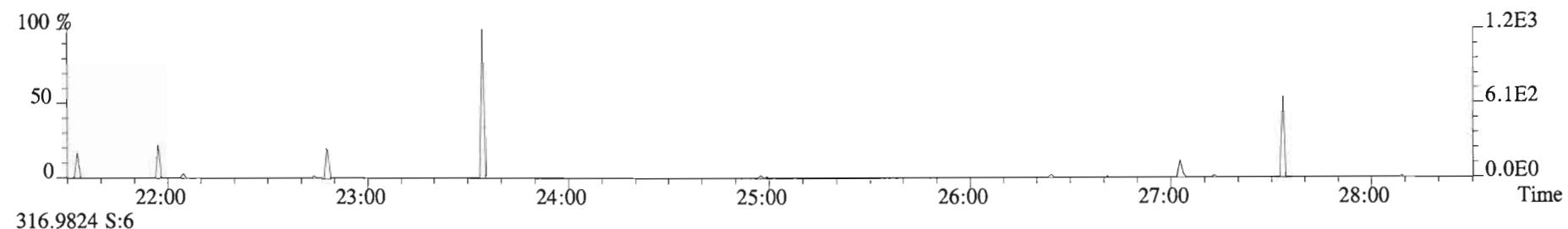
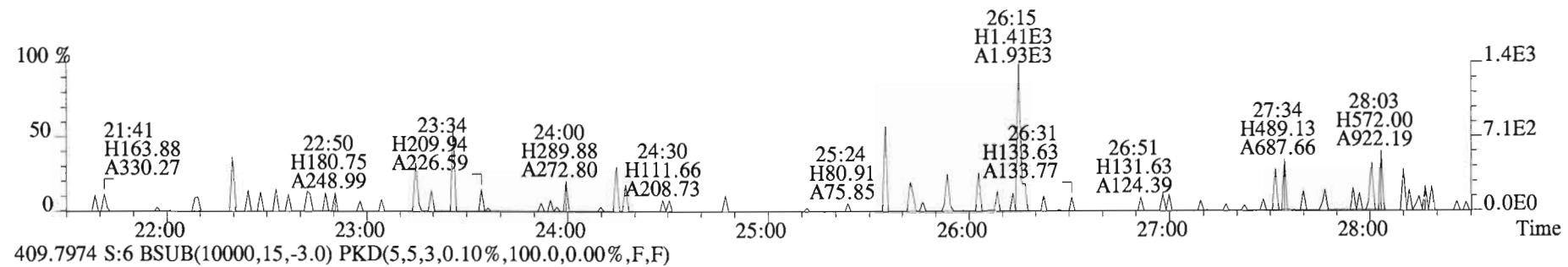
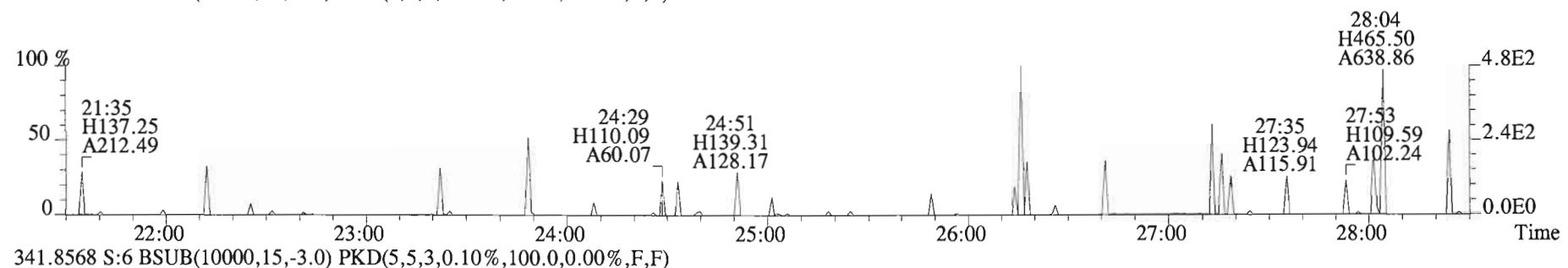
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 457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



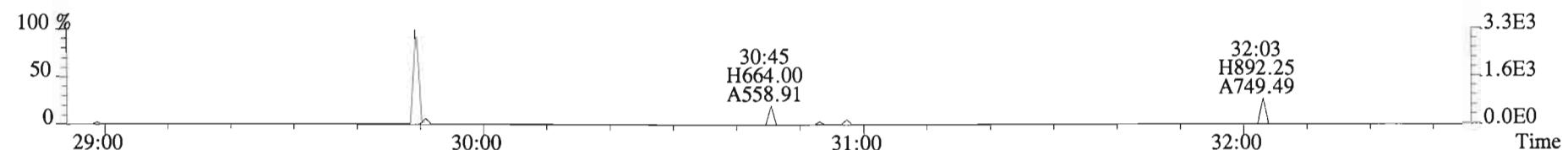
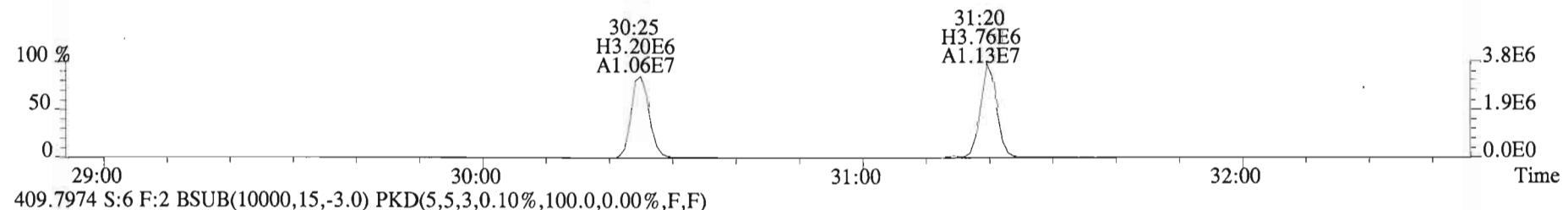
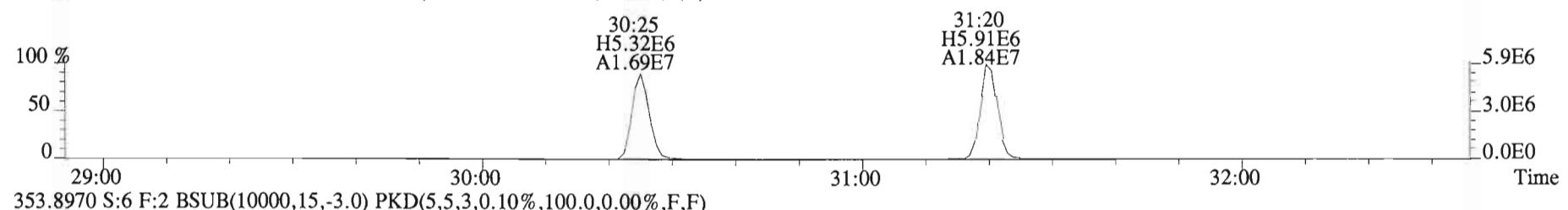
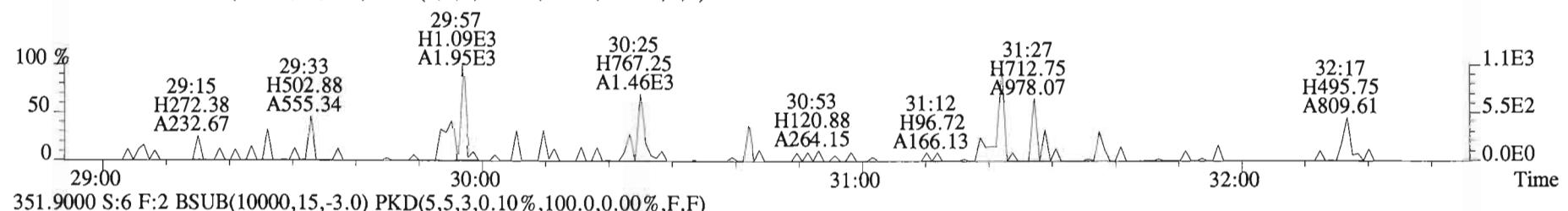
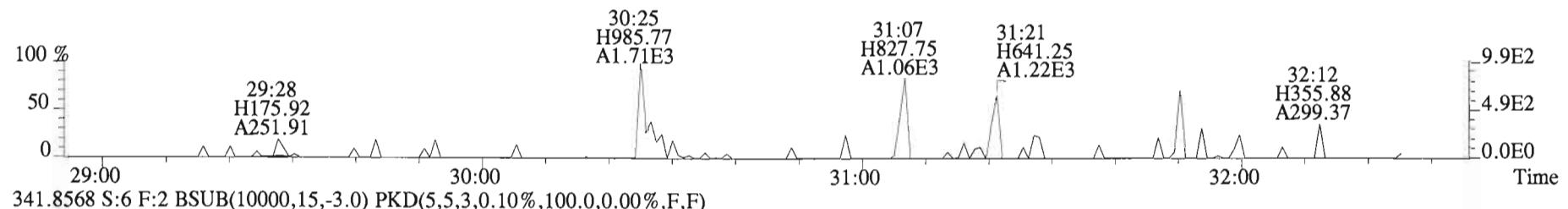
File:150217D2 #1-551 Acq:18-FEB-2015 04:03:51 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
 303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



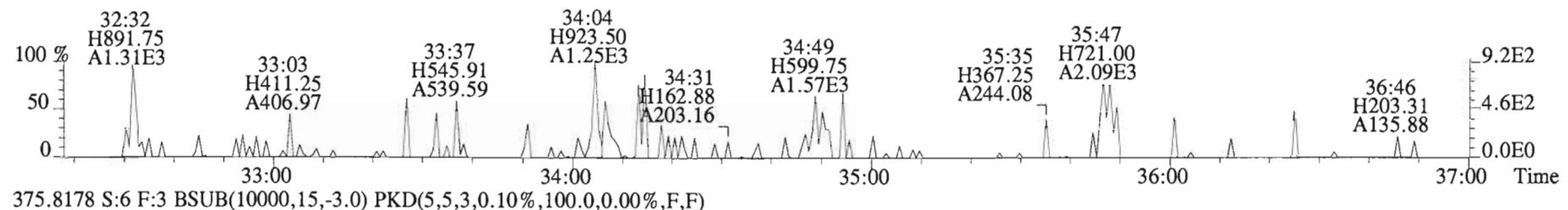
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Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



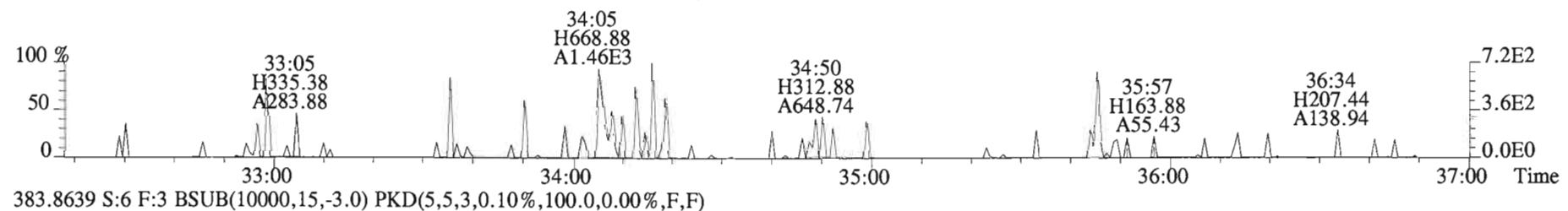
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Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



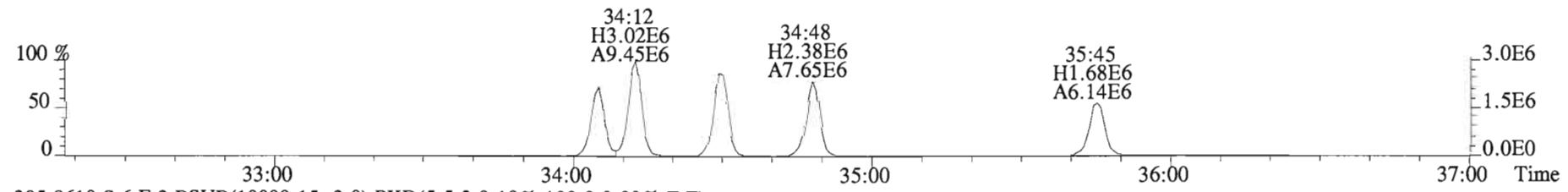
File:150217D2 #1-393 Acq:18-FEB-2015 04:03:51 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
 373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



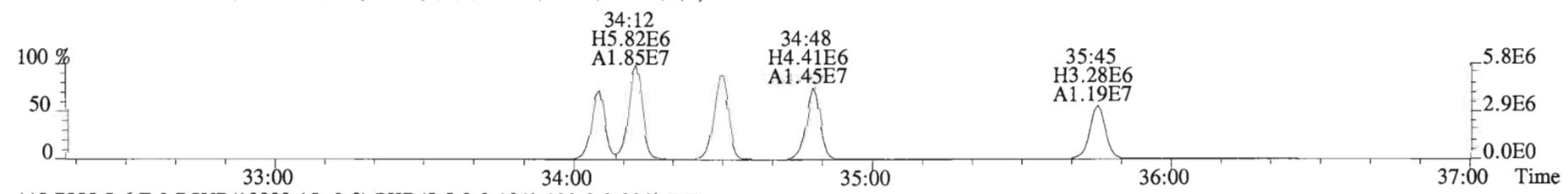
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



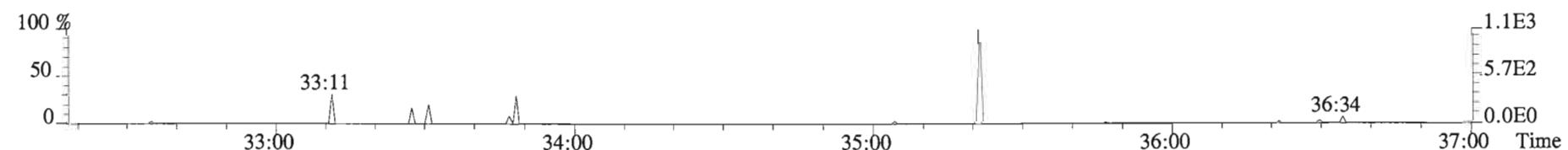
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



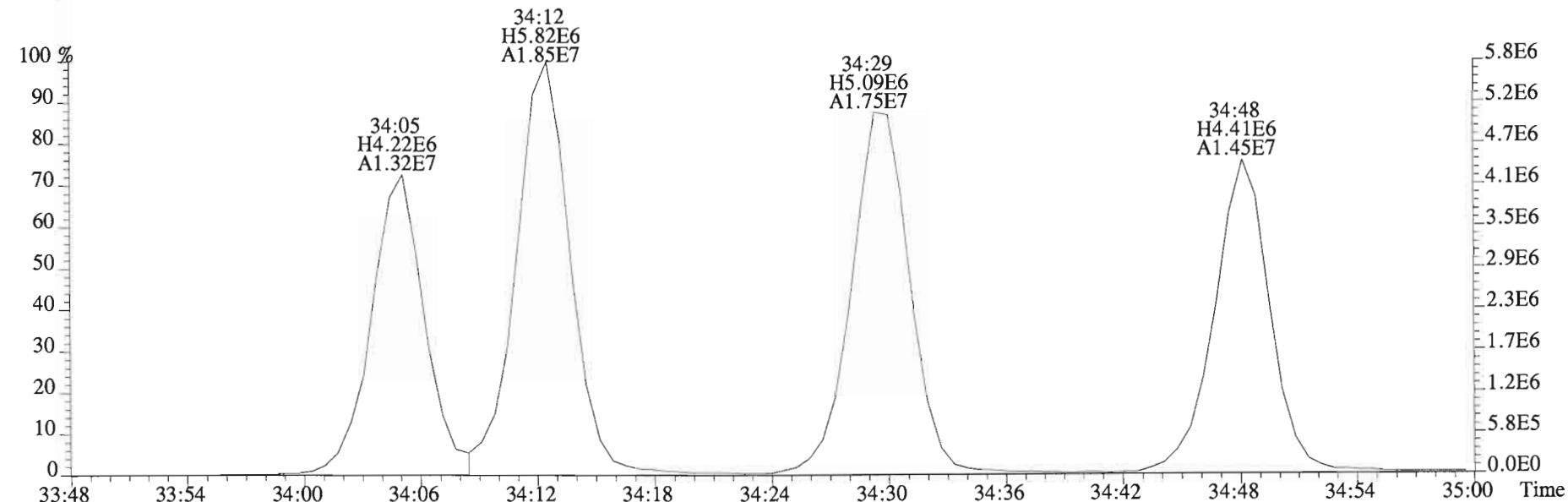
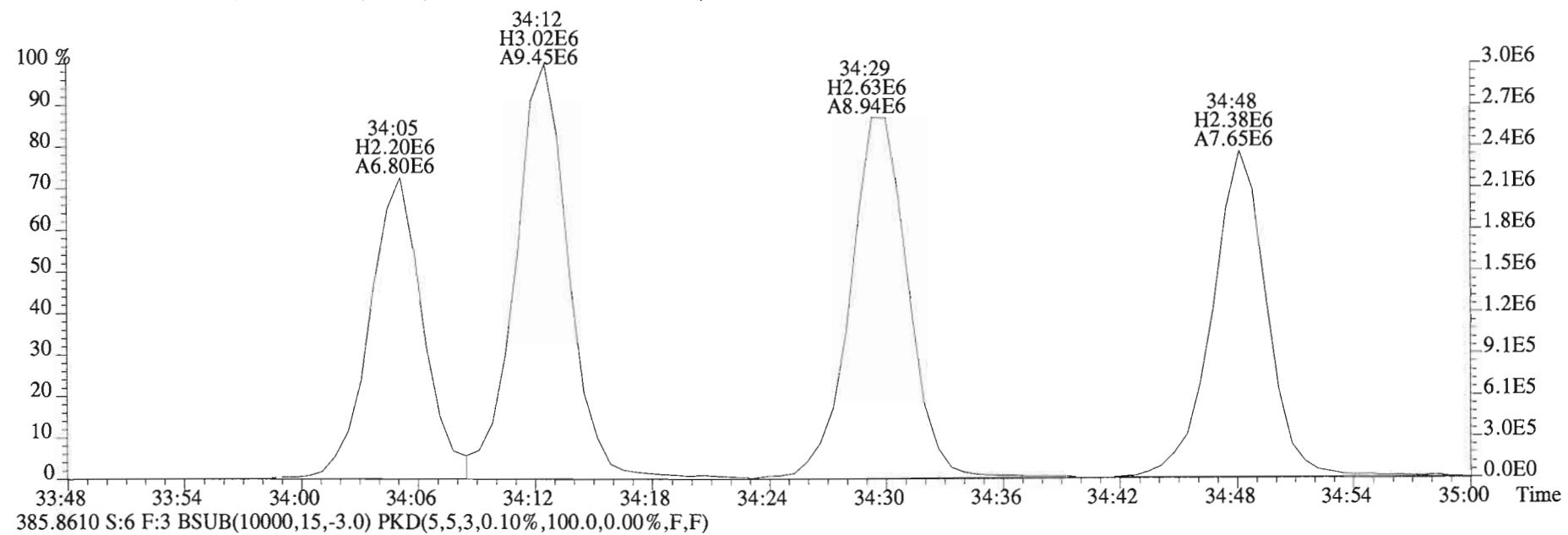
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



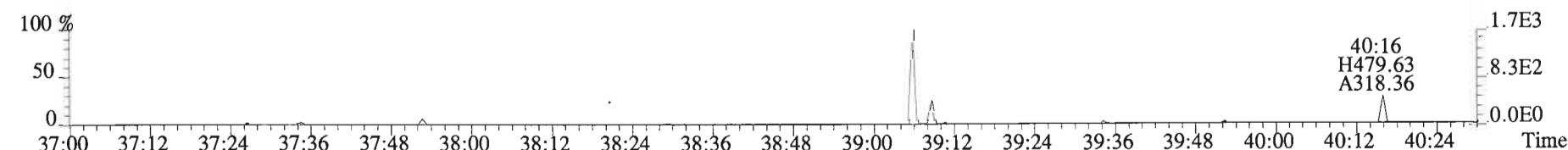
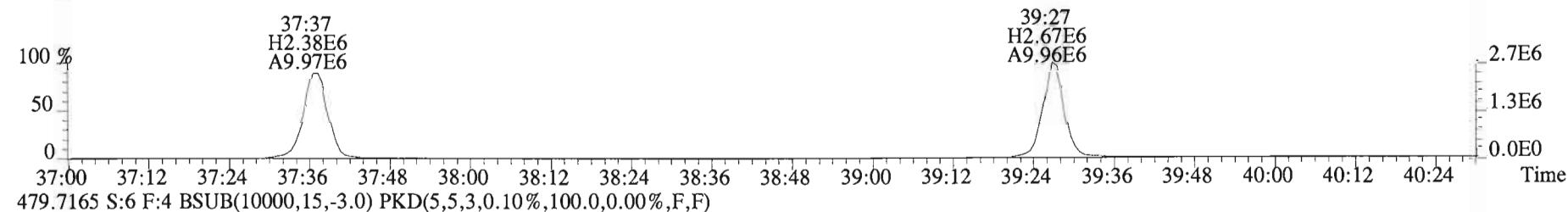
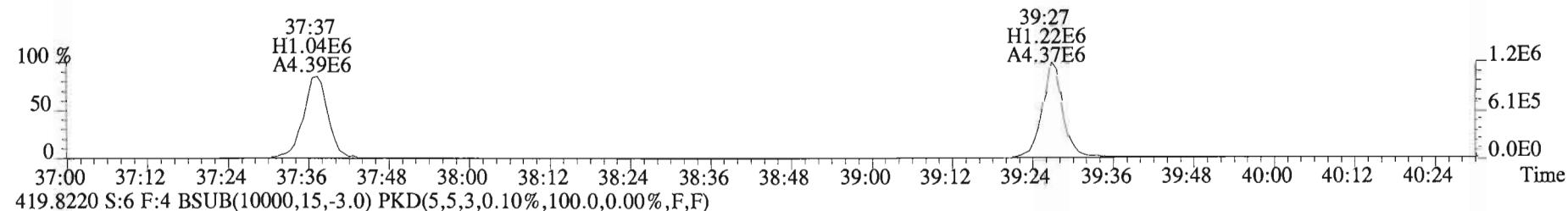
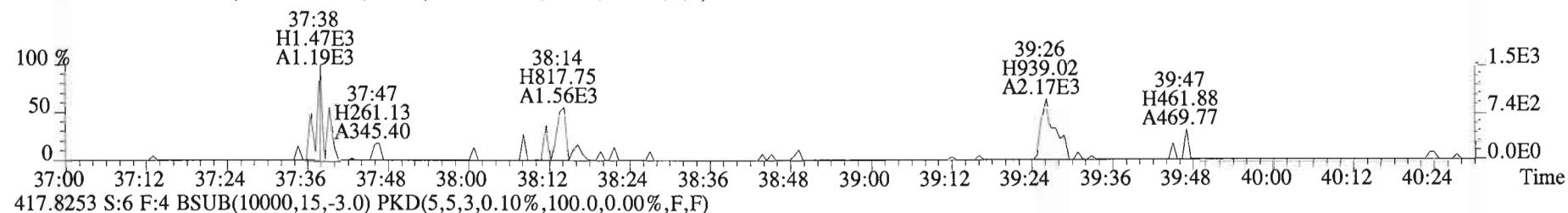
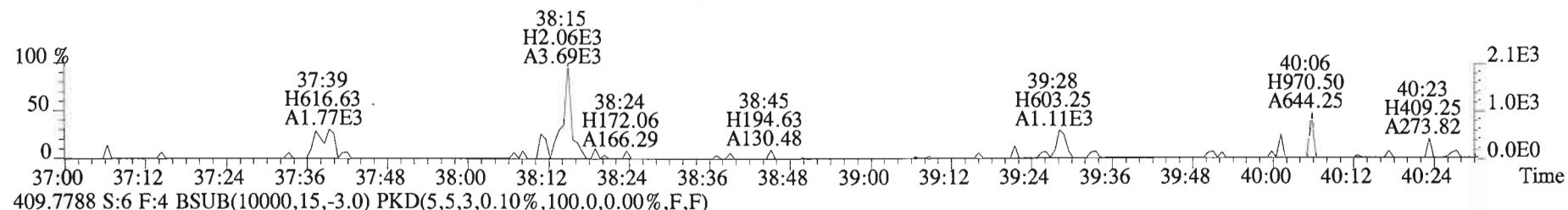
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



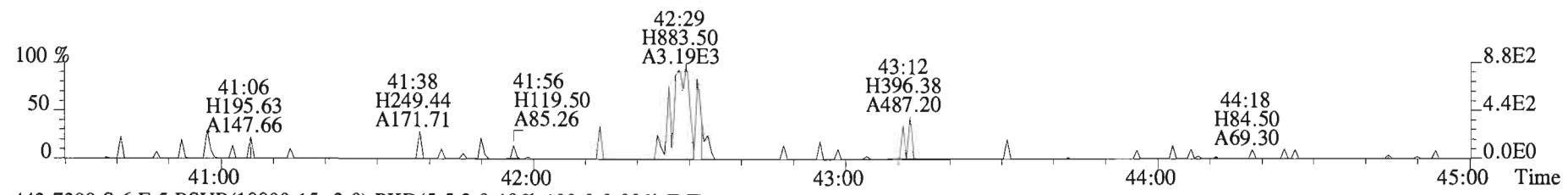
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Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



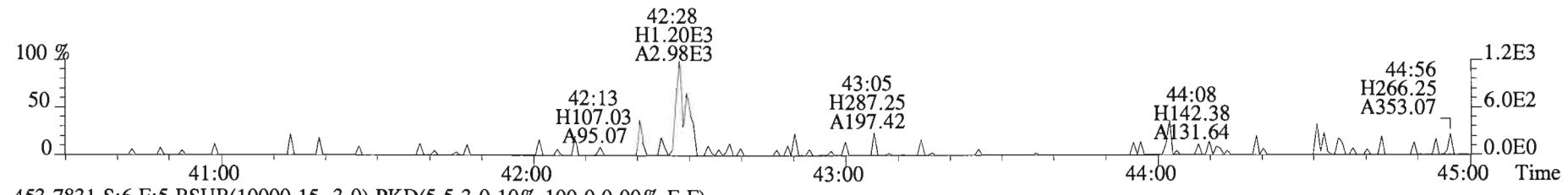
File:150217D2 #1-325 Acq:18-FEB-2015 04:03:51 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
 407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



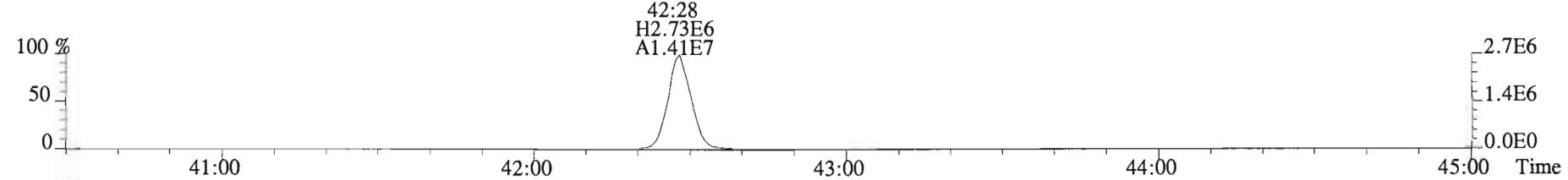
File:150217D2 #1-389 Acq:18-FEB-2015 04:03:51 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BLK1 Method Blank 5 Exp:OCDD_DB5
 441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



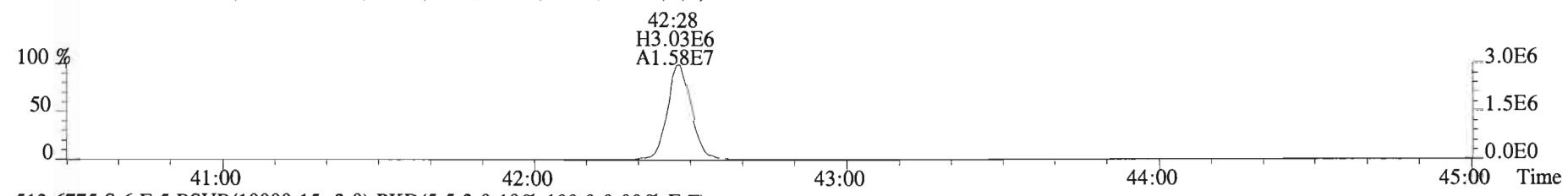
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



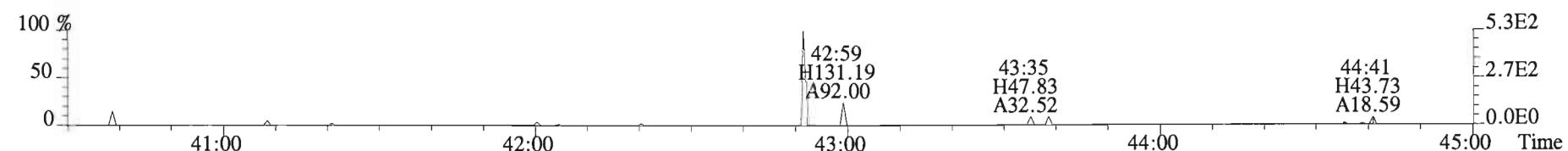
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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)



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

Lab Name: Vista Analytical Laboratory Extraction Batch: B5B0058-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 150217D2-3

Ext. Date: 2-12-15 Shift: Day Analysis Date: 18-FEB-15 Time: 01:37:27

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	8.94	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	47.6	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	50.1	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	50	49.8	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	50	48.5	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	50	49.0	35.0 - 70.0	
OCDD	100	98.2	78.0 - 144.0	
2,3,7,8-TCDF	10	9.44	7.5 - 15.8 8.0 - 14.7 (2)	
1,2,3,7,8-PeCDF	50	49.6	40.0 - 67.0	
2,3,4,7,8-PeCDF	50	49.6	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	50	49.8	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	50	48.9	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	50	48.7	35.0 - 78.0	
1,2,3,7,8,9-HxCDF	50	48.8	39.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	50	48.5	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	50	49.4	39.0 - 69.0	
OCDF	100	96.8	63.0 - 170.0	Analyst: <u>M</u>

Date: 2/19/15

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

Lab Name: Vista Analytical Laboratory Extraction Batch: B5B0058-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 150217D2-3

Ext. Date: 2-12-15 Shift: Day Analysis Date: 18-FEB-15 Time: 01:37:27

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	93.2	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	96.6	21.0 - 227.0	
13C-1,2,3,4,7,8-HxCDD	100	85.1	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	82.9	21.0 - 193.0	
13C-1,2,3,4,6,7,8-HpCDD	100	86.4	26.0 - 166.0	
13C-OCDD	200	133	26.0 - 397.0	
13C-2,3,7,8-TCDF	100	94.4	22.0 - 152.0 26.0 - 126.0 (2)	
13C-1,2,3,7,8-PeCDF	100	100	21.0 - 192.0	
13C-2,3,4,7,8-PeCDF	100	107	13.0 - 328.0	.
13C-1,2,3,4,7,8-HxCDF	100	84.8	19.0 - 202.0	
13C-1,2,3,6,7,8-HxCDF	100	98.9	21.0 - 159.0	
13C-2,3,4,6,7,8-HxCDF	100	86.1	22.0 - 176.0	
13C-1,2,3,7,8,9-HxCDF	100	86.2	17.0 - 205.0	
13C-1,2,3,4,6,7,8-HpCDF	100	79.4	21.0 - 158.0	
13C-1,2,3,4,7,8,9-HpCDF	100	84.3	20.0 - 186.0	
13C-OCDF	200	137	26.0 - 397.0	
CLEANUP STANDARD				
37Cl-2,3,7,8-TCDD	40	40.4	12.4 - 76.4	

Analyst: M)

Date: 2/19/15

Client ID: OPR
Lab ID: B5B0058-BS1

Filename: 150217D2 S:3 Acq:18-FEB-15 01:37:27
GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol: 1.000

ConCal: ST150217D2-1
EndCAL: ST150217D2-2

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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	1.93e+06	0.77 y	1.17	27:02	1.001	8.9430	*	2.5	*		Total Tetra-Dioxins	8.94	9.17	*	*	
	1,2,3,7,8-PeCDD	9.18e+06	0.60 y	0.91	31:39	1.001	47.604	*	2.5	*		Total Penta-Dioxins	47.6	47.8	*	*	
	1,2,3,4,7,8-HxCDD	8.55e+06	1.30 y	1.08	35:00	1.001	50.063	*	2.5	*		Total Hexa-Dioxins	148	149	*	*	
	1,2,3,6,7,8-HxCDD	8.28e+06	1.24 y	1.06	35:07	1.001	49.840	*	2.5	*		Total Hepta-Dioxins	49.0	49.3	*	*	
	1,2,3,7,8,9-HxCDD	8.26e+06	1.26 y	0.93	35:24	1.000	48.483	*	2.5	*		Total Tetra-Furans	9.61	9.66	*	*	
	1,2,3,4,6,7,8-HpCDD	7.90e+06	1.03 y	1.10	38:56	1.000	48.981	*	2.5	*		Total Penta-Furans	100.47	100.74	*	*	
	OCDD	1.22e+07	0.87 y	0.95	42:16	1.000	98.161	*	2.5	*		Total Hexa-Furans	196	197	*	*	
												Total Hepta-Furans	98.0	98.8	*	*	
	2,3,7,8-TCDF	2.80e+06	0.78 y	1.07	26:13	1.001	9.4419	*	2.5	*							
	1,2,3,7,8-PeCDF	1.57e+07	1.58 y	1.07	30:27	1.001	49.616	*	2.5	*							
	2,3,4,7,8-PeCDF	1.63e+07	1.62 y	1.03	31:21	1.000	49.588	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.48e+07	1.30 y	1.38	34:06	1.001	49.782	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.70e+07	1.29 y	1.26	34:14	1.000	48.898	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.43e+07	1.30 y	1.29	34:50	1.000	48.739	*	2.5	*							
	1,2,3,7,8,9-HxCDF	1.11e+07	1.30 y	1.19	35:47	1.000	48.756	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.16e+07	1.07 y	1.61	37:39	1.001	48.516	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	1.15e+07	1.10 y	1.53	39:28	1.000	49.414	*	2.5	*							
	OCDF	1.60e+07	0.90 y	1.10	42:30	1.000	96.840	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.84e+07	0.80 y	1.06	27:01	1.022	93.173					93.2					
IS	13C-1,2,3,7,8-PeCDD	2.12e+07	0.63 y	1.18	31:38	1.197	96.576					96.6					
IS	13C-1,2,3,4,7,8-HxCDD	1.58e+07	1.24 y	0.72	34:59	1.014	85.082					85.1					
IS	13C-1,2,3,6,7,8-HxCDD	1.56e+07	1.25 y	0.74	35:06	1.017	82.016					82.0					
IS	13C-1,2,3,7,8,9-HxCDD	1.83e+07	1.21 y	0.85	35:24	1.026	82.946					82.9					.
IS	13C-1,2,3,4,6,7,8-HpCDD	1.46e+07	1.05 y	0.65	38:55	1.128	86.440					86.4					
IS	13C-OCDD	2.62e+07	0.87 y	0.76	42:16	1.225	132.59					66.3					
IS	13C-2,3,7,8-TCDF	2.76e+07	0.79 y	0.92	26:12	0.991	94.364					94.4					
IS	13C-1,2,3,7,8-PeCDF	2.95e+07	1.61 y	0.92	30:26	1.151	100.41					100					
IS	13C-2,3,4,7,8-PeCDF	3.18e+07	1.59 y	0.93	31:20	1.186	107.11					107					
IS	13C-1,2,3,4,7,8-HxCDF	2.15e+07	0.51 y	0.98	34:05	0.988	84.791					84.8					
IS	13C-1,2,3,6,7,8-HxCDF	2.77e+07	0.51 y	1.08	34:13	0.992	98.905					98.9					
IS	13C-2,3,4,6,7,8-HxCDF	2.28e+07	0.51 y	1.03	34:49	1.009	86.072					86.1					
IS	13C-1,2,3,7,8,9-HxCDF	1.92e+07	0.51 y	0.86	35:46	1.037	86.239					86.2					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.48e+07	0.45 y	0.72	37:37	1.090	79.433					79.4					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.52e+07	0.44 y	0.70	39:28	1.144	84.294					84.3					
IS	13C-OCDF	3.02e+07	0.89 y	0.85	42:29	1.231	137.35					68.7					
C/Up	37Cl-2,3,7,8-TCDD	8.42e+06		1.12	27:02	1.022	40.386				101	Integrations by Analyst: <u>M</u>	Reviewed by Analyst: <u>J</u>	Date: <u>2/19/15</u>	Date: <u>2/21/15</u>		
RS/RT	13C-1,2,3,4-TCDD	1.87e+07	0.81 y	1.00	26:26	*	100.00										
RS	13C-1,2,3,4-TCDF	3.19e+07	0.79 y	1.00	24:57	*	100.00										
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.59e+07	0.52 y	1.00	34:30	*	100.00										

Client ID: OPR
Lab ID: B5B0058-BS1

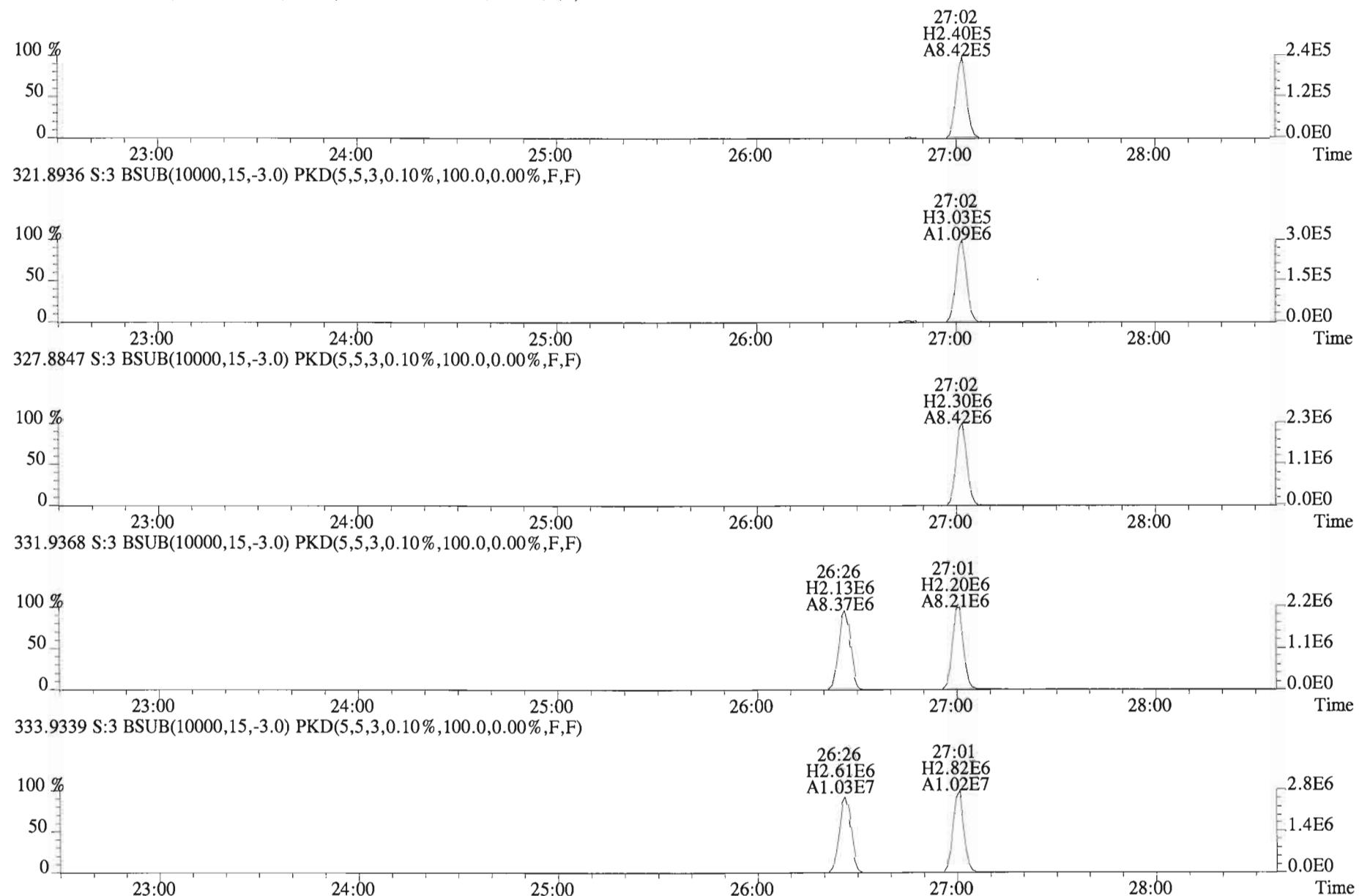
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ConCal: ST150217D2-1
EndCAL: ST150217D2-2

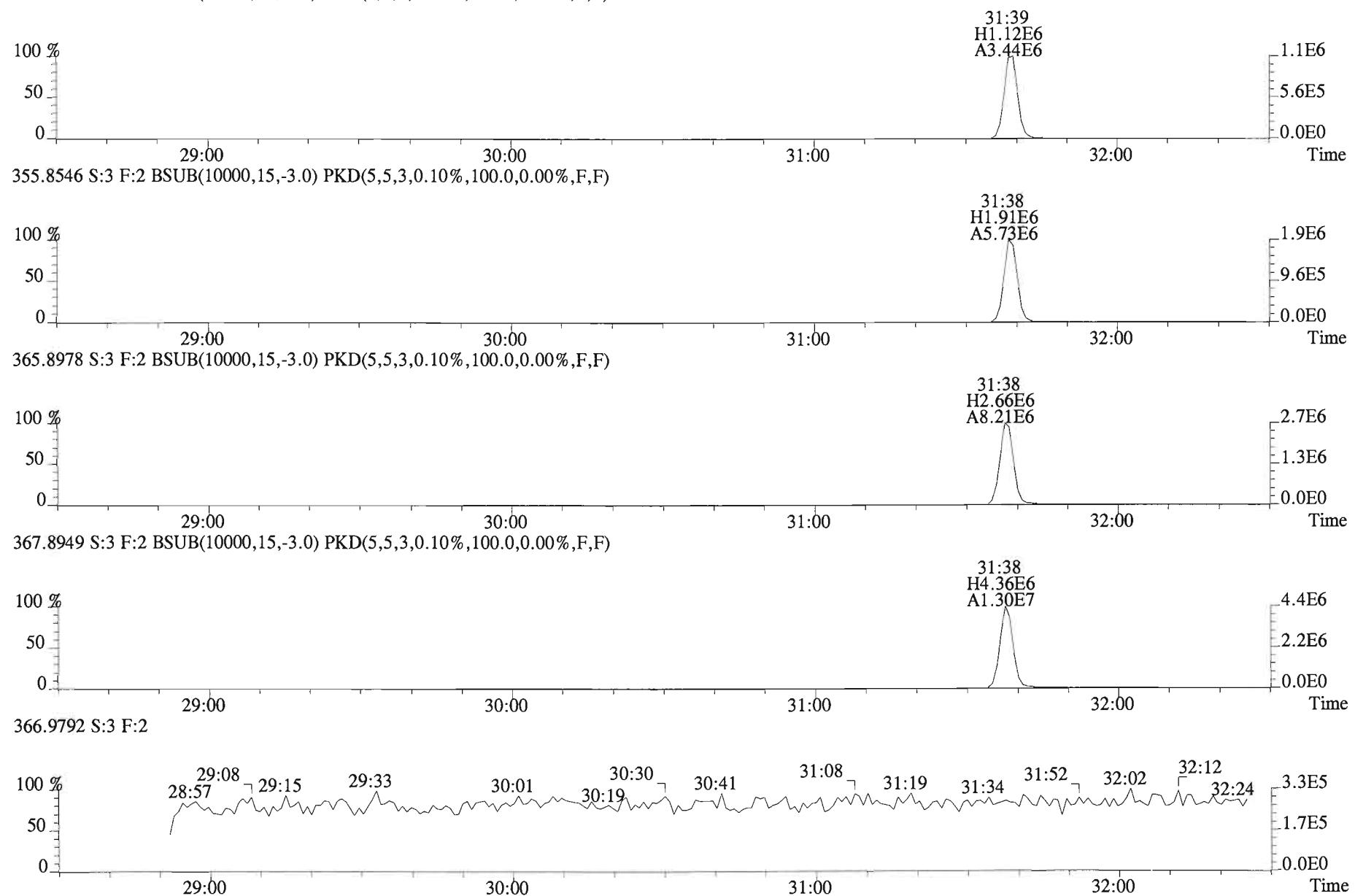
Page 3 of 5

	Name	Resp	RA	RRF	RT	RRT	Conc	Q noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	1.93e+06	0.77 y	1.17	27:02	1.001	35.772	*	2.5	*	Total Tetra-Dioxins	35.8	36.7	*	*	
	1,2,3,7,8-PeCDD	9.18e+06	0.60 y	0.91	31:39	1.001	190.41	*	2.5	*	Total Penta-Dioxins	190	191	*	*	
	1,2,3,4,7,8-HxCDD	8.55e+06	1.30 y	1.08	35:00	1.001	200.25	*	2.5	*	Total Hexa-Dioxins	594	596	*	*	
	1,2,3,6,7,8-HxCDD	8.28e+06	1.24 y	1.06	35:07	1.001	199.36	*	2.5	*	Total Hepta-Dioxins	196	197	*	*	
	1,2,3,7,8,9-HxCDD	8.26e+06	1.26 y	0.93	35:24	1.000	193.93	*	2.5	*	Total Tetra-Furans	38.4	38.6	*	*	
	1,2,3,4,6,7,8-HpCDD	7.90e+06	1.03 y	1.10	38:56	1.000	195.92	*	2.5	*	Total Penta-Furans	401.87	402.97	*	*	
	OCDD	1.22e+07	0.87 y	0.95	42:16	1.000	392.65	*	2.5	*	Total Hexa-Furans	785	786	*	*	
	2,3,7,8-TCDF	2.80e+06	0.78 y	1.07	26:13	1.001	37.768	*	2.5	*	Total Hepta-Furans	392	395	*	*	
	1,2,3,7,8-PeCDF	1.57e+07	1.58 y	1.07	30:27	1.001	198.46	*	2.5	*						
	2,3,4,7,8-PeCDF	1.63e+07	1.62 y	1.03	31:21	1.000	198.35	*	2.5	*						
	1,2,3,4,7,8-HxCDF	1.48e+07	1.30 y	1.38	34:06	1.001	199.13	*	2.5	*						
	1,2,3,6,7,8-HxCDF	1.70e+07	1.29 y	1.26	34:14	1.000	195.59	*	2.5	*						
	2,3,4,6,7,8-HxCDF	1.43e+07	1.30 y	1.29	34:50	1.000	194.96	*	2.5	*						
	1,2,3,7,8,9-HxCDF	1.11e+07	1.30 y	1.19	35:47	1.000	195.02	*	2.5	*						
	1,2,3,4,6,7,8-HpCDF	1.16e+07	1.07 y	1.61	37:39	1.001	194.07	*	2.5	*						
	1,2,3,4,7,8,9-HpCDF	1.15e+07	1.10 y	1.53	39:28	1.000	197.66	*	2.5	*						
	OCDF	1.60e+07	0.90 y	1.10	42:30	1.000	387.36	*	2.5	*						
											Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.84e+07	0.80 y	1.06	27:01	1.022	372.69				93.2					
IS	13C-1,2,3,7,8-PeCDD	2.12e+07	0.63 y	1.18	31:38	1.197	386.30				96.6					
IS	13C-1,2,3,4,7,8-HxCDD	1.58e+07	1.24 y	0.72	34:59	1.014	340.33				85.1					
IS	13C-1,2,3,6,7,8-HxCDD	1.56e+07	1.25 y	0.74	35:06	1.017	328.06				82.0					
IS	13C-1,2,3,7,8,9-HxCDD	1.83e+07	1.21 y	0.85	35:24	1.026	331.79				82.9					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.46e+07	1.05 y	0.65	38:55	1.128	345.76				86.4					
IS	13C-OCDD	2.62e+07	0.87 y	0.76	42:16	1.225	530.35				66.3					
IS	13C-2,3,7,8-TCDF	2.76e+07	0.79 y	0.92	26:12	0.991	377.45				94.4					
IS	13C-1,2,3,7,8-PeCDF	2.95e+07	1.61 y	0.92	30:26	1.151	401.64				100					
IS	13C-2,3,4,7,8-PeCDF	3.18e+07	1.59 y	0.93	31:20	1.186	428.46				107					
IS	13C-1,2,3,4,7,8-HxCDF	2.15e+07	0.51 y	0.98	34:05	0.988	339.17				84.8					
IS	13C-1,2,3,6,7,8-HxCDF	2.77e+07	0.51 y	1.08	34:13	0.992	395.62				98.9					
IS	13C-2,3,4,6,7,8-HxCDF	2.28e+07	0.51 y	1.03	34:49	1.009	344.29				86.1					
IS	13C-1,2,3,7,8,9-HxCDF	1.92e+07	0.51 y	0.86	35:46	1.037	344.96				86.2					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.48e+07	0.45 y	0.72	37:37	1.090	317.73				79.4					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.52e+07	0.44 y	0.70	39:28	1.144	337.18				84.3					
IS	13C-OCDF	3.02e+07	0.89 y	0.85	42:29	1.231	549.41				68.7					
C/Up	37Cl-2,3,7,8-TCDD	8.42e+06		1.12	27:02	1.022	161.55				101	Integrations by Analyst: <u>M</u>	Reviewed by Analyst:			
RS/RT	13C-1,2,3,4-TCDD	1.87e+07	0.81 y	1.00	26:26	*	400.00									
RS	13C-1,2,3,4-TCDF	3.19e+07	0.79 y	1.00	24:57	*	400.00									
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.59e+07	0.52 y	1.00	34:30	*	400.00					Date: <u>2/19/15</u>	Date:			

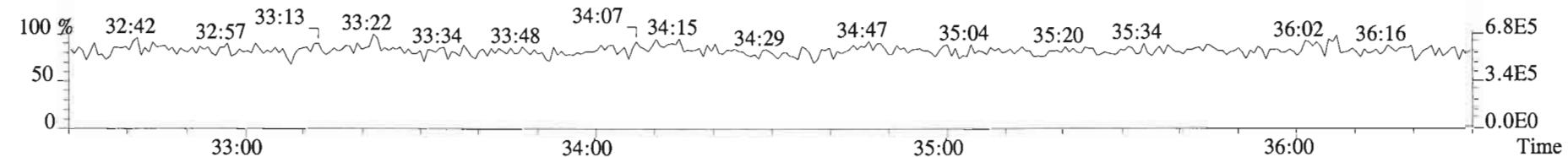
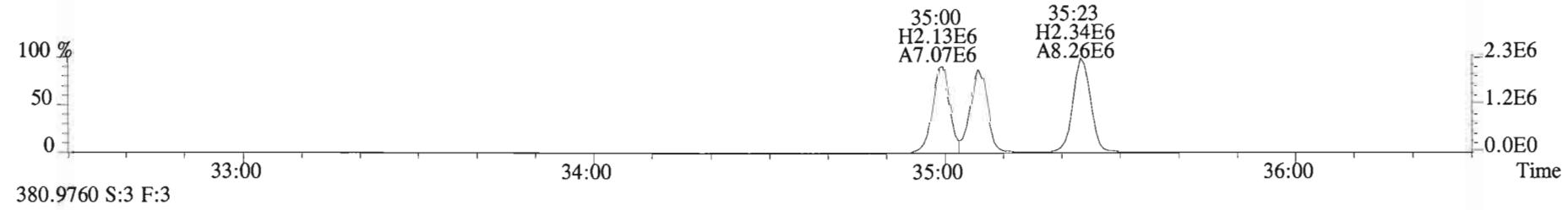
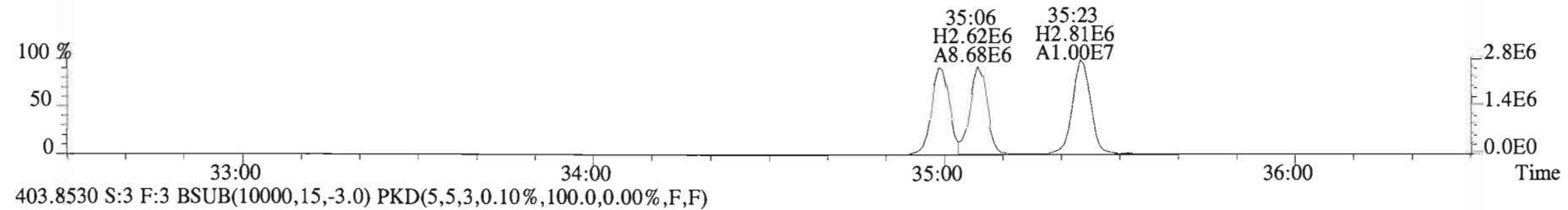
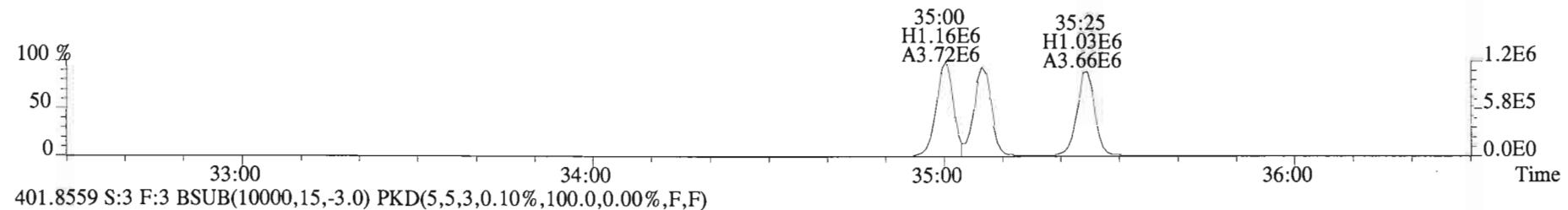
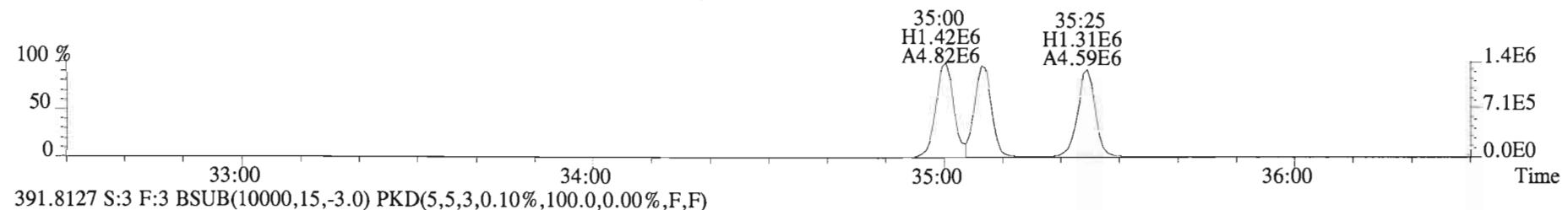
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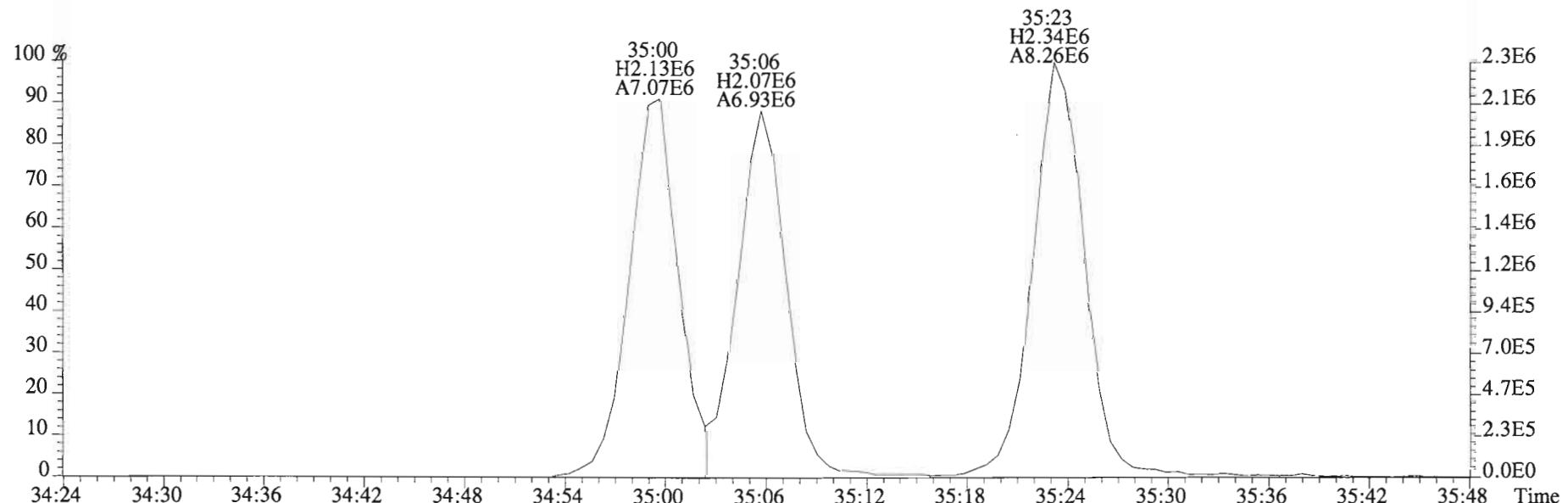
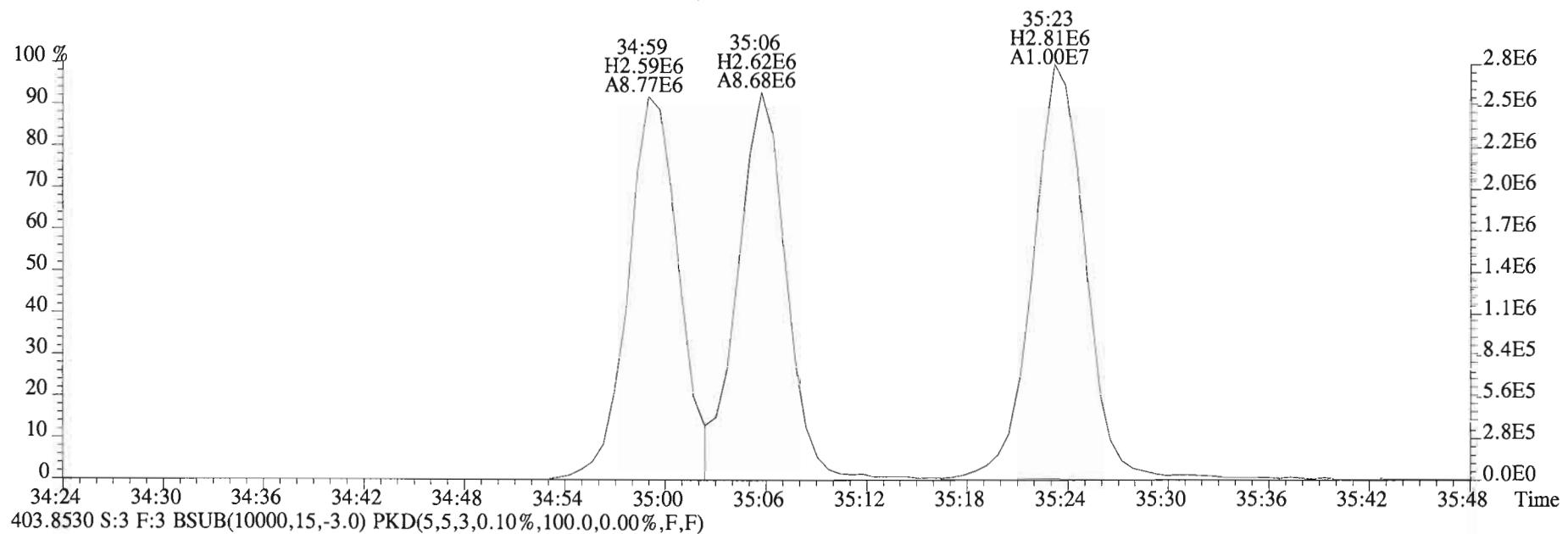
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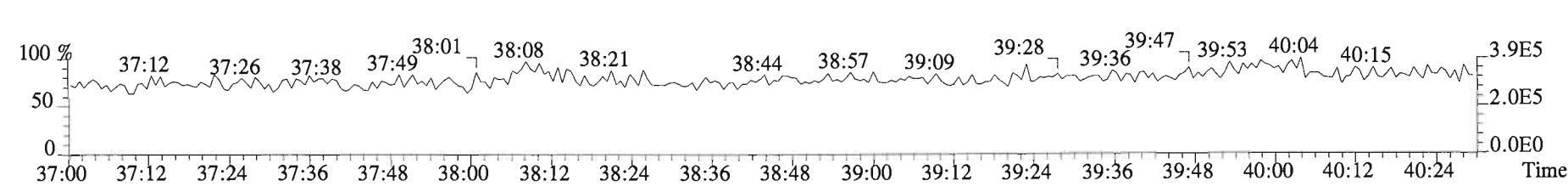
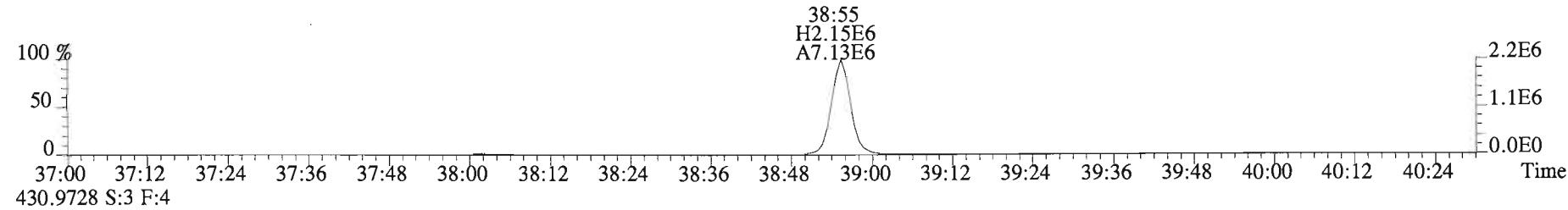
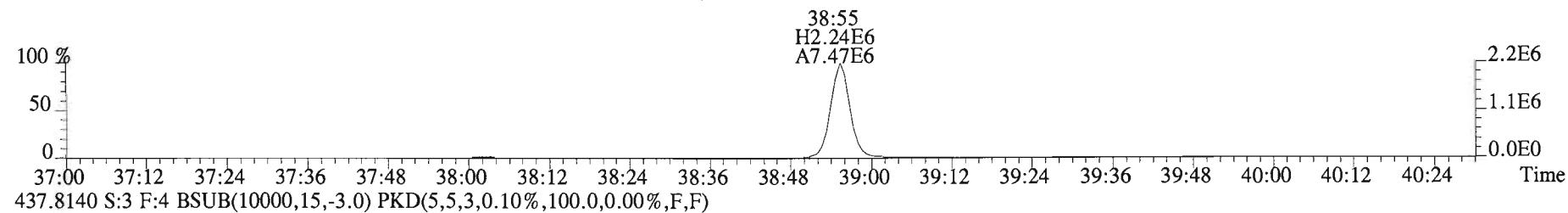
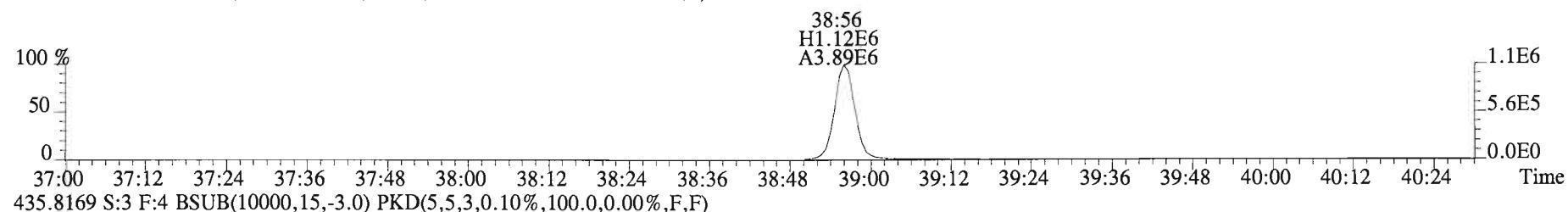
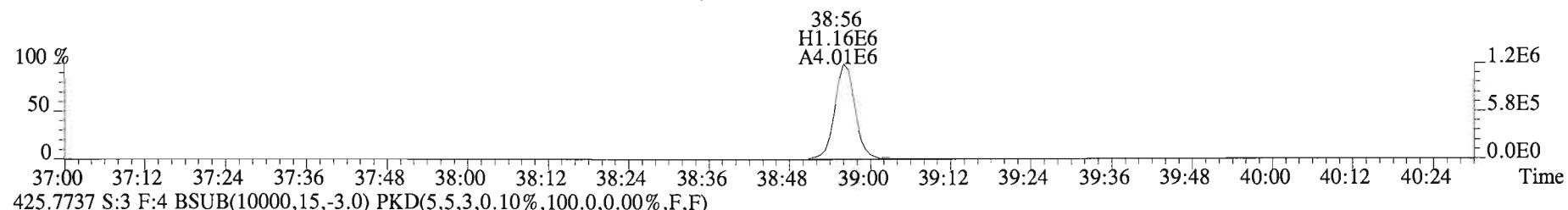
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389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



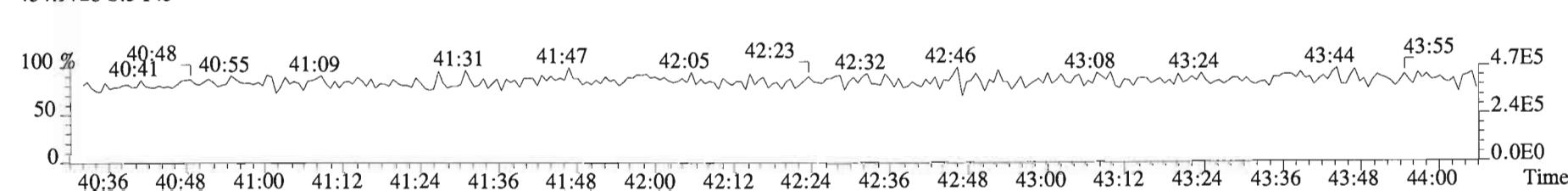
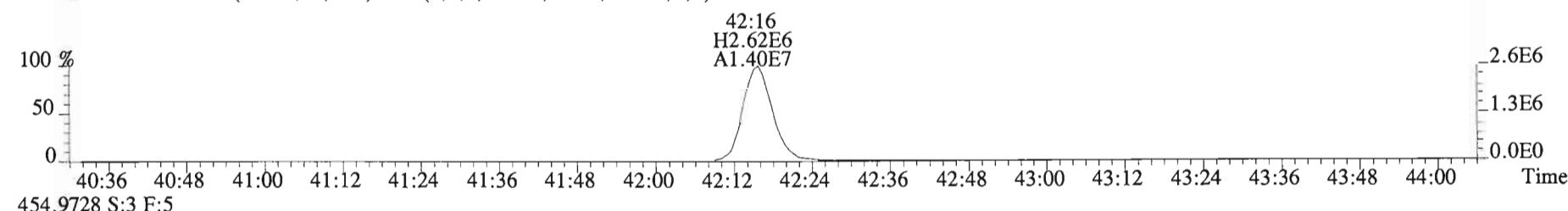
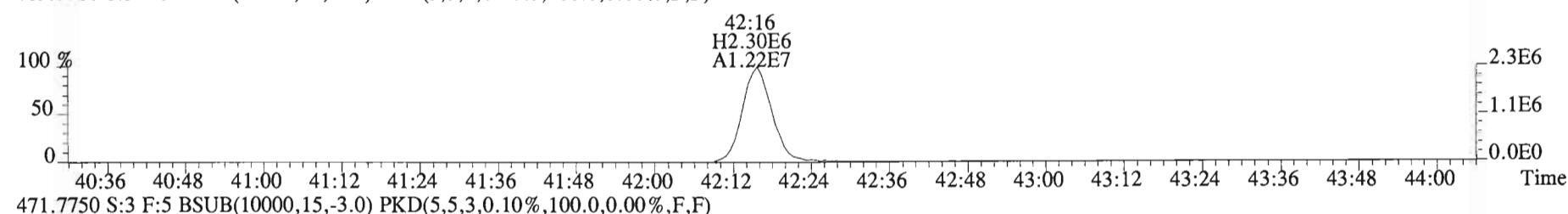
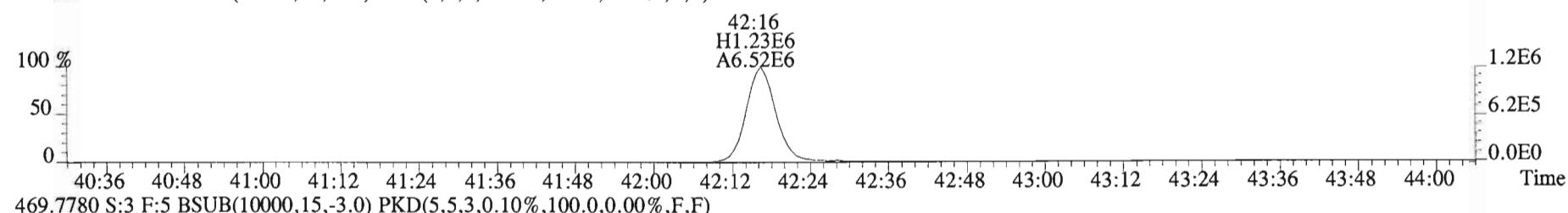
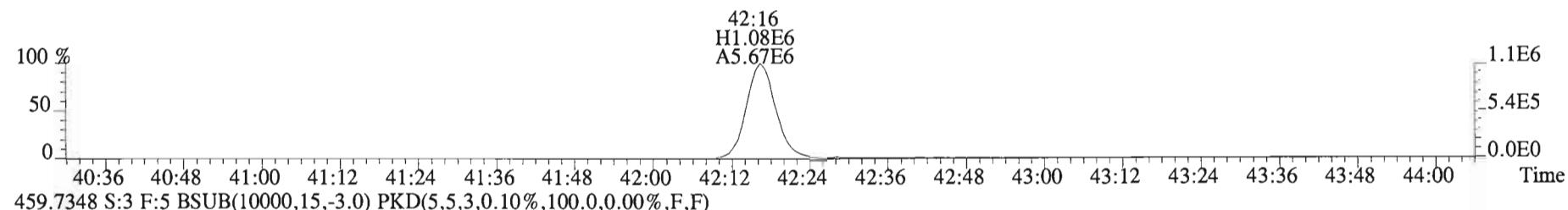
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401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



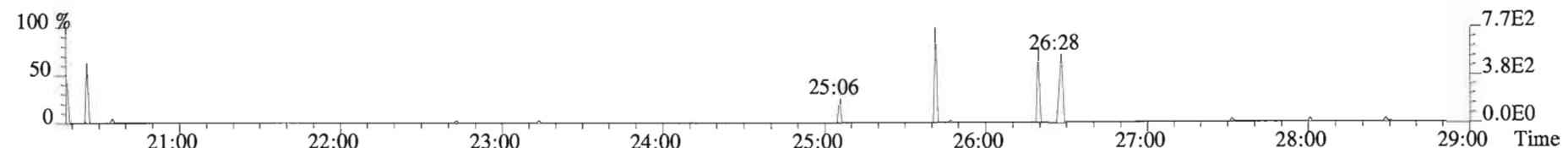
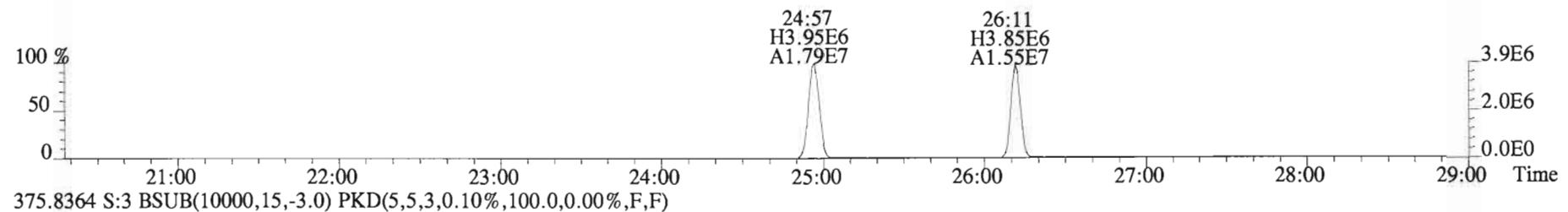
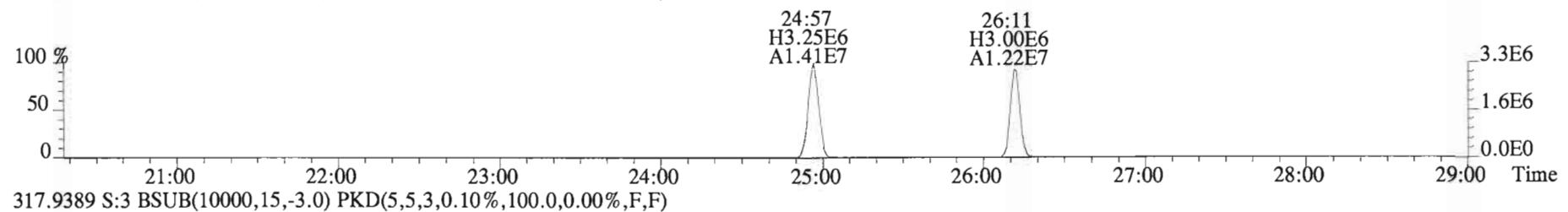
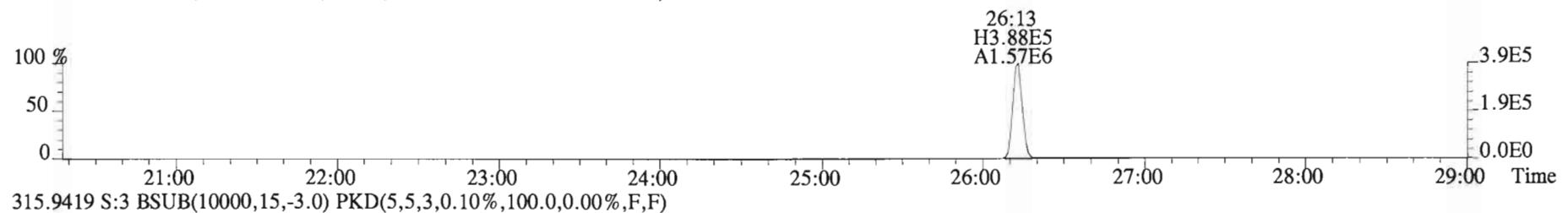
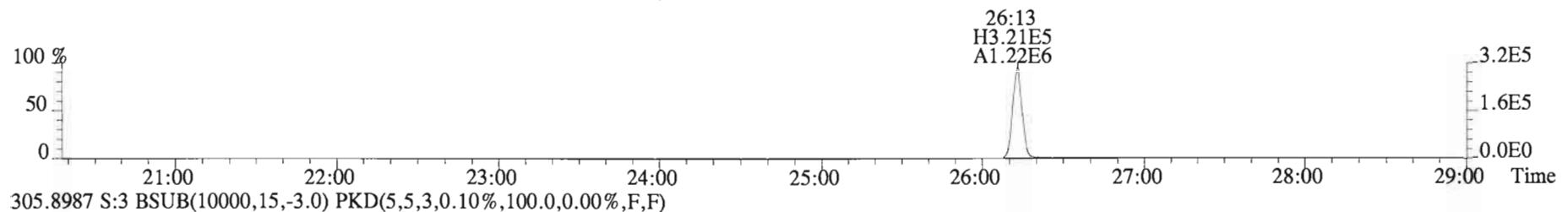
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423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



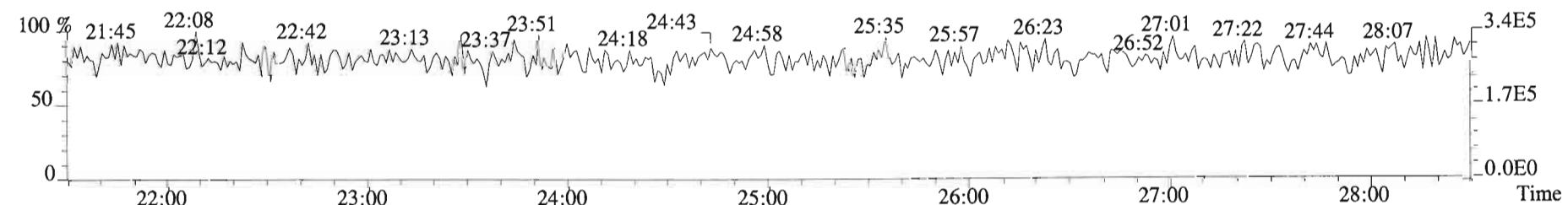
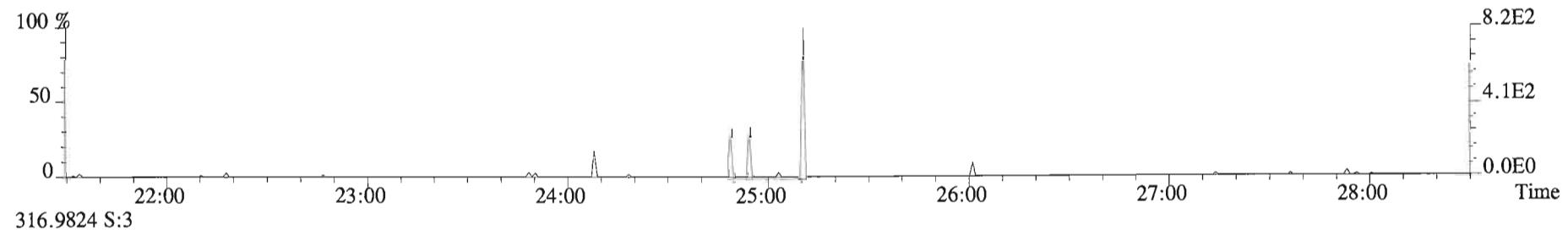
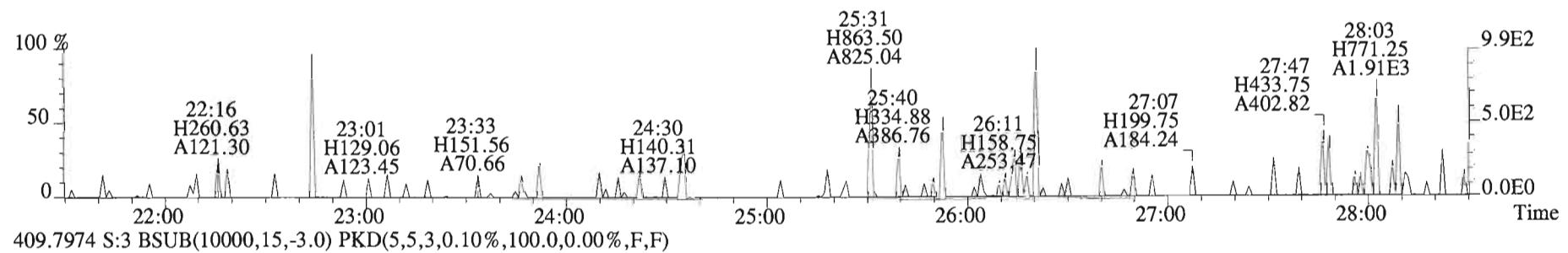
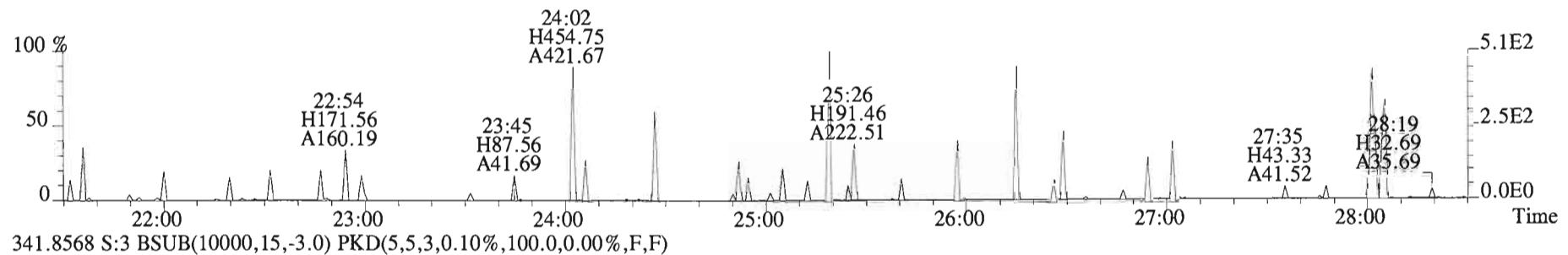
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457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



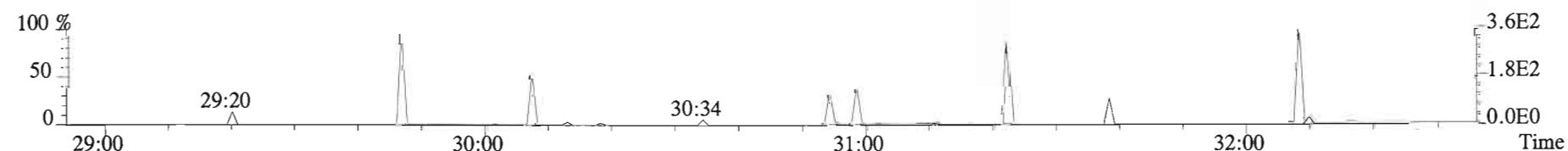
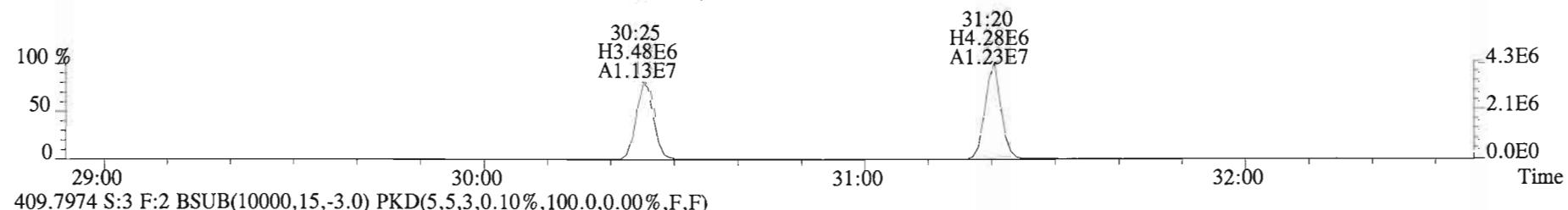
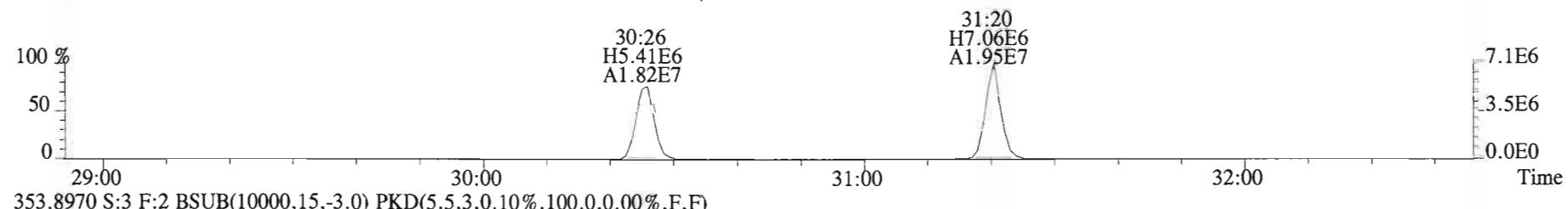
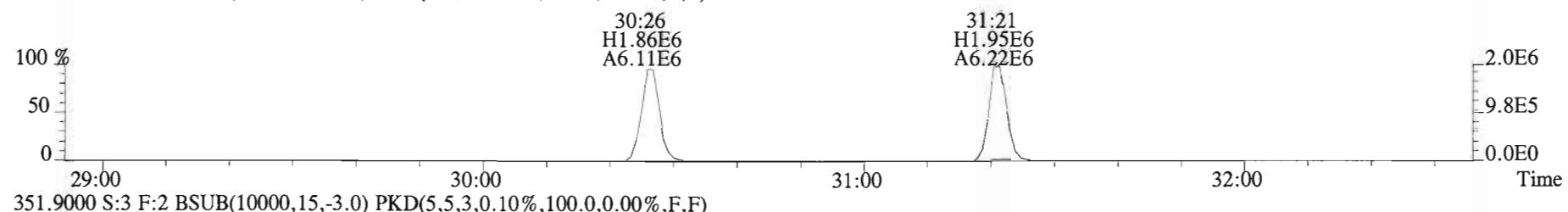
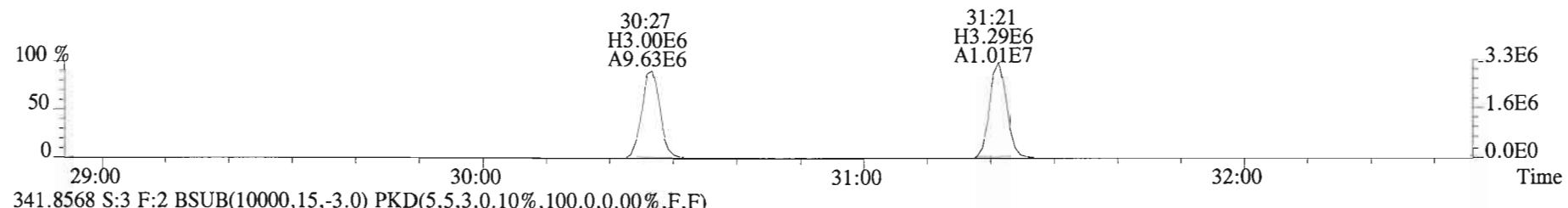
File:150217D2 #1-551 Acq:18-FEB-2015 01:37:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BS1 OPR 5 Exp:OCDD_DB5
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



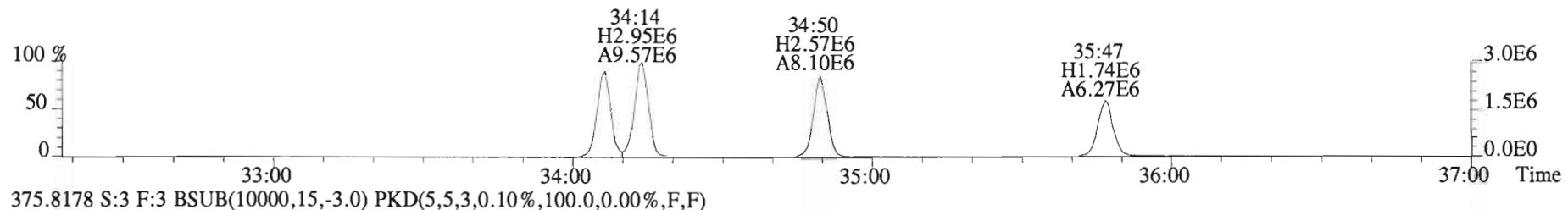
File:150217D2 #1-551 Acq:18-FEB-2015 01:37:27 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BS1 OPR 5 Exp:OCDD_DB5
 339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



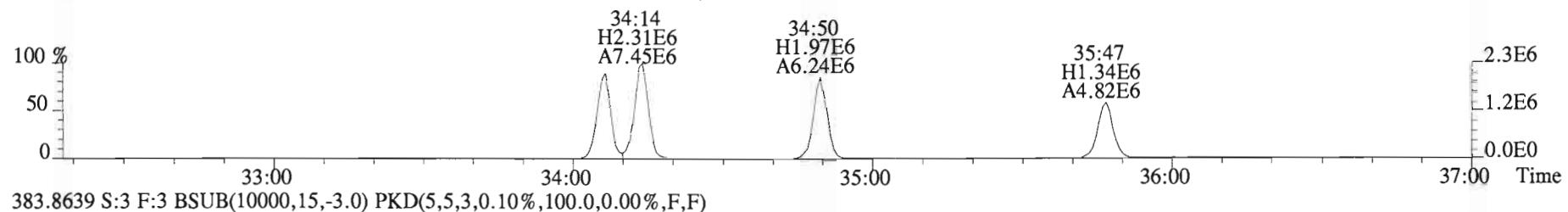
File:150217D2 #1-251 Acq:18-FEB-2015 01:37:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BS1 OPR 5 Exp:OCDD_DB5
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



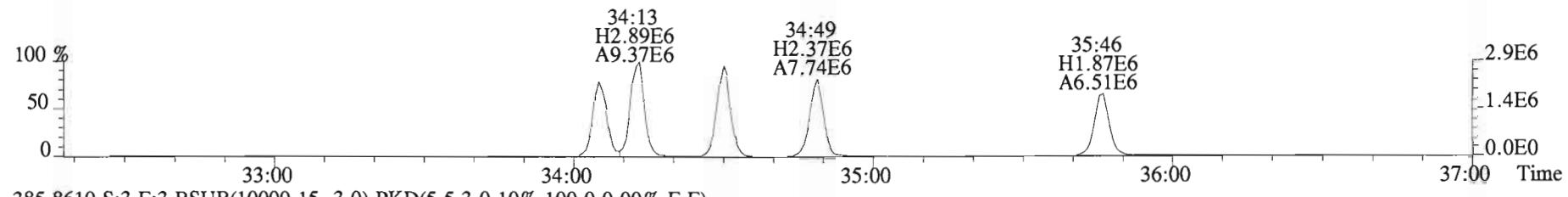
File:150217D2 #1-393 Acq:18-FEB-2015 01:37:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BS1 OPR 5 Exp:OCDD_DB5
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



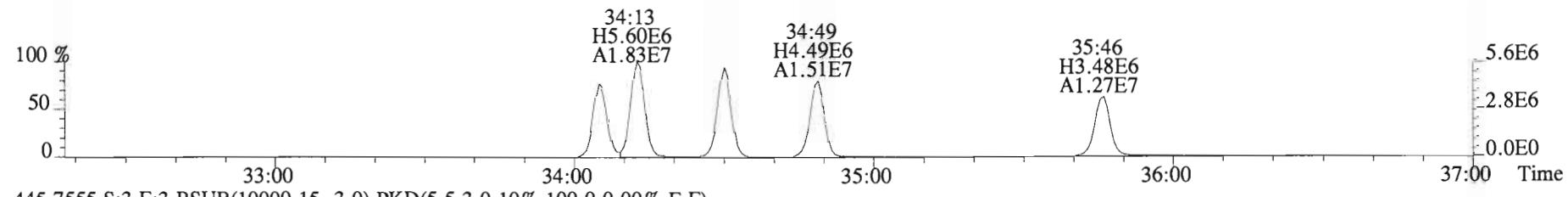
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



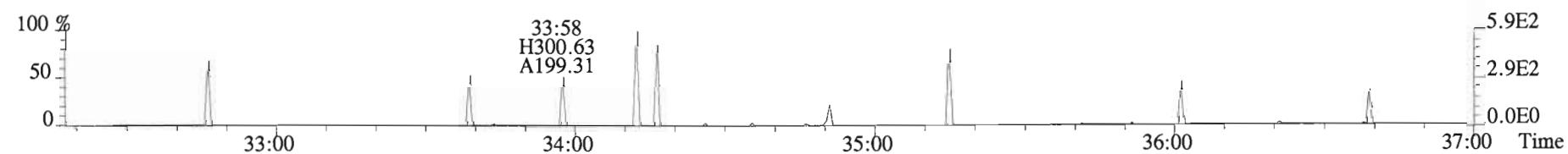
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



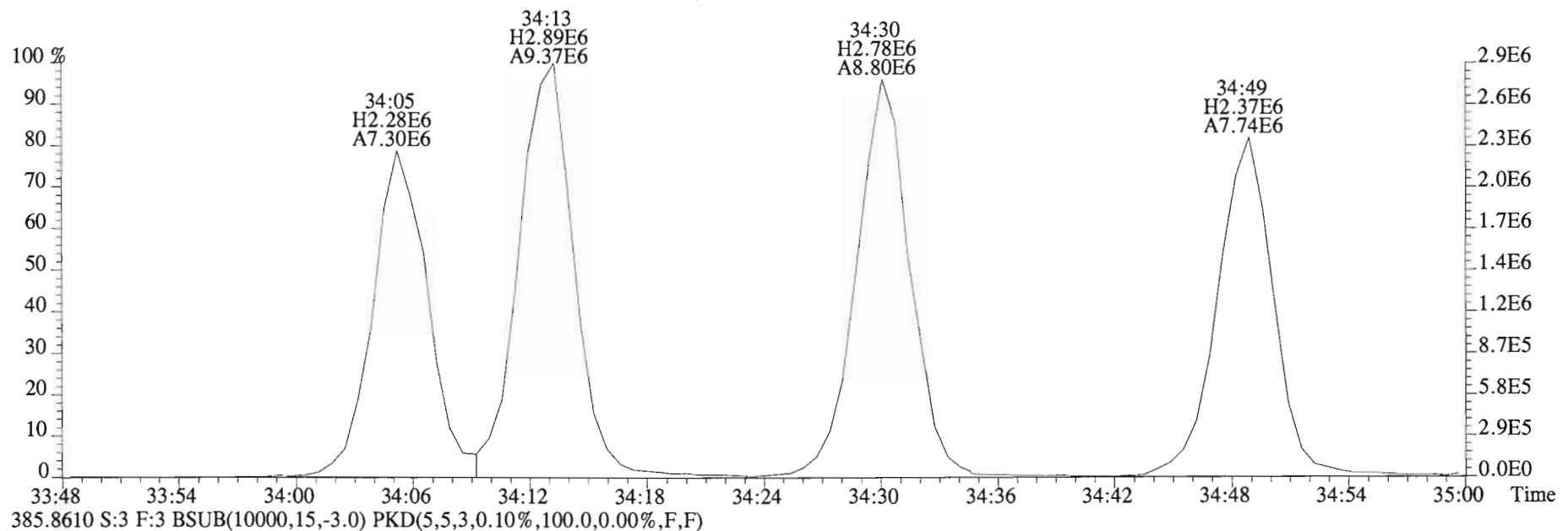
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



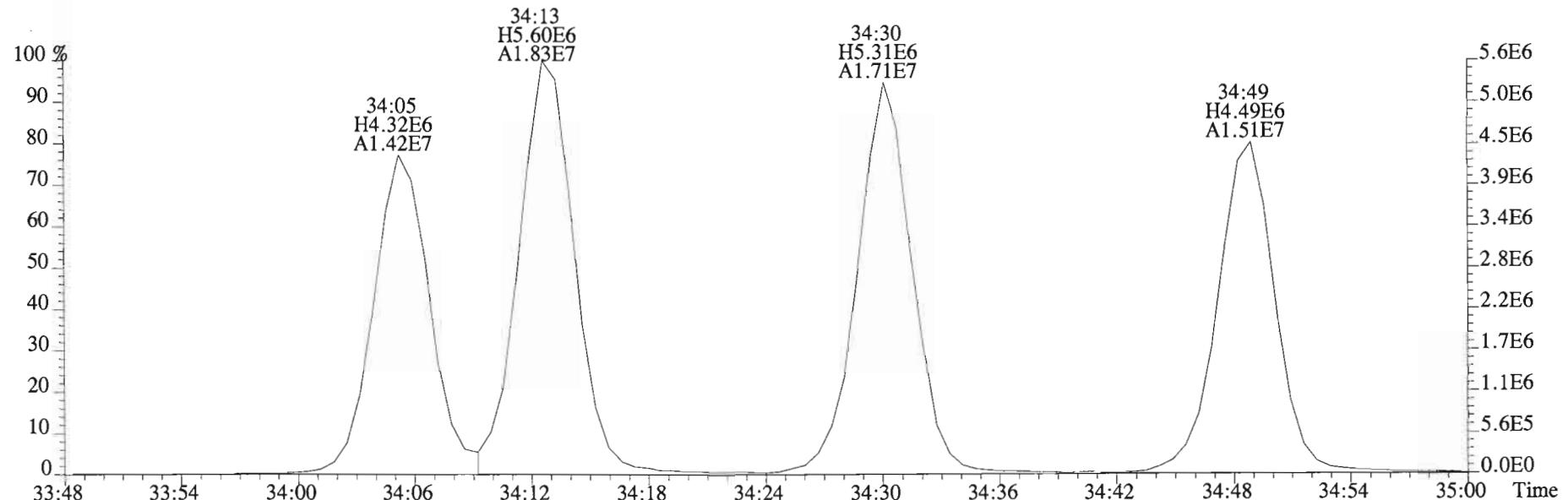
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



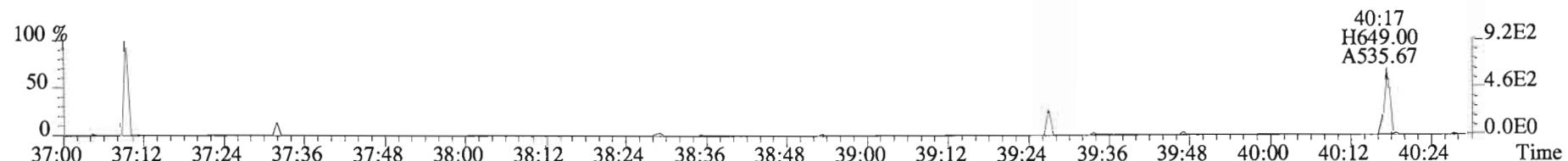
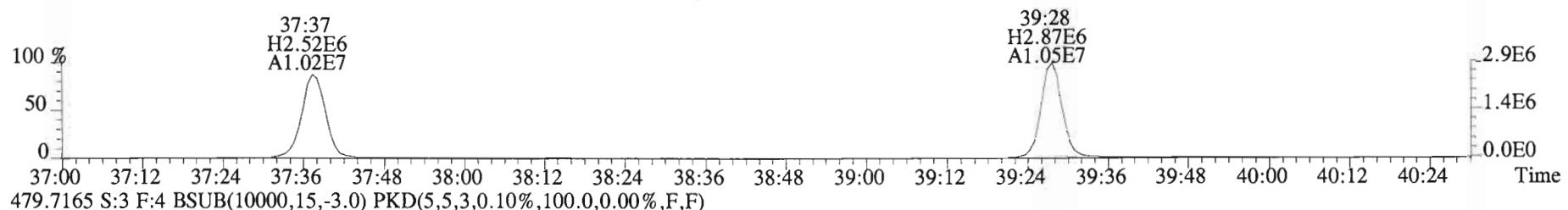
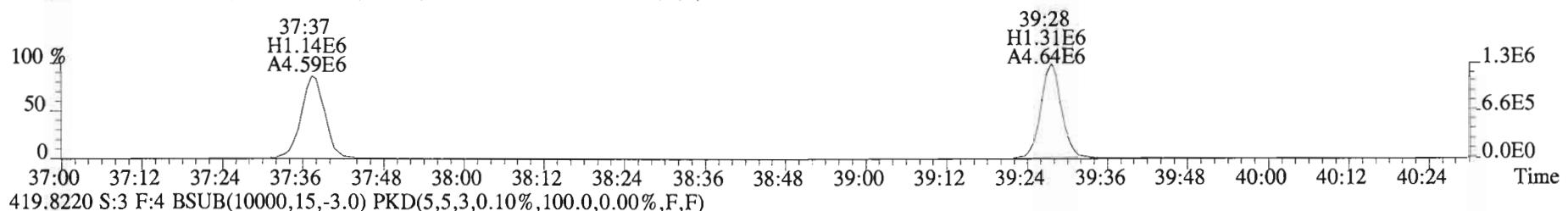
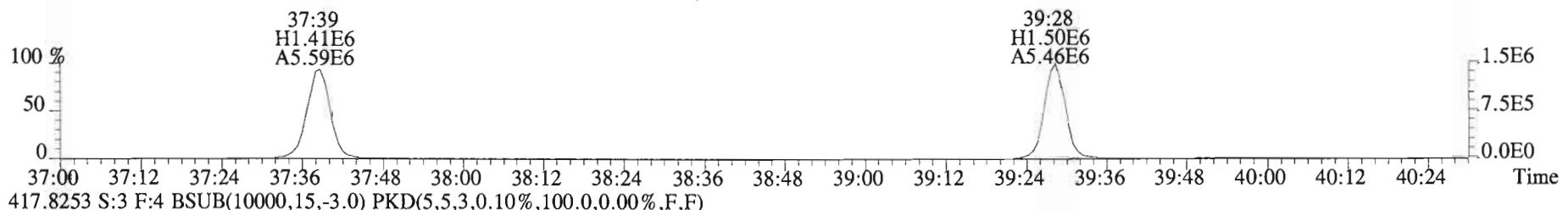
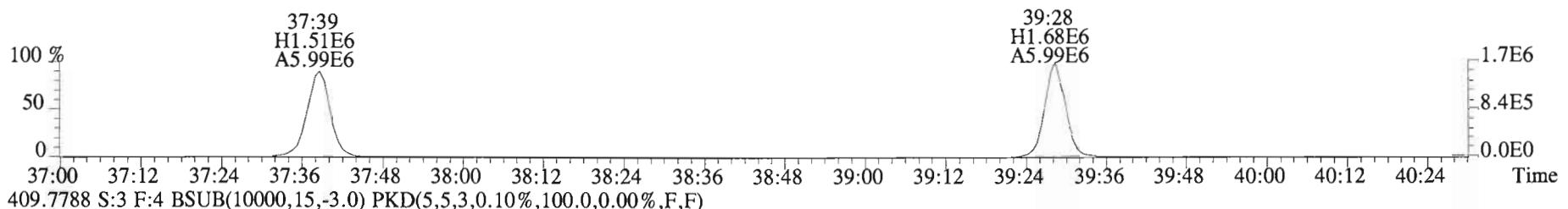
File:150217D2 #1-393 Acq:18-FEB-2015 01:37:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BS1 OPR 5 Exp:OCDD_DB5
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



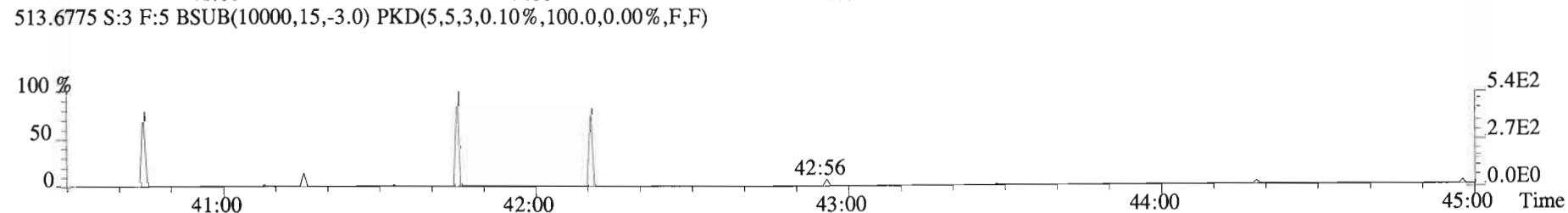
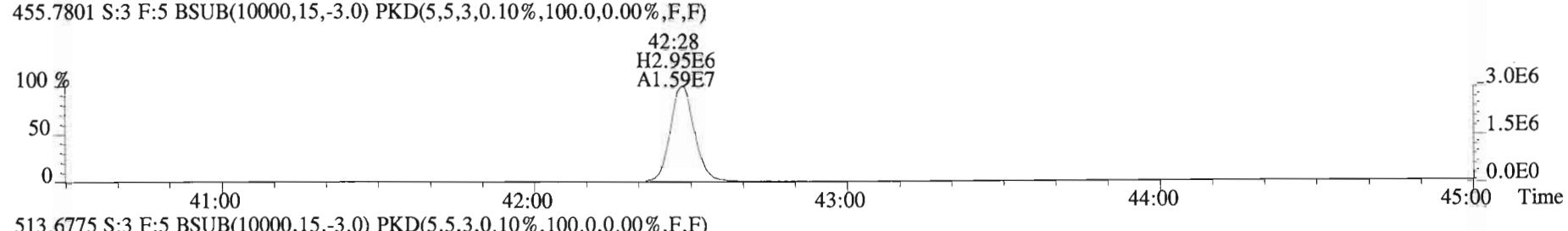
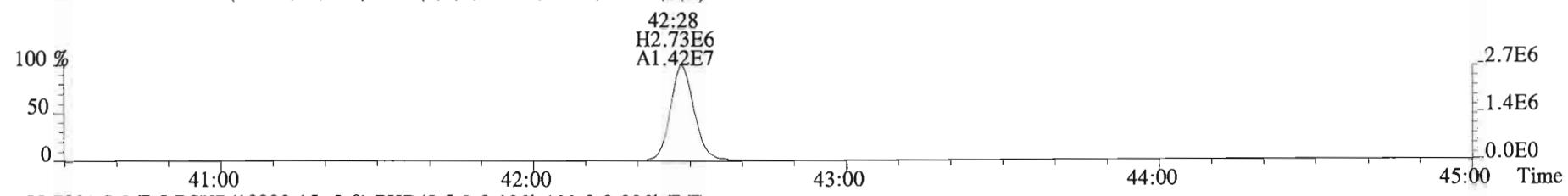
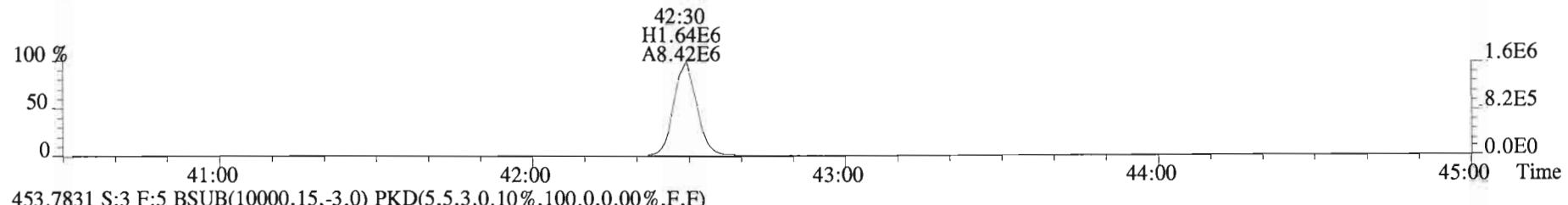
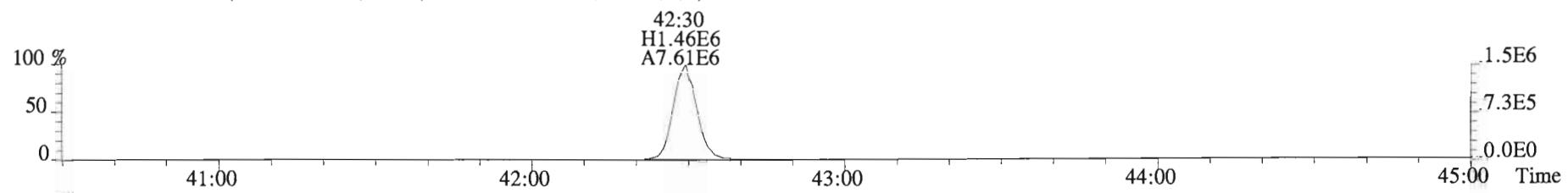
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:150217D2 #1-325 Acq:18-FEB-2015 01:37:27 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BS1 OPR 5 Exp:OCDD_DB5
 407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:150217D2 #1-389 Acq:18-FEB-2015 01:37:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B5B0058-BS1 OPR 5 Exp:OCDD_DB5
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: WM-MH-61-20150203-S
Lab ID: 1500147-02

Filename: 150220D1 S:13 Acq:20-FEB-15 20:47:41
GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol:10.014

ConCal: ST150220D1-1
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	1.59e+05	0.60 n	1.17	27:01	1.000	0.85215	*	2.5	*		Total Tetra-Dioxins	19.1	20.2	*	*	
	1,2,3,7,8-PeCDD	6.86e+05	0.62 y	0.91	31:38	1.000	5.0490	*	2.5	*		Total Penta-Dioxins	51.7	51.7	*	*	
	1,2,3,4,7,8-HxCDD	1.21e+06	1.08 y	1.08	35:00	1.001	9.9574	*	2.5	*		Total Hexa-Dioxins	414	414	*	*	
	1,2,3,6,7,8-HxCDD	3.71e+06	1.31 y	1.06	35:06	1.000	31.550	*	2.5	*		Total Hepta-Dioxins	3090	3090	*	*	
	1,2,3,7,8,9-HxCDD	2.01e+06	1.29 y	0.93	35:24	1.000	16.704	*	2.5	*		Total Tetra-Furans	118	120	*	*	
	1,2,3,4,6,7,8-HpCDD	1.03e+08	1.01 y	1.10	38:57	1.000	900.22	*	2.5	*		Total Penta-Furans	126.90	126.90	*	*	
	OCDD	6.38e+08	0.90 y	0.95	42:18	1.000	8756.4	*	2.5	*		Total Hexa-Furans	259	259	*	*	
												Total Hepta-Furans	706	706	*	*	
	2,3,7,8-TCDF	1.82e+06	0.77 y	1.07	26:12	1.000	7.8555	6163	*	2.5	*						
	1,2,3,7,8-PeCDF	1.01e+06	1.63 y	1.07	30:26	1.000	4.6635	*	2.5	*							
	2,3,4,7,8-PeCDF	1.67e+06	1.58 y	1.03	31:20	1.000	8.2187	*	2.5	*							
	1,2,3,4,7,8-HxCDF	2.68e+06	1.28 y	1.38	34:06	1.000	14.007	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.87e+06	1.35 y	1.26	34:13	1.000	9.2934	*	2.5	*							
	2,3,4,6,7,8-HxCDF	2.31e+06	1.31 y	1.29	34:49	1.000	12.336	*	2.5	*							
	1,2,3,7,8,9-HxCDF	9.02e+04	1.25 y	1.19	35:45	1.000	0.57745	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	3.39e+07	1.09 y	1.61	37:39	1.000	188.71	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	1.82e+06	1.12 y	1.53	39:29	1.000	11.660	*	2.5	*							
	OCDF	7.99e+07	0.92 y	1.10	42:31	1.000	771.35	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	3.18e+07	0.80 y	1.06	27:00	1.022	183.86					92.1					
IS	13C-1,2,3,7,8-PeCDD	2.99e+07	0.61 y	1.18	31:38	1.197	155.37					77.8					
IS	13C-1,2,3,4,7,8-HxCDD	2.25e+07	1.24 y	0.72	34:59	1.014	174.82					87.5					
IS	13C-1,2,3,6,7,8-HxCDD	2.20e+07	1.25 y	0.74	35:06	1.017	167.72					84.0					
IS	13C-1,2,3,7,8,9-HxCDD	2.58e+07	1.25 y	0.85	35:23	1.026	169.35					84.8					
IS	13C-1,2,3,4,6,7,8-HpCDD	2.07e+07	1.06 y	0.65	38:56	1.128	177.83					89.0					
IS	13C-OCDD	3.07e+07	0.91 y	0.76	42:18	1.226	224.90					56.3					
IS	13C-2,3,7,8-TCDF	4.33e+07	0.77 y	0.92	26:11	0.991	193.82					97.0					
IS	13C-1,2,3,7,8-PeCDF	4.01e+07	1.58 y	0.92	30:26	1.151	178.77					89.5					
IS	13C-2,3,4,7,8-PeCDF	3.92e+07	1.60 y	0.93	31:20	1.186	173.03					86.6					
IS	13C-1,2,3,4,7,8-HxCDF	2.76e+07	0.53 y	0.98	34:05	0.988	157.74					79.0					
IS	13C-1,2,3,6,7,8-HxCDF	3.20e+07	0.50 y	1.08	34:13	0.992	165.35					82.8					
IS	13C-2,3,4,6,7,8-HxCDF	2.90e+07	0.51 y	1.03	34:49	1.009	158.27					79.2					
IS	13C-1,2,3,7,8,9-HxCDF	2.63e+07	0.51 y	0.86	35:46	1.037	171.31					85.8					
IS	13C-1,2,3,4,6,7,8-HpCDF	2.22e+07	0.45 y	0.72	37:38	1.091	172.58					86.4					
IS	13C-1,2,3,4,7,8,9-HpCDF	2.05e+07	0.45 y	0.70	39:28	1.144	164.43					82.3					
IS	13C-OCDF	3.77e+07	0.89 y	0.85	42:30	1.232	248.67					62.3					
C/Up	37Cl-2,3,7,8-TCDD	1.44e+07		1.12	27:02	1.022	78.811					98.6	Integrations by Analyst:	MJS	Reviewed by Analyst:	HR	
RS/RT	13C-1,2,3,4-TCDD	3.26e+07	0.80 y	1.00	26:26	*	199.73										
RS	13C-1,2,3,4-TCDF	4.86e+07	0.77 y	1.00	24:56	*	199.73										
RS/RT	13C-1,2,3,4,6,9-HxCDF	3.57e+07	0.52 y	1.00	34:30	*	199.73						Date: 2/23/15		Date: 2/24/15		

Totals class: TCDD EMPC

Entry #: 19

Run: 18 File: 150220D1 S: 13 I: 1 F: 1
 Acquired: 20-FEB-15 20:47:41 Processed: 21-FEB-15 07:53:14

Total Concentration: 20.152 Unnamed Concentration: 19.299

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
23:29	4.035e+05	5.650e+05	0.71	y	9.685e+05	5.1886
23:52	2.446e+05	3.339e+05	0.73	y	5.784e+05	3.0990
24:18	6.797e+04	8.959e+04	0.76	y	1.576e+05	0.84413
25:05	2.366e+04	2.627e+04	0.90	n	4.650e+04	0.24911
25:18	1.611e+05	2.171e+05	0.74	y	3.781e+05	2.0258
25:28	1.382e+05	1.814e+05	0.76	y	3.196e+05	1.7121
25:40	6.463e+04	7.486e+04	0.86	y	1.395e+05	0.74731
25:54	2.886e+04	3.291e+04	0.88	y	6.177e+04	0.33094
26:05	6.656e+04	9.310e+04	0.71	y	1.597e+05	0.85537
26:25	7.460e+04	1.065e+05	0.70	y	1.811e+05	0.97013
26:32	2.076e+04	2.355e+04	0.88	y	4.431e+04	0.23740
26:46	1.105e+05	1.617e+05	0.68	y	2.722e+05	1.4584
26:54	2.347e+04	3.230e+04	0.73	y	5.577e+04	0.29877
27:01	6.920e+04	1.147e+05	0.60	n	1.591e+05	0.85215
27:20	6.811e+04	8.523e+04	0.80	y	1.533e+05	0.82152
27:27	1.651e+04	1.910e+04	0.86	y	3.561e+04	0.19076
27:54	1.995e+04	3.044e+04	0.66	y	5.039e+04	0.26998

Totals class: PeCDD EMPC

Entry #: 21

Run: 18 File: 150220D1 S: 13 I: 1 F: 2
 Acquired: 20-FEB-15 20:47:41 Processed: 21-FEB-15 07:53:14

Total Concentration: 51.734 Unnamed Concentration: 46.685

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
29:33	6.716e+05		1.076e+06	0.62	y	1.748e+06	12.859	
30:00	2.499e+05		4.178e+05	0.60	y	6.677e+05	4.9126	
30:28	2.990e+05		4.727e+05	0.63	y	7.717e+05	5.6777	
30:37	2.828e+05		4.614e+05	0.61	y	7.443e+05	5.4756	
30:43	2.342e+05		3.643e+05	0.64	y	5.986e+05	4.4037	
30:56	3.579e+05		6.023e+05	0.59	y	9.601e+05	7.0637	
31:14	1.448e+05		2.296e+05	0.63	y	3.744e+05	2.7547	
31:38	2.620e+05		4.243e+05	0.62	y	6.863e+05	5.0490	1,2,3,7,8-PeCDD
31:43	8.951e+04		1.349e+05	0.66	y	2.244e+05	1.6509	
32:01	1.015e+05		1.550e+05	0.65	y	2.565e+05	1.8874	

Totals class: HxCDD EMPC

Entry #: 23

Run: 18 File: 150220D1 S: 13 I: 1 F: 3
Acquired: 20-FEB-15 20:47:41 Processed: 21-FEB-15 07:53:14

Total Concentration: 413.53 Unnamed Concentration: 355.319

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
33:27	9.948e+06		7.932e+06	1.25	y	1.788e+07		149.52
34:02	1.897e+06		1.537e+06	1.23	y	3.434e+06		28.717
34:17	9.063e+06		7.210e+06	1.26	y	1.627e+07		136.07
34:25	1.819e+06		1.497e+06	1.21	y	3.316e+06		27.728
35:00	6.282e+05		5.793e+05	1.08	y	1.207e+06	1,2,3,4,7,8-HxCDD	9.9574
35:06	2.105e+06		1.601e+06	1.31	y	3.706e+06	1,2,3,6,7,8-HxCDD	31.550
35:18	8.898e+05		6.988e+05	1.27	y	1.589e+06		13.284
35:24	1.130e+06		8.783e+05	1.29	y	2.008e+06	1,2,3,7,8,9-HxCDD	16.704

Totals class: HpCDD EMPC

Entry #: 25

Run: 18 File: 150220D1 S: 13 I: 1 F: 4
Acquired: 20-FEB-15 20:47:41 Processed: 21-FEB-15 07:53:14

Total Concentration: 3090.7 Unnamed Concentration: 2190.499

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
38:03	1.281e+08		1.231e+08	1.04	y	2.512e+08	2190.5	
38:57	5.197e+07		5.128e+07	1.01	y	1.033e+08	900.22	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 18 File: 150220D1 S: 13 I: 1 F: 1
 Acquired: 20-FEB-15 20:47:41 Processed: 21-FEB-15 07:53:14

Total Concentration: 119.95 Unnamed Concentration: 112.094

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
21:18	2.098e+05		2.789e+05	0.75	y	4.886e+05		2.1054
21:52	2.919e+05		3.732e+05	0.78	y	6.651e+05		2.8658
22:29	9.110e+05		1.119e+06	0.81	y	2.030e+06		8.7469
23:02	1.219e+06		1.636e+06	0.75	y	2.855e+06		12.302
23:27	1.069e+06		1.358e+06	0.79	y	2.427e+06		10.456
23:53	5.262e+05		6.948e+05	0.76	y	1.221e+06		5.2608
24:02	4.945e+05		6.515e+05	0.76	y	1.146e+06		4.9379
24:12	5.806e+05		7.412e+05	0.78	y	1.322e+06		5.6954
24:34	2.230e+05		2.711e+05	0.82	y	4.941e+05		2.1289
24:42	3.961e+05		5.458e+05	0.73	y	9.420e+05		4.0586
24:50	6.421e+05		8.295e+05	0.77	y	1.472e+06		6.3406
24:58	9.324e+05		1.200e+06	0.78	y	2.132e+06		9.1873
25:24	7.229e+05		9.148e+05	0.79	y	1.638e+06		7.0563
25:39	4.831e+05		6.167e+05	0.78	y	1.100e+06		4.7387
25:50	3.592e+05		4.641e+05	0.77	y	8.233e+05		3.5474
26:00	3.011e+05		3.802e+05	0.79	y	6.812e+05		2.9352
26:07	3.435e+05		4.540e+05	0.76	y	7.975e+05		3.4364
26:12	7.910e+05		1.032e+06	0.77	y	1.823e+06	7.8555	2,3,7,8-TCDF
26:34	1.292e+06		1.694e+06	0.76	y	2.987e+06		12.869
26:47	9.774e+04		1.329e+05	0.74	y	2.306e+05		0.99360
27:02	3.200e+04		4.216e+04	0.76	y	7.417e+04		0.31956
27:46	1.834e+05		1.106e+05	1.66	n	1.957e+05		0.84334
28:02	1.938e+05		1.664e+05	1.17	n	2.945e+05		1.2689

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

Run: 18 File: 150220D1 S: 13 I: 1 F: 1
Acquired: 20-FEB-15 20:47:41 Processed: 21-FEB-15 07:53:14

Total Concentration: 39.830 Unnamed Concentration: 39.830

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
28:02	5.089e+06	3.237e+06	1.57	y	8.326e+06	39.830

Totals class: PeCDF EMPC

Entry #: 31

Run: 18 File: 150220D1 S: 13 I: 1 F: 2
 Acquired: 20-FEB-15 20:47:41 Processed: 21-FEB-15 07:53:14

Total Concentration: 87.066 Unnamed Concentration: 74.183

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
29:23	1.286e+06	8.075e+05	1.59	y	2.093e+06		10.014	
29:31	3.679e+06	2.280e+06	1.61	y	5.959e+06		28.507	
29:52	1.671e+05	1.160e+05	1.44	y	2.831e+05		1.3542	
30:04	1.562e+06	9.883e+05	1.58	y	2.550e+06		12.198	
30:16	3.603e+05	2.085e+05	1.73	y	5.688e+05		2.7211	
30:26	6.231e+05	3.823e+05	1.63	y	1.005e+06	4.6635		1,2,3,7,8-PeCDF
30:40	1.080e+06	7.098e+05	1.52	y	1.790e+06		8.5619	
31:09	6.879e+04	4.621e+04	1.49	y	1.150e+05		0.55016	
31:15	8.176e+05	5.178e+05	1.58	y	1.335e+06		6.3886	
31:20	1.020e+06	6.454e+05	1.58	y	1.665e+06	8.2187		2,3,4,7,8-PeCDF
31:24	3.739e+05	2.146e+05	1.74	y	5.884e+05		2.8151	
31:38	7.213e+04	4.562e+04	1.58	y	1.178e+05		0.56330	
32:15	6.090e+04	4.564e+04	1.33	y	1.065e+05		0.50965	

Totals class: HxCDF EMPC

Entry #: 33

Run: 18 File: 150220D1 S: 13 I: 1 F: 3
 Acquired: 20-FEB-15 20:47:41 Processed: 21-FEB-15 07:53:14

Total Concentration: 259.01 Unnamed Concentration: 222.796

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
32:54	2.569e+06	1.914e+06	1.34 y	4.482e+06	24.333
33:05	8.890e+06	6.740e+06	1.32 y	1.563e+07	84.847
33:16	1.300e+05	9.183e+04	1.42 y	2.218e+05	1.2041
33:26	2.436e+05	1.866e+05	1.31 y	4.303e+05	2.3356
33:38	1.013e+07	7.712e+06	1.31 y	1.784e+07	96.859
34:00	8.000e+05	6.037e+05	1.33 y	1.404e+06	7.6200
34:06	1.506e+06	1.174e+06	1.28 y	2.680e+06	14.007
34:13	1.074e+06	7.956e+05	1.35 y	1.869e+06	9.2934
34:23	5.568e+04	4.665e+04	1.19 y	1.023e+05	0.55550
34:31	1.432e+05	1.095e+05	1.31 y	2.527e+05	1.3715
34:37	6.739e+04	5.312e+04	1.27 y	1.205e+05	0.65422
34:42	3.258e+04	2.450e+04	1.33 y	5.707e+04	0.30982
34:49	1.308e+06	9.994e+05	1.31 y	2.307e+06	12.336
35:45	5.018e+04	4.002e+04	1.25 y	9.020e+04	0.57745
35:49	2.872e+05	2.114e+05	1.36 y	4.986e+05	2.7066

Totals class: HpCDF EMPC

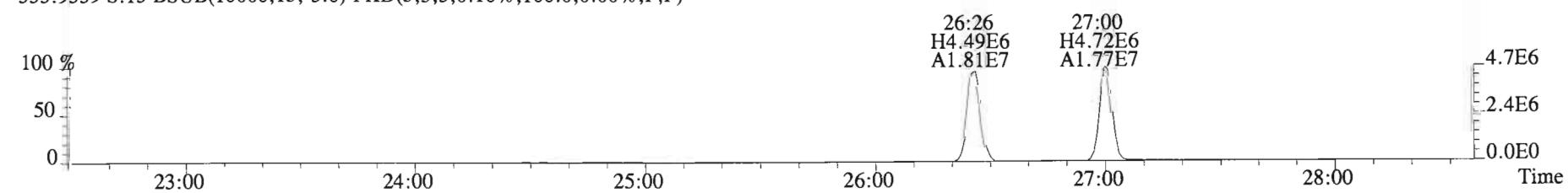
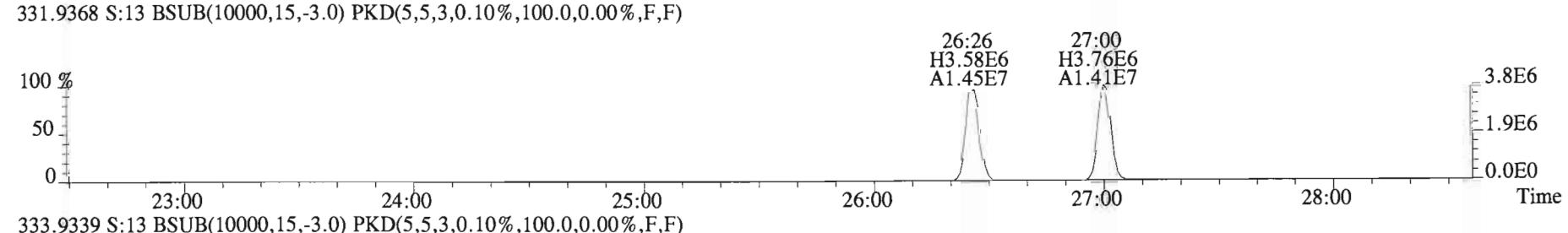
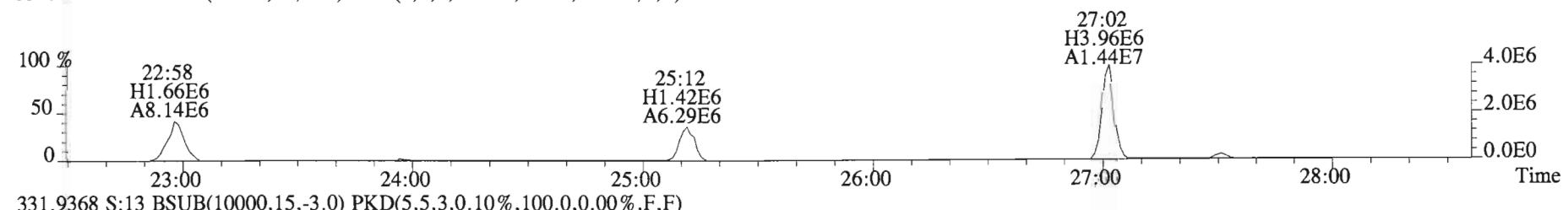
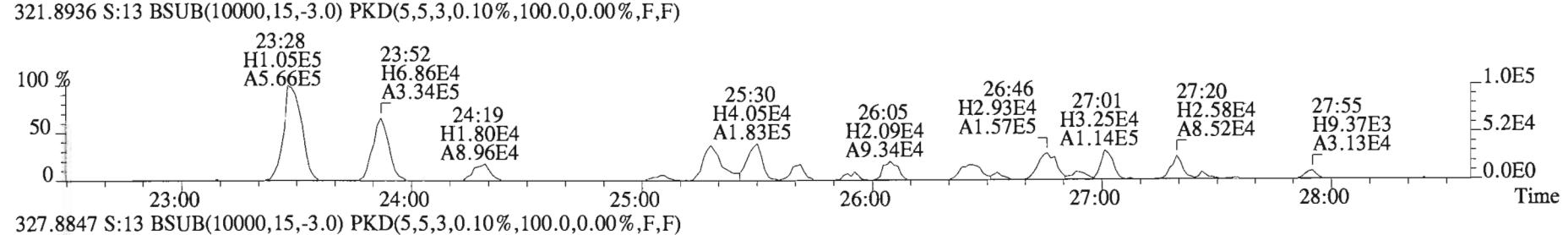
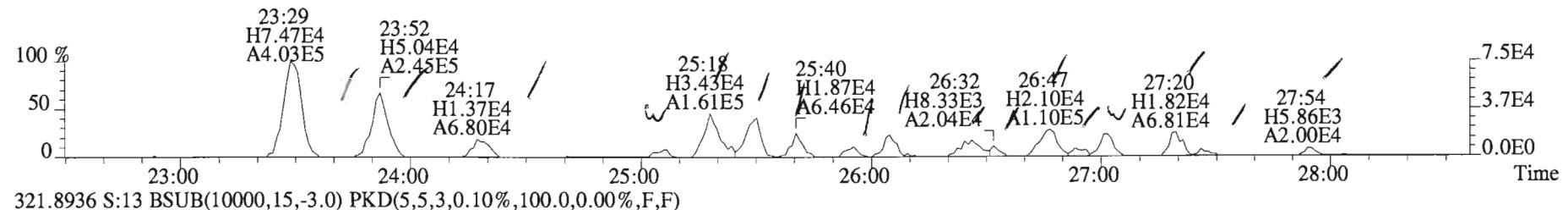
Entry #: 35

Run: 18 File: 150220D1 S: 13 I: 1 F: 4
Acquired: 20-FEB-15 20:47:41 Processed: 21-FEB-15 07:53:14

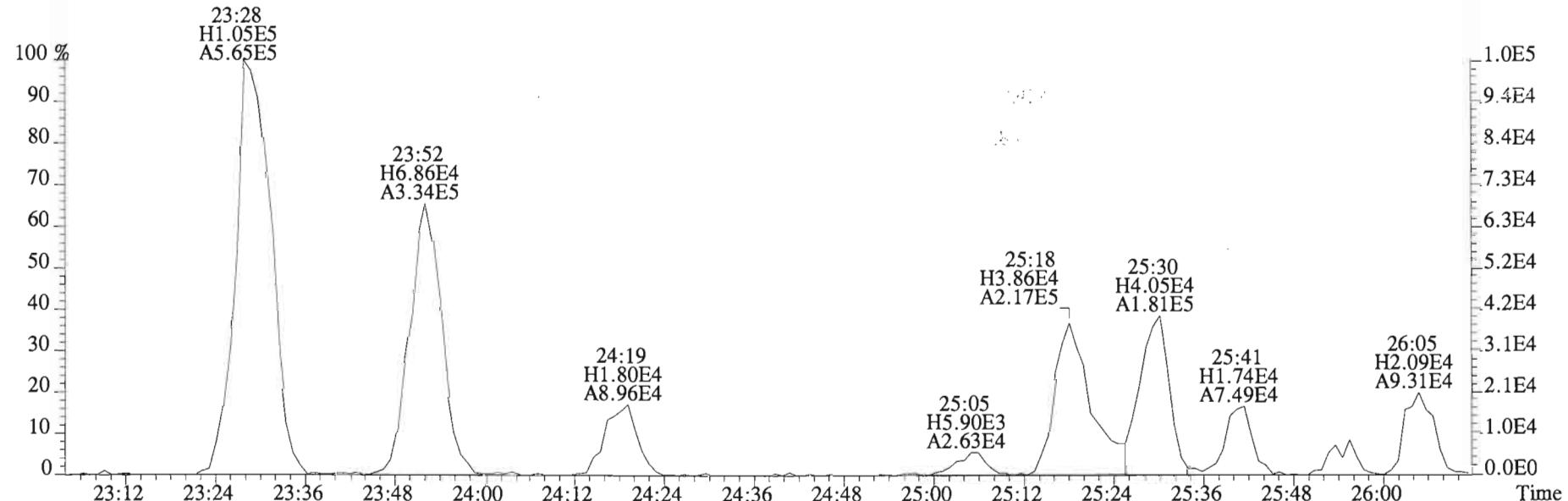
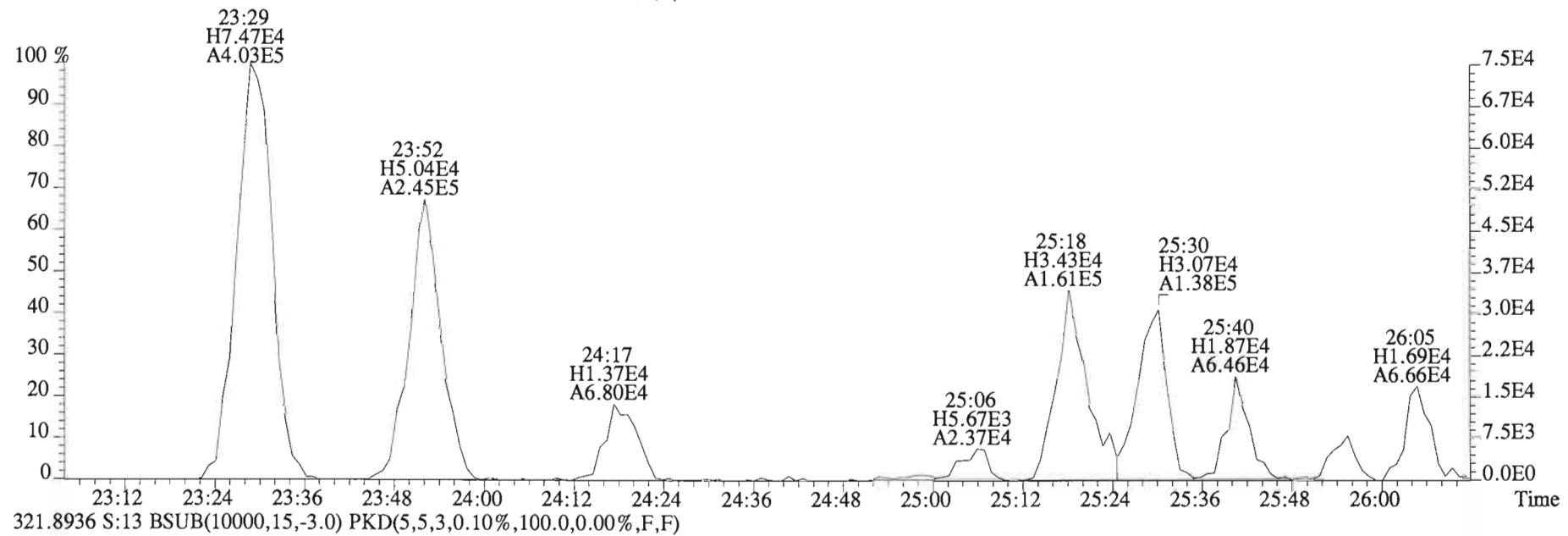
Total Concentration: 706.37 Unnamed Concentration: 505.992

RT	m1	Resp	m2	Resp	RA		Resp	Concentration	Name
37:39	1.767e+07		1.619e+07	1.09	y	3.385e+07		188.71	1,2,3,4,6,7,8-HpCDF
38:03	4.160e+05		3.900e+05	1.07	y	8.060e+05		4.8073	
38:15	4.359e+07		4.045e+07	1.08	y	8.403e+07		501.18	
39:29	9.638e+05		8.583e+05	1.12	y	1.822e+06		11.660	1,2,3,4,7,8,9-HpCDF

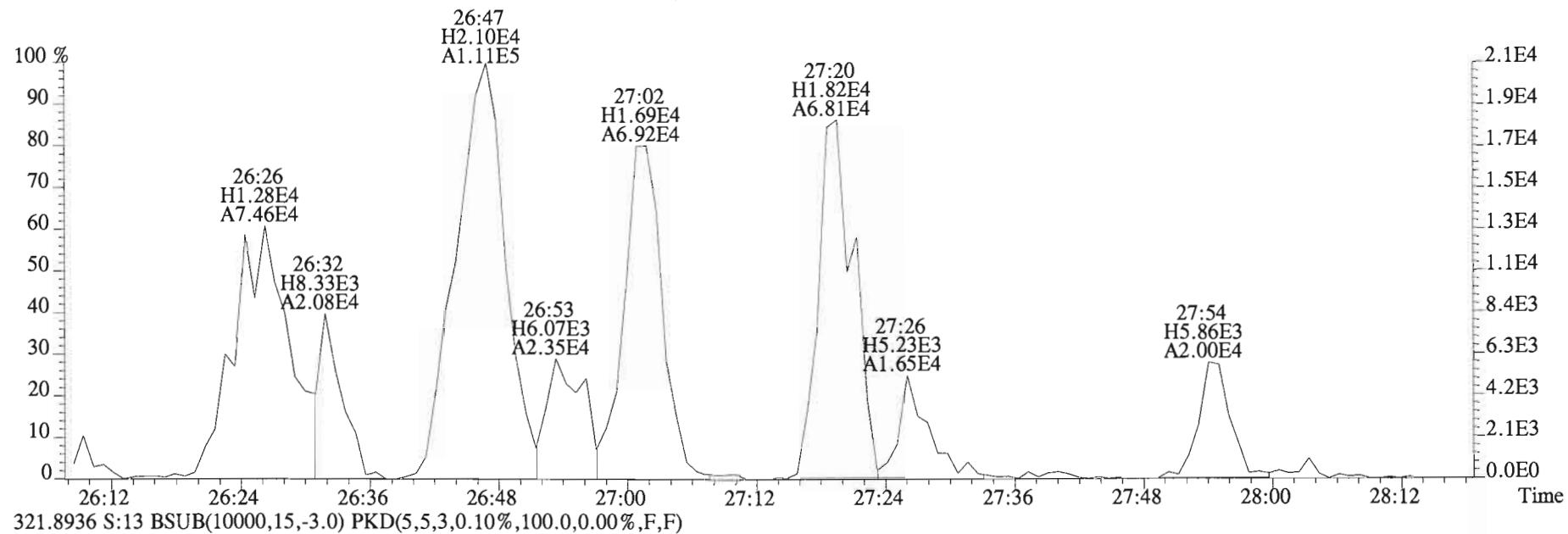
File:150220D1 #1-551 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
 319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



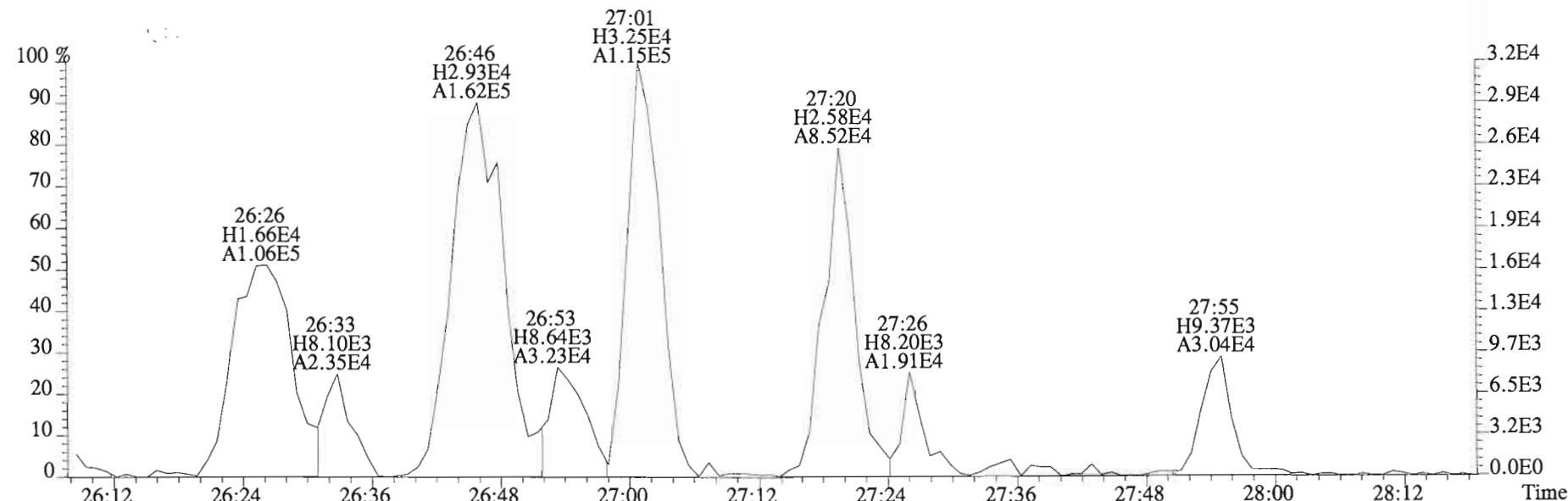
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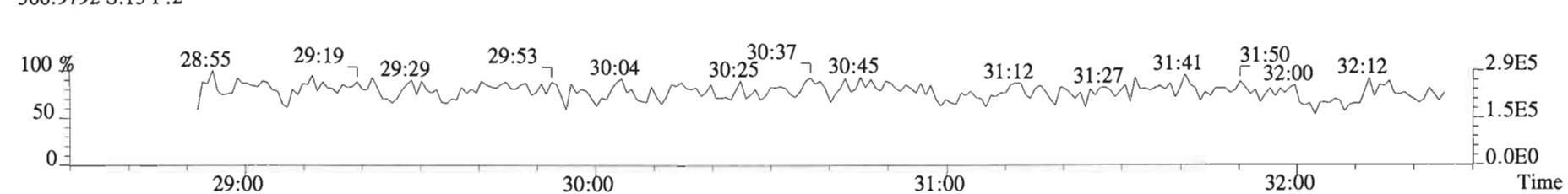
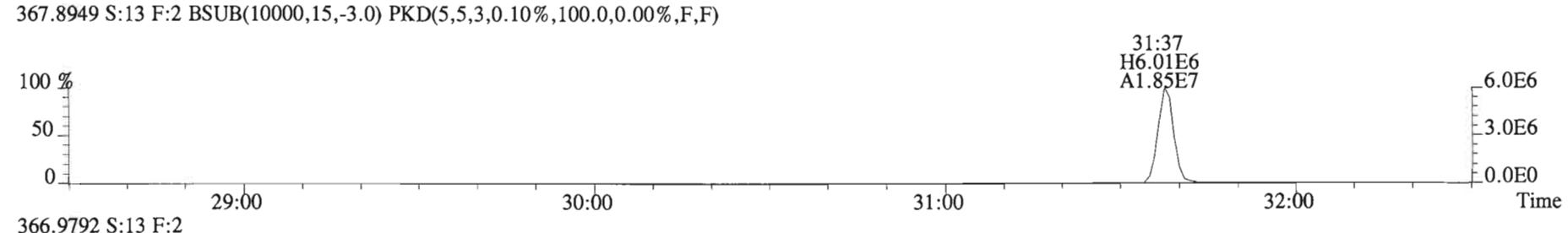
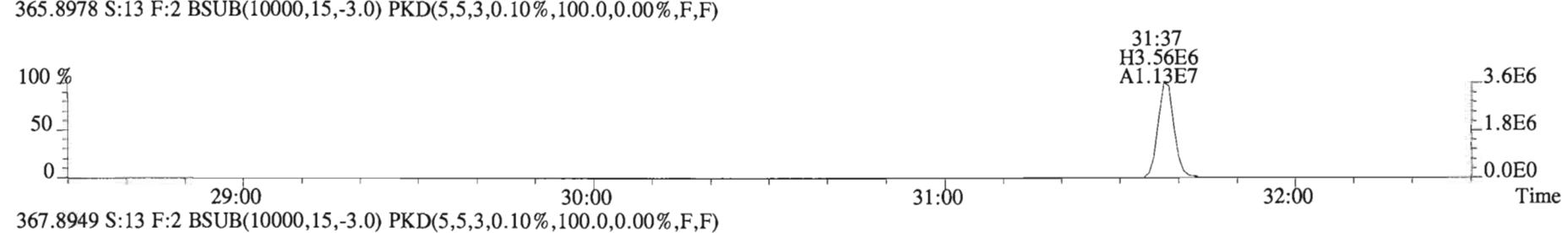
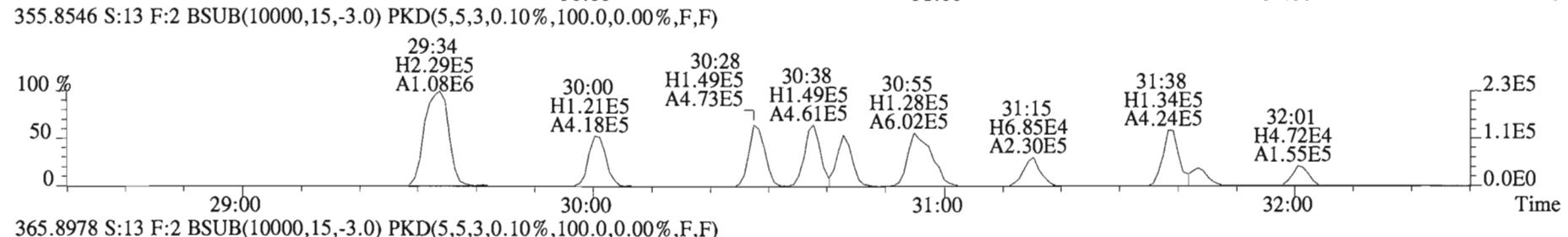
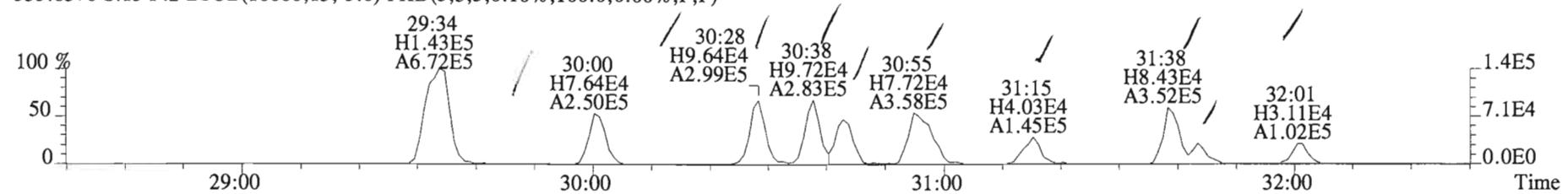
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Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
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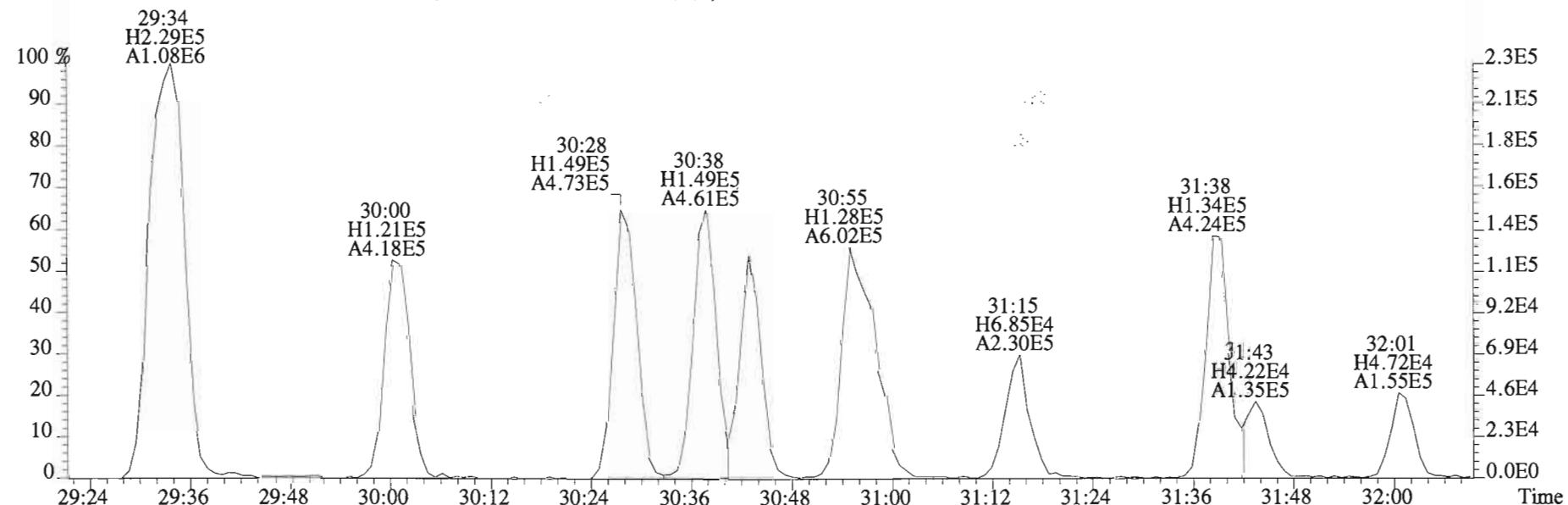
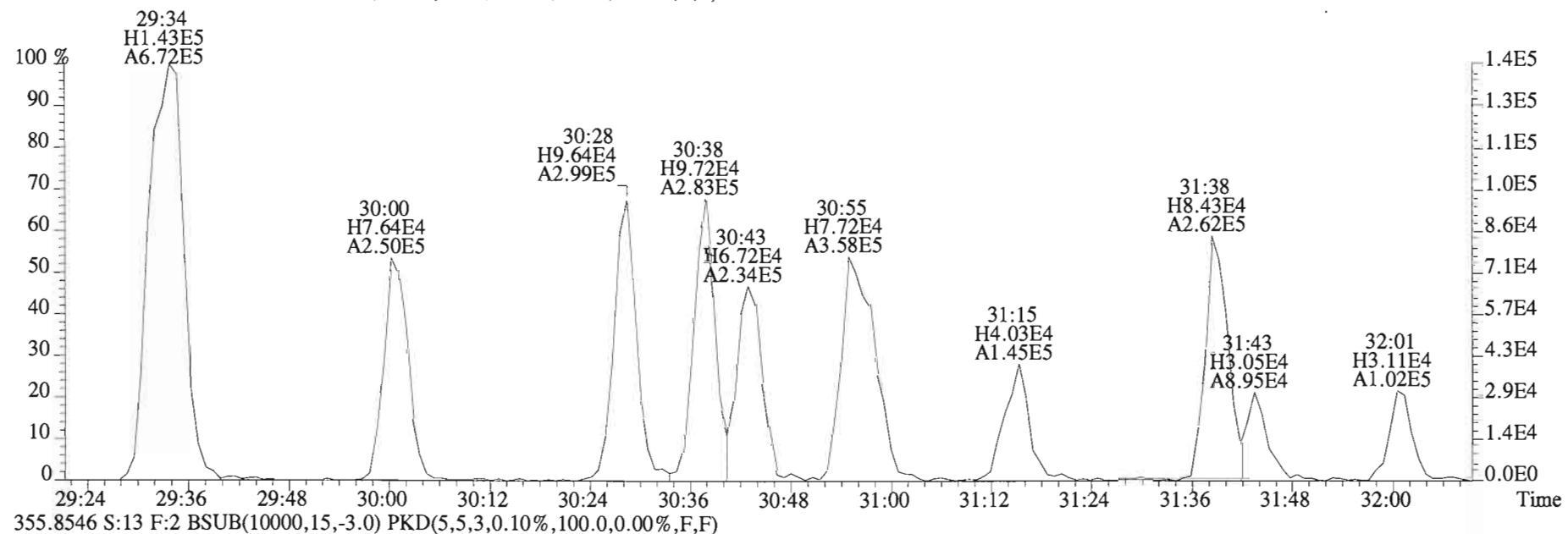
321.8936 S:13 BSB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



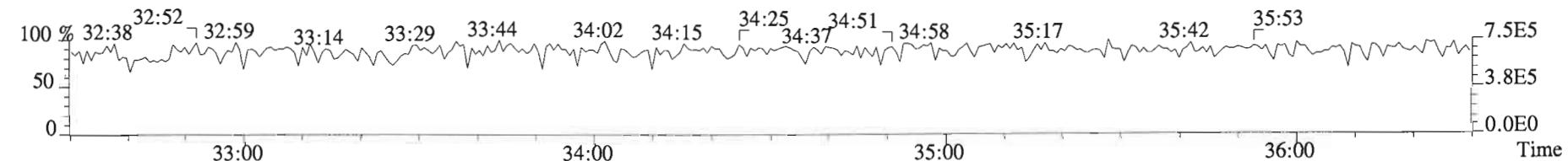
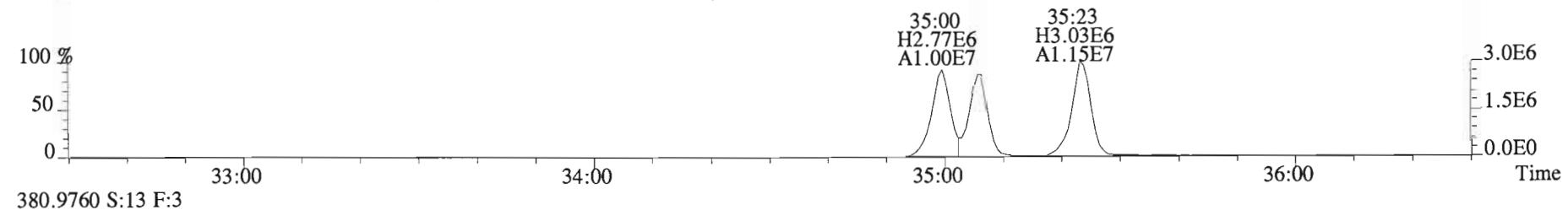
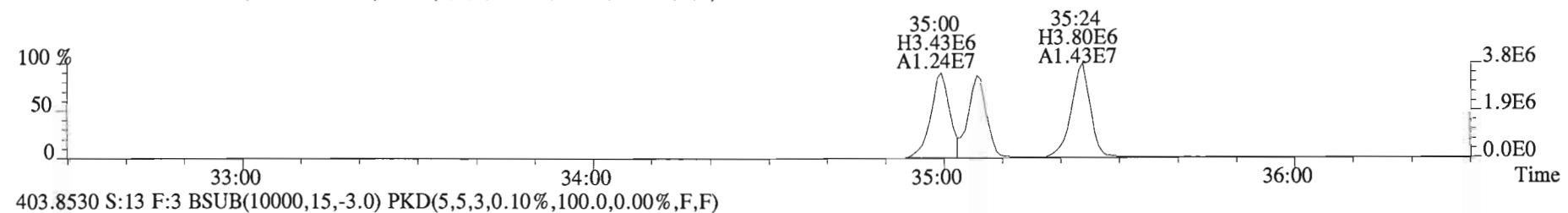
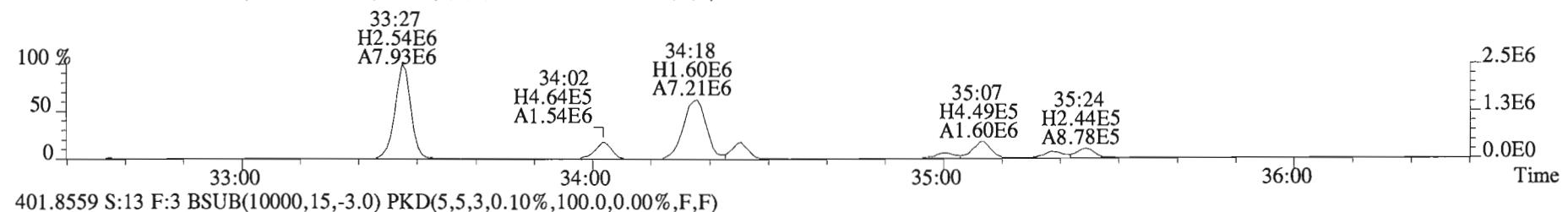
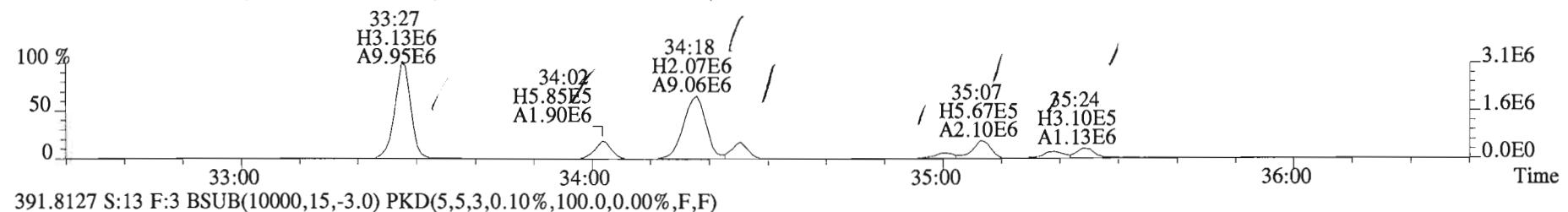
File:150220D1 #1-251 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
 353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



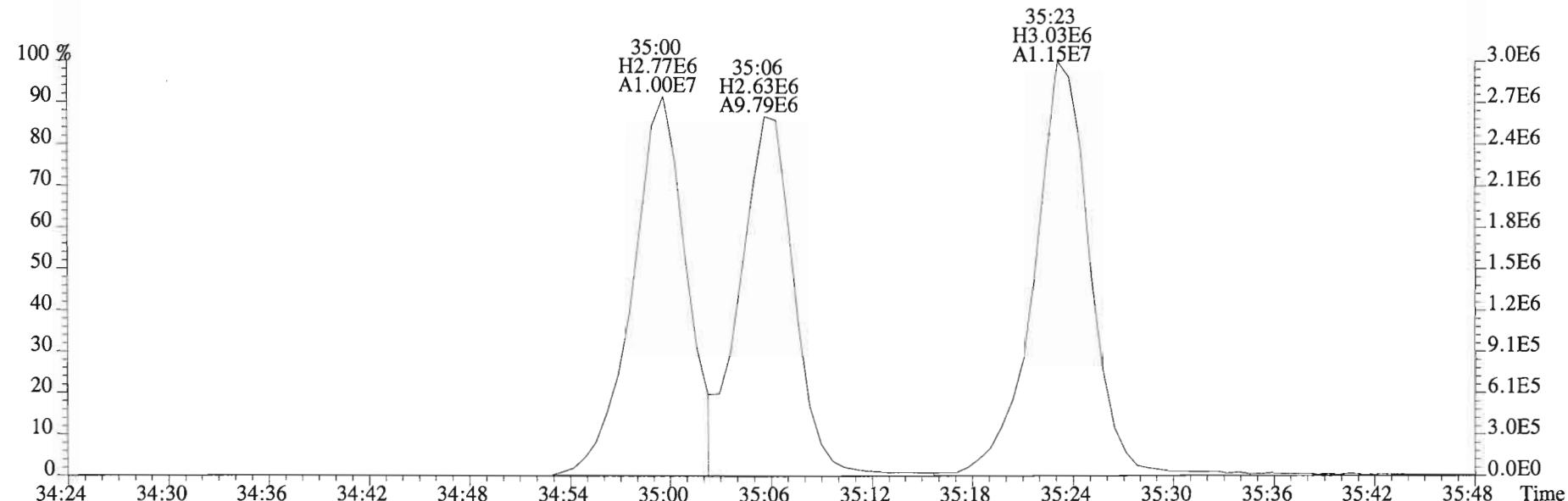
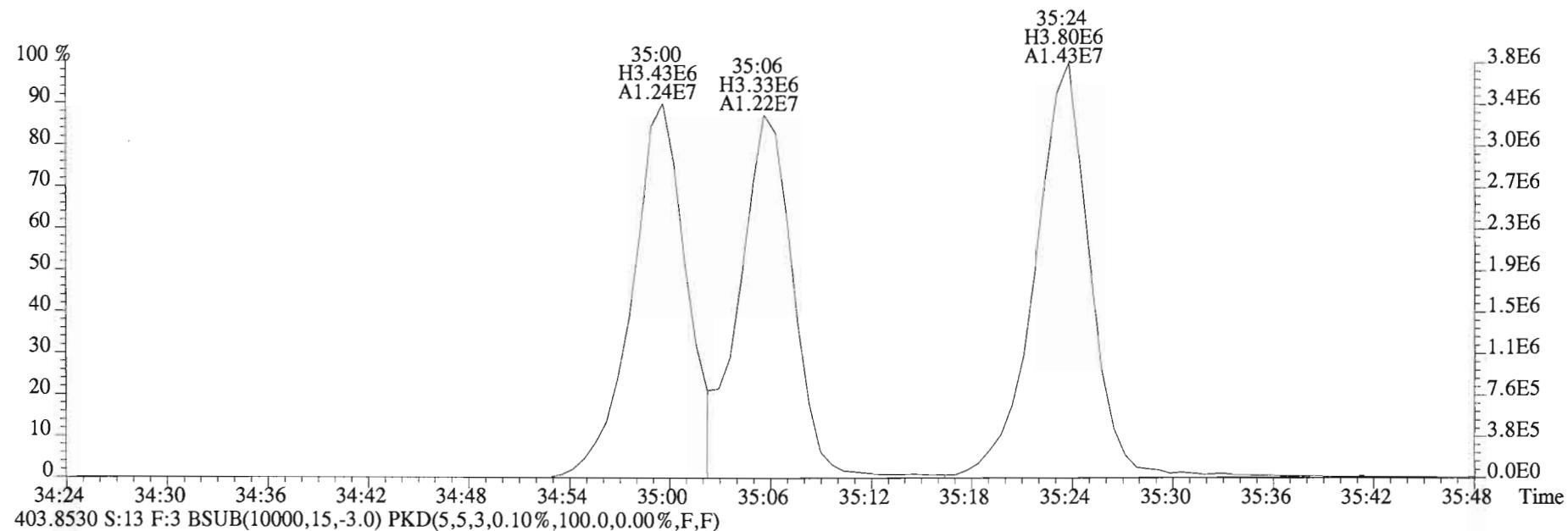
File:150220D1 #1-251 Acq:20-FEB-2015 20:47:41 GC EI + Voltage SIR Autospec-UltimaE
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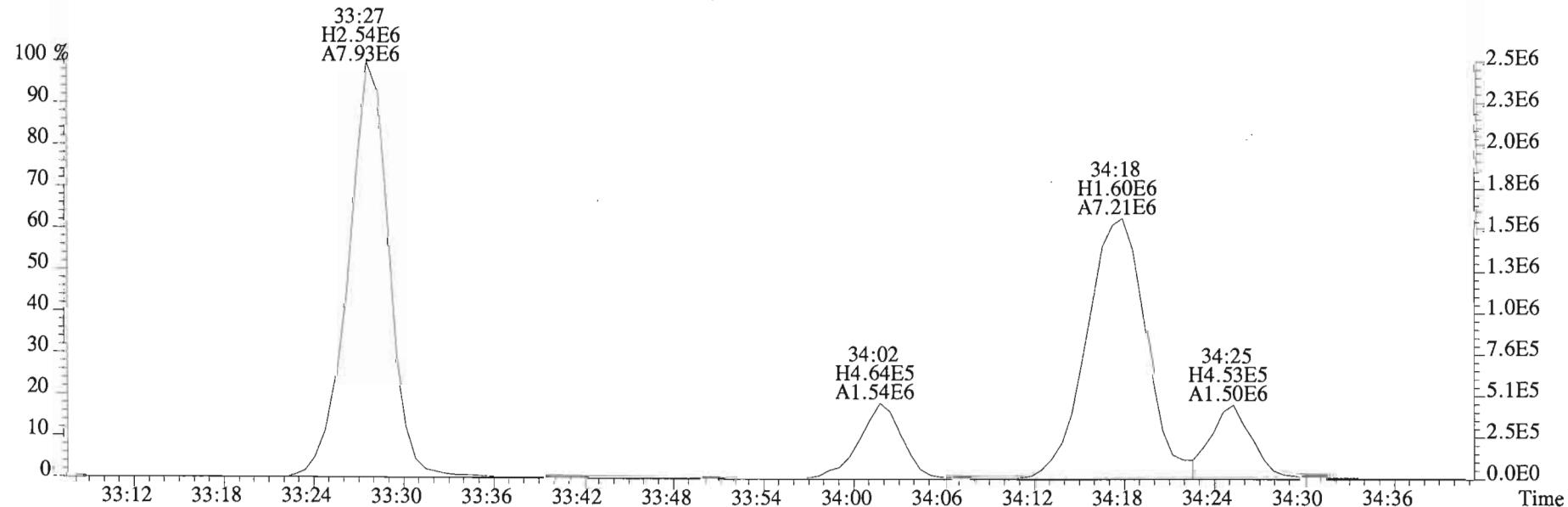
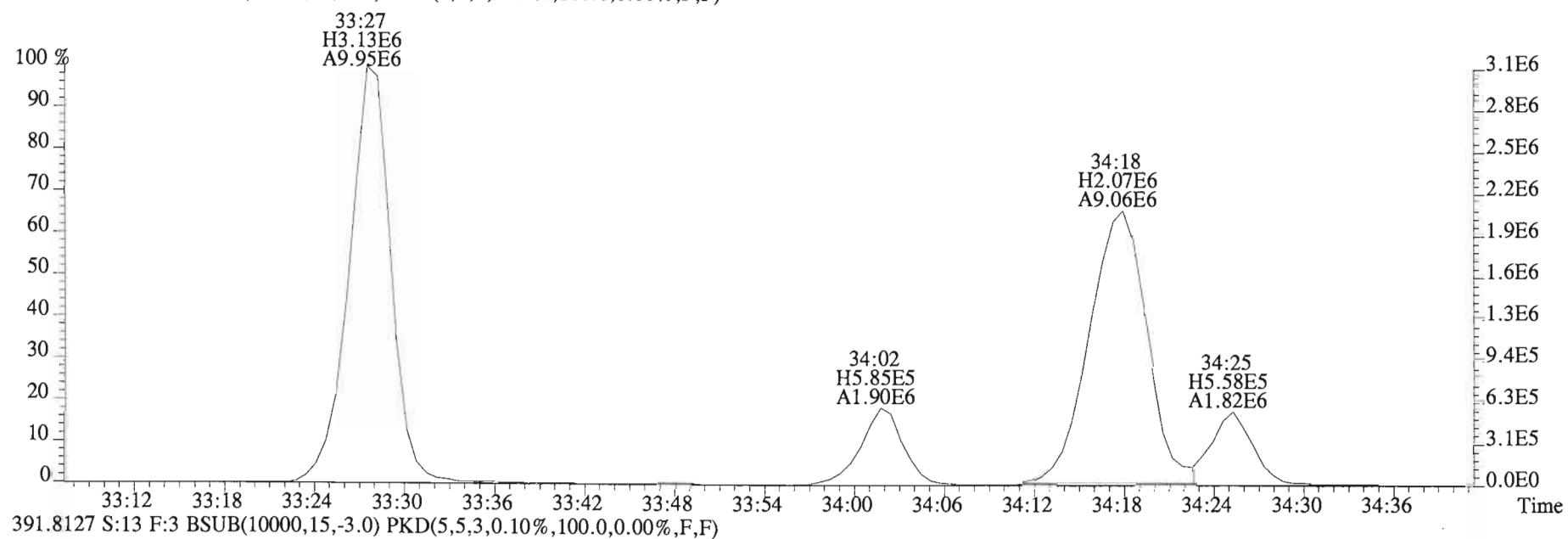
File:150220D1 #1-393 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
 389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



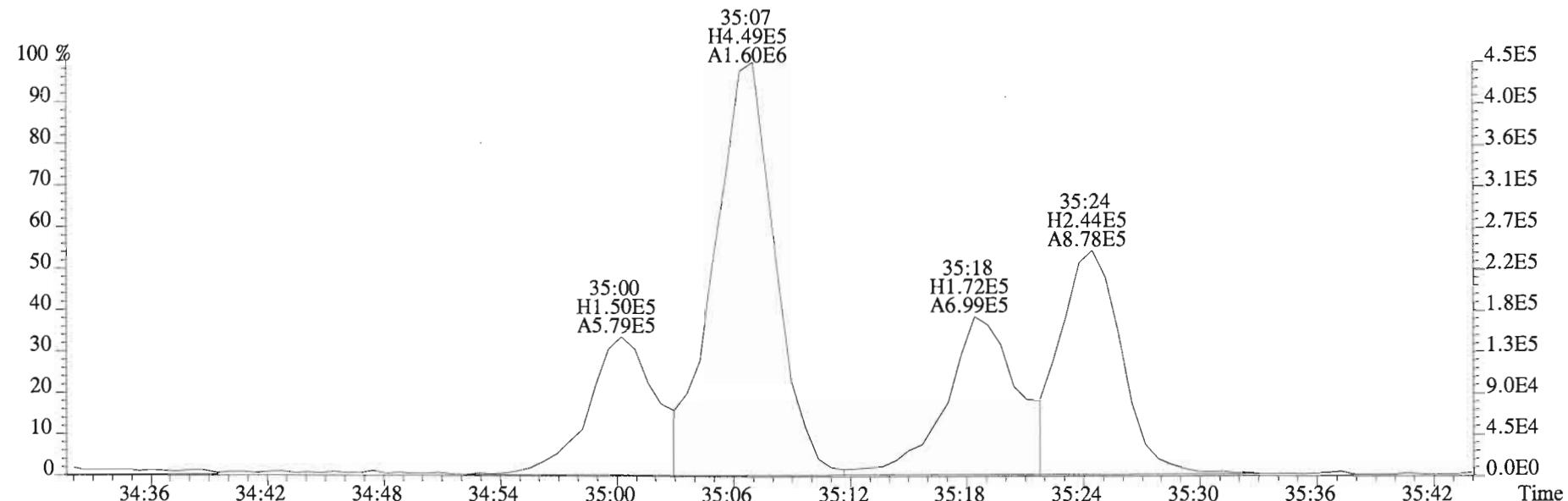
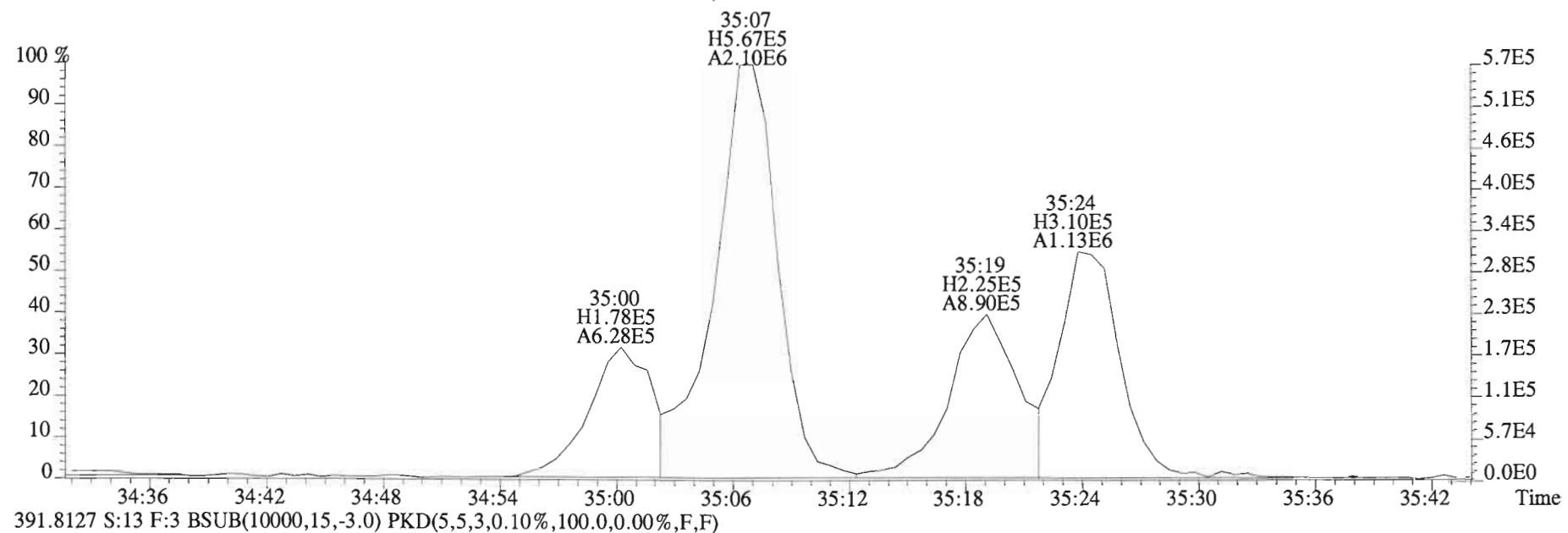
File:150220D1 #1-393 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
401.8559 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



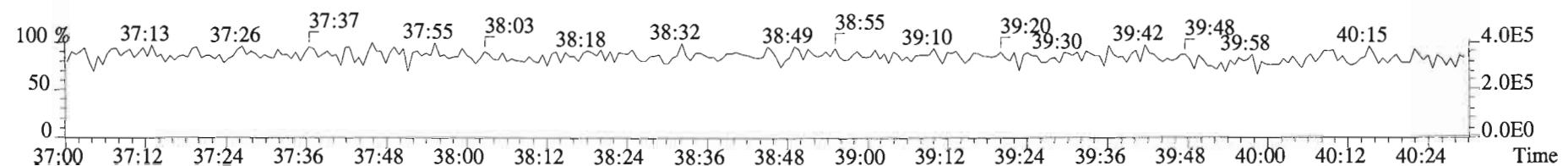
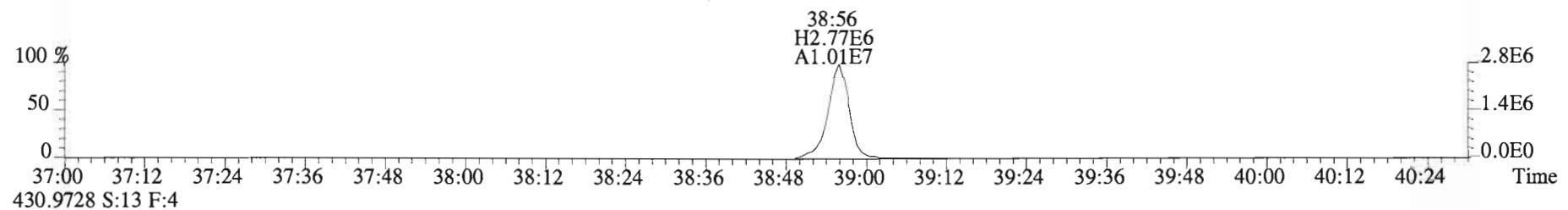
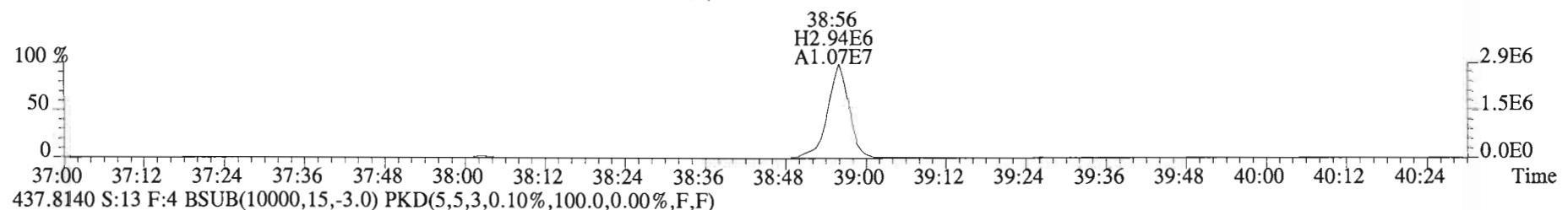
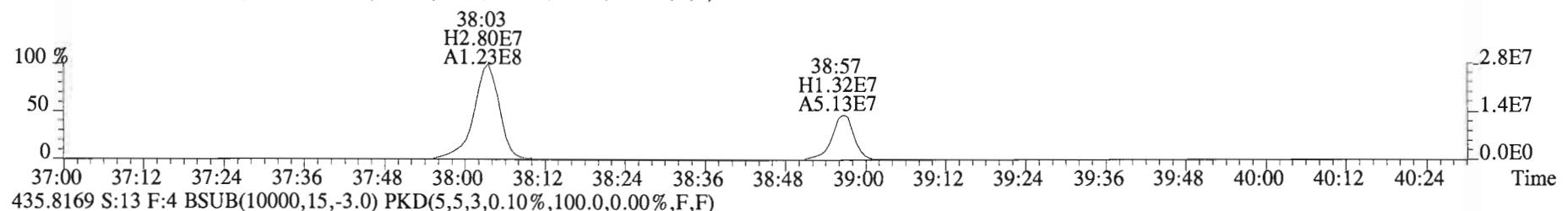
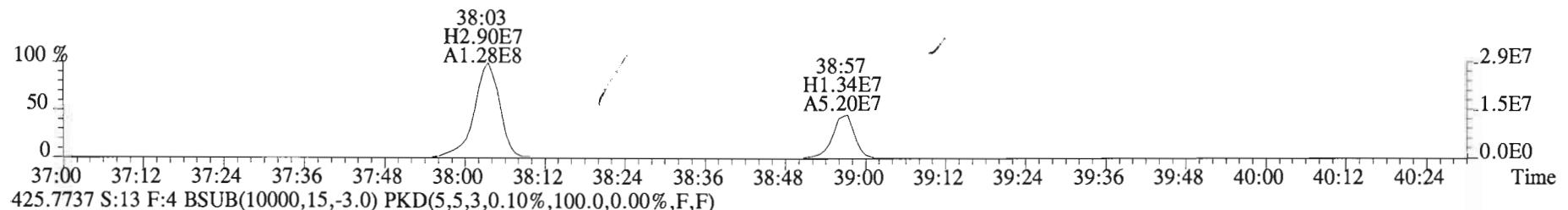
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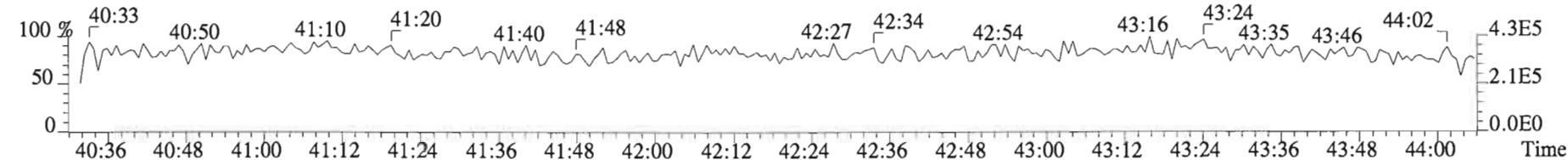
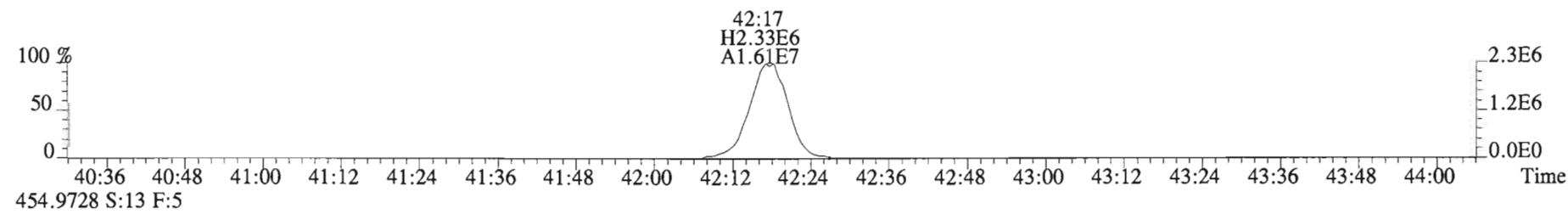
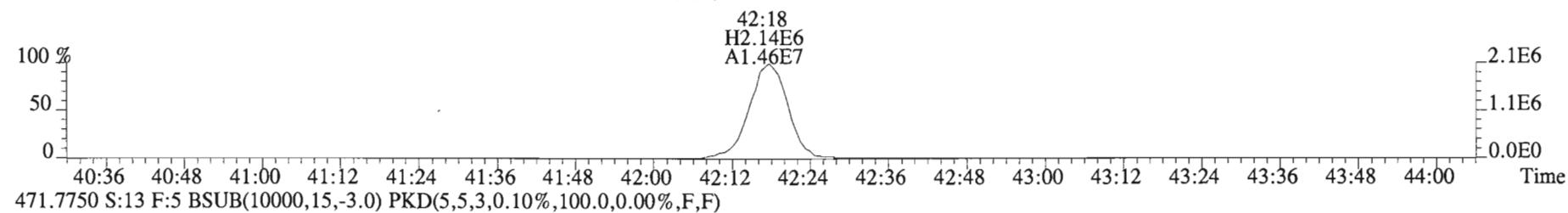
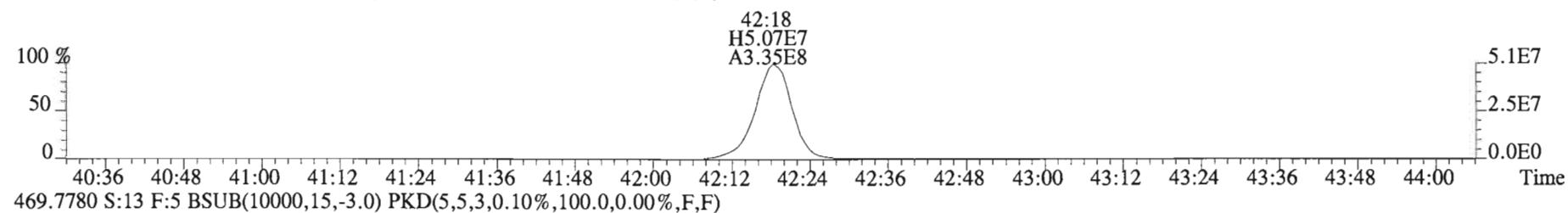
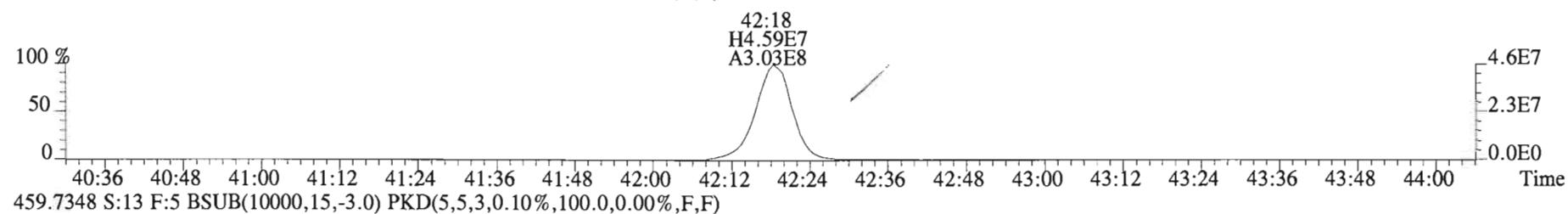
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Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



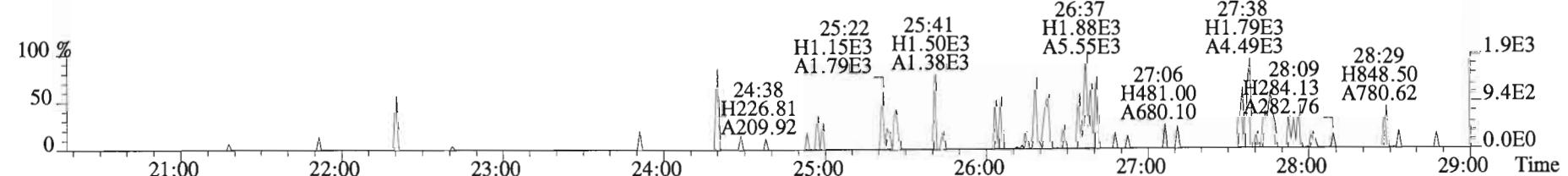
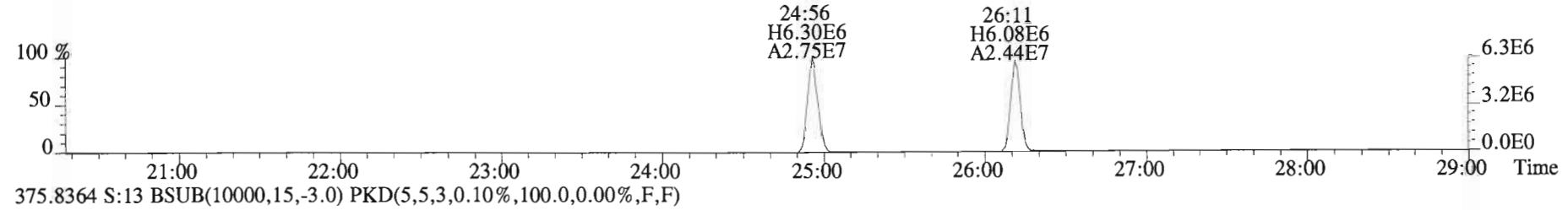
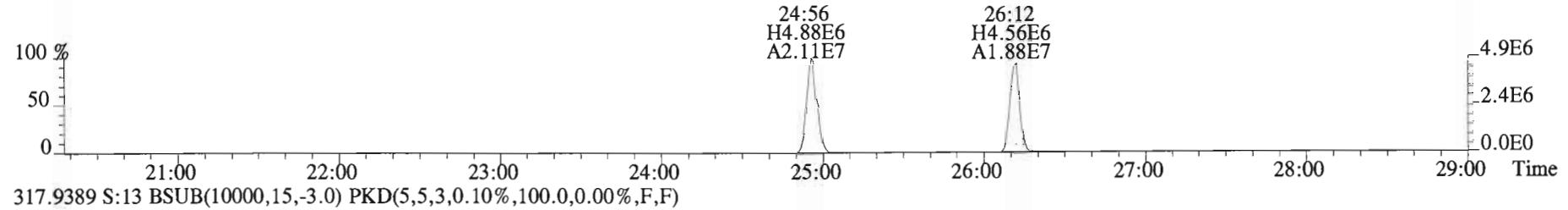
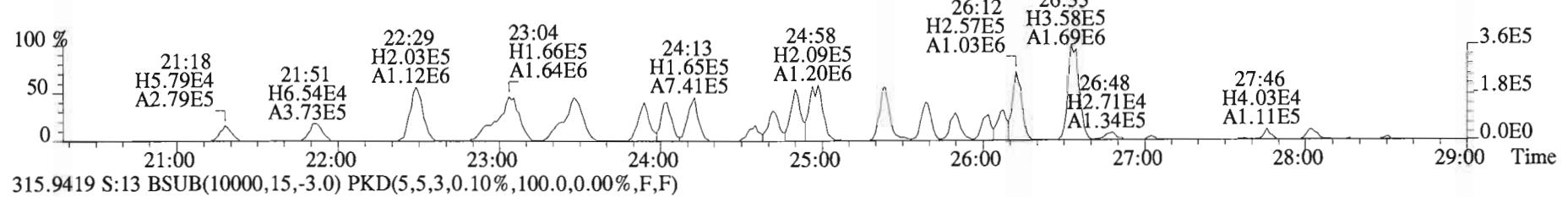
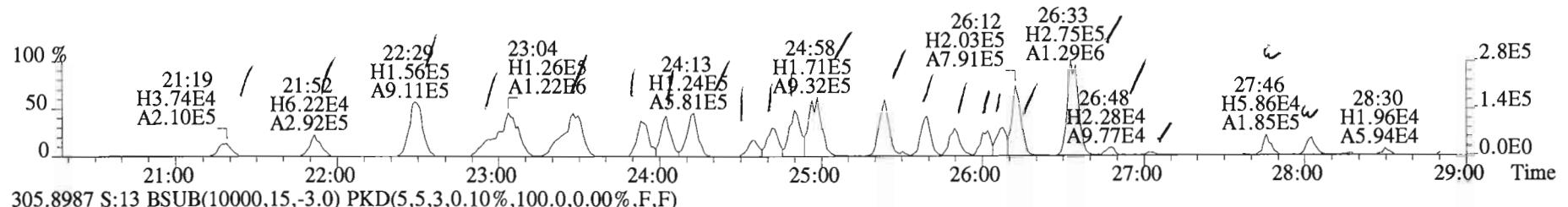
File:150220D1 #1-325 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
 423.7767 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



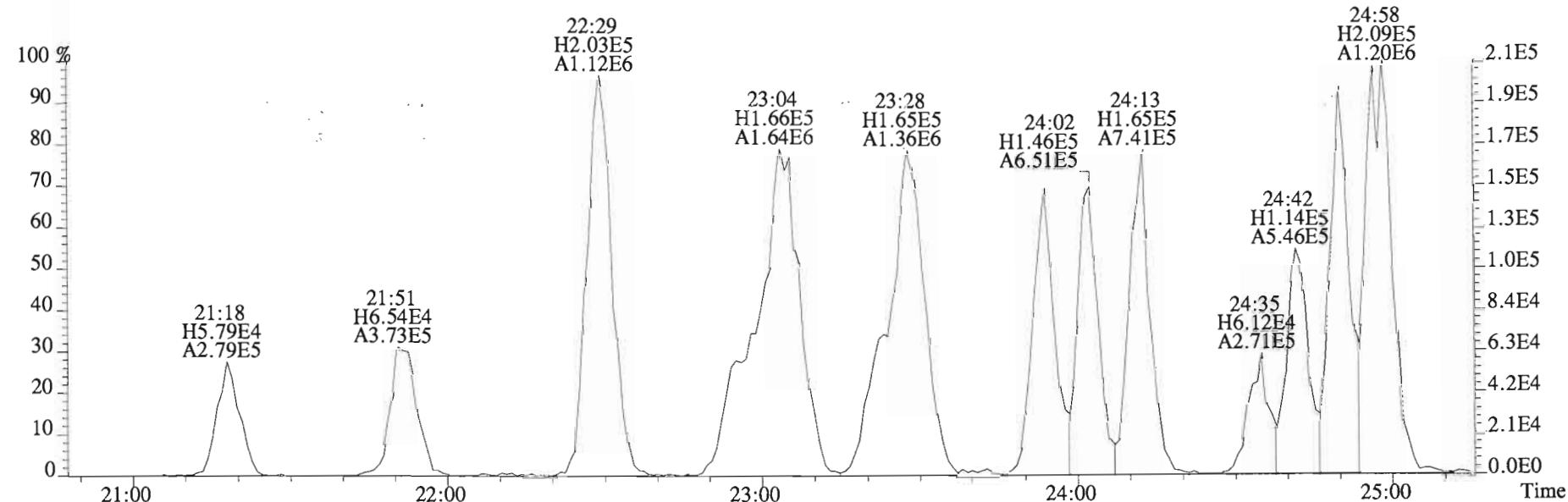
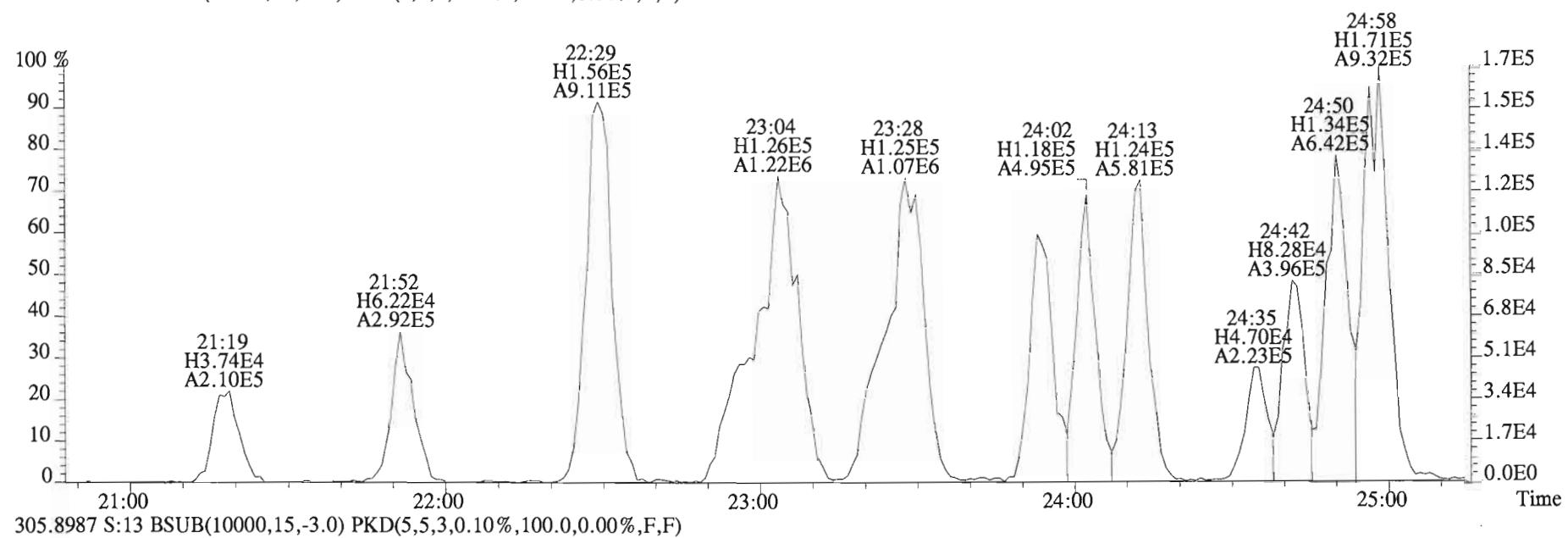
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457.7377 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



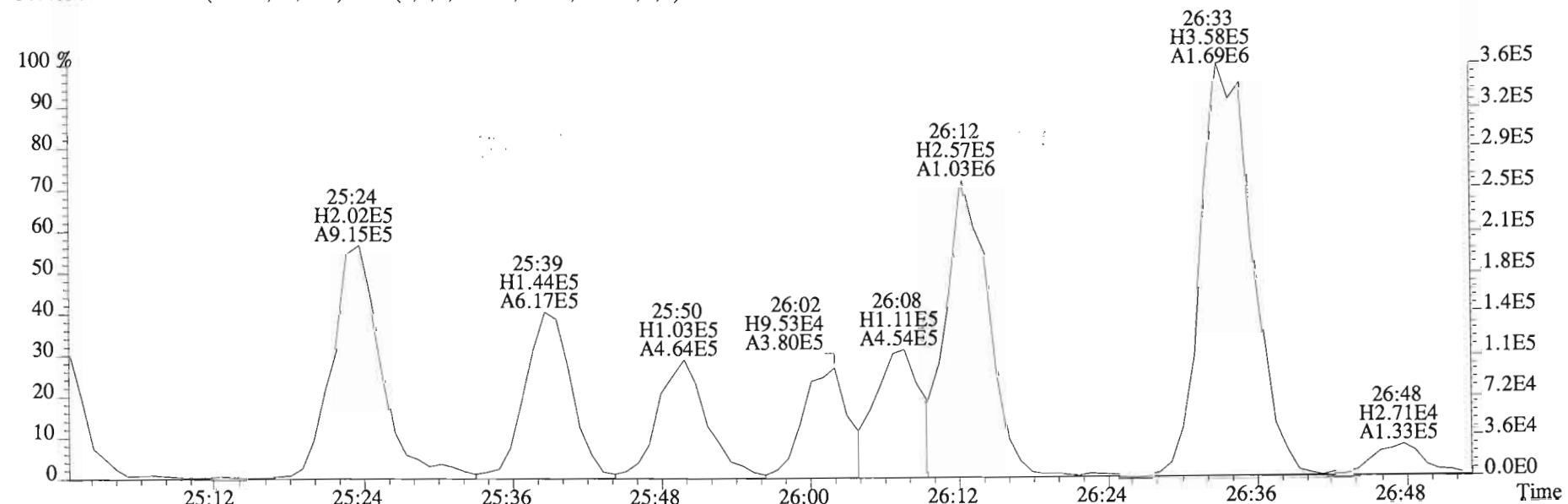
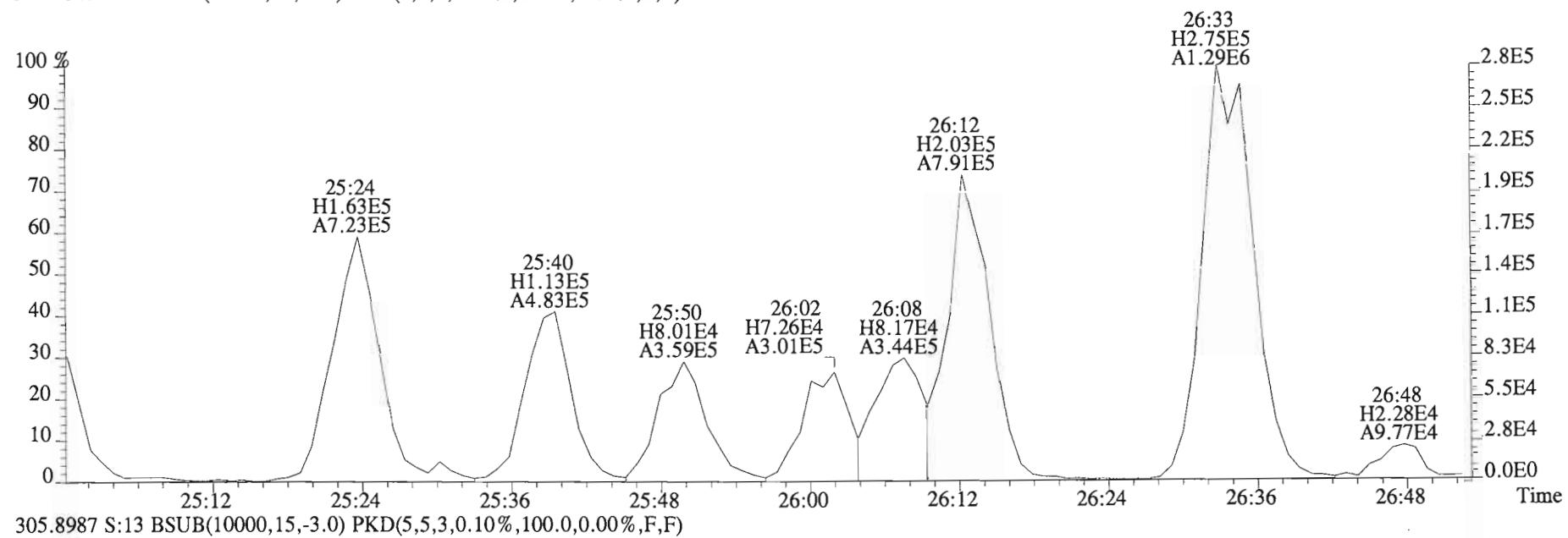
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 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
 303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



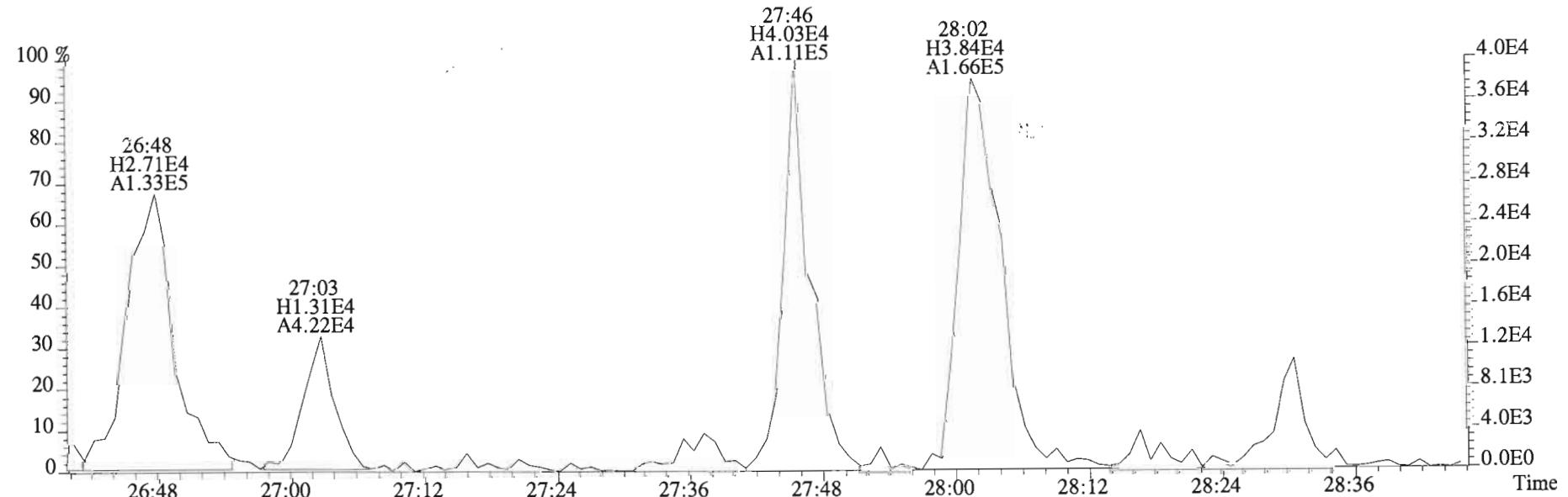
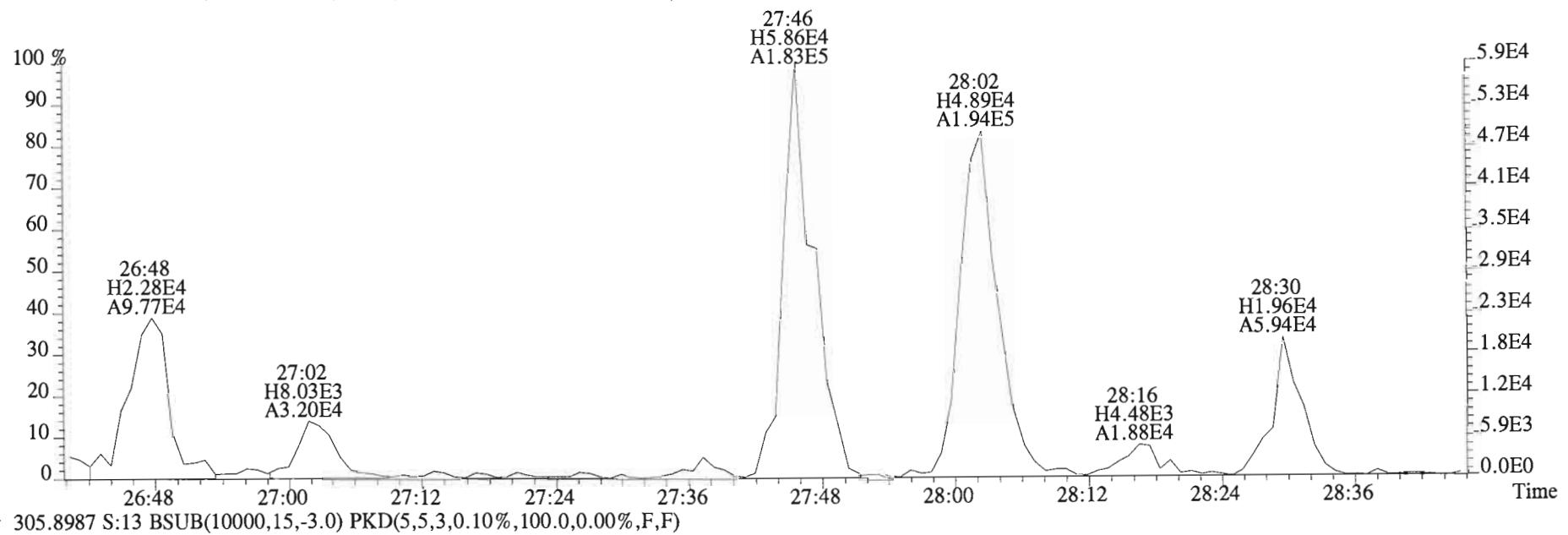
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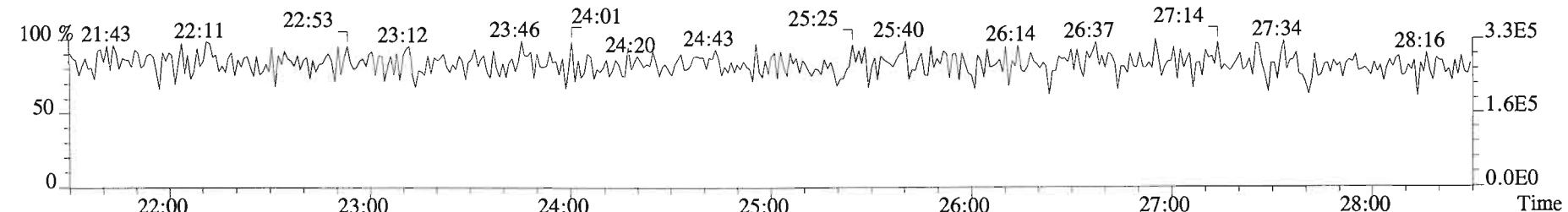
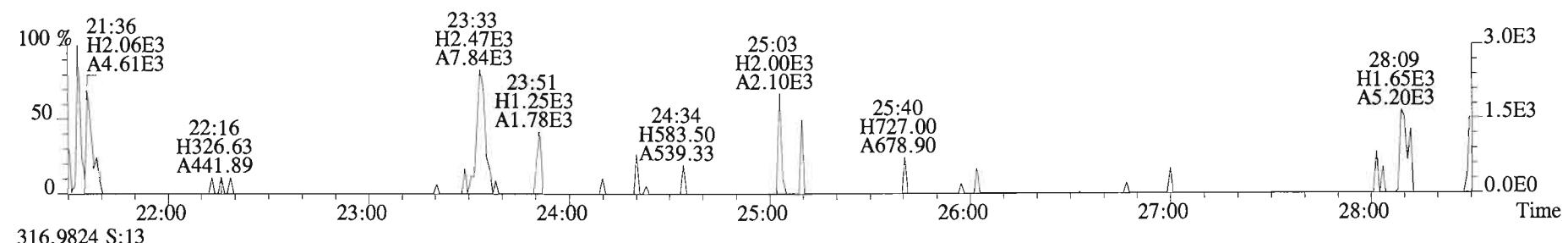
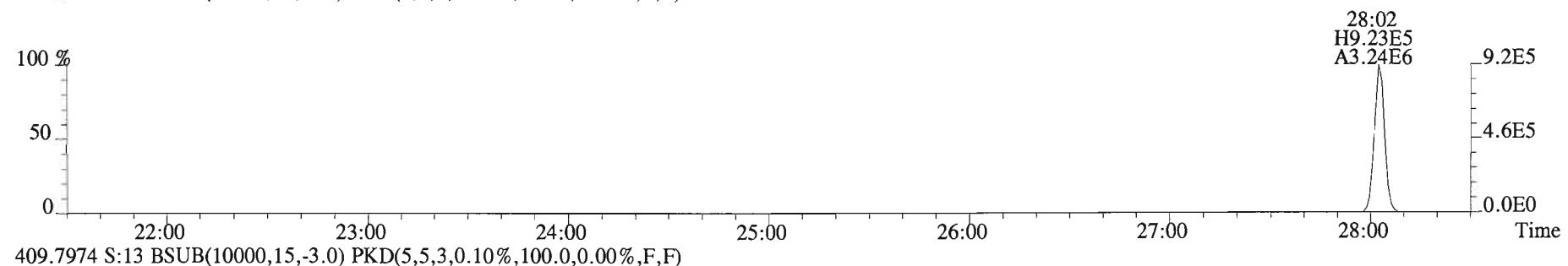
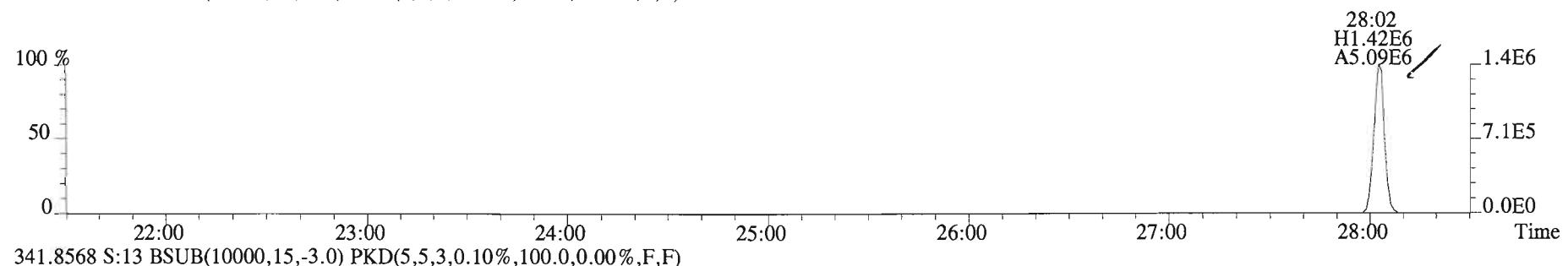
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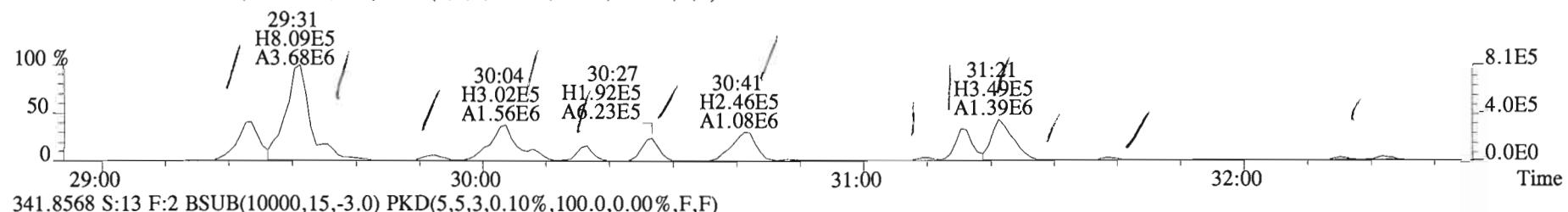
File:150220D1 #1-551 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



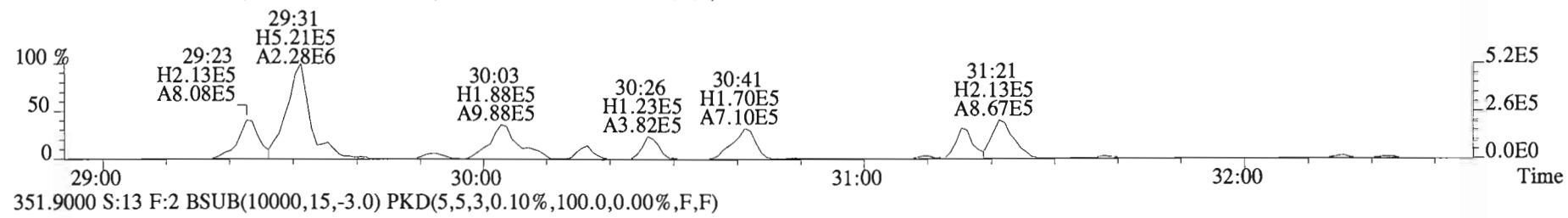
File:150220D1 #1-551 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
 339.8597 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



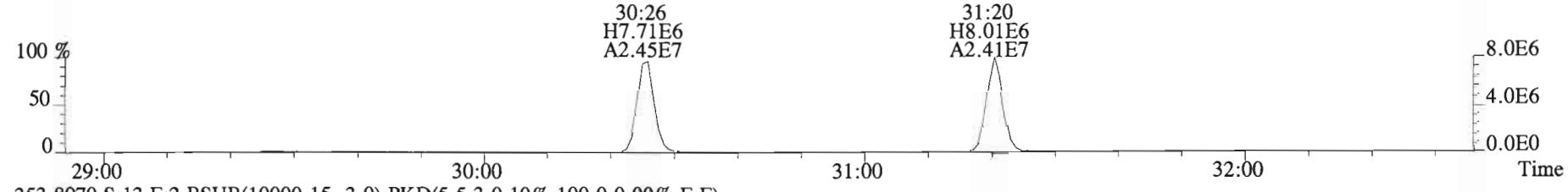
File:150220D1 #1-251 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
 339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



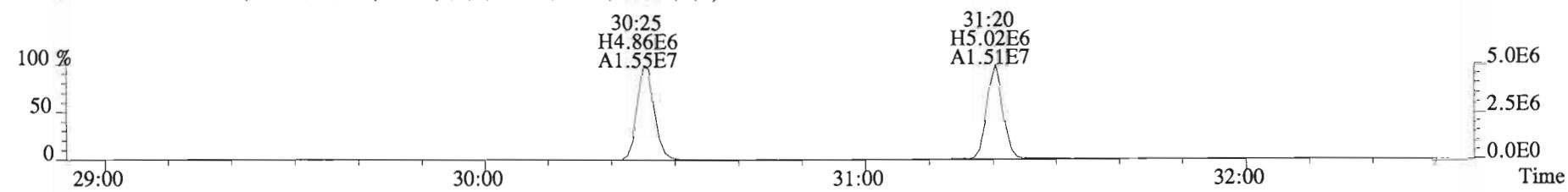
341.8568 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



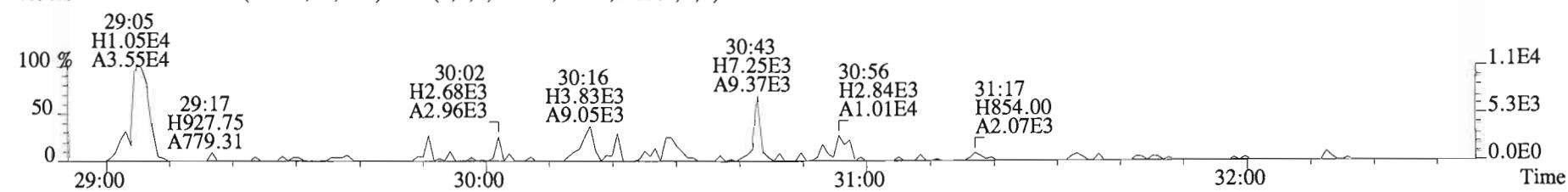
351.9000 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



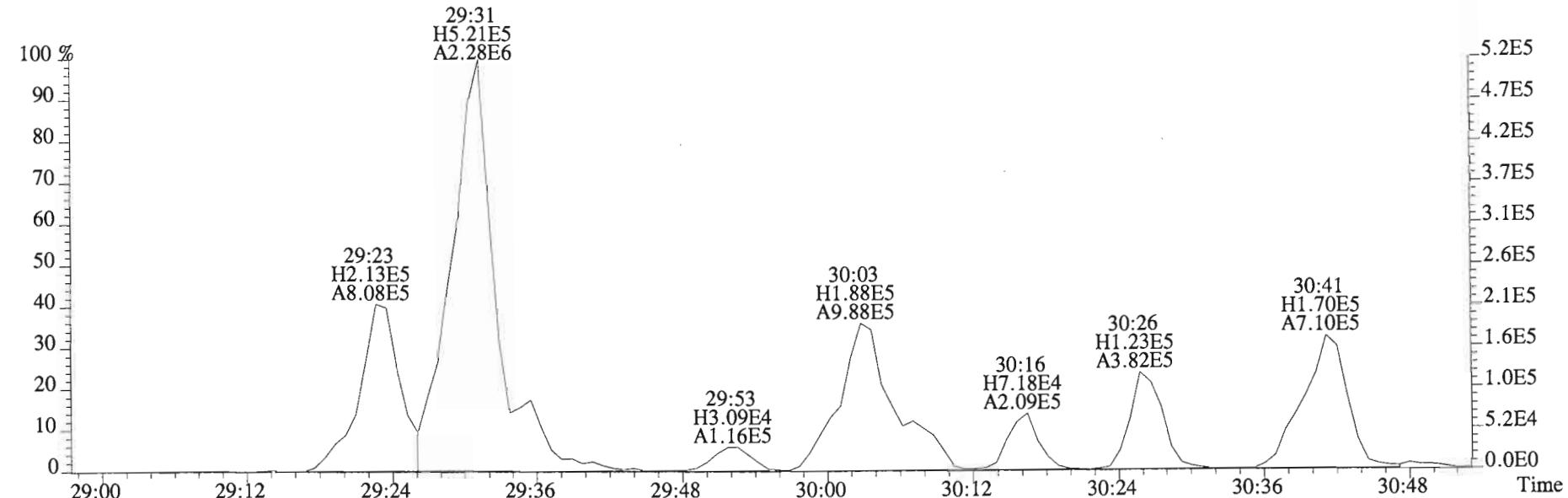
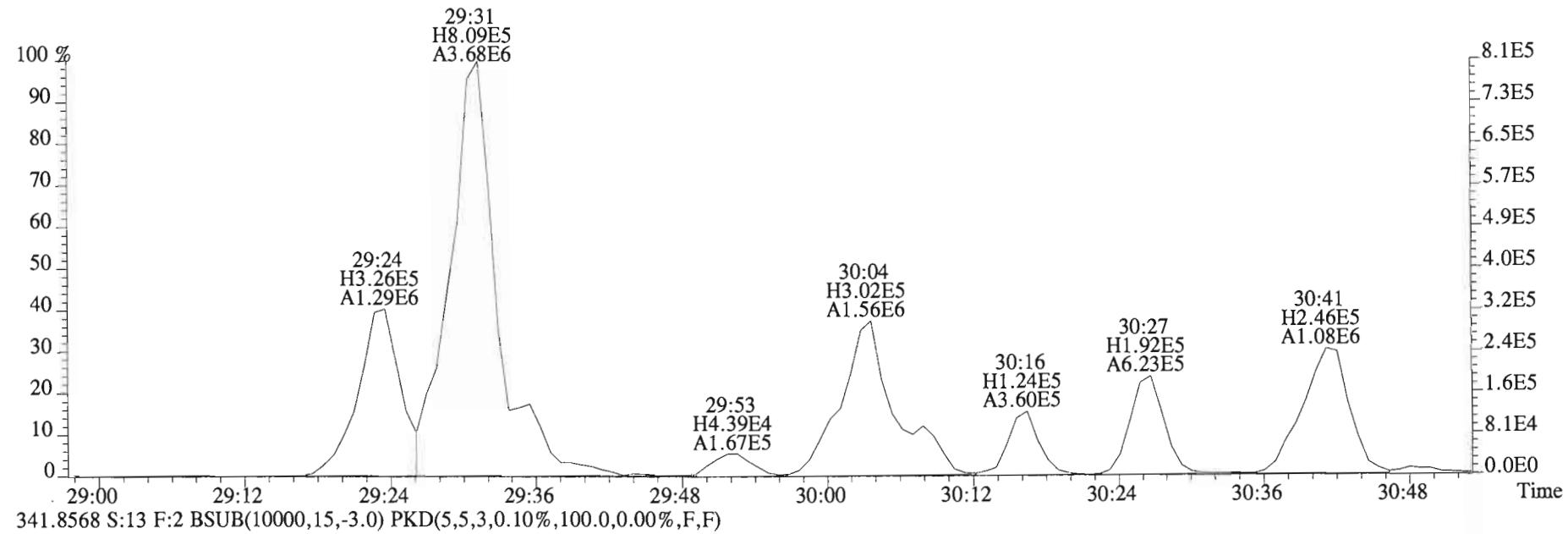
353.8970 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



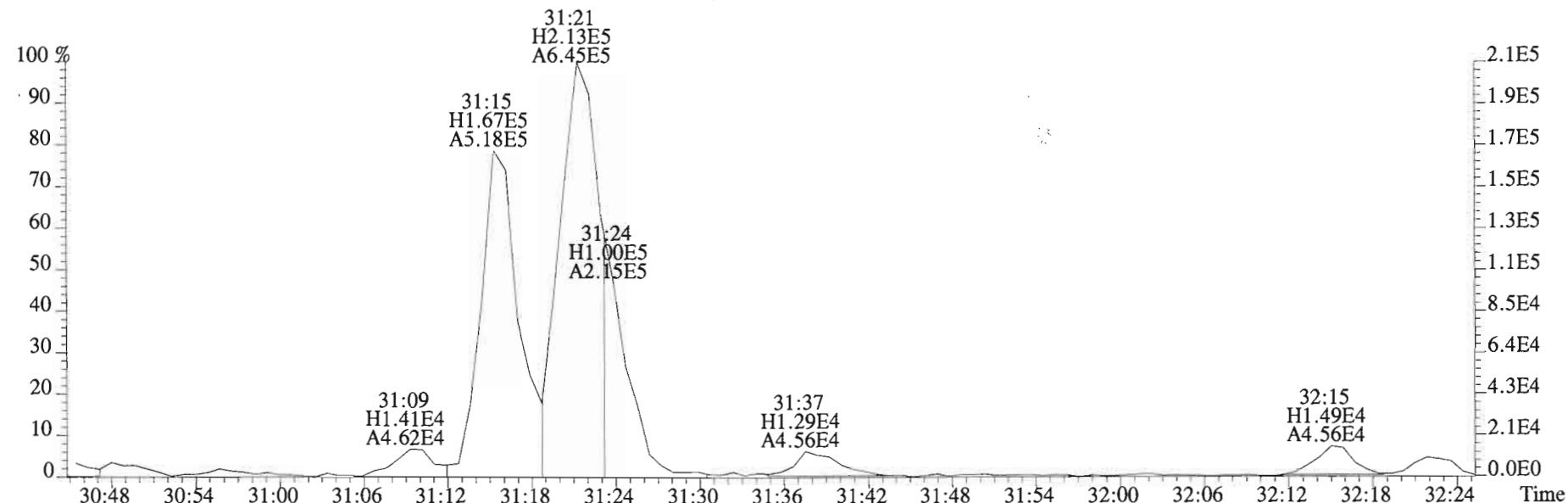
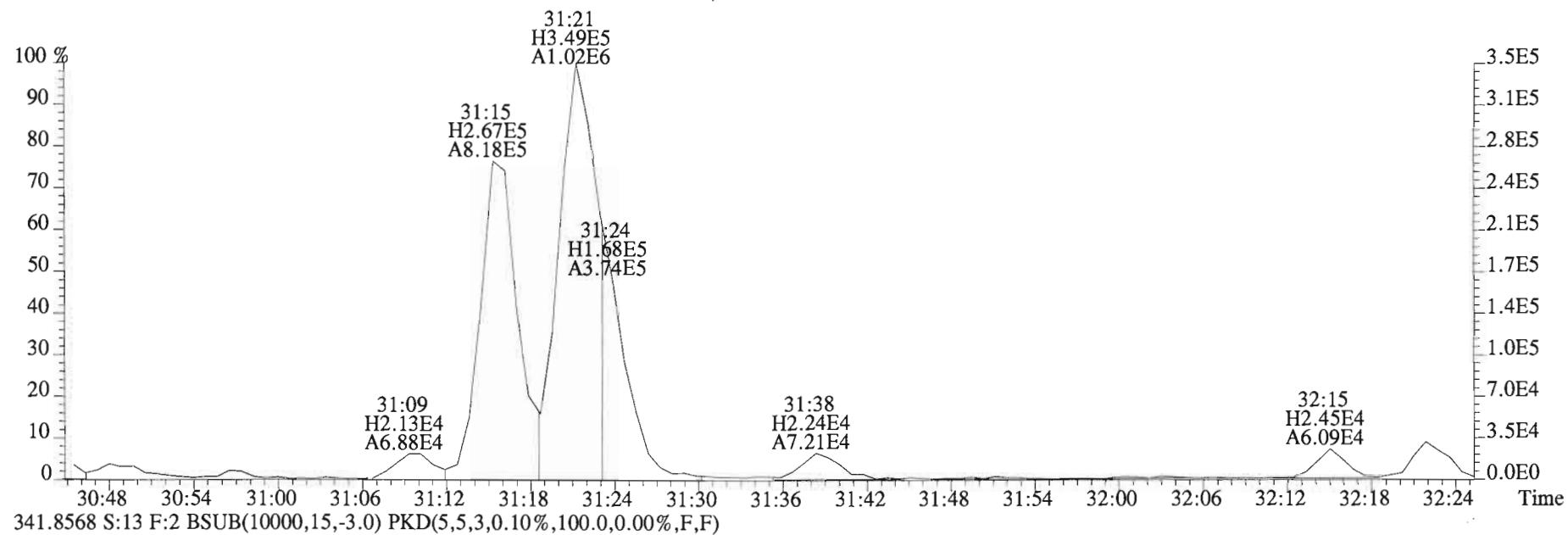
409.7974 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



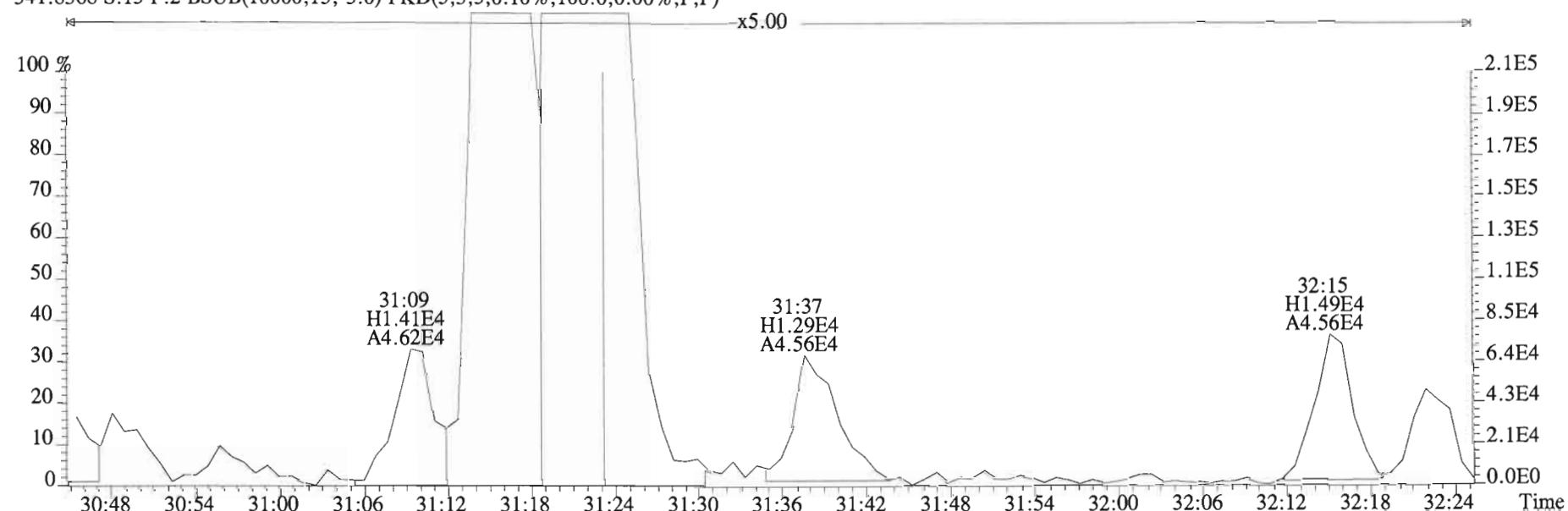
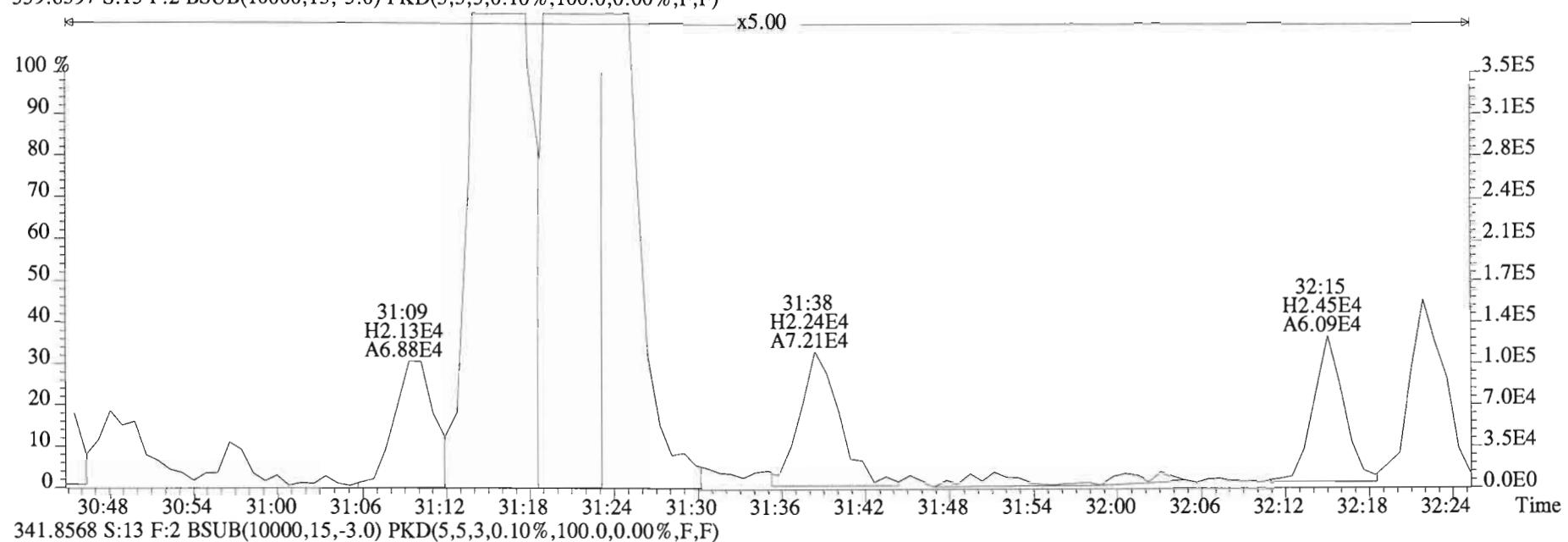
File:150220D1 #1-251 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



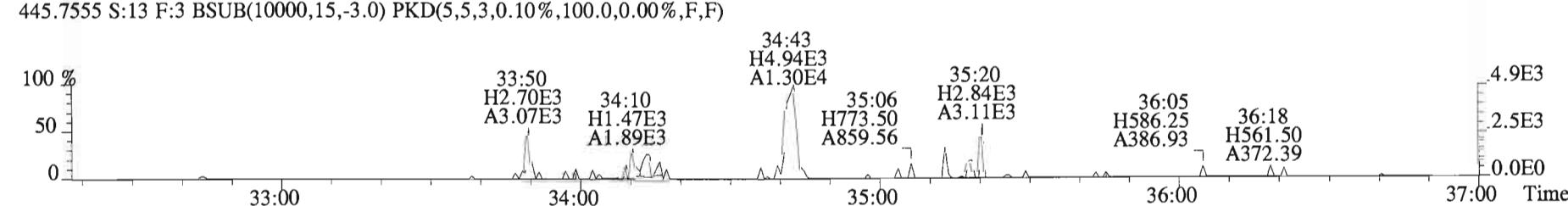
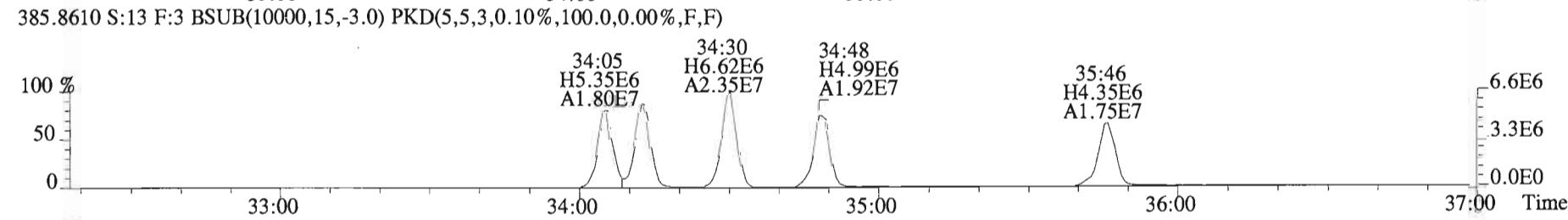
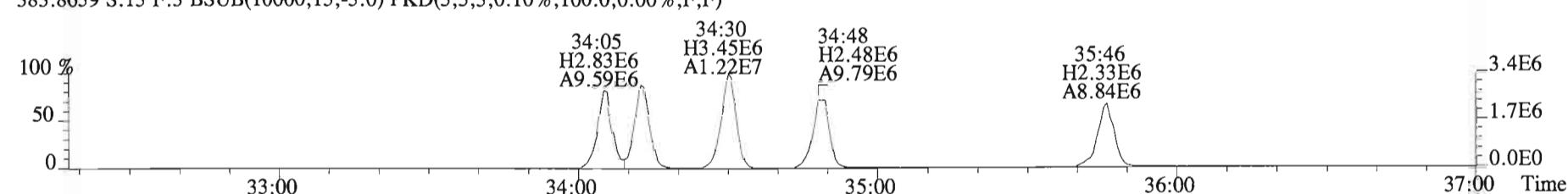
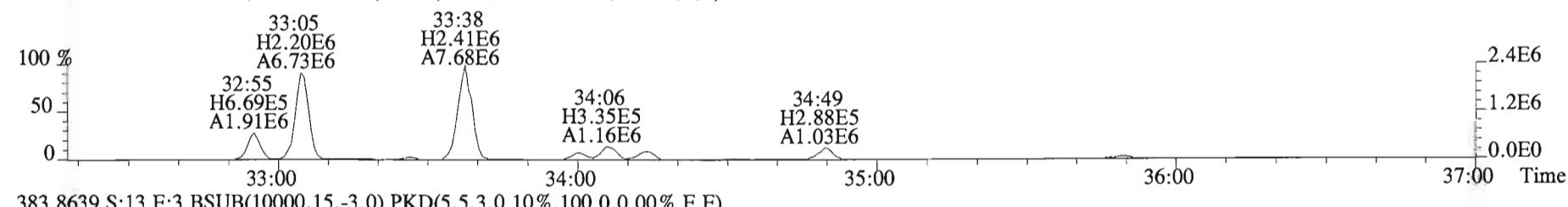
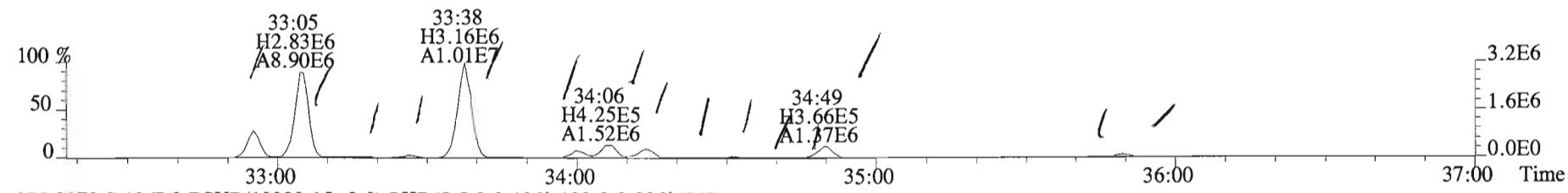
File:150220D1 #1-251 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
 339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



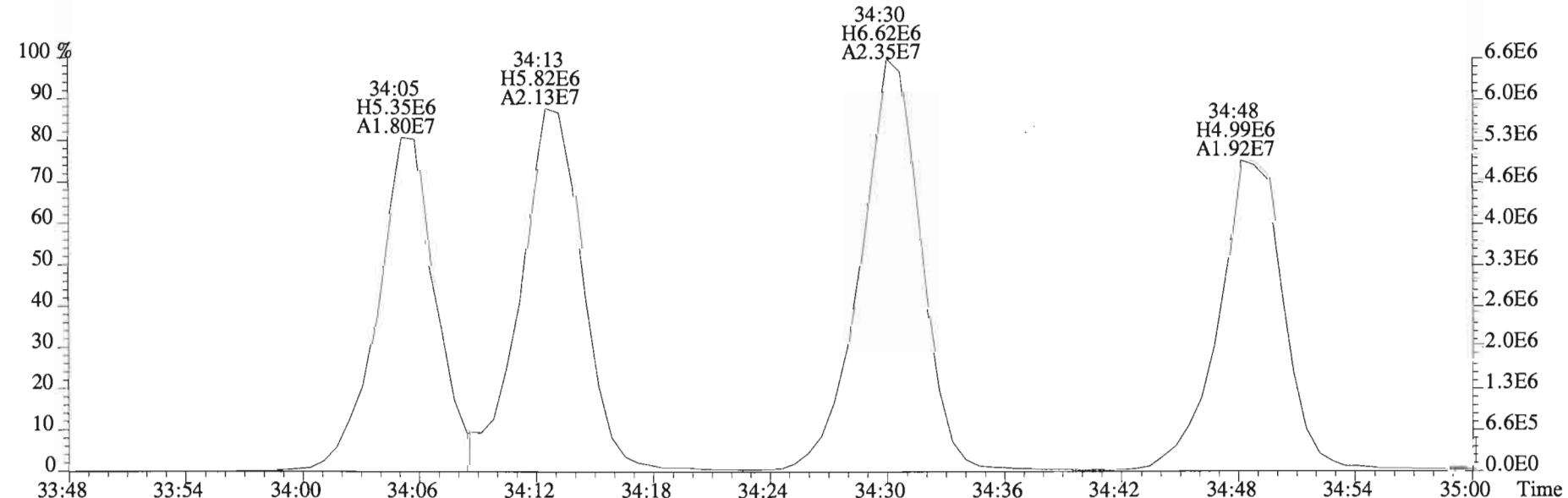
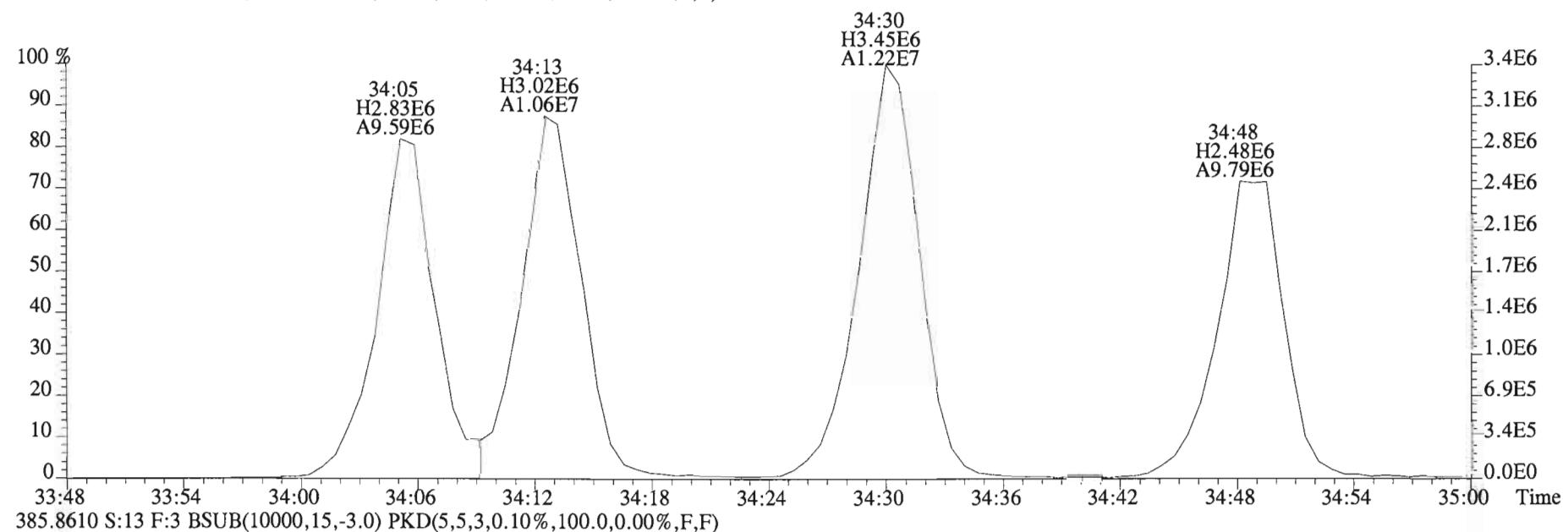
File:150220D1 #1-251 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



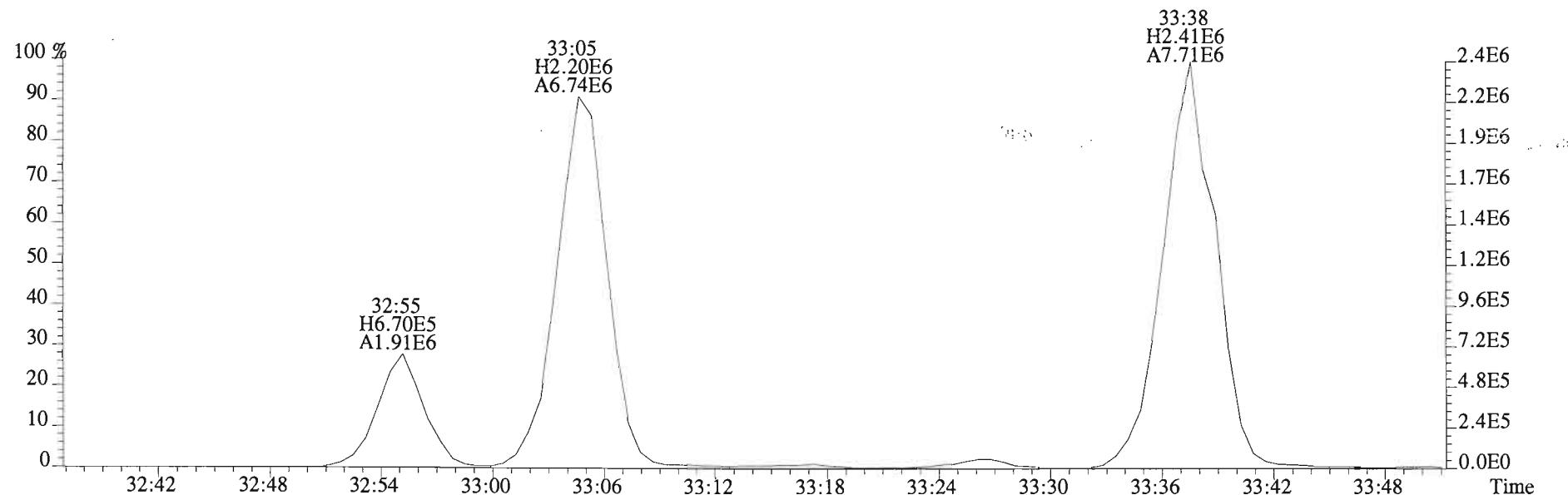
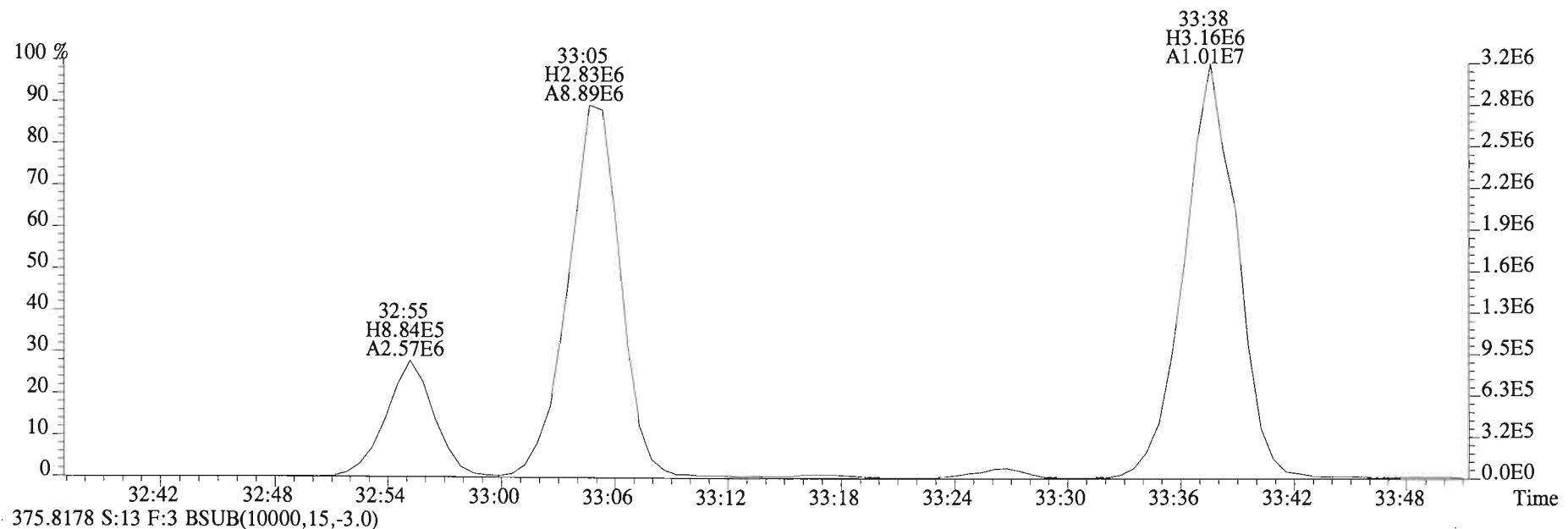
File:150220D1 #1-393 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
 373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



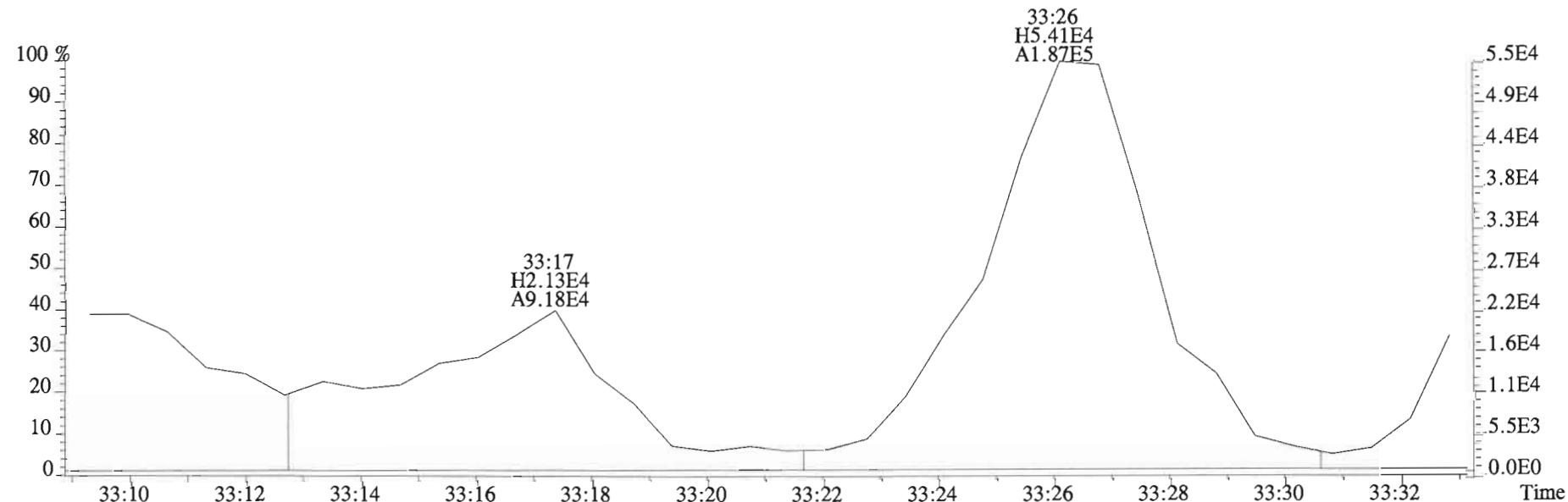
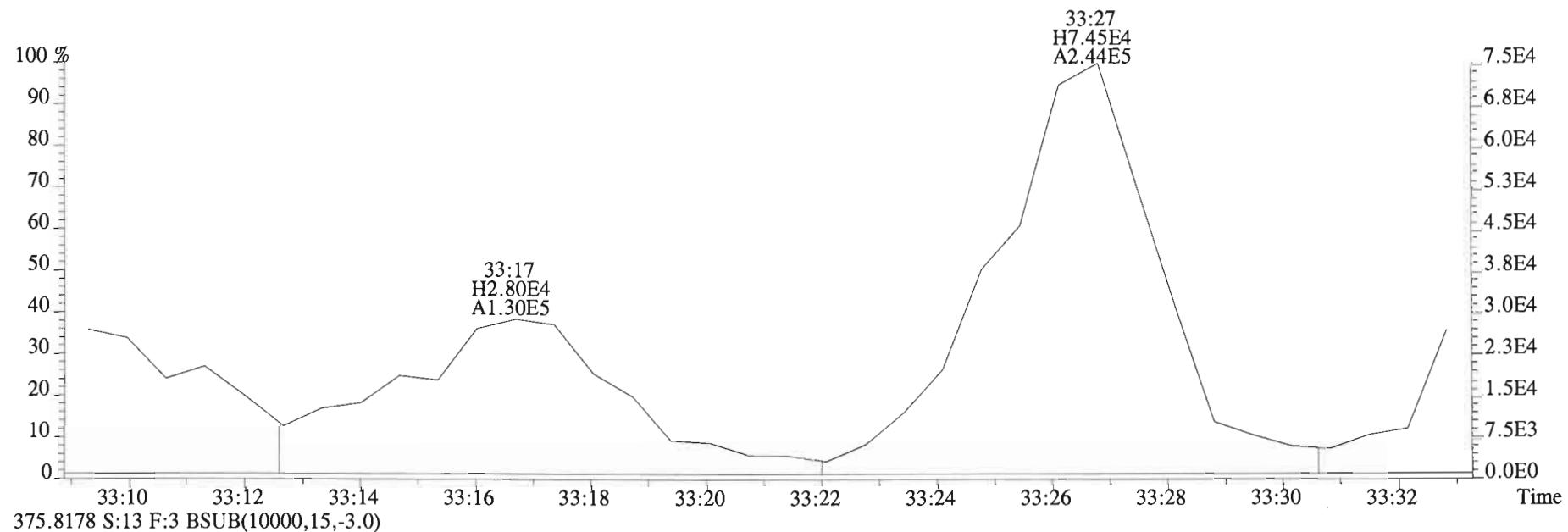
File:150220D1 #1-393 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
383.8639 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



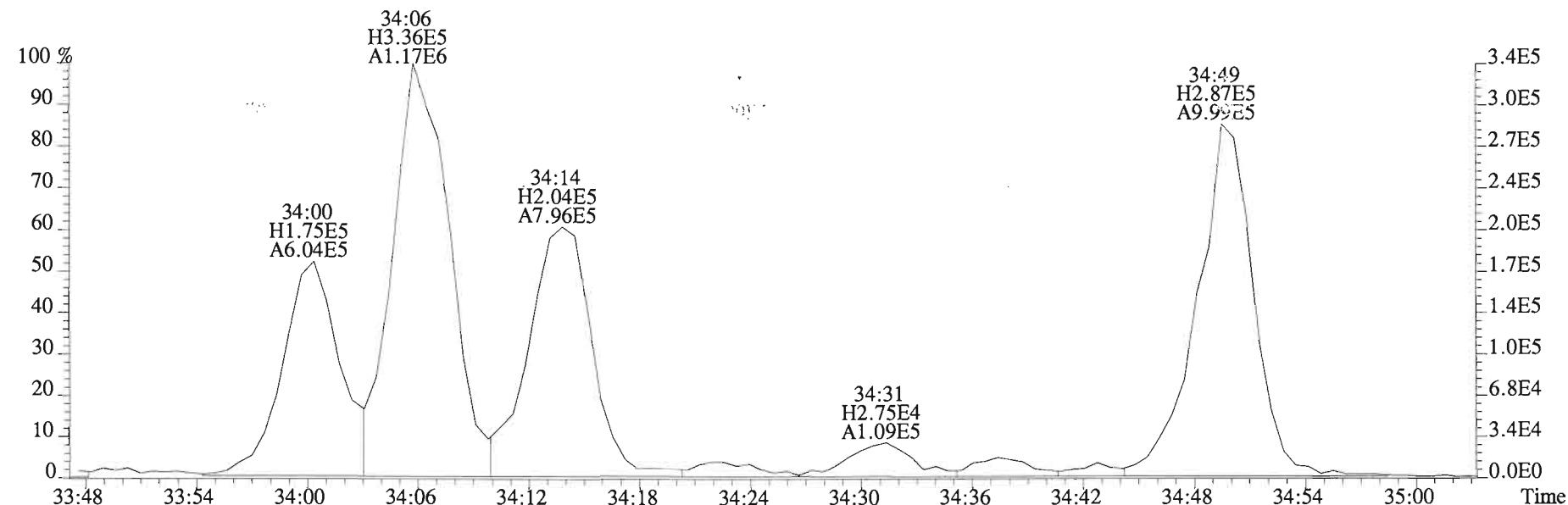
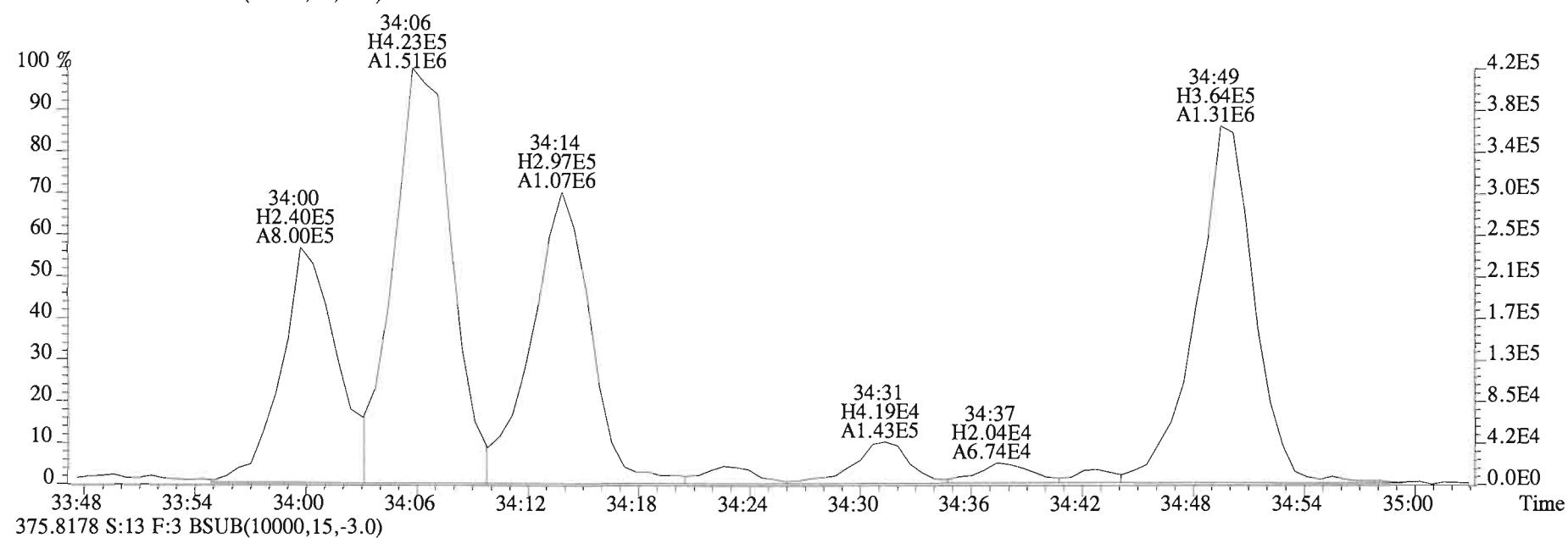
File:150220D1 #1-393 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0)



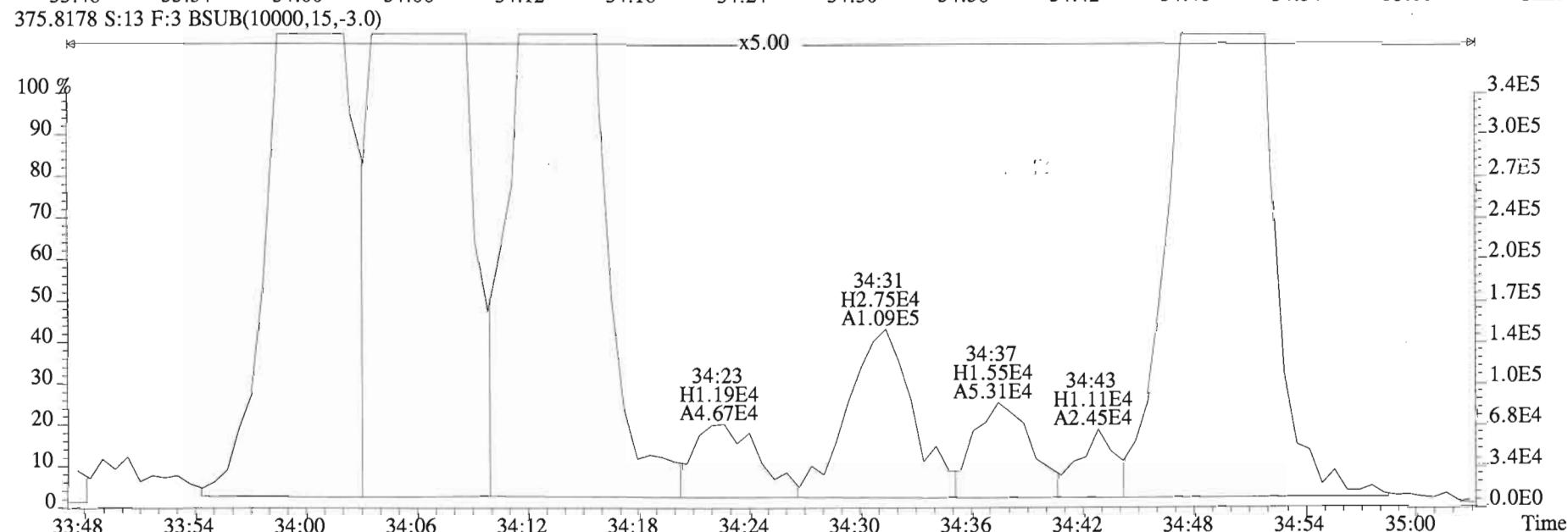
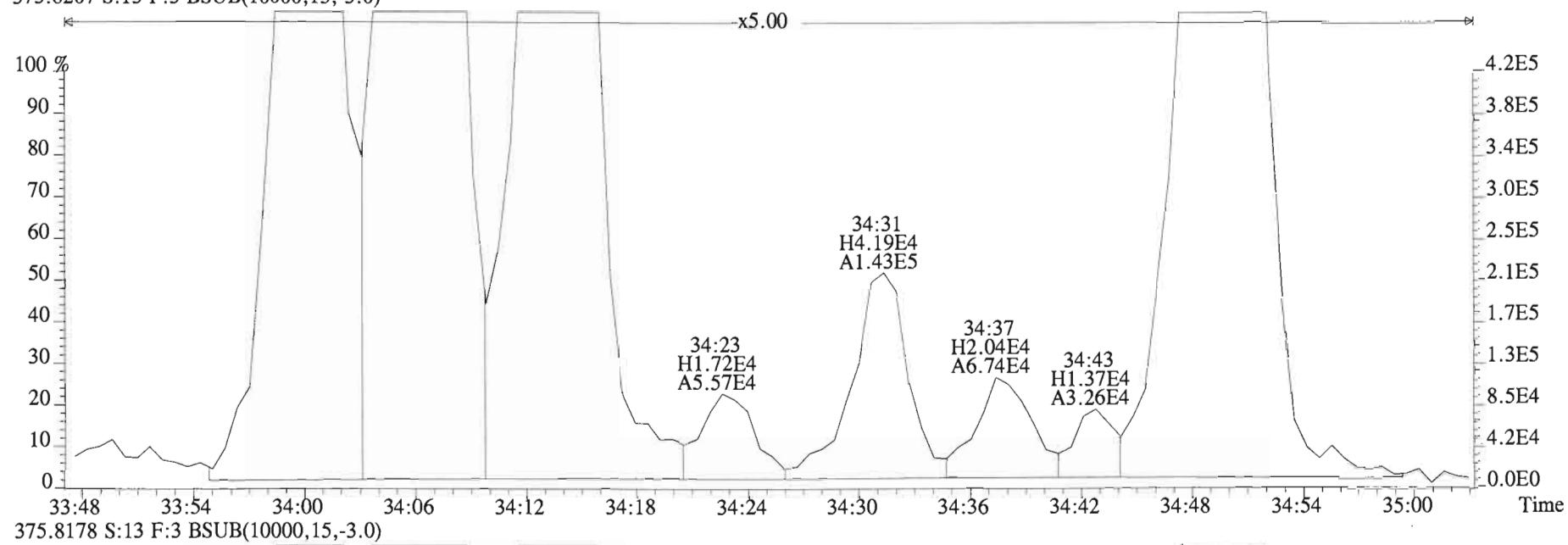
File:150220D1 #1-393 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0)



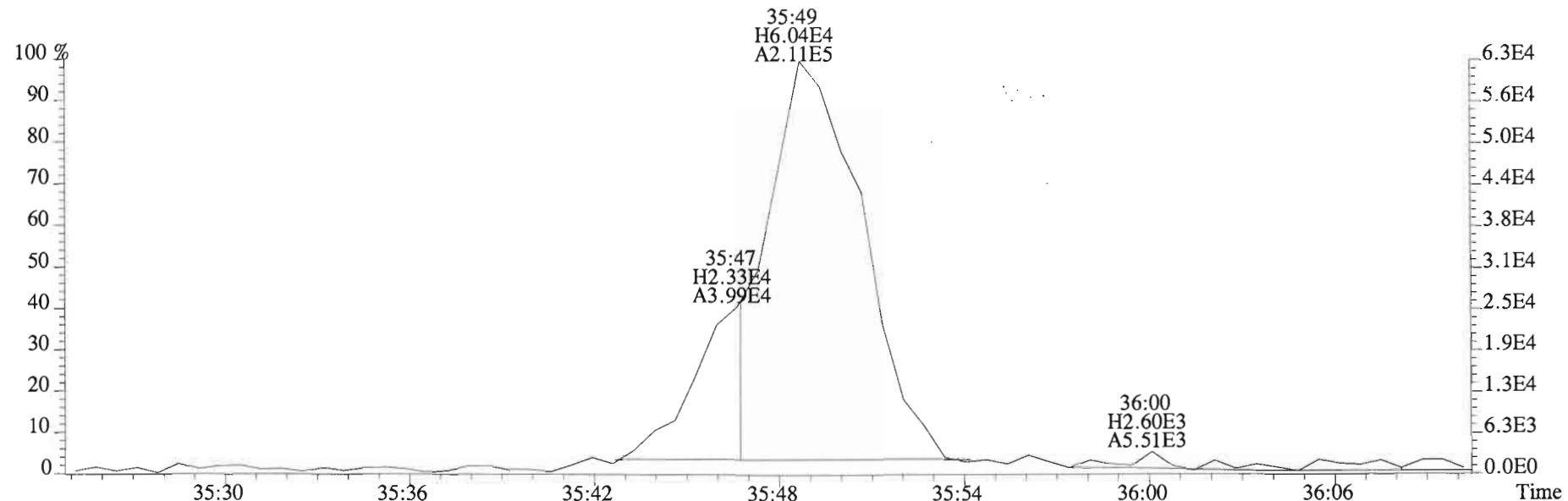
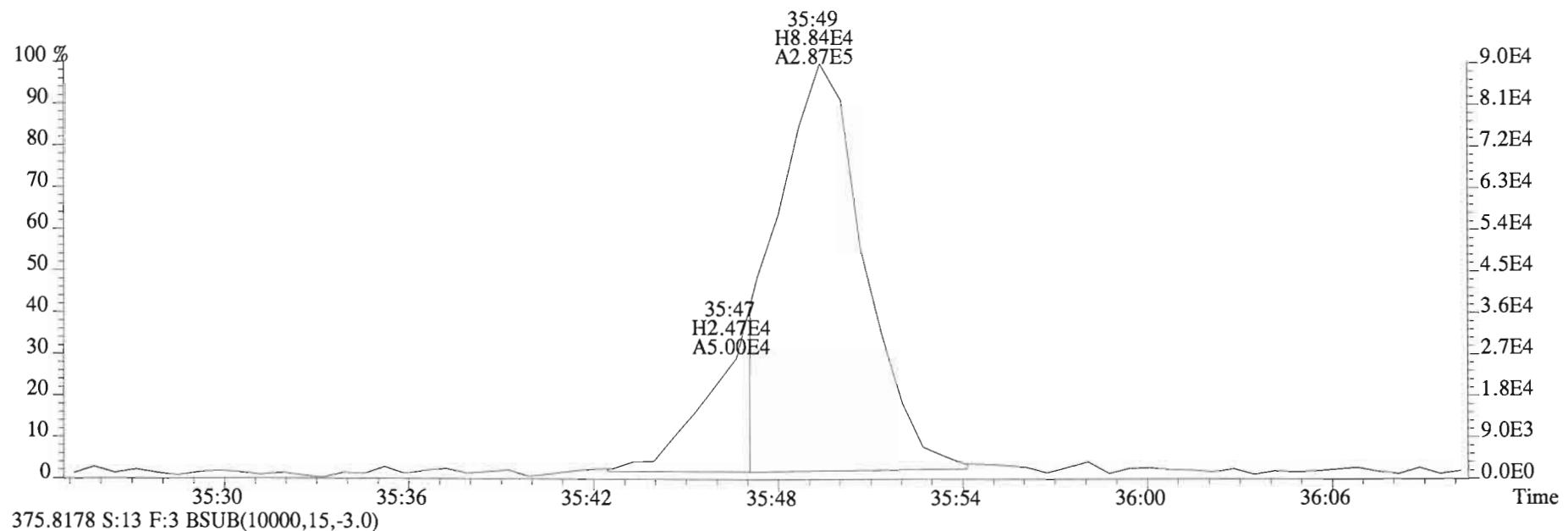
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Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0)



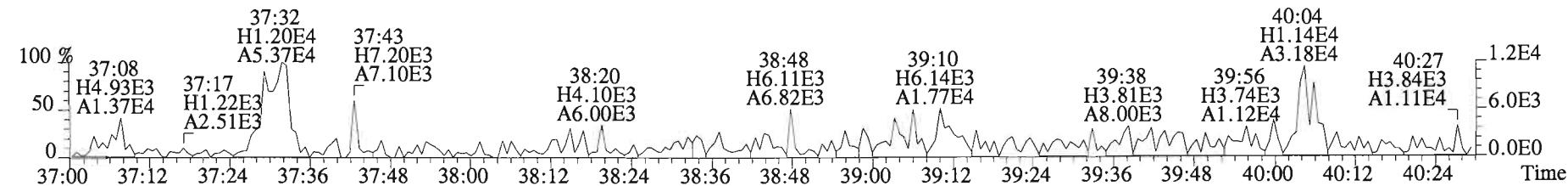
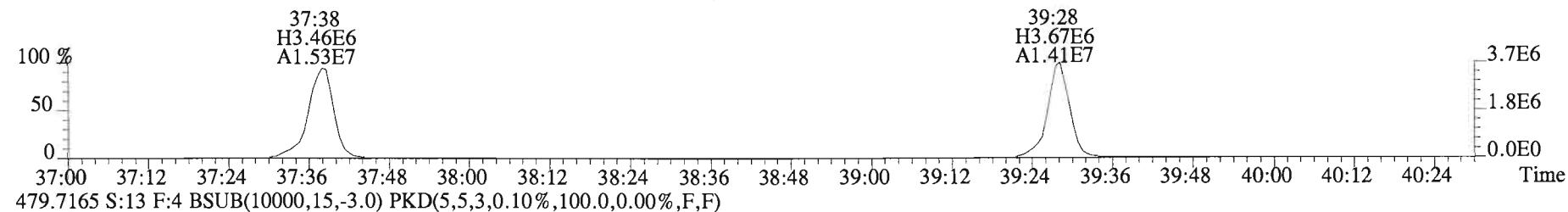
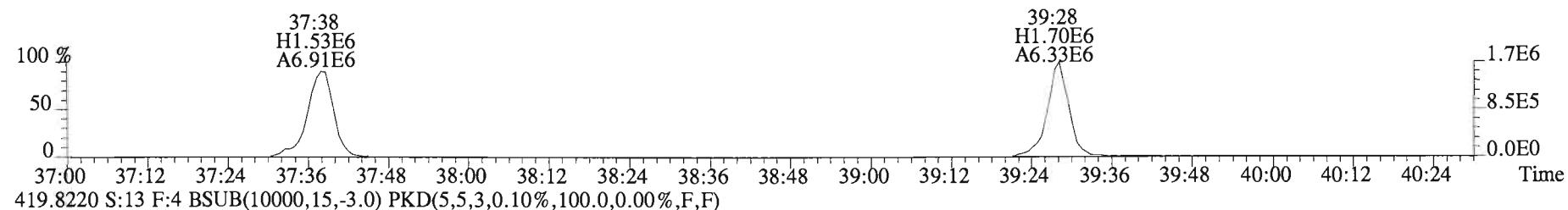
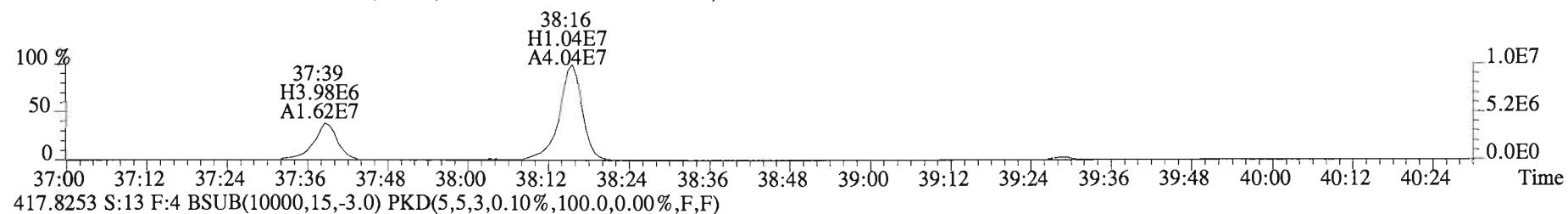
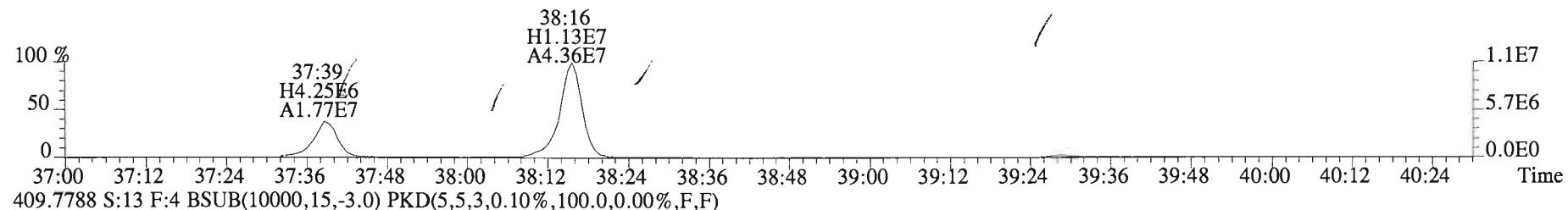
File:150220D1 #1-393 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0)



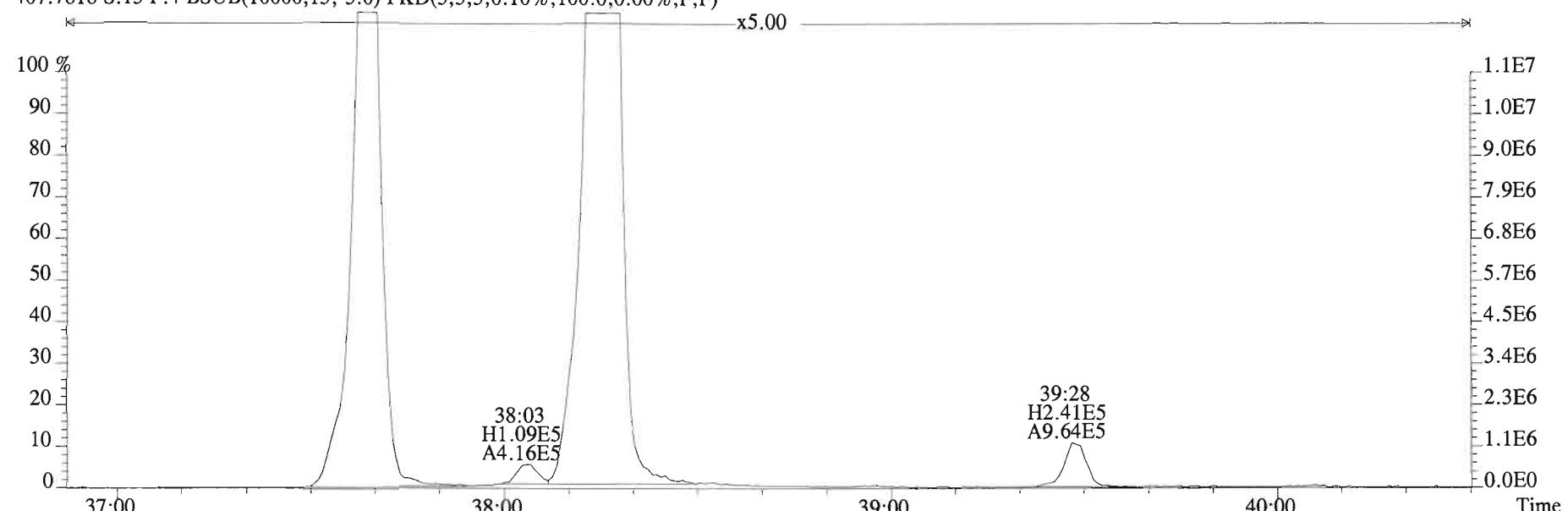
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Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0)



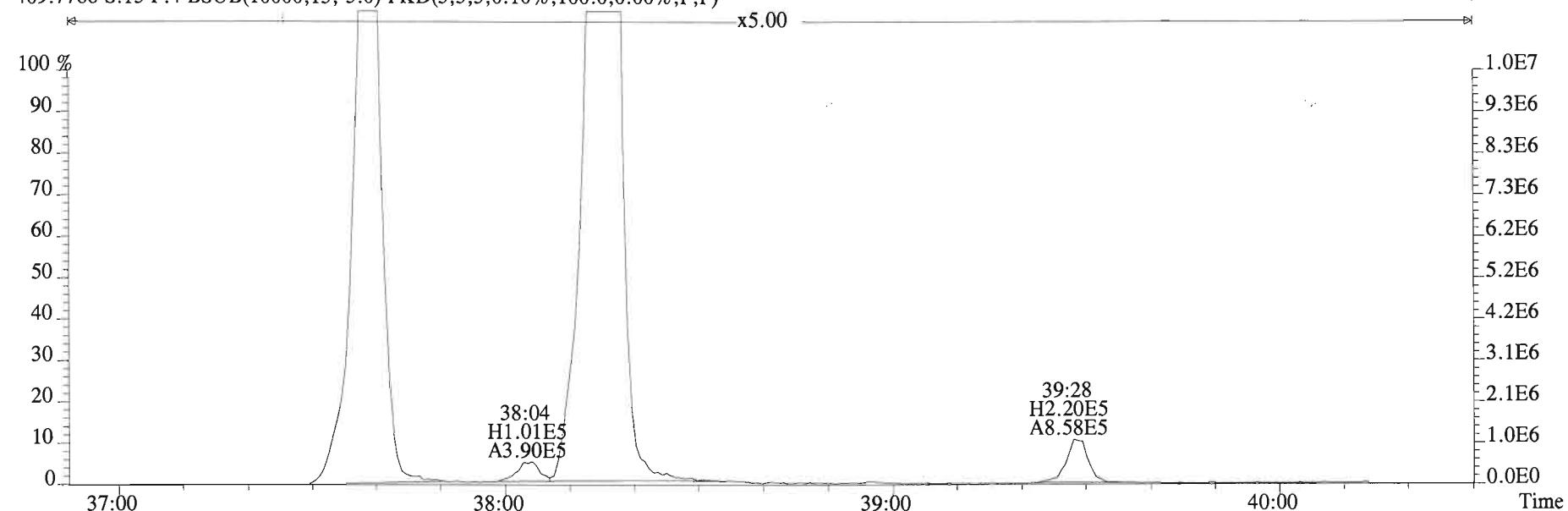
File:150220D1 #1-325 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
 407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



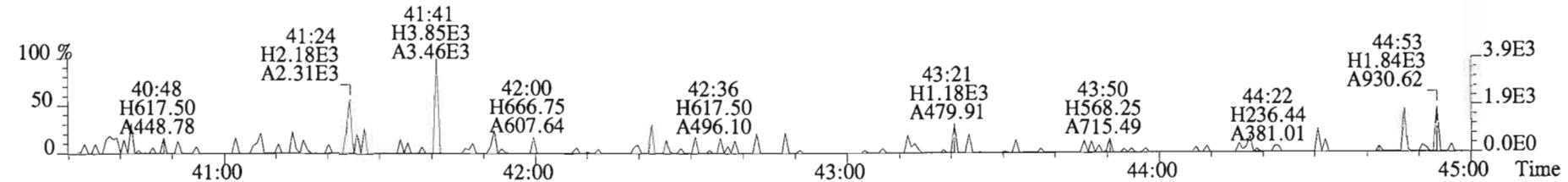
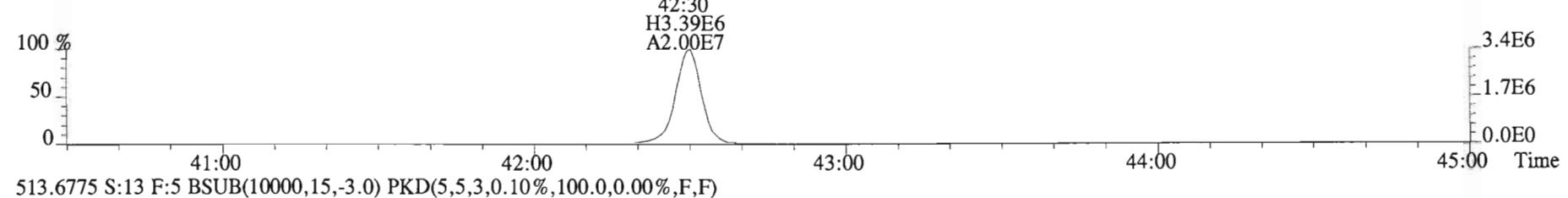
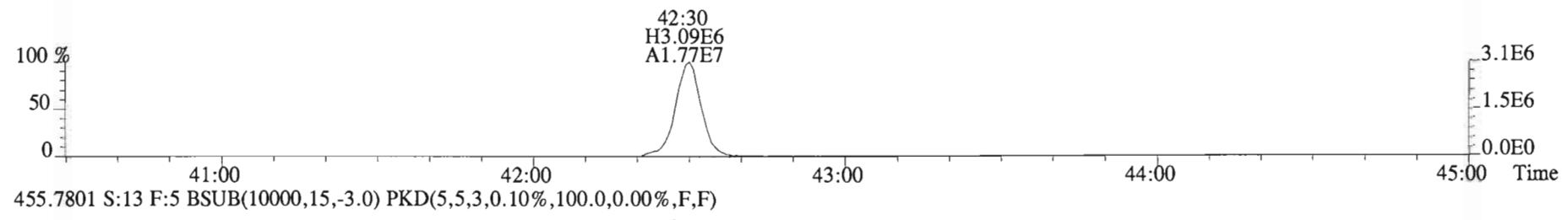
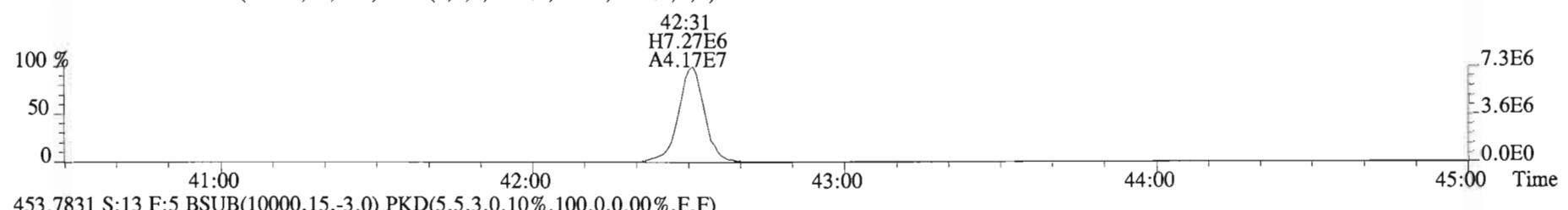
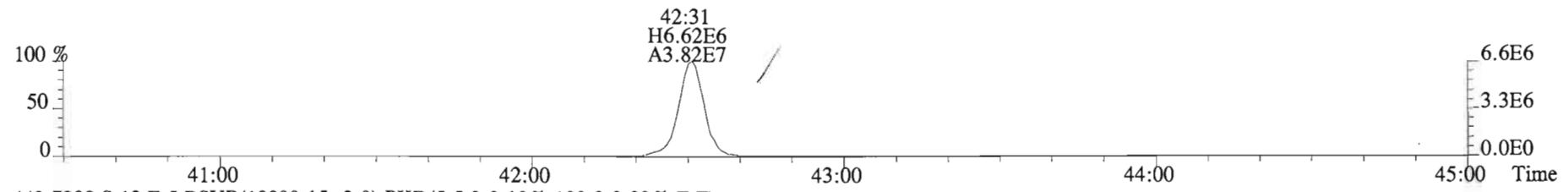
File:150220D1 #1-325 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 Exp:OCDD_DB5
407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7788 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:150220D1 #1-389 Acq:20-FEB-2015 20:47:41 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:1500147-02 WM-MH-61-20150203-S 25.3 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)



Client ID: WM-CB-52-20150203-S

Filename: 150220D1 S:14 Acq:20-FEB-15 21:36:26

Lab ID: 1500147-03

GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15

wt/vol: 9.999

ConCal: ST150220D1-1

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EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL	Name	Conc	EMPC	Qual	noise	DL
	2,3,7,8-TCDD	1.86e+05	0.60 n	1.17	27:01	1.001	1.0589	*	2.5	*		Total Tetra-Dioxins	33.3	35.1	*	*	
	1,2,3,7,8-PeCDD	1.00e+06	0.63 y	0.91	31:38	1.000	7.8743	*	2.5	*		Total Penta-Dioxins	85.7	85.7	*	*	
	1,2,3,4,7,8-HxCDD	1.19e+06	1.33 y	1.08	35:00	1.001	10.235	*	2.5	*		Total Hexa-Dioxins	880	880	*	*	
	1,2,3,6,7,8-HxCDD	1.11e+07	1.28 y	1.06	35:06	1.000	99.337	*	2.5	*		Total Hepta-Dioxins	2470	2470	*	*	
	1,2,3,7,8,9-HxCDD	4.89e+06	1.28 y	0.93	35:24	1.000	41.584	*	2.5	*		Total Tetra-Furans	109	110	*	*	
	1,2,3,4,6,7,8-HpCDD	9.90e+07	1.05 y	1.10	38:57	1.000	894.83	*	2.5	*		Total Penta-Furans	120.90	120.90	*	*	
	OCDD	3.65e+08	0.90 y	0.95	42:19	1.001	5115.3	*	2.5	*		Total Hexa-Furans	196	196	*	*	
												Total Hepta-Furans	271	271	*	*	
	2,3,7,8-TCDF	1.07e+06	0.81 y	1.07	26:12	1.000	4.8411	3197	*	2.5	*						
	1,2,3,7,8-PeCDF	7.54e+05	1.59 y	1.07	30:26	1.000	3.7784	*	2.5	*							
	2,3,4,7,8-PeCDF	8.56e+05	1.48 y	1.03	31:20	1.000	4.5317	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.51e+06	1.29 y	1.38	34:06	1.000	8.4296	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.62e+06	1.36 y	1.26	34:13	1.000	8.7685	*	2.5	*							
	2,3,4,6,7,8-HxCDF	2.27e+06	1.31 y	1.29	34:49	1.000	12.464	*	2.5	*							
	1,2,3,7,8,9-HxCDF	1.28e+05	1.38 y	1.19	35:46	1.000	0.87213	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.90e+07	1.08 y	1.61	37:38	1.000	110.37	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	1.14e+06	1.16 y	1.53	39:28	1.000	7.6493	*	2.5	*							
	OCDF	1.76e+07	0.91 y	1.10	42:31	1.000	180.26	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	3.01e+07	0.81 y	1.06	26:60	1.021	166.85					83.4					
IS	13C-1,2,3,7,8-PeCDD	2.80e+07	0.62 y	1.18	31:38	1.197	139.78					69.9					
IS	13C-1,2,3,4,7,8-HxCDD	2.15e+07	1.24 y	0.72	34:59	1.014	170.60					85.3					
IS	13C-1,2,3,6,7,8-HxCDD	2.10e+07	1.24 y	0.74	35:06	1.017	162.98					81.5					
IS	13C-1,2,3,7,8,9-HxCDD	2.53e+07	1.25 y	0.85	35:23	1.026	169.31					84.6					
IS	13C-1,2,3,4,6,7,8-HpCDD	2.00e+07	1.07 y	0.65	38:56	1.128	175.16					87.6					
IS	13C-OCDD	3.01e+07	0.88 y	0.76	42:18	1.226	224.83					56.2					
IS	13C-2,3,7,8-TCDF	4.11e+07	0.76 y	0.92	26:11	0.991	173.61					86.8					
IS	13C-1,2,3,7,8-PeCDF	3.72e+07	1.58 y	0.92	30:26	1.151	156.27					78.1					
IS	13C-2,3,4,7,8-PeCDF	3.66e+07	1.55 y	0.93	31:20	1.186	152.36					76.2					
IS	13C-1,2,3,4,7,8-HxCDF	2.59e+07	0.52 y	0.98	34:05	0.988	150.98					75.5					
IS	13C-1,2,3,6,7,8-HxCDF	2.94e+07	0.51 y	1.08	34:13	0.992	155.31					77.6					
IS	13C-2,3,4,6,7,8-HxCDF	2.83e+07	0.52 y	1.03	34:49	1.009	157.57					78.8					
IS	13C-1,2,3,7,8,9-HxCDF	2.48e+07	0.51 y	0.86	35:46	1.037	164.81					82.4					
IS	13C-1,2,3,4,6,7,8-HpCDF	2.14e+07	0.44 y	0.72	37:37	1.090	169.30					84.6					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.95e+07	0.45 y	0.70	39:28	1.144	159.48					79.7					
IS	13C-OCDF	3.55e+07	0.88 y	0.85	42:30	1.232	238.96					59.7					
C/Up	37Cl-2,3,7,8-TCDD	1.29e+07		1.12	27:01	1.022	68.090					85.1	Integrations by		Reviewed by		
RS/RT	13C-1,2,3,4-TCDD	3.40e+07	0.79 y	1.00	26:26	*	200.03						Analyst: <u>MJ</u>		Analyst: <u>JM</u>		
RS	13C-1,2,3,4-TCDF	5.16e+07	0.77 y	1.00	24:56	*	200.03										
RS/RT	13C-1,2,3,4,6,9-HxCDF	3.50e+07	0.51 y	1.00	34:30	*	200.03						Date: <u>2/23/15</u>		Date: <u>2/24/15</u>		

Totals class: TCDD EMPC

Entry #: 19

Run: 19 File: 150220D1 S: 14 I: 1 F: 1
 Acquired: 20-FEB-15 21:36:26 Processed: 21-FEB-15 07:53:15

Total Concentration: 35.078 Unnamed Concentration: 34.019

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
23:29	6.955e+05	9.386e+05	0.74	y	1.634e+06	9.2844
23:51	4.751e+05	6.217e+05	0.76	y	1.097e+06	6.2315
24:17	1.066e+05	1.409e+05	0.76	y	2.474e+05	1.4056
25:04	2.636e+04	3.354e+04	0.79	y	5.990e+04	0.34032
25:18	2.609e+05	3.741e+05	0.70	y	6.350e+05	3.6078
25:28	2.091e+05	2.980e+05	0.70	y	5.071e+05	2.8811
25:40	9.123e+04	1.241e+05	0.74	y	2.153e+05	1.2234
25:54	4.860e+04	4.633e+04	1.05	n	8.200e+04	0.46588
26:05	1.081e+05	1.519e+05	0.71	y	2.600e+05	1.4772
26:25	1.205e+05	1.544e+05	0.78	y	2.749e+05	1.5619
26:33	3.252e+04	4.763e+04	0.68	y	8.015e+04	0.45536
26:45	1.966e+05	2.477e+05	0.79	y	4.442e+05	2.5238
26:53	4.766e+04	5.677e+04	0.84	y	1.044e+05	0.59333
27:01	8.108e+04	1.351e+05	0.60	n	1.864e+05	1.0589
27:19	9.191e+04	1.197e+05	0.77	y	2.116e+05	1.2023
27:27	2.126e+04	3.681e+04	0.58	n	4.886e+04	0.27761
27:54	3.699e+04	4.876e+04	0.76	y	8.575e+04	0.48719

Totals class: PeCDD EMPC

Entry #: 21

Run: 19 File: 150220D1 S: 14 I: 1 F: 2
Acquired: 20-FEB-15 21:36:26 Processed: 21-FEB-15 07:53:15

Total Concentration: 85.683 Unnamed Concentration: 77.808

RT	m1 Resp	m2 Resp RA	Resp	Concentration	Name
29:33	1.214e+06	2.017e+06 0.60 y	3.231e+06	25.428	
30:00	2.170e+05	3.622e+05 0.60 y	5.792e+05	4.5583	
30:28	4.986e+05	8.048e+05 0.62 y	1.303e+06	10.258	
30:37	5.292e+05	8.535e+05 0.62 y	1.383e+06	10.882	
30:43	3.890e+05	6.113e+05 0.64 y	1.000e+06	7.8715	
30:56	4.922e+05	7.878e+05 0.62 y	1.280e+06	10.073	
31:14	1.788e+05	2.666e+05 0.67 y	4.454e+05	3.5055	
31:38	3.878e+05	6.128e+05 0.63 y	1.001e+06	7.8743	1,2,3,7,8-PeCDD
31:43	1.145e+05	1.806e+05 0.63 y	2.951e+05	2.3221	
32:01	1.461e+05	2.237e+05 0.65 y	3.698e+05	2.9102	

Totals class: HxCDD EMPC

Entry #: 23

Run: 19 File: 150220D1 S: 14 I: 1 F: 3
Acquired: 20-FEB-15 21:36:26 Processed: 21-FEB-15 07:53:15

Total Concentration: 879.64 Unnamed Concentration: 728.482

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
33:27	1.282e+07	1.013e+07	1.27 y	2.295e+07	199.33
34:01	2.009e+06	1.595e+06	1.26 y	3.605e+06	31.307
34:17	3.033e+07	2.420e+07	1.25 y	5.452e+07	473.53
34:26	9.260e+05	7.057e+05	1.31 y	1.632e+06	14.172
35:00	6.763e+05	5.096e+05	1.33 y	1.186e+06	10.235 1,2,3,4,7,8-HxCDD
35:06	6.228e+06	4.872e+06	1.28 y	1.110e+07	99.337 1,2,3,6,7,8-HxCDD
35:18	6.466e+05	5.204e+05	1.24 y	1.167e+06	10.136
35:24	2.749e+06	2.145e+06	1.28 y	4.894e+06	41.584 1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 19 File: 150220D1 S: 14 I: 1 F: 4
Acquired: 20-FEB-15 21:36:26 Processed: 21-FEB-15 07:53:15

Total Concentration: 2467.4 Unnamed Concentration: 1572.532

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
38:03	8.862e+07	8.532e+07	1.04	y	1.739e+08		1572.5	
38:57	5.069e+07	4.829e+07	1.05	y	9.898e+07		894.83	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 19 File: 150220D1 S: 14 I: 1 F: 1
 Acquired: 20-FEB-15 21:36:26 Processed: 21-FEB-15 07:53:15

Total Concentration: 110.27 Unnamed Concentration: 105.425

RT	m1 Resp	m2 Resp RA	Resp	Concentration	Name
21:18	2.883e+05	3.628e+05	0.79 y	6.510e+05	2.9563
21:52	3.244e+05	4.293e+05	0.76 y	7.538e+05	3.4228
22:29	8.111e+05	1.071e+06	0.76 y	1.882e+06	8.5468
23:02	1.194e+06	1.505e+06	0.79 y	2.699e+06	12.255
23:26	9.171e+05	1.168e+06	0.79 y	2.085e+06	9.4670
23:53	5.190e+05	6.652e+05	0.78 y	1.184e+06	5.3770
24:01	3.702e+05	4.639e+05	0.80 y	8.341e+05	3.7873
24:12	3.540e+05	4.649e+05	0.76 y	8.189e+05	3.7185
24:33	2.279e+05	3.010e+05	0.76 y	5.289e+05	2.4015
24:42	4.235e+05	5.411e+05	0.78 y	9.646e+05	4.3800
24:49	6.272e+05	7.806e+05	0.80 y	1.408e+06	6.3927
24:57	1.137e+06	1.440e+06	0.79 y	2.577e+06	11.703
25:24	5.897e+05	7.237e+05	0.81 y	1.313e+06	5.9639
25:39	3.064e+05	4.228e+05	0.72 y	7.292e+05	3.3112
25:49	3.974e+05	5.287e+05	0.75 y	9.261e+05	4.2054
26:00	2.890e+05	3.693e+05	0.78 y	6.583e+05	2.9892
26:07	2.578e+05	3.502e+05	0.74 y	6.080e+05	2.7609
26:12	4.759e+05	5.902e+05	0.81 y	1.066e+06	4.8411 2,3,7,8-TCDF
26:33	8.934e+05	1.207e+06	0.74 y	2.101e+06	9.5388
26:46	6.213e+04	7.950e+04	0.78 y	1.416e+05	0.64314
27:02	4.121e+04	4.759e+04	0.87 y	8.880e+04	0.40321
28:02	2.001e+05	1.495e+05	1.34 n	2.646e+05	1.2016

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

Run: 19 File: 150220D1 S: 14 I: 1 F: 1
Acquired: 20-FEB-15 21:36:26 Processed: 21-FEB-15 07:53:15

Total Concentration: 40.641 Unnamed Concentration: 40.641

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
28:02	4.849e+06	3.046e+06	1.59	y	7.895e+06
					40.641

Totals class: PeCDF EMPC

Entry #: 31

Run: 19 File: 150220D1 S: 14 I: 1 F: 2
 Acquired: 20-FEB-15 21:36:26 Processed: 21-FEB-15 07:53:15

Total Concentration: 80.257 Unnamed Concentration: 71.947

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
29:22	1.144e+06	7.146e+05	1.60	y	1.859e+06		9.5667	
29:30	3.159e+06	1.952e+06	1.62	y	5.111e+06		26.307	
29:52	2.842e+05	1.847e+05	1.54	y	4.689e+05		2.4136	
30:03	1.635e+06	9.785e+05	1.67	y	2.614e+06		13.454	
30:16	2.791e+05	1.669e+05	1.67	y	4.460e+05		2.2959	
30:26	4.631e+05	2.913e+05	1.59	y	7.544e+05	3.7784	1,2,3,7,8-PeCDF	
30:40	8.242e+05	5.281e+05	1.56	y	1.352e+06		6.9608	
30:49	5.345e+04	3.728e+04	1.43	y	9.073e+04		0.46703	
30:57	2.979e+04	1.855e+04	1.61	y	4.834e+04		0.24881	
31:09	6.957e+04	4.520e+04	1.54	y	1.148e+05		0.59081	
31:15	6.600e+05	4.086e+05	1.62	y	1.069e+06		5.5008	
31:20	5.110e+05	3.455e+05	1.48	y	8.565e+05	4.5317	2,3,4,7,8-PeCDF	
31:24	3.565e+05	2.320e+05	1.54	y	5.885e+05		3.0292	
31:38	7.234e+04	4.591e+04	1.58	y	1.183e+05		0.60870	
32:15	6.184e+04	3.611e+04	1.71	y	9.794e+04		0.50416	

Totals class: HxCDF EMPC

Entry #: 33

Run: 19 File: 150220D1 S: 14 I: 1 F: 3
 Acquired: 20-FEB-15 21:36:26 Processed: 21-FEB-15 07:53:15

Total Concentration: 196.36 Unnamed Concentration: 165.829

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
32:54	2.452e+06		1.847e+06	1.33	y	4.299e+06	24.752	
33:05	8.056e+06		6.160e+06	1.31	y	1.422e+07	81.853	
33:16	1.126e+05		9.166e+04	1.23	y	2.043e+05	1.1763	
33:25	2.563e+05		1.930e+05	1.33	y	4.493e+05	2.5871	
33:37	4.506e+06		3.359e+06	1.34	y	7.866e+06	45.288	
34:00	5.243e+05		4.012e+05	1.31	y	9.255e+05	5.3288	
34:06	8.502e+05		6.614e+05	1.29	y	1.512e+06	8.4296	1,2,3,4,7,8-HxCDF
34:13	9.336e+05		6.884e+05	1.36	y	1.622e+06	8.7685	1,2,3,6,7,8-HxCDF
34:22	1.106e+05		8.398e+04	1.32	y	1.946e+05	1.1203	
34:31	1.204e+05		8.640e+04	1.39	y	2.068e+05	1.1905	
34:38	1.107e+05		8.006e+04	1.38	y	1.908e+05	1.0984	
34:49	1.289e+06		9.832e+05	1.31	y	2.272e+06	12.464	2,3,4,6,7,8-HxCDF
35:46	7.443e+04		5.388e+04	1.38	y	1.283e+05	0.87213	1,2,3,7,8,9-HxCDF
35:49	1.457e+05		1.033e+05	1.41	y	2.490e+05	1.4337	

Totals class: HpCDF EMPC

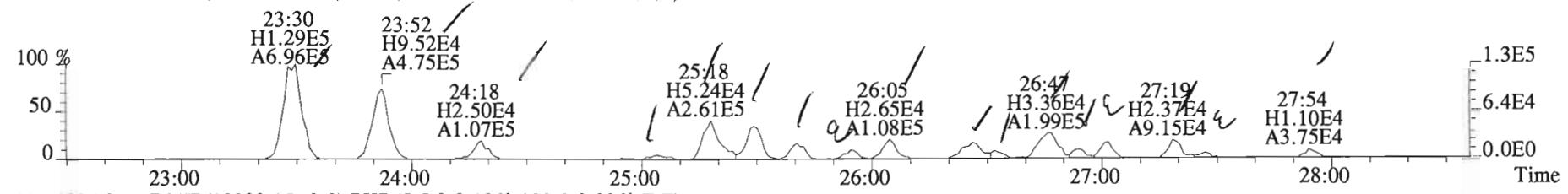
Entry #: 35

Run: 19 File: 150220D1 S: 14 I: 1 F: 4
Acquired: 20-FEB-15 21:36:26 Processed: 21-FEB-15 07:53:15

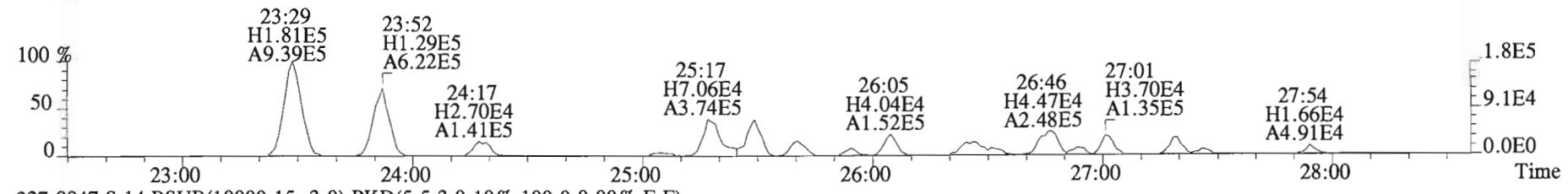
Total Concentration: 270.90 Unnamed Concentration: 152.874

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
37:38	9.858e+06		9.157e+06	1.08	y	1.902e+07	110.37	1,2,3,4,6,7,8-HpCDF
38:03	4.156e+05		3.606e+05	1.15	y	7.762e+05	4.8462	
38:15	1.236e+07		1.135e+07	1.09	y	2.371e+07	148.03	
39:28	6.086e+05		5.265e+05	1.16	y	1.135e+06	7.6493	1,2,3,4,7,8,9-HpCDF

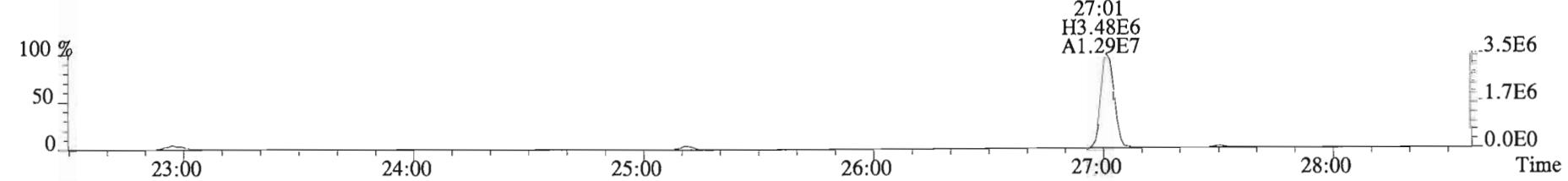
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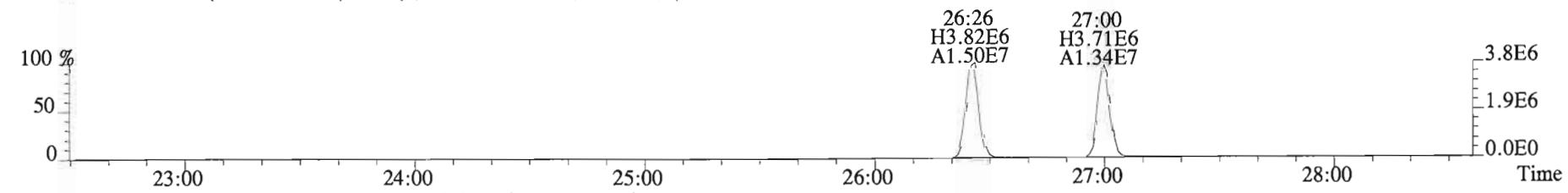
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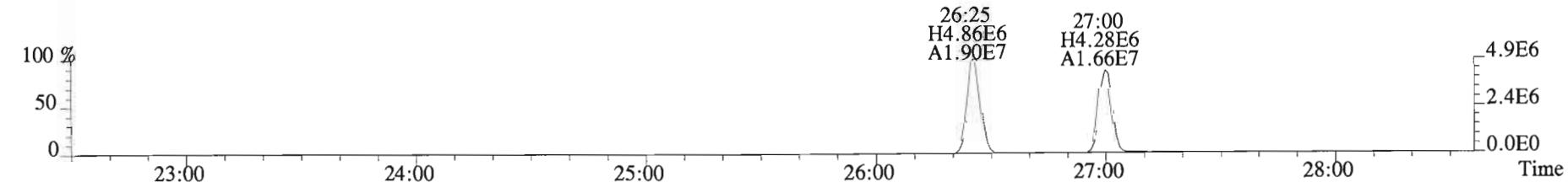
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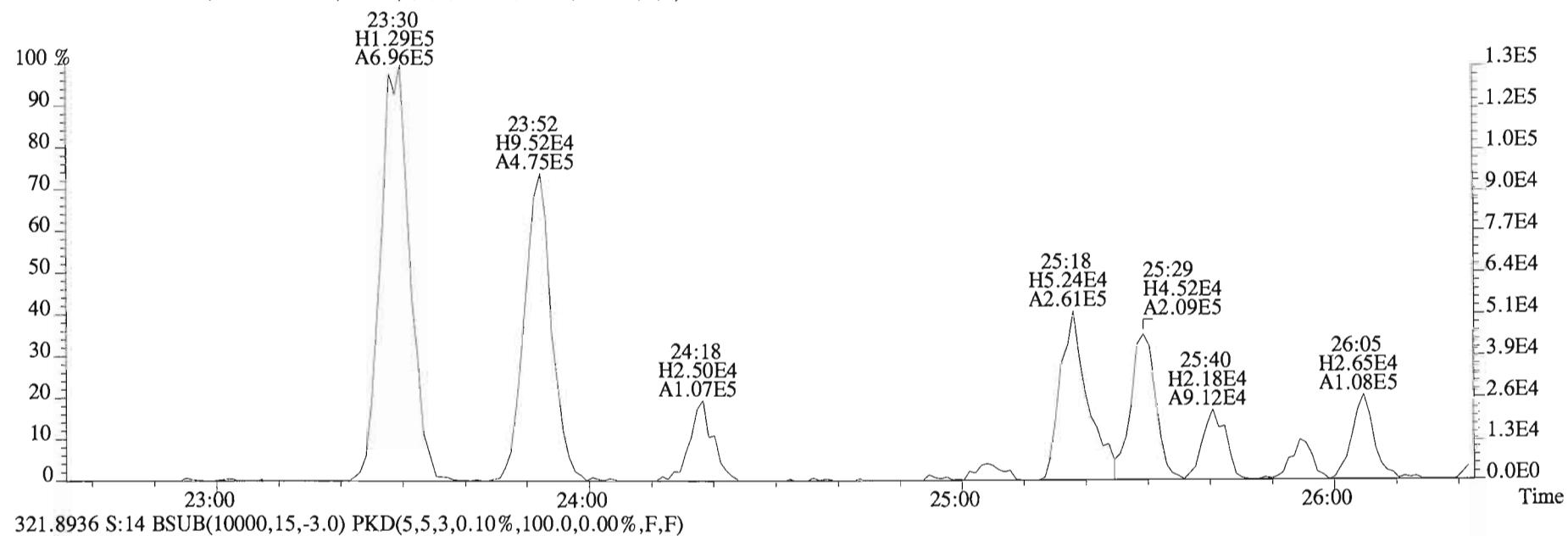
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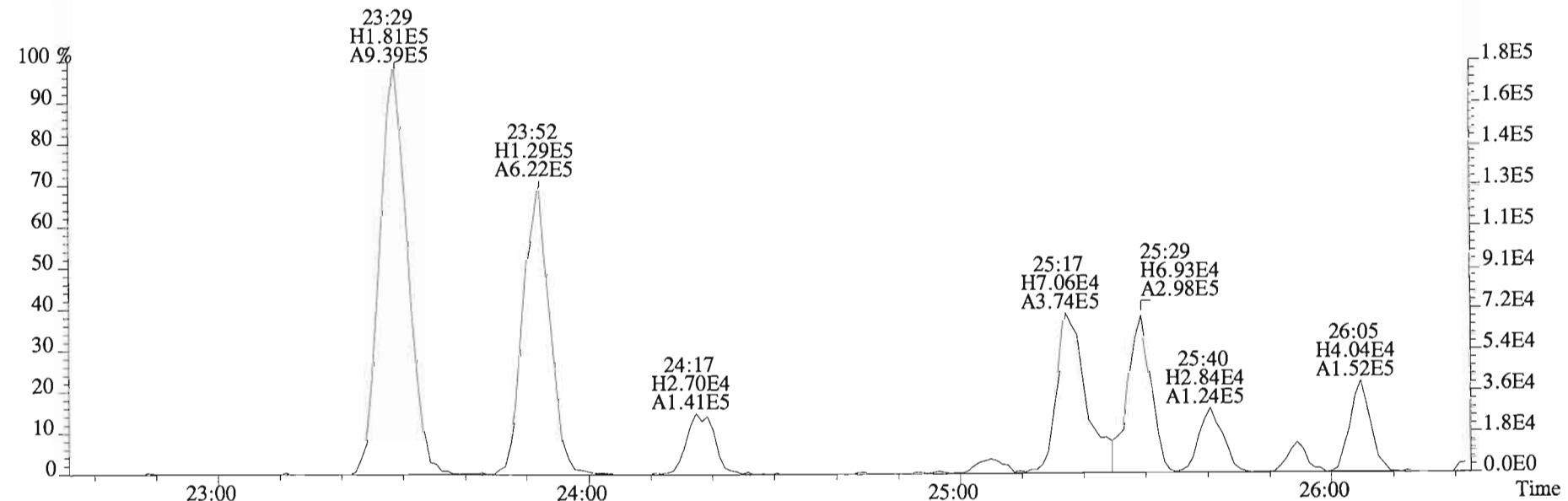
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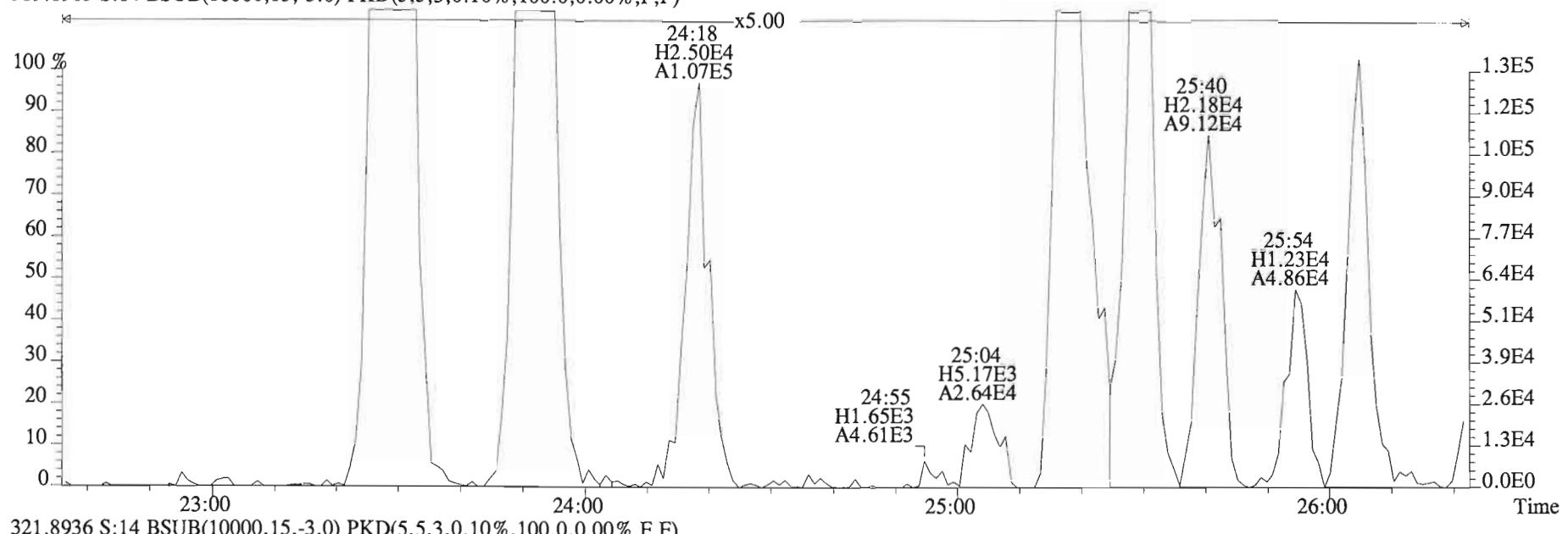
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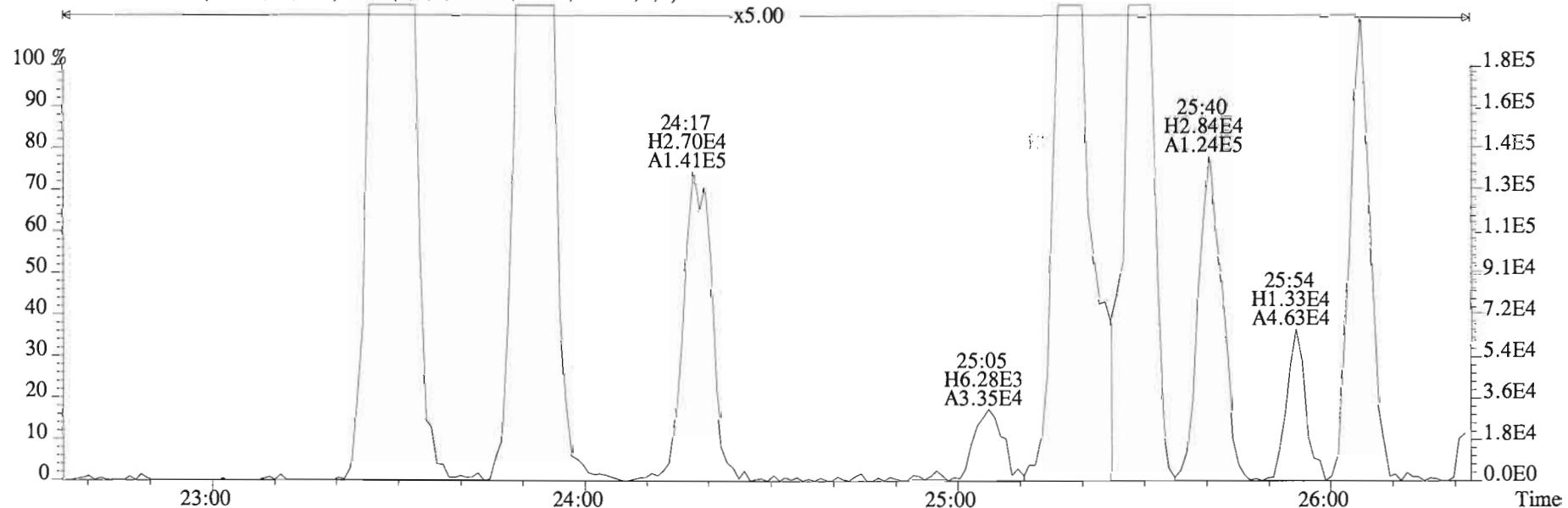
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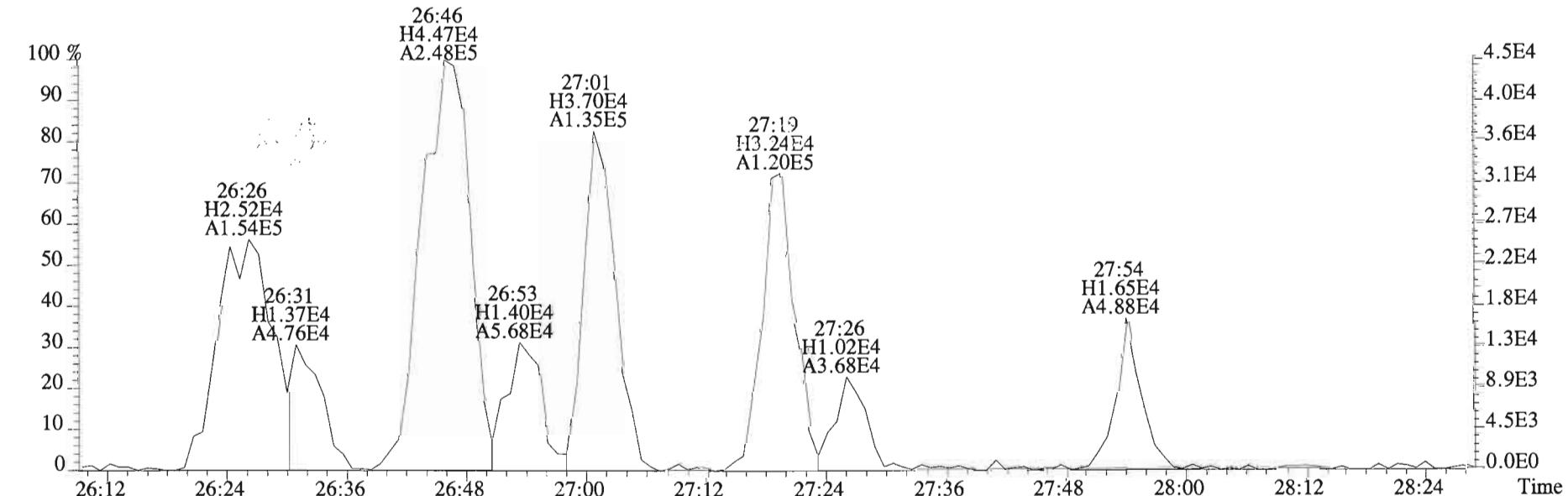
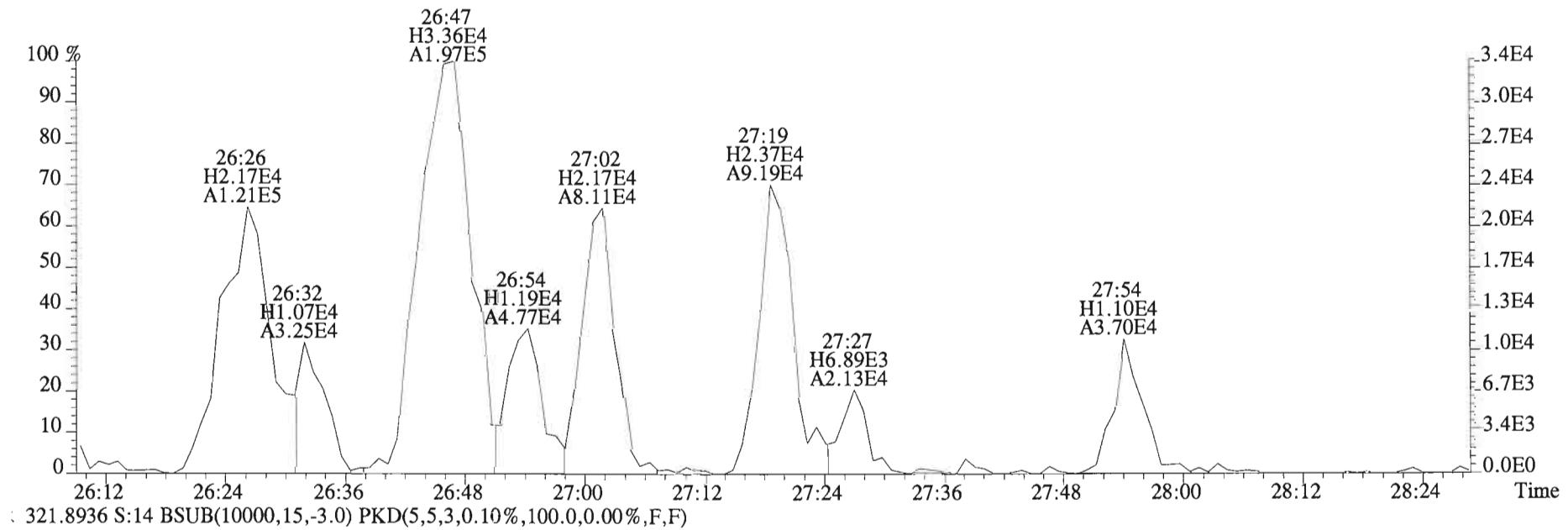
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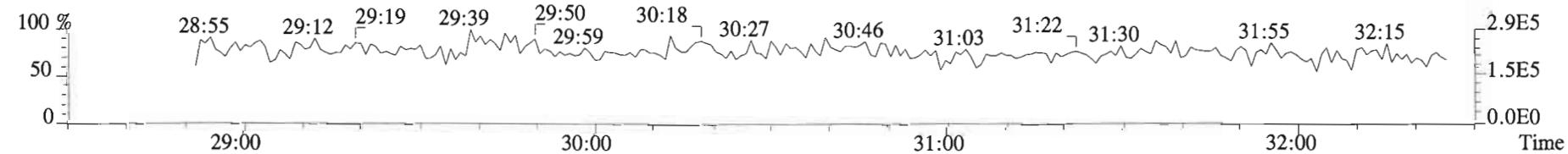
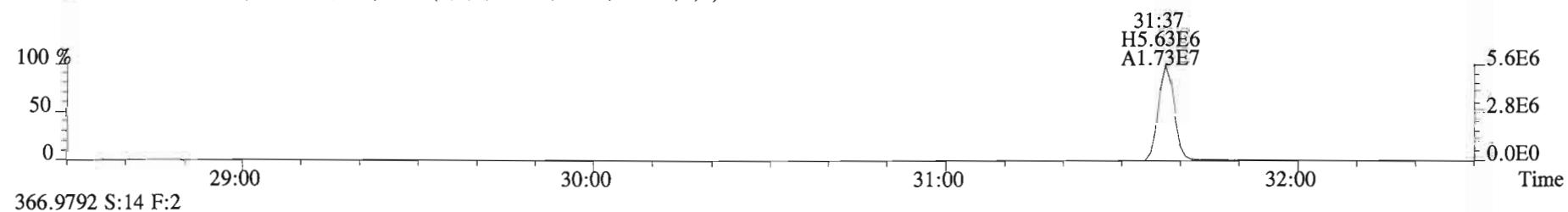
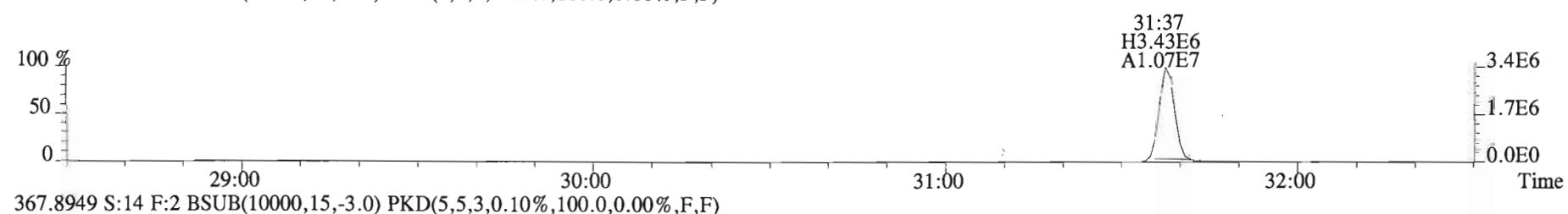
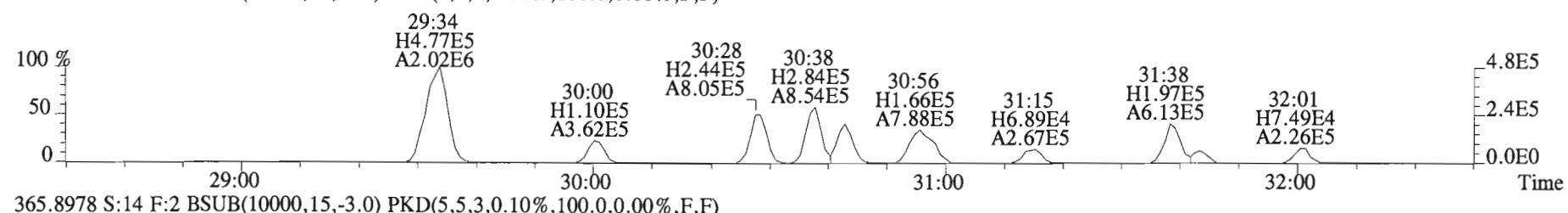
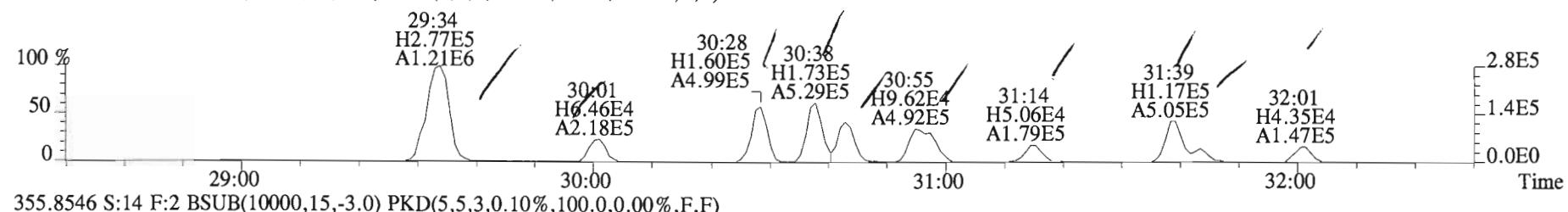
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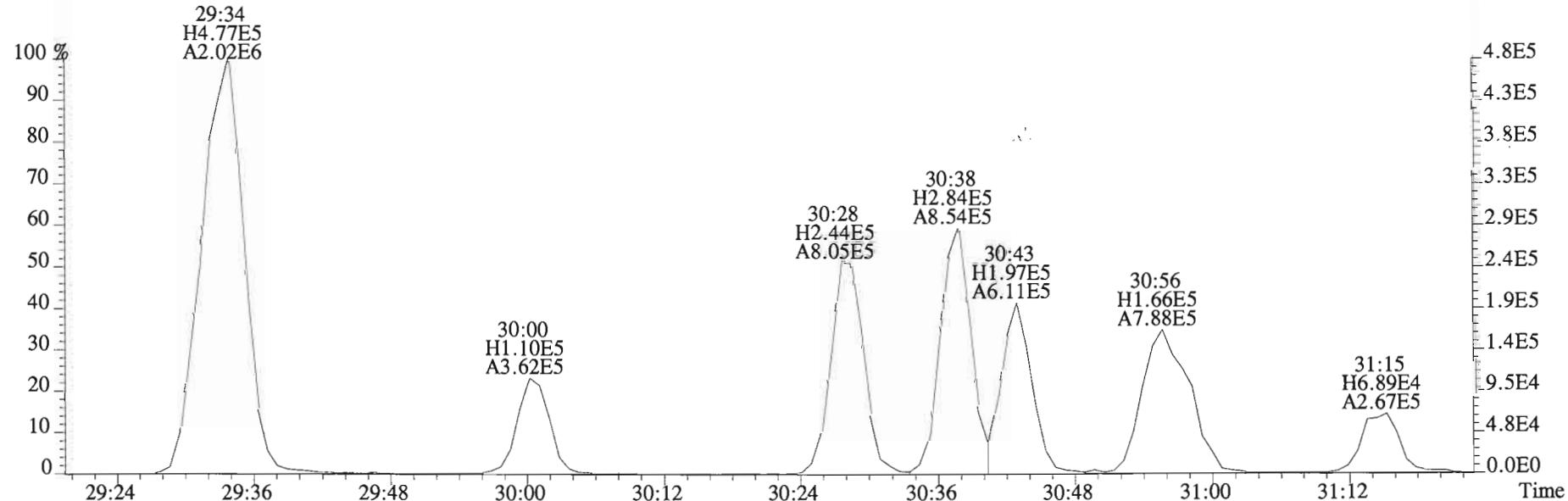
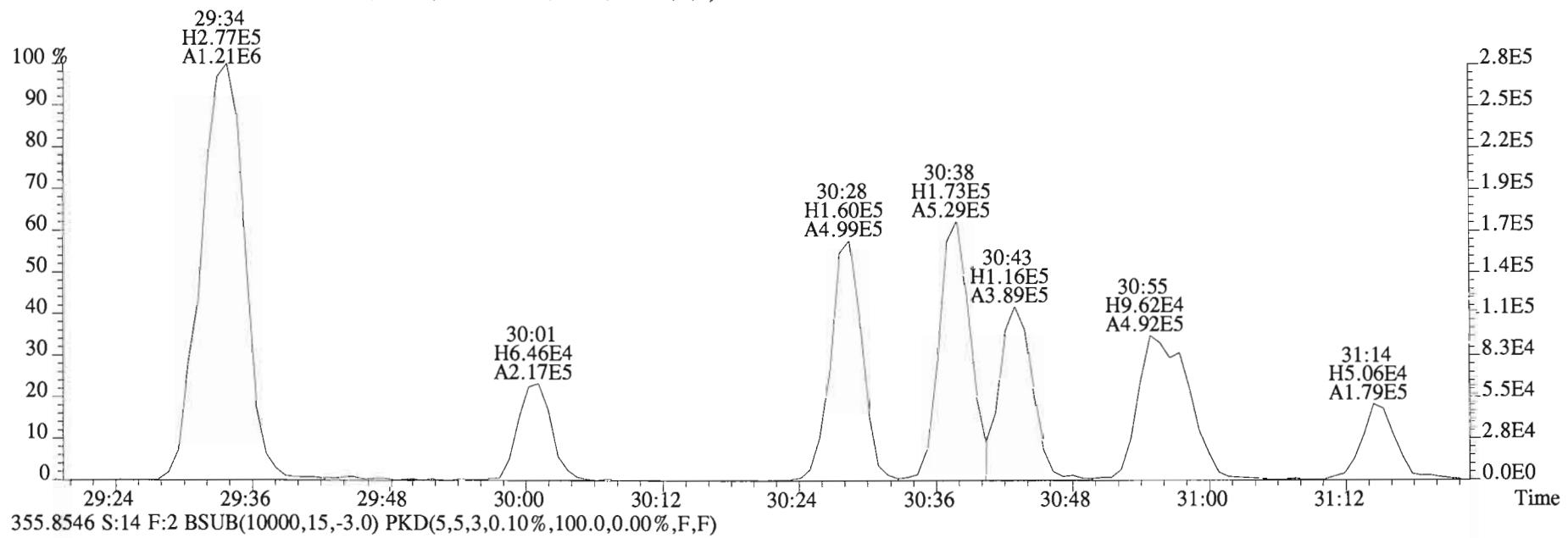
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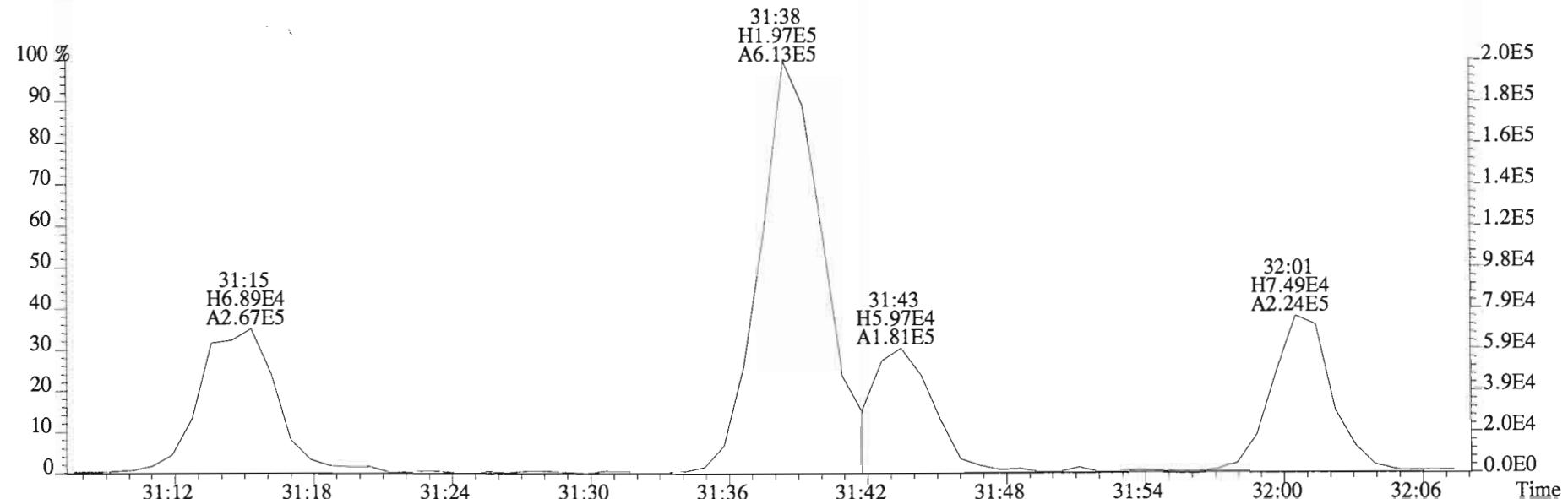
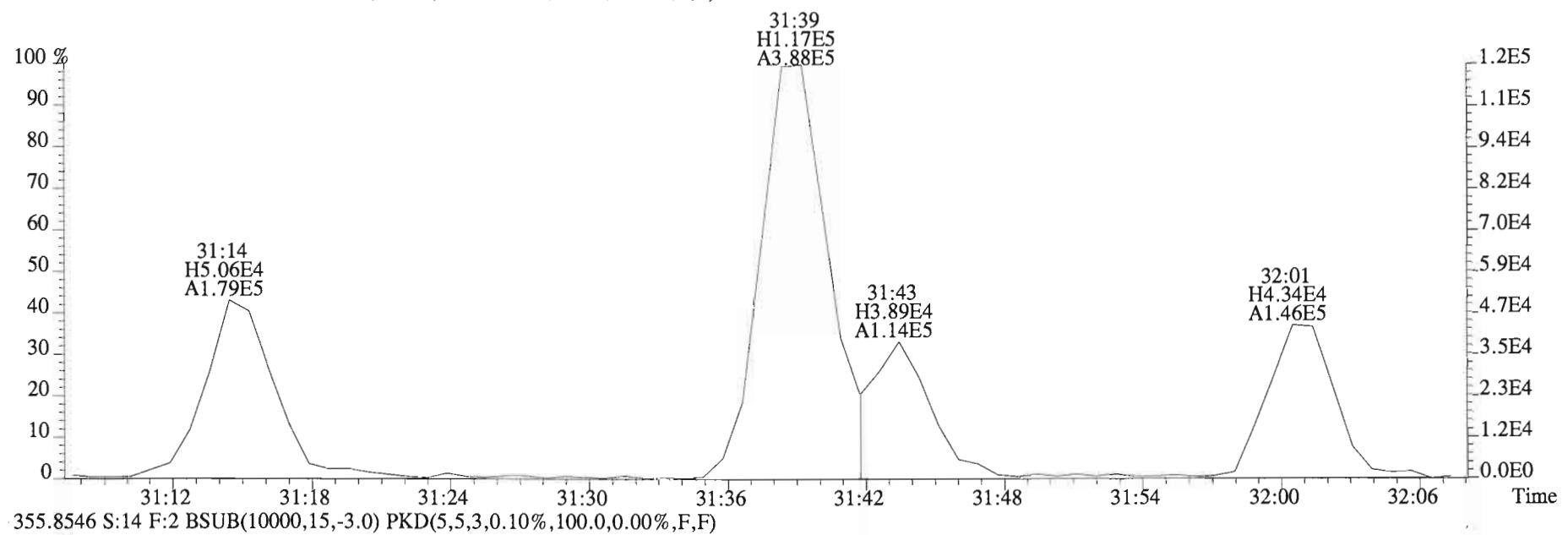
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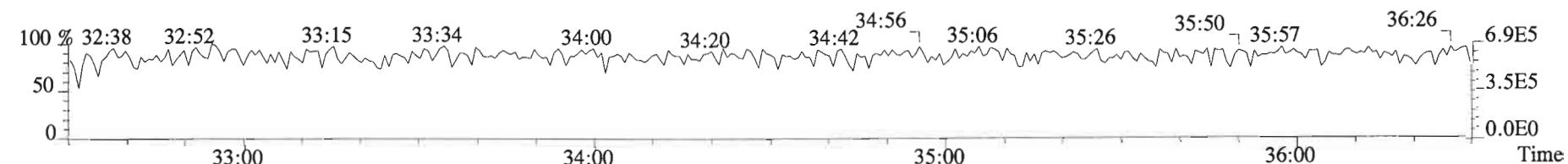
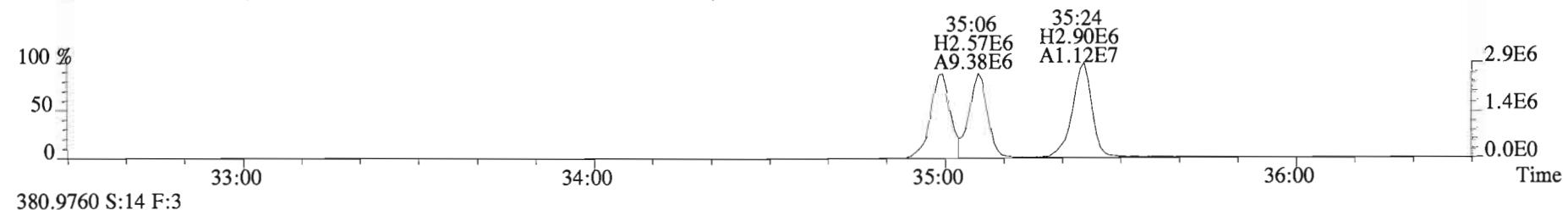
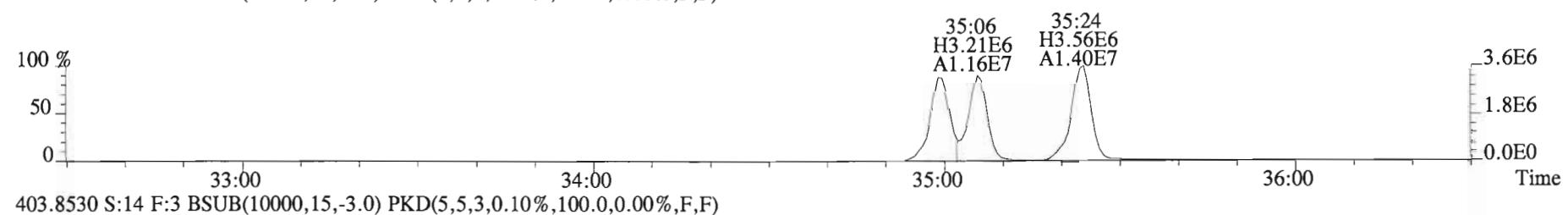
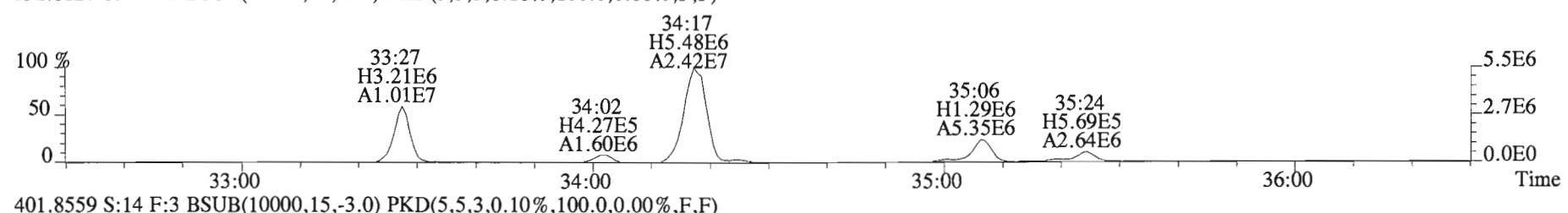
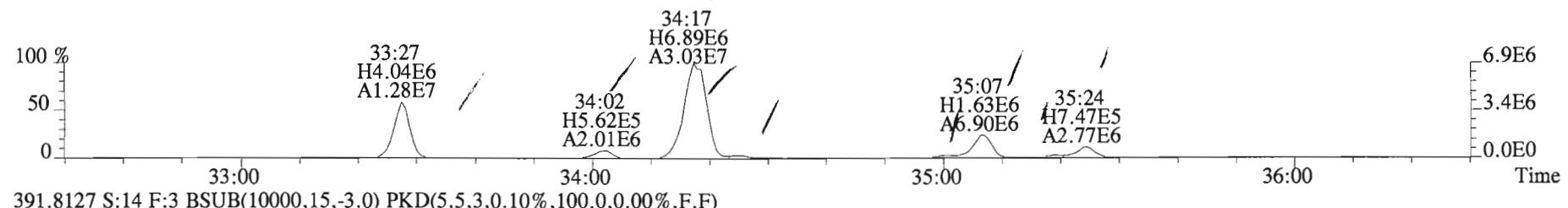
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 353.8576 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



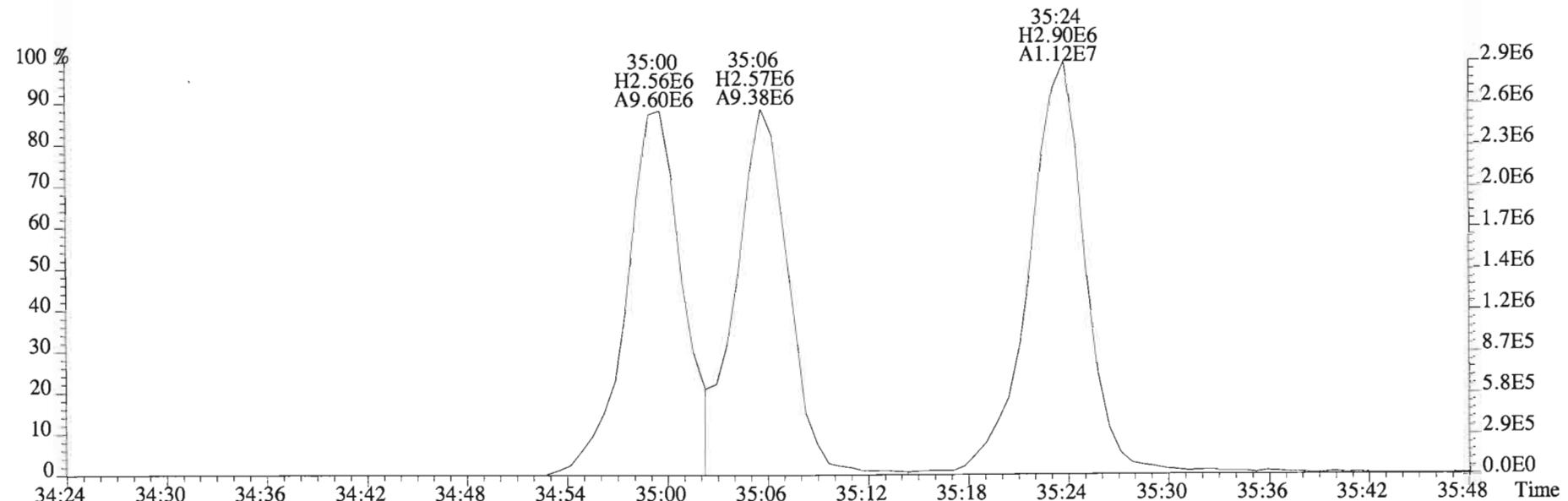
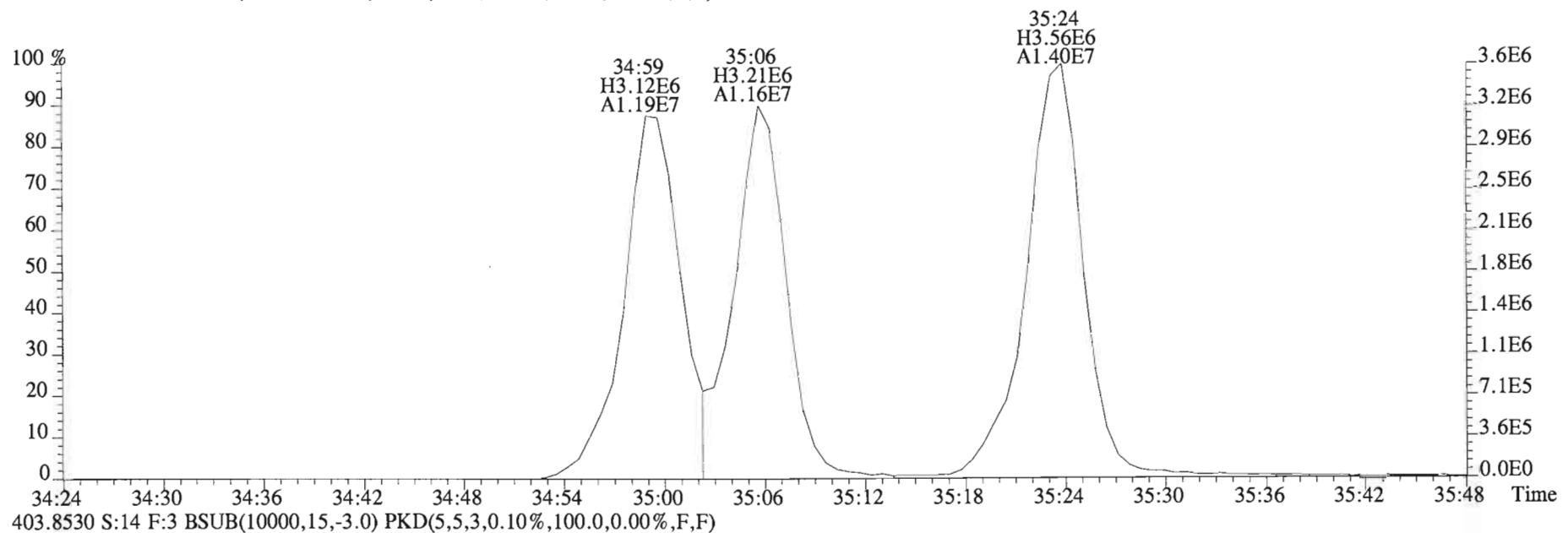
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353.8576 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



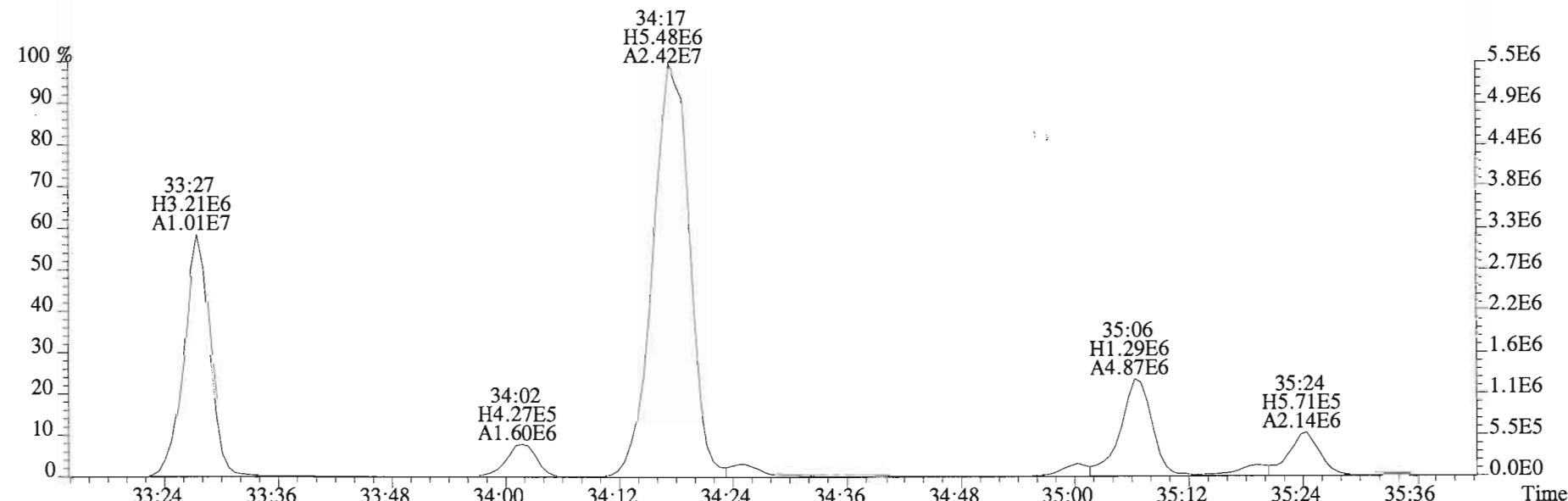
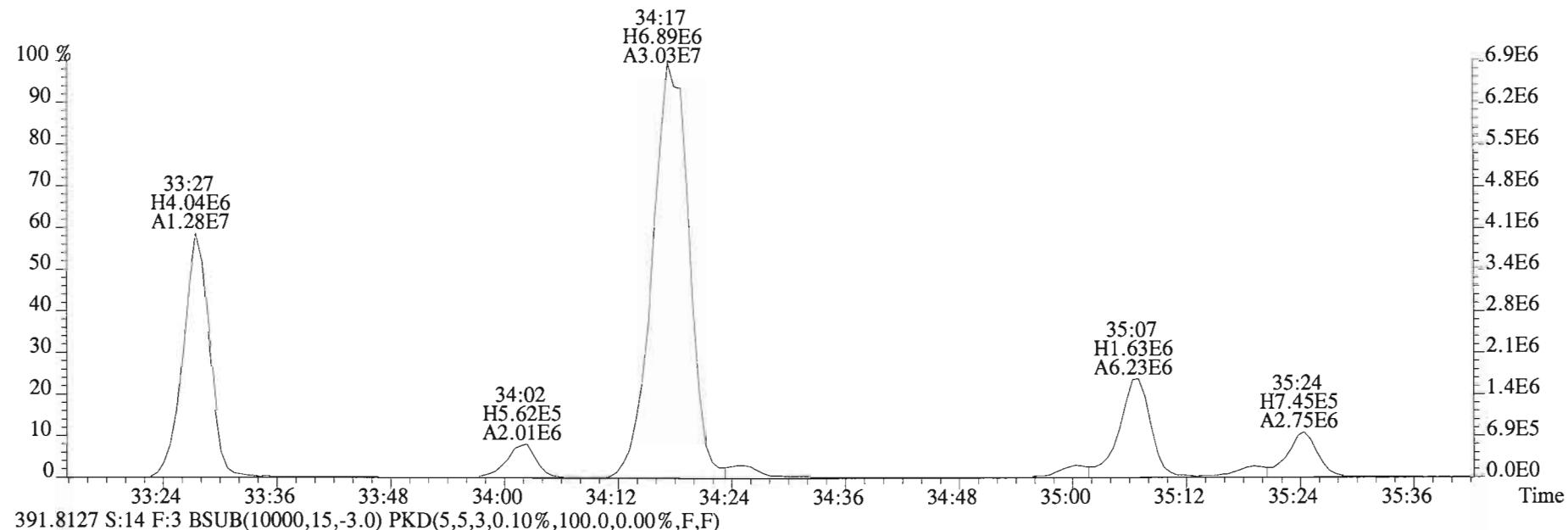
File:150220D1 #1-393 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
 389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



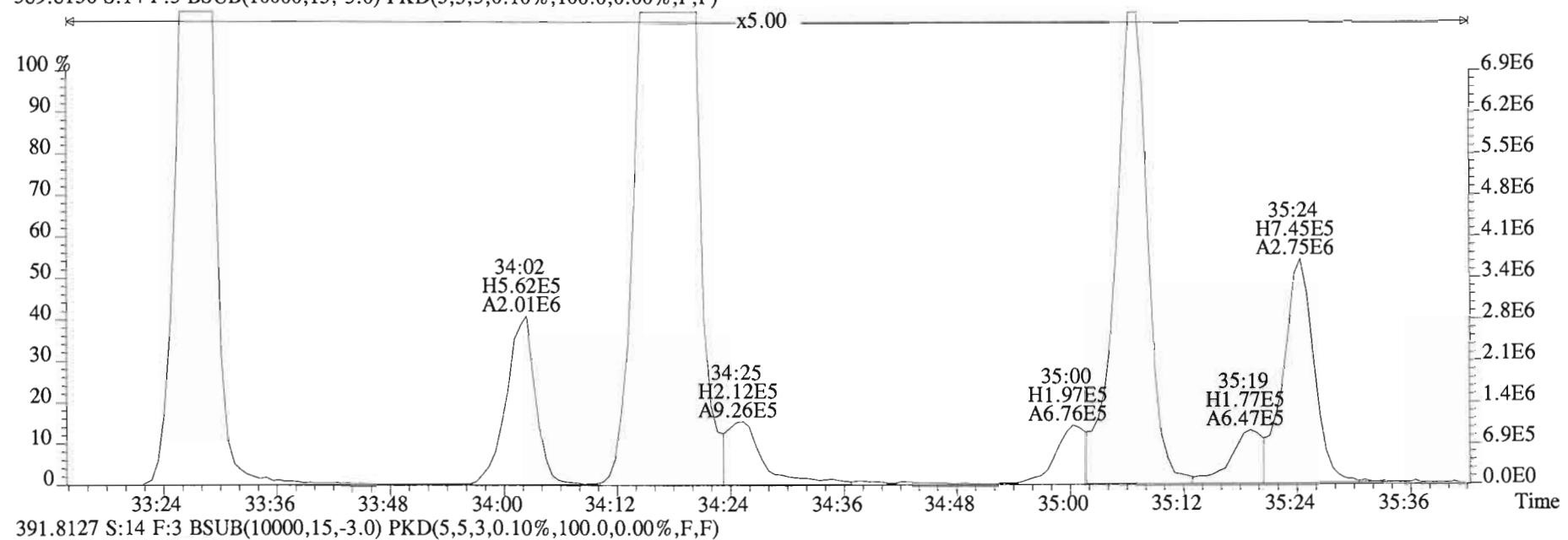
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Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
401.8559 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



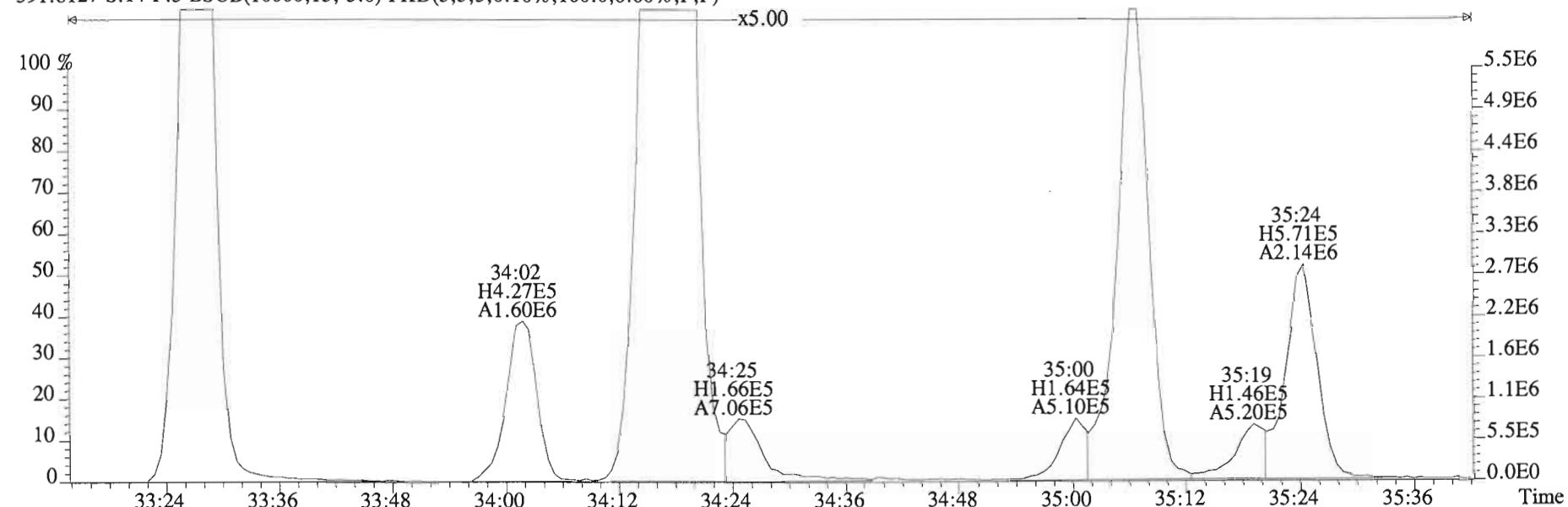
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Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
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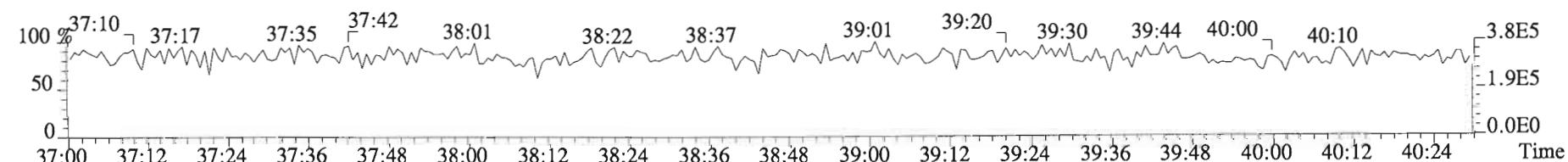
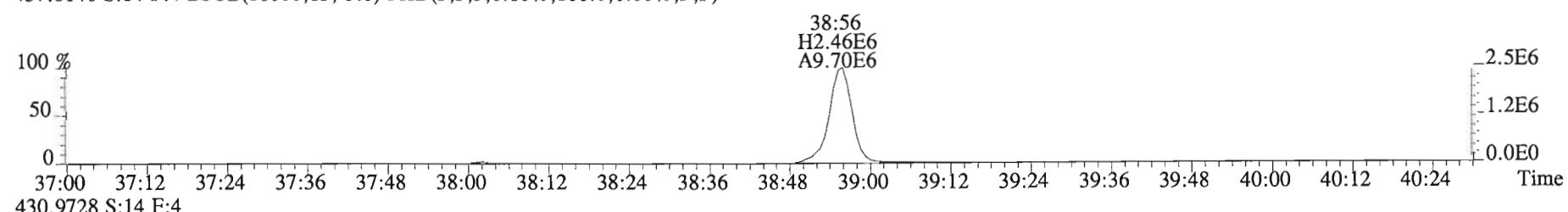
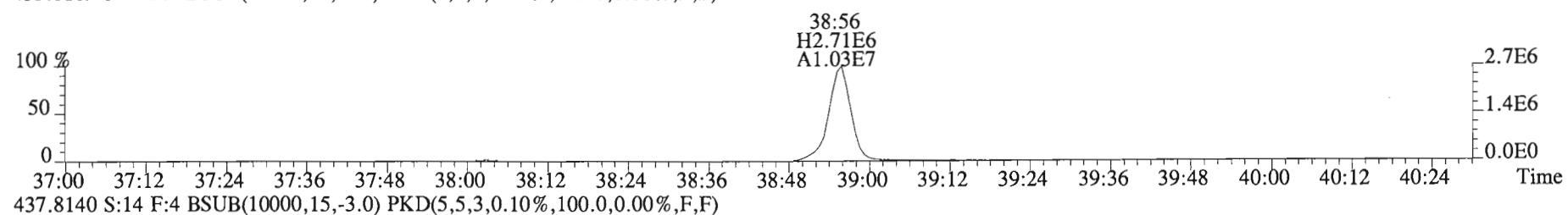
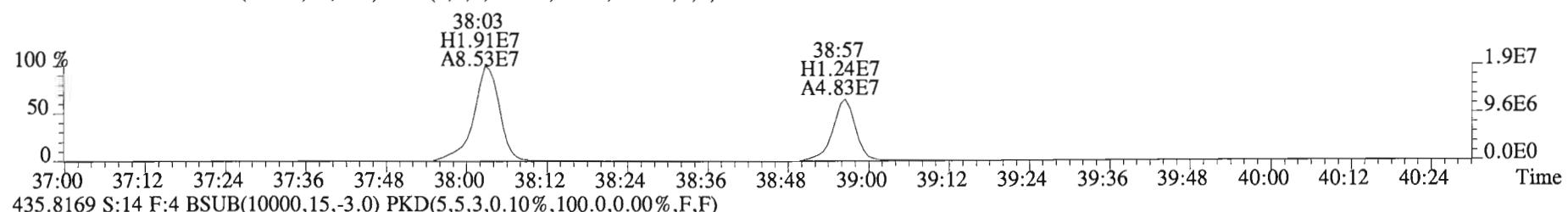
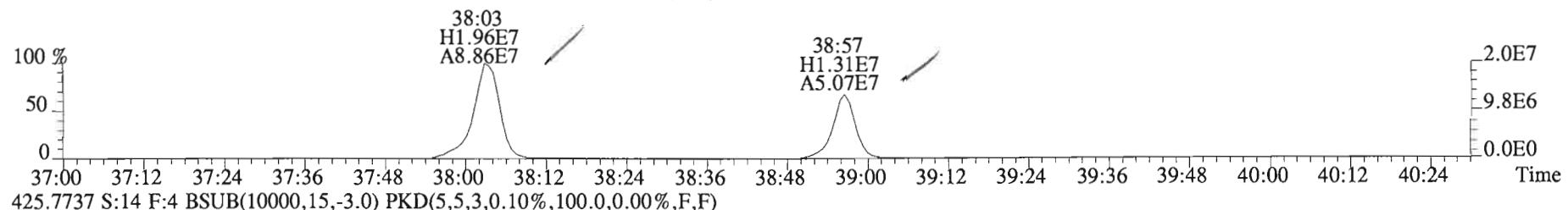
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Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
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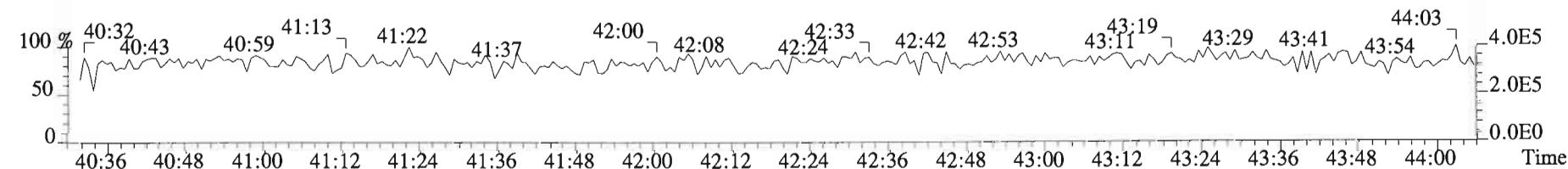
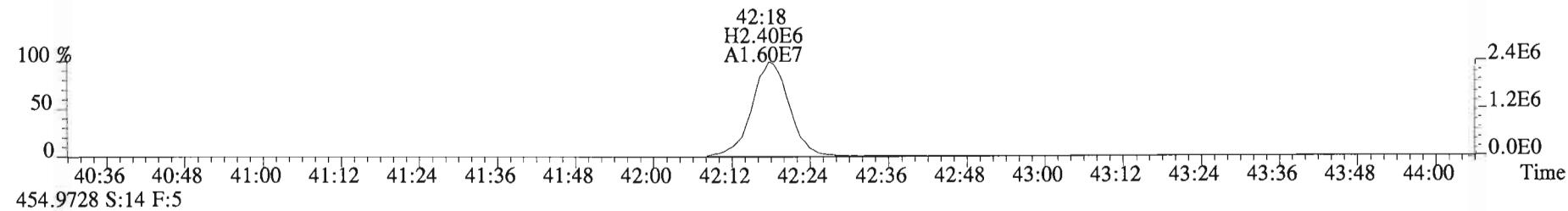
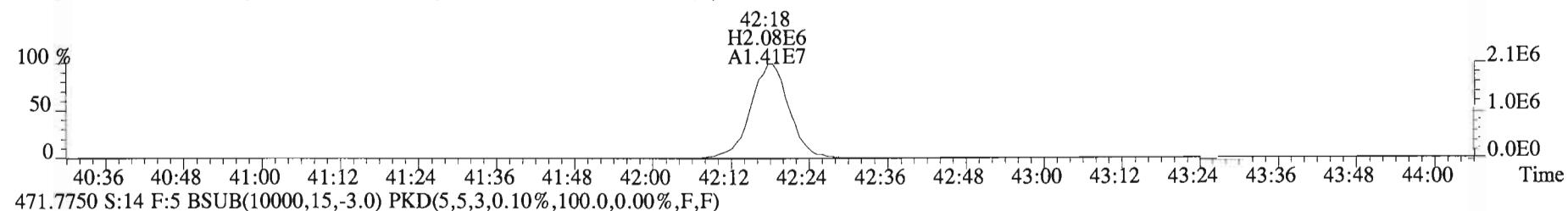
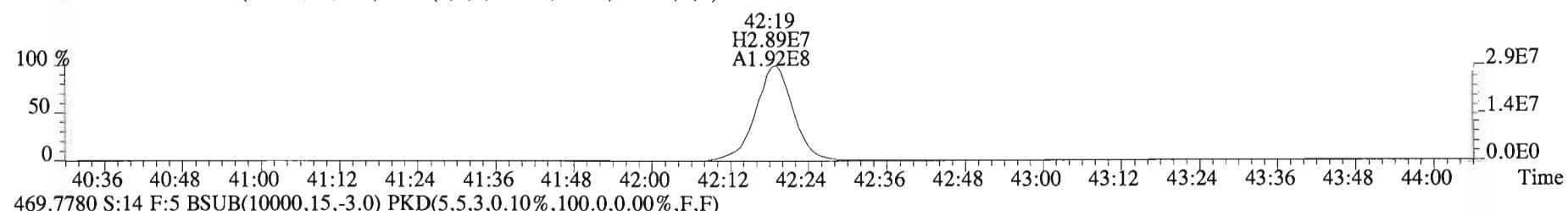
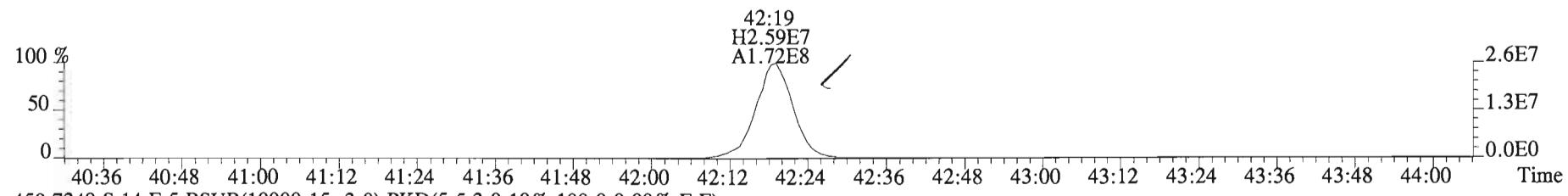
391.8127 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



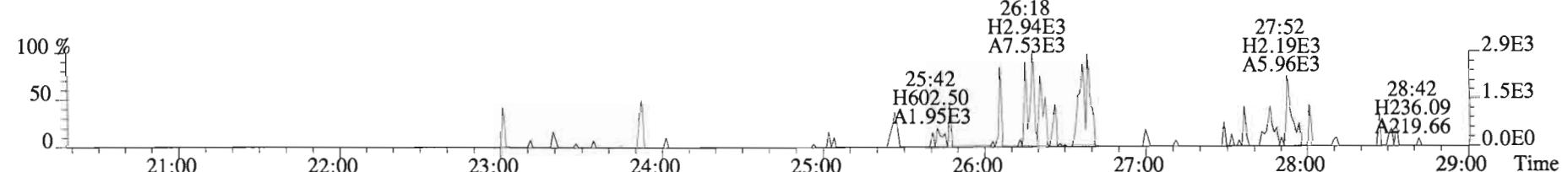
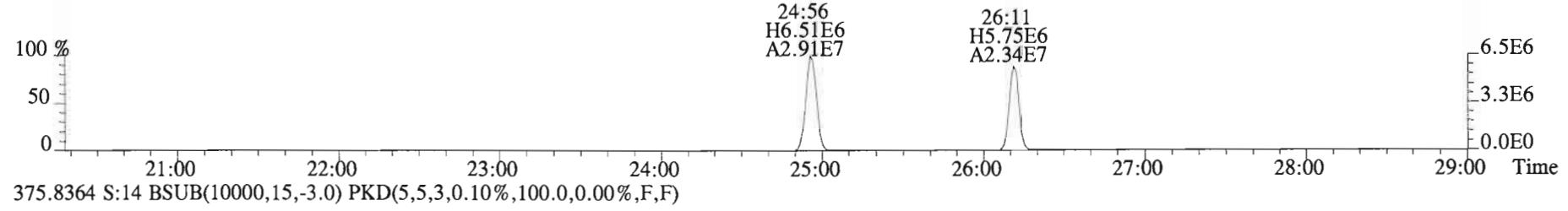
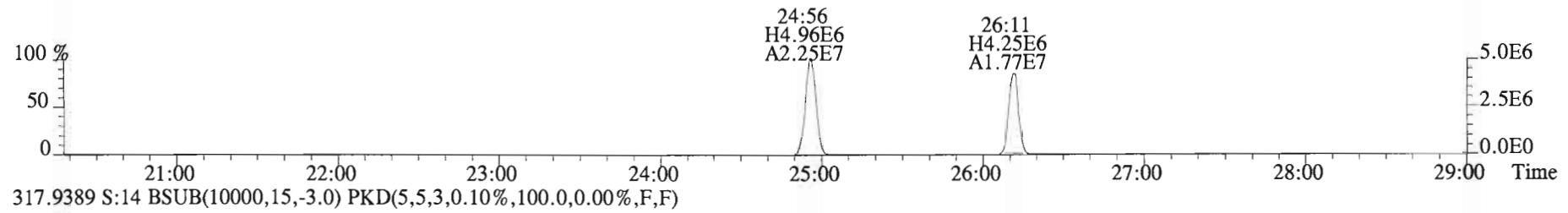
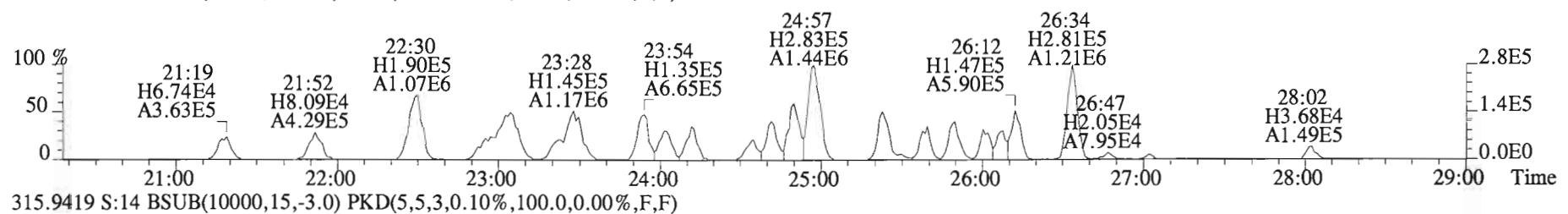
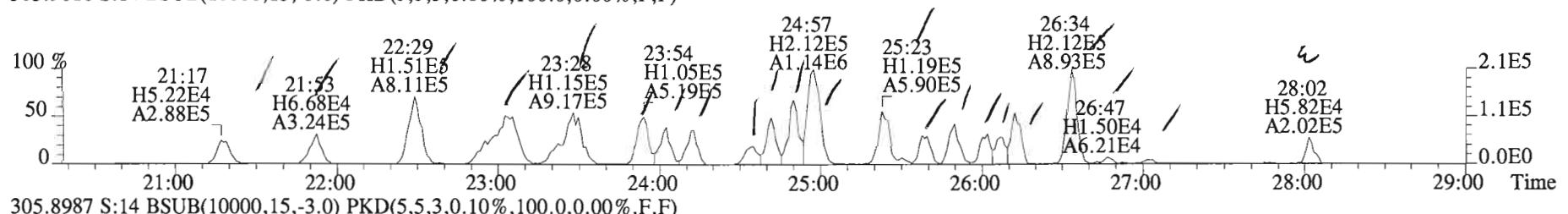
File:150220D1 #1-325 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
423.7767 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



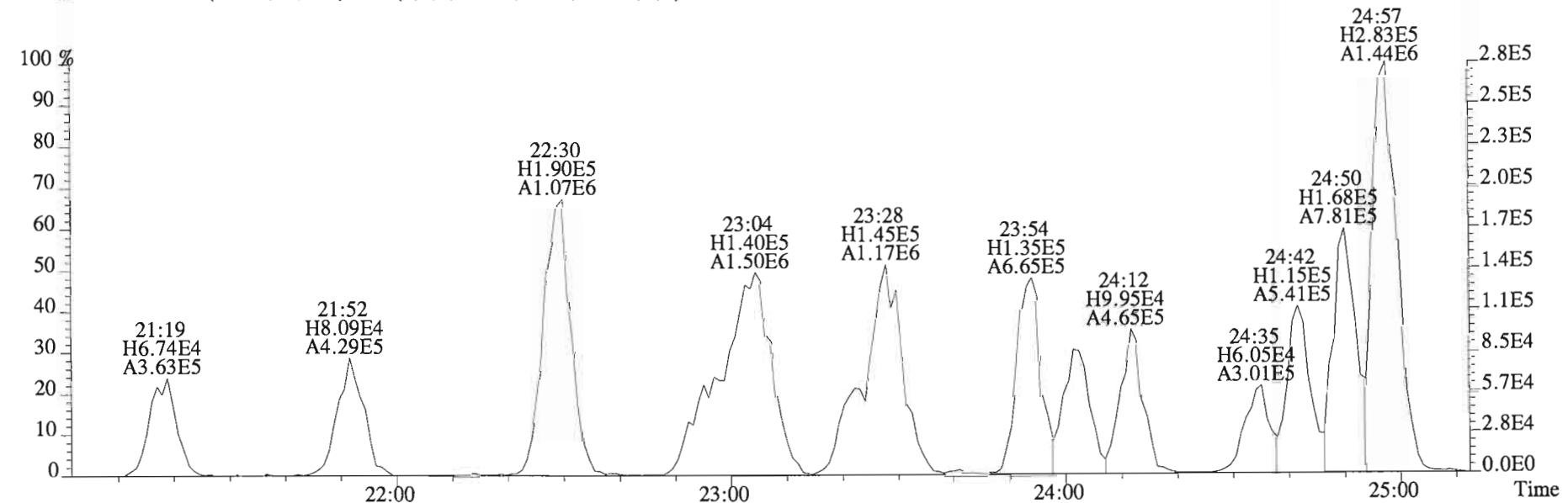
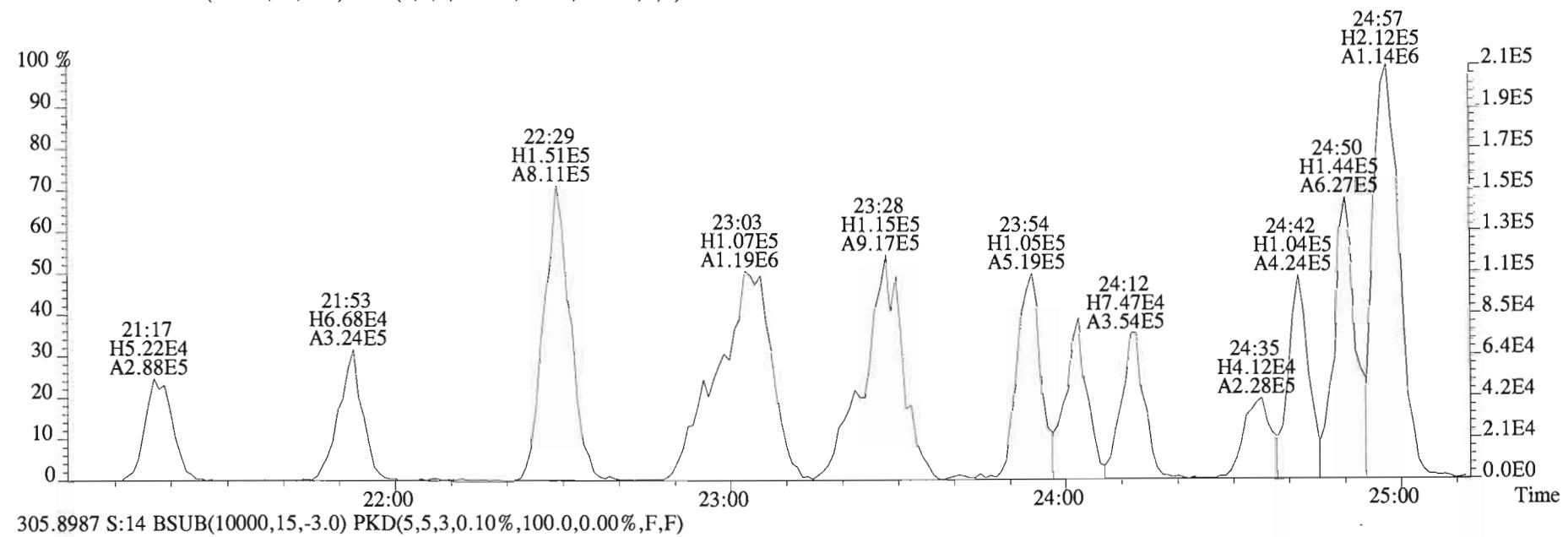
File:150220D1 #1-389 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
 457.7377 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



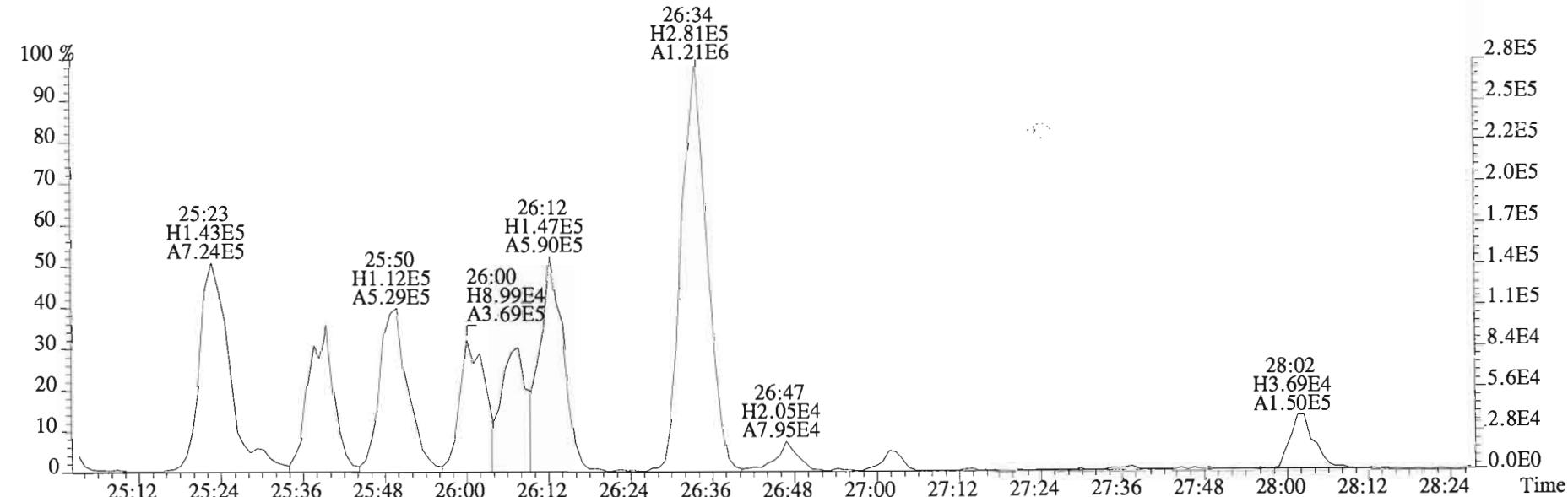
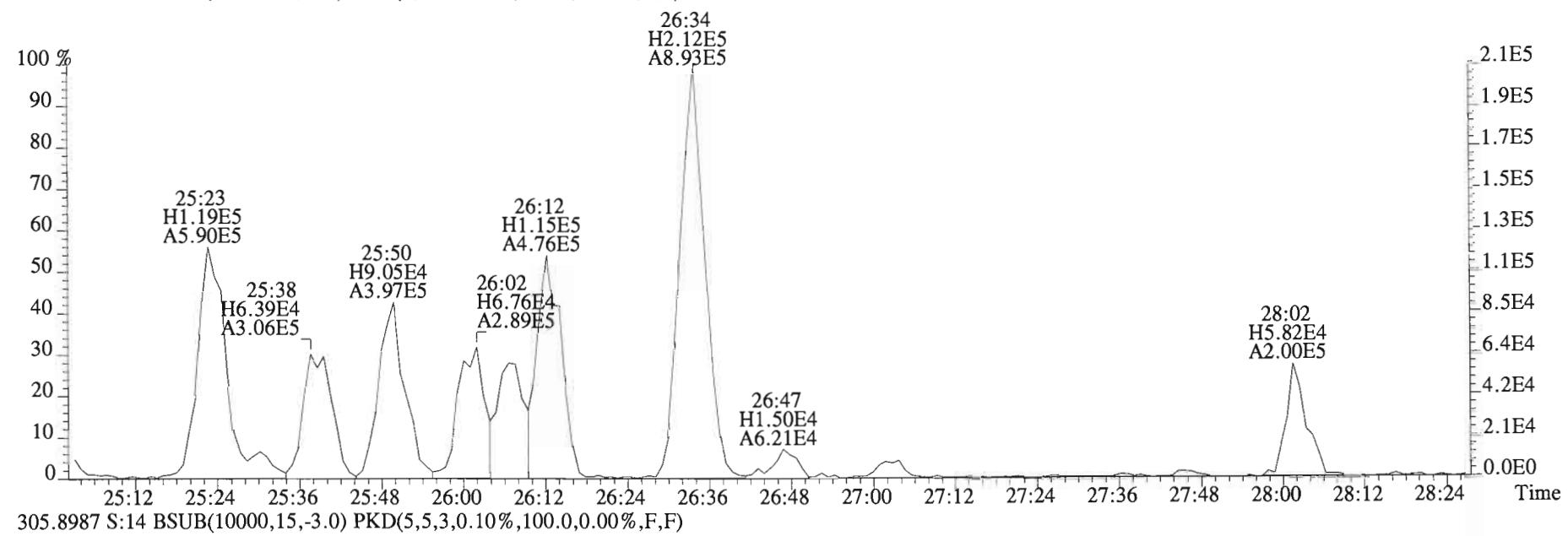
File:150220D1 #1-551 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
 303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



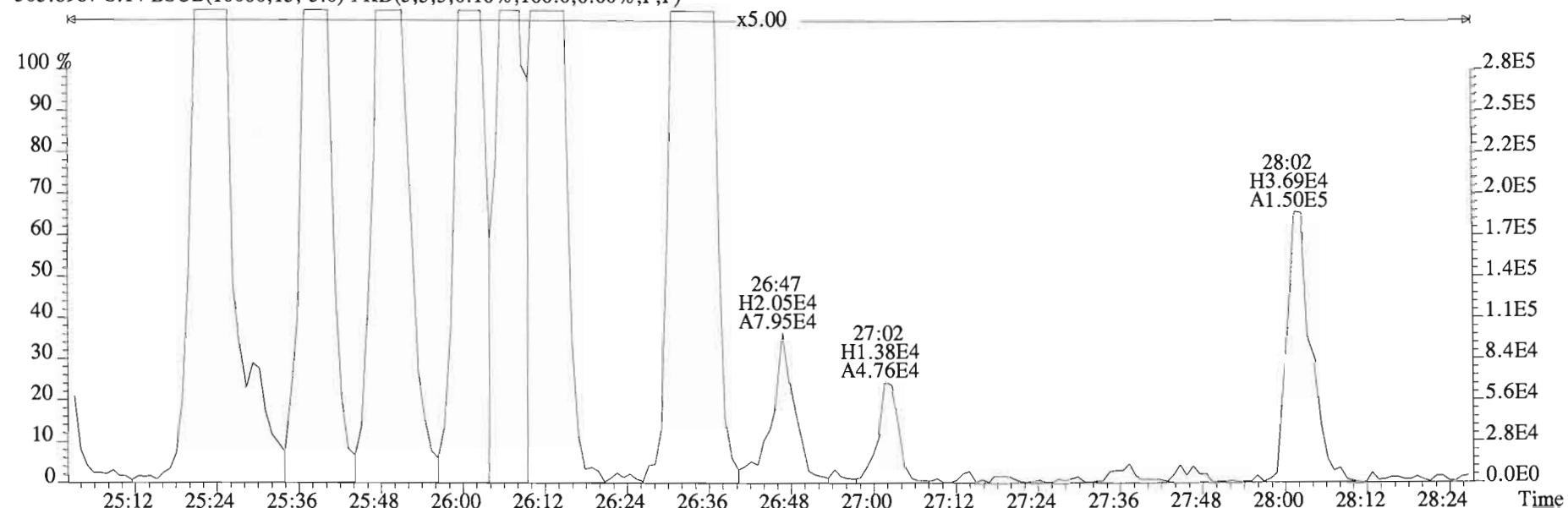
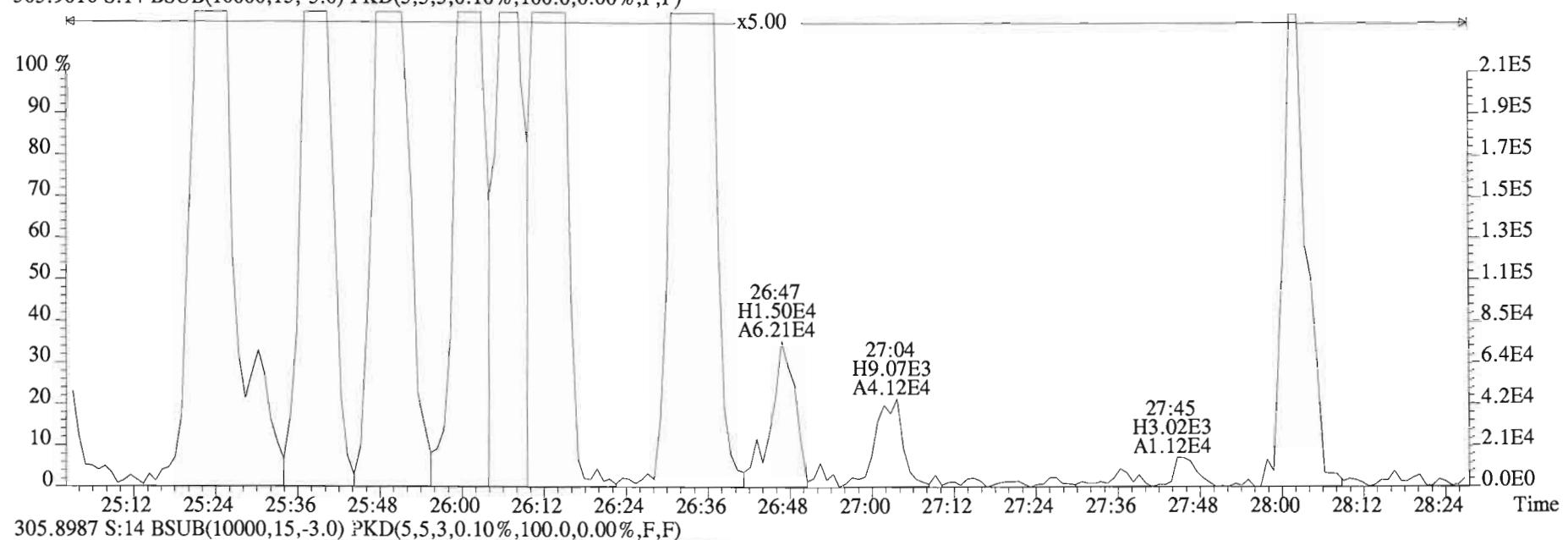
File:150220D1 #1-551 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



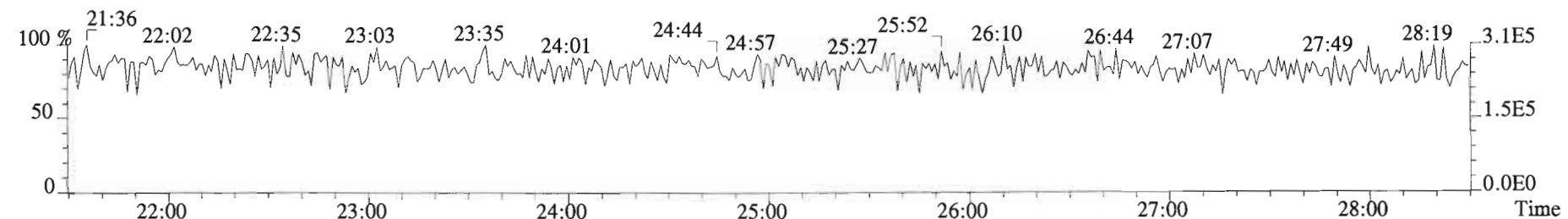
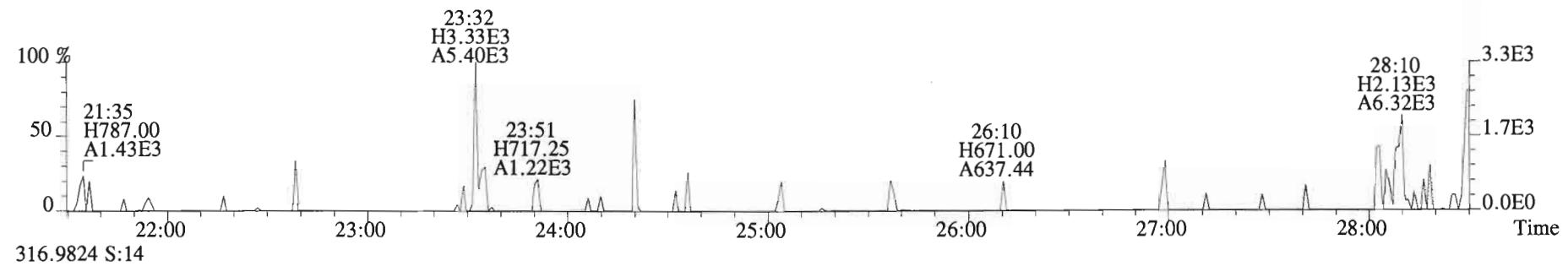
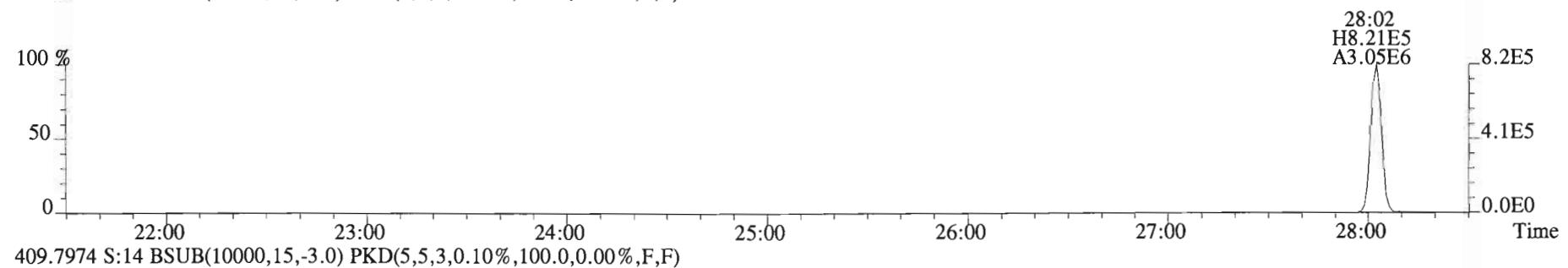
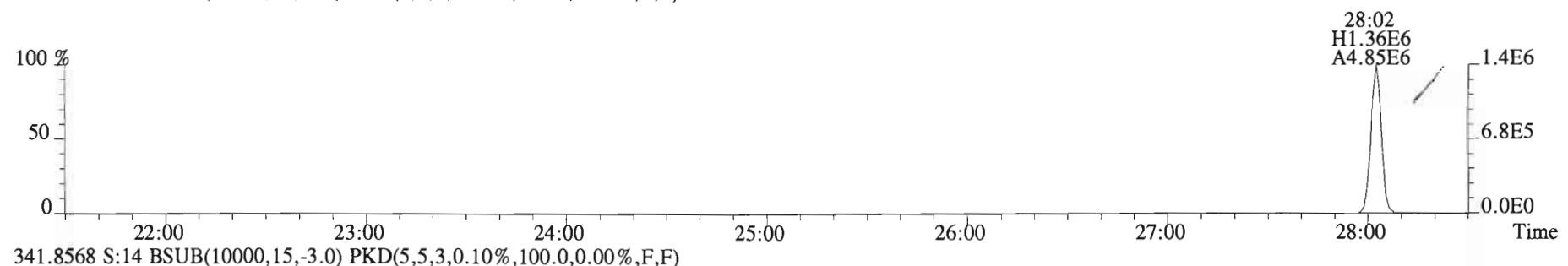
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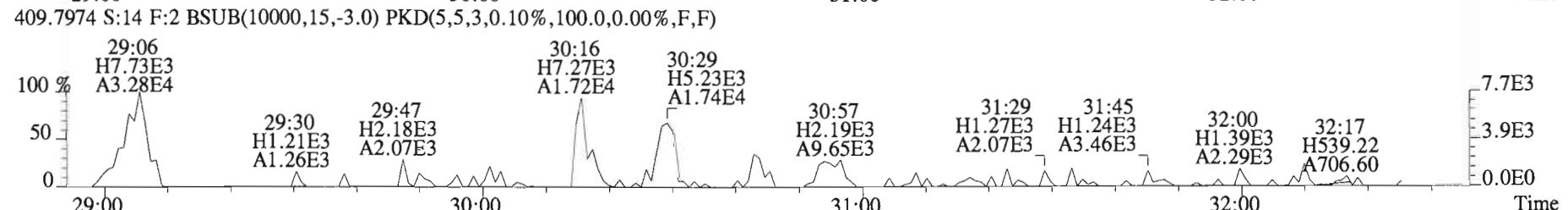
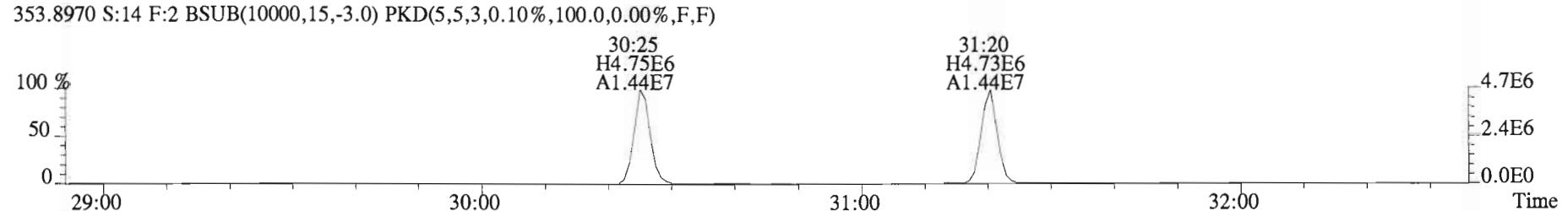
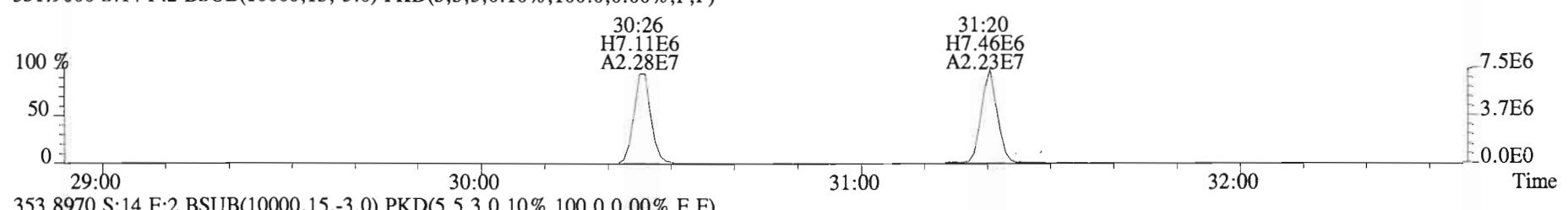
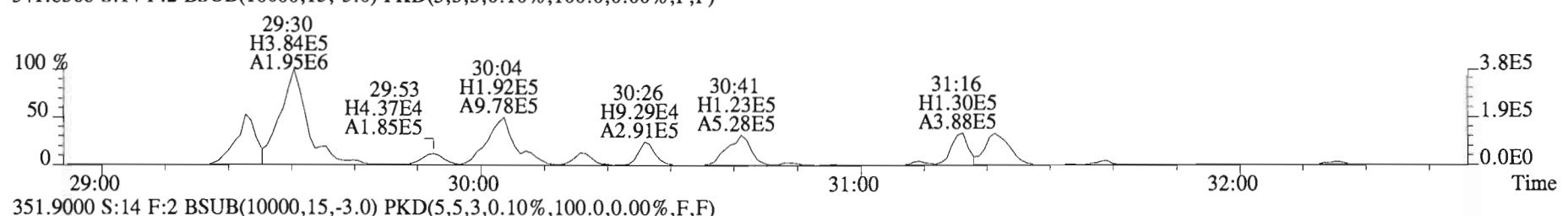
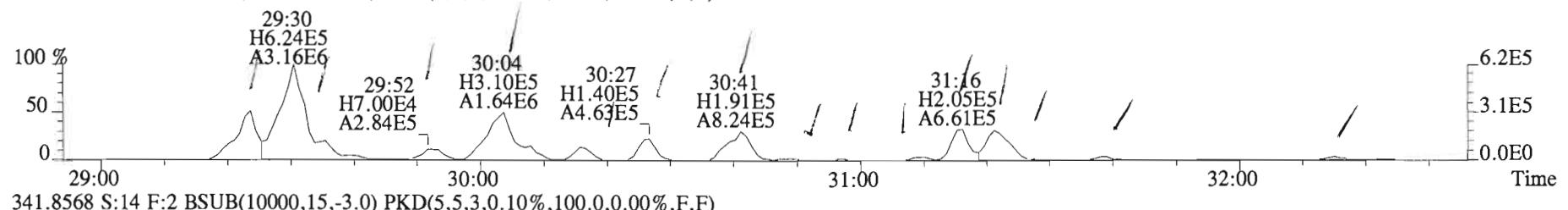
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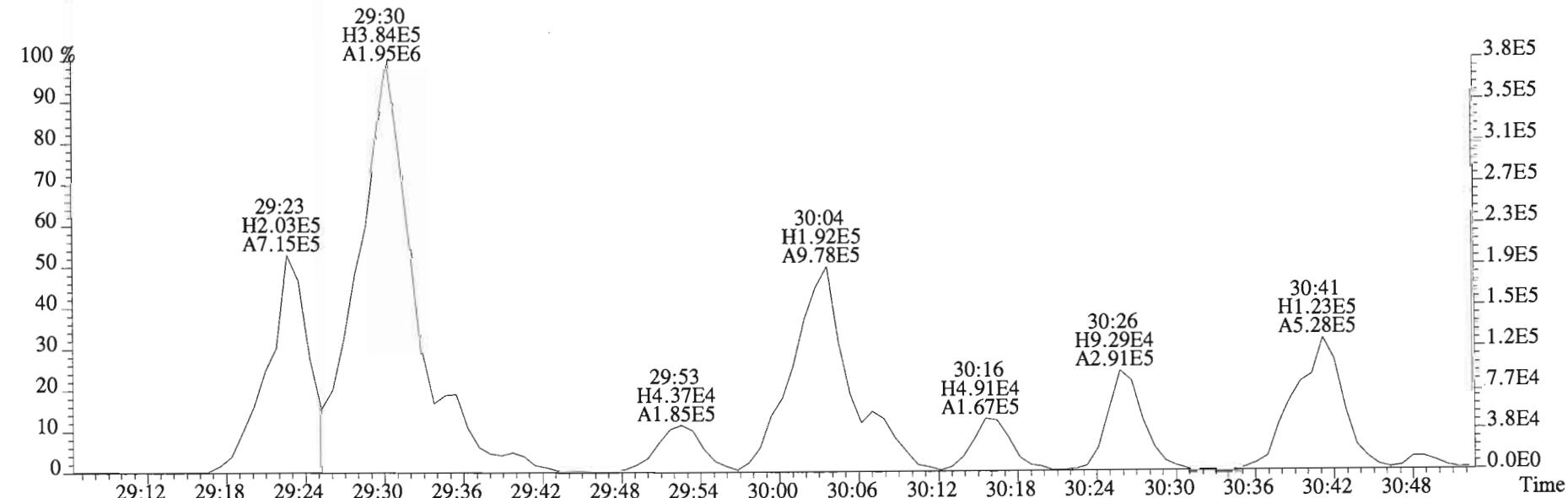
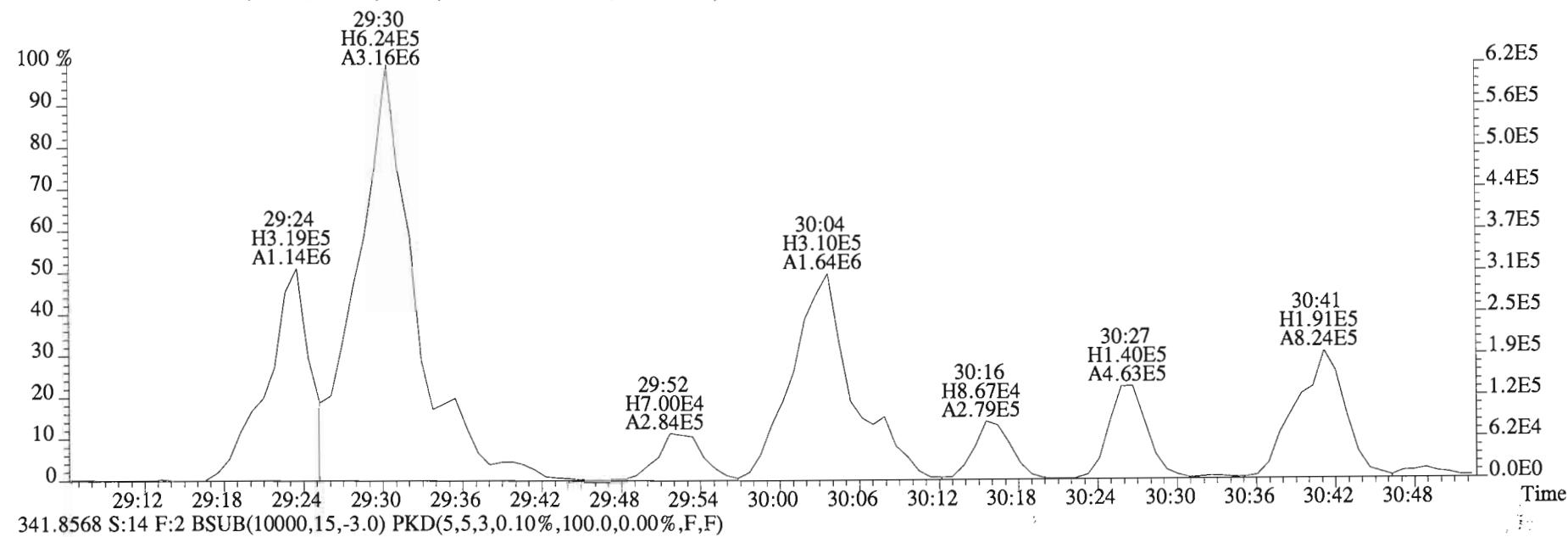
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 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
 339.8597 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



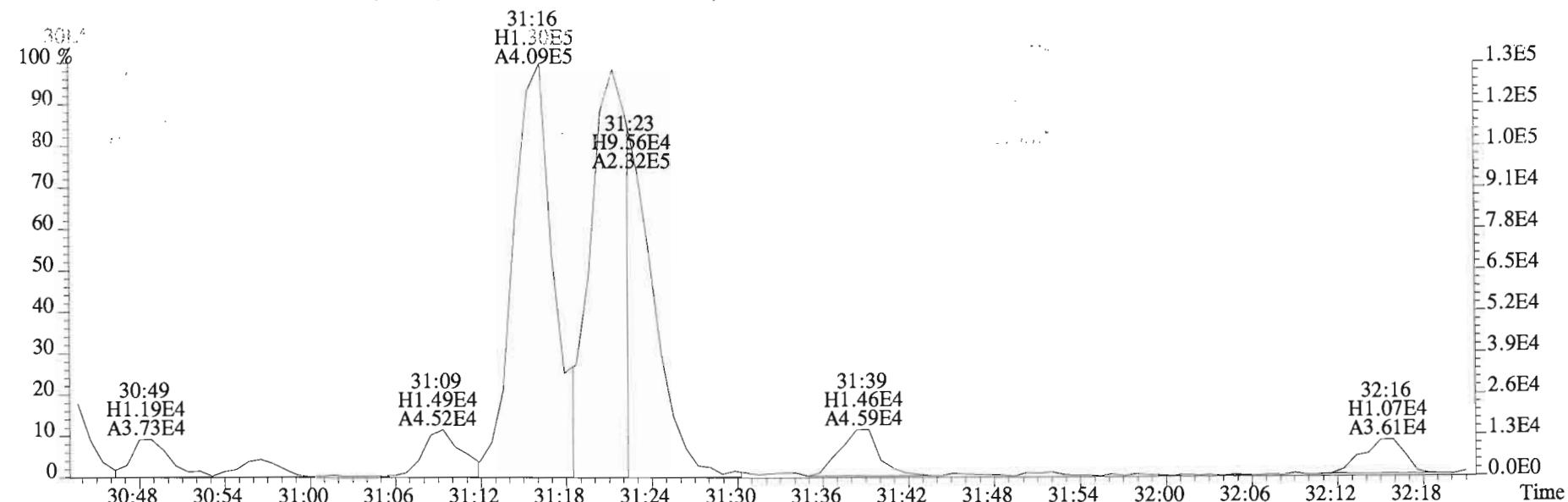
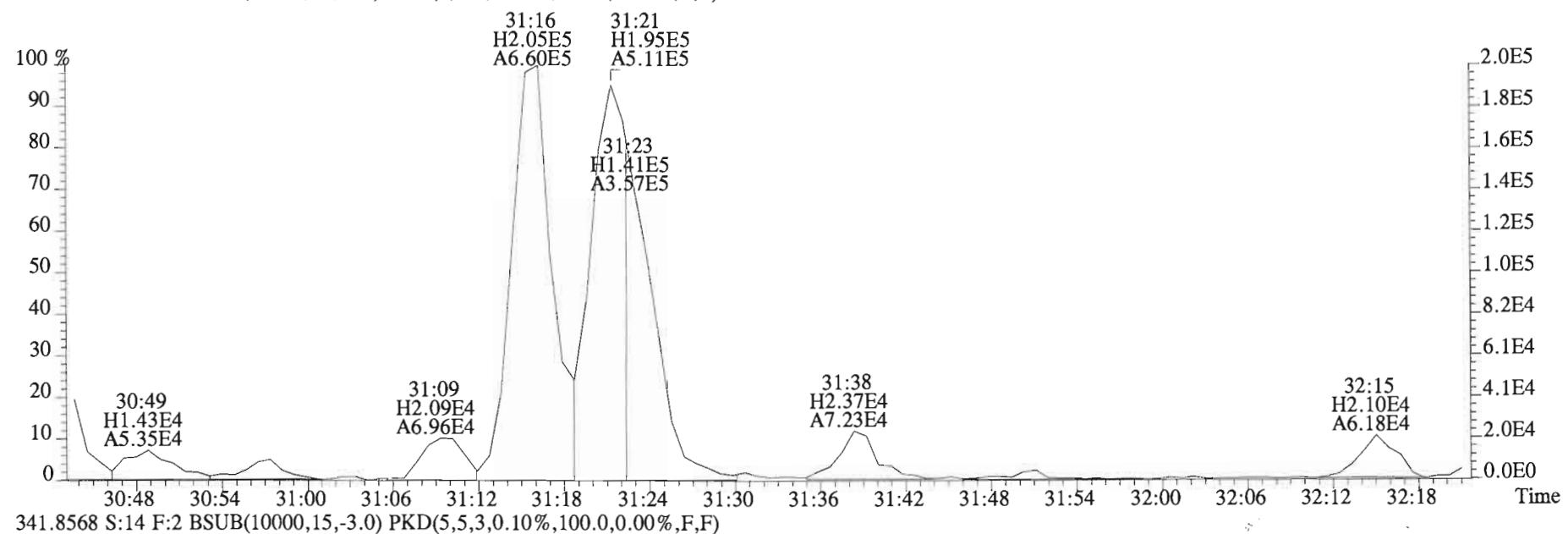
File:150220D1 #1-251 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
 339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



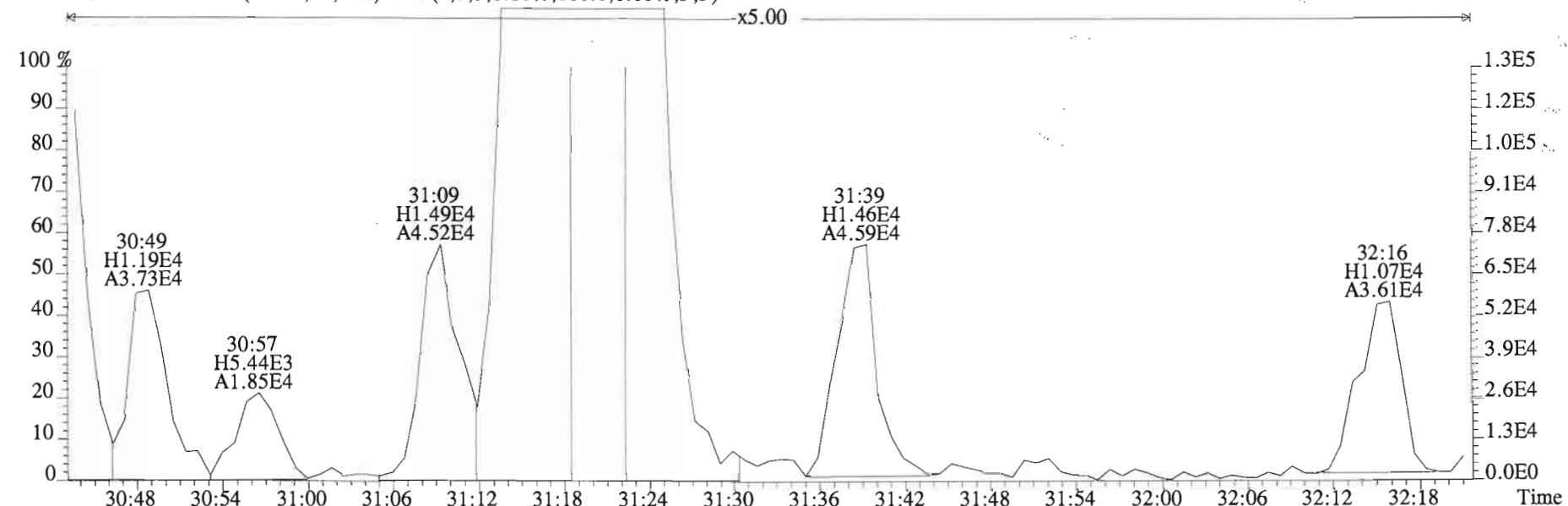
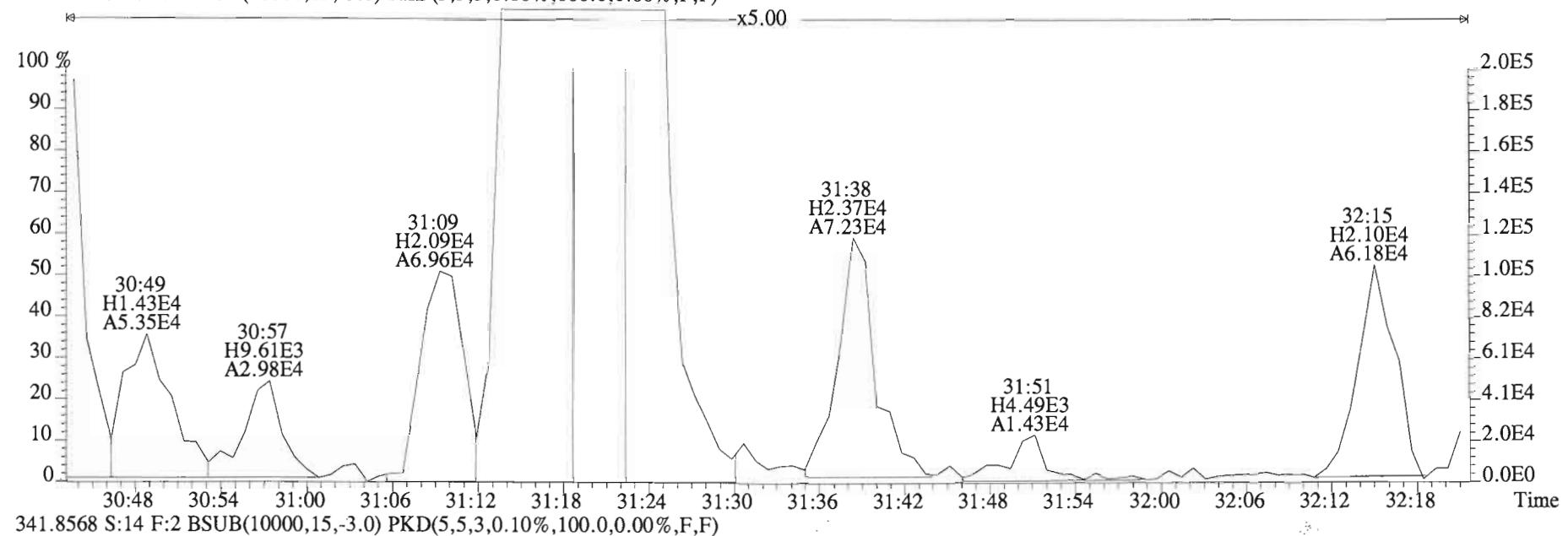
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 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
 339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



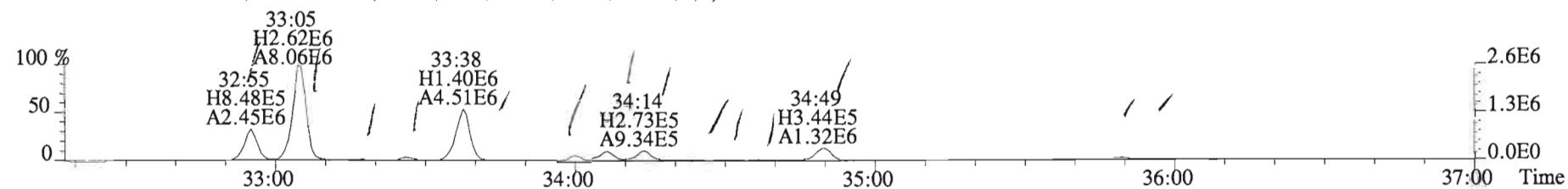
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 339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



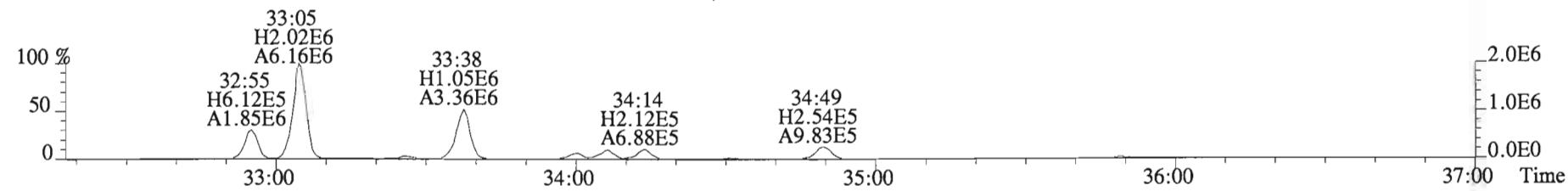
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Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



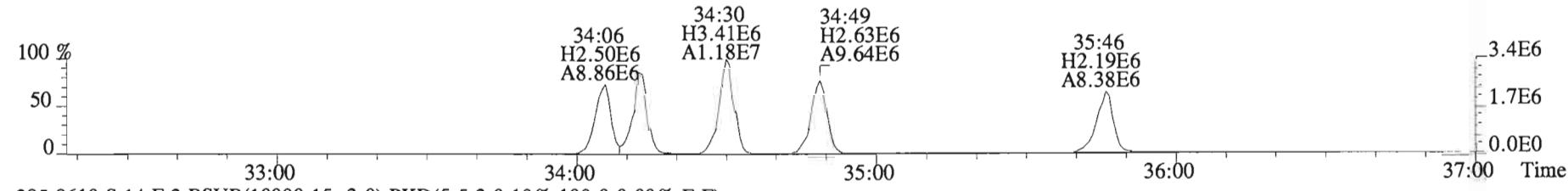
File:150220D1 #1-393 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
 373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



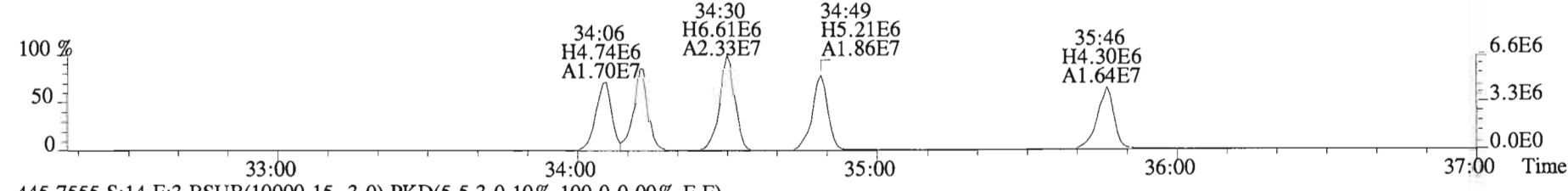
375.8178 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



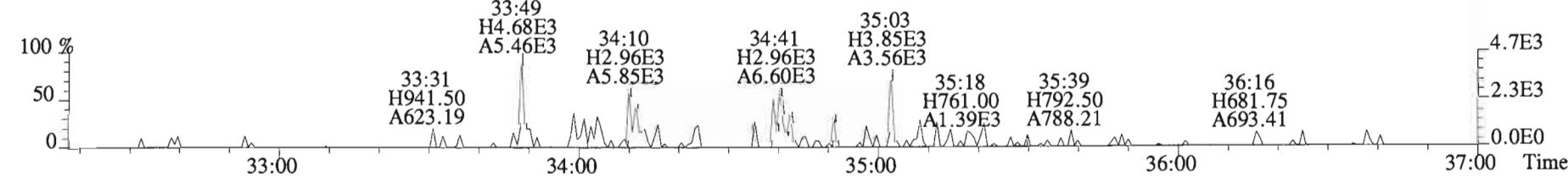
383.8639 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



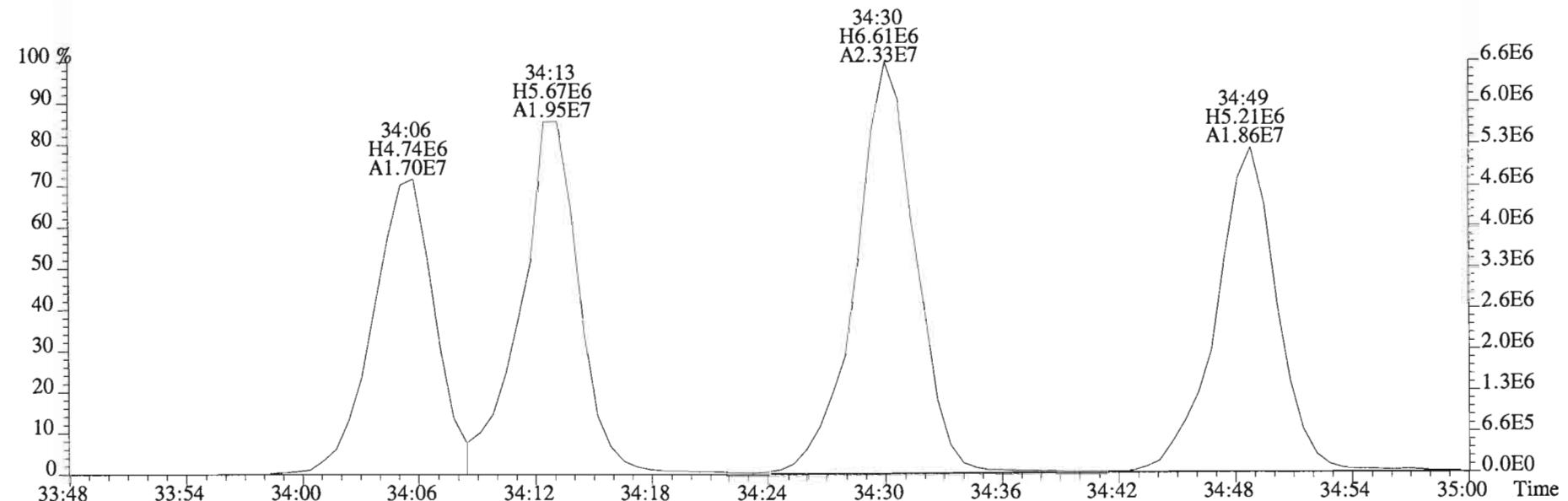
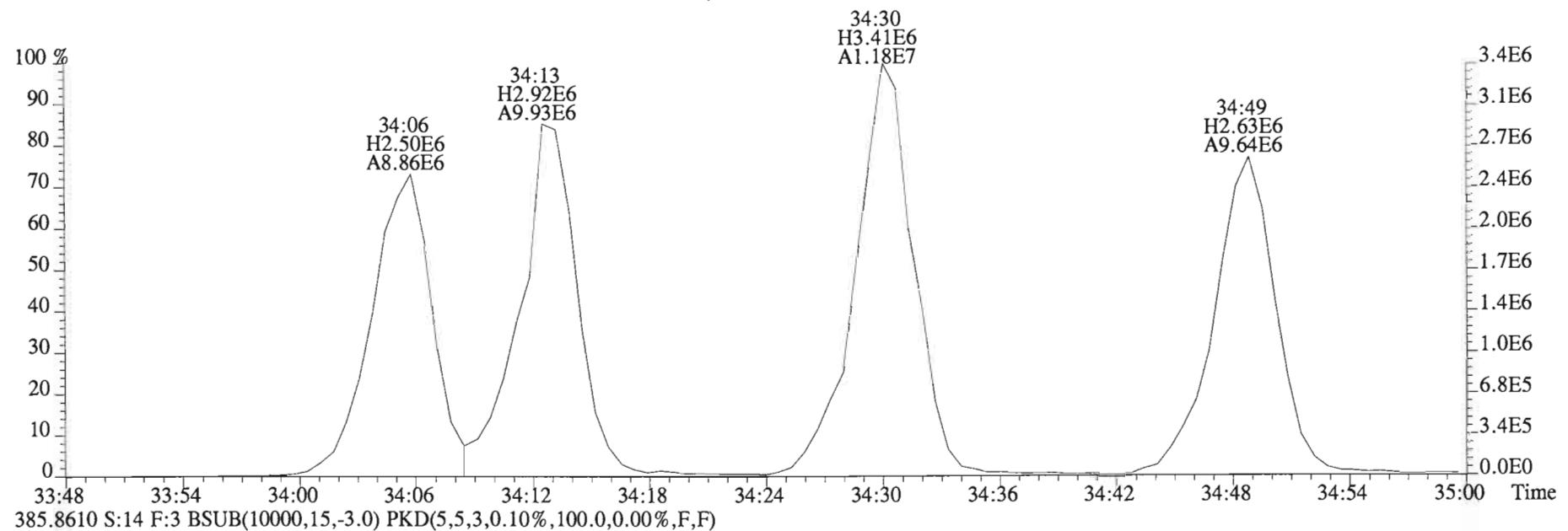
385.8610 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



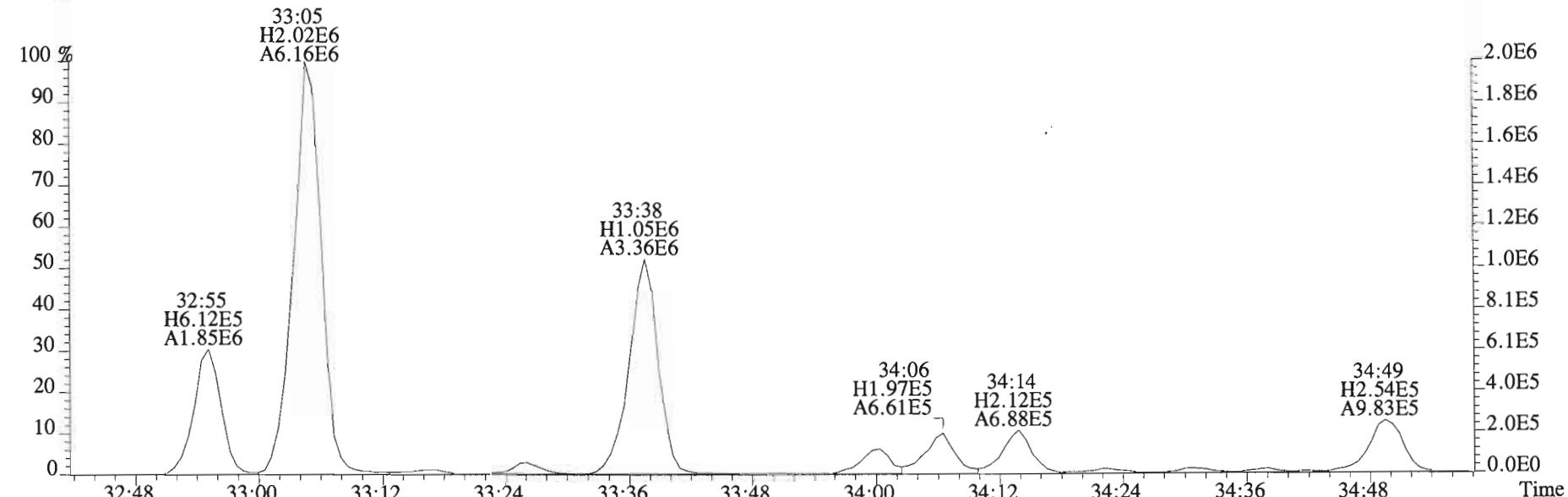
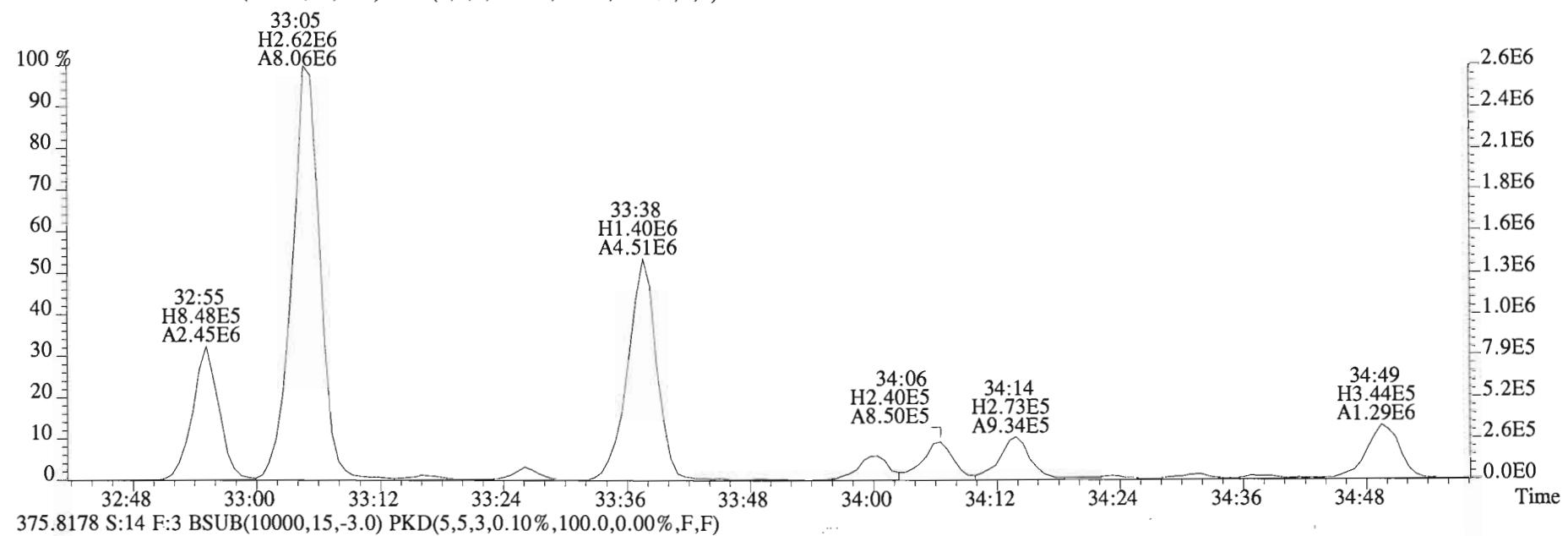
445.7555 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



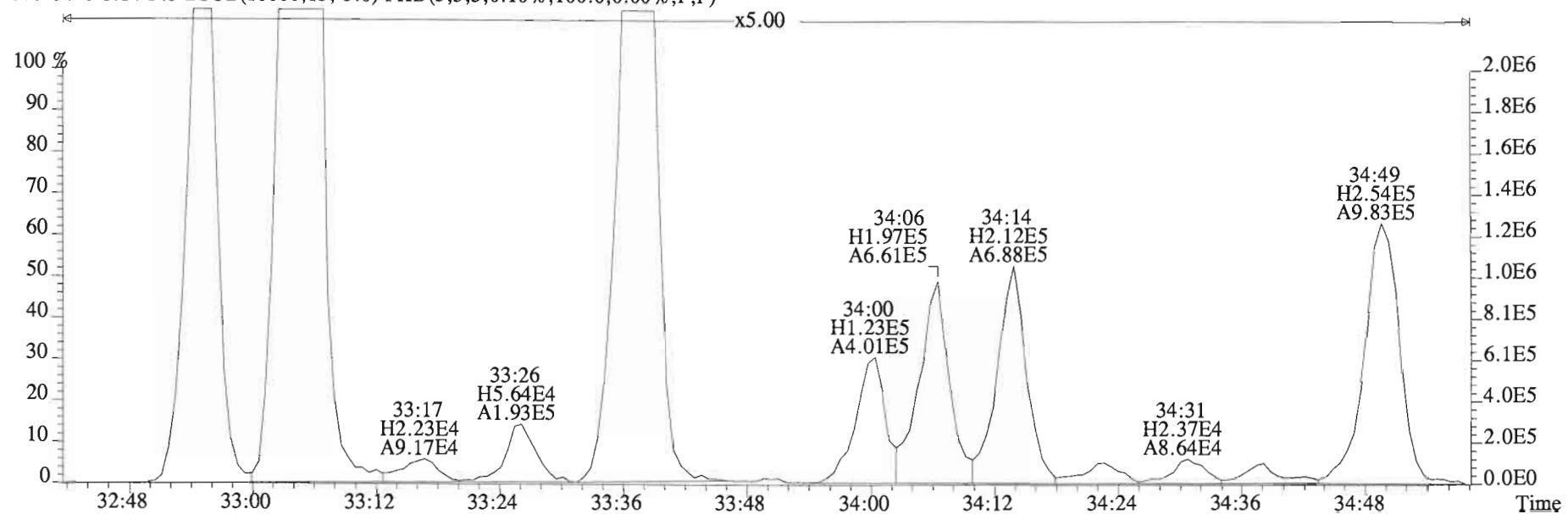
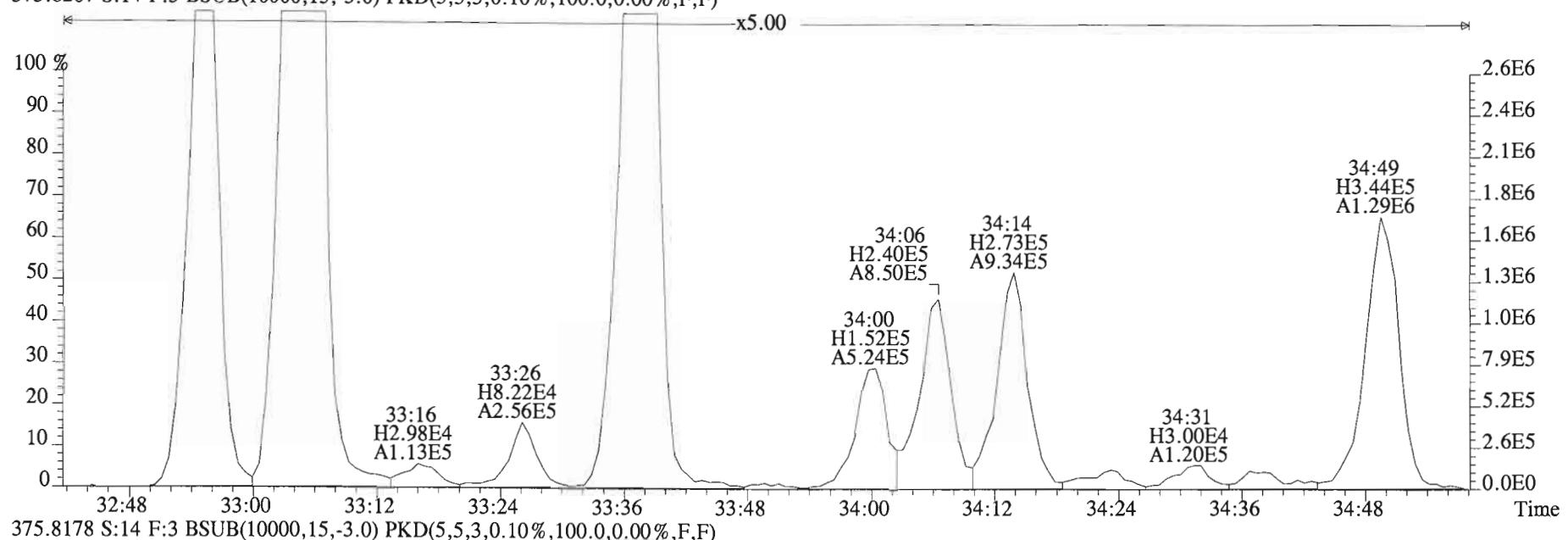
File:150220D1 #1-393 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
383.8639 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



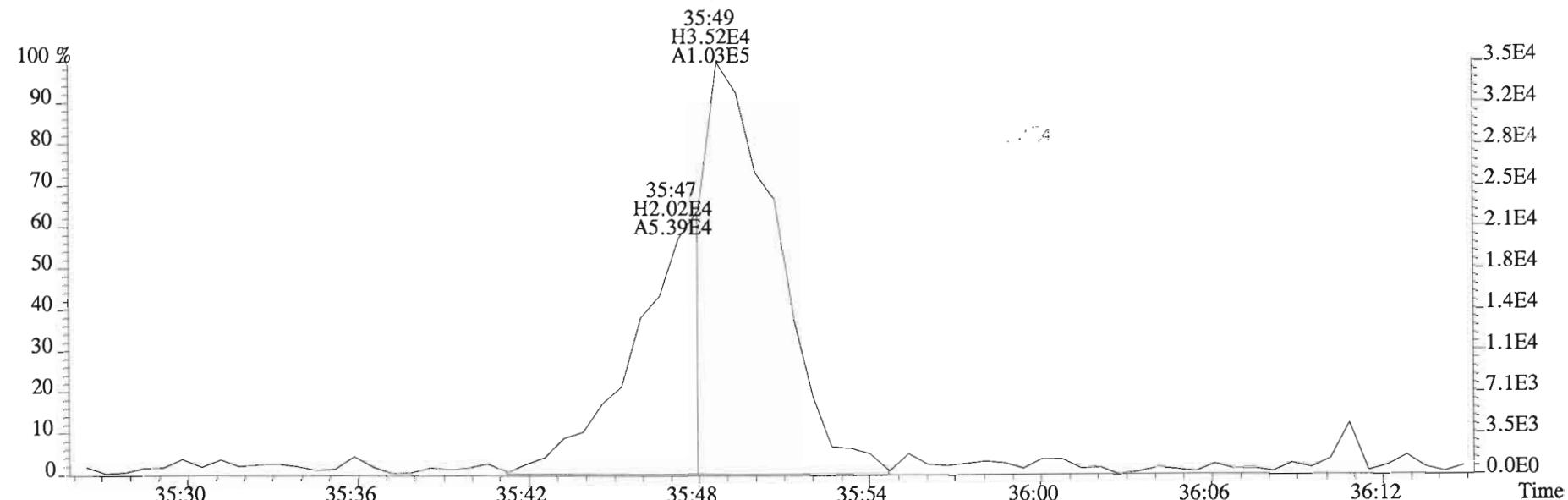
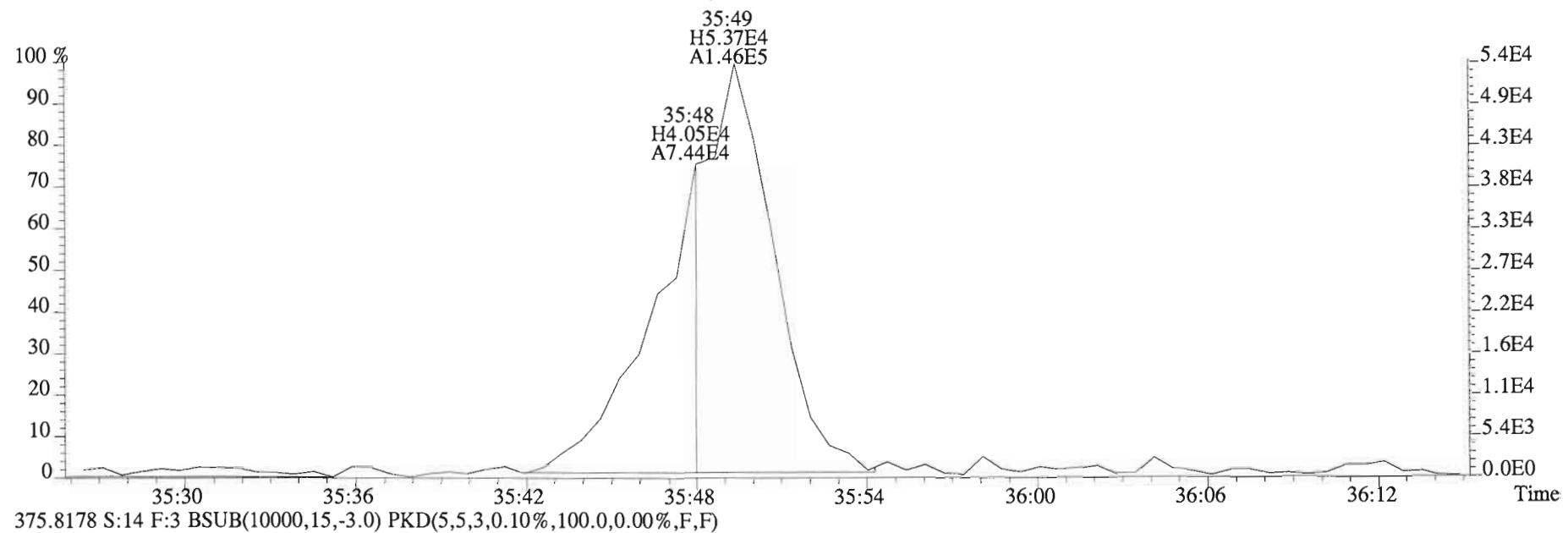
File:150220D1 #1-393 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



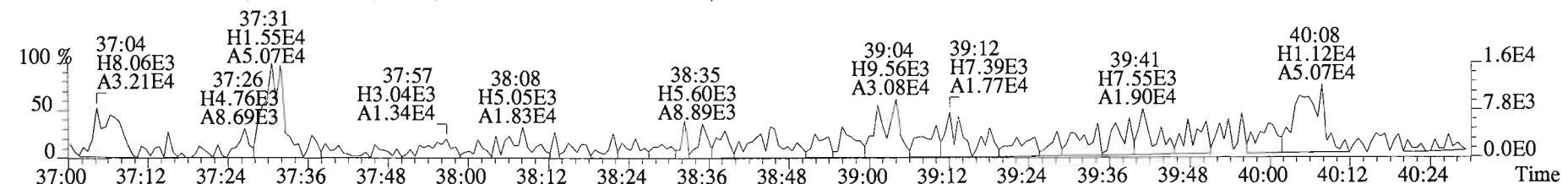
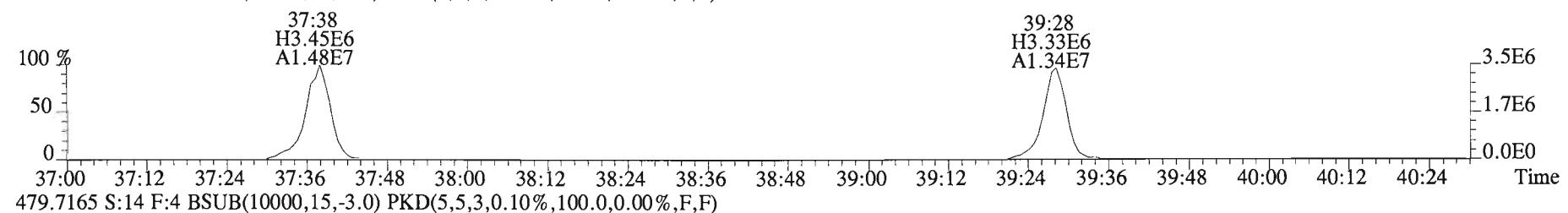
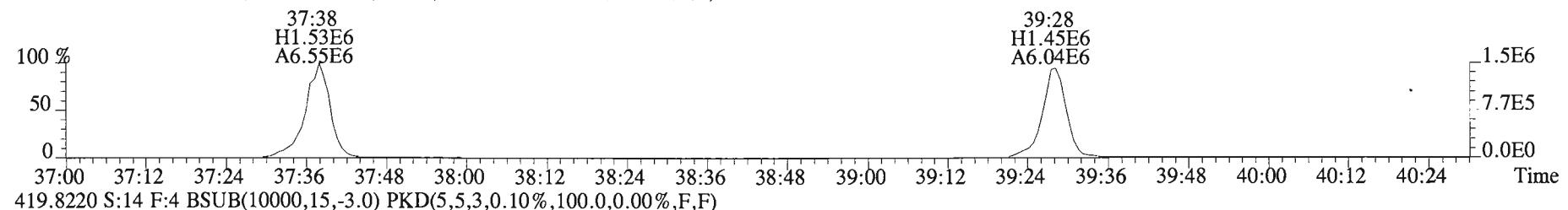
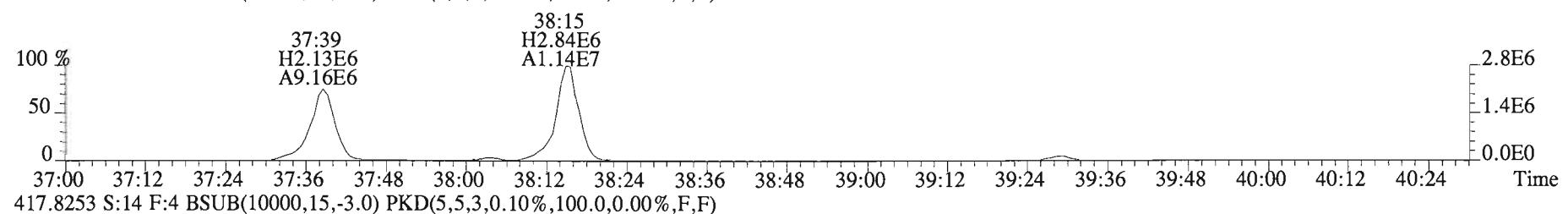
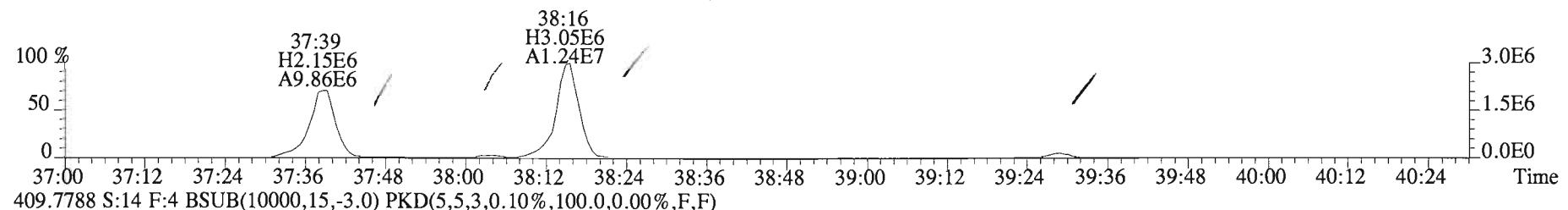
File:150220D1 #1-393 Acq:20-FEB-2015 21:36:26 GC EI + Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



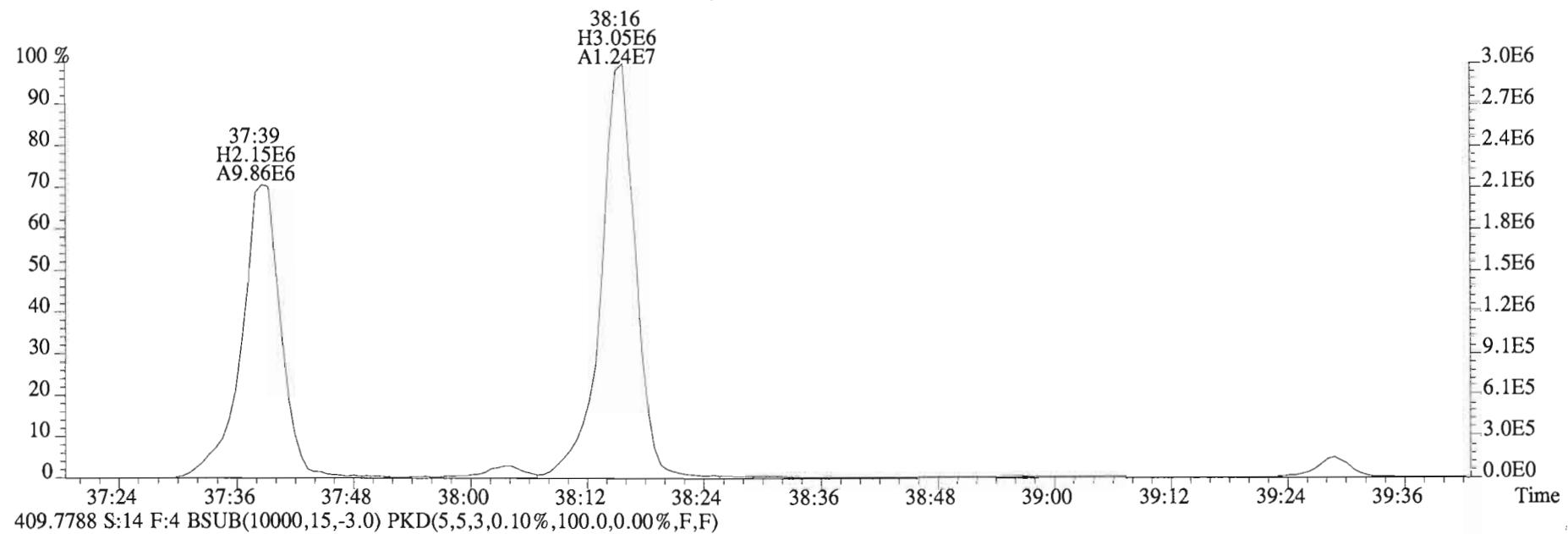
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Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



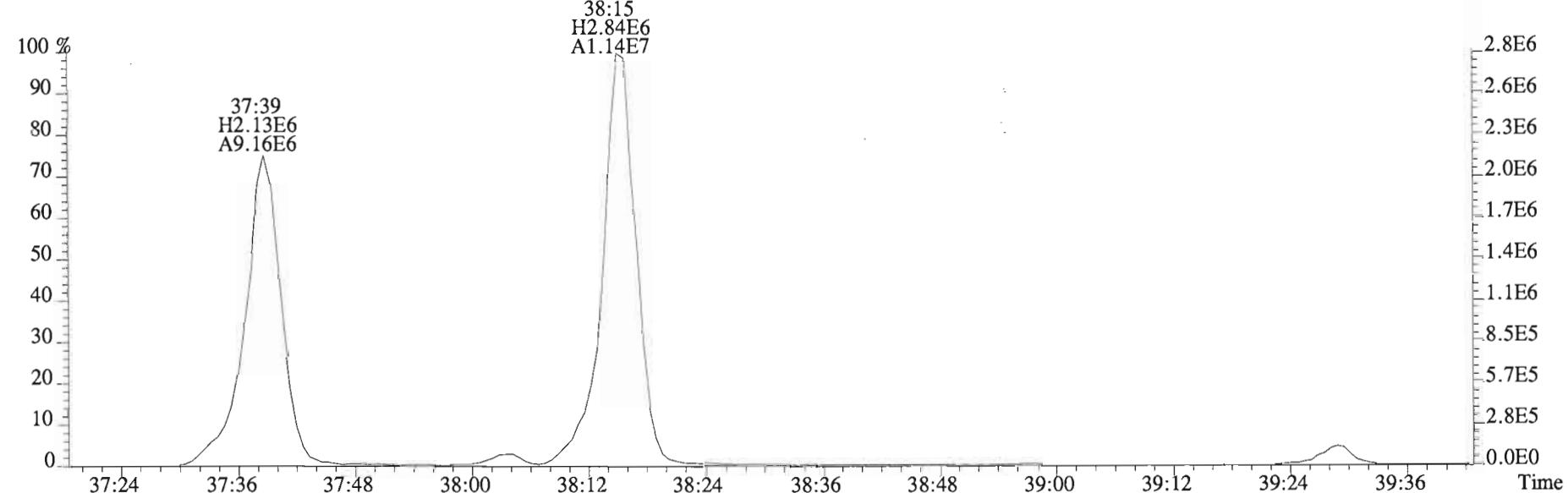
File:150220D1 #1-325 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
 407.7818 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



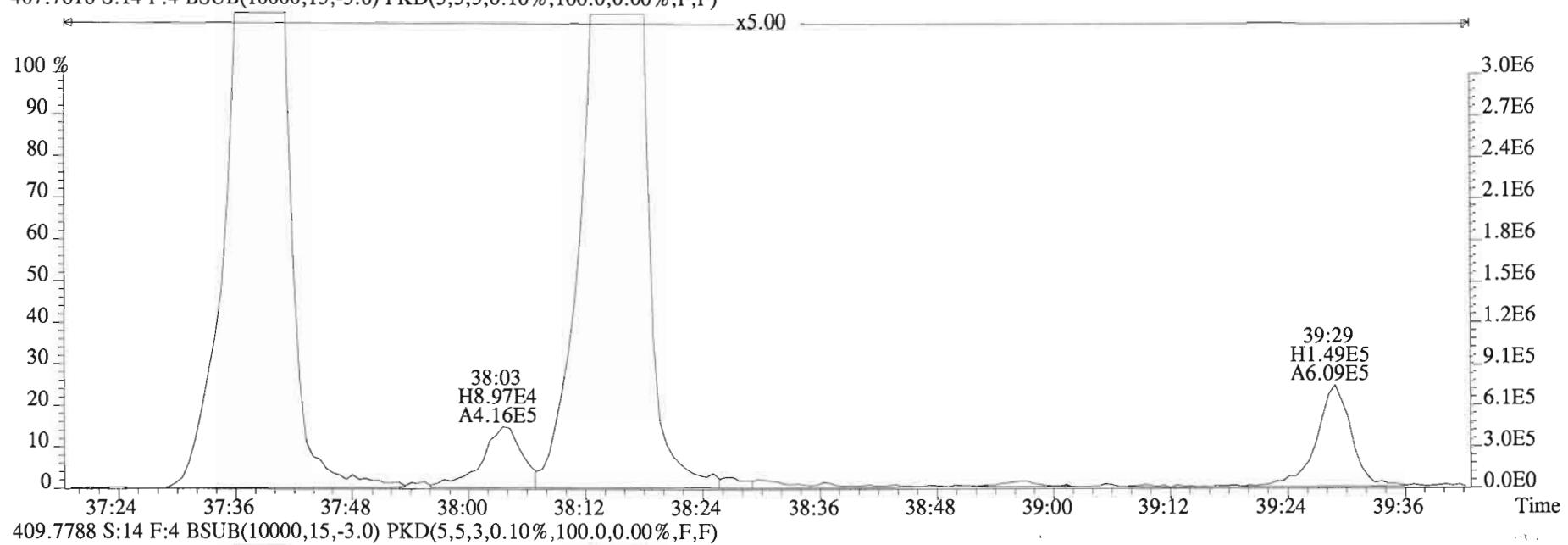
File:150220D1 #1-325 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
407.7818 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



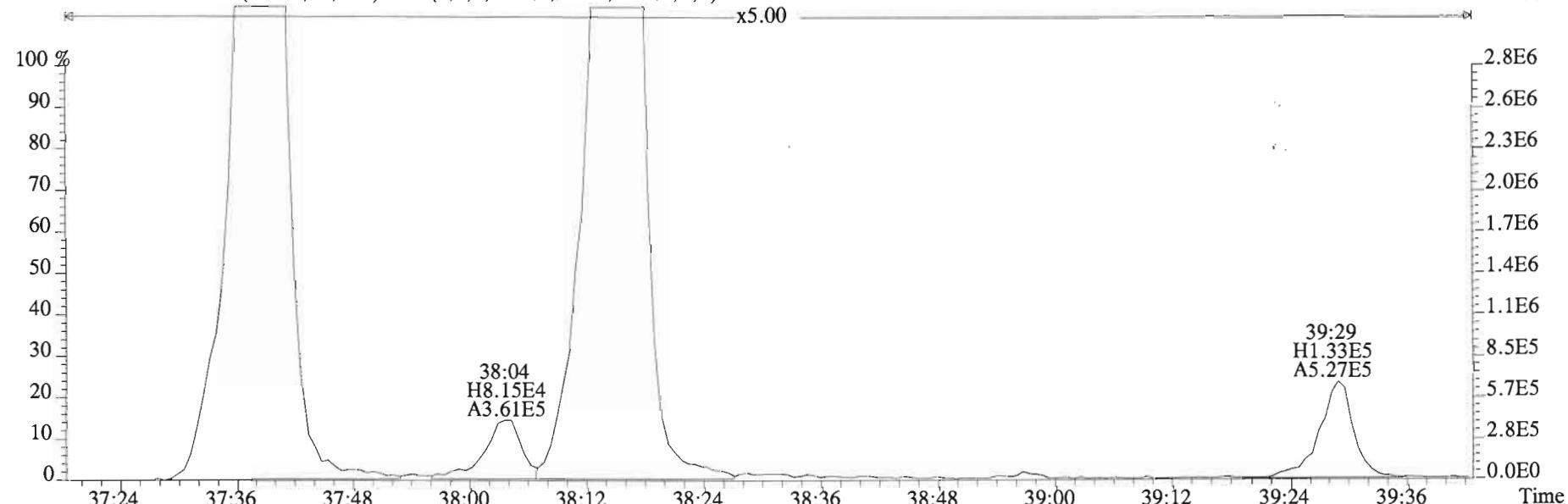
409.7788 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



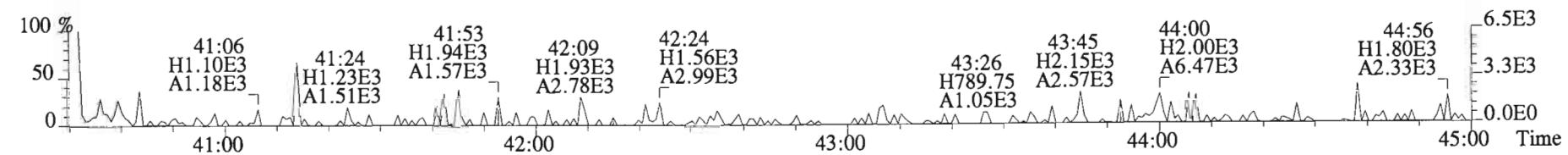
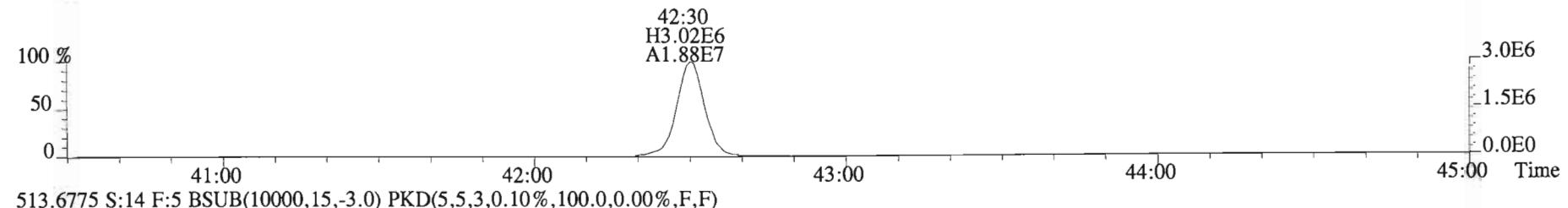
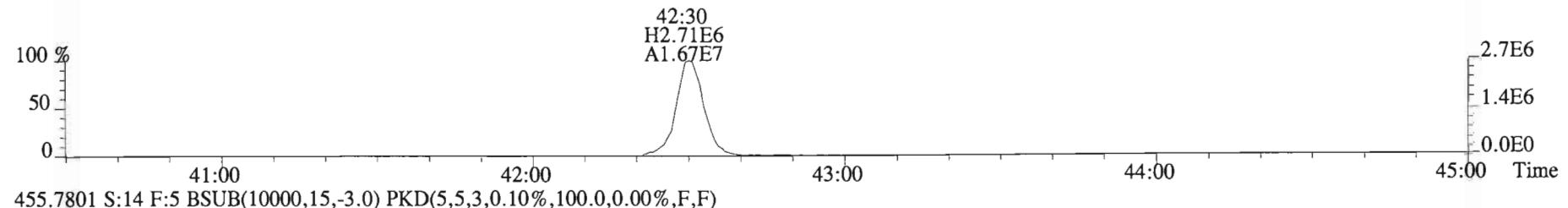
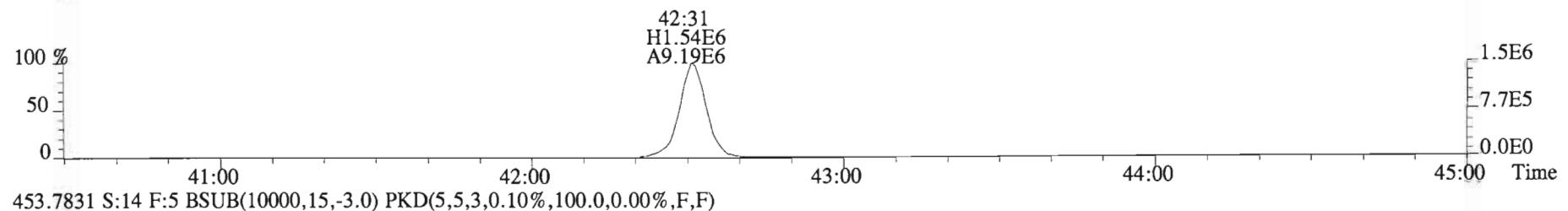
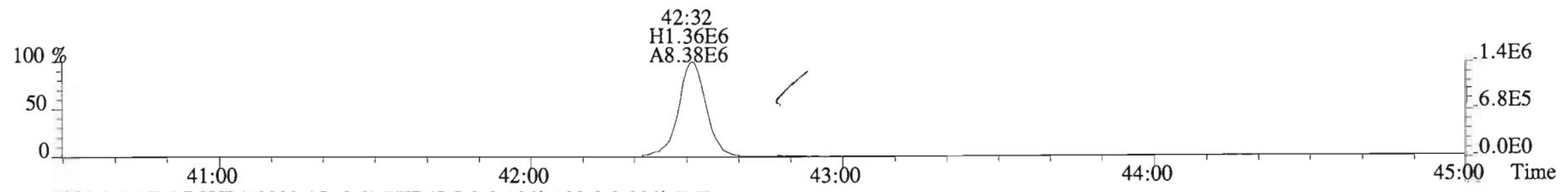
File:150220D1 #1-325 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 Exp:OCDD_DB5
407.7818 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7788 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:150220D1 #1-389 Acq:20-FEB-2015 21:36:26 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#14 File Text:Vista Analytical Laboratory VG-7 Text:1500147-03 WM-CB-52-20150203-S 20.77 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: WM-CB-21-20150203-S
Lab ID: 1500147-04

Filename: 150220D1 S:15 Acq:20-FEB-15 22:25:12
GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol:10.016

ConCal: ST150220D1-1
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	7.41e+04	0.55 n	1.17	27:01	1.001	0.37497	*	2.5	*		Total Tetra-Dioxins	8.30	8.92	*	*	
	1,2,3,7,8-PeCDD	3.92e+05	0.62 y	0.91	31:38	1.000	2.7815	*	2.5	*		Total Penta-Dioxins	32.0	32.0	*	*	
	1,2,3,4,7,8-HxCDD	1.01e+06	1.20 y	1.08	35:00	1.001	7.4501	*	2.5	*		Total Hexa-Dioxins	505	505	*	*	
	1,2,3,6,7,8-HxCDD	2.61e+06	1.26 y	1.06	35:06	1.000	21.461	*	2.5	*		Total Hepta-Dioxins	3860	3860	*	*	
	1,2,3,7,8,9-HxCDD	1.26e+06	1.29 y	0.93	35:24	1.001	9.7054	*	2.5	*		Total Tetra-Furans	37.8	38.7	*	*	
	1,2,3,4,6,7,8-HpCDD	1.04e+08	1.05 y	1.10	38:57	1.001	861.31	*	2.5	*		Total Penta-Furans	54.300	54.422	*	*	
	OCDD	4.86e+08	0.91 y	0.95	42:20	1.000	6521.1	*	2.5	*		Total Hexa-Furans	115	115	*	*	
												Total Hepta-Furans	183	183	*	*	
	2,3,7,8-TCDF	4.40e+05	0.82 y	1.07	26:12	1.001	1.7845	1142	*	2.5	*						
	1,2,3,7,8-PeCDF	3.34e+05	1.69 y	1.07	30:26	1.001	1.5039	*	2.5	*							
	2,3,4,7,8-PeCDF	4.54e+05	1.60 y	1.03	31:20	1.000	2.1634	*	2.5	*							
	1,2,3,4,7,8-HxCDF	9.03e+05	1.30 y	1.38	34:06	1.001	4.3505	*	2.5	*							
	1,2,3,6,7,8-HxCDF	8.50e+05	1.36 y	1.26	34:13	1.000	4.1187	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.23e+06	1.28 y	1.29	34:49	1.000	6.0737	*	2.5	*							
	1,2,3,7,8,9-HxCDF	1.23e+05	1.20 y	1.19	35:47	1.001	0.74497	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.33e+07	1.09 y	1.61	37:38	1.000	68.313	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	7.27e+05	1.14 y	1.53	39:28	1.000	4.5468	*	2.5	*							
	OCDF	1.55e+07	0.91 y	1.10	42:32	1.000	145.80	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	3.37e+07	0.79 y	1.06	26:60	1.022	188.13					94.2					
IS	13C-1,2,3,7,8-PeCDD	3.10e+07	0.62 y	1.18	31:38	1.197	155.70					78.0					
IS	13C-1,2,3,4,7,8-HxCDD	2.51e+07	1.26 y	0.72	34:59	1.014	190.01					95.2					
IS	13C-1,2,3,6,7,8-HxCDD	2.29e+07	1.27 y	0.74	35:06	1.017	168.85					84.6					
IS	13C-1,2,3,7,8,9-HxCDD	2.78e+07	1.21 y	0.85	35:23	1.026	177.29					88.8					
IS	13C-1,2,3,4,6,7,8-HpCDD	2.19e+07	1.05 y	0.65	38:55	1.128	182.39					91.3					
IS	13C-OCDD	3.14e+07	0.90 y	0.76	42:19	1.227	223.39					55.9					
IS	13C-2,3,7,8-TCDF	4.60e+07	0.77 y	0.92	26:11	0.991	198.32					99.3					
IS	13C-1,2,3,7,8-PeCDF	4.13e+07	1.56 y	0.92	30:25	1.151	177.28					88.8					
IS	13C-2,3,4,7,8-PeCDF	4.05e+07	1.58 y	0.93	31:20	1.186	172.31					86.3					
IS	13C-1,2,3,4,7,8-HxCDF	2.99e+07	0.52 y	0.98	34:05	0.988	166.13					83.2					
IS	13C-1,2,3,6,7,8-HxCDF	3.28e+07	0.52 y	1.08	34:13	0.992	164.66					82.5					
IS	13C-2,3,4,6,7,8-HxCDF	3.14e+07	0.51 y	1.03	34:48	1.009	166.80					83.5					
IS	13C-1,2,3,7,8,9-HxCDF	2.79e+07	0.51 y	0.86	35:45	1.036	176.46					88.4					
IS	13C-1,2,3,4,6,7,8-HpCDF	2.42e+07	0.45 y	0.72	37:37	1.091	182.21					91.3					
IS	13C-1,2,3,4,7,8,9-HpCDF	2.09e+07	0.44 y	0.70	39:28	1.144	163.42					81.8					
IS	13C-OCDF	3.86e+07	0.88 y	0.85	42:31	1.233	247.54					62.0					
C/Up	37Cl-2,3,7,8-TCDD	1.46e+07		1.12	27:01	1.022	77.287					96.8	Integrations by		Reviewed by		
RS/RT	13C-1,2,3,4-TCDD	3.37e+07	0.80 y	1.00	26:25	*	199.68					Analyst: M			Analyst:		
RS	13C-1,2,3,4-TCDF	5.05e+07	0.77 y	1.00	24:56	*	199.68										
RS/RT	13C-1,2,3,4,6,9-HxCDF	3.67e+07	0.52 y	1.00	34:30	*	199.68					Date: 2/23/15			Date: 2/24/15		

Totals class: TCDD EMPC

Entry #: 19

Run: 20 File: 150220D1 S: 15 I: 1 F: 1
 Acquired: 20-FEB-15 22:25:12 Processed: 21-FEB-15 07:53:16

Total Concentration: 8.9191 Unnamed Concentration: 8.544

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
23:28	1.987e+05		2.611e+05	0.76	y	4.598e+05	2.3264	
23:51	1.280e+05		1.595e+05	0.80	y	2.875e+05	1.4548	
24:17	2.977e+04		4.349e+04	0.68	y	7.326e+04	0.37068	
25:04	1.349e+04		1.563e+04	0.86	y	2.911e+04	0.14731	
25:18	6.241e+04		8.322e+04	0.75	y	1.456e+05	0.73684	
25:28	6.322e+04		9.583e+04	0.66	y	1.590e+05	0.80475	
25:41	2.848e+04		3.508e+04	0.81	y	6.355e+04	0.32157	
25:54	1.507e+04		1.561e+04	0.97	n	2.763e+04	0.13983	
26:05	3.668e+04		4.606e+04	0.80	y	8.274e+04	0.41863	
26:25	3.808e+04		4.804e+04	0.79	y	8.612e+04	0.43575	
26:33	9.001e+03		1.351e+04	0.67	y	2.251e+04	0.11391	
26:45	4.621e+04		6.865e+04	0.67	y	1.149e+05	0.58120	
26:53	1.116e+04		1.505e+04	0.74	y	2.621e+04	0.13264	
27:01	3.224e+04		5.819e+04	0.55	n	7.411e+04	0.37497	2,3,7,8-TCDD
27:18	3.129e+04		3.845e+04	0.81	y	6.974e+04	0.35288	
27:26	7.866e+03		1.172e+04	0.67	y	1.959e+04	0.099120	
27:54	1.147e+04		1.204e+04	0.95	n	2.131e+04	0.10785	

Totals class: PeCDD EMPC

Entry #: 21

Run: 20 File: 150220D1 S: 15 I: 1 F: 2
 Acquired: 20-FEB-15 22:25:12 Processed: 21-FEB-15 07:53:16

Total Concentration: 31.969 Unnamed Concentration: 29.187

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
29:32	3.923e+05	6.320e+05	0.62	y	1.024e+06	7.2673
30:00	2.979e+05	4.937e+05	0.60	y	7.915e+05	5.6160
30:28	1.634e+05	2.536e+05	0.64	y	4.170e+05	2.9585
30:37	1.502e+05	2.688e+05	0.56	y	4.190e+05	2.9728
30:42	1.180e+05	2.203e+05	0.54	y	3.383e+05	2.4002
30:55	2.851e+05	4.330e+05	0.66	y	7.180e+05	5.0944
31:14	5.852e+04	9.999e+04	0.59	y	1.585e+05	1.1247
31:38	1.506e+05	2.415e+05	0.62	y	3.920e+05	2.7815
31:43	3.979e+04	6.720e+04	0.59	y	1.070e+05	0.75911
32:01	5.414e+04	8.599e+04	0.63	y	1.401e+05	0.99416

Totals class: HxCDD EMPC

Entry #: 23

Run: 20 File: 150220D1 S: 15 I: 1 F: 3
Acquired: 20-FEB-15 22:25:12 Processed: 21-FEB-15 07:53:16

Total Concentration: 505.42 Unnamed Concentration: 466.802

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
33:27	1.527e+07		1.210e+07	1.26	y	2.737e+07		212.22
34:01	3.273e+06		2.643e+06	1.24	y	5.916e+06		45.869
34:17	9.598e+06		7.600e+06	1.26	y	1.720e+07		133.34
34:25	3.970e+06		3.217e+06	1.23	y	7.186e+06		55.719
35:00	5.518e+05		4.596e+05	1.20	y	1.011e+06	7.4501	1,2,3,4,7,8-HxCDD
35:06	1.456e+06		1.158e+06	1.26	y	2.614e+06	21.461	1,2,3,6,7,8-HxCDD
35:18	1.403e+06		1.132e+06	1.24	y	2.535e+06	19.652	
35:24	7.090e+05		5.491e+05	1.29	y	1.258e+06	9.7054	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC

Entry #: 25

Run: 20 File: 150220D1 S: 15 I: 1 F: 4
Acquired: 20-FEB-15 22:25:12 Processed: 21-FEB-15 07:53:16

Total Concentration: 3864.1 Unnamed Concentration: 3002.809

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
38:03	1.851e+08		1.787e+08	1.04	y	3.638e+08	3002.8	
38:57	5.336e+07		5.100e+07	1.05	y	1.044e+08	861.31	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC

Entry #: 27

Run: 20 File: 150220D1 S: 15 I: 1 F: 1
 Acquired: 20-FEB-15 22:25:12 Processed: 21-FEB-15 07:53:16

Total Concentration: 38.744 Unnamed Concentration: 36.959

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
21:18	1.205e+05	1.683e+05	0.72	y	2.889e+05		1.1707	
21:52	1.141e+05	1.562e+05	0.73	y	2.703e+05		1.0955	
22:28	4.170e+05	5.514e+05	0.76	y	9.684e+05		3.9249	
23:02	4.213e+05	5.379e+05	0.78	y	9.592e+05		3.8874	
23:26	3.618e+05	4.755e+05	0.76	y	8.374e+05		3.3937	
23:53	2.253e+05	3.046e+05	0.74	y	5.299e+05		2.1475	
24:02	1.584e+05	1.905e+05	0.83	y	3.488e+05		1.4138	
24:12	1.597e+05	2.050e+05	0.78	y	3.647e+05		1.4780	
24:33	7.532e+04	9.722e+04	0.77	y	1.725e+05		0.69928	
24:41	1.444e+05	1.772e+05	0.81	y	3.216e+05		1.3034	
24:49	2.431e+05	2.974e+05	0.82	y	5.405e+05		2.1905	
24:57	3.842e+05	4.839e+05	0.79	y	8.682e+05		3.5186	
25:23	2.419e+05	3.090e+05	0.78	y	5.509e+05		2.2327	
25:38	1.251e+05	1.617e+05	0.77	y	2.868e+05		1.1623	
25:49	1.177e+05	1.552e+05	0.76	y	2.730e+05		1.1063	
26:00	1.099e+05	1.278e+05	0.86	y	2.376e+05		0.96313	
26:06	8.623e+04	1.215e+05	0.71	y	2.077e+05		0.84181	
26:12	1.988e+05	2.415e+05	0.82	y	4.403e+05		1.7845	2,3,7,8-TCDF
26:33	3.269e+05	4.141e+05	0.79	y	7.410e+05		3.0031	
26:47	2.741e+04	3.550e+04	0.77	y	6.291e+04		0.25495	
27:02	1.167e+04	1.746e+04	0.67	y	2.913e+04		0.11804	
27:36	7.843e+03	9.559e+03	0.82	y	1.740e+04		0.070526	
27:45	1.020e+05	6.111e+04	1.67	n	1.082e+05		0.43836	
28:02	1.015e+05	7.596e+04	1.34	n	1.345e+05		0.54492	

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

Run: 20 File: 150220D1 S: 15 I: 1 F: 1
Acquired: 20-FEB-15 22:25:12 Processed: 21-FEB-15 07:53:16

Total Concentration: 22.834 Unnamed Concentration: 22.834

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
28:02	3.019e+06	1.909e+06	1.58	y	4.928e+06
					22.834

Totals class: PeCDF EMPC

Entry #: 31

Run: 20 File: 150220D1 S: 15 I: 1 F: 2
 Acquired: 20-FEB-15 22:25:12 Processed: 21-FEB-15 07:53:16

Total Concentration: 31.588 Unnamed Concentration: 27.921

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
29:22	4.368e+05	2.489e+05	1.76 y	6.857e+05	3.1773	
29:30	1.475e+06	9.501e+05	1.55 y	2.425e+06	11.235	
29:52	8.250e+04	4.746e+04	1.74 y	1.300e+05	0.60219	
30:03	6.845e+05	4.246e+05	1.61 y	1.109e+06	5.1390	
30:16	1.199e+05	7.690e+04	1.56 y	1.968e+05	0.91168	
30:26	2.099e+05	1.242e+05	1.69 y	3.341e+05	1.5039	1,2,3,7,8-PeCDF
30:40	3.700e+05	2.245e+05	1.65 y	5.944e+05	2.7543	
30:48	1.914e+04	1.098e+04	1.74 y	3.011e+04	0.13953	
30:56	1.595e+04	1.368e+04	1.17 n	2.624e+04	0.12158	
31:09	2.553e+04	1.780e+04	1.43 y	4.333e+04	0.20076	
31:14	2.339e+05	1.446e+05	1.62 y	3.785e+05	1.7539	
31:20	2.788e+05	1.748e+05	1.60 y	4.535e+05	2.1634	2,3,4,7,8-PeCDF
31:23	1.880e+05	1.144e+05	1.64 y	3.024e+05	1.4013	
31:38	3.151e+04	2.258e+04	1.40 y	5.409e+04	0.25063	
32:14	3.068e+04	1.967e+04	1.56 y	5.035e+04	0.23328	

Totals class: HxCDF EMPC

Entry #: 33

Run: 20 File: 150220D1 S: 15 I: 1 F: 3
 Acquired: 20-FEB-15 22:25:12 Processed: 21-FEB-15 07:53:16

Total Concentration: 114.53 Unnamed Concentration: 99.241

RT	m1	Resp	m2	Resp	RA	Resp	Concentration	Name
32:55	1.494e+06		1.126e+06	1.33	y	2.619e+06	13.376	
33:04	5.212e+06		4.029e+06	1.29	y	9.241e+06	47.189	
33:16	5.706e+04		4.889e+04	1.17	y	1.060e+05	0.54102	
33:25	1.429e+05		1.138e+05	1.26	y	2.567e+05	1.3110	
33:37	3.576e+06		2.718e+06	1.32	y	6.294e+06	32.139	
33:59	2.708e+05		2.047e+05	1.32	y	4.755e+05	2.4282	
34:06	5.112e+05		3.918e+05	1.30	y	9.030e+05	4.3505	1,2,3,4,7,8-HxCDF
34:13	4.901e+05		3.596e+05	1.36	y	8.497e+05	4.1187	1,2,3,6,7,8-HxCDF
34:22	3.127e+04		2.859e+04	1.09	y	5.986e+04	0.30565	
34:30	6.532e+04		5.177e+04	1.26	y	1.171e+05	0.59789	
34:37	3.686e+04		2.691e+04	1.37	y	6.377e+04	0.32562	
34:41	3.675e+04		2.771e+04	1.33	y	6.446e+04	0.32915	
34:49	6.932e+05		5.401e+05	1.28	y	1.233e+06	6.0737	2,3,4,6,7,8-HxCDF
35:47	6.725e+04		5.621e+04	1.20	y	1.235e+05	0.74497	1,2,3,7,8,9-HxCDF
35:50	7.617e+04		6.050e+04	1.26	y	1.367e+05	0.69790	

Totals class: HpCDF EMPC

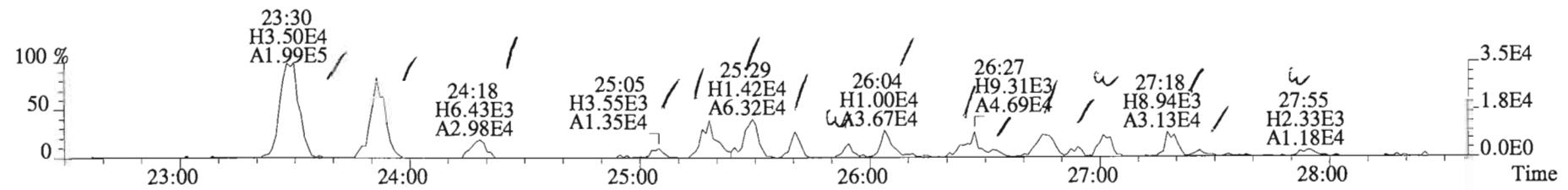
Entry #: 35

Run: 20 File: 150220D1 S: 15 I: 1 F: 4
Acquired: 20-FEB-15 22:25:12 Processed: 21-FEB-15 07:53:16

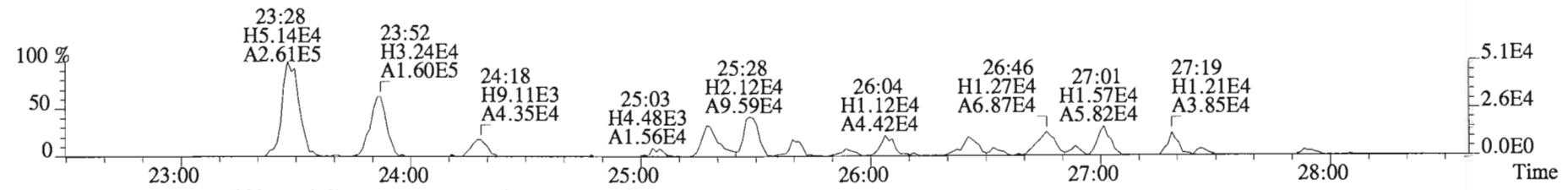
Total Concentration: 183.06 Unnamed Concentration: 110.203

RT	m1	Resp	m2	Resp	RA		Resp	Concentration	Name
37:38	6.955e+06		6.371e+06	1.09	y	1.333e+07		68.313	1,2,3,4,6,7,8-HpCDF
38:02	3.093e+05		2.680e+05	1.15	y	5.773e+05		3.2577	
38:15	9.905e+06		9.046e+06	1.09	y	1.895e+07		106.95	
39:28	3.880e+05		3.393e+05	1.14	y	7.273e+05		4.5468	1,2,3,4,7,8,9-HpCDF

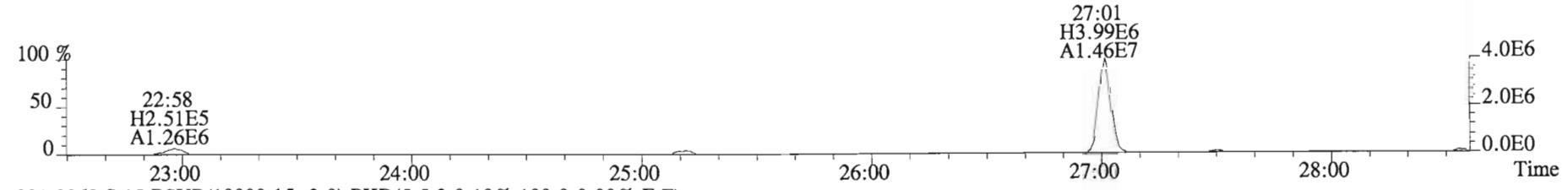
File:150220D1 #1-551 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
 319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



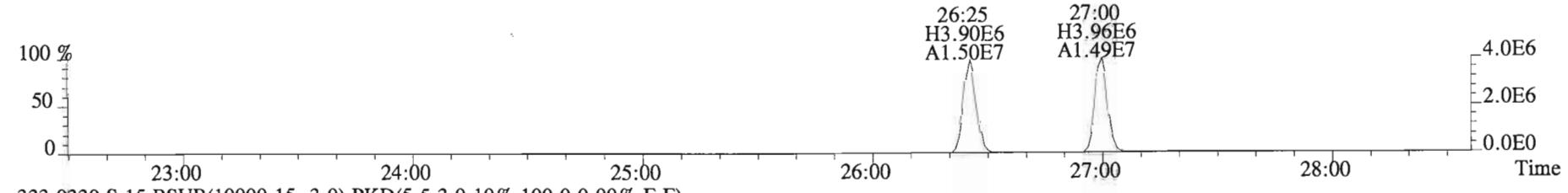
321.8936 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



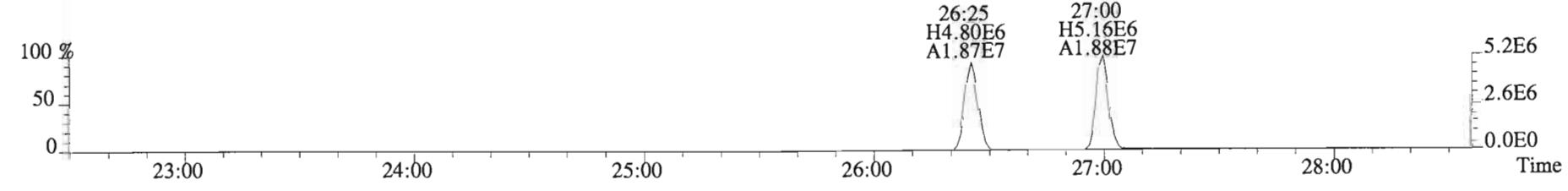
327.8847 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



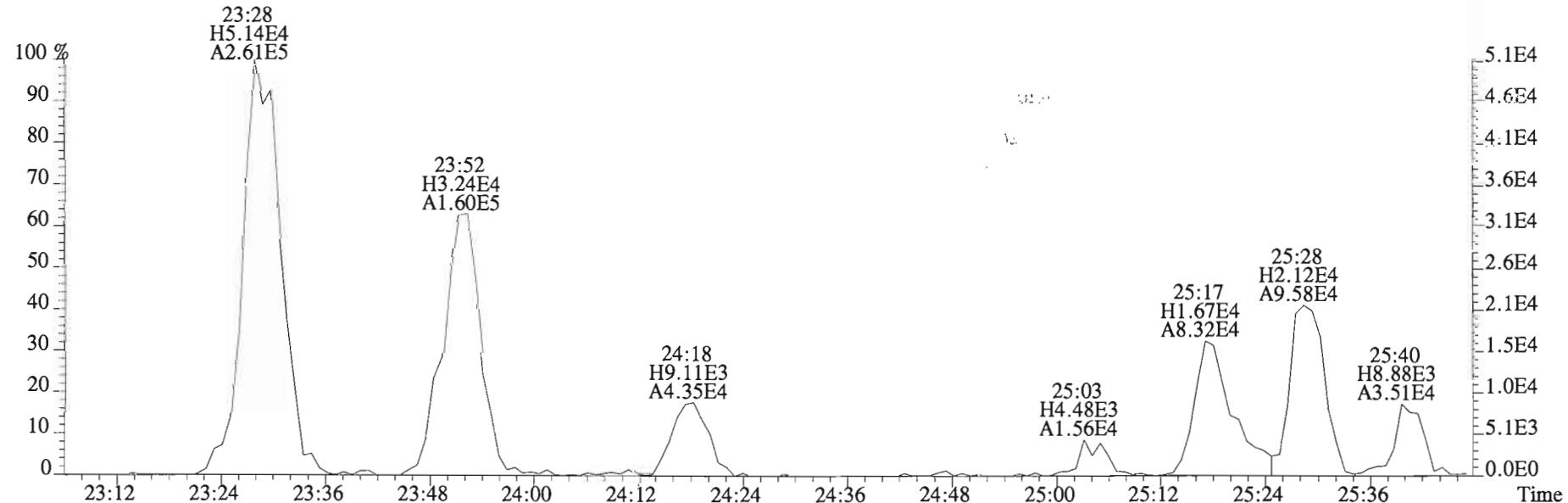
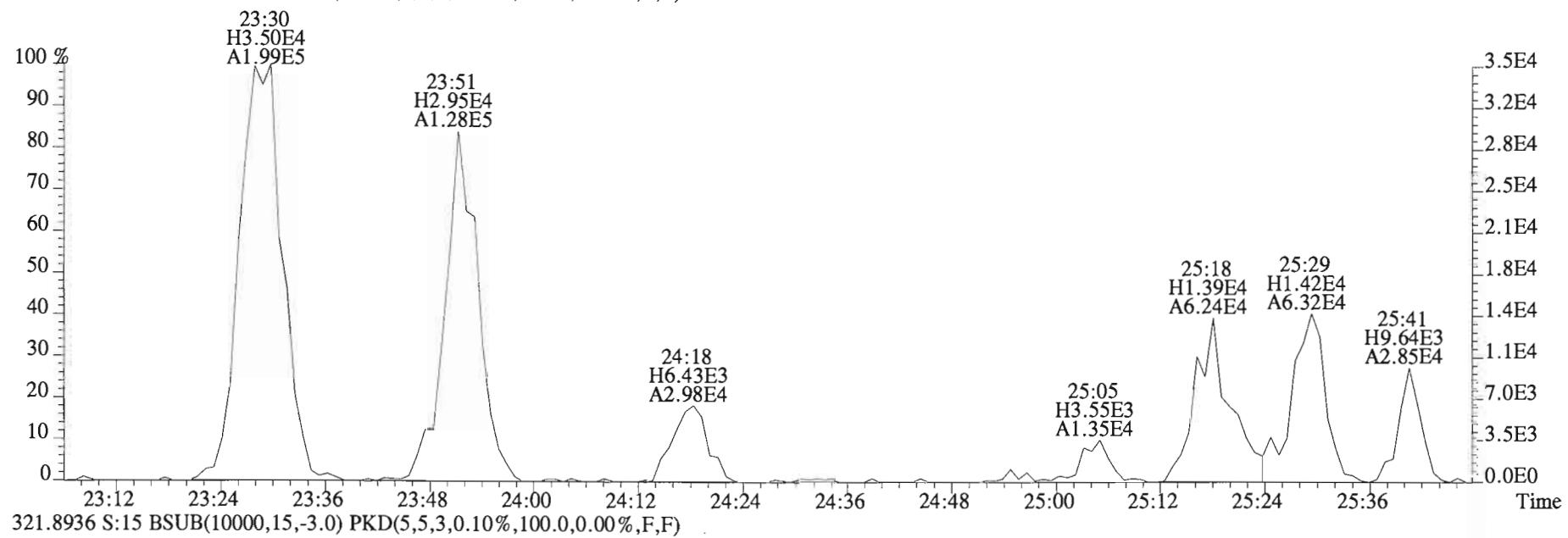
331.9368 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



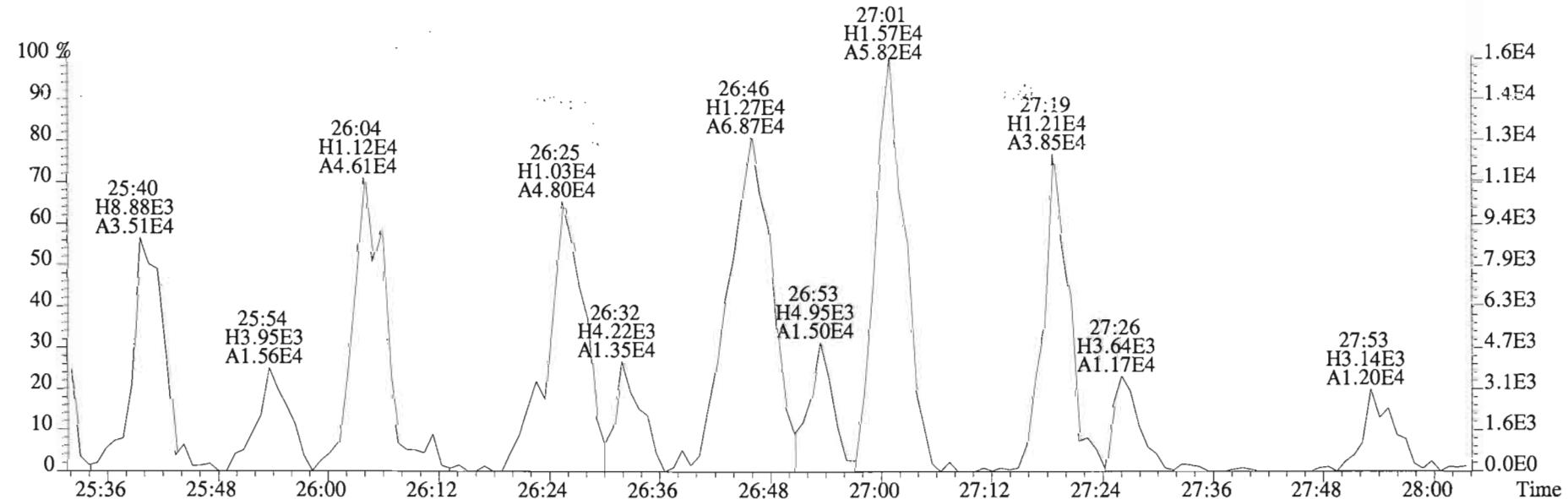
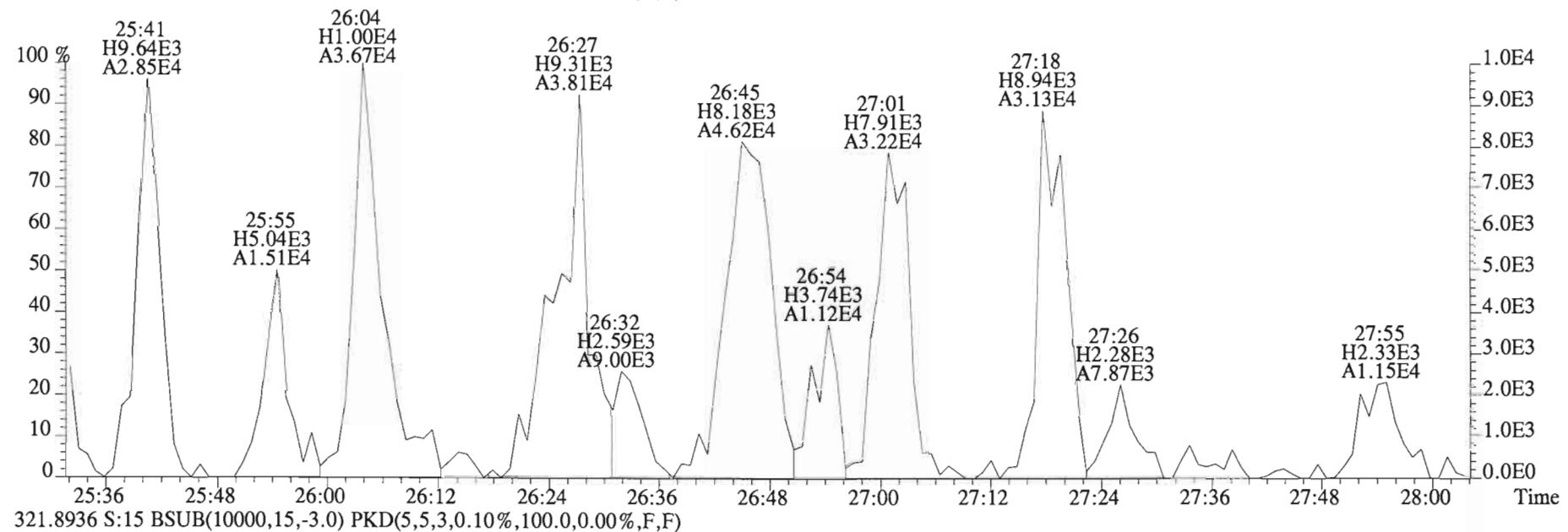
333.9339 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



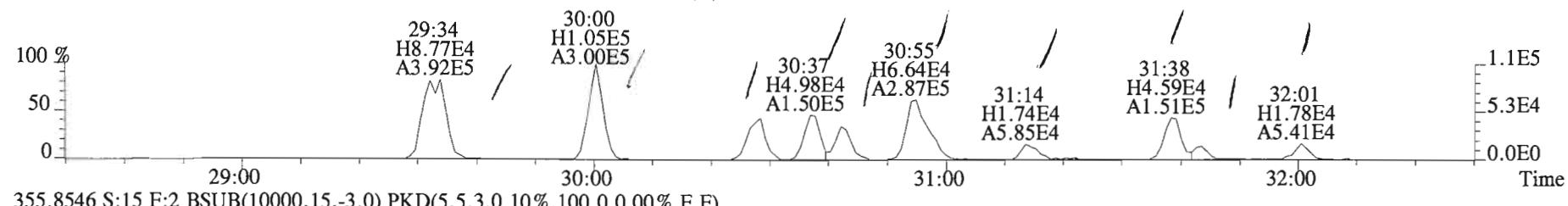
File:150220D1 #1-551 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
 319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



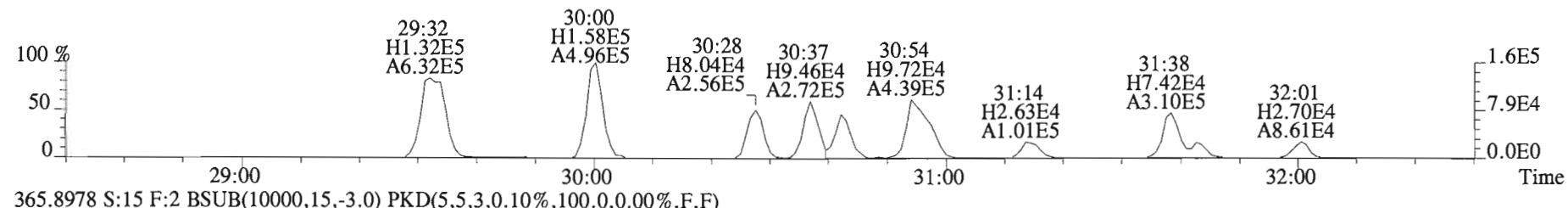
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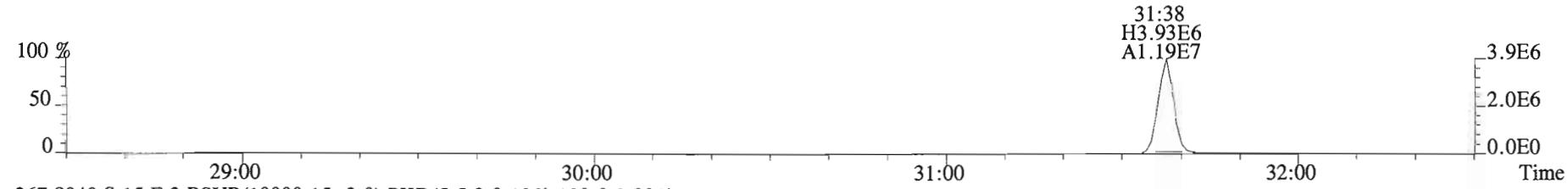
File:150220D1 #1-251 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
 353.8576 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



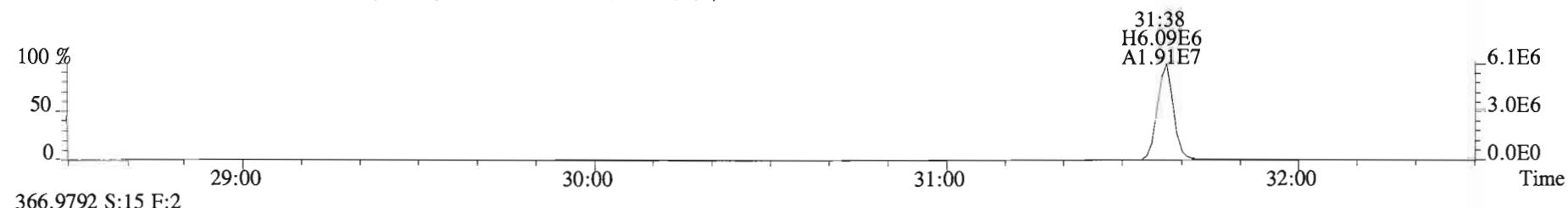
355.8546 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



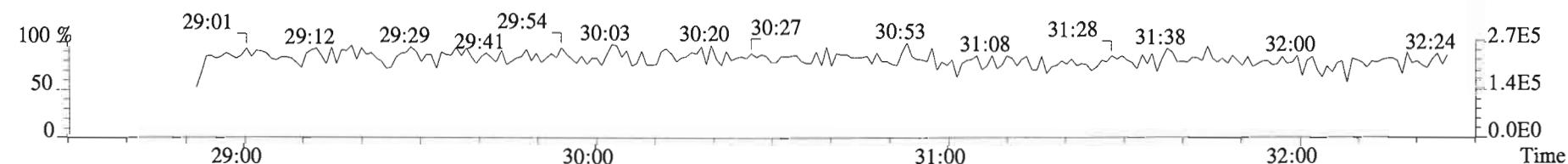
365.8978 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



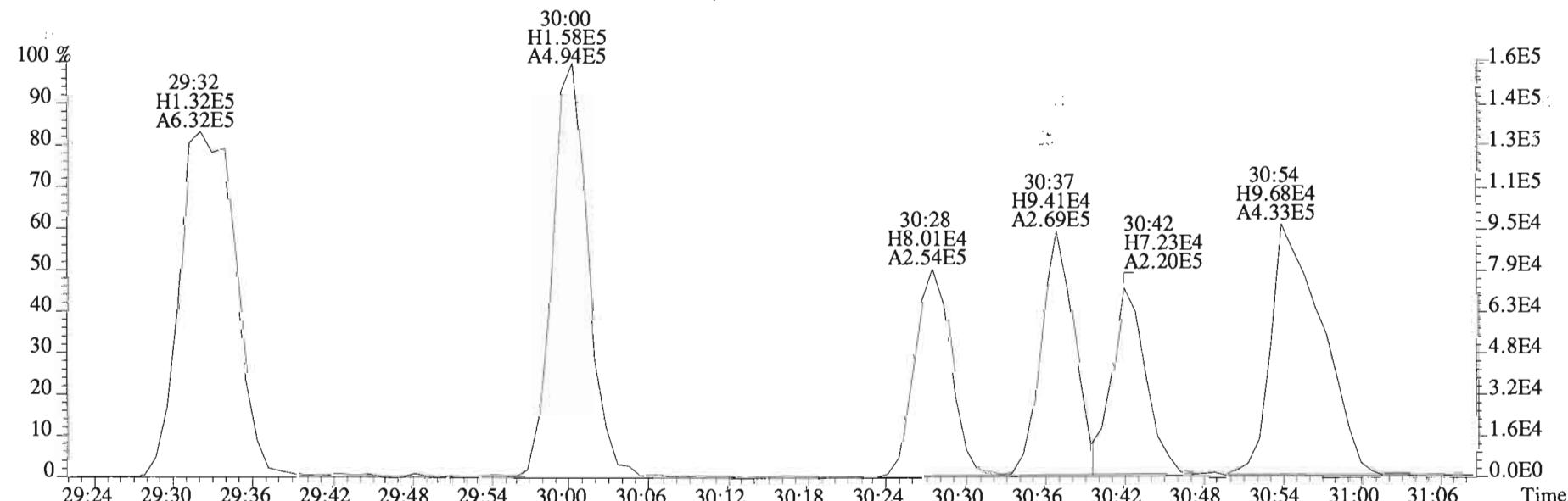
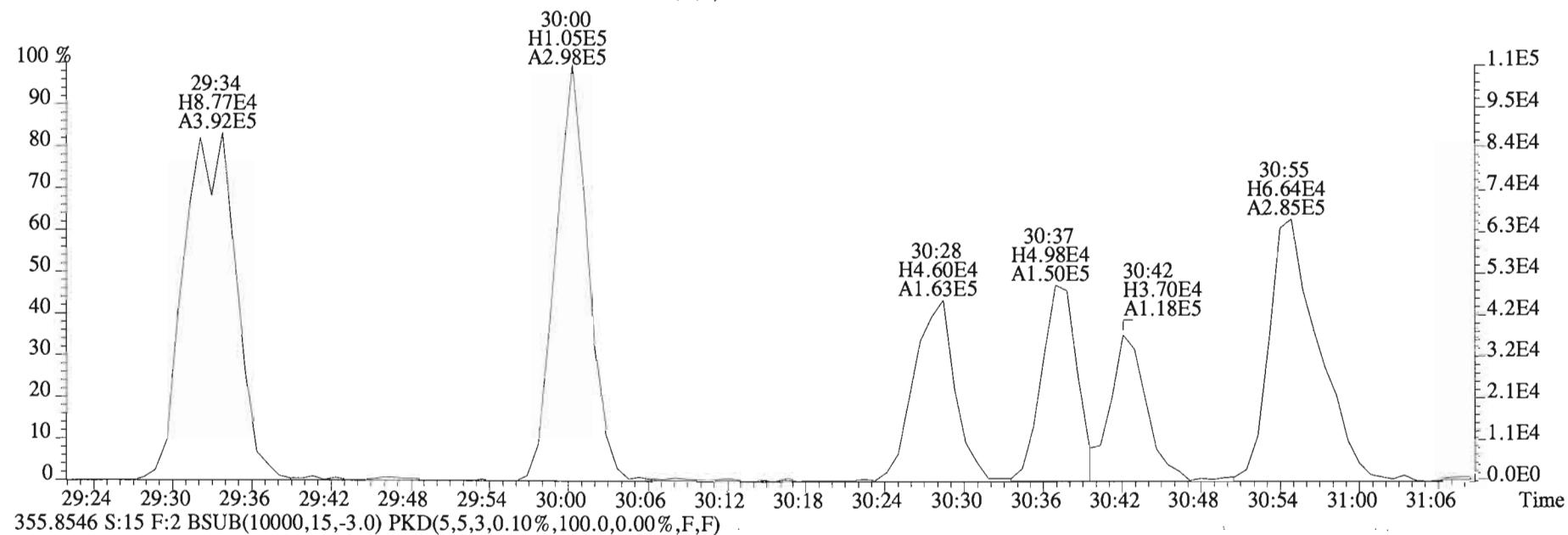
367.8949 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



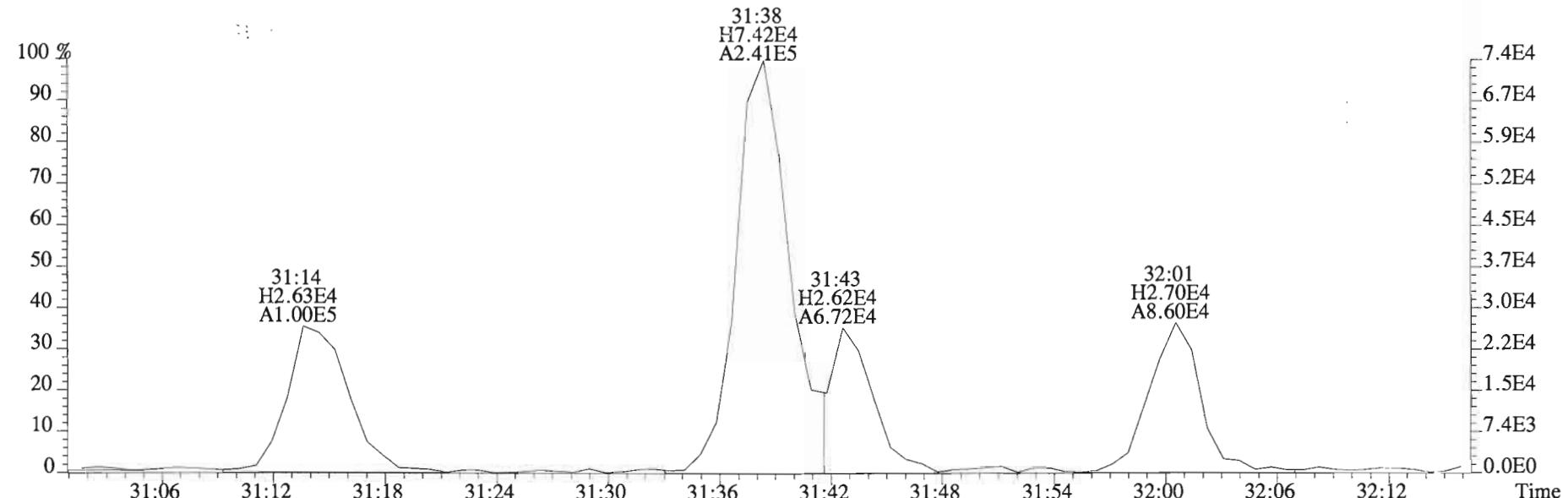
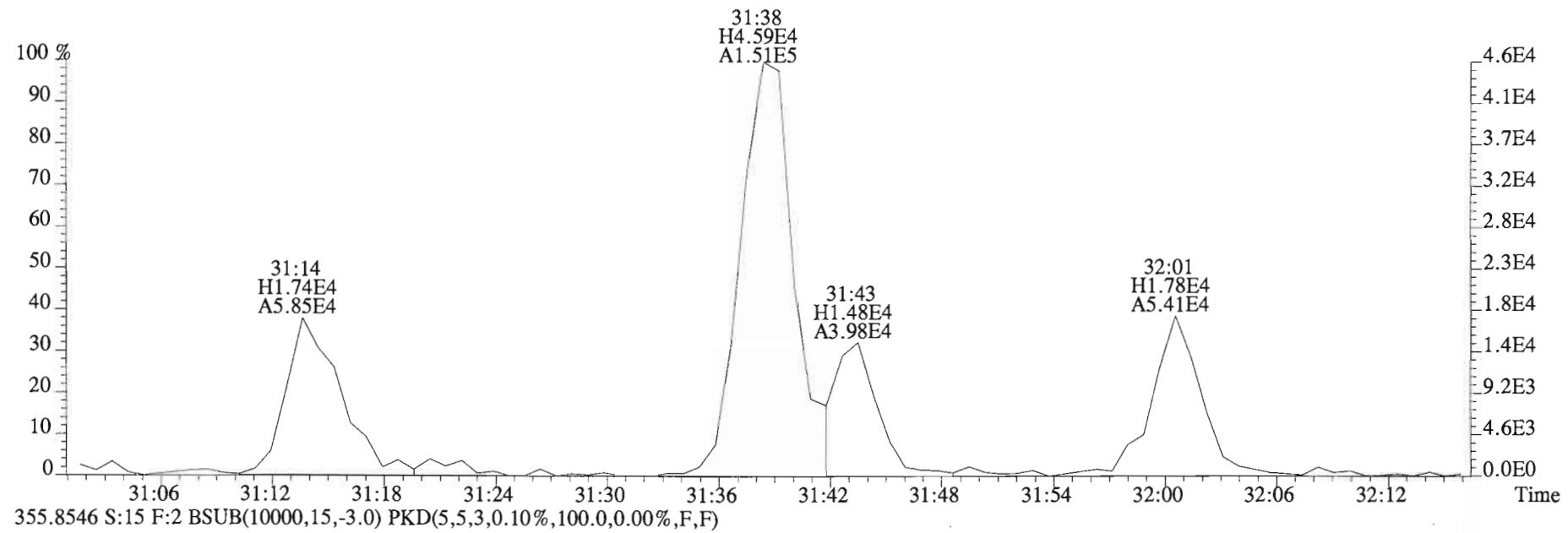
366.9792 S:15 F:2



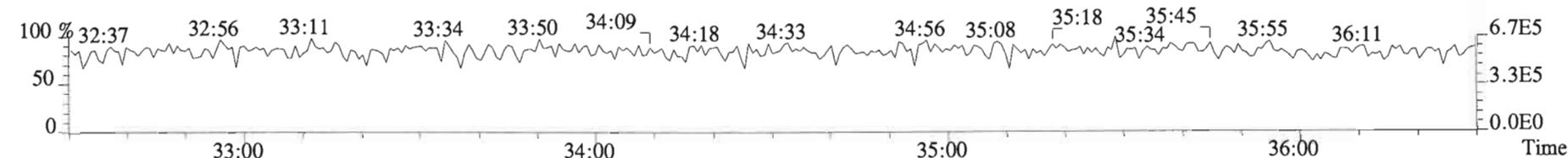
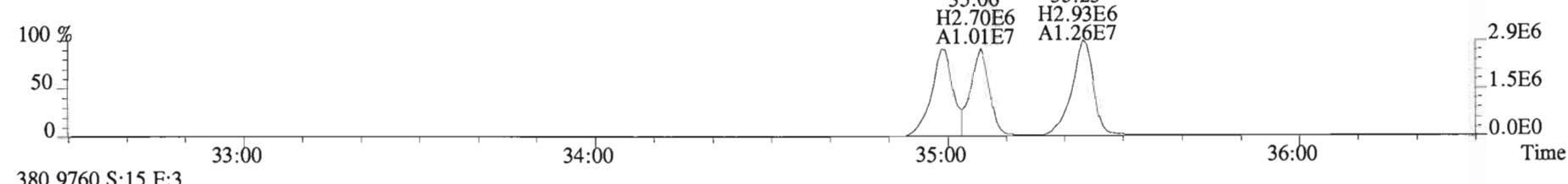
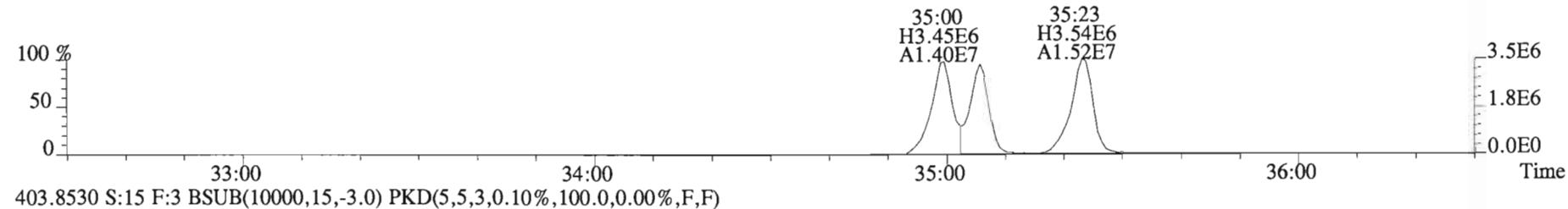
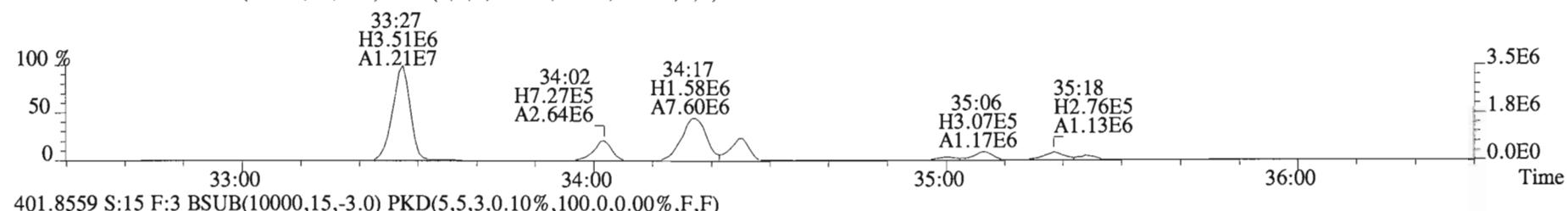
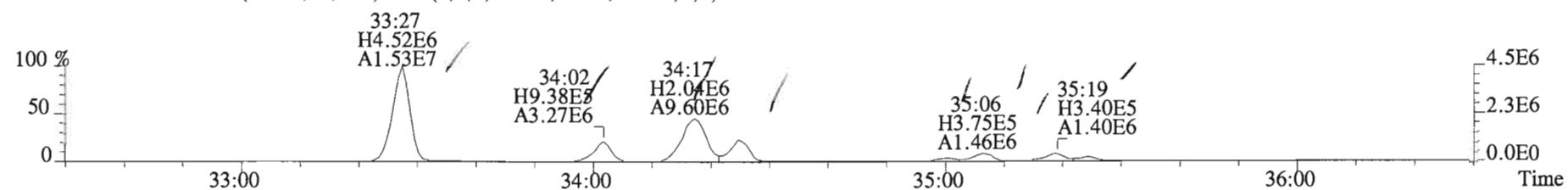
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Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
353.8576 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



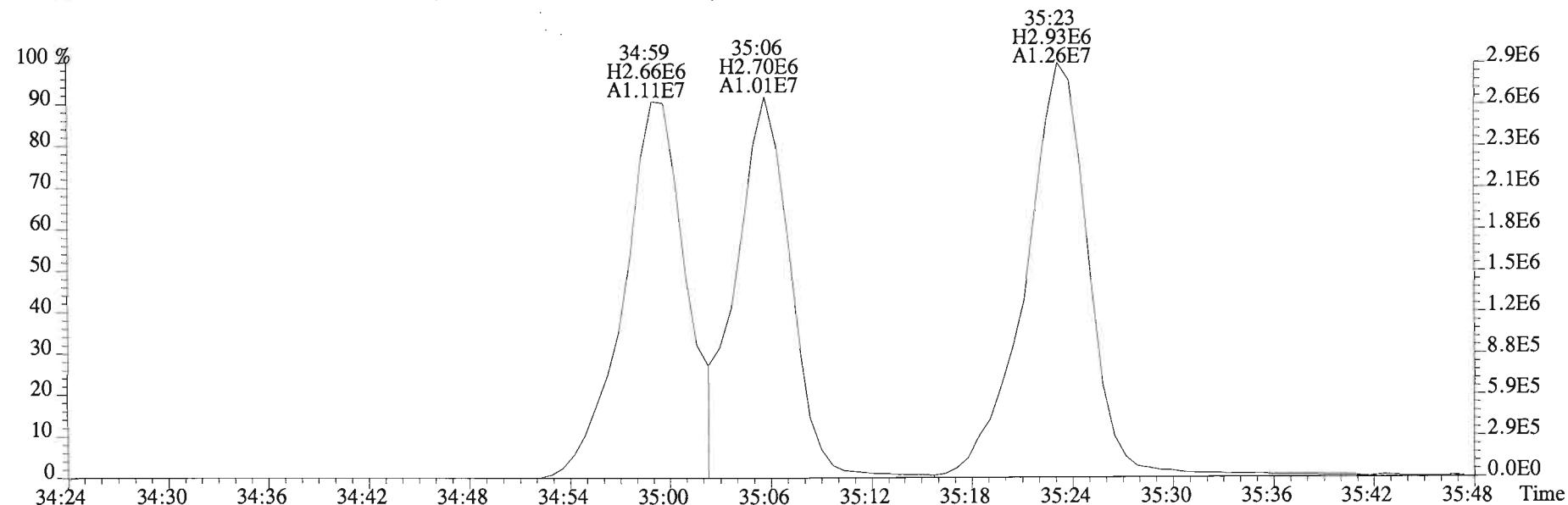
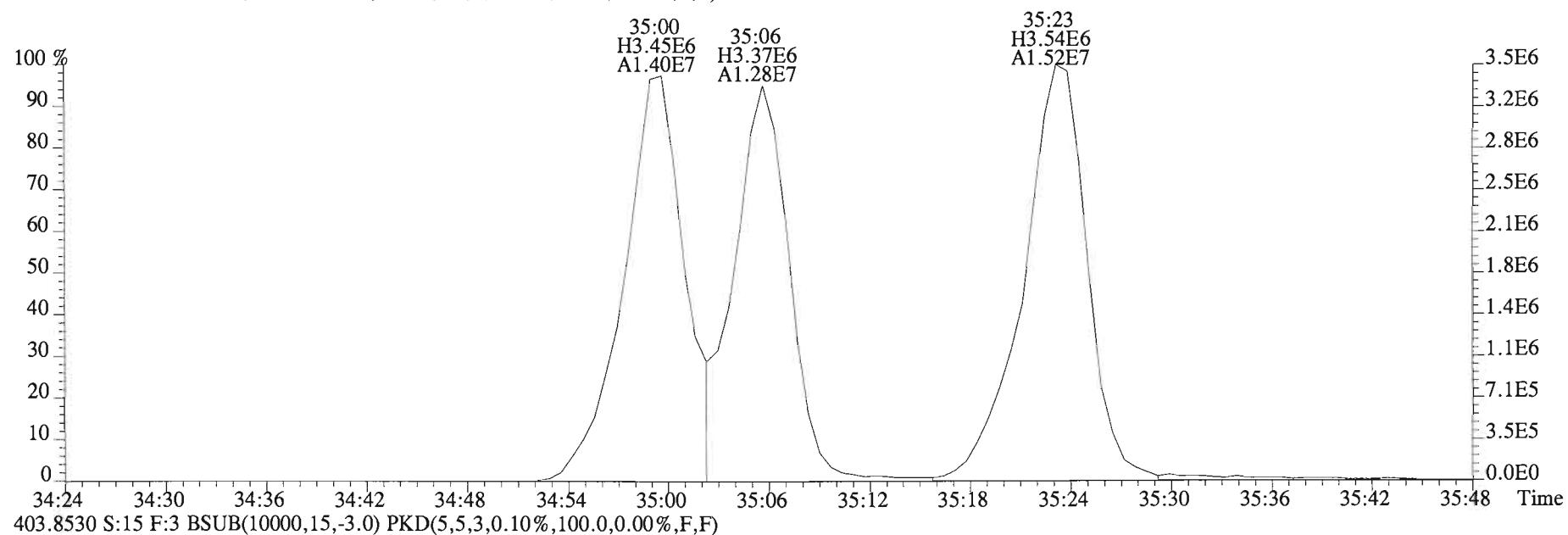
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353.8576 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



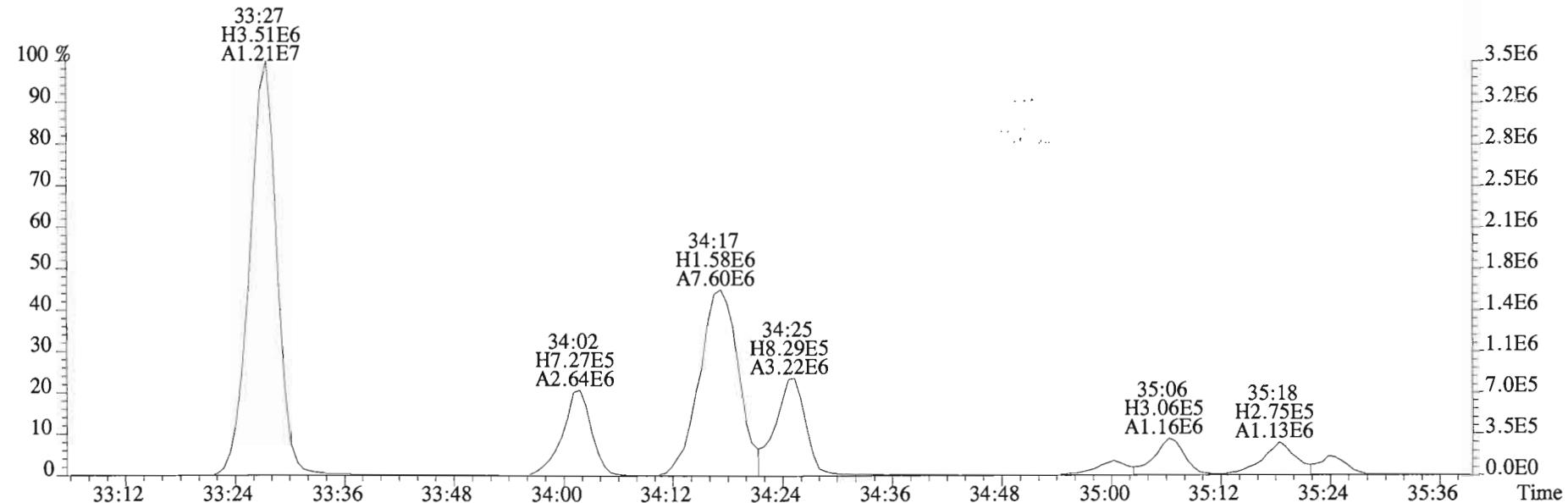
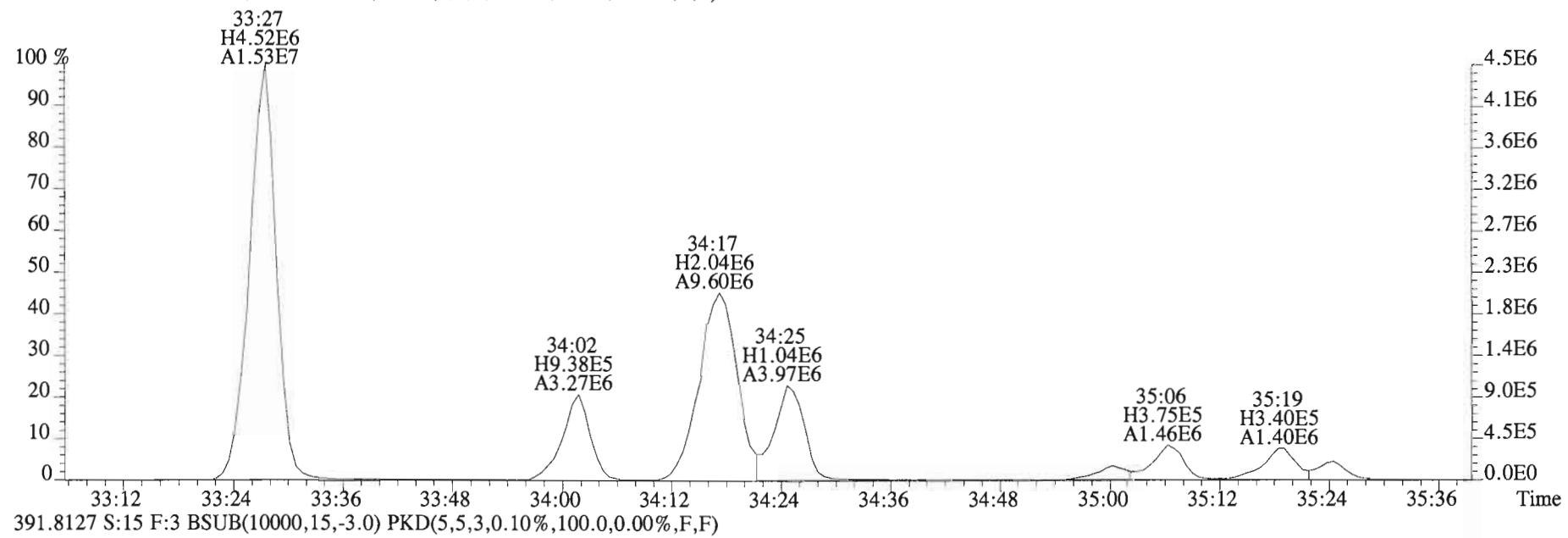
File:150220D1 #1-393 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
 389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



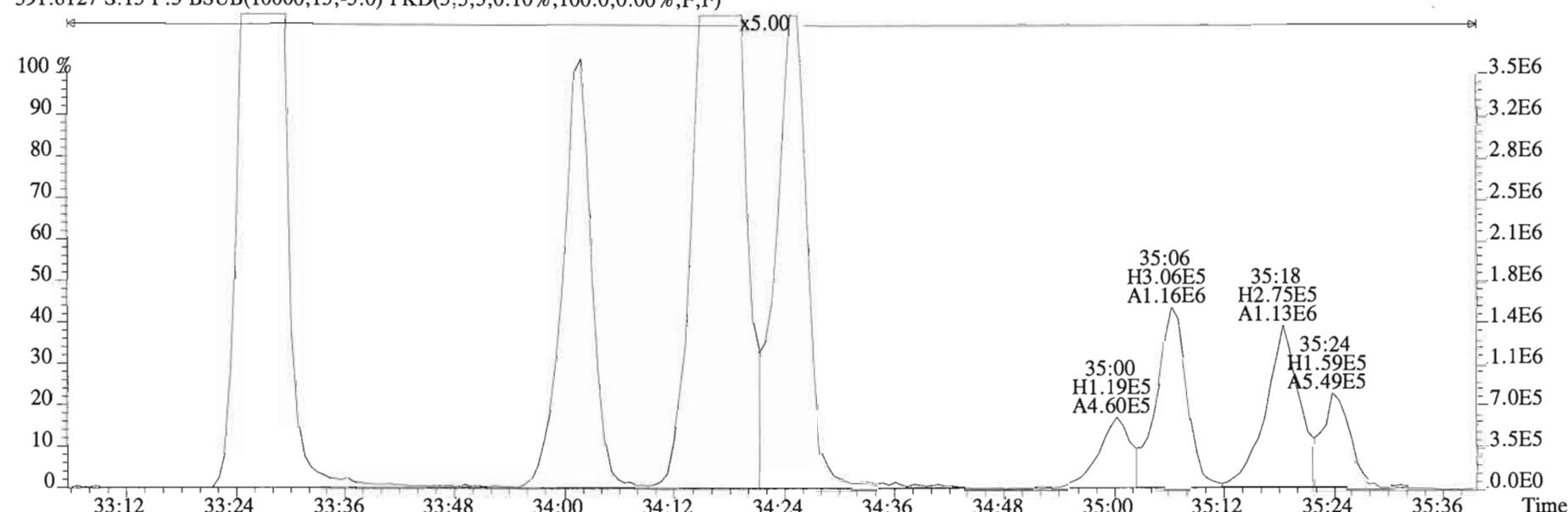
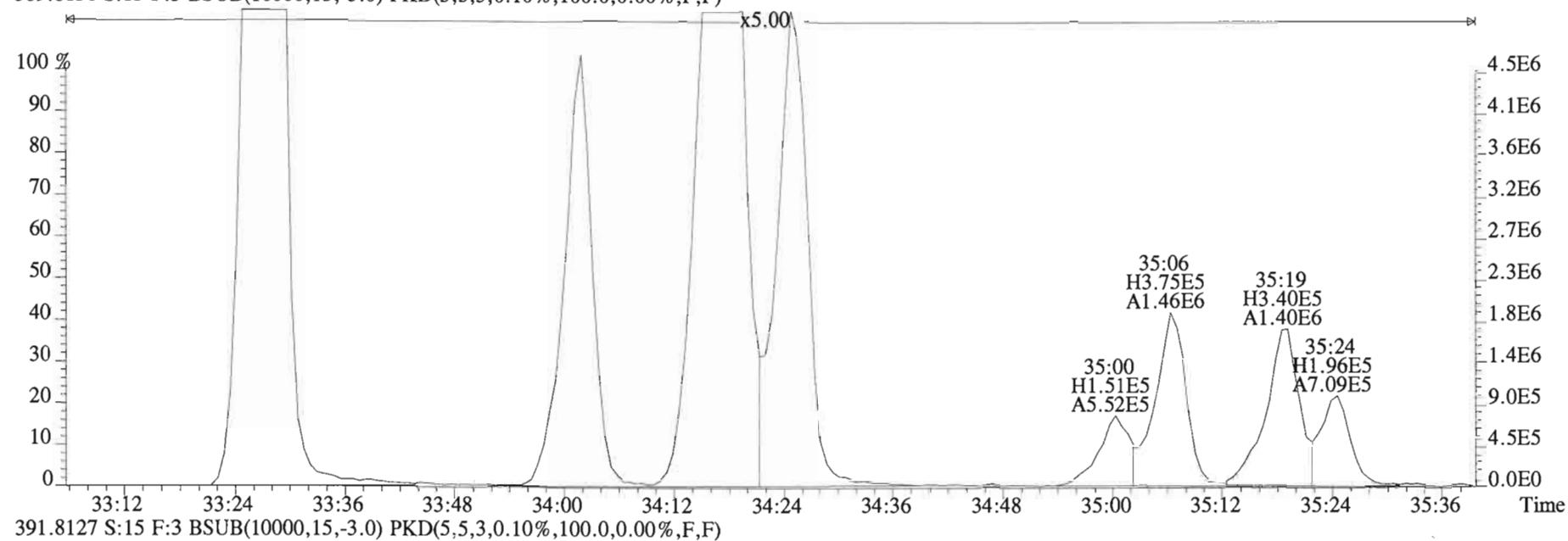
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Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
401.8559 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



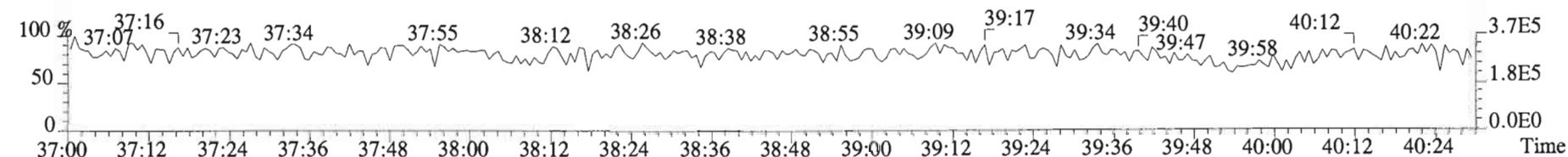
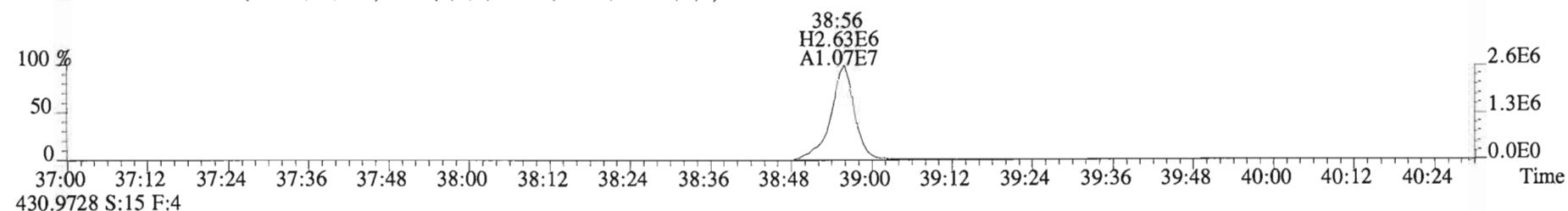
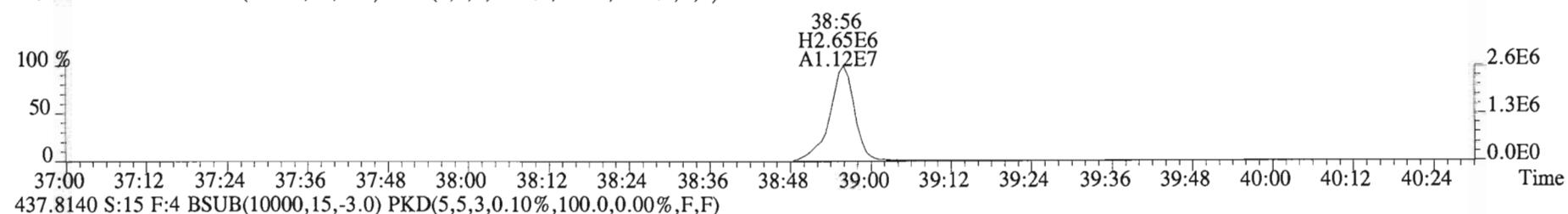
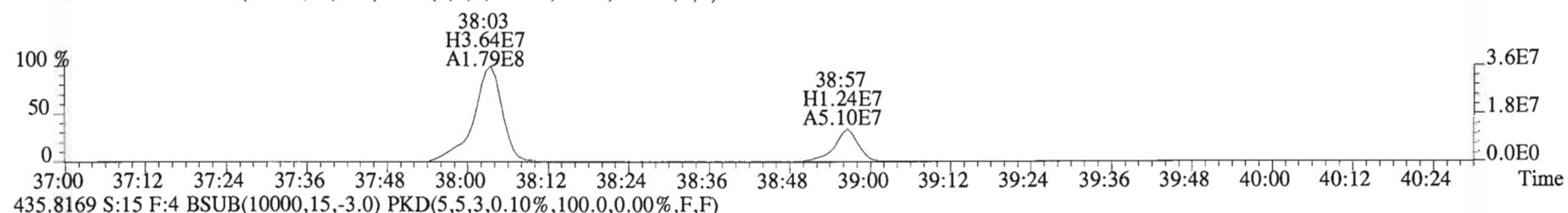
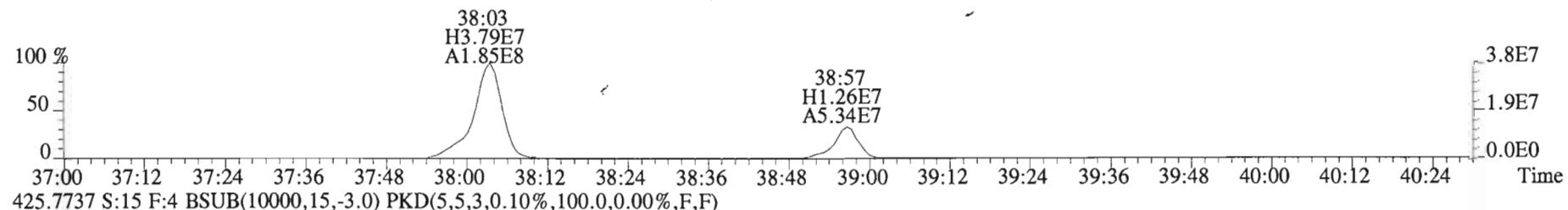
File:150220D1 #1-393 Acq:20-FEB-2015 22:25:12 GC EI + Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



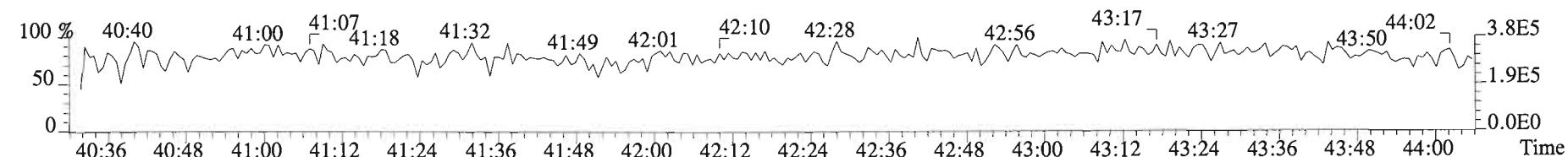
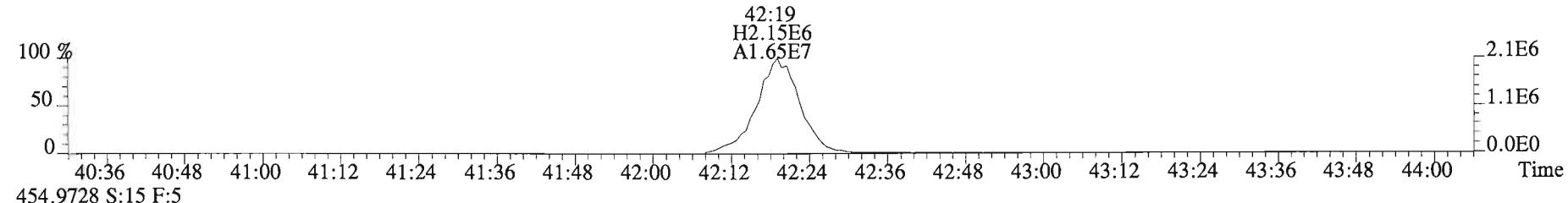
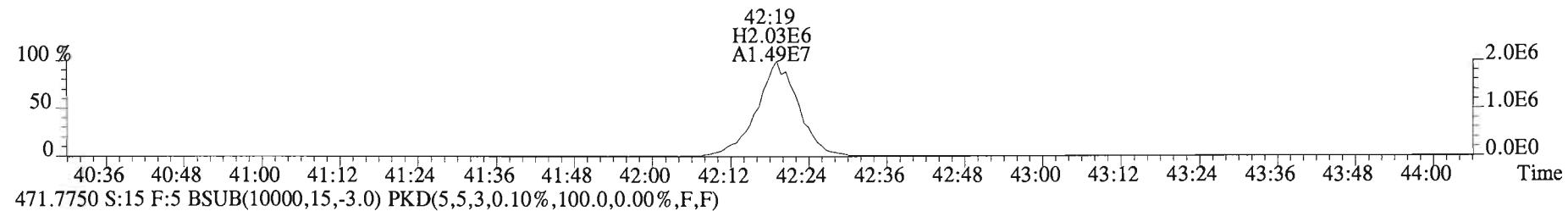
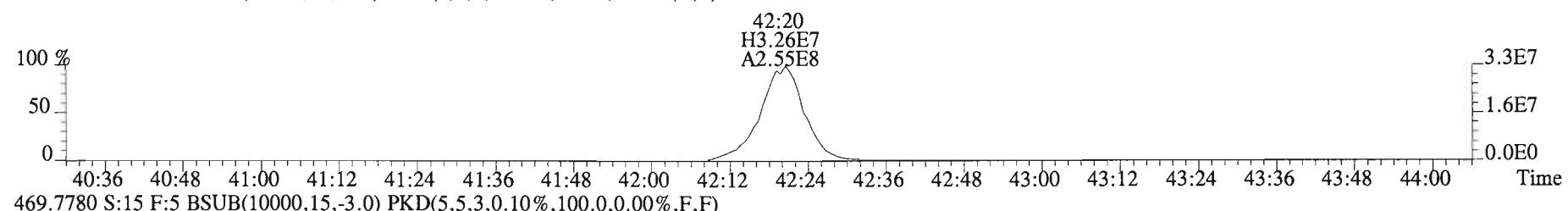
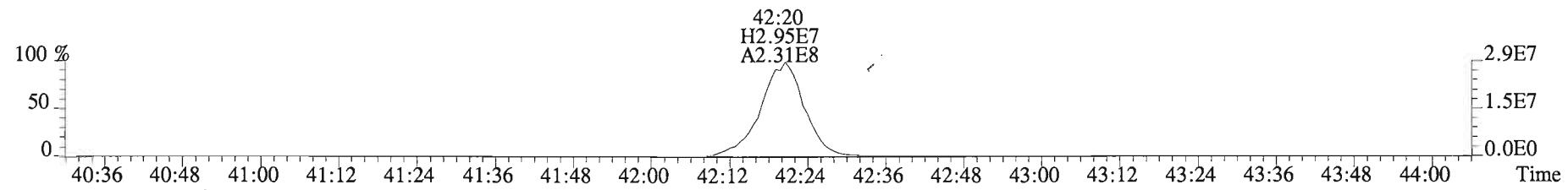
File:150220D1 #1-393 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



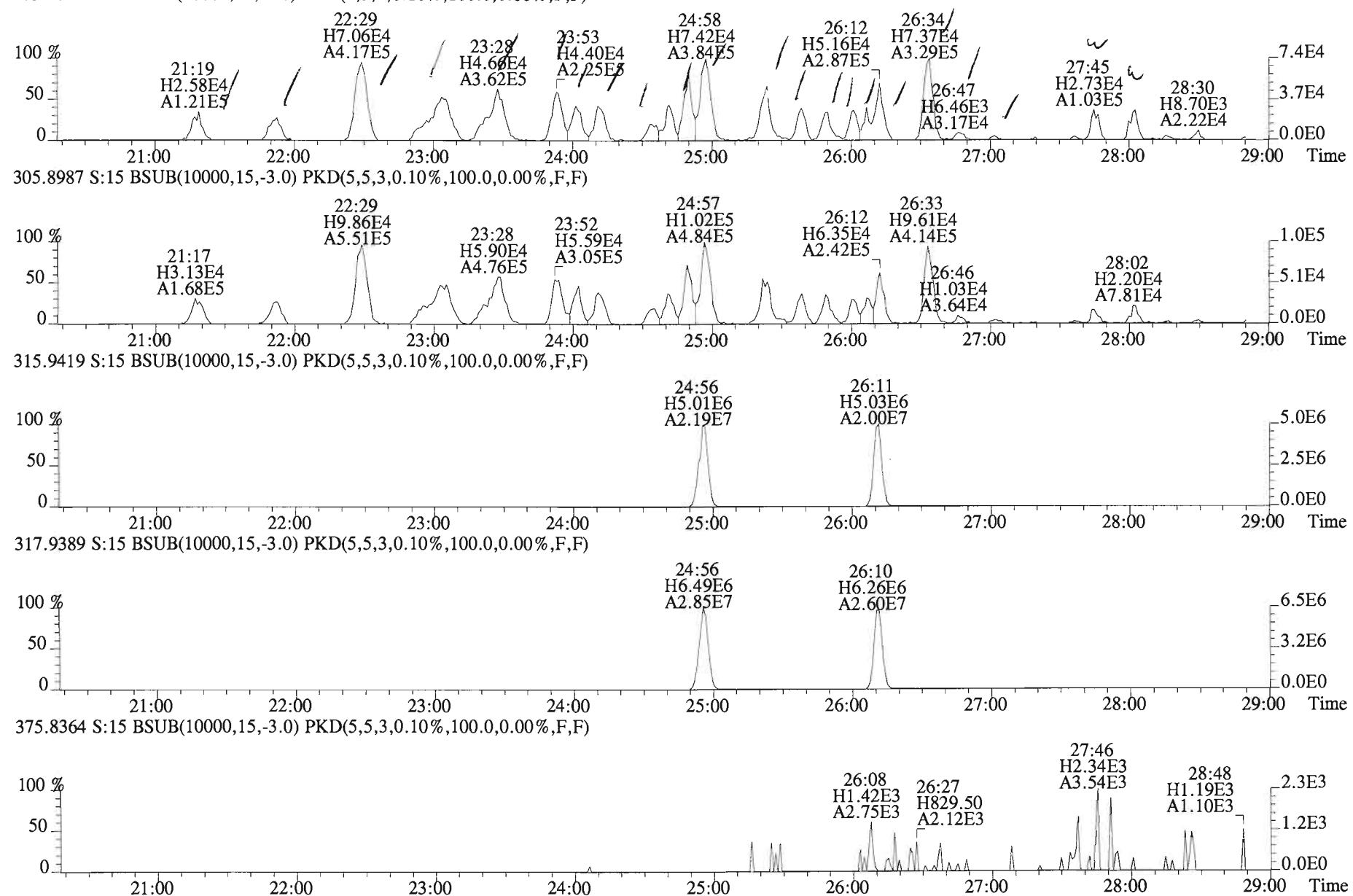
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Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
423.7767 S:15 F:4 BSB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



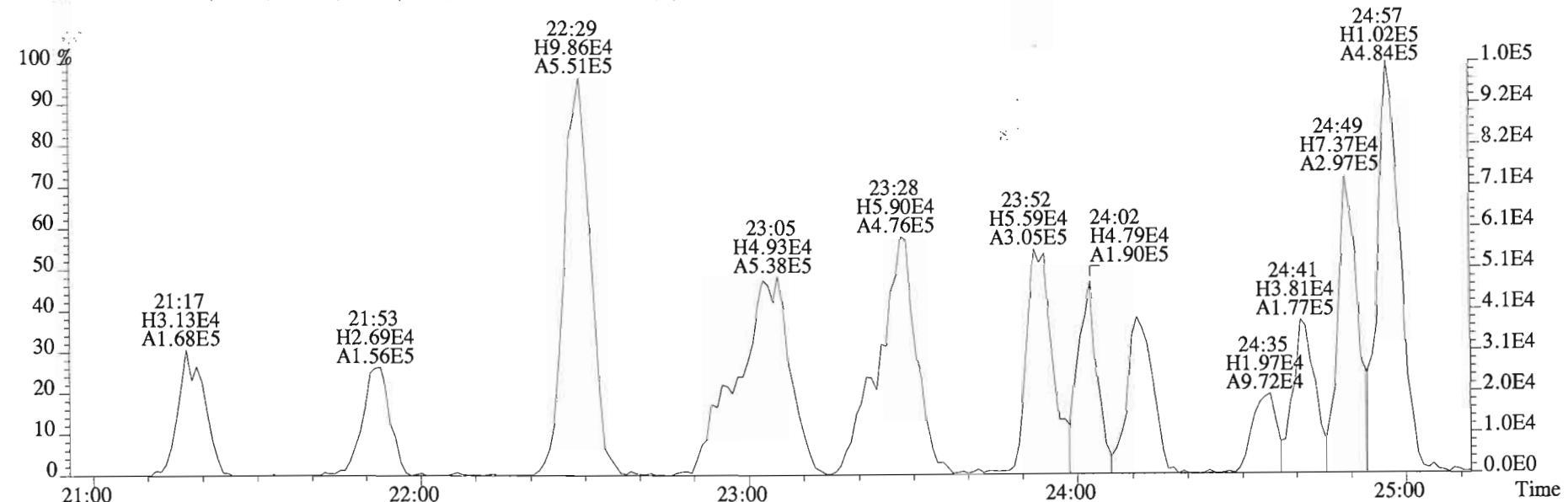
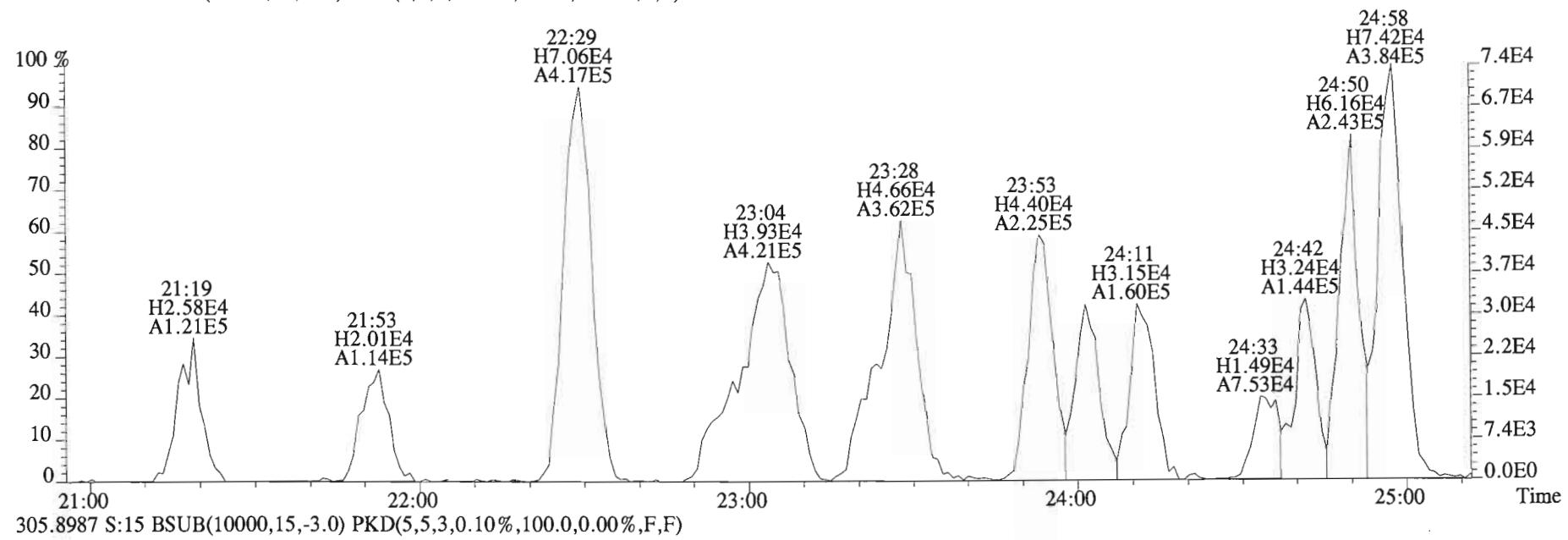
File:150220D1 #1-389 Acq:20-FEB-2015 22:25:12 GC EI + Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
457.7377 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



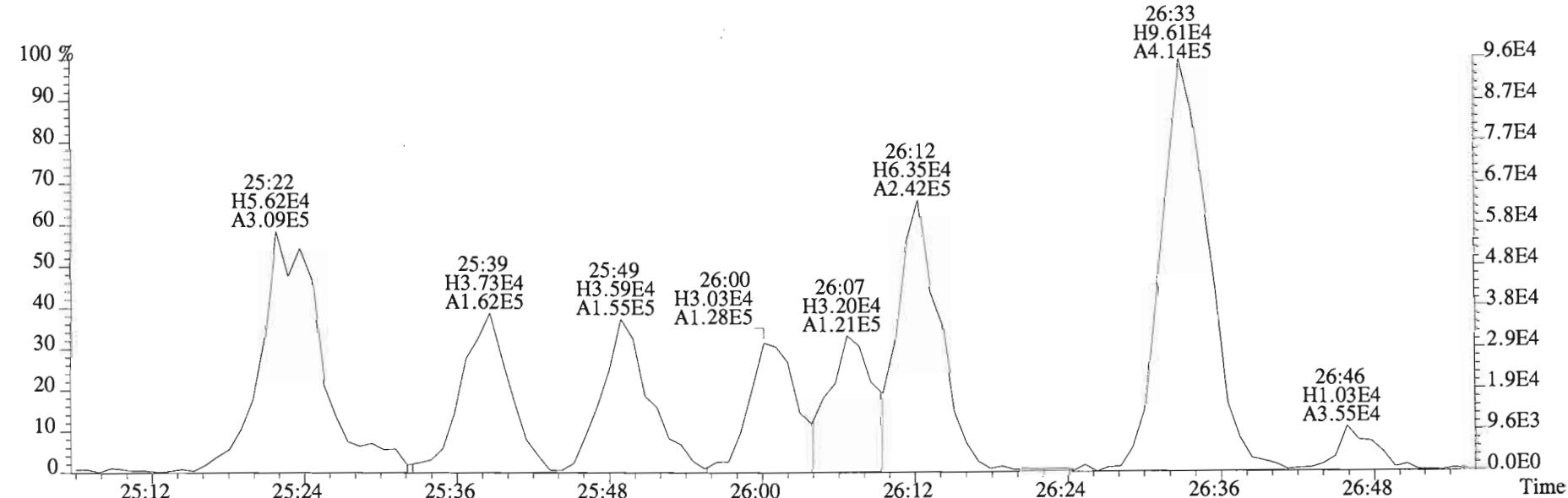
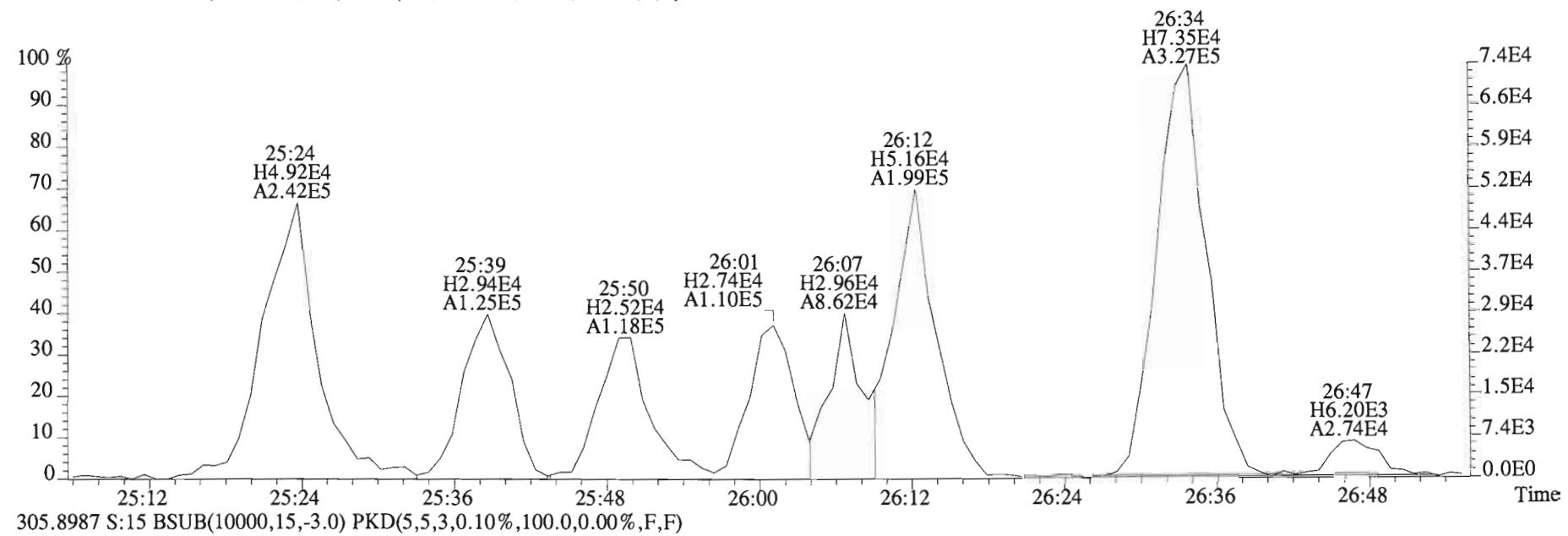
File:150220D1 #1-551 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
 303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



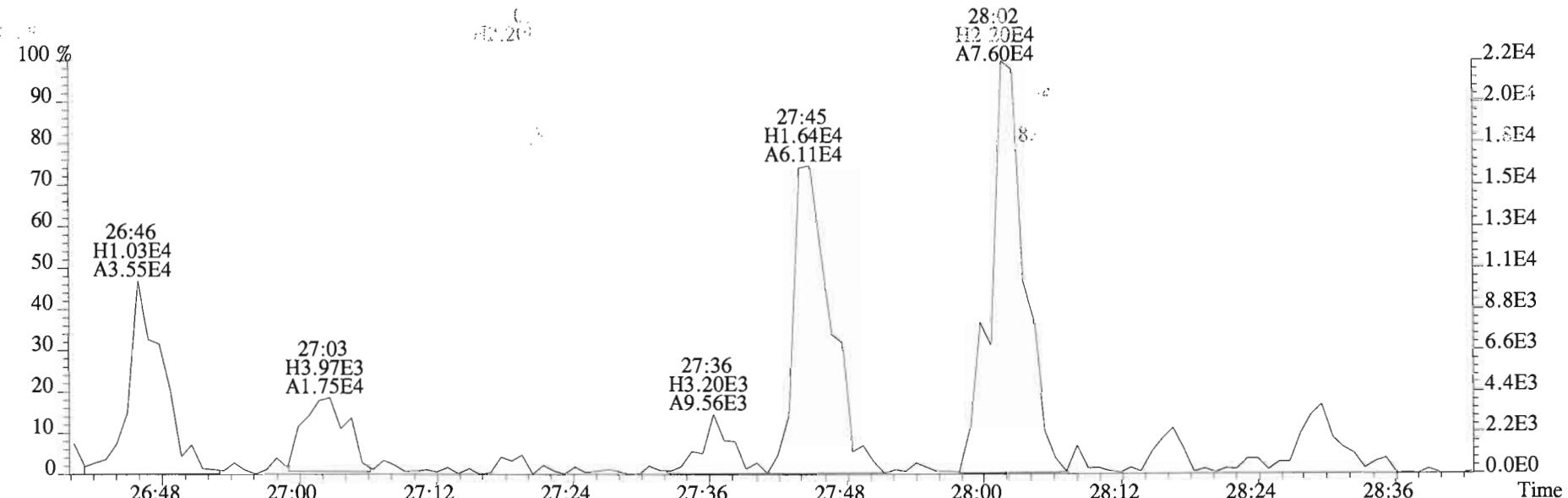
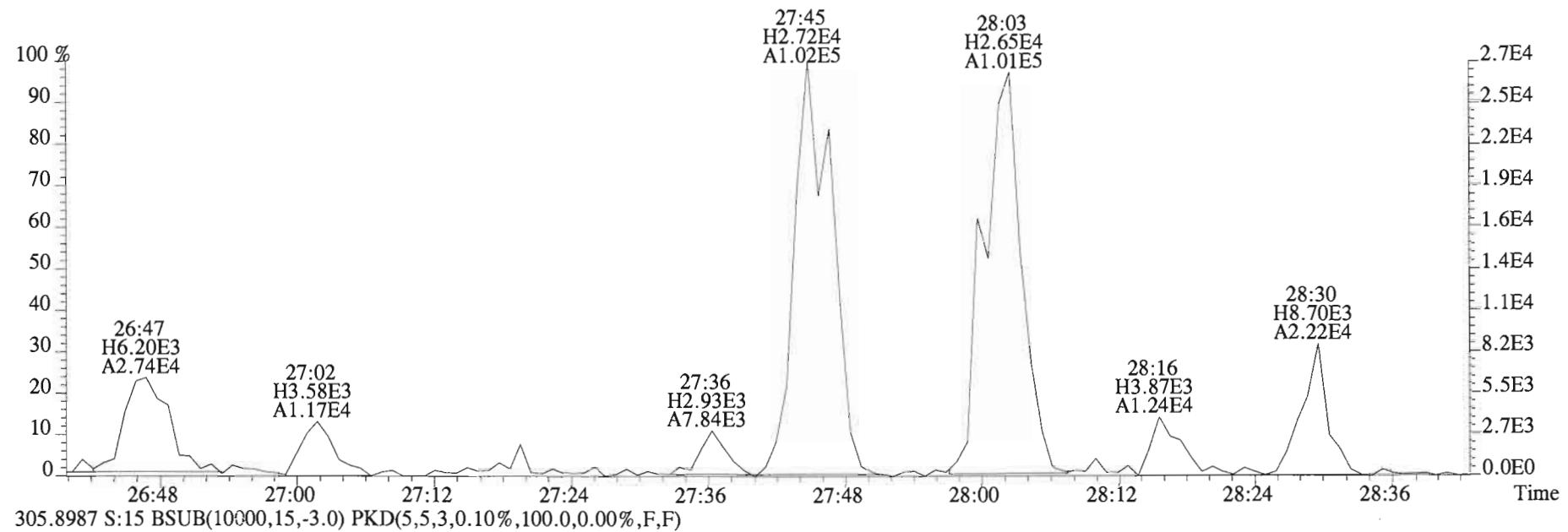
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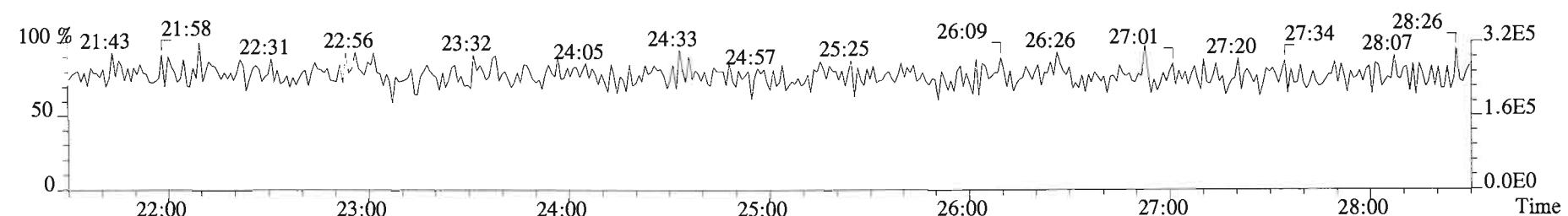
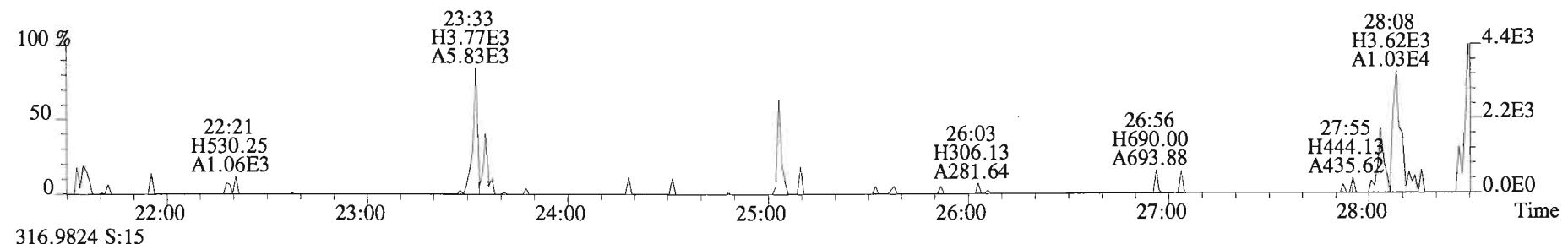
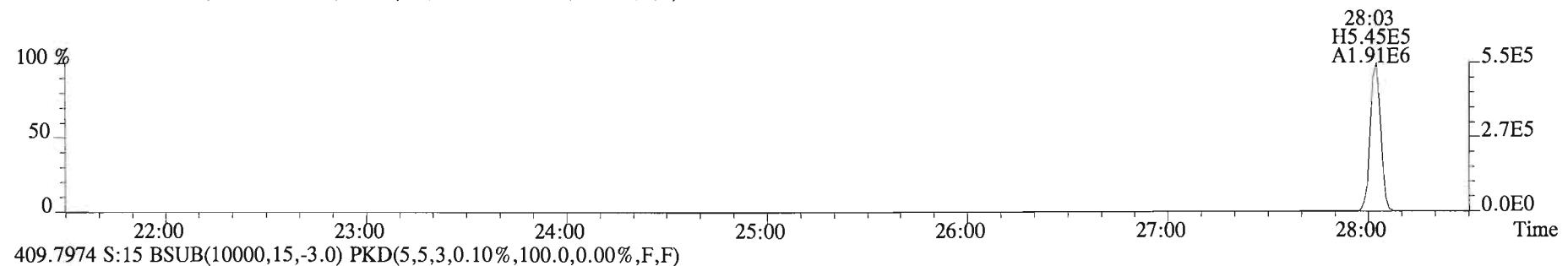
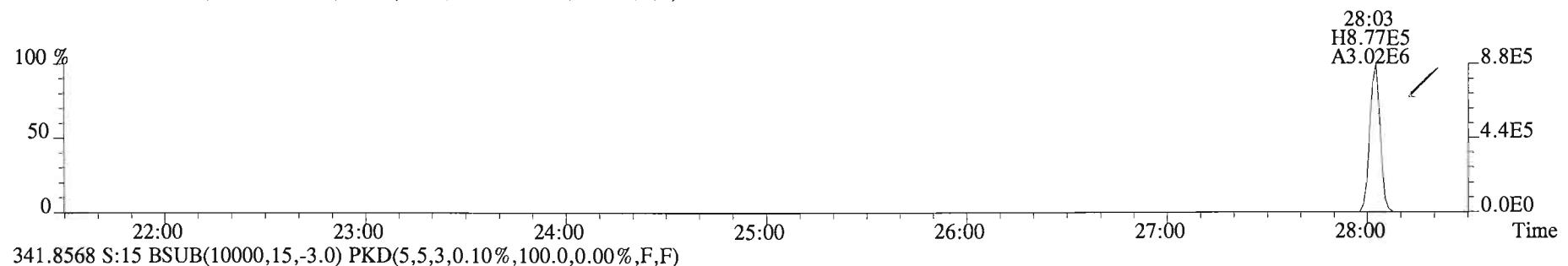
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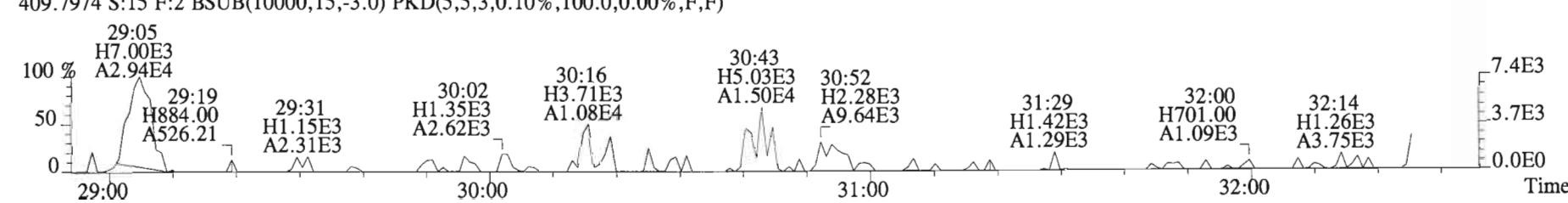
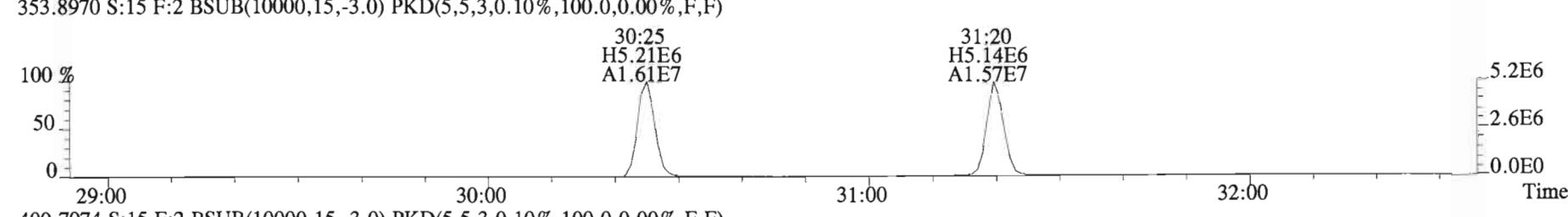
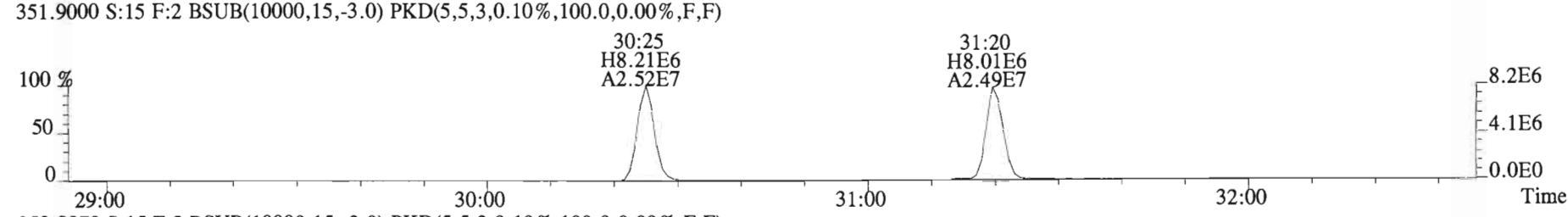
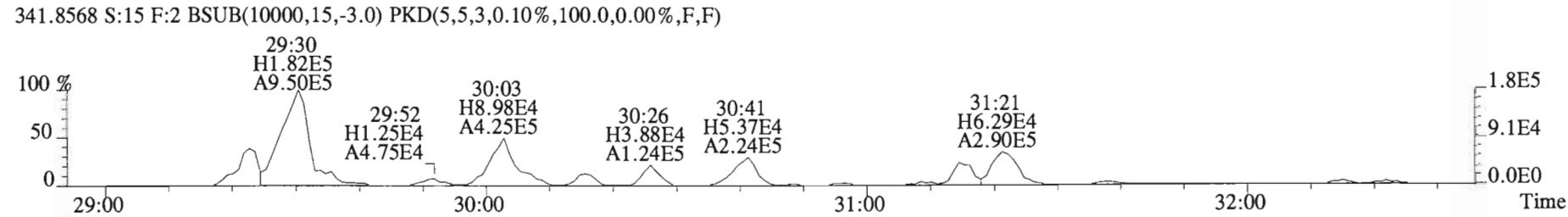
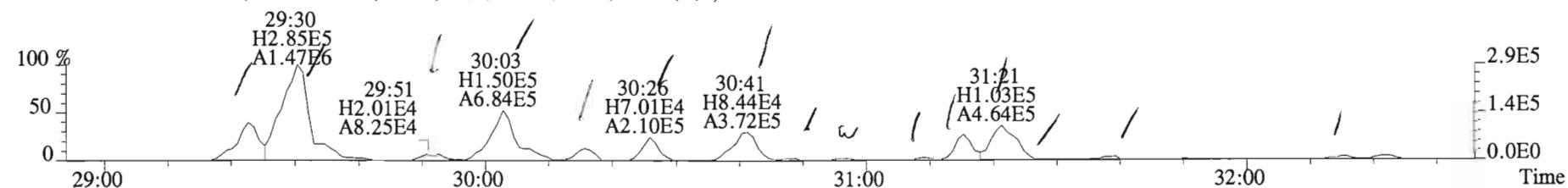
File:150220D1 #1-551 Acq:20-FEB-2015 22:25:12 GC EI + Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
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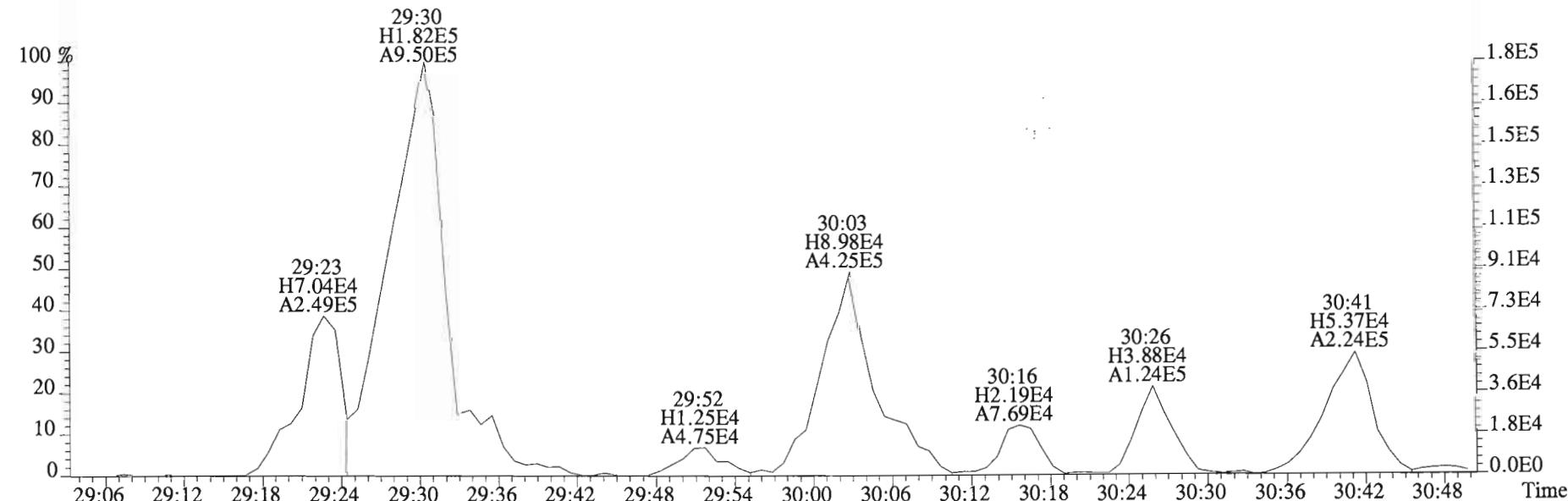
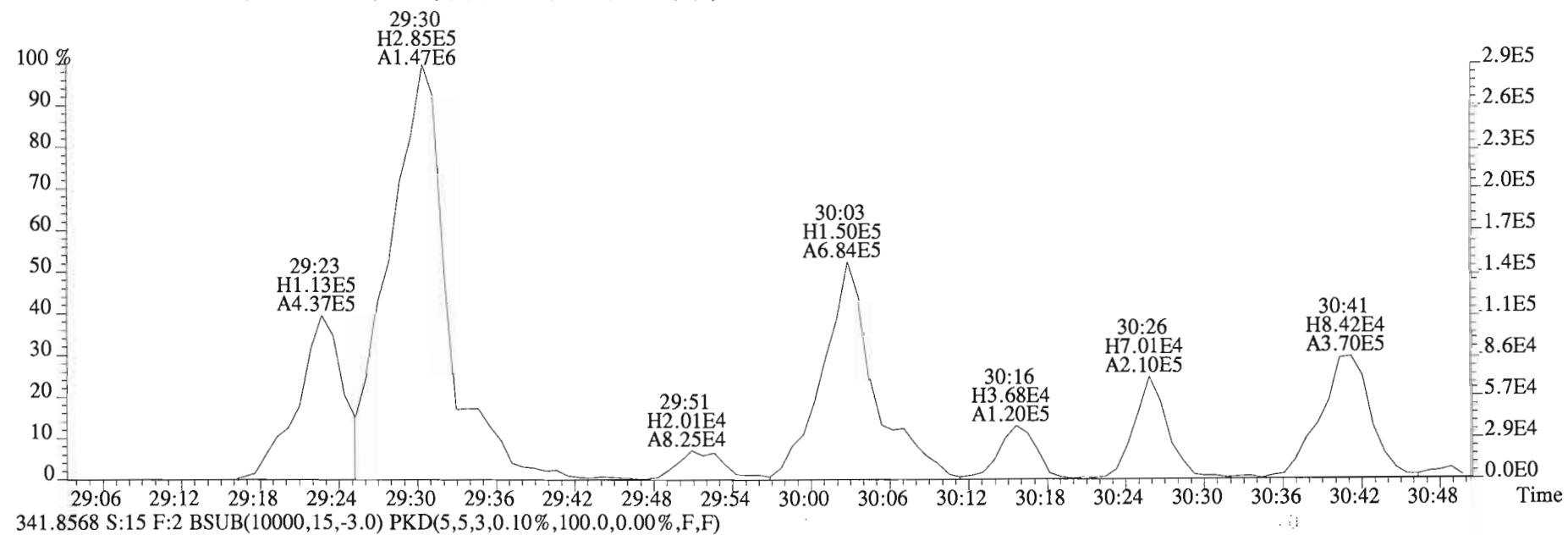
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 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
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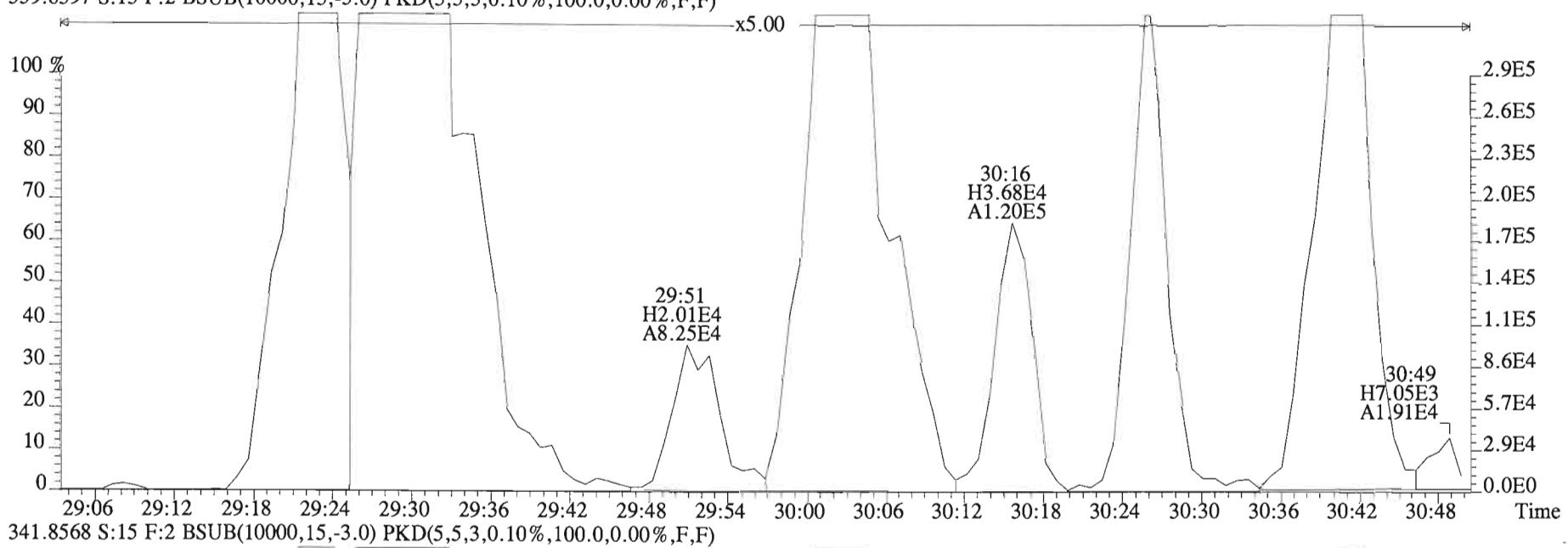
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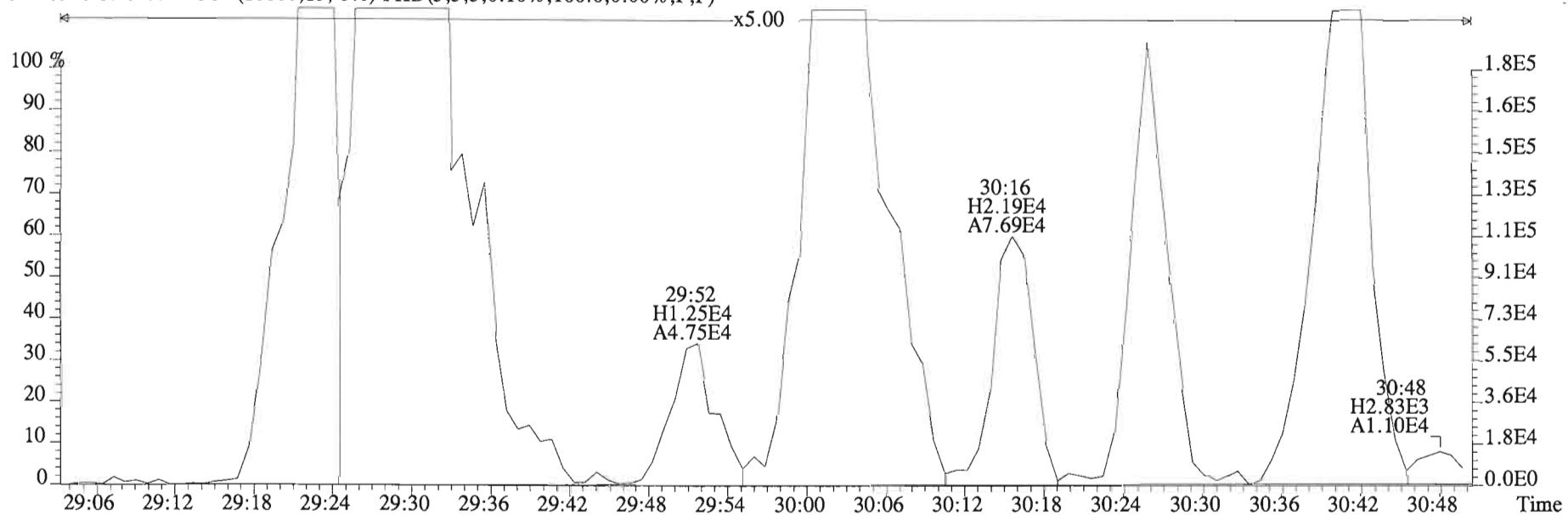
File:150220D1 #1-251 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
 339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



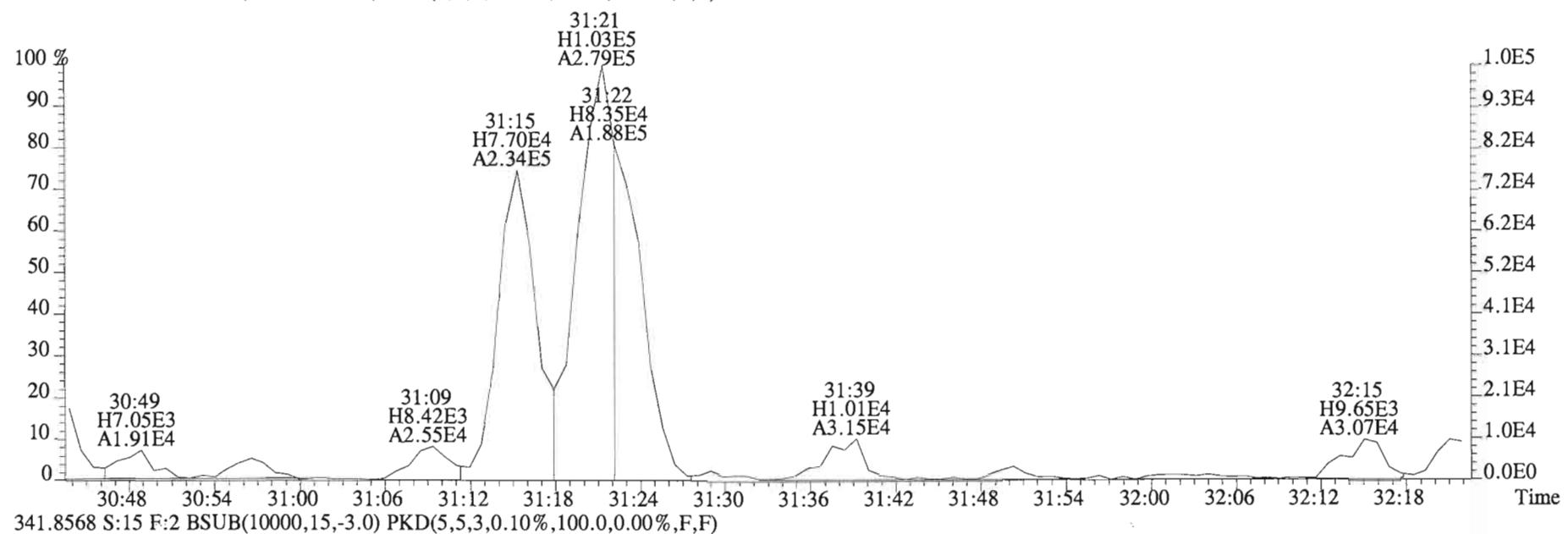
File:150220D1 #1-251 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
 339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



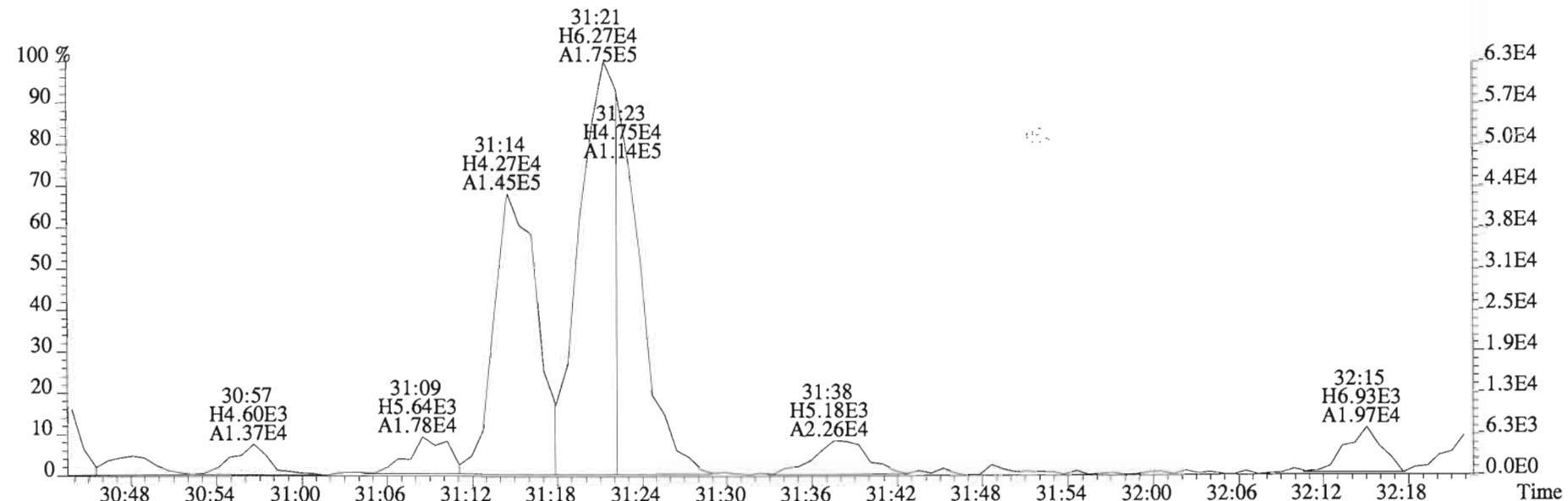
341.8568 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



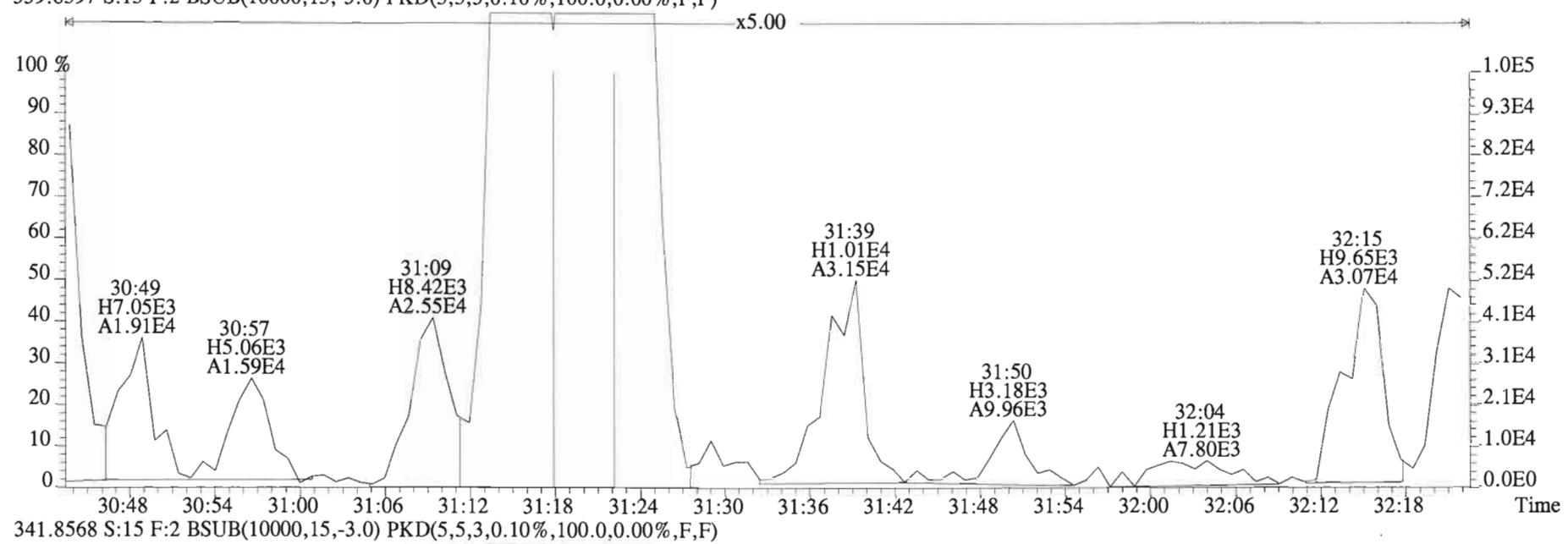
File:150220D1 #1-251 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



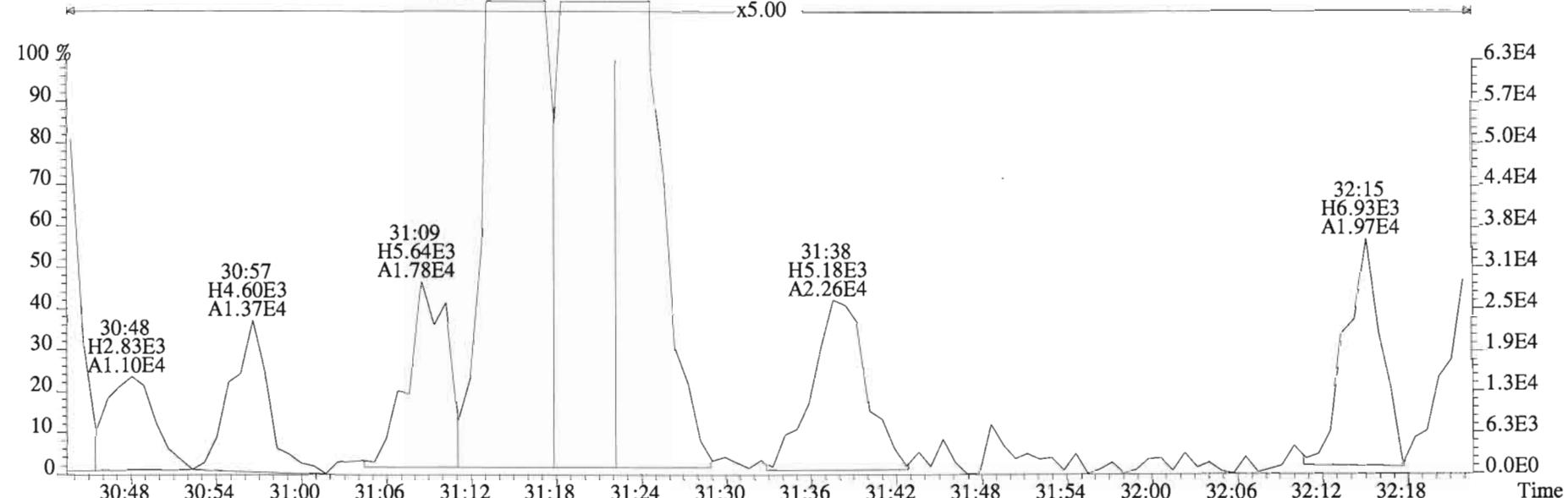
341.8568 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



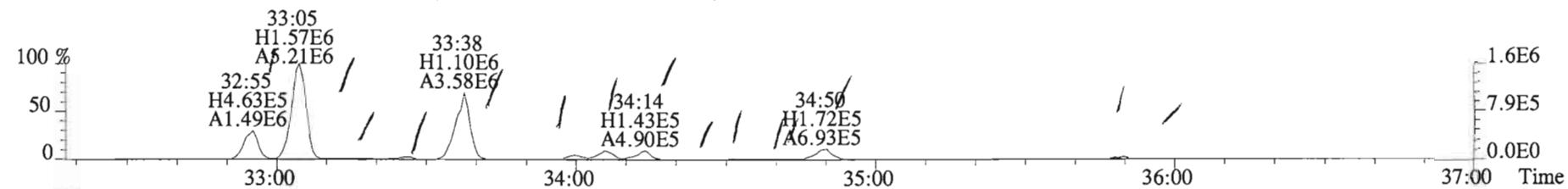
File:150220D1 #1-251 Acq:20-FEB-2015 22:25:12 GC EI + Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
 339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



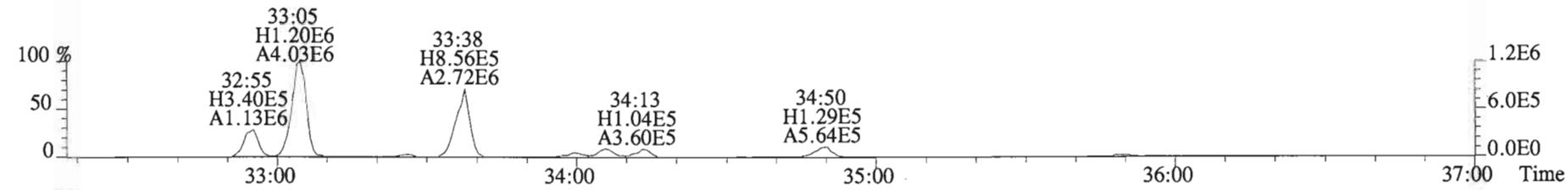
341.8568 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



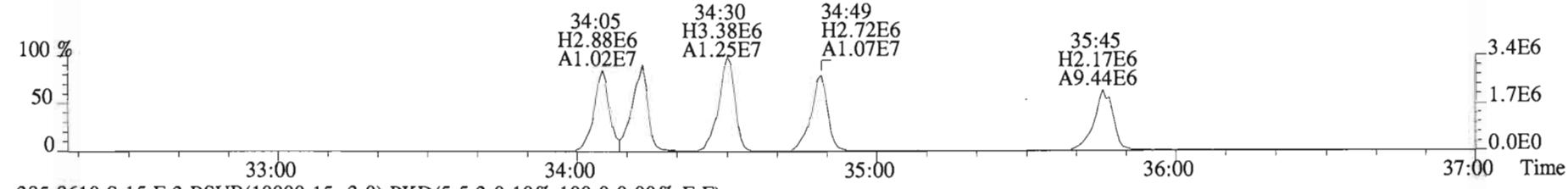
File:150220D1 #1-393 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
 373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



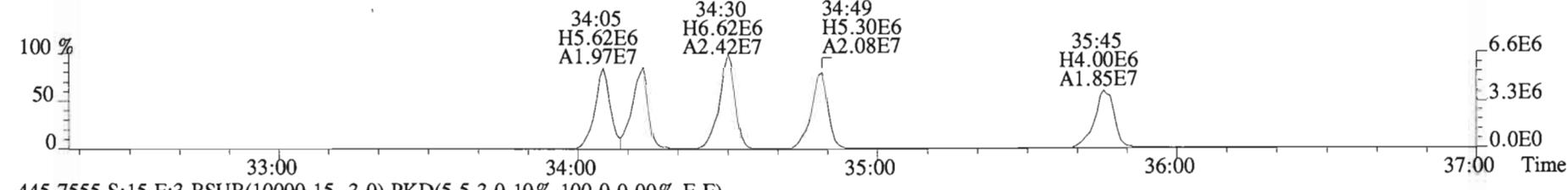
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



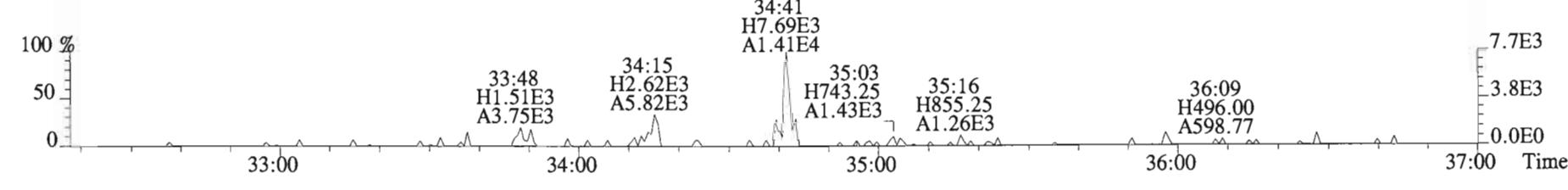
383.8639 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



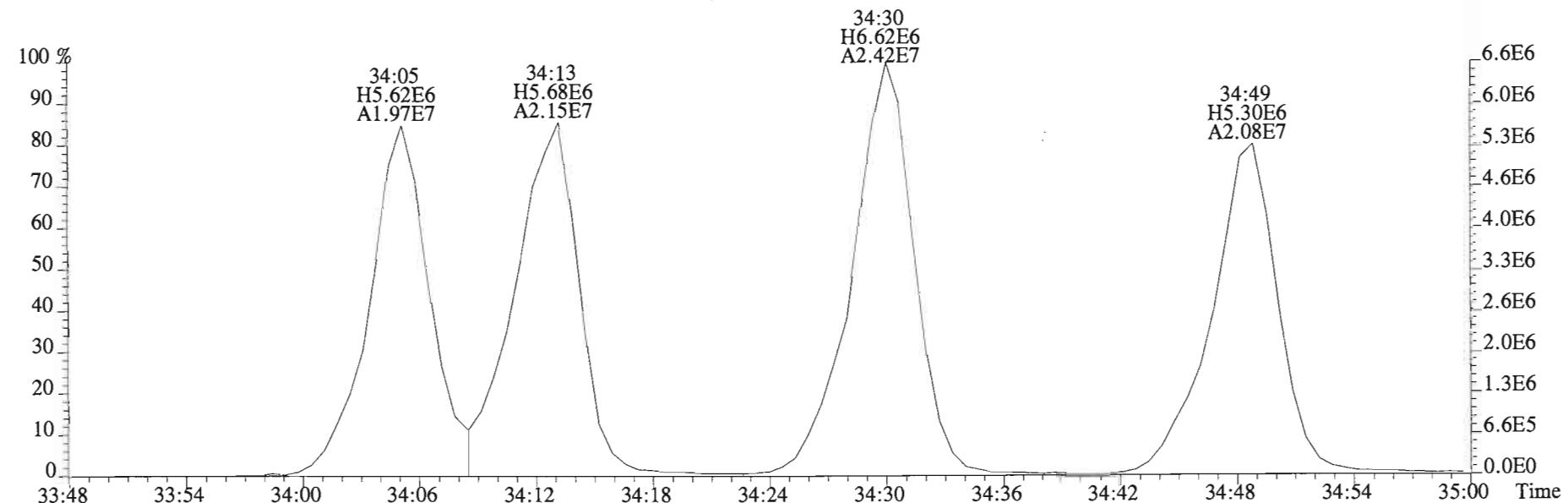
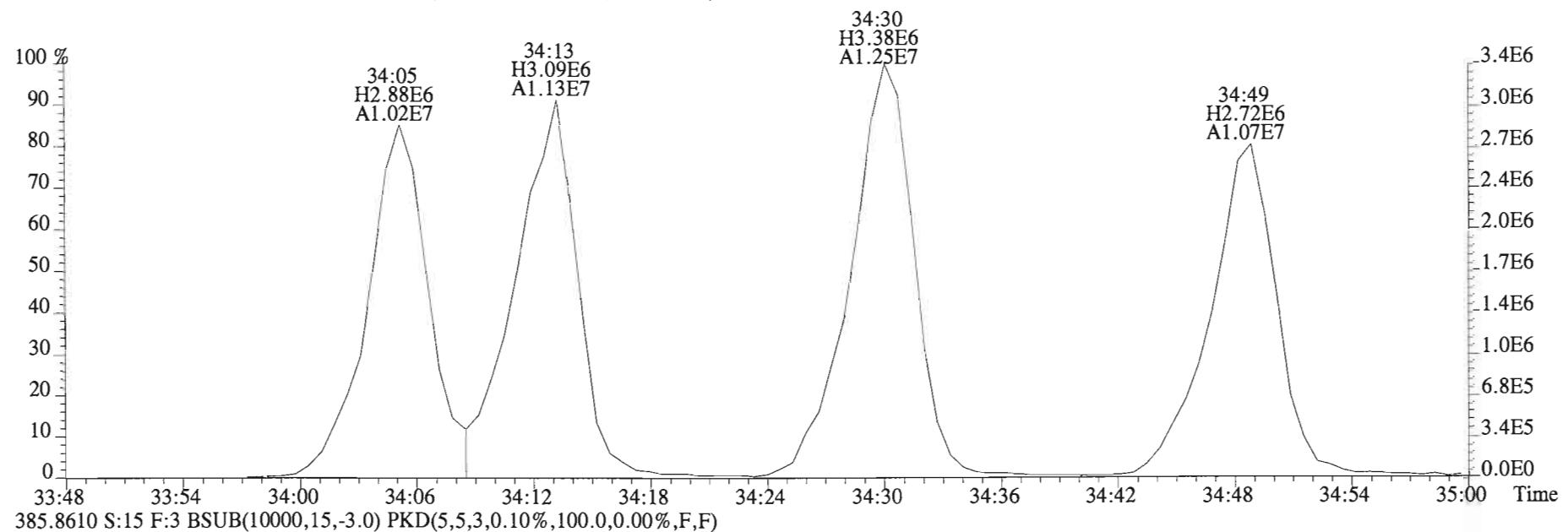
385.8610 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



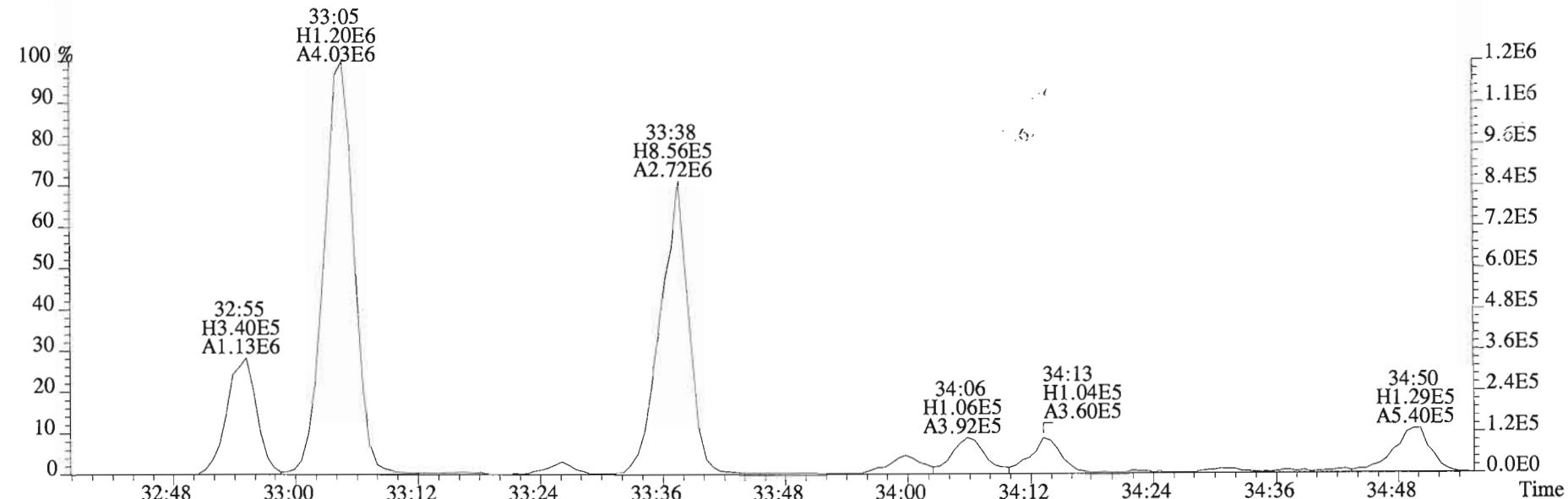
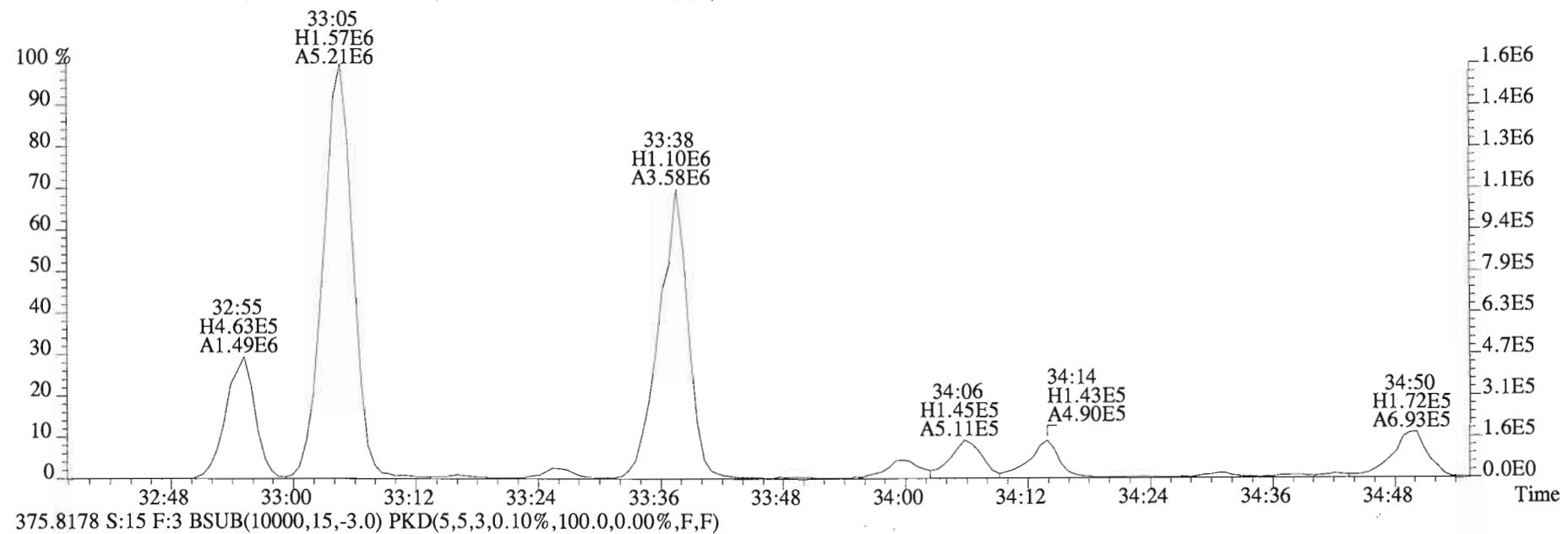
445.7555 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



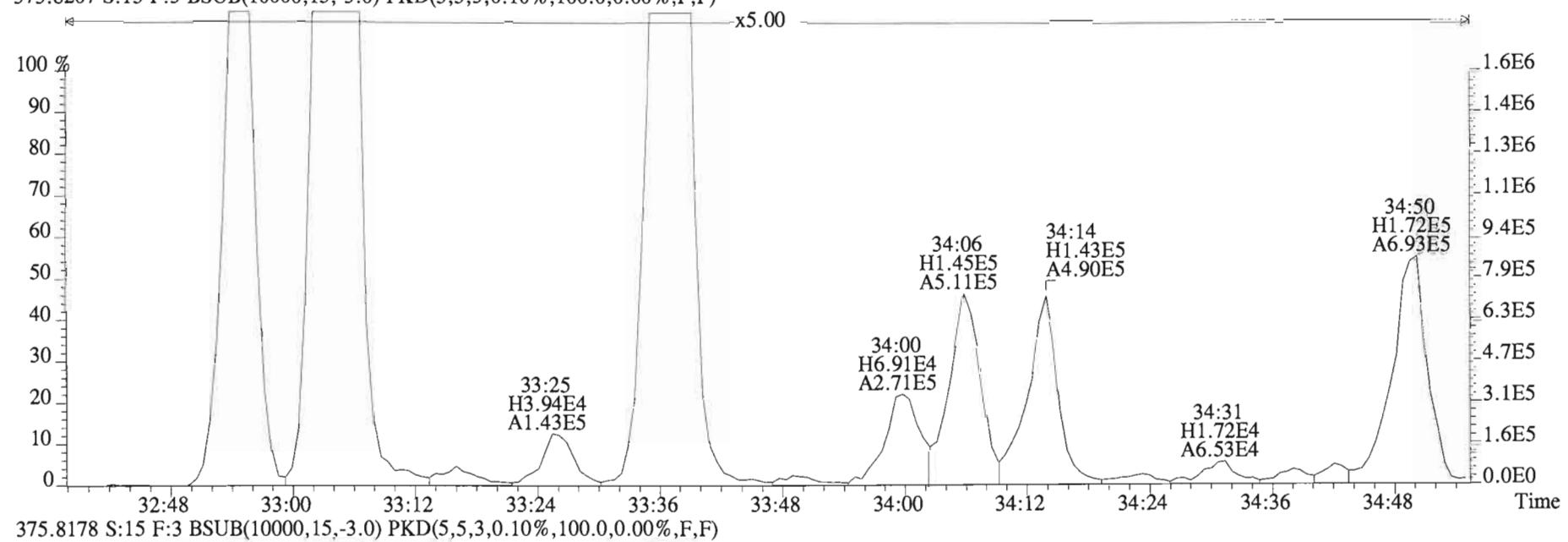
File:150220D1 #1-393 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
383.8639 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



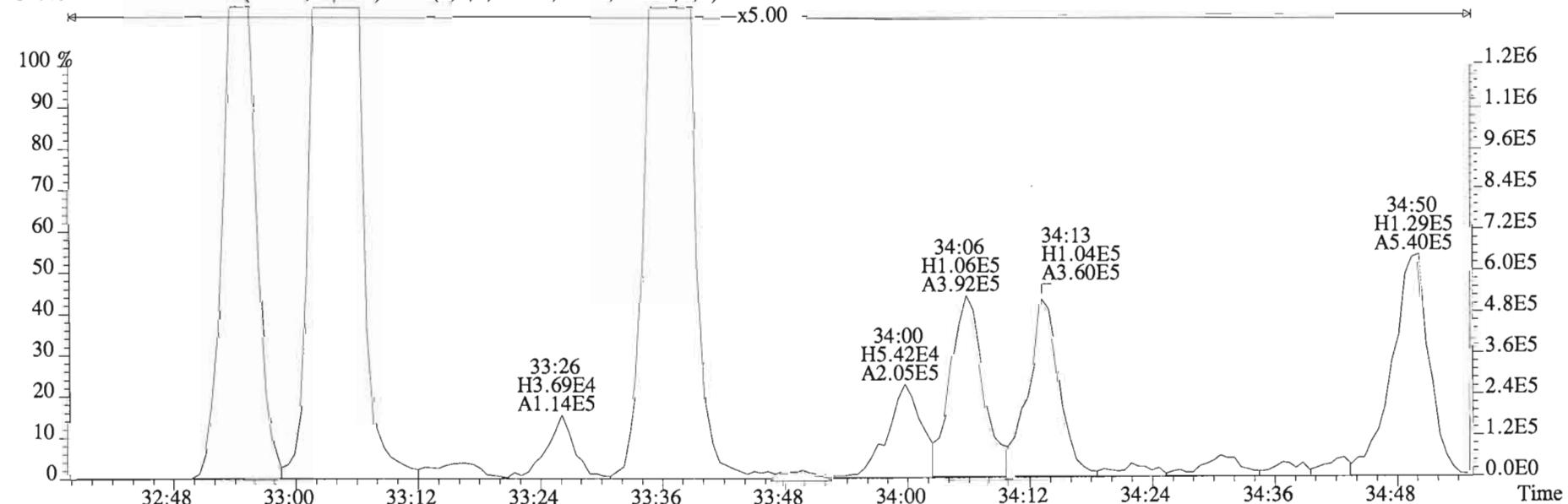
File:150220D1 #1-393 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



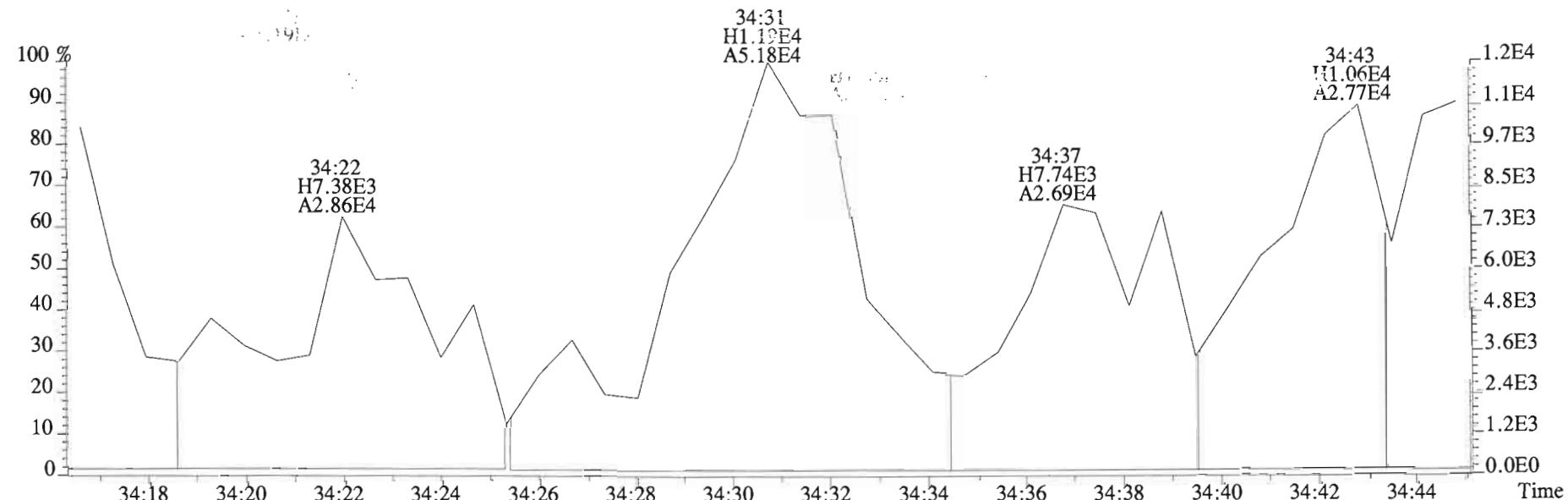
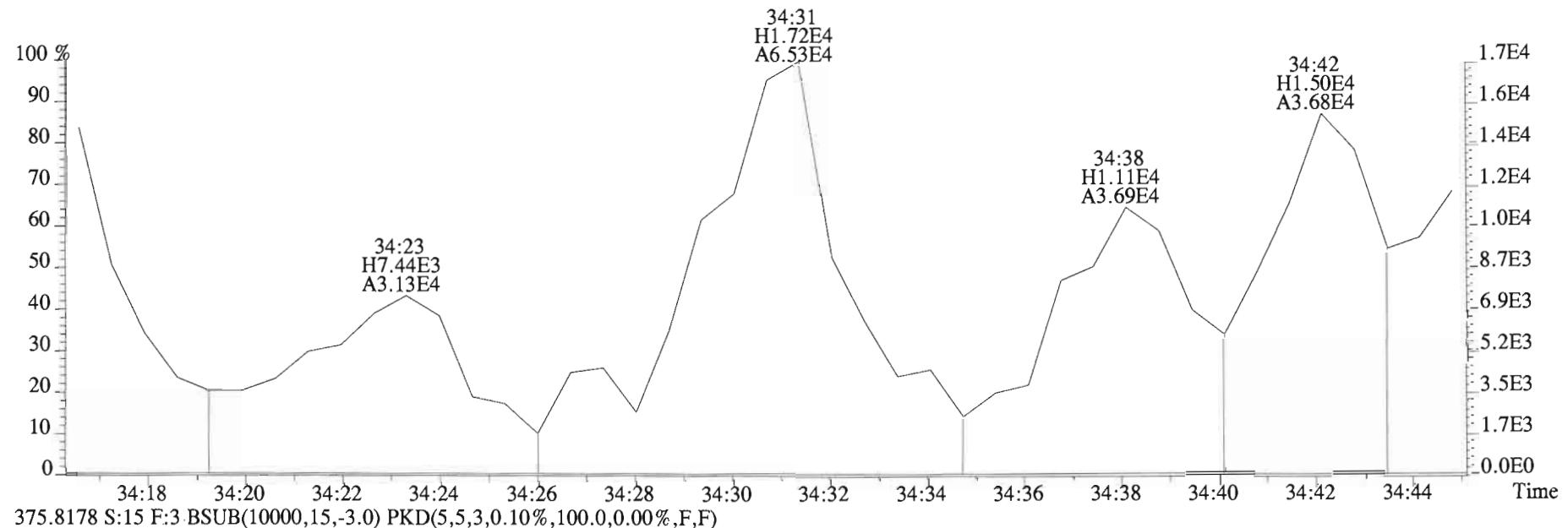
File:150220D1 #1-393 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
 373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



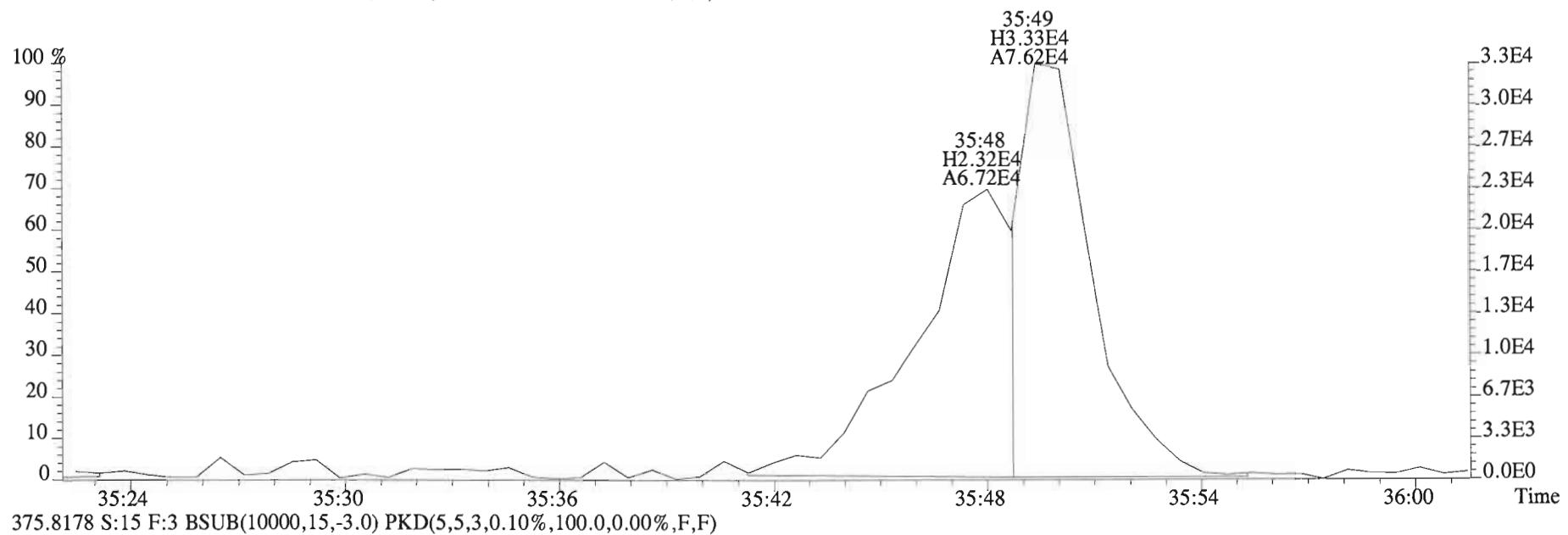
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



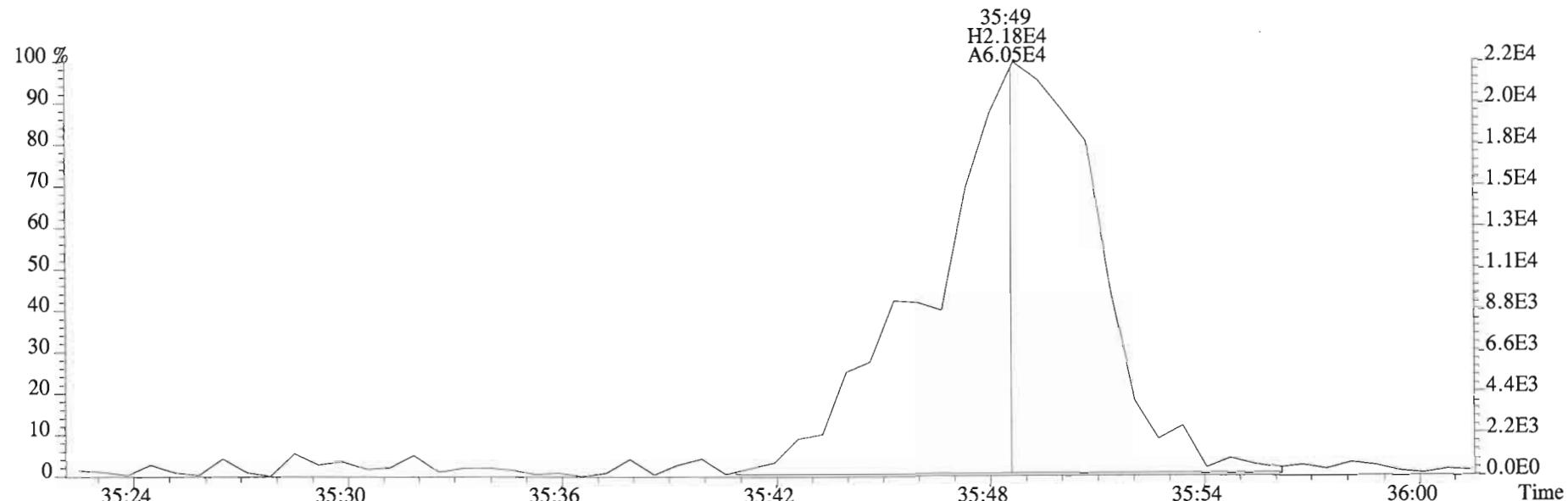
File:150220D1 #1-393 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



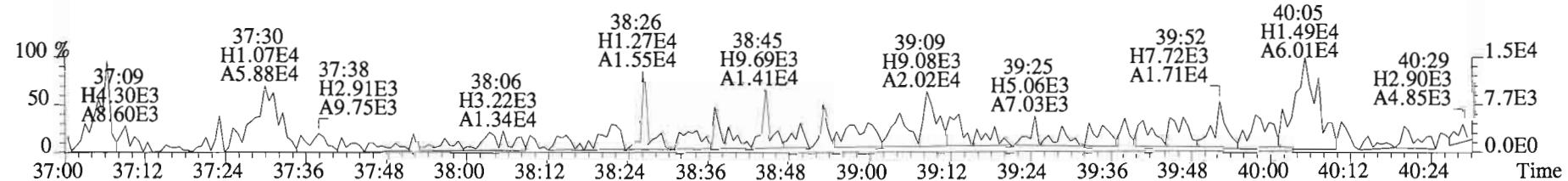
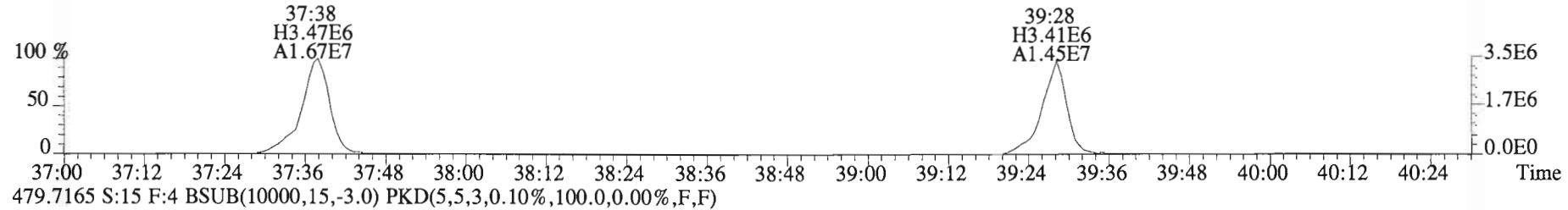
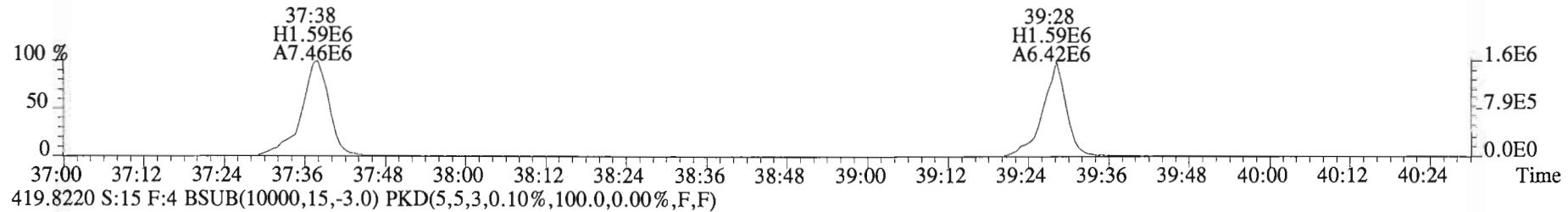
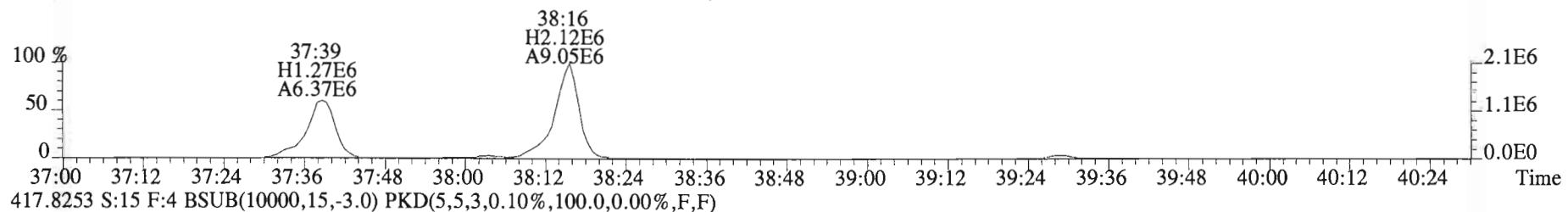
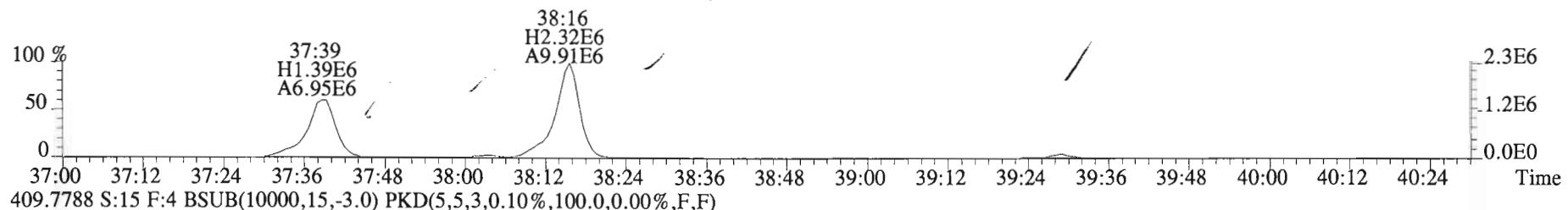
File:150220D1 #1-393 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



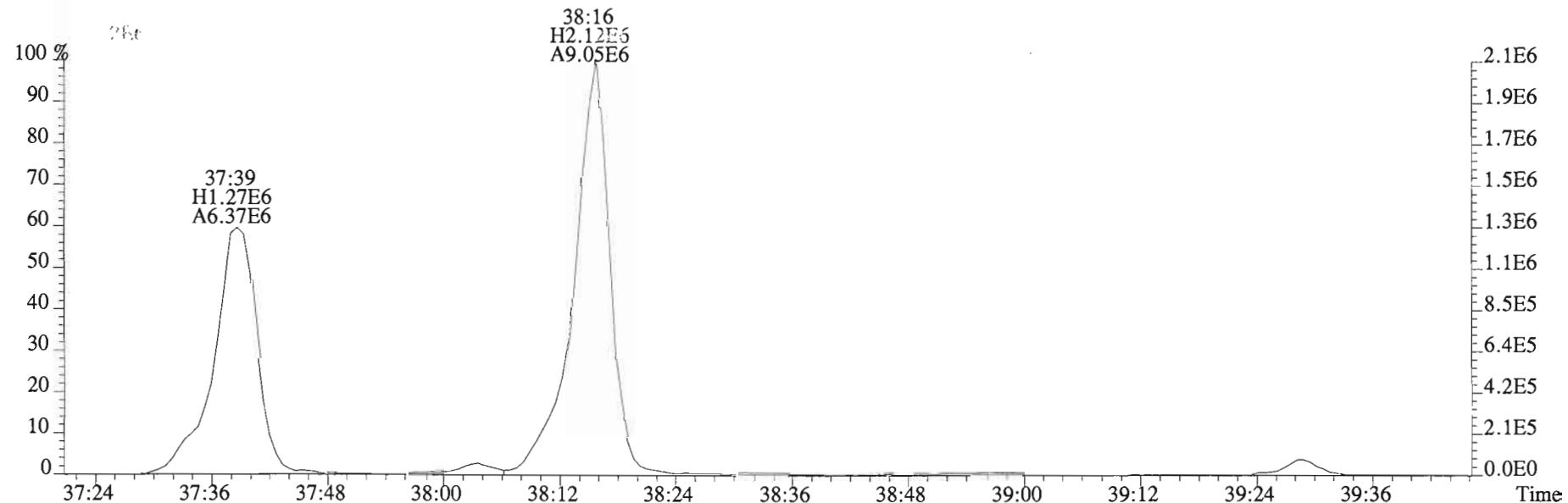
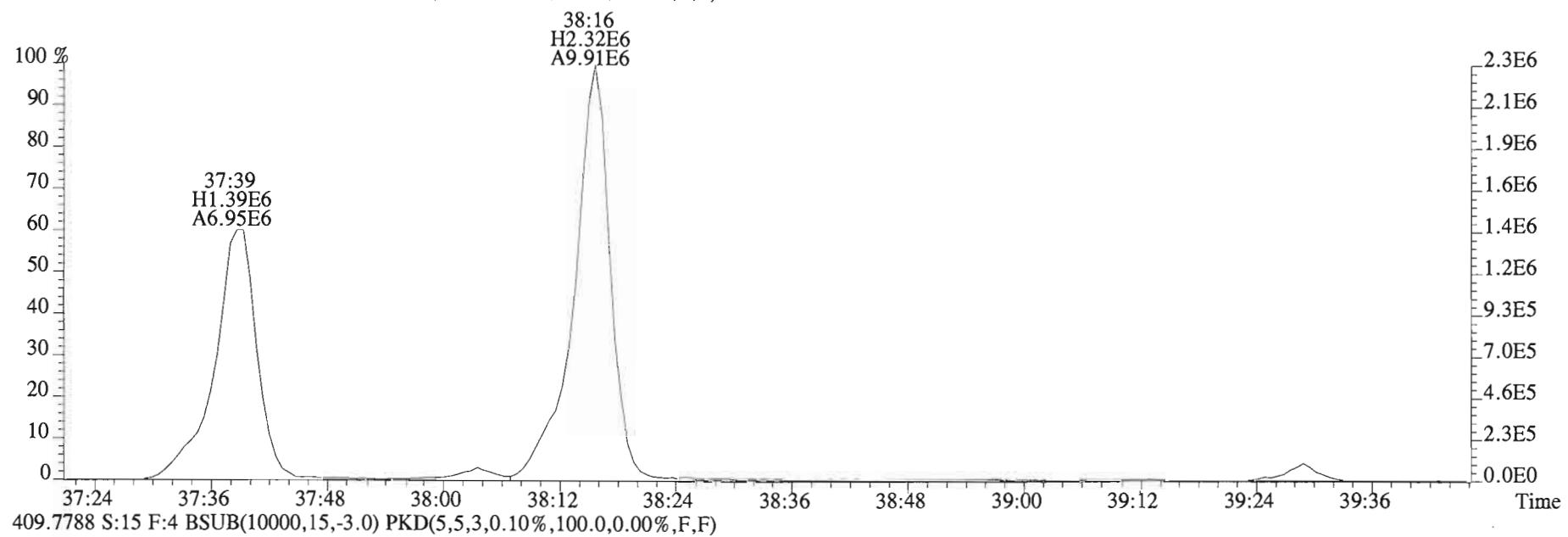
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



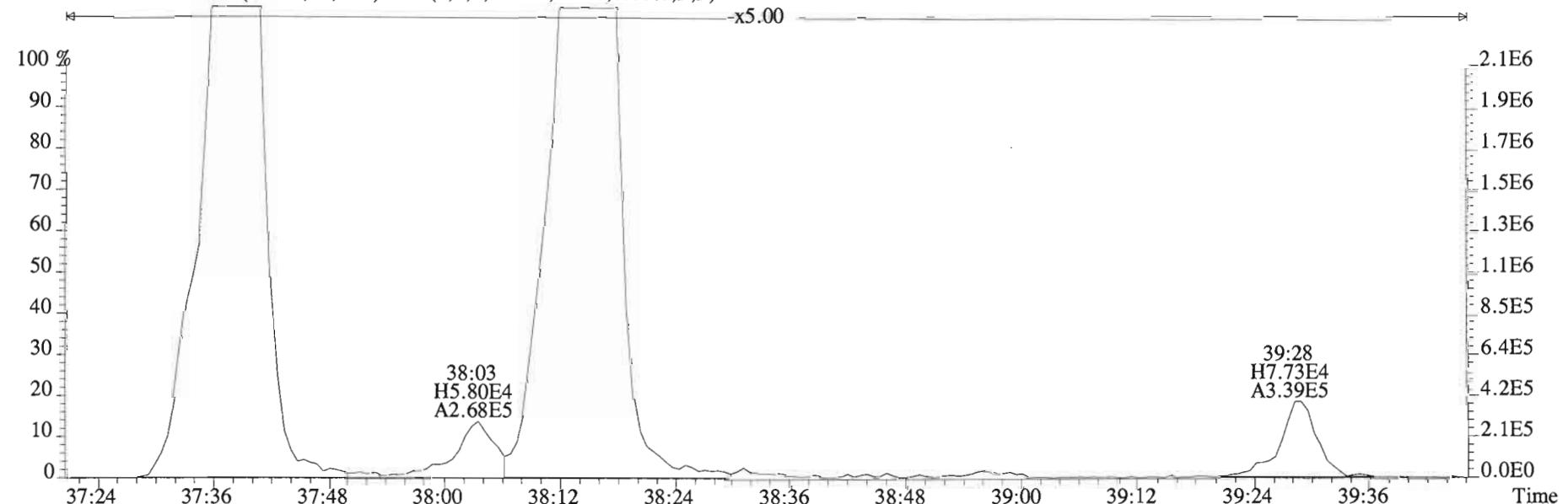
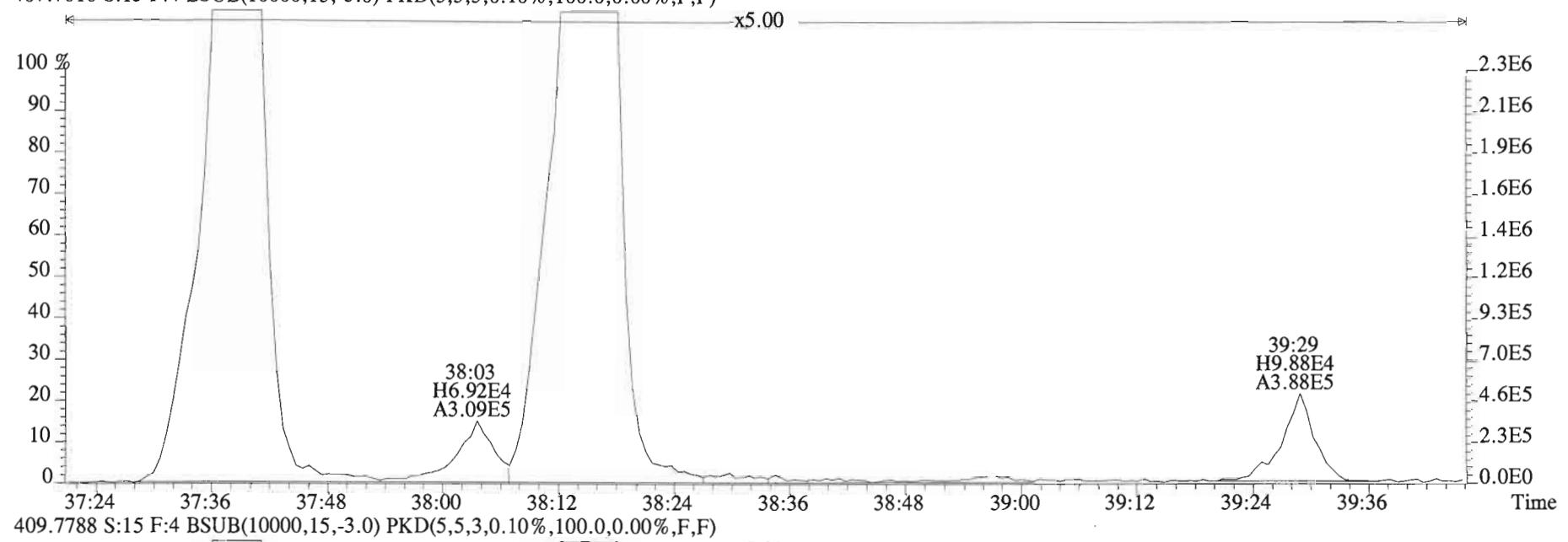
File:150220D1 #1-325 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
 407.7818 S:15 F:4 BSB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



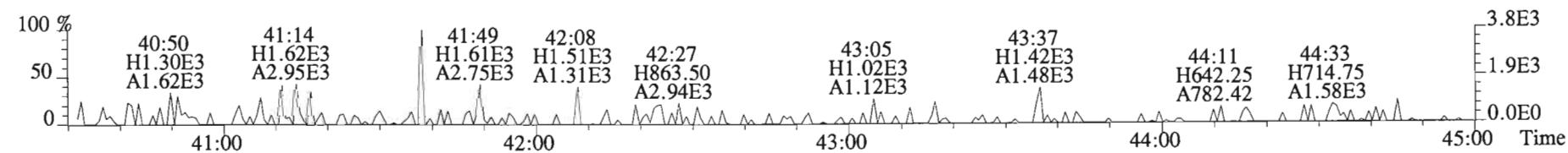
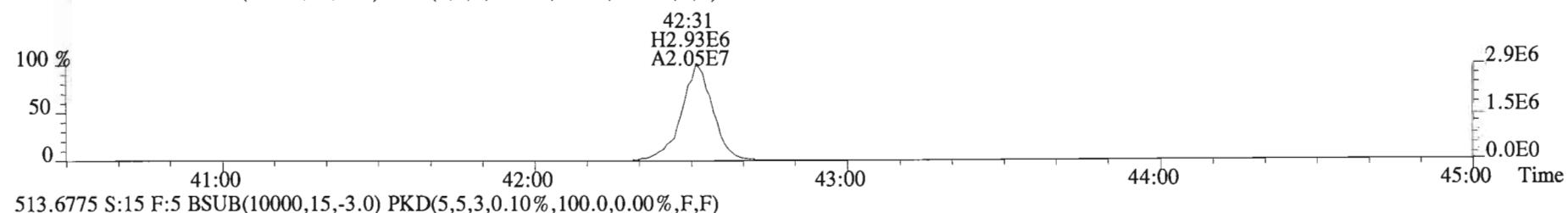
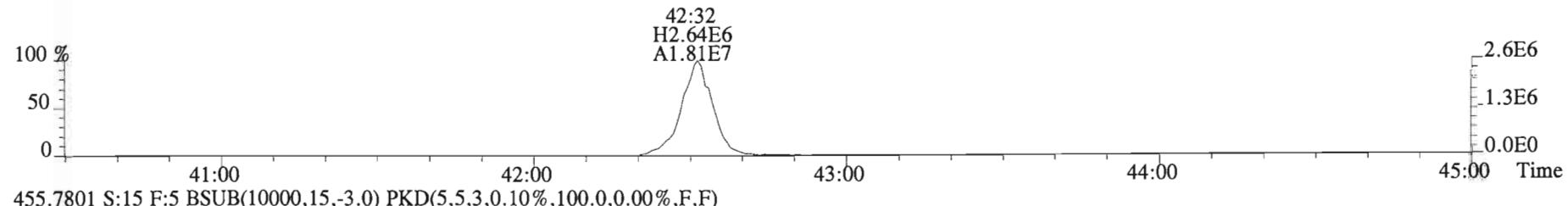
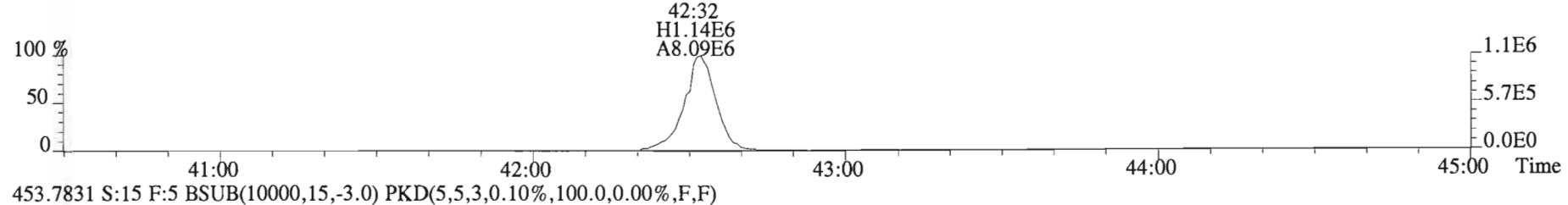
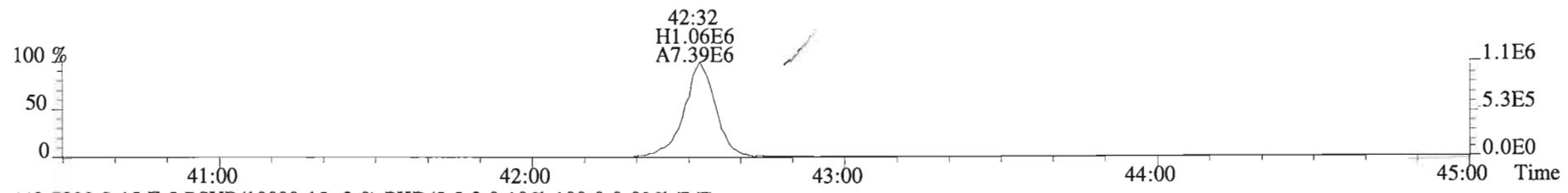
File:150220D1 #1-325 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 Exp:OCDD_DB5
407.7818 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:150220D1 #1-325 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 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:150220D1 #1-389 Acq:20-FEB-2015 22:25:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Vista Analytical Laboratory VG-7 Text:1500147-04 WM-CB-21-20150203-S 21.48 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: B5B0101-BLK1

Filename: 150225E1 S:6 Acq:25-FEB-15 18:28:35
 GC Column ID: ZB-1 ICAL: PCBVG8-1-14-15 wt/vol: 1.000
 ConCal: ST150225E1-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n NotF ₁₁	1.33	*		2190	2.5	3.63	*	0.997-1.007	
Mono	PCB-2	*	*	n NotF ₁₁	1.30	*		2190	2.5	3.57	*	0.983-0.993	
Mono	PCB-3	*	*	n NotF ₁₁	1.30	*		2190	2.5	3.56	*	0.996-1.006	
Di	PCB-4/10	*	*	n NotF ₁₁	1.67	*		8490	2.5	14.1	*	0.997-1.007	
Di	PCB-7/9	*	*	n NotF ₁₁	1.25	*		8490	2.5	12.6	*	0.864-0.872	
Di	PCB-6	*	*	n NotF ₁₁	1.24	*		8490	2.5	12.7	*	0.888-0.897	
Di	PCB-5/8	*	*	n NotF ₁₁	1.27	*		8490	2.5	12.4	*	0.905-0.915	
Di	PCB-14	*	*	n NotF ₁₁	1.47	*		8490	2.5	10.2	*	0.948-0.958	
Di	PCB-11	3.66e+05	1.60	y	25:15	1.28	18.6	*	2.5	*	1.001	0.995-1.005	
Di	PCB-12/13	*	*	n NotF ₁₁	1.27	*		8490	2.5	11.8	*	1.011-1.021	
Di	PCB-15	*	*	n NotF ₁₁	1.44	*		8490	2.5	10.4	*	1.023-1.031	
Tri	PCB-19	*	*	n NotF ₁₁	1.18	*		1870	2.5	2.89	*	0.996-1.006	
Tri	PCB-30	*	*	n NotF ₁₁	1.87	*		1870	2.5	1.83	*	1.033-1.043	
Tri	PCB-18	*	*	n NotF ₁₁	0.89	*		1870	2.5	2.64	*	0.949-0.959	
Tri	PCB-17	*	*	n NotF ₁₁	0.96	*		1870	2.5	2.45	*	0.956-0.966	
Tri	PCB-24/27	*	*	n NotF ₁₁	1.30	*		1870	2.5	1.80	*	0.977-0.987	
Tri	PCB-16/32	5.42e+04	1.27	n	27:09	1.05	3.13	R	*	2.5	*	1.001	0.996-1.006
Tri	PCB-34	*	*	n NotF ₁₁	1.30	*		1810	2.5	2.44	*	0.955-0.965	
Tri	PCB-23	*	*	n NotF ₁₁	1.21	*		1810	2.5	2.63	*	0.958-0.968	
Tri	PCB-29	*	*	n NotF ₁₁	1.21	*		1810	2.5	2.63	*	0.967-0.977	
Tri	PCB-26	*	*	n NotF ₁₁	1.24	*		1810	2.5	2.57	*	0.974-0.984	
Tri	PCB-25	*	*	n NotF ₁₁	1.10	*		1810	2.5	2.90	*	0.980-0.990	
Tri	PCB-31	*	*	n NotF ₁₁	1.25	*		1810	2.5	2.54	*	0.992-1.002	
Tri	PCB-28	*	*	n NotF ₁₁	1.24	*		1810	2.5	2.57	*	0.996-1.006	
Tri	PCB-20/21/33	*	*	n NotF ₁₁	1.16	*		1810	2.5	2.75	*	1.016-1.026	
Tri	PCB-22	*	*	n NotF ₁₁	1.16	*		1810	2.5	2.73	*	1.032-1.042	
Tri	PCB-36	*	*	n NotF ₁₁	1.30	*		1810	2.5	2.28	*	0.929-0.939	
Tri	PCB-39	*	*	n NotF ₁₁	1.26	*		1810	2.5	2.35	*	0.943-0.953	
Tri	PCB-38	*	*	n NotF ₁₁	1.24	*		1810	2.5	2.39	*	0.967-0.977	
Tri	PCB-35	*	*	n NotF ₁₁	1.26	*		1810	2.5	2.36	*	0.982-0.992	
Tri	PCB-37	*	*	n NotF ₁₁	1.35	*		1810	2.5	2.20	*	0.996-1.006	
Tetra	PCB-54	*	*	n NotF ₁₁	1.02	*		2100	2.5	2.86	*	0.996-1.006	Integrations by:
Tetra	PCB-50	*	*	n NotF ₁₁	0.78	*		2100	2.5	3.76	*	1.037-1.047	
Tetra	PCB-53	*	*	n NotF ₁₁	1.14	*		2100	2.5	3.20	*	0.941-0.951	Analyst: <u>Dms</u>
Tetra	PCB-51	*	*	n NotF ₁₁	1.16	*		2100	2.5	3.13	*	0.952-0.962	
Tetra	PCB-45	*	*	n NotF ₁₁	1.04	*		2100	2.5	3.49	*	0.965-0.975	
Tetra	PCB-46	*	*	n NotF ₁₁	0.95	*		2100	2.5	3.83	*	0.981-0.991	Date: <u>2/26/15</u>

Reviewed by: 4/2 Date: 2/26/15

Client ID: Method Blank
 Lab ID: B5B0101-BLK1

Filename: 150225E1 S:6 Acq:25-FEB-15 18:28:35
 GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 1.000

ConCal: ST150225E1-1
 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 NotF ₇	1.29	*		2100	2.5	2.82	*	0.996-1.006	
Tetra	PCB-73	*	*	n NotF ₇	1.41	*		2100	2.5	2.58	*	0.999-1.009	
Tetra	PCB-43/49	*	*	n NotF ₇	1.14	*		2100	2.5	3.19	*	1.005-1.015	
Tetra	PCB-47	*	*	n NotF ₇	1.20	*		2100	2.5	3.13	*	0.996-1.006	
Tetra	PCB-48/75	*	*	n NotF ₇	1.33	*		2100	2.5	2.83	*	0.999-1.009	
Tetra	PCB-65	*	*	n NotF ₇	1.32	*		2100	2.5	2.85	*	1.007-1.017	
Tetra	PCB-62	*	*	n NotF ₇	1.36	*		2100	2.5	2.76	*	1.011-1.021	
Tetra	PCB-44	*	*	n NotF ₇	0.87	*		2100	2.5	4.30	*	1.020-1.030	
Tetra	PCB-42/59	*	*	n NotF ₇	1.24	*		2100	2.5	3.03	*	1.027-1.037	
Tetra	PCB-41/64/71/72	*	*	n NotF ₇	1.34	*		2100	2.5	2.80	*	1.045-1.055	
Tetra	PCB-68	*	*	n NotF ₇	1.61	*		2100	2.5	2.33	*	1.053-1.063	
Tetra	PCB-40	*	*	n NotF ₇	0.86	*		2100	2.5	4.37	*	1.061-1.071	
Tetra	PCB-57	*	*	n NotF ₇	1.12	*		2100	2.5	2.40	*	0.965-0.975	
Tetra	PCB-67	*	*	n NotF ₇	1.09	*		2100	2.5	2.47	*	0.974-0.984	
Tetra	PCB-58	*	*	n NotF ₇	1.14	*		2100	2.5	2.37	*	0.977-0.987	
Tetra	PCB-63	*	*	n NotF ₇	1.16	*		2100	2.5	2.32	*	0.981-0.991	
Tetra	PCB-74	*	*	n NotF ₇	1.21	*		2100	2.5	2.22	*	0.989-0.999	
Tetra	PCB-61/70	*	*	n NotF ₇	1.13	*		2100	2.5	2.39	*	0.995-1.005	
Tetra	PCB-76/66	*	*	n NotF ₇	1.18	*		2100	2.5	2.28	*	1.000-1.010	
Tetra	PCB-80	*	*	n NotF ₇	1.32	*		2100	2.5	1.97	*	0.995-1.005	
Tetra	PCB-55	*	*	n NotF ₇	1.23	*		2100	2.5	2.12	*	1.004-1.014	
Tetra	PCB-56/60	*	*	n NotF ₇	1.11	*		2100	2.5	2.35	*	1.018-1.028	
Tetra	PCB-79	*	*	n NotF ₇	1.16	*		2100	2.5	2.24	*	1.048-1.058	
Tetra	PCB-78	*	*	n NotF ₇	1.18	*		2100	2.5	2.40	*	0.982-0.992	
Tetra	PCB-81	*	*	n NotF ₇	1.29	*		2100	2.5	2.19	*	0.995-1.005	
Tetra	PCB-77	*	*	n NotF ₇	1.29	*		2100	2.5	2.26	*	0.995-1.005	
Penta	PCB-104	*	*	n NotF ₇	1.26	*		2120	2.5	4.61	*	0.996-1.006	
Penta	PCB-96	*	*	n NotF ₇	1.09	*		2120	2.5	5.34	*	1.034-1.044	
Penta	PCB-103	*	*	n NotF ₇	0.97	*		2120	2.5	6.02	*	1.051-1.061	
Penta	PCB-100	*	*	n NotF ₇	0.96	*		2120	2.5	6.05	*	1.061-1.071	
Penta	PCB-94	*	*	n NotF ₇	1.13	*		2120	2.5	6.89	*	0.980-0.990	
Penta	PCB-95/98/102	5.57e+04	1.52	y	35:50	1.29	4.85	*	2.5	*	1.001	0.994-1.004	
Penta	PCB-93	*	*	n NotF ₇	1.06	*		2120	2.5	7.34	*	0.998-1.008	
Penta	PCB-88/91	*	*	n NotF ₇	1.12	*		2120	2.5	6.93	*	1.006-1.016	
Penta	PCB-121	*	*	n NotF ₇	1.76	*		2120	2.5	4.42	*	1.009-1.019	
Penta	PCB-84/92	*	*	n NotF ₇	1.07	*		2120	2.5	6.63	*	0.985-0.995	
Penta	PCB-89	*	*	n NotF ₇	1.00	*		2120	2.5	7.13	*	0.990-1.000	

Analyst: DMS

Date: 2/26/15

Client ID: Method Blank
Lab ID: B5B0101-BLK1

Filename: 150225E1 S:6 Acq:25-FEB-15 18:28:35
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 1.000

ConCal: ST150225E1-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	8.38e+04	1.39	y 37:31	1.21	6.89	*	2.5	*	1.000		0.995-1.005	
Penta	PCB-113	*	*	n NotF _q	1.34	*		2120	2.5	5.30	*	1.002-1.012	
Penta	PCB-99	*	*	n NotF _q	1.25	*		2120	2.5	5.68	*	1.004-1.014	
Penta	PCB-119	*	*	n NotF _q	1.88	*		2120	2.5	4.23	*	0.982-0.992	
Penta	PCB-108/112	*	*	n NotF _q	1.41	*		2120	2.5	5.65	*	0.986-0.996	
Penta	PCB-83	*	*	n NotF _q	1.66	*		2120	2.5	4.78	*	0.990-1.000	
Penta	PCB-97	*	*	n NotF _q	1.30	*		2120	2.5	6.12	*	0.995-1.005	
Penta	PCB-86	*	*	n NotF _q	1.03	*		2120	2.5	7.69	*	0.999-1.009	
Penta	PCB-87/117/125	*	*	n NotF _q	1.59	*		2120	2.5	4.99	*	1.002-1.012	
Penta	PCB-111/115	*	*	n NotF _q	1.86	*		2120	2.5	4.28	*	1.006-1.016	
Penta	PCB-85/116	*	*	n NotF _q	1.39	*		2120	2.5	5.71	*	1.010-1.020	
Penta	PCB-120	*	*	n NotF _q	1.99	*		2120	2.5	4.00	*	1.016-1.026	
Penta	PCB-110	4.56e+04	1.24	n 39:45	1.70	2.99	R	*	2.5	*	1.024		1.019-1.029
Penta	PCB-82	*	*	n NotF _q	0.74	*		2120	2.5	8.14	*	0.971-0.981	
Penta	PCB-124	*	*	n NotF _q	1.30	*		2120	2.5	4.64	*	0.988-0.998	
Penta	PCB-107/109	*	*	n NotF _q	1.34	*		2120	2.5	4.53	*	0.991-1.001	
Penta	PCB-123	*	*	n NotF _q	1.25	*		2120	2.5	4.83	*	0.995-1.005	
Penta	PCB-106/118	*	*	n NotF _q	1.29	*		2120	2.5	4.60	*	0.996-1.006	
Penta	PCB-114	*	*	n NotF _q	1.45	*		1750	2.5	3.34	*	0.995-1.005	
Penta	PCB-122	*	*	n NotF _q	1.22	*		1750	2.5	3.98	*	0.999-1.009	
Penta	PCB-105	*	*	n NotF _q	1.56	*		1750	2.5	3.43	*	0.995-1.005	
Penta	PCB-127	*	*	n NotF _q	1.31	*		1750	2.5	3.82	*	0.995-1.005	
Penta	PCB-126	*	*	n NotF _q	1.41	*		1750	2.5	3.51	*	0.995-1.005	
Hexa	PCB-155	*	*	n NotF _q	1.20	*		1450	2.5	3.41	*	0.966-1.006	
Hexa	PCB-150	*	*	n NotF _q	1.13	*		1450	2.5	3.62	*	1.030-1.040	
Hexa	PCB-152	*	*	n NotF _q	1.17	*		1450	2.5	3.49	*	1.043-1.053	
Hexa	PCB-145	*	*	n NotF _q	1.09	*		1450	2.5	3.73	*	1.055-1.065	
Hexa	PCB-136	*	*	n NotF _q	1.14	*		1450	2.5	3.57	*	1.063-1.073	
Hexa	PCB-148	*	*	n NotF _q	0.82	*		1450	2.5	4.99	*	1.066-1.076	
Hexa	PCB-154	*	*	n NotF _q	0.89	*		1450	2.5	4.58	*	1.079-1.089	
Hexa	PCB-151	*	*	n NotF _q	0.82	*		1450	2.5	4.99	*	1.097-1.107	
Hexa	PCB-135	*	*	n NotF _q	0.80	*		1450	2.5	5.12	*	1.101-1.113	
Hexa	PCB-144	*	*	n NotF _q	0.86	*		1450	2.5	4.77	*	1.105-1.116	
Hexa	PCB-147	*	*	n NotF _q	0.78	*		1450	2.5	5.24	*	1.108-1.120	
Hexa	PCB-139/149	7.23e+04	1.11	y 41:30	0.87	8.24		*	2.5	*	1.120		1.115-1.127
Hexa	PCB-140	*	*	n NotF _q	0.78	*		1450	2.5	5.25	*	1.120-1.132	
Hexa	PCB-134/143	*	*	n NotF _q	0.93	*		1620	2.5	3.68	*	0.970-0.980	

Analyst: DMS

Date: 2/26/15

Client ID: Method Blank
Lab ID: B5B0101-BLK1

Filename: 150225E1 S:6 Acq:25-FEB-15 18:28:35
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 1.000

ConCal: ST150225E1-1
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 Not F ₇	0.91	*	*	1620	2.5	3.77	*	0.977-0.987	
Hexa	PCB-131	*	*	n Not F ₇	0.85	*	*	1620	2.5	4.05	*	0.981-0.991	
Hexa	PCB-146/165	*	*	n Not F ₇	1.08	*	*	1620	2.5	3.17	*	0.986-0.996	
Hexa	PCB-132/161	*	*	n Not F ₇	1.12	*	*	1620	2.5	3.06	*	0.992-1.002	
Hexa	PCB-153	6.70e+04	1.27	y 43:15	1.20	4.12	*	2.5	*	1.001	*	0.996-1.006	
Hexa	PCB-168	*	*	n Not F ₇	1.36	*	*	1620	2.5	2.53	*	1.000-1.010	
Hexa	PCB-141	*	*	n Not F ₇	1.16	*	*	1620	2.5	3.47	*	0.995-1.005	
Hexa	PCB-137	*	*	n Not F ₇	1.18	*	*	1620	2.5	3.40	*	1.004-1.014	
Hexa	PCB-130	*	*	n Not F ₇	0.92	*	*	1620	2.5	4.36	*	1.006-1.016	
Hexa	PCB-138/163/164	*	*	n Not F ₇	1.38	*	*	1620	2.5	2.70	*	0.996-1.006	
Hexa	PCB-158/160	*	*	n Not F ₇	1.48	*	*	1620	2.5	2.53	*	1.001-1.011	
Hexa	PCB-129	*	*	n Not F ₇	0.99	*	*	1620	2.5	3.77	*	1.007-1.017	
Hexa	PCB-166	*	*	n Not F ₇	1.14	*	*	1620	2.5	2.78	*	0.988-0.998	
Hexa	PCB-159	*	*	n Not F ₇	1.22	*	*	1620	2.5	2.60	*	0.995-1.005	
Hexa	PCB-128/162	*	*	n Not F ₇	1.03	*	*	1620	2.5	3.07	*	1.002-1.012	
Hexa	PCB-167	*	*	n Not F ₇	1.18	*	*	1620	2.5	2.54	*	0.995-1.005	
Hexa	PCB-156	*	*	n Not F ₇	1.27	*	*	1620	2.5	2.51	*	0.995-1.005	
Hexa	PCB-157	*	*	n Not F ₇	1.22	*	*	1620	2.5	2.61	*	0.995-1.005	
Hexa	PCB-169	*	*	n Not F ₇	1.07	*	*	1620	2.5	2.91	*	0.995-1.005	
Hepta	PCB-188	*	*	n Not F ₇	1.52	*	*	1810	2.5	2.18	*	0.996-1.006	
Hepta	PCB-184	*	*	n Not F ₇	1.34	*	*	1810	2.5	2.48	*	1.006-1.016	
Hepta	PCB-179	*	*	n Not F ₇	1.39	*	*	1810	2.5	2.39	*	1.024-1.034	
Hepta	PCB-176	*	*	n Not F ₇	1.45	*	*	1810	2.5	2.28	*	1.035-1.045	
Hepta	PCB-186	*	*	n Not F ₇	1.46	*	*	1810	2.5	2.28	*	1.049-1.059	
Hepta	PCB-178	*	*	n Not F ₇	1.07	*	*	1810	2.5	3.09	*	1.061-1.071	
Hepta	PCB-175	*	*	n Not F ₇	1.05	*	*	1810	2.5	3.17	*	1.069-1.079	
Hepta	PCB-182/187	*	*	n Not F ₇	1.14	*	*	1810	2.5	2.92	*	1.073-1.083	
Hepta	PCB-183	*	*	n Not F ₇	1.22	*	*	1810	2.5	2.71	*	1.080-1.090	
Hepta	PCB-185	*	*	n Not F ₇	1.40	*	*	1810	2.5	2.84	*	0.950-0.960	
Hepta	PCB-174	*	*	n Not F ₇	1.29	*	*	1810	2.5	3.09	*	0.958-0.968	
Hepta	PCB-181	*	*	n Not F ₇	1.35	*	*	1810	2.5	2.95	*	0.960-0.970	
Hepta	PCB-177	*	*	n Not F ₇	1.27	*	*	1810	2.5	3.15	*	0.963-0.973	
Hepta	PCB-171	*	*	n Not F ₇	1.46	*	*	1810	2.5	2.74	*	0.969-0.979	
Hepta	PCB-173	*	*	n Not F ₇	1.10	*	*	1810	2.5	3.61	*	0.978-0.988	
Hepta	PCB-172	*	*	n Not F ₇	1.35	*	*	1810	2.5	2.94	*	0.987-0.997	
Hepta	PCB-192	*	*	n Not F ₇	1.74	*	*	1810	2.5	2.29	*	0.991-1.001	
Hepta	PCB-180	*	*	n Not F ₇	1.45	*	*	1810	2.5	2.75	*	0.995-1.005	

Analyst: DMS

Date: 2/26/15

Client ID: Method Blank
Lab ID: B5B0101-BLK1

Filename: 150225E1 S:6 Acq:25-FEB-15 18:28:35
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 1.000

ConCal: ST150225E1-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	*	*	n NotF ₇	1.85	*	*	1810	2.5	2.15	*	0.999-1.009	
Hepta	PCB-191	*	*	n NotF ₇	1.86	*	*	1810	2.5	2.14	*	1.005-1.015	
Hepta	PCB-170	*	*	n NotF ₇	1.67	*	*	1810	2.5	2.71	*	0.995-1.005	
Hepta	PCB-190	*	*	n NotF ₇	2.25	*	*	1810	2.5	2.01	*	0.999-1.009	
Hepta	PCB-189	*	*	n NotF ₇	1.67	*	*	1810	2.5	2.00	*	0.995-1.005	
Octa	PCB-202	*	*	n NotF ₈	1.02	*	*	1450	2.5	3.37	*	0.995-1.005	
Octa	PCB-201	*	*	n NotF ₈	1.10	*	*	1450	2.5	3.13	*	1.005-1.015	
Octa	PCB-204	*	*	n NotF ₈	1.07	*	*	1450	2.5	3.19	*	1.009-1.019	
Octa	PCB-197	*	*	n NotF ₈	1.17	*	*	1450	2.5	2.94	*	1.015-1.025	
Octa	PCB-200	*	*	n NotF ₈	1.03	*	*	1450	2.5	3.32	*	1.034-1.044	
Octa	PCB-198	*	*	n NotF ₈	0.75	*	*	1450	2.5	4.55	*	1.062-1.072	
Octa	PCB-199	*	*	n NotF ₈	0.74	*	*	1450	2.5	4.63	*	1.064-1.074	
Octa	PCB-196/203	*	*	n NotF ₈	0.83	*	*	1450	2.5	4.14	*	1.070-1.080	
Octa	PCB-195	*	*	n NotF ₈	1.14	*	*	1590	2.5	3.36	*	0.979-0.989	
Octa	PCB-194	2.44e+04	1.52	n 53:45	1.29	2.73	*	2.5	*	1.000	*	0.995-1.005	
Octa	PCB-205	*	*	n NotF ₈	1.61	*	*	1590	2.5	2.37	*	1.001-1.010	
Nona	PCB-208	*	*	n NotF ₉	1.01	*	*	1560	2.5	2.17	*	0.995-1.005	
Nona	PCB-207	*	*	n NotF ₉	1.03	*	*	1560	2.5	2.14	*	1.001-1.011	
Nona	PCB-206	*	*	n NotF ₉	0.88	*	*	1560	2.5	4.37	*	0.995-1.005	
Deca	PCB-209	*	*	n NotF ₁₀	1.35	*	*	1090	2.5	2.48	*	0.995-1.005	

Analyst: Dan

Date: 2/26/15

Client ID: Method Blank
Lab ID: B5B0101-BLK1

Filename: 150225E1 S:6 Acq:25-FEB-15 18:28:35 ConCal: ST150225E1-1
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 1.0000 EndCAL: NA

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	Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB		*	* n	NotFnd	1.31	*
Total Di-PCB	3.66e+05	1.60	y	25:15	1.32	18.5978
Total Tri-PCB		*	* n	NotFnd	1.20	*
Total Tri-PCB		*	* n	NotFnd	1.23	* Sum:0.00000
Total Tetra-PCB		*	* n	NotFnd	1.17	*
Total Penta-PCB	1.40e+05	1.52	y	35:50	1.24	11.7409
Total Penta-PCB		*	* n	NotFnd	1.39	* Sum:11.7409
Total Hexa-PCB	7.23e+04	1.11	y	41:30	0.94	8.23832
Total Hexa-PCB	6.70e+04	1.27	y	43:15	1.13	4.11798 Sum:12.3563
Total Hepta-PCB		*	* n	NotFnd	1.37	*
Total Octa-PCB		*	* n	NotFnd	0.95	*
Total Octa-PCB		*	* n	NotFnd	1.35	* Sum:0.00000
Total Nona-PCB		*	* n	NotFnd	0.99	*
Total Deca-PCB		*	* n	NotFnd	1.35	*

Total PCB Conc:51.5432200000

Integrations
by
Analyst: DMS
Date: 2/26/15

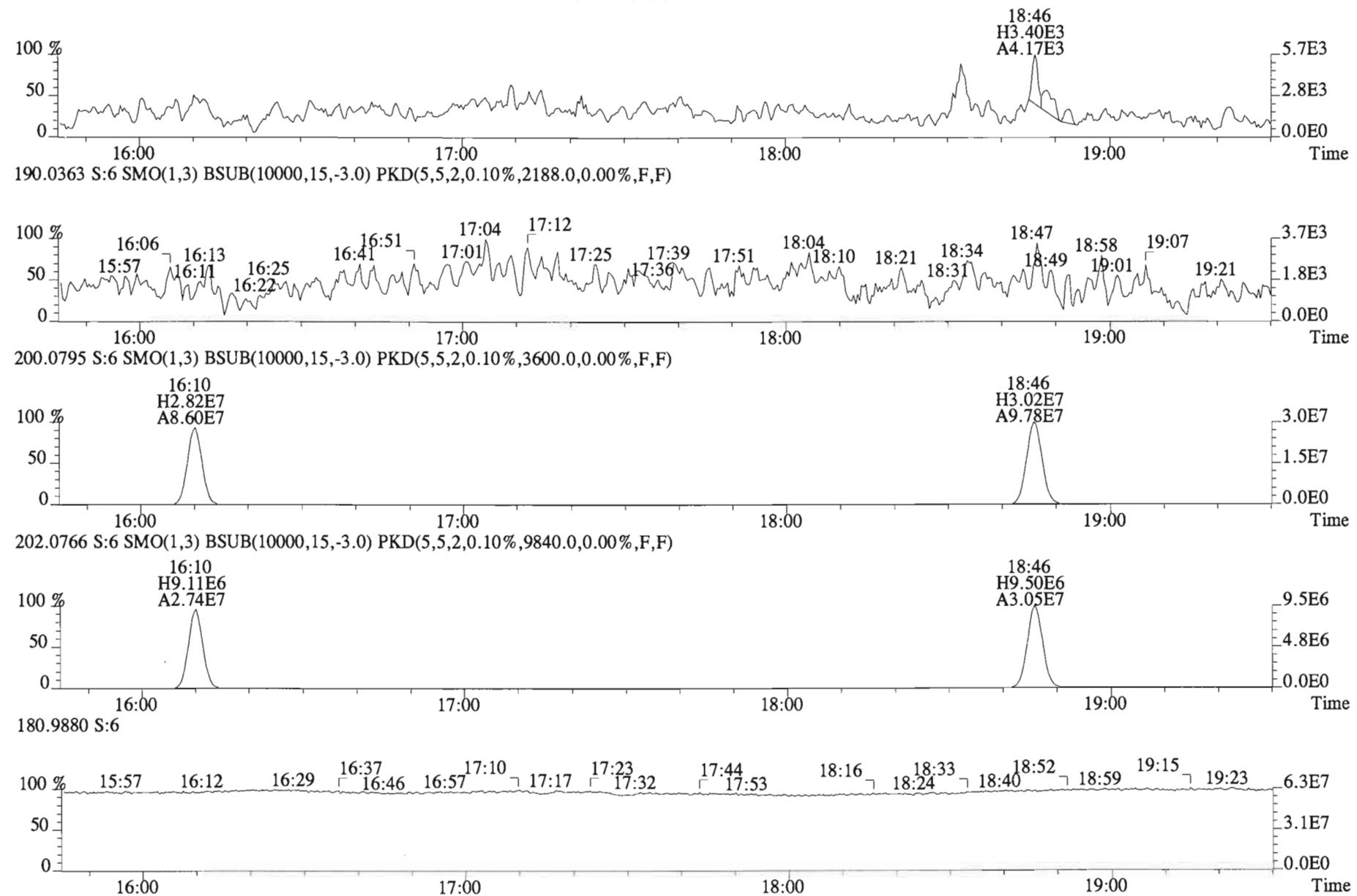
Client ID: Method Blank
Lab ID: B5B0101-BLK1

Filename: 150225E1 S:6 Acq:25-FEB-15 18:28:35
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol:1.0000
ConCal: ST150225E1-1 EndCAL: NA

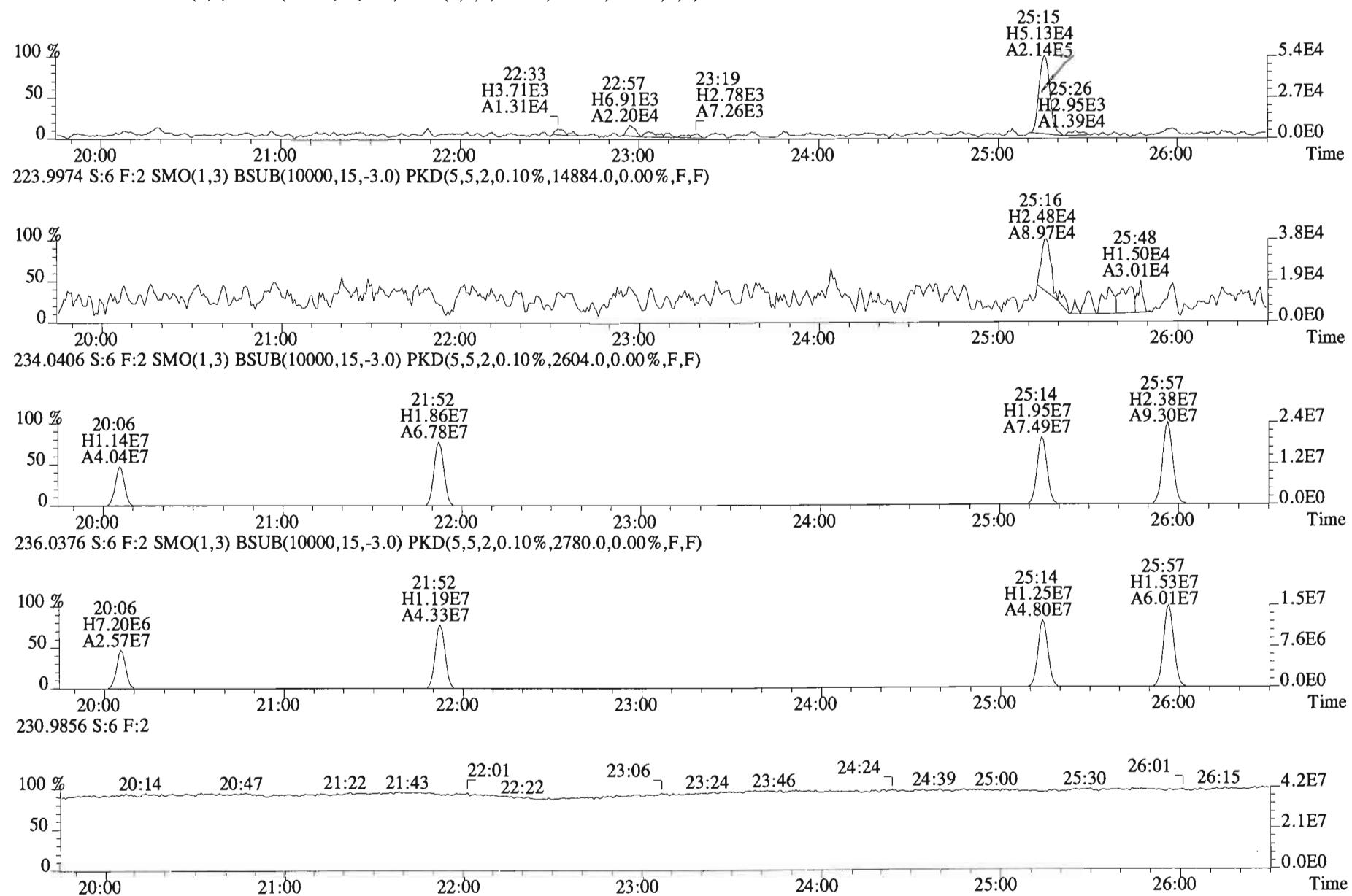
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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS		Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.13e+08	3.14	y	0.91	16:10	0.623	0.619-0.625	6520	81.5	13C-PCB-79	1.57e+08	0.78	y	1.02	37:49	1.029	1.024-1.033	7630	95.4		
13C-PCB-3	1.28e+08	3.21	y	0.94	18:46	0.723	0.718-0.726	7120	89.0	13C-PCB-178	5.60e+07	0.46	y	0.64	45:38	0.984	0.980-0.989	7510	93.9		
13C-PCB-4	6.61e+07	1.57	y	0.60	20:06	0.774	0.770-0.778	5780	72.3	13C-PCB-178	5.60e+07	0.46	y	0.84	45:38	0.925	0.920-0.930	8270	103		
13C-PCB-9	1.11e+08	1.57	y	0.96	21:52	0.843	0.839-0.847	6050	75.6												
13C-PCB-11	1.23e+08	1.56	y	0.95	25:14	0.973	0.968-0.978	6730	84.1	PS vs. IS											
13C-PCB-19	8.63e+07	1.07	y	0.56	24:13	0.934	0.929-0.939	8040	101	13C-PCB-79	1.57e+08	0.78	y	1.02	37:49	0.969	0.963-0.973	8670	108		
13C-PCB-28	1.11e+08	1.04	y	1.07	29:05	1.004	0.999-1.009	6730	84.1	13C-PCB-178	5.60e+07	0.46	y	0.84	45:38	0.925	0.920-0.930	8270	103		
13C-PCB-32	1.32e+08	1.06	y	0.83	27:08	1.046	1.041-1.051	8370	105												
13C-PCB-37	1.25e+08	1.05	y	0.96	32:57	1.137	1.131-1.143	8380	105												
13C-PCB-47	9.74e+07	0.75	y	0.77	31:59	0.870	0.867-0.875	6310	78.8												
13C-PCB-52	9.80e+07	0.78	y	0.71	31:30	0.857	0.853-0.861	6850	85.6												
13C-PCB-54	1.21e+08	0.79	y	1.06	27:58	0.761	0.757-0.765	5680	71.0												
13C-PCB-70	1.42e+08	0.79	y	0.99	35:31	0.966	0.961-0.971	7110	88.8												
13C-PCB-77	1.37e+08	0.80	y	0.96	39:39	1.078	1.073-1.083	7070	88.4												
13C-PCB-80	1.50e+08	0.79	y	1.02	35:56	0.978	0.973-0.983	7280	91.0												
13C-PCB-81	1.41e+08	0.79	y	1.00	39:03	1.062	1.057-1.067	7040	88.0												
13C-PCB-95	7.12e+07	1.65	y	0.70	35:49	0.913	0.908-0.918	7530	94.1	RS											
13C-PCB-97	7.16e+07	1.65	y	0.66	38:48	0.989	0.984-0.994	8050	101	13C-PCB-15	1.53e+08	1.55	y	1.00	25:57	8000					
13C-PCB-101	8.07e+07	1.67	y	0.77	37:30	0.956	0.951-0.961	7780	97.2	13C-PCB-31	1.24e+08	1.05	y	1.00	28:59	8000					
13C-PCB-104	9.02e+07	1.60	y	0.97	32:39	0.832	0.828-0.836	6900	86.2	13C-PCB-60	1.61e+08	0.79	y	1.00	36:46	8000					
13C-PCB-105	9.06e+07	1.60	y	1.20	43:04	0.929	0.924-0.934	6450	80.6	13C-PCB-111	1.08e+08	1.66	y	1.00	39:14	8000					
13C-PCB-114	9.69e+07	1.59	y	1.26	42:13	0.911	0.905-0.915	6590	82.4	13C-PCB-128	9.36e+07	1.33	y	1.00	46:21	8000					
13C-PCB-118	9.71e+07	1.65	y	0.94	41:33	1.059	1.054-1.064	7660	95.7	13C-PCB-205	7.61e+07	0.92	y	1.00	54:01	8000					
13C-PCB-123	9.59e+07	1.65	y	0.88	41:22	1.054	1.049-1.059	8050	101												
13C-PCB-126	9.27e+07	1.59	y	1.13	45:18	0.977	0.972-0.982	7040	88.0												
13C-PCB-127	9.45e+07	1.57	y	1.26	43:25	0.937	0.931-0.941	6420	80.3												
13C-PCB-138	9.76e+07	1.27	y	1.12	44:48	0.967	0.961-0.971	7450	93.2												
13C-PCB-141	9.42e+07	1.29	y	1.09	43:57	0.948	0.943-0.953	7380	92.2												
13C-PCB-153	1.09e+08	1.28	y	1.27	43:13	0.932	0.927-0.937	7310	91.3												
13C-PCB-155	8.07e+07	1.28	y	0.87	37:03	0.944	0.939-0.949	6850	85.6												
13C-PCB-156	1.17e+08	1.28	y	1.35	48:03	1.037	1.032-1.042	7420	92.8												
13C-PCB-157	1.21e+08	1.28	y	1.42	48:19	1.042	1.037-1.047	7320	91.5												
13C-PCB-159	1.19e+08	1.28	y	1.37	46:05	0.994	0.989-0.999	7410	92.6												
13C-PCB-167	1.21e+08	1.29	y	1.38	46:46	1.009	1.004-1.014	7520	93.9												
13C-PCB-169	1.11e+08	1.26	y	1.38	50:26	1.088	1.084-1.094	6880	86.0												
13C-PCB-170	5.09e+07	0.48	y	0.60	50:47	1.096	1.091-1.103	7210	90.2												
13C-PCB-180	6.42e+07	0.46	y	0.76	49:19	1.064	1.059-1.069	7260	90.7												
13C-PCB-188	7.94e+07	0.47	y	1.01	42:50	0.924	0.919-0.929	6700	83.7												
13C-PCB-189	6.51e+07	0.46	y	0.80	52:15	1.127	1.124-1.136	6940	86.8												
13C-PCB-194	5.54e+07	0.90	y	0.75	53:44	0.995	0.990-1.000	7810	97.7	Analyst:	DMS										
13C-PCB-202	7.89e+07	0.92	y	0.99	48:15	1.041	1.036-1.046	6830	85.3	Date:	2/26/15										
13C-PCB-206	5.43e+07	0.78	y	0.73	55:22	1.025	1.020-1.301	7780	97.2												
13C-PCB-208	8.63e+07	0.77	y	1.08	53:01	0.982	0.977-0.987	8380	105												
13C-PCB-209	5.13e+07	1.21	y	0.71	56:41	1.049	1.045-1.055	7590	94.9												

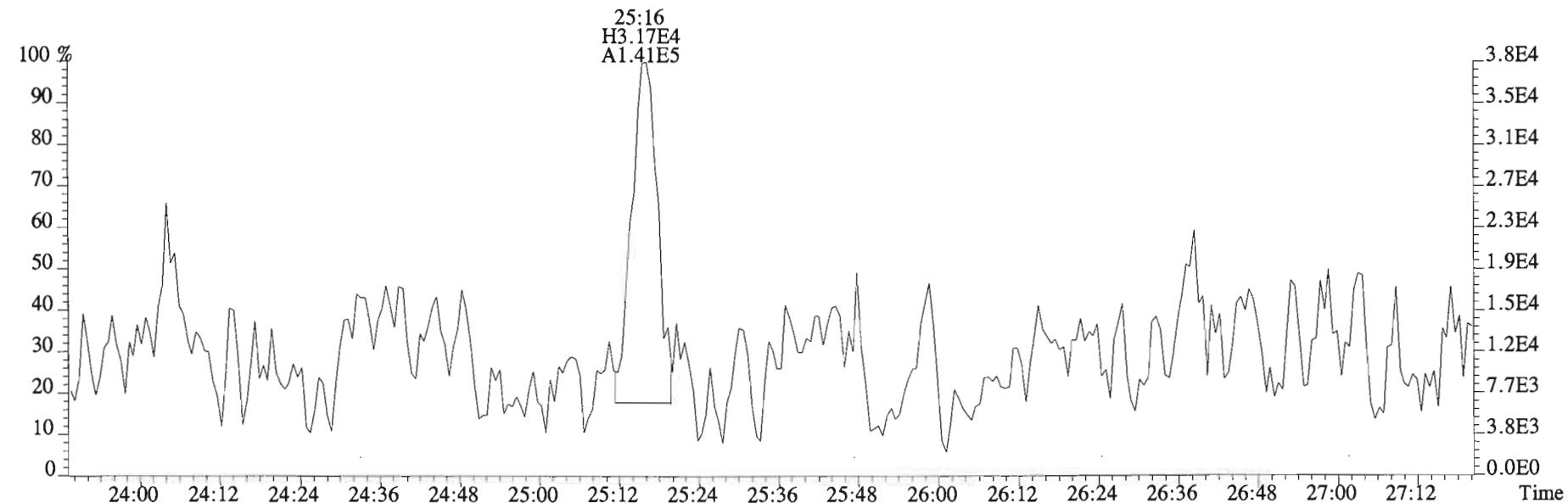
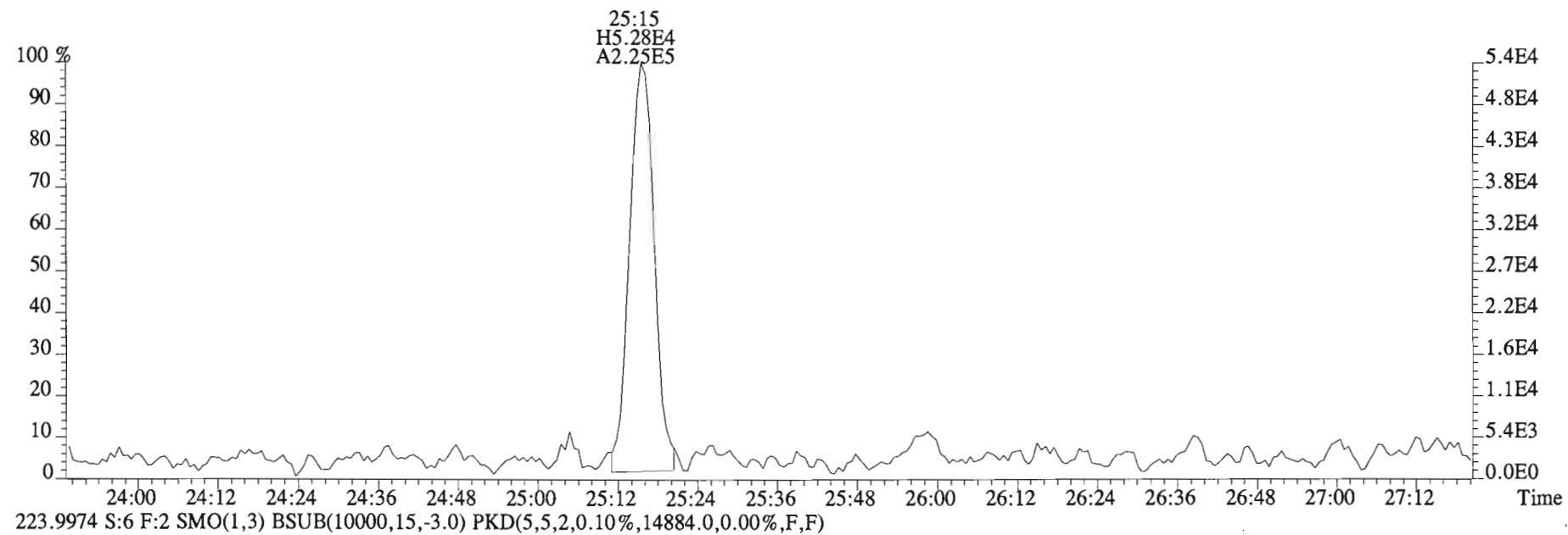
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 188.0393 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2088.0,0.00%,F,F)



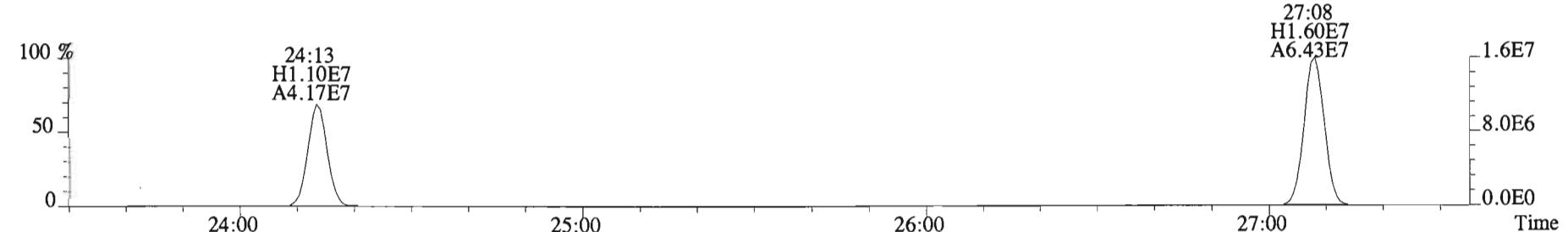
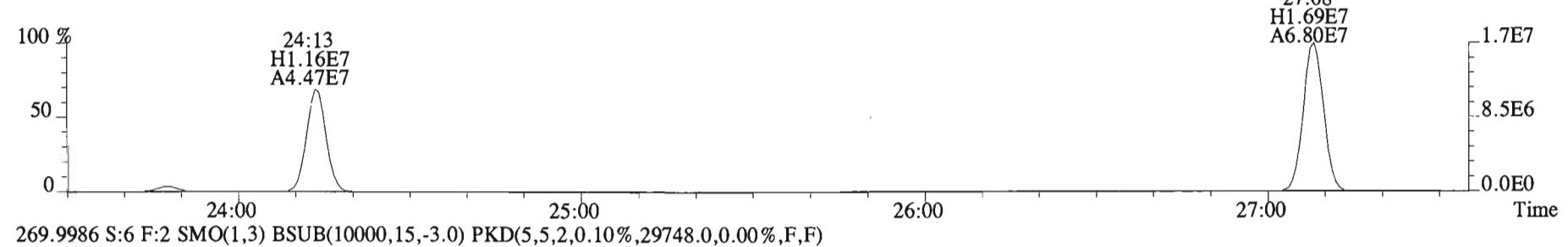
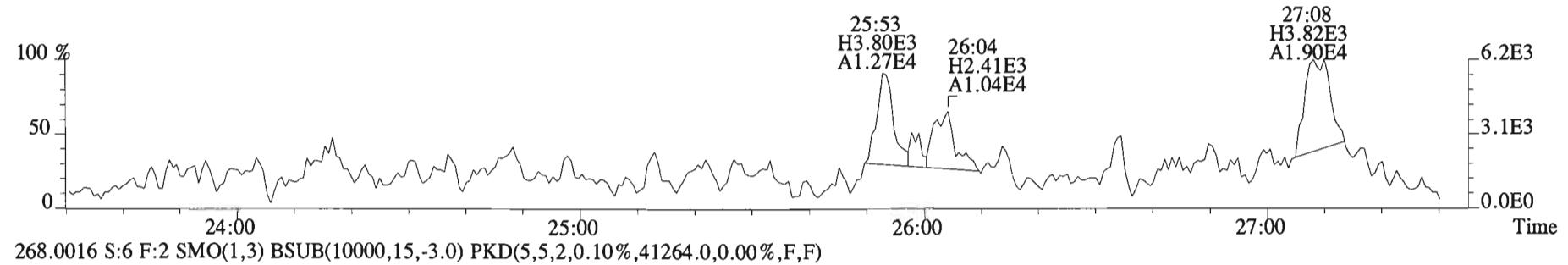
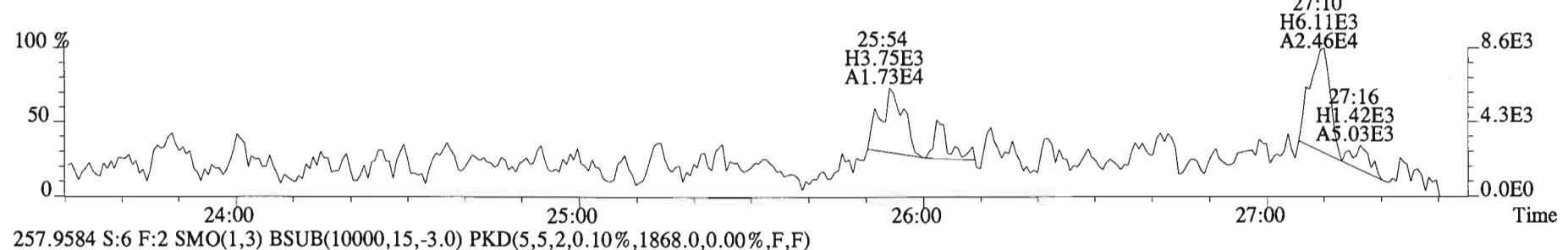
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 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
 222.0003 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3440.0,0.00%,F,F)



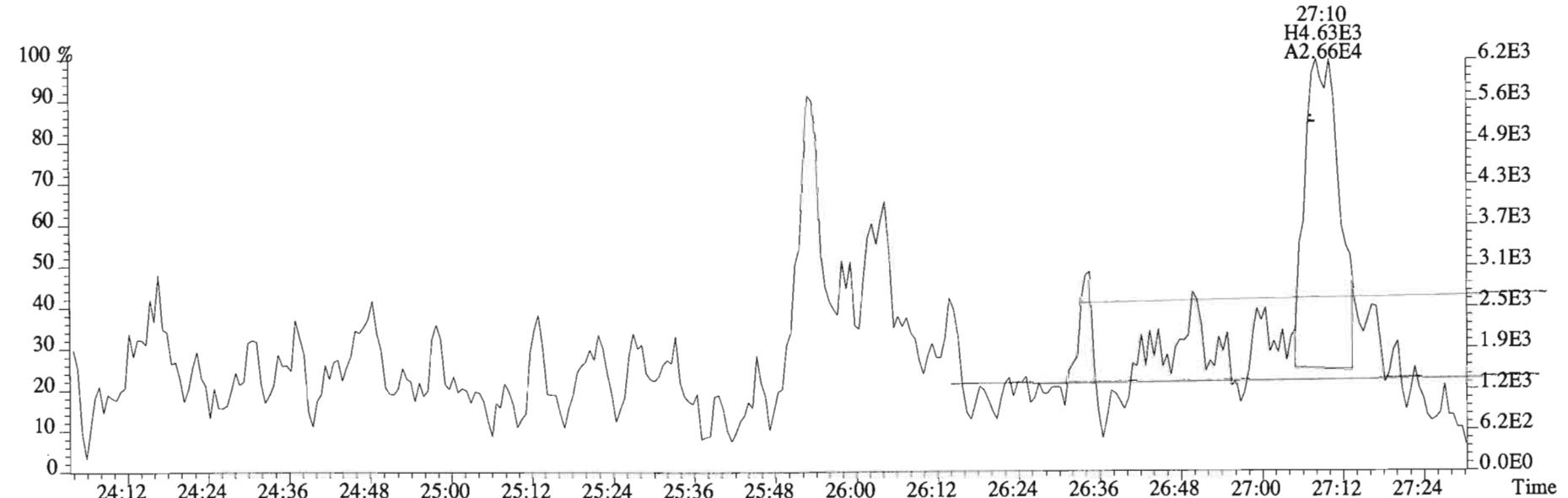
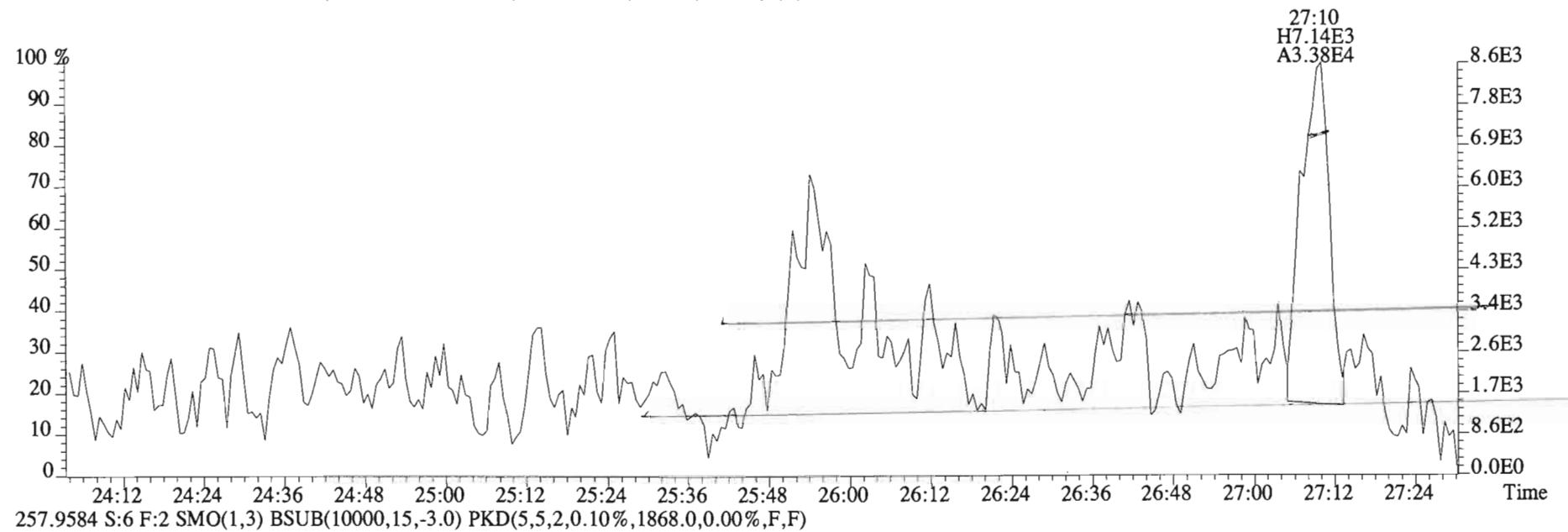
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222.0003 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3440.0,0.00%,F,F)



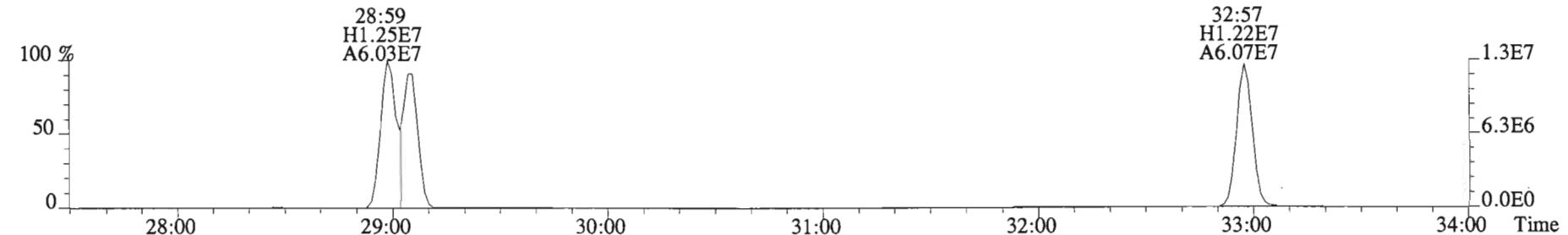
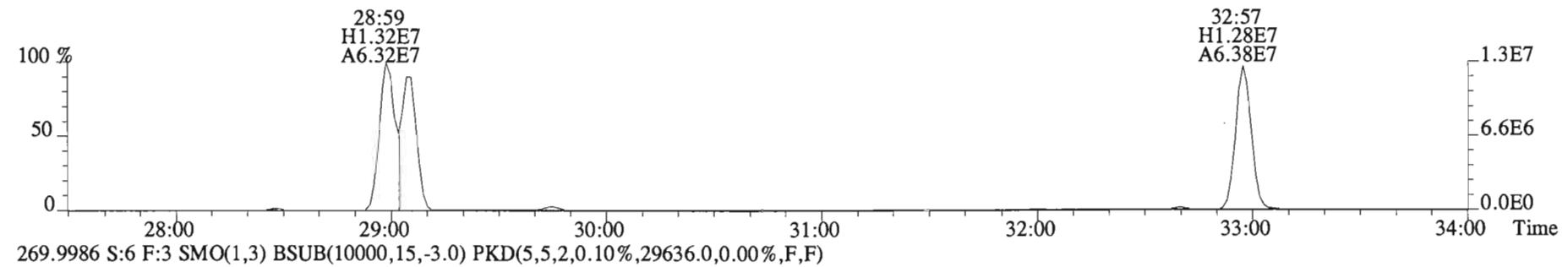
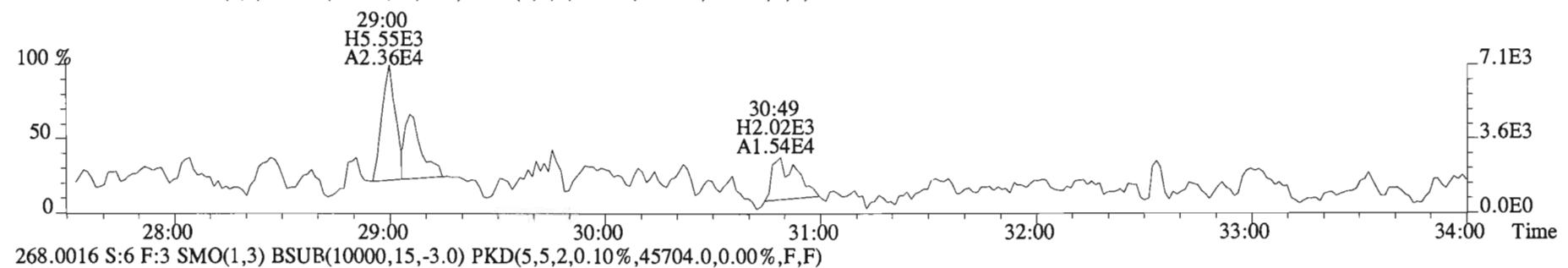
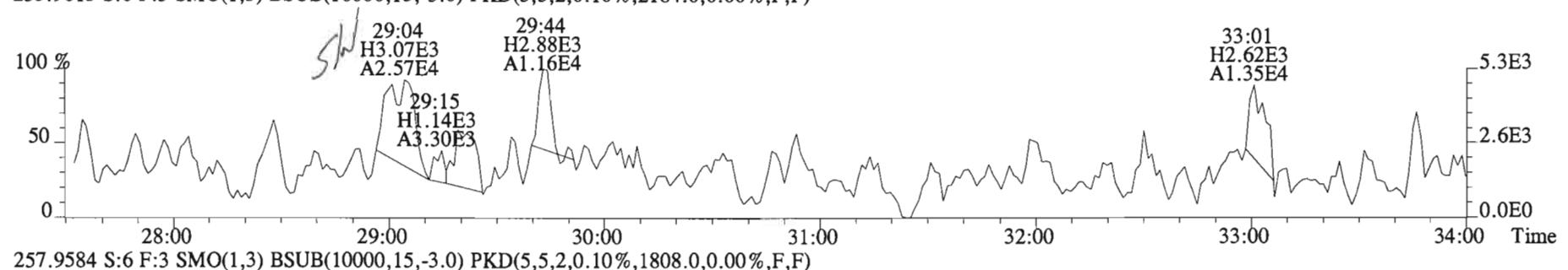
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Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2536.0,0.00%,F,F)



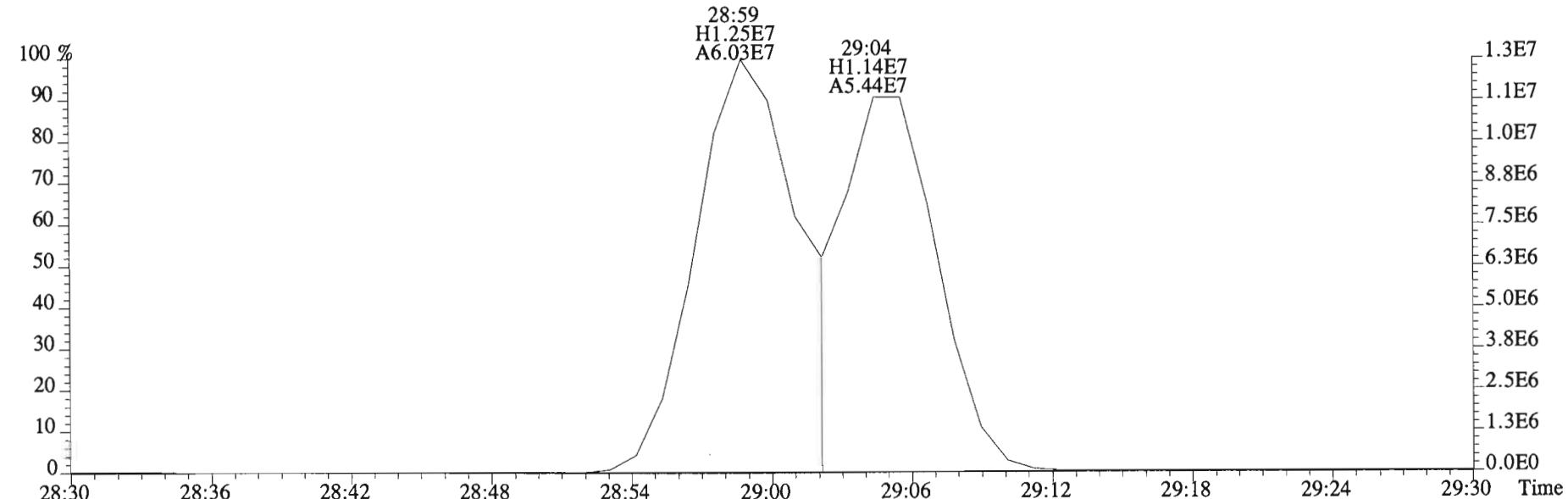
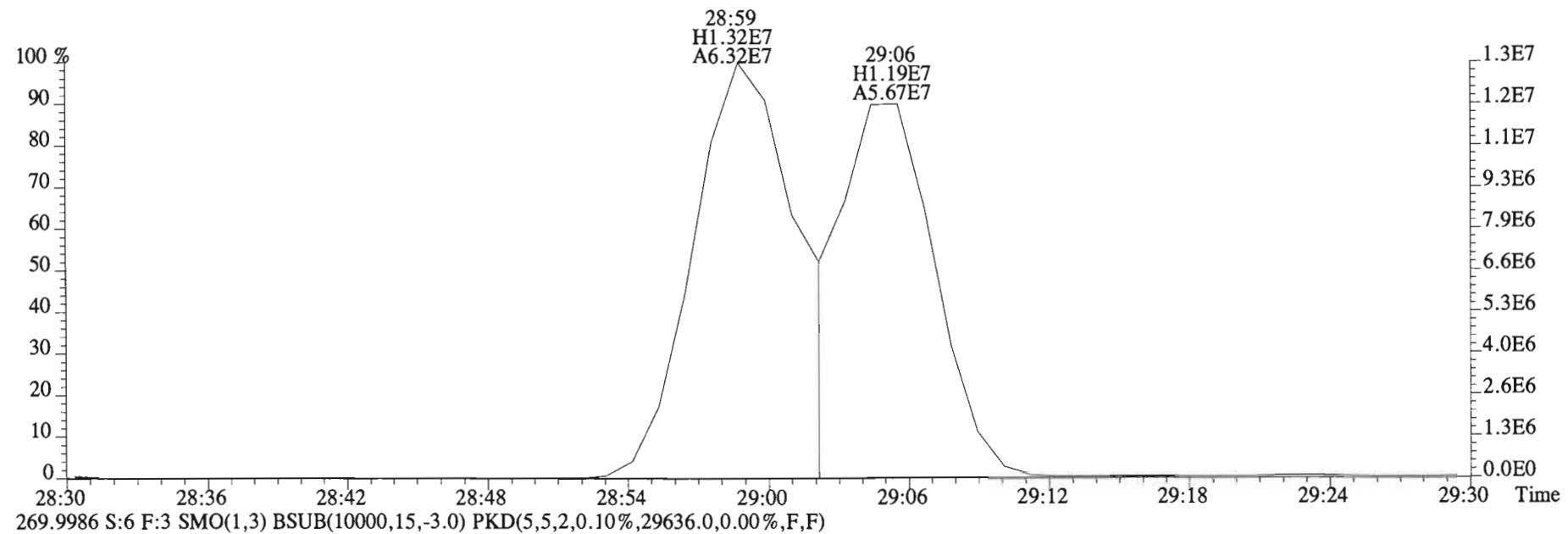
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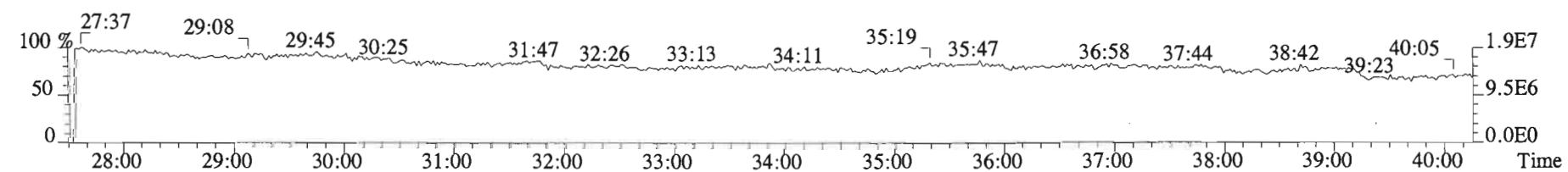
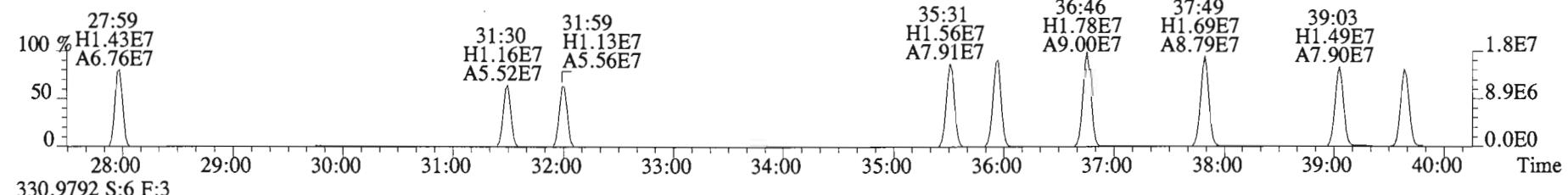
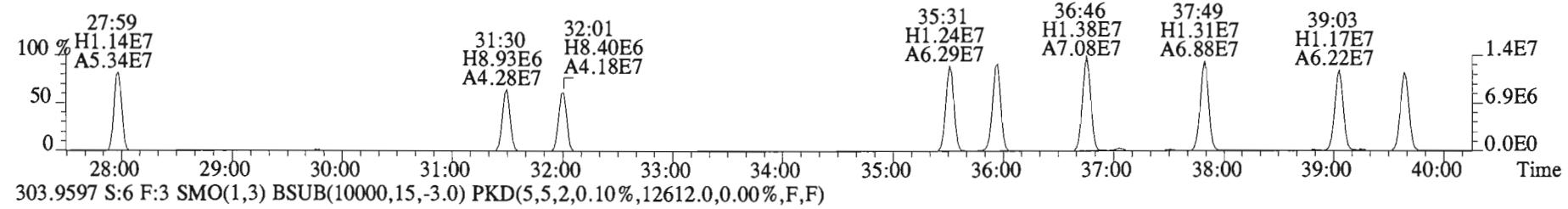
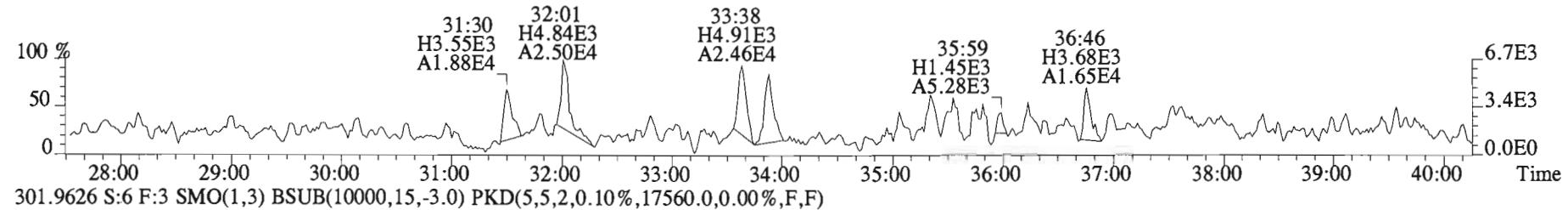
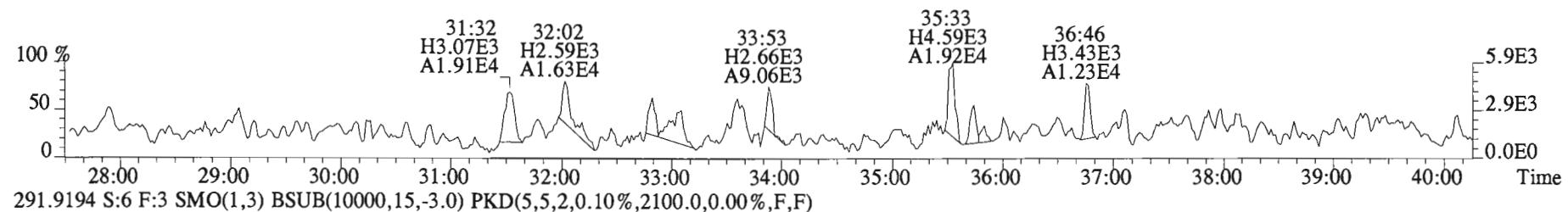
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 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
 255.9613 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2184.0,0.00%,F,F)



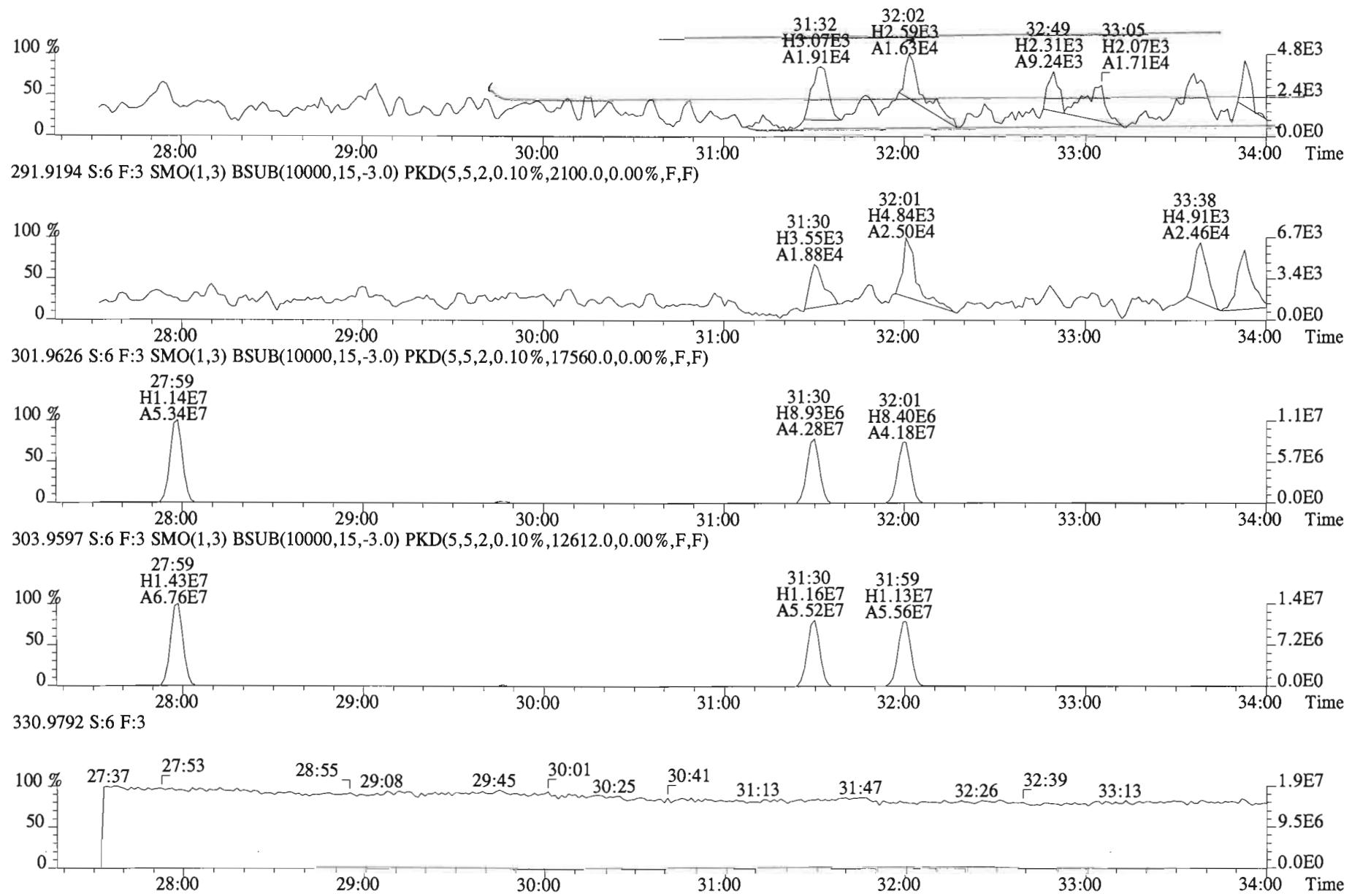
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Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
268.0016 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,45704.0,0.00%,F,F)



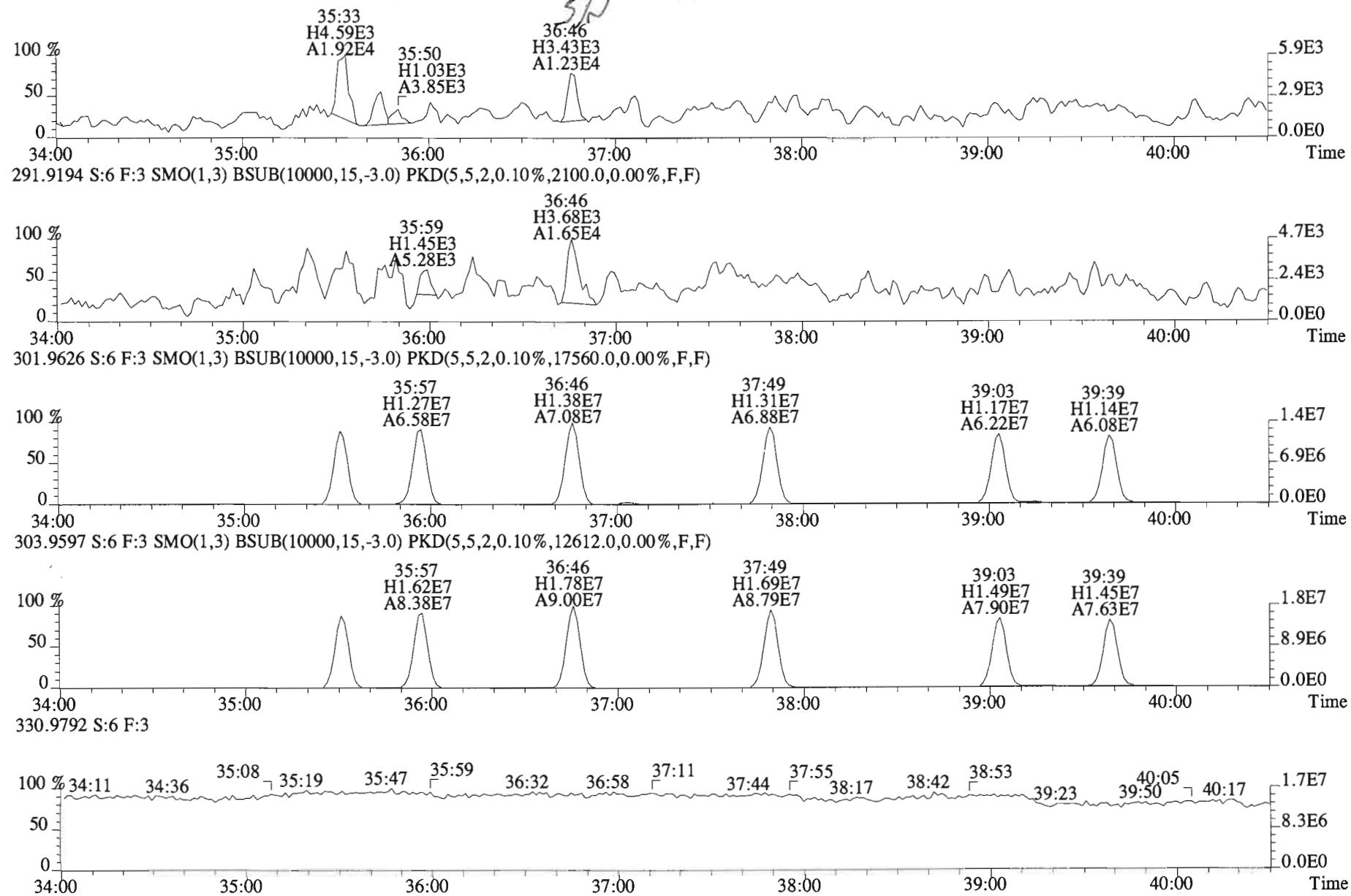
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 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
 289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2000.0,0.00%,F,F)



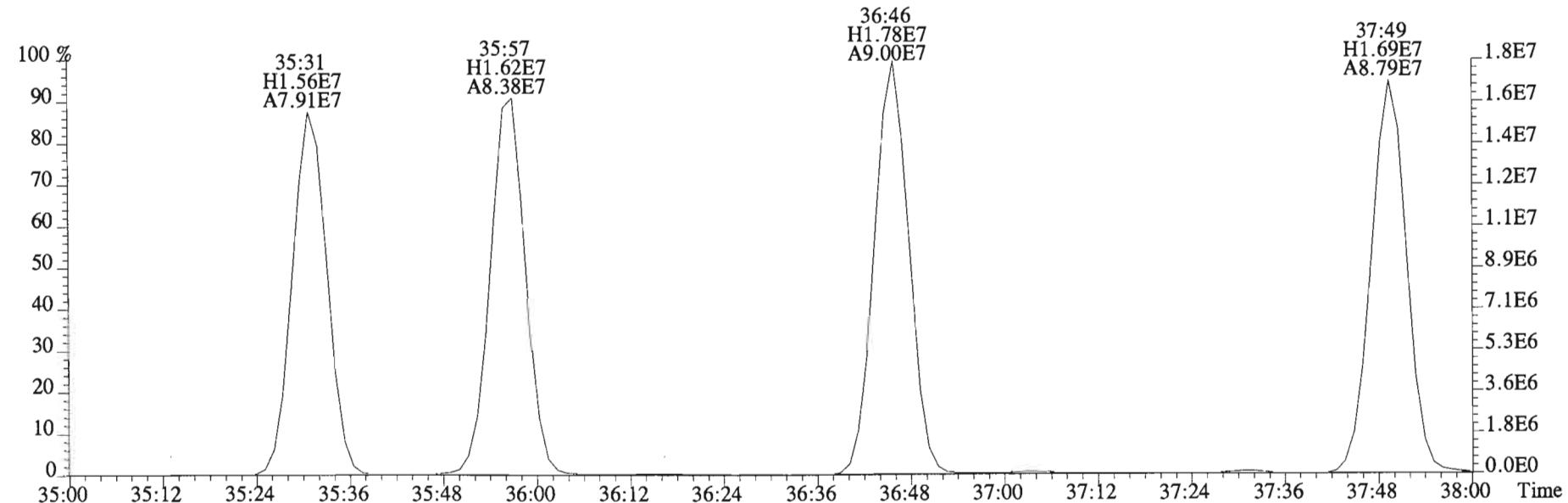
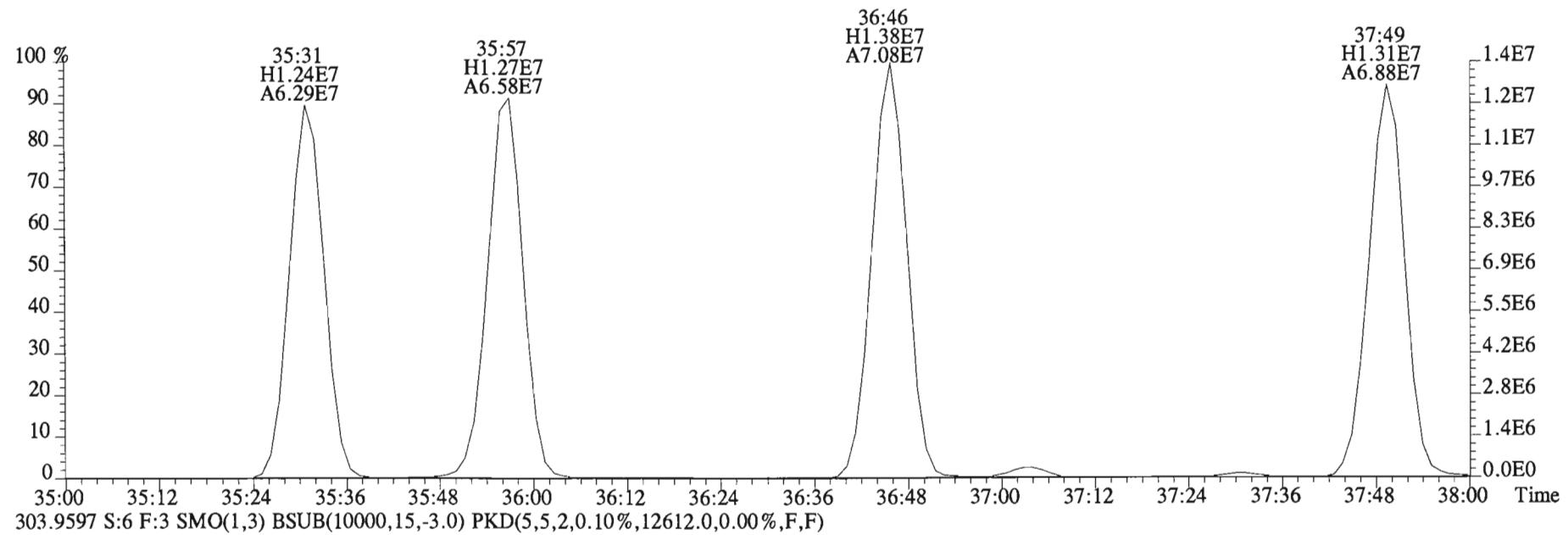
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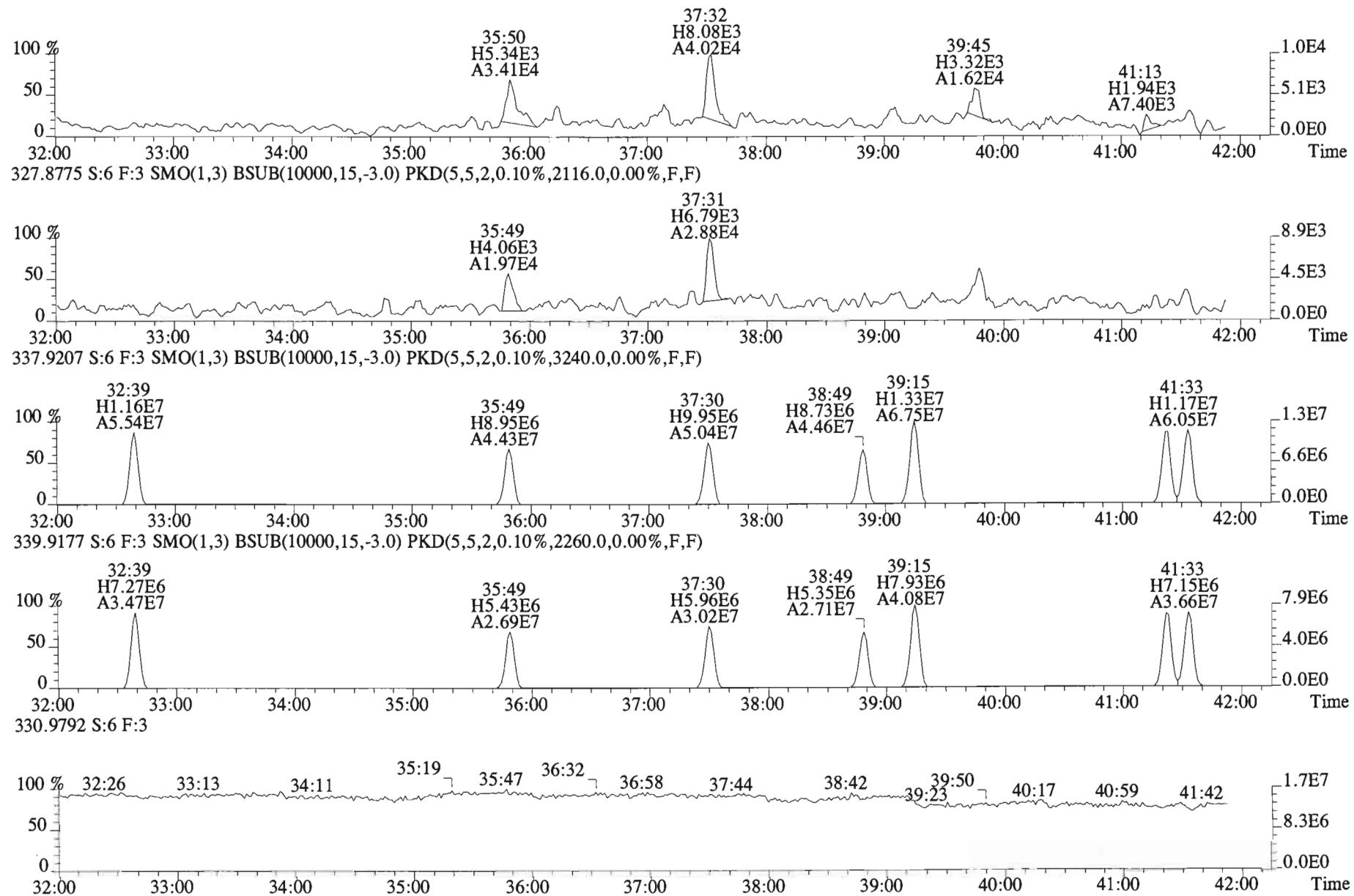
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 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
 289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2000,0,0.00%,F,F)



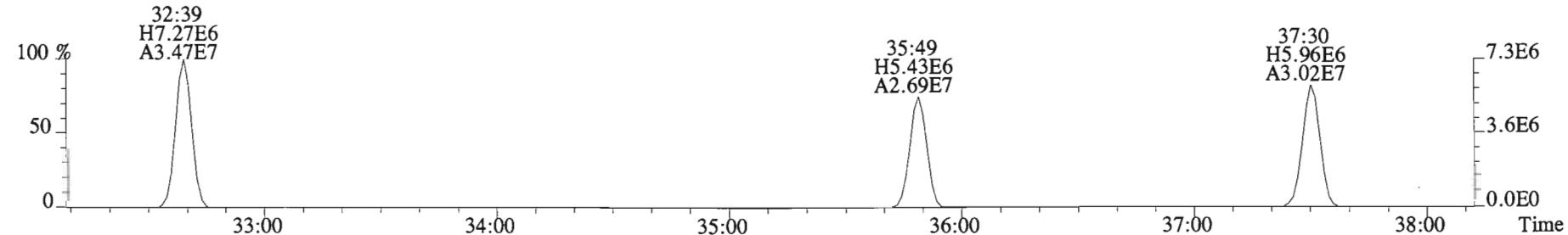
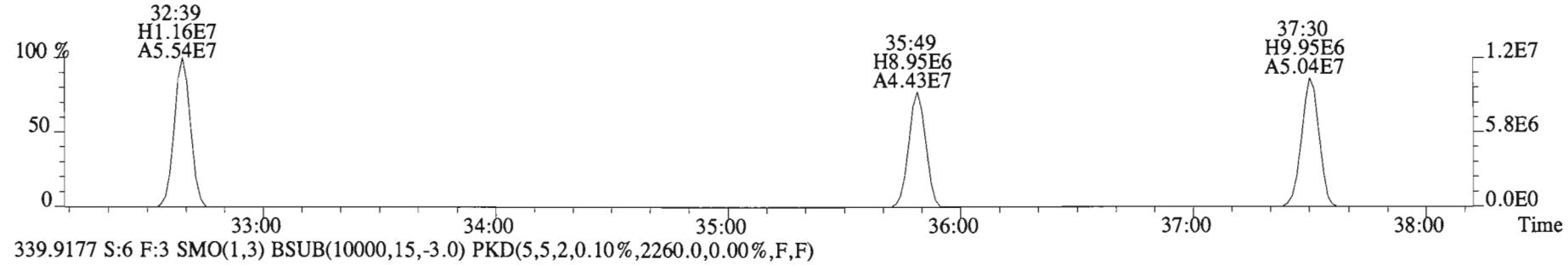
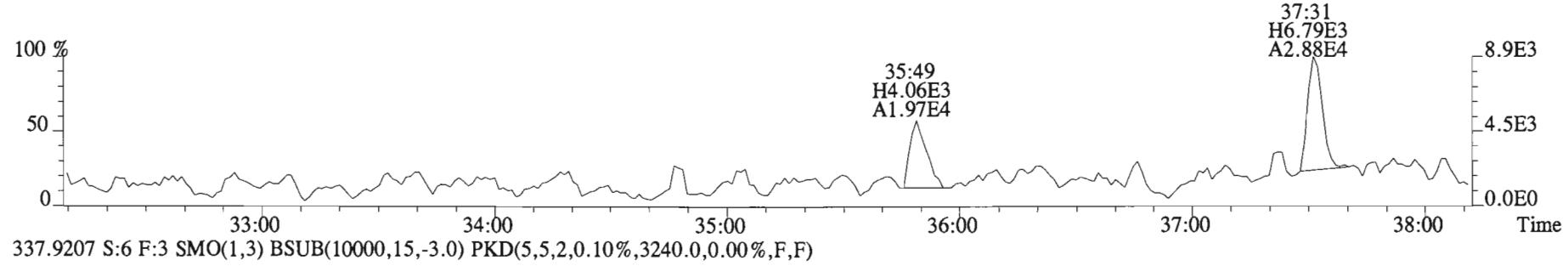
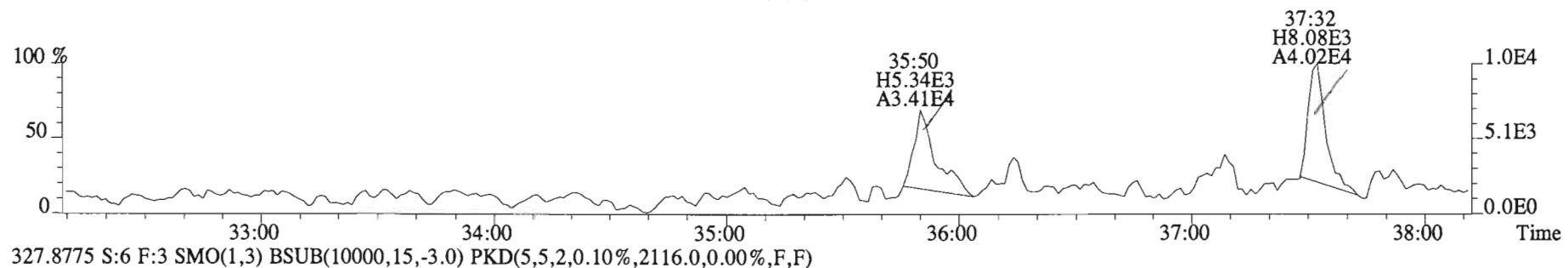
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Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,17560.0,0.00%,F,F)



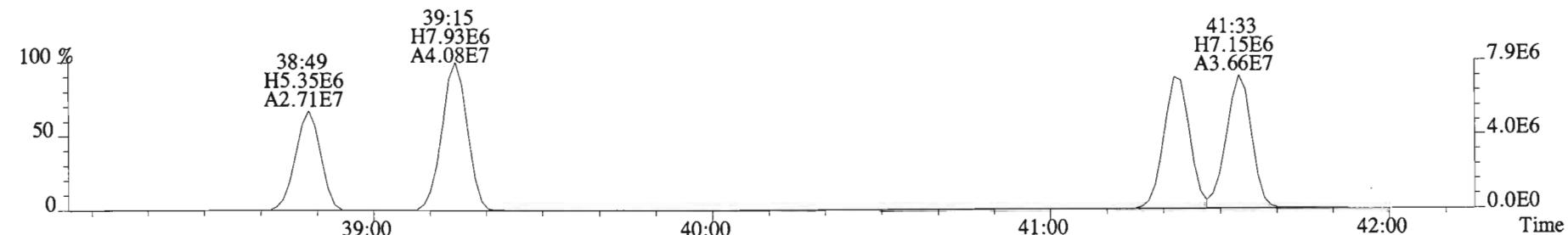
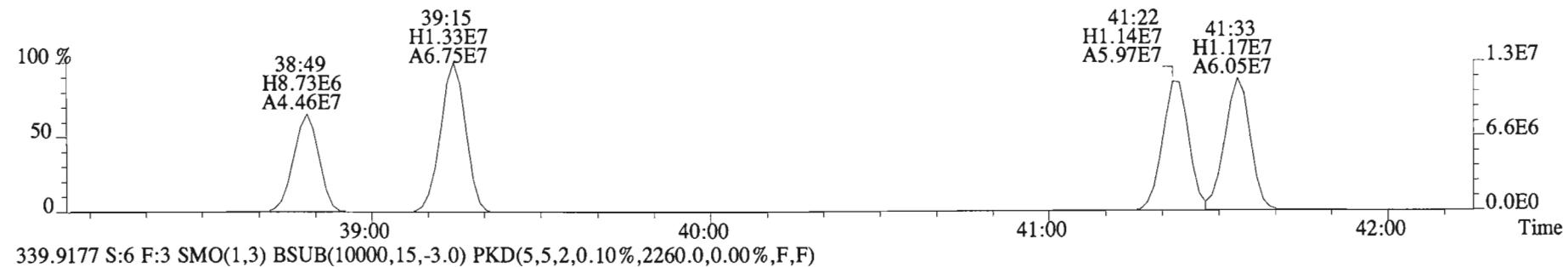
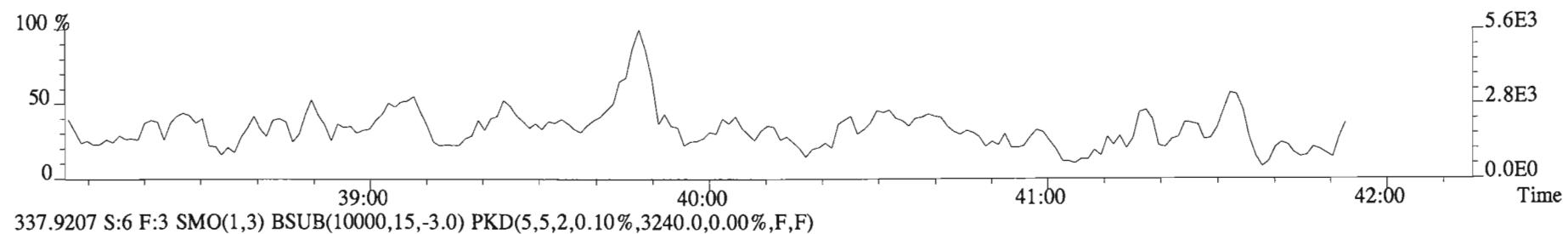
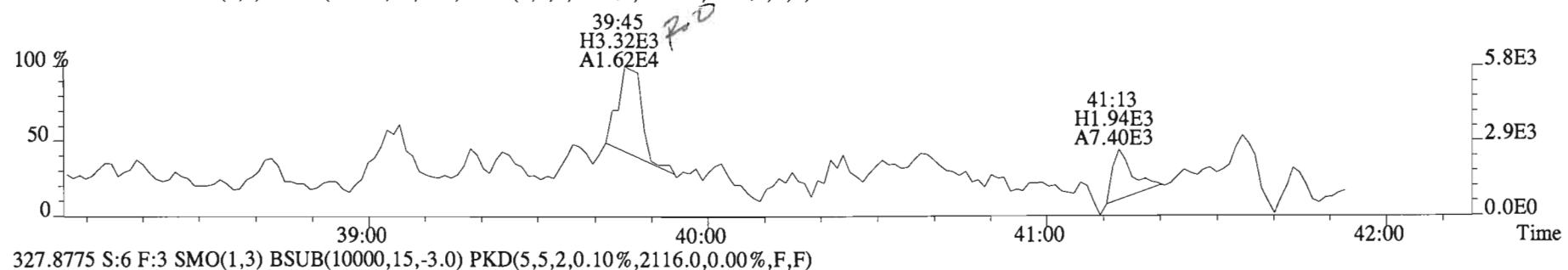
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 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
 325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1920.0,0.00%,F,F)



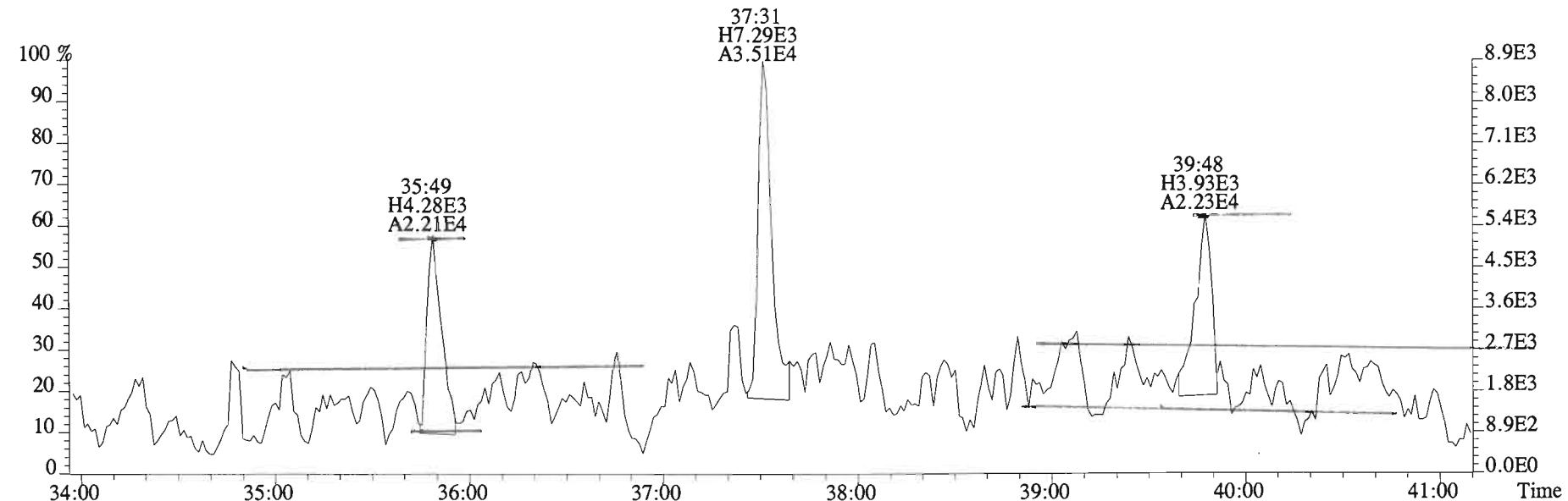
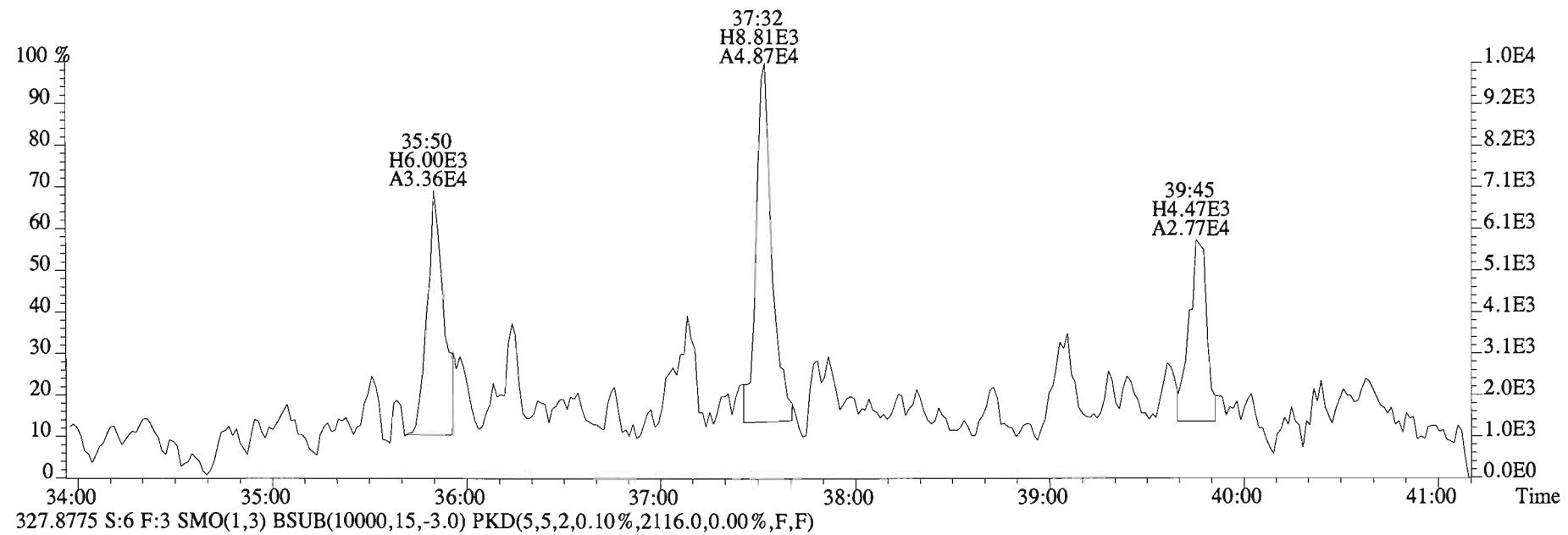
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Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1920.0,0.00%,F,F)



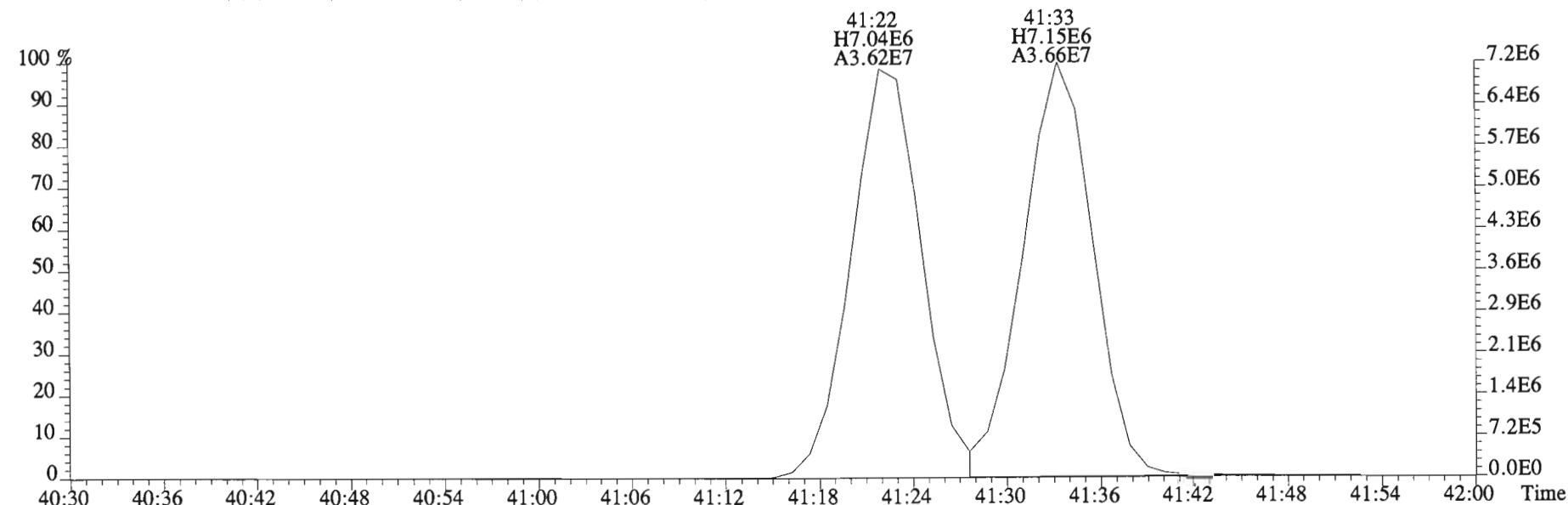
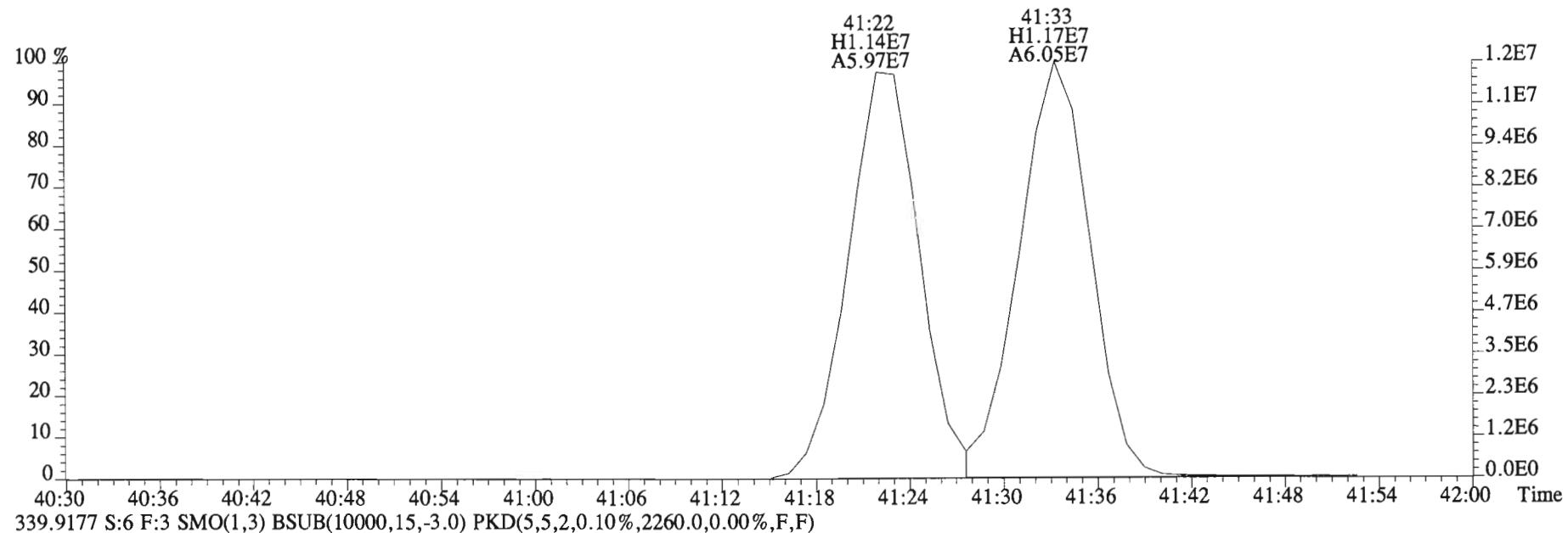
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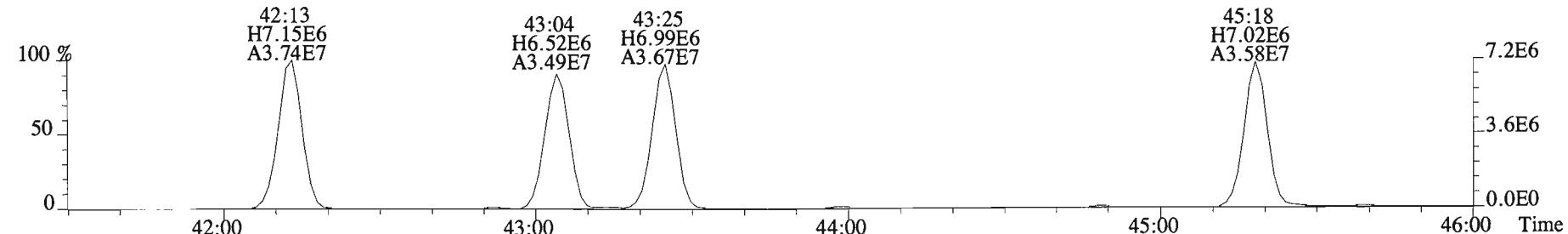
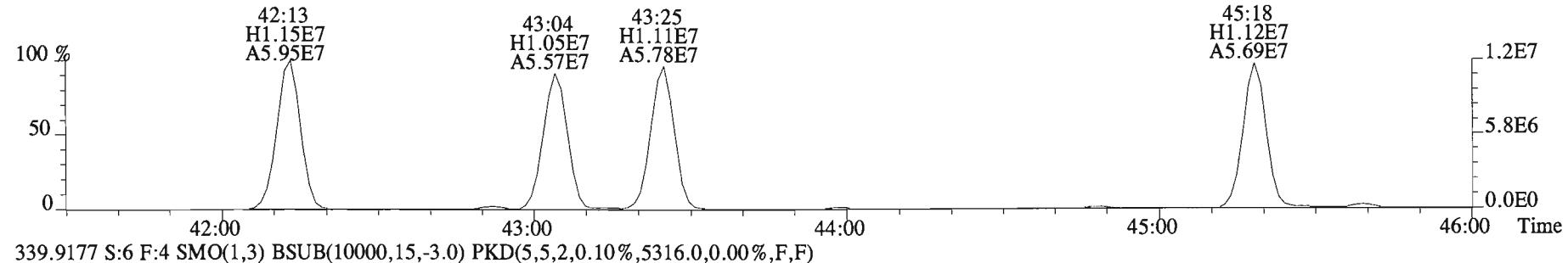
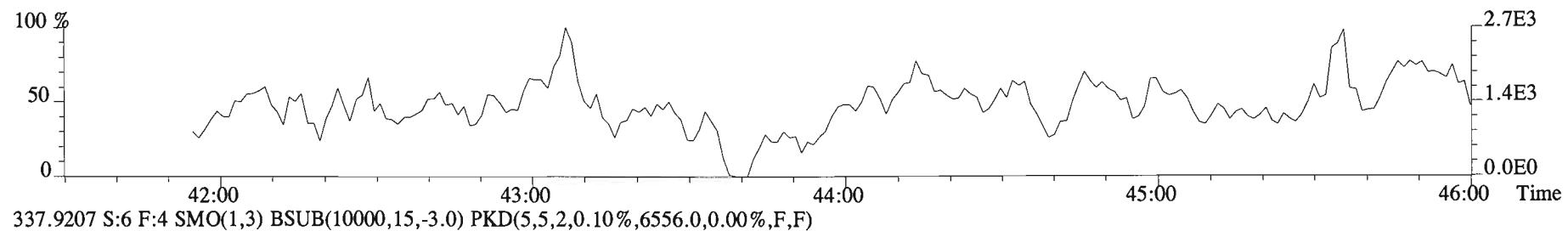
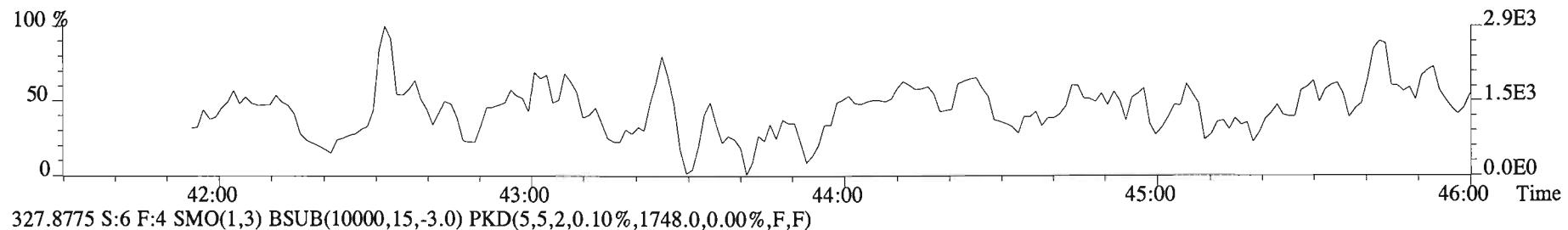
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325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



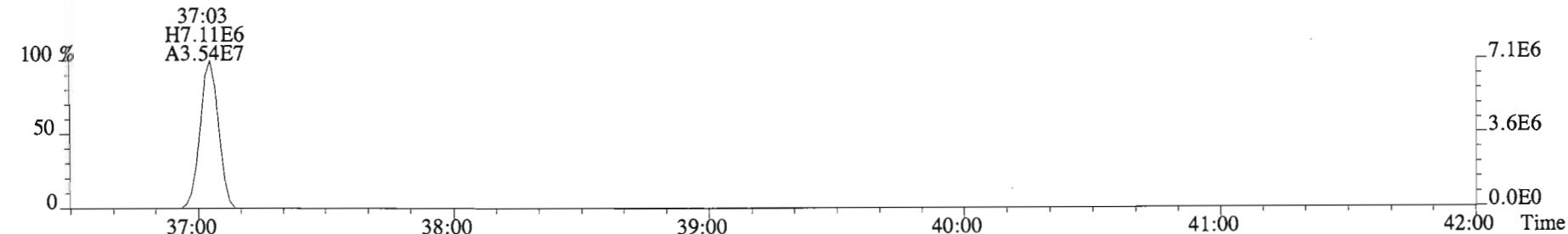
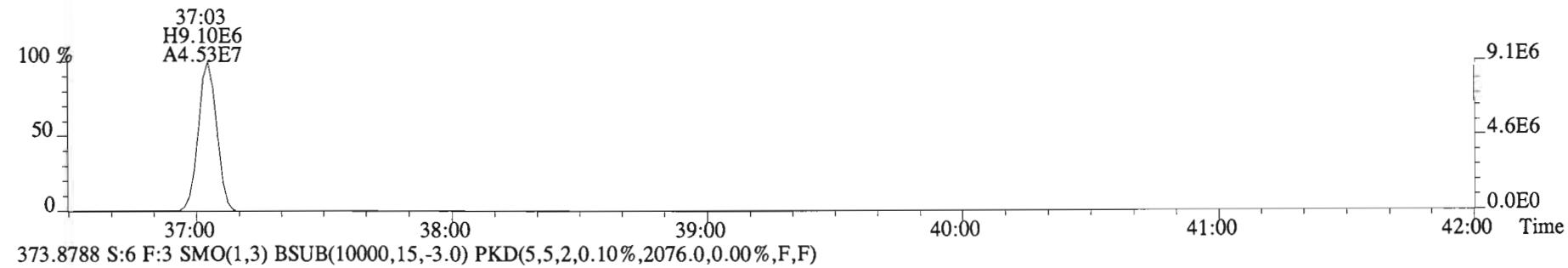
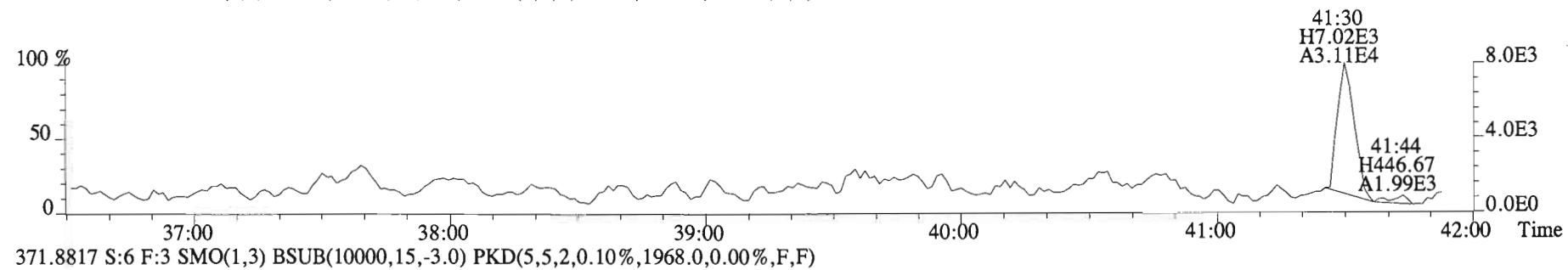
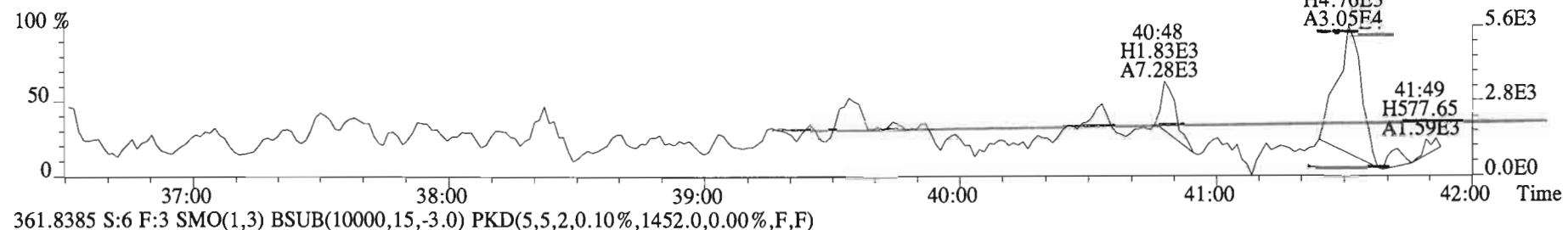
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337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3240.0,0.00%,F,F)



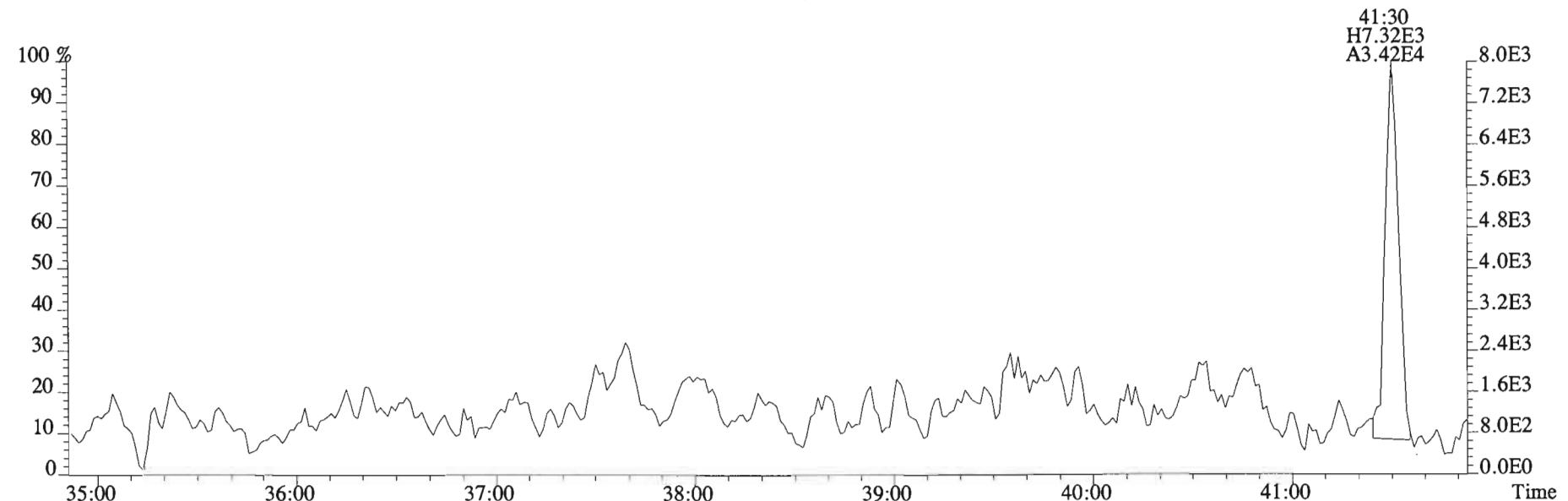
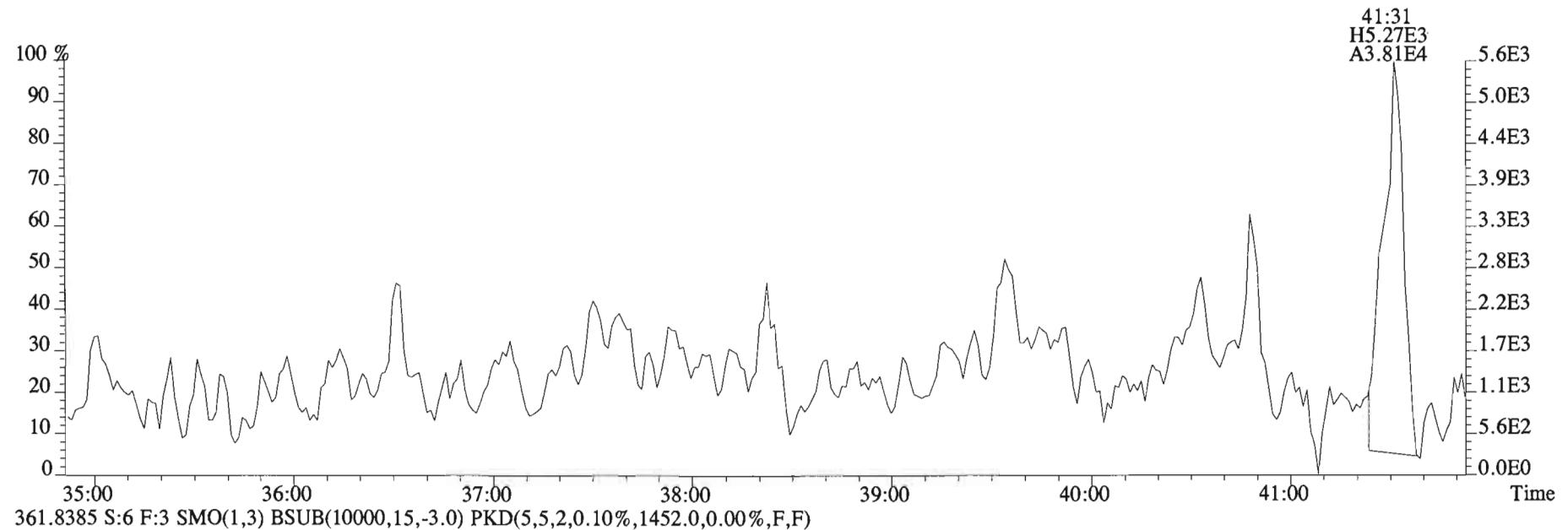
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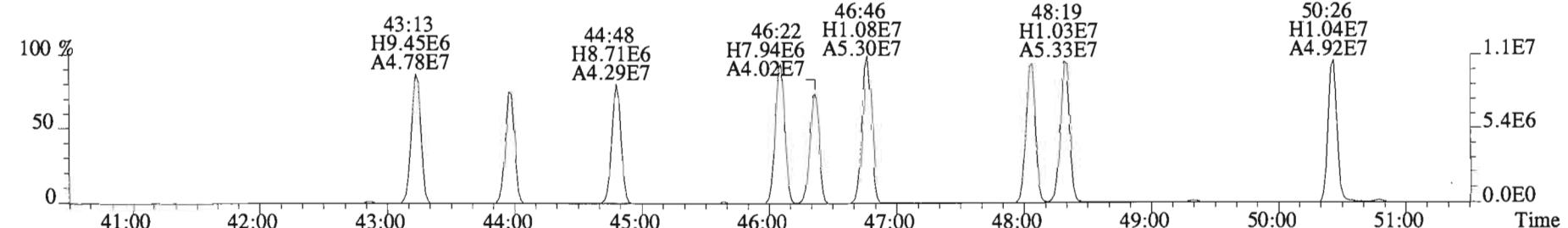
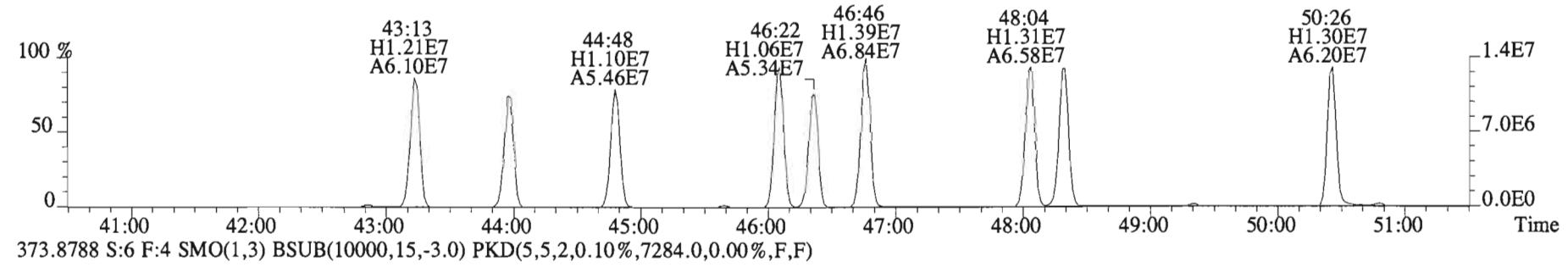
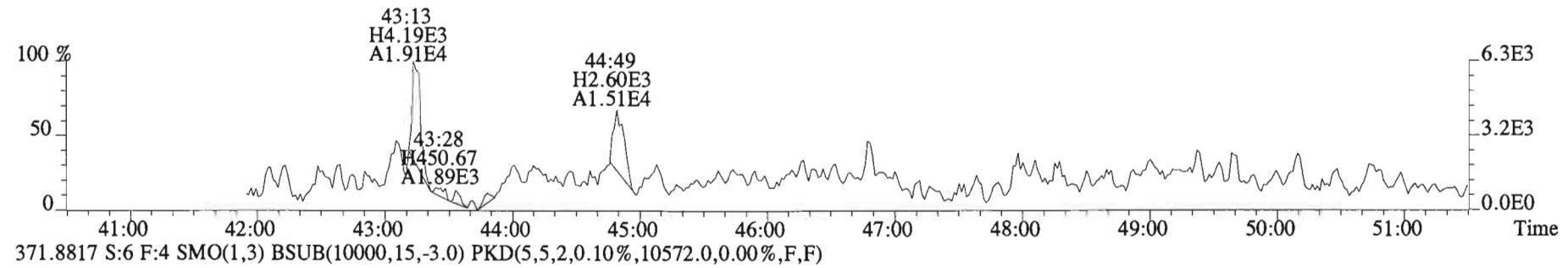
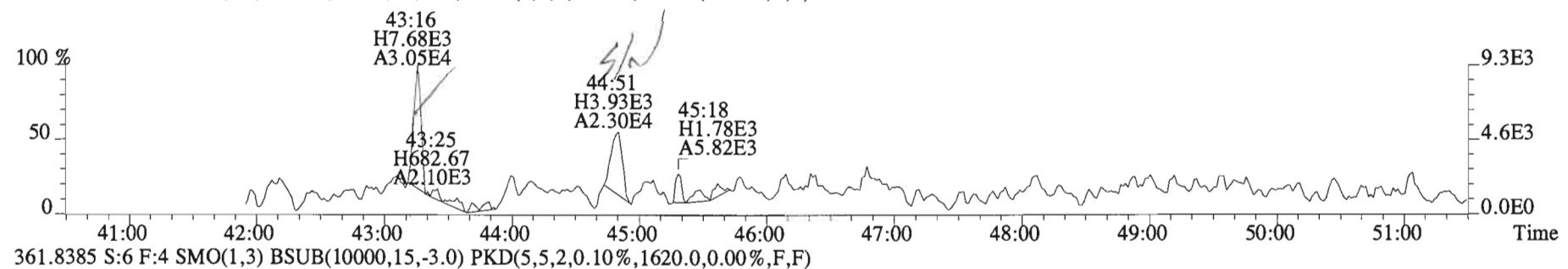
File:150225E1 #1-758 Acq:25-FEB-2015 18:28:35 GC EI + Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1644.0,0.00%,F,F)



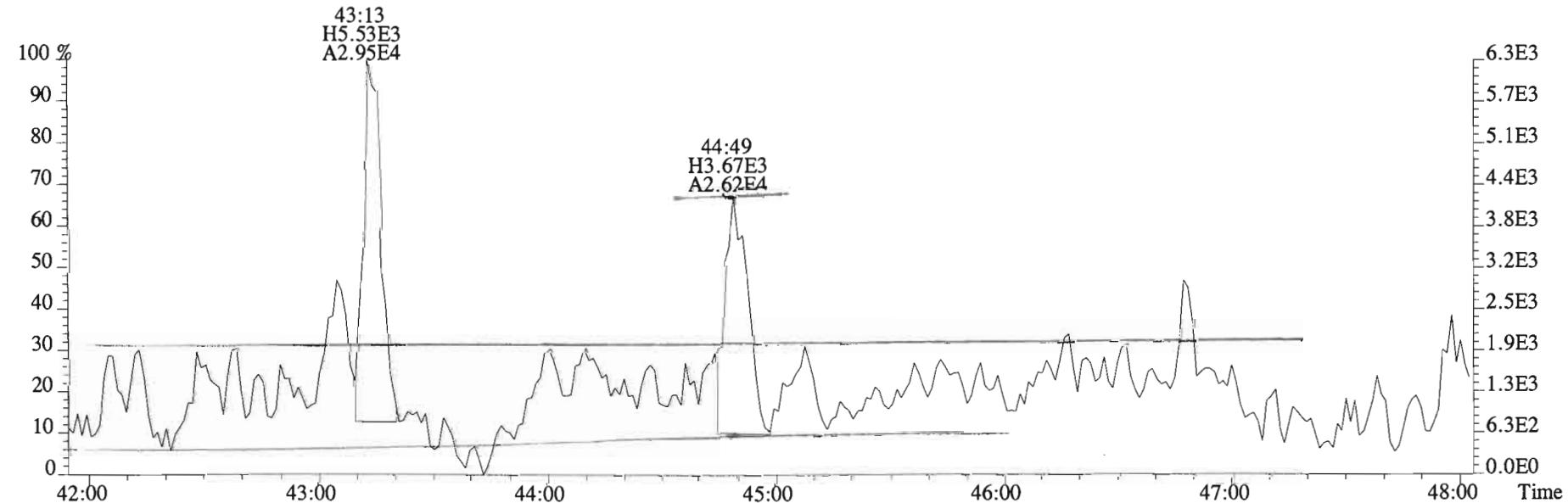
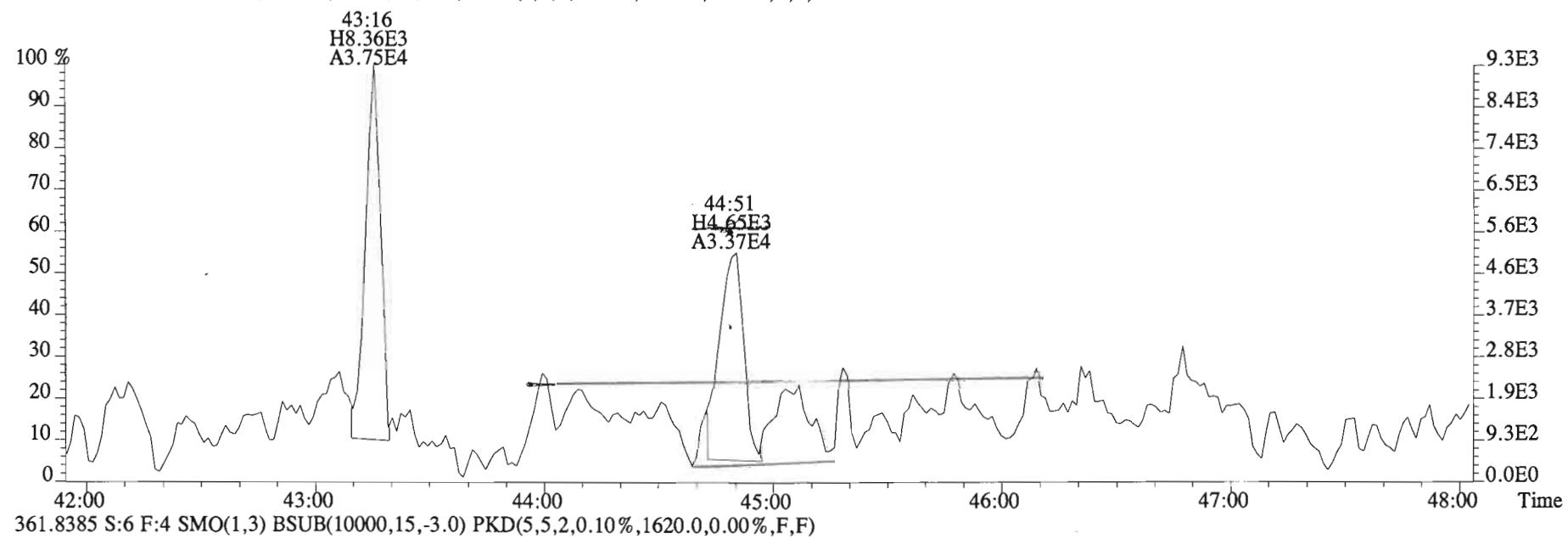
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Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1644.0,0.00%,F,F)



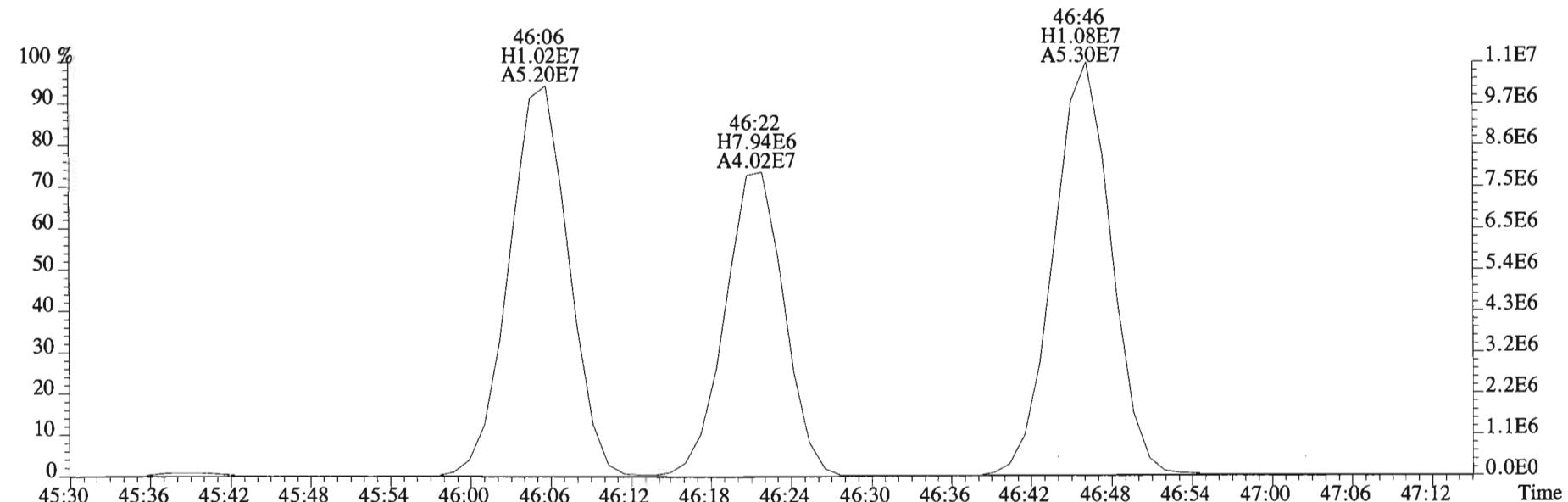
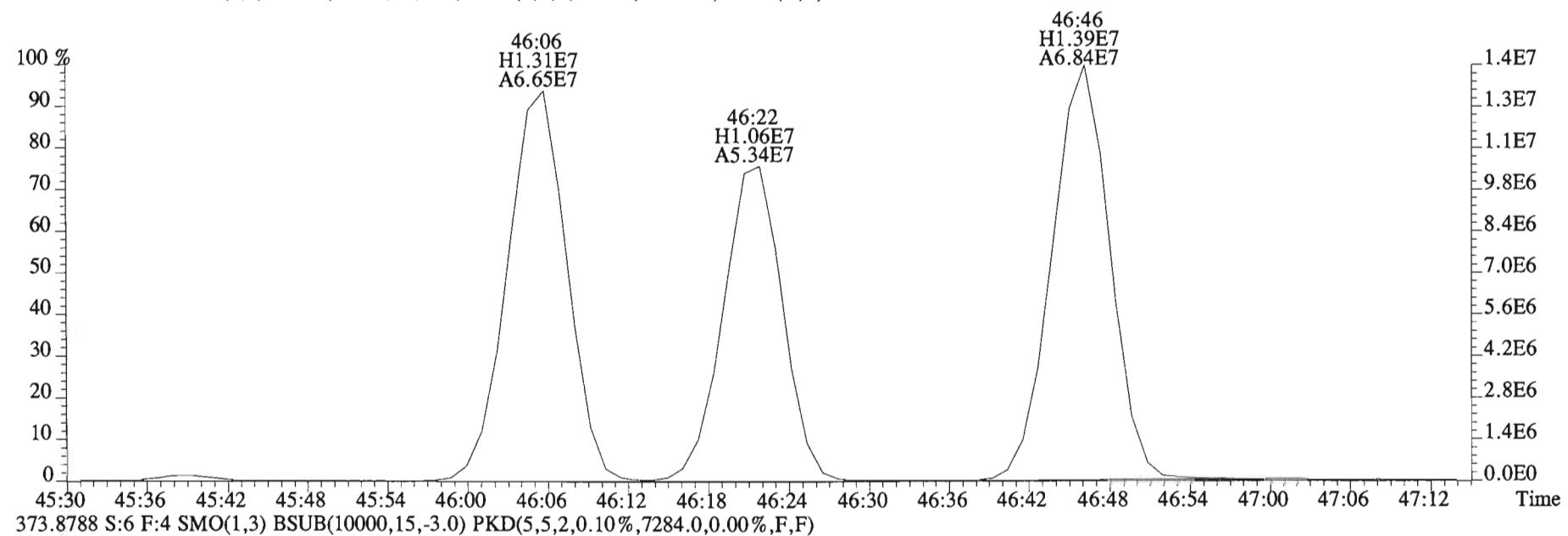
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 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
 359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1796.0,0.00%,F,F)



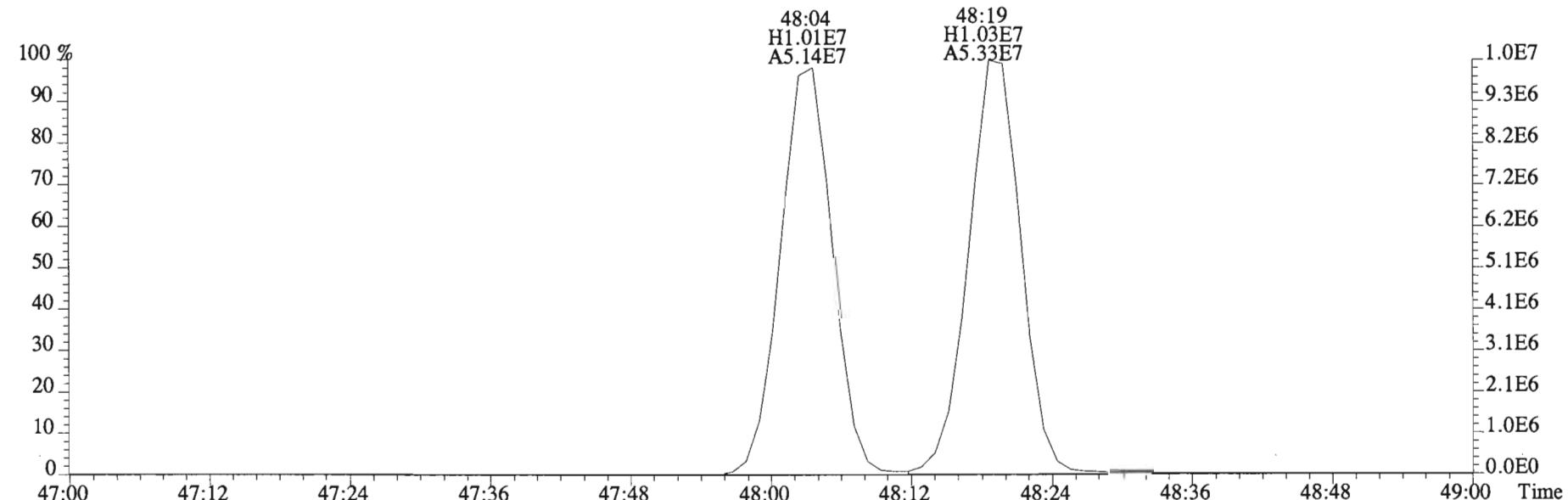
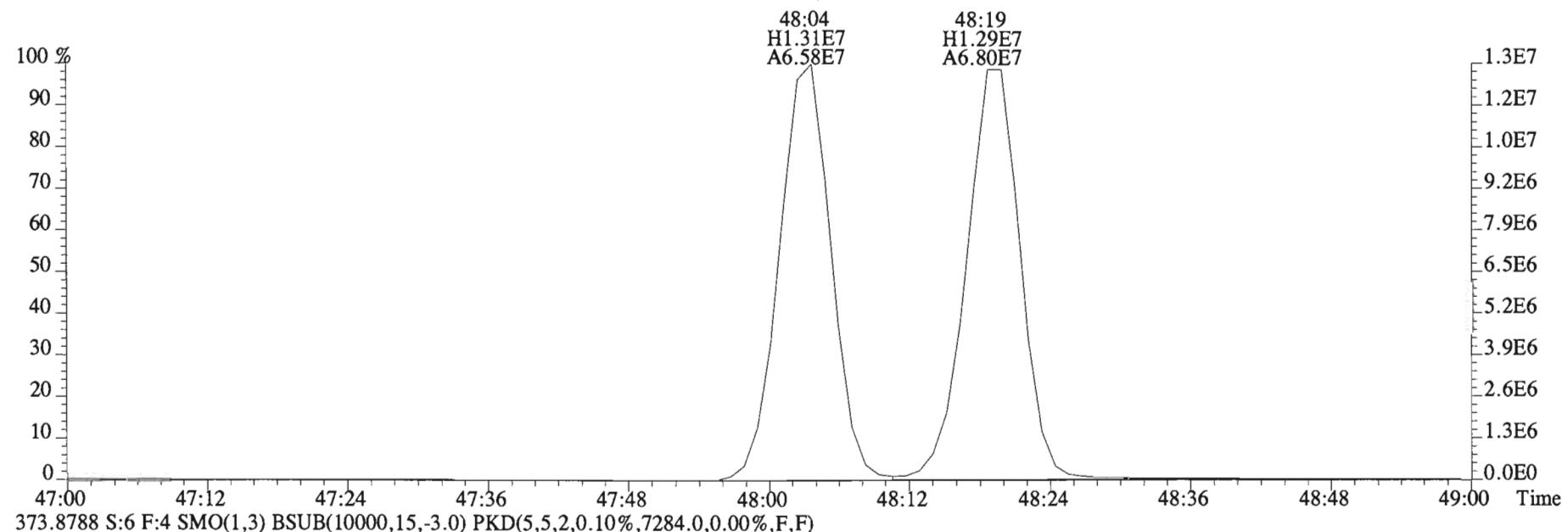
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Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1796.0,0.00%,F,F)



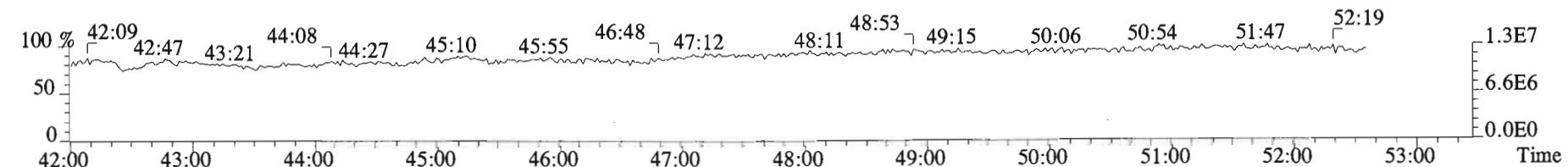
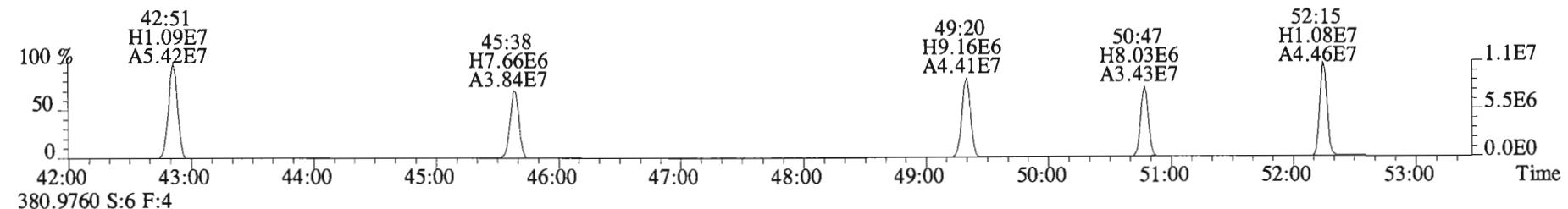
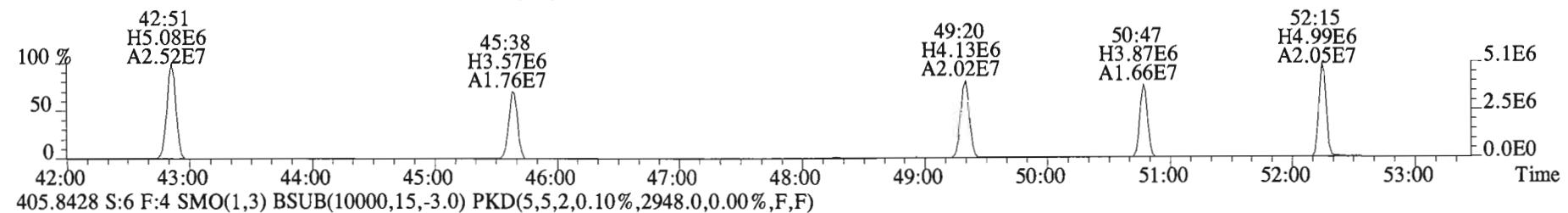
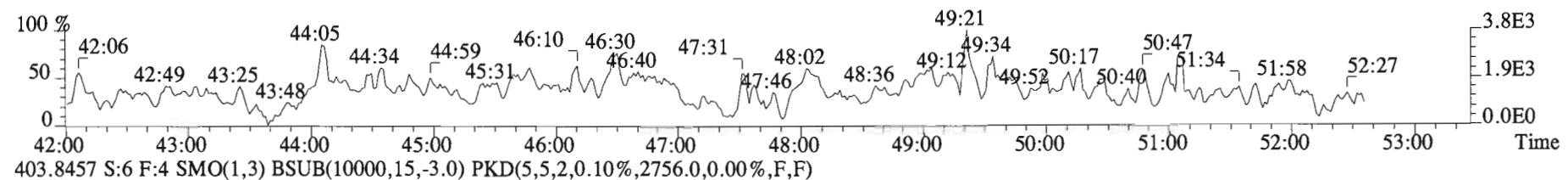
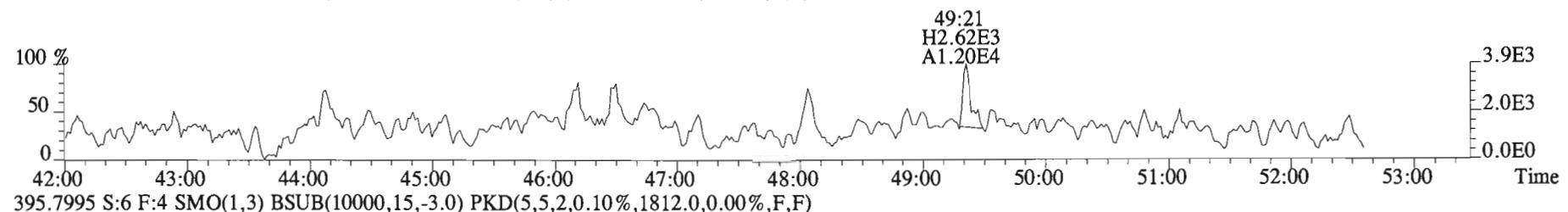
File:150225E1 #1-555 Acq:25-FEB-2015 18:28:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10572.0,0.00%,F,F)



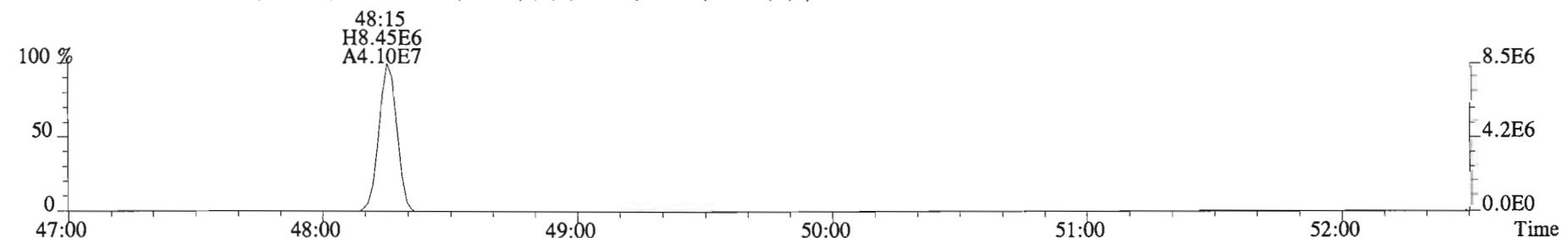
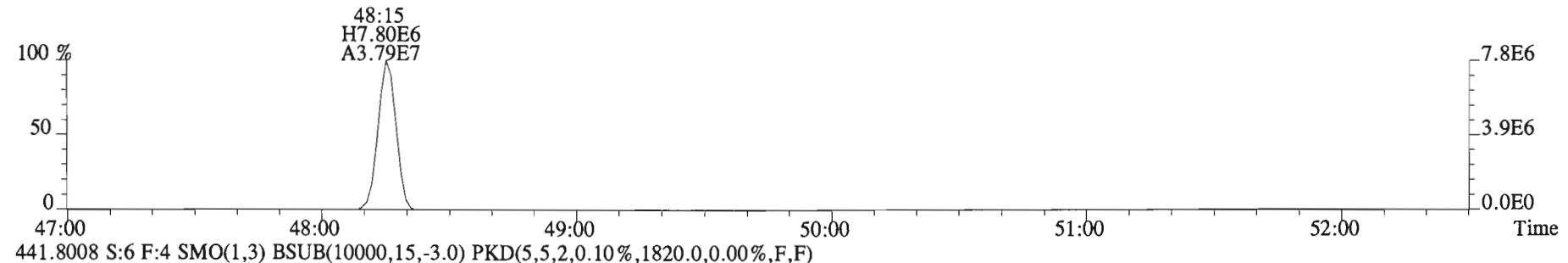
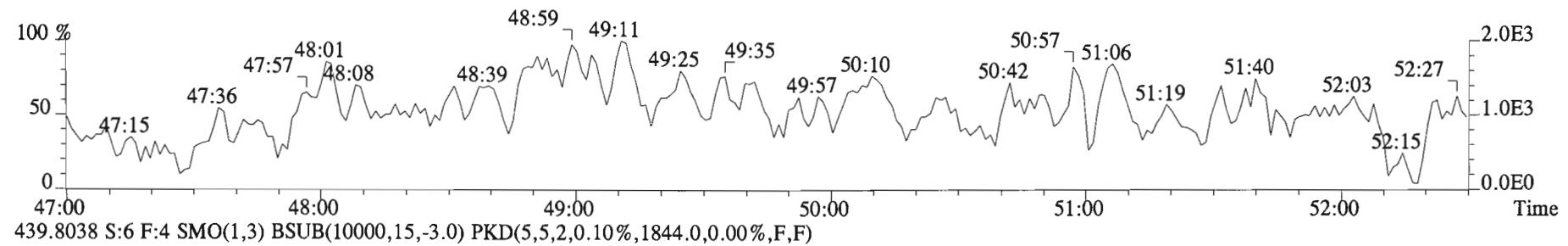
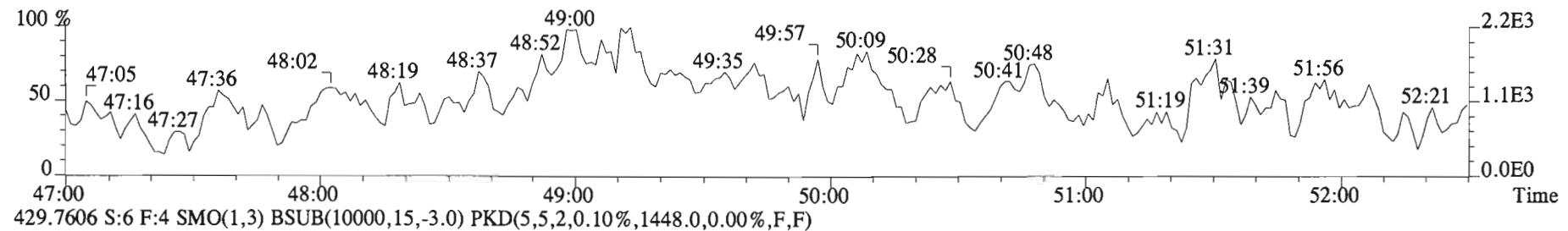
File:150225E1 #1-555 Acq:25-FEB-2015 18:28:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10572.0,0.00%,F,F)



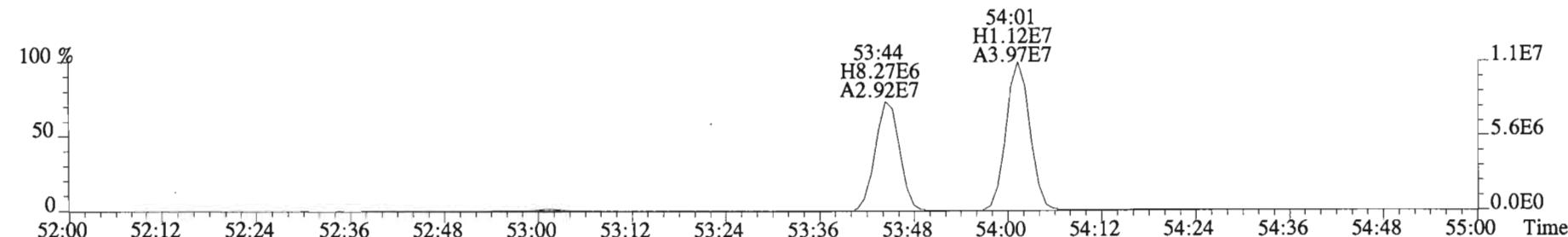
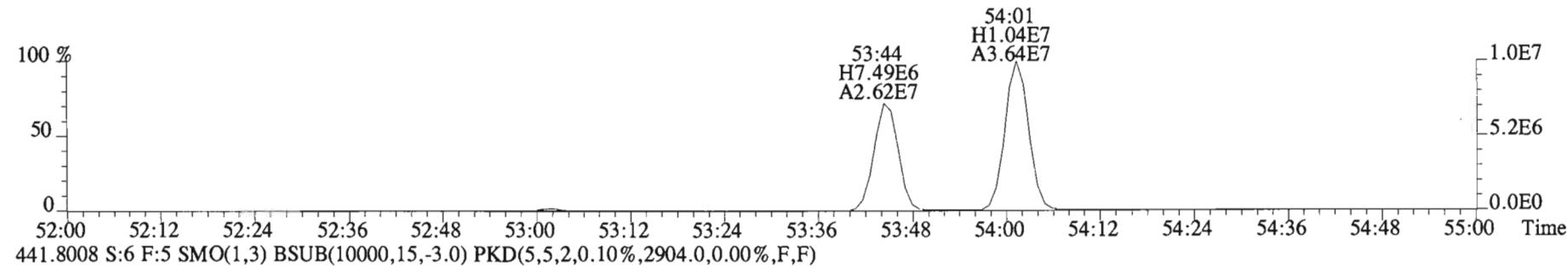
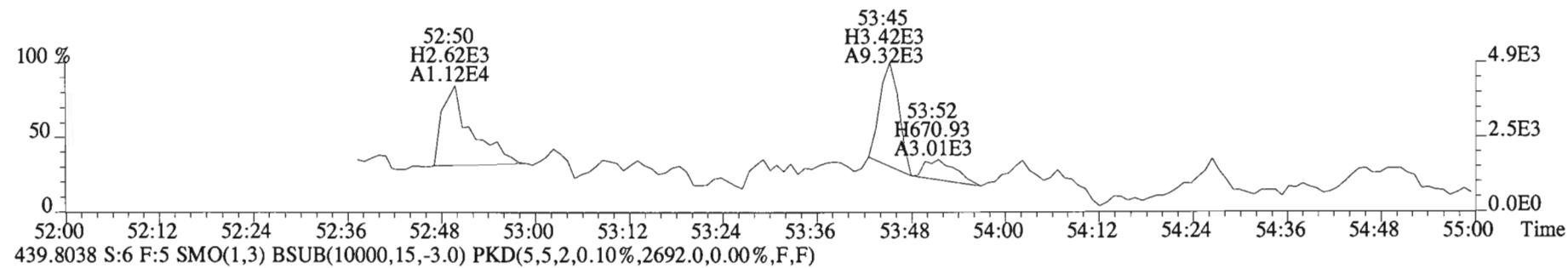
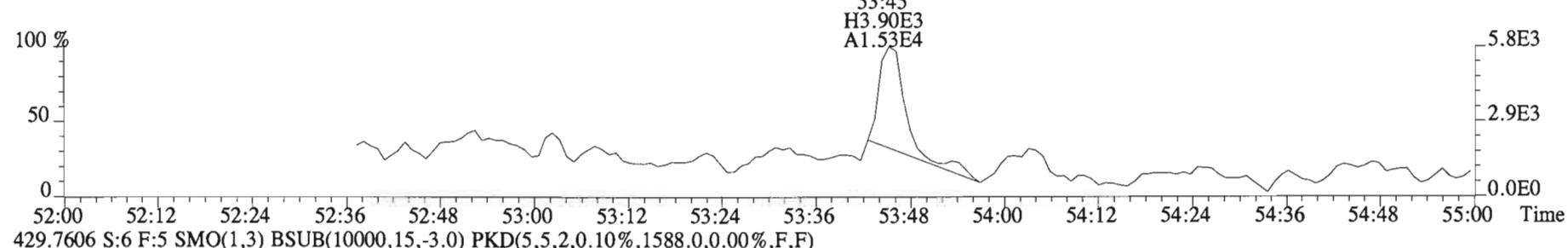
File:150225E1 #1-555 Acq:25-FEB-2015 18:28:35 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
 393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1680.0,0.00%,F,F)



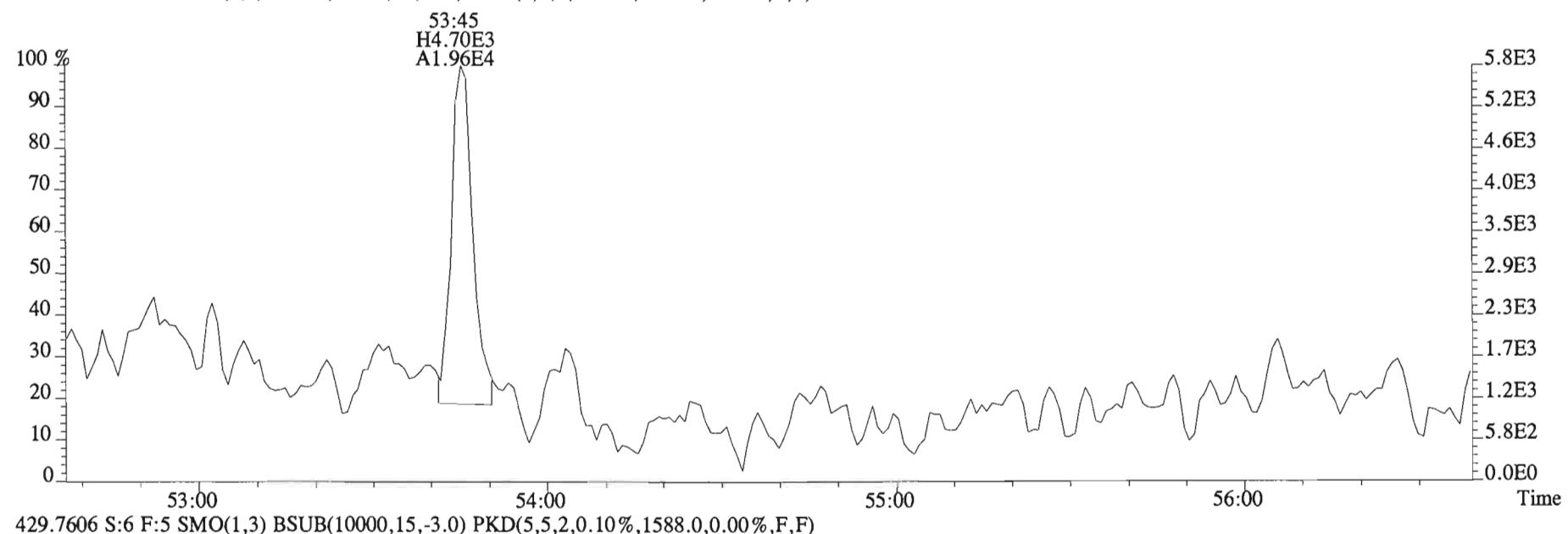
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 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
 427.7635 S:6 F:4 SMO(1,3) B\$UB(10000,15,-3.0) PKD(5,5,2,0.10%,1480.0,0.00%,F,F)



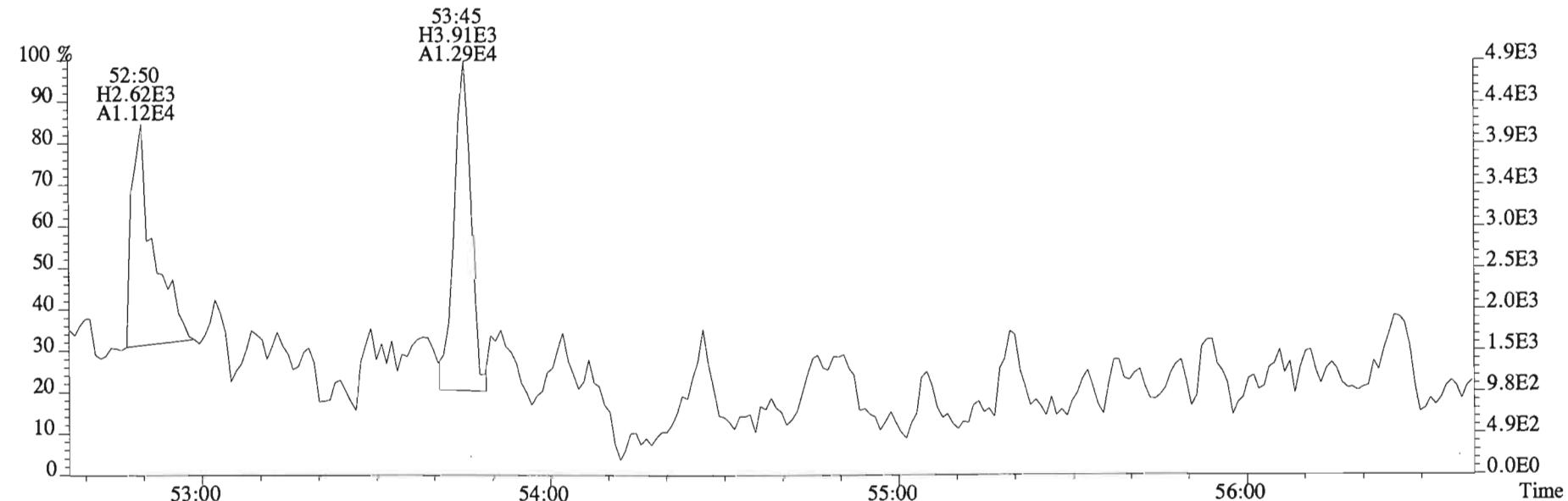
File:150225E1 #1-429 Acq:25-FEB-2015 18:28:35 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
 427.7635 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1616.0,0.00%,F,F)



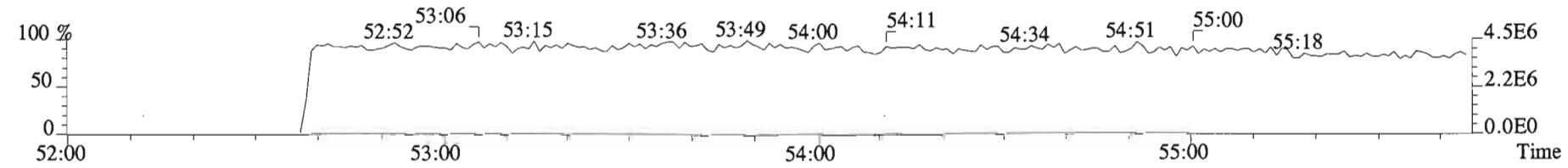
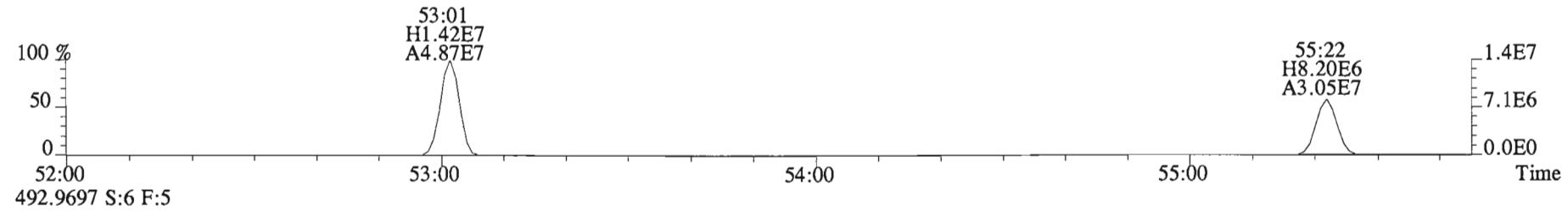
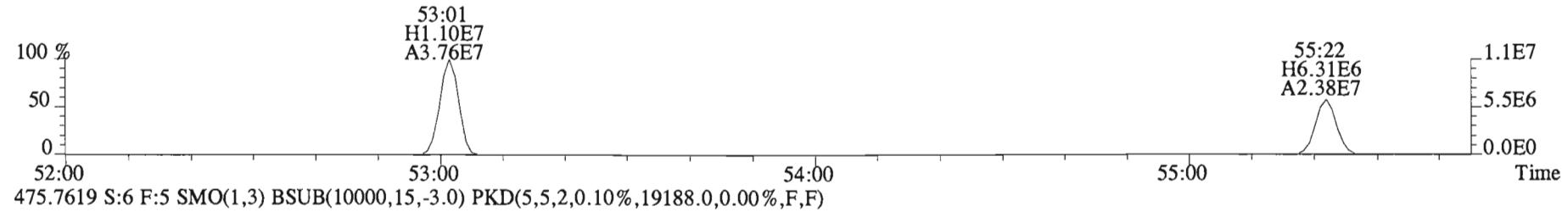
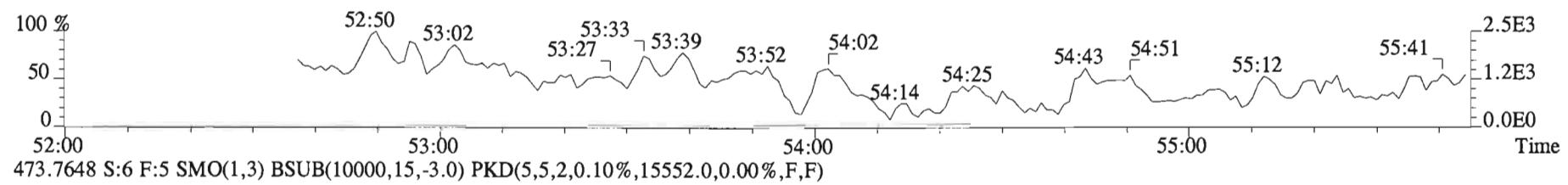
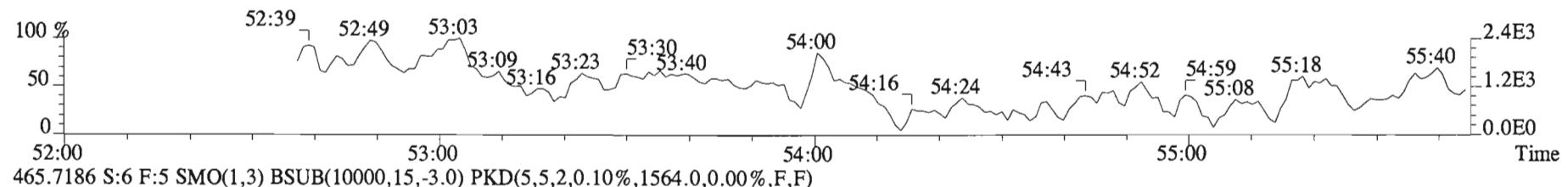
File:150225E1 #1-429 Acq:25-FEB-2015 18:28:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
427.7635 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1616.0,0.00%,F,F)



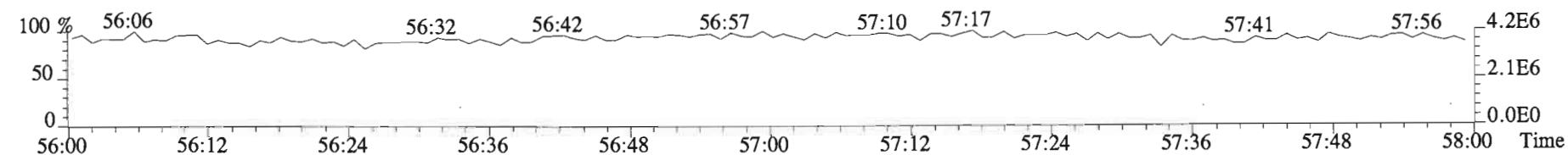
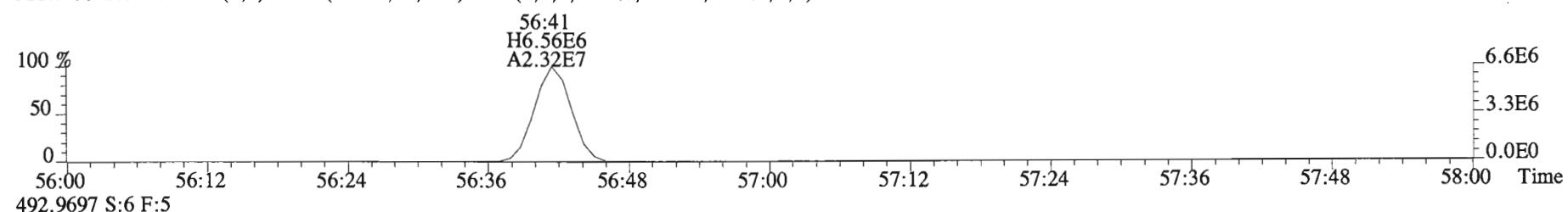
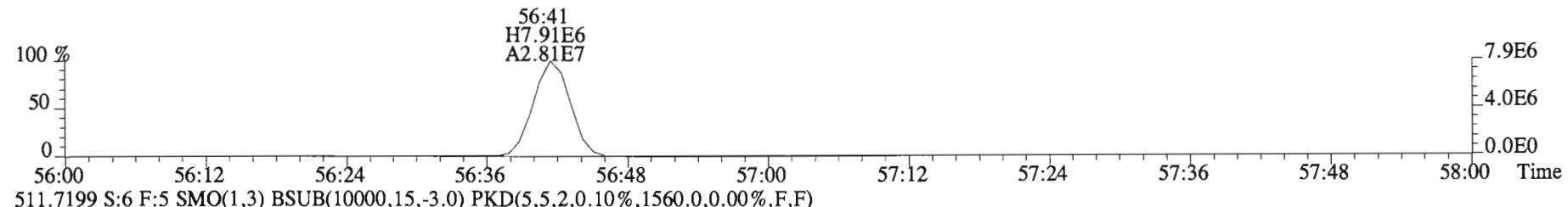
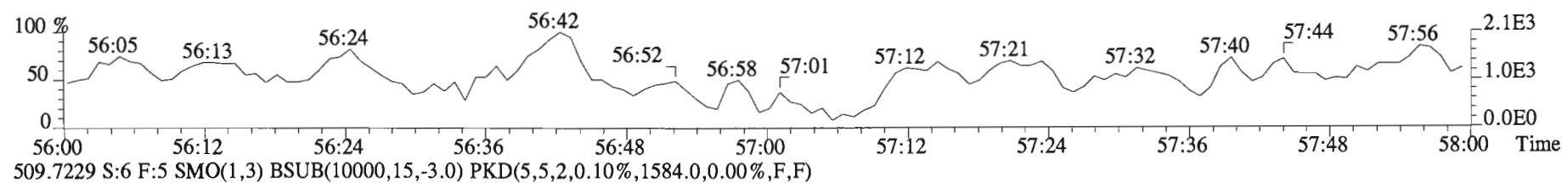
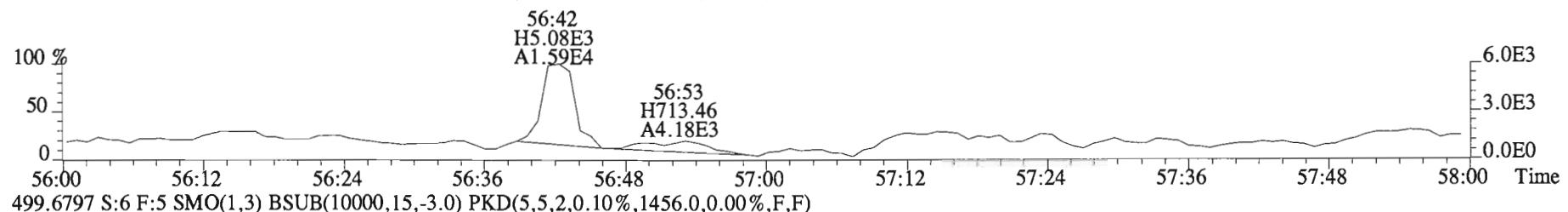
429.7606 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1588.0,0.00%,F,F)



File:150225E1 #1-429 Acq:25-FEB-2015 18:28:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
463.7216 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1436.0,0.00%,F,F)



File:150225E1 #1-429 Acq:25-FEB-2015 18:28:35 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BLK1 Method Blank 1 Exp:PCB_ZB1
 497.6826 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1432.0,0.00%,F,F)



Lab Name: Vista Analytical Laboratory OPR Data Filename: B5B0101-BS1

Matrix : AQUEOUS Ext. Date: 2-24-15 Analysis Date: 25-FEB-15 Time: 15:16:01

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

NATIVE ANALYTES	SPIKE	CONC.	OPR CONC.	Labeled Compounds	SPIKE	CONC.	OPR CONC.	Clean Up Standard	SPIKE	CONC.	OPR CONC.
	CONC.	FOUND	LIMITS		CONC.	FOUND	LIMITS		CONC.	FOUND	LIMITS
	(ng/mL)	(ng/mL)	(ng/mL)		(ng/mL)	(ng/mL)	(ng/mL)		(ng/mL)	(ng/mL)	(ng/mL)
PCB-1	50	37.8	30.0-67.5	13C-PCB-1	100	81.6	15-145	13C-PCB-79	100	93.8	40-145
PCB-3	50	38.0	30.0-67.5	13C-PCB-3	100	92.0	15-145	13C-PCB-178	100	86.9	40-145
PCB-4/10	200	80.1	120-270	13C-PCB-4	100	71.4	15-145				
PCB-15	100	42.0	60.0-135	13C-PCB-11	100	81.1	15-145				
PCB-19	50	46.8	30.0-67.5	13C-PCB-19	100	97.4	15-145				
PCB-37	50	46.7	30.0-67.5	13C-PCB-37	100	102.7	15-145				
PCB-54	50	48.4	30.0-67.5	13C-PCB-54	100	70.7	15-145				
PCB-81	50	43.1	30.0-67.5	13C-PCB-81	100	85.9	40-145				
PCB-77	50	43.6	30.0-67.5	13C-PCB-77	100	84.8	40-145				
PCB-104	50	49.1	30.0-67.5	13C-PCB-104	100	89.9	40-145				
PCB-123	50	49.5	30.0-67.5	13C-PCB-123	100	93.1	40-145				
PCB-106/118	100	97.0	60.0-135	13C-PCB-118	100	88.0	40-145				
PCB-114	50	40.4	30.0-67.5	13C-PCB-114	100	74.6	40-145				
PCB-105	50	40.5	30.0-67.5	13C-PCB-105	100	77.4	40-145				
PCB-126	50	42.7	30.0-67.5	13C-PCB-126	100	79.6	40-145				
PCB-155	50	48.2	30.0-67.5	13C-PCB-155	100	86.9	40-145				
PCB-167	50	47.4	30.0-67.5	13C-PCB-167	100	86.2	40-145				
PCB-156	50	46.7	30.0-67.5	13C-PCB-156	100	88.4	40-145				
PCB-157	50	48.1	30.0-67.5	13C-PCB-157	100	87.8	40-145				
PCB-169	50	48.0	30.0-67.5	13C-PCB-169	100	84.8	40-145				
PCB-188	50	47.7	30.0-67.5	13C-PCB-188	100	75.6	40-145				
PCB-189	50	47.5	30.0-67.5	13C-PCB-189	100	82.1	40-145				
PCB-202	50	49.0	30.0-67.5	13C-PCB-202	100	81.5	40-145				
PCB-205	50	47.0	30.0-67.5	13C-PCB-194	100	91.2	40-145				
PCB-208	50	48.4	30.0-67.5	13C-PCB-208	100	98.9	40-145				
PCB-206	50	49.2	30.0-67.5	13C-PCB-206	100	97.5	40-145				
PCB-209	50	45.5	30.0-67.5	13C-PCB-209	100	96.7	40-145				

Analyst: DMSDate: 2/26/15

Client ID: OPR
Lab ID: B5B0101-BS1

Filename: 150225E1 S:3 Acq:25-FEB-15 15:16:01 ConCal: ST150225E1-1
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 1.0000 EndCAL: NA

Page 2 of

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	5.90e+07	2.96	y	1.33	16:10	1.001	0.997-1.007	37.7636	PCB-52/69	1.22e+08	0.76	y	1.29	31:31	1.001	0.996-1.006	97.7631
PCB-2	6.86e+07	2.99	y	1.30	18:32	0.988	0.983-0.993	38.7199	PCB-73	5.97e+07	0.78	y	1.41	31:38	1.005	0.999-1.009	43.7871
PCB-3	6.74e+07	2.99	y	1.30	18:46	1.001	0.996-1.006	37.9560	PCB-43/49	1.05e+08	0.78	y	1.14	31:48	1.010	1.005-1.015	95.1235
PCB-4/10	9.02e+07	1.61	y	1.67	20:08	1.003	0.997-1.007	80.1125	PCB-47	5.28e+07	0.76	y	1.20	32:00	1.000	0.996-1.006	43.2079
PCB-7/9	1.15e+08	1.61	y	1.25	21:54	0.868	0.864-0.872	82.6266	PCB-48/75	1.33e+08	0.77	y	1.33	32:07	1.004	0.999-1.009	97.9798
PCB-6	5.87e+07	1.62	y	1.24	22:33	0.894	0.888-0.897	42.8123	PCB-65	6.63e+07	0.76	y	1.32	32:23	1.013	1.007-1.017	49.3981
PCB-5/8	1.21e+08	1.61	y	1.27	22:58	0.910	0.905-0.915	86.0592	PCB-62	6.56e+07	0.77	y	1.36	32:30	1.016	1.011-1.021	47.3573
PCB-14	7.19e+07	1.62	y	1.47	24:03	0.953	0.948-0.958	40.0175	PCB-44	4.94e+07	0.77	y	0.87	32:48	1.025	1.020-1.030	55.6518
PCB-11	6.49e+07	1.62	y	1.28	25:14	1.000	0.995-1.005	41.4303	PCB-42/59	1.25e+08	0.77	y	1.24	33:02	1.033	1.027-1.037	99.4495
PCB-12/13	1.31e+08	1.60	y	1.27	25:38	1.016	1.011-1.021	84.7114	PCB-41/64/71/72	2.72e+08	0.78	y	1.34	33:37	1.051	1.045-1.055	199.008
PCB-15	7.39e+07	1.61	y	1.44	25:57	1.029	1.023-1.031	41.9960	PCB-68	8.10e+07	0.78	y	1.61	33:52	1.059	1.053-1.063	49.3596
PCB-19	4.79e+07	1.06	y	1.18	24:14	1.001	0.996-1.006	46.8320	PCB-40	4.53e+07	0.77	y	0.86	34:05	1.066	1.061-1.071	51.7616
PCB-30	7.27e+07	1.04	y	1.87	25:07	1.037	1.033-1.043	44.9549	PCB-57	7.74e+07	0.77	y	1.12	34:27	0.970	0.965-0.975	45.5720
PCB-18	5.16e+07	1.04	y	0.89	25:52	0.954	0.949-0.959	44.7823	PCB-67	7.60e+07	0.76	y	1.09	34:45	0.979	0.974-0.984	45.9697
PCB-17	5.64e+07	1.05	y	0.96	26:03	0.960	0.956-0.966	45.3860	PCB-58	8.25e+07	0.78	y	1.14	34:52	0.982	0.977-0.987	47.8909
PCB-24/27	1.53e+08	1.05	y	1.30	26:37	0.981	0.977-0.987	90.7334	PCB-63	8.35e+07	0.78	y	1.16	35:01	0.986	0.981-0.991	47.3711
- PCB-16/32	1.26e+08	1.05	y	1.05	27:07	1.000	0.996-1.006	92.8205	PCB-74	8.34e+07	0.78	y	1.21	35:19	0.995	0.989-0.999	45.3258
- PCB-34	7.09e+07	1.08	y	1.30	27:55	0.960	0.955-0.965	44.1449	PCB-61/70	1.65e+08	0.78	y	1.13	35:30	1.000	0.995-1.005	96.7287
PCB-23	6.46e+07	1.08	y	1.21	28:01	0.964	0.958-0.968	43.2115	PCB-76/66	1.63e+08	0.78	y	1.18	35:42	1.006	1.000-1.010	90.9776
PCB-29	6.98e+07	1.07	y	1.21	28:15	0.972	0.967-0.977	46.7634	PCB-80	8.91e+07	0.78	y	1.32	35:57	1.001	0.995-1.005	45.5019
PCB-26	6.98e+07	1.08	y	1.24	28:28	0.979	0.974-0.984	45.6894	PCB-55	8.61e+07	0.78	y	1.23	36:16	1.009	1.004-1.014	47.3173
PCB-25	6.32e+07	1.08	y	1.10	28:37	0.984	0.980-0.990	46.6744	PCB-56/60	1.52e+08	0.78	y	1.11	36:46	1.023	1.018-1.028	93.2308
PCB-31	6.95e+07	1.06	y	1.25	28:59	0.997	0.992-1.002	44.9581	PCB-79	8.26e+07	0.77	y	1.16	37:50	1.053	1.048-1.058	48.1388
PCB-28	7.26e+07	1.10	y	1.24	29:05	1.000	0.996-1.006	47.5248	PCB-78	7.38e+07	0.78	y	1.18	38:32	0.987	0.982-0.992	44.7195
PCB-20/21/33	2.16e+08	1.07	y	1.16	29:42	1.022	1.016-1.026	151.507	PCB-81	7.79e+07	0.78	y	1.29	39:03	1.000	0.995-1.005	43.0931
PCB-22	6.85e+07	1.08	y	1.16	30:08	1.037	1.032-1.042	47.7065	PCB-77	7.51e+07	0.81	y	1.29	39:39	1.000	0.995-1.005	43.5586
PCB-36	7.41e+07	1.08	y	1.30	30:45	0.933	0.929-0.939	43.1967	PCB-104	5.66e+07	1.57	y	1.26	32:39	1.001	0.996-1.006	49.1113
PCB-39	7.80e+07	1.07	y	1.26	31:14	0.948	0.943-0.953	46.8655	PCB-96	4.95e+07	1.56	y	1.09	33:54	1.039	1.034-1.044	49.7338
PCB-38	7.36e+07	1.08	y	1.24	32:00	0.971	0.967-0.977	44.9380	PCB-103	4.67e+07	1.56	y	0.97	34:27	1.056	1.051-1.061	52.8659
PCB-35	7.75e+07	1.08	y	1.26	32:31	0.987	0.982-0.992	46.7523	PCB-100	4.74e+07	1.60	y	0.96	34:49	1.067	1.061-1.071	53.9531
PCB-37	8.32e+07	1.06	y	1.35	32:57	1.000	0.996-1.006	46.7292	PCB-94	4.04e+07	1.57	y	1.13	35:17	0.986	0.980-0.990	52.4379
PCB-54	6.07e+07	0.78	y	1.02	27:58	1.001	0.996-1.006	48.3737	PCB-95/98/102	1.32e+08	1.58	y	1.29	35:45	0.999	0.994-1.004	150.141
PCB-50	4.94e+07	0.77	y	0.78	29:08	1.042	1.037-1.047	51.8677	PCB-93	3.75e+07	1.55	y	1.06	35:55	1.003	0.998-1.008	51.7964
PCB-53	4.85e+07	0.78	y	1.14	29:46	0.946	0.941-0.951	44.2033	PCB-88/91	8.56e+07	1.54	y	1.12	36:12	1.011	1.006-1.016	111.823
PCB-51	4.77e+07	0.78	y	1.16	30:07	0.957	0.952-0.962	42.5419	PCB-121	5.61e+07	1.59	y	1.76	36:18	1.014	1.009-1.019	46.7607
PCB-45	4.56e+07	0.77	y	1.04	30:33	0.971	0.965-0.975	45.3721	PCB-84/92	8.50e+07	1.59	y	1.07	37:07	0.990	0.985-0.995	100.600
PCB-46	4.50e+07	0.78	y	0.95	31:03	0.986	0.981-0.991	49.1450	PCB-89	3.98e+07	1.59	y	1.00	37:19	0.995	0.990-1.000	50.6708

RL: MONO, TRI - DECA: _____

RL: DI : _____

Integrations

by

Analyst: *[Signature]*

Date: *2/26/11*

Reviewed

by

Analyst: *[Signature]*

Date: *2/26/11*

Client ID: OPR
Lab ID: B5B0101-BS1

Filename: 150225E1 S:3 Acq:25-FEB-15 15:16:01 ConCal: ST150225E1-1
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 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	9.32e+07	1.59	y	1.21	37:30	1.000	0.995-1.005	97.9321	PCB-133/142	8.02e+07	1.24	y	0.91	42:26	0.982	0.977-0.987	85.4678
PCB-113	5.72e+07	1.58	y	1.34	37:45	1.007	1.002-1.012	54.1534	PCB-131	4.08e+07	1.27	y	0.85	42:35	0.985	0.981-0.991	46.7302
PCB-99	4.36e+07	1.60	y	1.25	37:50	1.009	1.004-1.014	44.2446	PCB-146/165	1.00e+08	1.25	y	1.08	42:49	0.991	0.986-0.996	89.9174
PCB-119	6.08e+07	1.57	y	1.88	38:18	0.987	0.982-0.992	46.4012	PCB-132/161	1.04e+08	1.26	y	1.12	43:04	0.997	0.992-1.002	89.8357
PCB-108/112	9.30e+07	1.58	y	1.41	38:27	0.991	0.986-0.996	94.8270	PCB-153	5.45e+07	1.26	y	1.20	43:13	1.000	0.996-1.006	44.1186
PCB-83	5.76e+07	1.60	y	1.66	38:37	0.996	0.990-1.000	49.6709	PCB-168	6.43e+07	1.25	y	1.36	43:26	1.005	1.000-1.010	45.9593
PCB-97	4.38e+07	1.57	y	1.30	38:48	1.000	0.995-1.005	48.4305	PCB-141	4.85e+07	1.26	y	1.16	43:58	1.000	0.995-1.005	46.8155
PCB-86	3.38e+07	1.50	y	1.03	38:58	1.005	0.999-1.009	46.9533	PCB-137	5.03e+07	1.23	y	1.18	44:20	1.009	1.004-1.014	47.6801
B-87/117/125	1.58e+08	1.56	y	1.59	39:04	1.007	1.002-1.012	142.548	PCB-130	3.75e+07	1.26	y	0.92	44:27	1.011	1.006-1.016	45.4967
PCB-111/115	1.14e+08	1.57	y	1.86	39:15	1.012	1.006-1.016	88.1518	PCB-138/163/164	1.70e+08	1.26	y	1.38	44:49	1.001	0.996-1.006	132.078
PCB-85/116	8.64e+07	1.65	y	1.39	39:23	1.015	1.010-1.020	88.9850	PCB-158/160	1.23e+08	1.25	y	1.48	45:04	1.006	1.001-1.011	89.8599
PCB-120	6.30e+07	1.59	y	1.99	39:37	1.021	1.016-1.026	45.5255	PCB-129	4.31e+07	1.26	y	0.99	45:18	1.012	1.007-1.017	46.7782
PCB-110	5.29e+07	1.58	y	1.70	39:45	1.025	1.019-1.029	44.5810	PCB-166	6.34e+07	1.26	y	1.14	45:46	0.993	0.988-0.998	46.5379
PCB-82	3.30e+07	1.58	y	0.74	40:23	0.976	0.971-0.981	51.6557	PCB-159	6.81e+07	1.29	y	1.22	46:06	1.001	0.995-1.005	46.6709
PCB-124	6.02e+07	1.59	y	1.30	41:04	0.993	0.988-0.998	53.5921	PCB-128/162	1.16e+08	1.28	y	1.03	46:22	1.006	1.002-1.012	93.9851
PCB-107/109	1.09e+08	1.60	y	1.34	41:13	0.996	0.991-1.001	94.4609	PCB-167	6.49e+07	1.26	y	1.18	46:46	1.000	0.995-1.005	47.4361
PCB-123	5.34e+07	1.58	y	1.25	41:23	1.000	0.995-1.005	49.4761	PCB-156	6.87e+07	1.26	y	1.27	48:04	1.001	0.995-1.005	46.6658
- PCB-106/118	1.08e+08	1.57	y	1.29	41:34	1.000	0.996-1.006	97.0175	PCB-157	7.09e+07	1.25	y	1.22	48:20	1.000	0.995-1.005	48.1174
- PCB-114	5.35e+07	1.58	y	1.45	42:13	1.000	0.995-1.005	40.4117	PCB-169	5.88e+07	1.25	y	1.07	50:26	1.000	0.995-1.005	48.0332
PCB-122	4.81e+07	1.60	y	1.22	42:21	1.004	0.999-1.009	43.2084	PCB-188	5.40e+07	1.06	y	1.52	42:52	1.001	0.996-1.006	47.7088
PCB-105	5.70e+07	1.60	y	1.56	43:04	1.000	0.995-1.005	40.5386	PCB-184	5.10e+07	1.07	y	1.34	43:19	1.011	1.006-1.016	51.2384
PCB-127	4.98e+07	1.63	y	1.31	43:25	1.000	0.995-1.005	40.9186	PCB-179	5.41e+07	1.06	y	1.39	44:05	1.029	1.024-1.034	52.2541
PCB-126	5.25e+07	1.63	y	1.41	45:18	1.000	0.995-1.005	42.6560	PCB-176	5.58e+07	1.06	y	1.45	44:33	1.040	1.035-1.045	51.4784
PCB-155	4.59e+07	1.27	y	1.20	37:03	1.001	0.966-1.006	48.2224	PCB-186	5.54e+07	1.06	y	1.46	45:10	1.054	1.049-1.059	51.1024
PCB-150	4.26e+07	1.27	y	1.13	38:19	1.035	1.030-1.040	47.6188	PCB-178	4.17e+07	1.06	y	1.07	45:39	1.066	1.061-1.071	52.1674
PCB-152	4.36e+07	1.28	y	1.17	38:47	1.048	1.043-1.053	46.9530	PCB-175	4.33e+07	1.04	y	1.05	45:60	1.074	1.069-1.079	55.5924
PCB-145	3.92e+07	1.26	y	1.09	39:14	1.060	1.055-1.065	45.1533	PCB-182/187	9.01e+07	1.07	y	1.14	46:10	1.078	1.073-1.083	106.539
PCB-136	4.33e+07	1.26	y	1.14	39:34	1.068	1.063-1.073	47.7295	PCB-183	4.89e+07	1.05	y	1.22	46:29	1.085	1.080-1.090	53.6311
PCB-148	3.04e+07	1.30	y	0.82	39:41	1.072	1.066-1.076	46.9237	PCB-185	4.26e+07	1.05	y	1.40	47:08	0.956	0.950-0.960	49.1109
PCB-154	3.52e+07	1.27	y	0.89	40:10	1.085	1.079-1.089	49.7937	PCB-174	3.94e+07	1.05	y	1.29	47:30	0.963	0.958-0.968	49.4757
PCB-151	3.30e+07	1.27	y	0.82	40:48	1.102	1.097-1.107	50.7800	PCB-181	4.14e+07	1.06	y	1.35	47:37	0.965	0.960-0.970	49.6521
PCB-135	3.48e+07	1.24	y	0.80	41:01	1.108	1.101-1.113	55.0526	PCB-177	3.79e+07	1.06	y	1.27	47:46	0.969	0.963-0.973	48.4975
PCB-144	3.24e+07	1.26	y	0.86	41:08	1.111	1.105-1.116	47.7363	PCB-171	4.31e+07	1.05	y	1.46	48:04	0.975	0.969-0.979	47.9432
PCB-147	3.00e+07	1.28	y	0.78	41:15	1.114	1.108-1.120	48.5303	PCB-173	3.67e+07	1.05	y	1.10	48:30	0.983	0.978-0.988	53.8275
PCB-139/149	6.49e+07	1.31	y	0.87	41:31	1.121	1.115-1.127	93.8552	PCB-172	4.15e+07	1.06	y	1.35	48:56	0.992	0.987-0.997	49.7091
- PCB-140	3.06e+07	1.25	y	0.78	41:42	1.126	1.120-1.132	49.5415	PCB-192	5.14e+07	1.06	y	1.74	49:08	0.996	0.991-1.001	47.9322
- PCB-134/143	9.04e+07	1.26	y	0.93	42:09	0.975	0.970-0.980	94.1047	PCB-180	4.11e+07	1.04	y	1.45	49:20	1.000	0.995-1.005	45.9828

Integrations
by _____
RL: MONO, TRI - DECA: _____ Analyst: DMS
Date: 2/26/15

Client ID: OPR
Lab ID: B5B0101-BS1

Filename: 150225E1 S:3 Acq:25-FEB-15 15:16:01 ConCal: ST150225E1-1
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 1.0000 EndCAL: NA

Page 2 of

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-193	5.40e+07	1.05	y	1.85	49:32	1.004	0.999-1.009	47.2156
PCB-191	5.43e+07	1.07	y	1.86	49:46	1.009	1.005-1.015	47.2417
PCB-170	3.88e+07	1.06	y	1.67	50:47	1.001	0.995-1.005	46.3198
PCB-190	5.37e+07	1.05	y	2.25	50:57	1.004	0.999-1.009	47.6549
PCB-189	5.08e+07	1.05	y	1.67	52:15	1.001	0.995-1.005	47.4892
PCB-202	3.91e+07	0.89	y	1.02	48:16	1.000	0.995-1.005	49.0034
PCB-201	4.45e+07	0.90	y	1.10	48:45	1.010	1.005-1.015	51.8809
PCB-204	4.14e+07	0.90	y	1.07	48:54	1.014	1.009-1.019	49.2829
PCB-197	4.46e+07	0.89	y	1.17	49:13	1.020	1.015-1.025	48.8759
PCB-200	4.07e+07	0.89	y	1.03	50:04	1.038	1.034-1.044	50.3012
PCB-198	2.96e+07	0.91	y	0.75	51:21	1.064	1.062-1.072	50.1491
PCB-199	2.94e+07	0.89	y	0.74	51:28	1.067	1.064-1.074	50.7477
- PCB-196/203	6.34e+07	0.88	y	0.83	51:43	1.072	1.070-1.080	97.6870
- PCB-195	3.28e+07	0.91	y	1.14	52:53	0.984	0.979-0.989	52.7402
PCB-194	3.11e+07	0.91	y	1.29	53:44	1.000	0.995-1.005	44.1015
PCB-205	4.12e+07	0.92	y	1.61	54:01	1.006	1.001-1.010	46.9631
PCB-208	4.23e+07	1.32	y	1.01	53:01	1.000	0.995-1.005	48.4369
PCB-207	4.28e+07	1.36	y	1.03	53:20	1.006	1.001-1.011	48.4433
PCB-206	2.49e+07	1.33	y	0.88	55:23	1.000	0.995-1.005	49.2167
PCB-209	3.37e+07	1.20	y	1.35	56:43	1.000	0.995-1.005	45.4826

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	1.95e+08	2.96	y	16:10	1.31
Total Di-PCB	7.30e+08	1.61	y	20:08	1.32
Total Tri-PCB	5.08e+08	1.06	y	24:14	1.20
Total Tri-PCB	1.17e+09	1.08	y	27:55	1.23
Total Tetra-PCB	2.86e+09	0.78	y	27:58	1.17
Total Penta-PCB	2.00e+09	1.57	y	32:39	1.24
Total Penta-PCB	2.79e+08	1.58	y	42:13	1.39
Total Hexa-PCB	5.06e+08	1.27	y	37:03	0.94
Total Hexa-PCB	1.54e+09	1.26	y	42:09	1.13
Total Hepta-PCB	1.13e+09	1.06	y	42:52	1.37
Total Octa-PCB	3.33e+08	0.89	y	48:16	0.95
Total Octa-PCB	1.07e+08	0.91	y	52:53	1.35
Total Nona-PCB	1.10e+08	1.32	y	53:01	0.99
Total Deca-PCB	3.37e+07	1.20	y	56:43	1.35

Total PCB Conc:9882.61184800

Integrations
by
Analyst: DMS
Date: 2/26/15

RL: MONO, TRI - DECA:

Client ID: OPR
Lab ID: B5B0101-BS1

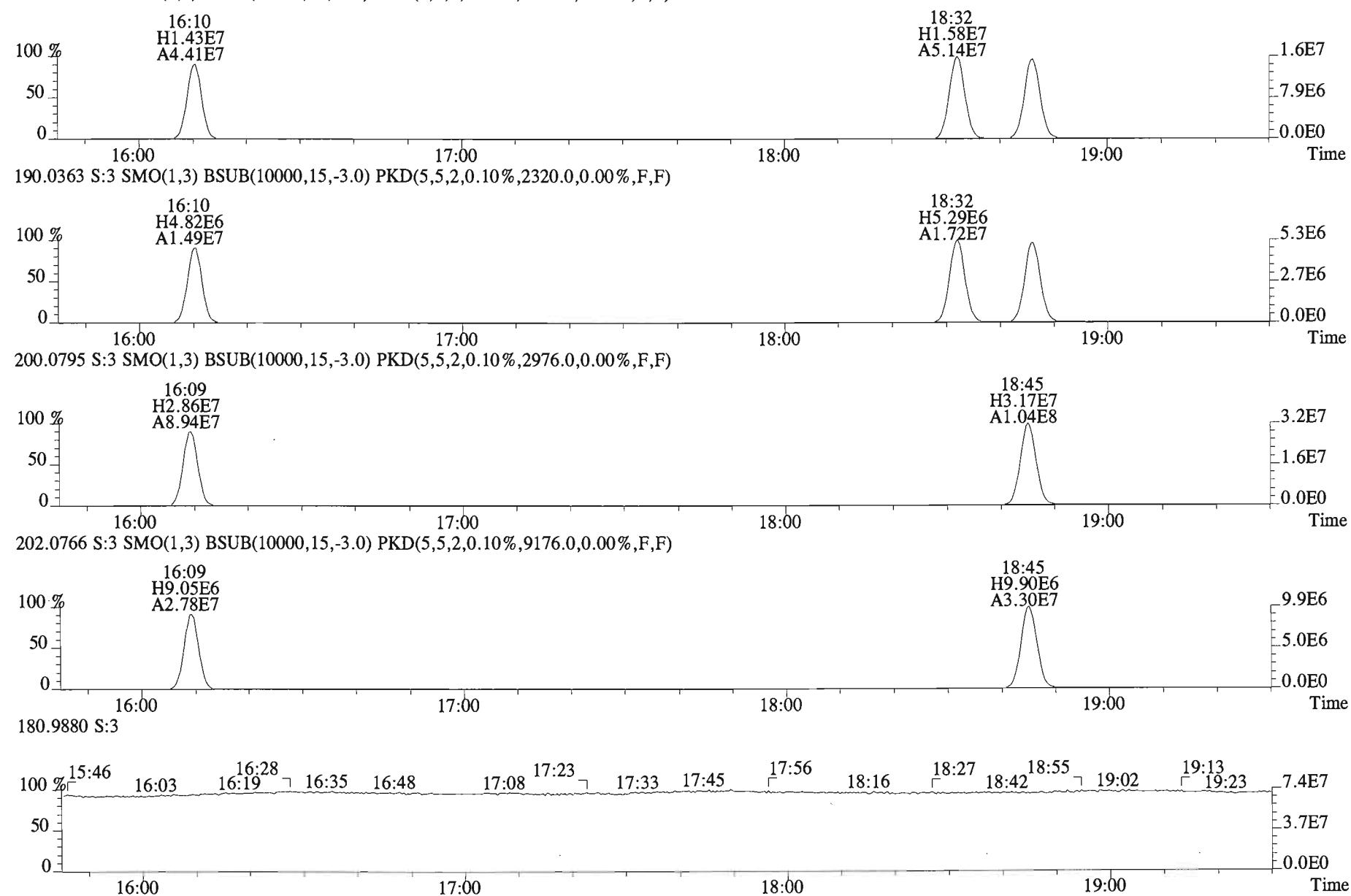
Filename: 150225E1 S:3 Acq:25-FEB-15 15:16:01
GC Column ID: ZB-1 ICal: PCVG8-1-14-15 wt/vol:1.0000
ConCal: ST150225E1-1 EndCAL: NA

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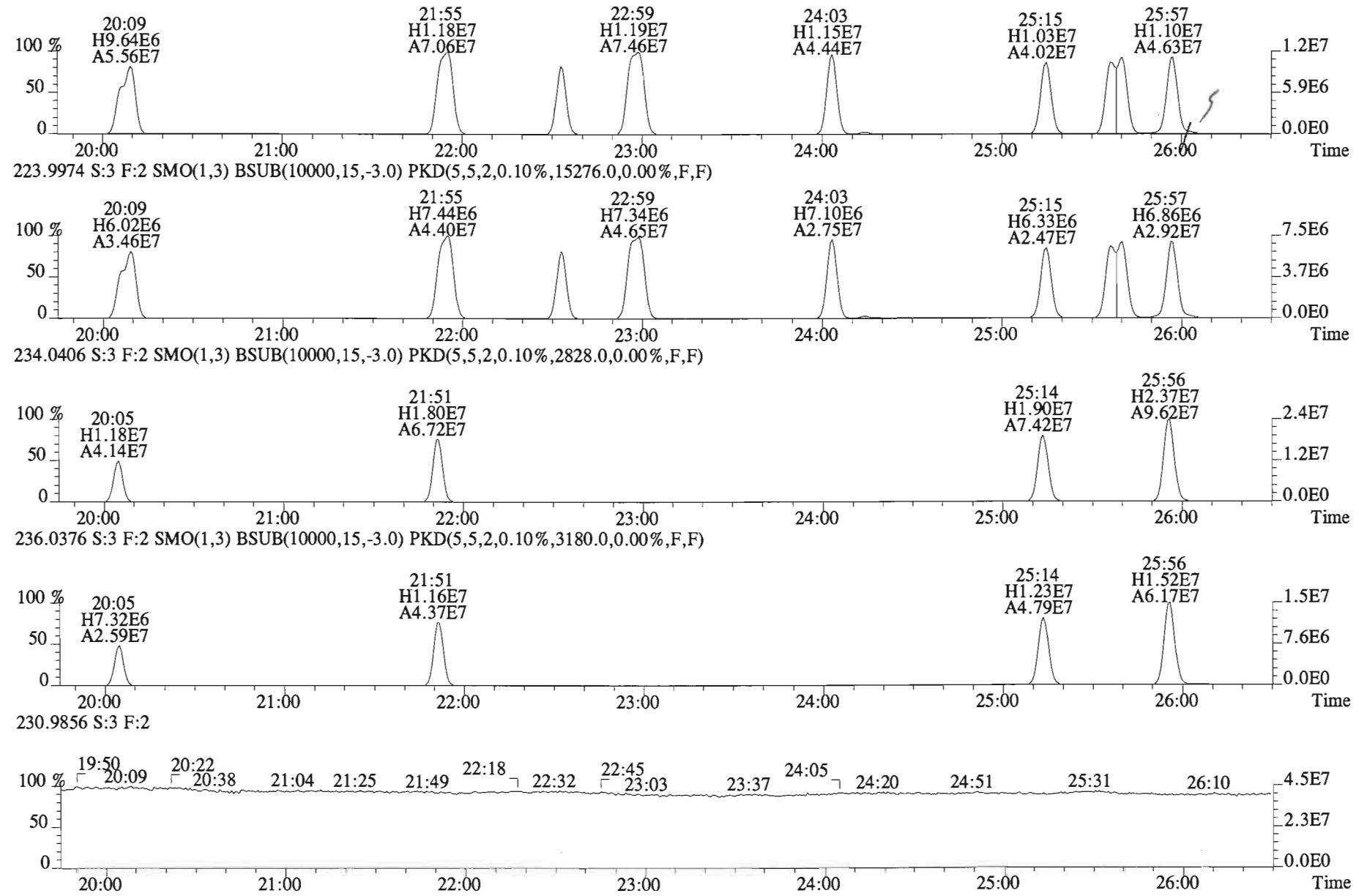
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS		Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.17e+08	3.22	y	0.91	16:09	0.623	0.619-0.625	81.6	81.6	13C-PCB-79	1.57e+08	0.79	y	1.02	37:49	1.029	1.024-1.033	93.8	93.8		
13C-PCB-3	1.37e+08	3.14	y	0.94	18:45	0.723	0.718-0.726	92.0	92.0	13C-PCB-178	5.38e+07	0.47	y	0.64	45:37	0.984	0.980-0.989	86.9	86.9		
13C-PCB-4	6.73e+07	1.60	y	0.60	20:05	0.774	0.770-0.778	71.4	71.4	13C-PCB-11	1.22e+08	1.55	y	0.95	25:14	0.973	0.968-0.978	81.1	81.1		
13C-PCB-9	1.11e+08	1.54	y	0.96	21:51	0.843	0.839-0.847	73.0	73.0	13C-PCB-19	8.63e+07	1.08	y	0.56	24:13	0.934	0.929-0.939	97.4	97.4		
13C-PCB-11	1.22e+08	1.55	y	0.95	25:14	0.973	0.968-0.978	81.1	81.1	13C-PCB-28	1.24e+08	1.04	y	1.07	29:04	1.004	0.999-1.009	86.7	86.7		
13C-PCB-19	8.63e+07	1.08	y	0.56	24:13	0.934	0.929-0.939	97.4	97.4	13C-PCB-32	1.30e+08	1.08	y	0.83	27:07	1.046	1.041-1.051	99.7	99.7		
13C-PCB-28	1.24e+08	1.04	y	1.07	29:04	1.004	0.999-1.009	86.7	86.7	13C-PCB-37	1.32e+08	1.05	y	0.96	32:57	1.138	1.131-1.143	103	103		
13C-PCB-32	1.30e+08	1.08	y	0.83	27:07	1.046	1.041-1.051	99.7	99.7	13C-PCB-47	1.02e+08	0.79	y	0.77	31:59	0.871	0.867-0.875	81.3	81.3		
13C-PCB-37	1.32e+08	1.05	y	0.96	32:57	1.138	1.131-1.143	103	103	13C-PCB-52	9.65e+07	0.79	y	0.71	31:29	0.857	0.853-0.861	82.9	82.9		
13C-PCB-47	1.02e+08	0.79	y	0.77	31:59	0.871	0.867-0.875	81.3	81.3	13C-PCB-54	1.23e+08	0.79	y	1.06	27:57	0.761	0.757-0.765	70.7	70.7		
13C-PCB-52	9.65e+07	0.79	y	0.71	31:29	0.857	0.853-0.861	82.9	82.9	13C-PCB-70	1.52e+08	0.81	y	0.99	35:30	0.966	0.961-0.971	93.3	93.3		
13C-PCB-54	1.23e+08	0.79	y	1.06	27:57	0.761	0.757-0.765	70.7	70.7	13C-PCB-77	1.34e+08	0.80	y	0.96	39:38	1.079	1.073-1.083	84.8	84.8		
13C-PCB-70	1.52e+08	0.81	y	0.99	35:30	0.966	0.961-0.971	93.3	93.3	13C-PCB-80	1.48e+08	0.78	y	1.02	35:56	0.978	0.973-0.983	88.5	88.5		
13C-PCB-77	1.34e+08	0.80	y	0.96	39:38	1.079	1.073-1.083	84.8	84.8	13C-PCB-80	1.40e+08	0.80	y	1.00	39:03	1.063	1.057-1.067	85.9	85.9		
13C-PCB-80	1.40e+08	0.80	y	1.00	39:03	1.063	1.057-1.067	85.9	85.9	13C-PCB-95	6.80e+07	1.66	y	0.70	35:48	0.913	0.908-0.918	92.8	92.8		
13C-PCB-95	6.80e+07	1.66	y	0.70	35:48	0.913	0.908-0.918	92.8	92.8	13C-PCB-97	6.97e+07	1.66	y	0.66	38:47	0.989	0.984-0.994	101	101		
13C-PCB-97	6.97e+07	1.66	y	0.66	38:47	0.989	0.984-0.994	101	101	13C-PCB-101	7.89e+07	1.64	y	0.77	37:30	0.956	0.951-0.961	98.0	98.0		
13C-PCB-101	7.89e+07	1.64	y	0.77	37:30	0.956	0.951-0.961	98.0	98.0	13C-PCB-104	9.12e+07	1.65	y	0.97	32:38	0.832	0.828-0.836	89.9	89.9		
13C-PCB-104	9.12e+07	1.65	y	0.97	32:38	0.832	0.828-0.836	89.9	89.9	13C-PCB-105	9.03e+07	1.61	y	1.20	43:04	0.929	0.924-0.934	77.4	77.4		
13C-PCB-105	9.03e+07	1.61	y	1.20	43:04	0.929	0.924-0.934	77.4	77.4	13C-PCB-114	9.11e+07	1.59	y	1.26	42:12	0.911	0.905-0.915	74.6	74.6		
13C-PCB-114	9.11e+07	1.59	y	1.26	42:12	0.911	0.905-0.915	74.6	74.6	13C-PCB-118	8.65e+07	1.67	y	0.94	41:33	1.059	1.054-1.064	88.0	88.0		
13C-PCB-118	8.65e+07	1.67	y	0.94	41:33	1.059	1.054-1.064	88.0	88.0	13C-PCB-123	8.61e+07	1.65	y	0.88	41:22	1.055	1.049-1.059	93.1	93.1		
13C-PCB-123	8.61e+07	1.65	y	0.88	41:22	1.055	1.049-1.059	93.1	93.1	13C-PCB-126	8.71e+07	1.58	y	1.13	45:18	0.977	0.972-0.982	79.6	79.6		
13C-PCB-126	8.71e+07	1.58	y	1.13	45:18	0.977	0.972-0.982	79.6	79.6	13C-PCB-127	9.31e+07	1.56	y	1.26	43:24	0.937	0.931-0.941	76.2	76.2		
13C-PCB-127	9.31e+07	1.56	y	1.26	43:24	0.937	0.931-0.941	76.2	76.2	13C-PCB-138	9.31e+07	1.29	y	1.12	44:47	0.966	0.961-0.971	85.7	85.7		
13C-PCB-138	9.31e+07	1.29	y	1.12	44:47	0.966	0.961-0.971	85.7	85.7	13C-PCB-141	8.96e+07	1.30	y	1.09	43:57	0.948	0.943-0.953	84.4	84.4		
13C-PCB-141	8.96e+07	1.30	y	1.09	43:57	0.948	0.943-0.953	84.4	84.4	13C-PCB-153	1.03e+08	1.28	y	1.27	43:13	0.933	0.927-0.937	83.5	83.5		
13C-PCB-153	1.03e+08	1.28	y	1.27	43:13	0.933	0.927-0.937	83.5	83.5	13C-PCB-155	7.94e+07	1.26	y	0.87	37:02	0.944	0.939-0.949	86.9	86.9		
13C-PCB-155	7.94e+07	1.26	y	0.87	37:02	0.944	0.939-0.949	86.9	86.9	13C-PCB-156	1.16e+08	1.29	y	1.35	48:02	1.037	1.032-1.042	88.4	88.4		
13C-PCB-156	1.16e+08	1.29	y	1.35	48:02	1.037	1.032-1.042	88.4	88.4	13C-PCB-157	1.21e+08	1.28	y	1.42	48:19	1.042	1.037-1.047	87.8	87.8		
13C-PCB-157	1.21e+08	1.28	y	1.42	48:19	1.042	1.037-1.047	87.8	87.8	13C-PCB-159	1.19e+08	1.28	y	1.37	46:04	0.994	0.989-0.999	89.7	89.7		
13C-PCB-159	1.19e+08	1.28	y	1.37	46:04	0.994	0.989-0.999	89.7	89.7	13C-PCB-167	1.16e+08	1.29	y	1.38	46:45	1.009	1.004-1.014	86.2	86.2		
13C-PCB-167	1.16e+08	1.29	y	1.38	46:45	1.009	1.004-1.014	86.2	86.2	13C-PCB-169	1.14e+08	1.27	y	1.38	50:25	1.088	1.084-1.094	84.8	84.8		
13C-PCB-169	1.14e+08	1.27	y	1.38	50:25	1.088	1.084-1.094	84.8	84.8	13C-PCB-170	5.02e+07	0.47	y	0.60	50:45	1.095	1.091-1.103	85.7	85.7		
13C-PCB-170	5.02e+07	0.47	y	0.60	50:45	1.095	1.091-1.103	85.7	85.7	13C-PCB-180	6.18e+07	0.47	y	0.76	49:19	1.064	1.059-1.069	84.1	84.0		
13C-PCB-180	6.18e+07	0.47	y	0.76	49:19	1.064	1.059-1.069	84.1	84.0	13C-PCB-188	7.45e+07	0.46	y	1.01	42:50	0.924	0.919-0.929	75.6	75.6		
13C-PCB-188	7.45e+07	0.46	y	1.01	42:50	0.924	0.919-0.929	75.6	75.6	13C-PCB-189	6.40e+07	0.45	y	0.80	52:13	1.127	1.124-1.136	82.1	82.1		
13C-PCB-189	6.40e+07	0.45	y	0.80	52:13	1.127	1.124-1.136	82.1	82.1	13C-PCB-194	5.45e+07	0.91	y	0.75	53:43	0.995	0.990-1.000	91.2	91.2		
13C-PCB-194	5.45e+07	0.91	y	0.75	53:43	0.995	0.990-1.000	91.2	91.2	13C-PCB-202	7.83e+07	0.92	y	0.99	48:15	1.041	1.036-1.046	81.5	81.5		
13C-PCB-202	7.83e+07	0.92	y	0.99	48:15	1.041	1.036-1.046	81.5	81.5	13C-PCB-206	5.74e+07	0.79	y	0.73	55:22	1.025	1.020-1.301	97.5	97.5		
13C-PCB-206	5.74e+07	0.79	y	0.73	55:22	1.025	1.020-1.301	97.5	97.5	13C-PCB-208	8.60e+07	0.77	y	1.08	53:00	0.982	0.977-0.987	98.9	98.9		
13C-PCB-208	8.60e+07	0.77	y	1.08	53:00	0.982	0.977-0.987	98.9	98.9	13C-PCB-209	5.51e+07	1.23	y	0.71	56:42	1.050	1.045-1.055	96.7	96.7		

Analyst: DMS
Date: 2/26/15

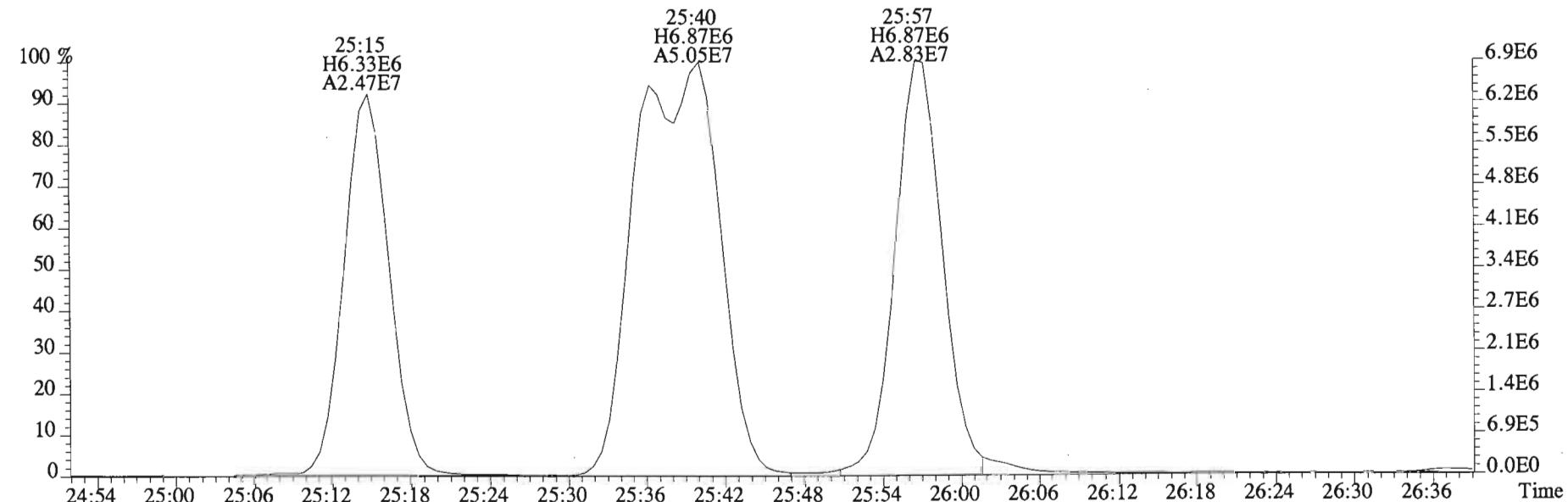
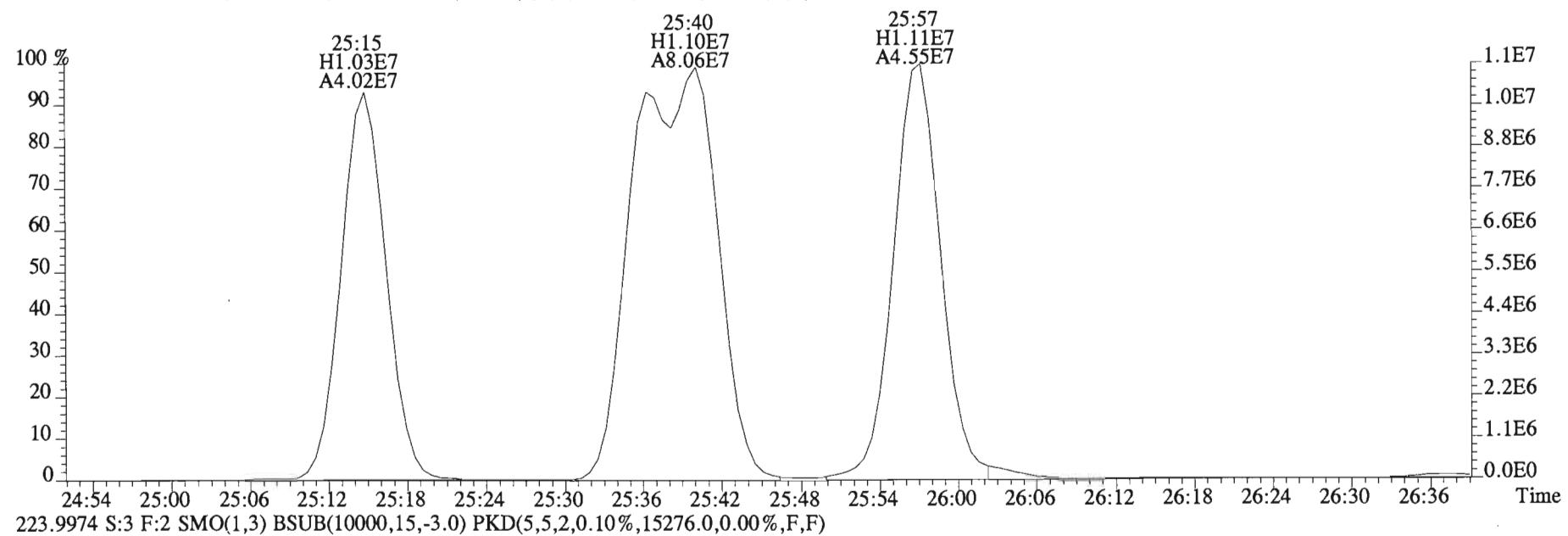
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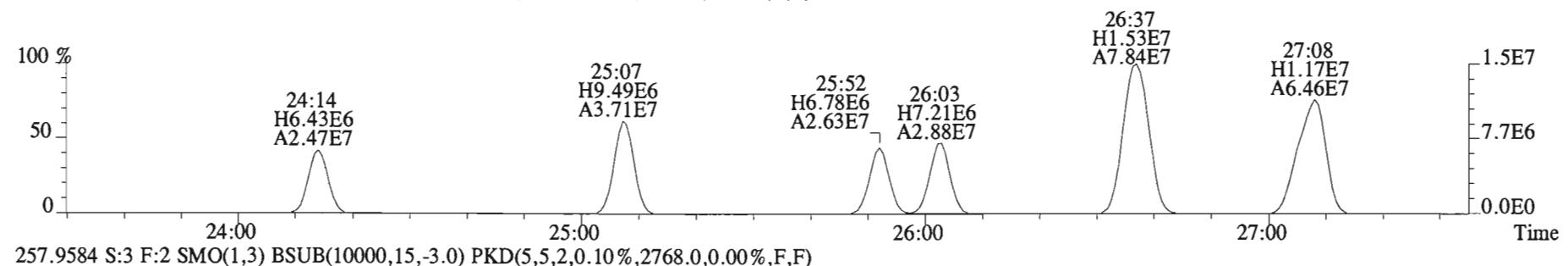
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 222.0003 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4860.0,0.00%,F,F)



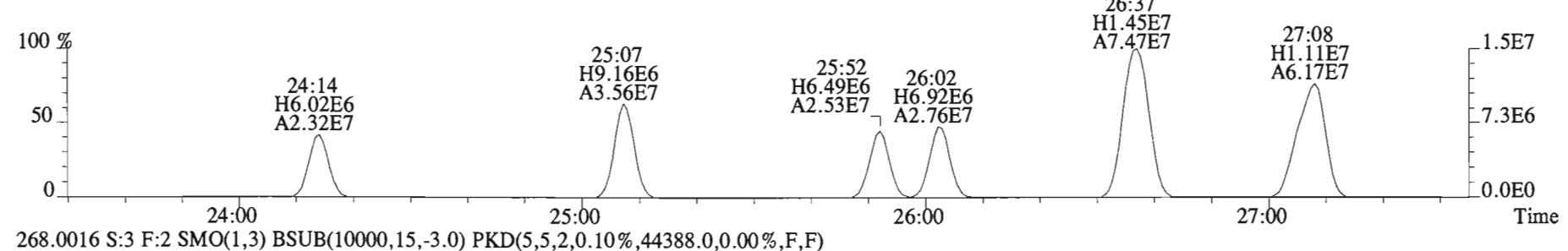
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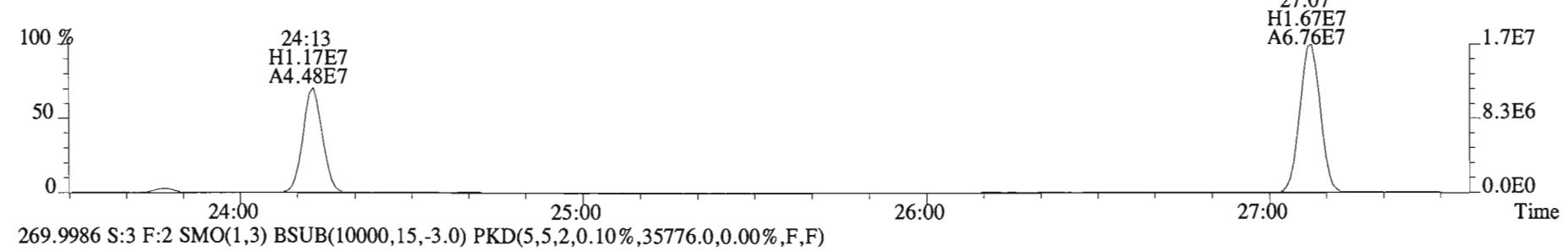
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255.9613 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3472.0,0.00%,F,F)



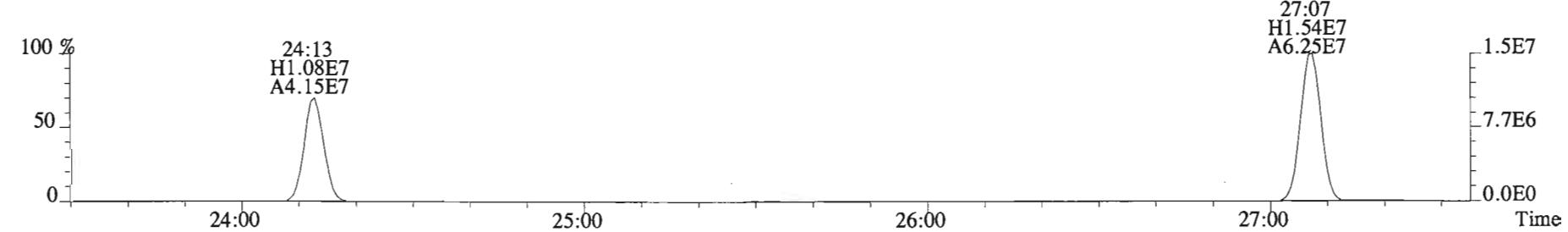
257.9584 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2768.0,0.00%,F,F)



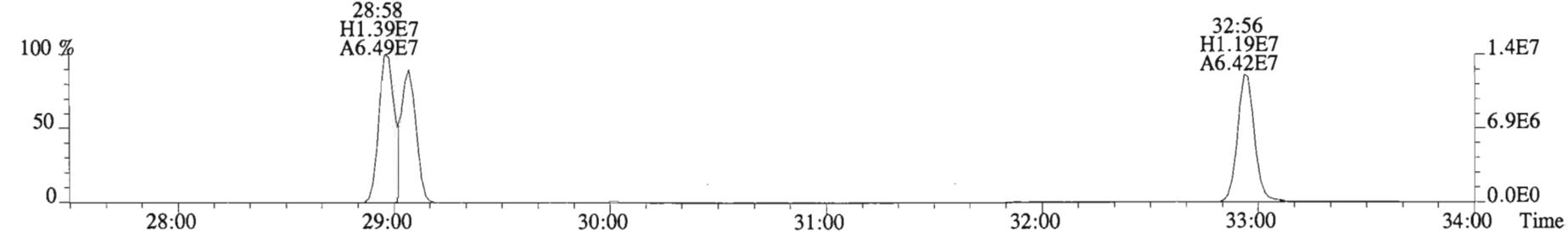
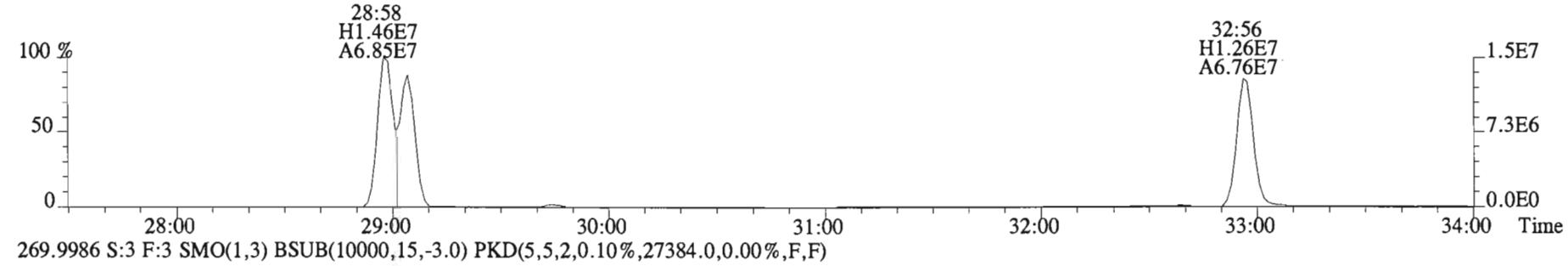
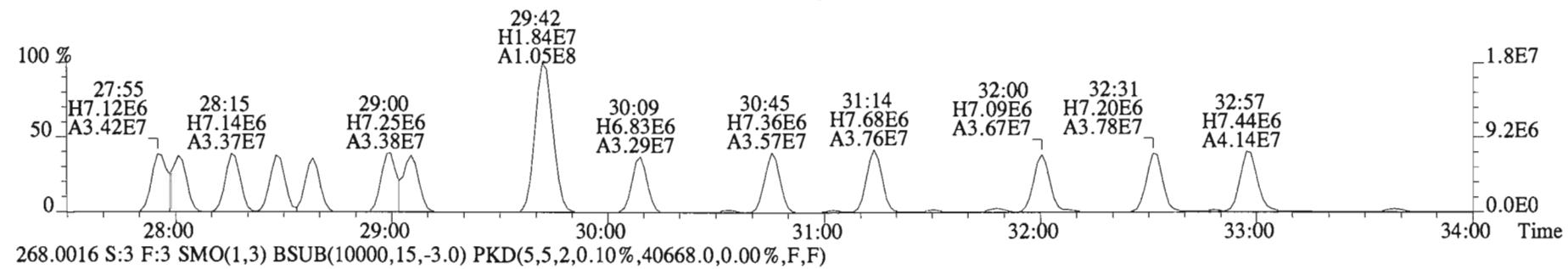
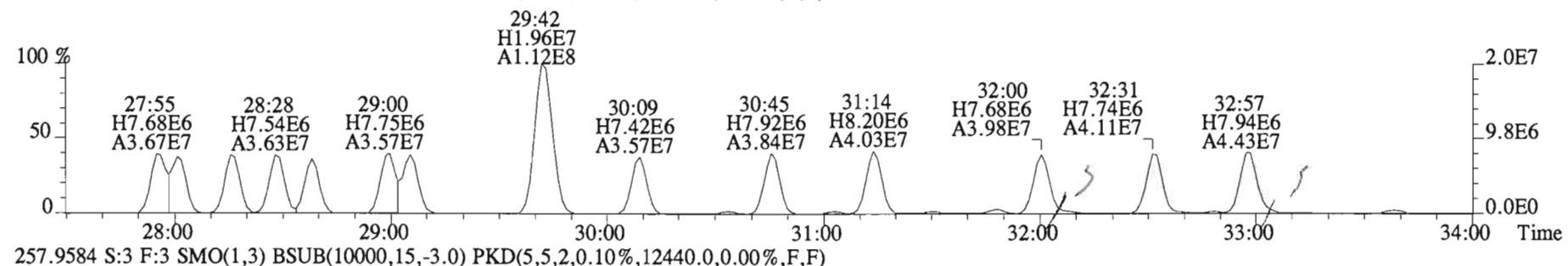
268.0016 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,44388.0,0.00%,F,F)



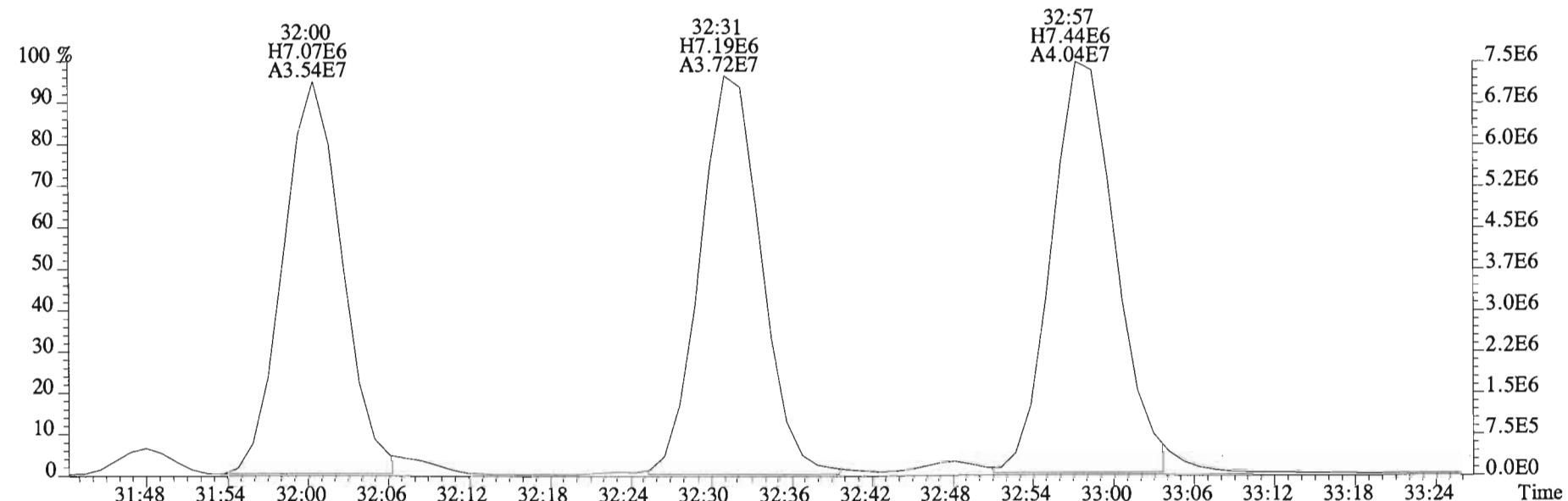
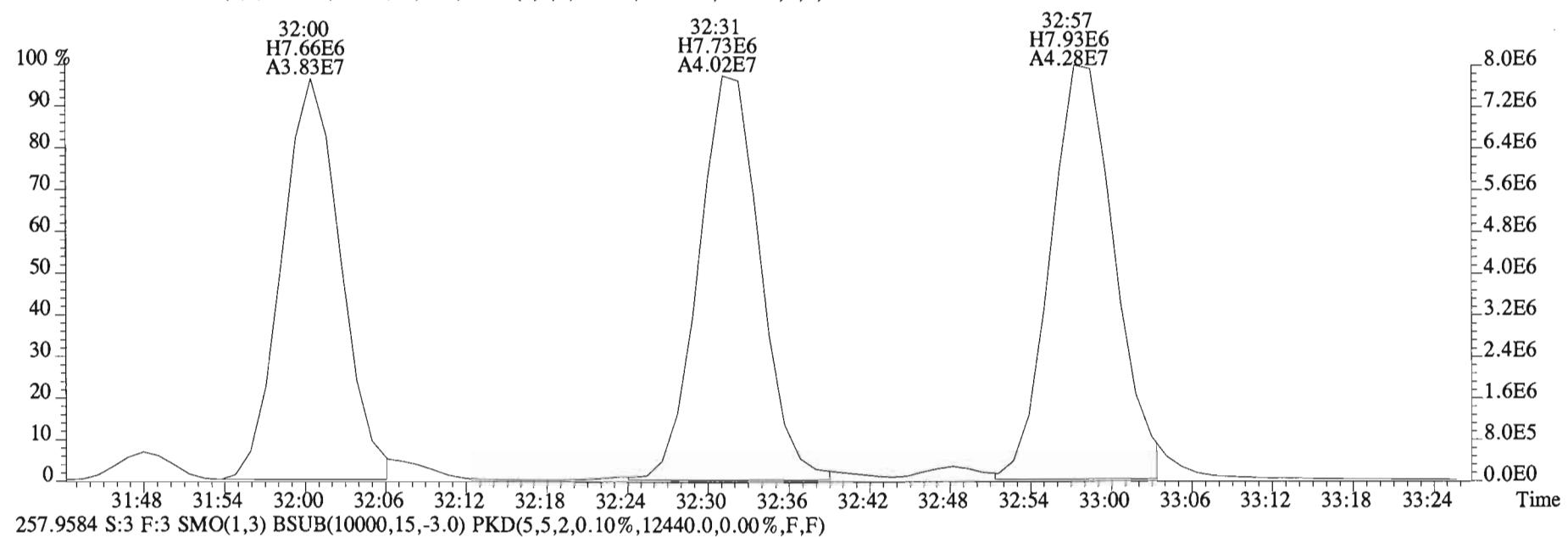
269.9986 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,35776.0,0.00%,F,F)



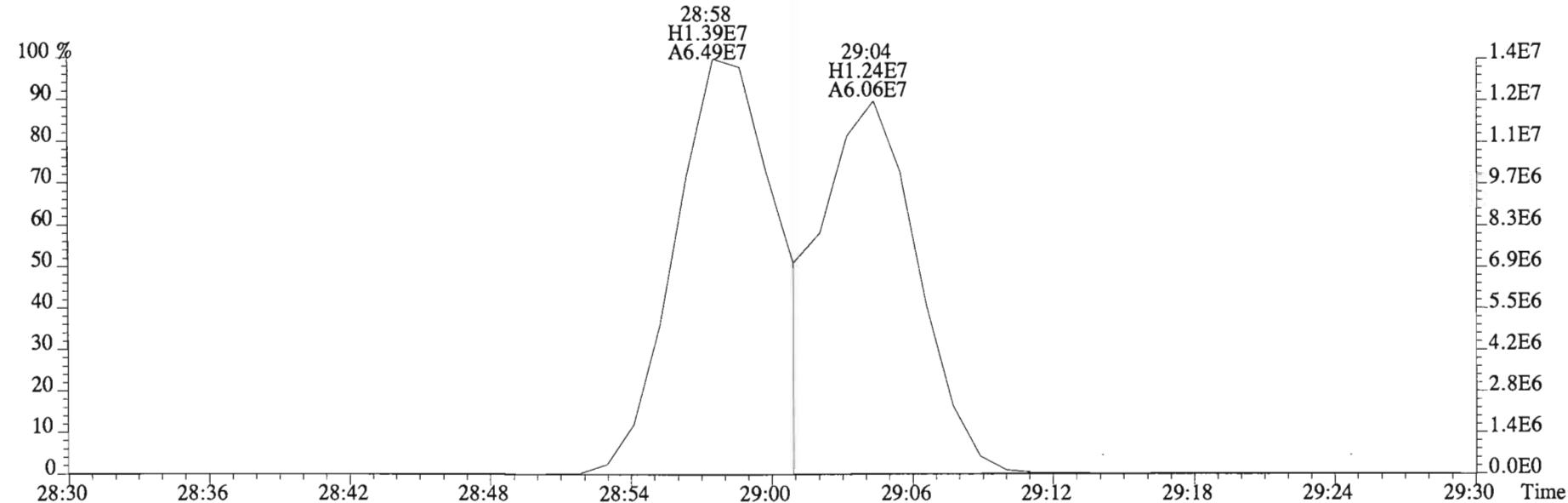
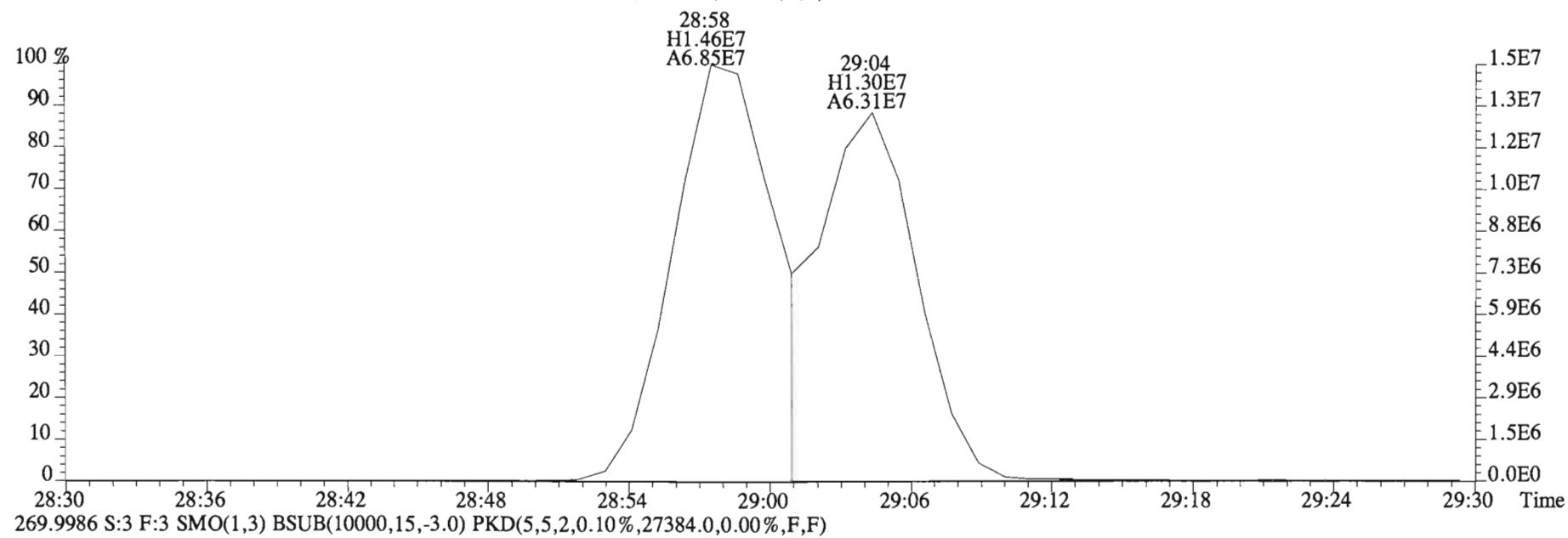
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 255.9613 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,12740.0,0.00%,F,F)



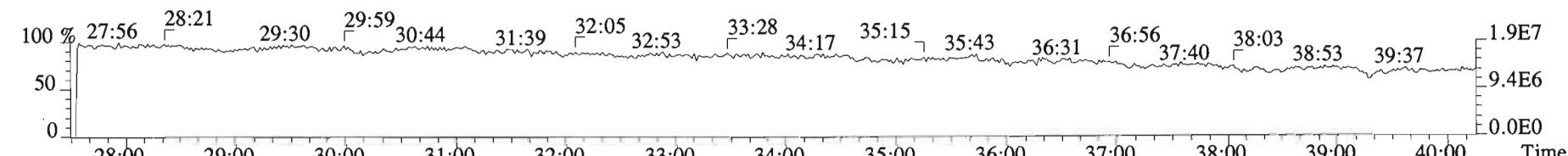
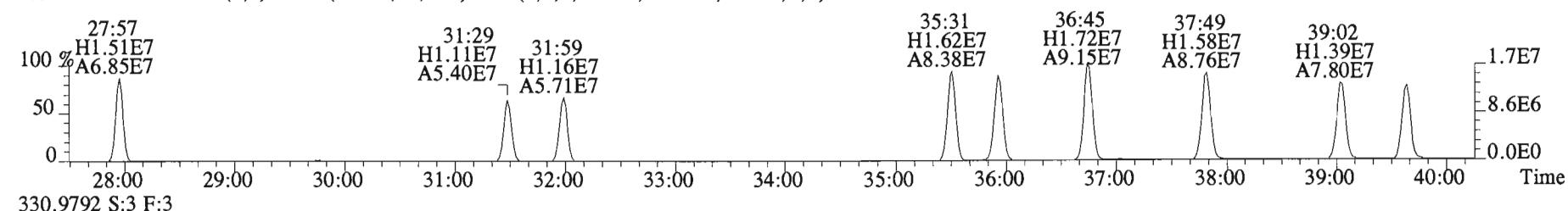
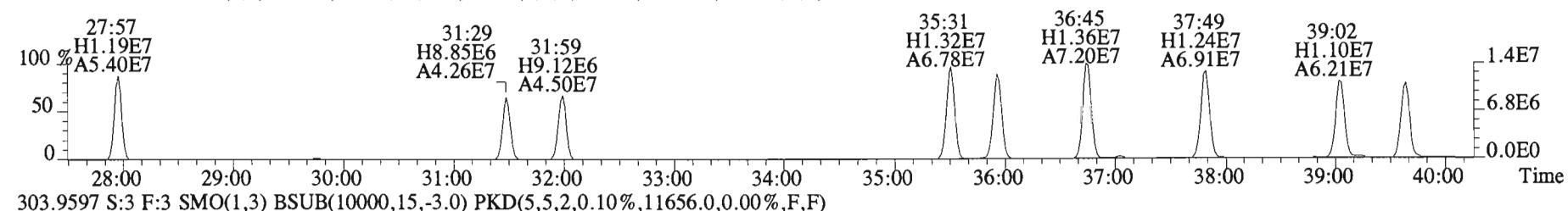
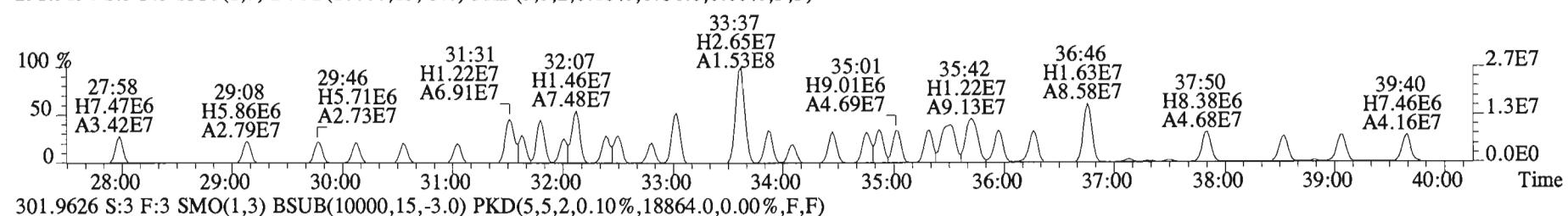
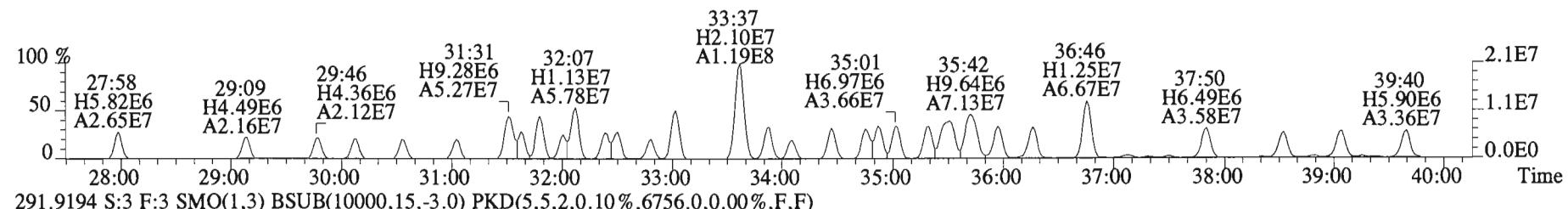
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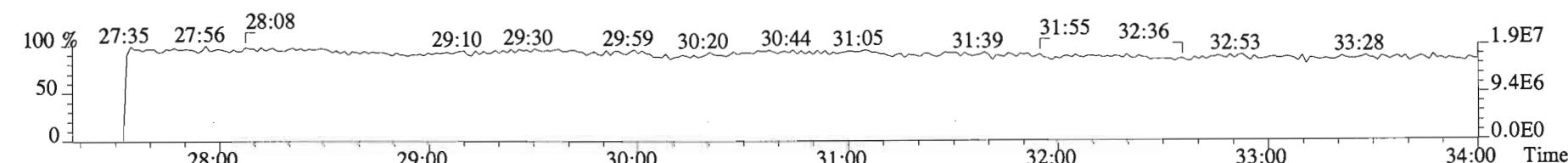
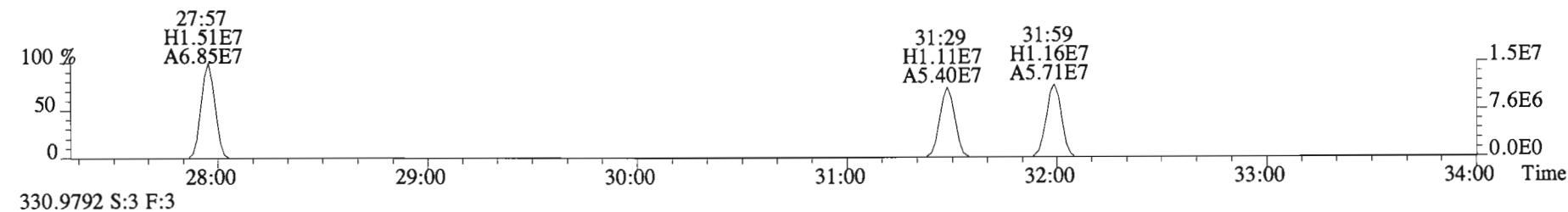
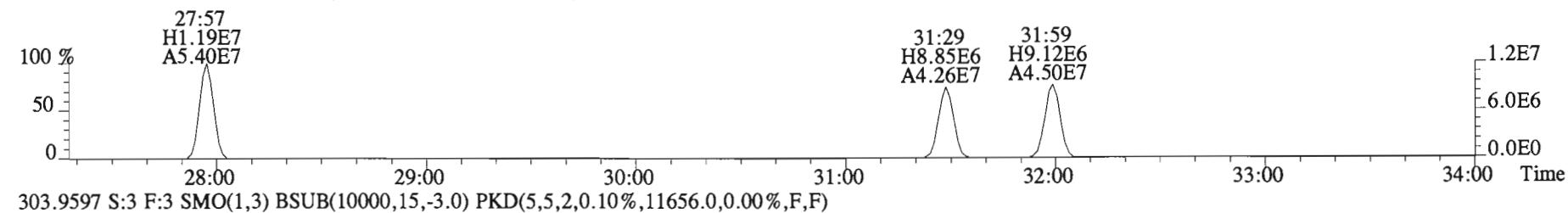
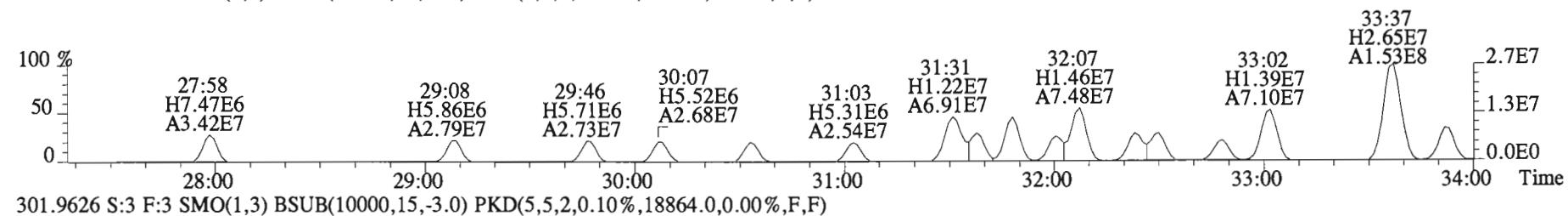
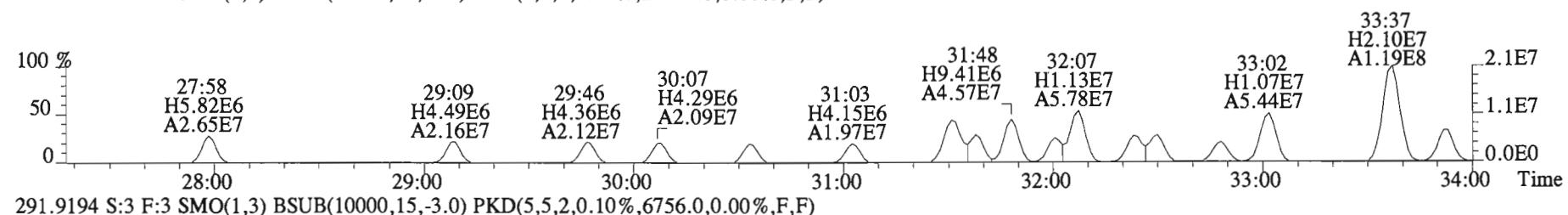
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Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
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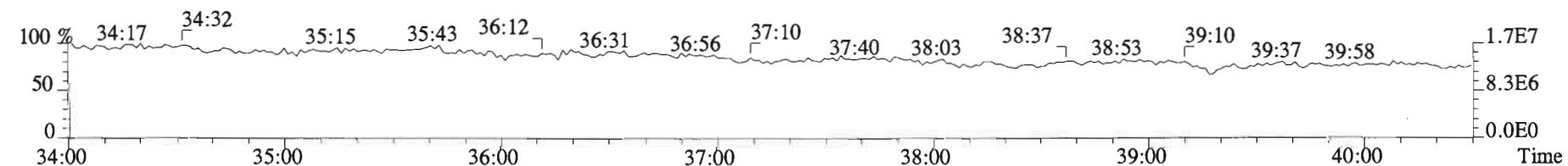
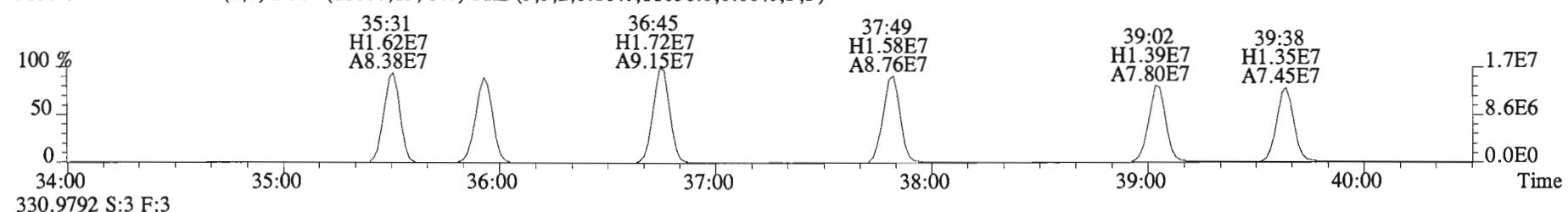
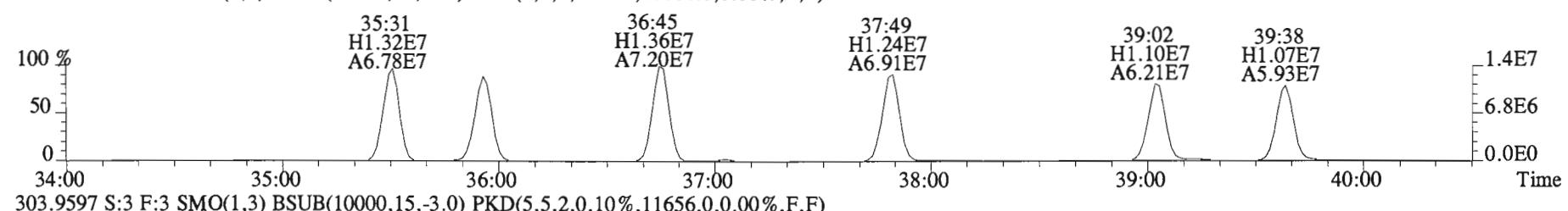
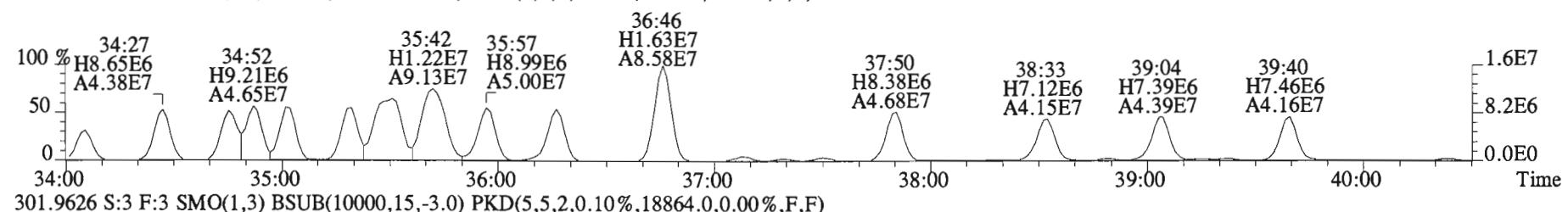
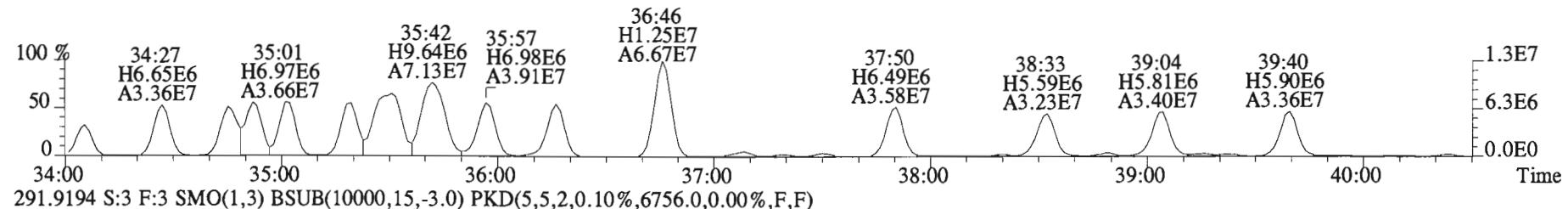
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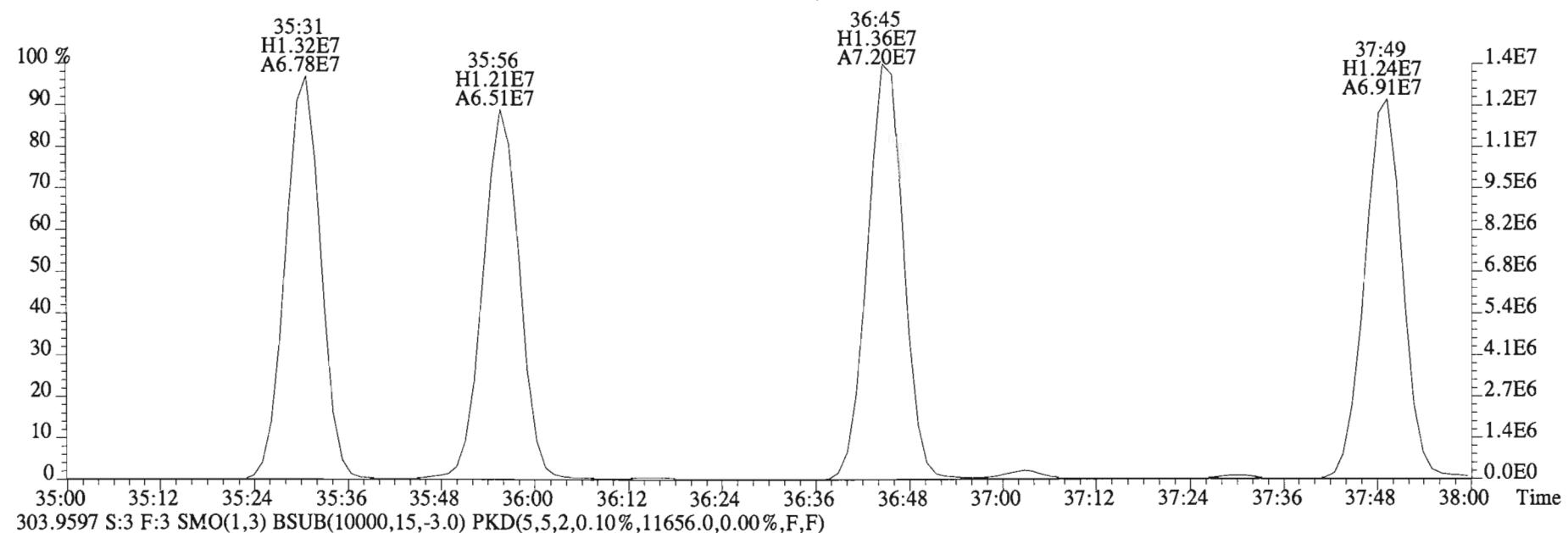
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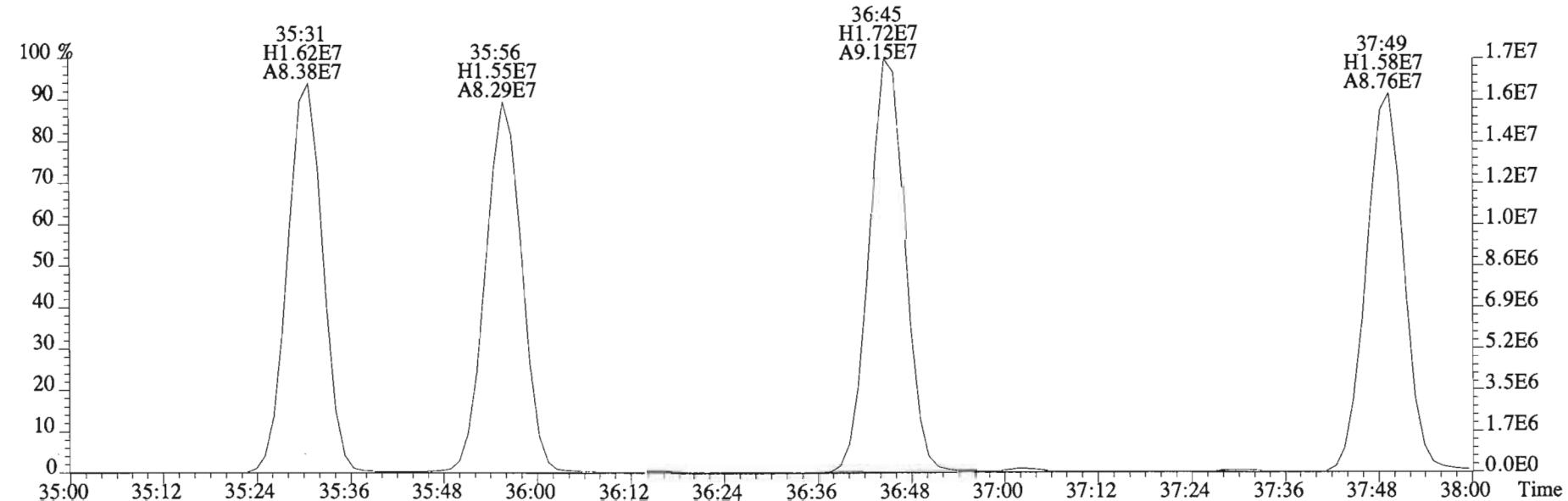
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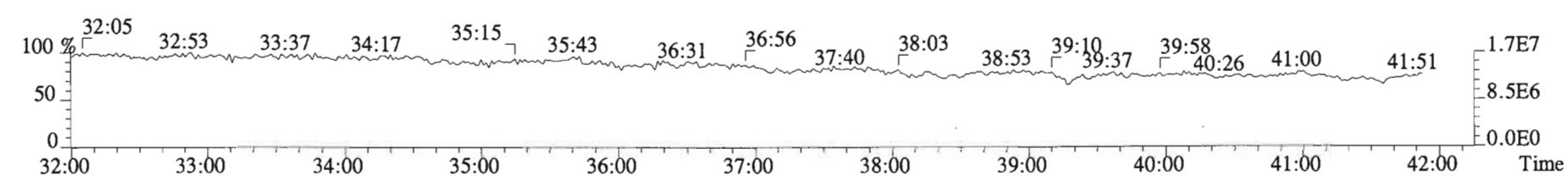
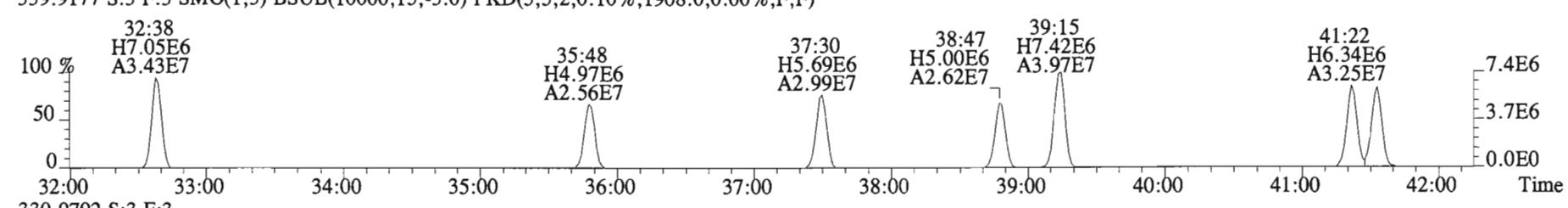
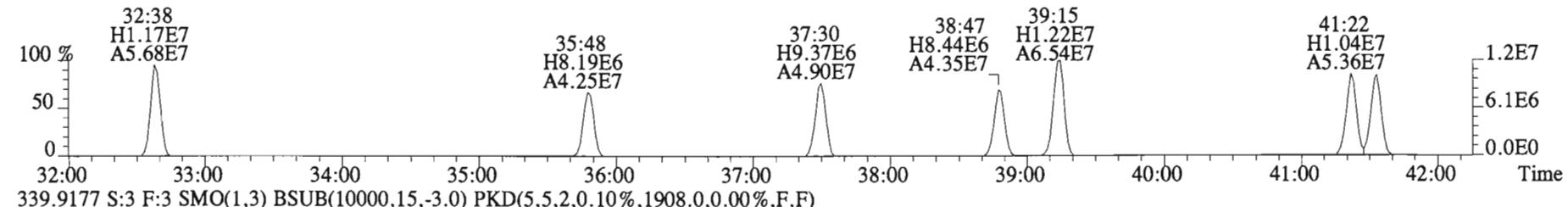
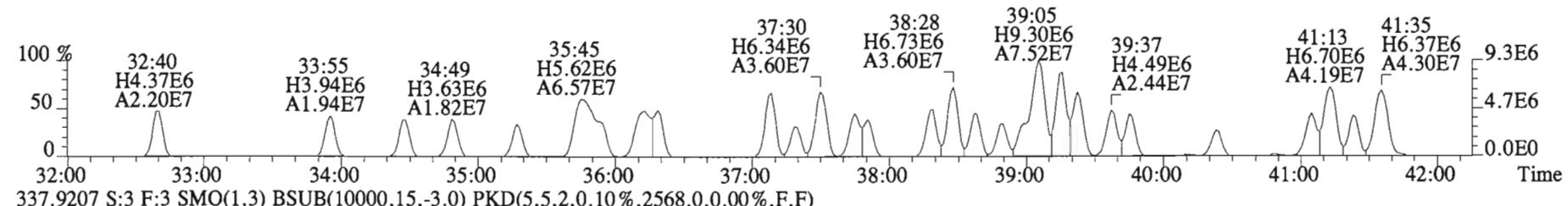
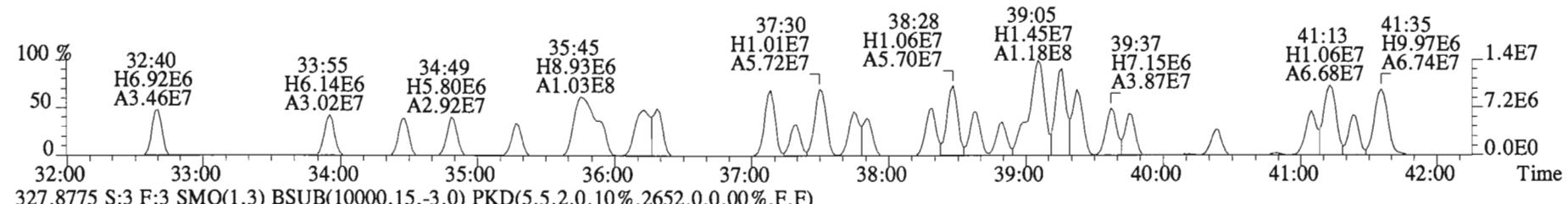
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Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
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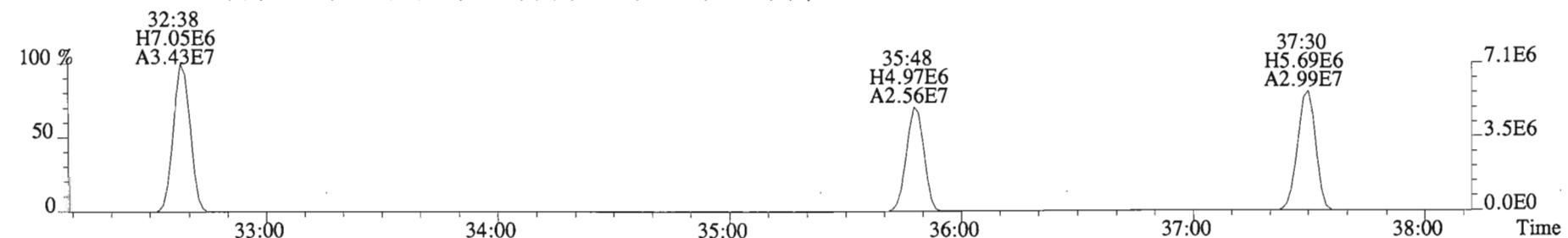
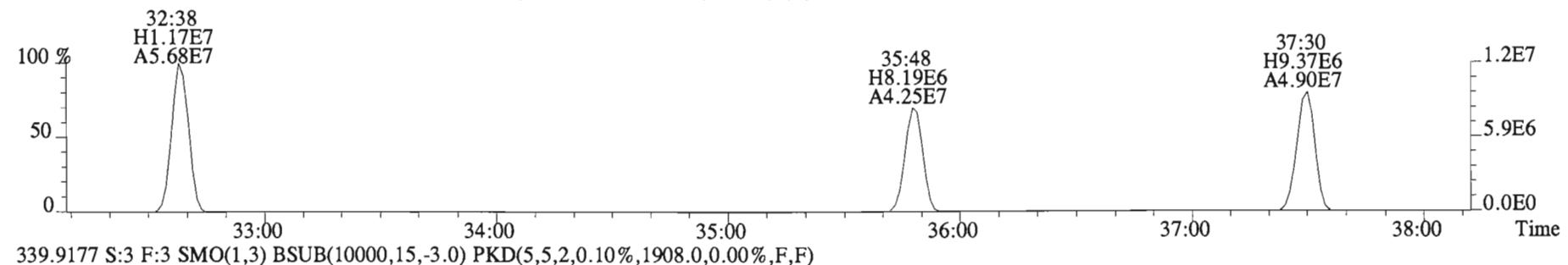
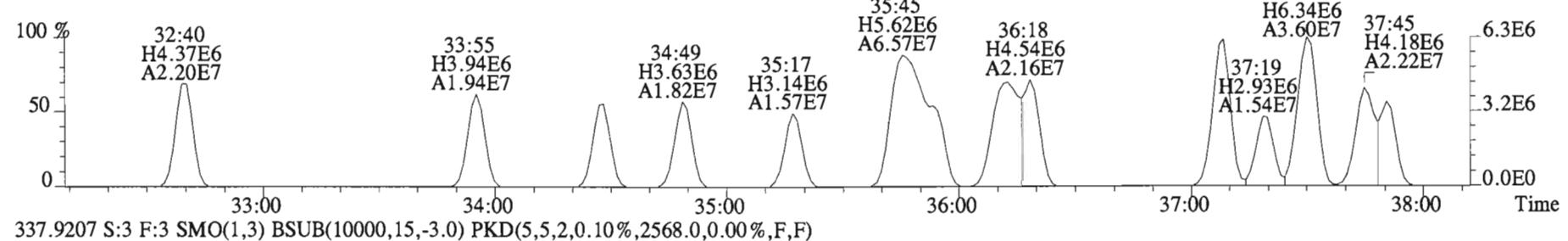
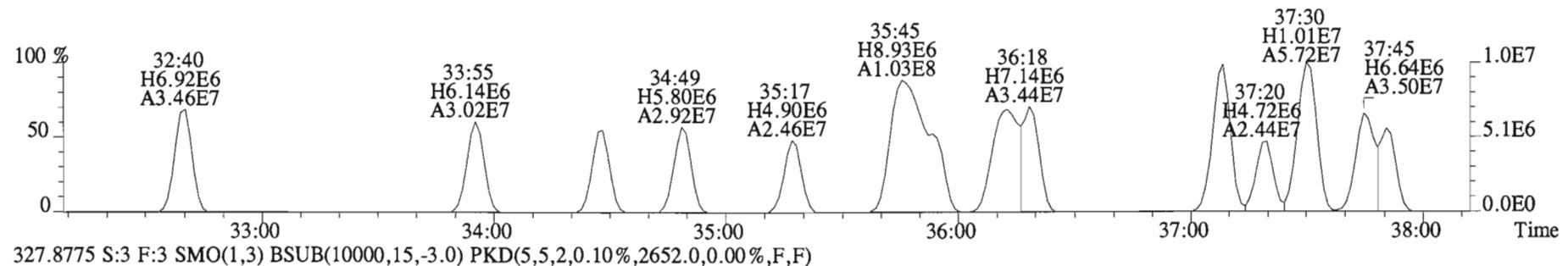
303.9597 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11656.0,0.00%,F,F)



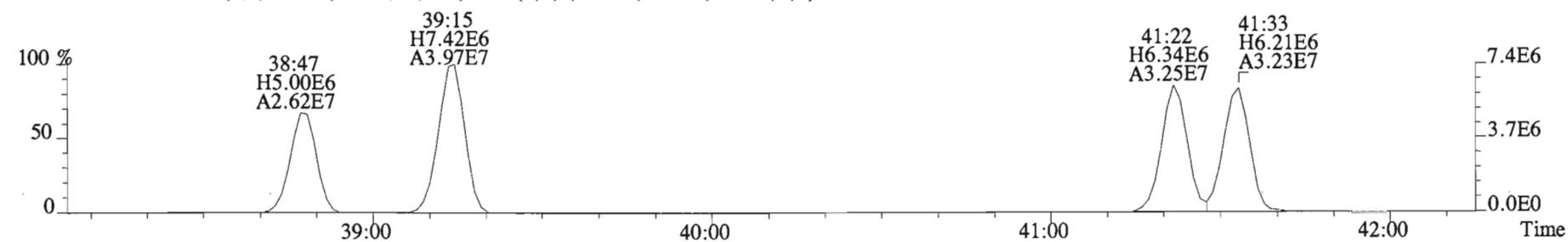
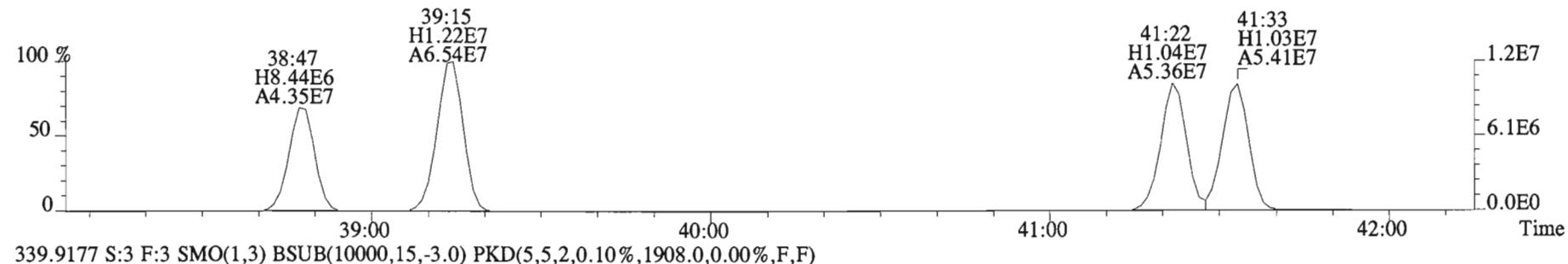
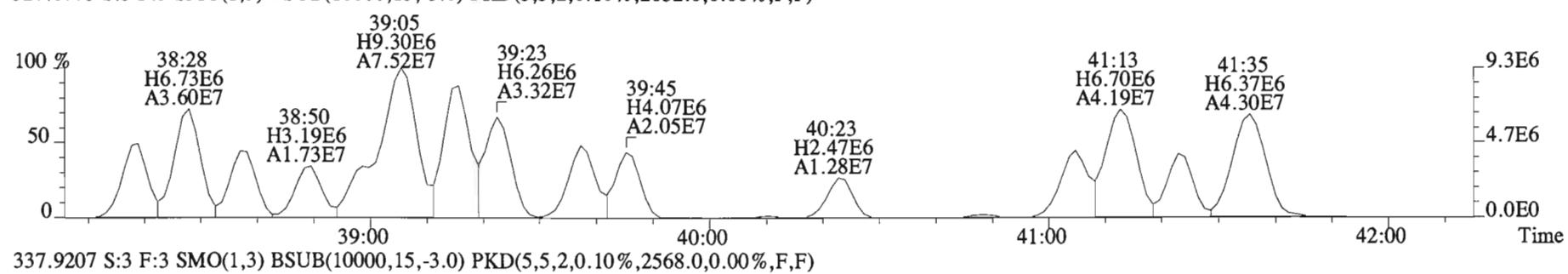
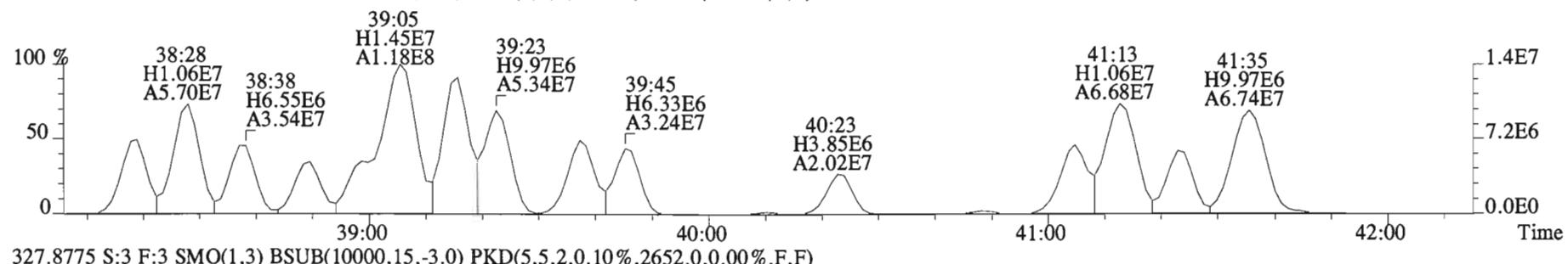
File:150225E1 #1-758 Acq:25-FEB-2015 15:16:01 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
 325.8804 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2148.0,0.00%,F,F)



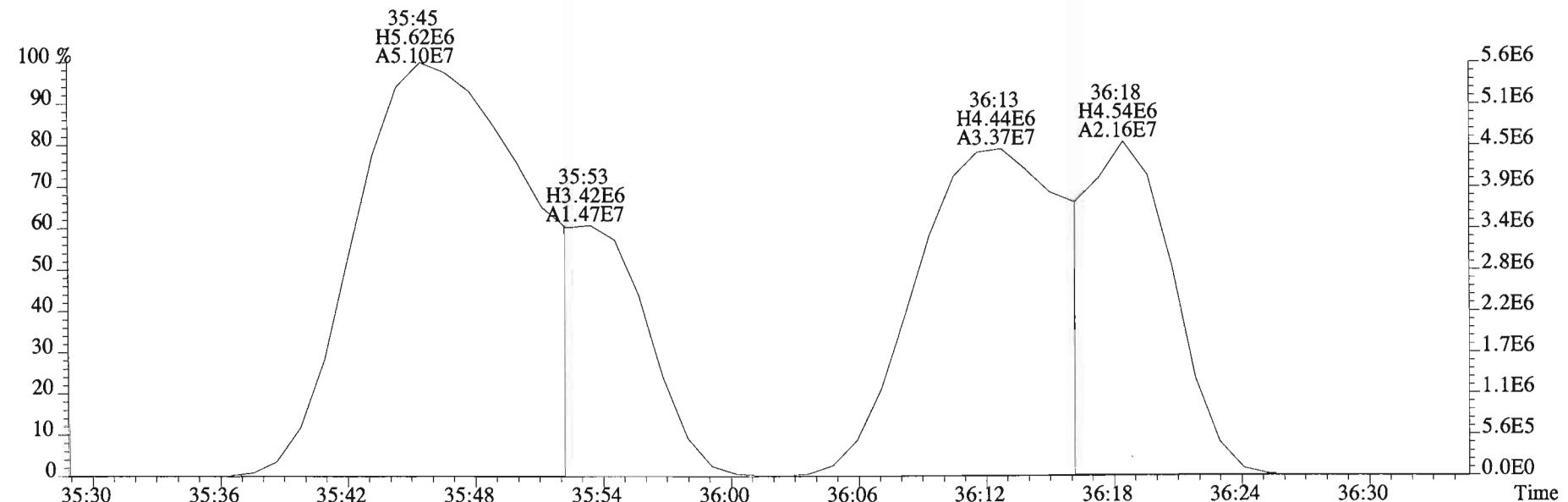
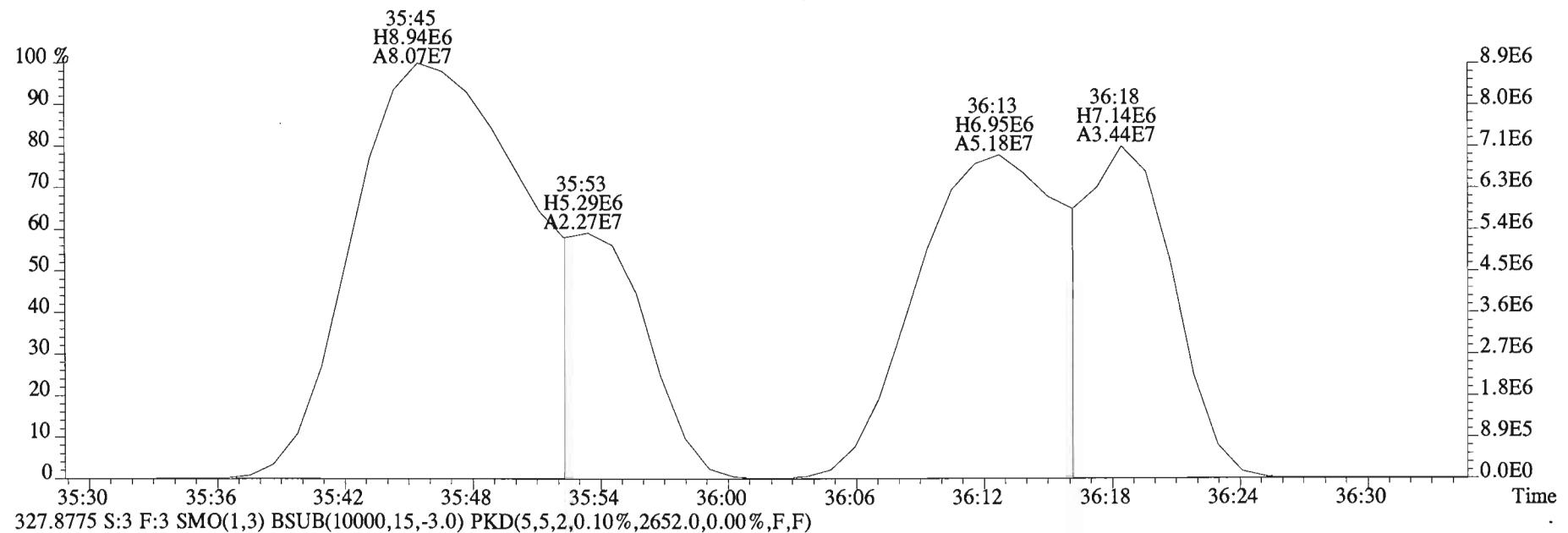
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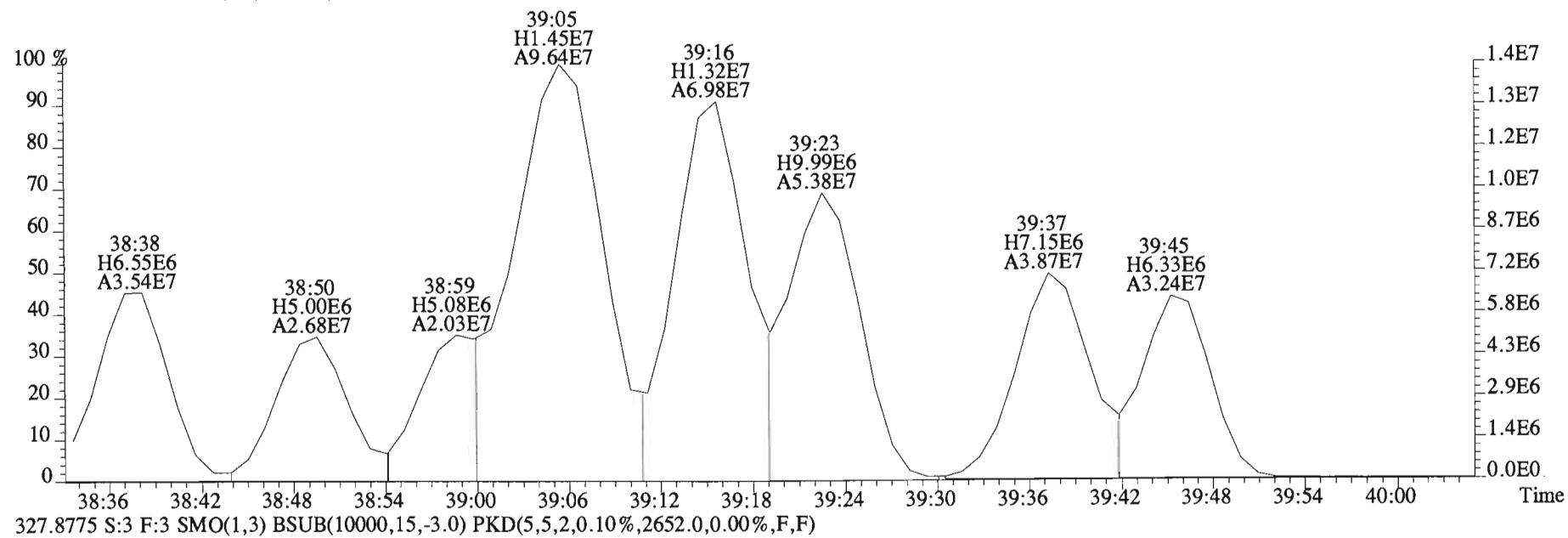
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Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
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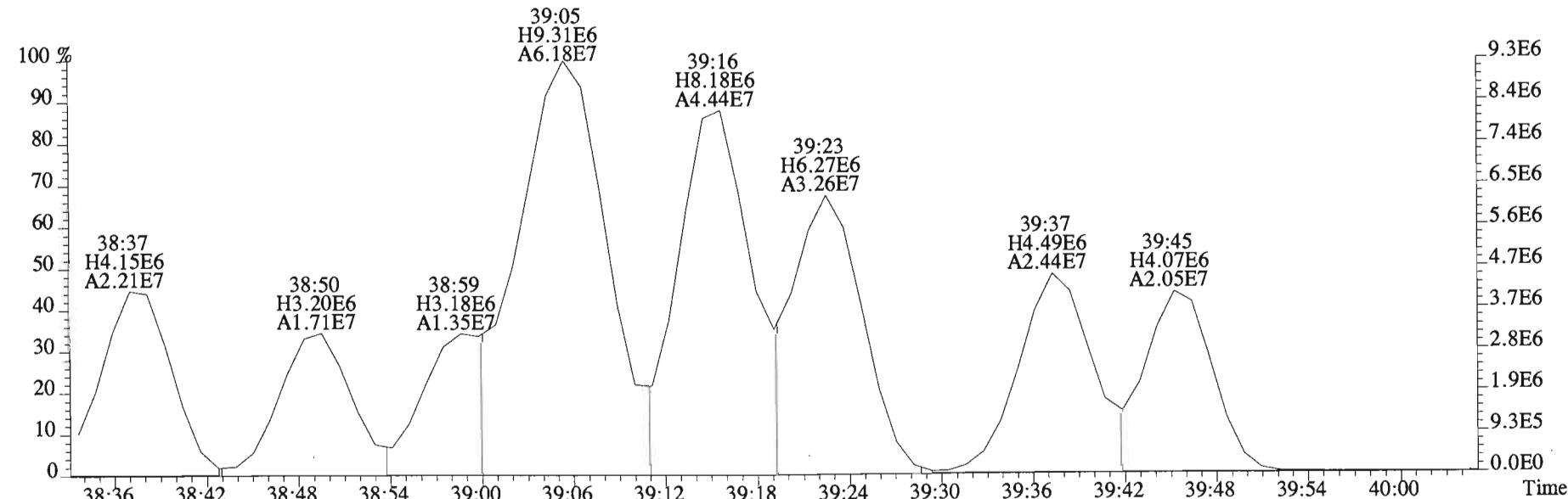
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325.8804 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2148.0,0.00%,F,F)



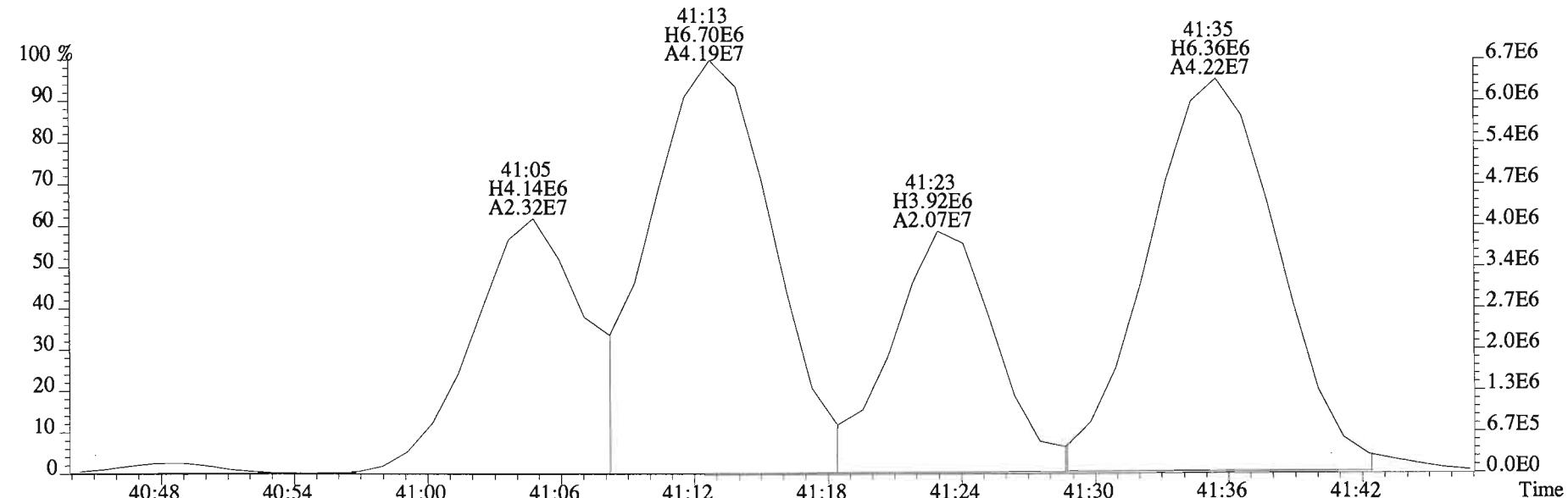
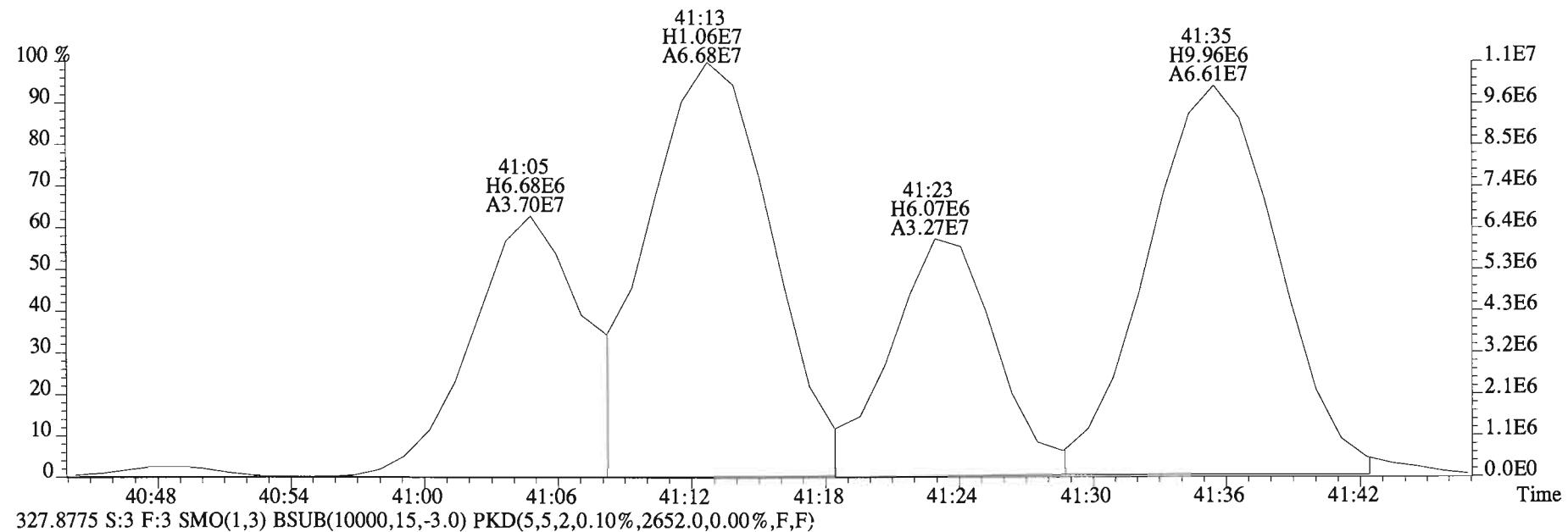
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 Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
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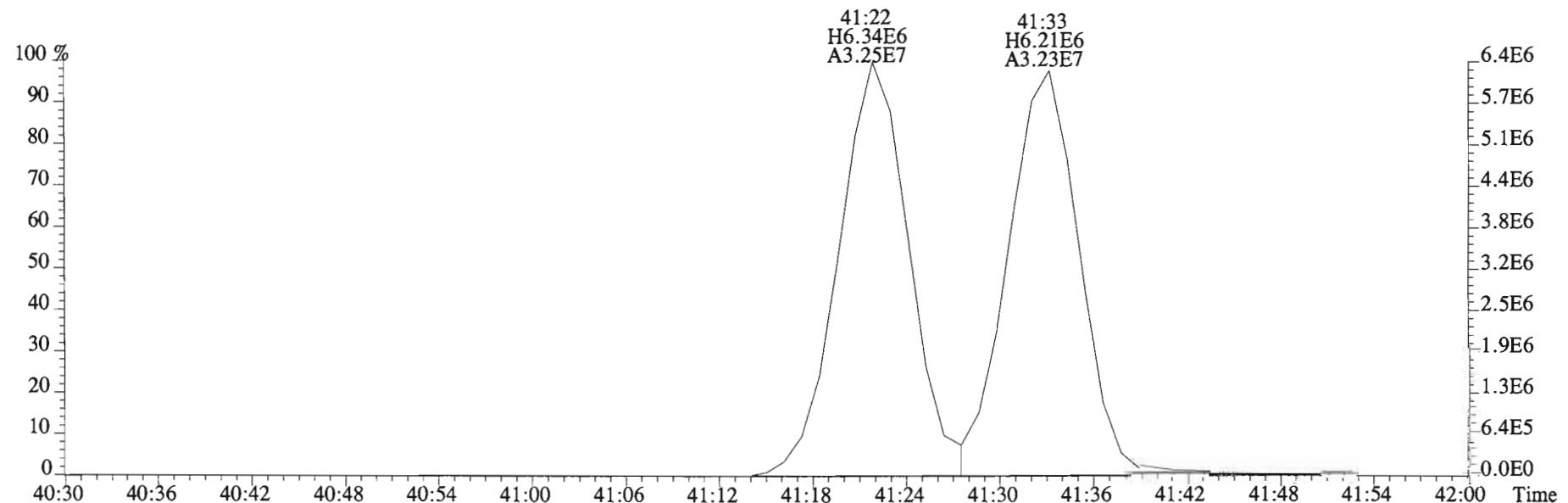
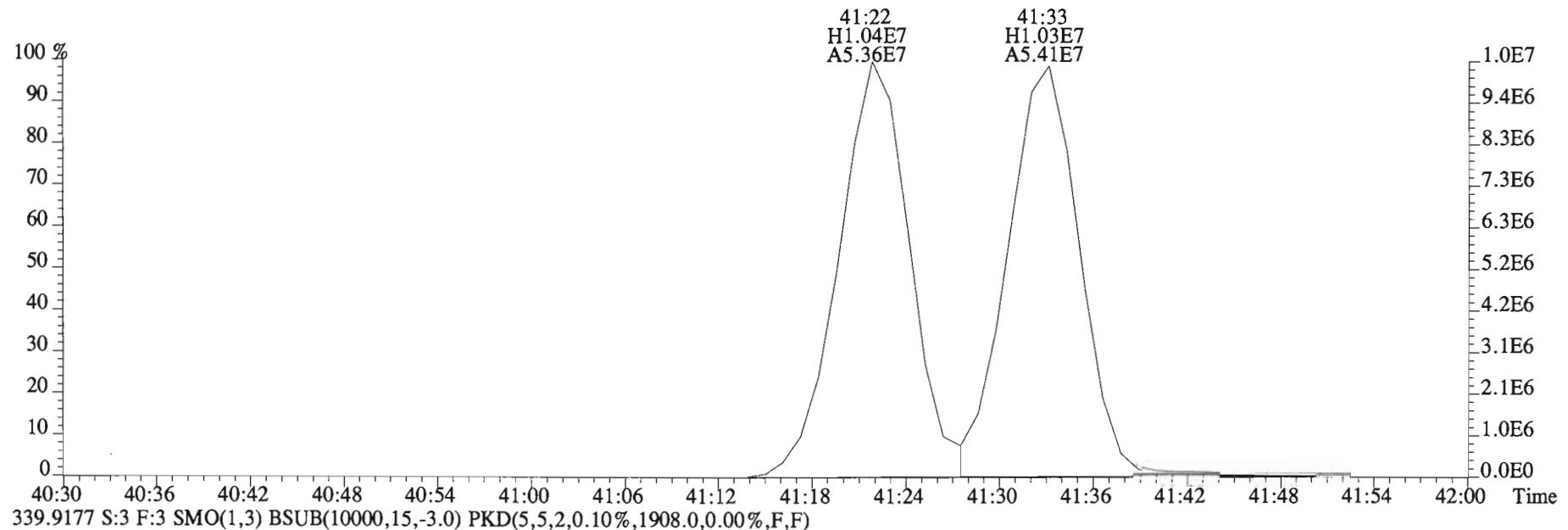
327.8775 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2652.0,0.00%,F,F)



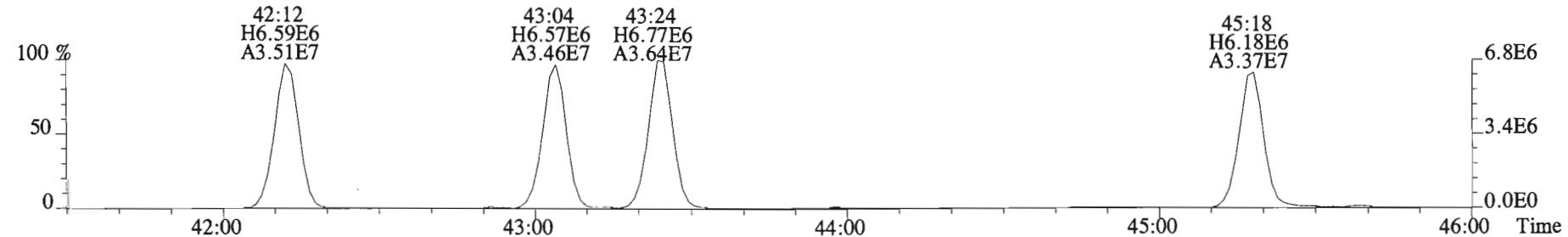
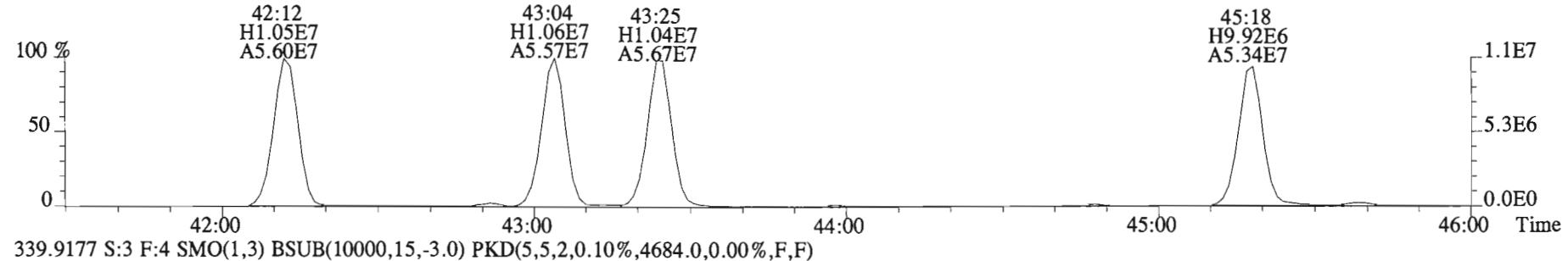
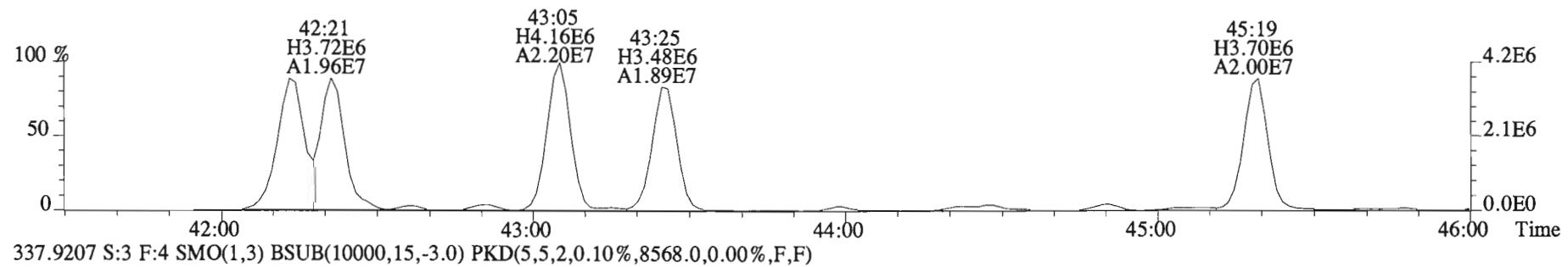
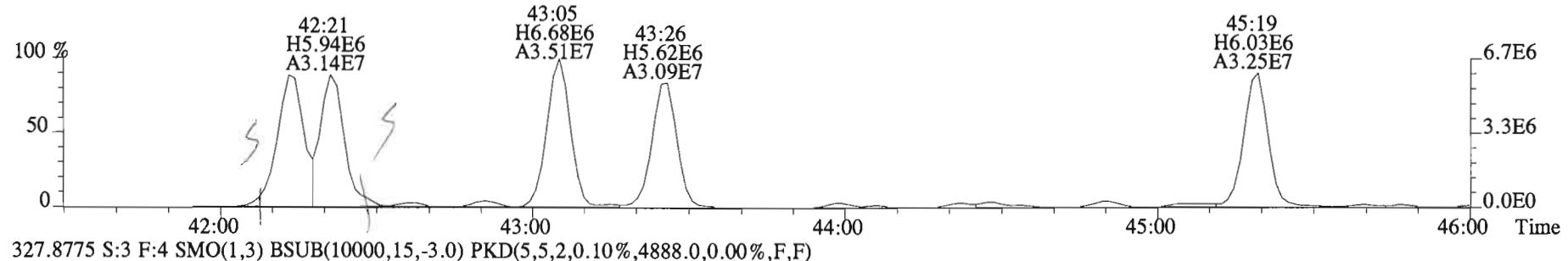
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Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
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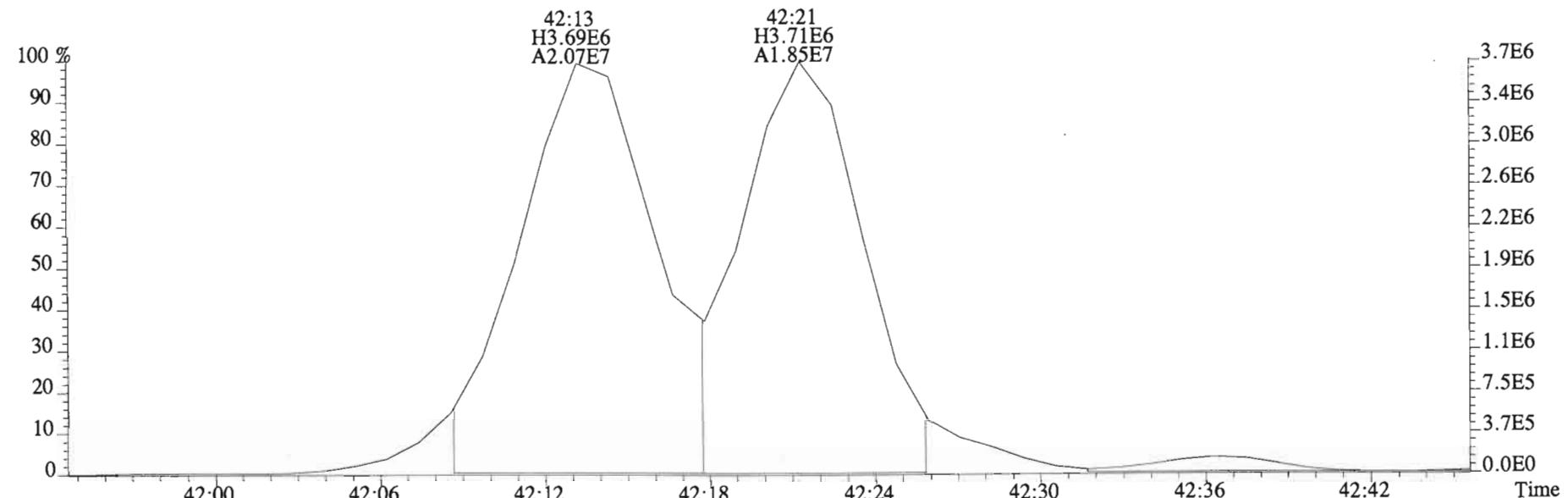
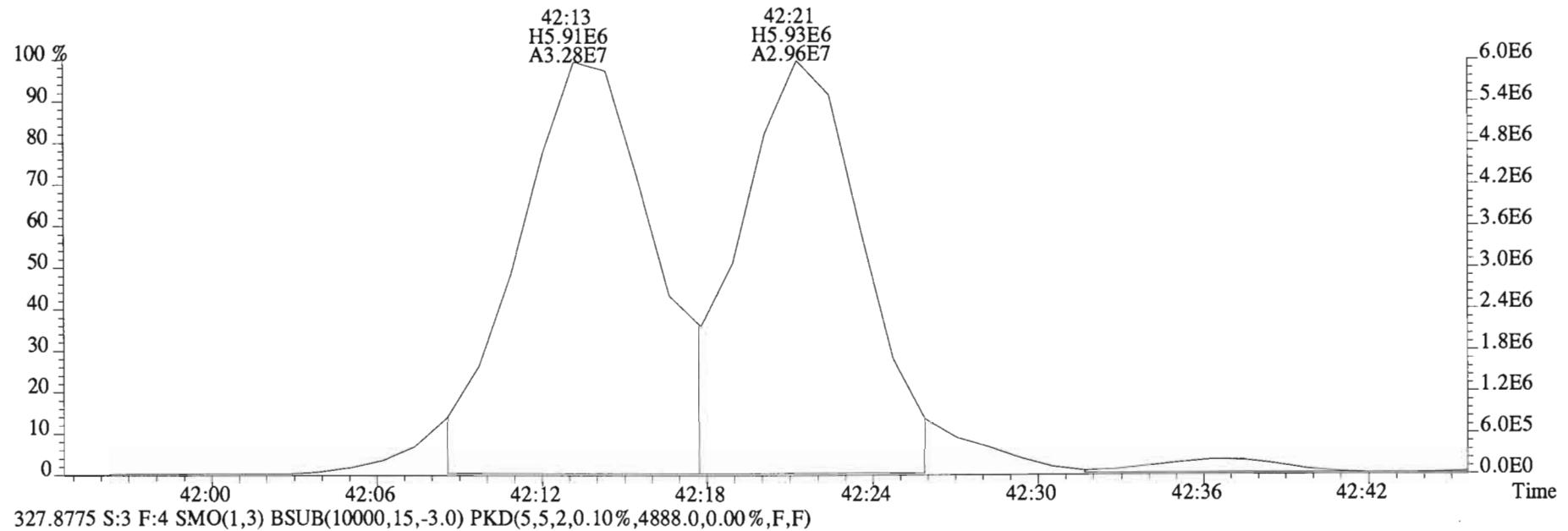
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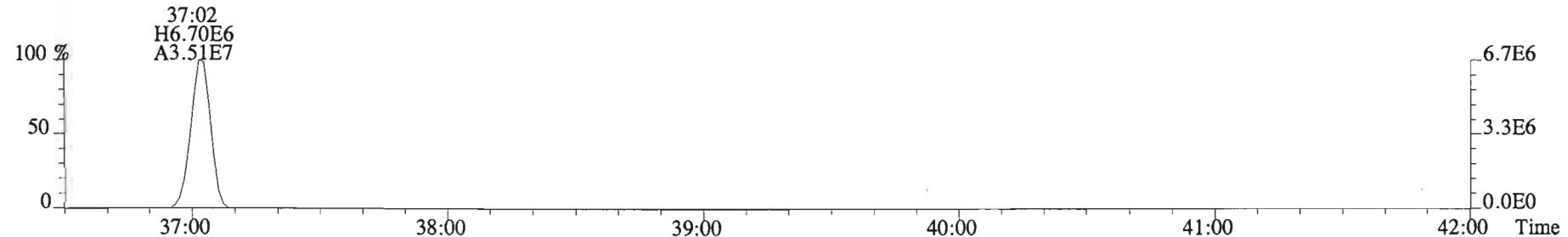
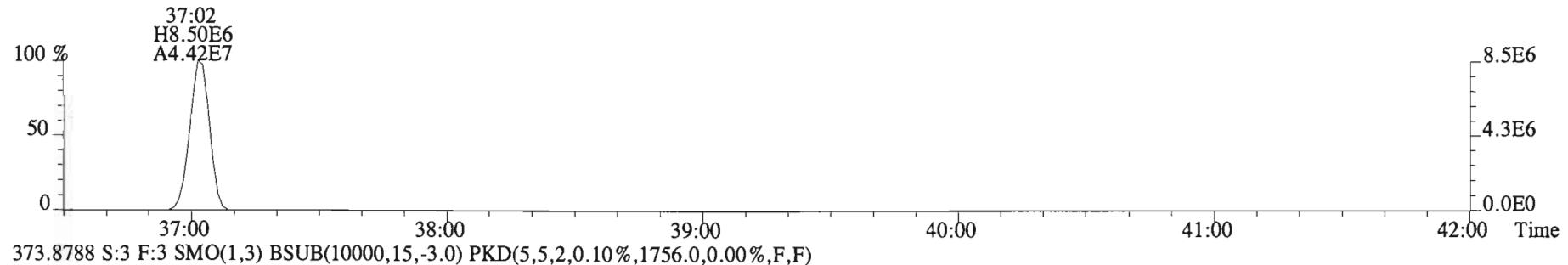
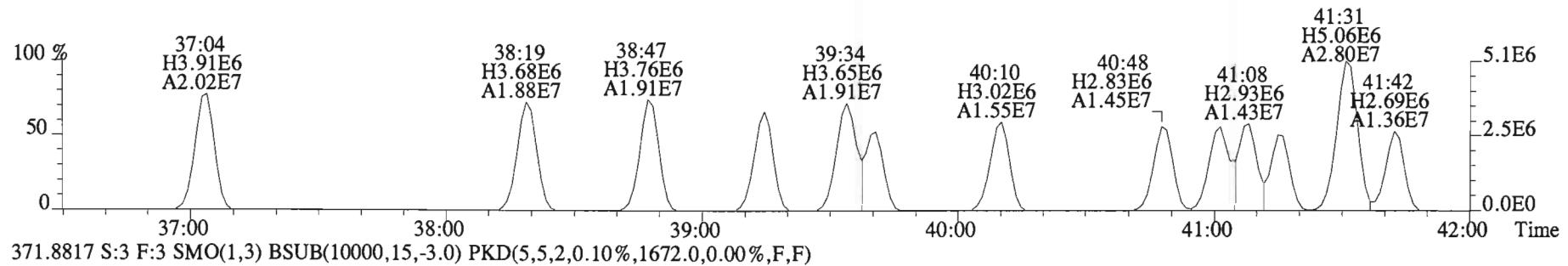
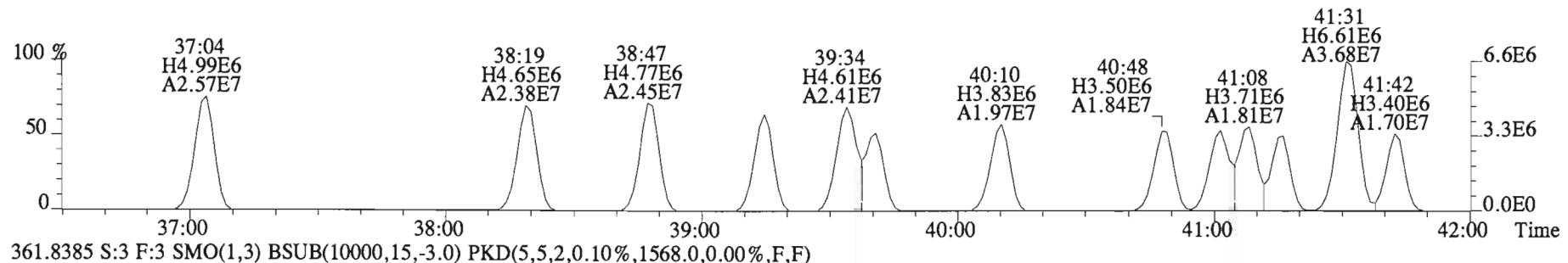
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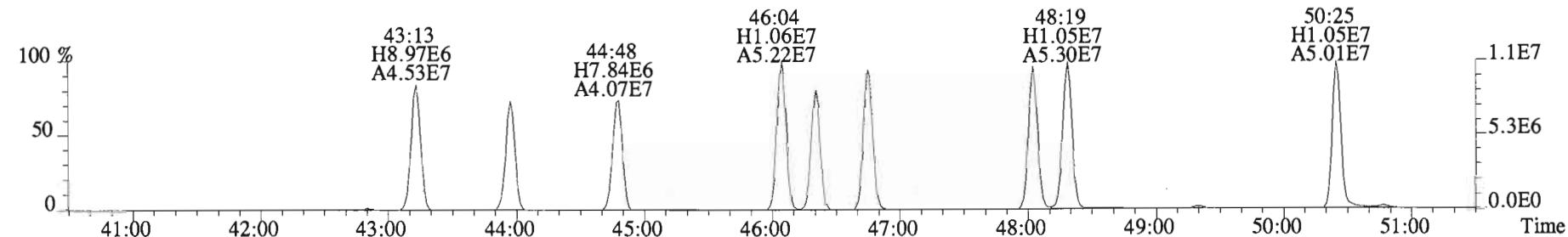
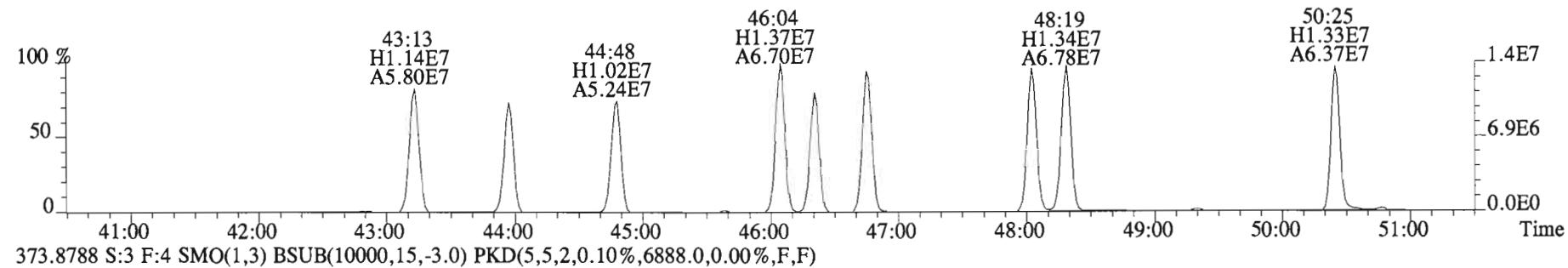
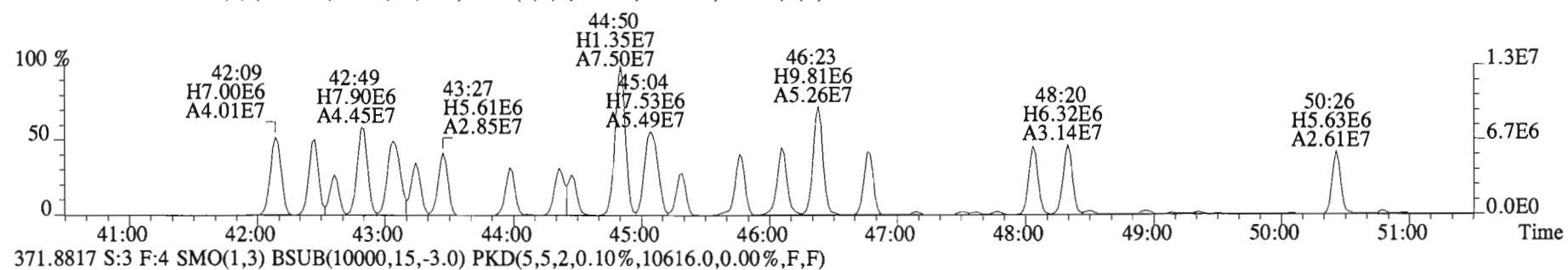
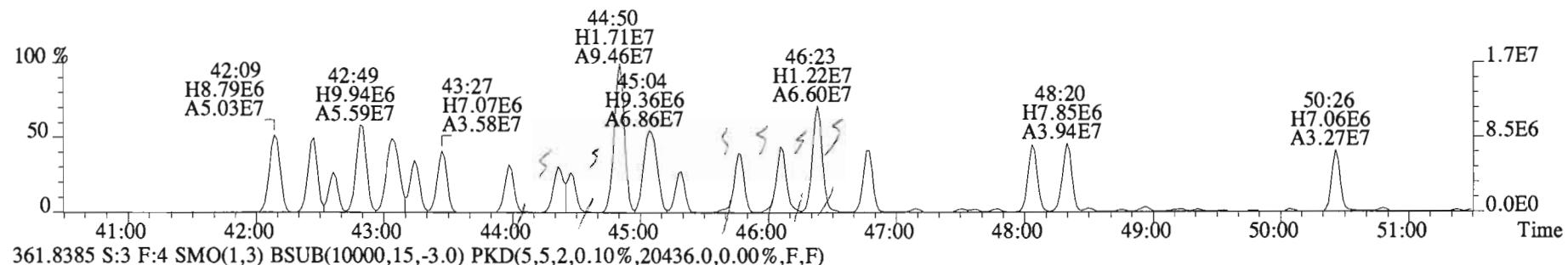
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Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
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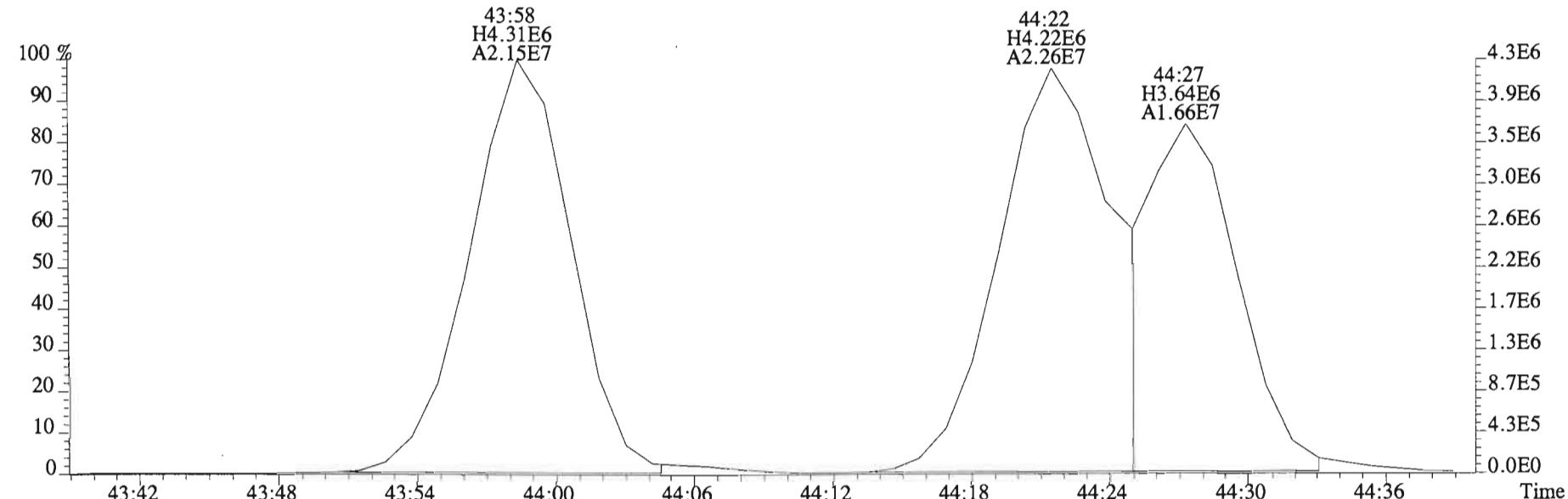
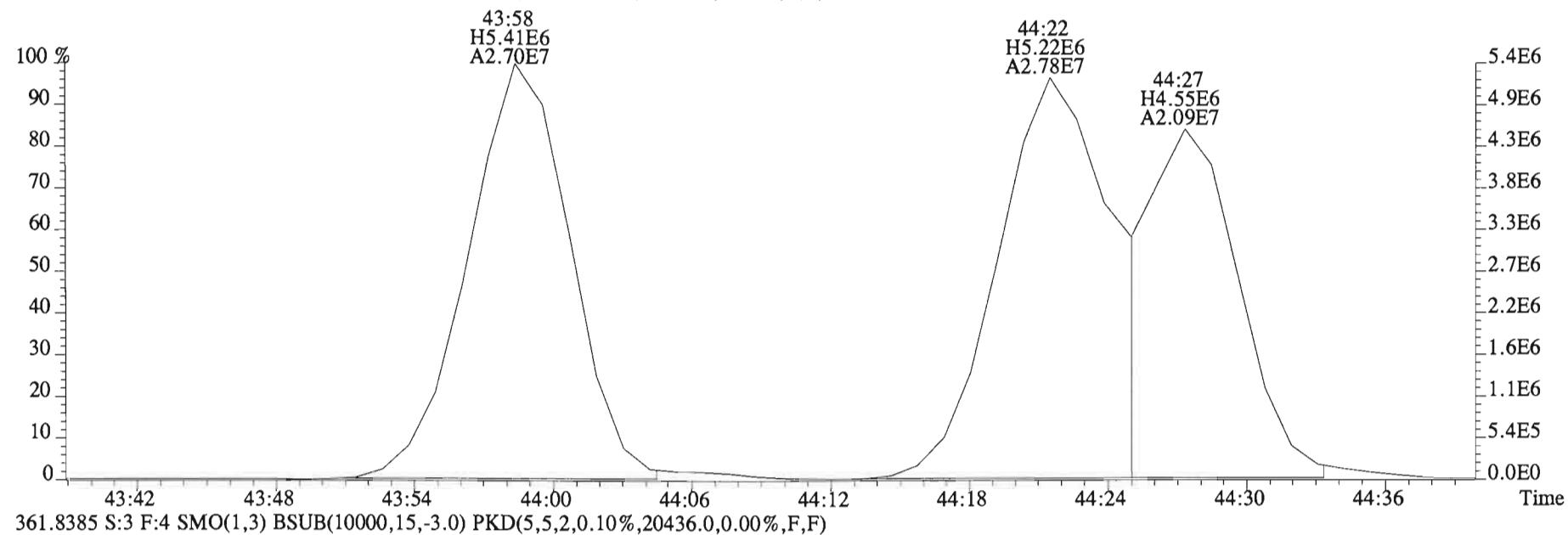
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 Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB ZB1
 359.8415 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1496.0,0.00%,F,F)



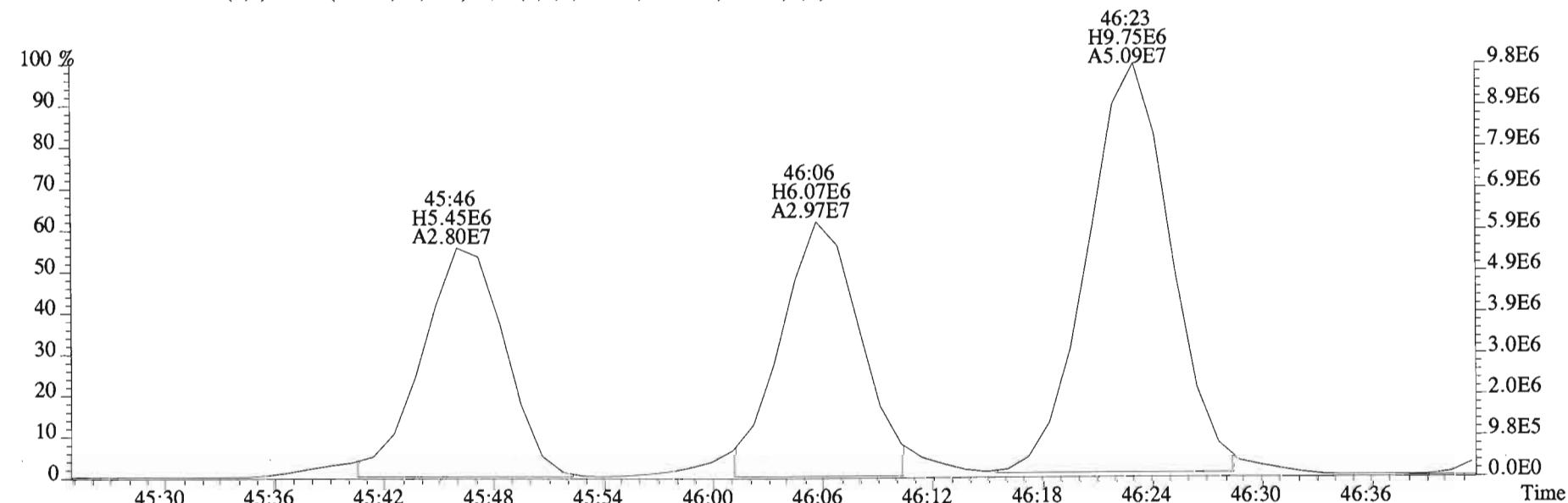
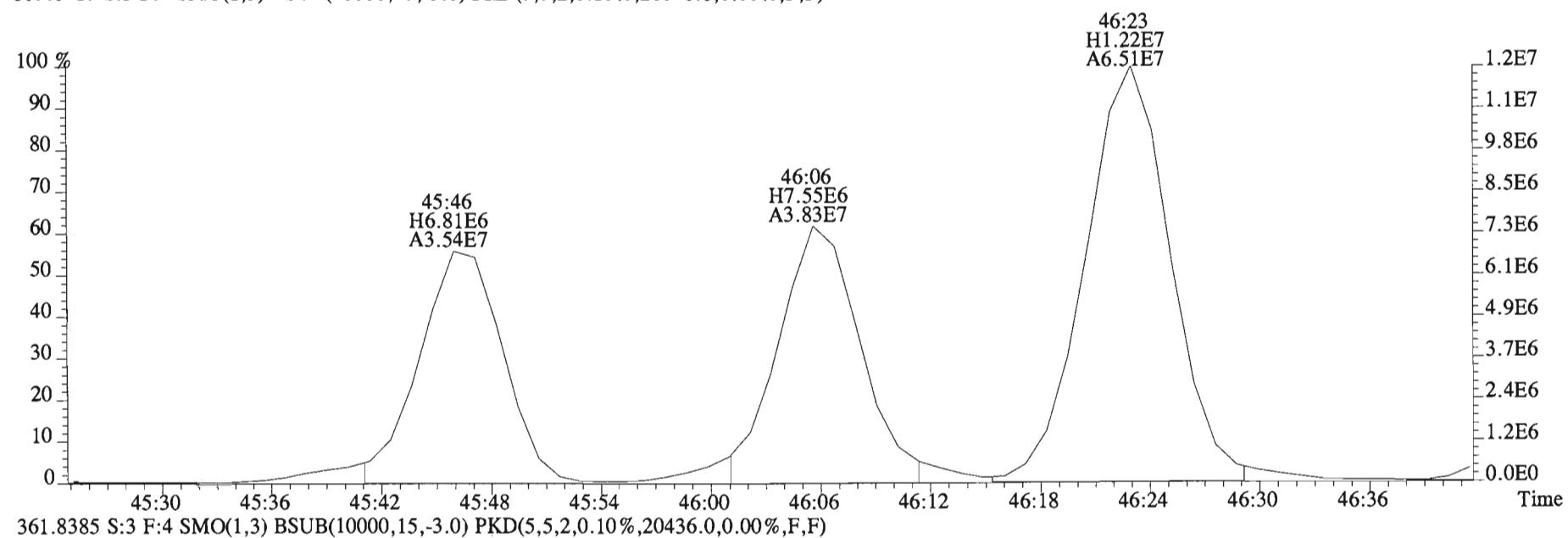
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 Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
 359.8415 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,26048.0,0.00%,F,F)



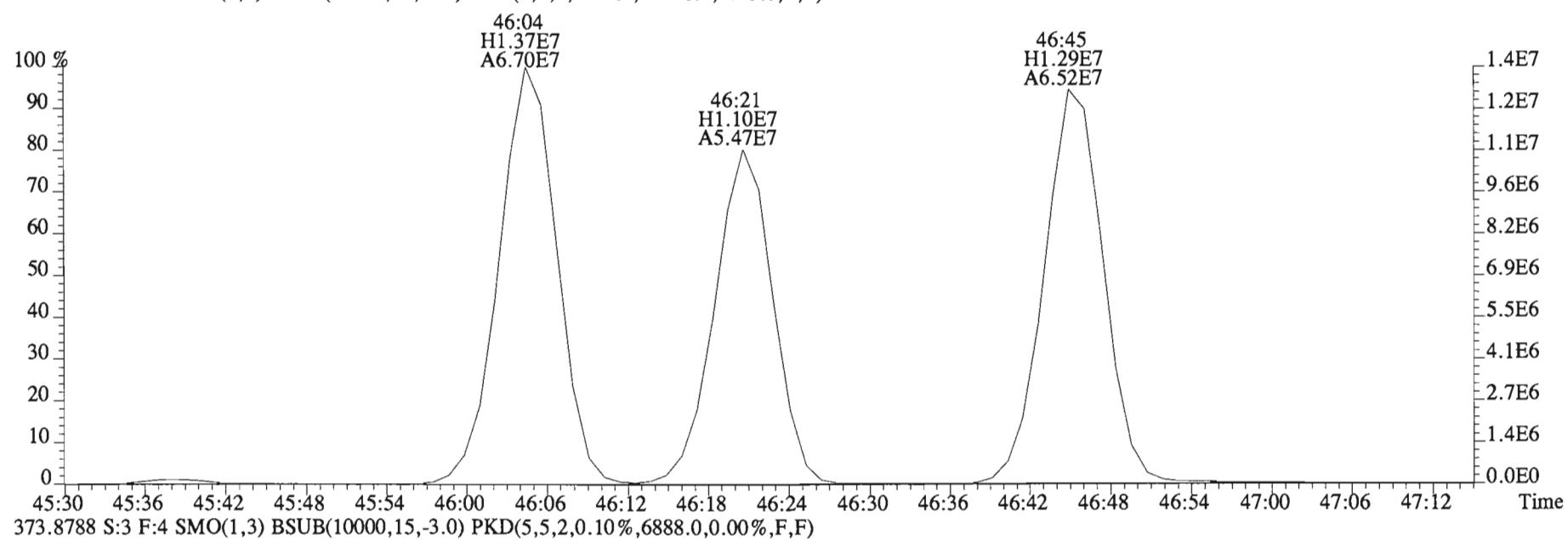
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Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB ZB1
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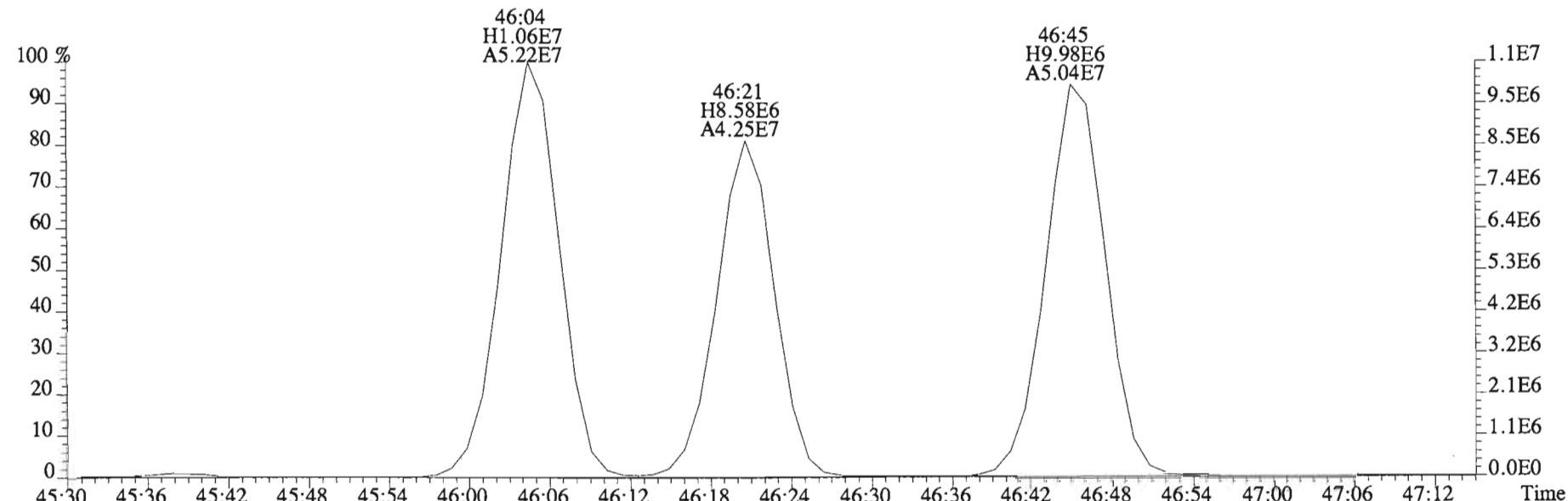
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Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,26048.0,0.00%,F,F)



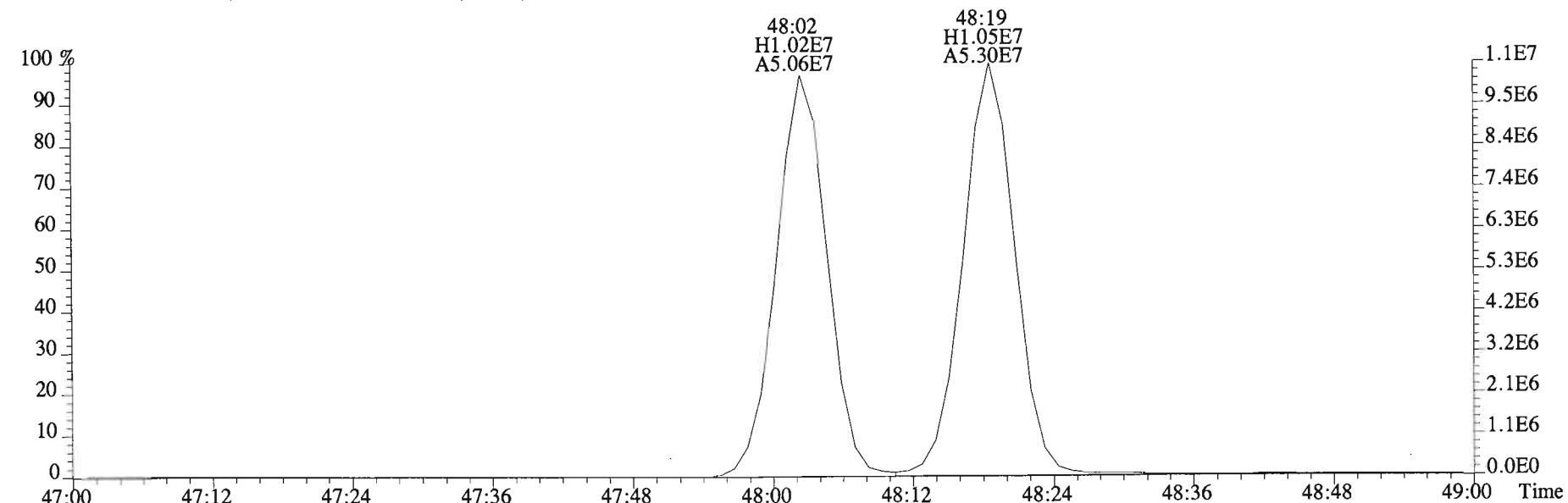
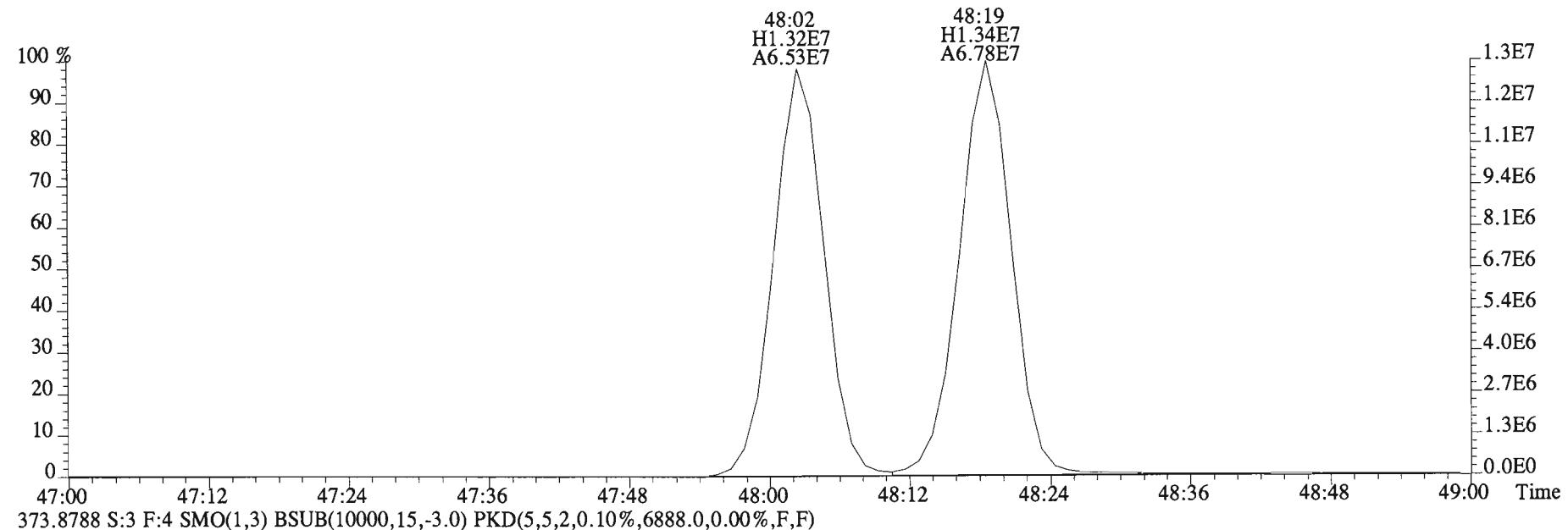
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Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
371.8817 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10616.0,0.00%,F,F)



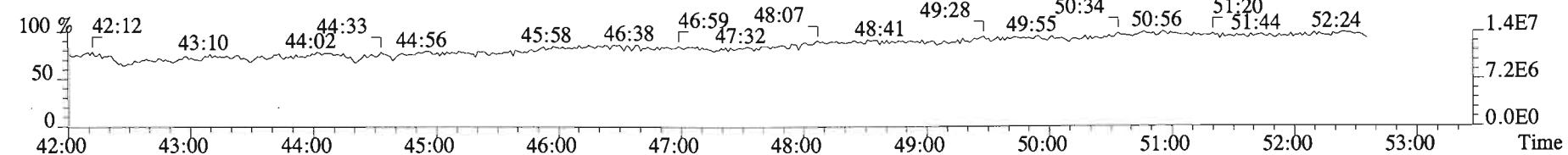
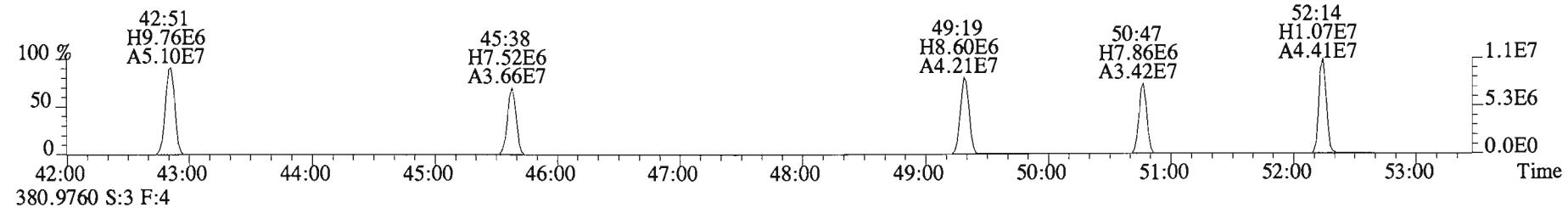
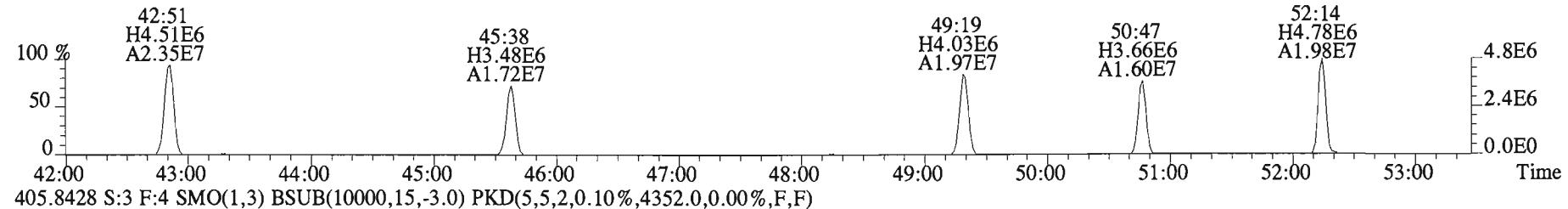
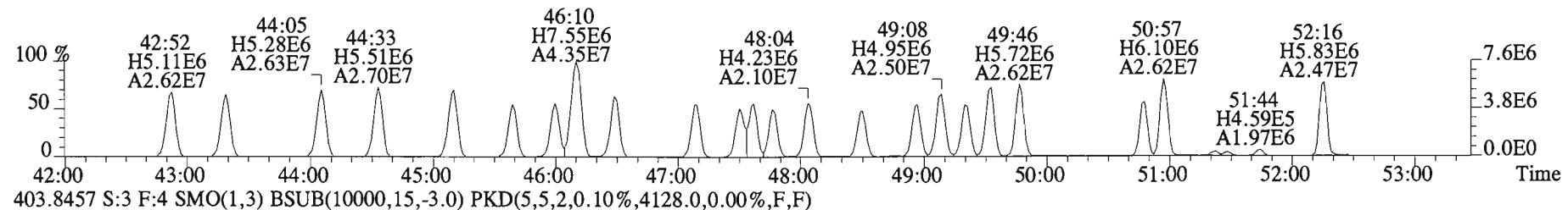
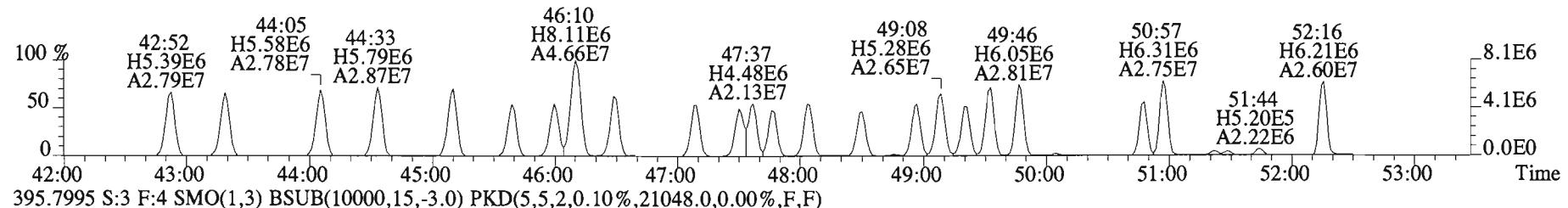
373.8788 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6888.0,0.00%,F,F)



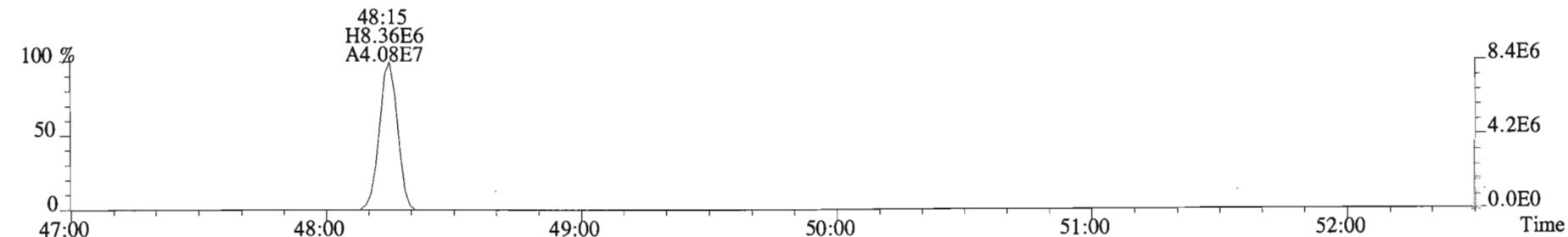
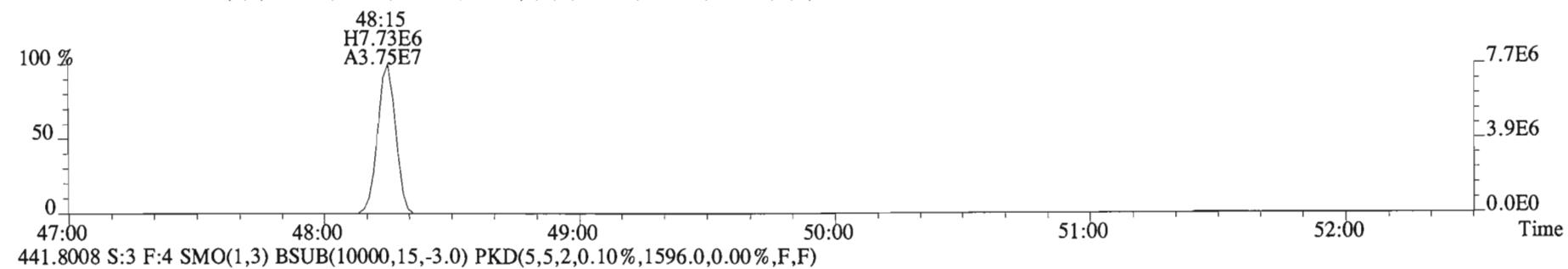
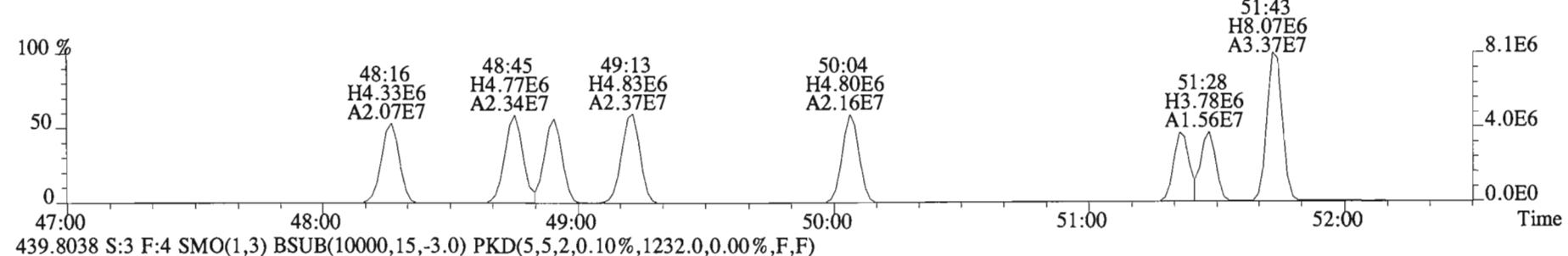
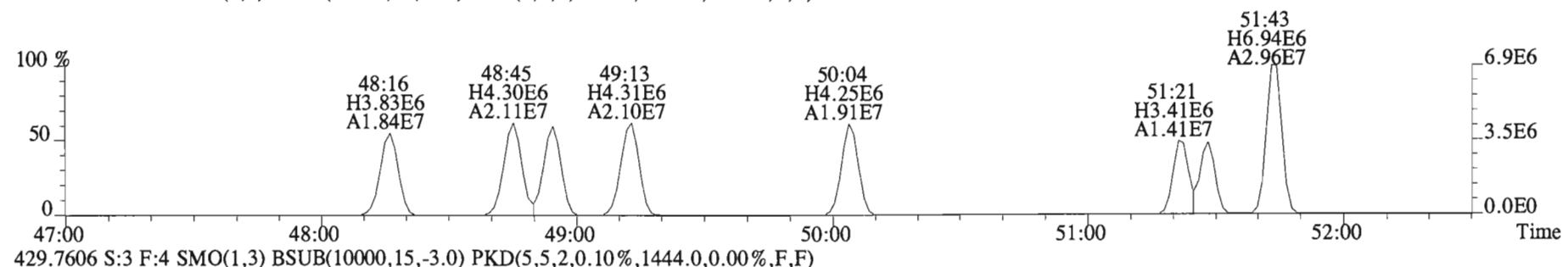
File:150225E1 #1-555 Acq:25-FEB-2015 15:16:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB ZB1
371.8817 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10616.0,0.00%,F,F)



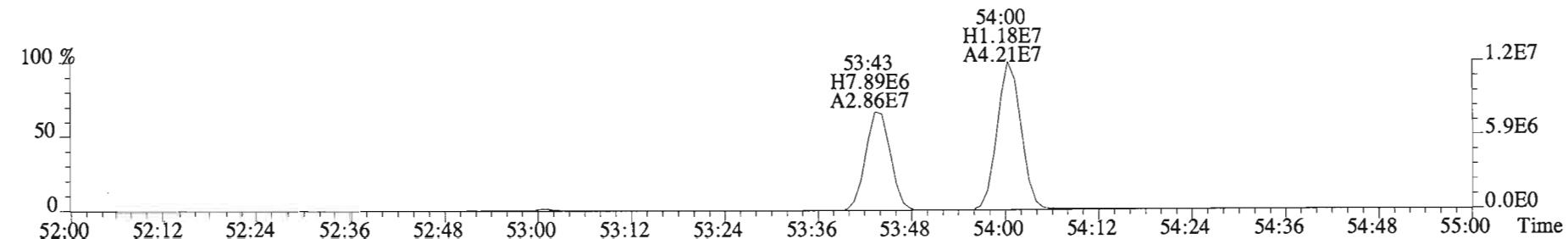
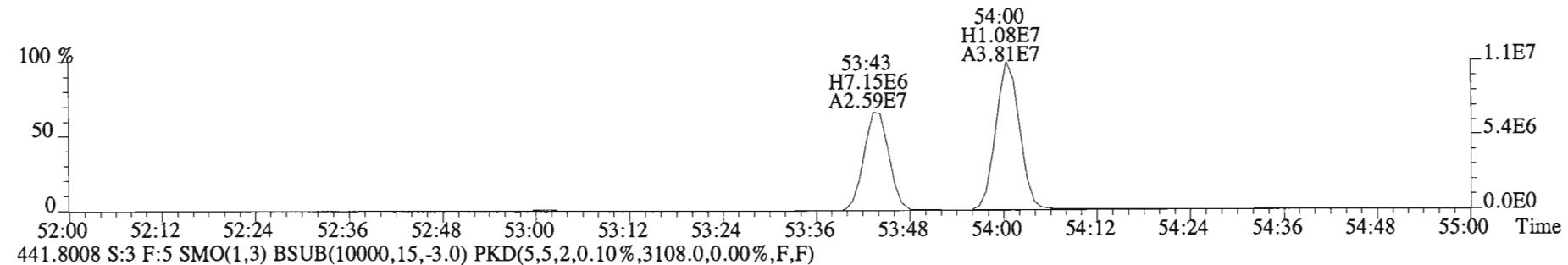
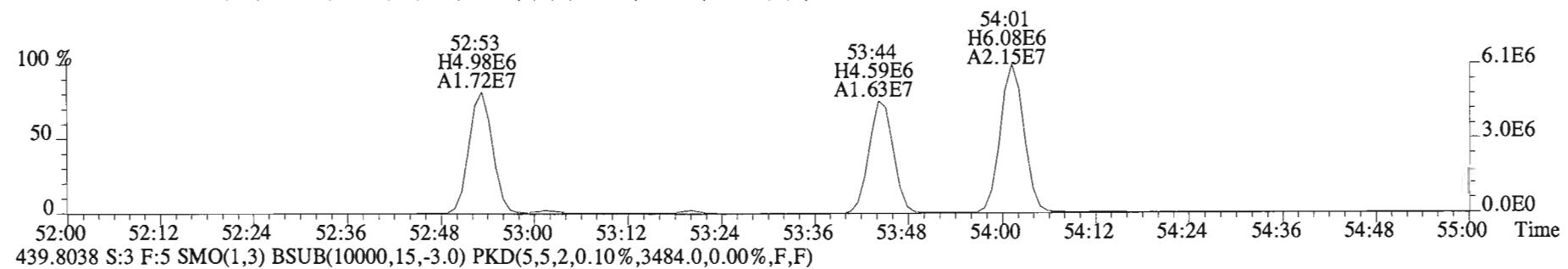
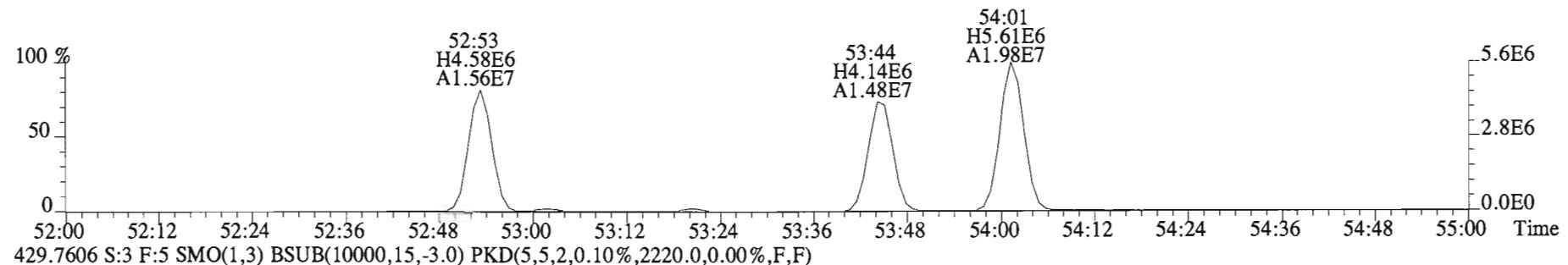
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 Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB ZB1
 393.8025 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,20216.0,0.00%,F,F)



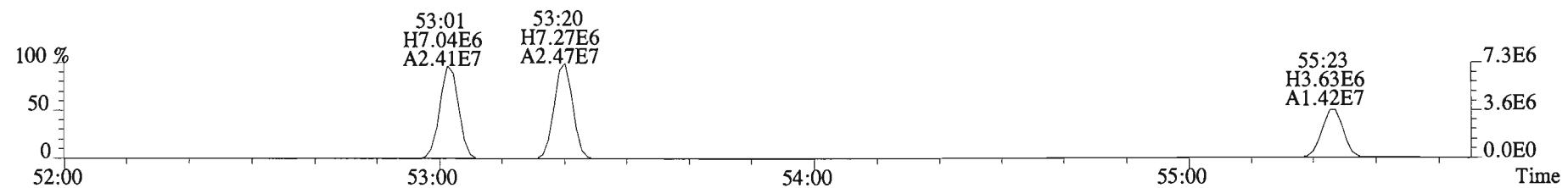
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Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB ZB1
427.7635 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1420.0,0.00%,F,F)



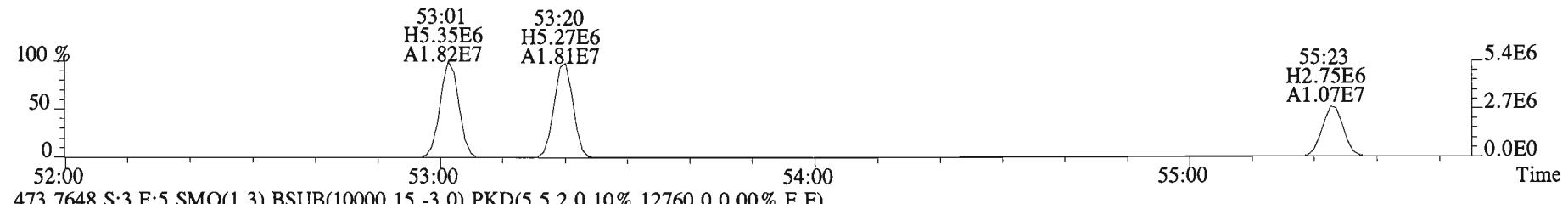
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Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
427.7635 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2180.0,0.00%,F,F)



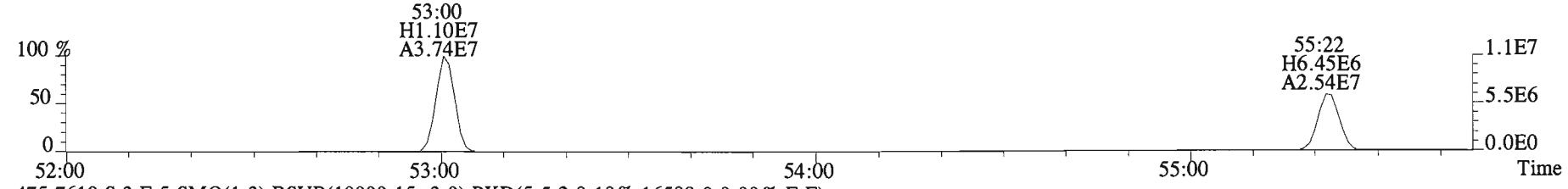
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Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB_ZB1
463.7216 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8840.0,0.00%,F,F)



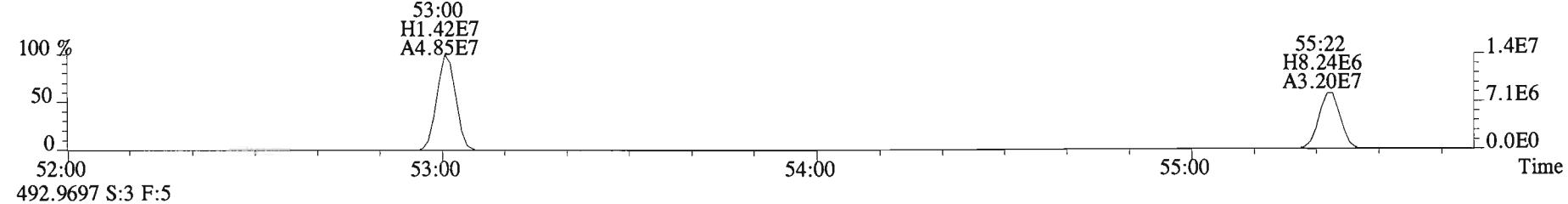
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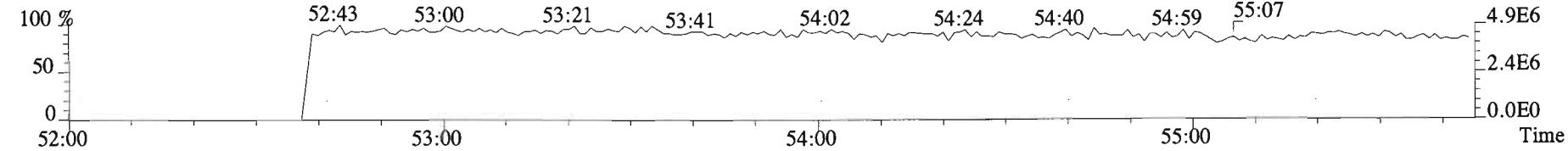
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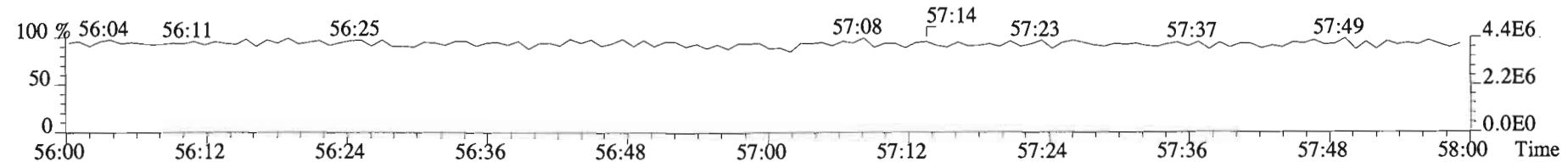
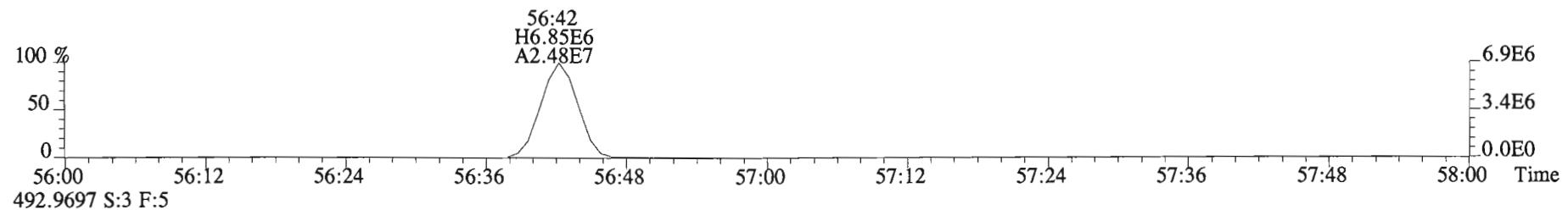
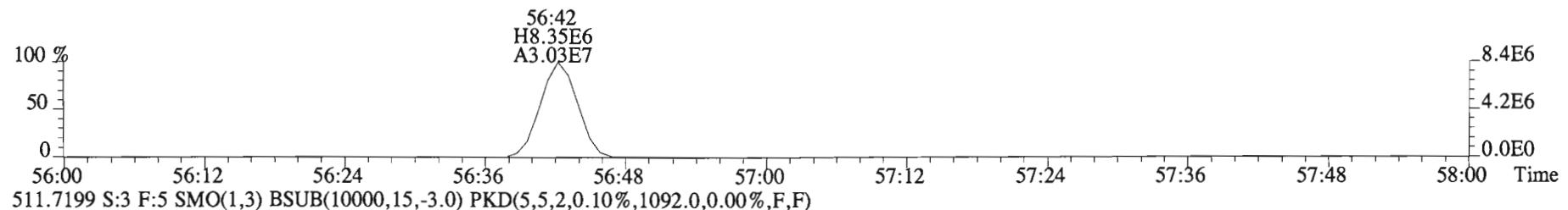
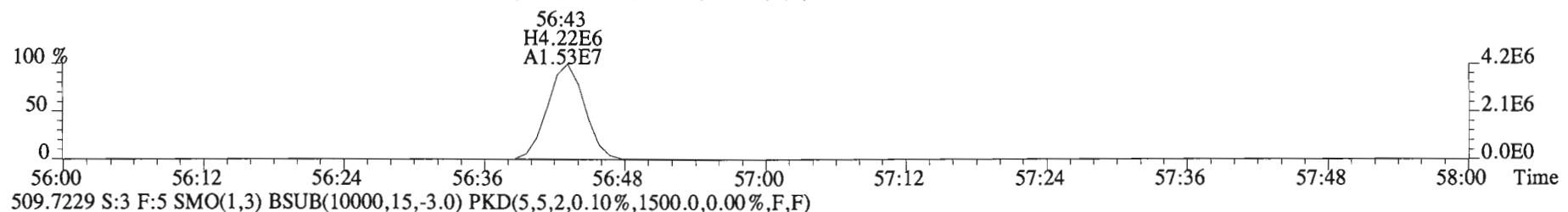
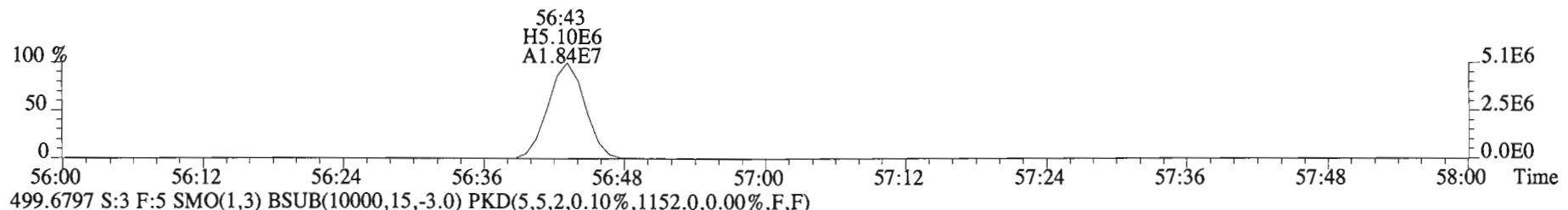
475.7619 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,16508.0,0.00%,F,F)



492.9697 S:3 F:5



File:150225E1 #1-429 Acq:25-FEB-2015 15:16:01 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B5B0101-BS1 OPR 1 Exp:PCB ZB1
 497.6826 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1192.0,0.00%,F,F)



Client ID: WM-CB-11-20150203-W RX Filename: 150225E1 S:10 Acq:25-FEB-15 22:45:17
 Lab ID: 1500147-01RE3@10X GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 0.995 ConCal: ST150225E1-1
 EndCAL: NA

Page 8 of

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n NotF _q	1.33	*		1940	2.5	27.6	*	0.997-1.007	
Mono	PCB-2	2.32e+05	2.97	y 18:32	1.30	82.9		*	2.5	*	0.988	0.983-0.993	
Mono	PCB-3	*	*	n NotF _q	1.30	*		1940	2.5	23.9	*	0.996-1.006	
Di	PCB-4/10	*	*	n NotF _q	1.67	*		7490	2.5	92.4	*	0.997-1.007	
Di	PCB-7/9	*	*	n NotF _q	1.25	*		7490	2.5	74.5	*	0.864-0.872	
Di	PCB-6	*	*	n NotF _q	1.24	*		7490	2.5	75.4	*	0.888-0.897	
Di	PCB-5/8	2.18e+05	1.41	y 22:56	1.27	90.5		*	2.5	*	0.909	0.905-0.915	
Di	PCB-14	*	*	n NotF _q	1.47	*		7490	2.5	62.5	*	0.948-0.958	
Di	PCB-11	2.89e+06	1.51	y 25:15	1.28	1110		*	2.5	*	1.001	0.995-1.005	
Di	PCB-12/13	*	*	n NotF _q	1.27	*		7490	2.5	72.6	*	1.011-1.021	
Di	PCB-15	3.80e+05	1.61	y 25:57	1.44	130		*	2.5	*	1.029	1.023-1.031	
Tri	PCB-19	8.13e+04	0.89	y 24:14	1.18	47.9		*	2.5	*	1.001	0.996-1.006	
Tri	PCB-30	*	*	n NotF _q	1.87	*		1870	2.5	13.3	*	1.033-1.043	
Tri	PCB-18	9.24e+05	1.00	y 25:52	0.89	499		*	2.5	*	0.954	0.949-0.959	
Tri	PCB-17	3.88e+05	1.00	y 26:02	0.96	194		*	2.5	*	0.960	0.956-0.966	
Tri	PCB-24/27	1.32e+05	1.18	y 26:36	1.30	48.5		*	2.5	*	0.981	0.977-0.987	
Tri	PCB-16/32	7.19e+05	1.03	y 27:07	1.05	329		*	2.5	*	1.000	0.996-1.006	
Tri	PCB-34	*	*	n NotF _q	1.30	*		1660	2.5	16.6	*	0.955-0.965	
Tri	PCB-23	*	*	n NotF _q	1.21	*		1660	2.5	17.9	*	0.958-0.968	
Tri	PCB-29	*	*	n NotF _q	1.21	*		1660	2.5	17.9	*	0.967-0.977	
Tri	PCB-26	2.69e+05	0.99	y 28:28	1.24	122		*	2.5	*	0.979	0.974-0.984	
Tri	PCB-25	1.43e+05	1.12	y 28:37	1.10	73.2		*	2.5	*	0.984	0.980-0.990	
Tri	PCB-31	1.15e+06	1.02	y 28:59	1.25	514		*	2.5	*	0.997	0.992-1.002	
Tri	PCB-28	1.34e+06	0.99	y 29:06	1.24	610		*	2.5	*	1.001	0.996-1.006	
Tri	PCB-20/21/33	5.69e+05	1.19	y 29:43	1.16	277		*	2.5	*	1.022	1.016-1.026	
Tri	PCB-22	4.55e+05	0.97	y 30:08	1.16	220		*	2.5	*	1.037	1.032-1.042	
Tri	PCB-36	7.11e+04	1.02	y 30:46	1.30	33.9		*	2.5	*	0.934	0.929-0.939	
Tri	PCB-39	*	*	n NotF _q	1.26	*		1660	2.5	20.0	*	0.943-0.953	
Tri	PCB-38	*	*	n NotF _q	1.24	*		1660	2.5	20.3	*	0.967-0.977	
Tri	PCB-35	1.23e+05	1.17	y 32:30	1.26	60.9		*	2.5	*	0.987	0.982-0.992	
Tri	PCB-37	5.32e+05	0.96	y 32:57	1.35	245		*	2.5	*	1.000	0.996-1.006	
Tetra	PCB-54	*	*	n NotF _q	1.02	*		1640	2.5	17.4	*	0.996-1.006	
Tetra	PCB-50	*	*	n NotF _q	0.78	*		1640	2.5	22.8	*	1.037-1.047	
Tetra	PCB-53	1.52e+05	0.85	y 29:46	1.14	94.5		*	2.5	*	0.946	0.941-0.951	
Tetra	PCB-51	3.54e+04	0.81	y 30:07	1.16	21.5		*	2.5	*	0.957	0.952-0.962	
Tetra	PCB-45	1.11e+05	0.81	y 30:33	1.04	75.1		*	2.5	*	0.971	0.965-0.975	
Tetra	PCB-46	5.61e+04	0.75	y 31:03	0.95	41.7		*	2.5	*	0.986	0.981-0.991	

Reviewed by: 

Date: 2/26/18

Analyst: 

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	1.50e+06	0.79	y 31:30	1.29	820	*	2.5	*	1.001	0.996-1.006		
Tetra	PCB-73	*	*	n NotF _q	1.41	*		1640	2.5	16.8	*	0.999-1.009	
Tetra	PCB-43/49	8.07e+05	0.77	y 31:48	1.14	500	*	2.5	*	1.010	1.005-1.015		
Tetra	PCB-47	2.70e+05	0.73	y 31:59	1.20	150	*	2.5	*	1.000	0.996-1.006		
Tetra	PCB-48/75	2.29e+05	0.86	y 32:07	1.33	115	*	2.5	*	1.004	0.999-1.009		
Tetra	PCB-65	*	*	n NotF _q	1.32	*		1640	2.5	17.0	*	1.007-1.017	
Tetra	PCB-62	*	*	n NotF _q	1.36	*		1640	2.5	16.5	*	1.011-1.021	
Tetra	PCB-44	9.78e+05	0.82	y 32:47	0.87	747	*	2.5	*	1.025	1.020-1.030		
Tetra	PCB-42/59	3.74e+05	0.85	y 33:01	1.24	201	*	2.5	*	1.032	1.027-1.037		
Tetra	PCB-41/64/71/72	1.09e+06	0.76	y 33:36	1.34	541	*	2.5	*	1.051	1.045-1.055		
Tetra	PCB-68	*	*	n NotF _q	1.61	*		1640	2.5	13.9	*	1.053-1.063	
Tetra	PCB-40	1.34e+05	0.62	n 34:04	0.86	104	R	*	2.5	*	1.065	1.061-1.071	
Tetra	PCB-57	*	*	n NotF _q	1.12	*		1640	2.5	16.4	*	0.965-0.975	
Tetra	PCB-67	7.47e+04	0.66	y 34:45	1.09	36.3	*	2.5	*	0.979	0.974-0.984		
Tetra	PCB-58	*	*	n NotF _q	1.14	*		1640	2.5	16.1	*	0.977-0.987	
Tetra	PCB-63	7.20e+04	0.91	n 35:01	1.16	32.8	R	*	2.5	*	0.987	0.981-0.991	
Tetra	PCB-74	7.39e+05	0.75	y 35:18	1.21	323	*	2.5	*	0.995	0.989-0.999		
Tetra	PCB-61/70	1.93e+06	0.81	y 35:31	1.13	909	*	2.5	*	1.001	0.995-1.005		
Tetra	PCB-76/66	1.23e+06	0.72	y 35:43	1.18	552	*	2.5	*	1.006	1.000-1.010		
Tetra	PCB-80	*	*	n NotF _q	1.32	*		1640	2.5	13.9	*	0.995-1.005	
Tetra	PCB-55	4.17e+04	0.68	y 36:13	1.23	17.5	*	2.5	*	1.009	1.004-1.014		
Tetra	PCB-56/60	8.80e+05	0.72	y 36:45	1.11	410	*	2.5	*	1.023	1.018-1.028		
Tetra	PCB-79	4.37e+04	0.50	n 37:49	1.16	19.4	R	*	2.5	*	1.053	1.048-1.058	
Tetra	PCB-78	*	*	n NotF _q	1.18	*		1640	2.5	16.1	*	0.982-0.992	
Tetra	PCB-81	*	*	n NotF _q	1.29	*		1640	2.5	14.7	*	0.995-1.005	
Tetra	PCB-77	2.04e+05	0.76	y 39:36	1.29	83.5	*	2.5	*	1.000	0.995-1.005		
Penta	PCB-104	*	*	n NotF _q	1.26	*		1530	2.5	26.4	*	0.996-1.006	
Penta	PCB-96	*	*	n NotF _q	1.09	*		1530	2.5	30.5	*	1.034-1.044	
Penta	PCB-103	*	*	n NotF _q	0.97	*		1530	2.5	34.4	*	1.051-1.061	
Penta	PCB-100	*	*	n NotF _q	0.96	*		1530	2.5	34.6	*	1.061-1.071	
Penta	PCB-94	*	*	n NotF _q	1.13	*		1530	2.5	42.8	*	0.980-0.990	
Penta	PCB-95/98/102	1.66e+06	1.64	y 35:48	1.29	1210	*	2.5	*	1.000	0.994-1.004		
Penta	PCB-93	*	*	n NotF _q	1.06	*		1530	2.5	45.5	*	0.998-1.008	
Penta	PCB-88/91	3.11e+05	1.51	y 36:13	1.12	259	*	2.5	*	1.012	1.006-1.016		
Penta	PCB-121	*	*	n NotF _q	1.76	*		1530	2.5	27.4	*	1.009-1.019	
Penta	PCB-84/92	9.37e+05	1.76	y 37:06	1.07	764	*	2.5	*	0.990	0.985-0.995		
Penta	PCB-89	2.71e+04	1.53	y 37:18	1.00	23.8	*	2.5	*	0.995	0.990-1.000		

Analyst: Dmrs

Date: 2/26/15

Client ID: WM-CB-11-20150203-W RX Filename: 150225E1 S:10 Acq:25-FEB-15 22:45:17
 Lab ID: 1500147-01RE3@10X GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 0.995

ConCal: ST150225E1-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	2.37e+06	1.65	y 37:29	1.21	1710	*	2.5	*	*	1.000	0.995-1.005	
Penta	PCB-113	*	*	n NotF ₇	1.34	*			1530	2.5	31.4	*	1.002-1.012
Penta	PCB-99	9.80e+05	1.55	y 37:49	1.25	685	*	2.5	*	*	1.009	1.004-1.014	
Penta	PCB-119	6.99e+04	1.12	n 38:17	1.88	37.5	R	*	2.5	*	0.987	0.982-0.992	
Penta	PCB-108/112	1.23e+05	1.39	y 38:27	1.41	88.4		*	2.5	*	0.992	0.986-0.996	
Penta	PCB-83	*	*	n NotF ₇	1.66	*			1530	2.5	29.9	*	0.990-1.000
Penta	PCB-97	6.70e+05	1.57	y 38:47	1.30	521		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-86	*	*	n NotF ₇	1.03	*			1530	2.5	48.0	*	0.999-1.009
Penta	PCB-87/117/125	1.11e+06	1.74	y 39:04	1.59	705		*	2.5	*	1.008	1.002-1.012	
Penta	PCB-111/115	4.81e+04	2.68	n 39:12	1.86	26.1	R	*	2.5	*	1.011	1.006-1.016	
Penta	PCB-85/116	3.77e+05	1.66	y 39:20	1.39	273		*	2.5	*	1.015	1.010-1.020	
Penta	PCB-120	*	*	n NotF ₇	1.99	*			1530	2.5	25.0	*	1.016-1.026
Penta	PCB-110	3.53e+06	1.61	y 39:44	1.70	2100		*	2.5	*	1.025	1.019-1.029	
Penta	PCB-82	2.38e+05	1.35	y 40:22	0.74	243		*	2.5	*	0.977	0.971-0.981	
Penta	PCB-124	1.14e+05	2.42	n 41:03	1.30	66.3	R	*	2.5	*	0.993	0.988-0.998	
Penta	PCB-107/109	2.26e+05	1.34	y 41:12	1.34	128		*	2.5	*	0.997	0.991-1.001	
Penta	PCB-123	4.81e+04	1.55	y 41:21	1.25	29.2		*	2.5	*	1.001	0.995-1.005	
Penta	PCB-106/118	2.84e+06	1.70	y 41:32	1.29	1620		*	2.5	*	1.000	0.996-1.006	
Penta	PCB-114	5.40e+04	1.20	n 42:11	1.45	27.1	R	*	2.5	*	1.000	0.995-1.005	
Penta	PCB-122	2.52e+04	1.15	n 42:19	1.22	15.1	R	*	2.5	*	1.003	0.999-1.009	
Penta	PCB-105	1.23e+06	1.58	y 43:03	1.56	590		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-127	*	*	n NotF ₇	1.31	*			2380	2.5	44.4	*	0.995-1.005
Penta	PCB-126	*	*	n NotF ₇	1.41	*			2380	2.5	47.8	*	0.995-1.005
Hexa	PCB-155	*	*	n NotF ₇	1.20	*			1490	2.5	28.2	*	0.966-1.006
Hexa	PCB-150	*	*	n NotF ₇	1.13	*			1490	2.5	30.0	*	1.030-1.040
Hexa	PCB-152	*	*	n NotF ₇	1.17	*			1490	2.5	28.9	*	1.043-1.053
Hexa	PCB-145	*	*	n NotF ₇	1.09	*			1490	2.5	30.9	*	1.055-1.065
Hexa	PCB-136	3.11e+05	1.18	y 39:32	1.14	220		*	2.5	*	1.068	1.063-1.073	
Hexa	PCB-148	*	*	n NotF ₇	0.82	*			1490	2.5	41.3	*	1.066-1.076
Hexa	PCB-154	4.30e+04	1.36	y 40:08	0.89	38.9		*	2.5	*	1.084	1.079-1.089	
Hexa	PCB-151	3.50e+05	1.38	y 40:47	0.82	345		*	2.5	*	1.102	1.097-1.107	
Hexa	PCB-135	2.11e+05	1.56	n 40:59	0.80	213	R	*	2.5	*	1.107	1.101-1.113	
Hexa	PCB-144	1.08e+05	1.08	y 41:06	0.86	102		*	2.5	*	1.111	1.105-1.116	
Hexa	PCB-147	5.60e+04	1.18	y 41:14	0.78	58.0		*	2.5	*	1.114	1.108-1.120	
Hexa	PCB-139/149	1.44e+06	1.25	y 41:29	0.87	1330		*	2.5	*	1.121	1.115-1.127	
Hexa	PCB-140	2.77e+04	1.36	y 41:41	0.78	28.7		*	2.5	*	1.126	1.120-1.132	
Hexa	PCB-134/143	1.31e+05	1.71	n 42:07	0.93	95.6	R	*	2.5	*	0.975	0.970-0.980	

Analyst: DMS

Date: 2/26/15

Client ID: WM-CB-11-20150203-W RX Filename: 150225E1 S:10 Acq:25-FEB-15 22:45:17
 Lab ID: 1500147-01RE3@10X GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 0.995

ConCal: ST150225E1-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	8.31e+04	0.94	n	42:25	0.91	61.9	R	*	2.5	*	0.982	0.977-0.987
Hexa	PCB-131	*	*	n	NotF _g	0.85	*		1900	2.5	42.4	*	0.981-0.991
Hexa	PCB-146/165	4.40e+05	1.25	y	42:48	1.08	275		*	2.5	*	0.991	0.986-0.996
Hexa	PCB-132/161	8.55e+05	1.25	y	43:04	1.12	518		*	2.5	*	0.997	0.992-1.002
Hexa	PCB-153	2.71e+06	1.22	y	43:12	1.20	1530		*	2.5	*	1.000	0.996-1.006
Hexa	PCB-168	*	*	n	NotF _g	1.36	*		1900	2.5	26.4	*	1.000-1.010
Hexa	PCB-141	4.90e+05	1.27	y	43:56	1.16	351		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-137	1.31e+05	1.10	y	44:19	1.18	92.2		*	2.5	*	1.009	1.004-1.014
Hexa	PCB-130	1.86e+05	1.14	y	44:26	0.92	167		*	2.5	*	1.011	1.006-1.016
Hexa	PCB-138/163/164	3.21e+06	1.25	y	44:47	1.38	1820		*	2.5	*	1.000	0.996-1.006
Hexa	PCB-158/160	3.94e+05	1.01	n	45:01	1.48	208	R	*	2.5	*	1.006	1.001-1.011
Hexa	PCB-129	1.25e+05	1.00	n	45:17	0.99	98.2	R	*	2.5	*	1.012	1.007-1.017
Hexa	PCB-166	*	*	n	NotF _g	1.14	*		1900	2.5	31.2	*	0.988-0.998
Hexa	PCB-159	6.57e+04	1.43	y	46:08	1.22	36.1		*	2.5	*	1.002	0.995-1.005
Hexa	PCB-128/162	5.24e+05	1.20	y	46:21	1.03	340		*	2.5	*	1.006	1.002-1.012
Hexa	PCB-167	1.52e+05	1.31	y	46:45	1.18	89.4		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-156	4.02e+05	1.24	y	48:02	1.27	220		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-157	8.45e+04	1.64	n	48:19	1.22	46.5	R	*	2.5	*	1.001	0.995-1.005
Hexa	PCB-169	*	*	n	NotF _g	1.07	*		1900	2.5	34.3	*	0.995-1.005
Hepta	PCB-188	*	*	n	NotF _g	1.52	*		1480	2.5	15.2	*	0.996-1.006
Hepta	PCB-184	*	*	n	NotF _g	1.34	*		1480	2.5	17.3	*	1.006-1.016
Hepta	PCB-179	3.20e+05	1.03	y	44:04	1.39	207		*	2.5	*	1.029	1.024-1.034
Hepta	PCB-176	8.97e+04	0.90	y	44:32	1.45	55.4		*	2.5	*	1.040	1.035-1.045
Hepta	PCB-186	*	*	n	NotF _g	1.46	*		1480	2.5	15.9	*	1.049-1.059
Hepta	PCB-178	1.07e+05	1.32	n	45:37	1.07	89.9	R	*	2.5	*	1.065	1.061-1.071
Hepta	PCB-175	2.83e+04	0.99	y	45:58	1.05	24.3		*	2.5	*	1.074	1.069-1.079
Hepta	PCB-182/187	7.58e+05	1.06	y	46:07	1.14	600		*	2.5	*	1.077	1.073-1.083
Hepta	PCB-183	3.53e+05	1.00	y	46:28	1.22	260		*	2.5	*	1.085	1.080-1.090
Hepta	PCB-185	5.69e+04	1.25	n	47:07	1.40	54.2	R	*	2.5	*	0.956	0.950-0.960
Hepta	PCB-174	5.37e+05	1.11	y	47:29	1.29	558		*	2.5	*	0.963	0.958-0.968
Hepta	PCB-181	*	*	n	NotF _g	1.35	*		1480	2.5	25.5	*	0.960-0.970
Hepta	PCB-177	2.88e+05	0.95	y	47:45	1.27	304		*	2.5	*	0.969	0.963-0.973
Hepta	PCB-171	1.59e+05	1.12	y	48:02	1.46	146		*	2.5	*	0.974	0.969-0.979
Hepta	PCB-173	*	*	n	NotF _g	1.10	*		1480	2.5	31.2	*	0.978-0.988
Hepta	PCB-172	1.06e+05	1.06	y	48:54	1.35	105		*	2.5	*	0.992	0.987-0.997
Hepta	PCB-192	*	*	n	NotF _g	1.74	*		1480	2.5	19.8	*	0.991-1.001
Hepta	PCB-180	1.25e+06	0.98	y	49:19	1.45	1150		*	2.5	*	1.000	0.995-1.005

Analyst: DMS

Date: 2/26/15

Client ID: WM-CB-11-20150203-W RX Filename: 150225E1 S:10 Acq:25-FEB-15 22:45:17
 Lab ID: 1500147-01RE3@10X GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 0.995

ConCal: ST150225E1-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	6.77e+04	1.07	y 49:31	1.85	48.9		*	2.5	*	1.004	0.999-1.009	
Hepta	PCB-191	*	*	n NotF _¶	1.86		*	1480	2.5	18.5	*	1.005-1.015	
Hepta	PCB-170	4.72e+05	1.08	y 50:47	1.67	464		*	2.5	*	1.000	0.995-1.005	
Hepta	PCB-190	1.38e+05	1.13	y 50:57	2.25	101		*	2.5	*	1.004	0.999-1.009	
Hepta	PCB-189	*	*	n NotF _¶	1.67	*		1480	2.5	17.5	*	0.995-1.005	
Octa	PCB-202	8.51e+04	0.99	y 48:15	1.02	84.1		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-201	5.73e+04	0.64	n 48:44	1.10	52.7	R	*	2.5	*	1.010	1.005-1.015	
Octa	PCB-204	*	*	n NotF _¶	1.07	*		1560	2.5	33.0	*	1.009-1.019	
Octa	PCB-197	*	*	n NotF _¶	1.17	*		1560	2.5	30.4	*	1.015-1.025	
Octa	PCB-200	5.88e+04	1.02	y 50:03	1.03	57.2		*	2.5	*	1.038	1.034-1.044	
Octa	PCB-198	*	*	n NotF _¶	0.75	*		1560	2.5	47.0	*	1.062-1.072	
Octa	PCB-199	2.79e+05	0.87	y 51:27	0.74	378		*	2.5	*	1.067	1.064-1.074	
Octa	PCB-196/203	3.28e+05	0.80	y 51:43	0.83	399		*	2.5	*	1.072	1.070-1.080	
Octa	PCB-195	7.78e+04	0.83	y 52:52	1.14	105		*	2.5	*	0.984	0.979-0.989	
Octa	PCB-194	2.32e+05	1.02	y 53:44	1.29	276		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-205	*	*	n NotF _¶	1.61	*		1360	2.5	21.6	*	1.001-1.010	
Nona	PCB-208	5.55e+04	1.51	y 53:01	1.01	53.7		*	2.5	*	1.000	0.995-1.005	
Nona	PCB-207	*	*	n NotF _¶	1.03	*		1100	2.5	15.6	*	1.001-1.011	
Nona	PCB-206	8.46e+04	1.47	y 55:22	0.88	139		*	2.5	*	1.000	0.995-1.005	
Deca	PCB-209	3.24e+04	1.41	n 56:41	1.35	37.3	R	*	2.5	*	1.000	0.995-1.005	

Analyst: Dms

Date: 2/26/15

Client ID: WM-CB-11-20150203-W RX
Lab ID: 1500147-01RE3@10X

Filename: 150225E1 S:10 Acq:25-FEB-15 22:45:17 ConCal: ST150225E1-1
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 0.9952 EndCAL: NA

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	Name	Resp	RA	RT	RRF	Conc	
Total Mono-PCB		2.32e+05	2.97	y	18:32	1.31	82.8639
Total Di-PCB		3.49e+06	1.41	y	22:56	1.32	1330.80
Total Tri-PCB		2.24e+06	0.89	y	24:14	1.20	1118.76
Total Tri-PCB		4.65e+06	0.99	y	28:28	1.23	2155.73 Sum:3274.49
Total Tetra-PCB		1.07e+07	0.85	y	29:46	1.17	5637.60
Total Penta-PCB		1.55e+07	1.64	y	35:48	1.24	10358.5
Total Penta-PCB		1.23e+06	1.58	y	43:03	1.39	589.958 Sum:10948.4
Total Hexa-PCB		2.33e+06	1.18	y	39:32	0.94	2126.75
Total Hexa-PCB		9.17e+06	1.25	y	42:48	1.13	5438.73 Sum:7565.48
Total Hepta-PCB		4.56e+06	1.03	y	44:04	1.37	4022.49
Total Octa-PCB		7.51e+05	0.99	y	48:15	0.95	918.413
Total Octa-PCB		3.09e+05	0.83	y	52:52	1.35	380.736 Sum:1299.15
Total Nona-PCB		1.40e+05	1.51	y	53:01	0.99	192.930
Total Deca-PCB		3.24e+04	1.41	n	56:41	1.35	37.3172

Total PCB Conc:35639.4977640

3440

Integrations
by
Analyst: DMS
Date: 2/26/15

Client ID: WM-CB-11-20150203-W RX
 Lab ID: 1500147-01RE3@10X

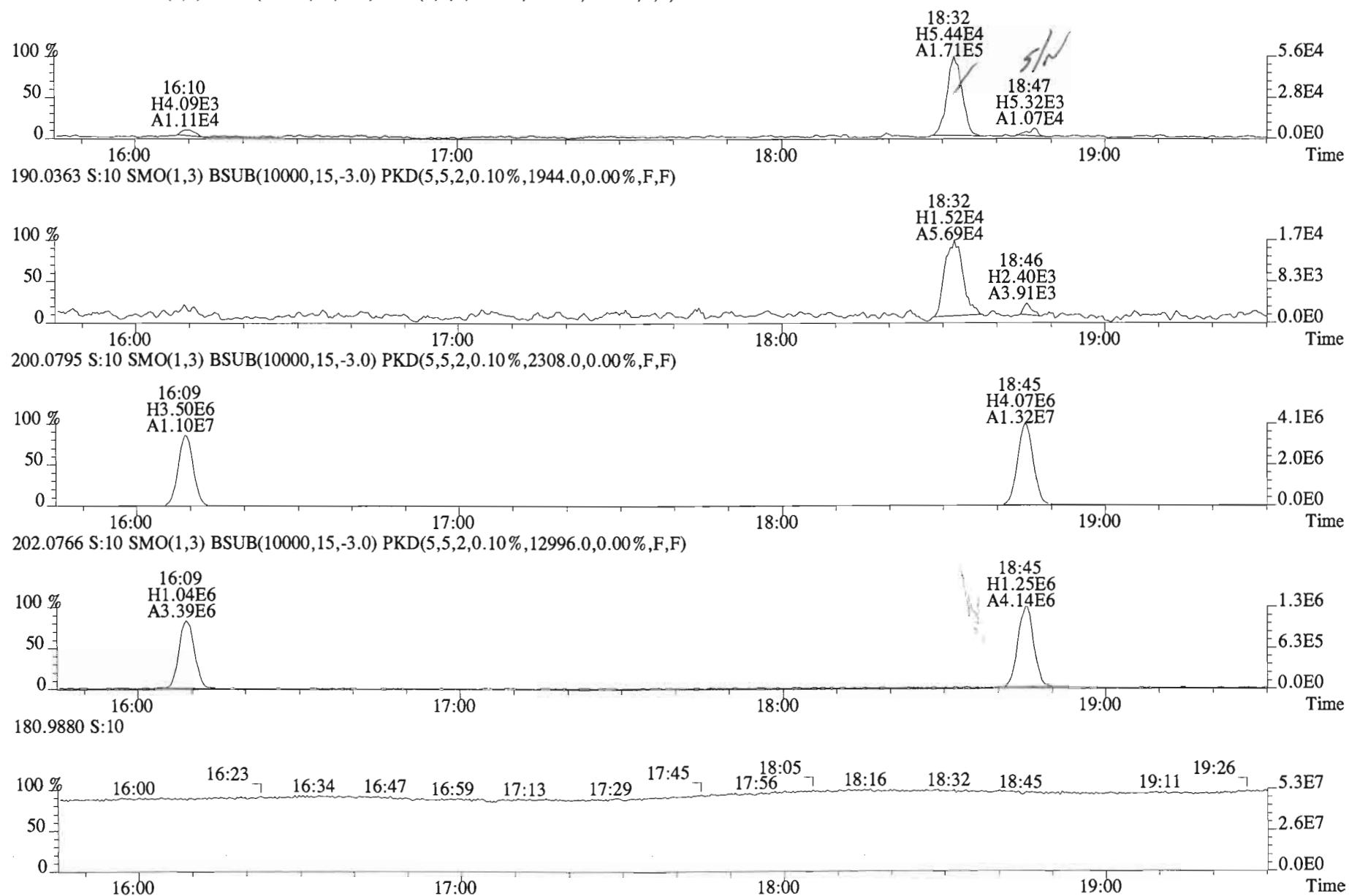
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 GC Column ID: ZB-1 ICal: PCVG8-1-14-15 wt/vol:0.9952
 ConCal: ST150225E1-1
 EndCAL: NA

Page 8 of

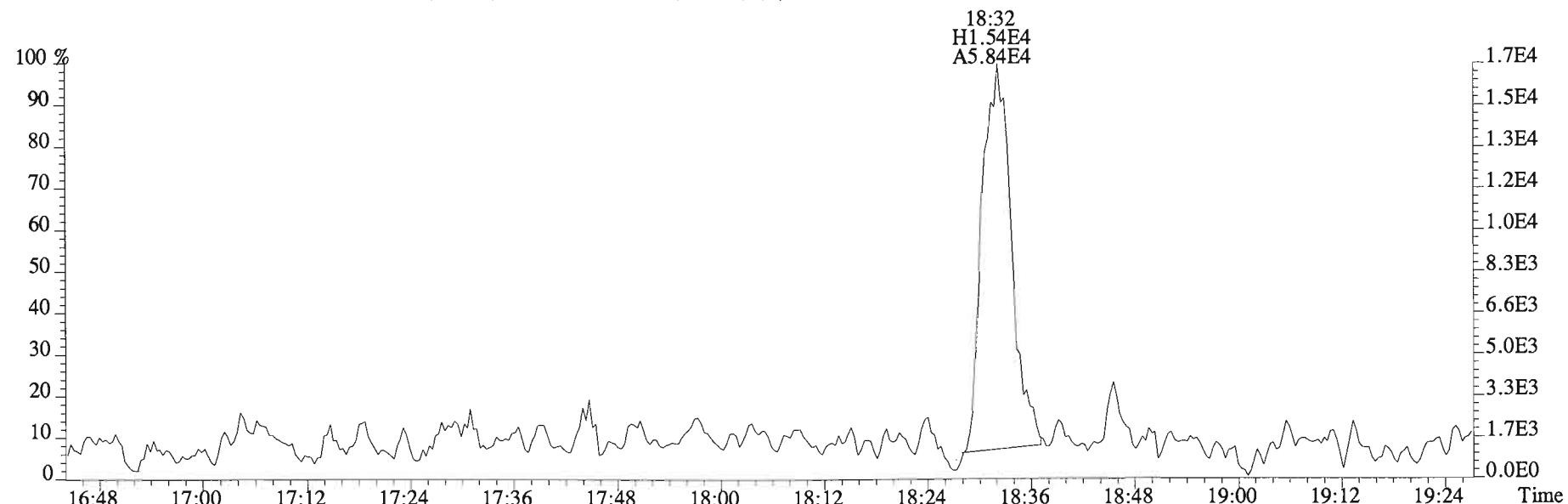
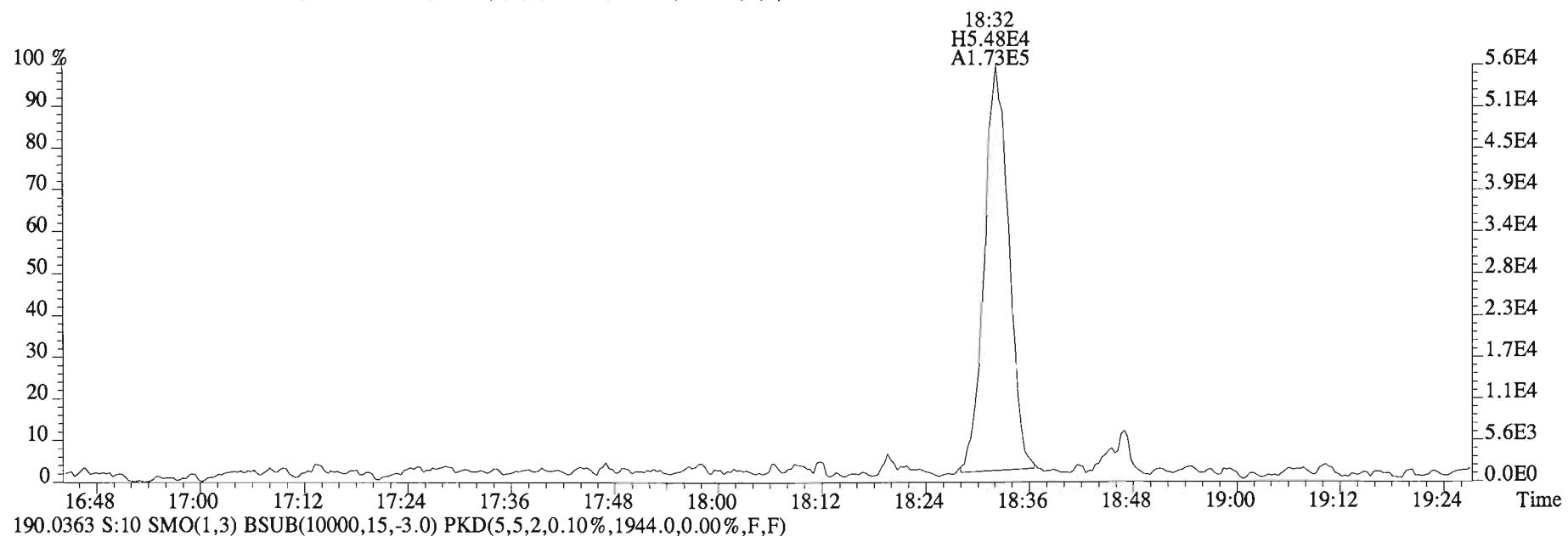
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS									
										Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.44e+07	3.24	y	0.91	16:09	0.623	0.619-0.625	8070	100	13C-PCB-79	1.65e+07	0.80	y	1.02	37:47	1.029	1.024-1.033	9100	113
13C-PCB-3	1.74e+07	3.20	y	0.94	18:45	0.723	0.718-0.726	9410	117	13C-PCB-178	5.47e+06	0.43	y	0.64	45:36	0.984	0.980-0.989	8130	101
13C-PCB-4	8.77e+06	1.56	y	0.60	20:05	0.774	0.770-0.778	7500	93.2										
13C-PCB-9	1.53e+07	1.58	y	0.96	21:52	0.843	0.839-0.847	8120	101										
13C-PCB-11	1.63e+07	1.55	y	0.95	25:14	0.973	0.968-0.978	8730	109										
13C-PCB-19	1.15e+07	1.00	y	0.56	24:13	0.934	0.929-0.939	10500	130										
13C-PCB-28	1.43e+07	0.98	y	1.07	29:04	1.004	0.999-1.009	9140	114										
13C-PCB-32	1.68e+07	1.09	y	0.83	27:07	1.046	1.041-1.051	10400	129										
13C-PCB-37	1.30e+07	1.00	y	0.96	32:56	1.137	1.131-1.143	9190	114										
13C-PCB-47	1.21e+07	0.74	y	0.77	31:59	0.871	0.867-0.875	8850	110										
13C-PCB-52	1.14e+07	0.80	y	0.71	31:29	0.857	0.853-0.861	8990	112										
13C-PCB-54	1.47e+07	0.77	y	1.06	27:57	0.761	0.757-0.765	7790	96.9										
13C-PCB-70	1.52e+07	0.77	y	0.99	35:30	0.966	0.961-0.971	8580	107										
13C-PCB-77	1.52e+07	0.80	y	0.96	39:36	1.078	1.073-1.083	8870	110										
13C-PCB-80	1.56e+07	0.81	y	1.02	35:55	0.978	0.973-0.983	8590	107										
13C-PCB-81	1.56e+07	0.77	y	1.00	39:01	1.062	1.057-1.067	8790	109										
13C-PCB-95	8.56e+06	1.77	y	0.70	35:48	0.913	0.908-0.918	9110	113										
13C-PCB-97	7.96e+06	1.68	y	0.66	38:46	0.989	0.984-0.994	9010	112										
13C-PCB-101	9.21e+06	1.62	y	0.77	37:29	0.956	0.951-0.961	8940	111	13C-PCB-15	1.58e+07	1.60	y	1.00	25:56	8040			
13C-PCB-104	1.13e+07	1.63	y	0.97	32:38	0.832	0.828-0.836	8700	108	13C-PCB-31	1.18e+07	1.04	y	1.00	28:58	8040			
13C-PCB-105	1.08e+07	1.62	y	1.20	43:02	0.929	0.924-0.934	8480	106	13C-PCB-60	1.43e+07	0.76	y	1.00	36:44	8040			
13C-PCB-114	1.10e+07	1.58	y	1.26	42:11	0.910	0.905-0.915	8310	103	13C-PCB-111	1.08e+07	1.58	y	1.00	39:12	8040			
13C-PCB-118	1.09e+07	1.66	y	0.94	41:31	1.059	1.054-1.064	8660	108	13C-PCB-128	8.49e+06	1.34	y	1.00	46:20	8040			
13C-PCB-123	1.06e+07	1.73	y	0.88	41:20	1.054	1.049-1.059	8950	111	13C-PCB-205	5.82e+06	0.90	y	1.00	54:00	8040			
13C-PCB-126	9.39e+06	1.61	y	1.13	45:16	0.977	0.972-0.982	7900	98.3										
13C-PCB-127	1.08e+07	1.61	y	1.26	43:22	0.936	0.931-0.941	8140	101										
13C-PCB-138	1.03e+07	1.33	y	1.12	44:46	0.966	0.961-0.971	8730	109										
13C-PCB-141	9.71e+06	1.31	y	1.09	43:56	0.948	0.943-0.953	8420	105										
13C-PCB-153	1.19e+07	1.28	y	1.27	43:11	0.932	0.927-0.937	8830	110										
13C-PCB-155	9.96e+06	1.31	y	0.87	37:01	0.944	0.939-0.949	8520	106										
13C-PCB-156	1.15e+07	1.22	y	1.35	48:01	1.037	1.032-1.042	8100	101										
13C-PCB-157	1.20e+07	1.27	y	1.42	48:17	1.042	1.037-1.047	8020	99.7										
13C-PCB-159	1.20e+07	1.30	y	1.37	46:03	0.994	0.989-0.999	8280	103										
13C-PCB-167	1.15e+07	1.33	y	1.38	46:44	1.009	1.004-1.014	7910	98.4										
13C-PCB-169	1.08e+07	1.28	y	1.38	50:25	1.088	1.084-1.094	7410	92.2										
13C-PCB-170	4.90e+06	0.45	y	0.60	50:46	1.096	1.091-1.103	7690	95.7										
13C-PCB-180	6.01e+06	0.47	y	0.76	49:18	1.064	1.059-1.069	7530	93.6										
13C-PCB-188	8.94e+06	0.45	y	1.01	42:49	0.924	0.919-0.929	8350	104										
13C-PCB-189	6.03e+06	0.46	y	0.80	52:13	1.127	1.124-1.136	7120	88.6										
13C-PCB-194	5.22e+06	0.89	y	0.75	53:43	0.995	0.990-1.000	9680	120										
13C-PCB-202	7.99e+06	0.91	y	0.99	48:14	1.041	1.036-1.046	7650	95.2										
13C-PCB-206	5.54e+06	0.75	y	0.73	55:22	1.025	1.020-1.301	10400	130										
13C-PCB-208	8.19e+06	0.76	y	1.08	53:00	0.981	0.977-0.987	10400	130										
13C-PCB-209	5.18e+06	1.17	y	0.71	56:41	1.050	1.045-1.055	10100	125										

Analyst: Doss
 Date: 2/26/15

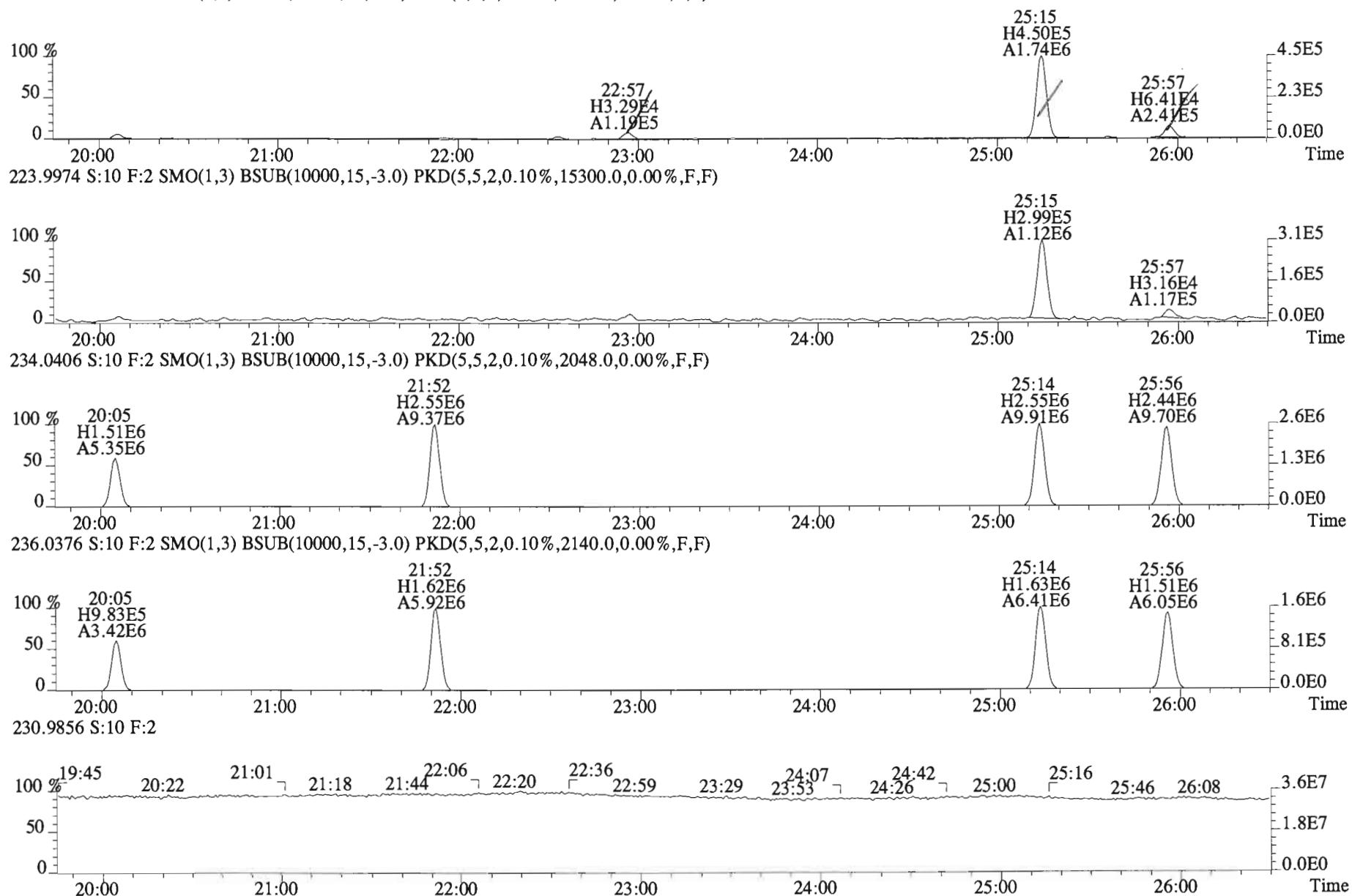
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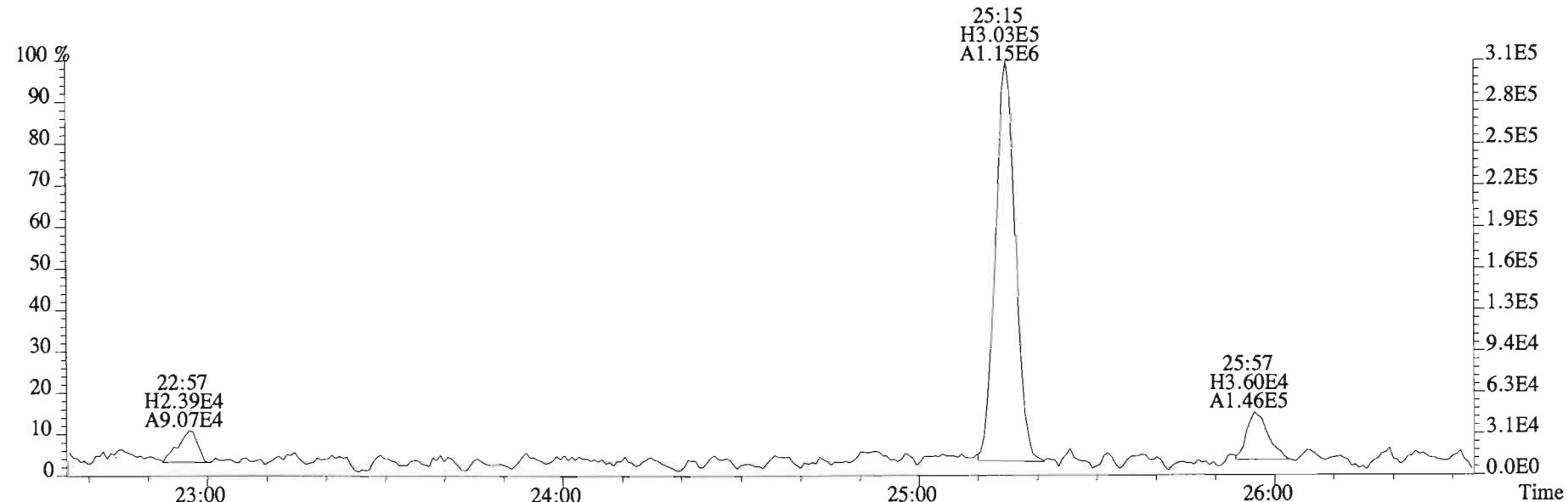
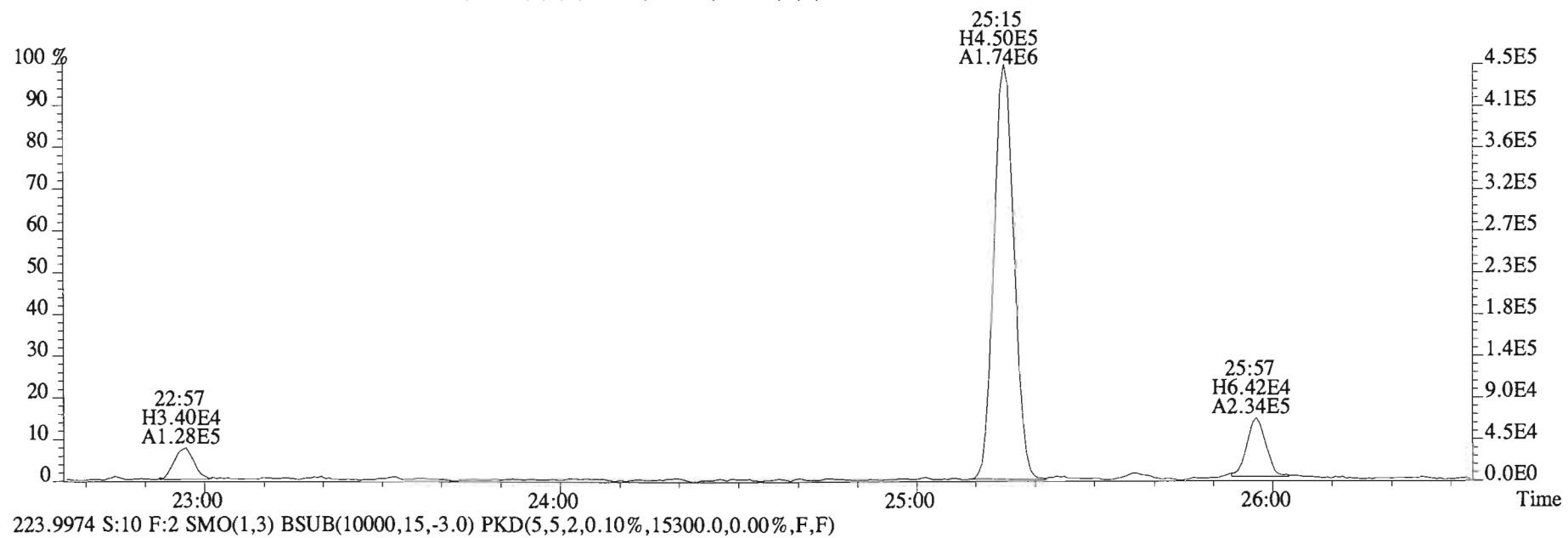
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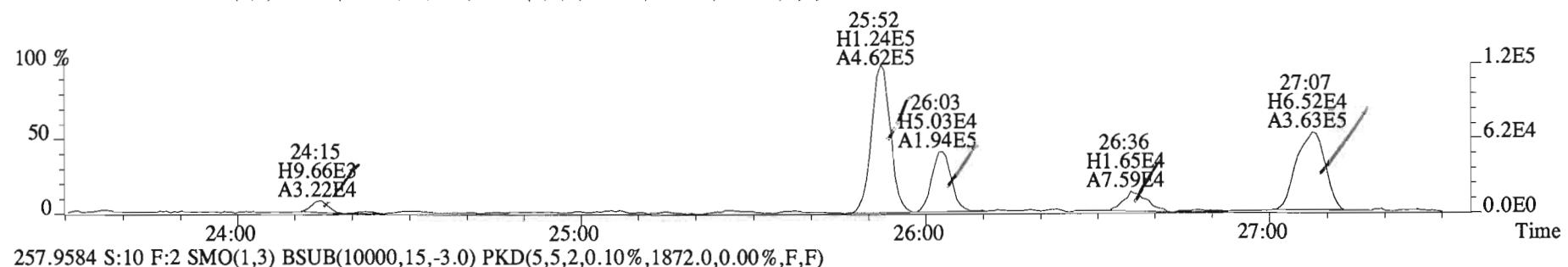
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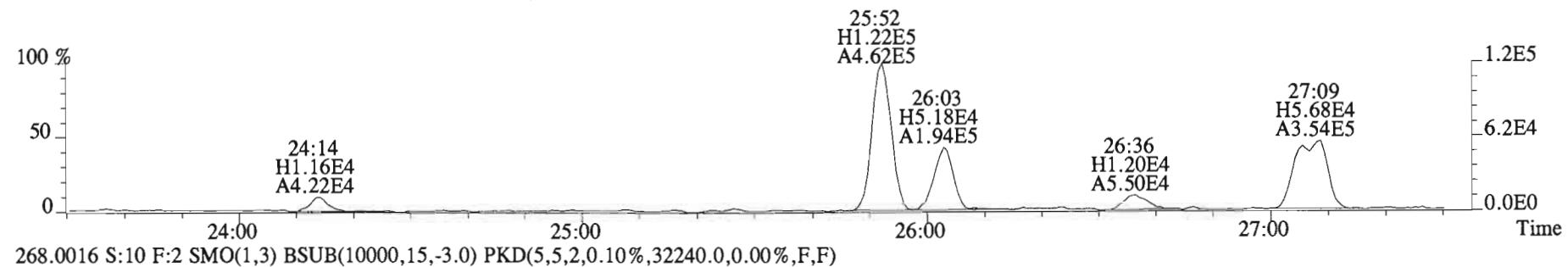
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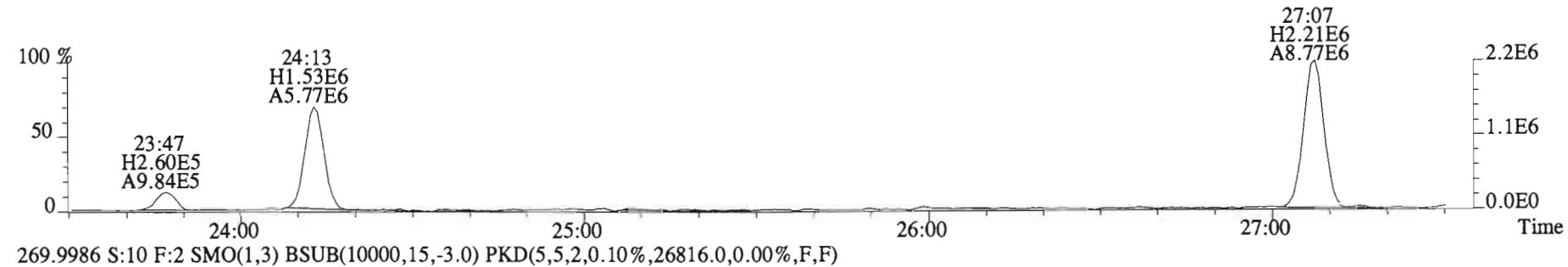
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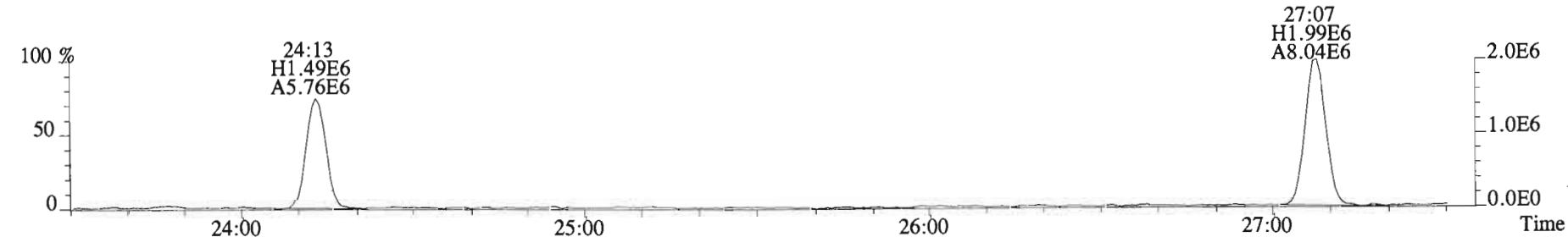
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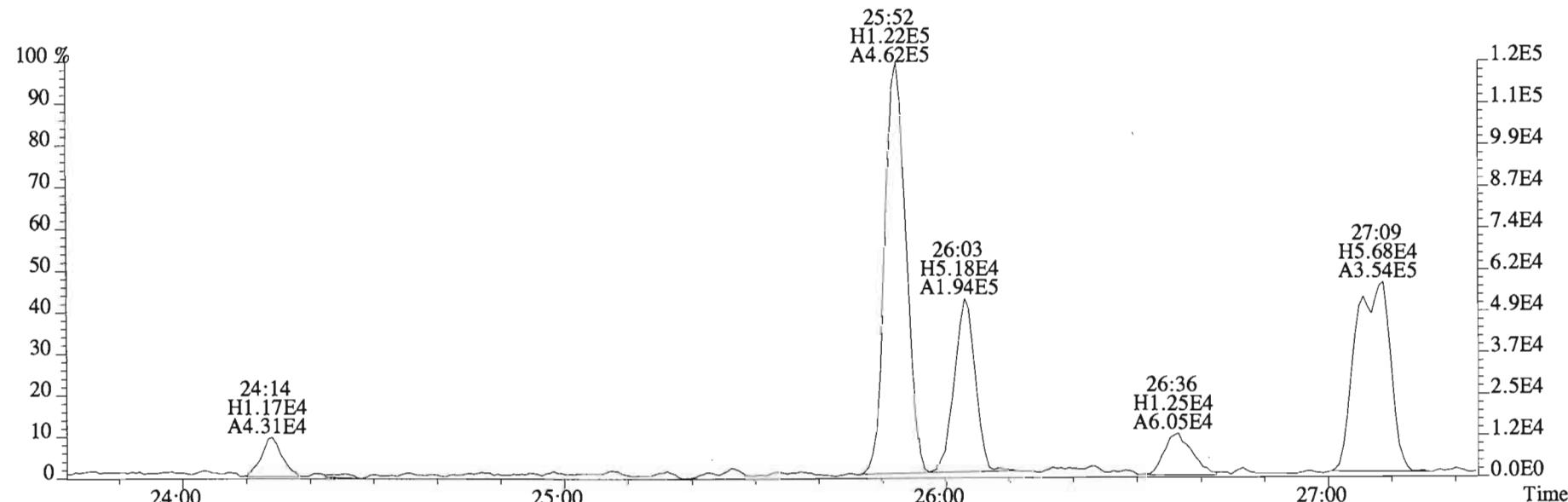
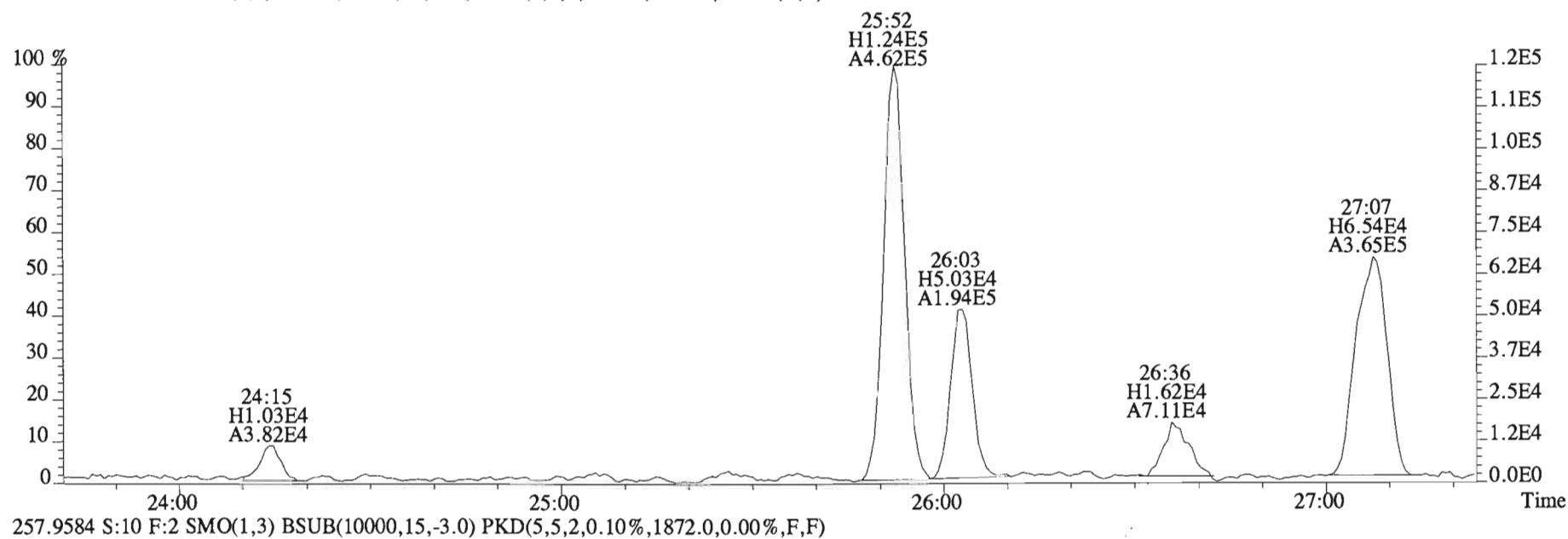
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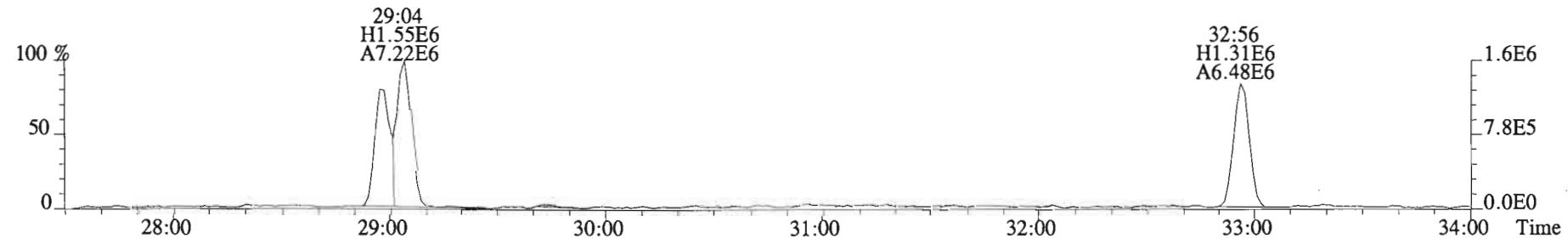
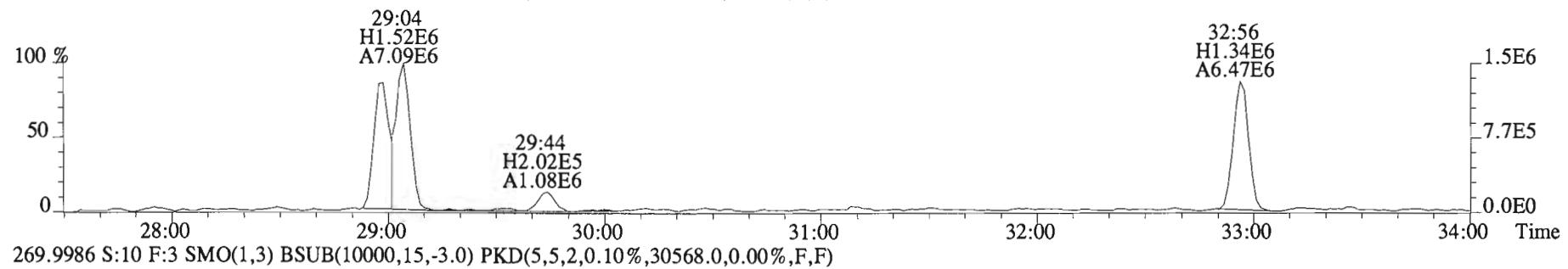
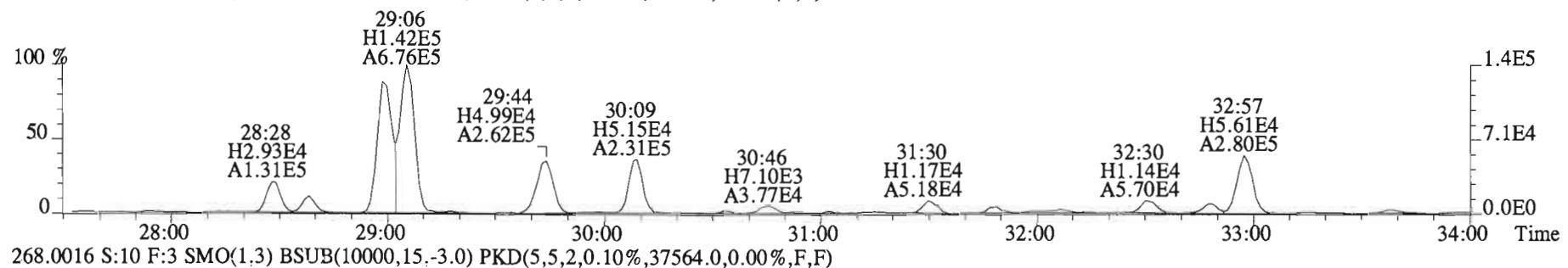
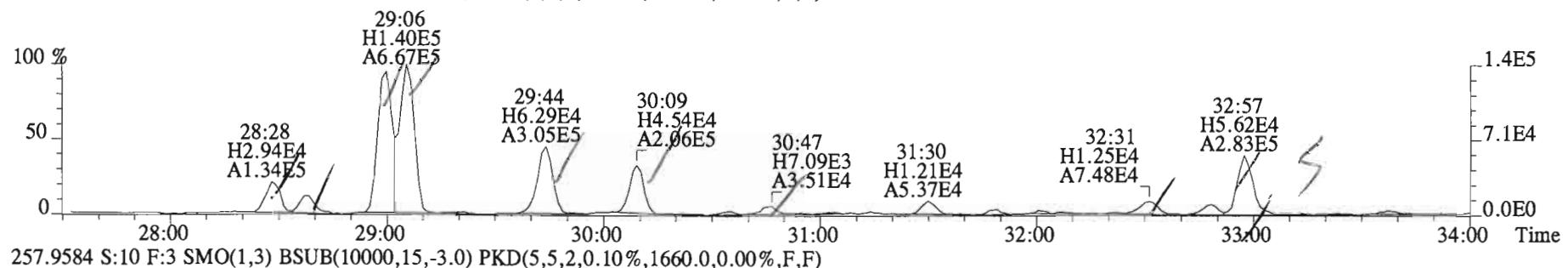
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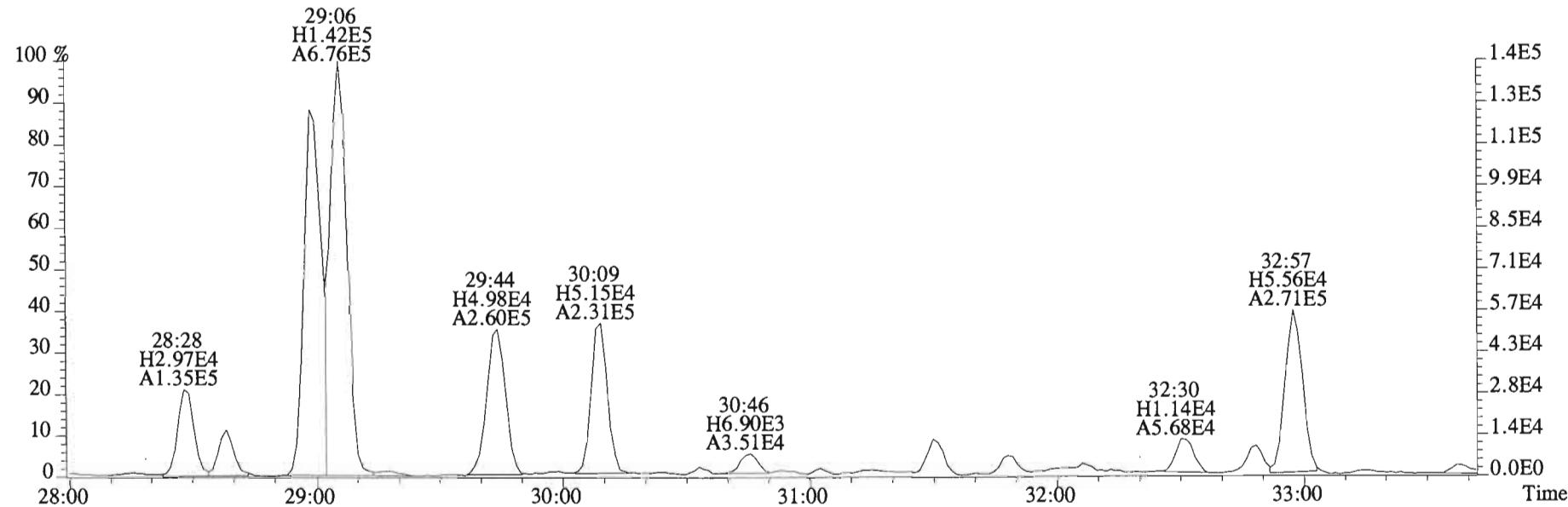
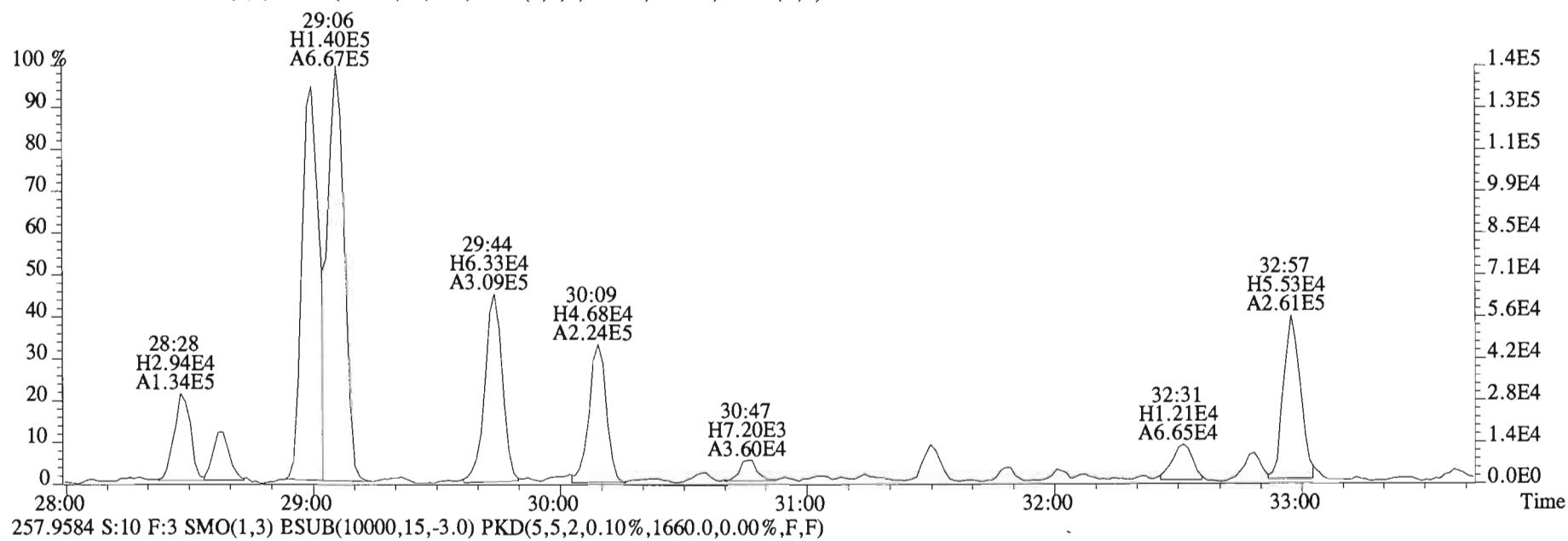
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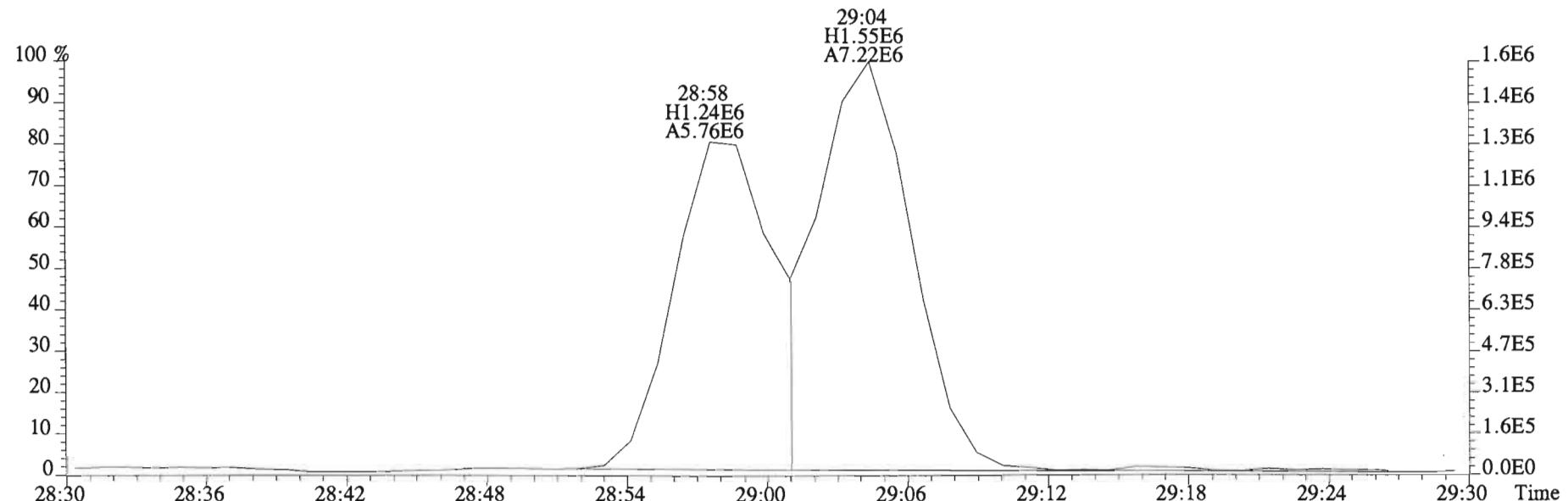
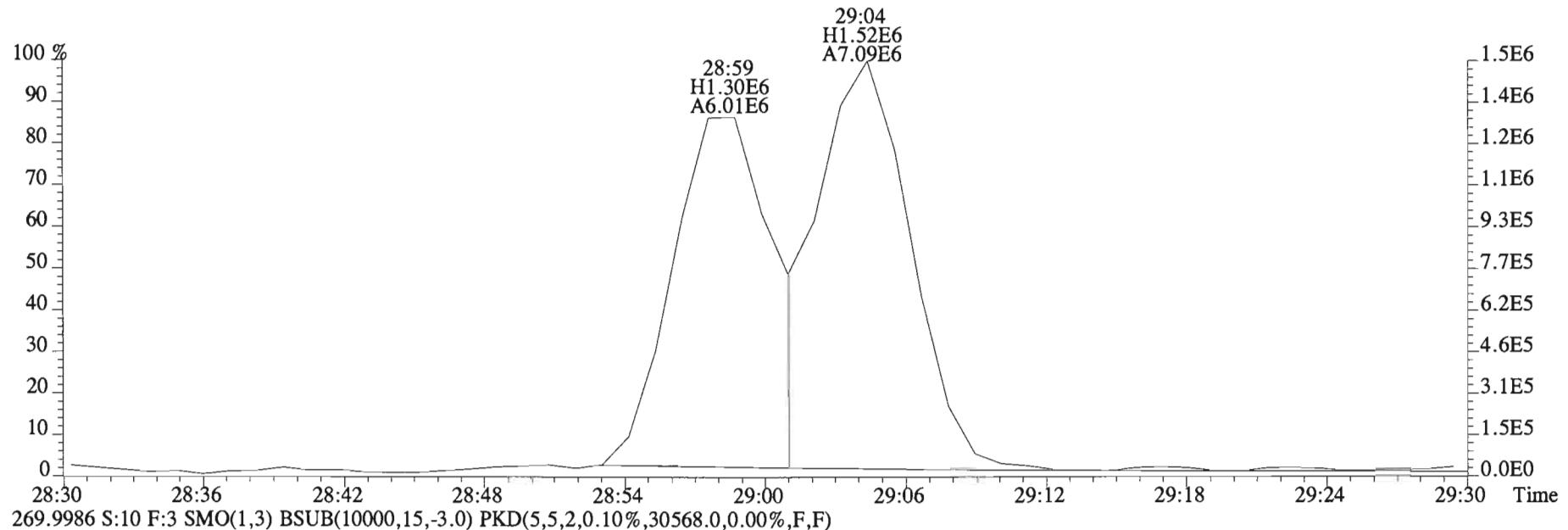
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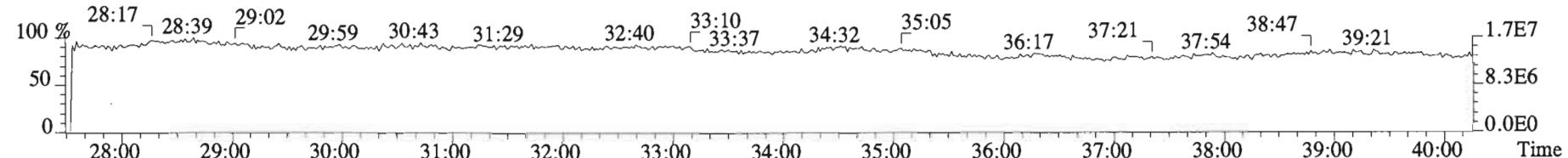
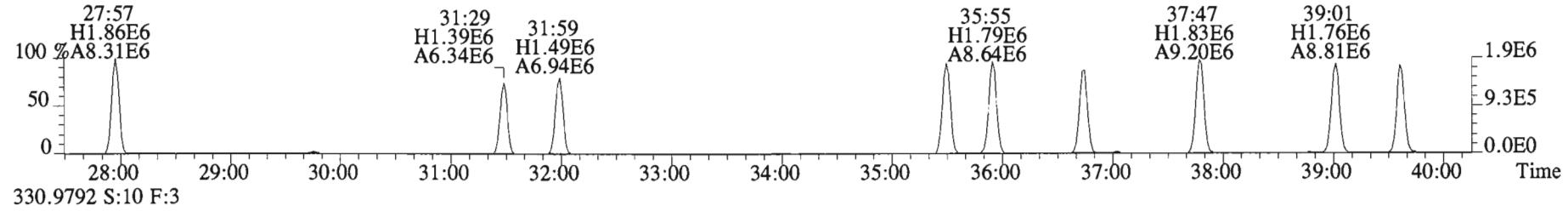
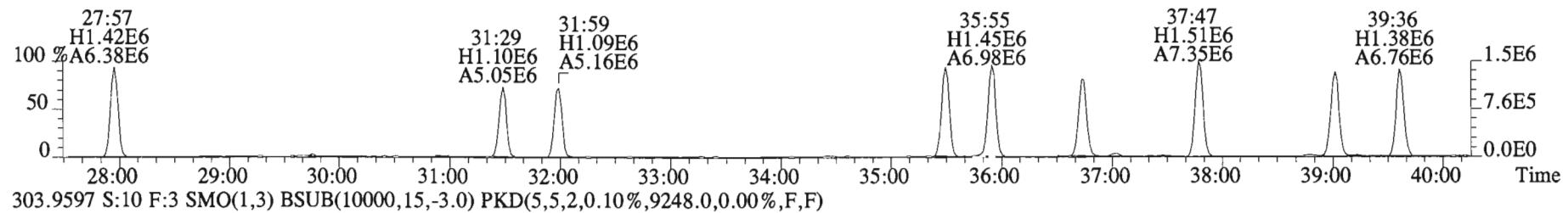
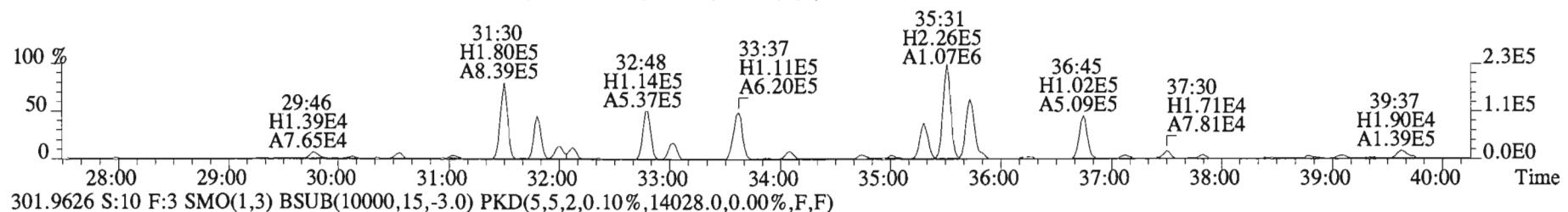
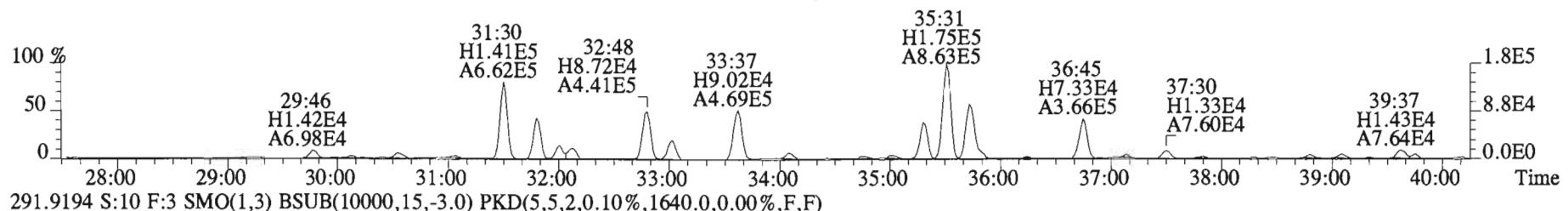
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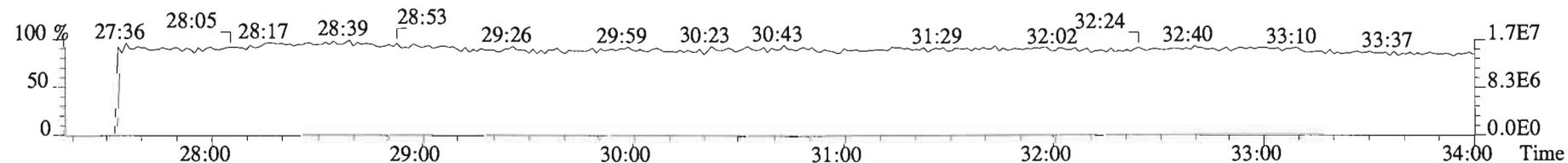
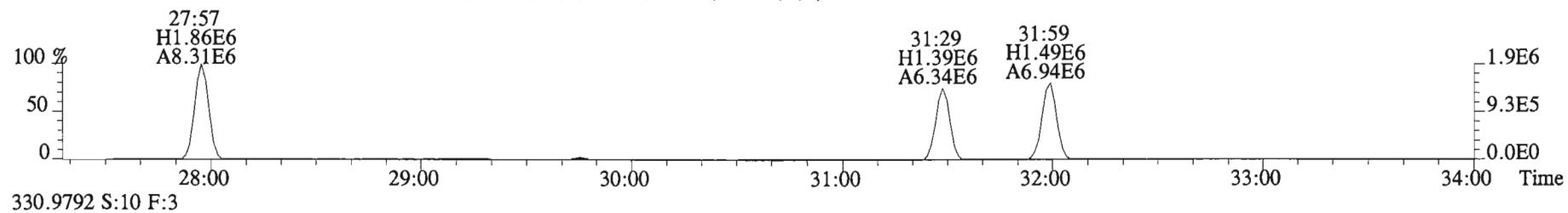
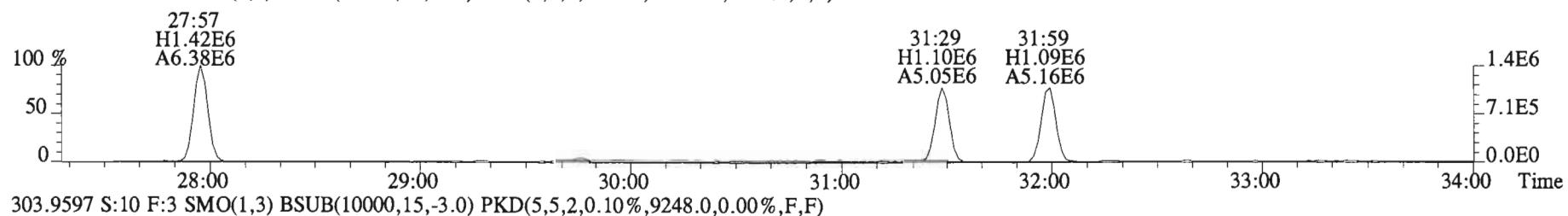
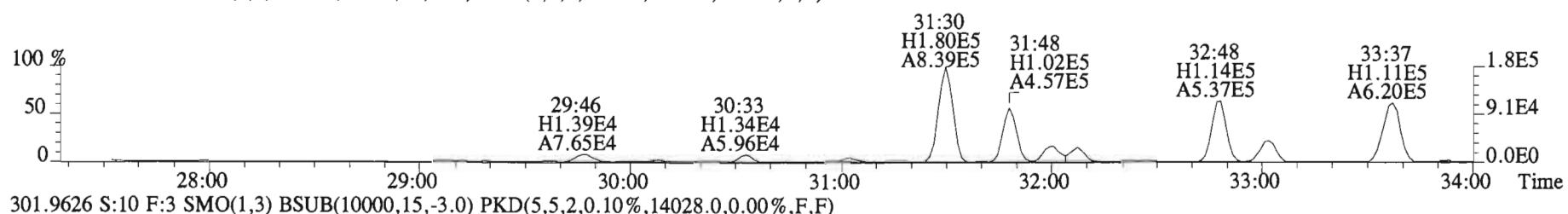
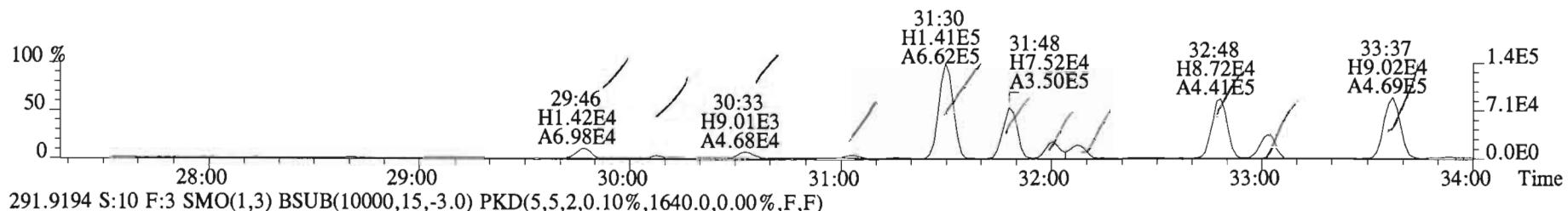
File:150225E1 #1-758 Acq:25-FEB-2015 22:45:17 GC EI + Voltage SIR Autospec-UltimaE
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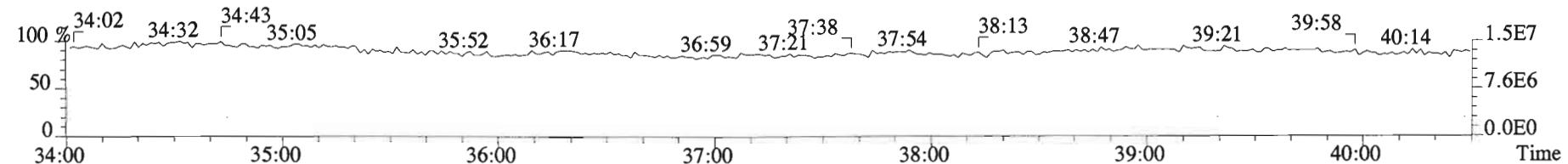
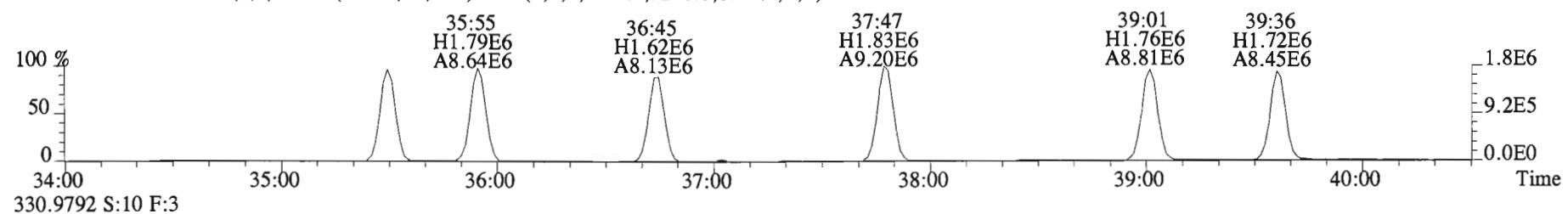
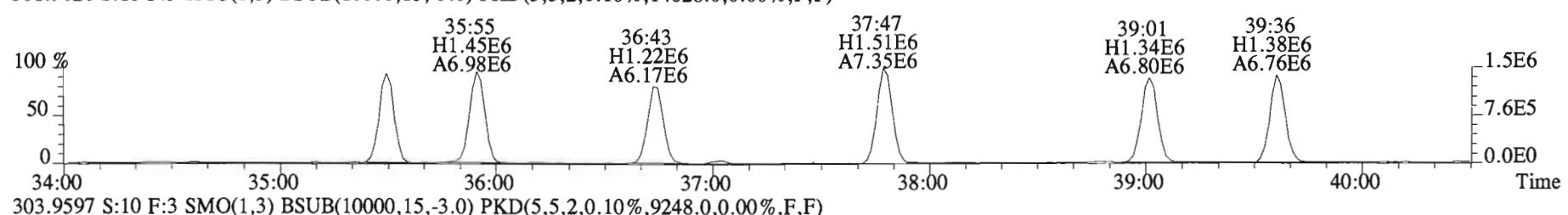
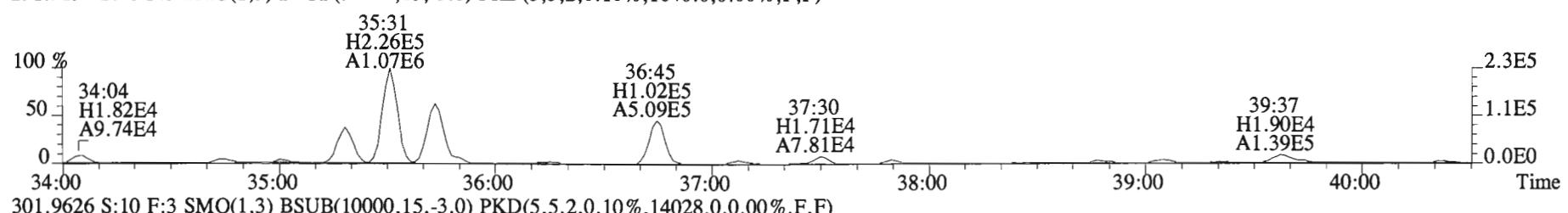
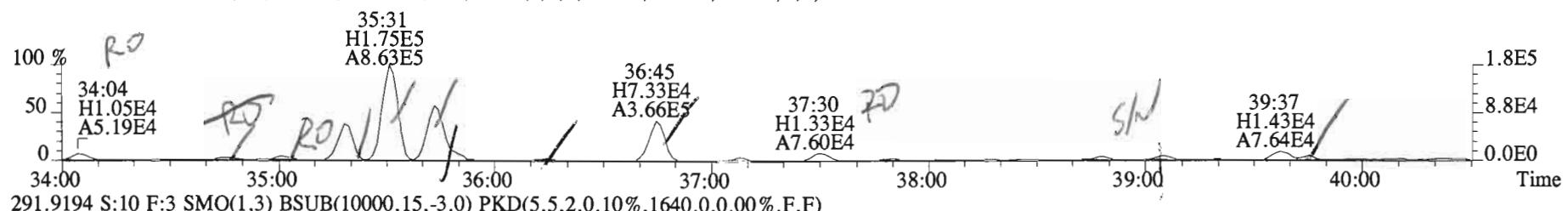
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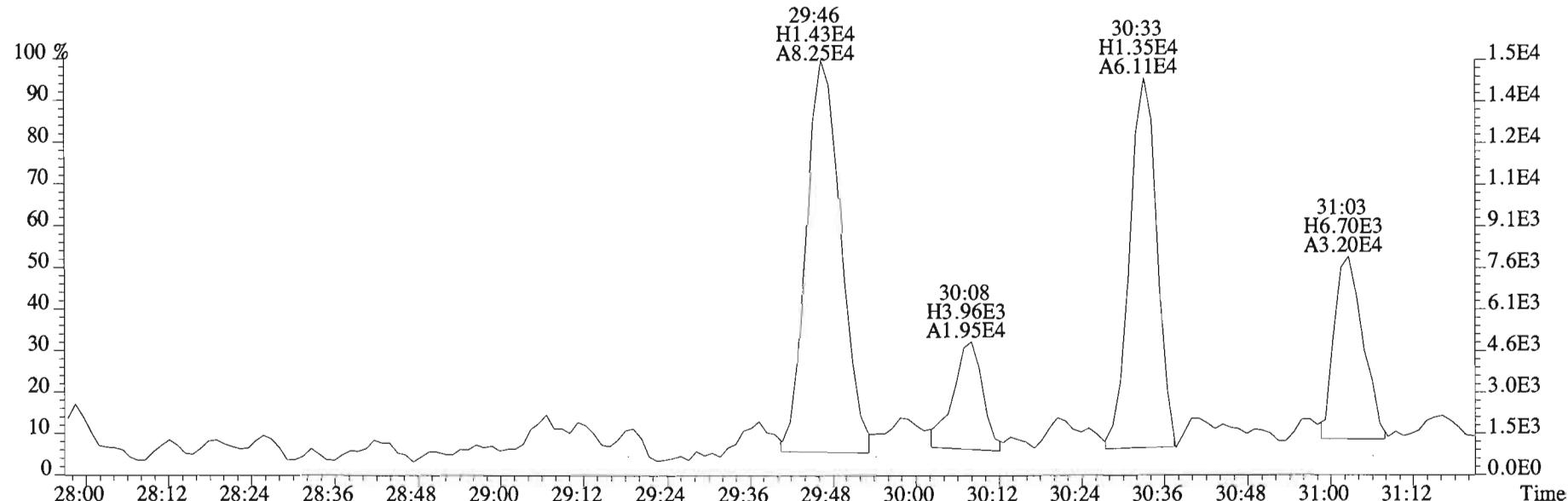
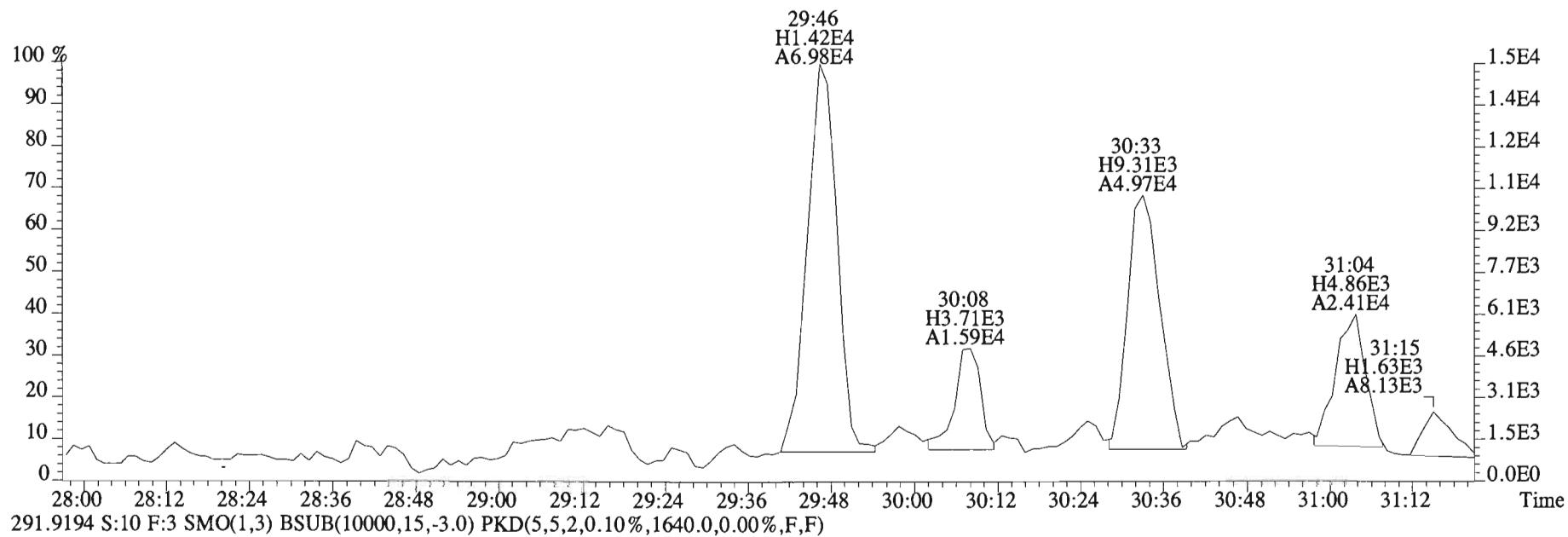
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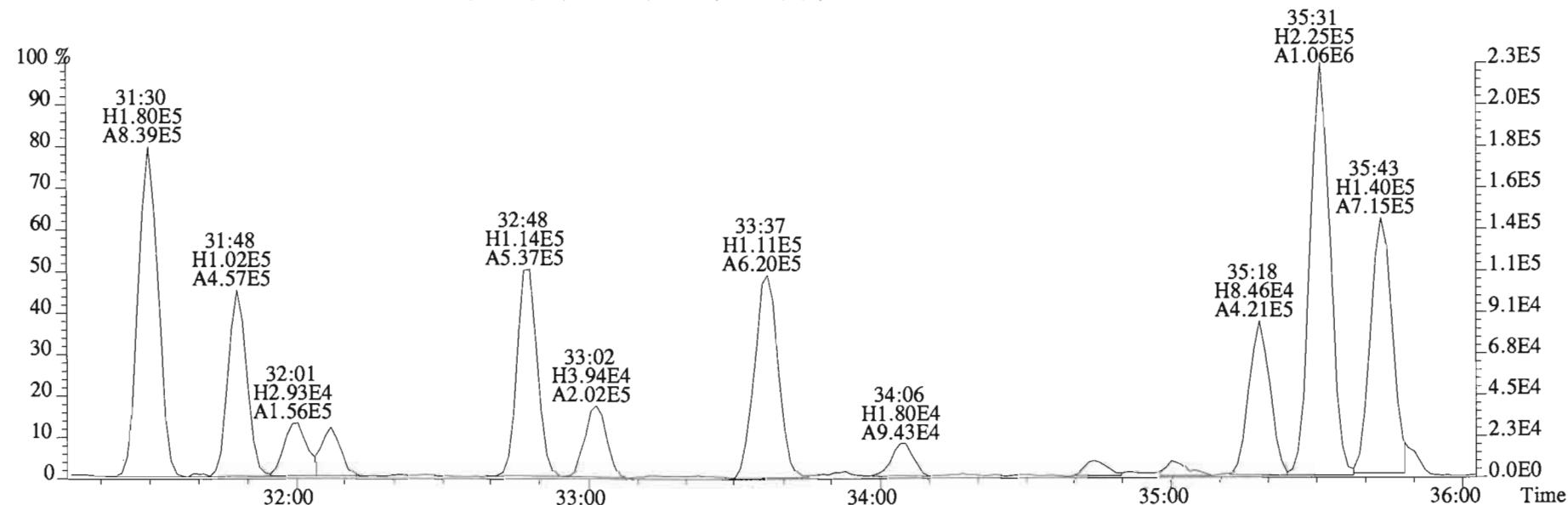
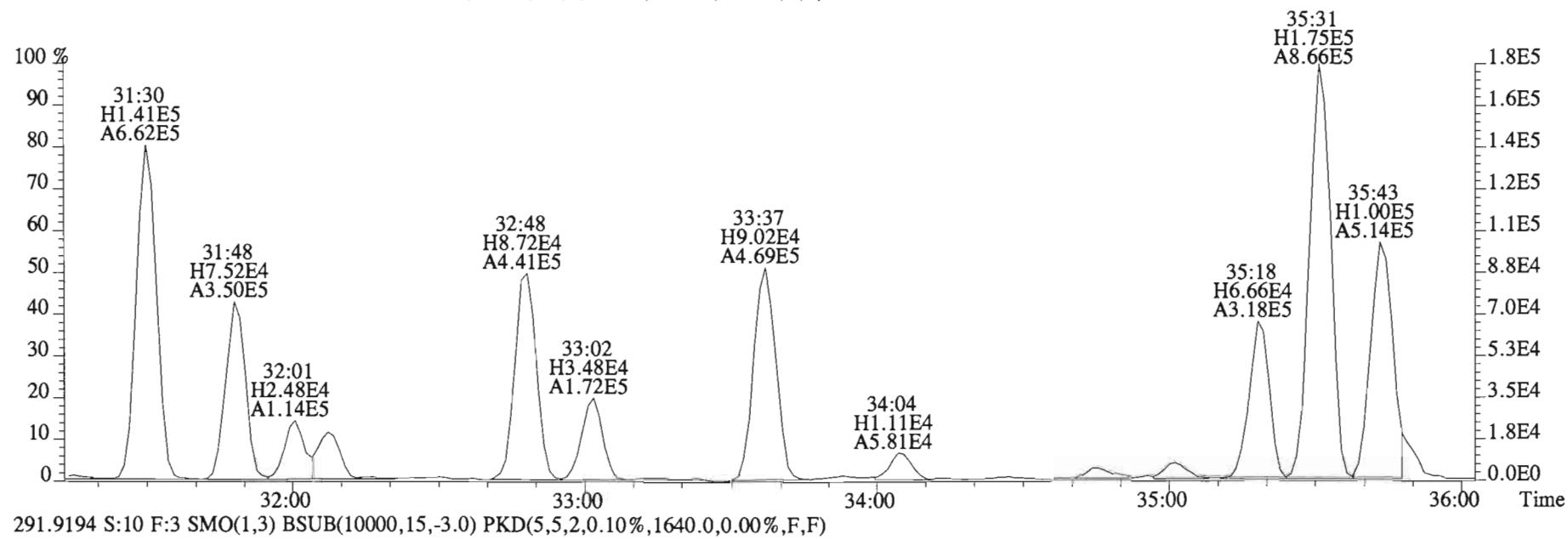
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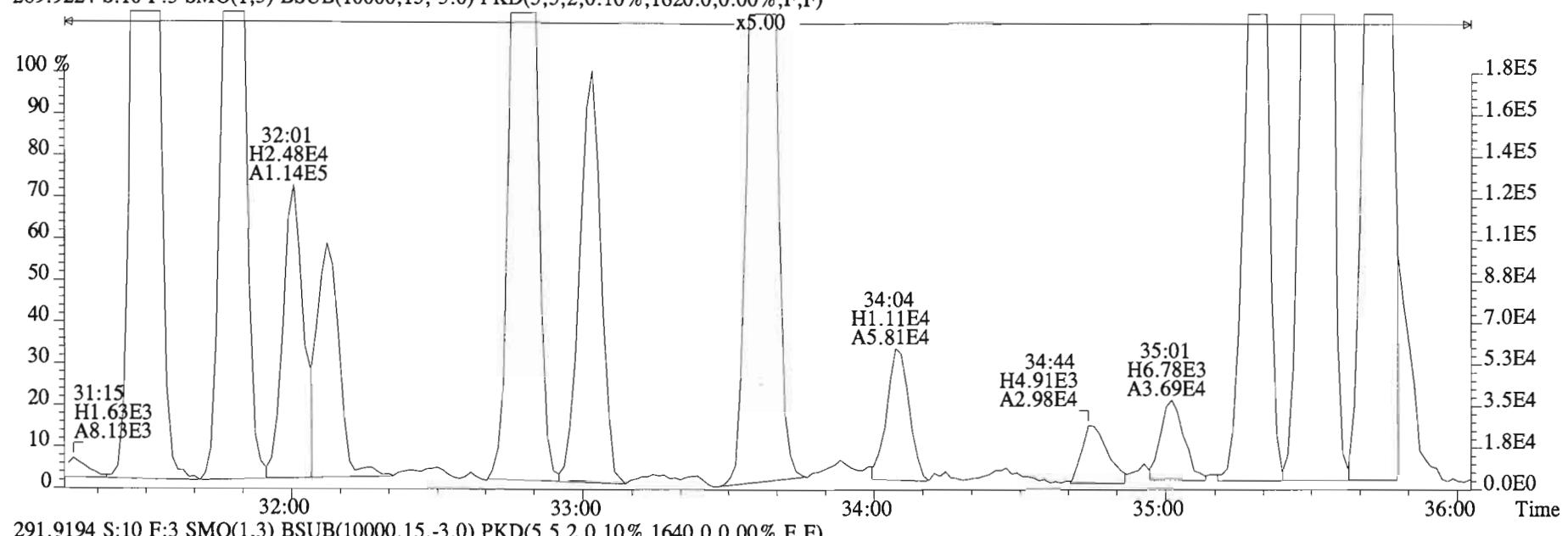
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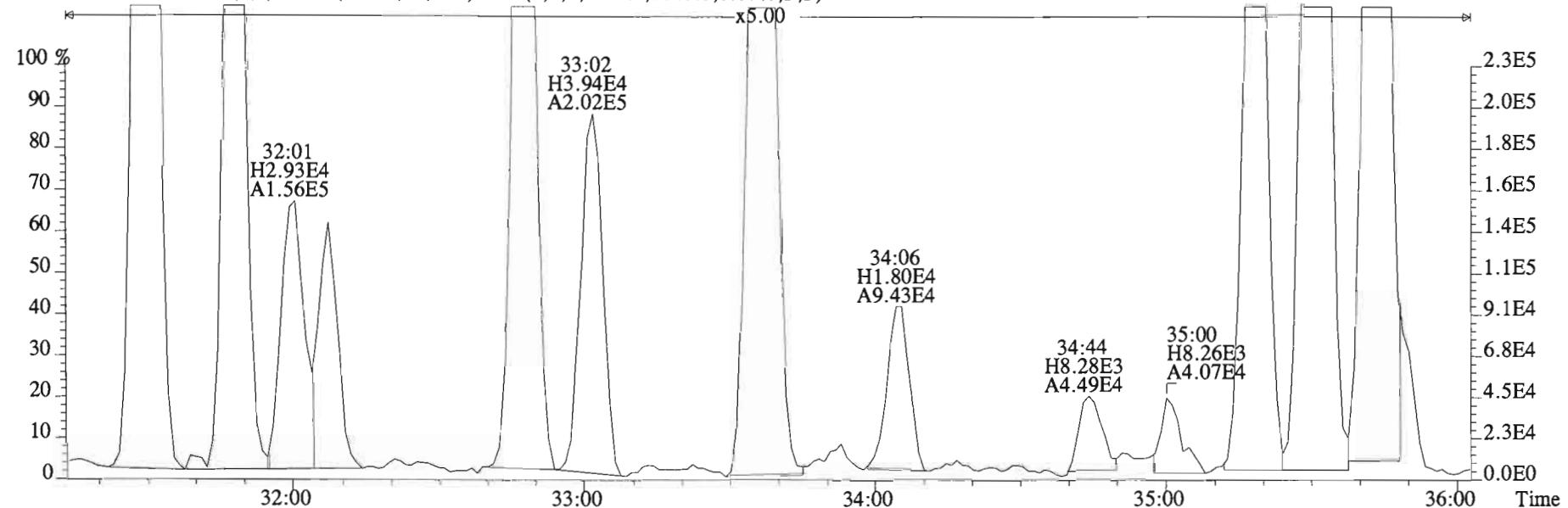
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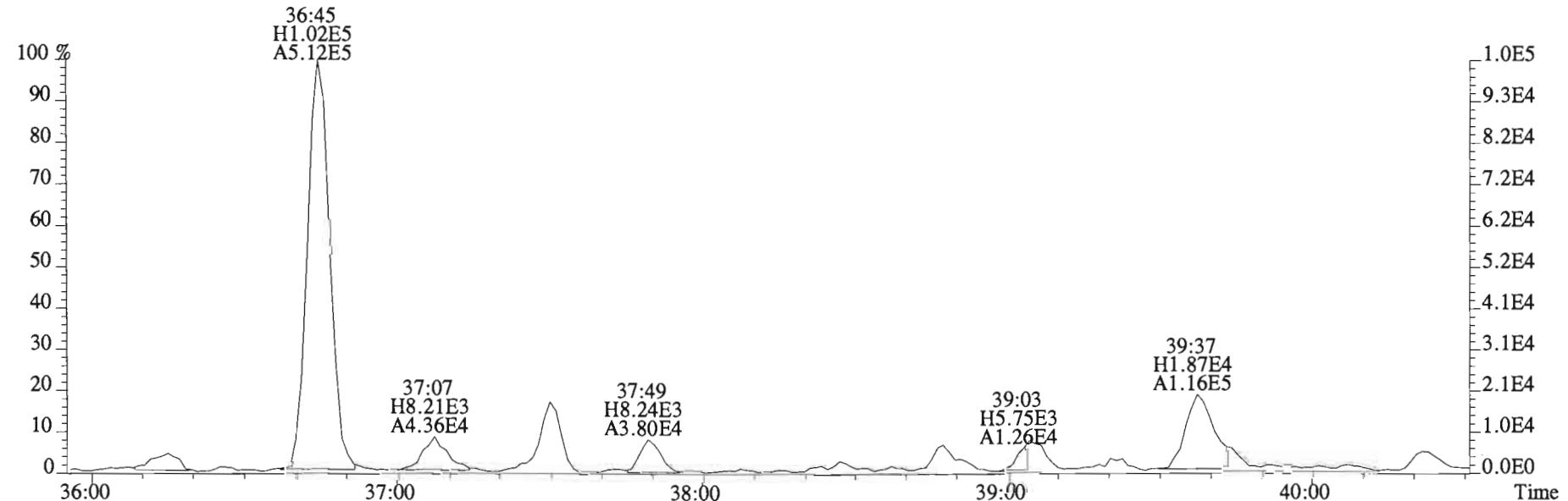
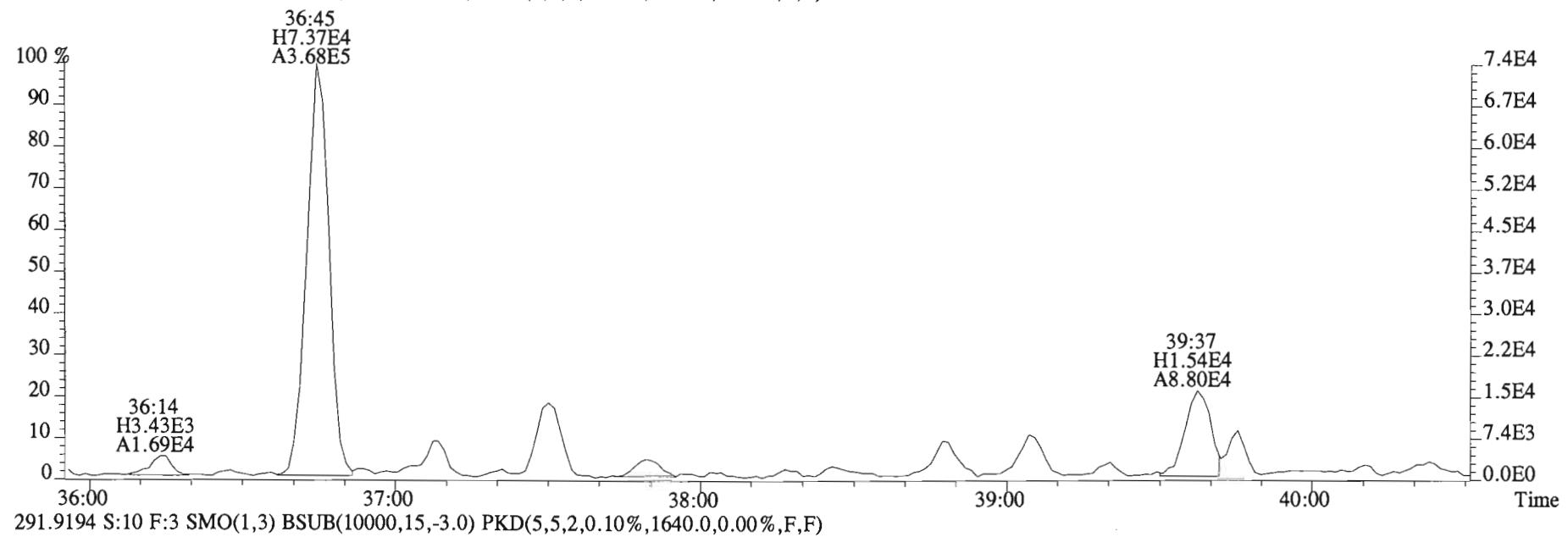
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Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
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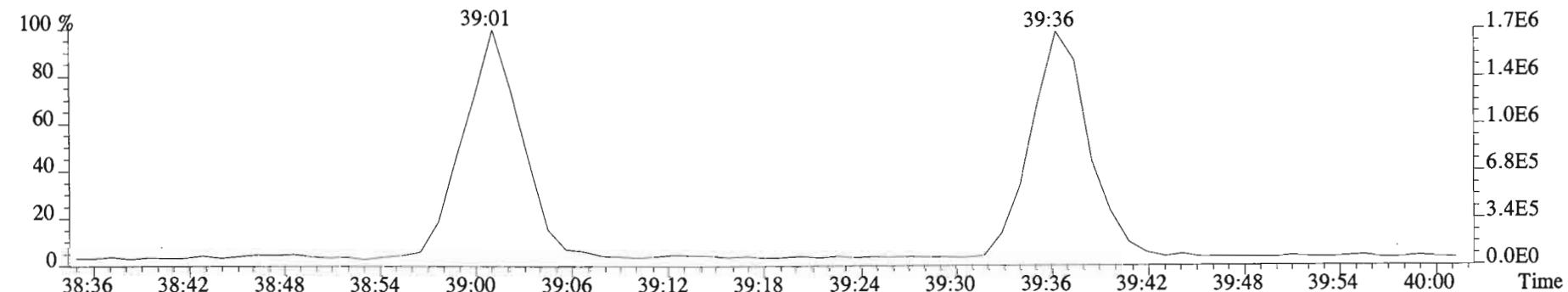
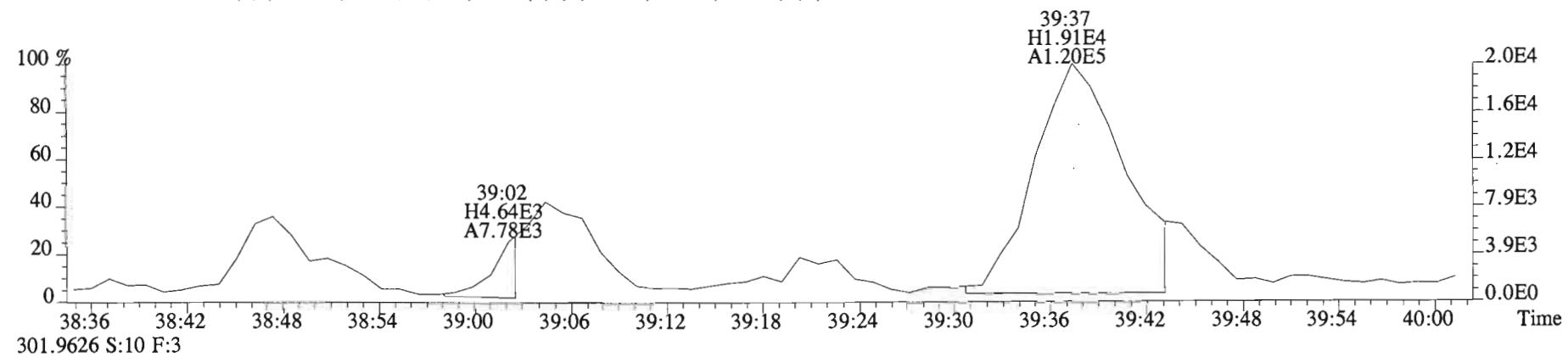
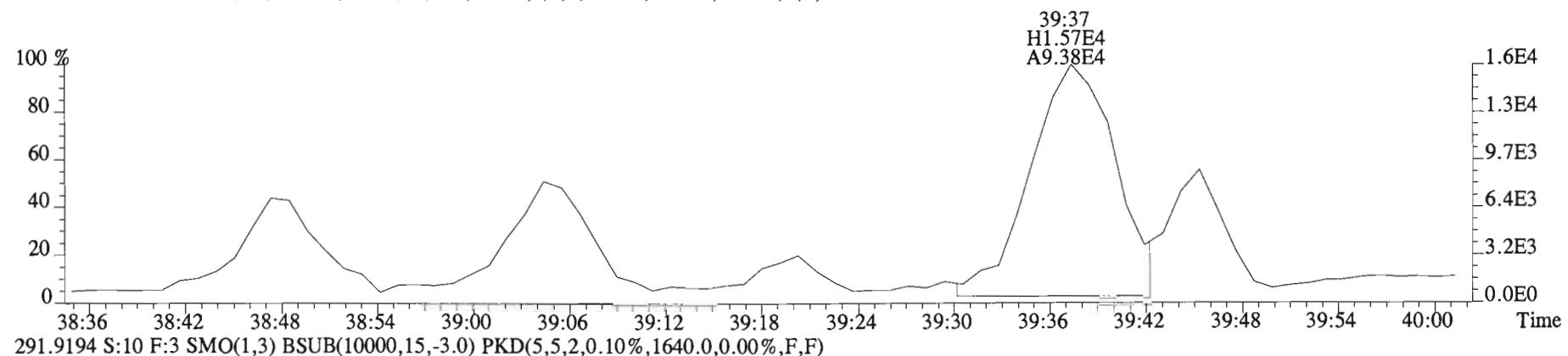
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1640.0,0.00%,F,F)



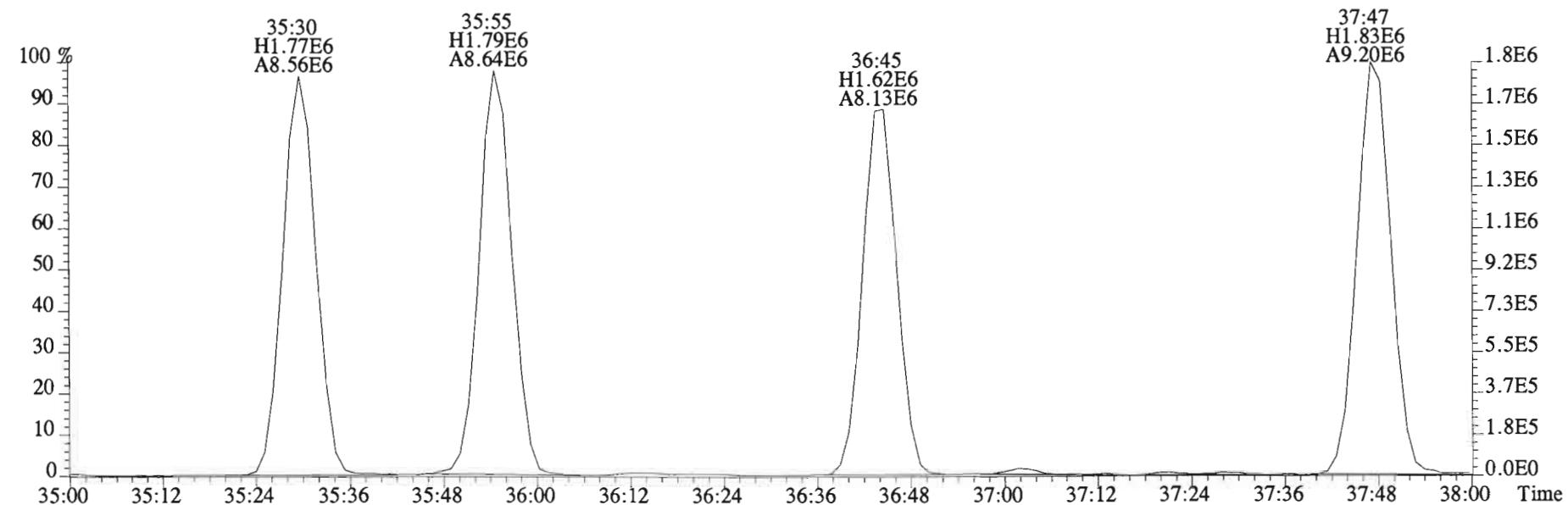
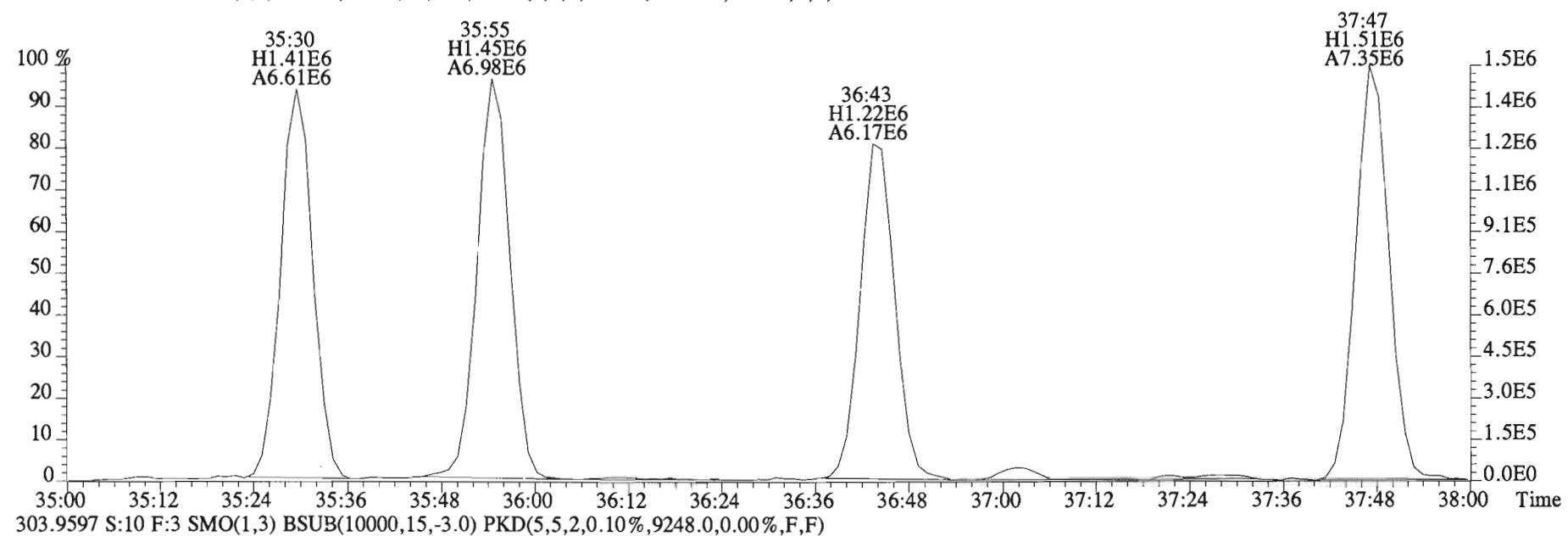
File:150225E1 #1-758 Acq:25-FEB-2015 22:45:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
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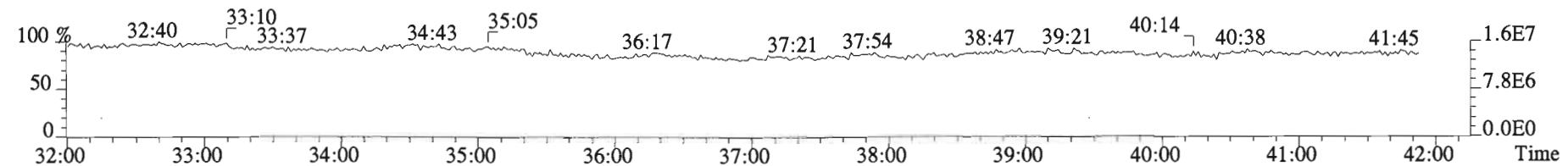
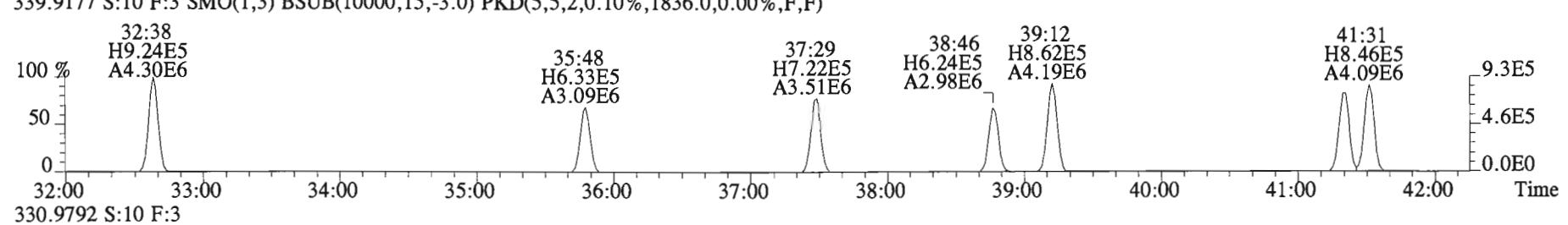
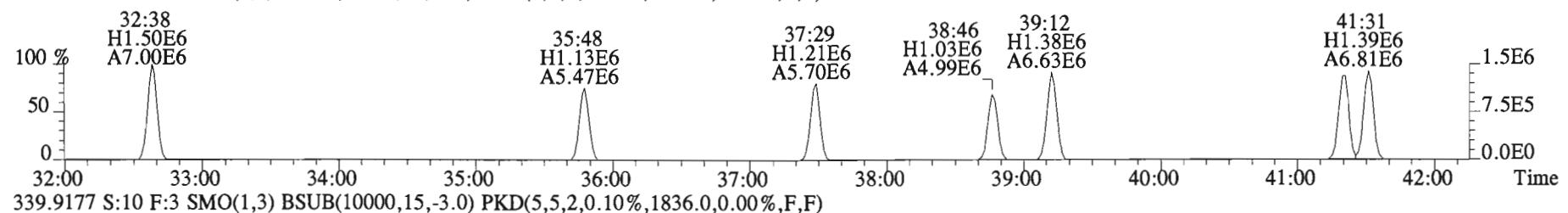
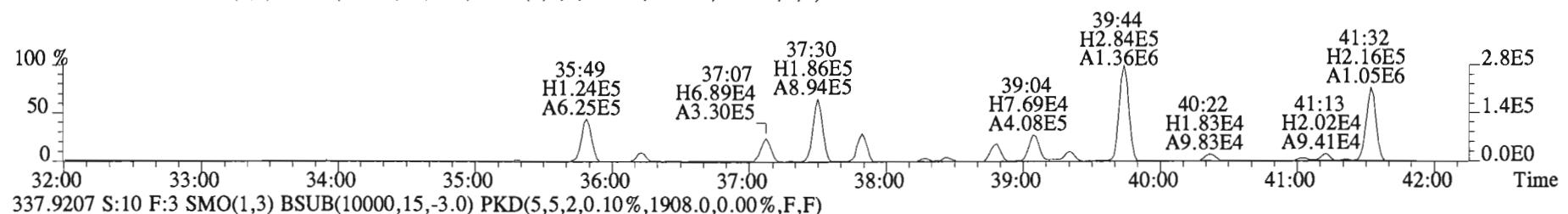
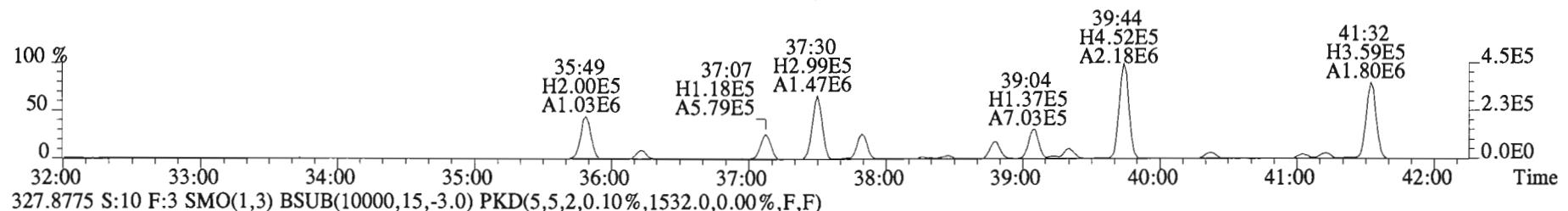
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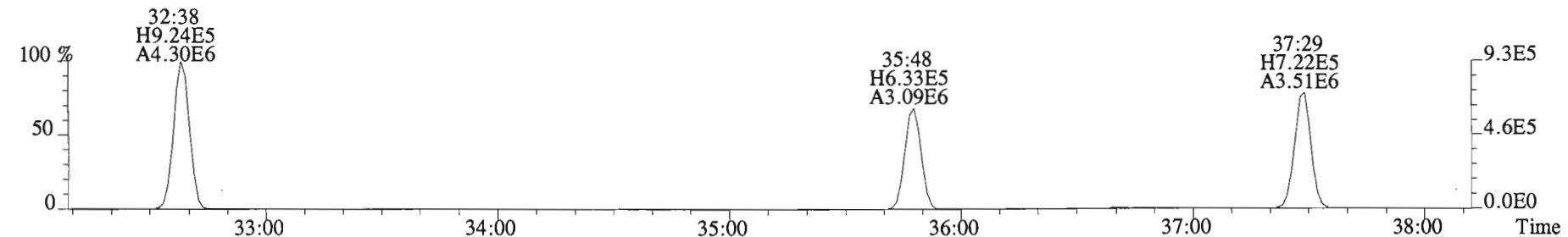
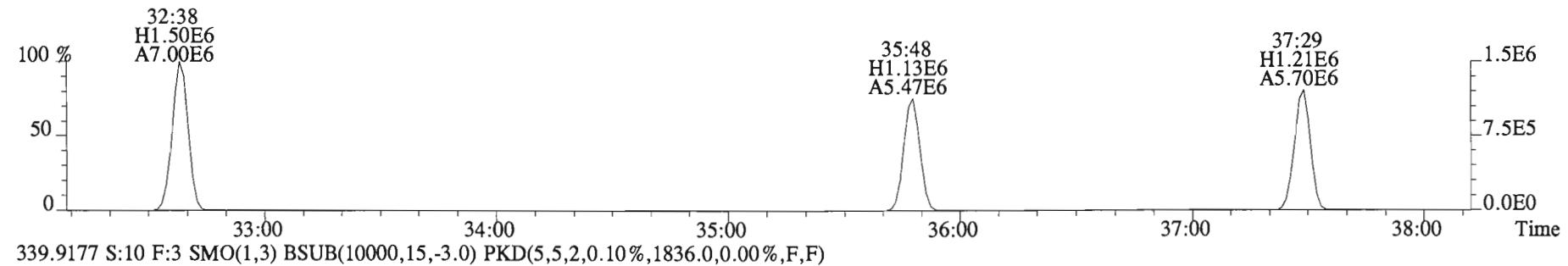
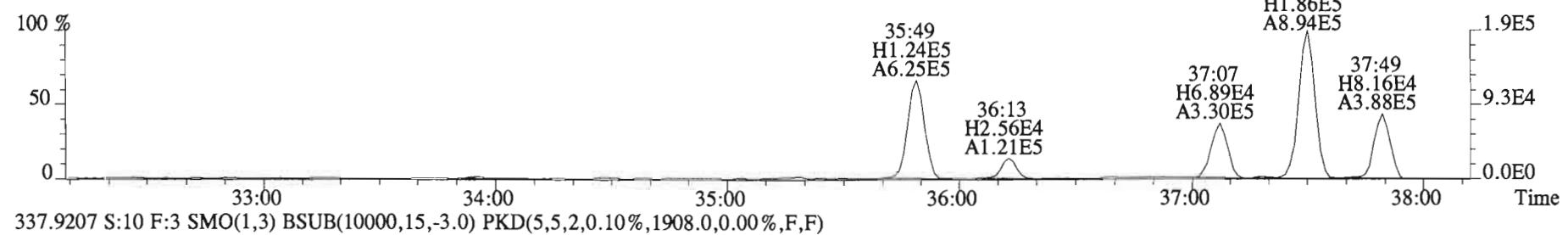
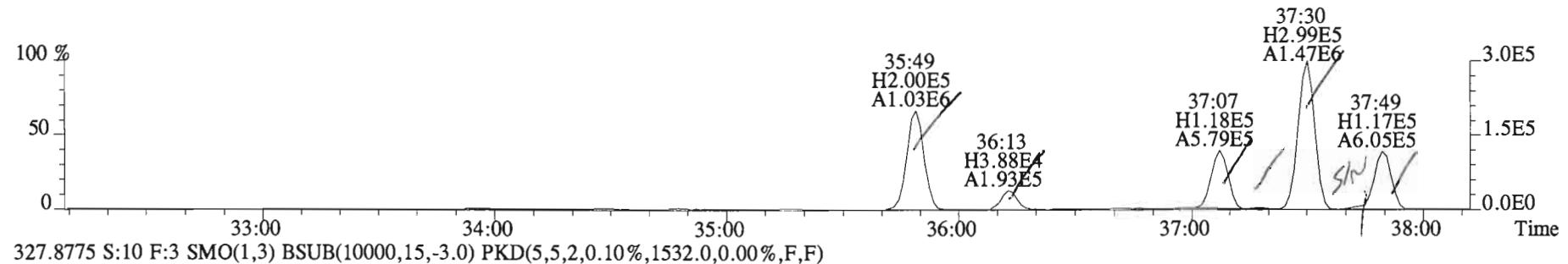
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Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
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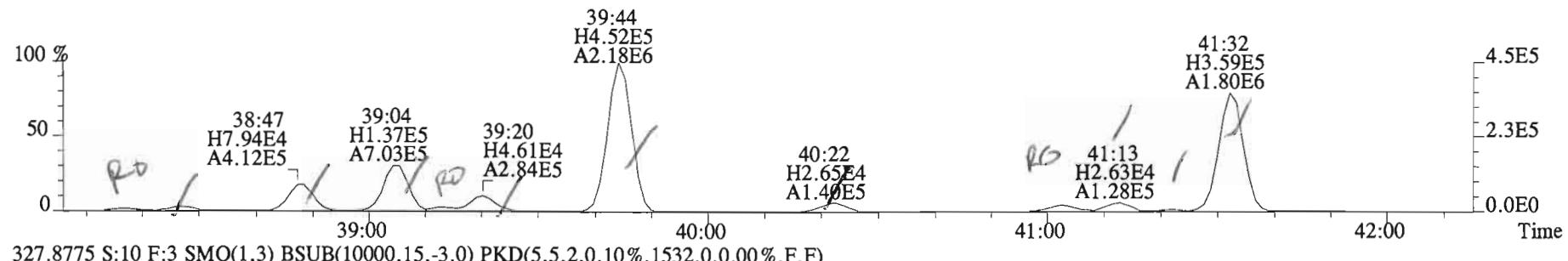
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 Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
 325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1748.0,0.00%,F,F)



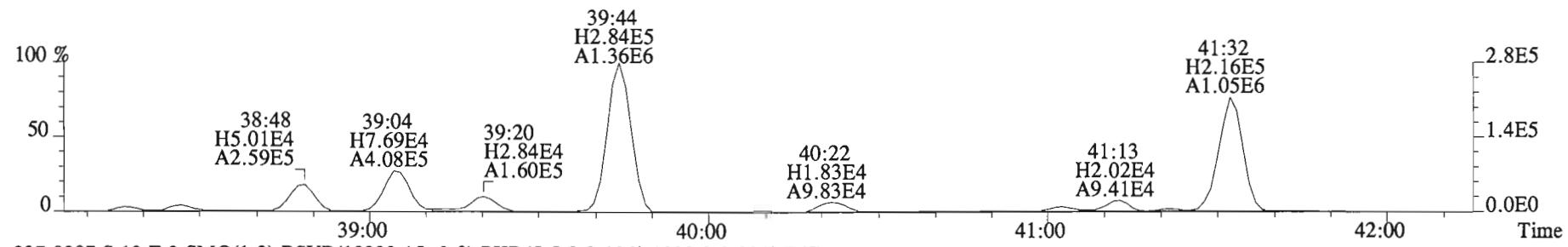
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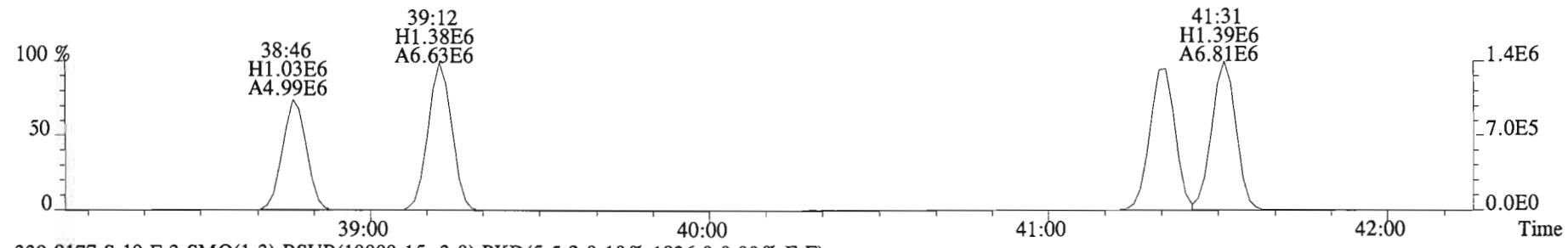
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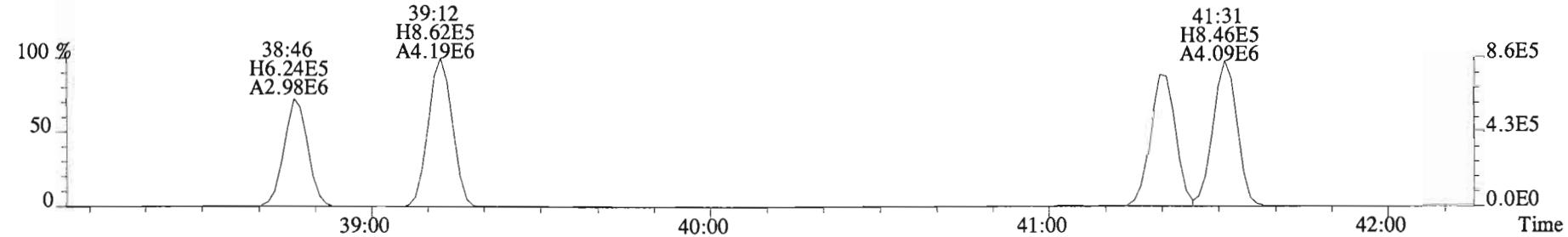
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1532.0,0.00%,F,F)



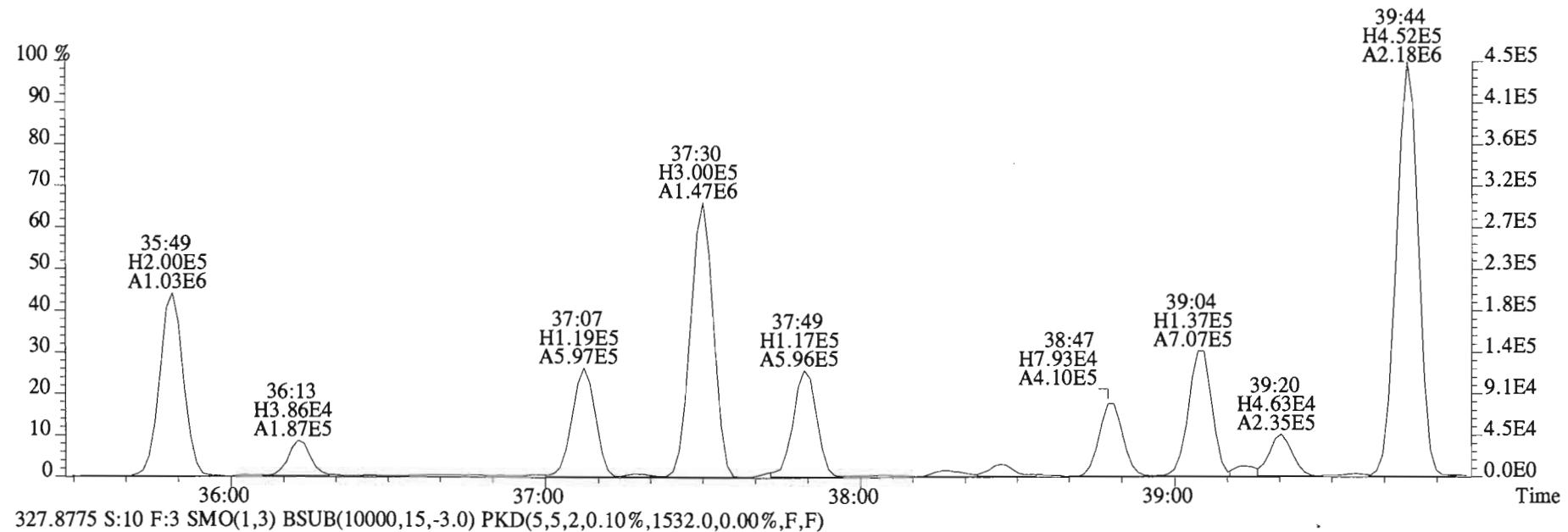
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1908.0,0.00%,F,F)



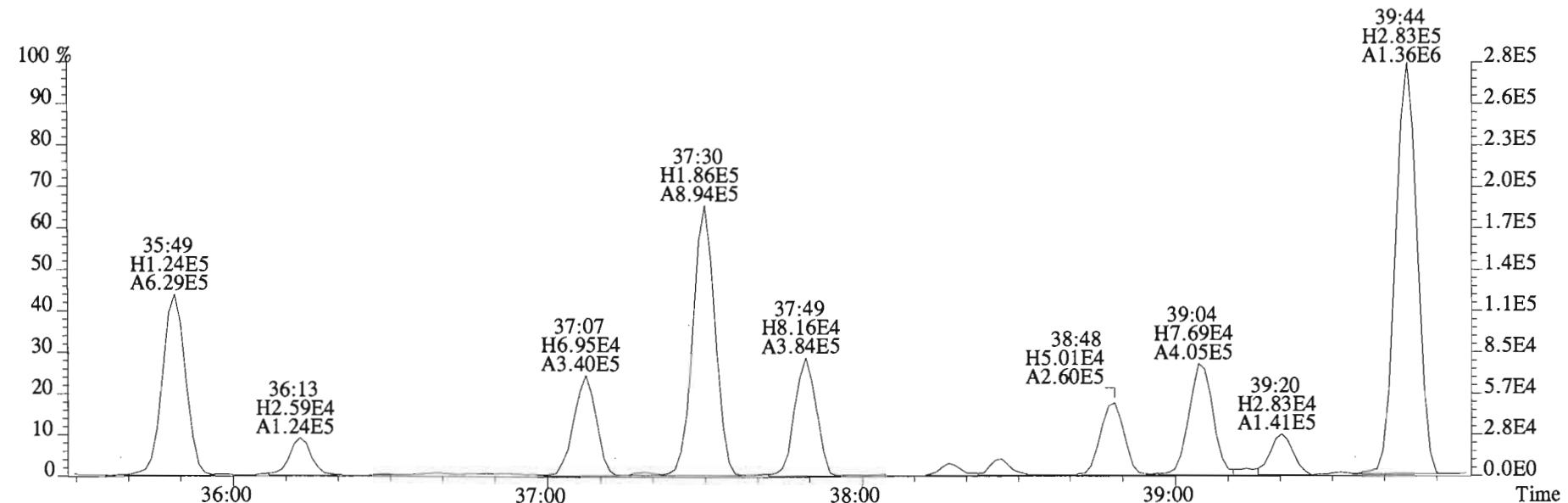
339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1836.0,0.00%,F,F)



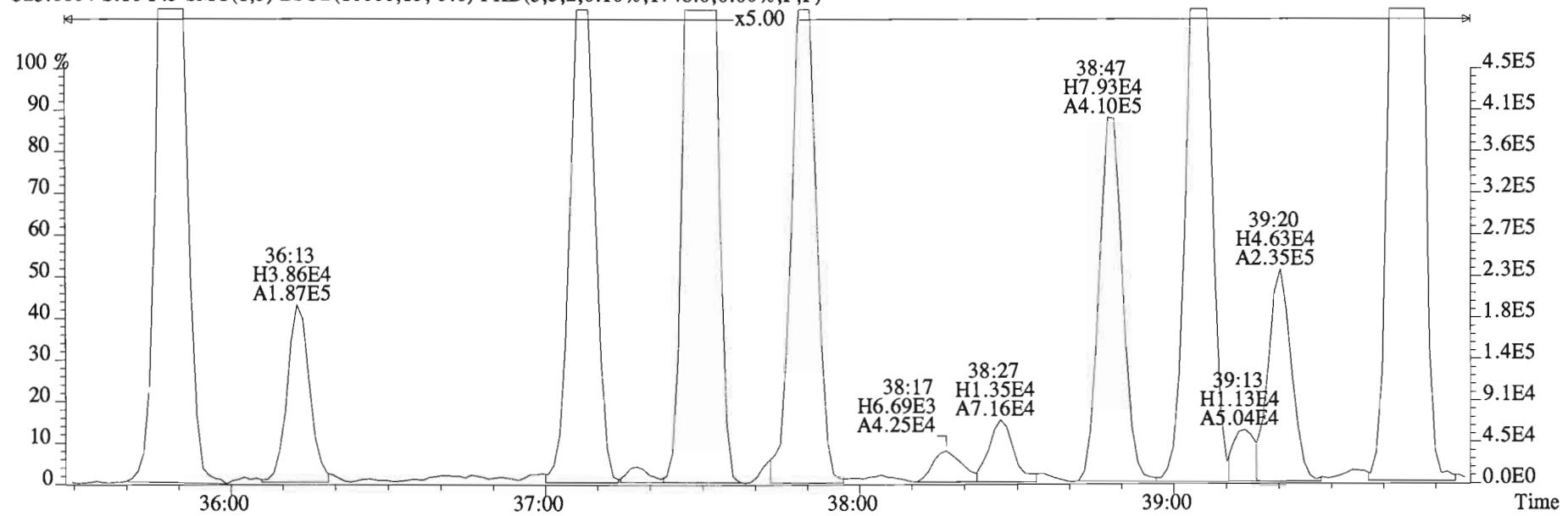
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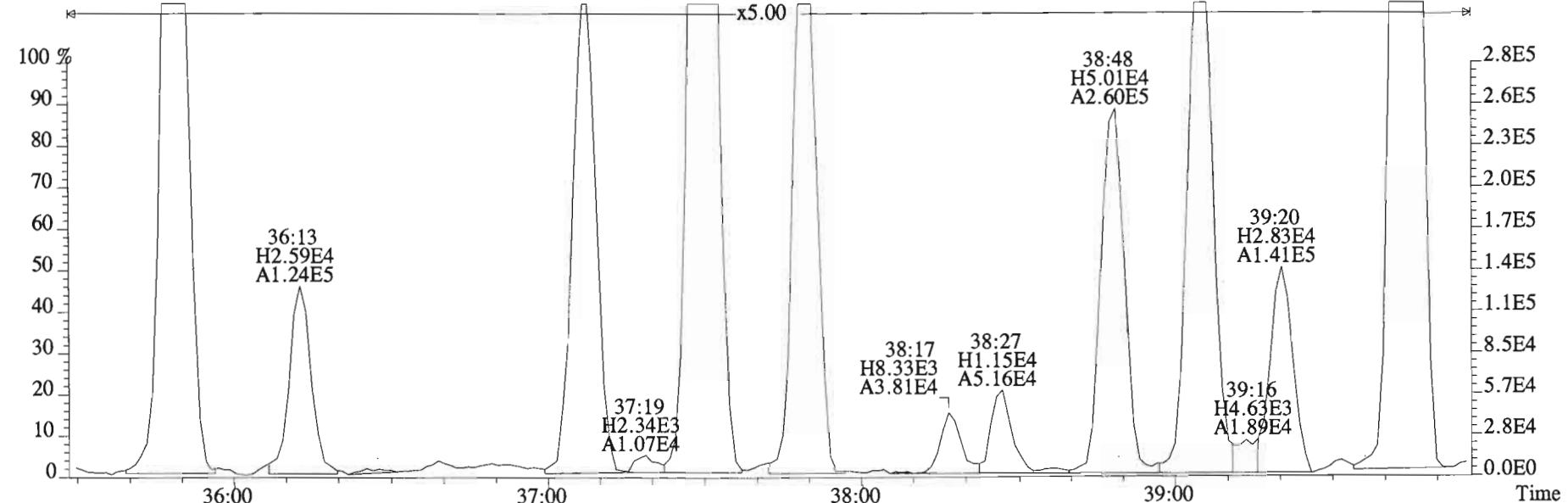
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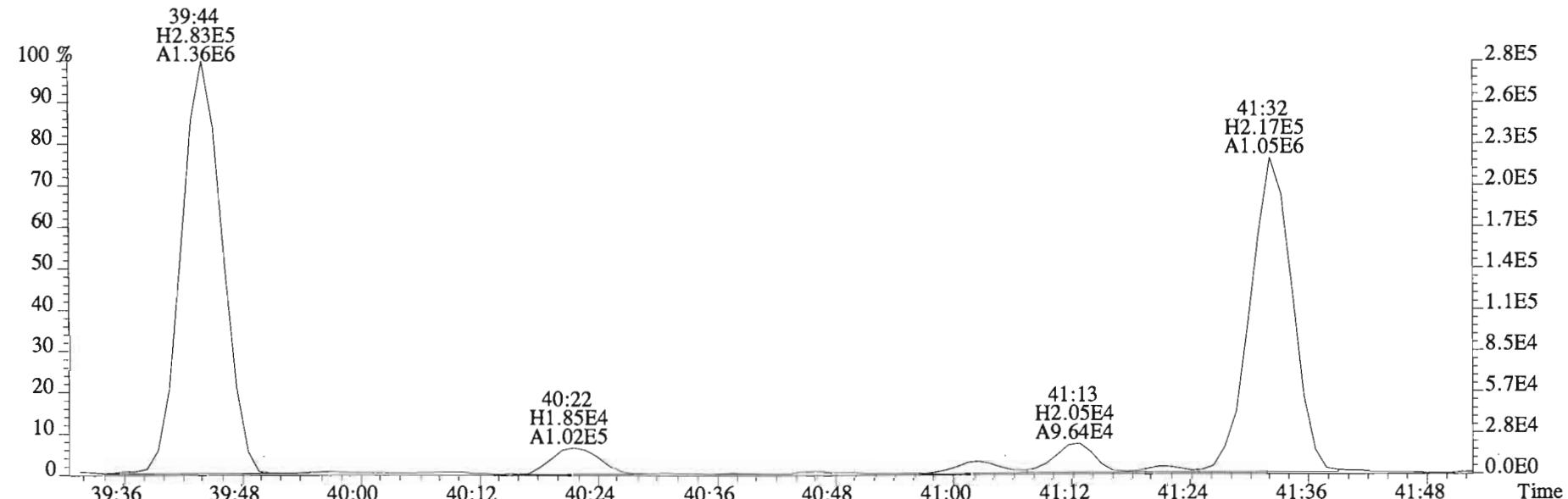
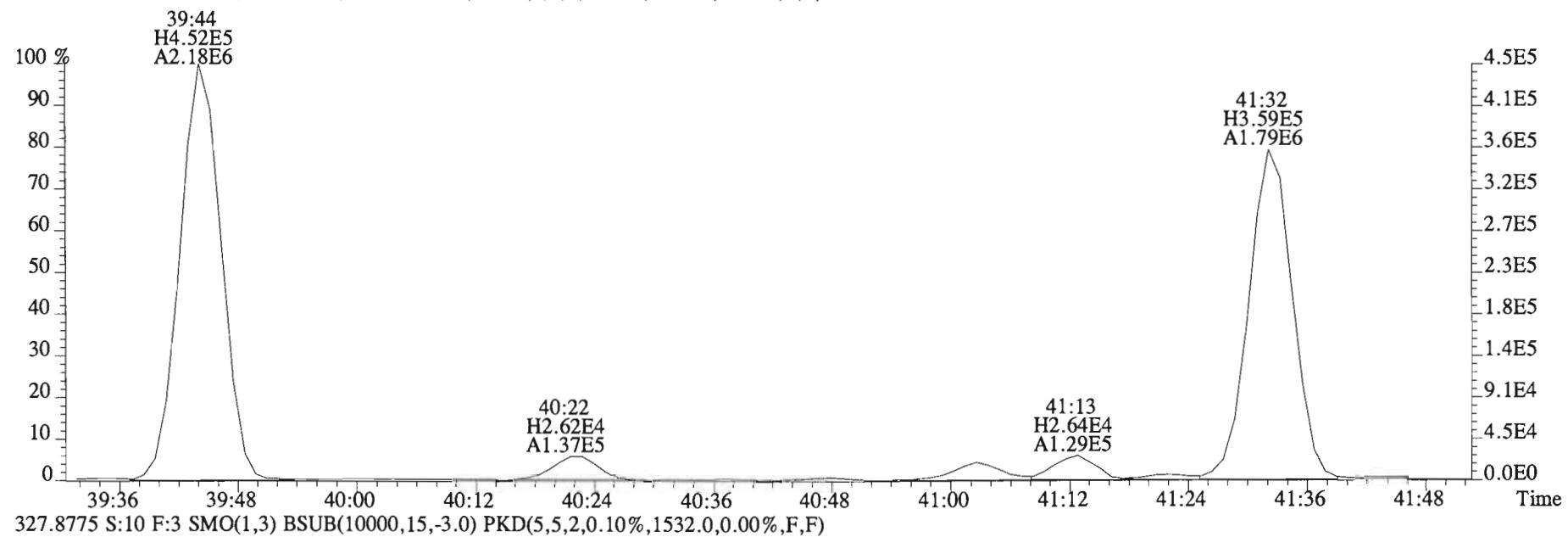
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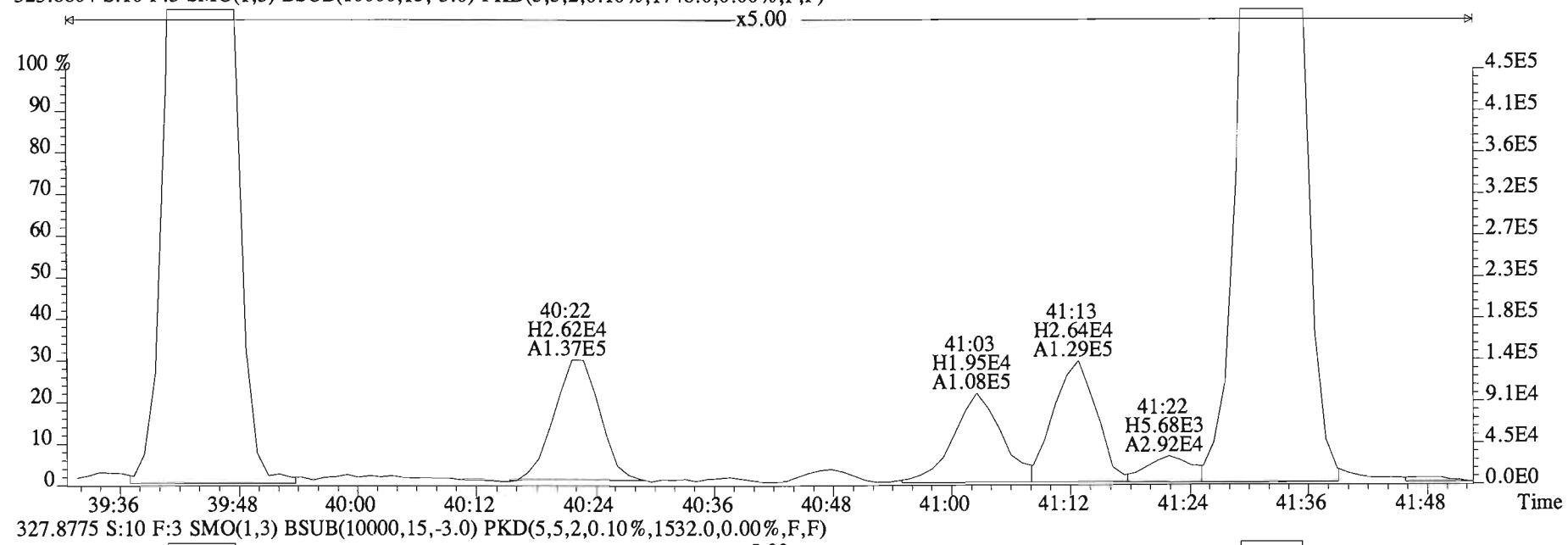
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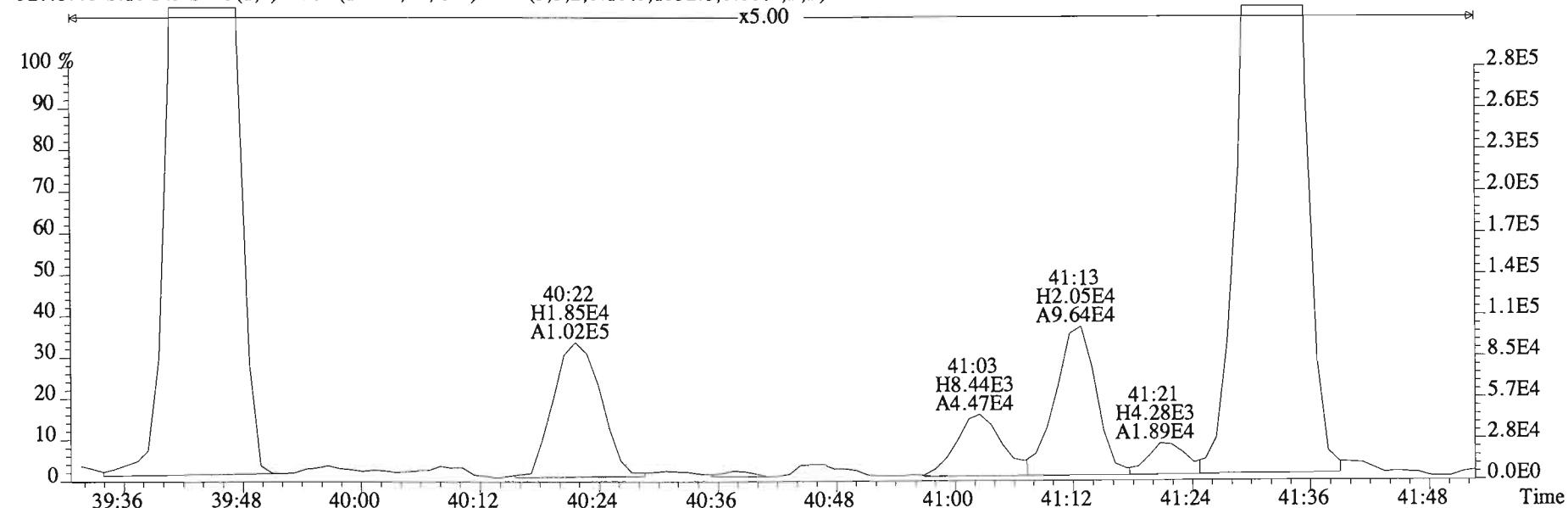
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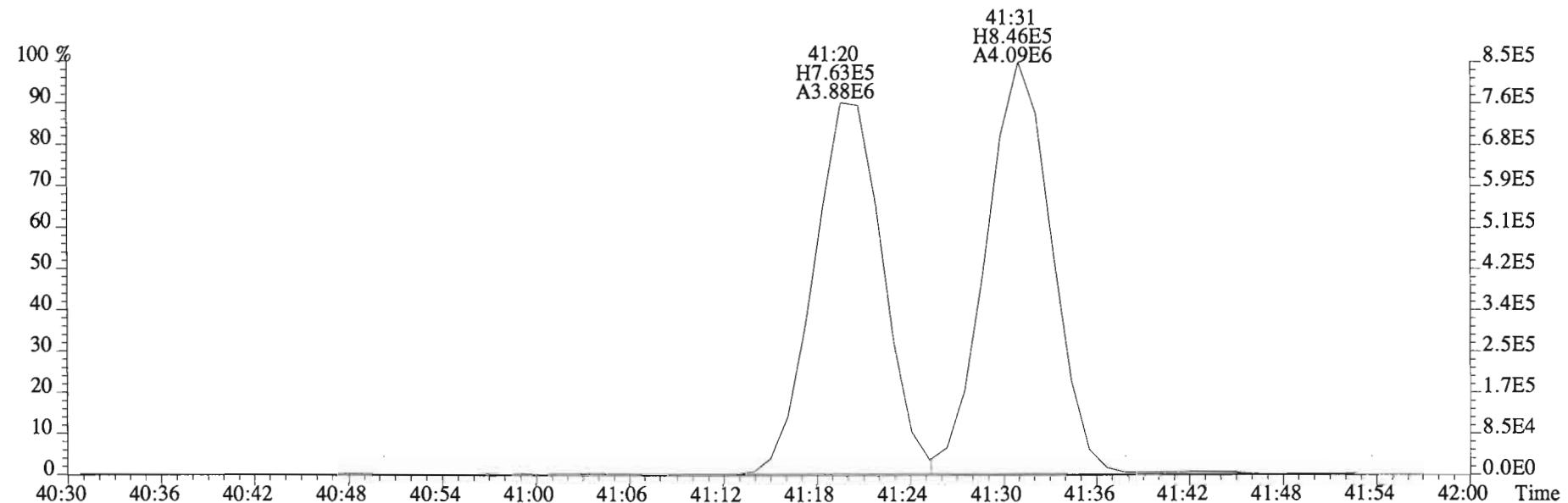
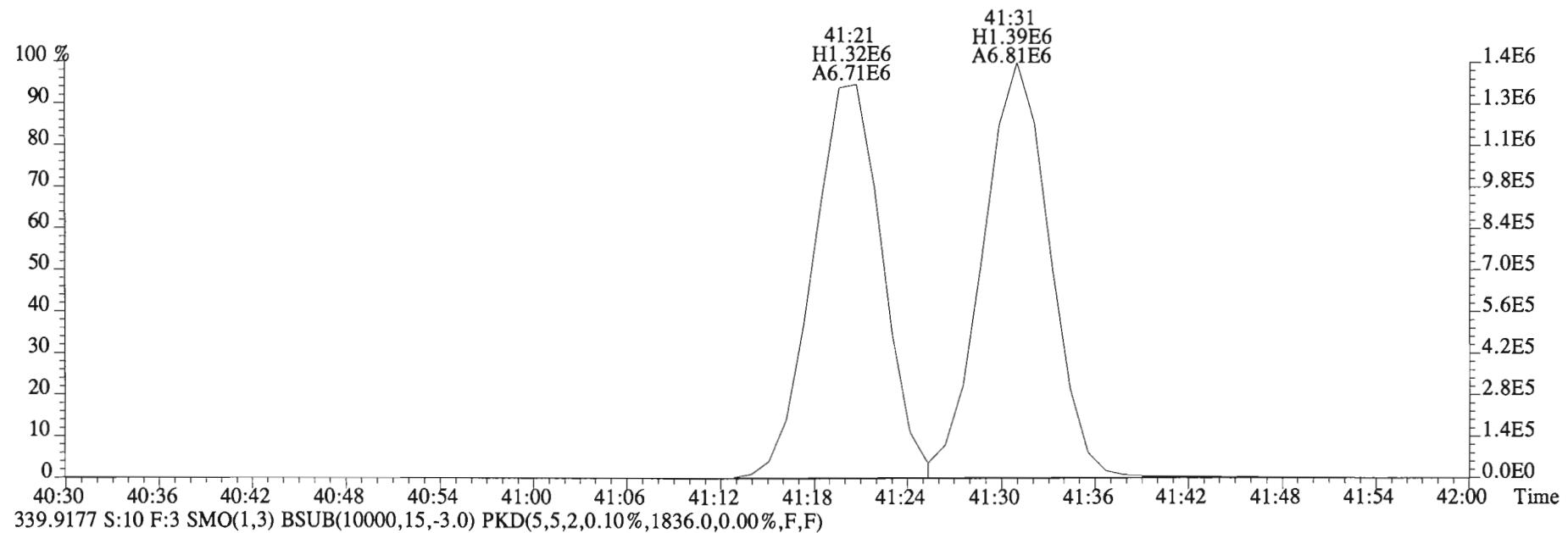
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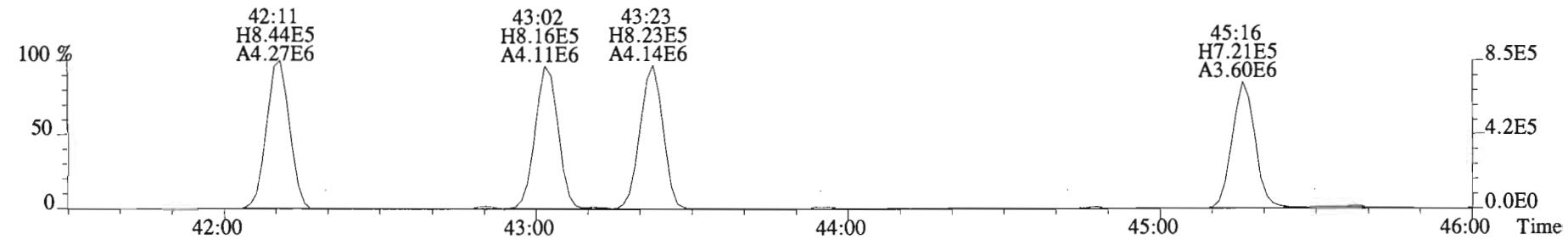
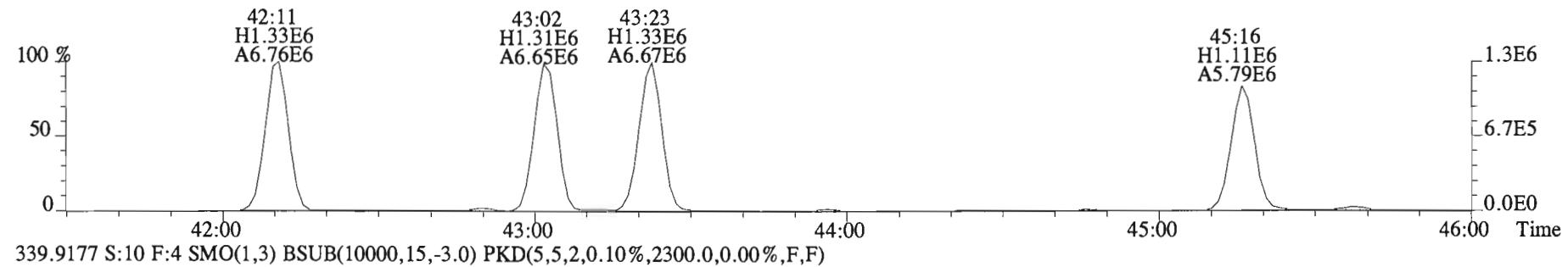
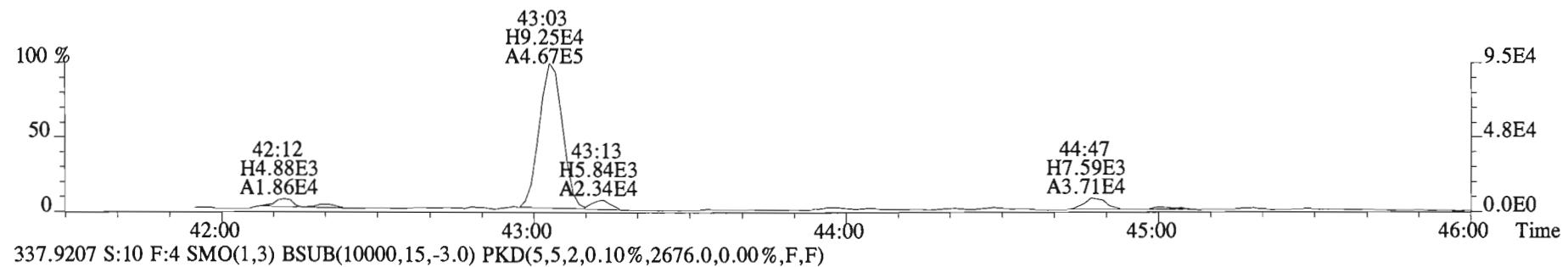
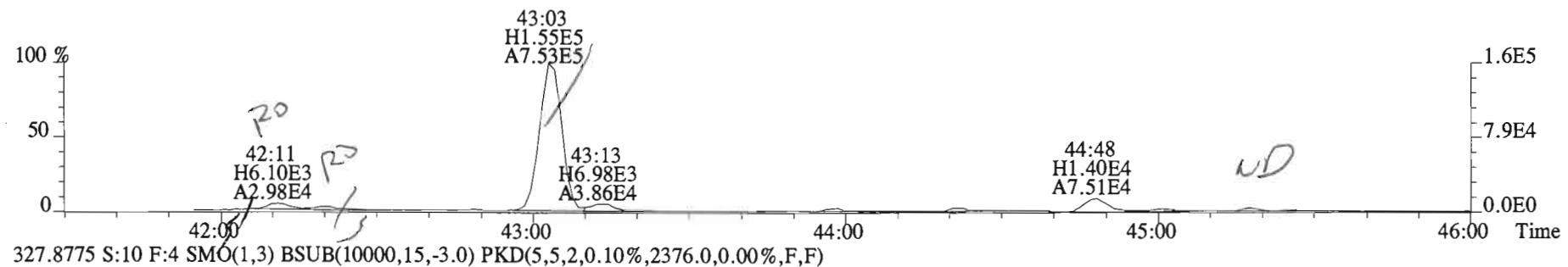
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1532.0,0.00%,F,F)



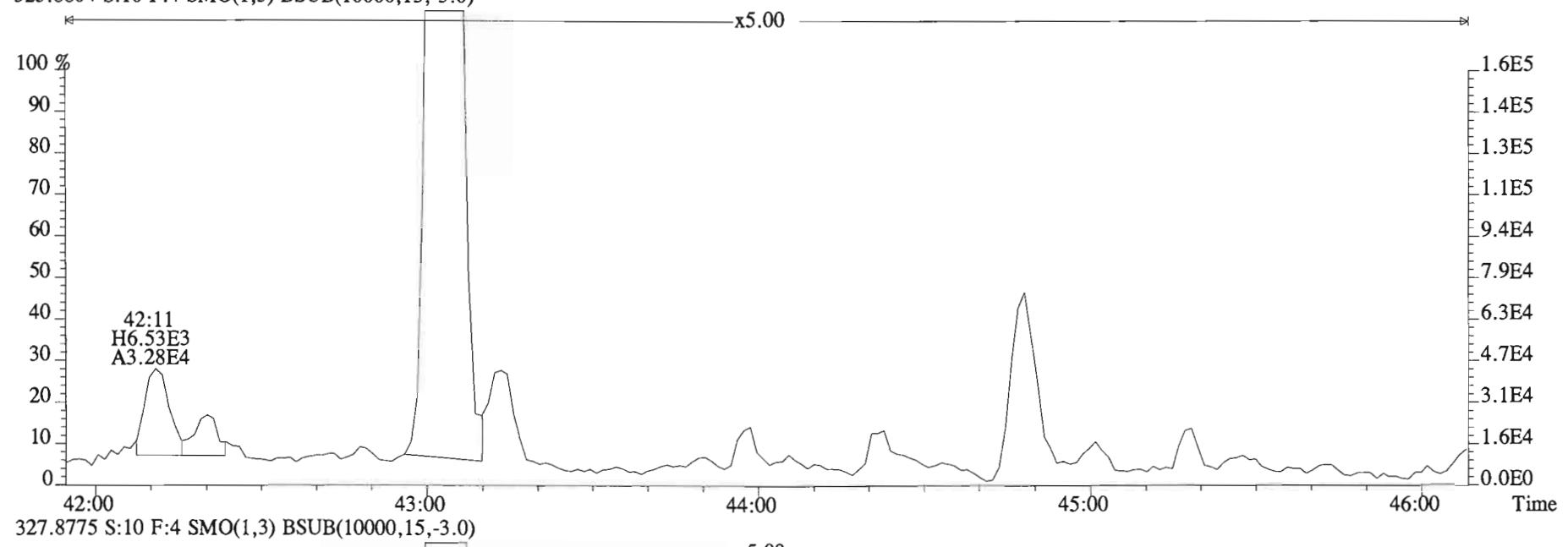
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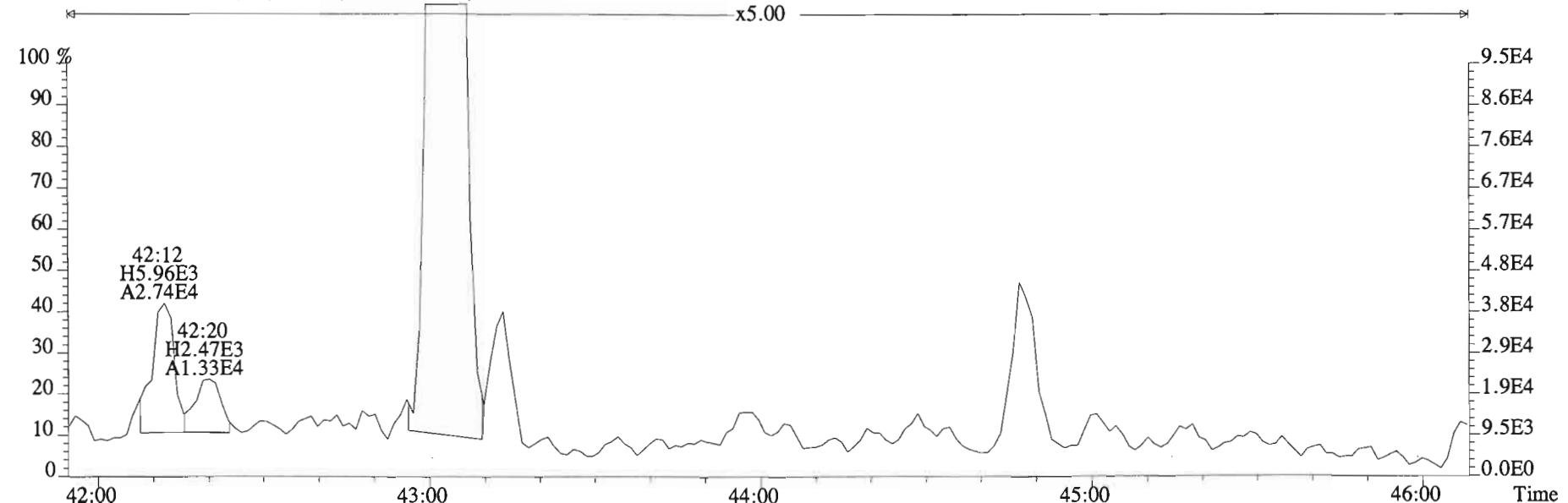
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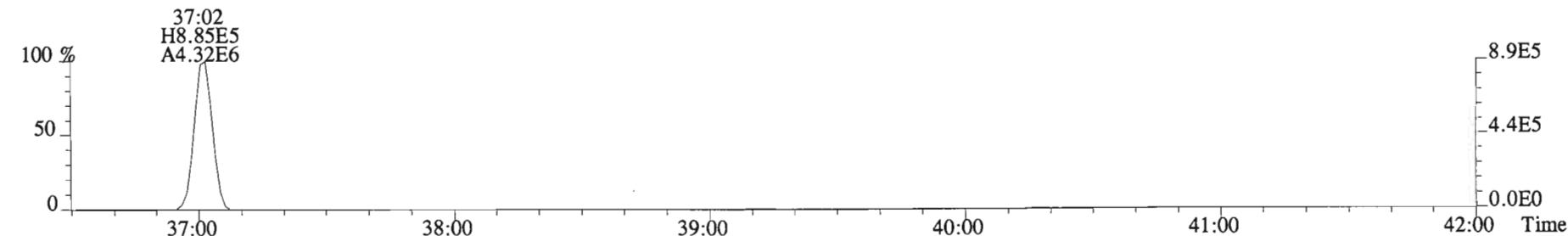
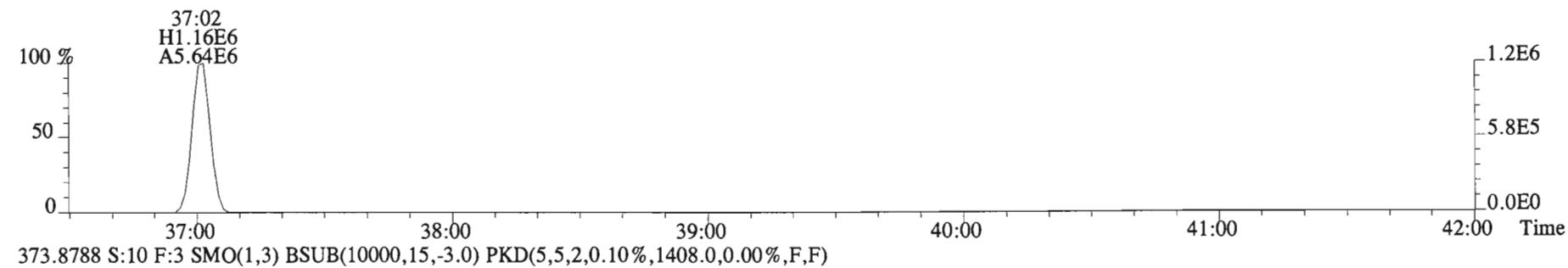
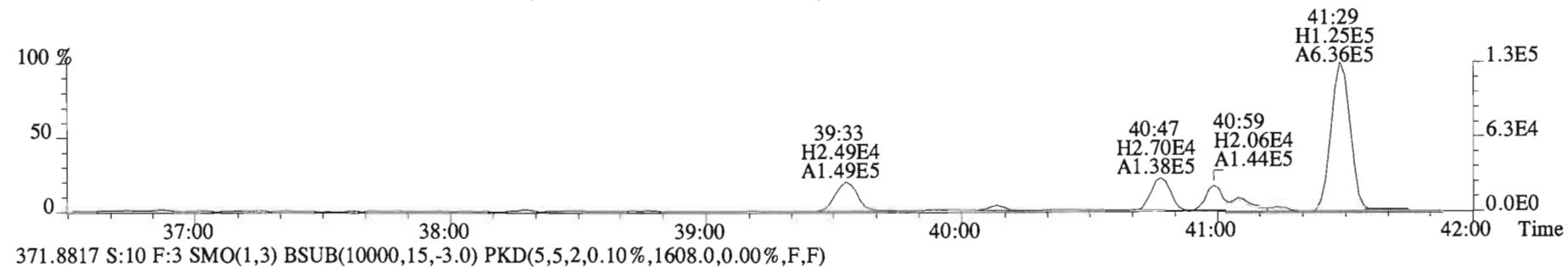
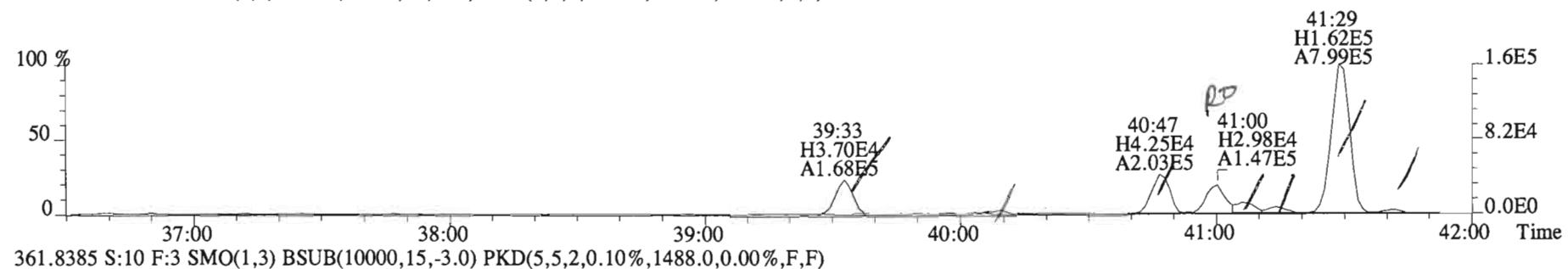
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325.8804 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0)



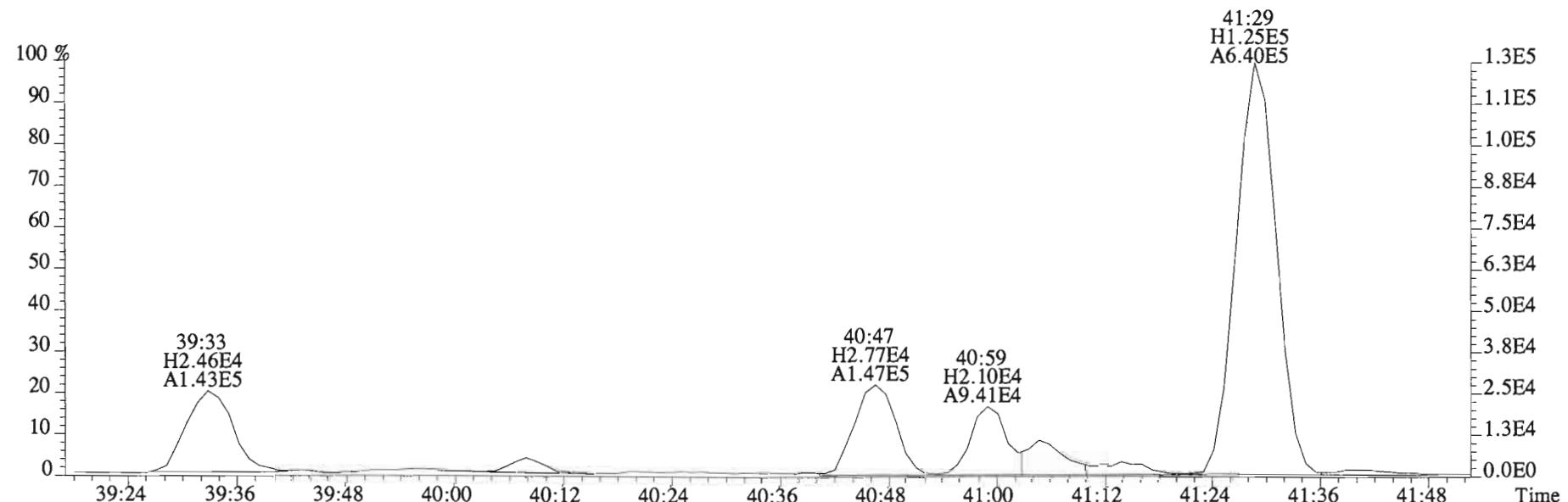
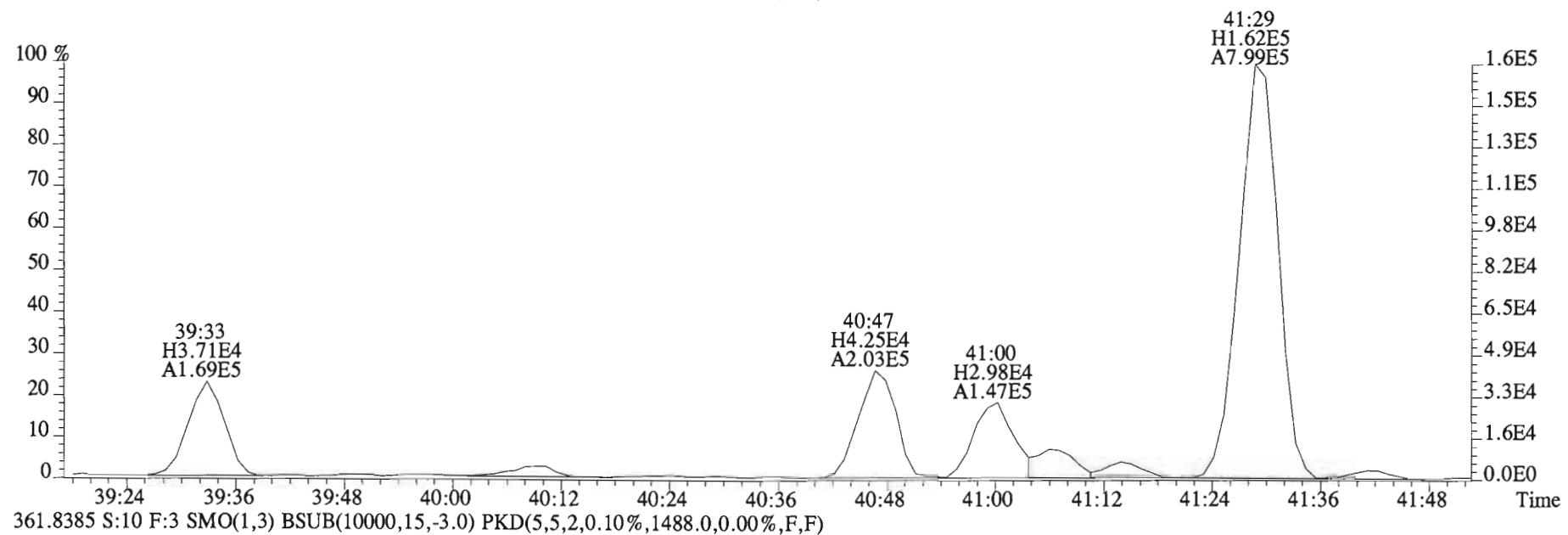
327.8775 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0)



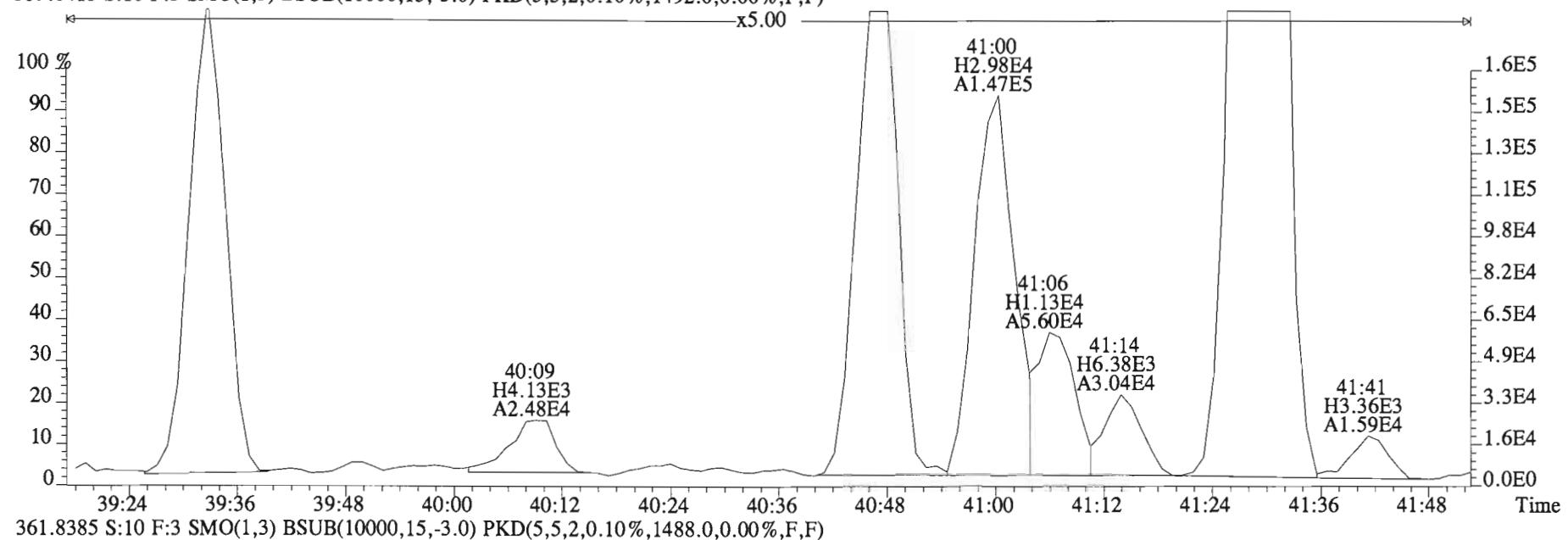
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Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
359.8415 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1492.0,0.00%,F,F)



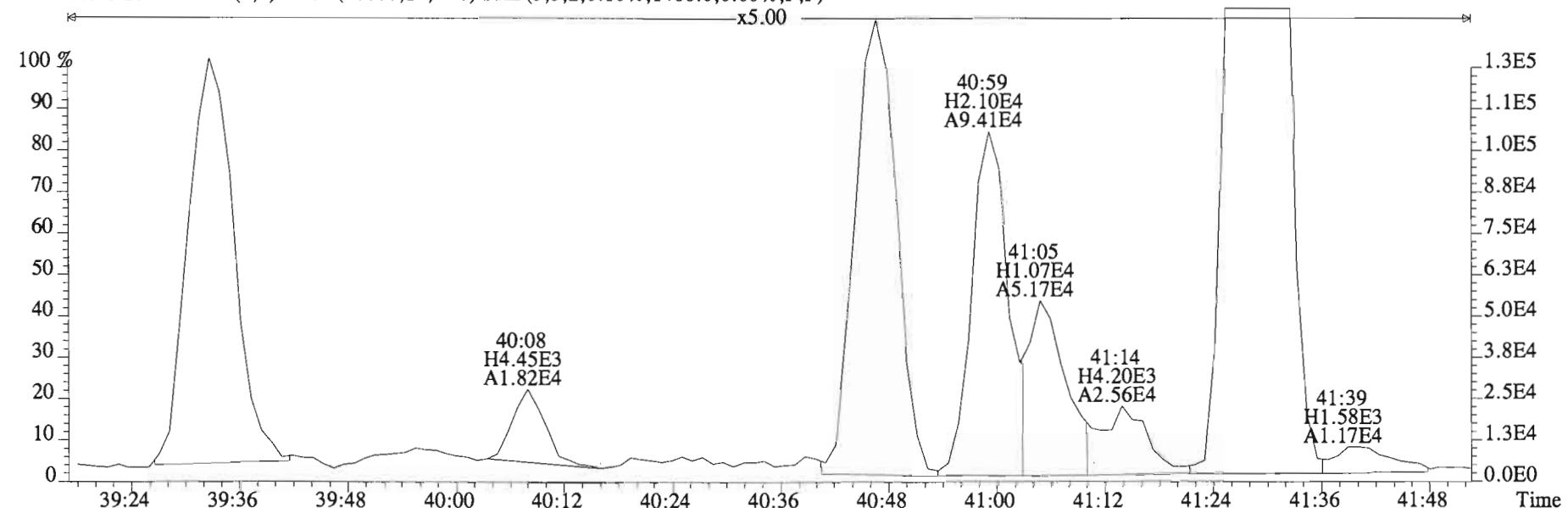
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Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
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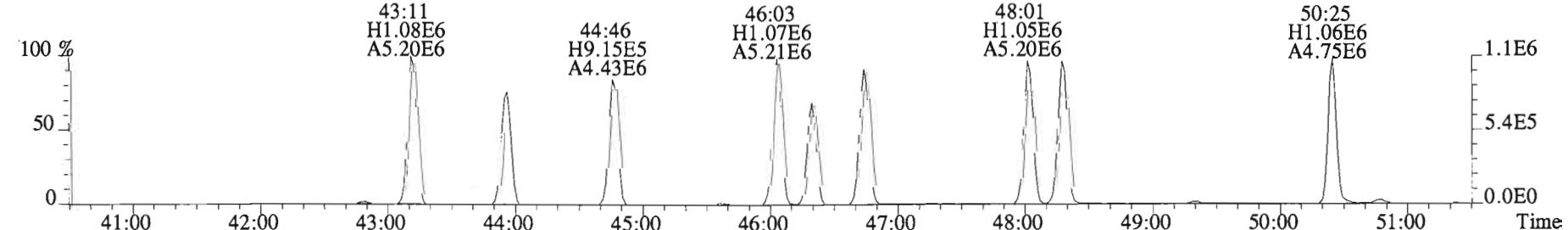
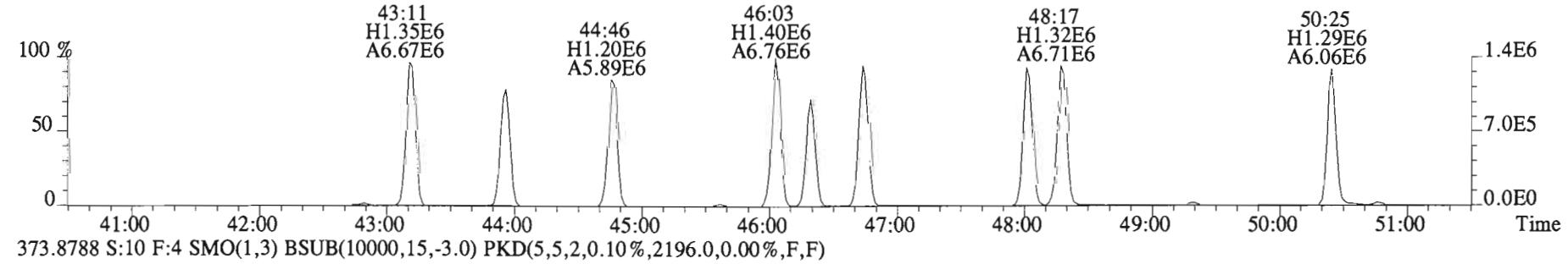
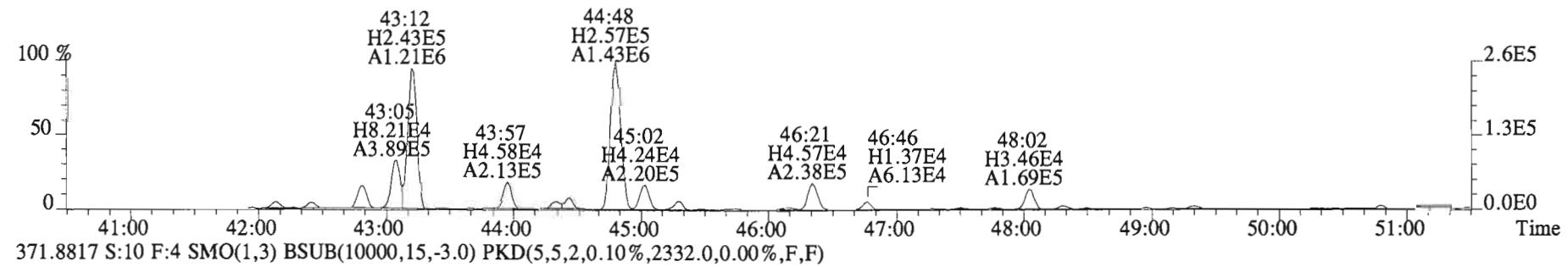
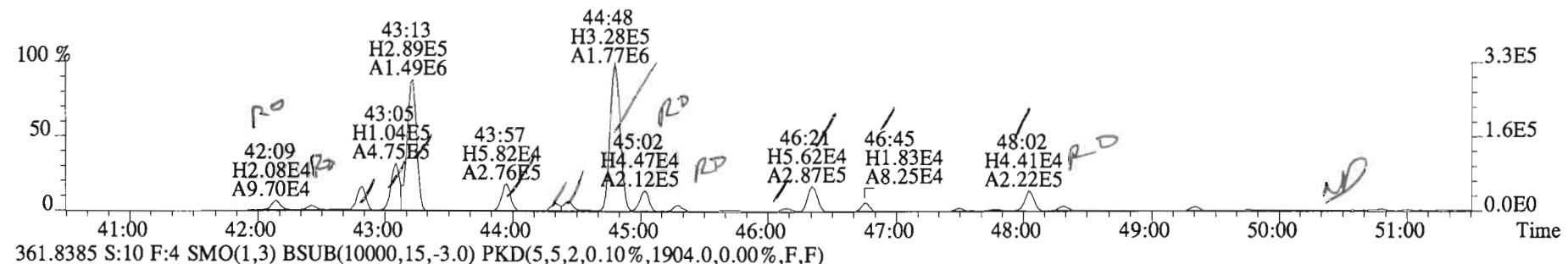
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 Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
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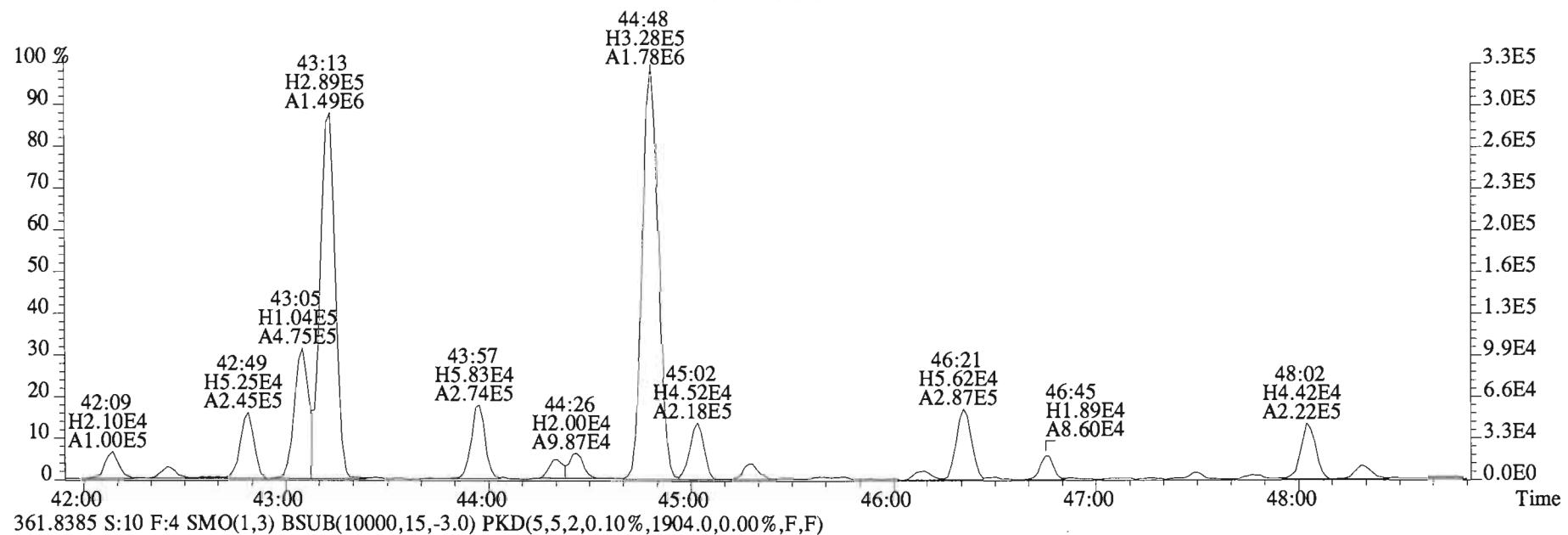
361.8385 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1488.0,0.00%,F,F)



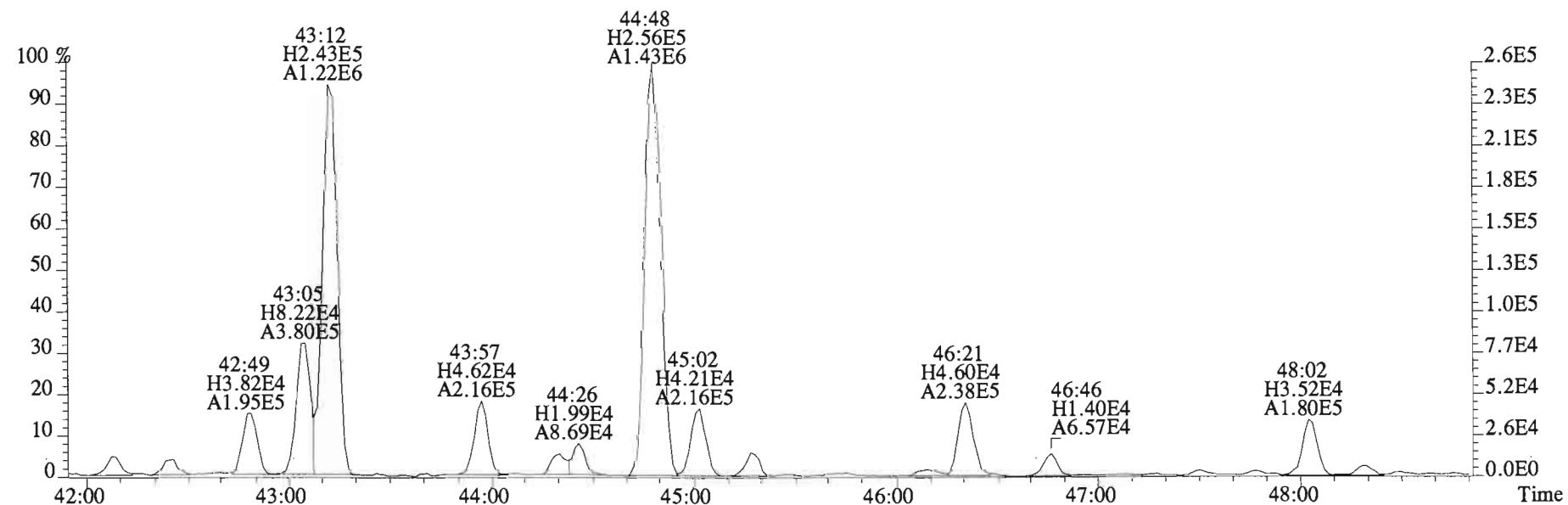
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 Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
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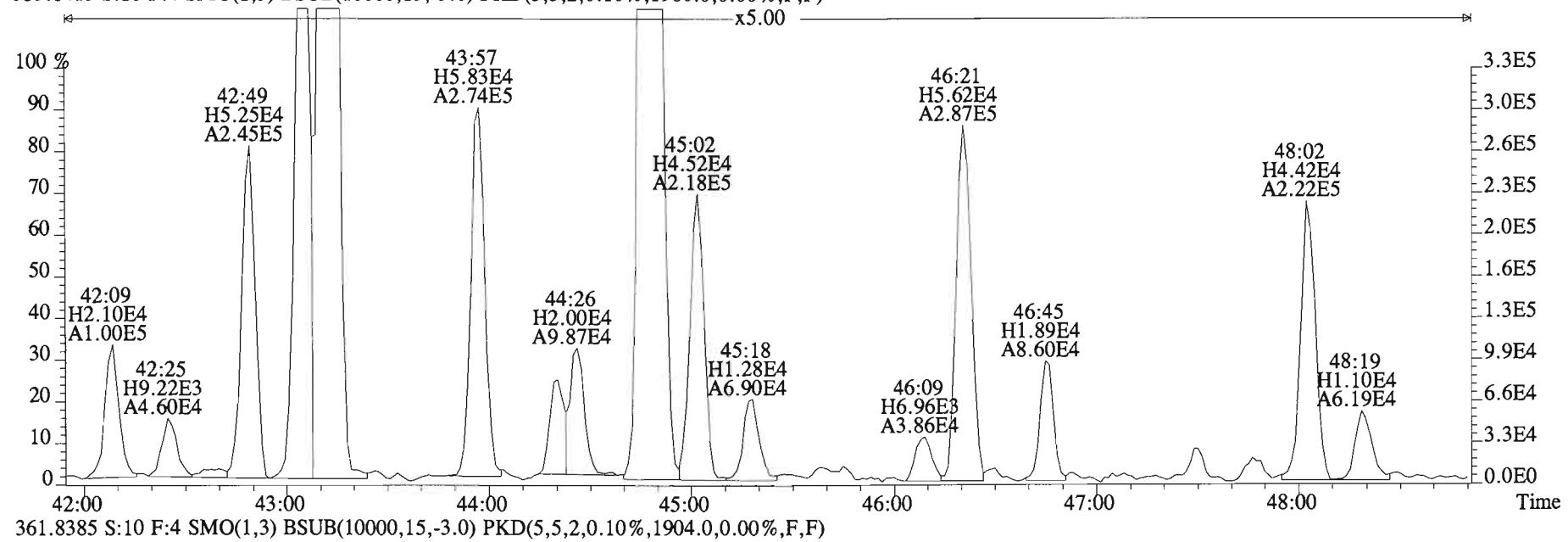
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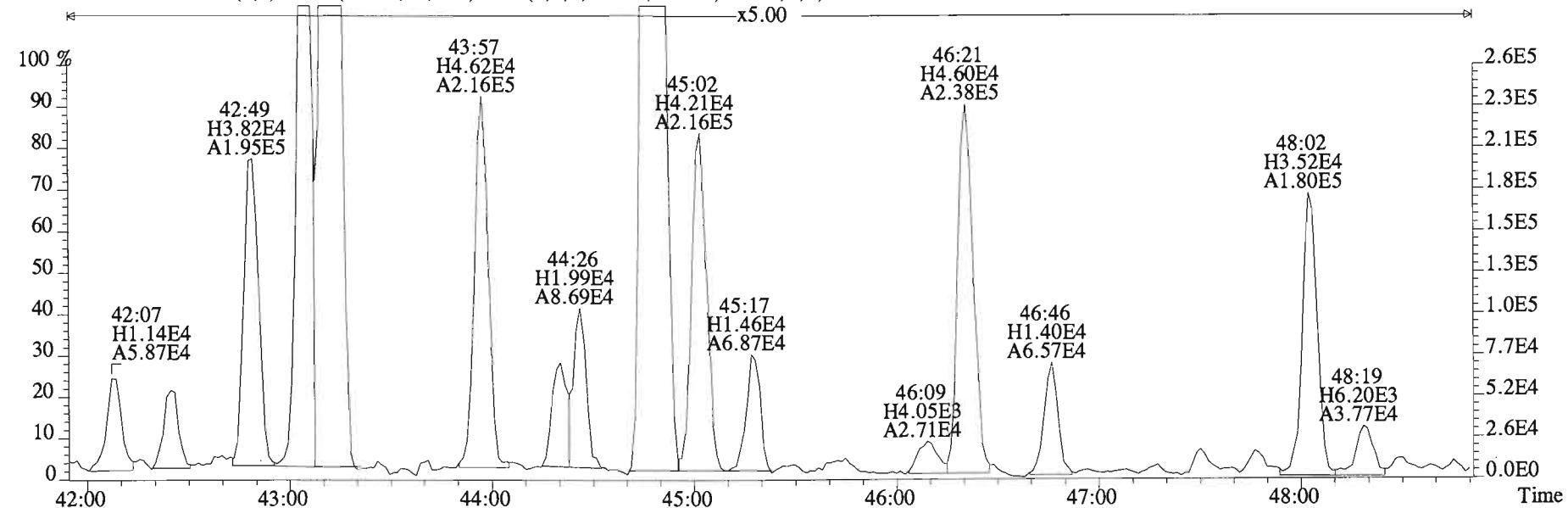
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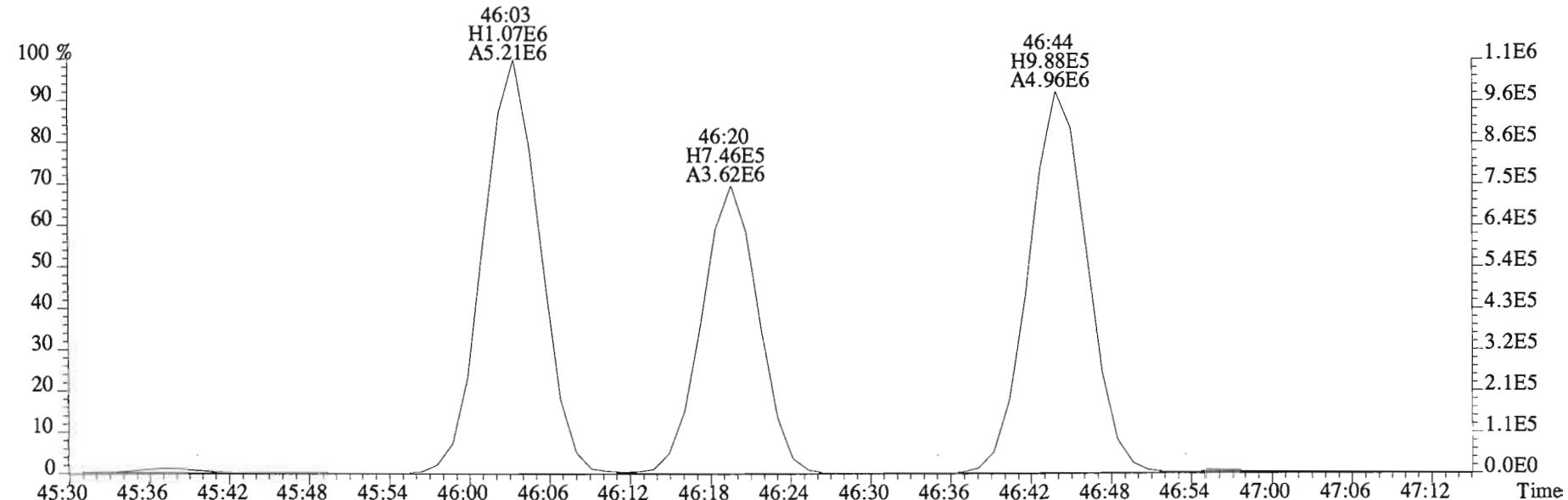
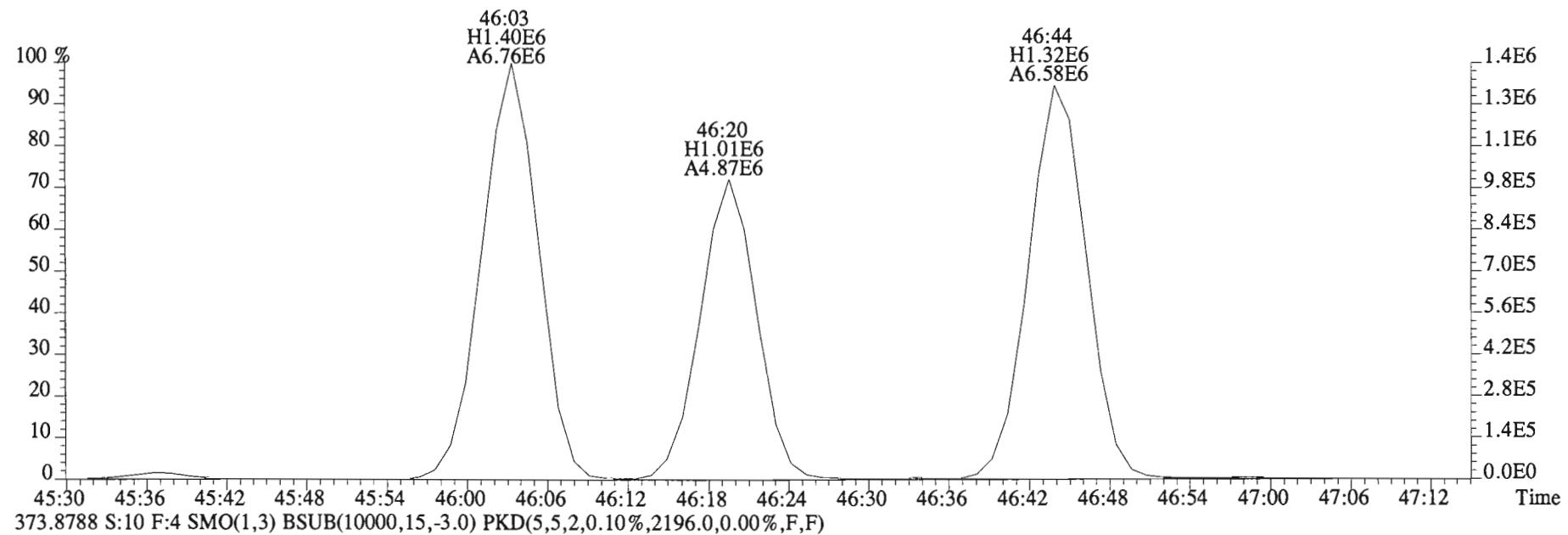
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 Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
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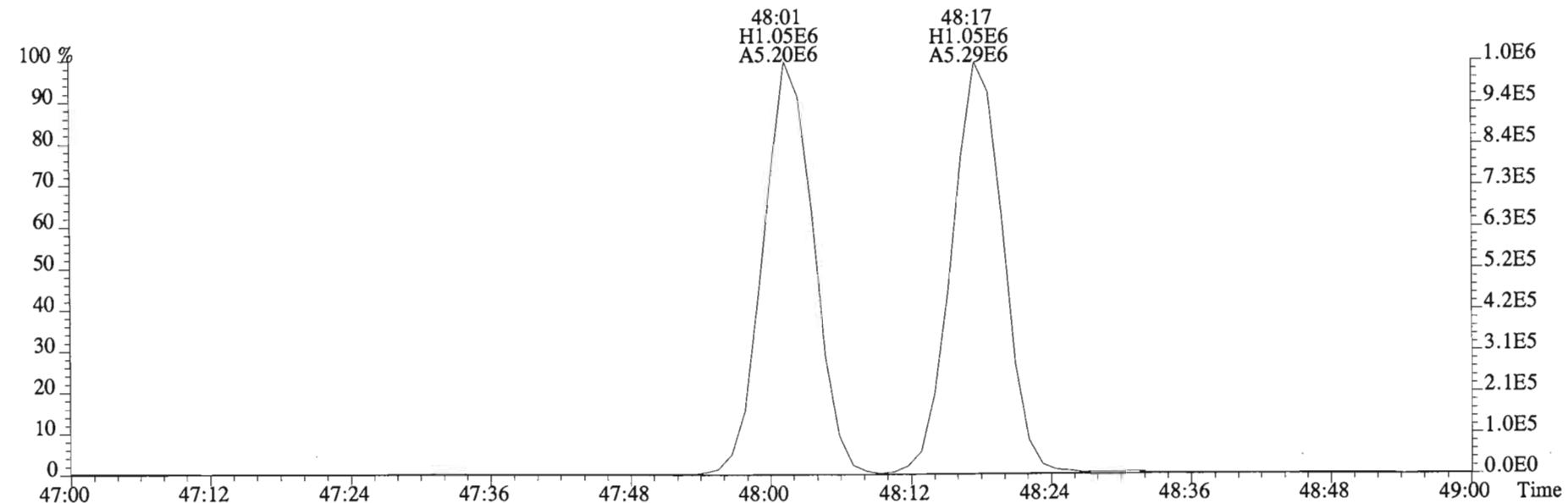
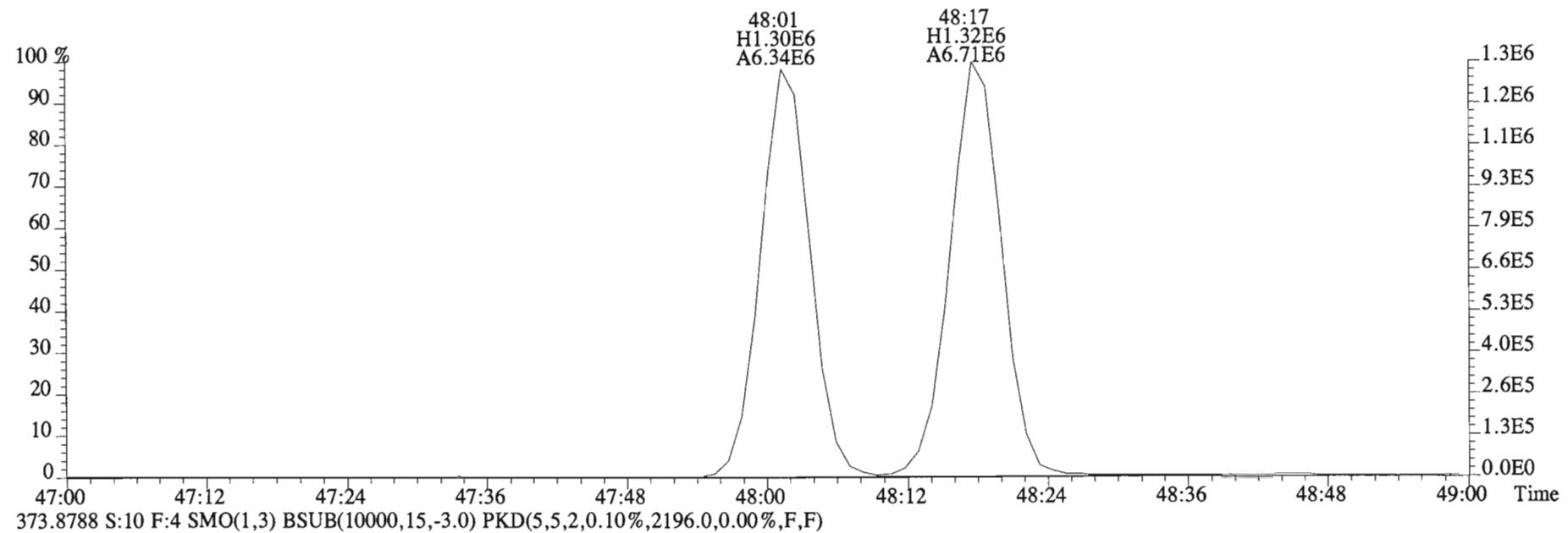
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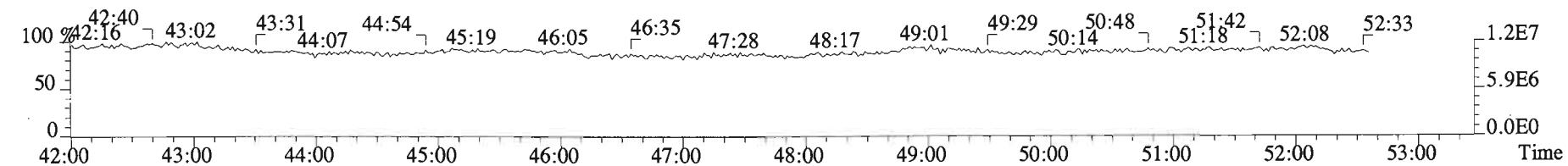
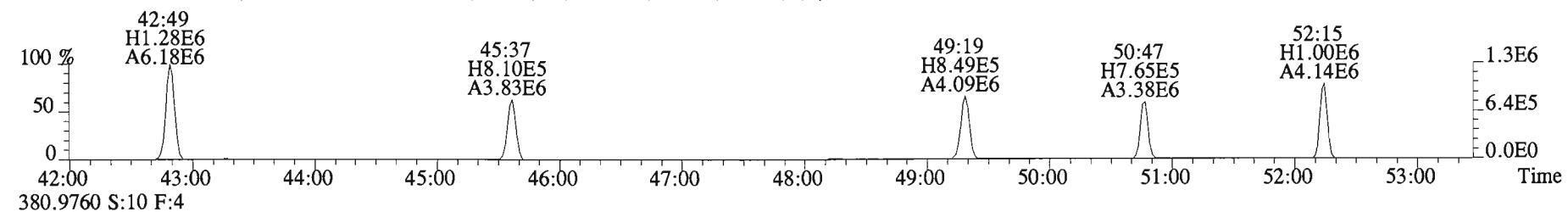
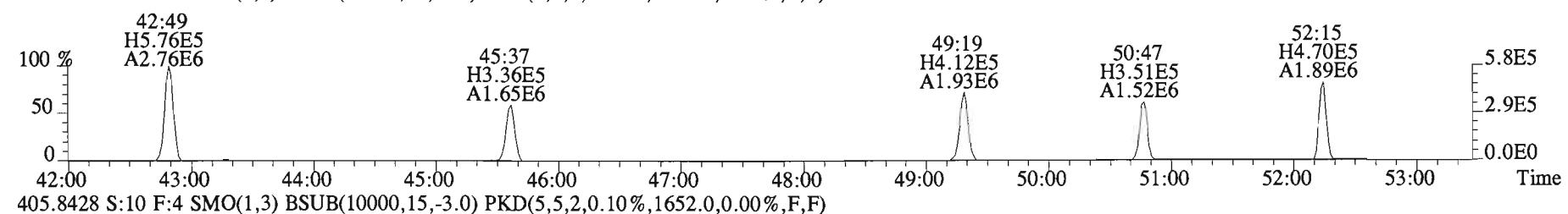
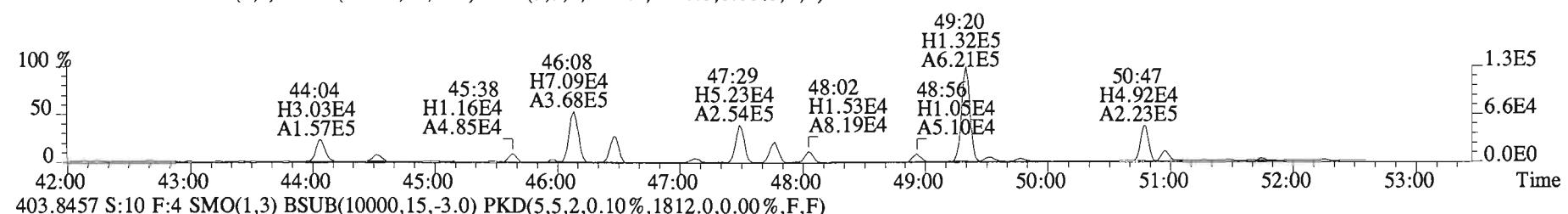
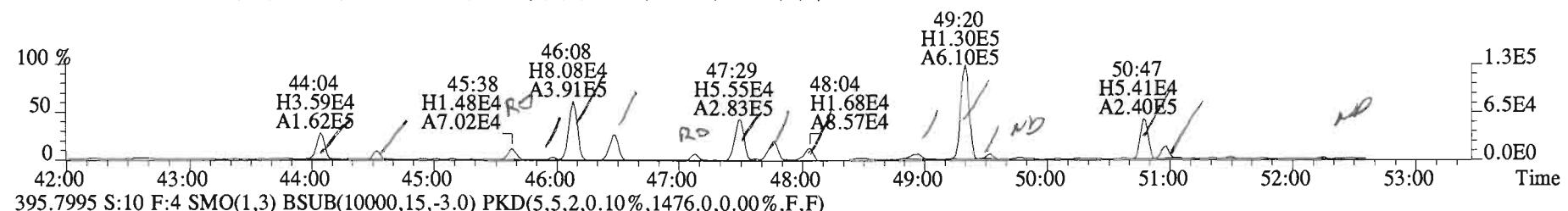
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Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
371.8817 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2332.0,0.00%,F,F)



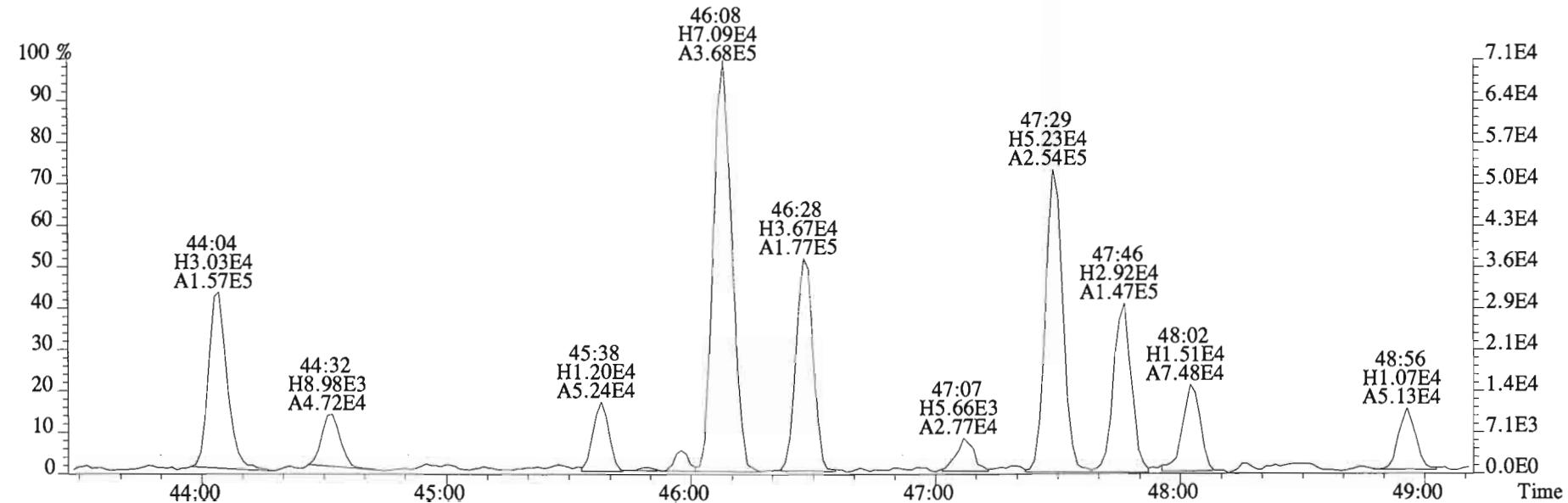
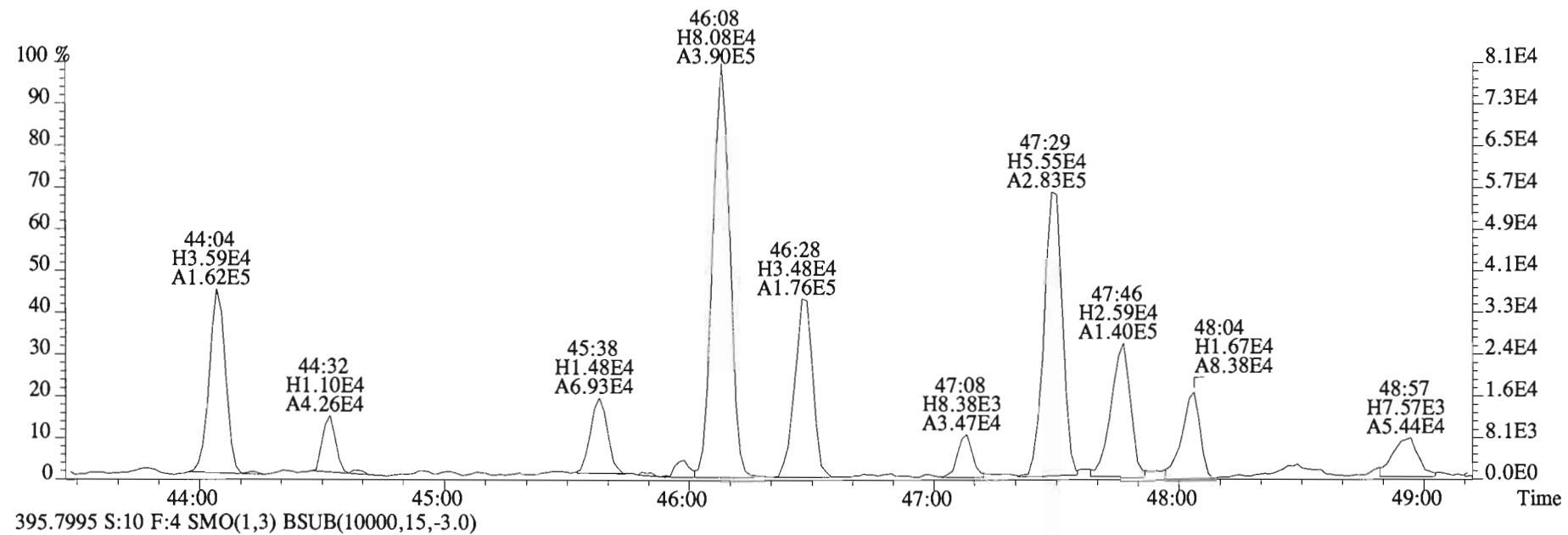
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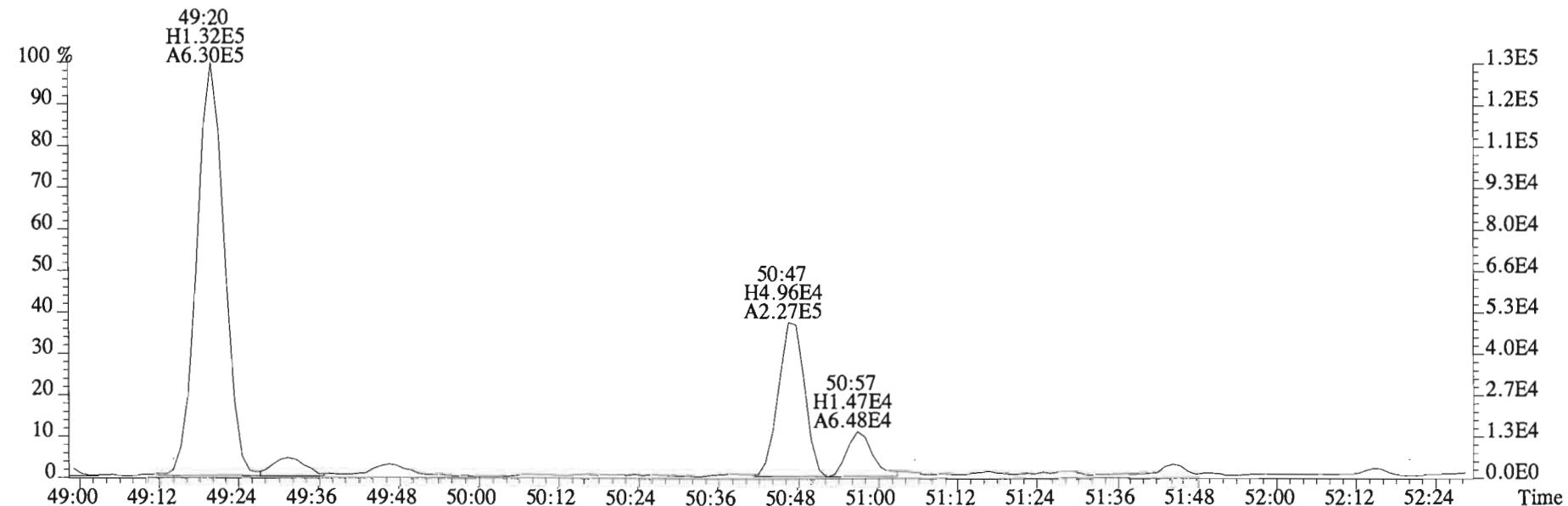
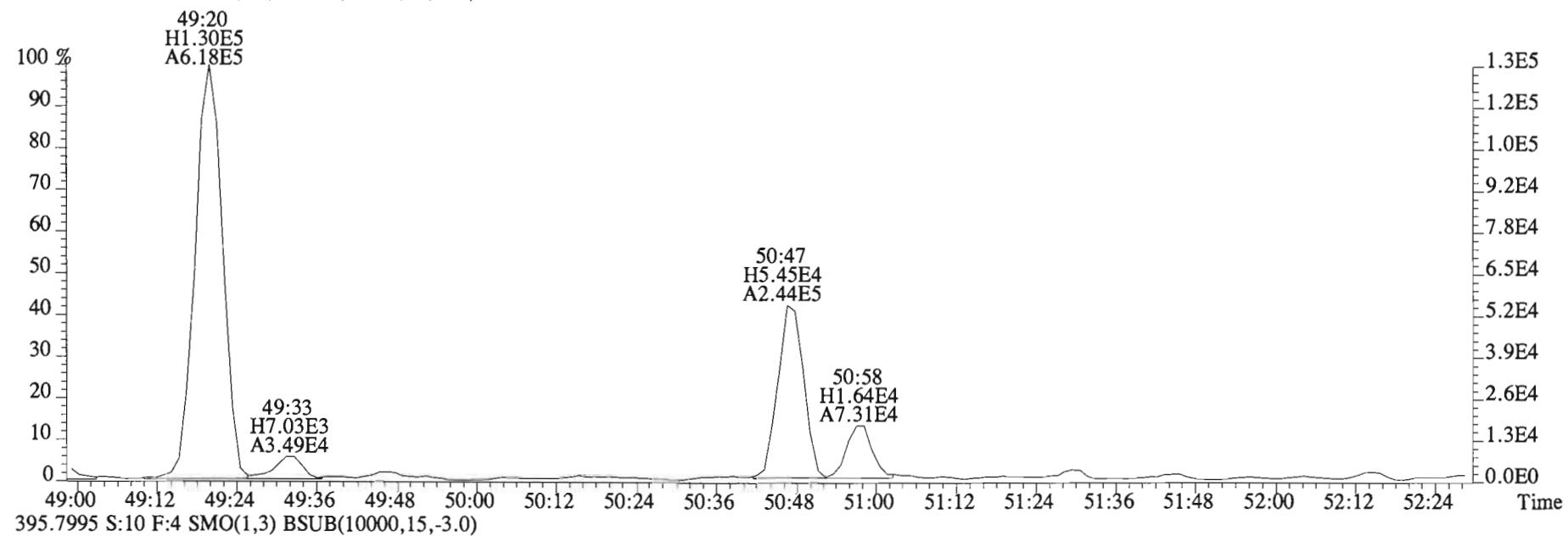
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 393.8025 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1824.0,0.00%,F,F)



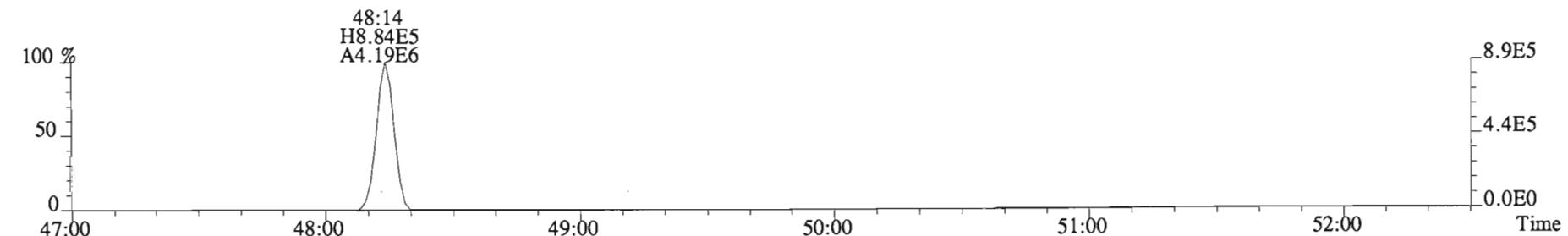
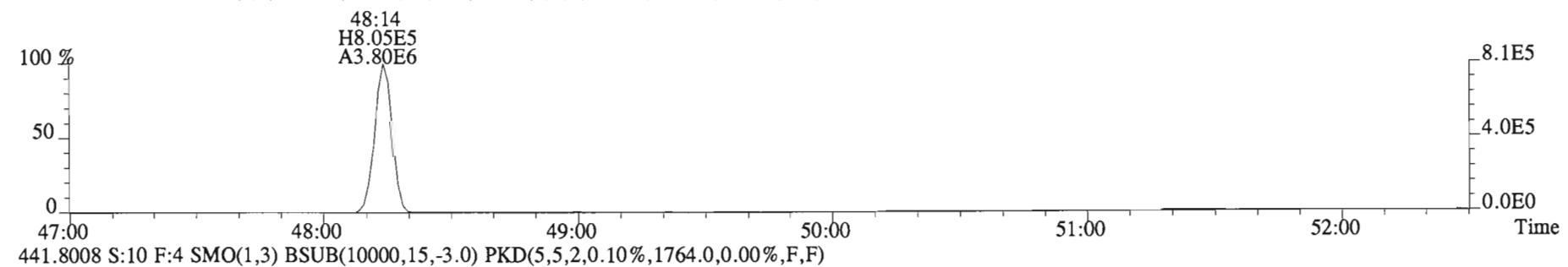
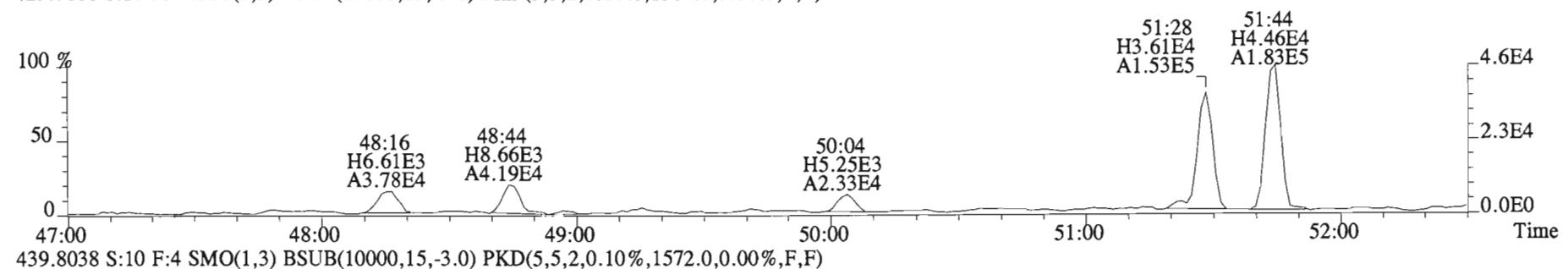
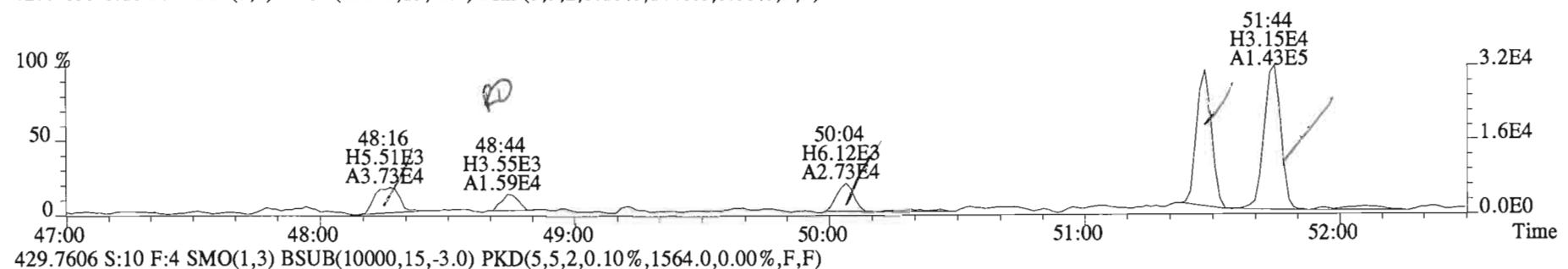
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393.8025 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0)



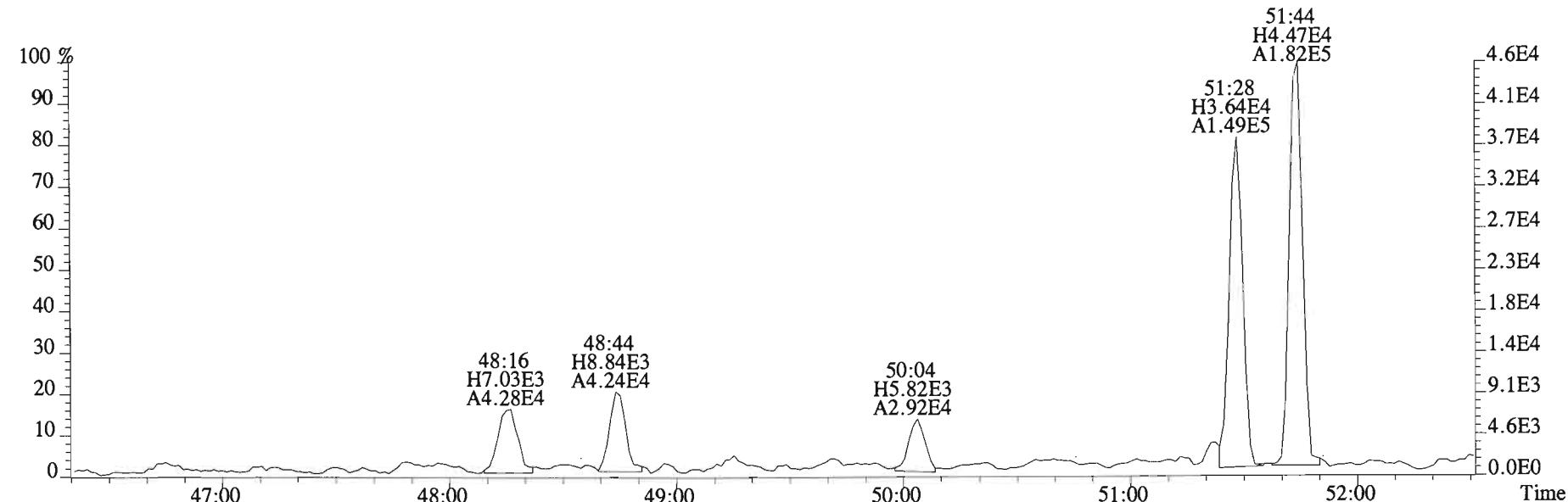
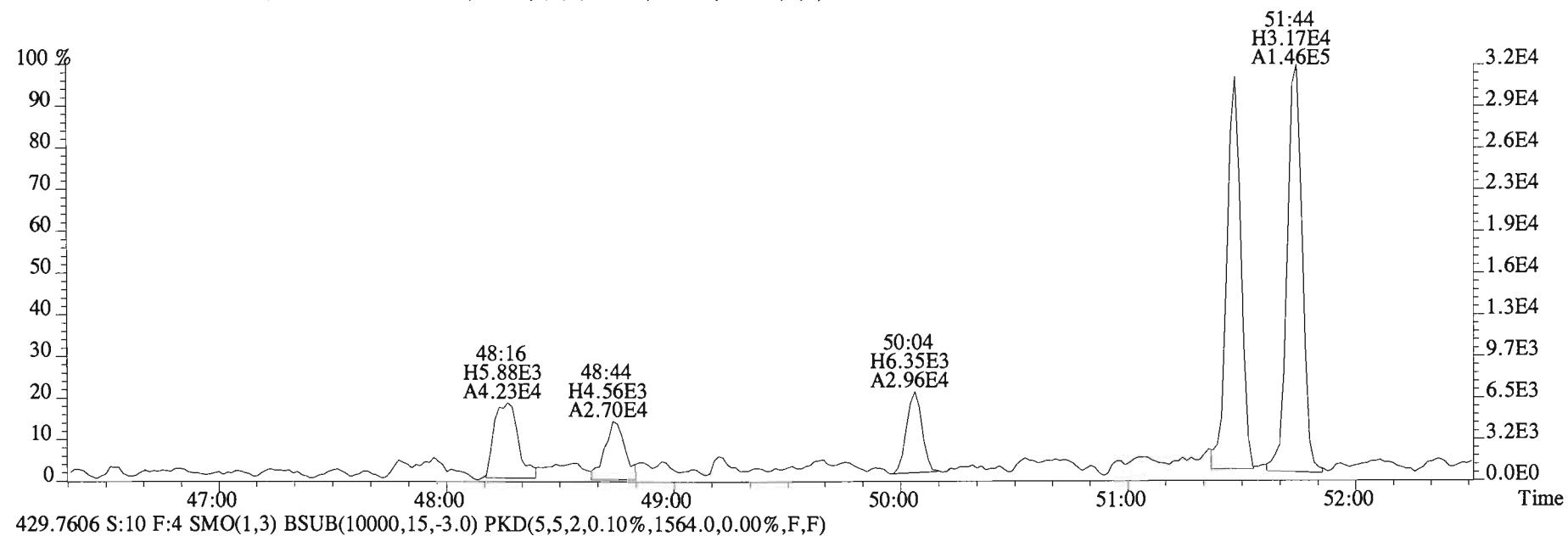
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393.8025 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0)



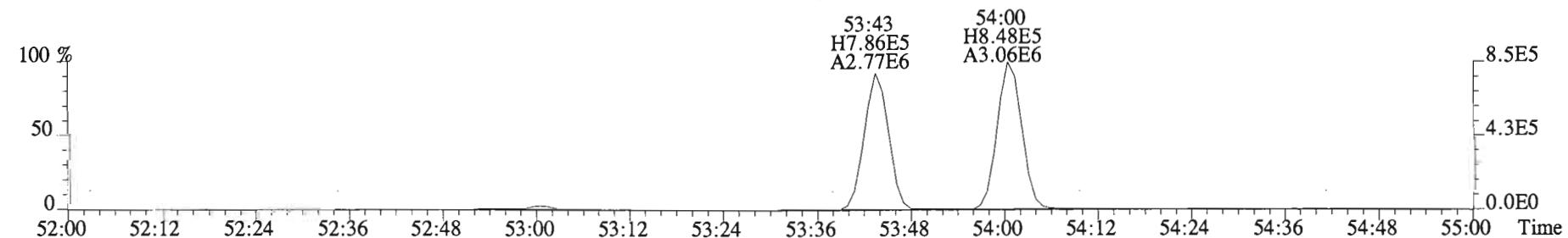
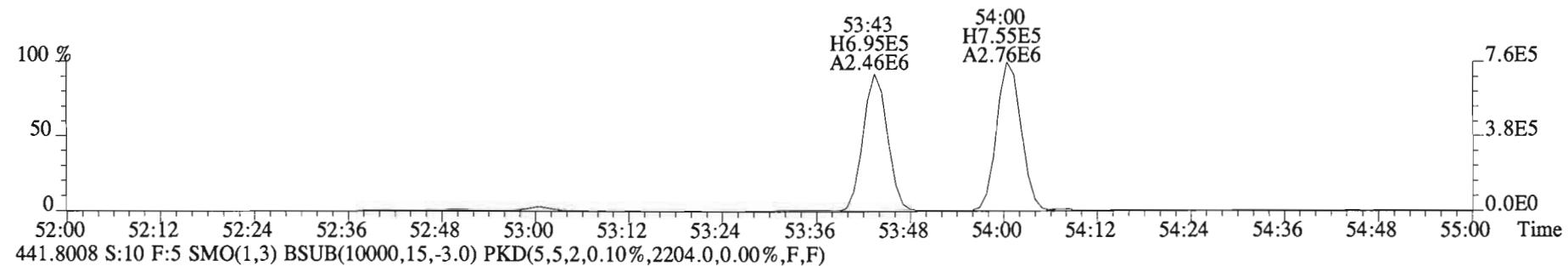
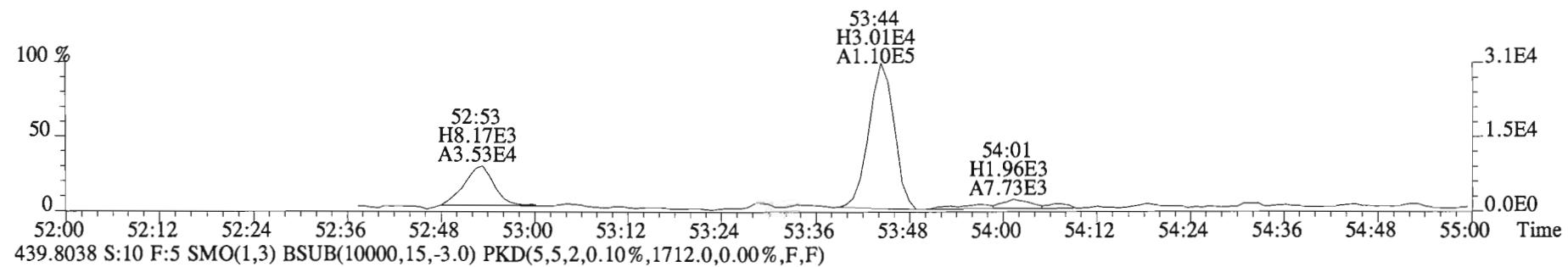
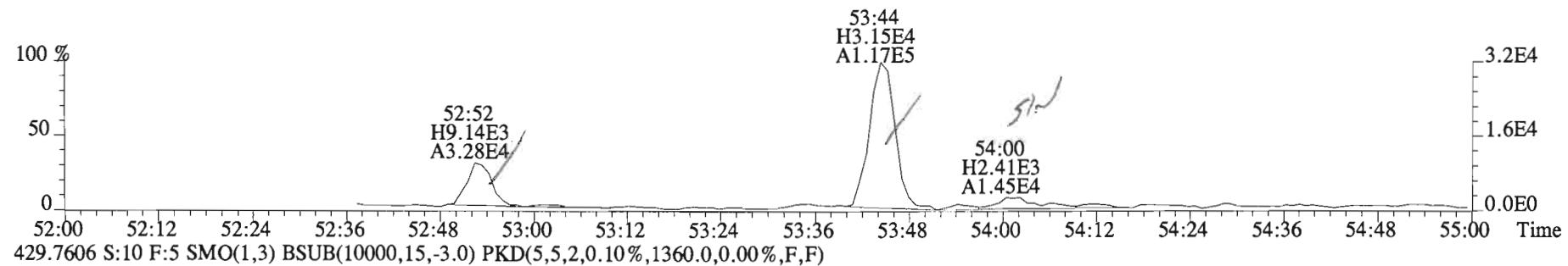
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Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
427.7635 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1440.0,0.00%,F,F)



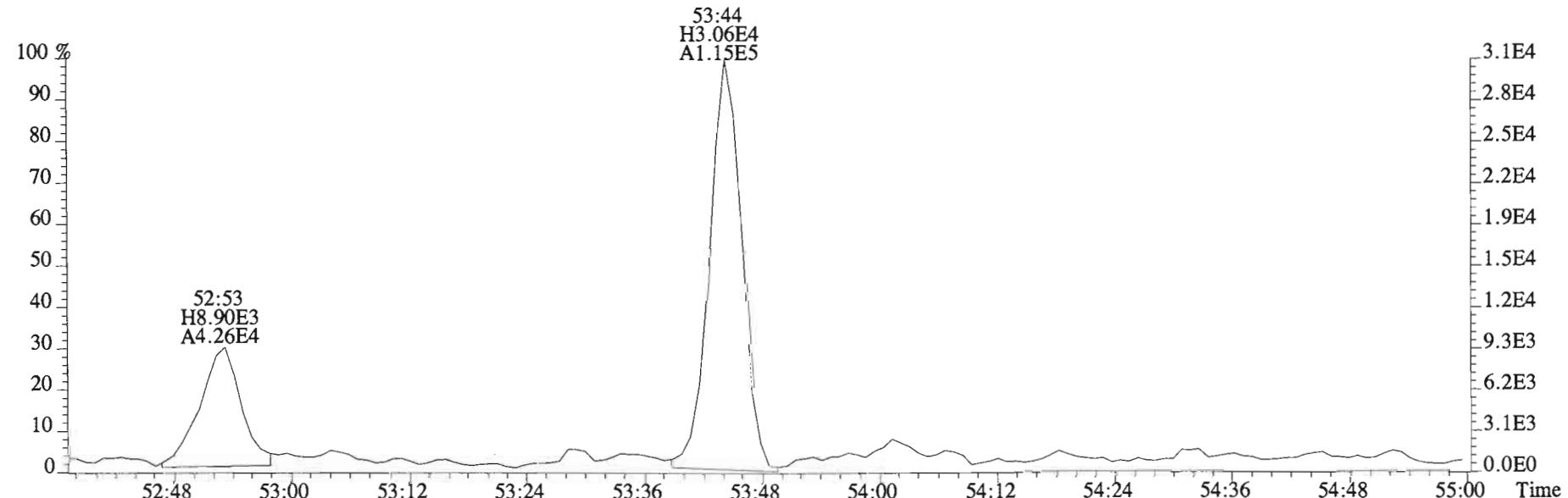
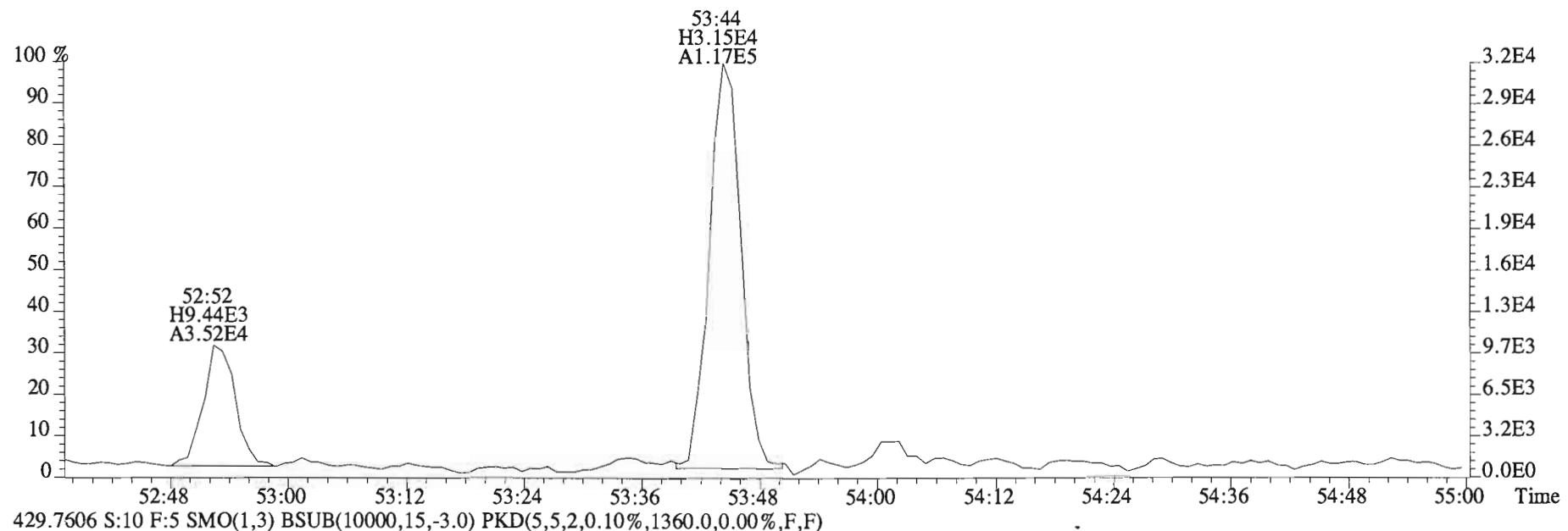
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 Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
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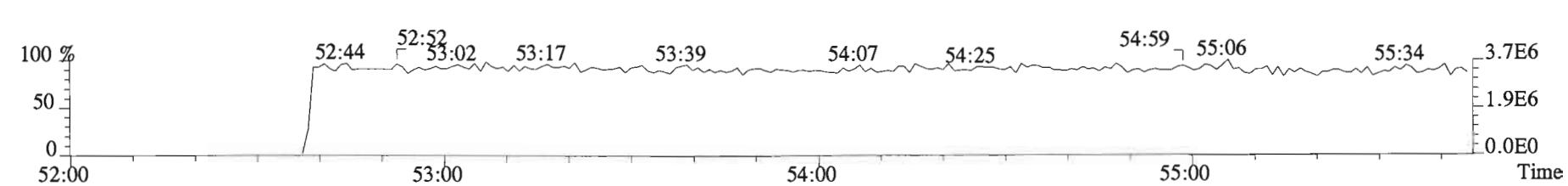
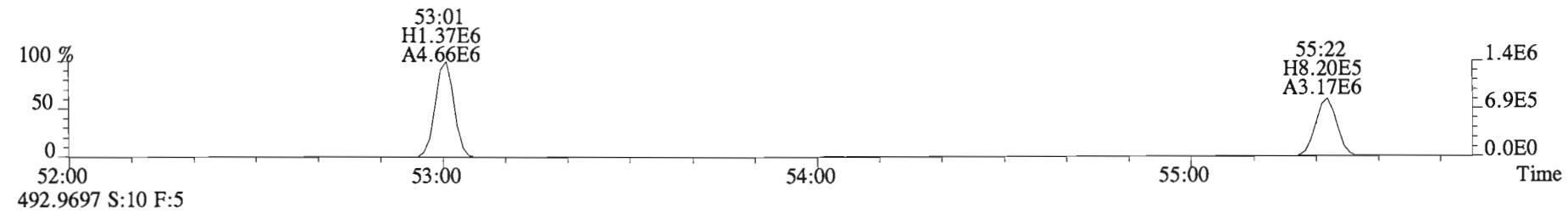
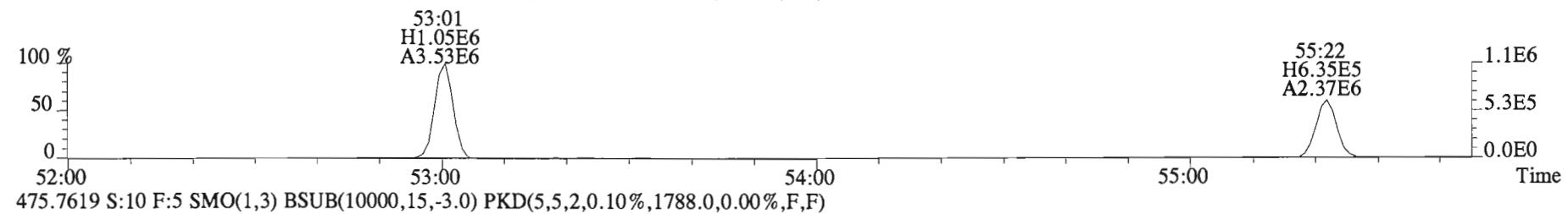
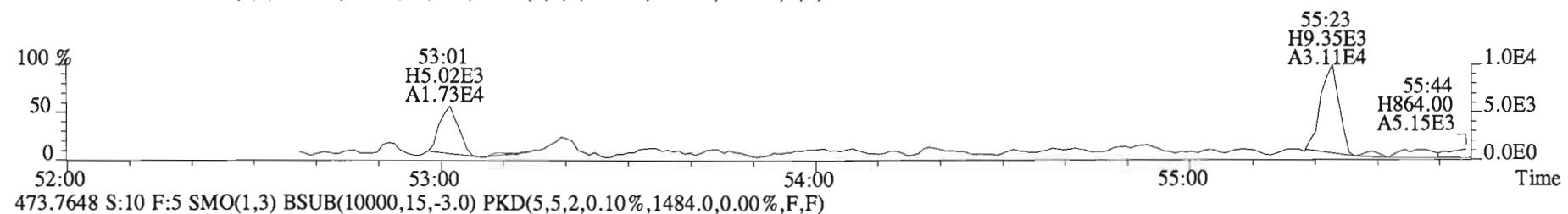
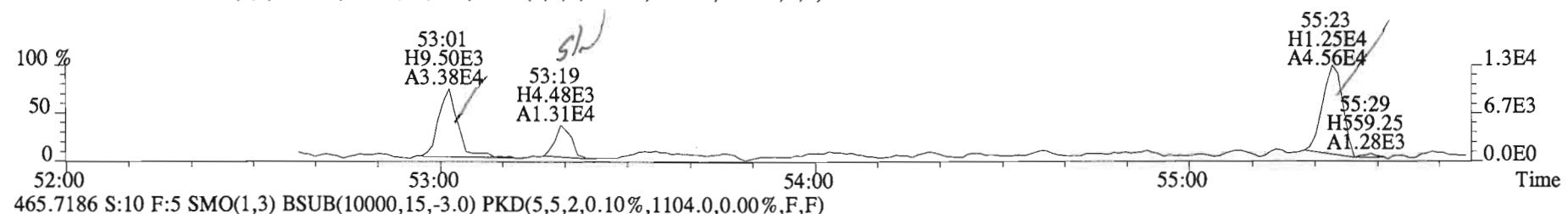
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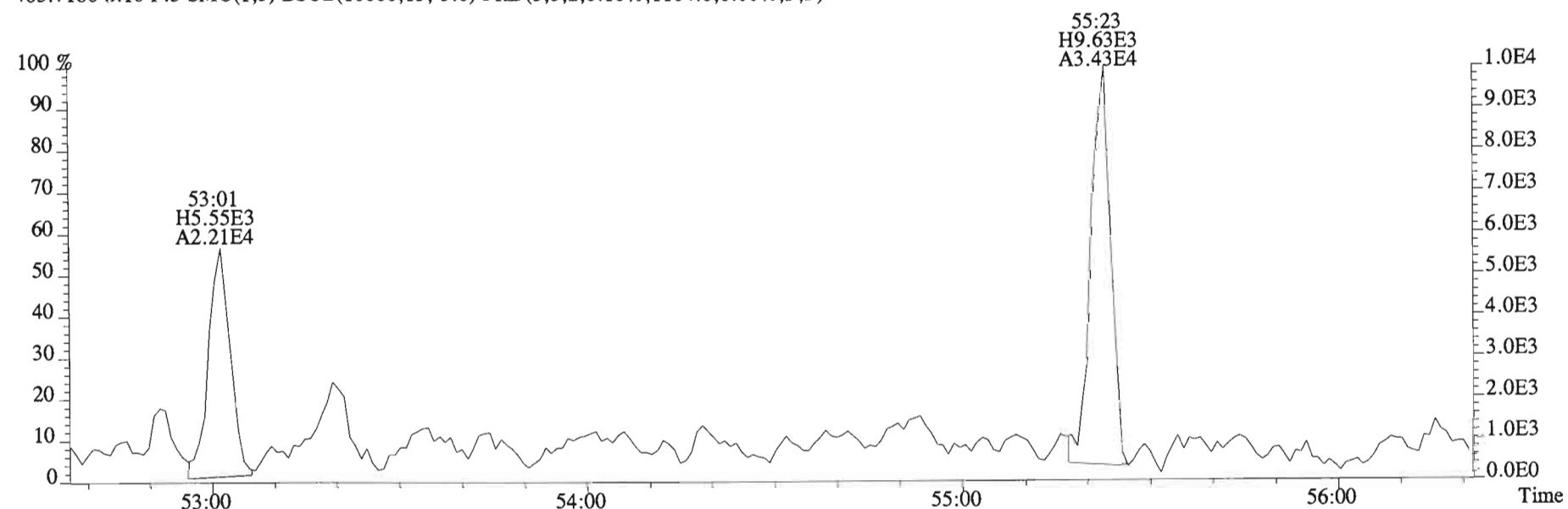
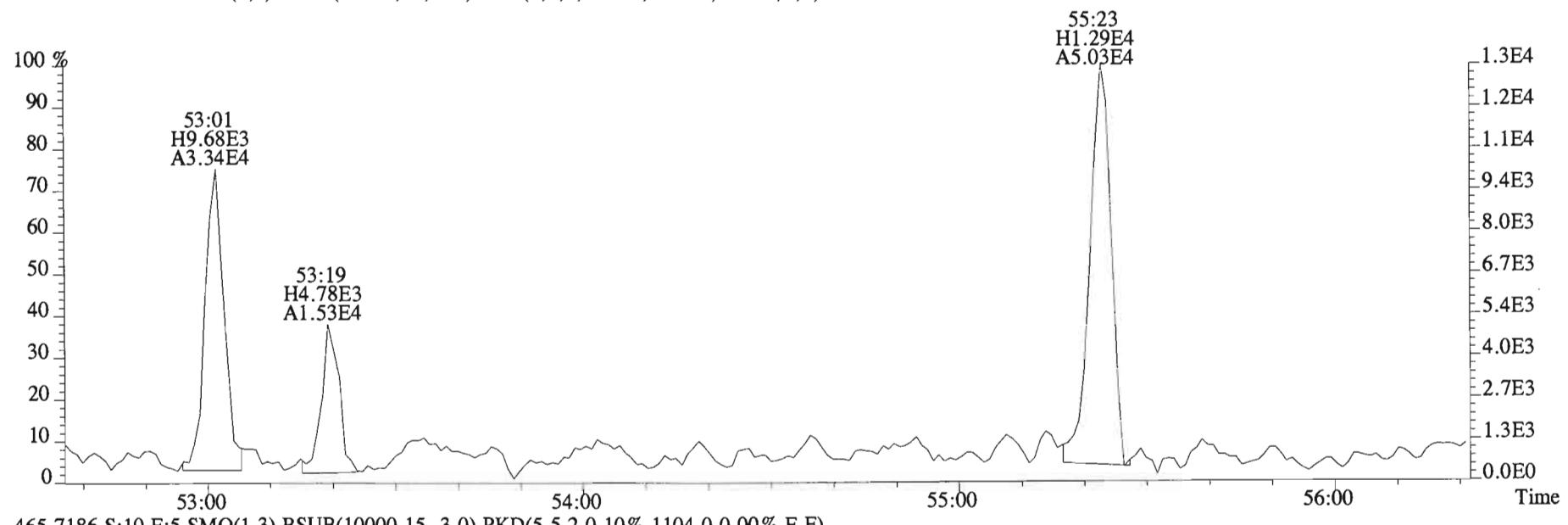
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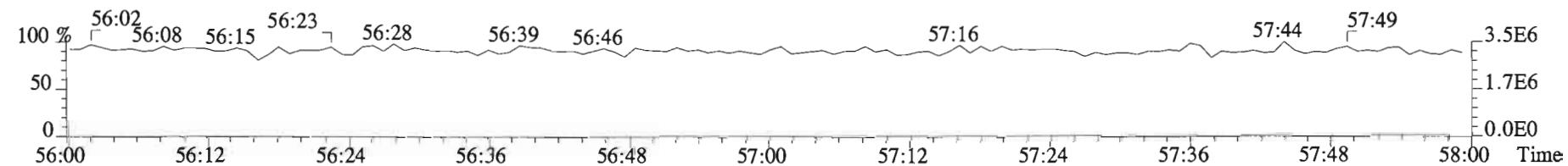
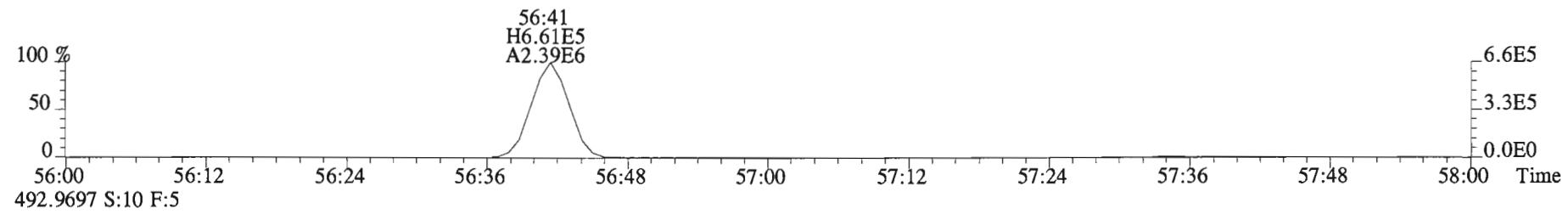
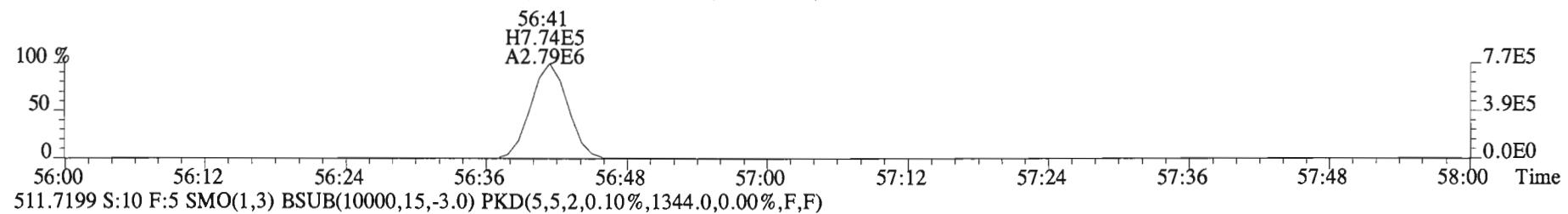
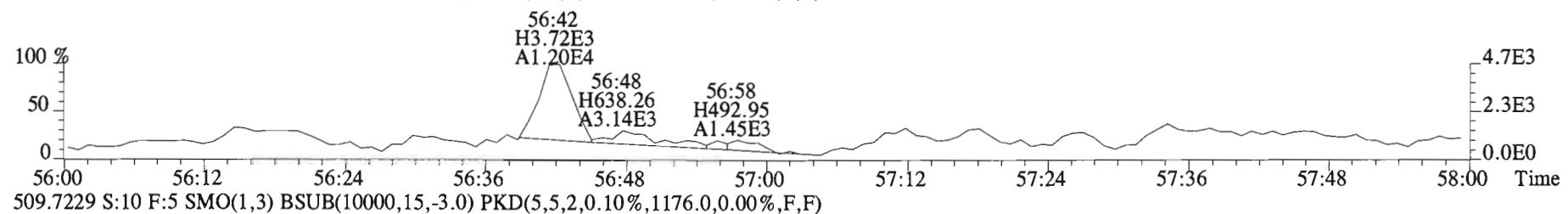
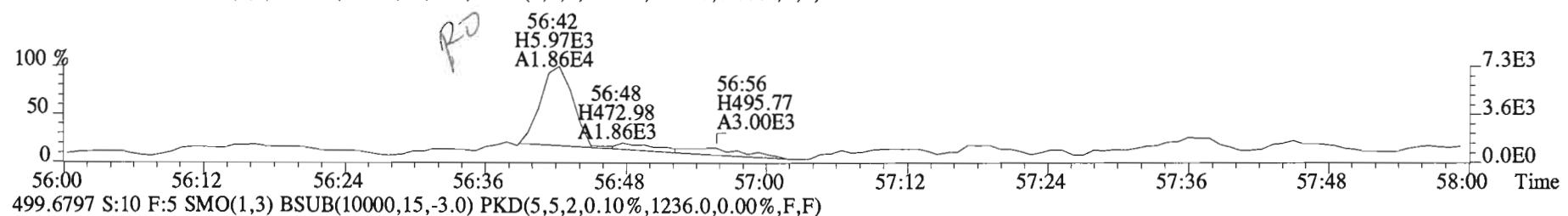
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 Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
 463.7216 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1136.0,0.00%,F,F)



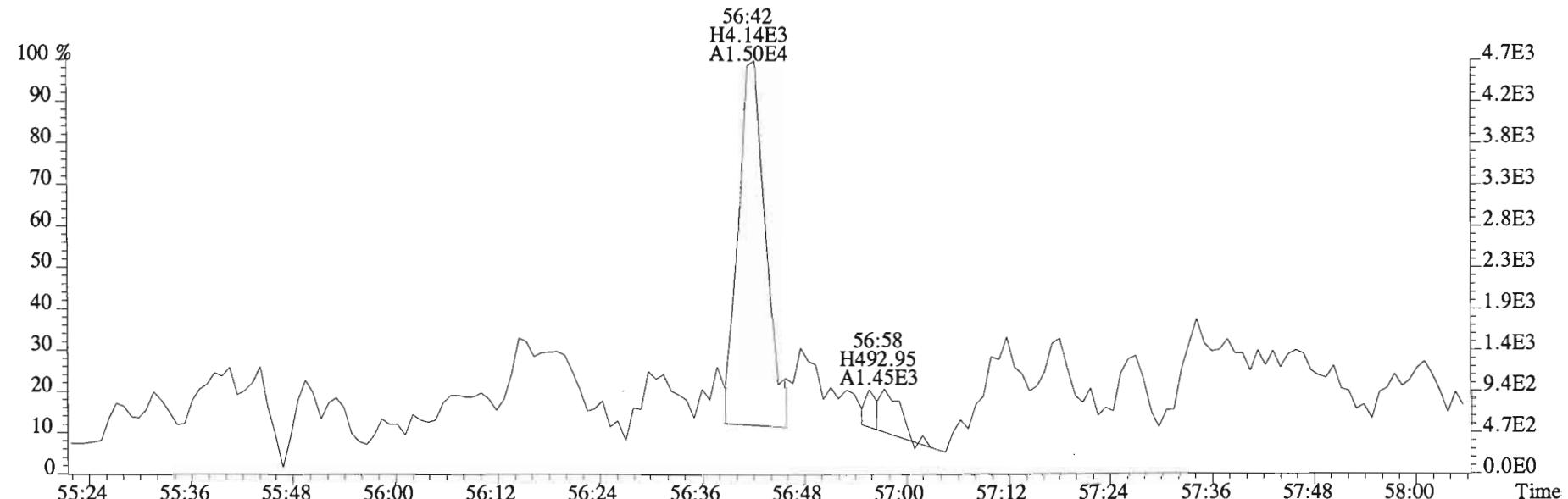
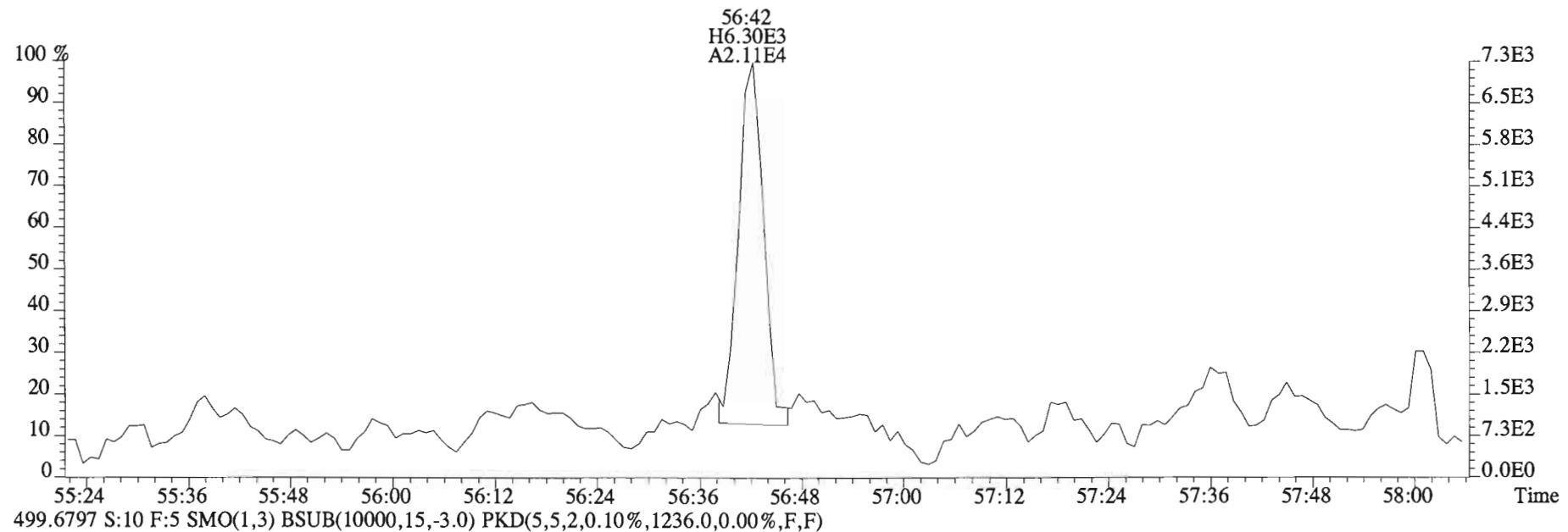
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Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
463.7216 S:10 F:5 SMO(1,3) B\$UB(10000,15,-3.0) PKD(5,5,2,0.10%,1136.0,0.00%,F,F)



File:150225E1 #1-429 Acq:25-FEB-2015 22:45:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
 497.6826 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1228.0,0.00%,F,F)



File:150225E1 #1-429 Acq:25-FEB-2015 22:45:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1500147-01RE3@10X WM-CB-11-20150203-W RX Exp:PCB_ZB1
 497.6826 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1228.0,0.00%,F,F)



Client ID: Method Blank
 Lab ID: B5B0059-BLK1

Filename: 150219E2 S:5 Acq:19-FEB-15 18:23:55
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.000
 ConCal: ST150219E2-1
 EndCAL: NA

Page 4 of

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n Not F ₁	1.19	*		2060	2.5	3.78	*	0.996-1.006	
Mono	PCB-2	*	*	n Not F ₁	1.18	*		2060	2.5	3.97	*	0.984-0.994	
Mono	PCB-3	*	*	n Not F ₁	1.43	*		2060	2.5	3.30	*	0.996-1.006	
Di	PCB-4/10	*	*	n Not F ₁	1.57	*		10000	2.5	14.3	*	0.997-1.007	
Di	PCB-7/9	*	*	n Not F ₁	1.21	*		10000	2.5	12.5	*	0.866-0.874	
Di	PCB-6	*	*	n Not F ₁	1.30	*		10000	2.5	11.6	*	0.890-0.899	
Di	PCB-5/8	*	*	n Not F ₁	1.15	*		10000	2.5	13.1	*	0.907-0.917	
Di	PCB-14	*	*	n Not F ₁	1.11	*		10000	2.5	12.4	*	0.949-0.959	
Di	PCB-11	*	*	n Not F ₁	1.09	*		10000	2.5	12.6	*	0.995-1.005	
Di	PCB-12/13	*	*	n Not F ₁	1.19	*		10000	2.5	11.5	*	1.011-1.021	
Di	PCB-15	*	*	n Not F ₁	1.28	*		10000	2.5	10.7	*	1.023-1.033	
Tri	PCB-19	*	*	n Not F ₁	1.04	*		2220	2.5	4.50	*	0.996-1.006	
Tri	PCB-30	*	*	n Not F ₁	1.71	*		2220	2.5	2.74	*	1.032-1.042	
Tri	PCB-18	*	*	n Not F ₁	0.78	*		2220	2.5	4.09	*	0.949-0.959	
Tri	PCB-17	*	*	n Not F ₁	0.92	*		2220	2.5	3.47	*	0.956-0.966	
Tri	PCB-24/27	*	*	n Not F ₁	1.19	*		2220	2.5	2.69	*	0.977-0.987	
Tri	PCB-16/32	*	*	n Not F ₁	0.94	*		2220	2.5	3.41	*	0.995-1.005	
Tri	PCB-34	*	*	n Not F ₁	1.14	*		2000	2.5	2.63	*	0.955-0.965	
Tri	PCB-23	*	*	n Not F ₁	1.28	*		2000	2.5	2.34	*	0.959-0.969	
Tri	PCB-29	*	*	n Not F ₁	1.08	*		2000	2.5	2.77	*	0.967-0.977	
Tri	PCB-26	*	*	n Not F ₁	1.21	*		2000	2.5	2.48	*	0.974-0.984	
Tri	PCB-25	*	*	n Not F ₁	1.26	*		2000	2.5	2.37	*	0.979-0.989	
Tri	PCB-31	*	*	n Not F ₁	1.28	*		2000	2.5	2.33	*	0.992-1.002	
Tri	PCB-28	*	*	n Not F ₁	1.71	*		2000	2.5	1.75	*	0.995-1.005	
Tri	PCB-20/21/33	*	*	n Not F ₁	1.08	*		2000	2.5	2.77	*	1.017-1.027	
Tri	PCB-22	*	*	n Not F ₁	1.21	*		2000	2.5	2.48	*	1.032-1.042	
Fri	PCB-36	*	*	n Not F ₁	1.14	*		2000	2.5	2.58	*	0.928-0.938	
Tri	PCB-39	*	*	n Not F ₁	1.12	*		2000	2.5	2.64	*	0.943-0.953	
Tri	PCB-38	*	*	n Not F ₁	1.20	*		2000	2.5	2.46	*	0.966-0.976	
Tri	PCB-35	*	*	n Not F ₁	1.23	*		2000	2.5	2.39	*	0.982-0.992	
Tri	PCB-37	*	*	n Not F ₁	1.23	*		2000	2.5	2.40	*	0.995-1.005	
Tetra	PCB-54	*	*	n Not F ₁	1.10	*		2000	2.5	2.97	*	0.996-1.006	Integrations by:
Tetra	PCB-50	*	*	n Not F ₁	0.88	*		2000	2.5	3.71	*	1.037-1.047	
Tetra	PCB-53	*	*	n Not F ₁	1.06	*		2000	2.5	3.59	*	0.942-0.952	Analyst: <u>Dms</u>
Tetra	PCB-51	*	*	n Not F ₁	0.99	*		2000	2.5	3.86	*	0.952-0.962	
Tetra	PCB-45	*	*	n Not F ₁	0.86	*		2000	2.5	4.43	*	0.966-0.976	Date: <u>2/20/15</u>
Tetra	PCB-46	*	*	n Not F ₁	0.85	*		2000	2.5	4.52	*	0.981-0.991	

Reviewed by: 

Date: 2/24/15

Client ID: Method Blank
 Lab ID: B5B0059-BLK1

Filename: 150219E2 S:5 Acq:19-FEB-15 18:23:55
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.000

ConCal: ST150219E2-1
 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 NotF _q	1.28	*		2000	2.5	2.98	*	0.996-1.006	
Tetra	PCB-73	*	*	n NotF _q	1.35	*		2000	2.5	2.83	*	1.000-1.010	
Tetra	PCB-43/49	*	*	n NotF _q	0.99	*		2000	2.5	3.84	*	1.005-1.015	
Tetra	PCB-47	*	*	n NotF _q	1.06	*		2000	2.5	3.35	*	0.996-1.006	
Tetra	PCB-48/75	*	*	n NotF _q	1.23	*		2000	2.5	2.89	*	0.999-1.009	
Tetra	PCB-65	*	*	n NotF _q	1.22	*		2000	2.5	2.89	*	1.008-1.018	
Tetra	PCB-62	*	*	n NotF _q	1.22	*		2000	2.5	2.90	*	1.011-1.021	
Tetra	PCB-44	*	*	n NotF _q	0.86	*		2000	2.5	4.12	*	1.021-1.031	
Tetra	PCB-42/59	*	*	n NotF _q	1.14	*		2000	2.5	3.11	*	1.028-1.038	
Tetra	PCB-41/64/71/72	*	*	n NotF _q	1.21	*		2000	2.5	2.93	*	1.046-1.056	
Tetra	PCB-68	*	*	n NotF _q	1.35	*		2000	2.5	2.63	*	1.054-1.064	
Tetra	PCB-40	*	*	n NotF _q	0.70	*		2000	2.5	5.05	*	1.061-1.071	
Tetra	PCB-57	*	*	n NotF _q	0.98	*		2000	2.5	2.76	*	0.965-0.975	
Tetra	PCB-67	*	*	n NotF _q	1.11	*		2000	2.5	2.44	*	0.974-0.984	
Tetra	PCB-58	*	*	n NotF _q	0.93	*		2000	2.5	2.91	*	0.977-0.987	
Tetra	PCB-63	*	*	n NotF _q	0.95	*		2000	2.5	2.84	*	0.982-0.992	
Tetra	PCB-74	*	*	n NotF _q	1.24	*		2000	2.5	2.17	*	0.990-1.000	
Tetra	PCB-61/70	*	*	n NotF _q	0.95	*		2000	2.5	2.83	*	0.995-1.005	
Tetra	PCB-76/66	*	*	n NotF _q	1.04	*		2000	2.5	2.58	*	1.001-1.011	
Tetra	PCB-80	*	*	n NotF _q	1.19	*		2000	2.5	2.22	*	0.996-1.006	
Tetra	PCB-55	*	*	n NotF _q	1.04	*		2000	2.5	2.54	*	1.005-1.015	
Tetra	PCB-56/60	*	*	n NotF _q	1.01	*		2000	2.5	2.62	*	1.019-1.029	
Tetra	PCB-79	*	*	n NotF _q	1.08	*		2000	2.5	2.45	*	1.048-1.058	
Tetra	PCB-78	*	*	n NotF _q	1.27	*		2000	2.5	2.24	*	0.982-0.992	
Tetra	PCB-81	*	*	n NotF _q	1.33	*		2000	2.5	2.14	*	0.995-1.005	
Tetra	PCB-77	*	*	n NotF _q	1.10	*		2000	2.5	2.61	*	0.995-1.005	
Penta	PCB-104	*	*	n NotF _q	1.18	*		2080	2.5	6.40	*	0.996-1.006	
Penta	PCB-96	*	*	n NotF _q	1.14	*		2080	2.5	6.64	*	1.034-1.044	
Penta	PCB-103	*	*	n NotF _q	0.96	*		2080	2.5	7.90	*	1.050-1.060	
Penta	PCB-100	*	*	n NotF _q	0.94	*		2080	2.5	8.07	*	1.061-1.071	
Penta	PCB-94	*	*	n NotF _q	1.06	*		2080	2.5	9.34	*	0.980-0.990	
Penta	PCB-95/98/102	*	*	n NotF _q	1.22	*		2080	2.5	8.06	*	0.995-1.005	
Penta	PCB-93	*	*	n NotF _q	0.84	*		2080	2.5	11.7	*	0.997-1.007	
Penta	PCB-88/91	*	*	n NotF _q	1.12	*		2080	2.5	8.84	*	1.005-1.015	
Penta	PCB-121	*	*	n NotF _q	1.62	*		2080	2.5	6.11	*	1.009-1.019	
Penta	PCB-84/92	*	*	n NotF _q	1.05	*		2080	2.5	8.91	*	0.985-0.995	
Penta	PCB-89	*	*	n NotF _q	1.13	*		2080	2.5	8.24	*	0.991-1.001	

Analyst: DMS

Date: 2/20/15

Client ID: Method Blank
 Lab ID: B5B0059-BLK1

Filename: 150219E2 S:5 Acq:19-FEB-15 18:23:55
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.000

ConCal: ST150219E2-1
 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 _q	1.10	*	*	2080	2.5	8.48	*	0.995-1.005	
Penta	PCB-113	*	*	n NotF _q	1.41	*	*	2080	2.5	6.61	*	1.002-1.012	
Penta	PCB-99	*	*	n NotF _q	1.34	*	*	2080	2.5	6.97	*	1.004-1.014	
Penta	PCB-119	*	*	n NotF _q	1.53	*	*	2080	2.5	6.74	*	0.982-0.992	
Penta	PCB-108/112	*	*	n NotF _q	1.28	*	*	2080	2.5	8.07	*	0.986-0.996	
Penta	PCB-83	*	*	n NotF _q	1.52	*	*	2080	2.5	6.80	*	0.990-1.000	
Penta	PCB-97	*	*	n NotF _q	1.18	*	*	2080	2.5	8.73	*	0.995-1.005	
Penta	PCB-86	*	*	n NotF _q	0.84	*	*	2080	2.5	12.3	*	0.999-1.009	
Penta	PCB-87/117/125	*	*	n NotF _q	1.55	*	*	2080	2.5	6.66	*	1.002-1.012	
Penta	PCB-111/115	*	*	n NotF _q	1.63	*	*	2080	2.5	6.32	*	1.006-1.016	
Penta	PCB-85/116	*	*	n NotF _q	1.30	*	*	2080	2.5	7.93	*	1.010-1.020	
Penta	PCB-120	*	*	n NotF _q	1.68	*	*	2080	2.5	6.16	*	1.016-1.026	
Penta	PCB-110	*	*	n NotF _q	1.56	*	*	2080	2.5	6.64	*	1.020-1.030	
Penta	PCB-82	*	*	n NotF _q	0.76	*	*	2080	2.5	9.99	*	0.971-0.981	
Penta	PCB-124	*	*	n NotF _q	1.47	*	*	2080	2.5	5.16	*	0.988-0.998	
Penta	PCB-107/109	*	*	n NotF _q	1.32	*	*	2080	2.5	5.74	*	0.991-1.001	
Penta	PCB-123	*	*	n NotF _q	1.17	*	*	2080	2.5	6.49	*	0.996-1.006	
Penta	PCB-106/118	*	*	n NotF _q	1.17	*	*	2080	2.5	6.21	*	0.996-1.006	
Penta	PCB-114	*	*	n NotF _q	1.30	*	*	2220	2.5	3.88	*	0.995-1.005	
Penta	PCB-122	*	*	n NotF _q	1.12	*	*	2220	2.5	4.49	*	0.999-1.009	
Penta	PCB-105	*	*	n NotF _q	1.30	*	*	2220	2.5	3.87	*	0.995-1.005	
Penta	PCB-127	*	*	n NotF _q	1.33	*	*	2220	2.5	3.50	*	0.996-1.006	
Penta	PCB-126	*	*	n NotF _q	1.18	*	*	2220	2.5	4.51	*	0.995-1.005	
Hexa	PCB-155	*	*	n NotF _q	1.11	*	*	1520	2.5	6.33	*	0.966-1.006	
Hexa	PCB-150	*	*	n NotF _q	1.00	*	*	1520	2.5	7.06	*	1.030-1.040	
Hexa	PCB-152	*	*	n NotF _q	1.12	*	*	1520	2.5	6.32	*	1.043-1.053	
Hexa	PCB-145	*	*	n NotF _q	1.20	*	*	1520	2.5	5.87	*	1.055-1.065	
Hexa	PCB-136	*	*	n NotF _q	1.18	*	*	1520	2.5	5.98	*	1.064-1.074	
Hexa	PCB-148	*	*	n NotF _q	0.74	*	*	1520	2.5	9.47	*	1.066-1.076	
Hexa	PCB-154	*	*	n NotF _q	0.86	*	*	1520	2.5	8.22	*	1.080-1.090	
Hexa	PCB-151	*	*	n NotF _q	0.75	*	*	1520	2.5	9.44	*	1.097-1.107	
Hexa	PCB-135	*	*	n NotF _q	0.79	*	*	1520	2.5	8.89	*	1.103-1.113	
Hexa	PCB-144	*	*	n NotF _q	0.76	*	*	1520	2.5	9.25	*	1.105-1.117	
Hexa	PCB-147	*	*	n NotF _q	0.82	*	*	1520	2.5	8.60	*	1.109-1.121	
Hexa	PCB-139/149	*	*	n NotF _q	0.76	*	*	1520	2.5	9.25	*	1.116-1.128	
Hexa	PCB-140	*	*	n NotF _q	0.72	*	*	1520	2.5	9.76	*	1.121-1.133	
Hexa	PCB-134/143	*	*	n NotF _q	0.92	*	*	1540	2.5	4.12	*	0.970-0.980	

Analyst: Dms

Date: 2/20/15

Client ID: Method Blank
 Lab ID: B5B0059-BLK1

Filename: 150219E2 S:5 Acq:19-FEB-15 18:23:55
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.000

ConCal: ST150219E2-1
 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 NotF ₇	0.82	*		1540	2.5	4.61	*	0.977-0.987	
Hexa	PCB-131	*	*	n NotF ₇	0.91	*		1540	2.5	4.16	*	0.981-0.991	
Hexa	PCB-146/165	*	*	n NotF ₇	1.25	*		1540	2.5	3.03	*	0.986-0.996	
Hexa	PCB-132/161	*	*	n NotF ₇	1.10	*		1540	2.5	3.42	*	0.992-1.002	
Hexa	PCB-153	*	*	n NotF ₇	1.25	*		1540	2.5	3.02	*	0.995-1.005	
Hexa	PCB-168	*	*	n NotF ₇	1.45	*		1540	2.5	2.60	*	1.001-1.011	
Hexa	PCB-141	*	*	n NotF ₇	1.09	*		1540	2.5	3.73	*	0.995-1.005	
Hexa	PCB-137	*	*	n NotF ₇	1.06	*		1540	2.5	3.81	*	1.004-1.014	
Hexa	PCB-130	*	*	n NotF ₇	0.96	*		1540	2.5	4.20	*	1.006-1.016	
Hexa	PCB-138/163/164	*	*	n NotF ₇	1.29	*		1540	2.5	2.98	*	0.996-1.006	
Hexa	PCB-158/160	*	*	n NotF ₇	1.34	*		1540	2.5	2.87	*	1.001-1.011	
Hexa	PCB-129	*	*	n NotF ₇	0.85	*		1540	2.5	4.51	*	1.007-1.017	
Hexa	PCB-166	*	*	n NotF ₇	1.19	*		1540	2.5	2.96	*	0.988-0.998	
Hexa	PCB-159	*	*	n NotF ₇	1.11	*		1540	2.5	3.15	*	0.996-1.006	
Hexa	PCB-128/162	*	*	n NotF ₇	1.05	*		1540	2.5	3.35	*	1.002-1.012	
Hexa	PCB-167	*	*	n NotF ₇	1.20	*		1540	2.5	2.57	*	0.995-1.005	
Hexa	PCB-156	*	*	n NotF ₇	1.14	*		1540	2.5	2.92	*	0.996-1.006	
Hexa	PCB-157	*	*	n NotF ₇	1.16	*		1540	2.5	2.77	*	0.995-1.005	
Hexa	PCB-169	*	*	n NotF ₇	1.12	*		1540	2.5	2.71	*	0.995-1.005	
Hepta	PCB-188	*	*	n NotF ₇	1.58	*		1700	2.5	2.38	*	0.996-1.006	
Hepta	PCB-184	*	*	n NotF ₇	1.63	*		1700	2.5	2.30	*	1.006-1.016	
Hepta	PCB-179	*	*	n NotF ₇	1.30	*		1700	2.5	2.88	*	1.024-1.034	
Hepta	PCB-176	*	*	n NotF ₇	1.48	*		1700	2.5	2.55	*	1.035-1.045	
Hepta	PCB-186	*	*	n NotF ₇	1.45	*		1700	2.5	2.59	*	1.050-1.060	
Hepta	PCB-178	*	*	n NotF ₇	1.03	*		1700	2.5	3.64	*	1.061-1.071	
Hepta	PCB-175	*	*	n NotF ₇	1.01	*		1700	2.5	3.71	*	1.069-1.079	
Hepta	PCB-182/187	*	*	n NotF ₇	1.25	*		1700	2.5	3.01	*	1.073-1.083	
Hepta	PCB-183	*	*	n NotF ₇	1.21	*		1700	2.5	3.11	*	1.081-1.091	
Hepta	PCB-185	*	*	n NotF ₇	1.80	*		1700	2.5	2.67	*	0.951-0.961	
Hepta	PCB-174	*	*	n NotF ₇	1.38	*		1700	2.5	3.49	*	0.958-0.968	
Hepta	PCB-181	*	*	n NotF ₇	1.38	*		1700	2.5	3.49	*	0.960-0.970	
Hepta	PCB-177	*	*	n NotF ₇	1.26	*		1700	2.5	3.83	*	0.963-0.973	
Hepta	PCB-171	*	*	n NotF ₇	1.58	*		1700	2.5	3.04	*	0.970-0.980	
Hepta	PCB-173	*	*	n NotF ₇	1.11	*		1700	2.5	4.33	*	0.978-0.988	
Hepta	PCB-172	*	*	n NotF ₇	1.63	*		1700	2.5	2.94	*	0.987-0.997	
Hepta	PCB-192	*	*	n NotF ₇	1.74	*		1700	2.5	2.76	*	0.991-1.001	
Hepta	PCB-180	*	*	n NotF ₇	1.34	*		1700	2.5	3.58	*	0.995-1.005	

Analyst: Dni

Date: 2/20/15

Client ID: Method Blank
Lab ID: B5B0059-BLK1

Filename: 150219E2 S:5 Acq:19-FEB-15 18:23:55
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.000

ConCal: ST150219E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	*	*	n NotF ₇	1.72	*		1700	2.5	2.80	*	0.999-1.009	
Hepta	PCB-191	*	*	n NotF ₇	1.69	*		1700	2.5	2.84	*	1.004-1.014	
Hepta	PCB-170	*	*	n NotF ₇	1.60	*		1700	2.5	3.33	*	0.995-1.005	
Hepta	PCB-190	*	*	n NotF ₇	2.21	*		1700	2.5	2.41	*	0.998-1.008	
Hepta	PCB-189	*	*	n NotF ₇	1.55	*		1700	2.5	2.38	*	0.995-1.005	
Octa	PCB-202	*	*	n NotF ₈	1.08	*		1470	2.5	4.75	*	0.995-1.005	
Octa	PCB-201	*	*	n NotF ₈	1.15	*		1470	2.5	4.48	*	1.005-1.015	
Octa	PCB-204	*	*	n NotF ₈	1.14	*		1470	2.5	4.52	*	1.008-1.018	
Octa	PCB-197	*	*	n NotF ₈	1.07	*		1470	2.5	4.79	*	1.015-1.025	
Octa	PCB-200	*	*	n NotF ₈	1.06	*		1470	2.5	4.84	*	1.032-1.044	
Octa	PCB-198	*	*	n NotF ₈	0.76	*		1470	2.5	6.82	*	1.059-1.069	
Octa	PCB-199	*	*	n NotF ₈	0.80	*		1470	2.5	6.45	*	1.061-1.071	
Octa	PCB-196/203	*	*	n NotF ₈	0.80	*		1470	2.5	6.42	*	1.066-1.076	
Octa	PCB-195	*	*	n NotF ₈	1.23	*		1650	2.5	2.60	*	0.979-0.989	
Octa	PCB-194	*	*	n NotF ₈	1.21	*		1650	2.5	2.63	*	0.995-1.005	
Octa	PCB-205	*	*	n NotF ₈	1.54	*		1650	2.5	2.07	*	1.001-1.011	
Nona	PCB-208	*	*	n NotF ₉	0.93	*		1120	2.5	1.54	*	0.995-1.005	
Nona	PCB-207	*	*	n NotF ₉	1.08	*		1120	2.5	1.33	*	1.001-1.011	
Nona	PCB-206	*	*	n NotF ₉	1.02	*		1120	2.5	2.36	*	0.995-1.005	
Deca	PCB-209	5.30e+04	1.35	n	56:47	1.17	5.49	*	2.5	*	1.001	0.995-1.005	

Analyst: DMS

Date: 2/20/15

Client ID: Method Blank
Lab ID: B5B0059-BLK1

Filename: 150219E2 S:5 Acq:19-FEB-15 18:23:55 ConCal: ST150219E2-1
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.0000 EndCAL: NA

Page 4 of

	Name	Resp	RA	RT	RRF	Conc	
Total Mono-PCB		*	*	n	NotFnd	1.27	*
Total Di-PCB		*	*	n	NotFnd	1.21	*
Total Tri-PCB	1.67e+04	0.97	y	27:06	1.10	1.20886	
Total Tri-PCB		*	*	n	NotFnd	1.21	* Sum:1.20886
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		*	*	n	NotFnd	1.42	*
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	5.30e+04	1.35	n	56:47	1.17	5.48732
-							

Total PCB Conc:5.48732200000

Integrations
by
Analyst Dms

Date: 2/20/15

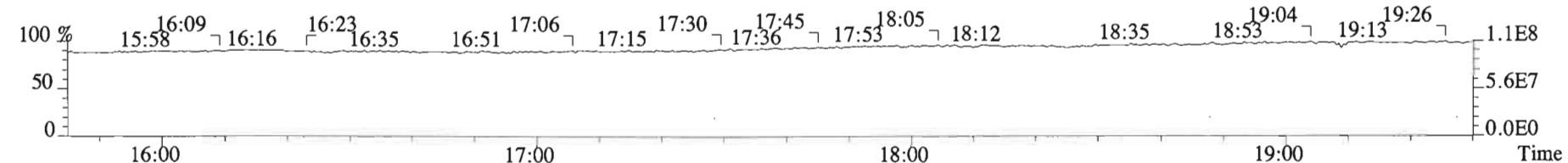
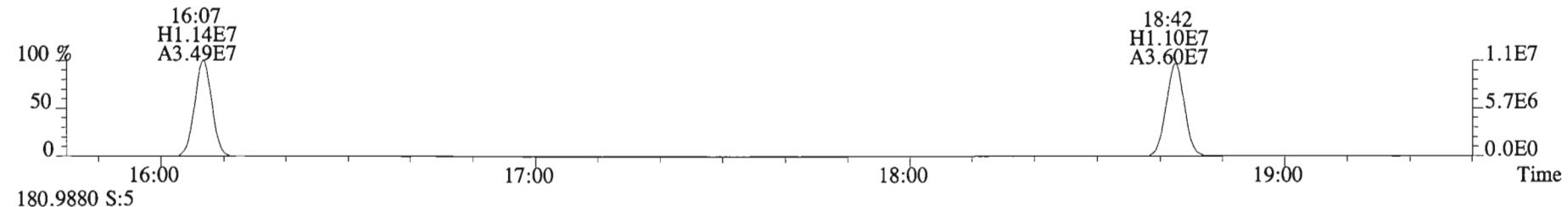
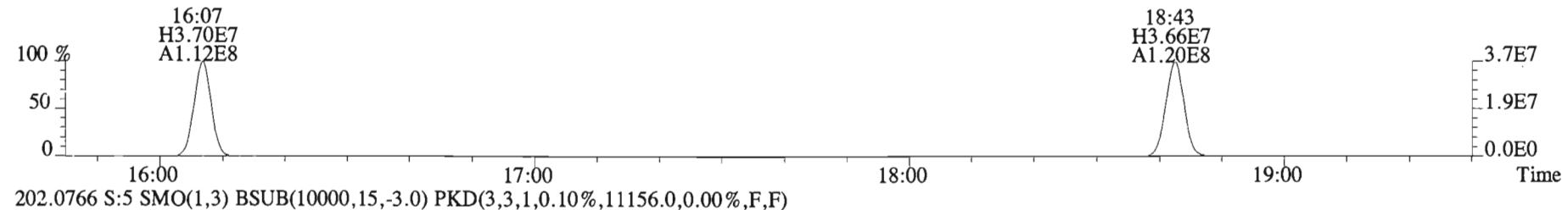
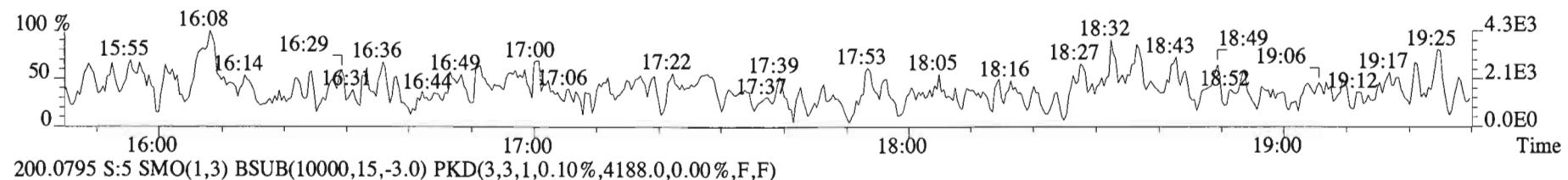
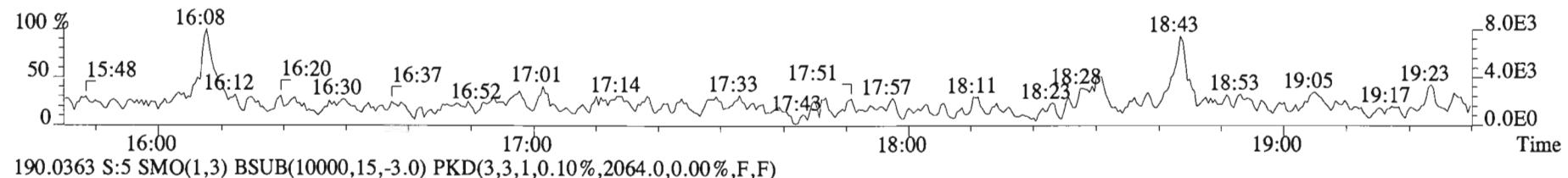
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 Lab ID: B5B0059-BLK1

Filename: 150219E2 S:5 Acq:19-FEB-15 18:23:55
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:2.0000
 ConCal: ST150219E2-1 EndCAL: NA

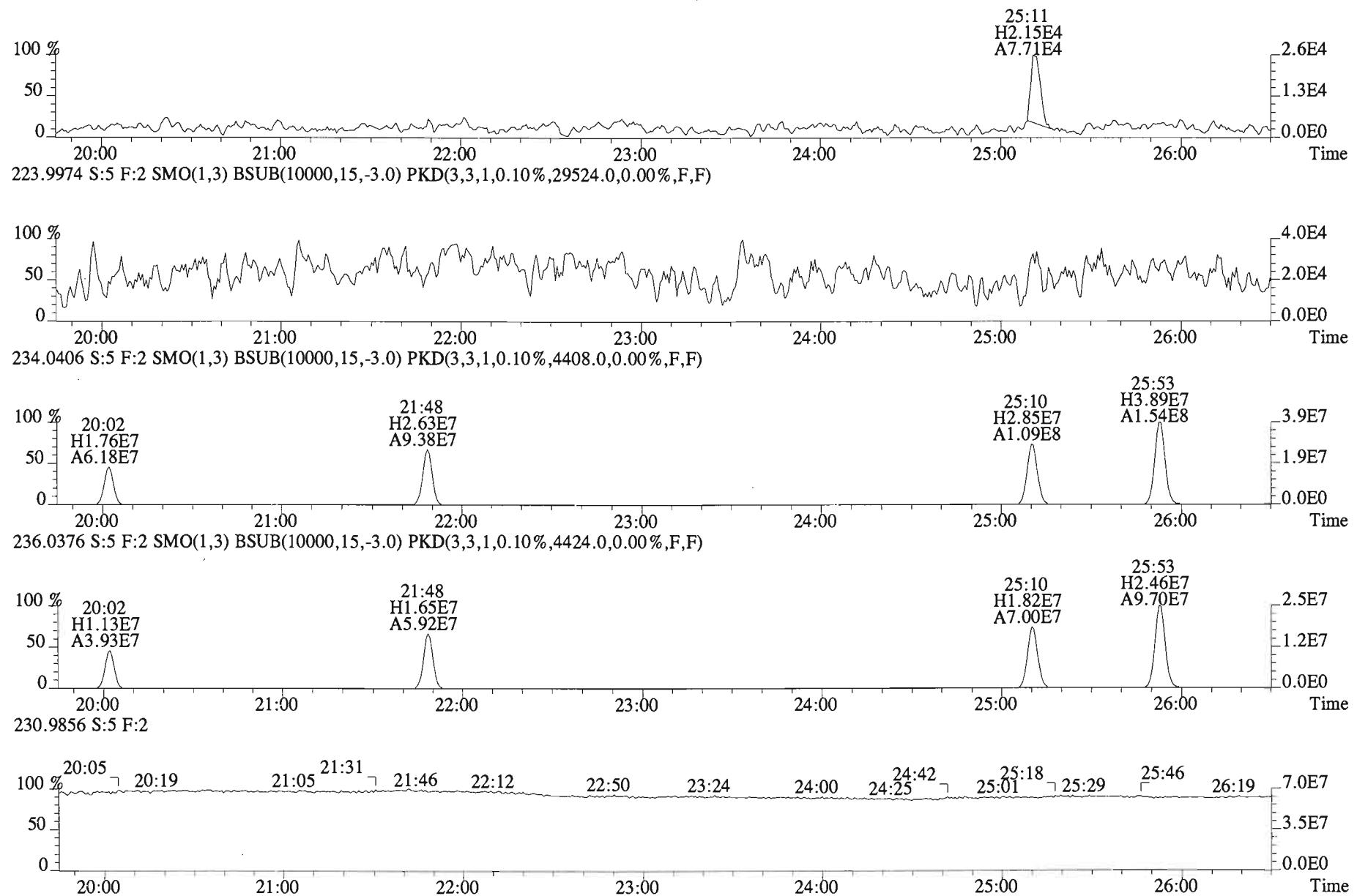
Page 4 of

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	1.47e+08	3.22	y	0.87	16:07	0.623	0.629-0.635	6720	67.2	13C-PCB-79	1.78e+08	0.80	y	1.02	37:45	1.029	1.023-1.034	9090	90.9					
13C-PCB-3	1.56e+08	3.34	y	0.91	18:42	0.723	0.725-0.733	6820	68.2	13C-PCB-178	5.95e+07	0.47	y	0.61	45:34	0.984	0.979-0.990	8330	83.3					
13C-PCB-4	1.01e+08	1.57	y	0.59	20:02	0.774	0.775-0.783	6870	68.7	13C-PCB-11	1.79e+08	0.94	25:10	0.972	0.968-0.978	7630	76.3	PS vs. IS						
13C-PCB-9	1.53e+08	1.58	y	0.90	21:48	0.843	0.842-0.850	6800	68.0	13C-PCB-79	1.78e+08	0.80	y	1.02	37:45	1.029	1.023-1.034	9090	90.9					
13C-PCB-11	1.79e+08	1.56	y	0.94	25:10	0.972	0.968-0.978	7630	76.3	13C-PCB-178	5.95e+07	0.47	y	0.61	45:34	0.984	0.979-0.990	8330	83.3					
13C-PCB-19	9.17e+07	1.09	y	0.53	24:10	0.934	0.930-0.940	6870	68.7	13C-PCB-11	1.79e+08	0.94	25:10	0.972	0.968-0.978	7630	76.3	PS vs. IS						
13C-PCB-28	1.61e+08	1.07	y	0.93	29:02	1.000	0.999-1.009	10700	107	13C-PCB-79	1.78e+08	0.80	y	1.10	37:45	0.968	0.964-0.974	10100	101					
13C-PCB-32	1.43e+08	1.09	y	0.80	27:04	1.046	1.040-1.050	7180	71.8	13C-PCB-178	5.95e+07	0.47	y	0.90	45:34	0.925	0.920-0.930	10500	105					
13C-PCB-37	1.72e+08	1.07	y	0.84	32:54	1.133	1.131-1.143	12700	127	13C-PCB-79	1.78e+08	0.80	y	1.10	37:45	0.968	0.964-0.974	10100	101					
13C-PCB-47	1.20e+08	0.80	y	0.81	31:56	0.870	0.866-0.874	7640	76.4	13C-PCB-178	5.95e+07	0.47	y	0.90	45:34	0.925	0.920-0.930	10500	105					
13C-PCB-52	1.14e+08	0.82	y	0.77	31:26	0.856	0.853-0.861	7630	76.3	13C-PCB-11	1.79e+08	0.94	25:10	0.972	0.968-0.978	7630	76.3	RS						
13C-PCB-54	1.27e+08	0.82	y	0.97	27:55	0.761	0.758-0.766	6810	68.1	13C-PCB-15	2.51e+08	1.59	y	1.00	25:53	10000	10000	13C-PCB-31	1.61e+08	1.07	y	1.00	29:02	10000
13C-PCB-70	1.61e+08	0.81	y	1.00	35:27	0.966	0.961-0.971	8340	83.4	13C-PCB-60	1.93e+08	0.80	y	1.00	36:42	10000	10000	13C-PCB-111	1.08e+08	1.62	y	1.00	39:10	10000
13C-PCB-77	1.66e+08	0.81	y	0.94	39:35	1.078	1.073-1.083	9110	91.1	13C-PCB-128	1.16e+08	1.25	y	1.00	46:18	10000	10000	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000
13C-PCB-80	1.66e+08	0.80	y	1.03	35:52	0.977	0.972-0.982	8360	83.6	13C-PCB-205	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-15	2.51e+08	1.59	y	1.00	25:53	10000
13C-PCB-81	1.60e+08	0.81	y	0.92	38:59	1.062	1.057-1.067	8970	89.7	13C-PCB-205	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-31	1.61e+08	1.07	y	1.00	29:02	10000
13C-PCB-95	6.58e+07	1.59	y	0.74	35:45	0.913	0.908-0.918	8230	82.3	13C-PCB-11	1.08e+08	1.62	y	1.00	39:10	10000	10000	13C-PCB-60	1.93e+08	0.80	y	1.00	36:42	10000
13C-PCB-97	6.79e+07	1.66	y	0.70	38:44	0.989	0.984-0.994	8930	89.3	13C-PCB-111	1.08e+08	1.62	y	1.00	39:10	10000	10000	13C-PCB-128	1.16e+08	1.25	y	1.00	46:18	10000
13C-PCB-101	7.29e+07	1.62	y	0.78	37:26	0.956	0.951-0.961	8630	86.3	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-205	1.30e+08	0.90	y	1.00	54:02	10000
13C-PCB-104	8.46e+07	1.61	y	1.00	32:35	0.832	0.828-0.836	7830	78.3	13C-PCB-15	2.51e+08	1.59	y	1.00	25:53	10000	10000	13C-PCB-15	2.51e+08	1.59	y	1.00	25:53	10000
13C-PCB-105	1.45e+08	1.59	y	1.37	43:00	0.929	0.924-0.934	9130	91.3	13C-PCB-15	2.51e+08	1.59	y	1.00	25:53	10000	10000	13C-PCB-31	1.61e+08	1.07	y	1.00	29:02	10000
13C-PCB-114	1.42e+08	1.60	y	1.36	42:08	0.910	0.905-0.915	8970	89.7	13C-PCB-111	1.08e+08	1.62	y	1.00	39:10	10000	10000	13C-PCB-60	1.93e+08	0.80	y	1.00	36:42	10000
13C-PCB-118	9.53e+07	1.63	y	0.96	41:29	1.059	1.054-1.064	9210	92.1	13C-PCB-128	1.16e+08	1.25	y	1.00	46:18	10000	10000	13C-PCB-111	1.08e+08	1.62	y	1.00	39:10	10000
13C-PCB-123	8.91e+07	1.61	y	0.89	41:18	1.055	1.050-1.060	9240	92.4	13C-PCB-205	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000
13C-PCB-126	1.40e+08	1.60	y	1.31	45:15	0.977	0.972-0.982	9170	91.7	13C-PCB-15	2.51e+08	1.59	y	1.00	25:53	10000	10000	13C-PCB-31	1.61e+08	1.07	y	1.00	29:02	10000
13C-PCB-127	1.56e+08	1.61	y	1.47	43:20	0.936	0.931-0.941	9110	91.1	13C-PCB-60	1.93e+08	0.80	y	1.00	36:42	10000	10000	13C-PCB-111	1.08e+08	1.62	y	1.00	39:10	10000
13C-PCB-138	1.13e+08	1.30	y	1.10	44:44	0.966	0.961-0.971	8790	87.9	13C-PCB-128	1.16e+08	1.25	y	1.00	46:18	10000	10000	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000
13C-PCB-141	1.08e+08	1.28	y	1.07	43:54	0.948	0.943-0.953	8630	86.3	13C-PCB-205	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-15	2.51e+08	1.59	y	1.00	25:53	10000
13C-PCB-153	1.18e+08	1.29	y	1.15	43:09	0.932	0.927-0.937	8810	88.1	13C-PCB-15	2.51e+08	1.59	y	1.00	25:53	10000	10000	13C-PCB-31	1.61e+08	1.07	y	1.00	29:02	10000
13C-PCB-155	5.98e+07	1.27	y	0.84	36:58	0.944	0.939-0.949	6600	66.0	13C-PCB-111	1.08e+08	1.62	y	1.00	39:10	10000	10000	13C-PCB-60	1.93e+08	0.80	y	1.00	36:42	10000
13C-PCB-156	1.37e+08	1.27	y	1.30	47:60	1.037	1.032-1.042	9060	90.6	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-15	2.51e+08	1.59	y	1.00	25:53	10000
13C-PCB-157	1.44e+08	1.28	y	1.36	48:16	1.042	1.038-1.048	9110	91.1	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-31	1.61e+08	1.07	y	1.00	29:02	10000
13C-PCB-159	1.27e+08	1.27	y	1.25	46:01	0.994	0.989-0.999	8720	87.2	13C-PCB-111	1.08e+08	1.62	y	1.00	39:10	10000	10000	13C-PCB-60	1.93e+08	0.80	y	1.00	36:42	10000
13C-PCB-167	1.41e+08	1.26	y	1.35	46:42	1.009	1.004-1.014	8960	89.6	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-15	2.51e+08	1.59	y	1.00	25:53	10000
13C-PCB-169	1.38e+08	1.27	y	1.29	50:24	1.089	1.083-1.093	9240	92.4	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-31	1.61e+08	1.07	y	1.00	29:02	10000
13C-PCB-170	5.26e+07	0.47	y	0.54	50:46	1.096	1.089-1.101	8330	83.3	13C-PCB-111	1.08e+08	1.62	y	1.00	39:10	10000	10000	13C-PCB-60	1.93e+08	0.80	y	1.00	36:42	10000
13C-PCB-180	6.33e+07	0.47	y	0.68	49:17	1.065	1.060-1.070	7950	79.5	13C-PCB-111	1.08e+08	1.62	y	1.00	39:10	10000	10000	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000
13C-PCB-188	8.27e+07	0.46	y	0.92	42:47	0.924	0.919-0.929	7750	77.5	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-31	1.61e+08	1.07	y	1.00	29:02	10000
13C-PCB-189	6.97e+07	0.46	y	0.72	52:14	1.128	1.120-1.132	8350	83.5	13C-PCB-111	1.08e+08	1.62	y	1.00	39:10	10000	10000	13C-PCB-60	1.93e+08	0.80	y	1.00	36:42	10000
13C-PCB-194	9.16e+07	0.92	y	0.80	53:44	0.995	0.990-1.000	8820	88.2	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-31	1.61e+08	1.07	y	1.00	29:02	10000
13C-PCB-202	6.83e+07	0.91	y	0.84	48:13	1.041	1.036-1.046	7000	70.0	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-60	1.93e+08	0.80	y	1.00	36:42	10000
13C-PCB-206	8.36e+07	0.80	y	0.65	55:24	1.026	1.021-1.031	9890	98.9	13C-PCB-111	1.08e+08	1.62	y	1.00	39:10	10000	10000	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000
13C-PCB-208	1.26e+08	0.78	y	1.08	53:01	0.981	0.976-0.986	8950	89.5	13C-PCB-12	1.30e+08	0.90	y	1.00	54:02	10000	10000	13C-PCB-31	1.61e+08	1.07	y	1.00	29:02	10000
13C-PCB-209	8.26e+0																							

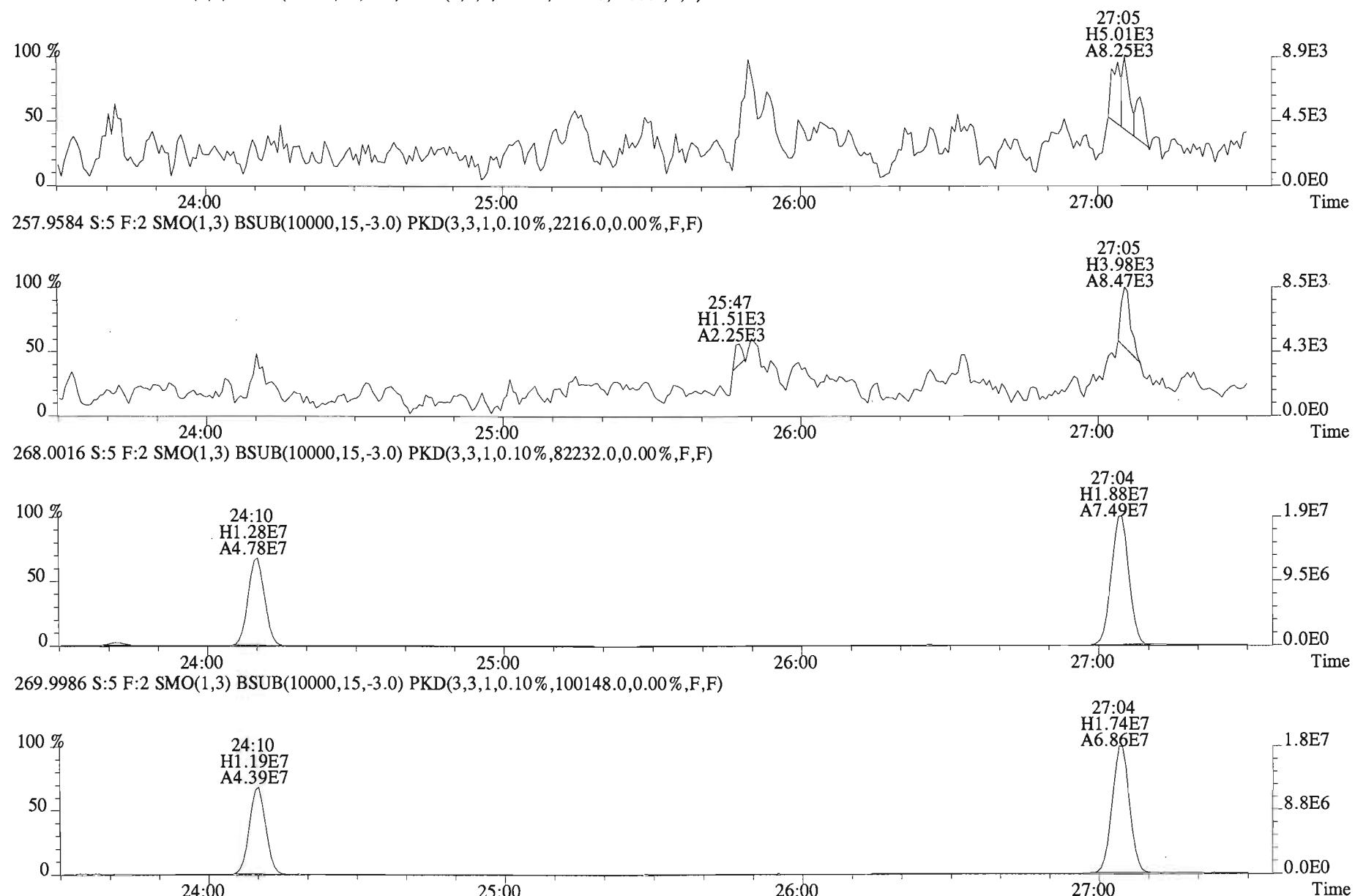
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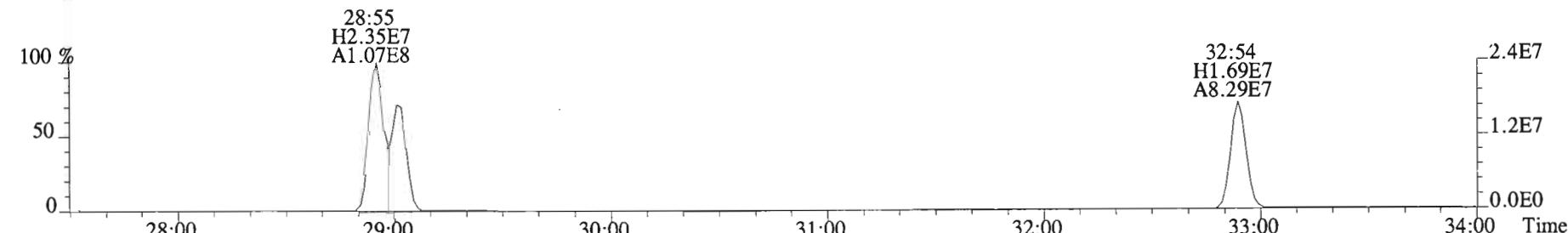
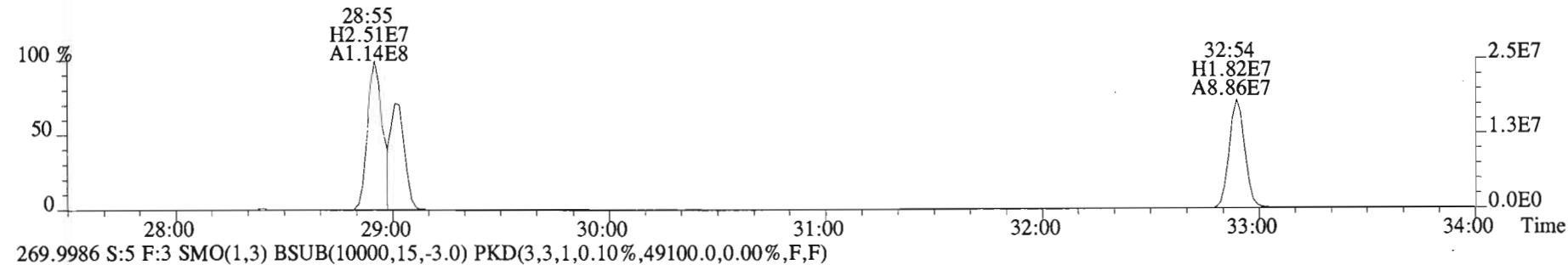
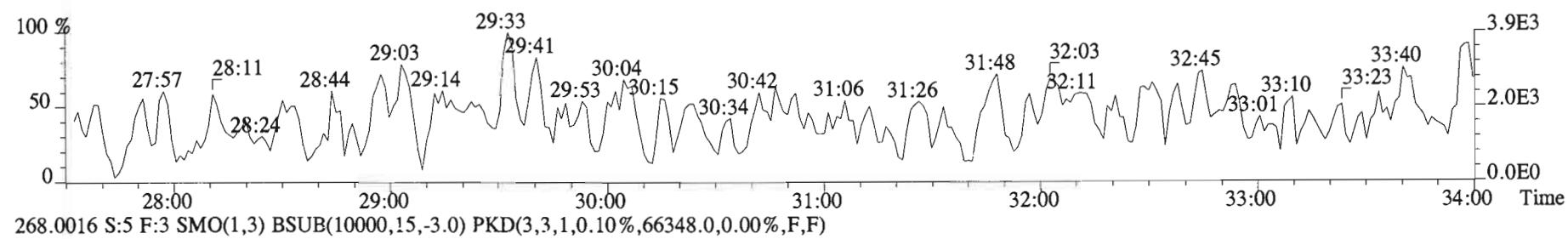
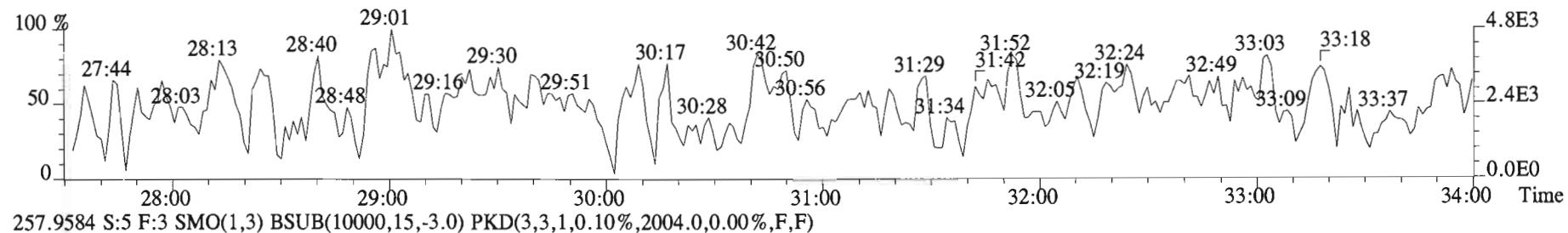
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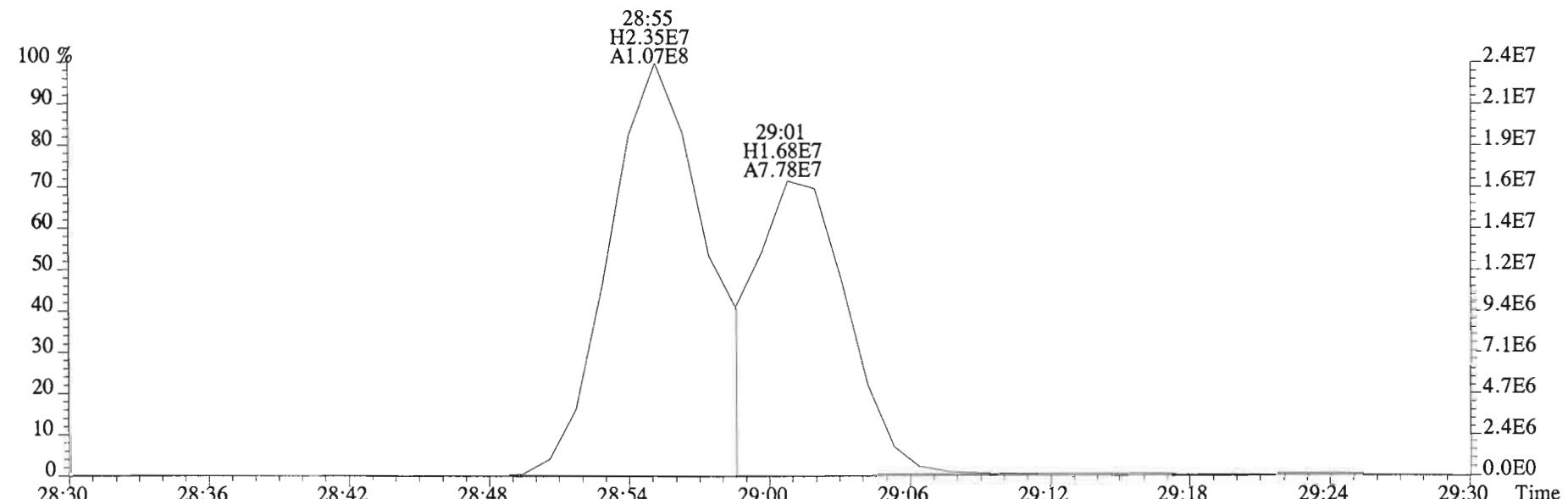
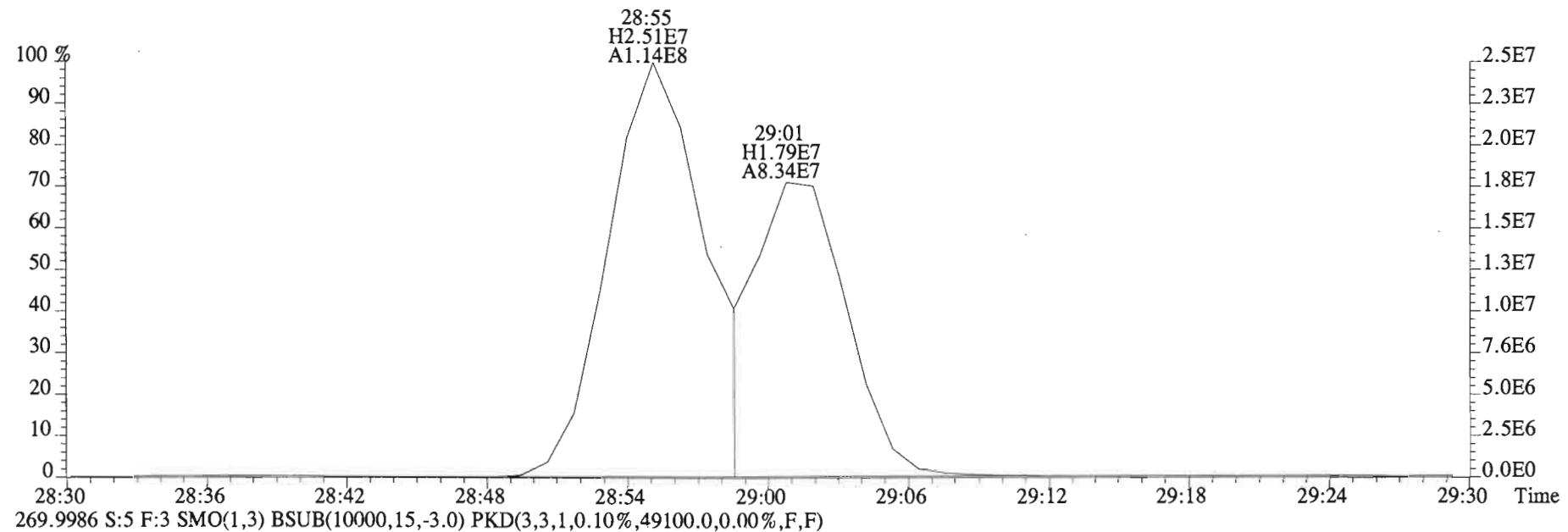
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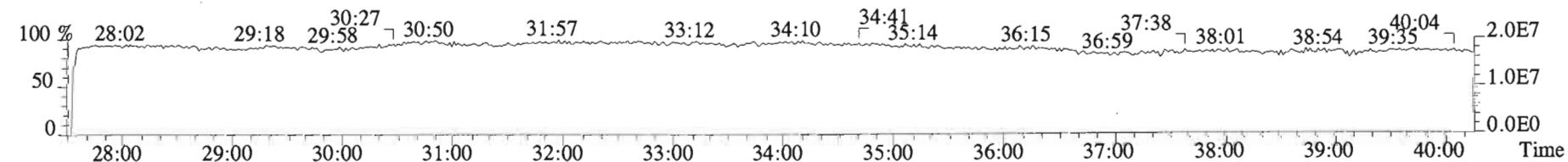
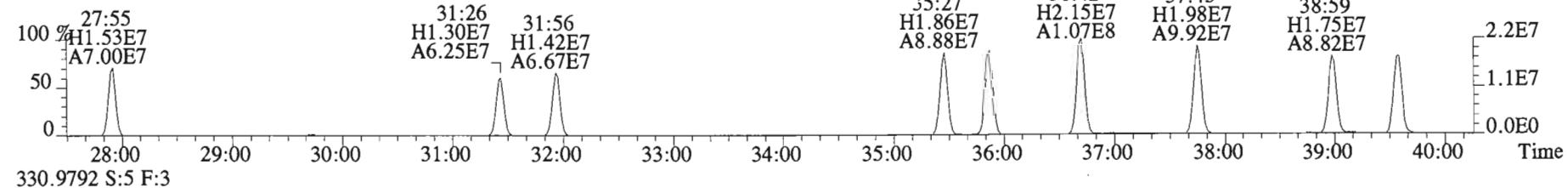
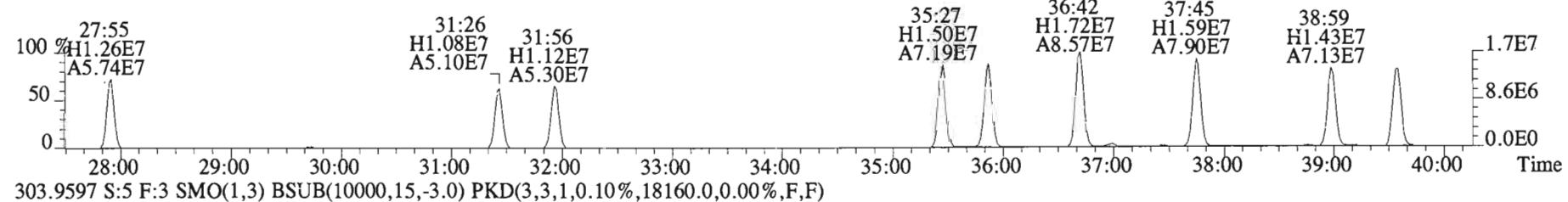
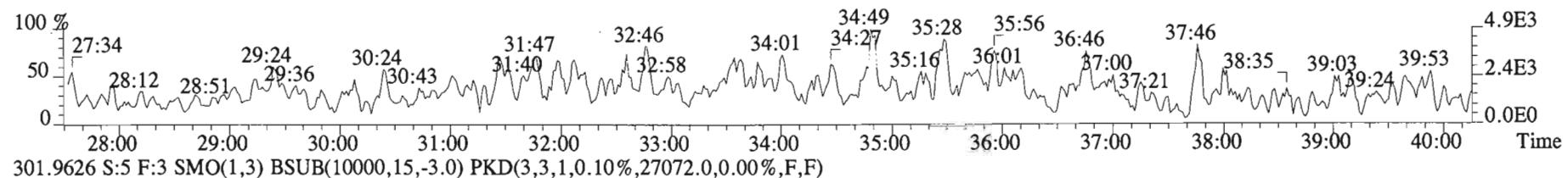
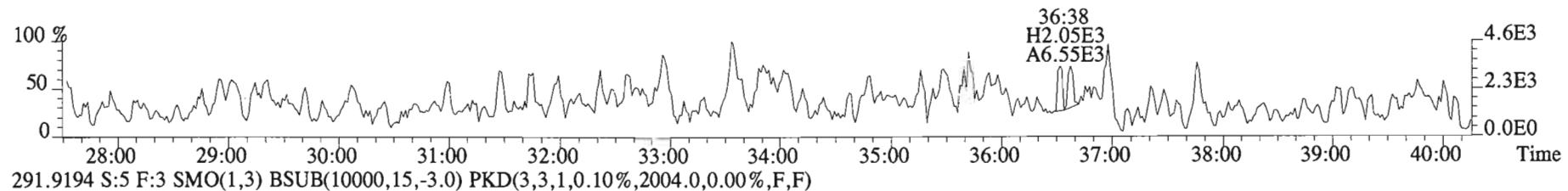
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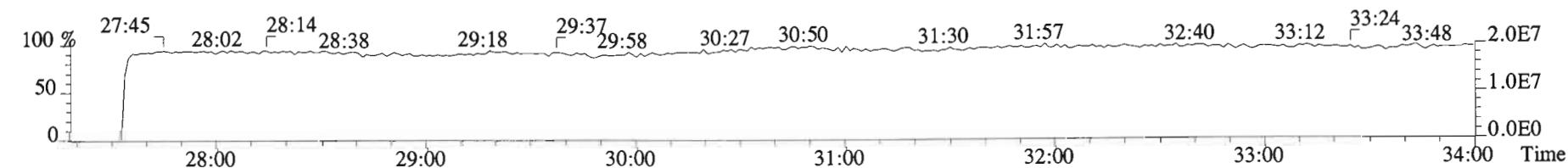
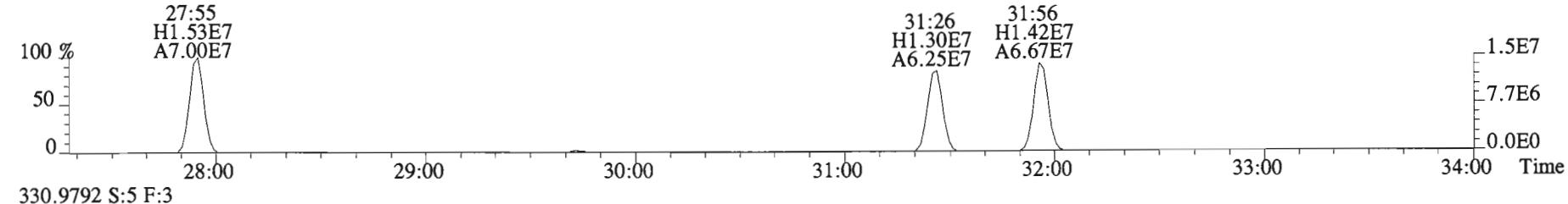
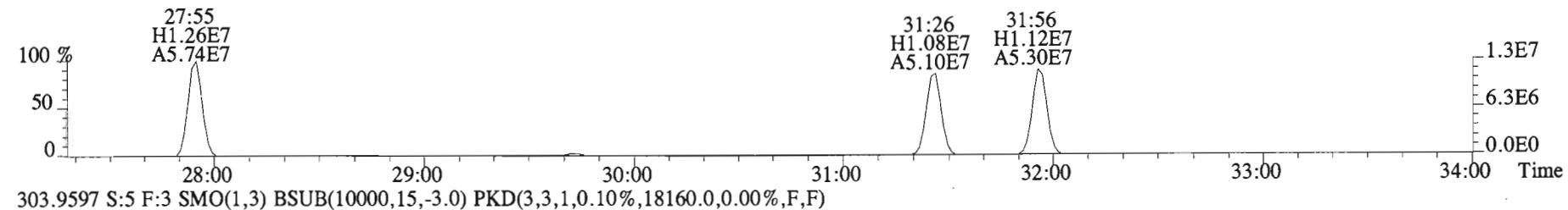
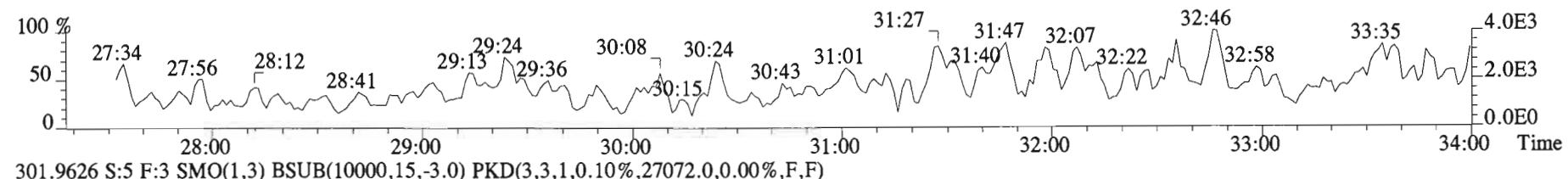
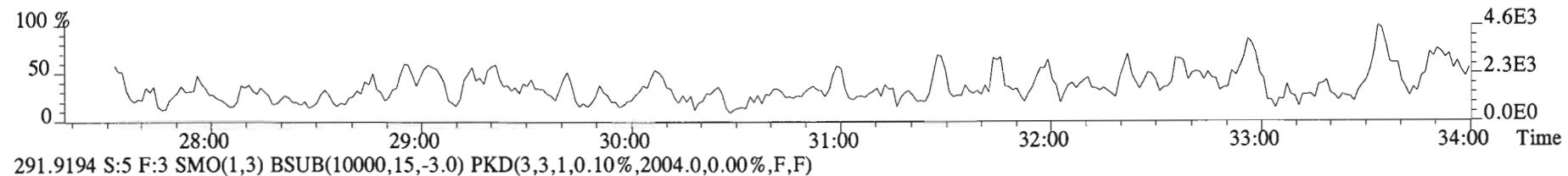
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Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
268.0016 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,66348.0,0.00%,F,F)



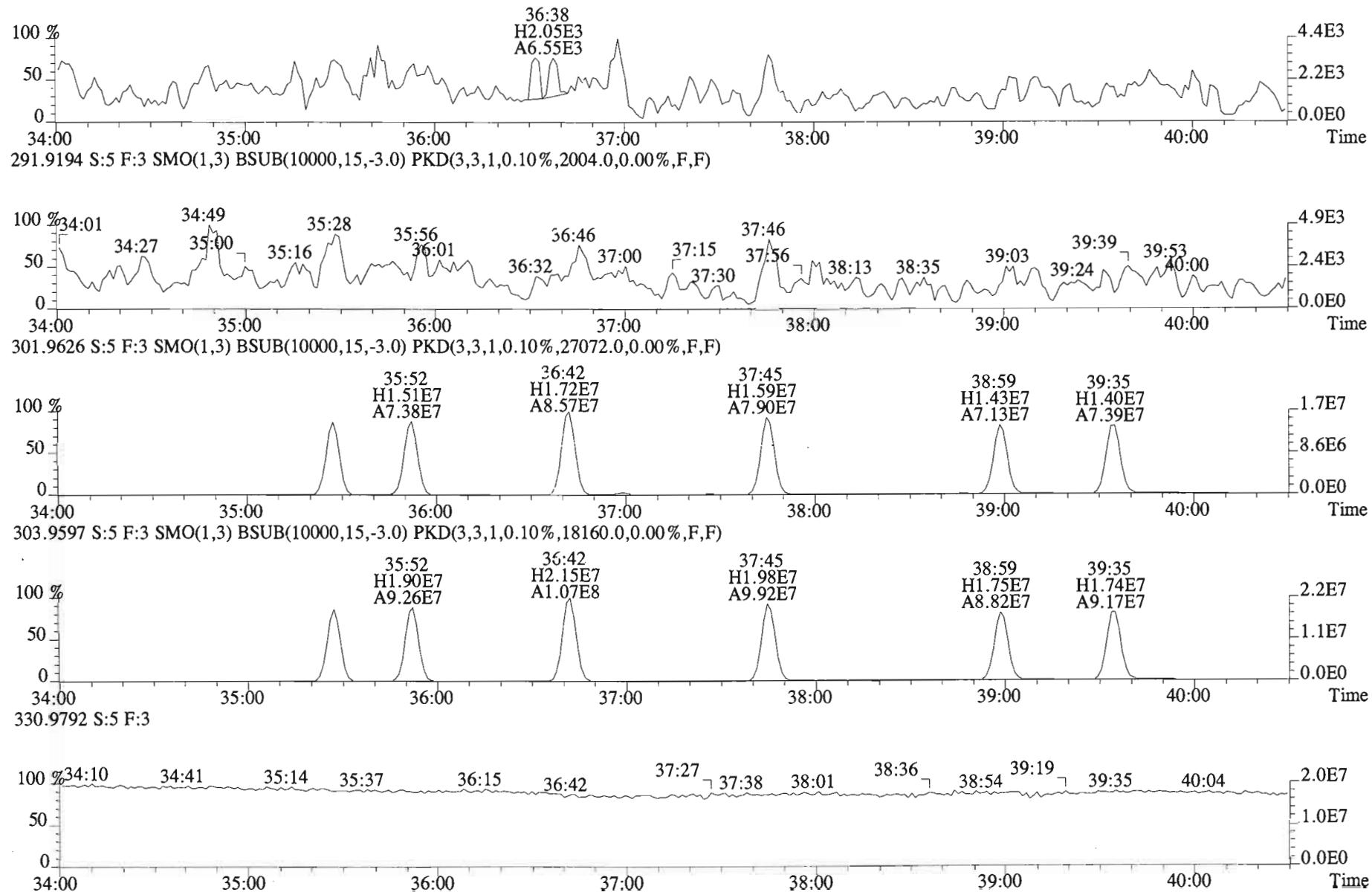
File:150219E2 #1-758 Acq:19-FEB-2015 18:23:55 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
 289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1912.0,0.00%,F,F)



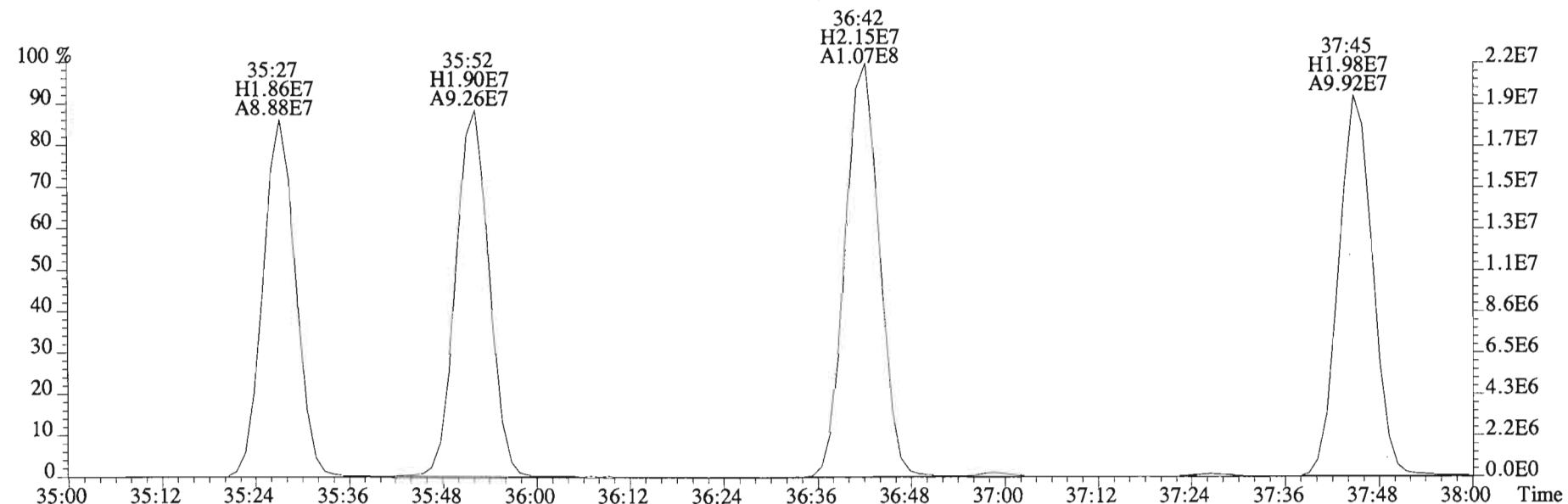
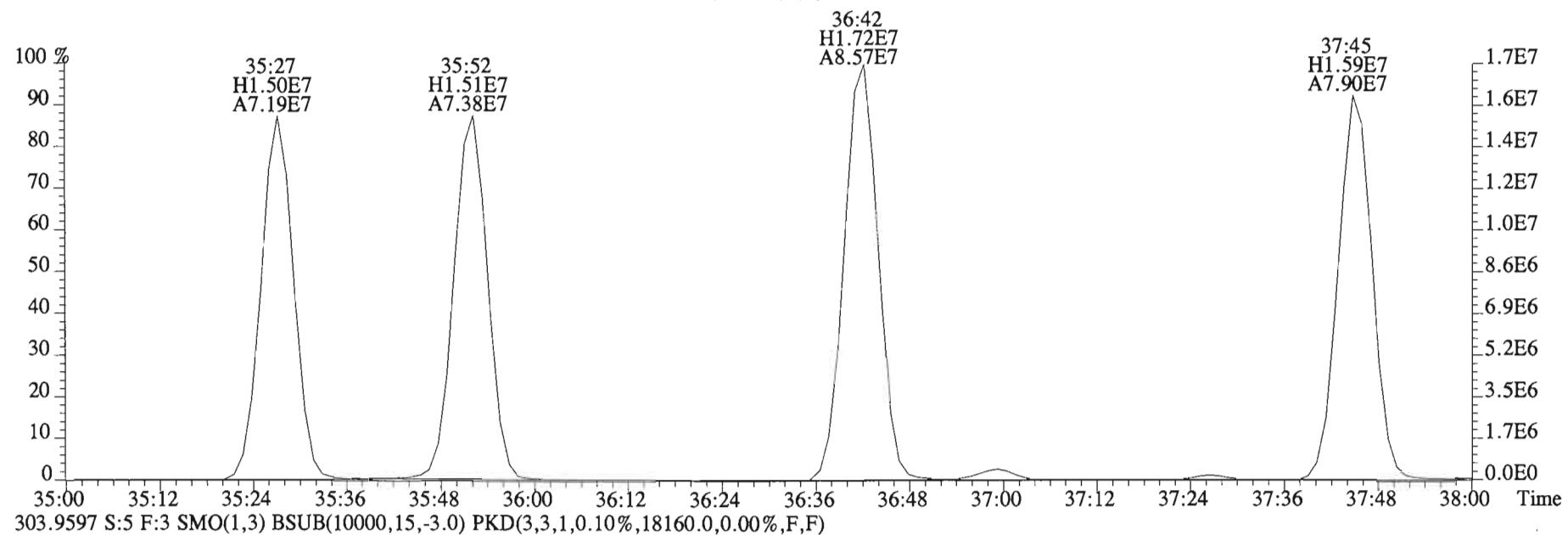
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 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
 289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1912.0,0.00%,F,F)



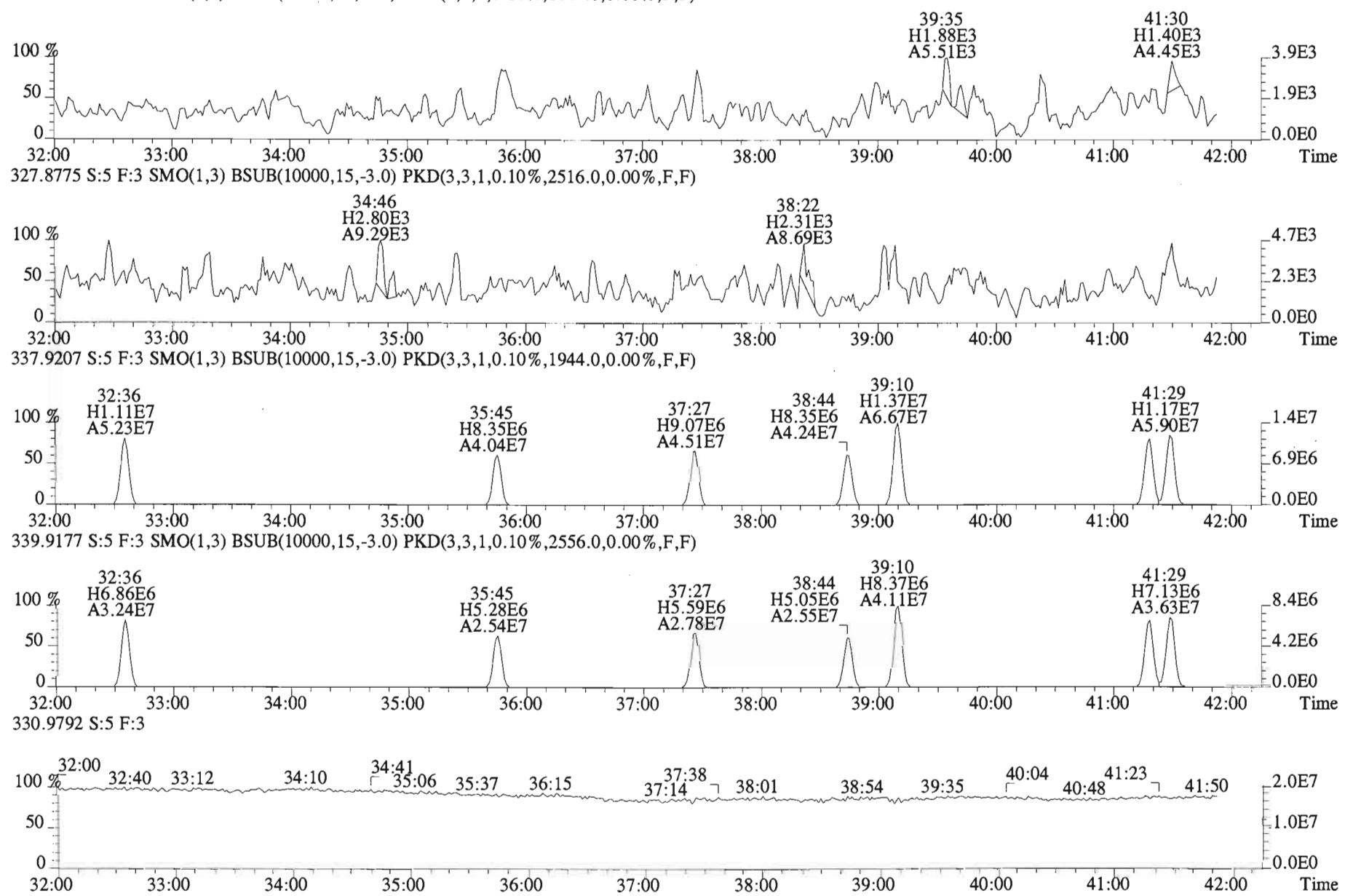
File:150219E2 #1-758 Acq:19-FEB-2015 18:23:55 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
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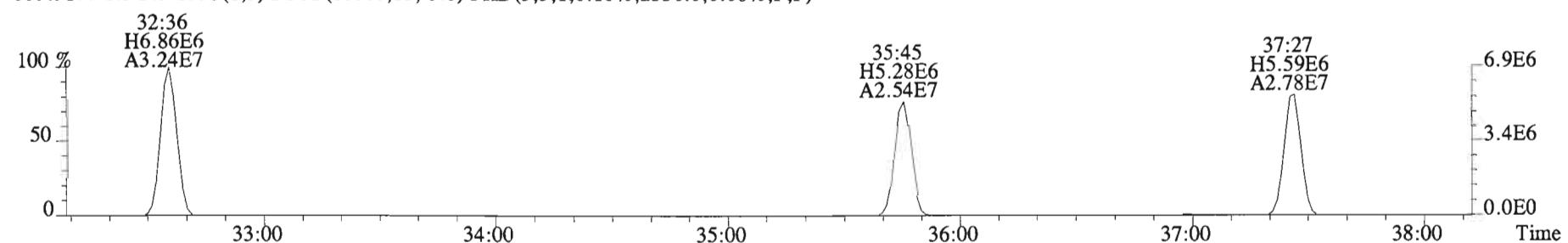
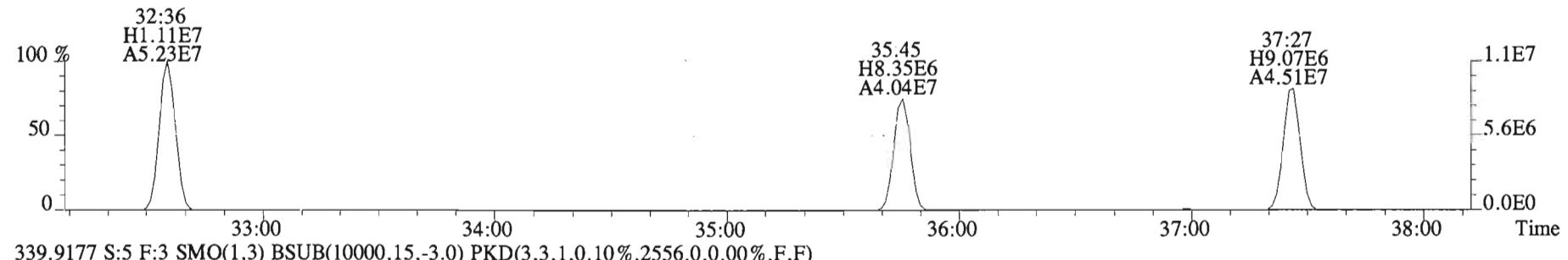
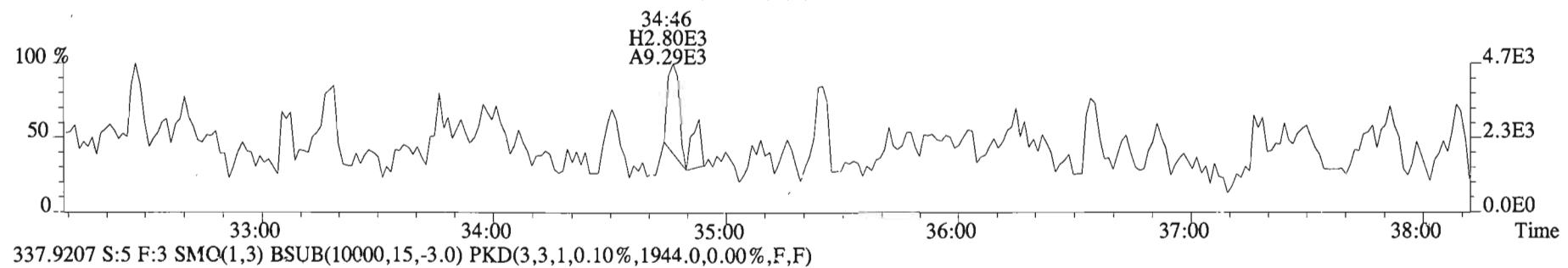
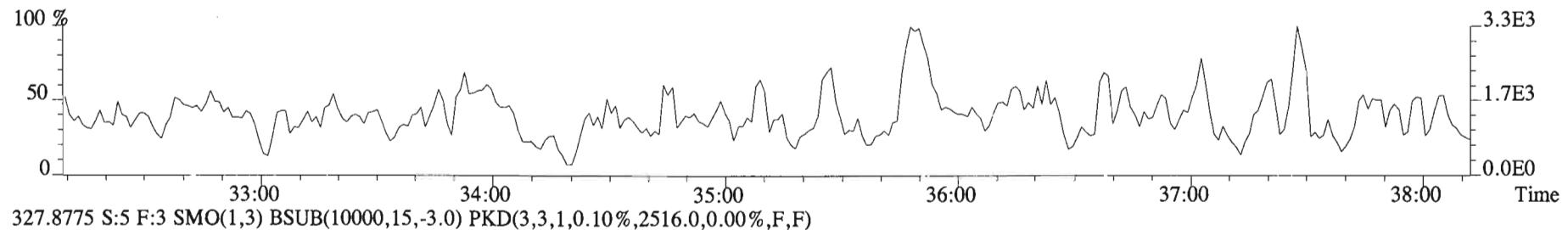
File:150219E2 #1-758 Acq:19-FEB-2015 18:23:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,27072.0,0.00%,F,F)



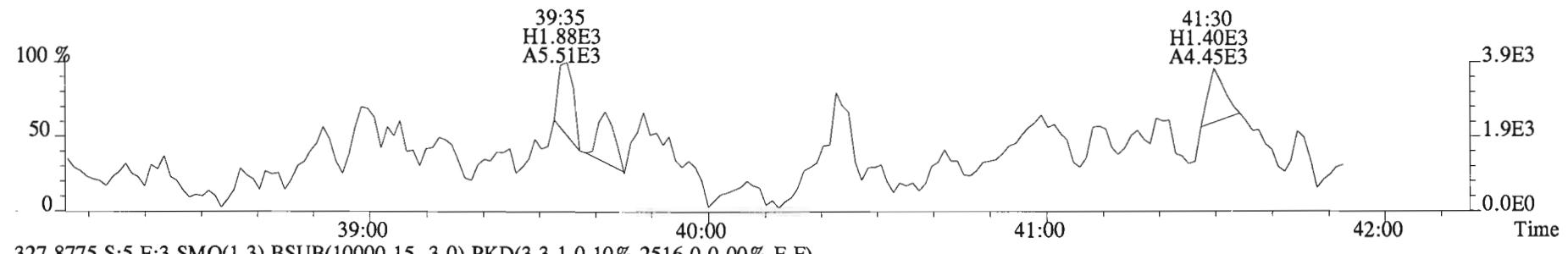
File:150219E2 #1-758 Acq:19-FEB-2015 18:23:55 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
 325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1644.0,0.00%,F,F)



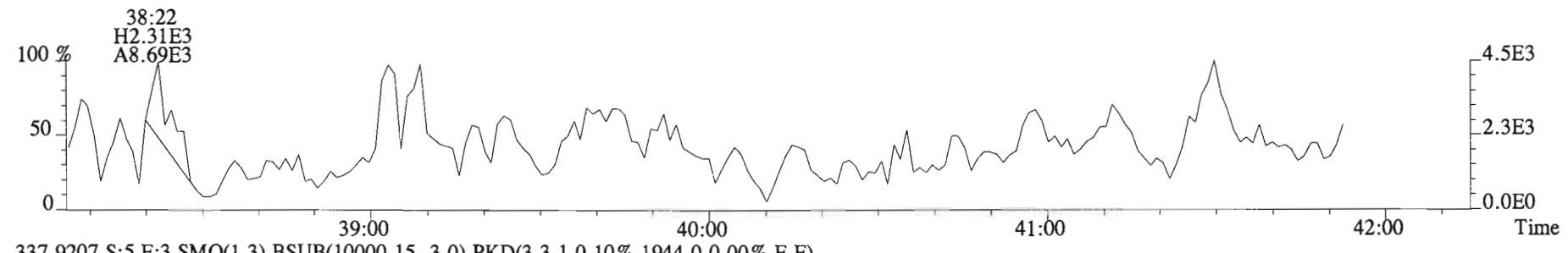
File:150219E2 #1-758 Acq:19-FEB-2015 18:23:55 GC EI + Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
 325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1644.0,0.00%,F,F)



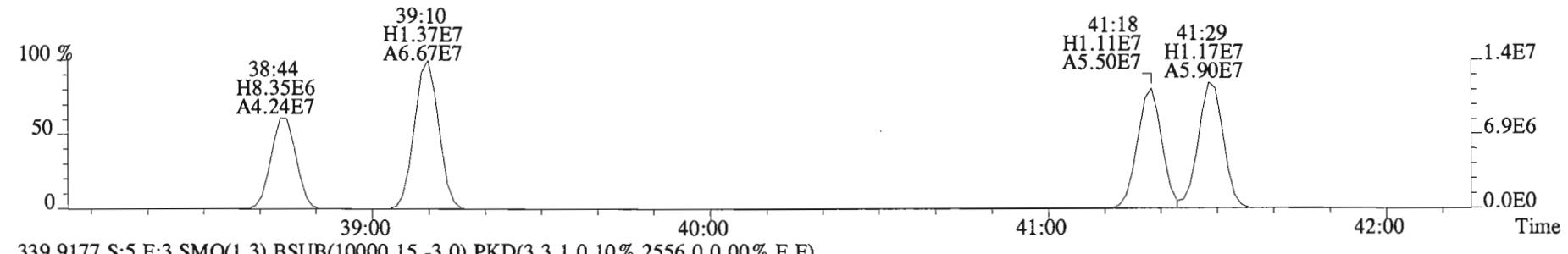
File:150219E2 #1-758 Acq:19-FEB-2015 18:23:55 GC EI + Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
 325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1644.0,0.00%,F,F)



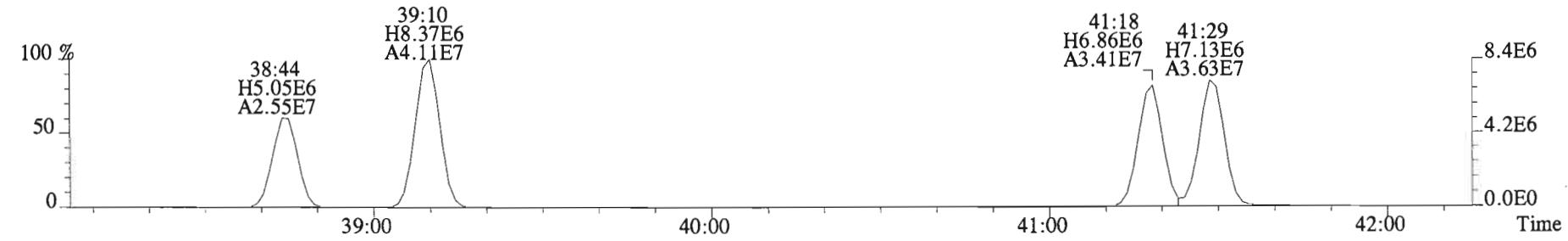
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2516.0,0.00%,F,F)



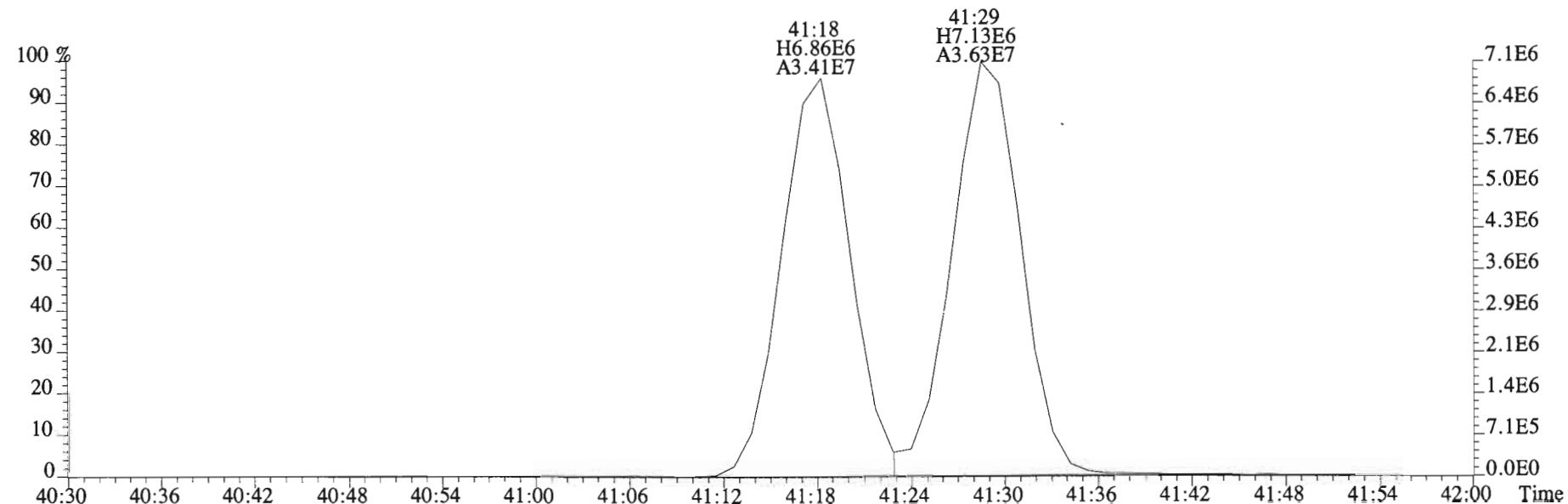
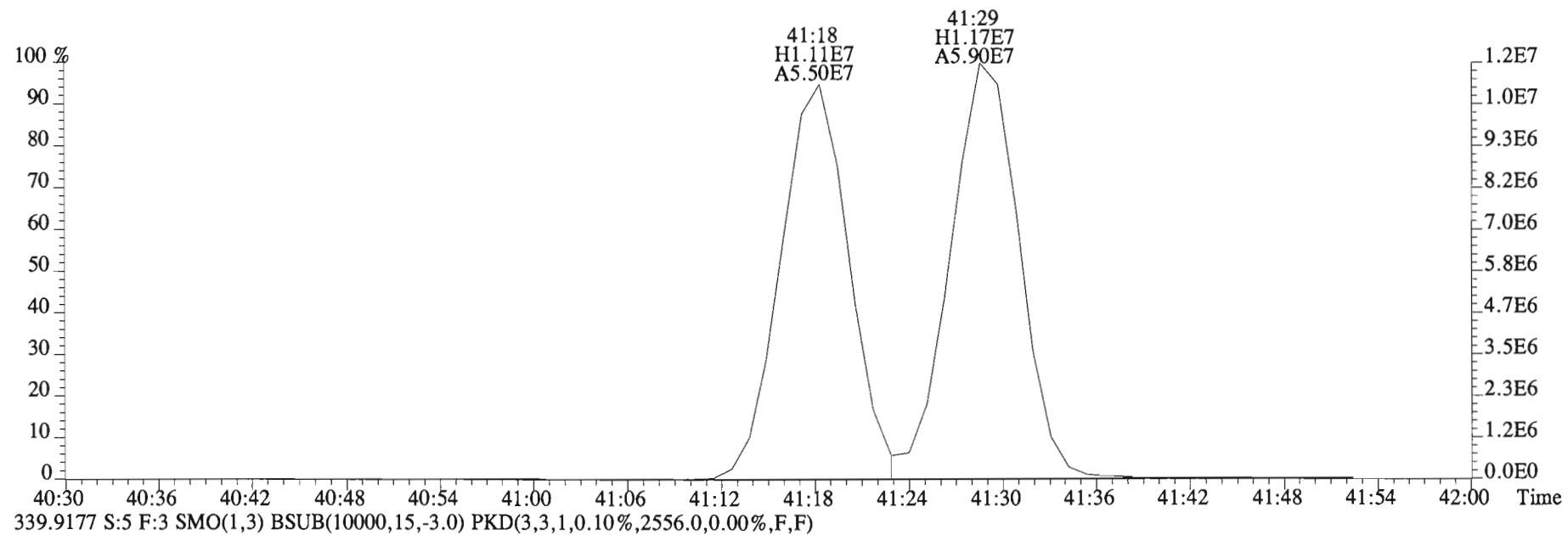
337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1944.0,0.00%,F,F)



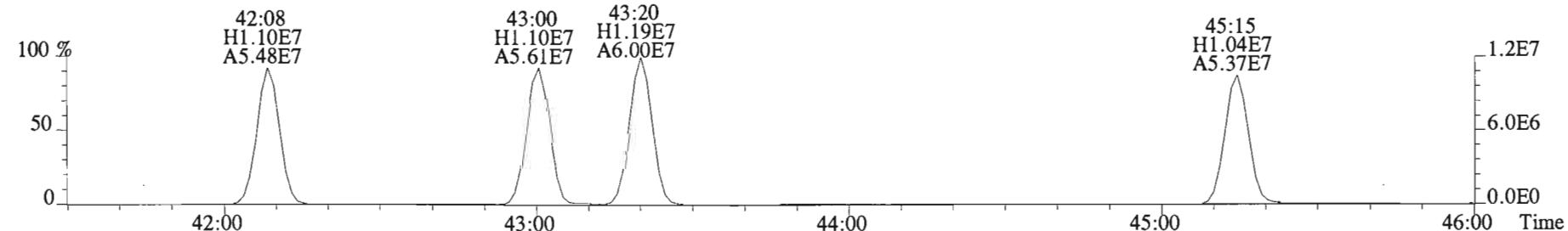
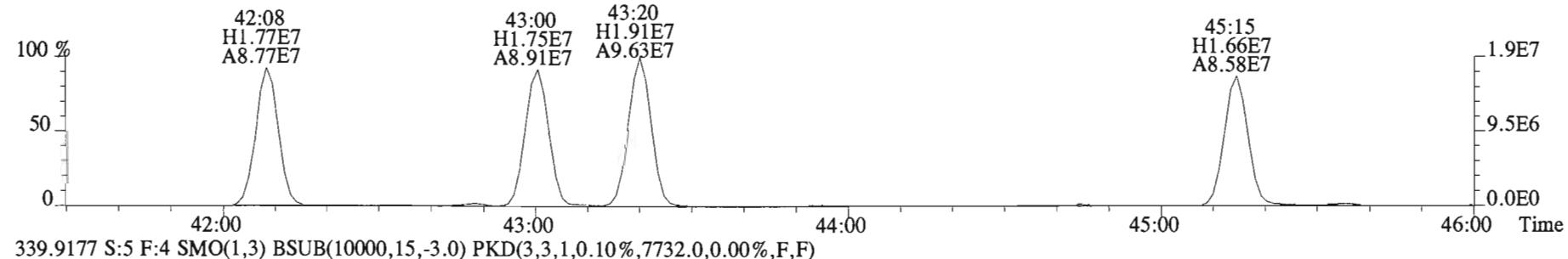
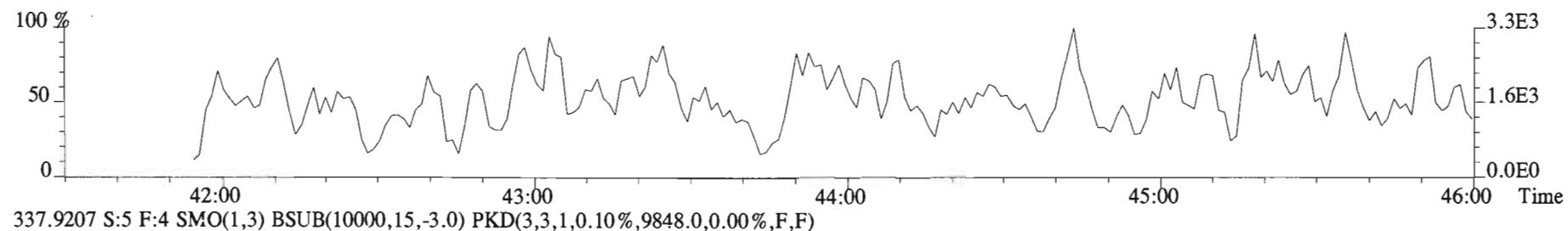
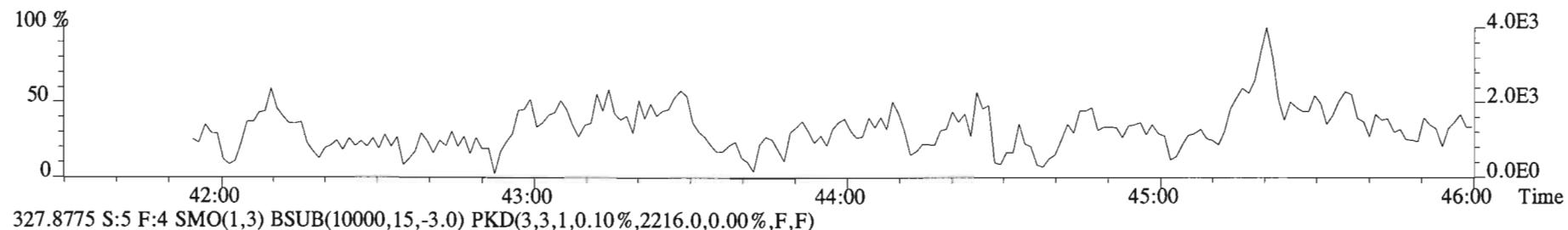
339.9177 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2556.0,0.00%,F,F)



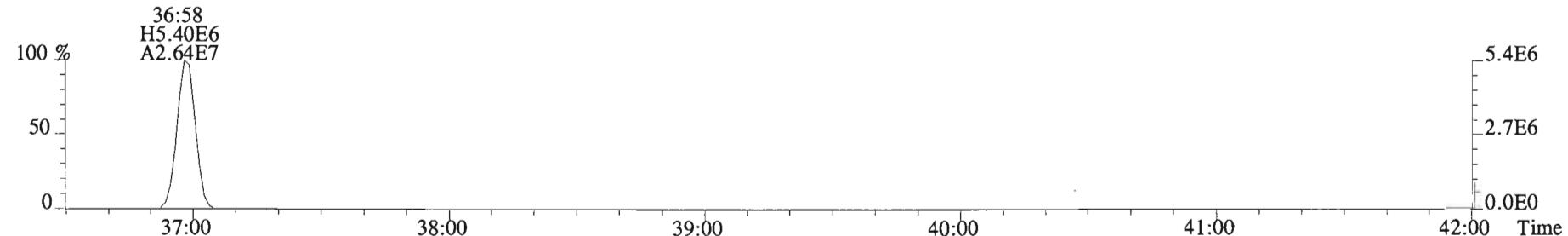
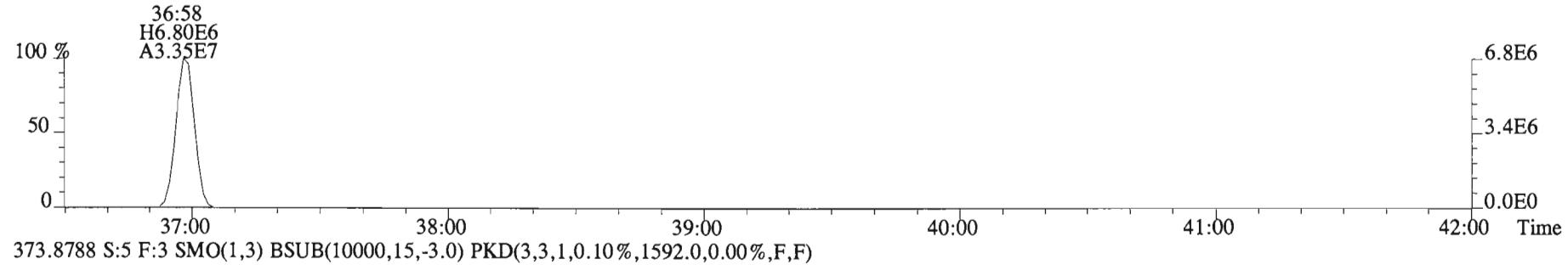
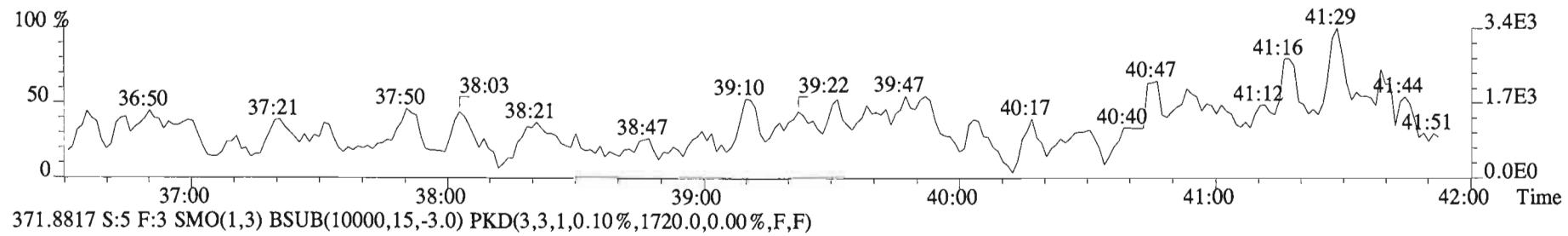
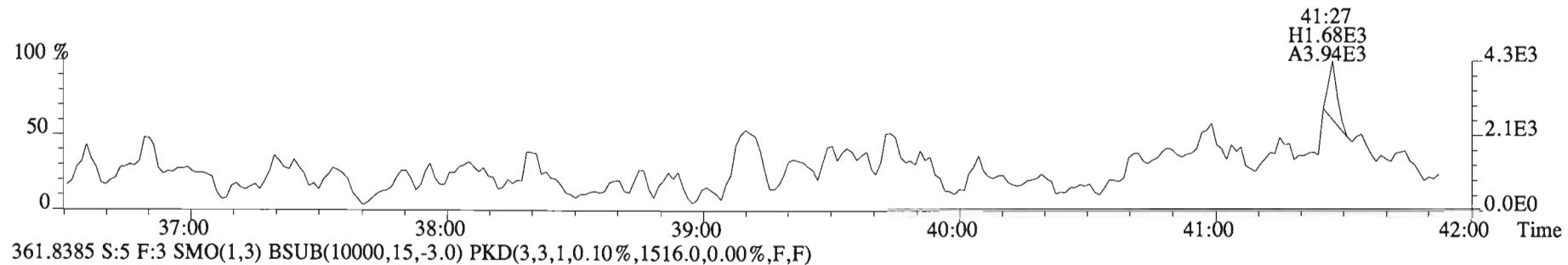
File:150219E2 #1-758 Acq:19-FEB-2015 18:23:55 GC EI + Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1944.0,0.00%,F,F)



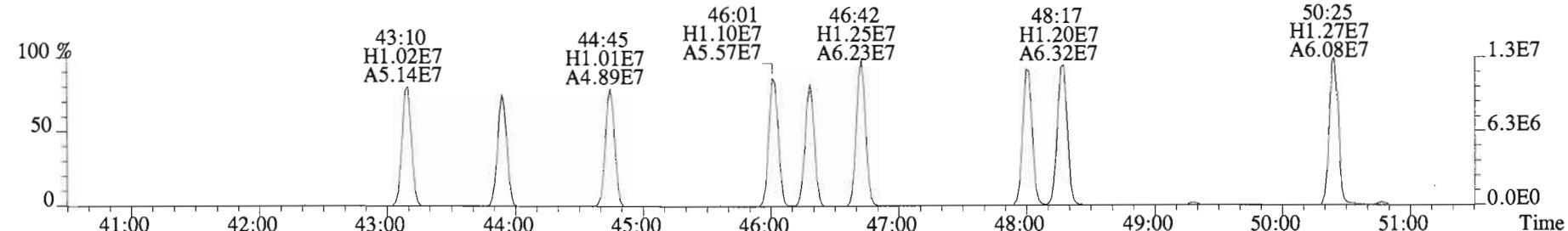
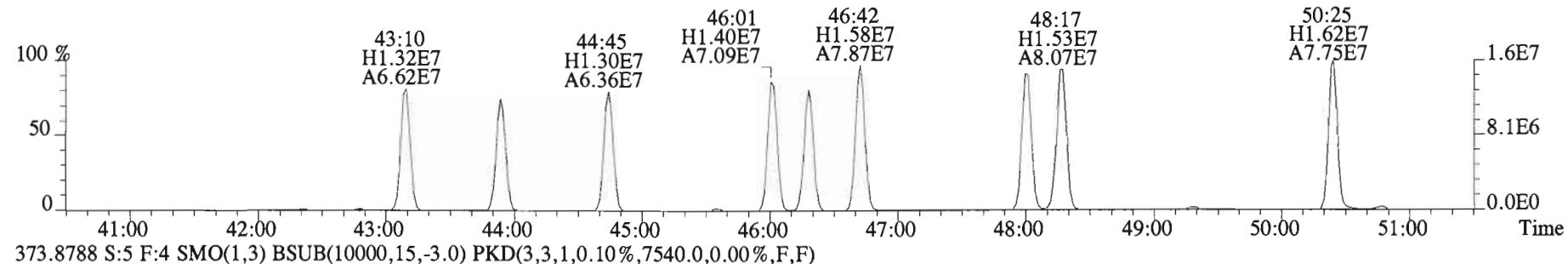
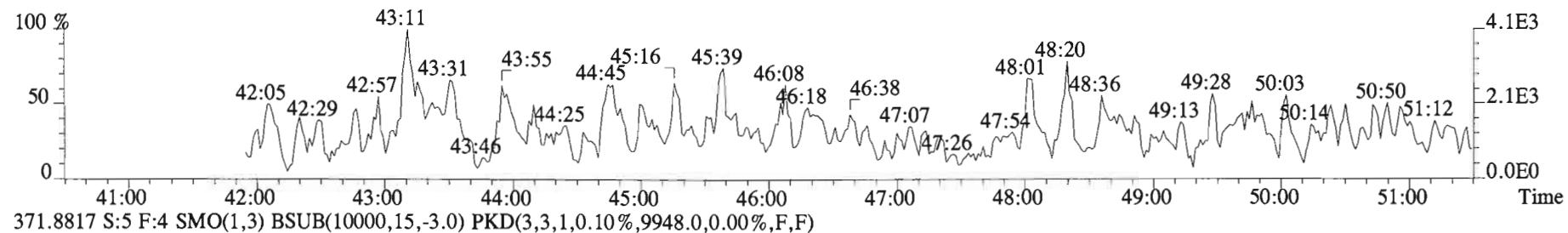
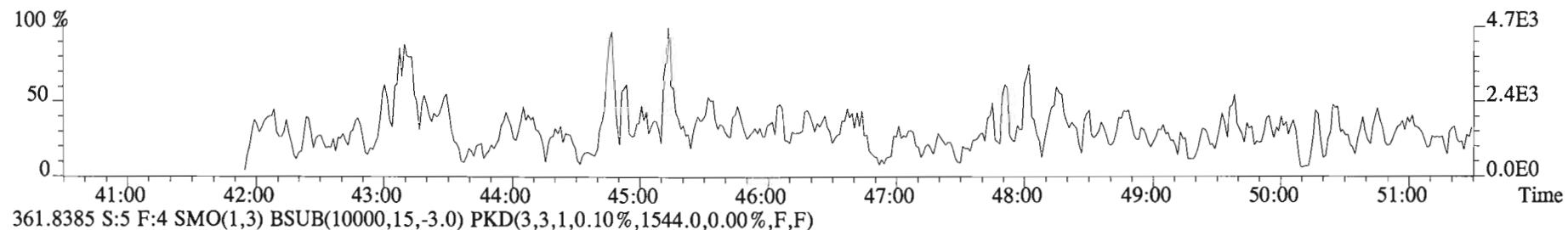
File:150219E2 #1-555 Acq:19-FEB-2015 18:23:55 GC EI + Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
325.8804 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1496.0,0.00%,F,F)



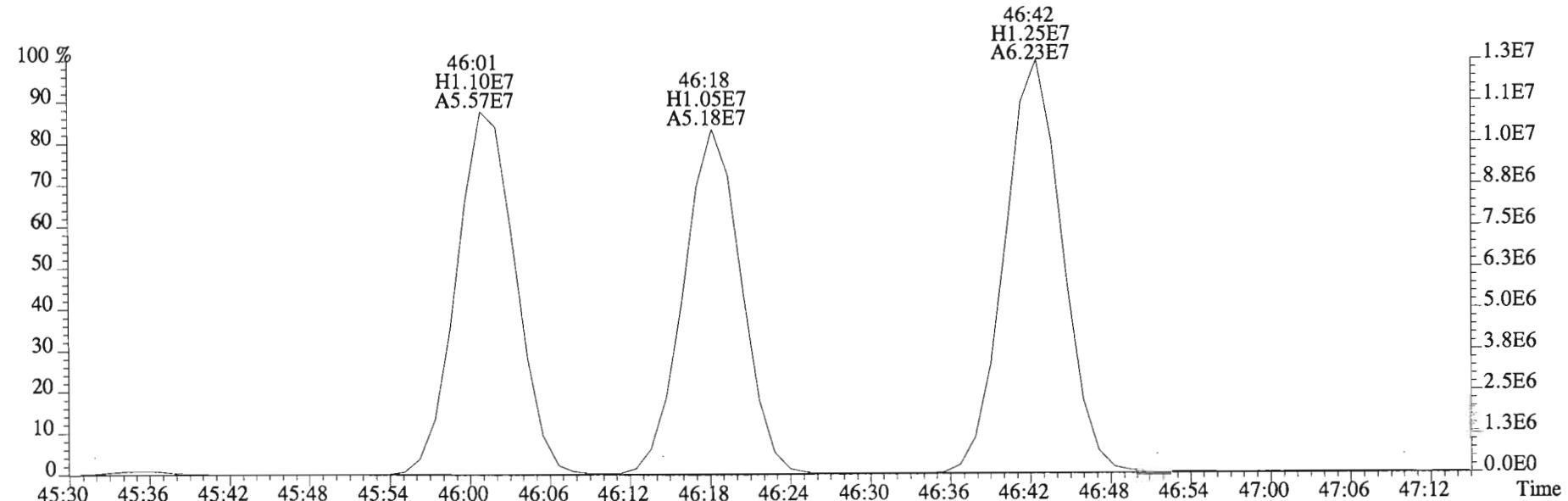
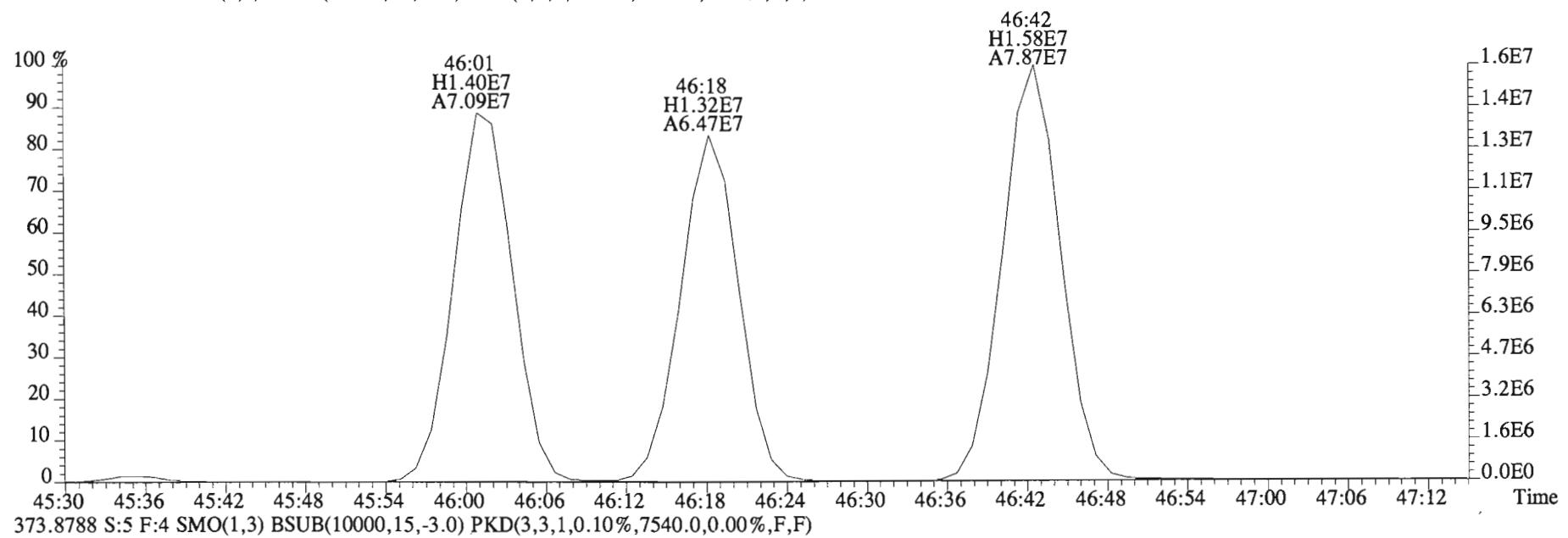
File:150219E2 #1-758 Acq:19-FEB-2015 18:23:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
359.8415 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1472.0,0.00%,F,F)



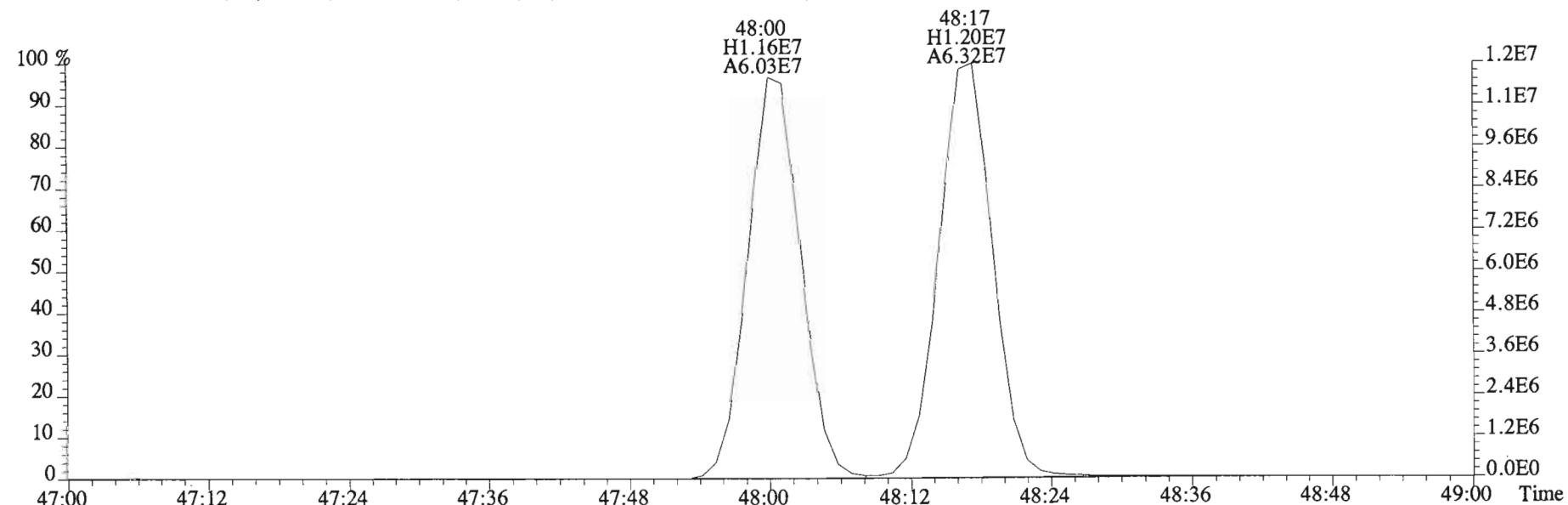
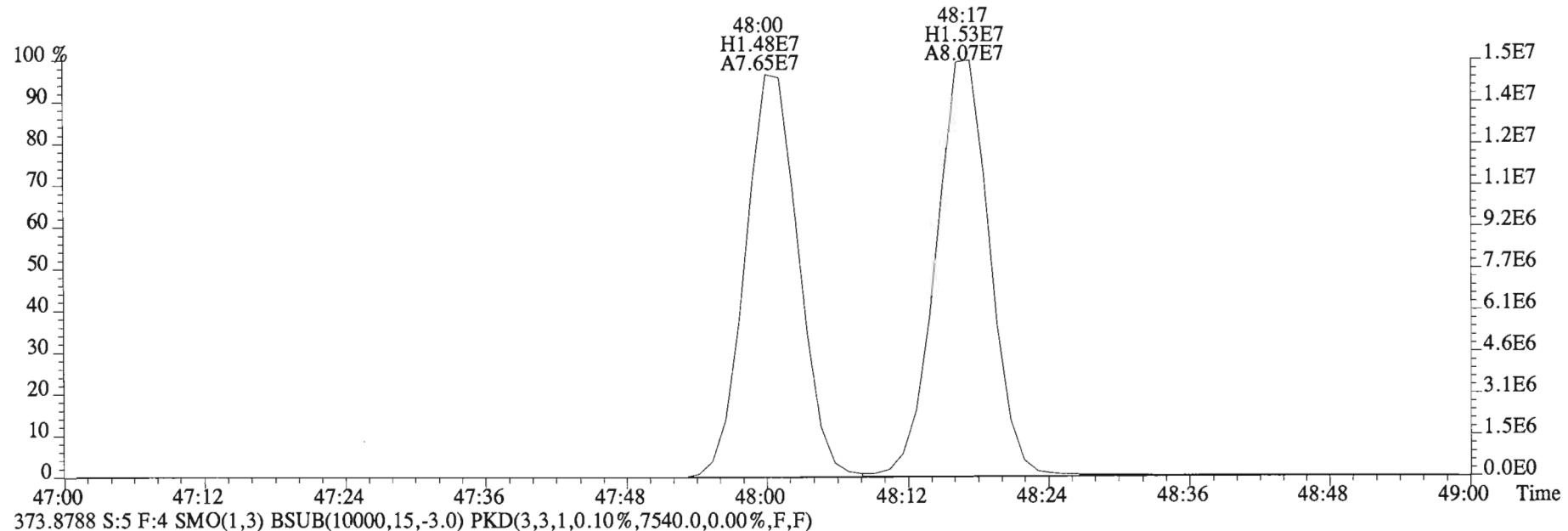
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 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
 359.8415 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1804.0,0.00%,F,F)



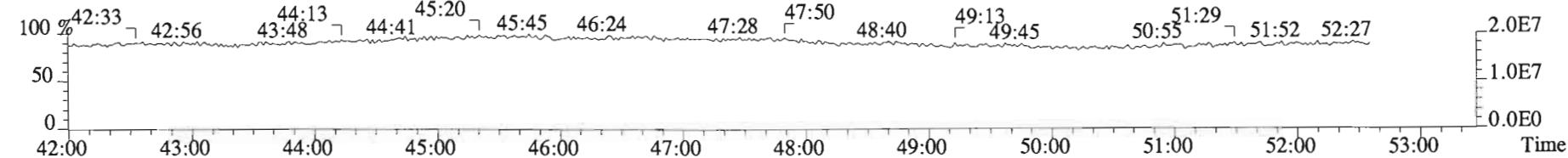
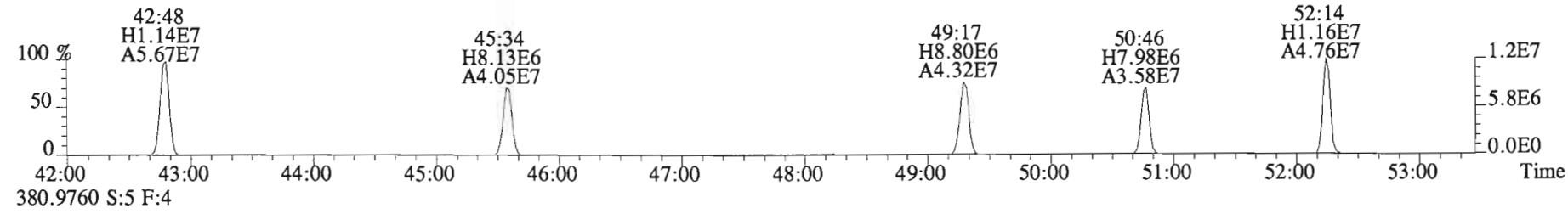
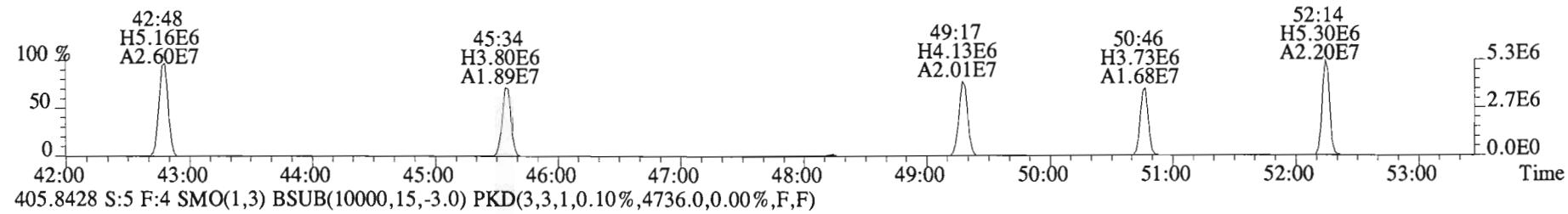
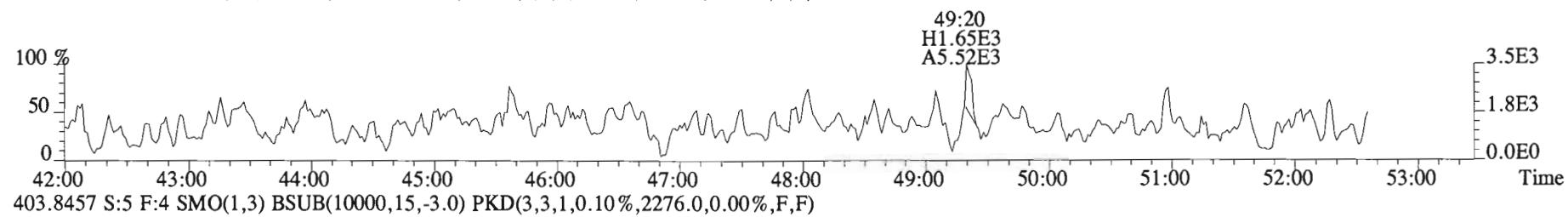
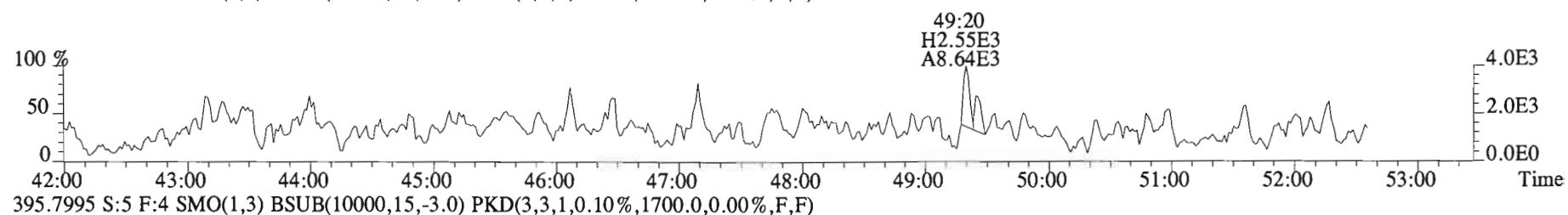
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Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
371.8817 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9948.0,0.00%,F,F)



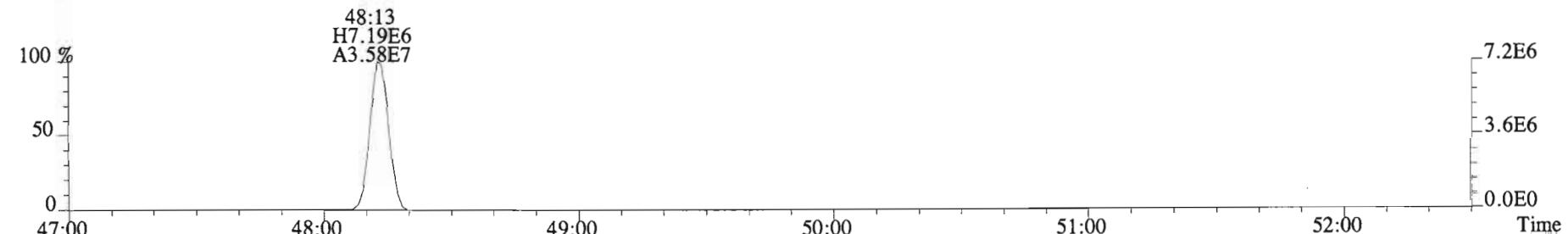
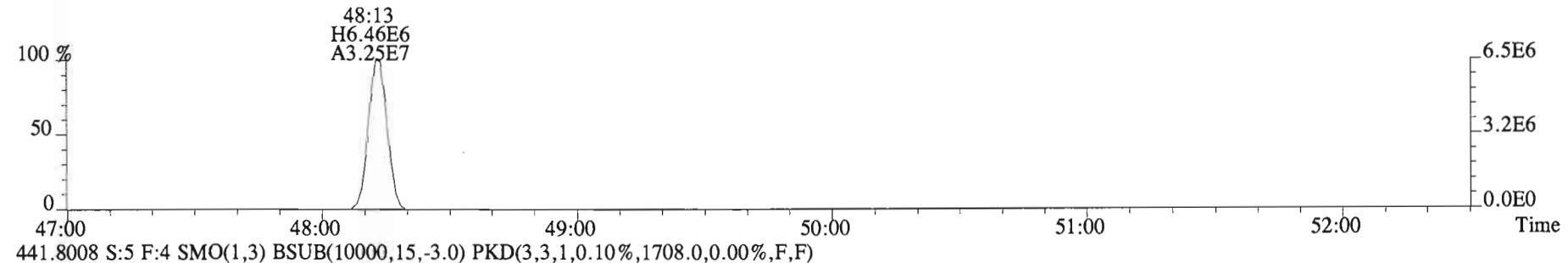
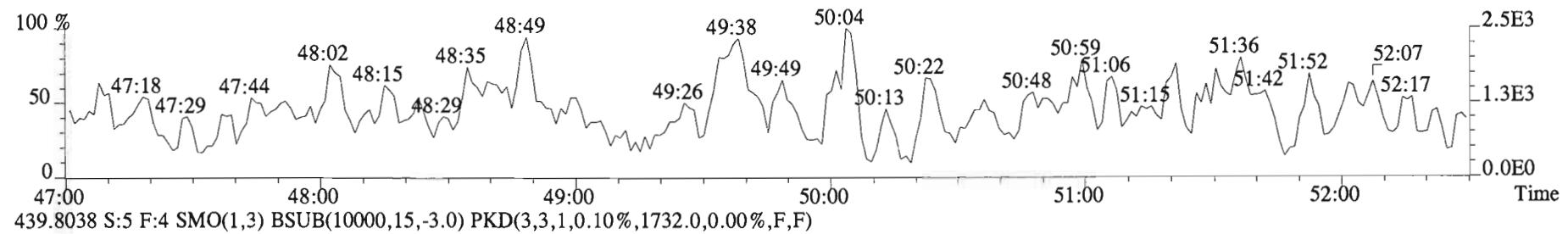
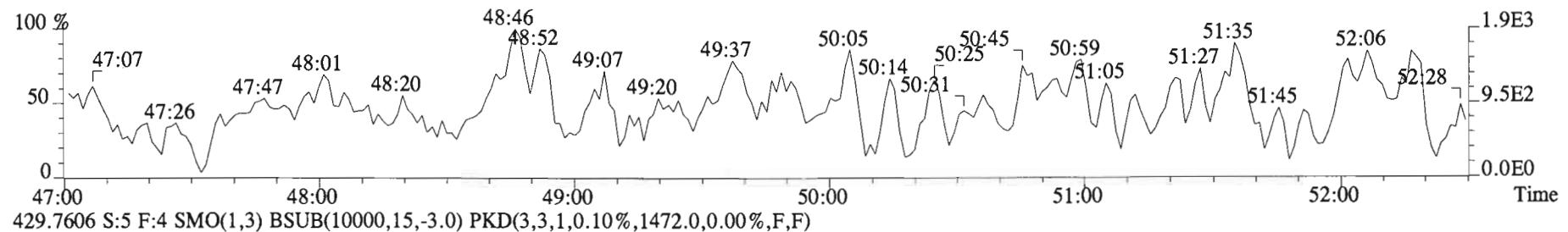
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Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
371.8817 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9948.0,0.00%,F,F)



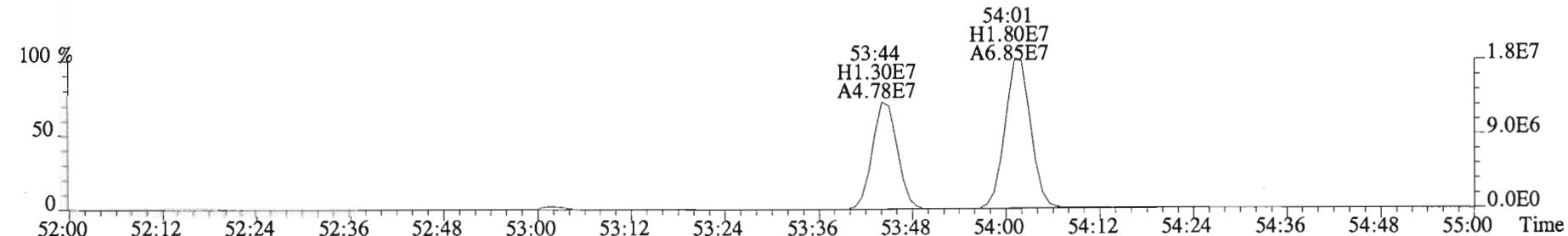
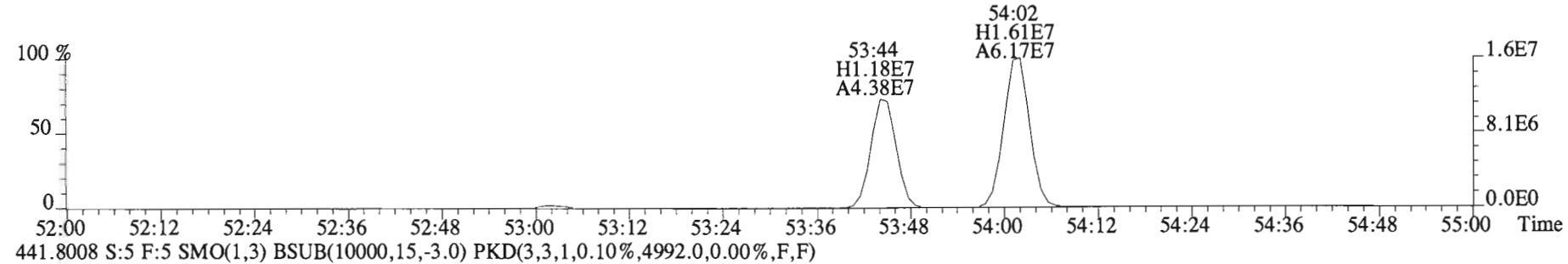
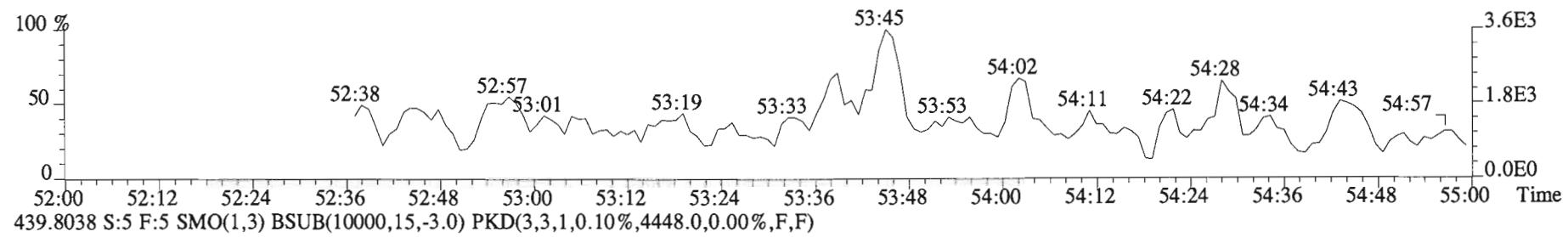
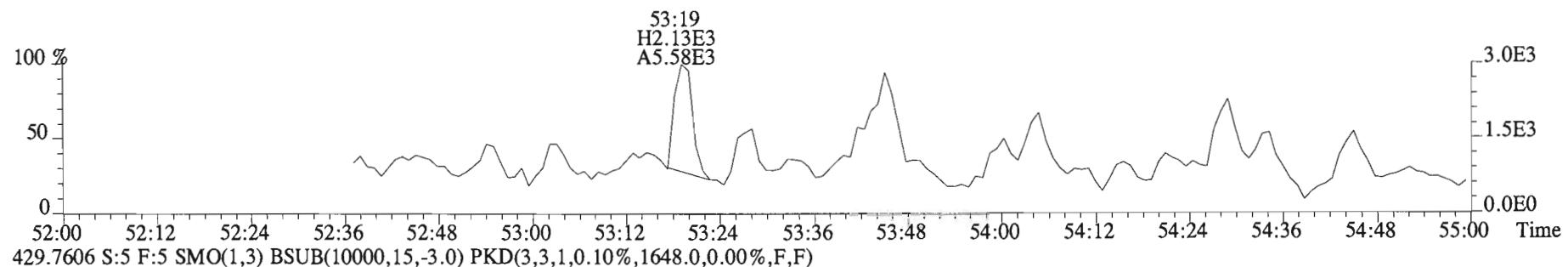
File:150219E2 #1-555 Acq:19-FEB-2015 18:23:55 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
 393.8025 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1736.0,0.00%,F,F)



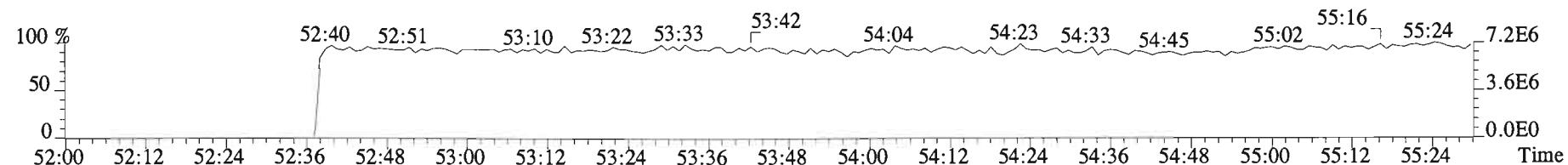
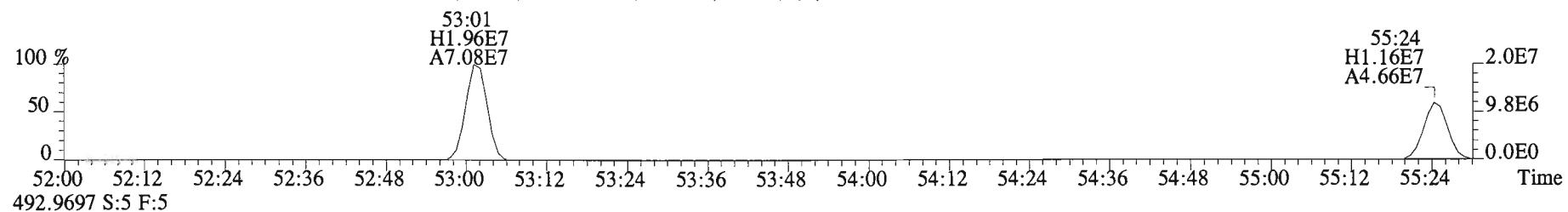
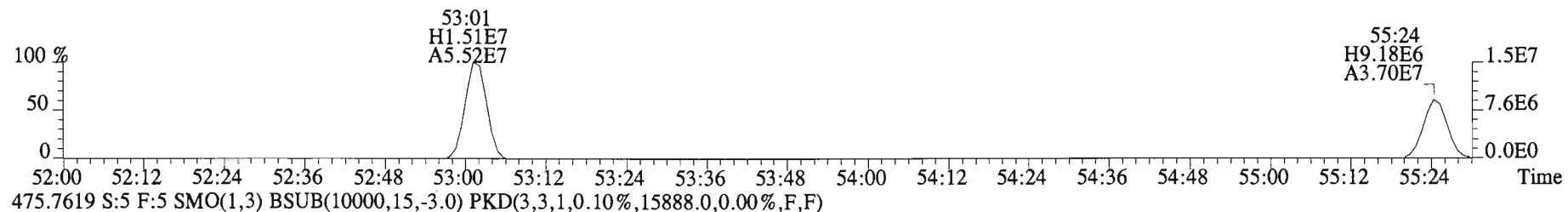
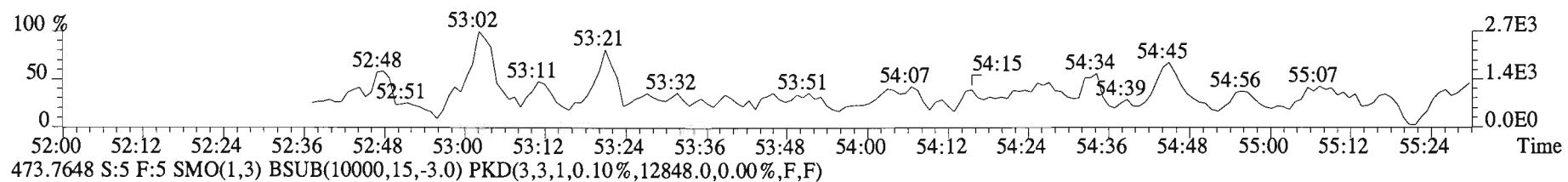
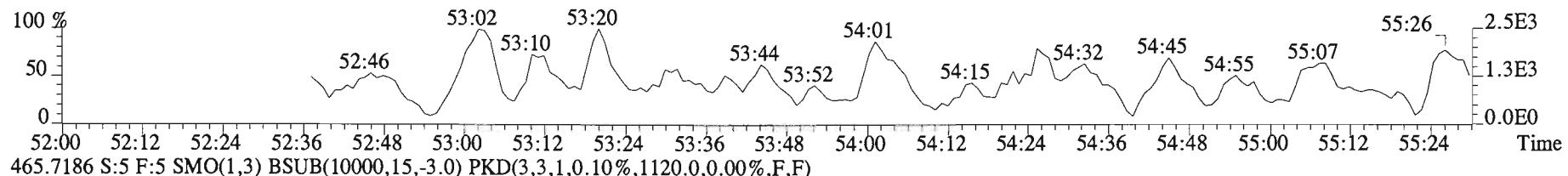
File:150219E2 #1-555 Acq:19-FEB-2015 18:23:55 GC EI + Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
427.7635 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1192.0,0.00%,F,F)



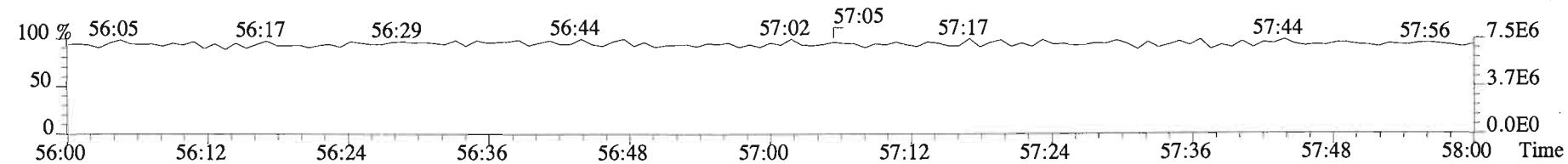
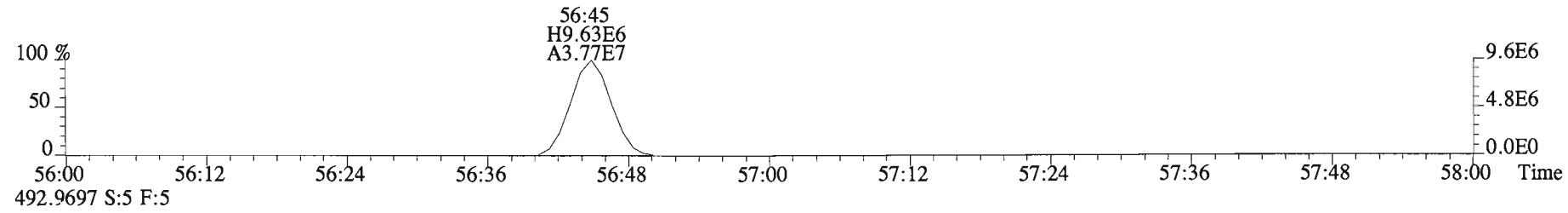
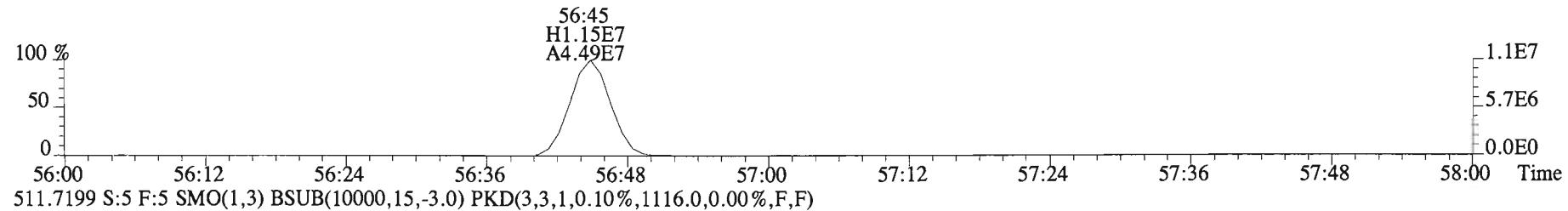
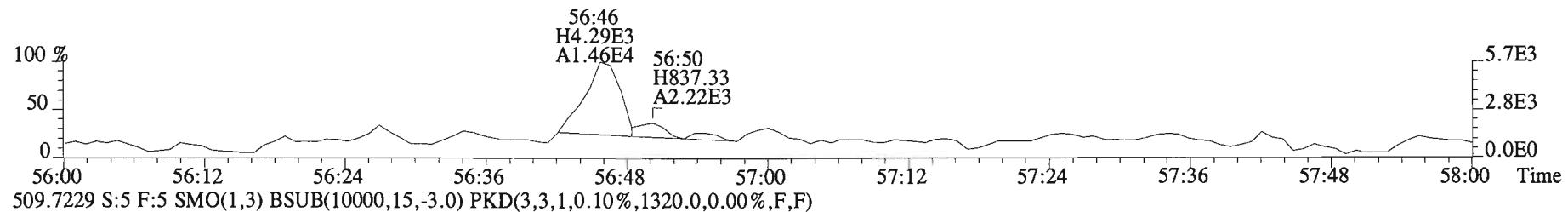
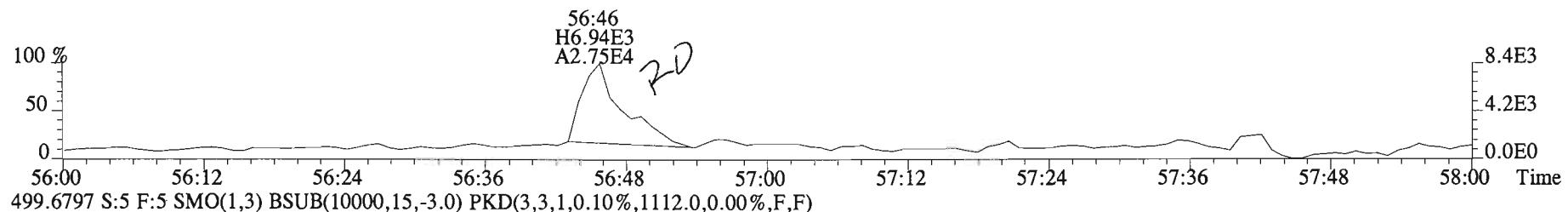
File:150219E2 #1-430 Acq:19-FEB-2015 18:23:55 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
 427.7635 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1256.0,0.00%,F,F)



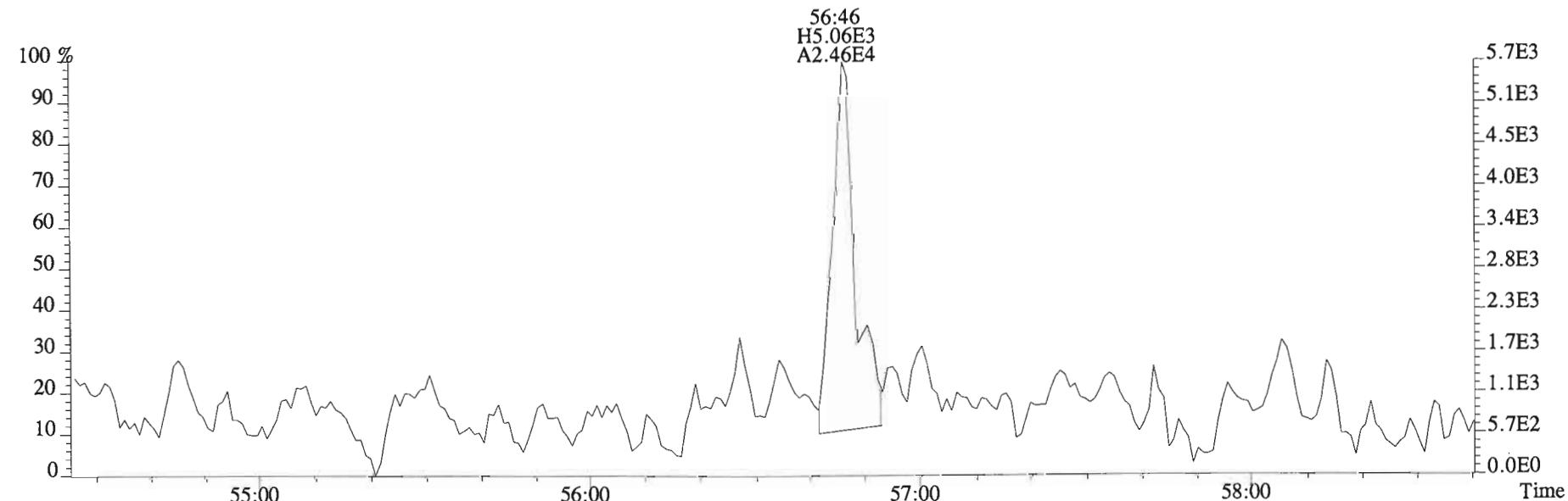
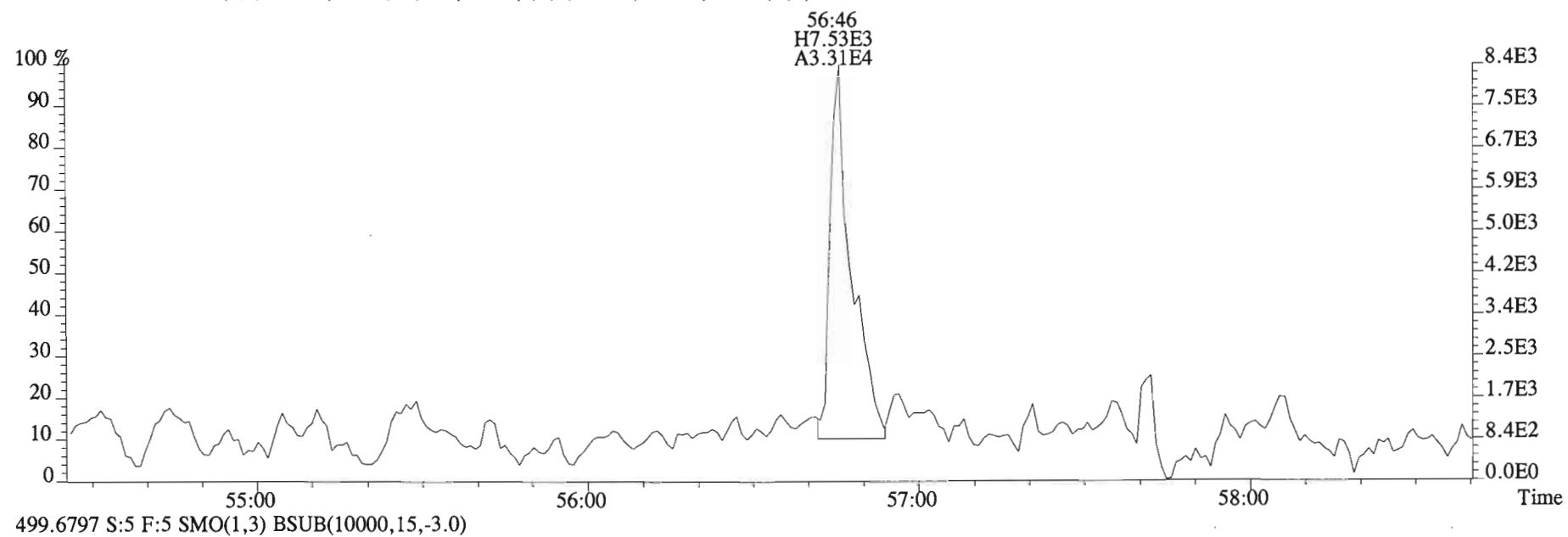
File:150219E2 #1-430 Acq:19-FEB-2015 18:23:55 GC EI + Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BLK1 Method Blank 10 Exp:PCB_ZB1
 463.7216 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1396.0,0.00%,F,F)



File:150219E2 #1-430 Acq:19-FEB-2015 18:23:55 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-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%,1148.0,0.00%,F,F)



File:150219E2 #1-430 Acq:19-FEB-2015 18:23:55 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-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%,1148.0,0.00%,F,F)



Lab Name: Vista Analytical Laboratory OPR Data Filename: B5B0059-BS1

Matrix : SOLID Ext. Date: 2-12-15 Analysis Date: 19-FEB-15 Time: 15:11:34

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	48.8	30.0-67.5	13C-PCB-1	100	69.9	15-145	13C-PCB-79	100	88.2	40-145
PCB-3	50	48.8	30.0-67.5	13C-PCB-3	100	71.5	15-145	13C-PCB-178	100	79.0	40-145
PCB-4/10	200	183.7	120-270	13C-PCB-4	100	70.8	15-145				
PCB-15	100	93.9	60.0-135	13C-PCB-11	100	77.1	15-145				
PCB-19	50	54.1	30.0-67.5	13C-PCB-19	100	70.5	15-145				
PCB-37	50	50.4	30.0-67.5	13C-PCB-37	100	131.5	15-145				
PCB-54	50	54.4	30.0-67.5	13C-PCB-54	100	70.2	15-145				
PCB-81	50	52.7	30.0-67.5	13C-PCB-81	100	85.3	40-145				
PCB-77	50	54.3	30.0-67.5	13C-PCB-77	100	87.7	40-145				
PCB-104	50	53.8	30.0-67.5	13C-PCB-104	100	78.1	40-145				
PCB-123	50	53.9	30.0-67.5	13C-PCB-123	100	86.9	40-145				
PCB-106/118	100	108.0	60.0-135	13C-PCB-118	100	85.7	40-145				
PCB-114	50	47.7	30.0-67.5	13C-PCB-114	100	81.9	40-145				
PCB-105	50	48.8	30.0-67.5	13C-PCB-105	100	83.3	40-145				
PCB-126	50	50.5	30.0-67.5	13C-PCB-126	100	84.9	40-145				
PCB-155	50	52.9	30.0-67.5	13C-PCB-155	100	63.4	40-145				
PCB-167	50	53.5	30.0-67.5	13C-PCB-167	100	83.6	40-145				
PCB-156	50	54.1	30.0-67.5	13C-PCB-156	100	84.6	40-145				
PCB-157	50	52.2	30.0-67.5	13C-PCB-157	100	84.3	40-145				
PCB-169	50	52.1	30.0-67.5	13C-PCB-169	100	85.2	40-145				
PCB-188	50	53.6	30.0-67.5	13C-PCB-188	100	73.5	40-145				
PCB-189	50	53.7	30.0-67.5	13C-PCB-189	100	74.0	40-145				
PCB-202	50	51.2	30.0-67.5	13C-PCB-202	100	65.1	40-145				
PCB-205	50	47.8	30.0-67.5	13C-PCB-194	100	86.3	40-145				
PCB-208	50	51.3	30.0-67.5	13C-PCB-208	100	89.4	40-145				
PCB-206	50	51.0	30.0-67.5	13C-PCB-206	100	92.5	40-145				
PCB-209	50	53.0	30.0-67.5	13C-PCB-209	100	91.8	40-145				

Analyst: *Dms*Date: *2/20/15*

Client ID: OPR
Lab ID: B5B0059-BS1

Filename: 150219E2 S:2 Acq:19-FEB-15 15:11:34 ConCal: ST150219E2-1
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	9.44e+07	3.00	y	1.19	16:08	1.001	0.996-1.006	48.7642	PCB-52/69	1.73e+08	0.79	y	1.28	31:28	1.001	0.996-1.006	114.529
PCB-2	1.04e+08	3.03	y	1.18	18:30	0.988	0.984-0.994	50.3972	PCB-73	8.84e+07	0.80	y	1.35	31:35	1.005	1.000-1.010	55.4176
PCB-3	1.21e+08	3.01	y	1.43	18:44	1.001	0.996-1.006	48.8065	PCB-43/49	1.29e+08	0.79	y	0.99	31:45	1.010	1.005-1.015	109.831
PCB-4/10	3.18e+08	1.59	y	1.57	20:05	1.002	0.997-1.007	183.673	PCB-47	6.58e+07	0.92	n	1.06	31:57	1.001	0.996-1.006	49.7856
PCB-7/9	3.78e+08	1.60	y	1.21	21:51	0.868	0.866-0.874	188.867	PCB-48/75	1.74e+08	0.73	y	1.23	32:04	1.004	0.999-1.009	113.171
PCB-6	2.03e+08	1.61	y	1.30	22:30	0.894	0.890-0.899	93.8905	PCB-65	8.63e+07	0.77	y	1.22	32:20	1.012	1.008-1.018	56.3912
PCB-5/8	3.71e+08	1.61	y	1.15	22:55	0.910	0.907-0.917	194.982	PCB-62	8.93e+07	0.79	y	1.22	32:27	1.016	1.011-1.021	58.5387
PCB-14	1.97e+08	1.62	y	1.11	24:00	0.953	0.949-0.959	92.3372	PCB-44	6.25e+07	0.79	y	0.86	32:45	1.025	1.021-1.031	58.1604
PCB-11	1.98e+08	1.61	y	1.09	25:11	1.000	0.995-1.005	94.6972	PCB-42/59	1.63e+08	0.80	y	1.14	32:59	1.033	1.028-1.038	114.947
PCB-12/13	4.25e+08	1.61	y	1.19	25:35	1.016	1.011-1.021	185.254	PCB-41/64/71/72	3.45e+08	0.79	y	1.21	33:34	1.051	1.046-1.056	228.809
PCB-15	2.31e+08	1.62	y	1.28	25:54	1.029	1.023-1.033	93.8788	PCB-68	1.02e+08	0.78	y	1.35	33:49	1.059	1.054-1.064	60.4873
PCB-19	5.63e+07	1.07	y	1.04	24:11	1.001	0.996-1.006	54.1178	PCB-40	5.49e+07	0.78	y	0.70	34:02	1.066	1.061-1.071	62.6996
PCB-30	9.43e+07	1.07	y	1.71	25:04	1.038	1.032-1.042	55.2381	PCB-57	9.09e+07	0.78	y	0.98	34:24	0.970	0.965-0.975	57.5326
PCB-18	6.61e+07	1.07	y	0.78	25:49	0.954	0.949-0.959	55.3900	PCB-67	9.71e+07	0.78	y	1.11	34:42	0.979	0.974-0.984	54.3894
PCB-17	7.63e+07	1.07	y	0.92	25:59	0.960	0.956-0.966	54.2204	PCB-58	8.76e+07	0.79	y	0.93	34:49	0.982	0.977-0.987	58.5756
PCB-24/27	1.98e+08	1.07	y	1.19	26:34	0.981	0.977-0.987	109.230	PCB-63	8.68e+07	0.80	y	0.95	34:58	0.986	0.982-0.992	56.4993
- PCB-16/32	1.57e+08	1.06	y	0.94	27:05	1.000	0.995-1.005	109.551	PCB-74	1.10e+08	0.80	y	1.24	35:15	0.994	0.990-1.000	54.7527
- PCB-34	9.17e+07	1.10	y	1.14	27:52	0.960	0.955-0.965	50.9689	PCB-61/70	1.80e+08	0.79	y	0.95	35:26	1.000	0.995-1.005	116.751
PCB-23	9.84e+07	1.09	y	1.28	27:58	0.964	0.959-0.969	48.6255	PCB-76/66	1.84e+08	0.79	y	1.04	35:39	1.006	1.001-1.011	109.080
PCB-29	8.58e+07	1.10	y	1.08	28:12	0.972	0.967-0.977	50.1735	PCB-80	1.16e+08	0.79	y	1.19	35:53	1.001	0.996-1.006	57.8209
PCB-26	1.01e+08	1.08	y	1.21	28:25	0.979	0.974-0.984	53.1404	PCB-55	9.91e+07	0.79	y	1.04	36:13	1.010	1.005-1.015	56.7223
PCB-25	1.07e+08	1.10	y	1.26	28:35	0.985	0.979-0.989	53.7544	PCB-56/60	1.95e+08	0.79	y	1.01	36:43	1.024	1.019-1.029	114.878
PCB-31	9.84e+07	1.09	y	1.28	28:56	0.997	0.992-1.002	48.3859	PCB-79	1.02e+08	0.79	y	1.08	37:46	1.053	1.048-1.058	56.5494
PCB-28	1.54e+08	1.11	y	1.71	29:02	1.000	0.995-1.005	56.8250	PCB-78	1.06e+08	0.79	y	1.27	38:28	0.987	0.982-0.992	53.3881
PCB-20/21/33	2.86e+08	1.09	y	1.08	29:39	1.022	1.017-1.027	167.034	PCB-81	1.09e+08	0.79	y	1.33	39:00	1.000	0.995-1.005	52.7010
PCB-22	1.09e+08	1.09	y	1.21	30:06	1.037	1.032-1.042	56.8275	PCB-77	9.81e+07	0.80	y	1.10	39:35	1.000	0.995-1.005	54.2680
PCB-36	9.70e+07	1.08	y	1.14	30:42	0.933	0.928-0.938	48.5182	PCB-104	5.53e+07	1.63	y	1.18	32:36	1.000	0.996-1.006	53.8049
PCB-39	9.57e+07	1.08	y	1.12	31:11	0.948	0.943-0.953	49.0349	PCB-96	5.51e+07	1.62	y	1.14	33:52	1.039	1.034-1.044	55.7690
PCB-38	9.34e+07	1.08	y	1.20	31:57	0.971	0.966-0.976	44.5103	PCB-103	4.61e+07	1.63	y	0.96	34:24	1.055	1.050-1.060	55.4839
PCB-35	1.14e+08	1.09	y	1.23	32:28	0.987	0.982-0.992	52.7264	PCB-100	4.53e+07	1.60	y	0.94	34:46	1.067	1.061-1.071	55.6292
PCB-37	1.08e+08	1.09	y	1.23	32:54	1.000	0.995-1.005	50.3601	PCB-94	3.69e+07	1.64	y	1.06	35:14	0.985	0.980-0.990	52.8905
PCB-54	8.12e+07	0.79	y	1.10	27:56	1.001	0.996-1.006	54.3767	PCB-95/98/102	1.29e+08	1.62	y	1.22	35:44	0.999	0.995-1.005	159.207
PCB-50	6.90e+07	0.79	y	0.88	29:06	1.043	1.037-1.047	57.8914	PCB-93	3.49e+07	1.59	y	0.84	35:52	1.003	0.997-1.007	62.7861
PCB-53	6.82e+07	0.78	y	1.06	29:44	0.946	0.942-0.952	54.3994	PCB-88/91	7.67e+07	1.59	y	1.12	36:08	1.011	1.005-1.015	104.078
PCB-51	6.35e+07	0.78	y	0.99	30:05	0.957	0.952-0.962	54.3642	PCB-121	6.47e+07	1.62	y	1.62	36:14	1.013	1.009-1.019	60.7179
PCB-45	5.62e+07	0.78	y	0.86	30:31	0.971	0.966-0.976	55.2239	PCB-84/92	8.13e+07	1.60	y	1.05	37:04	0.990	0.985-0.995	108.531
PCB-46	5.49e+07	0.78	y	0.85	31:00	0.987	0.981-0.991	55.0580	PCB-89	4.41e+07	1.62	y	1.13	37:16	0.996	0.991-1.001	54.5150

RL: MONO, TRI - DECA: _____

RL: DI : _____

Integrations
by
Analyst: DMS

Date: 2/20/15

Reviewed
by
Analyst: g2
Date: 2/24/15

Client ID: OPR
Lab ID: B5B0059-BS1

Filename: 150219E2 S:2 Acq:19-FEB-15 15:11:34 ConCal: ST150219E2-1
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	8.53e+07	1.63	y	1.10	37:26	1.000	0.995-1.005	108.207
PCB-113	5.33e+07	1.59	y	1.41	37:41	1.007	1.002-1.012	52.7581
PCB-99	5.49e+07	1.61	y	1.34	37:46	1.009	1.004-1.014	57.4178
PCB-119	5.48e+07	1.62	y	1.53	38:14	0.987	0.982-0.992	54.2196
PCB-108/112	9.15e+07	1.61	y	1.28	38:24	0.991	0.986-0.996	108.432
PCB-83	9.15e+07	1.61	y	1.52	38:24	0.991	0.990-1.000	91.4355
PCB-97	4.19e+07	1.63	y	1.18	38:45	1.000	0.995-1.005	53.7264
PCB-86	3.32e+07	1.51	y	0.84	38:53	1.004	0.999-1.009	59.7338
B-87/117/125	1.65e+08	1.62	y	1.55	39:01	1.007	1.002-1.012	161.146
PCB-111/115	1.13e+08	1.59	y	1.63	39:10	1.011	1.006-1.016	104.839
PCB-85/116	9.84e+07	1.61	y	1.30	39:18	1.014	1.010-1.020	114.549
PCB-120	6.08e+07	1.62	y	1.68	39:33	1.021	1.016-1.026	54.9610
PCB-110	5.60e+07	1.61	y	1.56	39:41	1.024	1.020-1.030	54.6172
PCB-82	3.65e+07	1.63	y	0.76	40:20	0.977	0.971-0.981	55.8669
PCB-124	6.90e+07	1.60	y	1.47	41:00	0.993	0.988-0.998	54.4646
PCB-107/109	1.23e+08	1.64	y	1.32	41:09	0.996	0.991-1.001	107.617
PCB-123	5.43e+07	1.54	y	1.17	41:19	1.001	0.996-1.006	53.8957
- PCB-106/118	1.15e+08	1.61	y	1.17	41:31	1.001	0.996-1.006	107.952
- PCB-114	8.32e+07	1.55	y	1.30	42:09	1.000	0.995-1.005	47.6793
PCB-122	7.81e+07	1.57	y	1.12	42:17	1.003	0.999-1.009	51.7870
PCB-105	8.68e+07	1.58	y	1.30	43:01	1.000	0.995-1.005	48.7754
PCB-127	9.62e+07	1.60	y	1.33	43:21	1.000	0.996-1.006	48.2007
PCB-126	7.99e+07	1.60	y	1.18	45:15	1.000	0.995-1.005	50.5080
PCB-155	3.48e+07	1.30	y	1.11	36:60	1.001	0.966-1.006	52.9374
PCB-150	3.26e+07	1.29	y	1.00	38:16	1.035	1.030-1.040	55.2959
PCB-152	3.54e+07	1.27	y	1.12	38:44	1.048	1.043-1.053	53.7770
PCB-145	3.90e+07	1.29	y	1.20	39:11	1.060	1.055-1.065	54.9389
PCB-136	4.02e+07	1.30	y	1.18	39:31	1.069	1.064-1.074	57.7169
PCB-148	2.34e+07	1.28	y	0.74	39:37	1.071	1.066-1.076	53.3042
PCB-154	2.88e+07	1.26	y	0.86	40:06	1.085	1.080-1.090	56.9488
PCB-151	2.48e+07	1.27	y	0.75	40:45	1.102	1.097-1.107	56.2302
PCB-135	2.65e+07	1.27	y	0.79	40:57	1.108	1.103-1.113	56.6466
PCB-144	2.72e+07	1.38	y	0.76	41:04	1.111	1.105-1.117	60.5586
PCB-147	2.84e+07	1.21	y	0.82	41:12	1.114	1.109-1.121	58.6895
PCB-139/149	5.23e+07	1.28	y	0.76	41:28	1.121	1.116-1.128	116.174
- PCB-140	2.52e+07	1.29	y	0.72	41:39	1.126	1.121-1.133	59.1621
- PCB-134/143	1.13e+08	1.25	y	0.92	42:06	0.976	0.970-0.980	105.618

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	1.02e+08	1.25	y	0.82	42:23	0.982	0.977-0.987	107.447
PCB-131	5.59e+07	1.25	y	0.91	42:32	0.986	0.981-0.991	52.9408
PCB-146/165	1.50e+08	1.26	y	1.25	42:45	0.991	0.986-0.996	103.734
PCB-132/161	1.34e+08	1.26	y	1.10	43:00	0.996	0.992-1.002	104.505
PCB-153	7.51e+07	1.27	y	1.25	43:10	1.000	0.995-1.005	51.6893
PCB-168	8.88e+07	1.26	y	1.45	43:23	1.005	1.001-1.011	52.6649
PCB-141	6.04e+07	1.25	y	1.09	43:54	1.000	0.995-1.005	51.7887
PCB-137	6.52e+07	1.24	y	1.06	44:17	1.009	1.004-1.014	57.1091
PCB-130	5.18e+07	1.24	y	0.96	44:24	1.011	1.006-1.016	49.9555
PCB-138/163/164	2.23e+08	1.25	y	1.29	44:46	1.000	0.996-1.006	156.191
PCB-158/160	1.59e+08	1.25	y	1.34	45:01	1.006	1.001-1.011	107.346
PCB-129	5.05e+07	1.28	y	0.85	45:15	1.011	1.007-1.017	53.5743
PCB-166	8.04e+07	1.26	y	1.19	45:43	0.993	0.988-0.998	54.7221
PCB-159	7.61e+07	1.27	y	1.11	46:03	1.001	0.996-1.006	55.2100
PCB-128/162	1.39e+08	1.25	y	1.05	46:20	1.007	1.002-1.012	107.040
PCB-167	8.74e+07	1.26	y	1.20	46:43	1.000	0.995-1.005	53.4705
PCB-156	8.11e+07	1.27	y	1.14	48:02	1.001	0.996-1.006	54.0666
PCB-157	8.39e+07	1.27	y	1.16	48:18	1.000	0.995-1.005	52.2365
PCB-169	7.69e+07	1.27	y	1.12	50:25	1.000	0.995-1.005	52.0524
PCB-188	6.89e+07	1.07	y	1.58	42:48	1.000	0.996-1.006	53.6075
PCB-184	7.11e+07	1.07	y	1.63	43:16	1.011	1.006-1.016	53.6173
PCB-179	5.63e+07	1.07	y	1.30	44:02	1.029	1.024-1.034	53.0978
PCB-176	6.31e+07	1.07	y	1.48	44:30	1.040	1.035-1.045	52.6379
PCB-186	6.28e+07	1.07	y	1.45	45:07	1.055	1.050-1.060	53.2160
PCB-178	4.52e+07	1.06	y	1.03	45:36	1.066	1.061-1.071	53.8289
PCB-175	4.40e+07	1.07	y	1.01	45:57	1.074	1.069-1.079	53.4843
PCB-182/187	1.09e+08	1.07	y	1.25	46:07	1.078	1.073-1.083	107.090
PCB-183	5.20e+07	1.07	y	1.21	46:27	1.086	1.081-1.091	52.9487
PCB-185	6.06e+07	1.07	y	1.80	47:06	0.955	0.951-0.961	54.1972
PCB-174	4.69e+07	1.06	y	1.38	47:28	0.963	0.958-0.968	54.8338
PCB-181	4.92e+07	1.09	y	1.38	47:35	0.965	0.960-0.970	57.3593
PCB-177	4.36e+07	1.08	y	1.26	47:45	0.969	0.963-0.973	55.8827
PCB-171	5.26e+07	1.06	y	1.58	48:03	0.975	0.970-0.980	53.5345
PCB-173	3.88e+07	1.06	y	1.11	48:28	0.983	0.978-0.988	56.2755
PCB-172	5.61e+07	1.06	y	1.63	48:55	0.992	0.987-0.997	55.2964
PCB-192	6.02e+07	1.07	y	1.74	49:06	0.996	0.991-1.001	55.7088
PCB-180	4.50e+07	1.07	y	1.34	49:19	1.000	0.995-1.005	53.8313

Integrations

by

Analyst: DMS

Date: 2/20/15

Client ID: OPR
Lab ID: B5B0059-BS1

Filename: 150219E2 S:2 Acq:19-FEB-15 15:11:34 ConCal: ST150219E2-1
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-193	5.50e+07	1.06	y	1.72	49:31	1.004	0.999-1.009	51.6523
PCB-191	5.49e+07	1.07	y	1.69	49:46	1.009	1.004-1.014	52.1417
PCB-170	4.18e+07	1.06	y	1.60	50:47	1.000	0.995-1.005	54.0405
PCB-190	5.77e+07	1.06	y	2.21	50:57	1.004	0.998-1.008	53.9118
PCB-189	5.32e+07	1.07	y	1.55	52:15	1.000	0.995-1.005	53.7067
PCB-202	3.64e+07	0.91	y	1.08	48:14	1.000	0.995-1.005	51.1680
PCB-201	4.04e+07	0.91	y	1.15	48:44	1.011	1.005-1.015	53.5113
PCB-204	3.80e+07	0.91	y	1.14	48:53	1.014	1.008-1.018	50.8403
PCB-197	3.68e+07	0.91	y	1.07	49:11	1.020	1.015-1.025	52.1842
PCB-200	3.60e+07	0.91	y	1.06	50:03	1.038	1.032-1.044	51.4981
PCB-198	2.73e+07	0.89	y	0.76	51:22	1.065	1.059-1.069	54.9946
PCB-199	2.74e+07	0.90	y	0.80	51:28	1.067	1.061-1.071	52.2680
- PCB-196/203	5.67e+07	0.90	y	0.80	51:44	1.073	1.066-1.076	107.644
- PCB-195	4.91e+07	0.92	y	1.23	52:54	0.984	0.979-0.989	47.8182
PCB-194	4.74e+07	0.90	y	1.21	53:46	1.000	0.995-1.005	46.7707
PCB-205	6.17e+07	0.90	y	1.54	54:03	1.006	1.001-1.011	47.8169
PCB-208	5.61e+07	1.33	y	0.93	53:02	1.000	0.995-1.005	51.2914
PCB-207	6.70e+07	1.33	y	1.08	53:21	1.006	1.001-1.011	52.6701
PCB-206	3.82e+07	1.29	y	1.02	55:27	1.000	0.995-1.005	51.0051
PCB-209	4.22e+07	1.18	y	1.17	56:47	1.000	0.995-1.005	52.9977

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	3.19e+08	3.00	y	16:08	1.27
Total Di-PCB	2.32e+09	1.59	y	20:05	1.21
Total Tri-PCB	6.48e+08	1.07	y	24:11	1.10
Total Tetra-PCB	1.64e+09	1.10	y	27:52	1.21
Total Penta-PCB	3.54e+09	0.79	y	27:56	1.09
Total Hepta-PCB	2.03e+09	1.63	y	32:36	1.18
Total Octa-PCB	4.43e+08	1.55	y	42:09	1.25
Total Hexa-PCB	4.19e+08	1.30	y	36:60	0.90
Total Nona-PCB	1.99e+09	1.25	y	42:06	1.11
Total Deca-PCB	1.30e+09	1.07	y	42:48	1.42
Total Octa-PCB	2.99e+08	0.91	y	48:14	0.96
Total Nona-PCB	1.63e+08	0.92	y	52:54	1.33
Total Deca-PCB	4.22e+07	1.33	y	53:02	1.01
Total PCB Conc:	11834.4917670				

Integrations
by _____
Analyst: Dms
Date: 2/20/15

Client ID: OPR
Lab ID: B5B0059-BS1

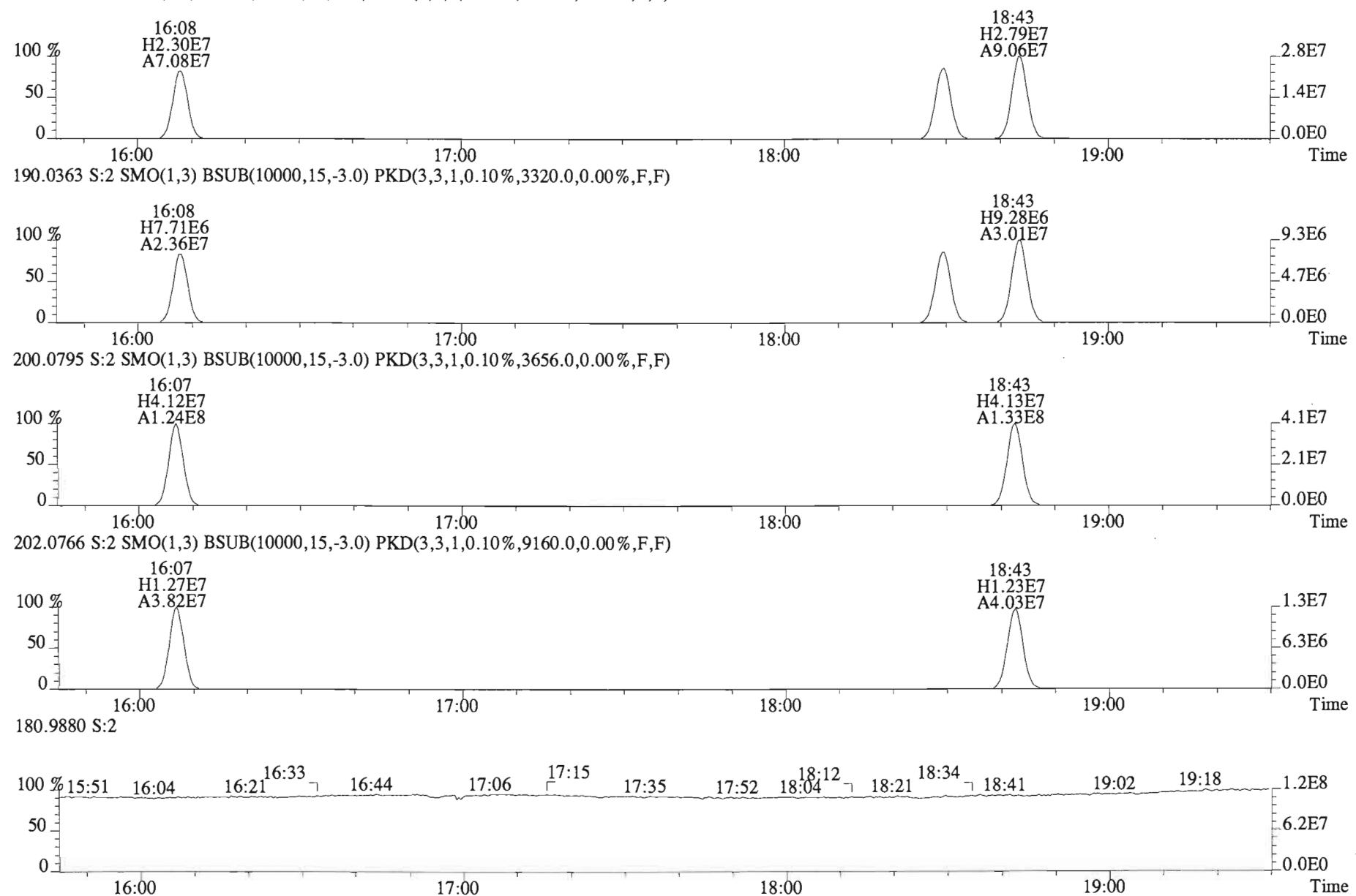
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GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:1.0000 EndCAL: NA

Page 2 of

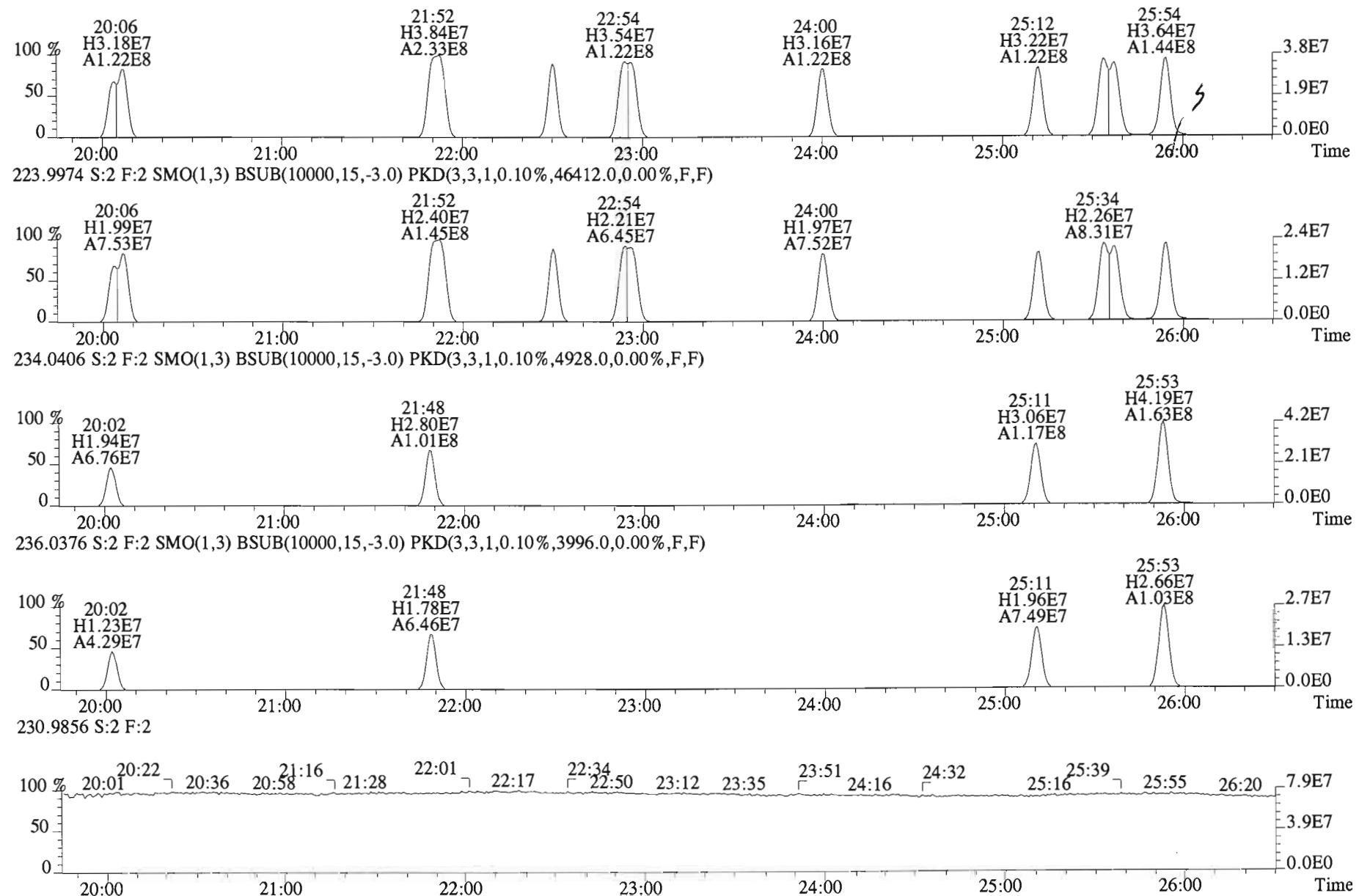
Analyst: Don S.

Date: 2/20/15

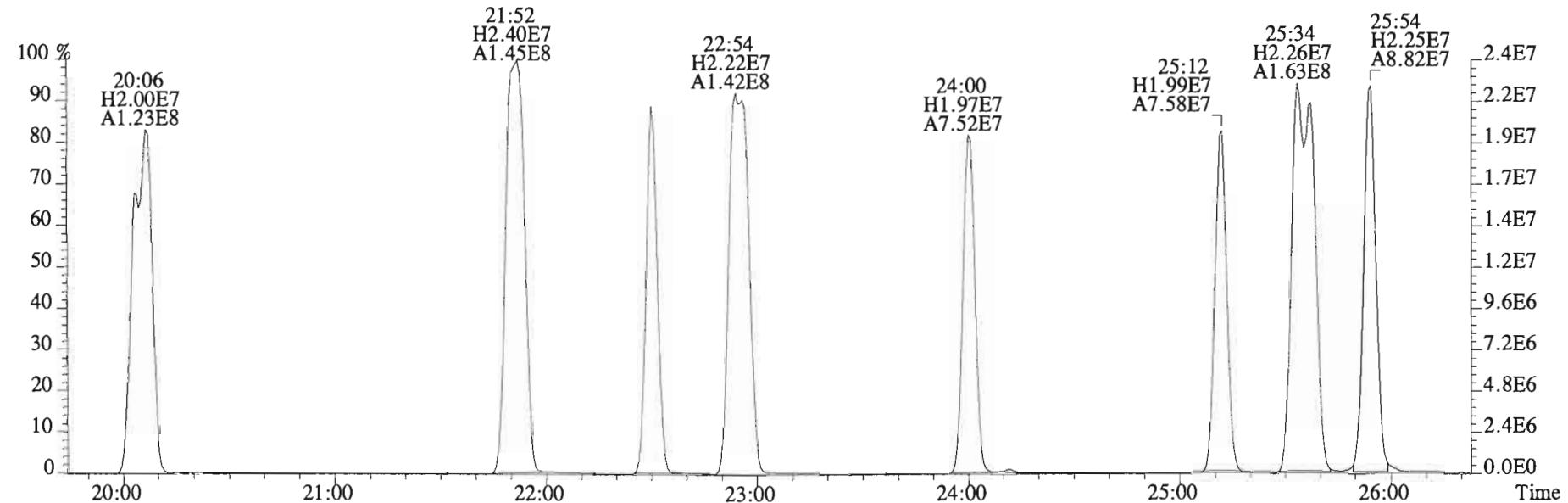
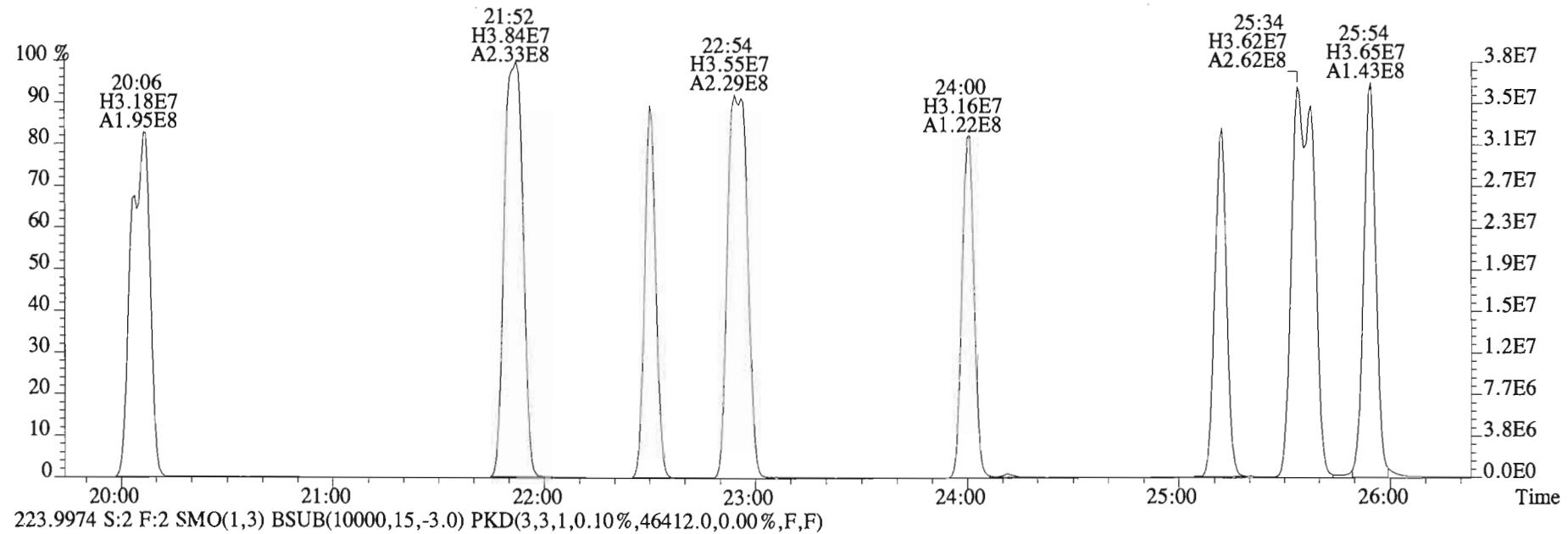
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
188.0393 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4164.0,0.00%,F,F)



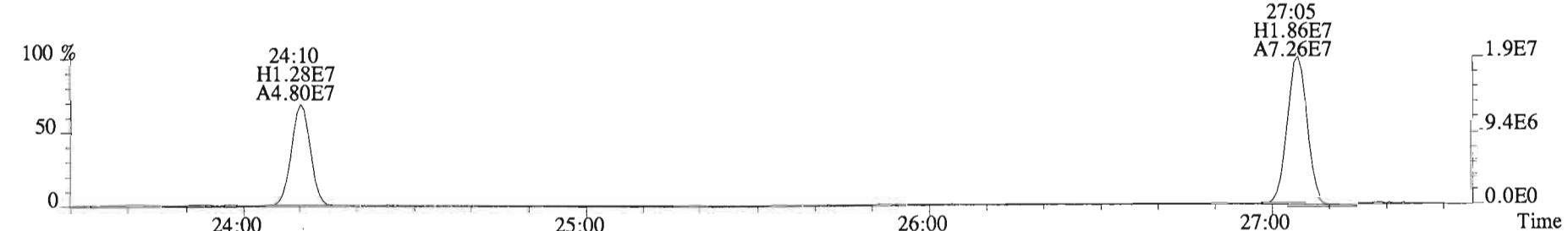
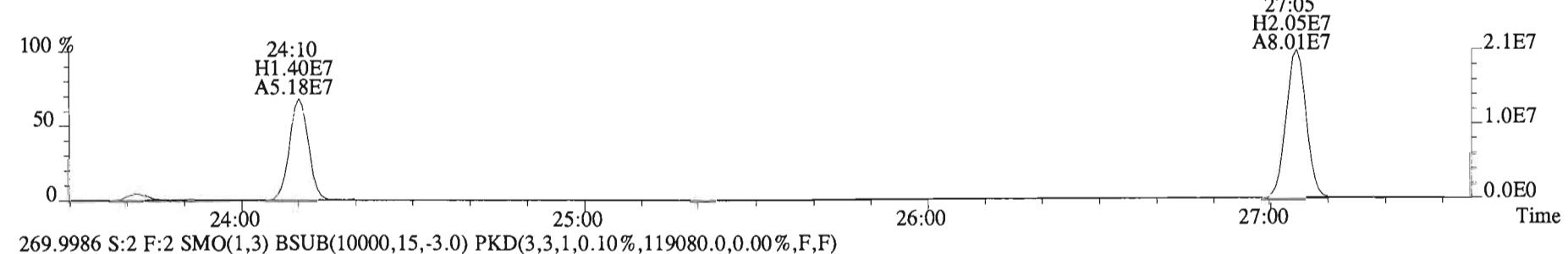
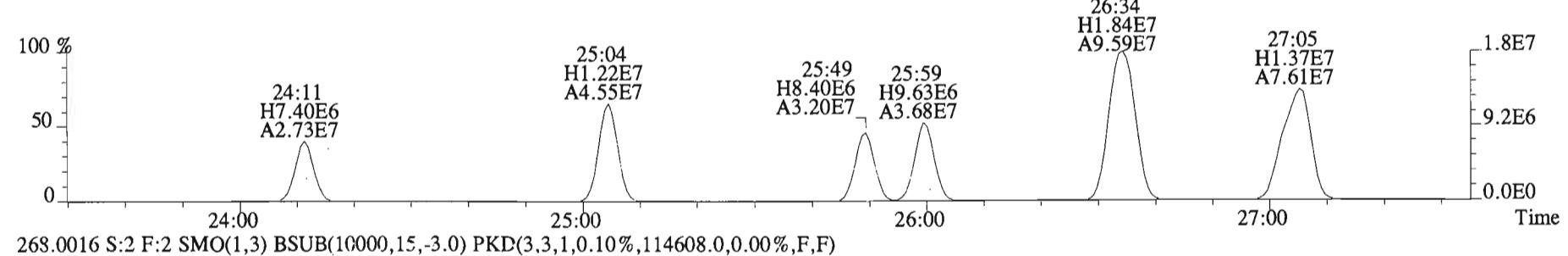
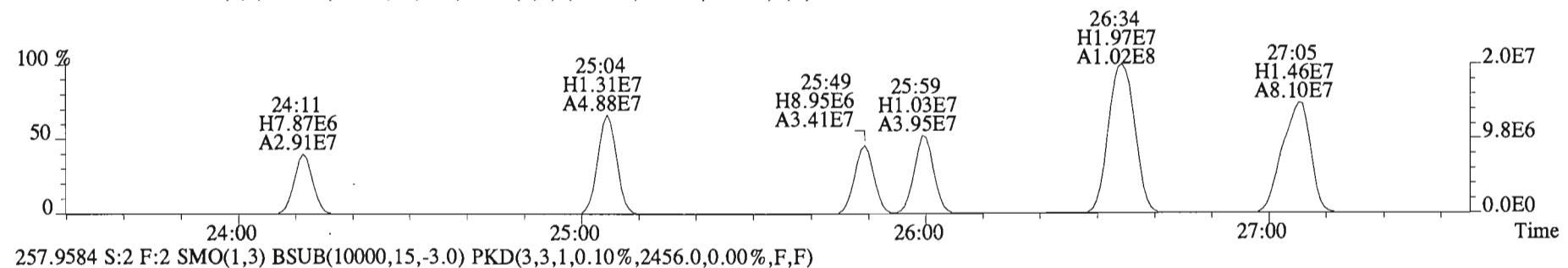
File:150219E2 #1-758 Acq:19-FEB-2015 15:11:34 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
 222.0003 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16348.0,0.00%,F,F)



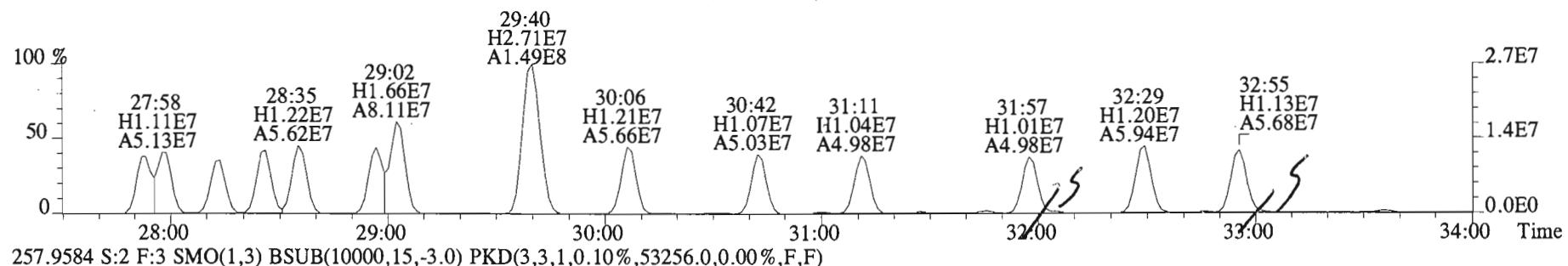
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
222.0003 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16348.0,0.00%,F,F)



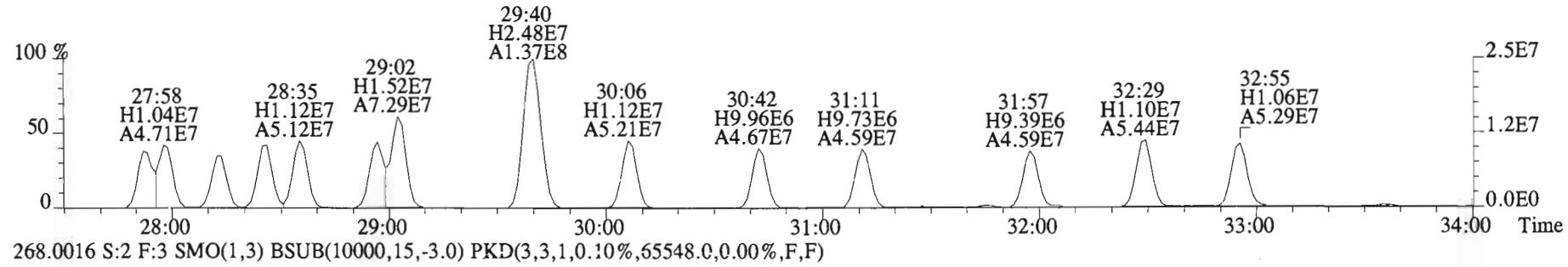
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
255.9613 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4072.0,0.00%,F,F)



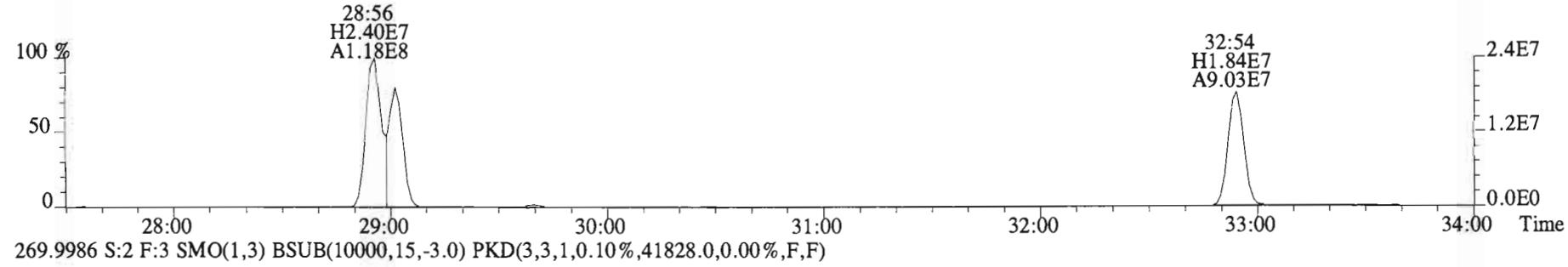
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 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
 255.9613 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,.42784,0,0.00%,F,F)



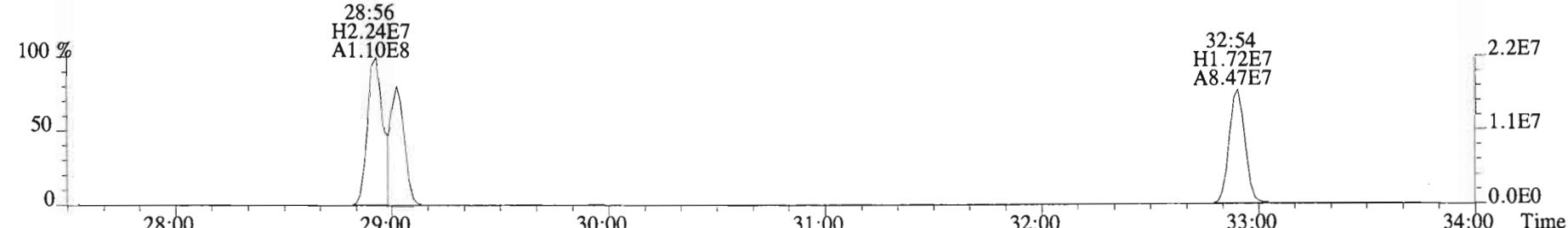
257.9584 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,.53256,0,0.00%,F,F)



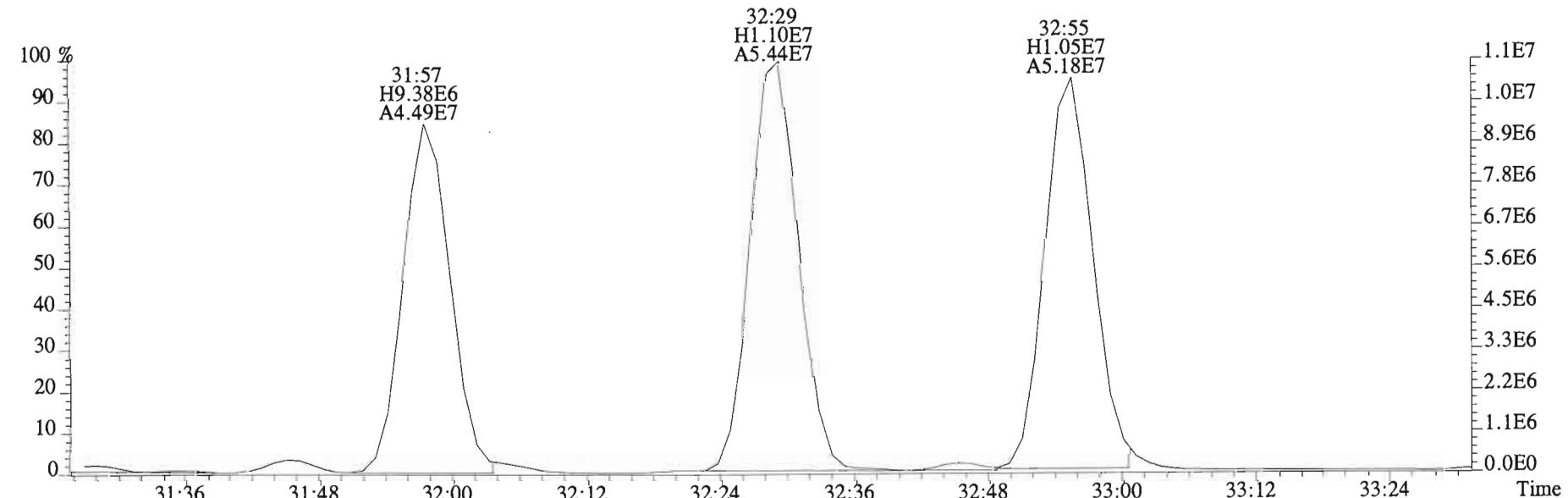
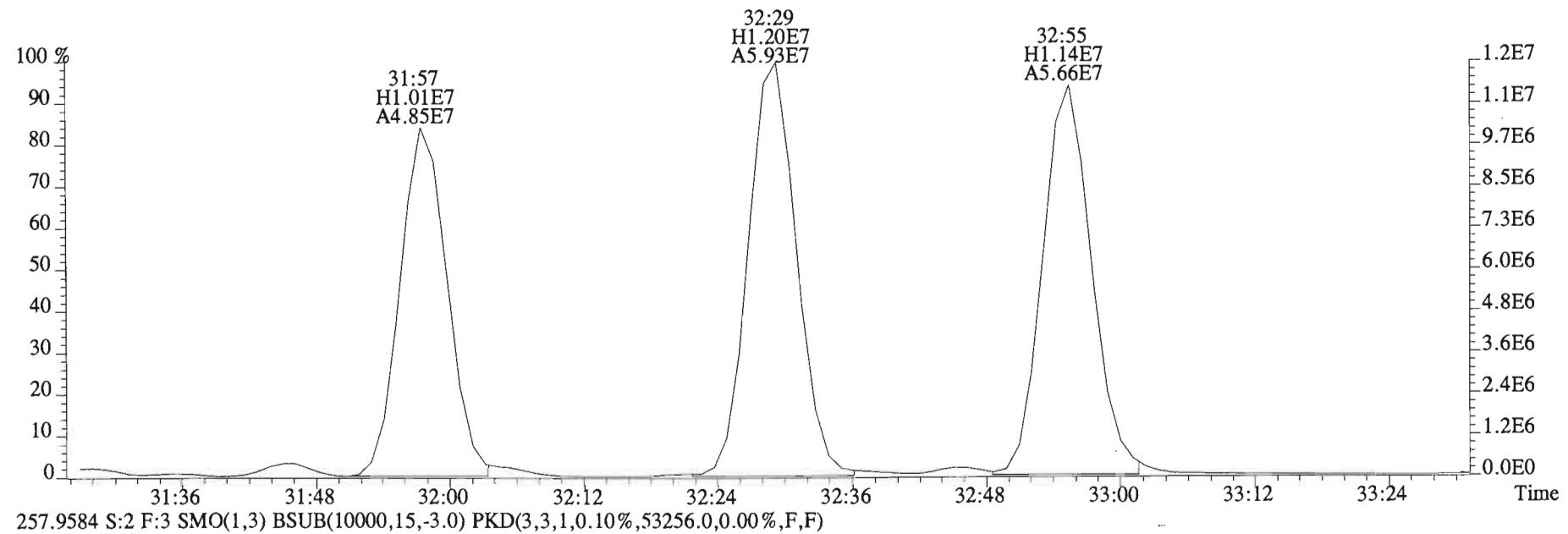
268.0016 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,.65548,0,0.00%,F,F)



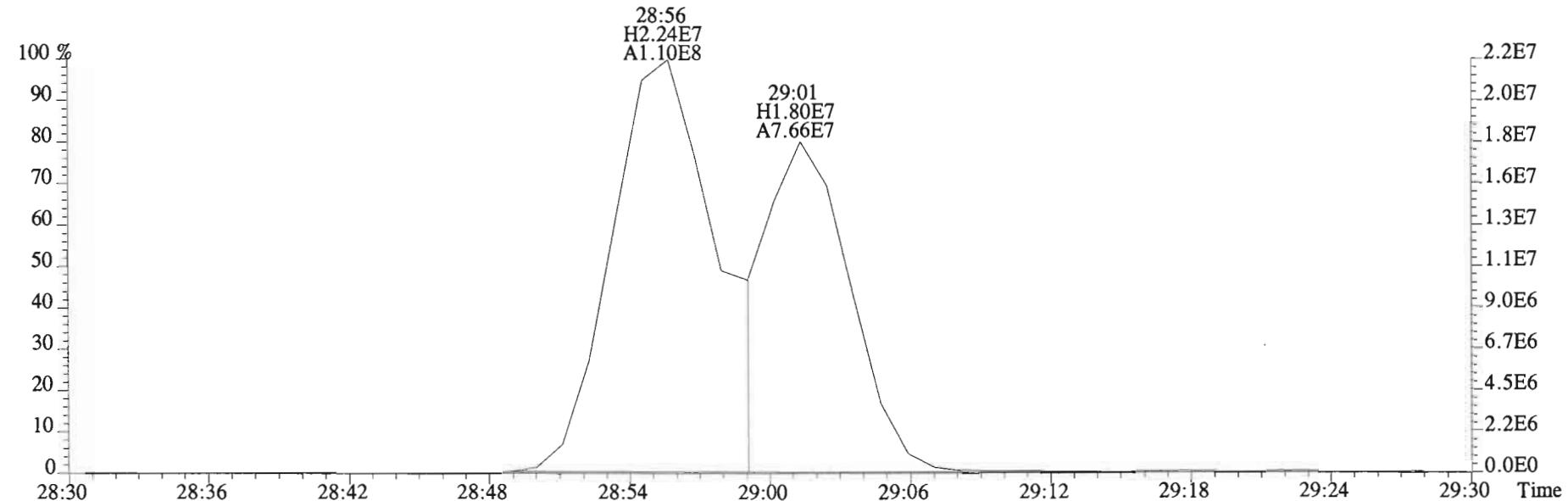
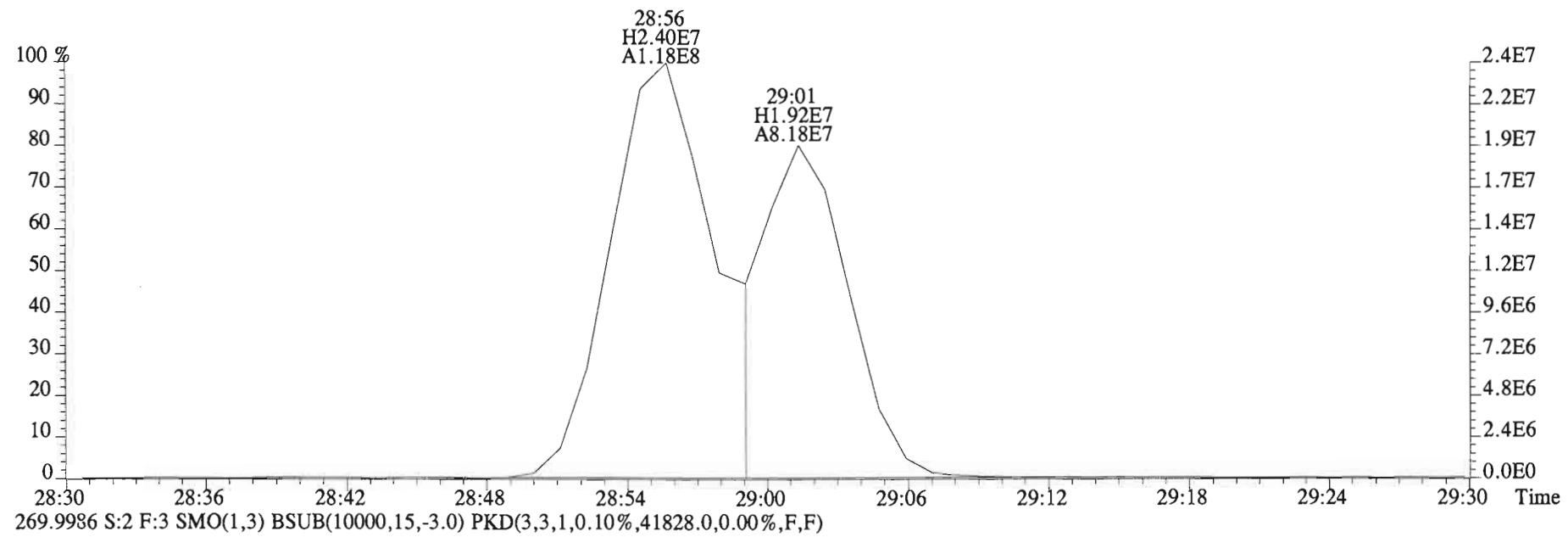
269.9986 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,.41828,0,0.00%,F,F)



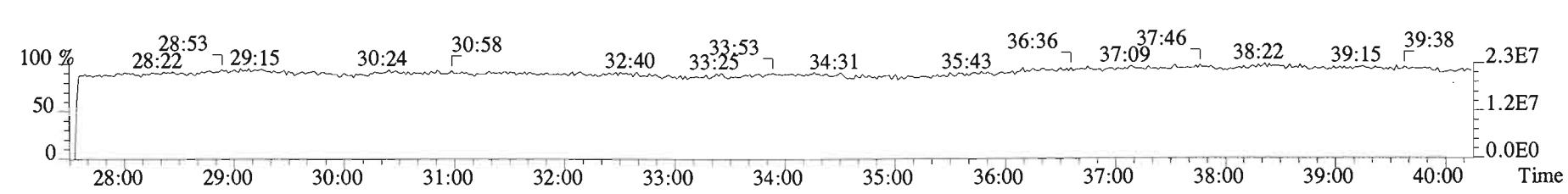
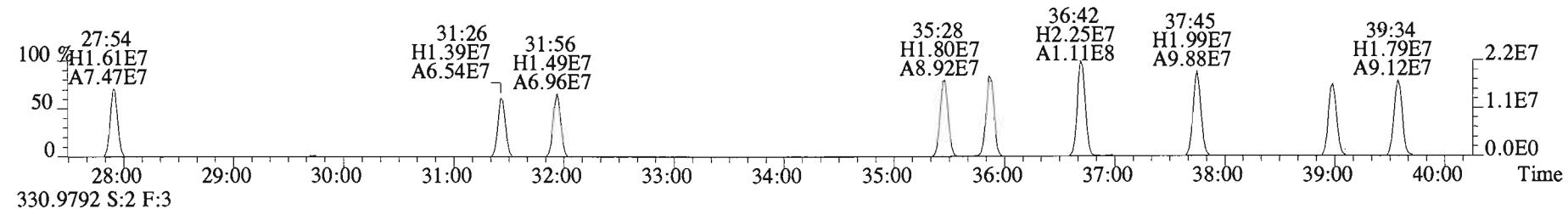
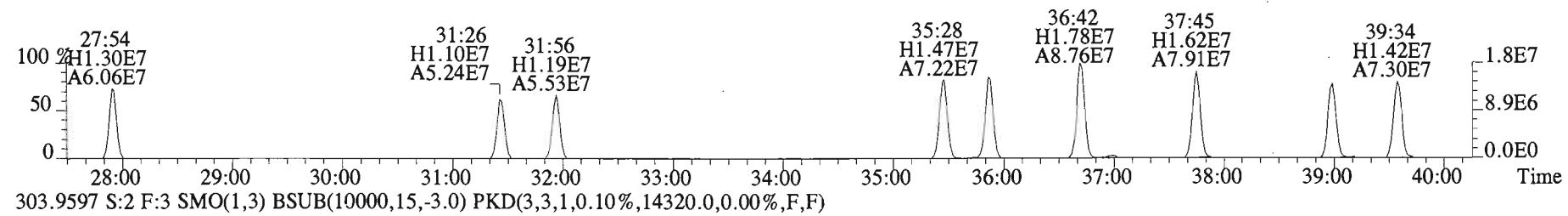
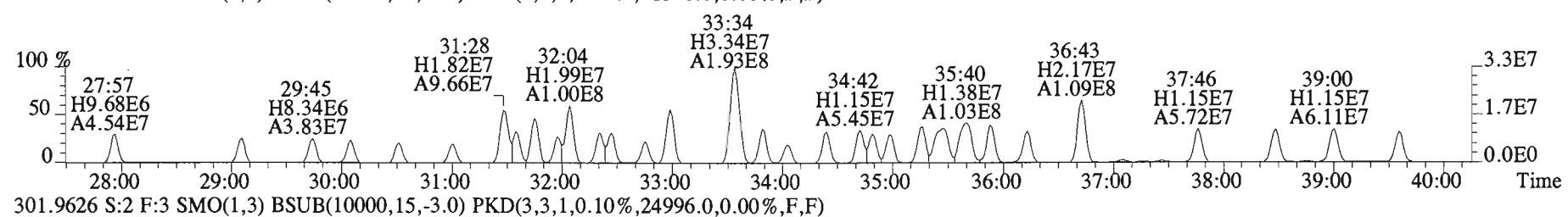
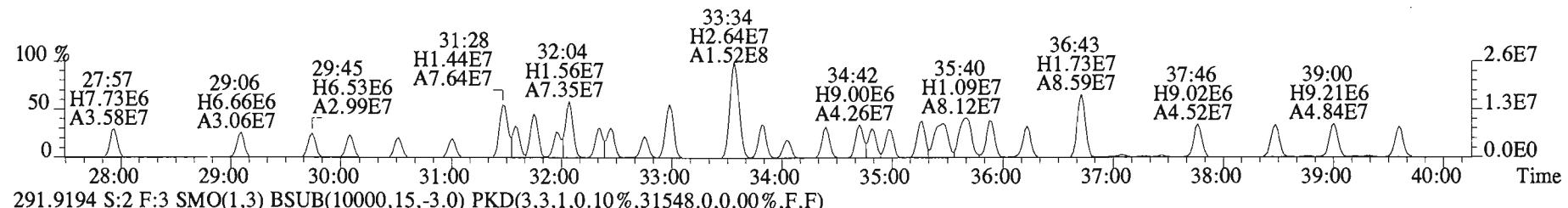
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
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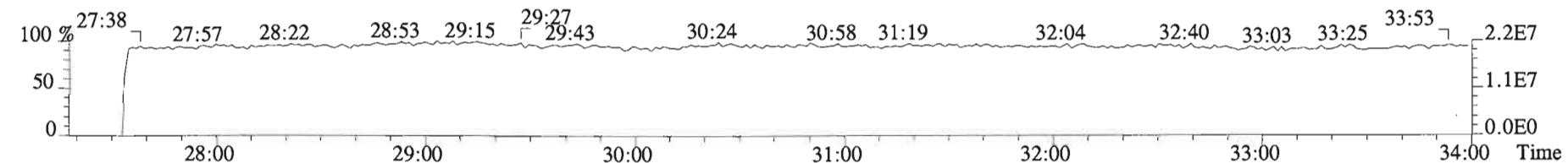
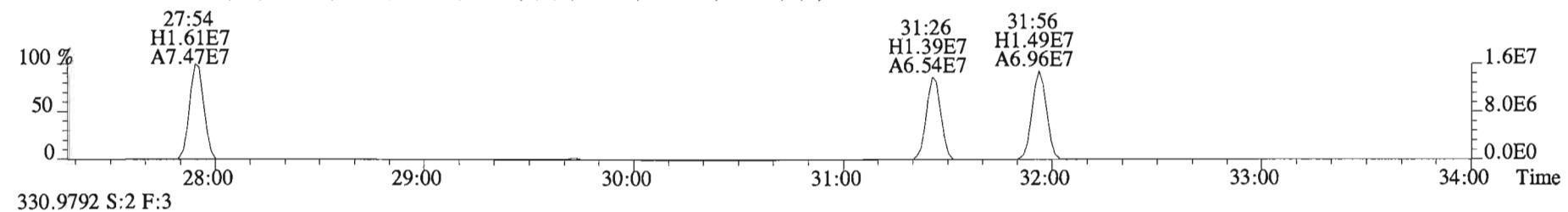
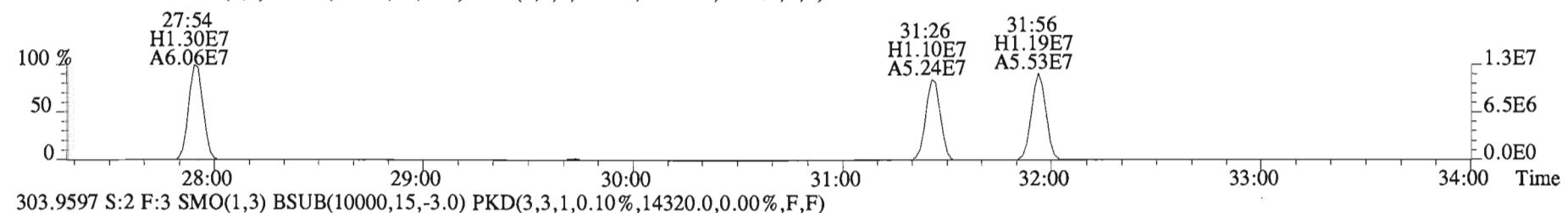
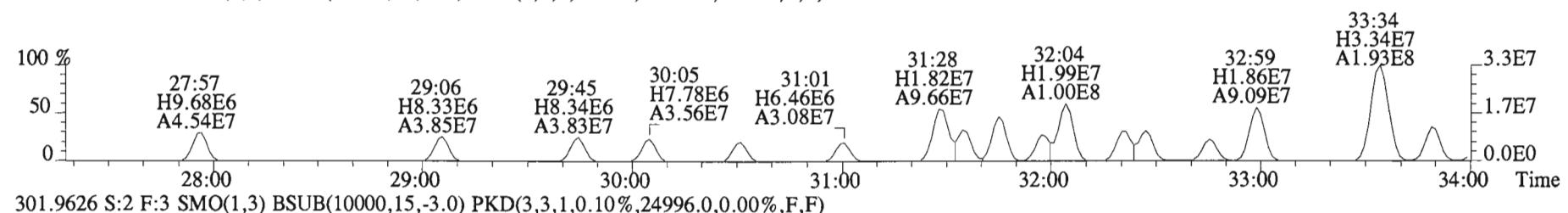
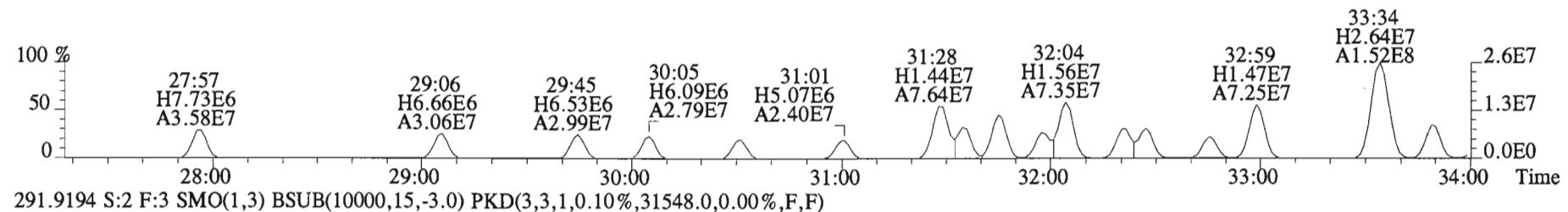
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
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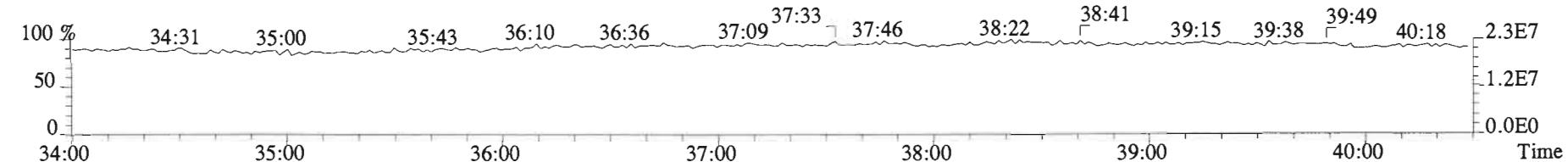
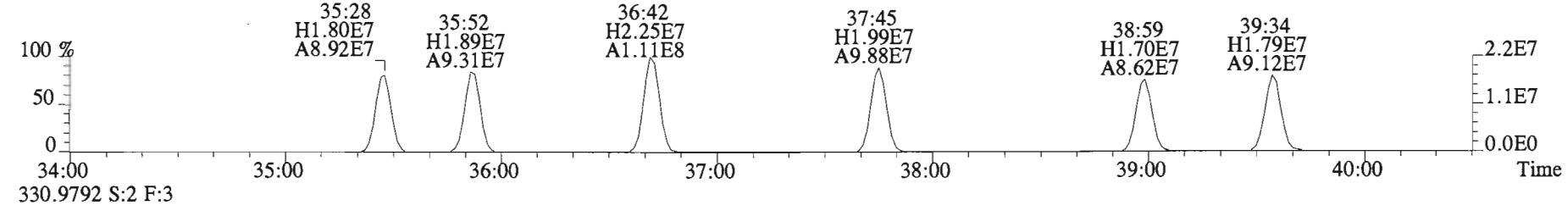
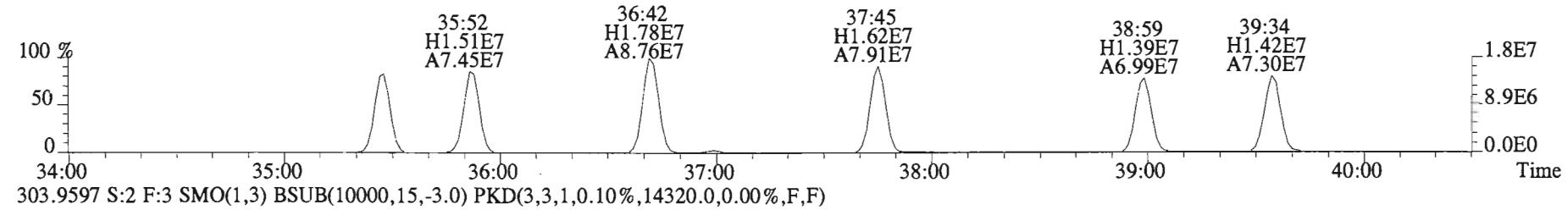
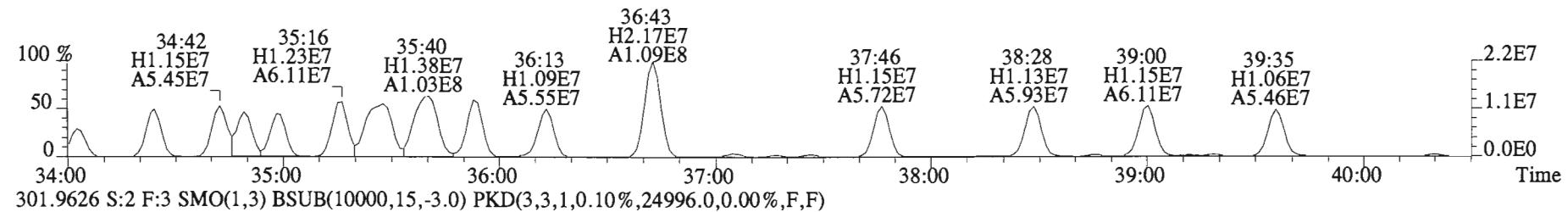
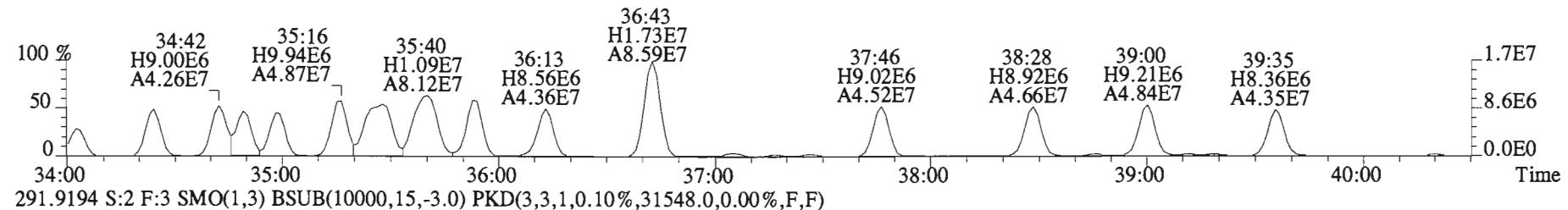
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 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
 289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,28624.0,0.00%,F,F)



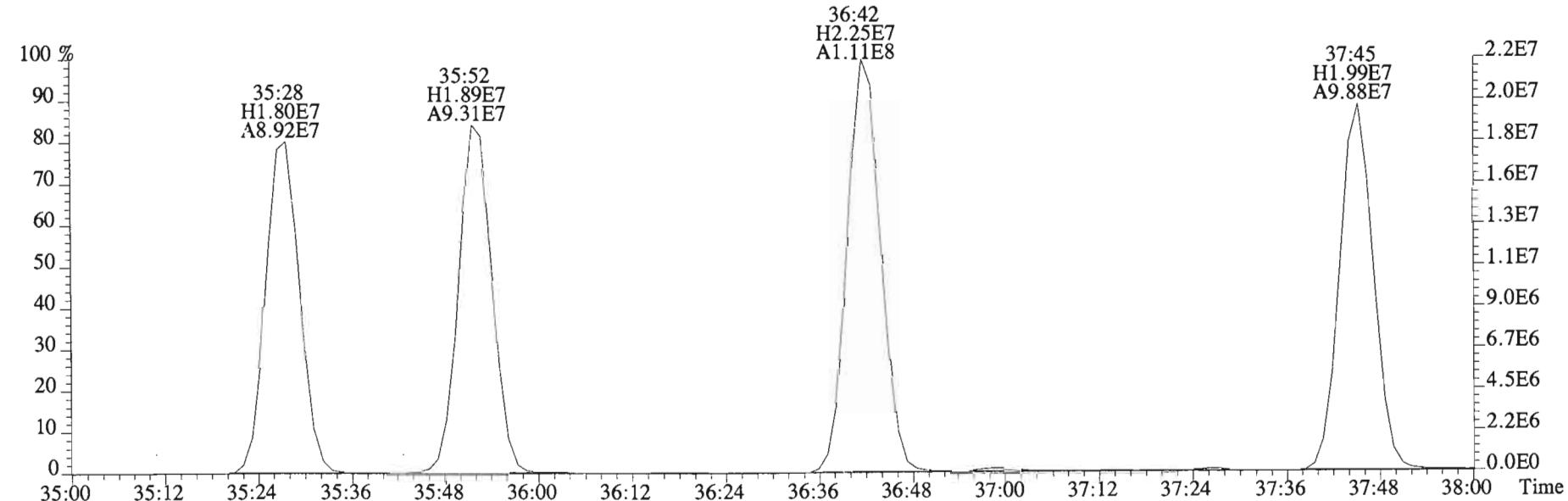
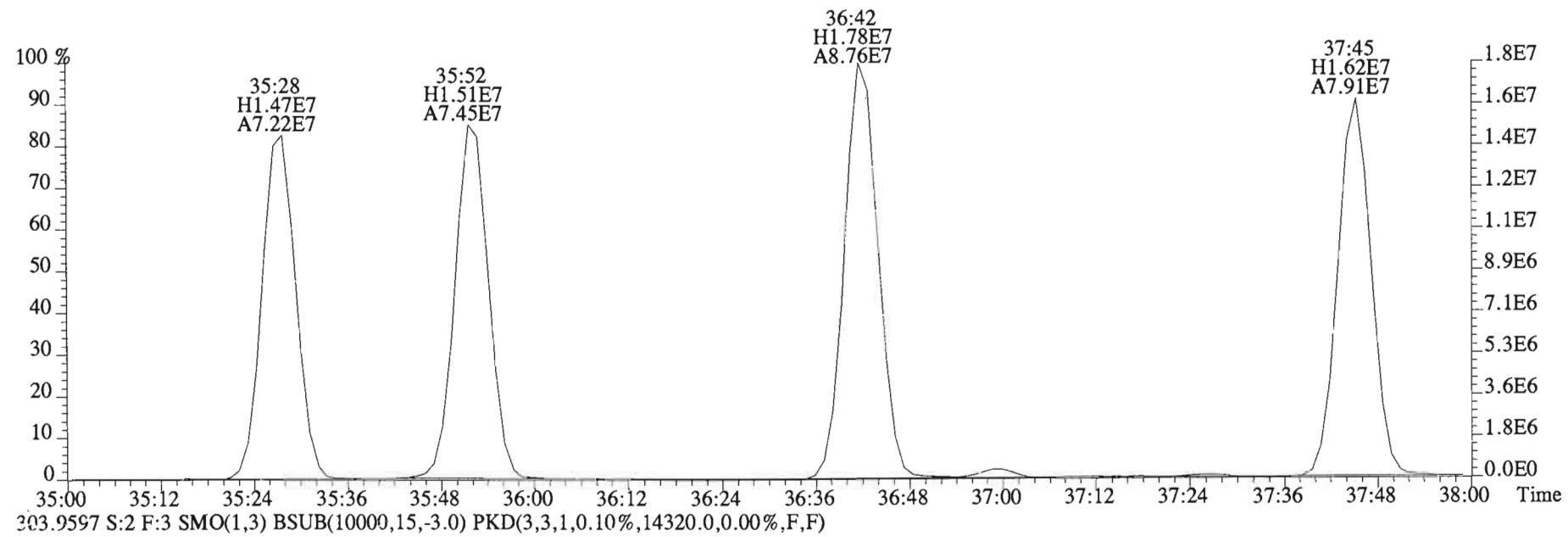
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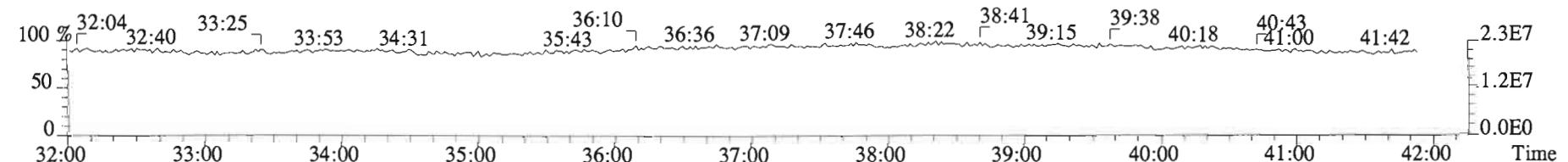
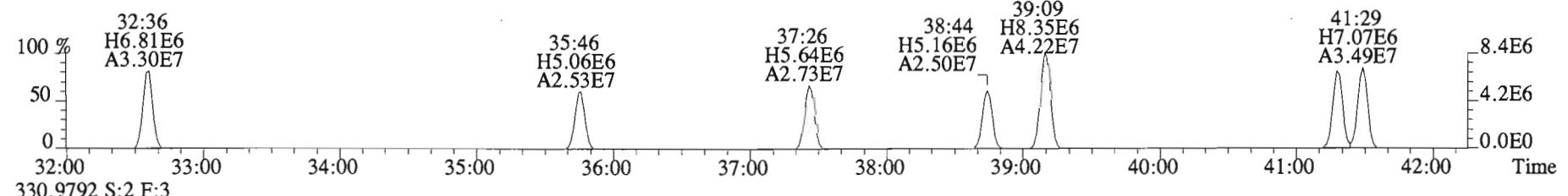
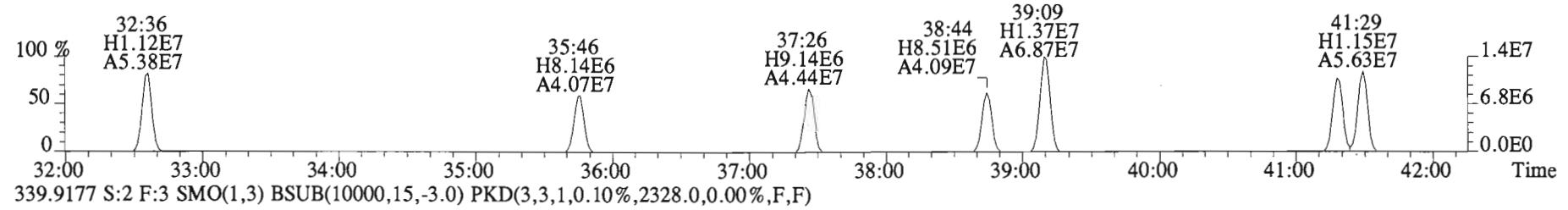
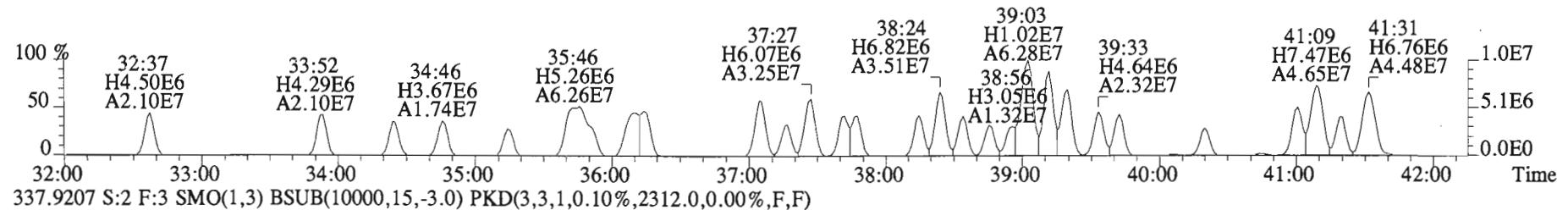
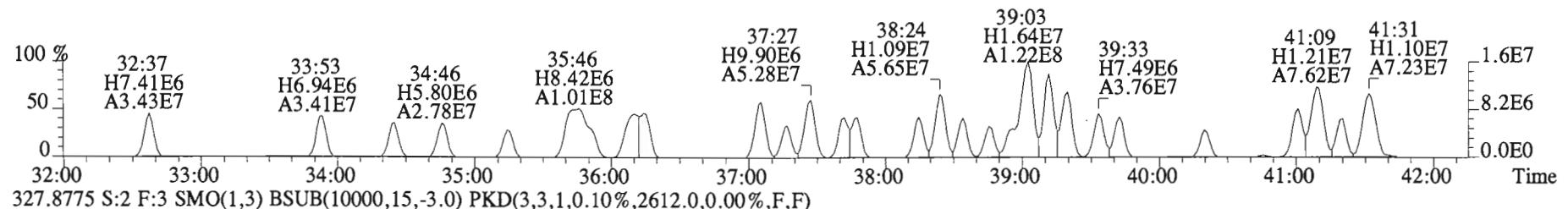
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 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
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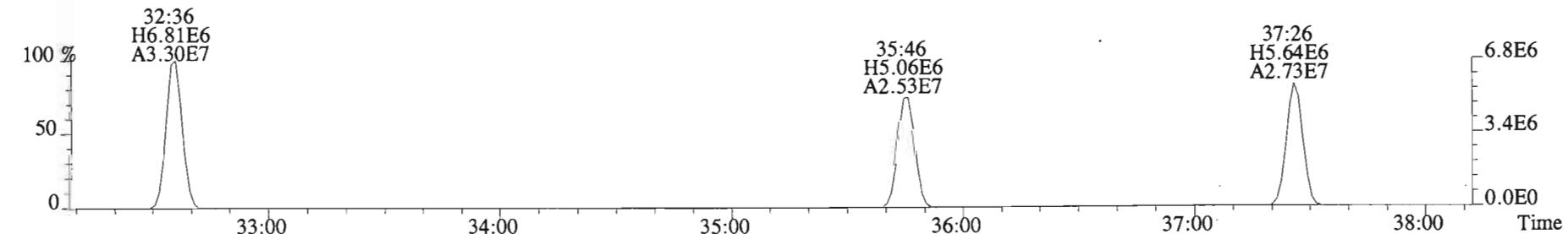
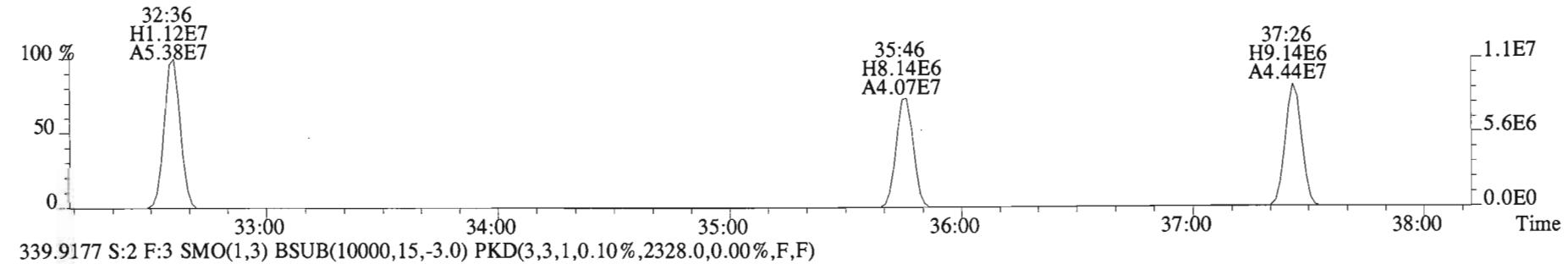
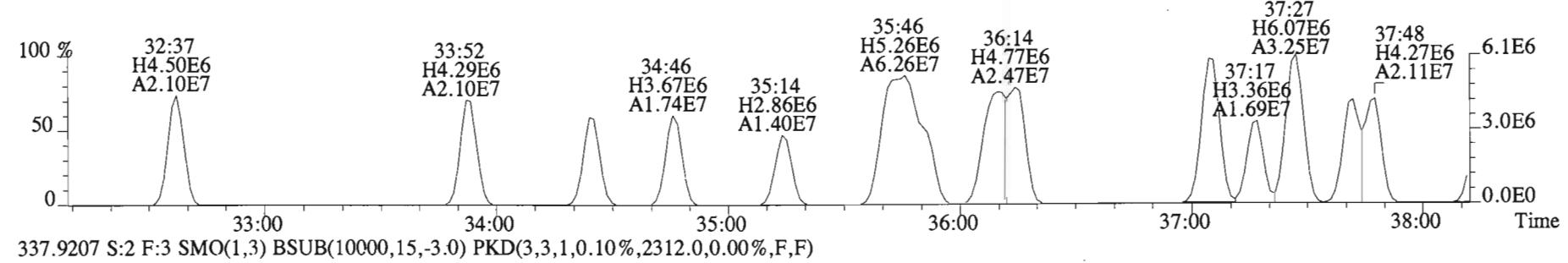
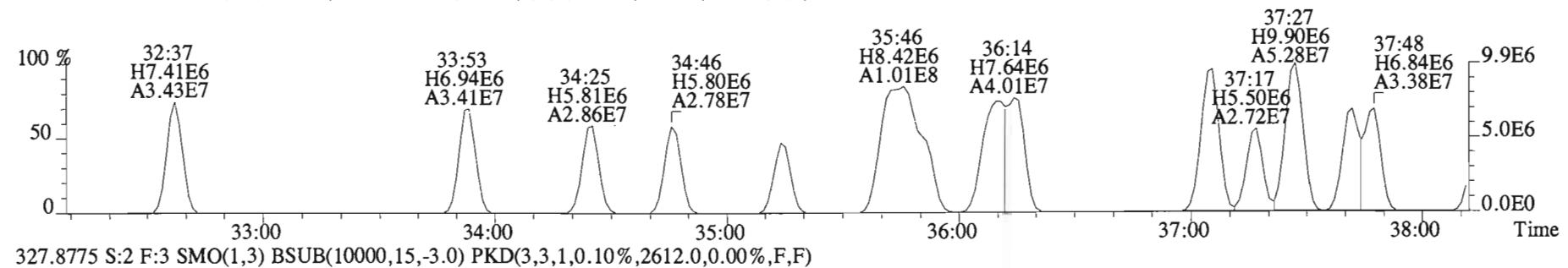
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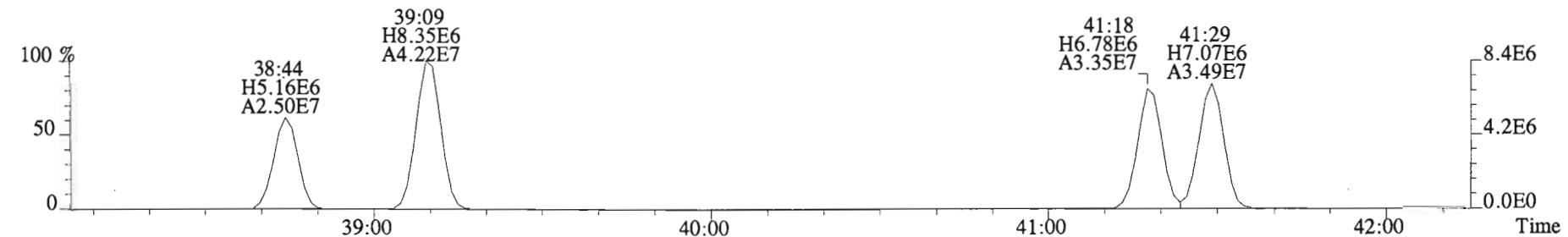
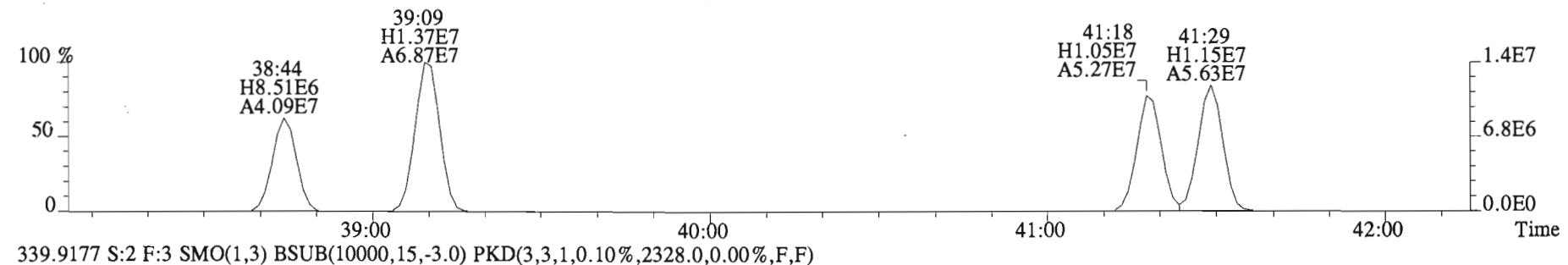
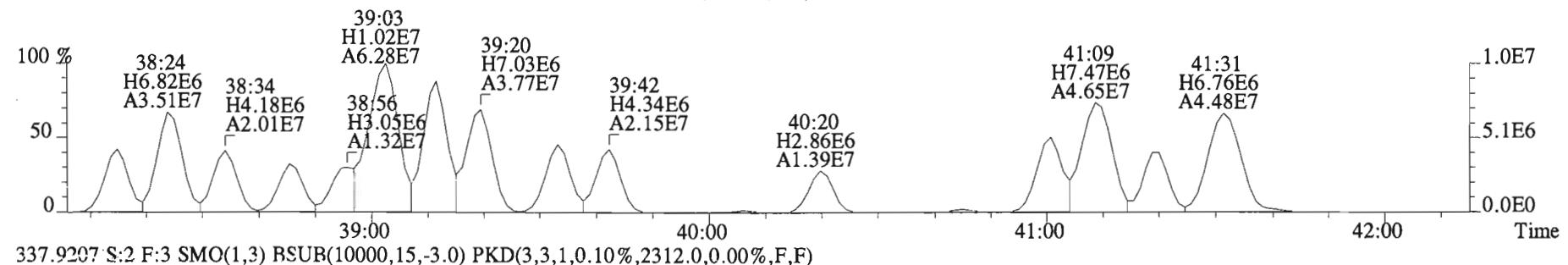
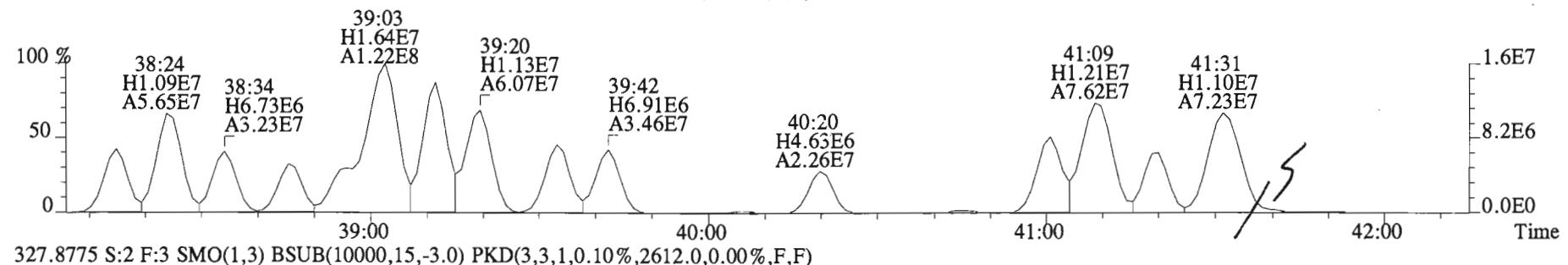
File:150219E2 #1-758 Acq:19-FEB-2015 15:11:34 GC EI + Voltage SIR Autospec-UltimaE
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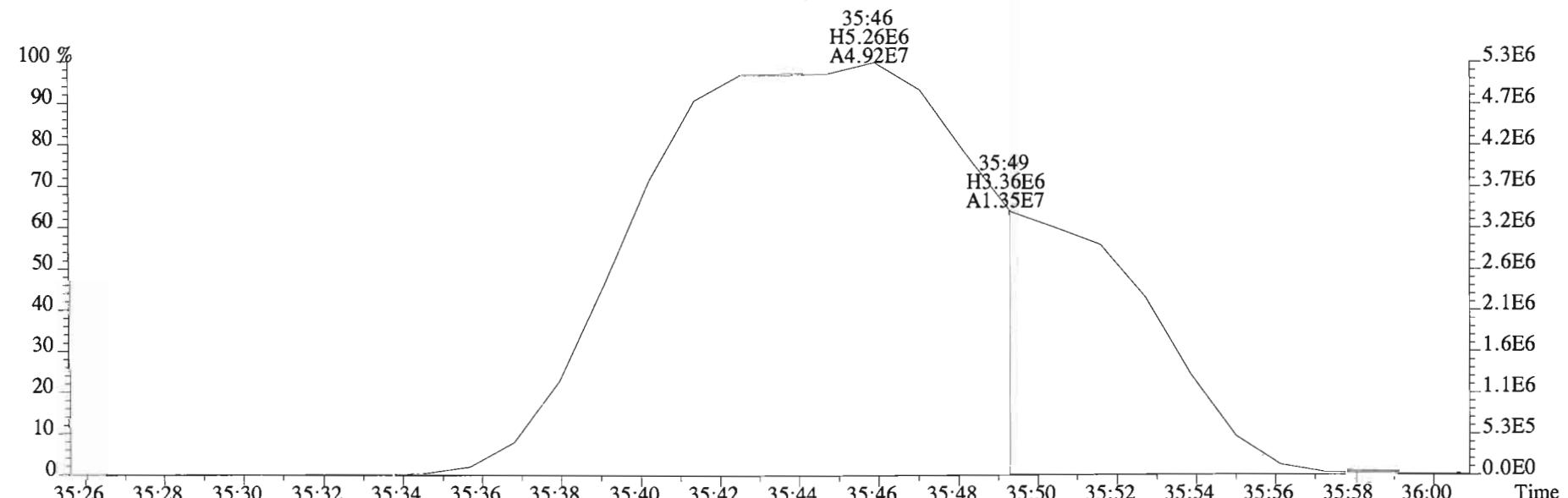
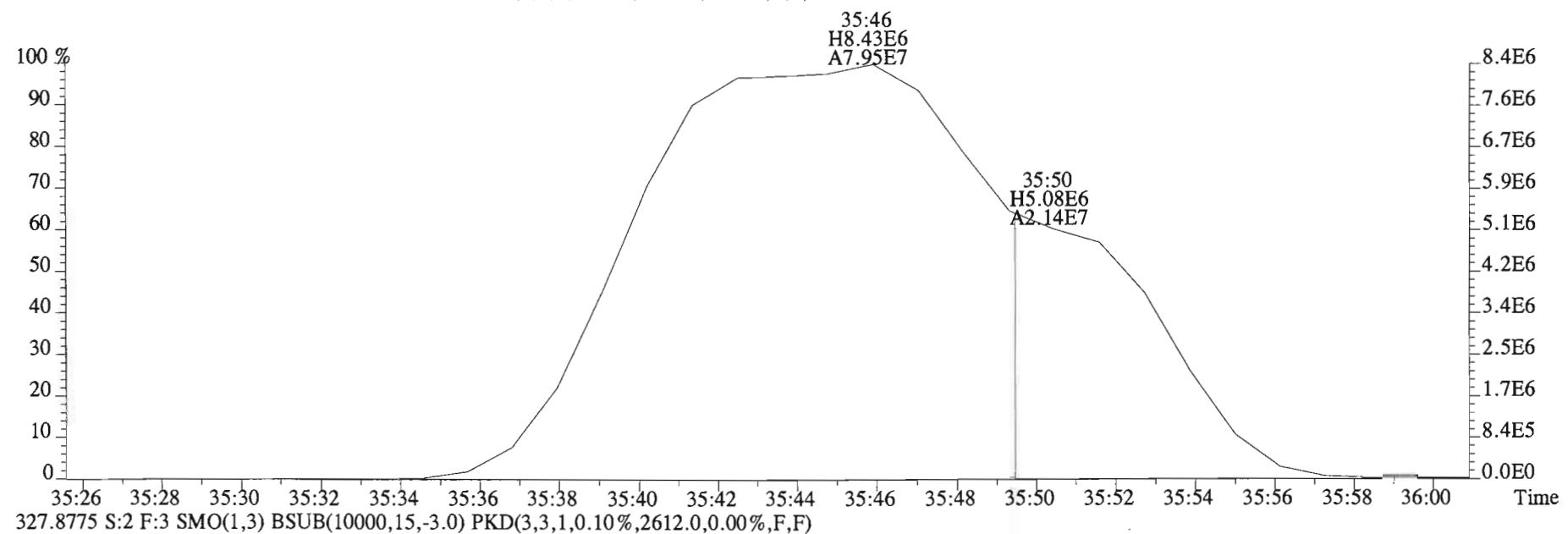
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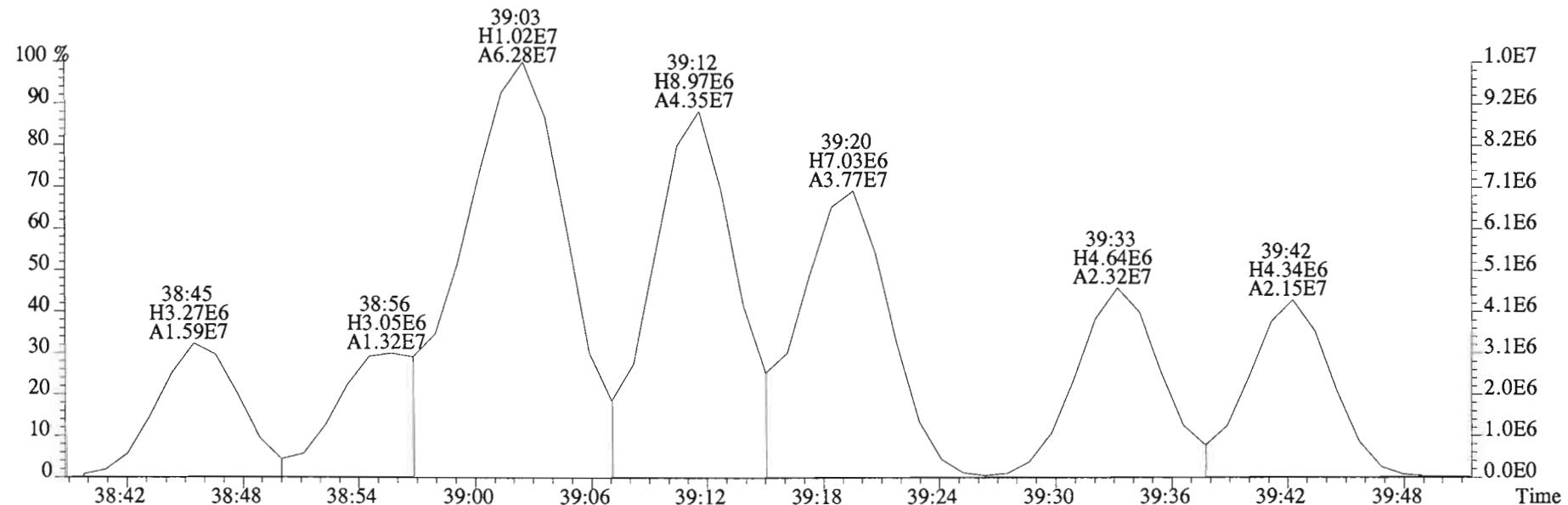
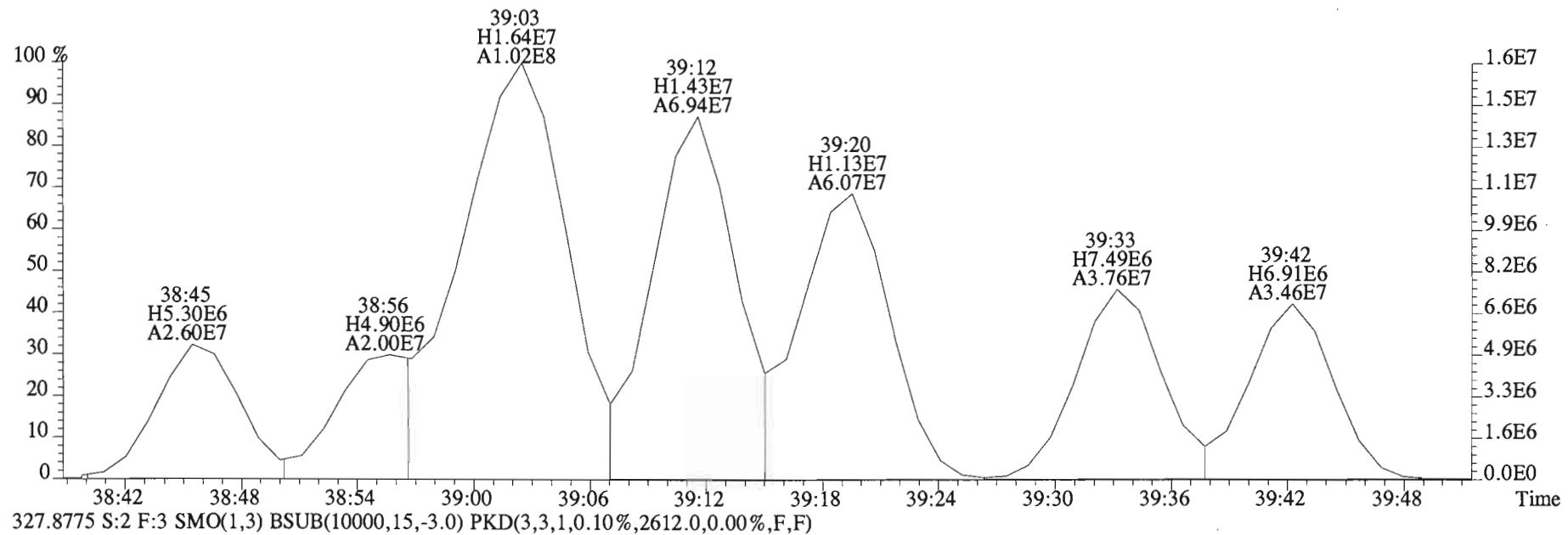
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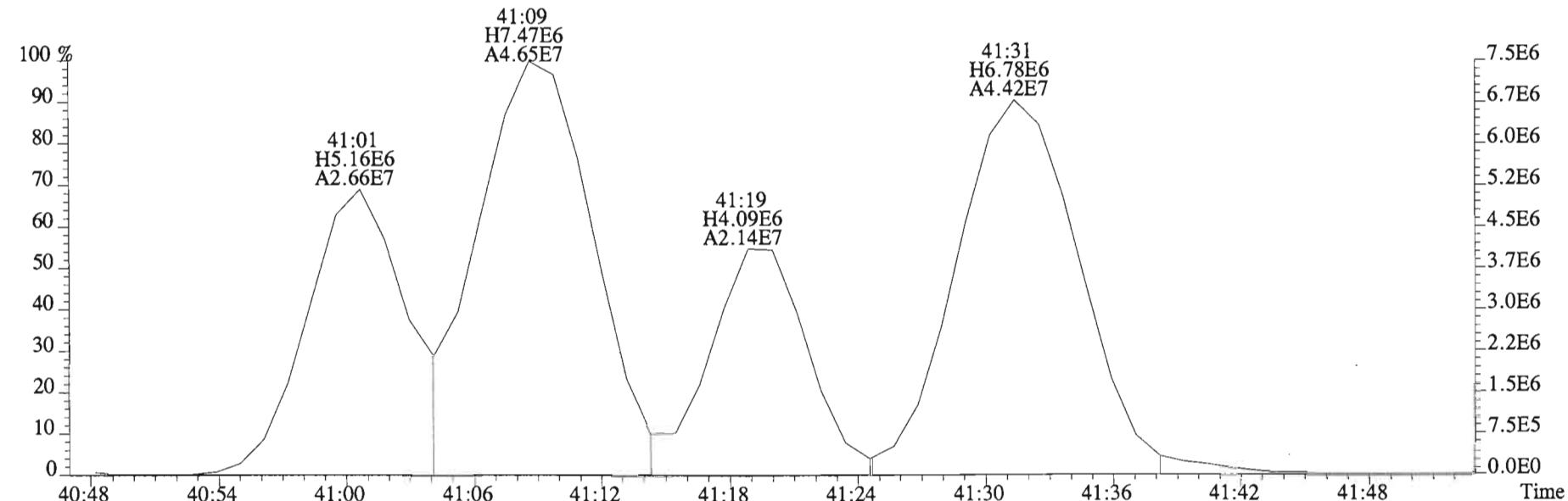
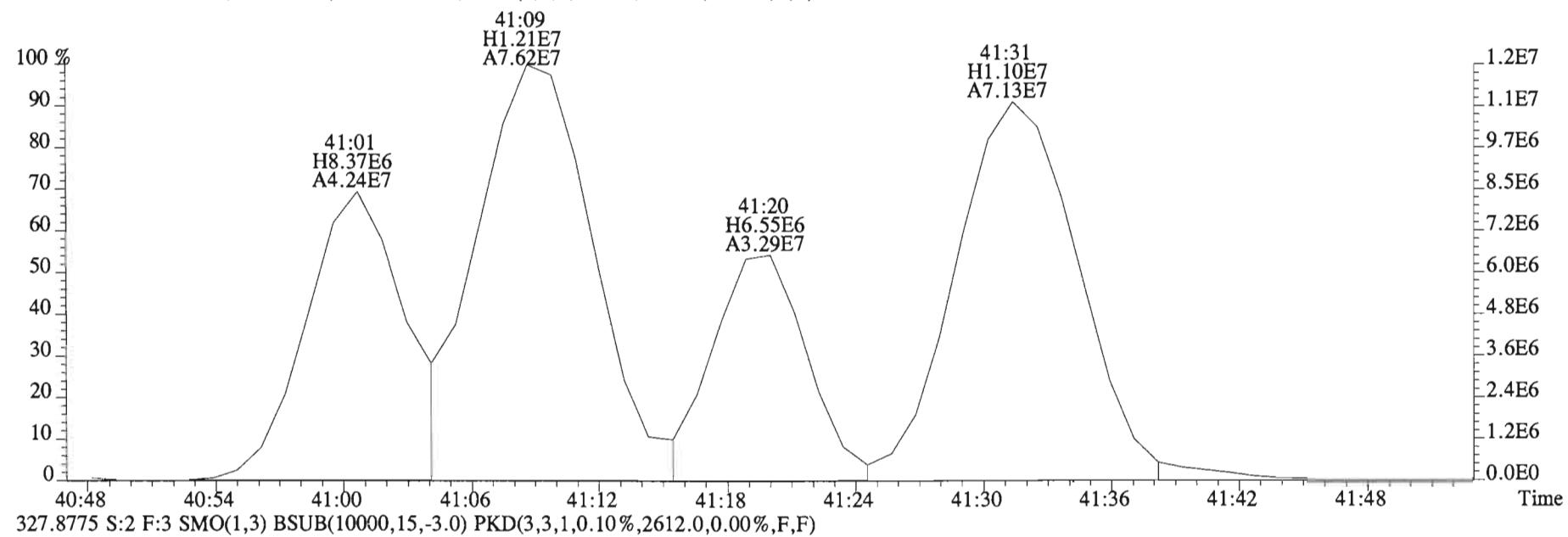
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325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1496.0,0.00%,F,F)



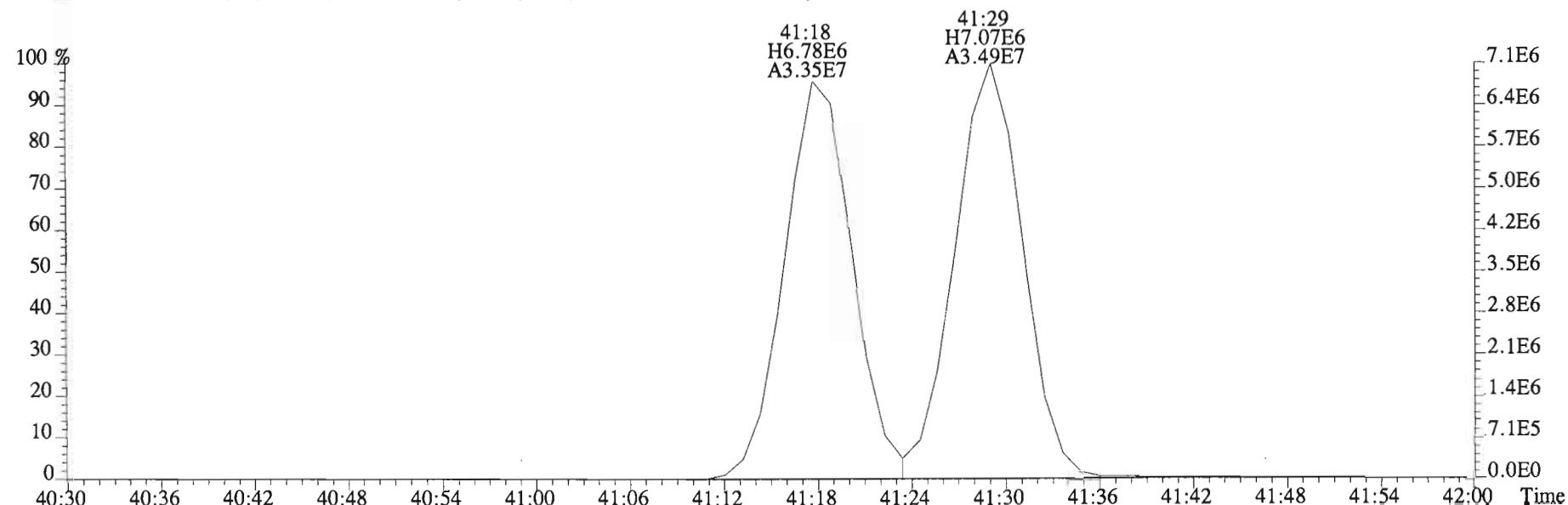
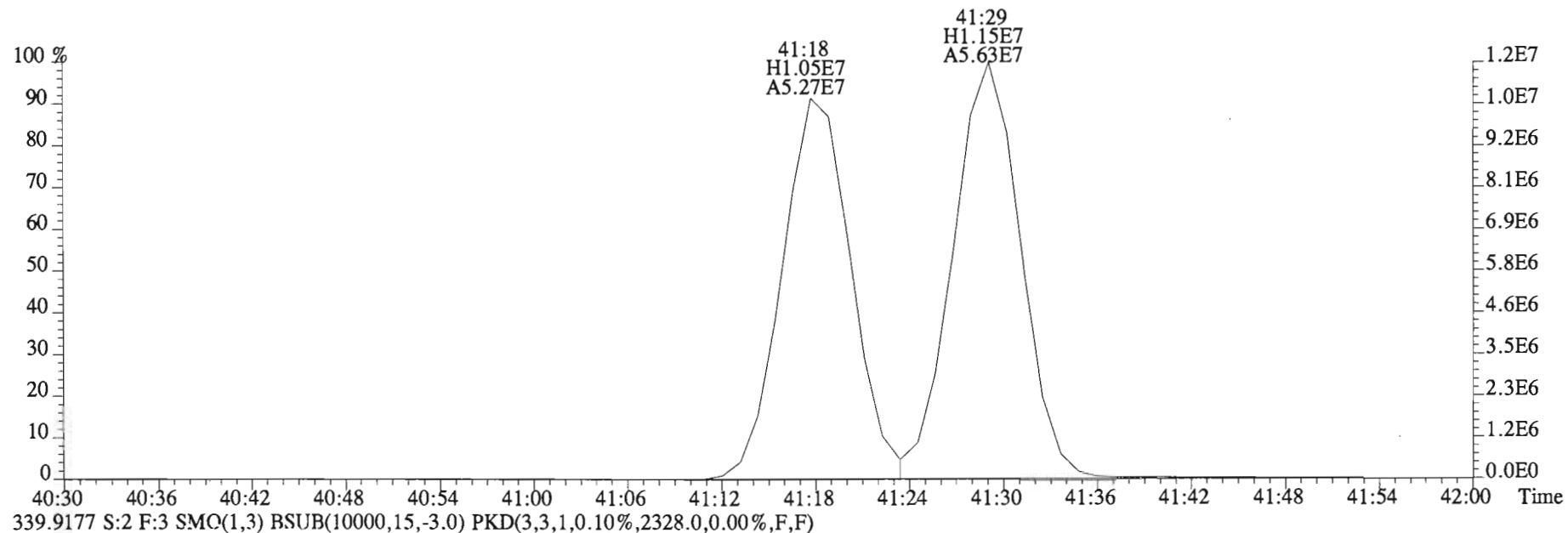
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 325.8804 S:2 F:3 SMO(1,3) B\$UB(10000,15,-3.0) PKD(3,3,1,0.10%,1496.0,0.00%,F,F)



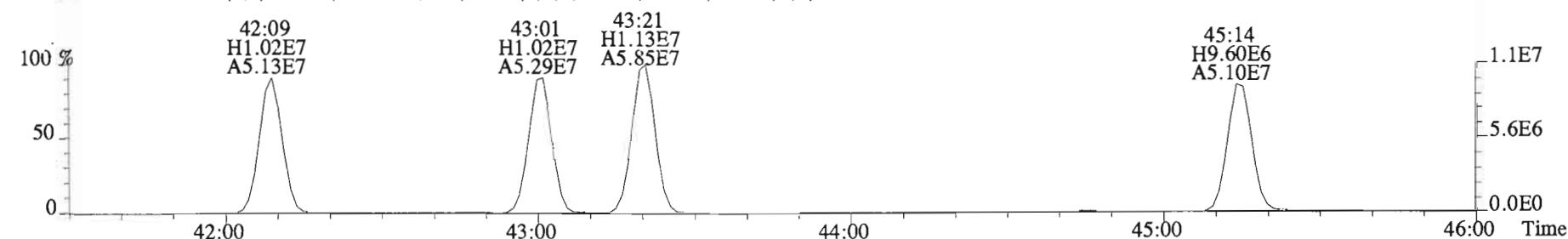
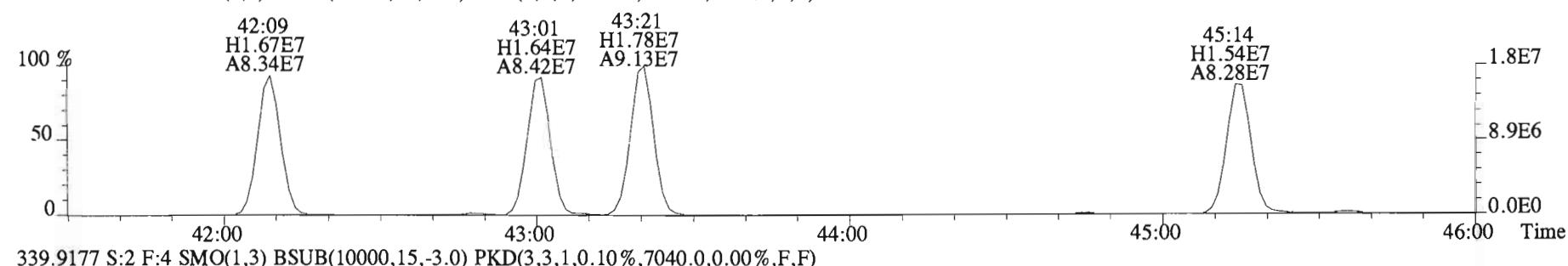
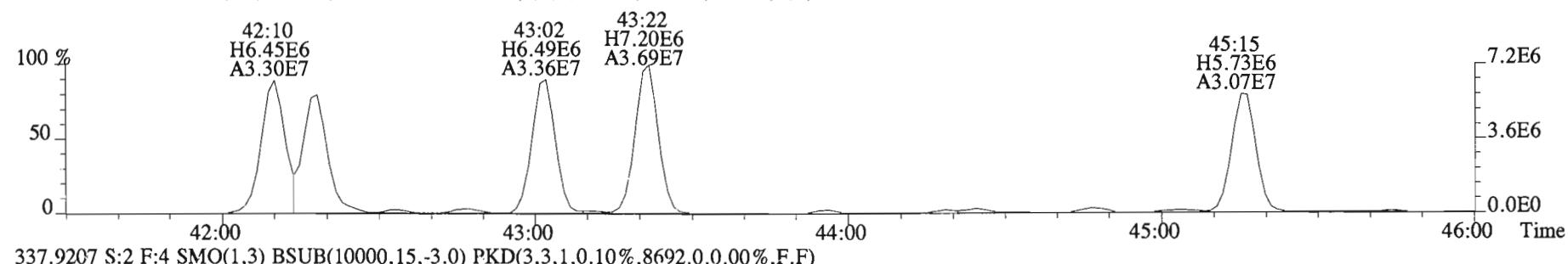
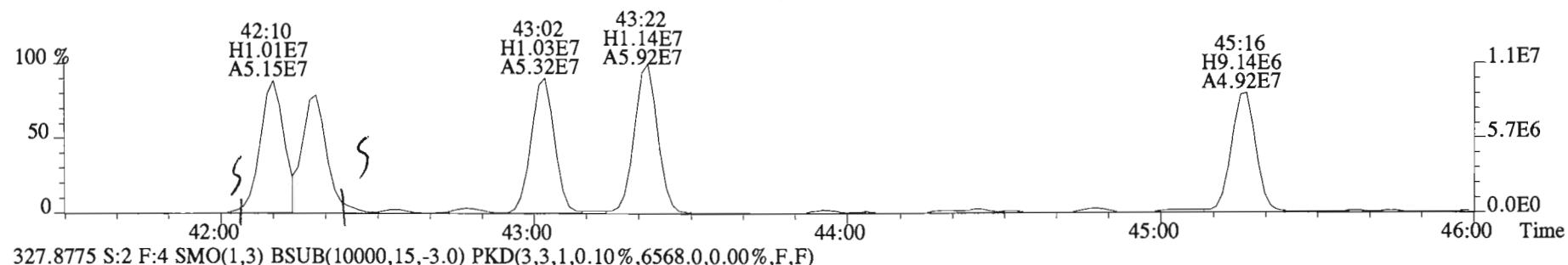
File:150219E2 #1-758 Acq:19-FEB-2015 15:11:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1496.0,0.00%,F,F)



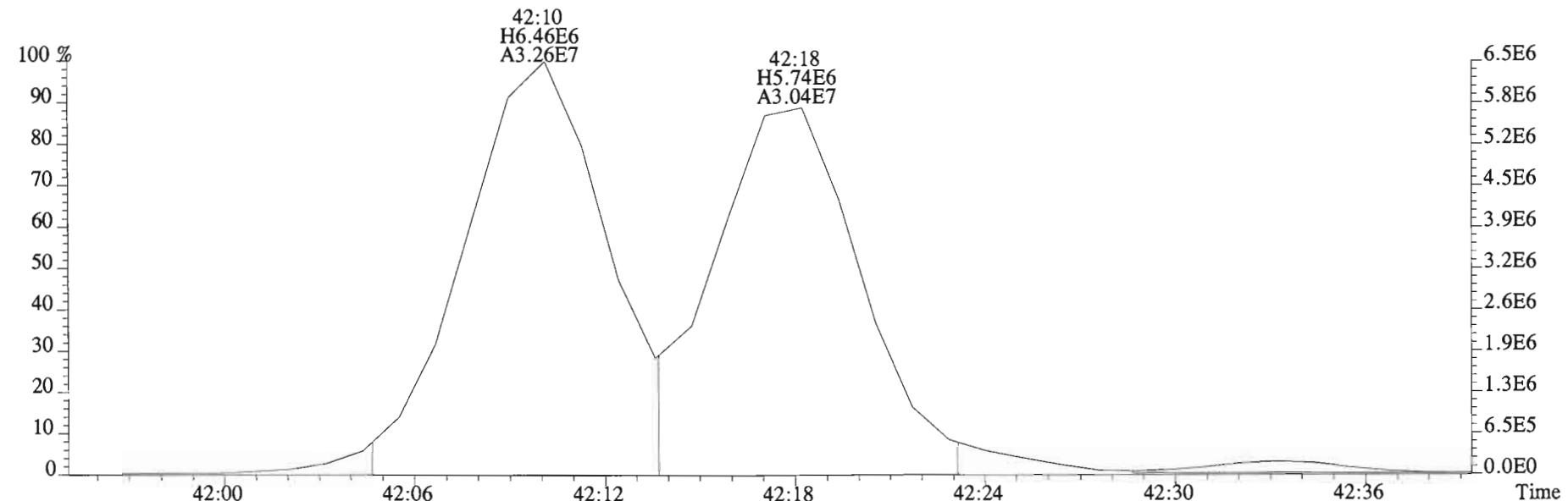
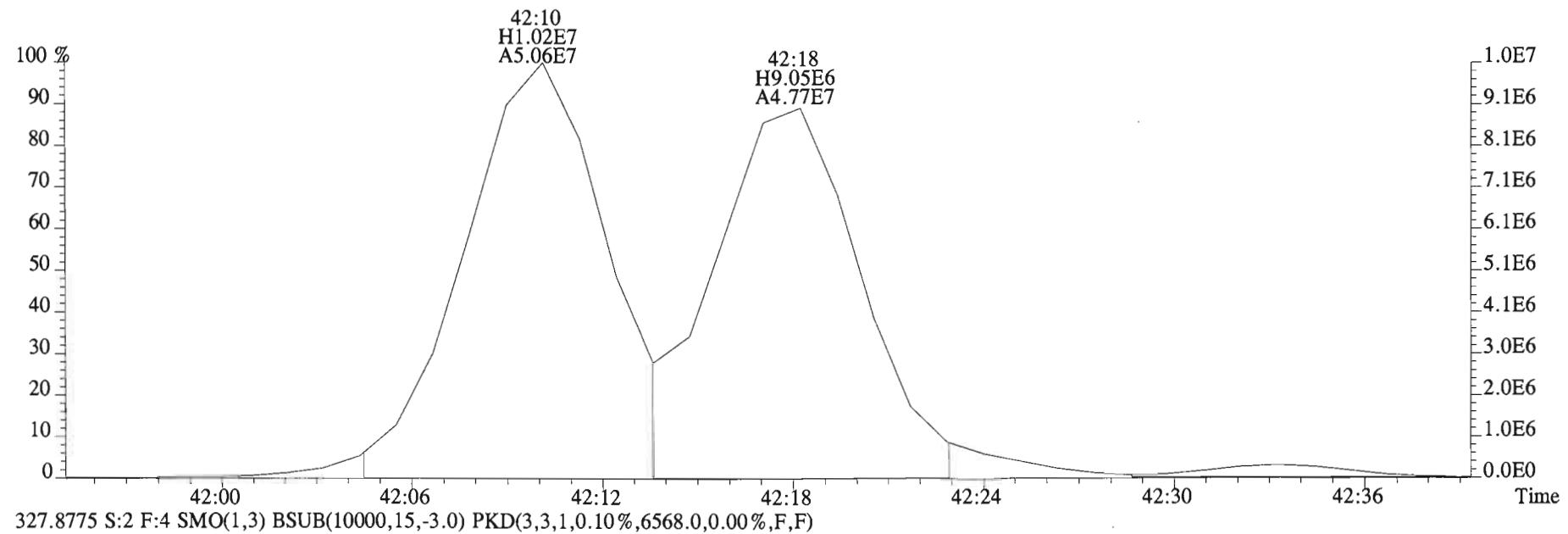
File:150219E2 #1-758 Acq:19-FEB-2015 15:11:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2312.0,0.00%,F,F)



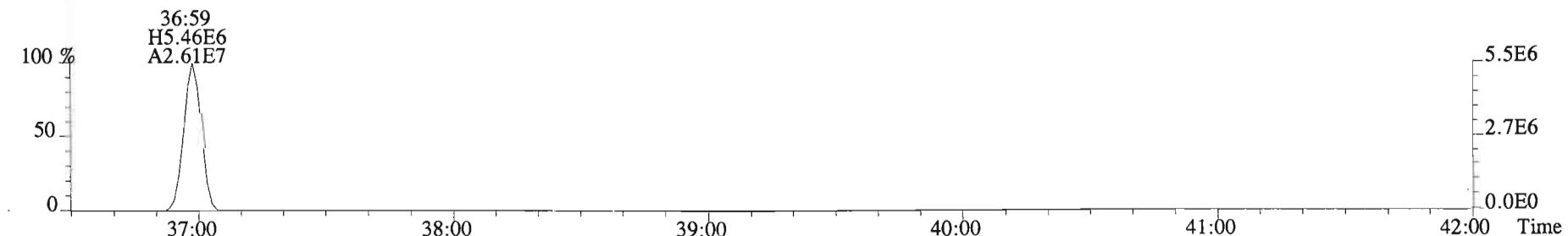
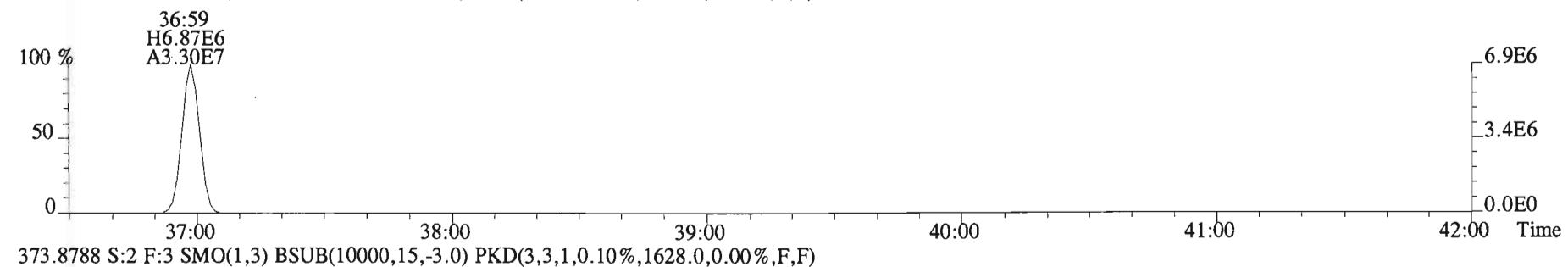
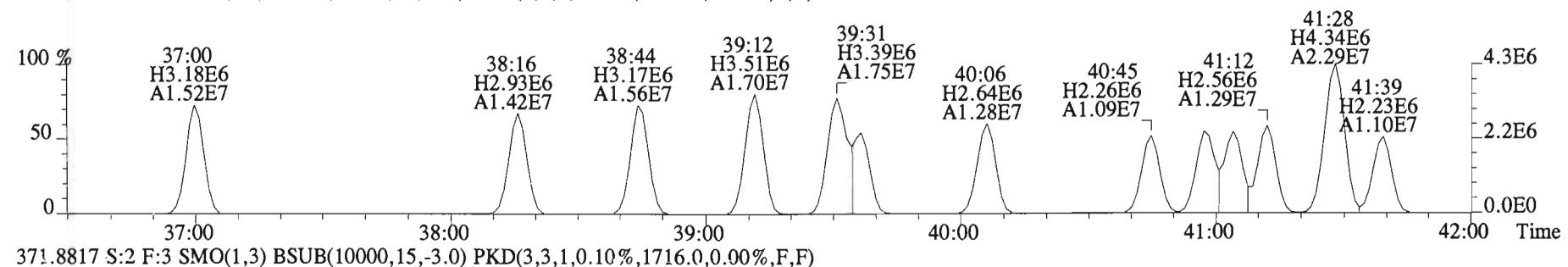
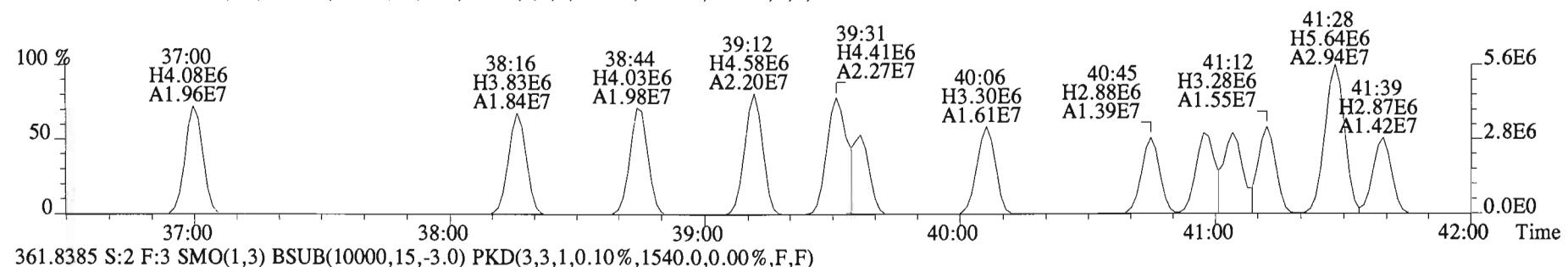
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
325.8804 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10712.0,0.00%,F,F)



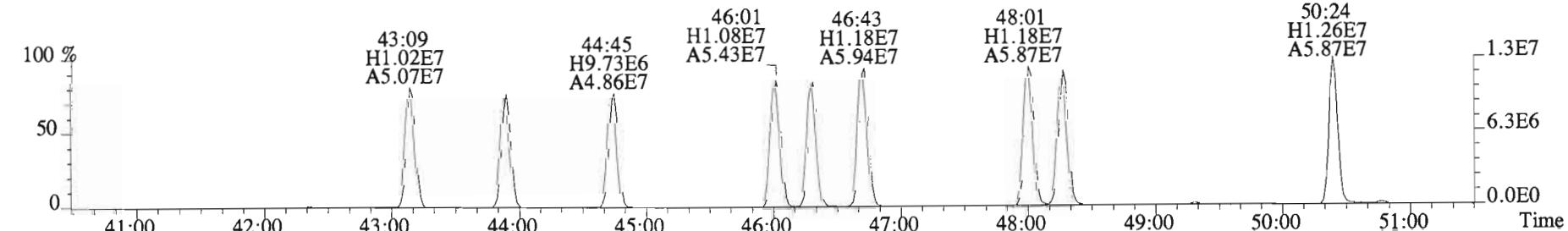
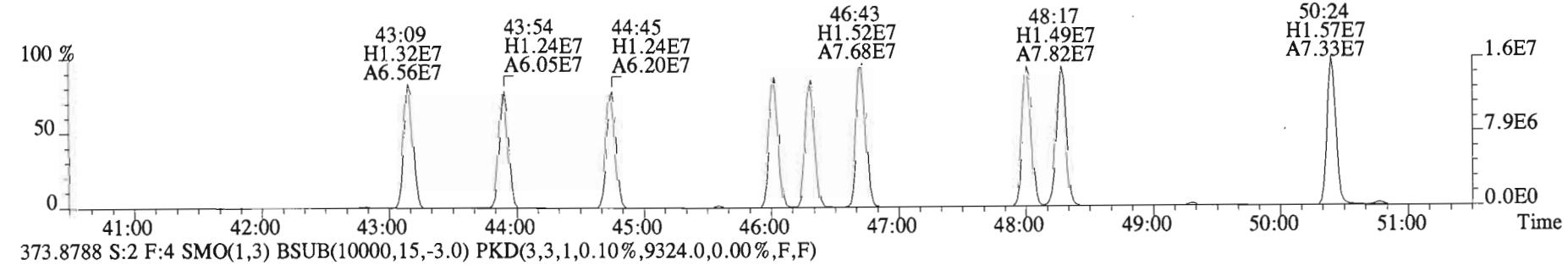
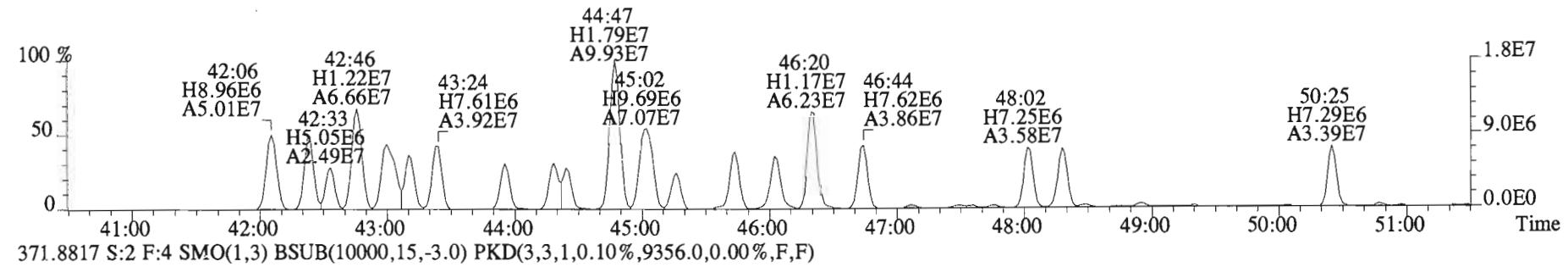
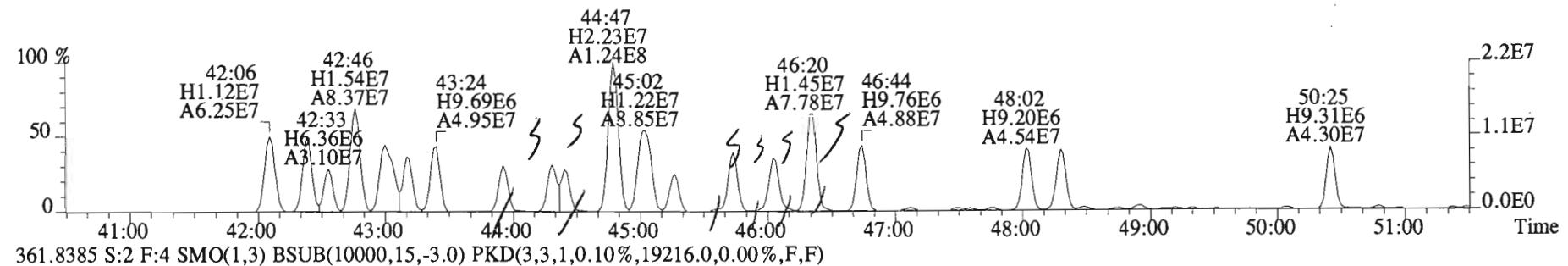
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
325.8804 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10712.0,0.00%,F,F)



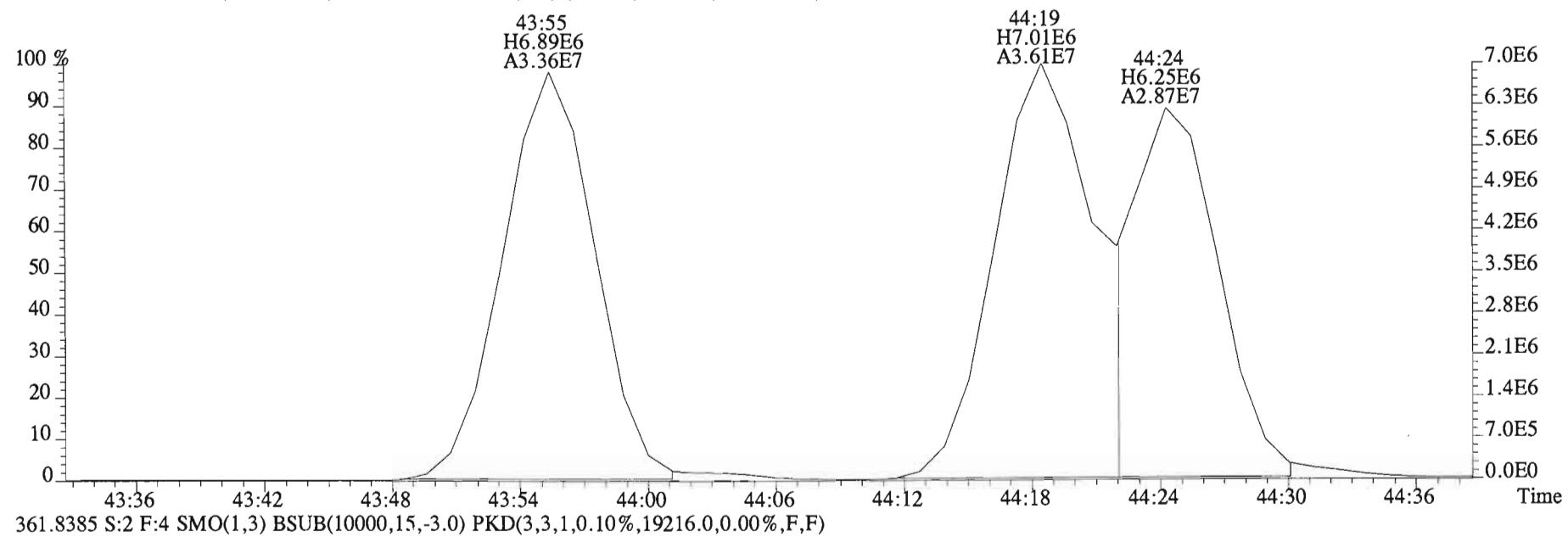
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 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
 359.8415 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1352.0,0.00%,F,F)



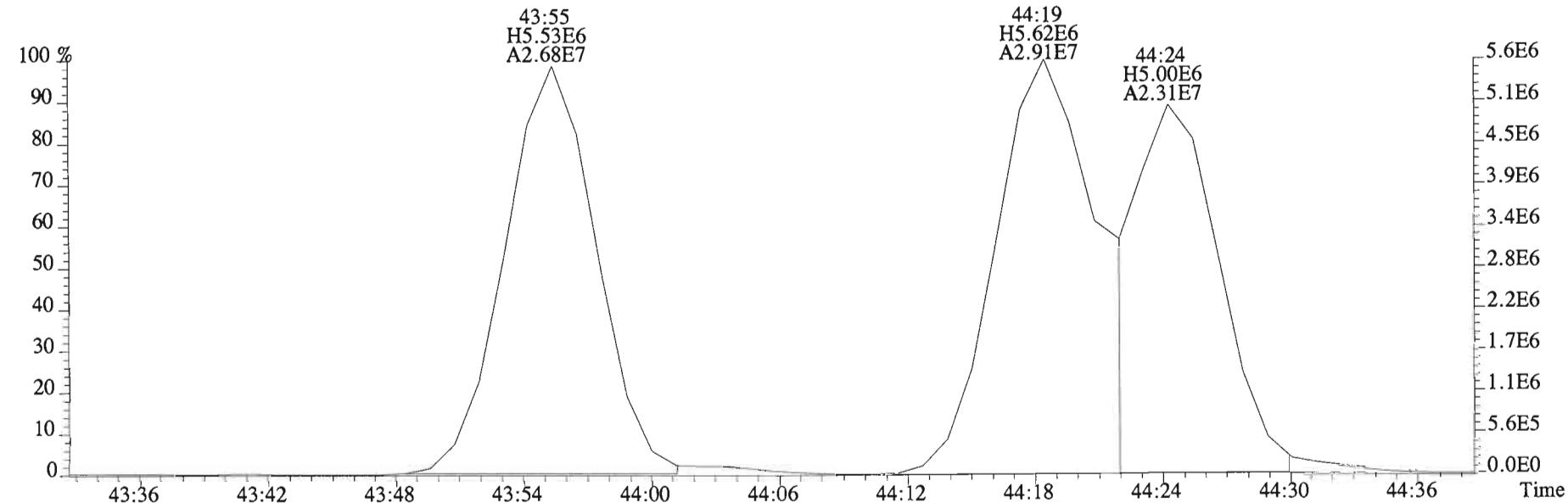
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 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
 359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18528.0,0.00%,F,F)



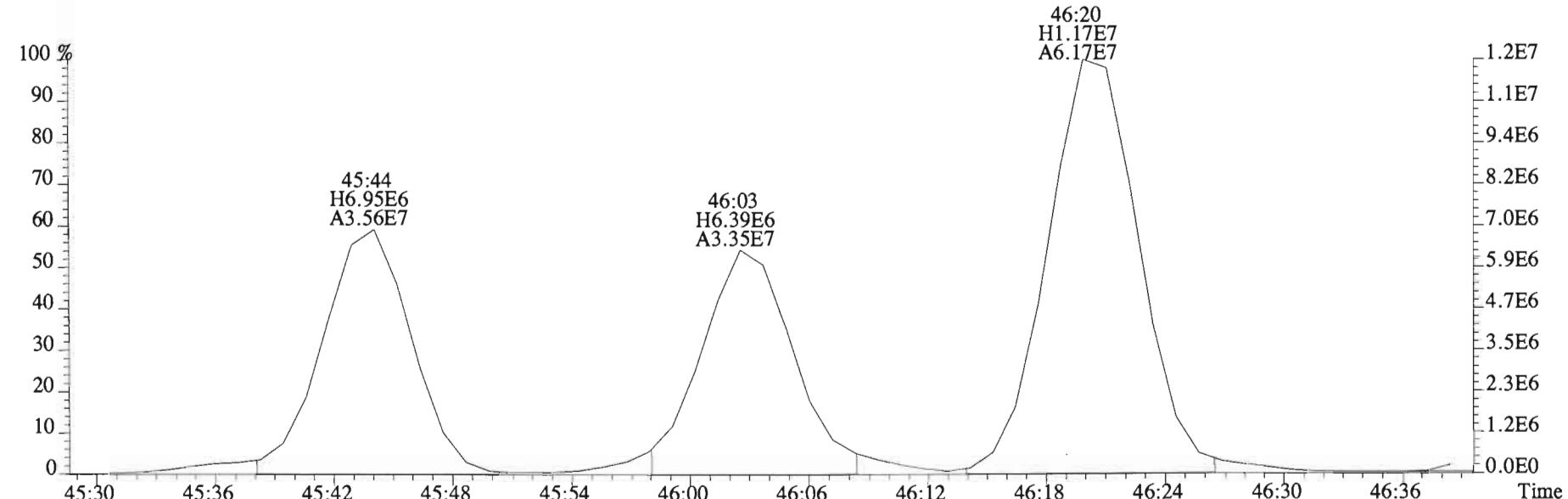
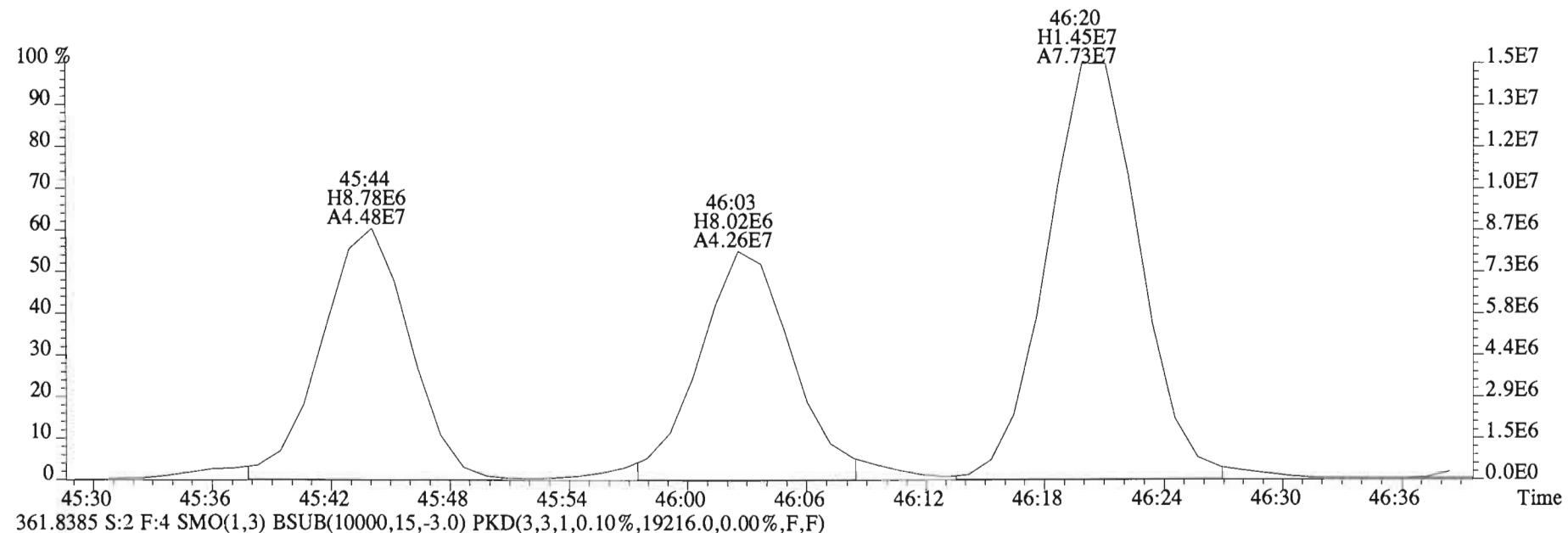
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18528.0,0.00%,F,F)



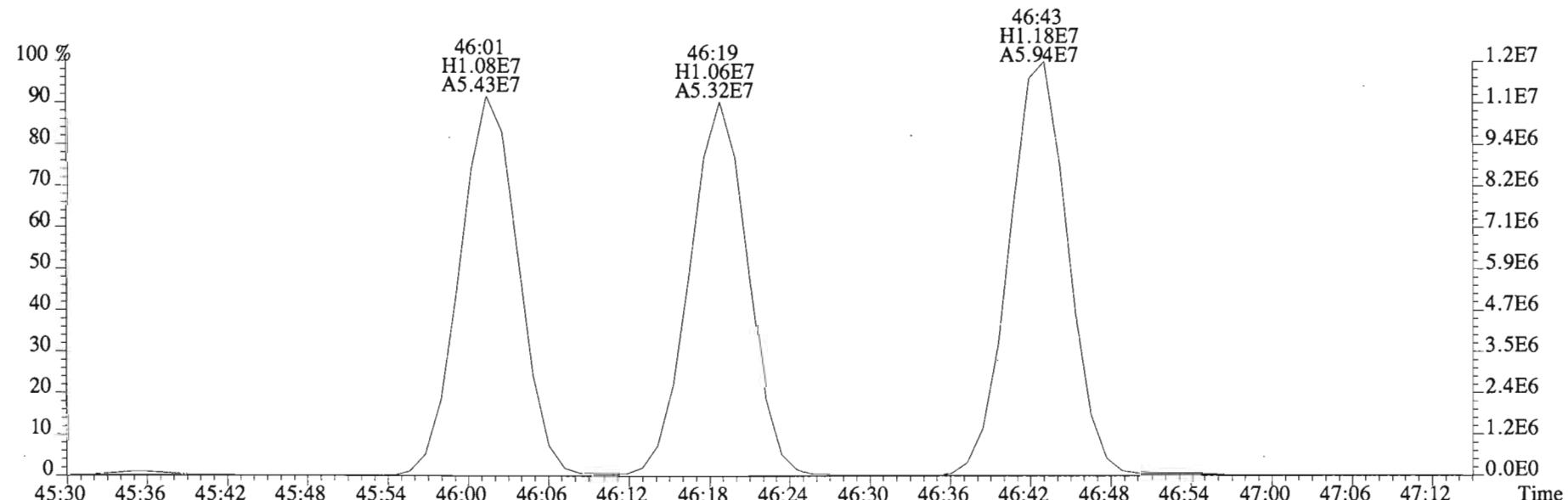
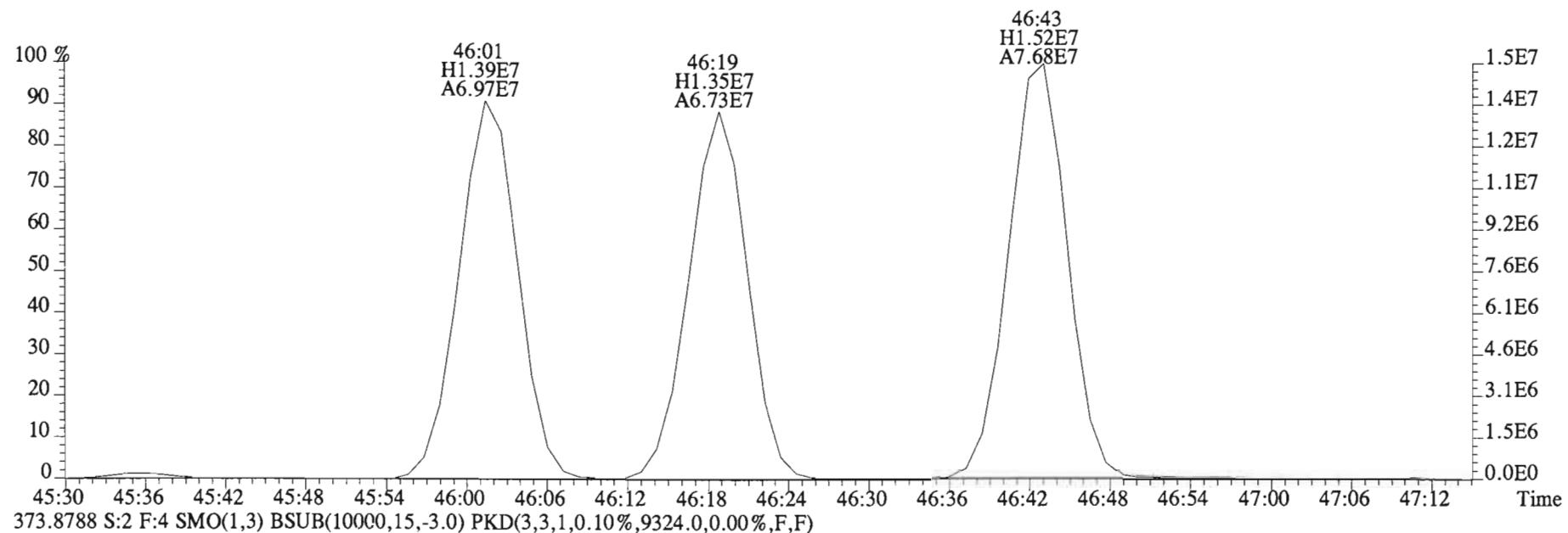
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,19216.0,0.00%,F,F)



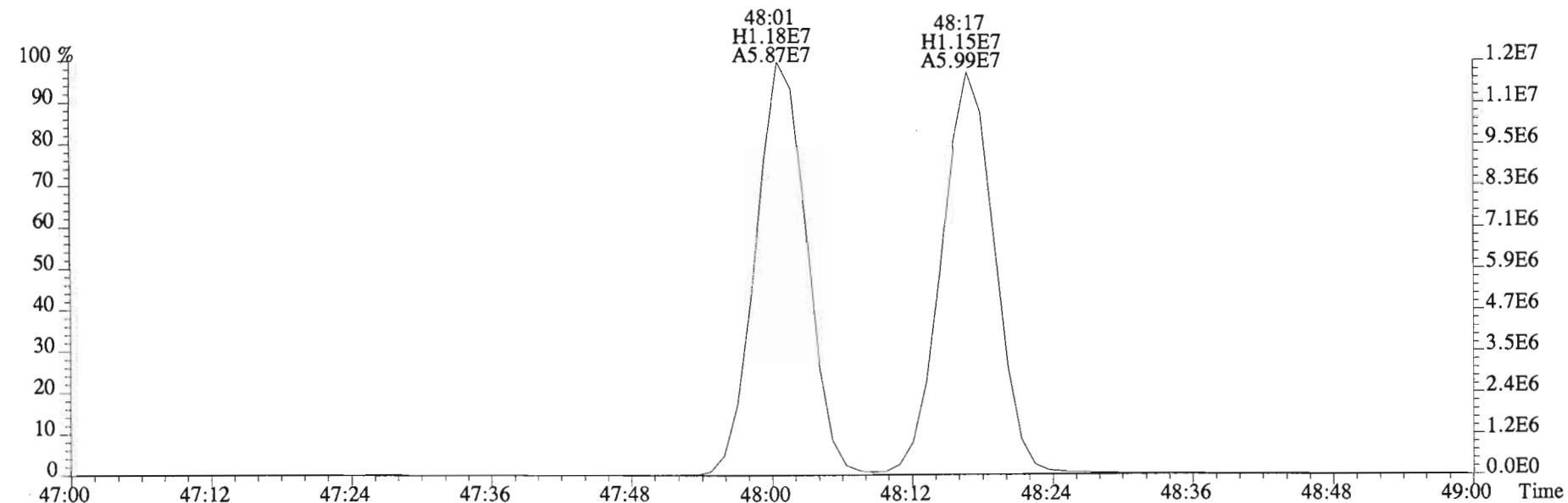
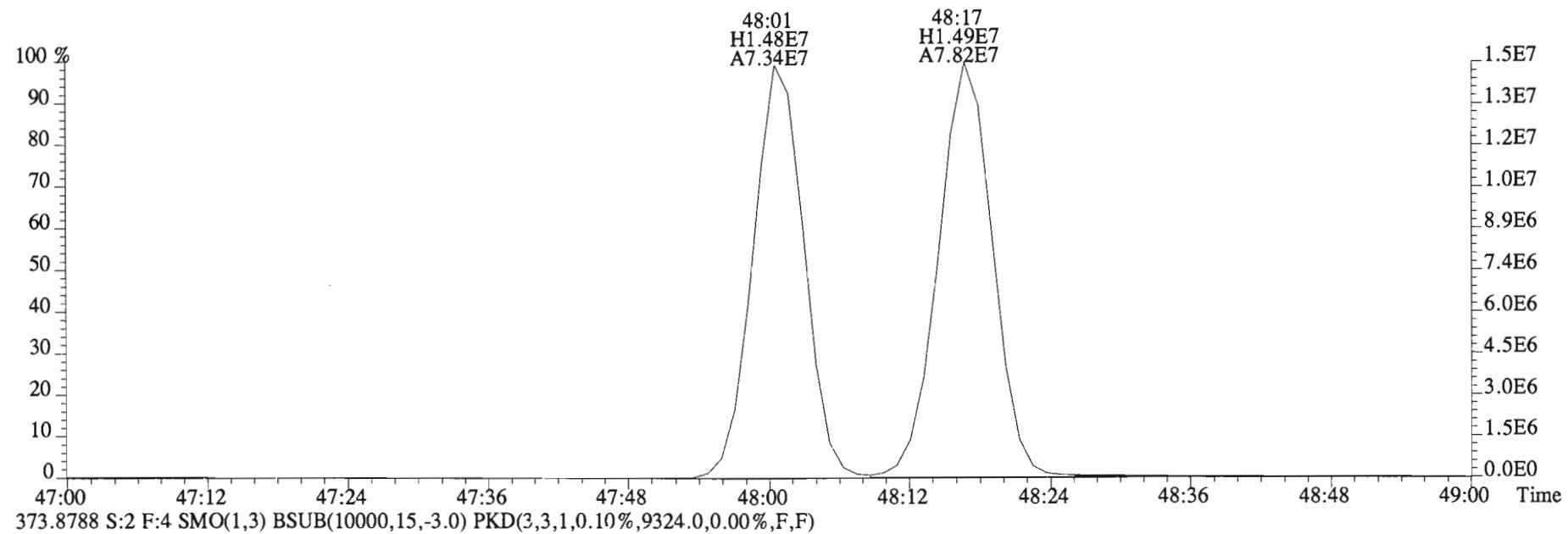
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Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18528.0,0.00%,F,F)



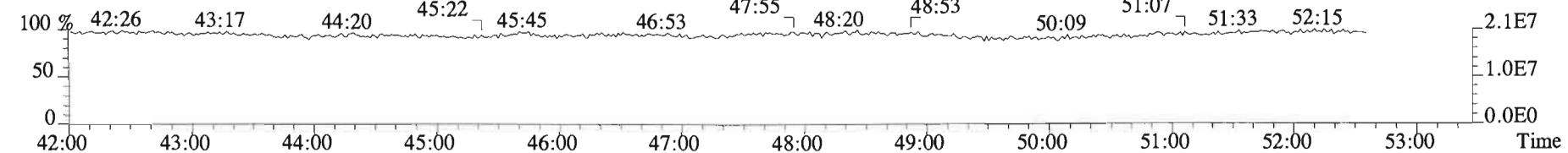
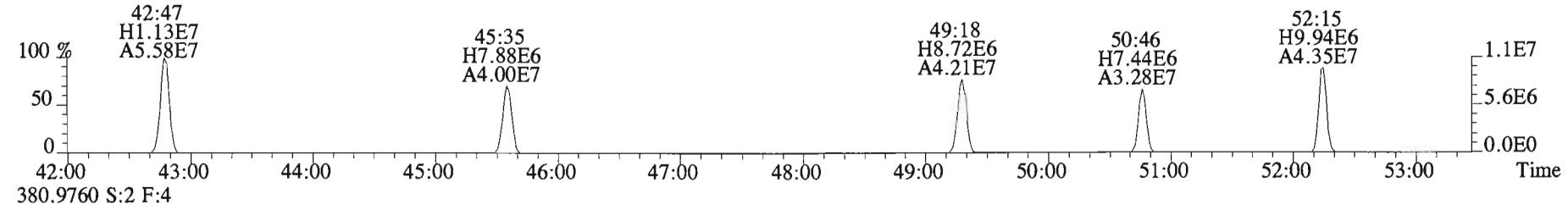
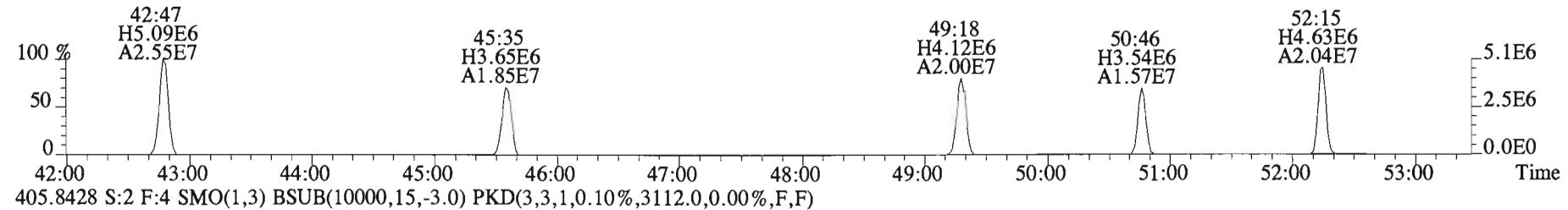
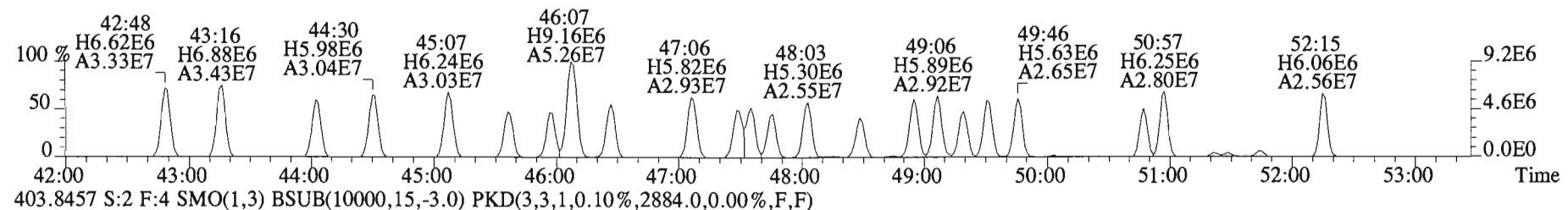
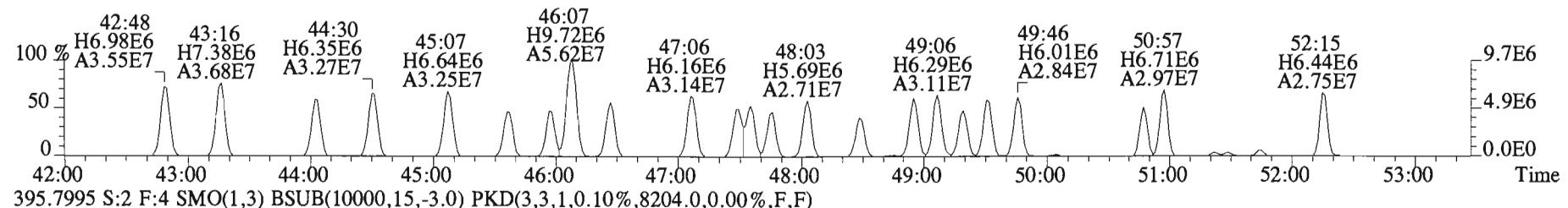
File:150219E2 #1-555 Acq:19-FEB-2015 15:11:34 GC EI + Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9356.0,0.00%,F,F)



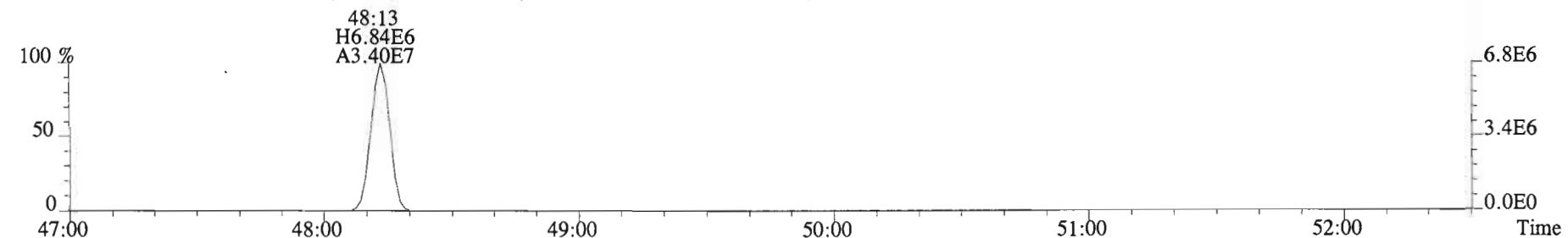
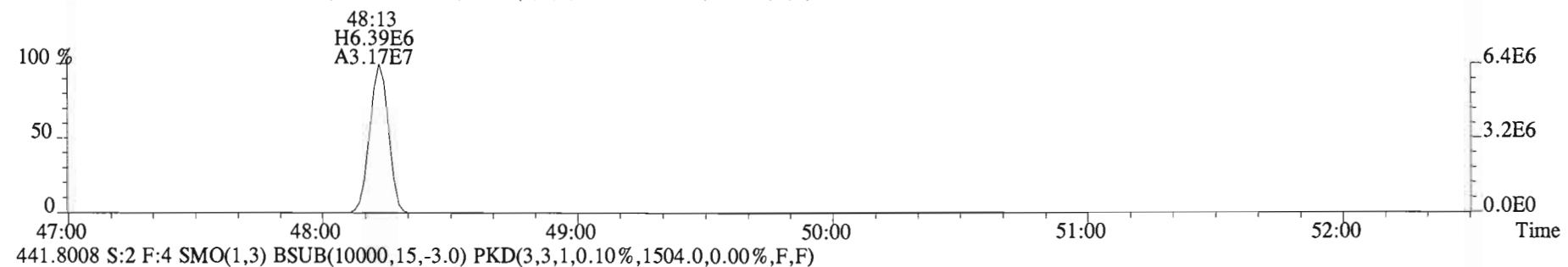
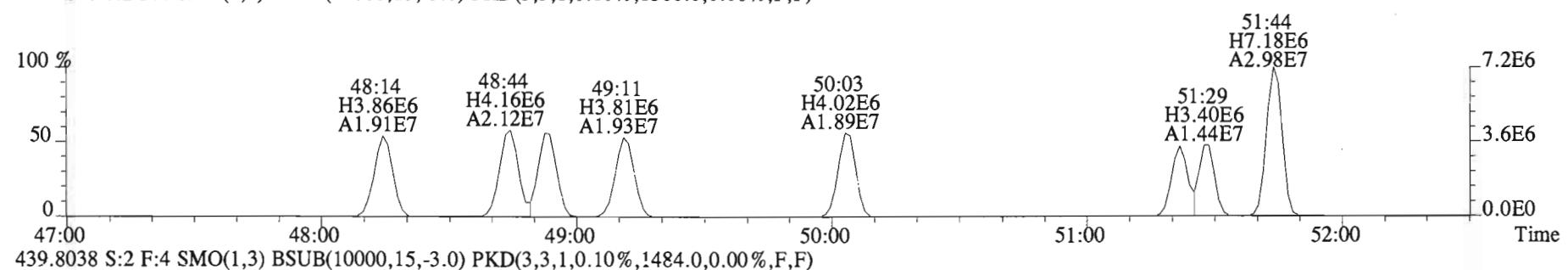
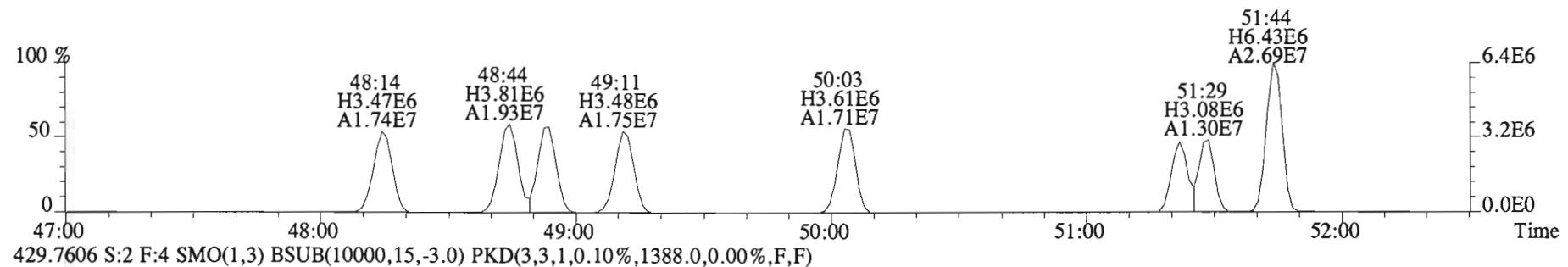
File:150219E2 #1-555 Acq:19-FEB-2015 15:11:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9356.0,0.00%,F,F)



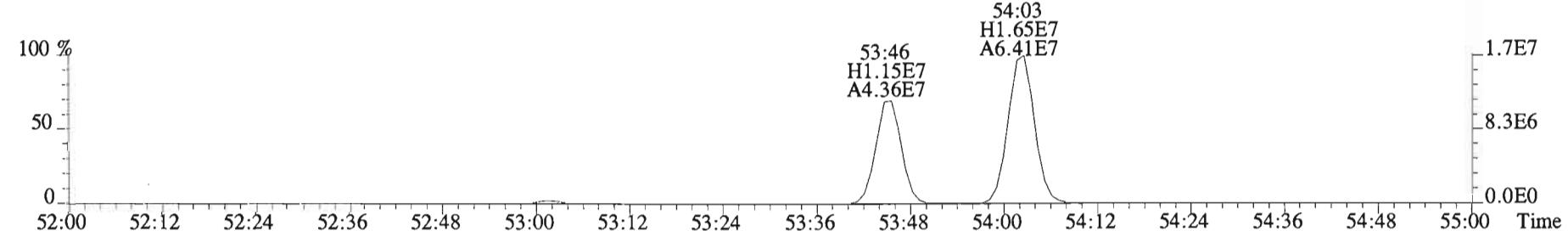
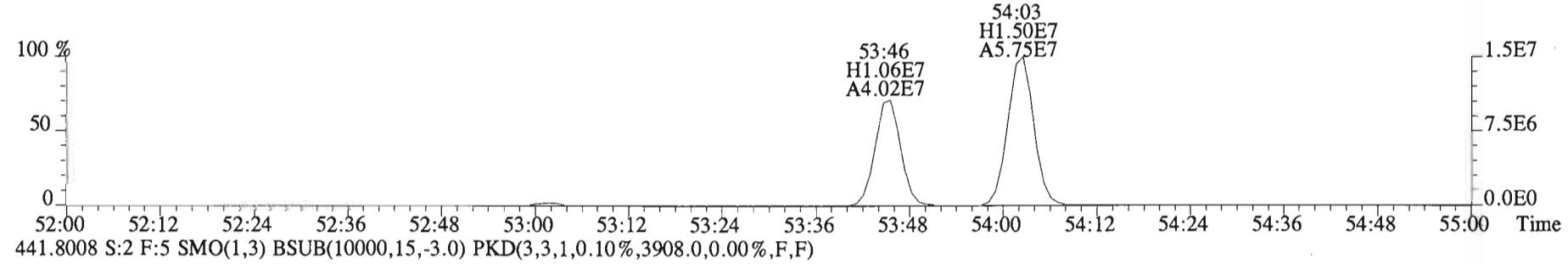
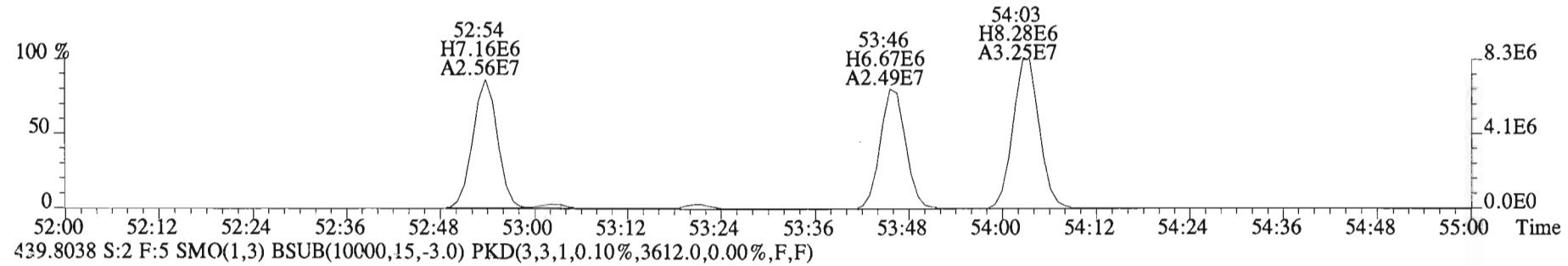
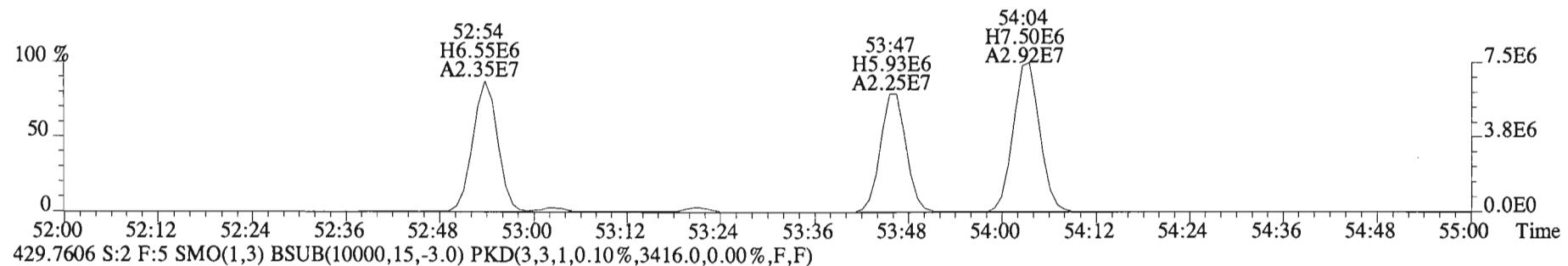
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 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
 393.8025 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7352.0,0.00%,F,F)



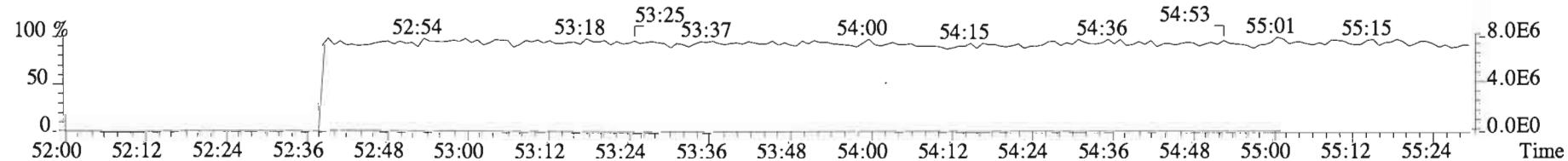
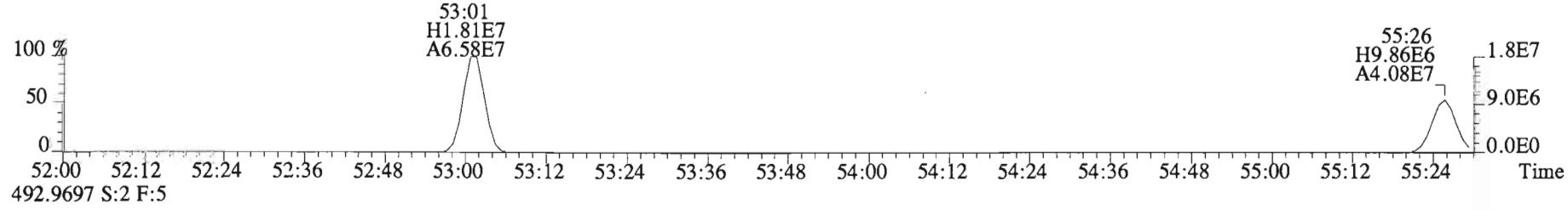
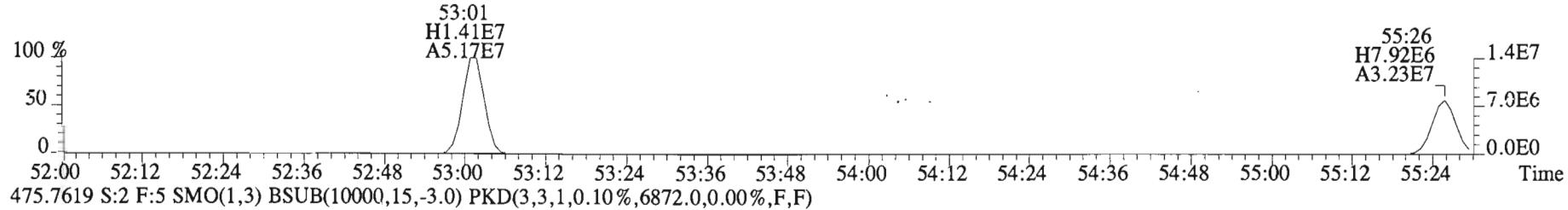
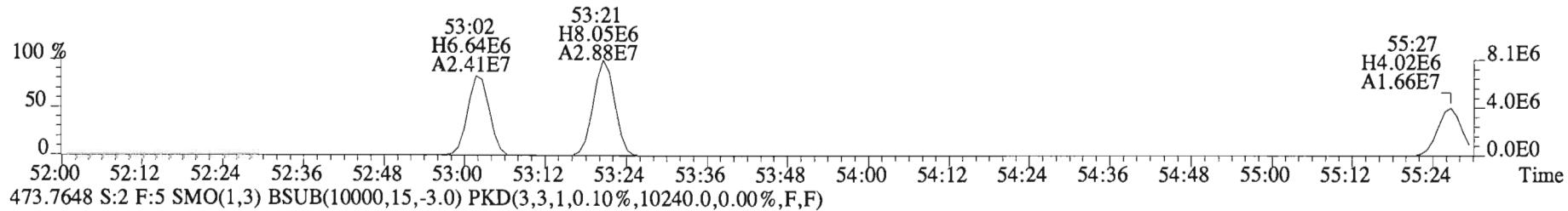
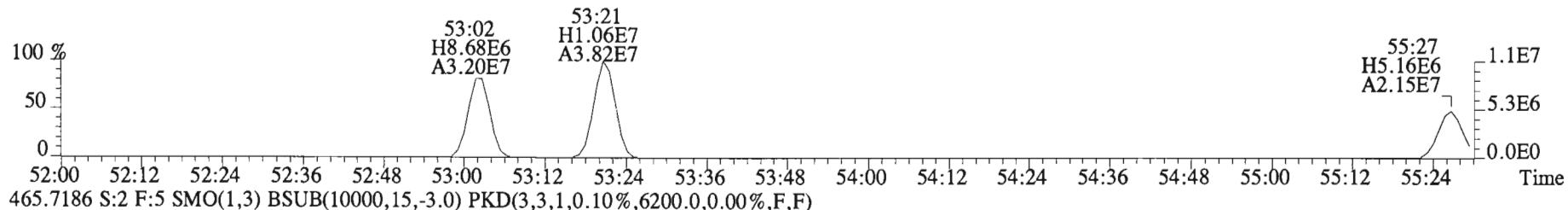
File:150219E2 #1-555 Acq:19-FEB-2015 15:11:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
427.7635 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1304.0,0.00%,F,F)



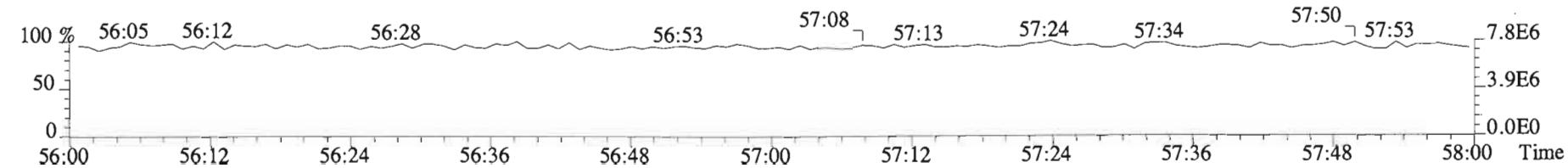
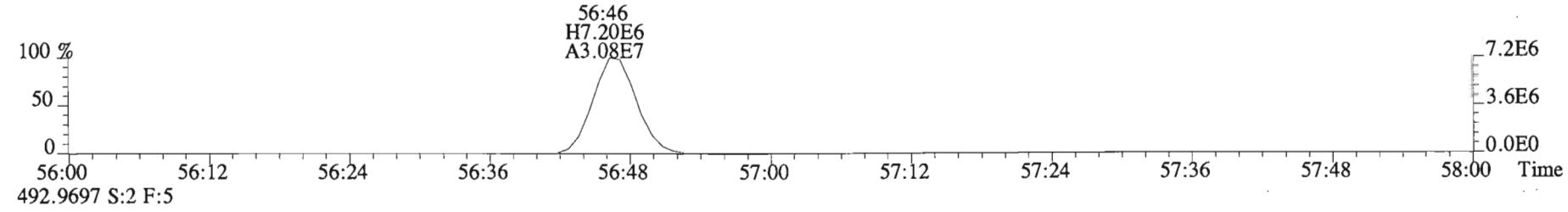
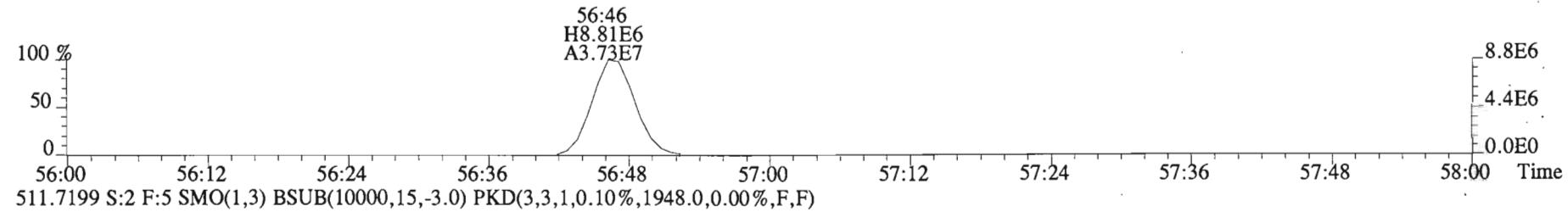
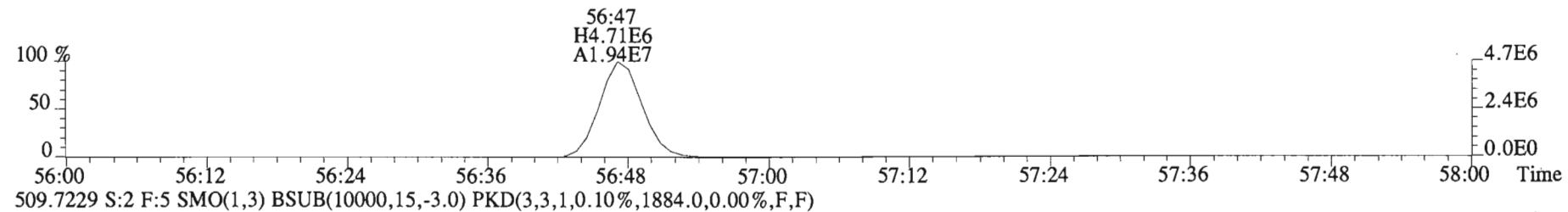
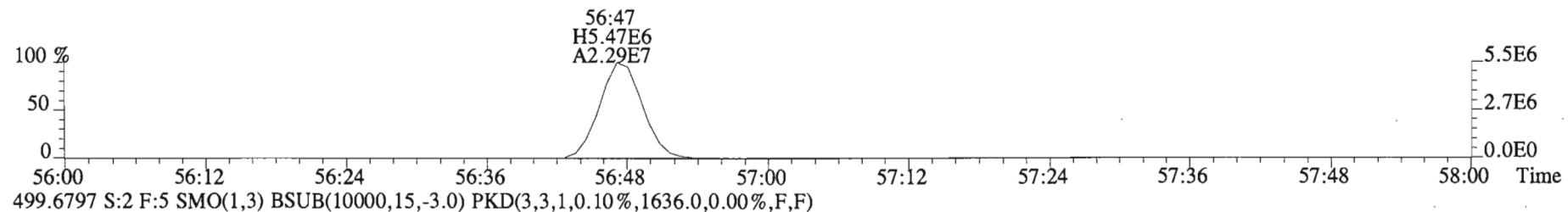
File:150219E2 #1-429 Acq:19-FEB-2015 15:11:34 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-BS1 OPR 10 Exp:PCB_ZB1
 427.7635 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2712.0,0.00%,F,F)



File:150219E2 #1-429 Acq:19-FEB-2015 15:11:34 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-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%,7152.0,0.00%,F,F)



File:150219E2 #1-429 Acq:19-FEB-2015 15:11:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5B0059-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%,1424.0,0.00%,F,F)



Client ID: WM-MH-61-20150203-S
 Lab ID: 1500147-02@10X

Filename: 150219E2 S:7 Acq:19-FEB-15 20:32:10
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.011

ConCal: ST150219E2-1
 EndCAL: NA

Page 6 of

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	1.01e+06	2.89	y 16:08	1.19	494		*	2.5	*	1.001	0.996-1.006	
Mono	PCB-2	2.99e+05	3.12	y 18:29	1.18	151		*	2.5	*	0.988	0.984-0.994	
Mono	PCB-3	6.71e+05	2.67	y 18:43	1.43	281		*	2.5	*	1.001	0.996-1.006	
Di	PCB-4/10	3.49e+06	1.60	y 20:03	1.57	2060		*	2.5	*	1.001	0.997-1.007	
Di	PCB-7/9	6.73e+05	1.63	y 21:50	1.21	339		*	2.5	*	0.867	0.866-0.874	
Di	PCB-6	2.02e+06	1.52	y 22:30	1.30	942		*	2.5	*	0.893	0.890-0.899	
Di	PCB-5/8	1.07e+07	1.61	y 22:53	1.15	5670		*	2.5	*	0.909	0.907-0.917	
Di	PCB-14	*	*	n NotF _q	1.11	*	11600	2.5		148	*	0.949-0.959	
Di	PCB-11	3.17e+06	1.51	y 25:12	1.09	1630		*	2.5	*	1.001	0.995-1.005	
Di	PCB-12/13	6.56e+05	1.61	y 25:33	1.19	307		*	2.5	*	1.015	1.011-1.021	
Di	PCB-15	7.97e+06	1.71	y 25:54	1.28	3470		*	2.5	*	1.028	1.023-1.033	
Tri	PCB-19	1.73e+06	1.11	y 24:11	1.04	1760		*	2.5	*	1.001	0.996-1.006	
Tri	PCB-30	*	*	n NotF _q	1.71	*	2410	2.5		30.3	*	1.032-1.042	
Tri	PCB-18	1.66e+07	1.07	y 25:49	0.78	15400		*	2.5	*	0.954	0.949-0.959	
Tri	PCB-17	6.11e+06	1.06	y 25:59	0.92	4790		*	2.5	*	0.960	0.956-0.966	
Tri	PCB-24/27	1.82e+06	1.05	y 26:33	1.19	1110		*	2.5	*	0.981	0.977-0.987	
Tri	PCB-16/32	1.16e+07	1.06	y 27:04	0.94	8930		*	2.5	*	1.000	0.995-1.005	
Tri	PCB-34	*	*	n NotF _q	1.14	*	3780	2.5		55.5	*	0.955-0.965	
Tri	PCB-23	*	*	n NotF _q	1.28	*	3780	2.5		49.3	*	0.959-0.969	
Tri	PCB-29	1.70e+05	1.05	y 28:12	1.08	113		*	2.5	*	0.972	0.967-0.977	
Tri	PCB-26	4.44e+06	1.03	y 28:25	1.21	2650		*	2.5	*	0.979	0.974-0.984	
Tri	PCB-25	1.65e+06	1.18	y 28:35	1.26	942		*	2.5	*	0.985	0.979-0.989	
Tri	PCB-31	2.34e+07	1.06	y 28:56	1.28	13100		*	2.5	*	0.997	0.992-1.002	
Tri	PCB-28	2.11e+07	1.09	y 29:02	1.71	8860		*	2.5	*	1.001	0.995-1.005	
Tri	PCB-20/21/33	1.52e+07	1.05	y 29:41	1.08	10100		*	2.5	*	1.023	1.017-1.027	
Tri	PCB-22	7.83e+06	1.04	y 30:06	1.21	4650		*	2.5	*	1.037	1.032-1.042	
Tri	PCB-36	*	*	n NotF _q	1.14	*	3780	2.5		47.3	*	0.928-0.938	
Tri	PCB-39	*	*	n NotF _q	1.12	*	3780	2.5		48.5	*	0.943-0.953	
Tri	PCB-38	*	*	n NotF _q	1.20	*	3780	2.5		45.1	*	0.966-0.976	
Tri	PCB-35	6.54e+05	1.03	y 32:31	1.23	325		*	2.5	*	0.987	0.982-0.992	
Tri	PCB-37	9.47e+06	1.09	y 32:57	1.23	4710		*	2.5	*	1.001	0.995-1.005	
Tetra	PCB-54	5.67e+04	0.95	n 27:54	1.10	42.3	R	*	2.5	*	0.999	0.996-1.006	Integrations by:
Tetra	PCB-50	5.20e+04	0.72	y 29:04	0.88	48.6		*	2.5	*	1.041	1.037-1.047	
Tetra	PCB-53	3.93e+06	0.81	y 29:44	1.06	3600		*	2.5	*	0.946	0.942-0.952	Analyst: <u>DMS</u>
Tetra	PCB-51	7.58e+05	0.83	y 30:05	0.99	746		*	2.5	*	0.957	0.952-0.962	
Tetra	PCB-45	2.55e+06	0.77	y 30:31	0.86	2870		*	2.5	*	0.971	0.966-0.976	
Tetra	PCB-46	1.09e+06	0.72	y 30:59	0.85	1260		*	2.5	*	0.986	0.981-0.991	Date: <u>2/23/15</u>

Reviewed by: 4/2

Date: 2/24/15

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	1.29e+08	0.79	y 31:28	1.28	98000		*	2.5	*	1.001	0.996	-1.006
Tetra	PCB-73	*	*	n NotF ₁₁	1.35			5040	2.5	86.3	*	1.000	-1.010
Tetra	PCB-43/49	2.95e+07	0.80	y 31:46	0.99	28900		*	2.5	*	1.011	1.005	-1.015
Tetra	PCB-47	4.85e+06	0.80	y 31:58	1.06	4180		*	2.5	*	1.000	0.996	-1.006
Tetra	PCB-48/75	4.13e+06	0.79	y 32:06	1.23	3070		*	2.5	*	1.004	0.999	-1.009
Tetra	PCB-65	*	*	n NotF ₁₁	1.22			5040	2.5	94.4	*	1.008	-1.018
Tetra	PCB-62	*	*	n NotF ₁₁	1.22			5040	2.5	94.7	*	1.011	-1.021
Tetra	PCB-44	5.14e+07	0.79	y 32:48	0.86	54600		*	2.5	*	1.026	1.021	-1.031
Tetra	PCB-42/59	6.80e+06	0.80	y 33:01	1.14	5460		*	2.5	*	1.033	1.028	-1.038
Tetra	PCB-41/64/71/72	3.06e+07	0.79	y 33:35	1.21	23200		*	2.5	*	1.051	1.046	-1.056
Tetra	PCB-68	4.59e+04	0.81	y 33:48	1.35	31.1		*	2.5	*	1.057	1.054	-1.064
Tetra	PCB-40	3.71e+06	0.77	y 34:02	0.70	4830		*	2.5	*	1.065	1.061	-1.071
Tetra	PCB-57	1.10e+05	0.83	y 34:24	0.98	83.1		*	2.5	*	0.970	0.965	-0.975
Tetra	PCB-67	7.47e+05	0.72	y 34:42	1.11	501		*	2.5	*	0.979	0.974	-0.984
Tetra	PCB-58	5.82e+04	0.66	y 34:48	0.93	46.5		*	2.5	*	0.982	0.977	-0.987
Tetra	PCB-63	1.32e+06	0.73	y 34:58	0.95	1030		*	2.5	*	0.986	0.982	-0.992
Tetra	PCB-74	2.41e+07	0.81	y 35:16	1.24	14400		*	2.5	*	0.995	0.990	-1.000
Tetra	PCB-61/70	1.06e+08	0.79	y 35:28	0.95	82100		*	2.5	*	1.000	0.995	-1.005
Tetra	PCB-76/66	3.42e+07	0.81	y 35:41	1.04	24200		*	2.5	*	1.007	1.001	-1.011
Tetra	PCB-80	*	*	n NotF ₁₁	1.19			5040	2.5	69.7	*	0.996	-1.006
Tetra	PCB-55	1.28e+06	0.88	y 36:12	1.04	879		*	2.5	*	1.009	1.005	-1.015
Tetra	PCB-56/60	2.11e+07	0.80	y 36:42	1.01	14900		*	2.5	*	1.023	1.019	-1.029
Tetra	PCB-79	1.99e+06	0.84	y 37:47	1.08	1320		*	2.5	*	1.053	1.048	-1.058
Tetra	PCB-78	*	*	n NotF ₁₁	1.27			5040	2.5	79.2	*	0.982	-0.992
Tetra	PCB-81	5.60e+05	0.81	y 38:59	1.33	357		*	2.5	*	1.000	0.995	-1.005
Tetra	PCB-77	3.07e+06	0.86	y 39:35	1.10	2250		*	2.5	*	1.000	0.995	-1.005
Penta	PCB-104	*	*	n NotF ₁₁	1.18	*		1820	2.5	70.6	*	0.996	-1.006
Penta	PCB-96	4.95e+05	1.67	y 33:52	1.14	575		1820	2.5	73.4	1.038	1.034	-1.044
Penta	PCB-103	5.21e+05	1.60	y 34:25	0.96	719		*	2.5	*	1.055	1.050	-1.060
Penta	PCB-100	1.53e+05	1.91	n 34:45	0.94	215	R	*	2.5	*	1.065	1.061	-1.071
Penta	PCB-94	3.62e+05	1.53	y 35:14	1.06	612		*	2.5	*	0.986	0.980	-0.990
Penta	PCB-95/98/102	1.01e+08	1.61	y 35:47	1.22	147000		*	2.5	*	1.001	0.995	-1.005
Penta	PCB-93	*	*	n NotF ₁₁	0.84			1820	2.5	119	*	0.997	-1.007
Penta	PCB-88/91	1.37e+07	1.54	y 36:11	1.12	21900		*	2.5	*	1.013	1.005	-1.015
Penta	PCB-121	*	*	n NotF ₁₁	1.62			1820	2.5	62.0	*	1.009	-1.019
Penta	PCB-84/92	5.05e+07	1.58	y 37:05	1.05	83200		*	2.5	*	0.991	0.985	-0.995
Penta	PCB-89	6.19e+05	1.37	y 37:15	1.13	945		*	2.5	*	0.995	0.991	-1.001

Analyst: *Doss*

Date: 2/23/15

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	1.26e+08	1.59	y 37:27	1.10	197000		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-113	*	*	n NotF ₁₁	1.41			1820	2.5	77.7	*	1.002-1.012	
Penta	PCB-99	4.60e+07	1.60	y 37:47	1.34	59300		*	2.5	*	1.009	1.004-1.014	
Penta	PCB-119	1.77e+06	1.58	y 38:14	1.53	2130		*	2.5	*	0.987	0.982-0.992	
Penta	PCB-108/112	5.54e+06	1.65	y 38:25	1.28	8000		*	2.5	*	0.992	0.986-0.996	
Penta	PCB-83	*	*	n NotF ₁₁	1.52			1820	2.5	75.4	*	0.990-1.000	
Penta	PCB-97	3.44e+07	1.60	y 38:45	1.18	53800		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-86	1.54e+05	1.66	y 38:54	0.84	338		*	2.5	*	1.004	0.999-1.009	
Penta	PCB-87/117/125	5.92e+07	1.60	y 39:02	1.55	70600		*	2.5	*	1.008	1.002-1.012	
Penta	PCB-111/115	2.52e+06	1.67	y 39:11	1.63	2850		*	2.5	*	1.012	1.006-1.016	
Penta	PCB-85/116	1.71e+07	1.59	y 39:18	1.30	24300		*	2.5	*	1.015	1.010-1.020	
Penta	PCB-120	2.60e+05	1.60	y 39:31	1.68	287		*	2.5	*	1.020	1.016-1.026	
Penta	PCB-110	1.71e+08	1.62	y 39:42	1.56	203000		*	2.5	*	1.025	1.020-1.030	
Penta	PCB-82	1.15e+07	1.60	y 40:19	0.76	21200		*	2.5	*	0.976	0.971-0.981	
Penta	PCB-124	6.33e+06	1.54	y 41:00	1.47	6040		*	2.5	*	0.993	0.988-0.998	
Penta	PCB-107/109	8.13e+06	1.59	y 41:11	1.32	8630		*	2.5	*	0.997	0.991-1.001	
Penta	PCB-123	1.63e+06	1.62	y 41:20	1.17	1950		*	2.5	*	1.001	0.996-1.006	
Penta	PCB-106/118	1.29e+08	1.61	y 41:30	1.17	155000		*	2.5	*	1.000	0.996-1.006	
Penta	PCB-114	4.52e+06	1.55	y 42:10	1.30	3080		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-122	1.93e+06	1.57	y 42:18	1.12	1520		*	2.5	*	1.004	0.999-1.009	
Penta	PCB-105	8.09e+07	1.59	y 43:02	1.30	55700		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-127	*	*	n NotF ₁₁	1.33			3530	2.5	74.2	*	0.996-1.006	
Penta	PCB-126	8.61e+05	1.68	y 45:16	1.18	668		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-155	*	*	n NotF ₁₁	1.11	*		958	2.5	54.4	*	0.966-1.006	
Hexa	PCB-150	8.16e+04	1.26	y 38:16	1.00	168		*	2.5	*	1.035	1.030-1.040	
Hexa	PCB-152	8.35e+04	1.55	n 38:44	1.12	154	R	*	2.5	*	1.048	1.043-1.053	
Hexa	PCB-145	4.28e+04	1.36	y 39:10	1.20	73.2		*	2.5	*	1.060	1.055-1.065	
Hexa	PCB-136	9.74e+06	1.24	y 39:31	1.18	17000		*	2.5	*	1.069	1.064-1.074	
Hexa	PCB-148	*	*	n NotF ₁₁	0.74	*		958	2.5	81.4	*	1.066-1.076	
Hexa	PCB-154	4.80e+05	1.30	y 40:06	0.86	1150		*	2.5	*	1.085	1.080-1.090	
Hexa	PCB-151	7.87e+06	1.31	y 40:44	0.75	21700		*	2.5	*	1.102	1.097-1.107	
Hexa	PCB-135	6.78e+06	1.30	y 40:58	0.79	17600		*	2.5	*	1.108	1.103-1.113	
Hexa	PCB-144	2.29e+06	1.30	y 41:05	0.76	6170		*	2.5	*	1.111	1.105-1.117	
Hexa	PCB-147	1.31e+06	1.33	y 41:12	0.82	3290		*	2.5	*	1.115	1.109-1.121	
Hexa	PCB-139/149	4.11e+07	1.28	y 41:26	0.76	111000		*	2.5	*	1.121	1.116-1.128	
Hexa	PCB-140	3.08e+05	1.31	y 41:39	0.72	877		*	2.5	*	1.127	1.121-1.133	
Hexa	PCB-134/143	8.95e+06	1.21	y 42:06	0.92	11100		*	2.5	*	0.975	0.970-0.980	

Analyst: DMS

Date: 2/23/15

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	4.36e+06	1.25	y 42:24	0.82	6050		*	2.5	*	0.982	0.977-0.987	
Hexa	PCB-131	*	*	n NotF _H	0.91		*	1740	2.5	63.3	*	0.981-0.991	
Hexa	PCB-146/165	1.84e+07	1.28	y 42:47	1.25	16800		*	2.5	*	0.991	0.986-0.996	
Hexa	PCB-132/161	5.16e+07	1.25	y 43:03	1.10	53000		*	2.5	*	0.997	0.992-1.002	
Hexa	PCB-153	1.21e+08	1.28	y 43:11	1.25	110000		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-168	1.95e+05	1.10	y 43:24	1.45	152		*	2.5	*	1.005	1.001-1.011	
Hexa	PCB-141	2.48e+07	1.23	y 43:55	1.09	26800		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-137	1.07e+07	1.22	y 44:18	1.06	11800		*	2.5	*	1.009	1.004-1.014	
Hexa	PCB-130	8.64e+06	1.27	y 44:25	0.96	10500		*	2.5	*	1.011	1.006-1.016	
Hexa	PCB-138/163/164	1.74e+08	1.27	y 44:46	1.29	154000		*	2.5	*	1.000	0.996-1.006	
Hexa	PCB-158/160	2.35e+07	1.25	y 45:00	1.34	20000		*	2.5	*	1.006	1.001-1.011	
Hexa	PCB-129	8.90e+06	1.23	y 45:16	0.85	11900		*	2.5	*	1.012	1.007-1.017	
Hexa	PCB-166	9.67e+05	1.37	y 45:44	1.19	850		*	2.5	*	0.993	0.988-0.998	
Hexa	PCB-159	*	*	n NotF _H	1.11		*	1740	2.5	49.2	*	0.996-1.006	
Hexa	PCB-128/162	3.20e+07	1.26	y 46:20	1.05	31800		*	2.5	*	1.007	1.002-1.012	
Hexa	PCB-167	7.87e+06	1.25	y 46:44	1.20	6140		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-156	2.28e+07	1.29	y 48:02	1.14	19100		*	2.5	*	1.000	0.996-1.006	
Hexa	PCB-157	5.08e+06	1.32	y 48:19	1.16	4090		*	2.5	*	1.001	0.995-1.005	
Hexa	PCB-169	*	*	n NotF _H	1.12		*	1740	2.5	45.4	*	0.995-1.005	
Hepta	PCB-188	3.82e+04	0.83	n 42:49	1.58	40.4	R	*	2.5	*	1.001	0.996-1.006	
Hepta	PCB-184	*	*	n NotF _H	1.63		*	1560	2.5	30.6	*	1.006-1.016	
Hepta	PCB-179	5.01e+06	1.07	y 44:03	1.30	6420		*	2.5	*	1.030	1.024-1.034	
Hepta	PCB-176	1.84e+06	1.07	y 44:31	1.48	2080		*	2.5	*	1.041	1.035-1.045	
Hepta	PCB-186	*	*	n NotF _H	1.45		*	1560	2.5	34.3	*	1.050-1.060	
Hepta	PCB-178	1.76e+06	0.95	y 45:37	1.03	2850		*	2.5	*	1.066	1.061-1.071	
Hepta	PCB-175	4.40e+05	0.94	y 45:58	1.01	726		*	2.5	*	1.074	1.069-1.079	
Hepta	PCB-182/187	1.11e+07	1.10	y 46:07	1.25	14800		*	2.5	*	1.078	1.073-1.083	
Hepta	PCB-183	6.76e+06	1.07	y 46:26	1.21	9340		*	2.5	*	1.085	1.081-1.091	
Hepta	PCB-185	9.85e+05	1.07	y 47:07	1.80	1180		*	2.5	*	0.955	0.951-0.961	
Hepta	PCB-174	1.07e+07	1.08	y 47:29	1.38	16700		*	2.5	*	0.963	0.958-0.968	
Hepta	PCB-181	1.88e+05	0.99	y 47:36	1.38	293		*	2.5	*	0.965	0.960-0.970	
Hepta	PCB-177	6.17e+06	1.13	y 47:45	1.26	10600		*	2.5	*	0.968	0.963-0.973	
Hepta	PCB-171	3.70e+06	1.09	y 48:02	1.58	5030		*	2.5	*	0.974	0.970-0.980	
Hepta	PCB-173	3.10e+05	1.04	y 48:29	1.11	601		*	2.5	*	0.983	0.978-0.988	
Hepta	PCB-172	1.97e+06	1.11	y 48:56	1.63	2590		*	2.5	*	0.992	0.987-0.997	
Hepta	PCB-192	*	*	n NotF _H	1.74		*	1560	2.5	37.2	*	0.991-1.001	
Hepta	PCB-180	2.46e+07	1.08	y 49:20	1.34	39300		*	2.5	*	1.000	0.995-1.005	

Analyst: DMS

Date: 2/23/15

Client ID: WM-MH-61-20150203-S Filename: 150219E2 S:7 Acq:19-FEB-15 20:32:10
 Lab ID: 1500147-02@10X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.011

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ConCal: ST150219E2-1

EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	1.34e+06	1.14	y 49:31	1.72	1690		*	2.5	*	1.004	0.999-1.009	
Hepta	PCB-191	6.83e+05	1.02	y 49:46	1.69	868		*	2.5	*	1.009	1.004-1.014	
Hepta	PCB-170	1.24e+07	1.08	y 50:48	1.60	20400		*	2.5	*	1.000	0.995-1.005	
Hepta	PCB-190	2.93e+06	1.05	y 50:57	2.21	3500		*	2.5	*	1.003	0.998-1.008	
Hepta	PCB-189	6.75e+05	1.04	y 52:16	1.55	980		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-202	4.49e+05	0.83	y 48:15	1.08	837		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-201	3.13e+05	0.74	n 48:44	1.15	549	R	*	2.5	*	1.010	1.005-1.015	
Octa	PCB-204	*	*	n NotF	1.14	*		1460	2.5	60.4	*	1.008-1.018	
Octa	PCB-197	1.12e+05	0.85	y 49:12	1.07	210		*	2.5	*	1.020	1.015-1.025	
Octa	PCB-200	3.35e+05	0.97	y 50:04	1.06	635		*	2.5	*	1.038	1.032-1.044	
Octa	PCB-198	7.55e+04	0.84	y 51:21	0.76	202		*	2.5	*	1.065	1.059-1.069	
Octa	PCB-199	1.95e+06	0.88	y 51:28	0.80	4940		*	2.5	*	1.067	1.061-1.071	
Octa	PCB-196/203	2.32e+06	0.93	y 51:44	0.80	5830		*	2.5	*	1.073	1.066-1.076	
Octa	PCB-195	1.54e+06	0.89	y 52:54	1.23	2050		*	2.5	*	0.984	0.979-0.989	
Octa	PCB-194	3.71e+06	0.95	y 53:47	1.21	5010		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-205	1.90e+05	0.99	y 54:04	1.54	202		*	2.5	*	1.006	1.001-1.011	
Nonna	PCB-208	5.05e+05	1.47	y 53:03	0.93	672		*	2.5	*	1.000	0.995-1.005	
Nonna	PCB-207	2.01e+05	1.36	y 53:22	1.08	230		*	2.5	*	1.006	1.001-1.011	
Nonna	PCB-206	1.24e+06	1.37	y 55:28	1.02	2430		*	2.5	*	1.000	0.995-1.005	
Deca	PCB-209	3.75e+05	1.32	y 56:48	1.17	751		*	2.5	*	1.000	0.995-1.005	

Analyst: DMS

Date: 2/23/15

Client ID: WM-MH-61-20150203-S
Lab ID: 1500147-02@10X

Filename: 150219E2 S:7 Acq:19-FEB-15 20:32:10 ConCal: ST150219E2-1
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.0110 EndCAL: NA

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	Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB		1.98e+06	2.89 y	16:08	1.27	925.772
Total Di-PCB		2.86e+07	1.60 y	20:03	1.21	14416.9
Total Tri-PCB		3.79e+07	1.11 y	24:11	1.10	31945.9
Total Tri-PCB		8.39e+07	1.05 y	28:12	1.21	45441.1 Sum:77386.9
Total Tetra-PCB		4.62e+08	0.72 y	29:04	1.09	372897
Total Penta-PCB		7.87e+08	1.67 y	33:52	1.18	1069540
Total Penta-PCB		8.82e+07	1.55 y	42:10	1.25	60944.7 Sum:1130490
Total Hexa-PCB		7.00e+07	1.26 y	38:16	0.90	178807
Total Hexa-PCB		5.24e+08	1.21 y	42:06	1.11	493700 Sum:672507
Total Hepta-PCB		9.35e+07	1.07 y	44:03	1.42	140071
Total Octa-PCB		5.24e+06	0.83 y	48:15	0.96	12657.2
Total Octa-PCB		5.44e+06	0.89 y	52:54	1.33	7259.60 Sum:19916.8
Total Nona-PCB		1.94e+06	1.47 y	53:03	1.01	3331.41
Total Deca-PCB		3.75e+05	1.32 y	56:48	1.17	750.746

Total PCB Conc:2433691.94308

Integrations
by
Analyst: Dms
Date: 2/23/15

Client ID: WM-MH-61-20150203-S
 Lab ID: 1500147-02@10X

Filename: 150219E2 S:7 Acq:19-FEB-15 20:32:10 ConCal: ST150219E2-1
 GC Column ID: ZB-1 ICal: PCVG8-6-23-14 wt/vol:2.0110 EndCAL: NA

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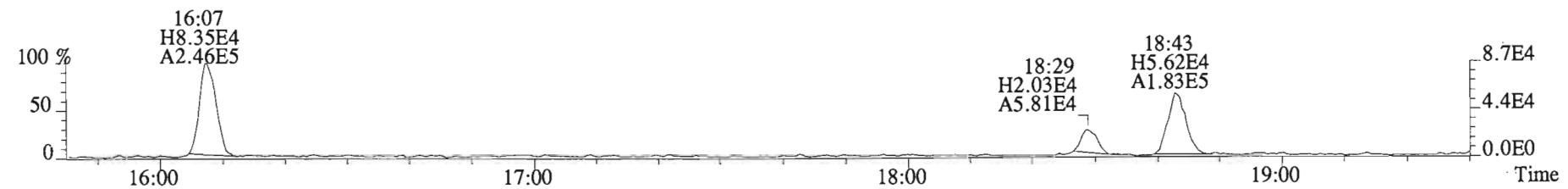
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13C-PCB-1	1.71e+07	3.33	y	0.87	16:07	0.623	0.629-0.635	9310	93.6	13C-PCB-79	1.38e+07	0.80	y	1.02	37:45	1.029	1.023-1.034	9260	93.1		
13C-PCB-3	1.67e+07	3.40	y	0.91	18:42	0.722	0.725-0.733	8700	87.5	13C-PCB-178	4.44e+06	0.45	y	0.61	45:36	0.985	0.979-0.990	8330	83.7		
13C-PCB-4	1.07e+07	1.57	y	0.59	20:02	0.774	0.775-0.783	8690	87.4	13C-PCB-37	1.63e+07	1.13	1.131-1.143	10500	105						
13C-PCB-9	1.63e+07	1.59	y	0.90	21:48	0.842	0.842-0.850	8660	87.0	13C-PCB-47	1.09e+07	0.80	y	31:58	0.871	0.866-0.874	9100	91.5			
13C-PCB-11	1.78e+07	1.58	y	0.94	25:11	0.973	0.968-0.978	9050	91.0	13C-PCB-52	1.02e+07	0.80	y	0.77	31:26	0.856	0.853-0.861	8990	90.4		
13C-PCB-19	9.36e+06	1.06	y	0.53	24:10	0.934	0.930-0.940	8380	84.3	13C-PCB-32	1.38e+07	1.12	y	0.80	27:04	1.046	1.040-1.050	8220	82.7		
13C-PCB-28	1.38e+07	1.06	y	0.93	29:01	1.003	0.999-1.009	8020	80.6	13C-PCB-54	1.21e+07	0.80	y	27:55	0.761	0.758-0.766	8450	85.0			
13C-PCB-37	1.63e+07	1.07	y	0.84	32:56	1.139	1.131-1.143	10500	105	13C-PCB-70	1.34e+07	0.79	y	1.00	35:27	0.966	0.961-0.971	9130	91.8		
13C-PCB-47	1.09e+07	0.80	y	0.81	31:58	0.871	0.866-0.874	9100	91.5	13C-PCB-77	1.23e+07	0.77	y	0.94	39:35	1.079	1.073-1.083	8900	89.5		
13C-PCB-52	1.02e+07	0.80	y	0.77	31:26	0.856	0.853-0.861	8990	90.4	13C-PCB-80	1.39e+07	0.82	y	1.03	35:52	0.977	0.972-0.982	9160	92.1		
13C-PCB-54	1.21e+07	0.80	y	0.97	27:55	0.761	0.758-0.766	8450	85.0	13C-PCB-81	1.17e+07	0.79	y	0.92	38:59	1.062	1.057-1.067	8640	86.8		
13C-PCB-70	1.34e+07	0.79	y	1.00	35:27	0.966	0.961-0.971	9130	91.8	13C-PCB-95	5.57e+06	1.56	y	0.74	35:44	0.912	0.908-0.918	9210	92.6		
13C-PCB-77	1.23e+07	0.77	y	0.94	39:35	1.079	1.073-1.083	8900	89.5	13C-PCB-97	5.38e+06	1.68	y	0.70	38:44	0.989	0.984-0.994	9360	94.2		
13C-PCB-80	1.39e+07	0.82	y	1.03	35:52	0.977	0.972-0.982	9160	92.1	13C-PCB-99	5.77e+06	1.77	y	0.78	37:26	0.956	0.951-0.961	9020	90.7		
13C-PCB-104	7.52e+06	1.70	y	1.00	32:38	0.833	0.828-0.836	9200	92.5	13C-PCB-104	7.52e+06	1.51	y	1.37	43:01	0.929	0.924-0.934	9380	94.3		
13C-PCB-105	1.11e+07	1.51	y	1.37	43:01	0.929	0.924-0.934	9380	94.3	13C-PCB-114	1.13e+07	1.59	y	1.36	42:09	0.910	0.905-0.915	9530	95.8		
13C-PCB-114	1.13e+07	1.59	y	1.36	42:09	0.910	0.905-0.915	9530	95.8	13C-PCB-118	7.02e+06	1.57	y	0.96	41:29	1.059	1.054-1.064	8970	90.2		
13C-PCB-118	7.02e+06	1.57	y	0.96	41:29	1.059	1.054-1.064	8970	90.2	13C-PCB-123	7.09e+06	1.52	y	0.89	41:18	1.054	1.050-1.060	9710	97.6		
13C-PCB-126	1.09e+07	1.61	y	1.31	45:16	0.977	0.972-0.982	9570	96.2	13C-PCB-126	1.09e+07	1.47	y	1.47	43:21	0.936	0.931-0.941	9270	93.2		
13C-PCB-127	1.19e+07	1.47	y	1.47	43:21	0.936	0.931-0.941	9270	93.2	13C-PCB-138	8.73e+06	1.29	y	1.10	44:45	0.966	0.961-0.971	9140	91.9		
13C-PCB-138	8.73e+06	1.29	y	1.10	44:45	0.966	0.961-0.971	9140	91.9	13C-PCB-141	8.49e+06	1.26	y	1.07	43:55	0.948	0.943-0.953	9100	91.5		
13C-PCB-141	8.49e+06	1.26	y	1.07	43:55	0.948	0.943-0.953	9100	91.5	13C-PCB-153	8.76e+06	1.27	y	1.15	43:10	0.932	0.927-0.937	8800	88.5		
13C-PCB-153	8.76e+06	1.27	y	1.15	43:10	0.932	0.927-0.937	8800	88.5	13C-PCB-155	4.84e+06	1.41	y	0.84	36:58	0.944	0.939-0.949	7060	71.0		
13C-PCB-155	4.84e+06	1.41	y	0.84	36:58	0.944	0.939-0.949	7060	71.0	13C-PCB-156	1.05e+07	1.22	y	1.30	48:01	1.037	1.032-1.042	9300	93.5		
13C-PCB-156	1.05e+07	1.22	y	1.30	48:01	1.037	1.032-1.042	9300	93.5	13C-PCB-157	1.06e+07	1.31	y	1.36	48:17	1.042	1.038-1.048	8990	90.4		
13C-PCB-157	1.06e+07	1.31	y	1.36	48:17	1.042	1.038-1.048	8990	90.4	13C-PCB-159	9.55e+06	1.28	y	1.25	46:02	0.994	0.989-0.999	8820	88.7		
13C-PCB-159	9.55e+06	1.28	y	1.25	46:02	0.994	0.989-0.999	8820	88.7	13C-PCB-167	1.06e+07	1.26	y	1.35	46:44	1.009	1.004-1.014	9050	91.0		
13C-PCB-167	1.06e+07	1.26	y	1.35	46:44	1.009	1.004-1.014	9050	91.0	13C-PCB-169	9.82e+06	1.26	y	1.29	50:26	1.089	1.083-1.093	8800	88.5		
13C-PCB-169	9.82e+06	1.26	y	1.29	50:26	1.089	1.083-1.093	8800	88.5	13C-PCB-170	3.76e+06	0.46	y	0.54	50:47	1.096	1.089-1.101	7990	80.4		
13C-PCB-170	3.76e+06	0.46	y	0.54	50:47	1.096	1.089-1.101	7990	80.4	13C-PCB-180	4.62e+06	0.52	y	0.68	49:19	1.065	1.060-1.070	7780	78.2		
13C-PCB-180	4.62e+06	0.52	y	0.68	49:19	1.065	1.060-1.070	7780	78.2	13C-PCB-188	5.95e+06	0.48	y	0.92	42:47	0.924	0.919-0.929	7470	75.1		
13C-PCB-188	5.95e+06	0.48	y	0.92	42:47	0.924	0.919-0.929	7470	75.1	13C-PCB-189	4.42e+06	0.45	y	0.72	52:15	1.128	1.120-1.132	7110	71.5		
13C-PCB-189	4.42e+06	0.45	y	0.72	52:15	1.128	1.120-1.132	7110	71.5	13C-PCB-194	6.08e+06	0.91	y	0.80	53:46	0.995	0.990-1.000	9190	92.4		
13C-PCB-194	6.08e+06	0.91	y	0.80	53:46	0.995	0.990-1.000	9190	92.4	13C-PCB-202	4.93e+06	0.86	y	0.84	48:14	1.041	1.036-1.046	6770	68.1		
13C-PCB-202	4.93e+06	0.86	y	0.84	48:14	1.041	1.036-1.046	6770	68.1	13C-PCB-206	4.94e+06	0.81	y	0.65	55:27	1.026	1.021-1.031	9170	92.2		
13C-PCB-206	4.94e+06	0.81	y	0.65	55:27	1.026	1.021-1.031	9170	92.2	13C-PCB-208	8.03e+06	0.79	y	1.08	53:02	0.981	0.976-0.986	8960	90.1		
13C-PCB-208	8.03e+06	0.79	y	1.08	53:02	0.981	0.976-0.986	8960	90.1	13C-PCB-209	4.24e+06	1.22	y	0.61	56:47	1.051	1.045-1.055	8370	84.2		

Analyst: DMS
 Date: 2/23/15

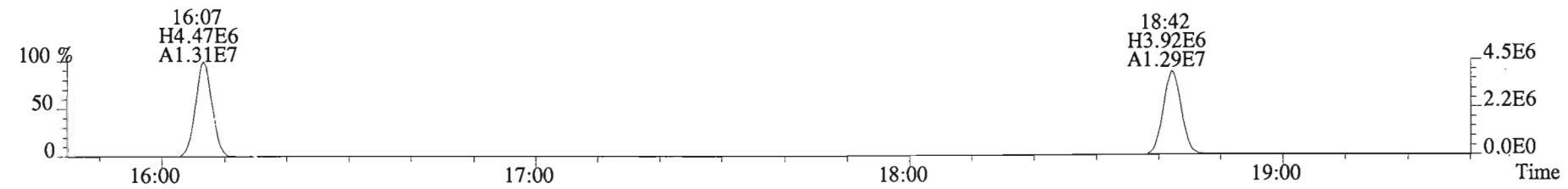
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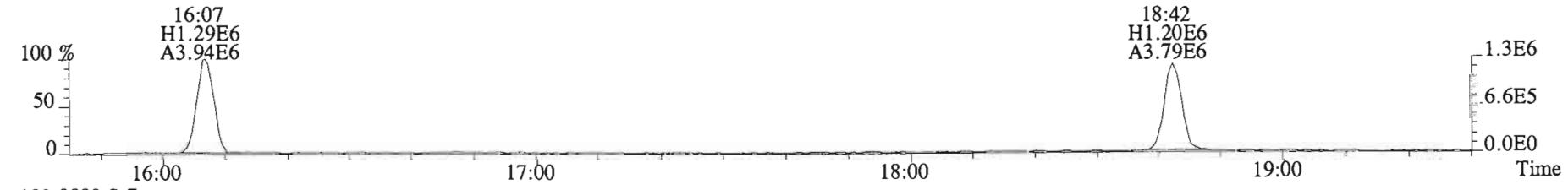
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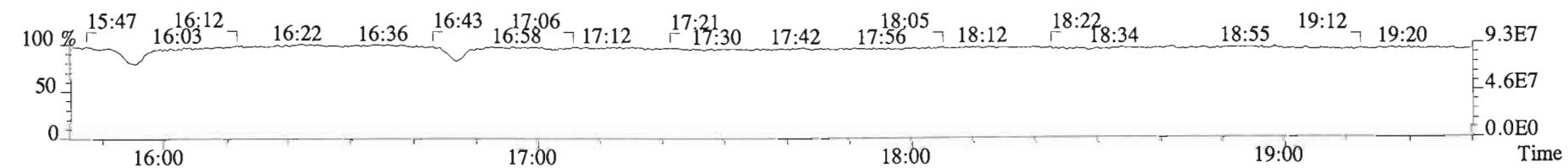
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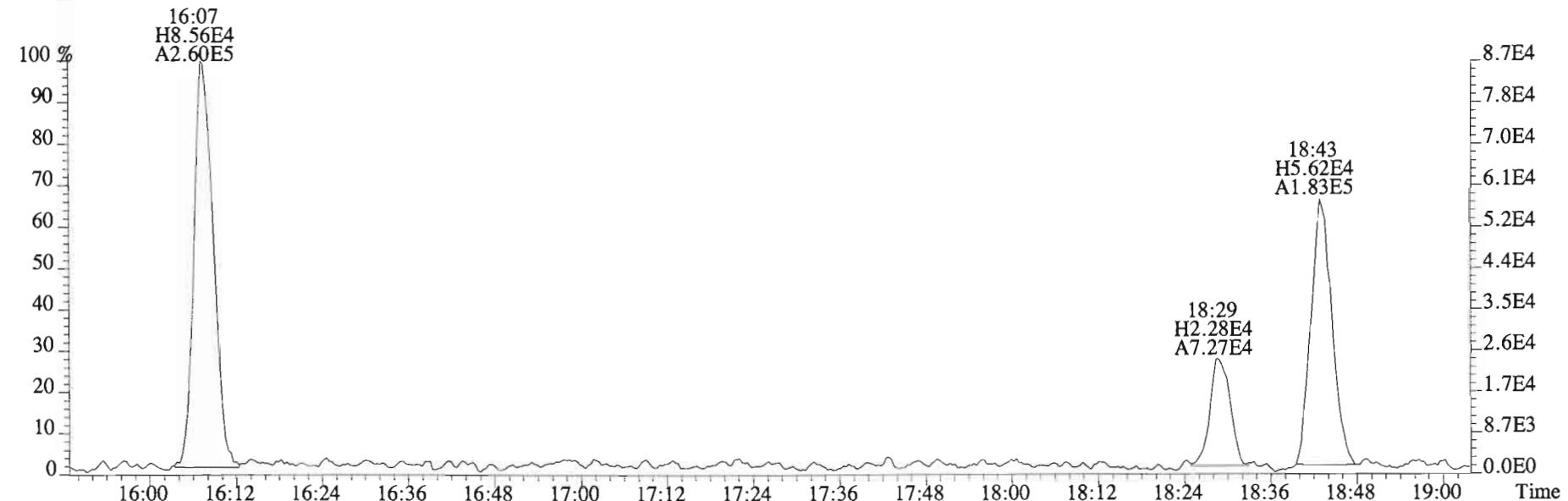
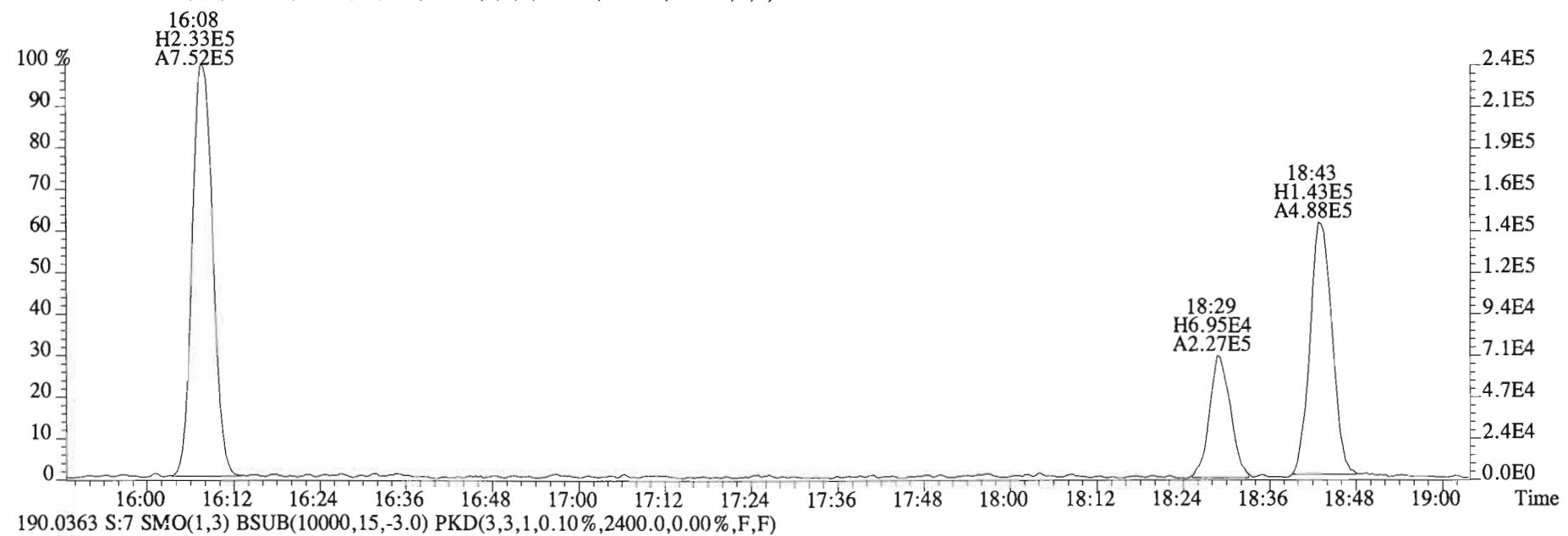
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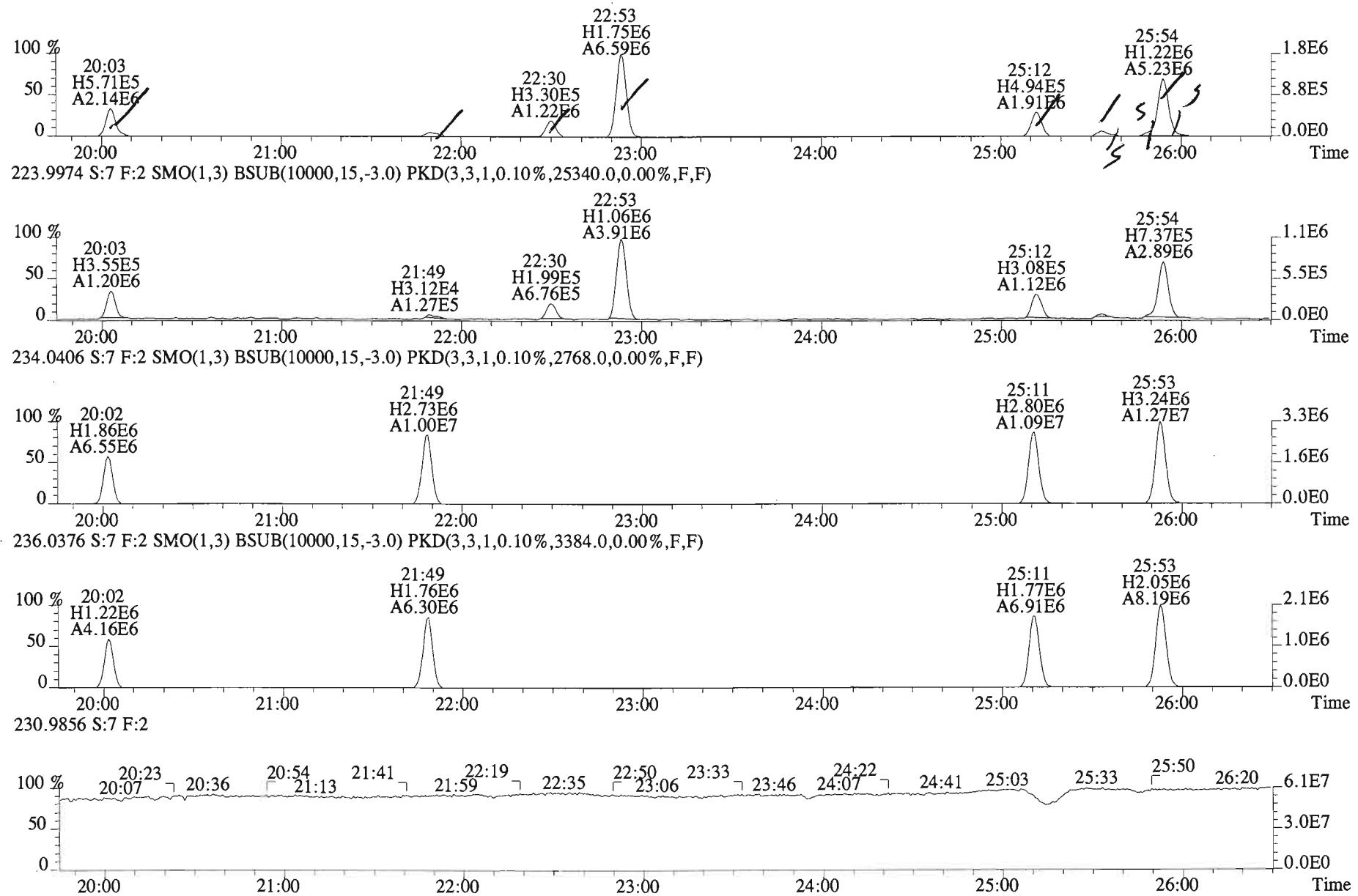
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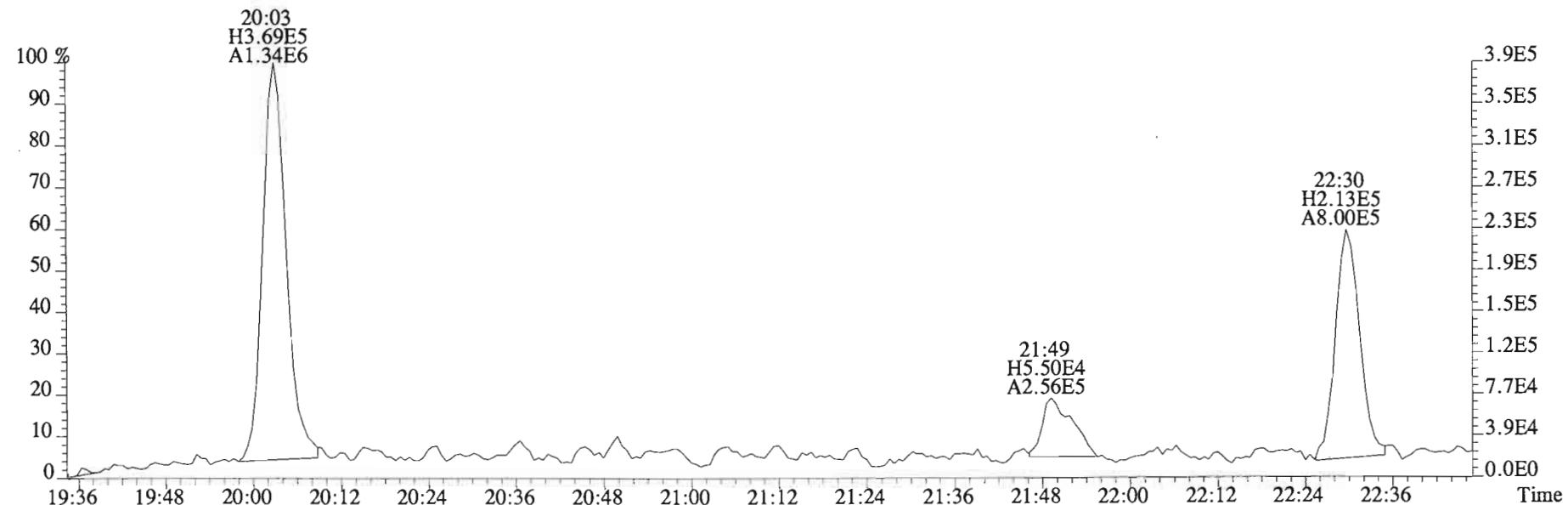
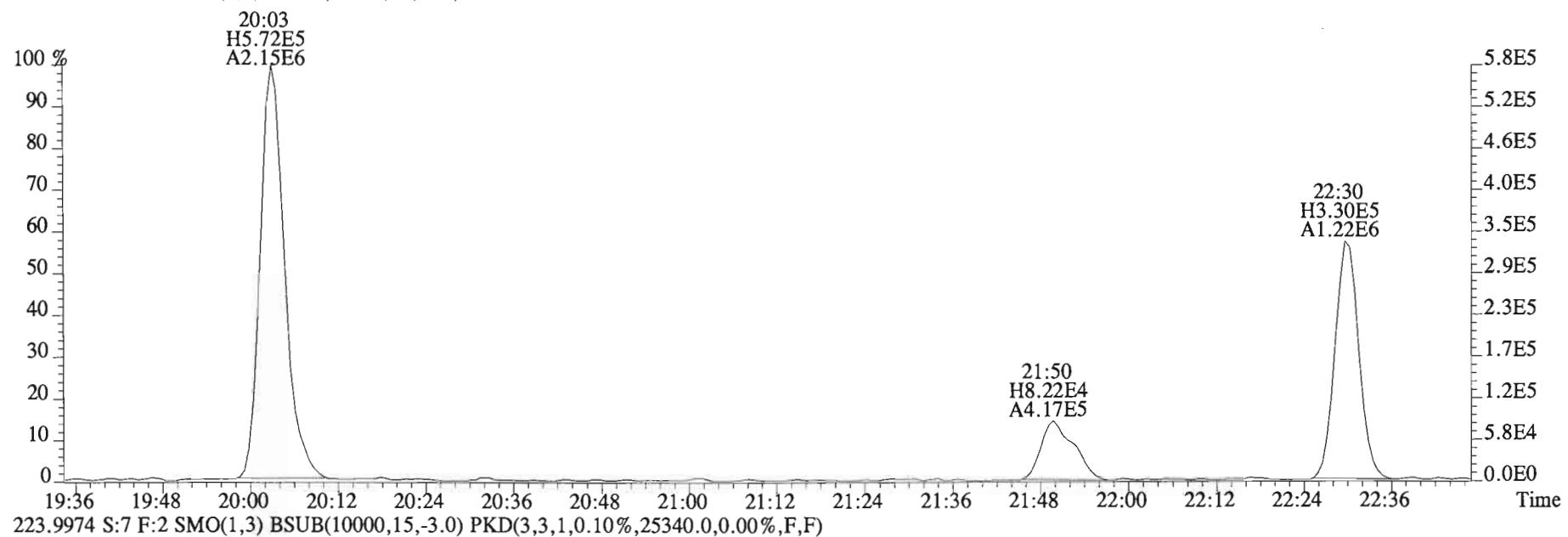
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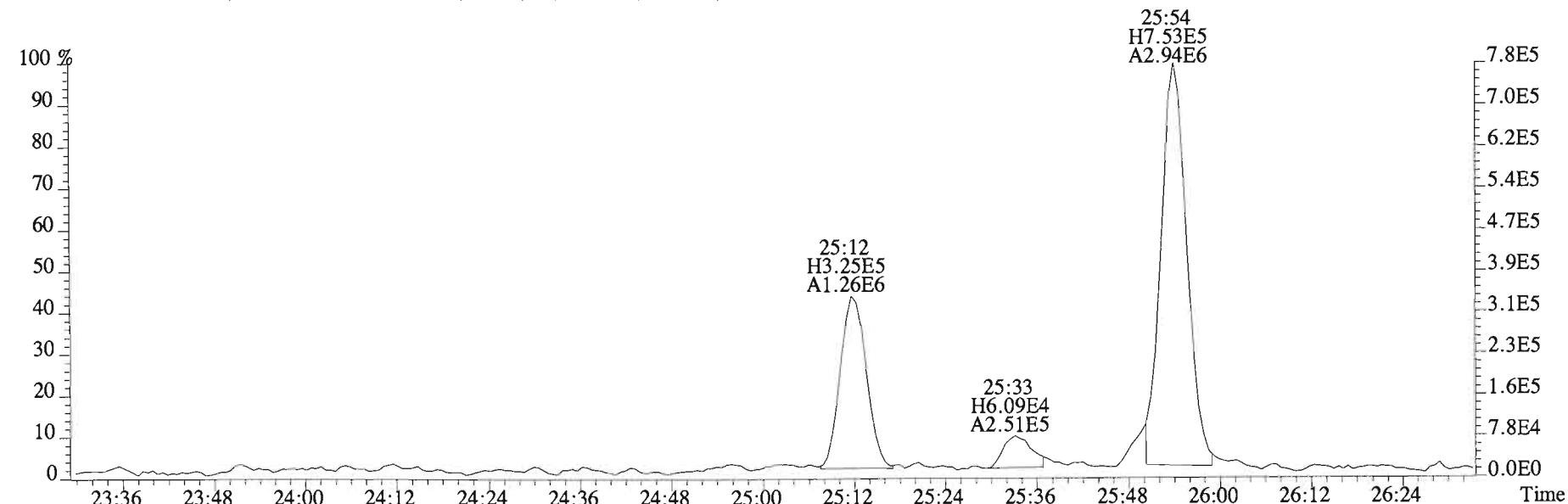
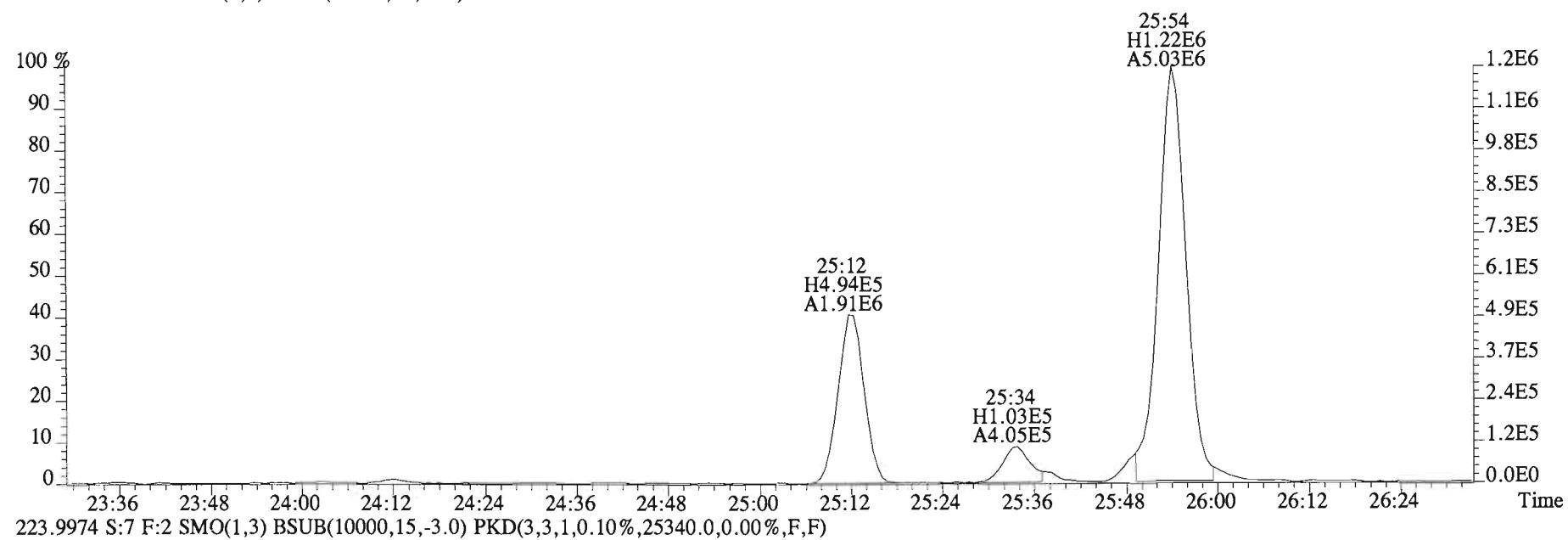
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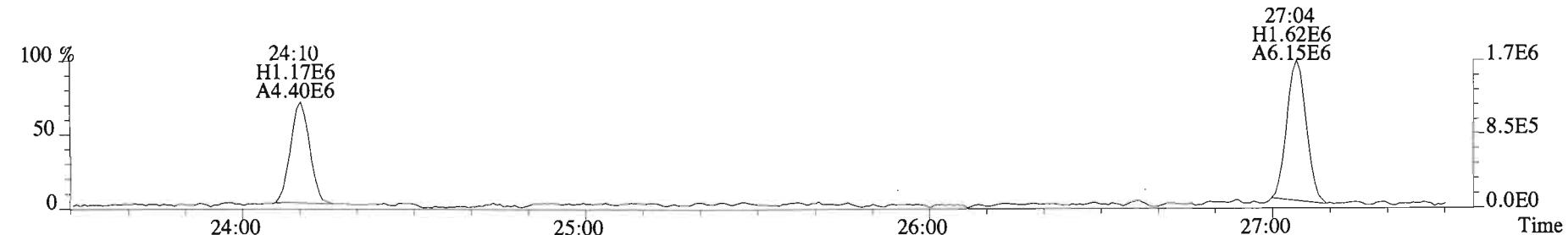
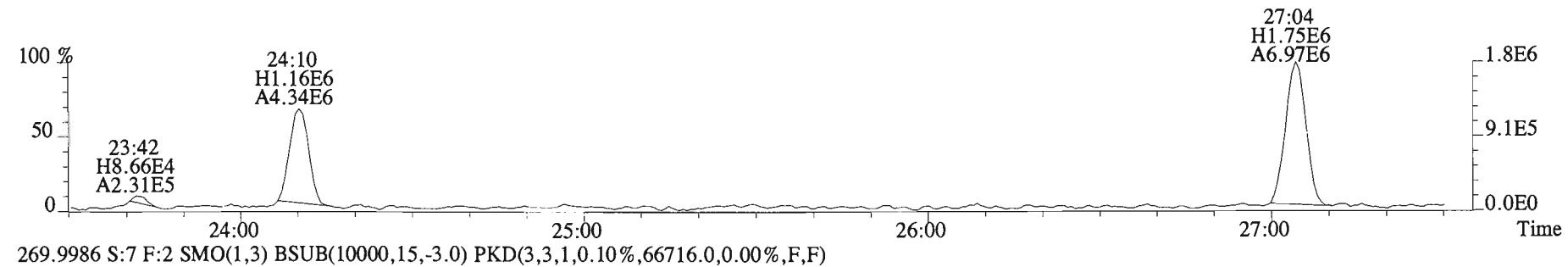
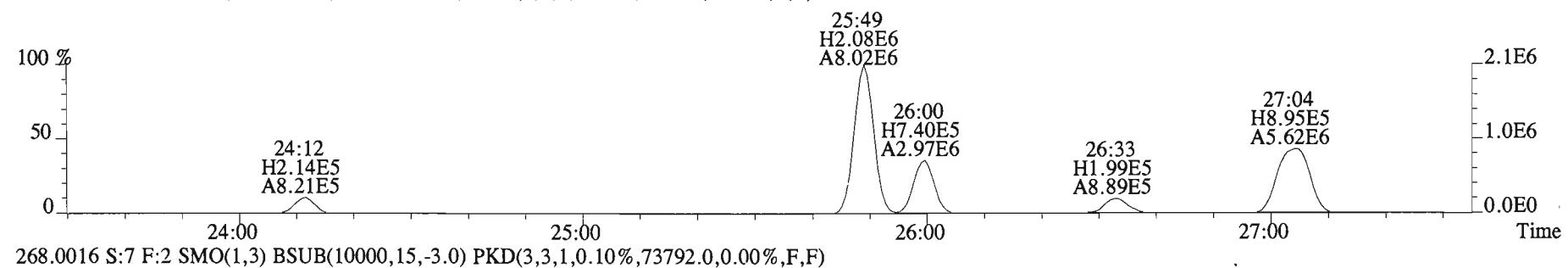
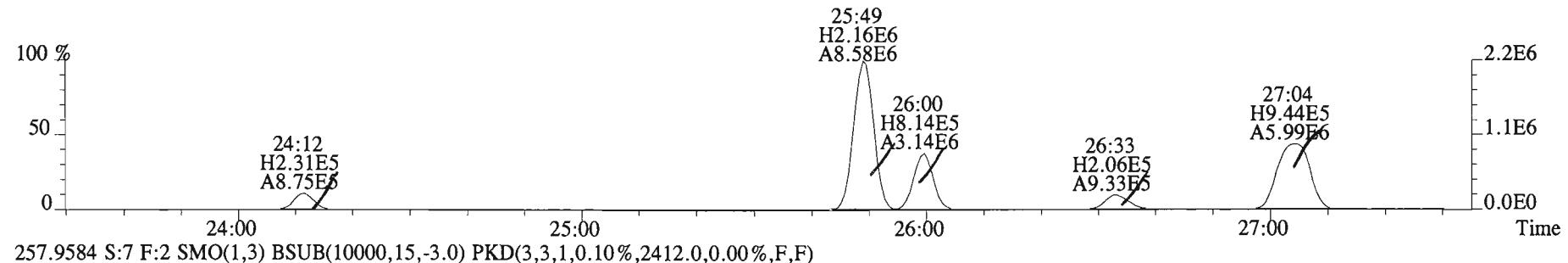
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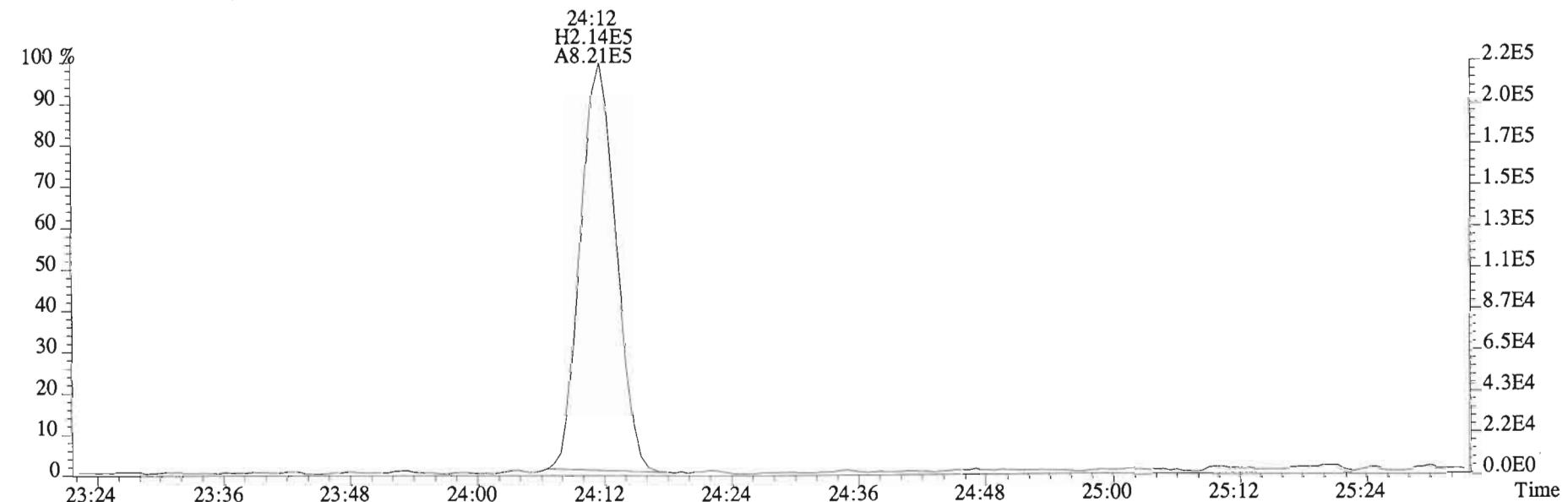
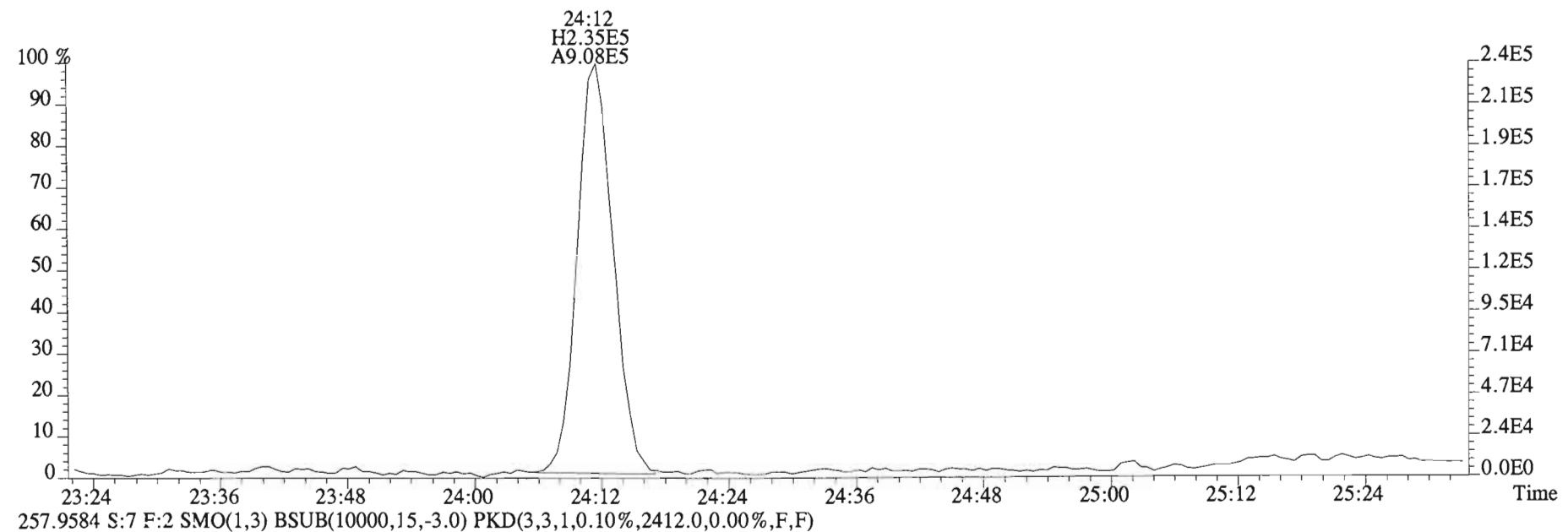
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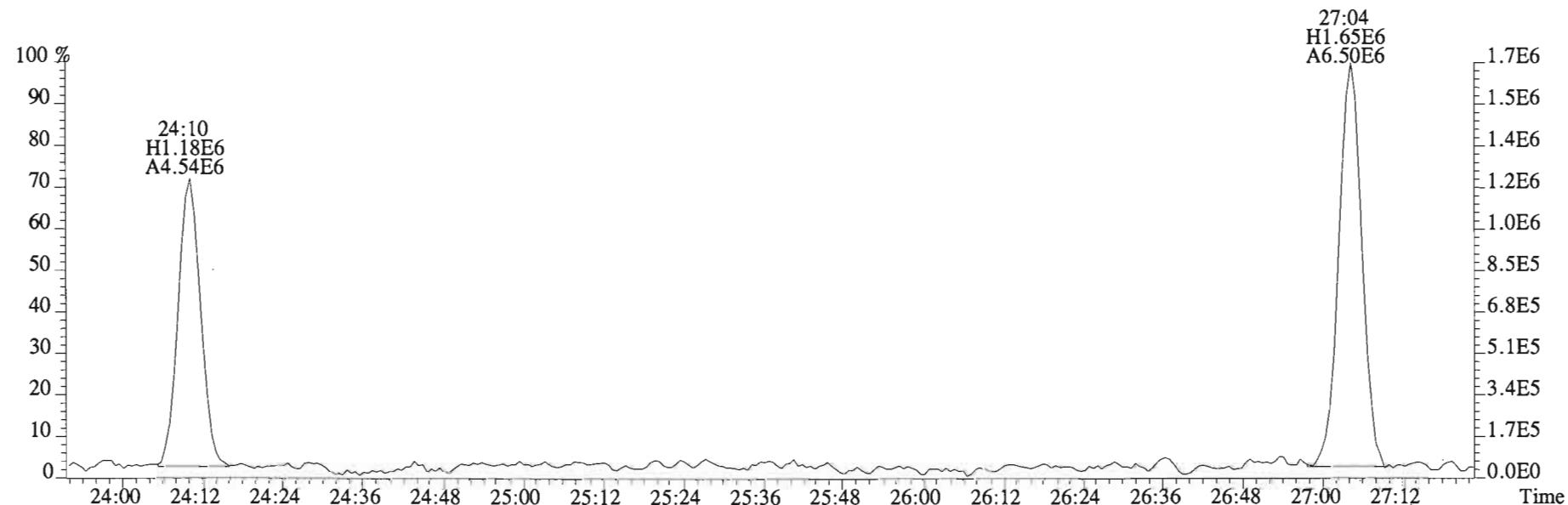
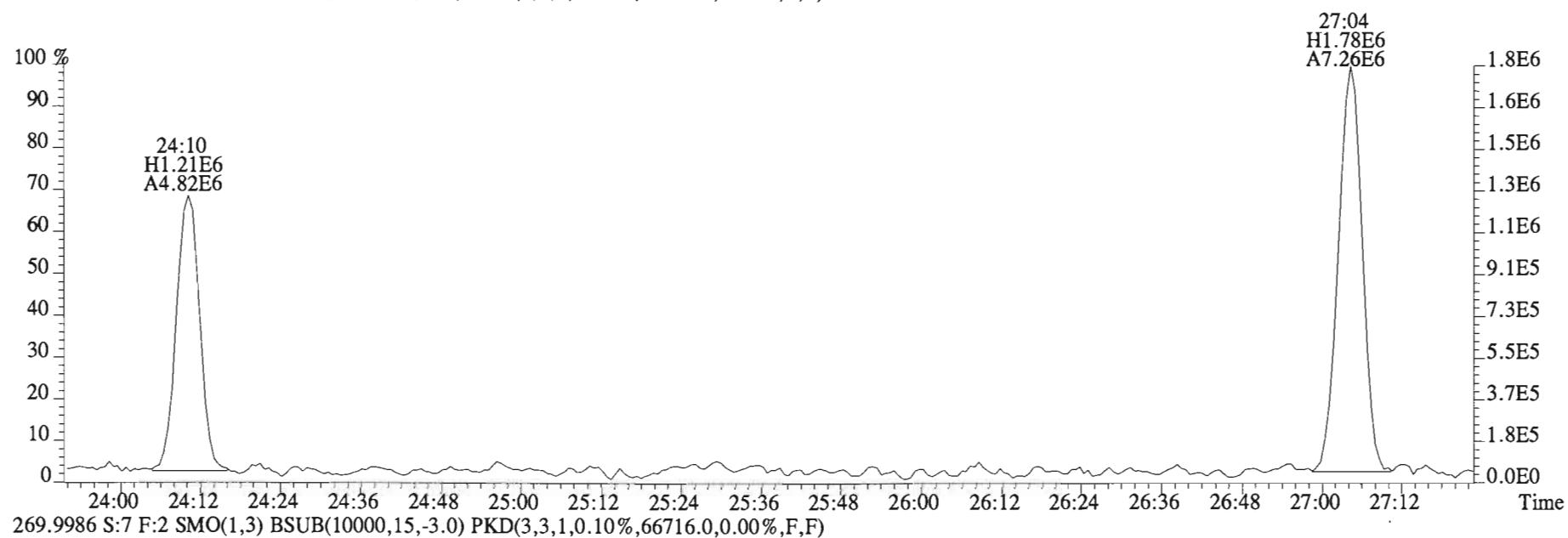
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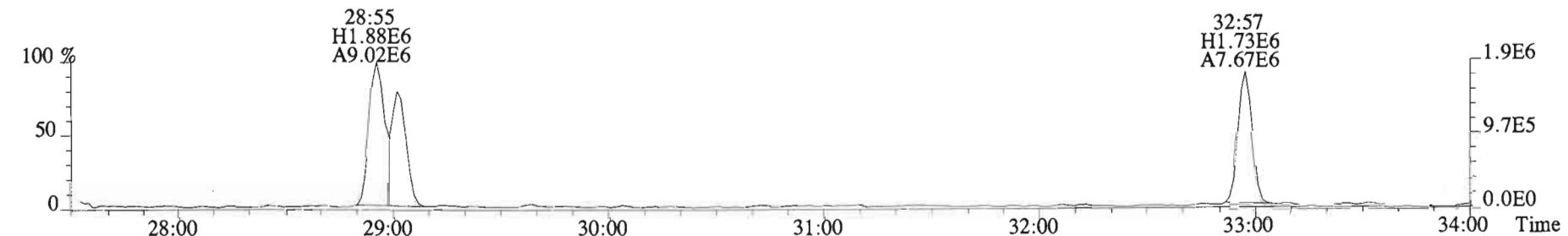
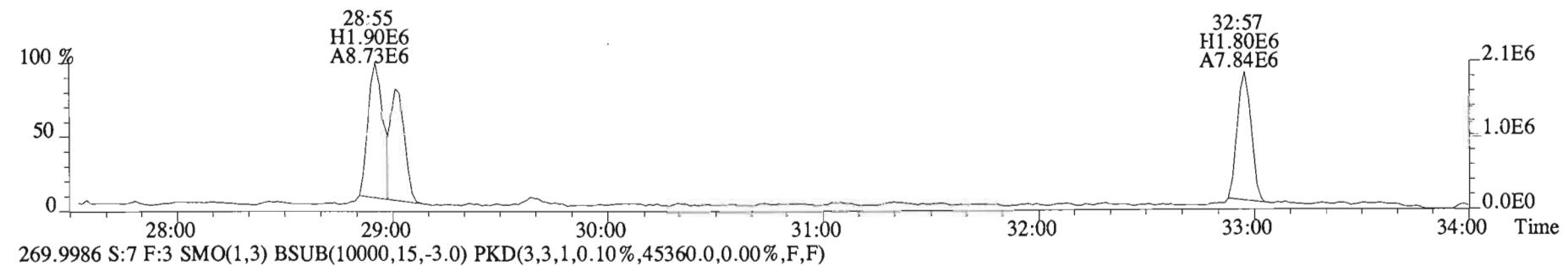
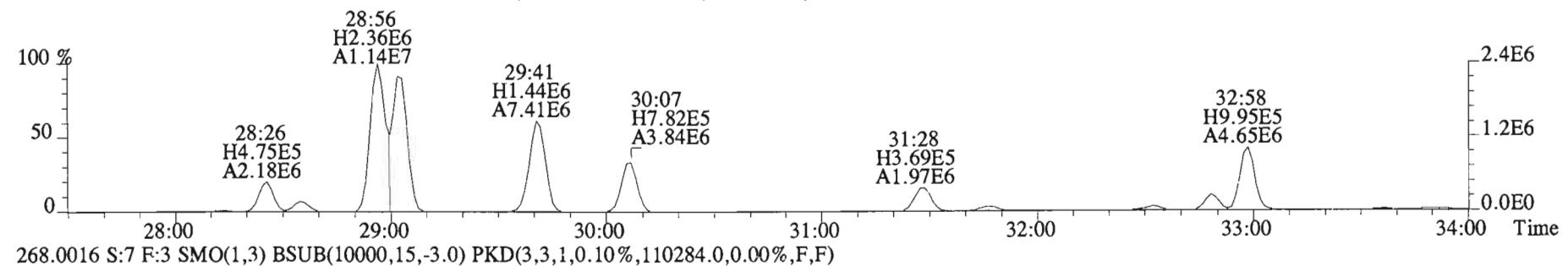
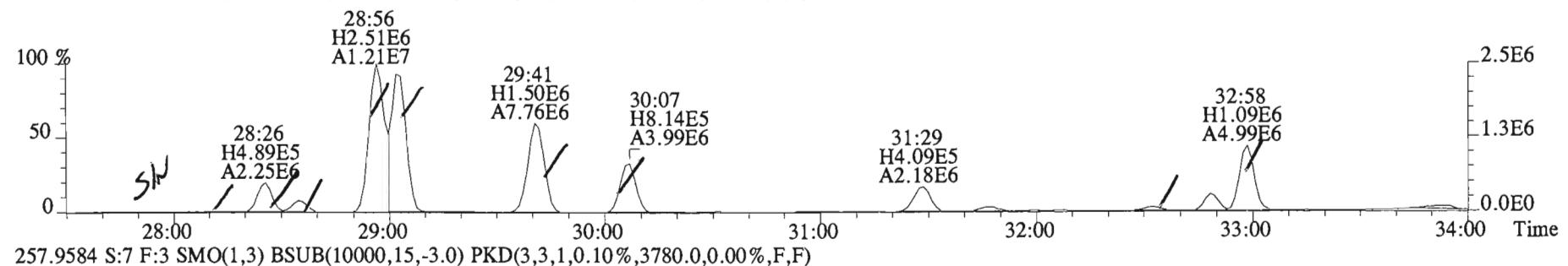
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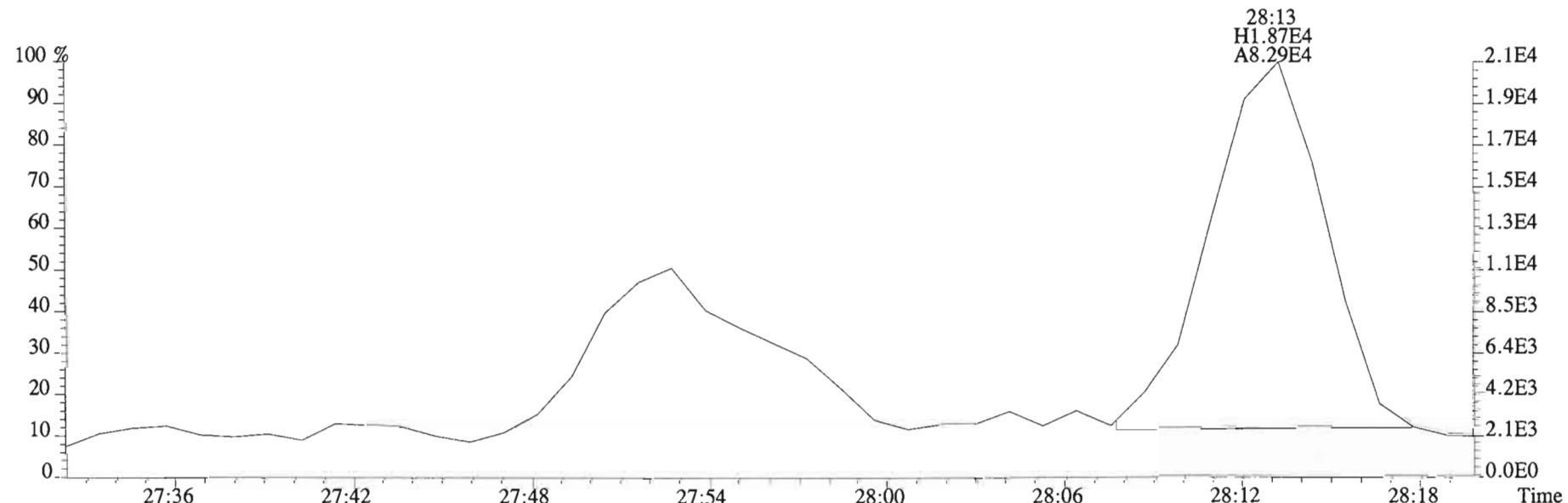
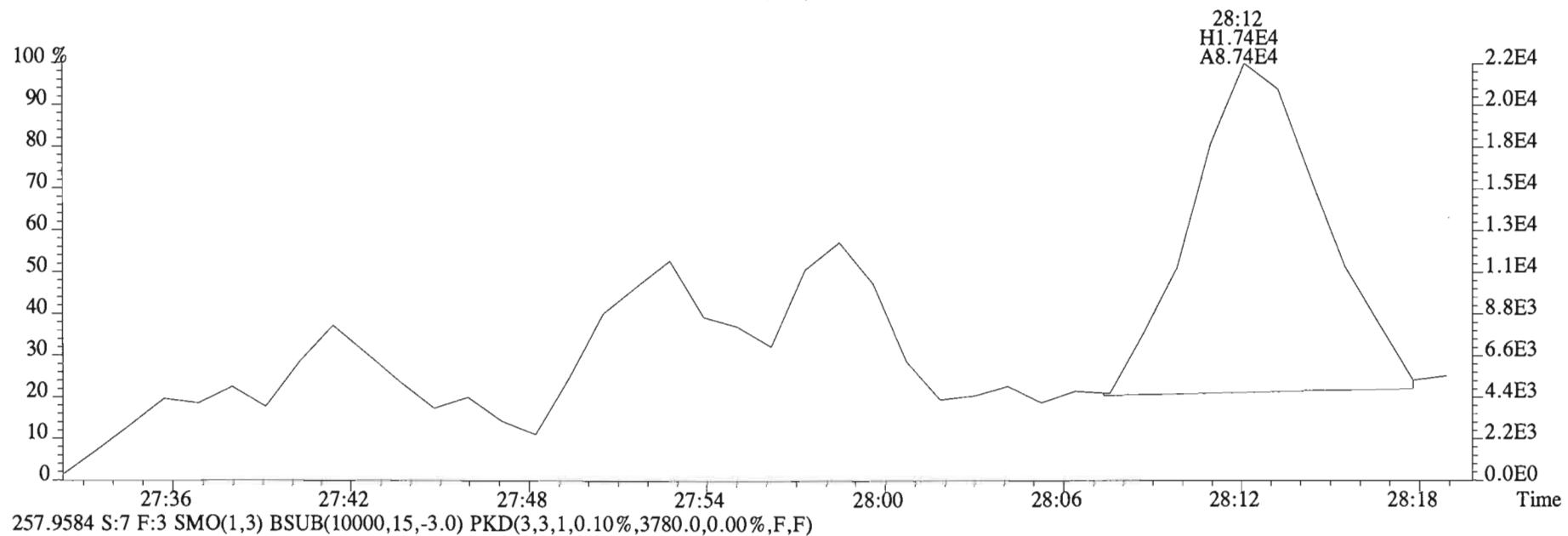
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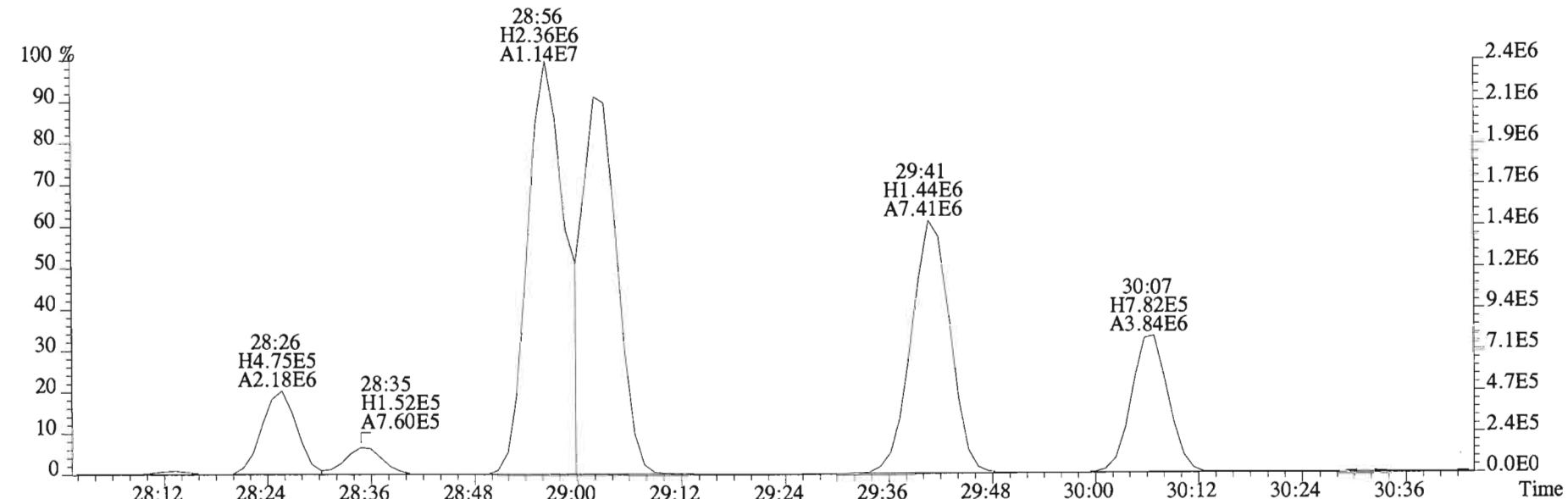
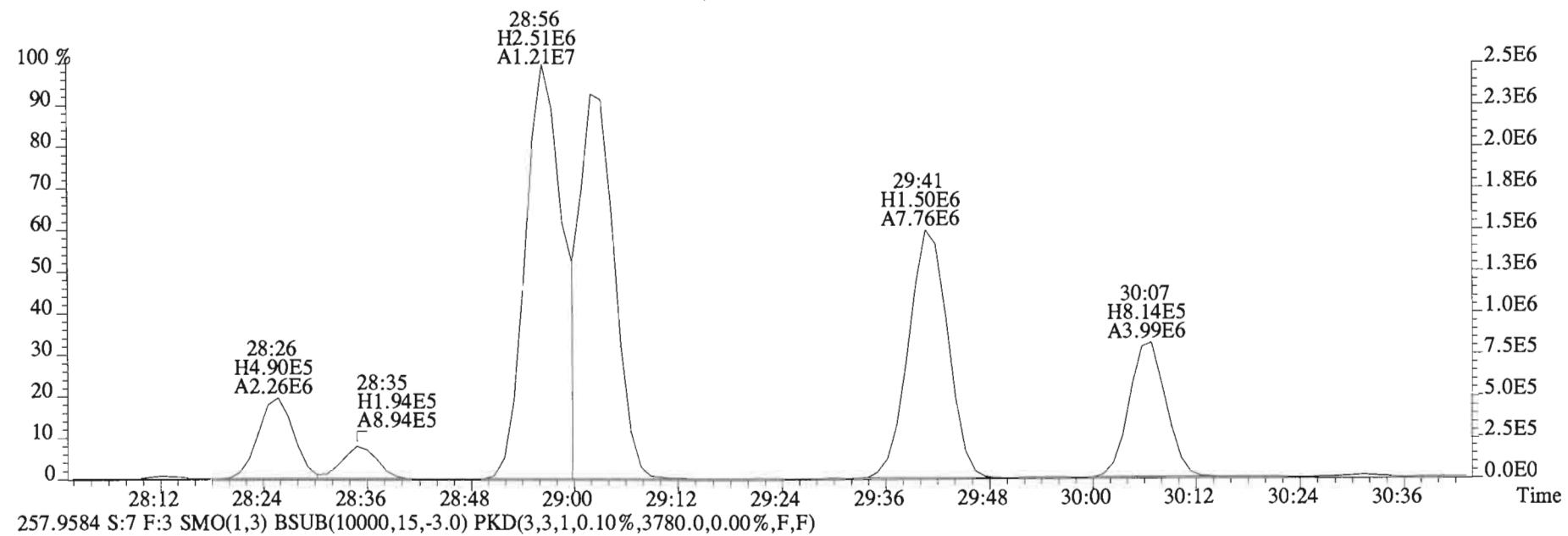
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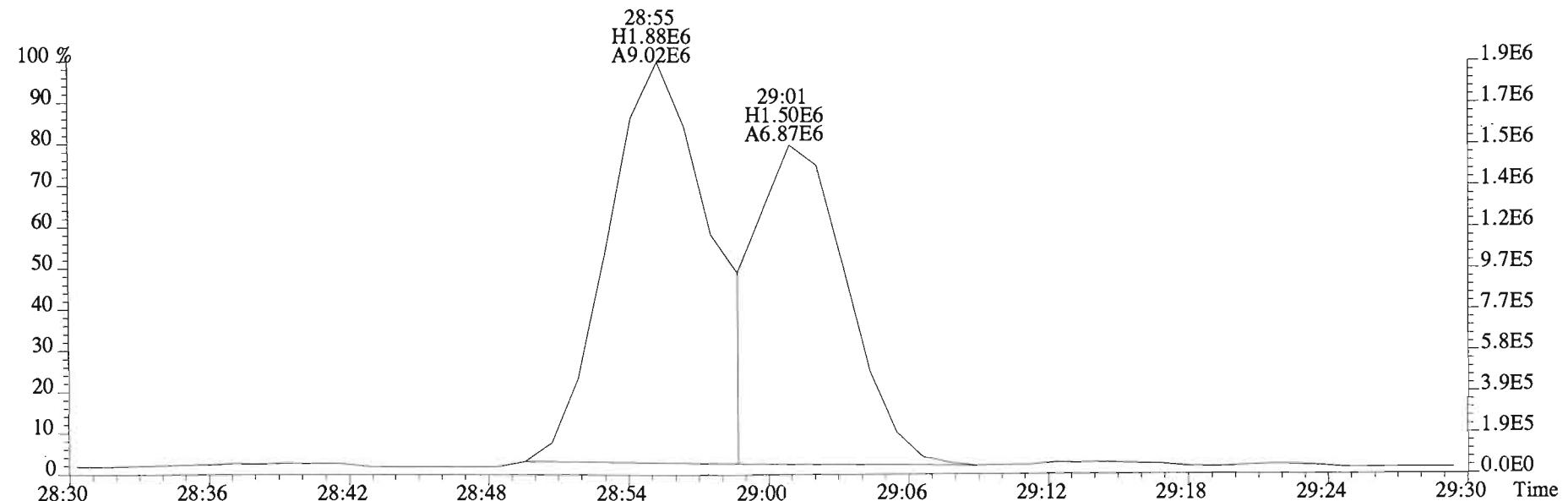
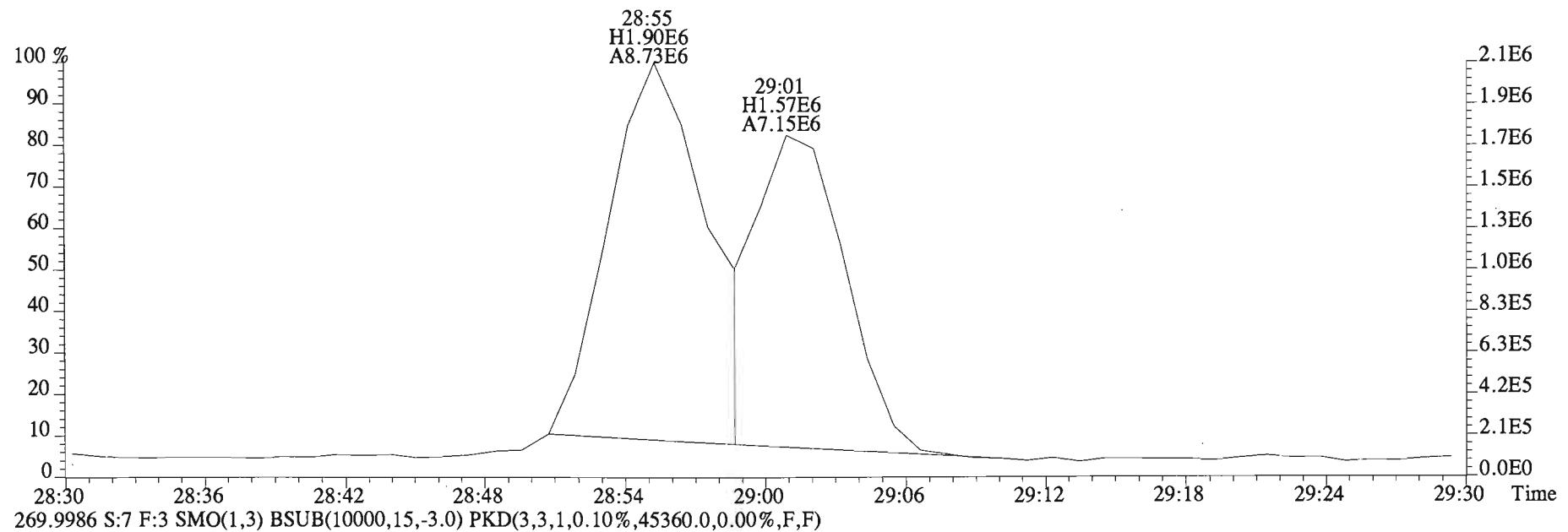
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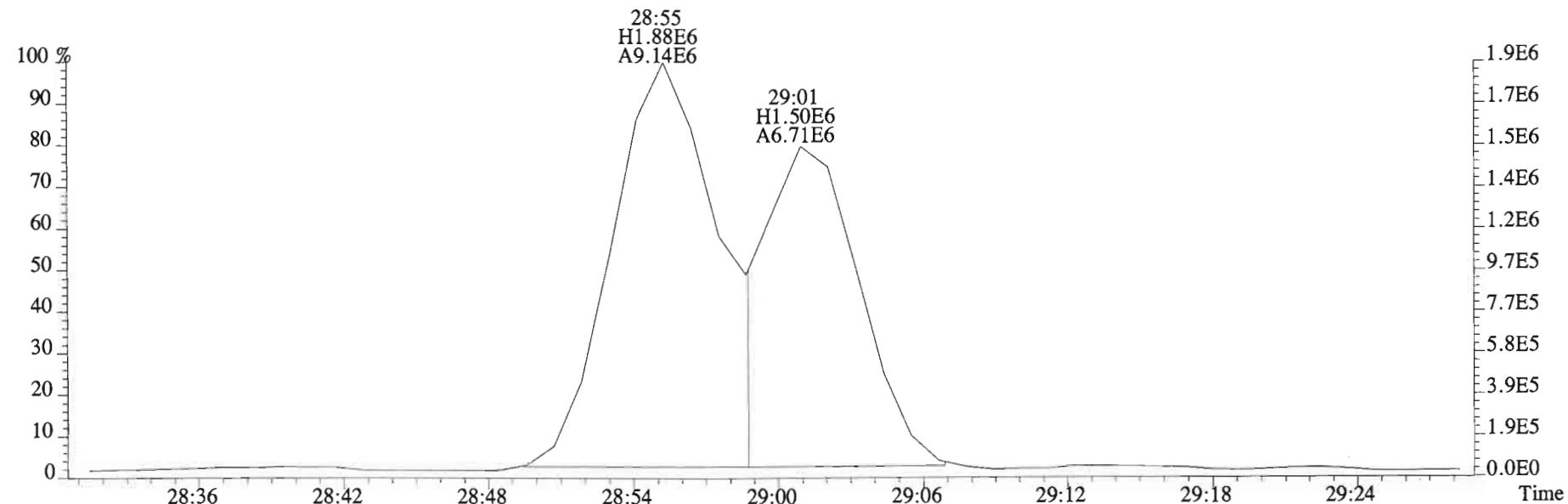
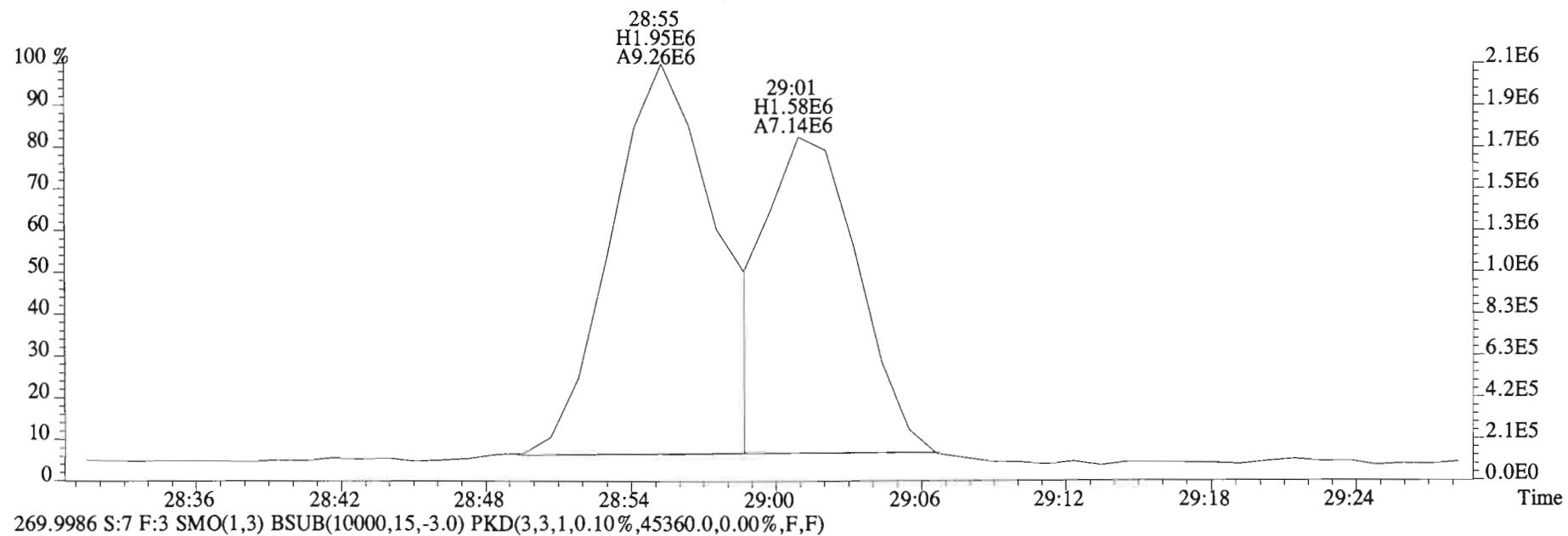
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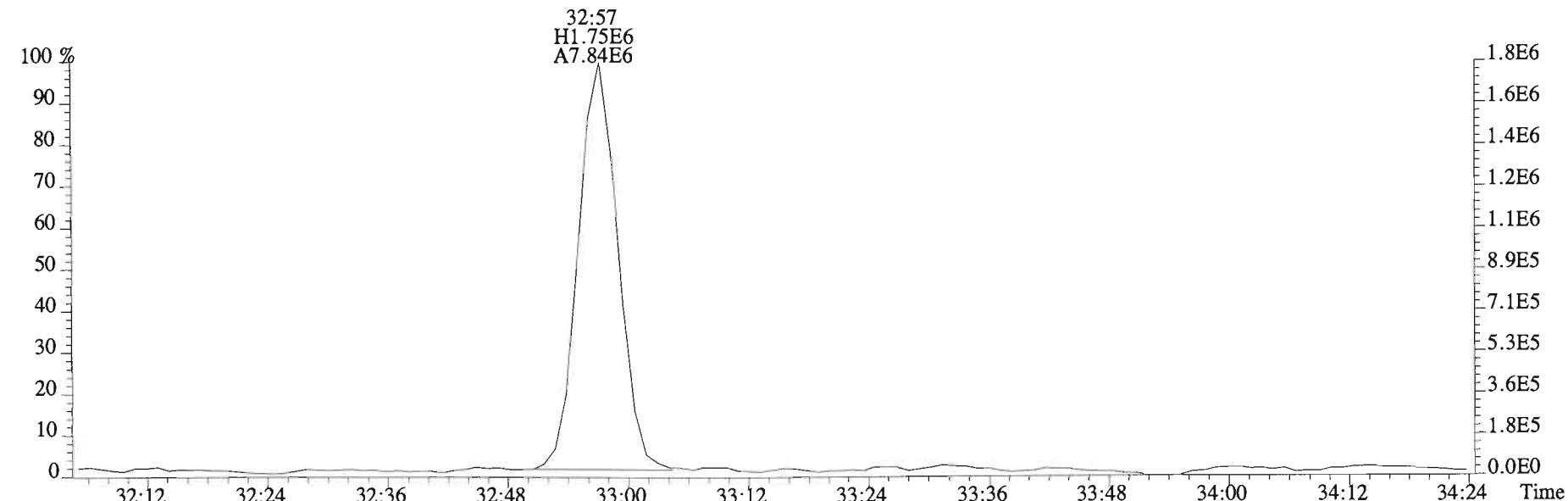
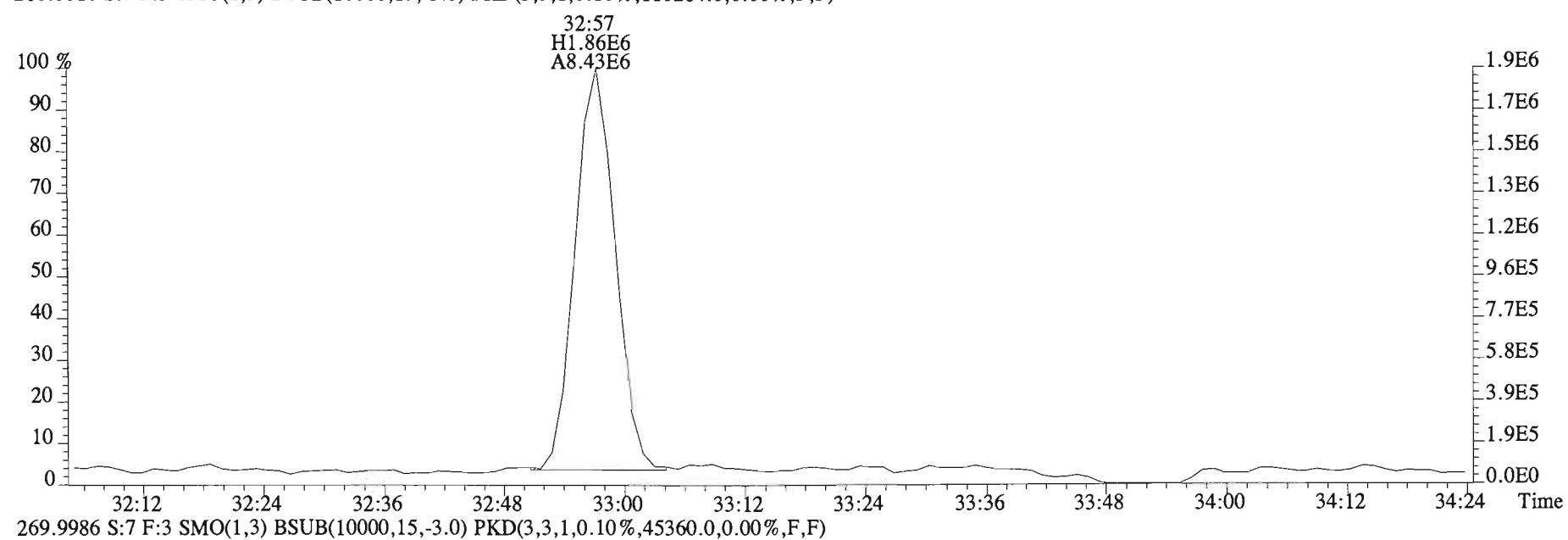
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
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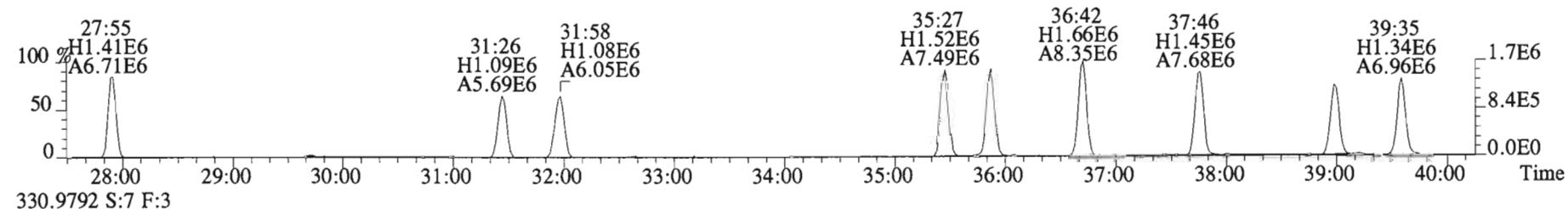
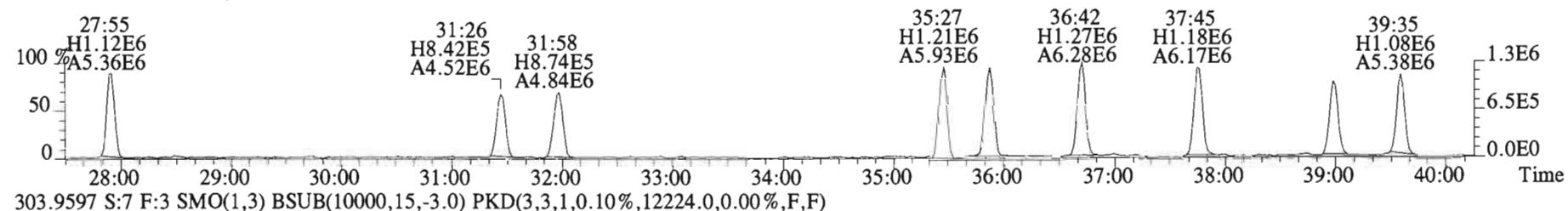
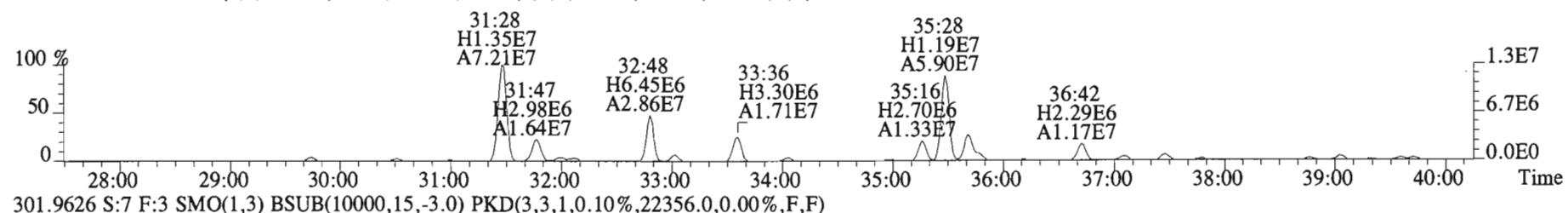
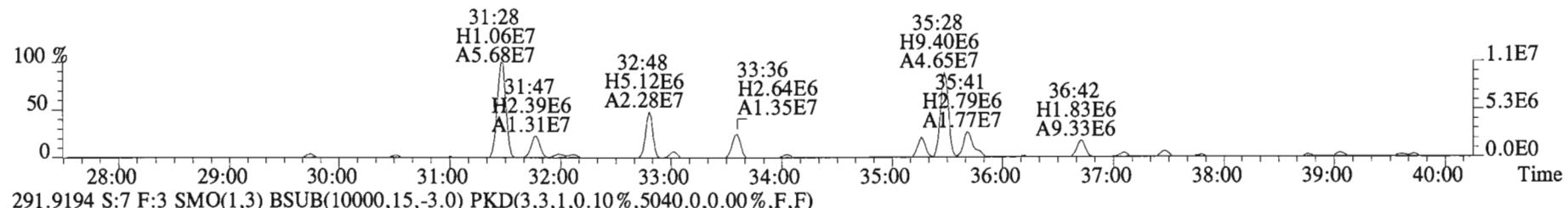
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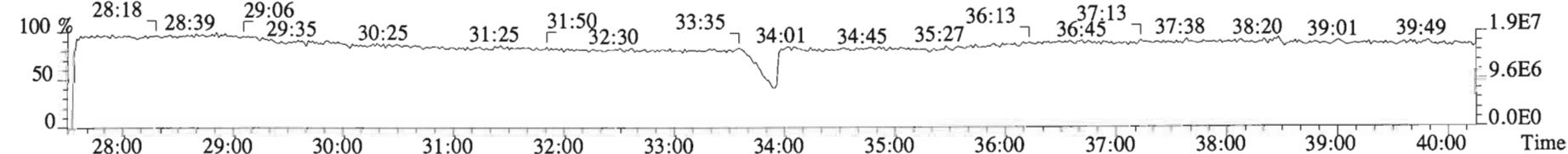
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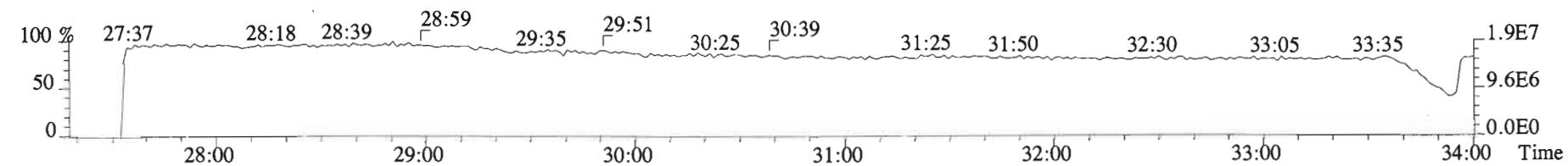
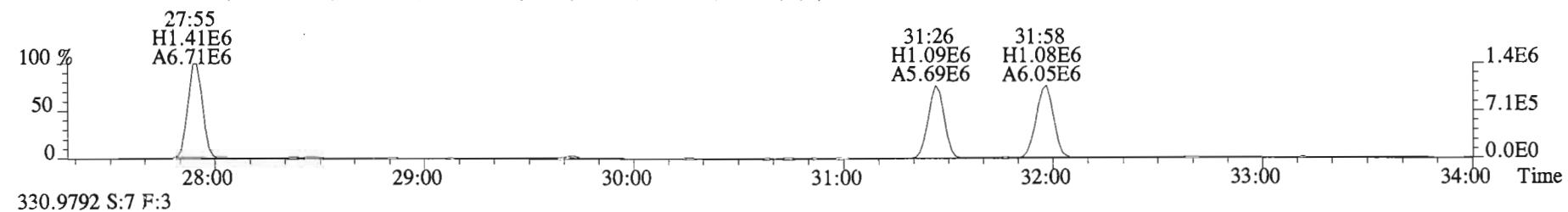
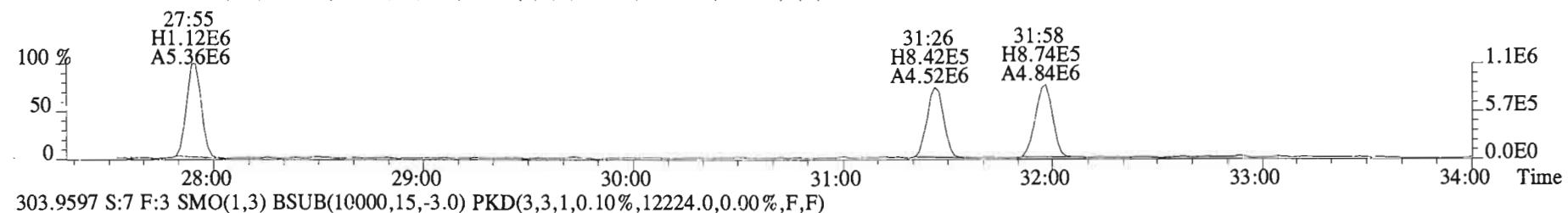
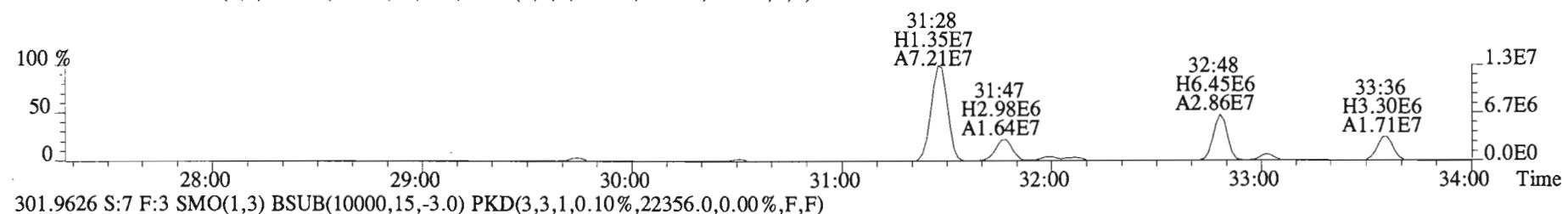
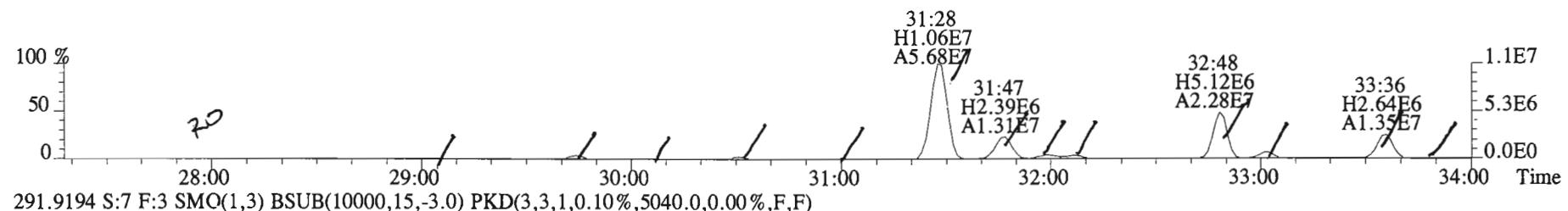
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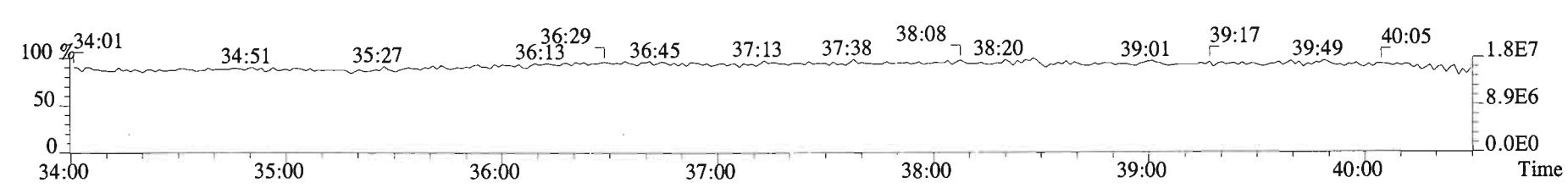
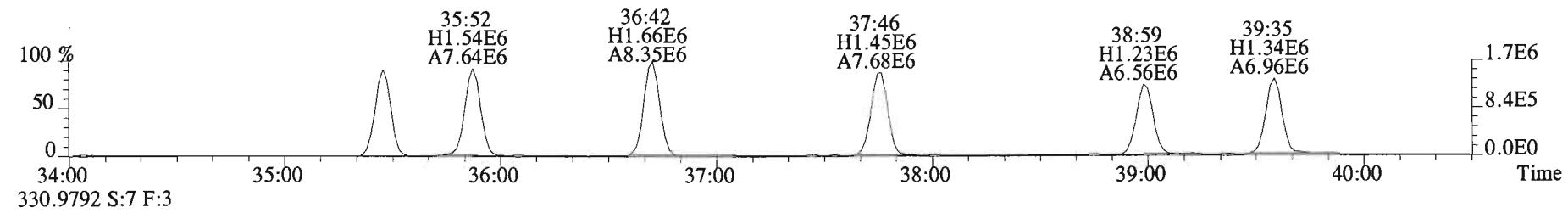
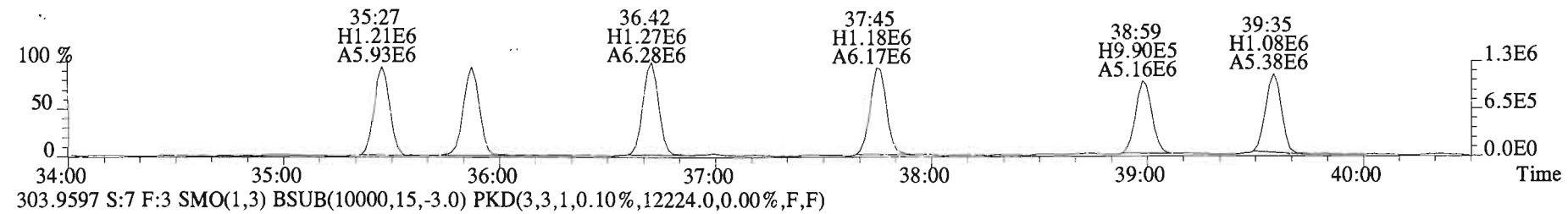
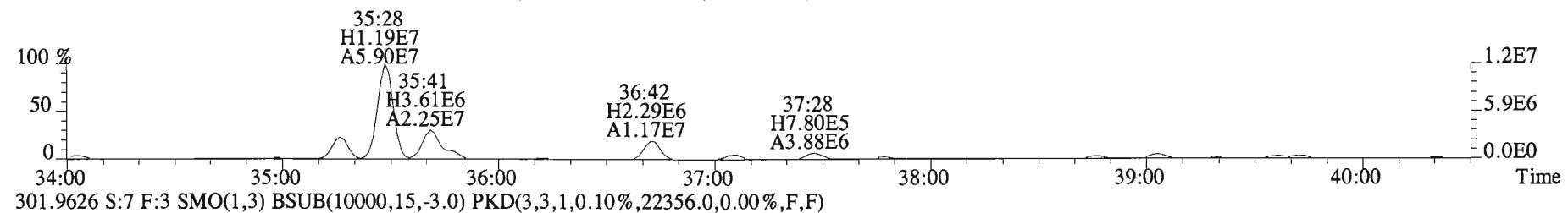
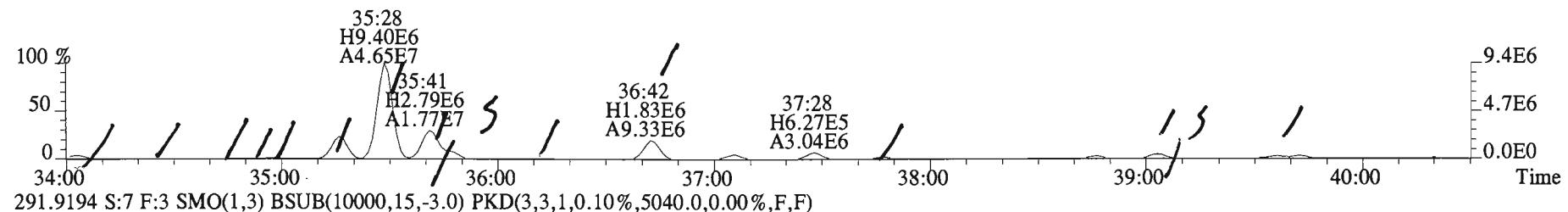
330.9792 S:7 F:3



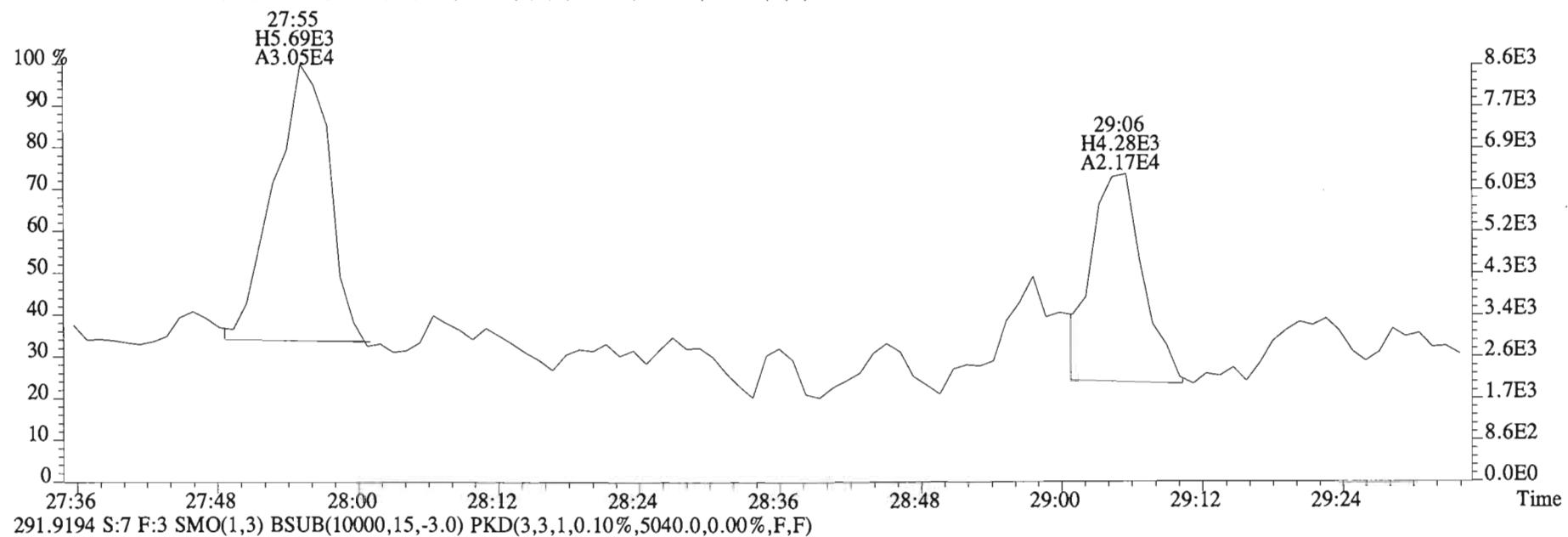
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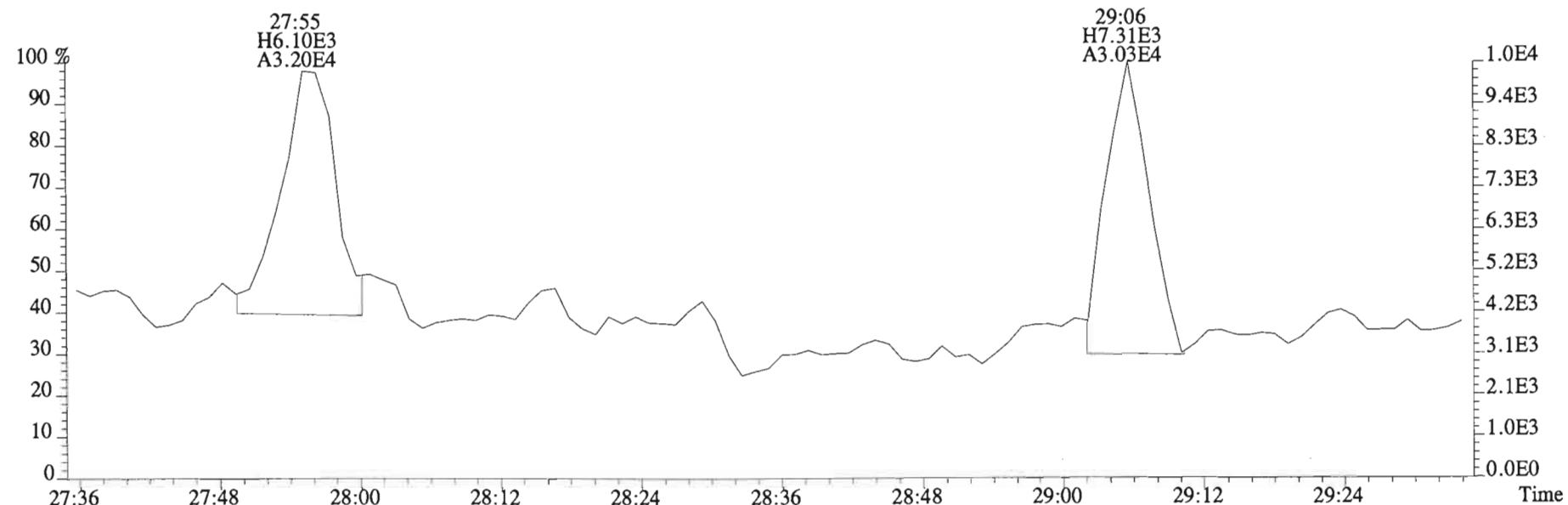
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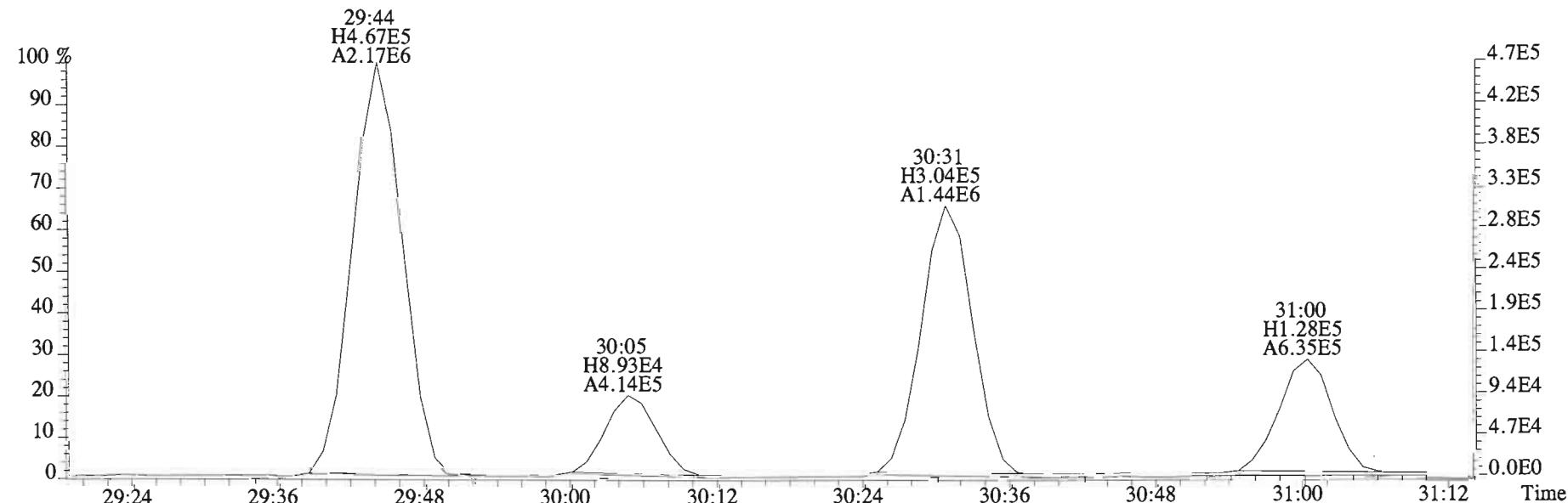
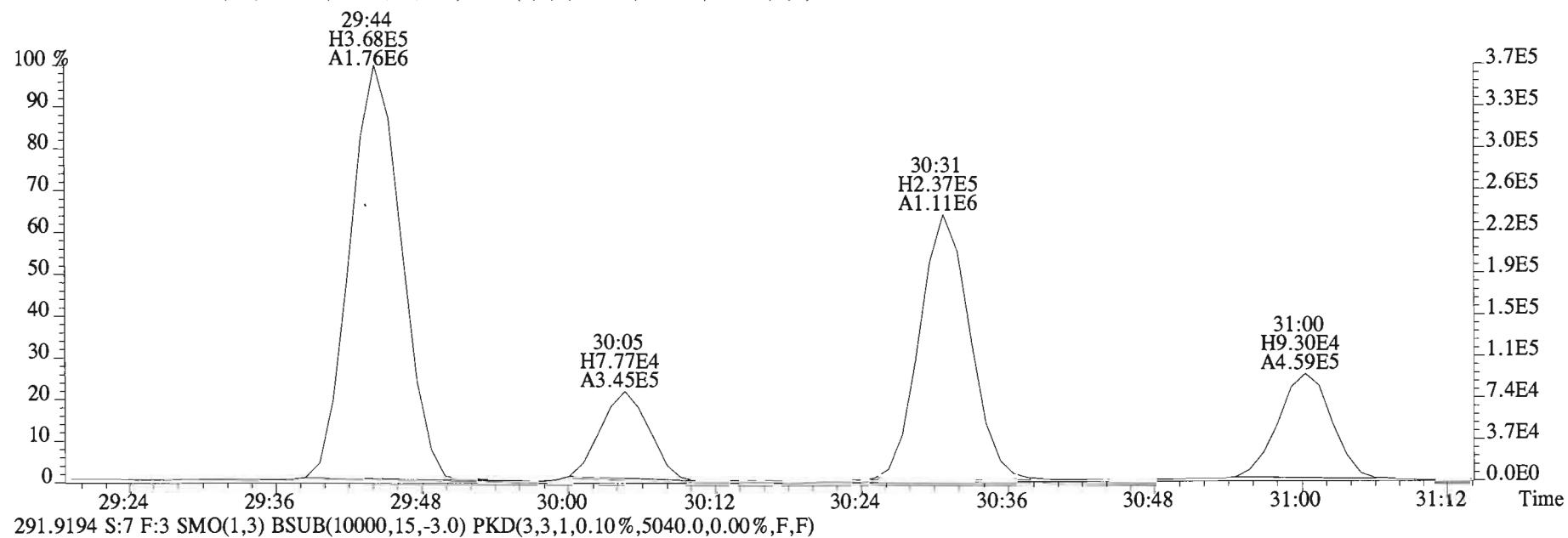
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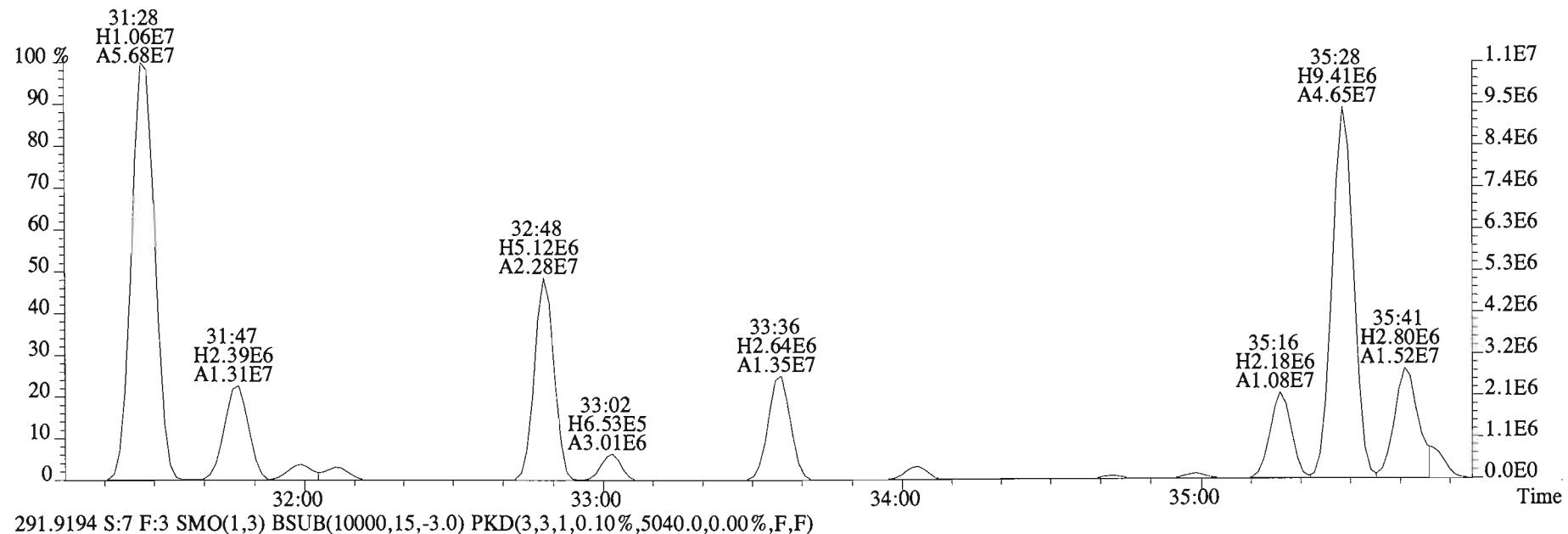
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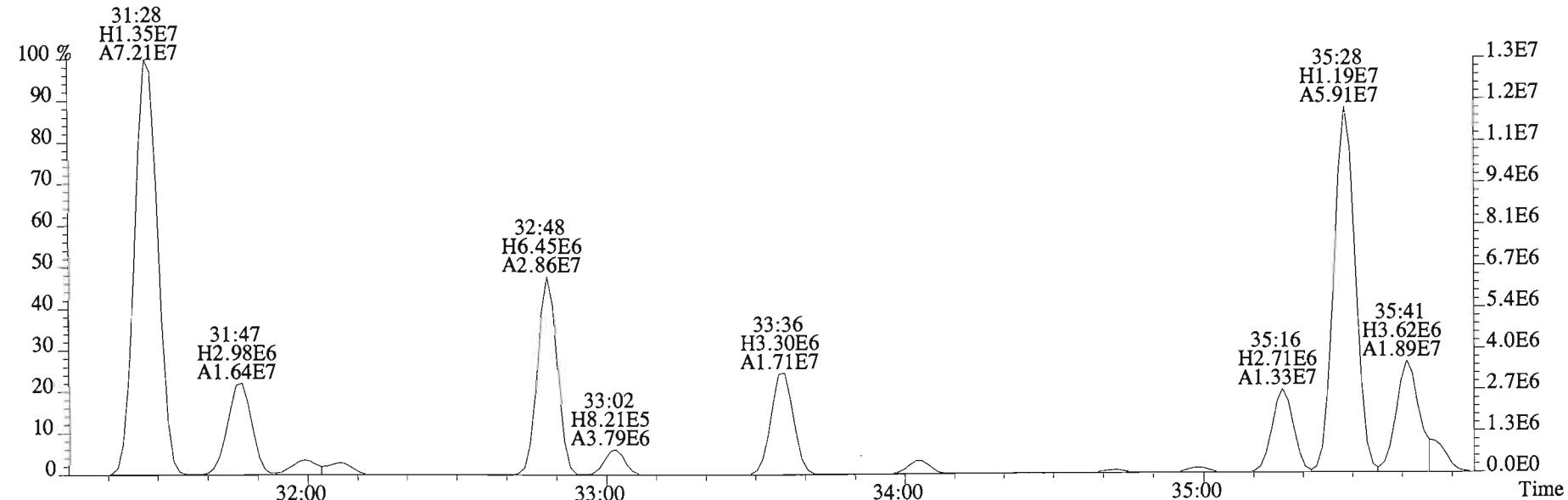
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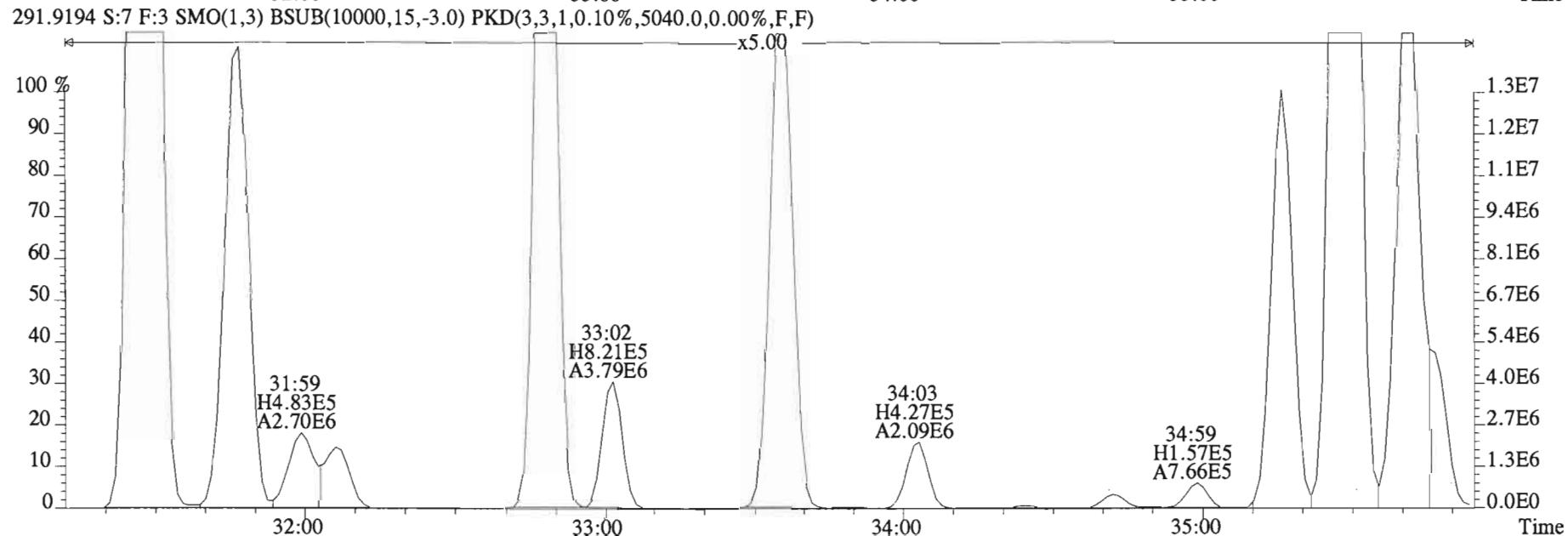
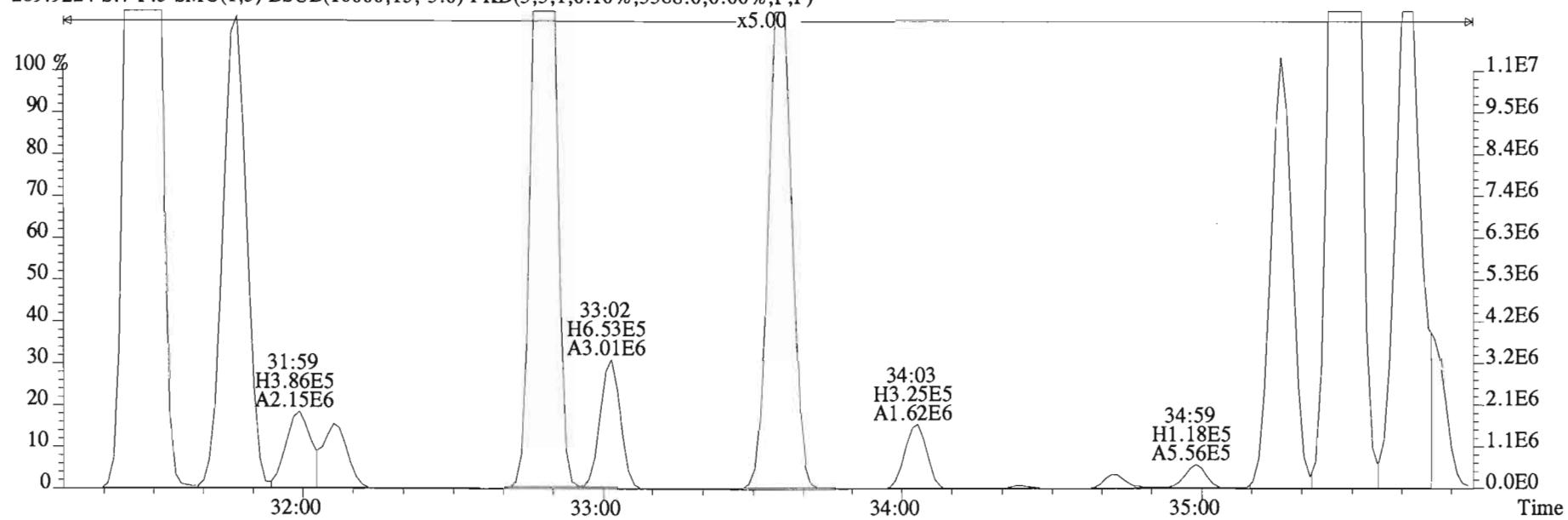
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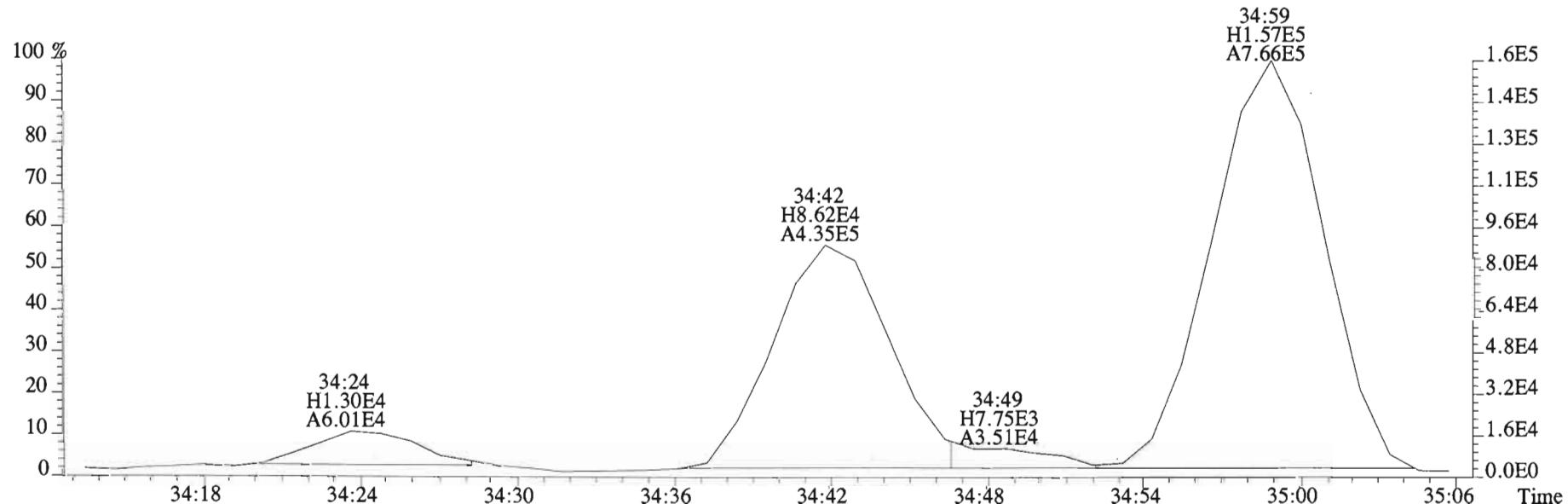
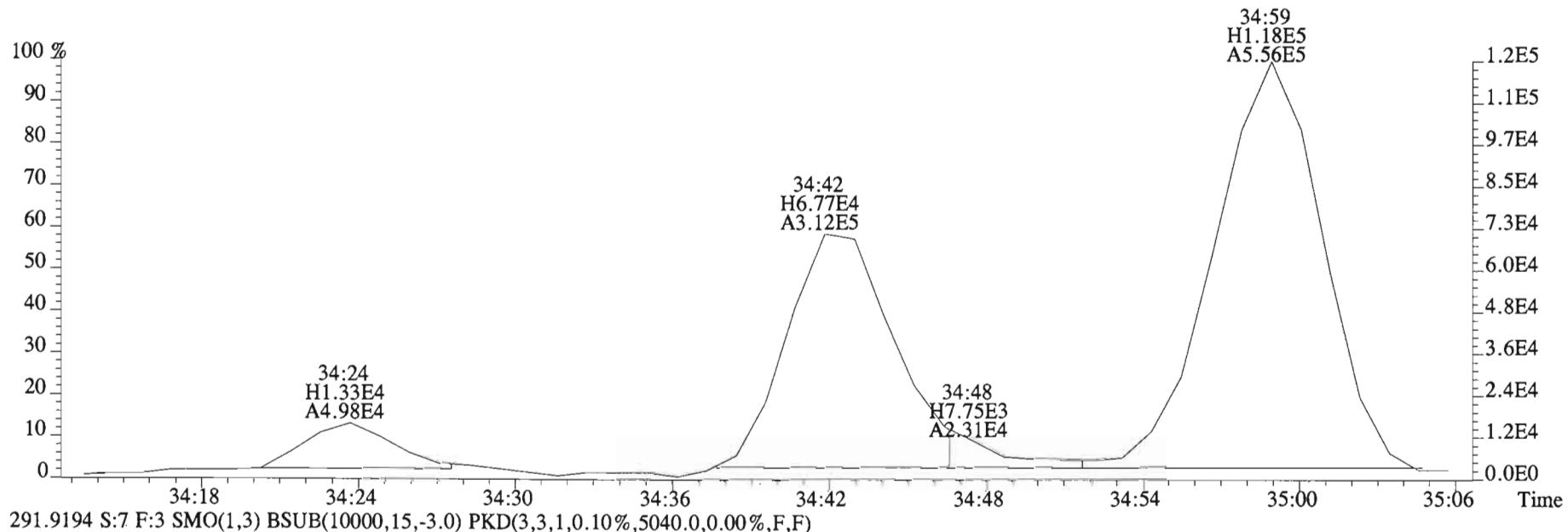
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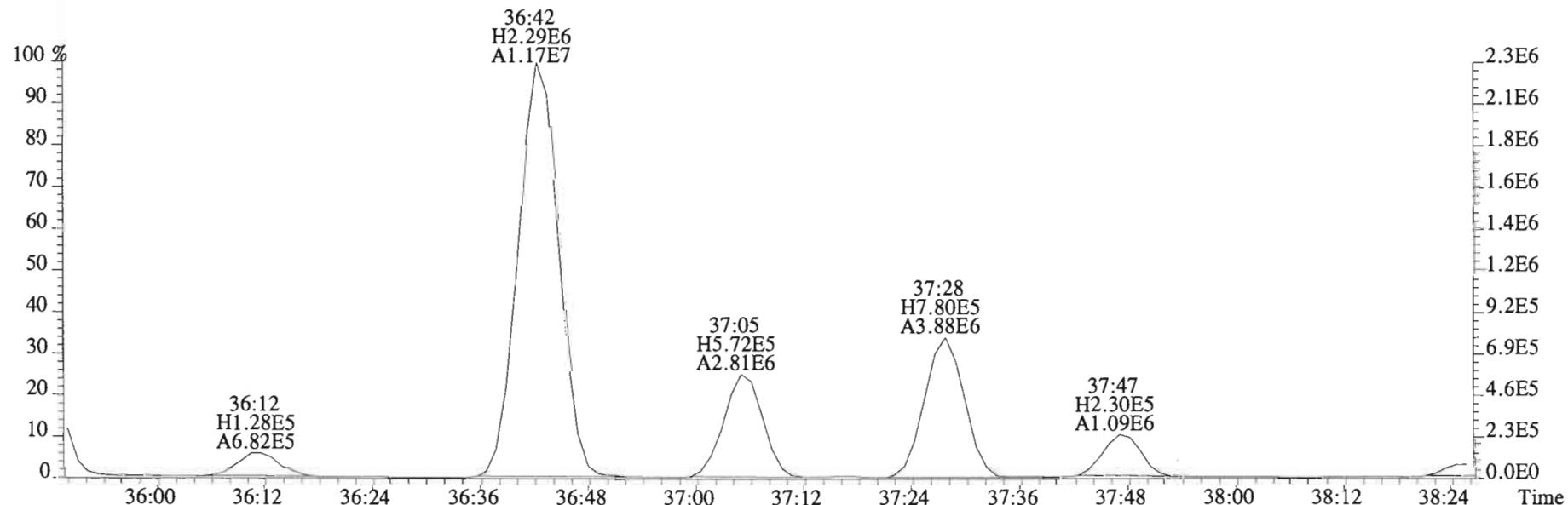
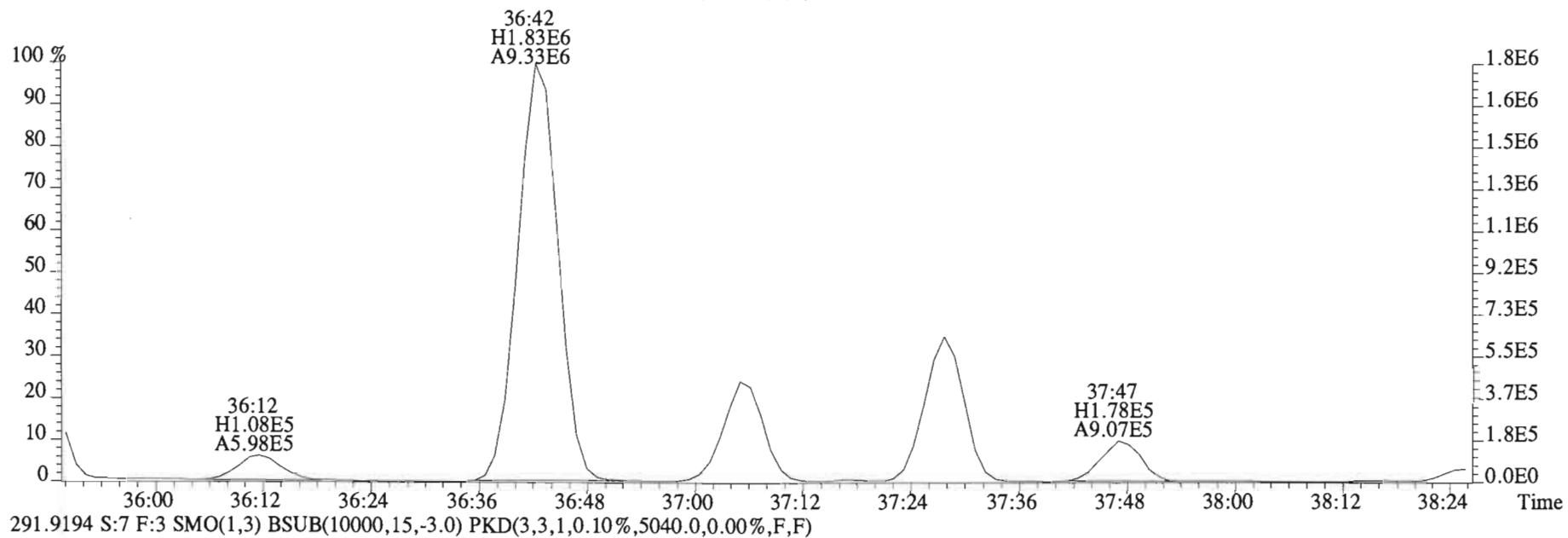
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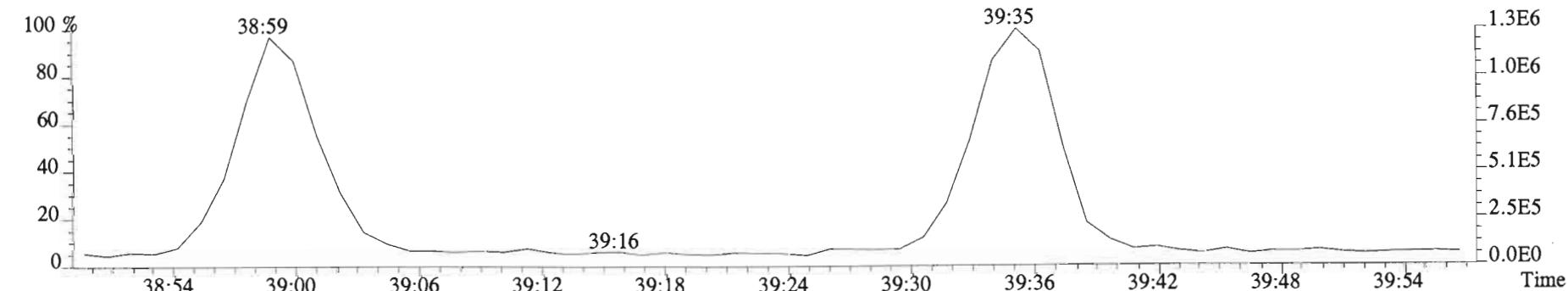
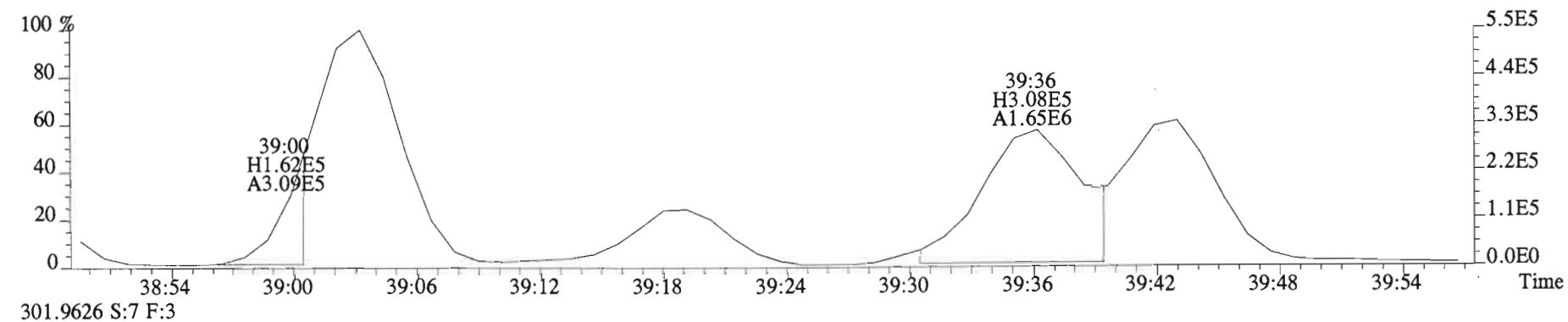
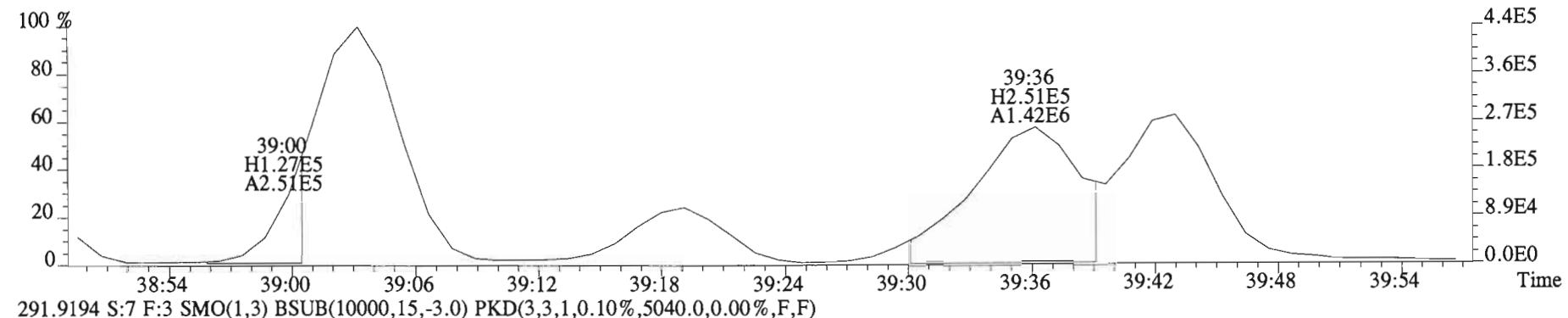
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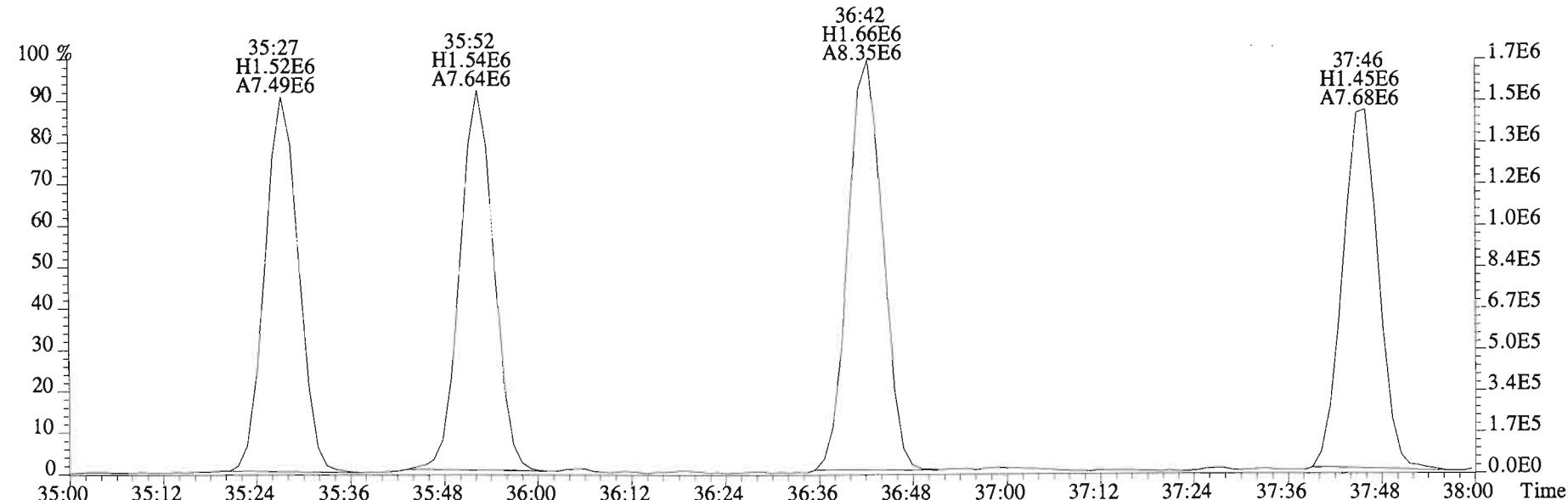
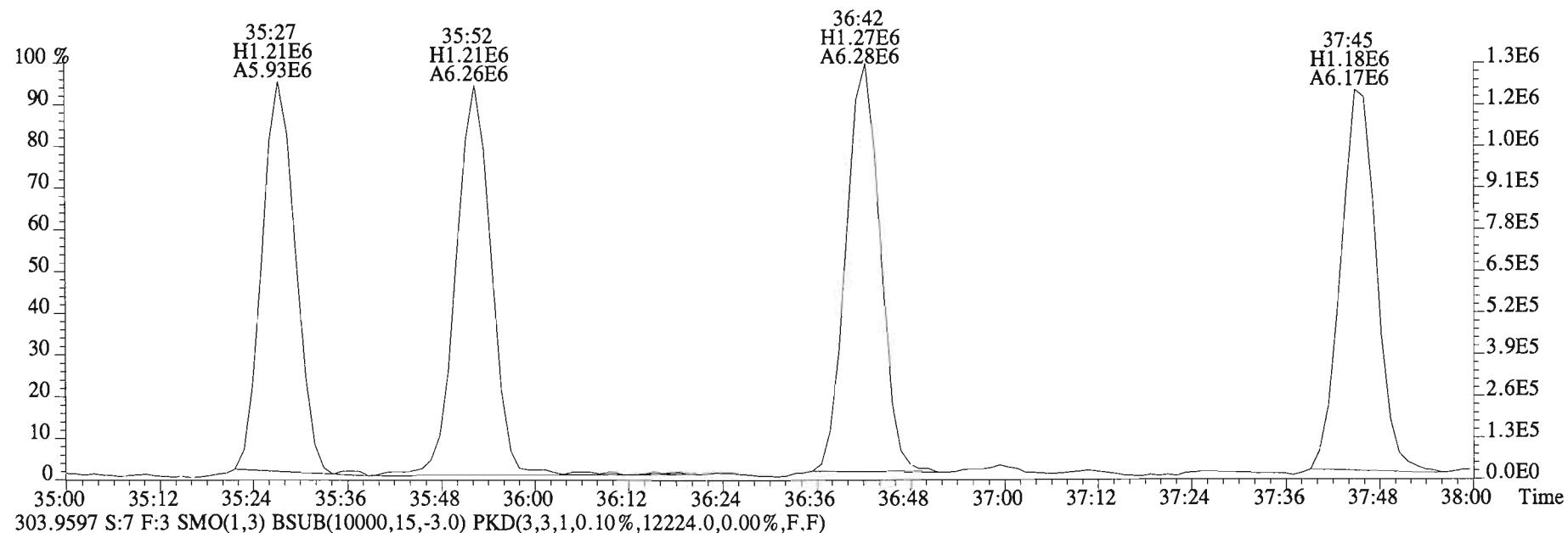
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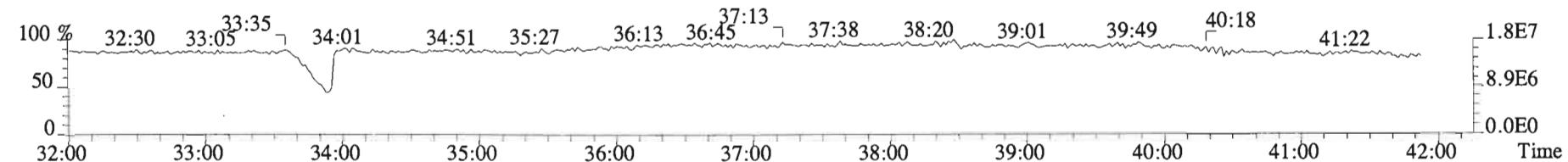
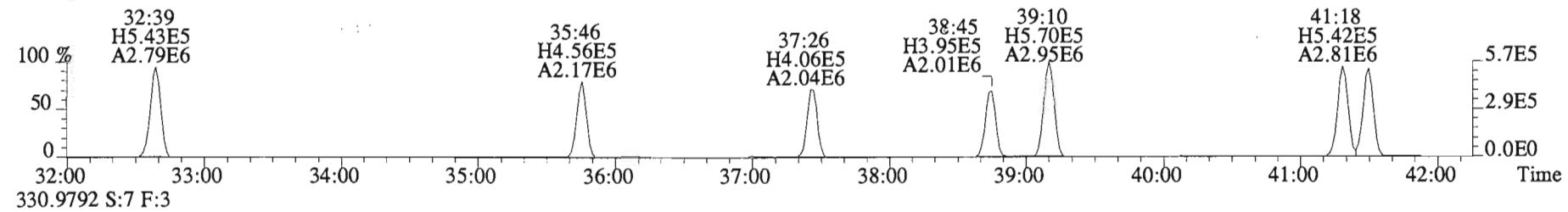
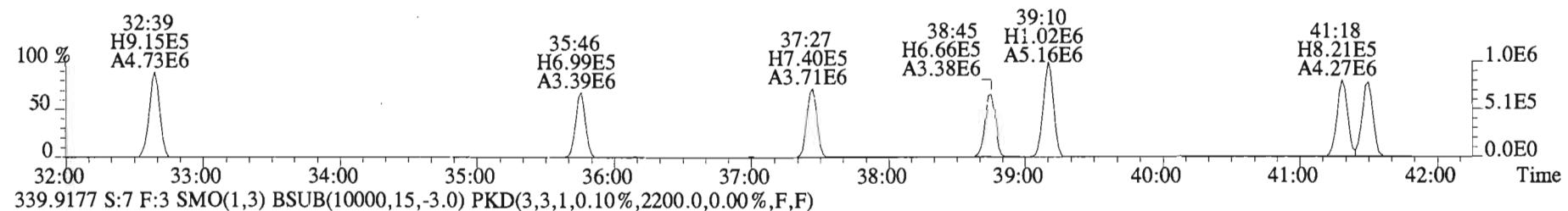
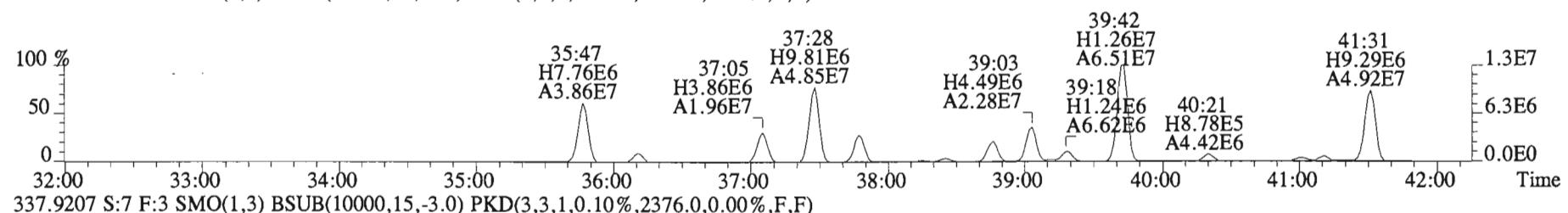
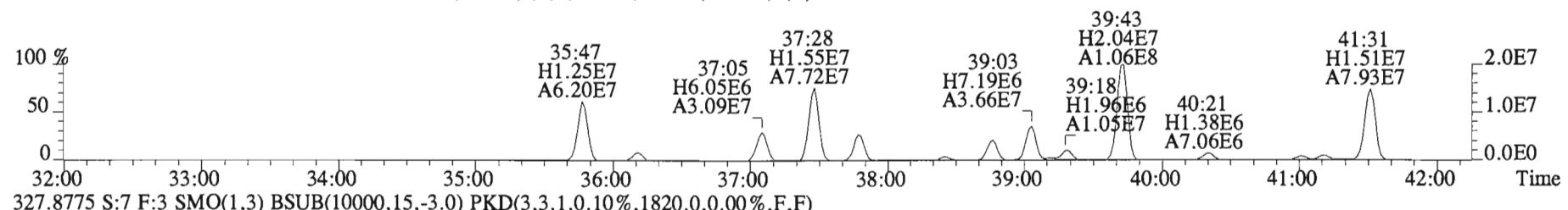
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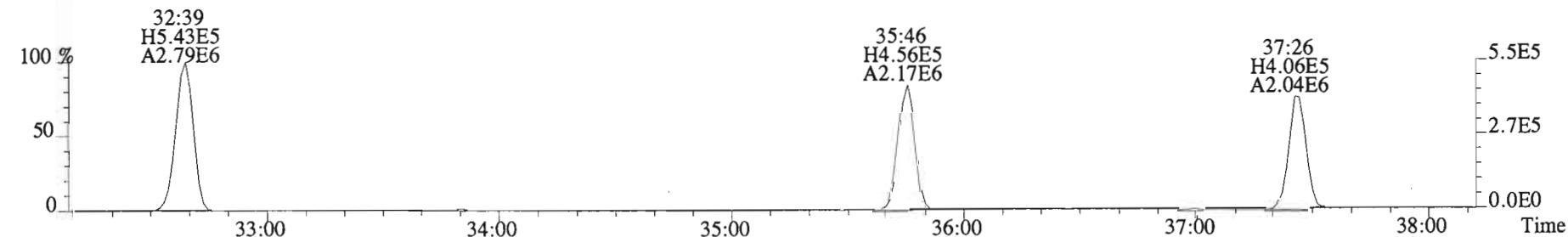
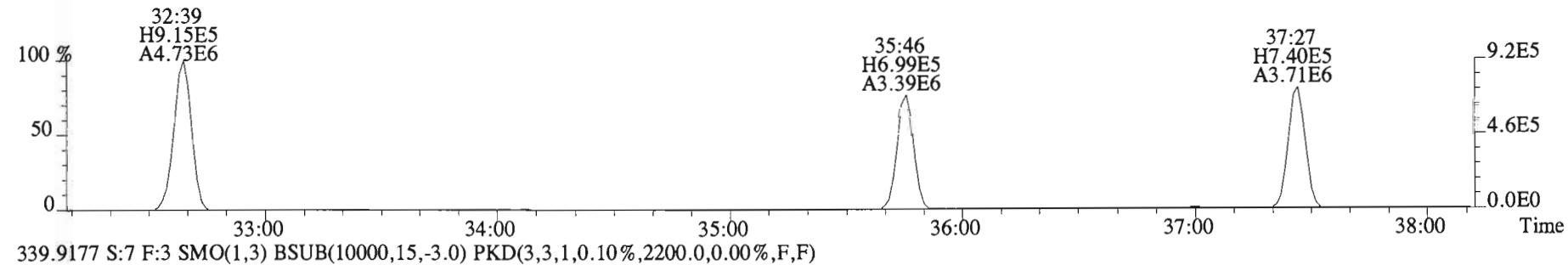
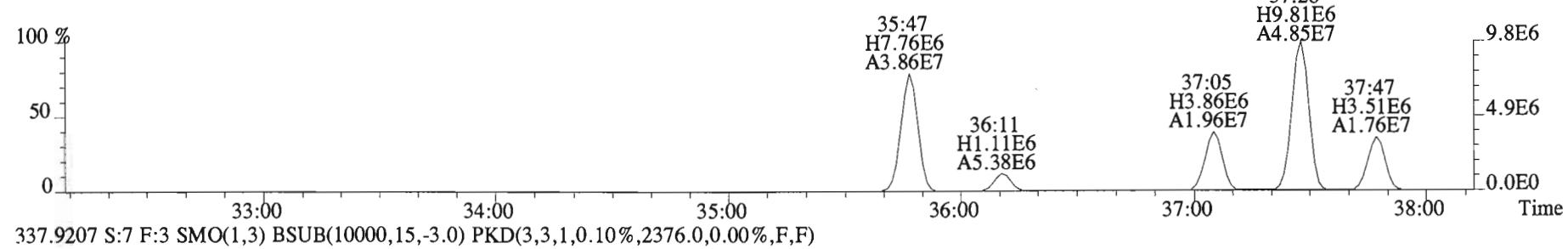
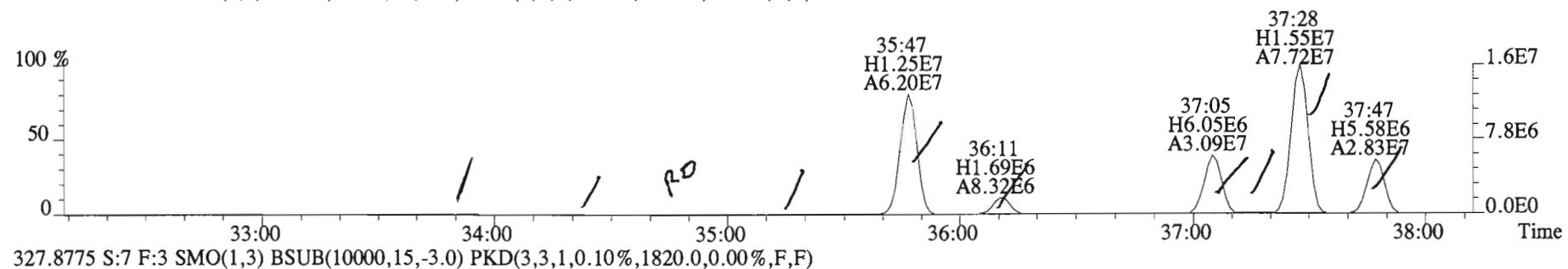
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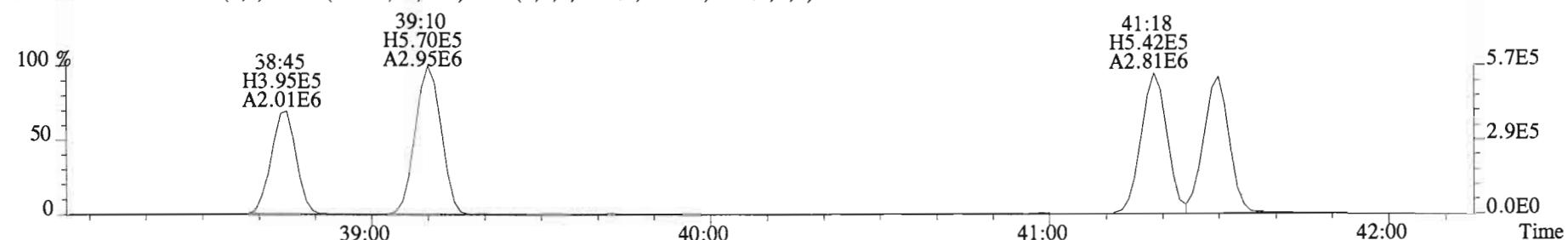
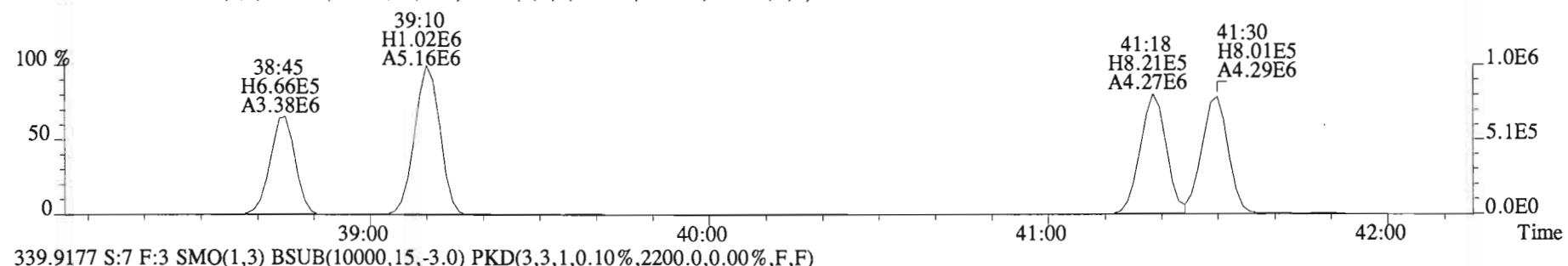
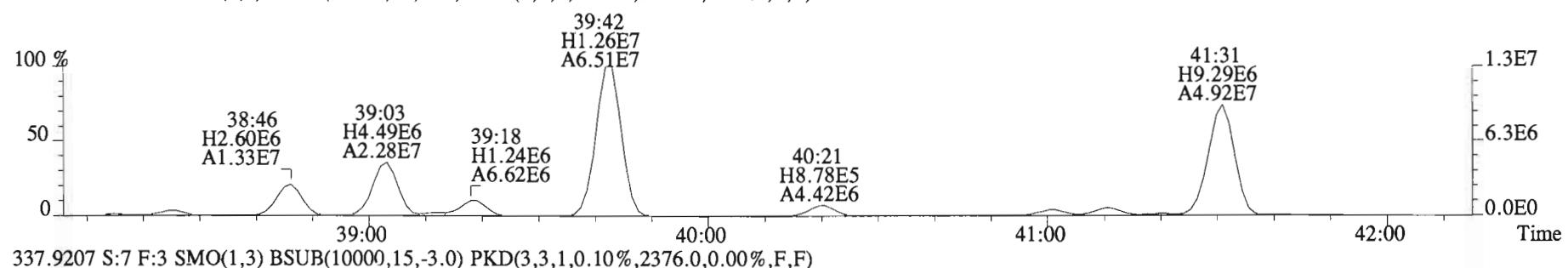
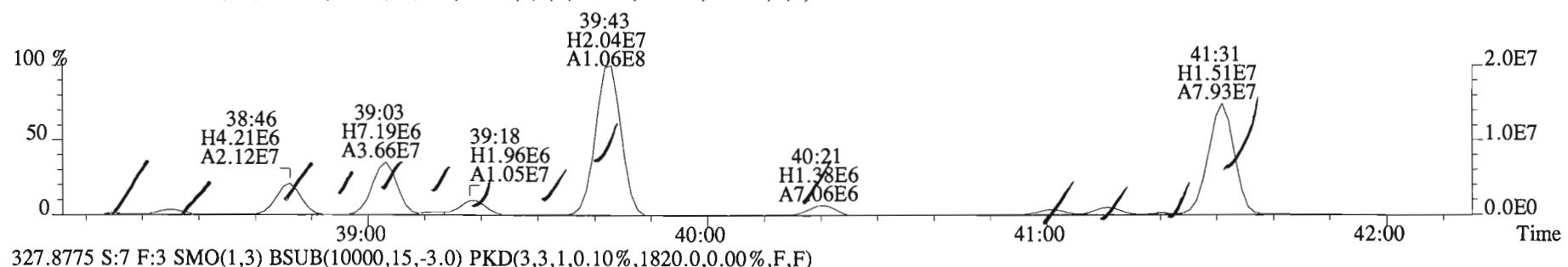
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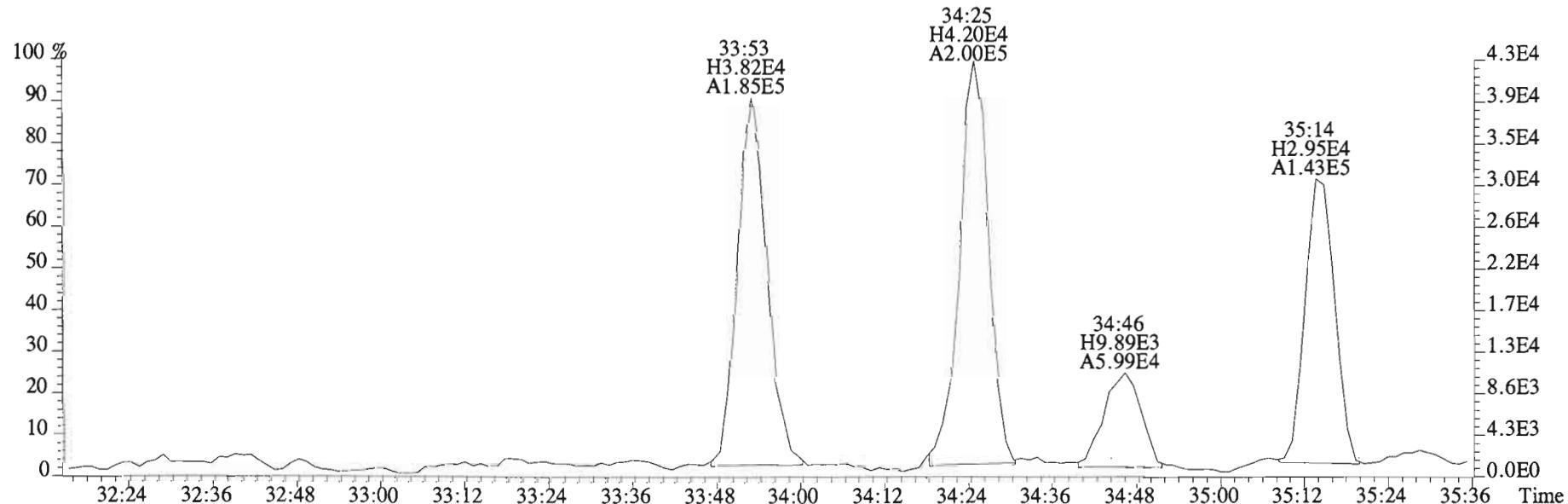
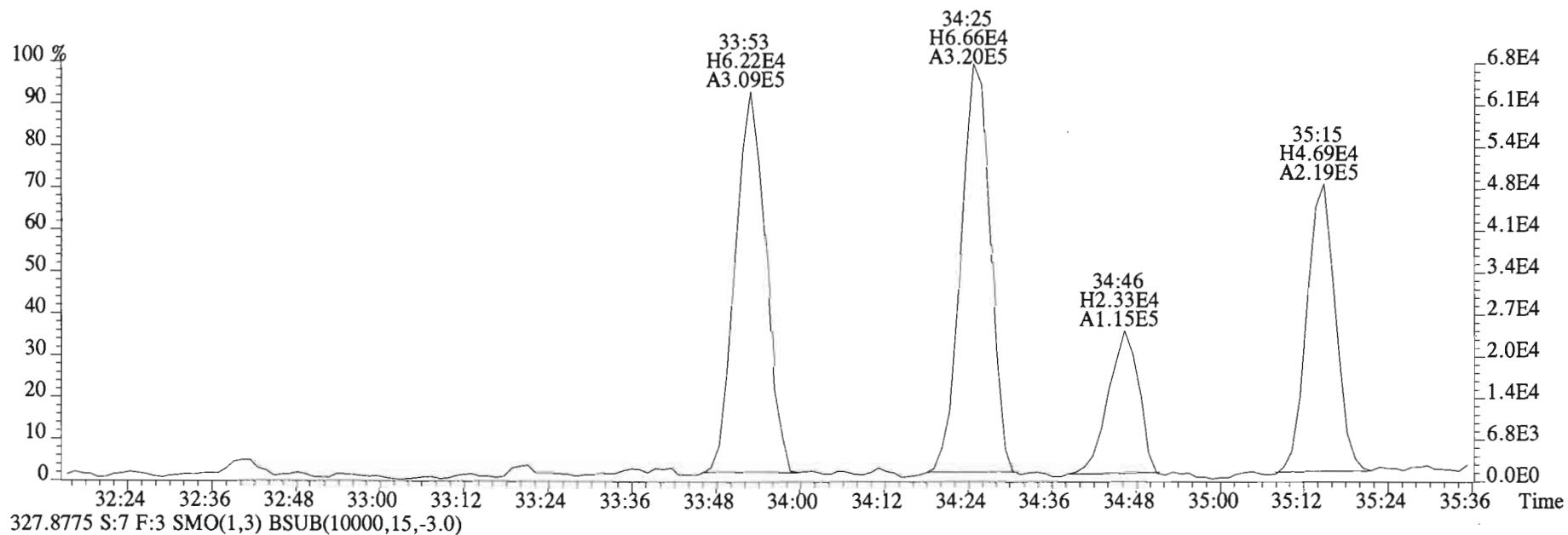
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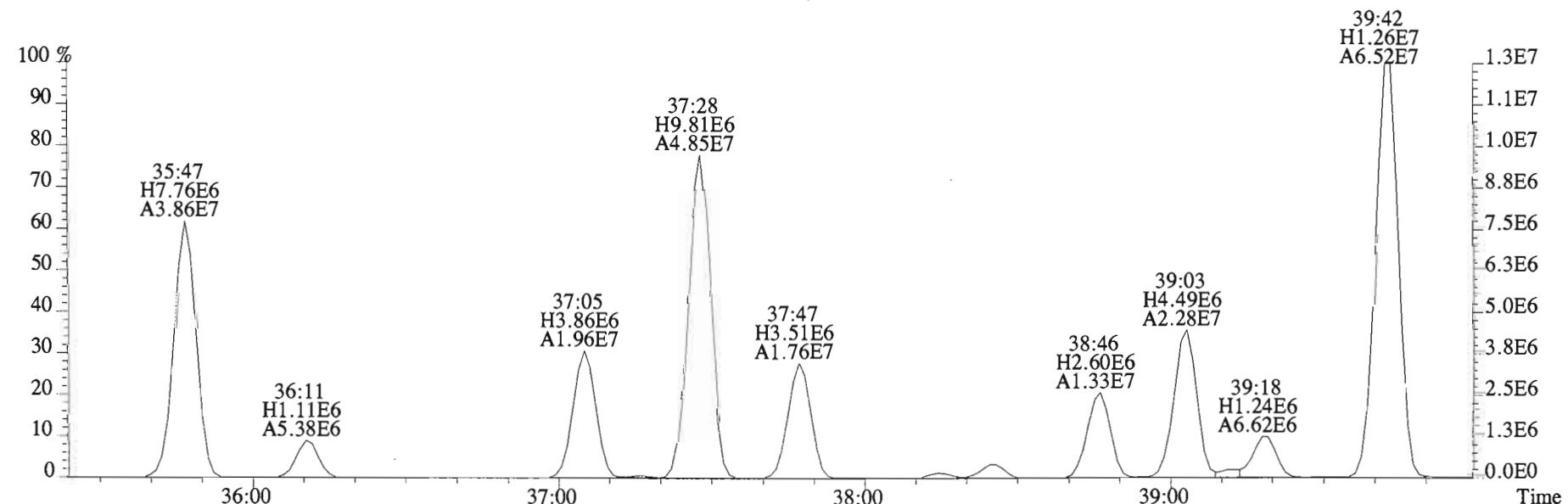
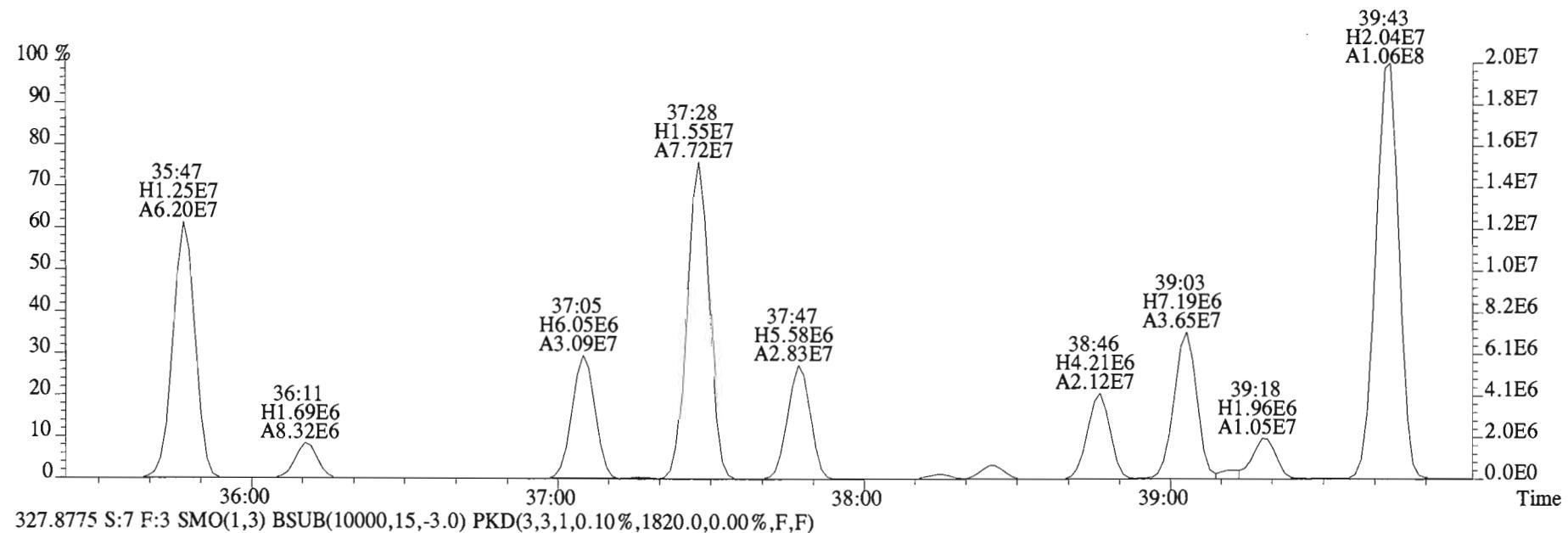
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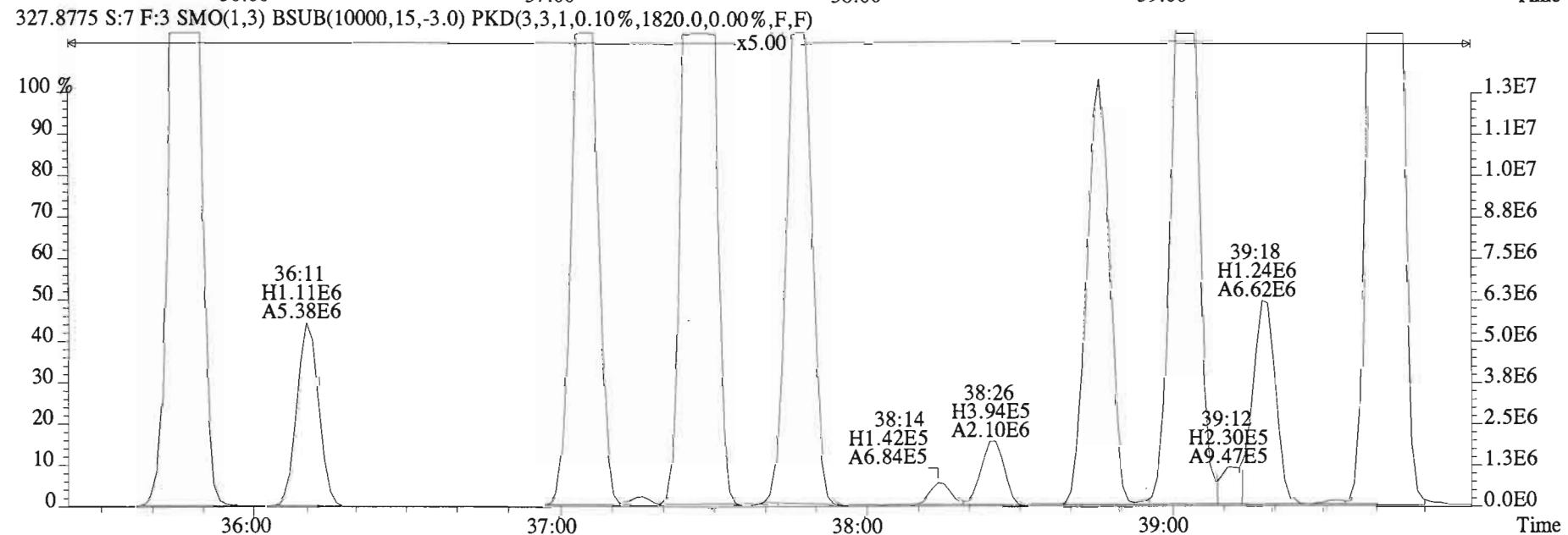
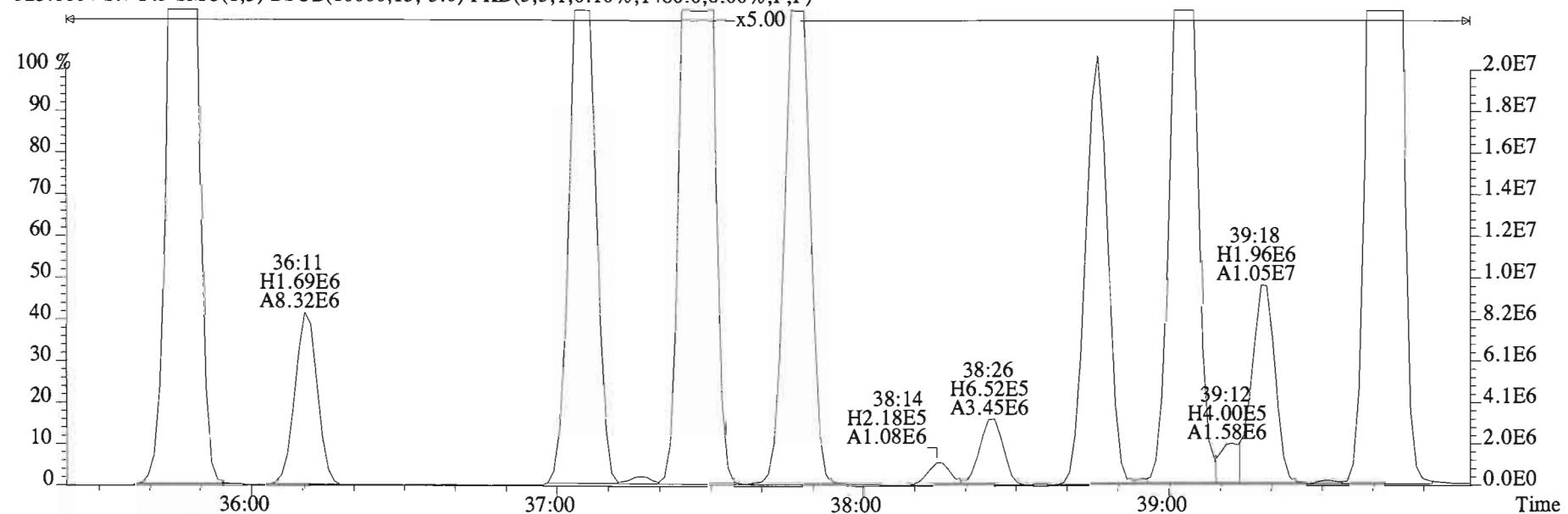
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325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



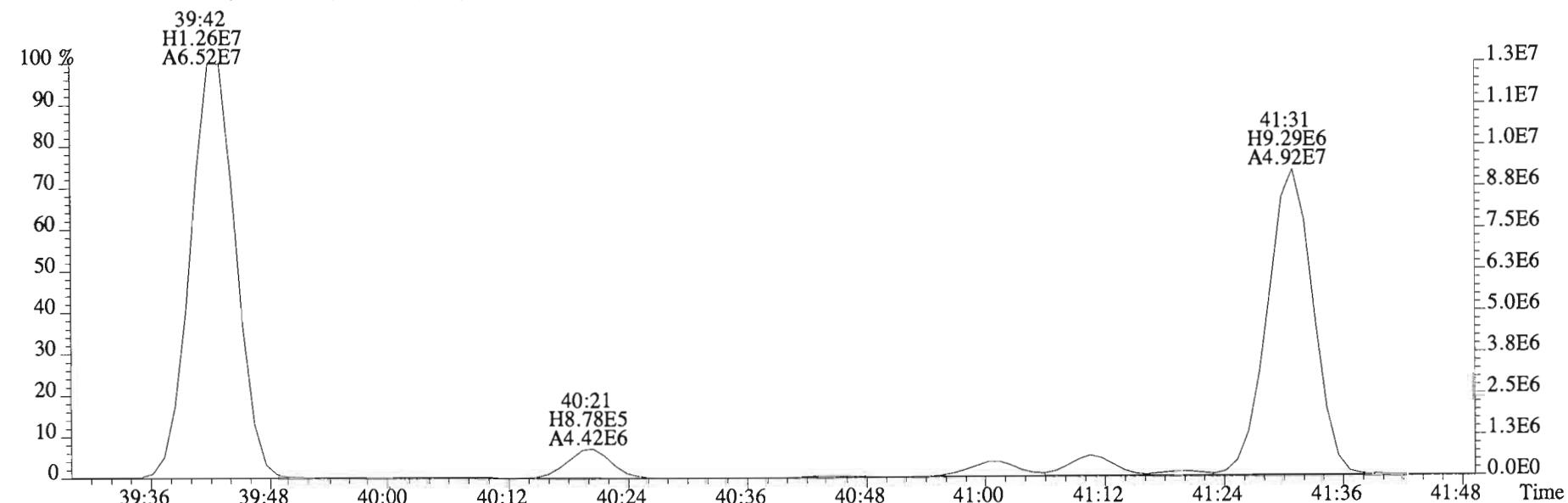
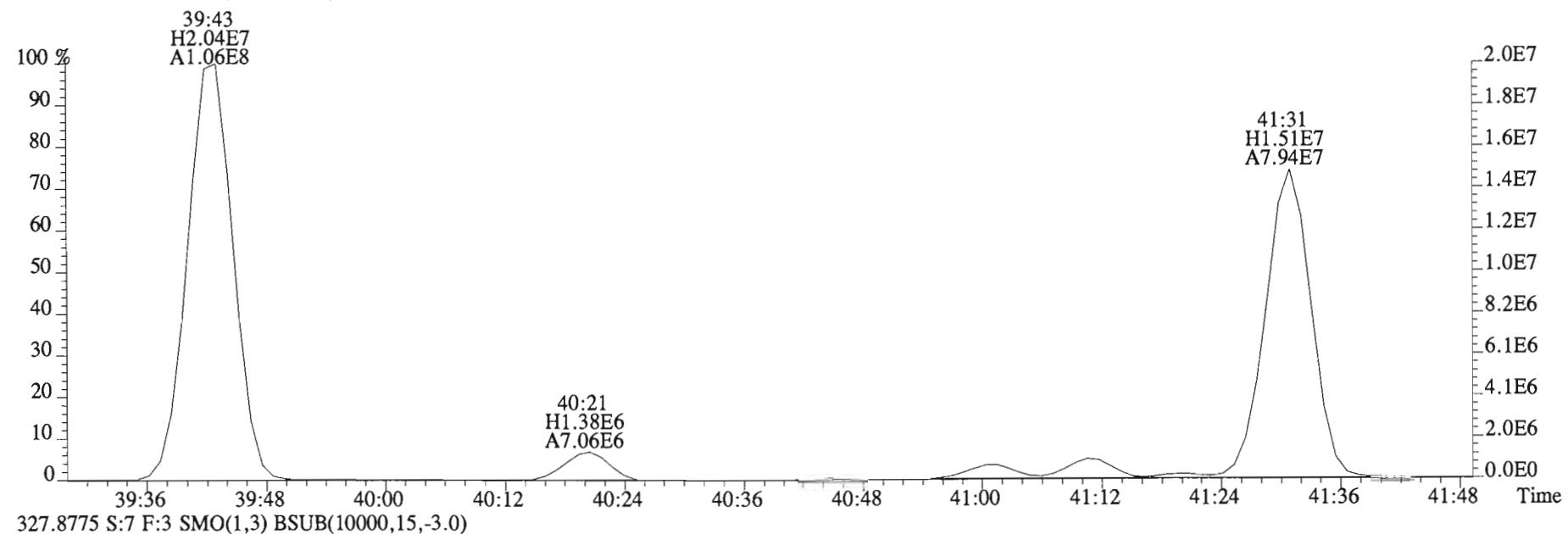
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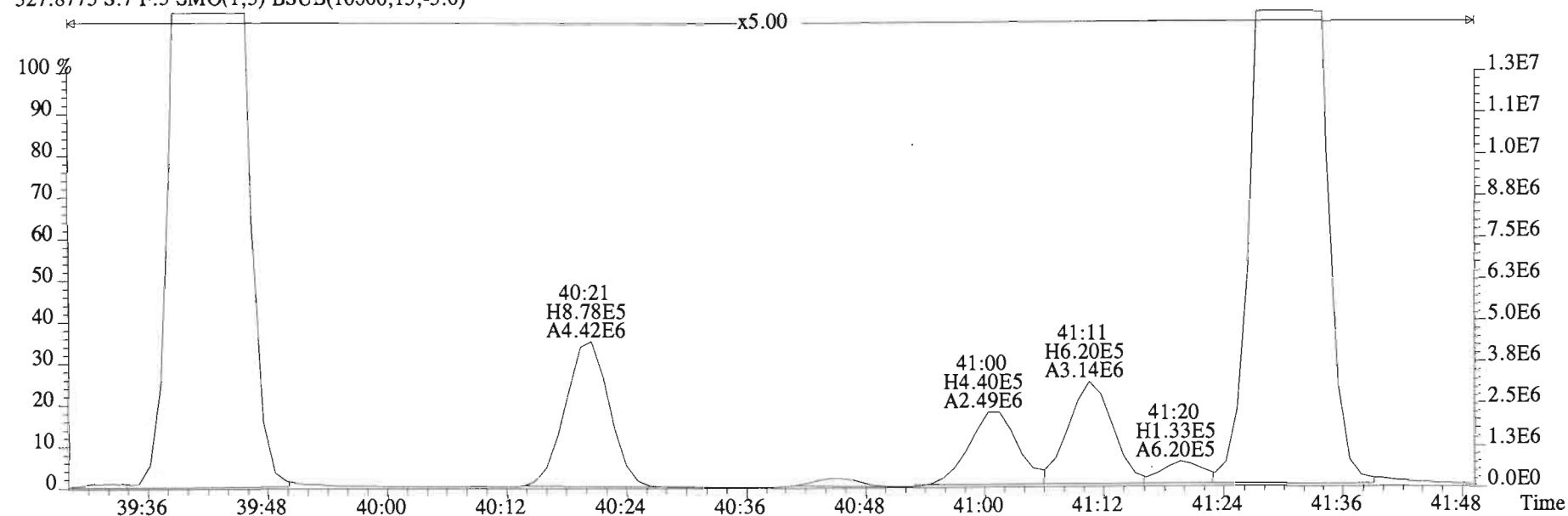
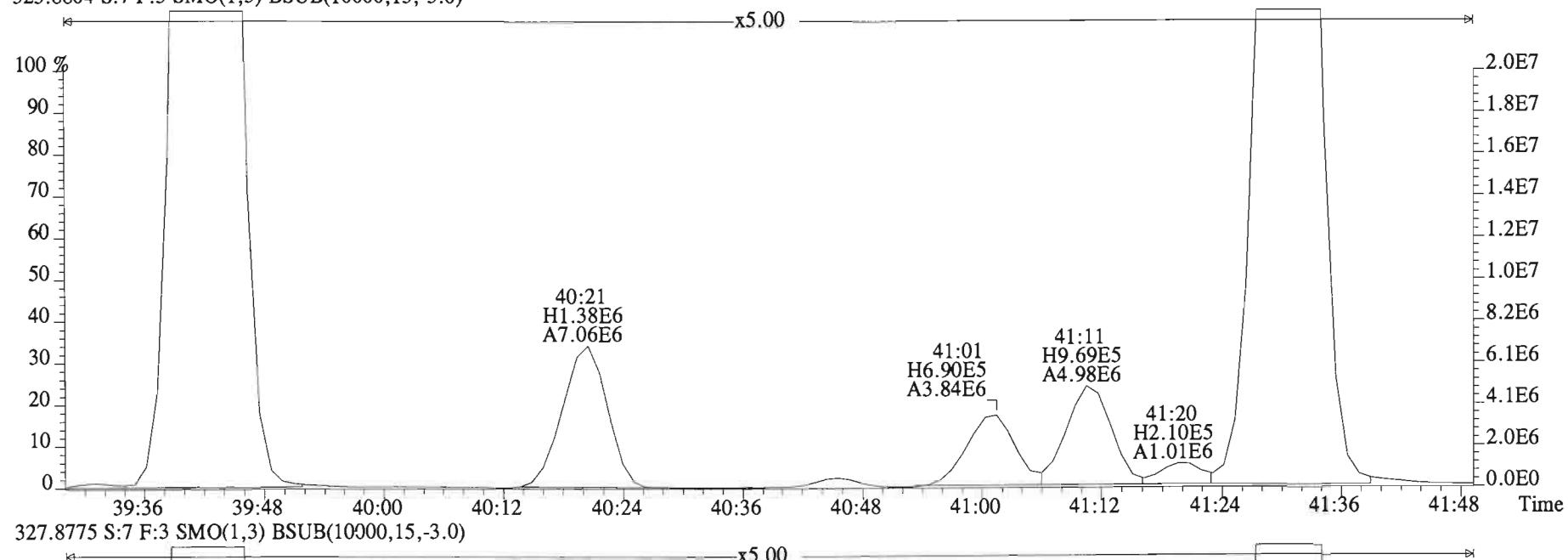
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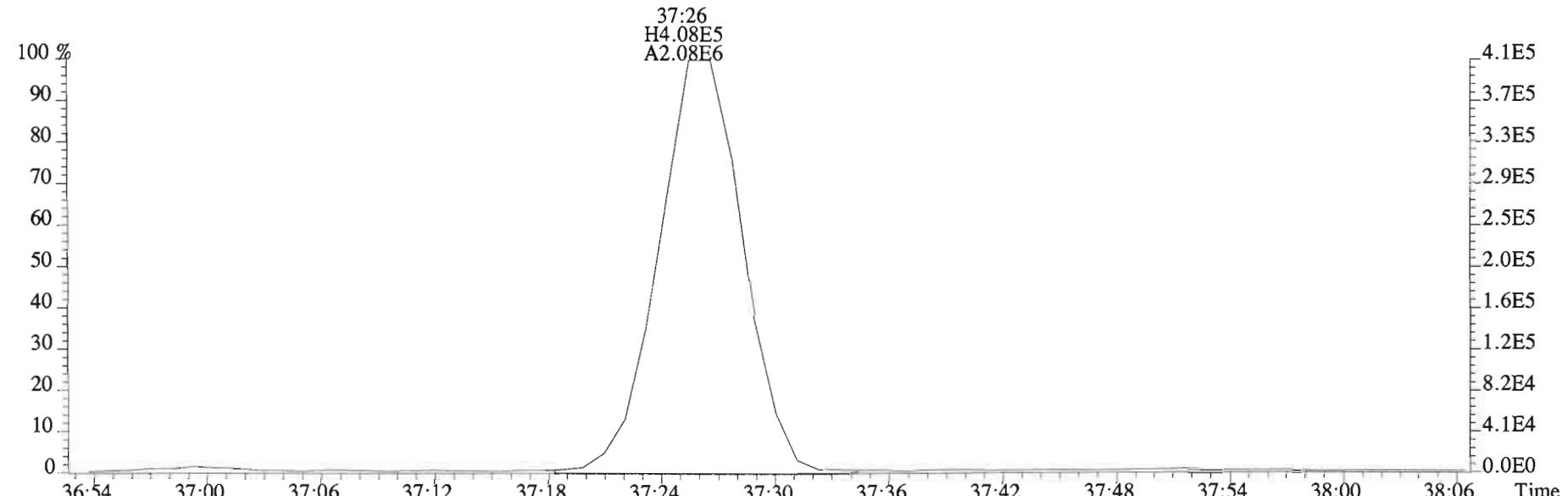
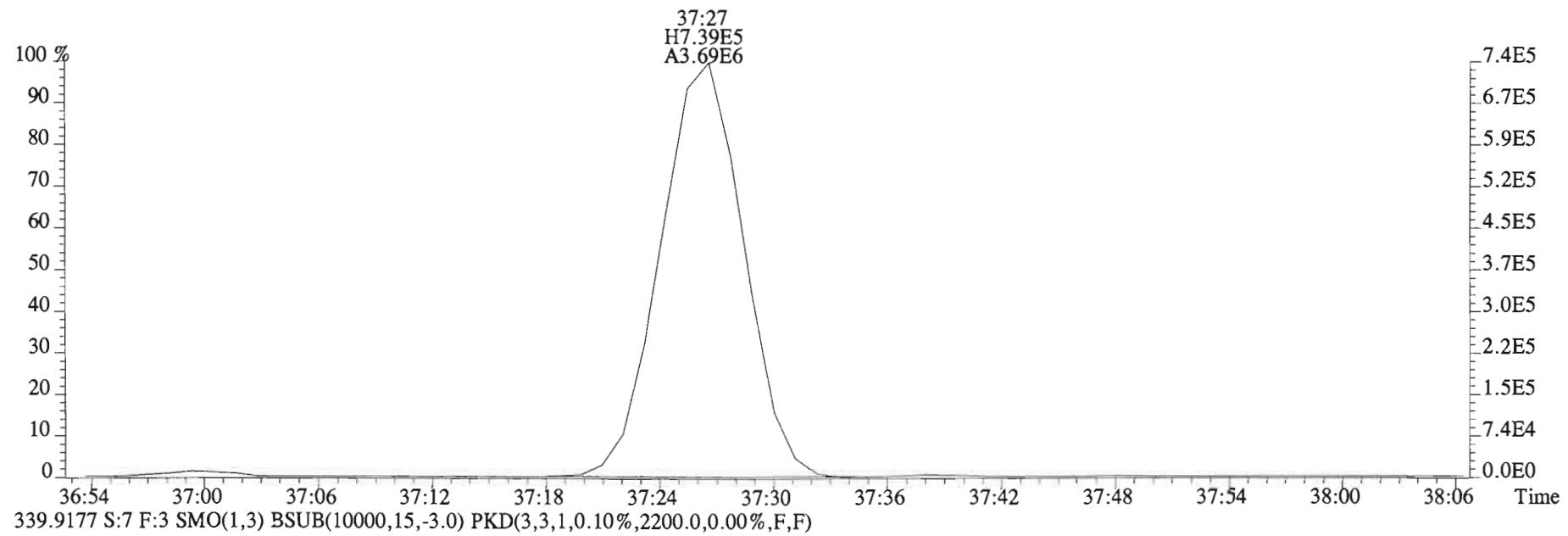
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325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



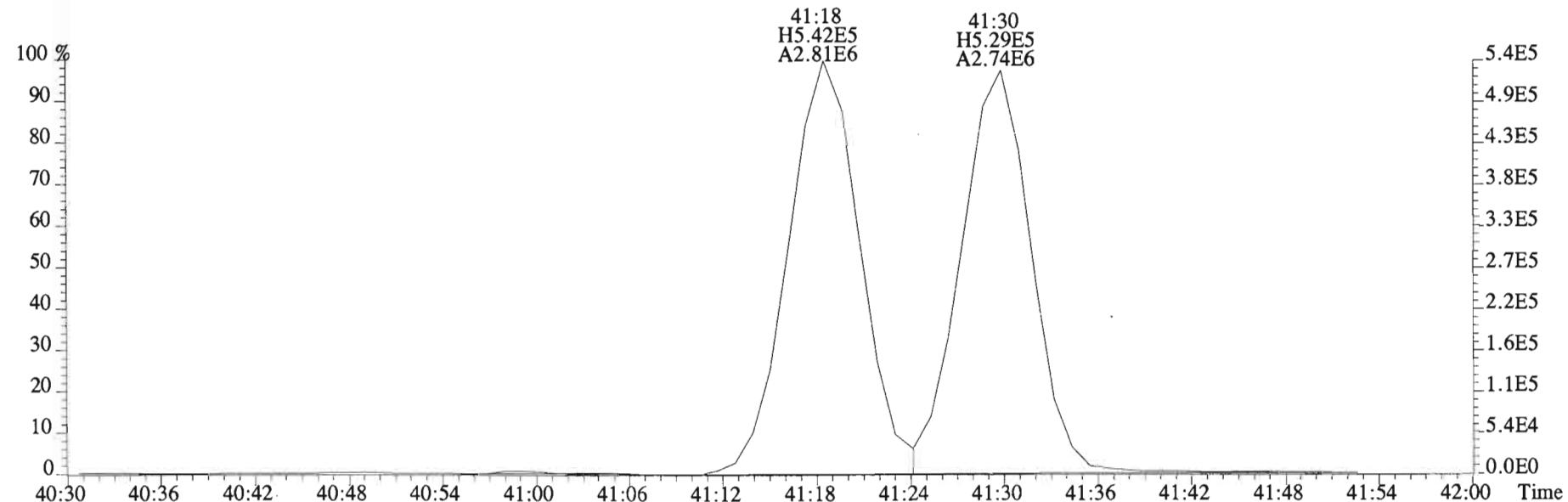
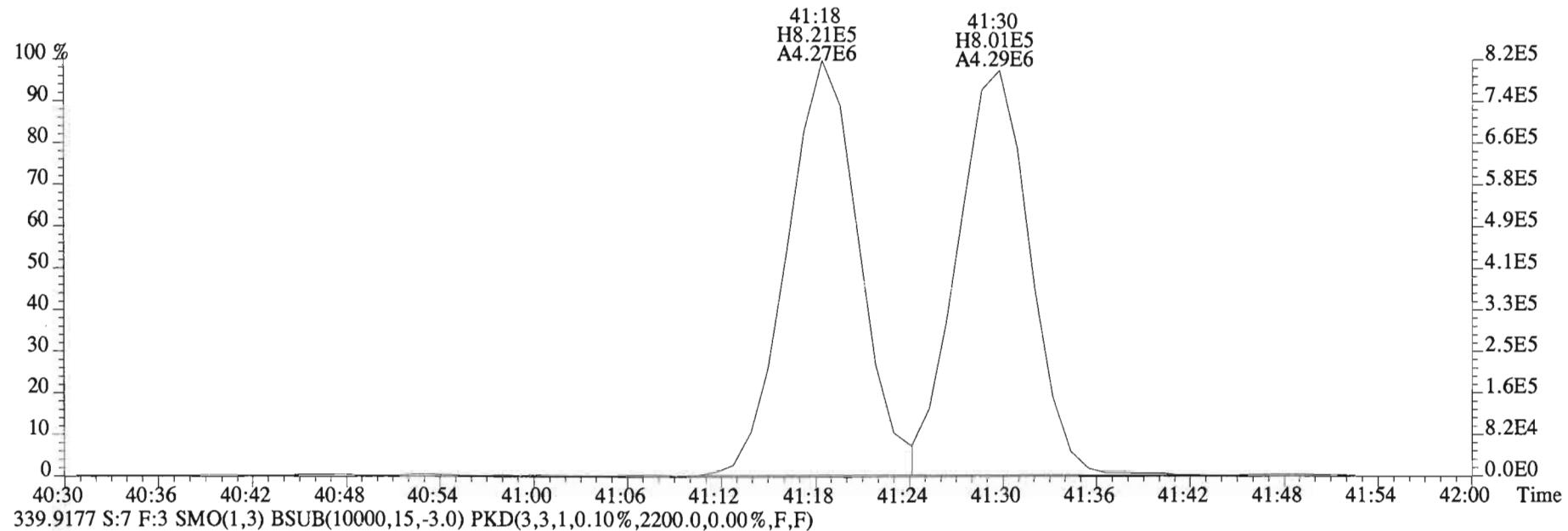
File:150219E2 #1-758 Acq:19-FEB-2015 20:32:10 GC EI+ Voltage SIR Autospec-UltimaE
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325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



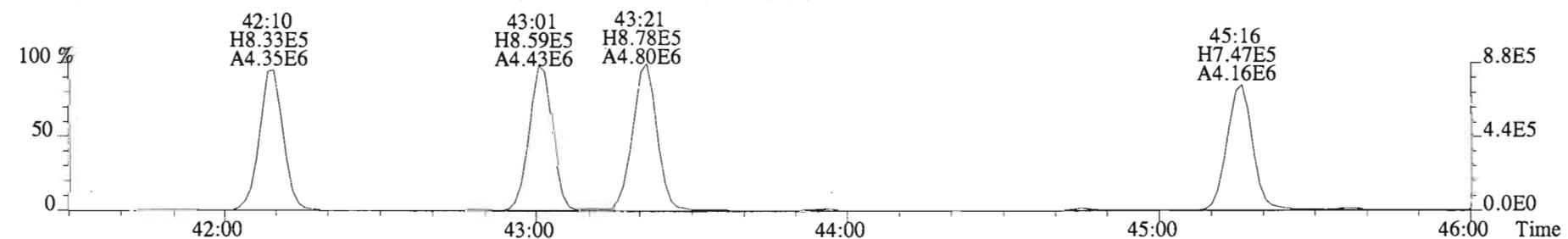
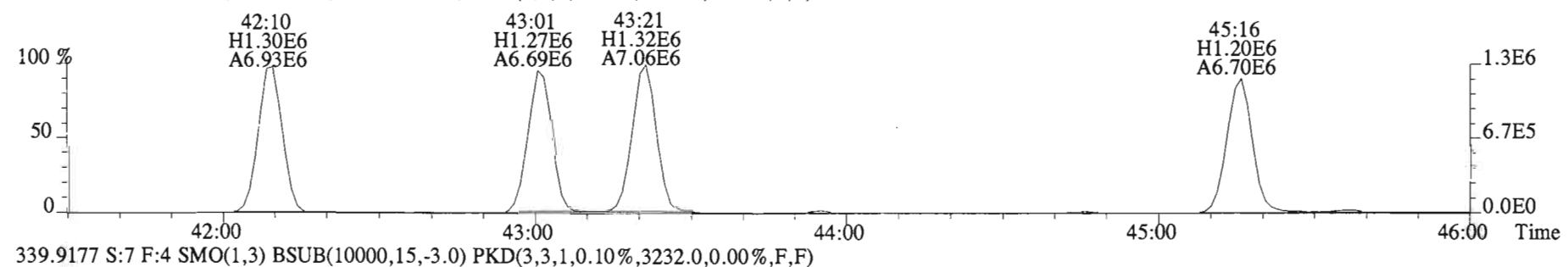
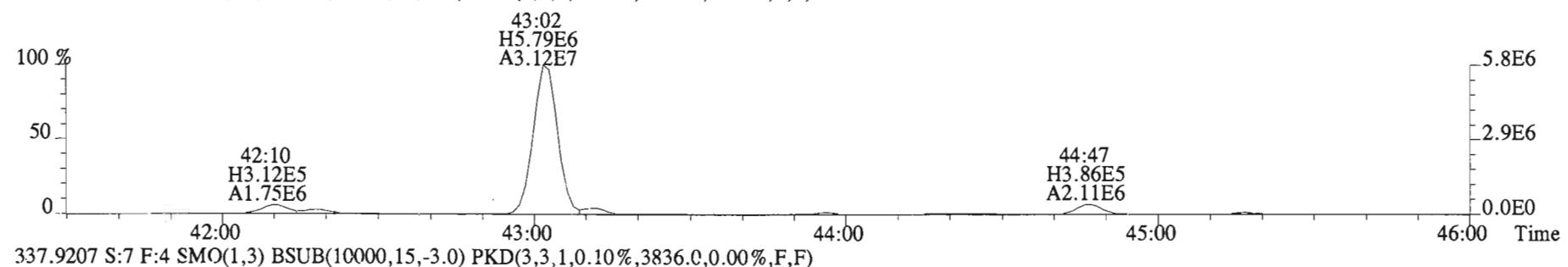
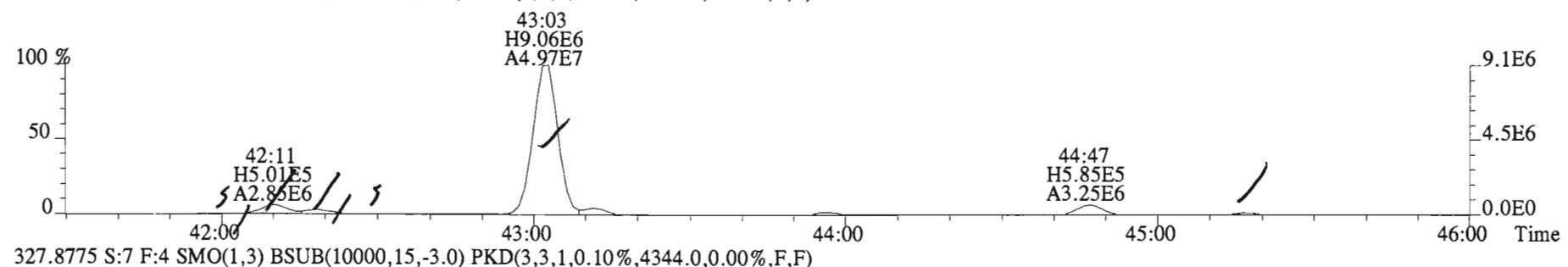
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)



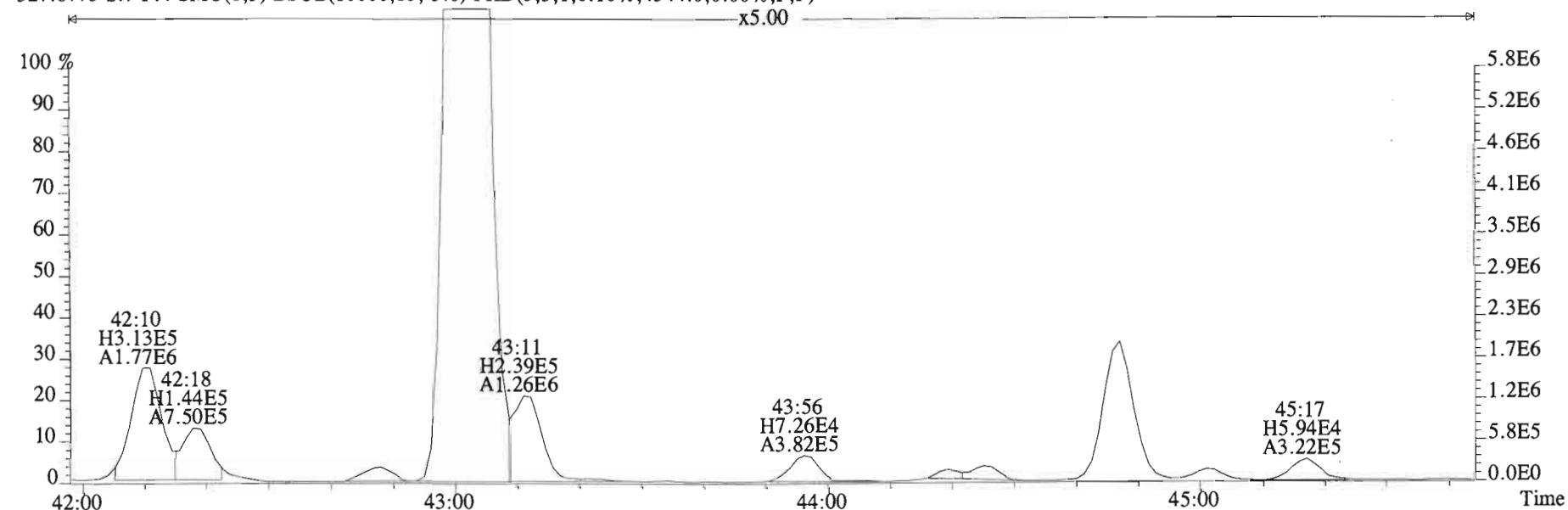
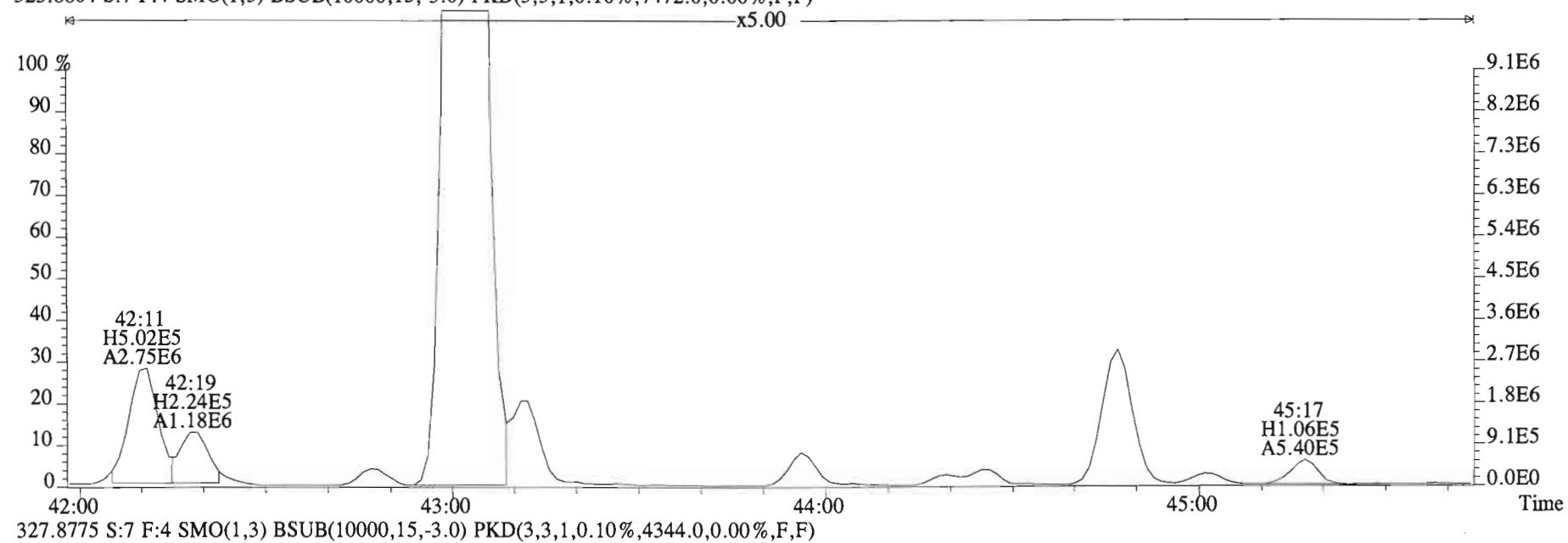
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337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)



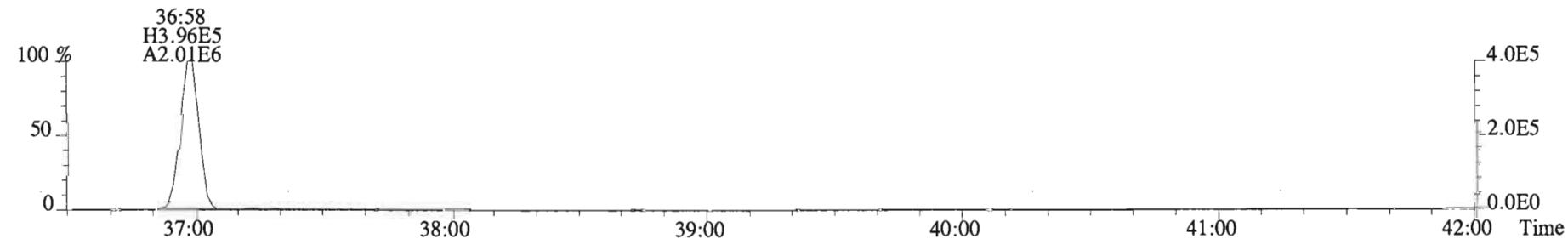
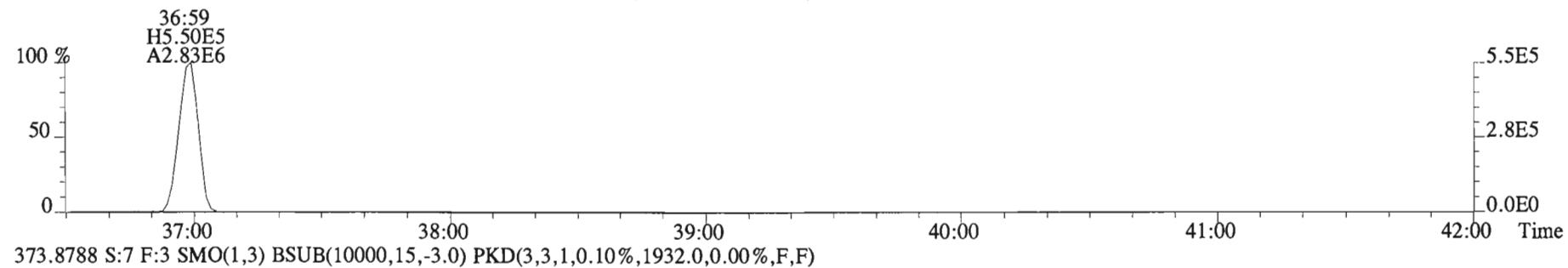
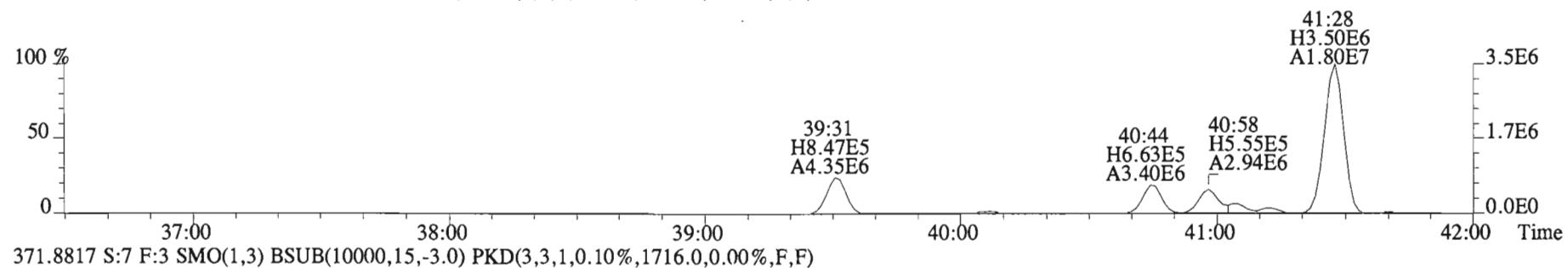
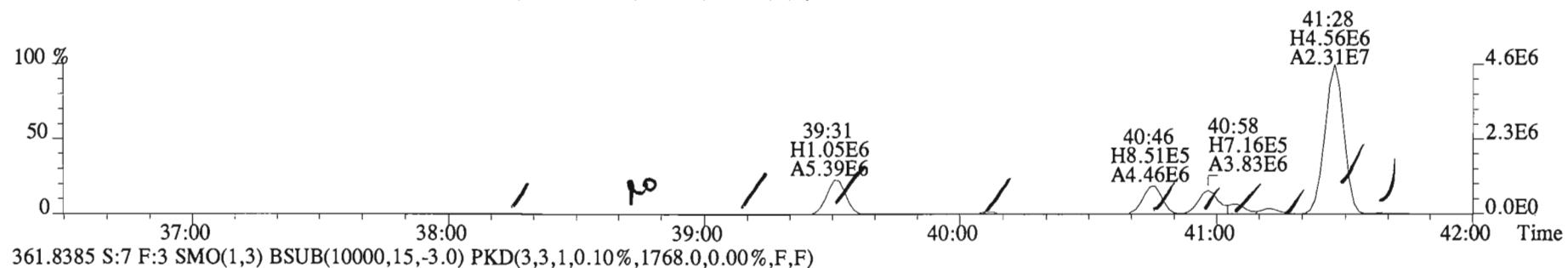
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 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
 325.8804 S:7 F:4 SMO(1,3) B\$UB(10000,15,-3.0) PKD(3,3,1,0.10%,7472.0,0.00%,F,F)



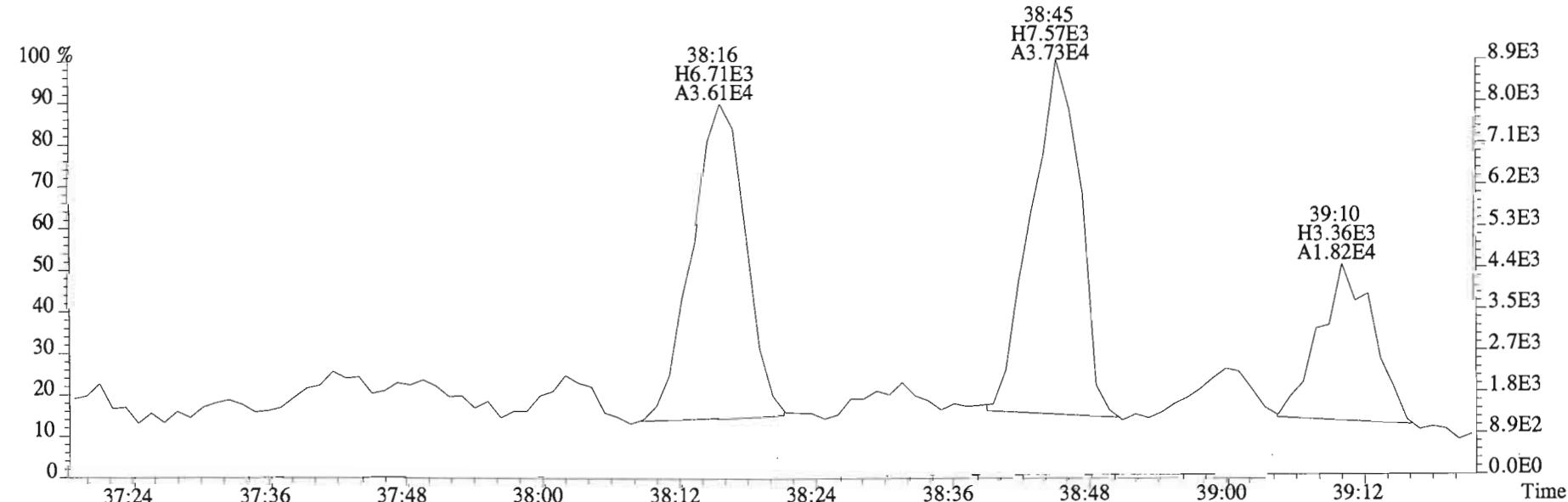
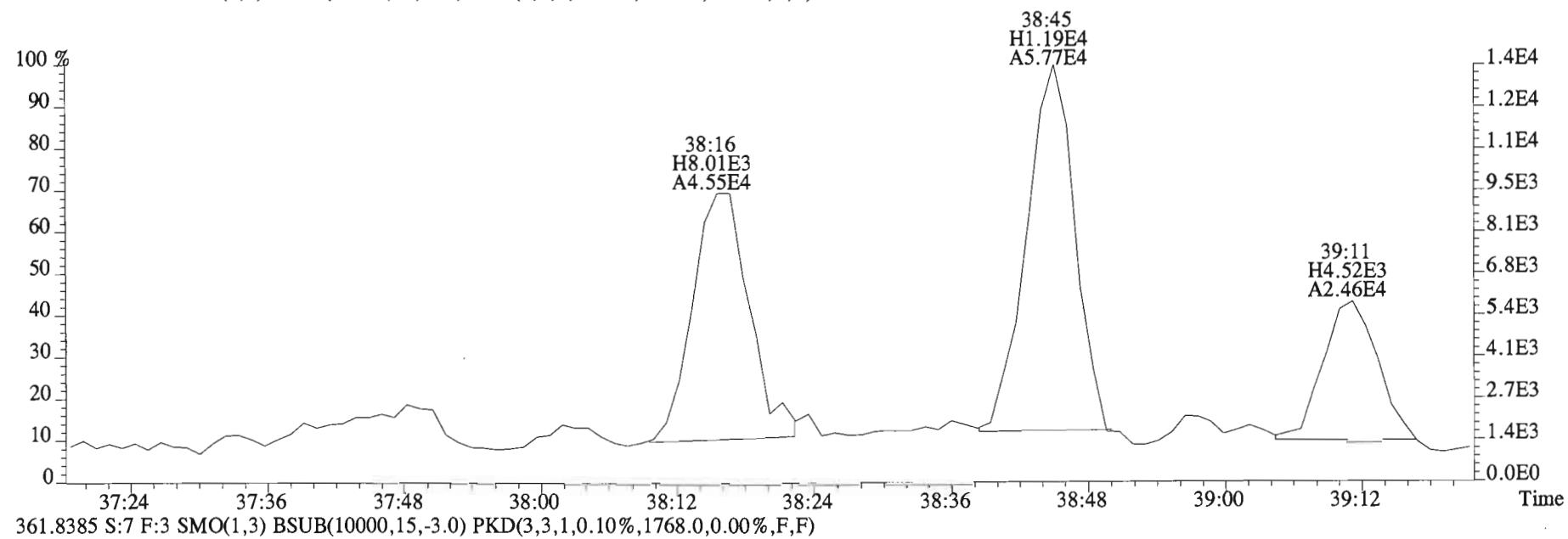
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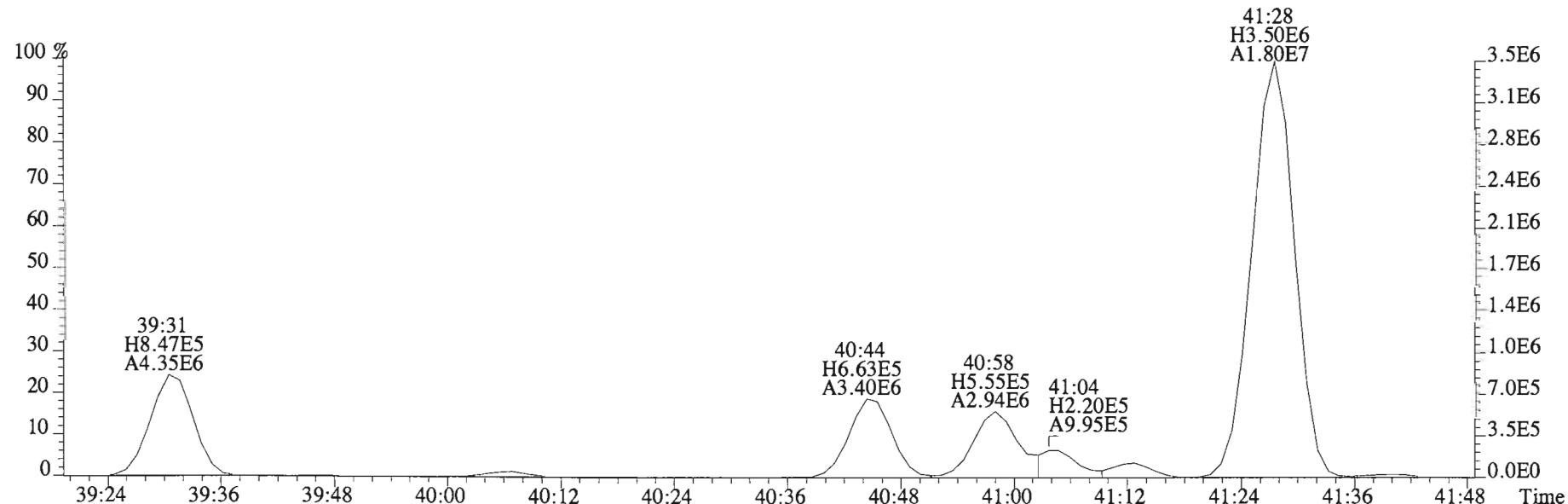
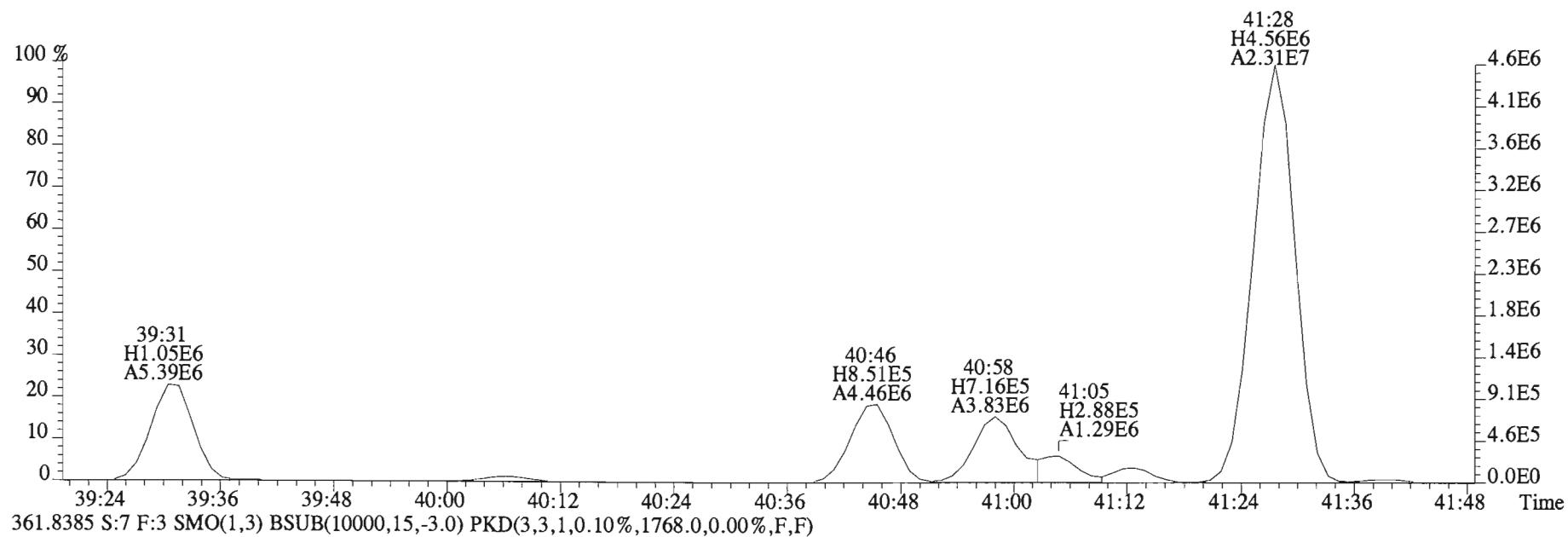
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
359.8415 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1728.0,0.00%,F,F)



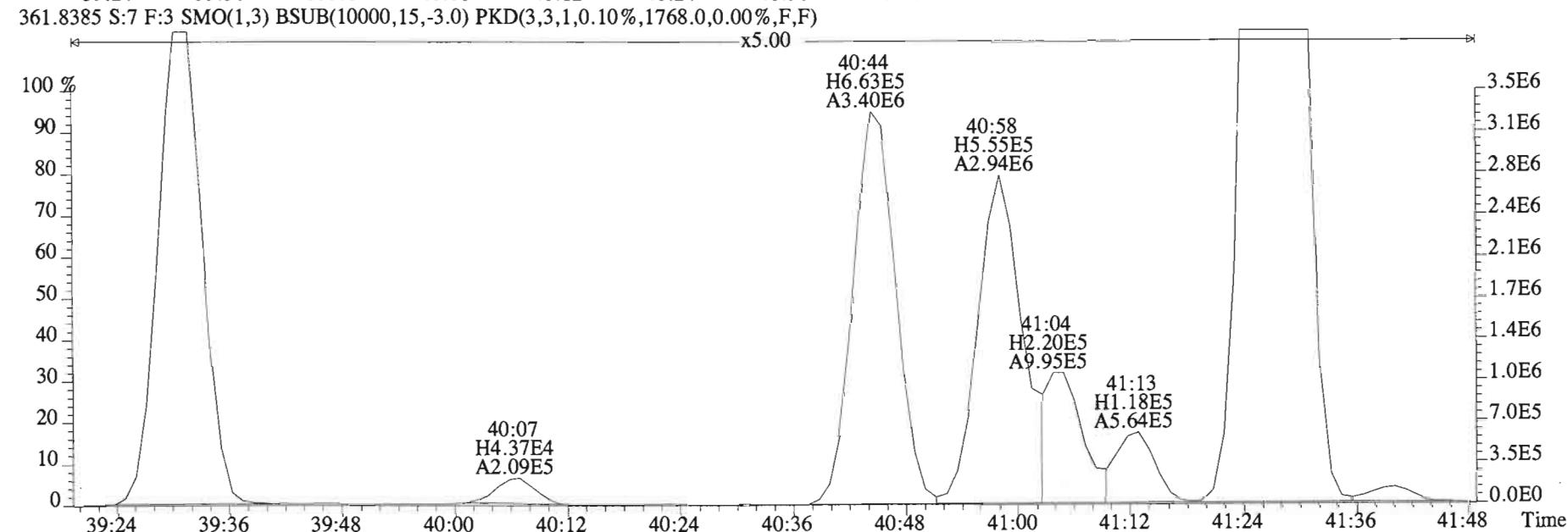
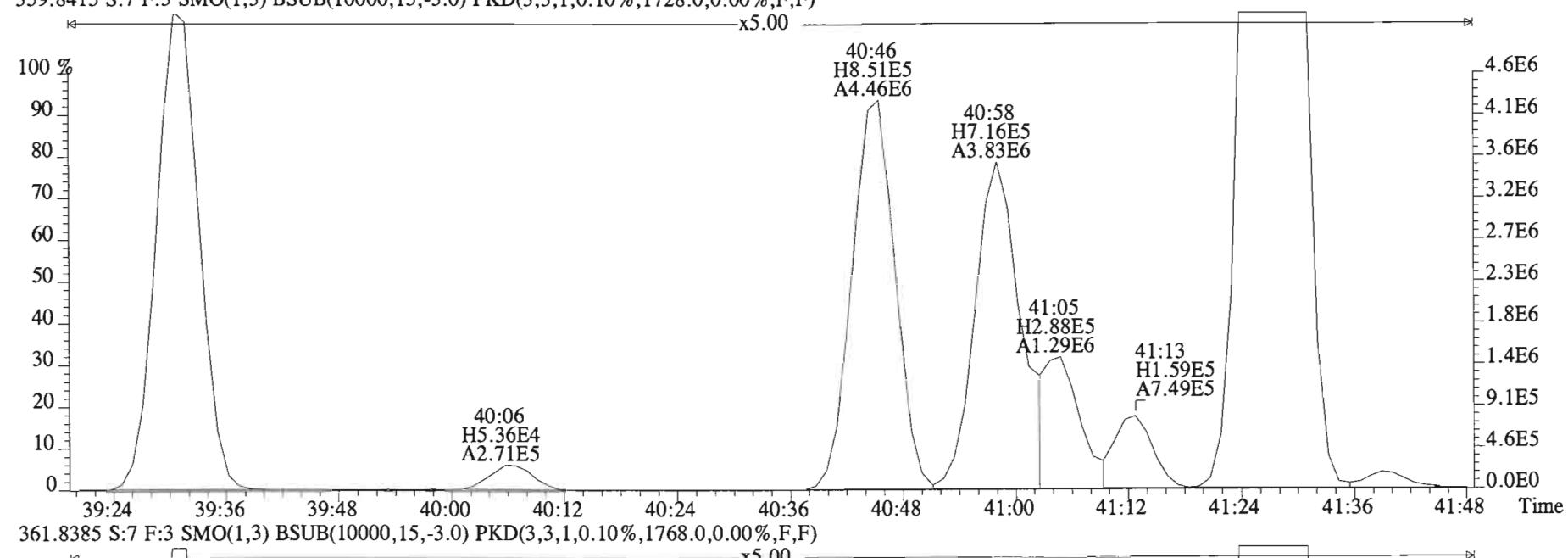
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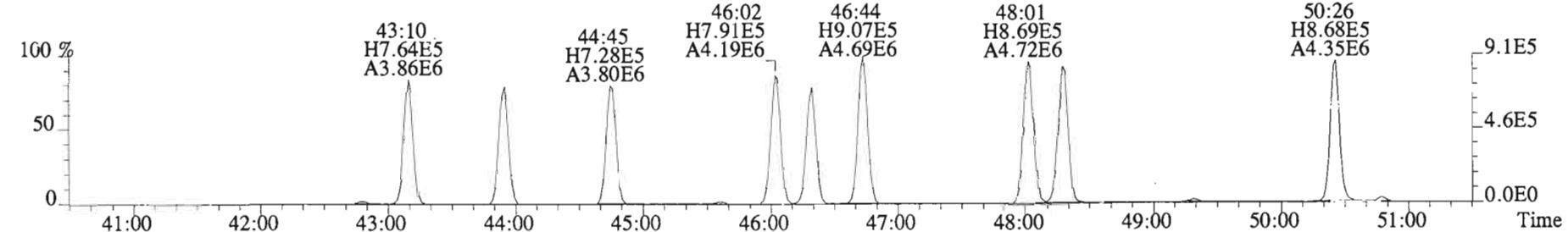
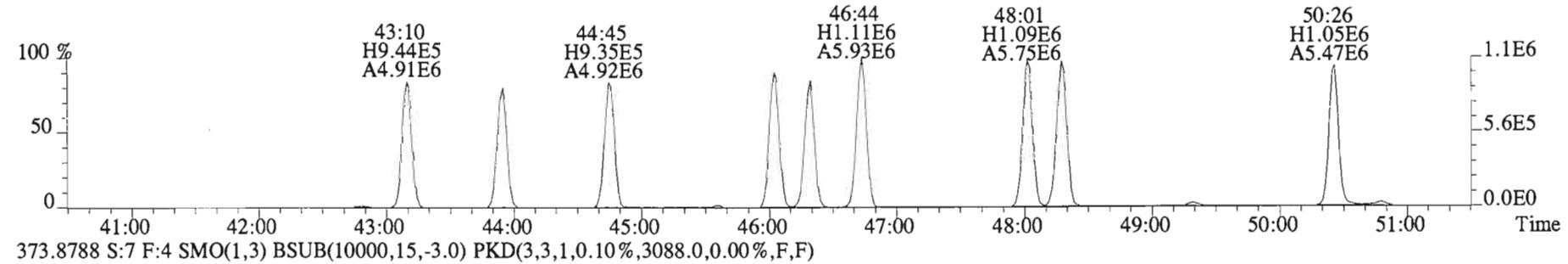
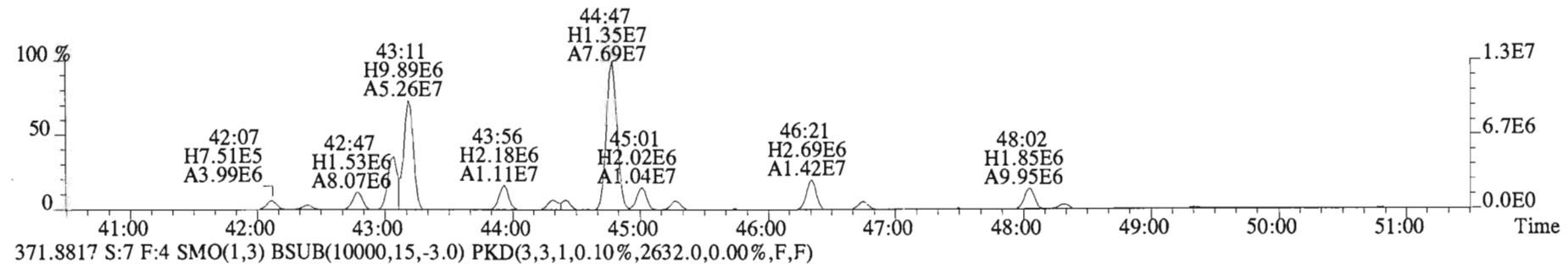
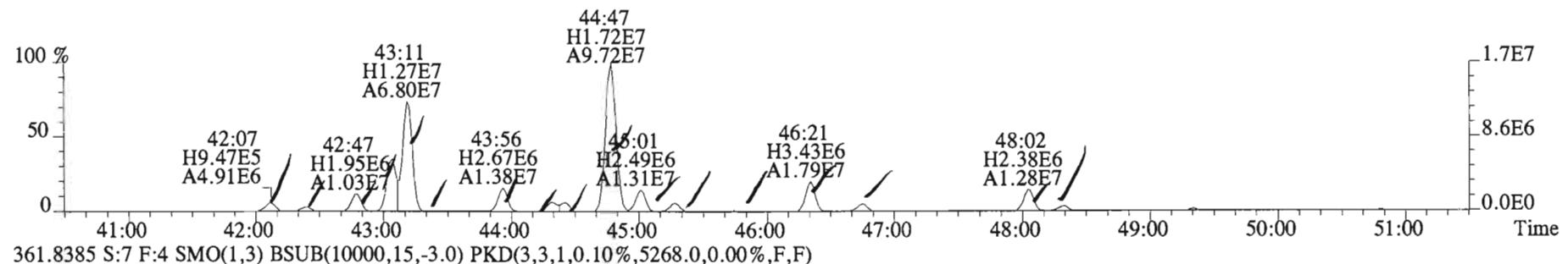
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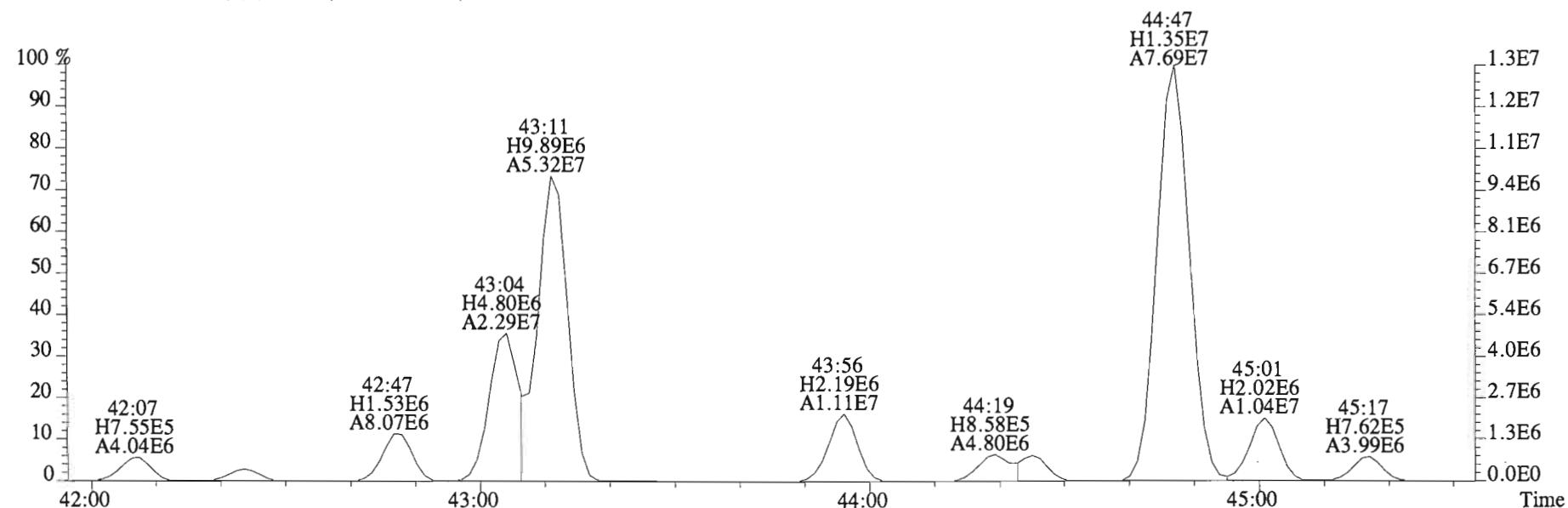
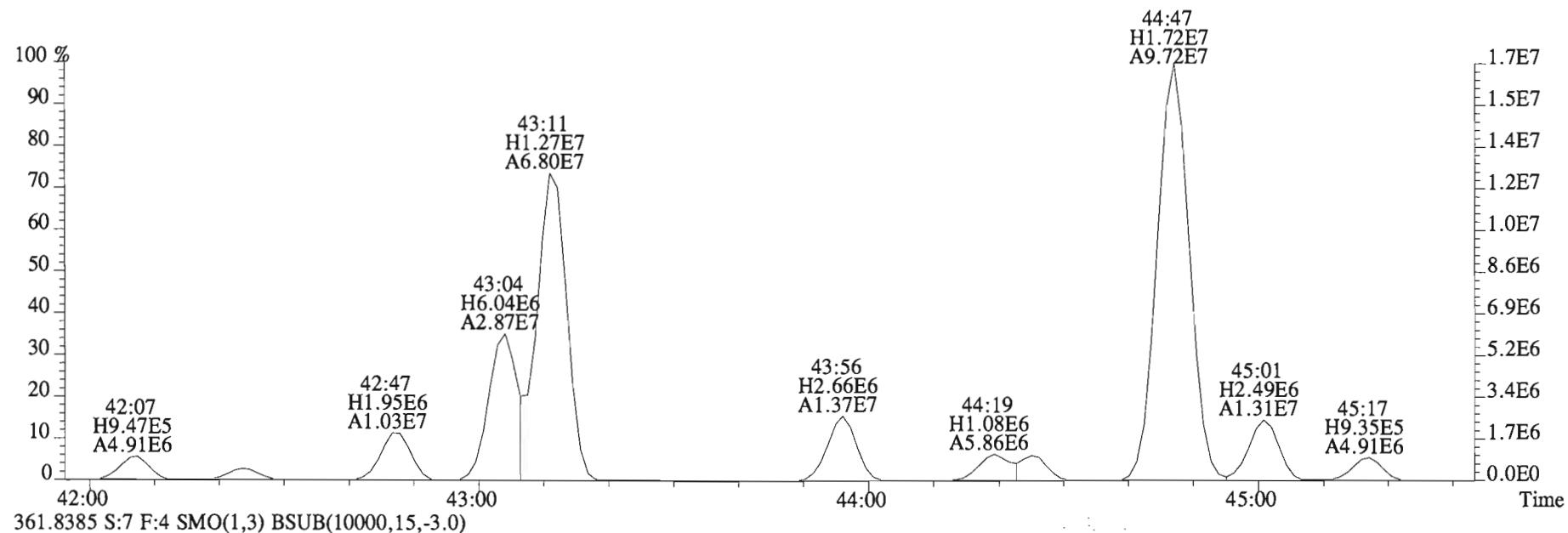
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
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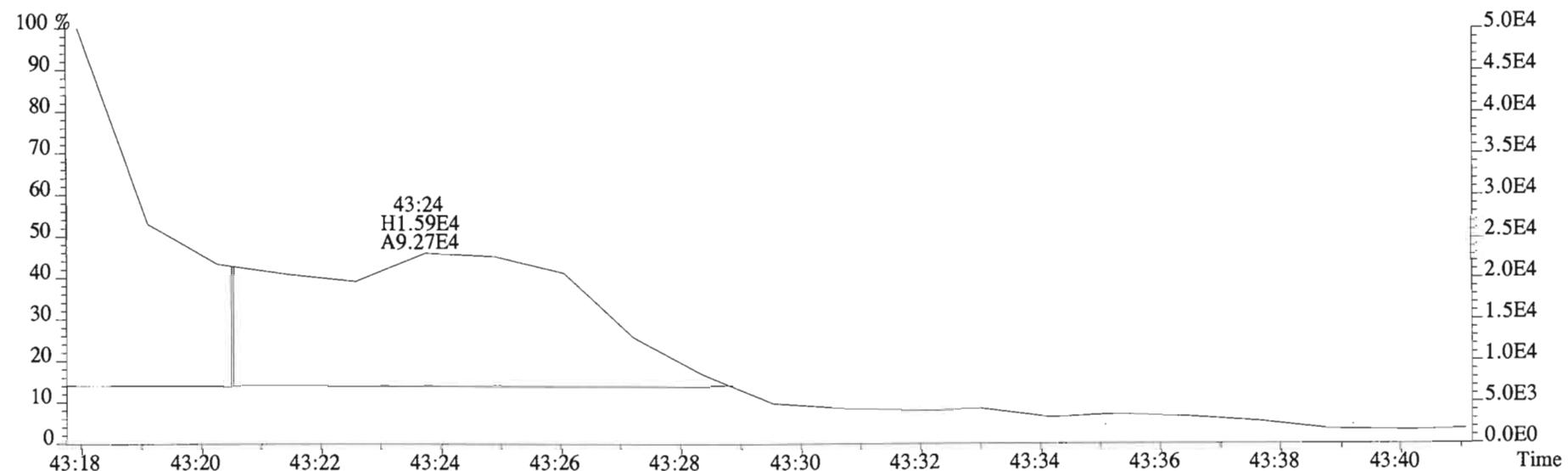
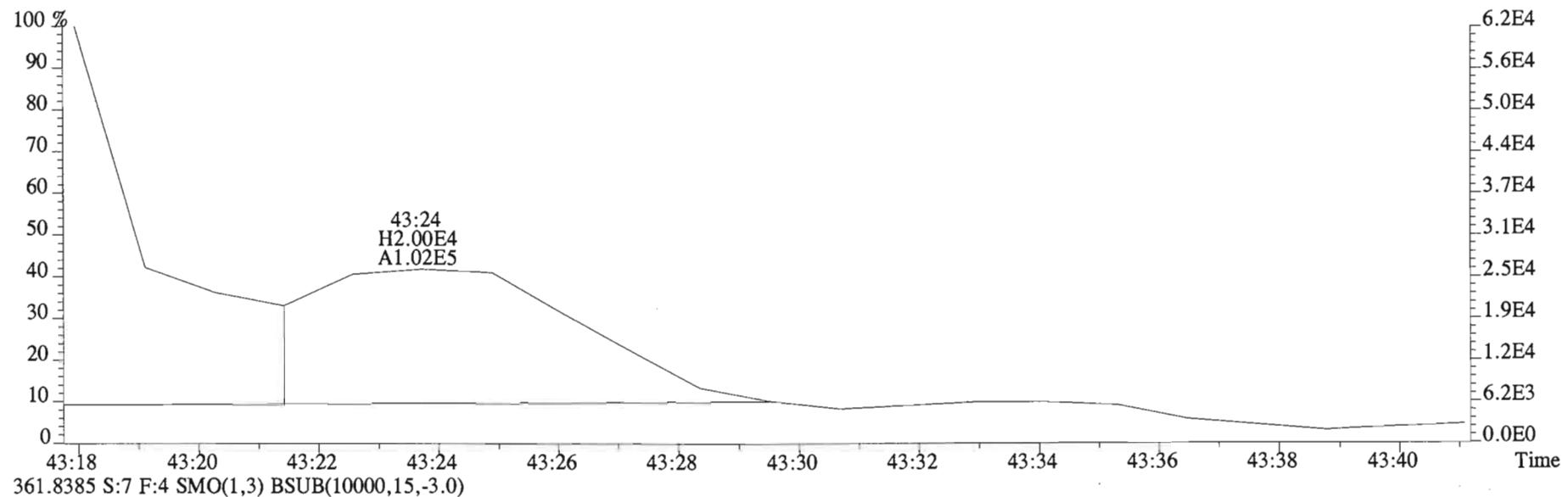
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 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
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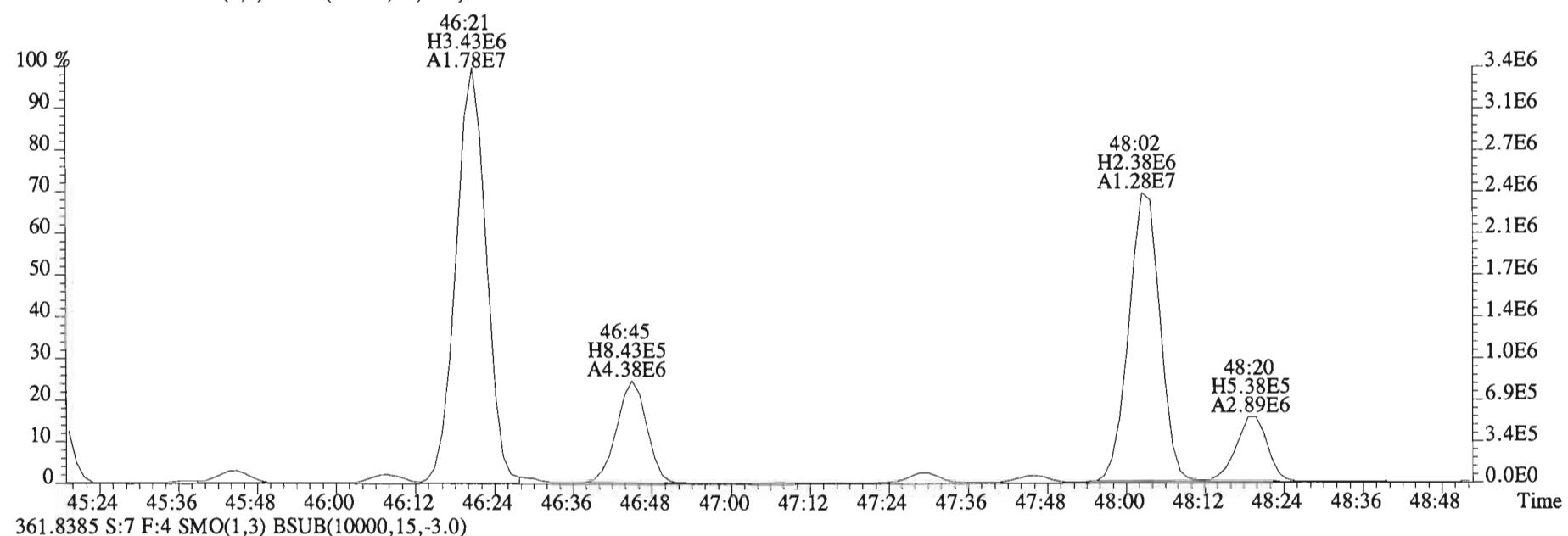
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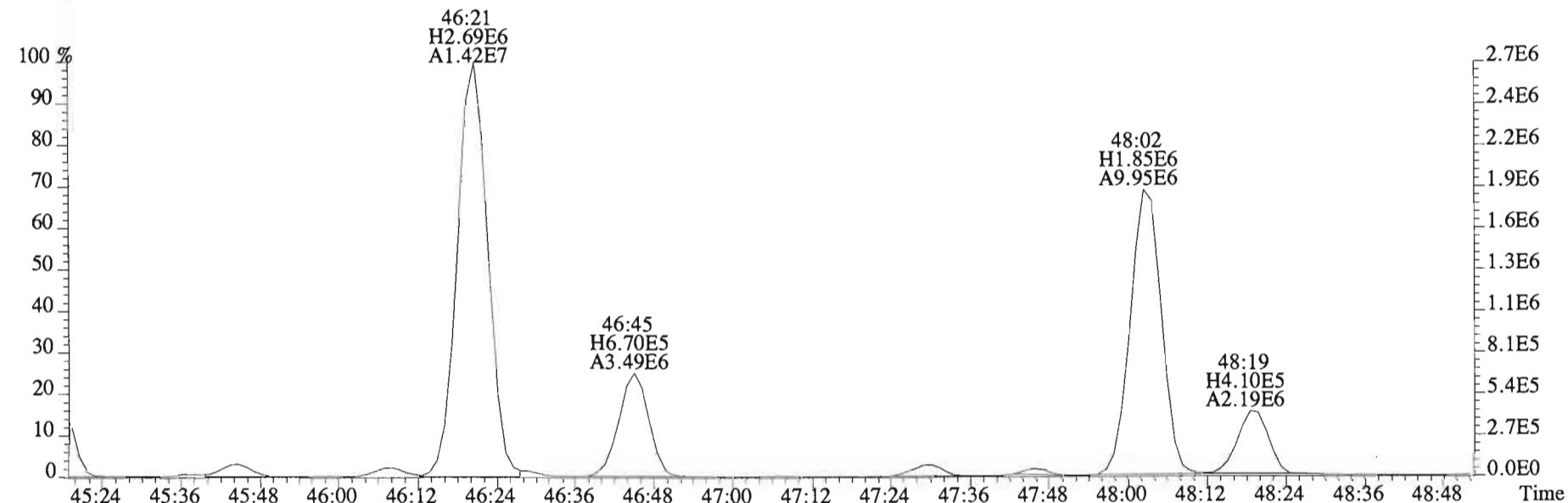
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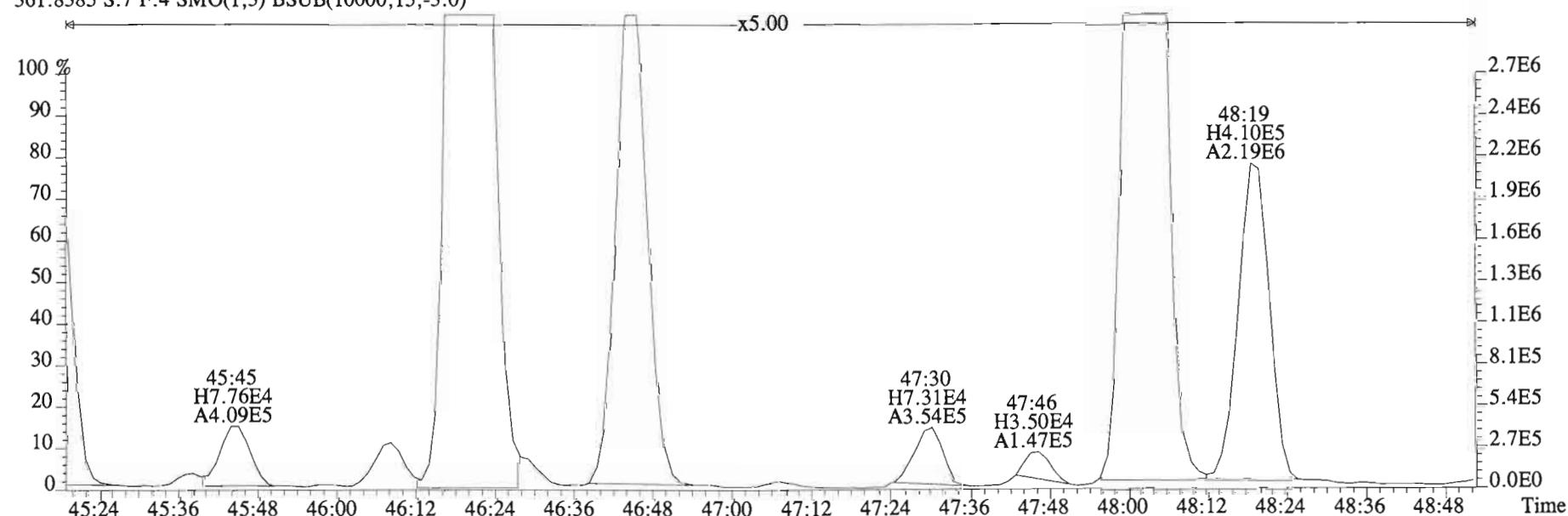
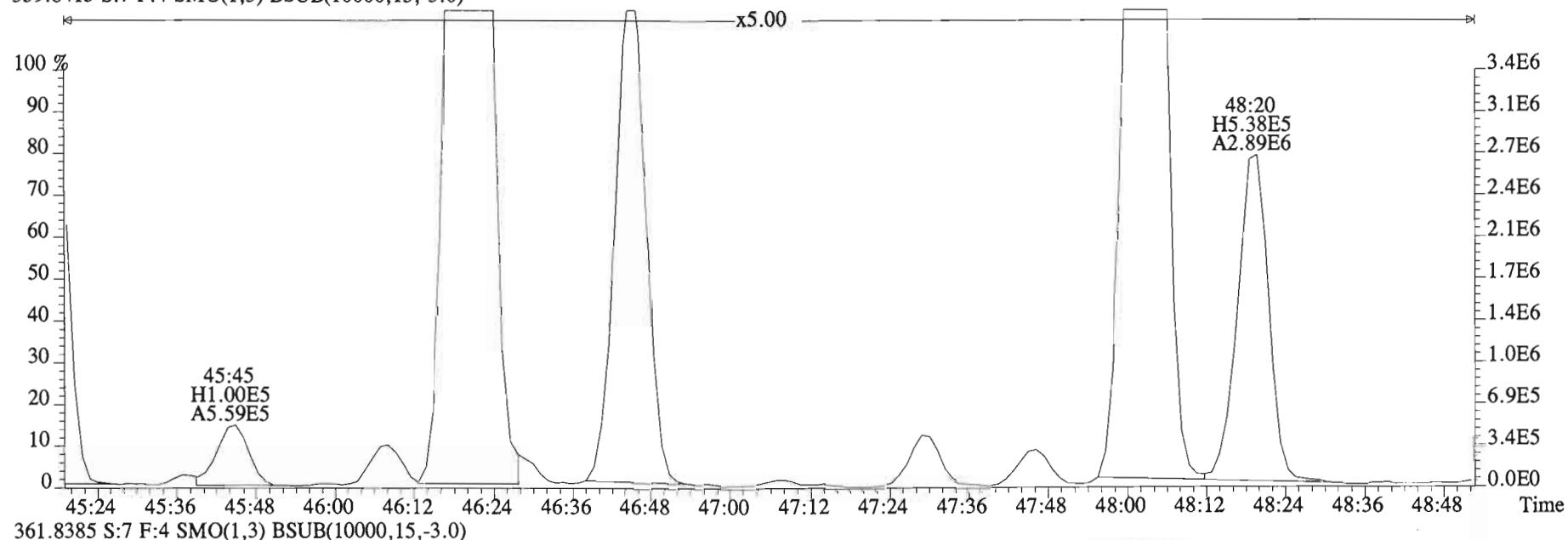
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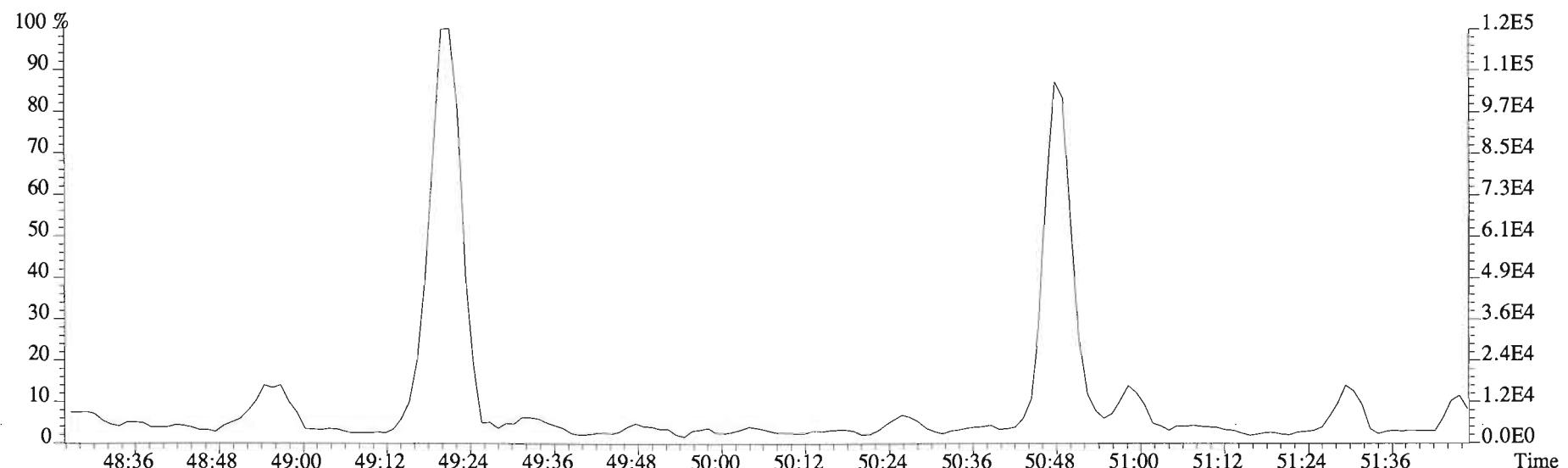
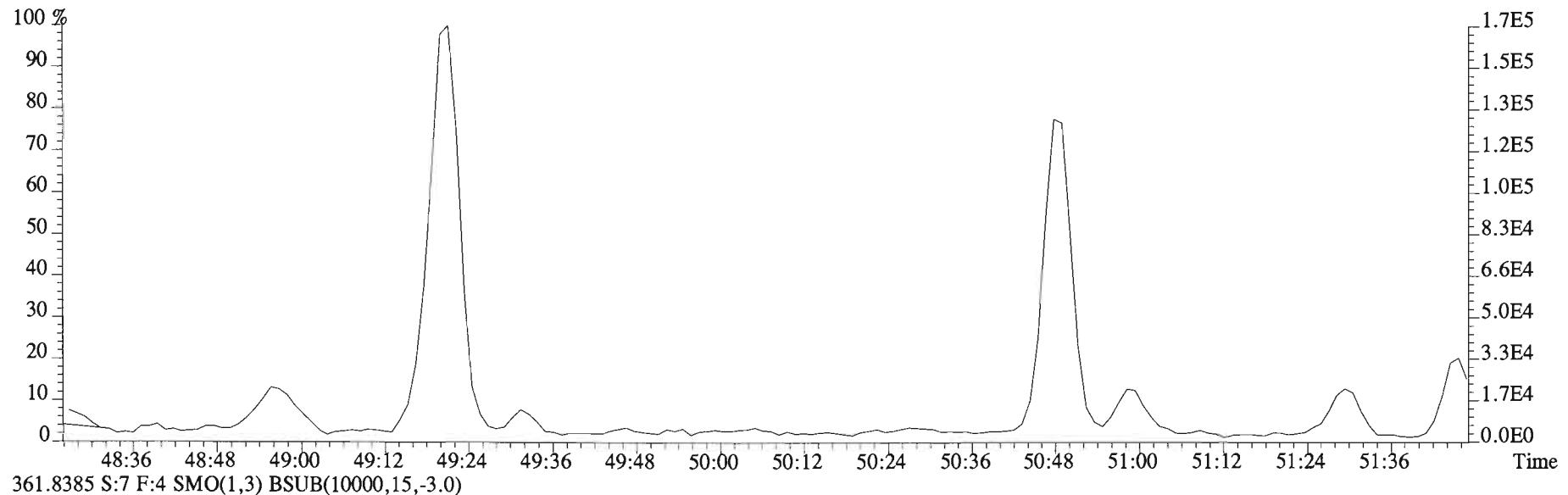
361.8385 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



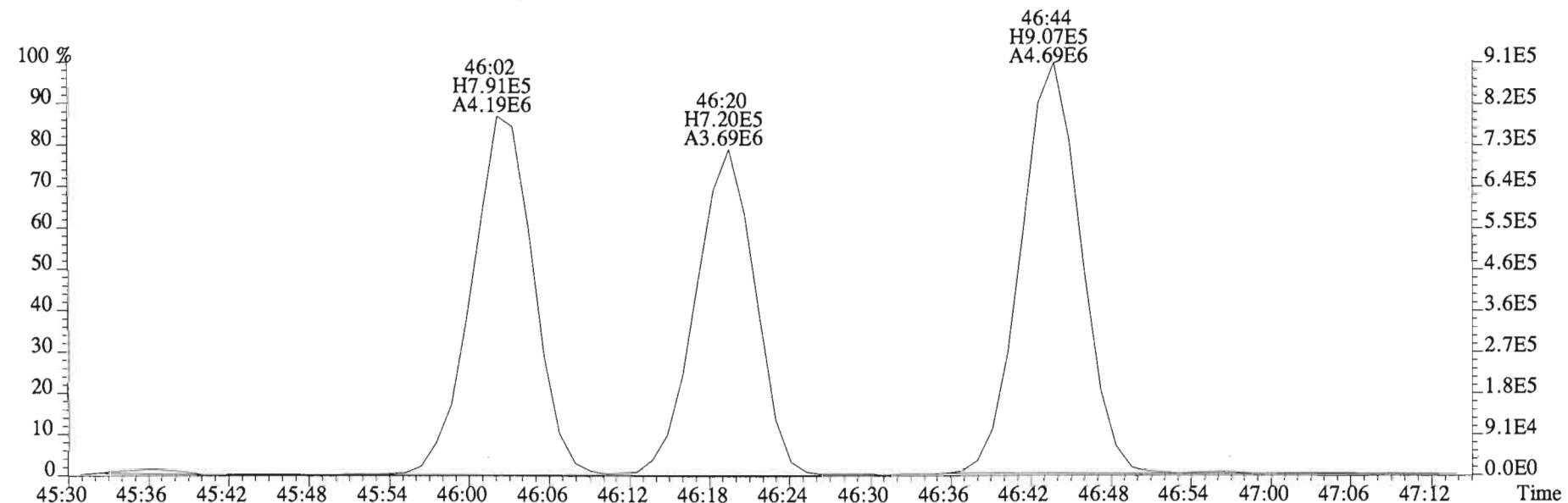
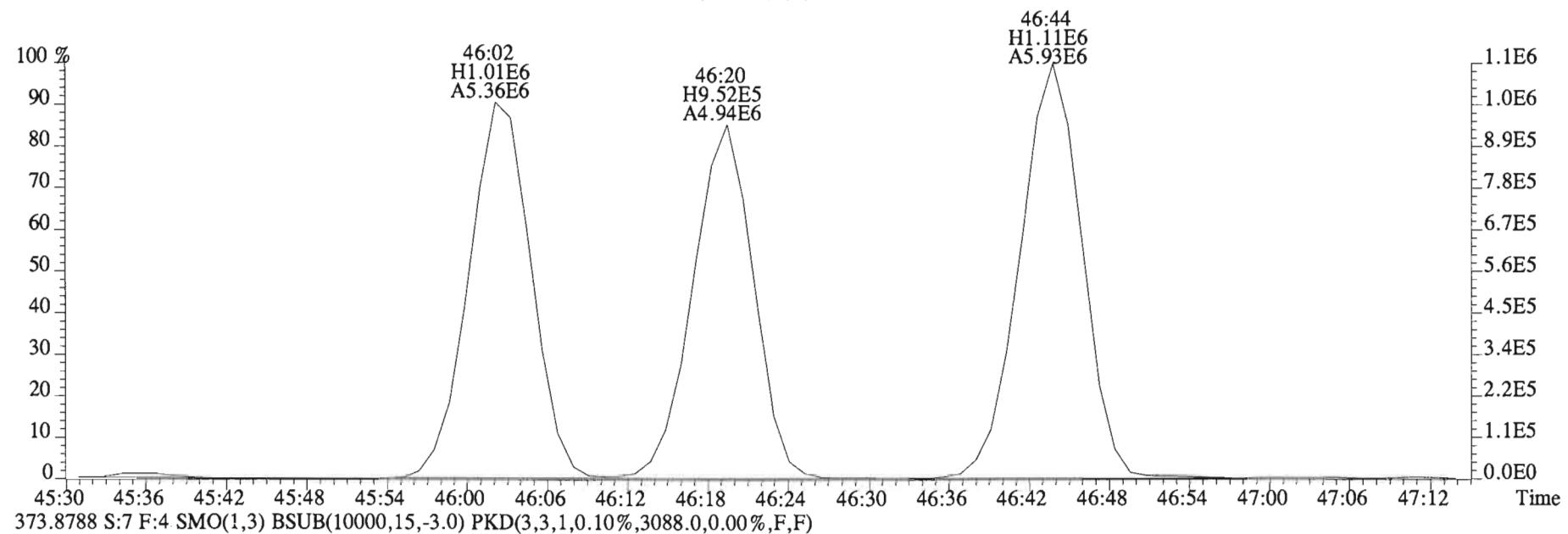
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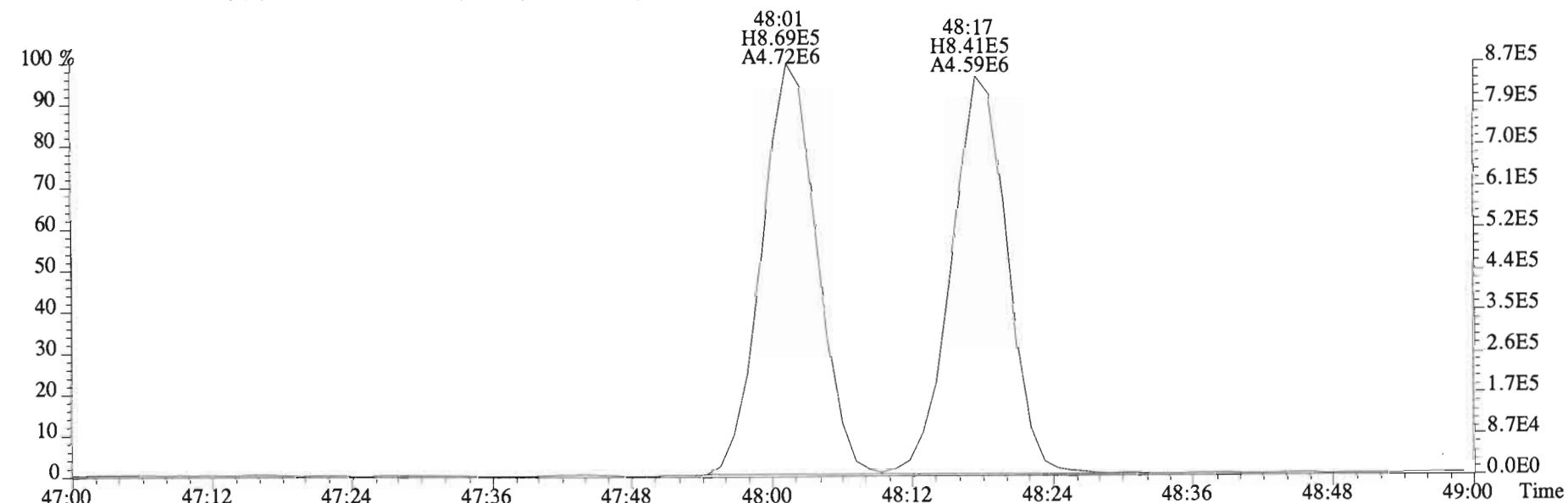
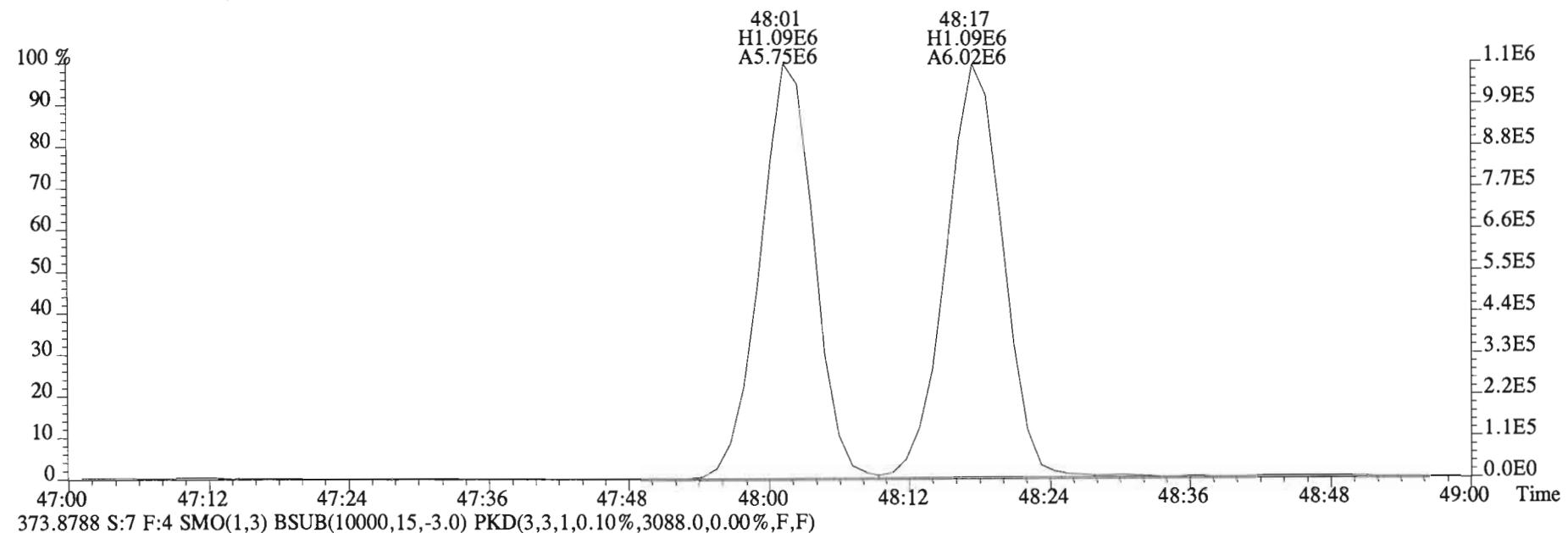
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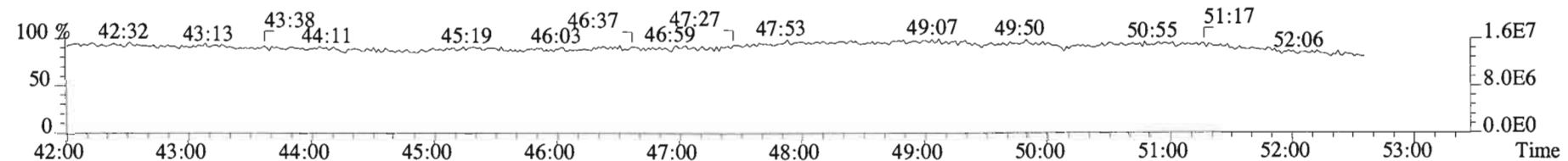
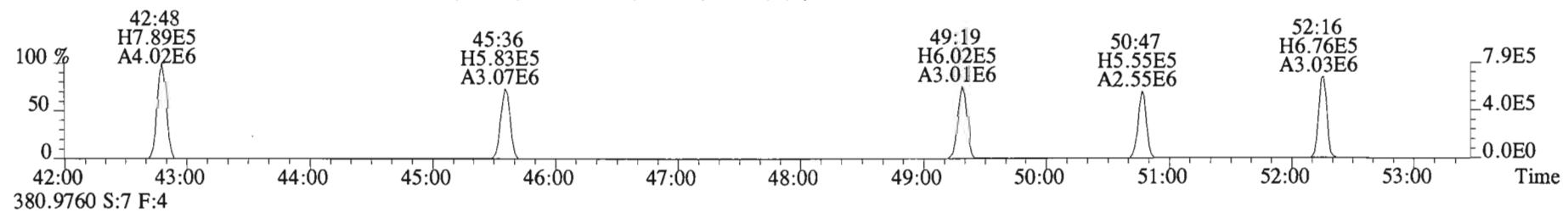
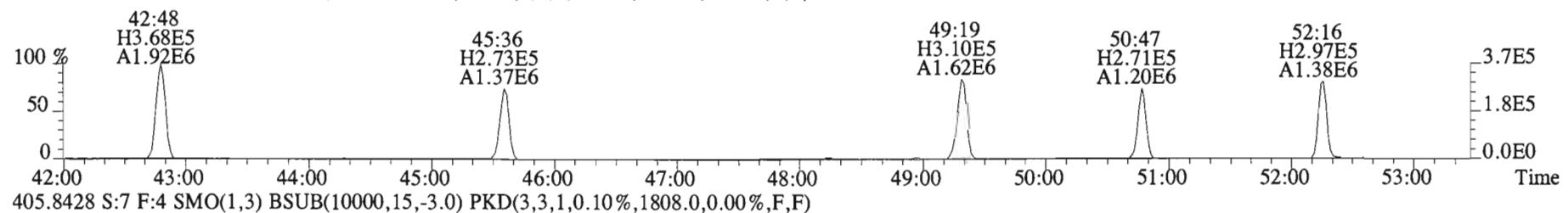
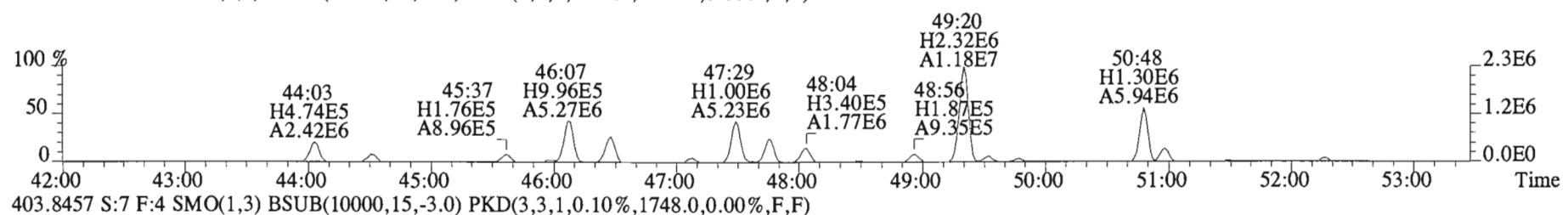
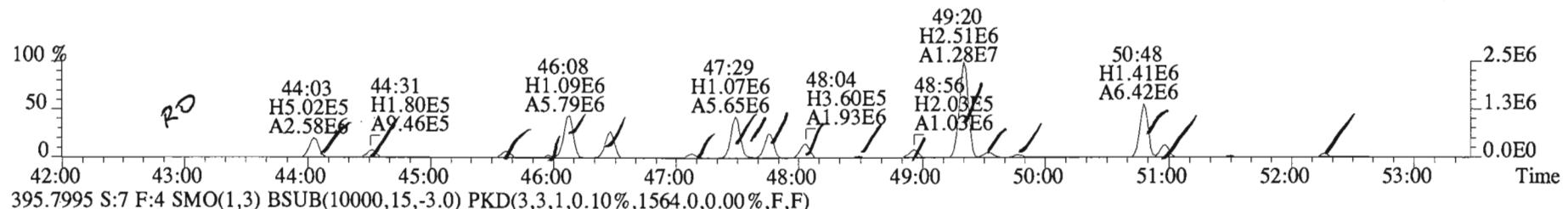
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371.8817 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2632.0,0.00%,F,F)



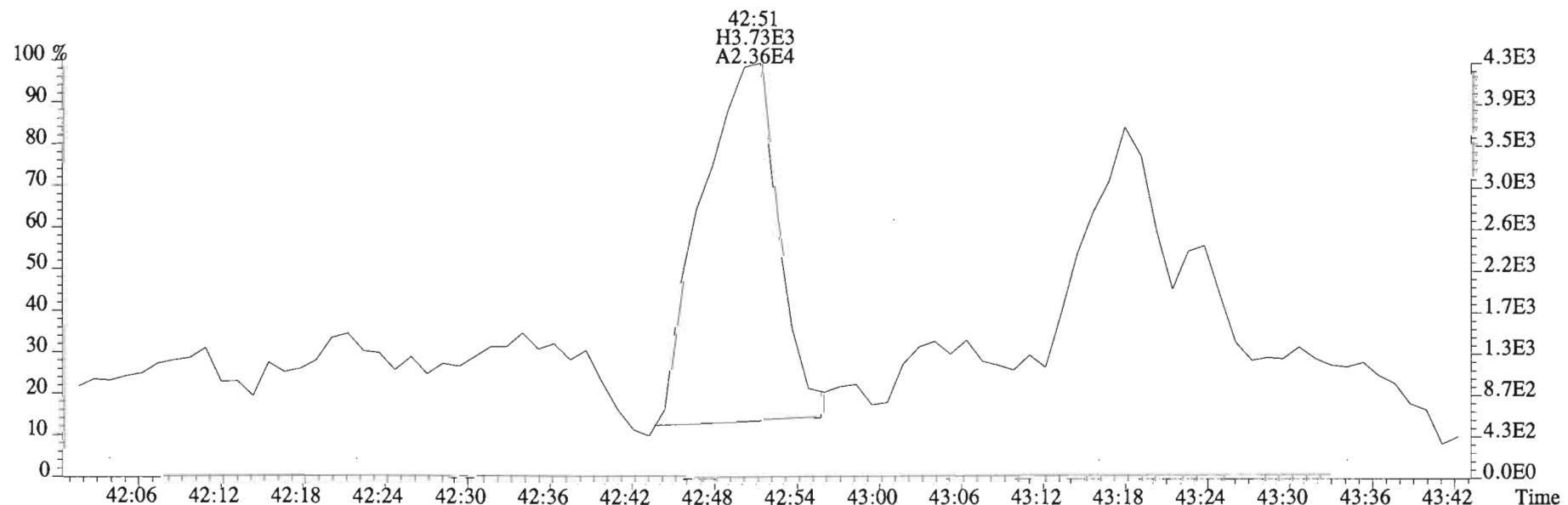
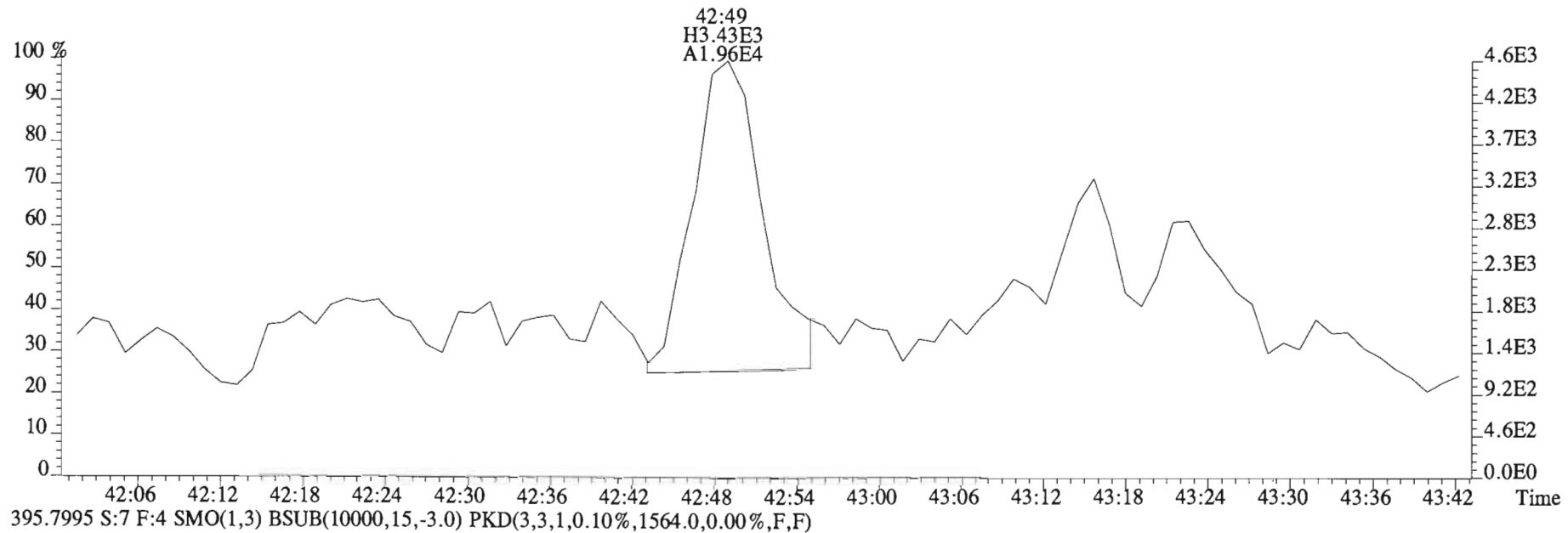
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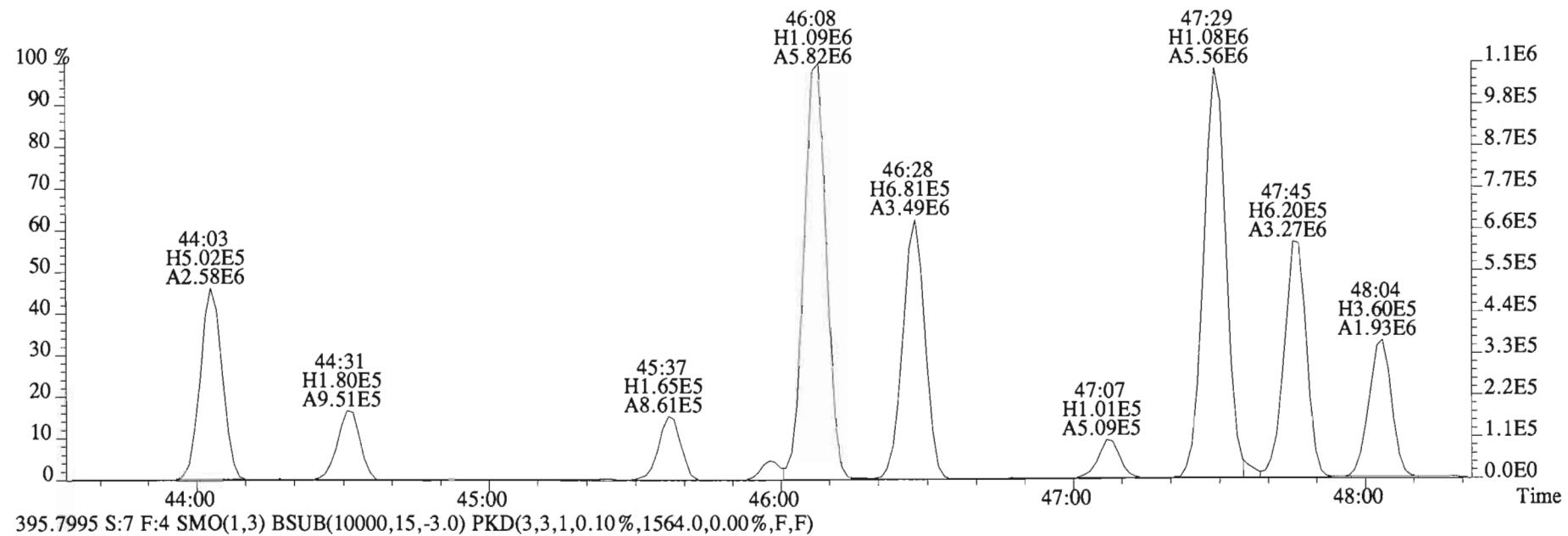
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 393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2276.0,0.00%,F,F)



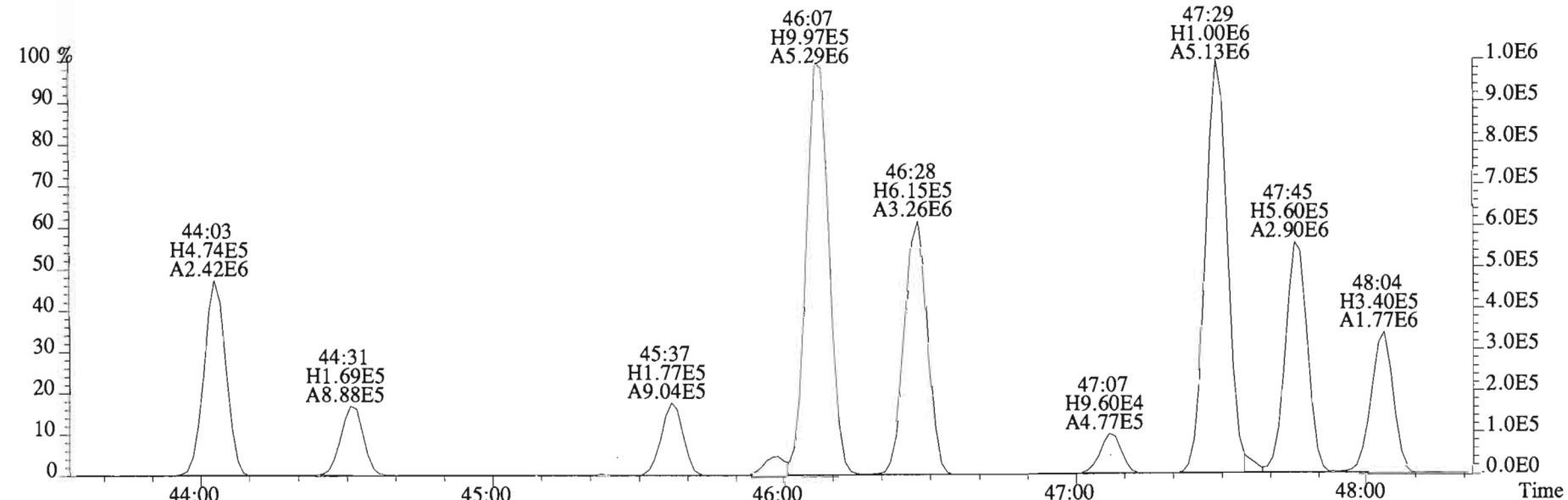
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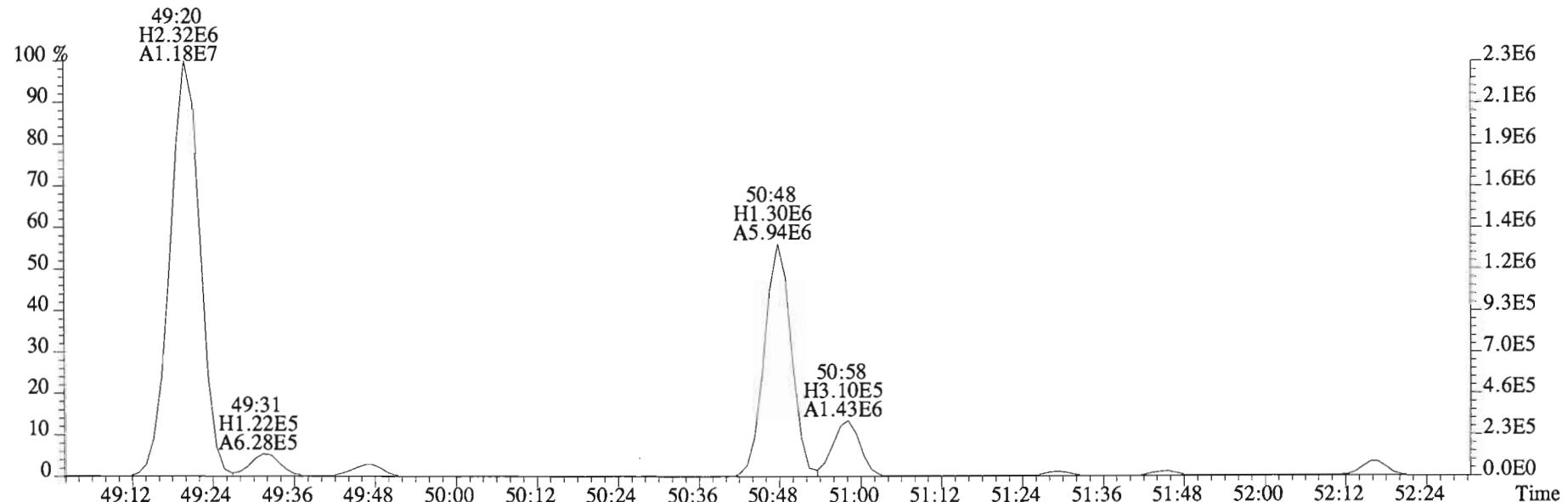
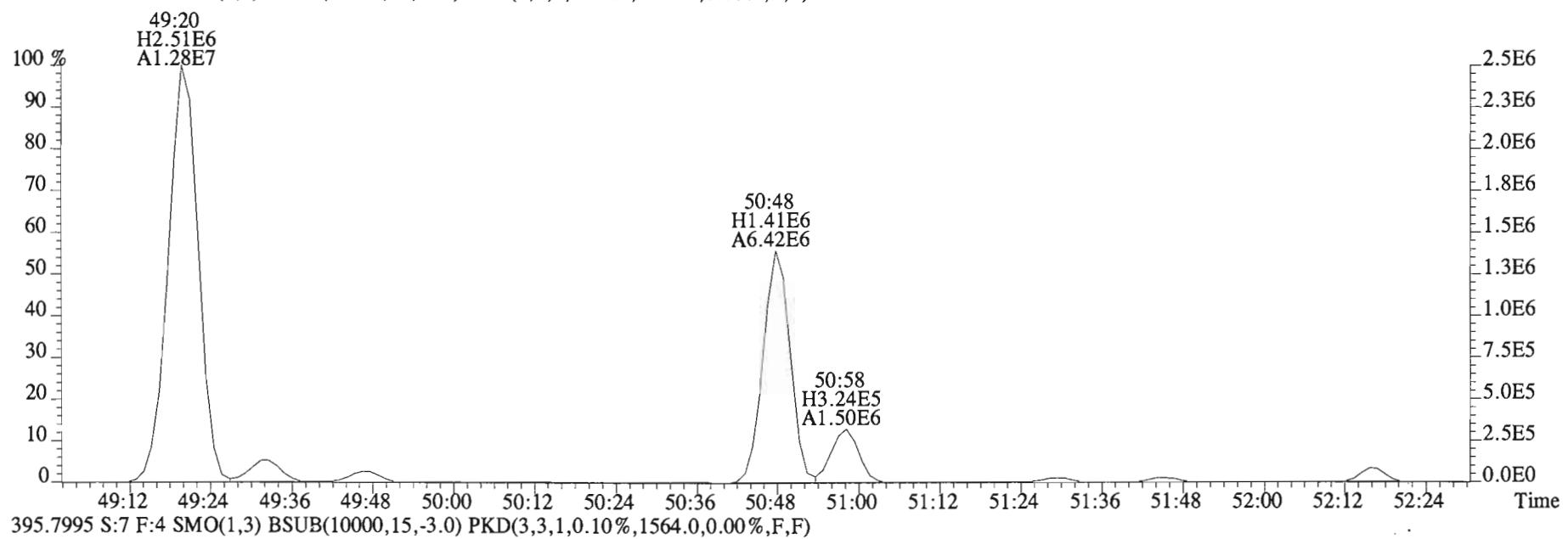
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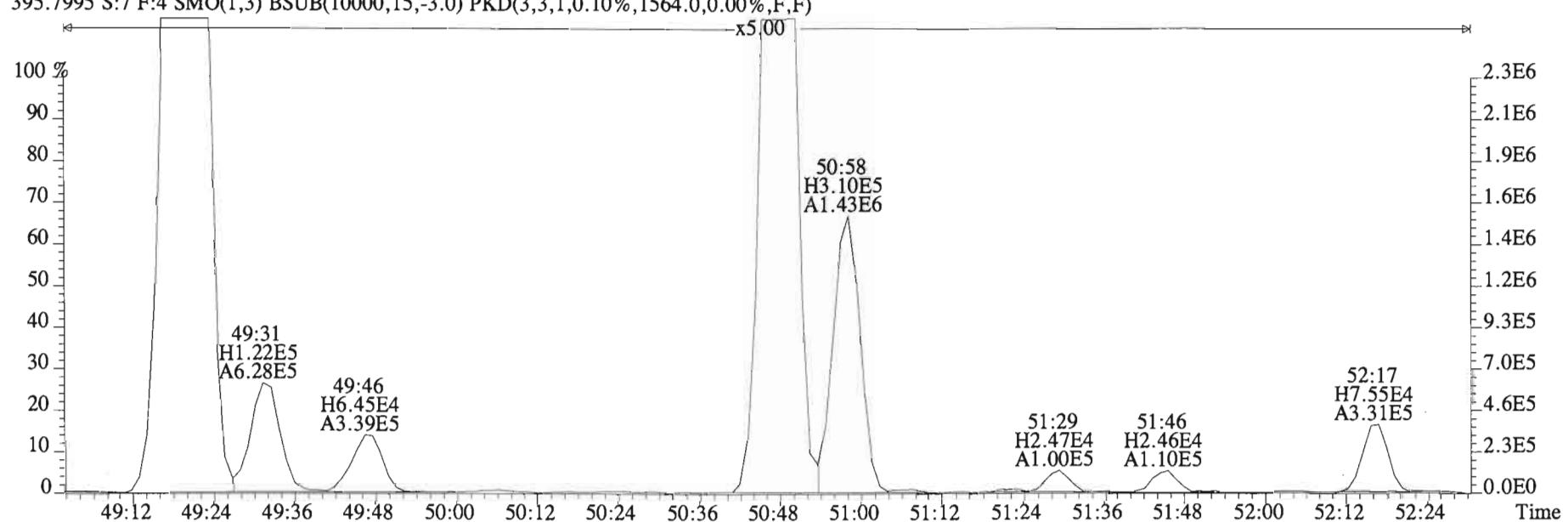
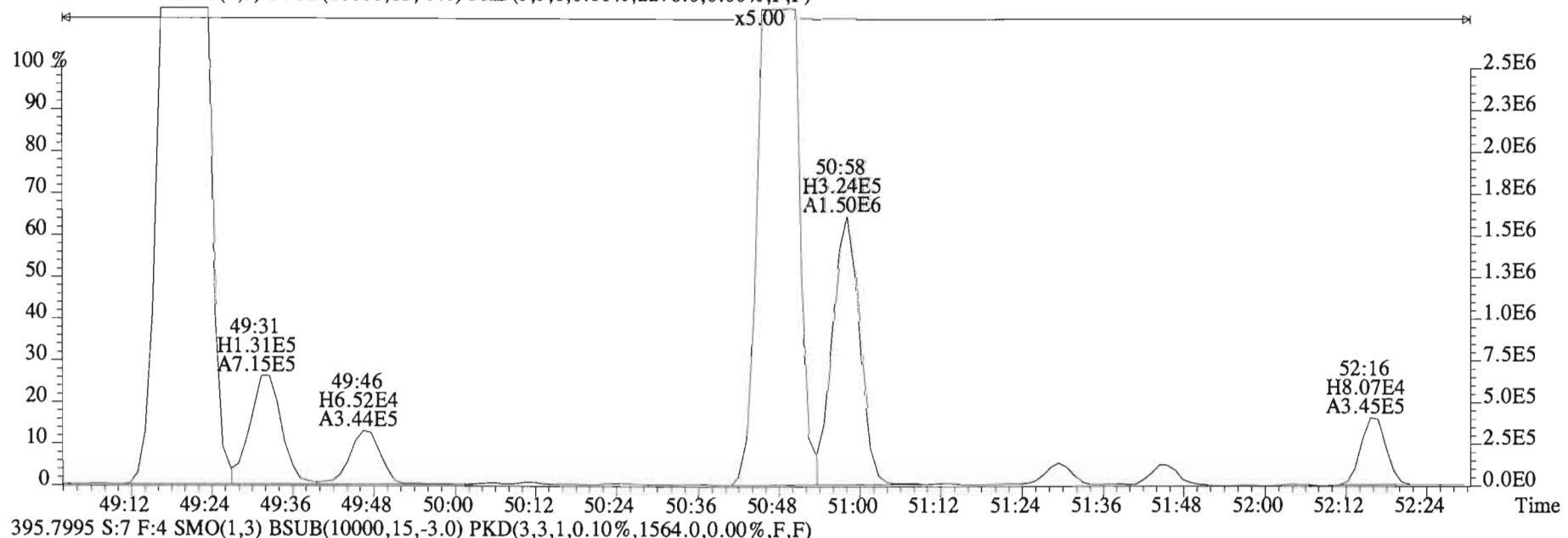
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1564.0,0.00%,F,F)



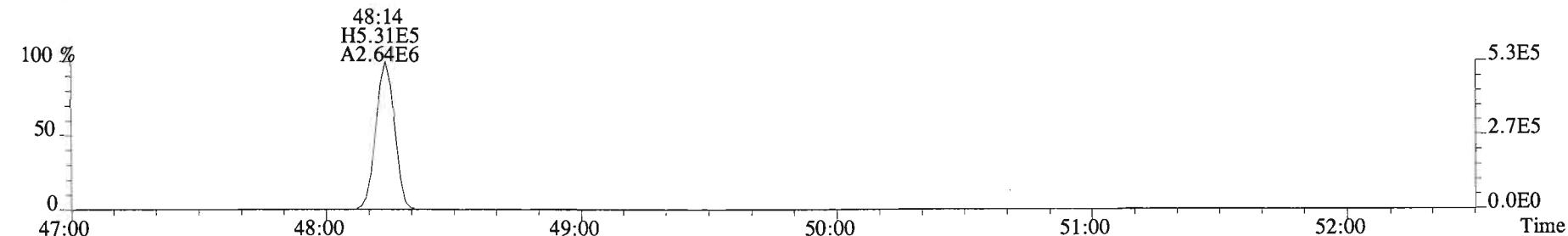
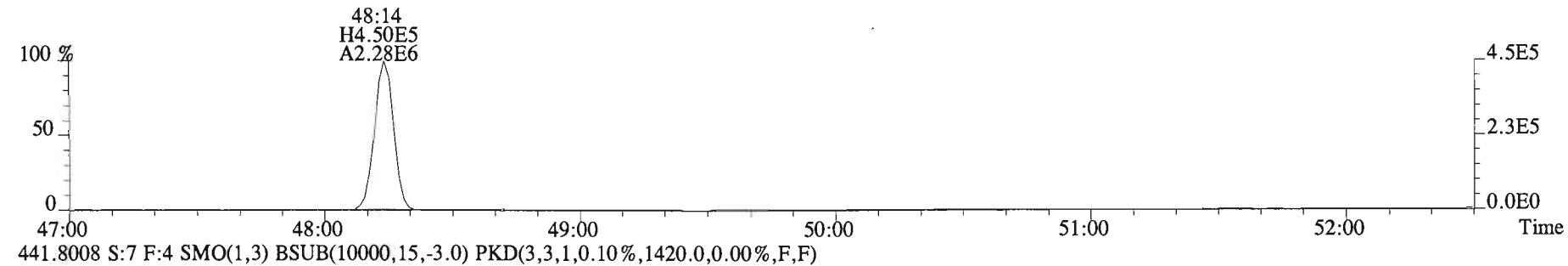
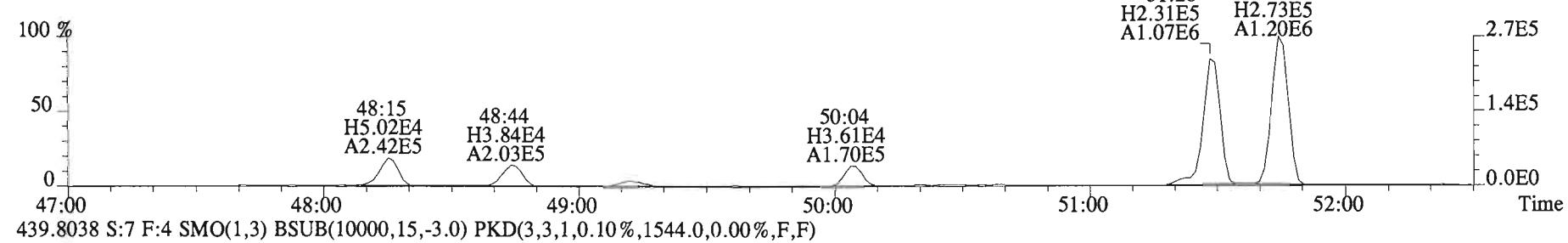
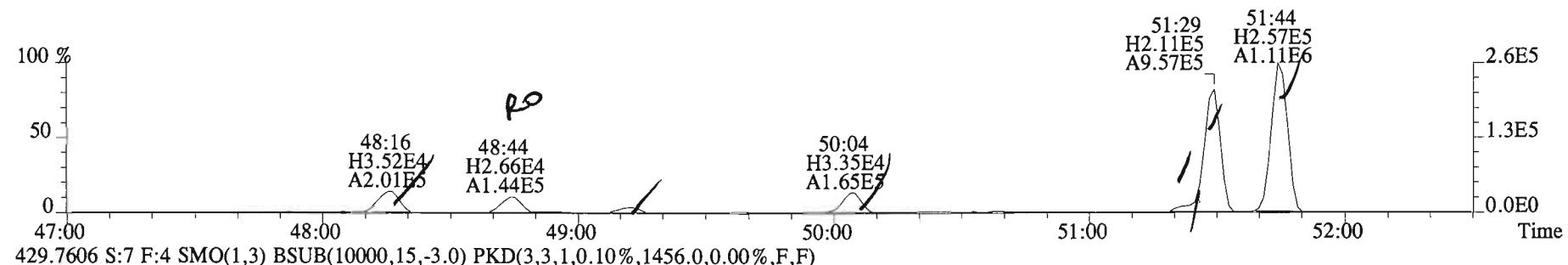
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Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
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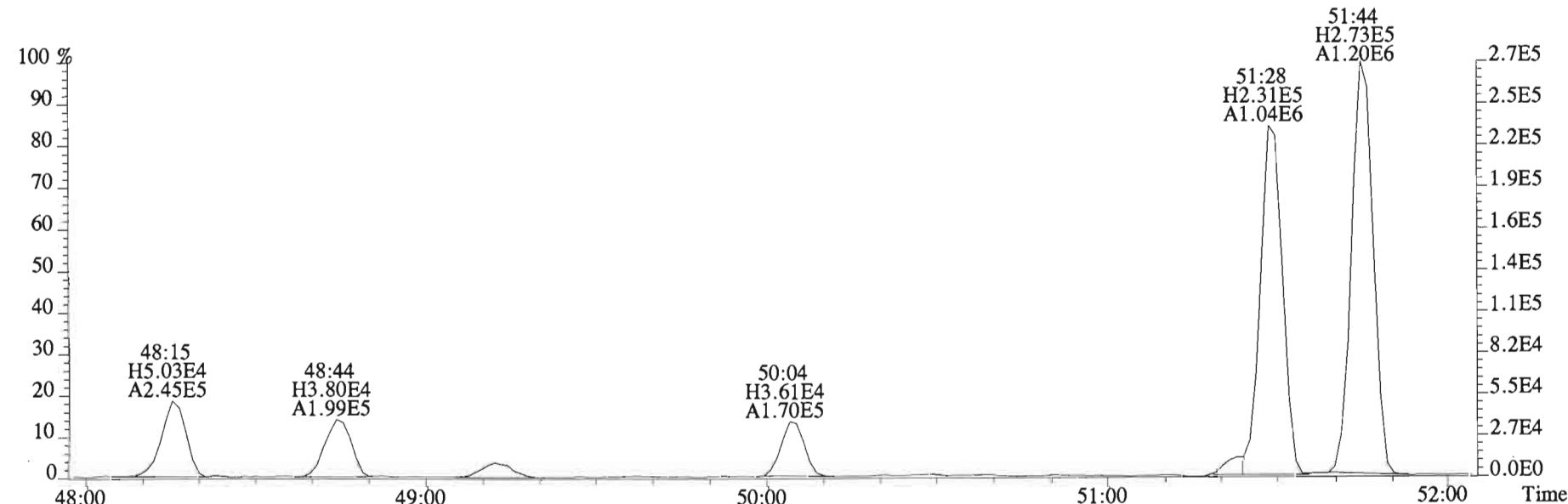
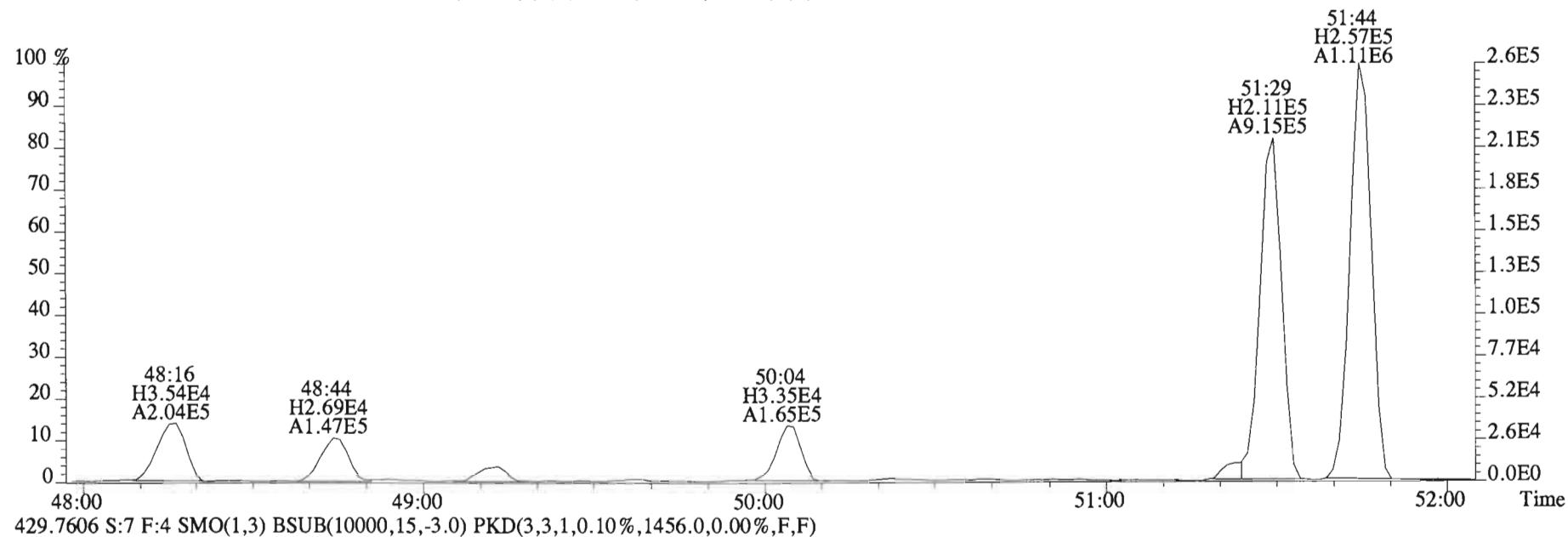
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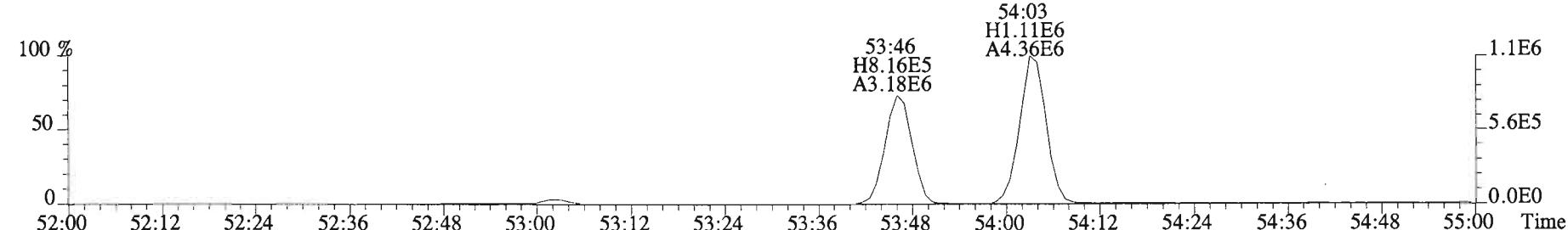
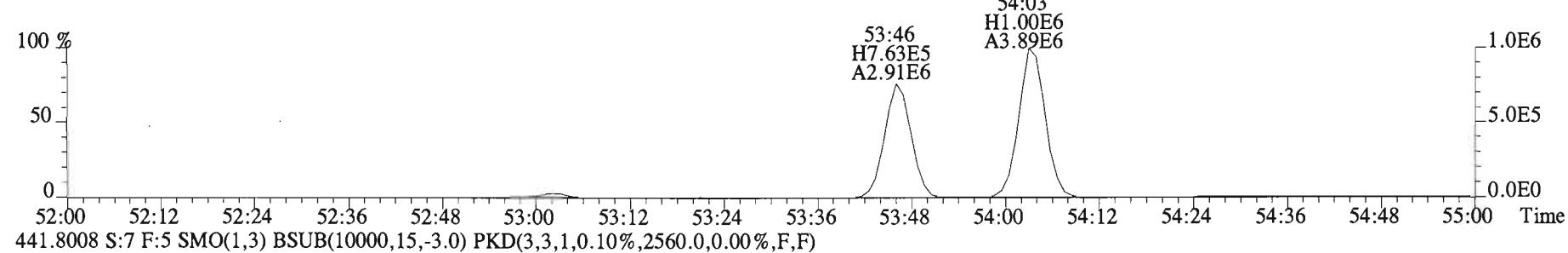
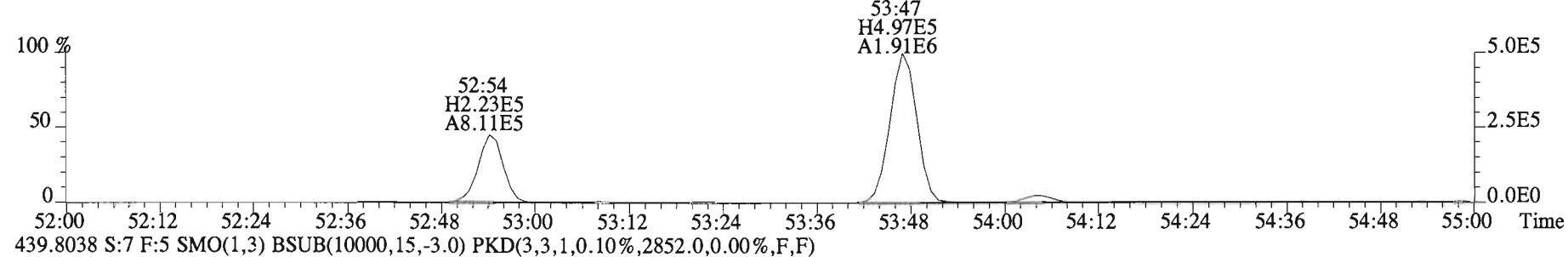
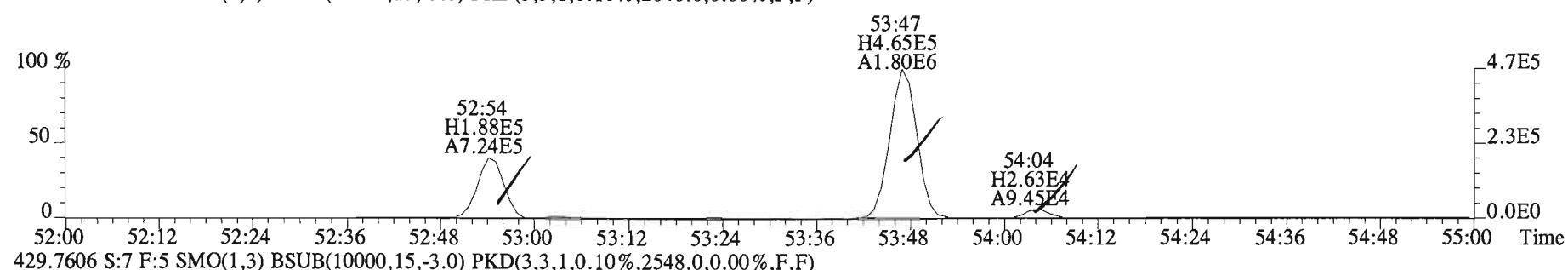
File:150219E2 #1-555 Acq:19-FEB-2015 20:32:10 GC EI + Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
 427.7635 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1248.0,0.00%,F,F)



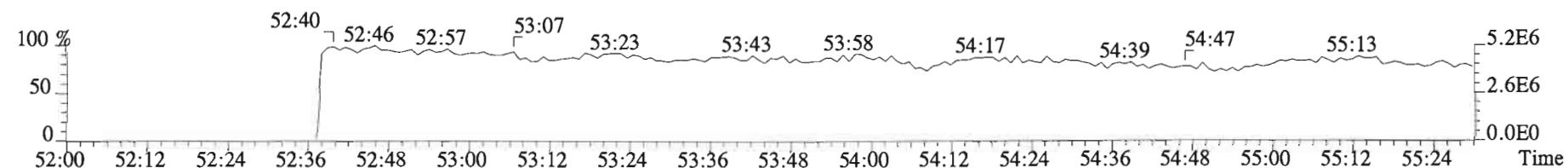
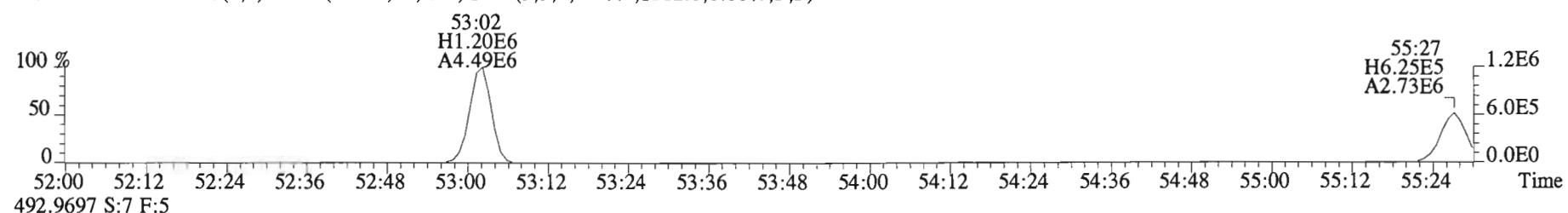
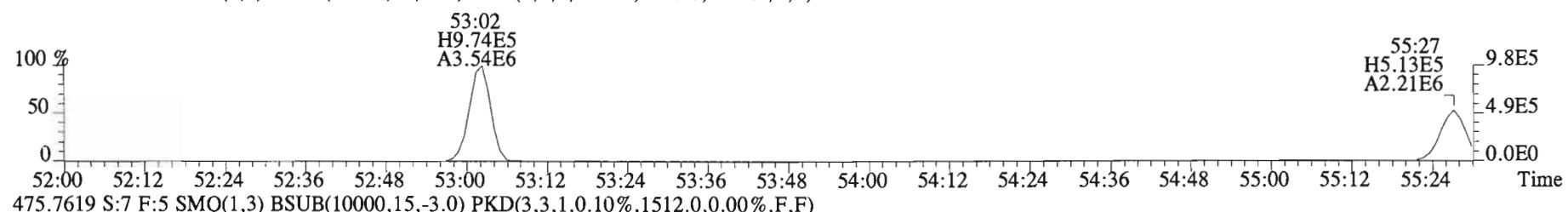
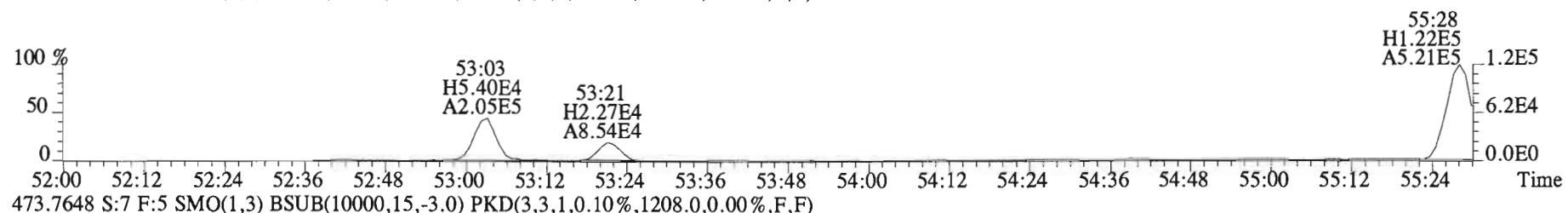
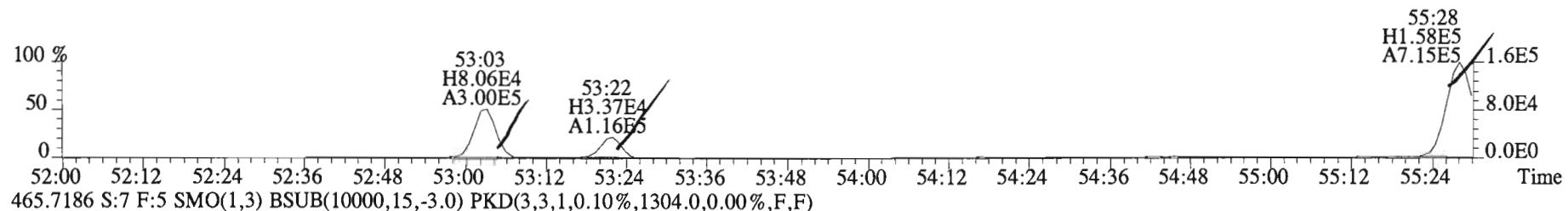
File:150219E2 #1-555 Acq:19-FEB-2015 20:32:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
427.7635 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1248.0,0.00%,F,F)



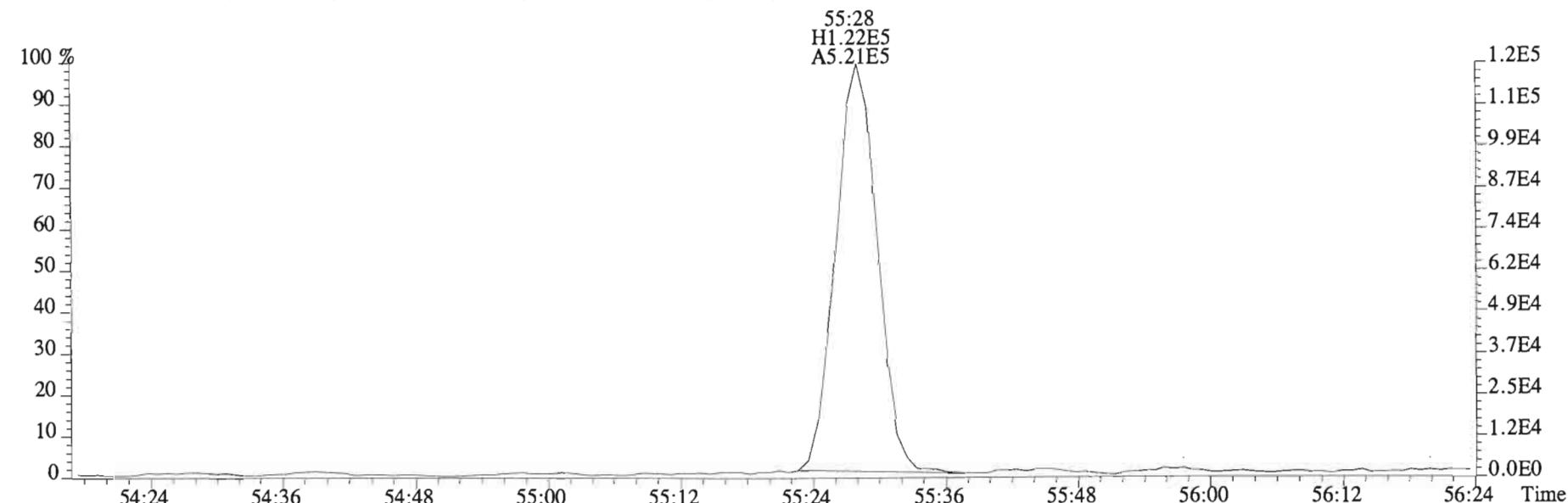
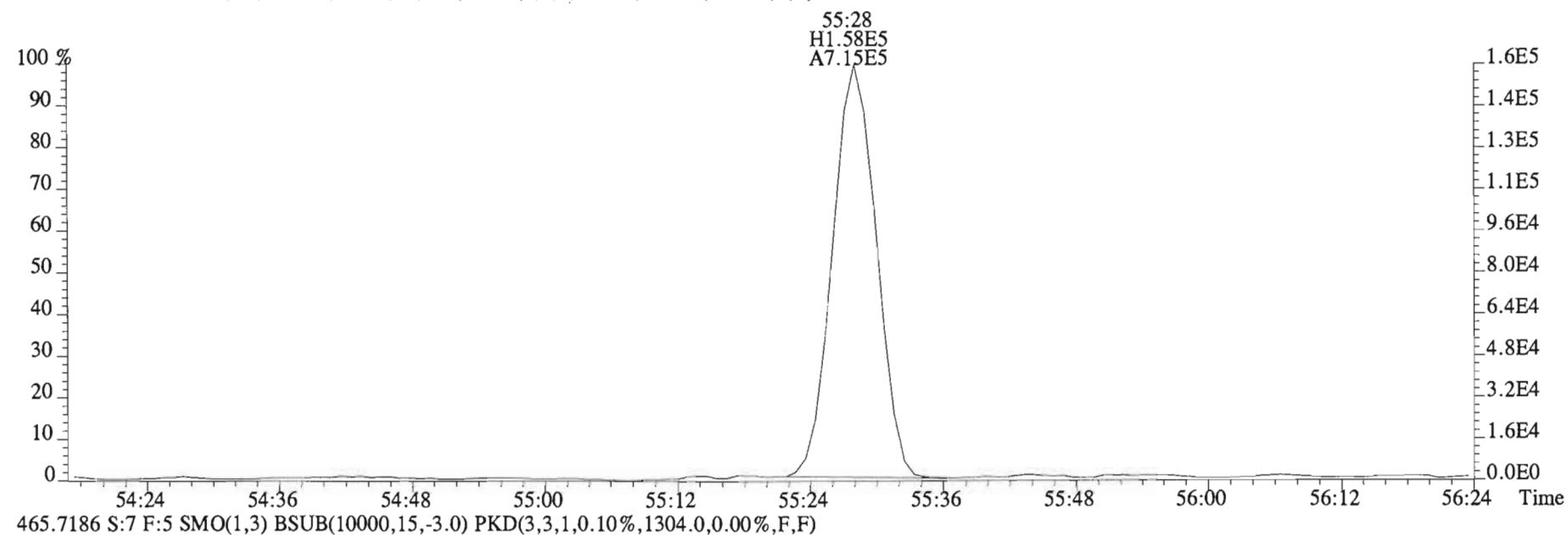
File:150219E2 #1-429 Acq:19-FEB-2015 20:32:10 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
 427.7635 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)



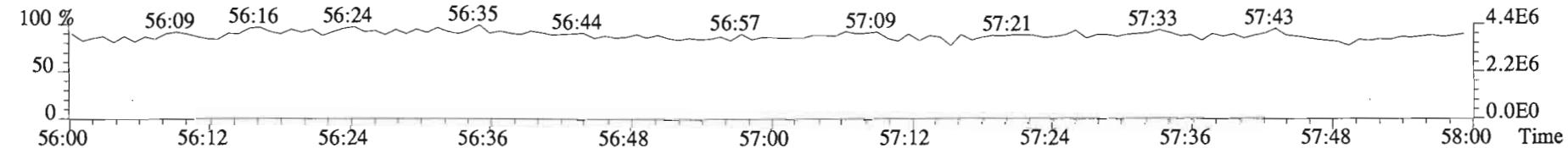
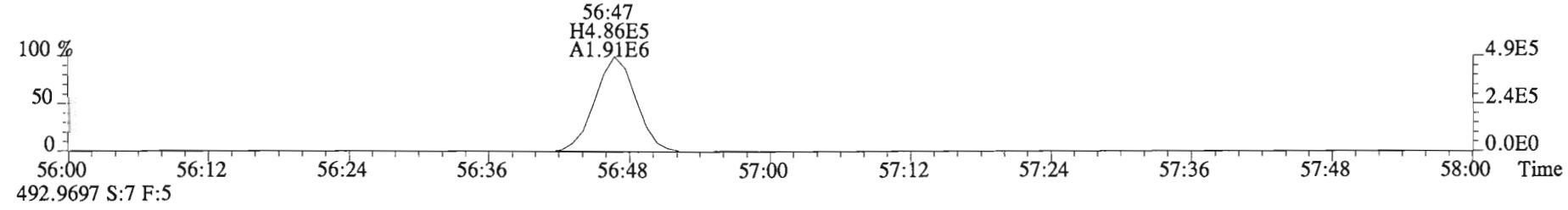
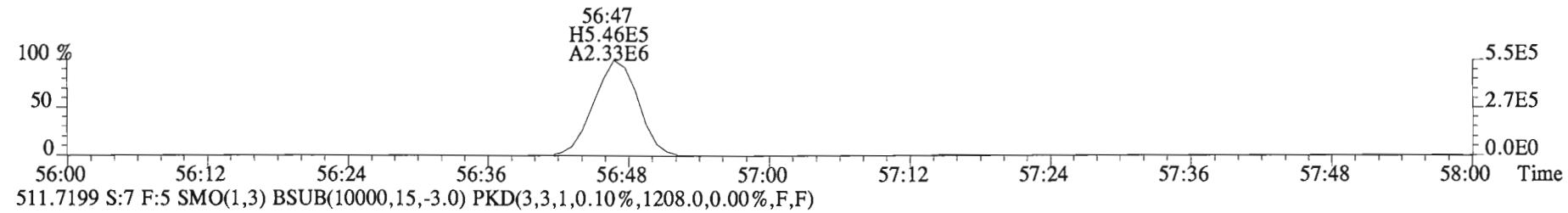
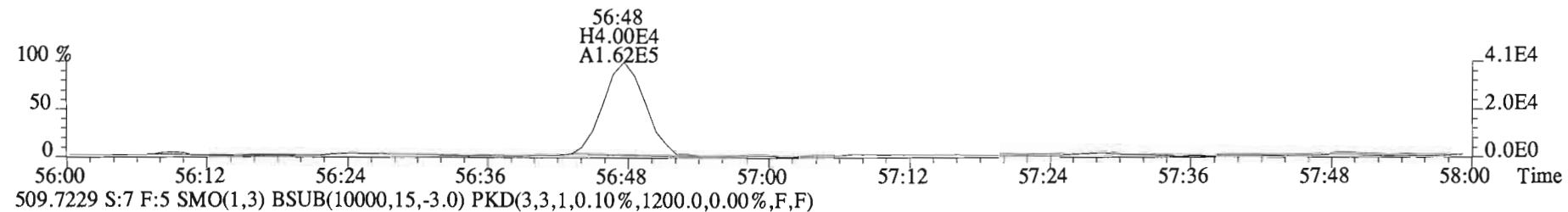
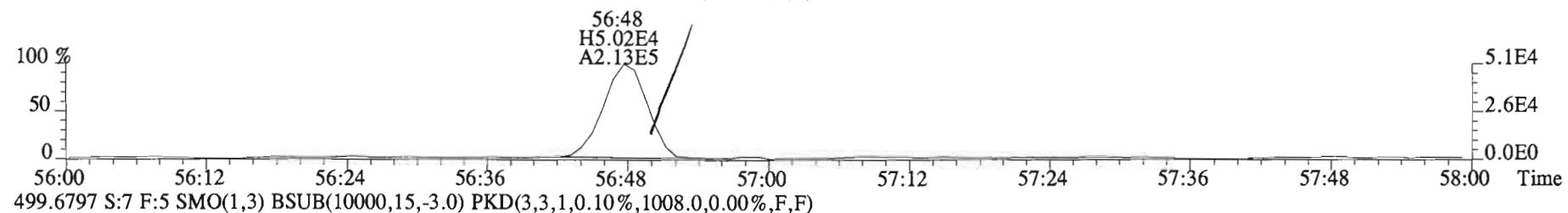
File:150219E2 #1-429 Acq:19-FEB-2015 20:32:10 GC EI + Voltage SIR Autospec-UltimaE
 Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
 463.7216 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1288.0,0.00%,F,F)



File:150219E2 #1-429 Acq:19-FEB-2015 20:32:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
463.7216 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1288.0,0.00%,F,F)



File:150219E2 #1-429 Acq:19-FEB-2015 20:32:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1500147-02@10X WM-MH-61-20150203-S Exp:PCB_ZB1
497.6826 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1096.0,0.00%,F,F)



Client ID: WM-CB-52-20150203-S
 Lab ID: 1500147-03@10X

Filename: 150219E2 S:8 Acq:19-FEB-15 21:36:17
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.007

ConCal: ST150219E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	2.07e+05	3.49	y 16:08	1.19	115		*	2.5	*	1.001	0.996-1.006	
Mono	PCB-2	2.80e+05	2.74	y 18:30	1.18	142		*	2.5	*	0.988	0.984-0.994	
Mono	PCB-3	3.39e+05	3.24	y 18:44	1.43	142		*	2.5	*	1.001	0.996-1.006	
Di	PCB-4/10	7.88e+05	1.65	y 20:04	1.57	389		*	2.5	*	1.001	0.997-1.007	
Di	PCB-7/9	*	*	n NotF ₁₁	1.21	*		12600	2.5	130	*	0.866-0.874	
Di	PCB-6	7.68e+05	1.60	y 22:32	1.30	296		*	2.5	*	0.894	0.890-0.899	
Di	PCB-5/8	3.30e+06	1.64	y 22:55	1.15	1440		*	2.5	*	0.909	0.907-0.917	
Di	PCB-14	*	*	n NotF ₁₁	1.11	*		12600	2.5	153	*	0.949-0.959	
Di	PCB-11	7.23e+06	1.59	y 25:13	1.09	3230		*	2.5	*	1.000	0.995-1.005	
Di	PCB-12/13	5.70e+05	1.48	y 25:36	1.19	232		*	2.5	*	1.015	1.011-1.021	
Di	PCB-15	3.36e+06	1.61	y 25:56	1.28	1270		*	2.5	*	1.028	1.023-1.033	
Tri	PCB-19	4.23e+05	1.14	y 24:13	1.04	368		*	2.5	*	1.001	0.996-1.006	
Tri	PCB-30	*	*	n NotF ₁₁	1.71	*		2050	2.5	23.0	*	1.032-1.042	
Tri	PCB-18	4.29e+06	1.07	y 25:51	0.78	3390		*	2.5	*	0.954	0.949-0.959	
Tri	PCB-17	1.75e+06	1.05	y 26:01	0.92	1170		*	2.5	*	0.960	0.956-0.966	
Tri	PCB-24/27	5.59e+05	1.19	y 26:35	1.19	291		*	2.5	*	0.981	0.977-0.987	
Tri	PCB-16/32	3.74e+06	1.07	y 27:05	0.94	2460		*	2.5	*	0.999	0.995-1.005	
Tri	PCB-34	*	*	n NotF ₁₁	1.14	*		3000	2.5	37.6	*	0.955-0.965	
Tri	PCB-23	*	*	n NotF ₁₁	1.28	*		3000	2.5	33.4	*	0.959-0.969	
Tri	PCB-29	8.33e+04	1.31	n 28:14	1.08	41.9	R	*	2.5	*	0.972	0.967-0.977	
Tri	PCB-26	1.92e+06	1.03	y 28:27	1.21	865		*	2.5	*	0.979	0.974-0.984	
Tri	PCB-25	8.57e+05	1.04	y 28:37	1.26	369		*	2.5	*	0.985	0.979-0.989	
Tri	PCB-31	9.65e+06	1.06	y 28:59	1.28	4080		*	2.5	*	0.998	0.992-1.002	
Tri	PCB-28	9.43e+06	1.08	y 29:04	1.71	2990		*	2.5	*	1.001	0.995-1.005	
Tri	PCB-20/21/33	6.79e+06	1.09	y 29:43	1.08	3410		*	2.5	*	1.023	1.017-1.027	
Tri	PCB-22	4.05e+06	1.07	y 30:08	1.21	1820		*	2.5	*	1.037	1.032-1.042	
Tri	PCB-36	1.34e+05	1.16	y 30:45	1.14	66.4		*	2.5	*	0.934	0.928-0.938	
Tri	PCB-39	*	*	n NotF ₁₁	1.12	*		3000	2.5	44.7	*	0.943-0.953	
Tri	PCB-38	*	*	n NotF ₁₁	1.20	*		3000	2.5	41.6	*	0.966-0.976	
Tri	PCB-35	5.01e+05	1.14	y 32:31	1.23	229		*	2.5	*	0.987	0.982-0.992	
Tri	PCB-37	5.49e+06	1.05	y 32:57	1.23	2520		*	2.5	*	1.001	0.995-1.005	
Tetra	PCB-54	*	*	n NotF ₁₁	1.10	*		3240	2.5	47.8	*	0.996-1.006	
Tetra	PCB-50	*	*	n NotF ₁₁	0.88	*		3240	2.5	59.9	*	1.037-1.047	
Tetra	PCB-53	9.94e+05	0.79	y 29:45	1.06	870		*	2.5	*	0.945	0.942-0.952	
Tetra	PCB-51	3.64e+05	0.69	y 30:07	0.99	342		*	2.5	*	0.957	0.952-0.962	
Tetra	PCB-45	1.02e+06	0.75	y 30:32	0.86	1100		*	2.5	*	0.970	0.966-0.976	
Tetra	PCB-46	4.28e+05	0.85	y 31:01	0.85	472		*	2.5	*	0.986	0.981-0.991	

Reviewed by: 

Date: 2/24/15

Integrations by:

Analyst: DMS

Date: 2/23/15

Client ID: WM-CB-52-20150203-S
 Lab ID: 1500147-03@10X

Filename: 150219E2 S:8 Acq:19-FEB-15 21:36:17
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.007

ConCal: ST150219E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	1.36e+07	0.81	y 31:29	1.28	9850		*	2.5	*	1.001	0.996-1.006	
Tetra	PCB-73	*	*	n NotF _¶	1.35			3240	2.5	52.9	*	1.000-1.010	
Tetra	PCB-43/49	5.59e+06	0.76	y 31:47	0.99	5230		*	2.5	*	1.010	1.005-1.015	
Tetra	PCB-47	1.73e+06	0.83	y 31:59	1.06	1380		*	2.5	*	1.000	0.996-1.006	
Tetra	PCB-48/75	1.60e+06	0.80	y 32:07	1.23	1110		*	2.5	*	1.004	0.999-1.009	
Tetra	PCB-65	*	*	n NotF _¶	1.22			3240	2.5	56.0	*	1.008-1.018	
Tetra	PCB-62	*	*	n NotF _¶	1.22			3240	2.5	56.2	*	1.011-1.021	
Tetra	PCB-44	7.63e+06	0.76	y 32:47	0.86	7520		*	2.5	*	1.025	1.021-1.031	
Tetra	PCB-42/59	2.67e+06	0.85	y 33:01	1.14	1990		*	2.5	*	1.032	1.028-1.038	
Tetra	PCB-41/64/71/72	8.75e+06	0.79	y 33:36	1.21	6150		*	2.5	*	1.051	1.046-1.056	
Tetra	PCB-68	7.78e+04	0.67	y 33:51	1.35	49.0		*	2.5	*	1.058	1.054-1.064	
Tetra	PCB-40	1.30e+06	0.87	y 34:04	0.70	1570		*	2.5	*	1.065	1.061-1.071	
Tetra	PCB-57	7.88e+04	0.91	n 34:26	0.98	60.4	R	*	2.5	*	0.970	0.965-0.975	
Tetra	PCB-67	3.73e+05	0.98	n 34:45	1.11	253	R	*	2.5	*	0.979	0.974-0.984	
Tetra	PCB-58	*	*	n NotF _¶	0.93			3240	2.5	68.9	*	0.977-0.987	
Tetra	PCB-63	3.47e+05	0.81	y 35:01	0.95	273		*	2.5	*	0.986	0.982-0.992	
Tetra	PCB-74	5.30e+06	0.72	y 35:18	1.24	3200		*	2.5	*	0.994	0.990-1.000	
Tetra	PCB-61/70	1.54e+07	0.77	y 35:31	0.95	12100		*	2.5	*	1.000	0.995-1.005	
Tetra	PCB-76/66	1.03e+07	0.76	y 35:43	1.04	7370		*	2.5	*	1.006	1.001-1.011	
Tetra	PCB-80	*	*	n NotF _¶	1.19			3240	2.5	56.1	*	0.996-1.006	
Tetra	PCB-55	3.37e+05	0.69	y 36:14	1.04	229		*	2.5	*	1.008	1.005-1.015	
Tetra	PCB-56/60	8.27e+06	0.80	y 36:45	1.01	5800		*	2.5	*	1.023	1.019-1.029	
Tetra	PCB-79	2.94e+05	0.80	y 37:50	1.08	193		*	2.5	*	1.053	1.048-1.058	
Tetra	PCB-78	*	*	n NotF _¶	1.27			3240	2.5	62.5	*	0.982-0.992	
Tetra	PCB-81	1.46e+05	0.78	y 39:02	1.33	96.4		*	2.5	*	1.000	0.995-1.005	
Tetra	PCB-77	1.63e+06	0.78	y 39:41	1.10	1340		*	2.5	*	1.001	0.995-1.005	
Penta	PCB-104	*	*	n NotF _¶	1.18	*		1420	2.5	56.3	*	0.996-1.006	
Penta	PCB-96	9.12e+04	1.18	n 33:54	1.14	107	R	*	2.5	*	1.039	1.034-1.044	
Penta	PCB-103	6.67e+04	1.35	y 34:27	0.96	92.7		*	2.5	*	1.056	1.050-1.060	
Penta	PCB-100	4.15e+04	1.26	n 34:50	0.94	58.9	R	*	2.5	*	1.067	1.061-1.071	
Penta	PCB-94	*	*	n NotF _¶	1.06	*		1420	2.5	87.8	*	0.980-0.990	
Penta	PCB-95/98/102	8.33e+06	1.58	y 35:49	1.22	12300		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-93	*	*	n NotF _¶	0.84	*		1420	2.5	110	*	0.997-1.007	
Penta	PCB-88/91	1.35e+06	1.69	y 36:13	1.12	2190		*	2.5	*	1.012	1.005-1.015	
Penta	PCB-121	*	*	n NotF _¶	1.62	*		1420	2.5	57.5	*	1.009-1.019	
Penta	PCB-84/92	4.23e+06	1.64	y 37:07	1.05	7240		*	2.5	*	0.990	0.985-0.995	
Penta	PCB-89	7.95e+04	1.88	n 37:19	1.13	126	R	*	2.5	*	0.996	0.991-1.001	

Analyst: Doris

Date: 2/23/15

Client ID: WM-CB-52-20150203-S
 Lab ID: 1500147-03@10X

Filename: 150219E2 S:8 Acq:19-FEB-15 21:36:17
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.007

ConCal: ST150219E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	1.07e+07	1.64	y 37:30	1.10	17500		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-113	*	*	n NotF ₁₁	1.41		*		1420	2.5	68.6	*	1.002-1.012
Penta	PCB-99	4.23e+06	1.58	y 37:49	1.34	5670		*	2.5	*	1.009	1.004-1.014	
Penta	PCB-119	1.86e+05	1.76	y 38:18	1.53	248		*	2.5	*	0.988	0.982-0.992	
Penta	PCB-108/112	4.83e+05	1.44	y 38:28	1.28	772		*	2.5	*	0.992	0.986-0.996	
Penta	PCB-83	*	*	n NotF ₁₁	1.52		*		1420	2.5	70.3	*	0.990-1.000
Penta	PCB-97	2.93e+06	1.55	y 38:48	1.18	5070		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-86	*	*	n NotF ₁₁	0.84		*		1420	2.5	127	*	0.999-1.009
Penta	PCB-87/117/125	4.86e+06	1.53	y 39:05	1.55	6420		*	2.5	*	1.008	1.002-1.012	
Penta	PCB-111/115	1.98e+05	1.94	n 39:14	1.63	248	R	*	2.5	*	1.012	1.006-1.016	
Penta	PCB-85/116	1.67e+06	1.55	y 39:21	1.30	2630		*	2.5	*	1.015	1.010-1.020	
Penta	PCB-120	3.06e+04	2.09	n 39:33	1.68	37.4	R	*	2.5	*	1.020	1.016-1.026	
Penta	PCB-110	1.36e+07	1.63	y 39:45	1.56	17900		*	2.5	*	1.025	1.020-1.030	
Penta	PCB-82	1.04e+06	1.72	y 40:23	0.76	2440		*	2.5	*	0.976	0.971-0.981	
Penta	PCB-124	4.87e+05	1.52	y 41:05	1.47	592		*	2.5	*	0.993	0.988-0.998	
Penta	PCB-107/109	7.32e+05	1.55	y 41:15	1.32	991		*	2.5	*	0.997	0.991-1.001	
Penta	PCB-123	*	*	n NotF ₁₁	1.17		*		1420	2.5	90.8	*	0.996-1.006
Penta	PCB-106/118	1.01e+07	1.59	y 41:34	1.17	16400		*	2.5	*	1.000	0.996-1.006	
Penta	PCB-114	4.37e+05	1.53	y 42:15	1.30	324		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-122	1.91e+05	1.76	y 42:22	1.12	164		*	2.5	*	1.003	0.999-1.009	
Penta	PCB-105	8.18e+06	1.61	y 43:06	1.30	6740		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-127	*	*	n NotF ₁₁	1.33		*		2940	2.5	98.3	*	0.996-1.006
Penta	PCB-126	1.68e+05	1.63	y 45:23	1.18	174		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-155	*	*	n NotF ₁₁	1.11		*		1410	2.5	92.3	*	0.966-1.006
Hexa	PCB-150	*	*	n NotF ₁₁	1.00		*		1410	2.5	103	*	1.030-1.040
Hexa	PCB-152	*	*	n NotF ₁₁	1.12		*		1410	2.5	92.1	*	1.043-1.053
Hexa	PCB-145	*	*	n NotF ₁₁	1.20		*		1410	2.5	85.5	*	1.055-1.065
Hexa	PCB-136	8.36e+05	1.14	y 39:33	1.18	1500		*	2.5	*	1.068	1.064-1.074	
Hexa	PCB-148	*	*	n NotF ₁₁	0.74		*		1410	2.5	138	*	1.066-1.076
Hexa	PCB-154	6.97e+04	1.39	y 40:09	0.86	171		*	2.5	*	1.084	1.080-1.090	
Hexa	PCB-151	8.27e+05	1.35	y 40:48	0.75	2340		*	2.5	*	1.102	1.097-1.107	
Hexa	PCB-135	6.42e+05	1.06	y 41:01	0.79	1710		*	2.5	*	1.108	1.103-1.113	
Hexa	PCB-144	1.73e+05	1.30	y 41:09	0.76	481		*	2.5	*	1.111	1.105-1.117	
Hexa	PCB-147	6.40e+04	1.61	n 41:16	0.82	165	R	*	2.5	*	1.114	1.109-1.121	
Hexa	PCB-139/149	3.83e+06	1.32	y 41:31	0.76	10600		*	2.5	*	1.121	1.116-1.128	
Hexa	PCB-140	2.94e+04	1.70	n 41:43	0.72	85.8	R	*	2.5	*	1.126	1.121-1.133	
Hexa	PCB-134/143	7.63e+05	1.41	y 42:10	0.92	1130		*	2.5	*	0.975	0.970-0.980	

Analyst: DMS

Date: 2/23/15

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	3.70e+05	1.22	y 42:27	0.82	615		*	2.5	*	0.982	0.977-0.987	
Hexa	PCB-131	*	*	n NotF _¶	0.91		*		3360	2.5	195	*	0.981-0.991
Hexa	PCB-146/165	1.93e+06	1.13	y 42:51	1.25	2110		*	2.5	*	0.991	0.986-0.996	
Hexa	PCB-132/161	4.57e+06	1.25	y 43:06	1.10	5630		*	2.5	*	0.997	0.992-1.002	
Hexa	PCB-153	1.23e+07	1.26	y 43:16	1.25	13400	R	*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-168	*	*	n NotF _¶	1.45		*		1970	2.5	71.6	*	1.001-1.011
Hexa	PCB-141	2.48e+06	1.23	y 44:01	1.09	3600		*	2.5	*	1.001	0.995-1.005	
Hexa	PCB-137	9.11e+05	1.12	y 44:24	1.06	1350		*	2.5	*	1.009	1.004-1.014	
Hexa	PCB-130	6.90e+05	1.23	y 44:31	0.96	1130		*	2.5	*	1.012	1.006-1.016	
Hexa	PCB-138/163/164	1.52e+07	1.27	y 44:52	1.29	18400		*	2.5	*	1.001	0.996-1.006	
Hexa	PCB-158/160	1.80e+06	1.30	y 45:07	1.34	2100		*	2.5	*	1.006	1.001-1.011	
Hexa	PCB-129	6.49e+05	1.16	y 45:22	0.85	1190		*	2.5	*	1.012	1.007-1.017	
Hexa	PCB-166	*	*	n NotF _¶	1.19		*		1970	2.5	90.9	*	0.988-0.998
Hexa	PCB-159	*	*	n NotF _¶	1.11		*		1970	2.5	96.9	*	0.996-1.006
Hexa	PCB-128/162	2.48e+06	1.26	y 46:25	1.05	3440		*	2.5	*	1.006	1.002-1.012	
Hexa	PCB-167	6.96e+05	1.29	y 46:52	1.20	854		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-156	1.56e+06	1.30	y 48:09	1.14	2150		*	2.5	*	1.000	0.996-1.006	
Hexa	PCB-157	3.59e+05	1.25	y 48:25	1.16	444		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-169	*	*	n NotF _¶	1.12		*		1970	2.5	129	*	0.995-1.005
Hepta	PCB-188	*	*	n NotF _¶	1.58	*			1590	2.5	47.8	*	0.996-1.006
Hepta	PCB-184	*	*	n NotF _¶	1.63	*			1590	2.5	46.3	*	1.006-1.016
Hepta	PCB-179	8.38e+05	0.95	y 44:06	1.30	1330		*	2.5	*	1.029	1.024-1.034	
Hepta	PCB-176	2.75e+05	1.08	y 44:35	1.48	387		*	2.5	*	1.040	1.035-1.045	
Hepta	PCB-186	*	*	n NotF _¶	1.45	*			1590	2.5	51.9	*	1.050-1.060
Hepta	PCB-178	3.38e+05	0.97	y 45:42	1.03	679		*	2.5	*	1.067	1.061-1.071	
Hepta	PCB-175	8.30e+04	1.17	y 46:02	1.01	170		*	2.5	*	1.074	1.069-1.079	
Hepta	PCB-182/187	2.15e+06	1.11	y 46:12	1.25	3570		*	2.5	*	1.078	1.073-1.083	
Hepta	PCB-183	1.00e+06	1.13	y 46:33	1.21	1720		*	2.5	*	1.086	1.081-1.091	
Hepta	PCB-185	1.86e+05	1.09	y 47:13	1.80	382		*	2.5	*	0.955	0.951-0.961	
Hepta	PCB-174	1.55e+06	1.02	y 47:35	1.38	4140		*	2.5	*	0.963	0.958-0.968	
Hepta	PCB-181	*	*	n NotF _¶	1.38	*			1590	2.5	98.3	*	0.960-0.970
Hepta	PCB-177	8.42e+05	1.09	y 47:51	1.26	2480		*	2.5	*	0.968	0.963-0.973	
Hepta	PCB-171	4.18e+05	1.03	y 48:09	1.58	977		*	2.5	*	0.974	0.970-0.980	
Hepta	PCB-173	*	*	n NotF _¶	1.11	*			1590	2.5	122	*	0.978-0.988
Hepta	PCB-172	2.77e+05	1.19	y 49:02	1.63	626		*	2.5	*	0.992	0.987-0.997	
Hepta	PCB-192	*	*	n NotF _¶	1.74	*			1590	2.5	78.0	*	0.991-1.001
Hepta	PCB-180	3.36e+06	1.05	y 49:27	1.34	9240		*	2.5	*	1.000	0.995-1.005	

Analyst: DMS

Date: 2/23/15

Client ID: WM-CB-52-20150203-S
Lab ID: 1500147-03@10X

Filename: 150219E2 S:8 Acq:19-FEB-15 21:36:17
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.007

ConCal: ST150219E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	1.70e+05	0.93	y 49:39	1.72	367		*	2.5	*	1.004	0.999	-1.009
Hepta	PCB-191	7.98e+04	1.03	y 49:53	1.69	174		*	2.5	*	1.009	1.004	-1.014
Hepta	PCB-170	1.18e+06	1.16	y 50:53	1.60	3710		*	2.5	*	1.000	0.995	-1.005
Hepta	PCB-190	2.48e+05	1.17	y 51:05	2.21	562		*	2.5	*	1.004	0.998	-1.008
Hepta	PCB-189	4.67e+04	1.18	y 52:24	1.55	147		*	2.5	*	1.001	0.995	-1.005
Octa	PCB-202	1.68e+05	0.77	y 48:21	1.08	480		*	2.5	*	1.000	0.995	-1.005
Octa	PCB-201	1.00e+05	0.95	y 48:50	1.15	269		*	2.5	*	1.010	1.005	-1.015
Octa	PCB-204	*	*	n Not F ₁₁	1.14	*		1210	2.5	94.4	*	1.008	-1.018
Octa	PCB-197	*	*	n Not F ₁₁	1.07	*		1210	2.5	99.9	*	1.015	-1.025
Octa	PCB-200	4.61e+04	0.53	n 50:08	1.06	134	R	*	2.5	*	1.037	1.032	-1.044
Octa	PCB-198	2.76e+04	0.66	n 51:28	0.76	113	R	*	2.5	*	1.065	1.059	-1.069
Octa	PCB-199	4.09e+05	0.93	y 51:34	0.80	1580		*	2.5	*	1.067	1.061	-1.071
Octa	PCB-196/203	5.11e+05	1.00	y 51:50	0.80	1970		*	2.5	*	1.072	1.066	-1.076
Octa	PCB-195	2.18e+05	0.93	y 52:59	1.23	689		*	2.5	*	0.983	0.979	-0.989
Octa	PCB-194	5.52e+05	0.85	y 53:54	1.21	1770		*	2.5	*	1.000	0.995	-1.005
Octa	PCB-205	*	*	n Not F ₁₁	1.54	*		2340	2.5	131	*	1.001	-1.011
Nona	PCB-208	1.56e+05	1.52	y 53:08	0.93	519		*	2.5	*	1.000	0.995	-1.005
Nona	PCB-207	5.59e+04	1.58	n 53:26	1.08	160	R	*	2.5	*	1.006	1.001	-1.011
Nona	PCB-206	3.01e+05	1.44	y 55:35	1.02	1440		*	2.5	*	1.000	0.995	-1.005
Deca	PCB-209	1.27e+05	1.12	y 56:55	1.17	540		*	2.5	*	1.000	0.995	-1.005

Analyst: Dms

Date: 2/23/15

Client ID: WM-CB-52-20150203-S
Lab ID: 1500147-03@10X

Filename: 150219E2 S:8 Acq:19-FEB-15 21:36:17 ConCal: ST150219E2-1
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.0070 EndCAL: NA

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	Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	8.26e+05	3.49	y	16:08	1.27	398.802
Total Di-PCB	1.60e+07	1.65	y	20:04	1.21	6859.80
Total Tri-PCB	1.08e+07	1.14	y	24:13	1.10	7680.66
Total Tri-PCB	3.88e+07	1.03	y	28:27	1.21	16361.5 Sum:24042.1
Total Tetra-PCB	8.77e+07	0.79	y	29:45	1.09	68268.3
Total Penta-PCB	6.51e+07	1.35	y	34:27	1.18	98396.0
Total Penta-PCB	8.98e+06	1.53	y	42:15	1.25	7402.54 Sum:105799
Total Hexa-PCB	6.38e+06	1.14	y	39:33	0.90	16821.7
Total Hexa-PCB	4.68e+07	1.41	y	42:10	1.11	57544.4 Sum:74366.1
Total Hepta-PCB	1.30e+07	0.95	y	44:06	1.42	30663.2
Total Octa-PCB	1.19e+06	0.77	y	48:21	0.96	4295.99
Total Octa-PCB	7.70e+05	0.93	y	52:59	1.33	2455.27 Sum:6751.26
Total Nona-PCB	4.58e+05	1.52	y	53:08	1.01	1963.77
Total Deca-PCB	1.27e+05	1.12	y	56:55	1.17	539.907

Total PCB Conc:321240.530297

321,240

Integrations
by
Analyst: DMS
Date: 2/27/15

Client ID: WM-CB-52-20150203-S
 Lab ID: 1500147-03@10X

Filename: 150219E2 S:8 Acq:19-FEB-15 21:36:17
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:2.0070
 ConCal: ST150219E2-1 EndCAL: NA

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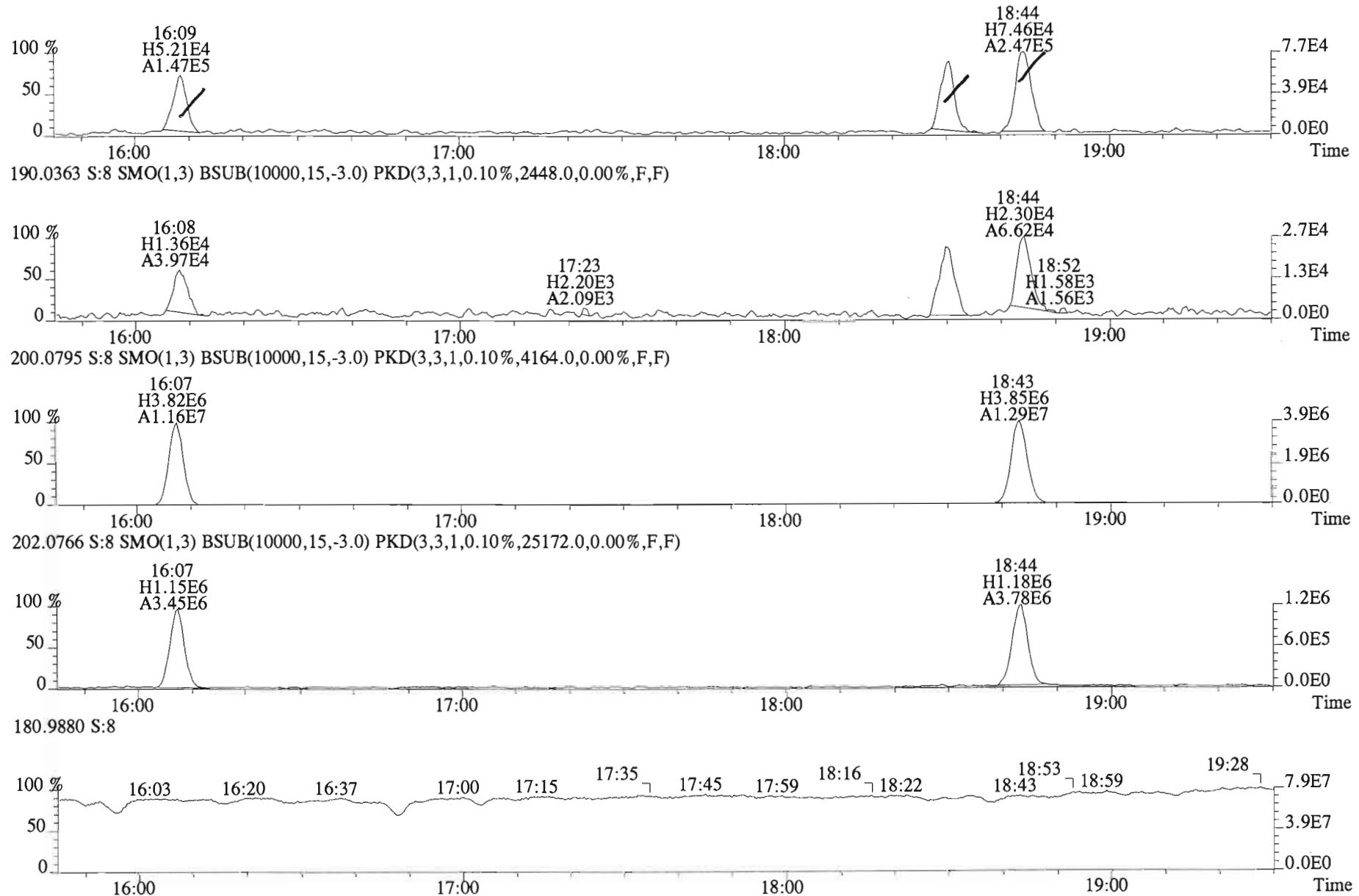
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13C-PCB-1	1.50e+07	3.35	y	0.87	16:07	0.622	0.629-0.635	7020	70.5
13C-PCB-3	1.67e+07	3.41	y	0.91	18:43	0.722	0.725-0.733	7460	74.9
13C-PCB-4	1.29e+07	1.60	y	0.59	20:03	0.774	0.775-0.783	8960	89.9
13C-PCB-9	1.98e+07	1.61	y	0.90	21:50	0.842	0.842-0.850	9030	90.7
13C-PCB-11	2.05e+07	1.57	y	0.94	25:13	0.973	0.968-0.978	8940	89.7
13C-PCB-19	1.10e+07	1.08	y	0.53	24:11	0.933	0.930-0.940	8450	84.8
13C-PCB-28	1.83e+07	1.08	y	0.93	29:03	1.004	0.999-1.009	8470	85.0
13C-PCB-32	1.61e+07	1.06	y	0.80	27:06	1.046	1.040-1.050	8270	83.0
13C-PCB-37	1.77e+07	1.10	y	0.84	32:56	1.138	1.131-1.143	9050	90.8
13C-PCB-47	1.17e+07	0.82	y	0.81	31:59	0.870	0.866-0.874	9880	99.1
13C-PCB-52	1.07e+07	0.77	y	0.77	31:28	0.856	0.853-0.861	9470	95.1
13C-PCB-54	1.35e+07	0.81	y	0.97	27:56	0.760	0.758-0.766	9460	95.0
13C-PCB-70	1.33e+07	0.80	y	1.00	35:30	0.966	0.961-0.971	9080	91.1
13C-PCB-77	1.11e+07	0.78	y	0.94	39:38	1.078	1.073-1.083	8010	80.4
13C-PCB-80	1.41e+07	0.84	y	1.03	35:56	0.978	0.972-0.982	9310	93.4
13C-PCB-81	1.14e+07	0.75	y	0.92	39:03	1.063	1.057-1.067	8420	84.5
13C-PCB-95	5.52e+06	1.62	y	0.74	35:48	0.912	0.908-0.918	10700	107
13C-PCB-97	4.87e+06	1.56	y	0.70	38:47	0.989	0.984-0.994	9900	99.3
13C-PCB-101	5.57e+06	1.63	y	0.78	37:29	0.955	0.951-0.961	10200	102
13C-PCB-104	7.49e+06	1.66	y	1.00	32:38	0.832	0.828-0.836	10700	108
13C-PCB-105	9.31e+06	1.58	y	1.37	43:05	0.928	0.924-0.934	11200	113
13C-PCB-114	1.04e+07	1.64	y	1.36	42:14	0.910	0.905-0.915	12500	126
13C-PCB-118	5.26e+06	1.61	y	0.96	41:34	1.059	1.054-1.064	7850	78.8
13C-PCB-123	5.57e+06	1.56	y	0.89	41:23	1.055	1.050-1.060	8930	89.6
13C-PCB-126	8.16e+06	1.56	y	1.31	45:22	0.977	0.972-0.982	10300	103
13C-PCB-127	9.74e+06	1.55	y	1.47	43:27	0.936	0.931-0.941	10900	109
13C-PCB-138	6.38e+06	1.23	y	1.10	44:50	0.966	0.961-0.971	9550	95.8
13C-PCB-141	6.33e+06	1.32	y	1.07	43:59	0.948	0.943-0.953	9700	97.3
13C-PCB-153	7.32e+06	1.39	y	1.15	43:15	0.932	0.927-0.937	10500	106
13C-PCB-155	4.72e+06	1.29	y	0.84	37:02	0.944	0.939-0.949	8060	80.8
13C-PCB-156	6.38e+06	1.30	y	1.30	48:09	1.037	1.032-1.042	8110	81.4
13C-PCB-157	6.92e+06	1.29	y	1.36	48:25	1.043	1.038-1.048	8400	84.3
13C-PCB-159	6.86e+06	1.26	y	1.25	46:09	0.994	0.989-0.999	9050	90.8
13C-PCB-167	6.78e+06	1.24	y	1.35	46:51	1.009	1.004-1.014	8260	82.9
13C-PCB-169	4.82e+06	1.31	y	1.29	50:33	1.089	1.083-1.093	6180	62.0
13C-PCB-170	1.99e+06	0.43	y	0.54	50:52	1.096	1.089-1.101	6040	60.6
13C-PCB-180	2.70e+06	0.47	y	0.68	49:26	1.065	1.060-1.070	6490	65.2
13C-PCB-188	4.80e+06	0.47	y	0.92	42:51	0.923	0.919-0.929	8620	86.5
13C-PCB-189	2.04e+06	0.46	y	0.72	52:21	1.128	1.120-1.132	4680	47.0
13C-PCB-194	2.57e+06	0.91	y	0.80	53:53	0.994	0.990-1.000	9310	93.4
13C-PCB-202	3.23e+06	0.92	y	0.84	48:20	1.041	1.036-1.046	6350	63.8
13C-PCB-206	2.03e+06	0.68	y	0.65	55:35	1.026	1.021-1.031	9020	90.5
13C-PCB-208	3.22e+06	0.77	y	1.08	53:07	0.980	0.976-0.986	8610	86.4
13C-PCB-209	2.01e+06	1.22	y	0.61	56:55	1.050	1.045-1.055	9500	95.3

CRS vs. RS									
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.40e+07	0.81	y	1.02	37:49	1.029	1.023-1.034	9390	94.3
13C-PCB-178	3.03e+06	0.44	y	0.61	45:40	0.984	0.979-0.990	8140	81.6
PS vs. IS									
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.40e+07	0.81	y	1.10	37:49	0.968	0.964-0.974	11100	111
13C-PCB-178	3.03e+06	0.44	y	0.90	45:40	0.924	0.920-0.930	12500	125
RS									
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-15	2.44e+07	1.57	y	1.00	25:55	9970			
13C-PCB-31	2.31e+07	1.07	y	1.00	28:56	9970			
13C-PCB-60	1.46e+07	0.75	y	1.00	36:45	9970			
13C-PCB-111	6.95e+06	1.62	y	1.00	39:14	9970			
13C-PCB-128	6.05e+06	1.28	y	1.00	46:25	9970			
13C-PCB-205	3.45e+06	0.92	y	1.00	54:11	9970			

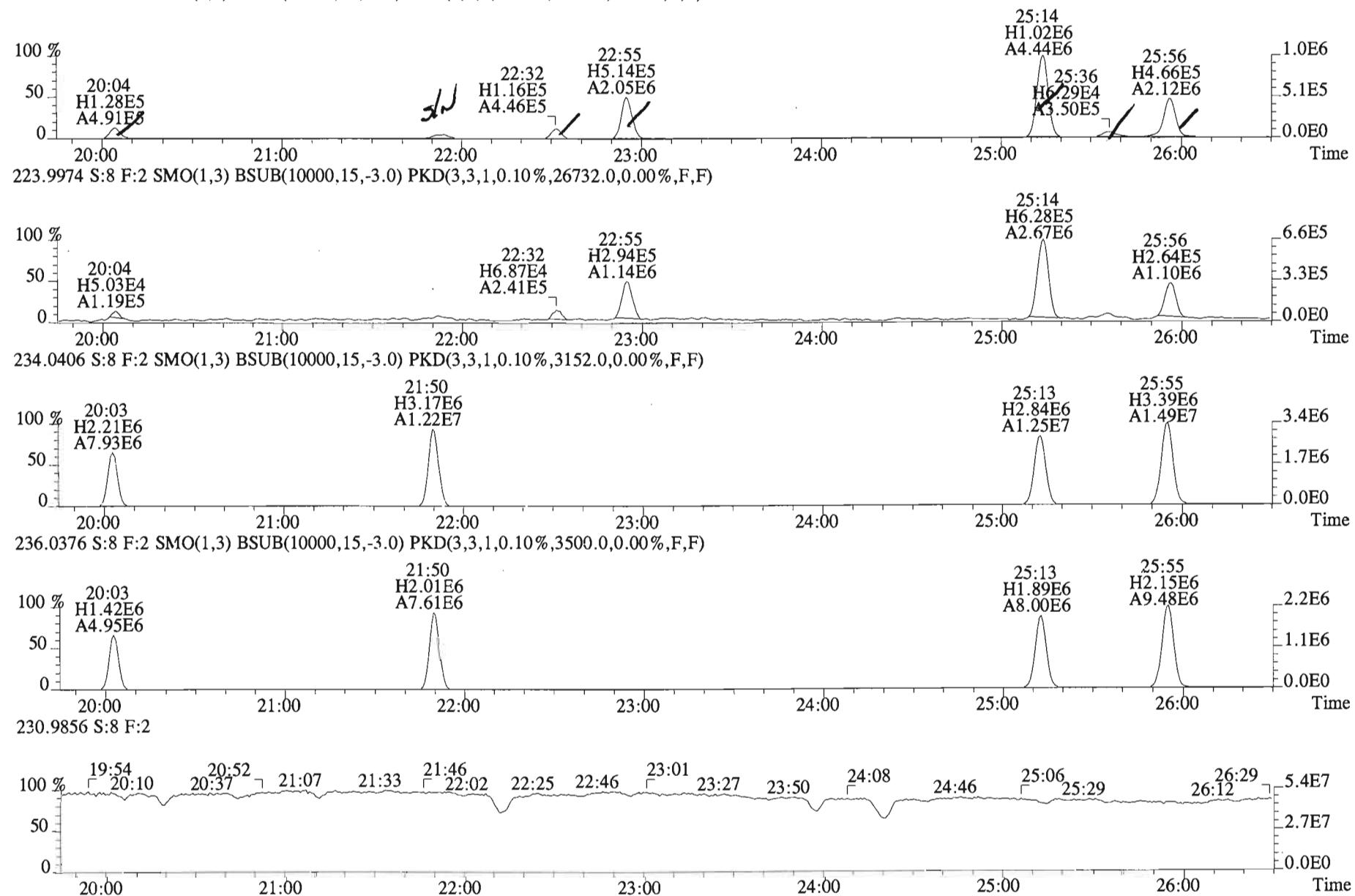
Analyst: Dms

Date: 2/23/15

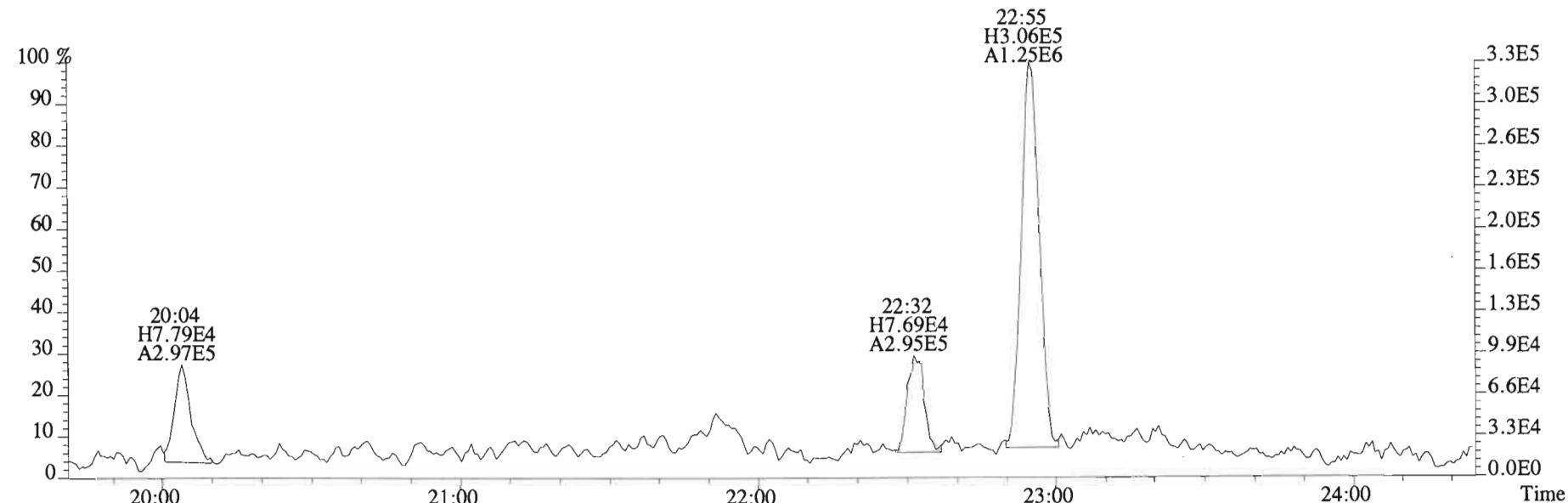
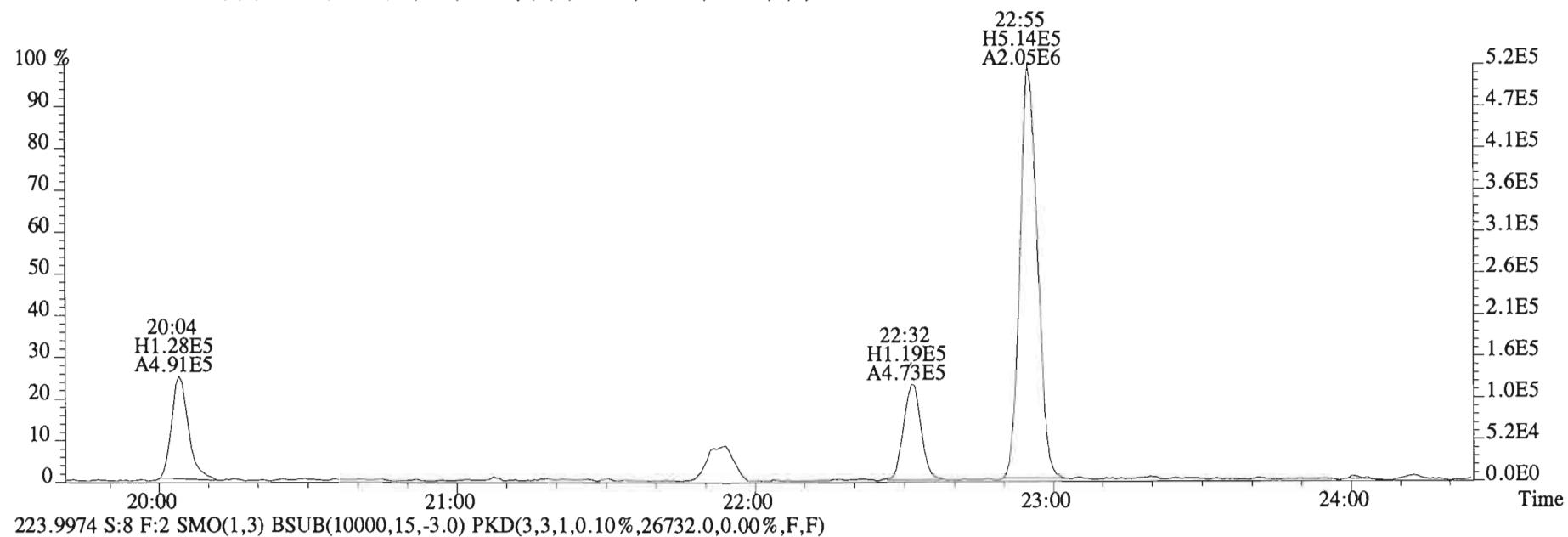
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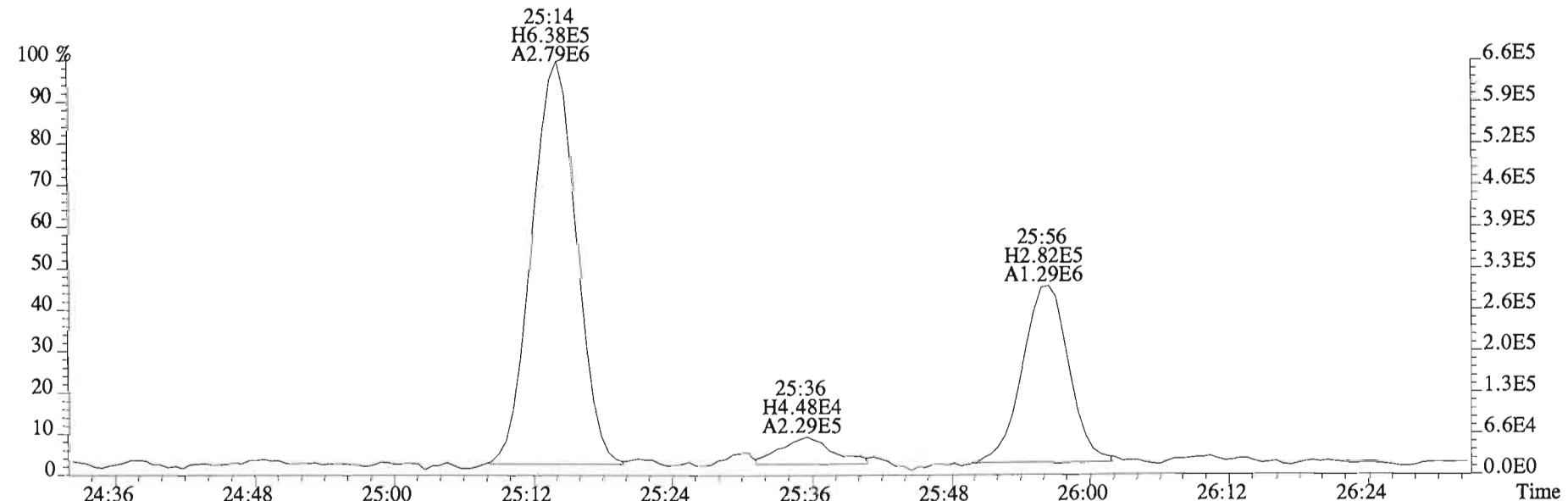
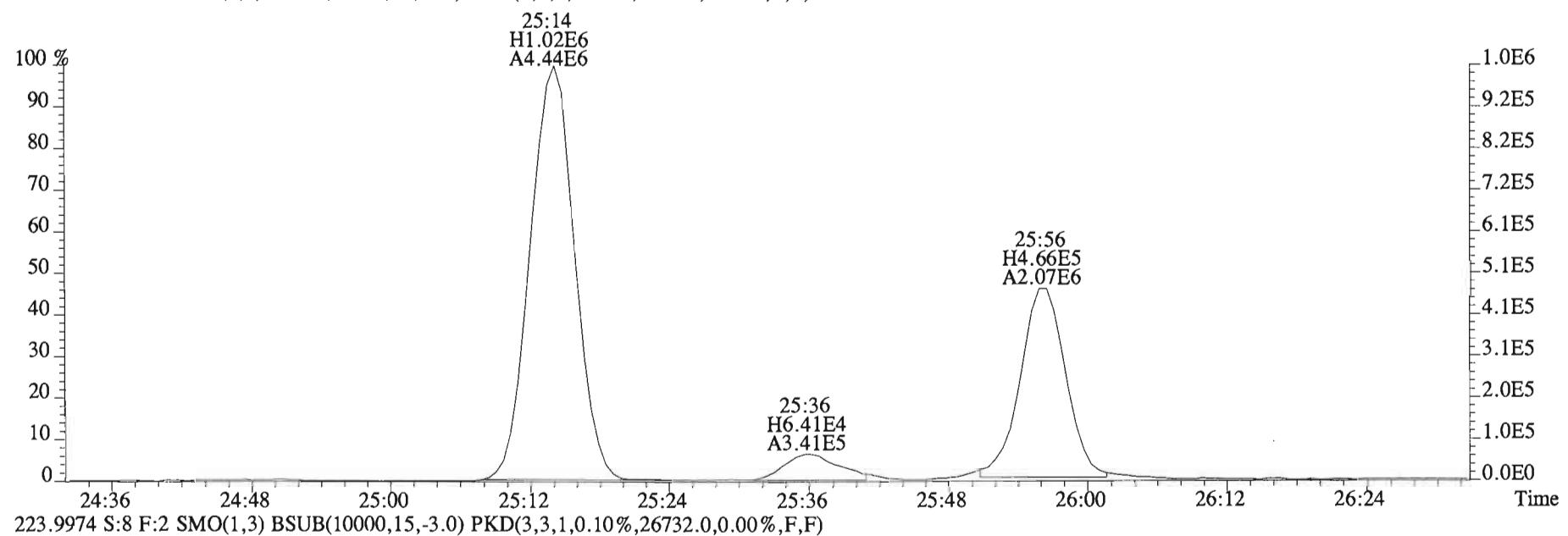
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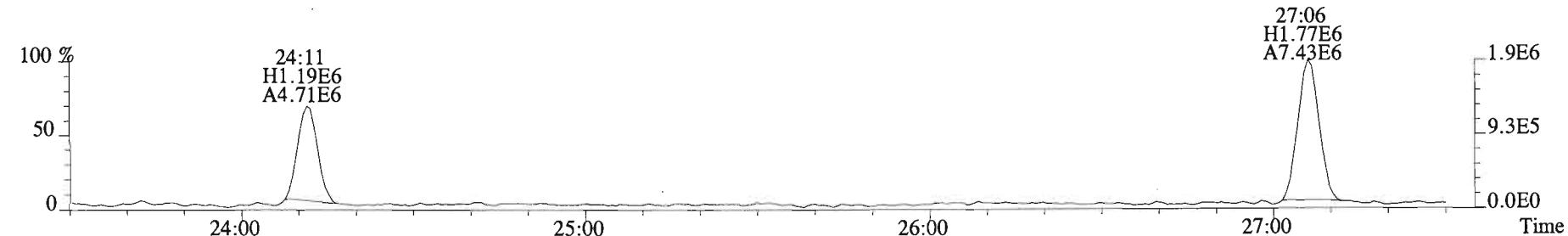
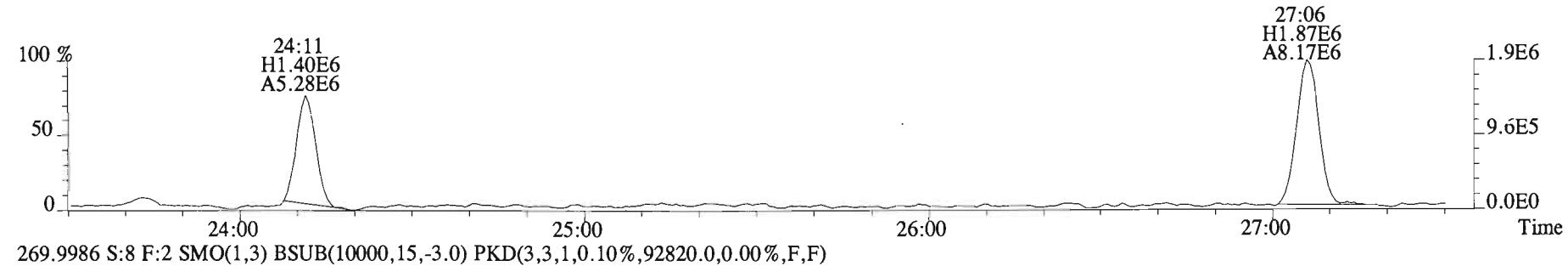
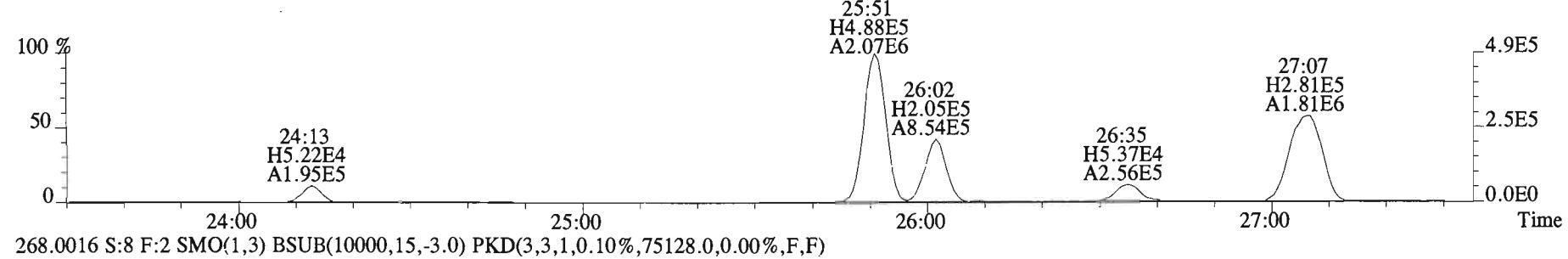
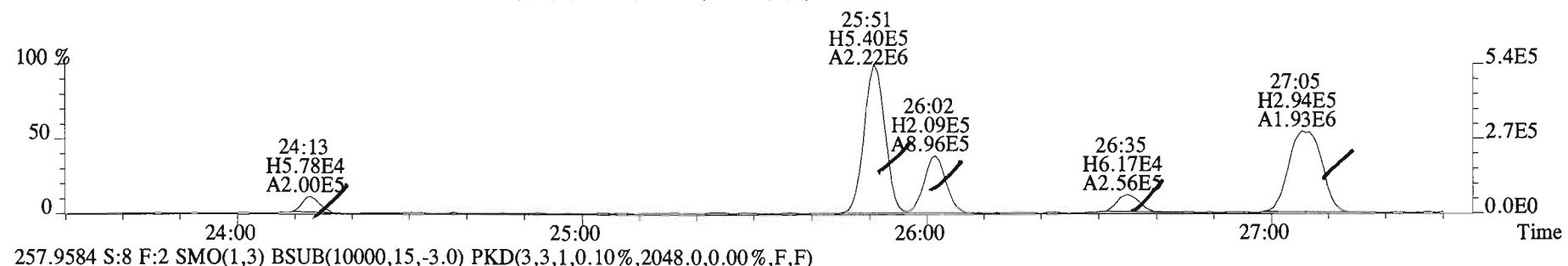
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
222.0003 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3456.0,0.00%,F,F)



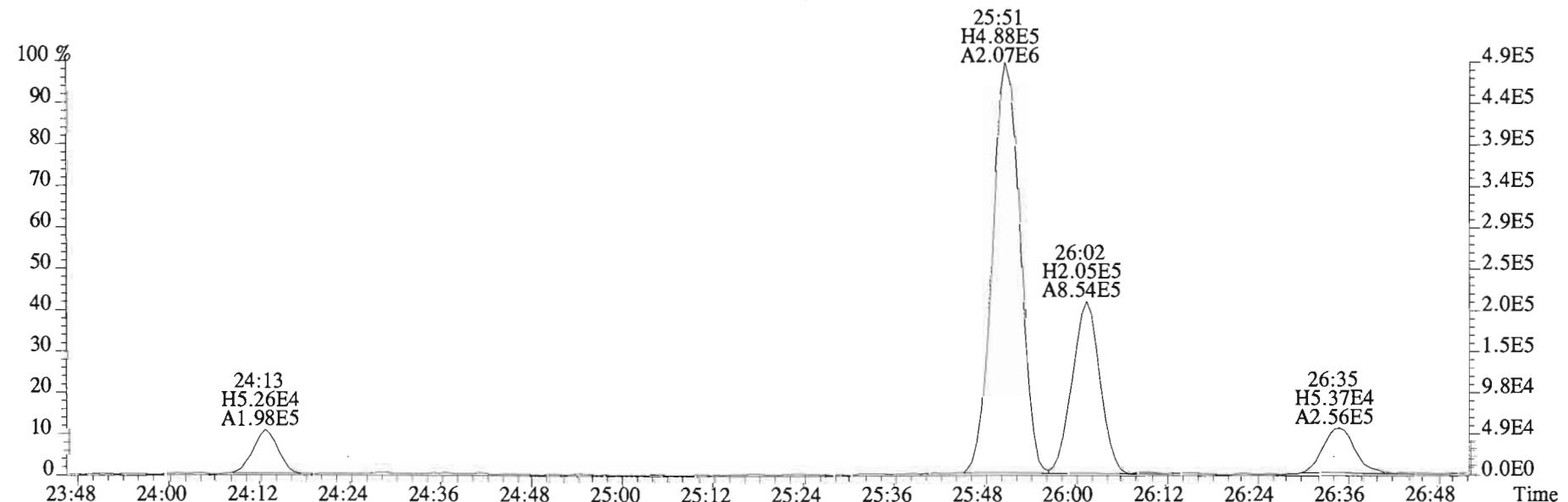
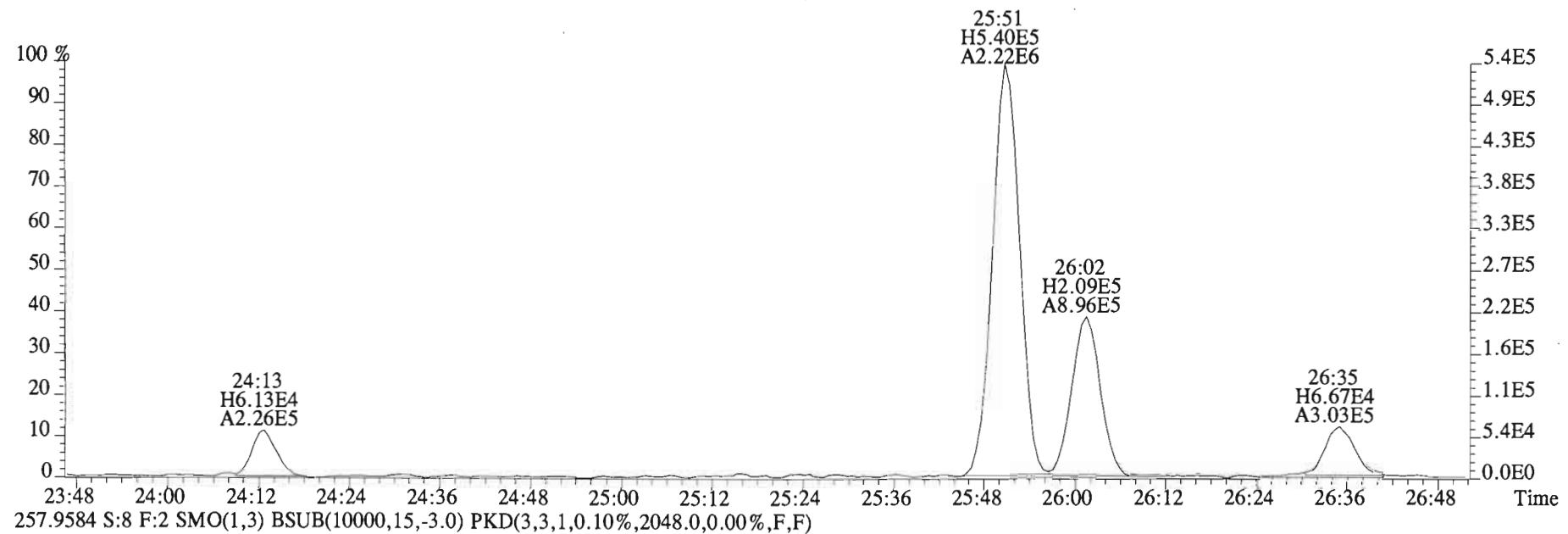
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
222.0003 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3456.0,0.00%,F,F)



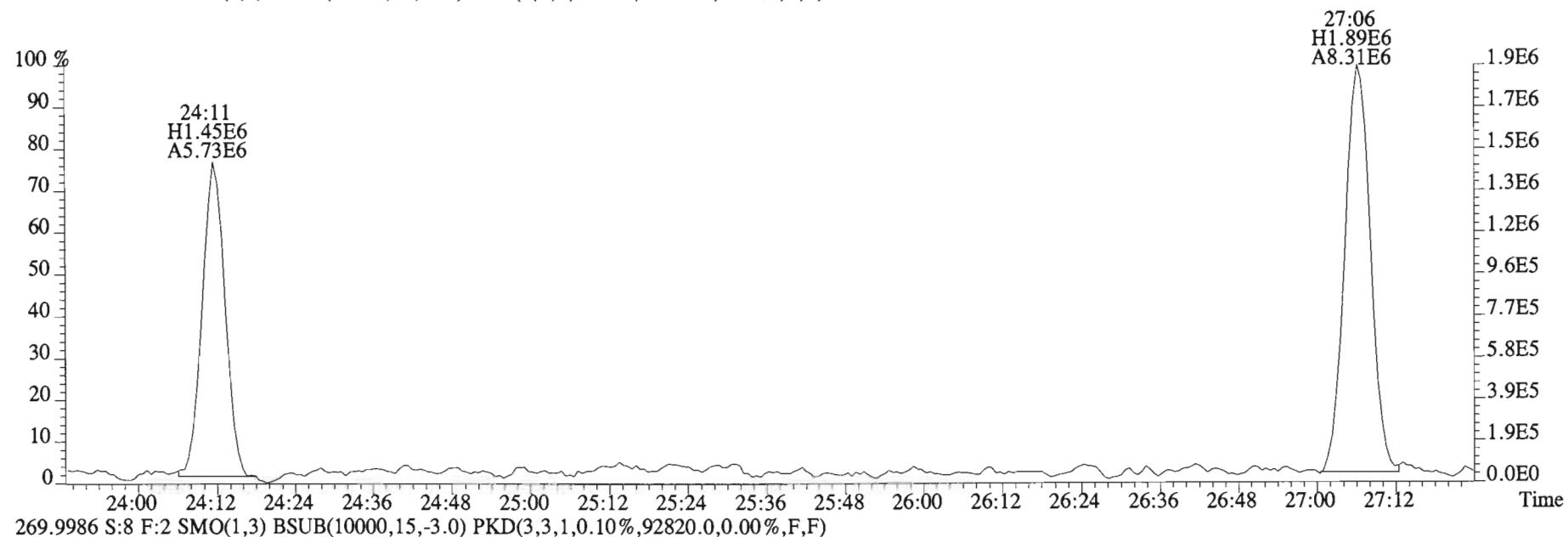
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
255.9613 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3936.0,0.00%,F,F)



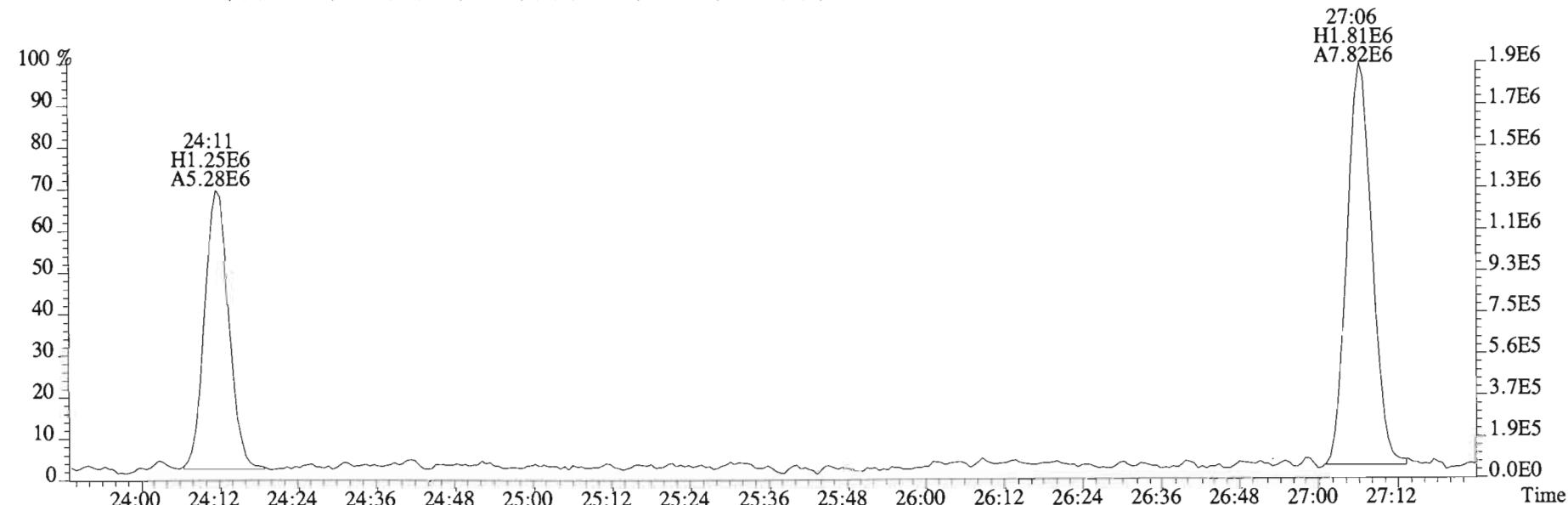
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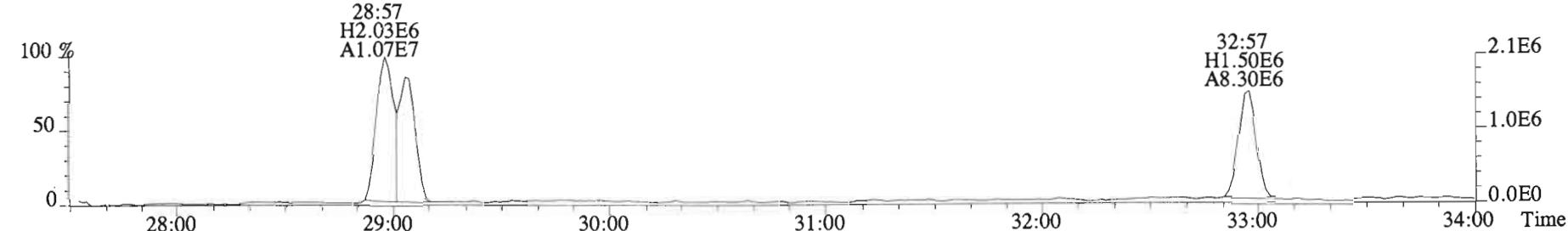
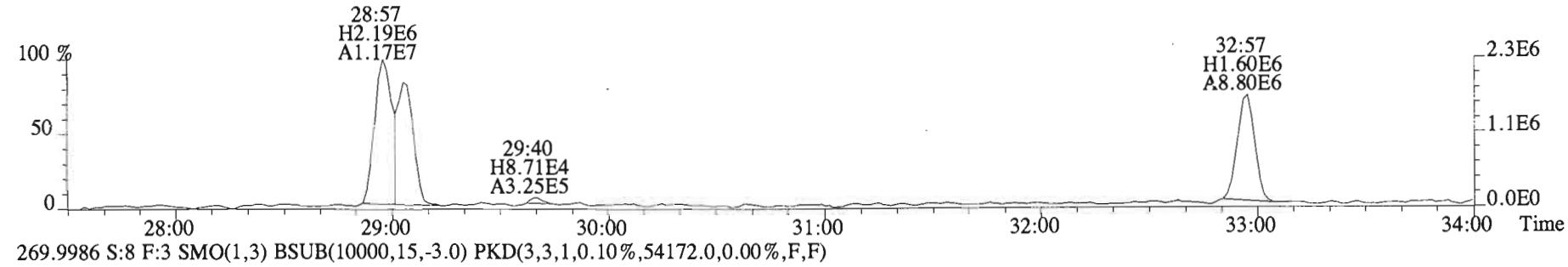
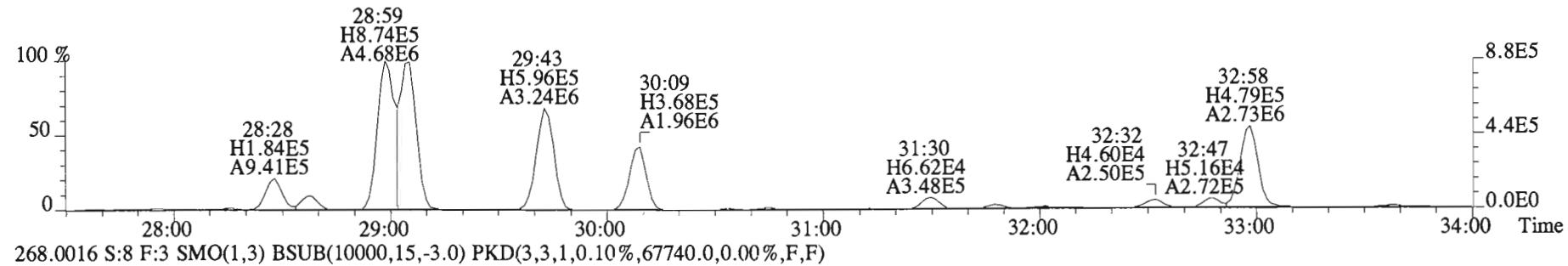
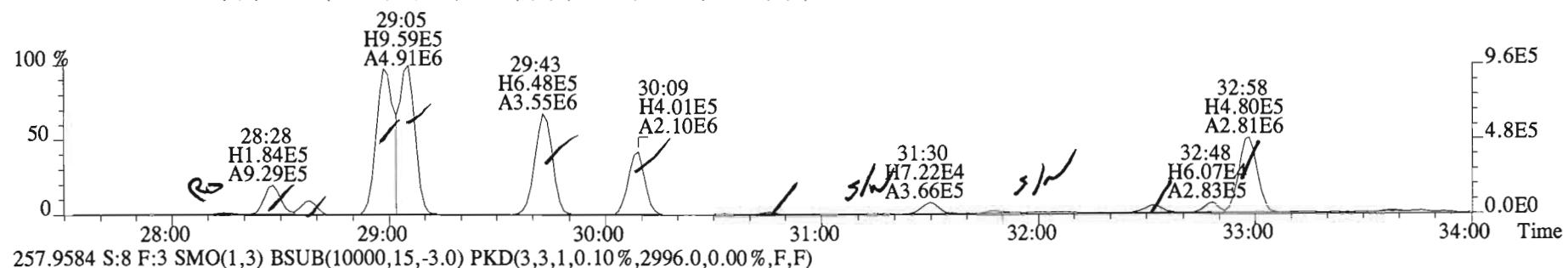
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
268.0016 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,75128.0,0.00%,F,F)



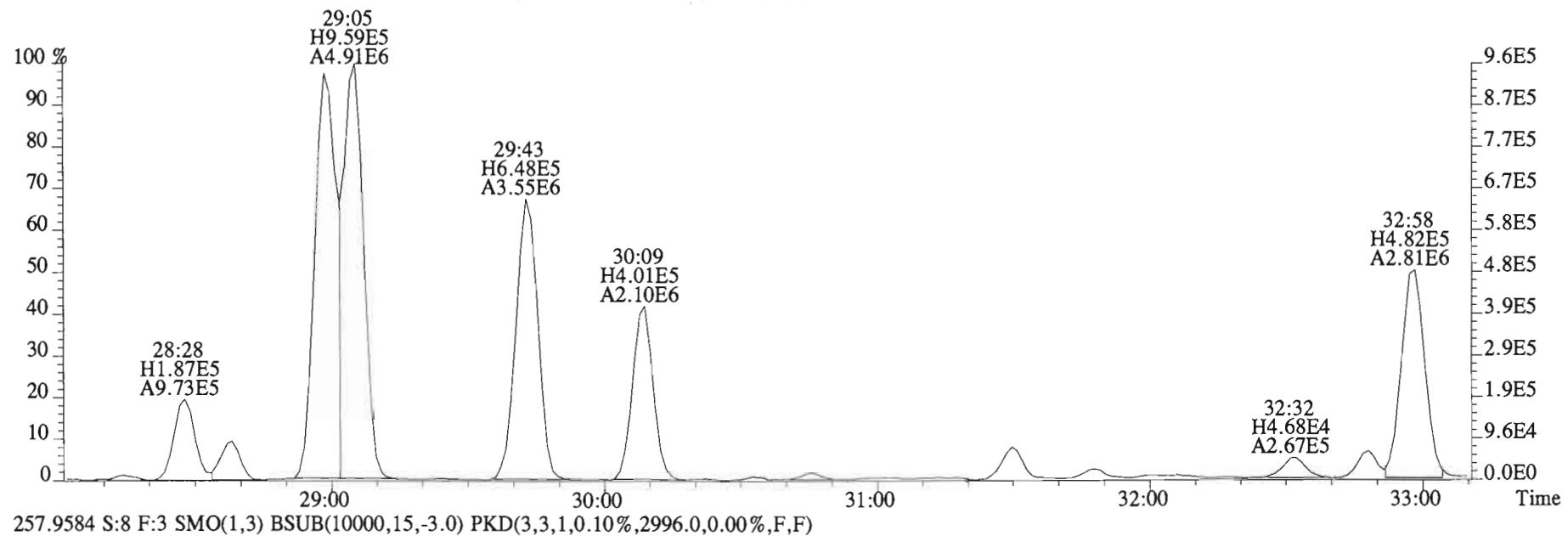
269.9986 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,92820.0,0.00%,F,F)



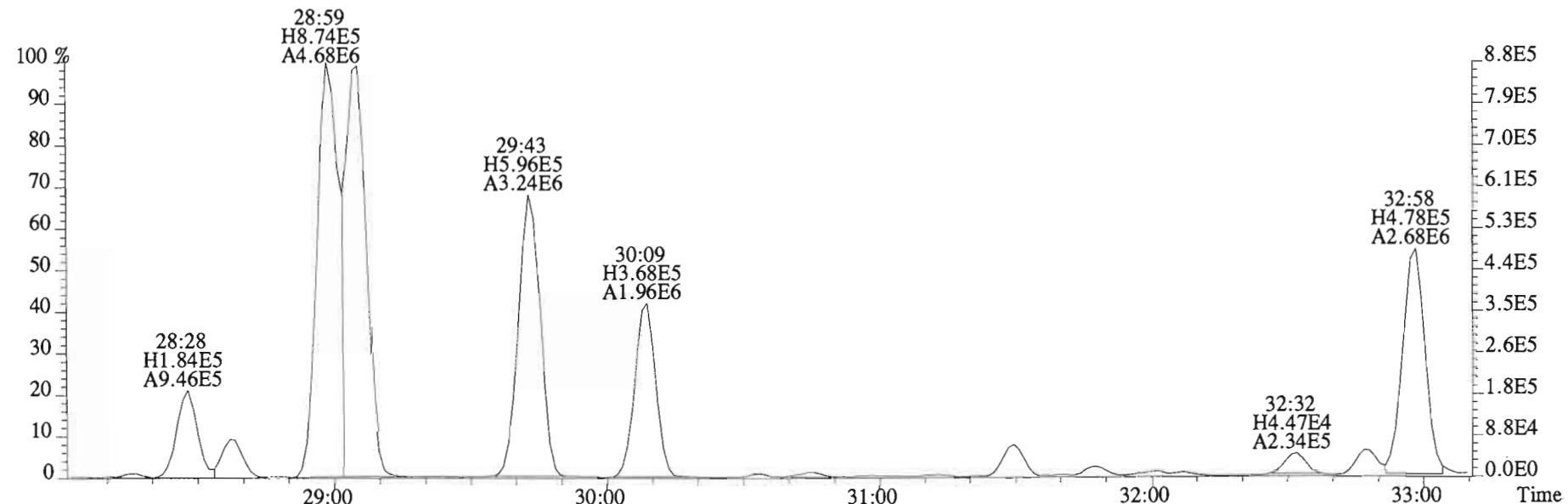
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 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
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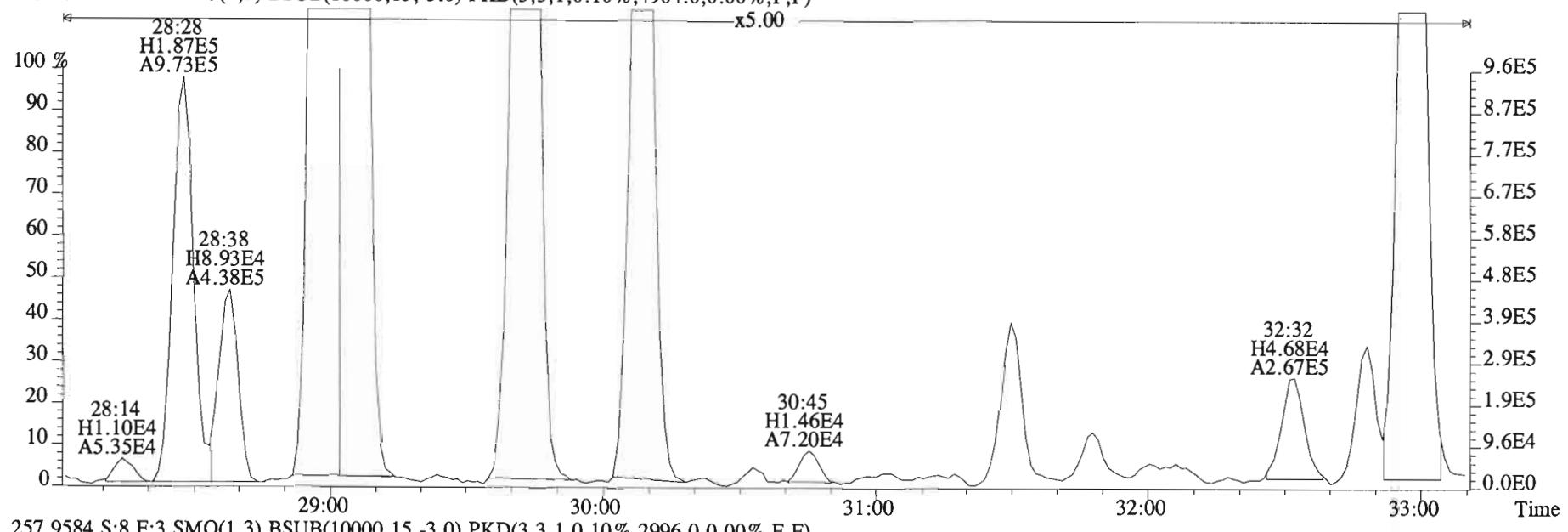
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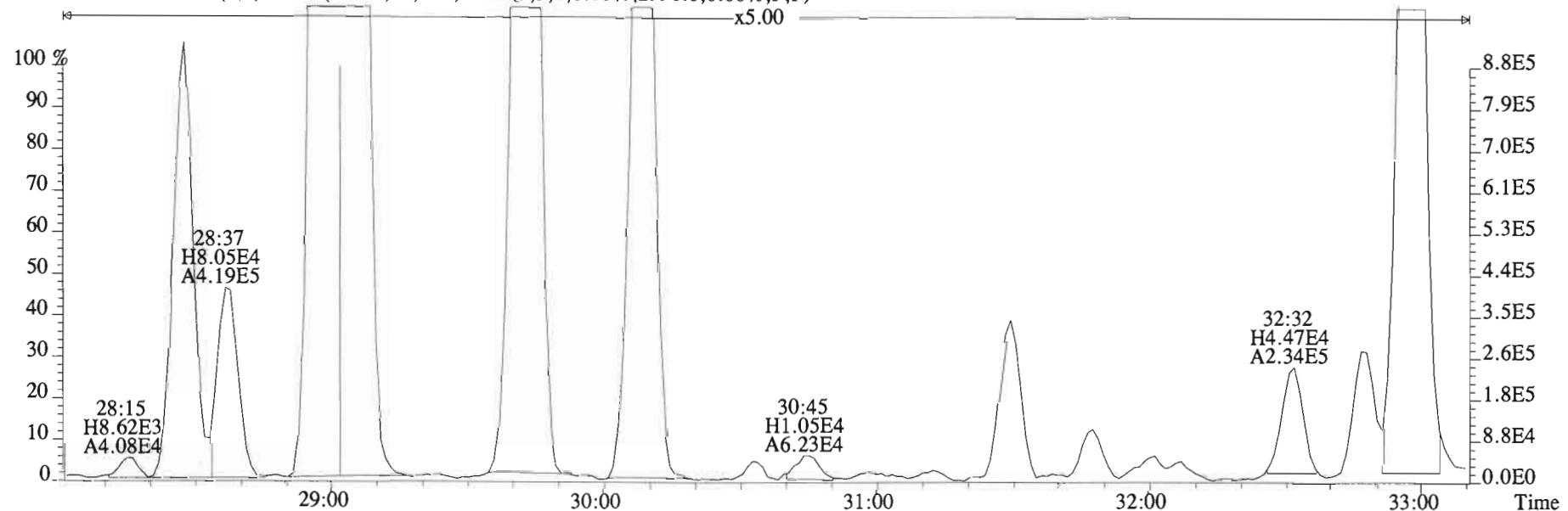
257.9584 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2996.0,0.00%,F,F)



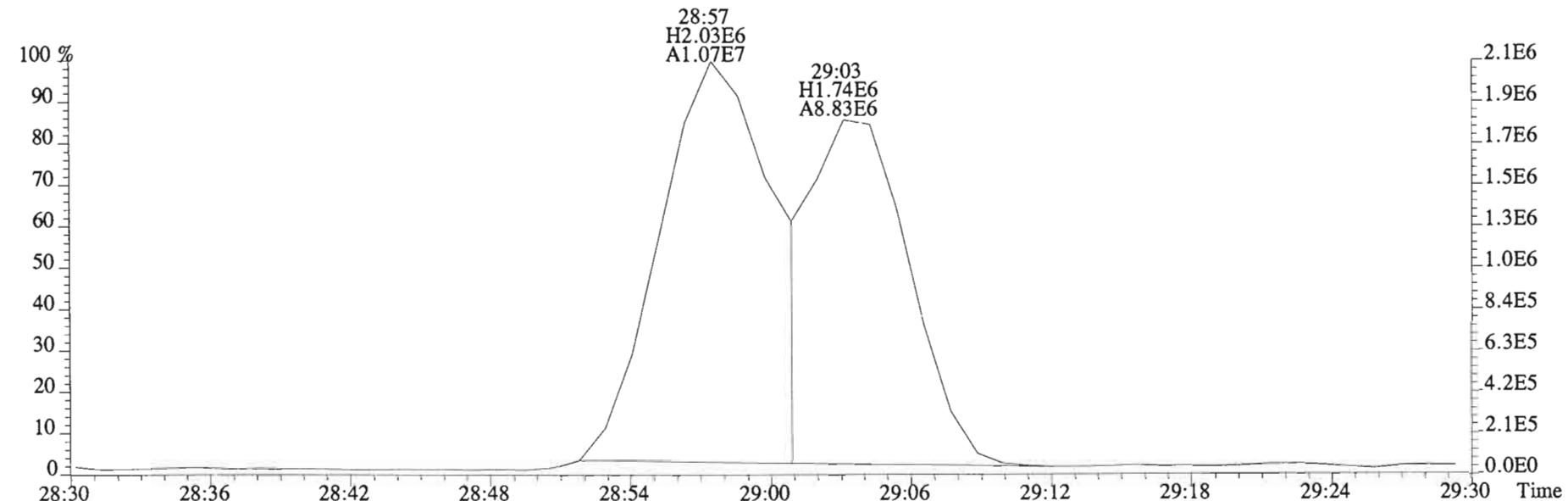
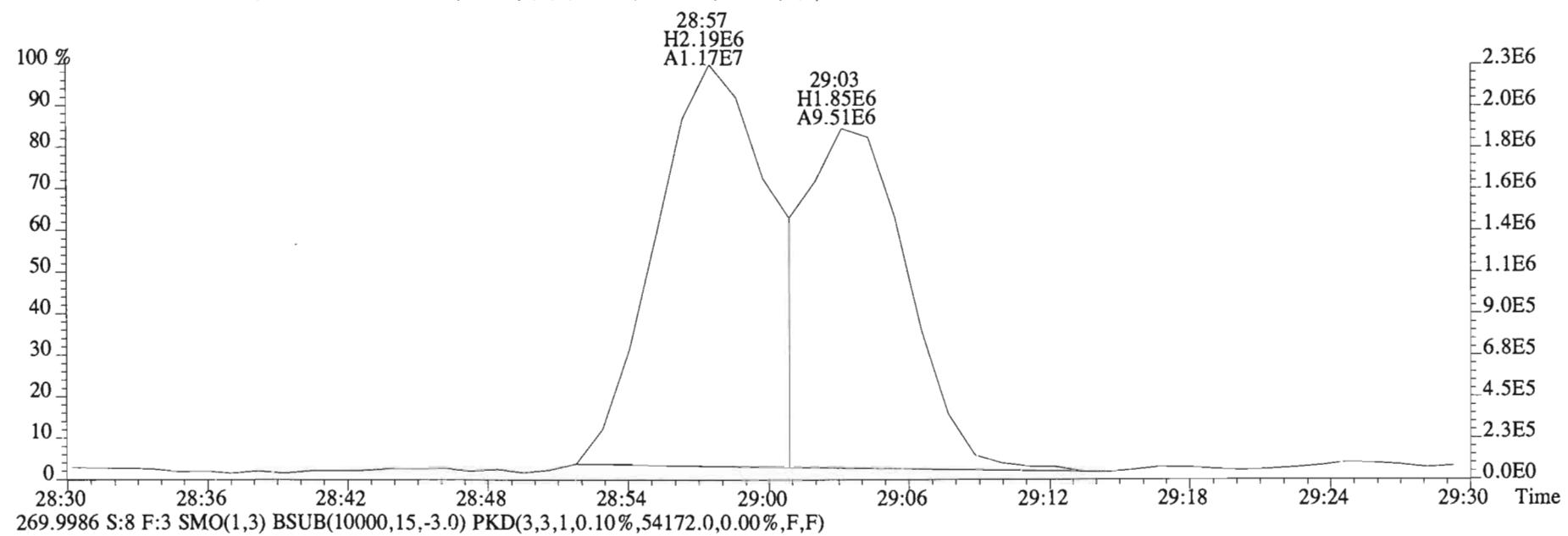
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
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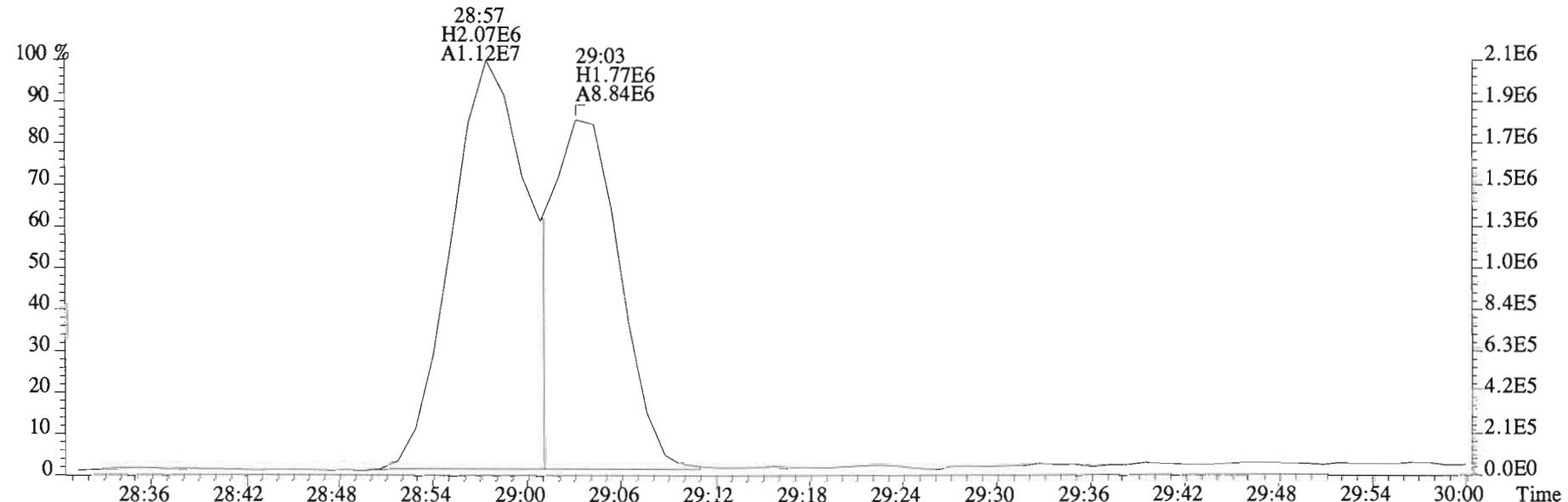
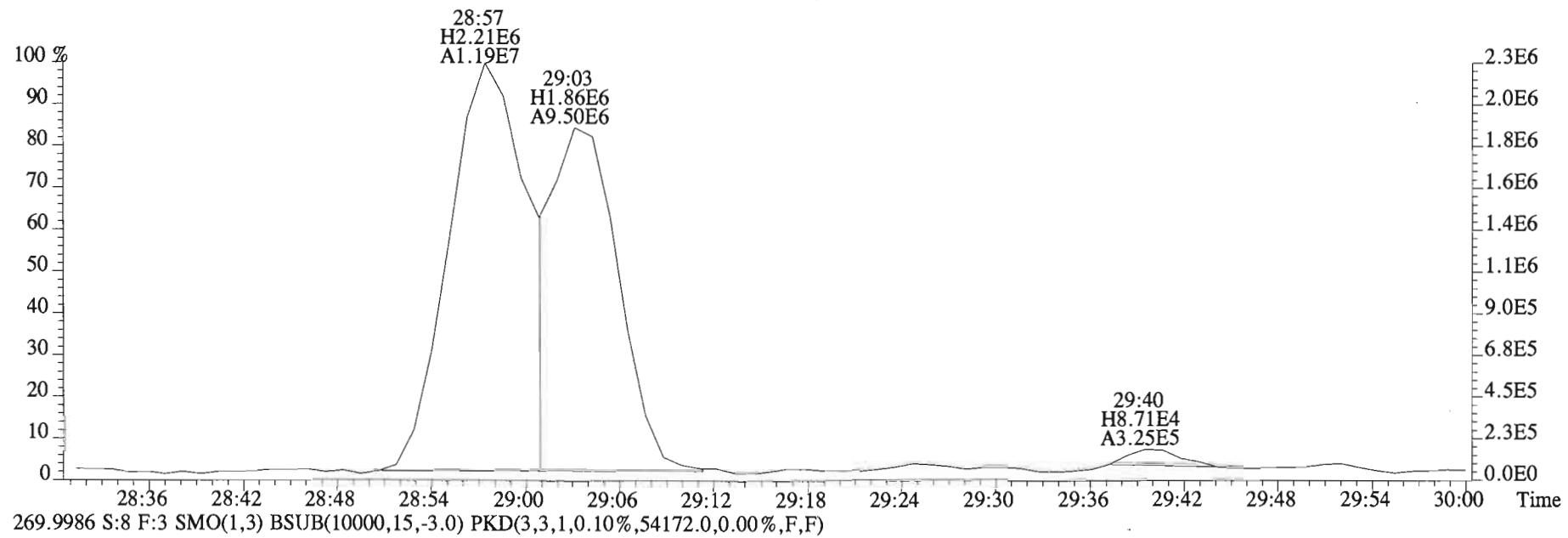
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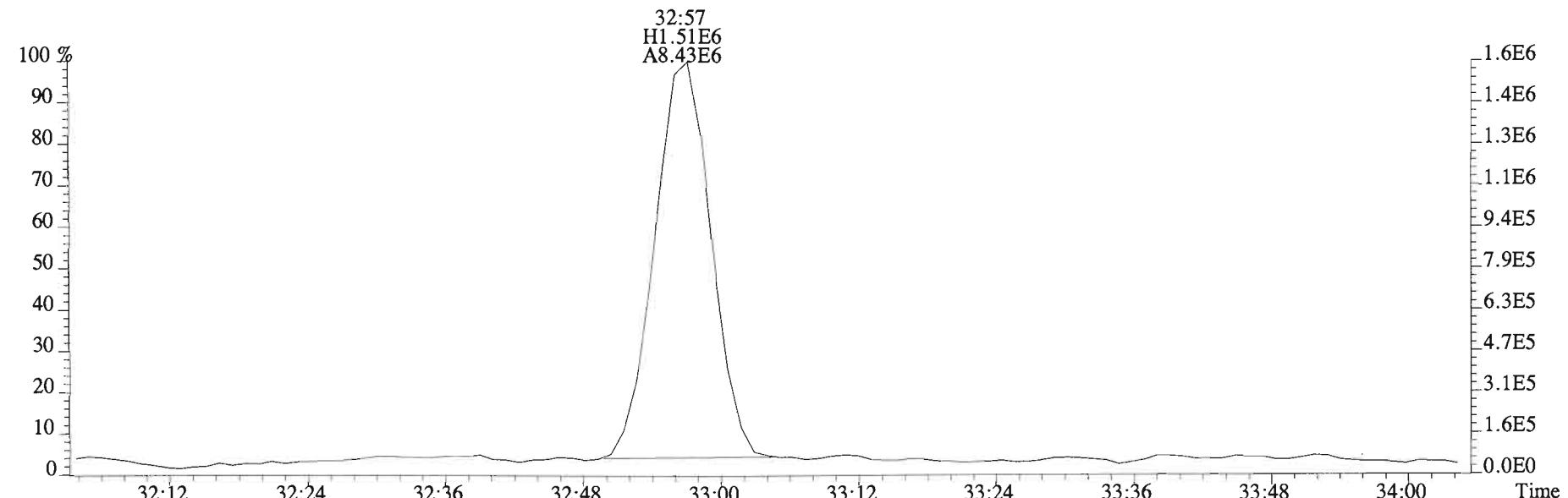
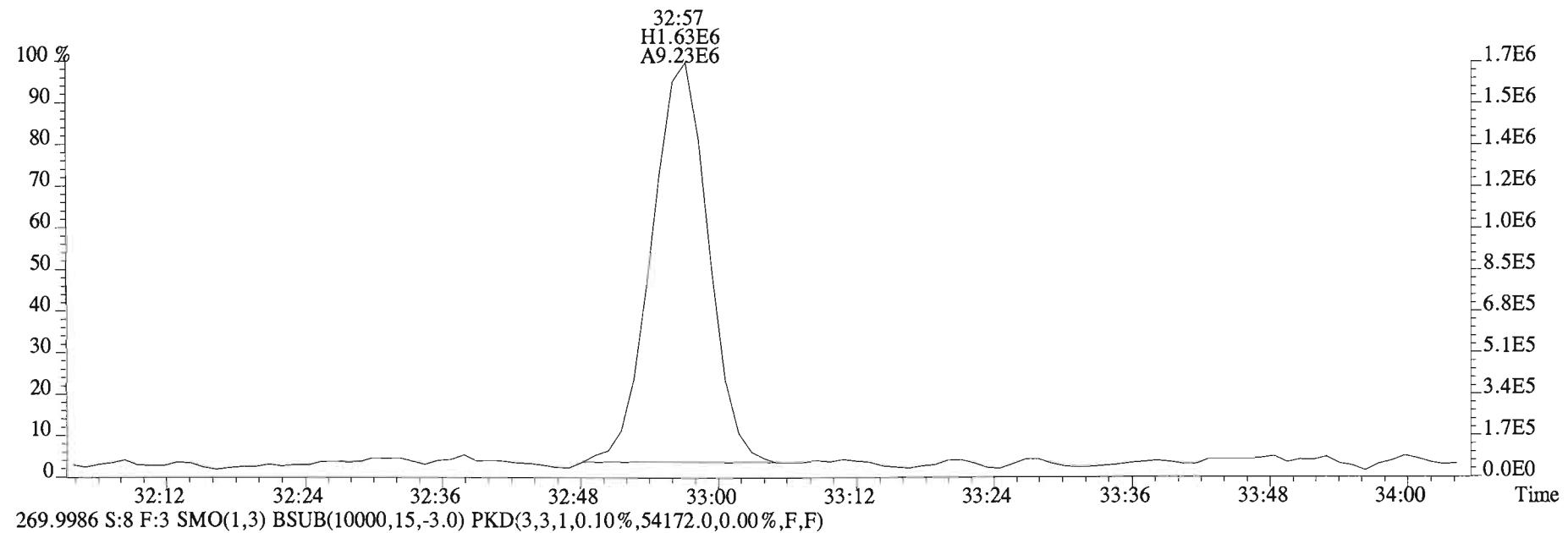
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
268.0016 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,67740.0,0.00%,F,F)



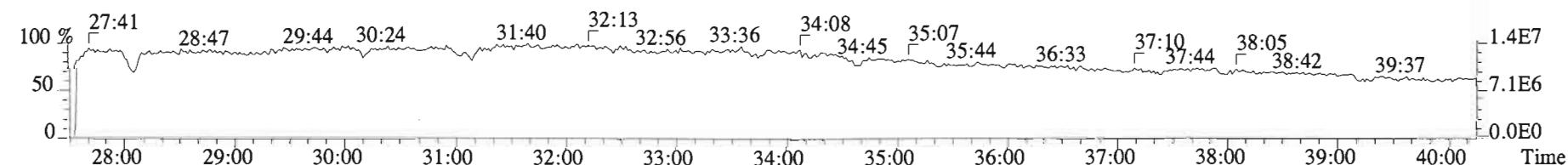
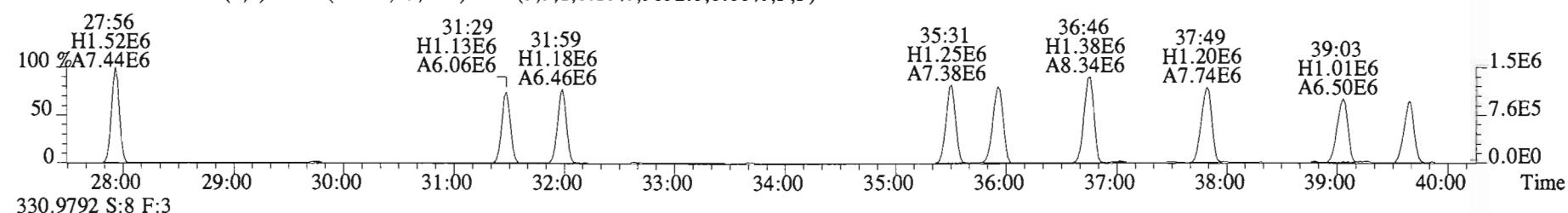
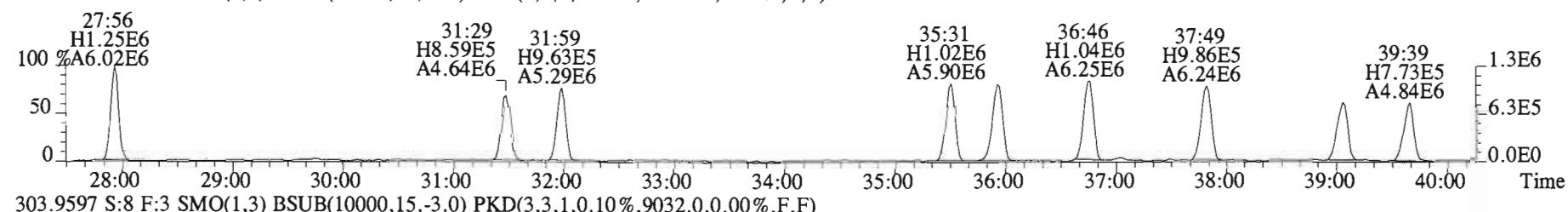
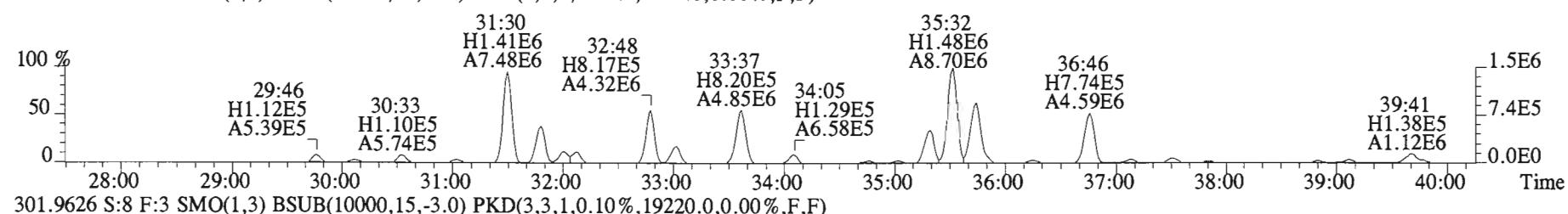
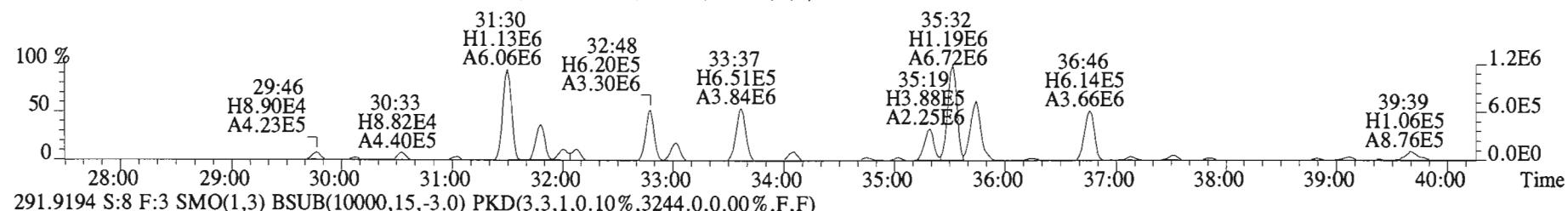
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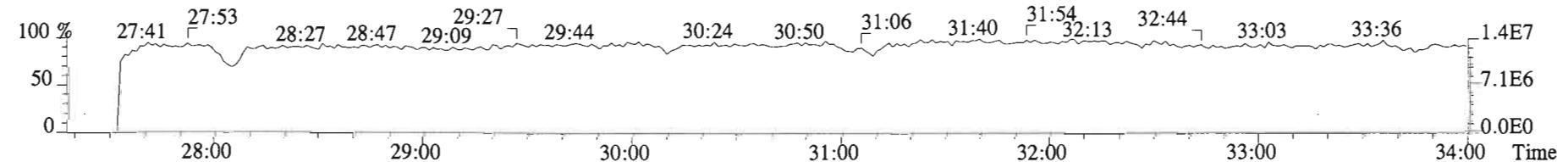
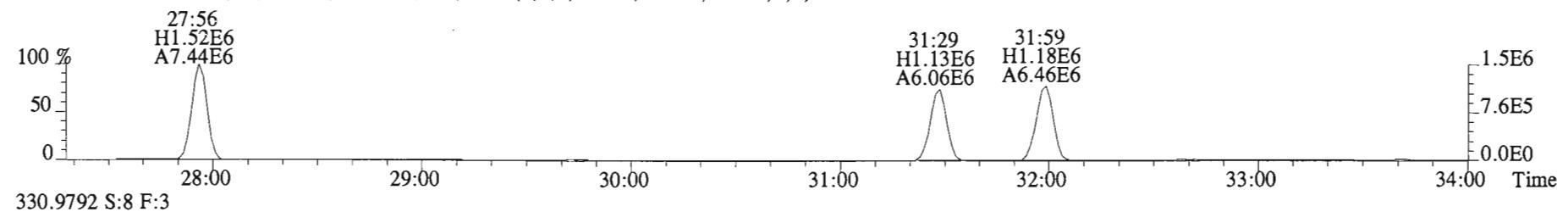
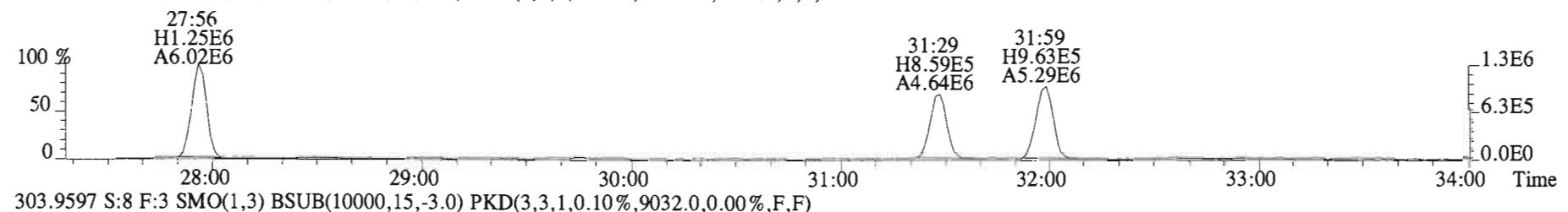
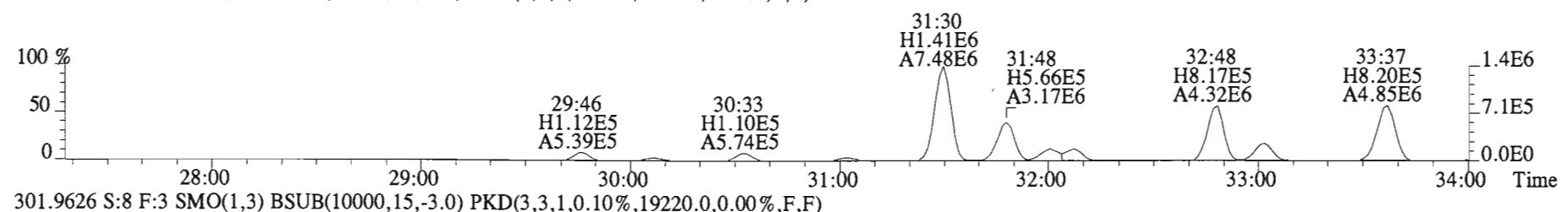
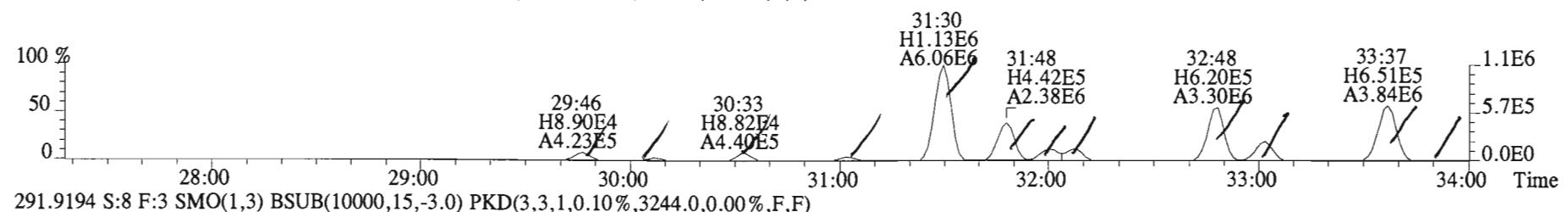
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
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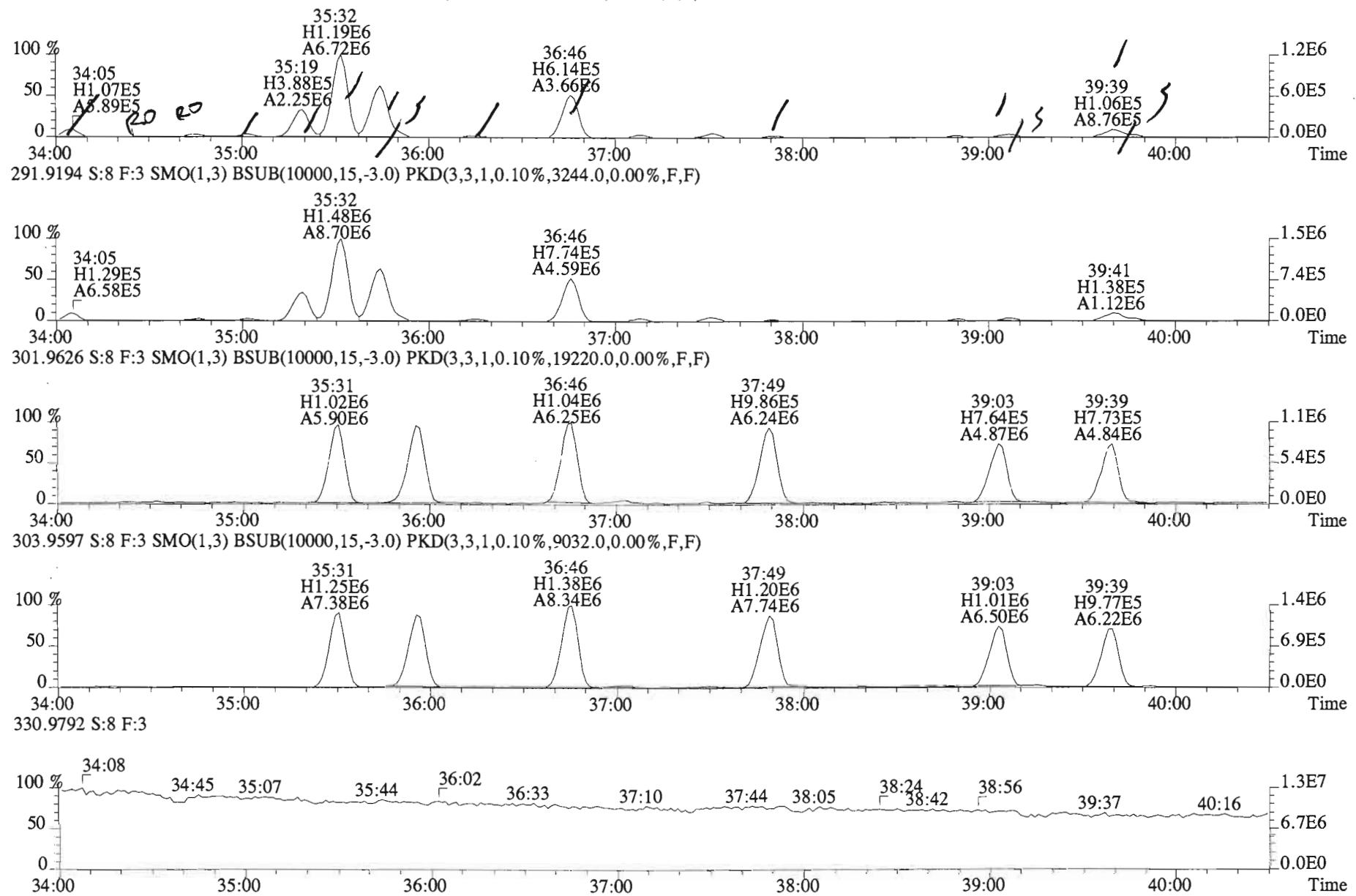
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 289.9224 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2260.0,0.00%,F,F)



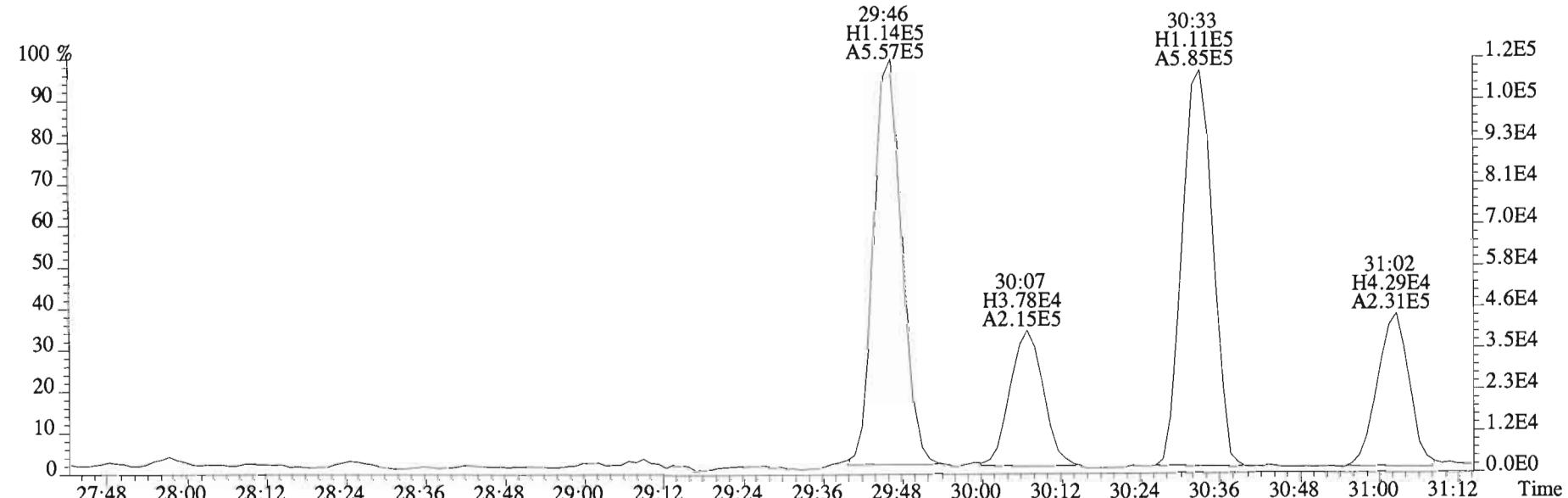
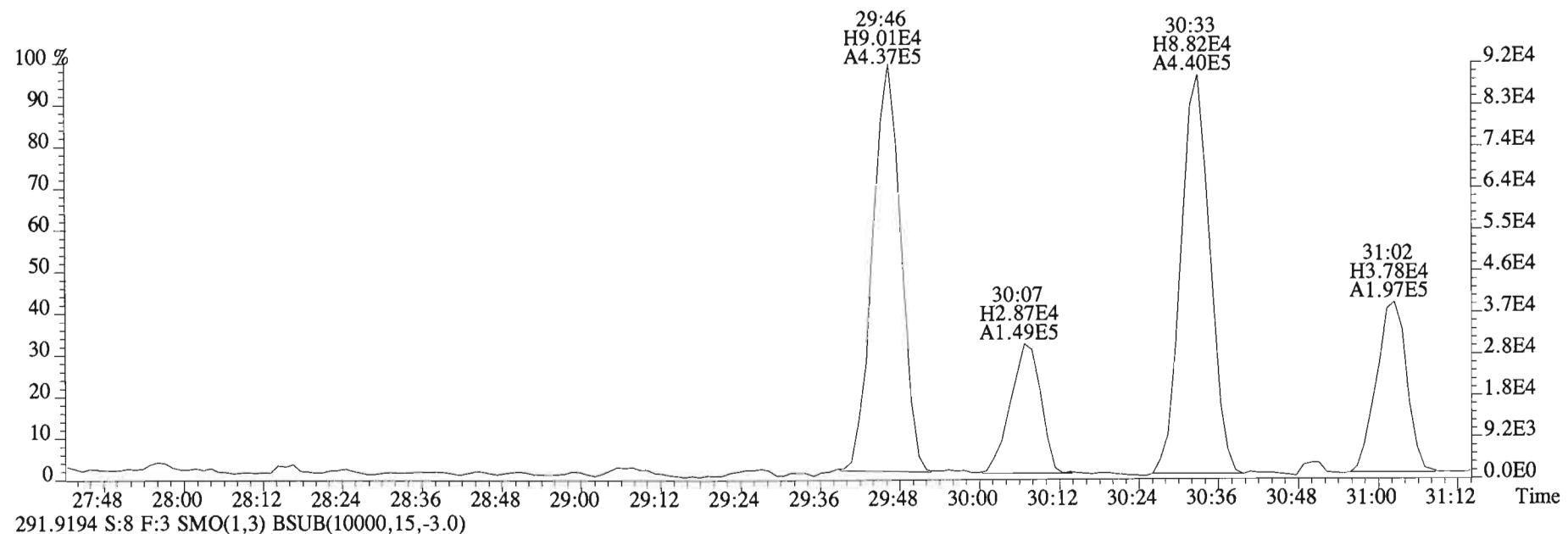
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 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
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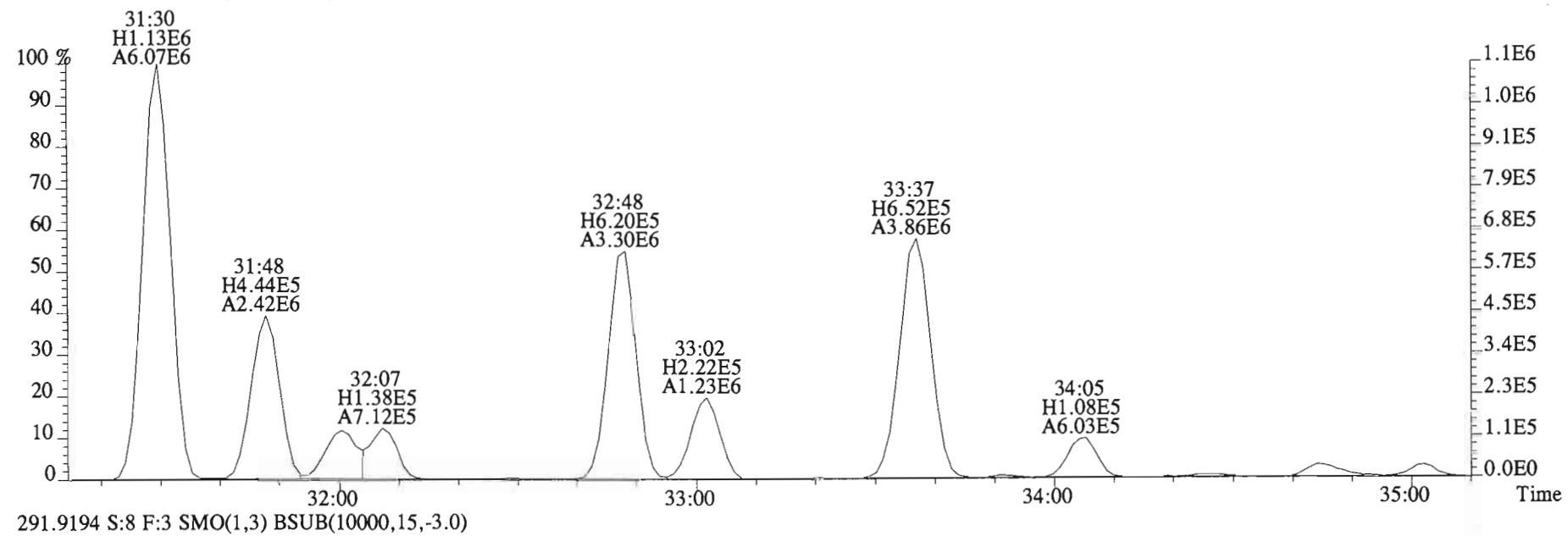
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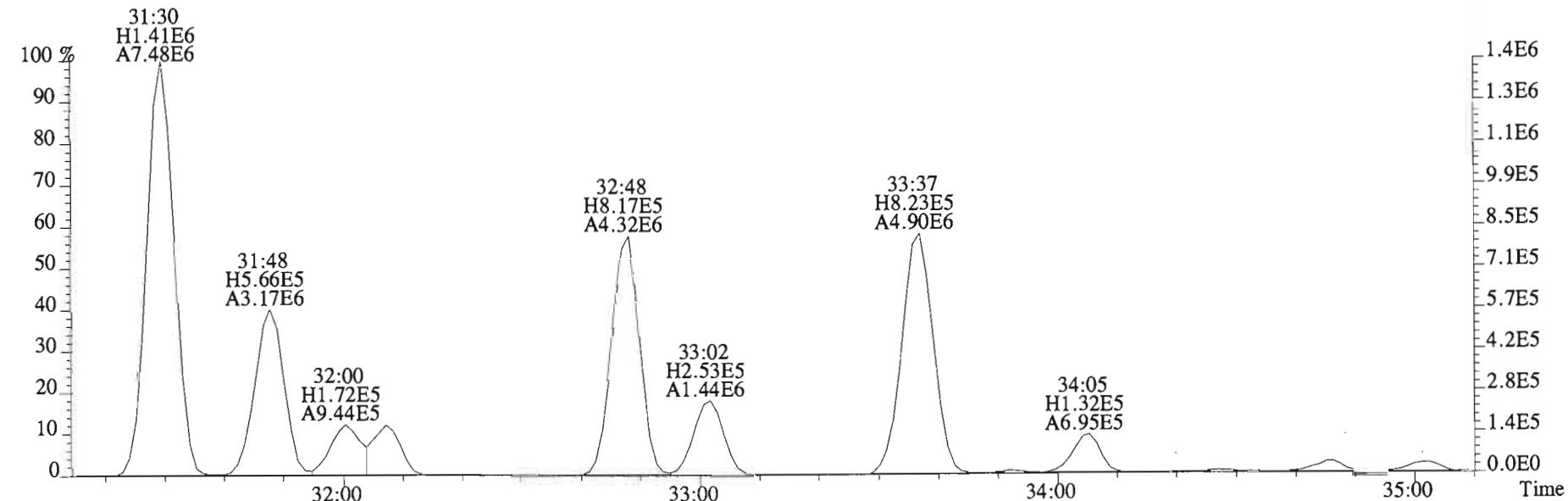
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
289.9224 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



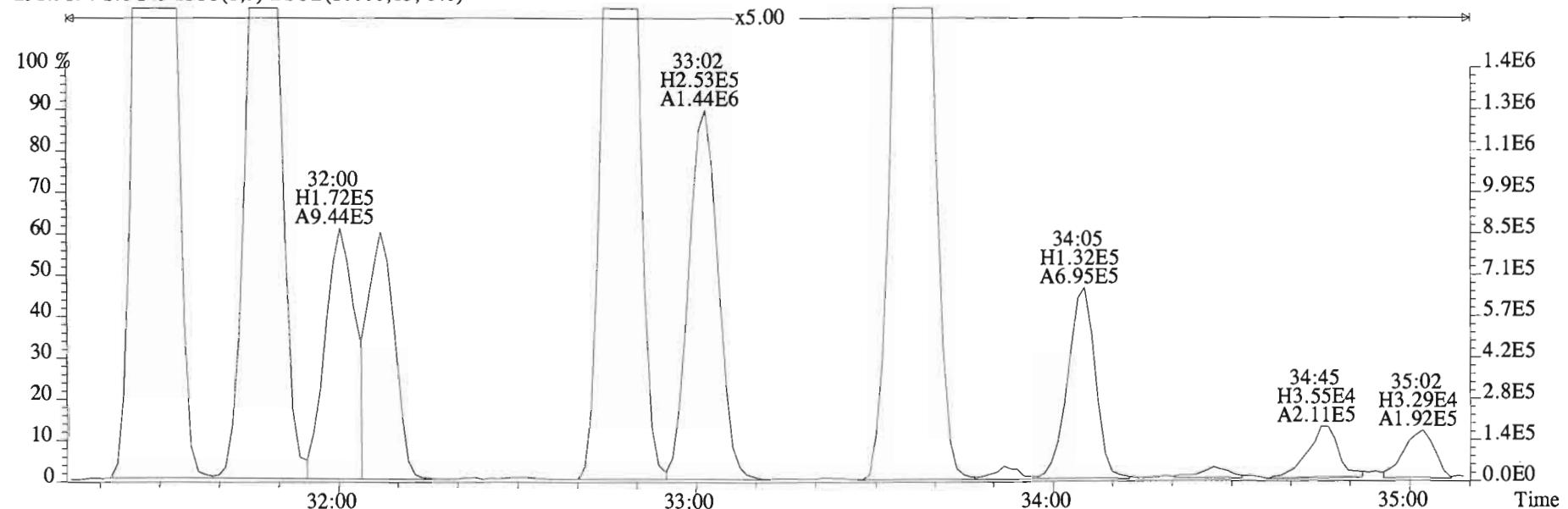
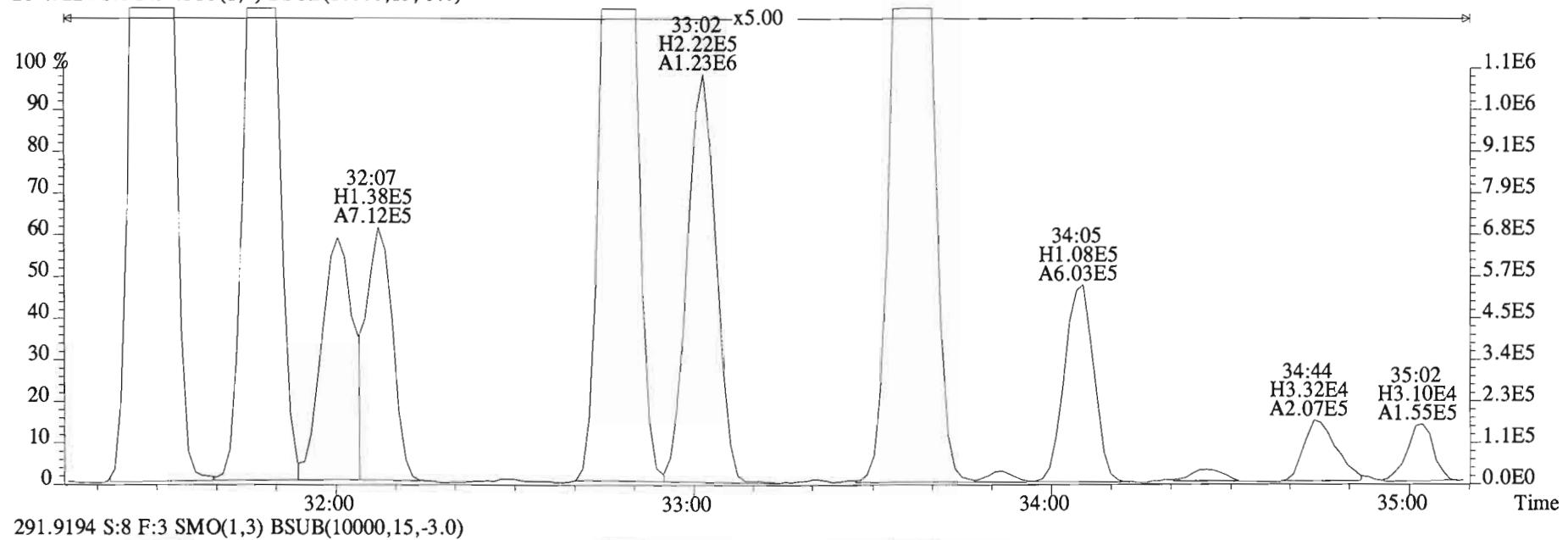
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
289.9224 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



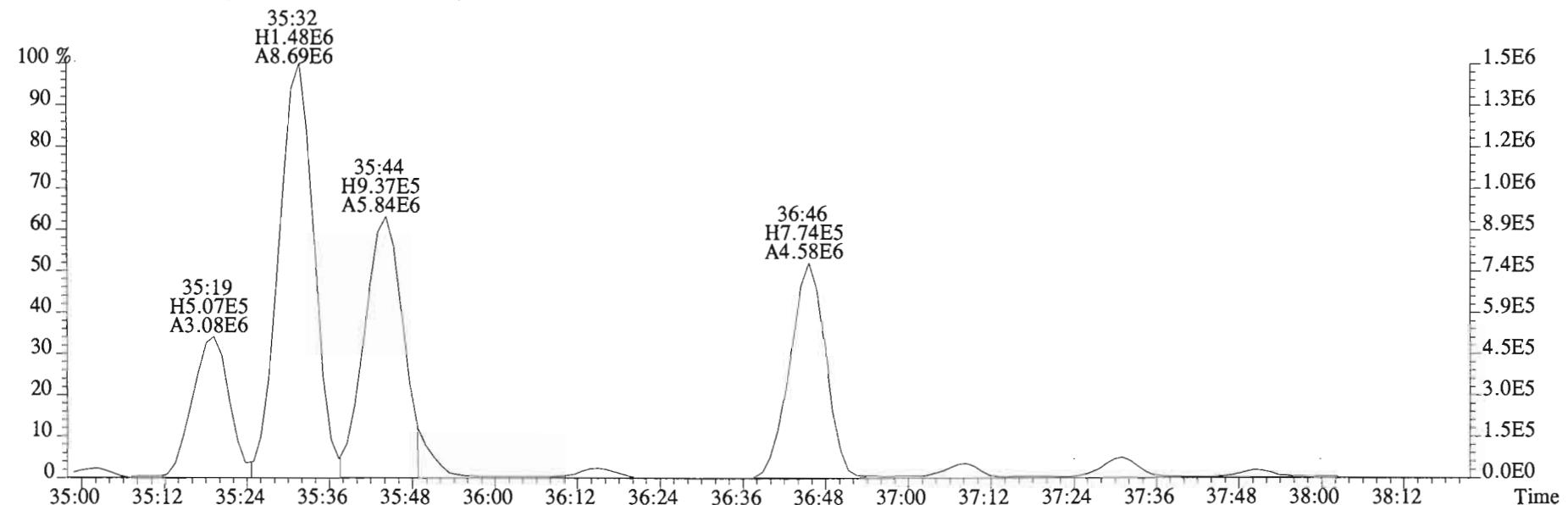
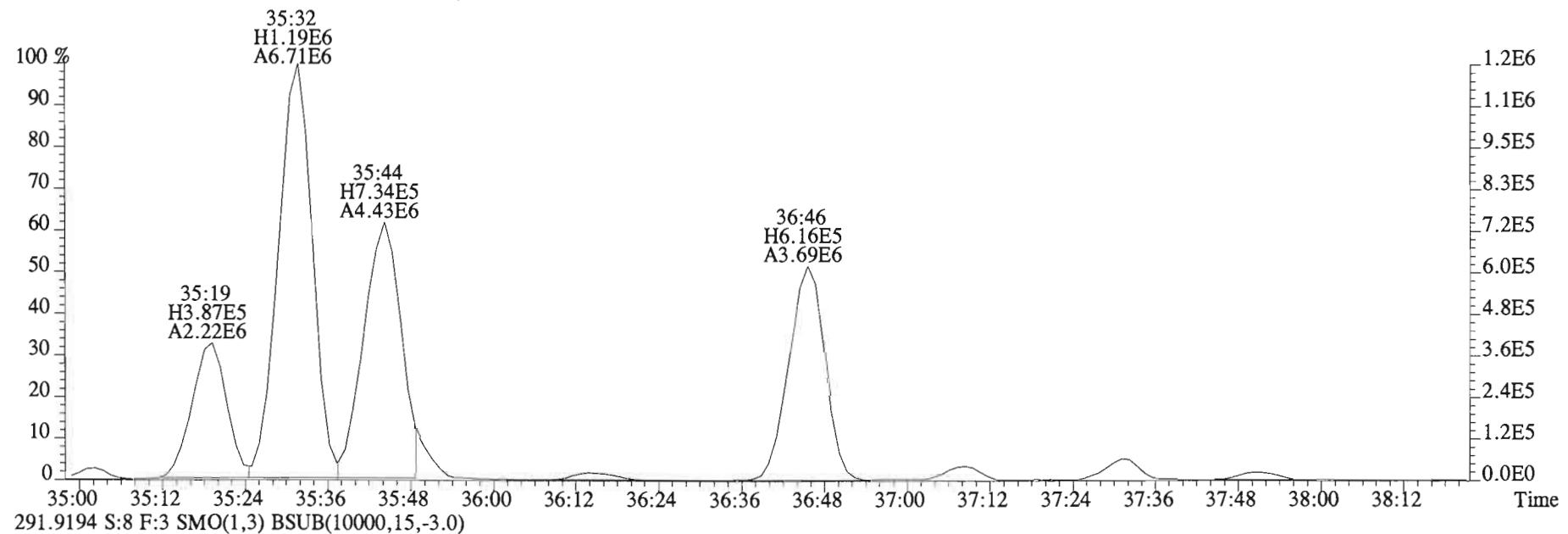
291.9194 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



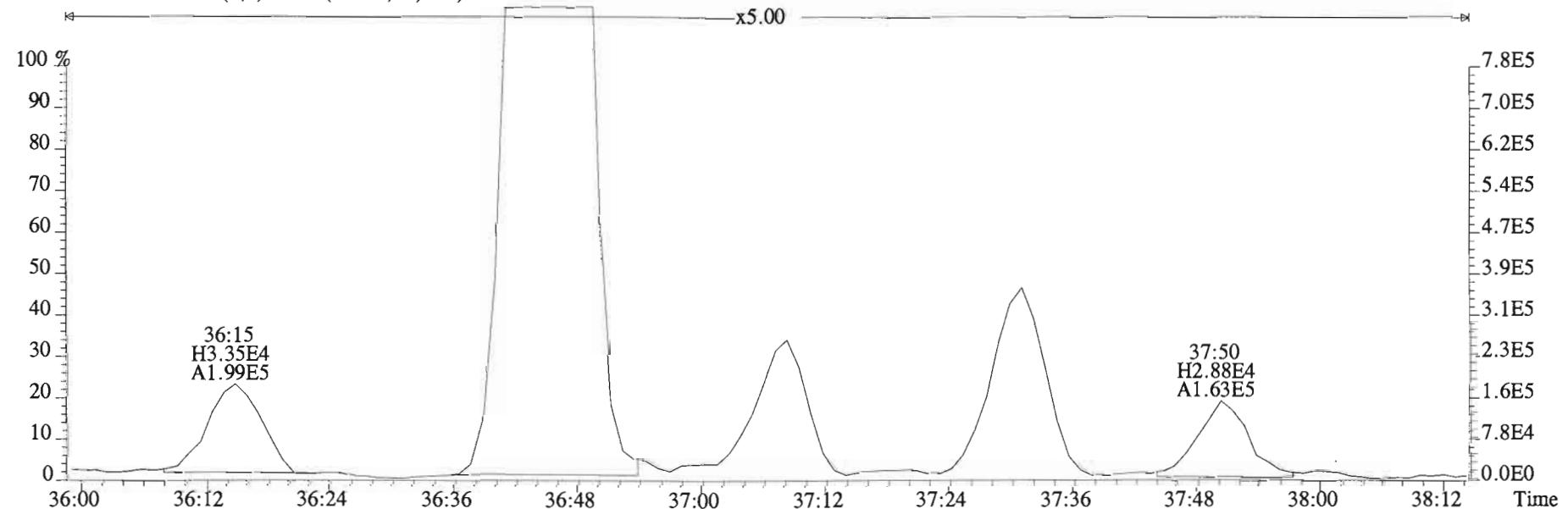
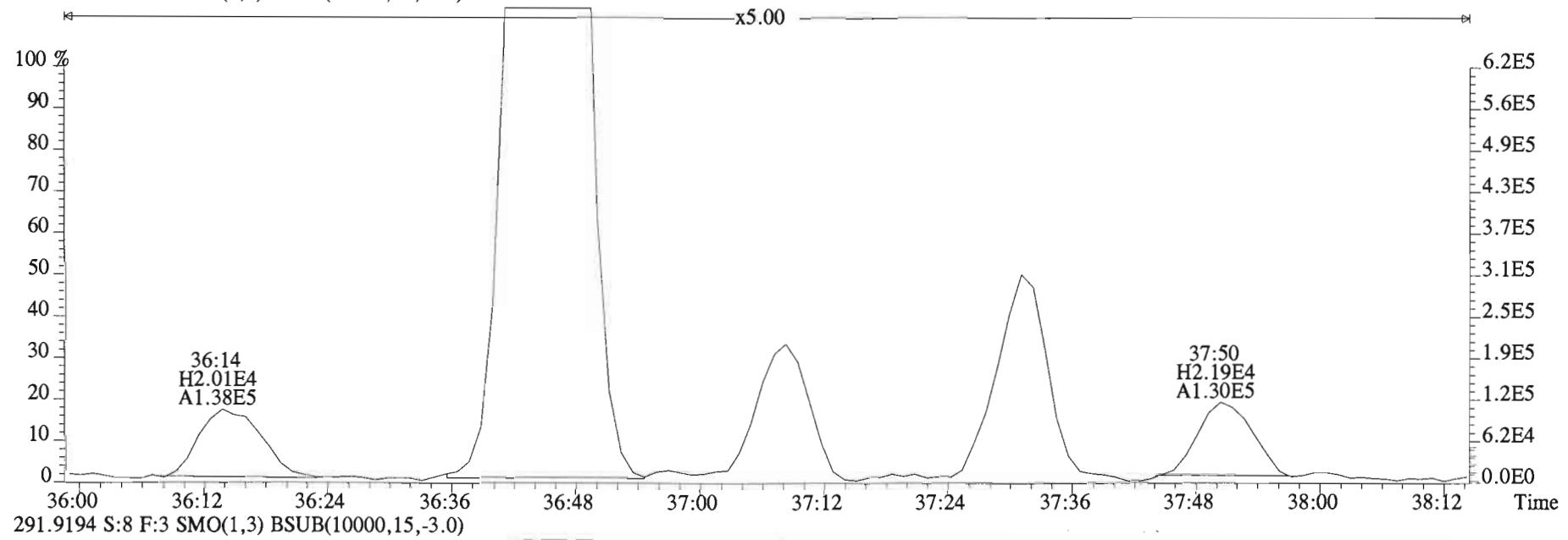
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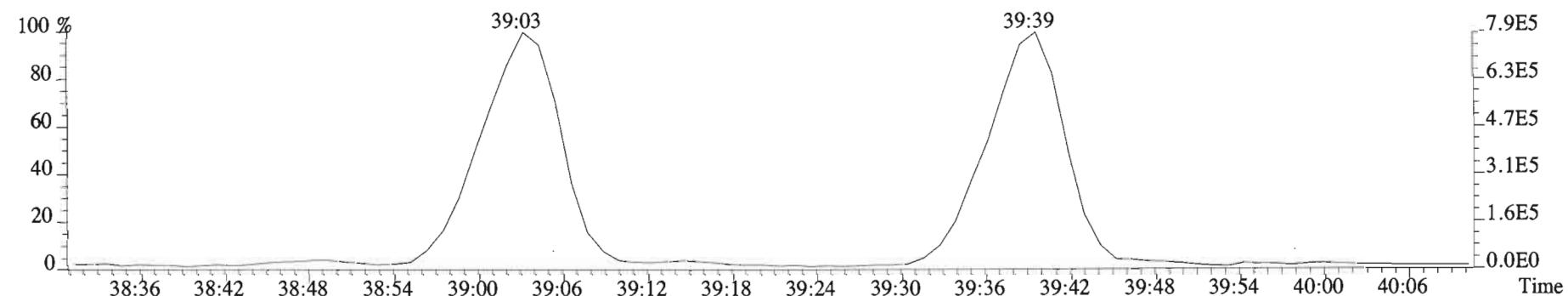
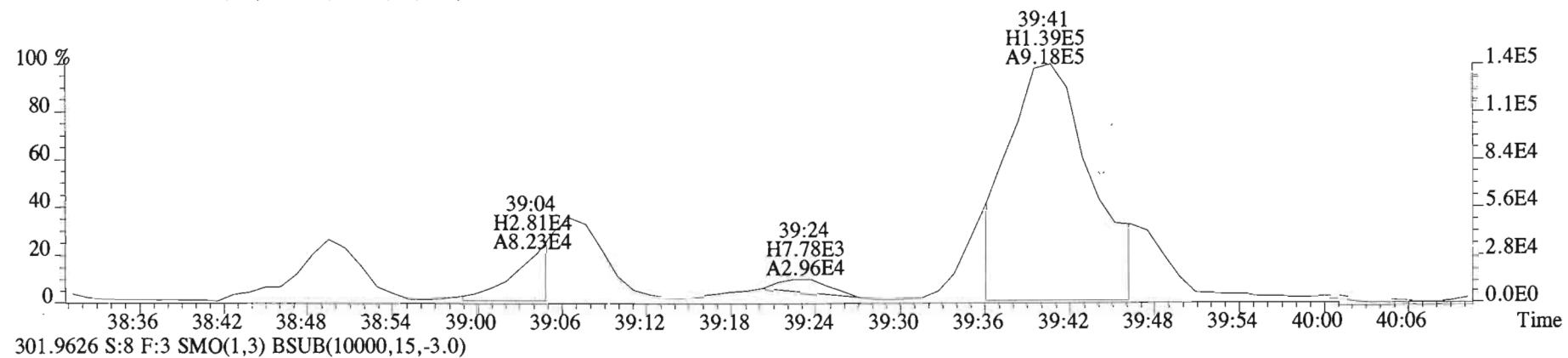
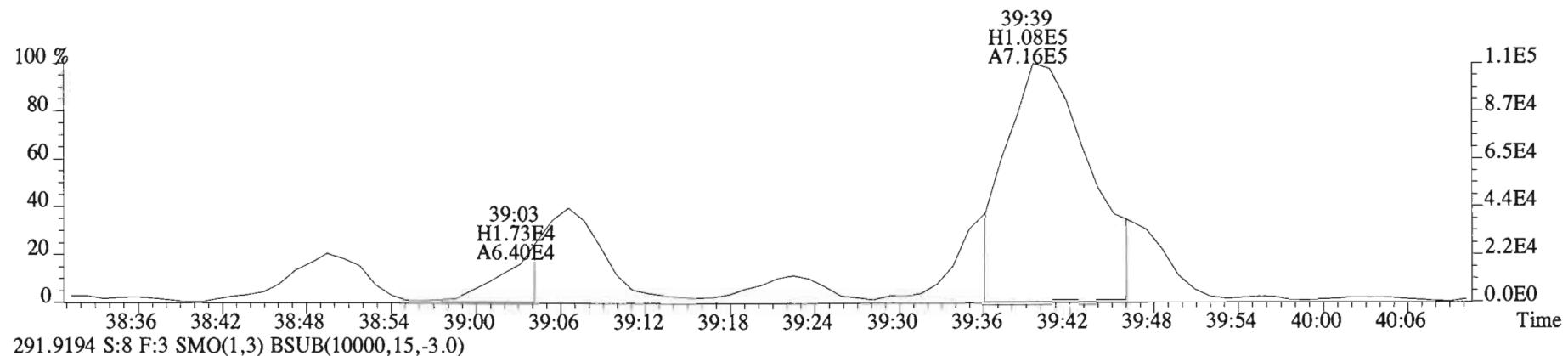
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
289.9224 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



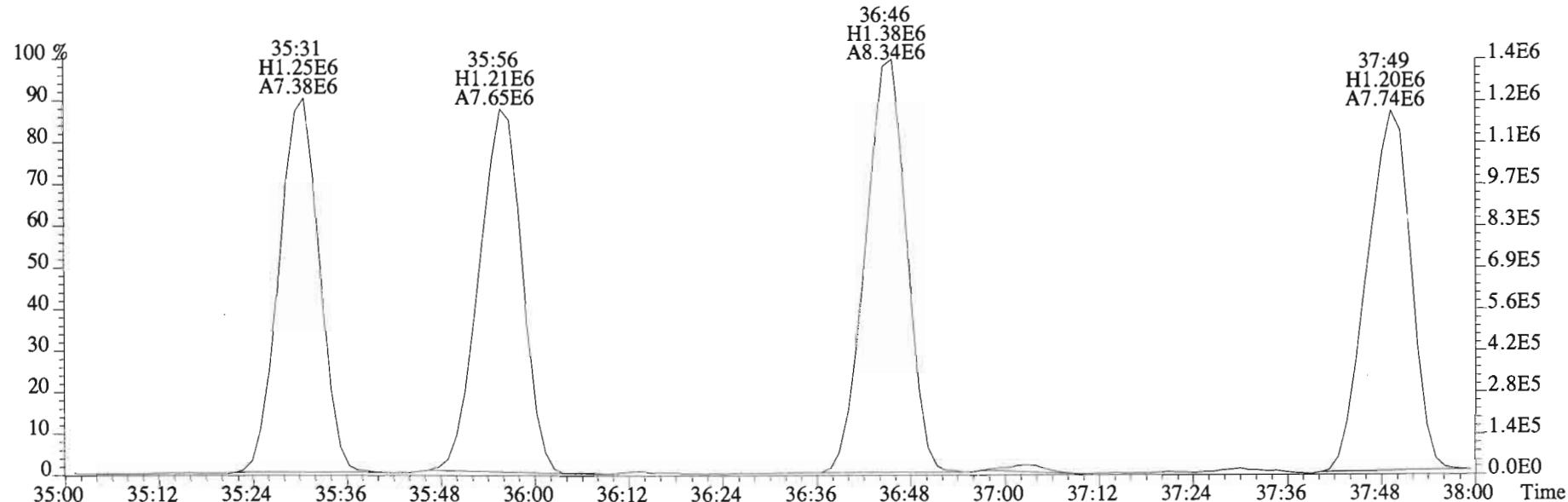
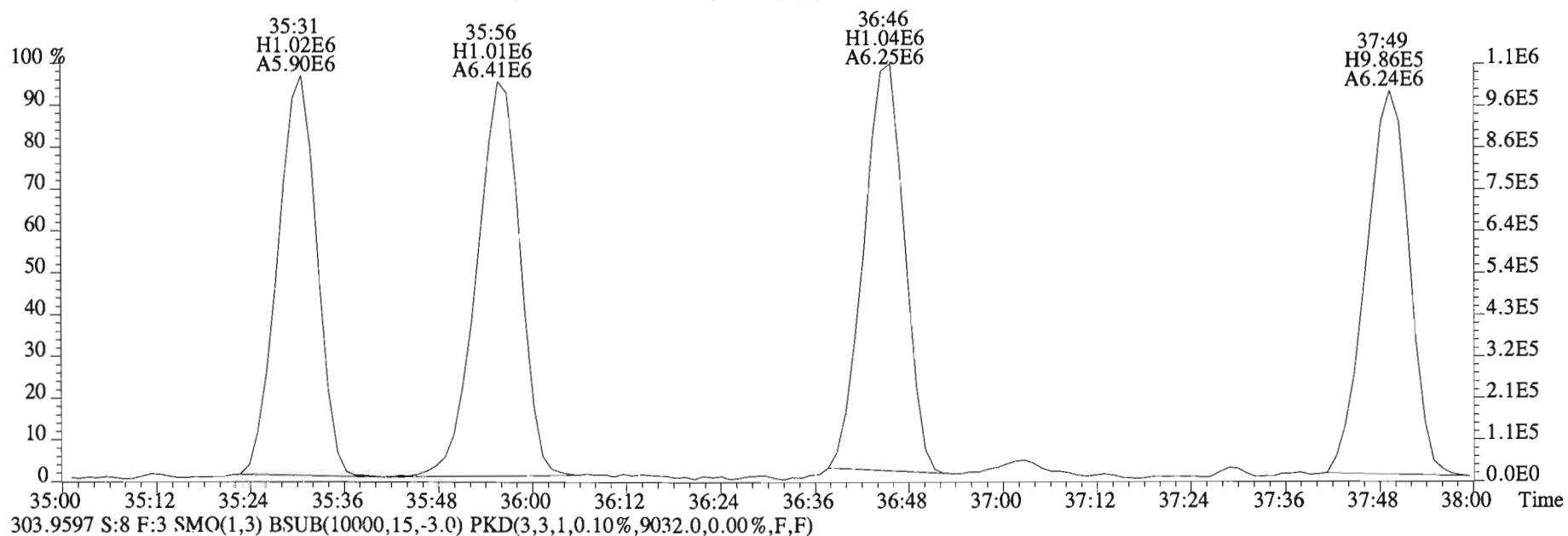
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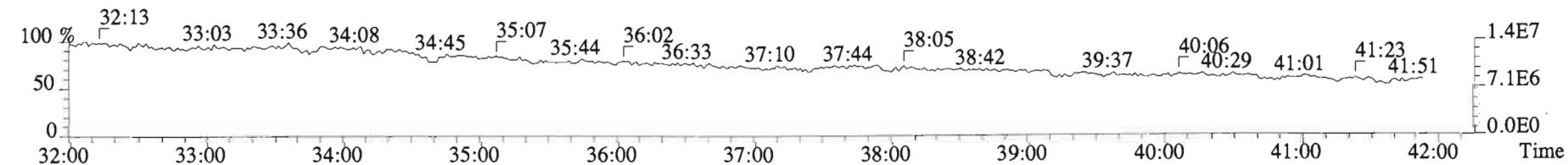
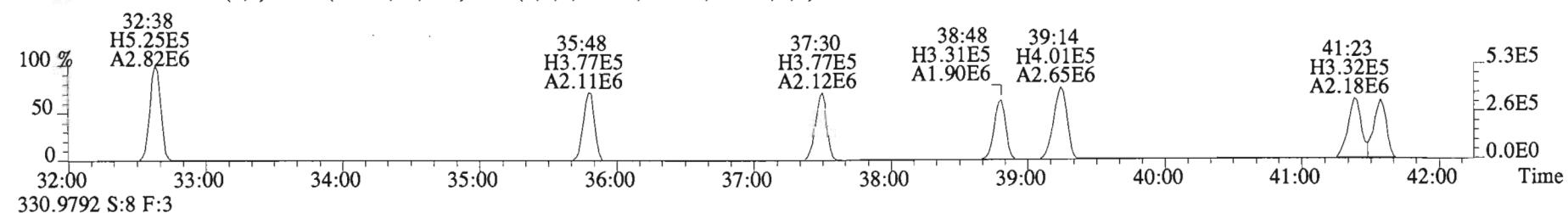
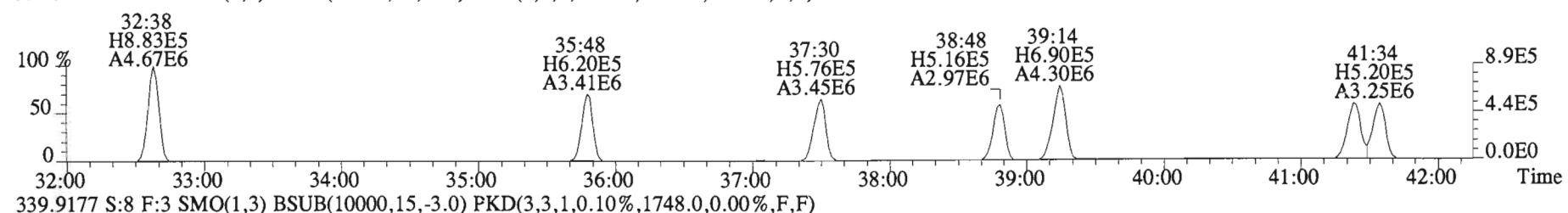
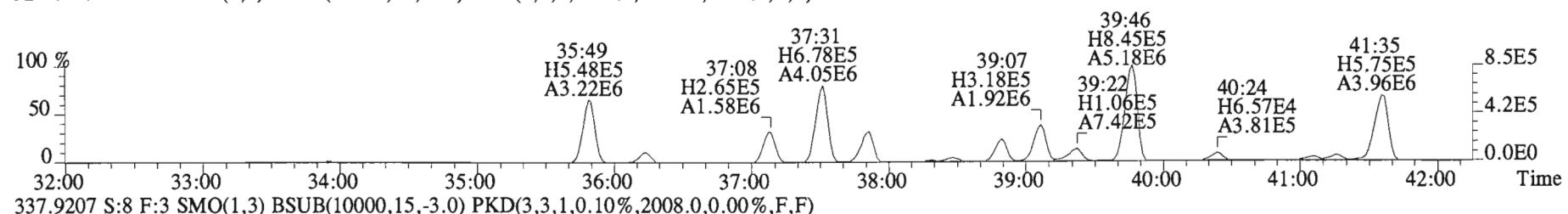
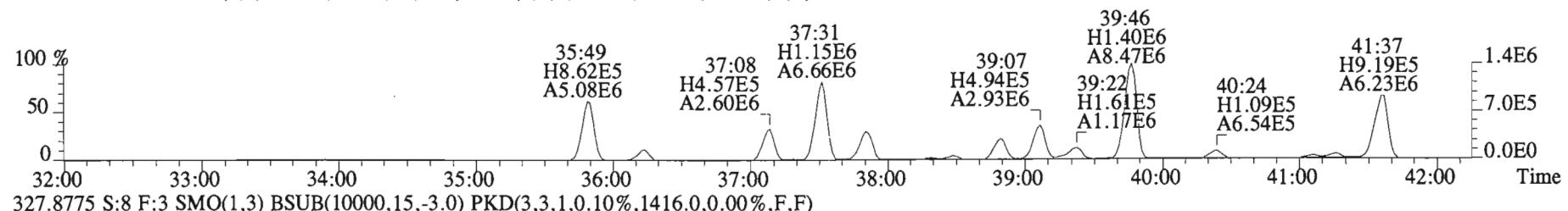
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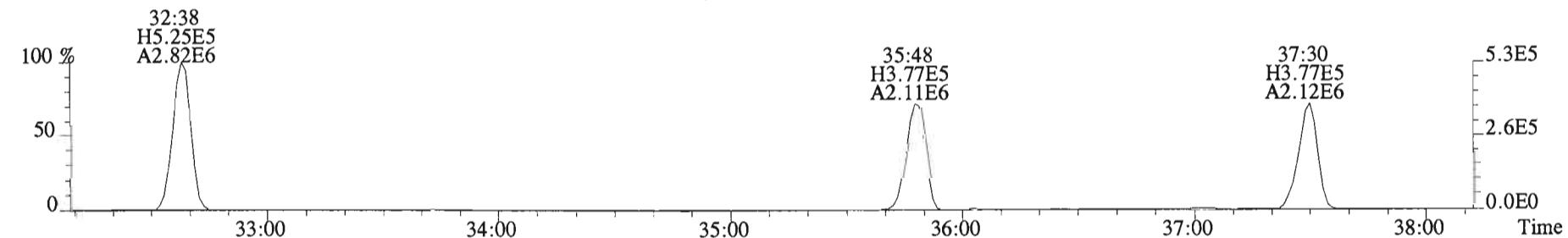
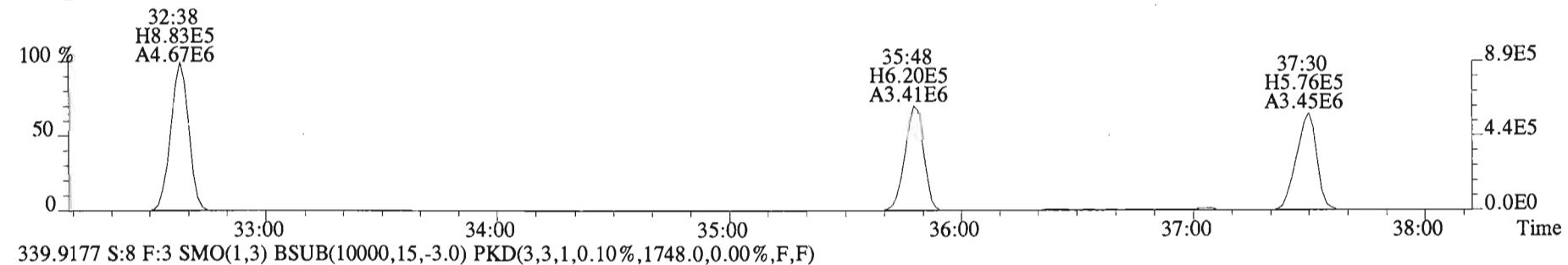
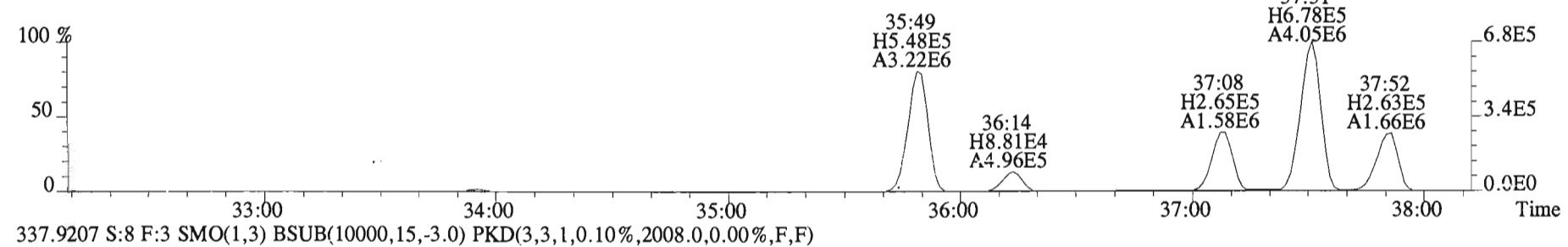
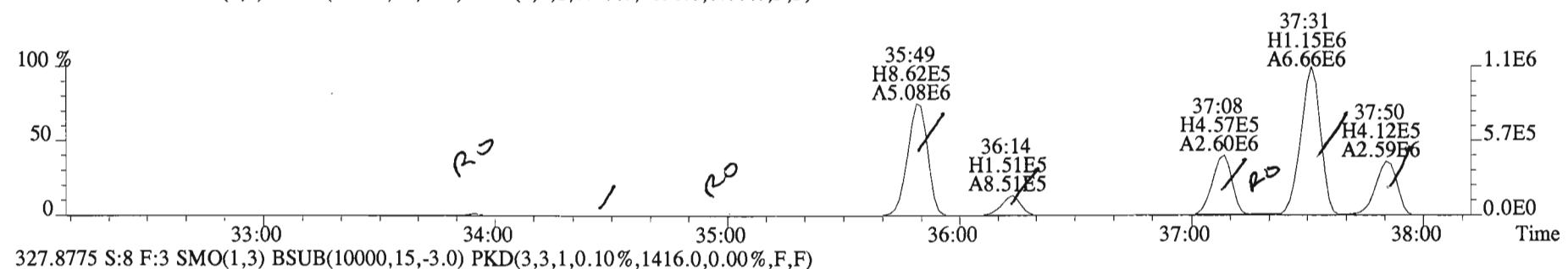
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
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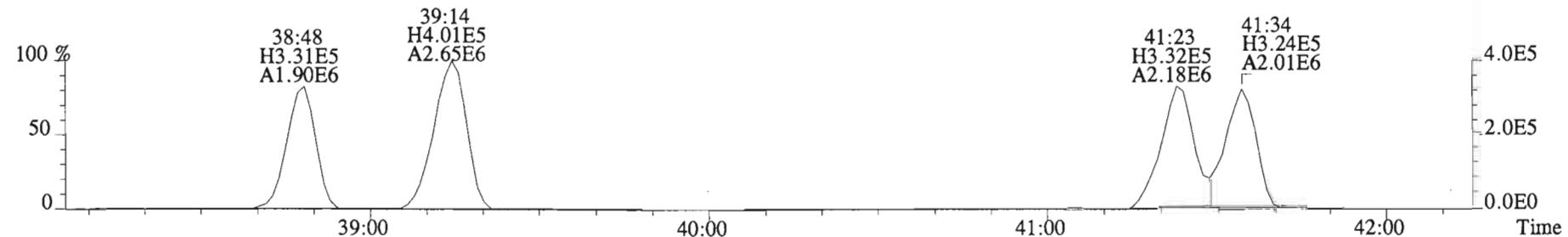
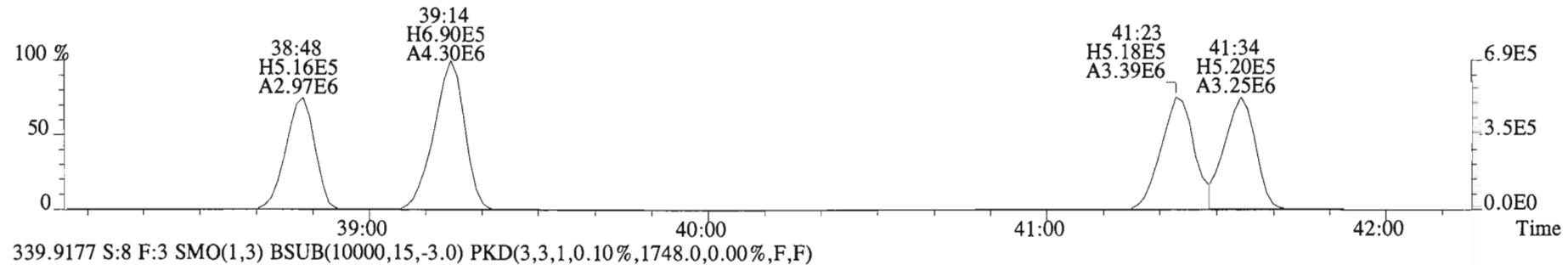
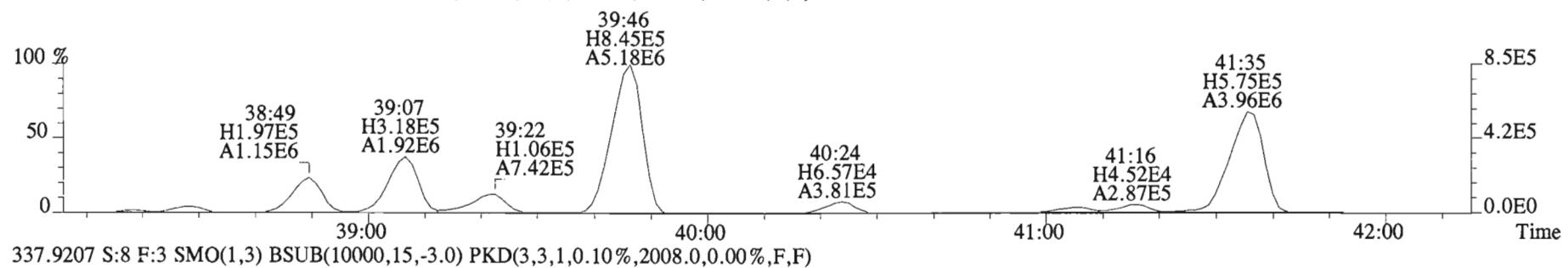
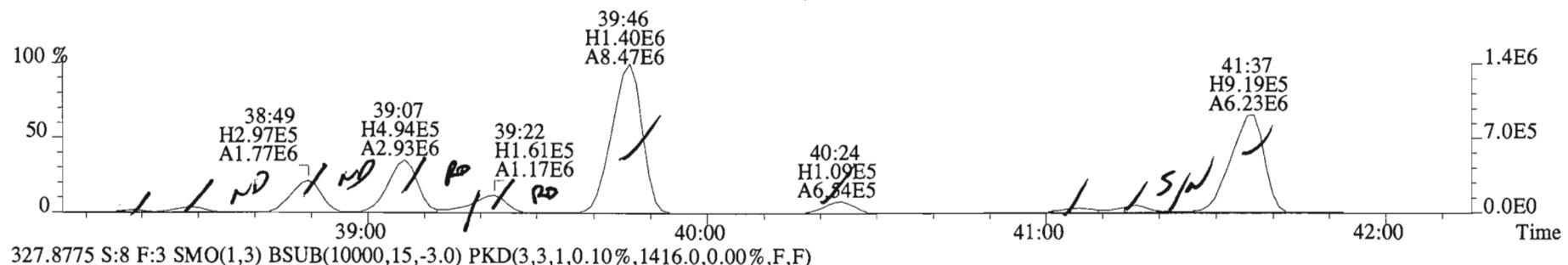
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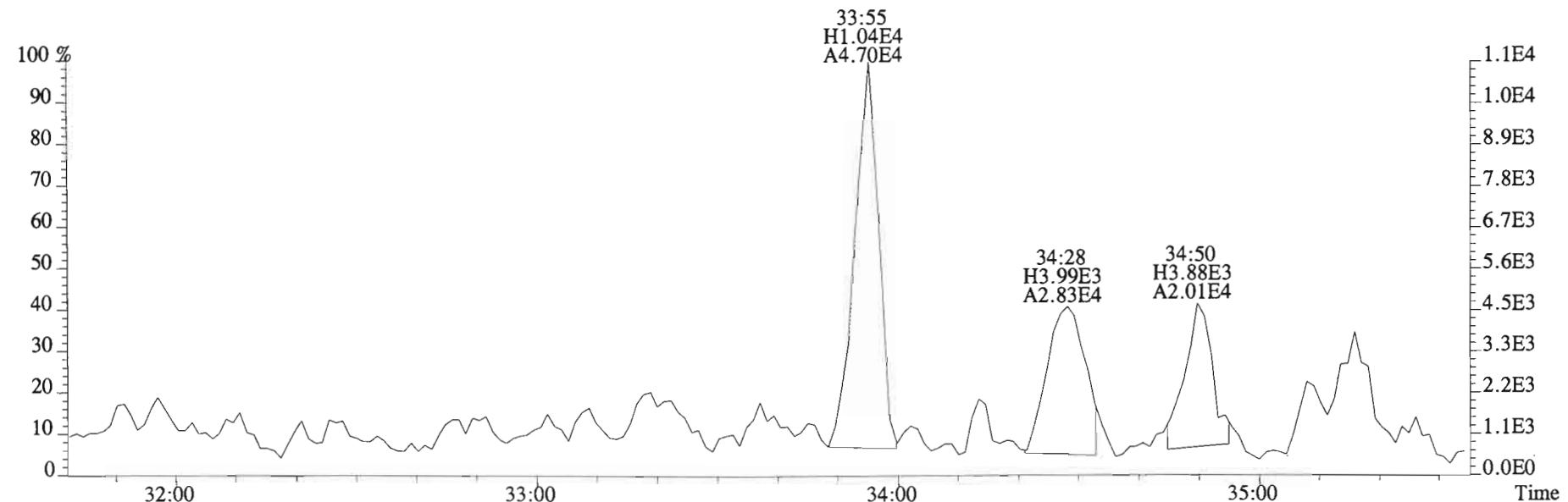
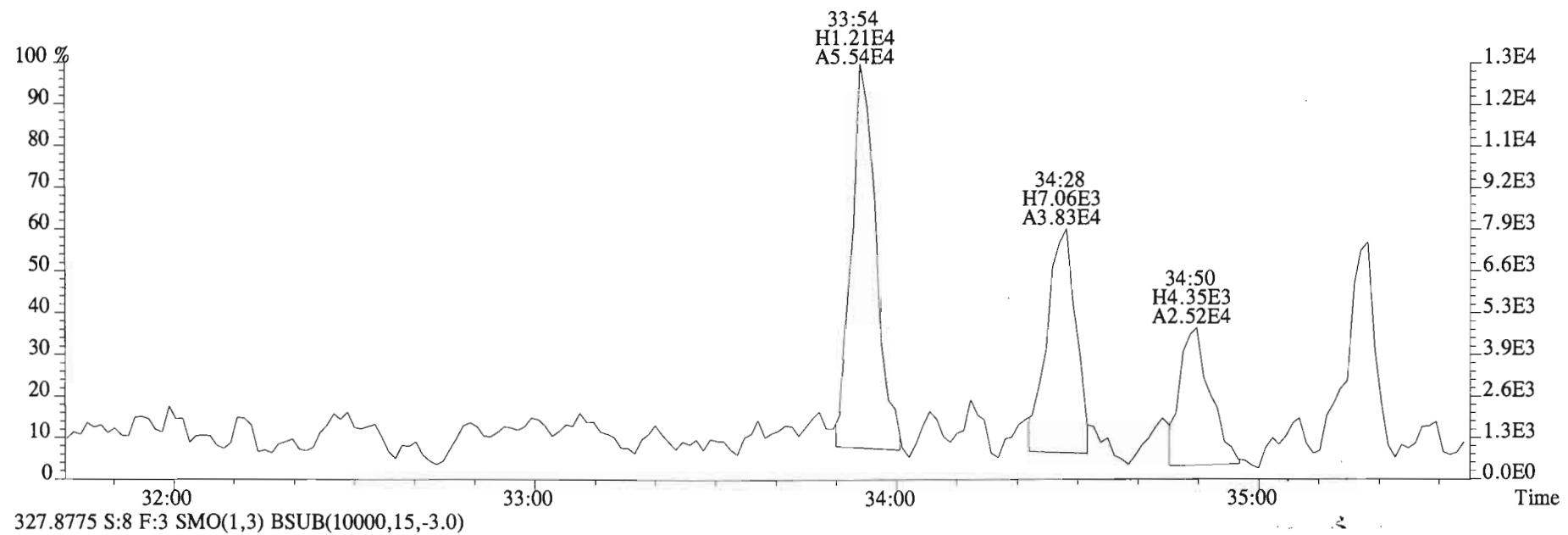
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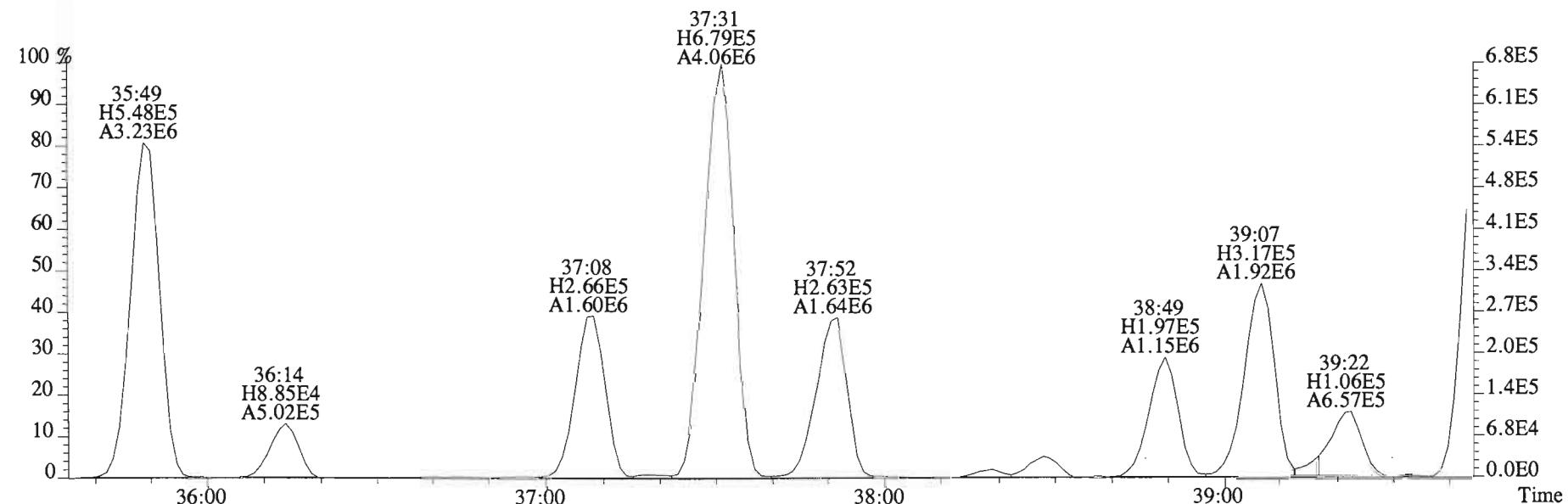
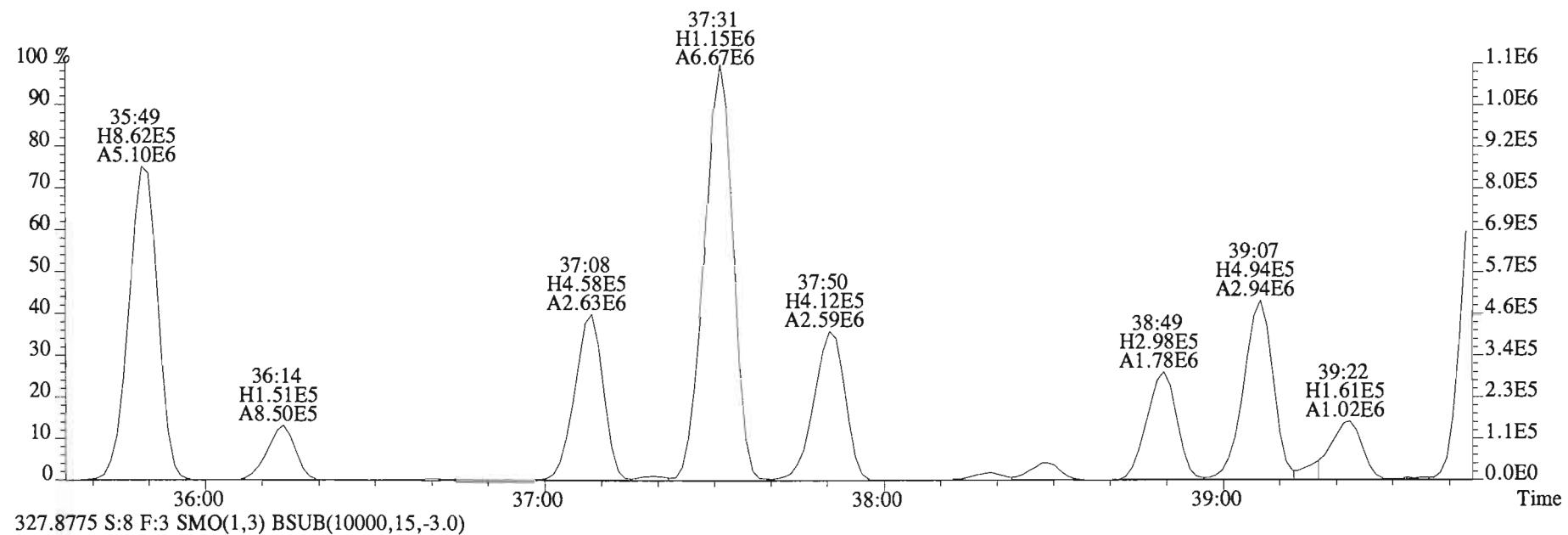
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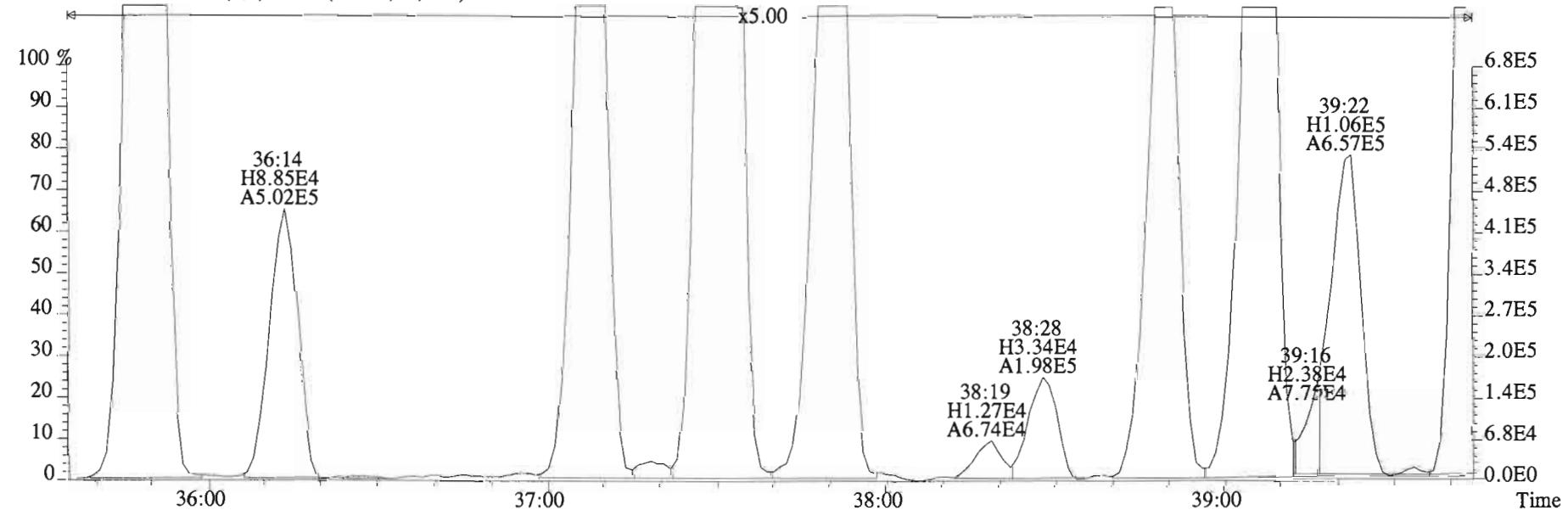
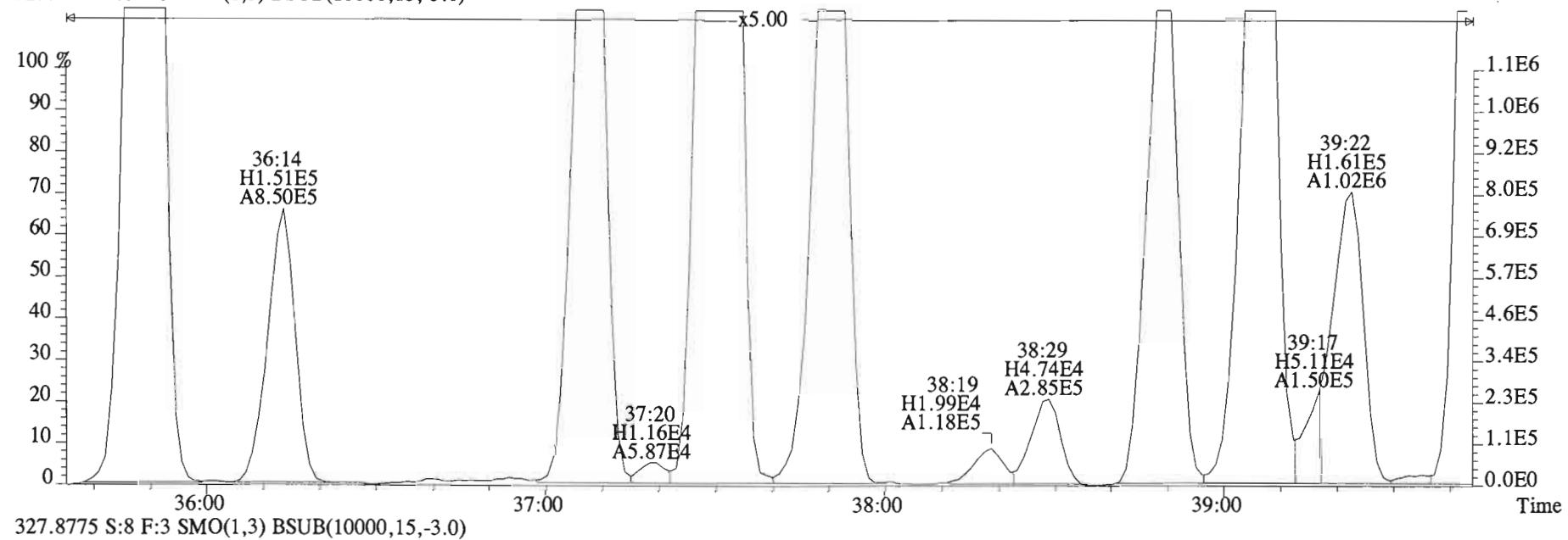
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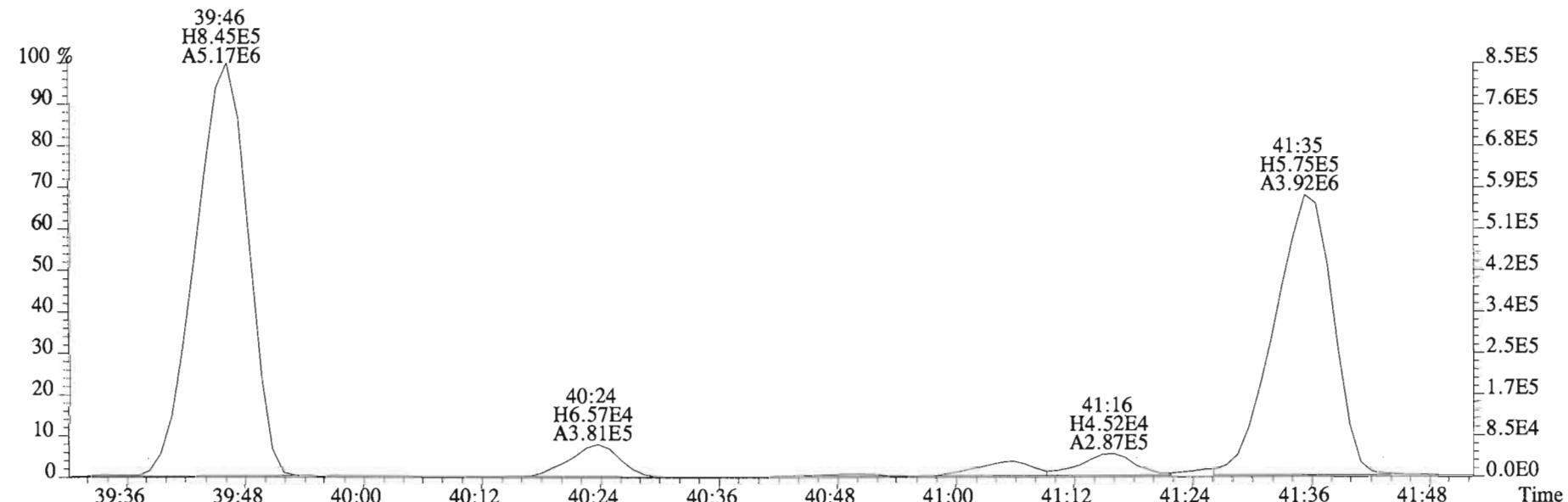
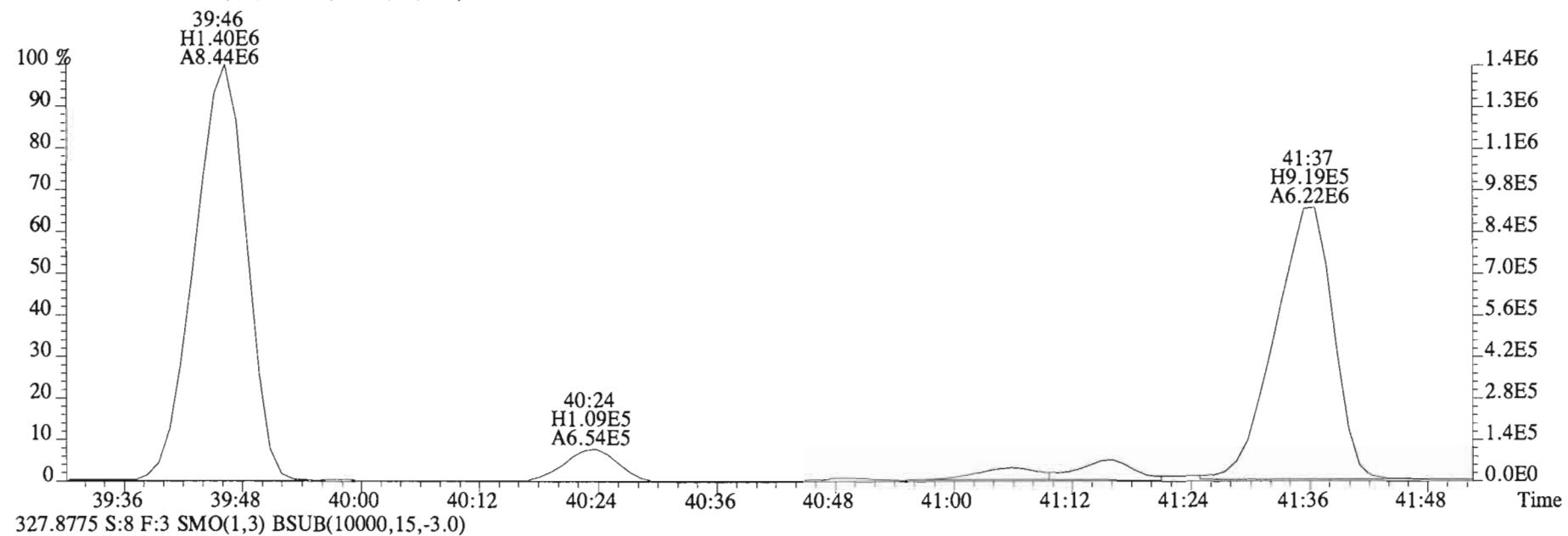
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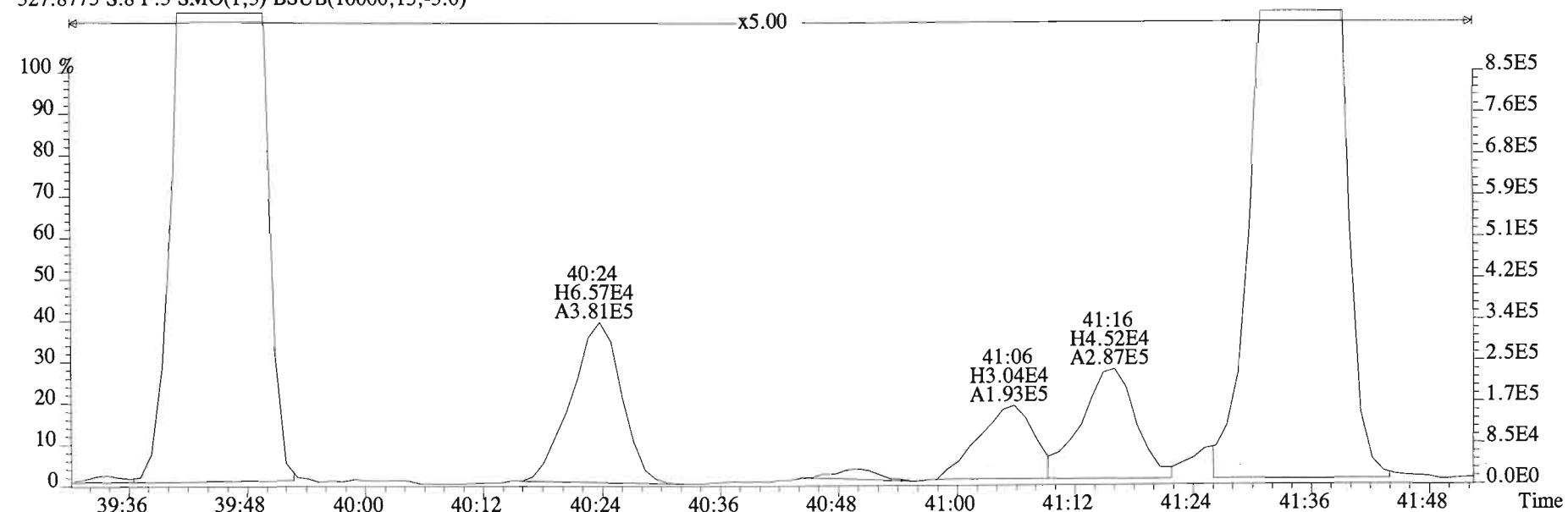
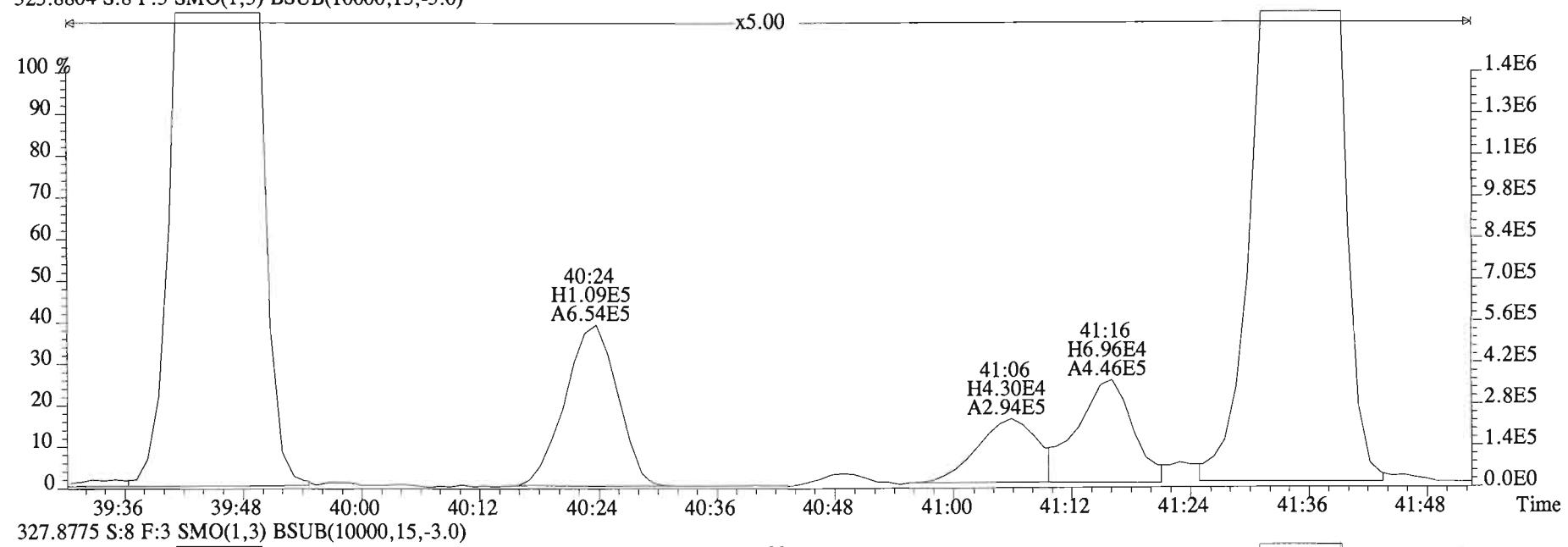
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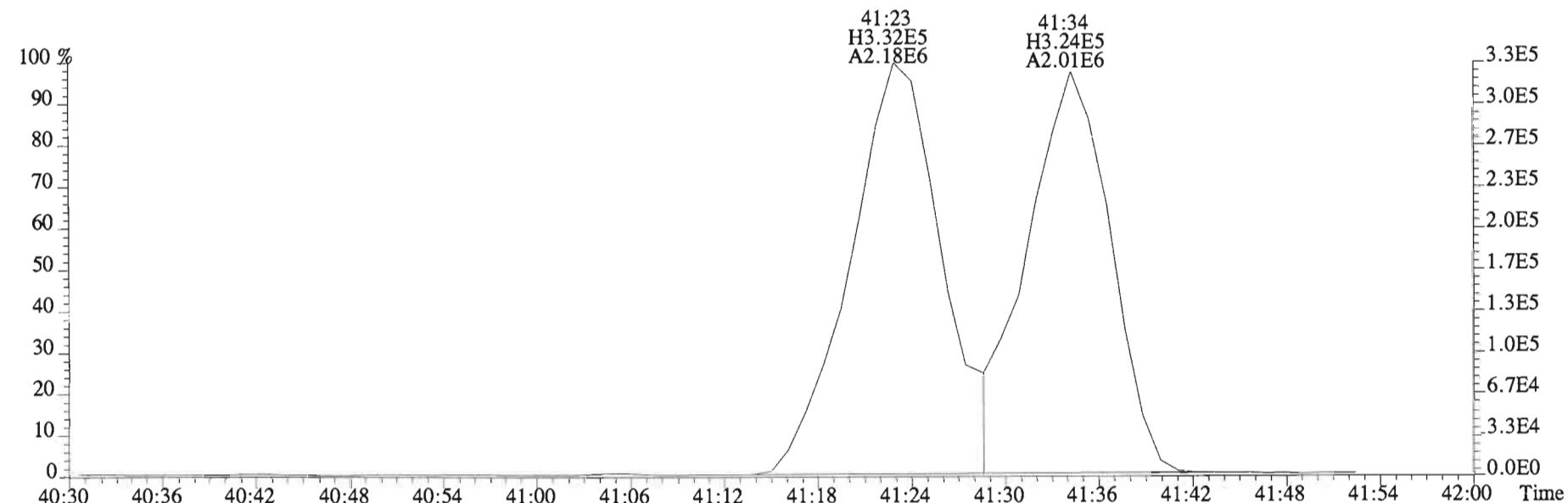
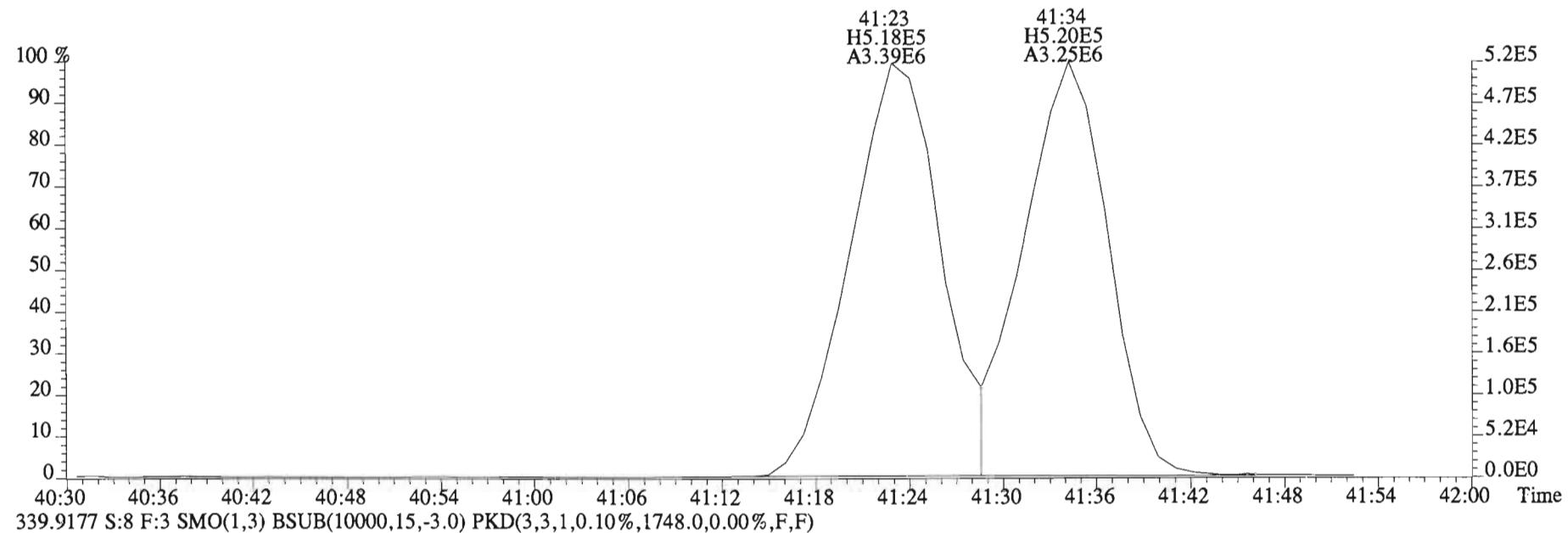
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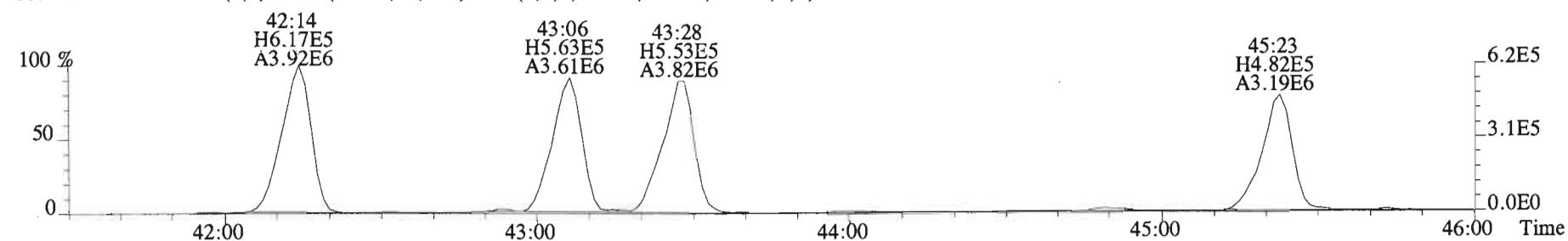
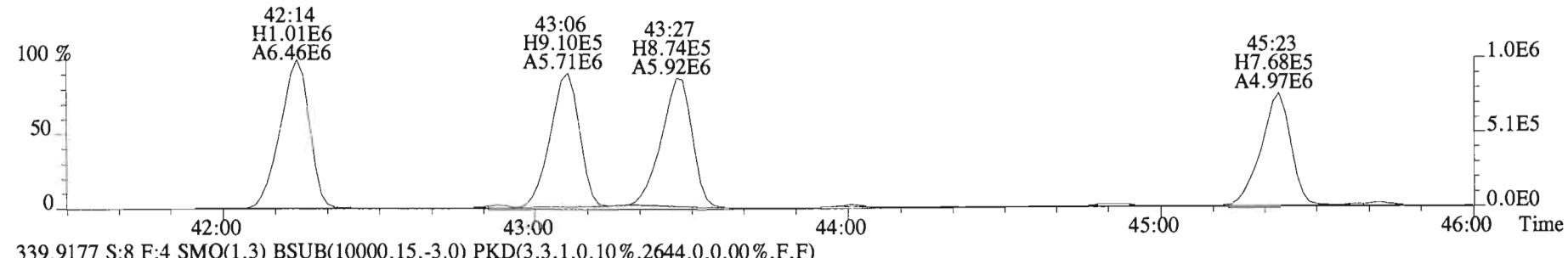
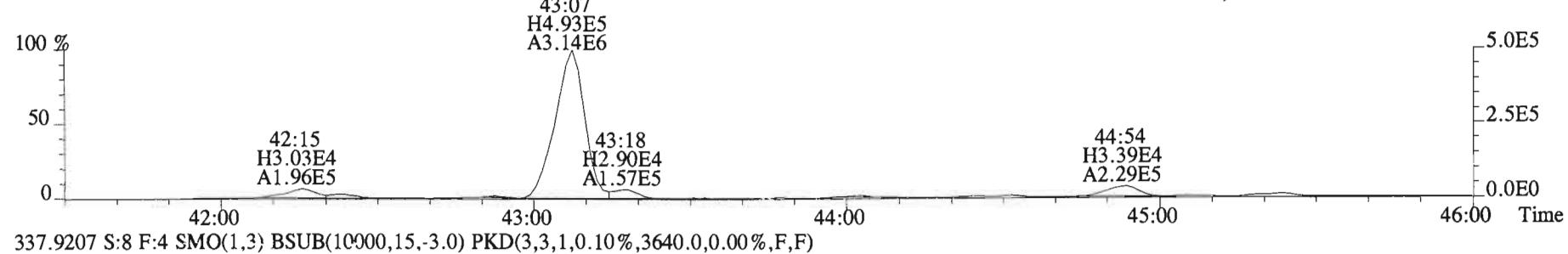
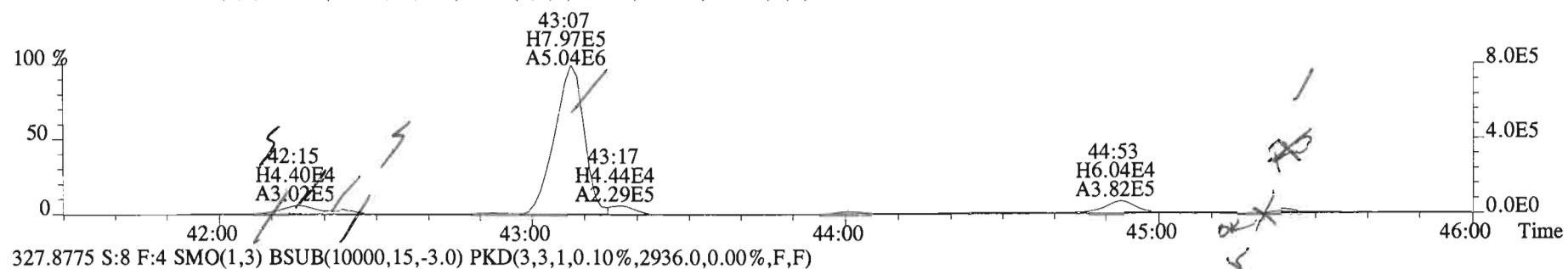
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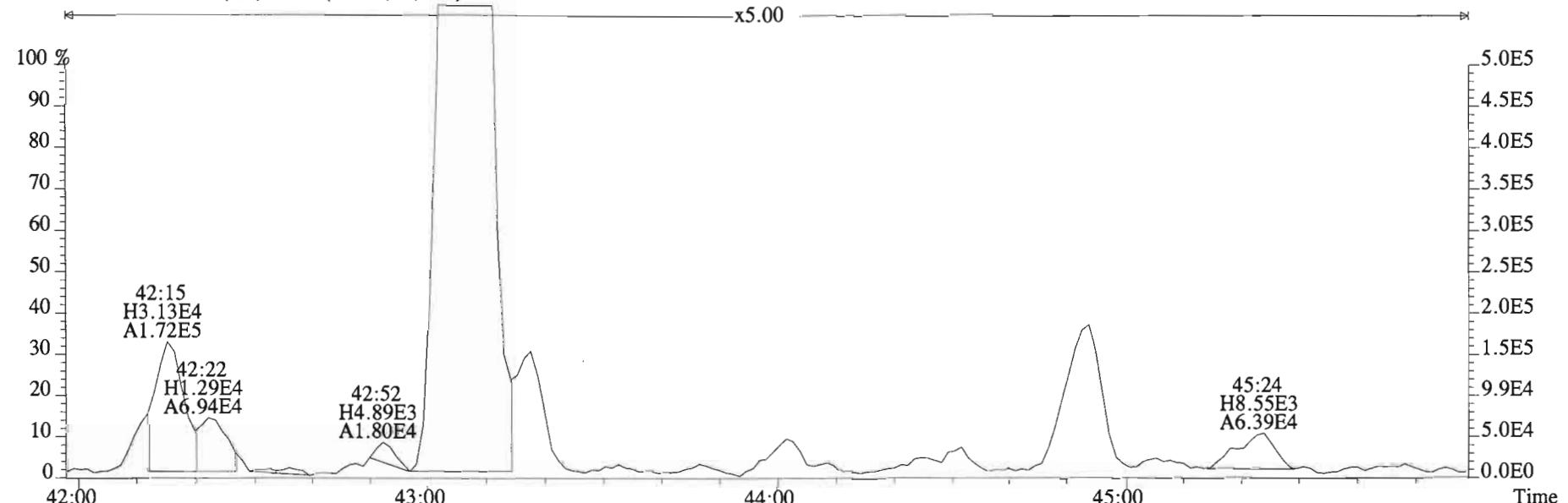
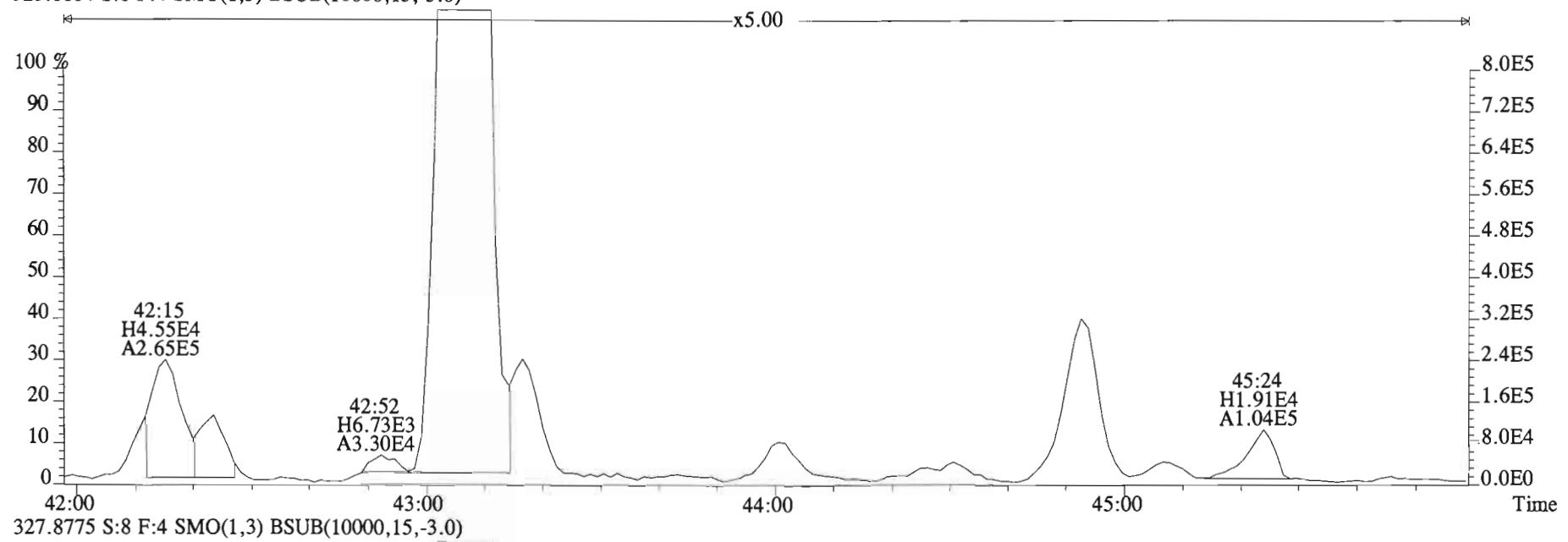
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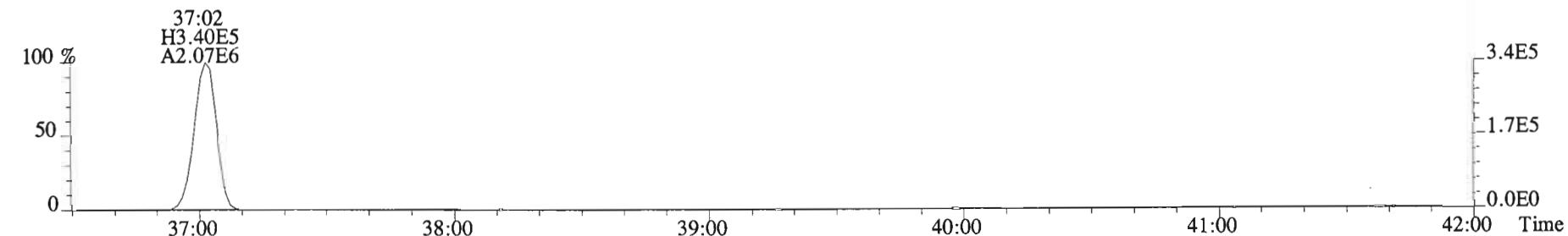
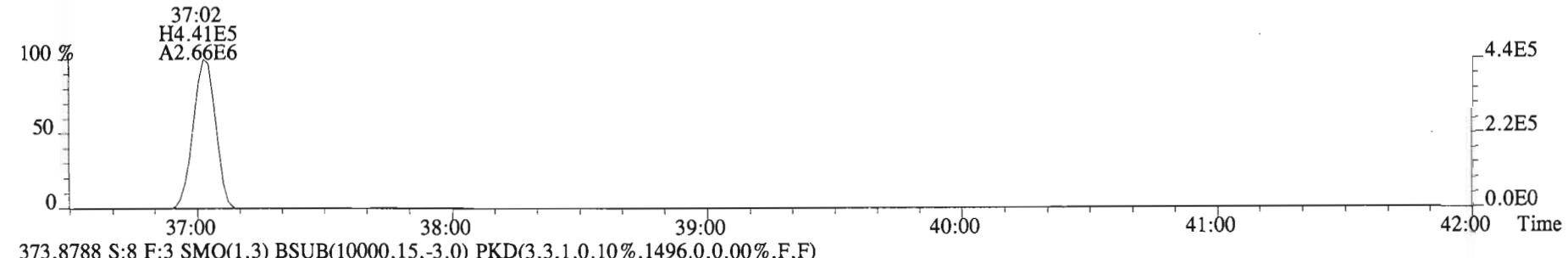
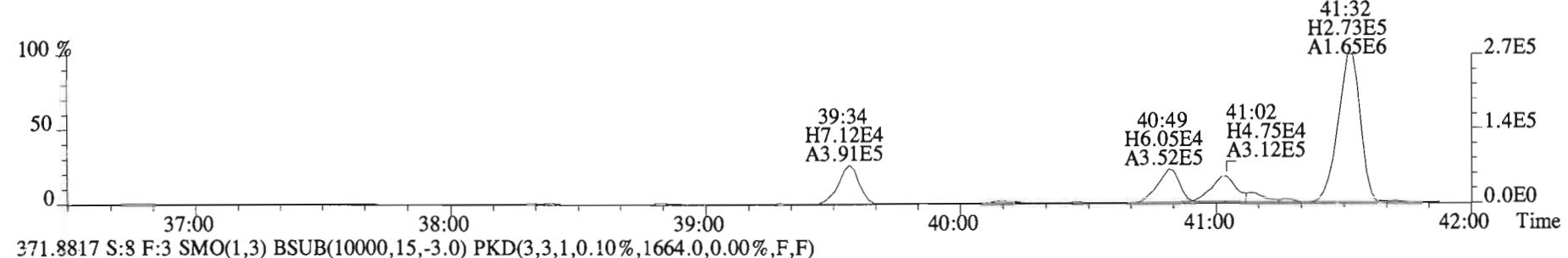
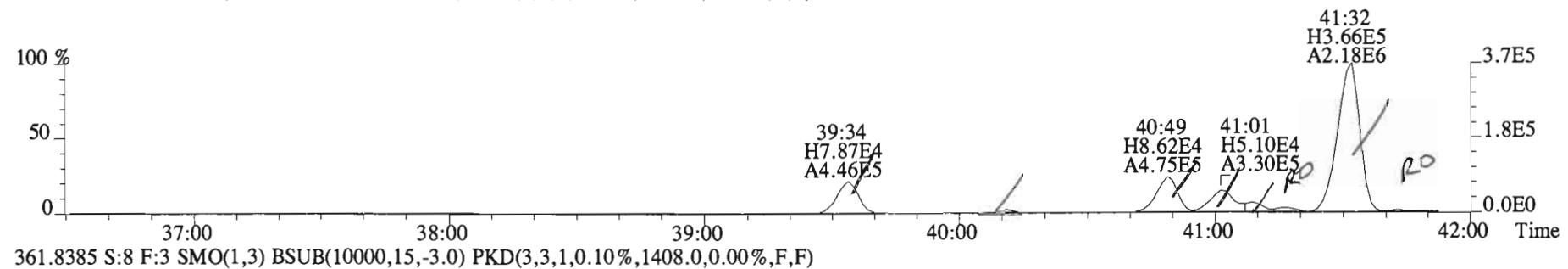
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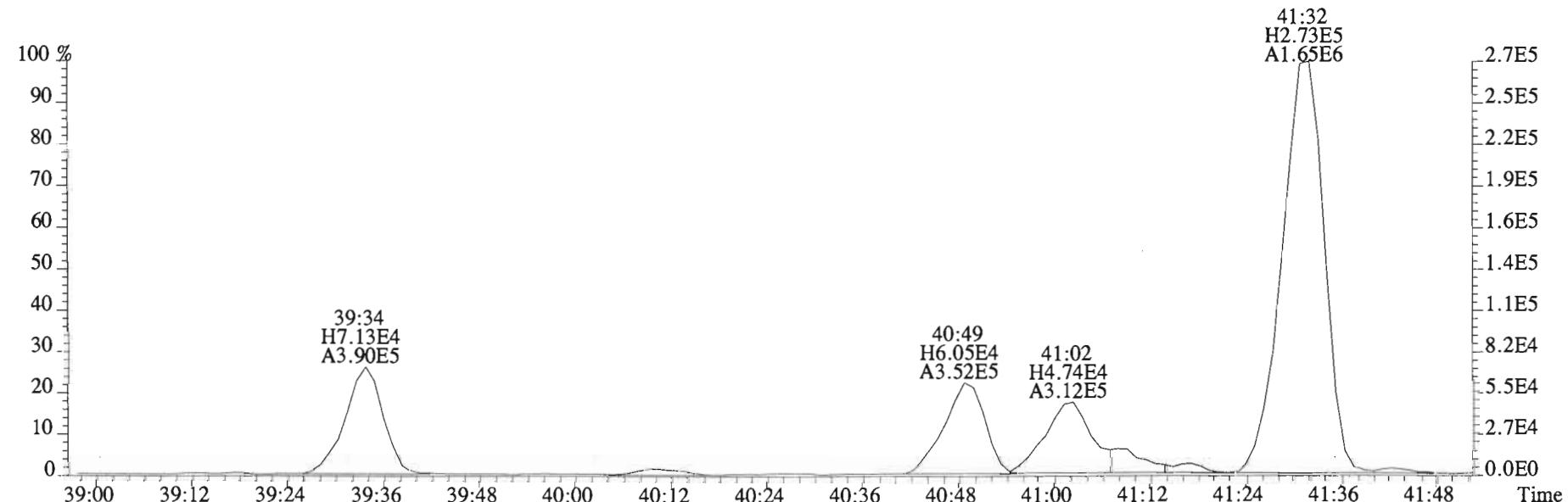
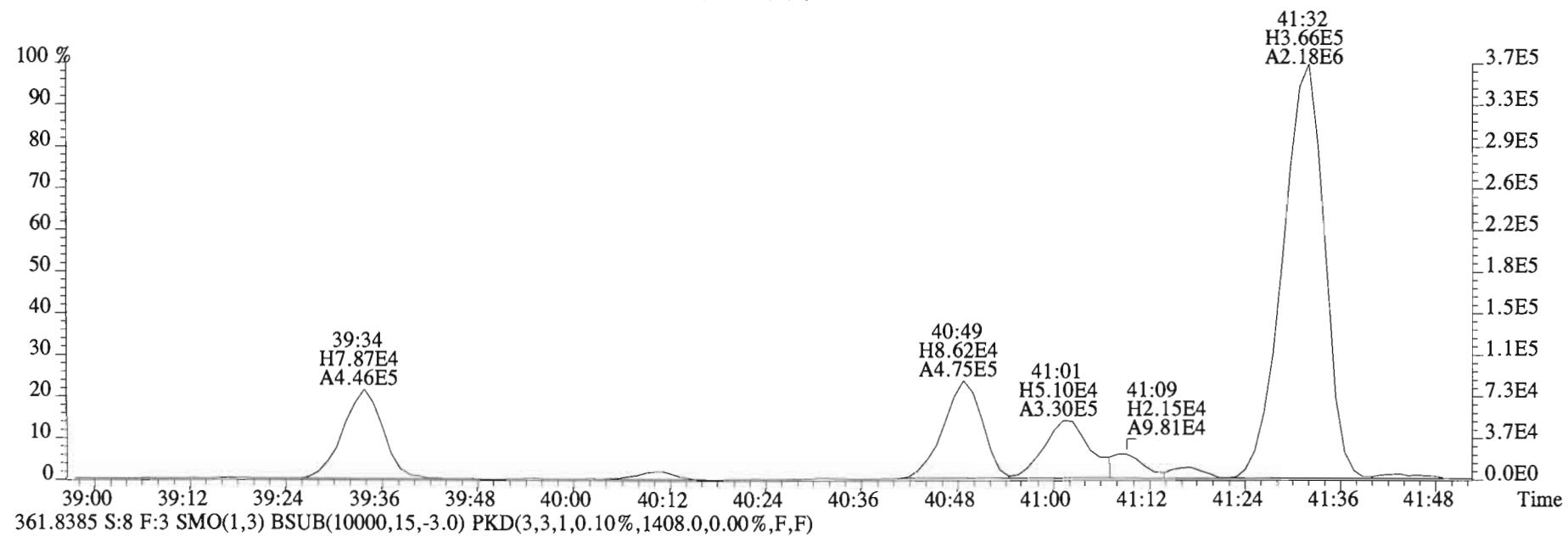
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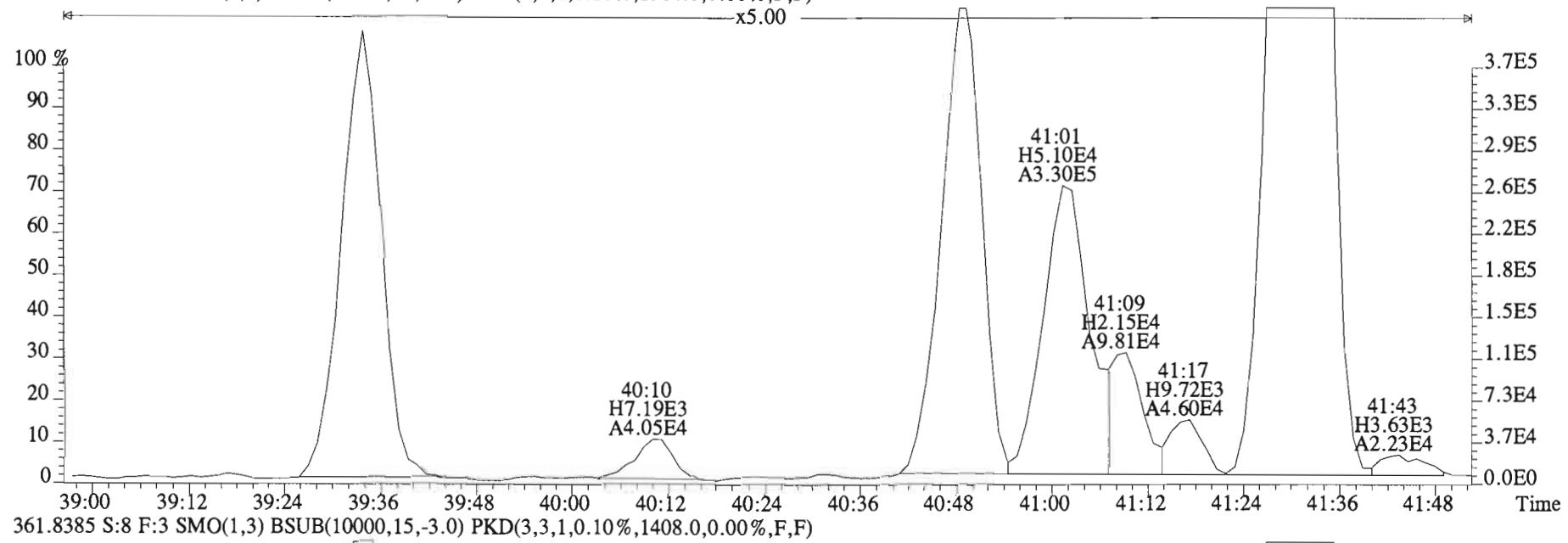
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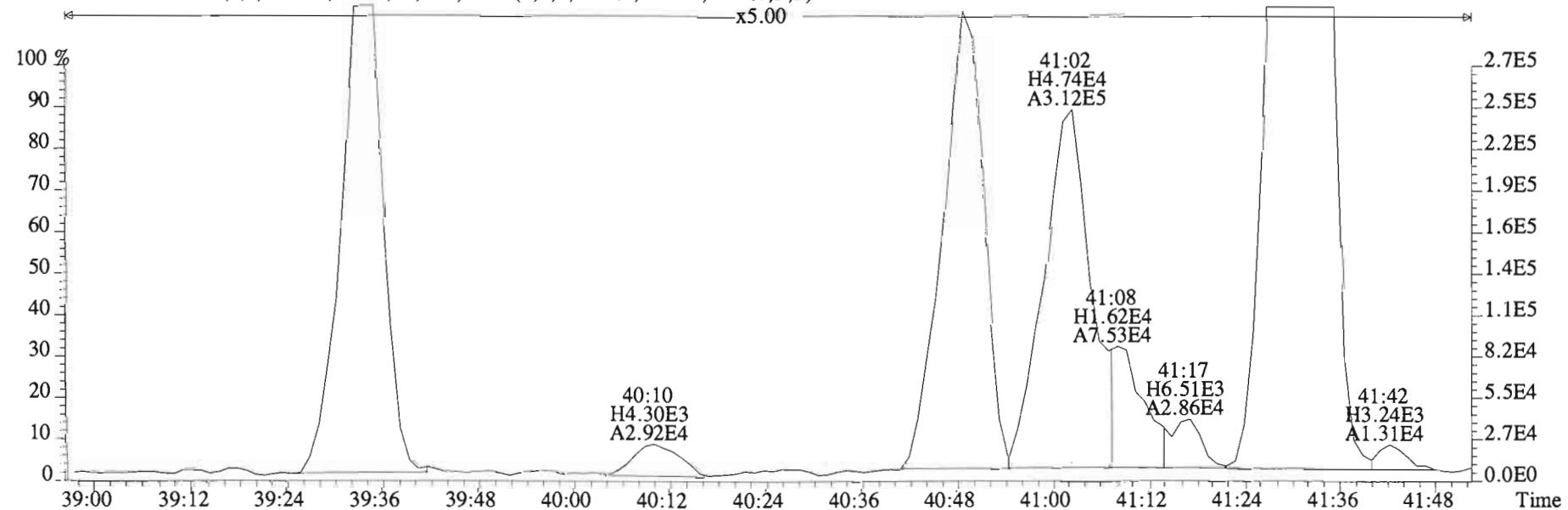
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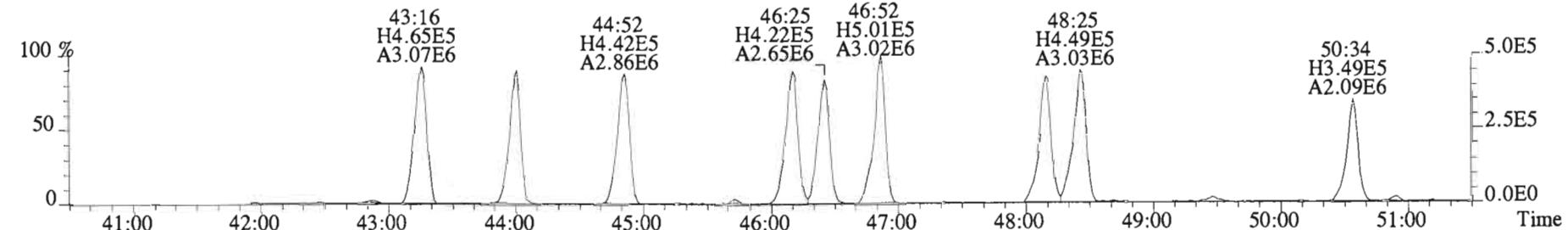
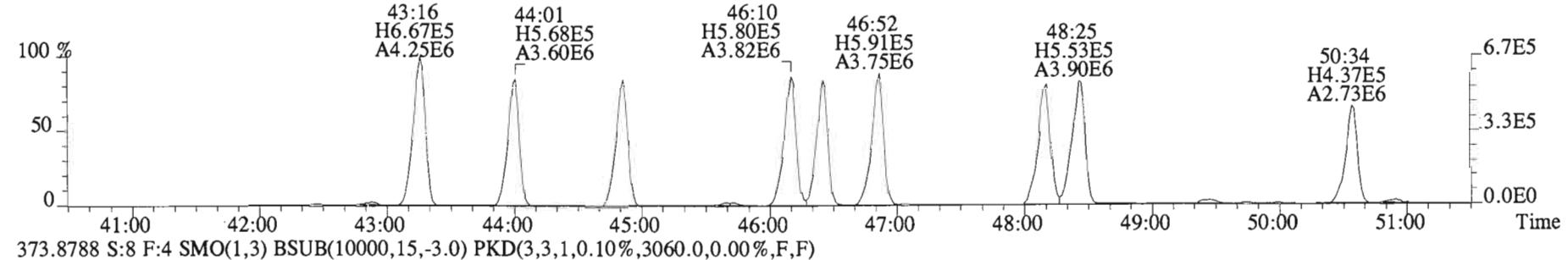
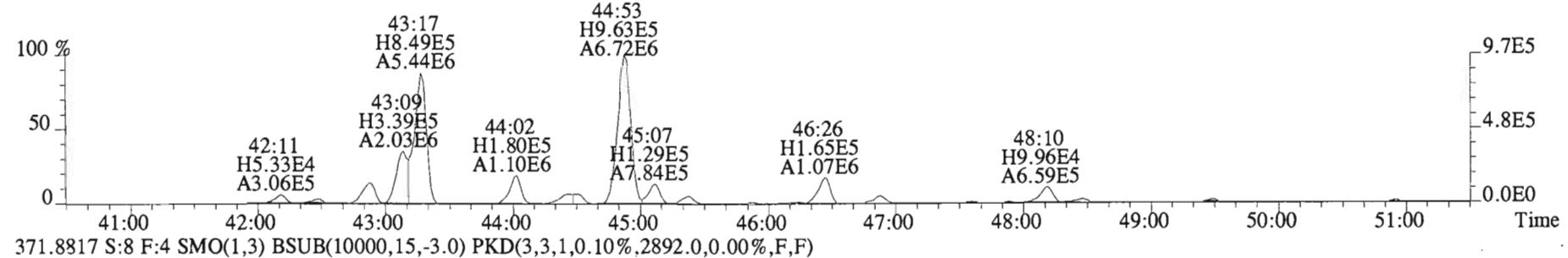
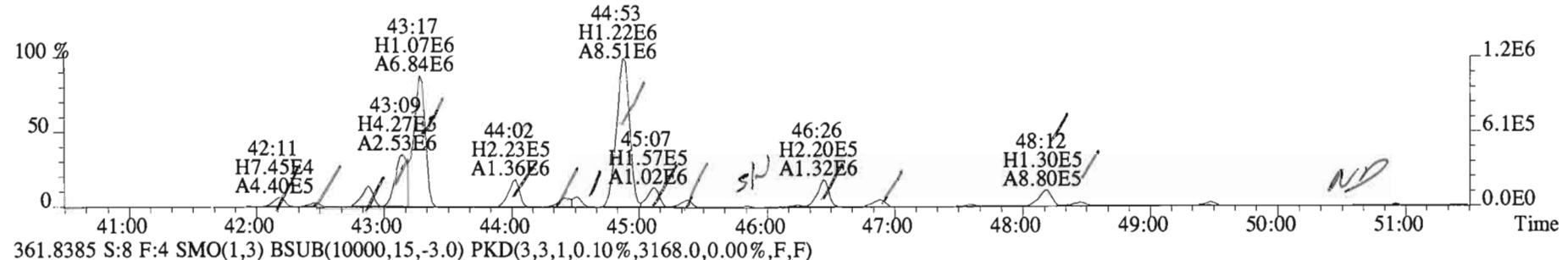
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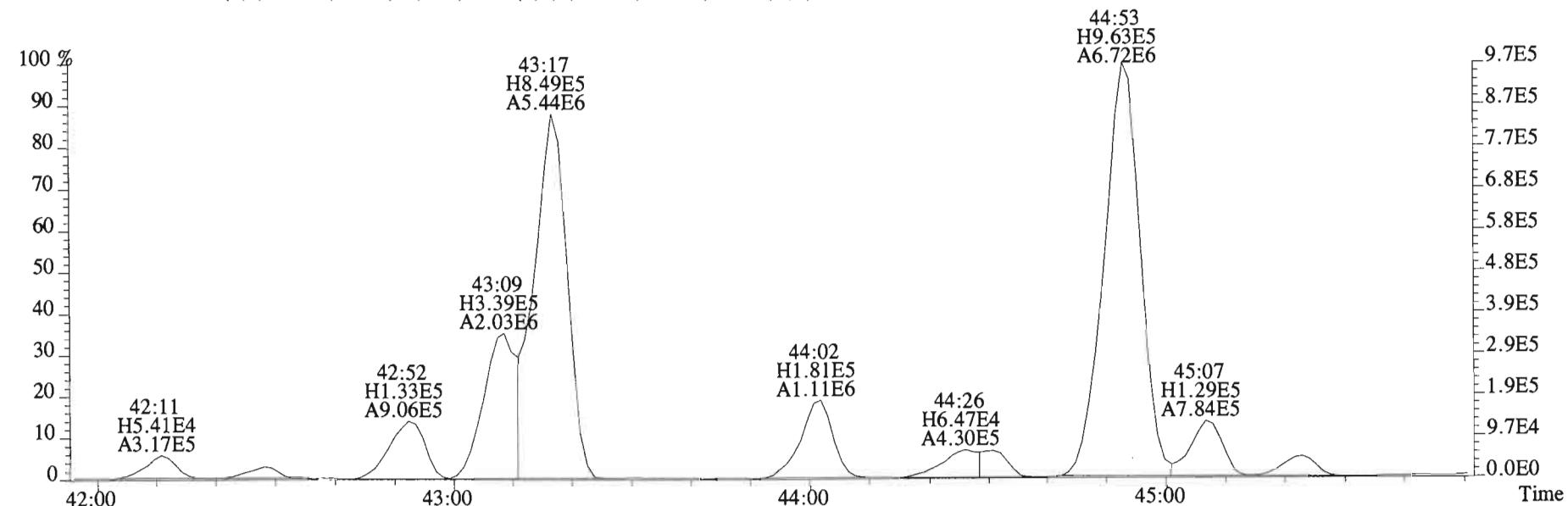
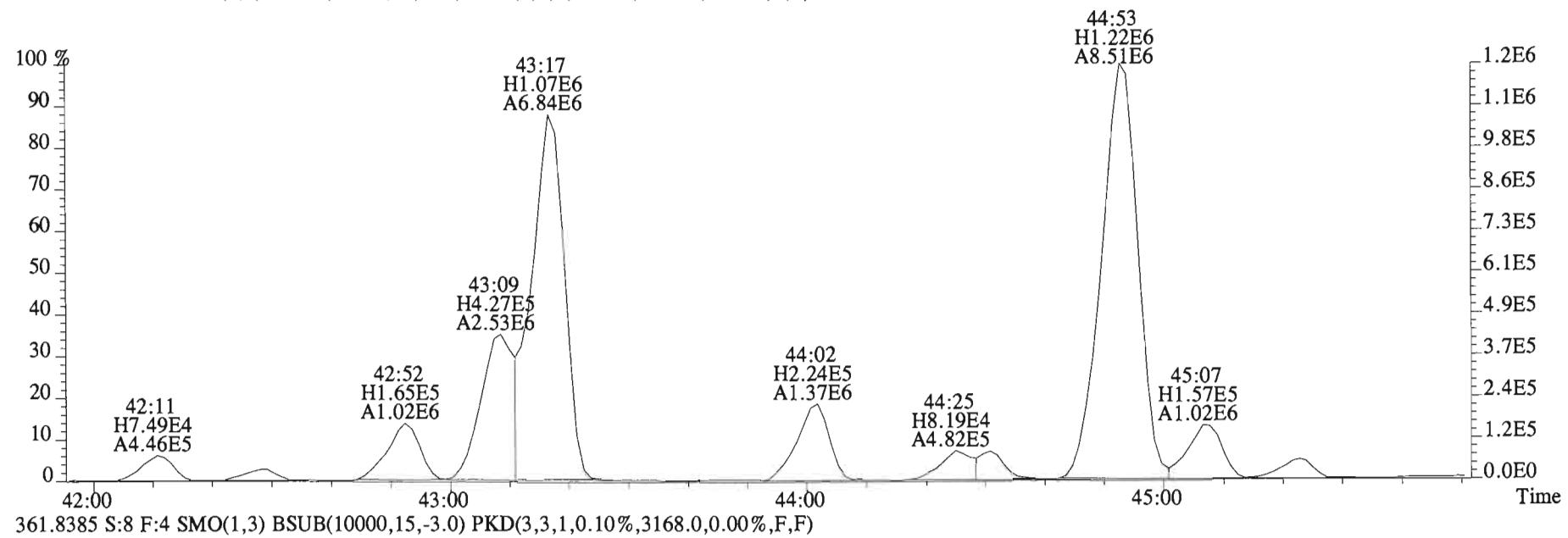
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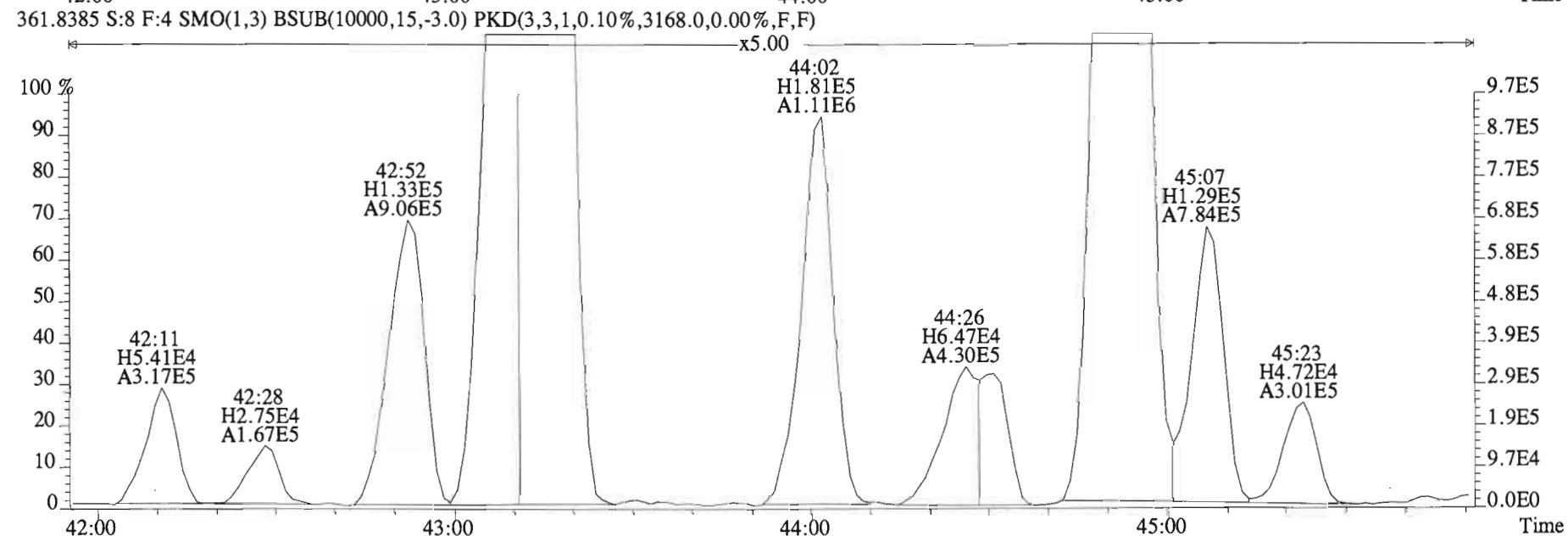
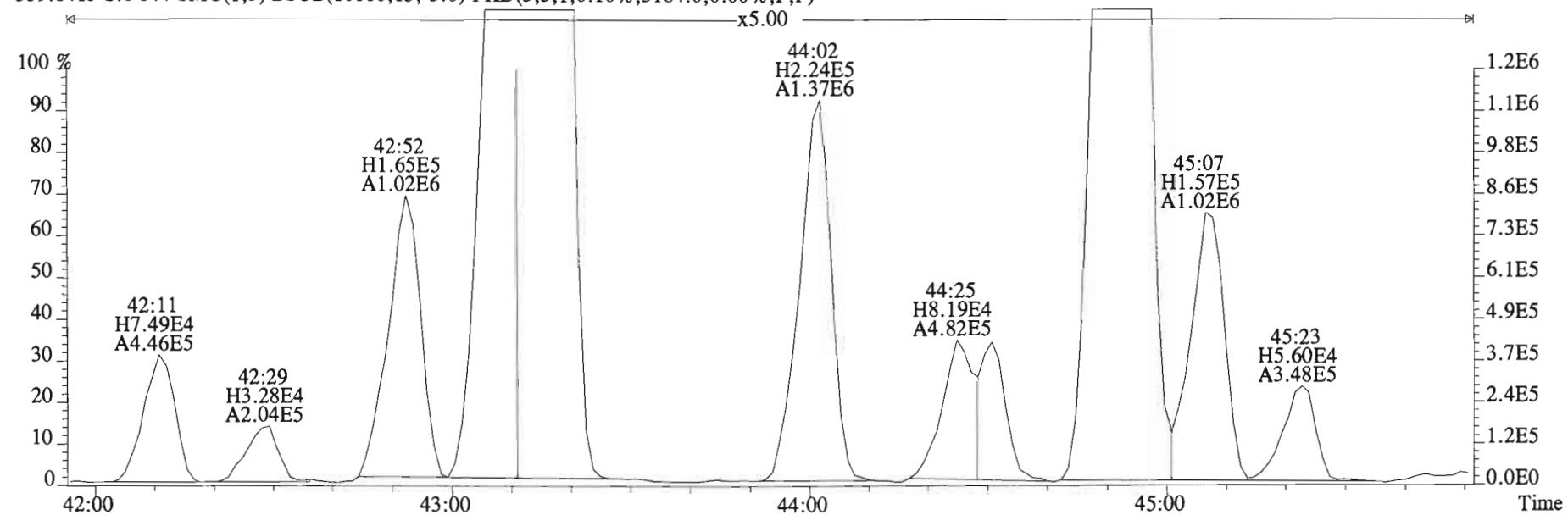
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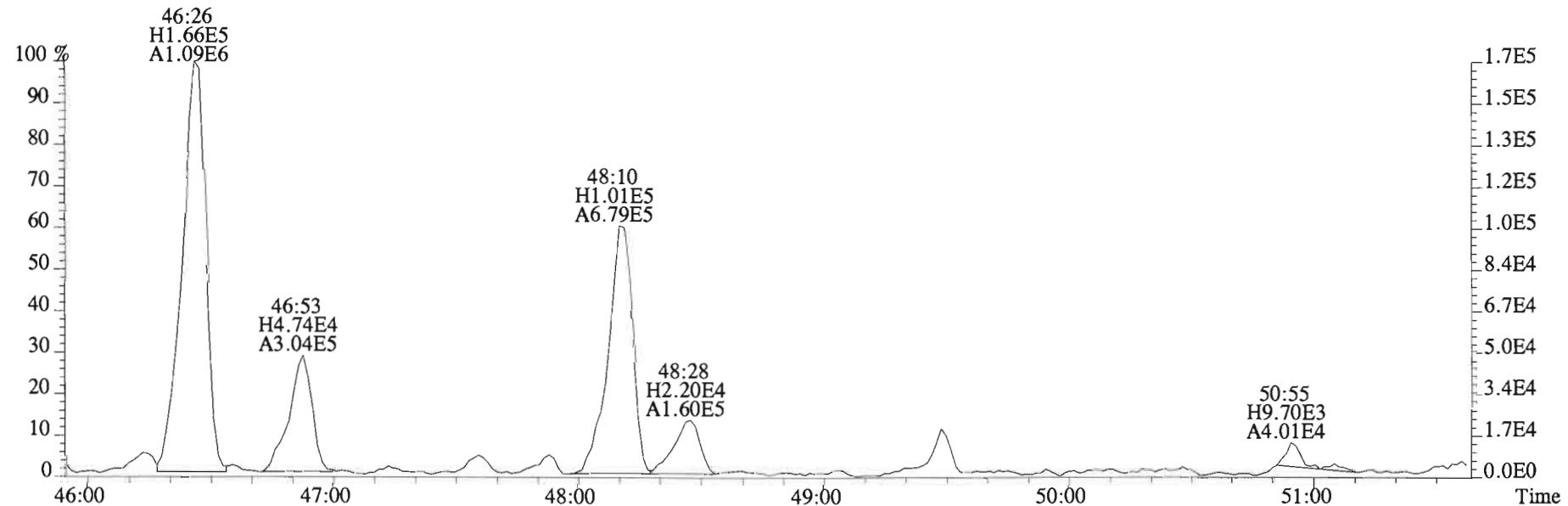
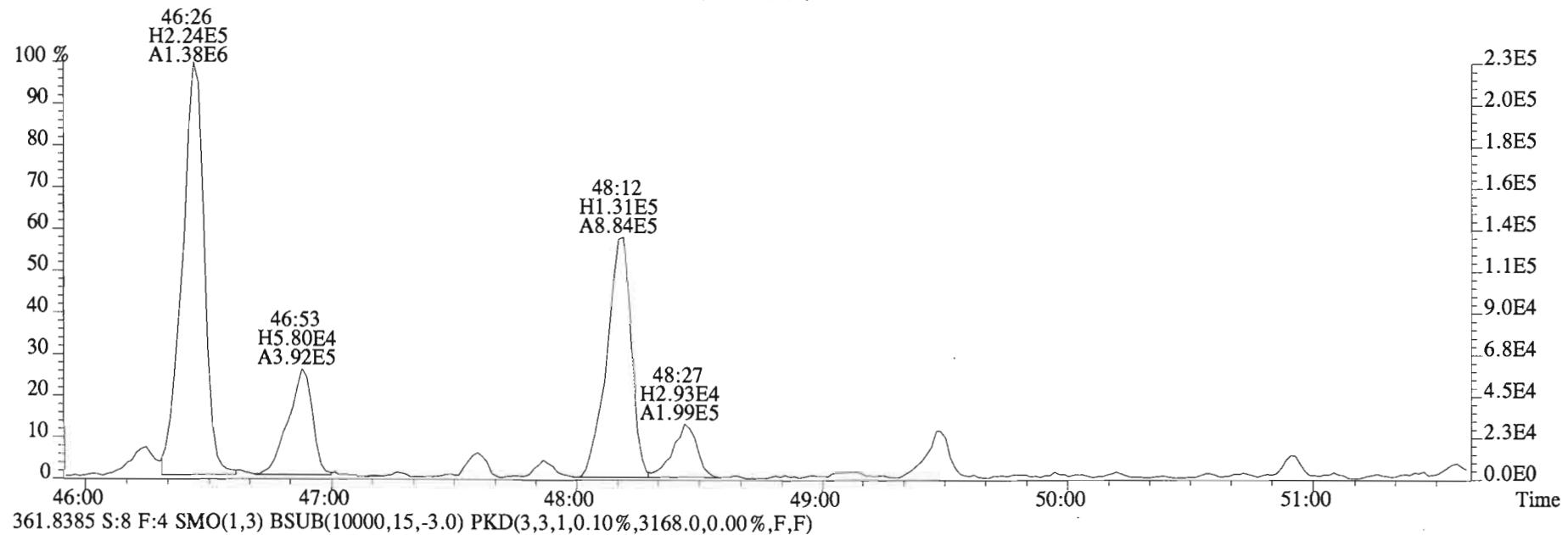
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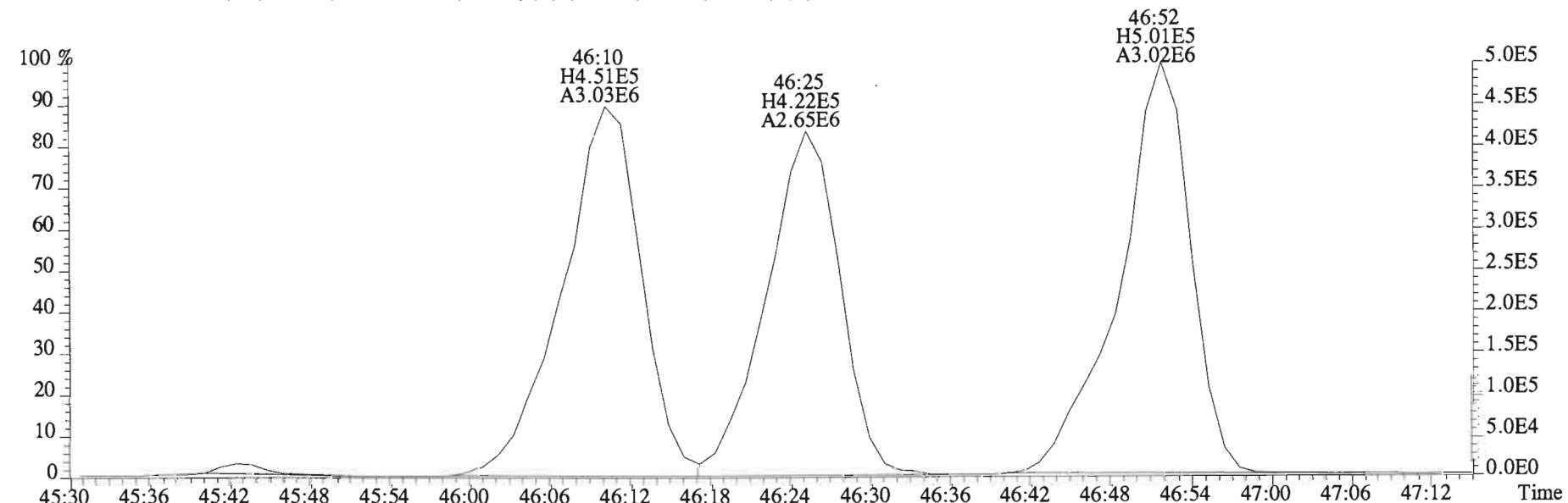
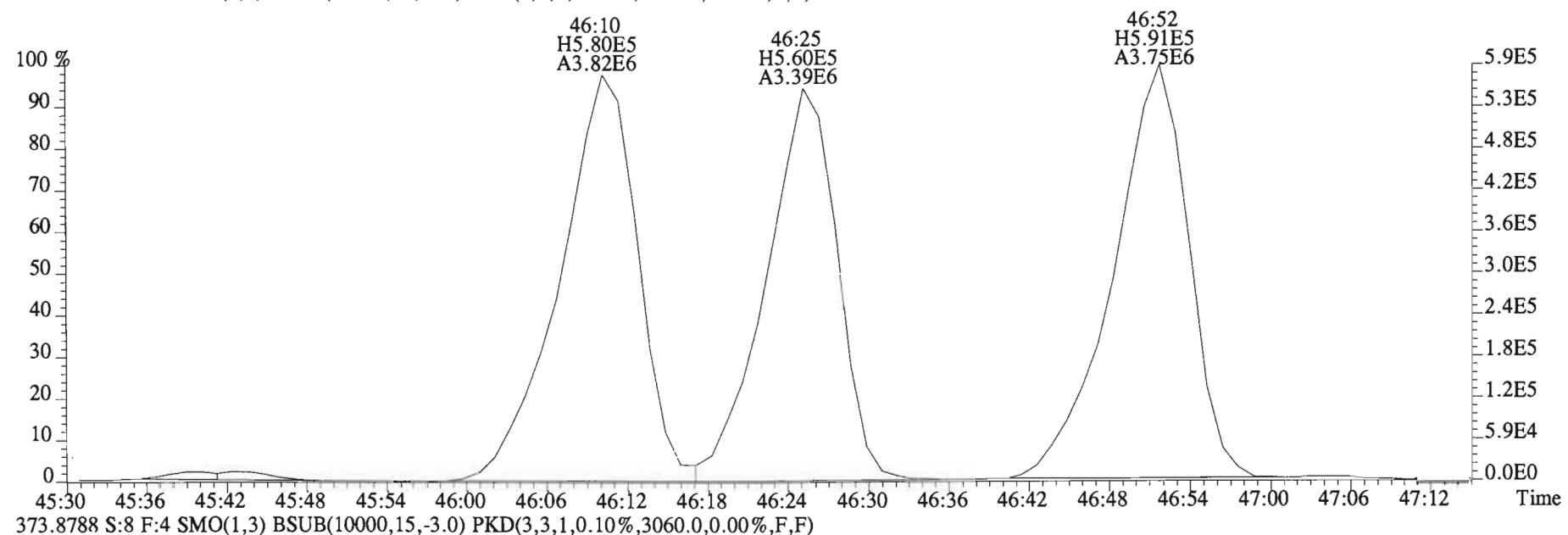
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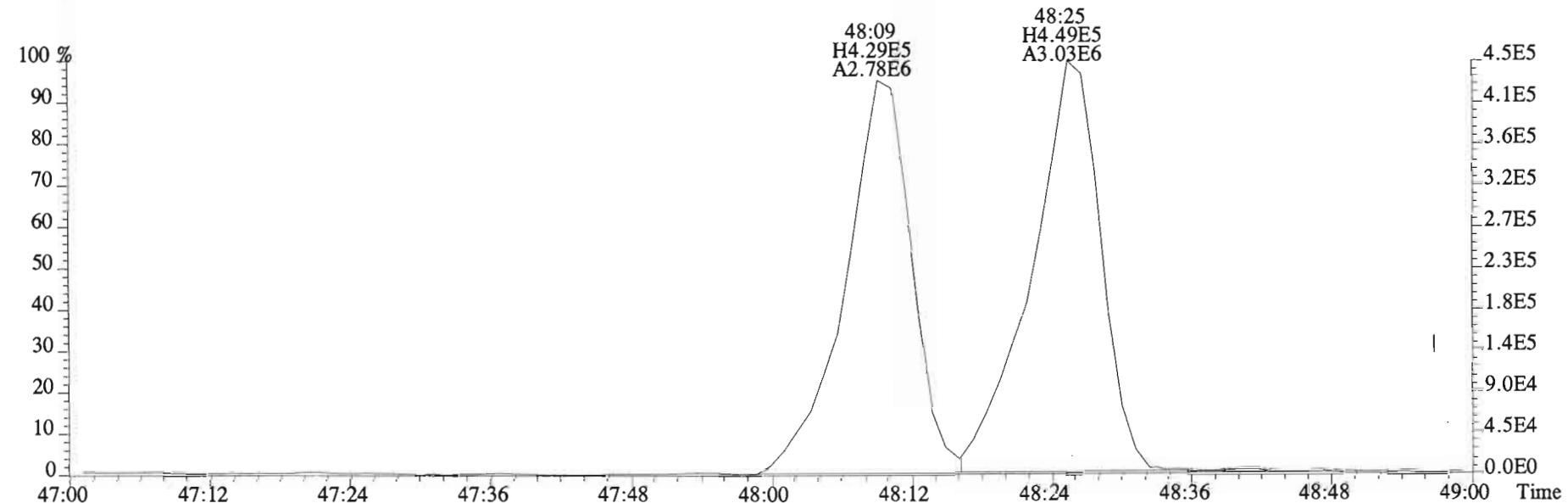
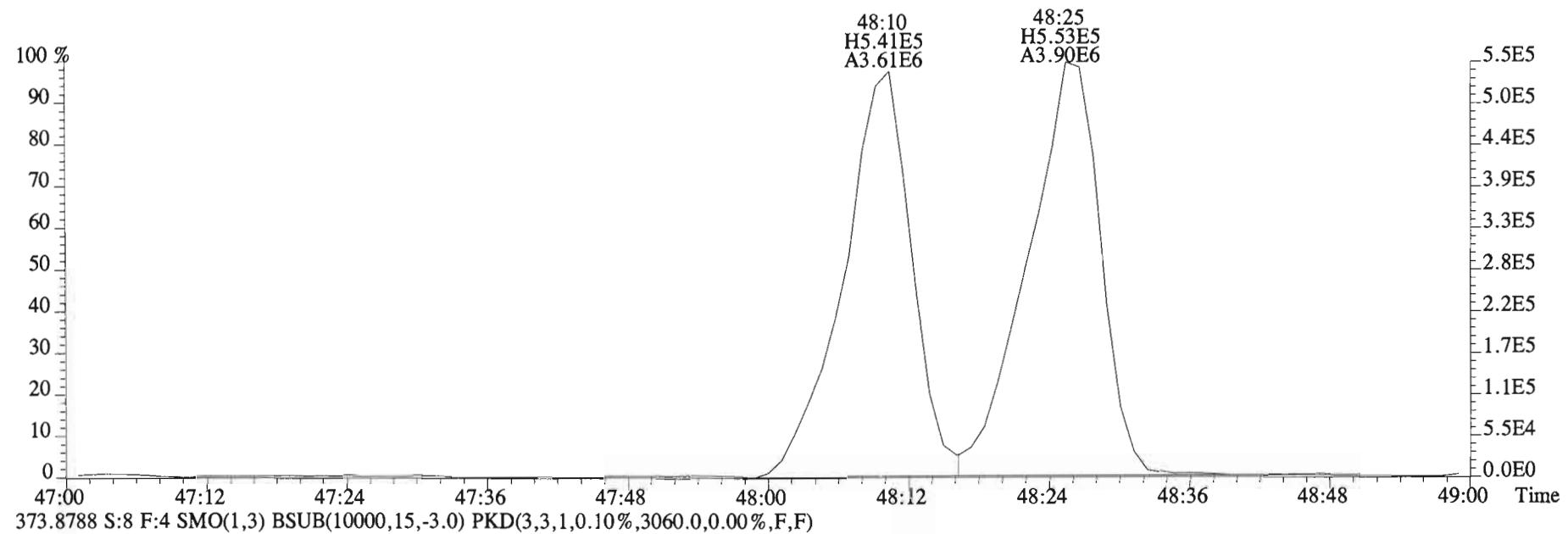
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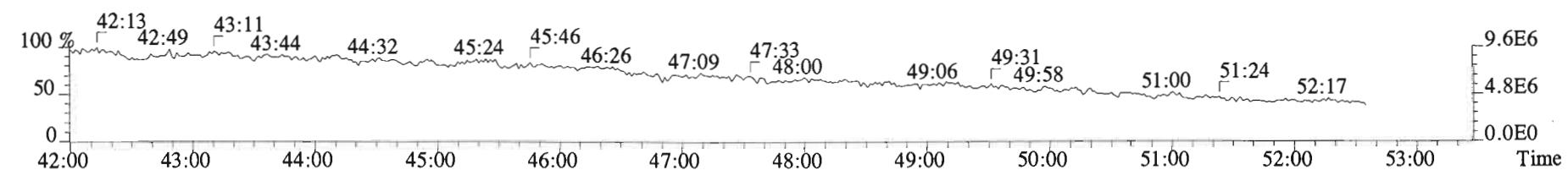
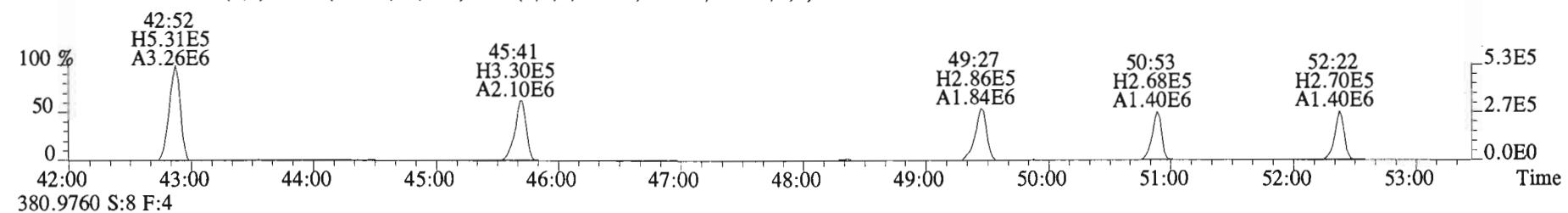
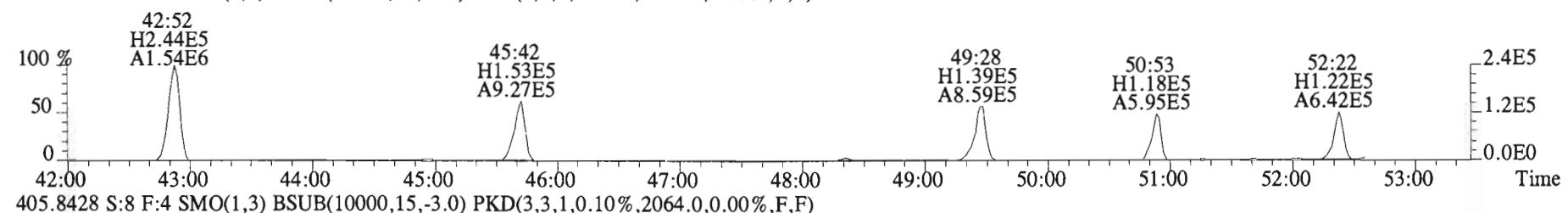
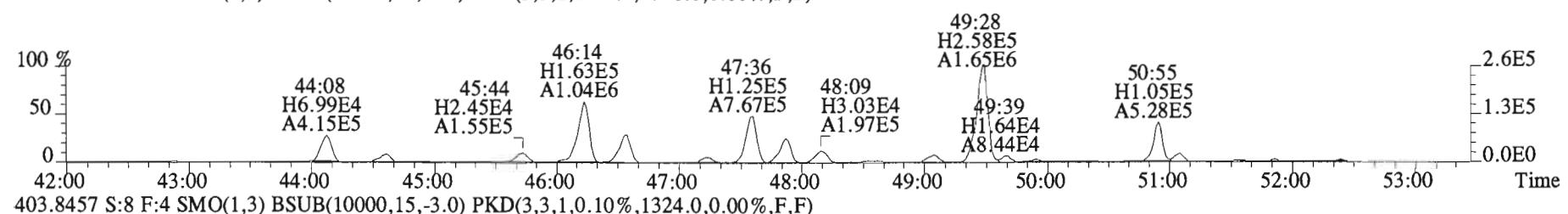
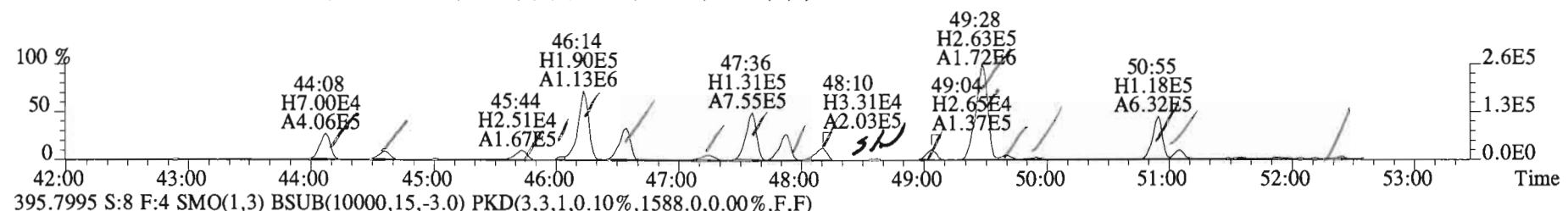
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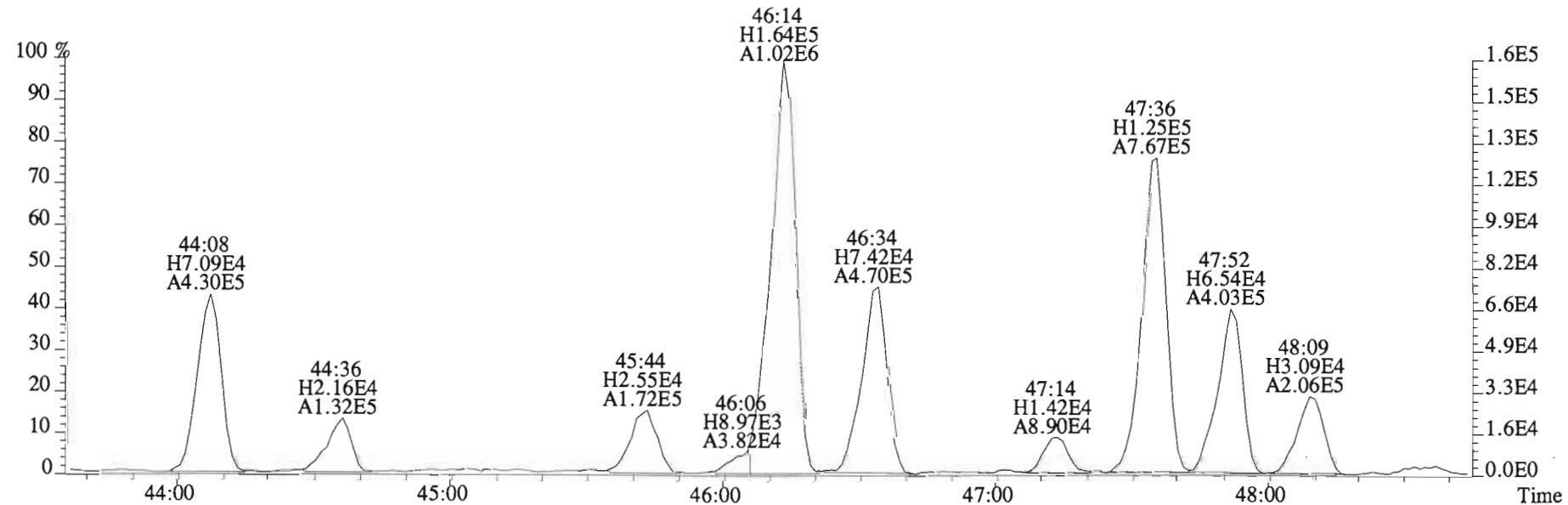
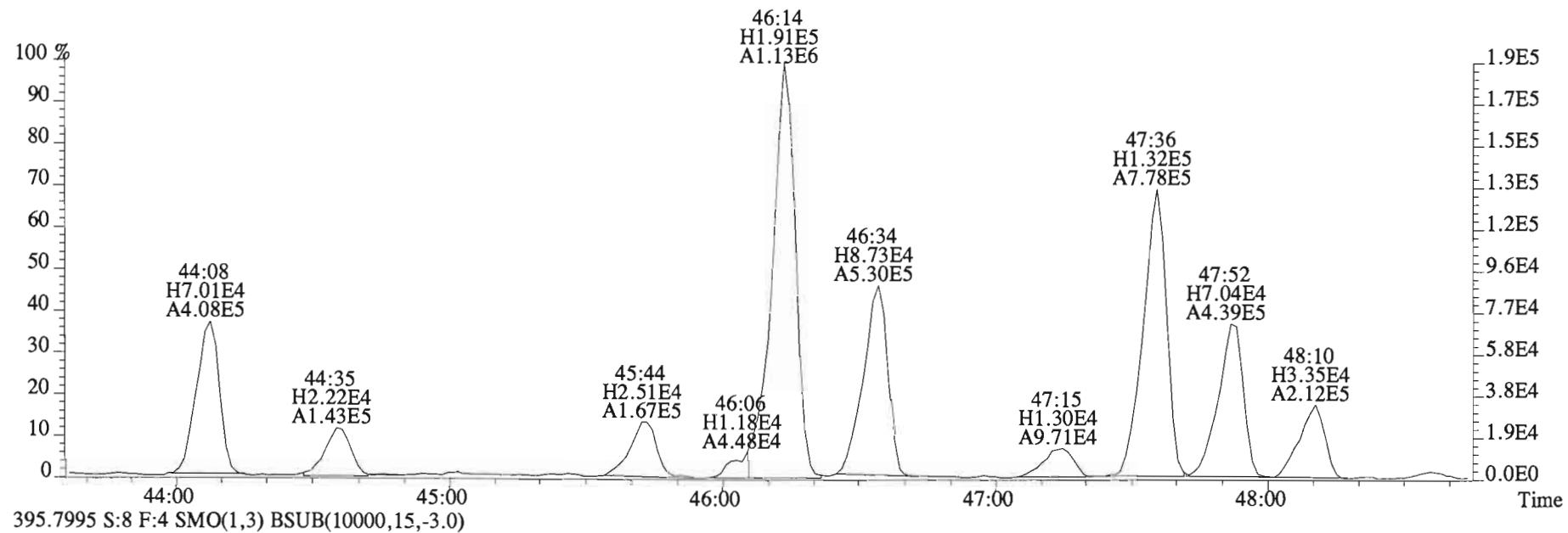
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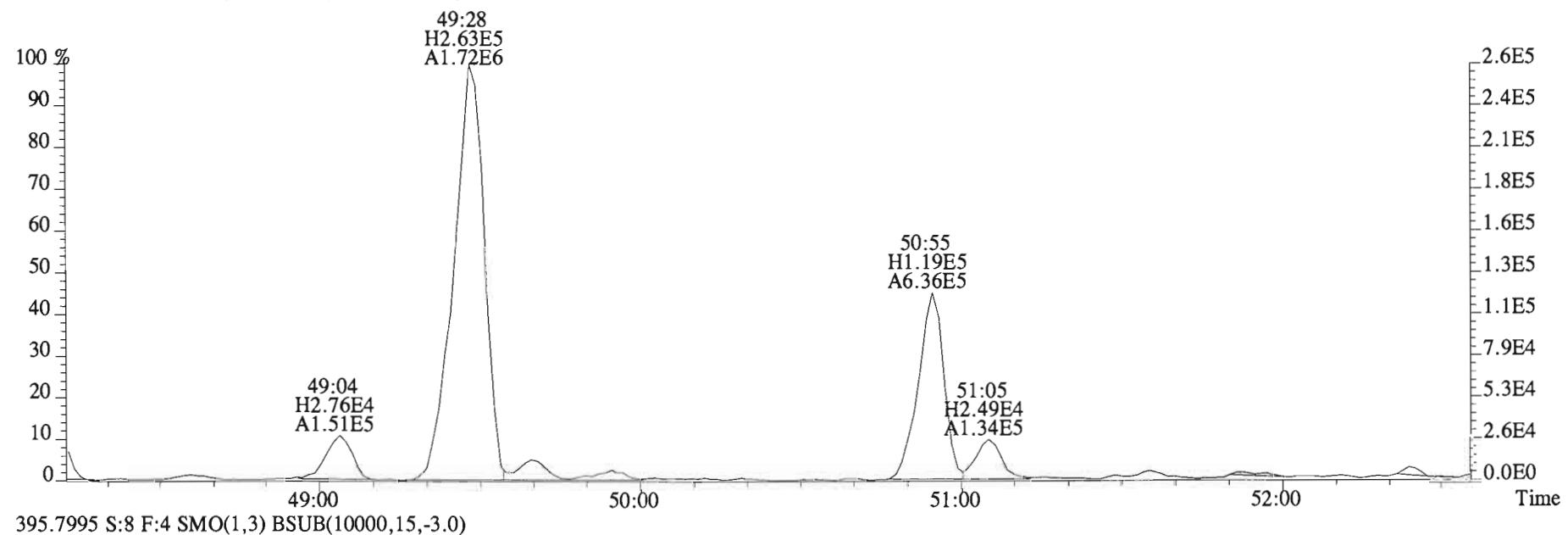
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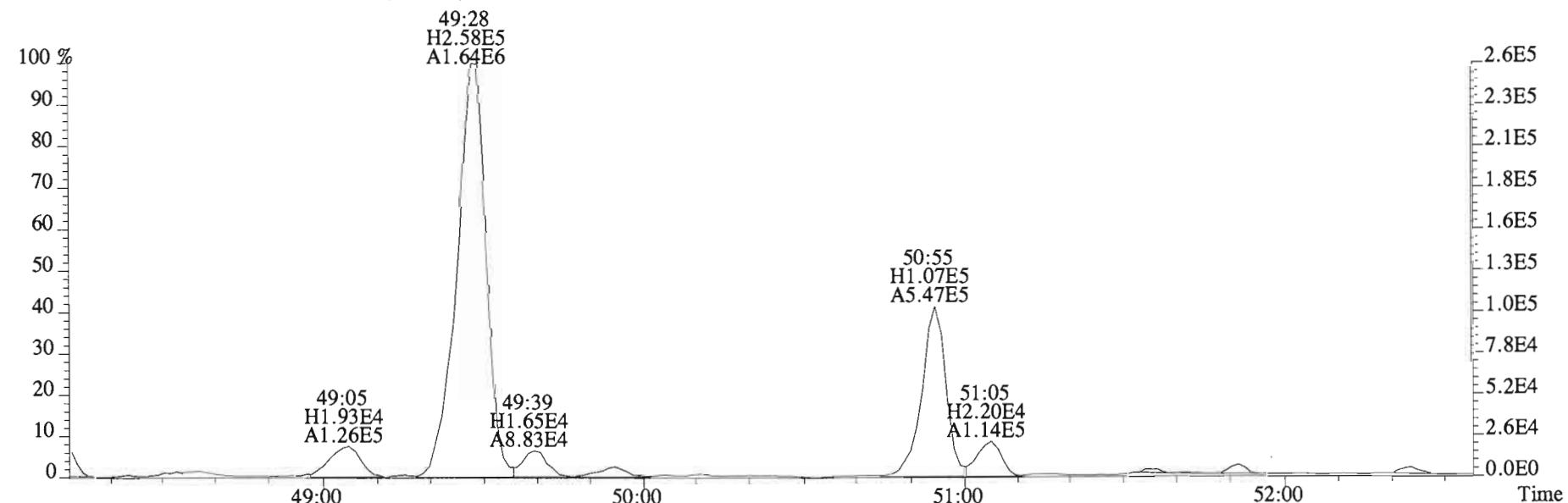
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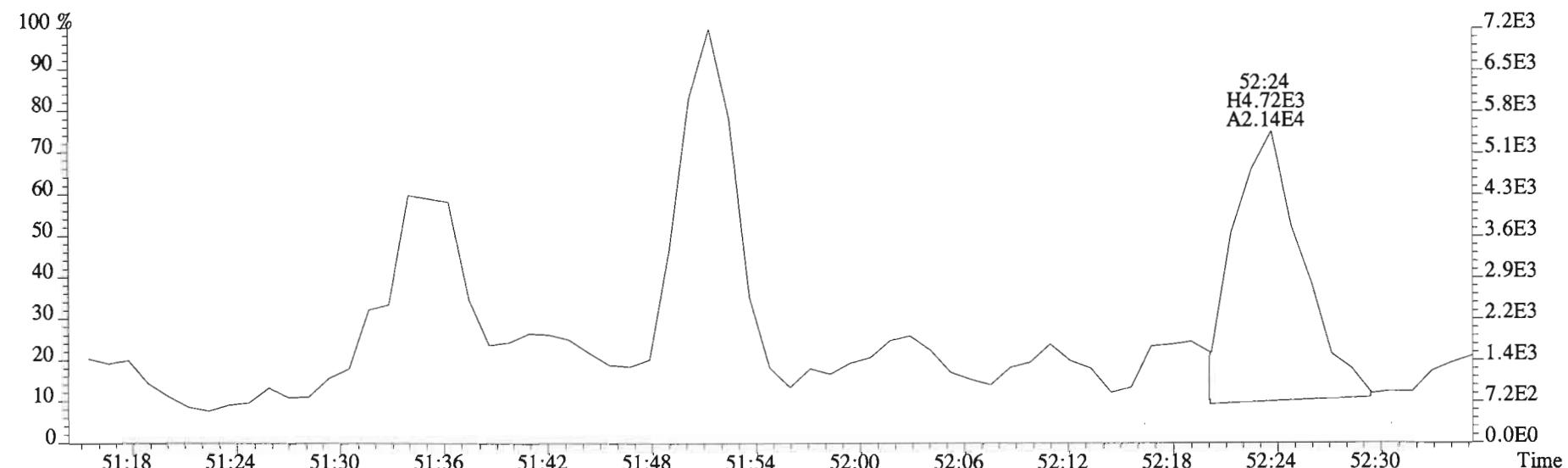
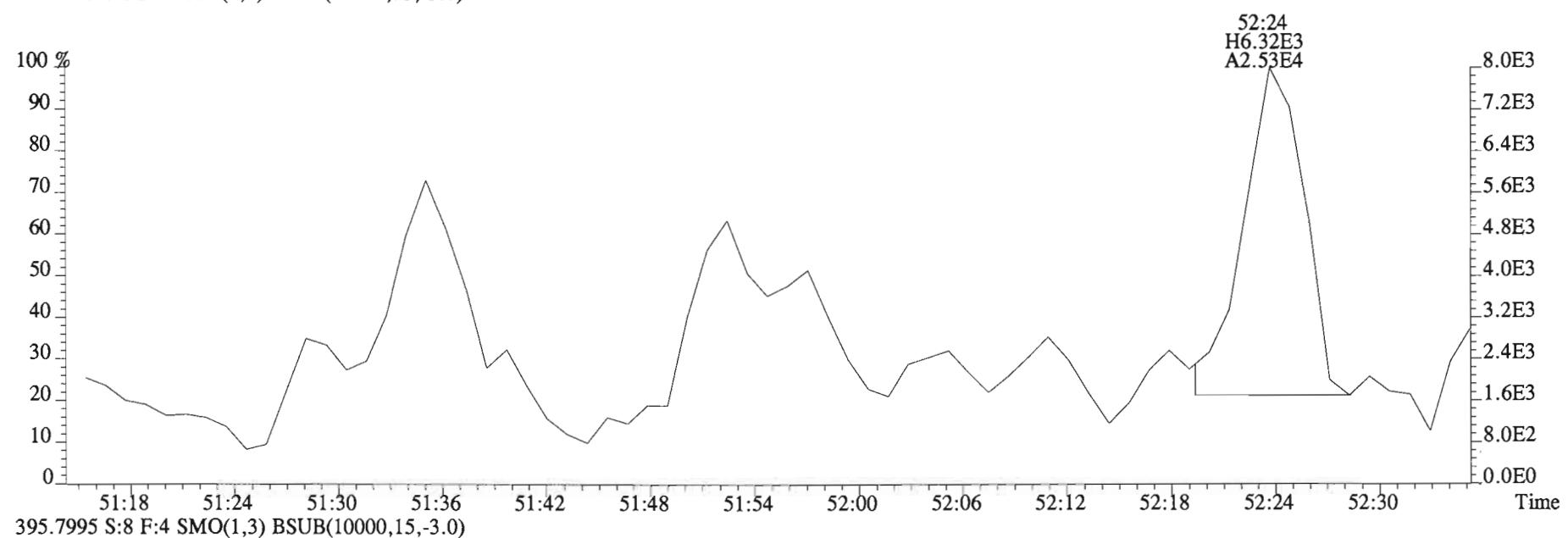
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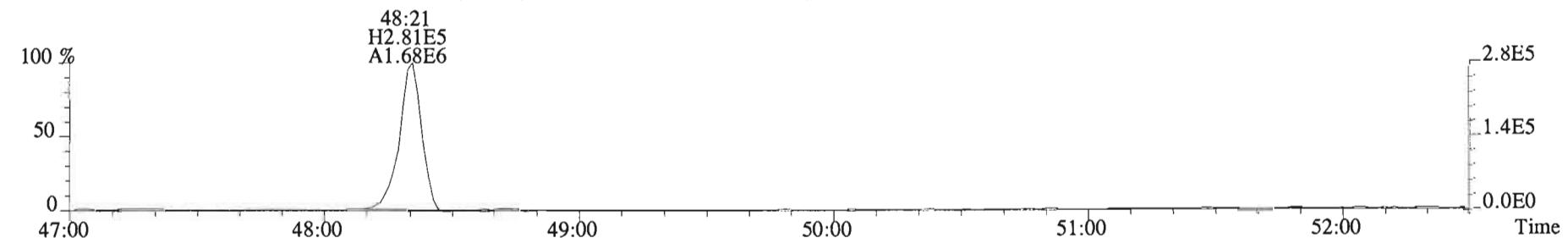
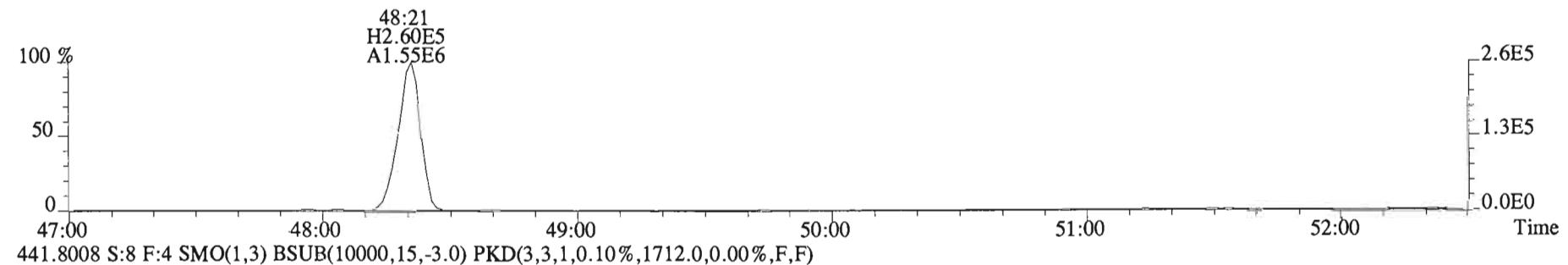
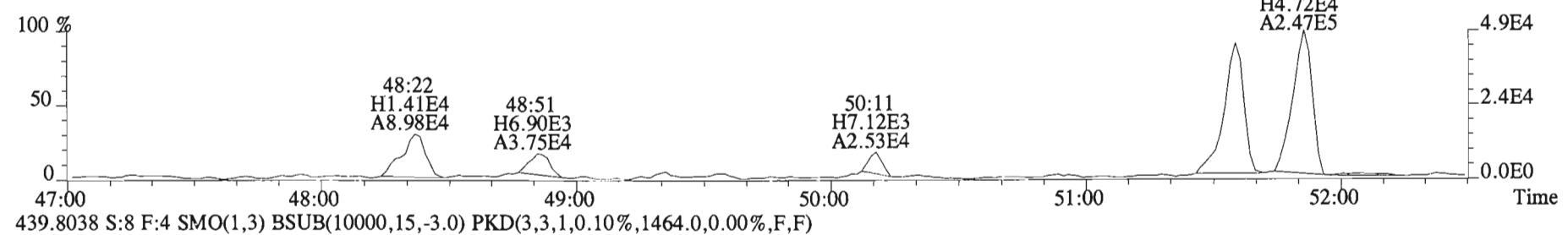
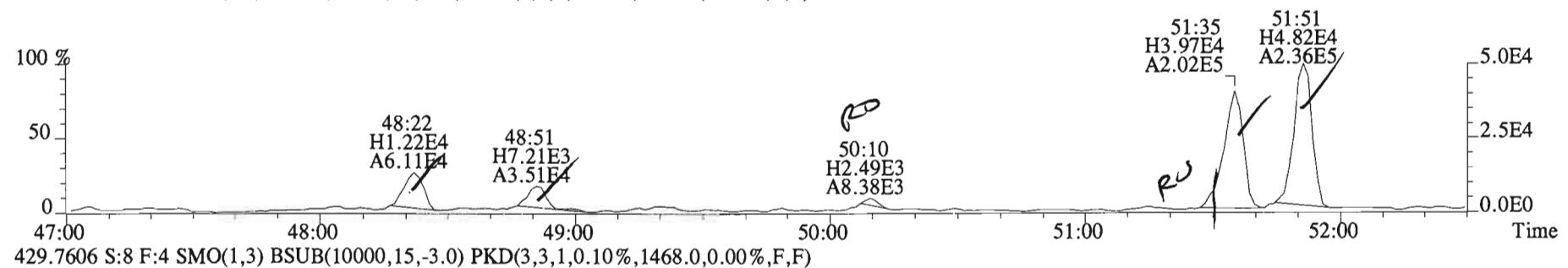
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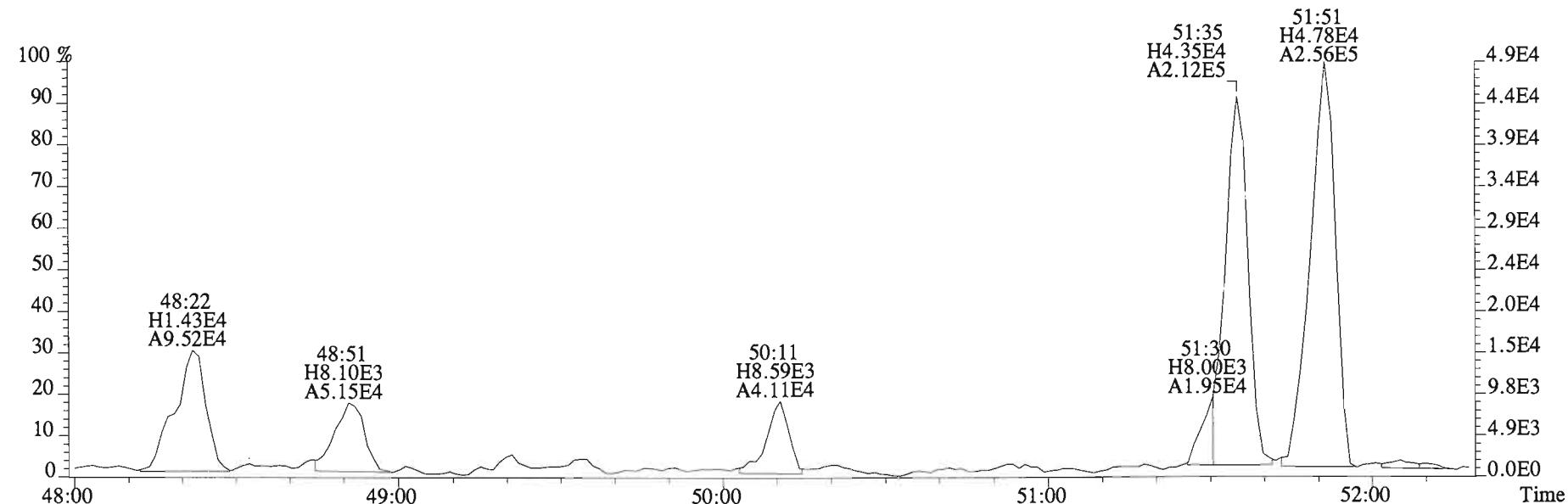
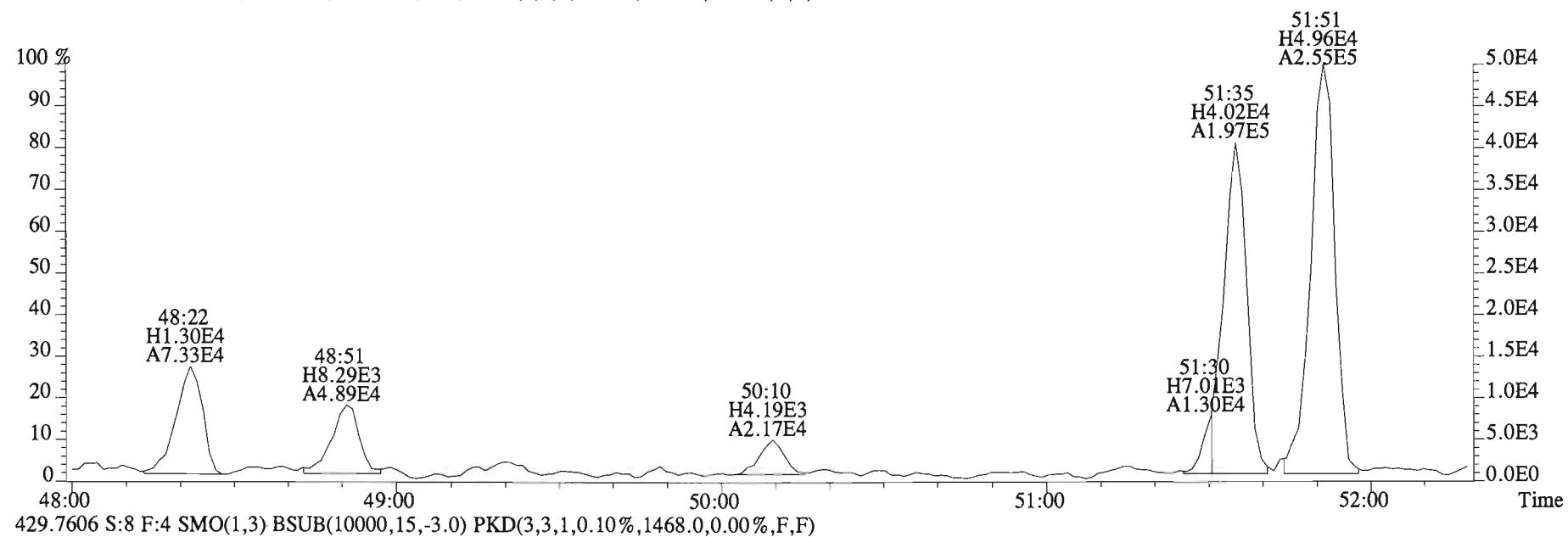
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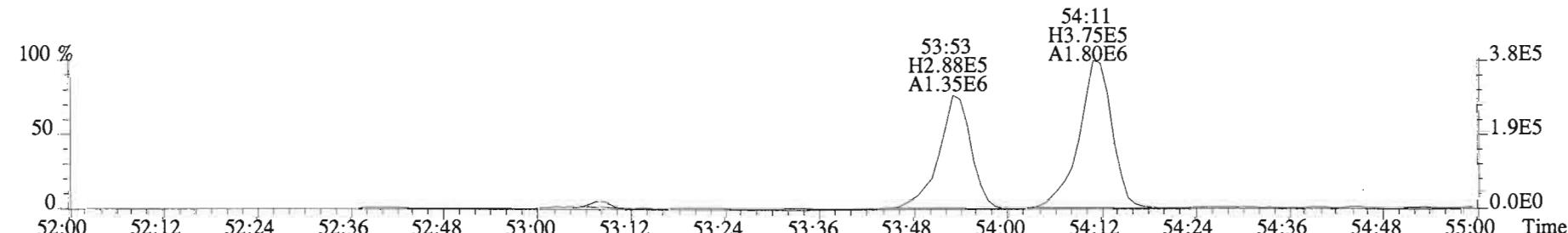
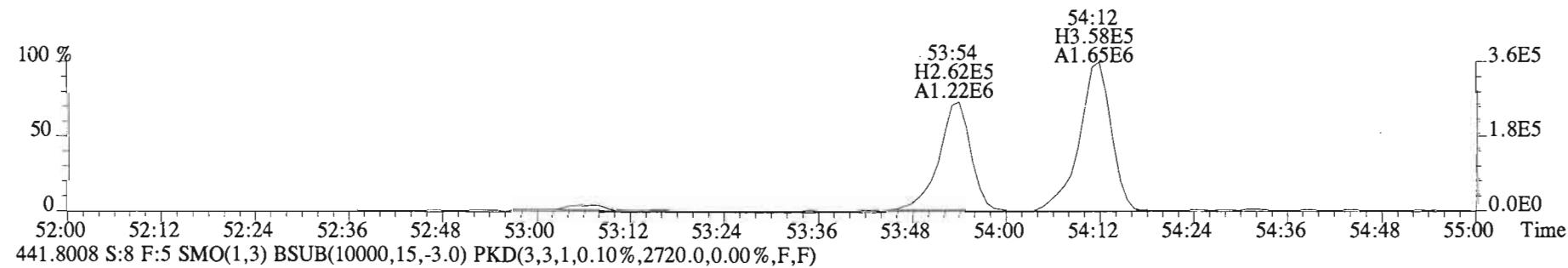
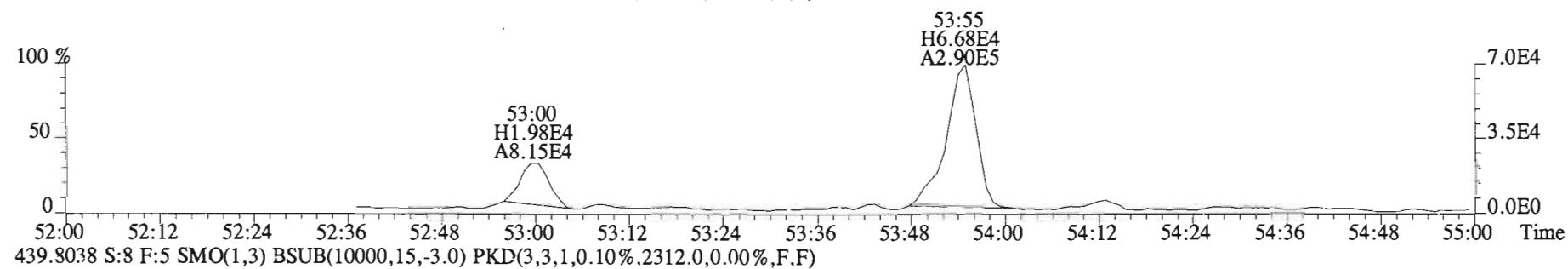
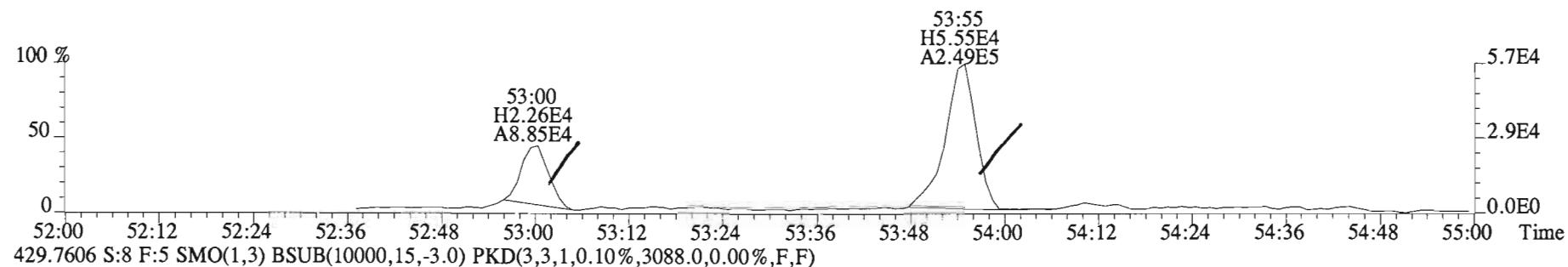
File:150219E2 #1-555 Acq:19-FEB-2015 21:36:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
427.7635 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)



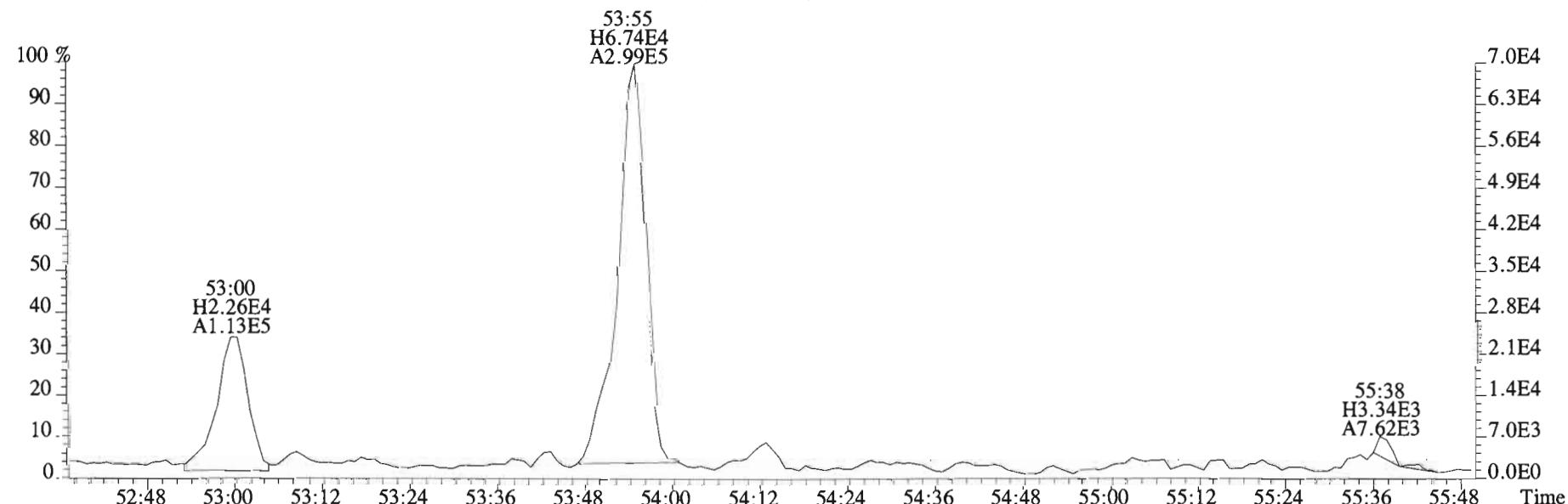
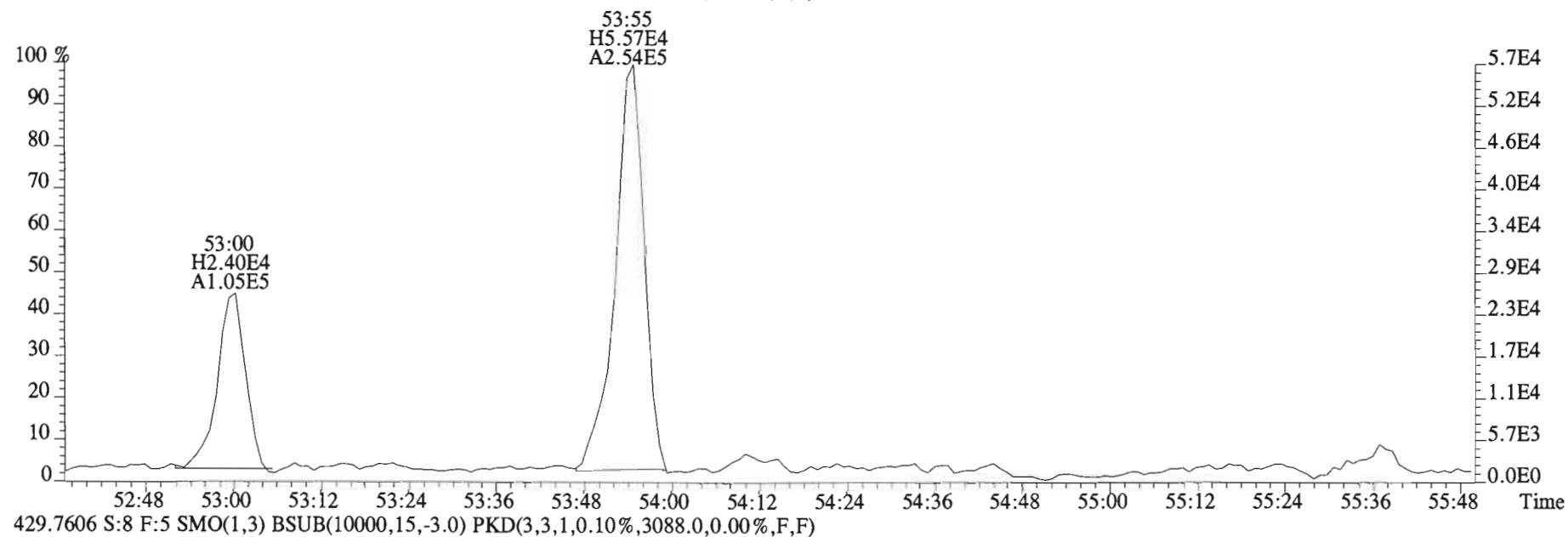
File:150219E2 #1-555 Acq:19-FEB-2015 21:36:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
427.7635 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)



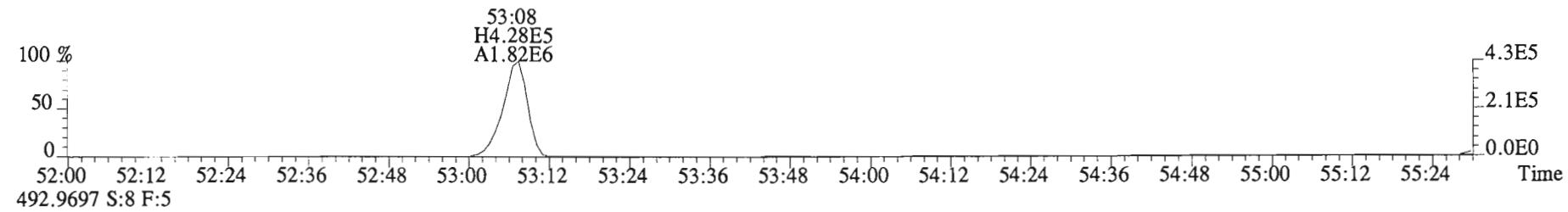
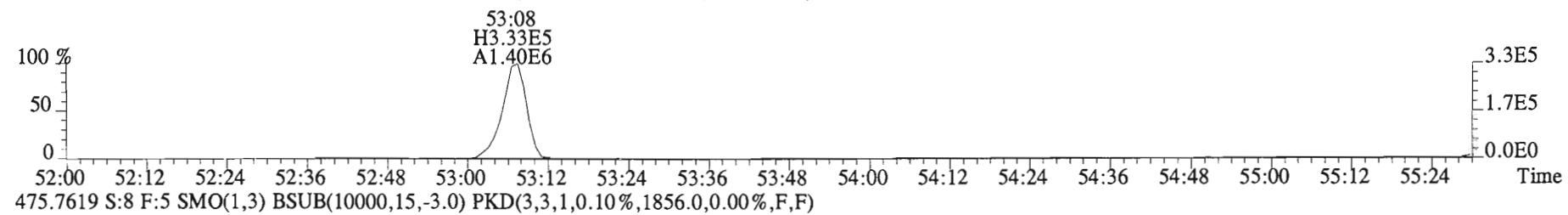
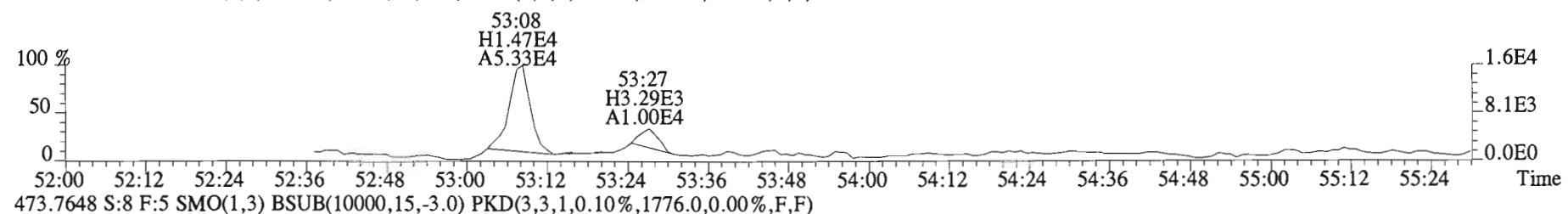
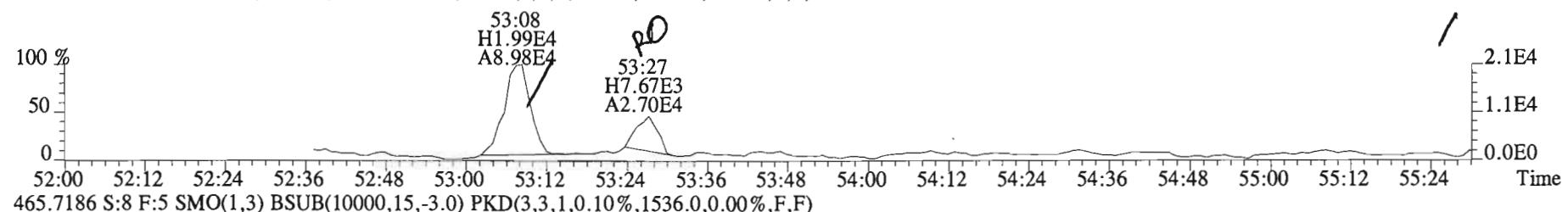
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Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
427.7635 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2504.0,0.00%,F,F)



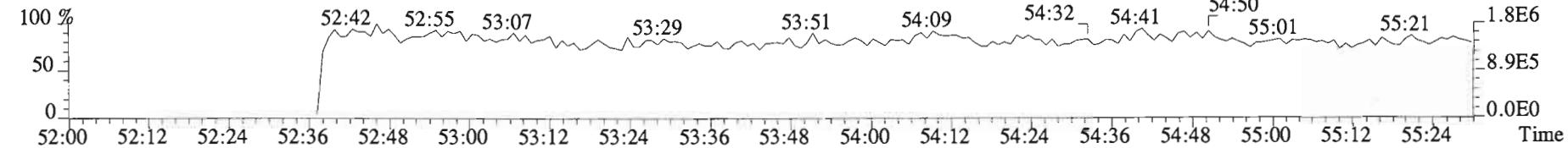
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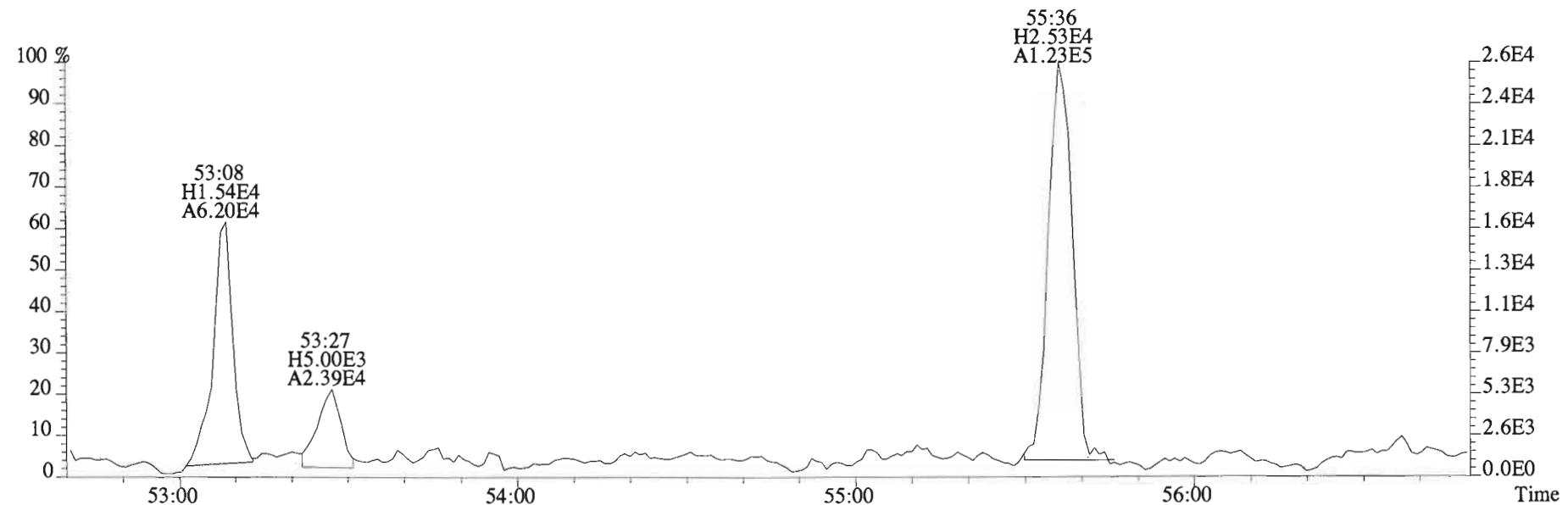
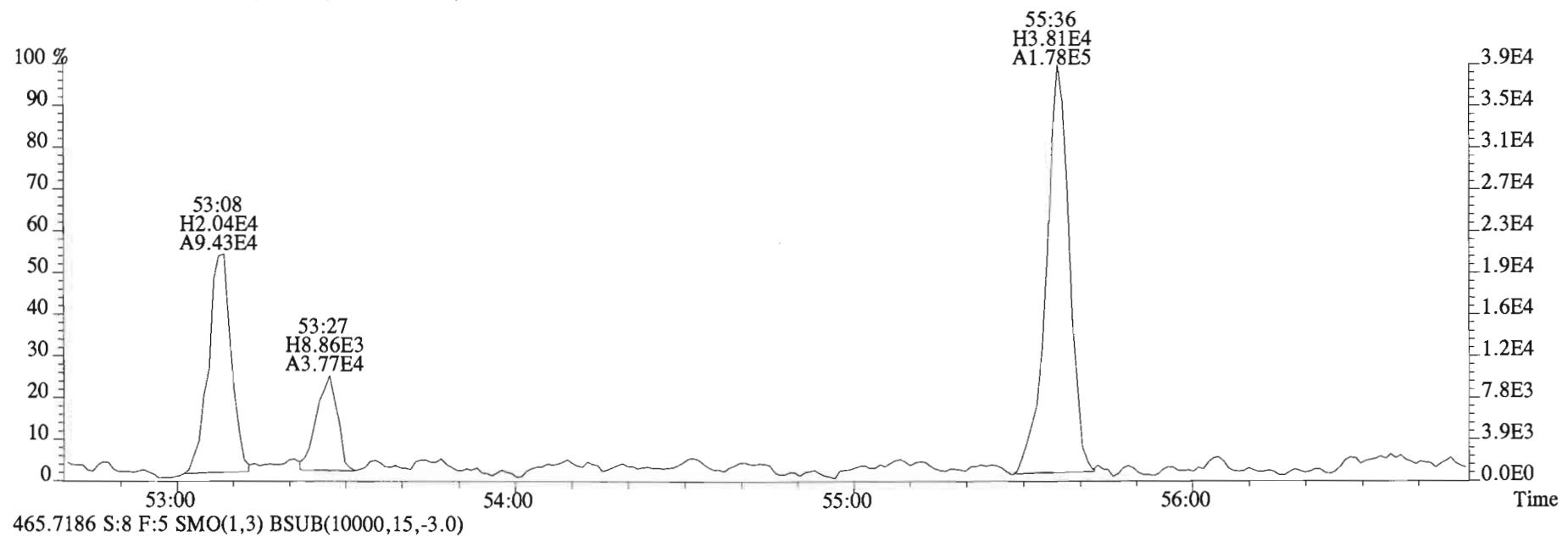
File:150219E2 #1-430 Acq:19-FEB-2015 21:36:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
 463.7216 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1668.0,0.00%,F,F)



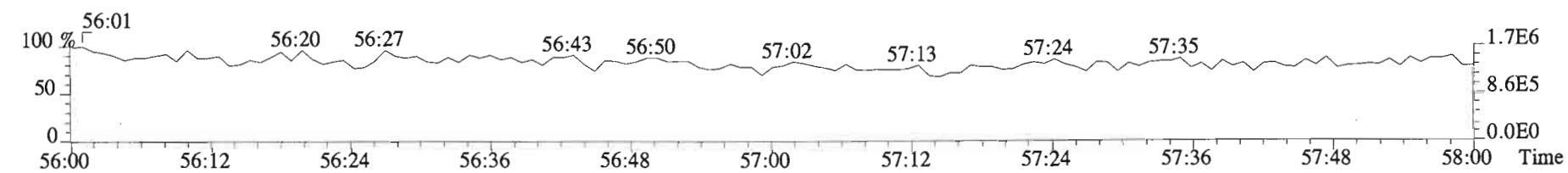
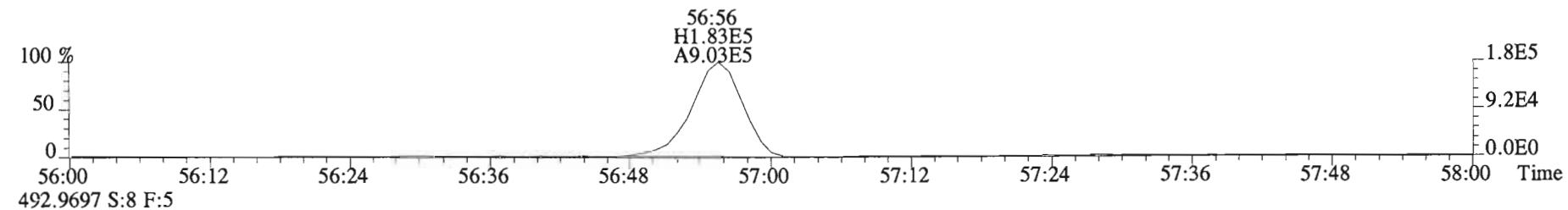
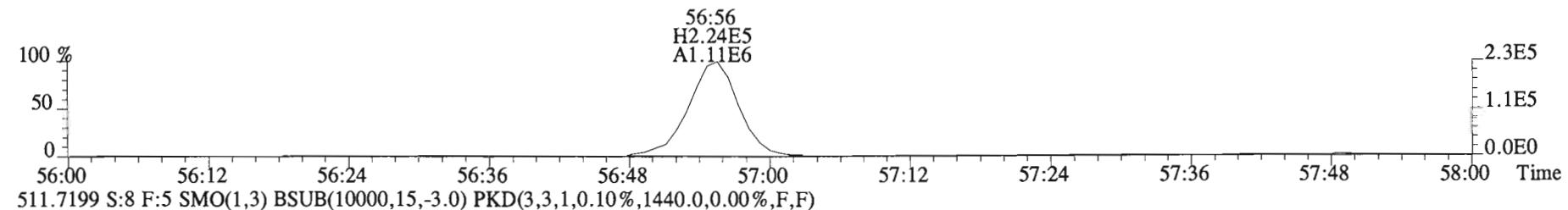
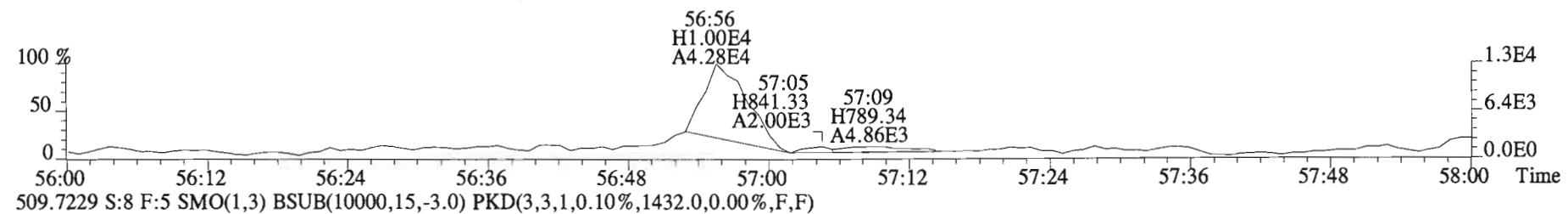
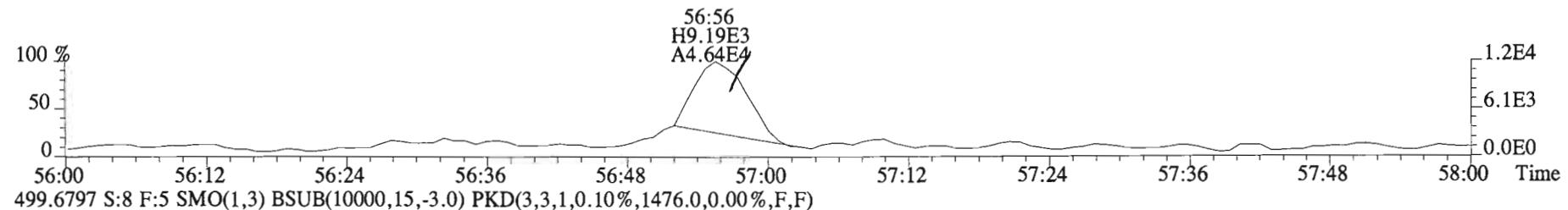
492.9697 S:8 F:5



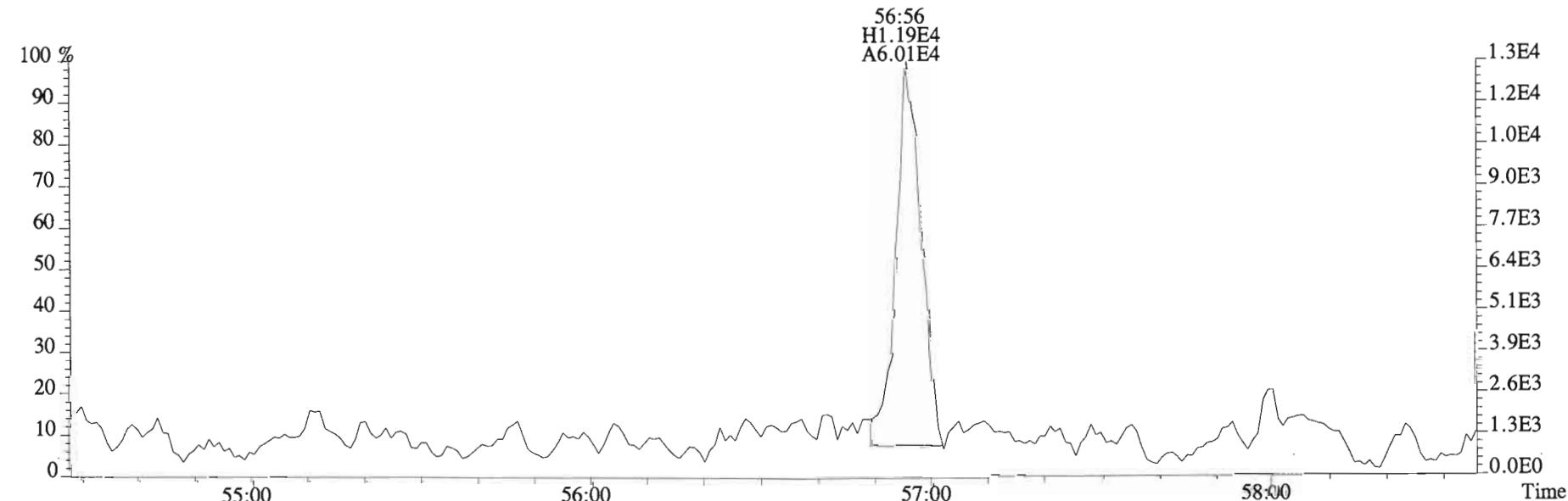
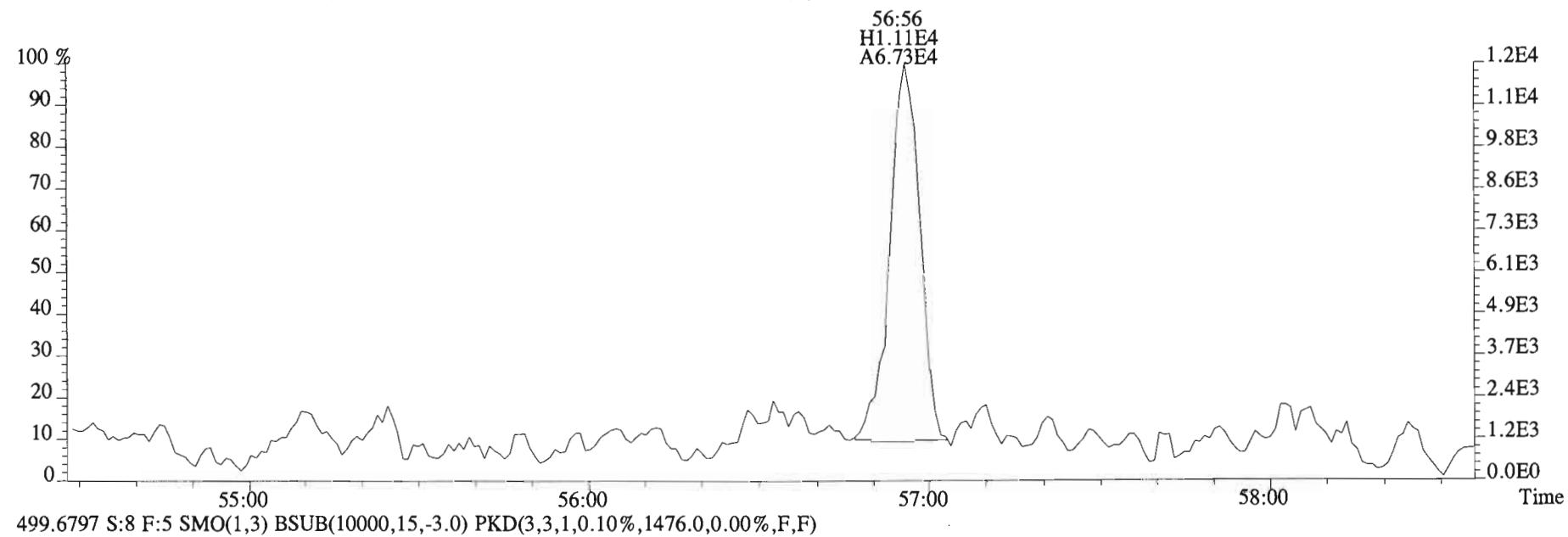
File:150219E2 #1-430 Acq:19-FEB-2015 21:36:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
463.7216 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0)



File:150219E2 #1-430 Acq:19-FEB-2015 21:36:17 GC EI+ Voltage SIR Autospec-UltimaE
 Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
 497.6826 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1496.0,0.00%,F,F)



File:150219E2 #1-430 Acq:19-FEB-2015 21:36:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1500147-03@10X WM-CB-52-20150203-S Exp:PCB_ZB1
497.6826 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1496.0,0.00%,F,F)



Client ID: WM-CB-21-20150203-S
 Lab ID: 1500147-04@10X

Filename: 150219E2 S:9 Acq:19-FEB-15 22:40:24
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.015

ConCal: ST150219E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	3.51e+05	2.88	y 16:09	1.19	237	*	2.5	*	1.001	0.996-1.006		
Mono	PCB-2	1.25e+05	2.67	y 18:31	1.18	85.8	*	2.5	*	0.988	0.984-0.994		
Mono	PCB-3	3.31e+05	2.93	y 18:46	1.43	189	*	2.5	*	1.002	0.996-1.006		
Di	PCB-4/10	1.02e+06	1.34	y 20:05	1.57	582	*	2.5	*	1.001	0.997-1.007		
Di	PCB-7/9	3.99e+05	1.48	y 21:53	1.21	190	*	2.5	*	0.867	0.866-0.874		
Di	PCB-6	1.25e+06	1.56	y 22:33	1.30	552	*	2.5	*	0.894	0.890-0.899		
Di	PCB-5/8	3.91e+06	1.55	y 22:56	1.15	1960	*	2.5	*	0.909	0.907-0.917		
Di	PCB-14	*	*	n Not F ₁	1.11	*	10900	2.5	140	*	0.949-0.959		
Di	PCB-11	1.10e+07	1.66	y 25:15	1.09	5720	*	2.5	*	1.001	0.995-1.005		
Di	PCB-12/13	5.35e+05	1.72	y 25:37	1.19	254	*	2.5	*	1.015	1.011-1.021		
Di	PCB-15	2.73e+06	1.70	y 25:57	1.28	1210	*	2.5	*	1.028	1.023-1.033		
Tri	PCB-19	4.33e+05	1.09	y 24:14	1.04	507	*	2.5	*	1.001	0.996-1.006		
Tri	PCB-30	*	*	n Not F ₁	1.71	*	2260	2.5	35.9	*	1.032-1.042		
Tri	PCB-18	3.88e+06	1.06	y 25:52	0.78	4080	*	2.5	*	0.954	0.949-0.959		
Tri	PCB-17	1.52e+06	1.10	y 26:03	0.92	1350	*	2.5	*	0.961	0.956-0.966		
Tri	PCB-24/27	6.84e+05	1.11	y 26:36	1.19	474	*	2.5	*	0.981	0.977-0.987		
Tri	PCB-16/32	2.85e+06	1.06	y 27:07	0.94	2490	*	2.5	*	1.000	0.995-1.005		
Tri	PCB-34	*	*	n Not F ₁	1.14	*	2780	2.5	48.7	*	0.955-0.965		
Tri	PCB-23	*	*	n Not F ₁	1.28	*	2780	2.5	43.3	*	0.959-0.969		
Tri	PCB-29	*	*	n Not F ₁	1.08	*	2780	2.5	51.2	*	0.967-0.977		
Tri	PCB-26	1.90e+06	1.02	y 28:28	1.21	1350	*	2.5	*	0.979	0.974-0.984		
Tri	PCB-25	9.98e+05	1.09	y 28:39	1.26	678	*	2.5	*	0.985	0.979-0.989		
Tri	PCB-31	5.48e+06	1.00	y 28:59	1.28	3660	*	2.5	*	0.997	0.992-1.002		
Tri	PCB-28	5.29e+06	1.01	y 29:06	1.71	2650	*	2.5	*	1.001	0.995-1.005		
Tri	PCB-20/21/33	3.27e+06	0.93	y 29:44	1.08	2590	*	2.5	*	1.022	1.017-1.027		
Tri	PCB-22	1.62e+06	0.99	y 30:09	1.21	1150	*	2.5	*	1.037	1.032-1.042		
Tri	PCB-36	*	*	n Not F ₁	1.14	*	2780	2.5	58.2	*	0.928-0.938		
Tri	PCB-39	*	*	n Not F ₁	1.12	*	2780	2.5	59.6	*	0.943-0.953		
Tri	PCB-38	*	*	n Not F ₁	1.20	*	2780	2.5	55.4	*	0.966-0.976		
Tri	PCB-35	2.88e+05	1.06	y 32:35	1.23	245	*	2.5	*	0.987	0.982-0.992		
Tri	PCB-37	1.72e+06	1.05	y 33:01	1.23	1470	*	2.5	*	1.001	0.995-1.005		
Tetra	PCB-54	*	*	n Not F ₁	1.10	*	2570	2.5	47.0	*	0.996-1.006	Integrations by:	
Tetra	PCB-50	*	*	n Not F ₁	0.88	*	2570	2.5	58.8	*	1.037-1.047		
Tetra	PCB-53	9.40e+05	0.81	y 29:47	1.06	1150	*	2.5	*	0.946	0.942-0.952	Analyst: <u>DMS</u>	
Tetra	PCB-51	3.35e+05	0.84	y 30:07	0.99	440	*	2.5	*	0.956	0.952-0.962		
Tetra	PCB-45	5.55e+05	0.88	y 30:33	0.86	837	*	2.5	*	0.970	0.966-0.976		
Tetra	PCB-46	2.70e+05	0.68	y 31:03	0.85	417	*	2.5	*	0.986	0.981-0.991	Date: <u>2/24/15</u>	

Reviewed by: gh Date: 2/24/15

Client ID: WM-CB-21-20150203-S
 Lab ID: 1500147-04@10X

Filename: 150219E2 S:9 Acq:19-FEB-15 22:40:24
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.015

ConCal: ST150219E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	8.11e+06	0.78	y 31:31	1.28	8250		*	2.5	*	1.001	0.996-1.006	
Tetra	PCB-73	*	*	n NotF _q	1.35			2570	2.5	57.1	*	1.000-1.010	
Tetra	PCB-43/49	4.27e+06	0.77	y 31:49	0.99	5590		*	2.5	*	1.010	1.005-1.015	
Tetra	PCB-47	1.18e+06	0.77	y 32:02	1.06	1370		*	2.5	*	1.001	0.996-1.006	
Tetra	PCB-48/75	8.22e+05	0.78	y 32:10	1.23	823		*	2.5	*	1.005	0.999-1.009	
Tetra	PCB-65	*	*	n NotF _q	1.22			2570	2.5	62.5	*	1.008-1.018	
Tetra	PCB-62	*	*	n NotF _q	1.22			2570	2.5	62.7	*	1.011-1.021	
Tetra	PCB-44	3.81e+06	0.81	y 32:51	0.86	5450		*	2.5	*	1.026	1.021-1.031	
Tetra	PCB-42/59	1.48e+06	0.76	y 33:04	1.14	1600		*	2.5	*	1.033	1.028-1.038	
Tetra	PCB-41/64/71/72	4.58e+06	0.79	y 33:39	1.21	4670		*	2.5	*	1.051	1.046-1.056	
Tetra	PCB-68	1.06e+05	0.76	y 33:52	1.35	96.5		*	2.5	*	1.058	1.054-1.064	
Tetra	PCB-40	5.88e+05	0.84	y 34:06	0.70	1030		*	2.5	*	1.065	1.061-1.071	
Tetra	PCB-57	4.48e+04	0.67	y 34:27	0.98	47.3		*	2.5	*	0.970	0.965-0.975	
Tetra	PCB-67	2.36e+05	0.88	y 34:46	1.11	221		*	2.5	*	0.979	0.974-0.984	
Tetra	PCB-58	*	*	n NotF _q	0.93			2570	2.5	62.1	*	0.977-0.987	
Tetra	PCB-63	1.92e+05	0.78	y 35:02	0.95	209		*	2.5	*	0.986	0.982-0.992	
Tetra	PCB-74	2.22e+06	0.74	y 35:20	1.24	1850		*	2.5	*	0.995	0.990-1.000	
Tetra	PCB-61/70	6.89e+06	0.77	y 35:32	0.95	7480		*	2.5	*	1.000	0.995-1.005	
Tetra	PCB-76/66	4.33e+06	0.79	y 35:45	1.04	4290		*	2.5	*	1.007	1.001-1.011	
Tetra	PCB-80	*	*	n NotF _q	1.19			2570	2.5	51.4	*	0.996-1.006	
Tetra	PCB-55	1.72e+05	0.71	y 36:15	1.04	167		*	2.5	*	1.009	1.005-1.015	
Tetra	PCB-56/60	2.63e+06	0.82	y 36:46	1.01	2630		*	2.5	*	1.023	1.019-1.029	
Tetra	PCB-79	2.58e+05	0.87	y 37:51	1.08	242		*	2.5	*	1.053	1.048-1.058	
Tetra	PCB-78	*	*	n NotF _q	1.27			2570	2.5	56.3	*	0.982-0.992	
Tetra	PCB-81	6.59e+04	0.67	y 39:02	1.33	56.9		*	2.5	*	1.000	0.995-1.005	
Tetra	PCB-77	6.05e+05	0.81	y 39:40	1.10	623		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-104	*	*	n NotF _q	1.18	*		1320	2.5	67.7	*	0.996-1.006	
Penta	PCB-96	4.06e+04	1.26	n 33:56	1.14	60.6	R	*	2.5	*	1.038	1.034-1.044	
Penta	PCB-103	8.35e+04	1.68	y 34:29	0.96	148		*	2.5	*	1.055	1.050-1.060	
Penta	PCB-100	*	*	n NotF _q	0.94	*		1320	2.5	85.5	*	1.061-1.071	
Penta	PCB-94	*	*	n NotF _q	1.06	*		1320	2.5	99.2	*	0.980-0.990	
Penta	PCB-95/98/102	5.82e+06	1.60	y 35:49	1.22	10800		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-93	*	*	n NotF _q	0.84	*		1320	2.5	124	*	0.997-1.007	
Penta	PCB-88/91	1.08e+06	1.69	y 36:14	1.12	2210		*	2.5	*	1.012	1.005-1.015	
Penta	PCB-121	*	*	n NotF _q	1.62	*		1320	2.5	64.9	*	1.009-1.019	
Penta	PCB-84/92	3.06e+06	1.50	y 37:08	1.05	6210		*	2.5	*	0.990	0.985-0.995	
Penta	PCB-89	4.75e+04	1.36	y 37:19	1.13	89.4		*	2.5	*	0.995	0.991-1.001	

Analyst: DMS

Date: 2/24/15

Client ID: WM-CB-21-20150203-S
 Lab ID: 1500147-04@10X

Filename: 150219E2 S:9 Acq:19-FEB-15 22:40:24
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.015

ConCal: ST150219E2-1
 EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	7.90e+06	1.62	y 37:32	1.10	15300		*	2.5	*	1.001	0.995-1.005	
Penta	PCB-113	*	*	n NotF _g	1.41			1320	2.5	67.0	*	1.002-1.012	
Penta	PCB-99	3.26e+06	1.71	y 37:51	1.34	5190		*	2.5	*	1.009	1.004-1.014	
Penta	PCB-119	2.26e+05	1.64	y 38:18	1.53	352		*	2.5	*	0.987	0.982-0.992	
Penta	PCB-108/112	3.49e+05	1.66	y 38:28	1.28	649		*	2.5	*	0.991	0.986-0.996	
Penta	PCB-83	*	*	n NotF _g	1.52		*	1320	2.5	71.5	*	0.990-1.000	
Penta	PCB-97	2.20e+06	1.63	y 38:49	1.18	4440		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-86	*	*	n NotF _g	0.84		*	1320	2.5	129	*	0.999-1.009	
Penta	PCB-87/117/125	3.58e+06	1.58	y 39:06	1.55	5500		*	2.5	*	1.008	1.002-1.012	
Penta	PCB-111/115	1.47e+05	1.59	y 39:15	1.63	215		*	2.5	*	1.012	1.006-1.016	
Penta	PCB-85/116	1.10e+06	1.46	y 39:22	1.30	2010		*	2.5	*	1.015	1.010-1.020	
Penta	PCB-120	*	*	n NotF _g	1.68		*	1320	2.5	64.8	*	1.016-1.026	
Penta	PCB-110	1.09e+07	1.64	y 39:46	1.56	16700		*	2.5	*	1.025	1.020-1.030	
Penta	PCB-82	7.64e+05	1.74	y 40:23	0.76	1950		*	2.5	*	0.976	0.971-0.981	
Penta	PCB-124	4.25e+05	1.78	y 41:05	1.47	559		*	2.5	*	0.993	0.988-0.998	
Penta	PCB-107/109	6.70e+05	1.59	y 41:14	1.32	979		*	2.5	*	0.996	0.991-1.001	
Penta	PCB-123	1.23e+05	1.37	y 41:23	1.17	203		*	2.5	*	1.000	0.996-1.006	
Penta	PCB-106/118	8.56e+06	1.57	y 41:35	1.17	13900		*	2.5	*	1.000	0.996-1.006	
Penta	PCB-114	3.23e+05	1.74	y 42:15	1.30	265		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-122	1.46e+05	1.60	y 42:23	1.12	139		*	2.5	*	1.004	0.999-1.009	
Penta	PCB-105	5.60e+06	1.71	y 43:07	1.30	4880		*	2.5	*	1.000	0.995-1.005	
Penta	PCB-127	*	*	n NotF _g	1.33		*	865	2.5	27.4	*	0.996-1.006	
Penta	PCB-126	1.28e+05	1.62	y 45:21	1.18	137		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-155	*	*	n NotF _g	1.11		*	832	2.5	59.8	*	0.966-1.006	
Hexa	PCB-150	*	*	n NotF _g	1.00		*	832	2.5	66.7	*	1.030-1.040	
Hexa	PCB-152	*	*	n NotF _g	1.12		*	832	2.5	59.7	*	1.043-1.053	
Hexa	PCB-145	*	*	n NotF _g	1.20		*	832	2.5	55.4	*	1.055-1.065	
Hexa	PCB-136	7.13e+05	1.42	y 39:34	1.18	1690		*	2.5	*	1.068	1.064-1.074	
Hexa	PCB-148	*	*	n NotF _g	0.74		*	832	2.5	89.5	*	1.066-1.076	
Hexa	PCB-154	7.70e+04	1.55	n 40:09	0.86	250	R	*	2.5	*	1.084	1.080-1.090	
Hexa	PCB-151	8.64e+05	1.30	y 40:48	0.75	3220		*	2.5	*	1.101	1.097-1.107	
Hexa	PCB-135	5.54e+05	1.34	y 41:02	0.79	1950		*	2.5	*	1.108	1.103-1.113	
Hexa	PCB-144	1.76e+05	1.54	n 41:09	0.76	642	R	*	2.5	*	1.111	1.105-1.117	
Hexa	PCB-147	1.13e+05	1.22	y 41:16	0.82	384		*	2.5	*	1.114	1.109-1.121	
Hexa	PCB-139/149	3.43e+06	1.34	y 41:31	0.76	12500		*	2.5	*	1.121	1.116-1.128	
Hexa	PCB-140	*	*	n NotF _g	0.72		*	832	2.5	92.2	*	1.121-1.133	
Hexa	PCB-134/143	7.12e+05	1.22	y 42:10	0.92	1110		*	2.5	*	0.975	0.970-0.980	

Analyst: DMS

Date: 2/24/15

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	3.93e+05	1.40	y 42:27	0.82	684		*	2.5	*	0.982	0.977-0.987	
Hexa	PCB-131	*	*	n NotF _q	0.91		*	873	2.5	42.1	*	0.981-0.991	
Hexa	PCB-146/165	1.83e+06	1.29	y 42:52	1.25	2090		*	2.5	*	0.991	0.986-0.996	
Hexa	PCB-132/161	4.02e+06	1.28	y 43:07	1.10	5190		*	2.5	*	0.997	0.992-1.002	
Hexa	PCB-153	1.12e+07	1.25	y 43:16	1.25	12800		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-168	*	*	n NotF _q	1.45		*	873	2.5	26.3	*	1.001-1.011	
Hexa	PCB-141	2.22e+06	1.30	y 44:00	1.09	3120		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-137	7.12e+05	1.26	y 44:23	1.06	1020		*	2.5	*	1.009	1.004-1.014	
Hexa	PCB-130	7.44e+05	1.40	y 44:29	0.96	1170		*	2.5	*	1.011	1.006-1.016	
Hexa	PCB-138/163/164	1.34e+07	1.22	y 44:51	1.29	15800		*	2.5	*	1.000	0.996-1.006	
Hexa	PCB-158/160	1.75e+06	1.31	y 45:05	1.34	1980		*	2.5	*	1.006	1.001-1.011	
Hexa	PCB-129	5.98e+05	1.36	y 45:21	0.85	1070		*	2.5	*	1.012	1.007-1.017	
Hexa	PCB-166	*	*	n NotF _q	1.19		*	873	2.5	32.5	*	0.988-0.998	
Hexa	PCB-159	*	*	n NotF _q	1.11		*	873	2.5	34.7	*	0.996-1.006	
Hexa	PCB-128/162	2.12e+06	1.33	y 46:24	1.05	2830		*	2.5	*	1.006	1.002-1.012	
Hexa	PCB-167	6.27e+05	1.39	y 46:50	1.20	691		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-156	1.49e+06	1.22	y 48:09	1.14	1890		*	2.5	*	1.001	0.996-1.006	
Hexa	PCB-157	3.96e+05	1.13	y 48:24	1.16	437		*	2.5	*	1.000	0.995-1.005	
Hexa	PCB-169	*	*	n NotF _q	1.12		*	873	2.5	39.9	*	0.995-1.005	
Hepta	PCB-188	*	*	n NotF _q	1.58		*	1760	2.5	50.4	*	0.996-1.006	
Hepta	PCB-184	*	*	n NotF _q	1.63		*	1760	2.5	48.8	*	1.006-1.016	
Hepta	PCB-179	1.11e+06	1.07	y 44:07	1.30	1870		*	2.5	*	1.029	1.024-1.034	
Hepta	PCB-176	2.91e+05	1.00	y 44:35	1.48	433		*	2.5	*	1.040	1.035-1.045	
Hepta	PCB-186	*	*	n NotF _q	1.45		*	1760	2.5	54.8	*	1.050-1.060	
Hepta	PCB-178	3.81e+05	1.07	y 45:40	1.03	810		*	2.5	*	1.065	1.061-1.071	
Hepta	PCB-175	6.83e+04	1.65	n 46:01	1.01	148	R	*	2.5	*	1.073	1.069-1.079	
Hepta	PCB-182/187	2.67e+06	0.98	y 46:12	1.25	4700		*	2.5	*	1.078	1.073-1.083	
Hepta	PCB-183	1.20e+06	1.08	y 46:31	1.21	2180		*	2.5	*	1.085	1.081-1.091	
Hepta	PCB-185	1.93e+05	1.27	n 47:12	1.80	328	R	*	2.5	*	0.955	0.951-0.961	
Hepta	PCB-174	1.64e+06	1.09	y 47:34	1.38	3640		*	2.5	*	0.963	0.958-0.968	
Hepta	PCB-181	*	*	n NotF _q	1.38		*	1760	2.5	81.1	*	0.960-0.970	
Hepta	PCB-177	8.46e+05	1.16	y 47:50	1.26	2070		*	2.5	*	0.968	0.963-0.973	
Hepta	PCB-171	4.12e+05	1.09	y 48:07	1.58	799		*	2.5	*	0.974	0.970-0.980	
Hepta	PCB-173	*	*	n NotF _q	1.11		*	1760	2.5	101	*	0.978-0.988	
Hepta	PCB-172	2.63e+05	1.13	y 49:01	1.63	493		*	2.5	*	0.992	0.987-0.997	
Hepta	PCB-192	*	*	n NotF _q	1.74		*	1760	2.5	64.3	*	0.991-1.001	
Hepta	PCB-180	4.08e+06	1.03	y 49:25	1.34	9310		*	2.5	*	1.000	0.995-1.005	

Analyst: DMS

Date: 2/24/15

Client ID: WM-CB-21-20150203-S
Lab ID: 1500147-04@10X

Filename: 150219E2 S:9 Acq:19-FEB-15 22:40:24
GC Column ID: ZB-1 ICal: PCVG8-6-23-14 wt/vol: 2.015

ConCal: ST150219E2-1
EndCAL: NA

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Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	2.30e+05	1.08	y 49:38	1.72	411		*	2.5	*	1.005	0.999-1.009	
Hepta	PCB-191	7.71e+04	0.87	n 49:51	1.69	140	R	*	2.5	*	1.009	1.004-1.014	
Hepta	PCB-170	1.25e+06	1.03	y 50:52	1.60	3460		*	2.5	*	1.000	0.995-1.005	
Hepta	PCB-190	3.03e+05	0.96	y 51:02	2.21	605		*	2.5	*	1.003	0.998-1.008	
Hepta	PCB-189	7.78e+04	1.15	y 52:22	1.55	198		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-202	2.72e+05	0.82	y 48:20	1.08	759		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-201	1.43e+05	1.40	n 48:49	1.15	377	R	*	2.5	*	1.010	1.005-1.015	
Octa	PCB-204	*	*	n NotF _q	1.14	*		1500	2.5	103	*	1.008-1.018	
Octa	PCB-197	4.72e+04	0.88	y 49:16	1.07	133		*	2.5	*	1.020	1.015-1.025	
Octa	PCB-200	1.40e+05	0.84	y 50:09	1.06	399		*	2.5	*	1.038	1.032-1.044	
Octa	PCB-198	*	*	n NotF _q	0.76	*		1500	2.5	156	*	1.059-1.069	
Octa	PCB-199	7.44e+05	0.85	y 51:33	0.80	2820		*	2.5	*	1.067	1.061-1.071	
Octa	PCB-196/203	7.94e+05	1.02	y 51:49	0.80	3000		*	2.5	*	1.072	1.066-1.076	
Octa	PCB-195	2.83e+05	0.84	y 52:58	1.23	710		*	2.5	*	0.983	0.979-0.989	
Octa	PCB-194	8.35e+05	0.97	y 53:52	1.21	2120		*	2.5	*	1.000	0.995-1.005	
Octa	PCB-205	*	*	n NotF _q	1.54	*		2520	2.5	96.5	*	1.001-1.011	
Nona	PCB-208	1.58e+05	1.24	y 53:06	0.93	382		*	2.5	*	1.000	0.995-1.005	
Nona	PCB-207	1.10e+05	1.20	y 53:26	1.08	228		*	2.5	*	1.007	1.001-1.011	
Nona	PCB-206	4.52e+05	1.24	y 55:34	1.02	1470		*	2.5	*	1.000	0.995-1.005	
Deca	PCB-209	4.19e+05	1.21	y 56:55	1.17	1290		*	2.5	*	1.000	0.995-1.005	

Analyst: Dan

Date: 2/24/15

Client ID: WM-CB-21-20150203-S
Lab ID: 1500147-04@10X

Filename: 150219E2 S:9 Acq:19-FEB-15 22:40:24 ConCal: ST150219E2-1
GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.0150 EndCAL: NA

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Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	8.07e+05	2.88 y	16:09	1.27	512.237
Total Di-PCB	2.08e+07	1.34 y	20:05	1.21	10471.5
Total Tri-PCB	9.35e+06	1.09 y	24:14	1.10	8904.78
Total Tri-PCB	2.06e+07	1.02 y	28:28	1.21	13777.7 Sum:22682.4
Total Tetra-PCB	4.47e+07	0.81 y	29:47	1.09	49529.2
Total Penta-PCB	5.03e+07	1.68 y	34:29	1.18	87342.0
Total Penta-PCB	6.20e+06	1.74 y	42:15	1.25	5420.99 Sum:92763.0
Total Hexa-PCB	5.67e+06	1.42 y	39:34	0.90	19784.9
Total Hexa-PCB	4.22e+07	1.22 y	42:10	1.11	51915.8 Sum:71700.7
Total Hepta-PCB	1.47e+07	1.07 y	44:07	1.42	30982.4
Total Octa-PCB	2.00e+06	0.82 y	48:20	0.96	7109.64
Total Octa-PCB	1.12e+06	0.84 y	52:58	1.33	2830.92 Sum:9940.56
Total Nona-PCB	7.20e+05	1.24 y	53:06	1.01	2083.82
Total Deca-PCB	4.19e+05	1.21 y	56:55	1.17	1291.99

Total PCB Conc:291904.554283

292000

Integrations
by
Analyst: DMS
Date: 2/24/15

Client ID: WM-CB-21-20150203-S
 Lab ID: 1500147-04@10X

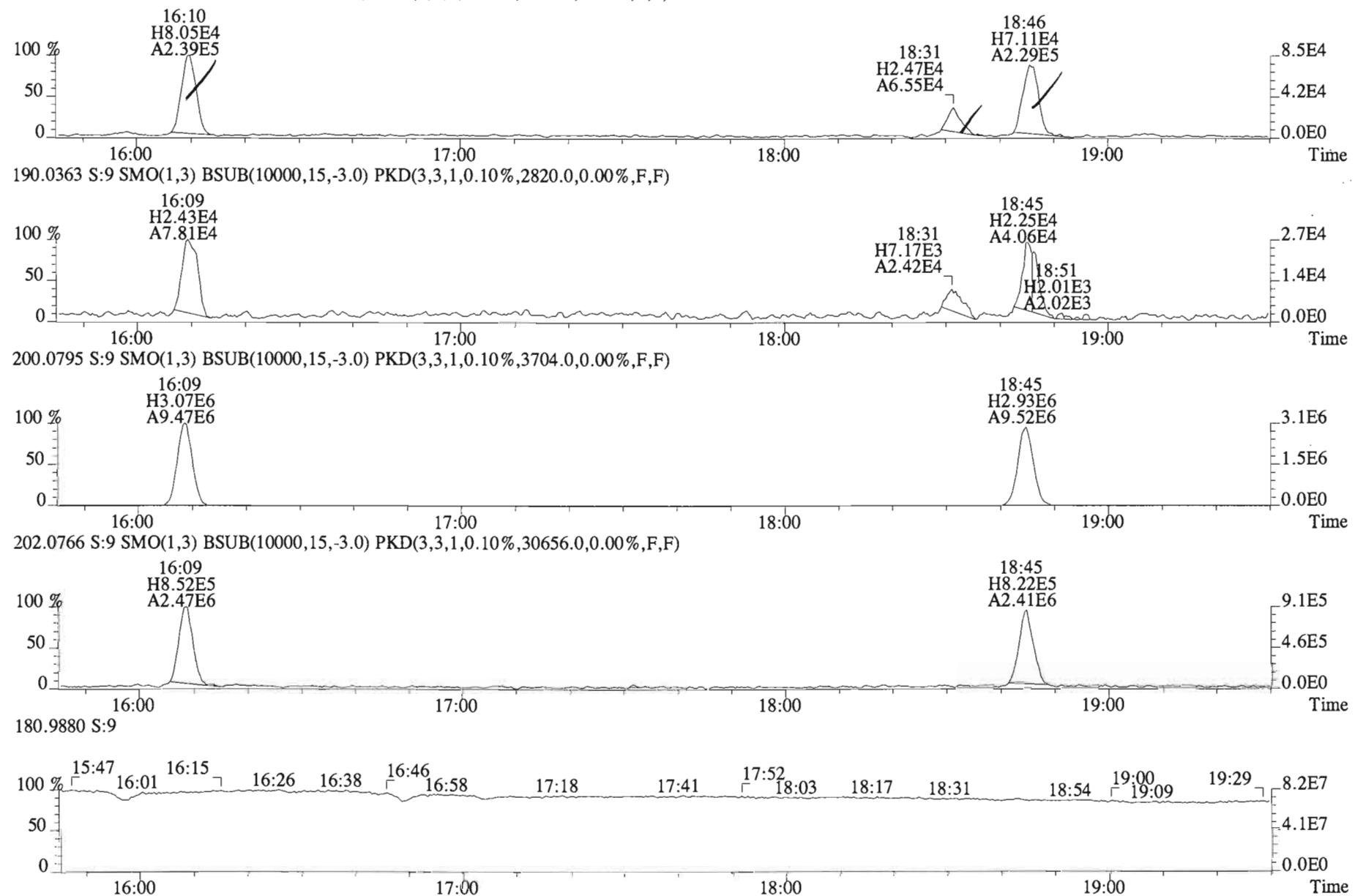
Filename: 150219E2 S:9 Acq:19-FEB-15 22:40:24 ConCal: ST150219E2-1
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:2.0150 EndCAL: NA

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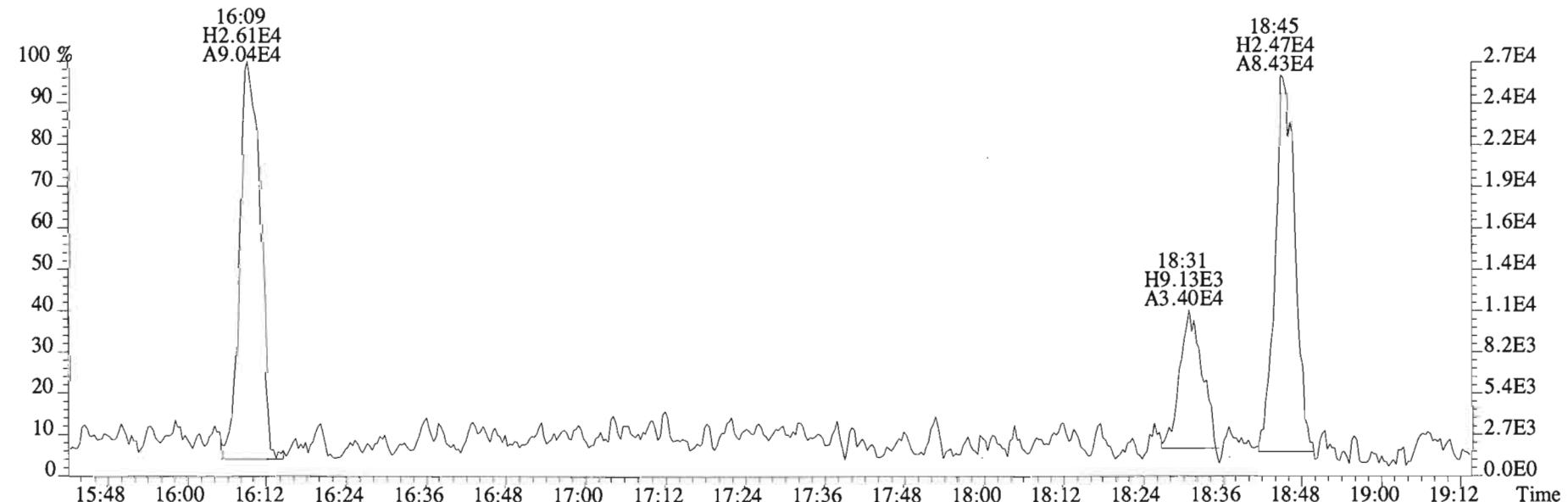
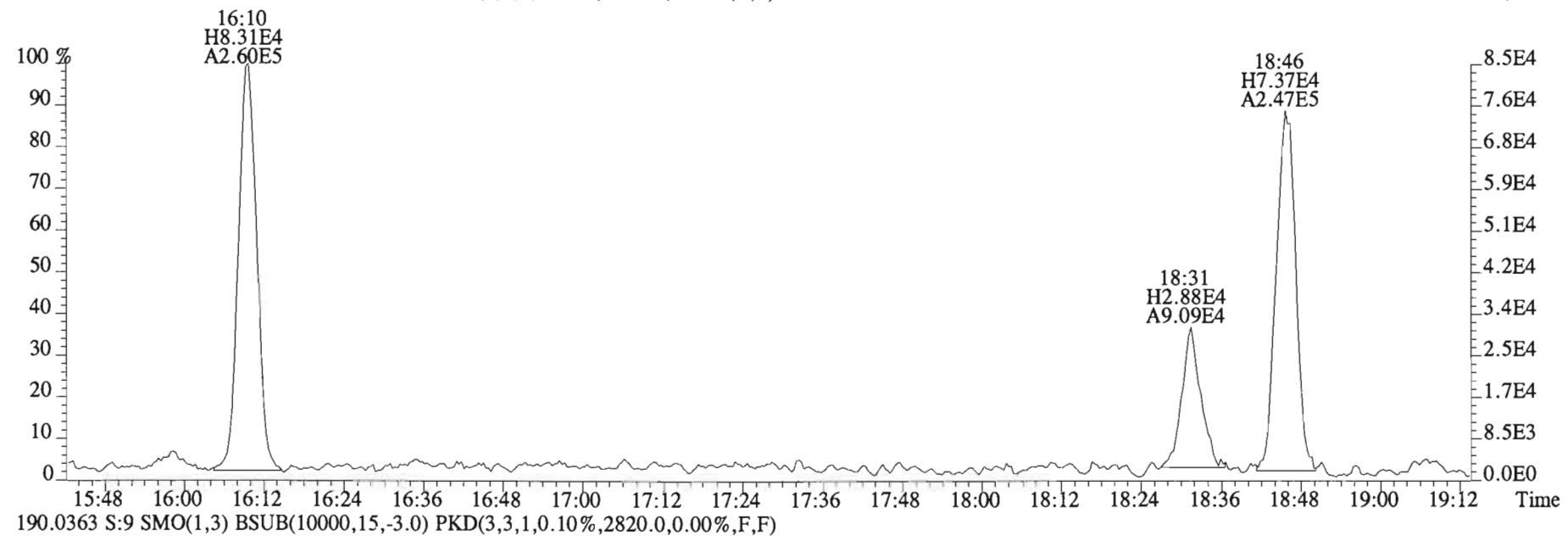
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS		Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec			
13C-PCB-1	1.23e+07	3.35	y	0.87	16:08	0.622	0.629-0.635	6710	67.6	13C-PCB-79	9.47e+06	0.80	y	1.02	37:50	1.029	1.023-1.034	8950	90.1					
13C-PCB-3	1.22e+07	3.56	y	0.91	18:44	0.722	0.725-0.733	6370	64.2	13C-PCB-178	3.23e+06	0.44	y	0.61	45:39	0.984	0.979-0.990	8190	82.5					
13C-PCB-4	1.11e+07	1.55	y	0.59	20:04	0.774	0.775-0.783	8980	90.4	13C-PCB-37	9.44e+06	1.139	1.131-1.143	7790	78.5	13C-PCB-47	8.07e+06	0.74	y	0.81	32:01	0.866-0.874	9540	96.1
13C-PCB-9	1.72e+07	1.60	y	0.90	21:51	0.843	0.842-0.850	9140	92.0	13C-PCB-52	7.62e+06	0.73	y	0.77	31:30	0.857	0.853-0.861	9470	95.5					
13C-PCB-11	1.75e+07	1.55	y	0.94	25:14	0.973	0.968-0.978	8900	89.7	13C-PCB-54	1.02e+07	0.78	y	0.97	27:58	0.761	0.758-0.766	10100	102					
13C-PCB-19	8.13e+06	1.18	y	0.53	24:13	0.934	0.930-0.940	7280	73.4	13C-PCB-70	9.59e+06	0.74	y	1.00	35:31	0.966	0.961-0.971	9220	92.9					
13C-PCB-28	1.16e+07	1.07	y	0.93	29:05	1.004	0.999-1.009	8620	86.8	13C-PCB-77	8.76e+06	0.81	y	0.94	39:39	1.078	1.073-1.083	8920	89.9					
13C-PCB-32	1.21e+07	1.10	y	0.80	27:07	1.046	1.040-1.050	7220	72.7	13C-PCB-80	9.79e+06	0.76	y	1.03	35:56	0.977	0.972-0.982	9110	91.8					
13C-PCB-37	9.44e+06	1.02	y	0.84	33:00	1.139	1.131-1.143	7790	78.5	13C-PCB-81	8.64e+06	0.82	y	0.92	39:03	1.062	1.057-1.067	8990	90.6					
13C-PCB-47	8.07e+06	0.74	y	0.81	32:01	0.871	0.866-0.874	9540	96.1	13C-PCB-95	4.35e+06	1.73	y	0.74	35:49	0.913	0.908-0.918	9560	96.4					
13C-PCB-49	4.17e+06	1.66	y	0.70	38:48	0.989	0.984-0.994	9630	97.0	13C-PCB-101	4.67e+06	1.60	y	0.78	37:30	0.955	0.951-0.961	9720	97.9					
13C-PCB-104	5.85e+06	1.70	y	1.00	32:42	0.833	0.828-0.836	9510	95.8	13C-PCB-105	8.77e+06	1.61	y	1.37	43:06	0.929	0.924-0.934	9990	101					
13C-PCB-105	8.77e+06	1.61	y	1.37	43:06	0.929	0.924-0.934	9990	101	13C-PCB-114	9.33e+06	1.62	y	1.36	42:14	0.911	0.905-0.915	10600	107					
13C-PCB-114	9.33e+06	1.62	y	1.36	42:14	0.911	0.905-0.915	10600	107	13C-PCB-118	5.22e+06	1.55	y	0.96	41:34	1.059	1.054-1.064	8870	89.4					
13C-PCB-118	5.22e+06	1.55	y	0.96	41:34	1.059	1.054-1.064	8870	89.4	13C-PCB-123	5.14e+06	1.67	y	0.89	41:23	1.054	1.050-1.060	9360	94.3					
13C-PCB-123	5.14e+06	1.67	y	0.89	41:23	1.054	1.050-1.060	9360	94.3	13C-PCB-126	7.89e+06	1.56	y	1.31	45:21	0.978	0.972-0.982	9380	94.5					
13C-PCB-126	7.89e+06	1.56	y	1.31	45:21	0.978	0.972-0.982	9380	94.5	13C-PCB-127	8.78e+06	1.61	y	1.47	43:26	0.936	0.931-0.941	9260	93.3					
13C-PCB-138	6.50e+06	1.28	y	1.10	44:50	0.967	0.961-0.971	9190	92.5	13C-PCB-141	6.51e+06	1.28	y	1.07	43:59	0.948	0.943-0.953	9420	94.9					
13C-PCB-141	6.51e+06	1.28	y	1.07	43:59	0.948	0.943-0.953	9420	94.9	13C-PCB-153	6.97e+06	1.24	y	1.15	43:15	0.932	0.927-0.937	9450	95.2					
13C-PCB-153	6.97e+06	1.24	y	1.15	43:15	0.932	0.927-0.937	9450	95.2	13C-PCB-155	3.56e+06	1.21	y	0.84	37:03	0.944	0.939-0.949	6910	69.6					
13C-PCB-155	3.56e+06	1.21	y	0.84	37:03	0.944	0.939-0.949	6910	69.6	13C-PCB-156	6.89e+06	1.25	y	1.30	48:07	1.037	1.032-1.042	8260	83.2					
13C-PCB-156	6.89e+06	1.25	y	1.30	48:07	1.037	1.032-1.042	8260	83.2	13C-PCB-157	7.74e+06	1.27	y	1.36	48:23	1.043	1.038-1.048	8860	89.3					
13C-PCB-157	7.74e+06	1.27	y	1.36	48:23	1.043	1.038-1.048	8860	89.3	13C-PCB-159	7.11e+06	1.29	y	1.25	46:08	0.995	0.989-0.999	8860	89.3					
13C-PCB-159	7.11e+06	1.29	y	1.25	46:08	0.995	0.989-0.999	8860	89.3	13C-PCB-167	7.50e+06	1.25	y	1.35	46:49	1.009	1.004-1.014	8630	86.9					
13C-PCB-167	7.50e+06	1.25	y	1.35	46:49	1.009	1.004-1.014	8630	86.9	13C-PCB-169	5.96e+06	1.36	y	1.29	50:31	1.089	1.083-1.093	7210	72.6					
13C-PCB-169	5.96e+06	1.36	y	1.29	50:31	1.089	1.083-1.093	7210	72.6	13C-PCB-170	2.25e+06	0.47	y	0.54	50:52	1.097	1.089-1.101	6440	64.9					
13C-PCB-170	2.25e+06	0.47	y	0.54	50:52	1.097	1.089-1.101	6440	64.9	13C-PCB-180	3.23e+06	0.52	y	0.68	49:24	1.065	1.060-1.070	7350	74.1					
13C-PCB-180	3.23e+06	0.52	y	0.68	49:24	1.065	1.060-1.070	7350	74.1	13C-PCB-188	4.51e+06	0.49	y	0.92	42:52	0.924	0.919-0.929	7650	77.0					
13C-PCB-188	4.51e+06	0.49	y	0.92	42:52	0.924	0.919-0.929	7650	77.0	13C-PCB-189	2.51e+06	0.44	y	0.72	52:21	1.129	1.120-1.132	5460	55.0					
13C-PCB-189	2.51e+06	0.44	y	0.72	52:21	1.129	1.120-1.132	5460	55.0	13C-PCB-194	3.23e+06	0.94	y	0.80	53:52	0.995	0.990-1.000	9890	99.7					
13C-PCB-194	3.23e+06	0.94	y	0.80	53:52	0.995	0.990-1.000	9890	99.7	13C-PCB-202	3.28e+06	0.94	y	0.84	48:19	1.042	1.036-1.046	6090	61.3					
13C-PCB-202	3.28e+06	0.94	y	0.84	48:19	1.042	1.036-1.046	6090	61.3	13C-PCB-206	2.97e+06	0.72	y	0.65	55:33	1.026	1.021-1.031	11200	113					
13C-PCB-206	2.97e+06	0.72	y	0.65	55:33	1.026	1.021-1.031	11200	113	13C-PCB-208	4.42e+06	0.77	y	1.08	53:05	0.980	0.976-0.986	9990	101					
13C-PCB-208	4.42e+06	0.77	y	1.08	53:05	0.980	0.976-0.986	9990	101	13C-PCB-209	2.75e+06	1.28	y	0.61	56:54	1.051	1.045-1.055	11000	111					

Analyst: DMS
 Date: 2/24/15

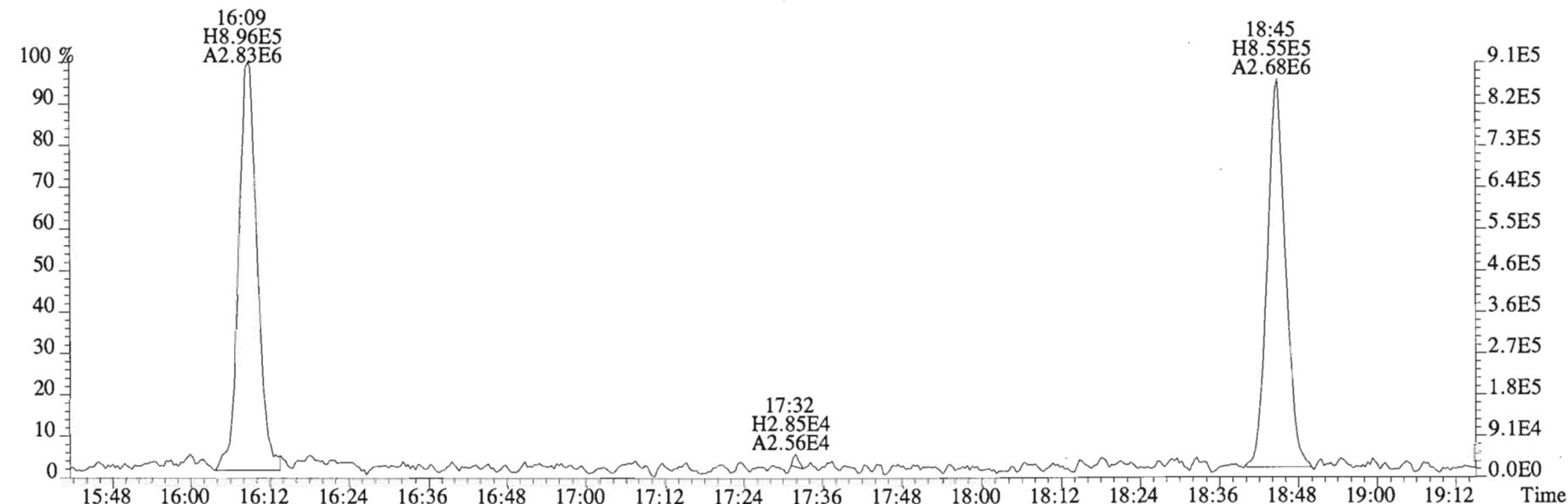
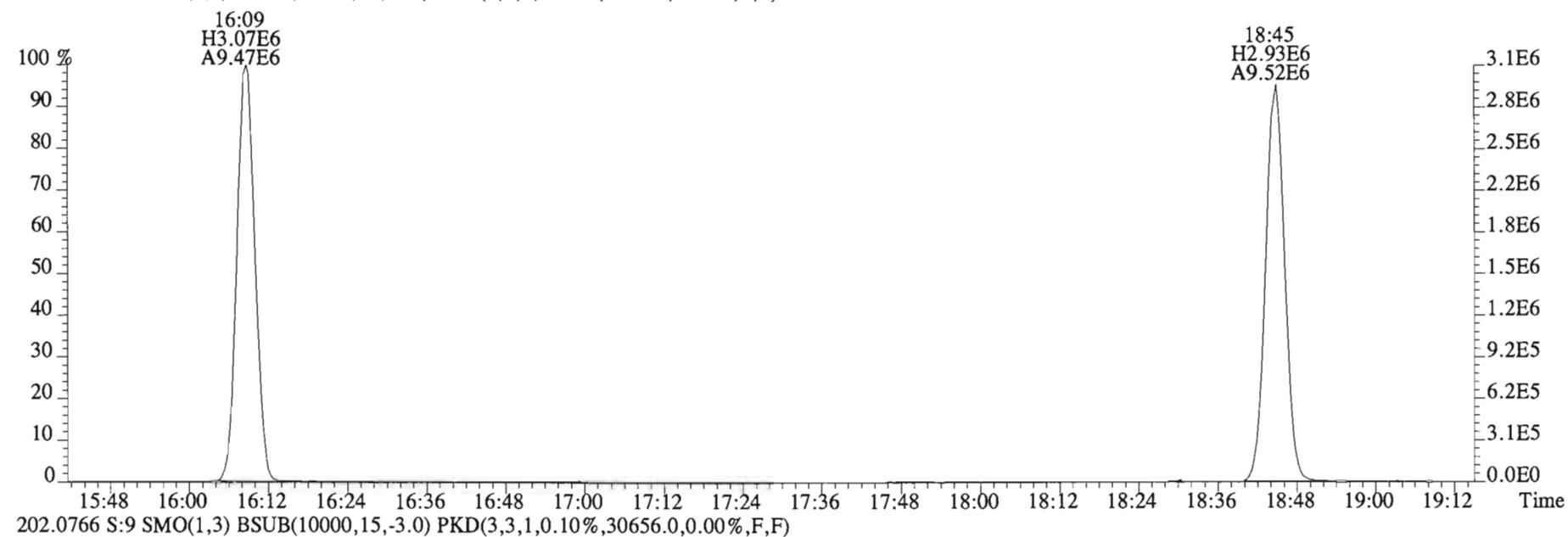
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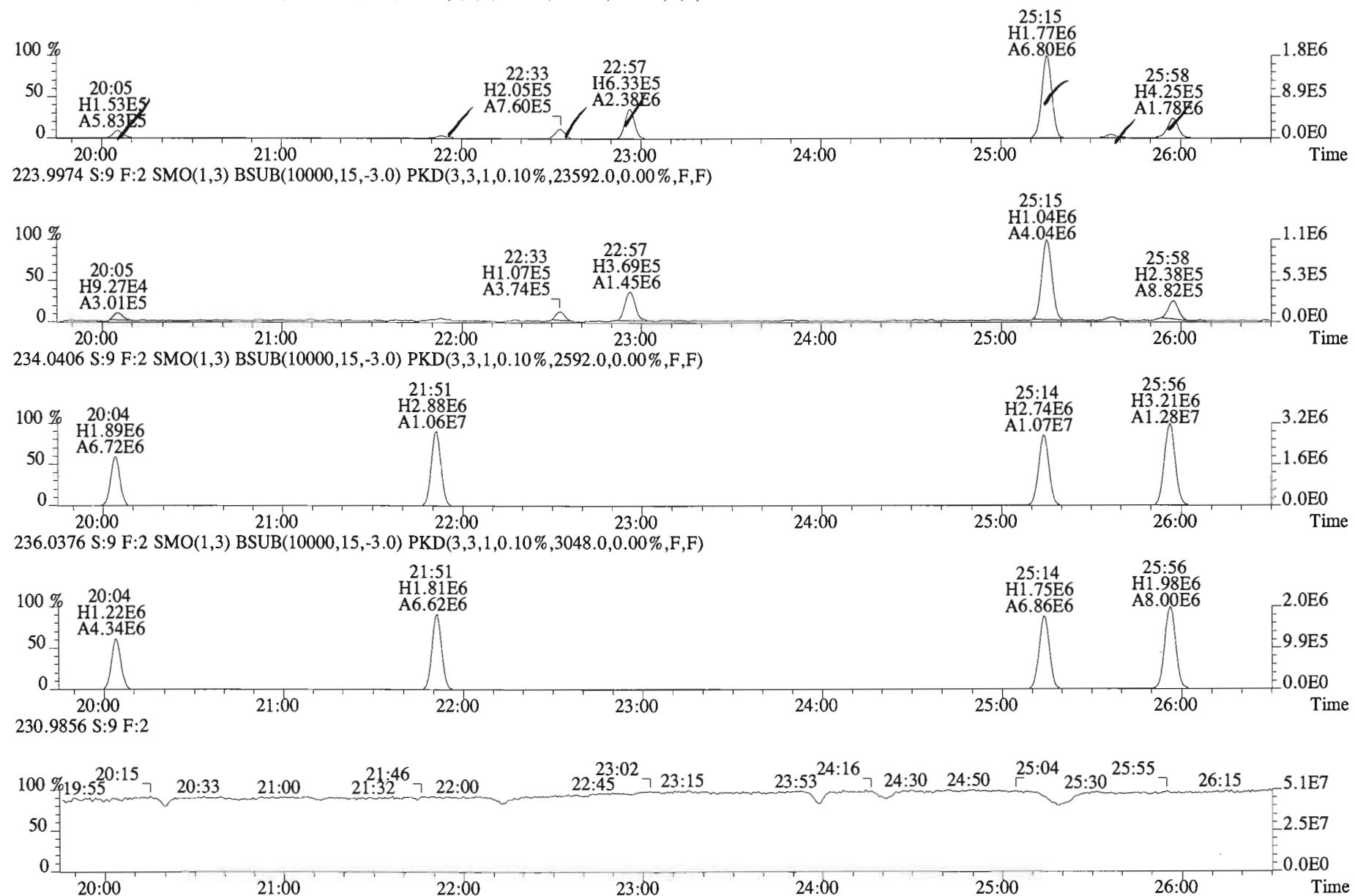
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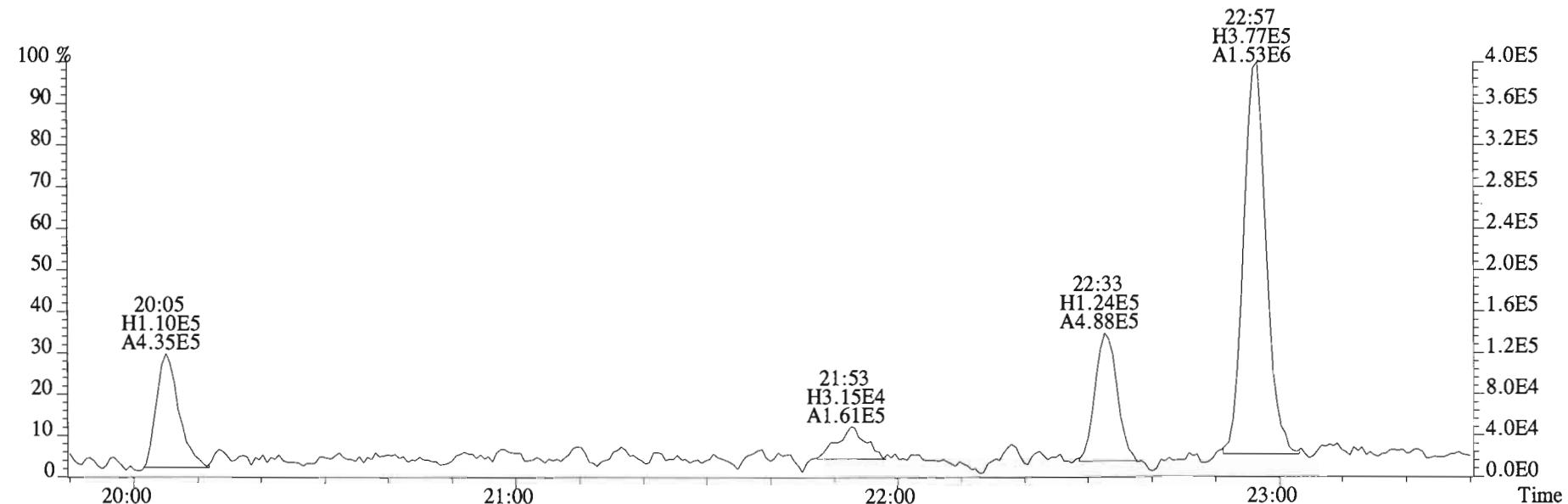
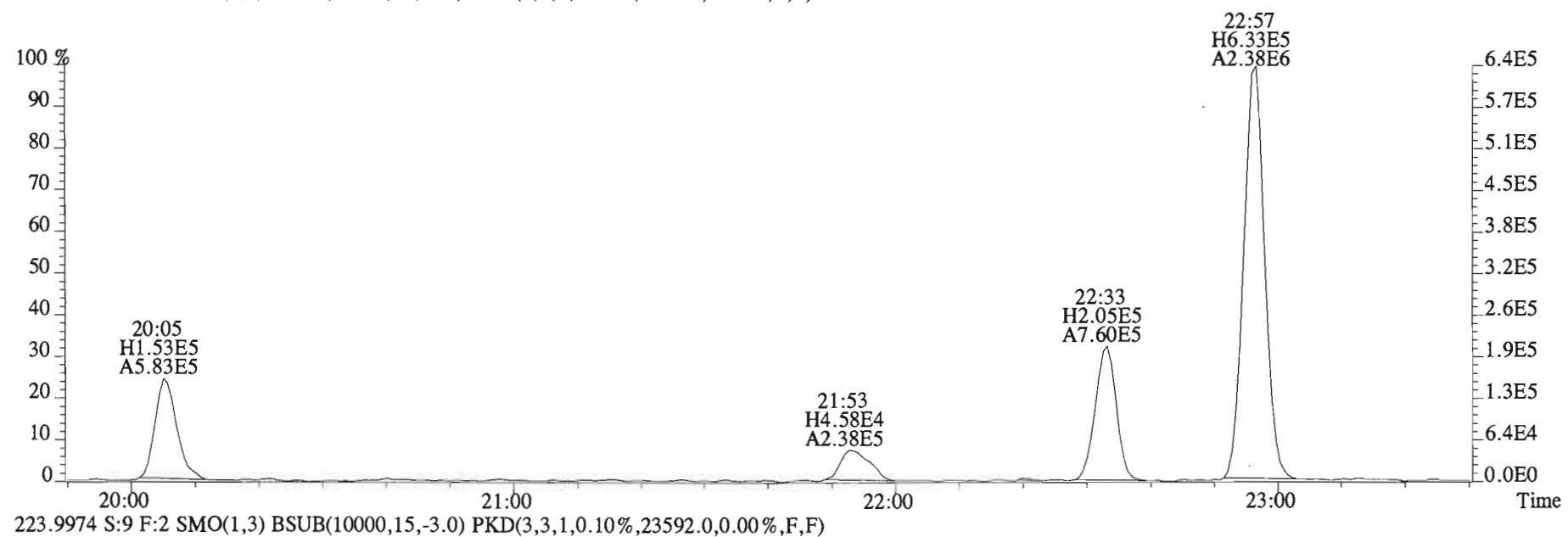
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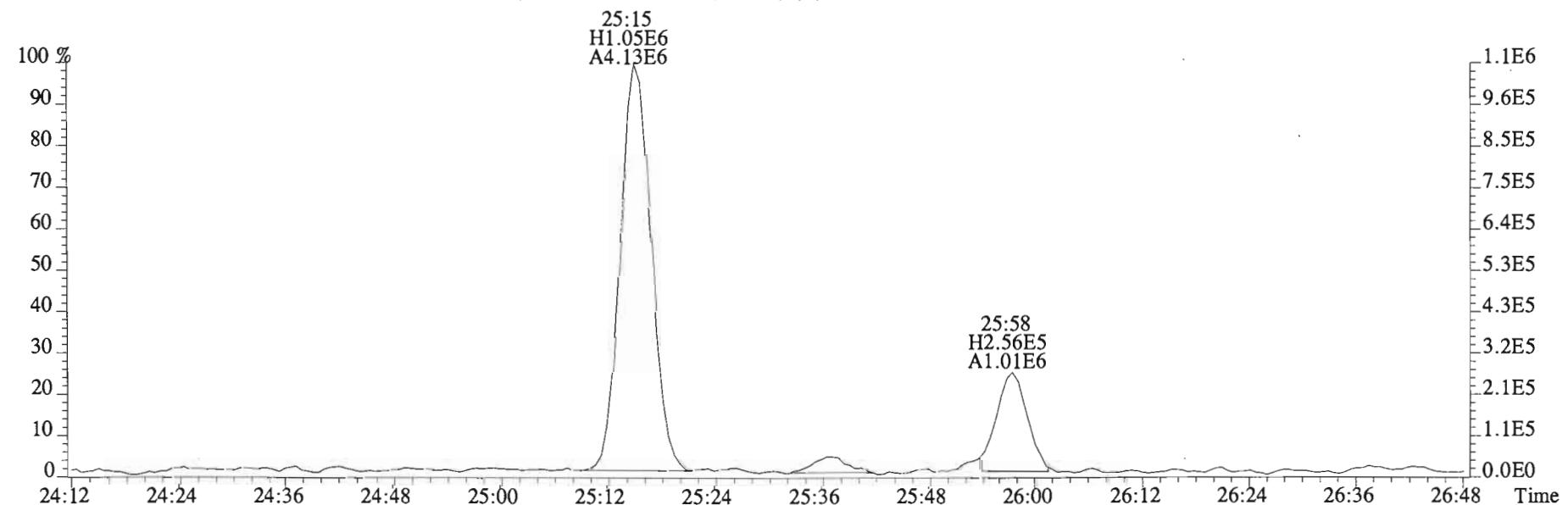
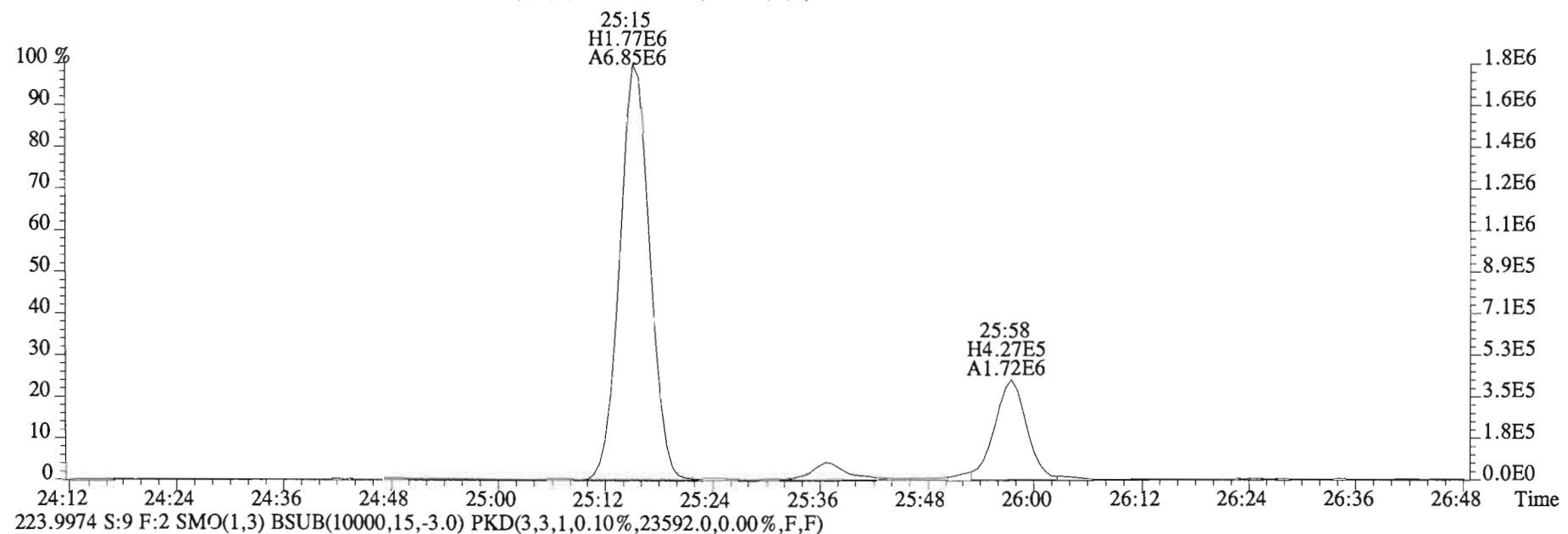
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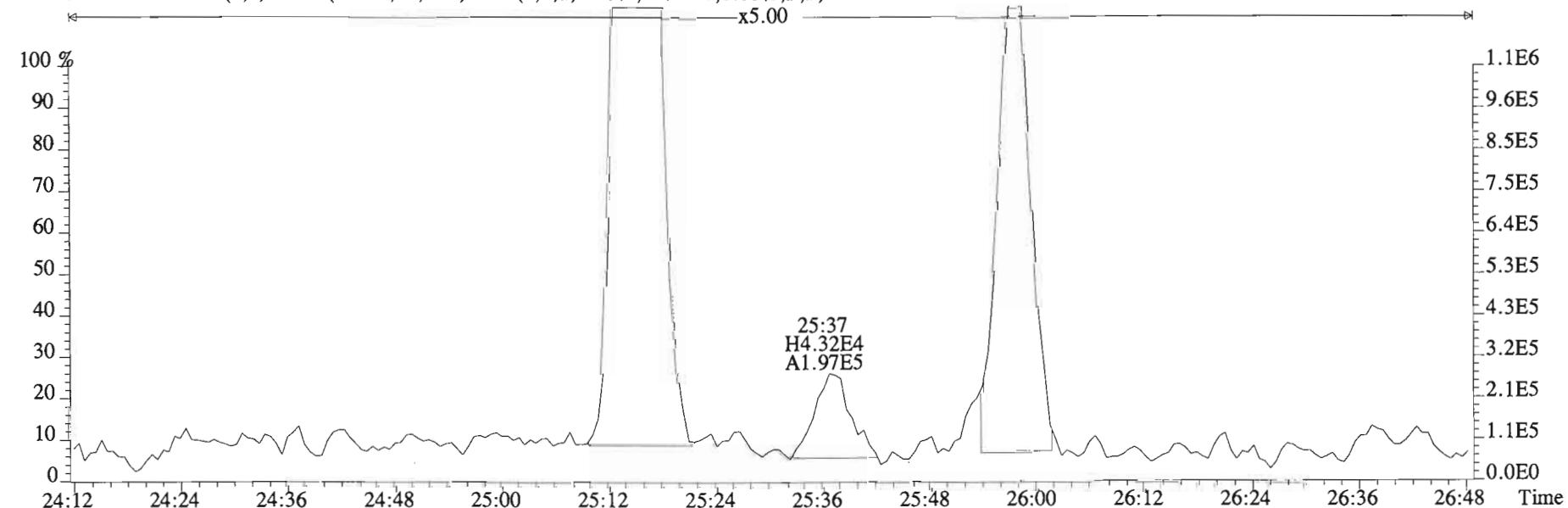
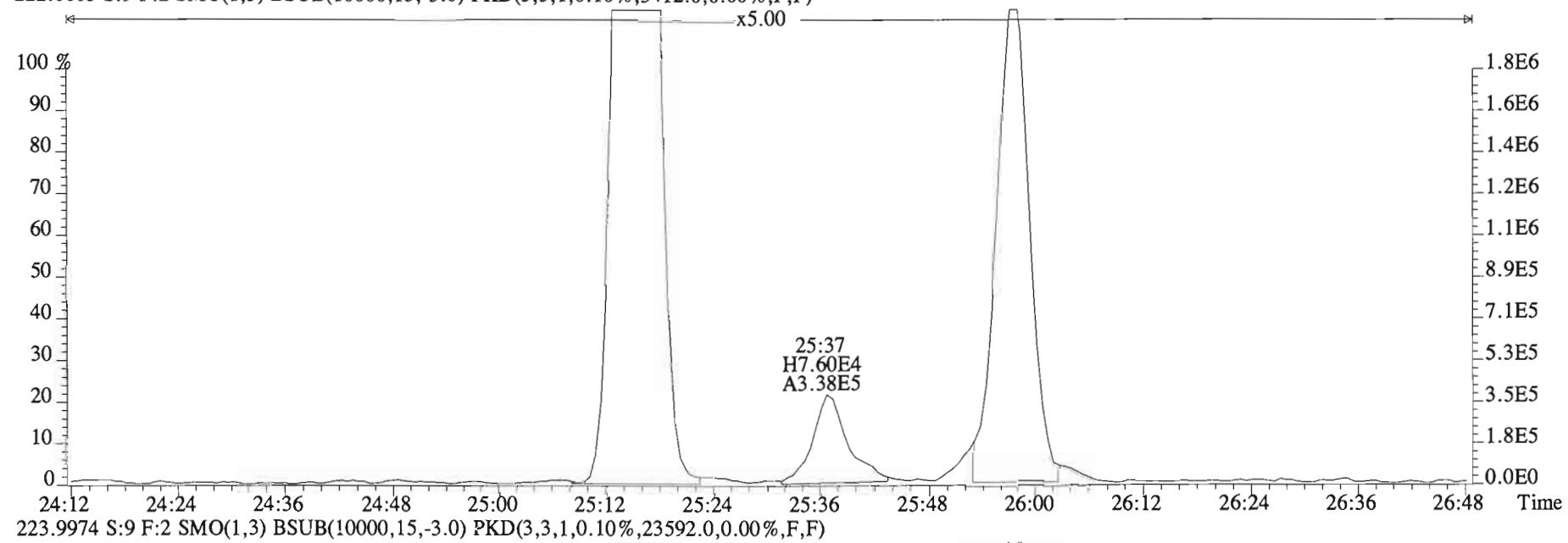
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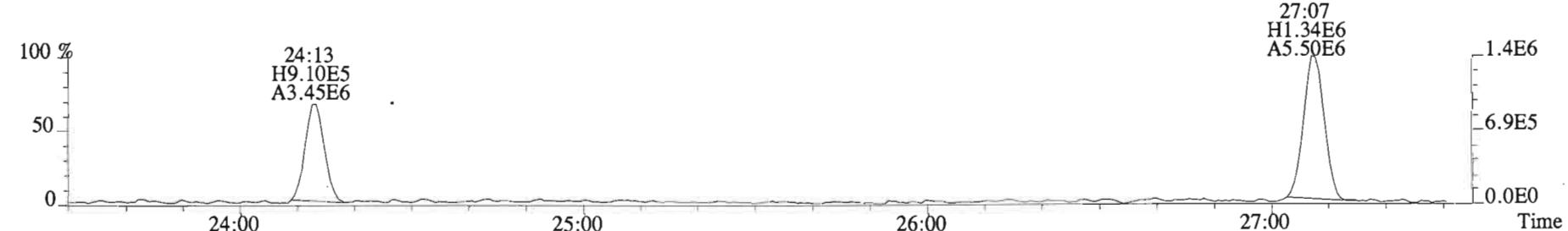
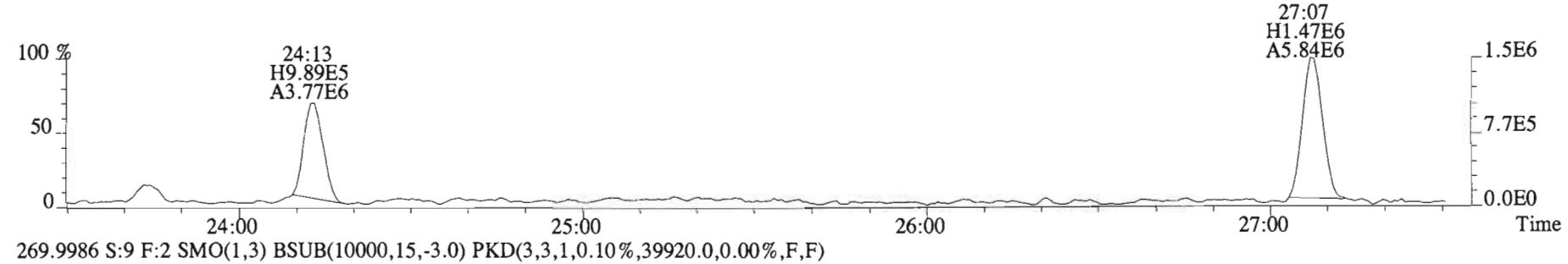
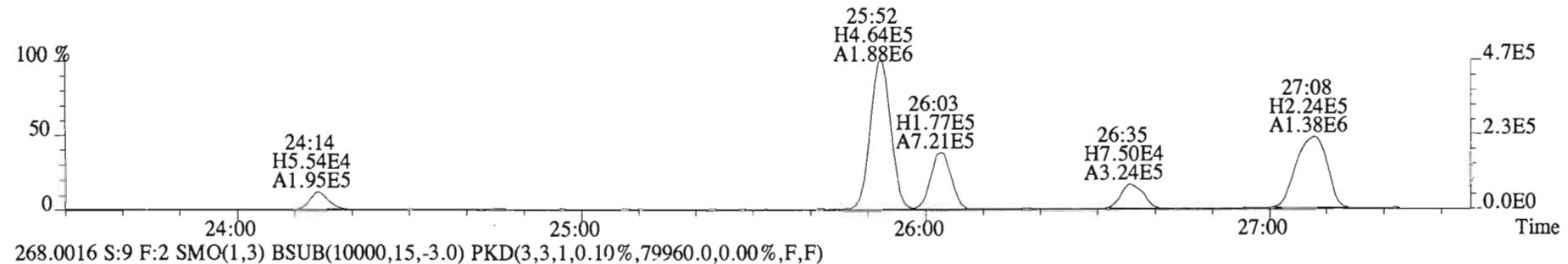
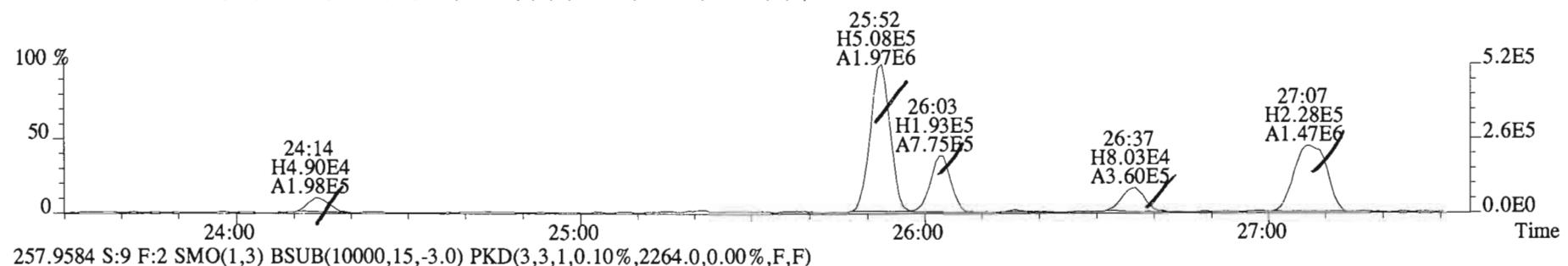
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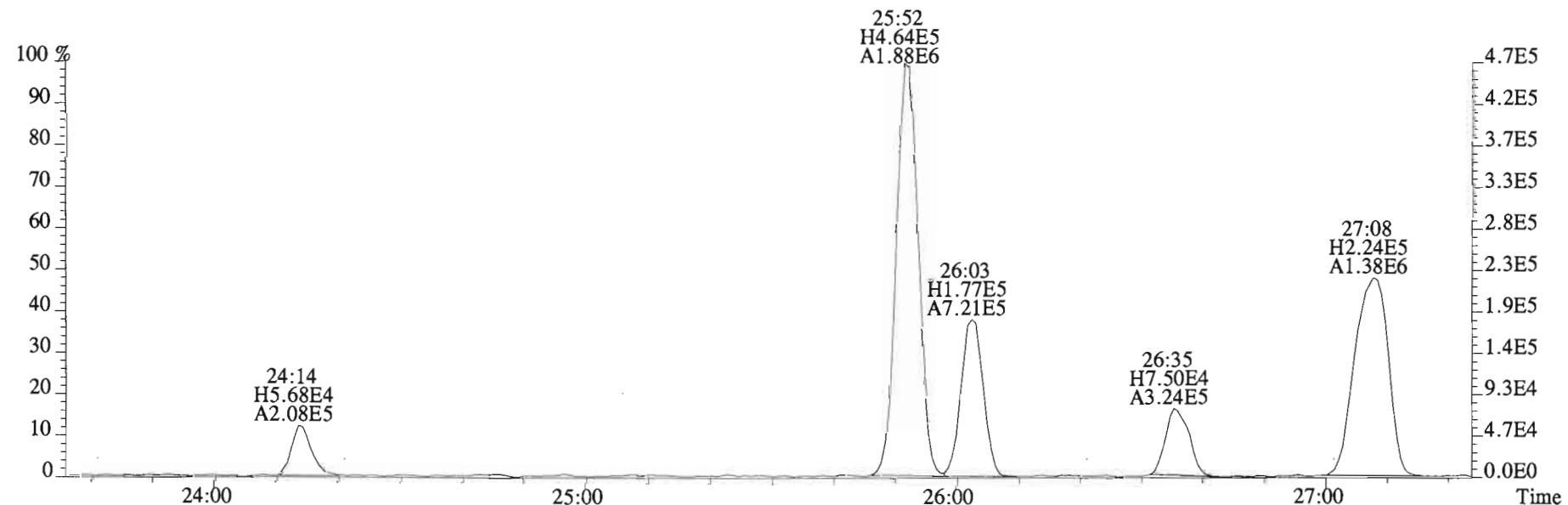
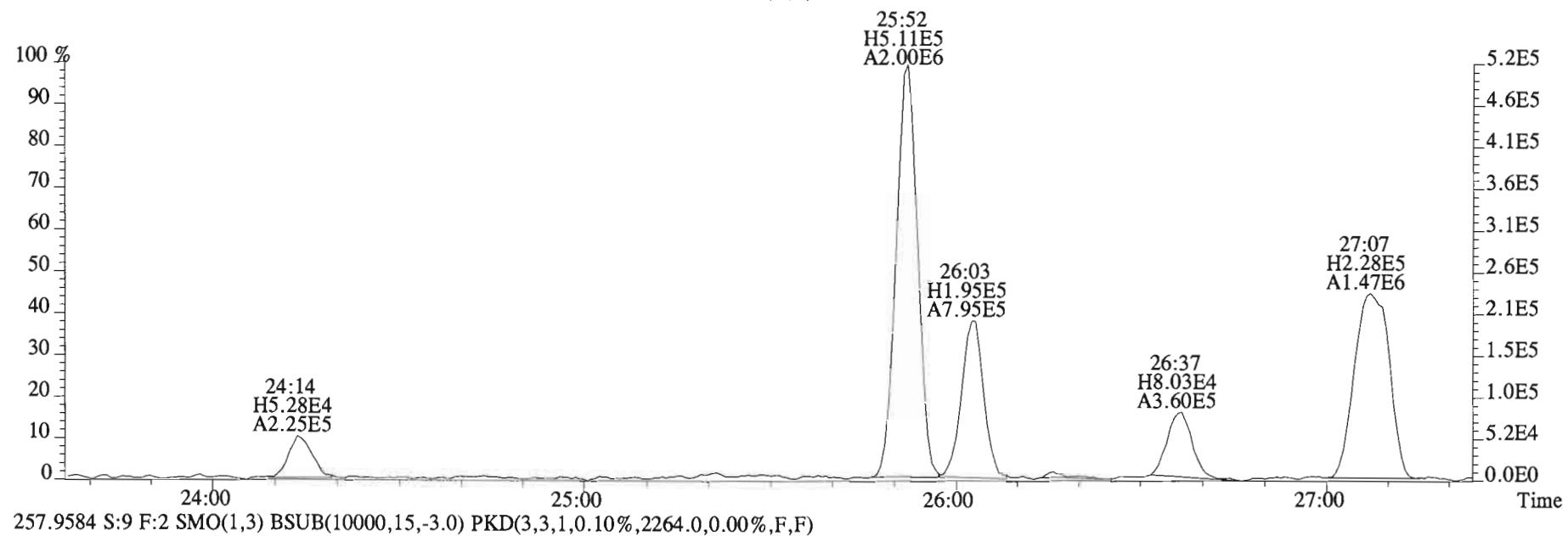
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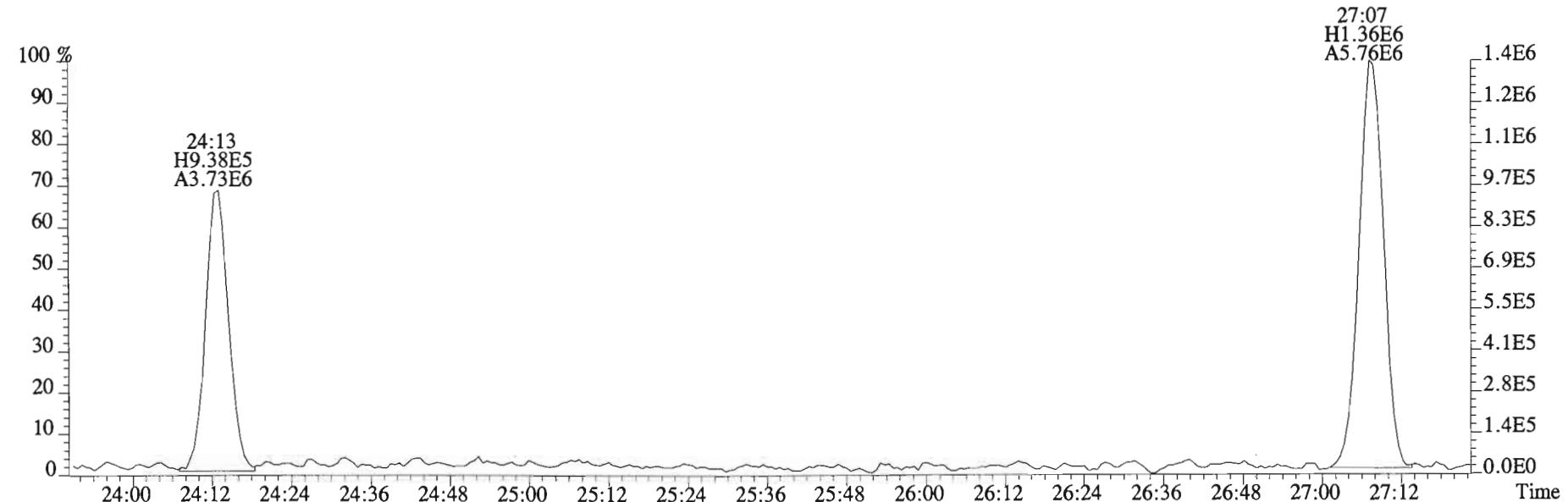
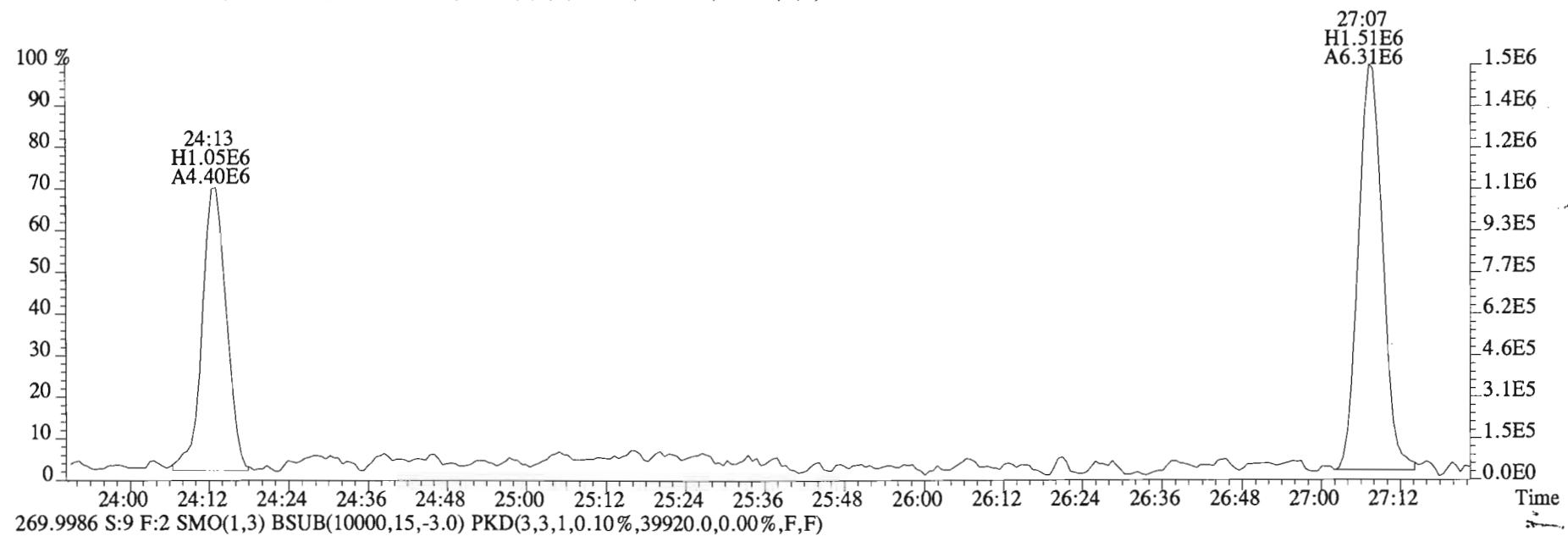
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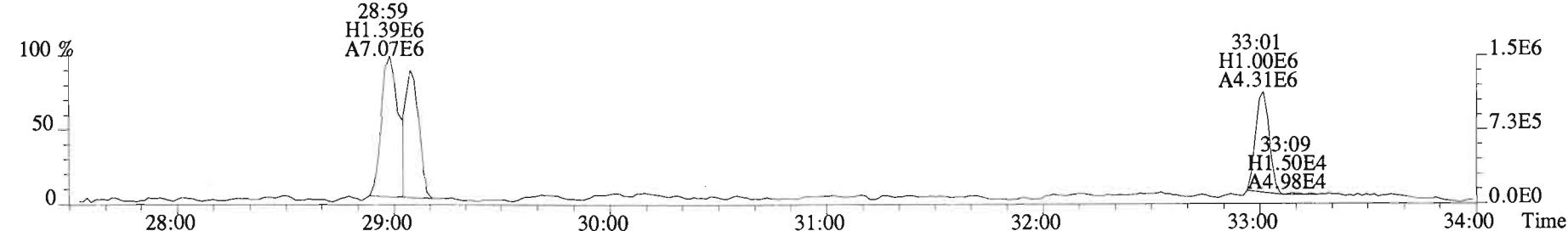
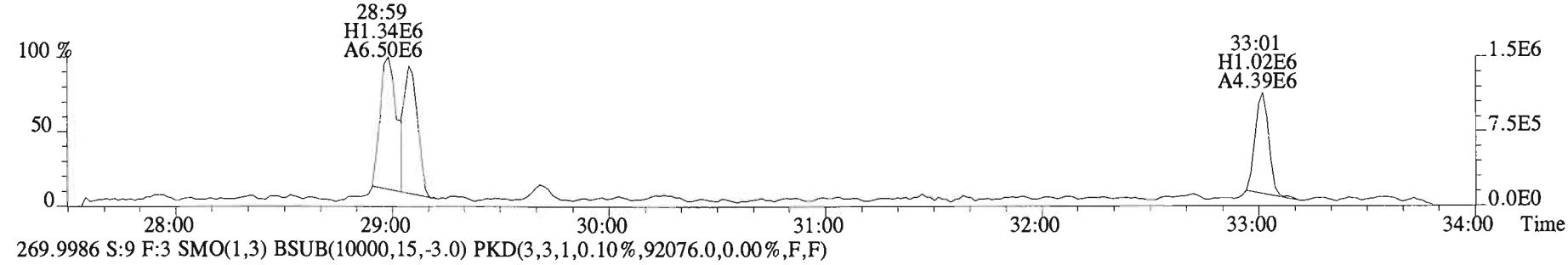
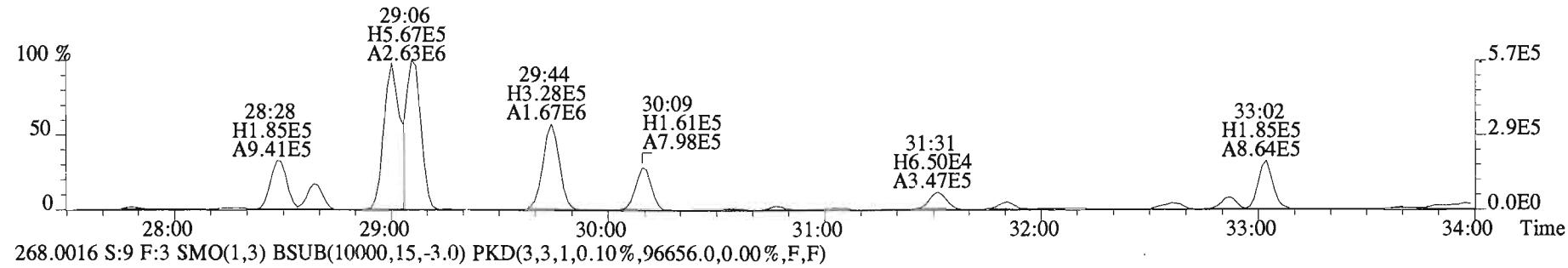
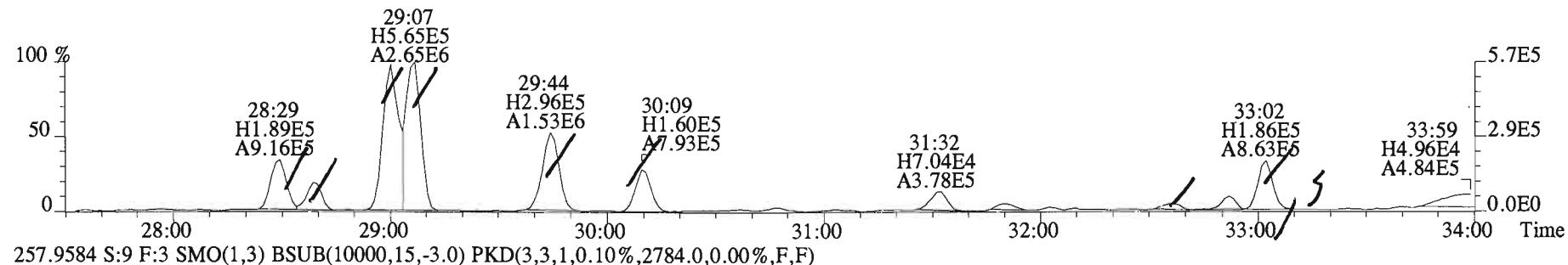
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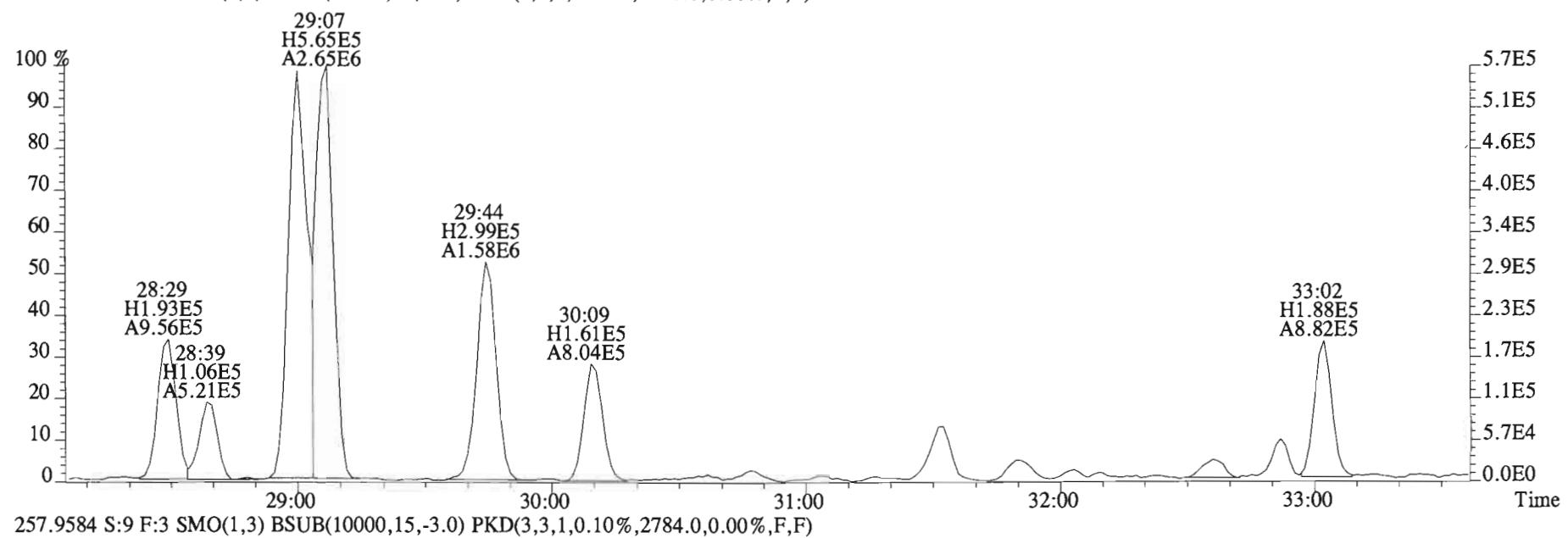
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268.0016 S:9 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,79960.0,0.00%,F,F)



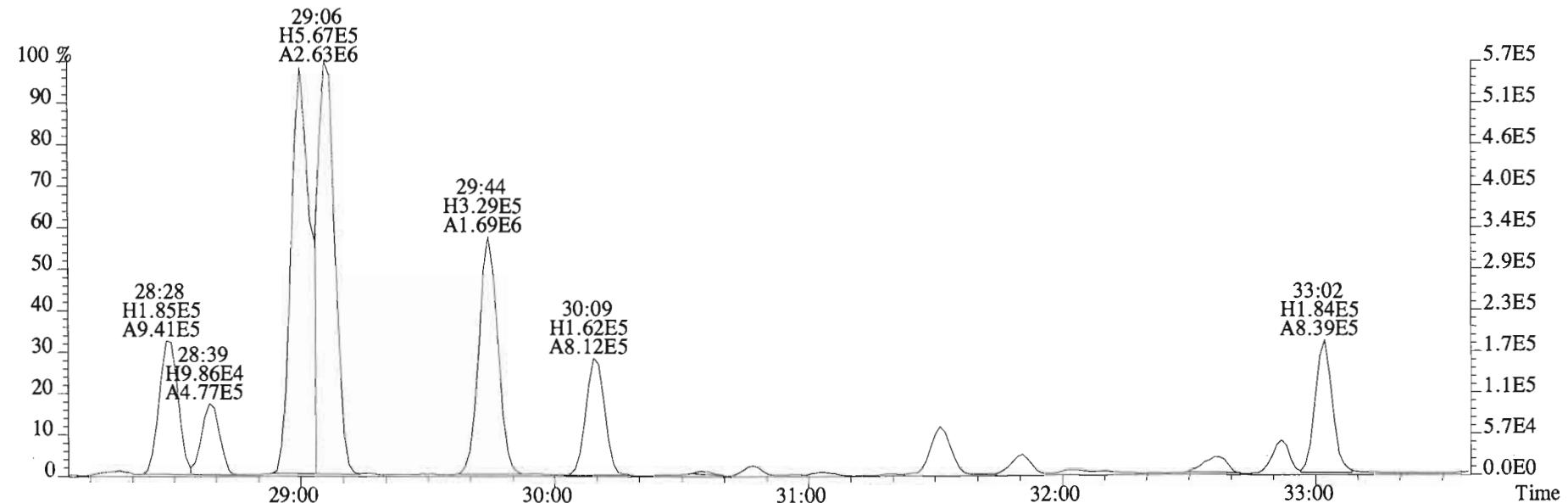
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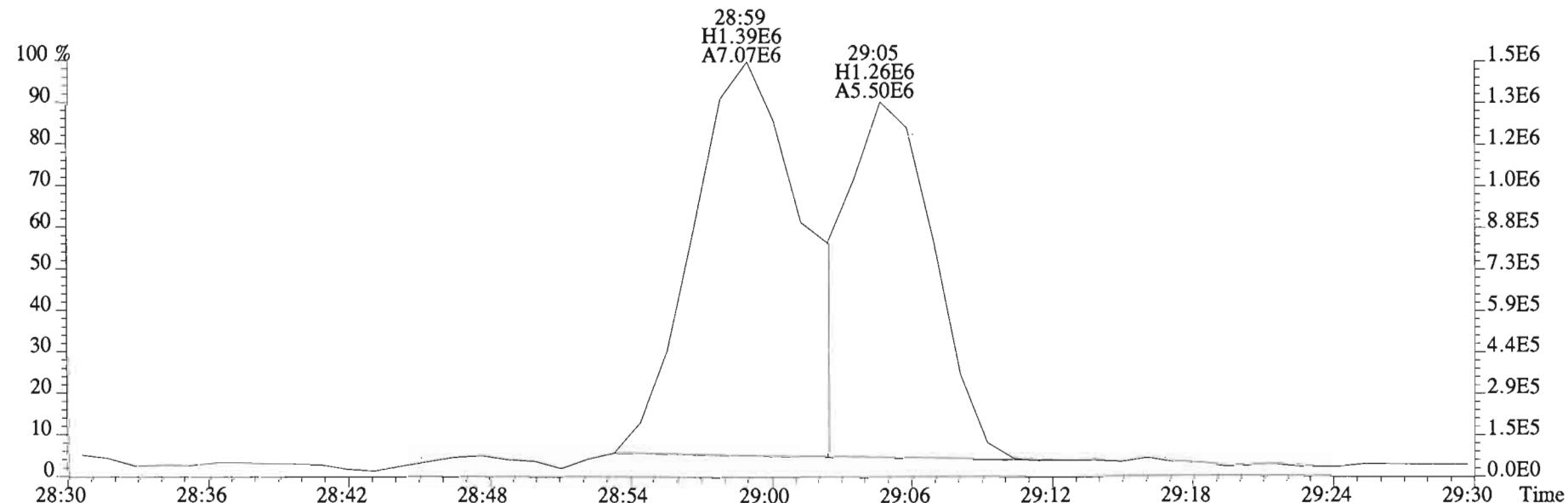
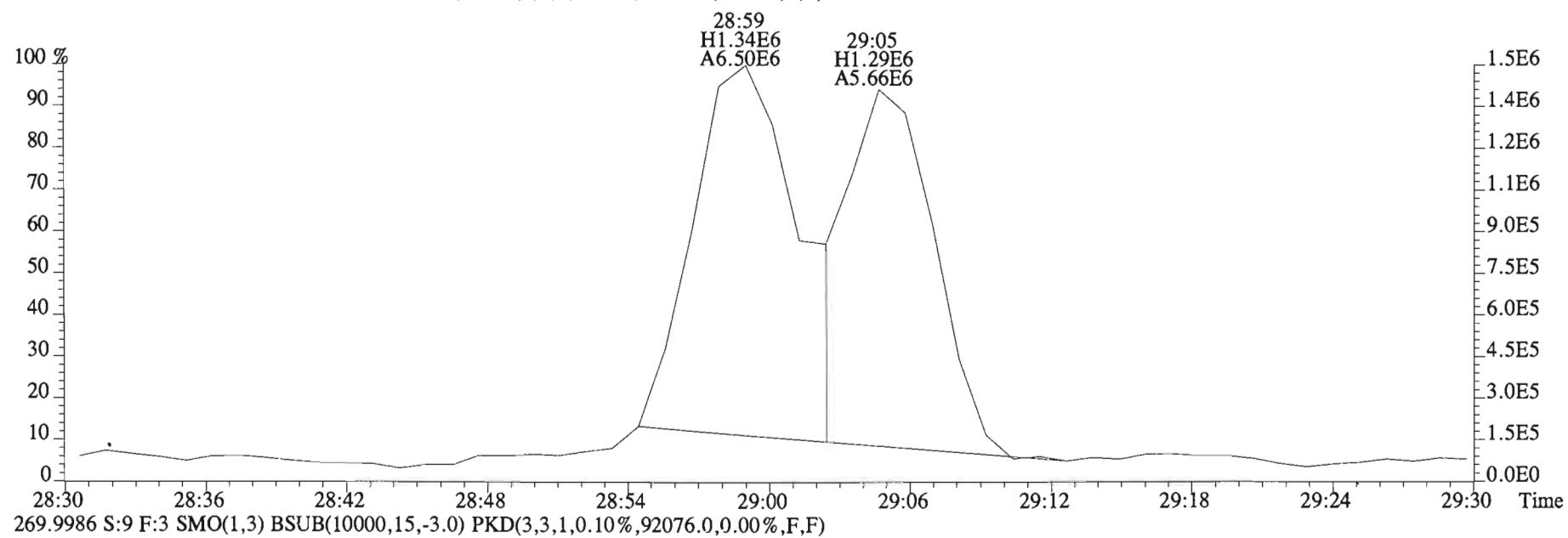
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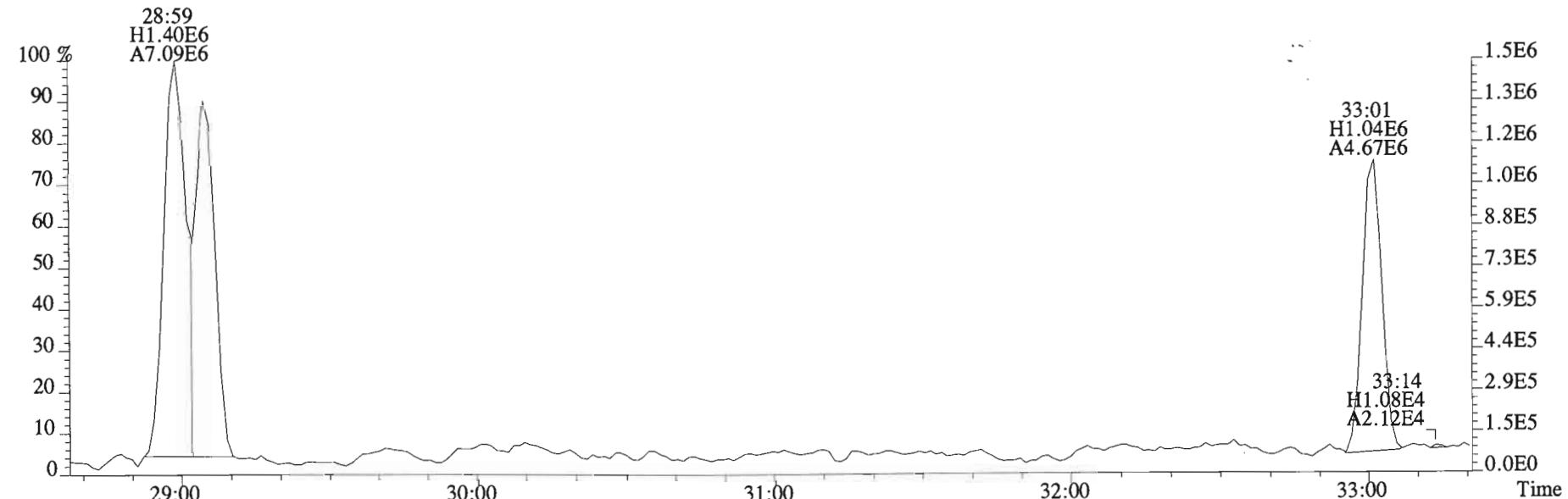
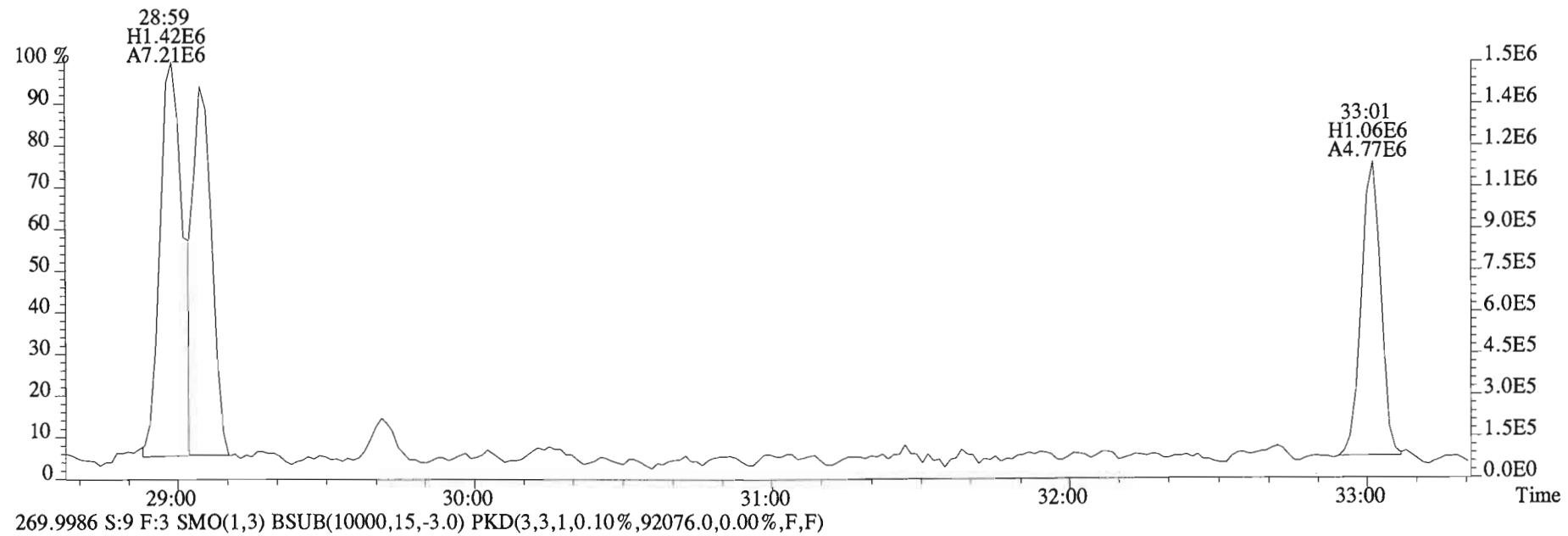
257.9584 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2784.0,0.00%,F,F)



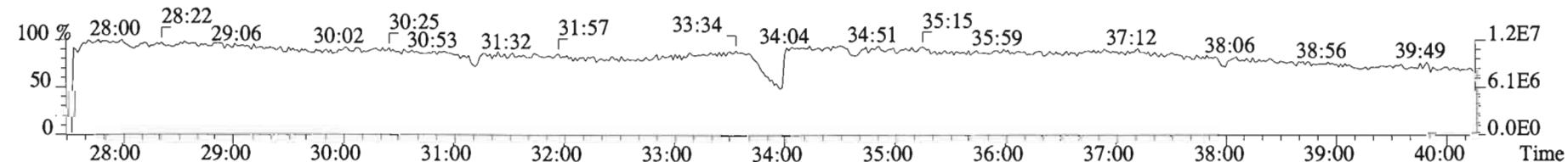
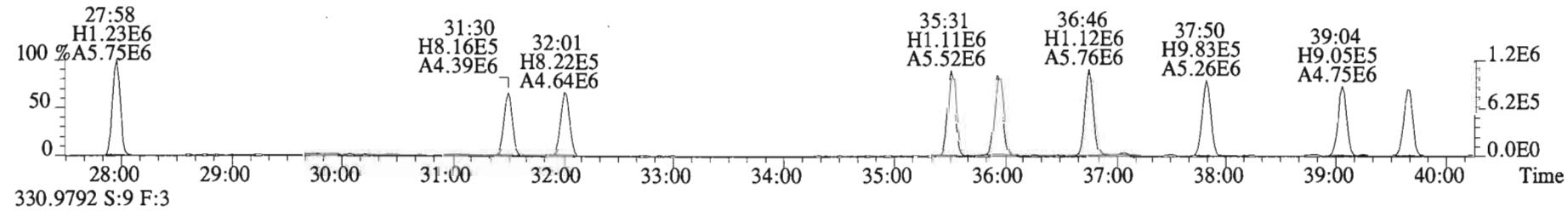
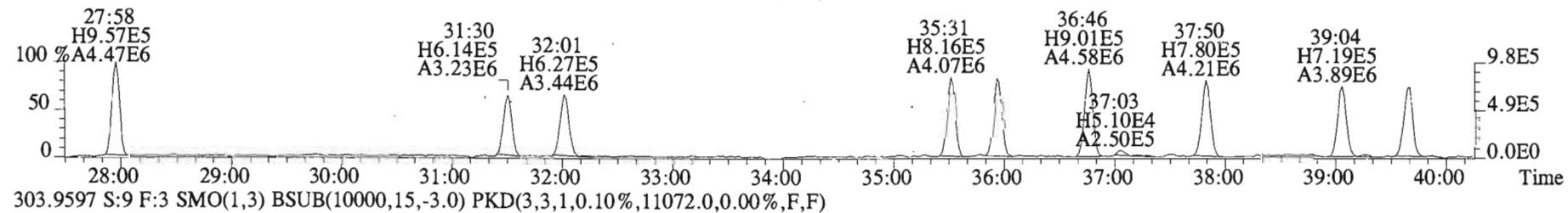
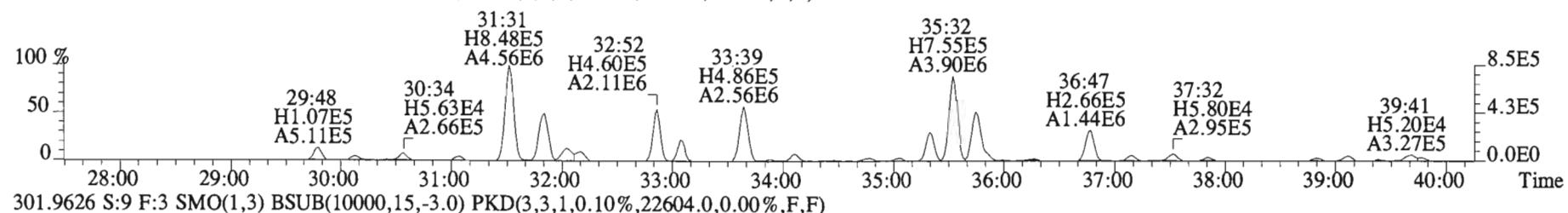
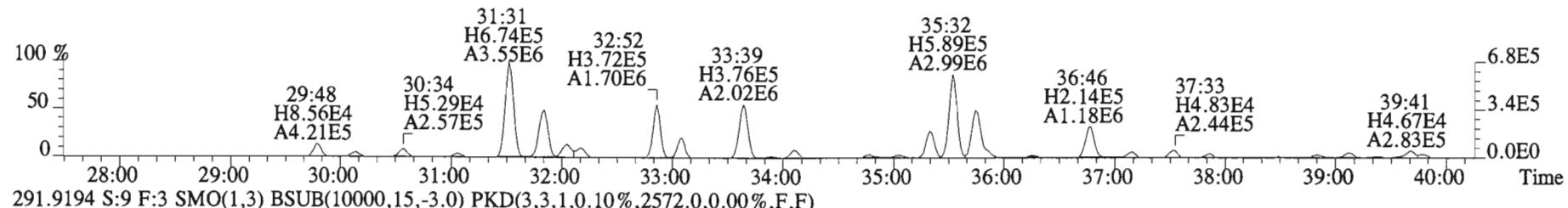
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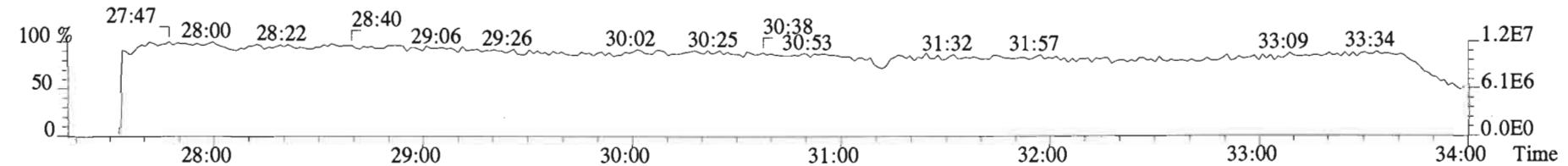
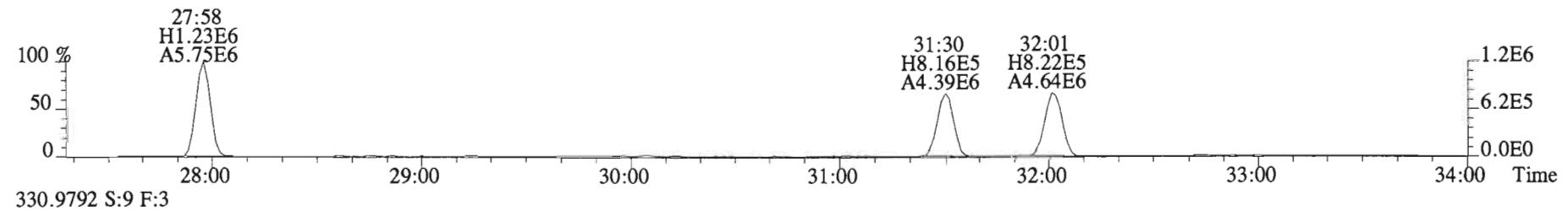
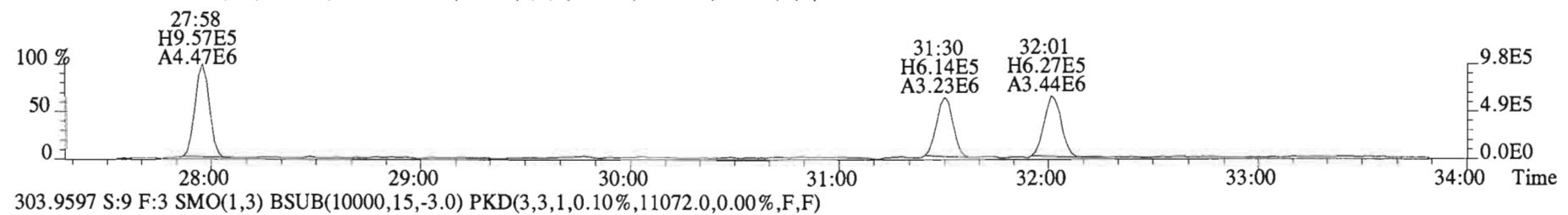
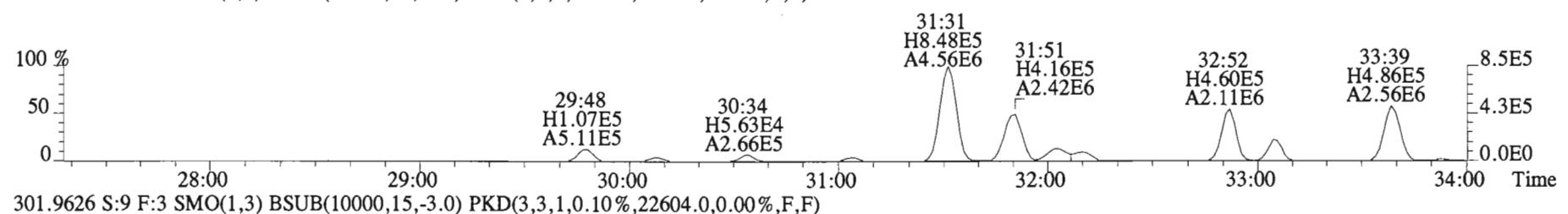
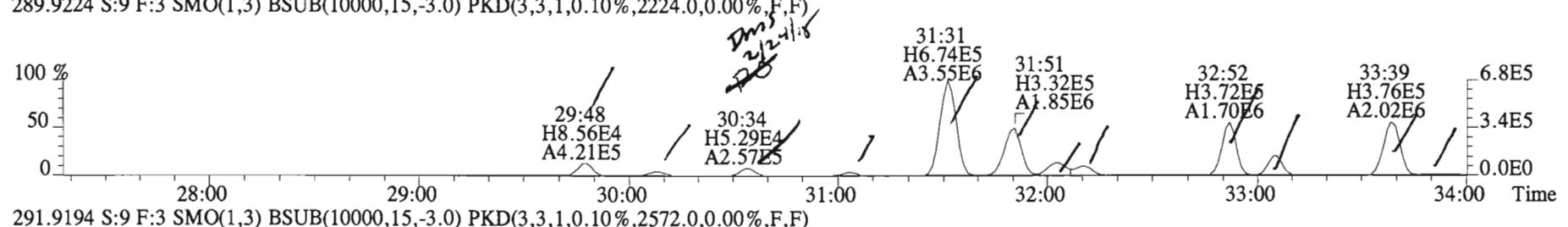
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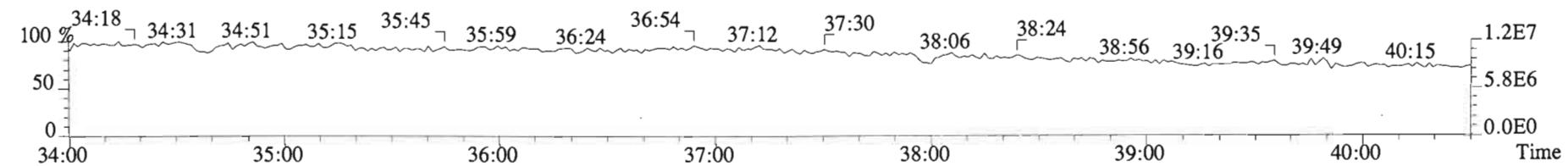
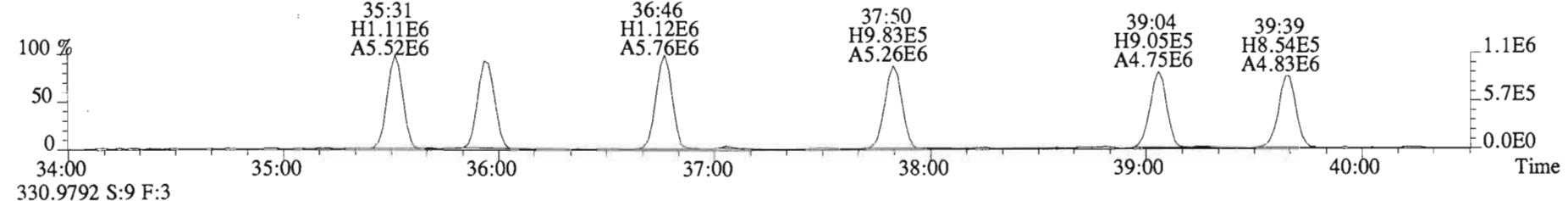
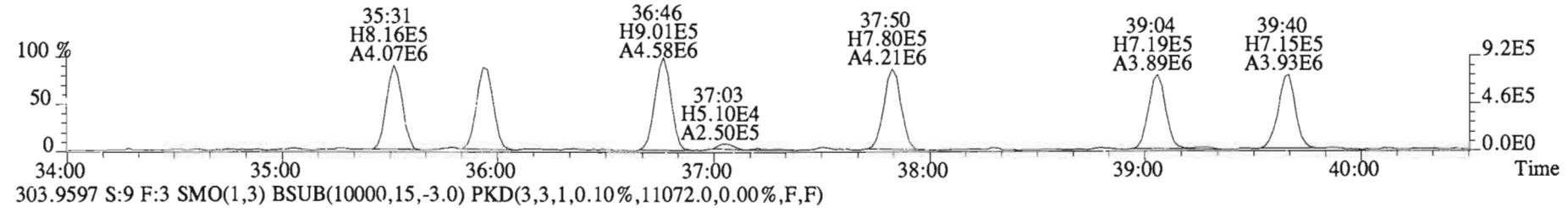
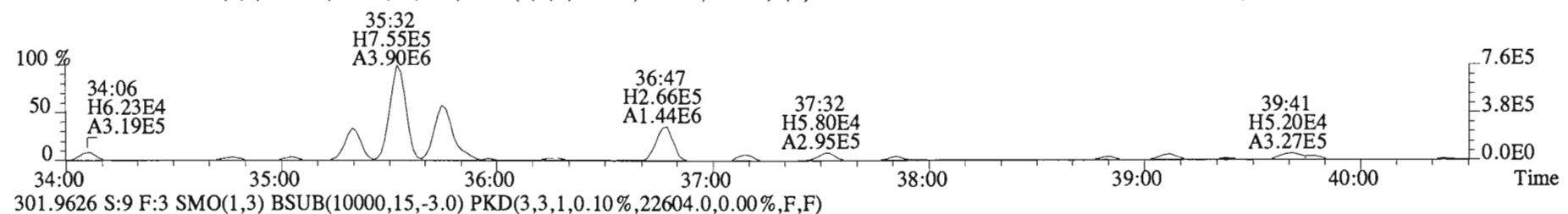
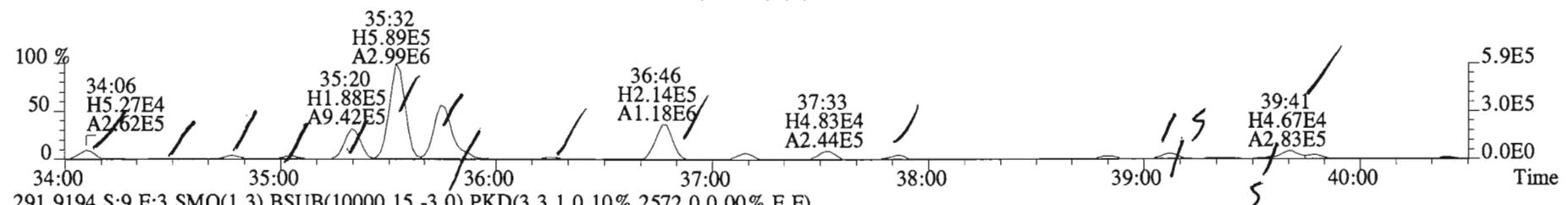
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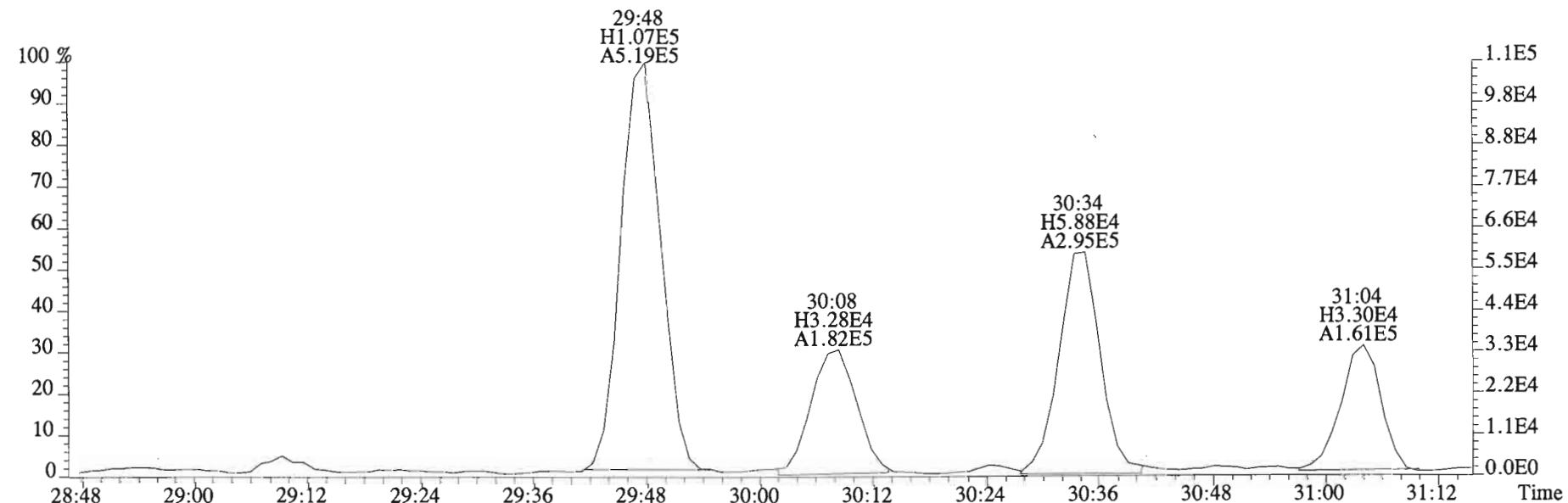
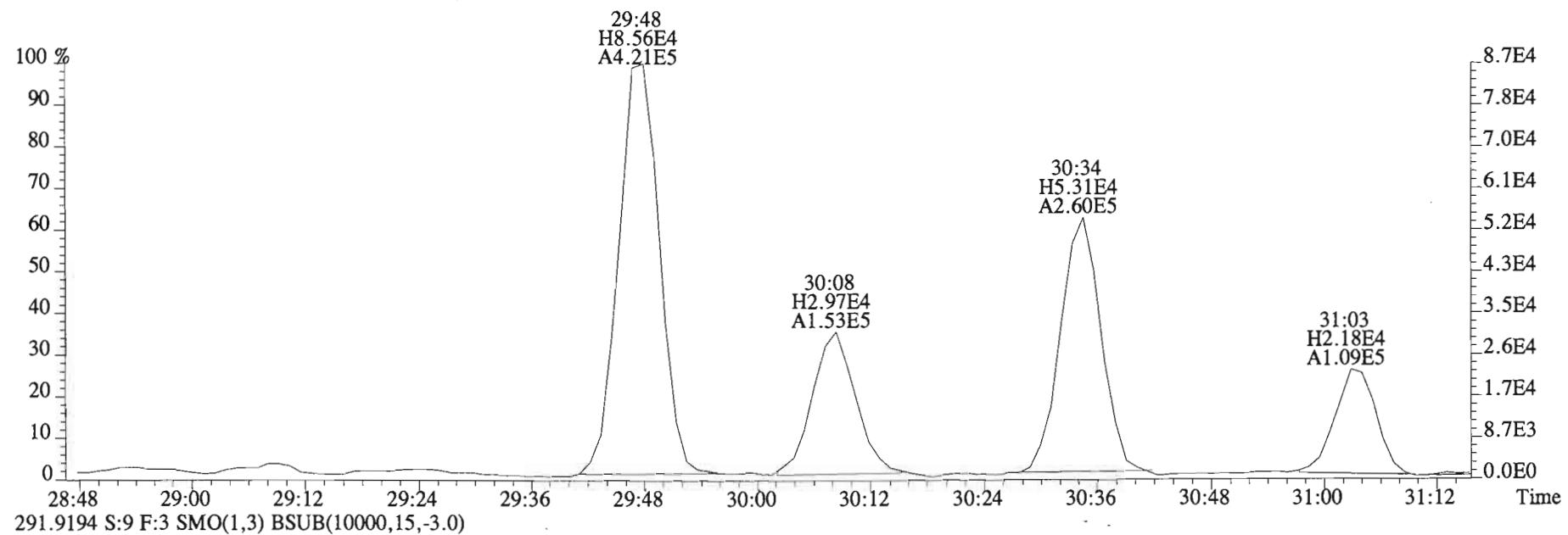
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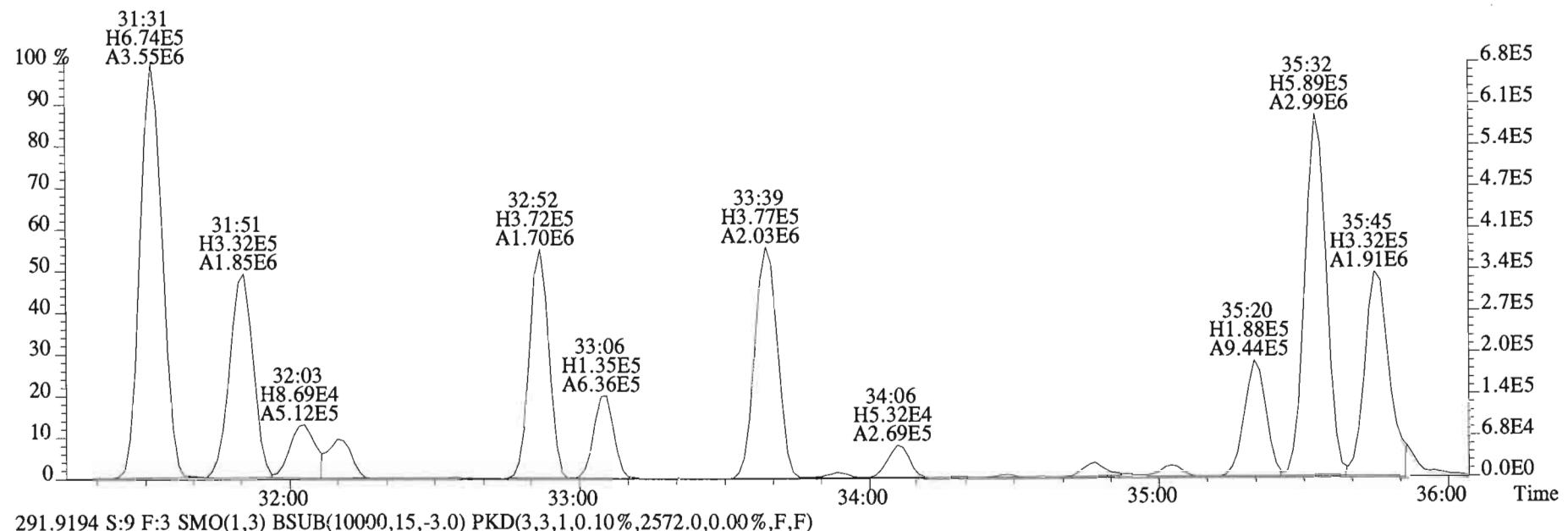
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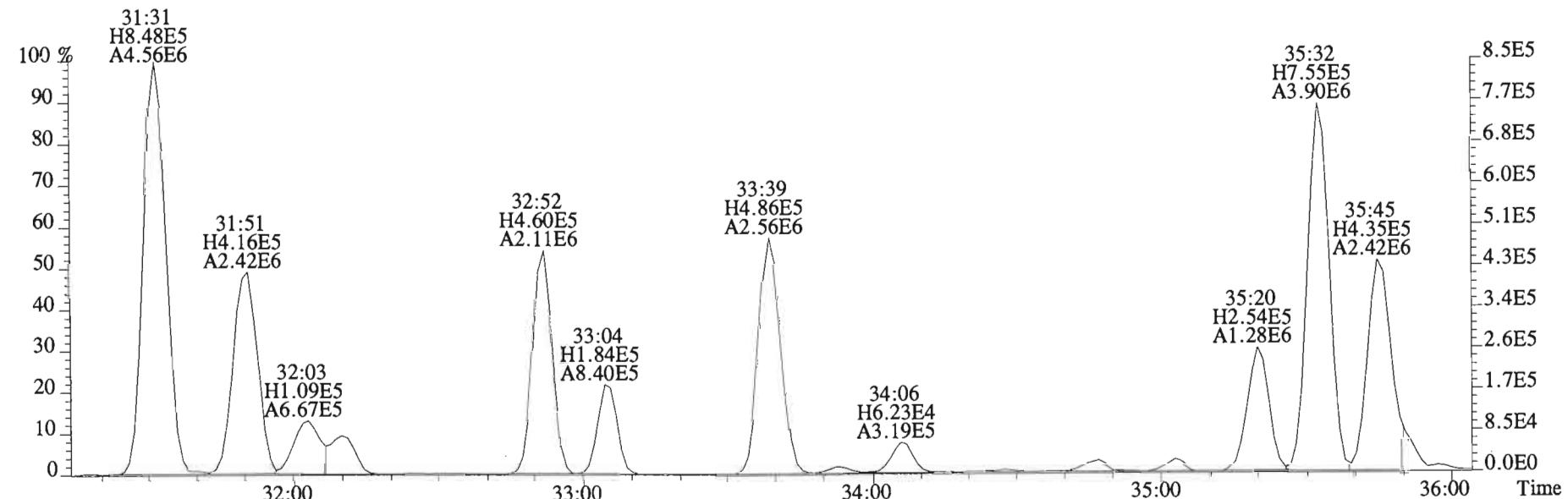
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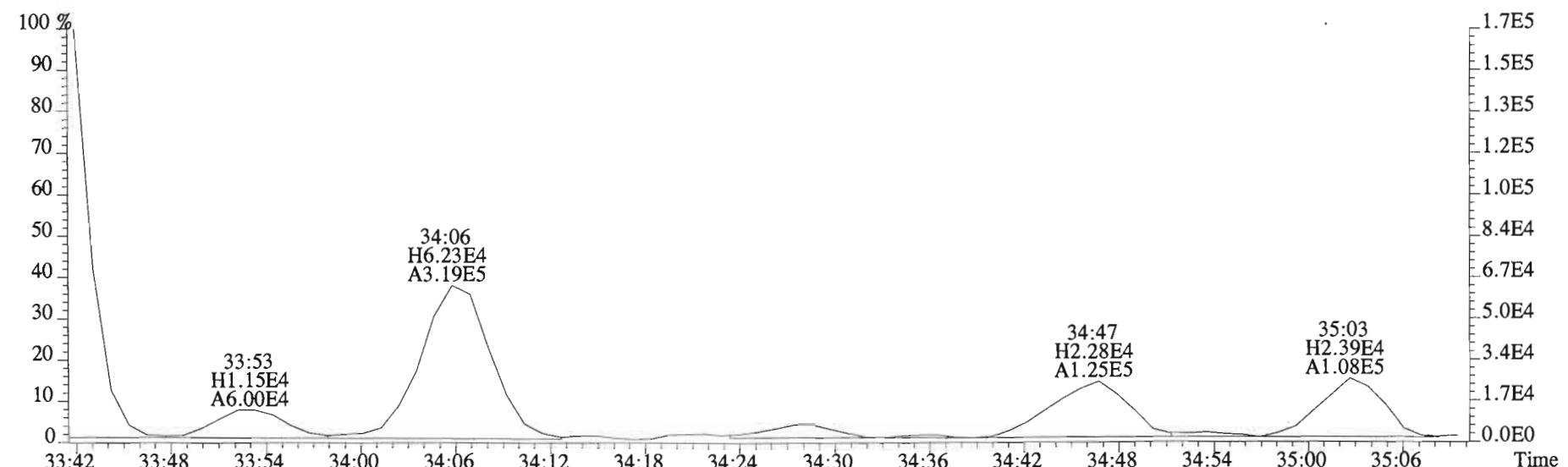
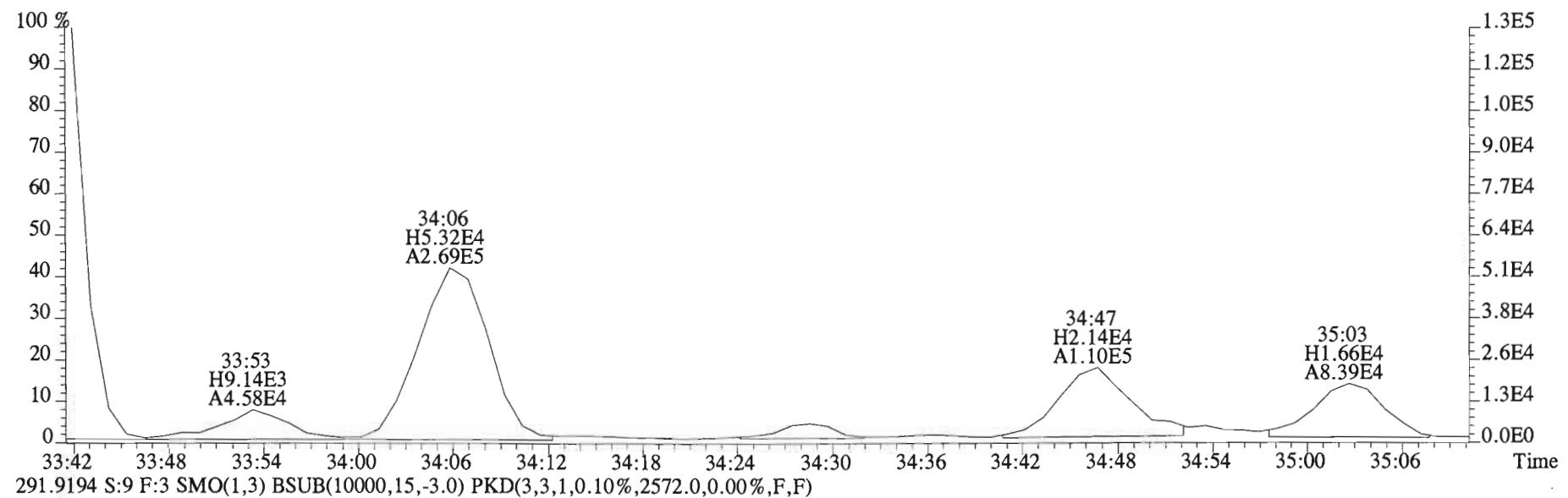
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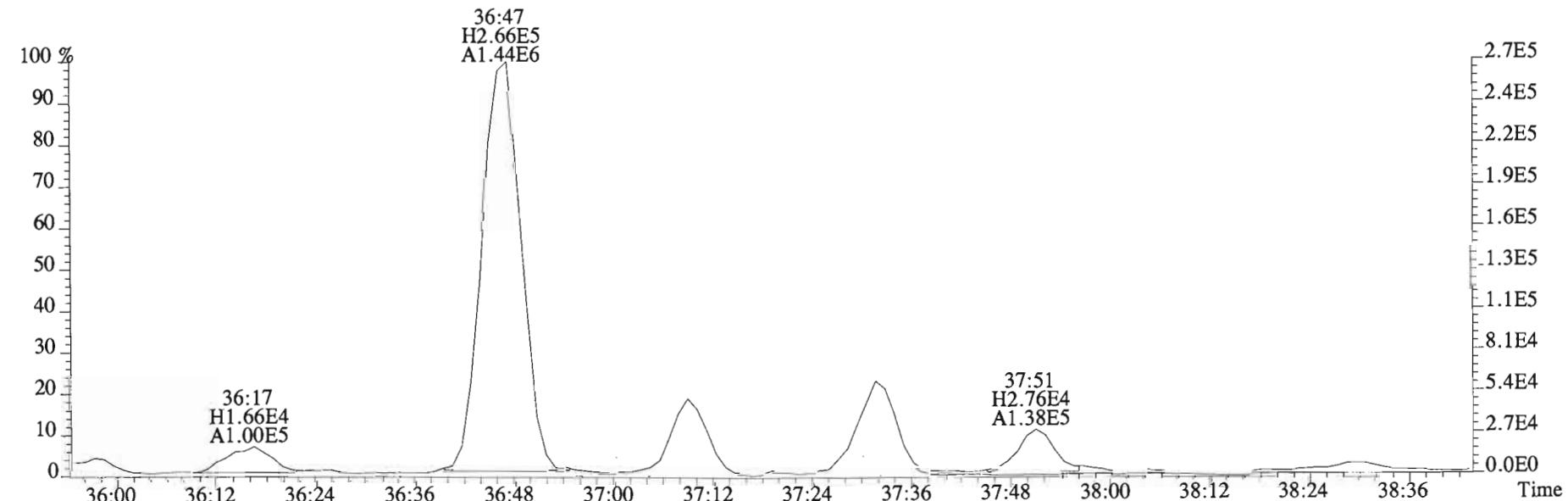
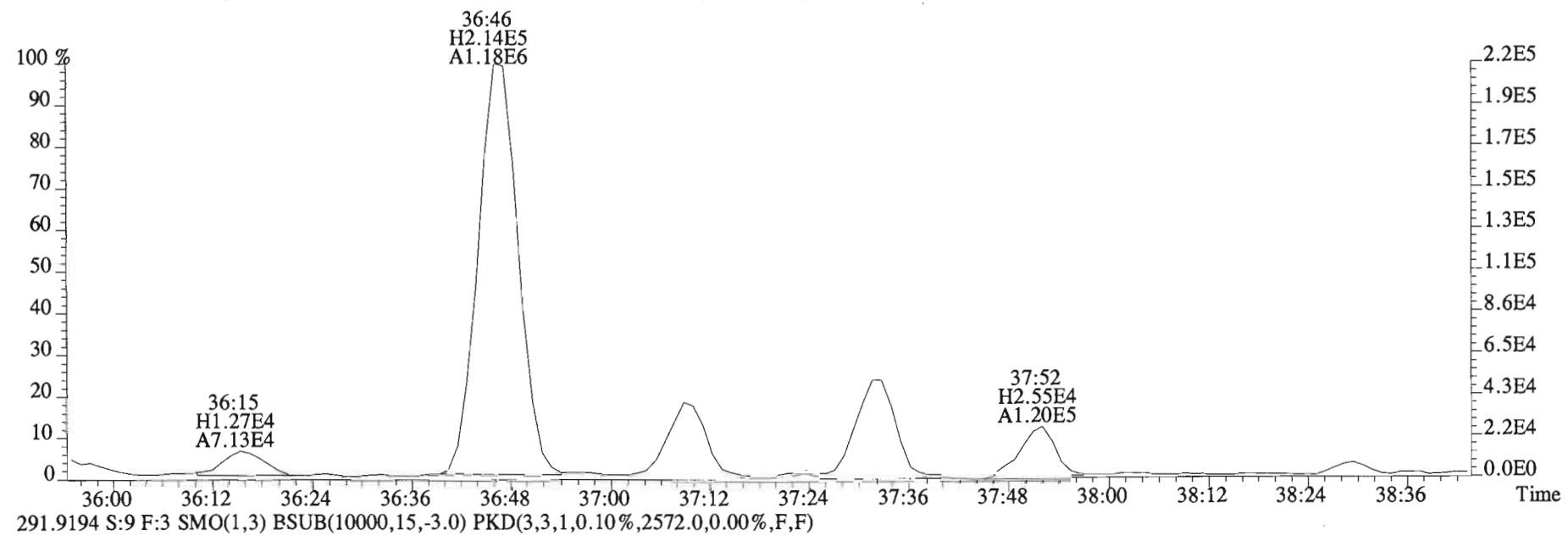
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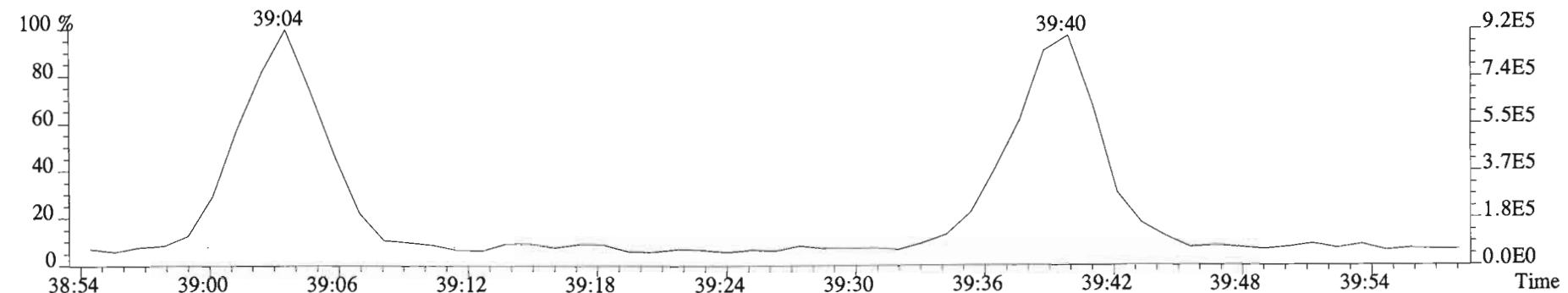
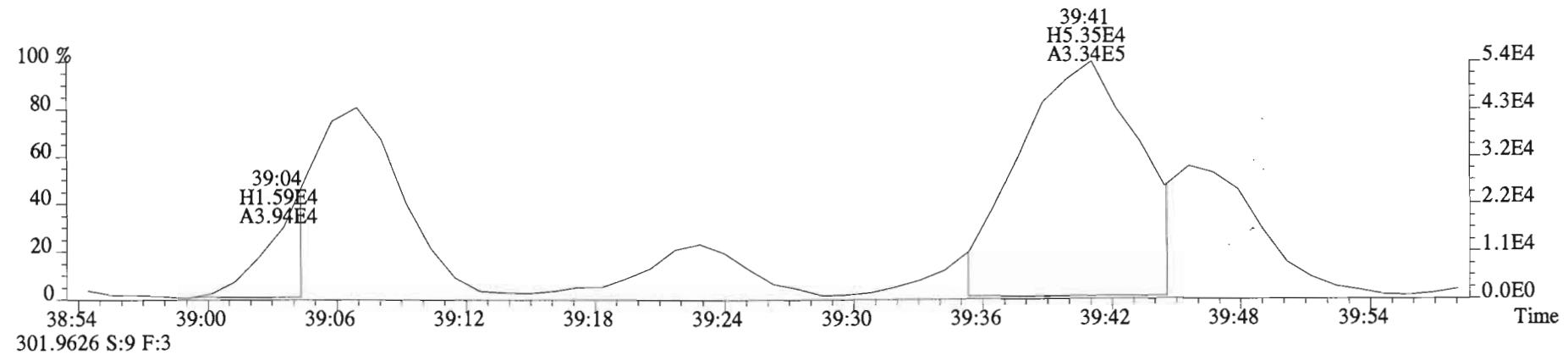
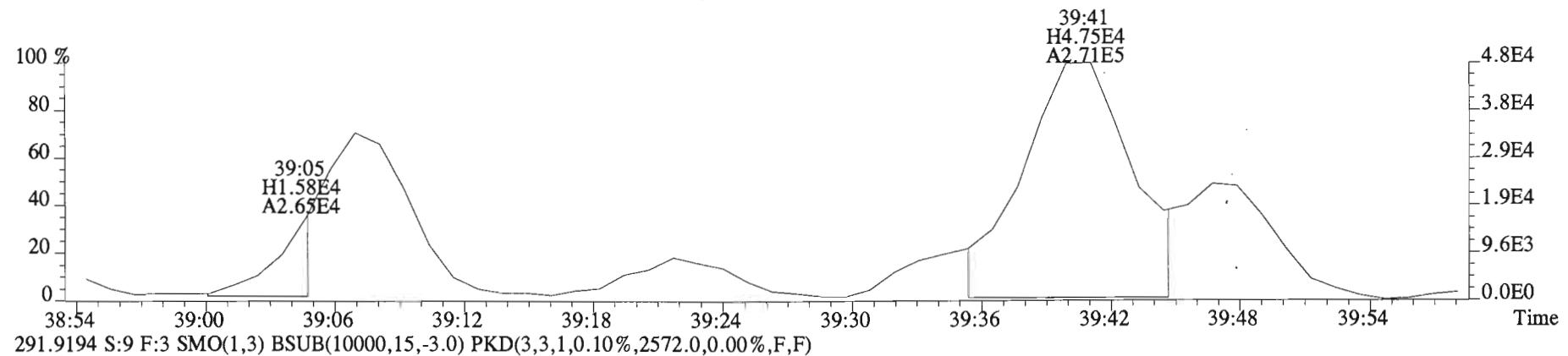
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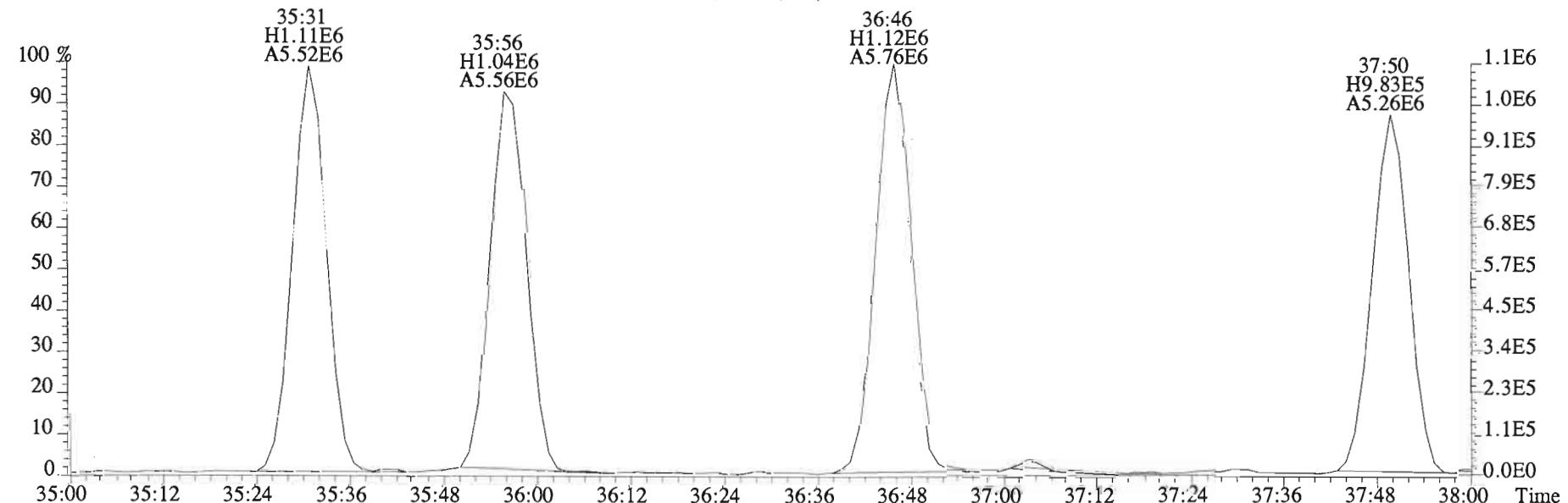
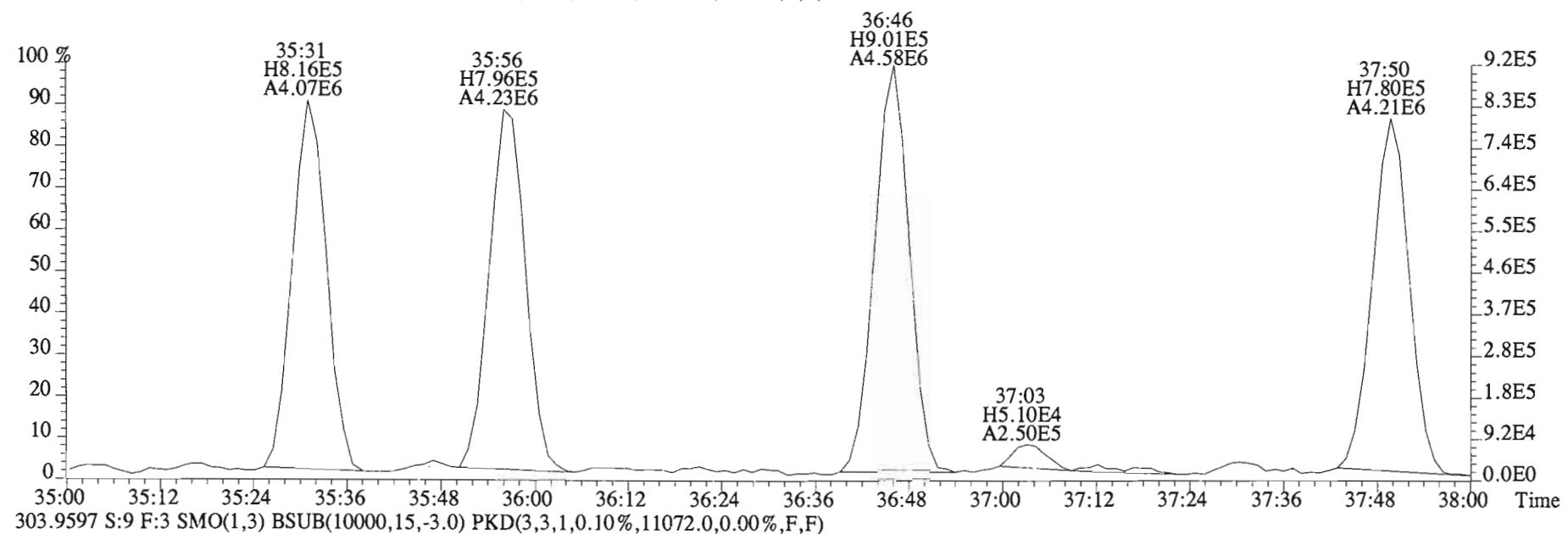
File:150219E2 #1-758 Acq:19-FEB-2015 22:40:24 GC EI + Voltage SIR Autospec-UltimaE
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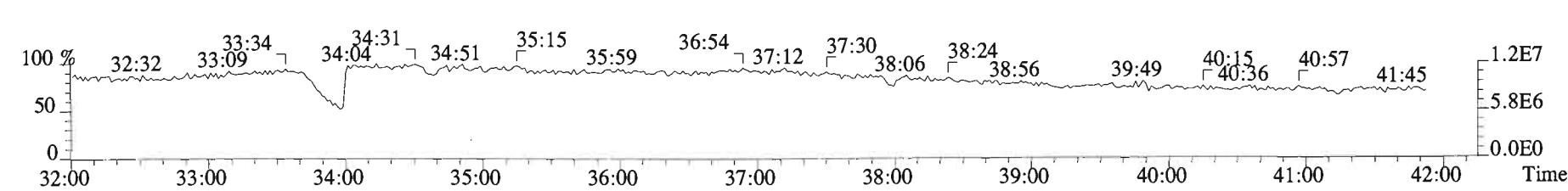
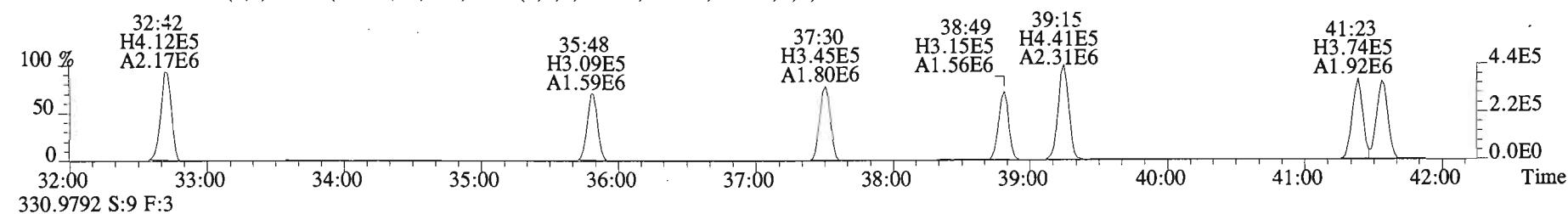
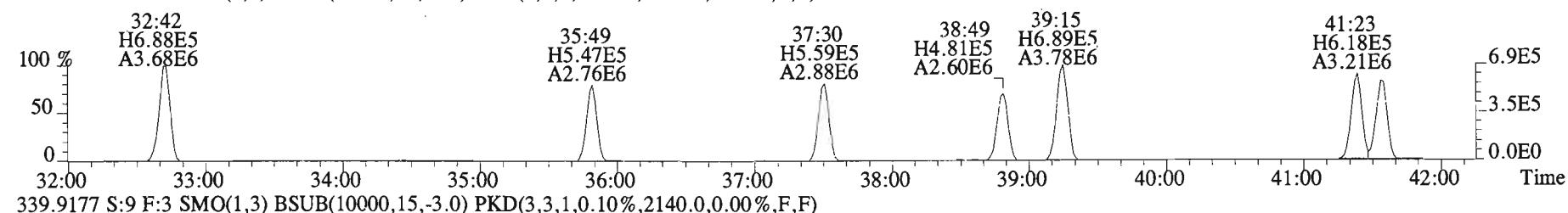
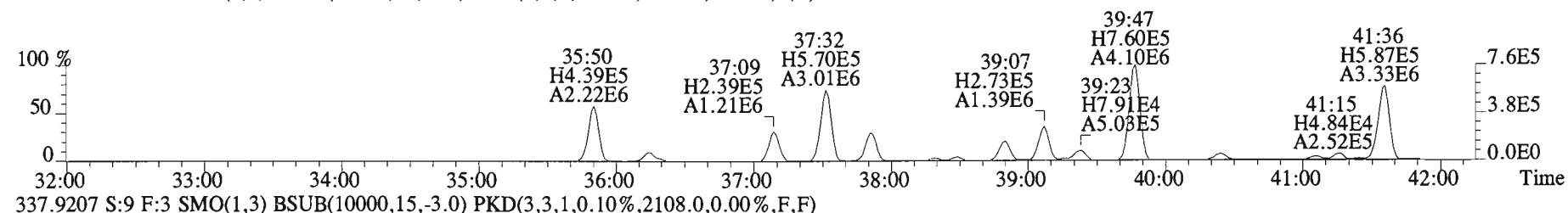
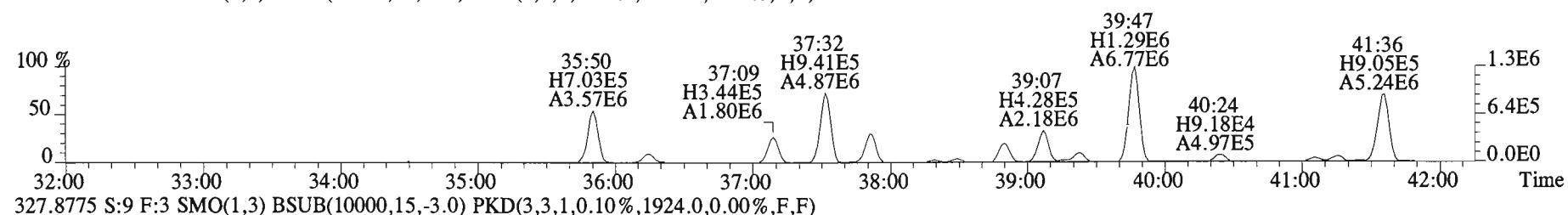
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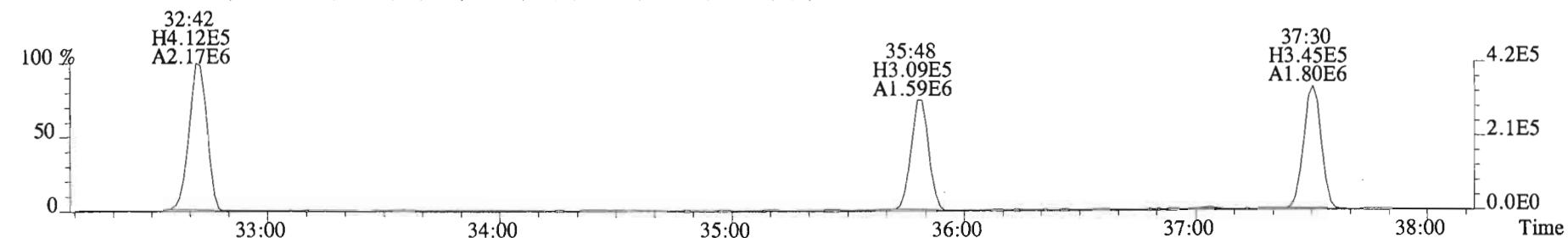
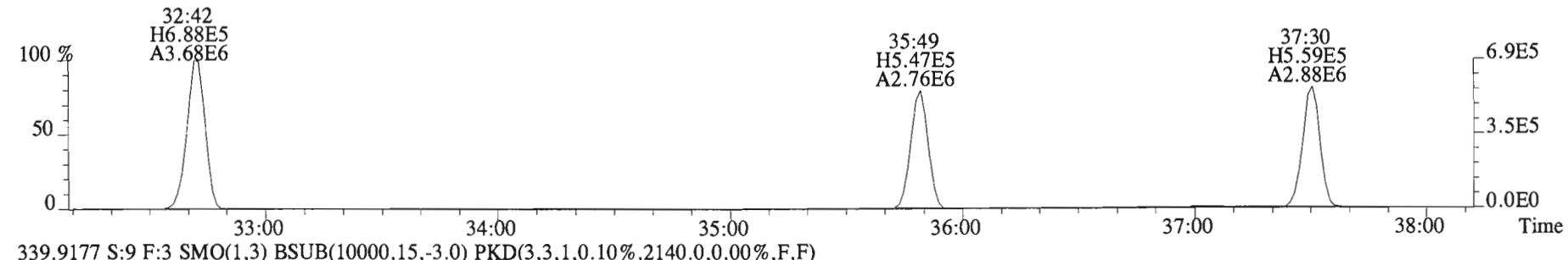
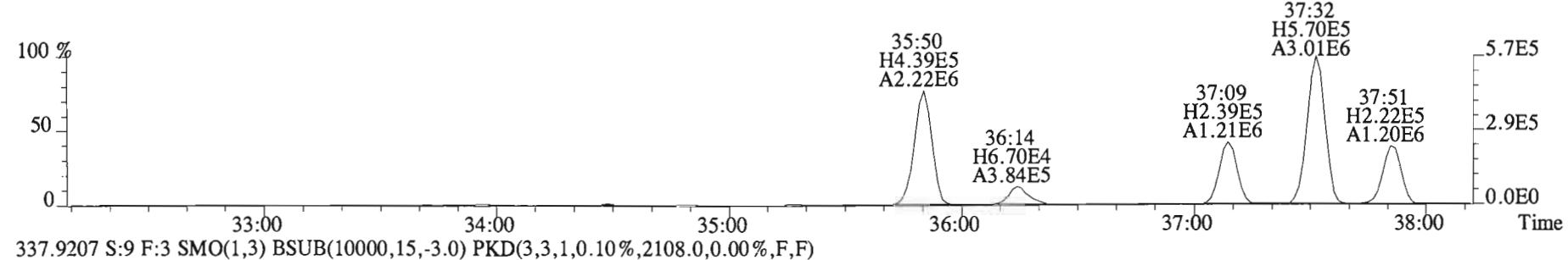
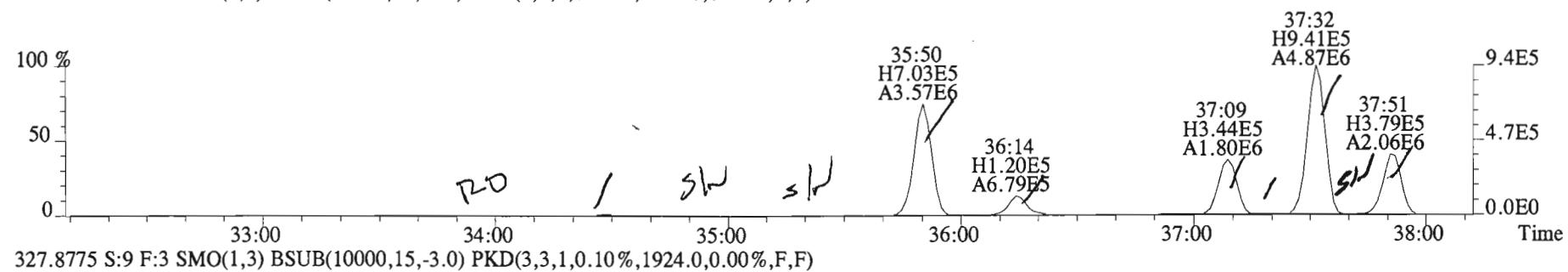
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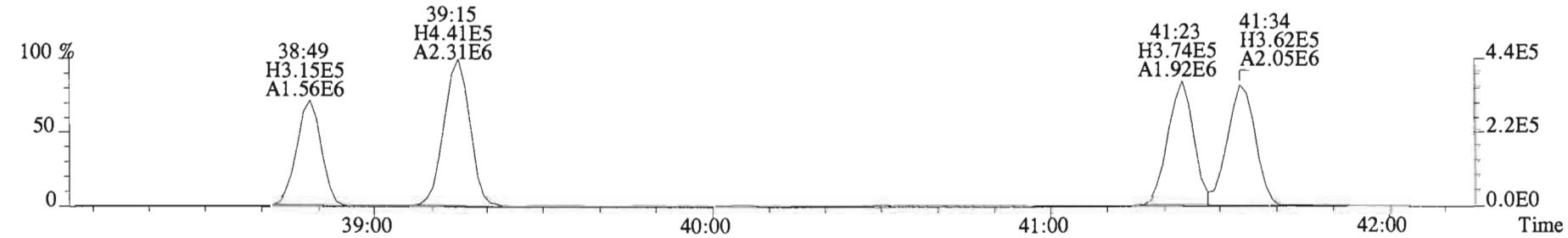
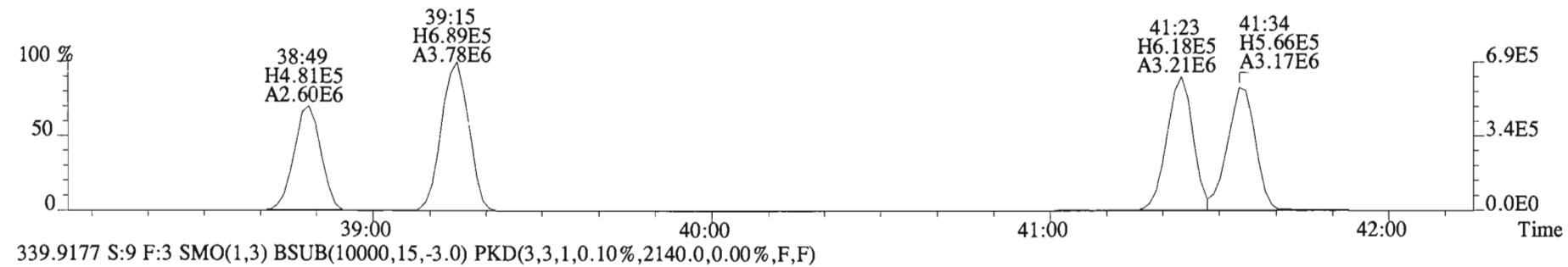
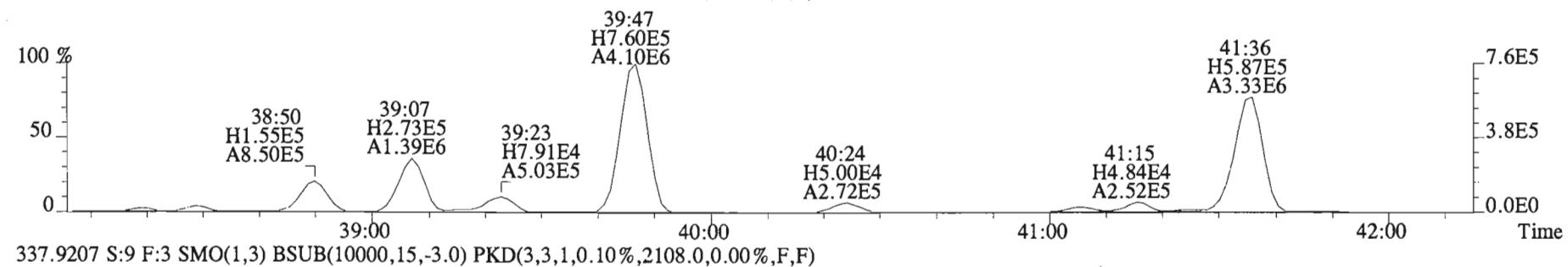
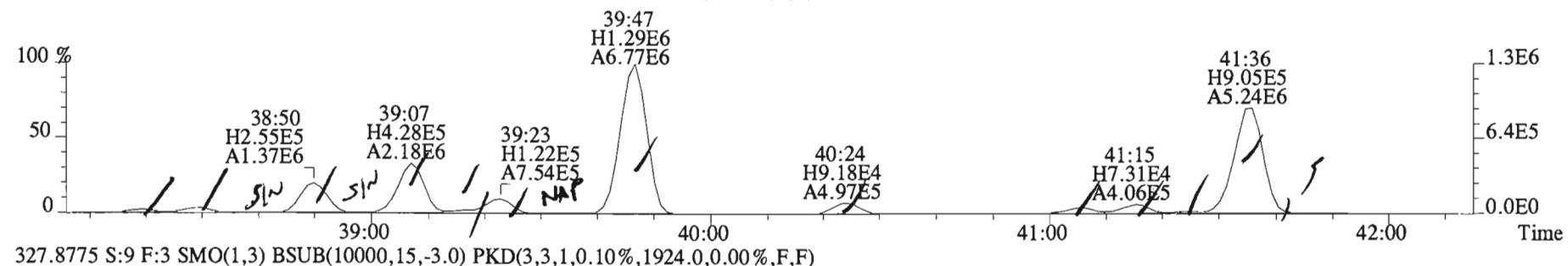
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 Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1500147-04@10X WM-CB-21-20150203-S Exp:PCB_ZB1
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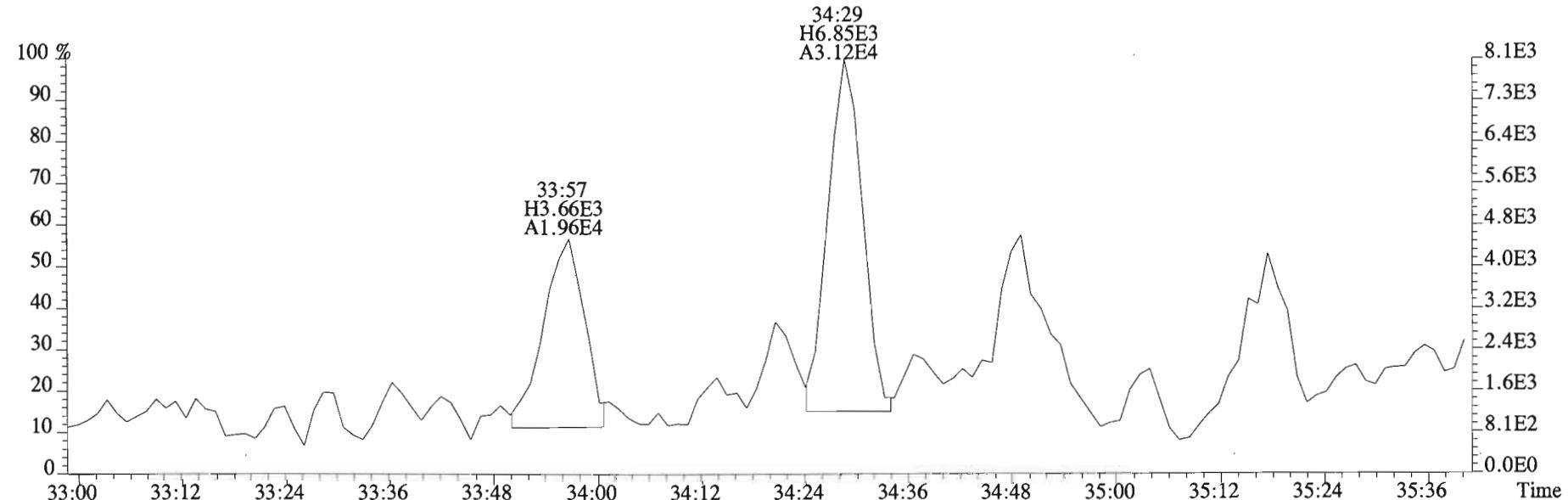
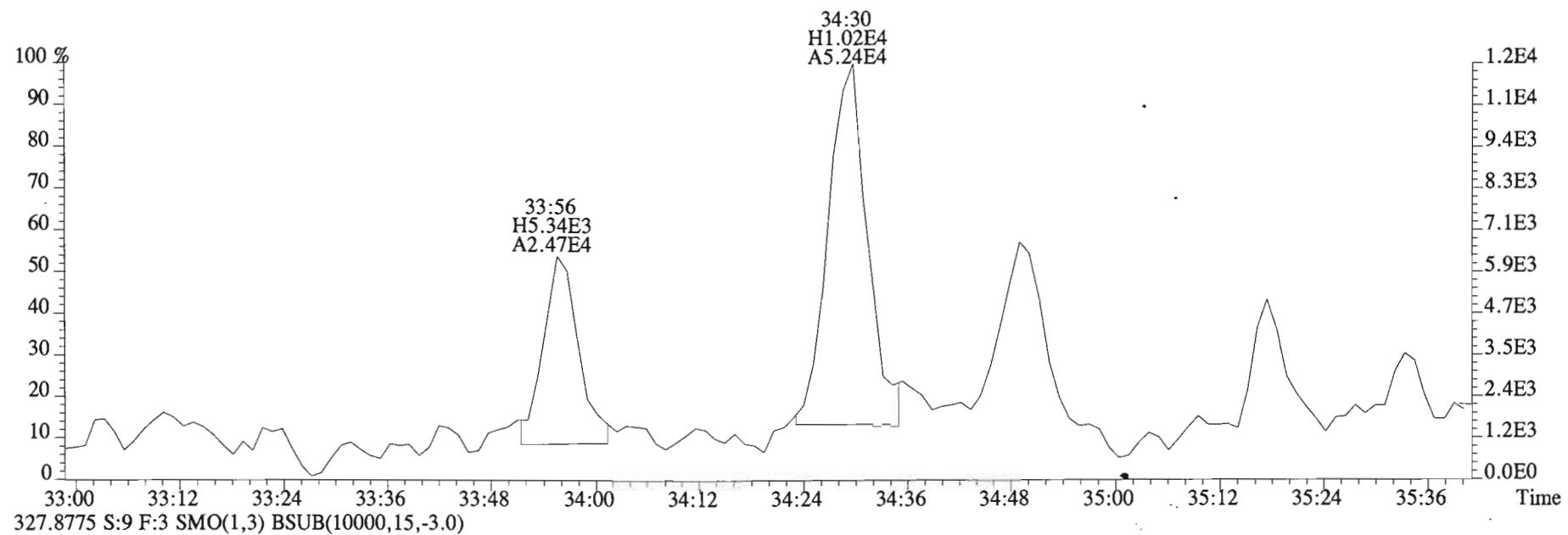
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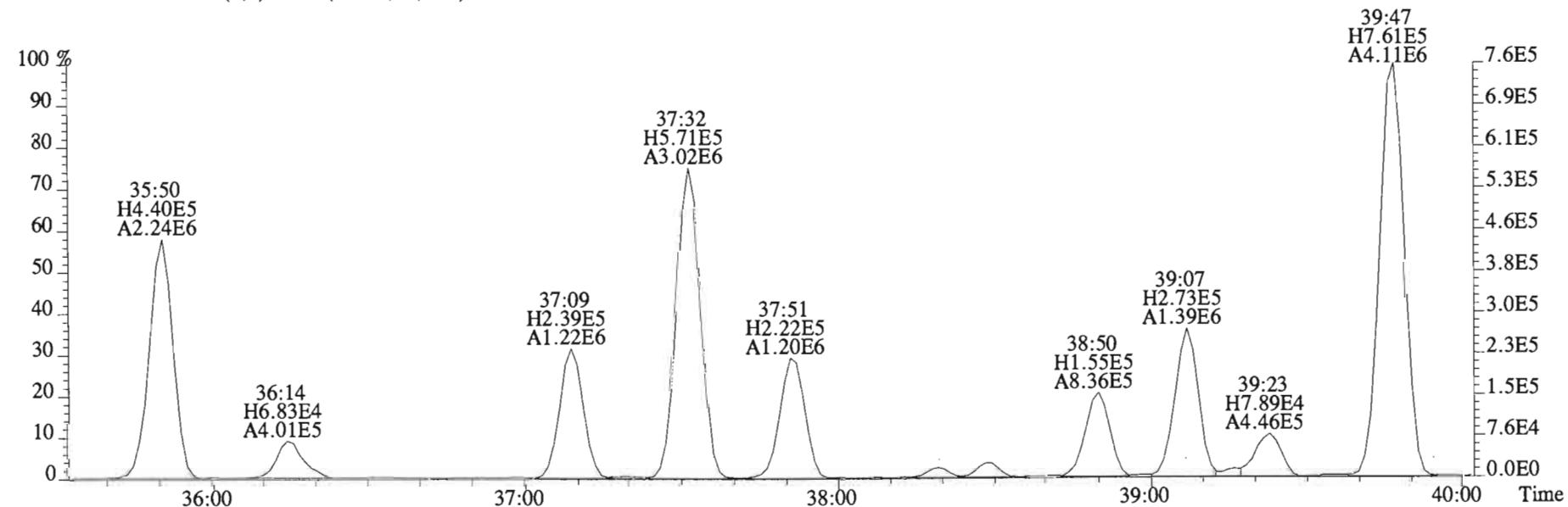
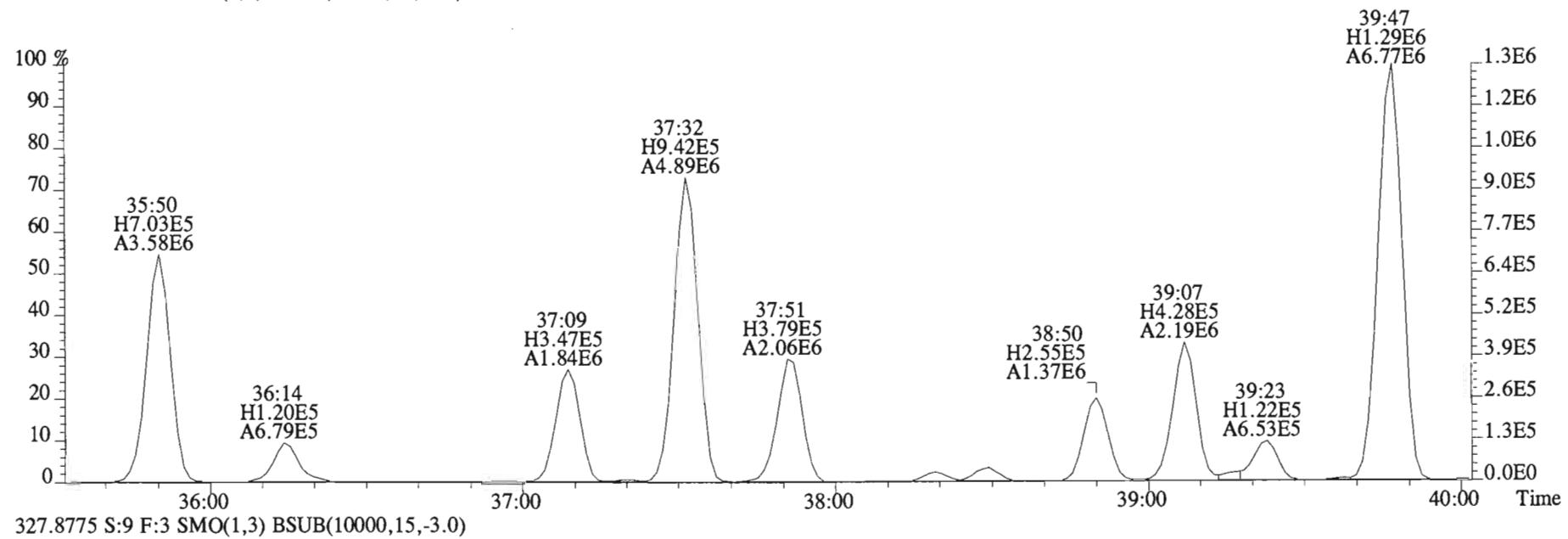
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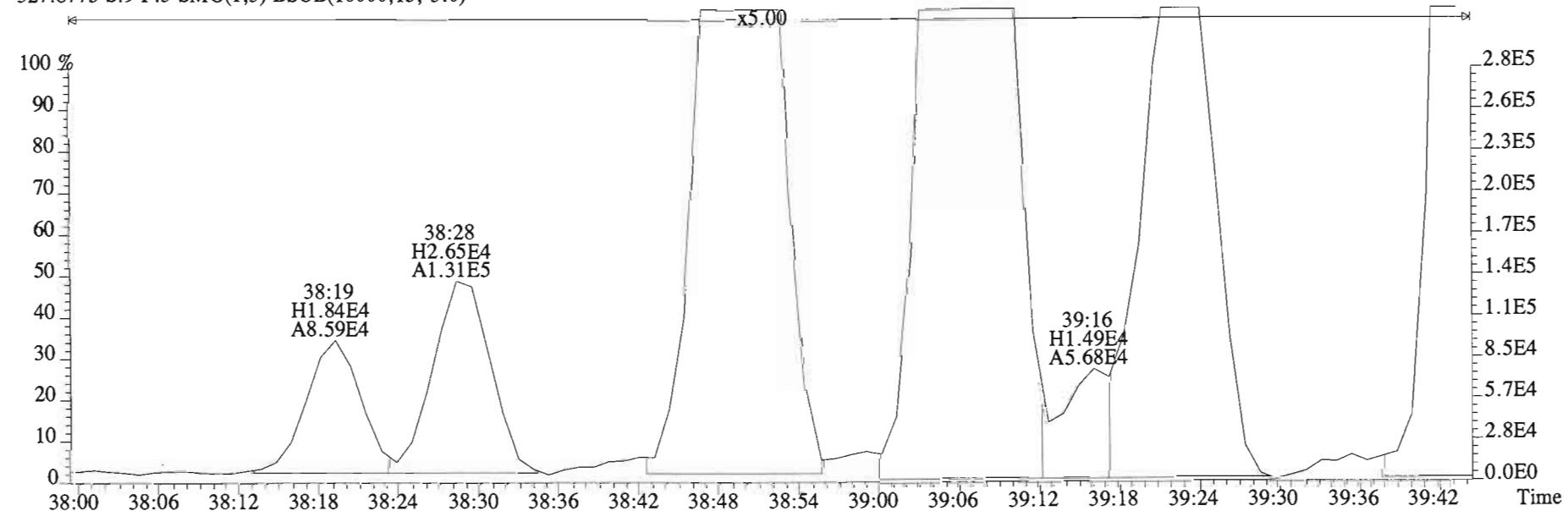
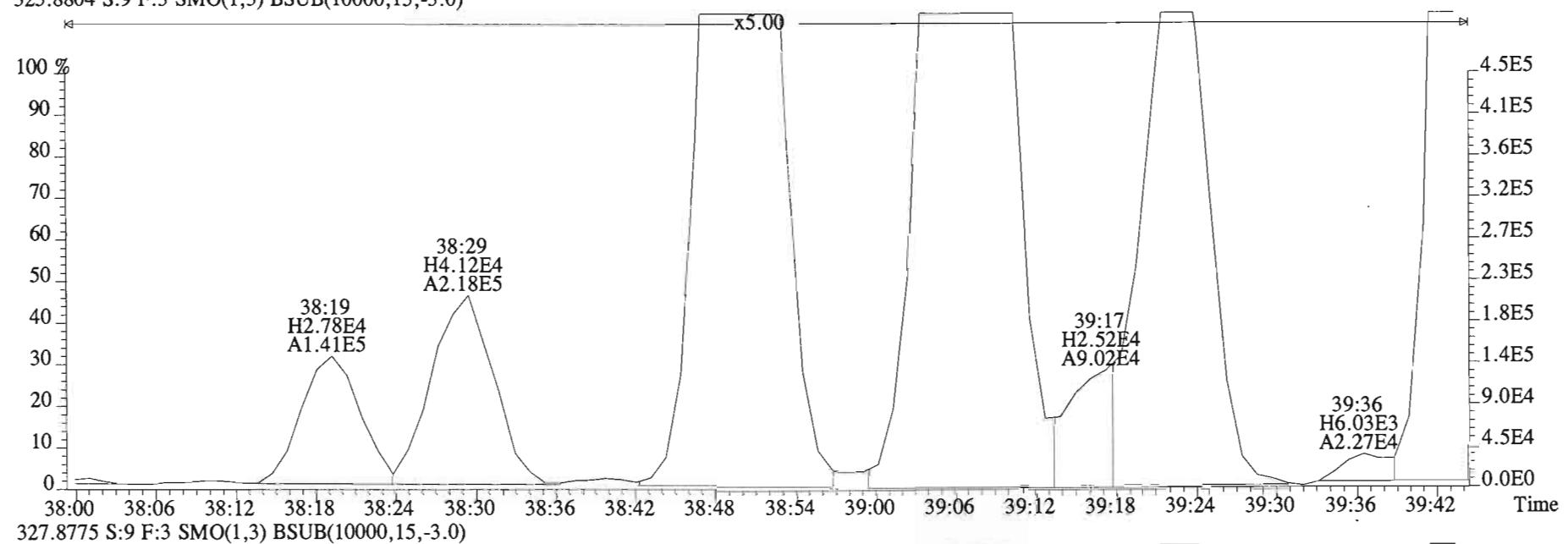
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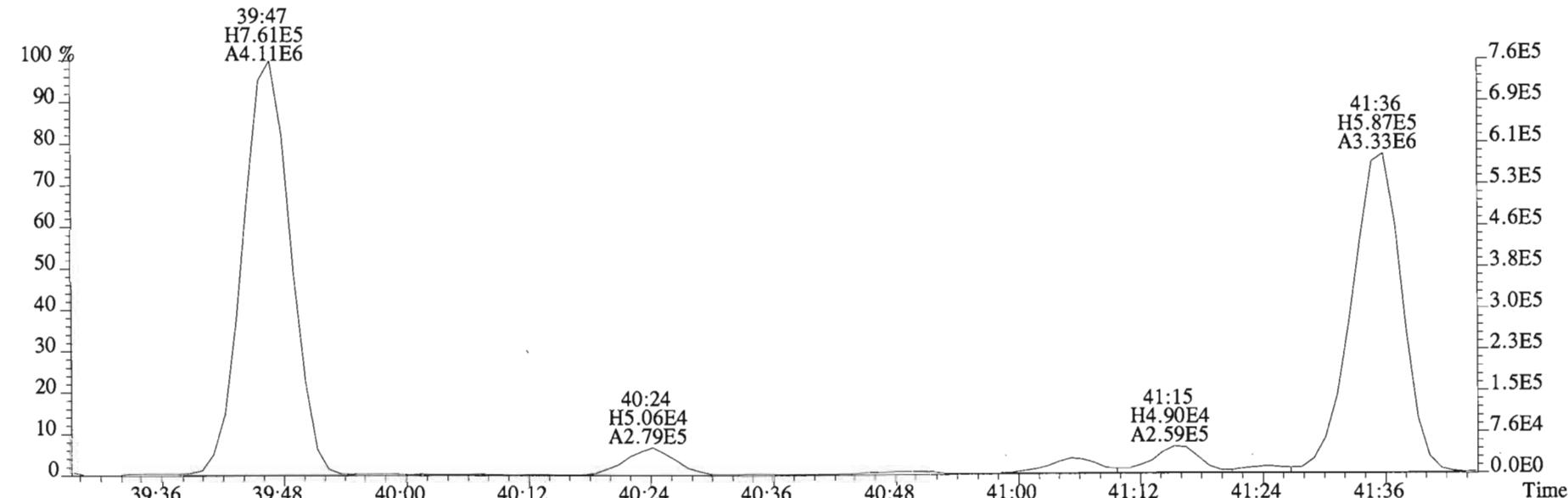
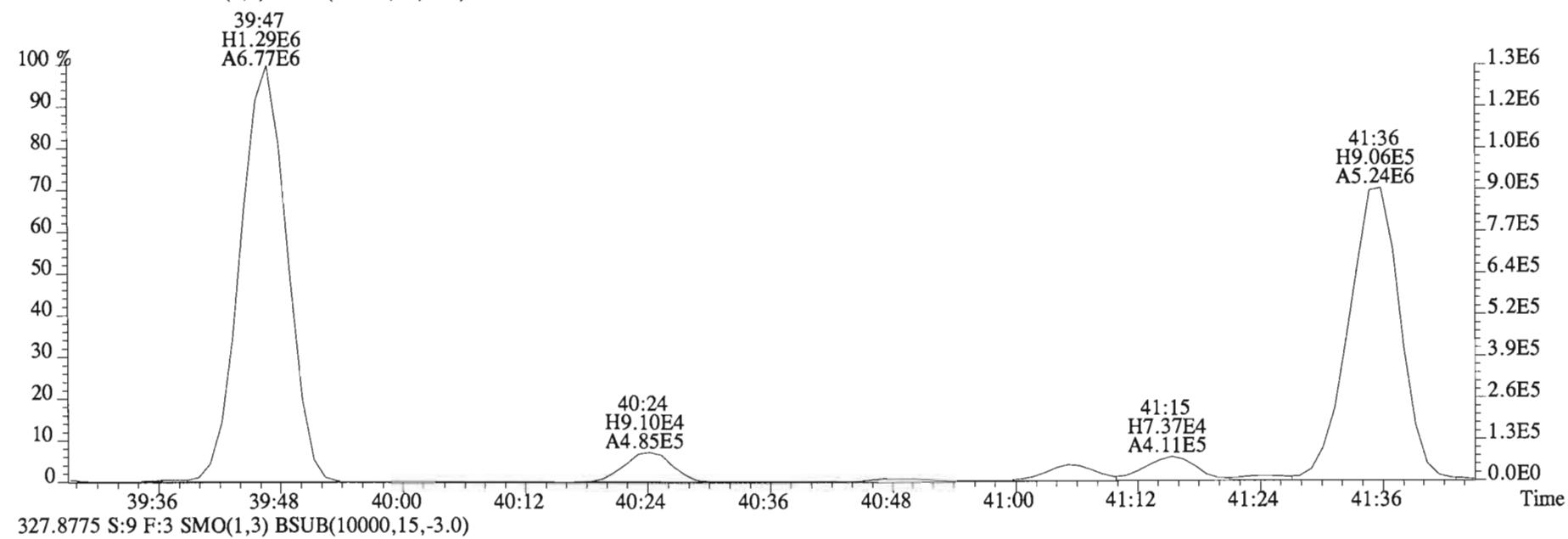
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325.8804 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0)



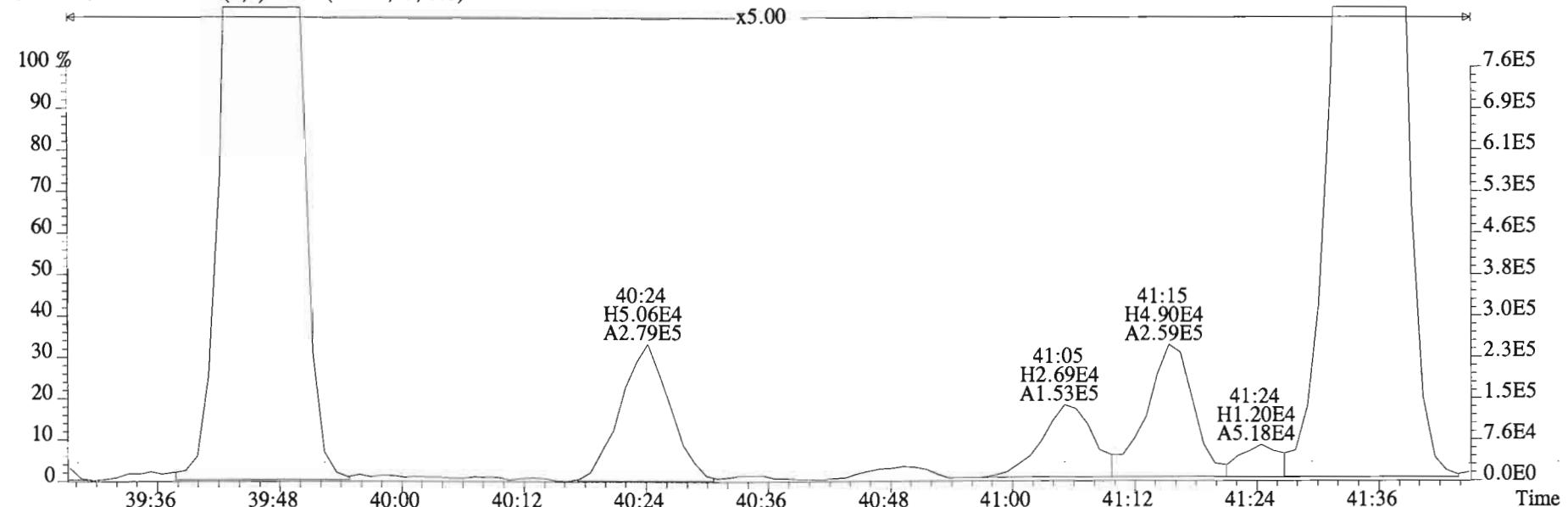
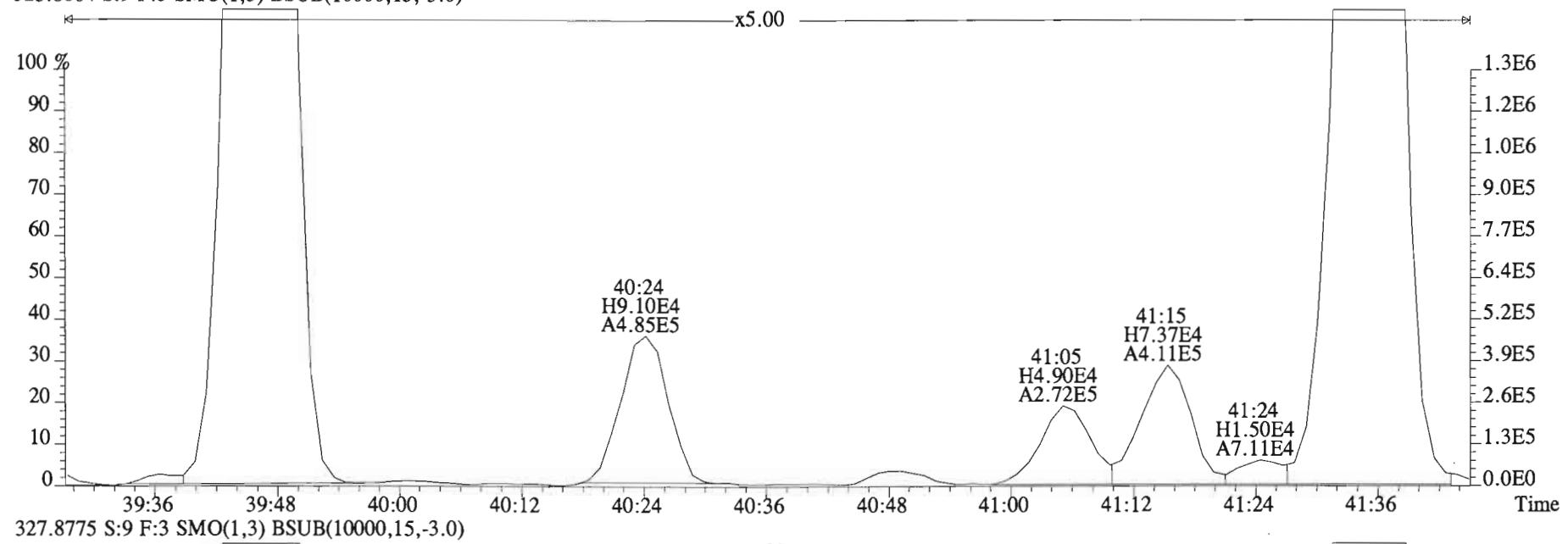
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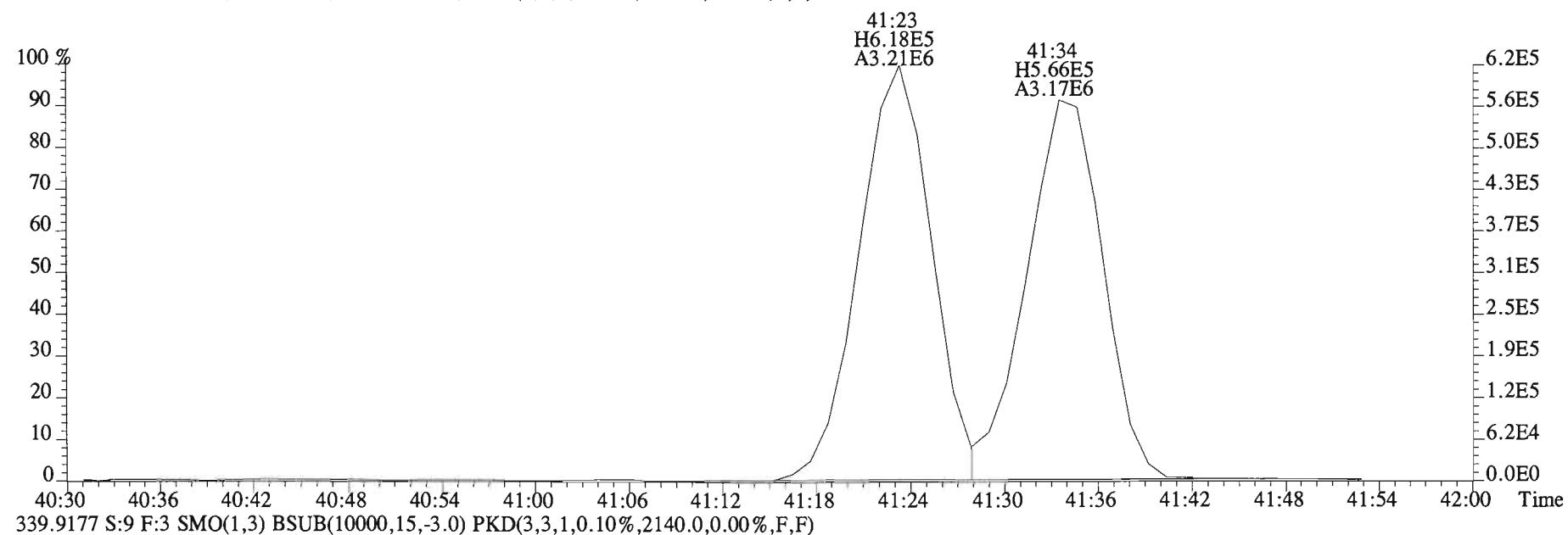
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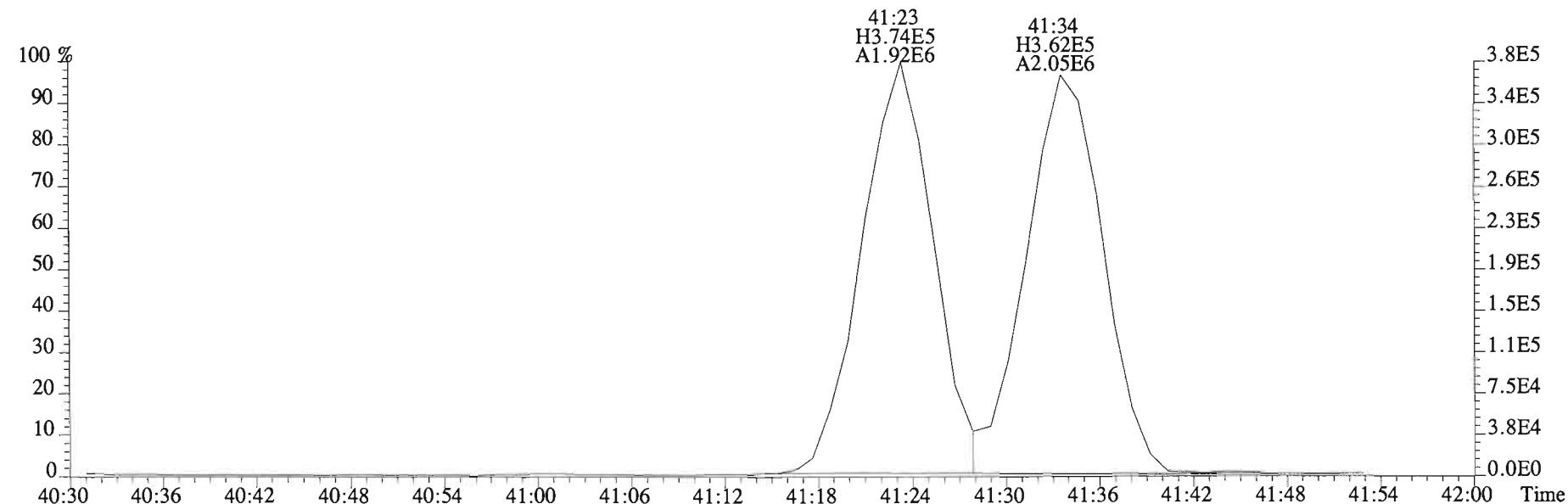
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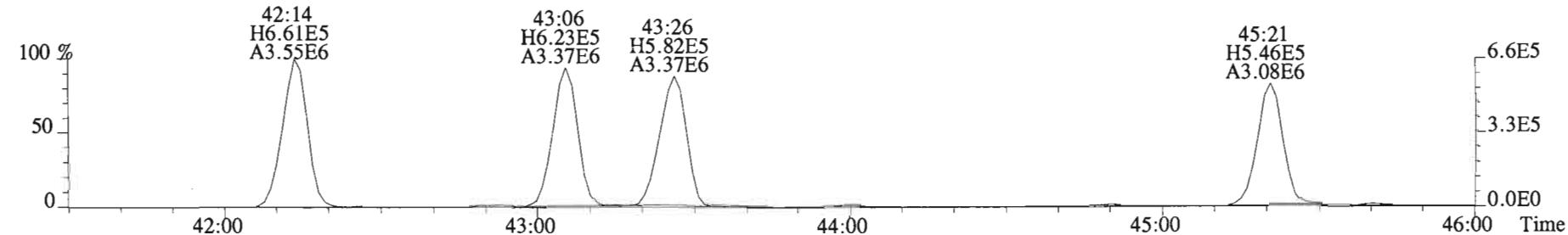
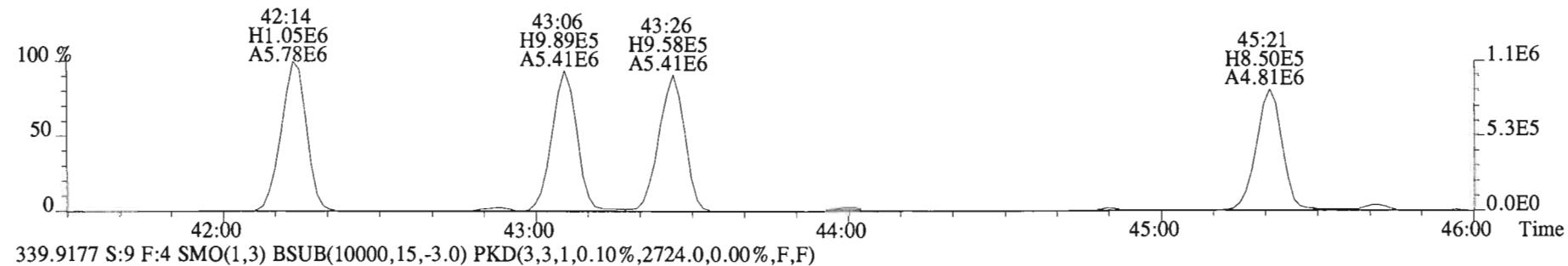
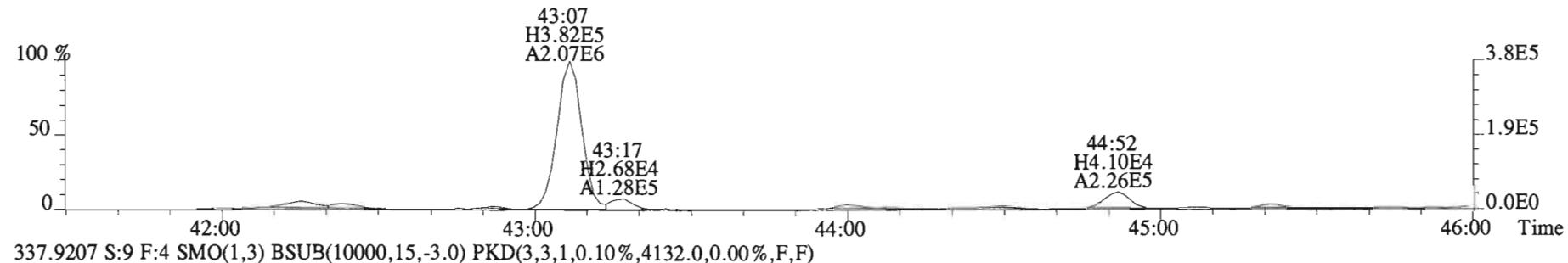
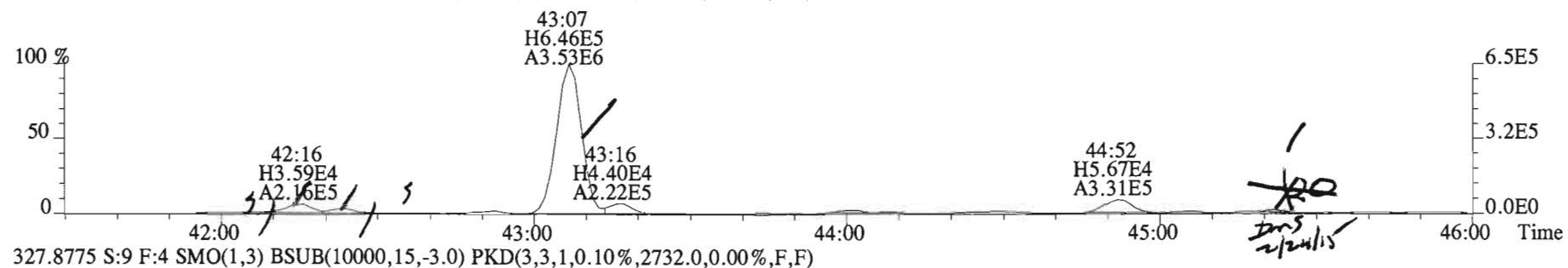
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1500147-04@10X WM-CB-21-20150203-S Exp:PCB_ZB1
337.9207 S:9 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2108.0,0.00%,F,F)



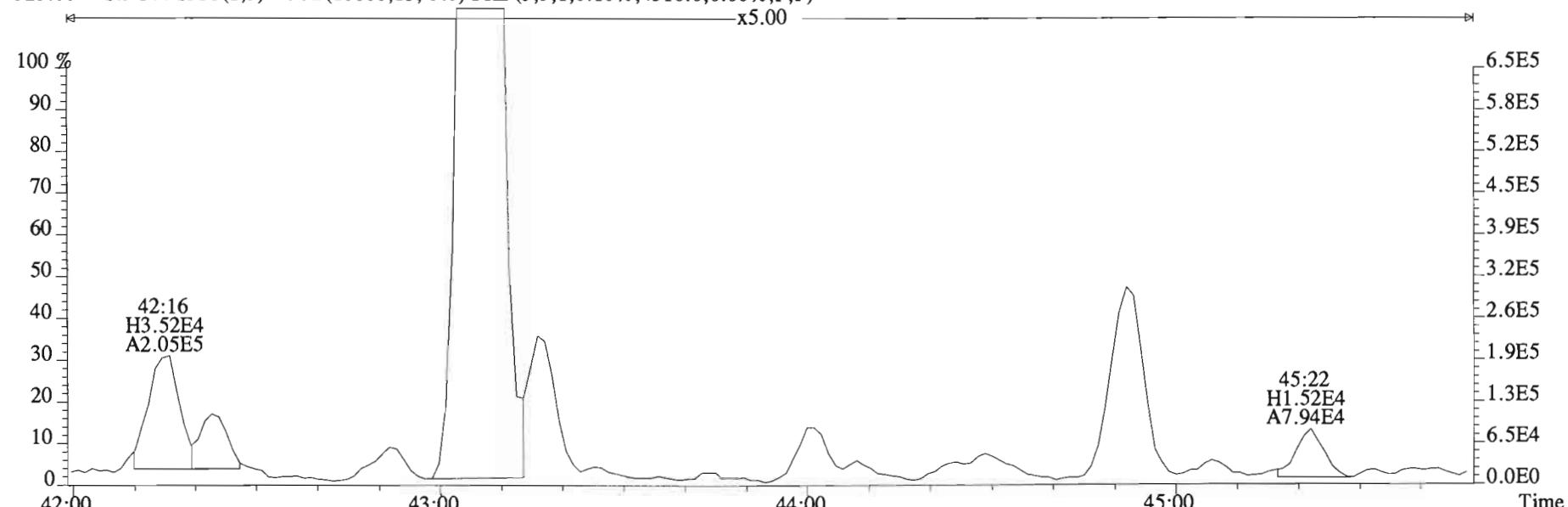
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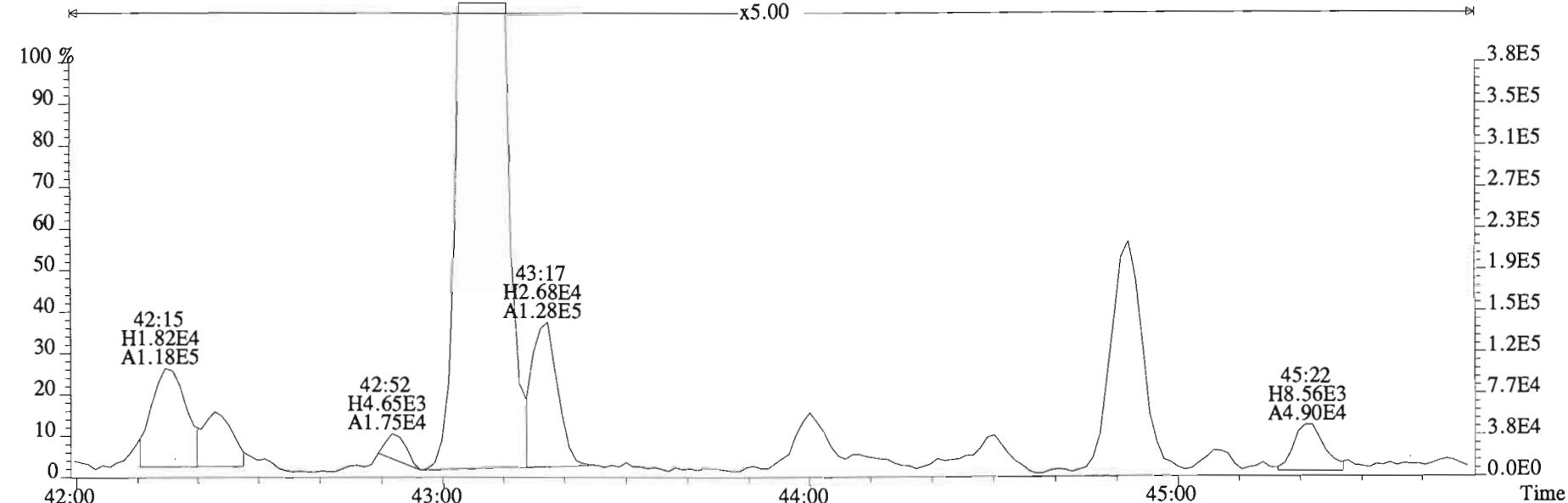
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 Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1500147-04@10X WM-CB-21-20150203-S Exp:PCB_ZB1
 325.8804 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4316.0,0.00%,F,F)



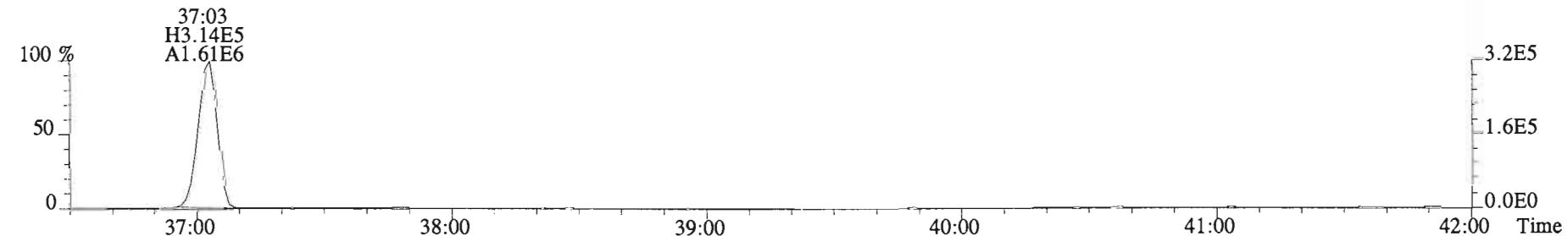
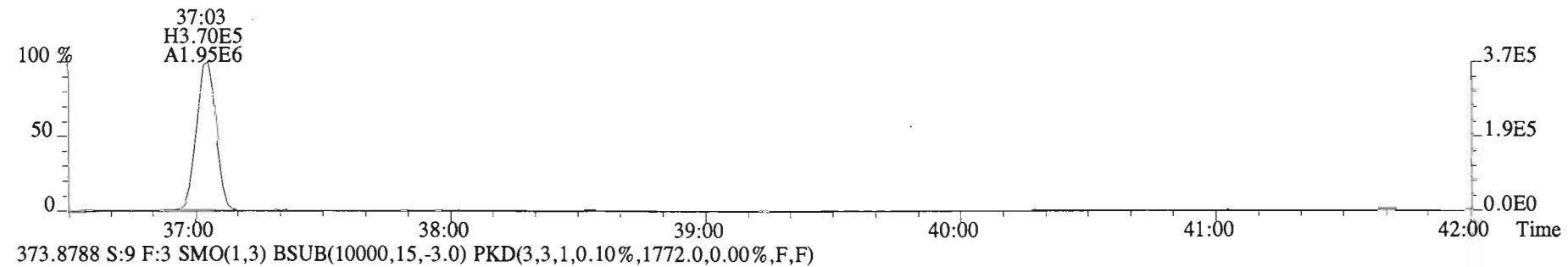
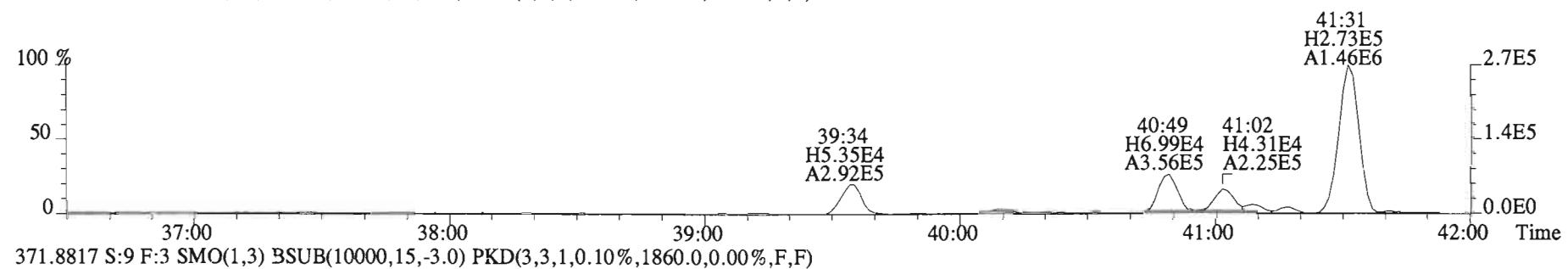
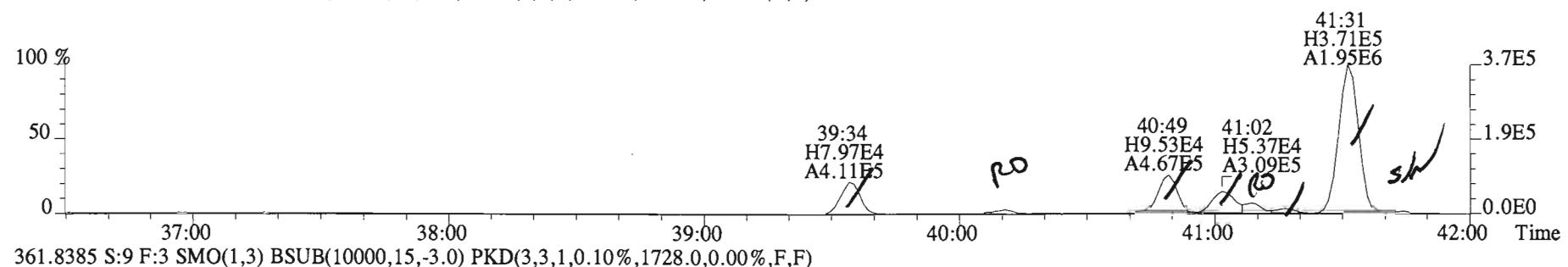
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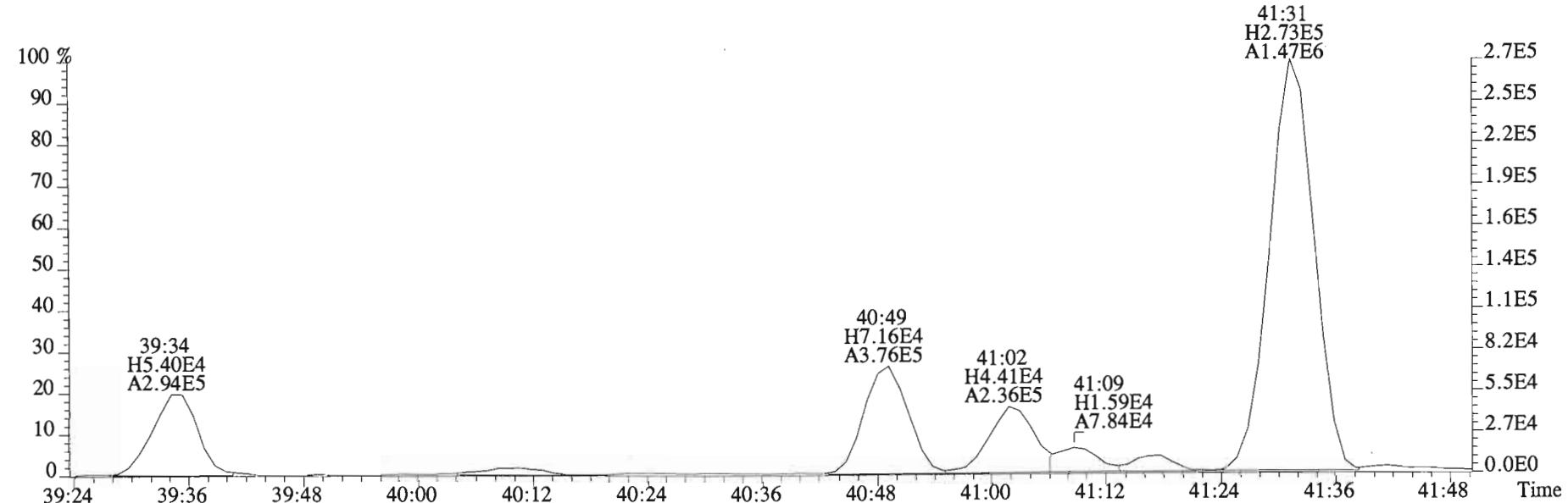
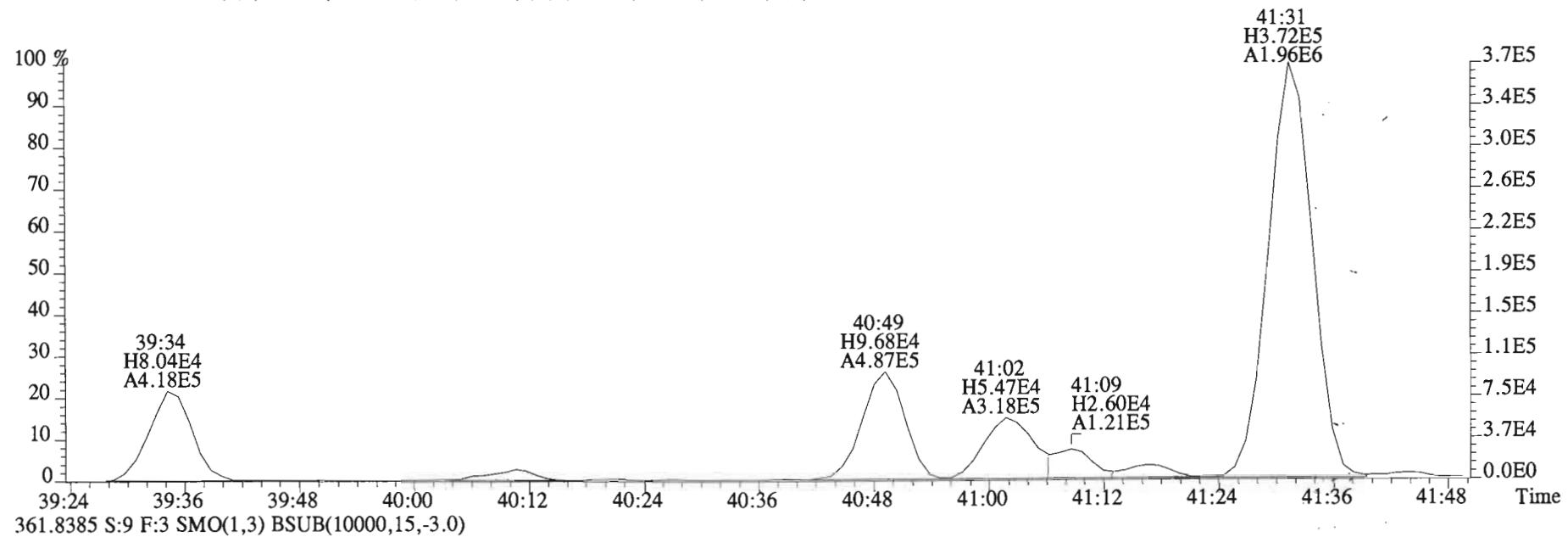
327.8775 S:9 F:4 SMO(1,3) B\$UB(10000,15,-3.0) PKD(3,3,1,0.10%,2732.0,0.00%,F,F)



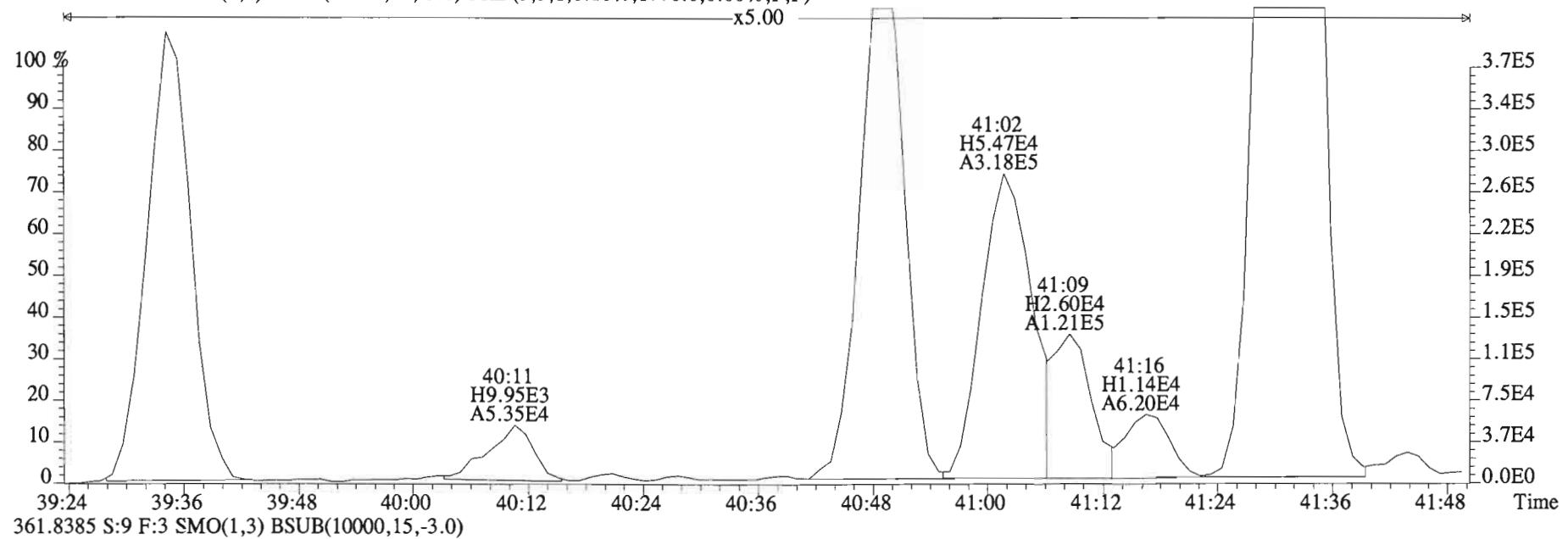
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1500147-04@10X WM-CB-21-20150203-S Exp:PCB_ZB1
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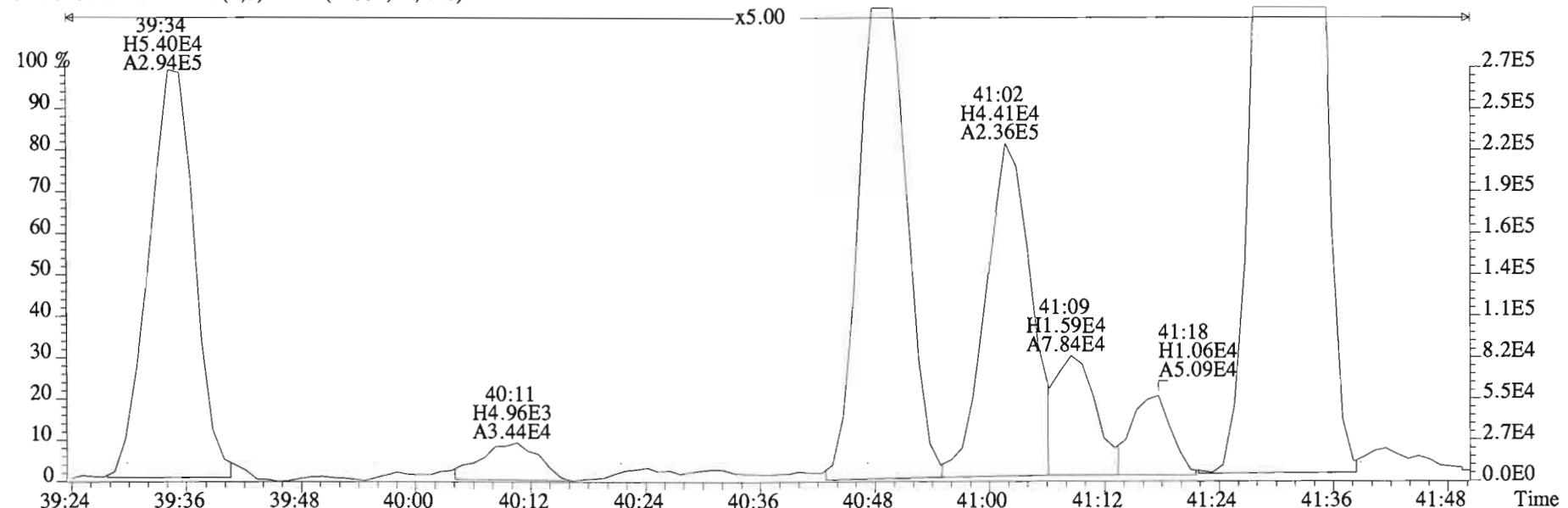
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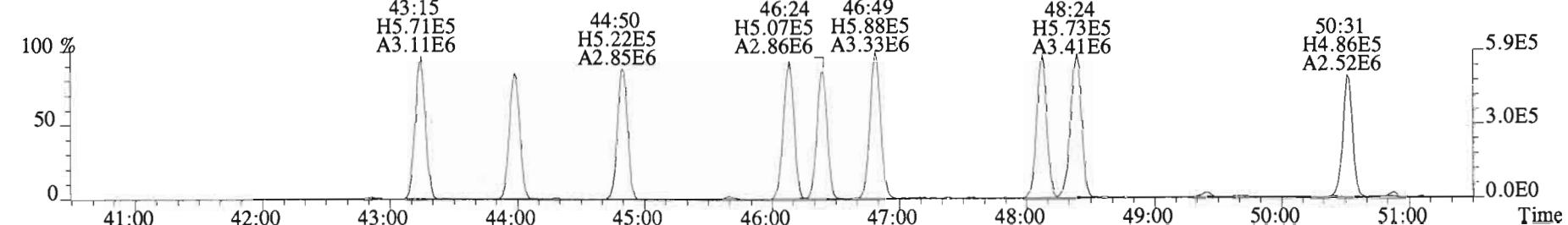
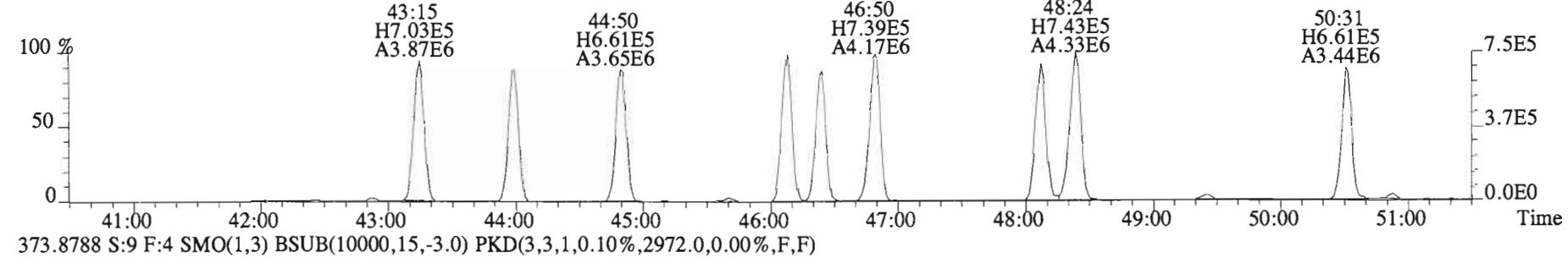
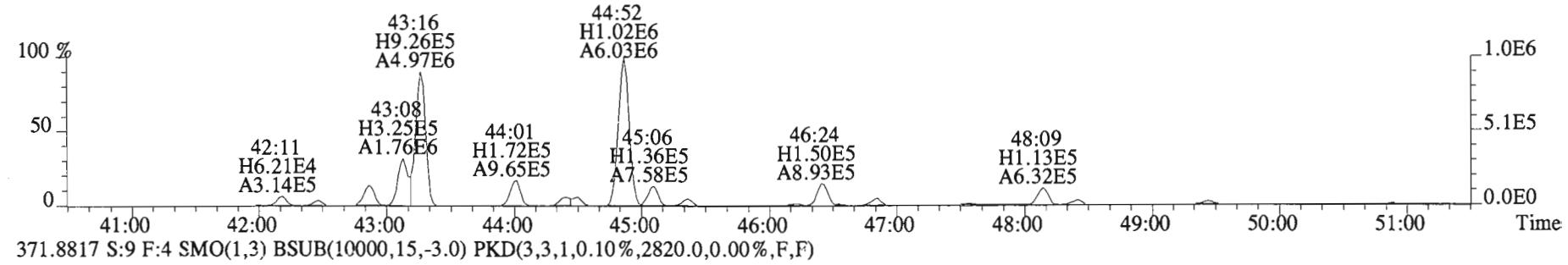
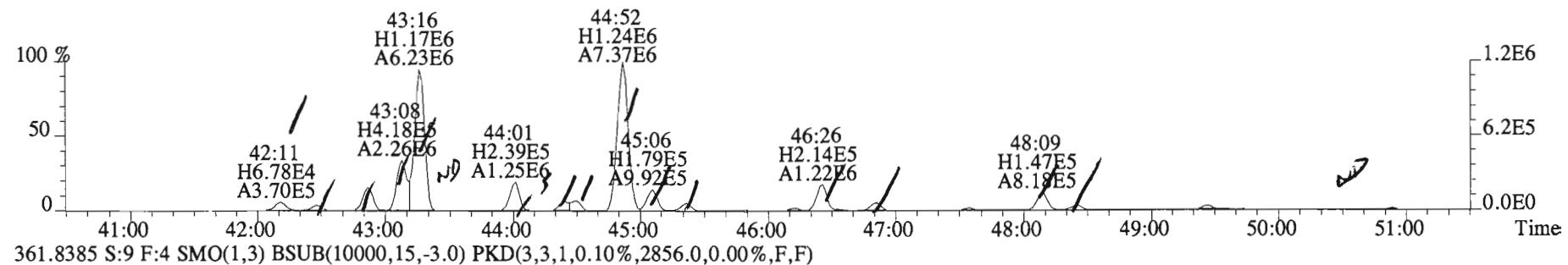
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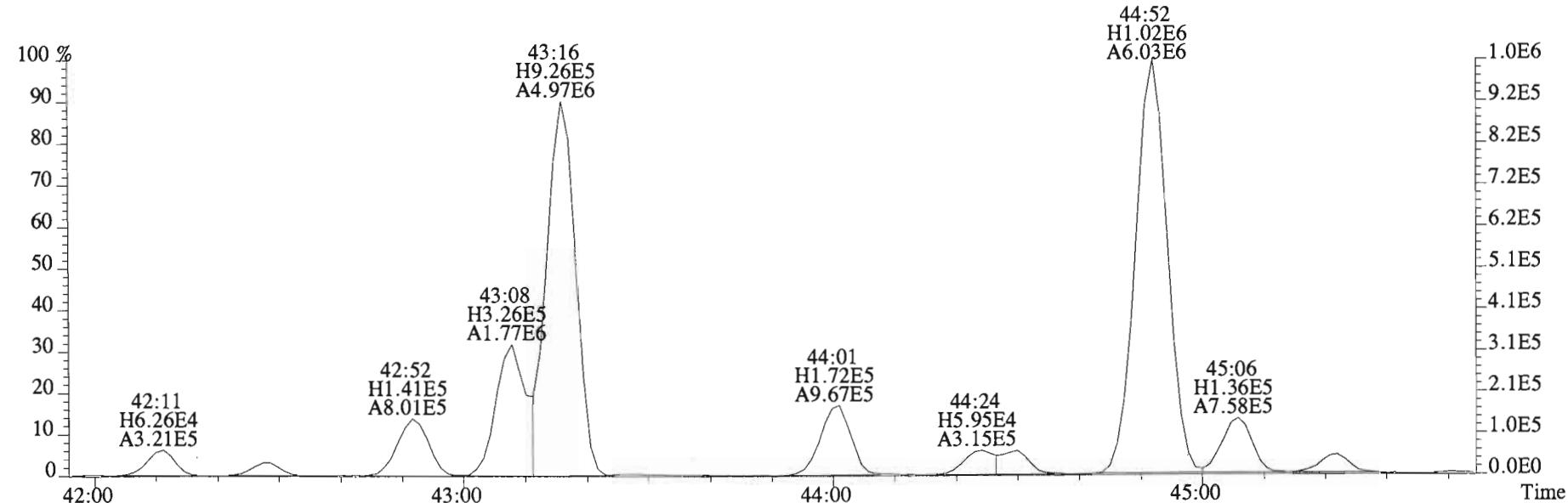
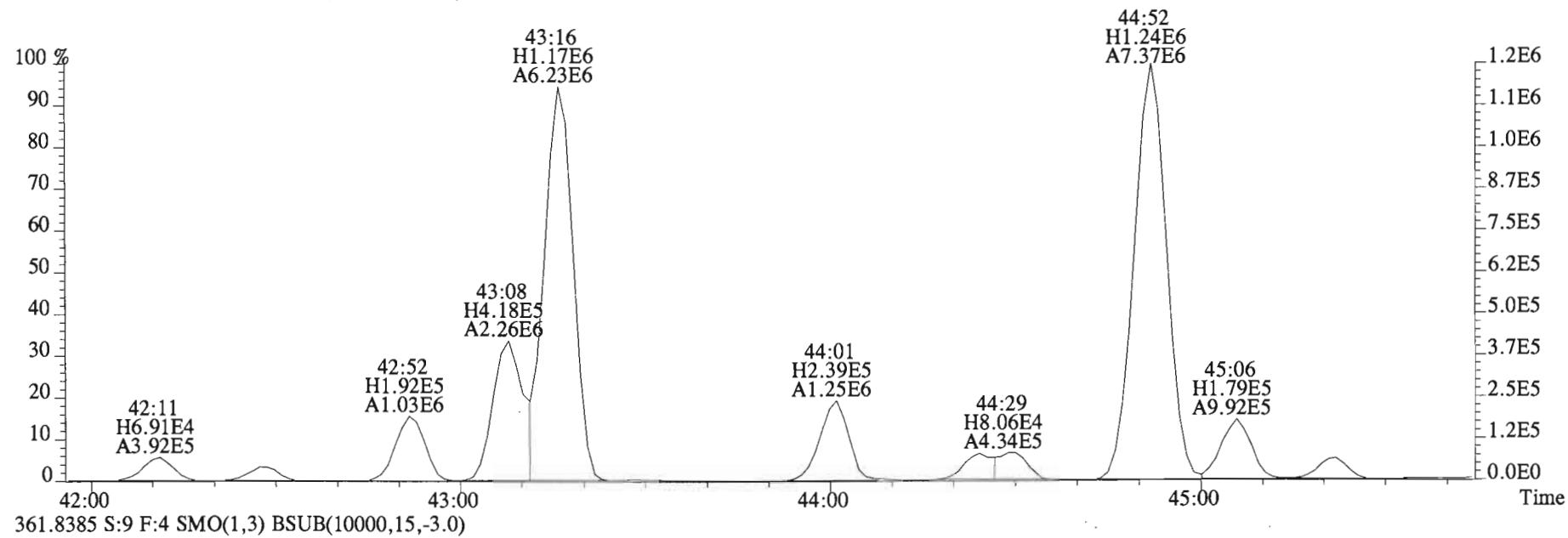
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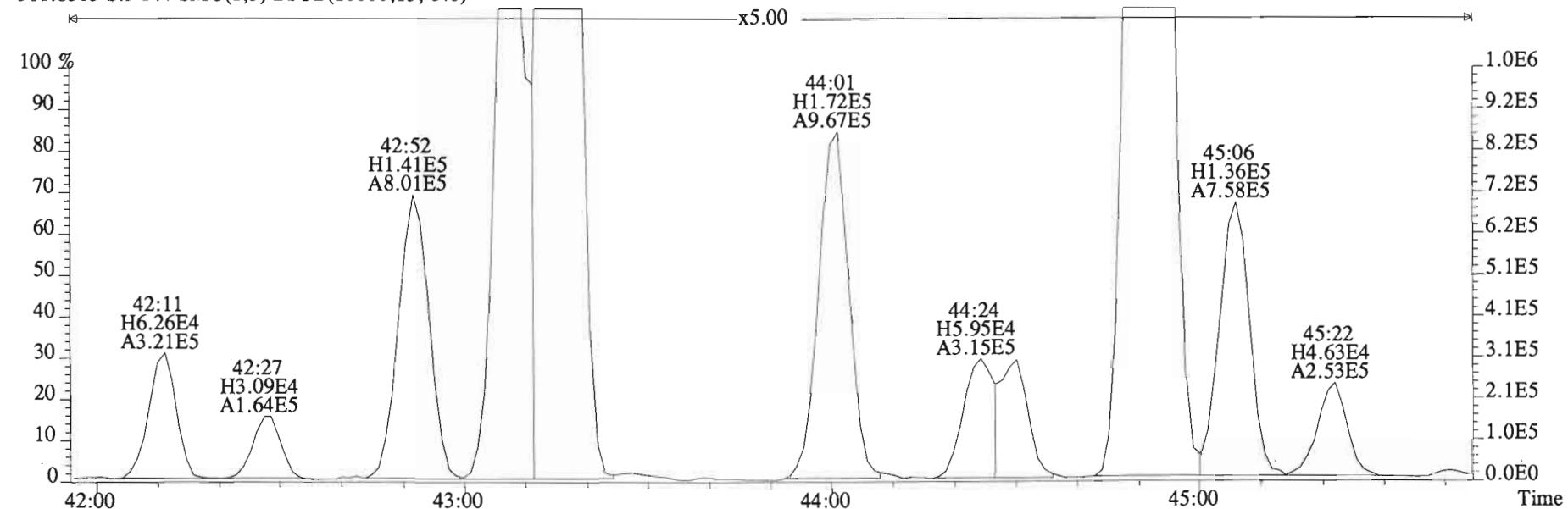
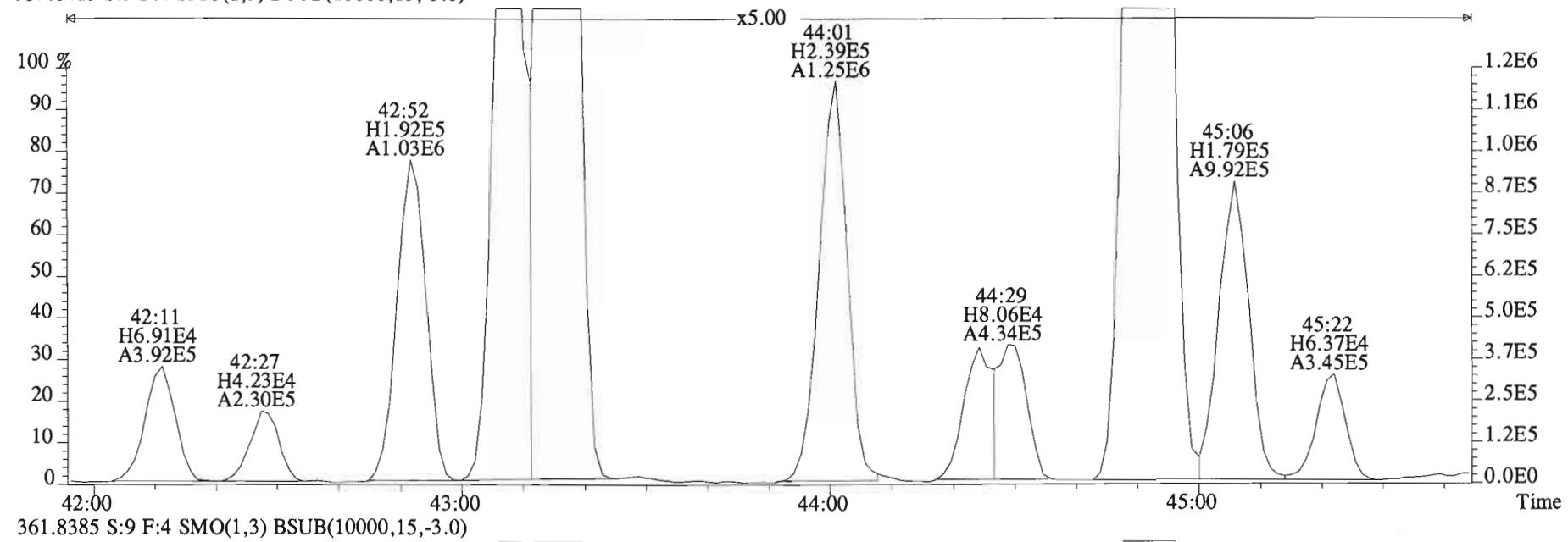
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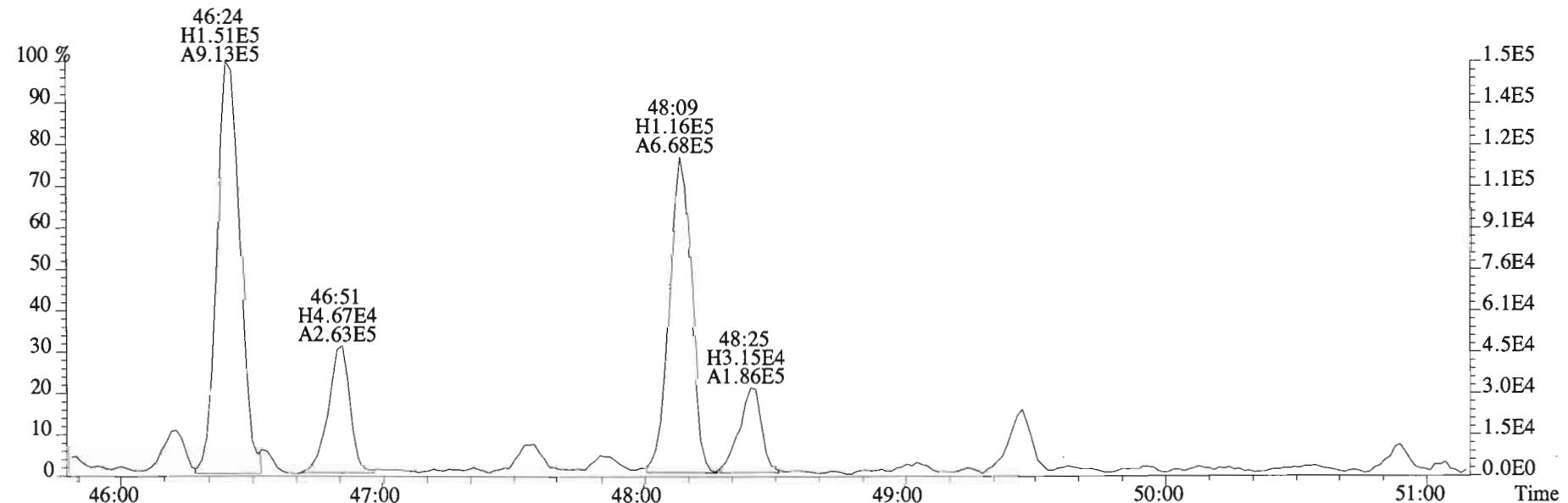
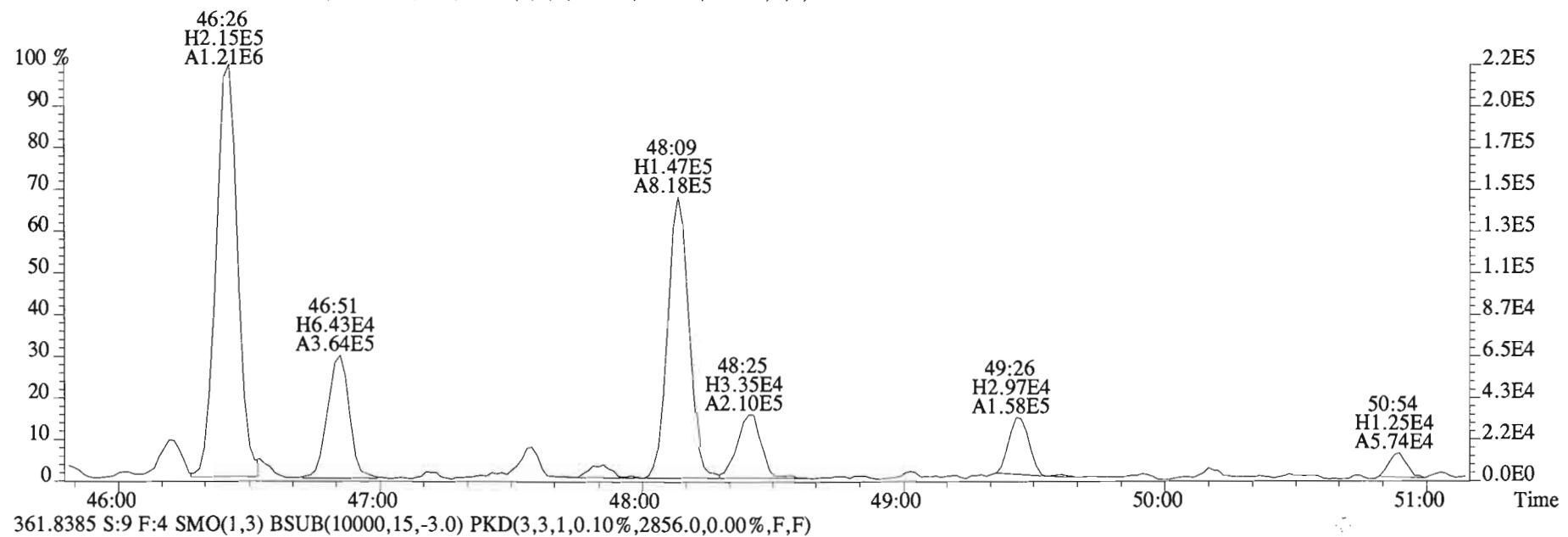
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1500147-04@10X WM-CB-21-20150203-S Exp:PCB_ZB1
359.8415 S:9 F:4 SMO(1,3) B\$UB(10000,15,-3.0)



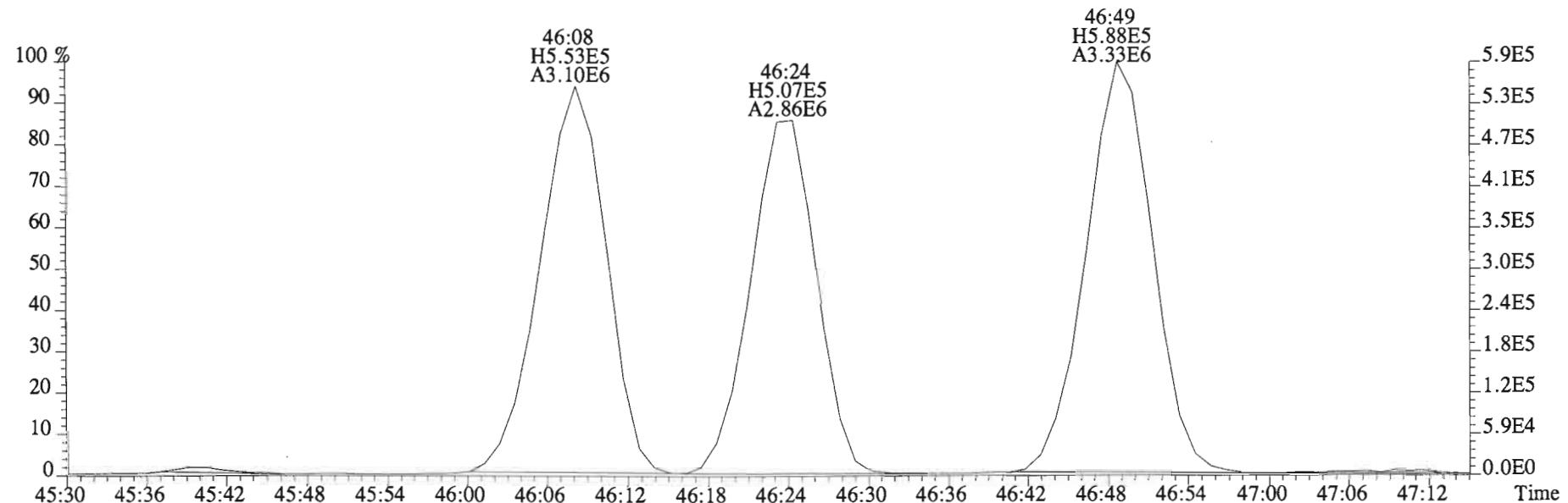
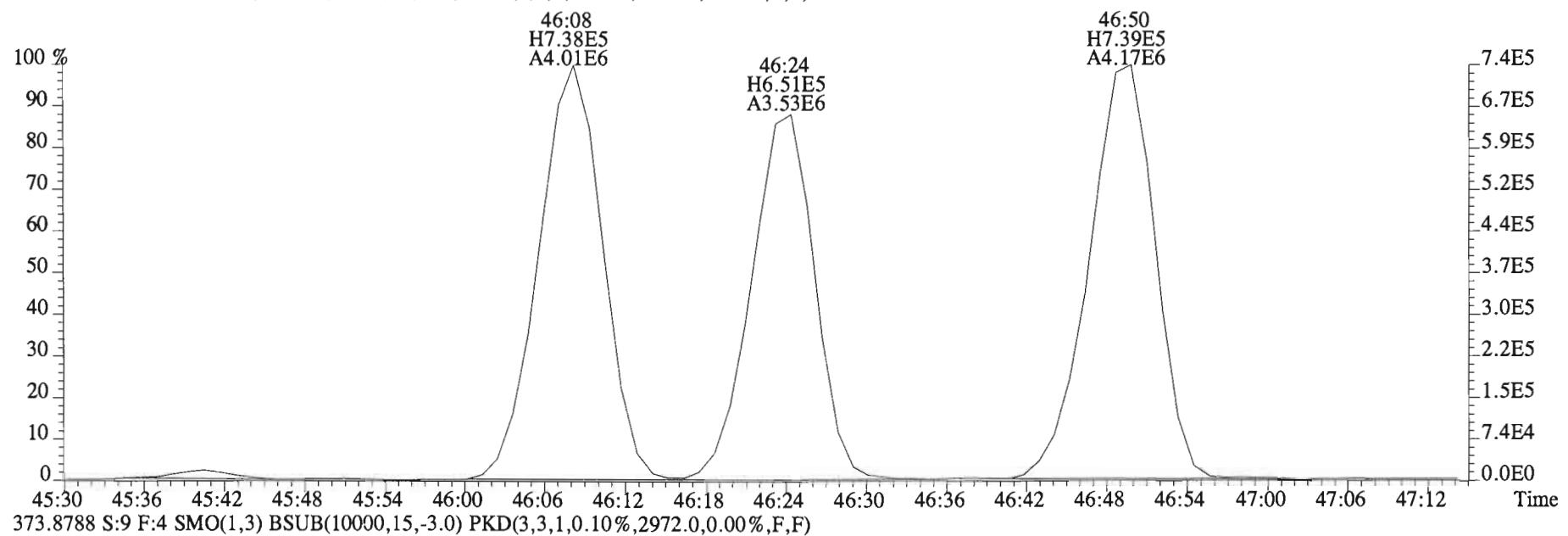
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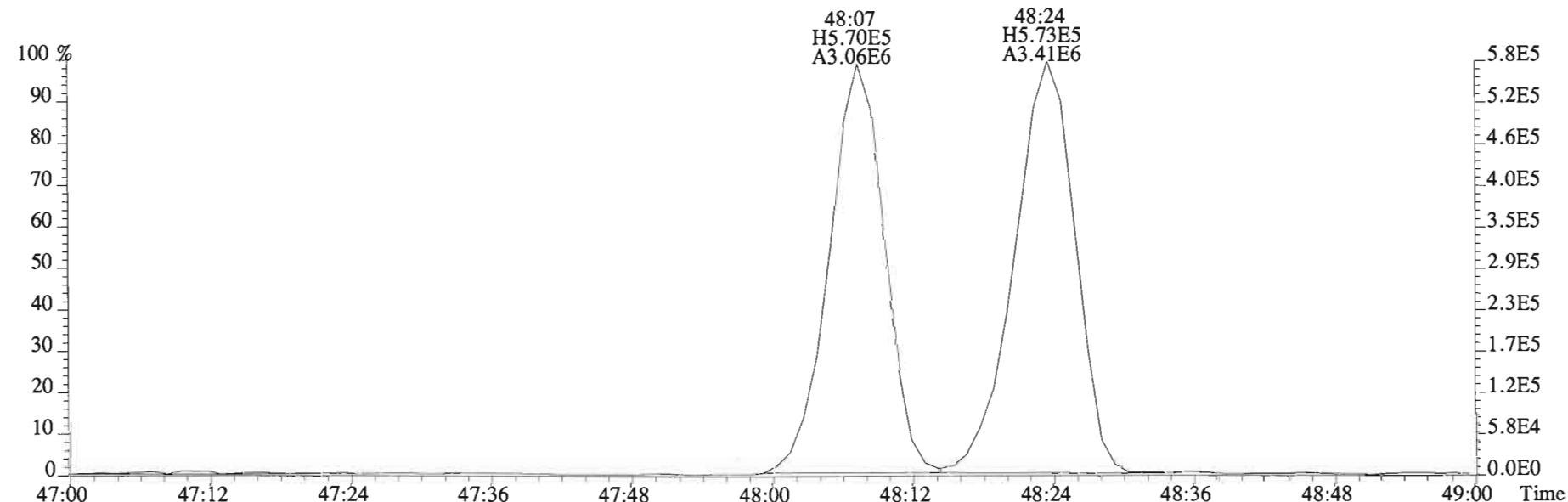
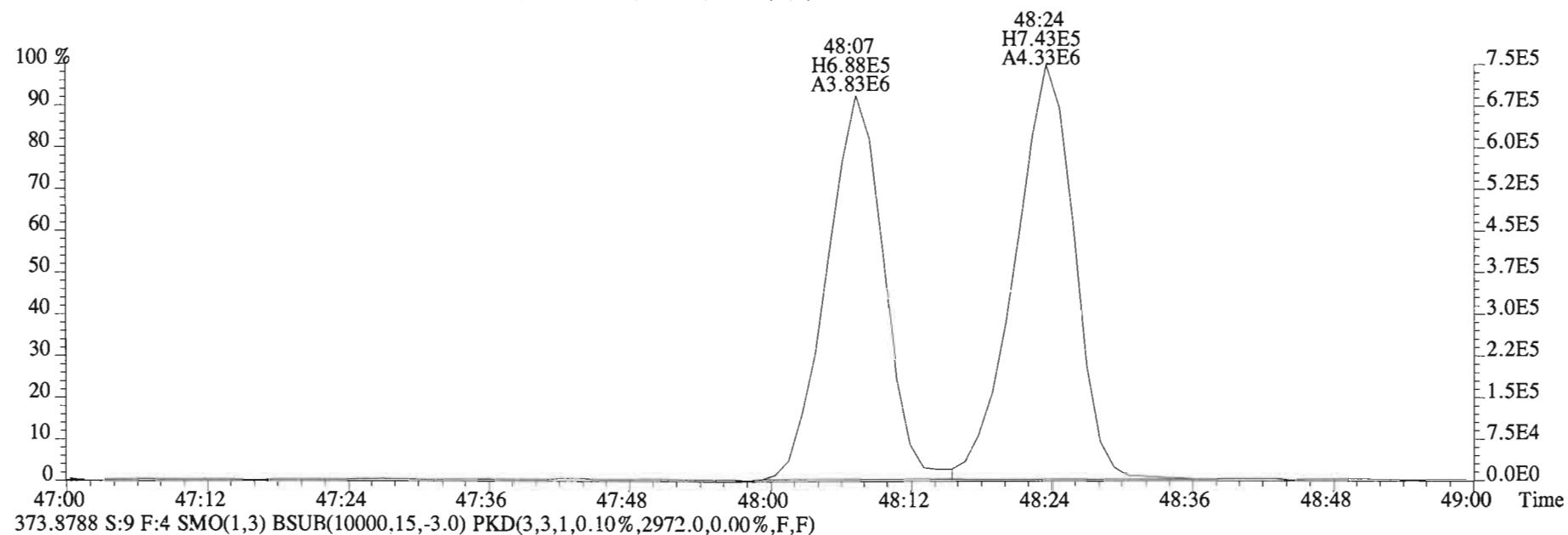
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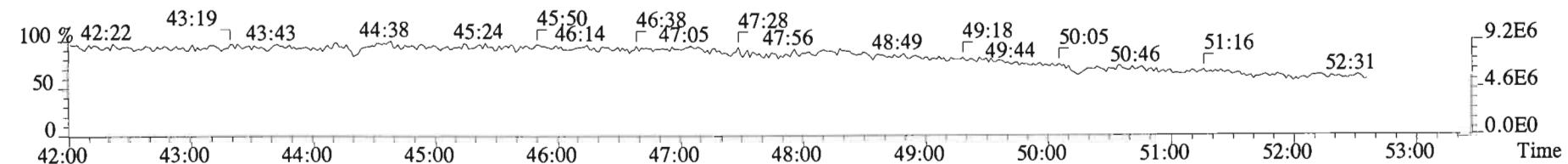
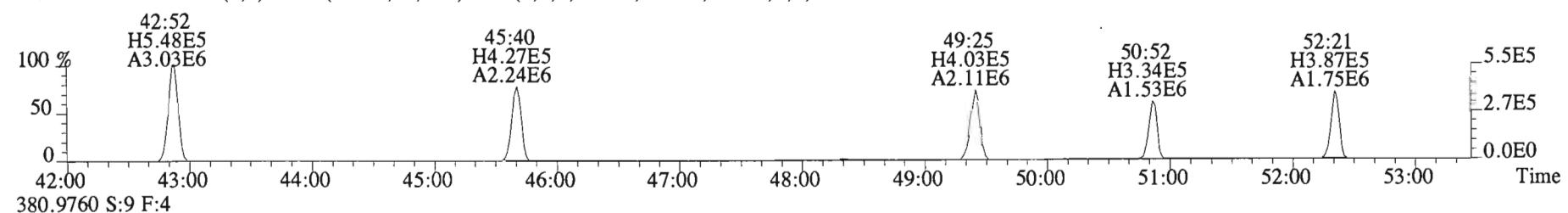
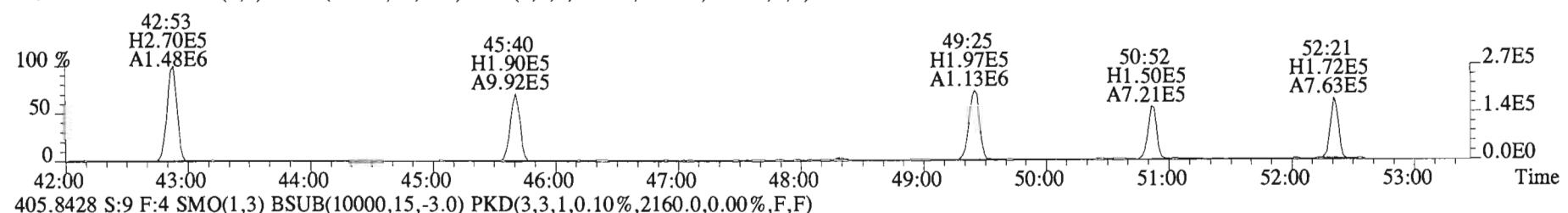
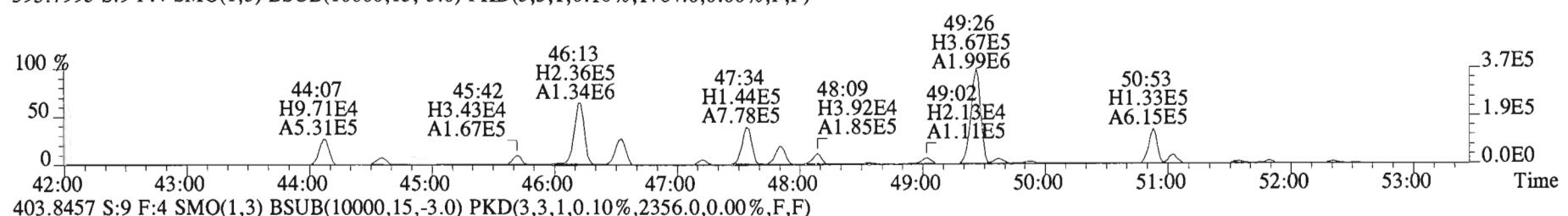
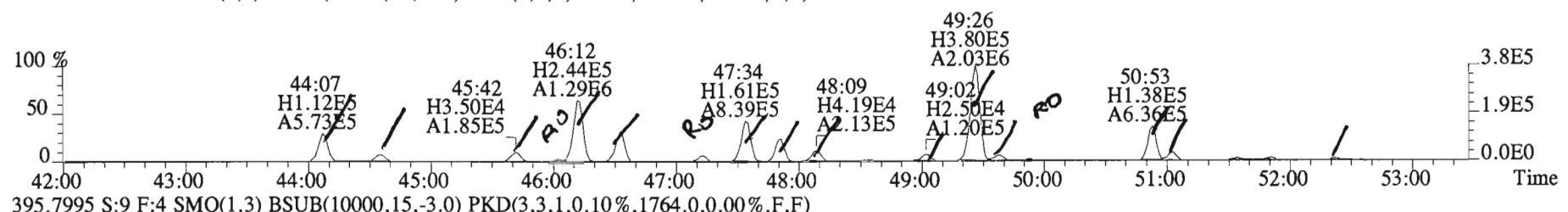
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371.8817 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2820.0,0.00%,F,F)



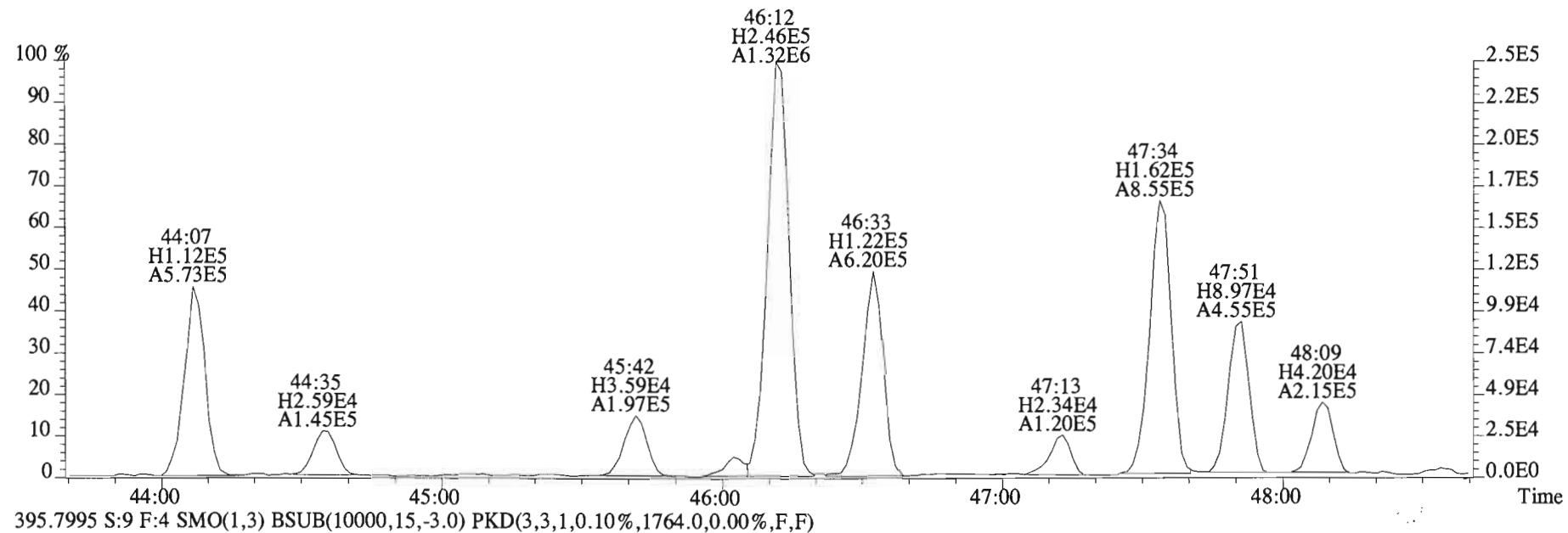
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Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1500147-04@10X WM-CB-21-20150203-S Exp:PCB_ZB1
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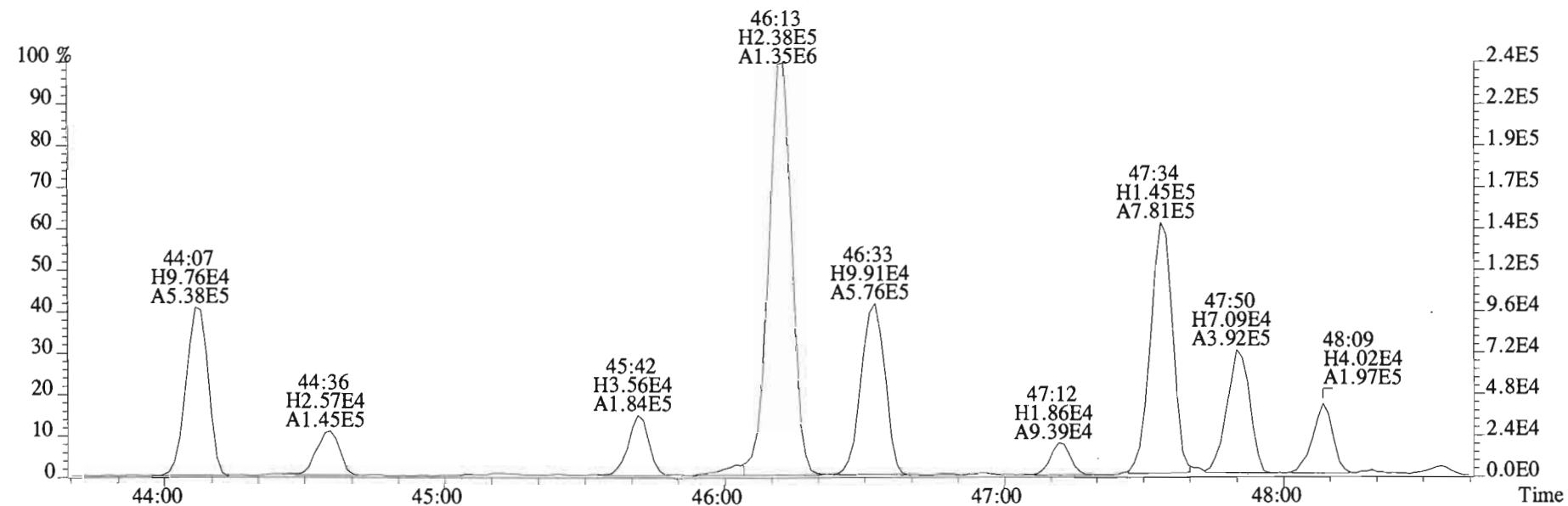
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 Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1500147-04@10X WM-CB-21-20150203-S Exp:PCB_ZB1
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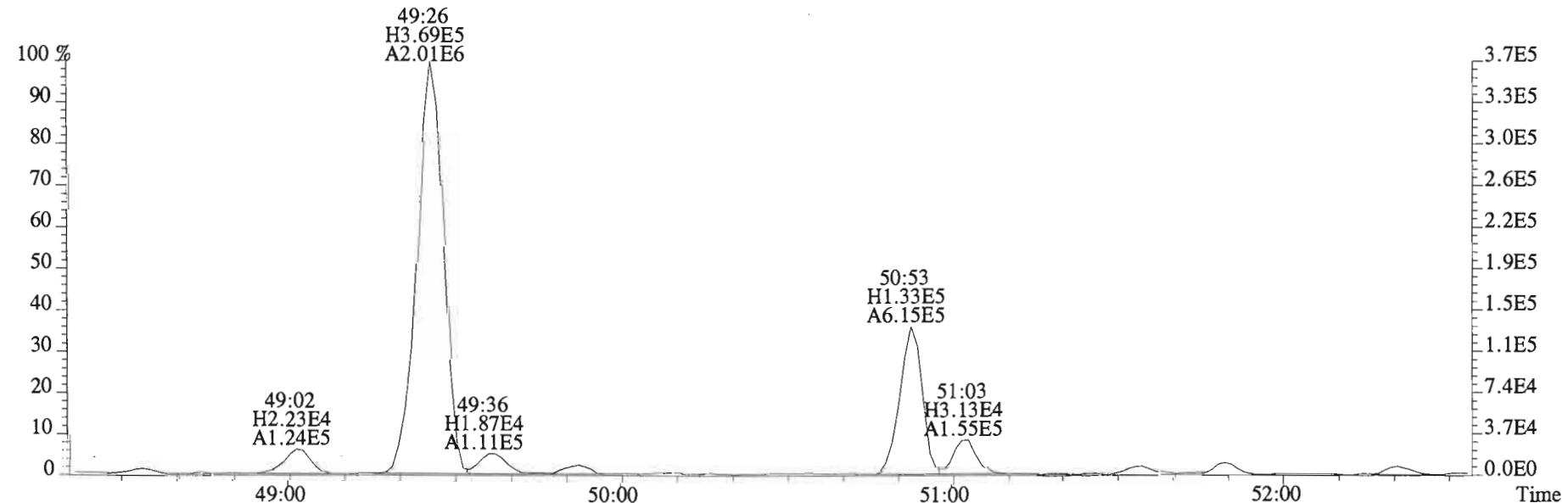
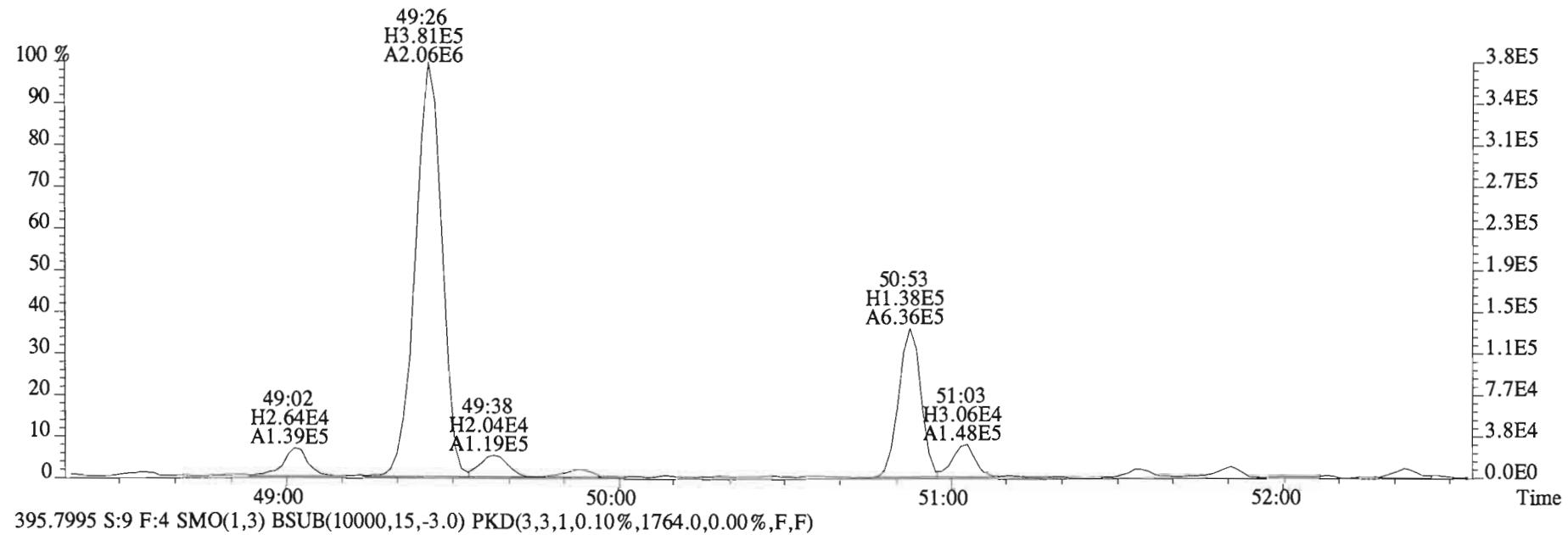
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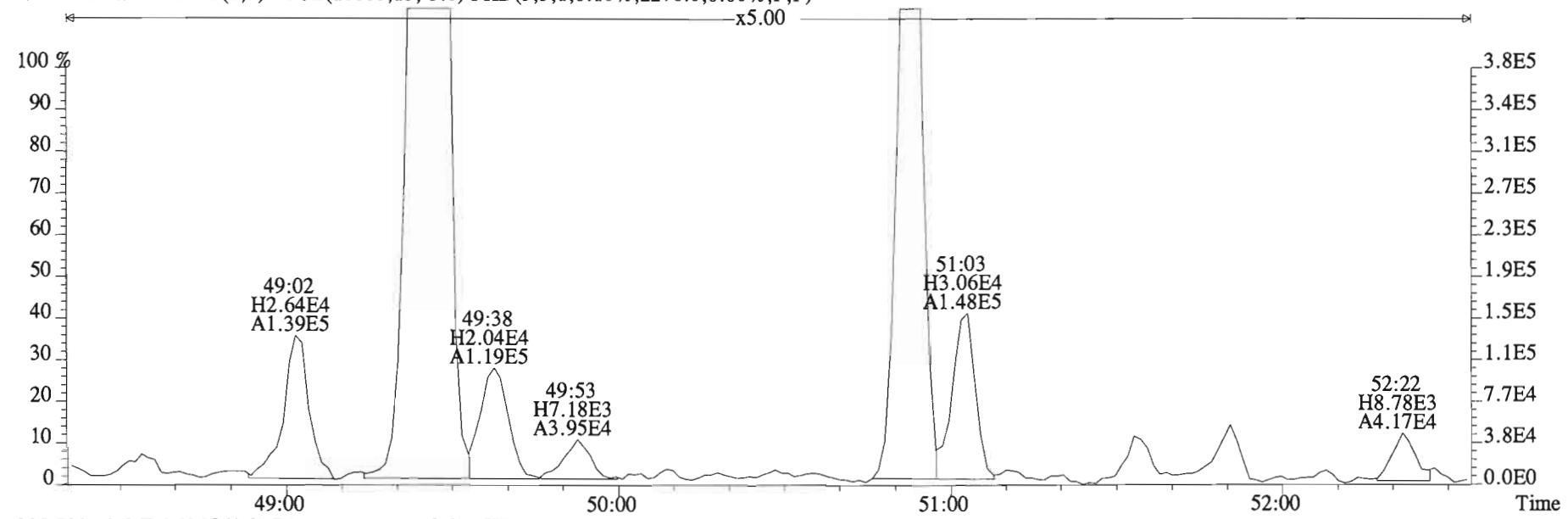
395.7995 S:9 F:4 SMO(1,3) B\$UB(10000,15,-3.0) PKD(3,3,1,0.10%,1764.0,0.00%,F,F)



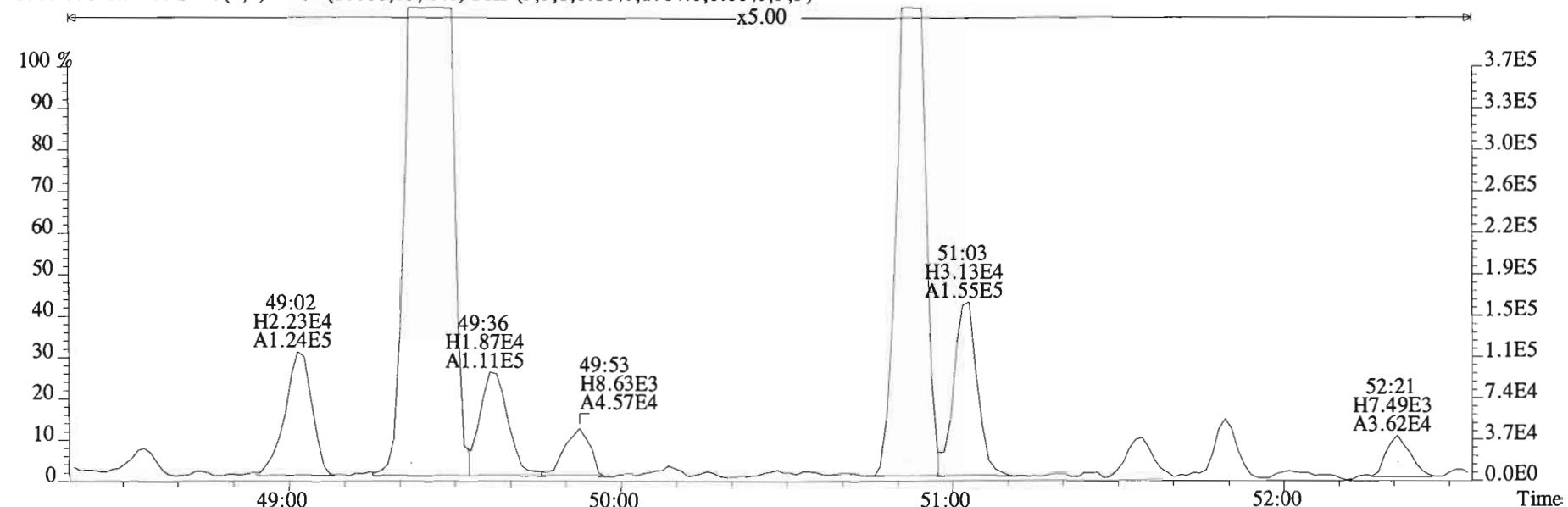
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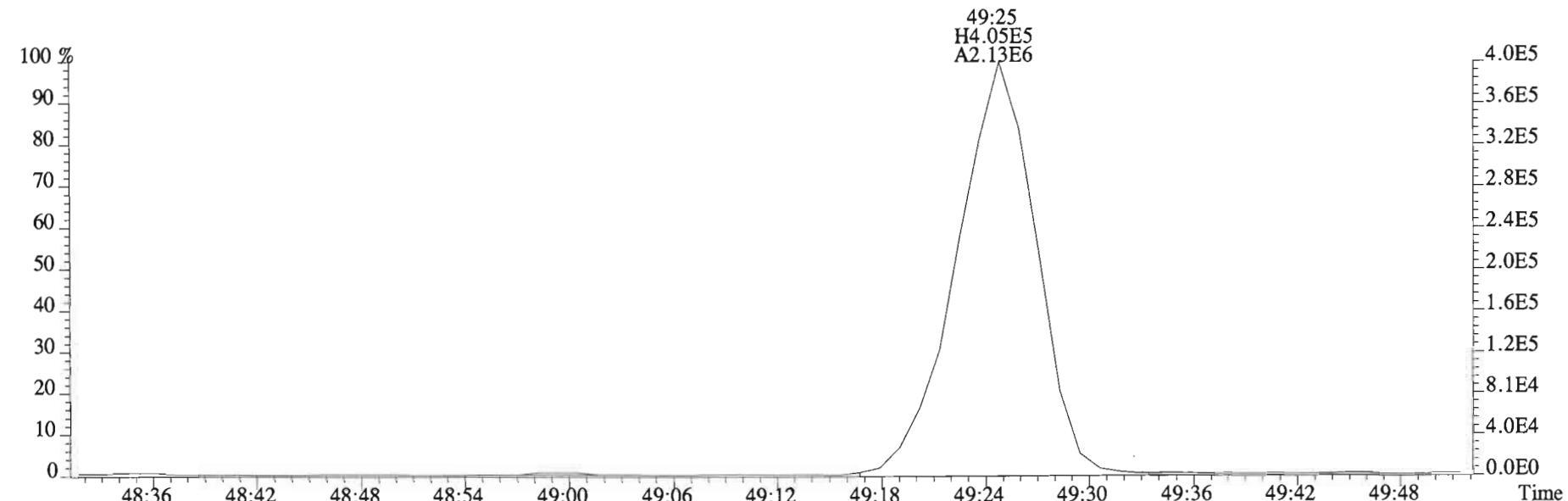
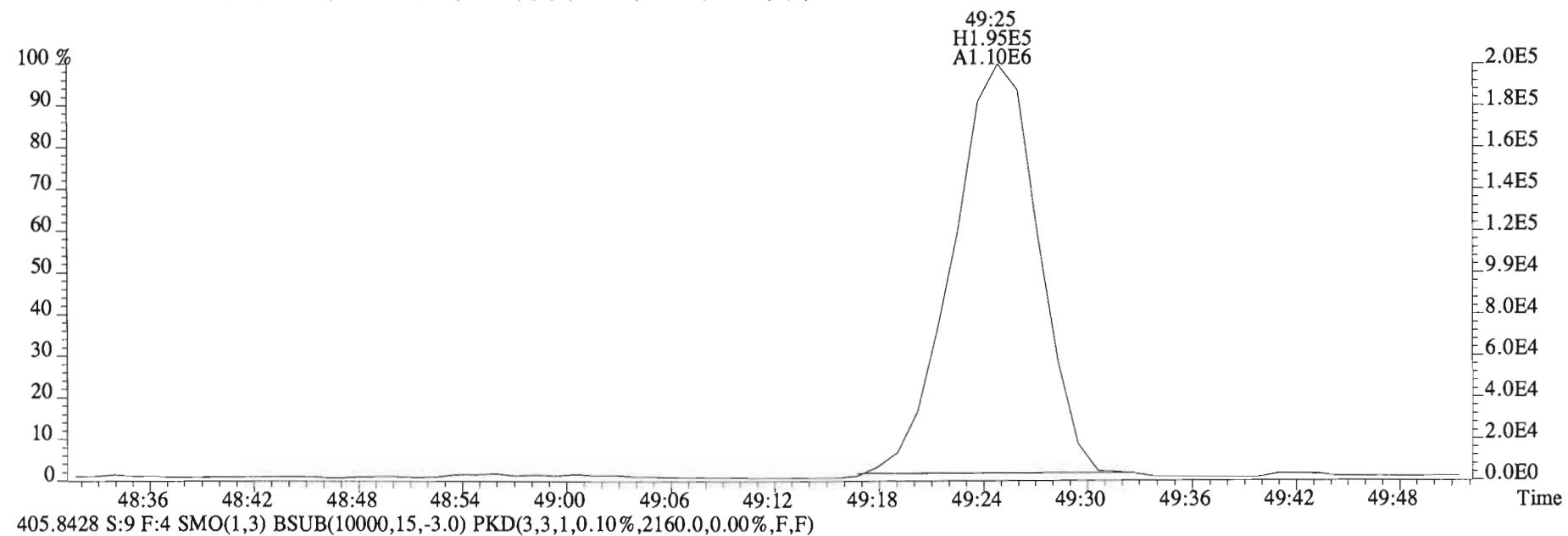
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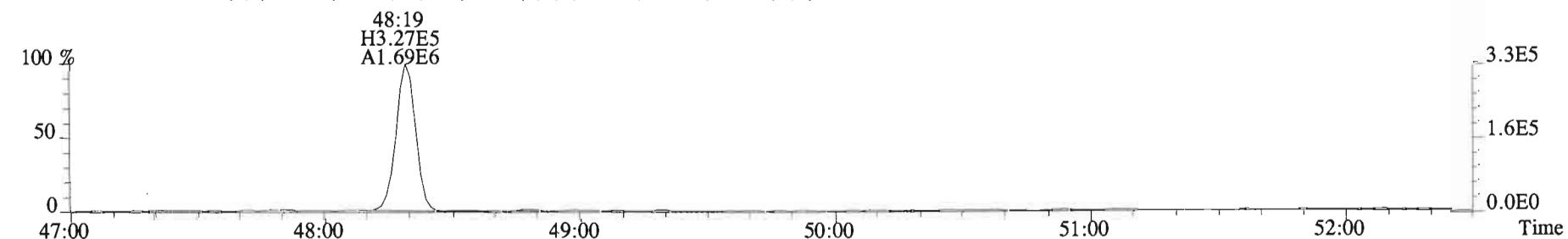
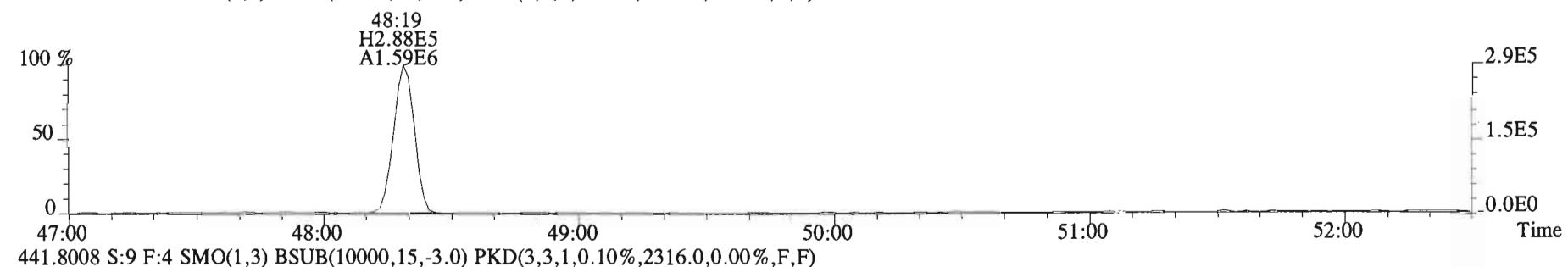
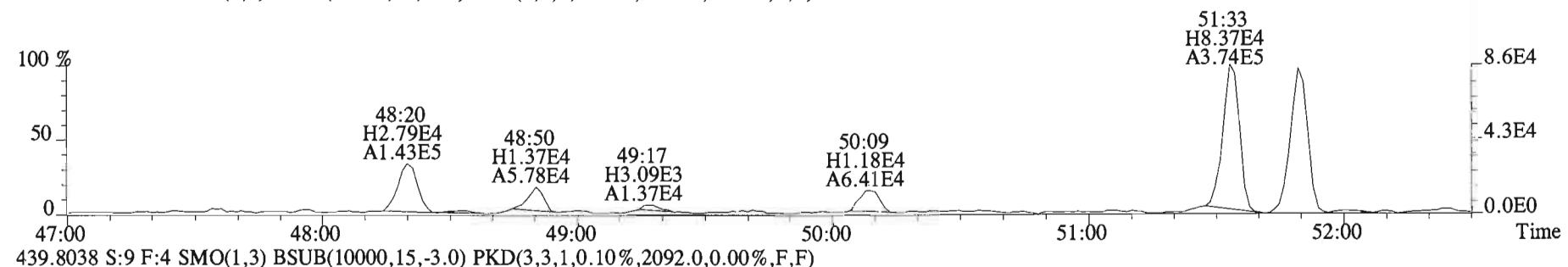
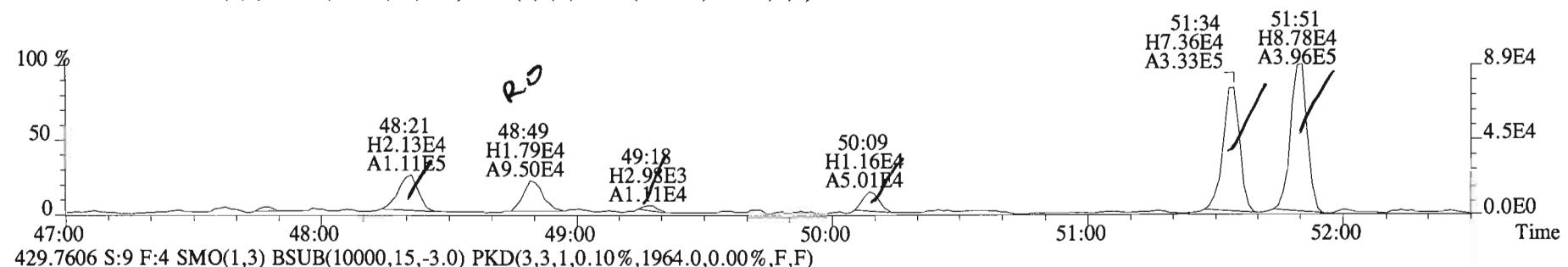
395.7995 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1764.0,0.00%,F,F)



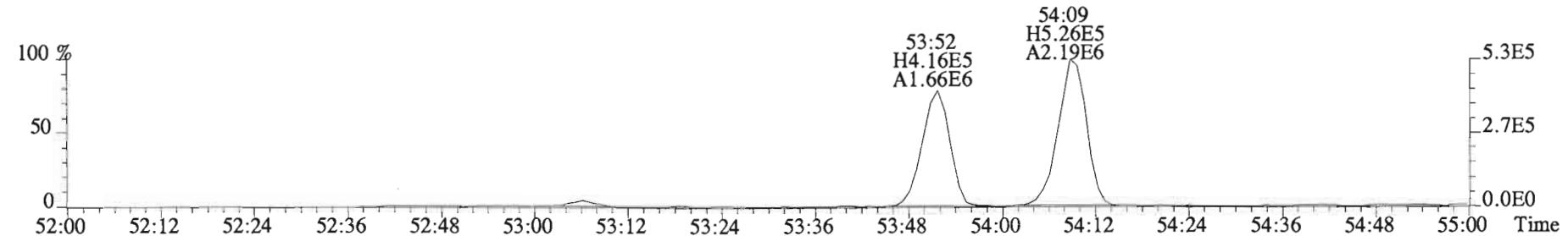
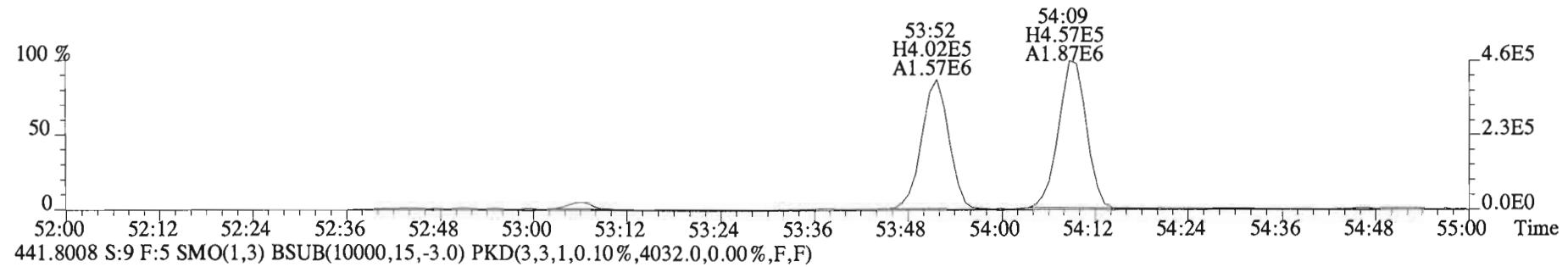
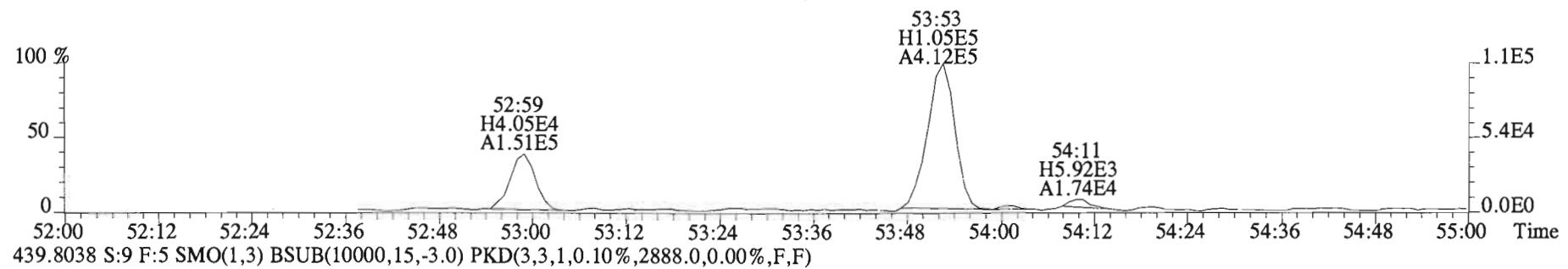
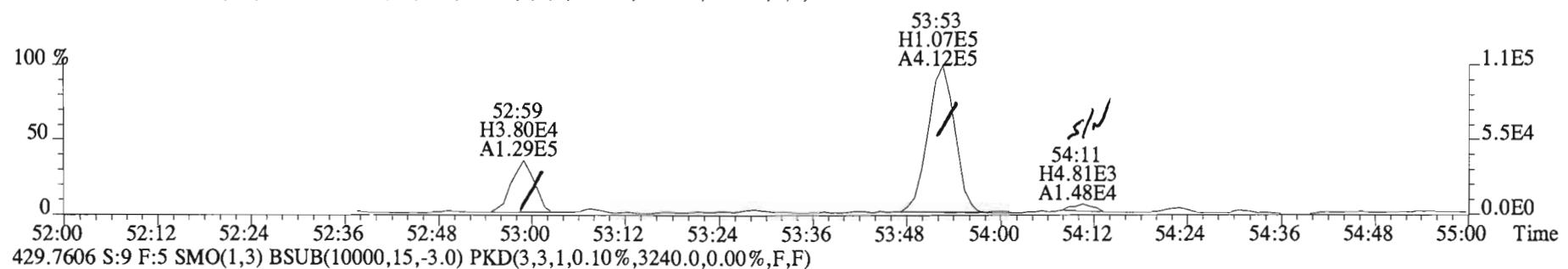
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403.8457 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2356.0,0.00%,F,F)



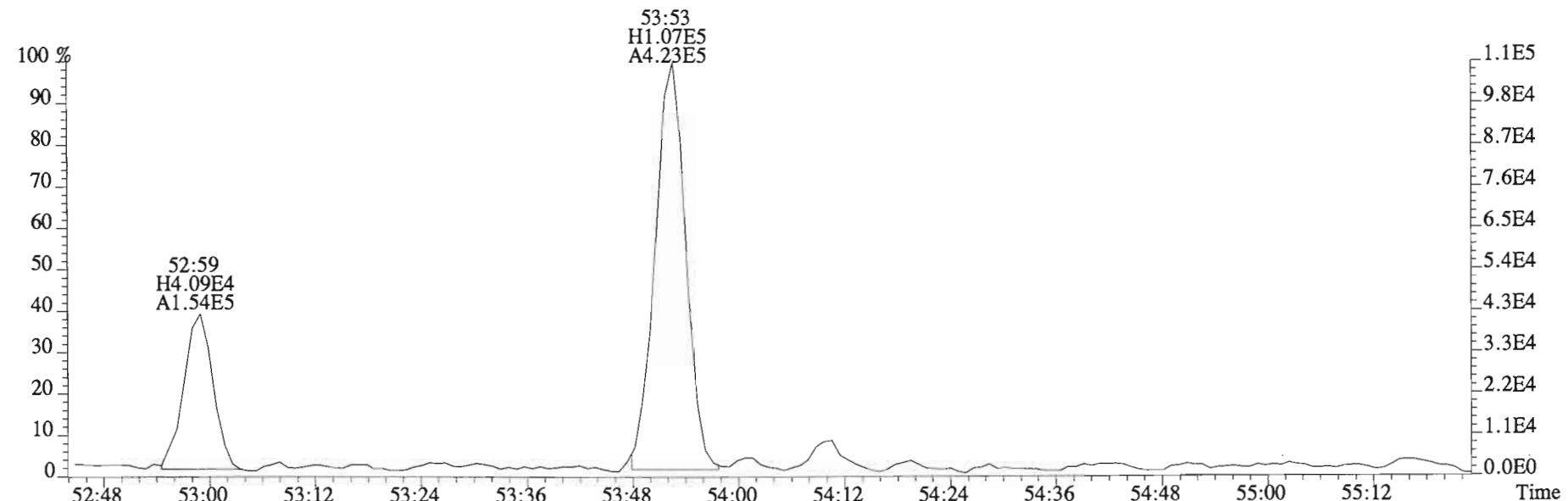
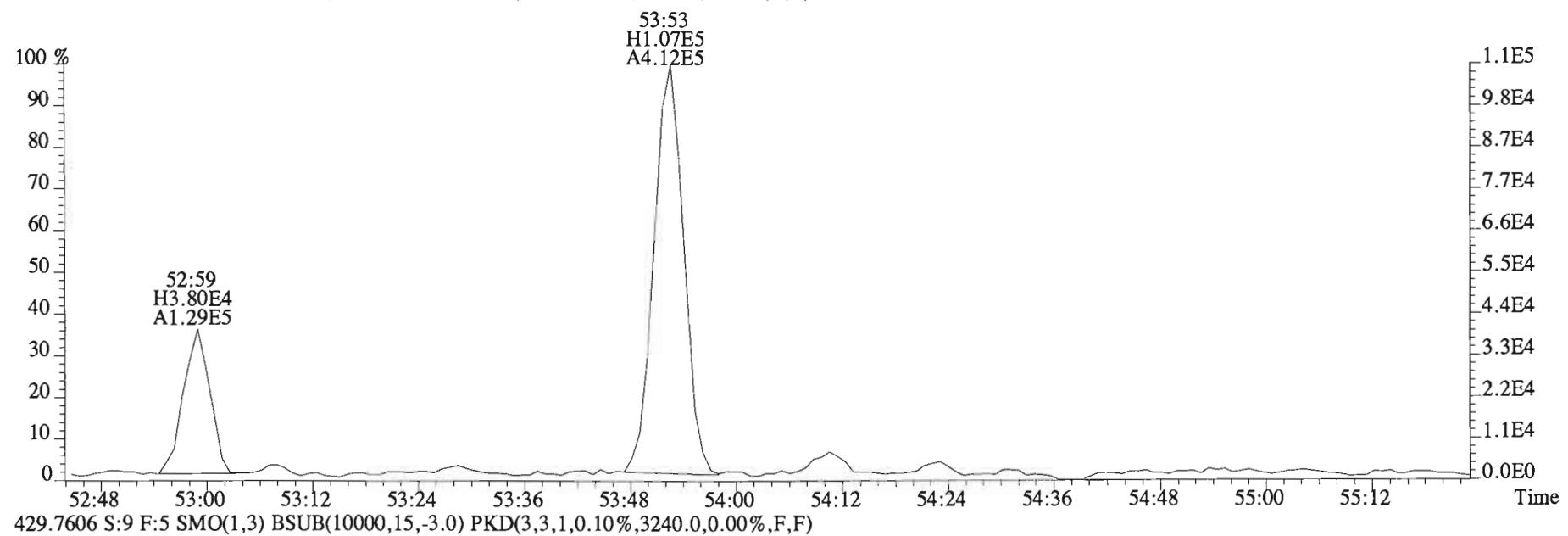
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427.7635 S:9 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2080.0,0.00%,F,F)



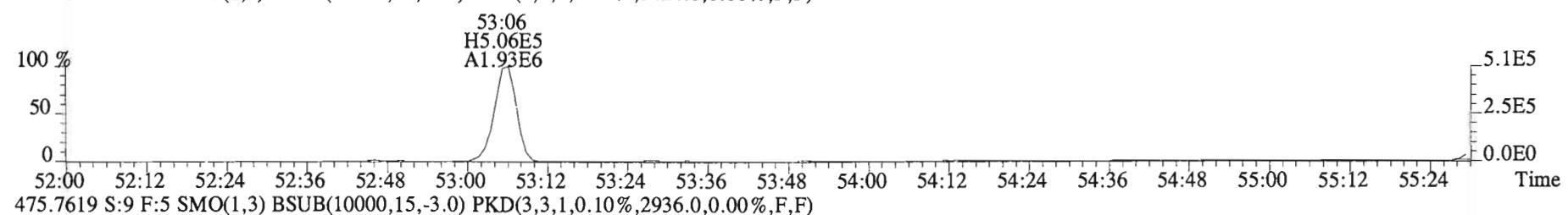
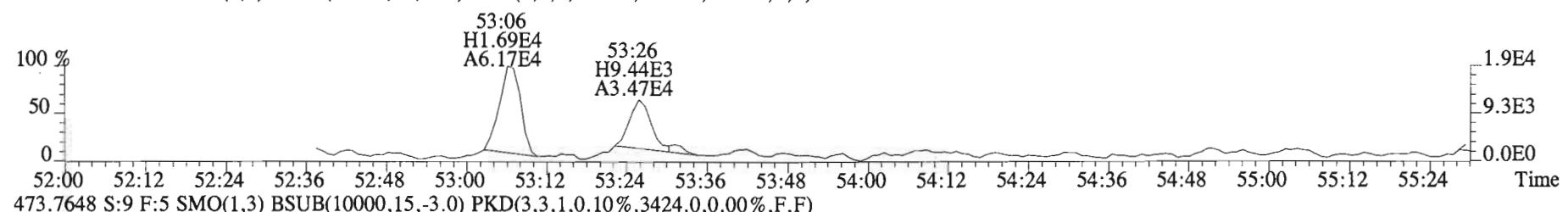
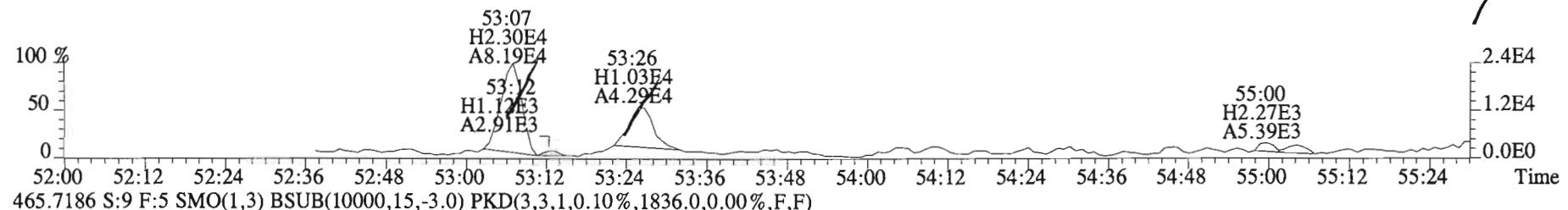
File:150219E2 #1-429 Acq:19-FEB-2015 22:40:24 GC EI+ Voltage SIR Autospec-UltimaE
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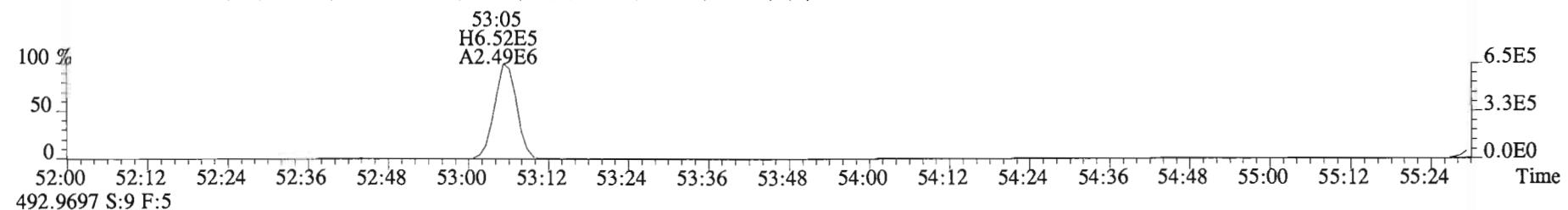
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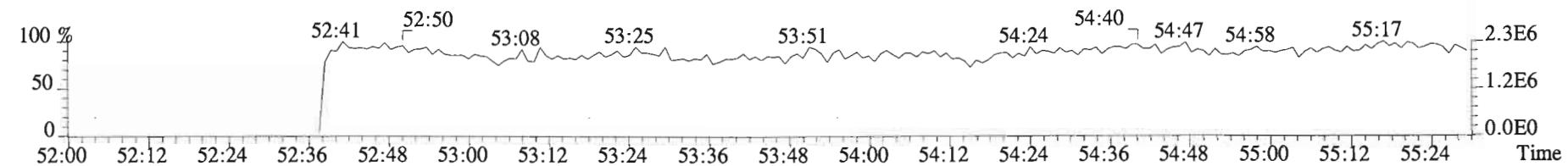
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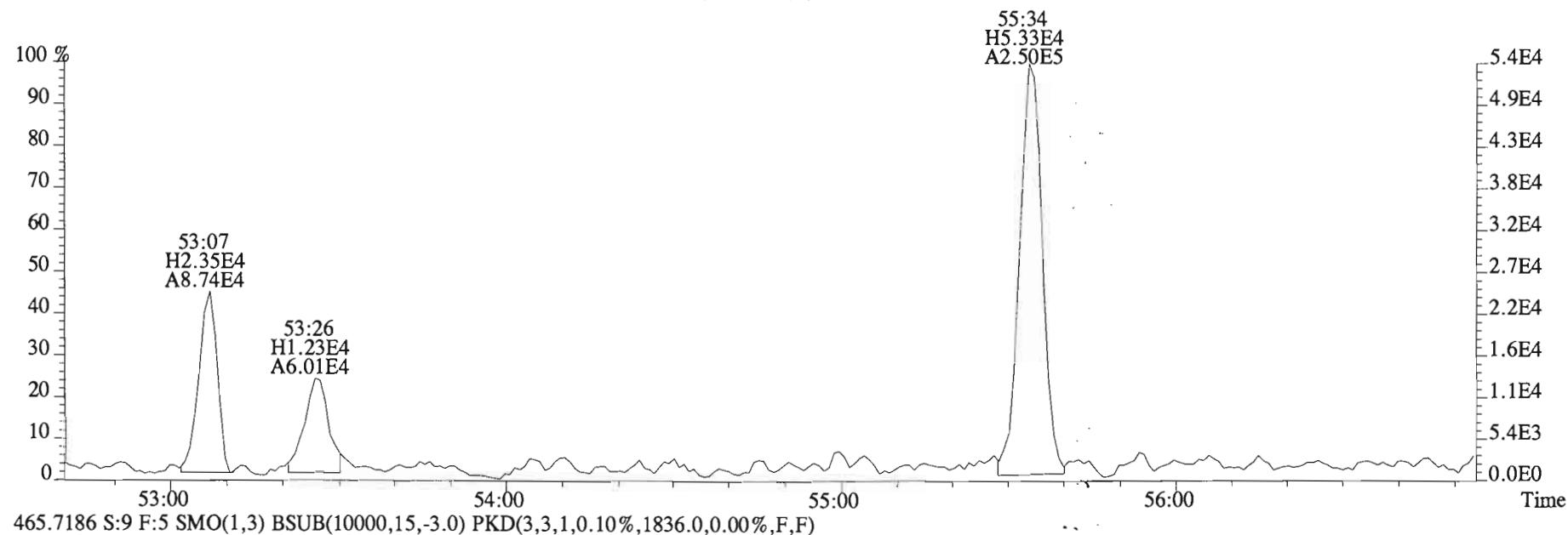
475.7619 S:9 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2936.0,0.00%,F,F)



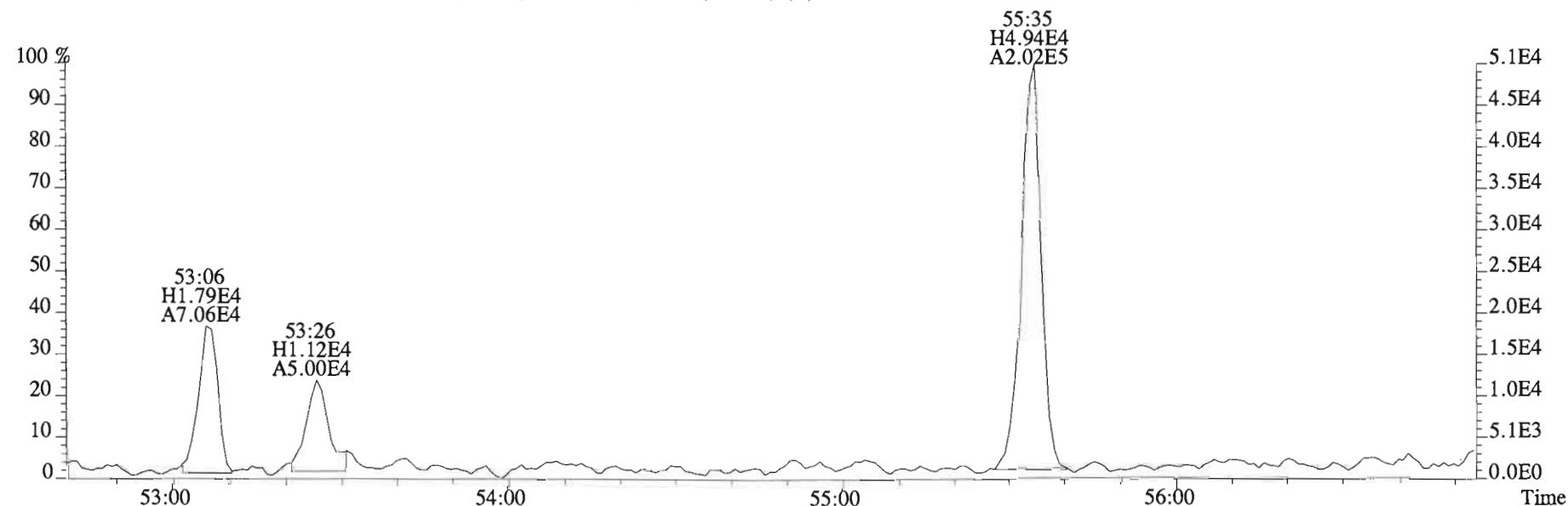
492.9697 S:9 F:5



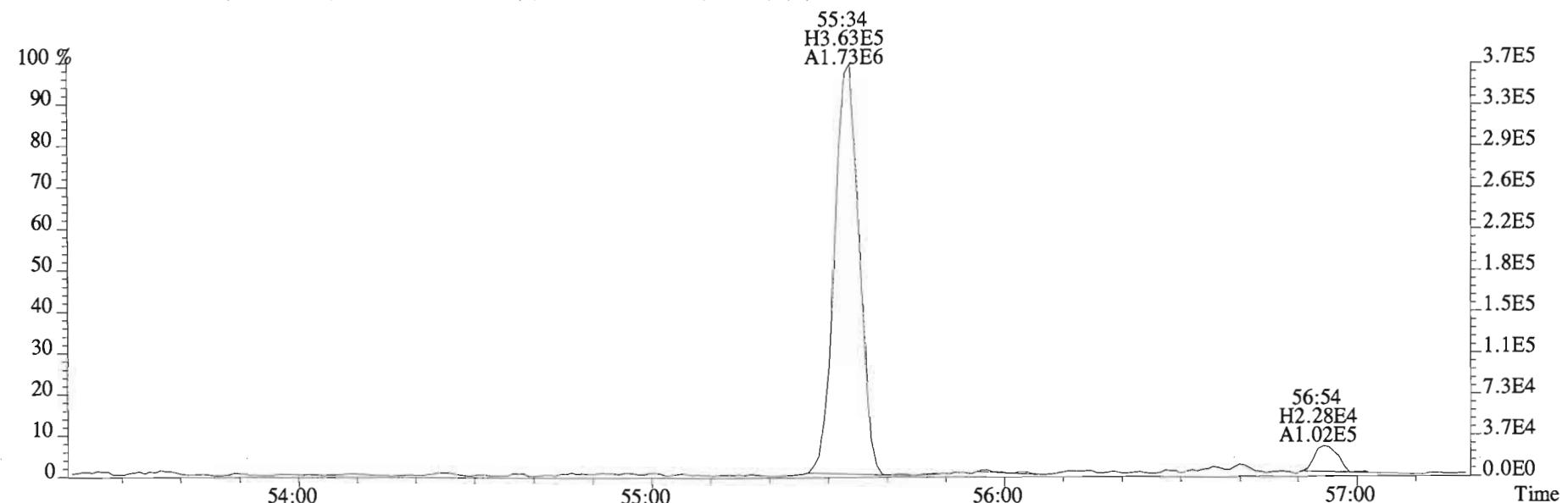
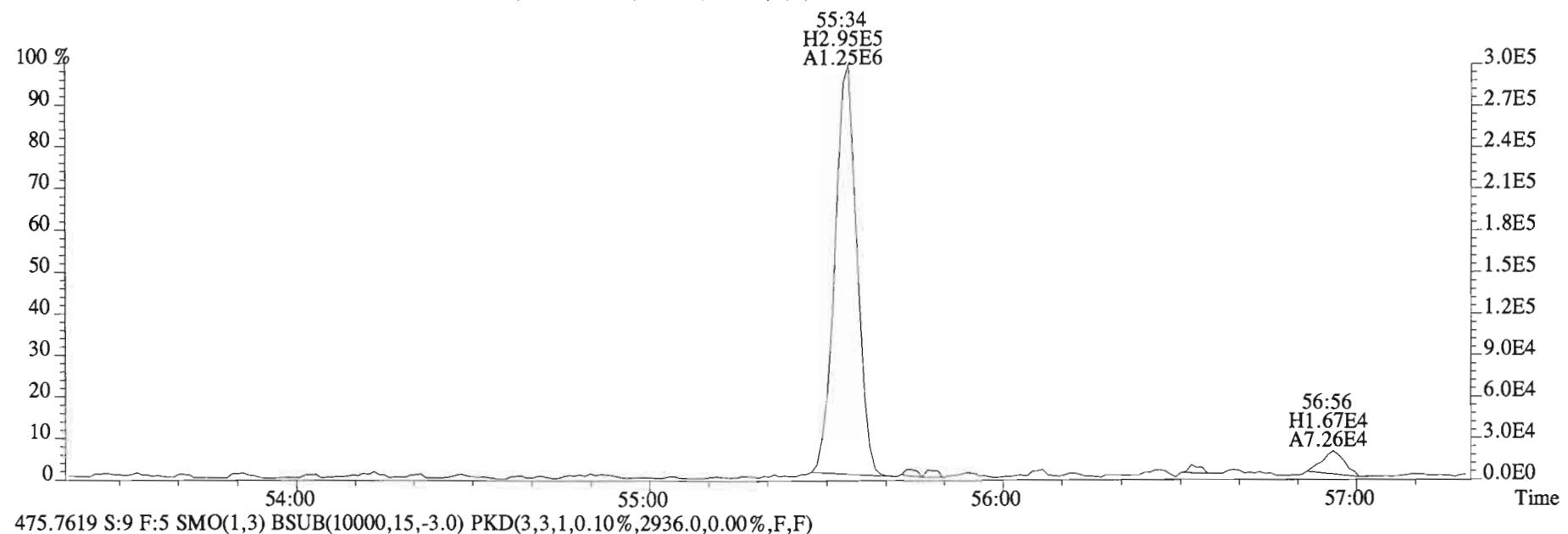
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463.7216 S:9 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2292.0,0.00%,F,F)



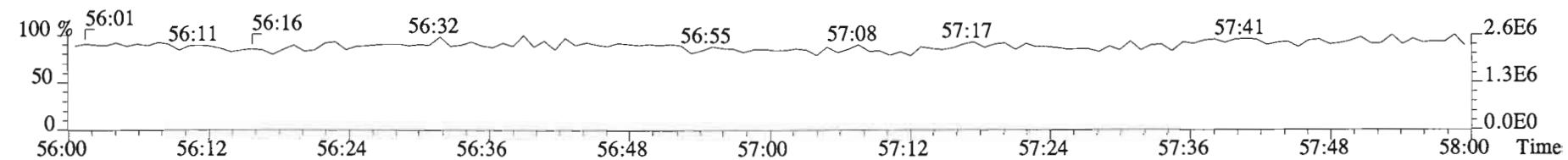
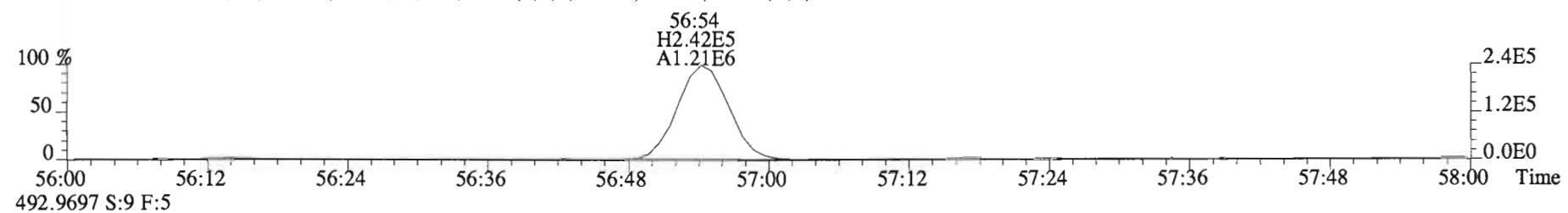
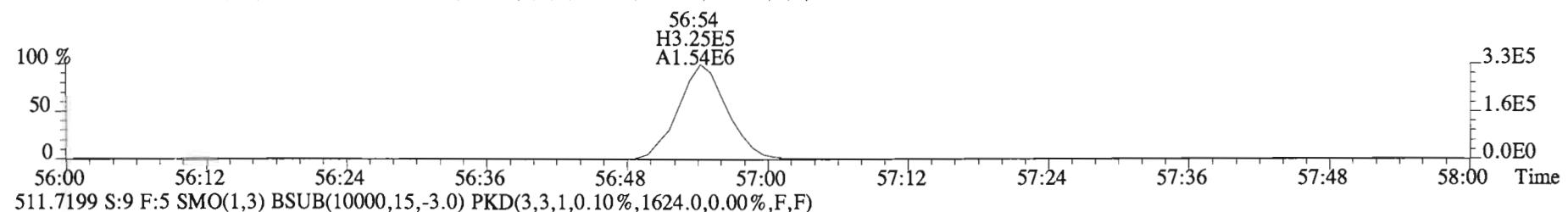
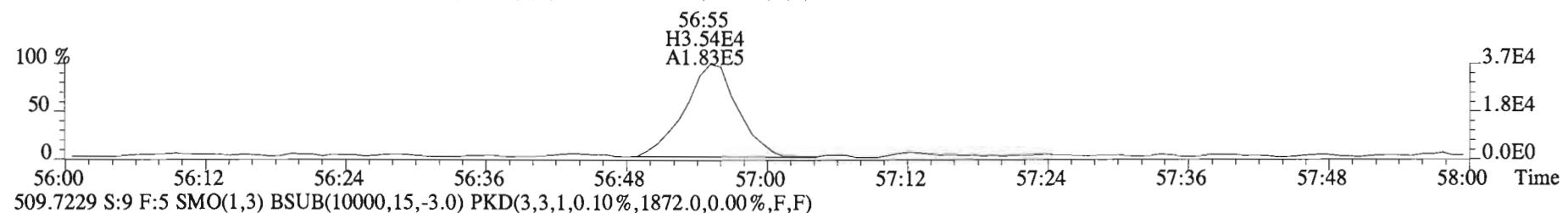
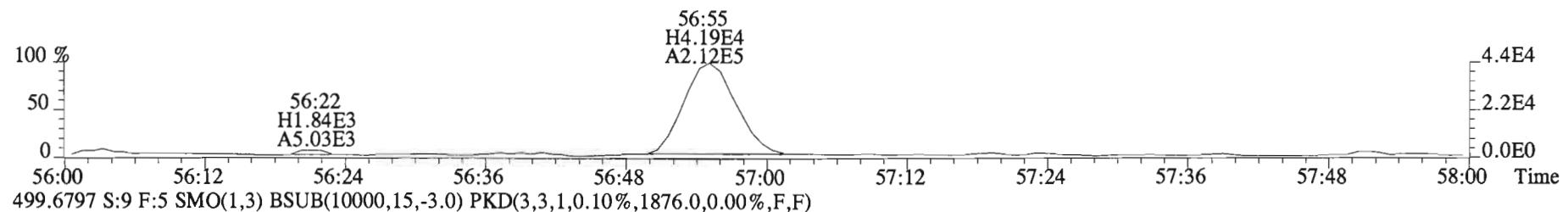
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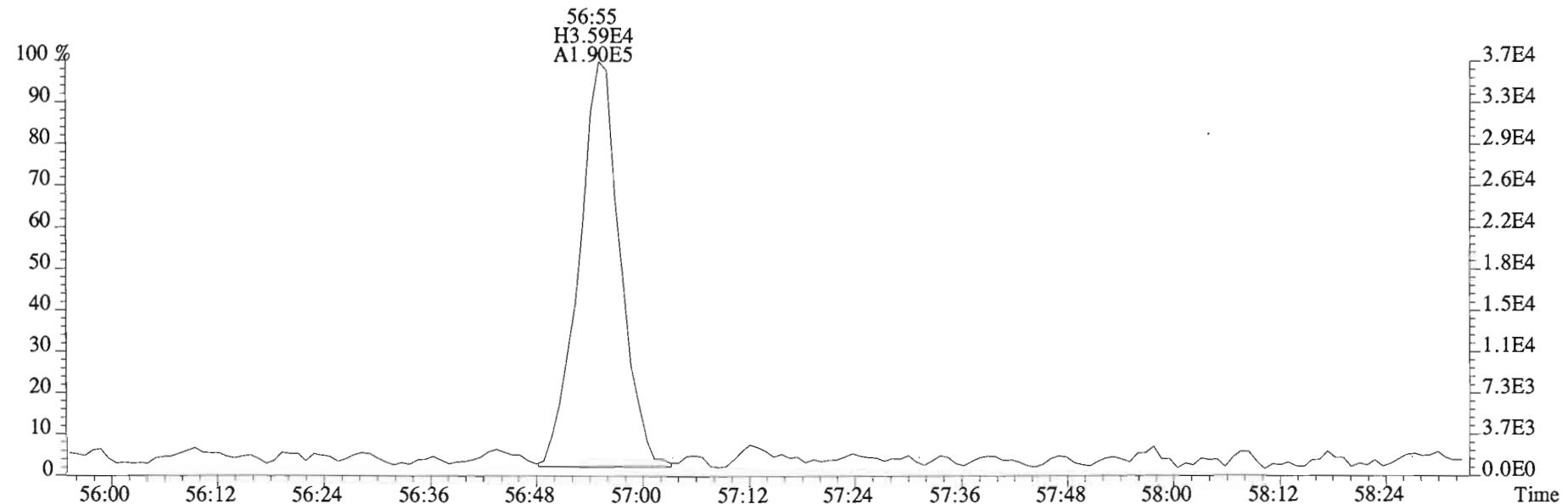
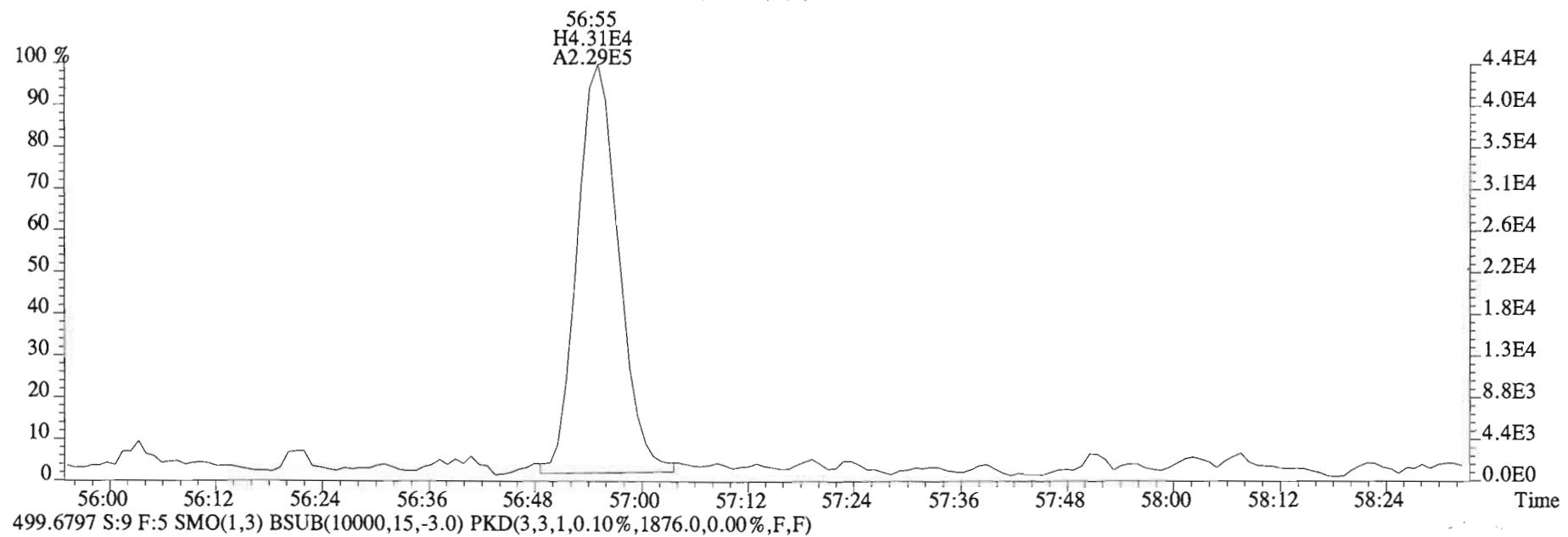
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File:150219E2 #1-429 Acq:19-FEB-2015 22:40:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1500147-04@10X WM-CB-21-20150203-S Exp:PCB_ZB1
497.6826 S:9 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1876.0,0.00%,F,F)



File:150219E2 #1-429 Acq:19-FEB-2015 22:40:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-8 Text:1500147-04@10X WM-CB-21-20150203-S Exp:PCB_ZB1
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CONFIRMATION

Dataset: C:\MassLynx\Default.pro\Results\150220F1\150220F1_4.qld

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Printed: Tuesday, February 24, 2015 09:11:46 Pacific Standard Time

Method: Untitled 20 Feb 2015 08:16:54 tcdf.mdb

Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\ldb-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 150220F1_4, Date: 20-Feb-2015, Time: 10:07:06, ID: 1500147-02RE1 WM-MH-61-20150203-S CF 25.3, Description: WM-MH-61-20150203-S CF

#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	5.39e4	0.80	NO	1.10	25.300	17.52	6.6277		0.807
2	2 13C-2,3,7,8-TCDF	1.48e6	0.78	NO	0.844	25.300	17.51	199.61	99.9	0.523
3	3 13C-1,2,3,4-TCDF	1.75e6	0.78	NO	1.00	25.300	15.28	199.76	100	0.441

Ch 2/24/15

(A) changed to 10.014. Ch 2/24/15

Ch 2/24/15

Dataset: Untitled

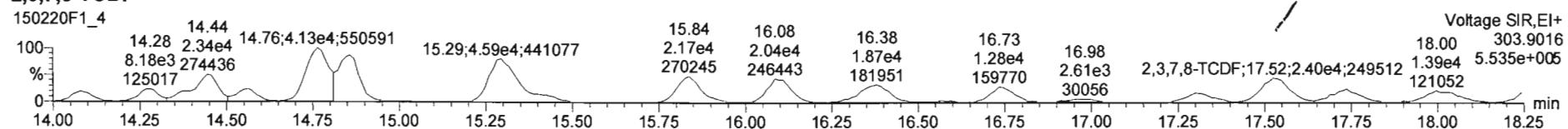
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Method: C:\MassLynx\DEFAULT.PRO\MethDB\lcdf.mdb 20 Feb 2015 08:16:54

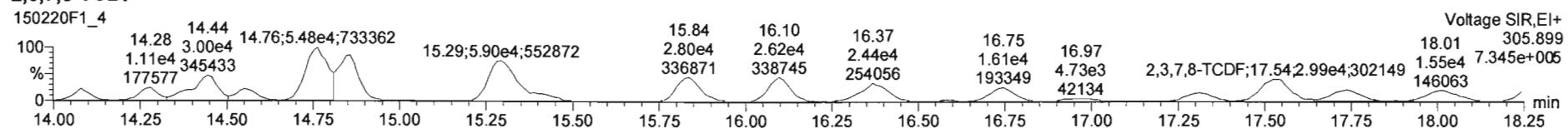
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Name: 150220F1_4, Date: 20-Feb-2015, Time: 10:07:06, ID: 1500147-02RE1 WM-MH-61-20150203-S CF 25.3, Description: WM-MH-61-20150203-S CF

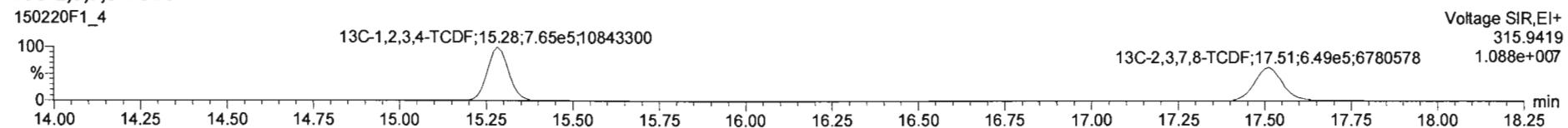
2,3,7,8-TCDF



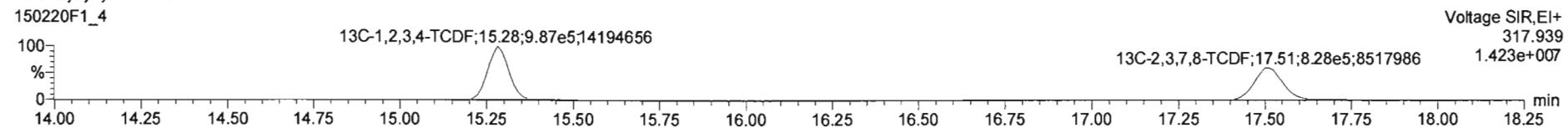
2,3,7,8-TCDF



13C-2,3,7,8-TCDF



13C-2,3,7,8-TCDF

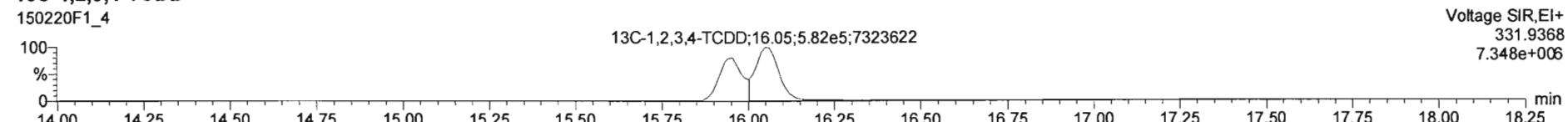


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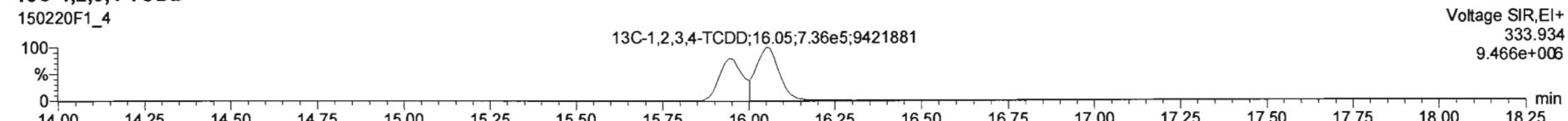
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Printed: Friday, February 20, 2015 13:47:27 Pacific Standard Time

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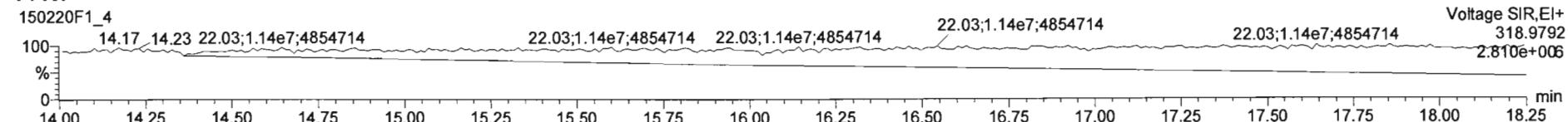
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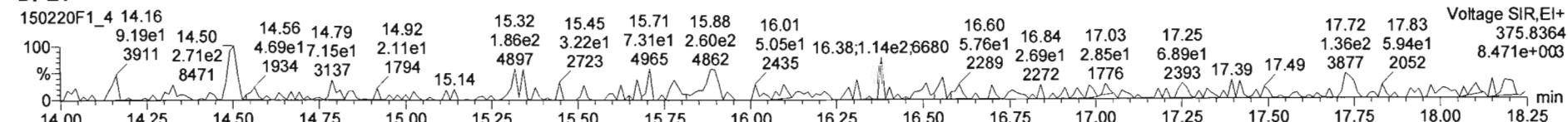
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PFK1



DPE1



Dataset: C:\MassLynx\Default.pro\Results\150220F1\150220F1_5.qld

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Printed: Tuesday, February 24, 2015 09:13:13 Pacific Standard Time

Method: Untitled 20 Feb 2015 08:16:54 tcdf.mdb

Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

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1	1 2,3,7,8-TCDF	2.54e4	0.81	NO	1.10	20.770	17.52	3.9700	0.261	
2	2 13C-2,3,7,8-TCDF	1.16e6	0.75	NO	0.844	20.770	17.51	173.04	86.5	0.690
3	3 13C-1,2,3,4-TCDF	1.59e6	0.78	NO	1.00	20.770	15.29	200.00	100	0.583

cJ 2/24/15

① changed to 9.999 cJ 2/24/15

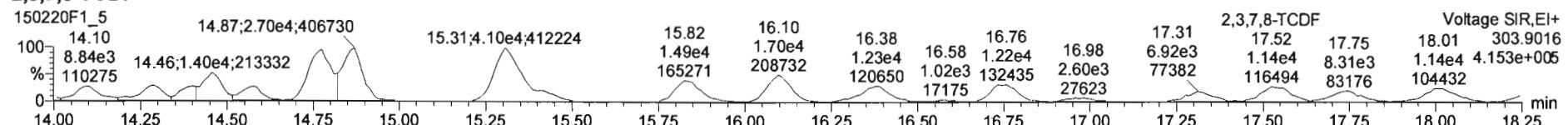
UV 2/24/15

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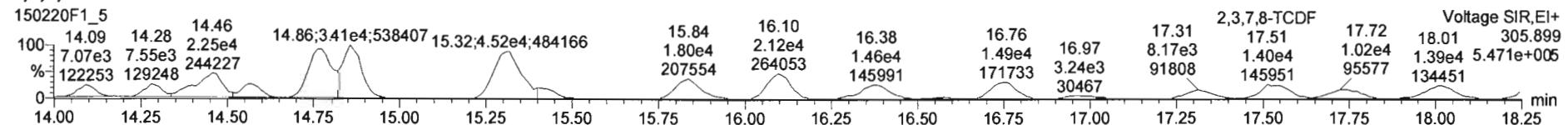
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Printed: Friday, February 20, 2015 13:47:27 Pacific Standard Time

Name: 150220F1_5, Date: 20-Feb-2015, Time: 10:39:24, ID: 1500147-03RE1 WM-CB-52-20150203-S CF 20.77, Description: WM-CB-52-20150203-S CF

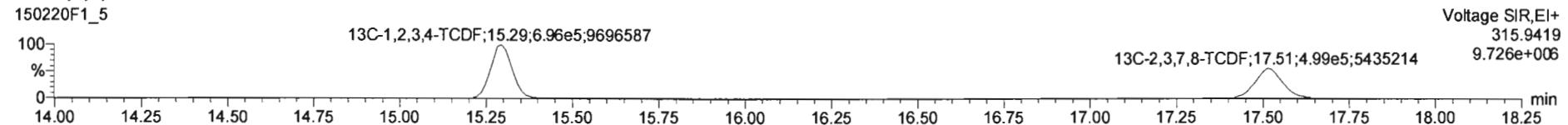
2,3,7,8-TCDF



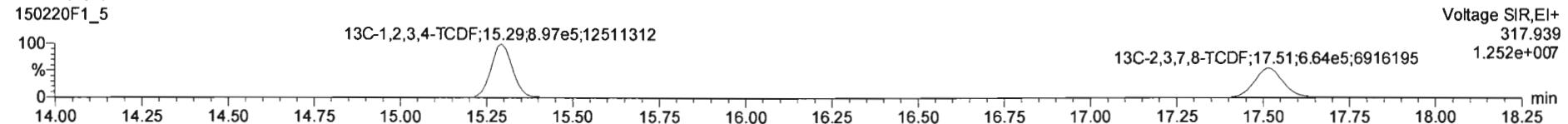
2,3,7,8-TCDF



13C-2,3,7,8-TCDF



13C-2,3,7,8-TCDF

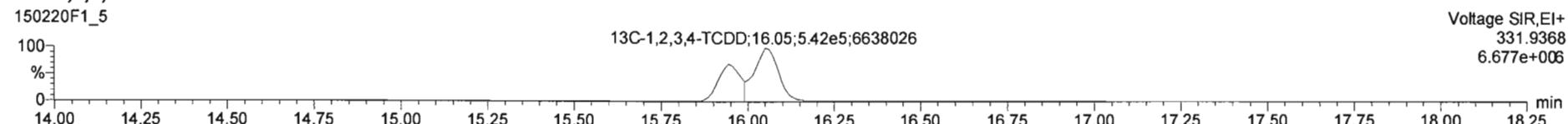


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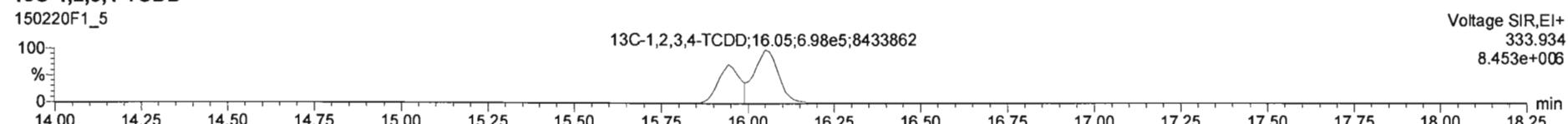
Last Altered: Friday, February 20, 2015 13:46:53 Pacific Standard Time
Printed: Friday, February 20, 2015 13:47:27 Pacific Standard Time

Name: 150220F1_5, Date: 20-Feb-2015, Time: 10:39:24, ID: 1500147-03RE1 WM-CB-52-20150203-S CF 20.77, Description: WM-CB-52-20150203-S CF

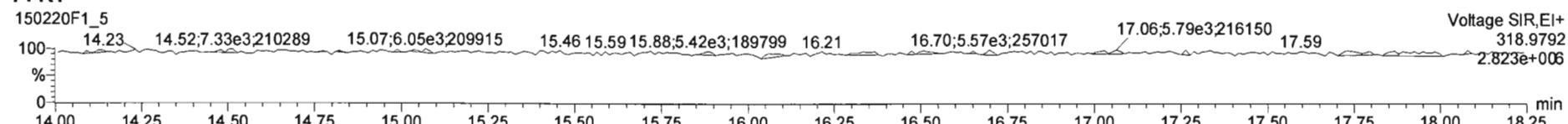
13C-1,2,3,4-TCDD



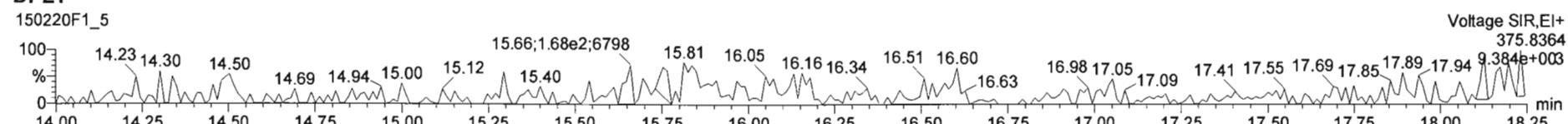
13C-1,2,3,4-TCDD



PFK1



DPE1



Dataset: C:\MassLynx\Default.pro\Results\150220F1\150220F1_6.qld

Last Altered: Tuesday, February 24, 2015 09:14:03 Pacific Standard Time

Printed: Tuesday, February 24, 2015 09:14:08 Pacific Standard Time

Method: Untitled 20 Feb 2015 08:16:54 tcdf.mdb

Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 150220F1_6, Date: 20-Feb-2015, Time: 11:11:53, ID: 1500147-04RE1 WM-CB-21-20150203-S CF 21.48, Description: WM-CB-21-20150203-S CF

	#	Name	Resp	RA	n/y	RRF M.	wt/vol	RT	Conc.	%Rec	DL
1		1 2,3,7,8-TCDF	1.22e4	0.87	NO	1.10	A	21.480	17.54	1.4159	0.143
2		2 13C-2,3,7,8-TCDF	1.57e6	0.75	NO	0.844	T	21.480	17.52	202.42	101
3		3 13C-1,2,3,4-TCDF	1.83e6	0.77	NO	1.00	D	21.480	15.29	199.72	100

C/S 2/24/15

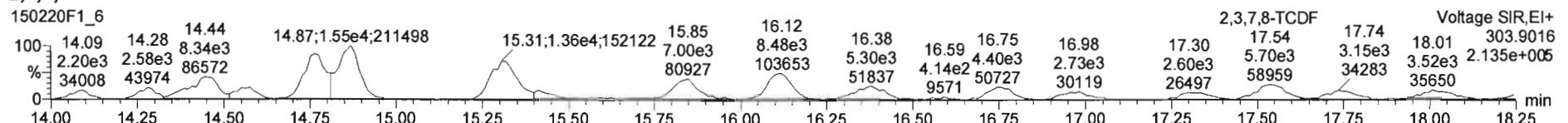
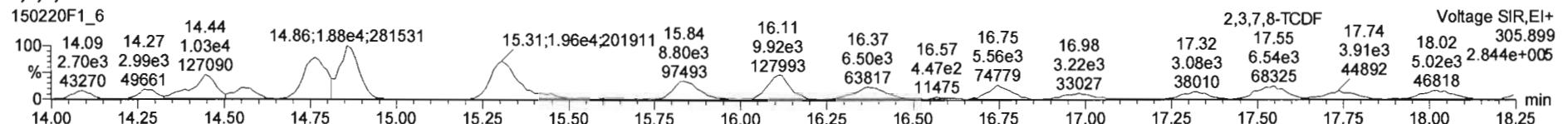
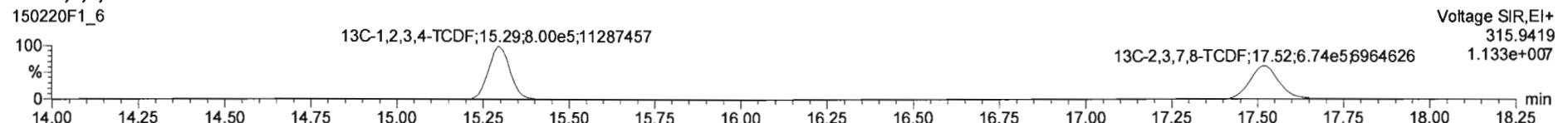
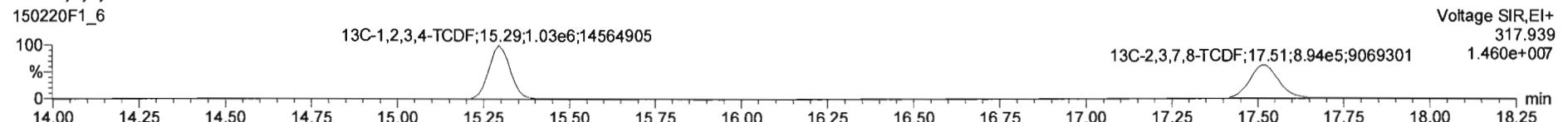
④ changed to 10.016. C/S 2/24/15 2/24/15

M 2/24/15

Dataset: Untitled

Last Altered: Friday, February 20, 2015 13:46:53 Pacific Standard Time
Printed: Friday, February 20, 2015 13:47:27 Pacific Standard Time

Name: 150220F1_6, Date: 20-Feb-2015, Time: 11:11:53, ID: 1500147-04RE1 WM-CB-21-20150203-S CF 21.48, Description: WM-CB-21-20150203-S CF

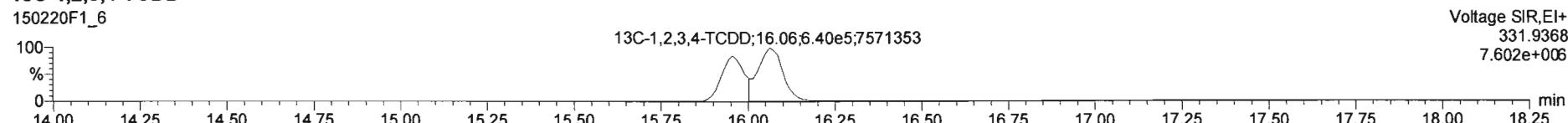
2,3,7,8-TCDF**2,3,7,8-TCDF****13C-2,3,7,8-TCDF****13C-2,3,7,8-TCDF**

Dataset: Untitled

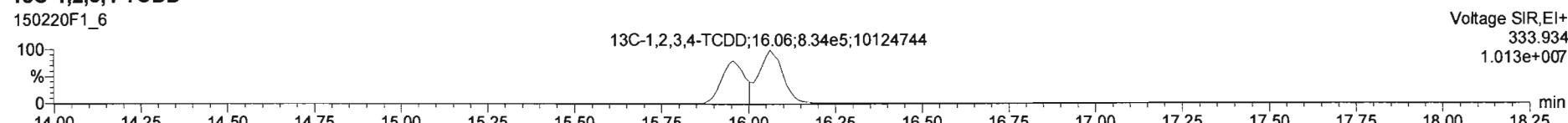
Last Altered: Friday, February 20, 2015 13:46:53 Pacific Standard Time
Printed: Friday, February 20, 2015 13:47:27 Pacific Standard Time

Name: 150220F1_6, Date: 20-Feb-2015, Time: 11:11:53, ID: 1500147-04RE1 WM-CB-21-20150203-S CF 21.48, Description: WM-CB-21-20150203-S CF

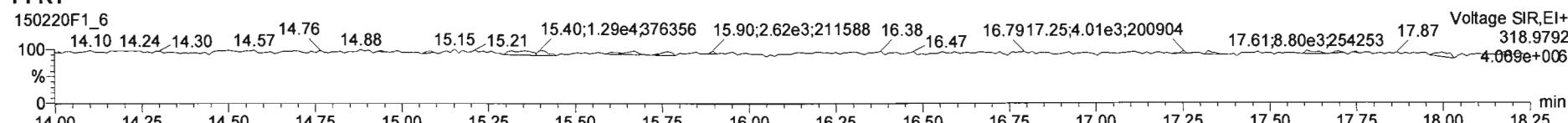
13C-1,2,3,4-TCDD



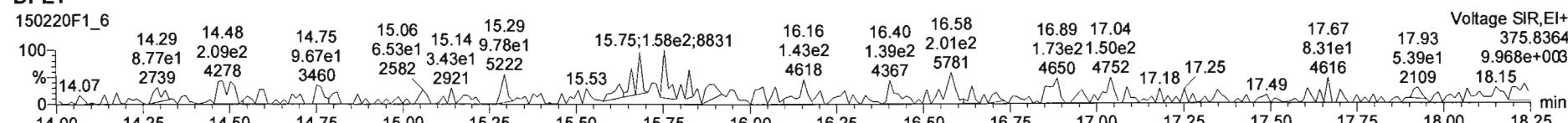
13C-1,2,3,4-TCDD



PFK1



DPE1



CONTINUING CALIBRATION

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST150217D1-1

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150217D1 S#1 Analysis Date: 17-FEB-15 Time: 10:44:01

	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	0.75	0.65-0.89 y	9.11	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	0.62	0.54-0.72 y	47.1	39.0 - 65.0	39.0 - 64.0	(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	49.1	39.0 - 64.0	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	1.28	1.05-1.43 y	50.6	41.0 - 61.0	41.0 - 61.0	
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43 y	49.0	43.0 - 58.0	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	100	79.0 - 126.0		
2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89 y	9.19	8.4 - 12.0	8.6 - 11.6 (4)	
1,2,3,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78 y	49.5	41.0 - 60.0		
2,3,4,7,8-PeCDF	M+2/M+4	1.62	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	49.8	45.0 - 56.0		
1,2,3,6,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43 y	49.8	44.0 - 57.0		
2,3,4,6,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43 y	48.6	44.0 - 57.0		
1,2,3,7,8,9-HxCDF	M+2/M+4	1.28	1.05-1.43 y	49.3	45.0 - 56.0		
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.08	0.88-1.20 y	49.2	45.0 - 55.0		Analyst: <u>MJ</u>
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.09	0.88-1.20 y	50.2	43.0 - 58.0		
OCDF	M+2/M+4	0.92	0.76-1.02 y	100	63.0 - 159.0		Date: <u>2/17/15</u>

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150217D1 S#1 Analysis Date: 17-FEB-15 Time: 10:44:01

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. (1)	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (ng/mL)	
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	y	106	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.62	0.54-0.72	y	91.7	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	95.9	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	95.5	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	y	99.0	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	97.9	72.0 - 138.0
13C-OCDD	M/M+2	0.89	0.76-1.02	y	180	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.77	0.65-0.89	y	103	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	98.5	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	105	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	96.8	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	114	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	98.5	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	99.7	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	y	99.4	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.44	0.37-0.51	y	97.1	77.0 - 129.0
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	187	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					11.0	7.9 - 12.7

Analyst: VJ

Date: 2/17/15

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: 1-7-15

RT Window Data Filename: 150217D1 S#1 Analysis Date: 17-FEB-15 Time: 10:44:01

ZB-5MS IS Data Filename: 150217D1 S#1 Analysis Date: 17-FEB-15 Time: 10:44:01

DB_225 IS Data Filename: Analysis Date: Time:

ZB-5MS RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:25	1,3,6,8-TCDF (F)	21:13
1,2,8,9-TCDD (L)	27:54	1,2,8,9-TCDF (L)	28:02
1,2,4,7,9-PeCDD (F)	29:33	1,3,4,6,8-PeCDF (F)	28:00
1,2,3,8,9-PeCDD (L)	32:01	1,2,3,8,9-PeCDF (L)	32:15
1,2,4,6,7,9-HxCDD (F)	33:27	1,2,3,4,6,8-HxCDF (F)	32:54
1,2,3,7,8,9-HxCDD (L)	35:23	1,2,3,7,8,9-HxCDF (L)	35:46
1,2,3,4,6,7,9-HpCDD (F)	38:02	1,2,3,4,6,7,8-HpCDF (F)	37:37
1,2,3,4,6,7,8-HpCDD (L)	38:55	1,2,3,4,7,8,9-HpCDF (L)	39:27

(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: AN

Date: 2/19/15

(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: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150217D1 S#1 Analysis Date: 17-FEB-15 Time: 10:44:01

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

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	1.198	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.991	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.152	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.187	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052

(1) Contract-required limits for
Relative Retention Times (RTT)
as specified in Table 2, Method 1613. 10/94

Analyst: (m)

Date: 2/17/15

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150217D1 S#1 Analysis Date: 17-FEB-15 Time: 10:44:01

NATIVE ANALYTES	RETENTION TIME	RRT		(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94
	REFERENCE	RRT	QC LIMITS (1)	
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	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	1.000	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	1.001	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	1.037	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	1.090	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.144	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.128	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.225	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.231	1.091-1.371

Analyst: MJ

Date: 2/17/15

Client ID: 1613 CS3 15A0501
 Lab ID: ST150217D1-1

Filename: 150217D1 S:1 Acq:17-FEB-15 10:44:01
 GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol: 1.000

ConCal: ST150217D1-1
 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	2.27e+06	0.75 y	1.17	27:00	1.001	9.1147	*	2.5	*		Total Tetra-Dioxins	51.0	51.4	*	*	
	1,2,3,7,8-PeCDD	8.78e+06	0.62 y	0.91	31:39	1.001	47.123	*	2.5	*		Total Penta-Dioxins	160	160	*	*	
	1,2,3,4,7,8-HxCDD	8.65e+06	1.25 y	1.08	34:59	1.000	49.147	*	2.5	*		Total Hexa-Dioxins	198	199	*	*	
	1,2,3,6,7,8-HxCDD	8.95e+06	1.28 y	1.06	35:05	1.000	50.610	*	2.5	*		Total Hepta-Dioxins	122	122	*	*	
	1,2,3,7,8,9-HxCDD	9.10e+06	1.26 y	0.93	35:23	1.001	48.956	*	2.5	*		Total Tetra-Furans	28.8	29.2	*	*	
	1,2,3,4,6,7,8-HpCDD	8.22e+06	1.06 y	1.10	38:55	1.000	49.204	*	2.5	*		Total Penta-Furans	187.17	188.53	*	*	
	OCDD	1.54e+07	0.90 y	0.95	42:15	1.000	100.04	*	2.5	*		Total Hexa-Furans	243	245	*	*	
												Total Hepta-Furans	100	101	*	*	
	2,3,7,8-TCDF	3.12e+06	0.80 y	1.07	26:11	1.001	9.1908	*	2.5	*							
	1,2,3,7,8-PeCDF	1.62e+07	1.61 y	1.07	30:26	1.000	49.545	*	2.5	*							
	2,3,4,7,8-PeCDF	1.66e+07	1.62 y	1.03	31:21	1.000	49.314	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.55e+07	1.28 y	1.38	34:05	1.001	49.845	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.82e+07	1.30 y	1.26	34:13	1.000	49.833	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.50e+07	1.30 y	1.29	34:49	1.000	48.625	*	2.5	*							
	1,2,3,7,8,9-HxCDF	1.19e+07	1.28 y	1.19	35:46	1.000	49.337	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.35e+07	1.08 y	1.61	37:37	1.000	49.246	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	1.22e+07	1.09 y	1.53	39:27	1.000	50.167	*	2.5	*							
	OCDF	2.06e+07	0.92 y	1.10	42:28	1.000	100.14	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	2.13e+07	0.80 y	1.06	26:58	1.022	105.73					106					
IS	13C-1,2,3,7,8-PeCDD	2.05e+07	0.62 y	1.18	31:38	1.198	91.721					91.7					
IS	13C-1,2,3,4,7,8-HxCDD	1.63e+07	1.27 y	0.72	34:58	1.014	95.926					95.9					
IS	13C-1,2,3,6,7,8-HxCDD	1.66e+07	1.24 y	0.74	35:05	1.017	95.516					95.5					
IS	13C-1,2,3,7,8,9-HxCDD	2.00e+07	1.25 y	0.85	35:22	1.026	99.046					99.0					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.51e+07	1.06 y	0.65	38:54	1.128	97.944					97.9					
IS	13C-OCDD	3.24e+07	0.89 y	0.76	42:14	1.225	179.62					89.8					
IS	13C-2,3,7,8-TCDF	3.17e+07	0.77 y	0.92	26:10	0.991	103.07					103					
IS	13C-1,2,3,7,8-PeCDF	3.04e+07	1.58 y	0.92	30:25	1.152	98.456					98.5					
IS	13C-2,3,4,7,8-PeCDF	3.26e+07	1.61 y	0.93	31:20	1.187	104.64					105					
IS	13C-1,2,3,4,7,8-HxCDF	2.24e+07	0.51 y	0.98	34:04	0.988	96.833					96.8					
IS	13C-1,2,3,6,7,8-HxCDF	2.91e+07	0.52 y	1.08	34:12	0.992	113.59					114					
IS	13C-2,3,4,6,7,8-HxCDF	2.39e+07	0.51 y	1.03	34:48	1.009	98.529					98.5					
IS	13C-1,2,3,7,8,9-HxCDF	2.03e+07	0.51 y	0.86	35:45	1.037	99.696					99.7					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.70e+07	0.44 y	0.72	37:36	1.090	99.418					99.4					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.60e+07	0.44 y	0.70	39:27	1.144	97.065					97.1					
IS	13C-OCDF	3.74e+07	0.90 y	0.85	42:27	1.231	186.55					93.3					
C/Up	37Cl-2,3,7,8-TCDD	2.34e+06		1.12	26:60	1.023	11.034					27.6	Integrations by				
RS/RT	13C-1,2,3,4-TCDD	1.90e+07	0.80 y	1.00	26:24	*	100.00						Analyst: <u>MJ</u>				
RS	13C-1,2,3,4-TCDF	3.35e+07	0.78 y	1.00	24:53	*	100.00						Analyst: <u>CL</u>				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.36e+07	0.51 y	1.00	34:29	*	100.00						Date: <u>2/17/15</u>				
														Date: <u>2/18/15</u>			

Vista Analytical Laboratory - Injection Log Run file: 150217D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
150217D1	1	ST150217D1-1	MAS	17-FEB-15	10:44:01	ST150217D1-1	NA
150217D1	2	B5B0038-BS1	MAS	17-FEB-15	11:32:46	ST150217D1-1	NA
150217D1	3	B5B0055-BS1	MAS	17-FEB-15	12:21:33	ST150217D1-1	NA
150217D1	4	SOLVENT BLANK	MAS	17-FEB-15	13:10:19	ST150217D1-1	NA
150217D1	5	B5B0038-BLK1	MAS	17-FEB-15	13:59:06	ST150217D1-1	NA
150217D1	6	B5B0055-BLK1	MAS	17-FEB-15	14:47:52	ST150217D1-1	NA
150217D1	7	1500147-01	MAS	17-FEB-15	15:36:38	ST150217D1-1	NA
150217D1	8	1500151-01	MAS	17-FEB-15	16:25:25	ST150217D1-1	NA
150217D1	9	1500153-01	MAS	17-FEB-15	17:14:11	ST150217D1-1	NA
150217D1	10	1500153-02	MAS	17-FEB-15	18:02:58	ST150217D1-1	NA
150217D1	11	1500161-01	MAS	17-FEB-15	18:51:43	ST150217D1-1	NA
150217D1	12	1500161-02	MAS	17-FEB-15	19:40:28	ST150217D1-1	NA
150217D1	13	1500161-03	MAS	17-FEB-15	20:29:14	ST150217D1-1	NA
150217D1	14	1500162-01	MAS	17-FEB-15	21:17:59	ST150217D1-1	NA
150217D1	15	1500163-01	MAS	17-FEB-15	22:06:45	ST150217D1-1	NA
150217D1	16	SOLVENT BLANK	MAS	17-FEB-15	22:55:31	ST150217D1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

 Beg. Calibration ID: ST15021701-1

 End Calibration ID: NA

Ion abundance within QC limits?

Beg. End

<input checked="" type="checkbox"/>	NA
<input checked="" type="checkbox"/>	

Concentration within range?

First and last eluters present?

Retention Times within criteria?

 Verification Std. named correctly?
 (ST-Year-Month-Day-VG ID)

Forms signed and dated?

Correct ICAL referenced?

Run Log:

-Data file matches Conc Cal ID?

-Correct instrument listed?

-Samples within 12-hour clock?

Beg. End

<input checked="" type="checkbox"/>	NA
<input checked="" type="checkbox"/>	

 Mass resolution $\leq 10,000?$

- 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

Beg. End

<input checked="" type="checkbox"/>	✓
<input checked="" type="checkbox"/>	NA
<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	

Comments:

 Reviewed by: CH

Initials & Date

*Ending standard criteria applicable to 8290 only.

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST150217D2-1

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150217D2 S#1 Analysis Date: 17-FEB-15 Time: 23:59:50

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)	
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89 y	9.26	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	0.61	0.54-0.72 y	48.1	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	1.27	1.05-1.43 y	50.1	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	50.7	39.0 - 64.0	
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43 y	49.2	41.0 - 61.0	
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20 y	49.5	43.0 - 58.0	(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.
OCDD	M+2/M+4	0.90	0.76-1.02 y	99.5	79.0 - 126.0	
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89 y	9.35	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	49.7	41.0 - 60.0	
2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78 y	50.6	41.0 - 61.0	
1,2,3,4,7,8-HxCDF	M+2/M+4	1.31	1.05-1.43 y	51.3	45.0 - 56.0	
1,2,3,6,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43 y	49.0	44.0 - 57.0	
2,3,4,6,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43 y	49.1	44.0 - 57.0	
1,2,3,7,8,9-HxCDF	M+2/M+4	1.29	1.05-1.43 y	48.8	45.0 - 56.0	
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.08	0.88-1.20 y	50.0	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	50.0	43.0 - 58.0	
OCDF	M+2/M+4	0.92	0.76-1.02 y	98.9	63.0 - 159.0	Date: <u>2/18/15</u>

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150217D2 S#1 Analysis Date: 17-FEB-15 Time: 23:59:50

LABLED COMPOUNDS	M/Z'S	ION FORMING	ION ABUND.	QC LIMITS	CONC. FOUND	CONC.
	RATIO (1)	RATIO	(2)	Pass		RANGE
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	Y	103	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	Y	96.1	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	Y	98.8	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	Y	96.3	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	Y	99.2	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.09	0.88-1.20	Y	100	72.0 - 138.0
13C-OCDD	M/M+2	0.89	0.76-1.02	Y	183	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.78	0.65-0.89	Y	104	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	Y	105	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	Y	105	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	Y	95.6	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	Y	107	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	Y	99.5	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43-0.59	Y	103	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	Y	101	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.45	0.37-0.51	Y	98.4	77.0 - 129.0
13C-OCDF	M+2/M+4	0.90	0.76-1.02	Y	187	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					11.2	7.9 - 12.7

Analyst: MM

Date: 2/18/15

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST150217D2-1

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150217D2 S#1 Analysis Date: 17-FEB-15 Time: 23:59:50

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS Pass	CONC. CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES					
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89 y	9.26	8.00 - 12.0
1,2,3,7,8-PeCDD	M/M+2	0.61	0.54-0.72 y	48.1	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43 y	50.1	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43 y	50.7	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43 y	49.2	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20 y	49.5	40.0 - 60.0
OCDD	M+2/M+4	0.90	0.76-1.02 y	99.5	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89 y	9.35	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78 y	49.7	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78 y	50.6	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.31	1.05-1.43 y	51.3	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43 y	49.0	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43 y	49.1	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.29	1.05-1.43 y	48.8	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.08	0.88-1.20 y	50.0	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.08	0.88-1.20 y	50.0	40.0 - 60.0
OCDF	M+2/M+4	0.92	0.76-1.02 y	98.9	80.0 - 120

Analyst: M)Date: 2/18/15

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150217D2 S#1 Analysis Date: 17-FEB-15 Time: 23:59:50

Labeled Compounds	M/Z'S	ION FORMING RATIO	QC ABUND. RATIO	QC LIMITS	Pass	CONC.	CONC. FOUND	RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	103	70.0	- 130	
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	96.1	70.0	- 130	
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	98.8	70.0	- 130	
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	96.3	70.0	- 130	
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	99.2	70.0	- 130	
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.09	0.88-1.20	y	100	70.0	- 130	
13C-OCDD	M+2/M+4	0.89	0.76-1.02	y	183	140	- 260	
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	104	70.0	- 130	
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	105	70.0	- 130	
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	105	70.0	- 130	
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	95.6	70.0	- 130	
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	107	70.0	- 130	
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	99.5	70.0	- 130	
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43-0.59	y	103	70.0	- 130	
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	101	70.0	- 130	
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	98.4	70.0	- 130	
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	187	140	- 260	
CLEANUP STANDARD								
37Cl-2,3,7,8-TCDD					11.2	7.00	- 13.0	

Analyst: (M)Date: 2/18/15

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: 1-7-15

RT Window Data Filename: 150217D2 S#1 Analysis Date: 17-FEB-15 Time: 23:59:50

ZB-5MS IS Data Filename: 150217D2 S#1 Analysis Date: 17-FEB-15 Time: 23:59:50

DB_225 IS Data Filename: Analysis Date: Time:

ZB-5MS RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE		ABSOLUTE	
	RT	ISOMERS	RT	
1,3,6,8-TCDD (F)	23:26	1,3,6,8-TCDF (F)	21:15	
1,2,8,9-TCDD (L)	27:53	1,2,8,9-TCDF (L)	28:01	
1,2,4,7,9-PeCDD (F)	29:32	1,3,4,6,8-PeCDF (F)	27:59	
1,2,3,8,9-PeCDD (L)	32:00	1,2,3,8,9-PeCDF (L)	32:14	
1,2,4,6,7,9-HxCDD (F)	33:27	1,2,3,4,6,8-HxCDF (F)	32:54	
1,2,3,7,8,9-HxCDD (L)	35:23	1,2,3,7,8,9-HxCDF (L)	35:46	
1,2,3,4,6,7,9-HpCDD (F)	38:02	1,2,3,4,6,7,8-HpCDF (F)	37:37	
1,2,3,4,6,7,8-HpCDD (L)	38:55	1,2,3,4,7,8,9-HpCDF (L)	39:27	

(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: 2/18/15

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150217D2 S#1 Analysis Date: 17-FEB-15 Time: 23:59:50

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	REFERENCE	RETENTION TIME		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		

(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	1.022	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.197	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.991	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.151	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.186	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052

Analyst: M

Date: 2/19/15

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150217D2 S#1 Analysis Date: 17-FEB-15 Time: 23:59:50

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	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	1.000	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	1.000	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	1.001	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	1.037	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	1.144	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.128	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.225	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.231	1.091-1.371

Analyst: VN

Date: 2/18/15

Client ID: 1613 CS3 15A0501
 Lab ID: ST150217D2-1

Filename: 150217D2 S:1 Acq:17-FEB-15 23:59:50
 GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol: 1.000

ConCal: ST150217D2-1
 EndCAL: ST150217D2-2

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	2.14e+06	0.77 y	1.17	26:60	1.001	9.2581	*	2.5	*		Total Tetra-Dioxins	52.7	52.8	*	*	
	1,2,3,7,8-PeCDD	8.98e+06	0.61 y	0.91	31:38	1.001	48.070	*	2.5	*		Total Penta-Dioxins	150	150	*	*	
	1,2,3,4,7,8-HxCDD	9.15e+06	1.27 y	1.08	34:59	1.000	50.095	*	2.5	*		Total Hexa-Dioxins	196	197	*	*	
	1,2,3,6,7,8-HxCDD	9.11e+06	1.26 y	1.06	35:05	1.000	50.669	*	2.5	*		Total Hepta-Dioxins	118	119	*	*	
	1,2,3,7,8,9-HxCDD	9.23e+06	1.24 y	0.93	35:23	1.001	49.181	*	2.5	*		Total Tetra-Furans	29.0	29.2	*	*	
	1,2,3,4,6,7,8-HpCDD	8.53e+06	1.04 y	1.10	38:55	1.000	49.549	*	2.5	*		Total Penta-Furans	188.96	189.21	*	*	
	OCDD	1.57e+07	0.90 y	0.95	42:16	1.000	99.459	*	2.5	*		Total Hexa-Furans	245	246	*	*	
												Total Hepta-Furans	100	101	*	*	
	2,3,7,8-TCDF	3.01e+06	0.78 y	1.07	26:11	1.001	9.3543	*	2.5	*							
	1,2,3,7,8-PeCDF	1.62e+07	1.58 y	1.07	30:25	1.001	49.690	*	2.5	*							
	2,3,4,7,8-PeCDF	1.61e+07	1.60 y	1.03	31:20	1.000	50.563	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.59e+07	1.31 y	1.38	34:05	1.000	51.323	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.70e+07	1.28 y	1.26	34:13	1.001	49.000	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.54e+07	1.30 y	1.29	34:49	1.000	49.126	*	2.5	*							
	1,2,3,7,8,9-HxCDF	1.22e+07	1.29 y	1.19	35:46	1.000	48.759	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.40e+07	1.08 y	1.61	37:37	1.000	49.954	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	1.25e+07	1.08 y	1.53	39:27	1.000	50.013	*	2.5	*							
	OCDF	2.06e+07	0.92 y	1.10	42:29	1.000	98.884	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.98e+07	0.78 y	1.06	26:59	1.022	102.58					103					
IS	13C-1,2,3,7,8-PeCDD	2.06e+07	0.63 y	1.18	31:36	1.197	96.107					96.1					
IS	13C-1,2,3,4,7,8-HxCDD	1.69e+07	1.26 y	0.72	34:58	1.014	98.835					98.8					
IS	13C-1,2,3,6,7,8-HxCDD	1.69e+07	1.24 y	0.74	35:05	1.017	96.342					96.3					
IS	13C-1,2,3,7,8,9-HxCDD	2.02e+07	1.24 y	0.85	35:22	1.026	99.229					99.2					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.56e+07	1.09 y	0.65	38:54	1.128	100.20					100					
IS	13C-OCDD	3.32e+07	0.89 y	0.76	42:15	1.225	182.73					91.4					
IS	13C-2,3,7,8-TCDF	3.01e+07	0.78 y	0.92	26:10	0.991	104.43					104					
IS	13C-1,2,3,7,8-PeCDF	3.03e+07	1.59 y	0.92	30:24	1.151	104.87					105					
IS	13C-2,3,4,7,8-PeCDF	3.08e+07	1.59 y	0.93	31:19	1.186	105.49					105					
IS	13C-1,2,3,4,7,8-HxCDF	2.23e+07	0.52 y	0.98	34:04	0.988	95.622					95.6					
IS	13C-1,2,3,6,7,8-HxCDF	2.77e+07	0.52 y	1.08	34:12	0.992	107.32					107					
IS	13C-2,3,4,6,7,8-HxCDF	2.43e+07	0.52 y	1.03	34:48	1.009	99.510					99.5					
IS	13C-1,2,3,7,8,9-HxCDF	2.10e+07	0.53 y	0.86	35:45	1.037	102.68					103					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.73e+07	0.44 y	0.72	37:36	1.091	100.84					101					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.63e+07	0.45 y	0.70	39:27	1.144	98.365					98.4					
IS	13C-OCDF	3.79e+07	0.90 y	0.85	42:28	1.231	187.27					93.6					
C/Up	37Cl-2,3,7,8-TCDD	2.27e+06		1.12	26:60	1.022	11.202					28.0	Integrations by Analyst:	M	Reviewed by Analyst:	CG	
RS/RT	13C-1,2,3,4-TCDD	1.82e+07	0.79 y	1.00	26:24	*	100.00										
RS	13C-1,2,3,4-TCDF	3.14e+07	0.78 y	1.00	24:54	*	100.00										
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.38e+07	0.52 y	1.00	34:29	*	100.00						Date: 2/14/15		Date: 2/18/15		

Vista Analytical Laboratory - Injection Log Run file: 150217D2 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
150217D2	1	ST150217D2-1	MAS	17-FEB-15	23:59:50	ST150217D2-1	ST150217D2-2
150217D2	2	B5B0043-BS1	MAS	18-FEB-15	00:48:38	ST150217D2-1	NA
150217D2	3	B5B0058-BS1	MAS	18-FEB-15	01:37:27	ST150217D2-1	ST150217D2-2
150217D2	4	SOLVENT BLANK	MAS	18-FEB-15	02:26:13	NA	NA
150217D2	5	B5B0043-BLK1	MAS	18-FEB-15	03:15:03	ST150217D2-1	NA
150217D2	6	B5B0058-BLK1	MAS	18-FEB-15	04:03:51	ST150217D2-1	ST150217D2-2
150217D2	7	1500057-03RE3	MAS	18-FEB-15	04:52:41	ST150217D2-1	NA
150217D2	8	1500057-03RE4	MAS	18-FEB-15	05:41:30	ST150217D2-1	NA
150217D2	9	1500057-03RE5	MAS	18-FEB-15	06:30:18	ST150217D2-1	NA
150217D2	10	1500142-01	MAS	18-FEB-15	07:19:06	ST150217D2-1	ST150217D2-2
150217D2	11	1500146-01	MAS	18-FEB-15	08:07:53	ST150217D2-1	NA
150217D2	12	1500133-01	MAS	18-FEB-15	08:56:41	ST150217D2-1	NA
150217D2	13	SOLVENT BLANK	MAS	18-FEB-15	09:45:29	ST150217D2-1	NA
150217D2	14	SOLVENT BLANK	MAS	18-FEB-15	10:34:16	ST150217D2-1	NA
150217D2	15	ST150217D2-2	MAS	18-FEB-15	11:23:05	ST150217D2-1	ST150217D2-2

CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST150217D2-1

End Calibration ID: ST150217D2-2

	<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? ▪ Method 1614 > 5,000; CARB 429 > 8,000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Concentration within range?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	TCDD/TCDF valleys < 25%?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
First and last eluters present?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Peaks integrated correctly?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Manual integrations included?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8280 CS1 Ending Standard			
Forms signed and dated?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-Ratios within limits		<input type="checkbox"/> NA	
Correct ICAL referenced?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-S/N > 2.5:1		<input checked="" type="checkbox"/>	
Run Log:			-CS1 within 12-hour clock		<input checked="" type="checkbox"/>	
-Data file matches Conc Cal ID?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Comments:			
-Correct instrument listed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
-Samples within 12-hour clock?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

Reviewed by: CH 2/18/15
Initials & Date

* Ending standard criteria applicable to 8290 only.

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST150220D1-1

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150220D1 S#1 Analysis Date: 20-FEB-15 Time: 11:02:22

	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	0.74	0.65-0.89 y	8.97	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	0.61	0.54-0.72 y	47.9	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	50.1	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	52.6	39.0 - 64.0		
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43 y	49.9	41.0 - 61.0		
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20 y	49.5	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	104	79.0 - 126.0		
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89 y	9.48	8.4 - 12.0 8.6 - 11.6 (4)		
1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78 y	48.3	41.0 - 60.0		
2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78 y	49.3	41.0 - 61.0		
1,2,3,4,7,8-HxCDF	M+2/M+4	1.34	1.05-1.43 y	50.1	45.0 - 56.0		
1,2,3,6,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43 y	50.4	44.0 - 57.0		
2,3,4,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43 y	50.4	44.0 - 57.0		
1,2,3,7,8,9-HxCDF	M+2/M+4	1.32	1.05-1.43 y	49.1	45.0 - 56.0		
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.08	0.88-1.20 y	50.1	45.0 - 55.0		Analyst: <u>mj</u>
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.08	0.88-1.20 y	50.3	43.0 - 58.0		Date: <u>2/20/15</u>
OCDF	M+2/M+4	0.92	0.76-1.02 y	97.6	63.0 - 159.0		

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150220D1 S#1 Analysis Date: 20-FEB-15 Time: 11:02:22

Labeled Compounds	M/Z'S FORMING	ION RATIO (1)	QC ABUND.	QC LIMITS	CONC. FOUND	CONC. RANGE
			(2)	Pass		(ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	99.2	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.61	0.54-0.72	y	79.9	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	102	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	90.3	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	97.1	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	0.89	0.76-1.02	y	158	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.78	0.65-0.89	y	96.7	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	90.1	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	89.1	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	94.7	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	102	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	94.9	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	97.9	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.45	0.37-0.51	y	104	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.44	0.37-0.51	y	94.5	77.0 - 129.0
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	172	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					10.5	7.9 - 12.7

Analyst: JK

Date: 2/20/15

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: 1-7-15

RT Window Data Filename: 150220D1 S#1 Analysis Date: 20-FEB-15 Time: 11:02:22

ZB-5MS IS Data Filename: 150220D1 S#1 Analysis Date: 20-FEB-15 Time: 11:02:22

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)	23:25	1,3,6,8-TCDF (F)	21:14
1,2,8,9-TCDD (L)	27:52	1,2,8,9-TCDF (L)	28:00
1,2,4,7,9-PeCDD (F)	29:31	1,3,4,6,8-PeCDF (F)	27:59
1,2,3,8,9-PeCDD (L)	31:59	1,2,3,8,9-PeCDF (L)	32:13
1,2,4,6,7,9-HxCDD (F)	33:25	1,2,3,4,6,8-HxCDF (F)	32:53
1,2,3,7,8,9-HxCDD (L)	35:22	1,2,3,7,8,9-HxCDF (L)	35:44
1,2,3,4,6,7,9-HpCDD (F)	38:00	1,2,3,4,6,7,8-HpCDF (F)	37:35
1,2,3,4,6,7,8-HpCDD (L)	38:54	1,2,3,4,7,8,9-HpCDF (L)	39:26

(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: DMS

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Date: 2/21/15

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150220D1 S#1 Analysis Date: 20-FEB-15 Time: 11:02:22

Compounds Using ¹³C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME	RRT	
	REFERENCE	RRT	QC LIMITS (1)
2,3,7,8-TCDD	¹³ C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	¹³ C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
2,3,7,8-TCDF	¹³ C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	¹³ C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	¹³ C-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

¹³ C-2,3,7,8-TCDD	¹³ C-1,2,3,4-TCDD	1.022	0.976-1.043
¹³ C-1,2,3,7,8-PeCDD	¹³ C-1,2,3,4-TCDD	1.197	1.000-1.567
¹³ C-2,3,7,8-TCDF	¹³ C-1,2,3,4-TCDD	0.991	0.923-1.103
¹³ C-1,2,3,7,8-PeCDF	¹³ C-1,2,3,4-TCDD	1.152	1.000-1.425
¹³ C-2,3,4,7,8-PeCDF	¹³ C-1,2,3,4-TCDD	1.186	1.011-1.526
37Cl-2,3,7,8-TCDD	¹³ C-1,2,3,4-TCDD	1.023	0.989-1.052

Analyst: MJ

Date: 2/20/15

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 150220D1 S#1 Analysis Date: 20-FEB-15 Time: 11:02:22

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	1.000	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	1.000	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	1.036	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	1.090	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.144	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.128	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.225	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.231	1.091-1.371

Analyst: MJ

Date: 2/20/15

Client ID: 1613 CS3 15A0501
 Lab ID: ST150220D1-1

Filename: 150220D1 S:1 Acq:20-FEB-15 11:02:22
 GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol: 1.000

ConCal: ST150220D1-1
 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	3.03e+06	0.74 y	1.17	26:59	1.001	8.9715	*	2.5	*	*	Total Tetra-Dioxins	50.5	50.6	*	*	*
	1,2,3,7,8-PeCDD	1.12e+07	0.61 y	0.91	31:37	1.000	47.886	*	2.5	*	*	Total Penta-Dioxins	154	154	*	*	*
	1,2,3,4,7,8-HxCDD	1.14e+07	1.25 y	1.08	34:58	1.000	50.121	*	2.5	*	*	Total Hexa-Dioxins	201	201	*	*	*
	1,2,3,6,7,8-HxCDD	1.07e+07	1.27 y	1.06	35:04	1.000	52.565	*	2.5	*	*	Total Hepta-Dioxins	124	125	*	*	*
	1,2,3,7,8,9-HxCDD	1.10e+07	1.26 y	0.93	35:22	1.000	49.876	*	2.5	*	*	Total Tetra-Furans	29.7	29.8	*	*	*
	1,2,3,4,6,7,8-HpCDD	1.01e+07	1.04 y	1.10	38:54	1.000	49.502	*	2.5	*	*	Total Penta-Furans	195.73	196.05	*	*	*
	OCDD	1.71e+07	0.89 y	0.95	42:14	1.000	104.09	*	2.5	*	*	Total Hexa-Furans	251	251	*	*	*
												Total Hepta-Furans	101	101	*	*	*
	2,3,7,8-TCDF	4.02e+06	0.79 y	1.07	26:10	1.001	9.4796	*	2.5	*	*						
	1,2,3,7,8-PeCDF	1.92e+07	1.59 y	1.07	30:24	1.000	48.320	*	2.5	*	*						
	2,3,4,7,8-PeCDF	1.88e+07	1.60 y	1.03	31:19	1.000	49.313	*	2.5	*	*						
	1,2,3,4,7,8-HxCDF	1.85e+07	1.34 y	1.38	34:04	1.000	50.064	*	2.5	*	*						
	1,2,3,6,7,8-HxCDF	2.00e+07	1.28 y	1.26	34:12	1.001	50.378	*	2.5	*	*						
	2,3,4,6,7,8-HxCDF	1.82e+07	1.29 y	1.29	34:47	1.000	50.399	*	2.5	*	*						
	1,2,3,7,8,9-HxCDF	1.41e+07	1.32 y	1.19	35:44	1.000	49.118	*	2.5	*	*						
	1,2,3,4,6,7,8-HpCDF	1.75e+07	1.08 y	1.61	37:35	1.000	50.080	*	2.5	*	*						
	1,2,3,4,7,8,9-HpCDF	1.45e+07	1.08 y	1.53	39:26	1.000	50.301	*	2.5	*	*						
	OCDF	2.25e+07	0.92 y	1.10	42:27	1.000	97.592	*	2.5	*	*						
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	2.88e+07	0.78 y	1.06	26:58	1.022	99.195					99.2					
IS	13C-1,2,3,7,8-PeCDD	2.58e+07	0.61 y	1.18	31:36	1.197	79.859					79.9					
IS	13C-1,2,3,4,7,8-HxCDD	2.10e+07	1.26 y	0.72	34:57	1.014	101.66					102					
IS	13C-1,2,3,6,7,8-HxCDD	1.91e+07	1.23 y	0.74	35:03	1.017	90.284					90.3					
IS	13C-1,2,3,7,8,9-HxCDD	2.38e+07	1.23 y	0.85	35:21	1.026	97.056					97.1					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.84e+07	1.05 y	0.65	38:53	1.128	98.296					98.3					
IS	13C-OCDD	3.47e+07	0.89 y	0.76	42:13	1.225	158.21					79.1					
IS	13C-2,3,7,8-TCDF	3.96e+07	0.78 y	0.92	26:08	0.991	96.705					96.7					
IS	13C-1,2,3,7,8-PeCDF	3.70e+07	1.59 y	0.92	30:23	1.152	90.120					90.1					
IS	13C-2,3,4,7,8-PeCDF	3.70e+07	1.58 y	0.93	31:18	1.186	89.107					89.1					
IS	13C-1,2,3,4,7,8-HxCDF	2.67e+07	0.52 y	0.98	34:03	0.988	94.696					94.7					
IS	13C-1,2,3,6,7,8-HxCDF	3.16e+07	0.52 y	1.08	34:10	0.992	101.52					102					
IS	13C-2,3,4,6,7,8-HxCDF	2.80e+07	0.53 y	1.03	34:46	1.009	94.860					94.9					
IS	13C-1,2,3,7,8,9-HxCDF	2.42e+07	0.51 y	0.86	35:43	1.036	97.867					97.9					
IS	13C-1,2,3,4,6,7,8-HpCDF	2.16e+07	0.45 y	0.72	37:35	1.090	104.40					104					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.89e+07	0.44 y	0.70	39:25	1.144	94.491					94.5					
IS	13C-OCDF	4.20e+07	0.89 y	0.85	42:26	1.231	172.18					86.1					
C/Up	37Cl-2,3,7,8-TCDD	3.21e+06		1.12	26:59	1.023	10.466					26.2	Integrations by Analyst:	M	Reviewed by Analyst:	Ch	
RS/RT	13C-1,2,3,4-TCDD	2.74e+07	0.82 y	1.00	26:23	*	100.00										
RS	13C-1,2,3,4-TCDF	4.46e+07	0.78 y	1.00	24:53	*	100.00										
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.87e+07	0.52 y	1.00	34:28	*	100.00						Date:	2/20/15	Date:	2/23/15	

Vista Analytical Laboratory - Injection Log Run file: 150220D1

Instrument ID: VG-7

GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
150220D1	1	ST150220D1-1	MAS	20-FEB-15	11:02:22	ST150220D1-1	NA
150220D1	2	B5B0065-BS1	MAS	20-FEB-15	11:51:08	ST150220D1-1	NA
150220D1	3	B5B0074-BS1	MAS	20-FEB-15	12:39:56	ST150220D1-1	NA
150220D1	4	SOLVENT BLANK	MAS	20-FEB-15	13:28:43	ST150220D1-1	NA
150220D1	5	B5B0065-BLK1	MAS	20-FEB-15	14:17:31	ST150220D1-1	NA
150220D1	6	B5B0074-BLK1	MAS	20-FEB-15	15:06:18	ST150220D1-1	NA
150220D1	7	1500173-01	MAS	20-FEB-15	15:55:04	ST150220D1-1	NA
150220D1	8	1500172-01	MAS	20-FEB-15	16:43:52	ST150220D1-1	NA
150220D1	9	1500172-03	MAS	20-FEB-15	17:32:39	ST150220D1-1	NA
150220D1	10	1500172-04	MAS	20-FEB-15	18:21:25	ST150220D1-1	NA
150220D1	11	1500172-05	MAS	20-FEB-15	19:10:10	ST150220D1-1	NA
150220D1	12	1500172-02	MAS	20-FEB-15	19:58:56	ST150220D1-1	NA
150220D1	13	1500147-02	MAS	20-FEB-15	20:47:41	ST150220D1-1	NA
150220D1	14	1500147-03	MAS	20-FEB-15	21:36:26	ST150220D1-1	NA
150220D1	15	1500147-04	MAS	20-FEB-15	22:25:12	ST150220D1-1	NA
150220D1	16	SOLVENT BLANK	MAS	20-FEB-15	23:14:01	ST150220D1-1	NA
150220D1	17	SOLVENT BLANK	MAS	21-FEB-15	00:02:47	ST150220D1-1	NA



CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calibration ID: ST150220D1-1 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	Mass resolution > 10,000?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Concentration within range?	<input checked="" type="checkbox"/>	/	TCDD/TCDF valleys < 25%?	<input checked="" type="checkbox"/>	NA	
First and last eluters present?	<input checked="" type="checkbox"/>		Peaks integrated correctly?	<input checked="" type="checkbox"/>		
Retention Times within criteria?	<input checked="" type="checkbox"/>		Manual integrations included?	<input checked="" type="checkbox"/>		
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" type="checkbox"/>		8280 CS1 Ending Standard			
Forms signed and dated?	<input checked="" type="checkbox"/>		-Ratios within limits			
Correct ICAL referenced?	<input checked="" type="checkbox"/>		-S/N > 2.5:1			
Run Log:			-CS1 within 12-hour clock			
-Data file matches Conc Cal ID?	<input checked="" type="checkbox"/>		Comments:			
-Correct instrument listed?	<input checked="" type="checkbox"/>	/				
-Samples within 12-hour clock?	(y)	n				

Reviewed by: CH 2/23/15
Initials & Date

* 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
CCAL ID: ST150220F1-1

Vista Analytical Laboratory

Initial Calibration Date: 11/13/2014

Instrument ID: VG-9

VER Data file name: 150220F1_2

GC Column ID: DB-225

Analysis Date: 20-Feb-15 Analysis Time: 09:02:15

NATIVE ANALYTES	M/Z'S FORMING RATIO (1) 2,3,7,8-TCDF	ION ABOUND. RATIO	QC LIMITS (2)	CONC. Flag	CONC. FOUND	CONC.	CONC.	CONC. RANGE (ng/ml)	CONC. RANGE (ng/ml)	CONC. RANGE (ng/ml)	
						RANGE (3)	RANGE (3)				
		M/M+2	0.78	0.65-0.89	NO	8.51	8.4 8.6	12.0 11.6 (4)	Yes	8.00 12.0	Yes

(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: clj

Date: 2/20/15

Vista Analytical Laboratory
Initial Calibration Date: 11/13/2014
Instrument ID: VG-9
VER Data file name: 150220F1_2

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION
CCAL ID: ST150220F1-1

GC Column ID: DB-225
Analysis Date: 20-Feb-15 Analysis Time: 09:02:15

Labeled Compounds	M/Z'S	ION FORMING	ABOUND.	QC LIMITS	CONC.	CONC.		CONC.	CONC.								
						(1)	(2)		Flag	FOUND	(3)	(3)	(ng/ml)	(ng/ml)	(ng/ml)	(ng/ml)	
13C-2,3,7,8-TCDF	M/M+2		0.78	0.65-0.89	NO	108		71.0		1613 Min	1613 Max	Yes	70.0	8290 Min	8290 Max	130.0	Yes

(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) No ion abundance ratio; report concentration found

(5) Contract required concentration range as specified in Table 6a, Method 1613, for tetras only

Analyst: Ch

Date: 2/20/15

Dataset: C:\MassLynx\Default.pro\Results\150220F1\150220F1_2.qld

Last Altered: Friday, February 20, 2015 11:07:51 Pacific Standard Time

Printed: Friday, February 20, 2015 11:08:57 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 20 Feb 2015 08:16:54

Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 150220F1_2, Date: 20-Feb-2015, Time: 09:02:15, ID: ST150220F1-1 1613 CS3 14I1102, Description: 1613 CS3 14I1102

#	Name	Resp	RA	nly	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	1.39e5	0.78	NO	1.10	1.002	17.54	8.5135	85.3	0.0461
2	2 13C-2,3,7,8-TCDF	1.48e6	0.78	NO	0.844	1.002	17.51	107.60	108	0.143
3	3 13C-1,2,3,4-TCDF	1.62e6	0.78	NO	1.00	1.002	15.29	99.801	100	0.120
4	4 13C-1,2,3,4-TCDD	1.23e6	0.79	NO		1.002	16.06			

CB 2/20/15

Dataset: Untitled

Last Altered: Friday, February 20, 2015 13:46:53 Pacific Standard Time

Printed: Friday, February 20, 2015 13:47:08 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 20 Feb 2015 08:16:54

Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Compound name: 2,3,7,8-TCDF

	Name	ID	Acq.Date	Acq.Time
1	150220F1_1	CP150220F1-1 DB-225 CPSM	20-Feb-15	08:31:26
2	150220F1_2	ST150220F1-1 1613 CS3 14I1102	20-Feb-15	09:02:15
3	150220F1_3	SOLVENT BLANK	20-Feb-15	09:34:42
4	150220F1_4	1500147-02RE1 WM-MH-61-20150203-S CF ...	20-Feb-15	10:07:06
5	150220F1_5	1500147-03RE1 WM-CB-52-20150203-S CF ...	20-Feb-15	10:39:24
6	150220F1_6	1500147-04RE1 WM-CB-21-20150203-S CF ...	20-Feb-15	11:11:53
7	150220F1_7	1500166-04RE1 ST-CB-08-20150210-S CF 2...	20-Feb-15	11:44:20
8	150220F1_8	1500166-05RE1 ST-CB-04A-20150210-S CF ...	20-Feb-15	12:16:42
9	150220F1_9	1400783-12RE3@5X UB-2S CF 21.73	20-Feb-15	12:49:13
10	150220F1_10	SOLVENT BLANK	20-Feb-15	13:21:32

CALIBRATION STANDARDS REVIEW CHECKLIST

 Beg. Calibration ID: ST150220F1-1

 End Calibration ID: N/A

	<u>Beg.</u>	<u>End</u>		<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/> N/A	Mass resolution > 10,000?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Concentration within range?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	▪ Method 1614 > 5,000; CARB 429 > 8,000	<input checked="" type="checkbox"/>	<input type="checkbox"/> N/A
First and last eluters present?	<input type="checkbox"/> N/A	<input type="checkbox"/>	TCDD/TCDF valleys < 25%?	<input checked="" type="checkbox"/>	<input type="checkbox"/> N/A
Retention Times within criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Peaks integrated correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	-CS1 within 12-hour clock	<input type="checkbox"/>	<input type="checkbox"/>
-Correct instrument listed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
-Samples within 12-hour clock?	<input type="checkbox"/> y	n			

 Reviewed by: AC 2/20/15
 Initials & Date

* Ending standard criteria applicable to 8290 only.

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST150219E2-1

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 150219E2 S#1 Analysis Date: 19-FEB-15 Time: 14:07:32

ANALYTES	ION	QC	CONC.				ION	QC	CONC.			
	ABUND.	LIMITS	PASS	FOUND	CONC.	RANGE	ABUND.	LIMITS	PASS	FOUND	CONC.	RANGE
	RATIO	(ng/mL)			ANALYTES	ANALYTES	(ng/mL)	(ng/mL)			(ng/mL)	
PCB-1	3.00	2.66-3.60	y	47.0	37.5-62.5	PCB-52/69	0.79	0.65-0.89	y	106.0	75.0-125	
PCB-2	3.00	2.66-3.60	y	46.3	37.5-62.5	PCB-73	0.80	0.65-0.89	y	58.5	37.5-62.5	
PCB-3	3.00	2.66-3.60	y	46.3	37.5-62.5	PCB-43/49	0.80	0.65-0.89	y	108.7	75.0-125	
PCB-4/10	1.60	1.33-1.79	y	173.4	150-250	PCB-47	0.79	0.65-0.89	y	51.1	37.5-62.5	
PCB-7/9	1.60	1.33-1.79	y	178.6	150-250	PCB-48/75	0.79	0.65-0.89	y	112.0	75.0-125	
PCB-6	1.60	1.33-1.79	y	91.4	75.0-125	PCB-65	0.78	0.65-0.89	y	55.4	37.5-62.5	
PCB-5/8	1.61	1.33-1.79	y	181.5	150-250	PCB-62	0.79	0.65-0.89	y	52.7	37.5-62.5	
PCB-14	1.61	1.33-1.79	y	90.4	75.0-125	PCB-44	0.81	0.65-0.89	y	54.8	37.5-62.5	
PCB-11	1.60	1.33-1.79	y	90.2	75.0-125	PCB-42/59	0.80	0.65-0.89	y	111.4	75.0-125	
PCB-12/13	1.60	1.33-1.79	y	179.9	150-250	PCB-41/64/71/72	0.79	0.65-0.89	y	214.1	150-250	
PCB-15	1.64	1.33-1.79	y	89.3	75.0-125	PCB-68	0.81	0.65-0.89	y	53.9	37.5-62.5	
PCB-19	1.08	0.88-1.20	y	52.3	37.5-62.5	PCB-40	0.79	0.65-0.89	y	58.0	37.5-62.5	
PCB-30	1.06	0.88-1.20	y	48.7	37.5-62.5	PCB-57	0.78	0.65-0.89	y	53.5	37.5-62.5	
PCB-18	1.07	0.88-1.20	y	54.5	37.5-62.5	PCB-67	0.79	0.65-0.89	y	52.3	37.5-62.5	
PCB-17	1.07	0.88-1.20	y	53.3	37.5-62.5	PCB-58	0.80	0.65-0.89	y	54.6	37.5-62.5	
PCB-24/27	1.05	0.88-1.20	y	105.7	75.0-125	PCB-63	0.78	0.65-0.89	y	53.1	37.5-62.5	
PCB-16/32	1.07	0.88-1.20	y	105.1	75.0-125	PCB-74	0.78	0.65-0.89	y	52.0	37.5-62.5	
PCB-34	1.08	0.88-1.20	y	41.2	37.5-62.5	PCB-61/70	0.79	0.65-0.89	y	109.0	75.0-125	
PCB-23	1.08	0.88-1.20	y	46.0	37.5-62.5	PCB-76/66	0.79	0.65-0.89	y	107.4	75.0-125	
PCB-29	1.08	0.88-1.20	y	46.1	37.5-62.5	PCB-80	0.79	0.65-0.89	y	54.8	37.5-62.5	
PCB-26	1.08	0.88-1.20	y	45.3	37.5-62.5	PCB-55	0.79	0.65-0.89	y	53.6	37.5-62.5	
PCB-25	1.08	0.88-1.20	y	49.2	37.5-62.5	PCB-56/60	0.79	0.65-0.89	y	108.2	75.0-125	
PCB-31	1.08	0.88-1.20	y	47.8	37.5-62.5	PCB-79	0.80	0.65-0.89	y	52.9	37.5-62.5	
PCB-28	1.08	0.88-1.20	y	48.5	37.5-62.5	PCB-78	0.80	0.65-0.89	y	50.9	37.5-62.5	
PCB-20/21/33	1.07	0.88-1.20	y	148.0	112.5-225	PCB-81	0.79	0.65-0.89	y	51.5	37.5-62.5	
PCB-22	1.10	0.88-1.20	y	48.3	37.5-62.5	PCB-77	0.80	0.65-0.89	y	53.0	37.5-62.5	
PCB-36	1.08	0.88-1.20	y	49.2	37.5-62.5	PCB-104	1.61	1.32-1.78	y	54.0	37.5-62.5	
PCB-39	1.07	0.88-1.20	y	49.5	37.5-62.5	PCB-96	1.59	1.32-1.78	y	52.9	37.5-62.5	
PCB-38	1.08	0.88-1.20	y	45.6	37.5-62.5	PCB-103	1.55	1.32-1.78	y	52.5	37.5-62.5	
PCB-35	1.08	0.88-1.20	y	50.7	37.5-62.5	PCB-100	1.58	1.32-1.78	y	53.1	37.5-62.5	
PCB-37	1.06	0.88-1.20	y	47.9	37.5-62.5	PCB-94	1.61	1.32-1.78	y	50.4	37.5-62.5	
PCB-54	0.79	0.65-0.89	y	52.9	37.5-62.5	PCB-95/98/102	1.60	1.32-1.78	y	155.2	112.5-225	Analyst: <u>Dm1</u>
PCB-50	0.79	0.65-0.89	y	55.5	37.5-62.5	PCB-93	1.61	1.32-1.78	y	54.8	37.5-62.5	
PCB-53	0.78	0.65-0.89	y	56.2	37.5-62.5	PCB-88/91	1.58	1.32-1.78	y	101.4	75.0-125	
PCB-51	0.79	0.65-0.89	y	54.9	37.5-62.5	PCB-121	1.63	1.32-1.78	y	55.0	37.5-62.5	Date: <u>2/19/15</u>
PCB-45	0.79	0.65-0.89	y	56.6	37.5-62.5							
PCB-46	0.79	0.65-0.89	y	55.6	37.5-62.5							

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST150219E2-1

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 150219E2 S#1 Analysis Date: 19-FEB-15 Time: 14:07:32

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	1.63	1.32-1.78	y	106.7	75.0-125	PCB-140	1.30	1.05-1.43	y	57.6	37.5-62.5						
PCB-89	1.64	1.32-1.78	y	53.6	37.5-62.5	PCB-134/143	1.24	1.05-1.43	y	103.6	75.0-125						
PCB-90/101	1.58	1.32-1.78	y	106.0	75.0-125	PCB-133/142	1.24	1.05-1.43	y	102.1	75.0-125						
PCB-113	1.59	1.32-1.78	y	53.1	37.5-62.5	PCB-131	1.26	1.05-1.43	y	50.8	37.5-62.5						
PCB-99	1.64	1.32-1.78	y	55.0	37.5-62.5	PCB-146/165	1.26	1.05-1.43	y	99.1	75.0-125						
PCB-119	1.62	1.32-1.78	y	53.2	37.5-62.5	PCB-132/161	1.25	1.05-1.43	y	100.6	75.0-125						
PCB-108/112	1.61	1.32-1.78	y	105.2	75.0-125	PCB-153	1.25	1.05-1.43	y	49.8	37.5-62.5						
PCB-83	1.59	1.32-1.78	y	50.3	37.5-62.5	PCB-168	1.24	1.05-1.43	y	50.0	37.5-62.5						
PCB-97	1.59	1.32-1.78	y	51.9	37.5-62.5	PCB-141	1.23	1.05-1.43	y	50.7	37.5-62.5						
PCB-86	1.57	1.32-1.78	y	57.5	37.5-62.5	PCB-137	1.31	1.05-1.43	y	53.3	37.5-62.5						
PCB-87/117/125	1.63	1.32-1.78	y	160.5	112.5-225	PCB-130	1.23	1.05-1.43	y	52.2	37.5-62.5						
PCB-111/115	1.63	1.32-1.78	y	102.2	75.0-125	PCB-138/163/164	1.26	1.05-1.43	y	149.8	112.5-225						
PCB-85/116	1.64	1.32-1.78	y	109.8	75.0-125	PCB-158/160	1.25	1.05-1.43	y	102.2	75.0-125						
PCB-120	1.60	1.32-1.78	y	51.5	37.5-62.5	PCB-129	1.25	1.05-1.43	y	51.8	37.5-62.5						
PCB-110	1.61	1.32-1.78	y	52.6	37.5-62.5	PCB-166	1.25	1.05-1.43	y	52.2	37.5-62.5						
PCB-82	1.61	1.32-1.78	y	54.1	37.5-62.5	PCB-159	1.23	1.05-1.43	y	52.0	37.5-62.5						
PCB-124	1.60	1.32-1.78	y	54.0	37.5-62.5	PCB-128/162	1.27	1.05-1.43	y	102.6	75.0-125						
PCB-107/109	1.63	1.32-1.78	y	104.5	75.0-125	PCB-167	1.24	1.05-1.43	y	52.3	37.5-62.5						
PCB-123	1.58	1.32-1.78	y	54.4	37.5-62.5	PCB-156	1.25	1.05-1.43	y	51.9	37.5-62.5						
PCB-106/118	1.63	1.32-1.78	y	103.8	75.0-125	PCB-157	1.26	1.05-1.43	y	50.8	37.5-62.5						
PCB-114	1.54	1.32-1.78	y	45.8	37.5-62.5	PCB-169	1.29	1.05-1.43	y	50.2	37.5-62.5						
PCB-122	1.59	1.32-1.78	y	48.1	37.5-62.5	PCB-188	1.08	0.89-1.21	y	52.1	37.5-62.5						
PCB-105	1.54	1.32-1.78	y	46.8	37.5-62.5	PCB-184	1.08	0.89-1.21	y	51.3	37.5-62.5						
PCB-127	1.61	1.32-1.78	y	46.5	37.5-62.5	PCB-179	1.07	0.89-1.21	y	51.0	37.5-62.5						
PCB-126	1.60	1.32-1.78	y	48.3	37.5-62.5	PCB-176	1.08	0.89-1.21	y	50.4	37.5-62.5						
PCB-155	1.27	1.05-1.43	y	52.5	37.5-62.5	PCB-186	1.06	0.89-1.21	y	52.0	37.5-62.5						
PCB-150	1.30	1.05-1.43	y	53.6	37.5-62.5	PCB-178	1.09	0.89-1.21	y	51.6	37.5-62.5						
PCB-152	1.27	1.05-1.43	y	53.6	37.5-62.5	PCB-175	1.07	0.89-1.21	y	52.4	37.5-62.5						
PCB-145	1.26	1.05-1.43	y	53.7	37.5-62.5	PCB-182/187	1.07	0.89-1.21	y	105.0	75.0-125						
PCB-136	1.29	1.05-1.43	y	57.9	37.5-62.5	PCB-183	1.07	0.89-1.21	y	51.6	37.5-62.5						
PCB-148	1.30	1.05-1.43	y	49.6	37.5-62.5	PCB-185	1.06	0.89-1.21	y	54.3	37.5-62.5						
PCB-154	1.29	1.05-1.43	y	56.7	37.5-62.5	PCB-174	1.08	0.89-1.21	y	55.9	37.5-62.5	Analyst: <u>DMS</u>					
PCB-151	1.29	1.05-1.43	y	57.5	37.5-62.5	PCB-181	1.08	0.89-1.21	y	56.2	37.5-62.5						
PCB-135	1.26	1.05-1.43	y	55.5	37.5-62.5	PCB-177	1.06	0.89-1.21	y	55.8	37.5-62.5						
PCB-144	1.29	1.05-1.43	y	57.8	37.5-62.5	PCB-171	1.06	0.89-1.21	y	55.2	37.5-62.5	Date: <u>2/19/15</u>					
PCB-147	1.29	1.05-1.43	y	59.6	37.5-62.5	PCB-173	1.06	0.89-1.21	y	57.4	37.5-62.5						
PCB-139/149	1.27	1.05-1.43	y	113.1	75.0-125	PCB-172	1.05	0.89-1.21	y	54.9	37.5-62.5						

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST150219E2-1

Instrument ID: VG-8

Initial Calibration Date: 6-23-14

ICal ID: PCBVG8-6-23-14

GC Column ID: ZB-1

VER Data Filename: 150219E2 S#1 Analysis Date: 19-FEB-15 Time: 14:07:32

ANALYTES	ION	QC	CONC.		
	ABUND.	LIMITS	CONC.	RANGE	
	RATIO	PASS	FOUND	(ng/mL)	
PCB-192	1.07	0.89-1.21	y	56.3	37.5-62.5
PCB-180	1.05	0.89-1.21	y	53.8	37.5-62.5
PCB-193	1.07	0.89-1.21	y	52.9	37.5-62.5
PCB-191	1.06	0.89-1.21	y	52.7	37.5-62.5
PCB-170	1.08	0.89-1.21	y	52.9	37.5-62.5
PCB-190	1.04	0.89-1.21	y	52.2	37.5-62.5
PCB-189	1.07	0.89-1.21	y	52.0	37.5-62.5
PCB-202	0.91	0.76-1.02	y	50.0	37.5-62.5
PCB-201	0.95	0.76-1.02	y	50.8	37.5-62.5
PCB-204	0.88	0.76-1.02	y	50.3	37.5-62.5
PCB-197	0.92	0.76-1.02	y	49.7	37.5-62.5
PCB-200	0.90	0.76-1.02	y	49.8	37.5-62.5
PCB-198	0.90	0.76-1.02	y	50.4	37.5-62.5
PCB-199	0.93	0.76-1.02	y	53.3	37.5-62.5
PCB-196/203	0.92	0.76-1.02	y	106.5	75.0-125
PCB-195	0.89	0.76-1.02	y	46.3	37.5-62.5
PCB-194	0.90	0.76-1.02	y	45.0	37.5-62.5
PCB-205	0.90	0.76-1.02	y	47.1	37.5-62.5
PCB-208	1.33	1.14-1.54	y	50.8	37.5-62.5
PCB-207	1.31	1.14-1.54	y	51.6	37.5-62.5
PCB-206	1.31	1.14-1.54	y	50.6	37.5-62.5
PCB-209	1.18	0.99-1.33	y	51.4	37.5-62.5

Analyst: DMSDate: 2/19/15

LABLED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST150219E2-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICAL ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 150219E2 S#1 Analysis Date: 19-FEB-15 Time: 14:07:32

LABLED 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)			LABLED IS	RATIO	LIMITS	PASS	FOUND	(ng/mL)				
13C-PCB-1	3.28	2.66-3.60	Y	112.0	50.0-145			13C-PCB-169	1.29	1.05-1.43	Y	97.8	50 - 145				
13C-PCB-3	3.27	2.66-3.60	Y	111.1	50.0-145			13C-PCB-188	0.47	0.38-0.52	Y	91.8	50 - 145				
13C-PCB-4	1.58	1.33-1.79	Y	104.3	50.0-145			13C-PCB-180	0.46	0.38-0.52	Y	87.5	50 - 145				
13C-PCB-9	1.56	1.33-1.79	Y	98.7	50.0-145			13C-PCB-170	0.48	0.38-0.52	Y	91.7	50 - 145				
13C-PCB-11	1.55	1.33-1.79	Y	99.4	50.0-145			13C-PCB-189	0.47	0.38-0.52	Y	92.5	50 - 145				
13C-PCB-19	1.08	0.88-1.20	Y	102.5	50.0-145			13C-PCB-202	0.92	0.76-1.02	Y	83.5	50 - 145				
13C-PCB-32	1.07	0.88-1.20	Y	97.4	50.0-145			13C-PCB-194	0.90	0.76-1.02	Y	96.9	50 - 145				
13C-PCB-28	1.06	0.88-1.20	Y	107.2	50.0-145			13C-PCB-208	0.78	0.65-0.89	Y	104.1	50 - 145				
13C-PCB-37	1.07	0.88-1.20	Y	108.8	50.0-145			13C-PCB-206	0.80	0.65-0.89	Y	121.2	50 - 145				
13C-PCB-54	0.81	0.65-0.89	Y	96.0	50.0-145			13C-PCB-209	1.18	0.99-1.33	Y	124.9	50 - 145				
13C-PCB-52	0.79	0.65-0.89	Y	97.7	50.0-145												
13C-PCB-47	0.80	0.65-0.89	Y	98.6	50.0-145												
13C-PCB-70	0.81	0.65-0.89	Y	99.4	50.0-145												
13C-PCB-80	0.80	0.65-0.89	Y	99.8	50.0-145												
13C-PCB-81	0.79	0.65-0.89	Y	99.2	50.0-145												
13C-PCB-77	0.80	0.65-0.89	Y	99.1	50.0-145												
13C-PCB-104	1.64	1.32-1.78	Y	97.8	50.0-145												
13C-PCB-95	1.60	1.32-1.78	Y	103.5	50.0-145												
13C-PCB-101	1.60	1.32-1.78	Y	98.6	50.0-145		CRS vs. RS										
13C-PCB-97	1.58	1.32-1.78	Y	100.8	50.0-145												
13C-PCB-123	1.62	1.32-1.78	Y	106.0	50.0-145			13C-PCB-79	0.79	0.65-0.89	Y	99.1	75 - 125				
13C-PCB-118	1.65	1.32-1.78	Y	104.6	50.0-145			13C-PCB-178	0.47	0.38-0.52	Y	93.1	75 - 125				
13C-PCB-114	1.63	1.32-1.78	Y	96.2	50.0-145												
13C-PCB-105	1.57	1.32-1.78	Y	93.6	50.0-145												
13C-PCB-127	1.61	1.32-1.78	Y	94.9	50.0-145												
13C-PCB-126	1.62	1.32-1.78	Y	96.7	50.0-145												
13C-PCB-155	1.31	1.05-1.43	Y	78.7	50.0-145												
13C-PCB-153	1.30	1.05-1.43	Y	100.9	50.0-145												
13C-PCB-141	1.26	1.05-1.43	Y	95.4	50.0-145												
13C-PCB-138	1.26	1.05-1.43	Y	99.1	50.0-145												
13C-PCB-159	1.31	1.05-1.43	Y	96.7	50.0-145												
13C-PCB-167	1.27	1.05-1.43	Y	96.9	50.0-145												
13C-PCB-156	1.26	1.05-1.43	Y	97.5	50.0-145												
13C-PCB-157	1.28	1.05-1.43	Y	98.3	50.0-145												

Analyst: DMSDate: 2/19/15

Client ID: PCB CS3 14K1102
Lab ID: ST150219E2-1

Filename: 150219E2 S:1 Acq:19-FEB-15 14:07:32 ConCal: ST150219E2-1
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	6.45e+07	3.00	y	1.19	16:05	1.001	0.996-1.006	46.9772	PCB-52/69	9.15e+07	0.79	y	1.28	31:26	1.001	0.996-1.006	106.041
PCB-2	6.55e+07	3.00	y	1.18	18:27	0.988	0.984-0.994	46.3283	PCB-73	5.33e+07	0.80	y	1.35	31:33	1.005	1.000-1.010	58.5454
PCB-3	7.87e+07	3.00	y	1.43	18:41	1.001	0.996-1.006	46.2502	PCB-43/49	7.28e+07	0.80	y	0.99	31:43	1.010	1.005-1.015	108.702
PCB-4/10	1.96e+08	1.60	y	1.57	20:03	1.003	0.997-1.007	173.368	PCB-47	3.87e+07	0.79	y	1.06	31:55	1.001	0.996-1.006	51.1402
PCB-7/9	2.25e+08	1.60	y	1.21	21:49	0.868	0.866-0.874	178.631	PCB-48/75	9.84e+07	0.79	y	1.23	32:02	1.004	0.999-1.009	111.972
PCB-6	1.24e+08	1.60	y	1.30	22:28	0.894	0.890-0.899	91.3648	PCB-65	4.86e+07	0.78	y	1.22	32:19	1.013	1.008-1.018	55.4479
PCB-5/8	2.17e+08	1.61	y	1.15	22:52	0.910	0.907-0.917	181.549	PCB-62	4.60e+07	0.79	y	1.22	32:25	1.016	1.011-1.021	52.6922
PCB-14	1.10e+08	1.61	y	1.11	23:57	0.953	0.949-0.959	90.4090	PCB-44	3.38e+07	0.81	y	0.86	32:43	1.026	1.021-1.031	54.8350
PCB-11	1.08e+08	1.60	y	1.09	25:10	1.001	0.995-1.005	90.1856	PCB-42/59	9.07e+07	0.80	y	1.14	32:57	1.033	1.028-1.038	111.393
PCB-12/13	2.36e+08	1.60	y	1.19	25:33	1.016	1.011-1.021	179.896	PCB-41/64/71/72	1.85e+08	0.79	y	1.21	33:32	1.051	1.046-1.056	214.129
PCB-15	1.26e+08	1.64	y	1.28	25:52	1.029	1.023-1.033	89.3446	PCB-68	5.20e+07	0.81	y	1.35	33:47	1.059	1.054-1.064	53.9043
PCB-19	3.50e+07	1.08	y	1.04	24:09	1.001	0.996-1.006	52.3067	PCB-40	2.91e+07	0.79	y	0.70	34:01	1.066	1.061-1.071	58.0429
PCB-30	5.35e+07	1.06	y	1.71	25:02	1.038	1.032-1.042	48.7201	PCB-57	4.64e+07	0.78	y	0.98	34:22	0.970	0.965-0.975	53.4604
PCB-18	3.89e+07	1.07	y	0.78	25:47	0.954	0.949-0.959	54.5007	PCB-67	5.13e+07	0.79	y	1.11	34:40	0.979	0.974-0.984	52.3225
PCB-17	4.50e+07	1.07	y	0.92	25:58	0.960	0.956-0.966	53.3336	PCB-58	4.48e+07	0.80	y	0.93	34:47	0.982	0.977-0.987	54.5526
PCB-24/27	1.15e+08	1.05	y	1.19	26:32	0.981	0.977-0.987	105.710	PCB-63	4.48e+07	0.78	y	0.95	34:57	0.987	0.982-0.992	53.0702
PCB-16/32	9.03e+07	1.07	y	0.94	27:02	1.000	0.995-1.005	105.100	PCB-74	5.74e+07	0.78	y	1.24	35:14	0.995	0.990-1.000	52.0419
PCB-34	4.64e+07	1.08	y	1.14	27:49	0.959	0.955-0.965	41.2047	PCB-61/70	9.21e+07	0.79	y	0.95	35:24	1.000	0.995-1.005	108.972
PCB-23	5.84e+07	1.08	y	1.28	27:55	0.963	0.959-0.969	46.0037	PCB-76/66	9.94e+07	0.79	y	1.04	35:37	1.006	1.001-1.011	107.355
PCB-29	4.95e+07	1.08	y	1.08	28:11	0.972	0.967-0.977	46.1486	PCB-80	6.01e+07	0.79	y	1.19	35:51	1.001	0.996-1.006	54.7648
PCB-26	5.42e+07	1.08	y	1.21	28:23	0.979	0.974-0.984	45.3057	PCB-55	5.14e+07	0.79	y	1.04	36:11	1.010	1.005-1.015	53.6031
PCB-25	6.16e+07	1.08	y	1.26	28:32	0.984	0.979-0.989	49.1855	PCB-56/60	1.01e+08	0.79	y	1.01	36:41	1.024	1.019-1.029	108.250
PCB-31	6.09e+07	1.08	y	1.28	28:54	0.997	0.992-1.002	47.7813	PCB-79	5.26e+07	0.80	y	1.08	37:45	1.053	1.048-1.058	52.9498
PCB-28	8.24e+07	1.08	y	1.71	29:00	1.000	0.995-1.005	48.5052	PCB-78	5.29e+07	0.80	y	1.27	38:26	0.987	0.982-0.992	50.9290
PCB-20/21/33	1.59e+08	1.07	y	1.08	29:37	1.022	1.017-1.027	148.026	PCB-81	5.60e+07	0.79	y	1.33	38:58	1.001	0.995-1.005	51.5128
PCB-22	5.79e+07	1.10	y	1.21	30:03	1.037	1.032-1.042	48.2829	PCB-77	4.87e+07	0.80	y	1.10	39:34	1.000	0.995-1.005	52.9733
PCB-36	5.10e+07	1.08	y	1.14	30:40	0.933	0.928-0.938	49.1795	PCB-104	3.22e+07	1.61	y	1.18	32:34	1.000	0.996-1.006	54.0483
PCB-39	5.01e+07	1.07	y	1.12	31:08	0.947	0.943-0.953	49.5263	PCB-96	3.03e+07	1.59	y	1.14	33:51	1.040	1.034-1.044	52.8640
PCB-38	4.96e+07	1.08	y	1.20	31:55	0.971	0.966-0.976	45.5731	PCB-103	2.53e+07	1.55	y	0.96	34:22	1.056	1.050-1.060	52.4924
PCB-35	5.67e+07	1.08	y	1.23	32:27	0.987	0.982-0.992	50.7430	PCB-100	2.50e+07	1.58	y	0.94	34:43	1.066	1.061-1.071	53.0690
PCB-37	5.34e+07	1.06	y	1.23	32:53	1.000	0.995-1.005	47.8811	PCB-94	2.10e+07	1.61	y	1.06	35:12	0.985	0.980-0.990	50.4386
PCB-54	4.86e+07	0.79	y	1.10	27:54	1.001	0.996-1.006	52.8995	PCB-95/98/102	7.49e+07	1.60	y	1.22	35:42	0.999	0.995-1.005	155.214
PCB-50	4.07e+07	0.79	y	0.88	29:03	1.042	1.037-1.047	55.4623	PCB-93	1.82e+07	1.61	y	0.84	35:50	1.003	0.997-1.007	54.8013
PCB-53	4.03e+07	0.78	y	1.06	29:42	0.946	0.942-0.952	56.2496	PCB-88/91	4.46e+07	1.58	y	1.12	36:06	1.011	1.005-1.015	101.370
PCB-51	3.66e+07	0.79	y	0.99	30:02	0.957	0.952-0.962	54.8555	PCB-121	3.50e+07	1.63	y	1.62	36:13	1.014	1.009-1.019	54.9549
PCB-45	3.29e+07	0.79	y	0.86	30:28	0.970	0.966-0.976	56.5959	PCB-84/92	4.43e+07	1.63	y	1.05	37:03	0.991	0.985-0.995	106.743
PCB-46	3.17e+07	0.79	y	0.85	30:58	0.986	0.981-0.991	55.6223	PCB-89	2.40e+07	1.64	y	1.13	37:14	0.995	0.991-1.001	53.6478

RL: MONO, TRI - DECA: _____

RL: DI : _____

Integrations

by _____

Analyst: DMS

Date: 2/19/15

Reviewed

by _____

Analyst: CJ

Date: 2/20/15

Client ID: PCB CS3 14K1102
Lab ID: ST150219E2-1

Filename: 150219E2 S:1 Acq:19-FEB-15 14:07:32 ConCal: ST150219E2-1
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	4.63e+07	1.58	y	1.10	37:24	1.000	0.995-1.005	105.994	PCB-133/142	5.37e+07	1.24	y	0.82	42:21	0.982	0.977-0.987	102.127
PCB-113	2.97e+07	1.59	y	1.41	37:39	1.007	1.002-1.012	53.0514	PCB-131	2.96e+07	1.26	y	0.91	42:30	0.986	0.981-0.991	50.8189
PCB-99	2.92e+07	1.64	y	1.34	37:45	1.009	1.004-1.014	55.0094	PCB-146/165	7.93e+07	1.26	y	1.25	42:43	0.991	0.986-0.996	99.1437
PCB-119	2.97e+07	1.62	y	1.53	38:12	0.987	0.982-0.992	53.2356	PCB-132/161	7.13e+07	1.25	y	1.10	42:58	0.996	0.992-1.002	100.594
PCB-108/112	4.91e+07	1.61	y	1.28	38:22	0.991	0.986-0.996	105.167	PCB-153	4.00e+07	1.25	y	1.25	43:09	1.001	0.995-1.005	49.8500
PCB-83	2.79e+07	1.59	y	1.52	38:31	0.995	0.990-1.000	50.3285	PCB-168	4.65e+07	1.24	y	1.45	43:21	1.005	1.001-1.011	50.0223
PCB-97	2.24e+07	1.59	y	1.18	38:44	1.001	0.995-1.005	51.9232	PCB-141	3.12e+07	1.23	y	1.09	43:53	1.000	0.995-1.005	50.6557
PCB-86	1.77e+07	1.57	y	0.84	38:52	1.004	0.999-1.009	57.5452	PCB-137	3.22e+07	1.31	y	1.06	44:16	1.009	1.004-1.014	53.3109
B-87/117/125	9.07e+07	1.63	y	1.55	39:00	1.008	1.002-1.012	160.534	PCB-130	2.86e+07	1.23	y	0.96	44:23	1.012	1.006-1.016	52.1930
PCB-111/115	6.09e+07	1.63	y	1.63	39:09	1.011	1.006-1.016	102.241	PCB-138/163/164	1.17e+08	1.26	y	1.29	44:45	1.001	0.996-1.006	149.804
PCB-85/116	5.21e+07	1.64	y	1.30	39:17	1.015	1.010-1.020	109.781	PCB-158/160	8.29e+07	1.25	y	1.34	45:00	1.006	1.001-1.011	102.164
PCB-120	3.15e+07	1.60	y	1.68	39:30	1.020	1.016-1.026	51.5454	PCB-129	2.67e+07	1.25	y	0.85	45:13	1.011	1.007-1.017	51.8481
PCB-110	2.98e+07	1.61	y	1.56	39:39	1.024	1.020-1.030	52.5653	PCB-166	4.14e+07	1.25	y	1.19	45:41	0.993	0.988-0.998	52.1604
PCB-82	2.00e+07	1.61	y	0.76	40:18	0.977	0.971-0.981	54.1210	PCB-159	3.87e+07	1.23	y	1.11	46:01	1.000	0.996-1.006	51.9727
PCB-124	3.87e+07	1.60	y	1.47	40:58	0.993	0.988-0.998	54.0464	PCB-128/162	7.18e+07	1.27	y	1.05	46:18	1.007	1.002-1.012	102.565
PCB-107/109	6.72e+07	1.63	y	1.32	41:07	0.996	0.991-1.001	104.505	PCB-167	4.56e+07	1.24	y	1.20	46:41	1.000	0.995-1.005	52.3490
PCB-123	3.09e+07	1.58	y	1.17	41:17	1.000	0.996-1.006	54.3790	PCB-156	4.13e+07	1.25	y	1.14	48:00	1.000	0.996-1.006	51.9109
- PCB-106/118	6.28e+07	1.63	y	1.17	41:30	1.001	0.996-1.006	103.822	PCB-157	4.37e+07	1.26	y	1.16	48:16	1.000	0.995-1.005	50.7690
- PCB-114	4.32e+07	1.54	y	1.30	42:07	1.000	0.995-1.005	45.8066	PCB-169	3.92e+07	1.29	y	1.12	50:23	1.000	0.995-1.005	50.2158
PCB-122	3.92e+07	1.59	y	1.12	42:15	1.003	0.999-1.009	48.0947	PCB-188	3.85e+07	1.08	y	1.58	42:47	1.000	0.996-1.006	52.0762
PCB-105	4.31e+07	1.54	y	1.30	42:59	1.000	0.995-1.005	46.8408	PCB-184	3.91e+07	1.08	y	1.63	43:14	1.011	1.006-1.016	51.2731
PCB-127	4.81e+07	1.61	y	1.33	43:19	1.000	0.996-1.006	46.5272	PCB-179	3.11e+07	1.07	y	1.30	44:01	1.029	1.024-1.034	51.0350
PCB-126	4.00e+07	1.60	y	1.18	45:13	1.000	0.995-1.005	48.2520	PCB-176	3.47e+07	1.08	y	1.48	44:28	1.040	1.035-1.045	50.3546
PCB-155	1.98e+07	1.27	y	1.11	36:58	1.001	0.966-1.006	52.5012	PCB-186	3.53e+07	1.06	y	1.45	45:05	1.055	1.050-1.060	51.9931
PCB-150	1.82e+07	1.30	y	1.00	38:14	1.035	1.030-1.040	53.6476	PCB-178	2.49e+07	1.09	y	1.03	45:34	1.066	1.061-1.071	51.5636
PCB-152	2.03e+07	1.27	y	1.12	38:43	1.048	1.043-1.053	53.6098	PCB-175	2.48e+07	1.07	y	1.01	45:55	1.074	1.069-1.079	52.3982
PCB-145	2.19e+07	1.26	y	1.20	39:10	1.060	1.055-1.065	53.6847	PCB-182/187	6.14e+07	1.07	y	1.25	46:06	1.078	1.073-1.083	104.983
PCB-136	2.31e+07	1.29	y	1.18	39:29	1.069	1.064-1.074	57.8561	PCB-183	2.91e+07	1.07	y	1.21	46:25	1.086	1.081-1.091	51.5660
PCB-148	1.25e+07	1.30	y	0.74	39:35	1.071	1.066-1.076	49.6477	PCB-185	3.25e+07	1.06	y	1.80	47:05	0.956	0.951-0.961	54.3483
PCB-154	1.65e+07	1.29	y	0.86	40:04	1.085	1.080-1.090	56.7002	PCB-174	2.56e+07	1.08	y	1.38	47:26	0.963	0.958-0.968	55.8765
PCB-151	1.46e+07	1.29	y	0.75	40:43	1.102	1.097-1.107	57.4632	PCB-181	2.58e+07	1.08	y	1.38	47:33	0.965	0.960-0.970	56.2392
PCB-135	1.49e+07	1.26	y	0.79	40:56	1.108	1.103-1.113	55.5320	PCB-177	2.33e+07	1.06	y	1.26	47:43	0.969	0.963-0.973	55.7893
PCB-144	1.49e+07	1.29	y	0.76	41:02	1.111	1.105-1.117	57.7500	PCB-171	2.90e+07	1.06	y	1.58	48:01	0.974	0.970-0.980	55.2345
PCB-147	1.66e+07	1.29	y	0.82	41:10	1.114	1.109-1.121	59.5909	PCB-173	2.11e+07	1.06	y	1.11	48:27	0.983	0.978-0.988	57.3754
PCB-139/149	2.93e+07	1.27	y	0.76	41:26	1.122	1.116-1.128	113.140	PCB-172	2.98e+07	1.05	y	1.63	48:53	0.992	0.987-0.997	54.8923
- PCB-140	1.41e+07	1.30	y	0.72	41:37	1.127	1.121-1.133	57.5917	PCB-192	3.25e+07	1.07	y	1.74	49:05	0.996	0.991-1.001	56.2745
- PCB-134/143	6.09e+07	1.24	y	0.92	42:03	0.975	0.970-0.980	103.555	PCB-180	2.40e+07	1.05	y	1.34	49:17	1.000	0.995-1.005	53.7750

Integrations

by

Analyst: *Dms*

Date: *2/19/15*

Client ID: PCB CS3 14K1102
Lab ID: ST150219E2-1

Filename: 150219E2 S:1 Acq:19-FEB-15 14:07:32 ConCal: ST150219E2-1
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	3.01e+07	1.07	y	1.72	49:30	1.005	0.999-1.009	52.8714
PCB-191	2.96e+07	1.06	y	1.69	49:44	1.009	1.004-1.014	52.7041
PCB-170	2.33e+07	1.08	y	1.60	50:45	1.000	0.995-1.005	52.9225
PCB-190	3.18e+07	1.04	y	2.21	50:56	1.004	0.998-1.008	52.2127
PCB-189	2.96e+07	1.07	y	1.55	52:14	1.000	0.995-1.005	51.9916
PCB-202	2.10e+07	0.91	y	1.08	48:13	1.000	0.995-1.005	49.9975
PCB-201	2.27e+07	0.95	y	1.15	48:42	1.011	1.005-1.015	50.8022
PCB-204	2.22e+07	0.88	y	1.14	48:52	1.014	1.008-1.018	50.3290
PCB-197	2.07e+07	0.92	y	1.07	49:10	1.020	1.015-1.025	49.6997
PCB-200	2.05e+07	0.90	y	1.06	50:02	1.038	1.032-1.044	49.8018
PCB-198	1.48e+07	0.90	y	0.76	51:20	1.065	1.059-1.069	50.3719
PCB-199	1.65e+07	0.93	y	0.80	51:27	1.068	1.061-1.071	53.3180
- PCB-196/203	3.31e+07	0.92	y	0.80	51:43	1.073	1.066-1.076	106.457
- PCB-195	2.68e+07	0.89	y	1.23	52:52	0.984	0.979-0.989	46.3348
PCB-194	2.57e+07	0.90	y	1.21	53:45	1.000	0.995-1.005	44.9950
PCB-205	3.42e+07	0.90	y	1.54	54:02	1.006	1.001-1.011	47.0654
PCB-208	3.24e+07	1.33	y	0.93	53:01	1.000	0.995-1.005	50.7714
PCB-207	3.84e+07	1.31	y	1.08	53:20	1.006	1.001-1.011	51.6196
PCB-206	2.49e+07	1.31	y	1.02	55:24	1.000	0.995-1.005	50.5978
PCB-209	2.80e+07	1.18	y	1.17	56:45	1.000	0.995-1.005	51.3849

Name	Resp	RA	RT	RRF	Conc
Total Mono-PCB	2.09e+08	3.00	y	16:05	1.27
Total Di-PCB	1.34e+09	1.60	y	20:03	1.21
Total Tri-PCB	3.78e+08	1.08	y	24:09	1.10
Total Tetra-PCB	8.94e+08	1.08	y	27:49	1.21
Total Penta-PCB	1.94e+09	0.79	y	27:54	1.09
Total Hepta-PCB	1.11e+09	1.61	y	32:34	1.18
Total Octa-PCB	2.21e+08	1.54	y	42:07	1.25
Total Hexa-PCB	2.37e+08	1.27	y	36:58	0.90
Total Nona-PCB	9.66e+07	1.33	y	53:01	1.01
Total Deca-PCB	2.80e+07	1.18	y	56:45	1.17
Total PCB Conc:	11367.6406790				

Integrations
by _____
Analyst: DMS
Date: 2/19/15

Client ID: PCB CS3 14K1102
 Lab ID: ST150219E2-1

Filename: 150219E2 S:1 Acq:19-FEB-15 14:07:32
 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:1.0000
 ConCal: ST150219E2-1
 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec	CRS vs. RS
13C-PCB-1	1.15e+08	3.28	y	0.87	16:04	0.622	0.629-0.635	112	112	
13C-PCB-3	1.19e+08	3.27	y	0.91	18:40	0.722	0.725-0.733	111	111	13C-PCB-79 8.99e+07
13C-PCB-4	7.21e+07	1.58	y	0.59	19:60	0.774	0.775-0.783	104	104	13C-PCB-178 3.17e+07
13C-PCB-9	1.04e+08	1.56	y	0.90	21:46	0.842	0.842-0.850	98.7	98.7	
13C-PCB-11	1.10e+08	1.55	y	0.94	25:08	0.973	0.968-0.978	99.4	99.4	PS vs. IS
13C-PCB-19	6.42e+07	1.08	y	0.53	24:08	0.934	0.930-0.940	103	103	
13C-PCB-28	9.93e+07	1.06	y	0.93	28:59	1.000	0.999-1.009	107	107	13C-PCB-79 8.99e+07
13C-PCB-32	9.14e+07	1.07	y	0.80	27:02	1.046	1.040-1.050	97.4	97.4	13C-PCB-178 3.17e+07
13C-PCB-37	9.08e+07	1.07	y	0.84	32:52	1.134	1.131-1.143	109	109	
13C-PCB-47	7.16e+07	0.80	y	0.81	31:54	0.870	0.866-0.874	98.6	98.6	* RRT limits used for processing only. RRT's ARE within 1688C method limits.
13C-PCB-52	6.73e+07	0.79	y	0.77	31:24	0.856	0.853-0.861	97.7	97.7	DMS 2/19/15
13C-PCB-54	8.33e+07	0.81	y	0.97	27:53	0.760	0.758-0.766	96.0	96.0	
13C-PCB-70	8.87e+07	0.81	y	1.00	35:25	0.966	0.961-0.971	99.4	99.4	
13C-PCB-77	8.34e+07	0.80	y	0.94	39:33	1.079	1.073-1.083	99.1	99.1	
13C-PCB-80	9.20e+07	0.80	y	1.03	35:50	0.977	0.972-0.982	99.8	99.8	
13C-PCB-81	8.17e+07	0.79	y	0.92	38:57	1.062	1.057-1.067	99.2	99.2	
13C-PCB-95	3.94e+07	1.60	y	0.74	35:43	0.913	0.908-0.918	103	103	RS
13C-PCB-97	3.65e+07	1.58	y	0.70	38:43	0.989	0.984-0.994	101	101	
13C-PCB-101	3.97e+07	1.60	y	0.78	37:24	0.956	0.951-0.961	98.6	98.6	13C-PCB-15 1.18e+08
13C-PCB-104	5.03e+07	1.64	y	1.00	32:33	0.832	0.828-0.836	97.8	97.8	13C-PCB-31 9.93e+07
13C-PCB-105	7.09e+07	1.57	y	1.37	42:59	0.929	0.924-0.934	93.6	93.6	13C-PCB-60 8.93e+07
13C-PCB-114	7.27e+07	1.63	y	1.36	42:07	0.910	0.905-0.915	96.2	96.2	13C-PCB-111 5.13e+07
13C-PCB-118	5.15e+07	1.65	y	0.96	41:27	1.059	1.054-1.064	105	105	13C-PCB-128 5.55e+07
13C-PCB-123	4.87e+07	1.62	y	0.89	41:16	1.055	1.050-1.060	106	106	13C-PCB-205 6.10e+07
13C-PCB-126	7.01e+07	1.62	y	1.31	45:13	0.977	0.972-0.982	96.7	96.7	
13C-PCB-127	7.75e+07	1.61	y	1.47	43:19	0.936	0.931-0.941	94.9	94.9	
13C-PCB-138	6.05e+07	1.26	y	1.10	44:43	0.966	0.961-0.971	99.1	99.1	
13C-PCB-141	5.68e+07	1.26	y	1.07	43:52	0.948	0.943-0.953	95.4	95.4	
13C-PCB-153	6.42e+07	1.30	y	1.15	43:07	0.932	0.927-0.937	101	101	
13C-PCB-155	3.40e+07	1.31	y	0.84	36:57	0.944	0.939-0.949	78.7	78.7	
13C-PCB-156	7.01e+07	1.26	y	1.30	47:59	1.037	1.032-1.042	97.5	97.5	
13C-PCB-157	7.40e+07	1.28	y	1.36	48:15	1.043	1.038-1.048	98.3	98.3	
13C-PCB-159	6.69e+07	1.31	y	1.25	45:60	0.994	0.988-0.999	96.7	96.7	
13C-PCB-167	7.27e+07	1.27	y	1.35	46:41	1.009	1.004-1.014	96.9	96.9	
13C-PCB-169	6.97e+07	1.29	y	1.29	50:23	1.089	1.083-1.093	97.8	97.8	
13C-PCB-170	2.76e+07	0.48	y	0.54	50:45	1.096	1.089-1.101	91.7	91.7	
13C-PCB-180	3.32e+07	0.46	y	0.68	49:16	1.065	1.060-1.070	87.5	87.5	
13C-PCB-188	4.67e+07	0.47	y	0.92	42:45	0.924	0.919-0.929	91.8	91.8	
13C-PCB-189	3.68e+07	0.47	y	0.72	52:13	1.128	1.120-1.132	92.5	92.5	
13C-PCB-194	4.72e+07	0.90	y	0.80	53:44	0.995	0.990-1.000	96.9	96.9	Analyst: DMS
13C-PCB-202	3.88e+07	0.92	y	0.84	48:12	1.041	1.036-1.046	83.5	83.5	Date: 2/19/15
13C-PCB-206	4.81e+07	0.80	y	0.65	55:23	1.025	1.021-1.031	121	121	
13C-PCB-208	6.87e+07	0.78	y	1.08	53:00	0.981	0.976-0.986	104	104	
13C-PCB-209	4.65e+07	1.18	y	0.61	56:44	1.050	1.045-1.055	125	125	

Vista Analytical Laboratory - Injection Log Run file: 150219E2 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
150219E2	1	ST150219E2-1	DMS	19-FEB-15	14:07:32	ST150219E2-1	NA
150219E2	2	B5B0059-BS1	DMS	19-FEB-15	15:11:34	ST150219E2-1	NA
150219E2	3	B5B0069-BS1	DMS	19-FEB-15	16:15:42	ST150219E2-1	NA
150219E2	4	SOLVENT BLANK	DMS	19-FEB-15	17:19:48	ST150219E2-1	NA
150219E2	5	B5B0059-BLK1	DMS	19-FEB-15	18:23:55	ST150219E2-1	NA
150219E2	6	B5B0069-BLK1	DMS	19-FEB-15	19:28:02	ST150219E2-1	NA
150219E2	7	1500147-02@10X	DMS	19-FEB-15	20:32:10	ST150219E2-1	NA
150219E2	8	1500147-03@10X	DMS	19-FEB-15	21:36:17	ST150219E2-1	NA
150219E2	9	1500147-04@10X	DMS	19-FEB-15	22:40:24	ST150219E2-1	NA
150219E2	10	1500166-04@10X	DMS	19-FEB-15	23:44:30	ST150219E2-1	NA
150219E2	11	1500166-05@10X	DMS	20-FEB-15	00:48:35	ST150219E2-1	NA
150219E2	12	SOLVENT BLANK	DMS	20-FEB-15	01:52:43	ST150219E2-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

 Beg. Calibration ID: ST150219EL-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"/>	<input type="checkbox"/> NA	Mass resolution > 10,000?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Concentration within range?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	▪ Method 1614 > 5,000; CARB 429 > 8,000	<input type="checkbox"/> NA	<input checked="" type="checkbox"/> N/A
First and last eluters present?	<input type="checkbox"/> N/A	<input type="checkbox"/>	TCDD/TCDF valleys < 25%?	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> N/A
Retention Times within criteria?	<input type="checkbox"/> DMS 2/19/15	<input type="checkbox"/>	Peaks integrated correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	-CS1 within 12-hour clock	<input type="checkbox"/> D	<input type="checkbox"/>
-Correct instrument listed?	<input checked="" type="checkbox"/>	<input type="checkbox"/> N/A			
-Samples within 12-hour clock?	<input checked="" type="checkbox"/> y	n			

 Reviewed by: dh 2/20/15
Initials & Date

* Ending standard criteria applicable to 8290 only.

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST150225E1-1

Instrument ID: VG-8

Initial Calibration Date: 1-14-15

ICal ID: PCBVG8-1-14-15

GC Column ID: ZB-1

VER Data Filename: 150225E1 S#1 Analysis Date: 25-FEB-15 Time: 13:07:41

ANALYTES	ION	QC	CONC.				ION	QC	CONC.			
	ABUND.	LIMITS	PASS	FOUND	CONC.		ABUND.	LIMITS	PASS	CONC.		
	RATIO				(ng/mL)	ANALYTES	RATIO			FOUND	(ng/mL)	
PCB-1	2.98	2.66-3.60	y	38.9	37.5-62.5	PCB-52/69	0.78	0.65-0.89	y	103.2	75.0-125	
PCB-2	3.01	2.66-3.60	y	38.1	37.5-62.5	PCB-73	0.79	0.65-0.89	y	47.9	37.5-62.5	
PCB-3	2.97	2.66-3.60	y	39.0	37.5-62.5	PCB-43/49	0.79	0.65-0.89	y	101.3	75.0-125	
PCB-4/10	1.60	1.33-1.79	y	80.7	75-125	PCB-47	0.77	0.65-0.89	y	45.1	37.5-62.5	
PCB-7/9	1.62	1.33-1.79	y	84.2	75-125	PCB-48/75	0.79	0.65-0.89	y	100.4	75.0-125	
PCB-6	1.63	1.33-1.79	y	45.5	37.5-62.5	PCB-65	0.79	0.65-0.89	y	48.5	37.5-62.5	
PCB-5/8	1.61	1.33-1.79	y	84.6	75-125	PCB-62	0.76	0.65-0.89	y	45.6	37.5-62.5	
PCB-14	1.62	1.33-1.79	y	41.4	37.5-62.5	PCB-44	0.79	0.65-0.89	y	52.8	37.5-62.5	
PCB-11	1.62	1.33-1.79	y	41.5	37.5-62.5	PCB-42/59	0.78	0.65-0.89	y	103.1	75.0-125	
PCB-12/13	1.61	1.33-1.79	y	82.9	75-125	PCB-41/64/71/72	0.78	0.65-0.89	y	204.0	150-250	
PCB-15	1.59	1.33-1.79	y	41.6	37.5-62.5	PCB-68	0.78	0.65-0.89	y	44.7	37.5-62.5	
PCB-19	1.06	0.88-1.20	y	49.1	37.5-62.5	PCB-40	0.76	0.65-0.89	y	47.2	37.5-62.5	
PCB-30	1.06	0.88-1.20	y	45.3	37.5-62.5	PCB-57	0.77	0.65-0.89	y	45.7	37.5-62.5	
PCB-18	1.05	0.88-1.20	y	48.9	37.5-62.5	PCB-67	0.78	0.65-0.89	y	46.7	37.5-62.5	
PCB-17	1.06	0.88-1.20	y	49.4	37.5-62.5	PCB-58	0.78	0.65-0.89	y	47.3	37.5-62.5	
PCB-24/27	1.06	0.88-1.20	y	94.6	75.0-125	PCB-63	0.77	0.65-0.89	y	48.1	37.5-62.5	
PCB-16/32	1.06	0.88-1.20	y	97.7	75.0-125	PCB-74	0.77	0.65-0.89	y	48.1	37.5-62.5	
PCB-34	1.10	0.88-1.20	y	42.0	37.5-62.5	PCB-61/70	0.77	0.65-0.89	y	96.2	75.0-125	
PCB-23	1.09	0.88-1.20	y	43.5	37.5-62.5	PCB-76/66	0.77	0.65-0.89	y	98.7	75.0-125	
PCB-29	1.09	0.88-1.20	y	44.4	37.5-62.5	PCB-80	0.78	0.65-0.89	y	48.8	37.5-62.5	
PCB-26	1.09	0.88-1.20	y	44.0	37.5-62.5	PCB-55	0.77	0.65-0.89	y	48.7	37.5-62.5	
PCB-25	1.09	0.88-1.20	y	45.3	37.5-62.5	PCB-56/60	0.77	0.65-0.89	y	102.8	75.0-125	
PCB-31	1.10	0.88-1.20	y	44.6	37.5-62.5	PCB-79	0.78	0.65-0.89	y	49.7	37.5-62.5	
PCB-28	1.07	0.88-1.20	y	47.9	37.5-62.5	PCB-78	0.78	0.65-0.89	y	47.2	37.5-62.5	
PCB-20/21/33	1.08	0.88-1.20	y	138.5	112.5-225	PCB-81	0.77	0.65-0.89	y	46.5	37.5-62.5	
PCB-22	1.07	0.88-1.20	y	44.5	37.5-62.5	PCB-77	0.80	0.65-0.89	y	47.3	37.5-62.5	
PCB-36	1.09	0.88-1.20	y	45.6	37.5-62.5	PCB-104	1.57	1.32-1.78	y	50.8	37.5-62.5	
PCB-39	1.09	0.88-1.20	y	49.6	37.5-62.5	PCB-96	1.58	1.32-1.78	y	49.7	37.5-62.5	
PCB-38	1.08	0.88-1.20	y	44.9	37.5-62.5	PCB-103	1.55	1.32-1.78	y	50.5	37.5-62.5	
PCB-35	1.10	0.88-1.20	y	45.3	37.5-62.5	PCB-100	1.55	1.32-1.78	y	51.0	37.5-62.5	
PCB-37	1.09	0.88-1.20	y	48.1	37.5-62.5	PCB-94	1.55	1.32-1.78	y	49.8	37.5-62.5	
PCB-54	0.77	0.65-0.89	y	51.2	37.5-62.5	PCB-95/98/102	1.57	1.32-1.78	y	154.2	112.5-225	
PCB-50	0.76	0.65-0.89	y	51.8	37.5-62.5	PCB-93	1.62	1.32-1.78	y	46.6	37.5-62.5	
PCB-53	0.78	0.65-0.89	y	53.4	37.5-62.5	PCB-88/91	1.63	1.32-1.78	y	106.1	75.0-125	
PCB-51	0.78	0.65-0.89	y	49.5	37.5-62.5	PCB-121	1.61	1.32-1.78	y	52.2	37.5-62.5	
PCB-45	0.79	0.65-0.89	y	49.9	37.5-62.5							
PCB-46	0.78	0.65-0.89	y	50.5	37.5-62.5							

Analyst: DMSDate: 2/25/15

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST150225E1-1

Instrument ID: VG-8

Initial Calibration Date: 1-14-15

ICal ID: PCBVG8-1-14-15

GC Column ID: ZB-1

VER Data Filename: 150225E1 S#1 Analysis Date: 25-FEB-15 Time: 13:07:41

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	1.57	1.32-1.78	y	101.6	75.0-125	PCB-140	1.27	1.05-1.43	y	48.8	37.5-62.5
PCB-89	1.59	1.32-1.78	y	51.5	37.5-62.5	PCB-134/143	1.24	1.05-1.43	y	98.6	75.0-125
PCB-90/101	1.57	1.32-1.78	y	100.0	75.0-125	PCB-133/142	1.25	1.05-1.43	y	98.8	75.0-125
PCB-113	1.55	1.32-1.78	y	51.3	37.5-62.5	PCB-131	1.25	1.05-1.43	y	49.3	37.5-62.5
PCB-99	1.60	1.32-1.78	y	44.4	37.5-62.5	PCB-146/165	1.25	1.05-1.43	y	99.0	75.0-125
PCB-119	1.58	1.32-1.78	y	49.6	37.5-62.5	PCB-132/161	1.26	1.05-1.43	y	97.0	75.0-125
PCB-108/112	1.56	1.32-1.78	y	101.1	75.0-125	PCB-153	1.25	1.05-1.43	y	45.3	37.5-62.5
PCB-83	1.58	1.32-1.78	y	52.8	37.5-62.5	PCB-168	1.25	1.05-1.43	y	48.3	37.5-62.5
PCB-97	1.54	1.32-1.78	y	50.8	37.5-62.5	PCB-141	1.24	1.05-1.43	y	48.2	37.5-62.5
PCB-86	1.63	1.32-1.78	y	44.7	37.5-62.5	PCB-137	1.20	1.05-1.43	y	46.8	37.5-62.5
PCB-87/117/125	1.55	1.32-1.78	y	151.8	112.5-225	PCB-130	1.28	1.05-1.43	y	50.8	37.5-62.5
PCB-111/115	1.54	1.32-1.78	y	104.0	75.0-125	PCB-138/163/164	1.25	1.05-1.43	y	141.7	112.5-225
PCB-85/116	1.58	1.32-1.78	y	96.0	75.0-125	PCB-158/160	1.24	1.05-1.43	y	94.5	75.0-125
PCB-120	1.58	1.32-1.78	y	47.6	37.5-62.5	PCB-129	1.26	1.05-1.43	y	48.7	37.5-62.5
PCB-110	1.60	1.32-1.78	y	51.9	37.5-62.5	PCB-166	1.23	1.05-1.43	y	48.1	37.5-62.5
PCB-82	1.59	1.32-1.78	y	50.3	37.5-62.5	PCB-159	1.25	1.05-1.43	y	49.6	37.5-62.5
PCB-124	1.55	1.32-1.78	y	49.3	37.5-62.5	PCB-128/162	1.23	1.05-1.43	y	99.8	75.0-125
PCB-107/109	1.57	1.32-1.78	y	99.9	75.0-125	PCB-167	1.25	1.05-1.43	y	49.7	37.5-62.5
PCB-123	1.59	1.32-1.78	y	50.8	37.5-62.5	PCB-156	1.26	1.05-1.43	y	49.1	37.5-62.5
PCB-106/118	1.58	1.32-1.78	y	98.5	75.0-125	PCB-157	1.26	1.05-1.43	y	47.6	37.5-62.5
PCB-114	1.56	1.32-1.78	y	41.3	37.5-62.5	PCB-169	1.26	1.05-1.43	y	50.0	37.5-62.5
PCB-122	1.60	1.32-1.78	y	44.1	37.5-62.5	PCB-188	1.06	0.89-1.21	y	48.1	37.5-62.5
PCB-105	1.60	1.32-1.78	y	41.8	37.5-62.5	PCB-184	1.06	0.89-1.21	y	47.8	37.5-62.5
PCB-127	1.61	1.32-1.78	y	42.4	37.5-62.5	PCB-179	1.06	0.89-1.21	y	46.5	37.5-62.5
PCB-126	1.61	1.32-1.78	y	44.3	37.5-62.5	PCB-176	1.08	0.89-1.21	y	45.6	37.5-62.5
PCB-155	1.29	1.05-1.43	y	49.6	37.5-62.5	PCB-186	1.07	0.89-1.21	y	48.1	37.5-62.5
PCB-150	1.28	1.05-1.43	y	47.0	37.5-62.5	PCB-178	1.05	0.89-1.21	y	45.4	37.5-62.5
PCB-152	1.29	1.05-1.43	y	45.0	37.5-62.5	PCB-175	1.04	0.89-1.21	y	45.0	37.5-62.5
PCB-145	1.28	1.05-1.43	y	47.2	37.5-62.5	PCB-182/187	1.06	0.89-1.21	y	92.1	75.0-125
PCB-136	1.24	1.05-1.43	y	47.6	37.5-62.5	PCB-183	1.08	0.89-1.21	y	47.5	37.5-62.5
PCB-148	1.28	1.05-1.43	y	46.9	37.5-62.5	PCB-185	1.07	0.89-1.21	y	46.5	37.5-62.5
PCB-154	1.25	1.05-1.43	y	45.5	37.5-62.5	PCB-174	1.04	0.89-1.21	y	45.0	37.5-62.5
PCB-151	1.24	1.05-1.43	y	47.0	37.5-62.5	PCB-181	1.06	0.89-1.21	y	49.1	37.5-62.5
PCB-135	1.27	1.05-1.43	y	45.5	37.5-62.5	PCB-177	1.06	0.89-1.21	y	46.4	37.5-62.5
PCB-144	1.23	1.05-1.43	y	51.5	37.5-62.5	PCB-171	1.07	0.89-1.21	y	46.8	37.5-62.5
PCB-147	1.25	1.05-1.43	y	46.7	37.5-62.5	PCB-173	1.06	0.89-1.21	y	50.1	37.5-62.5
PCB-139/149	1.24	1.05-1.43	y	96.3	75.0-125	PCB-172	1.06	0.89-1.21	y	46.8	37.5-62.5

Analyst: DMSDate: 2/25/15

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST150225E1-1

Instrument ID: VG-8

Initial Calibration Date: 1-14-15

ICal ID: PCBVG8-1-14-15

GC Column ID: ZB-1

VER Data Filename: 150225E1 S#1 Analysis Date: 25-FEB-15 Time: 13:07:41

ANALYTES	ION	QC	CONC.	
	ABUND.	LIMITS	CONC.	RANGE
	RATIO	PASS	FOUND	(ng/mL)
PCB-192	1.05	0.89-1.21	y	47.4 37.5-62.5
PCB-180	1.07	0.89-1.21	y	46.8 37.5-62.5
PCB-193	1.05	0.89-1.21	y	47.8 37.5-62.5
PCB-191	1.06	0.89-1.21	y	49.0 37.5-62.5
PCB-170	1.05	0.89-1.21	y	46.4 37.5-62.5
PCB-190	1.06	0.89-1.21	y	48.1 37.5-62.5
PCB-189	1.05	0.89-1.21	y	48.0 37.5-62.5
PCB-202	0.91	0.76-1.02	y	49.9 37.5-62.5
PCB-201	0.89	0.76-1.02	y	48.6 37.5-62.5
PCB-204	0.87	0.76-1.02	y	49.6 37.5-62.5
PCB-197	0.90	0.76-1.02	y	50.3 37.5-62.5
PCB-200	0.90	0.76-1.02	y	50.8 37.5-62.5
PCB-198	0.87	0.76-1.02	y	51.8 37.5-62.5
PCB-199	0.90	0.76-1.02	y	50.1 37.5-62.5
PCB-196/203	0.89	0.76-1.02	y	99.5 75.0-125
PCB-195	0.91	0.76-1.02	y	40.5 37.5-62.5
PCB-194	0.92	0.76-1.02	y	44.0 37.5-62.5
PCB-205	0.92	0.76-1.02	y	45.9 37.5-62.5
PCB-208	1.32	1.14-1.54	y	49.2 37.5-62.5
PCB-207	1.30	1.14-1.54	y	48.3 37.5-62.5
PCB-206	1.33	1.14-1.54	y	48.4 37.5-62.5
PCB-209	1.18	0.99-1.33	y	47.0 37.5-62.5

Analyst: DmsDate: 2/25/15

LABLED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: B5B0101-BS1 Instrument ID: VG-8

Initial Calibration Date: ICAL ID: PCVG8-1-14-15 GC Column ID: ZB-1

VER Data Filename: 150225E1 S#3 Analysis Date: 25-FEB-15 Time: 15:16:01

LABLED IS	ION				CONC.		LABLED IS	ION				CONC.	
	ABUND.	QC	CONC.	RANGE	FOUND	(ng/mL)		ABUND.	QC	CONC.	RANGE	FOUND	(ng/mL)
	RATIO	LIMITS	PASS					RATIO	LIMITS	PASS			
13C-PCB-1	3.22	2.66-3.60	y	81.6	50.0-145		13C-PCB-169	1.27	1.05-1.43	y	84.8	50 - 145	
13C-PCB-3	3.14	2.66-3.60	y	92.0	50.0-145		13C-PCB-188	0.46	0.38-0.52	y	75.6	50 - 145	
13C-PCB-4	1.60	1.33-1.79	y	71.4	50.0-145		13C-PCB-180	0.47	0.38-0.52	y	84.1	50 - 145	
13C-PCB-9	1.54	1.33-1.79	y	73.0	50.0-145		13C-PCB-170	0.47	0.38-0.52	y	85.7	50 - 145	
13C-PCB-11	1.55	1.33-1.79	y	81.1	50.0-145		13C-PCB-189	0.45	0.38-0.52	y	82.1	50 - 145	
13C-PCB-19	1.08	0.88-1.20	y	97.4	50.0-145		13C-PCB-202	0.92	0.76-1.02	y	81.5	50 - 145	
13C-PCB-32	1.08	0.88-1.20	y	99.7	50.0-145		13C-PCB-194	0.91	0.76-1.02	y	91.2	50 - 145	
13C-PCB-28	1.04	0.88-1.20	y	86.7	50.0-145		13C-PCB-208	0.77	0.65-0.89	y	98.9	50 - 145	
13C-PCB-37	1.05	0.88-1.20	y	102.7	50.0-145		13C-PCB-206	0.79	0.65-0.89	y	97.5	50 - 145	
13C-PCB-54	0.79	0.65-0.89	y	70.7	50.0-145		13C-PCB-209	1.23	0.99-1.33	y	96.7	50 - 145	
13C-PCB-52	0.79	0.65-0.89	y	82.9	50.0-145								
13C-PCB-47	0.79	0.65-0.89	y	81.3	50.0-145								
13C-PCB-70	0.81	0.65-0.89	y	93.3	50.0-145								
13C-PCB-80	0.78	0.65-0.89	y	88.5	50.0-145								
13C-PCB-81	0.80	0.65-0.89	y	85.9	50.0-145								
13C-PCB-77	0.80	0.65-0.89	y	84.8	50.0-145								
13C-PCB-104	1.65	1.32-1.78	y	89.9	50.0-145								
13C-PCB-95	1.66	1.32-1.78	y	92.8	50.0-145								
13C-PCB-101	1.64	1.32-1.78	y	98.0	50.0-145		CRS vs. RS						
13C-PCB-97	1.66	1.32-1.78	y	100.9	50.0-145								
13C-PCB-123	1.65	1.32-1.78	y	93.1	50.0-145		13C-PCB-79	0.79	0.65-0.89	y	93.8	75 - 125	
13C-PCB-118	1.67	1.32-1.78	y	88.0	50.0-145		13C-PCB-178	0.47	0.38-0.52	y	86.9	75 - 125	
13C-PCB-114	1.59	1.32-1.78	y	74.6	50.0-145								
13C-PCB-105	1.61	1.32-1.78	y	77.4	50.0-145								
13C-PCB-127	1.56	1.32-1.78	y	76.2	50.0-145								
13C-PCB-126	1.58	1.32-1.78	y	79.6	50.0-145								
13C-PCB-155	1.26	1.05-1.43	y	86.9	50.0-145								
13C-PCB-153	1.28	1.05-1.43	y	83.5	50.0-145								
13C-PCB-141	1.30	1.05-1.43	y	84.4	50.0-145								
13C-PCB-138	1.29	1.05-1.43	y	85.7	50.0-145								
13C-PCB-159	1.28	1.05-1.43	y	89.7	50.0-145								
13C-PCB-167	1.29	1.05-1.43	y	86.2	50.0-145								
13C-PCB-156	1.29	1.05-1.43	y	88.4	50.0-145								
13C-PCB-157	1.28	1.05-1.43	y	87.8	50.0-145								

Analyst: DMSDate: 2/26/15

Client ID: PCB CS3 14L1801
Lab ID: ST150225E1-1

Filename: 150225E1 S:1 Acq:25-FEB-15 13:07:41 ConCal: ST150225E1-1
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 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	6.48e+07	2.98	y	1.33	16:09	1.001	0.997-1.007	38.8652	PCB-52/69	8.42e+07	0.78	y	1.29	31:30	1.001	0.996-1.006	103.208
PCB-2	6.24e+07	3.01	y	1.30	18:31	0.988	0.983-0.993	38.0611	PCB-73	4.27e+07	0.79	y	1.41	31:37	1.005	0.999-1.009	47.8508
PCB-3	6.41e+07	2.97	y	1.30	18:45	1.001	0.996-1.006	39.0219	PCB-43/49	7.29e+07	0.79	y	1.14	31:47	1.010	1.005-1.015	101.299
PCB-4/10	8.86e+07	1.60	y	1.67	20:07	1.003	0.997-1.007	80.6557	PCB-47	3.51e+07	0.77	y	1.20	31:58	1.000	0.996-1.006	45.0530
PCB-7/9	1.01e+08	1.62	y	1.25	21:53	0.868	0.864-0.872	84.2409	PCB-48/75	8.66e+07	0.79	y	1.33	32:05	1.004	0.999-1.009	100.445
PCB-6	5.42e+07	1.63	y	1.24	22:32	0.894	0.888-0.897	45.5223	PCB-65	4.02e+07	0.76	y	1.32	32:22	1.012	1.007-1.017	46.9863
PCB-5/8	1.03e+08	1.61	y	1.27	22:57	0.911	0.905-0.915	84.6393	PCB-62	4.15e+07	0.79	y	1.36	32:28	1.016	1.011-1.021	47.0500
PCB-14	5.89e+07	1.62	y	1.47	24:02	0.954	0.948-0.958	41.3874	PCB-44	2.99e+07	0.79	y	0.87	32:46	1.025	1.020-1.030	52.8010
PCB-11	5.15e+07	1.62	y	1.28	25:13	1.001	0.995-1.005	41.4526	PCB-42/59	8.29e+07	0.78	y	1.24	33:00	1.032	1.027-1.037	103.093
PCB-12/13	1.02e+08	1.61	y	1.27	25:37	1.016	1.011-1.021	82.9227	PCB-41/64/71/72	1.77e+08	0.78	y	1.34	33:35	1.051	1.045-1.055	203.986
PCB-15	5.80e+07	1.59	y	1.44	25:55	1.028	1.023-1.031	41.6028	PCB-68	4.68e+07	0.78	y	1.61	33:51	1.059	1.053-1.063	44.6976
PCB-19	3.97e+07	1.06	y	1.18	24:13	1.001	0.996-1.006	49.0641	PCB-40	2.63e+07	0.76	y	0.86	34:03	1.065	1.061-1.071	47.2379
PCB-30	5.79e+07	1.06	y	1.87	25:06	1.038	1.033-1.043	45.2534	PCB-57	4.36e+07	0.77	y	1.12	34:25	0.970	0.965-0.975	45.7379
PCB-18	4.05e+07	1.05	y	0.89	25:51	0.954	0.949-0.959	48.8607	PCB-67	4.33e+07	0.78	y	1.09	34:43	0.979	0.974-0.984	46.6688
PCB-17	4.43e+07	1.06	y	0.96	26:01	0.960	0.956-0.966	49.4466	PCB-58	4.57e+07	0.78	y	1.14	34:50	0.982	0.977-0.987	47.2634
PCB-24/27	1.15e+08	1.06	y	1.30	26:36	0.981	0.977-0.987	94.5767	PCB-63	4.77e+07	0.77	y	1.16	35:00	0.987	0.981-0.991	48.1441
- PCB-16/32	9.58e+07	1.06	y	1.05	27:06	1.000	0.996-1.006	97.6628	PCB-74	4.96e+07	0.77	y	1.21	35:17	0.995	0.989-0.999	48.0528
- PCB-34	5.16e+07	1.10	y	1.30	27:54	0.960	0.955-0.965	41.9681	PCB-61/70	9.21e+07	0.77	y	1.13	35:27	0.999	0.995-1.005	96.1849
PCB-23	4.97e+07	1.09	y	1.21	28:00	0.964	0.958-0.968	43.5200	PCB-76/66	9.90e+07	0.77	y	1.18	35:40	1.005	1.000-1.010	98.6502
PCB-29	5.08e+07	1.09	y	1.21	28:14	0.972	0.967-0.977	44.4312	PCB-80	5.95e+07	0.78	y	1.32	35:55	1.001	0.995-1.005	48.7944
PCB-26	5.15e+07	1.09	y	1.24	28:27	0.979	0.974-0.984	44.0349	PCB-55	5.52e+07	0.77	y	1.23	36:14	1.010	1.004-1.014	48.6638
PCB-25	4.69e+07	1.09	y	1.10	28:37	0.985	0.980-0.990	45.2744	PCB-56/60	1.05e+08	0.77	y	1.11	36:43	1.023	1.018-1.028	102.815
PCB-31	5.28e+07	1.10	y	1.25	28:57	0.996	0.992-1.002	44.6427	PCB-79	5.31e+07	0.78	y	1.16	37:47	1.053	1.048-1.058	49.6735
PCB-28	5.60e+07	1.07	y	1.24	29:04	1.000	0.996-1.006	47.8978	PCB-78	4.96e+07	0.78	y	1.18	38:29	0.987	0.982-0.992	47.2119
PCB-20/21/33	1.51e+08	1.08	y	1.16	29:41	1.022	1.016-1.026	138.463	PCB-81	5.35e+07	0.77	y	1.29	39:01	1.001	0.995-1.005	46.4706
PCB-22	4.89e+07	1.07	y	1.16	30:08	1.037	1.032-1.042	44.5451	PCB-77	5.33e+07	0.80	y	1.29	39:36	1.000	0.995-1.005	47.2875
PCB-36	4.87e+07	1.09	y	1.30	30:44	0.933	0.929-0.939	45.6492	PCB-104	3.45e+07	1.57	y	1.26	32:38	1.001	0.996-1.006	50.8045
PCB-39	5.14e+07	1.09	y	1.26	31:13	0.948	0.943-0.953	49.6325	PCB-96	2.91e+07	1.58	y	1.09	33:53	1.039	1.034-1.044	49.6658
PCB-38	4.58e+07	1.08	y	1.24	31:59	0.971	0.967-0.977	44.9200	PCB-103	2.62e+07	1.55	y	0.97	34:26	1.056	1.051-1.061	50.4808
PCB-35	4.67e+07	1.10	y	1.26	32:30	0.987	0.982-0.992	45.2982	PCB-100	2.64e+07	1.55	y	0.96	34:46	1.066	1.061-1.071	51.0480
PCB-37	5.33e+07	1.09	y	1.35	32:56	1.000	0.996-1.006	48.1440	PCB-94	2.33e+07	1.55	y	1.13	35:15	0.985	0.980-0.990	49.8475
PCB-54	4.90e+07	0.77	y	1.02	27:57	1.001	0.996-1.006	51.2246	PCB-95/98/102	8.24e+07	1.57	y	1.29	35:44	0.999	0.994-1.004	154.222
PCB-50	3.77e+07	0.76	y	0.78	29:07	1.042	1.037-1.047	51.8491	PCB-93	2.05e+07	1.62	y	1.06	35:52	1.003	0.998-1.008	46.5960
PCB-53	3.84e+07	0.78	y	1.14	29:45	0.946	0.941-0.951	53.4034	PCB-88/91	4.94e+07	1.63	y	1.12	36:09	1.010	1.006-1.016	106.134
PCB-51	3.63e+07	0.78	y	1.16	30:06	0.957	0.952-0.962	49.4771	PCB-121	3.81e+07	1.61	y	1.76	36:16	1.014	1.009-1.019	52.1783
PCB-45	3.28e+07	0.79	y	1.04	30:32	0.971	0.965-0.975	49.8563	PCB-84/92	5.30e+07	1.57	y	1.07	37:05	0.990	0.985-0.995	101.620
PCB-46	3.03e+07	0.78	y	0.95	31:01	0.986	0.981-0.991	50.5018	PCB-89	2.50e+07	1.59	y	1.00	37:16	0.995	0.990-1.000	51.4630

Integrations
by _____
Reviewed
by _____
Analyst: *DMS*
Analyst: _____

RL: MONO, TRI - DECA: _____ Date: *2/25/14* Date: _____

Client ID: PCB CS3 14L1801
Lab ID: ST150225E1-1

Filename: 150225E1 S:1 Acq:25-FEB-15 13:07:41 ConCal: ST150225E1-1
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 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	5.88e+07	1.57	y	1.21	37:28	1.000	0.995-1.005	99.9514	PCB-133/142	5.74e+07	1.25	y	0.91	42:24	0.982	0.977-0.987	98.7816
PCB-113	3.35e+07	1.55	y	1.34	37:42	1.006	1.002-1.012	51.3154	PCB-131	2.66e+07	1.25	y	0.85	42:33	0.986	0.981-0.991	49.2530
PCB-99	2.70e+07	1.60	y	1.25	37:48	1.009	1.004-1.014	44.4158	PCB-146/165	6.84e+07	1.25	y	1.08	42:46	0.991	0.986-0.996	99.0104
PCB-119	3.66e+07	1.58	y	1.88	38:15	0.987	0.982-0.992	49.6089	PCB-132/161	6.93e+07	1.26	y	1.12	43:01	0.997	0.992-1.002	97.0055
PCB-108/112	5.58e+07	1.56	y	1.41	38:25	0.991	0.986-0.996	101.091	PCB-153	3.47e+07	1.25	y	1.20	43:11	1.000	0.996-1.006	45.3135
PCB-83	3.45e+07	1.58	y	1.66	38:35	0.996	0.990-1.000	52.8456	PCB-168	4.18e+07	1.25	y	1.36	43:24	1.005	1.000-1.010	48.2636
PCB-97	2.59e+07	1.54	y	1.30	38:46	1.000	0.995-1.005	50.7963	PCB-141	2.98e+07	1.24	y	1.16	43:55	1.000	0.995-1.005	48.2460
PCB-86	1.81e+07	1.63	y	1.03	38:55	1.004	0.999-1.009	44.7264	PCB-137	2.94e+07	1.20	y	1.18	44:18	1.009	1.004-1.014	46.8197
B-87/117/125	9.48e+07	1.55	y	1.59	39:02	1.007	1.002-1.012	151.793	PCB-130	2.50e+07	1.28	y	0.92	44:24	1.011	1.006-1.016	50.8079
PCB-111/115	7.58e+07	1.54	y	1.86	39:12	1.012	1.006-1.016	104.015	PCB-138/163/164	1.07e+08	1.25	y	1.38	44:47	1.001	0.996-1.006	141.670
PCB-85/116	5.25e+07	1.58	y	1.39	39:20	1.015	1.010-1.020	96.0215	PCB-158/160	7.66e+07	1.24	y	1.48	45:02	1.006	1.001-1.011	94.4748
PCB-120	3.71e+07	1.58	y	1.99	39:34	1.021	1.016-1.026	47.6182	PCB-129	2.64e+07	1.26	y	0.99	45:16	1.012	1.007-1.017	48.6709
PCB-110	3.47e+07	1.60	y	1.70	39:43	1.025	1.019-1.029	51.9360	PCB-166	3.63e+07	1.23	y	1.14	45:44	0.993	0.988-0.998	48.0636
PCB-82	2.01e+07	1.59	y	0.74	40:20	0.976	0.971-0.981	50.2893	PCB-159	4.01e+07	1.25	y	1.22	46:03	1.000	0.995-1.005	49.6229
PCB-124	3.45e+07	1.55	y	1.30	41:00	0.992	0.988-0.998	49.2693	PCB-128/162	6.83e+07	1.23	y	1.03	46:19	1.006	1.002-1.012	99.8136
PCB-107/109	7.17e+07	1.57	y	1.34	41:09	0.996	0.991-1.001	99.9463	PCB-167	4.00e+07	1.25	y	1.18	46:44	1.001	0.995-1.005	49.7308
PCB-123	3.42e+07	1.59	y	1.25	41:20	1.000	0.995-1.005	50.8261	PCB-156	3.92e+07	1.26	y	1.27	48:01	1.000	0.995-1.005	49.0666
- PCB-106/118	7.34e+07	1.58	y	1.29	41:32	1.001	0.996-1.006	98.4505	PCB-157	3.98e+07	1.26	y	1.22	48:17	1.000	0.995-1.005	47.6306
- PCB-114	3.76e+07	1.56	y	1.45	42:10	1.000	0.995-1.005	41.3164	PCB-169	3.53e+07	1.26	y	1.07	50:25	1.000	0.995-1.005	50.0019
PCB-122	3.37e+07	1.60	y	1.22	42:18	1.003	0.999-1.009	44.0826	PCB-188	3.58e+07	1.06	y	1.52	42:49	1.000	0.996-1.006	48.1329
PCB-105	4.02e+07	1.60	y	1.56	43:02	1.001	0.995-1.005	41.7972	PCB-184	3.13e+07	1.06	y	1.34	43:16	1.011	1.006-1.016	47.8203
PCB-127	3.52e+07	1.61	y	1.31	43:21	1.000	0.995-1.005	42.4438	PCB-179	3.17e+07	1.06	y	1.39	44:03	1.029	1.024-1.034	46.4994
PCB-126	3.63e+07	1.61	y	1.41	45:16	1.000	0.995-1.005	44.2978	PCB-176	3.25e+07	1.08	y	1.45	44:31	1.040	1.035-1.045	45.6061
PCB-155	2.88e+07	1.29	y	1.20	37:01	1.001	0.966-1.006	49.5690	PCB-186	3.43e+07	1.07	y	1.46	45:07	1.054	1.049-1.059	48.1031
PCB-150	2.57e+07	1.28	y	1.13	38:17	1.034	1.030-1.040	47.0317	PCB-178	2.39e+07	1.05	y	1.07	45:37	1.066	1.061-1.071	45.3864
PCB-152	2.55e+07	1.29	y	1.17	38:46	1.048	1.043-1.053	45.0127	PCB-175	2.31e+07	1.04	y	1.05	45:57	1.074	1.069-1.079	45.0414
PCB-145	2.50e+07	1.28	y	1.09	39:12	1.060	1.055-1.065	47.2234	PCB-182/187	5.12e+07	1.06	y	1.14	46:08	1.078	1.073-1.083	92.1384
PCB-136	2.64e+07	1.24	y	1.14	39:32	1.068	1.063-1.073	47.5940	PCB-183	2.84e+07	1.08	y	1.22	46:26	1.085	1.080-1.090	47.4939
PCB-148	1.86e+07	1.28	y	0.82	39:38	1.071	1.066-1.076	46.8805	PCB-185	2.29e+07	1.07	y	1.40	47:07	0.956	0.950-0.960	46.4530
PCB-154	1.96e+07	1.25	y	0.89	40:07	1.084	1.079-1.089	45.4781	PCB-174	2.03e+07	1.04	y	1.29	47:28	0.963	0.958-0.968	44.9615
PCB-151	1.87e+07	1.24	y	0.82	40:45	1.102	1.097-1.107	47.0409	PCB-181	2.32e+07	1.06	y	1.35	47:35	0.965	0.960-0.970	49.1059
PCB-135	1.76e+07	1.27	y	0.80	40:58	1.107	1.101-1.113	45.4808	PCB-177	2.06e+07	1.06	y	1.27	47:45	0.969	0.963-0.973	46.3590
PCB-144	2.14e+07	1.23	y	0.86	41:05	1.110	1.105-1.116	51.5452	PCB-171	2.39e+07	1.07	y	1.46	48:02	0.975	0.969-0.979	46.8094
PCB-147	1.76e+07	1.25	y	0.78	41:13	1.114	1.108-1.120	46.6813	PCB-173	1.94e+07	1.06	y	1.10	48:28	0.983	0.978-0.988	50.1454
PCB-139/149	4.07e+07	1.24	y	0.87	41:29	1.121	1.115-1.127	96.2928	PCB-172	2.22e+07	1.06	y	1.35	48:54	0.992	0.987-0.997	46.7838
- PCB-140	1.84e+07	1.27	y	0.78	41:40	1.126	1.120-1.132	48.7999	PCB-192	2.89e+07	1.05	y	1.74	49:06	0.996	0.991-1.001	47.3820
- PCB-134/143	5.87e+07	1.24	y	0.93	42:06	0.975	0.970-0.980	98.6372	PCB-180	2.38e+07	1.07	y	1.45	49:19	1.000	0.995-1.005	46.8178

Integrations

by

Analyst: DMS

Date: 2/25/15

Client ID: PCB CS3 14L1801
Lab ID: ST150225E1-1

Filename: 150225E1 S:1 Acq:25-FEB-15 13:07:41 ConCal: ST150225E1-1
GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-193	3.10e+07	1.05	y	1.85	49:31	1.005	0.999-1.009	47.8120
PCB-191	3.20e+07	1.06	y	1.86	49:45	1.009	1.005-1.015	48.9685
PCB-170	2.17e+07	1.05	y	1.67	50:47	1.000	0.995-1.005	46.4017
PCB-190	3.02e+07	1.06	y	2.25	50:57	1.004	0.999-1.009	48.0672
PCB-189	3.03e+07	1.05	y	1.67	52:14	1.000	0.995-1.005	48.0439
PCB-202	2.18e+07	0.91	y	1.02	48:14	1.000	0.995-1.005	49.9175
PCB-201	2.29e+07	0.89	y	1.10	48:43	1.010	1.005-1.015	48.6122
PCB-204	2.29e+07	0.87	y	1.07	48:52	1.014	1.009-1.019	49.6495
PCB-197	2.52e+07	0.90	y	1.17	49:11	1.020	1.015-1.025	50.3421
PCB-200	2.26e+07	0.90	y	1.03	50:03	1.038	1.034-1.044	50.7750
PCB-198	1.68e+07	0.87	y	0.75	51:21	1.065	1.062-1.072	51.7948
PCB-199	1.60e+07	0.90	y	0.74	51:28	1.067	1.064-1.074	50.0991
- PCB-196/203	3.54e+07	0.89	y	0.83	51:43	1.073	1.070-1.080	99.5015
- PCB-195	2.11e+07	0.91	y	1.14	52:52	0.984	0.979-0.989	40.5445
PCB-194	2.59e+07	0.92	y	1.29	53:45	1.000	0.995-1.005	43.9867
PCB-205	3.37e+07	0.92	y	1.61	54:01	1.005	1.001-1.010	45.8552
PCB-208	3.05e+07	1.32	y	1.01	53:01	1.000	0.995-1.005	49.1685
PCB-207	3.04e+07	1.30	y	1.03	53:20	1.006	1.001-1.011	48.3389
PCB-206	1.98e+07	1.33	y	0.88	55:23	1.000	0.995-1.005	48.3785
PCB-209	2.87e+07	1.18	y	1.35	56:43	1.000	0.995-1.005	46.9669

Name	Resp	RA	RT	RRF	Conc		
Total Mono-PCB	1.91e+08	2.98	y	16:09	1.31	115.948	
Total Di-PCB	6.21e+08	1.60	y	20:07	1.32	505.124	
Total Tri-PCB	3.93e+08	1.06	y	24:13	1.20	384.878	
Total Tetra-PCB	8.09e+08	1.10	y	27:54	1.23	731.359	Sum:1116.24
Total Penta-PCB	1.86e+09	0.77	y	27:57	1.17	2091.67	
Total Hepta-PCB	1.23e+09	1.57	y	32:38	1.24	2063.75	
Total Hexa-PCB	1.91e+08	1.56	y	42:10	1.39	223.520	Sum:2287.27
Total Octa-PCB	3.04e+08	1.29	y	37:01	0.94	664.630	
Total Nona-PCB	9.63e+08	1.24	y	42:06	1.13	1378.91	Sum:2043.54
Total Deca-PCB	6.50e+08	1.06	y	42:49	1.37	1143.76	
Total Octa-PCB	1.84e+08	0.91	y	48:14	0.95	450.692	
Total Nona-PCB	8.23e+07	0.91	y	52:52	1.35	133.099	Sum:583.791
Total Deca-PCB	8.09e+07	1.32	y	53:01	0.99	146.468	
Total PCB Conc:	10006.0353010						

Total PCB Conc:10006.0353010

Integrations
by _____
Analyst: DMS
Date: 2/25/15

Client ID: PCB CS3 14L1801
 Lab ID: ST150225E1-1

Filename: 150225E1 S:1 Acq:25-FEB-15 13:07:41
 GC Column ID: ZB-1 ICal: PCBVG8-1-14-15 wt/vol:1.0000
 ConCal: ST150225E1-1
 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	1.25e+08	3.14	y	0.91	16:08	0.623	0.619-0.625	134	134	13C-PCB-79	9.53e+07	0.80	y	1.02	37:46	1.029	1.024-1.033	95.8	95.8																															
13C-PCB-3	1.27e+08	3.19	y	0.94	18:44	0.723	0.718-0.726	131	131	13C-PCB-178	2.93e+07	0.46	y	0.64	45:34	0.984	0.980-0.989	94.0	94.0																															
13C-PCB-4	6.56e+07	1.56	y	0.60	20:04	0.774	0.770-0.778	107	107	PS vs. IS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec																												
13C-PCB-9	9.63e+07	1.55	y	0.96	21:50	0.843	0.839-0.847	97.5	97.5	13C-PCB-79	9.53e+07	0.80	y	1.02	37:46	0.969	0.963-0.973	104	104																															
13C-PCB-11	9.69e+07	1.53	y	0.95	25:12	0.973	0.968-0.978	98.7	98.7	13C-PCB-178	2.93e+07	0.46	y	0.84	45:34	0.924	0.920-0.930	99.0	99.0																															
13C-PCB-19	6.82e+07	1.07	y	0.56	24:11	0.934	0.929-0.939	118	118	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec																												
13C-PCB-28	9.46e+07	1.05	y	1.07	29:03	1.004	0.999-1.009	107	107	13C-PCB-79	9.53e+07	0.80	y	1.02	37:46	0.969	0.963-0.973	104	104																															
13C-PCB-32	9.37e+07	1.08	y	0.83	27:06	1.046	1.041-1.051	110	110	13C-PCB-178	2.93e+07	0.46	y	0.84	45:34	0.924	0.920-0.930	99.0	99.0																															
13C-PCB-37	8.20e+07	1.04	y	0.96	32:56	1.138	1.131-1.143	104	104	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec																												
13C-PCB-47	6.51e+07	0.79	y	0.77	31:58	0.871	0.867-0.875	87.0	87.0	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec																					
13C-PCB-52	6.32e+07	0.78	y	0.71	31:27	0.857	0.853-0.861	91.1	91.1	13C-PCB-31	8.23e+07	1.04	y	1.00	28:56	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec														
13C-PCB-54	9.35e+07	0.79	y	1.06	27:56	0.761	0.757-0.765	90.5	90.5	13C-PCB-60	9.74e+07	0.78	y	1.00	36:43	100	13C-PCB-31	8.23e+07	1.04	y	1.00	28:56	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec							
13C-PCB-70	8.51e+07	0.79	y	0.99	35:28	0.966	0.961-0.971	88.0	88.0	13C-PCB-111	5.96e+07	1.72	y	1.00	39:11	100	13C-PCB-60	9.74e+07	0.78	y	1.00	36:43	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-77	8.75e+07	0.79	y	0.96	39:36	1.078	1.073-1.083	93.1	93.1	13C-PCB-111	5.96e+07	1.72	y	1.00	39:11	100	13C-PCB-128	4.89e+07	1.26	y	1.00	46:18	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-80	9.22e+07	0.82	y	1.02	35:53	0.977	0.973-0.983	92.6	92.6	13C-PCB-111	5.96e+07	1.72	y	1.00	39:11	100	13C-PCB-128	4.89e+07	1.26	y	1.00	46:18	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-81	8.93e+07	0.78	y	1.00	38:60	1.062	1.057-1.067	91.9	91.9	13C-PCB-128	4.89e+07	1.26	y	1.00	46:18	100	13C-PCB-128	4.89e+07	1.26	y	1.00	46:18	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-95	4.14e+07	1.66	y	0.70	35:47	0.913	0.908-0.918	99.5	99.5	13C-PCB-128	4.89e+07	1.26	y	1.00	46:18	100	13C-PCB-205	6.08e+07	0.91	y	1.00	54:00	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-97	3.92e+07	1.72	y	0.66	38:45	0.989	0.984-0.994	100	100	13C-PCB-205	6.08e+07	0.91	y	1.00	54:00	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-101	4.87e+07	1.68	y	0.77	37:27	0.956	0.951-0.961	107	107	13C-PCB-31	8.23e+07	1.04	y	1.00	28:56	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-104	5.37e+07	1.62	y	0.97	32:37	0.832	0.828-0.836	93.2	93.2	13C-PCB-60	9.74e+07	0.78	y	1.00	36:43	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-105	6.17e+07	1.59	y	1.20	43:01	0.929	0.924-0.934	105	105	13C-PCB-111	5.96e+07	1.72	y	1.00	39:11	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-114	6.25e+07	1.58	y	1.26	42:09	0.910	0.905-0.915	102	102	13C-PCB-111	5.96e+07	1.72	y	1.00	39:11	100	13C-PCB-128	4.89e+07	1.26	y	1.00	46:18	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-118	5.78e+07	1.71	y	0.94	41:30	1.059	1.054-1.064	103	103	13C-PCB-111	5.96e+07	1.72	y	1.00	39:11	100	13C-PCB-128	4.89e+07	1.26	y	1.00	46:18	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-123	5.37e+07	1.68	y	0.88	41:19	1.054	1.049-1.059	102	102	13C-PCB-128	4.89e+07	1.26	y	1.00	46:18	100	13C-PCB-205	6.08e+07	0.91	y	1.00	54:00	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-126	5.79e+07	1.58	y	1.13	45:15	0.977	0.972-0.982	105	105	13C-PCB-205	6.08e+07	0.91	y	1.00	54:00	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-127	6.36e+07	1.58	y	1.26	43:21	0.936	0.931-0.941	104	104	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-138	5.49e+07	1.29	y	1.12	44:45	0.966	0.961-0.971	100	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name		Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-141	5.34e+07	1.25	y	1.09	43:55	0.948	0.943-0.953	100	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	13C-PCB-15	1.03e+08	1.54	y	1.00	25:55	100	RS		Name										

Vista Analytical Laboratory - Injection Log Run file: 150225E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
150225E1	1	ST150225E1-1	DMS	25-FEB-15	13:07:41	ST150225E1-1	NA
150225E1	2	SOLVENT BLANK	DMS	25-FEB-15	14:11:51	ST150225E1-1	NA
150225E1	3	B5B0101-BS1	DMS	25-FEB-15	15:16:01	ST150225E1-1	NA
150225E1	4	B5B0085-BS1	DMS	25-FEB-15	16:20:10	ST150225E1-1	NA
150225E1	5	SOLVENT BLANK	DMS	25-FEB-15	17:24:26	ST150225E1-1	NA
150225E1	6	B5B0101-BLK1	DMS	25-FEB-15	18:28:35	ST150225E1-1	NA
150225E1	7	B5B0085-BLK1	DMS	25-FEB-15	19:32:49	ST150225E1-1	NA
150225E1	8	1500147-01RE3@40X	DMS	25-FEB-15	20:36:58	ST150225E1-1	NA
150225E1	9	1500147-01RE3@20X	DMS	25-FEB-15	21:41:08	ST150225E1-1	NA
150225E1	10	1500147-01RE3@10X	DMS	25-FEB-15	22:45:17	ST150225E1-1	NA
150225E1	11	1500147-01RE3	DMS	25-FEB-15	23:49:26	ST150225E1-1	NA
150225E1	12	SOLVENT BLANK	DMS	26-FEB-15	00:53:34	ST150225E1-1	NA
150225E1	13	SOLVENT BLANK	DMS	26-FEB-15	01:57:42	ST150225E1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST



Beg. Calibration ID: ST150225E1-1

End Calibration ID: N/A

	<u>Beg.</u>	<u>End</u>		<u>Beg.</u>	<u>End</u>
Ion abundance within QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/> NA	Mass resolution $\geq 10,000$?	<input type="checkbox"/>	<input type="checkbox"/>
Concentration within range?	<input type="checkbox"/>	<input type="checkbox"/>	TCDD/TCDF valleys $< 25\%$?	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/> N/A
First and last eluters present?	<input type="checkbox"/>	<input type="checkbox"/>	Peaks integrated correctly?	<input type="checkbox"/>	<input type="checkbox"/>
Retention Times within criteria?	<input checked="" type="checkbox"/> 2025.00	<input type="checkbox"/>	Manual integrations included?	<input type="checkbox"/>	<input type="checkbox"/>
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	<input type="checkbox"/>	<input type="checkbox"/>	8280 CS1 Ending Standard		
Forms signed and dated?	<input type="checkbox"/>	<input type="checkbox"/>	-Ratios within limits	<input type="checkbox"/>	<input type="checkbox"/>
Correct ICAL referenced?	<input type="checkbox"/>	<input type="checkbox"/>	-S/N $> 2.5:1$	<input type="checkbox"/>	<input type="checkbox"/>
Run Log:			-CS1 within 12-hour clock	<input type="checkbox"/>	<input checked="" type="checkbox"/> ✓
-Data file matches Conc Cal ID?	<input type="checkbox"/>	<input type="checkbox"/>	Comments:		
-Correct instrument listed?	<input type="checkbox"/>	<input checked="" type="checkbox"/> ✓			
-Samples within 12-hour clock?	<input checked="" type="checkbox"/> y	<input type="checkbox"/> n			

Reviewed by: M 2/26/15

Initials & Date

* Ending standard criteria applicable to 8290 only.

INITIAL CALIBRATION

Initial Calibration RRF Summary (ICAL)

Run: 141016D1

Vista Analytical Laboratory

Analyte:

Cal: 1613VG7-1-7-15

Inst. ID. VG-7

Data filename: 141016D1

	Samp# 1	Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 1
	10	0.25	0.50	2.0	40	300

Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
2,3,7,8-TCDD	1.17	9.14 %	1.11	1.36	1.22	1.06	1.16	1.12
1,2,3,7,8-PeCDD	0.91	4.03 %	0.93	0.94	0.93	0.84	0.93	0.89
1,2,3,4,7,8-HxCDD	1.08	5.35 %	1.08	1.18	1.07	1.00	1.08	1.07
1,2,3,6,7,8-HxCDD	1.06	5.61 %	1.06	1.06	1.06	0.96	1.13	1.12
1,2,3,7,8,9-HxCDD	0.93	4.13 %	0.92	0.98	0.95	0.86	0.93	0.95
1,2,3,4,6,7,8-HpCDD	1.10	3.57 %	1.12	1.04	1.14	1.07	1.14	1.11
OCDD	0.95	4.86 %	0.97	0.96	0.97	0.85	0.97	0.97
2,3,7,8-TCDF	1.07	6.82 %	1.00	1.16	1.15	0.99	1.08	1.04
1,2,3,7,8-PeCDF	1.07	4.51 %	1.10	1.13	1.05	1.00	1.11	1.06
2,3,4,7,8-PeCDF	1.03	3.55 %	1.05	1.04	1.06	0.96	1.07	1.02
1,2,3,4,7,8-HxCDF	1.38	3.14 %	1.40	1.42	1.37	1.31	1.42	1.39
1,2,3,6,7,8-HxCDF	1.26	5.25 %	1.26	1.34	1.29	1.14	1.26	1.27
2,3,4,6,7,8-HxCDF	1.29	3.82 %	1.28	1.30	1.33	1.20	1.34	1.29
1,2,3,7,8,9-HxCDF	1.19	3.32 %	1.16	1.25	1.18	1.13	1.20	1.19
1,2,3,4,6,7,8-HpCDF	1.61	4.02 %	1.59	1.67	1.66	1.49	1.64	1.61
1,2,3,4,7,8,9-HpCDF	1.53	4.55 %	1.54	1.58	1.55	1.39	1.53	1.57
OCDF	1.10	3.96 %	1.11	1.09	1.13	1.01	1.13	1.11
13C-2,3,7,8-TCDD	1.06	3.81 %	1.05	1.00	1.07	1.04	1.10	1.10
13C-1,2,3,7,8-PeCDD	1.18	9.13 %	1.06	1.09	1.23	1.23	1.34	1.11
13C-1,2,3,4,7,8-HxCDD	0.72	5.98 %	0.70	0.69	0.70	0.70	0.73	0.80
13C-1,2,3,6,7,8-HxCDD	0.74	6.30 %	0.72	0.71	0.71	0.71	0.73	0.83
13C-1,2,3,7,8,9-HxCDD	0.85	6.05 %	0.83	0.81	0.83	0.83	0.86	0.95
13C-1,2,3,4,6,7,8-HpCDD	0.65	10.75 %	0.63	0.61	0.61	0.62	0.66	0.79
13C-OCDD	0.76	5.80 %	0.70	0.73	0.76	0.77	0.79	0.82
13C-2,3,7,8-TCDF	0.92	2.26 %	0.93	0.89	0.91	0.91	0.94	0.93
13C-1,2,3,7,8-PeCDF	0.92	6.20 %	0.86	0.87	0.90	0.95	1.01	0.94
13C-2,3,4,7,8-PeCDF	0.93	5.50 %	0.89	0.89	0.91	0.96	1.02	0.92
13C-1,2,3,4,7,8-HxCDF	0.98	5.30 %	0.92	0.94	0.96	0.98	1.01	1.07
13C-1,2,3,6,7,8-HxCDF	1.08	5.13 %	1.07	1.00	1.05	1.09	1.12	1.16
13C-2,3,4,6,7,8-HxCDF	1.03	4.15 %	0.97	1.00	1.02	1.01	1.04	1.10
13C-1,2,3,7,8,9-HxCDF	0.86	7.80 %	0.84	0.82	0.82	0.83	0.87	0.99
13C-1,2,3,4,6,7,8-HpCDF	0.72	9.95 %	0.70	0.69	0.67	0.69	0.72	0.86
13C-1,2,3,4,7,8,9-HpCDF	0.70	6.18 %	0.65	0.69	0.67	0.67	0.74	0.76
13C-OCDF	0.85	5.23 %	0.82	0.80	0.83	0.85	0.88	0.92
37Cl-2,3,7,8-TCDD	1.12	13.99 %	1.22	1.08	1.03	1.24	1.27	0.86
13C-1,2,3,4-TCDD	1.00	0.00 %	1.00	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	1.00
13C-1,2,3,4,6,9-HxCDF	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00

ms 1/9/15
dy 1/9/15

ct 1/9/15

Filename: 141016D1 S: 1 Acquired: 16-OCT-14 11:05:57
 Run: 141016D1 Analyte: Cal: 1613VG7-1-7-15 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: 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: 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	3.56e+05	1.22 y	34:59	-	1.06
5	Unk	1,2,3,7,8,9-HxCDD	2.50	3.72e+05	1.18 y	35:17	-	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: 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: Results:
 Sample text: ST141016D1-5 1613 CS4 14II1822

	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: 150107D1 S: 1 Acquired: 7-JAN-15 10:43:31
 Run: 141016D1 Analyte: Cal: 1613VG7-1-7-15 Results:
 Sample text: ST150107D1-1 1613 CS5 15A0502

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	300.00	9.22e+07	0.77 y	26:59	-	1.12
2	Unk	1,2,3,7,8-PeCDD	1500.00	3.69e+08	0.62 y	31:40	-	0.89
3	Unk	1,2,3,4,7,8-HxCDD	1500.00	3.48e+08	1.26 y	34:59	-	1.07
4	Unk	1,2,3,6,7,8-HxCDD	1500.00	3.80e+08	1.25 y	35:06	-	1.12
5	Unk	1,2,3,7,8,9-HxCDD	1500.00	3.67e+08	1.25 y	35:23	-	0.95
6	Unk	1,2,3,4,6,7,8-HpCDD	1500.00	3.56e+08	1.05 y	38:54	-	1.11
7	Unk	OCDD	3000.00	6.47e+08	0.90 y	42:09	-	0.97
8	Unk	2,3,7,8-TCDF	300.00	1.19e+08	0.78 y	26:09	-	1.04
9	Unk	1,2,3,7,8-PeCDF	1500.00	6.12e+08	1.59 y	30:27	-	1.06
10	Unk	2,3,4,7,8-PeCDF	1500.00	5.74e+08	1.56 y	31:23	-	1.02
11	Unk	1,2,3,4,7,8-HxCDF	1500.00	6.02e+08	1.28 y	34:06	-	1.39
12	Unk	1,2,3,6,7,8-HxCDF	1500.00	5.99e+08	1.28 y	34:14	-	1.27
13	Unk	2,3,4,6,7,8-HxCDF	1500.00	5.77e+08	1.29 y	34:50	-	1.29
14	Unk	1,2,3,7,8,9-HxCDF	1500.00	4.82e+08	1.30 y	35:46	-	1.19
15	Unk	1,2,3,4,6,7,8-HpCDF	1500.00	5.67e+08	1.07 y	37:34	-	1.61
16	Unk	1,2,3,4,7,8,9-HpCDF	1500.00	4.84e+08	1.07 y	39:27	-	1.57
17	Unk	OCDF	3000.00	8.27e+08	0.92 y	42:22	-	1.11
36	IS	13C-2,3,7,8-TCDD	100.00	2.74e+07	0.80 y	26:57	-	1.10
37	IS	13C-1,2,3,7,8-PeCDD	100.00	2.75e+07	0.62 y	31:39	-	1.11
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	2.18e+07	1.22 y	34:58	-	0.80
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	2.25e+07	1.30 y	35:05	-	0.83
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	2.59e+07	1.25 y	35:22	-	0.95
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	2.15e+07	1.07 y	38:53	-	0.79
42	IS	13C-OCDD	200.00	4.45e+07	0.91 y	42:08	-	0.82
43	IS	13C-2,3,7,8-TCDF	100.00	3.80e+07	0.75 y	26:08	-	0.93
44	IS	13C-1,2,3,7,8-PeCDF	100.00	3.84e+07	1.58 y	30:27	-	0.94
45	IS	13C-2,3,4,7,8-PeCDF	100.00	3.74e+07	1.62 y	31:22	-	0.92
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	2.90e+07	0.52 y	34:05	-	1.07
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	3.15e+07	0.52 y	34:13	-	1.16
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	2.98e+07	0.51 y	34:49	-	1.10
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	2.69e+07	0.51 y	35:45	-	0.99
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	2.34e+07	0.44 y	37:34	-	0.86
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	2.06e+07	0.45 y	39:26	-	0.76
52	IS	13C-OCDF	200.00	4.97e+07	0.90 y	42:22	-	0.92
53	C/Up	37Cl-2,3,7,8-TCDD	300.00	6.41e+07		26:59	-	0.86
54	RS/RT	13C-1,2,3,4-TCDD	100.00	2.48e+07	0.80 y	26:21	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	4.08e+07	0.78 y	24:48	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	2.71e+07	0.51 y	34:30	-	1.00

Run: 141016D1

Analyte:

Cal: 1613VG7-1-7-15

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# 1 300
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Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
Total Tetra-Dioxins	1.17	9.14 %	1.11	1.36	1.22	1.06	1.16	1.12
TCDD EMPC	1.17	9.14 %	1.11	1.36	1.22	1.06	1.16	1.12
Total Penta-Dioxins	0.91	4.03 %	0.93	0.94	0.93	0.84	0.93	0.89
PeCDD EMPC	0.91	4.03 %	0.93	0.94	0.93	0.84	0.93	0.89
Total Hexa-Dioxins	1.02	4.32 %	1.02	1.07	1.02	0.94	1.04	1.04
HxCDD EMPC	1.02	4.32 %	1.02	1.07	1.02	0.94	1.04	1.04
Total Hepta-Dioxins	1.10	3.57 %	1.12	1.04	1.14	1.07	1.14	1.11
HxCDD EMPC	1.10	3.57 %	1.12	1.04	1.14	1.07	1.14	1.11
Total Tetra-Furans	1.07	6.82 %	1.00	1.16	1.15	0.99	1.08	1.04
TCDF EMPC	1.07	6.82 %	1.00	1.16	1.15	0.99	1.08	1.04
1st Func. Penta-Furans	1.05	3.80 %	1.07	1.08	1.05	0.98	1.09	1.04
1st Func. PeCDF EMPC	1.05	3.80 %	1.07	1.08	1.05	0.98	1.09	1.04
Total Penta-Furans	1.05	3.80 %	1.07	1.08	1.05	0.98	1.09	1.04
PeCDF EMPC	1.05	3.80 %	1.07	1.08	1.05	0.98	1.09	1.04
Total Hexa-Furans	1.28	3.62 %	1.28	1.33	1.30	1.19	1.31	1.29
HxCDF EMPC	1.28	3.62 %	1.28	1.33	1.30	1.19	1.31	1.29
Total Hepta-Furans	1.57	4.17 %	1.57	1.62	1.60	1.44	1.59	1.59
HpCDF EMPC	1.57	4.17 %	1.57	1.62	1.60	1.44	1.59	1.59

Initial Calibration RRF Summary (ICAL)

Run: 141016D1

Analyte:

Vista Analytical Laboratory

Cal: 1613VG7-1-7-15

Page 1 of 1

Inst. ID. VG-7

Data filename: 141016D1

	Samp# 1	Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 1
	10	0.25	0.50	2.0	40	300

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	1.001
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	1.000
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	1.023	
13C-1,2,3,7,8-PeCDD	1.000	-1.567	1.192	1.191	1.191	1.191	1.201	
13C-1,2,3,4,7,8-HxCDD	1.002	-1.026	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	
13C-1,2,3,7,8,9-HxCDD	1.014	-1.038	1.026	1.026	1.026	1.026	1.025	
13C-1,2,3,4,6,7,8-HpCDD	1.117	-1.141	1.127	1.126	1.126	1.126	1.127	
13C-OCDD	1.085	-1.365	1.224	1.223	1.223	1.223	1.222	
13C-2,3,7,8-TCDF	0.923	-1.103	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	1.155
13C-2,3,4,7,8-PeCDF	1.011	-1.526	1.182	1.181	1.180	1.180	1.180	1.190
13C-1,2,3,4,7,8-HxCDF	0.975	-1.001	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	
13C-2,3,4,6,7,8-HxCDF	1.001	-1.020	1.009	1.009	1.009	1.009	1.009	
13C-1,2,3,7,8,9-HxCDF	1.002	-1.072	1.037	1.038	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	1.089	
13C-1,2,3,4,7,8,9-HpCDF	1.098	-1.192	1.143	1.142	1.143	1.143	1.143	
13C-OCDF	1.091	-1.371	1.230	1.230	1.230	1.230	1.228	
37Cl-2,3,7,8-TCDD	0.989	-1.052	1.022	1.022	1.022	1.022	1.024	
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	*	*	*	*	*	*

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST141016D1-1

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141016D1 S#1 Analysis Date: 16-OCT-14 Time: 11:05:57

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	0.73	0.65-0.89 y	9.45	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	50.9	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43 y	50.2	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43 y	49.6	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43 y	49.6	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20 y	50.8	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02 y	102	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89 y	9.38	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78 y	51.3	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78 y	50.7	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43 y	50.6	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43 y	50.2	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.31	1.05-1.43 y	49.6	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43 y	49.1	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.08	0.88-1.20 y	49.4	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.07	0.88-1.20 y	50.4	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02 y	101	63.0 - 159.0

Analyst: MDate: 1/8/15

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141016D1 S#1 Analysis Date: 16-OCT-14 Time: 11:05:57

Labeled Compounds	M/Z'S FORMING	ION RATIO (1)	QC ABUND.	QC LIMITS	CONC.	RANGE
			(2)	Pass	Conc.	(ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	98.9	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	90.0	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	96.6	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	98.4	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	97.3	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	95.7	72.0 - 138.0
13C-OCDD	M/M+2	0.89	0.76-1.02	y	182	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.74	0.65-0.89	y	102	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	92.8	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	95.2	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	94.1	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	99.0	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	94.9	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	97.1	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.43	0.37-0.51	y	97.2	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.45	0.37-0.51	y	93.4	77.0 - 129.0
13C-OCDF	M+2/M+4	0.92	0.76-1.02	y	192	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					10.9	7.9 - 12.7

Analyst: mj

Date: 10/15

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

CCAL ID: ST141016D1-1

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141016D1 S#1 Analysis Date: 16-OCT-14 Time: 11:05:57

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	CONC. Pass	CONC. FOUND	RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.73	0.65-0.89 y	9.45	8.00 - 12.0	
1,2,3,7,8-PeCDD	M/M+2	0.61	0.54-0.72 y	50.9	40.0 - 60.0	
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43 y	50.2	40.0 - 60.0	
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43 y	49.6	40.0 - 60.0	
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43 y	49.6	40.0 - 60.0	
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20 y	50.8	40.0 - 60.0	
OCDD	M+2/M+4	0.89	0.76-1.02 y	102	80.0 - 120	
2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89 y	9.38	8.00 - 12.0	
1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78 y	51.3	40.0 - 60.0	
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78 y	50.7	40.0 - 60.0	
1,2,3,4,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43 y	50.6	40.0 - 60.0	
1,2,3,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43 y	50.2	40.0 - 60.0	
2,3,4,6,7,8-HxCDF	M+2/M+4	1.31	1.05-1.43 y	49.6	40.0 - 60.0	
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43 y	49.1	40.0 - 60.0	
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.08	0.88-1.20 y	49.4	40.0 - 60.0	
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.07	0.88-1.20 y	50.4	40.0 - 60.0	
OCDF	M+2/M+4	0.91	0.76-1.02 y	101	80.0 - 120	

Analyst: MDate: 1/8/15

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141016D1 S#1 Analysis Date: 16-OCT-14 Time: 11:05:57

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. CONC. FOUND	RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	98.9	70.0 - 130
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	90.0	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	96.6	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	98.4	70.0 - 130
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	97.3	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	95.7	70.0 - 130
13C-OCDD	M+2/M+4	0.89	0.76-1.02	y	182	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.74	0.65-0.89	y	102	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	92.8	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	95.2	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	94.1	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	99.0	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	94.9	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	97.1	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.43	0.37-0.51	y	97.2	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	93.4	70.0 - 130
13C-OCDF	M+2/M+4	0.92	0.76-1.02	y	192	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					10.9	7.00 - 13.0

Analyst: m)Date: 1/8/15

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141016D1 S#1 Analysis Date: 16-OCT-14 Time: 11:05:57

Compounds Using ¹³C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME	RRT	
	REFERENCE	RR _T	QC LIMITS (1)
2,3,7,8-TCDD	¹³ C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	¹³ C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
2,3,7,8-TCDF	¹³ C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	¹³ C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	¹³ C-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

¹³ C-2,3,7,8-TCDD	¹³ C-1,2,3,4-TCDD	1.021	0.976-1.043
¹³ C-1,2,3,7,8-PeCDD	¹³ C-1,2,3,4-TCDD	1.192	1.000-1.567
¹³ C-2,3,7,8-TCDF	¹³ C-1,2,3,4-TCDD	0.992	0.923-1.103
¹³ C-1,2,3,7,8-PeCDF	¹³ C-1,2,3,4-TCDD	1.148	1.000-1.425
¹³ C-2,3,4,7,8-PeCDF	¹³ C-1,2,3,4-TCDD	1.182	1.011-1.526
³⁷ Cl-2,3,7,8-TCDD	¹³ C-1,2,3,4-TCDD	1.022	0.989-1.052

Analyst: M
Date: 1/8/15

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 1-7-15

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141016D1 S#1 Analysis Date: 16-OCT-14 Time: 11:05:57

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	1.001	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	1.037	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	1.224	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.230	1.091-1.371

Analyst: MJ

Date: 1/8/15

Client ID: 1613 CS3 14I1102
 Lab ID: ST141016D1-1

Filename: 141016D1 S:1 Acq:16-OCT-14 11:05:57
 GC Column ID: ZB-5MS ICal: 1613VG7-1-7-15 wt/vol: 1.000

ConCal: NA
 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	2.08e+06	0.73 y	1.17	26:60	1.001	9.4477	*	2.5	*		Total Tetra-Dioxins	54.8	55.1	*	*	
	1,2,3,7,8-PeCDD	8.78e+06	0.61 y	0.91	31:30	1.000	50.922	*	2.5	*		Total Penta-Dioxins	159	159	*	*	
	1,2,3,4,7,8-HxCDD	7.82e+06	1.26 y	1.08	34:50	1.000	50.237	*	2.5	*		Total Hexa-Dioxins	194	195	*	*	
	1,2,3,6,7,8-HxCDD	7.94e+06	1.25 y	1.06	34:57	1.001	49.601	*	2.5	*		Total Hepta-Dioxins	128	128	*	*	
	1,2,3,7,8,9-HxCDD	7.97e+06	1.24 y	0.93	35:15	1.000	49.631	*	2.5	*		Total Tetra-Furans	30.0	30.3	*	*	
	1,2,3,4,6,7,8-HpCDD	7.29e+06	1.04 y	1.10	38:42	1.000	50.805	*	2.5	*		Total Penta-Furans	209.92	210.51	*	*	
	OCDD	1.40e+07	0.89 y	0.95	42:02	1.000	102.06	*	2.5	*		Total Hexa-Furans	248	249	*	*	
												Total Hepta-Furans	102	102	*	*	
	2,3,7,8-TCDF	2.78e+06	0.80 y	1.07	26:13	1.001	9.3791	*	2.5	*							
	1,2,3,7,8-PeCDF	1.40e+07	1.59 y	1.07	30:20	1.000	51.276	*	2.5	*							
	2,3,4,7,8-PeCDF	1.38e+07	1.59 y	1.03	31:14	1.000	50.741	*	2.5	*							
	1,2,3,4,7,8-HxCDF	1.34e+07	1.29 y	1.38	33:56	1.000	50.629	*	2.5	*							
	1,2,3,6,7,8-HxCDF	1.40e+07	1.29 y	1.26	34:04	1.001	50.176	*	2.5	*							
	2,3,4,6,7,8-HxCDF	1.29e+07	1.31 y	1.29	34:40	1.001	49.592	*	2.5	*							
	1,2,3,7,8,9-HxCDF	1.01e+07	1.27 y	1.19	35:39	1.000	49.090	*	2.5	*							
	1,2,3,4,6,7,8-HpCDF	1.16e+07	1.08 y	1.61	37:30	1.000	49.399	*	2.5	*							
	1,2,3,4,7,8,9-HpCDF	1.04e+07	1.07 y	1.53	39:16	1.000	50.426	*	2.5	*							
	OCDF	1.88e+07	0.91 y	1.10	42:16	1.000	100.89	*	2.5	*							
												Rec	Qual				
IS	13C-2,3,7,8-TCDD	1.87e+07	0.79 y	1.06	26:58	1.021	98.865					98.9					
IS	13C-1,2,3,7,8-PeCDD	1.90e+07	0.63 y	1.18	31:29	1.192	90.040					90.0					
IS	13C-1,2,3,4,7,8-HxCDD	1.44e+07	1.25 y	0.72	34:49	1.014	96.577					96.6					
IS	13C-1,2,3,6,7,8-HxCDD	1.50e+07	1.25 y	0.74	34:56	1.017	98.426					98.4					
IS	13C-1,2,3,7,8,9-HxCDD	1.72e+07	1.23 y	0.85	35:14	1.026	97.305					97.3					
IS	13C-1,2,3,4,6,7,8-HpCDD	1.30e+07	1.07 y	0.65	38:42	1.127	95.724					95.7					
IS	13C-OCDD	2.89e+07	0.89 y	0.76	42:02	1.224	182.02					91.0					
IS	13C-2,3,7,8-TCDF	2.77e+07	0.74 y	0.92	26:12	0.992	101.61					102					
IS	13C-1,2,3,7,8-PeCDF	2.54e+07	1.55 y	0.92	30:19	1.148	92.843					92.8					
IS	13C-2,3,4,7,8-PeCDF	2.63e+07	1.61 y	0.93	31:13	1.182	95.246					95.2					
IS	13C-1,2,3,4,7,8-HxCDF	1.92e+07	0.51 y	0.98	33:55	0.988	94.089					94.1					
IS	13C-1,2,3,6,7,8-HxCDF	2.23e+07	0.50 y	1.08	34:03	0.991	99.047					99.0					
IS	13C-2,3,4,6,7,8-HxCDF	2.02e+07	0.52 y	1.03	34:39	1.009	94.921					94.9					
IS	13C-1,2,3,7,8,9-HxCDF	1.73e+07	0.51 y	0.86	35:38	1.037	97.069					97.1					
IS	13C-1,2,3,4,6,7,8-HpCDF	1.46e+07	0.43 y	0.72	37:29	1.091	97.247					97.2					
IS	13C-1,2,3,4,7,8,9-HpCDF	1.35e+07	0.45 y	0.70	39:15	1.143	93.423					93.4					
IS	13C-OCDF	3.39e+07	0.92 y	0.85	42:15	1.230	192.38					96.2					
C/Up	37Cl-2,3,7,8-TCDD	2.18e+06		1.12	26:59	1.022	10.884					2180	Integrations by Analyst: <u>M</u>	Reviewed by Analyst: <u>C7</u>	Date: <u>1/01/15</u>	Date: <u>1/12/15</u>	
RS/RT	13C-1,2,3,4-TCDD	1.79e+07	0.80 y	1.00	26:24	*	100.00										
RS	13C-1,2,3,4-TCDF	2.97e+07	0.78 y	1.00	24:58	*	100.00										
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.08e+07	0.51 y	1.00	34:21	*	100.00										

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	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
150107D1	1	ST150107D1-1	MAS	7-JAN-15	10:43:31	ST141016D1-1	NA

Dataset: C:\MassLynx\Default.pro\Results\141113F1\141113F1_CRV.qld

Last Altered: Friday, November 14, 2014 07:50:29 Pacific Standard Time

Printed: Friday, November 14, 2014 08:18:43 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 13 Nov 2014 15:04:53

Calibration: C:\MassLynx\Default.pro\Curvedb\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Compound name: 2,3,7,8-TCDF

Response Factor: 1.10023

RRF SD: 0.100726, Relative SD: 9.15499

Response type: Internal Std (Ref 2), Area * (IS Conc. / IS Area)

Curve type: RF

	#-Name	Std. Conc.	RA	n/y	RT	Resp	IS Resp	Conc.	RRF
1	1 141113F1_2	0.250	0.76	NO	17.52	2.58e3	9.20e5	0.255	1.12
2	2 141113F1_3	0.500	0.88	NO	17.54	5.25e3	1.05e6	0.455	1.00
3	3 141113F1_4	2.00	0.76	NO	17.52	2.24e4	1.16e6	1.76	0.968
4	4 141113F1_5	40.0	0.78	NO	17.52	5.36e5	1.16e6	41.8	1.15
5	5 141113F1_6	200	0.80	NO	17.52	3.07e6	1.24e6	226	1.24
6	6 141113F1_7	10.0	0.86	NO	17.55	1.30e5	1.16e6	10.2	1.12

CB 11/14/14

11/14/14

Compound name: 13C-2,3,7,8-TCDF

Response Factor: 0.843843

RRF SD: 0.0230178, Relative SD: 2.72774

Response type: Internal Std (Ref 3), Area * (IS Conc. / IS Area)

Curve type: RF

	#-Name	Std. Conc.	RA	n/y	RT	Resp	IS Resp	Conc.	RRF
1	1 141113F1_2	100	0.79	NO	17.51	9.20e5	1.11e6	98.2	0.829
2	2 141113F1_3	100	0.79	NO	17.51	1.05e6	1.28e6	97.4	0.822
3	3 141113F1_4	100	0.79	NO	17.51	1.16e6	1.37e6	99.6	0.840
4	4 141113F1_5	100	0.80	NO	17.51	1.16e6	1.31e6	105	0.885
5	5 141113F1_6	100	0.81	NO	17.51	1.24e6	1.45e6	101	0.853
6	6 141113F1_7	100	0.81	NO	17.52	1.16e6	1.39e6	98.8	0.833

Dataset: C:\MassLynx\Default.pro\Results\141113F1\141113F1_CRV.qld

Last Altered: Friday, November 14, 2014 07:50:29 Pacific Standard Time

Printed: Friday, November 14, 2014 08:18:43 Pacific Standard Time

Compound name: 13C-1,2,3,4-TCDF

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 3), Area * (IS Conc. / IS Area)

Curve type: RF

	#-Name	Std. Conc.	RA	n/y	RT	Resp	IS Resp	Conc.	RRF
1	1 141113F1_2	100	0.81	NO	15.25	1.11e6	1.11e6	100	1.00
2	2 141113F1_3	100	0.81	NO	15.23	1.28e6	1.28e6	100	1.00
3	3 141113F1_4	100	0.80	NO	15.23	1.37e6	1.37e6	100	1.00
4	4 141113F1_5	100	0.80	NO	15.23	1.31e6	1.31e6	100	1.00
5	5 141113F1_6	100	0.82	NO	15.23	1.45e6	1.45e6	100	1.00
6	6 141113F1_7	100	0.81	NO	15.25	1.39e6	1.39e6	100	1.00

Compound name: 13C-1,2,3,4-TCDD

No Calibration

Response type: External Std, Area

Curve type: RF

	#-Name	Std. Conc.	RA	n/y	RT	Resp	IS Resp	Conc.	RRF
1	1 141113F1_2	0.000	0.80	NO	16.00	7.79e5		0.000	
2	2 141113F1_3	0.000	0.78	NO	16.00	9.07e5		0.000	
3	3 141113F1_4	0.000	0.80	NO	16.00	9.36e5		0.000	
4	4 141113F1_5	0.000	0.80	NO	16.00	9.46e5		0.000	
5	5 141113F1_6	0.000	0.79	NO	16.00	1.03e6		0.000	
6	6 141113F1_7	0.000	0.79	NO	16.00	9.83e5		0.000	

Dataset: C:\MassLynx\Default.pro\Results\141113F1\141113F1_CRV.qld

Last Altered: Friday, November 14, 2014 07:50:29 Pacific Standard Time

Printed: Friday, November 14, 2014 08:16:25 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 13 Nov 2014 15:04:53

Calibration: C:\MassLynx\Default.pro\Curvedb\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 141113F1_7, Date: 13-Nov-2014, Time: 17:16:30, ID: ST141113F1-6 1613 CS3 14I1102, Description: 1613 CS3 14I1102

	#-Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	1.30e5	0.86	NO	1.10	1.000	17.55	10.185	102	0.217
2	2 13C-2,3,7,8-TCDF	1.16e6	0.81	NO	0.844	1.000	17.52	98.766	98.8	0.302
3	3 13C-1,2,3,4-TCDF	1.39e6	0.81	NO	1.00	1.000	15.25	100.00	100	0.255
4	4 13C-1,2,3,4-TCDD	9.83e5	0.79	NO		1.000	16.00			

CO 11/14/14

Dataset: Untitled

Last Altered: Friday, November 14, 2014 07:58:55 Pacific Standard Time

Printed: Friday, November 14, 2014 08:07:25 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 13 Nov 2014 15:04:53

Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\11-13-TEST.cdb 14 Nov 2014 07:50:26

Compound name: 2,3,7,8-TCDF

	Name	ID	Acq.Date	Acq.Time
1	141113F1_1	CP141113F1-1 DB-225 CPSM	13-Nov-14	14:06:21
2	141113F1_2	ST141113F1-1 1613 CS0 14I1819	13-Nov-14	14:37:32
3	141113F1_3	ST141113F1-2 1613 CS1 14I1820	13-Nov-14	15:09:19
4	141113F1_4	ST141113F1-3 1613 CS2 14I1821	13-Nov-14	15:41:06
5	141113F1_5	ST141113F1-4 1613 CS4 14I1822	13-Nov-14	16:12:54
6	141113F1_6	ST141113F1-5 1613 CS5 14I1823	13-Nov-14	16:44:42
7	141113F1_7	ST141113F1-6 1613 CS3 14I1102	13-Nov-14	17:16:30
8	141113F1_8	SOLVENT BLANK	13-Nov-14	17:48:17
9	141113F1_9	SS141113F1-1 1613 SSS 13J3107	13-Nov-14	18:20:05
10	141113F1_10	SOLVENT BLANK	13-Nov-14	18:53:47
11	141113F1_11	1400819-01RE1 DP-1 CF 0.93853	13-Nov-14	19:23:48
12	141113F1_12	1400819-02RE1 RP-4 CF 0.95774	13-Nov-14	19:55:36
13	141113F1_13	1400824-02RE1 Secondary Sludge CF 19.78	13-Nov-14	20:27:24
14	141113F1_14	1400785-01RE1 DU1SU2 CF 29.92	13-Nov-14	20:59:12
15	141113F1_15	1400785-02RE1 DU1SU4 CF 31.78	13-Nov-14	21:31:00
16	141113F1_16	1400789-01RE1 DU1SU5 CF 33.89	13-Nov-14	22:02:48
17	141113F1_17	1400789-02RE1 DU2SU17 CF 30.06	13-Nov-14	22:34:35
18	141113F1_18	1400789-03RE1 DU2SU9 CF 29.99	13-Nov-14	23:06:23
19	141113F1_19	1400789-04RE1 DU2SU10 CF 30.04	13-Nov-14	23:38:10
20	141113F1_20	SOLVENT BLANK	14-Nov-14	00:09:58
21	141113F1_21	1400798-01RE1 DU2SU19 CF 31.55	14-Nov-14	00:43:33
22	141113F1_22	1400798-02RE1 DU2SU28 CF 33.04	14-Nov-14	01:13:41
23	141113F1_23	1400798-03RE1 DU2SU36 CF 30.86	14-Nov-14	01:45:28
24	141113F1_24	1400798-04RE1 DU2SU30-1 CF 32.41	14-Nov-14	02:17:16
25	141113F1_25	1400798-05RE1 DU2SU30-2 CF 33.37	14-Nov-14	02:49:03
26	141113F1_26	1400798-06RE1 DU2SU30-3 CF 30.24	14-Nov-14	03:20:52
27	141113F1_27	SOLVENT BLANK	14-Nov-14	03:52:41
28	141113F1_28	SOLVENT BLANK	14-Nov-14	04:24:29
29	141113F1_29	SOLVENT BLANK	14-Nov-14	04:56:17

Dataset: C:\MassLynx\Default.pro\Results\141113F1\141113F1_9.qld

Last Altered: Friday, November 14, 2014 08:14:45 Pacific Standard Time

Printed: Friday, November 14, 2014 08:22:47 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 13 Nov 2014 15:04:53

Calibration: C:\MassLynx\Default.pro\Curvedb\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 141113F1_9, Date: 13-Nov-2014, Time: 18:20:05, ID: SS141113F1-1 1613 SSS 13J3107, Description: 1613 SSS 13J3107

	#-Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	1.48e5	0.81	NO	1.10	1.000	17.54	8.9493	89.5	0.0832
2	2 13C-2,3,7,8-TCDF	1.51e6	0.81	NO	0.844	1.000	17.52	109.62	110	0.171
3	3 13C-1,2,3,4-TCDF	1.63e6	0.81	NO	1.00	1.000	15.25	100.00	100	0.145
4	4 13C-1,2,3,4-TCDD	1.29e6	0.78	NO		1.000	16.00			

QY 11/14/14

Initial Calibration RRF Summary (ICAL)
Run: 140623E2

Vista Analytical Laboratory
Analyte: PCBNEW
Cal: PCBVG8-6-23-14

Inst. ID. VG 8

Page 1 of 1

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 ݄	Total Tri-PCB	0.00	-	- n	-	-	1.06
172	Tot ݄	Total Tri-PCB	0.00	-	- n	-	-	1.33
173	Tot ݄	Total Tetra-PCB	0.00	-	- n	-	-	1.14
174	Tot ݄	Total Penta-PCB	0.00	-	- n	-	-	1.18
175	Tot ݄	Total Penta-PCB	0.00	-	- n	-	-	1.28
176	Tot ݄	Total Hexa-PCB	0.00	-	- n	-	-	0.90
177	Tot ݄	Total Hexa-PCB	0.00	-	- n	-	-	1.13
178	Tot ݄	Total Hepta-PCB	0.00	-	- n	-	-	1.41
179	Tot ݄	Total Octa-PCB	0.00	-	- n	-	-	0.92
180	Tot ݄	Total Octa-PCB	0.00	-	- n	-	-	1.33
181	Tot ݄	Total Nona-PCB	0.00	-	- n	-	-	1.03
182	Tot ݄	Total Deca-PCB	0.25	1.20e+05	1.18 y	56:37	-	1.15
183	Mono݄	13C-PCB-1	100.00	1.84e+08	3.30 y	16:23	-	1.00
184	Mono݄	13C-PCB-3	100.00	1.91e+08	3.30 y	18:53	-	1.04
185	Di-IS	13C-PCB-4	100.00	1.10e+08	1.58 y	20:10	-	0.60
186	Di-IS	13C-PCB-9	100.00	1.66e+08	1.58 y	21:54	-	0.90
187	Di-IS	13C-PCB-11	100.00	1.74e+08	1.56 y	25:12	-	0.95
188	Tri-݄	13C-PCB-19	100.00	1.07e+08	1.08 y	24:13	-	0.58
189	Tri-݄	13C-PCB-32	100.00	1.60e+08	1.07 y	27:05	-	0.87
190	Tri-݄	13C-PCB-28	100.00	1.55e+08	1.06 y	29:00	-	0.92
191	Tri-݄	13C-PCB-37	100.00	1.46e+08	1.07 y	32:51	-	0.87
192	Tetr݄	13C-PCB-54	100.00	1.29e+08	0.80 y	27:54	-	0.96
193	Tetr݄	13C-PCB-52	100.00	1.08e+08	0.80 y	31:23	-	0.80
194	Tetr݄	13C-PCB-47	100.00	1.14e+08	0.80 y	31:53	-	0.85
195	Tetr݄	13C-PCB-70	100.00	1.38e+08	0.80 y	35:24	-	1.03
196	Tetr݄	13C-PCB-80	100.00	1.41e+08	0.80 y	35:48	-	1.05
197	Tetr݄	13C-PCB-81	100.00	1.22e+08	0.80 y	38:55	-	0.91
198	Tetr݄	13C-PCB-77	100.00	1.28e+08	0.80 y	39:31	-	0.95
199	Pent݄	13C-PCB-104	100.00	9.53e+07	1.55 y	32:33	-	1.02
200	Pent݄	13C-PCB-95	100.00	6.94e+07	1.58 y	35:42	-	0.74
201	Pent݄	13C-PCB-101	100.00	7.42e+07	1.61 y	37:22	-	0.79
202	Pent݄	13C-PCB-97	100.00	6.72e+07	1.62 y	38:40	-	0.72
203	Pent݄	13C-PCB-123	100.00	8.66e+07	1.59 y	41:15	-	0.92
204	Pent݄	13C-PCB-118	100.00	9.00e+07	1.59 y	41:25	-	0.96
205	Pent݄	13C-PCB-114	100.00	9.79e+07	1.62 y	42:05	-	1.33
206	Pent݄	13C-PCB-105	100.00	9.84e+07	1.62 y	42:57	-	1.34
207	Pent݄	13C-PCB-127	100.00	1.04e+08	1.60 y	43:17	-	1.42
208	Pent݄	13C-PCB-126	100.00	9.44e+07	1.59 y	45:11	-	1.29
209	Hexa݄	13C-PCB-155	100.00	8.36e+07	1.29 y	36:55	-	0.89
210	Hexa݄	13C-PCB-153	100.00	8.47e+07	1.26 y	43:06	-	1.15
211	Hexa݄	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	Hexa݄	13C-PCB-159	100.00	9.21e+07	1.27 y	45:58	-	1.26
214	Hexa݄	13C-PCB-167	100.00	9.97e+07	1.26 y	46:40	-	1.36
215	Hexa݄	13C-PCB-156	100.00	9.50e+07	1.29 y	47:58	-	1.30
216	Hexa݄	13C-PCB-157	100.00	1.00e+08	1.32 y	48:14	-	1.37
217	Hexa݄	13C-PCB-169	100.00	9.71e+07	1.27 y	50:19	-	1.32
218	Hept݄	13C-PCB-188	100.00	7.00e+07	0.47 y	42:44	-	0.95
219	Hept݄	13C-PCB-180	100.00	5.49e+07	0.46 y	49:15	-	0.75
220	Hept݄	13C-PCB-170	100.00	4.33e+07	0.46 y	50:40	-	0.59
221	Hept݄	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 က	Total Tri-PCB	0.00	-	- n	-	-	1.24
173	Tot က	Total Tetra-PCB	0.00	-	- n	-	-	1.08
174	Tot က	Total Penta-PCB	0.00	-	- n	-	-	1.17
175	Tot က	Total Penta-PCB	0.00	-	- n	-	-	1.26
176	Tot က	Total Hexa-PCB	0.00	-	- n	-	-	0.88
177	Tot က	Total Hexa-PCB	0.00	-	- n	-	-	1.10
178	Tot က	Total Hepta-PCB	0.00	-	- n	-	-	1.42
179	Tot က	Total Octa-PCB	0.00	-	- n	-	-	0.95
180	Tot က	Total Octa-PCB	0.00	-	- n	-	-	1.32
181	Tot က	Total Nona-PCB	0.00	-	- n	-	-	0.98
182	Tot က	Total Deca-PCB	2.50	1.17e+06	1.22 y	56:39	-	1.17
183	Monoက	13C-PCB-1	100.00	1.61e+08	3.34 y	16:23	-	0.91
184	Monoက	13C-PCB-3	100.00	1.70e+08	3.41 y	18:53	-	0.96
185	Di-IS	13C-PCB-4	100.00	1.05e+08	1.60 y	20:11	-	0.60
186	Di-IS	13C-PCB-9	100.00	1.61e+08	1.58 y	21:54	-	0.91
187	Di-IS	13C-PCB-11	100.00	1.68e+08	1.55 y	25:12	-	0.95
188	Tri-က	13C-PCB-19	100.00	9.81e+07	1.09 y	24:13	-	0.56
189	Tri-က	13C-PCB-32	100.00	1.41e+08	1.10 y	27:05	-	0.80
190	Tri-က	13C-PCB-28	100.00	1.45e+08	1.05 y	29:00	-	0.93
191	Tri-က	13C-PCB-37	100.00	1.23e+08	1.05 y	32:51	-	0.79
192	Tetrက	13C-PCB-54	100.00	1.19e+08	0.80 y	27:55	-	0.97
193	Tetrက	13C-PCB-52	100.00	9.54e+07	0.79 y	31:24	-	0.77
194	Tetrက	13C-PCB-47	100.00	9.99e+07	0.78 y	31:53	-	0.81
195	Tetrက	13C-PCB-70	100.00	1.22e+08	0.79 y	35:24	-	0.99
196	Tetrက	13C-PCB-80	100.00	1.26e+08	0.79 y	35:48	-	1.02
197	Tetrက	13C-PCB-81	100.00	1.13e+08	0.80 y	38:55	-	0.92
198	Tetrက	13C-PCB-77	100.00	1.13e+08	0.81 y	39:31	-	0.92
199	Pentက	13C-PCB-104	100.00	8.51e+07	1.58 y	32:33	-	1.01
200	Pentက	13C-PCB-95	100.00	6.16e+07	1.60 y	35:42	-	0.73
201	Pentက	13C-PCB-101	100.00	6.46e+07	1.61 y	37:22	-	0.77
202	Pentက	13C-PCB-97	100.00	5.95e+07	1.56 y	38:40	-	0.71
203	Pentက	13C-PCB-123	100.00	7.57e+07	1.60 y	41:14	-	0.90
204	Pentက	13C-PCB-118	100.00	7.96e+07	1.58 y	41:25	-	0.95
205	Pentက	13C-PCB-114	100.00	9.23e+07	1.63 y	42:05	-	1.35
206	Pentက	13C-PCB-105	100.00	9.25e+07	1.61 y	42:57	-	1.36
207	Pentက	13C-PCB-127	100.00	1.01e+08	1.61 y	43:17	-	1.48
208	Pentက	13C-PCB-126	100.00	8.91e+07	1.60 y	45:11	-	1.31
209	Hexaက	13C-PCB-155	100.00	7.08e+07	1.28 y	36:55	-	0.84
210	Hexaက	13C-PCB-153	100.00	7.84e+07	1.29 y	43:06	-	1.15
211	Hexaက	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	Hexaက	13C-PCB-159	100.00	8.52e+07	1.28 y	45:58	-	1.25
214	Hexaက	13C-PCB-167	100.00	9.23e+07	1.29 y	46:40	-	1.35
215	Hexaက	13C-PCB-156	100.00	8.80e+07	1.30 y	47:58	-	1.29
216	Hexaက	13C-PCB-157	100.00	9.23e+07	1.29 y	48:14	-	1.35
217	Hexaက	13C-PCB-169	100.00	8.83e+07	1.28 y	50:19	-	1.29
218	Heptက	13C-PCB-188	100.00	6.20e+07	0.47 y	42:44	-	0.91
219	Heptက	13C-PCB-180	100.00	4.56e+07	0.47 y	49:15	-	0.67
220	Heptက	13C-PCB-170	100.00	3.64e+07	0.46 y	50:40	-	0.53
221	Heptက	13C-PCB-189	100.00	4.86e+07	0.48 y	52:07	-	0.71
222	Octaက	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 ₉	13C-PCB-194	100.00	5.16e+07	0.92	y	53:36	-	0.79
224	Nona ₉	13C-PCB-208	100.00	7.00e+07	0.78	y	52:53	-	1.08
225	Nona ₉	13C-PCB-206	100.00	4.23e+07	0.78	y	55:19	-	0.65
226	Deca ₉	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- ₉	13C-PCB-31	100.00	1.52e+08	1.05	y	28:55	-	1.00
229	Tetr ₉	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 ₉	13C-PCB-128	100.00	6.93e+07	1.27	y	46:16	-	1.00
232	Octa ₉	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	MonoΣ	13C-PCB-1	100.00	1.43e+08	3.35 y	16:24	-	0.77
184	MonoΣ	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	TetrΣ	13C-PCB-54	100.00	1.26e+08	0.81 y	27:55	-	0.97
193	TetrΣ	13C-PCB-52	100.00	9.82e+07	0.78 y	31:24	-	0.76
194	TetrΣ	13C-PCB-47	100.00	1.05e+08	0.77 y	31:55	-	0.81
195	TetrΣ	13C-PCB-70	100.00	1.29e+08	0.79 y	35:25	-	1.00
196	TetrΣ	13C-PCB-80	100.00	1.35e+08	0.80 y	35:50	-	1.04
197	TetrΣ	13C-PCB-81	100.00	1.20e+08	0.78 y	38:56	-	0.93
198	TetrΣ	13C-PCB-77	100.00	1.27e+08	0.80 y	39:32	-	0.98
199	PentΣ	13C-PCB-104	100.00	8.83e+07	1.55 y	32:34	-	1.00
200	PentΣ	13C-PCB-95	100.00	6.77e+07	1.62 y	35:43	-	0.77
201	PentΣ	13C-PCB-101	100.00	7.03e+07	1.56 y	37:23	-	0.80
202	PentΣ	13C-PCB-97	100.00	6.24e+07	1.61 y	38:42	-	0.71
203	PentΣ	13C-PCB-123	100.00	7.82e+07	1.58 y	41:16	-	0.88
204	PentΣ	13C-PCB-118	100.00	8.64e+07	1.60 y	41:26	-	0.98
205	PentΣ	13C-PCB-114	100.00	1.01e+08	1.61 y	42:06	-	1.37
206	PentΣ	13C-PCB-105	100.00	1.02e+08	1.58 y	42:58	-	1.38
207	PentΣ	13C-PCB-127	100.00	1.09e+08	1.60 y	43:18	-	1.48
208	PentΣ	13C-PCB-126	100.00	9.62e+07	1.57 y	45:12	-	1.30
209	HexaΣ	13C-PCB-155	100.00	7.37e+07	1.30 y	36:56	-	0.83
210	HexaΣ	13C-PCB-153	100.00	8.26e+07	1.29 y	43:07	-	1.12
211	HexaΣ	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	HexaΣ	13C-PCB-159	100.00	9.15e+07	1.26 y	46:00	-	1.24
214	HexaΣ	13C-PCB-167	100.00	1.01e+08	1.25 y	46:40	-	1.37
215	HexaΣ	13C-PCB-156	100.00	9.58e+07	1.27 y	47:59	-	1.30
216	HexaΣ	13C-PCB-157	100.00	1.01e+08	1.31 y	48:15	-	1.36
217	HexaΣ	13C-PCB-169	100.00	9.47e+07	1.29 y	50:19	-	1.28
218	HeptaΣ	13C-PCB-188	100.00	6.72e+07	0.46 y	42:45	-	0.91
219	HeptaΣ	13C-PCB-180	100.00	4.95e+07	0.46 y	49:15	-	0.67
220	HeptaΣ	13C-PCB-170	100.00	3.88e+07	0.47 y	50:41	-	0.53
221	HeptaΣ	13C-PCB-189	100.00	5.10e+07	0.48 y	52:07	-	0.69
222	OctaΣ	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	CRS	13C-PCB-79	100.00	1.31e+08	0.78	y	37:43	-	1.01
234	CRS	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 ٦	Total Tri-PCB	0.00	-	- n	-	-	1.12
173	Tot ٦	Total Tetra-PCB	0.00	-	- n	-	-	1.09
174	Tot ٦	Total Penta-PCB	0.00	-	- n	-	-	1.23
175	Tot ٦	Total Penta-PCB	0.00	-	- n	-	-	1.25
176	Tot ٦	Total Hexa-PCB	0.00	-	- n	-	-	0.96
177	Tot ٦	Total Hexa-PCB	0.00	-	- n	-	-	1.14
178	Tot ٦	Total Hepta-PCB	0.00	-	- n	-	-	1.46
179	Tot ٦	Total Octa-PCB	0.00	-	- n	-	-	1.03
180	Tot ٦	Total Octa-PCB	0.00	-	- n	-	-	1.36
181	Tot ٦	Total Nona-PCB	0.00	-	- n	-	-	1.03
182	Tot ٦	Total Deca-PCB	750.00	3.89e+08	1.19 y	56:40	-	1.22
183	Mono٦	13C-PCB-1	100.00	1.51e+08	3.37 y	16:24	-	0.77
184	Mono٦	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-٦	13C-PCB-19	100.00	9.33e+07	1.09 y	24:14	-	0.48
189	Tri-٦	13C-PCB-32	100.00	1.45e+08	1.09 y	27:05	-	0.74
190	Tri-٦	13C-PCB-28	100.00	1.37e+08	1.03 y	29:01	-	1.02
191	Tri-٦	13C-PCB-37	100.00	1.25e+08	1.07 y	32:52	-	0.93
192	Tetr٦	13C-PCB-54	100.00	1.30e+08	0.80 y	27:56	-	0.98
193	Tetr٦	13C-PCB-52	100.00	9.99e+07	0.80 y	31:25	-	0.75
194	Tetr٦	13C-PCB-47	100.00	1.04e+08	0.77 y	31:55	-	0.78
195	Tetr٦	13C-PCB-70	100.00	1.35e+08	0.78 y	35:24	-	1.02
196	Tetr٦	13C-PCB-80	100.00	1.39e+08	0.80 y	35:49	-	1.05
197	Tetr٦	13C-PCB-81	100.00	1.30e+08	0.79 y	38:56	-	0.98
198	Tetr٦	13C-PCB-77	100.00	1.29e+08	0.80 y	39:32	-	0.97
199	Pent٦	13C-PCB-104	100.00	8.83e+07	1.59 y	32:34	-	0.96
200	Pent٦	13C-PCB-95	100.00	6.79e+07	1.55 y	35:43	-	0.74
201	Pent٦	13C-PCB-101	100.00	7.25e+07	1.55 y	37:23	-	0.79
202	Pent٦	13C-PCB-97	100.00	6.44e+07	1.57 y	38:42	-	0.70
203	Pent٦	13C-PCB-123	100.00	8.18e+07	1.58 y	41:16	-	0.89
204	Pent٦	13C-PCB-118	100.00	9.11e+07	1.59 y	41:27	-	0.99
205	Pent٦	13C-PCB-114	100.00	1.10e+08	1.61 y	42:06	-	1.45
206	Pent٦	13C-PCB-105	100.00	1.10e+08	1.59 y	42:58	-	1.45
207	Pent٦	13C-PCB-127	100.00	1.18e+08	1.61 y	43:18	-	1.54
208	Pent٦	13C-PCB-126	100.00	1.02e+08	1.57 y	45:13	-	1.34
209	Hexa٦	13C-PCB-155	100.00	7.27e+07	1.27 y	36:56	-	0.79
210	Hexa٦	13C-PCB-153	100.00	8.79e+07	1.29 y	43:07	-	1.15
211	Hexa٦	13C-PCB-141	100.00	8.18e+07	1.28 y	43:52	-	1.07
212	Hexa٦	13C-PCB-138	100.00	8.32e+07	1.27 y	44:43	-	1.09
213	Hexa٦	13C-PCB-159	100.00	9.51e+07	1.28 y	45:59	-	1.25
214	Hexa٦	13C-PCB-167	100.00	1.01e+08	1.26 y	46:41	-	1.33
215	Hexa٦	13C-PCB-156	100.00	1.01e+08	1.27 y	47:59	-	1.32
216	Hexa٦	13C-PCB-157	100.00	1.05e+08	1.31 y	48:15	-	1.38
217	Hexa٦	13C-PCB-169	100.00	9.82e+07	1.28 y	50:20	-	1.29
218	Hepta٦	13C-PCB-188	100.00	6.91e+07	0.47 y	42:45	-	0.91
219	Hepta٦	13C-PCB-180	100.00	4.94e+07	0.48 y	49:16	-	0.65
220	Hepta٦	13C-PCB-170	100.00	3.94e+07	0.46 y	50:41	-	0.52
221	Hepta٦	13C-PCB-189	100.00	5.34e+07	0.46 y	52:08	-	0.70
222	Octa٦	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-89	1.58	1.32-1.78	y	50.3	37.5-62.5	PCB-134/143	1.25	1.05-1.43	y	97.1	75.0-125						
PCB-90/101	1.56	1.32-1.78	y	100.3	75.0-125	PCB-133/142	1.24	1.05-1.43	y	97.4	75.0-125						
PCB-113	1.57	1.32-1.78	y	52.7	37.5-62.5	PCB-131	1.23	1.05-1.43	y	49.1	37.5-62.5						
PCB-99	1.60	1.32-1.78	y	47.7	37.5-62.5	PCB-146/165	1.25	1.05-1.43	y	98.5	75.0-125						
PCB-119	1.56	1.32-1.78	y	49.8	37.5-62.5	PCB-132/161	1.31	1.05-1.43	y	98.0	75.0-125						
PCB-108/112	1.58	1.32-1.78	y	100.2	75.0-125	PCB-153	1.16	1.05-1.43	y	49.2	37.5-62.5						
PCB-83	1.57	1.32-1.78	y	49.2	37.5-62.5	PCB-168	1.25	1.05-1.43	y	50.1	37.5-62.5						
PCB-97	1.55	1.32-1.78	y	49.4	37.5-62.5	PCB-141	1.24	1.05-1.43	y	48.7	37.5-62.5						
PCB-86	1.55	1.32-1.78	y	47.3	37.5-62.5	PCB-137	1.23	1.05-1.43	y	49.3	37.5-62.5						
PCB-87/117/125	1.62	1.32-1.78	y	153.7	112.5-225	PCB-130	1.23	1.05-1.43	y	50.2	37.5-62.5						
PCB-111/115	1.51	1.32-1.78	y	98.7	75.0-125	PCB-138/163/164	1.24	1.05-1.43	y	147.8	112.5-225						
PCB-85/116	1.58	1.32-1.78	y	100.6	75.0-125	PCB-158/160	1.23	1.05-1.43	y	99.9	75.0-125						
PCB-120	1.59	1.32-1.78	y	48.7	37.5-62.5	PCB-129	1.24	1.05-1.43	y	49.1	37.5-62.5						
PCB-110	1.57	1.32-1.78	y	50.0	37.5-62.5	PCB-166	1.24	1.05-1.43	y	49.5	37.5-62.5						
PCB-82	1.55	1.32-1.78	y	49.8	37.5-62.5	PCB-159	1.23	1.05-1.43	y	49.9	37.5-62.5						
PCB-124	1.58	1.32-1.78	y	48.7	37.5-62.5	PCB-128/162	1.23	1.05-1.43	y	97.4	75.0-125						
PCB-107/109	1.59	1.32-1.78	y	102.0	75.0-125	PCB-167	1.22	1.05-1.43	y	50.2	37.5-62.5						
PCB-123	1.59	1.32-1.78	y	50.6	37.5-62.5	PCB-156	1.25	1.05-1.43	y	50.3	37.5-62.5						
PCB-106/118	1.59	1.32-1.78	y	100.2	75.0-125	PCB-157	1.24	1.05-1.43	y	48.4	37.5-62.5						
PCB-114	1.65	1.32-1.78	y	50.6	37.5-62.5	PCB-169	1.27	1.05-1.43	y	48.4	37.5-62.5						
PCB-122	1.66	1.32-1.78	y	49.6	37.5-62.5	PCB-188	1.05	0.89-1.21	y	49.3	37.5-62.5						
PCB-105	1.64	1.32-1.78	y	49.4	37.5-62.5	PCB-184	1.06	0.89-1.21	y	49.1	37.5-62.5						
PCB-127	1.67	1.32-1.78	y	47.6	37.5-62.5	PCB-179	1.06	0.89-1.21	y	49.7	37.5-62.5						
PCB-126	1.63	1.32-1.78	y	49.7	37.5-62.5	PCB-176	1.04	0.89-1.21	y	49.5	37.5-62.5						
PCB-155	1.27	1.05-1.43	y	49.7	37.5-62.5	PCB-186	1.05	0.89-1.21	y	49.8	37.5-62.5						
PCB-150	1.29	1.05-1.43	y	50.1	37.5-62.5	PCB-178	1.05	0.89-1.21	y	49.4	37.5-62.5						
PCB-152	1.30	1.05-1.43	y	49.4	37.5-62.5	PCB-175	1.05	0.89-1.21	y	49.6	37.5-62.5						
PCB-145	1.28	1.05-1.43	y	49.5	37.5-62.5	PCB-182/187	1.05	0.89-1.21	y	96.9	75.0-125						
PCB-136	1.29	1.05-1.43	y	49.0	37.5-62.5	PCB-183	1.05	0.89-1.21	y	47.6	37.5-62.5						
PCB-148	1.30	1.05-1.43	y	49.6	37.5-62.5	PCB-185	1.07	0.89-1.21	y	49.3	37.5-62.5						
PCB-154	1.28	1.05-1.43	y	48.4	37.5-62.5	PCB-174	1.02	0.89-1.21	y	51.7	37.5-62.5	Analyst: <i>DMS</i>					
PCB-151	1.29	1.05-1.43	y	47.9	37.5-62.5	PCB-181	1.06	0.89-1.21	y	49.2	37.5-62.5						
PCB-135	1.26	1.05-1.43	y	48.7	37.5-62.5	PCB-177	1.05	0.89-1.21	y	50.0	37.5-62.5						
PCB-144	1.30	1.05-1.43	y	46.6	37.5-62.5	PCB-171	1.07	0.89-1.21	y	50.3	37.5-62.5	Date: <i>6/24/14</i>					
PCB-147	1.30	1.05-1.43	y	48.2	37.5-62.5	PCB-173	1.04	0.89-1.21	y	50.8	37.5-62.5						
PCB-139/149	1.28	1.05-1.43	y	96.8	75.0-125	PCB-172	1.07	0.89-1.21	y	50.2	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.		
	ABUND.	LIMITS	CONC.	RANGE	
	RATIO	PASS	FOUND	(ng/mL)	
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

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	9.40e+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-19	4.92e+07	1.05	y	1.04	24:15	1.001	0.996-1.006	49.8495	PCB-40	3.48e+07	0.77	y	0.70	34:00	1.066	1.061-1.071	48.4517
PCB-30	7.99e+07	1.06	y	1.71	25:07	1.037	1.032-1.042	49.3635	PCB-57	6.06e+07	0.76	y	0.98	34:22	0.970	0.965-0.975	50.6920
PCB-18	5.58e+07	1.05	y	0.78	25:51	0.954	0.949-0.959	51.2756	PCB-67	6.65e+07	0.76	y	1.11	34:40	0.979	0.974-0.984	49.1755
PCB-17	6.48e+07	1.05	y	0.92	26:02	0.961	0.956-0.966	50.4844	PCB-58	5.67e+07	0.79	y	0.93	34:47	0.982	0.977-0.987	50.1141
PCB-24/27	1.68e+08	1.05	y	1.19	26:36	0.982	0.977-0.987	101.312	PCB-63	5.70e+07	0.76	y	0.95	34:56	0.987	0.982-0.992	48.9977
- PCB-16/32	1.31e+08	1.06	y	0.94	27:06	1.000	0.995-1.005	100.158	PCB-74	7.34e+07	0.77	y	1.24	35:13	0.995	0.990-1.000	48.3011
- PCB-34	7.59e+07	1.03	y	1.14	27:52	0.960	0.955-0.965	47.8540	PCB-61/70	1.16e+08	0.77	y	0.95	35:24	1.000	0.995-1.005	99.8888
PCB-23	8.55e+07	1.06	y	1.28	27:58	0.964	0.959-0.969	47.9079	PCB-76/66	1.26e+08	0.77	y	1.04	35:37	1.006	1.001-1.011	99.0361
PCB-29	7.42e+07	1.04	y	1.08	28:13	0.972	0.967-0.977	49.2142	PCB-80	7.72e+07	0.77	y	1.19	35:50	1.001	0.996-1.006	51.1089
PCB-26	8.24e+07	1.04	y	1.21	28:25	0.979	0.974-0.984	48.9217	PCB-55	6.84e+07	0.77	y	1.04	36:10	1.010	1.005-1.015	51.7926
PCB-25	8.85e+07	1.06	y	1.26	28:34	0.984	0.979-0.989	50.2567	PCB-56/60	1.27e+08	0.77	y	1.01	36:40	1.024	1.019-1.029	98.8614
PCB-31	8.64e+07	1.02	y	1.28	28:56	0.997	0.992-1.002	48.1924	PCB-79	6.79e+07	0.78	y	1.08	37:43	1.053	1.048-1.058	49.6313
PCB-28	1.19e+08	1.04	y	1.71	29:02	1.000	0.995-1.005	49.7990	PCB-78	6.97e+07	0.77	y	1.27	38:25	0.987	0.982-0.992	49.0861
PCB-20/21/33	2.26e+08	1.03	y	1.08	29:39	1.022	1.017-1.027	149.601	PCB-81	7.20e+07	0.78	y	1.33	38:57	1.000	0.995-1.005	48.4278
PCB-22	8.60e+07	1.04	y	1.21	30:05	1.037	1.032-1.042	50.9455	PCB-77	6.19e+07	0.79	y	1.10	39:33	1.000	0.995-1.005	49.2464
PCB-36	7.12e+07	1.03	y	1.14	30:40	0.933	0.928-0.938	51.8469	PCB-104	5.11e+07	1.57	y	1.18	32:35	1.001	0.996-1.006	50.6145
PCB-39	7.20e+07	1.02	y	1.12	31:09	0.948	0.943-0.953	53.6838	PCB-96	4.80e+07	1.56	y	1.14	33:50	1.039	1.034-1.044	49.4868
PCB-38	7.37e+07	1.03	y	1.20	31:55	0.971	0.966-0.976	51.1156	PCB-103	3.98e+07	1.56	y	0.96	34:22	1.055	1.050-1.060	48.8016
PCB-35	7.10e+07	1.03	y	1.23	32:26	0.987	0.982-0.992	47.9376	PCB-100	3.93e+07	1.58	y	0.94	34:42	1.066	1.061-1.071	49.1824
PCB-37	7.16e+07	1.02	y	1.23	32:53	1.000	0.995-1.005	48.3854	PCB-94	3.18e+07	1.55	y	1.06	35:11	0.985	0.980-0.990	48.0705
PCB-54	6.73e+07	0.78	y	1.10	27:57	1.001	0.996-1.006	49.6981	PCB-95/98/102	1.14e+08	1.55	y	1.22	35:42	1.000	0.995-1.005	149.073
PCB-50	5.38e+07	0.77	y	0.88	29:05	1.042	1.037-1.047	49.7280	PCB-93	2.65e+07	1.58	y	0.84	35:48	1.002	0.997-1.007	50.1439
PCB-53	5.23e+07	0.75	y	1.06	29:44	0.947	0.942-0.952	50.5493	PCB-88/91	7.03e+07	1.58	y	1.12	36:05	1.010	1.005-1.015	100.5229
PCB-51	4.77e+07	0.77	y	0.99	30:04	0.957	0.952-0.962	49.5846	PCB-121	5.08e+07	1.60	y	1.62	36:12	1.014	1.009-1.019	50.2163
PCB-45	4.32e+07	0.77	y	0.86	30:30	0.971	0.966-0.976	51.4204	PCB-84/92	6.82e+07	1.56	y	1.05	37:01	0.990	0.985-0.995	99.2072
PCB-46	4.05e+07	0.76	y	0.85	30:59	0.986	0.981-0.991	49.2764	PCB-89	3.73e+07	1.58	y	1.13	37:14	0.996	0.991-1.001	50.2710

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

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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	7.26e+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

Page 1 of

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

Data filename: 150114E1

	Samp# 4 1.0	Samp# 5 2.5	Samp# 6 50	Samp# 7 400	Samp# 8 1000	Samp# 2 0.25
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Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
PCB-1	1.33	4.52 %	1.38	1.32	1.23	1.32	1.34	1.40
PCB-2	1.30	5.65 %	1.42	1.31	1.26	1.21	1.33	1.25
PCB-3	1.30	4.28 %	1.38	1.33	1.26	1.23	1.31	1.27
PCB-4/10	1.67	10.28 %	1.75	1.67	1.56	1.54	1.54	1.98
PCB-7/9	1.25	8.26 %	1.30	1.26	1.18	1.16	1.18	1.43
PCB-6	1.24	9.18 %	1.34	1.24	1.18	1.14	1.13	1.41
PCB-5/8	1.27	10.47 %	1.34	1.25	1.17	1.17	1.17	1.50
PCB-14	1.47	7.78 %	1.58	1.45	1.41	1.37	1.36	1.64
PCB-11	1.28	10.60 %	1.39	1.25	1.21	1.17	1.17	1.51
PCB-12/13	1.27	7.89 %	1.33	1.25	1.20	1.18	1.20	1.44
PCB-15	1.44	10.40 %	1.50	1.41	1.36	1.32	1.35	1.72
PCB-19	1.18	7.51 %	1.25	1.20	1.13	1.11	1.10	1.32
PCB-30	1.87	8.54 %	2.03	1.85	1.80	1.72	1.75	2.11
PCB-18	0.89	9.45 %	0.98	0.90	0.85	0.82	0.78	0.98
PCB-17	0.96	10.12 %	1.03	0.97	0.92	0.86	0.86	1.10
PCB-24/27	1.30	9.45 %	1.34	1.31	1.23	1.21	1.18	1.52
PCB-16/32	1.05	11.15 %	1.10	1.04	0.98	0.95	0.95	1.25
PCB-34	1.30	11.06 %	1.30	1.41	1.19	1.16	1.21	1.53
PCB-23	1.21	8.15 %	1.26	1.14	1.16	1.22	1.10	1.37
PCB-29	1.21	10.43 %	1.29	1.31	1.06	1.14	1.10	1.36
PCB-26	1.24	7.44 %	1.31	1.30	1.11	1.14	1.24	1.32
PCB-25	1.10	6.57 %	1.21	1.09	1.00	1.13	1.10	1.04
PCB-31	1.25	8.92 %	1.30	1.32	1.13	1.26	1.10	1.38
PCB-28	1.24	9.99 %	1.34	1.30	1.07	1.20	1.13	1.38
PCB-20/21/33	1.16	9.64 %	1.21	1.23	1.05	1.19	0.98	1.26
PCB-22	1.16	10.72 %	1.23	1.17	1.09	1.13	0.99	1.36
PCB-36	1.30	9.13 %	1.25	1.36	1.40	1.10	1.27	1.42
PCB-39	1.26	10.29 %	1.36	1.38	1.28	1.07	1.13	1.35
PCB-38	1.24	2.89 %	1.26	1.22	1.31	1.22	1.24	1.22
PCB-35	1.26	5.42 %	1.19	1.19	1.28	1.23	1.31	1.35
PCB-37	1.35	8.86 %	1.43	1.33	1.28	1.27	1.23	1.55
PCB-54	1.02	10.31 %	1.04	1.07	0.95	0.94	0.94	1.21
PCB-50	0.78	8.21 %	0.84	0.78	0.73	0.75	0.70	0.87
PCB-53	1.14	10.76 %	1.14	1.15	1.09	1.09	0.99	1.36
PCB-51	1.16	7.07 %	1.26	1.16	1.11	1.15	1.04	1.25
PCB-45	1.04	10.54 %	1.02	1.04	1.01	0.92	1.00	1.25
PCB-46	0.95	12.05 %	0.99	0.98	0.87	0.85	0.86	1.15
PCB-52/69	1.29	11.02 %	1.38	1.38	1.20	1.15	1.15	1.49
PCB-73	1.41	11.96 %	1.52	1.25	1.42	1.40	1.22	1.67
PCB-43/49	1.14	10.50 %	1.14	1.11	1.06	1.10	1.05	1.37
PCB-47	1.20	15.31 %	1.29	1.11	1.09	1.04	1.13	1.53

Dms 1/20/15
 * = C50 Rejected due
 to PCB 153 contamination.

& M 1/20/15

PCB-48/75	1.33	10.00 %	1.39	1.32	1.20	1.24	1.23	1.56
PCB-65	1.32	14.66 %	1.41	1.33	1.13	1.22	1.15	1.64
PCB-62	1.36	13.10 %	1.46	1.27	1.28	1.15	1.31	1.66
PCB-44	0.87	16.44 %	0.91	0.87	0.80	0.76	0.75	1.13
PCB-42/59	1.24	17.44 %	1.33	1.27	1.05	1.09	1.07	1.61
PCB-41/64/71/72	1.34	13.28 %	1.39	1.35	1.14	1.28	1.21	1.65
PCB-68	1.61	19.92 %	1.69	1.57	1.30	1.45	1.43	2.21
PCB-40	0.86	17.24 %	0.93	0.84	0.71	0.78	0.77	1.11
PCB-57	1.12	17.03 %	1.23	1.12	1.03	1.00	0.90	1.44
PCB-67	1.09	14.59 %	1.18	1.11	1.00	0.99	0.91	1.35
PCB-58	1.14	12.88 %	1.24	1.09	1.12	1.00	1.00	1.37

PCB-63	1.16	14.60 %	1.26	1.16	1.10	1.05	0.96	1.44
PCB-74	1.21	14.89 %	1.31	1.20	1.08	1.12	1.04	1.52
PCB-61/70	1.13	14.67 %	1.22	1.08	1.04	0.97	1.01	1.42
PCB-76/66	1.18	16.88 %	1.25	1.12	1.06	1.06	1.03	1.55
PCB-80	1.32	13.55 %	1.40	1.32	1.20	1.18	1.20	1.65
PCB-55	1.23	13.61 %	1.29	1.19	1.13	1.08	1.15	1.54
PCB-56/60	1.11	15.55 %	1.17	1.12	0.98	1.03	0.93	1.40
PCB-79	1.16	11.65 %	1.23	1.21	1.03	1.01	1.11	1.37
PCB-78	1.18	15.63 %	1.24	1.16	1.03	1.11	1.01	1.51
PCB-81	1.29	14.36 %	1.31	1.29	1.17	1.15	1.17	1.64
PCB-77	1.29	15.01 %	1.32	1.31	1.18	1.14	1.14	1.65
PCB-104	1.26	11.04 %	1.36	1.24	1.16	1.16	1.17	1.50
PCB-96	1.09	9.21 %	1.16	1.09	0.96	1.08	1.02	1.25
PCB-103	0.97	9.45 %	1.10	0.96	0.86	0.94	0.89	1.05
PCB-100	0.96	7.05 %	1.03	0.99	0.87	0.92	0.92	1.04
PCB-94	1.13	8.09 %	1.21	1.14	1.06	1.08	1.03	1.26
PCB-95/98/102	1.29	10.92 %	1.37	1.31	1.16	1.22	1.16	1.52
PCB-93	1.06	13.28 %	1.14	1.05	1.13	0.82	1.01	1.23
PCB-88/91	1.12	10.49 %	1.27	1.11	1.12	1.00	0.99	1.26
PCB-121	1.76	11.27 %	1.84	1.74	1.57	1.55	1.79	2.09
PCB-84/92	1.07	8.45 %	1.11	1.12	1.04	1.01	0.95	1.20
PCB-89	1.00	10.58 %	1.05	1.04	0.95	0.91	0.87	1.15
PCB-90/101	1.21	11.77 %	1.28	1.22	1.13	1.09	1.07	1.45
PCB-113	1.34	9.13 %	1.37	1.42	1.39	1.24	1.15	1.48
PCB-99	1.25	17.56 %	1.42	1.22	1.03	1.05	1.17	1.59
PCB-119	1.88	8.86 %	2.00	1.89	1.77	1.76	1.72	2.15
PCB-108/112	1.41	6.60 %	1.50	1.45	1.33	1.37	1.29	1.51
PCB-83	1.66	6.92 %	1.76	1.70	1.58	1.64	1.49	1.80
PCB-97	1.30	10.69 %	1.38	1.32	1.20	1.20	1.17	1.53
PCB-86	1.03	17.33 %	1.08	0.93	0.99	0.90	0.93	1.38
PCB-87/117/125	1.59	6.14 %	1.67	1.60	1.52	1.53	1.50	1.74
PCB-111/115	1.86	9.78 %	1.89	1.86	1.77	1.72	1.71	2.20
PCB-85/116	1.39	12.01 %	1.44	1.31	1.33	1.23	1.34	1.71
PCB-120	1.99	10.45 %	2.06	2.00	1.83	1.83	1.84	2.36
PCB-110	1.70	12.10 %	1.82	1.69	1.62	1.50	1.54	2.05
PCB-82	0.74	11.63 %	0.78	0.74	0.73	0.68	0.64	0.89
PCB-124	1.30	5.43 %	1.41	1.29	1.29	1.20	1.28	1.36
PCB-107/109	1.34	11.92 %	1.40	1.33	1.21	1.22	1.24	1.62
PCB-123	1.25	9.48 %	1.24	1.29	1.21	1.15	1.15	1.47
PCB-106/118	1.29	12.71 %	1.36	1.30	1.20	1.15	1.16	1.58
PCB-114	1.45	9.74 %	1.52	1.46	1.36	1.32	1.36	1.70
PCB-122	1.22	8.66 %	1.24	1.30	1.12	1.17	1.11	1.38
PCB-105	1.56	9.15 %	1.62	1.62	1.47	1.44	1.41	1.79
PCB-127	1.31	10.47 %	1.40	1.30	1.24	1.19	1.18	1.53
PCB-126	1.41	6.08 %	1.42	1.46	1.39	1.32	1.33	1.55
PCB-155	1.20	7.21 %	1.27	1.21	1.12	1.14	1.12	1.33
PCB-153	1.13	8.78 %	1.15	1.07	1.02	1.12	1.10	1.31
PCB-152	1.17	14.36 %	1.21	1.11	1.03	1.09	1.08	1.49
PCB-145	1.09	6.93 %	1.10	1.09	1.00	1.07	1.08	1.23
PCB-136	1.14	7.24 %	1.16	1.12	1.09	1.08	1.11	1.30

PCB-148	0.82	8.69 %	0.87	0.81	0.71	0.79	0.80	0.92
PCB-154	0.89	11.57 %	0.89	0.89	0.80	0.84	0.84	1.09
PCB-151	0.82	6.55 %	0.85	0.80	0.75	0.79	0.80	0.91
PCB-135	0.80	7.09 %	0.78	0.80	0.72	0.78	0.81	0.89
PCB-144	0.86	9.26 %	0.87	0.77	0.78	0.85	0.87	0.99
PCB-147	0.78	10.69 %	0.80	0.72	0.68	0.75	0.81	0.92
PCB-139/149	0.87	8.00 %	0.87	0.85	0.77	0.86	0.88	0.99
PCB-140	0.78	8.58 %	0.80	0.76	0.70	0.76	0.76	0.90
PCB-134/143	0.93	8.74 %	0.93	0.94	0.85	0.90	0.88	1.08
PCB-133/142	0.91	6.06 %	0.95	0.89	0.85	0.89	0.88	1.00
PCB-131	0.85	6.74 %	0.94	0.85	0.79	0.81	0.80	0.89

PCB-146/165	1.08	4.94 %	1.13	1.08	1.01	1.05	1.06	1.15
PCB-132/161	1.12	8.35 %	1.19	1.12	1.04	1.03	1.07	1.26
PCB-153	1.20	18.86 %	1.31	1.19	1.04	1.03	1.02	1.60
PCB-168	1.36	6.98 %	1.37	1.39	1.27	1.28	1.31	1.52
PCB-141	1.16	10.89 %	1.25	1.16	1.05	1.06	1.06	1.36
PCB-137	1.18	10.18 %	1.27	1.16	1.07	1.09	1.10	1.38
PCB-130	0.92	9.18 %	0.95	0.80	0.89	0.90	0.92	1.06
PCB-138/163/164	1.38	11.94 %	1.43	1.35	1.27	1.28	1.26	1.69
PCB-158/160	1.48	12.88 %	1.51	1.44	1.37	1.35	1.34	1.84
PCB-129	0.99	13.56 %	1.06	0.96	0.88	0.94	0.87	1.23
PCB-166	1.14	10.59 %	1.18	1.10	1.06	1.06	1.08	1.37
PCB-159	1.22	9.93 %	1.21	1.22	1.17	1.13	1.15	1.46
PCB-128/162	1.03	8.90 %	1.07	1.05	0.97	0.97	0.96	1.20
PCB-167	1.18	10.96 %	1.23	1.18	1.10	1.09	1.09	1.42
PCB-156	1.27	7.87 %	1.31	1.30	1.19	1.19	1.19	1.44
PCB-157	1.22	9.73 %	1.29	1.24	1.13	1.12	1.13	1.41
PCB-169	1.07	6.63 %	1.08	1.10	1.02	1.02	1.03	1.20
PCB-188	1.52	12.80 %	1.60	1.46	1.43	1.38	1.38	1.88
PCB-184	1.34	8.74 %	1.42	1.37	1.27	1.23	1.22	1.51
PCB-179	1.39	10.02 %	1.47	1.41	1.33	1.27	1.25	1.62
PCB-176	1.45	9.52 %	1.52	1.46	1.40	1.34	1.32	1.69
PCB-186	1.46	10.56 %	1.52	1.44	1.37	1.33	1.34	1.73
PCB-178	1.07	12.94 %	1.18	1.07	1.00	0.96	0.94	1.30
PCB-175	1.05	10.07 %	1.12	1.03	1.01	0.94	0.97	1.22
PCB-182/187	1.14	9.45 %	1.21	1.15	1.06	1.05	1.03	1.31
PCB-183	1.22	10.61 %	1.33	1.26	1.16	1.10	1.08	1.40
PCB-185	1.40	10.38 %	1.43	1.40	1.34	1.32	1.27	1.68
PCB-174	1.29	7.93 %	1.34	1.26	1.25	1.19	1.22	1.47
PCB-181	1.35	6.04 %	1.34	1.43	1.30	1.31	1.25	1.46
PCB-177	1.27	12.30 %	1.27	1.32	1.16	1.17	1.13	1.55
PCB-171	1.46	8.76 %	1.52	1.43	1.34	1.38	1.38	1.68
PCB-173	1.10	5.77 %	1.13	1.10	1.08	1.04	1.06	1.22
PCB-172	1.35	12.56 %	1.35	1.24	1.27	1.30	1.27	1.69
PCB-192	1.74	9.92 %	1.83	1.64	1.61	1.67	1.63	2.05
PCB-180	1.45	14.04 %	1.57	1.42	1.32	1.30	1.29	1.80
PCB-193	1.85	10.11 %	1.97	1.77	1.72	1.74	1.72	2.18
PCB-191	1.86	7.62 %	1.97	1.81	1.76	1.76	1.77	2.10
PCB-170	1.67	11.07 %	1.73	1.65	1.56	1.52	1.55	2.01
PCB-190	2.25	7.94 %	2.26	2.12	2.17	2.15	2.18	2.60
PCB-189	1.67	7.88 %	1.76	1.69	1.58	1.56	1.55	1.88
PCB-202	1.02	8.62 %	1.09	0.99	0.96	0.95	0.96	1.16
PCB-201	1.10	8.30 %	1.14	1.10	1.01	1.06	1.02	1.25
PCB-204	1.07	12.15 %	1.08	1.02	0.96	1.06	1.00	1.33
PCB-197	1.17	8.84 %	1.18	1.12	1.08	1.14	1.11	1.37
PCB-200	1.03	10.36 %	1.06	1.01	0.97	0.97	0.96	1.24
PCB-198	0.75	8.91 %	0.73	0.69	0.73	0.73	0.75	0.88
PCB-199	0.74	10.59 %	0.80	0.68	0.68	0.71	0.71	0.87
PCB-196/203	0.83	11.76 %	0.84	0.74	0.75	0.82	0.81	1.01
PCB-195	1.14	9.26 %	1.10	1.04	1.07	1.14	1.16	1.34
PCB-194	1.29	13.97 %	1.37	1.30	1.18	1.15	1.14	1.61

PCB-205	1.61	8.14 %	1.58	1.56	1.55	1.56	1.53	1.88
PCB-208	1.01	10.69 %	1.10	1.03	0.94	0.92	0.91	1.18
PCB-207	1.03	10.99 %	1.07	1.00	0.96	0.95	0.95	1.24
PCB-206	0.88	12.49 %	0.89	0.91	0.82	0.79	0.79	1.08
PCB-209	1.35	13.71 %	1.42	1.31	1.21	1.22	1.23	1.69
Total Mono-PCB	1.31	4.13 %	1.39	1.32	1.25	1.25	1.33	1.30
Total Di-PCB	1.32	9.07 %	1.39	1.31	1.25	1.22	1.23	1.52
Total Tri-PCB	1.20	9.46 %	1.28	1.21	1.14	1.11	1.10	1.39

Total Tri-PCB	1.23	6.59 %	1.28	1.27	1.16	1.18	1.13	1.34
Total Tetra-PCB	1.17	12.41 %	1.23	1.16	1.06	1.08	1.04	1.42
Total Penta-PCB	1.24	9.06 %	1.32	1.25	1.15	1.16	1.14	1.42
Total Penta-PCB	1.39	8.69 %	1.44	1.43	1.31	1.29	1.28	1.59
Total Hexa-PCB	0.94	8.43 %	0.96	0.92	0.85	0.91	0.93	1.09
Total Hexa-PCB	1.13	9.33 %	1.17	1.12	1.05	1.06	1.06	1.32
Total Hepta-PCB	1.37	9.78 %	1.44	1.36	1.29	1.27	1.26	1.61
Total Octa-PCB	0.95	9.73 %	0.98	0.90	0.88	0.92	0.90	1.12
Total Octa-PCB	1.35	9.69 %	1.35	1.30	1.27	1.28	1.28	1.61
Total Nona-PCB	0.99	10.97 %	1.04	0.99	0.92	0.90	0.90	1.18
Total Deca-PCB	1.35	13.71 %	1.42	1.31	1.21	1.22	1.23	1.69
13C-PCB-1	0.91	8.84 %	0.97	0.98	0.98	0.87	0.78	0.87
13C-PCB-3	0.94	7.32 %	0.95	0.94	0.95	0.99	0.81	1.01
13C-PCB-4	0.60	4.10 %	0.61	0.61	0.62	0.61	0.57	0.57
13C-PCB-9	0.96	2.48 %	0.97	0.98	0.98	0.97	0.92	0.95
13C-PCB-11	0.95	1.55 %	0.95	0.97	0.96	0.96	0.93	0.95
13C-PCB-19	0.56	2.90 %	0.57	0.58	0.56	0.57	0.54	0.54
13C-PCB-32	0.83	2.16 %	0.84	0.83	0.82	0.85	0.81	0.80
13C-PCB-28	1.07	9.16 %	1.09	1.00	1.21	0.96	1.15	1.00
13C-PCB-37	0.96	6.55 %	1.03	0.89	1.00	0.88	1.02	0.96
13C-PCB-54	1.06	5.00 %	1.00	1.08	1.15	1.03	1.08	1.03
13C-PCB-52	0.71	4.14 %	0.71	0.73	0.76	0.68	0.69	0.70
13C-PCB-47	0.77	5.19 %	0.74	0.74	0.84	0.78	0.79	0.73
13C-PCB-70	0.99	4.52 %	0.99	0.95	0.99	0.99	1.08	0.96
13C-PCB-80	1.02	3.31 %	1.02	0.99	1.03	1.00	1.08	1.02
13C-PCB-81	1.00	4.12 %	0.96	0.96	1.02	0.97	1.07	1.00
13C-PCB-77	0.96	4.93 %	0.94	0.94	0.98	0.93	1.06	0.95
13C-PCB-104	0.97	5.43 %	0.97	0.98	1.05	0.95	0.89	0.96
13C-PCB-95	0.70	2.72 %	0.71	0.71	0.72	0.71	0.67	0.68
13C-PCB-101	0.77	2.41 %	0.77	0.80	0.76	0.75	0.75	0.76
13C-PCB-97	0.66	1.72 %	0.66	0.67	0.66	0.65	0.64	0.66
13C-PCB-123	0.88	1.37 %	0.87	0.90	0.87	0.88	0.87	0.88
13C-PCB-118	0.94	2.58 %	0.90	0.95	0.93	0.97	0.95	0.91
13C-PCB-114	1.26	2.59 %	1.25	1.24	1.25	1.23	1.25	1.32
13C-PCB-105	1.20	4.66 %	1.21	1.20	1.19	1.11	1.21	1.29
13C-PCB-127	1.26	4.39 %	1.23	1.25	1.22	1.19	1.30	1.34
13C-PCB-126	1.13	5.54 %	1.12	1.07	1.06	1.16	1.12	1.23
13C-PCB-155	0.87	5.64 %	0.88	0.92	0.93	0.84	0.81	0.84
13C-PCB-153	1.27	2.20 %	1.26	1.27	1.29	1.23	1.27	1.31
13C-PCB-141	1.09	1.88 %	1.09	1.12	1.11	1.06	1.08	1.10
13C-PCB-138	1.12	2.25 %	1.09	1.11	1.11	1.10	1.16	1.14
13C-PCB-159	1.37	1.53 %	1.35	1.36	1.35	1.37	1.41	1.38
13C-PCB-167	1.38	2.42 %	1.37	1.39	1.41	1.33	1.37	1.42
13C-PCB-156	1.35	2.75 %	1.30	1.34	1.33	1.35	1.41	1.37
13C-PCB-157	1.42	3.06 %	1.39	1.35	1.41	1.42	1.48	1.45
13C-PCB-169	1.38	3.38 %	1.35	1.36	1.37	1.34	1.41	1.46
13C-PCB-188	1.01	2.32 %	0.99	1.00	1.01	1.03	1.05	1.01
13C-PCB-180	0.76	2.20 %	0.73	0.75	0.76	0.75	0.78	0.77
13C-PCB-170	0.60	2.12 %	0.60	0.59	0.59	0.61	0.62	0.62
13C-PCB-189	0.80	3.20 %	0.78	0.78	0.78	0.80	0.83	0.84
13C-PCB-202	0.99	1.63 %	0.96	0.98	1.00	0.98	1.00	1.00

13C-PCB-194	0.75	3.67 %	0.78	0.77	0.75	0.72	0.72	0.73
13C-PCB-208	1.08	5.55 %	1.08	1.09	1.11	1.12	1.13	0.97
13C-PCB-206	0.73	4.68 %	0.75	0.76	0.73	0.75	0.74	0.67
13C-PCB-209	0.71	4.81 %	0.71	0.69	0.75	0.72	0.74	0.66
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	5.92 %	1.04	1.02	0.99	0.97	1.13	0.97
13C-PCB-178	0.64	1.49 %	0.64	0.63	0.63	0.64	0.63	0.65
13C-PCB-79	1.02	4.88 %	1.08	1.07	0.97	0.99	1.06	0.97
13C-PCB-178	0.84	2.93 %	0.88	0.85	0.83	0.85	0.80	0.84

Filename: 150114E1 S: 4 Acquired: 14-JAN-15 15:50:46
 Run: 150114e1 Analyte: ICal: pcbvg8-1-14-15 Results: 150114e1
 Sample text: ST150114E1-3 PCB CS1 14L2903

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	1.00	2.35e+06	3.11 y	16:11	-	1.38
2	Mono	PCB-2	1.00	2.36e+06	3.10 y	18:34	-	1.42
3	Mono	PCB-3	1.00	2.30e+06	3.03 y	18:48	-	1.38
4	Di	PCB-4/10	2.00	3.70e+06	1.55 y	20:10	-	1.75
5	Di	PCB-7/9	2.00	4.37e+06	1.61 y	21:57	-	1.30
6	Di	PCB-6	1.00	2.25e+06	1.47 y	22:36	-	1.34
7	Di	PCB-5/8	2.00	4.52e+06	1.59 y	23:01	-	1.34
8	Di	PCB-14	1.00	2.63e+06	1.54 y	24:06	-	1.58
9	Di	PCB-11	1.00	2.31e+06	1.75 y	25:18	-	1.39
10	Di	PCB-12/13	2.00	4.44e+06	1.62 y	25:42	-	1.33
11	Di	PCB-15	1.00	2.50e+06	1.76 y	26:00	-	1.50
12	Tri	PCB-19	1.00	1.25e+06	1.01 y	24:18	-	1.25
13	Tri	PCB-30	1.00	2.02e+06	1.05 y	25:11	-	2.03
14	Tri	PCB-18	1.00	1.43e+06	1.13 y	25:56	-	0.98
15	Tri	PCB-17	1.00	1.51e+06	1.06 y	26:06	-	1.03
16	Tri	PCB-24/27	2.00	3.91e+06	1.01 y	26:41	-	1.34
17	Tri	PCB-16/32	2.00	3.23e+06	1.10 y	27:11	-	1.10
18	Tri	PCB-34	1.00	1.63e+06	0.97 y	27:59	-	1.30
19	Tri	PCB-23	1.00	1.58e+06	0.97 y	28:05	-	1.26
20	Tri	PCB-29	1.00	1.62e+06	0.88 y	28:20	-	1.29
21	Tri	PCB-26	1.00	1.64e+06	1.03 y	28:32	-	1.31
22	Tri	PCB-25	1.00	1.52e+06	0.98 y	28:43	-	1.21
23	Tri	PCB-31	1.00	1.63e+06	1.07 y	29:03	-	1.30
24	Tri	PCB-28	1.00	1.68e+06	1.05 y	29:10	-	1.34
25	Tri	PCB-20/21/33	3.00	4.56e+06	1.03 y	29:46	-	1.21
26	Tri	PCB-22	1.00	1.54e+06	1.02 y	30:12	-	1.23
27	Tri	PCB-36	1.00	1.47e+06	1.12 y	30:50	-	1.25
28	Tri	PCB-39	1.00	1.60e+06	1.04 y	31:18	-	1.36
29	Tri	PCB-38	1.00	1.49e+06	1.01 y	32:05	-	1.26
30	Tri	PCB-35	1.00	1.40e+06	1.06 y	32:36	-	1.19
31	Tri	PCB-37	1.00	1.68e+06	1.09 y	33:02	-	1.43
32	Tetra	PCB-54	1.00	1.33e+06	0.82 y	28:03	-	1.04
33	Tetra	PCB-50	1.00	1.07e+06	0.70 y	29:12	-	0.84
34	Tetra	PCB-53	1.00	1.03e+06	0.70 y	29:51	-	1.14
35	Tetra	PCB-51	1.00	1.14e+06	0.66 y	30:11	-	1.26
36	Tetra	PCB-45	1.00	9.30e+05	0.74 y	30:37	-	1.02
37	Tetra	PCB-46	1.00	9.02e+05	0.68 y	31:07	-	0.99
38	Tetra	PCB-52/69	2.00	2.51e+06	0.71 y	31:35	-	1.38
39	Tetra	PCB-73	1.00	1.38e+06	0.76 y	31:42	-	1.52
40	Tetra	PCB-43/49	2.00	2.07e+06	0.78 y	31:52	-	1.14

41	Tetra	PCB-47	1.00	1.22e+06	0.78	y	32:05	-	1.29
42	Tetra	PCB-48/75	2.00	2.65e+06	0.70	y	32:12	-	1.39
43	Tetra	PCB-65	1.00	1.34e+06	0.70	y	32:28	-	1.41
44	Tetra	PCB-62	1.00	1.39e+06	0.79	y	32:33	-	1.46
45	Tetra	PCB-44	1.00	8.60e+05	0.85	y	32:53	-	0.91
46	Tetra	PCB-42/59	2.00	2.53e+06	0.74	y	33:06	-	1.33
47	Tetra	PCB-41/64/71/72	4.00	5.28e+06	0.74	y	33:40	-	1.39
48	Tetra	PCB-68	1.00	1.60e+06	0.69	y	33:56	-	1.69
49	Tetra	PCB-40	1.00	8.85e+05	0.77	y	34:09	-	0.93
50	Tetra	PCB-57	1.00	1.55e+06	0.69	y	34:31	-	1.23
51	Tetra	PCB-67	1.00	1.49e+06	0.76	y	34:50	-	1.18

52	Tetra	PCB-58	1.00	1.57e+06	0.74	y	34:56	-	1.24
53	Tetra	PCB-63	1.00	1.60e+06	0.74	y	35:06	-	1.26
54	Tetra	PCB-74	1.00	1.66e+06	0.79	y	35:23	-	1.31
55	Tetra	PCB-61/70	2.00	3.08e+06	0.69	y	35:33	-	1.22
56	Tetra	PCB-76/66	2.00	3.16e+06	0.76	y	35:46	-	1.25
57	Tetra	PCB-80	1.00	1.83e+06	0.80	y	36:00	-	1.40
58	Tetra	PCB-55	1.00	1.69e+06	0.72	y	36:19	-	1.29
59	Tetra	PCB-56/60	2.00	3.05e+06	0.71	y	36:49	-	1.17
60	Tetra	PCB-79	1.00	1.60e+06	0.78	y	37:53	-	1.23
61	Tetra	PCB-78	1.00	1.54e+06	0.78	y	38:35	-	1.24
62	Tetra	PCB-81	1.00	1.62e+06	0.72	y	39:06	-	1.31
63	Tetra	PCB-77	1.00	1.58e+06	0.76	y	39:42	-	1.32
64	Penta	PCB-104	1.00	1.21e+06	1.62	y	32:44	-	1.36
65	Penta	PCB-96	1.00	1.03e+06	1.56	y	34:00	-	1.16
66	Penta	PCB-103	1.00	9.77e+05	1.45	y	34:31	-	1.10
67	Penta	PCB-100	1.00	9.21e+05	1.70	y	34:53	-	1.03
68	Penta	PCB-94	1.00	7.88e+05	1.43	y	35:21	-	1.21
69	Penta	PCB-95/98/102	3.00	2.67e+06	1.60	y	35:51	-	1.37
70	Penta	PCB-93	1.00	7.41e+05	1.72	y	35:59	-	1.14
71	Penta	PCB-88/91	2.00	1.65e+06	1.45	y	36:16	-	1.27
72	Penta	PCB-121	1.00	1.20e+06	1.67	y	36:23	-	1.84
73	Penta	PCB-84/92	2.00	1.58e+06	1.55	y	37:12	-	1.11
74	Penta	PCB-89	1.00	7.49e+05	1.60	y	37:23	-	1.05
75	Penta	PCB-90/101	2.00	1.82e+06	1.49	y	37:33	-	1.28
76	Penta	PCB-113	1.00	9.71e+05	1.64	y	37:48	-	1.37
77	Penta	PCB-99	1.00	1.01e+06	1.55	y	37:54	-	1.42
78	Penta	PCB-119	1.00	1.22e+06	1.57	y	38:22	-	2.00
79	Penta	PCB-108/112	2.00	1.82e+06	1.55	y	38:31	-	1.50
80	Penta	PCB-83	1.00	1.07e+06	1.64	y	38:40	-	1.76
81	Penta	PCB-97	1.00	8.40e+05	1.56	y	38:53	-	1.38
82	Penta	PCB-86	1.00	6.57e+05	1.43	y	39:01	-	1.08
83	Penta	PCB-87/117/125	3.00	3.05e+06	1.55	y	39:09	-	1.67
84	Penta	PCB-111/115	2.00	2.31e+06	1.56	y	39:18	-	1.89
85	Penta	PCB-85/116	2.00	1.75e+06	1.73	y	39:26	-	1.44
86	Penta	PCB-120	1.00	1.26e+06	1.71	y	39:41	-	2.06
87	Penta	PCB-110	1.00	1.11e+06	1.71	y	39:49	-	1.82
88	Penta	PCB-82	1.00	6.26e+05	1.67	y	40:26	-	0.78
89	Penta	PCB-124	1.00	1.13e+06	1.44	y	41:07	-	1.41
90	Penta	PCB-107/109	2.00	2.24e+06	1.54	y	41:16	-	1.40
91	Penta	PCB-123	1.00	1.00e+06	1.62	y	41:26	-	1.24
92	Penta	PCB-106/118	2.00	2.26e+06	1.67	y	41:38	-	1.36
93	Penta	PCB-114	1.00	1.30e+06	1.74	y	42:16	-	1.52
94	Penta	PCB-122	1.00	1.06e+06	1.71	y	42:23	-	1.24
95	Penta	PCB-105	1.00	1.35e+06	1.66	y	43:07	-	1.62
96	Penta	PCB-127	1.00	1.18e+06	1.71	y	43:28	-	1.40
97	Penta	PCB-126	1.00	1.09e+06	1.69	y	45:21	-	1.42
98	Hexa	PCB-155	1.00	1.03e+06	1.24	y	37:07	-	1.27
99	Hexa	PCB-150	1.00	9.30e+05	1.32	y	38:22	-	1.15
100	Hexa	PCB-152	1.00	9.81e+05	1.24	y	38:52	-	1.21
101	Hexa	PCB-145	1.00	8.92e+05	1.38	y	39:18	-	1.10

102	Hexa	PCB-136	1.00	9.41e+05	1.33	y	39:37	-	1.16
103	Hexa	PCB-148	1.00	7.03e+05	1.35	y	39:43	-	0.87
104	Hexa	PCB-154	1.00	7.18e+05	1.19	y	40:14	-	0.89
105	Hexa	PCB-151	1.00	6.88e+05	1.33	y	40:51	-	0.85
106	Hexa	PCB-135	1.00	6.28e+05	1.20	y	41:05	-	0.78
107	Hexa	PCB-144	1.00	7.04e+05	1.27	y	41:10	-	0.87
108	Hexa	PCB-147	1.00	6.51e+05	1.41	y	41:18	-	0.80
109	Hexa	PCB-139/149	2.00	1.40e+06	1.21	y	41:34	-	0.87
110	Hexa	PCB-140	1.00	6.48e+05	1.30	y	41:46	-	0.80
111	Hexa	PCB-134/143	2.00	1.60e+06	1.14	y	42:12	-	0.93
112	Hexa	PCB-133/142	2.00	1.64e+06	1.33	y	42:29	-	0.95

113	Hexa	PCB-131	1.00	8.08e+05	1.26 y	42:38	-	0.94
114	Hexa	PCB-146/165	2.00	1.96e+06	1.28 y	42:52	-	1.13
115	Hexa	PCB-132/161	2.00	2.06e+06	1.27 y	43:07	-	1.19
116	Hexa	PCB-153	1.00	1.13e+06	1.23 y	43:18	-	1.31
117	Hexa	PCB-168	1.00	1.18e+06	1.09 y	43:30	-	1.37
118	Hexa	PCB-141	1.00	9.29e+05	1.17 y	44:02	-	1.25
119	Hexa	PCB-137	1.00	9.45e+05	1.20 y	44:25	-	1.27
120	Hexa	PCB-130	1.00	7.07e+05	1.13 y	44:31	-	0.95
121	Hexa	PCB-138/163/164	3.00	3.22e+06	1.21 y	44:54	-	1.43
122	Hexa	PCB-158/160	2.00	2.26e+06	1.24 y	45:08	-	1.51
123	Hexa	PCB-129	1.00	7.93e+05	1.31 y	45:23	-	1.06
124	Hexa	PCB-166	1.00	1.09e+06	1.28 y	45:49	-	1.18
125	Hexa	PCB-159	1.00	1.13e+06	1.11 y	46:09	-	1.21
126	Hexa	PCB-128/162	2.00	1.98e+06	1.23 y	46:26	-	1.07
127	Hexa	PCB-167	1.00	1.15e+06	1.12 y	46:50	-	1.23
128	Hexa	PCB-156	1.00	1.17e+06	1.37 y	48:07	-	1.31
129	Hexa	PCB-157	1.00	1.24e+06	1.29 y	48:23	-	1.29
130	Hexa	PCB-169	1.00	1.00e+06	1.13 y	50:32	-	1.08
131	Hepta	PCB-188	1.00	1.09e+06	1.07 y	42:56	-	1.60
132	Hepta	PCB-184	1.00	9.60e+05	1.07 y	43:22	-	1.42
133	Hepta	PCB-179	1.00	9.94e+05	0.98 y	44:09	-	1.47
134	Hepta	PCB-176	1.00	1.03e+06	1.02 y	44:37	-	1.52
135	Hepta	PCB-186	1.00	1.03e+06	1.08 y	45:13	-	1.52
136	Hepta	PCB-178	1.00	7.97e+05	0.98 y	45:43	-	1.18
137	Hepta	PCB-175	1.00	7.60e+05	1.10 y	46:04	-	1.12
138	Hepta	PCB-182/187	2.00	1.64e+06	0.98 y	46:14	-	1.21
139	Hepta	PCB-183	1.00	9.02e+05	1.10 y	46:33	-	1.33
140	Hepta	PCB-185	1.00	7.20e+05	1.10 y	47:12	-	1.43
141	Hepta	PCB-174	1.00	6.73e+05	0.92 y	47:34	-	1.34
142	Hepta	PCB-181	1.00	6.72e+05	0.96 y	47:41	-	1.34
143	Hepta	PCB-177	1.00	6.37e+05	1.01 y	47:51	-	1.27
144	Hepta	PCB-171	1.00	7.64e+05	1.06 y	48:08	-	1.52
145	Hepta	PCB-173	1.00	5.68e+05	0.94 y	48:34	-	1.13
146	Hepta	PCB-172	1.00	6.81e+05	1.09 y	49:01	-	1.35
147	Hepta	PCB-192	1.00	9.21e+05	1.03 y	49:13	-	1.83
148	Hepta	PCB-180	1.00	7.89e+05	0.96 y	49:25	-	1.57
149	Hepta	PCB-193	1.00	9.90e+05	0.98 y	49:37	-	1.97
150	Hepta	PCB-191	1.00	9.89e+05	0.99 y	49:53	-	1.97
151	Hepta	PCB-170	1.00	7.14e+05	0.92 y	50:56	-	1.73
152	Hepta	PCB-190	1.00	9.30e+05	1.10 y	51:06	-	2.26
153	Hepta	PCB-189	1.00	9.45e+05	1.11 y	52:27	-	1.76
154	Octa	PCB-202	1.00	7.24e+05	0.77 y	48:21	-	1.09
155	Octa	PCB-201	1.00	7.55e+05	0.84 y	48:50	-	1.14
156	Octa	PCB-204	1.00	7.15e+05	0.96 y	48:59	-	1.08
157	Octa	PCB-197	1.00	7.78e+05	0.82 y	49:16	-	1.18
158	Octa	PCB-200	1.00	7.01e-05	0.87 y	50:10	-	1.06
159	Octa	PCB-198	1.00	4.84e+05	0.84 y	51:31	-	0.73
160	Octa	PCB-199	1.00	5.29e+05	0.89 y	51:38	-	0.80
161	Octa	PCB-196/203	2.00	1.12e+06	0.95 y	51:55	-	0.84
162	Octa	PCB-195	1.00	5.76e+05	0.88 y	53:05	-	1.10

163	Octa	PCB-194	1.00	7.18e+05	0.90	y	53:57	-	1.37
164	Octa	PCB-205	1.00	8.28e+05	0.91	y	54:14	-	1.58
165	Nona	PCB-208	1.00	7.99e+05	1.27	y	53:14	-	1.10
166	Nona	PCB-207	1.00	7.76e+05	1.14	y	53:33	-	1.07
167	Nona	PCB-206	1.00	4.50e+05	1.29	y	55:35	-	0.89
168	Deca	PCB-209	1.00	6.79e+05	1.05	y	56:57	-	1.42
169	Tot ፻	Total Mono-PCB	0.00	-	-	n	-	-	1.39
170	Tot ፻	Total Di-PCB	0.00	-	-	n	-	-	1.39

171	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.28
172	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.28
173	Tot Σ	Total Tetra-PCB	0.00	-	- n	-	-	1.28
174	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.23
175	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.32
176	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	1.44
177	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	0.96
178	Tot Σ	Total Hepta-PCB	0.00	-	- n	-	-	1.17
179	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	1.44
180	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	0.98
181	Tot Σ	Total Nona-PCB	0.00	-	- n	-	-	1.35
182	Tot Σ	Total Deca-PCB	1.00	6.79e+05	1.05 y	56:57	-	1.04
183	MonoΣ	13C-PCB-1	100.00	1.70e+08	3.57 y	16:10	-	0.97
184	MonoΣ	13C-PCB-3	100.00	1.67e+08	3.59 y	18:47	-	0.95
185	Di-Σ	13C-PCB-4	100.00	1.06e+08	1.60 y	20:07	-	0.61
186	Di-Σ	13C-PCB-9	100.00	1.69e+08	1.58 y	21:55	-	0.97
187	Di-Σ	13C-PCB-11	100.00	1.67e+08	1.56 y	25:17	-	0.95
188	Tri-Σ	13C-PCB-19	100.00	9.99e+07	1.10 y	24:16	-	0.57
189	Tri-Σ	13C-PCB-32	100.00	1.46e+08	1.10 y	27:11	-	0.84
190	Tri-Σ	13C-PCB-28	100.00	1.25e+08	1.03 y	29:09	-	1.09
191	Tri-Σ	13C-PCB-37	100.00	1.18e+08	1.04 y	33:01	-	1.03
192	TetrΣ	13C-PCB-54	100.00	1.28e+08	0.77 y	28:02	-	1.00
193	TetrΣ	13C-PCB-52	100.00	9.09e+07	0.78 y	31:33	-	0.71
194	TetrΣ	13C-PCB-47	100.00	9.50e+07	0.76 y	32:04	-	0.74
195	TetrΣ	13C-PCB-70	100.00	1.26e+08	0.78 y	35:35	-	0.99
196	TetrΣ	13C-PCB-80	100.00	1.30e+08	0.79 y	36:00	-	1.02
197	TetrΣ	13C-PCB-81	100.00	1.24e+08	0.77 y	39:05	-	0.96
198	TetrΣ	13C-PCB-77	100.00	1.20e+08	0.79 y	39:41	-	0.94
199	PentΣ	13C-PCB-104	100.00	8.90e+07	1.62 y	32:43	-	0.97
200	PentΣ	13C-PCB-95	100.00	6.51e+07	1.60 y	35:52	-	0.71
201	PentΣ	13C-PCB-101	100.00	7.10e+07	1.68 y	37:33	-	0.77
202	PentΣ	13C-PCB-97	100.00	6.10e+07	1.61 y	38:52	-	0.66
203	PentΣ	13C-PCB-123	100.00	8.03e+07	1.65 y	41:25	-	0.87
204	PentΣ	13C-PCB-118	100.00	8.33e+07	1.62 y	41:36	-	0.90
205	PentΣ	13C-PCB-114	100.00	8.57e+07	1.57 y	42:15	-	1.25
206	PentΣ	13C-PCB-105	100.00	8.29e+07	1.58 y	43:07	-	1.21
207	PentΣ	13C-PCB-127	100.00	8.47e+07	1.60 y	43:27	-	1.23
208	PentΣ	13C-PCB-126	100.00	7.66e+07	1.55 y	45:21	-	1.12
209	HexaΣ	13C-PCB-155	100.00	8.10e+07	1.26 y	37:06	-	0.88
210	HexaΣ	13C-PCB-153	100.00	8.63e+07	1.26 y	43:16	-	1.26
211	HexaΣ	13C-PCB-141	100.00	7.46e+07	1.29 y	44:00	-	1.09
212	Hexa	13C-PCB-138	100.00	7.51e+07	1.24 y	44:51	-	1.09
213	HexaΣ	13C-PCB-159	100.00	9.27e+07	1.26 y	46:08	-	1.35
214	HexaΣ	13C-PCB-167	100.00	9.41e+07	1.25 y	46:49	-	1.37
215	HexaΣ	13C-PCB-156	100.00	8.95e+07	1.29 y	48:07	-	1.30
216	HexaΣ	13C-PCB-157	100.00	9.57e+07	1.30 y	48:23	-	1.39
217	HexaΣ	13C-PCB-169	100.00	9.25e+07	1.28 y	50:32	-	1.35
218	HeptaΣ	13C-PCB-188	100.00	6.78e+07	0.45 y	42:54	-	0.99
219	HeptaΣ	13C-PCB-180	100.00	5.03e+07	0.47 y	49:24	-	0.73
220	HeptaΣ	13C-PCB-170	100.00	4.12e+07	0.45 y	50:54	-	0.60
221	HeptaΣ	13C-PCB-189	100.00	5.36e+07	0.47 y	52:26	-	0.78

222	Octa ₇	13C-PCB-202	100.00	6.61e+07	0.92	y	48:19	-	0.96
223	Octa ₇	13C-PCB-194	100.00	5.23e+07	0.90	y	53:56	-	0.78
224	Nona ₇	13C-PCB-208	100.00	7.26e+07	0.77	y	53:13	-	1.08
225	Nona ₇	13C-PCB-206	100.00	5.04e+07	0.78	y	55:34	-	0.75
226	Deca ₇	13C-PCB-209	100.00	4.78e+07	1.19	y	56:56	-	0.71
227	DI-RS	13C-PCB-15	100.00	1.75e+08	1.56	y	26:00	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.15e+08	1.03	y	29:02	-	1.00
229	Tetra ₇	13C-PCB-60	100.00	1.28e+08	0.78	y	36:49	-	1.00
230	Penta	13C-PCB-111	100.00	9.21e+07	1.63	y	39:17	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	6.87e+07	1.27	y	46:25	-	1.00

232	Octa γ	13C-PCB-205	100.00	6.70e+07	0.88 y	54:13	-	1.00
233	CRS	13C-PCB-79	100.00	1.34e+08	0.79 y	37:52	-	1.04
234	CRS	13C-PCB-178	100.00	4.42e+07	0.46 y	45:42	-	0.64
235	PS	13C-PCB-79	100.00	1.34e+08	0.79 y	37:52	-	1.08
236	PS	13C-PCB-178	100.00	4.42e+07	0.46 y	45:42	-	0.88

Filename: 150114E1 S: 5 Acquired: 14-JAN-15 16:55:24
 Run: 150114e1 Analyte: ICal: pcbvg8-1-14-15 Results: 150114e1
 Sample text: ST150114E1-4 PCB CS2 14L2904

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	2.50	5.57e+06	3.10 y	16:11	-	1.32
2	Mono	PCB-2	2.50	5.30e+06	3.00 y	18:33	-	1.31
3	Mono	PCB-3	2.50	5.37e+06	3.04 y	18:48	-	1.33
4	Di	PCB-4/10	5.00	8.76e+06	1.64 y	20:10	-	1.67
5	Di	PCB-7/9	5.00	1.06e+07	1.75 y	21:57	-	1.26
6	Di	PCB-6	2.50	5.18e+06	1.70 y	22:36	-	1.24
7	Di	PCB-5/8	5.00	1.05e+07	1.64 y	23:01	-	1.25
8	Di	PCB-14	2.50	6.03e+06	1.67 y	24:06	-	1.25
9	Di	PCB-11	2.50	5.22e+06	1.71 y	25:18	-	1.25
10	Di	PCB-12/13	5.00	1.04e+07	1.62 y	25:41	-	1.25
11	Di	PCB-15	2.50	5.86e+06	1.59 y	26:00	-	1.41
12	Tri	PCB-19	2.50	3.00e+06	1.04 y	24:17	-	1.20
13	Tri	PCB-30	2.50	4.60e+06	1.06 y	25:11	-	1.85
14	Tri	PCB-18	2.50	3.22e+06	1.05 y	25:56	-	0.90
15	Tri	PCB-17	2.50	3.45e+06	1.03 y	26:06	-	0.97
16	Tri	PCB-24/27	5.00	9.33e+06	1.06 y	26:41	-	1.31
17	Tri	PCB-16/32	5.00	7.45e+06	1.05 y	27:11	-	1.04
18	Tri	PCB-34	2.50	4.16e+06	1.01 y	27:59	-	1.41
19	Tri	PCB-23	2.50	3.35e+06	1.05 y	28:05	-	1.14
20	Tri	PCB-29	2.50	3.86e+06	1.02 y	28:20	-	1.31
21	Tri	PCB-26	2.50	3.84e+06	1.08 y	28:32	-	1.30
22	Tri	PCB-25	2.50	3.22e+06	1.07 y	28:41	-	1.09
23	Tri	PCB-31	2.50	3.90e+06	1.02 y	29:03	-	1.32
24	Tri	PCB-28	2.50	3.83e+06	1.03 y	29:09	-	1.30
25	Tri	PCB-20/21/33	7.50	1.09e+07	1.03 y	29:46	-	1.23
26	Tri	PCB-22	2.50	3.46e+06	1.06 y	30:12	-	1.17
27	Tri	PCB-36	2.50	3.56e+06	1.01 y	30:50	-	1.36
28	Tri	PCB-39	2.50	3.61e+06	1.03 y	31:17	-	1.38
29	Tri	PCB-38	2.50	3.19e+06	1.11 y	32:04	-	1.22
30	Tri	PCB-35	2.50	3.11e+06	1.13 y	32:36	-	1.19
31	Tri	PCB-37	2.50	3.49e+06	1.03 y	33:02	-	1.33
32	Tetra	PCB-54	2.50	3.51e+06	0.73 y	28:02	-	1.07
33	Tetra	PCB-50	2.50	2.59e+06	0.74 y	29:12	-	0.78
34	Tetra	PCB-53	2.50	2.54e+06	0.71 y	29:51	-	1.15
35	Tetra	PCB-51	2.50	2.57e+06	0.77 y	30:11	-	1.16
36	Tetra	PCB-45	2.50	2.31e+06	0.78 y	30:37	-	1.04
37	Tetra	PCB-46	2.50	2.17e+06	0.77 y	31:07	-	0.98
38	Tetra	PCB-52/69	5.00	6.13e+06	0.74 y	31:35	-	1.38
39	Tetra	PCB-73	2.50	2.77e+06	0.78 y	31:42	-	1.25
40	Tetra	PCB-43/49	5.00	4.93e+06	0.75 y	31:52	-	1.11
41	Tetra	PCB-47	2.50	2.50e+06	0.77 y	32:04	-	1.11

42	Tetra	PCB-48/75	5.00	5.98e+06	0.73	y	32:11	-	1.32
43	Tetra	PCB-65	2.50	3.01e+06	0.69	y	32:28	-	1.33
44	Tetra	PCB-62	2.50	2.87e+06	0.75	y	32:34	-	1.27
45	Tetra	PCB-44	2.50	1.97e+06	0.67	y	32:52	-	0.87
46	Tetra	PCB-42/59	5.00	5.75e+06	0.74	y	33:06	-	1.27
47	Tetra	PCB-41/64/71/72	10.00	1.22e+07	0.74	y	33:41	-	1.35
48	Tetra	PCB-68	2.50	3.54e+06	0.72	y	33:56	-	1.57
49	Tetra	PCB-40	2.50	1.90e+06	0.77	y	34:09	-	0.84
50	Tetra	PCB-57	2.50	3.26e+06	0.80	y	34:31	-	1.12
51	Tetra	PCB-67	2.50	3.25e+06	0.70	y	34:49	-	1.11
52	Tetra	PCB-58	2.50	3.17e+06	0.72	y	34:56	-	1.09

53	Tetra	PCB-63	2.50	3.38e+06	0.69	y	35:06	-	1.16
54	Tetra	PCB-74	2.50	3.48e+06	0.73	y	35:23	-	1.20
55	Tetra	PCB-61/70	5.00	6.32e+06	0.68	y	35:33	-	1.08
56	Tetra	PCB-76/66	5.00	6.53e+06	0.75	y	35:46	-	1.12
57	Tetra	PCB-80	2.50	3.97e+06	0.74	y	36:00	-	1.32
58	Tetra	PCB-55	2.50	3.60e+06	0.75	y	36:19	-	1.19
59	Tetra	PCB-56/60	5.00	6.76e+06	0.76	y	36:49	-	1.12
60	Tetra	PCB-79	2.50	3.65e+06	0.72	y	37:53	-	1.21
61	Tetra	PCB-78	2.50	3.42e+06	0.74	y	38:35	-	1.16
62	Tetra	PCB-81	2.50	3.78e+06	0.73	y	39:06	-	1.29
63	Tetra	PCB-77	2.50	3.77e+06	0.76	y	39:42	-	1.31
64	Penta	PCB-104	2.50	2.66e+06	1.51	y	32:44	-	1.24
65	Penta	PCB-96	2.50	2.34e+06	1.66	y	33:59	-	1.09
66	Penta	PCB-103	2.50	2.06e+06	1.55	y	34:31	-	0.96
67	Penta	PCB-100	2.50	2.12e+06	1.63	y	34:53	-	0.99
68	Penta	PCB-94	2.50	1.77e+06	1.57	y	35:20	-	1.14
69	Penta	PCB-95/98/102	7.50	6.08e+06	1.61	y	35:50	-	1.31
70	Penta	PCB-93	2.50	1.62e+06	1.42	y	35:58	-	1.05
71	Penta	PCB-88/91	5.00	3.44e+06	1.55	y	36:15	-	1.11
72	Penta	PCB-121	2.50	2.69e+06	1.55	y	36:22	-	1.74
73	Penta	PCB-84/92	5.00	3.93e+06	1.62	y	37:12	-	1.12
74	Penta	PCB-89	2.50	1.84e+06	1.52	y	37:22	-	1.04
75	Penta	PCB-90/101	5.00	4.29e+06	1.56	y	37:33	-	1.22
76	Penta	PCB-113	2.50	2.50e+06	1.56	y	37:48	-	1.42
77	Penta	PCB-99	2.50	2.14e+06	1.54	y	37:54	-	1.22
78	Penta	PCB-119	2.50	2.79e+06	1.62	y	38:21	-	1.89
79	Penta	PCB-108/112	5.00	4.27e+06	1.62	y	38:30	-	1.45
80	Penta	PCB-83	2.50	2.51e+06	1.64	y	38:40	-	1.70
81	Penta	PCB-97	2.50	1.95e+06	1.50	y	38:52	-	1.32
82	Penta	PCB-86	2.50	1.37e+06	1.47	y	39:01	-	0.93
83	Penta	PCB-87/117/125	7.50	7.08e+06	1.62	y	39:08	-	1.60
84	Penta	PCB-111/115	5.00	5.48e+06	1.46	y	39:18	-	1.86
85	Penta	PCB-85/116	5.00	3.87e+06	1.60	y	39:26	-	1.31
86	Penta	PCB-120	2.50	2.96e+06	1.50	y	39:39	-	2.00
87	Penta	PCB-110	2.50	2.50e+06	1.58	y	39:48	-	1.69
88	Penta	PCB-82	2.50	1.46e+06	1.65	y	40:26	-	0.74
89	Penta	PCB-124	2.50	2.56e+06	1.52	y	41:06	-	1.29
90	Penta	PCB-107/109	5.00	5.26e+06	1.53	y	41:15	-	1.33
91	Penta	PCB-123	2.50	2.55e+06	1.55	y	41:25	-	1.29
92	Penta	PCB-106/118	5.00	5.39e+06	1.55	y	41:38	-	1.30
93	Penta	PCB-114	2.50	3.07e+06	1.72	y	42:15	-	1.46
94	Penta	PCB-122	2.50	2.74e+06	1.68	y	42:23	-	1.30
95	Penta	PCB-105	2.50	3.30e+06	1.60	y	43:07	-	1.62
96	Penta	PCB-127	2.50	2.77e+06	1.59	y	43:27	-	1.30
97	Penta	PCB-126	2.50	2.66e+06	1.59	y	45:21	-	1.46
98	Hexa	PCB-155	2.50	2.45e+06	1.27	y	37:07	-	1.21
99	Hexa	PCB-150	2.50	2.17e+06	1.23	y	38:22	-	1.07
100	Hexa	PCB-152	2.50	2.24e+06	1.23	y	38:51	-	1.11
101	Hexa	PCB-145	2.50	2.20e+06	1.31	y	39:18	-	1.09
102	Hexa	PCB-136	2.50	2.25e+06	1.25	y	39:36	-	1.12

103	Hexa	PCB-148	2.50	1.64e+06	1.30	y	39:43	-	0.81
104	Hexa	PCB-154	2.50	1.79e+06	1.26	y	40:12	-	0.89
105	Hexa	PCB-151	2.50	1.62e+06	1.28	y	40:51	-	0.80
106	Hexa	PCB-135	2.50	1.62e+06	1.09	y	41:03	-	0.80
107	Hexa	PCB-144	2.50	1.56e+06	1.28	y	41:10	-	0.77
108	Hexa	PCB-147	2.50	1.45e+06	1.24	y	41:18	-	0.72
109	Hexa	PCB-139/149	5.00	3.45e+06	1.23	y	41:34	-	0.85
110	Hexa	PCB-140	2.50	1.53e+06	1.14	y	41:46	-	0.76
111	Hexa	PCB-134/143	5.00	4.05e+06	1.23	y	42:12	-	0.94
112	Hexa	PCB-133/142	5.00	3.84e+06	1.20	y	42:29	-	0.89
113	Hexa	PCB-131	2.50	1.83e+06	1.25	y	42:38	-	0.85

114	Hexa	PCB-146/165	5.00	4.66e+06	1.26 y	42:52	-	1.08
115	Hexa	PCB-132/161	5.00	4.84e+06	1.19 y	43:07	-	1.12
116	Hexa	PCB-153	2.50	2.56e+06	1.27 y	43:17	-	1.19
117	Hexa	PCB-168	2.50	3.00e+06	1.22 y	43:29	-	1.39
118	Hexa	PCB-141	2.50	2.20e+06	1.20 y	44:00	-	1.16
119	Hexa	PCB-137	2.50	2.20e+06	1.31 y	44:24	-	1.16
120	Hexa	PCB-130	2.50	1.53e+06	1.23 y	44:31	-	0.80
121	Hexa	PCB-138/163/164	7.50	7.63e+06	1.22 y	44:52	-	1.35
122	Hexa	PCB-158/160	5.00	5.45e+06	1.20 y	45:08	-	1.44
123	Hexa	PCB-129	2.50	1.82e+06	1.23 y	45:21	-	0.96
124	Hexa	PCB-166	2.50	2.53e+06	1.20 y	45:49	-	1.10
125	Hexa	PCB-159	2.50	2.81e+06	1.30 y	46:09	-	1.22
126	Hexa	PCB-128/162	5.00	4.82e+06	1.23 y	46:26	-	1.05
127	Hexa	PCB-167	2.50	2.78e+06	1.23 y	46:49	-	1.18
128	Hexa	PCB-156	2.50	2.96e+06	1.27 y	48:07	-	1.30
129	Hexa	PCB-157	2.50	2.84e+06	1.24 y	48:23	-	1.24
130	Hexa	PCB-169	2.50	2.53e+06	1.17 y	50:32	-	1.10
131	Hepta	PCB-188	2.50	2.47e+06	1.00 y	42:55	-	1.46
132	Hepta	PCB-184	2.50	2.33e+06	1.04 y	43:22	-	1.37
133	Hepta	PCB-179	2.50	2.38e+06	1.02 y	44:09	-	1.41
134	Hepta	PCB-176	2.50	2.48e+06	0.98 y	44:36	-	1.46
135	Hepta	PCB-186	2.50	2.44e+06	1.11 y	45:13	-	1.44
136	Hepta	PCB-178	2.50	1.82e+06	1.06 y	45:42	-	1.07
137	Hepta	PCB-175	2.50	1.74e+06	1.03 y	46:03	-	1.03
138	Hepta	PCB-182/187	5.00	3.90e+06	1.11 y	46:13	-	1.15
139	Hepta	PCB-183	2.50	2.14e+06	1.05 y	46:33	-	1.26
140	Hepta	PCB-185	2.50	1.77e+06	1.02 y	47:12	-	1.40
141	Hepta	PCB-174	2.50	1.60e+06	1.07 y	47:34	-	1.26
142	Hepta	PCB-181	2.50	1.81e+06	1.12 y	47:40	-	1.43
143	Hepta	PCB-177	2.50	1.67e+06	1.13 y	47:50	-	1.32
144	Hepta	PCB-171	2.50	1.81e+06	1.05 y	48:08	-	1.43
145	Hepta	PCB-173	2.50	1.39e+06	0.93 y	48:33	-	1.10
146	Hepta	PCB-172	2.50	1.57e+06	1.02 y	49:00	-	1.24
147	Hepta	PCB-192	2.50	2.08e+06	0.99 y	49:12	-	1.64
148	Hepta	PCB-180	2.50	1.80e+06	1.01 y	49:24	-	1.42
149	Hepta	PCB-193	2.50	2.24e+06	1.07 y	49:37	-	1.77
150	Hepta	PCB-191	2.50	2.29e+06	1.00 y	49:52	-	1.81
151	Hepta	PCB-170	2.50	1.64e+06	1.01 y	50:56	-	1.65
152	Hepta	PCB-190	2.50	2.11e+06	1.07 y	51:06	-	2.12
153	Hepta	PCB-189	2.50	2.24e+06	1.04 y	52:27	-	1.69
154	Octa	PCB-202	2.50	1.65e+06	0.92 y	48:20	-	0.99
155	Octa	PCB-201	2.50	1.83e+06	0.88 y	48:49	-	1.10
156	Octa	PCB-204	2.50	1.71e+06	0.88 y	48:59	-	1.02
157	Octa	PCB-197	2.50	1.87e+06	0.88 y	49:17	-	1.12
158	Octa	PCB-200	2.50	1.68e+06	0.82 y	50:10	-	1.01
159	Octa	PCB-198	2.50	1.15e+06	0.85 y	51:31	-	0.69
160	Octa	PCB-199	2.50	1.14e+06	0.89 y	51:38	-	0.68
161	Octa	PCB-196/203	5.00	2.48e+06	0.93 y	51:55	-	0.74
162	Octa	PCB-195	2.50	1.33e+06	0.94 y	53:05	-	1.04
163	Octa	PCB-194	2.50	1.66e+06	0.88 y	53:57	-	1.30

164	Octa	PCB-205	2.50	1.99e+06	0.92	y	54:14	-	1.56
165	Nona	PCB-208	2.50	1.85e+06	1.33	y	53:14	-	1.03
166	Nona	PCB-207	2.50	1.79e+06	1.27	y	53:32	-	1.00
167	Nona	PCB-206	2.50	1.13e+06	1.21	y	55:34	-	0.91
168	Deca	PCB-209	2.50	1.48e+06	1.16	y	56:55	-	1.31
169	Tot Σ	Total Mono-PCB	0.00	-	-	n	-	-	1.32
170	Tot Σ	Total Di-PCB	0.00	-	-	n	-	-	1.31
171	Tot Σ	Total Tri-PCB	0.00	-	-	n	-	-	1.21

172	Tot က	Total Tri-PCB	0.00	-	- n	-	-	1.27
173	Tot က	Total Tetra-PCB	0.00	-	- n	-	-	1.16
174	Tot က	Total Penta-PCB	0.00	-	- n	-	-	1.25
175	Tot က	Total Penta-PCB	0.00	-	- n	-	-	1.43
176	Tot က	Total Hexa-PCB	0.00	-	- n	-	-	0.92
177	Tot က	Total Hexa-PCB	0.00	-	- n	-	-	1.12
178	Tot က	Total Hepta-PCB	0.00	-	- n	-	-	1.36
179	Tot က	Total Octa-PCB	0.00	-	- n	-	-	0.90
180	Tot က	Total Octa-PCB	0.00	-	- n	-	-	1.30
181	Tot က	Total Nona-PCB	0.00	-	- n	-	-	0.99
182	Tot က	Total Deca-PCB	2.50	1.48e+06	1.16 y	56:55	-	1.31
183	Monoက	13C-PCB-1	100.00	1.69e+08	3.58 y	16:10	-	0.98
184	Monoက	13C-PCB-3	100.00	1.62e+08	3.60 y	18:46	-	0.94
185	Di-IS	13C-PCB-4	100.00	1.05e+08	1.60 y	20:07	-	0.61
186	Di-IS	13C-PCB-9	100.00	1.68e+08	1.58 y	21:54	-	0.98
187	Di-IS	13C-PCB-11	100.00	1.66e+08	1.56 y	25:17	-	0.97
188	Tri-က	13C-PCB-19	100.00	9.97e+07	1.10 y	24:16	-	0.58
189	Tri-က	13C-PCB-32	100.00	1.43e+08	1.10 y	27:11	-	0.83
190	Tri-က	13C-PCB-28	100.00	1.18e+08	1.06 y	29:08	-	1.00
191	Tri-က	13C-PCB-37	100.00	1.05e+08	1.05 y	33:01	-	0.89
192	Tetrက	13C-PCB-54	100.00	1.32e+08	0.77 y	28:01	-	1.08
193	Tetrက	13C-PCB-52	100.00	8.88e+07	0.77 y	31:33	-	0.73
194	Tetrက	13C-PCB-47	100.00	9.03e+07	0.76 y	32:03	-	0.74
195	Tetrက	13C-PCB-70	100.00	1.16e+08	0.77 y	35:34	-	0.95
196	Tetrက	13C-PCB-80	100.00	1.21e+08	0.78 y	35:59	-	0.99
197	Tetrက	13C-PCB-81	100.00	1.17e+08	0.79 y	39:05	-	0.96
198	Tetrက	13C-PCB-77	100.00	1.15e+08	0.78 y	39:41	-	0.94
199	Pentက	13C-PCB-104	100.00	8.57e+07	1.62 y	32:42	-	0.98
200	Pentက	13C-PCB-95	100.00	6.19e+07	1.62 y	35:52	-	0.71
201	Pentက	13C-PCB-101	100.00	7.03e+07	1.60 y	37:33	-	0.80
202	Pentက	13C-PCB-97	100.00	5.90e+07	1.61 y	38:51	-	0.67
203	Pentက	13C-PCB-123	100.00	7.92e+07	1.59 y	41:25	-	0.90
204	Pentက	13C-PCB-118	100.00	8.31e+07	1.61 y	41:35	-	0.95
205	Pentက	13C-PCB-114	100.00	8.41e+07	1.59 y	42:15	-	1.24
206	Pentက	13C-PCB-105	100.00	8.15e+07	1.57 y	43:06	-	1.20
207	Pentက	13C-PCB-127	100.00	8.51e+07	1.56 y	43:27	-	1.25
208	Pentက	13C-PCB-126	100.00	7.30e+07	1.52 y	45:20	-	1.07
209	Hexaက	13C-PCB-155	100.00	8.08e+07	1.29 y	37:06	-	0.92
210	Hexaက	13C-PCB-153	100.00	8.63e+07	1.25 y	43:16	-	1.27
211	Hexaက	13C-PCB-141	100.00	7.58e+07	1.27 y	44:00	-	1.12
212	Hexa	13C-PCB-138	100.00	7.56e+07	1.27 y	44:51	-	1.11
213	Hexaက	13C-PCB-159	100.00	9.21e+07	1.26 y	46:08	-	1.36
214	Hexaက	13C-PCB-167	100.00	9.42e+07	1.28 y	46:49	-	1.39
215	Hexaက	13C-PCB-156	100.00	9.08e+07	1.28 y	48:06	-	1.34
216	Hexaက	13C-PCB-157	100.00	9.19e+07	1.25 y	48:22	-	1.35
217	Hexaက	13C-PCB-169	100.00	9.21e+07	1.27 y	50:32	-	1.36
218	Heptaက	13C-PCB-188	100.00	6.77e+07	0.45 y	42:54	-	1.00
219	Heptaက	13C-PCB-180	100.00	5.07e+07	0.45 y	49:23	-	0.75
220	Heptaက	13C-PCB-170	100.00	3.98e+07	0.46 y	50:54	-	0.59
221	Heptaက	13C-PCB-189	100.00	5.32e+07	0.47 y	52:26	-	0.78
222	Octaက	13C-PCB-202	100.00	6.68e+07	0.92 y	48:19	-	0.98

223	Octa ₇	13C-PCB-194	100.00	5.10e+07	0.91	y	53:56	-	0.77
224	Nona ₇	13C-PCB-208	100.00	7.15e+07	0.76	y	53:13	-	1.09
225	Nona ₇	13C-PCB-206	100.00	4.98e+07	0.77	y	55:33	-	0.76
226	Deca ₇	13C-PCB-209	100.00	4.53e+07	1.18	y	56:54	-	0.69
227	DI-RS	13C-PCB-15	100.00	1.72e+08	1.58	y	25:59	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.18e+08	1.05	y	29:02	-	1.00
229	Tetra ₇	13C-PCB-60	100.00	1.22e+08	0.78	y	36:48	-	1.00
230	Penta	13C-PCB-111	100.00	8.77e+07	1.62	y	39:17	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	6.80e+07	1.29	y	46:24	-	1.00
232	Octa ₇	13C-PCB-205	100.00	6.58e+07	0.89	y	54:13	-	1.00

233	CRS	13C-PCB-79	100.00	1.25e+08	0.78	y	37:51	-	1.02
234	CRS	13C-PCB-178	100.00	4.29e+07	0.46	y	45:41	-	0.63
235	PS	13C-PCB-79	100.00	1.25e+08	0.78	y	37:51	-	1.07
236	PS	13C-PCB-178	100.00	4.29e+07	0.46	y	45:41	-	0.85

Filename: 150114E1 S: 6 Acquired: 14-JAN-15 18:00:03
 Run: 150114e1 Analyte: ICal: pcbvg8-1-14-15 Results: 150114e1
 Sample text: ST150114E1-5 PCB CS3 14L1801

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	50.00	8.07e+07	2.99 y	16:11	-	1.23
2	Mono	PCB-2	50.00	8.02e+07	2.99 y	18:33	-	1.26
3	Mono	PCB-3	50.00	8.03e+07	2.98 y	18:47	-	1.26
4	Di	PCB-4/10	100.00	1.30e+08	1.64 y	20:10	-	1.56
5	Di	PCB-7/9	100.00	1.56e+08	1.63 y	21:57	-	1.18
6	Di	PCB-6	50.00	7.76e+07	1.65 y	22:35	-	1.18
7	Di	PCB-5/8	100.00	1.55e+08	1.64 y	23:00	-	1.17
8	Di	PCB-14	50.00	9.12e+07	1.64 y	24:06	-	1.41
9	Di	PCB-11	50.00	7.80e+07	1.68 y	25:17	-	1.21
10	Di	PCB-12/13	100.00	1.55e+08	1.65 y	25:41	-	1.20
11	Di	PCB-15	50.00	8.75e+07	1.65 y	26:00	-	1.36
12	Tri	PCB-19	50.00	4.22e+07	1.06 y	24:17	-	1.13
13	Tri	PCB-30	50.00	6.72e+07	1.05 y	25:11	-	1.80
14	Tri	PCB-18	50.00	4.67e+07	1.06 y	25:55	-	0.85
15	Tri	PCB-17	50.00	5.08e+07	1.05 y	26:06	-	0.92
16	Tri	PCB-24/27	100.00	1.36e+08	1.06 y	26:40	-	1.23
17	Tri	PCB-16/32	100.00	1.08e+08	1.05 y	27:11	-	0.98
18	Tri	PCB-34	50.00	5.36e+07	1.01 y	27:58	-	1.19
19	Tri	PCB-23	50.00	5.23e+07	1.06 y	28:04	-	1.16
20	Tri	PCB-29	50.00	4.77e+07	1.01 y	28:19	-	1.06
21	Tri	PCB-26	50.00	5.01e+07	1.00 y	28:31	-	1.11
22	Tri	PCB-25	50.00	4.54e+07	1.01 y	28:41	-	1.00
23	Tri	PCB-31	50.00	5.13e+07	1.03 y	29:03	-	1.13
24	Tri	PCB-28	50.00	4.84e+07	1.04 y	29:09	-	1.07
25	Tri	PCB-20/21/33	150.00	1.42e+08	1.02 y	29:45	-	1.05
26	Tri	PCB-22	50.00	4.91e+07	1.03 y	30:12	-	1.09
27	Tri	PCB-36	50.00	5.22e+07	1.05 y	30:49	-	1.40
28	Tri	PCB-39	50.00	4.78e+07	1.05 y	31:17	-	1.28
29	Tri	PCB-38	50.00	4.87e+07	1.03 y	32:04	-	1.31
30	Tri	PCB-35	50.00	4.75e+07	1.03 y	32:34	-	1.28
31	Tri	PCB-37	50.00	4.79e+07	1.08 y	33:01	-	1.28
32	Tetra	PCB-54	50.00	4.77e+07	0.74 y	28:02	-	0.95
33	Tetra	PCB-50	50.00	3.65e+07	0.72 y	29:11	-	0.73
34	Tetra	PCB-53	50.00	3.64e+07	0.75 y	29:51	-	1.09
35	Tetra	PCB-51	50.00	3.70e+07	0.72 y	30:11	-	1.11
36	Tetra	PCB-45	50.00	3.37e+07	0.73 y	30:36	-	1.01
37	Tetra	PCB-46	50.00	2.89e+07	0.73 y	31:06	-	0.87
38	Tetra	PCB-52/69	100.00	8.00e+07	0.74 y	31:34	-	1.20
39	Tetra	PCB-73	50.00	4.72e+07	0.75 y	31:41	-	1.42
40	Tetra	PCB-43/49	100.00	7.08e-07	0.73 y	31:51	-	1.06
41	Tetra	PCB-47	50.00	3.98e+07	0.74 y	32:04	-	1.09

42	Tetra	PCB-48/75	100.00	8.76e+07	0.73	y	32:11	-	1.20
43	Tetra	PCB-65	50.00	4.12e+07	0.73	y	32:26	-	1.13
44	Tetra	PCB-62	50.00	4.67e+07	0.74	y	32:33	-	1.28
45	Tetra	PCB-44	50.00	2.93e+07	0.74	y	32:51	-	0.80
46	Tetra	PCB-42/59	100.00	7.65e+07	0.74	y	33:05	-	1.05
47	Tetra	PCB-41/64/71/72	200.00	1.66e+08	0.73	y	33:40	-	1.14
48	Tetra	PCB-68	50.00	4.75e+07	0.73	y	33:55	-	1.30
49	Tetra	PCB-40	50.00	2.57e+07	0.73	y	34:09	-	0.71
50	Tetra	PCB-57	50.00	4.47e+07	0.74	y	34:30	-	1.03
51	Tetra	PCB-67	50.00	4.34e+07	0.73	y	34:49	-	1.00
52	Tetra	PCB-58	50.00	4.85e+07	0.76	y	34:55	-	1.12

53	Tetra	PCB-63	50.00	4.77e+07	0.71	y	35:04	-	1.10
54	Tetra	PCB-74	50.00	4.68e+07	0.74	y	35:21	-	1.08
55	Tetra	PCB-61/70	100.00	9.06e+07	0.73	y	35:33	-	1.04
56	Tetra	PCB-76/66	100.00	9.21e+07	0.74	y	35:45	-	1.06
57	Tetra	PCB-80	50.00	5.39e+07	0.74	y	35:59	-	1.20
58	Tetra	PCB-55	50.00	5.08e+07	0.74	y	36:18	-	1.13
59	Tetra	PCB-56/60	100.00	8.80e+07	0.73	y	36:48	-	0.98
60	Tetra	PCB-79	50.00	4.65e+07	0.73	y	37:53	-	1.03
61	Tetra	PCB-78	50.00	4.56e+07	0.74	y	38:34	-	1.03
62	Tetra	PCB-81	50.00	5.20e+07	0.75	y	39:05	-	1.17
63	Tetra	PCB-77	50.00	5.01e+07	0.76	y	39:41	-	1.18
64	Penta	PCB-104	50.00	4.01e+07	1.59	y	32:44	-	1.16
65	Penta	PCB-96	50.00	3.32e+07	1.56	y	33:59	-	0.96
66	Penta	PCB-103	50.00	2.97e+07	1.54	y	34:31	-	0.86
67	Penta	PCB-100	50.00	3.02e+07	1.57	y	34:52	-	0.87
68	Penta	PCB-94	50.00	2.48e+07	1.56	y	35:20	-	1.06
69	Penta	PCB-95/98/102	150.00	8.16e+07	1.52	y	35:50	-	1.16
70	Penta	PCB-93	50.00	2.65e+07	1.68	y	35:58	-	1.13
71	Penta	PCB-88/91	100.00	5.25e+07	1.56	y	36:15	-	1.12
72	Penta	PCB-121	50.00	3.68e+07	1.57	y	36:22	-	1.57
73	Penta	PCB-84/92	100.00	5.15e+07	1.54	y	37:11	-	1.04
74	Penta	PCB-89	50.00	2.34e+07	1.53	y	37:22	-	0.95
75	Penta	PCB-90/101	100.00	5.59e+07	1.56	y	37:33	-	1.13
76	Penta	PCB-113	50.00	3.44e+07	1.55	y	37:48	-	1.39
77	Penta	PCB-99	50.00	2.56e+07	1.60	y	37:54	-	1.03
78	Penta	PCB-119	50.00	3.83e+07	1.56	y	38:21	-	1.77
79	Penta	PCB-108/112	100.00	5.74e+07	1.56	y	38:30	-	1.33
80	Penta	PCB-83	50.00	3.43e+07	1.57	y	38:40	-	1.58
81	Penta	PCB-97	50.00	2.60e+07	1.55	y	38:52	-	1.20
82	Penta	PCB-86	50.00	2.15e+07	1.46	y	39:00	-	0.99
83	Penta	PCB-87/117/125	150.00	9.85e+07	1.59	y	39:08	-	1.52
84	Penta	PCB-111/115	100.00	7.67e+07	1.56	y	39:17	-	1.77
85	Penta	PCB-85/116	100.00	5.77e+07	1.60	y	39:25	-	1.33
86	Penta	PCB-120	50.00	3.97e+07	1.53	y	39:39	-	1.83
87	Penta	PCB-110	50.00	3.50e+07	1.56	y	39:47	-	1.62
88	Penta	PCB-82	50.00	2.08e+07	1.56	y	40:25	-	0.73
89	Penta	PCB-124	50.00	3.69e+07	1.57	y	41:06	-	1.29
90	Penta	PCB-107/109	100.00	6.93e+07	1.58	y	41:15	-	1.21
91	Penta	PCB-123	50.00	3.47e+07	1.55	y	41:25	-	1.21
92	Penta	PCB-106/118	100.00	7.35e+07	1.54	y	41:38	-	1.20
93	Penta	PCB-114	50.00	4.27e+07	1.62	y	42:15	-	1.36
94	Penta	PCB-122	50.00	3.51e+07	1.63	y	42:23	-	1.12
95	Penta	PCB-105	50.00	4.36e+07	1.65	y	43:07	-	1.47
96	Penta	PCB-127	50.00	3.79e+07	1.69	y	43:27	-	1.24
97	Penta	PCB-126	50.00	3.67e+07	1.64	y	45:20	-	1.39
98	Hexa	PCB-155	50.00	3.43e+07	1.23	y	37:07	-	1.12
99	Hexa	PCB-150	50.00	3.11e+07	1.24	y	38:22	-	1.02
100	Hexa	PCB-152	50.00	3.16e+07	1.25	y	38:51	-	1.03
101	Hexa	PCB-145	50.00	3.04e+07	1.24	y	39:18	-	1.00
102	Hexa	PCB-136	50.00	3.31e+07	1.23	y	39:37	-	1.09

103	Hexa	PCB-148	50.00	2.18e+07	1.24	y	39:43	-	0.71
104	Hexa	PCB-154	50.00	2.45e+07	1.23	y	40:12	-	0.80
105	Hexa	PCB-151	50.00	2.30e+07	1.25	y	40:51	-	0.75
106	Hexa	PCB-135	50.00	2.19e+07	1.23	y	41:04	-	0.72
107	Hexa	PCB-144	50.00	2.39e+07	1.33	y	41:10	-	0.78
108	Hexa	PCB-147	50.00	2.07e+07	1.15	y	41:18	-	0.68
109	Hexa	PCB-139/149	100.00	4.69e+07	1.23	y	41:34	-	0.77
110	Hexa	PCB-140	50.00	2.12e+07	1.24	y	41:45	-	0.70
111	Hexa	PCB-134/143	100.00	5.52e+07	1.22	y	42:11	-	0.85
112	Hexa	PCB-133/142	100.00	5.46e+07	1.24	y	42:29	-	0.85
113	Hexa	PCB-131	50.00	2.55e+07	1.16	y	42:38	-	0.79

Filename: 150114E1 S: 6 Acquired: 14-JAN-15 18:00:03
 Run: 150114E1 Analyte: ICal: pcbvg8-1-14-15 Results: 150114e1
 Sample text: ST150114E1-5 PCB CS3 14L1801

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	50.00	8.07e+07	2.99 y	16:11	-	1.23
2	Mono	PCB-2	50.00	8.02e+07	2.99 y	18:33	-	1.26
3	Mono	PCB-3	50.00	8.03e+07	2.98 y	18:47	-	1.26
4	Di	PCB-4/10	100.00	1.30e+08	1.64 y	20:10	-	1.56
5	Di	PCB-7/9	100.00	1.56e+08	1.63 y	21:57	-	1.18
6	Di	PCB-6	50.00	7.76e+07	1.65 y	22:35	-	1.18
7	Di	PCB-5/8	100.00	1.55e+08	1.64 y	23:00	-	1.17
8	Di	PCB-14	50.00	9.12e+07	1.64 y	24:06	-	1.41
9	Di	PCB-11	50.00	7.80e+07	1.68 y	25:17	-	1.21
10	Di	PCB-12/13	100.00	1.55e+08	1.65 y	25:41	-	1.20
11	Di	PCB-15	50.00	8.75e+07	1.65 y	26:00	-	1.36
12	Tri	PCB-19	50.00	4.22e+07	1.06 y	24:17	-	1.13
13	Tri	PCB-30	50.00	6.72e+07	1.05 y	25:11	-	1.80
14	Tri	PCB-18	50.00	4.67e+07	1.06 y	25:55	-	0.85
15	Tri	PCB-17	50.00	5.08e+07	1.05 y	26:06	-	0.92
16	Tri	PCB-24/27	100.00	1.36e+08	1.06 y	26:40	-	1.23
17	Tri	PCB-16/32	100.00	1.08e+08	1.05 y	27:11	-	0.98
18	Tri	PCB-34	50.00	5.36e+07	1.01 y	27:58	-	1.19
19	Tri	PCB-23	50.00	5.23e+07	1.06 y	28:04	-	1.16
20	Tri	PCB-29	50.00	4.77e+07	1.01 y	28:19	-	1.06
21	Tri	PCB-26	50.00	5.01e+07	1.00 y	28:31	-	1.11
22	Tri	PCB-25	50.00	4.54e+07	1.01 y	28:41	-	1.00
23	Tri	PCB-31	50.00	5.13e+07	1.03 y	29:03	-	1.13
24	Tri	PCB-28	50.00	4.84e+07	1.04 y	29:09	-	1.07
25	Tri	PCB-20/21/33	150.00	1.42e+08	1.02 y	29:45	-	1.05
26	Tri	PCB-22	50.00	4.91e+07	1.03 y	30:12	-	1.09
27	Tri	PCB-36	50.00	5.22e+07	1.05 y	30:49	-	1.40
28	Tri	PCB-39	50.00	4.78e+07	1.05 y	31:17	-	1.28
29	Tri	PCB-38	50.00	4.87e+07	1.03 y	32:04	-	1.31
30	Tri	PCB-35	50.00	4.75e+07	1.03 y	32:34	-	1.28
31	Tri	PCB-37	50.00	4.79e+07	1.08 y	33:01	-	1.28
32	Tetra	PCB-54	50.00	4.77e+07	0.74 y	28:02	-	0.95
33	Tetra	PCB-50	50.00	3.65e+07	0.72 y	29:11	-	0.73
34	Tetra	PCB-53	50.00	3.64e+07	0.75 y	29:51	-	1.09
35	Tetra	PCB-51	50.00	3.70e+07	0.72 y	30:11	-	1.11
36	Tetra	PCB-45	50.00	3.37e+07	0.73 y	30:36	-	1.01
37	Tetra	PCB-46	50.00	2.89e+07	0.73 y	31:06	-	0.87
38	Tetra	PCB-52/69	100.00	8.00e+07	0.74 y	31:34	-	1.20
39	Tetra	PCB-73	50.00	4.72e+07	0.75 y	31:41	-	1.42
40	Tetra	PCB-43/49	100.00	7.08e-07	0.73 y	31:51	-	1.06

41	Tetra	PCB-47	50.00	3.98e+07	0.74	y	32:04	-	1.09
42	Tetra	PCB-48/75	100.00	8.76e+07	0.73	y	32:11	-	1.20
43	Tetra	PCB-65	50.00	4.12e+07	0.73	y	32:26	-	1.13
44	Tetra	PCB-62	50.00	4.67e+07	0.74	y	32:33	-	1.28
45	Tetra	PCB-44	50.00	2.93e+07	0.74	y	32:51	-	0.80
46	Tetra	PCB-42/59	100.00	7.65e+07	0.74	y	33:05	-	1.05
47	Tetra	PCB-41/64/71/72	200.00	1.66e+08	0.73	y	33:40	-	1.14
48	Tetra	PCB-68	50.00	4.75e+07	0.73	y	33:55	-	1.30
49	Tetra	PCB-40	50.00	2.57e+07	0.73	y	34:09	-	0.71
50	Tetra	PCB-57	50.00	4.47e+07	0.74	y	34:30	-	1.03
51	Tetra	PCB-67	50.00	4.34e+07	0.73	y	34:49	-	1.00

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52	Tetra	PCB-58	50.00	4.85e+07	0.76	y	34:55	-	1.12
53	Tetra	PCB-63	50.00	4.77e+07	0.71	y	35:04	-	1.10
54	Tetra	PCB-74	50.00	4.68e+07	0.74	y	35:21	-	1.08
55	Tetra	PCB-61/70	100.00	9.06e+07	0.73	y	35:33	-	1.04
56	Tetra	PCB-76/66	100.00	9.21e+07	0.74	y	35:45	-	1.06
57	Tetra	PCB-80	50.00	5.39e+07	0.74	y	35:59	-	1.20
58	Tetra	PCB-55	50.00	5.08e+07	0.74	y	36:18	-	1.13
59	Tetra	PCB-56/60	100.00	8.80e+07	0.73	y	36:48	-	0.98
60	Tetra	PCB-79	50.00	4.65e+07	0.73	y	37:53	-	1.03
61	Tetra	PCB-78	50.00	4.56e+07	0.74	y	38:34	-	1.03
62	Tetra	PCB-81	50.00	5.20e+07	0.75	y	39:05	-	1.17
63	Tetra	PCB-77	50.00	5.01e+07	0.76	y	39:41	-	1.18
64	Penta	PCB-104	50.00	4.01e+07	1.59	y	32:44	-	1.16
65	Penta	PCB-96	50.00	3.32e+07	1.56	y	33:59	-	0.96
66	Penta	PCB-103	50.00	2.97e+07	1.54	y	34:31	-	0.86
67	Penta	PCB-100	50.00	3.02e+07	1.57	y	34:52	-	0.87
68	Penta	PCB-94	50.00	2.48e+07	1.56	y	35:20	-	1.06
69	Penta	PCB-95/98/102	150.00	8.16e+07	1.52	y	35:50	-	1.16
70	Penta	PCB-93	50.00	2.65e+07	1.68	y	35:58	-	1.13
71	Penta	PCB-88/91	100.00	5.25e+07	1.56	y	36:15	-	1.12
72	Penta	PCB-121	50.00	3.68e+07	1.57	y	36:22	-	1.57
73	Penta	PCB-84/92	100.00	5.15e+07	1.54	y	37:11	-	1.04
74	Penta	PCB-89	50.00	2.34e+07	1.53	y	37:22	-	0.95
75	Penta	PCB-90/101	100.00	5.59e+07	1.56	y	37:33	-	1.13
76	Penta	PCB-113	50.00	3.44e+07	1.55	y	37:48	-	1.39
77	Penta	PCB-99	50.00	2.56e+07	1.60	y	37:54	-	1.03
78	Penta	PCB-119	50.00	3.83e+07	1.56	y	38:21	-	1.77
79	Penta	PCB-108/112	100.00	5.74e+07	1.56	y	38:30	-	1.33
80	Penta	PCB-83	50.00	3.43e+07	1.57	y	38:40	-	1.58
81	Penta	PCB-97	50.00	2.60e+07	1.55	y	38:52	-	1.20
82	Penta	PCB-86	50.00	2.15e+07	1.46	y	39:00	-	0.99
83	Penta	PCB-87/117/125	150.00	9.85e+07	1.59	y	39:08	-	1.52
84	Penta	PCB-111/115	100.00	7.67e+07	1.56	y	39:17	-	1.77
85	Penta	PCB-85/116	100.00	5.77e+07	1.60	y	39:25	-	1.33
86	Penta	PCB-120	50.00	3.97e+07	1.53	y	39:39	-	1.83
87	Penta	PCB-110	50.00	3.50e+07	1.56	y	39:47	-	1.62
88	Penta	PCB-82	50.00	2.08e+07	1.56	y	40:25	-	0.73
89	Penta	PCB-124	50.00	3.69e+07	1.57	y	41:06	-	1.29
90	Penta	PCB-107/109	100.00	6.93e+07	1.58	y	41:15	-	1.21
91	Penta	PCB-123	50.00	3.47e+07	1.55	y	41:25	-	1.21
92	Penta	PCB-106/118	100.00	7.35e+07	1.54	y	41:38	-	1.20
93	Penta	PCB-114	50.00	4.27e+07	1.62	y	42:15	-	1.36
94	Penta	PCB-122	50.00	3.51e+07	1.63	y	42:23	-	1.12
95	Penta	PCB-105	50.00	4.36e+07	1.65	y	43:07	-	1.47
96	Penta	PCB-127	50.00	3.79e+07	1.69	y	43:27	-	1.24
97	Penta	PCB-126	50.00	3.67e+07	1.64	y	45:20	-	1.39
98	Hexa	PCB-155	50.00	3.43e+07	1.23	y	37:07	-	1.12
99	Hexa	PCB-150	50.00	3.11e+07	1.24	y	38:22	-	1.02
100	Hexa	PCB-152	50.00	3.16e+07	1.25	y	38:51	-	1.03
101	Hexa	PCB-145	50.00	3.04e+07	1.24	y	39:18	-	1.00

102	Hexa	PCB-136	50.00	3.31e+07	1.23	y	39:37	-	1.09
103	Hexa	PCB-148	50.00	2.18e+07	1.24	y	39:43	-	0.71
104	Hexa	PCB-154	50.00	2.45e+07	1.23	y	40:12	-	0.80
105	Hexa	PCB-151	50.00	2.30e+07	1.25	y	40:51	-	0.75
106	Hexa	PCB-135	50.00	2.19e+07	1.23	y	41:04	-	0.72
107	Hexa	PCB-144	50.00	2.39e+07	1.33	y	41:10	-	0.78
108	Hexa	PCB-147	50.00	2.07e+07	1.15	y	41:18	-	0.68
109	Hexa	PCB-139/149	100.00	4.69e+07	1.23	y	41:34	-	0.77
110	Hexa	PCB-140	50.00	2.12e+07	1.24	y	41:45	-	0.70
111	Hexa	PCB-134/143	100.00	5.52e+07	1.22	y	42:11	-	0.85
112	Hexa	PCB-133/142	100.00	5.46e+07	1.24	y	42:29	-	0.85

113	Hexa	PCB-131	50.00	2.55e+07	1.16	y	42:38	-	0.79
114	Hexa	PCB-146/165	100.00	6.52e+07	1.22	y	42:51	-	1.01
115	Hexa	PCB-132/161	100.00	6.70e+07	1.22	y	43:06	-	1.04
116	Hexa	PCB-153	50.00	3.34e+07	1.21	y	43:17	-	1.04
117	Hexa	PCB-168	50.00	4.08e+07	1.22	y	43:29	-	1.27
118	Hexa	PCB-141	50.00	2.90e+07	1.22	y	44:00	-	1.05
119	Hexa	PCB-137	50.00	2.95e+07	1.18	y	44:24	-	1.07
120	Hexa	PCB-130	50.00	2.45e+07	1.22	y	44:29	-	0.89
121	Hexa	PCB-138/163/164	150.00	1.05e+08	1.21	y	44:52	-	1.27
122	Hexa	PCB-158/160	100.00	7.63e+07	1.22	y	45:06	-	1.37
123	Hexa	PCB-129	50.00	2.45e+07	1.20	y	45:21	-	0.88
124	Hexa	PCB-166	50.00	3.59e+07	1.21	y	45:48	-	1.06
125	Hexa	PCB-159	50.00	3.96e+07	1.22	y	46:08	-	1.17
126	Hexa	PCB-128/162	100.00	6.57e+07	1.20	y	46:25	-	0.97
127	Hexa	PCB-167	50.00	3.85e+07	1.17	y	46:49	-	1.10
128	Hexa	PCB-156	50.00	3.93e+07	1.19	y	48:07	-	1.19
129	Hexa	PCB-157	50.00	3.97e+07	1.21	y	48:23	-	1.13
130	Hexa	PCB-169	50.00	3.46e+07	1.20	y	50:32	-	1.02
131	Hepta	PCB-188	50.00	3.60e+07	1.06	y	42:55	-	1.43
132	Hepta	PCB-184	50.00	3.21e+07	1.05	y	43:21	-	1.27
133	Hepta	PCB-179	50.00	3.36e+07	1.03	y	44:08	-	1.33
134	Hepta	PCB-176	50.00	3.52e+07	1.04	y	44:36	-	1.40
135	Hepta	PCB-186	50.00	3.45e+07	1.05	y	45:12	-	1.37
136	Hepta	PCB-178	50.00	2.51e+07	1.06	y	45:42	-	1.00
137	Hepta	PCB-175	50.00	2.54e+07	1.06	y	46:03	-	1.01
138	Hepta	PCB-182/187	100.00	5.34e+07	1.05	y	46:13	-	1.06
139	Hepta	PCB-183	50.00	2.93e+07	1.04	y	46:32	-	1.16
140	Hepta	PCB-185	50.00	2.52e+07	1.05	y	47:11	-	1.34
141	Hepta	PCB-174	50.00	2.35e+07	1.05	y	47:33	-	1.25
142	Hepta	PCB-181	50.00	2.45e+07	1.08	y	47:40	-	1.30
143	Hepta	PCB-177	50.00	2.19e+07	1.04	y	47:49	-	1.16
144	Hepta	PCB-171	50.00	2.53e+07	1.05	y	48:07	-	1.34
145	Hepta	PCB-173	50.00	2.04e+07	1.04	y	48:33	-	1.08
146	Hepta	PCB-172	50.00	2.39e+07	1.04	y	49:00	-	1.27
147	Hepta	PCB-192	50.00	3.03e+07	1.05	y	49:12	-	1.61
148	Hepta	PCB-180	50.00	2.48e+07	1.03	y	49:24	-	1.32
149	Hepta	PCB-193	50.00	3.25e+07	1.04	y	49:36	-	1.72
150	Hepta	PCB-191	50.00	3.32e+07	1.04	y	49:52	-	1.76
151	Hepta	PCB-170	50.00	2.30e+07	1.02	y	50:55	-	1.56
152	Hepta	PCB-190	50.00	3.20e+07	1.07	y	51:06	-	2.17
153	Hepta	PCB-189	50.00	3.08e+07	1.05	y	52:26	-	1.58
154	Octa	PCB-202	50.00	2.38e+07	0.91	y	48:19	-	0.96
155	Octa	PCB-201	50.00	2.52e+07	0.87	y	48:48	-	1.01
156	Octa	PCB-204	50.00	2.39e+07	0.89	y	48:58	-	0.96
157	Octa	PCB-197	50.00	2.70e-07	0.91	y	49:16	-	1.08
158	Octa	PCB-200	50.00	2.41e+07	0.87	y	50:10	-	0.97
159	Octa	PCB-198	50.00	1.82e-07	0.89	y	51:31	-	0.73
160	Octa	PCB-199	50.00	1.68e-07	0.90	y	51:38	-	0.68
161	Octa	PCB-196/203	100.00	3.74e+07	0.89	y	51:54	-	0.75
162	Octa	PCB-195	50.00	1.90e-07	0.91	y	53:04	-	1.07

163	Octa	PCB-194	50.00	2.09e+07	0.92	y	53:56	-	1.18
164	Octa	PCB-205	50.00	2.74e+07	0.92	y	54:13	-	1.55
165	Nona	PCB-208	50.00	2.49e+07	1.31	y	53:13	-	0.94
166	Nona	PCB-207	50.00	2.55e+07	1.33	y	53:32	-	0.96
167	Nona	PCB-206	50.00	1.42e+07	1.31	y	55:34	-	0.82
168	Deca	PCB-209	50.00	2.15e+07	1.16	y	56:55	-	1.21
169	Tot Ȑ	Total Mono-PCB	0.00	-	-	n	-	-	1.25
170	Tot Ȑ	Total Di-PCB	0.00	-	-	n	-	-	1.25

171	Tot 7	Total Tri-PCB	0.00	-	- n	-	-	1.14
172	Tot 7	Total Tri-PCB	0.00	-	- n	-	-	1.16
173	Tot 7	Total Tetra-PCB	0.00	-	- n	-	-	1.06
174	Tot 7	Total Penta-PCB	0.00	-	- n	-	-	1.15
175	Tot 7	Total Penta-PCB	0.00	-	- n	-	-	1.31
176	Tot 7	Total Hexa-PCB	0.00	-	- n	-	-	0.85
177	Tot 7	Total Hexa-PCB	0.00	-	- n	-	-	1.05
178	Tot 7	Total Hepta-PCB	0.00	-	- n	-	-	1.29
179	Tot 7	Total Octa-PCB	0.00	-	- n	-	-	0.88
180	Tot 7	Total Octa-PCB	0.00	-	- n	-	-	1.27
181	Tot 7	Total Nona-PCB	0.00	-	- n	-	-	0.92
182	Tot 7	Total Deca-PCB	50.00	2.15e+07	1.16 y	56:55	-	1.21
183	Mono ₇	13C-PCB-1	100.00	1.31e+08	3.59 y	16:09	-	0.98
184	Mono ₇	13C-PCB-3	100.00	1.27e+08	3.55 y	18:46	-	0.95
185	Di-IS	13C-PCB-4	100.00	8.37e+07	1.59 y	20:07	-	0.62
186	Di-IS	13C-PCB-9	100.00	1.32e+08	1.58 y	21:54	-	0.98
187	Di-IS	13C-PCB-11	100.00	1.29e+08	1.57 y	25:17	-	0.96
188	Tri- ₇	13C-PCB-19	100.00	7.48e+07	1.10 y	24:16	-	0.56
189	Tri- ₇	13C-PCB-32	100.00	1.10e+08	1.10 y	27:10	-	0.82
190	Tri- ₇	13C-PCB-28	100.00	9.04e+07	1.03 y	29:08	-	1.21
191	Tri- ₇	13C-PCB-37	100.00	7.45e+07	1.04 y	33:00	-	1.00
192	Tetr ₇	13C-PCB-54	100.00	1.00e+08	0.78 y	28:01	-	1.15
193	Tetr ₇	13C-PCB-52	100.00	6.66e+07	0.76 y	31:33	-	0.76
194	Tetr ₇	13C-PCB-47	100.00	7.29e+07	0.77 y	32:03	-	0.84
195	Tetr ₇	13C-PCB-70	100.00	8.67e+07	0.76 y	35:34	-	0.99
196	Tetr ₇	13C-PCB-80	100.00	9.01e+07	0.78 y	35:59	-	1.03
197	Tetr ₇	13C-PCB-81	100.00	8.87e+07	0.77 y	39:05	-	1.02
198	Tetr ₇	13C-PCB-77	100.00	8.51e+07	0.79 y	39:40	-	0.98
199	Pent ₇	13C-PCB-104	100.00	6.91e+07	1.61 y	32:42	-	1.05
200	Pent ₇	13C-PCB-95	100.00	4.69e+07	1.61 y	35:52	-	0.72
201	Pent ₇	13C-PCB-101	100.00	4.96e+07	1.62 y	37:33	-	0.76
202	Pent ₇	13C-PCB-97	100.00	4.33e+07	1.65 y	38:51	-	0.66
203	Pent ₇	13C-PCB-123	100.00	5.73e+07	1.61 y	41:24	-	0.87
204	Pent ₇	13C-PCB-118	100.00	6.14e+07	1.60 y	41:35	-	0.93
205	Pent ₇	13C-PCB-114	100.00	6.26e+07	1.57 y	42:14	-	1.25
206	Pent ₇	13C-PCB-105	100.00	5.94e+07	1.58 y	43:06	-	1.19
207	Pent ₇	13C-PCB-127	100.00	6.10e+07	1.55 y	43:26	-	1.22
208	Pent ₇	13C-PCB-126	100.00	5.27e+07	1.61 y	45:20	-	1.06
209	Hexa ₇	13C-PCB-155	100.00	6.10e+07	1.23 y	37:05	-	0.93
210	Hexa ₇	13C-PCB-153	100.00	6.45e+07	1.29 y	43:15	-	1.29
211	Hexa ₇	13C-PCB-141	100.00	5.52e+07	1.29 y	43:59	-	1.11
212	Hexa	13C-PCB-138	100.00	5.55e+07	1.26 y	44:50	-	1.11
213	Hexa ₇	13C-PCB-159	100.00	6.75e+07	1.31 y	46:07	-	1.35
214	Hexa ₇	13C-PCB-167	100.00	7.02e+07	1.27 y	46:48	-	1.41
215	Hexa ₇	13C-PCB-156	100.00	6.63e+07	1.27 y	48:06	-	1.33
216	Hexa ₇	13C-PCB-157	100.00	7.04e+07	1.32 y	48:22	-	1.41
217	Hexa ₇	13C-PCB-169	100.00	6.82e+07	1.25 y	50:31	-	1.37
218	Hept ₇	13C-PCB-188	100.00	5.04e+07	0.46 y	42:53	-	1.01
219	Hept ₇	13C-PCB-180	100.00	3.77e+07	0.46 y	49:23	-	0.76
220	Hept ₇	13C-PCB-170	100.00	2.95e+07	0.47 y	50:54	-	0.59
221	Hept ₇	13C-PCB-189	100.00	3.89e+07	0.45 y	52:25	-	0.78

222	Octa ₇	13C-PCB-202	100.00	4.98e+07	0.89	y	48:18	-	1.00
223	Octa ₇	13C-PCB-194	100.00	3.54e+07	0.90	y	53:56	-	0.75
224	Nona ₇	13C-PCB-208	100.00	5.30e+07	0.77	y	53:13	-	1.11
225	Nona ₇	13C-PCB-206	100.00	3.47e+07	0.77	y	55:33	-	0.73
226	Deca ₇	13C-PCB-209	100.00	3.56e+07	1.18	y	56:55	-	0.75
227	DI-RS	13C-PCB-15	100.00	1.34e+08	1.56	y	25:59	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	7.47e+07	1.02	y	29:01	-	1.00
229	Tetr ₇	13C-PCB-60	100.00	8.72e+07	0.74	y	36:48	-	1.00
230	Penta	13C-PCB-111	100.00	6.56e+07	1.64	y	39:17	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	4.99e+07	1.27	y	46:24	-	1.00

232	Octa ⁷⁷	13C-PCB-205	100.00	4.76e+07	0.89	y	54:12	-	1.00
233	CRS	13C-PCB-79	100.00	8.64e+07	0.77	y	37:51	-	0.99
234	CRS	13C-PCB-178	100.00	3.14e+07	0.45	y	45:41	-	0.63
235	PS	13C-PCB-79	100.00	8.64e+07	0.77	y	37:51	-	0.97
236	PS	13C-PCB-178	100.00	3.14e+07	0.45	y	45:41	-	0.83

Filename: 150114E1 S: 7 Acquired: 14-JAN-15 19:04:40
 Run: 150114e1 Analyte: ICal: pcbvg8-1-14-15 Results: 150114e1
 Sample text: ST150114E1-6 PCB CS4 14L2905

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	400.00	6.94e+08	2.96 y	16:11	-	1.32
2	Mono	PCB-2	400.00	7.15e+08	2.99 y	18:34	-	1.21
3	Mono	PCB-3	400.00	7.26e+08	2.99 y	18:48	-	1.23
4	Di	PCB-4/10	800.00	1.13e+09	1.63 y	20:10	-	1.54
5	Di	PCB-7/9	800.00	1.36e+09	1.64 y	21:57	-	1.16
6	Di	PCB-6	400.00	6.64e+08	1.65 y	22:36	-	1.14
7	Di	PCB-5/8	800.00	1.37e+09	1.63 y	23:01	-	1.17
8	Di	PCB-14	400.00	7.93e+08	1.64 y	24:06	-	1.37
9	Di	PCB-11	400.00	6.78e+08	1.65 y	25:18	-	1.17
10	Di	PCB-12/13	800.00	1.36e+09	1.63 y	25:42	-	1.18
11	Di	PCB-15	400.00	7.60e+08	1.64 y	26:00	-	1.32
12	Tri	PCB-19	400.00	3.81e+08	1.06 y	24:17	-	1.11
13	Tri	PCB-30	400.00	5.91e+08	1.06 y	25:11	-	1.72
14	Tri	PCB-18	400.00	4.19e+08	1.05 y	25:56	-	0.82
15	Tri	PCB-17	400.00	4.40e+08	1.06 y	26:06	-	0.86
16	Tri	PCB-24/27	800.00	1.23e+09	1.06 y	26:41	-	1.21
17	Tri	PCB-16/32	800.00	9.74e+08	1.05 y	27:11	-	0.95
18	Tri	PCB-34	400.00	4.41e+08	1.02 y	27:59	-	1.16
19	Tri	PCB-23	400.00	4.64e+08	1.03 y	28:04	-	1.22
20	Tri	PCB-29	400.00	4.32e+08	1.03 y	28:19	-	1.14
21	Tri	PCB-26	400.00	4.32e+08	1.01 y	28:32	-	1.14
22	Tri	PCB-25	400.00	4.27e+08	1.03 y	28:42	-	1.13
23	Tri	PCB-31	400.00	4.79e+08	1.03 y	29:04	-	1.26
24	Tri	PCB-28	400.00	4.54e+08	1.04 y	29:09	-	1.20
25	Tri	PCB-20/21/33	1200.00	1.36e+09	1.02 y	29:47	-	1.19
26	Tri	PCB-22	400.00	4.30e+08	1.01 y	30:13	-	1.13
27	Tri	PCB-36	400.00	3.85e+08	1.00 y	30:49	-	1.10
28	Tri	PCB-39	400.00	3.74e+08	1.01 y	31:18	-	1.07
29	Tri	PCB-38	400.00	4.25e+08	1.04 y	32:04	-	1.22
30	Tri	PCB-35	400.00	4.27e+08	1.04 y	32:35	-	1.23
31	Tri	PCB-37	400.00	4.44e+08	1.06 y	33:02	-	1.27
32	Tetra	PCB-54	400.00	4.13e+08	0.74 y	28:02	-	0.94
33	Tetra	PCB-50	400.00	3.31e+08	0.73 y	29:13	-	0.75
34	Tetra	PCB-53	400.00	3.18e+08	0.73 y	29:51	-	1.09
35	Tetra	PCB-51	400.00	3.35e+08	0.74 y	30:12	-	1.15
36	Tetra	PCB-45	400.00	2.67e+08	0.73 y	30:38	-	0.92
37	Tetra	PCB-46	400.00	2.47e+08	0.72 y	31:07	-	0.85
38	Tetra	PCB-52/69	800.00	6.65e+08	0.72 y	31:36	-	1.15
39	Tetra	PCB-73	400.00	4.07e+08	0.73 y	31:43	-	1.40
40	Tetra	PCB-43/49	800.00	6.39e+08	0.74 y	31:53	-	1.10
41	Tetra	PCB-47	400.00	3.44e+08	0.73 y	32:05	-	1.04

42	Tetra	PCB-48/75	800.00	8.25e+08	0.74	y	32:12	-	1.24
43	Tetra	PCB-65	400.00	4.06e+08	0.73	y	32:28	-	1.22
44	Tetra	PCB-62	400.00	3.83e+08	0.74	y	32:35	-	1.15
45	Tetra	PCB-44	400.00	2.51e+08	0.73	y	32:53	-	0.76
46	Tetra	PCB-42/59	800.00	7.21e+08	0.73	y	33:06	-	1.09
47	Tetra	PCB-41/64/71/72	1600.00	1.70e+09	0.74	y	33:41	-	1.28
48	Tetra	PCB-68	400.00	4.83e+08	0.74	y	33:57	-	1.45
49	Tetra	PCB-40	400.00	2.58e+08	0.74	y	34:09	-	0.78
50	Tetra	PCB-57	400.00	4.23e+08	0.73	y	34:31	-	1.00
51	Tetra	PCB-67	400.00	4.16e+08	0.73	y	34:50	-	0.99
52	Tetra	PCB-58	400.00	4.23e+08	0.74	y	34:57	-	1.00

53	Tetra	PCB-63	400.00	4.44e+08	0.74	y	35:06	-	1.05
54	Tetra	PCB-74	400.00	4.75e+08	0.73	y	35:23	-	1.12
55	Tetra	PCB-61/70	800.00	8.24e+08	0.73	y	35:33	-	0.97
56	Tetra	PCB-76/66	800.00	8.98e+08	0.74	y	35:47	-	1.06
57	Tetra	PCB-80	400.00	5.02e+08	0.75	y	36:01	-	1.18
58	Tetra	PCB-55	400.00	4.59e+08	0.74	y	36:20	-	1.08
59	Tetra	PCB-56/60	800.00	8.76e+08	0.74	y	36:49	-	1.03
60	Tetra	PCB-79	400.00	4.30e+08	0.73	y	37:53	-	1.01
61	Tetra	PCB-78	400.00	4.62e+08	0.73	y	38:35	-	1.11
62	Tetra	PCB-81	400.00	4.78e+08	0.75	y	39:07	-	1.15
63	Tetra	PCB-77	400.00	4.50e+08	0.76	y	39:42	-	1.14
64	Penta	PCB-104	400.00	3.46e+08	1.56	y	32:44	-	1.16
65	Penta	PCB-96	400.00	3.23e+08	1.56	y	33:59	-	1.08
66	Penta	PCB-103	400.00	2.83e+08	1.56	y	34:32	-	0.94
67	Penta	PCB-100	400.00	2.76e+08	1.56	y	34:52	-	0.92
68	Penta	PCB-94	400.00	2.45e+08	1.57	y	35:21	-	1.08
69	Penta	PCB-95/98/102	1200.00	8.28e+08	1.54	y	35:50	-	1.22
70	Penta	PCB-93	400.00	1.85e+08	1.63	y	35:58	-	0.82
71	Penta	PCB-88/91	800.00	4.53e+08	1.54	y	36:15	-	1.00
72	Penta	PCB-121	400.00	3.50e+08	1.58	y	36:22	-	1.55
73	Penta	PCB-84/92	800.00	4.81e+08	1.56	y	37:11	-	1.01
74	Penta	PCB-89	400.00	2.17e+08	1.57	y	37:22	-	0.91
75	Penta	PCB-90/101	800.00	5.22e+08	1.57	y	37:34	-	1.09
76	Penta	PCB-113	400.00	2.96e+08	1.55	y	37:49	-	1.24
77	Penta	PCB-99	400.00	2.51e+08	1.57	y	37:54	-	1.05
78	Penta	PCB-119	400.00	3.64e+08	1.57	y	38:22	-	1.76
79	Penta	PCB-108/112	800.00	5.68e+08	1.57	y	38:31	-	1.37
80	Penta	PCB-83	400.00	3.40e+08	1.58	y	38:41	-	1.64
81	Penta	PCB-97	400.00	2.48e+08	1.55	y	38:52	-	1.20
82	Penta	PCB-86	400.00	1.86e+08	1.65	y	39:01	-	0.90
83	Penta	PCB-87/117/125	1200.00	9.47e+08	1.57	y	39:08	-	1.53
84	Penta	PCB-111/115	800.00	7.12e+08	1.52	y	39:18	-	1.72
85	Penta	PCB-85/116	800.00	5.09e+08	1.62	y	39:26	-	1.23
86	Penta	PCB-120	400.00	3.79e+08	1.56	y	39:40	-	1.83
87	Penta	PCB-110	400.00	3.10e+08	1.58	y	39:49	-	1.50
88	Penta	PCB-82	400.00	1.91e+08	1.57	y	40:27	-	0.68
89	Penta	PCB-124	400.00	3.36e+08	1.55	y	41:07	-	1.20
90	Penta	PCB-107/109	800.00	6.83e+08	1.56	y	41:15	-	1.22
91	Penta	PCB-123	400.00	3.22e+08	1.56	y	41:26	-	1.15
92	Penta	PCB-106/118	800.00	7.08e+08	1.56	y	41:38	-	1.15
93	Penta	PCB-114	400.00	4.01e+08	1.63	y	42:16	-	1.32
94	Penta	PCB-122	400.00	3.55e+08	1.68	y	42:24	-	1.17
95	Penta	PCB-105	400.00	3.96e+08	1.67	y	43:08	-	1.44
96	Penta	PCB-127	400.00	3.51e+08	1.68	y	43:27	-	1.19
97	Penta	PCB-126	400.00	3.80e+08	1.65	y	45:22	-	1.32
98	Hexa	PCB-155	400.00	3.03e+08	1.24	y	37:08	-	1.14
99	Hexa	PCB-150	400.00	2.98e+08	1.23	y	38:23	-	1.12
100	Hexa	PCB-152	400.00	2.90e+08	1.24	y	38:52	-	1.09
101	Hexa	PCB-145	400.00	2.84e+08	1.24	y	39:18	-	1.07
102	Hexa	PCB-136	400.00	2.87e+08	1.24	y	39:38	-	1.08

103	Hexa	PCB-148	400.00	2.10e+08	1.25	y	39:44	-	0.79
104	Hexa	PCB-154	400.00	2.24e+08	1.24	y	40:14	-	0.84
105	Hexa	PCB-151	400.00	2.11e+08	1.25	y	40:52	-	0.79
106	Hexa	PCB-135	400.00	2.08e+08	1.40	y	41:05	-	0.78
107	Hexa	PCB-144	400.00	2.26e+08	1.10	y	41:12	-	0.85
108	Hexa	PCB-147	400.00	1.99e+08	1.23	y	41:19	-	0.75
109	Hexa	PCB-139/149	800.00	4.60e+08	1.23	y	41:35	-	0.86
110	Hexa	PCB-140	400.00	2.02e+08	1.22	y	41:46	-	0.76
111	Hexa	PCB-134/143	800.00	5.51e+08	1.24	y	42:12	-	0.90
112	Hexa	PCB-133/142	800.00	5.43e+08	1.22	y	42:30	-	0.89
113	Hexa	PCB-131	400.00	2.46e+08	1.21	y	42:39	-	0.81

114	Hexa	PCB-146/165	800.00	6.43e+08	1.22 y	42:53	-	1.05
115	Hexa	PCB-132/161	800.00	6.26e+08	1.21 y	43:07	-	1.03
116	Hexa	PCB-153	400.00	3.15e+08	1.21 y	43:17	-	1.03
117	Hexa	PCB-168	400.00	3.92e+08	1.21 y	43:30	-	1.28
118	Hexa	PCB-141	400.00	2.79e+08	1.22 y	44:01	-	1.06
119	Hexa	PCB-137	400.00	2.87e+08	1.17 y	44:24	-	1.09
120	Hexa	PCB-130	400.00	2.37e+08	1.26 y	44:31	-	0.90
121	Hexa	PCB-138/163/164	1200.00	1.05e+09	1.20 y	44:53	-	1.28
122	Hexa	PCB-158/160	800.00	7.31e+08	1.20 y	45:08	-	1.35
123	Hexa	PCB-129	400.00	2.54e+08	1.23 y	45:22	-	0.94
124	Hexa	PCB-166	400.00	3.59e+08	1.21 y	45:50	-	1.06
125	Hexa	PCB-159	400.00	3.81e+08	1.21 y	46:09	-	1.13
126	Hexa	PCB-128/162	800.00	6.54e+08	1.21 y	46:26	-	0.97
127	Hexa	PCB-167	400.00	3.57e+08	1.21 y	46:50	-	1.09
128	Hexa	PCB-156	400.00	3.98e+08	1.22 y	48:07	-	1.19
129	Hexa	PCB-157	400.00	3.91e+08	1.22 y	48:23	-	1.12
130	Hexa	PCB-169	400.00	3.39e+08	1.22 y	50:33	-	1.02
131	Hepta	PCB-188	400.00	3.52e+08	1.05 y	42:56	-	1.38
132	Hepta	PCB-184	400.00	3.14e+08	1.04 y	43:23	-	1.23
133	Hepta	PCB-179	400.00	3.24e+08	1.05 y	44:09	-	1.27
134	Hepta	PCB-176	400.00	3.41e+08	1.04 y	44:37	-	1.34
135	Hepta	PCB-186	400.00	3.41e+08	1.05 y	45:13	-	1.33
136	Hepta	PCB-178	400.00	2.45e+08	1.05 y	45:43	-	0.96
137	Hepta	PCB-175	400.00	2.39e+08	1.05 y	46:04	-	0.94
138	Hepta	PCB-182/187	800.00	5.39e+08	1.05 y	46:14	-	1.05
139	Hepta	PCB-183	400.00	2.80e+08	1.05 y	46:32	-	1.10
140	Hepta	PCB-185	400.00	2.45e+08	1.05 y	47:13	-	1.32
141	Hepta	PCB-174	400.00	2.22e+08	1.04 y	47:34	-	1.19
142	Hepta	PCB-181	400.00	2.44e+08	1.05 y	47:41	-	1.31
143	Hepta	PCB-177	400.00	2.18e+08	1.04 y	47:51	-	1.17
144	Hepta	PCB-171	400.00	2.57e+08	1.04 y	48:08	-	1.38
145	Hepta	PCB-173	400.00	1.93e+08	1.06 y	48:34	-	1.04
146	Hepta	PCB-172	400.00	2.43e+08	1.05 y	49:00	-	1.30
147	Hepta	PCB-192	400.00	3.11e+08	1.04 y	49:12	-	1.67
148	Hepta	PCB-180	400.00	2.42e+08	1.05 y	49:25	-	1.30
149	Hepta	PCB-193	400.00	3.25e+08	1.05 y	49:37	-	1.74
150	Hepta	PCB-191	400.00	3.28e+08	1.04 y	49:53	-	1.76
151	Hepta	PCB-170	400.00	2.28e+08	1.05 y	50:56	-	1.52
152	Hepta	PCB-190	400.00	3.23e+08	1.05 y	51:07	-	2.15
153	Hepta	PCB-189	400.00	3.10e+08	1.04 y	52:27	-	1.56
154	Octa	PCB-202	400.00	2.31e+08	0.89 y	48:21	-	0.95
155	Octa	PCB-201	400.00	2.56e+08	0.88 y	48:50	-	1.06
156	Octa	PCB-204	400.00	2.56e+08	0.88 y	48:50	-	1.06
157	Octa	PCB-197	400.00	2.77e+08	0.89 y	49:17	-	1.14
158	Octa	PCB-200	400.00	2.35e+08	0.89 y	50:11	-	0.97
159	Octa	PCB-198	400.00	1.78e+08	0.90 y	51:32	-	0.73
160	Octa	PCB-199	400.00	1.72e+08	0.89 y	51:39	-	0.71
161	Octa	PCB-196/203	800.00	3.96e+08	0.88 y	51:55	-	0.82
162	Octa	PCB-195	400.00	1.92e+08	0.91 y	53:06	-	1.14
163	Octa	PCB-194	400.00	1.94e+08	0.91 y	53:58	-	1.15

164	Octa	PCB-205	400.00	2.64e+08	0.91	y	54:14	-	1.56
165	Nona	PCB-208	400.00	2.44e+08	1.30	y	53:14	-	0.92
166	Nona	PCB-207	400.00	2.51e+08	1.30	y	53:33	-	0.95
167	Nona	PCB-206	400.00	1.40e+08	1.30	y	55:36	-	0.79
168	Deca	PCB-209	400.00	2.07e+08	1.17	y	56:58	-	1.22
169	Tot ȝ	Total Mono-PCB	0.00	-	-	n	-	-	1.25
170	Tot ȝ	Total Di-PCB	0.00	-	-	n	-	-	1.22
171	Tot ȝ	Total Tri-PCB	0.00	-	-	n	-	-	1.11

172	Tot 7	Total Tri-PCB	0.00	-	- n	-	-	1.18
173	Tot 7	Total Tetra-PCB	0.00	-	- n	-	-	1.08
174	Tot 7	Total Penta-PCB	0.00	-	- n	-	-	1.08
175	Tot 7	Total Penta-PCB	0.00	-	- n	-	-	1.16
176	Tot 7	Total Hexa-PCB	0.00	-	- n	-	-	1.29
177	Tot 7	Total Hexa-PCB	0.00	-	- n	-	-	0.91
178	Tot 7	Total Hepta-PCB	0.00	-	- n	-	-	1.06
179	Tot 7	Total Octa-PCB	0.00	-	- n	-	-	1.27
180	Tot 7	Total Octa-PCB	0.00	-	- n	-	-	0.92
181	Tot 7	Total Nona-PCB	0.00	-	- n	-	-	1.28
182	Tot 7	Total Deca-PCB	400.00	2.07e+08	1.17 y	56:58	-	0.90
183	Mono ₇	13C-PCB-1	100.00	1.31e+08	3.58 y	16:10	-	0.87
184	Mono ₇	13C-PCB-3	100.00	1.48e+08	3.55 y	18:47	-	0.99
185	Di-IS	13C-PCB-4	100.00	9.18e+07	1.61 y	20:07	-	0.61
186	Di-IS	13C-PCB-9	100.00	1.46e+08	1.57 y	21:55	-	0.97
187	Di-IS	13C-PCB-11	100.00	1.45e+08	1.56 y	25:17	-	0.96
188	Tri- ₇	13C-PCB-19	100.00	8.61e+07	1.11 y	24:16	-	0.57
189	Tri- ₇	13C-PCB-32	100.00	1.28e+08	1.10 y	27:11	-	0.85
190	Tri- ₇	13C-PCB-28	100.00	9.48e+07	1.03 y	29:09	-	0.96
191	Tri- ₇	13C-PCB-37	100.00	8.72e+07	1.04 y	33:01	-	0.88
192	Tetr ₇	13C-PCB-54	100.00	1.10e+08	0.77 y	28:01	-	1.03
193	Tetr ₇	13C-PCB-52	100.00	7.25e+07	0.77 y	31:34	-	0.68
194	Tetr ₇	13C-PCB-47	100.00	8.30e+07	0.77 y	32:04	-	0.78
195	Tetr ₇	13C-PCB-70	100.00	1.06e+08	0.76 y	35:34	-	0.99
196	Tetr ₇	13C-PCB-80	100.00	1.06e+08	0.75 y	35:59	-	1.00
197	Tetr ₇	13C-PCB-81	100.00	1.04e+08	0.78 y	39:06	-	0.97
198	Tetr ₇	13C-PCB-77	100.00	9.87e+07	0.76 y	39:41	-	0.93
199	Pent ₇	13C-PCB-104	100.00	7.49e+07	1.60 y	32:43	-	0.95
200	Pent ₇	13C-PCB-95	100.00	5.64e+07	1.61 y	35:53	-	0.71
201	Pent ₇	13C-PCB-101	100.00	5.96e+07	1.61 y	37:34	-	0.75
202	Pent ₇	13C-PCB-97	100.00	5.17e+07	1.63 y	38:51	-	0.65
203	Pent ₇	13C-PCB-123	100.00	7.00e+07	1.62 y	41:25	-	0.88
204	Pent ₇	13C-PCB-118	100.00	7.68e+07	1.66 y	41:36	-	0.97
205	Pent ₇	13C-PCB-114	100.00	7.59e+07	1.59 y	42:15	-	1.23
206	Pent ₇	13C-PCB-105	100.00	6.87e+07	1.58 y	43:07	-	1.11
207	Pent ₇	13C-PCB-127	100.00	7.37e+07	1.55 y	43:27	-	1.19
208	Pent ₇	13C-PCB-126	100.00	7.18e+07	1.55 y	45:21	-	1.16
209	Hexa ₇	13C-PCB-155	100.00	6.66e+07	1.26 y	37:06	-	0.84
210	Hexa ₇	13C-PCB-153	100.00	7.63e+07	1.28 y	43:16	-	1.23
211	Hexa ₇	13C-PCB-141	100.00	6.56e+07	1.29 y	44:01	-	1.06
212	Hexa	13C-PCB-138	100.00	6.79e+07	1.28 y	44:51	-	1.10
213	Hexa ₇	13C-PCB-159	100.00	8.47e+07	1.26 y	46:08	-	1.37
214	Hexa ₇	13C-PCB-167	100.00	8.20e+07	1.28 y	46:49	-	1.33
215	Hexa ₇	13C-PCB-156	100.00	8.33e+07	1.29 y	48:06	-	1.35
216	Hexa ₇	13C-PCB-157	100.00	8.77e+07	1.28 y	48:22	-	1.42
217	Hexa ₇	13C-PCB-169	100.00	8.32e+07	1.28 y	50:33	-	1.34
218	Hepta ₇	13C-PCB-188	100.00	6.38e+07	0.45 y	42:54	-	1.03
219	Hepta ₇	13C-PCB-180	100.00	4.66e+07	0.47 y	49:24	-	0.75
220	Hepta ₇	13C-PCB-170	100.00	3.75e+07	0.47 y	50:55	-	0.61
221	Hepta ₇	13C-PCB-189	100.00	4.95e+07	0.46 y	52:26	-	0.80
222	Octa ₇	13C-PCB-202	100.00	6.06e+07	0.91 y	48:19	-	0.98

223	Octa ₇	13C-PCB-194	100.00	4.22e+07	0.89	y	53:57	-	0.72
224	Nona ₇	13C-PCB-208	100.00	6.60e+07	0.76	y	53:14	-	1.12
225	Nona ₇	13C-PCB-206	100.00	4.43e+07	0.76	y	55:35	-	0.75
226	Deca ₇	13C-PCB-209	100.00	4.22e+07	1.18	y	56:57	-	0.72
227	DI-RS	13C-PCB-15	100.00	1.50e+08	1.58	y	25:59	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	9.85e+07	1.04	y	29:02	-	1.00
229	Tetr ₇	13C-PCB-60	100.00	1.07e+08	0.78	y	36:49	-	1.00
230	Penta	13C-PCB-111	100.00	7.92e+07	1.60	y	39:17	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	6.19e+07	1.30	y	46:24	-	1.00
232	Octa ₇	13C-PCB-205	100.00	5.88e+07	0.91	y	54:14	-	1.00

233	CRS	13C-PCB-79	100.00	1.03e+08	0.76	y	37:52	-	0.97
234	CRS	13C-PCB-178	100.00	3.98e+07	0.46	y	45:42	-	0.64
235	PS	13C-PCB-79	100.00	1.03e+08	0.76	y	37:52	-	0.99
236	PS	13C-PCB-178	100.00	3.98e+07	0.46	y	45:42	-	0.85

Filename: 150114E1 S: 8 Acquired: 14-JAN-15 20:09:16
 Run: 150114E1 Analyte: ICal: pcbvg8-1-14-15
 Sample text: ST150114E1-7 PCB CS5 14L2906

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	1000.00	1.39e+09	2.97 y	16:11	-	1.34
2	Mono	PCB-2	1000.00	1.43e+09	2.99 y	18:34	-	1.33
3	Mono	PCB-3	1000.00	1.41e+09	2.98 y	18:48	-	1.31
4	Di	PCB-4/10	2000.00	2.31e+09	1.62 y	20:11	-	1.54
5	Di	PCB-7/9	2000.00	2.86e+09	1.64 y	21:57	-	1.18
6	Di	PCB-6	1000.00	1.37e+09	1.64 y	22:36	-	1.13
7	Di	PCB-5/8	2000.00	2.86e+09	1.64 y	23:01	-	1.17
8	Di	PCB-14	1000.00	1.67e+09	1.63 y	24:06	-	1.36
9	Di	PCB-11	1000.00	1.43e+09	1.65 y	25:19	-	1.17
10	Di	PCB-12/13	2000.00	2.95e+09	1.62 y	25:42	-	1.20
11	Di	PCB-15	1000.00	1.65e+09	1.61 y	26:01	-	1.35
12	Tri	PCB-19	1000.00	7.86e+08	1.06 y	24:18	-	1.10
13	Tri	PCB-30	1000.00	1.25e+09	1.07 y	25:12	-	1.75
14	Tri	PCB-18	1000.00	8.43e+08	1.06 y	25:56	-	0.78
15	Tri	PCB-17	1000.00	9.23e+08	1.06 y	26:07	-	0.86
16	Tri	PCB-24/27	2000.00	2.55e+09	1.06 y	26:41	-	1.18
17	Tri	PCB-16/32	2000.00	2.05e+09	1.06 y	27:12	-	0.95
18	Tri	PCB-34	1000.00	9.86e+08	1.02 y	28:00	-	1.21
19	Tri	PCB-23	1000.00	8.98e+08	1.04 y	28:05	-	1.10
20	Tri	PCB-29	1000.00	8.94e+08	1.02 y	28:20	-	1.10
21	Tri	PCB-26	1000.00	1.01e+09	1.03 y	28:32	-	1.24
22	Tri	PCB-25	1000.00	8.93e+08	1.01 y	28:43	-	1.10
23	Tri	PCB-31	1000.00	8.93e+08	1.14 y	29:03	-	1.10
24	Tri	PCB-28	1000.00	9.16e+08	0.92 y	29:10	-	1.13
25	Tri	PCB-20/21/33	3000.00	2.41e+09	1.02 y	29:46	-	0.98
26	Tri	PCB-22	1000.00	8.07e+08	1.02 y	30:14	-	0.99
27	Tri	PCB-36	1000.00	9.15e+08	1.01 y	30:50	-	1.27
28	Tri	PCB-39	1000.00	8.14e+08	1.02 y	31:18	-	1.13
29	Tri	PCB-38	1000.00	8.90e+08	1.03 y	32:05	-	1.24
30	Tri	PCB-35	1000.00	9.47e+08	1.02 y	32:36	-	1.31
31	Tri	PCB-37	1000.00	8.87e-08	1.02 y	33:02	-	1.23
32	Tetra	PCB-54	1000.00	8.93e+08	0.74 y	28:03	-	0.94
33	Tetra	PCB-50	1000.00	6.66e-08	0.73 y	29:13	-	0.70
34	Tetra	PCB-53	1000.00	6.07e-08	0.71 y	29:52	-	0.99
35	Tetra	PCB-51	1000.00	6.35e+08	0.73 y	30:12	-	1.04
36	Tetra	PCB-45	1000.00	6.11e-08	0.73 y	30:38	-	1.00
37	Tetra	PCB-46	1000.00	5.24e-08	0.72 y	31:07	-	0.86
38	Tetra	PCB-52/69	2000.00	1.41e-09	0.71 y	31:36	-	1.15
39	Tetra	PCB-73	1000.00	7.43e+08	0.72 y	31:43	-	1.22
40	Tetra	PCB-43/49	2000.00	1.28e-09	0.73 y	31:53	-	1.05

41	Tetra	PCB-47	1000.00	7.82e+08	0.72	y	32:05	-	1.13
42	Tetra	PCB-48/75	2000.00	1.71e+09	0.73	y	32:12	-	1.23
43	Tetra	PCB-65	1000.00	7.98e+08	0.73	y	32:28	-	1.15
44	Tetra	PCB-62	1000.00	9.11e+08	0.74	y	32:35	-	1.31
45	Tetra	PCB-44	1000.00	5.20e+08	0.73	y	32:53	-	0.75
46	Tetra	PCB-42/59	2000.00	1.48e+09	0.73	y	33:06	-	1.07
47	Tetra	PCB-41/64/71/72	4000.00	3.37e+09	0.74	y	33:42	-	1.21
48	Tetra	PCB-68	1000.00	9.93e+08	0.74	y	33:57	-	1.43
49	Tetra	PCB-40	1000.00	5.33e+08	0.73	y	34:10	-	0.77
50	Tetra	PCB-57	1000.00	8.58e+08	0.72	y	34:32	-	0.90
51	Tetra	PCB-67	1000.00	8.68e+08	0.72	y	34:50	-	0.91

52	Tetra	PCB-58	1000.00	9.49e+08	0.74 y	34:57	-	1.00
53	Tetra	PCB-63	1000.00	9.14e+08	0.73 y	35:06	-	0.96
54	Tetra	PCB-74	1000.00	9.90e+08	0.72 y	35:23	-	1.04
55	Tetra	PCB-61/70	2000.00	1.93e+09	0.73 y	35:34	-	1.01
56	Tetra	PCB-76/66	2000.00	1.96e+09	0.74 y	35:47	-	1.03
57	Tetra	PCB-80	1000.00	1.15e+09	0.72 y	36:01	-	1.20
58	Tetra	PCB-55	1000.00	1.10e+09	0.74 y	36:20	-	1.15
59	Tetra	PCB-56/60	2000.00	1.77e+09	0.73 y	36:50	-	0.93
60	Tetra	PCB-79	1000.00	1.06e+09	0.74 y	37:54	-	1.11
61	Tetra	PCB-78	1000.00	9.51e+08	0.73 y	38:36	-	1.01
62	Tetra	PCB-81	1000.00	1.11e+09	0.74 y	39:07	-	1.17
63	Tetra	PCB-77	1000.00	1.06e+09	0.75 y	39:43	-	1.14
64	Penta	PCB-104	1000.00	7.52e+08	1.57 y	32:44	-	1.17
65	Penta	PCB-96	1000.00	6.57e+08	1.58 y	34:00	-	1.02
66	Penta	PCB-103	1000.00	5.75e+08	1.55 y	34:32	-	0.89
67	Penta	PCB-100	1000.00	5.96e+08	1.56 y	34:53	-	0.92
68	Penta	PCB-94	1000.00	5.00e+08	1.57 y	35:22	-	1.03
69	Penta	PCB-95/98/102	3000.00	1.69e+09	1.56 y	35:51	-	1.16
70	Penta	PCB-93	1000.00	4.91e+08	1.60 y	35:59	-	1.01
71	Penta	PCB-88/91	2000.00	9.64e+08	1.55 y	36:15	-	0.99
72	Penta	PCB-121	1000.00	8.72e+08	1.59 y	36:22	-	1.79
73	Penta	PCB-84/92	2000.00	1.03e+09	1.54 y	37:12	-	0.95
74	Penta	PCB-89	1000.00	4.76e+08	1.58 y	37:23	-	0.87
75	Penta	PCB-90/101	2000.00	1.17e+09	1.56 y	37:33	-	1.07
76	Penta	PCB-113	1000.00	6.26e+08	1.54 y	37:48	-	1.15
77	Penta	PCB-99	1000.00	6.40e+08	1.57 y	37:54	-	1.17
78	Penta	PCB-119	1000.00	7.94e+08	1.57 y	38:22	-	1.72
79	Penta	PCB-108/112	2000.00	1.19e+09	1.57 y	38:31	-	1.29
80	Penta	PCB-83	1000.00	6.87e+08	1.56 y	38:40	-	1.49
81	Penta	PCB-97	1000.00	5.38e+08	1.56 y	38:53	-	1.17
82	Penta	PCB-86	1000.00	4.30e+08	1.55 y	39:01	-	0.93
83	Penta	PCB-87/117/125	3000.00	2.08e+09	1.58 y	39:09	-	1.50
84	Penta	PCB-111/115	2000.00	1.58e+09	1.55 y	39:18	-	1.71
85	Penta	PCB-85/116	2000.00	1.24e+09	1.58 y	39:26	-	1.34
86	Penta	PCB-120	1000.00	8.48e+08	1.57 y	39:41	-	1.84
87	Penta	PCB-110	1000.00	7.10e+08	1.58 y	39:49	-	1.54
88	Penta	PCB-82	1000.00	4.02e+08	1.56 y	40:26	-	0.64
89	Penta	PCB-124	1000.00	8.06e+08	1.55 y	41:07	-	0.64
90	Penta	PCB-107/109	2000.00	1.56e+09	1.57 y	41:07	-	1.28
91	Penta	PCB-123	1000.00	7.24e+08	1.56 y	41:16	-	1.24
92	Penta	PCB-106/118	2000.00	1.59e+09	1.57 y	41:26	-	1.15
93	Penta	PCB-114	1000.00	9.36e+08	1.65 y	41:38	-	1.16
94	Penta	PCB-122	1000.00	7.65e+08	1.67 y	42:17	-	1.36
95	Penta	PCB-105	1000.00	9.43e+08	1.66 y	43:07	-	1.11
96	Penta	PCB-127	1000.00	8.39e+08	1.66 y	43:28	-	1.41
97	Penta	PCB-126	1000.00	8.19e+08	1.68 y	45:22	-	1.18
98	Hexa	PCB-155	1000.00	6.54e+08	1.24 y	37:08	-	1.12
99	Hexa	PCB-150	1000.00	6.42e+08	1.24 y	38:23	-	1.10
100	Hexa	PCB-152	1000.00	6.30e+08	1.24 y	38:52	-	1.08
101	Hexa	PCB-145	1000.00	6.31e+08	1.25 y	39:19	-	1.08

102	Hexa	PCB-136	1000.00	6.49e+08	1.38	y	39:38	-	1.11
103	Hexa	PCB-148	1000.00	4.68e+08	1.07	y	39:44	-	0.80
104	Hexa	PCB-154	1000.00	4.88e+08	1.24	y	40:14	-	0.84
105	Hexa	PCB-151	1000.00	4.67e+08	1.25	y	40:52	-	0.80
106	Hexa	PCB-135	1000.00	4.74e+08	1.23	y	41:05	-	0.81
107	Hexa	PCB-144	1000.00	5.08e+08	1.24	y	41:11	-	0.87
108	Hexa	PCB-147	1000.00	4.71e+08	1.25	y	41:19	-	0.81
109	Hexa	PCB-139/149	2000.00	1.03e+09	1.24	y	41:35	-	0.88
110	Hexa	PCB-140	1000.00	4.41e+08	1.24	y	41:46	-	0.76
111	Hexa	PCB-134/143	2000.00	1.22e+09	1.22	y	42:12	-	0.88
112	Hexa	PCB-133/142	2000.00	1.23e+09	1.22	y	42:29	-	0.88

113	Hexa	PCB-131	1000.00	5.60e+08	1.22	y	42:40	-	0.80
114	Hexa	PCB-146/165	2000.00	1.48e+09	1.21	y	42:52	-	1.06
115	Hexa	PCB-132/161	2000.00	1.49e+09	1.22	y	43:07	-	1.07
116	Hexa	PCB-153	1000.00	7.14e+08	1.23	y	43:18	-	1.02
117	Hexa	PCB-168	1000.00	9.13e+08	1.23	y	43:31	-	1.31
118	Hexa	PCB-141	1000.00	6.28e+08	1.20	y	44:02	-	1.06
119	Hexa	PCB-137	1000.00	6.54e+08	1.18	y	44:25	-	1.10
120	Hexa	PCB-130	1000.00	5.46e+08	1.23	y	44:31	-	0.92
121	Hexa	PCB-138/163/164	3000.00	2.41e+09	1.21	y	44:54	-	1.26
122	Hexa	PCB-158/160	2000.00	1.71e+09	1.21	y	45:08	-	1.34
123	Hexa	PCB-129	1000.00	5.54e+08	1.21	y	45:22	-	0.87
124	Hexa	PCB-166	1000.00	8.34e+08	1.21	y	45:49	-	1.08
125	Hexa	PCB-159	1000.00	8.85e+08	1.18	y	46:09	-	1.15
126	Hexa	PCB-128/162	2000.00	1.48e+09	1.19	y	46:26	-	0.96
127	Hexa	PCB-167	1000.00	8.20e+08	1.22	y	46:49	-	1.09
128	Hexa	PCB-156	1000.00	9.21e+08	1.23	y	48:08	-	1.19
129	Hexa	PCB-157	1000.00	9.13e+08	1.23	y	48:23	-	1.13
130	Hexa	PCB-169	1000.00	7.98e+08	1.22	y	50:33	-	1.03
131	Hepta	PCB-188	1000.00	7.95e+08	1.05	y	42:56	-	1.38
132	Hepta	PCB-184	1000.00	7.03e+08	1.05	y	43:22	-	1.22
133	Hepta	PCB-179	1000.00	7.20e+08	1.05	y	44:09	-	1.25
134	Hepta	PCB-176	1000.00	7.64e+08	1.05	y	44:37	-	1.32
135	Hepta	PCB-186	1000.00	7.73e+08	1.05	y	45:13	-	1.34
136	Hepta	PCB-178	1000.00	5.43e+08	1.05	y	45:43	-	0.94
137	Hepta	PCB-175	1000.00	5.58e+08	1.04	y	46:04	-	0.97
138	Hepta	PCB-182/187	2000.00	1.19e+09	1.05	y	46:14	-	1.03
139	Hepta	PCB-183	1000.00	6.25e+08	1.04	y	46:33	-	1.08
140	Hepta	PCB-185	1000.00	5.42e+08	1.05	y	47:13	-	1.27
141	Hepta	PCB-174	1000.00	5.22e+08	1.04	y	47:35	-	1.22
142	Hepta	PCB-181	1000.00	5.36e+08	1.05	y	47:41	-	1.25
143	Hepta	PCB-177	1000.00	4.84e+08	1.05	y	47:51	-	1.13
144	Hepta	PCB-171	1000.00	5.90e+08	1.05	y	48:08	-	1.38
145	Hepta	PCB-173	1000.00	4.55e+08	1.05	y	48:34	-	1.06
146	Hepta	PCB-172	1000.00	5.42e+08	1.04	y	49:01	-	1.27
147	Hepta	PCB-192	1000.00	6.95e+08	1.06	y	49:13	-	1.63
148	Hepta	PCB-180	1000.00	5.49e+08	1.04	y	49:25	-	1.29
149	Hepta	PCB-193	1000.00	7.36e+08	1.05	y	49:37	-	1.72
150	Hepta	PCB-191	1000.00	7.57e+08	1.05	y	49:53	-	1.77
151	Hepta	PCB-170	1000.00	5.24e+08	1.04	y	50:56	-	1.55
152	Hepta	PCB-190	1000.00	7.39e+08	1.05	y	51:06	-	2.18
153	Hepta	PCB-189	1000.00	7.06e+08	1.05	y	52:27	-	1.55
154	Octa	PCB-202	1000.00	5.29e+08	0.89	y	48:21	-	0.96
155	Octa	PCB-201	1000.00	5.60e+08	0.88	y	48:50	-	1.02
156	Octa	PCB-204	1000.00	5.48e+08	0.88	y	48:59	-	1.00
157	Octa	PCB-197	1000.00	6.09e+08	0.89	y	49:17	-	1.11
158	Octa	PCB-200	1000.00	5.29e+08	0.88	y	50:11	-	0.96
159	Octa	PCB-198	1000.00	4.13e+08	0.96	y	51:32	-	0.75
160	Octa	PCB-199	1000.00	3.88e+08	0.81	y	51:38	-	0.71
161	Octa	PCB-196/203	2000.00	8.89e+08	0.89	y	51:55	-	0.81
162	Octa	PCB-195	1000.00	4.52e+08	0.91	y	53:05	-	1.16

163	Octa	PCB-194	1000.00	4.45e+08	0.90	y	53:58	-	1.14
164	Octa	PCB-205	1000.00	5.99e+08	0.92	y	54:15	-	1.53
165	Nona	PCB-208	1000.00	5.57e+08	1.30	y	53:14	-	0.91
166	Nona	PCB-207	1000.00	5.77e+08	1.31	y	53:33	-	0.95
167	Nona	PCB-206	1000.00	3.20e+08	1.30	y	55:35	-	0.79
168	Deca	PCB-209	1000.00	4.90e+08	1.17	y	56:57	-	1.23
169	Tot ↴	Total Mono-PCB	0.00	-	-	n	-	-	1.33
170	Tot ↴	Total Di-PCB	0.00	-	-	n	-	-	1.23

171	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.10
172	Tot Σ	Total Tri-PCB	0.00	-	- n	-	-	1.13
173	Tot Σ	Total Tetra-PCB	0.00	-	- n	-	-	1.04
174	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.14
175	Tot Σ	Total Penta-PCB	0.00	-	- n	-	-	1.28
176	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	0.93
177	Tot Σ	Total Hexa-PCB	0.00	-	- n	-	-	1.06
178	Tot Σ	Total Hepta-PCB	0.00	-	- n	-	-	1.26
179	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	0.90
180	Tot Σ	Total Octa-PCB	0.00	-	- n	-	-	1.28
181	Tot Σ	Total Nona-PCB	0.00	-	- n	-	-	0.90
182	Tot Σ	Total Deca-PCB	1000.00	4.90e+08	1.17 y	56:57	-	1.23
183	MonoΣ	13C-PCB-1	100.00	1.04e-08	3.59 y	16:10	-	0.78
184	MonoΣ	13C-PCB-3	100.00	1.08e-08	3.59 y	18:47	-	0.81
185	Di-IS	13C-PCB-4	100.00	7.50e-07	1.62 y	20:07	-	0.57
186	Di-IS	13C-PCB-9	100.00	1.22e-08	1.57 y	21:55	-	0.92
187	Di-IS	13C-PCB-11	100.00	1.23e-08	1.57 y	25:17	-	0.93
188	Tri-Σ	13C-PCB-19	100.00	7.15e-07	1.09 y	24:17	-	0.54
189	Tri-Σ	13C-PCB-32	100.00	1.08e-08	1.10 y	27:12	-	0.81
190	Tri-Σ	13C-PCB-28	100.00	8.14e-07	1.06 y	29:09	-	1.15
191	Tri-Σ	13C-PCB-37	100.00	7.21e-07	1.00 y	33:01	-	1.02
192	Tetr-Σ	13C-PCB-54	100.00	9.52e-07	0.76 y	28:02	-	1.08
193	Tetr-Σ	13C-PCB-52	100.00	6.10e-07	0.76 y	31:34	-	0.69
194	Tetr-Σ	13C-PCB-47	100.00	6.93e-07	0.76 y	32:04	-	0.79
195	Tetr-Σ	13C-PCB-70	100.00	9.52e-07	0.77 y	35:35	-	1.08
196	Tetr-Σ	13C-PCB-80	100.00	9.56e-07	0.77 y	36:00	-	1.08
197	Tetr-Σ	13C-PCB-81	100.00	9.43e-07	0.77 y	39:06	-	1.07
198	Tetr-Σ	13C-PCB-77	100.00	9.31e-07	0.78 y	39:42	-	1.06
199	Pent-Σ	13C-PCB-104	100.00	6.44e-07	1.60 y	32:43	-	0.89
200	Pent-Σ	13C-PCB-95	100.00	4.86e-07	1.62 y	35:53	-	0.67
201	Pent-Σ	13C-PCB-101	100.00	5.46e-07	1.67 y	37:33	-	0.75
202	Pent-Σ	13C-PCB-97	100.00	4.62e-07	1.66 y	38:52	-	0.64
203	Pent-Σ	13C-PCB-123	100.00	6.30e-07	1.65 y	41:25	-	0.87
204	Pent-Σ	13C-PCB-118	100.00	6.84e-07	1.63 y	41:36	-	0.95
205	Pent-Σ	13C-PCB-114	100.00	6.88e-07	1.63 y	42:15	-	1.25
206	Pent-Σ	13C-PCB-105	100.00	6.67e-07	1.58 y	43:07	-	1.21
207	Pent-Σ	13C-PCB-127	100.00	7.14e-07	1.58 y	43:27	-	1.30
208	Pent-Σ	13C-PCB-126	100.00	6.15e-07	1.59 y	45:21	-	1.12
209	HexaΣ	13C-PCB-155	100.00	5.83e-07	1.23 y	37:06	-	0.81
210	HexaΣ	13C-PCB-153	100.00	6.98e-07	1.26 y	43:17	-	1.27
211	HexaΣ	13C-PCB-141	100.00	5.93e-07	1.28 y	44:01	-	1.08
212	Hexa	13C-PCB-138	100.00	6.37e-07	1.29 y	44:51	-	1.16
213	HexaΣ	13C-PCB-159	100.00	7.72e-07	1.27 y	46:08	-	1.41
214	HexaΣ	13C-PCB-167	100.00	7.55e-07	1.27 y	46:49	-	1.37
215	HexaΣ	13C-PCB-156	100.00	7.74e-07	1.26 y	48:07	-	1.41
216	HexaΣ	13C-PCB-157	100.00	8.11e-07	1.28 y	48:23	-	1.48
217	HexaΣ	13C-PCB-169	100.00	7.75e-07	1.26 y	50:33	-	1.41
218	HeptaΣ	13C-PCB-188	100.00	5.77e-07	0.46 y	42:55	-	1.05
219	HeptaΣ	13C-PCB-180	100.00	4.27e-07	0.47 y	49:24	-	0.78
220	HeptaΣ	13C-PCB-170	100.00	3.39e-07	0.46 y	50:55	-	0.62
221	HeptaΣ	13C-PCB-189	100.00	4.55e-07	0.47 y	52:26	-	0.83

222	Octa ₂	13C-PCB-202	100.00	5.50e+07	0.90	y	48:20	-	1.00
223	Octa ₂	13C-PCB-194	100.00	3.90e+07	0.88	y	53:57	-	0.72
224	Nona ₂	13C-PCB-208	100.00	6.09e+07	0.76	y	53:14	-	1.13
225	Nona ₂	13C-PCB-206	100.00	4.02e+07	0.78	y	55:35	-	0.74
226	Deca ₂	13C-PCB-209	100.00	3.99e+07	1.19	y	56:56	-	0.74
227	DI-RS	13C-PCB-15	100.00	1.33e+08	1.59	y	26:00	-	1.00
228	Tri- ₂	13C-PCB-31	100.00	7.06e+07	1.04	y	29:03	-	1.00
229	Tetra ₂	13C-PCB-60	100.00	8.83e+07	0.76	y	36:49	-	1.00
230	Penta ₂	13C-PCB-111	100.00	7.23e+07	1.63	y	39:18	-	1.00
231	Hexa ₂	13C-PCB-128	100.00	5.49e+07	1.27	y	46:25	-	1.00

232	Oceania	13C-PCB-205	100.00	5.41e+07	0.88	y	54:14	-	1.00
233	CRS	13C-PCB-79	100.00	9.97e+07	0.78	y	37:53	-	1.13
234	CRS	13C-PCB-178	100.00	3.44e+07	0.46	y	45:42	-	0.63
235	PS	13C-PCB-79	100.00	9.97e+07	0.78	y	37:53	-	1.06
236	PS	13C-PCB-178	100.00	3.44e+07	0.46	y	45:42	-	0.80

Filename: 150116E1 S: 2 Acquired: 16-JAN-15 08:51:27
 Run: 150114e1 Analyte: ICal: pcbvg8-1-14-15 Results: 150114e1
 Sample text: ST150116E1-2 PCB CS0 14L2902

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	0.25	8.23e+05	2.94 y	16:10	-	1.40
2	Mono	PCB-2	0.25	8.54e+05	2.97 y	18:33	-	1.25
3	Mono	PCB-3	0.25	8.73e+05	2.80 y	18:47	-	1.27
4	Di	PCB-4/10	0.50	1.52e+06	1.35 y	20:10	-	1.98
5	Di	PCB-7/9	0.50	1.84e+06	1.60 y	21:57	-	1.43
6	Di	PCB-6	0.25	9.02e+05	1.49 y	22:35	-	1.41
7	Di	PCB-5/8	0.50	1.93e+06	1.40 y	23:00	-	1.50
8	Di	PCB-14	0.25	1.06e+06	1.71 y	24:06	-	1.64
9	Di	PCB-11	0.25	9.73e+05	1.71 y	25:18	-	1.51
10	Di	PCB-12/13	0.50	1.86e+06	1.64 y	25:41	-	1.44
11	Di	PCB-15	0.25	1.11e+06	1.59 y	25:59	-	1.72
12	Tri	PCB-19	0.25	4.86e+05	1.00 y	24:16	-	1.32
13	Tri	PCB-30	0.25	7.78e+05	1.01 y	25:10	-	2.11
14	Tri	PCB-18	0.25	5.31e+05	1.06 y	25:55	-	0.98
15	Tri	PCB-17	0.25	5.95e+05	0.99 y	26:05	-	1.10
16	Tri	PCB-24/27	0.50	1.64e+06	1.07 y	26:40	-	1.52
17	Tri	PCB-16/32	0.50	1.35e+06	1.01 y	27:10	-	1.25
18	Tri	PCB-34	0.25	6.39e+05	1.00 y	27:59	-	1.53
19	Tri	PCB-23	0.25	5.74e+05	1.11 y	28:05	-	1.37
20	Tri	PCB-29	0.25	5.69e+05	0.97 y	28:19	-	1.36
21	Tri	PCB-26	0.25	5.52e+05	1.11 y	28:32	-	1.32
22	Tri	PCB-25	0.25	4.36e+05	1.04 y	28:41	-	1.04
23	Tri	PCB-31	0.25	5.79e+05	1.08 y	29:02	-	1.38
24	Tri	PCB-28	0.25	5.76e+05	1.10 y	29:08	-	1.38
25	Tri	PCB-20/21/33	0.75	1.58e+06	1.08 y	29:46	-	1.26
26	Tri	PCB-22	0.25	5.67e+05	1.08 y	30:12	-	1.36
27	Tri	PCB-36	0.25	5.70e+05	0.95 y	30:49	-	1.42
28	Tri	PCB-39	0.25	5.42e+05	0.91 y	31:18	-	1.35
29	Tri	PCB-38	0.25	4.87e+05	1.13 y	32:03	-	1.22
30	Tri	PCB-35	0.25	5.42e+05	0.99 y	32:35	-	1.35
31	Tri	PCB-37	0.25	6.21e+05	1.00 y	33:01	-	1.55
32	Tetra	PCB-54	0.25	5.77e+05	0.67 y	28:01	-	1.21
33	Tetra	PCB-50	0.25	4.13e+05	0.75 y	29:12	-	0.87
34	Tetra	PCB-53	0.25	4.43e+05	0.78 y	29:50	-	1.36
35	Tetra	PCB-51	0.25	4.07e+05	0.88 y	30:11	-	1.25
36	Tetra	PCB-45	0.25	4.06e+05	0.68 y	30:37	-	1.25
37	Tetra	PCB-46	0.25	3.73e+05	0.69 y	31:06	-	1.15
38	Tetra	PCB-52/69	0.50	9.67e+05	0.72 y	31:35	-	1.49
39	Tetra	PCB-73	0.25	5.44e+05	0.66 y	31:42	-	1.67
40	Tetra	PCB-43/49	0.50	8.95e+05	0.73 y	31:52	-	1.37
41	Tetra	PCB-47	0.25	5.18e+05	0.66 y	32:04	-	1.53

42	Tetra	PCB-48/75	0.50	1.05e+06	0.73	y	32:11	-	1.56
43	Tetra	PCB-65	0.25	5.56e+05	0.78	y	32:27	-	1.64
44	Tetra	PCB-62	0.25	5.62e-05	0.80	y	32:33	-	1.66
45	Tetra	PCB-44	0.25	3.84e+05	0.80	y	32:52	-	1.13
46	Tetra	PCB-42/59	0.50	1.09e+06	0.73	y	33:05	-	1.61
47	Tetra	PCB-41/64/71/72	1.00	2.24e+06	0.68	y	33:40	-	1.65
48	Tetra	PCB-68	0.25	7.48e+05	0.76	y	33:56	-	2.21
49	Tetra	PCB-40	0.25	3.78e+05	0.77	y	34:08	-	1.11
50	Tetra	PCB-57	0.25	6.40e+05	0.76	y	34:30	-	1.44
51	Tetra	PCB-67	0.25	6.01e+05	0.76	y	34:48	-	1.35
52	Tetra	PCB-58	0.25	6.11e+05	0.84	y	34:56	-	1.37

53	Tetra	PCB-63	0.25	6.42e+05	0.73 y	35:05	-	1.44
54	Tetra	PCB-74	0.25	6.79e+05	0.76 y	35:22	-	1.52
55	Tetra	PCB-61/70	0.50	1.26e+06	0.79 y	35:32	-	1.42
56	Tetra	PCB-76/66	0.50	1.38e+06	0.72 y	35:46	-	1.55
57	Tetra	PCB-80	0.25	7.76e+05	0.66 y	36:00	-	1.65
58	Tetra	PCB-55	0.25	7.25e+05	0.69 y	36:19	-	1.54
59	Tetra	PCB-56/60	0.50	1.33e+06	0.69 y	36:48	-	1.40
60	Tetra	PCB-79	0.25	6.44e+05	0.72 y	37:52	-	1.37
61	Tetra	PCB-78	0.25	7.03e+05	0.86 y	38:34	-	1.51
62	Tetra	PCB-81	0.25	7.65e+05	0.71 y	39:06	-	1.64
63	Tetra	PCB-77	0.25	7.30e+05	0.72 y	39:41	-	1.65
64	Penta	PCB-104	0.25	5.67e+05	1.55 y	32:43	-	1.50
65	Penta	PCB-96	0.25	4.70e+05	1.56 y	33:59	-	1.25
66	Penta	PCB-103	0.25	3.98e+05	1.40 y	34:31	-	1.05
67	Penta	PCB-100	0.25	3.93e+05	1.57 y	34:52	-	1.04
68	Penta	PCB-94	0.25	3.35e+05	1.51 y	35:21	-	1.26
69	Penta	PCB-95/98/102	0.75	1.21e+06	1.44 y	35:49	-	1.52
70	Penta	PCB-93	0.25	3.27e+05	1.57 y	35:58	-	1.23
71	Penta	PCB-88/91	0.50	6.67e+05	1.73 y	36:14	-	1.26
72	Penta	PCB-121	0.25	5.54e+05	1.37 y	36:21	-	2.09
73	Penta	PCB-84/92	0.50	7.20e+05	1.52 y	37:11	-	1.20
74	Penta	PCB-89	0.25	3.45e+05	1.57 y	37:22	-	1.15
75	Penta	PCB-90/101	0.50	8.67e+05	1.49 y	37:33	-	1.45
76	Penta	PCB-113	0.25	4.42e+05	1.63 y	37:47	-	1.48
77	Penta	PCB-99	0.25	4.77e+05	1.32 y	37:53	-	1.59
78	Penta	PCB-119	0.25	5.55e+05	1.73 y	38:22	-	2.15
79	Penta	PCB-108/112	0.50	7.83e+05	1.67 y	38:31	-	1.51
80	Penta	PCB-83	0.25	4.64e+05	1.57 y	38:40	-	1.80
81	Penta	PCB-97	0.25	3.95e+05	1.40 y	38:52	-	1.53
82	Penta	PCB-86	0.25	3.56e+05	1.44 y	39:00	-	1.38
83	Penta	PCB-87/117/125	0.75	1.35e+06	1.64 y	39:08	-	1.74
84	Penta	PCB-111/115	0.50	1.14e+06	1.55 y	39:17	-	2.20
85	Penta	PCB-85/116	0.50	8.83e+05	1.60 y	39:25	-	1.71
86	Penta	PCB-120	0.25	6.10e+05	1.61 y	39:40	-	2.36
87	Penta	PCB-110	0.25	5.31e+05	1.49 y	39:48	-	2.05
88	Penta	PCB-82	0.25	3.08e+05	1.51 y	40:25	-	0.89
89	Penta	PCB-124	0.25	4.70e+05	1.54 y	41:06	-	1.36
90	Penta	PCB-107/109	0.50	1.12e+06	1.59 y	41:14	-	1.62
91	Penta	PCB-123	0.25	5.08e+05	1.71 y	41:26	-	1.47
92	Penta	PCB-106/118	0.50	1.14e+06	1.54 y	41:37	-	1.58
93	Penta	PCB-114	0.25	6.35e+05	1.49 y	42:16	-	1.70
94	Penta	PCB-122	0.25	5.14e+05	1.72 y	42:23	-	1.38
95	Penta	PCB-105	0.25	6.49e+05	1.73 y	43:07	-	1.79
96	Penta	PCB-127	0.25	5.82e+05	1.76 y	43:28	-	1.53
97	Penta	PCB-126	0.25	5.40e+05	1.61 y	45:21	-	1.55
98	Hexa	PCB-155	0.25	4.38e+05	1.32 y	37:07	-	1.33
99	Hexa	PCB-150	0.25	4.32e+05	1.10 y	38:22	-	1.31
100	Hexa	PCB-152	0.25	4.91e+05	1.20 y	38:51	-	1.49
101	Hexa	PCB-145	0.25	4.05e+05	1.30 y	39:17	-	1.23
102	Hexa	PCB-136	0.25	4.29e+05	1.20 y	39:37	-	1.30

103	Hexa	PCB-148	0.25	3.04e+05	1.36	y	39:43	-	0.92
104	Hexa	PCB-154	0.25	3.60e+05	1.19	y	40:13	-	1.09
105	Hexa	PCB-151	0.25	3.00e+05	1.24	y	40:50	-	0.91
106	Hexa	PCB-135	0.25	2.94e+05	1.38	y	41:04	-	0.89
107	Hexa	PCB-144	0.25	3.27e+05	1.29	y	41:10	-	0.99
108	Hexa	PCB-147	0.25	3.02e+05	1.31	y	41:18	-	0.92
109	Hexa	PCB-139/149	0.50	6.50e+05	1.18	y	41:34	-	0.99
110	Hexa	PCB-140	0.25	2.95e+05	1.42	y	41:45	-	0.90
111	Hexa	PCB-134/143	0.50	8.06e+05	1.27	y	42:11	-	1.08
112	Hexa	PCB-133/142	0.50	7.42e+05	1.18	y	42:29	-	1.00
113	Hexa	PCB-131	0.25	3.29e+05	1.26	y	42:39	-	0.89

114	Hexa	PCB-146/165	0.50	8.57e+05	1.23	y	42:52	-	1.15
115	Hexa	PCB-132/161	0.50	9.37e+05	1.30	y	43:07	-	1.26
116	Hexa	PCB-153	0.25	5.93e+05	1.35	y	43:16	-	1.60
117	Hexa	PCB-168	0.25	5.66e+05	1.42	y	43:30	-	1.52
118	Hexa	PCB-141	0.25	4.25e+05	1.18	y	44:01	-	1.36
119	Hexa	PCB-137	0.25	4.29e+05	1.26	y	44:24	-	1.38
120	Hexa	PCB-130	0.25	3.31e+05	1.11	y	44:30	-	1.06
121	Hexa	PCB-138/163/164	0.75	1.63e+06	1.16	y	44:53	-	1.69
122	Hexa	PCB-158/160	0.50	1.19e+06	1.31	y	45:07	-	1.84
123	Hexa	PCB-129	0.25	3.95e+05	1.21	y	45:21	-	1.23
124	Hexa	PCB-166	0.25	5.35e+05	1.28	y	45:49	-	1.37
125	Hexa	PCB-159	0.25	5.69e+05	1.35	y	46:08	-	1.46
126	Hexa	PCB-128/162	0.50	9.34e+05	1.12	y	46:26	-	1.20
127	Hexa	PCB-167	0.25	5.71e+05	1.24	y	46:49	-	1.42
128	Hexa	PCB-156	0.25	5.58e+05	1.24	y	48:06	-	1.44
129	Hexa	PCB-157	0.25	5.78e+05	1.29	y	48:22	-	1.41
130	Hexa	PCB-169	0.25	4.98e+05	1.30	y	50:32	-	1.20
131	Hepta	PCB-188	0.25	5.36e+05	0.97	y	42:55	-	1.88
132	Hepta	PCB-184	0.25	4.31e+05	1.00	y	43:22	-	1.51
133	Hepta	PCB-179	0.25	4.62e+05	1.08	y	44:08	-	1.62
134	Hepta	PCB-176	0.25	4.83e+05	1.07	y	44:36	-	1.69
135	Hepta	PCB-186	0.25	4.94e+05	1.00	y	45:13	-	1.73
136	Hepta	PCB-178	0.25	3.70e+05	1.00	y	45:42	-	1.30
137	Hepta	PCB-175	0.25	3.47e+05	1.08	y	46:02	-	1.22
138	Hepta	PCB-182/187	0.50	7.45e+05	1.05	y	46:13	-	1.31
139	Hepta	PCB-183	0.25	4.00e+05	0.93	y	46:33	-	1.40
140	Hepta	PCB-185	0.25	3.66e+05	0.97	y	47:12	-	1.68
141	Hepta	PCB-174	0.25	3.21e+05	1.06	y	47:34	-	1.47
142	Hepta	PCB-181	0.25	3.20e+05	1.15	y	47:40	-	1.46
143	Hepta	PCB-177	0.25	3.38e+05	1.05	y	47:50	-	1.55
144	Hepta	PCB-171	0.25	3.67e+05	1.16	y	48:07	-	1.68
145	Hepta	PCB-173	0.25	2.66e+05	1.19	y	48:33	-	1.22
146	Hepta	PCB-172	0.25	3.69e+05	0.98	y	48:59	-	1.69
147	Hepta	PCB-192	0.25	4.47e+05	1.15	y	49:11	-	2.05
148	Hepta	PCB-180	0.25	3.93e+05	1.10	y	49:24	-	1.80
149	Hepta	PCB-193	0.25	4.76e+05	0.93	y	49:36	-	2.18
150	Hepta	PCB-191	0.25	4.59e+05	1.01	y	49:51	-	2.10
151	Hepta	PCB-170	0.25	3.50e+05	0.92	y	50:55	-	2.01
152	Hepta	PCB-190	0.25	4.53e+05	1.20	y	51:05	-	2.60
153	Hepta	PCB-189	0.25	4.45e+05	1.16	y	52:25	-	1.88
154	Octa	PCB-202	0.25	3.30e+05	0.89	y	48:20	-	1.16
155	Octa	PCB-201	0.25	3.56e+05	0.82	y	48:49	-	1.25
156	Octa	PCB-204	0.25	3.77e+05	0.86	y	48:58	-	1.33
157	Octa	PCB-197	0.25	3.89e+05	0.83	y	49:17	-	1.37
158	Octa	PCB-200	0.25	3.52e+05	0.82	y	50:10	-	1.24
159	Octa	PCB-198	0.25	2.51e+05	0.98	y	51:31	-	0.88
160	Octa	PCB-199	0.25	2.48e+05	0.90	y	51:38	-	0.87
161	Octa	PCB-196/203	0.50	5.74e+05	0.85	y	51:54	-	1.01
162	Octa	PCB-195	0.25	2.88e-05	0.95	y	53:05	-	1.34
163	Octa	PCB-194	0.25	3.47e+05	0.88	y	53:57	-	1.61

164	Octa	PCB-205	0.25	4.05e+05	0.83	y	54:13	-	1.88
165	Nona	PCB-208	0.25	3.37e+05	1.26	y	53:14	-	1.18
166	Nona	PCB-207	0.25	3.54e+05	1.38	y	53:33	-	1.24
167	Nona	PCB-206	0.25	2.13e+05	1.52	y	55:34	-	1.08
168	Deca	PCB-209	0.25	3.27e+05	1.27	y	56:56	-	1.69
169	Tot Σ	Total Mono-PCB	0.00	-	-	n	-	-	1.30
170	Tot Σ	Total Di-PCB	0.00	-	-	n	-	-	1.52
171	Tot Σ	Total Tri-PCB	0.00	-	-	n	-	-	1.39

172	Tot 卦	Total Tri-PCB	0.00	-	- n	-	-	1.34
173	Tot 卦	Total Tetra-PCB	0.00	-	- n	-	-	1.42
174	Tot 卦	Total Penta-PCB	0.00	-	- n	-	-	1.42
175	Tot 卦	Total Penta-PCB	0.00	-	- n	-	-	1.59
176	Tot 卦	Total Hexa-PCB	0.00	-	- n	-	-	1.09
177	Tot 卦	Total Hexa-PCB	0.00	-	- n	-	-	1.32
178	Tot 卦	Total Hepta-PCB	0.00	-	- n	-	-	1.61
179	Tot 卦	Total Octa-PCB	0.00	-	- n	-	-	1.12
180	Tot 卦	Total Octa-PCB	0.00	-	- n	-	-	1.61
181	Tot 卦	Total Nona-PCB	0.00	-	- n	-	-	1.18
182	Tot 卦	Total Deca-PCB	0.25	3.27e+05	1.27 y	56:56	-	1.69
183	Mono卦	13C-PCB-1	100.00	2.35e+08	3.49 y	16:09	-	0.87
184	Mono卦	13C-PCB-3	100.00	2.74e+08	3.42 y	18:46	-	1.01
185	Di-IS	13C-PCB-4	100.00	1.53e+08	1.60 y	20:06	-	0.57
186	Di-IS	13C-PCB-9	100.00	2.57e+08	1.58 y	21:53	-	0.95
187	Di-IS	13C-PCB-11	100.00	2.58e+08	1.57 y	25:16	-	0.95
188	Tri-卦	13C-PCB-19	100.00	1.47e+08	1.12 y	24:15	-	0.54
189	Tri-卦	13C-PCB-32	100.00	2.16e+08	1.11 y	27:10	-	0.80
190	Tri-卦	13C-PCB-28	100.00	1.67e+08	1.03 y	29:08	-	1.00
191	Tri-卦	13C-PCB-37	100.00	1.60e+08	1.04 y	33:00	-	0.96
192	Tetr卦	13C-PCB-54	100.00	1.91e+08	0.76 y	28:01	-	1.03
193	Tetr卦	13C-PCB-52	100.00	1.30e+08	0.78 y	31:32	-	0.70
194	Tetr卦	13C-PCB-47	100.00	1.36e+08	0.78 y	32:03	-	0.73
195	Tetr卦	13C-PCB-70	100.00	1.78e+08	0.78 y	35:33	-	0.96
196	Tetr卦	13C-PCB-80	100.00	1.89e+08	0.79 y	35:59	-	1.02
197	Tetr卦	13C-PCB-81	100.00	1.86e+08	0.78 y	39:05	-	1.00
198	Tetr卦	13C-PCB-77	100.00	1.77e+08	0.79 y	39:41	-	0.95
199	Pent卦	13C-PCB-104	100.00	1.51e+08	1.58 y	32:42	-	0.96
200	Pent卦	13C-PCB-95	100.00	1.06e+08	1.59 y	35:52	-	0.68
201	Pent卦	13C-PCB-101	100.00	1.20e+08	1.60 y	37:33	-	0.76
202	Pent卦	13C-PCB-97	100.00	1.03e+08	1.63 y	38:51	-	0.66
203	Pent卦	13C-PCB-123	100.00	1.38e+08	1.61 y	41:25	-	0.88
204	Pent卦	13C-PCB-118	100.00	1.44e+08	1.62 y	41:35	-	0.91
205	Pent卦	13C-PCB-114	100.00	1.49e+08	1.59 y	42:15	-	1.32
206	Pent卦	13C-PCB-105	100.00	1.45e+08	1.60 y	43:06	-	1.29
207	Pent卦	13C-PCB-127	100.00	1.52e+08	1.58 y	43:26	-	1.34
208	Pent卦	13C-PCB-126	100.00	1.39e+08	1.58 y	45:20	-	1.23
209	Hexa卦	13C-PCB-155	100.00	1.32e+08	1.26 y	37:05	-	0.84
210	Hexa卦	13C-PCB-153	100.00	1.49e+08	1.28 y	43:16	-	1.31
211	Hexa卦	13C-PCB-141	100.00	1.25e+08	1.29 y	44:00	-	1.10
212	Hexa	13C-PCB-138	100.00	1.29e+08	1.29 y	44:51	-	1.14
213	Hexa卦	13C-PCB-159	100.00	1.56e+08	1.29 y	46:07	-	1.38
214	Hexa卦	13C-PCB-167	100.00	1.61e+08	1.27 y	46:49	-	1.42
215	Hexa卦	13C-PCB-156	100.00	1.55e+08	1.30 y	48:06	-	1.37
216	Hexa卦	13C-PCB-157	100.00	1.64e+08	1.33 y	48:22	-	1.45
217	Hexa卦	13C-PCB-169	100.00	1.66e+08	1.26 y	50:32	-	1.46
218	Hepta卦	13C-PCB-188	100.00	1.14e+08	0.45 y	42:54	-	1.01
219	Hepta卦	13C-PCB-180	100.00	8.73e+07	0.47 y	49:23	-	0.77
220	Hepta卦	13C-PCB-170	100.00	6.97e+07	0.45 y	50:54	-	0.62
221	Hepta卦	13C-PCB-189	100.00	9.47e-07	0.46 y	52:25	-	0.84
222	Octa卦	13C-PCB-202	100.00	1.14e+08	0.93 y	48:19	-	1.00

223	Octa ₇	13C-PCB-194	100.00	8.63e+07	0.90	y	53:56	-	0.73
224	Nona ₇	13C-PCB-208	100.00	1.14e+08	0.77	y	53:13	-	0.97
225	Nona ₇	13C-PCB-206	100.00	7.88e+07	0.76	y	55:34	-	0.67
226	Deca ₇	13C-PCB-209	100.00	7.76e+07	1.20	y	56:55	-	0.66
227	DI-RS	13C-PCB-15	100.00	2.71e+08	1.57	y	25:59	-	1.00
228	Tri- ₇	13C-PCB-31	100.00	1.67e+08	1.05	y	29:01	-	1.00
229	Tetr ₇	13C-PCB-60	100.00	1.85e+08	0.79	y	36:48	-	1.00
230	Penta	13C-PCB-111	100.00	1.57e+08	1.61	y	39:17	-	1.00
231	Hexa ₇	13C-PCB-128	100.00	1.13e+08	1.27	y	46:23	-	1.00
232	Octa ₇	13C-PCB-205	100.00	1.18e+08	0.91	y	54:13	-	1.00

233	CRS	13C-PCB-79	100.00	1.81e+08	0.78	y	37:52	-	0.97
234	CRS	13C-PCB-178	100.00	7.34e+07	0.47	y	45:41	-	0.65
235	PS	13C-PCB-79	100.00	1.81e+08	0.78	y	37:52	-	0.97
236	PS	13C-PCB-178	100.00	7.34e+07	0.47	y	45:41	-	0.84

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST150114E1-5

Instrument ID: VG-8

Initial Calibration Date: 1-14-15

ICal ID: PCBVG8-1-14-15

GC Column ID: ZB-1

VER Data Filename: 150114E1 S#6 Analysis Date: 14-JAN-15 Time: 18:00:03

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-1	2.99	2.66-3.60	y	46.1	37.5-62.5	PCB-52/69	0.74	0.65-0.89	y	93.1	75.0-125
PCB-2	2.99	2.66-3.60	y	48.8	37.5-62.5	PCB-73	0.75	0.65-0.89	y	50.2	37.5-62.5
PCB-3	2.98	2.66-3.60	y	48.7	37.5-62.5	PCB-43/49	0.73	0.65-0.89	y	93.4	75.0-125
PCB-4/10	1.64	1.33-1.79	y	93.0	75-125	PCB-47	0.74	0.65-0.89	y	45.6	37.5-62.5
PCB-7/9	1.63	1.33-1.79	y	94.5	75-125	PCB-48/75	0.73	0.65-0.89	y	90.7	75.0-125
PCB-6	1.65	1.33-1.79	y	47.6	37.5-62.5	PCB-65	0.73	0.65-0.89	y	42.9	37.5-62.5
PCB-5/8	1.64	1.33-1.79	y	92.5	75-125	PCB-62	0.74	0.65-0.89	y	47.2	37.5-62.5
PCB-14	1.64	1.33-1.79	y	48.1	37.5-62.5	PCB-44	0.74	0.65-0.89	y	46.2	37.5-62.5
PCB-11	1.68	1.33-1.79	y	47.1	37.5-62.5	PCB-42/59	0.74	0.65-0.89	y	85.0	75.0-125
PCB-12/13	1.65	1.33-1.79	y	94.6	75-125	PCB-41/64/71/72	0.73	0.65-0.89	y	170.4	150-250
PCB-15	1.65	1.33-1.79	y	47.1	37.5-62.5	PCB-68	0.73	0.65-0.89	y	40.2	37.5-62.5
PCB-19	1.06	0.88-1.20	y	47.6	37.5-62.5	PCB-40	0.73	0.65-0.89	y	40.8	37.5-62.5
PCB-30	1.05	0.88-1.20	y	47.9	37.5-62.5	PCB-57	0.74	0.65-0.89	y	46.0	37.5-62.5
PCB-18	1.06	0.88-1.20	y	47.8	37.5-62.5	PCB-67	0.73	0.65-0.89	y	45.9	37.5-62.5
PCB-17	1.05	0.88-1.20	y	48.2	37.5-62.5	PCB-58	0.76	0.65-0.89	y	49.2	37.5-62.5
PCB-24/27	1.06	0.88-1.20	y	95.1	75.0-125	PCB-63	0.71	0.65-0.89	y	47.3	37.5-62.5
PCB-16/32	1.05	0.88-1.20	y	93.3	75.0-125	PCB-74	0.74	0.65-0.89	y	44.5	37.5-62.5
PCB-34	1.01	0.88-1.20	y	45.7	37.5-62.5	PCB-61/70	0.73	0.65-0.89	y	92.8	75.0-125
PCB-23	1.06	0.88-1.20	y	47.9	37.5-62.5	PCB-76/66	0.74	0.65-0.89	y	90.0	75.0-125
PCB-29	1.01	0.88-1.20	y	43.7	37.5-62.5	PCB-80	0.74	0.65-0.89	y	45.2	37.5-62.5
PCB-26	1.00	0.88-1.20	y	44.9	37.5-62.5	PCB-55	0.74	0.65-0.89	y	45.9	37.5-62.5
PCB-25	1.01	0.88-1.20	y	45.8	37.5-62.5	PCB-56/60	0.73	0.65-0.89	y	88.4	75.0-125
PCB-31	1.03	0.88-1.20	y	45.4	37.5-62.5	PCB-79	0.73	0.65-0.89	y	44.5	37.5-62.5
PCB-28	1.04	0.88-1.20	y	43.3	37.5-62.5	PCB-78	0.74	0.65-0.89	y	43.6	37.5-62.5
PCB-20/21/33	1.02	0.88-1.20	y	136.2	112.5-225	PCB-81	0.75	0.65-0.89	y	45.5	37.5-62.5
PCB-22	1.03	0.88-1.20	y	46.7	37.5-62.5	PCB-77	0.76	0.65-0.89	y	45.7	37.5-62.5
PCB-36	1.05	0.88-1.20	y	53.8	37.5-62.5	PCB-104	1.59	1.32-1.78	y	45.9	37.5-62.5
PCB-39	1.05	0.88-1.20	y	50.8	37.5-62.5	PCB-96	1.56	1.32-1.78	y	43.9	37.5-62.5
PCB-38	1.03	0.88-1.20	y	52.5	37.5-62.5	PCB-103	1.54	1.32-1.78	y	44.4	37.5-62.5
PCB-35	1.03	0.88-1.20	y	50.7	37.5-62.5	PCB-100	1.57	1.32-1.78	y	45.3	37.5-62.5
PCB-37	1.08	0.88-1.20	y	47.6	37.5-62.5	PCB-94	1.56	1.32-1.78	y	46.8	37.5-62.5
PCB-54	0.74	0.65-0.89	y	46.6	37.5-62.5	PCB-95/98/102	1.52	1.32-1.78	y	134.8	112.5-225
PCB-50	0.72	0.65-0.89	y	46.9	37.5-62.5	PCB-93	1.68	1.32-1.78	y	53.0	37.5-62.5
PCB-53	0.75	0.65-0.89	y	48.1	37.5-62.5	PCB-88/91	1.56	1.32-1.78	y	99.5	75.0-125
PCB-51	0.72	0.65-0.89	y	47.8	37.5-62.5	PCB-121	1.57	1.32-1.78	y	44.4	37.5-62.5
PCB-45	0.73	0.65-0.89	y	48.7	37.5-62.5						
PCB-46	0.73	0.65-0.89	y	45.8	37.5-62.5						

Analyst: DMSDate: 1/20/15

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST150114E1-5

Instrument ID: VG-8

Initial Calibration Date: 1-14-15

ICal ID: pcbvg8-1-14-15

GC Column ID: ZB-1

VER Data Filename: 150114E1 S#6 Analysis Date: 14-JAN-15 Time: 18:00:03

ANALYTES	ION	QC	CONC.			ANALYTES	ION	QC	CONC.		
	ABUND.	LIMITS	CONC.	RANGE	ABUND.	LIMITS	CONC.	RANGE	FOUND	(ng/mL)	FOUND
	RATIO	PASS	FOUND	(ng/mL)	RATIO	PASS	FOUND	(ng/mL)	FOUND	(ng/mL)	FOUND
PCB-84/92	1.54	1.32-1.78	y	97.1	75.0-125	PCB-140	1.24	1.05-1.43	y	44.8	37.5-62.5
PCB-89	1.53	1.32-1.78	y	47.5	37.5-62.5	PCB-134/143	1.22	1.05-1.43	y	91.8	75.0-125
PCB-90/101	1.56	1.32-1.78	y	93.5	75.0-125	PCB-133/142	1.24	1.05-1.43	y	93.1	75.0-125
PCB-113	1.55	1.32-1.78	y	51.7	37.5-62.5	PCB-131	1.16	1.05-1.43	y	46.7	37.5-62.5
PCB-99	1.60	1.32-1.78	y	41.4	37.5-62.5	PCB-146/165	1.22	1.05-1.43	y	93.5	75.0-125
PCB-119	1.56	1.32-1.78	y	47.0	37.5-62.5	PCB-132/161	1.22	1.05-1.43	y	92.8	75.0-125
PCB-108/112	1.56	1.32-1.78	y	94.2	75.0-125	PCB-153	1.21	1.05-1.43	y	43.2	37.5-62.5
PCB-83	1.57	1.32-1.78	y	47.6	37.5-62.5	PCB-168	1.22	1.05-1.43	y	46.7	37.5-62.5
PCB-97	1.55	1.32-1.78	y	46.2	37.5-62.5	PCB-141	1.22	1.05-1.43	y	45.4	37.5-62.5
PCB-86	1.46	1.32-1.78	y	48.0	37.5-62.5	PCB-137	1.18	1.05-1.43	y	45.4	37.5-62.5
PCB-87/117/125	1.59	1.32-1.78	y	142.8	112.5-225	PCB-130	1.21	1.05-1.43	y	48.2	37.5-62.5
PCB-111/115	1.56	1.32-1.78	y	95.3	75.0-125	PCB-138/163/164	1.21	1.05-1.43	y	137.7	112.5-225
PCB-85/116	1.60	1.32-1.78	y	95.6	75.0-125	PCB-158/160	1.22	1.05-1.43	y	93.2	75.0-125
PCB-120	1.53	1.32-1.78	y	46.1	37.5-62.5	PCB-129	1.20	1.05-1.43	y	44.6	37.5-62.5
PCB-110	1.56	1.32-1.78	y	47.5	37.5-62.5	PCB-166	1.21	1.05-1.43	y	46.6	37.5-62.5
PCB-82	1.56	1.32-1.78	y	48.9	37.5-62.5	PCB-159	1.22	1.05-1.43	y	47.9	37.5-62.5
PCB-124	1.57	1.32-1.78	y	49.4	37.5-62.5	PCB-128/162	1.20	1.05-1.43	y	94.0	75.0-125
PCB-107/109	1.58	1.32-1.78	y	90.6	75.0-125	PCB-167	1.17	1.05-1.43	y	46.3	37.5-62.5
PCB-123	1.55	1.32-1.78	y	48.4	37.5-62.5	PCB-156	1.19	1.05-1.43	y	46.7	37.5-62.5
PCB-106/118	1.54	1.32-1.78	y	92.8	75.0-125	PCB-157	1.21	1.05-1.43	y	46.2	37.5-62.5
PCB-114	1.62	1.32-1.78	y	46.9	37.5-62.5	PCB-169	1.20	1.05-1.43	y	47.2	37.5-62.5
PCB-122	1.63	1.32-1.78	y	45.9	37.5-62.5	PCB-188	1.06	0.89-1.21	y	47.0	37.5-62.5
PCB-105	1.65	1.32-1.78	y	47.1	37.5-62.5	PCB-184	1.05	0.89-1.21	y	47.6	37.5-62.5
PCB-127	1.69	1.32-1.78	y	47.5	37.5-62.5	PCB-179	1.03	0.89-1.21	y	47.9	37.5-62.5
PCB-126	1.64	1.32-1.78	y	49.3	37.5-62.5	PCB-176	1.04	0.89-1.21	y	48.0	37.5-62.5
PCB-155	1.23	1.05-1.43	y	46.8	37.5-62.5	PCB-186	1.05	0.89-1.21	y	46.9	37.5-62.5
PCB-150	1.24	1.05-1.43	y	45.2	37.5-62.5	PCB-178	1.06	0.89-1.21	y	46.4	37.5-62.5
PCB-152	1.25	1.05-1.43	y	44.2	37.5-62.5	PCB-175	1.06	0.89-1.21	y	48.1	37.5-62.5
PCB-145	1.24	1.05-1.43	y	45.5	37.5-62.5	PCB-182/187	1.05	0.89-1.21	y	93.3	75.0-125
PCB-136	1.23	1.05-1.43	y	47.5	37.5-62.5	PCB-183	1.04	0.89-1.21	y	47.4	37.5-62.5
PCB-148	1.24	1.05-1.43	y	43.6	37.5-62.5	PCB-185	1.05	0.89-1.21	y	47.6	37.5-62.5
PCB-154	1.23	1.05-1.43	y	45.1	37.5-62.5	PCB-174	1.05	0.89-1.21	y	48.5	37.5-62.5
PCB-151	1.25	1.05-1.43	y	46.1	37.5-62.5	PCB-181	1.08	0.89-1.21	y	48.3	37.5-62.5
PCB-135	1.23	1.05-1.43	y	45.1	37.5-62.5	PCB-177	1.04	0.89-1.21	y	45.9	37.5-62.5
PCB-144	1.33	1.05-1.43	y	45.7	37.5-62.5	PCB-171	1.05	0.89-1.21	y	46.1	37.5-62.5
PCB-147	1.15	1.05-1.43	y	43.6	37.5-62.5	PCB-173	1.04	0.89-1.21	y	49.0	37.5-62.5
PCB-139/149	1.23	1.05-1.43	y	88.3	75.0-125	PCB-172	1.04	0.89-1.21	y	46.8	37.5-62.5

Analyst: DMSDate: 1/16/15

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Page 1 of

Lab Name: Vista Analytical Laboratory

Lab ID: ST150114E1-5

Instrument ID: VG-8

Initial Calibration Date: 1-14-15

ICal ID: pcovg8-1-14-15

GC Column ID: ZB-1

VER Data Filename: 150114E1 S#6 Analysis Date: 14-JAN-15 Time: 18:00:03

ANALYTES	ION	QC	CONC.		
	ABUND.	LIMITS	CONC.	RANGE	(ng/mL)
	RATIO	PASS	FOUND		
PCB-192	1.05	0.89-1.21	y	46.3	37.5-62.5
PCB-180	1.03	0.89-1.21	y	45.4	37.5-62.5
PCB-193	1.04	0.89-1.21	y	46.5	37.5-62.5
PCB-191	1.04	0.89-1.21	y	47.3	37.5-62.5
PCB-170	1.02	0.89-1.21	y	46.7	37.5-62.5
PCB-190	1.07	0.89-1.21	y	48.3	37.5-62.5
PCB-189	1.05	0.89-1.21	y	47.3	37.5-62.5
PCB-202	0.91	0.76-1.02	y	47.0	37.5-62.5
PCB-201	0.87	0.76-1.02	y	46.2	37.5-62.5
PCB-204	0.89	0.76-1.02	y	44.7	37.5-62.5
PCB-197	0.91	0.76-1.02	y	46.5	37.5-62.5
PCB-200	0.87	0.76-1.02	y	46.9	37.5-62.5
PCB-198	0.89	0.76-1.02	y	48.5	37.5-62.5
PCB-199	0.90	0.76-1.02	y	45.7	37.5-62.5
PCB-196/203	0.89	0.76-1.02	y	90.5	75.0-125
PCB-195	0.91	0.76-1.02	y	46.9	37.5-62.5
PCB-194	0.92	0.76-1.02	y	45.7	37.5-62.5
PCB-205	0.92	0.76-1.02	y	48.0	37.5-62.5
PCB-208	1.31	1.14-1.54	y	46.2	37.5-62.5
PCB-207	1.33	1.14-1.54	y	46.8	37.5-62.5
PCB-206	1.31	1.14-1.54	y	46.5	37.5-62.5
PCB-209	1.16	0.99-1.33	y	44.9	37.5-62.5

Analyst: DmrsDate: 1/20/15

LABLED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory

Lab ID: ST150114E1-5

Instrument ID: VG-8

Initial Calibration Date: 1-14-15

ICal ID: pcbvg8-1-14-15

GC Column ID: ZB-1

VER Data Filename: 150114E1 S#6 Analysis Date: 14-JAN-15 Time: 18:00:03

LABLED 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)	LABLED IS	RATIO	LIMITS	PASS	FOUND	(ng/mL)	LABLED IS	RATIO	LIMITS	PASS	FOUND	(ng/mL)
13C-PCB-1	3.59	2.66-3.60	Y	107.5	50.0-145	13C-PCB-169	1.25	1.05-1.43	Y	99.0	50 - 145	13C-PCB-169	1.25	1.05-1.43	Y	99.0	50 - 145
13C-PCB-3	3.55	2.66-3.60	Y	100.5	50.0-145	13C-PCB-188	0.46	0.38-0.52	Y	99.7	50 - 145	13C-PCB-188	0.46	0.38-0.52	Y	99.7	50 - 145
13C-PCB-4	1.59	1.33-1.79	Y	104.5	50.0-145	13C-PCB-180	0.46	0.38-0.52	Y	100.0	50 - 145	13C-PCB-180	0.46	0.38-0.52	Y	100.0	50 - 145
13C-PCB-9	1.58	1.33-1.79	Y	102.4	50.0-145	13C-PCB-170	0.47	0.38-0.52	Y	98.2	50 - 145	13C-PCB-170	0.47	0.38-0.52	Y	98.2	50 - 145
13C-PCB-11	1.57	1.33-1.79	Y	100.8	50.0-145	13C-PCB-189	0.45	0.38-0.52	Y	97.3	50 - 145	13C-PCB-189	0.45	0.38-0.52	Y	97.3	50 - 145
13C-PCB-19	1.10	0.88-1.20	Y	99.4	50.0-145	13C-PCB-202	0.89	0.76-1.02	Y	101.0	50 - 145	13C-PCB-202	0.89	0.76-1.02	Y	101.0	50 - 145
13C-PCB-32	1.10	0.88-1.20	Y	99.7	50.0-145	13C-PCB-194	0.90	0.76-1.02	Y	100.0	50 - 145	13C-PCB-194	0.90	0.76-1.02	Y	100.0	50 - 145
13C-PCB-28	1.03	0.88-1.20	Y	113.1	50.0-145	13C-PCB-208	0.77	0.65-0.89	Y	102.9	50 - 145	13C-PCB-208	0.77	0.65-0.89	Y	102.9	50 - 145
13C-PCB-37	1.04	0.88-1.20	Y	103.7	50.0-145	13C-PCB-206	0.77	0.65-0.89	Y	99.6	50 - 145	13C-PCB-206	0.77	0.65-0.89	Y	99.6	50 - 145
13C-PCB-54	0.78	0.65-0.89	Y	108.1	50.0-145	13C-PCB-209	1.18	0.99-1.33	Y	105.5	50 - 145	13C-PCB-209	1.18	0.99-1.33	Y	105.5	50 - 145
13C-PCB-52	0.76	0.65-0.89	Y	107.2	50.0-145												
13C-PCB-47	0.77	0.65-0.89	Y	108.7	50.0-145												
13C-PCB-70	0.76	0.65-0.89	Y	100.0	50.0-145												
13C-PCB-80	0.78	0.65-0.89	Y	101.0	50.0-145												
13C-PCB-81	0.77	0.65-0.89	Y	101.8	50.0-145												
13C-PCB-77	0.79	0.65-0.89	Y	101.1	50.0-145												
13C-PCB-104	1.61	1.32-1.78	Y	109.1	50.0-145												
13C-PCB-95	1.61	1.32-1.78	Y	102.4	50.0-145												
13C-PCB-101	1.62	1.32-1.78	Y	98.6	50.0-145												
13C-PCB-97	1.65	1.32-1.78	Y	100.4	50.0-145	CRS vs. RS											
13C-PCB-123	1.61	1.32-1.78	Y	99.1	50.0-145	13C-PCB-79	0.77	0.65-0.89	Y	97.0	75 - 125	13C-PCB-79	0.77	0.65-0.89	Y	97.0	75 - 125
13C-PCB-118	1.60	1.32-1.78	Y	99.9	50.0-145	13C-PCB-178	0.45	0.38-0.52	Y	98.8	75 - 125	13C-PCB-178	0.45	0.38-0.52	Y	98.8	75 - 125
13C-PCB-114	1.57	1.32-1.78	Y	99.9	50.0-145												
13C-PCB-105	1.58	1.32-1.78	Y	99.1	50.0-145												
13C-PCB-127	1.55	1.32-1.78	Y	97.3	50.0-145												
13C-PCB-126	1.61	1.32-1.78	Y	93.9	50.0-145												
13C-PCB-155	1.23	1.05-1.43	Y	106.9	50.0-145												
13C-PCB-153	1.29	1.05-1.43	Y	101.6	50.0-145												
13C-PCB-141	1.29	1.05-1.43	Y	101.3	50.0-145												
13C-PCB-138	1.26	1.05-1.43	Y	99.4	50.0-145												
13C-PCB-159	1.31	1.05-1.43	Y	98.9	50.0-145												
13C-PCB-167	1.27	1.05-1.43	Y	101.9	50.0-145												
13C-PCB-156	1.27	1.05-1.43	Y	98.5	50.0-145												
13C-PCB-157	1.32	1.05-1.43	Y	99.7	50.0-145												

Analyst: DMSDate: 1/20/15

Client ID: PCB CS3 14L1801
 Lab ID: ST150114E1-5

Filename: 150114E1 S:6 Acq:14-JAN-15 18:00:03 ConCal: NA
 GC Column ID: ZB-1 ICal: pcbvg8-1-14-15 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	8.07e+07	2.99	y	1.33	16:11	1.001	0.997-1.007	52.0249
PCB-2	8.02e+07	2.99	y	1.30	18:33	0.988	0.983-0.993	54.7140
PCB-3	8.03e+07	2.98	y	1.30	18:47	1.001	0.996-1.006	54.6072
PCB-4/10	1.30e+08	1.64	y	1.67	20:10	1.002	0.997-1.007	93.0306
PCB-7/9	1.56e+08	1.63	y	1.25	21:57	0.868	0.864-0.872	94.4847
PCB-6	7.76e+07	1.65	y	1.24	22:35	0.893	0.888-0.897	47.5758
PCB-5/8	1.55e+08	1.64	y	1.27	23:00	0.910	0.905-0.915	92.4994
PCB-14	9.12e+07	1.64	y	1.47	24:06	0.953	0.948-0.958	48.1061
PCB-11	7.80e+07	1.68	y	1.28	25:17	1.000	0.995-1.005	47.0854
PCB-12/13	1.55e+08	1.65	y	1.27	25:41	1.016	1.011-1.021	94.5607
PCB-15	8.75e+07	1.65	y	1.44	26:00	1.028	1.023-1.031	47.1177
PCB-19	4.22e+07	1.06	y	1.18	24:17	1.001	0.996-1.006	47.5975
PCB-30	6.72e+07	1.05	y	1.87	25:11	1.038	1.033-1.043	47.8879
PCB-18	4.67e+07	1.06	y	0.89	25:55	0.954	0.949-0.959	47.7748
PCB-17	5.08e+07	1.05	y	0.96	26:06	0.961	0.956-0.966	48.1501
PCB-24/27	1.36e+08	1.06	y	1.30	26:40	0.982	0.977-0.987	95.1310
- PCB-16/32	1.08e+08	1.05	y	1.05	27:11	1.001	0.996-1.006	93.2649
- PCB-34	5.36e+07	1.01	y	1.30	27:58	0.960	0.955-0.965	45.6626
PCB-23	5.23e+07	1.06	y	1.21	28:04	0.963	0.958-0.968	47.8931
PCB-29	4.77e+07	1.01	y	1.21	28:19	0.972	0.967-0.977	43.6736
PCB-26	5.01e+07	1.00	y	1.24	28:31	0.979	0.974-0.984	44.8563
PCB-25	4.54e+07	1.01	y	1.10	28:41	0.985	0.980-0.990	45.8240
PCB-31	5.13e+07	1.03	y	1.25	29:03	0.997	0.992-1.002	45.3770
PCB-28	4.84e+07	1.04	y	1.24	29:09	1.001	0.996-1.006	43.3229
PCB-20/21/33	1.42e+08	1.02	y	1.16	29:45	1.021	1.016-1.026	136.238
PCB-22	4.91e+07	1.03	y	1.16	30:12	1.037	1.032-1.042	46.7230
PCB-36	5.22e+07	1.05	y	1.30	30:49	0.934	0.929-0.939	53.8213
PCB-39	4.78e+07	1.05	y	1.26	31:17	0.948	0.943-0.953	50.8404
PCB-38	4.87e+07	1.03	y	1.24	32:04	0.972	0.967-0.977	52.5442
PCB-35	4.75e+07	1.03	y	1.26	32:34	0.987	0.982-0.992	50.7102
PCB-37	4.79e+07	1.08	y	1.35	33:01	1.001	0.996-1.006	47.5517
PCB-54	4.77e+07	0.74	y	1.02	28:02	1.001	0.996-1.006	46.5543
PCB-50	3.65e+07	0.72	y	0.78	29:12	1.042	1.037-1.047	46.9035
PCB-53	3.64e+07	0.75	y	1.14	29:51	0.946	0.941-0.951	48.0525
PCB-51	3.70e+07	0.72	y	1.16	30:11	0.957	0.952-0.962	47.8251
PCB-45	3.37e+07	0.73	y	1.04	30:37	0.970	0.965-0.975	48.6868
PCB-46	2.89e+07	0.73	y	0.95	31:06	0.986	0.981-0.991	45.7766

RL: MONO, TRI - DECA: _____

RL: DI : _____

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	8.00e+07	0.74	y	1.29	31:35	1.001	0.996-1.006	93.0967
PCB-73	4.72e+07	0.75	y	1.41	31:42	1.005	0.999-1.009	50.2177
PCB-43/49	7.08e+07	0.73	y	1.14	31:52	1.010	1.005-1.015	93.3696
PCB-47	3.98e+07	0.74	y	1.20	32:04	1.001	0.996-1.006	45.5825
PCB-48/75	8.76e+07	0.73	y	1.33	32:11	1.004	0.999-1.009	90.7089
PCB-65	4.12e+07	0.73	y	1.32	32:26	1.012	1.007-1.017	42.9478
PCB-62	4.67e+07	0.74	y	1.36	32:33	1.016	1.011-1.021	47.2058
PCB-44	2.93e+07	0.74	y	0.87	32:51	1.025	1.020-1.030	46.1675
PCB-42/59	7.65e+07	0.74	y	1.24	33:05	1.032	1.027-1.037	85.0074
PCB-41/64/71/72	1.66e+08	0.73	y	1.34	33:40	1.050	1.045-1.055	170.423
PCB-68	4.72e+07	0.73	y	1.61	33:56	1.059	1.053-1.063	40.2479
PCB-40	2.55e+07	0.73	y	0.86	34:09	1.066	1.061-1.071	40.7920
PCB-57	4.47e+07	0.74	y	1.12	34:30	0.970	0.965-0.975	46.0101
PCB-67	4.34e+07	0.73	y	1.09	34:49	0.979	0.974-0.984	45.9086
PCB-58	4.85e+07	0.76	y	1.14	34:55	0.982	0.977-0.987	49.2155
PCB-63	4.77e+07	0.71	y	1.16	35:05	0.986	0.981-0.991	47.3221
PCB-74	4.68e+07	0.74	y	1.21	35:22	0.994	0.989-0.999	44.4585
PCB-61/70	9.06e+07	0.73	y	1.13	35:33	1.000	0.995-1.005	92.8240
PCB-76/66	9.21e+07	0.74	y	1.18	35:46	1.006	1.000-1.010	90.0496
PCB-80	5.39e+07	0.74	y	1.32	36:00	1.000	0.995-1.005	45.2354
PCB-55	5.08e+07	0.74	y	1.23	36:19	1.009	1.004-1.014	45.9074
PCB-56/60	8.80e+07	0.73	y	1.11	36:49	1.023	1.018-1.028	88.4456
PCB-79	4.65e+07	0.73	y	1.16	37:53	1.053	1.048-1.058	44.5110
PCB-78	4.56e+07	0.74	y	1.18	38:34	0.987	0.982-0.992	43.6493
PCB-81	5.20e+07	0.75	y	1.29	39:06	1.000	0.995-1.005	45.4820
PCB-77	5.01e+07	0.76	y	1.29	39:42	1.001	0.995-1.005	45.6501
PCB-104	4.01e+07	1.59	y	1.26	32:44	1.001	0.996-1.006	45.8646
PCB-96	3.32e+07	1.56	y	1.09	33:59	1.039	1.034-1.044	43.9315
PCB-103	2.97e+07	1.54	y	0.97	34:31	1.056	1.051-1.061	44.3834
PCB-100	3.02e+07	1.57	y	0.96	34:52	1.066	1.061-1.071	45.2813
PCB-94	2.48e+07	1.56	y	1.13	35:20	0.985	0.980-0.990	46.7663
PCB-95/98/102	8.16e+07	1.52	y	1.29	35:50	0.999	0.994-1.004	134.832
PCB-93	2.65e+07	1.68	y	1.06	35:58	1.003	0.998-1.008	53.0450
PCB-88/91	5.25e+07	1.56	y	1.12	36:15	1.011	1.006-1.016	99.4803
PCB-121	3.67e+07	1.57	y	1.76	36:22	1.014	1.009-1.019	44.4163
PCB-84/92	5.15e+07	1.54	y	1.07	37:11	0.990	0.985-0.995	97.0520
PCB-89	2.34e+07	1.53	y	1.00	37:22	0.995	0.990-1.000	47.4938

Integrations

by
 Analyst: *Dms*

Reviewed

by
 Analyst: _____

Date: *1/16/15*

Date: _____

Client ID: PCB CS3 14L1801
 Lab ID: ST150114E1-5

Filename: 150114E1 S:6 Acq:14-JAN-15 18:00:03
 GC Column ID: ZB-1 ICal: pcbvg8-1-14-15 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-90/101	5.59e+07	1.56	y	1.21	37:33	1.000	0.995-1.005	93.4510
PCB-113	3.44e+07	1.55	y	1.34	37:48	1.007	1.002-1.012	51.7174
PCB-99	2.56e+07	1.60	y	1.25	37:54	1.009	1.004-1.014	41.4323
PCB-119	3.83e+07	1.56	y	1.88	38:21	0.987	0.982-0.992	46.9690
PCB-108/112	5.74e+07	1.56	y	1.41	38:30	0.991	0.986-0.996	94.2376
PCB-83	3.43e+07	1.57	y	1.66	38:40	0.995	0.990-1.000	47.6313
PCB-97	2.60e+07	1.55	y	1.30	38:52	1.000	0.995-1.005	46.2488
PCB-86	2.15e+07	1.46	y	1.03	39:00	1.004	0.999-1.009	47.9826
B-87/117/125	9.85e+07	1.59	y	1.59	39:08	1.007	1.002-1.012	142.777
PCB-111/115	7.67e+07	1.56	y	1.86	39:17	1.011	1.006-1.016	95.2753
PCB-85/116	5.77e+07	1.60	y	1.39	39:25	1.015	1.010-1.020	95.6148
PCB-120	3.97e+07	1.53	y	1.99	39:39	1.021	1.016-1.026	46.1066
PCB-110	3.50e+07	1.56	y	1.70	39:47	1.024	1.019-1.029	47.4714
PCB-82	2.08e+07	1.56	y	0.74	40:25	0.976	0.971-0.981	48.9430
PCB-124	3.69e+07	1.57	y	1.30	41:06	0.993	0.988-0.998	49.3629
PCB-107/109	6.93e+07	1.58	y	1.34	41:15	0.996	0.991-1.001	90.5539
PCB-123	3.47e+07	1.55	y	1.25	41:25	1.000	0.995-1.005	48.3609
- PCB-106/118	7.35e+07	1.54	y	1.29	41:38	1.001	0.996-1.006	92.8153
- PCB-114	4.27e+07	1.62	y	1.45	42:15	1.000	0.995-1.005	46.8884
PCB-122	3.51e+07	1.63	y	1.22	42:23	1.004	0.999-1.009	45.9413
PCB-105	4.36e+07	1.65	y	1.56	43:07	1.000	0.995-1.005	47.0955
PCB-127	3.79e+07	1.69	y	1.31	43:27	1.000	0.995-1.005	47.5187
PCB-126	3.67e+07	1.64	y	1.41	45:20	1.000	0.995-1.005	49.2617
PCB-155	3.43e+07	1.23	y	1.20	37:07	1.001	0.966-1.006	46.8420
PCB-150	3.11e+07	1.24	y	1.13	38:22	1.035	1.030-1.040	45.1927
PCB-152	3.16e+07	1.25	y	1.17	38:51	1.048	1.043-1.053	44.2320
PCB-145	3.04e+07	1.24	y	1.09	39:18	1.060	1.055-1.065	45.5249
PCB-136	3.31e+07	1.23	y	1.14	39:37	1.068	1.063-1.073	47.5060
PCB-148	2.18e+07	1.24	y	0.82	39:43	1.071	1.066-1.076	43.6154
PCB-154	2.45e+07	1.23	y	0.89	40:12	1.084	1.079-1.089	45.0618
PCB-151	2.30e+07	1.25	y	0.82	40:51	1.102	1.097-1.107	46.1089
PCB-135	2.19e+07	1.23	y	0.80	41:04	1.107	1.101-1.113	45.0763
PCB-144	2.39e+07	1.33	y	0.86	41:10	1.110	1.105-1.116	45.7102
PCB-147	2.07e+07	1.15	y	0.78	41:18	1.114	1.108-1.120	43.6051
PCB-139/149	4.69e+07	1.23	y	0.87	41:34	1.121	1.115-1.127	88.2749
- PCB-140	2.12e+07	1.24	y	0.78	41:45	1.126	1.120-1.132	44.7555
- PCB-134/143	5.52e+07	1.22	y	0.93	42:11	0.975	0.970-0.980	91.8432

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	5.46e+07	1.24	y	0.91	42:29	0.982	0.977-0.987	93.0668
PCB-131	2.55e+07	1.16	y	0.85	42:38	0.986	0.981-0.991	46.7153
PCB-146/165	6.52e+07	1.22	y	1.08	42:51	0.991	0.986-0.996	93.4865
PCB-132/161	6.70e+07	1.22	y	1.12	43:06	0.997	0.992-1.002	92.8456
PCB-153	3.34e+07	1.21	y	1.20	43:17	1.001	0.996-1.006	43.2433
PCB-168	4.08e+07	1.22	y	1.36	43:29	1.005	1.000-1.010	46.6695
PCB-141	2.90e+07	1.22	y	1.16	44:00	1.000	0.995-1.005	45.4172
PCB-137	2.95e+07	1.18	y	1.18	44:24	1.009	1.004-1.014	45.3841
PCB-130	2.45e+07	1.21	y	0.92	44:29	1.011	1.006-1.016	48.1957
PCB-138/163/164	1.05e+08	1.21	y	1.38	44:52	1.001	0.996-1.006	137.688
PCB-158/160	7.63e+07	1.22	y	1.48	45:06	1.006	1.001-1.011	93.2016
PCB-129	2.45e+07	1.20	y	0.99	45:21	1.012	1.007-1.017	44.6385
PCB-166	3.59e+07	1.21	y	1.14	45:48	0.993	0.988-0.998	46.5698
PCB-159	3.96e+07	1.22	y	1.22	46:08	1.000	0.995-1.005	47.9497
PCB-128/162	6.57e+07	1.20	y	1.03	46:25	1.007	1.002-1.012	94.0179
PCB-167	3.85e+07	1.17	y	1.18	46:49	1.000	0.995-1.005	46.3110
PCB-156	3.93e+07	1.19	y	1.27	48:07	1.000	0.995-1.005	46.6553
PCB-157	3.97e+07	1.21	y	1.22	48:23	1.000	0.995-1.005	46.2329
PCB-169	3.46e+07	1.20	y	1.07	50:32	1.000	0.995-1.005	47.2196
PCB-188	3.60e+07	1.06	y	1.52	42:55	1.001	0.996-1.006	46.9710
PCB-184	3.21e+07	1.05	y	1.34	43:21	1.011	1.006-1.016	47.6292
PCB-179	3.36e+07	1.03	y	1.39	44:08	1.029	1.024-1.034	47.9352
PCB-176	3.52e+07	1.04	y	1.45	44:36	1.040	1.035-1.045	48.0468
PCB-186	3.45e+07	1.05	y	1.46	45:12	1.054	1.049-1.059	46.9300
PCB-178	2.51e+07	1.06	y	1.07	45:42	1.066	1.061-1.071	46.3910
PCB-175	2.54e+07	1.06	y	1.05	46:03	1.074	1.069-1.079	48.0617
PCB-182/187	5.34e+07	1.05	y	1.14	46:13	1.078	1.073-1.083	93.2941
PCB-183	2.93e+07	1.04	y	1.22	46:32	1.085	1.080-1.090	47.4465
PCB-185	2.52e+07	1.05	y	1.40	47:11	0.955	0.950-0.960	47.6023
PCB-174	2.35e+07	1.05	y	1.29	47:33	0.963	0.958-0.968	48.4673
PCB-181	2.45e+07	1.08	y	1.35	47:40	0.965	0.960-0.970	48.2534
PCB-177	2.19e+07	1.04	y	1.27	47:49	0.968	0.963-0.973	45.9044
PCB-171	2.53e+07	1.05	y	1.46	48:07	0.974	0.969-0.979	46.0900
PCB-173	2.04e+07	1.04	y	1.10	48:33	0.983	0.978-0.988	48.9835
PCB-172	2.39e+07	1.04	y	1.35	49:00	0.992	0.987-0.997	46.7746
PCB-192	3.03e+07	1.05	y	1.74	49:12	0.996	0.991-1.001	46.2733
PCB-180	2.48e+07	1.03	y	1.45	49:24	1.000	0.995-1.005	45.3976

Integrations
 by
 RL: MONO, TRI - DECA: _____ Analyst: DMS
 Date: 1/16/15

Client ID: PCB CS3 14L1801
Lab ID: ST150114E1-5

Filename: 150114E1 S:6 Acq:14-JAN-15 18:00:03 ConCal: NA
GC Column ID: ZB-1 ICal: pcbvg8-1-14-15 wt/vol: 1.0000 EndCAL: NA

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Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-193	3.25e+07	1.04	y	1.85	49:36	1.004	0.999-1.009	46.5289
PCB-191	3.32e+07	1.04	y	1.86	49:52	1.010	1.005-1.015	47.3156
PCB-170	2.30e+07	1.02	y	1.67	50:55	1.000	0.995-1.005	46.7443
PCB-190	3.20e+07	1.07	y	2.25	51:06	1.004	0.999-1.009	48.2533
PCB-189	3.08e+07	1.05	y	1.67	52:26	1.000	0.995-1.005	47.3113
PCB-202	2.38e+07	0.91	y	1.02	48:19	1.000	0.995-1.005	46.9721
PCB-201	2.52e+07	0.87	y	1.10	48:48	1.010	1.005-1.015	46.1751
PCB-204	2.39e+07	0.89	y	1.07	48:58	1.014	1.009-1.019	44.7059
PCB-197	2.70e+07	0.91	y	1.17	49:16	1.020	1.015-1.025	46.4964
PCB-200	2.41e+07	0.87	y	1.03	50:10	1.039	1.034-1.044	46.8569
PCB-198	1.82e+07	0.89	y	0.75	51:31	1.067	1.062-1.072	48.5071
PCB-199	1.68e+07	0.90	y	0.74	51:38	1.069	1.064-1.074	45.6525
- PCB-196/203	3.74e+07	0.89	y	0.83	51:54	1.075	1.070-1.080	90.5292
- PCB-195	1.90e+07	0.91	y	1.14	53:04	0.984	0.979-0.989	46.9126
PCB-205	2.74e+07	0.92	y	1.61	54:13	1.005	1.001-1.010	48.0015
PCB-208	2.49e+07	1.31	y	1.01	53:13	1.000	0.995-1.005	46.1981
PCB-207	2.55e+07	1.33	y	1.03	53:32	1.006	1.001-1.011	46.8056
PCB-206	1.42e+07	1.31	y	0.88	55:34	1.000	0.995-1.005	46.5433
PCB-209	2.15e+07	1.16	y	1.35	56:55	1.000	0.995-1.005	44.8746

Name	Resp	RA	RT	RRF	Conc	
Total Mono-PCB	2.41e+08	2.99	y	16:11	1.31	143.595
Total Di-PCB	9.32e+08	1.64	y	20:10	1.32	565.796
Total Tri-PCB	4.51e+08	1.06	y	24:17	1.20	379.806
Total Tri-PCB	8.18e+08	1.01	y	27:58	1.23	787.958 Sum:1167.76
Total Tetra-PCB	1.80e+09	0.74	y	28:02	1.17	1928.65
Total Penta-PCB	1.27e+09	1.59	y	32:44	1.24	1932.56
Total Penta-PCB	2.15e+08	1.62	y	42:15	1.39	259.871 Sum:2192.43
Total Hexa-PCB	3.64e+08	1.23	y	37:07	0.94	631.506
Total Hexa-PCB	9.40e+08	1.22	y	42:11	1.13	1319.24 Sum:1950.75
Total Hepta-PCB	6.80e+08	1.06	y	42:55	1.37	1139.00
Total Octa-PCB	1.96e+08	0.91	y	48:19	0.95	415.895
Total Octa-PCB	6.97e+07	0.91	y	53:04	1.35	145.548 Sum:561.443
Total Nona-PCB	6.53e+07	1.31	y	53:13	0.99	140.996
Total Deca-PCB	2.15e+07	1.16	y	56:55	1.35	44.8746
Total PCB Conc:9715.75044600						

Integrations
by _____
Analyst: DMS
Date: 1/20/15

Client ID: PCB CS3 14L1801
 Lab ID: ST150114E1-5

Filename: 150114E1 S:6 Acc:14-JAN-15 18:00:03
 GC Column ID: ZB-1 ICal: pcbvg8-1-14-15 wt/vol:1.0000
 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	1.31e+08	3.59	y	0.91	16:09	0.622	0.619-0.625	108	108	13C-PCB-79	8.64e+07	0.77	y	1.02	37:51	1.029	1.024-1.033	97.0	97.0		
13C-PCB-3	1.27e+08	3.55	y	0.94	18:46	0.722	0.718-0.726	101	101	13C-PCB-178	3.14e+07	0.45	y	0.64	45:41	0.985	0.980-0.989	98.8	98.8		
13C-PCB-4	8.37e+07	1.59	y	0.60	20:07	0.774	0.770-0.778	104	104												
13C-PCB-9	1.32e+08	1.58	y	0.96	21:54	0.843	0.839-0.847	102	102												
13C-PCB-11	1.29e+08	1.57	y	0.95	25:17	0.973	0.968-0.978	101	101	PS vs. IS											
13C-PCB-19	7.48e+07	1.10	y	0.56	24:16	0.934	0.929-0.939	99.4	99.4	13C-PCB-79	8.64e+07	0.77	y	1.02	37:51	0.968	0.963-0.973	95.2	95.2		
13C-PCB-28	9.04e+07	1.03	y	1.07	29:08	1.004	0.999-1.009	113	113	13C-PCB-178	3.14e+07	0.45	y	0.84	45:41	0.925	0.920-0.930	98.7	98.7		
13C-PCB-32	1.10e+08	1.10	y	0.83	27:10	1.046	1.041-1.051	99.7	99.7												
13C-PCB-37	7.45e+07	1.04	y	0.96	33:00	1.137	1.131-1.143	104	104												
13C-PCB-47	7.29e+07	0.77	y	0.77	32:03	0.871	0.867-0.875	109	109												
13C-PCB-52	6.66e+07	0.76	y	0.71	31:33	0.857	0.853-0.861	107	107												
13C-PCB-54	1.00e+08	0.78	y	1.06	28:01	0.761	0.757-0.765	108	108												
13C-PCB-70	8.67e+07	0.76	y	0.99	35:34	0.966	0.961-0.971	100	100												
13C-PCB-77	8.51e+07	0.79	y	0.96	39:40	1.078	1.073-1.083	101	101												
13C-PCB-80	9.01e+07	0.78	y	1.02	35:59	0.978	0.973-0.983	101	101												
13C-PCB-81	8.87e+07	0.77	y	1.00	39:05	1.062	1.057-1.067	102	102												
13C-PCB-95	4.69e+07	1.61	y	0.70	35:52	0.913	0.908-0.918	102	102	RS											
13C-PCB-97	4.33e+07	1.65	y	0.66	38:51	0.989	0.984-0.994	100	100	13C-PCB-15	1.34e+08	1.56	y	1.00	25:59	100					
13C-PCB-101	4.96e+07	1.62	y	0.77	37:33	0.956	0.951-0.961	98.6	98.6	13C-PCB-31	7.47e+07	1.02	y	1.00	29:01	100					
13C-PCB-104	6.91e+07	1.61	y	0.97	32:42	0.832	0.828-0.836	109	109	13C-PCB-60	8.72e+07	0.74	y	1.00	36:48	100					
13C-PCB-105	5.94e+07	1.58	y	1.20	43:06	0.929	0.924-0.934	99.1	99.1	13C-PCB-111	6.56e+07	1.64	y	1.00	39:17	100					
13C-PCB-114	6.26e+07	1.57	y	1.26	42:14	0.910	0.905-0.915	99.9	99.9	13C-PCB-128	4.99e+07	1.27	y	1.00	46:24	100					
13C-PCB-118	6.14e+07	1.60	y	0.94	41:35	1.059	1.054-1.064	99.9	99.9	13C-PCB-205	4.76e+07	0.89	y	1.00	54:12	100					
13C-PCB-123	5.73e+07	1.61	y	0.88	41:24	1.054	1.049-1.059	99.1	99.1												
13C-PCB-126	5.27e+07	1.61	y	1.13	45:20	0.977	0.972-0.982	93.9	93.9												
13C-PCB-127	6.10e+07	1.55	y	1.26	43:26	0.936	0.931-0.941	97.3	97.3												
13C-PCB-138	5.55e+07	1.26	y	1.12	44:50	0.966	0.961-0.971	99.4	99.4												
13C-PCB-141	5.52e+07	1.29	y	1.09	43:59	0.948	0.943-0.953	101	101												
13C-PCB-153	6.45e+07	1.29	y	1.27	43.15	0.932	0.927-0.937	102	102												
13C-PCB-155	6.10e+07	1.23	y	0.87	37:05	0.944	0.939-0.949	107	107												
13C-PCB-156	6.63e+07	1.27	y	1.35	48:06	1.037	1.032-1.042	98.5	98.5												
13C-PCB-157	7.04e+07	1.32	y	1.42	48:22	1.042	1.037-1.047	99.7	99.7												
13C-PCB-159	6.75e+07	1.31	y	1.37	46:07	0.994	0.989-0.999	98.9	98.9												
13C-PCB-167	7.02e+07	1.27	y	1.38	46:48	1.009	1.004-1.014	102	102												
13C-PCB-169	6.82e+07	1.25	y	1.38	50:31	1.089	1.084-1.094	99.0	99.0												
13C-PCB-170	2.95e+07	0.47	y	0.60	50:54	1.097	1.091-1.103	98.2	98.2												
13C-PCB-180	3.77e+07	0.46	y	0.76	49:23	1.064	1.059-1.069	100.0	100.0												
13C-PCB-188	5.04e+07	0.46	y	1.01	42:53	0.924	0.919-0.929	99.7	99.7												
13C-PCB-189	3.89e+07	0.45	y	0.80	52:25	1.130	1.124-1.136	97.3	97.3												
13C-PCB-194	3.54e+07	0.90	y	0.75	53:56	0.995	0.990-1.000	100	100												
13C-PCB-202	4.98e+07	0.89	y	0.99	48:18	1.041	1.036-1.046	101	101												
13C-PCB-206	3.47e+07	0.77	y	0.73	55:33	1.025	1.020-1.301	99.6	99.6												
13C-PCB-208	5.30e+07	0.77	y	1.08	53:13	0.982	0.977-0.987	103	103												
13C-PCB-209	3.56e+07	1.18	y	0.71	56:55	1.050	1.045-1.055	105	105												

Analyst: Dms

Date: 1/20/15

Vista Analytical Laboratory - Injection Log Run file:

Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
150114E1	4	ST150114E1-3	dms	14-JAN-15	15:50:46	NA	NA
150114E1	5	ST150114E1-4	dms	14-JAN-15	16:55:24	NA	NA
150114E1	6	ST150114E1-5	dms	14-JAN-15	18:00:03	NA	NA
150114E1	7	ST150114E1-6	dms	14-JAN-15	19:04:40	NA	NA
150114E1	8	ST150114E1-7	dms	14-JAN-15	20:09:16	NA	NA
150114E1	9	SOLVENT BLANK	dms	14-JAN-15	21:13:53	NA	NA
150114E1	10	ST150114E1-8	dms	14-JAN-15	22:18:30	NA	NA
150114E1	11	SOLVENT BLANK	dms	14-JAN-15	23:23:07	NA	NA

Vista Analytical Laboratory - Injection Log Run file: 150116E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
150116E1	2	ST150116E1-2	dms	16-JAN-15	08:51:27	NA	NA