Lower Duwamish Waterway

NPDES Inspection Sampling Support 2014/2015

Prepared for

Toxics Cleanup Program
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Appendix O
South Park Marina

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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O-1 Introduction and Background

Facility Name	South Park Marina
Facility/Site ID	44653368
Address	8604 Dallas Avenue S Seattle, WA 98108
NPDES Permit Type	Industrial Stormwater General Permit
NPDES Permit No.	WAG030045
Permit Monitoring Requirements	Turbidity, pH, total zinc, total copper, petroleum–oil, grease
SIC Code	3732: Boat Building and Repair
Inspection Date	October 8, 2014
Grab Samples	1 water Sample; 2 solids samples
Sample ID(s)	SP-CB-09-20141008-S SP-OWS-01-20141008-S SP-OWS-01-20141008-W
Water Sample Analytes	PCB congeners, dioxins/furans, SVOCs, metals, mercury, pH, specific conductance, anions, alkalinity, TOC/DOC, TSS, turbidity, oil & grease
Solids Sample Analytes	Dioxins/furans, PCB congeners, PCB Aroclors, SVOCs, TPH-diesel and motor oil, TPH-gasoline, VOCs, metals, mercury, TOC, grain size
Split Samples with Facility	No

South Park Marina is located adjacent to the Lower Duwamish Waterway (LDW) at River Mile 3.5 West. The Port of Seattle's Terminal 117 is located directly south of the property. Activities conducted at the facility include boat building and repair, pressure washing, painting, engine maintenance, and welding and grinding. The 2-acre facility is approximately 90 percent impervious and the yard has a storage capacity for up to 30 vessels. Approximately 110 vessels are hauled out and pressure washed each year (South Park Marina 2012). An overview of the facility is presented in Figure O-1.

O-1.1 Stormwater Conveyance

According to the facility Stormwater Pollution Prevention Plan (SWPPP), the property slopes from Dallas Avenue S east towards the LDW. Stormwater is collected in catch basins and conveyed to a 3,000-gallon oil/water separator. In 2009, South Park Marina installed a StormwateRx filtration system downstream of the oil/water separator. Following filtration, stormwater is discharged to the LDW. A closed loop pressure washing system is operated in the area that drains to catch basin CB3 (Figure O-1). Catch basin CB2 is plugged during pressure washing activities (South Park Marina 2012). A facility drainage map is presented in Figure O-1.

O-1.2 Recent Compliance History

Ecology conducted a previous inspection at the South Park Marina facility on June 7, 2005. Upland boatyard activities required tarping for cover. Ecology was concerned about the proximity of the catch basins to surface water and to the wash pad sump. The catch basins are located adjacent to each other and the catch basin is covered when the wash pad is in use. There were visible spills on bare ground under the crane that is used to lift the boats out of the water. South Park Marina needed to clean the spill immediately, fix the crane and placed secondary containment under the crane for any future spills. Proper storage and disposal of paints and solvents was also an issue. Paints and solvents need to be stored in covered areas and on a durable impervious bermed surface (Ecology 2005).

South Park Marina exceeded benchmarks for copper during the 2nd quarter of 2012. The facility exceeded benchmarks for zinc during the 4th quarter of 2013 and the 2nd quarter of 2014 (Ecology 2015).

O-2 Inspection and Sampling

O-2.1 October 2014 Stormwater Compliance Inspection

On October 8, 2014, Ecology conducted a stormwater compliance inspection at South Park Marina. 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 O-2 using geographic information system software. An inspection photographic log and field documentation are presented in Attachments O-1 and O-2, respectively.

The field team inspected the following stormwater conveyance structures at South Park Marina, as shown on Figure O-2 (locations where sample were collected are shown in bold):

- Catch basin 2 (SP-CB-02)
- Catch basin 4 (SP-CB-04)
- **Oil/water separator (SP-OWS-01)**
- Manhole 5 (SP-MH-05)
- **Catch basin 9 (SP-CB-09)**

Location SP-CB-02 (catch basin CB2) is in the southeast area of South Park Marina, in a paved parking lot where vessel pressure washing occurs (Figure O-1). Catch basin CB2 receives stormwater from CB1, also located in a paved parking lot next to the office building. Stormwater is conveyed from SP-CB-02 to SP-CB-04 (Figure O-2). Manhole MH5 (SP-MH-05) is located in the north central portion of South Park Marina, in a paved parking lot area. A 4-inch pipe enters from the northwest. An outlet was not observed; the manhole appears to only collect surface flow. A sheen was observed on the water surface during inspection of the manhole. Locations

SP-OWS-01 and SP-CB-09 contained sufficient material for collection of solids samples. Location SP-OWS-01 contained sufficient water to collect a water grab sample.

O-2.2 Stormwater Conveyance System Sampling

Ecology collected one water sample and two solids samples from the stormwater conveyance system at South Park Marina. Sample locations, analytes, and analytical methods are listed on Table O-1. Results for the water sample are presented in Tables O-2 through O-6. Results for the solids samples are listed on Tables O-7 through O-9. Chain of custody forms and the laboratory reports are provided as Attachments O-3 and O-4, respectively.

O-2.2.1 Water Sample

Water sample SP-OWS-01-20141008-W was collected from the oil/water separator OWS-01 (Figure O-2 and Attachment O-1). The oil/water separator is located in the southeast area of South Park Marina. It receives stormwater from an area that drains the parking lot in the southern portion of the site. Stormwater is conveyed from the oil/water separator to a stormwater treatment system prior to discharge to the LDW.

O-2.2.2 Solids Samples

Solids sample SP-OWS-01-20141008-W was collected from the oil/water separator OWS-01 (Figure O-2 and Attachment O-1). It is located in the southeast area of South Park Marina and receives stormwater from an area that drains the parking lot in the southern portion of the site. Stormwater is conveyed from the oil/water separator to a stormwater treatment system prior to discharge to the LDW. The sample consisted of black organic matter with a strong odor. A sheen was observed on the water surface during sample collection.

Solids sample SP-CB-09-20141008-S was collected from catch basin CB9 (Figure O-2 and Attachment O-1). This catch basin receives stormwater from the boat storage area, and has the potential to receive roof drainage from the boat storage facility on the north portion of the site. The sample consisted of black organic matter with a moderate to strong odor.

O-3 Results

O-3.1 Chemical Analysis

Ecology collected one water sample and two solids samples during the October 8, 2014 stormwater compliance inspection at South Park Marina. Analytical methods, chemical results and regulatory criteria are presented in Tables O-1 through O-9.

All chemical results were independently validated by EcoChem, Inc. of Seattle, WA. A summary-level, U.S. Environmental Protection Agency (EPA) Stage 2A data validation was performed on all chemistry result. 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).

In the water sample, copper, zinc, total PCB congeners, and two PAHs (benzo[b]fluoranthene and chrysene) were detected at concentrations above a screening level (Table O-4).

The following chemicals were detected at concentrations above a screening level in one or both samples (Table O-8).

- PAHs: various individual PAHs, total HPAHs, total LPAHs, total cPAHs;
- Phthalates: bis(2-ethylhexyl)phthalate, butylbenzylphthalate, di-n-butylphthalate, dimethylphthalate;
- Phenols: 4-methylphenol, pentachlorophenol, phenol;
- Other SVOCs: benzoic acid, and benzyl alcohol;
- TPH: gasoline-, diesel-, and motor oil-range hydrocarbons.

O-3.2 Inspection Results and Permit Compliance Requirements

The Ecology inspection report was not available for review.

O-4 References

Ecology (Washington State Department of Ecology). 2005. Stormwater Compliance Inspection Report: South Park Marina. June 7, 2005.

Ecology. 2015. Water Quality Permitting and Reporting Information System, Summary Information, South Park Marina. Online database; accessed May 4, 2015.

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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.

South Park Marina. 2012. Stormwater Pollution Prevention Plan: South Park Marina, 8604 Dallas Ave S, Seattle, WA, 98108. May 2012.

Figures

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Figure O-1. South Park Marina SWPPP Map

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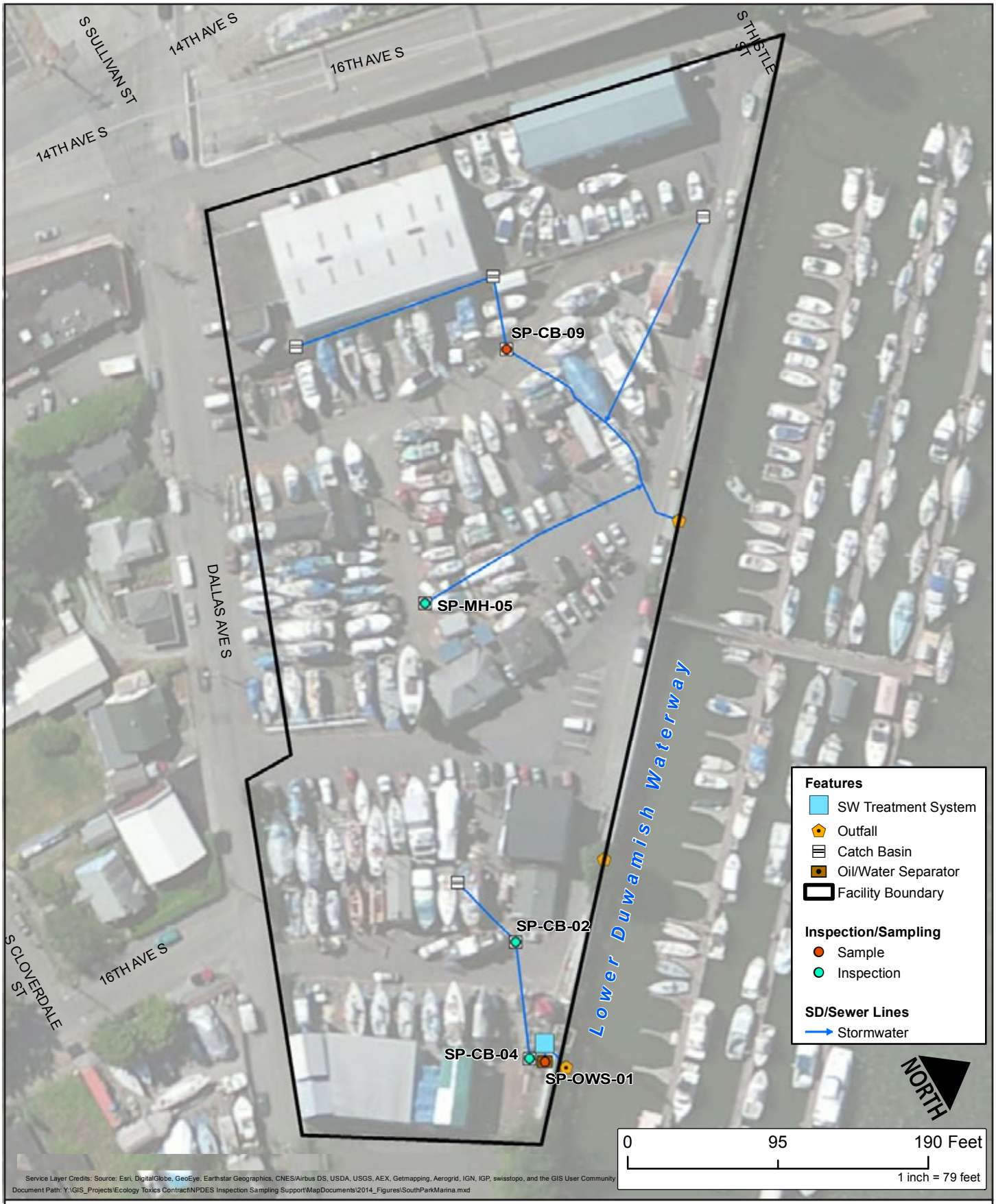

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Figure O-2. South Park Marina Inspection and Sample Locations

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Tables

Acronyms and Abbreviations Used in Tables

<	not detected
%	percent
2LAET	Second Lowest Apparent Effects Threshold
$CaCO_3$	calcium carbonate
CB	chlorobiphenyl
cPAH	carcinogenic polycyclic aromatic hydrocarbon
CSL	Cleanup Screening Level
EF	exceedance factor (sample result / criteria value)
EMPC	estimated maximum possible concentration
EPA	U.S. Environmental Protection Agency
HHO	human health – consumption of organisms only
HPAH	high molecular weight polycyclic aromatic hydrocarbon
ICP-MS	Inductively coupled plasma – mass spectrometry
ISGP	Industrial Stormwater General Permit
J	estimated concentration
JN	estimated concentration
LAET	Lower Apparent Effects Threshold
LDW	Lower Duwamish Waterway
LPAH	low molecular weight polycyclic aromatic hydrocarbon
MA	marine acute
MC	marine chronic
µg/L	micrograms per liter
µmhos/cm	micromhos per centimeter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mS/cm	milliSiemens per centimeter
MTCA	Model Toxics Control Act
na	not analyzed
nd	not detected

ng/kg	nanograms per kilogram
NPDES	National Pollutant Discharge Elimination System
NR WQC	National Recommended Water Quality Criteria
NTR WQC	National Toxics Rule Water Quality Criteria
NTU	Nephelometric Turbidity Units
OC	organic carbon
ORP	Oxidation Reduction Potential
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
pg/L	picograms per liter
PSEP	Puget Sound Estuary Program
R	rejected during data validation review
RAL	Remedial Action Level
RL	reporting limit
SCO	Sediment Cleanup Objective
SDL	sample detection limit
SIM	Selected ion monitoring
SMS	Washington State Sediment Management Standards
std units	standard units
SVOC	Semivolatile organic compound
SW	Surface water
TEQ	toxic equivalency
TPH	Total petroleum hydrocarbon
U	not detected
U*	Flagged as EMPC by the laboratory; this was changed to U (non-detect) during data validation
VOC	volatile organic compound
WA WQC	Washington State Water Quality Criteria
WQC	Water Quality Criteria

Table O-1
Sampling Locations and Analytical Methods
South Park Marina

Analyte	Method	Sample Location / Collection Date	
		SP-OWS-01 10/8/2014	SP-CB-09 10/8/2014
Water Samples			
Metals (total)	EPA 200.8	●	
Mercury (total, dissolved)	EPA 245.1	●	
PCB Congeners	EPA 1668C	●	
SVOCs	EPA 8270D-Low	●	
Dioxins/furans	EPA 1613B	●	
Alkalinity/Bicarbonate/Carbonate	SM 2320B	●	
Anions	EPA 300.0	●	
Specific Conductance	EPA 120.1	●	
pH	SM 4500H+B	●	
Total organic carbon	SM 5310B	●	
Dissolved organic carbon	SM 5310B	●	
Total suspended solids	SM 2540D	●	
Turbidity	SM 2130B	●	
Oil & grease	EPA 1664A	●	
Solids Samples			
Metals (total)	SW 6020	●	●
Mercury	SW 7471A	●	●
PCB Aroclors	EPA 8082	●	●
PCB Congeners	EPA 1668 C	●	●
Dioxins/furans	EPA 1613B	●	●
SVOCs	SW 8270D-Low	●	●
VOCs	SW 8260C	●	●
TPH-diesel/motor oil	NWTPH-Dx	●	●
TPH-gasoline	NWTPH-Gx	●	●
Grain size	PSEP Plumb 1981	●	●
Total organic carbon	PSEP 9060	●	●

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

Table O-2. Water Quality Data - Field Measurements
South Park Marina

		Location ID	SP-OWS-01
		Collection Date	10/8/2014
Analyte	**ISGP Benchmark**	**Units**	**Result**
Field Parameters			
Flow	--	Yes/No	No
pH	5.0 to 9.0	std units	6.4
Conductivity	--	mS/cm	0.11 a
Temperature	--	degrees C	19.1
Total Dissolved Solids	--	mg/L	na
Turbidity	25	NTU	14
Oil & Grease	No visible sheen	Yes/No	No
Dissolved Oxygen	--	mg/L	9.9
ORP	--	mV	224

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

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

Table O-3. Water Sample Results
South Park Marina

Analyte	ISGP Benchmark	WA WQC Marine Chronic	WA WQC Marine Acute	NTR WQC HHO	NR WQC HHO	Location ID: SP-OWS-01 Collection Date: 10/8/2014 Result
Total Metals (µg/L)						
Antimony	--	--	--	--	--	**0.31 J**
Arsenic	150	36	69	--	--	2.0
Beryllium	--	--	--	--	--	< 0.40 U
Cadmium	2.1	9.4	42	--	--	**0.27 J**
Chromium	--	--	--	--	--	**0.52**
Chromium, hexavalent	--	--	--	--	--	na
Copper	14	3.7	5.8	--	--	**88**
Lead	81.6	8.5	221	--	--	**3.6**
Mercury	1.4	0.025	2.1	--	--	< 0.20 U
Nickel	--	8.3	75	--	--	**1.3 J**
Selenium	5	71	291	--	--	< 1.0 U
Silver	3.8	--	2.2	--	--	< 0.4 U
Thallium	--	--	--	--	--	< 1.0 U
Zinc	117	86	95	--	--	**92**
PCB Congeners (ug/L) [a]						
Total PCB Congeners	--	0.03	10	1.70E-04	6.40E-05	**0.014 J**
PCB TEQ, nd SDL*0	--	0.03	10	--	--	**6.60E-07 J**
PCB TEQ, nd SDL*0.5	--	0.03	10	--	--	**7.10E-07 J**
PCB TEQ, nd SDL*1	--	0.03	10	--	--	**7.50E-07 J**
Dioxins and Furans (pg/L) [a]						
2,3,7,8-TCDD	--	--	--	0.014	0.0051	< 1.63 U
1,2,3,7,8-PeCDD	--	--	--	--	--	< 2.55 U
1,2,3,4,7,8-HxCDD	--	--	--	--	--	< 3.23 U
1,2,3,6,7,8-HxCDD	--	--	--	--	--	**10.9 J**
1,2,3,7,8,9-HxCDD	--	--	--	--	--	< 4.12 U*
1,2,3,4,6,7,8-HpCDD	--	--	--	--	--	**206**
OCDD	--	--	--	--	--	**1280**
2,3,7,8-TCDF	--	--	--	--	--	< 1.17 U
1,2,3,7,8-PeCDF	--	--	--	--	--	< 1.79 U
2,3,4,7,8-PeCDF	--	--	--	--	--	< 1.09 U
1,2,3,4,7,8-HxCDF	--	--	--	--	--	< 1.20 U*
1,2,3,6,7,8-HxCDF	--	--	--	--	--	< 1.23 U*
1,2,3,7,8,9-HxCDF	--	--	--	--	--	< 1.20 U
2,3,4,6,7,8-HxCDF	--	--	--	--	--	**2.35 J**
1,2,3,4,6,7,8-HpCDF	--	--	--	--	--	**33.1**
1,2,3,4,7,8,9-HpCDF	--	--	--	--	--	**1.71 J**
OCDF	--	--	--	--	--	**75.1**
Total TCDD	--	--	--	--	--	< 1.63 U
Total PeCDD	--	--	--	--	--	< 2.55 U
Total HxCDD	--	--	--	--	--	**27.9 J**
Total HpCDD	--	--	--	--	--	**352**
Total TCDF	--	--	--	--	--	< 1.17 U
Total PeCDF	--	--	--	--	--	**6.50**
Total HxCDF	--	--	--	--	--	**45.4 J**
Total HpCDF	--	--	--	--	--	**89.6**
Dioxin/Furan TEQ, nd SDL*0	--	--	--	--	--	**4.14 J**
Dioxin/Furan TEQ, nd SDL*0.5	--	--	--	--	--	**7.03 J**
Dioxin/Furan TEQ, nd SDL*1	--	--	--	--	--	**9.92 J**

Table O-3. Water Sample Results
South Park Marina

Analyte	ISGP Benchmark	WA WQC Marine Chronic	WA WQC Marine Acute	NTR WQC HHO	NR WQC HHO	Location ID / Collection Date: SP-OWS-01 / 10/8/2014 Result		
PAHs (µg/L)								
1-Methylnaphthalene	--	--	--	--	--	<	0.057	U
2-Chloronaphthalene	--	--	--	--	1,600	<	0.057	U
2-Methylnaphthalene	--	--	--	--	--		**0.042**	**J**
Acenaphthene	--	--	--	--	990	<	0.095	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		**0.033**	**J**
Benzo(g,h,i)perylene	--	--	--	--	--	<	0.057	UJ
Benzo(k)fluoranthene	--	--	--	0.031	0.018	<	0.057	U
Chrysene	--	--	--	0.031	0.018		**0.039**	
Dibenz(a,h)anthracene	--	--	--	0.031	0.018	<	0.057	U
Dibenzofuran	--	--	--	--	--	<	0.38	U
Fluoranthene	--	--	--	370	140		**0.10**	
Fluorene	--	--	--	14,000	5,300		**0.033**	**J**
Indeno(1,2,3-cd)pyrene	--	--	--	0.031	0.018	<	0.057	UJ
Naphthalene	--	--	--	--	--	<	0.38	U
Phenanthrene	--	--	--	--	--		**0.11**	
Pyrene	--	--	--	11,000	4,000		**0.061**	
Total Benzofluoranthenes	--	--	--	--	--		**0.033**	**J**
Total HPAHs	--	--	--	--	--		**0.23**	
Total LPAHs	--	--	--	--	--		**0.14**	
Total PAHs	--	--	--	--	--		**0.38**	
cPAHs, nd RL*0	--	--	--	--	--		**0.0037**	**J**
cPAHs, nd RL*0.5	--	--	--	--	--		**0.034**	**J**
cPAHs, nd RL*1	--	--	--	--	--		**0.064**	**J**
Phthalates (µg/L)								
bis(2-Ethylhexyl)phthalate	--	--	--	5.9	2.2	<	2.8	U
Butylbenzylphthalate	--	--	--	--	1,900		**0.25**	**J**
Di-n-Butylphthalate	--	--	--	12,000	4,500		**0.15**	**J**
Diethylphthalate	--	--	--	120,000	44,000	<	0.38	U
Dimethylphthalate	--	--	--	2,900,000	1,100,000		**0.31**	**J**
Di-n-Octyl phthalate	--	--	--	--	--	<	0.38	U
Phenols (µg/L)								
2,3,4,6-Tetrachlorophenol	--	--	--	--	--		na	
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	U
4-Chloro-3-methylphenol	--	--	--	--	--	<	0.38	U
4-Methylphenol	--	--	--	--	--		**3.4**	
4-Nitrophenol	--	--	--	--	--	<	2.8	U

Table O-3. Water Sample Results
South Park Marina

Analyte	ISGP Benchmark	WA WQC Marine Chronic	WA WQC Marine Acute	NTR WQC HHO	NR WQC HHO	Location ID / Collection Date / Result
						Location ID: SP-OWS-01
						Collection Date: 10/8/2014
Pentachlorophenol	--	7.9	13	8.2	3.0	< 0.66 U
Phenol	--	--	--	4,600,000	860,000	< 0.57 U
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	--	--	--	--	--	< 0.38 U
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 U
4-Chlorophenyl-phenylether	--	--	--	--	--	< 0.38 U
4-Nitroaniline	--	--	--	--	--	< 0.57 U
Benzoic Acid	--	--	--	--	--	**3.6**
Benzyl Alcohol	--	--	--	--	--	< 0.38 U
2,2'-Oxybis(1-Chloropropane)	--	--	--	170,000	65,000	**0.38**
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	< 0.38 U
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 O-4. Water Sample Results Compared to Criteria
South Park Marina

Location ID	SP-OWS-01				
Collection Date	10/8/2014				
	Exceedance Factor				
Analyte	ISGP Benchmark	WA Marine Chronic	WA Marine Acute	NTR Human Health - Organisms	NR Human Health - Organisms
Total Metals					
Copper	6.3	24	15		
Zinc		1.1			
PCB Congeners					
Total PCB Congeners				82	219
PAHs					
Benzo(b)fluoranthene				1.1	1.8
Chrysene				1.3	2.2

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 O-5. Water Sample Results - PCB Congeners
South Park Marina

Location ID	SP-OWS-01	
Collection Date	10/8/2014	
Analyte	Result	
Total PCB Congeners (µg/L)	0.0140	J
Total PCB Congeners (pg/L)	14,000	J
Total Mono-CB (pg/L)	22.7	J
PCB-1	11.0	
PCB-2	2.00	J
PCB-3	9.67	
Total Di-CB (pg/L)	82.3	J
PCB-4/10	23.8	
PCB-5/8	31.0	
PCB-6	6.83	J
PCB-7/9	< 5.22	U
PCB-11	< 84.5	U
PCB-12/13	< 6.29	U
PCB-14	< 5.61	U
PCB-15	20.7	
Total Tri-CB (pg/L)	431	J
PCB-16/32	56.0	
PCB-17	27.8	
PCB-18	92.3	
PCB-19	11.4	
PCB-20/21/33	36.1	
PCB-22	22.1	
PCB-23	< 0.659	U
PCB-24/27	6.73	J
PCB-25	4.45	J
PCB-26	12.4	
PCB-28	62.9	
PCB-29	< 0.650	U
PCB-30	< 0.673	U
PCB-31	65.7	
PCB-34	< 0.685	U
PCB-35	6.27	
PCB-36	< 0.733	U
PCB-37	26.9	
PCB-38	< 0.745	U
PCB-39	< 0.711	U
Total Tetra-CB (pg/L)	1,960	J
PCB-40	31.1	
PCB-41/64/71/72	152	
PCB-42/59	42.7	
PCB-43/49	144	
PCB-44	245	
PCB-45	22.6	
PCB-46	10.3	
PCB-47	37.8	
PCB-48/75	24.1	
PCB-50	< 1.26	U
PCB-51	6.95	
PCB-52/69	396	
PCB-53	25.0	
PCB-54	< 1.02	U
PCB-55	< 4.93	U*

Table O-5. Water Sample Results - PCB Congeners
South Park Marina

Location ID	SP-OWS-01	
Collection Date	10/8/2014	
Analyte	Result	
PCB-56/60	117	
PCB-57	< 1.06	U
PCB-58	< 0.694	U*
PCB-61/70	377	
PCB-62	< 1.19	U
PCB-63	7.30	
PCB-65	< 1.15	U
PCB-67	4.05	J
PCB-68	2.21	J
PCB-73	< 1.19	U
PCB-74	93.9	
PCB-76/66	185	
PCB-77	25.3	
PCB-78	2.48	J
PCB-79	8.81	
PCB-80	< 0.943	U
PCB-81	< 1.82	U*
Total Penta-CB (pg/L)	5,340	J
PCB-82	107	
PCB-83	< 2.28	U
PCB-84/92	357	
PCB-85/116	135	
PCB-86	< 3.01	U*
PCB-87/117/125	321	
PCB-88/91	115	
PCB-89	5.79	
PCB-90/101	854	
PCB-93	< 3.13	U
PCB-94	3.39	J
PCB-95/98/102	637	
PCB-96	< 3.66	U*
PCB-97	253	
PCB-99	315	
PCB-100	< 1.69	U*
PCB-103	4.91	J
PCB-104	< 2.01	U
PCB-105	294	
PCB-106/118	766	
PCB-107/109	53.2	
PCB-108/112	40.8	
PCB-110	966	
PCB-111/115	11.6	
PCB-113	< 2.40	U
PCB-114	17.6	
PCB-119	13.5	
PCB-120	2.28	J
PCB-121	< 1.86	U
PCB-122	7.17	
PCB-123	11.6	
PCB-124	37.8	
PCB-126	6.18	
PCB-127	< 3.73	U

Table O-5. Water Sample Results - PCB Congeners
South Park Marina

Location ID	SP-OWS-01	
Collection Date	10/8/2014	
Analyte	Result	
Total Hexa-CB (pg/L)	4,060	J
PCB-128/162	158	
PCB-129	54.3	
PCB-130	65.5	
PCB-131	< 3.18	U
PCB-132/161	259	
PCB-133/142	27.4	
PCB-134/143	50.7	
PCB-135	104	
PCB-136	101	
PCB-137	43.7	
PCB-138/163/164	981	
PCB-139/149	649	
PCB-140	3.73	J
PCB-141	195	
PCB-144	34.4	
PCB-145	< 2.56	U
PCB-146/165	107	
PCB-147	16.6	
PCB-148	< 3.78	U
PCB-150	< 2.63	U
PCB-151	167	
PCB-152	< 2.55	U
PCB-153	763	
PCB-154	6.74	
PCB-155	< 2.47	U
PCB-156	94.0	
PCB-157	20.3	
PCB-158/160	117	
PCB-159	< 2.43	U
PCB-166	< 2.89	U*
PCB-167	40.9	
PCB-168	< 2.12	U
PCB-169	< 3.08	U
Total Hepta-CB (pg/L)	1,720	
PCB-170	199	
PCB-171	57.5	
PCB-172	39.4	
PCB-173	5.58	
PCB-174	212	
PCB-175	7.85	
PCB-176	25.9	
PCB-177	123	
PCB-178	41.2	
PCB-179	81.0	
PCB-180	450	
PCB-181	< 2.76	U
PCB-182/187	263	
PCB-183	109	
PCB-184	< 2.00	U
PCB-185	23.0	
PCB-186	< 1.94	U

Table O-5. Water Sample Results - PCB Congeners
South Park Marina

Location ID	SP-OWS-01	
Collection Date	10/8/2014	
Analyte	Result	
PCB-188	< 1.76	U
PCB-189	7.26	
PCB-190	39.4	
PCB-191	8.44	
PCB-192	< 2.46	U
PCB-193	23.5	
Total Octa-CB (pg/L)	359	J
PCB-194	85.4	
PCB-195	33.3	
PCB-196/203	92.6	
PCB-197	4.06	J
PCB-198	3.75	J
PCB-199	94.0	
PCB-200	12.5	
PCB-201	10.2	
PCB-202	18.4	
PCB-204	< 2.58	U
PCB-205	4.80	J
Total Nona-CB (pg/L)	26.4	J
PCB-206	19.6	
PCB-207	2.32	J
PCB-208	4.44	J
Deca-CB (pg/L)	6.56	
PCB-209	6.56	
PCB TEQ, nd SDL*0	0.660	J
PCB TEQ, nd SDL*0.5	0.710	J
PCB TEQ, nd SDL*1	0.750	J

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

Table O-6. Water Sample Results - Conventionals
South Park Marina

		Location ID	SP-OWS-01	
		Collection	10/8/2014	
Analyte	ISGP Benchmark	Units	Result	
Conventionals				
Alkalinity	--	mg/L	25	
Bicarbonate	--	mg/L $CaCO_3$	25	
Carbonate	--	mg/L $CaCO_3$	5	
Chloride	--	mg/L	5.1	
Specific Conductance	--	µmhos/cm	81	
Hydroxide	--	mg/L $CaCO_3$	na	
Nitrate	--	mg/L	< 0.9	U
pH	5-9	std units	7.25	
Salinity	--	mg/L	na	
Sulfate	--	mg/L	2	
Dissolved Organic Carbon	--	mg/L	2.1	
Total Organic Carbon	--	mg/L	1.7	
Total Suspended Solids[a]	30	mg/L	< 3.3	U
Turbidity	25	NTU	1.5	
Oil & Grease	--	mg/L	< 4.7	U
Oil & Grease - Polar	--	mg/L	< 4.7	U
Oil & Grease - Silica Gel Treated	--	mg/L	< 4.7	U

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

Shaded results exceed the ISGP benchmark for that parameter.

Table O-7. Solids Sample Results
South Park Marina

Analyte	SMS Criteria SCO/ LAET[a]	SMS Criteria CSL/ 2LAET	Unit	Location ID: SP-CB-09 Collection Date: 10/8/2015 Result		Location ID: SP-OWS-01 Collection Date: 10/8/2014 Result	
Metals (Total) (mg/kg)							
Antimony	--	--	mg/kg	**20**		**16**	
Arsenic	57	93	mg/kg	**22**		**69**	
Beryllium	--	--	mg/kg	**0.23**	**J**	**0.21**	**J**
Cadmium	5.1	6.7	mg/kg	**6.5**		**16**	
Chromium	260	270	mg/kg	**160**		**330**	
Copper	390	390	mg/kg	**1,800**		**14,000**	
Lead	450	530	mg/kg	**430**		**940**	
Mercury	0.41	0.59	mg/kg	**0.19**		**1.7**	
Nickel	--	--	mg/kg	**180**		**230**	
Selenium	--	--	mg/kg	**1.2**		**1.6**	
Silver	6.1	6.1	mg/kg	**2.1**		**1.2**	
Thallium	--	--	mg/kg	**0.3**	**J**	< 1.1	U
Zinc	410	960	mg/kg	**5,600**		**2,900**	
PCB Aroclors (µg/kg)							
Aroclor 1016	--	--	µg/kg	< 22	U	**210**	**J**
Aroclor 1221	--	--	µg/kg	< 24	U	< 31	U
Aroclor 1232	--	--	µg/kg	< 24	U	< 31	U
Aroclor 1242	--	--	µg/kg	< 22	U	< 28	U
Aroclor 1248	--	--	µg/kg	< 22	U	< 28	U
Aroclor 1254	--	--	µg/kg	< 22	U	**2,200**	
Aroclor 1260	--	--	µg/kg	**540**		**1,700**	**J**
Total PCB Aroclors	130	1,000	µg/kg	**540**		**4,100**	**J**
PCB Congeners (µg/kg) [b]							
Total PCB Congeners	130	1,000	µg/kg	**896**	**J**	**3,960**	**J**
PCB TEQ, nd SDL*0	--	--	µg/kg	**0.017**	**J**	**0.23**	**J**
PCB TEQ, nd SDL*0.5	--	--	µg/kg	**0.0852**	**J**	**0.24**	**J**
PCB TEQ, nd SDL*1	--	--	µg/kg	**0.17**	**J**	**0.26**	**J**
Dioxins and Furans (ng/kg)							
2,3,7,8-TCDD	--	--	ng/kg	**2.03**		**19.3**	
1,2,3,7,8-PeCDD	--	--	ng/kg	**11.7**		**134**	
1,2,3,4,7,8-HxCDD	--	--	ng/kg	**20.9**		**245**	
1,2,3,6,7,8-HxCDD	--	--	ng/kg	**51.8**		**871**	
1,2,3,7,8,9-HxCDD	--	--	ng/kg	**37.4**		**609**	
1,2,3,4,6,7,8-HpCDD	--	--	ng/kg	**1,650**		**30,400**	**J**
OCDD	--	--	ng/kg	**19,800**	**J**	**484,000**	**J**
2,3,7,8-TCDF	--	--	ng/kg	**7.9**		**29.1**	
1,2,3,7,8-PeCDF	--	--	ng/kg	**4.66**		**35.3**	
2,3,4,7,8-PeCDF	--	--	ng/kg	**10.5**		**54.5**	
1,2,3,4,7,8-HxCDF	--	--	ng/kg	**14.8**		**166**	
1,2,3,6,7,8-HxCDF	--	--	ng/kg	**13.8**		**118**	
1,2,3,7,8,9-HxCDF	--	--	ng/kg	**1.18**	**J**	**17.1**	
2,3,4,6,7,8-HxCDF	--	--	ng/kg	**18.5**		**167**	
1,2,3,4,6,7,8-HpCDF	--	--	ng/kg	**256**		**3,830**	**J**
1,2,3,4,7,8,9-HpCDF	--	--	ng/kg	**15.7**		**180**	
OCDF	--	--	ng/kg	**876**		**14,000**	**J**
Dioxin/Furan TEQ, nd SDL*0	25	--	ng/kg	**59**	**J**	**890**	**J**
Dioxin/Furan TEQ, nd SDL*0.5	25	--	ng/kg	**59**	**J**	**890**	**J**
Dioxin/Furan TEQ, nd SDL*1	25	--	ng/kg	**59**	**J**	**890**	**J**

Table O-7. Solids Sample Results
South Park Marina

Analyte	SMS Criteria SCO/ LAET[a]	SMS Criteria CSL/ 2LAET	Unit	Location ID: SP-CB-09, Collection Date: 10/8/2015 Result		Location ID: SP-OWS-01, Collection Date: 10/8/2014 Result	
Total TCDD	--	--	ng/kg	**31.4**		**126**	
Total TCDF	--	--	ng/kg	**127**	**J**	**339**	**J**
Total PeCDD	--	--	ng/kg	**86.1**		**589**	
Total PeCDF	--	--	ng/kg	**230**		**1,180**	**J**
Total HxCDD	--	--	ng/kg	**479**		**5,220**	
Total HxCDF	--	--	ng/kg	**360**		**4,670**	
Total HpCDD	--	--	ng/kg	**3,620**		**56,000**	
Total HpCDF	--	--	ng/kg	**718**		**12,700**	
PAHs (µg/kg)							
1-Methylnaphthalene	--	--	µg/kg	**3,100**		**2,800**	
2-Chloronaphthalene	--	--	µg/kg	< 88	UJ	< 57	U
2-Methylnaphthalene	670	1,400	µg/kg	**4,600**		**4,700**	
Acenaphthene	500	730	µg/kg	**170**	**J**	< 57	U
Acenaphthylene	1,300	1,300	µg/kg	< 88	U	< 57	U
Anthracene	960	4,400	µg/kg	**190**	**J**	**800**	
Benzo(a)anthracene	1,300	1,600	µg/kg	**270**	**J**	**3,400**	
Benzo(a)pyrene	1,600	3,000	µg/kg	**370**	**J**	**3,800**	
Benzo(g,h,i)perylene	670	720	µg/kg	**360**		**1,400**	
Chrysene	1,400	2,800	µg/kg	**960**	**J**	**5,900**	
Dibenz(a,h)anthracene	230	540	µg/kg	< 180	U	**440**	
Dibenzofuran	540	700	µg/kg	< 440	UJ	< 290	U
Fluoranthene	1,700	2,500	µg/kg	**1,600**	**J**	**12,000**	
Fluorene	540	1,000	µg/kg	**510**		**950**	
Indeno(1,2,3-cd)pyrene	600	690	µg/kg	**250**		**1,800**	
Naphthalene	2,100	2,400	µg/kg	**2,200**		**2,000**	
Phenanthrene	1,500	5,400	µg/kg	**880**	**J**	**6,300**	
Pyrene	2,600	3,300	µg/kg	**2,200**	**J**	**11,000**	
Total Benzofluoranthenes	3,200	3,600	µg/kg	**1,000**	**J**	**11,000**	
Total HPAHs	12,000	17,000	µg/kg	**7,000**		**50,000**	
Total LPAHs	5,200	13,000	µg/kg	**4,000**		**10,000**	
cPAHs, nd RL*0	1,000	--	µg/kg	**530**	**J**	**5,500**	
cPAHs, nd RL*0.5	1,000	--	µg/kg	**540**	**J**	**5,500**	
cPAHs, nd RL*1	1,000	--	µg/kg	**550**	**J**	**5,500**	
Phthalates (µg/kg)							
bis(2-Ethylhexyl)phthalate	1,300	1,900	µg/kg	**37,000**		**110,000**	
Butylbenzylphthalate	63	900	µg/kg	**1,800**		**4,300**	
Di-n-Butylphthalate	1,400	5,100	µg/kg	**3,700**		**6,600**	
Diethylphthalate	200	1,200	µg/kg	< 880	U	< 570	U
Dimethylphthalate	71	160	µg/kg	**3,900**	**J**	**70,000**	
Di-n-Octyl phthalate	6,200	--	µg/kg	**1,200**	**J**	**4,400**	
Phenols (µg/kg)							
2,4,5-Trichlorophenol	--	--	µg/kg	< 440	U	< 290	U
2,4,6-Trichlorophenol	--	--	µg/kg	< 660	U	< 430	U
2,4-Dichlorophenol	--	--	µg/kg	< 440	U	< 290	U
2,4-Dimethylphenol	29	29	µg/kg	< 440	U	< 290	U
2,4-Dinitrophenol	--	--	µg/kg	< 4,400	U	< 2,900	U
2-Chlorophenol	--	--	µg/kg	< 440	UJ	< 290	U
2-Methylphenol	63	63	µg/kg	< 440	UJ	< 290	U
2-Nitrophenol	--	--	µg/kg	< 440	U	< 290	U

Table O-7. Solids Sample Results
South Park Marina

Analyte	SMS Criteria SCO/ LAET[a]	SMS Criteria CSL/ 2LAET	Unit	Location ID: SP-CB-09 Collection Date: 10/8/2015 Result	Location ID: SP-OWS-01 Collection Date: 10/8/2014 Result
4,6-Dinitro-2-Methylphenol	--	--	µg/kg	< 4,400 U	< 2,900 U
4-Chloro-3-methylphenol	--	--	µg/kg	< 440 U	**17,000**
4-Methylphenol	670	670	µg/kg	**330 J**	**6,400**
4-Nitrophenol	--	--	µg/kg	< 4,400 U	< 2,900 U
Pentachlorophenol	360	690	µg/kg	< 880 U	**1,500**
Phenol	420	1,200	µg/kg	**370 J**	**2,200**
Other SVOCs (µg/kg)					
1,2,4-Trichlorobenzene	31	51	µg/kg	< 220 UJ	< 140 U
1,2-Dichlorobenzene	35	50	µg/kg	< 240 UJ	< 160 U
1,3-Dichlorobenzene	--	--	µg/kg	< 220 UJ	< 140 U
1,4-Dichlorobenzene	110	120	µg/kg	< 220 UJ	< 140 U
2,4-Dinitrotoluene	--	--	µg/kg	< 440 U	< 290 U
2,6-Dinitrotoluene	--	--	µg/kg	< 440 U	< 290 U
2-Nitroaniline	--	--	µg/kg	< 440 U	< 290 U
3,3'-Dichlorobenzidine	--	--	µg/kg	< 880 U	< 570 U
3-Nitroaniline	--	--	µg/kg	< 440 U	< 290 U
4-Bromophenyl-phenylether	--	--	µg/kg	< 440 U	< 290 U
4-Chloroaniline	--	--	µg/kg	< 440 U	< 290 U
4-Chlorophenyl-phenylether	--	--	µg/kg	< 440 UJ	< 290 U
4-Nitroaniline	--	--	µg/kg	< 440 U	< 290 U
Benzoic Acid	650	650	µg/kg	< 11,000 U	**9,700**
Benzyl Alcohol	57	73	µg/kg	**3,600 J**	**63,000**
2,2'-Oxybis(1-Chloropropane)	--	--	µg/kg	< 1,100 U	< 710 U
bis(2-Chloroethoxy) Methane	--	--	µg/kg	< 440 UJ	< 290 U
Bis-(2-Chloroethyl) Ether	--	--	µg/kg	< 440 UJ	< 290 U
Carbazole	--	--	µg/kg	< 440 UJ	**850**
Hexachlorobenzene	22	70	µg/kg	< 220 U	< 140 U
Hexachlorobutadiene	11	120	µg/kg	< 220 U	< 140 U
Hexachlorocyclopentadiene	--	--	µg/kg	< 440 U	< 290 U
Hexachloroethane	--	--	µg/kg	< 440 UJ	< 290 U
Isophorone	--	--	µg/kg	< 440 U	< 290 U
Nitrobenzene	--	--	µg/kg	< 440 U	< 290 U
N-Nitrosodimethylamine	--	--	µg/kg	< 4,400 U	< 2,900 U
N-Nitroso-Di-N-Propylamine	--	--	µg/kg	< 440 U	< 290 U
N-Nitrosodiphenylamine	28	40	µg/kg	< 220 UJ	< 140 U
VOCs (µg/kg)					
1,1,1,2-Tetrachloroethane	--	--	µg/kg	< 220 U	< 270 U
1,1,1-Trichloroethane	--	--	µg/kg	< 220 U	< 270 U
1,1,2,2-Tetrachloroethane	--	--	µg/kg	< 56 U	< 66 U
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	µg/kg	< 220 U	< 270 U
1,1,2-Trichloroethane	--	--	µg/kg	< 67 U	< 80 U
1,1-Dichloroethane	--	--	µg/kg	< 220 U	< 270 U
1,1-Dichloroethene	--	--	µg/kg	< 110 U	< 130 U
1,1-Dichloropropene	--	--	µg/kg	< 220 U	< 270 U
1,2,3-Trichlorobenzene	--	--	µg/kg	< 220 U	< 270 U
1,2,3-Trichloropropane	--	--	µg/kg	< 220 U	< 270 U
1,2,4-Trimethylbenzene	--	--	µg/kg	**3,300**	**4,600**
1,2-Dibromo-3-chloropropane	--	--	µg/kg	< 1,100 U	< 1,300 U
1,2-Dibromoethane	--	--	µg/kg	< 89 U	< 110 U
1,2-Dichloroethane	--	--	µg/kg	< 89 U	< 110 U

Table O-7. Solids Sample Results
South Park Marina

Analyte	SMS Criteria SCO/ LAET[a]	SMS Criteria CSL/ 2LAET	Unit	Location ID: SP-CB-09 Collection Date: 10/8/2015 Result		Location ID: SP-OWS-01 Collection Date: 10/8/2014 Result	
1,2-Dichloropropane	--	--	µg/kg	< 67	U	< 80	U
1,3,5-Trimethylbenzene	--	--	µg/kg	**610**		**2,000**	
1,3-Dichloropropane	--	--	µg/kg	< 220	U	< 270	U
2,2-Dichloropropane	--	--	µg/kg	< 220	U	< 270	U
2-Chloroethylvinylether	--	--	µg/kg	< 1,100	U	< 1,300	U
2-Chlorotoluene	--	--	µg/kg	< 220	U	67	J
2-Hexanone	--	--	µg/kg	< 1,100	U	< 1,300	U
4-Chlorotoluene	--	--	µg/kg	< 220	U	< 270	U
Acetone	--	--	µg/kg	< 2,200	U	< 2,700	U
Acrolein	--	--	µg/kg	< 6,700	U	< 8,000	U
Acrylonitrile	--	--	µg/kg	< 1,100	U	< 1,300	U
Benzene	--	--	µg/kg	< 89	U	< 110	U
Bromobenzene	--	--	µg/kg	< 220	U	< 270	U
Bromochloromethane	--	--	µg/kg	< 220	U	< 270	U
Bromoform	--	--	µg/kg	< 220	U	< 270	U
Bromomethane	--	--	µg/kg	< 780	U	< 930	U
Carbon Disulfide	--	--	µg/kg	< 220	U	< 270	U
Carbon Tetrachloride	--	--	µg/kg	< 110	U	< 130	U
Chlorobenzene	--	--	µg/kg	< 220	U	< 270	U
Dibromochloromethane	--	--	µg/kg	< 220	U	< 270	U
Chloroethane	--	--	µg/kg	< 2,200	U	< 2,700	U
Chloroform	--	--	µg/kg	< 220	U	< 270	U
Chloromethane	--	--	µg/kg	< 560	U	< 660	U
cis-1,2-Dichloroethene	--	--	µg/kg	< 220	U	< 270	U
cis-1,3-Dichloropropene	--	--	µg/kg	< 89	U	< 110	U
Dibromomethane	--	--	µg/kg	< 220	U	< 270	U
Bromodichloromethane	--	--	µg/kg	< 220	U	< 270	U
Dichlorodifluoromethane	--	--	µg/kg	< 220	U	< 270	U
Ethylbenzene	--	--	µg/kg	**240**		**12,000**	
Isopropylbenzene	--	--	µg/kg	**50**	**J**	**830**	
m,p-Xylene	--	--	µg/kg	**430**		**5,200**	
2-Butanone	--	--	µg/kg	< 2,200	U	< 2700	U
Iodomethane	--	--	µg/kg	< 1,100	U	< 1,300	U
4-Methyl-2-Pentanone (MIBK)	--	--	µg/kg	< 1,100	U	**900**	**J**
Methyl tert-Butyl Ether	--	--	µg/kg	< 220	U	< 270	U
Methylene Chloride	--	--	µg/kg	< 140	U	< 170	U
n-Butylbenzene	--	--	µg/kg	**1,800**		**1,200**	
n-Propylbenzene	--	--	µg/kg	**180**	**J**	**1,100**	
o-Xylene	--	--	µg/kg	**230**		**2,300**	
4-Isopropyltoluene	--	--	µg/kg	**290**		**400**	
sec-Butylbenzene	--	--	µg/kg	**160**	**J**	**370**	
Styrene	--	--	µg/kg	**220**		**9,300**	
tert-Butylbenzene	--	--	µg/kg	< 220	U	< 270	U
Tetrachloroethene	--	--	µg/kg	< 110	U	**810**	
Toluene	--	--	µg/kg	**380**		**8,800**	
Total Xylenes	--	--	µg/kg	**660**		**7,500**	
trans-1,2-Dichloroethene	--	--	µg/kg	< 220	U	< 270	U
trans-1,3-Dichloropropene	--	--	µg/kg	< 89	U	< 110	U
trans-1,4-Dichloro-2-butene	--	--	µg/kg	< 1,100	U	< 1,300	U
Trichloroethene	--	--	µg/kg	< 89	U	**570**	

Table O-7. Solids Sample Results
South Park Marina

Analyte	SMS Criteria SCO/ LAET[a]	SMS Criteria CSL/ 2LAET	Unit	Location ID: SP-CB-09 Collection Date: 10/8/2015 Result	Location ID: SP-OWS-01 Collection Date: 10/8/2014 Result
Trichlorofluoromethane	--	--	µg/kg	< 220 U	< 270 U
Vinyl Acetate	--	--	µg/kg	< 1,100 U	< 1,300 U
Vinyl Chloride	--	--	µg/kg	< 89 U	< 110 U
TPH (mg/kg)					
Gasoline-Range Hydrocarbons	30/100	--	mg/kg	**480**	**340**
Diesel-Range Hydrocarbons	2,000	--	mg/kg	**5,300**	**6,600**
Motor Oil-Range Hydrocarbons	2,000	--	mg/kg	**14,000**	**16,000**
Grain size (%)					
Clay	--	--	%	1.3	4.1
Silt	--	--	%	45	44
Sand	--	--	%	48	49
Gravel	--	--	%	6.5	2.9
Cobbles	--	--	%	0.0	0.0
Conventionals (%)					
Total Organic Carbon	--	--	%	11	23
Total Solids	--	--	%	44.7	34.4

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

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

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

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

Results in **bold** are detections.

Results shaded in gray exceed one or more criteria.

Table O-8. Solids Sample Results Compared to Dry Weight Criteria
South Park Marina

Location ID	SP-CB-09		SP-OWS-01	
Collection Date	10/8/2015		10/8/2014	
Analyte	Exceedance Factor		Exceedance Factor	
	SCO/ LAET	CSL/ 2LAET	SCO/ LAET	CSL/ 2LAET
Metals (Total)				
Arsenic			1.2	
Cadmium	1.3		3.1	2
Chromium			1.3	1
Copper	4.6	4.6	36	36
Lead			2.1	1.8
Mercury			4.1	2.9
Zinc	14	5.8	7.1	3.0
PCBs				
Total PCB Aroclors	4.2		32	4.1
Total PCB Congeners	6.9		30	4.0
Dioxins and Furans				
Dioxin/Furan TEQ, nd SDL*0	2.4		36	
Dioxin/Furan TEQ, nd SDL*0.5	2.4		36	
Dioxin/Furan TEQ, nd SDL*1	2.4		36	
PAHs				
2-Methylnaphthalene	6.9	3.3	7.0	3.4
Benzo(a)anthracene			2.6	2.1
Benzo(a)pyrene			2.4	1.3
Benzo(g,h,i)perylene			2.1	1.9
Chrysene			4.2	2.1
Dibenz(a,h)anthracene			1.9	
Fluoranthene			7.1	4.8
Fluorene			1.8	
Indeno(1,2,3-cd)pyrene			3.0	2.6
Phenanthrene			4.2	1.2
Pyrene			4.2	3.3
Total Benzofluoranthenes			3.4	3.1
Total HPAHs			4.2	2.9
Total LPAHs			1.9	
cPAHs, nd RL*0			5.5	
cPAHs, nd RL*0.5			5.5	
cPAHs, nd RL*1			5.5	
Phthalates				
bis(2-Ethylhexyl)phthalate	28	19	85	58
Butylbenzylphthalate	29	2.0	68	4.8
Di-n-Butylphthalate	2.6		4.7	1.3
Dimethylphthalate	55	24	986	438
Phenols				
4-Methylphenol			9.6	10
Pentachlorophenol			4.2	2.2
Phenol			5.2	1.8
Other SVOCs				
Benzoic Acid			15	15
Benzyl Alcohol	63	49	1105	863

Table O-8. Solids Sample Results Compared to Dry Weight Criteria
South Park Marina

Location ID	SP-CB-09		SP-OWS-01	
Collection Date	10/8/2015		10/8/2014	
Analyte	Exceedance Factor		Exceedance Factor	
	SCO/ LAET	CSL/ 2LAET	SCO/ LAET	CSL/ 2LAET
TPH				
Gasoline-Range Hydrocarbons	4.8		3.4	
Diesel-Range Hydrocarbons	2.7		3.3	
Motor Oil-Range Hydrocarbons	7.0		8.0	

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 O-9. Solids Sample Results - PCB Congeners
South Park Marina

Location ID	SP-CB-09		SP-OWS-01	
Collection Date	**10/8/2014**		**10/8/2014**	
Analyte	**Result**		**Result**	
Total PCB Congeners (ng/kg)[a]	896,000	J	3,960,000	J
Total Monochlorobiphenyl (ng/kg)[a]	< 1,010	U	< 1,050	U
PCB-1	< 979	U	< 1,050	U
PCB-2	< 1,010	U	< 986	U
PCB-3	< 843	U	< 819	U
Total Dichlorobiphenyl (ng/kg)[a]	5,210	J	9,620	J
PCB-4/10	< 4,250	U	< 3,450	U
PCB-5/8	< 2,020	U*	5,380	
PCB-6	< 3,170	U	< 2,690	U
PCB-7/9	< 3,420	U	< 2,900	U
PCB-11	5,210		< 5,590	U*
PCB-12/13	< 3,270	U	< 3,020	U
PCB-14	< 3,510	U	< 3,250	U
PCB-15	< 2,920	U	4,240	
Total Trichlorobiphenyl (ng/kg)[a]	15,000	J	123,000	J
PCB-16/32	2,230	J	12,600	
PCB-17	< 981	U	5,970	
PCB-18	3,290		21,000	
PCB-19	< 1,190	U	1,760	
PCB-20/21/33	1,860	J	15,100	
PCB-22	1,460		9,700	
PCB-23	< 595	U	< 715	U
PCB-24/27	< 761	U	1,440	J
PCB-25	< 603	U	1,210	
PCB-26	< 630	U	3,890	
PCB-28	1,810		15,600	
PCB-29	< 704	U	< 847	U
PCB-30	< 726	U	< 460	U
PCB-31	2,360		22,600	
PCB-34	< 669	U	< 805	U
PCB-35	< 860	U	1,400	
PCB-36	< 926	U	< 868	U
PCB-37	1,940		11,200	
PCB-38	< 883	U	< 826	U
PCB-39	< 950	U	< 889	U
Total Tetrachlorobiphenyl (ng/kg)[a]	44,000	J	604,000	J
PCB-40	< 1,680	U	11,400	
PCB-41/64/71/72	5,280		50,100	
PCB-42/59	< 1,030	U	14,800	
PCB-43/49	4,880		42,600	
PCB-44	< 5,480	U*	66,400	
PCB-45	< 1,630	U	6,420	
PCB-46	< 1,670	U	3,330	
PCB-47	< 1,110	U	10,600	
PCB-48/75	< 959	U	9,580	
PCB-50	< 1,270	U	< 361	U
PCB-51	< 1,420	U	2,070	
PCB-52/69	9,730		81,400	
PCB-53	< 1,320	U	5,890	
PCB-54	< 1,010	U	< 289	U
PCB-55	< 855	U	1,860	
PCB-56/60	3,710		54,100	

Table O-9. Solids Sample Results - PCB Congeners
South Park Marina

Location ID	SP-CB-09		SP-OWS-01	
Collection Date	10/8/2014		10/8/2014	
Analyte	Result		Result	
PCB-57	< 1,080	U	< 1,040	U
PCB-58	< 1,140	U	< 1,100	U
PCB-61/70	10,800		124,000	
PCB-62	< 964	U	< 978	U
PCB-63	< 1,110	U	2,920	
PCB-65	< 961	U	< 975	U
PCB-67	< 957	U	1,350	
PCB-68	< 874	U	< 887	U
PCB-73	< 1,040	U	< 963	U
PCB-74	2,470		30,400	
PCB-76/66	4,880		71,200	
PCB-77	2,220		11,700	
PCB-78	< 954	U	< 847	U
PCB-79	< 825	U	2,330	
PCB-80	< 747	U	< 841	U
PCB-81	< 911	U	< 702	U*
Total Pentachlorobiphenyl (ng/kg)[a]	171,000	J	1,230,000	J
PCB-82	4,430		26,900	
PCB-83	< 1,460	U	< 502	U
PCB-84/92	11,400		81,300	
PCB-85/116	3,330		30,900	
PCB-86	< 2,630	U	1,330	
PCB-87/117/125	9,690		71,700	
PCB-88/91	3,230		26,100	
PCB-89	< 1,950	U	2,190	
PCB-90/101	31,400		201,000	
PCB-93	< 2,460	U	< 1,120	U
PCB-94	< 1,960	U	< 1,060	U*
PCB-95/98/102	16,400		156,000	
PCB-96	< 1,480	U	1,280	
PCB-97	7,020		56,800	
PCB-99	7,910		63,600	
PCB-100	< 1,800	U	< 657	U
PCB-103	< 1,770	U	1,030	J
PCB-104	< 1,430	U	< 519	U
PCB-105	12,400		85,500	
PCB-106/118	27,800		169,000	
PCB-107/109	2,090	J	12,300	
PCB-108/112	< 1,730	U	8,840	
PCB-110	31,700		211,000	
PCB-111/115	< 1,360	U	3,910	
PCB-113	< 1,570	U	< 548	U
PCB-114	< 1,190	U	4,700	
PCB-119	< 1,450	U	3,230	
PCB-120	< 1,320	U	< 538	U*
PCB-121	< 1,280	U	< 587	U
PCB-122	< 1,390	U	< 2,450	U*
PCB-123	< 1,670	U	3,240	
PCB-124	1,700		7,930	
PCB-126	< 1,490	U	2,190	
PCB-127	< 1,060	U	< 1,140	U

Table O-9. Solids Sample Results - PCB Congeners
South Park Marina

Location ID	SP-CB-09	SP-OWS-01
Collection Date	10/8/2014	10/8/2014
Analyte	Result	Result
Total Hexachlorobiphenyl (ng/kg)[a]	325,000 J	1,110,000 J
PCB-128/162	7,890	36,800
PCB-129	< 3,950 U*	13,600
PCB-130	5,280	16,500
PCB-131	< 781 U	< 985 U
PCB-132/161	18,000	59,500
PCB-133/142	2,600	7,380
PCB-134/143	3,360	12,800
PCB-135	9,690	28,300
PCB-136	6,700	27,700
PCB-137	2,810	12,500
PCB-138/163/164	72,400	264,000
PCB-139/149	63,200	208,000
PCB-140	< 1,720 U	1,710
PCB-141	19,200	57,400
PCB-144	4,720	< 11,900 U*
PCB-145	< 1,030 U	< 160 U*
PCB-146/165	10,700	27,800
PCB-147	< 1,510 U	3,920
PCB-148	< 1,670 U	< 935 U
PCB-150	< 1,240 U	< 697 U
PCB-151	17,700	56,000
PCB-152	< 1,110 U	< 316 U*
PCB-153	65,400	206,000
PCB-154	< 1,450 U	1,990
PCB-155	< 1,110 U	< 625 U
PCB-156	6,100	24,700
PCB-157	1,500	5,330
PCB-158/160	8,030	32,000
PCB-159	< 504 U	< 812 U
PCB-166	< 473 U	< 757 U
PCB-167	< 2,980 U*	8,960
PCB-168	< 490 U	< 618 U
PCB-169	< 583 U	< 927 U
Total Heptachlorobiphenyl (ng/kg)[a]	267,000 J	674,000 J
PCB-170	27,800	73,600
PCB-171	6,070	18,300
PCB-172	5,560	10,700
PCB-173	< 1,050 U	2,180
PCB-174	34,300	88,700
PCB-175	1,370	3,400
PCB-176	3,410	9,940
PCB-177	19,700	47,900
PCB-178	7,350	16,600
PCB-179	12,800	37,900
PCB-180	83,600	203,000
PCB-181	< 840 U	< 624 U
PCB-182/187	35,200	87,900
PCB-183	16,200	40,900
PCB-184	< 398 U	< 383 U
PCB-185	2,830	7,860
PCB-186	< 447 U	< 430 U

Table O-9. Solids Sample Results - PCB Congeners
South Park Marina

Location ID	SP-CB-09		SP-OWS-01	
Collection Date	**10/8/2014**		**10/8/2014**	
Analyte	**Result**		**Result**	
PCB-188	< 411	U	< 395	U
PCB-189	1,300		< 2,580	U*
PCB-190	5,730		15,200	
PCB-191	< 1,730	U*	< 2,890	U*
PCB-192	< 667	U	< 494	U
PCB-193	4,210		9,470	
Total Octachlorobiphenyl (ng/kg)[a]	63,300		193,000	
PCB-194	16,200		46,000	
PCB-195	6,390		17,700	
PCB-196/203	17,700		54,200	
PCB-197	< 823	U	1,820	
PCB-198	< 1,170	U	1,720	
PCB-199	16,300		49,700	
PCB-200	2,260		5,950	
PCB-201	1,580		6,120	
PCB-202	2,850		8,460	
PCB-204	< 773	U	< 712	U
PCB-205	< 1,670	U	1,710	
Total Nonachlorobiphenyl (ng/kg)[a]	5,460	J	11,600	J
PCB-206	5,460		11,600	
PCB-207	< 877	U	< 1,460	U*
PCB-208	< 851	U*	< 2,470	U*
Decachlorobiphenyl (ng/kg)	< 1,920	U	3,350	
PCB-209	< 1,920	U	3,350	
PCB TEQ, nd SDL*0	1.70	J	230	J
PCB TEQ, nd SDL*0.5	85.2	J	240	J
PCB TEQ, nd SDL*1	170	J	260	J

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 O-1
Inspection Photographic Log

Conveyance Structure Information	
Structure Identification Number: SP-OWS-01	**N↙** 
Structure Type: Oil Water Separator	
General Location: Southeast portion of facility	
Characteristics: 3’ of standing water, 6” of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Wood manhole cover	
Volume Gauge: --	
Sample ID: SP-OWS-01-20141008-S SP-OWS-01-20141008-W	
Drainage Information:	
The OWS is located in the southeast area of South Park Marina. The OWS receives stormwater from an area that drains the parking lot in the southern portion of the site. Stormwater is conveyed from the OWS to a StormwateRx treatment system. The treated stormwater is then conveyed to an outfall (Outfall 2114) that discharges to the LDW.	**N↑** 

Conveyance Structure Information	
Structure Identification Number: SP-CB-09	**N↖** 
Structure Type: Catch Basin	
General Location: Northwest portion of facility	
Characteristics: Catch Basin Elbow; 2'4" deep, 1'2" of water, and 7" of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Wooden Catch Basin Grate	
Volume Gauge: --	
Sample ID: SP-CB-09-20141008-S	
Drainage Information:	
Catch Basin CB9 is located in the northwest portion of South Park Marina and receives stormwater from the boat storage area. There is potential for roof drainage to CB9 from boat storage on north portion of site.	**N↖** 

Attachment O-2
Field Documentation

Location South Park Marina Date 10/08/14

Project / Client NPDES/Ecology

0650 M. Ivancevich departs home & stops to pick up ice

0750 M. Ivancevich arrives at storage unit & loads sampling equipment

0825 M. Ivancevich departs field office; stops @ Tully's to pick up C. Nancarrow

0845 Leidos arrives at South Park Marina, parks around corner to wait for Ecology.

0910 Ecology onsite @ South Park Marina, Mahbub Alam / ECY already onsite.

0925 Steve Brown w/ South Park Marina explains the site & procedures. Pressure washing a closed loop system - solids filtered out & disposed of separately.

0935 Begin site walk. All CBs have particulate screens - particulates disposed of with sediments from pressure washing. CB 3 closed. CB 1 → CB2 → CB4 → OWS → stormwater Rx treatment. Maintenance to treatment system a week & a half ago - all media replaced. Has an overflow for heavy

Location South Park Marina Date 10/08/14

Project / Client NPDES/Ecology

rain events. Treated water then goes to outfall to LDW. CB 2 capped during pressure washing.*

1000 C. Nancarrow conducts H&S meeting w/ M. Alam & M. Ivancevich.

1003 C. Nancarrow gives S. Brown a copy of the SAP & reviews the analytical / lab information.

* cont'd: CBs in N portion of site have wood covers. Appears stormwater would be sheetflow. Water appeared to be ~ 3 inches below CB cover.

1015 Leidos & Ecology site walk dock to verify outfall locations. Found an outfall that appears to drain street flow not in outfall inventory / or outfall inventory has wrong location. Outfall currently on map N of outfall 2214 not observed.

1055 @ CB2 - no connection to CB3. NE & SE corners have enough solids to collect. Water clear. Inlet pipe

Location South Park Marina
Project / Client NPDES/Ecology Date 10/08/14

appears to be coming from NE. Outlet to CB 4. Inlet ~ 4 inches.

1112 @ CB 4 - thin layer of sediment at bottom. Appears to have more oil than CB 2. Inlet pipe from CB 2 ~6 inch. Outlet pipe to OWS. Water mostly clean. CB4 a better location than CB 2.

1117 @ OWS - inlet pipe pretty high up. Outlet pipe appears to go to LDW. Good amount of sediment, approx 6 inches. Water fairly clear. Approx. 3 ft of water. A little bit of a sheen. Doesn't appear the OWS is still functioning. Collect solids and water.

1147 @ MH (MH-5) at N side of property. 4" pipe at top coming from NW. Sheen on water. Approx 1 ft water. Approx 3 inches sediment. No inlet, outlet appears to only collect surface flow.

1220 @ CB in N portion of yard, in boat storage area. OWS pipe. Sediment depth 1'2", sediment depth 7".

1250 Lunch break

Location South Park Marina Date 10/08/14
Project / Client NPDES/Ecology

1305 Began setup @ OWS for sampling water & solids.
Water sample ID: SP-OWS-01-20141008-W

1403 Began collecting water sample. Bucket too large. Discussed sampling issue w/ Manbub/ECY. Assembled a sampling device w/ pitcher - composited water in bucket. Actually collected samples @ 1453.

1533 Began collecting solids @ OWS.
Sample ID: SP-OWS-01-20141008-S

1617 @ CB 9 to collect solids sample
Sample ID: SP-CB-09-20141008-S

1628 Began sampling @ CB 9

1658 Finished sampling

1708 GPS previously unknown outfall (UNKOF01). C Nancarrow checking in with S. Brown to review the NPDES permit for analytical analysis methods for the select group of analytes that South Park Marina requested split water samples for. S. Park Marina will

Location South Park Marina Date 10/08/14

Project / Client NPDES/Ecology

only be analyzing split water samples for analytes listed in their NPDES permit. **

1725 Leidos offsite, mobbed to field office.

** S. Brown informed C. Nancarrow that South Park Marina decided not to run split samples.

1810 M. Ivancevich at field office prepping Vista samples for shipment.

1853 M. Ivancevich secured field office, en route to FedEx to ship Vista samples

1857 M. Ivancevich delivered Vista samples in a secure cooler to FedEx for shipment

1900 All personnel offsite.

MM 10/08/14

Location Field office Date 10/09/14

Project / Client NPDES/Ecology

0720 M. Ivancevich arrives at field office and prepares Test America cooler for pick up, adding more ice and preparing COC.

0845 Straightened up field office; finished unloading supplies; labeled IDW.

0900 Spoke to Kris Allen/TA and scheduled Paco to pick up cooler from Bothell this afternoon.

0930 M. Ivancevich completed activities at field office & secured location. En route to GeoTech to return water quality meter for calibration.

1030 M. Ivancevich arrives at Bothell office.

MM 10/09/14

Sediment Collection Form

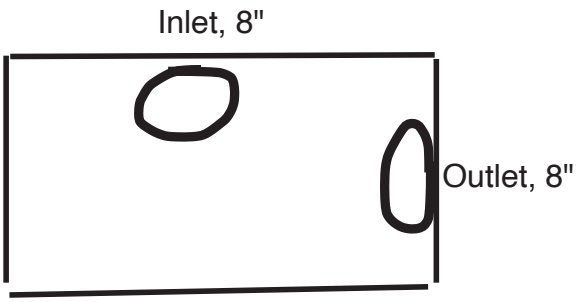
Project: NPDES Sampling Support **Location ID:** CB4

Facility Name: South Park Marina **Sample ID:** NA

Sampled By: NA **Date:** 10 / 08 / 2014 **Time:** 1130

Structure Type:	**Dimensions:**	**Standing Water:**	**Flow:**
CB	W 18 L 24	Y / N	Y / N

Conveyance System Sketch ↑N



Depth to Bottom:	**Depth to Water:**	**Depth of Sediment:**	**Sampled: Y / N**
_____ft	_____ft	_____in	**Discrete / Composite** *(circle one)*

Sediment type:	***Sediment color:***	***Sediment Odor:***	***Comments:***
Cobble	Drab olive	None	
Gravel	Brown	Slight	
Sand C M F	Brown surface	Moderate	
Silt/clay	Gray	Strong	
Organic matter	Black	Overwhelming	Photo ID(s):
Debris	Tan	H_2S	_____
		Petroleum	GPS ID:
			_____

NOTES: CB has particulate screen

Recorded By/Date: MAI 10/8/2014 **Reviewed By/Date:** CHW 5/3/15

Version2 -030311

Sediment Collection Form

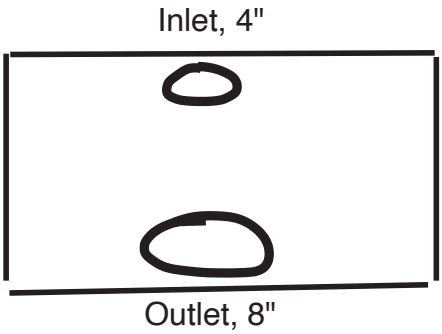
Project: NPDES Sampling Support **Location ID:** CB2

Facility Name: South Park Marina **Sample ID:** NA

Sampled By: NA **Date:** 10 / 08 / 2014 **Time:** 1140

Structure Type:	**Dimensions:**	**Standing Water:**	**Flow:**
CB	W 18 L 24	Y / N	Y / N

Conveyance System Sketch ↑N



Depth to Bottom:	**Depth to Water:**	**Depth of Sediment:**	**Sampled: Y / N**
_____ft	_____ft	_____in	**Discrete / Composite** *(circle one)*

Sediment type:	***Sediment color:***	***Sediment Odor:***	***Comments:***
Cobble	Drab olive	None	
Gravel	Brown	Slight	
Sand C M F	Brown surface	Moderate	
Silt/clay	Gray	Strong	
Organic matter	Black	Overwhelming	Photo ID(s):
Debris	Tan	H_2S	_____
		Petroleum	GPS ID:
			_____

NOTES: CB has particulate screen

Recorded By/Date: MAI 10/8/2014 **Reviewed By/Date:** CHW 5/3/15

Version2 -030311

Sediment Collection Form

Project: NPDES Sampling Support **Location ID:** OWS

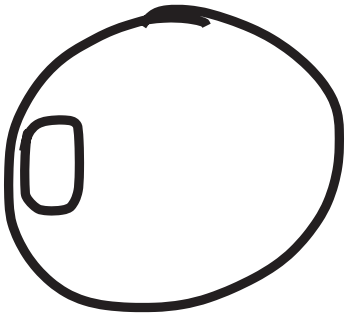
Facility Name: South Park Marina **Sample ID:** SP-OWS-01-20141008-S

Sampled By: MI & CN **Date:** 10 / 08 / 2014 **Time:** 1533

Structure Type:	**Dimensions:**	**Standing Water:**	**Flow:**
OWS	W_____L_____	**Y** / N	**Y** / N

Conveyance System Sketch ↑N

8" inlet pipe approx half way down



Depth to Bottom:	**Depth to Water:**	**Depth of Sediment:**	**Sampled:** Y / N
_____ft	_____ft	6" in	**Discrete / Composite** *(circle one)*

Sediment type:	***Sediment color:***	***Sediment Odor:***	***Comments:***
Cobble	Drab olive	None	Solvent odor
Gravel	Brown	Slight	
Sand C M F	Brown surface	Moderate	
Silt/clay	Gray	Strong	
Organic matter	Black	Overwhelming	Photo ID(s): _____
Debris	Tan	H_2S	
		Petroleum	GPS ID: _____

NOTES: Approx 3 feet of water

Recorded By/Date: MAI, 10/08/14 **Reviewed By/Date:** CHW 5/3/15

Version2 -030311

Sediment Collection Form

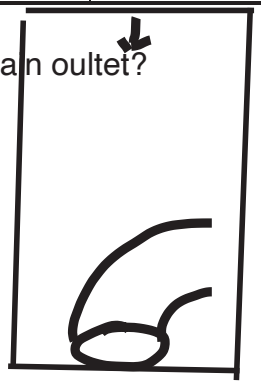
Project: NPDES Sampling Support **Location ID:** CB9

Facility Name: South Park Marina **Sample ID:** SP-CB-09-20141008-S

Sampled By: MI & CN **Date:** 10 / 08 / 2014 **Time:** 1628

Structure Type:	**Dimensions:**	**Standing Water:**	**Flow**
CB	W 3' L 4'6"	Y / N	Y / N

Conveyance System Sketch



Depth to Bottom:	**Depth to Water:**	**Depth of Sediment:**	**Sampled** Y / N **Discrete / Composite** *(circle one)*
2'4" ft	5" ft	7" in	

Sediment type:	***Sediment color:***	***Sediment Odor:***	***Comments:***
Cobble Gravel Sand C M F Silt/clay Organic matter Debris	Drab olive Brown Brown surface Gray Black Tan	None Slight Moderate Strong Overwhelming H_2S Petroleum	Photo ID(s): _____ GPS ID: 102

NOTES: No particulate screen

Recorded By/Date: MAI, 10/08/14 **Reviewed By/Date:** CHW 5/3/15

Version2 -030311

leidos

SURFACE WATER SAMPLING FORM

Client: Department of Ecology **Site:** South Park Marina **Job #:** 309382

Sample ID	TIME	DATE	Flow	pH	Electrical Conductivity	Temp (°C)	Total Dissolved Solids	Dissolved Oxygen	Turbidity (NTU)	Oil & Grease (visible?)	COMMENTS
SP-OWS-01-20141008-W	1527	10/08/14	None	6.42	0.105 [x] S/cm	19.05	--	9.92	14.1	No	ORP - 224 mV
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						
					S/cm						

Sample Date:__10_/__8__/2014

Attachment O-3
Chain of Custody Forms

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☑ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Christine Nancarrow	Site Contact: Melissa Ivancevich	Date: 10/09/14	COC No:
Leidos	Tel/Fax: 206.300.2144	Lab Contact: Kris Allen	Carrier: Courier	1 of 2 COCs
18912 N Creek Pkwy, Ste. 101	Analysis Turnaround Time			Sampler: MJ & CN
Bothell, WA 98011	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
425.398.2101 Phone	TAT if different from Below 3 Weeks			Walk-in Client:
425.485.5566 FAX	☐ 2 weeks			Lab Sampling:
Project Name: NPDES Sampling Support	☐ 1 week			Job / SDG No.:
Site: Lower Duwamish Waterway	☐ 2 days			
P O # P010163427	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	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)	Sample Specific Notes:
SP-OWS-01-20141008-S	10/08/14	1533	C	Sed	6	N		V	V	V	V	V	1	2	1	1	V=1 bottle for all
SP-CB-09-20141008-S	10/08/14	1628	C	Sed	6	N		V	V	V	V	V	1	2	1	1	analyses

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 242410 | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Melissa Ivancevich	Leidos	10/09/14 8:45			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☑ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Christine Nancarrow	Site Contact: Melissa Ivancevich	Date: 10/09/14	COC No:
Leidos	Tel/Fax: 206.300.2144	Lab Contact: Kris Allen	Carrier: Courier	2 of 2 COCs
18912 N Creek Pkwy, Ste. 101	Analysis Turnaround Time			Sampler:
Bothell, WA 98011	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
425.398.2101 Phone	TAT if different from Below 3 Weeks			Walk-in Client:
425.485.5566 FAX	☐ 2 weeks			Lab Sampling:
Project Name: NPDES Sampling Support	☐ 1 week			Job / SDG No.:
Site: Lower Duwamish Waterway	☐ 2 days			
P O # P010163427	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	SVOCs (Method 8270D)	Metals (Method 200.8/7470A)	pH (Method SM4500H)	Spec Cond (Method 120.1)	Alk/Bicarb/Carb (Method SM2320)	Anions (Method 300.0/353.2)	TOC (Method SM5310B)	DOC (Method SM5310B)	TSS (Method 2540D)	Oil & Grease (Method [illegible])	Turbidity (Method 2130)	Sample Specific Notes:
SP-OWS-01-20141008-W	10/08/14	1453	C	W	13	N		2	2		3			1	1	2	1	1	ONLY RUN ANALYSES ON CONTAINERS WITH LEIDOS LOGO. DISPOSE OF SAMPLES WITHOUT LEIDOS LOGO (5 CONTAINERS)
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other MeOH									4					3					

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.: 242410	Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____			
Relinquished by: Melissa Ivancevich	Company: Leidos	Date/Time: 10/09/14 8:45	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Vista

CHAIN OF CUSTODY

FOR LABORATORY USE ONLY
Laboratory Project ID:____________ Storage Secured Yes ☐ No ☐
Storage ID____________ Temp ________°C

TAT: (Check One):
Standard: ○ 21 Days
Rush (surcharge may apply):
○ 14 days ○ 7 days Specify:___

Project I.D.: NPDES Sampling Support P.O.# ~~PO10163427~~ MAI [illegible] 14 P010163569 Sampler: M. Wancewicz, C. Naiman (Name)

Invoice to: Name	Company	Address	City	State	Zip	Ph#	Fax#
Christine Naiman	Leidos	18912 N Creek Pkwy, Suite 101	Bothell	WA	98011	425.398.2101	425.485.5566

Relinquished by: (Signature and Printed Name) Melissa Smith Date: 10/08/14 Time: 1840 Received by: (Signature and Printed Name) Date: Time:

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

See "Sample Log-in Checklist" for additional sample information

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

ATTN: Sample Receiving

Method of Shipment: FedEx

Tracking No.: 874101313041 8

Add Analysis(es) Requested

Sample ID	Date	Time	Location/Sample Description	Container(s) Quantity	Container(s) Type	Matrix	EPA1613 2378-TCDD	EPA1613 2378-TCDD/TCDF	EPA1613 PCDD/PCDF	EPA8290 2378-TCDD	EPA8290 2378-TCDD/TCDF	EPA8290 PCDD/PCDF	EPA8280 2378-TCDD	EPA8280 2378-TCDD/TCDF	EPA8280 PCDD/PCDF	EPA1668 TOTALS	EPA1668 COPLANAR PCB's	EPA1668 209 CONGENERS	EPA1614 PBDE	CARB429 PAH	WHO-29
SP-OWS-01-20141008-N	10/08/14	1453	S Park Marina	4	A	AQ			24									24			
SP-OWS-01-20141008-S	10/08/14	1523	S Park Marina	1	G	S			1✓									1✓			
SP-CB-09-20141008-S	10/08/14	1628	S Park Marina	1	G	S			1✓									1✓			

Special Instructions/Comments:

SEND DOCUMENTATION AND RESULTS TO:

Name: Christine Naiman
Company: Leidos
Address: 18912 N. Creek Pkwy, Ste 101
City: Bothell State: WA Zip: 98011
Phone: 425.398.2101 Fax: 425.485.5566
Email: [illegible]naimanc@leidos.com

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

*Bottle Preservative Type: T = Thiosulfate,
O = Other________

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________

WHITE - ORIGINAL YELLOW - ARCHIVE PINK - COPY

Attachment O-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: 580-45834-1
Client Project/Site: NPDES Sampling Support
Revision: 1

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

Attn: Christine Nancarrow

Kristine D. Allen

Authorized for release by:
12/22/2014 5:29:56 PM

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

Table of Contents

Case Narrative

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

TestAmerica Job ID: 580-45834-1

Job ID: 580-45834-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-45834-1

Comments
No additional comments.

Receipt
The sample was received on 10/9/2014 5:00 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2° C.

Except:

The reference method for Oil & Grease requires samples to be preserved to a pH of 2 or less. The following sample was received unpreserved: SP-OWS-01-20141008-W (580-45834-1).

One of the 1L ambers marked for 8270 analysis was preserved in Sample Receiving on 10/10/2014 at 0930 using 3 ml of HCl with the lot#53077.

GC/MS Semi VOA
Method(s) 8270D: The following analytes recovered outside control limits for the LCS and/or LCSD associated with batch 172523: Indeno(1,2,3-cd)pyrene (low in both LCS and LCSD), Benzo(g,h,i)perylene (low in both), Benzo(k)fluoranthene (high in LCS), Dibenz(a,h)anthracene (low in LCSD). This is not indicative of a systematic control problem because these were random marginal exceedances. 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 172523 recovered outside control limits for 4-Chloroaniline. The individual recoveries are within the acceptance criteria.

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
Method(s) 1664A: Analysis for Hexane Extractable Material (HEM) was performed for the following samples: SP-OWS-01-20141008-W (580-45834-1). Since the HEM results was below the reporting limit (RL), the results for Silica Gel Treated - Hexane Extractable Material (SGT-HEM) was reported as a non-detect. All HEM quality control criteria were met.

Method(s) 300.0: The following sample(s) was analyzed outside of holding time: SP-OWS-01-20141008-W (580-45834-1).

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

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

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the 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.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
H	Sample was prepped or analyzed beyond the specified holding time

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

TestAmerica Job ID: 580-45834-1

Client Sample ID: SP-OWS-01-20141008-W
Date Collected: 10/08/14 14:53
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45834-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.57	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Bis(2-chloroethyl)ether	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
2-Chlorophenol	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
1,3-Dichlorobenzene	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
1,4-Dichlorobenzene	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Benzyl alcohol	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
1,2-Dichlorobenzene	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
2-Methylphenol	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
2,2'-oxybis[1-chloropropane]	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
3 & 4 Methylphenol	**3.4**		0.76	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
N-Nitrosodi-n-propylamine	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Hexachloroethane	ND		0.57	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Nitrobenzene	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Isophorone	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
2-Nitrophenol	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
2,4-Dimethylphenol	ND		1.9	0.28	ug/L		10/13/14 13:33	10/16/14 15:42	1
Benzoic acid	**3.6**		2.8	0.57	ug/L		10/13/14 13:33	10/16/14 15:42	1
Bis(2-chloroethoxy)methane	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
2,4-Dichlorophenol	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
1,2,4-Trichlorobenzene	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Naphthalene	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
4-Chloroaniline	ND	*	0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Hexachlorobutadiene	ND		0.57	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
4-Chloro-3-methylphenol	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
2-Methylnaphthalene	**0.042**	**J**	0.19	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
1-Methylnaphthalene	ND		0.057	0.028	ug/L		10/13/14 13:33	10/16/14 15:42	1
Hexachlorocyclopentadiene	ND		1.9	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
2,4,6-Trichlorophenol	ND		0.57	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
2,4,5-Trichlorophenol	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
2-Chloronaphthalene	ND		0.057	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
2-Nitroaniline	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Dimethyl phthalate	**0.31**	**J**	0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Acenaphthylene	ND		0.076	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
2,6-Dinitrotoluene	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
3-Nitroaniline	ND		0.38	0.11	ug/L		10/13/14 13:33	10/16/14 15:42	1
Acenaphthene	ND		0.095	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
2,4-Dinitrophenol	ND		4.7	0.95	ug/L		10/13/14 13:33	10/16/14 15:42	1
4-Nitrophenol	ND		2.8	0.95	ug/L		10/13/14 13:33	10/16/14 15:42	1
Dibenzofuran	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
2,4-Dinitrotoluene	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Diethyl phthalate	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
4-Chlorophenyl phenyl ether	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Fluorene	**0.033**	**J**	0.057	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
4-Nitroaniline	ND		0.57	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
4,6-Dinitro-2-methylphenol	ND		3.8	0.95	ug/L		10/13/14 13:33	10/16/14 15:42	1
N-Nitrosodiphenylamine	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
4-Bromophenyl phenyl ether	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Hexachlorobenzene	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Pentachlorophenol	ND		0.66	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1

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

TestAmerica Job ID: 580-45834-1

Client Sample ID: SP-OWS-01-20141008-W
Date Collected: 10/08/14 14:53
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45834-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	**0.11**		0.076	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
Anthracene	ND		0.038	0.0095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Carbazole	ND		0.38	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Di-n-butyl phthalate	**0.15**	**J**	0.38	0.12	ug/L		10/13/14 13:33	10/16/14 15:42	1
Fluoranthene	**0.10**		0.047	0.012	ug/L		10/13/14 13:33	10/16/14 15:42	1
Pyrene	**0.061**		0.057	0.012	ug/L		10/13/14 13:33	10/16/14 15:42	1
Butyl benzyl phthalate	**0.25**	**J**	0.57	0.19	ug/L		10/13/14 13:33	10/16/14 15:42	1
3,3'-Dichlorobenzidine	ND		1.9	0.095	ug/L		10/13/14 13:33	10/16/14 15:42	1
Benzo[a]anthracene	ND		0.057	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
Chrysene	**0.039**		0.038	0.012	ug/L		10/13/14 13:33	10/16/14 15:42	1
Bis(2-ethylhexyl) phthalate	ND		2.8	1.1	ug/L		10/13/14 13:33	10/16/14 15:42	1
Di-n-octyl phthalate	ND		0.38	0.17	ug/L		10/13/14 13:33	10/16/14 15:42	1
Benzo[b]fluoranthene	**0.033**	**J**	0.076	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
Benzo[k]fluoranthene	ND	*	0.057	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
Benzo[a]pyrene	ND		0.038	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
Indeno[1,2,3-cd]pyrene	ND	*	0.057	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
Dibenz(a,h)anthracene	ND	*	0.057	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
Benzo[g,h,i]perylene	ND	*	0.057	0.019	ug/L		10/13/14 13:33	10/16/14 15:42	1
N-Nitrosodimethylamine	ND		1.9	0.19	ug/L		10/13/14 13:33	10/16/14 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*71*		*30 - 134*	*10/13/14 13:33*	*10/16/14 15:42*	*1*
Phenol-d5	*78*		*52 - 120*	*10/13/14 13:33*	*10/16/14 15:42*	*1*
2,4,6-Tribromophenol	*92*		*44 - 125*	*10/13/14 13:33*	*10/16/14 15:42*	*1*
Nitrobenzene-d5	*71*		*59 - 120*	*10/13/14 13:33*	*10/16/14 15:42*	*1*
2-Fluorobiphenyl	*71*		*50 - 120*	*10/13/14 13:33*	*10/16/14 15:42*	*1*
Terphenyl-d14	*93*		*64 - 150*	*10/13/14 13:33*	*10/16/14 15:42*	*1*

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0020**		0.0010	0.00075	mg/L		10/29/14 10:36	10/30/14 11:01	1
Antimony	**0.00031**	**J**	0.00040	0.000080	mg/L		10/29/14 10:36	10/30/14 11:01	1
Beryllium	ND		0.00040	0.00010	mg/L		10/29/14 10:36	10/30/14 11:01	1
Cadmium	**0.00027**	**J**	0.00040	0.000028	mg/L		10/29/14 10:36	10/30/14 11:01	1
Chromium	**0.00052**		0.00040	0.00027	mg/L		10/29/14 10:36	10/30/14 11:01	1
Copper	**0.088**		0.0010	0.00011	mg/L		10/29/14 10:36	10/30/14 11:01	1
Lead	**0.0036**		0.00040	0.000034	mg/L		10/29/14 10:36	10/30/14 11:01	1
Nickel	**0.0013**	**J**	0.0030	0.00040	mg/L		10/29/14 10:36	10/30/14 11:01	1
Selenium	ND		0.0010	0.00071	mg/L		10/29/14 10:36	10/30/14 11:01	1
Silver	ND		0.00040	0.000030	mg/L		10/29/14 10:36	10/30/14 11:01	1
Thallium	ND		0.0010	0.00028	mg/L		10/29/14 10:36	10/30/14 11:01	1
Zinc	**0.092**		0.0040	0.0019	mg/L		10/29/14 10:36	10/30/14 11:01	1

Method: 245.1 - Mercury (CVAA)

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

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**81**		10	10	umhos/cm			10/10/14 17:50	1

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

TestAmerica Job ID: 580-45834-1

Client Sample ID: SP-OWS-01-20141008-W
Date Collected: 10/08/14 14:53
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45834-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		4.7	4.7	mg/L		10/20/14 10:03	10/20/14 10:03	1
SGT-HEM	ND		4.7	4.7	mg/L		10/20/14 10:03	10/20/14 10:03	1
HEM Polar (Oil and Grease - Polar)	ND		4.7	4.7	mg/L		10/20/14 10:03	10/20/14 10:03	1
Alkalinity	**25**		5.0	5.0	mg/L			10/13/14 10:35	1
Bicarbonate Alkalinity as CaCO3	**25**		5.0	5.0	mg/L			10/13/14 10:35	1
Carbonate Alkalinity as CaCO3	ND		5.0	5.0	mg/L			10/13/14 10:35	1
Chloride	**5.1**		0.90	0.30	mg/L			10/10/14 18:12	1
Nitrate as N	ND	H	0.90	0.20	mg/L			10/10/14 18:12	1
Sulfate	**2.0**		1.2	0.40	mg/L			10/10/14 18:12	1
Turbidity	**1.5**		1.0	1.0	NTU			10/09/14 19:02	1
Total Suspended Solids	ND		3.3	3.3	mg/L			10/10/14 15:04	1
pH	**7.25**	**HF**	0.0100	0.0100	SU			10/09/14 19:17	1
Total Organic Carbon	**1.7**		1.0	0.33	mg/L			10/16/14 12:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**2.1**		1.0	0.33	mg/L			10/16/14 09:28	1

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

TestAmerica Job ID: 580-45834-1

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

Lab Sample ID: MB 580-172523/1-A
Matrix: Water
Analysis Batch: 172732

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172523

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.60	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Bis(2-chloroethyl)ether	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
2-Chlorophenol	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
1,3-Dichlorobenzene	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
1,4-Dichlorobenzene	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Benzyl alcohol	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
1,2-Dichlorobenzene	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
2-Methylphenol	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
2,2'-oxybis[1-chloropropane]	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
3 & 4 Methylphenol	ND		0.80	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
N-Nitrosodi-n-propylamine	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Hexachloroethane	ND		0.60	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Nitrobenzene	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Isophorone	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
2-Nitrophenol	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
2,4-Dimethylphenol	ND		2.0	0.30	ug/L		10/13/14 13:33	10/15/14 14:46	1
Benzoic acid	ND		3.0	0.60	ug/L		10/13/14 13:33	10/15/14 14:46	1
Bis(2-chloroethoxy)methane	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
2,4-Dichlorophenol	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
1,2,4-Trichlorobenzene	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Naphthalene	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
4-Chloroaniline	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Hexachlorobutadiene	ND		0.60	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
4-Chloro-3-methylphenol	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
1-Methylnaphthalene	ND		0.060	0.030	ug/L		10/13/14 13:33	10/15/14 14:46	1
Hexachlorocyclopentadiene	ND		2.0	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
2,4,6-Trichlorophenol	ND		0.60	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
2,4,5-Trichlorophenol	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
2-Chloronaphthalene	ND		0.060	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
2-Nitroaniline	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Dimethyl phthalate	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Acenaphthylene	ND		0.080	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
2,6-Dinitrotoluene	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
3-Nitroaniline	ND		0.40	0.12	ug/L		10/13/14 13:33	10/15/14 14:46	1
Acenaphthene	ND		0.10	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
2,4-Dinitrophenol	ND		5.0	1.0	ug/L		10/13/14 13:33	10/15/14 14:46	1
4-Nitrophenol	ND		3.0	1.0	ug/L		10/13/14 13:33	10/15/14 14:46	1
Dibenzofuran	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
2,4-Dinitrotoluene	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Diethyl phthalate	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
4-Chlorophenyl phenyl ether	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Fluorene	ND		0.060	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
4-Nitroaniline	ND		0.60	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
4,6-Dinitro-2-methylphenol	ND		4.0	1.0	ug/L		10/13/14 13:33	10/15/14 14:46	1
N-Nitrosodiphenylamine	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
4-Bromophenyl phenyl ether	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Hexachlorobenzene	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1

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

Lab Sample ID: MB 580-172523/1-A
Matrix: Water
Analysis Batch: 172732

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172523

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.70	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Phenanthrene	ND		0.080	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
Anthracene	ND		0.040	0.010	ug/L		10/13/14 13:33	10/15/14 14:46	1
Carbazole	ND		0.40	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Di-n-butyl phthalate	ND		0.40	0.13	ug/L		10/13/14 13:33	10/15/14 14:46	1
Fluoranthene	ND		0.050	0.013	ug/L		10/13/14 13:33	10/15/14 14:46	1
Pyrene	ND		0.060	0.013	ug/L		10/13/14 13:33	10/15/14 14:46	1
Butyl benzyl phthalate	ND		0.60	0.20	ug/L		10/13/14 13:33	10/15/14 14:46	1
3,3'-Dichlorobenzidine	ND		2.0	0.10	ug/L		10/13/14 13:33	10/15/14 14:46	1
Benzo[a]anthracene	ND		0.060	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
Chrysene	ND		0.040	0.013	ug/L		10/13/14 13:33	10/15/14 14:46	1
Bis(2-ethylhexyl) phthalate	ND		3.0	1.2	ug/L		10/13/14 13:33	10/15/14 14:46	1
Di-n-octyl phthalate	ND		0.40	0.18	ug/L		10/13/14 13:33	10/15/14 14:46	1
Benzo[b]fluoranthene	ND		0.080	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
Benzo[k]fluoranthene	ND		0.060	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
Benzo[a]pyrene	ND		0.040	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
Indeno[1,2,3-cd]pyrene	ND		0.060	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
Dibenz(a,h)anthracene	ND		0.060	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
Benzo[g,h,i]perylene	ND		0.060	0.020	ug/L		10/13/14 13:33	10/15/14 14:46	1
N-Nitrosodimethylamine	ND		2.0	0.20	ug/L		10/13/14 13:33	10/15/14 14:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*74*		*30 - 134*	*10/13/14 13:33*	*10/15/14 14:46*	*1*
Phenol-d5	*81*		*52 - 120*	*10/13/14 13:33*	*10/15/14 14:46*	*1*
2,4,6-Tribromophenol	*92*		*44 - 125*	*10/13/14 13:33*	*10/15/14 14:46*	*1*
Nitrobenzene-d5	*78*		*59 - 120*	*10/13/14 13:33*	*10/15/14 14:46*	*1*
2-Fluorobiphenyl	*80*		*50 - 120*	*10/13/14 13:33*	*10/15/14 14:46*	*1*
Terphenyl-d14	*103*		*64 - 150*	*10/13/14 13:33*	*10/15/14 14:46*	*1*

Lab Sample ID: LCS 580-172523/2-A
Matrix: Water
Analysis Batch: 172732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172523

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	2.00	1.67		ug/L		83	53 - 130
Bis(2-chloroethyl)ether	2.00	1.81		ug/L		90	55 - 125
2-Chlorophenol	2.00	1.75		ug/L		87	57 - 125
1,3-Dichlorobenzene	2.00	1.25		ug/L		63	40 - 125
1,4-Dichlorobenzene	2.00	1.27		ug/L		64	40 - 125
Benzyl alcohol	2.00	1.04		ug/L		52	41 - 144
1,2-Dichlorobenzene	2.00	1.37		ug/L		68	44 - 125
2-Methylphenol	2.00	1.84		ug/L		92	60 - 130
2,2'-oxybis[1-chloropropane]	2.00	1.64		ug/L		82	44 - 130
3 & 4 Methylphenol	2.00	1.74		ug/L		87	60 - 130
N-Nitrosodi-n-propylamine	2.00	1.60		ug/L		80	60 - 120
Hexachloroethane	2.00	1.03		ug/L		52	30 - 125
Nitrobenzene	2.00	1.79		ug/L		90	62 - 125
Isophorone	2.00	1.78		ug/L		89	64 - 125

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

Lab Sample ID: LCS 580-172523/2-A
Matrix: Water
Analysis Batch: 172732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172523

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Nitrophenol	2.00	1.88		ug/L		94	55 - 140
2,4-Dimethylphenol	2.00	1.55	J	ug/L		77	30 - 135
Benzoic acid	4.00	2.74	J	ug/L		68	20 - 144
Bis(2-chloroethoxy)methane	2.00	1.83		ug/L		91	59 - 125
2,4-Dichlorophenol	2.00	1.95		ug/L		98	50 - 140
1,2,4-Trichlorobenzene	2.00	1.43		ug/L		72	40 - 125
Naphthalene	2.00	1.70		ug/L		85	56 - 125
4-Chloroaniline	2.00	0.447		ug/L		22	20 - 150
Hexachlorobutadiene	2.00	1.10		ug/L		55	25 - 125
4-Chloro-3-methylphenol	2.00	2.14		ug/L		107	65 - 145
2-Methylnaphthalene	2.00	1.58		ug/L		79	56 - 125
1-Methylnaphthalene	2.00	1.60		ug/L		80	54 - 125
Hexachlorocyclopentadiene	2.00	0.881	J	ug/L		44	20 - 125
2,4,6-Trichlorophenol	2.00	2.03		ug/L		102	55 - 140
2,4,5-Trichlorophenol	2.00	2.33		ug/L		117	66 - 130
2-Chloronaphthalene	2.00	1.65		ug/L		82	55 - 125
2-Nitroaniline	2.00	2.02		ug/L		101	52 - 140
Dimethyl phthalate	2.00	2.05		ug/L		102	65 - 155
Acenaphthylene	2.00	1.88		ug/L		94	62 - 125
2,6-Dinitrotoluene	2.00	2.09		ug/L		105	67 - 134
3-Nitroaniline	2.00	1.42		ug/L		71	22 - 124
Acenaphthene	2.00	1.72		ug/L		86	63 - 125
2,4-Dinitrophenol	4.00	3.19	J	ug/L		80	24 - 146
4-Nitrophenol	4.00	2.78	J	ug/L		70	35 - 153
Dibenzofuran	2.00	1.81		ug/L		91	60 - 125
2,4-Dinitrotoluene	2.00	2.04		ug/L		102	73 - 126
Diethyl phthalate	2.00	1.88		ug/L		94	60 - 150
4-Chlorophenyl phenyl ether	2.00	1.76		ug/L		88	59 - 125
Fluorene	2.00	1.84		ug/L		92	69 - 125
4-Nitroaniline	2.00	1.75		ug/L		87	49 - 125
4,6-Dinitro-2-methylphenol	4.00	3.06	J	ug/L		77	50 - 136
N-Nitrosodiphenylamine	2.00	1.66		ug/L		83	40 - 135
4-Bromophenyl phenyl ether	2.00	1.88		ug/L		94	62 - 132
Hexachlorobenzene	2.00	1.79		ug/L		89	61 - 125
Pentachlorophenol	4.00	3.91		ug/L		98	20 - 145
Phenanthrene	2.00	1.83		ug/L		91	70 - 125
Anthracene	2.00	1.75		ug/L		87	50 - 125
Carbazole	2.00	1.92		ug/L		96	75 - 142
Di-n-butyl phthalate	2.00	2.11		ug/L		105	55 - 167
Fluoranthene	2.00	1.95		ug/L		98	70 - 145
Pyrene	2.00	1.93		ug/L		97	70 - 133
Butyl benzyl phthalate	2.00	2.08		ug/L		104	60 - 167
3,3'-Dichlorobenzidine	4.00	2.76		ug/L		69	20 - 175
Benzo[a]anthracene	2.00	1.84		ug/L		92	65 - 125
Chrysene	2.00	1.85		ug/L		93	70 - 125
Bis(2-ethylhexyl) phthalate	2.00	2.22	J	ug/L		111	70 - 185
Di-n-octyl phthalate	2.00	2.51		ug/L		125	55 - 150
Benzo[b]fluoranthene	2.00	2.27		ug/L		114	70 - 129

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

Lab Sample ID: LCS 580-172523/2-A
Matrix: Water
Analysis Batch: 172732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172523

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[k]fluoranthene	2.00	2.49	*	ug/L		124	70 - 123
Benzo[a]pyrene	2.00	1.92		ug/L		96	45 - 125
Indeno[1,2,3-cd]pyrene	2.00	1.35	*	ug/L		67	70 - 136
Dibenz(a,h)anthracene	2.00	1.42		ug/L		71	69 - 154
Benzo[g,h,i]perylene	2.00	1.08	*	ug/L		54	65 - 153
N-Nitrosodimethylamine	2.00	1.85	J	ug/L		92	33 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*76*		*30 - 134*
Phenol-d5	*85*		*52 - 120*
2,4,6-Tribromophenol	*103*		*44 - 125*
Nitrobenzene-d5	*85*		*59 - 120*
2-Fluorobiphenyl	*74*		*50 - 120*
Terphenyl-d14	*102*		*64 - 150*

Lab Sample ID: LCSD 580-172523/3-A
Matrix: Water
Analysis Batch: 172732

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172523

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	2.00	1.71		ug/L		86	53 - 130	3	20
Bis(2-chloroethyl)ether	2.00	1.83		ug/L		92	55 - 125	1	20
2-Chlorophenol	2.00	1.77		ug/L		89	57 - 125	2	20
1,3-Dichlorobenzene	2.00	1.33		ug/L		66	40 - 125	6	20
1,4-Dichlorobenzene	2.00	1.34		ug/L		67	40 - 125	5	20
Benzyl alcohol	2.00	0.925		ug/L		46	41 - 144	11	20
1,2-Dichlorobenzene	2.00	1.43		ug/L		72	44 - 125	4	20
2-Methylphenol	2.00	1.84		ug/L		92	60 - 130	0	20
2,2'-oxybis[1-chloropropane]	2.00	1.71		ug/L		85	44 - 130	4	20
3 & 4 Methylphenol	2.00	1.73		ug/L		86	60 - 130	0	20
N-Nitrosodi-n-propylamine	2.00	1.66		ug/L		83	60 - 120	4	20
Hexachloroethane	2.00	1.20		ug/L		60	30 - 125	15	20
Nitrobenzene	2.00	1.80		ug/L		90	62 - 125	0	20
Isophorone	2.00	1.77		ug/L		88	64 - 125	1	20
2-Nitrophenol	2.00	1.75		ug/L		88	55 - 140	7	20
2,4-Dimethylphenol	2.00	1.59	J	ug/L		80	30 - 135	3	20
Benzoic acid	4.00	2.98	J	ug/L		74	20 - 144	8	20
Bis(2-chloroethoxy)methane	2.00	1.86		ug/L		93	59 - 125	2	20
2,4-Dichlorophenol	2.00	1.98		ug/L		99	50 - 140	2	20
1,2,4-Trichlorobenzene	2.00	1.46		ug/L		73	40 - 125	2	20
Naphthalene	2.00	1.66		ug/L		83	56 - 125	2	20
4-Chloroaniline	2.00	1.00	*	ug/L		50	20 - 150	77	20
Hexachlorobutadiene	2.00	1.22		ug/L		61	25 - 125	11	20
4-Chloro-3-methylphenol	2.00	2.05		ug/L		102	65 - 145	4	20
2-Methylnaphthalene	2.00	1.62		ug/L		81	56 - 125	2	20
1-Methylnaphthalene	2.00	1.61		ug/L		81	54 - 125	1	20
Hexachlorocyclopentadiene	2.00	0.868	J	ug/L		43	20 - 125	1	20
2,4,6-Trichlorophenol	2.00	2.01		ug/L		100	55 - 140	1	20

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

Lab Sample ID: LCSD 580-172523/3-A
Matrix: Water
Analysis Batch: 172732

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172523

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	2.00	2.15		ug/L		107	66 - 130	8	20
2-Chloronaphthalene	2.00	1.61		ug/L		81	55 - 125	2	20
2-Nitroaniline	2.00	1.96		ug/L		98	52 - 140	3	20
Dimethyl phthalate	2.00	1.95		ug/L		97	65 - 155	5	20
Acenaphthylene	2.00	1.83		ug/L		92	62 - 125	3	20
2,6-Dinitrotoluene	2.00	2.08		ug/L		104	67 - 134	1	20
3-Nitroaniline	2.00	1.51		ug/L		75	22 - 124	6	20
Acenaphthene	2.00	1.66		ug/L		83	63 - 125	4	20
2,4-Dinitrophenol	4.00	2.94	J	ug/L		73	24 - 146	8	20
4-Nitrophenol	4.00	2.71	J	ug/L		68	35 - 153	3	20
Dibenzofuran	2.00	1.79		ug/L		90	60 - 125	1	20
2,4-Dinitrotoluene	2.00	1.98		ug/L		99	73 - 126	3	20
Diethyl phthalate	2.00	1.79		ug/L		89	60 - 150	5	20
4-Chlorophenyl phenyl ether	2.00	1.75		ug/L		87	59 - 125	1	20
Fluorene	2.00	1.73		ug/L		87	69 - 125	6	20
4-Nitroaniline	2.00	1.69		ug/L		84	49 - 125	3	20
4,6-Dinitro-2-methylphenol	4.00	2.79	J	ug/L		70	50 - 136	9	20
N-Nitrosodiphenylamine	2.00	1.68		ug/L		84	40 - 135	1	20
4-Bromophenyl phenyl ether	2.00	1.93		ug/L		97	62 - 132	3	20
Hexachlorobenzene	2.00	1.75		ug/L		88	61 - 125	2	20
Pentachlorophenol	4.00	3.39		ug/L		85	20 - 145	14	20
Phenanthrene	2.00	1.84		ug/L		92	70 - 125	1	20
Anthracene	2.00	1.72		ug/L		86	50 - 125	2	20
Carbazole	2.00	1.89		ug/L		94	75 - 142	2	20
Di-n-butyl phthalate	2.00	2.05		ug/L		102	55 - 167	3	20
Fluoranthene	2.00	1.94		ug/L		97	70 - 145	1	20
Pyrene	2.00	1.93		ug/L		96	70 - 133	0	20
Butyl benzyl phthalate	2.00	2.08		ug/L		104	60 - 167	0	20
3,3'-Dichlorobenzidine	4.00	2.84		ug/L		71	20 - 175	3	20
Benzo[a]anthracene	2.00	1.83		ug/L		91	65 - 125	1	20
Chrysene	2.00	1.82		ug/L		91	70 - 125	2	20
Bis(2-ethylhexyl) phthalate	2.00	2.08	J	ug/L		104	70 - 185	7	20
Di-n-octyl phthalate	2.00	2.36		ug/L		118	55 - 150	6	20
Benzo[b]fluoranthene	2.00	2.21		ug/L		111	70 - 129	3	20
Benzo[k]fluoranthene	2.00	2.28		ug/L		114	70 - 123	9	20
Benzo[a]pyrene	2.00	1.77		ug/L		89	45 - 125	8	20
Indeno[1,2,3-cd]pyrene	2.00	1.16	*	ug/L		58	70 - 136	15	20
Dibenz(a,h)anthracene	2.00	1.21	*	ug/L		60	69 - 154	16	20
Benzo[g,h,i]perylene	2.00	0.988	*	ug/L		49	65 - 153	9	20
N-Nitrosodimethylamine	2.00	1.91	J	ug/L		95	33 - 143	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*73*		*30 - 134*
Phenol-d5	*85*		*52 - 120*
2,4,6-Tribromophenol	*95*		*44 - 125*
Nitrobenzene-d5	*81*		*59 - 120*
2-Fluorobiphenyl	*73*		*50 - 120*
Terphenyl-d14	*100*		*64 - 150*

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-174191/22-A
Matrix: Water
Analysis Batch: 174420

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 174191

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010	0.00075	mg/L		10/29/14 10:36	10/30/14 10:58	1
Antimony	ND		0.00040	0.000080	mg/L		10/29/14 10:36	10/30/14 10:58	1
Beryllium	ND		0.00040	0.00010	mg/L		10/29/14 10:36	10/30/14 10:58	1
Cadmium	ND		0.00040	0.000028	mg/L		10/29/14 10:36	10/30/14 10:58	1
Chromium	ND		0.00040	0.00027	mg/L		10/29/14 10:36	10/30/14 10:58	1
Copper	ND		0.0010	0.00011	mg/L		10/29/14 10:36	10/30/14 10:58	1
Lead	ND		0.00040	0.000034	mg/L		10/29/14 10:36	10/30/14 10:58	1
Nickel	ND		0.0030	0.00040	mg/L		10/29/14 10:36	10/30/14 10:58	1
Selenium	ND		0.0010	0.00071	mg/L		10/29/14 10:36	10/30/14 10:58	1
Silver	ND		0.00040	0.000030	mg/L		10/29/14 10:36	10/30/14 10:58	1
Thallium	ND		0.0010	0.00028	mg/L		10/29/14 10:36	10/30/14 10:58	1
Zinc	ND		0.0040	0.0019	mg/L		10/29/14 10:36	10/30/14 10:58	1

Lab Sample ID: LCS 580-174191/23-A
Matrix: Water
Analysis Batch: 174420

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 174191

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0974		mg/L		97	80 - 120
Antimony	0.100	0.0981		mg/L		98	80 - 120
Beryllium	0.100	0.0970		mg/L		97	80 - 120
Cadmium	0.100	0.0987		mg/L		99	80 - 120
Chromium	0.100	0.0979		mg/L		98	80 - 120
Copper	0.100	0.104		mg/L		104	80 - 120
Lead	0.100	0.0990		mg/L		99	80 - 120
Nickel	0.100	0.0983		mg/L		98	80 - 120
Selenium	0.100	0.101		mg/L		101	80 - 120
Silver	0.100	0.0984		mg/L		98	80 - 120
Thallium	0.100	0.101		mg/L		101	80 - 120
Zinc	0.100	0.0990		mg/L		99	80 - 120

Lab Sample ID: LCSD 580-174191/24-A
Matrix: Water
Analysis Batch: 174420

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 174191

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.100	0.0969		mg/L		97	80 - 120	0	20
Antimony	0.100	0.0986		mg/L		99	80 - 120	1	20
Beryllium	0.100	0.0990		mg/L		99	80 - 120	2	20
Cadmium	0.100	0.0995		mg/L		100	80 - 120	1	20
Chromium	0.100	0.0986		mg/L		99	80 - 120	1	20
Copper	0.100	0.103		mg/L		103	80 - 120	1	20
Lead	0.100	0.0977		mg/L		98	80 - 120	1	20
Nickel	0.100	0.0964		mg/L		96	80 - 120	2	20
Selenium	0.100	0.101		mg/L		101	80 - 120	1	20
Silver	0.100	0.0985		mg/L		99	80 - 120	0	20
Thallium	0.100	0.0999		mg/L		100	80 - 120	1	20
Zinc	0.100	0.0985		mg/L		98	80 - 120	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 580-172474/24-A
Matrix: Water
Analysis Batch: 172550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172474

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000041	mg/L		10/13/14 10:30	10/13/14 12:41	1

Lab Sample ID: LCS 580-172474/25-A
Matrix: Water
Analysis Batch: 172550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172474

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00200	0.00185		mg/L		92	80 - 120		

Lab Sample ID: LCSD 580-172474/26-A
Matrix: Water
Analysis Batch: 172550

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172474

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.00200	0.00179		mg/L		89	80 - 120	3	20

Lab Sample ID: LCSSRM 580-172474/27-A
Matrix: Water
Analysis Batch: 172550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172474

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00200	0.00182		mg/L		91	75 - 125		

Lab Sample ID: 580-45834-1 MS
Matrix: Water
Analysis Batch: 172550

Client Sample ID: SP-OWS-01-20141008-W
Prep Type: Total/NA
Prep Batch: 172474

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		0.00200	0.00191		mg/L		95	80 - 120		

Lab Sample ID: 580-45834-1 MSD
Matrix: Water
Analysis Batch: 172550

Client Sample ID: SP-OWS-01-20141008-W
Prep Type: Total/NA
Prep Batch: 172474

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00200	0.00198		mg/L		99	80 - 120	4	20

Method: 120.1 - Conductivity, Specific Conductance

Lab Sample ID: MB 580-172397/1
Matrix: Water
Analysis Batch: 172397

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		10	10	umhos/cm			10/10/14 17:50	1

Method: 120.1 - Conductivity, Specific Conductance (Continued)

Lab Sample ID: LCS 580-172397/2
Matrix: Water
Analysis Batch: 172397

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	100	108		umhos/cm		108	90 - 110

Lab Sample ID: 580-45834-1 DU
Matrix: Water
Analysis Batch: 172397

Client Sample ID: SP-OWS-01-20141008-W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	81		81.1		umhos/cm		0.3	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 580-173176/1-A
Matrix: Water
Analysis Batch: 173223

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173176

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0	5.0	mg/L		10/20/14 10:03	10/20/14 10:03	1
SGT-HEM	ND		5.0	5.0	mg/L		10/20/14 10:03	10/20/14 10:03	1
HEM Polar (Oil and Grease - Polar)	ND		5.0	5.0	mg/L		10/20/14 10:03	10/20/14 10:03	1

Lab Sample ID: LCS 580-173176/2-A
Matrix: Water
Analysis Batch: 173223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173176

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil & Grease)	40.0	33.5		mg/L		84	79 - 114
SGT-HEM	20.0	15.6		mg/L		78	66 - 114

Lab Sample ID: LCSD 580-173176/3-A
Matrix: Water
Analysis Batch: 173223

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173176

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	33.7		mg/L		84	79 - 114	1	18
SGT-HEM	20.0	14.7		mg/L		74	66 - 114	6	24

Method: 2320B - Alkalinity - Titrimetric

Lab Sample ID: LCS 580-172476/2
Matrix: Water
Analysis Batch: 172476

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

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

Method: 2320B - Alkalinity - Titrimetric (Continued)

Lab Sample ID: 580-45834-1 DU — **Client Sample ID: SP-OWS-01-20141008-W**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 172476

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	25		25.3		mg/L		0	17
Bicarbonate Alkalinity as CaCO3	25		25.3		mg/L		0	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-172423/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 172423

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90	0.20	mg/L			10/10/14 14:36	1

Lab Sample ID: LCS 580-172423/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 172423

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.80	1.81		mg/L		101	90 - 110

Lab Sample ID: LCSD 580-172423/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 172423

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	1.80	1.81		mg/L		101	90 - 110	0	15

Lab Sample ID: 580-45834-1 MS — **Client Sample ID: SP-OWS-01-20141008-W**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 172423

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	ND	H	1.80	1.96		mg/L		109	90 - 110

Lab Sample ID: 580-45834-1 DU — **Client Sample ID: SP-OWS-01-20141008-W**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 172423

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

Lab Sample ID: MB 580-172424/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 172424

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90	0.30	mg/L			10/10/14 14:36	1
Sulfate	ND		1.2	0.40	mg/L			10/10/14 14:36	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 580-172424/2
Matrix: Water
Analysis Batch: 172424

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.00	9.20		mg/L		102	90 - 110
Sulfate	12.0	11.2		mg/L		93	90 - 110

Lab Sample ID: LCSD 580-172424/3
Matrix: Water
Analysis Batch: 172424

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9.00	9.25		mg/L		103	90 - 110	1	15
Sulfate	12.0	11.2		mg/L		93	90 - 110	0	15

Lab Sample ID: 580-45834-1 MS
Matrix: Water
Analysis Batch: 172424

Client Sample ID: SP-OWS-01-20141008-W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.1		9.00	14.7		mg/L		107	90 - 110
Sulfate	2.0		12.0	13.2		mg/L		94	90 - 110

Lab Sample ID: 580-45834-1 DU
Matrix: Water
Analysis Batch: 172424

Client Sample ID: SP-OWS-01-20141008-W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	5.1		5.06		mg/L		0.2	10
Sulfate	2.0		1.95		mg/L		0	10

Lab Sample ID: MB 580-172471/1
Matrix: Water
Analysis Batch: 172471

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90	0.30	mg/L			10/11/14 12:30	1
Sulfate	ND		1.2	0.40	mg/L			10/11/14 12:30	1

Lab Sample ID: LCS 580-172471/2
Matrix: Water
Analysis Batch: 172471

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.00	9.20		mg/L		102	90 - 110
Sulfate	12.0	11.2		mg/L		93	90 - 110

Lab Sample ID: LCSD 580-172471/3
Matrix: Water
Analysis Batch: 172471

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9.00	9.21		mg/L		102	90 - 110	0	15

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 580-172471/3
Matrix: Water
Analysis Batch: 172471

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			12.0	11.1		mg/L		92	90 - 110	1	15

Method: SM 2130B - Turbidity

Lab Sample ID: MB 580-172399/1
Matrix: Water
Analysis Batch: 172399

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	ND		1.0	1.0	NTU			10/09/14 08:42	1

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

Lab Sample ID: MB 580-172225/1
Matrix: Water
Analysis Batch: 172225

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		2.0	2.0	mg/L			10/09/14 13:56	1

Lab Sample ID: LCS 580-172225/2
Matrix: Water
Analysis Batch: 172225

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			30.0	26.0		mg/L		87	70.6 - 120		

Method: SM 4500 H+ B - pH

Lab Sample ID: 580-45834-1 DU
Matrix: Water
Analysis Batch: 172290

Client Sample ID: SP-OWS-01-20141008-W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.25	HF		7.220		SU				0.4	1

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

Lab Sample ID: MB 580-172909/1
Matrix: Water
Analysis Batch: 172909

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.33	mg/L			10/16/14 10:09	1

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

Lab Sample ID: LCS 580-172909/2
Matrix: Water
Analysis Batch: 172909

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon			15.0	16.5		mg/L		110	85 - 115		

Lab Sample ID: MB 580-172951/1
Matrix: Water
Analysis Batch: 172951

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.33	mg/L			10/16/14 09:28	1

Lab Sample ID: LCS 580-172951/2
Matrix: Water
Analysis Batch: 172951

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon			15.0	15.2		mg/L		101	85 - 115		

Lab Sample ID: 580-45834-1 MS
Matrix: Water
Analysis Batch: 172951

Client Sample ID: SP-OWS-01-20141008-W
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon	2.1		10.0	12.2		mg/L		101	85 - 115		

Lab Sample ID: 580-45834-1 MSD
Matrix: Water
Analysis Batch: 172951

Client Sample ID: SP-OWS-01-20141008-W
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	2.1		10.0	12.3		mg/L		101	85 - 115	0	20

Lab Sample ID: 580-45834-1 DU
Matrix: Water
Analysis Batch: 172951

Client Sample ID: SP-OWS-01-20141008-W
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	2.1		2.00		mg/L		7	20

Lab Chronicle

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

TestAmerica Job ID: 580-45834-1

Client Sample ID: SP-OWS-01-20141008-W
Date Collected: 10/08/14 14:53
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45834-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			172523	10/13/14 13:33	LHJ	TAL SEA
Total/NA	Analysis	8270D		1	172881	10/16/14 15:42	ERB	TAL SEA
Total/NA	Prep	200.8			174191	10/29/14 10:36	PAB	TAL SEA
Total/NA	Analysis	200.8		1	174420	10/30/14 11:01	FCW	TAL SEA
Total/NA	Prep	245.1			172474	10/13/14 10:30	PAB	TAL SEA
Total/NA	Analysis	245.1		1	172550	10/13/14 13:14	FCW	TAL SEA
Total/NA	Analysis	120.1		1	172397	10/10/14 17:50	JLS	TAL SEA
Total/NA	Analysis	1664A		1	173223	10/20/14 10:03	CRH	TAL SEA
Total/NA	Prep	1664A			173176	10/20/14 10:03	CRH	TAL SEA
Total/NA	Analysis	2320B		1	172476	10/13/14 10:35	SPP	TAL SEA
Total/NA	Analysis	300.0		1	172423	10/10/14 18:12	JLS	TAL SEA
Total/NA	Analysis	300.0		1	172424	10/10/14 18:12	JLS	TAL SEA
Total/NA	Analysis	SM 2130B		1	172399	10/09/14 19:02	LKC	TAL SEA
Total/NA	Analysis	SM 2540D		1	172225	10/10/14 15:04	LKC	TAL SEA
Total/NA	Analysis	SM 4500 H+ B		1	172290	10/09/14 19:17	JLS	TAL SEA
Dissolved	Analysis	SM 5310B		1	172951	10/16/14 09:28	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	172909	10/16/14 12:45	JLS	TAL SEA

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 580-45834-1

Laboratory: TestAmerica Seattle

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

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

Sample Summary

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

TestAmerica Job ID: 580-45834-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-45834-1	SP-OWS-01-20141008-W	Water	10/08/14 14:53	10/09/14 17:00

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

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TestAmerica Laboratories, Inc.

45834

Regulatory Program: ☐ DW ☑ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Christine Nancarrow	Site Contact: Melissa Ivancevich	Date: 10/09/14	COC No:
Leidos	Tel/Fax: 206.300.2144	Lab Contact: Kris Allen	Carrier: Courier	2 of 2 COCs
18912 N Creek Pkwy, Ste. 101	Analysis Turnaround Time			Sampler:
Bothell, WA 98011	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
425.398.2101 Phone	TAT if different from Below 3 Weeks			Walk-in Client:
425.485.5566 FAX	☐ 2 weeks			Lab Sampling:
Project Name: NPDES Sampling Support	☐ 1 week			
Site: Lower Duwamish Waterway	☐ 2 days			Job / SDG No.:
P O # P010163427	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SVOCs (Method 8270D)	Metals (Method 200.8/7470A)	pH (Method SM4500H)	Spec Cond (Method 120.1)	Alk/Bicarb/Carb (Method SM2320)	Anions (Method 300.0/353.2)	TOC (Method SM5310B)	DOC (Method SM5310B)	TSS (Method 2540D)	Oil & Grease (Method 1664)	Turbidity (Method 2130)	Sample Specific Notes:
SP-OWS-01-20141008-W	10/08/14	1453	C	W	13	N		2	2		3			1	1	2	1	1	ONLY RUN ANALYSES ON CONTAINERS WITH LEIDOS LOGO. DISPOSE OF SAMPLES WITHOUT LEIDOS LOGO (5 CONTAINERS)
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other MeOH									4					3					

580-45834 Chain of Custody

Cooler/~~TB~~ ~~Dig~~/IR cor 4.2°c unc 4.5°c
Cooler Dsc Lg Green/Blu @Lab 1700
Wet/Packs Packing Bubble
w/c50 A2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for ______ Months

Special Instructions/QC Requirements & Comments:

1 UNPRESERVED AMBER PRESERVED IN LAB FOR OIL & GREASE AND 10/10/14 #53077 3mL HCl

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 242410 | Cooler Temp. (°C): Obs'd:______ Corr'd:______ Therm ID No.:______

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Melissa [signature]	Leidos	10/09/14 8:45	[signature]	TASEA	10/9/14 1700
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 580-45834-1

Login Number: 45834

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?	True	
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.	False	An unpreserved amber was provided for oil&grease analysis.
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

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

TestAmerica Job ID: 580-45835-1
Client Project/Site: NPDES Sampling Support
Revision: 2

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

Attn: Christine Nancarrow

Kristine D. Allen

Authorized for release by:
12/22/2014 5:26:31 PM

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

Table of Contents

Job ID: 580-45835-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-45835-1

Comments
Report was revised 12/16/14 to include QC from method NWTPH-Dx that was not included in the original report.

No additional comments.

Receipt
The samples were received on 10/9/2014 5:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 172403 was outside the method criteria for the following analyte(s): Acrolein and Trichlorofluoromethane. A CCVL standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 172403 was outside criteria for the following analyte(s): Acetone and MEK. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated. A low level standard CCVL was run with passing detection criteria.

Method(s) NWTPH-Gx: The method blank for batch 172426 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.

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

GC/MS Semi VOA
Method(s) 8270D: The continuing calibration verification (CCV) associated with analytical batch 172999 recovered above the upper control limit for 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Method(s) 8270C, 8270D: Multiple analyte(s) recovered outside control limits for the LCS/LCSD associated with prep batch 172868. In addition, the %RPD of the LCSD recovered outside control limits for benzyl alcohol. These analytes were outside the Marginal Exceedance Limits; therefore, re-extraction and/or re-analysis was performed (outside of holding time). Both sets of data have been reported.

Method(s) 8270C, 8270D: The following samples were re-extracted outside of prep holding time due to LCS/LCSD failures in the original prep batch 172868: SP-OWS-09-20141008-S (580-45835-2), (LCS 580-173678/2-A), (LCSD 580-173678/3-A). The re-extracted LCS/LCSD associated with prep batch 173678 recovered outside control limits for the Anthracene and Benzyl alcohol. This is not indicative of a systematic control problem because these were random marginal exceedances. 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 173678 recovered outside control limits for the following analyte: 4-Nitrophenol. The individual LCS/LCSD recoveries for this analyte were within control limits.

Method(s) 8270D: The method blank for batch 173001 contained Diethyl phthalate, Bis(2-ethylhexyl) phthalate and Butyl benzyl phthalate above the method detection limit. The target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8270D: In analytical batch 174626, surrogate recovery for the following sample(s) was outside control limits: SP-OWS-09-20141008-S (580-45835-2). Evidence of matrix interference is present; therefore, re-analysis was not performed. Data have been qualified and reported.

Job ID: 580-45835-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

Method(s) 8270D: The following analytes recovered outside control limits for the LCSD associated with prep batch 173001: 1,2-Dichlorobenzene (low), Anthracene (low), 1,3-Dichlorobenzene (low) and 1,4-Dichlorobenzene (low). This is not indicative of a systematic control problem because these were random marginal exceedances. The lab SOP allows four marginal exceedances when a full list spike is utilized; qualified results have been reported. The following sample is associated: SP-OWS-01-20141008-S (580-45835-1).

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix and abundance of target analytes: (580-45835-1 MS), (580-45835-1 MSD), SP-OWS-01-20141008-S (580-45835-1). As such, surrogate and MS/MSD spike recoveries were diluted out and calculated recovery values are not meaningful.

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

GC Semi VOA

Method(s) 8082, 8082A: In batch 173183, sample SP-OWS-01-20141008-S (580-45835-1) surrogate Decachlorobiphenyl was recovered with a dual column RPD > 40%. The lower value was reported. This could be attributed to matrix interference indicated on the chromatogram and dark sulfuric acid layer from the acid cleanup.

Method(s) 8082: In batch 173332, the following sample(s) required a copper clean-up to reduce matrix interferences caused by sulfur: SP-OWS-09-20141008-S (580-45835-2). Lot# MKBN5574V

Method(s) NWTPH-Dx: In analysis batch 172969, for the following sample(s) from preparation batch 172722: The following sample(s) contained a hydrocarbon pattern in the diesel range; however, the elution pattern was a mixture of the typical diesel fuel pattern used by the laboratory for quantitative purposes: (580-45835-1 DU), SP-OWS-01-20141008-S (580-45835-1), SP-OWS-09-20141008-S (580-45835-2).

Method(s) NWTPH-Dx: In analysis batch 172969, for the following sample(s) from preparation batch 172722: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) 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) NWTPH-Dx: In analysis batch 172851, the continuing calibration verification (CCV) associated with the batch quality control samples from preparation batch 172722 recovered above the upper control limit for Motor Oil (>C24-C36). The method blank samples associated with this CCV was non-detect and the laboratory control sample and laboratory control sample duplicate recoveries were not adversely affected by the high bias for the affected analytes; therefore, the data have been qualified and reported. The following samples are impacted: (CCV 580-172851/13), (LCS 580-172722/2-A), (LCSD 580-172722/3-A), (MB 580-172722/1-A).

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.

Organic Prep

Method(s) 3546: A little bit of the sample spilled during the pouring process: SP-OWS-09-20141008-S (580-45835-2).

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

Method(s) NWTPH-Dx: In analysis batch 172851, the continuing calibration verification (CCV) associated with the batch quality control samples from preparation batch 172722 recovered above the upper control limit for Motor Oil (>C24-C36). The method blank samples associated with this CCV was non-detect and the laboratory control sample and laboratory control sample duplicate recoveries were not

Job ID: 580-45835-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

adversely affected by the high bias for the affected analytes; therefore, the data have been qualified and reported. The following samples are impacted: (CCV 580-172851/13), (LCS 580-172722/2-A), (LCSD 580-172722/3-A), (MB 580-172722/1-A).

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
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.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
*	ISTD response or retention time outside acceptable limits
H	Sample was prepped or analyzed beyond the specified holding time
*	RPD of the LCS and LCSD exceeds the control limits
X	Surrogate is outside control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
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
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the 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.

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
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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: Leidos, Inc.
Project/Site: NPDES Sampling Support

TestAmerica Job ID: 580-45835-1

Client Sample ID: SP-OWS-01-20141008-S
Date Collected: 10/08/14 15:33
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-1
Matrix: Solid
Percent Solids: 34.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		270	43	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Chloromethane	ND		660	67	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Vinyl chloride	ND		110	47	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Bromomethane	ND		930	89	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Chloroethane	ND		2700	110	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Trichlorofluoromethane	ND		270	39	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Acrolein	ND		8000	8000	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,1-Dichloroethene	ND		130	58	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		270	45	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Iodomethane	ND		1300	42	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Carbon disulfide	ND		270	29	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Acetone	ND		2700	1200	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Methylene Chloride	ND		170	76	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Methyl tert-butyl ether	ND		270	40	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
trans-1,2-Dichloroethene	ND		270	40	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Acrylonitrile	ND		1300	640	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,1-Dichloroethane	ND		270	28	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Vinyl acetate	ND		1300	74	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
2,2-Dichloropropane	ND		270	32	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
cis-1,2-Dichloroethene	ND		270	32	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
2-Butanone	ND		2700	120	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Bromochloromethane	ND		270	30	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Chloroform	ND		270	28	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,1,1-Trichloroethane	ND		270	37	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Carbon tetrachloride	ND		130	25	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,1-Dichloropropene	ND		270	35	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Benzene	ND		110	23	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,2-Dichloroethane	ND		110	22	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Trichloroethene	**570**		110	21	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,2-Dichloropropane	ND		80	16	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Dibromomethane	ND		270	27	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Bromodichloromethane	ND		270	9.3	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
2-Chloroethyl vinyl ether	ND		1300	41	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
cis-1,3-Dichloropropene	ND		110	12	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
4-Methyl-2-pentanone	**900**	**J**	1300	54	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Toluene	**8800**		270	17	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
trans-1,3-Dichloropropene	ND		110	16	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,1,2-Trichloroethane	ND		80	19	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Tetrachloroethene	**810**		130	8.6	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,3-Dichloropropane	ND		270	15	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
2-Hexanone	ND		1300	76	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Chlorodibromomethane	ND		130	6.6	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,2-Dibromoethane	ND		110	23	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Chlorobenzene	ND		270	14	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,1,1,2-Tetrachloroethane	ND		270	7.3	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Ethylbenzene	**12000**		270	13	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
m-Xylene & p-Xylene	**5200**		270	20	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
o-Xylene	**2300**		270	20	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Styrene	**9300**		270	16	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1

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Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-1
Matrix: Solid
Percent Solids: 34.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		270	15	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Isopropylbenzene	**830**		270	17	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Bromobenzene	ND		270	16	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,1,2,2-Tetrachloroethane	ND		66	15	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,2,3-Trichloropropane	ND		270	25	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
trans-1,4-Dichloro-2-butene	ND		1300	110	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
N-Propylbenzene	**1100**		270	17	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
2-Chlorotoluene	**67**	**J**	270	23	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
4-Chlorotoluene	ND		270	20	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,3,5-Trimethylbenzene	**2000**		270	19	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
tert-Butylbenzene	ND		270	21	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,2,4-Trimethylbenzene	**4600**		270	22	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
sec-Butylbenzene	**370**		270	19	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
4-Isopropyltoluene	**400**		270	19	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,3-Dichlorobenzene	ND		270	21	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,4-Dichlorobenzene	ND		270	13	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
n-Butylbenzene	**1200**		270	23	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,2-Dichlorobenzene	ND		270	21	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,2-Dibromo-3-Chloropropane	ND		1300	17	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,2,4-Trichlorobenzene	ND		270	26	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Hexachloro-1,3-butadiene	ND		270	22	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
Naphthalene	**1500**		270	40	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1
1,2,3-Trichlorobenzene	ND		270	52	ug/Kg	☼	10/11/14 09:14	10/11/14 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*103*		*65 - 140*	*10/11/14 09:14*	*10/11/14 16:00*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*	*10/11/14 09:14*	*10/11/14 16:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 136*	*10/11/14 09:14*	*10/11/14 16:00*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 120*	*10/11/14 09:14*	*10/11/14 16:00*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 132*	*10/11/14 09:14*	*10/11/14 16:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**2200**		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Bis(2-chloroethyl)ether	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2-Chlorophenol	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
1,3-Dichlorobenzene	ND	*	140	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
1,4-Dichlorobenzene	ND	*	140	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
1,2-Dichlorobenzene	ND	*	160	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2-Methylphenol	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2,2'-oxybis[1-chloropropane]	ND		710	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
3 & 4 Methylphenol	**6400**		570	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
N-Nitrosodi-n-propylamine	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Hexachloroethane	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Nitrobenzene	ND		290	97	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Isophorone	ND		290	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2-Nitrophenol	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2,4-Dimethylphenol	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Benzoic acid	**9700**		7100	2100	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Bis(2-chloroethoxy)methane	ND		290	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10

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Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-1
Matrix: Solid
Percent Solids: 34.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
1,2,4-Trichlorobenzene	ND		140	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Naphthalene	**2000**		57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
4-Chloroaniline	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Hexachlorobutadiene	ND		140	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
4-Chloro-3-methylphenol	**17000**		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2-Methylnaphthalene	**4700**		57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
1-Methylnaphthalene	**2800**		86	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Hexachlorocyclopentadiene	ND		290	29	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2,4,6-Trichlorophenol	ND		430	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2,4,5-Trichlorophenol	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2-Chloronaphthalene	ND		57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2-Nitroaniline	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Acenaphthylene	ND		57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2,6-Dinitrotoluene	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
3-Nitroaniline	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Acenaphthene	ND		57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2,4-Dinitrophenol	ND		2900	570	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
4-Nitrophenol	ND		2900	710	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Dibenzofuran	ND		290	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
2,4-Dinitrotoluene	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Diethyl phthalate	ND		570	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
4-Chlorophenyl phenyl ether	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Fluorene	**950**		57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
4-Nitroaniline	ND		290	57	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
4,6-Dinitro-2-methylphenol	ND		2900	290	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
N-Nitrosodiphenylamine	ND		140	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
4-Bromophenyl phenyl ether	ND		290	43	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Hexachlorobenzene	ND		140	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Pentachlorophenol	**1500**		570	57	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Phenanthrene	**6300**		57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Anthracene	**800**	*	57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Carbazole	**850**		290	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Di-n-butyl phthalate	**6600**		1400	140	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Fluoranthene	**12000**		57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Pyrene	**11000**		57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Butyl benzyl phthalate	**4300**	**B**	570	140	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
3,3'-Dichlorobenzidine	ND		570	86	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Benzo[a]anthracene	**3400**		57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Chrysene	**5900**		71	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Di-n-octyl phthalate	**4400**		1400	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Benzo[b]fluoranthene	**8000**		57	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Benzo[k]fluoranthene	**2700**		71	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Benzo[a]pyrene	**3800**		86	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Indeno[1,2,3-cd]pyrene	**1800**		110	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Dibenz(a,h)anthracene	**440**		110	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
Benzo[g,h,i]perylene	**1400**		71	14	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10
N-Nitrosodimethylamine	ND		2900	710	ug/Kg	☼	10/17/14 11:05	10/22/14 17:51	10

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Percent Solids: 34.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	74		36 - 145	10/17/14 11:05	10/22/14 17:51	10
Phenol-d5	81		38 - 149	10/17/14 11:05	10/22/14 17:51	10
2,4,6-Tribromophenol	98		28 - 143	10/17/14 11:05	10/22/14 17:51	10
Nitrobenzene-d5	100		38 - 141	10/17/14 11:05	10/22/14 17:51	10
2-Fluorobiphenyl	72		42 - 140	10/17/14 11:05	10/22/14 17:51	10
Terphenyl-d14	120		42 - 151	10/17/14 11:05	10/22/14 17:51	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzyl alcohol	63000		2900	430	ug/Kg	☼	10/17/14 11:05	11/04/14 18:13	100
Dimethyl phthalate	70000		2900	140	ug/Kg	☼	10/17/14 11:05	11/04/14 18:13	100
Bis(2-ethylhexyl) phthalate	110000	B	17000	1400	ug/Kg	☼	10/17/14 11:05	11/04/14 18:13	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	340	B	27	3.4	mg/Kg	☼	10/11/14 14:40	10/13/14 16:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		50 - 150	10/11/14 14:40	10/13/14 16:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	0.21		0.028	0.0090	mg/Kg	☼	10/17/14 12:14	10/20/14 23:02	1
Arochlor 1221	ND		0.031	0.023	mg/Kg	☼	10/17/14 12:14	10/20/14 23:02	1
Arochlor 1232	ND		0.031	0.020	mg/Kg	☼	10/17/14 12:14	10/20/14 23:02	1
Arochlor 1242	ND		0.028	0.0059	mg/Kg	☼	10/17/14 12:14	10/20/14 23:02	1
Arochlor 1248	ND		0.028	0.0085	mg/Kg	☼	10/17/14 12:14	10/20/14 23:02	1
Arochlor 1254	2.2		0.028	0.0059	mg/Kg	☼	10/17/14 12:14	10/20/14 23:02	1
Arochlor 1260	1.7		0.028	0.0085	mg/Kg	☼	10/17/14 12:14	10/20/14 23:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		45 - 135	10/17/14 12:14	10/20/14 23:02	1
DCB Decachlorobiphenyl	101	p	50 - 140	10/17/14 12:14	10/20/14 23:02	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)	6600	Y	710	160	mg/Kg	☼	10/15/14 08:42	10/17/14 11:12	10
Motor Oil (>C24-C36)	16000	Y	1400	260	mg/Kg	☼	10/15/14 08:42	10/17/14 11:12	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	90		50 - 150	10/15/14 08:42	10/17/14 11:12	10

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	69		1.1	0.38	mg/Kg	☼	10/28/14 10:12	10/28/14 14:40	10
Lead	940		0.42	0.027	mg/Kg	☼	10/28/14 10:12	10/28/14 14:40	10
Antimony	16		0.42	0.089	mg/Kg	☼	10/28/14 10:12	10/28/14 14:40	10
Beryllium	0.21	J	0.42	0.074	mg/Kg	☼	10/28/14 10:12	10/28/14 14:40	10
Cadmium	16		0.42	0.017	mg/Kg	☼	10/28/14 10:12	10/28/14 14:40	10
Chromium	330		0.42	0.24	mg/Kg	☼	10/28/14 10:12	10/28/14 14:40	10
Copper	14000		84	21	mg/Kg	☼	10/28/14 10:12	10/28/14 15:03	1000
Nickel	230		1.1	0.17	mg/Kg	☼	10/28/14 10:12	10/28/14 14:40	10

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

TestAmerica Job ID: 580-45835-1

Client Sample ID: SP-OWS-01-20141008-S
Date Collected: 10/08/14 15:33
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-1
Matrix: Solid
Percent Solids: 34.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	1.6		1.5	0.43	mg/Kg	☼	10/28/14 10:12	10/28/14 14:40	10
Silver	1.2		0.42	0.025	mg/Kg	☼	10/28/14 10:12	10/28/14 14:40	10
Thallium	ND		1.1	0.27	mg/Kg	☼	10/28/14 10:12	10/28/14 14:40	10
Zinc	2900		4.2	2.4	mg/Kg	☼	10/28/14 10:12	10/28/14 14:40	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.7		0.044	0.014	mg/Kg	☼	10/28/14 12:52	10/28/14 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	34		0.10	0.10	%			10/18/14 13:17	1
Percent Moisture	66		0.10	0.10	%			10/18/14 13:17	1
Total Organic Carbon	230000		2000	250	mg/Kg			10/16/14 14:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobbles	0.00				%			10/16/14 12:09	1
Gravel	2.9				%			10/16/14 12:09	1
Sand	49				%			10/16/14 12:09	1
Silt	44				%			10/16/14 12:09	1
Clay	4.1				%			10/16/14 12:09	1

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

TestAmerica Job ID: 580-45835-1

Client Sample ID: SP-OWS-09-20141008-S
Date Collected: 10/08/14 16:28
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-2
Matrix: Solid
Percent Solids: 44.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		220	36	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Chloromethane	ND		560	56	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Vinyl chloride	ND		89	40	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Bromomethane	ND		780	75	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Chloroethane	ND		2200	89	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Trichlorofluoromethane	ND		220	33	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Acrolein	ND		6700	6700	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,1-Dichloroethene	ND		110	49	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		220	38	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Iodomethane	ND		1100	35	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Carbon disulfide	ND		220	25	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Acetone	ND		2200	970	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Methylene Chloride	ND		140	64	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Methyl tert-butyl ether	ND		220	34	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
trans-1,2-Dichloroethene	ND		220	34	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Acrylonitrile	ND		1100	540	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,1-Dichloroethane	ND		220	23	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Vinyl acetate	ND		1100	62	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
2,2-Dichloropropane	ND		220	27	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
cis-1,2-Dichloroethene	ND		220	27	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
2-Butanone	ND		2200	100	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Bromochloromethane	ND		220	26	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Chloroform	ND		220	23	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,1,1-Trichloroethane	ND		220	31	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Carbon tetrachloride	ND		110	21	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,1-Dichloropropene	ND		220	30	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Benzene	ND		89	20	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,2-Dichloroethane	ND		89	18	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Trichloroethene	ND		89	17	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,2-Dichloropropane	ND		67	13	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Dibromomethane	ND		220	23	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Bromodichloromethane	ND		220	7.8	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
2-Chloroethyl vinyl ether	ND		1100	35	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
cis-1,3-Dichloropropene	ND		89	10	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
4-Methyl-2-pentanone	ND		1100	46	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Toluene	**380**		220	15	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
trans-1,3-Dichloropropene	ND		89	13	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,1,2-Trichloroethane	ND		67	16	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Tetrachloroethene	ND		110	7.3	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,3-Dichloropropane	ND		220	13	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
2-Hexanone	ND		1100	64	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Chlorodibromomethane	ND		110	5.6	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,2-Dibromoethane	ND		89	19	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Chlorobenzene	ND		220	12	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,1,1,2-Tetrachloroethane	ND		220	6.1	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Ethylbenzene	**240**		220	11	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
m-Xylene & p-Xylene	**430**		220	17	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
o-Xylene	**230**		220	17	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Styrene	**220**		220	13	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1

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

TestAmerica Job ID: 580-45835-1

Client Sample ID: SP-OWS-09-20141008-S
Date Collected: 10/08/14 16:28
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-2
Matrix: Solid
Percent Solids: 44.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		220	12	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Isopropylbenzene	**50**	**J**	220	15	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Bromobenzene	ND		220	13	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,1,2,2-Tetrachloroethane	ND		56	13	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,2,3-Trichloropropane	ND		220	21	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
trans-1,4-Dichloro-2-butene	ND		1100	89	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
N-Propylbenzene	**180**	**J**	220	15	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
2-Chlorotoluene	ND		220	19	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
4-Chlorotoluene	ND		220	17	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,3,5-Trimethylbenzene	**610**		220	16	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
tert-Butylbenzene	ND		220	17	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,2,4-Trimethylbenzene	**3300**		220	18	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
sec-Butylbenzene	**160**	**J**	220	16	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
4-Isopropyltoluene	**290**		220	16	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,3-Dichlorobenzene	ND		220	17	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,4-Dichlorobenzene	ND		220	11	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
n-Butylbenzene	**1800**		220	20	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,2-Dichlorobenzene	ND		220	18	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,2-Dibromo-3-Chloropropane	ND		1100	15	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,2,4-Trichlorobenzene	ND		220	22	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Hexachloro-1,3-butadiene	ND		220	18	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
Naphthalene	**5000**		220	34	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1
1,2,3-Trichlorobenzene	ND		220	44	ug/Kg	☼	10/11/14 09:14	10/11/14 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*102*		*65 - 140*	*10/11/14 09:14*	*10/11/14 16:27*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*	*10/11/14 09:14*	*10/11/14 16:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 136*	*10/11/14 09:14*	*10/11/14 16:27*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 120*	*10/11/14 09:14*	*10/11/14 16:27*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 132*	*10/11/14 09:14*	*10/11/14 16:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**370**	**J ***	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Bis(2-chloroethyl)ether	ND	*	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2-Chlorophenol	ND	*	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
1,3-Dichlorobenzene	ND	*	220	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
1,4-Dichlorobenzene	ND	*	220	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Benzyl alcohol	**3600**	****	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
1,2-Dichlorobenzene	ND	*	240	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2-Methylphenol	ND	*	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2,2'-oxybis[1-chloropropane]	ND		1100	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
3 & 4 Methylphenol	**330**	**J ***	880	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
N-Nitrosodi-n-propylamine	ND	*	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Hexachloroethane	ND	*	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Nitrobenzene	ND	*	440	150	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Isophorone	ND	*	440	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2-Nitrophenol	ND	*	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2,4-Dimethylphenol	ND		440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Benzoic acid	ND		11000	3300	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20

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

TestAmerica Job ID: 580-45835-1

Client Sample ID: SP-OWS-09-20141008-S
Date Collected: 10/08/14 16:28
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-2
Matrix: Solid
Percent Solids: 44.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND	*	440	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2,4-Dichlorophenol	ND		440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
1,2,4-Trichlorobenzene	ND	*	220	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Naphthalene	**2200**	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
4-Chloroaniline	ND		440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Hexachlorobutadiene	ND	*	220	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
4-Chloro-3-methylphenol	ND	*	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2-Methylnaphthalene	**4600**	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
1-Methylnaphthalene	**3100**	*	130	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Hexachlorocyclopentadiene	ND		440	44	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2,4,6-Trichlorophenol	ND	*	660	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2,4,5-Trichlorophenol	ND		440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2-Chloronaphthalene	ND	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2-Nitroaniline	ND		440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Dimethyl phthalate	**3900**	*	440	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Acenaphthylene	ND	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2,6-Dinitrotoluene	ND	*	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
3-Nitroaniline	ND		440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Acenaphthene	**170**	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2,4-Dinitrophenol	ND		4400	880	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
4-Nitrophenol	ND		4400	1100	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Dibenzofuran	ND	*	440	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
2,4-Dinitrotoluene	ND	*	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Diethyl phthalate	ND	*	880	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
4-Chlorophenyl phenyl ether	ND	*	440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Fluorene	**510**	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
4-Nitroaniline	ND		440	88	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
4,6-Dinitro-2-methylphenol	ND		4400	440	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
N-Nitrosodiphenylamine	ND	*	220	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
4-Bromophenyl phenyl ether	ND		440	66	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Hexachlorobenzene	ND	*	220	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Pentachlorophenol	ND		880	88	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Phenanthrene	**880**	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Anthracene	**190**	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Carbazole	ND	*	440	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Di-n-butyl phthalate	**3700**	B	2200	220	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Fluoranthene	**1600**	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Pyrene	**2200**	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Butyl benzyl phthalate	**1800**	B	880	220	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
3,3'-Dichlorobenzidine	ND		880	130	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Benzo[a]anthracene	**270**	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Chrysene	**960**	*	110	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Bis(2-ethylhexyl) phthalate	**37000**	B	2600	220	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Di-n-octyl phthalate	**1200**	J *	2200	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Benzo[b]fluoranthene	**720**	*	88	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Benzo[k]fluoranthene	**300**		110	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Benzo[a]pyrene	**370**	*	130	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Indeno[1,2,3-cd]pyrene	**250**		180	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
Dibenz(a,h)anthracene	ND		180	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20

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

TestAmerica Job ID: 580-45835-1

Client Sample ID: SP-OWS-09-20141008-S
Date Collected: 10/08/14 16:28
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-2
Matrix: Solid
Percent Solids: 44.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	360		110	22	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20
N-Nitrosodimethylamine	ND		4400	1100	ug/Kg	☼	10/16/14 09:52	11/03/14 20:27	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*69*		*36 - 145*	*10/16/14 09:52*	*11/03/14 20:27*	*20*
Phenol-d5	*74*		*38 - 149*	*10/16/14 09:52*	*11/03/14 20:27*	*20*
2,4,6-Tribromophenol	*116*		*28 - 143*	*10/16/14 09:52*	*11/03/14 20:27*	*20*
Nitrobenzene-d5	*58*		*38 - 141*	*10/16/14 09:52*	*11/03/14 20:27*	*20*
2-Fluorobiphenyl	*77*		*42 - 140*	*10/16/14 09:52*	*11/03/14 20:27*	*20*
Terphenyl-d14	*110*		*42 - 151*	*10/16/14 09:52*	*11/03/14 20:27*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	440	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Bis(2-chloroethyl)ether	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2-Chlorophenol	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
1,3-Dichlorobenzene	ND	H	220	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
1,4-Dichlorobenzene	ND	H	220	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Benzyl alcohol	3700	H *	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
1,2-Dichlorobenzene	ND	H	240	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2-Methylphenol	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2,2'-oxybis[1-chloropropane]	ND	H	1100	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
3 & 4 Methylphenol	ND	H	880	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
N-Nitrosodi-n-propylamine	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Hexachloroethane	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Nitrobenzene	ND	H	440	150	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Isophorone	ND	H	440	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2-Nitrophenol	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2,4-Dimethylphenol	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Benzoic acid	ND	H	11000	3300	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Bis(2-chloroethoxy)methane	ND	H	440	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2,4-Dichlorophenol	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
1,2,4-Trichlorobenzene	ND	H	220	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Naphthalene	2600	H	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
4-Chloroaniline	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Hexachlorobutadiene	ND	H	220	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
4-Chloro-3-methylphenol	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2-Methylnaphthalene	5100	H	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
1-Methylnaphthalene	3800	H	130	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Hexachlorocyclopentadiene	ND	H	440	44	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2,4,6-Trichlorophenol	ND	H	660	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2,4,5-Trichlorophenol	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2-Chloronaphthalene	ND	H	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2-Nitroaniline	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Dimethyl phthalate	5100	H	440	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Acenaphthylene	ND	H	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2,6-Dinitrotoluene	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
3-Nitroaniline	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Acenaphthene	120	H	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2,4-Dinitrophenol	ND	H	4400	880	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20

Client Sample ID: SP-OWS-09-20141008-S
Date Collected: 10/08/14 16:28
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-2
Matrix: Solid
Percent Solids: 44.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	ND	H *	4400	1100	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Dibenzofuran	ND	H	440	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
2,4-Dinitrotoluene	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Diethyl phthalate	ND	H	880	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
4-Chlorophenyl phenyl ether	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Fluorene	**490**	**H**	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
4-Nitroaniline	ND	H	440	88	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
4,6-Dinitro-2-methylphenol	ND	H	4400	440	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
N-Nitrosodiphenylamine	ND	H	220	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
4-Bromophenyl phenyl ether	ND	H	440	66	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Hexachlorobenzene	ND	H	220	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Pentachlorophenol	ND	H	880	88	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Phenanthrene	**780**	**H**	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Anthracene	**210**	**H ***	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Carbazole	ND	H	440	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Di-n-butyl phthalate	**1200**	**J H**	2200	220	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Fluoranthene	**1500**	**H**	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Pyrene	**2500**	**H**	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Butyl benzyl phthalate	**1800**	**H**	880	220	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
3,3'-Dichlorobenzidine	ND	H	880	130	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Benzo[a]anthracene	**350**	**H**	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Chrysene	**970**	**H**	110	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Di-n-octyl phthalate	**1400**	**J H**	2200	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Benzo[b]fluoranthene	**700**	**H**	88	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Benzo[k]fluoranthene	**310**	**H**	110	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Benzo[a]pyrene	**520**	**H**	130	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Indeno[1,2,3-cd]pyrene	**260**	**H**	180	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Dibenz(a,h)anthracene	ND	H	180	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
Benzo[g,h,i]perylene	**430**	**H**	110	22	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20
N-Nitrosodimethylamine	ND	H	4400	1100	ug/Kg	☼	10/24/14 12:00	11/03/14 20:53	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*76*		*36 - 145*	*10/24/14 12:00*	*11/03/14 20:53*	*20*
Phenol-d5	*106*		*38 - 149*	*10/24/14 12:00*	*11/03/14 20:53*	*20*
2,4,6-Tribromophenol	*164*	*X*	*28 - 143*	*10/24/14 12:00*	*11/03/14 20:53*	*20*
Nitrobenzene-d5	*82*		*38 - 141*	*10/24/14 12:00*	*11/03/14 20:53*	*20*
2-Fluorobiphenyl	*70*		*42 - 140*	*10/24/14 12:00*	*11/03/14 20:53*	*20*
Terphenyl-d14	*146*		*42 - 151*	*10/24/14 12:00*	*11/03/14 20:53*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	**58000**	**H**	13000	1100	ug/Kg	☼	10/24/14 12:00	11/03/14 20:02	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**480**	**B**	23	2.9	mg/Kg	☼	10/11/14 14:40	10/13/14 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*50 - 150*	*10/11/14 14:40*	*10/13/14 17:30*	*1*

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

TestAmerica Job ID: 580-45835-1

Client Sample ID: SP-OWS-09-20141008-S
Date Collected: 10/08/14 16:28
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-2
Matrix: Solid
Percent Solids: 44.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.022	0.0070	mg/Kg	☼	10/17/14 12:14	10/20/14 23:47	1
Arochlor 1221	ND		0.024	0.018	mg/Kg	☼	10/17/14 12:14	10/20/14 23:47	1
Arochlor 1232	ND		0.024	0.015	mg/Kg	☼	10/17/14 12:14	10/20/14 23:47	1
Arochlor 1242	ND		0.022	0.0046	mg/Kg	☼	10/17/14 12:14	10/20/14 23:47	1
Arochlor 1248	ND		0.022	0.0066	mg/Kg	☼	10/17/14 12:14	10/20/14 23:47	1
Arochlor 1254	ND		0.022	0.0046	mg/Kg	☼	10/17/14 12:14	10/20/14 23:47	1
Arochlor 1260	**0.54**		0.022	0.0066	mg/Kg	☼	10/17/14 12:14	10/20/14 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*45 - 135*	*10/17/14 12:14*	*10/20/14 23:47*	*1*
DCB Decachlorobiphenyl	*86*		*50 - 140*	*10/17/14 12:14*	*10/20/14 23:47*	*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)	**5300**	**Y**	540	120	mg/Kg	☼	10/15/14 08:42	10/17/14 12:49	10
Motor Oil (>C24-C36)	**14000**	**Y**	1100	200	mg/Kg	☼	10/15/14 08:42	10/17/14 12:49	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*78*		*50 - 150*	*10/15/14 08:42*	*10/17/14 12:49*	*10*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**22**		0.88	0.32	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10
Lead	**430**		0.35	0.023	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10
Antimony	**20**		0.35	0.074	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10
Beryllium	**0.23**	**J**	0.35	0.062	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10
Cadmium	**6.5**		0.35	0.014	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10
Chromium	**160**		0.35	0.20	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10
Copper	**1800**		0.71	0.17	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10
Nickel	**180**		0.88	0.14	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10
Selenium	**1.2**		1.2	0.36	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10
Silver	**2.1**		0.35	0.021	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10
Thallium	**0.30**	**J**	0.88	0.23	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10
Zinc	**5600**		3.5	2.0	mg/Kg	☼	10/28/14 10:12	10/28/14 14:43	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.19**		0.029	0.0090	mg/Kg	☼	10/28/14 12:52	10/28/14 16:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**45**		0.10	0.10	%			10/18/14 13:17	1
Percent Moisture	**55**		0.10	0.10	%			10/18/14 13:17	1
Total Organic Carbon	**110000**		2000	250	mg/Kg			10/16/14 14:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobbles	**0.00**				%			10/16/14 12:09	1
Gravel	**6.5**				%			10/16/14 12:09	1
Sand	**48**				%			10/16/14 12:09	1
Silt	**45**				%			10/16/14 12:09	1

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

TestAmerica Job ID: 580-45835-1

Client Sample ID: SP-OWS-09-20141008-S
Date Collected: 10/08/14 16:28
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	1.3				%			10/16/14 12:09	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-172411/1-A
Matrix: Solid
Analysis Batch: 172403

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172411

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		40	6.5	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Chloromethane	ND		100	10	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Vinyl chloride	ND		16	7.1	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Bromomethane	ND		140	13	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Chloroethane	ND		400	16	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Trichlorofluoromethane	ND		40	5.9	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Acrolein	ND		1200	1200	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,1-Dichloroethene	ND		20	8.8	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		40	6.8	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Iodomethane	ND		200	6.3	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Carbon disulfide	ND		40	4.4	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Acetone	ND		400	170	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Methylene Chloride	ND		25	12	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Methyl tert-butyl ether	ND		40	6.0	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
trans-1,2-Dichloroethene	ND		40	6.1	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Acrylonitrile	ND		200	96	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,1-Dichloroethane	ND		40	4.2	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Vinyl acetate	ND		200	11	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
2,2-Dichloropropane	ND		40	4.8	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
cis-1,2-Dichloroethene	ND		40	4.9	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
2-Butanone	ND		400	19	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Bromochloromethane	ND		40	4.6	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Chloroform	ND		40	4.2	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,1,1-Trichloroethane	ND		40	5.6	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Carbon tetrachloride	ND		20	3.8	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,1-Dichloropropene	ND		40	5.3	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Benzene	ND		16	3.5	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,2-Dichloroethane	ND		16	3.3	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Trichloroethene	ND		16	3.1	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,2-Dichloropropane	ND		12	2.4	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Dibromomethane	ND		40	4.1	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Bromodichloromethane	ND		40	1.4	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
2-Chloroethyl vinyl ether	ND		200	6.2	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
cis-1,3-Dichloropropene	ND		16	1.8	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
4-Methyl-2-pentanone	ND		200	8.2	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Toluene	ND		40	2.6	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
trans-1,3-Dichloropropene	ND		16	2.4	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,1,2-Trichloroethane	ND		12	2.8	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Tetrachloroethene	ND		20	1.3	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,3-Dichloropropane	ND		40	2.3	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
2-Hexanone	ND		200	12	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Chlorodibromomethane	ND		20	1.0	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,2-Dibromoethane	ND		16	3.4	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Chlorobenzene	ND		40	2.1	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,1,1,2-Tetrachloroethane	ND		40	1.1	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Ethylbenzene	ND		40	2.0	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
m-Xylene & p-Xylene	ND		40	3.0	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
o-Xylene	ND		40	3.0	ug/Kg		10/11/14 08:30	10/11/14 08:37	1

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

Lab Sample ID: MB 580-172411/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 172403 — **Prep Batch: 172411**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		40	2.4	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Bromoform	ND		40	2.2	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Isopropylbenzene	ND		40	2.6	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Bromobenzene	ND		40	2.4	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,1,2,2-Tetrachloroethane	ND		10	2.3	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,2,3-Trichloropropane	ND		40	3.8	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
trans-1,4-Dichloro-2-butene	ND		200	16	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
N-Propylbenzene	ND		40	2.6	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
2-Chlorotoluene	ND		40	3.4	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
4-Chlorotoluene	ND		40	3.0	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,3,5-Trimethylbenzene	ND		40	2.9	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
tert-Butylbenzene	ND		40	3.1	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,2,4-Trimethylbenzene	ND		40	3.3	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
sec-Butylbenzene	ND		40	2.8	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
4-Isopropyltoluene	ND		40	2.8	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,3-Dichlorobenzene	ND		40	3.1	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,4-Dichlorobenzene	ND		40	2.0	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
n-Butylbenzene	ND		40	3.5	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,2-Dichlorobenzene	ND		40	3.2	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,2-Dibromo-3-Chloropropane	ND		200	2.6	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,2,4-Trichlorobenzene	ND		40	3.9	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Hexachloro-1,3-butadiene	ND		40	3.3	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
Naphthalene	ND		40	6.0	ug/Kg		10/11/14 08:30	10/11/14 08:37	1
1,2,3-Trichlorobenzene	ND		40	7.8	ug/Kg		10/11/14 08:30	10/11/14 08:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*115*		*65 - 140*	*10/11/14 08:30*	*10/11/14 08:37*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*	*10/11/14 08:30*	*10/11/14 08:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*71 - 136*	*10/11/14 08:30*	*10/11/14 08:37*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 120*	*10/11/14 08:30*	*10/11/14 08:37*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 132*	*10/11/14 08:30*	*10/11/14 08:37*	*1*

Lab Sample ID: LCS 580-172411/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 172403 — **Prep Batch: 172411**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	800	738		ug/Kg		92	38 - 150
Chloromethane	800	671		ug/Kg		84	55 - 136
Vinyl chloride	800	746		ug/Kg		93	67 - 131
Bromomethane	800	722		ug/Kg		90	57 - 148
Chloroethane	800	730		ug/Kg		91	48 - 167
Trichlorofluoromethane	800	876		ug/Kg		109	47 - 165
Acrolein	4740	2120		ug/Kg		45	10 - 125
1,1-Dichloroethene	800	851		ug/Kg		106	70 - 133
1,1,2-Trichloro-1,2,2-trifluoroethane	800	854		ug/Kg		107	66 - 163
Iodomethane	800	816		ug/Kg		102	44 - 148

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

Lab Sample ID: LCS 580-172411/2-A
Matrix: Solid
Analysis Batch: 172403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172411

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	800	796		ug/Kg		99	45 - 160
Acetone	3200	2760		ug/Kg		86	20 - 160
Methylene Chloride	800	827		ug/Kg		103	57 - 146
Methyl tert-butyl ether	800	721		ug/Kg		90	65 - 125
trans-1,2-Dichloroethene	800	823		ug/Kg		103	76 - 131
Acrylonitrile	8000	6530		ug/Kg		82	74 - 117
1,1-Dichloroethane	800	835		ug/Kg		104	70 - 128
Vinyl acetate	1600	1370		ug/Kg		85	19 - 144
2,2-Dichloropropane	800	737		ug/Kg		92	56 - 144
cis-1,2-Dichloroethene	800	816		ug/Kg		102	70 - 130
2-Butanone	3200	2910		ug/Kg		91	30 - 160
Bromochloromethane	800	811		ug/Kg		101	78 - 123
Chloroform	800	814		ug/Kg		102	78 - 125
1,1,1-Trichloroethane	800	886		ug/Kg		111	63 - 135
Carbon tetrachloride	800	929		ug/Kg		116	59 - 145
1,1-Dichloropropene	800	856		ug/Kg		107	77 - 125
Benzene	800	823		ug/Kg		103	70 - 128
1,2-Dichloroethane	800	800		ug/Kg		100	71 - 128
Trichloroethene	800	864		ug/Kg		108	83 - 124
1,2-Dichloropropane	800	803		ug/Kg		100	76 - 161
Dibromomethane	800	779		ug/Kg		97	78 - 126
Bromodichloromethane	800	835		ug/Kg		104	58 - 133
2-Chloroethyl vinyl ether	800	740		ug/Kg		93	60 - 150
cis-1,3-Dichloropropene	800	819		ug/Kg		102	69 - 129
4-Methyl-2-pentanone	3200	3170		ug/Kg		99	45 - 145
Toluene	800	795		ug/Kg		99	75 - 126
trans-1,3-Dichloropropene	800	841		ug/Kg		105	72 - 129
1,1,2-Trichloroethane	800	799		ug/Kg		100	77 - 124
Tetrachloroethene	800	851		ug/Kg		106	56 - 155
1,3-Dichloropropane	800	792		ug/Kg		99	77 - 123
2-Hexanone	3200	3210		ug/Kg		100	45 - 145
Chlorodibromomethane	800	857		ug/Kg		107	42 - 129
1,2-Dibromoethane	800	814		ug/Kg		102	69 - 126
Chlorobenzene	800	825		ug/Kg		103	75 - 120
1,1,1,2-Tetrachloroethane	800	854		ug/Kg		107	72 - 123
Ethylbenzene	800	853		ug/Kg		107	78 - 126
m-Xylene & p-Xylene	800	843		ug/Kg		105	78 - 126
o-Xylene	800	834		ug/Kg		104	77 - 127
Styrene	800	844		ug/Kg		106	79 - 127
Bromoform	800	837		ug/Kg		105	50 - 124
Isopropylbenzene	800	861		ug/Kg		108	79 - 127
Bromobenzene	800	825		ug/Kg		103	80 - 120
1,1,2,2-Tetrachloroethane	800	796		ug/Kg		100	73 - 125
1,2,3-Trichloropropane	800	798		ug/Kg		100	77 - 123
trans-1,4-Dichloro-2-butene	800	780		ug/Kg		97	42 - 160
N-Propylbenzene	800	855		ug/Kg		107	81 - 127
2-Chlorotoluene	800	830		ug/Kg		104	79 - 122
4-Chlorotoluene	800	807		ug/Kg		101	80 - 122

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

Lab Sample ID: LCS 580-172411/2-A
Matrix: Solid
Analysis Batch: 172403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172411

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	800	840		ug/Kg		105	80 - 125
tert-Butylbenzene	800	889		ug/Kg		111	71 - 136
1,2,4-Trimethylbenzene	800	831		ug/Kg		104	79 - 124
sec-Butylbenzene	800	873		ug/Kg		109	78 - 128
4-Isopropyltoluene	800	840		ug/Kg		105	78 - 126
1,3-Dichlorobenzene	800	821		ug/Kg		103	79 - 119
1,4-Dichlorobenzene	800	793		ug/Kg		99	79 - 117
n-Butylbenzene	800	857		ug/Kg		107	78 - 128
1,2-Dichlorobenzene	800	802		ug/Kg		100	79 - 117
1,2-Dibromo-3-Chloropropane	800	840		ug/Kg		105	53 - 132
1,2,4-Trichlorobenzene	800	821		ug/Kg		103	61 - 130
Hexachloro-1,3-butadiene	800	806		ug/Kg		101	68 - 134
Naphthalene	800	825		ug/Kg		103	14 - 170
1,2,3-Trichlorobenzene	800	806		ug/Kg		101	61 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*127*		*65 - 140*
Toluene-d8 (Surr)	*99*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 136*
4-Bromofluorobenzene (Surr)	*103*		*70 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 132*

Lab Sample ID: LCSD 580-172411/3-A
Matrix: Solid
Analysis Batch: 172403

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172411

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	800	725		ug/Kg		91	38 - 150	2	26
Chloromethane	800	676		ug/Kg		85	55 - 136	1	26
Vinyl chloride	800	860		ug/Kg		108	67 - 131	14	22
Bromomethane	800	740		ug/Kg		92	57 - 148	2	29
Chloroethane	800	722		ug/Kg		90	48 - 167	1	53
Trichlorofluoromethane	800	841		ug/Kg		105	47 - 165	4	54
Acrolein	4740	1920		ug/Kg		40	10 - 125	10	30
1,1-Dichloroethene	800	845		ug/Kg		106	70 - 133	1	23
1,1,2-Trichloro-1,2,2-trifluoroethane	800	868		ug/Kg		108	66 - 163	2	30
Iodomethane	800	815		ug/Kg		102	44 - 148	0	30
Carbon disulfide	800	797		ug/Kg		100	45 - 160	0	30
Acetone	3200	2700		ug/Kg		85	20 - 160	2	30
Methylene Chloride	800	850		ug/Kg		106	57 - 146	3	21
Methyl tert-butyl ether	800	800		ug/Kg		100	65 - 125	10	30
trans-1,2-Dichloroethene	800	795		ug/Kg		99	76 - 131	3	18
Acrylonitrile	8000	7770		ug/Kg		97	74 - 117	17	30
1,1-Dichloroethane	800	795		ug/Kg		99	70 - 128	5	21
Vinyl acetate	1600	1430		ug/Kg		89	19 - 144	5	30
2,2-Dichloropropane	800	798		ug/Kg		100	56 - 144	8	21
cis-1,2-Dichloroethene	800	780		ug/Kg		97	70 - 130	5	19

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

Lab Sample ID: LCSD 580-172411/3-A
Matrix: Solid
Analysis Batch: 172403

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172411

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Butanone	3200	2940		ug/Kg		92	30 - 160	1	30
Bromochloromethane	800	789		ug/Kg		99	78 - 123	3	19
Chloroform	800	792		ug/Kg		99	78 - 125	3	17
1,1,1-Trichloroethane	800	881		ug/Kg		110	63 - 135	1	20
Carbon tetrachloride	800	902		ug/Kg		113	59 - 145	3	19
1,1-Dichloropropene	800	818		ug/Kg		102	77 - 125	4	16
Benzene	800	793		ug/Kg		99	70 - 128	4	19
1,2-Dichloroethane	800	809		ug/Kg		101	71 - 128	1	18
Trichloroethene	800	807		ug/Kg		101	83 - 124	7	17
1,2-Dichloropropane	800	770		ug/Kg		96	76 - 161	4	15
Dibromomethane	800	768		ug/Kg		96	78 - 126	1	18
Bromodichloromethane	800	810		ug/Kg		101	58 - 133	3	19
2-Chloroethyl vinyl ether	800	713		ug/Kg		89	60 - 150	4	30
cis-1,3-Dichloropropene	800	773		ug/Kg		97	69 - 129	6	19
4-Methyl-2-pentanone	3200	2940		ug/Kg		92	45 - 145	8	30
Toluene	800	733		ug/Kg		92	75 - 126	8	19
trans-1,3-Dichloropropene	800	787		ug/Kg		98	72 - 129	7	20
1,1,2-Trichloroethane	800	744		ug/Kg		93	77 - 124	7	18
Tetrachloroethene	800	782		ug/Kg		98	56 - 155	8	27
1,3-Dichloropropane	800	737		ug/Kg		92	77 - 123	7	19
2-Hexanone	3200	2820		ug/Kg		88	45 - 145	13	30
Chlorodibromomethane	800	823		ug/Kg		103	42 - 129	4	23
1,2-Dibromoethane	800	765		ug/Kg		96	69 - 126	6	21
Chlorobenzene	800	772		ug/Kg		96	75 - 120	7	21
1,1,1,2-Tetrachloroethane	800	827		ug/Kg		103	72 - 123	3	20
Ethylbenzene	800	776		ug/Kg		97	78 - 126	9	23
m-Xylene & p-Xylene	800	774		ug/Kg		97	78 - 126	8	23
o-Xylene	800	794		ug/Kg		99	77 - 127	5	22
Styrene	800	772		ug/Kg		97	79 - 127	9	21
Bromoform	800	794		ug/Kg		99	50 - 124	5	25
Isopropylbenzene	800	808		ug/Kg		101	79 - 127	6	20
Bromobenzene	800	795		ug/Kg		99	80 - 120	4	19
1,1,2,2-Tetrachloroethane	800	753		ug/Kg		94	73 - 125	6	22
1,2,3-Trichloropropane	800	743		ug/Kg		93	77 - 123	7	23
trans-1,4-Dichloro-2-butene	800	722		ug/Kg		90	42 - 160	8	30
N-Propylbenzene	800	781		ug/Kg		98	81 - 127	9	20
2-Chlorotoluene	800	791		ug/Kg		99	79 - 122	5	18
4-Chlorotoluene	800	746		ug/Kg		93	80 - 122	8	18
1,3,5-Trimethylbenzene	800	806		ug/Kg		101	80 - 125	4	18
tert-Butylbenzene	800	851		ug/Kg		106	71 - 136	4	27
1,2,4-Trimethylbenzene	800	787		ug/Kg		98	79 - 124	5	18
sec-Butylbenzene	800	838		ug/Kg		105	78 - 128	4	17
4-Isopropyltoluene	800	805		ug/Kg		101	78 - 126	4	18
1,3-Dichlorobenzene	800	769		ug/Kg		96	79 - 119	7	17
1,4-Dichlorobenzene	800	742		ug/Kg		93	79 - 117	7	18
n-Butylbenzene	800	822		ug/Kg		103	78 - 128	4	17
1,2-Dichlorobenzene	800	775		ug/Kg		97	79 - 117	3	17
1,2-Dibromo-3-Chloropropane	800	777		ug/Kg		97	53 - 132	8	27

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

Lab Sample ID: LCSD 580-172411/3-A
Matrix: Solid
Analysis Batch: 172403

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172411

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene			800	838		ug/Kg		105	61 - 130	2	22
Hexachloro-1,3-butadiene			800	862		ug/Kg		108	68 - 134	7	21
Naphthalene			800	805		ug/Kg		101	14 - 170	2	50
1,2,3-Trichlorobenzene			800	806		ug/Kg		101	61 - 130	0	23

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Trifluorotoluene (Surr)	*125*		*65 - 140*
Toluene-d8 (Surr)	*97*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 136*
4-Bromofluorobenzene (Surr)	*98*		*70 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 132*

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

Lab Sample ID: MB 580-172868/1-A
Matrix: Solid
Analysis Batch: 172999

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172868

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Bis(2-chloroethyl)ether	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2-Chlorophenol	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
1,3-Dichlorobenzene	ND		5.0	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
1,4-Dichlorobenzene	ND		5.0	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Benzyl alcohol	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
1,2-Dichlorobenzene	ND		5.5	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2-Methylphenol	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2,2'-oxybis[1-chloropropane]	ND		25	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
3 & 4 Methylphenol	ND		20	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Hexachloroethane	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Nitrobenzene	ND		10	3.4	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Isophorone	ND		10	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2-Nitrophenol	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2,4-Dimethylphenol	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Benzoic acid	ND		250	75	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Bis(2-chloroethoxy)methane	ND		10	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2,4-Dichlorophenol	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
1,2,4-Trichlorobenzene	ND		5.0	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Naphthalene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
4-Chloroaniline	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Hexachlorobutadiene	ND		5.0	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
4-Chloro-3-methylphenol	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2-Methylnaphthalene	ND		2.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
1-Methylnaphthalene	ND		3.0	0.50	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
Hexachlorocyclopentadiene	ND		10	1.0	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2,4,6-Trichlorophenol	ND		15	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1
2,4,5-Trichlorophenol	ND		10	1.5	ug/Kg		10/16/14 09:52	10/17/14 14:31	1

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

Lab Sample ID: MB 580-172868/1-A
Matrix: Solid
Analysis Batch: 172999

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172868

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

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*60*		*36 - 145*	*10/16/14 09:52*	*10/17/14 14:31*	*1*
Phenol-d5	*65*		*38 - 149*	*10/16/14 09:52*	*10/17/14 14:31*	*1*
2,4,6-Tribromophenol	*73*		*28 - 143*	*10/16/14 09:52*	*10/17/14 14:31*	*1*
Nitrobenzene-d5	*65*		*38 - 141*	*10/16/14 09:52*	*10/17/14 14:31*	*1*
2-Fluorobiphenyl	*66*		*42 - 140*	*10/16/14 09:52*	*10/17/14 14:31*	*1*
Terphenyl-d14	*76*		*42 - 151*	*10/16/14 09:52*	*10/17/14 14:31*	*1*

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

Lab Sample ID: LCS 580-172868/2-A
Matrix: Solid
Analysis Batch: 172999

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172868

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

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

Lab Sample ID: LCS 580-172868/2-A
Matrix: Solid
Analysis Batch: 172999

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172868

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

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

Lab Sample ID: LCSD 580-172868/3-A
Matrix: Solid
Analysis Batch: 172999

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172868

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

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

Lab Sample ID: LCSD 580-172868/3-A
Matrix: Solid
Analysis Batch: 172999

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172868

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

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

Lab Sample ID: LCSD 580-172868/3-A
Matrix: Solid
Analysis Batch: 172999

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172868

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

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

Lab Sample ID: MB 580-173001/1-A
Matrix: Solid
Analysis Batch: 173503

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173001

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

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

Lab Sample ID: MB 580-173001/1-A
Matrix: Solid
Analysis Batch: 173503

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173001

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

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

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

Lab Sample ID: LCS 580-173001/2-A
Matrix: Solid
Analysis Batch: 173503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173001

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

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

Lab Sample ID: LCS 580-173001/2-A
Matrix: Solid
Analysis Batch: 173503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173001

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

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

Lab Sample ID: LCSD 580-173001/3-A
Matrix: Solid
Analysis Batch: 173503

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173001

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

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

Lab Sample ID: LCSD 580-173001/3-A
Matrix: Solid
Analysis Batch: 173503

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173001

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

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

Lab Sample ID: LCSD 580-173001/3-A
Matrix: Solid
Analysis Batch: 173503

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173001

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

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

Lab Sample ID: 580-45835-1 MS
Matrix: Solid
Analysis Batch: 173503

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 173001

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	2200		283	2730	4	ug/Kg	☼	176	63 - 111
Bis(2-chloroethyl)ether	ND		283	230	J	ug/Kg	☼	81	62 - 110
2-Chlorophenol	ND		283	211	J	ug/Kg	☼	75	68 - 117
1,3-Dichlorobenzene	ND	*	283	184		ug/Kg	☼	65	64 - 111
1,4-Dichlorobenzene	ND	*	283	183		ug/Kg	☼	65	65 - 110
1,2-Dichlorobenzene	ND	*	283	169	F1	ug/Kg	☼	60	64 - 112
2-Methylphenol	ND		283	718	F1	ug/Kg	☼	254	71 - 116
2,2'-oxybis[1-chloropropane]	ND		283	175	J	ug/Kg	☼	62	41 - 126
3 & 4 Methylphenol	6400		283	6260	4	ug/Kg	☼	-57	70 - 116
N-Nitrosodi-n-propylamine	ND		283	476	F1	ug/Kg	☼	168	62 - 116
Hexachloroethane	ND		283	220	J	ug/Kg	☼	78	62 - 120
Nitrobenzene	ND		283	443	F1	ug/Kg	☼	156	64 - 118
Isophorone	ND		283	344	F1	ug/Kg	☼	122	67 - 119
2-Nitrophenol	ND		283	256	J	ug/Kg	☼	91	67 - 127
2,4-Dimethylphenol	ND		283	406	F1	ug/Kg	☼	144	54 - 139
Benzoic acid	9700		566	5700	J 4	ug/Kg	☼	-709	29 - 158
Bis(2-chloroethoxy)methane	ND		283	352	F1	ug/Kg	☼	125	69 - 107
2,4-Dichlorophenol	ND		283	339		ug/Kg	☼	120	68 - 125
1,2,4-Trichlorobenzene	ND		283	242		ug/Kg	☼	86	66 - 115
Naphthalene	2000		283	2140	4	ug/Kg	☼	49	62 - 112
4-Chloroaniline	ND		283	237	J	ug/Kg	☼	84	20 - 103
Hexachlorobutadiene	ND		283	290		ug/Kg	☼	102	65 - 116
4-Chloro-3-methylphenol	17000		283	13600	4	ug/Kg	☼	-1141	69 - 121
2-Methylnaphthalene	4700		283	4650	4	ug/Kg	☼	-9	64 - 119
1-Methylnaphthalene	2800		283	2810	4	ug/Kg	☼	-7	62 - 118
Hexachlorocyclopentadiene	ND		283	ND	F1	ug/Kg	☼	0	46 - 131
2,4,6-Trichlorophenol	ND		283	338	J	ug/Kg	☼	120	62 - 133
2,4,5-Trichlorophenol	ND		283	373		ug/Kg	☼	132	57 - 133

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

Lab Sample ID: 580-45835-1 MS
Matrix: Solid
Analysis Batch: 173503

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 173001

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	ND		283	254		ug/Kg	☼	90	68 - 112
2-Nitroaniline	ND		283	394	F1	ug/Kg	☼	139	64 - 112
Acenaphthylene	ND		283	370	F1	ug/Kg	☼	131	68 - 120
2,6-Dinitrotoluene	ND		283	3640	F1	ug/Kg	☼	1287	66 - 123
3-Nitroaniline	ND		283	309	F1	ug/Kg	☼	109	27 - 103
Acenaphthene	ND		283	683	F1	ug/Kg	☼	242	68 - 116
2,4-Dinitrophenol	ND		566	ND		ug/Kg	☼	NC	20 - 141
4-Nitrophenol	ND		566	1910	J	ug/Kg	☼	NC	20 - 165
Dibenzofuran	ND		283	609	F1	ug/Kg	☼	215	72 - 109
2,4-Dinitrotoluene	ND		283	790	F1	ug/Kg	☼	279	68 - 121
Diethyl phthalate	ND		283	347	J F1	ug/Kg	☼	123	73 - 116
4-Chlorophenyl phenyl ether	ND		283	278	J	ug/Kg	☼	98	75 - 108
Fluorene	950		283	1160		ug/Kg	☼	77	70 - 121
4-Nitroaniline	ND		283	185	J	ug/Kg	☼	65	58 - 108
4,6-Dinitro-2-methylphenol	ND		566	ND	F1	ug/Kg	☼	0	48 - 130
N-Nitrosodiphenylamine	ND		283	911	F1	ug/Kg	☼	322	73 - 115
4-Bromophenyl phenyl ether	ND		283	217	J	ug/Kg	☼	77	68 - 122
Hexachlorobenzene	ND		283	268		ug/Kg	☼	95	66 - 117
Pentachlorophenol	1500		566	1890		ug/Kg	☼	62	45 - 117
Phenanthrene	6300		283	7070	4	ug/Kg	☼	283	73 - 106
Anthracene	800	*	283	1400	F1	ug/Kg	☼	212	73 - 116
Carbazole	850		283	1210		ug/Kg	☼	129	76 - 135
Di-n-butyl phthalate	6600		283	6840	4	ug/Kg	☼	75	66 - 140
Fluoranthene	12000		283	13300	4	ug/Kg	☼	422	73 - 125
Pyrene	11000		283	13300	4	ug/Kg	☼	666	70 - 120
Butyl benzyl phthalate	4300	B	283	4940	4	ug/Kg	☼	215	69 - 142
3,3'-Dichlorobenzidine	ND		566	ND	F1	ug/Kg	☼	0	20 - 103
Benzo[a]anthracene	3400		283	4300	4	ug/Kg	☼	301	76 - 119
Chrysene	5900		283	6700	4	ug/Kg	☼	275	75 - 114
Di-n-octyl phthalate	4400		283	6740	4	ug/Kg	☼	842	65 - 141
Benzo[b]fluoranthene	8000		283	11800	4	ug/Kg	☼	1310	63 - 132
Benzo[k]fluoranthene	2700		283	8090	4	ug/Kg	☼	1895	63 - 119
Benzo[a]pyrene	3800		283	4240	4	ug/Kg	☼	153	72 - 117
Indeno[1,2,3-cd]pyrene	1800		283	1830	4	ug/Kg	☼	24	56 - 127
Dibenz(a,h)anthracene	440		283	400	F1	ug/Kg	☼	-15	56 - 134
Benzo[g,h,i]perylene	1400		283	1590	4	ug/Kg	☼	51	55 - 139
N-Nitrosodimethylamine	ND		283	ND		ug/Kg	☼	NC	38 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorophenol	*77*		*36 - 145*
Phenol-d5	*75*		*38 - 149*
2,4,6-Tribromophenol	*114*		*28 - 143*
Nitrobenzene-d5	*91*		*38 - 141*
2-Fluorobiphenyl	*83*		*42 - 140*
Terphenyl-d14	*131*		*42 - 151*

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

Lab Sample ID: 580-45835-1 MSD
Matrix: Solid
Analysis Batch: 173503

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 173001

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	2200		286	2300	4	ug/Kg	☼	24	63 - 111	17	26
Bis(2-chloroethyl)ether	ND		286	263	J	ug/Kg	☼	92	62 - 110	13	60
2-Chlorophenol	ND		286	206	J	ug/Kg	☼	72	68 - 117	3	27
1,3-Dichlorobenzene	ND	*	286	187		ug/Kg	☼	65	64 - 111	2	60
1,4-Dichlorobenzene	ND	*	286	182	F1	ug/Kg	☼	64	65 - 110	0	32
1,2-Dichlorobenzene	ND	*	286	204		ug/Kg	☼	71	64 - 112	19	60
2-Methylphenol	ND		286	630	F1	ug/Kg	☼	220	71 - 116	13	25
2,2'-oxybis[1-chloropropane]	ND		286	201	J	ug/Kg	☼	70	41 - 126	14	60
3 & 4 Methylphenol	6400		286	6090	4	ug/Kg	☼	-114	70 - 116	3	27
N-Nitrosodi-n-propylamine	ND		286	350	F1 F2	ug/Kg	☼	122	62 - 116	31	28
Hexachloroethane	ND		286	668	F1 F2	ug/Kg	☼	233	62 - 120	101	60
Nitrobenzene	ND		286	495	F1	ug/Kg	☼	173	64 - 118	11	60
Isophorone	ND		286	329		ug/Kg	☼	115	67 - 119	4	60
2-Nitrophenol	ND		286	275	J	ug/Kg	☼	96	67 - 127	7	60
2,4-Dimethylphenol	ND		286	450	F1	ug/Kg	☼	157	54 - 139	10	60
Benzoic acid	9700		573	4190	J 4	ug/Kg	☼	-962	29 - 158	30	60
Bis(2-chloroethoxy)methane	ND		286	341	F1	ug/Kg	☼	119	69 - 107	3	60
2,4-Dichlorophenol	ND		286	290		ug/Kg	☼	101	68 - 125	15	60
1,2,4-Trichlorobenzene	ND		286	229		ug/Kg	☼	80	66 - 115	5	28
Naphthalene	2000		286	2060	4	ug/Kg	☼	22	62 - 112	4	26
4-Chloroaniline	ND		286	61.5	J F2	ug/Kg	☼	21	20 - 103	117	60
Hexachlorobutadiene	ND		286	242		ug/Kg	☼	84	65 - 116	18	60
4-Chloro-3-methylphenol	17000		286	15000	4	ug/Kg	☼	-615	69 - 121	10	27
2-Methylnaphthalene	4700		286	4530	4	ug/Kg	☼	-49	64 - 119	3	27
1-Methylnaphthalene	2800		286	2790	4	ug/Kg	☼	-16	62 - 118	1	30
Hexachlorocyclopentadiene	ND		286	47.9	J F1	ug/Kg	☼	17	46 - 131	NC	60
2,4,6-Trichlorophenol	ND		286	268	J	ug/Kg	☼	94	62 - 133	23	60
2,4,5-Trichlorophenol	ND		286	270	J	ug/Kg	☼	94	57 - 133	32	60
2-Chloronaphthalene	ND		286	219		ug/Kg	☼	76	68 - 112	15	25
2-Nitroaniline	ND		286	399	F1	ug/Kg	☼	139	64 - 112	1	60
Acenaphthylene	ND		286	335		ug/Kg	☼	117	68 - 120	10	28
2,6-Dinitrotoluene	ND		286	3440	F1	ug/Kg	☼	1200	66 - 123	6	60
3-Nitroaniline	ND		286	145	J F2	ug/Kg	☼	51	27 - 103	72	60
Acenaphthene	ND		286	616	F1	ug/Kg	☼	215	68 - 116	10	27
2,4-Dinitrophenol	ND		573	ND	F1	ug/Kg	☼	0	20 - 141	NC	60
4-Nitrophenol	ND		573	1900	J	ug/Kg	☼	NC	20 - 165	1	33
Dibenzofuran	ND		286	495	F1	ug/Kg	☼	173	72 - 109	21	60
2,4-Dinitrotoluene	ND		286	563	F1 F2	ug/Kg	☼	197	68 - 121	33	31
Diethyl phthalate	ND		286	673	F1 F2	ug/Kg	☼	235	73 - 116	64	26
4-Chlorophenyl phenyl ether	ND		286	243	J	ug/Kg	☼	85	75 - 108	13	60
Fluorene	950		286	1120	F1	ug/Kg	☼	62	70 - 121	3	31
4-Nitroaniline	ND		286	131	J F1	ug/Kg	☼	46	58 - 108	34	60
4,6-Dinitro-2-methylphenol	ND		573	ND	F1	ug/Kg	☼	0	48 - 130	NC	60
N-Nitrosodiphenylamine	ND		286	804	F1	ug/Kg	☼	281	73 - 115	12	60
4-Bromophenyl phenyl ether	ND		286	298		ug/Kg	☼	104	68 - 122	31	60
Hexachlorobenzene	ND		286	259		ug/Kg	☼	90	66 - 117	3	60
Pentachlorophenol	1500		573	1830		ug/Kg	☼	51	45 - 117	3	68
Phenanthrene	6300		286	6020	4	ug/Kg	☼	-84	73 - 106	16	28

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

Lab Sample ID: 580-45835-1 MSD
Matrix: Solid
Analysis Batch: 173503

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 173001

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Anthracene	800	*	286	1020	F2	ug/Kg	☼	78	73 - 116	31	27
Carbazole	850		286	1040	F1	ug/Kg	☼	66	76 - 135	16	60
Di-n-butyl phthalate	6600		286	7600	4	ug/Kg	☼	337	66 - 140	10	60
Fluoranthene	12000		286	11900	4	ug/Kg	☼	-83	73 - 125	11	36
Pyrene	11000		286	11100	4	ug/Kg	☼	-102	70 - 120	18	31
Butyl benzyl phthalate	4300	B	286	6790	4	ug/Kg	☼	860	69 - 142	32	60
3,3'-Dichlorobenzidine	ND		573	ND	F1	ug/Kg	☼	0	20 - 103	NC	60
Benzo[a]anthracene	3400		286	3960	4	ug/Kg	☼	180	76 - 119	8	27
Chrysene	5900		286	5430	4	ug/Kg	☼	-172	75 - 114	21	26
Di-n-octyl phthalate	4400		286	5140	4 *	ug/Kg	☼	273	65 - 141	27	31
Benzo[b]fluoranthene	8000		286	7190	4 * F2	ug/Kg	☼	-297	63 - 132	48	31
Benzo[k]fluoranthene	2700		286	3340	4 * F2	ug/Kg	☼	215	63 - 119	83	31
Benzo[a]pyrene	3800		286	3800	4 *	ug/Kg	☼	-3	72 - 117	11	30
Indeno[1,2,3-cd]pyrene	1800		286	1900	4 *	ug/Kg	☼	47	56 - 127	4	29
Dibenz(a,h)anthracene	440		286	582	* F1 F2	ug/Kg	☼	48	56 - 134	37	30
Benzo[g,h,i]perylene	1400		286	1600	4 *	ug/Kg	☼	52	55 - 139	0	28
N-Nitrosodimethylamine	ND		286	ND		ug/Kg	☼	NC	38 - 133	NC	60

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorophenol	*73*		*36 - 145*
Phenol-d5	*71*		*38 - 149*
2,4,6-Tribromophenol	*97*		*28 - 143*
Nitrobenzene-d5	*110*		*38 - 141*
2-Fluorobiphenyl	*68*		*42 - 140*
Terphenyl-d14	*109*		*42 - 151*

Lab Sample ID: MB 580-173678/1-A
Matrix: Solid
Analysis Batch: 174213

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173678

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

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

Lab Sample ID: MB 580-173678/1-A
Matrix: Solid
Analysis Batch: 174213

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173678

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

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

Lab Sample ID: MB 580-173678/1-A
Matrix: Solid
Analysis Batch: 174213

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173678

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		4.0	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
Benzo[g,h,i]perylene	ND		2.5	0.50	ug/Kg		10/24/14 12:00	10/29/14 19:14	1
N-Nitrosodimethylamine	ND		100	25	ug/Kg		10/24/14 12:00	10/29/14 19:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*48*		*36 - 145*	*10/24/14 12:00*	*10/29/14 19:14*	*1*
Phenol-d5	*50*		*38 - 149*	*10/24/14 12:00*	*10/29/14 19:14*	*1*
2,4,6-Tribromophenol	*50*		*28 - 143*	*10/24/14 12:00*	*10/29/14 19:14*	*1*
Nitrobenzene-d5	*53*		*38 - 141*	*10/24/14 12:00*	*10/29/14 19:14*	*1*
2-Fluorobiphenyl	*53*		*42 - 140*	*10/24/14 12:00*	*10/29/14 19:14*	*1*
Terphenyl-d14	*63*		*42 - 151*	*10/24/14 12:00*	*10/29/14 19:14*	*1*

Lab Sample ID: LCS 580-173678/2-A
Matrix: Solid
Analysis Batch: 174213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173678

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

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

Lab Sample ID: LCS 580-173678/2-A
Matrix: Solid
Analysis Batch: 174213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173678

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dimethyl phthalate	100	85.0		ug/Kg		85	78 - 117
Acenaphthylene	100	87.2		ug/Kg		87	68 - 120
2,6-Dinitrotoluene	100	79.6		ug/Kg		80	66 - 123
3-Nitroaniline	100	56.8		ug/Kg		57	27 - 103
Acenaphthene	100	80.1		ug/Kg		80	68 - 116
2,4-Dinitrophenol	200	130		ug/Kg		65	20 - 141
4-Nitrophenol	200	165		ug/Kg		83	20 - 165
Dibenzofuran	100	80.4		ug/Kg		80	72 - 109
2,4-Dinitrotoluene	100	80.4		ug/Kg		80	68 - 121
Diethyl phthalate	100	88.4		ug/Kg		88	73 - 116
4-Chlorophenyl phenyl ether	100	86.4		ug/Kg		86	75 - 108
Fluorene	100	84.3		ug/Kg		84	70 - 121
4-Nitroaniline	100	71.3		ug/Kg		71	58 - 108
4,6-Dinitro-2-methylphenol	200	158		ug/Kg		79	48 - 130
N-Nitrosodiphenylamine	99.7	85.6		ug/Kg		86	73 - 115
4-Bromophenyl phenyl ether	100	88.3		ug/Kg		88	68 - 122
Hexachlorobenzene	100	89.9		ug/Kg		90	66 - 117
Pentachlorophenol	200	135		ug/Kg		67	45 - 117
Phenanthrene	100	78.8		ug/Kg		79	73 - 106
Anthracene	100	75.1		ug/Kg		75	73 - 116
Carbazole	100	82.5		ug/Kg		83	76 - 135
Di-n-butyl phthalate	100	90.1		ug/Kg		90	66 - 140
Fluoranthene	100	85.7		ug/Kg		86	73 - 125
Pyrene	100	83.6		ug/Kg		84	70 - 120
Butyl benzyl phthalate	100	86.8		ug/Kg		87	69 - 142
3,3'-Dichlorobenzidine	200	138		ug/Kg		69	20 - 103
Benzo[a]anthracene	100	92.5		ug/Kg		92	76 - 119
Chrysene	100	81.4		ug/Kg		81	75 - 114
Bis(2-ethylhexyl) phthalate	100	84.6		ug/Kg		85	62 - 144
Di-n-octyl phthalate	100	73.4		ug/Kg		73	65 - 141
Benzo[b]fluoranthene	100	85.5		ug/Kg		85	63 - 132
Benzo[k]fluoranthene	100	73.3		ug/Kg		73	63 - 119
Benzo[a]pyrene	100	80.5		ug/Kg		81	72 - 117
Indeno[1,2,3-cd]pyrene	100	83.1		ug/Kg		83	56 - 127
Dibenz(a,h)anthracene	100	84.5		ug/Kg		85	56 - 134
Benzo[g,h,i]perylene	100	79.2		ug/Kg		79	55 - 139
N-Nitrosodimethylamine	100	78.9	J	ug/Kg		79	38 - 133

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

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

Lab Sample ID: LCSD 580-173678/3-A
Matrix: Solid
Analysis Batch: 174213

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173678

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	100	74.5		ug/Kg		75	63 - 111	11	26
Bis(2-chloroethyl)ether	100	72.2		ug/Kg		72	62 - 110	13	22
2-Chlorophenol	100	74.4		ug/Kg		74	68 - 117	15	27
1,3-Dichlorobenzene	100	70.2		ug/Kg		70	64 - 111	3	30
1,4-Dichlorobenzene	100	66.9		ug/Kg		67	65 - 110	9	30
Benzyl alcohol	100	40.6	*	ug/Kg		41	55 - 123	52	60
1,2-Dichlorobenzene	100	67.6		ug/Kg		68	64 - 112	14	30
2-Methylphenol	100	74.8		ug/Kg		75	71 - 116	12	25
2,2'-oxybis[1-chloropropane]	100	67.2		ug/Kg		67	41 - 126	0	57
3 & 4 Methylphenol	100	79.9		ug/Kg		80	70 - 116	10	27
N-Nitrosodi-n-propylamine	100	79.5		ug/Kg		80	62 - 116	0	28
Hexachloroethane	100	70.8		ug/Kg		71	62 - 120	10	30
Nitrobenzene	100	77.9		ug/Kg		78	64 - 118	7	30
Isophorone	100	79.8		ug/Kg		80	67 - 119	4	30
2-Nitrophenol	100	78.8		ug/Kg		79	67 - 127	7	30
2,4-Dimethylphenol	100	73.8		ug/Kg		74	54 - 139	3	30
Benzoic acid	200	115	J	ug/Kg		58	29 - 158	15	28
Bis(2-chloroethoxy)methane	100	74.7		ug/Kg		75	69 - 107	8	30
2,4-Dichlorophenol	100	79.7		ug/Kg		80	68 - 125	12	30
1,2,4-Trichlorobenzene	100	76.5		ug/Kg		77	66 - 115	4	28
Naphthalene	100	71.2		ug/Kg		71	62 - 112	8	26
4-Chloroaniline	100	31.3		ug/Kg		31	20 - 103	13	60
Hexachlorobutadiene	100	86.5		ug/Kg		87	65 - 116	5	30
4-Chloro-3-methylphenol	100	78.6		ug/Kg		79	69 - 121	5	27
2-Methylnaphthalene	100	73.3		ug/Kg		73	64 - 119	7	27
1-Methylnaphthalene	100	74.6		ug/Kg		75	62 - 118	5	30
Hexachlorocyclopentadiene	100	83.6		ug/Kg		84	46 - 131	0	29
2,4,6-Trichlorophenol	100	61.7		ug/Kg		62	62 - 133	19	30
2,4,5-Trichlorophenol	100	82.5		ug/Kg		83	57 - 133	11	30
2-Chloronaphthalene	100	73.2		ug/Kg		73	68 - 112	8	25
2-Nitroaniline	100	71.7		ug/Kg		72	64 - 112	9	22
Dimethyl phthalate	100	78.0		ug/Kg		78	78 - 117	9	30
Acenaphthylene	100	80.7		ug/Kg		81	68 - 120	8	28
2,6-Dinitrotoluene	100	70.6		ug/Kg		71	66 - 123	12	30
3-Nitroaniline	100	54.2		ug/Kg		54	27 - 103	5	33
Acenaphthene	100	71.8		ug/Kg		72	68 - 116	11	27
2,4-Dinitrophenol	200	119		ug/Kg		59	20 - 141	9	36
4-Nitrophenol	200	118	*	ug/Kg		59	20 - 165	34	30
Dibenzofuran	100	76.0		ug/Kg		76	72 - 109	6	30
2,4-Dinitrotoluene	100	73.6		ug/Kg		74	68 - 121	9	30
Diethyl phthalate	100	83.1		ug/Kg		83	73 - 116	6	26
4-Chlorophenyl phenyl ether	100	84.5		ug/Kg		84	75 - 108	2	30
Fluorene	100	81.7		ug/Kg		82	70 - 121	3	30
4-Nitroaniline	100	60.4		ug/Kg		60	58 - 108	17	32
4,6-Dinitro-2-methylphenol	200	147		ug/Kg		73	48 - 130	7	22
N-Nitrosodiphenylamine	99.7	83.5		ug/Kg		84	73 - 115	2	30
4-Bromophenyl phenyl ether	100	91.8		ug/Kg		92	68 - 122	4	30
Hexachlorobenzene	100	87.2		ug/Kg		87	66 - 117	3	30

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

Lab Sample ID: LCSD 580-173678/3-A
Matrix: Solid
Analysis Batch: 174213

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173678

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol			200	121		ug/Kg		60	45 - 117	11	23
Phenanthrene			100	77.1		ug/Kg		77	73 - 106	2	28
Anthracene			100	72.1	*	ug/Kg		72	73 - 116	4	27
Carbazole			100	80.2		ug/Kg		80	76 - 135	3	30
Di-n-butyl phthalate			100	88.2		ug/Kg		88	66 - 140	2	30
Fluoranthene			100	85.1		ug/Kg		85	73 - 125	1	30
Pyrene			100	79.7		ug/Kg		80	70 - 120	5	30
Butyl benzyl phthalate			100	84.5		ug/Kg		84	69 - 142	3	30
3,3'-Dichlorobenzidine			200	131		ug/Kg		66	20 - 103	5	60
Benzo[a]anthracene			100	80.0		ug/Kg		80	76 - 119	14	27
Chrysene			100	81.9		ug/Kg		82	75 - 114	1	26
Bis(2-ethylhexyl) phthalate			100	82.9		ug/Kg		83	62 - 144	2	30
Di-n-octyl phthalate			100	71.9		ug/Kg		72	65 - 141	2	30
Benzo[b]fluoranthene			100	81.4		ug/Kg		81	63 - 132	5	30
Benzo[k]fluoranthene			100	68.7		ug/Kg		69	63 - 119	7	30
Benzo[a]pyrene			100	76.7		ug/Kg		77	72 - 117	5	30
Indeno[1,2,3-cd]pyrene			100	76.6		ug/Kg		77	56 - 127	8	29
Dibenz(a,h)anthracene			100	82.7		ug/Kg		83	56 - 134	2	30
Benzo[g,h,i]perylene			100	79.1		ug/Kg		79	55 - 139	0	28
N-Nitrosodimethylamine			100	77.5	J	ug/Kg		77	38 - 133	2	30

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

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

Lab Sample ID: 580-45835-1 MS
Matrix: Solid
Analysis Batch: 174767

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 173001

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Phenol - DL	ND		283	2240	J	ug/Kg	☼	NC	63 - 111		
Bis(2-chloroethyl)ether - DL	ND		283	ND		ug/Kg	☼	NC	62 - 110		
2-Chlorophenol - DL	ND		283	ND		ug/Kg	☼	NC	68 - 117		
1,3-Dichlorobenzene - DL	ND	*	283	ND		ug/Kg	☼	NC	64 - 111		
1,4-Dichlorobenzene - DL	ND	*	283	ND		ug/Kg	☼	NC	65 - 110		
Benzyl alcohol - DL	63000		283	73600	4	ug/Kg	☼	3617	55 - 123		
1,2-Dichlorobenzene - DL	ND	*	283	ND		ug/Kg	☼	NC	64 - 112		
2-Methylphenol - DL	ND		283	ND		ug/Kg	☼	NC	71 - 116		
2,2'-oxybis[1-chloropropane] - DL	ND		283	ND		ug/Kg	☼	NC	41 - 126		
3 & 4 Methylphenol - DL	2500	J	283	2950	J 4	ug/Kg	☼	169	70 - 116		
N-Nitrosodi-n-propylamine - DL	ND		283	1200	J	ug/Kg	☼	NC	62 - 116		

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

Lab Sample ID: 580-45835-1 MS
Matrix: Solid
Analysis Batch: 174767

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 173001

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachloroethane - DL	ND		283	ND		ug/Kg	☼	NC	62 - 120
Nitrobenzene - DL	ND		283	ND		ug/Kg	☼	NC	64 - 118
Isophorone - DL	ND		283	224	J	ug/Kg	☼	79	67 - 119
2-Nitrophenol - DL	ND		283	ND		ug/Kg	☼	NC	67 - 127
2,4-Dimethylphenol - DL	ND		283	ND		ug/Kg	☼	NC	54 - 139
Benzoic acid - DL	ND		566	ND		ug/Kg	☼	NC	29 - 158
Bis(2-chloroethoxy)methane - DL	ND		283	541	J F1	ug/Kg	☼	191	69 - 107
2,4-Dichlorophenol - DL	ND		283	ND		ug/Kg	☼	NC	68 - 125
1,2,4-Trichlorobenzene - DL	ND		283	ND		ug/Kg	☼	NC	66 - 115
Naphthalene - DL	2100		283	2230	4	ug/Kg	☼	51	62 - 112
4-Chloroaniline - DL	ND		283	ND		ug/Kg	☼	NC	20 - 103
Hexachlorobutadiene - DL	ND		283	473	J	ug/Kg	☼	NC	65 - 116
4-Chloro-3-methylphenol - DL	ND		283	8090		ug/Kg	☼	NC	69 - 121
2-Methylnaphthalene - DL	4800		283	4760	4	ug/Kg	☼	-0.6	64 - 119
1-Methylnaphthalene - DL	3000		283	2660	4	ug/Kg	☼	-126	62 - 118
Hexachlorocyclopentadiene - DL	ND		283	ND	F1	ug/Kg	☼	0	46 - 131
2,4,6-Trichlorophenol - DL	ND		283	ND		ug/Kg	☼	NC	62 - 133
2,4,5-Trichlorophenol - DL	ND		283	ND		ug/Kg	☼	NC	57 - 133
2-Chloronaphthalene - DL	ND		283	321	J F1	ug/Kg	☼	114	68 - 112
2-Nitroaniline - DL	ND		283	505	J	ug/Kg	☼	NC	64 - 112
Dimethyl phthalate - DL	70000		283	63100	4	ug/Kg	☼	-2497	78 - 117
Acenaphthylene - DL	ND		283	479	J F1	ug/Kg	☼	169	68 - 120
2,6-Dinitrotoluene - DL	ND		283	443	J	ug/Kg	☼	NC	66 - 123
3-Nitroaniline - DL	ND		283	636	J	ug/Kg	☼	NC	27 - 103
Acenaphthene - DL	430	J	283	786	F1	ug/Kg	☼	126	68 - 116
2,4-Dinitrophenol - DL	ND		566	ND		ug/Kg	☼	NC	20 - 141
4-Nitrophenol - DL	ND		566	ND		ug/Kg	☼	NC	20 - 165
Dibenzofuran - DL	360	J	283	562	J F1	ug/Kg	☼	70	72 - 109
2,4-Dinitrotoluene - DL	ND		283	574	J	ug/Kg	☼	NC	68 - 121
Diethyl phthalate - DL	ND		283	ND		ug/Kg	☼	NC	73 - 116
4-Chlorophenyl phenyl ether - DL	ND		283	462	J	ug/Kg	☼	NC	75 - 108
Fluorene - DL	970		283	984	F1	ug/Kg	☼	4	70 - 121
4-Nitroaniline - DL	ND		283	775	J	ug/Kg	☼	NC	58 - 108
4,6-Dinitro-2-methylphenol - DL	ND		566	ND		ug/Kg	☼	NC	48 - 130
N-Nitrosodiphenylamine - DL	ND		283	782	J F1	ug/Kg	☼	276	73 - 115
4-Bromophenyl phenyl ether - DL	ND		283	ND		ug/Kg	☼	NC	68 - 122
Hexachlorobenzene - DL	ND		283	258	J	ug/Kg	☼	91	66 - 117
Pentachlorophenol - DL	ND		566	3510	J	ug/Kg	☼	NC	45 - 117
Phenanthrene - DL	6100		283	6350	4	ug/Kg	☼	103	73 - 106
Anthracene - DL	820	*	283	1650	F1	ug/Kg	☼	295	73 - 116
Carbazole - DL	1300	J	283	1210	J 4	ug/Kg	☼	-44	76 - 135
Di-n-butyl phthalate - DL	8300	J	283	6980	J 4	ug/Kg	☼	-452	66 - 140
Fluoranthene - DL	16000		283	15900	4	ug/Kg	☼	-183	73 - 125
Pyrene - DL	12000		283	12600	4	ug/Kg	☼	115	70 - 120
Butyl benzyl phthalate - DL	5200	J B	283	5410	J 4	ug/Kg	☼	73	69 - 142
3,3'-Dichlorobenzidine - DL	ND		566	ND		ug/Kg	☼	NC	20 - 103
Benzo[a]anthracene - DL	3800		283	4530	4	ug/Kg	☼	260	76 - 119
Chrysene - DL	6600		283	7330	4	ug/Kg	☼	267	75 - 114

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

Lab Sample ID: 580-45835-1 MS
Matrix: Solid
Analysis Batch: 174767

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 173001

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate - DL	110000	B	283	108000	4	ug/Kg	☼	285	62 - 144
Di-n-octyl phthalate - DL	5800	J	283	4470	J 4	ug/Kg	☼	-460	65 - 141
Benzo[b]fluoranthene - DL	6300		283	7290	4	ug/Kg	☼	349	63 - 132
Benzo[k]fluoranthene - DL	2900		283	3510	4	ug/Kg	☼	225	63 - 119
Benzo[a]pyrene - DL	3600		283	4430	4	ug/Kg	☼	307	72 - 117
Indeno[1,2,3-cd]pyrene - DL	2200		283	2530	4	ug/Kg	☼	111	56 - 127
Dibenz(a,h)anthracene - DL	ND		283	711	J F1	ug/Kg	☼	251	56 - 134
Benzo[g,h,i]perylene - DL	1900		283	2590	4	ug/Kg	☼	229	55 - 139
N-Nitrosodimethylamine - DL	ND		283	ND		ug/Kg	☼	NC	38 - 133

Lab Sample ID: 580-45835-1 MSD
Matrix: Solid
Analysis Batch: 174767

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 173001

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol - DL	ND		286	1210	J F2	ug/Kg	☼	NC	63 - 111	60	26
Bis(2-chloroethyl)ether - DL	ND		286	ND		ug/Kg	☼	NC	62 - 110	NC	60
2-Chlorophenol - DL	ND		286	ND		ug/Kg	☼	NC	68 - 117	NC	27
1,3-Dichlorobenzene - DL	ND	*	286	ND		ug/Kg	☼	NC	64 - 111	NC	60
1,4-Dichlorobenzene - DL	ND	*	286	ND		ug/Kg	☼	NC	65 - 110	NC	32
Benzyl alcohol - DL	63000		286	62400	4	ug/Kg	☼	-353	55 - 123	17	60
1,2-Dichlorobenzene - DL	ND	*	286	ND		ug/Kg	☼	NC	64 - 112	NC	60
2-Methylphenol - DL	ND		286	ND		ug/Kg	☼	NC	71 - 116	NC	25
2,2'-oxybis[1-chloropropane] - DL	ND		286	ND		ug/Kg	☼	NC	41 - 126	NC	60
3 & 4 Methylphenol - DL	2500	J	286	3490	J 4	ug/Kg	☼	354	70 - 116	17	27
N-Nitrosodi-n-propylamine - DL	ND		286	ND		ug/Kg	☼	NC	62 - 116	NC	28
Hexachloroethane - DL	ND		286	ND		ug/Kg	☼	NC	62 - 120	NC	60
Nitrobenzene - DL	ND		286	ND		ug/Kg	☼	NC	64 - 118	NC	60
Isophorone - DL	ND		286	288	J	ug/Kg	☼	101	67 - 119	25	60
2-Nitrophenol - DL	ND		286	ND		ug/Kg	☼	NC	67 - 127	NC	60
2,4-Dimethylphenol - DL	ND		286	ND		ug/Kg	☼	NC	54 - 139	NC	60
Benzoic acid - DL	ND		573	ND		ug/Kg	☼	NC	29 - 158	NC	60
Bis(2-chloroethoxy)methane - DL	ND		286	287	J F2	ug/Kg	☼	100	69 - 107	61	60
2,4-Dichlorophenol - DL	ND		286	ND		ug/Kg	☼	NC	68 - 125	NC	60
1,2,4-Trichlorobenzene - DL	ND		286	ND		ug/Kg	☼	NC	66 - 115	NC	28
Naphthalene - DL	2100		286	2140	4	ug/Kg	☼	18	62 - 112	4	26
4-Chloroaniline - DL	ND		286	ND		ug/Kg	☼	NC	20 - 103	NC	60
Hexachlorobutadiene - DL	ND		286	ND		ug/Kg	☼	NC	65 - 116	NC	60
4-Chloro-3-methylphenol - DL	ND		286	9460		ug/Kg	☼	NC	69 - 121	16	27
2-Methylnaphthalene - DL	4800		286	4600	4	ug/Kg	☼	-57	64 - 119	3	27
1-Methylnaphthalene - DL	3000		286	2680	4	ug/Kg	☼	-115	62 - 118	1	30
Hexachlorocyclopentadiene - DL	ND		286	ND		ug/Kg	☼	NC	46 - 131	NC	60
2,4,6-Trichlorophenol - DL	ND		286	ND		ug/Kg	☼	NC	62 - 133	NC	60
2,4,5-Trichlorophenol - DL	ND		286	ND		ug/Kg	☼	NC	57 - 133	NC	60
2-Chloronaphthalene - DL	ND		286	243	J F2	ug/Kg	☼	85	68 - 112	28	25
2-Nitroaniline - DL	ND		286	1020	J F2	ug/Kg	☼	NC	64 - 112	68	60
Dimethyl phthalate - DL	70000		286	78700	4	ug/Kg	☼	2954	78 - 117	22	60
Acenaphthylene - DL	ND		286	406	J F1	ug/Kg	☼	142	68 - 120	17	28

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

Lab Sample ID: 580-45835-1 MSD
Matrix: Solid
Analysis Batch: 174767

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 173001

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,6-Dinitrotoluene - DL	ND		286	4520	F2	ug/Kg	☼	NC	66 - 123	164	60
3-Nitroaniline - DL	ND		286	1040	J	ug/Kg	☼	NC	27 - 103	48	60
Acenaphthene - DL	430	J	286	709		ug/Kg	☼	98	68 - 116	10	27
2,4-Dinitrophenol - DL	ND		573	ND		ug/Kg	☼	NC	20 - 141	NC	60
4-Nitrophenol - DL	ND		573	ND		ug/Kg	☼	NC	20 - 165	NC	33
Dibenzofuran - DL	360	J	286	535	J F1	ug/Kg	☼	60	72 - 109	5	60
2,4-Dinitrotoluene - DL	ND		286	673	J	ug/Kg	☼	NC	68 - 121	16	31
Diethyl phthalate - DL	ND		286	863	J	ug/Kg	☼	NC	73 - 116	NC	26
4-Chlorophenyl phenyl ether - DL	ND		286	ND		ug/Kg	☼	NC	75 - 108	NC	60
Fluorene - DL	970		286	798	F1	ug/Kg	☼	-61	70 - 121	21	31
4-Nitroaniline - DL	ND		286	1130	J	ug/Kg	☼	NC	58 - 108	37	60
4,6-Dinitro-2-methylphenol - DL	ND		573	ND		ug/Kg	☼	NC	48 - 130	NC	60
N-Nitrosodiphenylamine - DL	ND		286	1070	J F1	ug/Kg	☼	372	73 - 115	31	60
4-Bromophenyl phenyl ether - DL	ND		286	661	J	ug/Kg	☼	NC	68 - 122	NC	60
Hexachlorobenzene - DL	ND		286	206	J	ug/Kg	☼	72	66 - 117	23	60
Pentachlorophenol - DL	ND		573	3490	J F1	ug/Kg	☼	610	45 - 117	1	68
Phenanthrene - DL	6100		286	6070	4	ug/Kg	☼	3	73 - 106	5	28
Anthracene - DL	820	*	286	1020	F1 F2	ug/Kg	☼	69	73 - 116	48	27
Carbazole - DL	1300	J	286	1010	J 4	ug/Kg	☼	-112	76 - 135	18	60
Di-n-butyl phthalate - DL	8300	J	286	8690	J 4	ug/Kg	☼	151	66 - 140	22	60
Fluoranthene - DL	16000		286	15500	4	ug/Kg	☼	-341	73 - 125	3	36
Pyrene - DL	12000		286	12200	4	ug/Kg	☼	-35	70 - 120	3	31
Butyl benzyl phthalate - DL	5200	J B	286	6600	4	ug/Kg	☼	486	69 - 142	20	60
3,3'-Dichlorobenzidine - DL	ND		573	ND		ug/Kg	☼	NC	20 - 103	NC	60
Benzo[a]anthracene - DL	3800		286	4740	4	ug/Kg	☼	328	76 - 119	4	27
Chrysene - DL	6600		286	6270	4	ug/Kg	☼	-109	75 - 114	16	26
Bis(2-ethylhexyl) phthalate - DL	110000	B	286	113000	4	ug/Kg	☼	1883	62 - 144	4	60
Di-n-octyl phthalate - DL	5800	J	286	4250	J 4	ug/Kg	☼	-531	65 - 141	5	31
Benzo[b]fluoranthene - DL	6300		286	5820	4	ug/Kg	☼	-167	63 - 132	22	31
Benzo[k]fluoranthene - DL	2900		286	2160	4 F2	ug/Kg	☼	-250	63 - 119	48	31
Benzo[a]pyrene - DL	3600		286	3730	4	ug/Kg	☼	60	72 - 117	17	30
Indeno[1,2,3-cd]pyrene - DL	2200		286	2130	4	ug/Kg	☼	-32	56 - 127	17	29
Dibenz(a,h)anthracene - DL	ND		286	638	J F1	ug/Kg	☼	223	56 - 134	11	30
Benzo[g,h,i]perylene - DL	1900		286	1860	4 F2	ug/Kg	☼	-27	55 - 139	33	28
N-Nitrosodimethylamine - DL	ND		286	ND		ug/Kg	☼	NC	38 - 133	NC	60

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

Lab Sample ID: MB 580-172430/1-A
Matrix: Solid
Analysis Batch: 172436

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172430

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	1.27	J	4.0	0.50	mg/Kg		10/11/14 14:40	10/13/14 10:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*50 - 150*	*10/11/14 14:40*	*10/13/14 10:16*	*1*

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

Lab Sample ID: LCS 580-172430/2-A
Matrix: Solid
Analysis Batch: 172436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172430

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline			40.0	30.7		mg/Kg		77	68 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*50 - 150*

Lab Sample ID: LCSD 580-172430/3-A
Matrix: Solid
Analysis Batch: 172436

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172430

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline			40.0	36.0		mg/Kg		90	68 - 120	16	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*50 - 150*

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

Lab Sample ID: MB 580-173014/1-A
Matrix: Solid
Analysis Batch: 173011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173014

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.010	0.0032	mg/Kg		10/17/14 12:14	10/17/14 21:50	1
Arochlor 1221	ND		0.011	0.0080	mg/Kg		10/17/14 12:14	10/17/14 21:50	1
Arochlor 1232	ND		0.011	0.0070	mg/Kg		10/17/14 12:14	10/17/14 21:50	1
Arochlor 1242	ND		0.010	0.0021	mg/Kg		10/17/14 12:14	10/17/14 21:50	1
Arochlor 1248	ND		0.010	0.0030	mg/Kg		10/17/14 12:14	10/17/14 21:50	1
Arochlor 1254	ND		0.010	0.0021	mg/Kg		10/17/14 12:14	10/17/14 21:50	1
Arochlor 1260	ND		0.010	0.0030	mg/Kg		10/17/14 12:14	10/17/14 21:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*45 - 135*	*10/17/14 12:14*	*10/17/14 21:50*	*1*
DCB Decachlorobiphenyl	*102*		*50 - 140*	*10/17/14 12:14*	*10/17/14 21:50*	*1*

Lab Sample ID: LCS 580-173014/2-A
Matrix: Solid
Analysis Batch: 173011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173014

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arochlor 1016			0.100	0.108		mg/Kg		108	40 - 140		
Arochlor 1260			0.100	0.103		mg/Kg		103	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*88*		*45 - 135*
DCB Decachlorobiphenyl	*100*		*50 - 140*

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

Lab Sample ID: LCSD 580-173014/3-A
Matrix: Solid
Analysis Batch: 173011

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173014

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arochlor 1016			0.100	0.108		mg/Kg		108	40 - 140	0	20
Arochlor 1260			0.100	0.104		mg/Kg		104	60 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*99*		*45 - 135*
DCB Decachlorobiphenyl	*106*		*50 - 140*

Lab Sample ID: 580-45835-1 MS
Matrix: Solid
Analysis Batch: 173183

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 173014

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arochlor 1016	0.21		0.285	0.379		mg/Kg	☼	59	40 - 140
Arochlor 1260	1.7		0.285	2.35	4	mg/Kg	☼	217	60 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*82*		*45 - 135*
DCB Decachlorobiphenyl	*105*		*50 - 140*

Lab Sample ID: 580-45835-1 MSD
Matrix: Solid
Analysis Batch: 173183

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 173014

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arochlor 1016	0.21		0.282	0.497	F2	mg/Kg	☼	102	40 - 140	27	20
Arochlor 1260	1.7		0.282	1.85	4 F2	mg/Kg	☼	42	60 - 130	24	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*45 - 135*
DCB Decachlorobiphenyl	*101*		*50 - 140*

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

Lab Sample ID: MB 580-172722/1-A
Matrix: Solid
Analysis Batch: 172851

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25	5.7	mg/Kg		10/15/14 08:42	10/16/14 11:31	1
Motor Oil (>C24-C36)	ND	^	50	9.1	mg/Kg		10/15/14 08:42	10/16/14 11:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*65*		*50 - 150*	*10/15/14 08:42*	*10/16/14 11:31*	*1*

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

Lab Sample ID: LCS 580-172722/2-A
Matrix: Solid
Analysis Batch: 172851

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172722

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	500	394		mg/Kg		79	70 - 125
Motor Oil (>C24-C36)	502	469	^	mg/Kg		94	64 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*72*		*50 - 150*

Lab Sample ID: LCSD 580-172722/3-A
Matrix: Solid
Analysis Batch: 172851

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 172722

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	500	444		mg/Kg		89	70 - 125	12	16
Motor Oil (>C24-C36)	502	529	^	mg/Kg		105	64 - 127	12	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*92*		*50 - 150*

Lab Sample ID: 580-45835-1 MS
Matrix: Solid
Analysis Batch: 172969

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 172722

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	6600	Y	1430	8910	4	mg/Kg	☼	163	70 - 125
Motor Oil (>C24-C36)	16000	Y	1440	20000	4	mg/Kg	☼	255	64 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*87*		*50 - 150*

Lab Sample ID: 580-45835-1 MSD
Matrix: Solid
Analysis Batch: 172969

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 172722

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	6600	Y	1420	6700	4 F2	mg/Kg	☼	9	70 - 125	28	16
Motor Oil (>C24-C36)	16000	Y	1420	15400	4 F2	mg/Kg	☼	-63	64 - 127	26	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*82*		*50 - 150*

Lab Sample ID: 580-45835-1 DU
Matrix: Solid
Analysis Batch: 172969

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 172722

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
#2 Diesel (C10-C24)	6600	Y	5780		mg/Kg	☼	13	35
Motor Oil (>C24-C36)	16000	Y	14400		mg/Kg	☼	12	35

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

Lab Sample ID: 580-45835-1 DU
Matrix: Solid
Analysis Batch: 172969

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA
Prep Batch: 172722

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*69*		*50 - 150*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-174066/20-A
Matrix: Solid
Analysis Batch: 174168

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 174066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50	0.18	mg/Kg		10/28/14 10:12	10/28/14 13:40	10
Lead	ND		0.20	0.013	mg/Kg		10/28/14 10:12	10/28/14 13:40	10
Antimony	ND		0.20	0.042	mg/Kg		10/28/14 10:12	10/28/14 13:40	10
Beryllium	ND		0.20	0.035	mg/Kg		10/28/14 10:12	10/28/14 13:40	10
Cadmium	ND		0.20	0.0080	mg/Kg		10/28/14 10:12	10/28/14 13:40	10
Chromium	ND		0.20	0.11	mg/Kg		10/28/14 10:12	10/28/14 13:40	10
Copper	ND		0.40	0.098	mg/Kg		10/28/14 10:12	10/28/14 13:40	10
Nickel	ND		0.50	0.081	mg/Kg		10/28/14 10:12	10/28/14 13:40	10
Selenium	ND		0.70	0.20	mg/Kg		10/28/14 10:12	10/28/14 13:40	10
Silver	ND		0.20	0.012	mg/Kg		10/28/14 10:12	10/28/14 13:40	10
Thallium	ND		0.50	0.13	mg/Kg		10/28/14 10:12	10/28/14 13:40	10
Zinc	ND		2.0	1.1	mg/Kg		10/28/14 10:12	10/28/14 13:40	10

Lab Sample ID: LCS 580-174066/21-A
Matrix: Solid
Analysis Batch: 174168

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 174066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	195		mg/Kg		97	80 - 120
Lead	50.0	47.0		mg/Kg		94	80 - 120
Antimony	150	147		mg/Kg		98	80 - 120
Beryllium	5.00	4.88		mg/Kg		98	80 - 120
Cadmium	5.00	4.92		mg/Kg		98	80 - 120
Chromium	20.0	19.4		mg/Kg		97	80 - 120
Copper	25.0	24.1		mg/Kg		97	80 - 120
Nickel	50.0	48.3		mg/Kg		97	80 - 120
Selenium	200	194		mg/Kg		97	80 - 120
Silver	30.0	29.9		mg/Kg		100	80 - 120
Thallium	200	181		mg/Kg		91	80 - 120
Zinc	200	190		mg/Kg		95	80 - 120

Lab Sample ID: LCSD 580-174066/22-A
Matrix: Solid
Analysis Batch: 174168

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 174066

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	201		mg/Kg		100	80 - 120	3	20
Lead	50.0	48.5		mg/Kg		97	80 - 120	3	20
Antimony	150	151		mg/Kg		101	80 - 120	3	20

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

Lab Sample ID: LCSD 580-174066/22-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 174168 — **Prep Batch: 174066**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium			5.00	5.20		mg/Kg		104	80 - 120	6	20
Cadmium			5.00	5.16		mg/Kg		103	80 - 120	5	20
Chromium			20.0	19.5		mg/Kg		97	80 - 120	1	20
Copper			25.0	24.7		mg/Kg		99	80 - 120	2	20
Nickel			50.0	49.9		mg/Kg		100	80 - 120	3	20
Selenium			200	199		mg/Kg		99	80 - 120	2	20
Silver			30.0	30.6		mg/Kg		102	80 - 120	2	20
Thallium			200	186		mg/Kg		93	80 - 120	3	20
Zinc			200	193		mg/Kg		96	80 - 120	2	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-174104/19-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 174163 — **Prep Batch: 174104**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0053	mg/Kg		10/28/14 12:52	10/28/14 15:40	1

Lab Sample ID: LCS 580-174104/20-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 174163 — **Prep Batch: 174104**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.167	0.158		mg/Kg		95	80 - 120		

Lab Sample ID: LCSD 580-174104/21-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 174163 — **Prep Batch: 174104**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.167	0.157		mg/Kg		94	80 - 120	0	20

Lab Sample ID: LCSSRM 580-174104/22-A ^10 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 174163 — **Prep Batch: 174104**

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			12.9	14.7		mg/Kg		114.2	51.2 - 148.1		

Method: 2540B - Percent Moisture

Lab Sample ID: 580-45835-1 DU — **Client Sample ID: SP-OWS-01-20141008-S**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 173088

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	34			34		%				0.04	20

Method: 2540B - Percent Moisture (Continued)

Lab Sample ID: 580-45835-1 DU
Matrix: Solid
Analysis Batch: 173088

Client Sample ID: SP-OWS-01-20141008-S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	66			66		%				0.02	20

Method: 9060_PSEP - TOC (Puget Sound)

Lab Sample ID: MB 580-174343/3
Matrix: Solid
Analysis Batch: 174343

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			10/16/14 12:00	1

Lab Sample ID: LCS 580-174343/4
Matrix: Solid
Analysis Batch: 174343

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon			2850	3080		mg/Kg		108	27.8 - 170		

Lab Sample ID: LCSD 580-174343/5
Matrix: Solid
Analysis Batch: 174343

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon			2850	3020		mg/Kg		106	27.8 - 170	2	35

Client Sample ID: SP-OWS-01-20141008-S

Lab Sample ID: 580-45835-1

Date Collected: 10/08/14 15:33

Matrix: Solid

Date Received: 10/09/14 17:00

Percent Solids: 34.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			172411	10/11/14 09:14	MMH	TAL SEA
Total/NA	Analysis	8260C		1	172403	10/11/14 16:00	CJ	TAL SEA
Total/NA	Prep	3550B			173001	10/17/14 11:05	ALL	TAL SEA
Total/NA	Analysis	8270D		10	173503	10/22/14 17:51	AHP	TAL SEA
Total/NA	Prep	3550B	DL		173001	10/17/14 11:05	ALL	TAL SEA
Total/NA	Analysis	8270D	DL	100	174767	11/04/14 18:13	AHP	TAL SEA
Total/NA	Prep	5035			172430	10/11/14 14:40	ERZ	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	172436	10/13/14 16:59	AS	TAL SEA
Total/NA	Prep	3550B			173014	10/17/14 12:14	ALL	TAL SEA
Total/NA	Analysis	8082		1	173183	10/20/14 23:02	ALC	TAL SEA
Total/NA	Prep	3546			172722	10/15/14 08:42	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		10	172969	10/17/14 11:12	JJP	TAL SEA
Total/NA	Prep	3050B			174066	10/28/14 10:12	PAB	TAL SEA
Total/NA	Analysis	6020		10	174168	10/28/14 14:40	FCW	TAL SEA
Total/NA	Prep	3050B			174066	10/28/14 10:12	PAB	TAL SEA
Total/NA	Analysis	6020		1000	174168	10/28/14 15:03	FCW	TAL SEA
Total/NA	Prep	7471A			174104	10/28/14 12:52	PAB	TAL SEA
Total/NA	Analysis	7471A		1	174163	10/28/14 16:30	FCW	TAL SEA
Total/NA	Analysis	2540B		1	173088	10/18/14 13:17	CRH	TAL SEA
Total/NA	Analysis	9060_PSEP		1	172987	10/16/14 14:03	CRH	TAL SEA
Total/NA	Analysis	PSEP Plumb 1981		1	172900	10/16/14 12:09	LKC	TAL SEA

Client Sample ID: SP-OWS-09-20141008-S

Lab Sample ID: 580-45835-2

Date Collected: 10/08/14 16:28

Matrix: Solid

Date Received: 10/09/14 17:00

Percent Solids: 44.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			172411	10/11/14 09:14	MMH	TAL SEA
Total/NA	Analysis	8260C		1	172403	10/11/14 16:27	CJ	TAL SEA
Total/NA	Prep	3550B	REDL		173678	10/24/14 12:00	ALL	TAL SEA
Total/NA	Analysis	8270D	REDL	100	174626	11/03/14 20:02	AHP	TAL SEA
Total/NA	Prep	3550B			172868	10/16/14 09:52	ALL	TAL SEA
Total/NA	Analysis	8270D		20	174626	11/03/14 20:27	AHP	TAL SEA
Total/NA	Prep	3550B	RE		173678	10/24/14 12:00	ALL	TAL SEA
Total/NA	Analysis	8270D	RE	20	174626	11/03/14 20:53	AHP	TAL SEA
Total/NA	Prep	5035			172430	10/11/14 14:40	ERZ	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	172436	10/13/14 17:30	AS	TAL SEA
Total/NA	Prep	3550B			173014	10/17/14 12:14	ALL	TAL SEA
Total/NA	Analysis	8082		1	173183	10/20/14 23:47	ALC	TAL SEA
Total/NA	Prep	3546			172722	10/15/14 08:42	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		10	172969	10/17/14 12:49	JJP	TAL SEA
Total/NA	Prep	3050B			174066	10/28/14 10:12	PAB	TAL SEA
Total/NA	Analysis	6020		10	174168	10/28/14 14:43	FCW	TAL SEA

Lab Chronicle

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

TestAmerica Job ID: 580-45835-1

Client Sample ID: SP-OWS-09-20141008-S
Date Collected: 10/08/14 16:28
Date Received: 10/09/14 17:00

Lab Sample ID: 580-45835-2
Matrix: Solid
Percent Solids: 44.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			174104	10/28/14 12:52	PAB	TAL SEA
Total/NA	Analysis	7471A		1	174163	10/28/14 16:32	FCW	TAL SEA
Total/NA	Analysis	2540B		1	173088	10/18/14 13:17	CRH	TAL SEA
Total/NA	Analysis	9060_PSEP		1	172987	10/16/14 14:07	CRH	TAL SEA
Total/NA	Analysis	PSEP Plumb 1981		1	172900	10/16/14 12:09	LKC	TAL SEA

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 580-45835-1

Laboratory: TestAmerica Seattle

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

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

Sample Summary

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

TestAmerica Job ID: 580-45835-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-45835-1	SP-OWS-01-20141008-S	Solid	10/08/14 15:33	10/09/14 17:00
580-45835-2	SP-OWS-09-20141008-S	Solid	10/08/14 16:28	10/09/14 17:00

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.

45835

Regulatory Program: ☐ DW ☑ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Christine Nancarrow	Site Contact: Melissa Ivancevich	Date: 10/09/14	COC No:
Leidos	Tel/Fax: 206.300.2144	Lab Contact: Kris Allen	Carrier: Courier	1 of 2 COCs
18912 N Creek Pkwy, Ste. 101	**Analysis Turnaround Time**			Sampler: MI & CN
Bothell, WA 98011	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
425.398.2101 Phone	TAT if different from Below 3 Weeks			Walk-in Client:
425.485.5566 FAX	☐ 2 weeks			Lab Sampling:
Project Name: NPDES Sampling Support	☐ 1 week			Job / SDG No.:
Site: Lower Duwamish Waterway	☐ 2 days			
P O # P010163427	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	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)	Sample Specific Notes:
SP-OWS-01-20141008-S	10/08/14	1533	C	Sed	6	N		V	V	V	V	V	1	2	1	1	1 bottle for all analyses
SP-CB-09-20141008-S	10/08/14	1628	C	Sed	6	N		V	V	V	V	V	1	2	1	1	

580-45835 Chain of Custody

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 242410 | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company	Date/Time		Company	Date/Time
Relinquished by: Melissa Smith	Leidos	10/09/14 8:45	Received by:	TA-SEA	10/9/14 1700
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

12/22/2014

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 580-45835-1

Login Number: 45835

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?	True	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

October 30, 2014

Vista Project I.D.: 1400737

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

Dear Ms. Nancarrow,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on October 09, 2014. This sample set was analyzed on a standard turn-around time, under your Project Name 'NPDES Sampling Support'. The work was authorized under your Purchase Order No. PO10163569.

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 Work Order No. 1400737
Case Narrative

Sample Condition on Receipt:

One aqueous sample and two 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 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 34.4 pg/L in the aqueous method blank, which is above the sample quantitation limit. No other analytes were detected above the sample quantitation limit in the Method Blanks. The OPR recoveries were within the method acceptance criteria.

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

TABLE OF CONTENTS

Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1400737-01	SP-OWS-01-20141008-W	08-Oct-14 14:53	09-Oct-14 08:38	Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
1400737-02	SP-OWS-01-20141008-S	08-Oct-14 15:33	09-Oct-14 08:38	Amber Glass, 250mL
1400737-03	SP-CB-09-20141008-S	08-Oct-14 16:28	09-Oct-14 08:38	Amber Glass, 250mL

Vista Project: 1400737

Client Project: NPDES Sampling Support

ANALYTICAL RESULTS

Sample ID: Method Blank

EPA Method 1613B

Matrix: Aqueous
Sample Size: 1.00 L

QC Batch: B4J0059
Date Extracted: 13-Oct-2014 8:35

Lab Sample: B4J0059-BLK1
Date Analyzed : 14-Oct-14 21:17 Column: ZB-5MS Analyst: MAS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	ND	5.00	1.29		0.943	
1,2,3,7,8-PeCDD	ND	25.0	0.921		4.51	
1,2,3,4,7,8-HxCDD	ND	25.0	1.06		2.21	
1,2,3,6,7,8-HxCDD	ND	25.0	1.03		1.93	
1,2,3,7,8,9-HxCDD	ND	25.0	1.14		2.02	
1,2,3,4,6,7,8-HpCDD	ND	25.0	2.31		2.98	
OCDD	ND	50.0	4.23		3.57	
2,3,7,8-TCDF	ND	5.00	1.04		0.984	
1,2,3,7,8-PeCDF	ND	25.0	0.795		2.50	
2,3,4,7,8-PeCDF	ND	25.0	0.889		1.73	
1,2,3,4,7,8-HxCDF	ND	25.0	0.740		1.36	
1,2,3,6,7,8-HxCDF	ND	25.0	0.814		1.56	
2,3,4,6,7,8-HxCDF	ND	25.0	0.418		2.05	
1,2,3,7,8,9-HxCDF	ND	25.0	0.643		1.34	
1,2,3,4,6,7,8-HpCDF	ND	25.0	0.714		1.46	
1,2,3,4,7,8,9-HpCDF	ND	25.0	0.487		1.75	
OCDF	ND	50.0	1.67		2.98	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	83.0	25 - 164	
	13C-1,2,3,7,8-PeCDD	95.5	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	80.3	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	84.8	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	80.9	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	77.8	23 - 140	
	13C-OCDD	83.6	17 - 157	
	13C-2,3,7,8-TCDF	82.9	24 - 169	
	13C-1,2,3,7,8-PeCDF	78.4	24 - 185	
	13C-2,3,4,7,8-PeCDF	77.4	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	90.9	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	73.1	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	81.2	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	80.2	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	82.7	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	92.8	26 - 138	
	13C-OCDF	87.2	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	103	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	0.00

TOTALS

Total TCDD	ND	1.29
Total PeCDD	ND	0.921
Total HxCDD	ND	2.10
Total HpCDD	ND	3.11
Total TCDF	ND	1.04
Total PeCDF	ND	1.60
Total HxCDF	ND	0.911
Total HpCDF	ND	0.808

DL - Sample specifc estimated detection limit
EMPC - Estimated maximum possible concentration
MDL - Method detection limit
RL - Reporting limit
LCL-UCL- Lower control limit - upper control 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	QC Batch:	B4J0059	Lab Sample:	B4J0059-BS1
Sample Size:	1.00 L	Date Extracted:	13-Oct-2014 8:35	Date Analyzed:	14-Oct-14 18:52 Column: ZB-5MS Analyst: MAS

Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits		Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	208	200	104	67 - 158	IS	13C-2,3,7,8-TCDD	83.8	20 - 175
1,2,3,7,8-PeCDD	972	1000	97.2	70 - 142		13C-1,2,3,7,8-PeCDD	89.1	21 - 227
1,2,3,4,7,8-HxCDD	956	1000	95.6	70 - 164		13C-1,2,3,4,7,8-HxCDD	74.9	21 - 193
1,2,3,6,7,8-HxCDD	970	1000	97.0	76 - 134		13C-1,2,3,6,7,8-HxCDD	81.9	25 - 163
1,2,3,7,8,9-HxCDD	949	1000	94.9	64 - 162		13C-1,2,3,7,8,9-HxCDD	74.7	21 - 193
1,2,3,4,6,7,8-HpCDD	1010	1000	101	70 - 140		13C-1,2,3,4,6,7,8-HpCDD	70.3	26 - 166
OCDD	1920	2000	96.0	78 - 144		13C-OCDD	69.1	13 - 199
2,3,7,8-TCDF	193	200	96.4	75 - 158		13C-2,3,7,8-TCDF	82.8	22 - 152
1,2,3,7,8-PeCDF	1000	1000	100	80 - 134		13C-1,2,3,7,8-PeCDF	75.8	21 - 192
2,3,4,7,8-PeCDF	1050	1000	105	68 - 160		13C-2,3,4,7,8-PeCDF	74.7	13 - 328
1,2,3,4,7,8-HxCDF	954	1000	95.4	72 - 134		13C-1,2,3,4,7,8-HxCDF	83.9	19 - 202
1,2,3,6,7,8-HxCDF	978	1000	97.8	84 - 130		13C-1,2,3,6,7,8-HxCDF	66.3	21 - 159
2,3,4,6,7,8-HxCDF	975	1000	97.5	70 - 156		13C-2,3,4,6,7,8-HxCDF	73.2	22 - 176
1,2,3,7,8,9-HxCDF	958	1000	95.8	78 - 130		13C-1,2,3,7,8,9-HxCDF	79.4	17 - 205
1,2,3,4,6,7,8-HpCDF	920	1000	92.0	82 - 122		13C-1,2,3,4,6,7,8-HpCDF	75.0	21 - 158
1,2,3,4,7,8,9-HpCDF	912	1000	91.2	78 - 138		13C-1,2,3,4,7,8,9-HpCDF	84.0	20 - 186
OCDF	1920	2000	96.0	63 - 170		13C-OCDF	71.5	13 - 199
					CRS	37Cl-2,3,7,8-TCDD	106	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: SP-OWS-01-20141008-W

EPA Method 1613B

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 14:53

Sample Data
Matrix: Aqueous
Sample Size: 1.00 L

Laboratory Data
Lab Sample: 1400737-01 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0059 Date Extracted: 13-Oct-2014 8:35
Date Analyzed : 15-Oct-14 07:12 Column: ZB-5MS Analyst: MAS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	ND	4.99	1.63		0.943	
1,2,3,7,8-PeCDD	ND	24.9	2.55		4.51	
1,2,3,4,7,8-HxCDD	ND	24.9	3.23		2.21	
1,2,3,6,7,8-HxCDD	10.9	24.9			1.93	J
1,2,3,7,8,9-HxCDD	ND	24.9		4.12	2.02	
1,2,3,4,6,7,8-HpCDD	206	24.9			2.98	
OCDD	1280	49.9			3.57	
2,3,7,8-TCDF	ND	4.99	1.17		0.984	
1,2,3,7,8-PeCDF	ND	24.9	1.79		2.50	
2,3,4,7,8-PeCDF	ND	24.9	1.09		1.73	
1,2,3,4,7,8-HxCDF	ND	24.9		1.20	1.36	
1,2,3,6,7,8-HxCDF	ND	24.9		1.23	1.56	
2,3,4,6,7,8-HxCDF	2.35	24.9			2.05	J
1,2,3,7,8,9-HxCDF	ND	24.9	1.20		1.34	
1,2,3,4,6,7,8-HpCDF	33.1	24.9			1.46	
1,2,3,4,7,8,9-HpCDF	1.71	24.9			1.75	J
OCDF	75.1	49.9			2.98	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	80.3	25 - 164	
	13C-1,2,3,7,8-PeCDD	79.8	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	75.6	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	77.4	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	79.6	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	74.9	23 - 140	
	13C-OCDD	89.3	17 - 157	
	13C-2,3,7,8-TCDF	84.2	24 - 169	
	13C-1,2,3,7,8-PeCDF	75.5	24 - 185	
	13C-2,3,4,7,8-PeCDF	74.9	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	80.9	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	64.6	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	75.7	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	75.2	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	83.1	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	87.4	26 - 138	
	13C-OCDF	85.4	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	99.1	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	4.14

TOTALS				
Total TCDD	ND	1.63		
Total PeCDD	ND	2.55		
Total HxCDD	27.9		39.0	
Total HpCDD	352			
Total TCDF	ND	1.17		
Total PeCDF	6.50			
Total HxCDF	45.4		47.9	
Total HpCDF	89.6			

DL - Sample specifc estimated detection limit
EMPC - Estimated maximum possible concentration
MDL - Method detection limit
RL - Reporting limit
LCL-UCL- Lower control limit - upper control 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
Sample Size: 10.0 g

QC Batch: B4J0064
Date Extracted: 13-Oct-2014 13:45

Lab Sample: B4J0064-BLK1
Date Analyzed : 14-Oct-14 22:05 Column: ZB-5MS Analyst: MAS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	ND	0.500	0.120		0.0778	
1,2,3,7,8-PeCDD	ND	2.50	0.0645		0.230	
1,2,3,4,7,8-HxCDD	ND	2.50	0.117		0.231	
1,2,3,6,7,8-HxCDD	ND	2.50	0.129		0.126	
1,2,3,7,8,9-HxCDD	ND	2.50	0.130		0.173	
1,2,3,4,6,7,8-HpCDD	ND	2.50	0.195		0.263	
OCDD	ND	5.00	0.182		0.167	
2,3,7,8-TCDF	ND	0.500	0.0680		0.0289	
1,2,3,7,8-PeCDF	ND	2.50	0.0515		0.254	
2,3,4,7,8-PeCDF	ND	2.50	0.0585		0.211	
1,2,3,4,7,8-HxCDF	ND	2.50	0.0421		0.154	
1,2,3,6,7,8-HxCDF	ND	2.50	0.0475		0.195	
2,3,4,6,7,8-HxCDF	ND	2.50	0.0314		0.0805	
1,2,3,7,8,9-HxCDF	ND	2.50	0.0425		0.195	
1,2,3,4,6,7,8-HpCDF	ND	2.50	0.0935		0.230	
1,2,3,4,7,8,9-HpCDF	ND	2.50	0.0618		0.211	
OCDF	ND	5.00	0.110		0.470	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	83.5	25 - 164	
	13C-1,2,3,7,8-PeCDD	96.2	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	91.1	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	91.2	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	91.3	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	87.3	23 - 140	
	13C-OCDD	98.8	17 - 157	
	13C-2,3,7,8-TCDF	87.4	24 - 169	
	13C-1,2,3,7,8-PeCDF	83.9	24 - 185	
	13C-2,3,4,7,8-PeCDF	81.4	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	94.8	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	79.2	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	88.3	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	88.8	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	96.7	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	99.4	26 - 138	
	13C-OCDF	98.3	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	96.0	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	0.00

TOTALS

Total TCDD	ND	0.120
Total PeCDD	ND	0.0985
Total HxCDD	ND	0.214
Total HpCDD	ND	0.195
Total TCDF	ND	0.0680
Total PeCDF	ND	0.0898
Total HxCDF	ND	0.0512
Total HpCDF	ND	0.152

DL - Sample specifc 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: OPR **EPA Method 1613B**

Matrix:	Solid	QC Batch:	B4J0064	Lab Sample:	B4J0064-BS1
Sample Size:	10.0 g	Date Extracted:	13-Oct-2014 13:45	Date Analyzed:	14-Oct-14 19:40 Column: ZB-5MS Analyst: MAS

Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits
2,3,7,8-TCDD	19.7	20.0	98.4	67 - 158
1,2,3,7,8-PeCDD	92.5	100	92.5	70 - 142
1,2,3,4,7,8-HxCDD	91.5	100	91.5	70 - 164
1,2,3,6,7,8-HxCDD	89.4	100	89.4	76 - 134
1,2,3,7,8,9-HxCDD	89.3	100	89.3	64 - 162
1,2,3,4,6,7,8-HpCDD	97.1	100	97.1	70 - 140
OCDD	182	200	90.9	78 - 144
2,3,7,8-TCDF	18.4	20.0	91.9	75 - 158
1,2,3,7,8-PeCDF	96.5	100	96.5	80 - 134
2,3,4,7,8-PeCDF	97.1	100	97.1	68 - 160
1,2,3,4,7,8-HxCDF	89.0	100	89.0	72 - 134
1,2,3,6,7,8-HxCDF	89.6	100	89.6	84 - 130
2,3,4,6,7,8-HxCDF	88.3	100	88.3	70 - 156
1,2,3,7,8,9-HxCDF	90.7	100	90.7	78 - 130
1,2,3,4,6,7,8-HpCDF	85.3	100	85.3	82 - 122
1,2,3,4,7,8,9-HpCDF	83.9	100	83.9	78 - 138
OCDF	181	200	90.4	63 - 170

	Labeled Standard	%R	LCL-UCL
IS	13C-2,3,7,8-TCDD	89.4	20 - 175
	13C-1,2,3,7,8-PeCDD	107	21 - 227
	13C-1,2,3,4,7,8-HxCDD	89.2	21 - 193
	13C-1,2,3,6,7,8-HxCDD	91.0	25 - 163
	13C-1,2,3,7,8,9-HxCDD	88.8	21 - 193
	13C-1,2,3,4,6,7,8-HpCDD	85.2	26 - 166
	13C-OCDD	95.6	13 - 199
	13C-2,3,7,8-TCDF	89.7	22 - 152
	13C-1,2,3,7,8-PeCDF	86.6	21 - 192
	13C-2,3,4,7,8-PeCDF	90.0	13 - 328
	13C-1,2,3,4,7,8-HxCDF	99.9	19 - 202
	13C-1,2,3,6,7,8-HxCDF	82.1	21 - 159
	13C-2,3,4,6,7,8-HxCDF	88.5	22 - 176
	13C-1,2,3,7,8,9-HxCDF	89.3	17 - 205
	13C-1,2,3,4,6,7,8-HpCDF	94.7	21 - 158
	13C-1,2,3,4,7,8,9-HpCDF	99.9	20 - 186
	13C-OCDF	95.7	13 - 199
CRS	37Cl-2,3,7,8-TCDD	93.0	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: SP-OWS-01-20141008-S

EPA Method 1613B

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 15:33

Sample Data
Matrix: Sediment
Sample Size: 35.6 g
% Solids: 28.9

Laboratory Data
Lab Sample: 1400737-02 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0064 Date Extracted: 13-Oct-2014 13:45
Date Analyzed : 15-Oct-14 08:49 Column: ZB-5MS Analyst: MAS
19-Oct-14 13:03 Column: ZB-5MS Analyst: MAS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	19.3	0.486			0.0778	
1,2,3,7,8-PeCDD	134	2.43			0.230	
1,2,3,4,7,8-HxCDD	245	2.43			0.231	
1,2,3,6,7,8-HxCDD	871	2.43			0.126	
1,2,3,7,8,9-HxCDD	609	2.43			0.173	
1,2,3,4,6,7,8-HpCDD	30400	2.43			0.263	E
OCDD	484000	97.2			0.167	E, D
2,3,7,8-TCDF	29.1	0.486			0.0289	
1,2,3,7,8-PeCDF	35.3	2.43			0.254	
2,3,4,7,8-PeCDF	54.5	2.43			0.211	
1,2,3,4,7,8-HxCDF	166	2.43			0.154	
1,2,3,6,7,8-HxCDF	118	2.43			0.195	
2,3,4,6,7,8-HxCDF	167	2.43			0.0805	
1,2,3,7,8,9-HxCDF	17.1	2.43			0.195	
1,2,3,4,6,7,8-HpCDF	3830	2.43			0.230	E
1,2,3,4,7,8,9-HpCDF	180	2.43			0.211	
OCDF	14000	4.86			0.470	E

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	82.0	25 - 164	
	13C-1,2,3,7,8-PeCDD	82.8	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	91.0	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	94.7	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	92.0	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	126	23 - 140	
	13C-OCDD	136	17 - 157	D
	13C-2,3,7,8-TCDF	85.7	24 - 169	
	13C-1,2,3,7,8-PeCDF	85.9	24 - 185	
	13C-2,3,4,7,8-PeCDF	85.3	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	91.2	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	75.7	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	81.5	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	85.0	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	107	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	103	26 - 138	
	13C-OCDF	110	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	80.4	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	886

TOTALS		
Total TCDD	126	
Total PeCDD	589	
Total HxCDD	5220	
Total HpCDD	56000	
Total TCDF	339	P
Total PeCDF	1180	P
Total HxCDF	4670	
Total HpCDF	12700	

DL - Sample specifc 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: SP-CB-09-20141008-S

EPA Method 1613B

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 16:28

Sample Data
Matrix: Sediment
Sample Size: 24.8 g
% Solids: 41.4

Laboratory Data
Lab Sample: 1400737-03 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0064 Date Extracted: 13-Oct-2014 13:45
Date Analyzed : 15-Oct-14 09:37 Column: ZB-5MS Analyst: MAS
17-Oct-14 12:21 Column: DB-225 Analyst: MAS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	2.03	0.487			0.0778	
1,2,3,7,8-PeCDD	11.7	2.44			0.230	
1,2,3,4,7,8-HxCDD	20.9	2.44			0.231	
1,2,3,6,7,8-HxCDD	51.8	2.44			0.126	
1,2,3,7,8,9-HxCDD	37.4	2.44			0.173	
1,2,3,4,6,7,8-HpCDD	1650	2.44			0.263	
OCDD	19800	4.87			0.167	E
2,3,7,8-TCDF	7.90	0.487			0.0289	
1,2,3,7,8-PeCDF	4.66	2.44			0.254	
2,3,4,7,8-PeCDF	10.5	2.44			0.211	
1,2,3,4,7,8-HxCDF	14.8	2.44			0.154	
1,2,3,6,7,8-HxCDF	13.8	2.44			0.195	
2,3,4,6,7,8-HxCDF	18.5	2.44			0.0805	
1,2,3,7,8,9-HxCDF	1.18	2.44			0.195	J
1,2,3,4,6,7,8-HpCDF	256	2.44			0.230	
1,2,3,4,7,8,9-HpCDF	15.7	2.44			0.211	
OCDF	876	4.87			0.470	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	81.1	25 - 164	
	13C-1,2,3,7,8-PeCDD	84.9	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	81.8	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	82.7	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	83.3	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	88.9	23 - 140	
	13C-OCDD	114	17 - 157	
	13C-2,3,7,8-TCDF	85.9	24 - 169	
	13C-1,2,3,7,8-PeCDF	82.6	24 - 185	
	13C-2,3,4,7,8-PeCDF	84.1	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	81.7	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	68.8	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	75.9	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	77.2	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	86.8	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	95.7	26 - 138	
	13C-OCDF	87.9	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	77.6	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	59.1

TOTALS

Total TCDD	31.4					
Total PeCDD	86.1					
Total HxCDD	479					
Total HpCDD	3620					
Total TCDF	127			130		
Total PeCDF	230					
Total HxCDF	360					
Total HpCDF	718					

DL - Sample specifc 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: B4J0088
Date Extracted: 16-Oct-2014 8:52
Lab Sample: B4J0088-BLK1
Date Analyzed: 20-Oct-14 16:23 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	5.00	2.02		1.21	
PCB-2	ND	5.00	2.31		1.75	
PCB-3	ND	5.00	2.24		1.49	
PCB-4/10	ND	20.0	8.41		5.64	
PCB-5/8	ND	20.0	7.18		3.59	
PCB-6	ND	10.0	7.03		3.10	
PCB-7/9	ND	20.0	6.98		6.22	
PCB-11	34.4	10.0			3.86	
PCB-12/13	ND	20.0	7.00		5.01	
PCB-14	ND	10.0	6.24		3.98	
PCB-15	ND	10.0	6.37		2.53	
PCB-16/32	3.26	10.0			2.87	J
PCB-17	ND	5.00		1.16	1.37	
PCB-18	ND	5.00		3.53	2.57	
PCB-19	ND	5.00	1.00		2.38	
PCB-20/21/33	2.39	15.0			10.3	J
PCB-22	ND	5.00		1.09	3.17	
PCB-23	ND	5.00	0.960		1.35	
PCB-24/27	ND	10.0	0.745		3.16	
PCB-25	ND	5.00	0.938		3.34	
PCB-26	ND	5.00	0.975		2.19	
PCB-28	ND	5.00		2.56	2.90	
PCB-29	ND	5.00	0.948		1.60	
PCB-30	ND	5.00	0.708		2.09	
PCB-31	2.94	5.00			4.29	J
PCB-34	ND	5.00	0.999		2.34	
PCB-35	ND	5.00	0.939		1.65	
PCB-36	ND	5.00	0.939		2.69	
PCB-37	ND	5.00	0.929		1.92	
PCB-38	ND	5.00	0.954		1.56	
PCB-39	ND	5.00	0.910		2.60	
PCB-40	ND	5.00	2.28		3.08	
PCB-41/64/71/72	3.05	20.0			5.57	J
PCB-42/59	ND	10.0	1.53		2.84	

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-43/49	ND	10.0	1.68		3.38	
PCB-44	ND	5.00	1.98		2.48	
PCB-45	ND	5.00	1.94		1.96	
PCB-46	ND	5.00	1.97		2.49	
PCB-47	ND	5.00	1.65		4.42	
PCB-48/75	ND	10.0	1.43		2.09	
PCB-50	ND	5.00	1.60		1.40	
PCB-51	ND	5.00	1.62		1.42	
PCB-52/69	3.92	10.0			3.64	J
PCB-53	ND	5.00	1.57		1.12	
PCB-54	ND	5.00	1.29		1.51	
PCB-55	ND	5.00	1.20		1.19	
PCB-56/60	1.57	10.0			2.19	J
PCB-57	ND	5.00	1.23		0.857	
PCB-58	ND	5.00	1.24		1.81	
PCB-61/70	ND	10.0		2.62	2.40	
PCB-62	ND	5.00	1.44		1.46	
PCB-63	ND	5.00	1.22		0.696	
PCB-65	ND	5.00	1.40		0.953	
PCB-66/76	ND	10.0		1.67	2.82	
PCB-67	ND	5.00	1.27		1.22	
PCB-68	ND	5.00	1.26		1.24	
PCB-73	ND	5.00	1.36		1.56	
PCB-74	ND	5.00		1.38	1.53	
PCB-77	ND	5.00	1.21		1.34	
PCB-78	ND	5.00	1.23		0.990	
PCB-79	ND	5.00	1.18		1.60	
PCB-80	ND	5.00	1.04		1.98	
PCB-81	ND	5.00	1.10		2.34	
PCB-82	ND	5.00	5.31		1.69	
PCB-83	ND	5.00	3.55		1.32	
PCB-84/92	ND	10.0	4.55		3.38	
PCB-85/116	ND	10.0	4.14		2.83	
PCB-86	ND	5.00	5.28		2.34	

RL - Reporting limit
DL - Sample specifc estimated detection limit
LCL-UCL- Lower control limit - upper control limit
EMPC - Estimated maximum possible concentration
MDL - Method detection limit

Sample ID: Method Blank — EPA Method 1668C

Matrix: Aqueous
Sample Size: 1.00 L
QC Batch: B4J0088
Date Extracted: 16-Oct-2014 8:52
Lab Sample: B4J0088-BLK1
Date Analyzed: 20-Oct-14 16:23 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-87/117/125	ND	15.0	3.46		3.79	
PCB-88/91	ND	5.00	5.14		3.25	
PCB-89	ND	5.00	4.71		1.84	
PCB-90/101	8.61	10.0			1.92	J
PCB-93	ND	5.00	4.64		1.47	
PCB-94	ND	5.00	4.73		1.91	
PCB-95/98/102	7.49	15.0			6.58	J
PCB-96	ND	5.00	3.74		2.16	
PCB-97	ND	5.00	4.32		1.24	
PCB-99	ND	5.00	3.72		1.94	
PCB-100	ND	5.00	4.08		2.03	
PCB-103	ND	5.00	4.38		2.28	
PCB-104	ND	5.00	3.25		0.931	
PCB-105	ND	5.00	1.81		2.21	
PCB-106/118	2.75	10.0			2.44	J
PCB-107/109	ND	10.0	3.21		1.98	
PCB-108/112	ND	10.0	4.19		1.86	
PCB-110	3.61	5.00			1.94	J
PCB-111/115	ND	10.0	3.08		0.768	
PCB-113	ND	5.00	3.54		1.31	
PCB-114	ND	5.00	1.76		1.81	
PCB-119	ND	5.00	3.13		0.949	
PCB-120	ND	5.00	3.03		1.01	
PCB-121	ND	5.00	2.75		1.94	
PCB-122	ND	5.00	1.93		1.84	
PCB-123	ND	5.00	3.22		1.35	
PCB-124	ND	5.00	2.96		1.79	
PCB-126	ND	5.00	2.04		2.05	
PCB-127	ND	5.00	1.82		0.808	
PCB-128/162	ND	10.0	2.26		1.68	
PCB-129	ND	5.00	2.81		1.11	
PCB-130	ND	5.00	3.15		2.21	
PCB-131	ND	5.00	2.70		1.46	
PCB-132/161	ND	10.0	2.22		2.34	
PCB-133/142	ND	10.0	2.61		2.19	
PCB-134/143	ND	10.0	2.67		2.40	
PCB-135	ND	5.00	7.16		2.90	
PCB-136	ND	5.00	5.15		2.89	
PCB-137	ND	5.00	2.49		2.08	
PCB-138/163/164	7.52	15.0			2.68	J
PCB-139/149	ND	10.0		10.3	7.87	
PCB-140	ND	5.00	7.11		3.52	
PCB-141	ND	5.00	2.74		1.15	
PCB-144	ND	5.00	6.81		3.22	
PCB-145	ND	5.00	5.11		1.73	
PCB-146/165	ND	10.0	2.14		1.91	
PCB-147	ND	5.00	6.74		3.62	
PCB-148	ND	5.00	7.53		1.68	
PCB-150	ND	5.00	5.25		1.14	
PCB-151	ND	5.00	6.90		3.59	
PCB-152	ND	5.00	5.08		1.82	
PCB-153	8.97	5.00			1.83	
PCB-154	ND	5.00	6.32		2.78	
PCB-155	ND	5.00	4.92		1.45	
PCB-156	ND	5.00	1.87		1.74	
PCB-157	ND	5.00	2.01		1.17	
PCB-158/160	ND	10.0	2.01		1.99	
PCB-159	ND	5.00	1.97		1.20	
PCB-166	ND	5.00	2.06		0.920	
PCB-167	ND	5.00	1.98		1.65	
PCB-168	ND	5.00	1.80		0.933	
PCB-169	ND	5.00	2.18		1.12	
PCB-170	ND	5.00	2.54		1.38	
PCB-171	ND	5.00	2.49		1.61	
PCB-172	ND	5.00	2.68		1.46	
PCB-173	ND	5.00	2.82		1.49	
PCB-174	ND	5.00	2.44		1.42	
PCB-175	ND	5.00	2.43		3.15	

RL - Reporting limit
EMPC - Estimated maximum possible concentration
DL - Sample specifc 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:	B4J0088	Lab Sample:	B4J0088-BLK1
Sample Size:	1.00 L	Date Extracted:	16-Oct-2014 8:52	Date Analyzed:	20-Oct-14 16:23 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-176	ND	5.00	1.73		2.17	
PCB-177	ND	5.00	2.64		1.34	
PCB-178	ND	5.00	2.51		2.25	
PCB-179	ND	5.00	1.80		1.57	
PCB-180	ND	5.00	2.29		0.610	
PCB-181	ND	5.00	2.40		1.01	
PCB-182/187	ND	10.0	2.32		6.20	
PCB-183	ND	5.00	2.17		3.29	
PCB-184	ND	5.00	1.90		1.25	
PCB-185	ND	5.00	2.44		1.47	
PCB-186	ND	5.00	1.84		2.43	
PCB-188	ND	5.00	1.67		1.08	
PCB-189	ND	5.00	1.88		1.49	
PCB-190	ND	5.00	1.89		1.70	
PCB-191	ND	5.00	1.96		1.96	
PCB-192	ND	5.00	2.14		1.69	
PCB-193	ND	5.00	1.98		1.46	
PCB-194	ND	5.00	1.61		1.71	
PCB-195	ND	5.00	1.67		1.47	
PCB-196/203	ND	10.0	5.29		6.35	
PCB-197	ND	5.00	3.81		1.80	
PCB-198	ND	5.00	5.50		3.78	
PCB-199	ND	5.00	5.61		4.05	
PCB-200	ND	5.00	4.02		1.75	
PCB-201	ND	5.00	3.71		1.02	
PCB-202	ND	5.00	3.93		1.55	
PCB-204	ND	5.00	4.12		1.48	
PCB-205	ND	5.00	1.42		1.53	
PCB-206	ND	5.00	2.68		1.32	
PCB-207	ND	5.00	1.28		1.51	
PCB-208	ND	5.00	1.22		1.34	
PCB-209	ND	5.00	3.84		1.86	
Total monoCB	ND	5.00	2.31			
Total diCB	34.4	10.0				
Total triCB	8.59	5.00		16.9		
Total tetraCB	8.54	5.00		14.2		
Total pentaCB	22.5	5.00				
Total hexaCB	16.5	5.00		26.8		
Total heptaCB	ND	5.00	2.82			
Total octaCB	ND	5.00	5.61			
Total nonaCB	ND	5.00	2.68			
DecaCB	ND	5.00	3.84			
Total PCB	90.5	10.0				

RL - Reporting limit
EMPC - Estimated maximum possible concentration
DL - Sample specifc 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: B4J0088
Date Extracted: 16-Oct-2014 8:52

Lab Sample: B4J0088-BLK1
Date Analyzed: 20-Oct-14 16:23 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	64.8	5 - 145	
	13C-PCB-3	62.5	5 - 145	
	13C-PCB-4	61.0	5 - 145	
	13C-PCB-11	67.8	5 - 145	
	13C-PCB-9	61.4	5 - 145	
	13C-PCB-19	52.7	5 - 145	
	13C-PCB-28	73.5	5 - 145	
	13C-PCB-32	54.5	5 - 145	
	13C-PCB-37	79.7	5 - 145	
	13C-PCB-47	69.6	5 - 145	
	13C-PCB-52	72.7	5 - 145	
	13C-PCB-54	70.1	5 - 145	
	13C-PCB-70	78.4	5 - 145	
	13C-PCB-77	82.1	10 - 145	
	13C-PCB-80	79.2	10 - 145	
	13C-PCB-81	82.0	10 - 145	
	13C-PCB-95	77.5	10 - 145	
	13C-PCB-97	81.6	10 - 145	
	13C-PCB-101	79.1	10 - 145	
	13C-PCB-104	74.7	10 - 145	
	13C-PCB-105	112	10 - 145	
	13C-PCB-114	110	10 - 145	
	13C-PCB-118	80.8	10 - 145	
	13C-PCB-123	81.9	10 - 145	
	13C-PCB-126	114	10 - 145	
	13C-PCB-127	114	10 - 145	
	13C-PCB-138	91.0	10 - 145	
	13C-PCB-141	84.9	10 - 145	
	13C-PCB-153	87.8	10 - 145	
	13C-PCB-155	51.4	10 - 145	
	13C-PCB-156	90.2	10 - 145	
	13C-PCB-157	89.5	10 - 145	
	13C-PCB-159	89.6	10 - 145	
	13C-PCB-167	90.0	10 - 145	
	13C-PCB-169	87.7	10 - 145	
	13C-PCB-170	61.3	10 - 145	
	13C-PCB-180	63.1	10 - 145	
	13C-PCB-188	59.5	10 - 145	
	13C-PCB-189	64.8	10 - 145	
	13C-PCB-194	84.3	10 - 145	
	13C-PCB-202	49.5	10 - 145	
	13C-PCB-206	72.3	10 - 145	
	13C-PCB-208	70.3	10 - 145	
	13C-PCB-209	56.7	10 - 145	
CRS	13C-PCB-79	102	10 - 145	
	13C-PCB-178	78.5	10 - 145	

RL - Reporting limit
EMPC - Estimated maximum possible concentration
DL - Sample specifc estimated detection limit
MDL - Method detection limit
LCL-UCL- Lower control limit - upper control limit

Sample ID: OPR

EPA Method 1668C

Matrix: Aqueous
Sample Size: 1.00 L

QC Batch: B4J0088
Date Extracted: 16-Oct-2014 8:52

Lab Sample: B4J0088-BS1
Date Analyzed: 20-Oct-14 14:14 Column: ZB-1 Analyst: DMS

Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits
PCB-1	1130	1000	113	60 - 135
PCB-3	1130	1000	113	60 - 135
PCB-4/10	4600	4000	115	60 - 135
PCB-15	2240	2000	112	60 - 135
PCB-19	1120	1000	112	60 - 135
PCB-37	1070	1000	107	60 - 135
PCB-54	1110	1000	111	60 - 135
PCB-77	1120	1000	112	60 - 135
PCB-81	1130	1000	113	60 - 135
PCB-104	1160	1000	116	60 - 135
PCB-105	1190	1000	119	60 - 135
PCB-106/118	2300	2000	115	60 - 135
PCB-114	1190	1000	119	60 - 135
PCB-123	1190	1000	119	60 - 135
PCB-126	1180	1000	118	60 - 135
PCB-155	1210	1000	121	60 - 135
PCB-156	1210	1000	121	60 - 135
PCB-157	1210	1000	121	60 - 135
PCB-167	1210	1000	121	60 - 135
PCB-169	1200	1000	120	60 - 135
PCB-188	1180	1000	118	60 - 135
PCB-189	1240	1000	124	60 - 135
PCB-202	1130	1000	113	60 - 135
PCB-205	1160	1000	116	60 - 135
PCB-206	1090	1000	109	60 - 135
PCB-208	1070	1000	107	60 - 135
PCB-209	1190	1000	119	60 - 135

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-1	58.0	15 - 145
IS	13C-PCB-3	60.8	15 - 145
IS	13C-PCB-4	59.6	15 - 145
IS	13C-PCB-9	63.2	15 - 145
IS	13C-PCB-11	71.2	15 - 145
IS	13C-PCB-19	57.7	15 - 145
IS	13C-PCB-28	65.3	15 - 145
IS	13C-PCB-32	62.7	15 - 145
IS	13C-PCB-37	77.1	15 - 145
IS	13C-PCB-47	73.1	15 - 145
IS	13C-PCB-52	77.6	15 - 145
IS	13C-PCB-54	73.0	15 - 145
IS	13C-PCB-70	81.4	15 - 145
IS	13C-PCB-77	88.0	40 - 145
IS	13C-PCB-80	82.4	40 - 145
IS	13C-PCB-81	87.4	40 - 145
IS	13C-PCB-95	78.2	40 - 145
IS	13C-PCB-97	83.3	40 - 145
IS	13C-PCB-101	80.5	40 - 145
IS	13C-PCB-104	73.1	40 - 145
IS	13C-PCB-105	106	40 - 145
IS	13C-PCB-114	106	40 - 145
IS	13C-PCB-118	86.8	40 - 145
IS	13C-PCB-123	85.6	40 - 145
IS	13C-PCB-126	107	40 - 145
IS	13C-PCB-127	109	40 - 145
IS	13C-PCB-138	91.4	40 - 145
IS	13C-PCB-141	91.5	40 - 145
IS	13C-PCB-153	89.9	40 - 145
IS	13C-PCB-155	58.1	40 - 145
IS	13C-PCB-156	90.3	40 - 145
IS	13C-PCB-157	89.0	40 - 145
IS	13C-PCB-159	90.9	40 - 145
IS	13C-PCB-167	91.5	40 - 145
IS	13C-PCB-169	87.7	40 - 145
IS	13C-PCB-170	69.3	40 - 145
IS	13C-PCB-180	67.8	40 - 145
IS	13C-PCB-188	68.2	40 - 145
IS	13C-PCB-189	68.9	40 - 145
IS	13C-PCB-194	87.6	40 - 145

Sample ID: OPR

EPA Method 1668C

Matrix: Aqueous
Sample Size: 1.00 L

QC Batch: B4J0088
Date Extracted: 16-Oct-2014 8:52

Lab Sample: B4J0088-BS1
Date Analyzed: 20-Oct-14 14:14 Column: ZB-1 Analyst: DMS

Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-202	61.5	40 - 145
IS	13C-PCB-206	78.0	40 - 145
IS	13C-PCB-208	79.0	40 - 145
IS	13C-PCB-209	66.1	40 - 145
CRS	13C-PCB-79	93.4	40 - 145
CRS	13C-PCB-178	79.8	40 - 145

LCL-UCL - Lower control limit - upper control limit

Sample ID: SP-OWS-01-20141008-W

EPA Method 1668C

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 14:53

Sample Data
Matrix: Aqueous
Sample Size: 0.978 L

Laboratory Data
Lab Sample: 1400737-01 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0088 Date Extracted: 16-Oct-2014 8:52
Date Analyzed : 20-Oct-14 17:28 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	11.0	5.11			1.21	
PCB-2	2.00	5.11			1.75	J
PCB-3	9.67	5.11			1.49	
PCB-4/10	23.8	20.5			5.64	
PCB-5/8	31.0	20.5			3.59	
PCB-6	6.83	10.2			3.10	J
PCB-7/9	ND	20.5	5.22		6.22	
PCB-11	84.5	10.2			3.86	B
PCB-12/13	ND	20.5	6.29		5.01	
PCB-14	ND	10.2	5.61		3.98	
PCB-15	20.7	10.2			2.53	
PCB-16/32	56.0	10.2			2.87	B
PCB-17	27.8	5.11			1.37	
PCB-18	92.3	5.11			2.57	
PCB-19	11.4	5.11			2.38	
PCB-20/21/33	36.1	15.3			10.3	B
PCB-22	22.1	5.11			3.17	
PCB-23	ND	5.11	0.659		1.35	
PCB-24/27	6.73	10.2			3.16	J
PCB-25	4.45	5.11			3.34	J
PCB-26	12.4	5.11			2.19	
PCB-28	62.9	5.11			2.90	
PCB-29	ND	5.11	0.650		1.60	
PCB-30	ND	5.11	0.673		2.09	
PCB-31	65.7	5.11			4.29	B
PCB-34	ND	5.11	0.685		2.34	
PCB-35	6.27	5.11			1.65	
PCB-36	ND	5.11	0.733		2.69	
PCB-37	26.9	5.11			1.92	
PCB-38	ND	5.11	0.745		1.56	
PCB-39	ND	5.11	0.711		2.60	
PCB-40	31.1	5.11			3.08	
PCB-41/64/71/72	152	20.5			5.57	B
PCB-42/59	42.7	10.2			2.84	
PCB-43/49	144	10.2			3.38	

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-44	245	5.11			2.48	
PCB-45	22.6	5.11			1.96	
PCB-46	10.3	5.11			2.49	
PCB-47	37.8	5.11			4.42	
PCB-48/75	24.1	10.2			2.09	
PCB-50	ND	5.11	1.26		1.40	
PCB-51	6.95	5.11			1.42	
PCB-52/69	396	10.2			3.64	B
PCB-53	25.0	5.11			1.12	
PCB-54	ND	5.11	1.02		1.51	
PCB-55	ND	5.11		4.93	1.19	
PCB-56/60	117	10.2			2.19	B
PCB-57	ND	5.11	1.06		0.857	
PCB-58	ND	5.11		0.694	1.81	
PCB-61/70	377	10.2			2.40	
PCB-62	ND	5.11	1.19		1.46	
PCB-63	7.30	5.11			0.696	
PCB-65	ND	5.11	1.15		0.953	
PCB-66/76	185	10.2			2.82	
PCB-67	4.05	5.11			1.22	J
PCB-68	2.21	5.11			1.24	J
PCB-73	ND	5.11	1.19		1.56	
PCB-74	93.9	5.11			1.53	
PCB-77	25.3	5.11			1.34	
PCB-78	2.48	5.11			0.990	J
PCB-79	8.81	5.11			1.60	
PCB-80	ND	5.11	0.943		1.98	
PCB-81	ND	5.11		1.82	2.34	
PCB-82	107	5.11			1.69	
PCB-83	ND	5.11	2.28		1.32	
PCB-84/92	357	10.2			3.38	
PCB-85/116	135	10.2			2.83	
PCB-86	ND	5.11		3.01	2.34	
PCB-87/117/125	321	15.3			3.79	
PCB-88/91	115	5.11			3.25	

RL - Reporting limit
EMPC - Estimated maximum possible concentration
DL - Sample specifc estimated detection limit
MDL - Method detection limit
LCL-UCL- Lower control limit - upper control limit

Sample ID: SP-OWS-01-20141008-W

EPA Method 1668C

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 14:53

Sample Data
Matrix: Aqueous
Sample Size: 0.978 L

Laboratory Data
Lab Sample: 1400737-01 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0088 Date Extracted: 16-Oct-2014 8:52
Date Analyzed : 20-Oct-14 17:28 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-89	5.79	5.11			1.84	
PCB-90/101	854	10.2			1.92	B
PCB-93	ND	5.11	3.13		1.47	
PCB-94	3.39	5.11			1.91	J
PCB-95/98/102	637	15.3			6.58	B
PCB-96	ND	5.11		3.66	2.16	
PCB-97	253	5.11			1.24	
PCB-99	315	5.11			1.94	
PCB-100	ND	5.11		1.69	2.03	
PCB-103	4.91	5.11			2.28	J
PCB-104	ND	5.11	2.01		0.931	
PCB-105	294	5.11			2.21	
PCB-106/118	766	10.2			2.44	B
PCB-107/109	53.2	10.2			1.98	
PCB-108/112	40.8	10.2			1.86	
PCB-110	966	5.11			1.94	B
PCB-111/115	11.6	10.2			0.768	
PCB-113	ND	5.11	2.40		1.31	
PCB-114	17.6	5.11			1.81	
PCB-119	13.5	5.11			0.949	
PCB-120	2.28	5.11			1.01	J
PCB-121	ND	5.11	1.86		1.94	
PCB-122	7.17	5.11			1.84	
PCB-123	11.6	5.11			1.35	
PCB-124	37.8	5.11			1.79	
PCB-126	6.18	5.11			2.05	
PCB-127	ND	5.11	3.73		0.808	
PCB-128/162	158	10.2			1.68	
PCB-129	54.3	5.11			1.11	
PCB-130	65.5	5.11			2.21	
PCB-131	ND	5.11	3.18		1.46	
PCB-132/161	259	10.2			2.34	
PCB-133/142	27.4	10.2			2.19	
PCB-134/143	50.7	10.2			2.40	
PCB-135	104	5.11			2.90	
PCB-136	101	5.11			2.89	
PCB-137	43.7	5.11			2.08	
PCB-138/163/164	981	15.3			2.68	B
PCB-139/149	649	10.2			7.87	
PCB-140	3.73	5.11			3.52	J
PCB-141	195	5.11			1.15	
PCB-144	34.4	5.11			3.22	
PCB-145	ND	5.11	2.56		1.73	
PCB-146/165	107	10.2			1.91	
PCB-147	16.6	5.11			3.62	
PCB-148	ND	5.11	3.78		1.68	
PCB-150	ND	5.11	2.63		1.14	
PCB-151	167	5.11			3.59	
PCB-152	ND	5.11	2.55		1.82	
PCB-153	763	5.11			1.83	B
PCB-154	6.74	5.11			2.78	
PCB-155	ND	5.11	2.47		1.45	
PCB-156	94.0	5.11			1.74	
PCB-157	20.3	5.11			1.17	
PCB-158/160	117	10.2			1.99	
PCB-159	ND	5.11	2.43		1.20	
PCB-166	ND	5.11		2.89	0.920	
PCB-167	40.9	5.11			1.65	
PCB-168	ND	5.11	2.12		0.933	
PCB-169	ND	5.11	3.08		1.12	
PCB-170	199	5.11			1.38	
PCB-171	57.5	5.11			1.61	
PCB-172	39.4	5.11			1.46	
PCB-173	5.58	5.11			1.49	
PCB-174	212	5.11			1.42	
PCB-175	7.85	5.11			3.15	
PCB-176	25.9	5.11			2.17	
PCB-177	123	5.11			1.34	
PCB-178	41.2	5.11			2.25	
PCB-179	81.0	5.11			1.57	

RL - Reporting limit
EMPC - Estimated maximum possible concentration
DL - Sample specifc estimated detection limit
MDL - Method detection limit
LCL-UCL- Lower control limit - upper control limit

Sample ID: SP-OWS-01-20141008-W

EPA Method 1668C

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 14:53

Sample Data
Matrix: Aqueous
Sample Size: 0.978 L

Laboratory Data
Lab Sample: 1400737-01 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0088 Date Extracted: 16-Oct-2014 8:52
Date Analyzed : 20-Oct-14 17:28 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-180	450	5.11			0.610	
PCB-181	ND	5.11	2.76		1.01	
PCB-182/187	263	10.2			6.20	
PCB-183	109	5.11			3.29	
PCB-184	ND	5.11	2.00		1.25	
PCB-185	23.0	5.11			1.47	
PCB-186	ND	5.11	1.94		2.43	
PCB-188	ND	5.11	1.76		1.08	
PCB-189	7.26	5.11			1.49	
PCB-190	39.4	5.11			1.70	
PCB-191	8.44	5.11			1.96	
PCB-192	ND	5.11	2.46		1.69	
PCB-193	23.5	5.11			1.46	
PCB-194	85.4	5.11			1.71	
PCB-195	33.3	5.11			1.47	
PCB-196/203	92.6	10.2			6.35	
PCB-197	4.06	5.11			1.80	J
PCB-198	3.75	5.11			3.78	J
PCB-199	94.0	5.11			4.05	
PCB-200	12.5	5.11			1.75	
PCB-201	10.2	5.11			1.02	
PCB-202	18.4	5.11			1.55	
PCB-204	ND	5.11	2.58		1.48	
PCB-205	4.80	5.11			1.53	J
PCB-206	19.6	5.11			1.32	
PCB-207	2.32	5.11			1.51	J
PCB-208	4.44	5.11			1.34	J
PCB-209	6.56	5.11			1.86	
Total monoCB	22.6	5.11				
Total diCB	167	10.2				B
Total triCB	431	5.11				B
Total tetraCB	1960	5.11		1970		B
Total pentaCB	5340	5.11		5350		B
Total hexaCB	4060	5.11				B
Total heptaCB	1720	5.11				
Total octaCB	359	5.11				
Total nonaCB	26.3	5.11				
DecaCB	6.56	5.11				
Total PCB	14100	10.2				B

RL - Reporting limit
EMPC - Estimated maximum possible concentration
DL - Sample specifc estimated detection limit
MDL - Method detection limit
LCL-UCL- Lower control limit - upper control limit

Sample ID: SP-OWS-01-20141008-W

EPA Method 1668C

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 14:53

Sample Data
Matrix: Aqueous
Sample Size: 0.978 L

Laboratory Data
Lab Sample: 1400737-01 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0088 Date Extracted: 16-Oct-2014 8:52
Date Analyzed : 20-Oct-14 17:28 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	88.5	5 -145	
	13C-PCB-3	91.1	5 -145	
	13C-PCB-4	88.7	5 -145	
	13C-PCB-11	86.5	5 -145	
	13C-PCB-9	91.9	5 -145	
	13C-PCB-19	77.2	5 -145	
	13C-PCB-28	91.5	5 -145	
	13C-PCB-32	75.6	5 -145	
	13C-PCB-37	88.0	5 -145	
	13C-PCB-47	87.8	5 -145	
	13C-PCB-52	87.8	5 -145	
	13C-PCB-54	91.1	5 -145	
	13C-PCB-70	94.1	5 -145	
	13C-PCB-77	92.2	10 -145	
	13C-PCB-80	92.0	10 -145	
	13C-PCB-81	93.8	10 -145	
	13C-PCB-95	86.8	10 -145	
	13C-PCB-97	93.9	10 -145	
	13C-PCB-101	89.2	10 -145	
	13C-PCB-104	84.1	10 -145	
	13C-PCB-105	107	10 -145	
	13C-PCB-114	110	10 -145	
	13C-PCB-118	86.1	10 -145	
	13C-PCB-123	87.2	10 -145	
	13C-PCB-126	106	10 -145	
	13C-PCB-127	109	10 -145	
	13C-PCB-138	92.1	10 -145	
	13C-PCB-141	94.6	10 -145	
	13C-PCB-153	95.4	10 -145	
	13C-PCB-155	70.1	10 -145	
	13C-PCB-156	89.4	10 -145	
	13C-PCB-157	88.0	10 -145	
	13C-PCB-159	94.3	10 -145	
	13C-PCB-167	90.6	10 -145	
	13C-PCB-169	79.7	10 -145	
	13C-PCB-170	71.3	10 -145	
	13C-PCB-180	74.7	10 -145	
	13C-PCB-188	76.9	10 -145	
	13C-PCB-189	63.2	10 -145	
	13C-PCB-194	95.6	10 -145	
	13C-PCB-202	71.0	10 -145	
	13C-PCB-206	95.3	10 -145	
	13C-PCB-208	97.7	10 -145	
	13C-PCB-209	97.2	10 -145	
CRS	13C-PCB-79	103	10 -145	
	13C-PCB-178	86.8	10 -145	

RL - Reporting limit
EMPC - Estimated maximum possible concentration
DL - Sample specifc estimated detection limit
MDL - Method detection limit
LCL-UCL- Lower control limit - upper control limit

Sample ID: Method Blank

EPA Method 1668C

Matrix: Solid
Sample Size: 1.00 g

QC Batch: B4J0139
Date Extracted: 24-Oct-2014 13:55

Lab Sample: B4J0139-BLK1
Date Analyzed: 28-Oct-14 12:04 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	25.0	13.4		0.320	
PCB-2	ND	25.0	13.0		0.240	
PCB-3	ND	25.0	10.8		0.323	
PCB-4/10	ND	100	47.6		1.14	
PCB-5/8	ND	100	42.0		1.76	
PCB-6	ND	50.0	37.0		1.00	
PCB-7/9	ND	100	39.9		1.34	
PCB-11	ND	50.0	37.0		3.48	
PCB-12/13	ND	100	33.7		1.37	
PCB-14	ND	50.0	36.3		0.337	
PCB-15	ND	50.0	31.4		0.634	
PCB-16/32	20.2	100			0.430	J
PCB-17	ND	25.0	5.57		0.658	
PCB-18	ND	25.0	6.57		0.696	
PCB-19	ND	25.0	8.39		0.612	
PCB-20/21/33	ND	75.0	8.68		2.47	
PCB-22	ND	25.0	7.77		0.964	
PCB-23	ND	25.0	7.34		0.543	
PCB-24/27	ND	50.0	4.32		0.742	
PCB-25	ND	25.0	7.44		0.768	
PCB-26	ND	25.0	7.78		0.766	
PCB-28	10.9	25.0			1.12	J
PCB-29	ND	25.0	8.70		0.949	
PCB-30	ND	25.0	5.11		0.355	
PCB-31	9.77	25.0			0.809	J
PCB-34	ND	25.0	8.27		1.57	
PCB-35	ND	25.0	7.98		0.565	
PCB-36	ND	25.0	8.61		0.406	
PCB-37	ND	25.0		9.30	0.389	
PCB-38	ND	25.0	8.20		0.528	
PCB-39	ND	25.0	8.81		0.461	
PCB-40	ND	25.0	12.7		0.927	
PCB-41/64/71/72	21.6	100			1.70	J
PCB-42/59	ND	50.0	7.81		0.899	
PCB-43/49	14.6	50.0			0.879	J
PCB-44	ND	25.0	10.3		0.745	
PCB-45	ND	25.0	10.1		0.402	
PCB-46	ND	25.0	10.3		0.537	
PCB-47	ND	25.0	8.39		2.19	
PCB-48/75	ND	50.0	7.24		0.983	
PCB-50	ND	25.0	8.83		0.603	
PCB-51	ND	25.0	8.82		0.789	
PCB-52/69	ND	50.0		12.3	0.722	
PCB-53	ND	25.0	8.21		0.331	
PCB-54	ND	25.0	7.05		0.275	
PCB-55	ND	25.0	6.07		0.416	
PCB-56/60	34.5	50.0			0.825	J
PCB-57	ND	25.0	6.35		0.354	
PCB-58	ND	25.0	6.71		0.589	
PCB-61/70	41.8	50.0			1.20	J
PCB-62	ND	25.0	7.28		0.597	
PCB-63	ND	25.0	6.53		0.524	
PCB-65	ND	25.0	7.26		0.842	
PCB-66/76	34.2	50.0			1.31	J
PCB-67	ND	25.0	5.62		0.486	
PCB-68	ND	25.0	6.59		0.658	
PCB-73	ND	25.0	6.45		0.454	
PCB-74	ND	25.0		14.3	0.781	
PCB-77	10.5	25.0			0.748	J
PCB-78	ND	25.0	5.20		0.385	
PCB-79	ND	25.0	5.85		0.633	
PCB-80	ND	25.0	5.30		0.336	
PCB-81	ND	25.0	4.97		0.674	
PCB-82	ND	25.0	15.8		0.981	
PCB-83	ND	25.0	10.6		0.440	
PCB-84/92	ND	50.0	13.4		1.01	
PCB-85/116	ND	50.0	12.3		1.64	
PCB-86	ND	25.0	19.0		1.79	

RL - Reporting limit
EMPC - Estimated maximum possible concentration

DL - Sample specifc 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: 1.00 g
QC Batch: B4J0139
Date Extracted: 24-Oct-2014 13:55
Lab Sample: B4J0139-BLK1
Date Analyzed: 28-Oct-14 12:04 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-87/117/125	ND	75.0	10.3		0.880	
PCB-88/91	ND	50.0	14.0		1.25	
PCB-89	ND	25.0	12.4		1.22	
PCB-90/101	ND	50.0		32.1	1.19	
PCB-93	ND	25.0	18.5		2.53	
PCB-94	ND	25.0	14.8		0.874	
PCB-95/98/102	27.6	75.0			1.38	J
PCB-96	ND	25.0	10.7		0.588	
PCB-97	ND	25.0	13.6		0.675	
PCB-99	ND	25.0		12.8	0.474	
PCB-100	ND	25.0	13.0		0.511	
PCB-103	ND	25.0	12.8		0.428	
PCB-104	ND	25.0	10.3		0.876	
PCB-105	26.2	25.0			0.462	
PCB-106/118	40.6	50.0			0.728	J
PCB-107/109	ND	50.0	9.09		0.631	
PCB-108/112	ND	50.0	12.5		0.844	
PCB-110	29.9	25.0			0.555	
PCB-111/115	ND	50.0	9.81		1.24	
PCB-113	ND	25.0	9.96		0.495	
PCB-114	ND	25.0	11.2		0.418	
PCB-119	ND	25.0	10.5		0.383	
PCB-120	ND	25.0	9.56		0.622	
PCB-121	ND	25.0	9.68		0.978	
PCB-122	ND	25.0	12.9		0.619	
PCB-123	ND	25.0	10.3		0.494	
PCB-124	ND	25.0	8.18		0.813	
PCB-126	ND	25.0	13.0		0.543	
PCB-127	ND	25.0	10.1		0.326	
PCB-128/162	ND	50.0	10.1		1.08	
PCB-129	ND	25.0	14.9		0.567	
PCB-130	ND	25.0	13.5		0.798	
PCB-131	ND	25.0	13.1		0.731	
PCB-132/161	ND	50.0	10.8		1.05	
PCB-133/142	ND	50.0	14.5		1.04	
PCB-134/143	ND	50.0	13.0		1.05	
PCB-135	ND	25.0	10.8		1.47	
PCB-136	ND	25.0	7.26		0.776	
PCB-137	ND	25.0	12.2		0.541	
PCB-138/163/164	38.1	75.0			0.809	J
PCB-139/149	40.5	25.0			1.49	
PCB-140	ND	25.0	11.8		1.20	
PCB-141	ND	25.0	12.0		0.678	
PCB-144	ND	25.0	11.2		1.38	
PCB-145	ND	25.0	7.12		1.05	
PCB-146/165	ND	50.0	9.56		0.792	
PCB-147	ND	25.0	10.4		5.26	
PCB-148	ND	25.0	11.5		1.45	
PCB-150	ND	25.0	8.57		0.801	
PCB-151	ND	25.0		9.81	1.16	
PCB-152	ND	25.0	7.67		0.744	
PCB-153	40.6	25.0			0.484	
PCB-154	ND	25.0	9.97		0.837	
PCB-155	ND	25.0	7.68		0.767	
PCB-156	ND	25.0	9.18		0.534	
PCB-157	ND	25.0	8.64		0.485	
PCB-158/160	ND	50.0	9.49		0.915	
PCB-159	ND	25.0	9.53		0.578	
PCB-166	ND	25.0	8.95		0.425	
PCB-167	ND	25.0	8.09		0.653	
PCB-168	ND	25.0	8.22		0.502	
PCB-169	ND	25.0	8.76		0.767	
PCB-170	ND	25.0	6.89		0.758	
PCB-171	ND	25.0	6.14		0.372	
PCB-172	ND	25.0	5.94		0.857	
PCB-173	ND	25.0	8.76		0.507	
PCB-174	ND	25.0	7.05		0.797	
PCB-175	ND	25.0	7.44		0.679	

RL - Reporting limit
EMPC - Estimated maximum possible concentration
DL - Sample specifc 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: 1.00 g

QC Batch: B4J0139
Date Extracted: 24-Oct-2014 13:55

Lab Sample: B4J0139-BLK1
Date Analyzed: 28-Oct-14 12:04 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-176	ND	25.0	5.10		0.729	
PCB-177	ND	25.0	7.74		0.404	
PCB-178	ND	25.0	7.28		0.610	
PCB-179	ND	25.0	5.78		0.418	
PCB-180	ND	25.0	7.23		0.420	
PCB-181	ND	25.0	7.04		1.26	
PCB-182/187	ND	50.0	6.02		1.33	
PCB-183	ND	25.0	6.23		0.638	
PCB-184	ND	25.0	4.62		0.597	
PCB-185	ND	25.0	5.39		0.557	
PCB-186	ND	25.0	5.18		0.421	
PCB-188	ND	25.0	4.76		0.759	
PCB-189	ND	25.0	5.96		0.483	
PCB-190	ND	25.0	4.99		0.686	
PCB-191	ND	25.0	5.74		0.447	
PCB-192	ND	25.0	5.58		0.528	
PCB-193	ND	25.0	5.66		0.836	
PCB-194	ND	25.0	12.0		0.645	
PCB-195	ND	25.0	11.8		0.722	
PCB-196/203	ND	50.0	9.31		0.983	
PCB-197	ND	25.0	6.95		0.794	
PCB-198	ND	25.0	9.88		0.792	
PCB-199	ND	25.0	9.35		0.615	
PCB-200	ND	25.0	7.01		0.795	
PCB-201	ND	25.0	6.49		0.317	
PCB-202	ND	25.0	6.89		0.759	
PCB-204	ND	25.0	6.55		0.543	
PCB-205	ND	25.0	9.42		0.471	
PCB-206	ND	25.0	14.1		0.852	
PCB-207	ND	25.0	5.00		0.402	
PCB-208	ND	25.0	5.82		0.441	
PCB-209	ND	25.0	17.5		1.10	
Total monoCB	ND	25.0	13.4			
Total diCB	ND	50.0	47.6			
Total triCB	40.9	25.0		50.2		
Total tetraCB	157	25.0		184		
Total pentaCB	124	25.0		169		
Total hexaCB	119	25.0		129		
Total heptaCB	ND	25.0	8.76			
Total octaCB	ND	25.0	12.0			
Total nonaCB	ND	25.0	14.1			
DecaCB	ND	25.0	17.5			
Total PCB	442	50.0				

RL - Reporting limit
EMPC - Estimated maximum possible concentration
DL - Sample specifc 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: 1.00 g

QC Batch: B4J0139
Date Extracted: 24-Oct-2014 13:55

Lab Sample: B4J0139-BLK1
Date Analyzed: 28-Oct-14 12:04 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	76.0	5 - 145	
	13C-PCB-3	88.2	5 - 145	
	13C-PCB-4	60.2	5 - 145	
	13C-PCB-11	67.1	5 - 145	
	13C-PCB-9	61.5	5 - 145	
	13C-PCB-19	82.0	5 - 145	
	13C-PCB-28	79.9	5 - 145	
	13C-PCB-32	90.7	5 - 145	
	13C-PCB-37	84.4	5 - 145	
	13C-PCB-47	67.9	5 - 145	
	13C-PCB-52	72.0	5 - 145	
	13C-PCB-54	63.7	5 - 145	
	13C-PCB-70	77.9	5 - 145	
	13C-PCB-77	80.9	10 - 145	
	13C-PCB-80	75.7	10 - 145	
	13C-PCB-81	81.7	10 - 145	
	13C-PCB-95	71.8	10 - 145	
	13C-PCB-97	77.8	10 - 145	
	13C-PCB-101	76.5	10 - 145	
	13C-PCB-104	68.0	10 - 145	
	13C-PCB-105	58.6	10 - 145	
	13C-PCB-114	60.1	10 - 145	
	13C-PCB-118	79.2	10 - 145	
	13C-PCB-123	81.0	10 - 145	
	13C-PCB-126	61.1	10 - 145	
	13C-PCB-127	58.6	10 - 145	
	13C-PCB-138	76.1	10 - 145	
	13C-PCB-141	74.8	10 - 145	
	13C-PCB-153	75.9	10 - 145	
	13C-PCB-155	90.9	10 - 145	
	13C-PCB-156	80.0	10 - 145	
	13C-PCB-157	80.9	10 - 145	
	13C-PCB-159	78.6	10 - 145	
	13C-PCB-167	80.0	10 - 145	
	13C-PCB-169	86.5	10 - 145	
	13C-PCB-170	103	10 - 145	
	13C-PCB-180	99.6	10 - 145	
	13C-PCB-188	88.4	10 - 145	
	13C-PCB-189	103	10 - 145	
	13C-PCB-194	81.8	10 - 145	
	13C-PCB-202	116	10 - 145	
	13C-PCB-206	94.0	10 - 145	
	13C-PCB-208	94.4	10 - 145	
	13C-PCB-209	95.2	10 - 145	
CRS	13C-PCB-79	79.8	10 - 145	
	13C-PCB-178	92.8	10 - 145	

RL - Reporting limit
EMPC - Estimated maximum possible concentration

DL - Sample specifc 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
Sample Size: 1.00 g

QC Batch: B4J0139
Date Extracted: 24-Oct-2014 13:55

Lab Sample: B4J0139-BS1
Date Analyzed: 28-Oct-14 09:57 Column: ZB-1 Analyst: DMS

Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits
PCB-1	19100	25000	76.2	60 - 135
PCB-3	18800	25000	75.2	60 - 135
PCB-4/10	88900	100000	88.9	60 - 135
PCB-15	44200	50000	88.4	60 - 135
PCB-19	22400	25000	89.8	60 - 135
PCB-37	23100	25000	92.4	60 - 135
PCB-54	22800	25000	91.1	60 - 135
PCB-77	23300	25000	93.1	60 - 135
PCB-81	22700	25000	90.8	60 - 135
PCB-104	22900	25000	91.6	60 - 135
PCB-105	23600	25000	94.5	60 - 135
PCB-106/118	44300	50000	88.6	60 - 135
PCB-114	23900	25000	95.4	60 - 135
PCB-123	22000	25000	87.9	60 - 135
PCB-126	24600	25000	98.3	60 - 135
PCB-155	22600	25000	90.4	60 - 135
PCB-156	22900	25000	91.7	60 - 135
PCB-157	22300	25000	89.2	60 - 135
PCB-167	22800	25000	91.2	60 - 135
PCB-169	21900	25000	87.6	60 - 135
PCB-188	22500	25000	90.0	60 - 135
PCB-189	21500	25000	86.2	60 - 135
PCB-202	22500	25000	90.1	60 - 135
PCB-205	21300	25000	85.4	60 - 135
PCB-206	22900	25000	91.8	60 - 135
PCB-208	23500	25000	93.9	60 - 135
PCB-209	23700	25000	95.0	60 - 135

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-1	105	15 - 145
IS	13C-PCB-3	104	15 - 145
IS	13C-PCB-4	76.8	15 - 145
IS	13C-PCB-11	80.1	15 - 145
IS	13C-PCB-9	78.1	15 - 145
IS	13C-PCB-19	106	15 - 145
IS	13C-PCB-28	83.9	15 - 145
IS	13C-PCB-32	112	15 - 145
IS	13C-PCB-37	82.9	15 - 145
IS	13C-PCB-47	83.0	15 - 145
IS	13C-PCB-52	81.2	15 - 145
IS	13C-PCB-54	75.8	15 - 145
IS	13C-PCB-70	86.4	15 - 145
IS	13C-PCB-77	81.1	40 - 145
IS	13C-PCB-80	85.7	40 - 145
IS	13C-PCB-81	83.8	40 - 145
IS	13C-PCB-95	85.5	40 - 145
IS	13C-PCB-97	88.6	40 - 145
IS	13C-PCB-101	86.7	40 - 145
IS	13C-PCB-104	81.5	40 - 145
IS	13C-PCB-105	67.0	40 - 145
IS	13C-PCB-114	68.7	40 - 145
IS	13C-PCB-118	88.2	40 - 145
IS	13C-PCB-123	89.8	40 - 145
IS	13C-PCB-126	63.8	40 - 145
IS	13C-PCB-127	66.3	40 - 145
IS	13C-PCB-138	88.7	40 - 145
IS	13C-PCB-141	86.8	40 - 145
IS	13C-PCB-153	90.0	40 - 145
IS	13C-PCB-155	105	40 - 145
IS	13C-PCB-156	88.8	40 - 145
IS	13C-PCB-157	87.8	40 - 145
IS	13C-PCB-159	88.0	40 - 145
IS	13C-PCB-167	88.0	40 - 145
IS	13C-PCB-169	86.5	40 - 145
IS	13C-PCB-170	110	40 - 145
IS	13C-PCB-180	109	40 - 145
IS	13C-PCB-188	106	40 - 145
IS	13C-PCB-189	107	40 - 145
IS	13C-PCB-194	96.3	40 - 145

Sample ID: OPR

EPA Method 1668C

Matrix: Solid
Sample Size: 1.00 g

QC Batch: B4J0139
Date Extracted: 24-Oct-2014 13:55

Lab Sample: B4J0139-BS1
Date Analyzed: 28-Oct-14 09:57 Column: ZB-1 Analyst: DMS

Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-202	128	40 - 145
IS	13C-PCB-206	98.6	40 - 145
IS	13C-PCB-208	106	40 - 145
IS	13C-PCB-209	99.5	40 - 145
CRS	13C-PCB-79	82.8	40 - 145
CRS	13C-PCB-178	104	40 - 145

LCL-UCL - Lower control limit - upper control limit

Sample ID: SP-OWS-01-20141008-S

EPA Method 1668C

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 15:33

Sample Data
Matrix: Sediment
Sample Size: 3.72 g
% Solids: 28.9

Laboratory Data
Lab Sample: 1400737-02 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0139 Date Extracted: 13-Oct-2014 13:46
Date Analyzed : 28-Oct-14 14:11 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	1160	1050		0.320	D
PCB-2	ND	1160	986		0.240	D
PCB-3	ND	1160	819		0.323	D
PCB-4/10	ND	4660	3450		1.14	D
PCB-5/8	5380	4660			1.76	D
PCB-6	ND	2330	2690		1.00	D
PCB-7/9	ND	4660	2900		1.34	D
PCB-11	ND	2330		5590	3.48	D
PCB-12/13	ND	4660	3020		1.37	D
PCB-14	ND	2330	3250		0.337	D
PCB-15	4240	2330			0.634	D
PCB-16/32	12600	4660			0.430	B, D
PCB-17	5970	1160			0.658	D
PCB-18	21000	1160			0.696	D
PCB-19	1760	1160			0.612	D
PCB-20/21/33	15100	3490			2.47	D
PCB-22	9700	1160			0.964	D
PCB-23	ND	1160	715		0.543	D
PCB-24/27	1440	2330			0.742	J, D
PCB-25	1210	1160			0.768	D
PCB-26	3890	1160			0.766	D
PCB-28	15600	1160			1.12	B, D
PCB-29	ND	1160	847		0.949	D
PCB-30	ND	1160	460		0.355	D
PCB-31	22600	1160			0.809	B, D
PCB-34	ND	1160	805		1.57	D
PCB-35	1400	1160			0.565	D
PCB-36	ND	1160	868		0.406	D
PCB-37	11200	1160			0.389	D
PCB-38	ND	1160	826		0.528	D
PCB-39	ND	1160	889		0.461	D
PCB-40	11400	1160			0.927	D
PCB-41/64/71/72	50100	4660			1.70	B, D
PCB-42/59	14800	2330			0.899	D
PCB-43/49	42600	2330			0.879	B, D
PCB-44	66400	1160			0.745	D
PCB-45	6420	1160			0.402	D
PCB-46	3330	1160			0.537	D
PCB-47	10600	1160			2.19	D
PCB-48/75	9580	2330			0.983	D
PCB-50	ND	1160	361		0.603	D
PCB-51	2070	1160			0.789	D
PCB-52/69	81400	2330			0.722	D
PCB-53	5890	1160			0.331	D
PCB-54	ND	1160	289		0.275	D
PCB-55	1860	1160			0.416	D
PCB-56/60	54100	2330			0.825	B, D
PCB-57	ND	1160	1040		0.354	D
PCB-58	ND	1160	1100		0.589	D
PCB-61/70	124000	2330			1.20	B, D
PCB-62	ND	1160	978		0.597	D
PCB-63	2920	1160			0.524	D
PCB-65	ND	1160	975		0.842	D
PCB-66/76	71200	2330			1.31	B, D
PCB-67	1350	1160			0.486	D
PCB-68	ND	1160	887		0.658	D
PCB-73	ND	1160	963		0.454	D
PCB-74	30400	1160			0.781	D
PCB-77	11700	1160			0.748	B, D
PCB-78	ND	1160	847		0.385	D
PCB-79	2330	1160			0.633	D
PCB-80	ND	1160	841		0.336	D
PCB-81	ND	1160		702	0.674	D
PCB-82	26900	1160			0.981	D
PCB-83	ND	1160	502		0.440	D
PCB-84/92	81300	2330			1.01	D
PCB-85/116	30900	2330			1.64	D
PCB-86	1330	1160			1.79	D
PCB-87/117/125	71700	3490			0.880	D
PCB-88/91	26100	2330			1.25	D

RL - Reporting limit
DL - Sample specifc estimated detection limit
LCL-UCL- Lower control limit - upper control limit
EMPC - Estimated maximum possible concentration
MDL - Method detection limit
The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: SP-OWS-01-20141008-S

EPA Method 1668C

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 15:33

Sample Data
Matrix: Sediment
Sample Size: 3.72 g
% Solids: 28.9

Laboratory Data
Lab Sample: 1400737-02 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0139 Date Extracted: 13-Oct-2014 13:46
Date Analyzed : 28-Oct-14 14:11 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-89	2190	1160			1.22	D
PCB-90/101	201000	2330			1.19	D
PCB-93	ND	1160	1120		2.53	D
PCB-94	ND	1160		1060	0.874	D
PCB-95/98/102	156000	3490			1.38	B, D
PCB-96	1280	1160			0.588	D
PCB-97	56800	1160			0.675	D
PCB-99	63600	1160			0.474	D
PCB-100	ND	1160	657		0.511	D
PCB-103	1030	1160			0.428	J, D
PCB-104	ND	1160	519		0.876	D
PCB-105	85500	1160			0.462	B, D
PCB-106/118	169000	2330			0.728	B, D
PCB-107/109	12300	2330			0.631	D
PCB-108/112	8840	2330			0.844	D
PCB-110	211000	1160			0.555	B, D
PCB-111/115	3910	2330			1.24	D
PCB-113	ND	1160	548		0.495	D
PCB-114	4700	1160			0.418	D
PCB-119	3230	1160			0.383	D
PCB-120	ND	1160		538	0.622	D
PCB-121	ND	1160	587		0.978	D
PCB-122	ND	1160		2450	0.619	D
PCB-123	3240	1160			0.494	D
PCB-124	7930	1160			0.813	D
PCB-126	2190	1160			0.543	D
PCB-127	ND	1160	1140		0.326	D
PCB-128/162	36800	2330			1.08	D
PCB-129	13600	1160			0.567	D
PCB-130	16500	1160			0.798	D
PCB-131	ND	1160	985		0.731	D
PCB-132/161	59500	2330			1.05	D
PCB-133/142	7380	2330			1.04	D
PCB-134/143	12800	2330			1.05	D
PCB-135	28300	1160			1.47	D

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-136	27700	1160			0.776	D
PCB-137	12500	1160			0.541	D
PCB-138/163/164	264000	3490			0.809	B, D
PCB-139/149	208000	1160			1.49	B, D
PCB-140	1710	1160			1.20	D
PCB-141	57400	1160			0.678	D
PCB-144	ND	1160		11900	1.38	D
PCB-145	ND	1160		160	1.05	D
PCB-146/165	27800	2330			0.792	D
PCB-147	3920	1160			5.26	D
PCB-148	ND	1160	935		1.45	D
PCB-150	ND	1160	697		0.801	D
PCB-151	56000	1160			1.16	D
PCB-152	ND	1160		316	0.744	D
PCB-153	206000	1160			0.484	B, D
PCB-154	1990	1160			0.837	D
PCB-155	ND	1160	625		0.767	D
PCB-156	24700	1160			0.534	D
PCB-157	5330	1160			0.485	D
PCB-158/160	32000	2330			0.915	D
PCB-159	ND	1160	812		0.578	D
PCB-166	ND	1160	757		0.425	D
PCB-167	8960	1160			0.653	D
PCB-168	ND	1160	618		0.502	D
PCB-169	ND	1160	927		0.767	D
PCB-170	73600	1160			0.758	D
PCB-171	18300	1160			0.372	D
PCB-172	10700	1160			0.857	D
PCB-173	2180	1160			0.507	D
PCB-174	88700	1160			0.797	D
PCB-175	3400	1160			0.679	D
PCB-176	9940	1160			0.729	D
PCB-177	47900	1160			0.404	D
PCB-178	16600	1160			0.610	D
PCB-179	37900	1160			0.418	D

RL - Reporting limit
EMPC - Estimated maximum possible concentration
DL - Sample specifc 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: SP-OWS-01-20141008-S

EPA Method 1668C

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 15:33

Sample Data
Matrix: Sediment
Sample Size: 3.72 g
% Solids: 28.9

Laboratory Data
Lab Sample: 1400737-02 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0139 Date Extracted: 13-Oct-2014 13:46
Date Analyzed : 28-Oct-14 14:11 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-180	203000	1160			0.420	D
PCB-181	ND	1160	624		1.26	D
PCB-182/187	87900	2330			1.33	D
PCB-183	40900	1160			0.638	D
PCB-184	ND	1160	383		0.597	D
PCB-185	7860	1160			0.557	D
PCB-186	ND	1160	430		0.421	D
PCB-188	ND	1160	395		0.759	D
PCB-189	ND	1160		2580	0.483	D
PCB-190	15200	1160			0.686	D
PCB-191	ND	1160		2890	0.447	D
PCB-192	ND	1160	494		0.528	D
PCB-193	9470	1160			0.836	D
PCB-194	46000	1160			0.645	D
PCB-195	17700	1160			0.722	D
PCB-196/203	54200	2330			0.983	D
PCB-197	1820	1160			0.794	D
PCB-198	1720	1160			0.792	D
PCB-199	49700	1160			0.615	D
PCB-200	5950	1160			0.795	D
PCB-201	6120	1160			0.317	D
PCB-202	8460	1160			0.759	D
PCB-204	ND	1160	712		0.543	D
PCB-205	1710	1160			0.471	D
PCB-206	11600	1160			0.852	D
PCB-207	ND	1160		1460	0.402	D
PCB-208	ND	1160		2470	0.441	D
PCB-209	3350	1160			1.10	D
Total monoCB	ND	1160	1050			
Total diCB	9620	2330		15200		
Total triCB	123000	1160				B
Total tetraCB	605000	1160		606000		B
Total pentaCB	1230000	1160		1240000		B
Total hexaCB	1110000	1160		1130000		B
Total heptaCB	673000	1160		679000		
Total octaCB	193000	1160				
Total nonaCB	11600	1160		15500		
DecaCB	3350	1160				
Total PCB	3960000	2330				B

RL - Reporting limit
DL - Sample specifc estimated detection limit
LCL-UCL- Lower control limit - upper control limit
EMPC - Estimated maximum possible concentration
MDL - Method detection limit
The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: SP-OWS-01-20141008-S

EPA Method 1668C

Client Data

Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 15:33

Sample Data

Matrix: Sediment
Sample Size: 3.72 g
% Solids: 28.9

Laboratory Data

Lab Sample: 1400737-02 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0139 Date Extracted: 13-Oct-2014 13:46
Date Analyzed : 28-Oct-14 14:11 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	84.4	5 -145	D
	13C-PCB-3	94.4	5 -145	D
	13C-PCB-4	67.1	5 -145	D
	13C-PCB-11	69.4	5 -145	D
	13C-PCB-9	68.2	5 -145	D
	13C-PCB-19	84.9	5 -145	D
	13C-PCB-28	74.2	5 -145	D
	13C-PCB-32	88.4	5 -145	D
	13C-PCB-37	80.9	5 -145	D
	13C-PCB-47	73.1	5 -145	D
	13C-PCB-52	72.3	5 -145	D
	13C-PCB-54	70.0	5 -145	D
	13C-PCB-70	71.5	5 -145	D
	13C-PCB-77	78.2	10 -145	D
	13C-PCB-80	71.5	10 -145	D
	13C-PCB-81	78.7	10 -145	D
	13C-PCB-95	63.8	10 -145	D
	13C-PCB-97	79.7	10 -145	D
	13C-PCB-101	75.0	10 -145	D
	13C-PCB-104	67.7	10 -145	D
	13C-PCB-105	48.2	10 -145	D
	13C-PCB-114	52.0	10 -145	D
	13C-PCB-118	79.6	10 -145	D
	13C-PCB-123	77.9	10 -145	D
	13C-PCB-126	50.6	10 -145	D
	13C-PCB-127	51.5	10 -145	D
	13C-PCB-138	67.7	10 -145	D
	13C-PCB-141	69.0	10 -145	D
	13C-PCB-153	76.3	10 -145	D
	13C-PCB-155	88.3	10 -145	D
	13C-PCB-156	76.1	10 -145	D
	13C-PCB-157	70.9	10 -145	D
	13C-PCB-159	73.4	10 -145	D
	13C-PCB-167	73.2	10 -145	D
	13C-PCB-169	68.7	10 -145	D
	13C-PCB-170	85.8	10 -145	D
	13C-PCB-180	85.4	10 -145	D
	13C-PCB-188	84.2	10 -145	D
	13C-PCB-189	78.7	10 -145	D
	13C-PCB-194	77.7	10 -145	D
	13C-PCB-202	96.5	10 -145	D
	13C-PCB-206	83.8	10 -145	D
	13C-PCB-208	88.6	10 -145	D
	13C-PCB-209	79.6	10 -145	D
CRS	13C-PCB-79	73.4	10 -145	D
	13C-PCB-178	74.6	10 -145	D

RL - Reporting limit
EMPC - Estimated maximum possible concentration
DL - Sample specifc 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: SP-CB-09-20141008-S

EPA Method 1668C

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 16:28

Sample Data
Matrix: Sediment
Sample Size: 2.67 g
% Solids: 41.4

Laboratory Data
Lab Sample: 1400737-03 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0139 Date Extracted: 13-Oct-2014 13:46
Date Analyzed : 28-Oct-14 16:18 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	1130	979		0.320	D
PCB-2	ND	1130	1010		0.240	D
PCB-3	ND	1130	843		0.323	D
PCB-4/10	ND	4520	4250		1.14	D
PCB-5/8	ND	4520		2020	1.76	D
PCB-6	ND	2260	3170		1.00	D
PCB-7/9	ND	4520	3420		1.34	D
PCB-11	5210	2260			3.48	D
PCB-12/13	ND	4520	3270		1.37	D
PCB-14	ND	2260	3510		0.337	D
PCB-15	ND	2260	2920		0.634	D
PCB-16/32	2230	4520			0.430	J, B, D
PCB-17	ND	1130	981		0.658	D
PCB-18	3290	1130			0.696	D
PCB-19	ND	1130	1190		0.612	D
PCB-20/21/33	1860	3390			2.47	J, D
PCB-22	1460	1130			0.964	D
PCB-23	ND	1130	595		0.543	D
PCB-24/27	ND	2260	761		0.742	D
PCB-25	ND	1130	603		0.768	D
PCB-26	ND	1130	630		0.766	D
PCB-28	1810	1130			1.12	B, D
PCB-29	ND	1130	704		0.949	D
PCB-30	ND	1130	726		0.355	D
PCB-31	2360	1130			0.809	B, D
PCB-34	ND	1130	669		1.57	D
PCB-35	ND	1130	860		0.565	D
PCB-36	ND	1130	926		0.406	D
PCB-37	1940	1130			0.389	D
PCB-38	ND	1130	883		0.528	D
PCB-39	ND	1130	950		0.461	D
PCB-40	ND	1130	1680		0.927	D
PCB-41/64/71/72	5280	4520			1.70	B, D
PCB-42/59	ND	2260	1030		0.899	D
PCB-43/49	4880	2260			0.879	B, D

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-44	ND	1130		5480	0.745	D
PCB-45	ND	1130	1630		0.402	D
PCB-46	ND	1130	1670		0.537	D
PCB-47	ND	1130	1110		2.19	D
PCB-48/75	ND	2260	959		0.983	D
PCB-50	ND	1130	1270		0.603	D
PCB-51	ND	1130	1420		0.789	D
PCB-52/69	9730	2260			0.722	D
PCB-53	ND	1130	1320		0.331	D
PCB-54	ND	1130	1010		0.275	D
PCB-55	ND	1130	855		0.416	D
PCB-56/60	3710	2260			0.825	B, D
PCB-57	ND	1130	1080		0.354	D
PCB-58	ND	1130	1140		0.589	D
PCB-61/70	10800	2260			1.20	B, D
PCB-62	ND	1130	964		0.597	D
PCB-63	ND	1130	1110		0.524	D
PCB-65	ND	1130	961		0.842	D
PCB-66/76	4880	2260			1.31	B, D
PCB-67	ND	1130	957		0.486	D
PCB-68	ND	1130	874		0.658	D
PCB-73	ND	1130	1040		0.454	D
PCB-74	2470	1130			0.781	D
PCB-77	2220	1130			0.748	B, D
PCB-78	ND	1130	954		0.385	D
PCB-79	ND	1130	825		0.633	D
PCB-80	ND	1130	747		0.336	D
PCB-81	ND	1130	911		0.674	D
PCB-82	4430	1130			0.981	D
PCB-83	ND	1130	1460		0.440	D
PCB-84/92	11400	2260			1.01	D
PCB-85/116	3330	2260			1.64	D
PCB-86	ND	1130	2630		1.79	D
PCB-87/117/125	9690	3390			0.880	D
PCB-88/91	3230	2260			1.25	D

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EMPC - Estimated maximum possible concentration
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Sample ID: SP-CB-09-20141008-S

EPA Method 1668C

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 16:28

Sample Data
Matrix: Sediment
Sample Size: 2.67 g
% Solids: 41.4

Laboratory Data
Lab Sample: 1400737-03 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0139 Date Extracted: 13-Oct-2014 13:46
Date Analyzed : 28-Oct-14 16:18 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-89	ND	1130	1950		1.22	D
PCB-90/101	31400	2260			1.19	D
PCB-93	ND	1130	2460		2.53	D
PCB-94	ND	1130	1960		0.874	D
PCB-95/98/102	16400	3390			1.38	B, D
PCB-96	ND	1130	1480		0.588	D
PCB-97	7020	1130			0.675	D
PCB-99	7910	1130			0.474	D
PCB-100	ND	1130	1800		0.511	D
PCB-103	ND	1130	1770		0.428	D
PCB-104	ND	1130	1430		0.876	D
PCB-105	12400	1130			0.462	B, D
PCB-106/118	27800	2260			0.728	B, D
PCB-107/109	2090	2260			0.631	J, D
PCB-108/112	ND	2260	1730		0.844	D
PCB-110	31700	1130			0.555	B, D
PCB-111/115	ND	2260	1360		1.24	D
PCB-113	ND	1130	1570		0.495	D
PCB-114	ND	1130	1190		0.418	D
PCB-119	ND	1130	1450		0.383	D
PCB-120	ND	1130	1320		0.622	D
PCB-121	ND	1130	1280		0.978	D
PCB-122	ND	1130	1390		0.619	D
PCB-123	ND	1130	1670		0.494	D
PCB-124	1700	1130			0.813	D
PCB-126	ND	1130	1490		0.543	D
PCB-127	ND	1130	1060		0.326	D
PCB-128/162	7890	2260			1.08	D
PCB-129	ND	1130		3950	0.567	D
PCB-130	5280	1130			0.798	D
PCB-131	ND	1130	781		0.731	D
PCB-132/161	18000	2260			1.05	D
PCB-133/142	2600	2260			1.04	D
PCB-134/143	3360	2260			1.05	D
PCB-135	9690	1130			1.47	D
PCB-136	6700	1130			0.776	D
PCB-137	2810	1130			0.541	D
PCB-138/163/164	72400	3390			0.809	B, D
PCB-139/149	63200	1130			1.49	B, D
PCB-140	ND	1130	1720		1.20	D
PCB-141	19200	1130			0.678	D
PCB-144	4720	1130			1.38	D
PCB-145	ND	1130	1030		1.05	D
PCB-146/165	10700	2260			0.792	D
PCB-147	ND	1130	1510		5.26	D
PCB-148	ND	1130	1670		1.45	D
PCB-150	ND	1130	1240		0.801	D
PCB-151	17700	1130			1.16	D
PCB-152	ND	1130	1110		0.744	D
PCB-153	65400	1130			0.484	B, D
PCB-154	ND	1130	1450		0.837	D
PCB-155	ND	1130	1110		0.767	D
PCB-156	6100	1130			0.534	D
PCB-157	1500	1130			0.485	D
PCB-158/160	8030	2260			0.915	D
PCB-159	ND	1130	504		0.578	D
PCB-166	ND	1130	473		0.425	D
PCB-167	ND	1130		2980	0.653	D
PCB-168	ND	1130	490		0.502	D
PCB-169	ND	1130	583		0.767	D
PCB-170	27800	1130			0.758	D
PCB-171	6070	1130			0.372	D
PCB-172	5560	1130			0.857	D
PCB-173	ND	1130	1050		0.507	D
PCB-174	34300	1130			0.797	D
PCB-175	1370	1130			0.679	D
PCB-176	3410	1130			0.729	D
PCB-177	19700	1130			0.404	D
PCB-178	7350	1130			0.610	D
PCB-179	12800	1130			0.418	D

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EMPC - Estimated maximum possible concentration
MDL - Method detection limit
The results are reported in dry weight. The sample size is reported in wet weight.

Sample ID: SP-CB-09-20141008-S

EPA Method 1668C

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 16:28

Sample Data
Matrix: Sediment
Sample Size: 2.67 g
% Solids: 41.4

Laboratory Data
Lab Sample: 1400737-03 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0139 Date Extracted: 13-Oct-2014 13:46
Date Analyzed : 28-Oct-14 16:18 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-180	83600	1130			0.420	D
PCB-181	ND	1130	840		1.26	D
PCB-182/187	35200	2260			1.33	D
PCB-183	16200	1130			0.638	D
PCB-184	ND	1130	398		0.597	D
PCB-185	2830	1130			0.557	D
PCB-186	ND	1130	447		0.421	D
PCB-188	ND	1130	411		0.759	D
PCB-189	1300	1130			0.483	D
PCB-190	5730	1130			0.686	D
PCB-191	ND	1130		1730	0.447	D
PCB-192	ND	1130	667		0.528	D
PCB-193	4210	1130			0.836	D
PCB-194	16200	1130			0.645	D
PCB-195	6390	1130			0.722	D
PCB-196/203	17700	2260			0.983	D
PCB-197	ND	1130	823		0.794	D
PCB-198	ND	1130	1170		0.792	D
PCB-199	16300	1130			0.615	D
PCB-200	2260	1130			0.795	D
PCB-201	1580	1130			0.317	D
PCB-202	2850	1130			0.759	D
PCB-204	ND	1130	773		0.543	D
PCB-205	ND	1130	1670		0.471	D
PCB-206	5460	1130			0.852	D
PCB-207	ND	1130	877		0.402	D
PCB-208	ND	1130		851	0.441	D
PCB-209	ND	1130	1920		1.10	D
Total monoCB	ND	1130	1010			
Total diCB	5210	2260		7230		
Total triCB	14900	1130				B
Total tetraCB	43900	1130		49400		B
Total pentaCB	170000	1130				B
Total hexaCB	325000	1130		332000		B
Total heptaCB	268000	1130		269000		
Total octaCB	63300	1130				
Total nonaCB	5460	1130		6310		
DecaCB	ND	1130	1920			
Total PCB	896000	2260				B

RL - Reporting limit
EMPC - Estimated maximum possible concentration
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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: SP-CB-09-20141008-S

EPA Method 1668C

Client Data
Name: Leidos
Project: NPDES Sampling Support
Date Collected: 08-Oct-2014 16:28

Sample Data
Matrix: Sediment
Sample Size: 2.67 g
% Solids: 41.4

Laboratory Data
Lab Sample: 1400737-03 Date Received: 09-Oct-2014 8:38
QC Batch: B4J0139 Date Extracted: 13-Oct-2014 13:46
Date Analyzed : 28-Oct-14 16:18 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	95.6	5 -145	D
	13C-PCB-3	104	5 -145	D
	13C-PCB-4	76.6	5 -145	D
	13C-PCB-11	81.1	5 -145	D
	13C-PCB-9	82.4	5 -145	D
	13C-PCB-19	110	5 -145	D
	13C-PCB-28	89.7	5 -145	D
	13C-PCB-32	103	5 -145	D
	13C-PCB-37	101	5 -145	D
	13C-PCB-47	79.9	5 -145	D
	13C-PCB-52	70.8	5 -145	D
	13C-PCB-54	74.0	5 -145	D
	13C-PCB-70	83.3	5 -145	D
	13C-PCB-77	73.5	10 -145	D
	13C-PCB-80	85.0	10 -145	D
	13C-PCB-81	75.9	10 -145	D
	13C-PCB-95	76.5	10 -145	D
	13C-PCB-97	86.9	10 -145	D
	13C-PCB-101	77.1	10 -145	D
	13C-PCB-104	72.7	10 -145	D
	13C-PCB-105	61.2	10 -145	D
	13C-PCB-114	61.0	10 -145	D
	13C-PCB-118	77.5	10 -145	D
	13C-PCB-123	78.8	10 -145	D
	13C-PCB-126	53.9	10 -145	D
	13C-PCB-127	60.7	10 -145	D
	13C-PCB-138	77.4	10 -145	D
	13C-PCB-141	73.5	10 -145	D
	13C-PCB-153	76.2	10 -145	D
	13C-PCB-155	94.3	10 -145	D
	13C-PCB-156	81.3	10 -145	D
	13C-PCB-157	78.4	10 -145	D
	13C-PCB-159	86.2	10 -145	D
	13C-PCB-167	76.7	10 -145	D
	13C-PCB-169	78.4	10 -145	D
	13C-PCB-170	120	10 -145	D
	13C-PCB-180	102	10 -145	D
	13C-PCB-188	97.7	10 -145	D
	13C-PCB-189	104	10 -145	D
	13C-PCB-194	90.8	10 -145	D
	13C-PCB-202	132	10 -145	D
	13C-PCB-206	99.4	10 -145	D
	13C-PCB-208	106	10 -145	D
	13C-PCB-209	101	10 -145	D
CRS	13C-PCB-79	83.7	10 -145	D
	13C-PCB-178	101	10 -145	D

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

CHAIN OF CUSTODY

Vista

FOR LABORATORY USE ONLY Storage Secured

Laboratory Project ID: 1400737 Yes ☑ No ☐

Storage ID WR-2 Temp 2.2 °C

TAT: (Check One):
Standard: ○ 21 Days
Rush (surcharge may apply):
○ 14 days ○ 7 days Specify:___

Project I.D.: NPDES Sampling Support P.O.# ~~PO10163427~~ MM 10/08/14 PO10163569 Sampler: M. Ivancevich, C. Nancarrow (Name)

Invoice to: Name Christine Nancarrow Company Leidos Address 18912 N Creek Pwky, Suite 101 City Bothell State WA Zip 98011 Ph# 425.398.2101 Fax# 425.485.5566

Relinquished by: (Signature and Printed Name) Melissa Smith Date: 10/08/14 Time: 1840 Received by: (Signature and Printed Name) [illegible] Date: 10/9/14 Time: 8:50

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: FedEx

Tracking No.: 874613130418

Add Analysis(es) Requested

Sample ID	Date	Time	Location/Sample Description	Container(s) Quantity	Type	Matrix	EPA1613 2378-TCDD	EPA1613 2378-TCDD/TCDF	EPA1613 PCDD/PCDF	EPA8290 2378-TCDD	EPA8290 2378-TCDD/TCDF	EPA8290 PCDD/PCDF	EPA8280 2378-TCDD	EPA8280 2378-TCDD/TCDF	EPA8280 PCDD/PCDF	EPA1668 TOTALS	EPA1668 COPLANAR PCB's	EPA1668 209 CONGENERS	EPA1668 PBDE	EPA1614 PAH	EPA1614 WHO-29	CARB429
SP-OWS-01-20141008-N	10/08/14	1453	S Park Marina	4	A	AQ			2✓								2✓					
SP-OWS-01-20141008-S	10/08/14	1533	S Park Marina	1	G	S			1✓								1✓					
SP-CB-09-20141008-S	10/08/14	1620	S Park Marina	1	G	S			1✓								1✓					

Special Instructions/Comments:

SEND DOCUMENTATION AND RESULTS TO:

Name: Christine Nancarrow
Company: Leidos
Address: 18912 N. Creek Pkwy, Ste 101
City: Bothell State: WA Zip: 98011
Phone: 425.398.2101 Fax: 425.485.5566
Email: CNancarrowC@leidos.com

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

*Bottle Preservative Type: T = Thiosulfate,
O = Other_____

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_____

WHITE - ORIGINAL YELLOW - ARCHIVE PINK - COPY

SAMPLE LOG-IN CHECKLIST

Vista Analytical Laboratory

Vista Project #: 1400737 **TAT** Std

Samples Arrival:	**Date/Time** 10/9/14 8:38		**Initials:**		**Location:** WR-2 **Shelf/Rack:** NA		
Logged In:	**Date/Time** 10/9/14 1243		**Initials:** BSB		**Location:** WR-2 **Shelf/Rack:** B2/F6		
Delivered By:	FedEx	UPS	On Trac	DHL	Hand Delivered	Other	
Preservation:	Ice	Blue Ice		Dry Ice	None		
Temp °C: 2.2 (uncorrected) **Temp °C:** 2.2 (corrected)	**Time:** 8:50			**Thermometer ID:** IR-1			

	YES	NO	NA
Adequate Sample Volume Received? A, B, CD for AQ	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?			✓
Shipping Documentation Present?	✓		
Airbill / Trk # 8746 1313 0418	✓		
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?			✓

$Na_2S_2O_3$ Preservation Documented? NA	COC	Sample Container	None	
Shipping Container	Vista	Client	Retain	Return	Dispose

Comments:

Sample Login 11/2013 ckt

EXTRACTION INFORMATION

Process Sheet

Workorder: 1400737

Prep Expiration: 10/08/2015
Client: Leidos

Workorder Due: 30-Oct-14 00:00

TAT: 21

Method: **1613 Full List**
Matrix: **Aqueous**
Client Matrix: Aqueous
Also run: **Percent Solids**

Prep Batch: BAJ00159

Prep Data Entered: 10/14/14 SR
Date and Initials

Initial Sequence: S4J0025

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400737-01 "A"	☒	SP-OWS-01-20141008-W	09-Oct-14 08:38	WR-2 B-2	

Vista PM:Martha Maier

Vial Box ID: Jack

Sample Reconciled By: B. Smith 10/13/14

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4J0058

Analyst: B. Smith **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

BMS 10/13/14

INST HRMS-4

Date/Time IN: 10/13/14 0923 Date/Time OUT: 10/14/14 1125

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	BMS 10/13/14	SR 10/14/14			BMS 10/13/14			
Pan #	SampID	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid Added	Cl-
	1400737-01		Sample	1.23	25.02	1.24			6	NA	NA	0
	1400740-01		Sample	1.23	17.94	1.24			7	↓	↓	↓
	1400741-01		Sample	1.24	17.94	1.26			7			
	1400743-01		Sample	1.24	24.01	1.28			7			

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4J0058

Analyst: B. Smith **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

HRMS-4

Date/Time IN:	Date/Time OUT
10/13/14 0923	10/14/14 1125

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	BMS 10/13/14	SR 10/14/14			BMS 10/13/14			
Pan #	SampID	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid Added	Cl-
	1400737-01		Sample	1.2300	25.0200	1.2400	0.0100	0.04	6	NA	NA	0
	1400740-01		Sample	1.2300	17.4400	1.2400	0.0100	0.06	7	NA	NA	0
	1400741-01		Sample	1.2400	17.9400	1.2600	0.0200	0.12	7	NA	NA	0
	1400743-01		Sample	1.2400	24.0100	1.2800	0.0400	0.18	7	NA	NA	0

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 1613 Full List
Method: 1613 TCDD Only
Method: 8290 Full List

B4J0059

Chemist: B. Smith

Prep Date/Time: 13-Oct-14 08:35

Prepared using: HRMS - SPE Extraction

C	VISTA Sample ID	Bottle + Sample (L) mL	Bottle Only (L) 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
							N/A	CAJ0078	CAJ0078	CAJ0079	
☐	B4J0059-BLK1	N/A	N/A	1.000	BMS SR 10/13/14	SR BMS 10/14/14	N/A	SR 10/14/14	SR 10/14/14	SR 10/14/14	SR BMS 10/14/14
☐	B4J0059-BS1 (A)	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
☐	B4J0059-BS2 (B)	↓	↓	↓	↓	N/A	↓	↓	↓	↓	↓
☐	B4J0059-BS3 (C)	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
☐	~~1400724-01~~										BMS 10/13/14
☐	1400737-01	1501.25	498.94	1.00231	BMS SR 10/13/14	SR BMS 10/14/14		SR 10/14/14	SR 10/14/14	SR 10/14/14	SR BMS 10/14/14
☐	1400740-01	1514.62	501.34	1.01328	↓	↓	↓	↓	↓	↓	↓
☐	1400741-01	1513.97	501.52	1.01245	↓	↓	↓	↓	↓	↓	↓
☐	1400743-01	1510.45	502.52	1.00793	↓	↓	↓	↓	↓	↓	↓

IS Name (V1)	NS Name (V1)	CRS Name (V3)	RS Name (V1)	Cycle Time	APP: SEFUN SOX (SDS)	Check Out: Chemist/Date: BMS 10/13/14
PCDD/F 13J0101, 10µL	(A) PCDD/F 13L1101, 10µL	PCDD/F 13J0103, 10mL	PCDD/F 13J0703, 10mL	Start Date/Time 10/13/14 1548	SOLV: To	Check In: Chemist/Date: cmpk 10/14/14
PCB	(B) PCB 1400113, 20µL	PCB	PCB	Other SPE		
PAH	(C) PAH 1400113, 25µL	PAH	PAH	Final Volume(s) 20µL		Balance ID: HRMS-4
				Stop Date/Time 10/14/14 0810	C14	

Comments:

Process Sheet

Workorder: 1400737

Prep Expiration: 10/08/2015
Client: Leidos

Workorder Due: 30-Oct-14 00:00

TAT: 21

Method: **1613 Full List**
Matrix: **Solid**
Client Matrix: Sediment
Also run: **Percent Solids**

Prep Batch: B4J0064

Prep Data Entered: 10/14/14 ES
Date and Initials

Initial Sequence: S4J0025

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400737-02	☑	SP-OWS-01-20141008-S	09-Oct-14 08:38	WR-2 F-6	
1400737-03	☑	SP-CB-09-20141008-S	09-Oct-14 08:38	WR-2 F-6	

Vista PM:Martha Maier

Vial Box ID: Jacic

Sample Reconciled By: BR 10/10/14

- Solids estimate

Batch: B4J0052

Lab ID	Analysis	% Solids	Entered	Target weight	Weigh this much
1400735-01	Percent Solids	25.95		10.00	38.53
1400737-02	Percent Solids	28.86		10.00	34.65
1400737-03	Percent Solids	41.43		10.00	24.14

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4J0052

Analyst: B. Roberts **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

HRMS-2

Date/Time IN:	Date/Time OUT
10/10/14 16:15	10/13/14 9:59

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	BR 10/10/14	BR 10/13/14			NA			
Pan #	SampID	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid Added	Cl-
	1400735-01		Sample	1.2400	11.2200	3.8300	2.5900	25.95	NA	NA	NA	NA
	1400737-02		Sample	1.2400	10.1100	3.8000	2.5600	28.86	NA	NA	NA	NA
	1400737-03		Sample	1.2400	13.3800	6.2700	5.0300	41.43	NA	NA	NA	NA

Percent Moisture/Percent Solids

D2216-90 BATCH ID B4J0052

Analyst: B. Roberts **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

INST HRMS-2

Date/Time IN: 10/10/14 10:15 Date/Time OUT 10/13/14 07:59

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	BR 10/10/14	DR 10/13/14			NA			
Pan #	SampID	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid Added	Cl-
	1400735-01		Sample	1.24	11.22	3.83			NA	NA	NA	NA
	1400737-02		Sample	1.24	10.11	3.80			↓	↓	↓	↓
	1400737-03		Sample	1.24	13.38	6.27			↓	↓	↓	↓

PREPARATION BENCH SHEET

Matrix: Solid

B4J0064

Chemist: B. Roberts

Method: 1613 Full List
Method: 8290 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 13-Oct-14 13:45

C	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	C4J0073 AP CHEM/ DATE	C4J0074 ABSG CHEM/ DATE	C4J0074 AA CHEM/ DATE	C4J0073 Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	B4J0064-BLK1 (E) (D)	NA	10.00	BR (4.1.T) 10/13/14	ES BR 10/14/14	ES 10/14/14	ES 10/14/14	EJ 10/14/14	ES 10/14/14	ES SR 10/14/14
☐	B4J0064-BS1 OPR (E) (A)	↓	↓	↓	↓	↓	↓	↓	↓	↓
☐	B4J0064-BS2 LOD (B)				N/A					
☐	B4J0064-BS3 LOQ (C)				N/A					
☐	1400725-01									
☐	1400737-02 (E) (D)	34.65	35.64	BR (4.1.T) 10/13/14	ES BR 10/14/14	ES 10/14/14				ES SR 10/14/14
☐	1400737-03 (E) I	24.14	24.77	↓	↓	↓	↓	↓	↓	↓

DNU BR 10/13/14

(D) Hydromatrix added to thimble prior to extraction BR 10/13/14
(E) Second aa'd partition performed. ES 10/14/14

IS Name (V1)	NS Name (V14)	CRS Name (V3)	RS Name (V1)	Cycle Time	APP: SEFUN SOX SDS	Check Out: Chemist/Date:
PCDD/F 13J0101, 10µL	PCDD/F 13L1101, 10µL (A)	PCDD/F 13J0103, 10µL	PCDD/F 13J0703, 10µL	Start Date/Time 10/13/14 16:10	SOLV: TOL	BR 10/13/14
PCB	PCB 14D0113, 20µL (B)	PCB	PCB		Other NA	Check In: Chemist/Date:
PAH	PAH 14D0113, 25µL (C)	PAH	PAH	Stop Date/Time 10/14/14 8:40	Final Volume(s) ~~100µL~~ 20µL BR 10/13/14 C14	Balance ID: HRMS-2

Comments:

Process Sheet

Workorder: 1400737

Prep Expiration: 10/08/2015
Client: Leidos

Workorder Due: 30-Oct-14 00:00

TAT: 21

Method: **1668C Full List**
Matrix: **Aqueous**
Client Matrix: Aqueous
Also run: **Percent Solids**

Prep Batch: BHJ0088

Prep Data Entered: M.T 10/17/14
Date and Initials

Initial Sequence: S4J0034E

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400737-01 "B"	☑	SP-OWS-01-20141008-W	09-Oct-14 08:38	WR-2 B-2	

Vista PM:Martha Maier

Vial Box ID: muscle up

Sample Reconciled By: M.T 10/16/14

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4J0087

Analyst: MJT **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

INST HRMS-4

Date/Time IN: 10/16/14 ~~0:00~~ 9:40 Date/Time OUT 10/17/14 10:20

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	MJT 10/16/2014	MJT 10/17/14			MJT 10/16/2014			
Pan #	SampID	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid (A) Added	Cl-
	1400737-01		Sample	1.24	8.54	1.24			7	3	10	0
	1400738-03		Sample	1.24	12.81	1.25			7	3	15	0
	1400757-01		Sample	1.24	14.45	1.35			6	3	20	0
	B4J0088-MB		QC	NA	NA	NA			5	2	10	0
	B4J0088-BS1		QC	NA	NA	NA			5	2	10	0

(A) Acid was added in drops. MJT 10/16/14

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4J0087

Analyst: MJT **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

INST HRMS-4

Date/Time IN:	Date/Time OUT
10/16/14 0:00	10/17/14 10:20

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	MJT 10/16/2014	MJT 10/17/2014			MJT 10/16/2014			
Pan #	SampID	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid Added	Cl-
	1400737-01		Sample	1.2400	8.5400	1.2400	0.0000	0.00	7	3	10	0
	1400738-03		Sample	1.2400	12.8100	1.2500	0.0100	0.09	7	3	15	0
	1400757-01		Sample	1.2400	14.4500	1.3500	0.1100	0.83	6	3	20	0
	B4J0088-MB		QC	QC	QC	QC	QC	QC	5	2	10	0
	B4J0088-BS1		QC	QC	QC	QC	QC	QC	5	2	10	0

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 1668A Full List
Method: 1668C Full List

B4J0088

Chemist: M.T

Prep Date/Time: 16-Oct-14 08:52

Prepared using: HRMS - Separatory Funnel

C	VISTA Sample ID	Bottle + Sample (L)/mL	Bottle Only (L)/mL	Sample Amt. (L)	IS/NS CHEM/WIT DATE	PS CRS CHEM/WIT DATE	NA AP CHEM/ DATE	CLT00095 ABSG CHEM/ DATE	NA AA CHEM/ DATE	NA Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	B4J0088-BLK1	NA	NA	(1.000)	M.T BMS 10/16/14	M.T CG 10/16/14	NA	M.T 10/16/14	NA	NA	M.T SBP 10/17/14
☐	B4J0088-BS1	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
☐	1400737-01	1480.77	503.02	0.97775							
☐	1400738-03	787.77	285.28	0.50249							
☐	1400757-01	799.10	285.77	0.51333	↓	↓	↓	↓	↓	↓	↓

IS Name	NS Name	PS CRS Name	RS Name	Cycle Time	APP: (SEFUN) SOX SDS	Check Out:
PCDD/F (V2)	PCDD/F (V5)	PCDD/F (V2)	PCDD/F (V2)	Start Date/Time	SOLV: DCM	Chemist/Date: M.T 10/16/14
PCB 14A3001, 10ul	PCB 13I2503, 10ul	PCB 14A3002, 20ul	PCB 14A3003, 10ul	NA	Other NA	Check In: Chemist/Date: Empty ↓
PAH	PAH	PAH	PAH	Stop Date/Time	Final Volume(s) 20ul C9	Balance ID: HRMS-4
				NA		

Comments:

Process Sheet

Workorder: 1400737

RX

Prep Expiration: 10/08/2015
Client: Leidos

Workorder Due: 30-Oct-14 00:00

TAT: 21

Method: **1668C Full List**
Matrix: **Solid**
Client Matrix: Sediment
Also run: **Percent Solids**

Prep Batch: B4J0139

Prep Data Entered: BR 10/27/14
Date and Initials

Initial Sequence: _____

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400737-02	☒	SP-OWS-01-20141008-S (A)	09-Oct-14 08:38	WR-2 F-6	
1400737-03	☒	SP-CB-09-20141008-S	09-Oct-14 08:38	WR-2 F-6	

(A) Samples have petroleum like smell SR 10/24/14

WO Comments: **PCB Seds: 1g dry weight 5X spike 1:20, 1:50**

Vista PM:Martha Maier

Vial Box ID: ISO 3

Sample Reconciled By: S. Roughton 10/24/2014

Solids estimate

Batch: B4J0052

Lab ID	Analysis	% Solids	Entered	Target weight	Weigh this much
1400735-01	Percent Solids	25.95		1.00	3.85
1400737-02	Percent Solids	28.86		1.00	3.46
1400737-03	Percent Solids	41.43		1.00	2.41

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4J0052

Analyst: B. Roberts **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

HRMS-2

Date/Time IN:	Date/Time OUT
10/10/14 16:15	10/13/14 9:59

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	BR 10/10/14	BR 10/13/14			NA			
Pan #	SampID	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid Added	Cl-
	1400735-01		Sample	1.2400	11.2200	3.8300	2.5900	25.95	NA	NA	NA	NA
	1400737-02		Sample	1.2400	10.1100	3.8000	2.5600	28.86	NA	NA	NA	NA
	1400737-03		Sample	1.2400	13.3800	6.2700	5.0300	41.43	NA	NA	NA	NA

PREPARATION BENCH SHEET

Matrix: Solid

B4J0139

Chemist: S.Roughton

Method: 1668C Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 24-Oct-14 13:55

C	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	AP CHEM/ DATE (C4J0137)	ABSG CHEM/ DATE (C4J0138)	AA CHEM/ DATE (NA)	Florisil CHEM/ DATE (NA)	RS CHEM/WIT DATE
☐	B4J0139-BLK1	N/A	(1.00)	SR BR 10/24/14	BR BMS 10/27/14	BR 10/27/14	BR 10/27/14	NA	NA	BR CB 10/27/14
☐	B4J0139-BS1	↓	↓	—	—	—	—	↓	—	—
☐	1400737-02RE1 (A)	3.46	3.72	↓	↓	↓	↓	↓	↓	↓
☐	1400737-03RE1 J	2.41	2.67	↓	↓	↓	↓	↓	↓	↓

(A) Samples slightly turbid at FU. Made 1:20 & 1:50 dilutions BR 10/27/14

5x IS Name	5x NS Name	5x CRS Name	5x RS Name	Cycle Time	APP: SEFUN SOX (SDS)	Check Out: SR 10/24/14
PCDD/F _____ (V3)	PCDD/F _____ (V2)	PCDD/F _____ (V2)	PCDD/F _____ (V3)	Start Date/Time	SOLV: Tol	Chemist/Date: HRMS-2
PCB 14D2901, 50ml	PCB 14F1301, 50ml	PCB ~~1D~~2903, 50 mL	PCB 14D2904, 50 mL	10/24/14 1515	Other N/A	Check In: ↓
PAH _____	PAH _____	PAH _____	PAH _____	Stop Date/Time ~~10/25/14~~ 0905	Final Volume(s) 100ml Cg	Chemist/Date: _____
_____	_____	_____	_____			Balance ID: HRMS-2

Comments:

SAMPLE DATA

EPA Method 1613

Client ID: Method Blank Filename: 141014D1 S:12 Acq:14-OCT-14 21:17:18 ConCal: ST141014D1-1
Lab ID: B4J0059-BLK1 GC Column ID: ZB-5MS ICal: 1613VG7-4-17-14 wt/vol: 1.000 EndCAL: ST141014D1-2

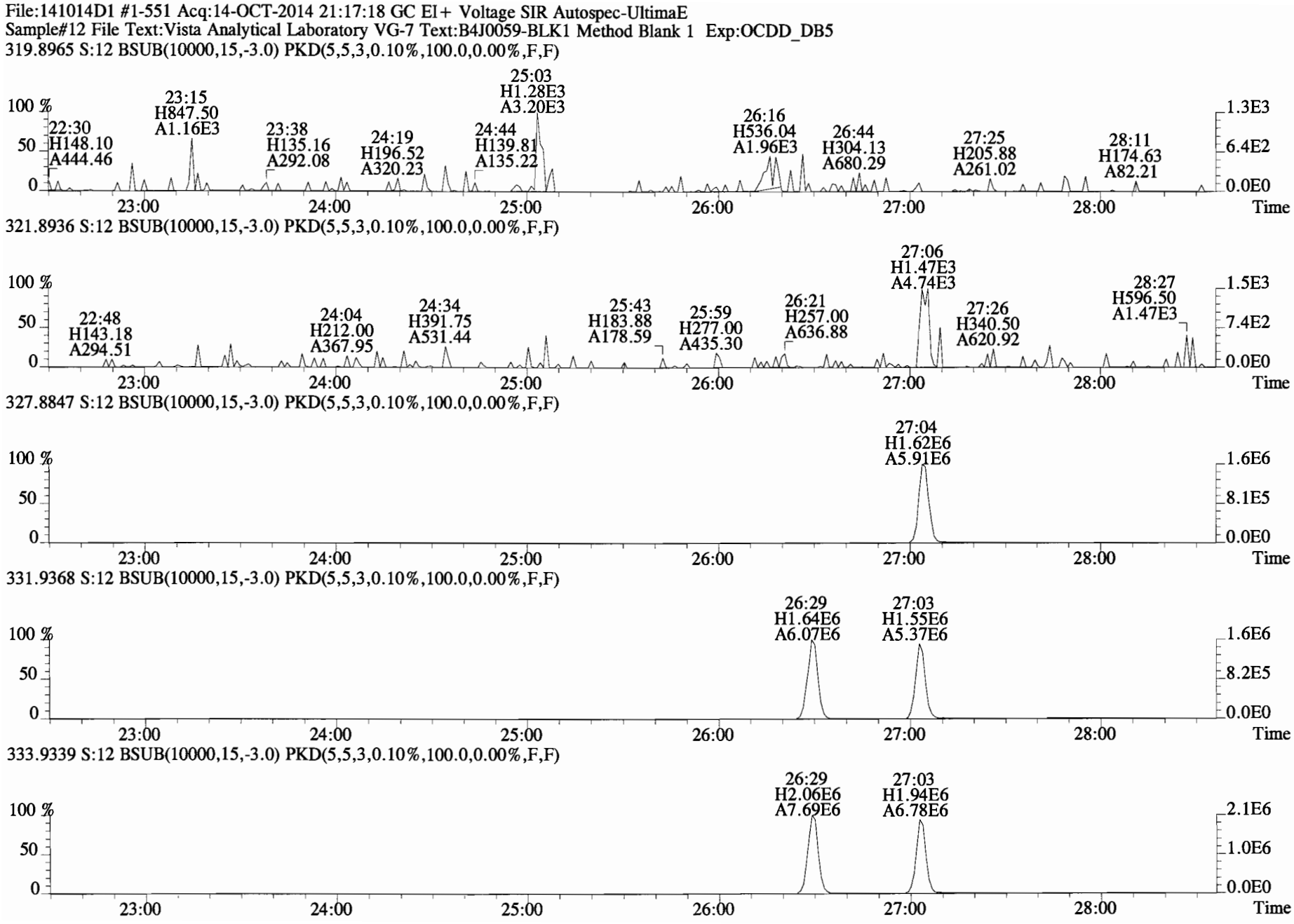
	Name	Resp	RA		RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	*	*	n	1.03	NotF¶	*	*		517	2.5	1.29
	1,2,3,7,8-PeCDD	*	*	n	0.84	NotF¶	*	*		471	2.5	0.921
	1,2,3,4,7,8-HxCDD	*	*	n	1.05	NotF¶	*	*		285	2.5	1.06
	1,2,3,6,7,8-HxCDD	*	*	n	1.04	NotF¶	*	*		285	2.5	1.03
	1,2,3,7,8,9-HxCDD	*	*	n	0.90	NotF¶	*	*		285	2.5	1.14
	1,2,3,4,6,7,8-HpCDD	*	*	n	1.01	NotF¶	*	*		615	2.5	2.31
	OCDD	*	*	n	1.04	NotF¶	*	*		2180	1.0	4.23
	2,3,7,8-TCDF	*	*	n	0.91	NotF¶	*	*		524	2.5	1.04
	1,2,3,7,8-PeCDF	*	*	n	0.97	NotF¶	*	*		356	2.5	0.795
	2,3,4,7,8-PeCDF	*	*	n	0.94	NotF¶	*	*		356	2.5	0.889
	1,2,3,4,7,8-HxCDF	*	*	n	1.32	NotF¶	*	*		575	2.5	0.740
	1,2,3,6,7,8-HxCDF	*	*	n	1.18	NotF¶	*	*		575	2.5	0.814
	2,3,4,6,7,8-HxCDF	*	*	n	1.23	NotF¶	*	*		279	2.5	0.418
	1,2,3,7,8,9-HxCDF	*	*	n	1.13	NotF¶	*	*		279	2.5	0.643
	1,2,3,4,6,7,8-HpCDF	*	*	n	1.57	NotF¶	*	*		352	2.5	0.714
	1,2,3,4,7,8,9-HpCDF	*	*	n	1.50	NotF¶	*	*		276	2.5	0.487
	OCDF	*	*	n	1.05	NotF¶	*	*		474	2.5	1.67

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		517	1.29
Total Penta-Dioxins	*	*		471	0.921
Total Hexa-Dioxins	*	*		555	2.10
Total Hepta-Dioxins	*	*		829	3.11
Total Tetra-Furans	*	*		524	1.04
Total Penta-Furans	0.0000	0.0000		676	1.60
Total Hexa-Furans	*	*		575	0.911
Total Hepta-Furans	*	*		427	0.808

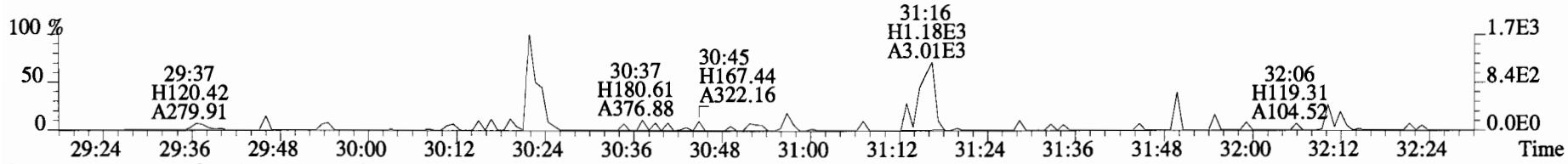
								Rec	Qual
IS	13C-2,3,7,8-TCDD	1.21e+07	0.79	y	1.06	27:03	1.021	1659.2	83.0	
IS	13C-1,2,3,7,8-PeCDD	1.42e+07	0.62	y	1.08	31:33	1.191	1909.1	95.5	
IS	13C-1,2,3,4,7,8-HxCDD	1.02e+07	1.25	y	0.74	34:53	1.014	1606.9	80.3	
IS	13C-1,2,3,6,7,8-HxCDD	1.09e+07	1.24	y	0.75	34:59	1.017	1695.4	84.8	
IS	13C-1,2,3,7,8,9-HxCDD	1.24e+07	1.28	y	0.89	35:18	1.026	1618.7	80.9	
IS	13C-1,2,3,4,6,7,8-HpCDD	9.36e+06	1.05	y	0.70	38:45	1.126	1556.2	77.8	
IS	13C-OCDD	1.69e+07	0.90	y	0.59	42:05	1.223	3345.3	83.6	
IS	13C-2,3,7,8-TCDF	1.81e+07	0.75	y	0.97	26:17	0.992	1658.3	82.9	
IS	13C-1,2,3,7,8-PeCDF	1.75e+07	1.55	y	0.99	30:22	1.146	1567.7	78.4	
IS	13C-2,3,4,7,8-PeCDF	1.76e+07	1.55	y	1.01	31:16	1.180	1548.0	77.4	
IS	13C-1,2,3,4,7,8-HxCDF	1.46e+07	0.52	y	0.94	33:58	0.988	1817.1	90.9	
IS	13C-1,2,3,6,7,8-HxCDF	1.54e+07	0.52	y	1.23	34:06	0.992	1461.6	73.1	
IS	13C-2,3,4,6,7,8-HxCDF	1.44e+07	0.52	y	1.03	34:43	1.009	1623.4	81.2	
IS	13C-1,2,3,7,8,9-HxCDF	1.22e+07	0.50	y	0.89	35:41	1.037	1603.8	80.2	
IS	13C-1,2,3,4,6,7,8-HpCDF	1.00e+07	0.44	y	0.71	37:33	1.091	1653.8	82.7	
IS	13C-1,2,3,4,7,8,9-HpCDF	1.02e+07	0.44	y	0.64	39:18	1.142	1855.9	92.8	
IS	13C-OCDF	2.26e+07	0.90	y	0.76	42:18	1.230	3488.5	87.2	
C/Up	37Cl-2,3,7,8-TCDD	5.91e+06			1.04	27:05	1.022	822.82	103	
RS/RT	13C-1,2,3,4-TCDD	1.38e+07	0.79	y	1.00	26:29	*	2000.0		
RS	13C-1,2,3,4-TCDF	2.26e+07	0.76	y	1.00	25:05	*	2000.0		
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.71e+07	0.52	y	1.00	34:24	*	2000.0		

Integrations by Analyst: (M) Date: 10/15/14

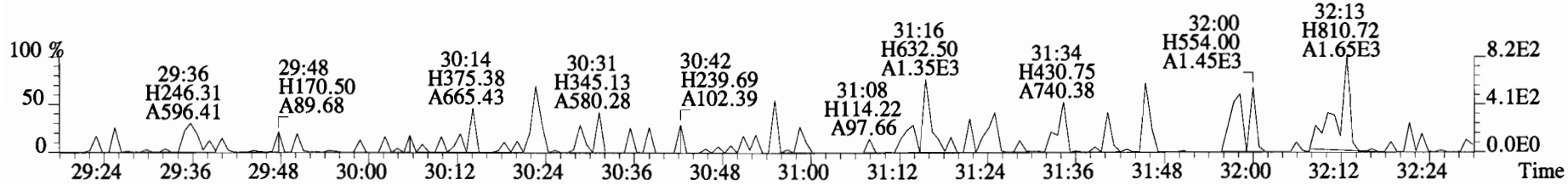
Reviewed by Analyst: Date: 10/16/14


File:141014D1 #1-551 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5
319.8965 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
22:30 H148.10 A444.46
23:15 H847.50 A1.16E3
23:38 H135.16 A292.08
24:19 H196.52 A320.23
24:44 H139.81 A135.22
25:03 H1.28E3 A3.20E3
26:16 H536.04 A1.96E3
26:44 H304.13 A680.29
27:25 H205.88 A261.02
28:11 H174.63 A82.21
321.8936 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
22:48 H143.18 A294.51
24:04 H212.00 A367.95
24:34 H391.75 A531.44
25:43 H183.88 A178.59
25:59 H277.00 A435.30
26:21 H257.00 A636.88
27:06 H1.47E3 A4.74E3
27:26 H340.50 A620.92
28:27 H596.50 A1.47E3
327.8847 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04 H1.62E6 A5.91E6
331.9368 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:29 H1.64E6 A6.07E6
27:03 H1.55E6 A5.37E6
333.9339 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:29 H2.06E6 A7.69E6
27:03 H1.94E6 A6.78E6
100 %
50
0
23:00
24:00
25:00
26:00
27:00
28:00
Time
1.3E3
6.4E2
0.0E0
1.5E3
7.4E2
1.6E6
8.1E5
1.6E6
8.2E5
2.1E6
1.0E6

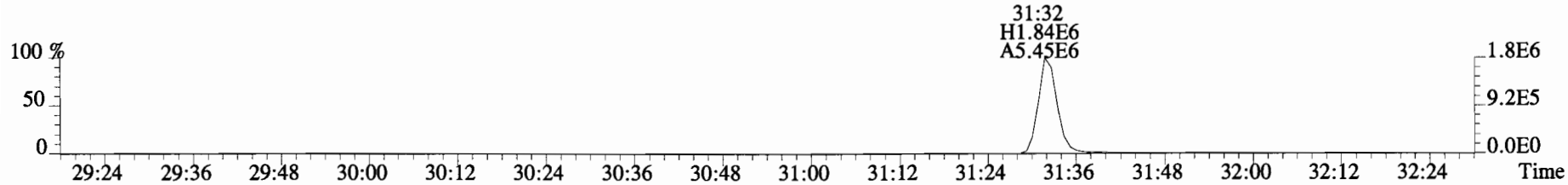
File:141014D1 #1-257 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5
353.8576 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



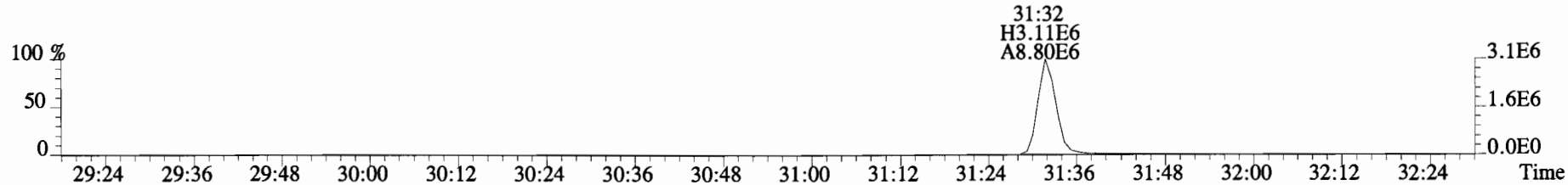
355.8546 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



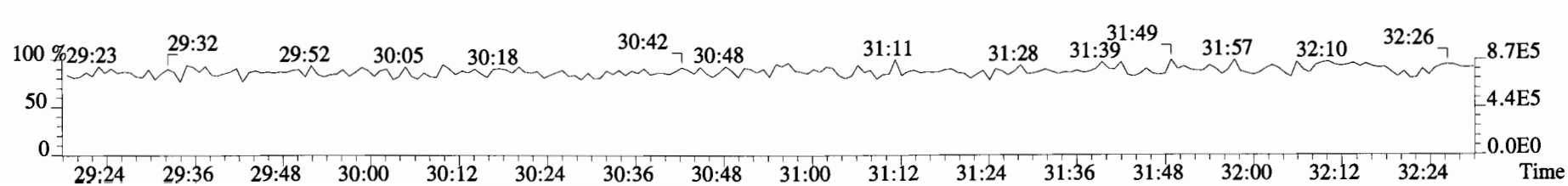
365.8978 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



367.8949 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

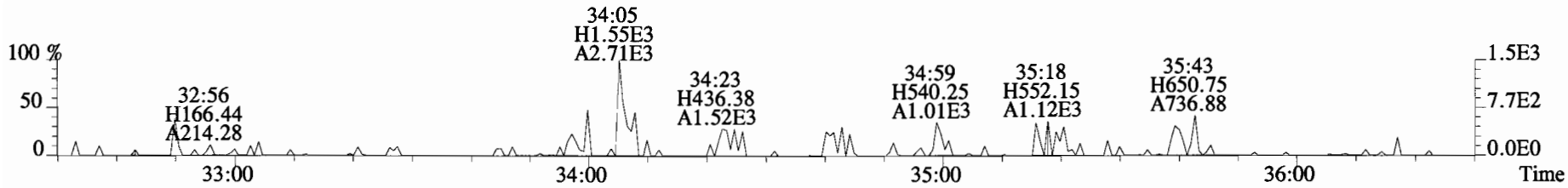


366.9792 S:12 F:2

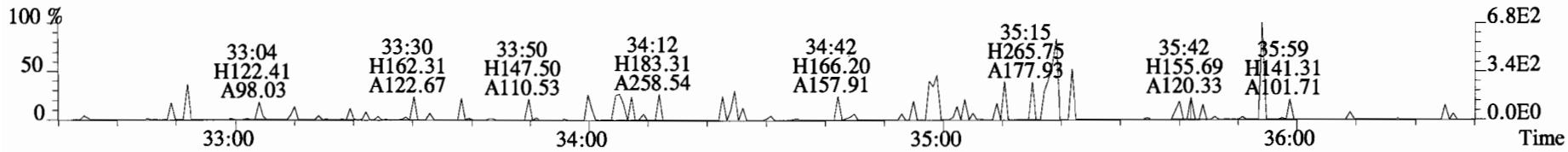


File:141014D1 #1-385 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5

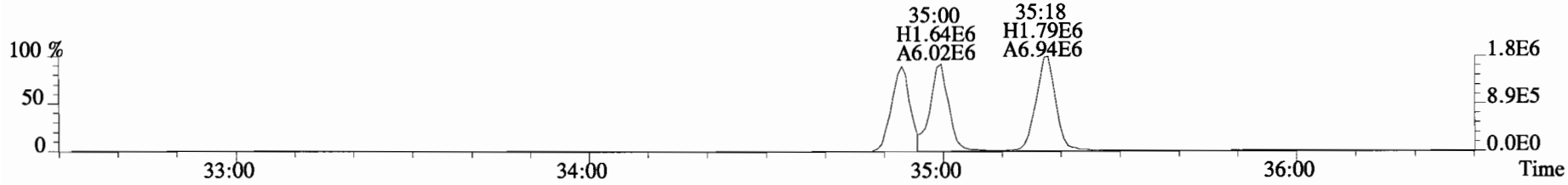
389.8156 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



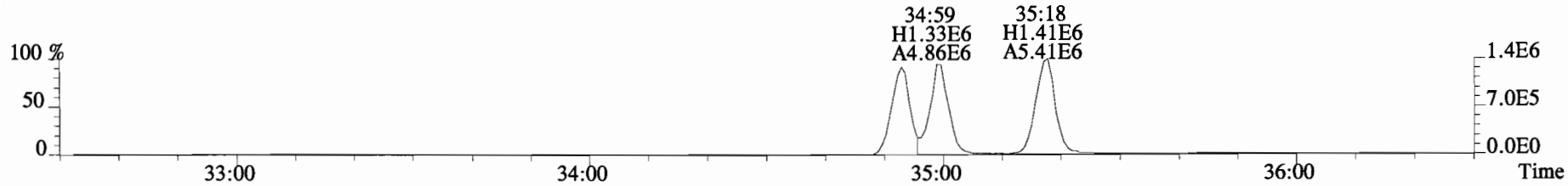
391.8127 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



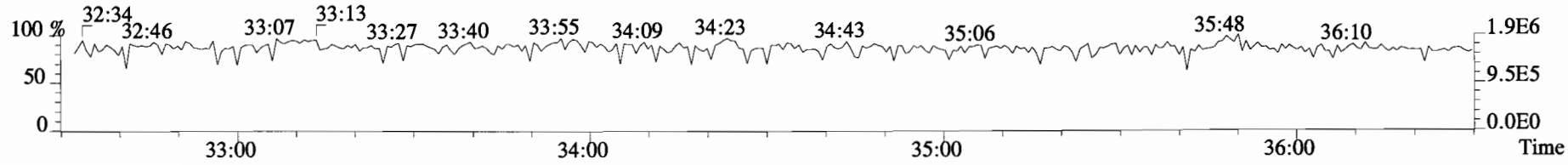
401.8559 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



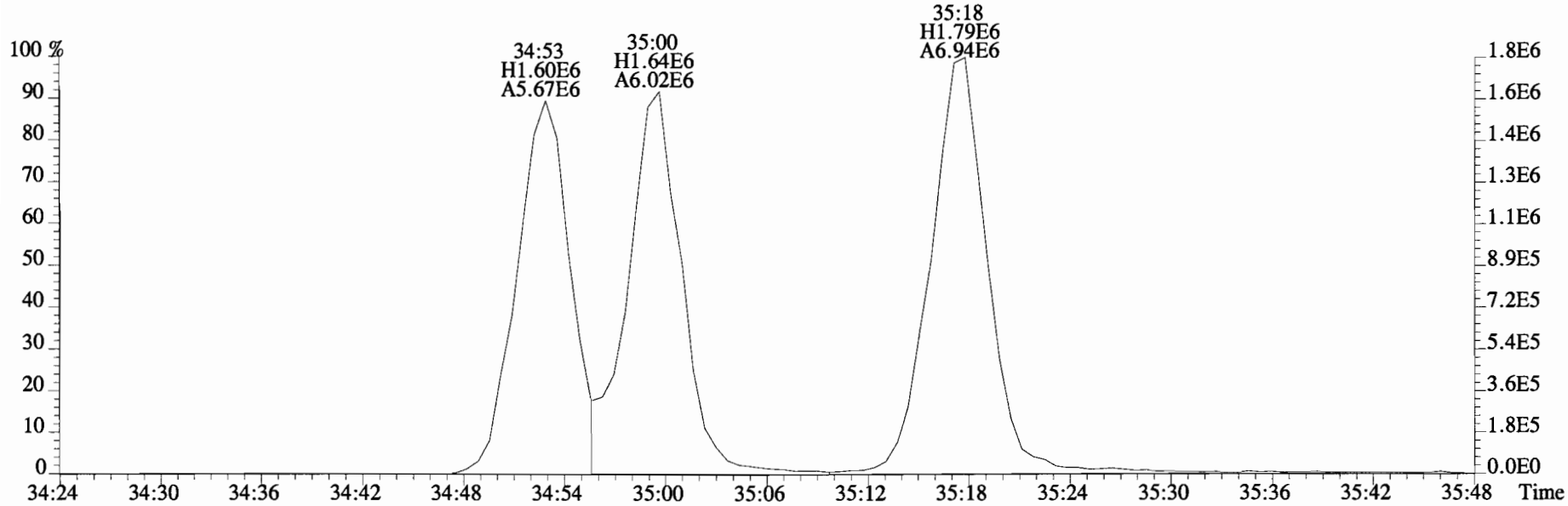
403.8530 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



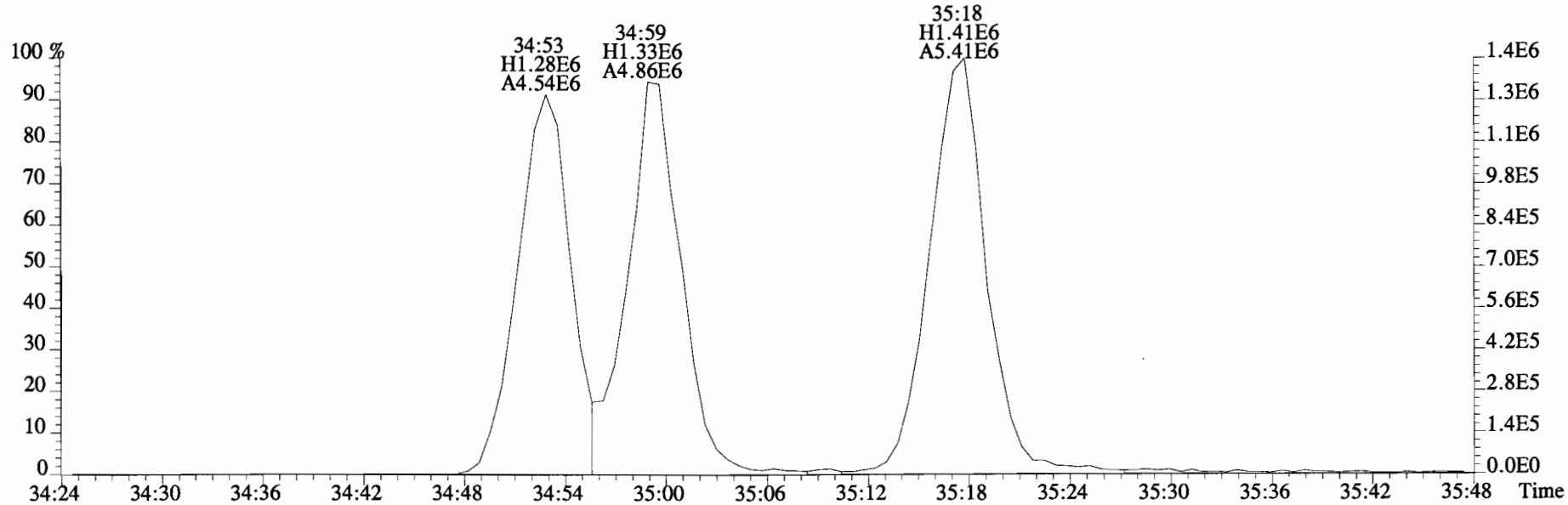
380.9760 S:12 F:3



File:141014D1 #1-385 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5
401.8559 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

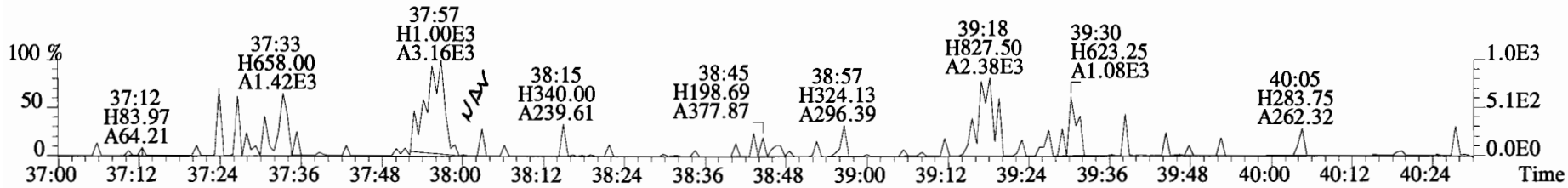


403.8530 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

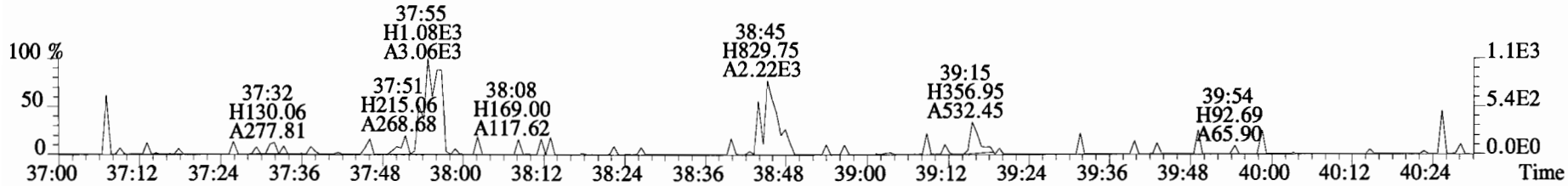


File:141014D1 #1-325 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5

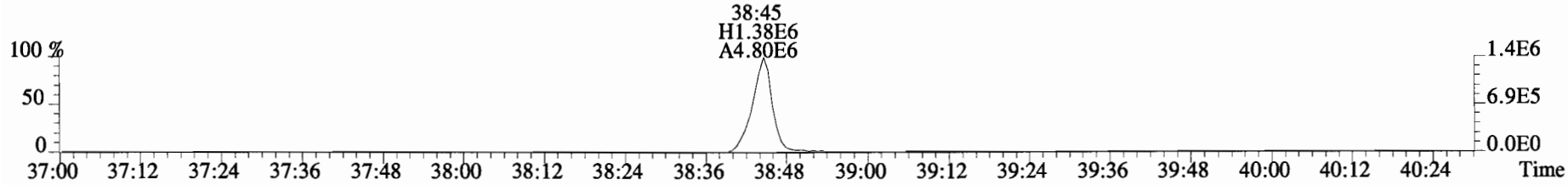
423.7767 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



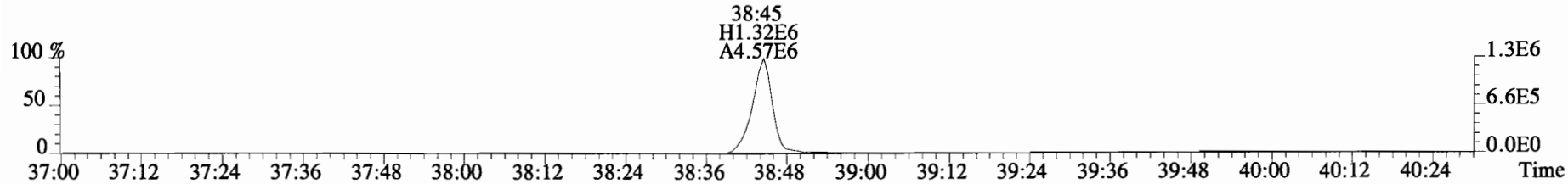
425.7737 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



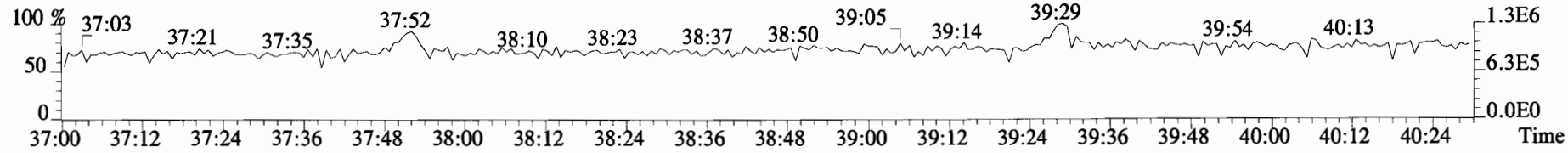
435.8169 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



437.8140 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

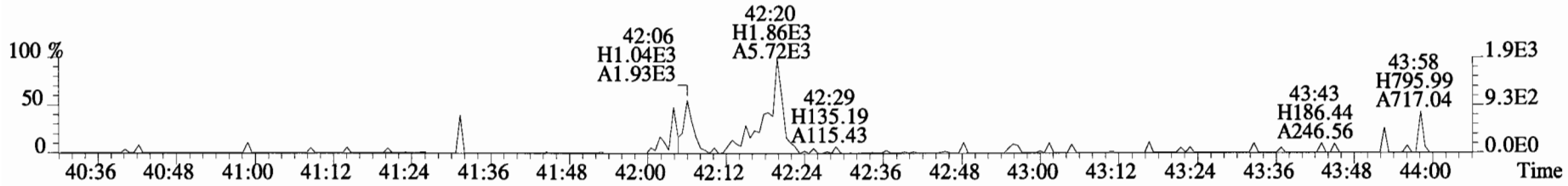


430.9728 S:12 F:4

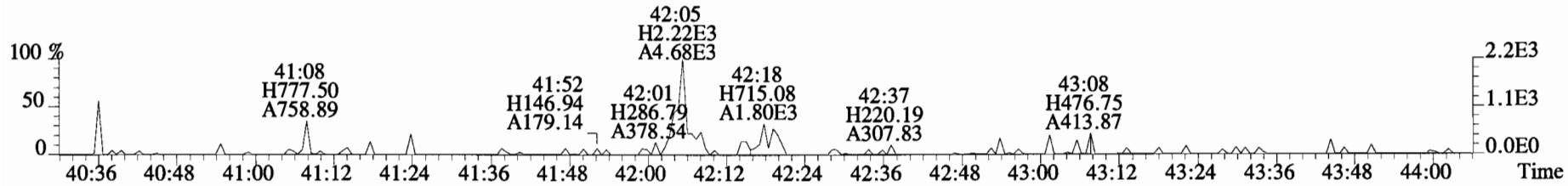


File:141014D1 #1-389 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5

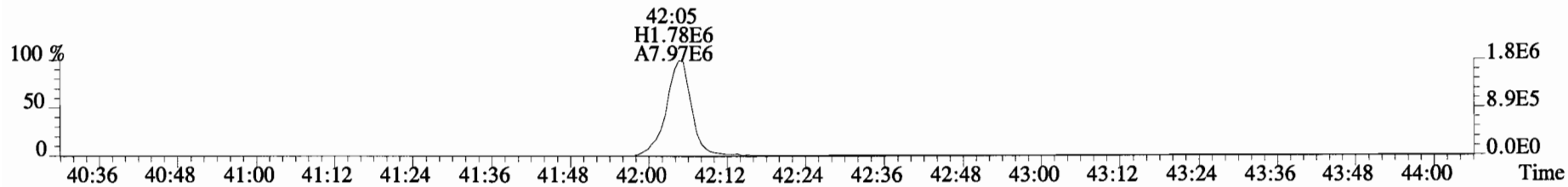
457.7377 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



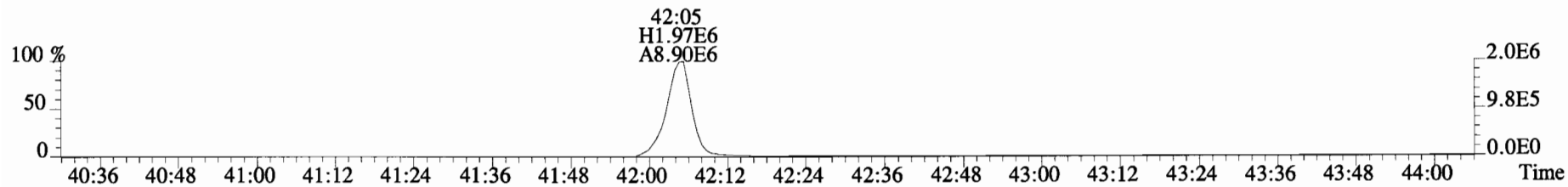
459.7348 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



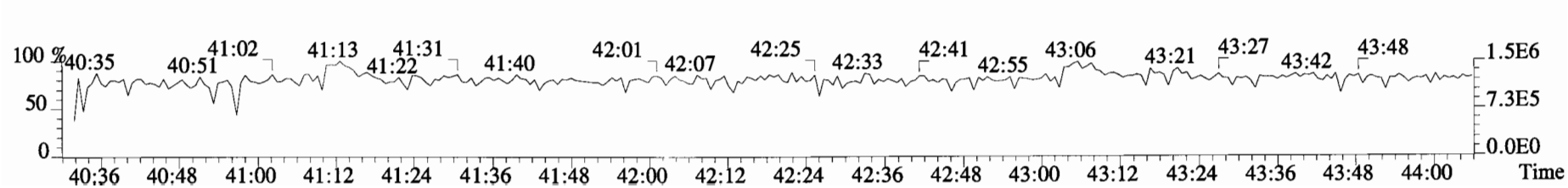
469.7780 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



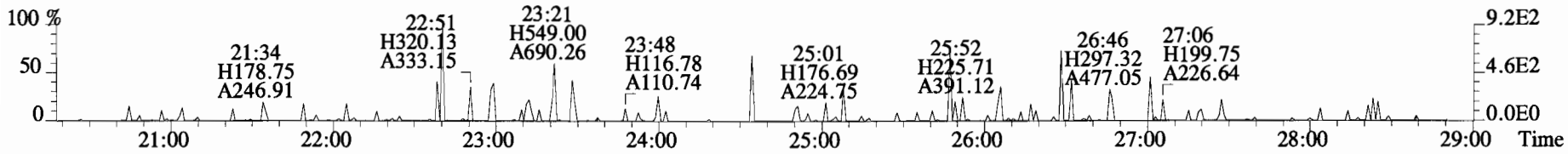
471.7750 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



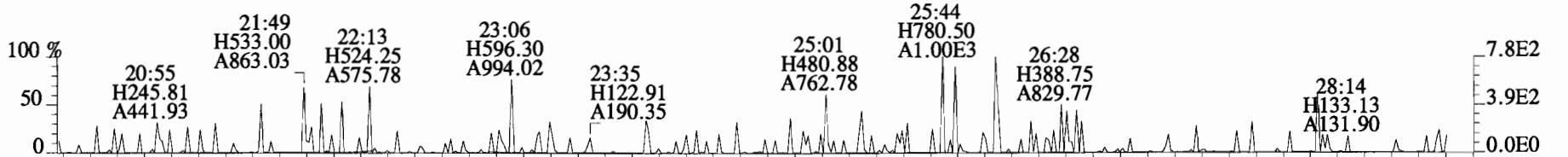
454.9728 S:12 F:5



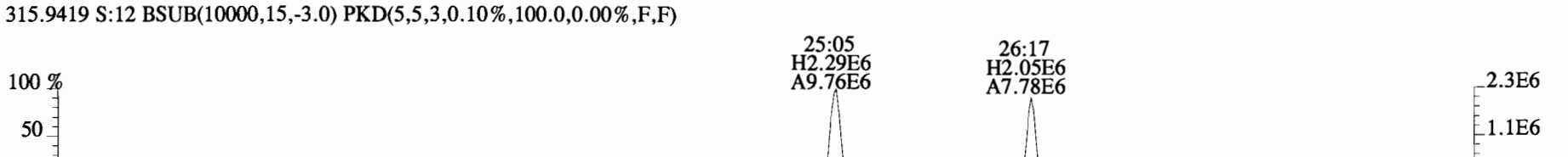
File:141014D1 #1-551 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



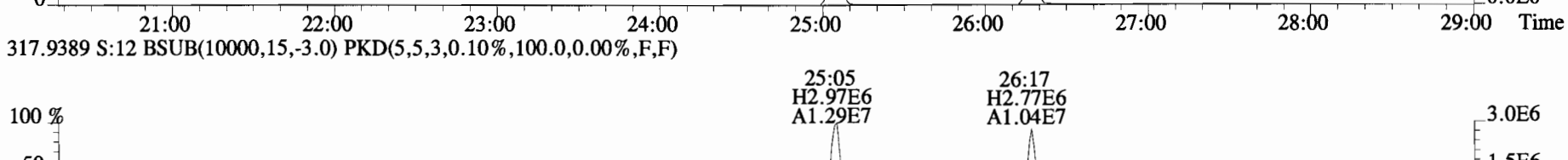
305.8987 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



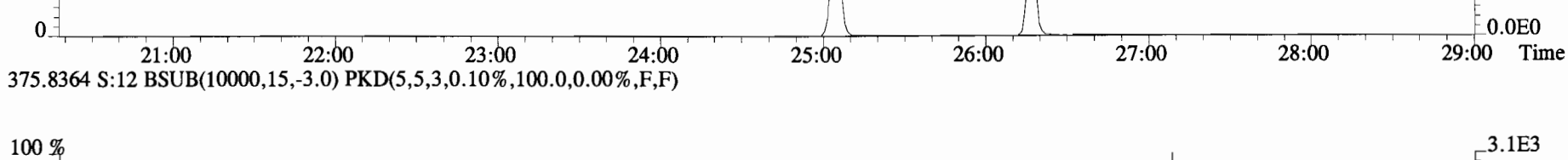
315.9419 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



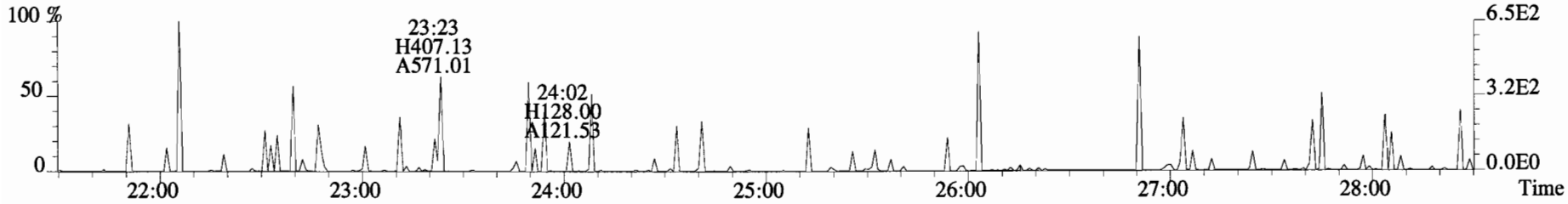
317.9389 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



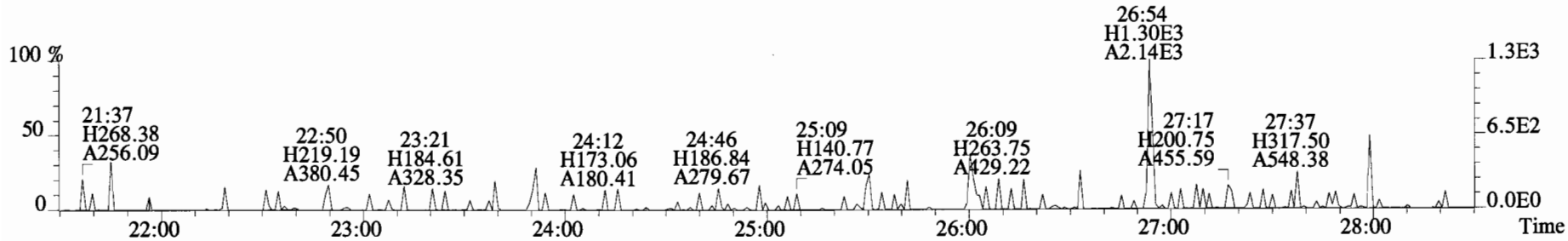
375.8364 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



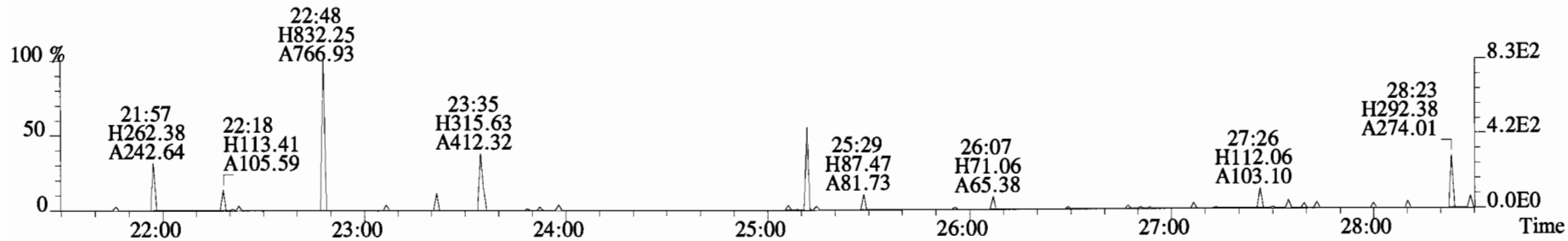
File:141014D1 #1-551 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5
339.8597 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



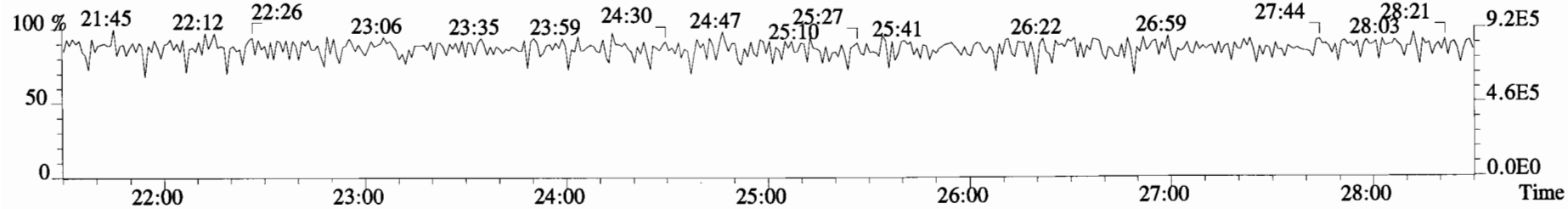
341.8568 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7974 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

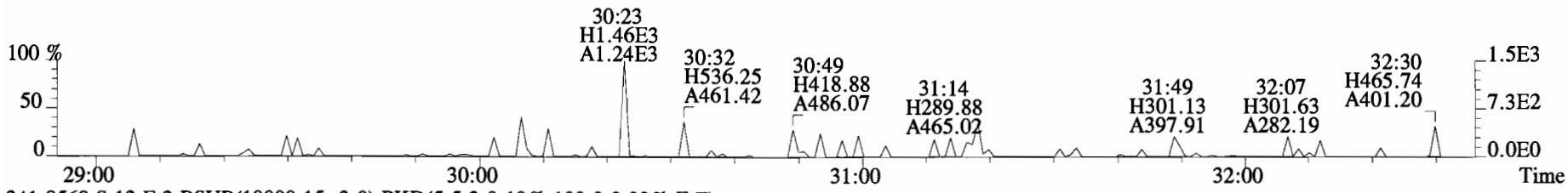


316.9824 S:12

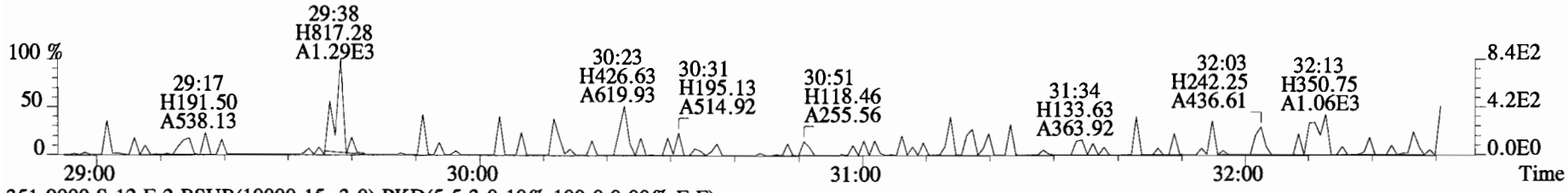


File:141014D1 #1-257 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5

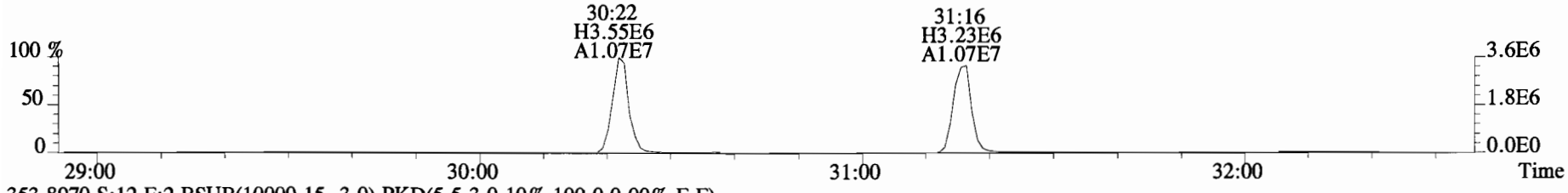
339.8597 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



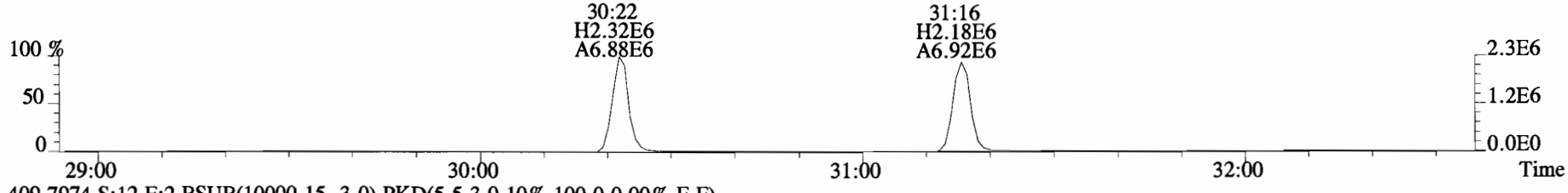
341.8568 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



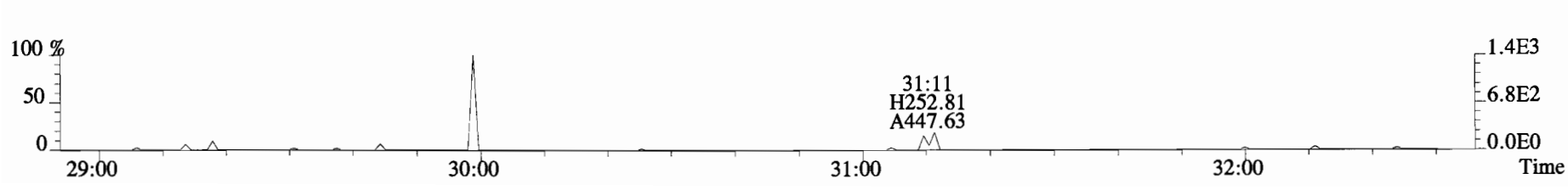
351.9000 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

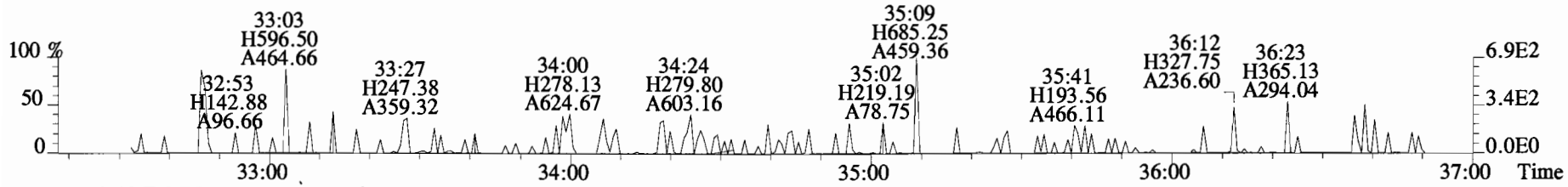


409.7974 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

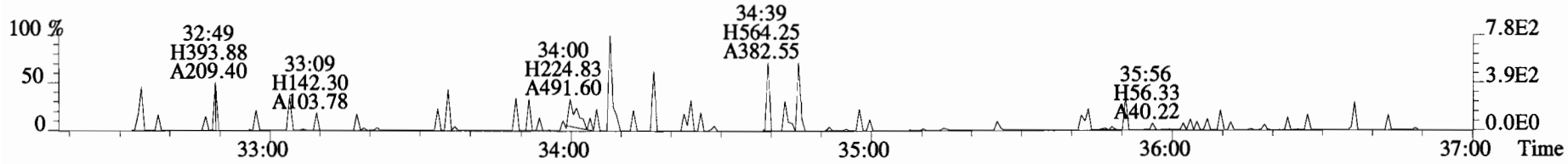


File:141014D1 #1-385 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5

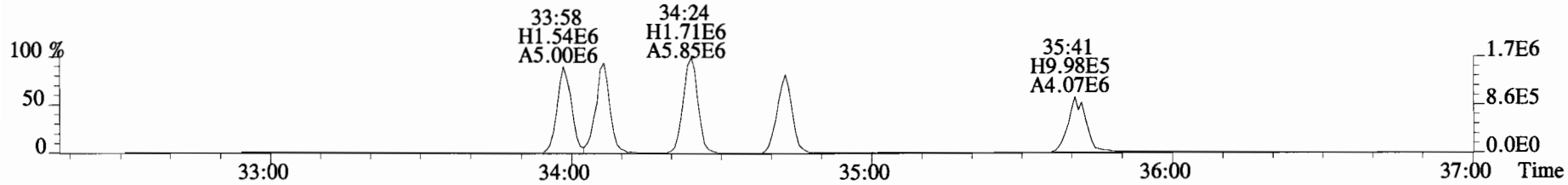
373.8207 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



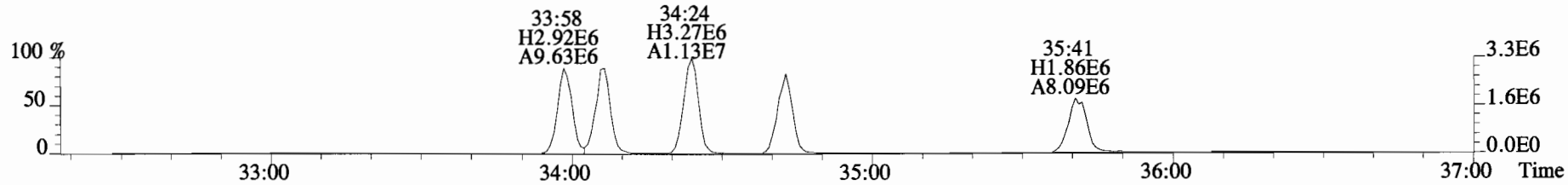
375.8178 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



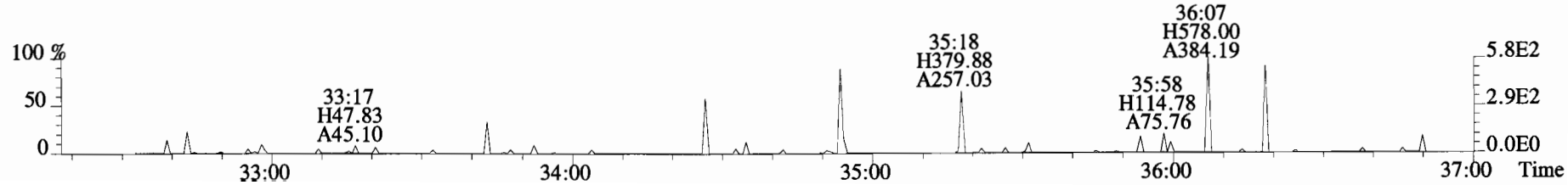
383.8639 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



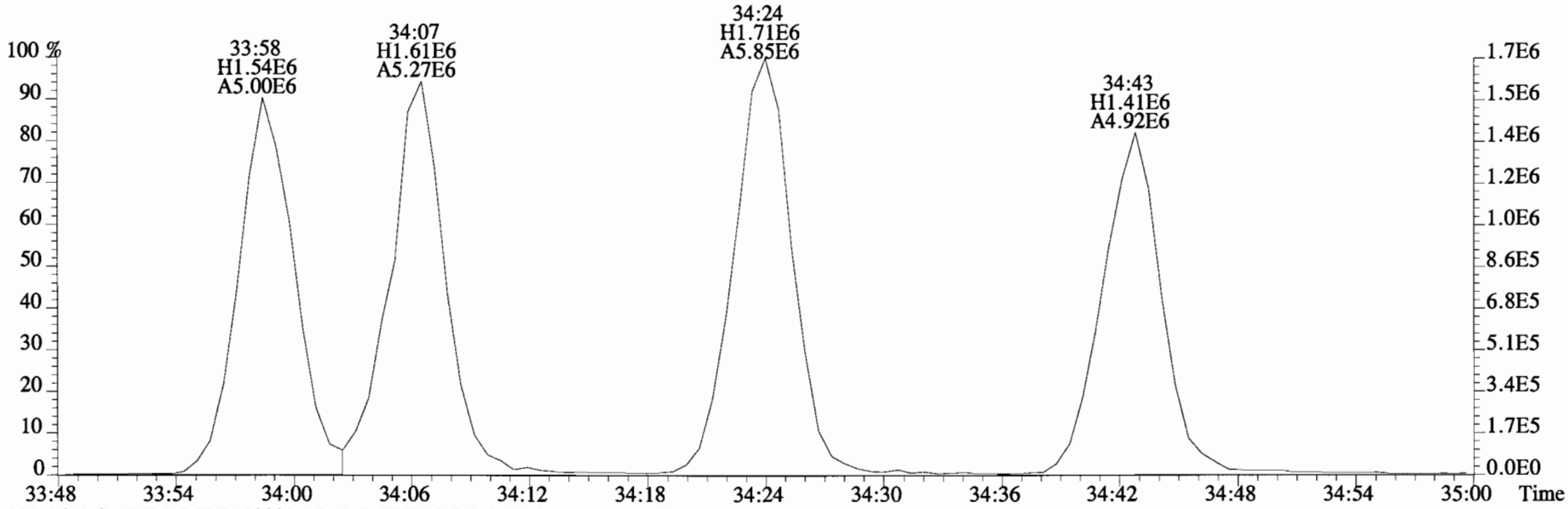
385.8610 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



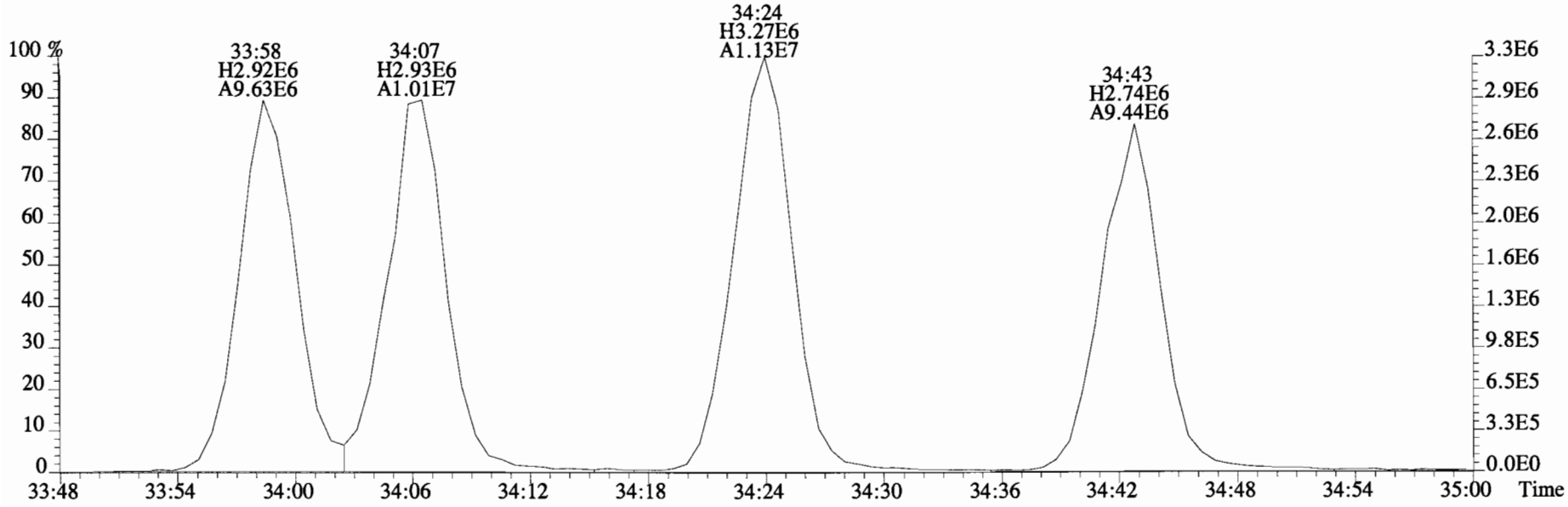
445.7555 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



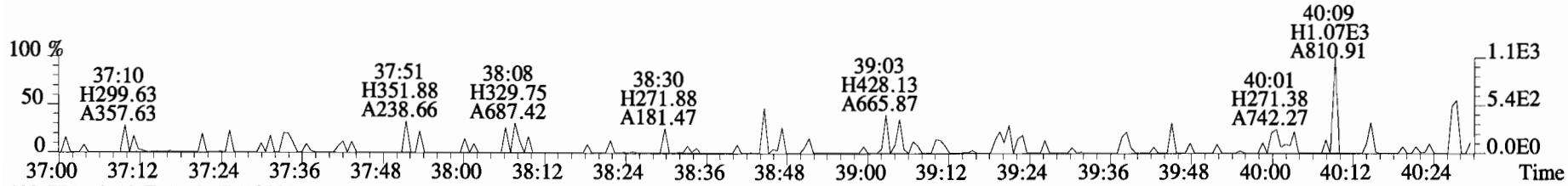
File:141014D1 #1-385 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5
383.8639 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



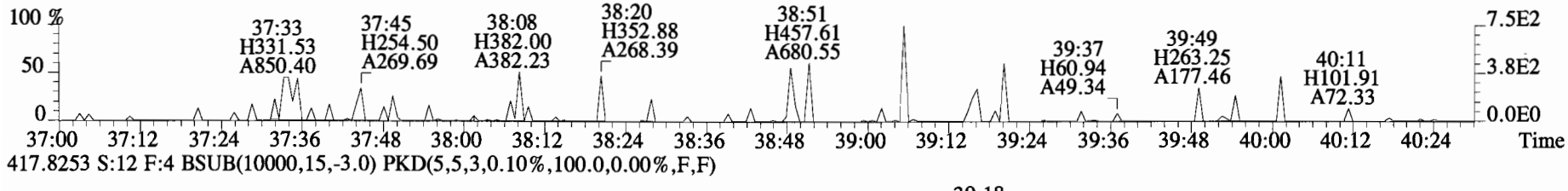
385.8610 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



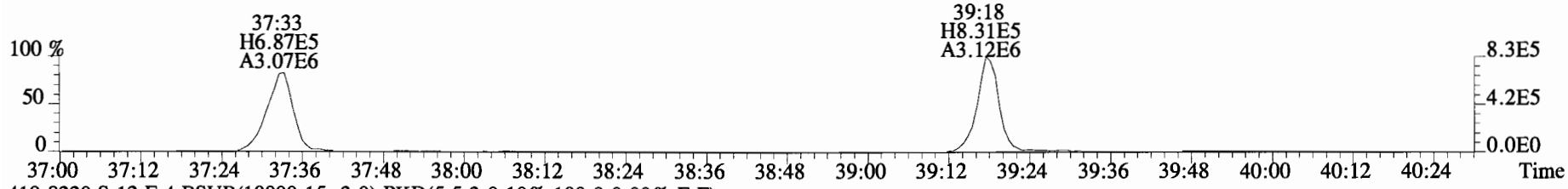
File:141014D1 #1-325 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5
407.7818 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



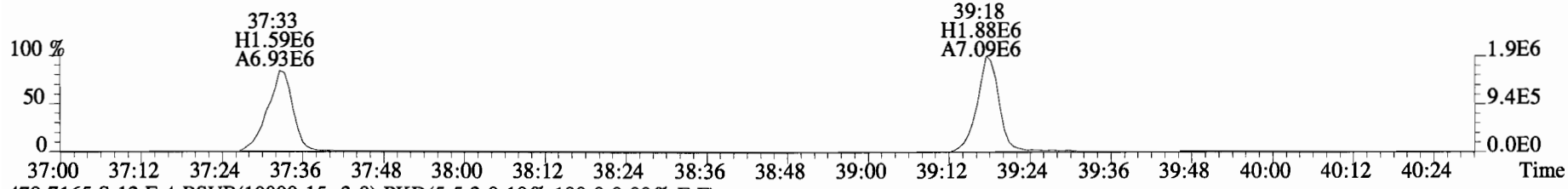
409.7788 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



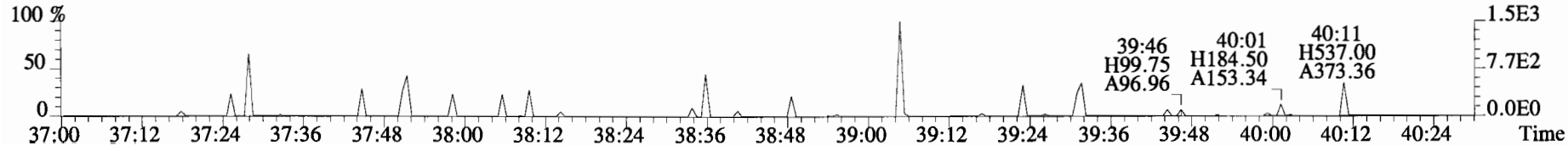
417.8253 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



419.8220 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

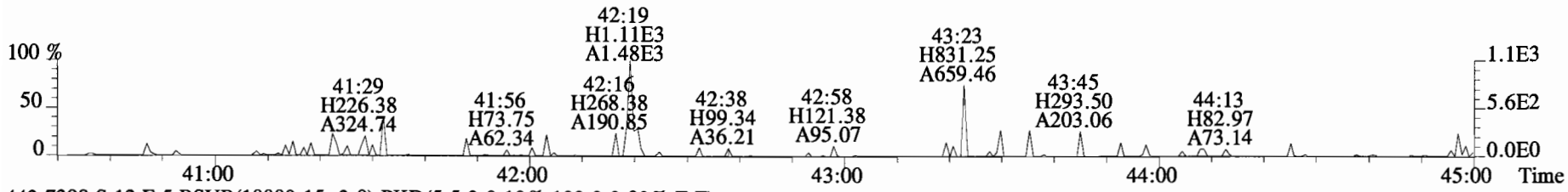


479.7165 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

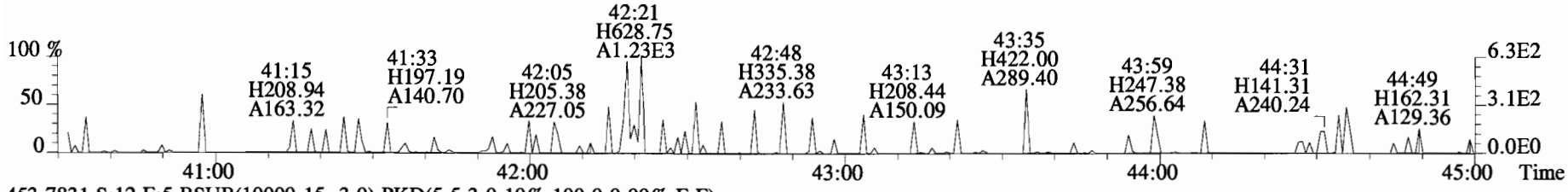


File:141014D1 #1-389 Acq:14-OCT-2014 21:17:18 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BLK1 Method Blank 1 Exp:OCDD_DB5

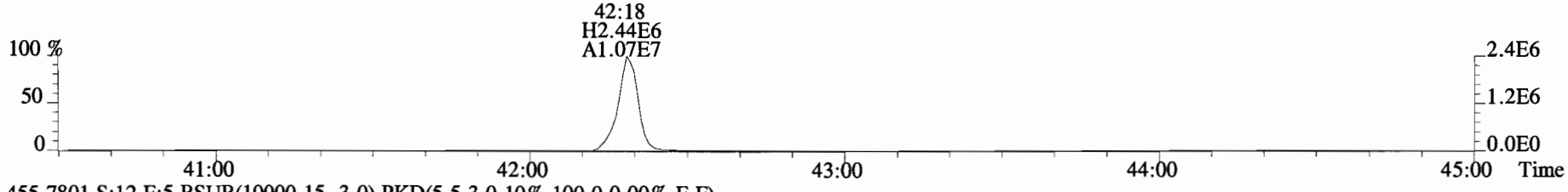
441.7428 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



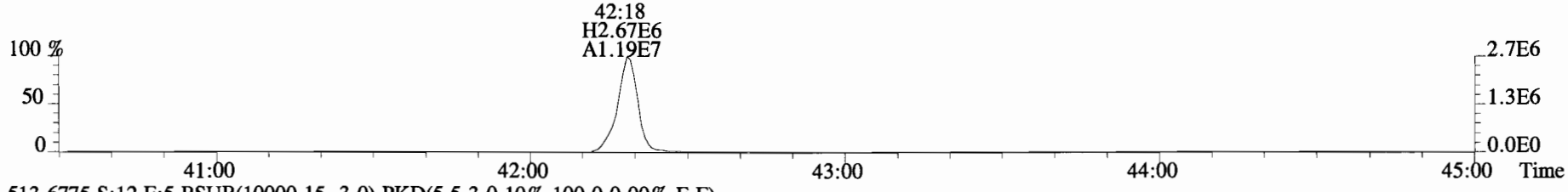
443.7398 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



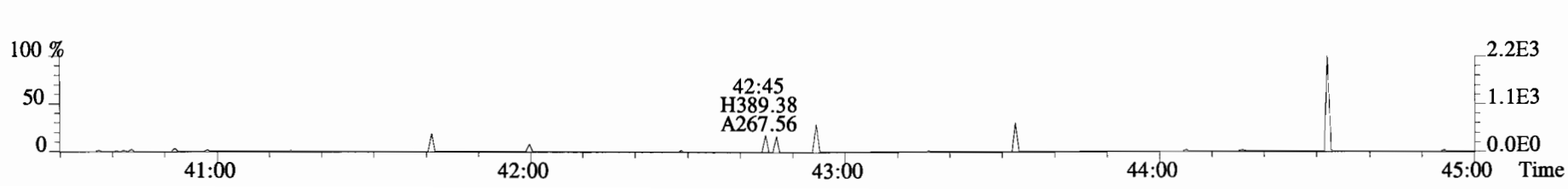
453.7831 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RRF	RT	Conc	Method QC Limits	Vista Historical Limits Aqueous Limits	Solid Limits
2,3,7,8-TCDD	1.52e+06	0.75 y	1.03	27:04	10.4	7.0 - 13	7.73 - 12.4	7.53 - 12.5
1,2,3,7,8-PeCDD	6.28e+06	0.61 y	0.84	31:32	48.6	35 - 65	37.8 - 57.5	40.4 - 65.1
1,2,3,4,7,8-HxCDD	5.74e+06	1.32 y	1.05	34:52	47.8	35 - 65	38.3 - 58.0	41.2 - 63.2
1,2,3,6,7,8-HxCDD	6.36e+06	1.27 y	1.04	34:60	48.5	35 - 65	38.7 - 57.0	40.8 - 65.2
1,2,3,7,8,9-HxCDD	5.82e+06	1.33 y	0.90	35:18	47.5	35 - 65	37.0 - 57.5	41.7 - 65.4
1,2,3,4,6,7,8-HpCDD	5.18e+06	1.05 y	1.01	38:44	50.4	35 - 65	39.0 - 58.5	21.3 - 87.7
OCDD	8.38e+06	0.89 y	1.04	42:05	96.0	70 - 130	83.2 - 126	0 - 400
2,3,7,8-TCDF	1.85e+06	0.77 y	0.91	26:17	9.64	7.0 - 13	7.65 - 12.4	7.82 - 12.0
1,2,3,7,8-PeCDF	9.62e+06	1.61 y	0.97	30:22	50.2	35 - 65	41.4 - 64.9	39.6 - 65.6
2,3,4,7,8-PeCDF	9.73e+06	1.62 y	0.94	31:16	52.4	35 - 65	36.9 - 56.0	40.2 - 66.5
1,2,3,4,7,8-HxCDF	1.02e+07	1.30 y	1.32	33:59	47.7	35 - 65	33.4 - 59.4	39.4 - 63.9
1,2,3,6,7,8-HxCDF	9.63e+06	1.30 y	1.18	34:06	48.9	35 - 65	38.7 - 59.0	41.1 - 62.9
2,3,4,6,7,8-HxCDF	9.33e+06	1.27 y	1.23	34:43	48.8	35 - 65	39.3 - 58.0	40.9 - 63.3
1,2,3,7,8,9-HxCDF	7.84e+06	1.26 y	1.13	35:41	47.9	35 - 65	38.8 - 58.0	39.5 - 64.9
1,2,3,4,6,7,8-HpCDF	7.90e+06	1.08 y	1.57	37:33	46.0	35 - 65	40.2 - 63.1	31.9 - 74.7
1,2,3,4,7,8,9-HpCDF	7.62e+06	1.08 y	1.50	39:18	45.6	35 - 65	40.5 - 62.2	39.8 - 63.8
OCDF	1.13e+07	0.89 y	1.05	42:19	96.0	70 - 130	80.0 - 120	69.8 - 136

						% Rec	Method QC Limits	Aqueous Limits	Solid Limits
13C-2,3,7,8-TCDD	1.42e+07	0.77 y	1.06	27:02	83.8	83.8	40 - 135	48.8 - 105	53.0 - 115
13C-1,2,3,7,8-PeCDD	1.54e+07	0.62 y	1.08	31:32	89.1	89.1	40 - 135	49.8 - 109	61.4 - 117
13C-1,2,3,4,7,8-HxCDD	1.14e+07	1.23 y	0.74	34:52	74.9	74.9	40 - 135	50.4 - 99.1	54.6 - 121
13C-1,2,3,6,7,8-HxCDD	1.26e+07	1.23 y	0.75	34:58	81.9	81.9	40 - 135	50.4 - 99.1	54.6 - 121
13C-1,2,3,7,8,9-HxCDD	1.37e+07	1.21 y	0.89	35:17	74.7	74.7	40 - 135	50.4 - 99.1	54.6 - 121
13C-1,2,3,4,6,7,8-HpCDD	1.02e+07	1.06 y	0.70	38:43	70.3	70.3	40 - 135	51.2 - 106	67.6 - 117
13C-OCDD	1.68e+07	0.89 y	0.59	42:04	138	69.1	40 - 135	30.8 - 113	14.0 - 147
13C-2,3,7,8-TCDF	2.11e+07	0.77 y	0.97	26:16	82.8	82.8	40 - 135	50.3 - 103	56.0 - 112
13C-1,2,3,7,8-PeCDF	1.97e+07	1.57 y	0.99	30:21	75.8	75.8	40 - 135	49.3 - 105	58.6 - 116
13C-2,3,4,7,8-PeCDF	1.98e+07	1.59 y	1.01	31:15	74.7	74.7	40 - 135	53.3 - 109	62.9 - 118
13C-1,2,3,4,7,8-HxCDF	1.62e+07	0.52 y	0.94	33:58	83.9	83.9	40 - 135	44.5 - 110	55.9 - 118
13C-1,2,3,6,7,8-HxCDF	1.68e+07	0.51 y	1.23	34:05	66.3	66.3	40 - 135	45.8 - 111	58.6 - 118
13C-2,3,4,6,7,8-HxCDF	1.56e+07	0.52 y	1.03	34:42	73.2	73.2	40 - 135	50.8 - 110	63.7 - 115
13C-1,2,3,7,8,9-HxCDF	1.45e+07	0.50 y	0.89	35:40	79.4	79.4	40 - 135	48.6 - 108	63.3 - 112
13C-1,2,3,4,6,7,8-HpCDF	1.09e+07	0.44 y	0.71	37:32	75.0	75.0	40 - 135	45.9 - 104	55.0 - 117
13C-1,2,3,4,7,8,9-HpCDF	1.11e+07	0.44 y	0.64	39:17	84.0	84.0	40 - 135	41.1 - 114	53.2 - 122
13C-OCDF	2.23e+07	0.90 y	0.76	42:18	143	71.5	40 - 135	36.8 - 109	48.3 - 109
37Cl-2,3,7,8-TCDD	7.02e+06		1.04	27:04	42.3	106	40 - 135	51.1 - 117	49.6 - 106
13C-1,2,3,4-TCDD	1.59e+07	0.83 y	1.00	26:28	100				
13C-1,2,3,4-TCDF	2.63e+07	0.77 y	1.00	25:04	100				
13C-1,2,3,4,6,9-HxCDF	2.06e+07	0.51 y	1.00	34:23	100				

Analyst: (M)

Date: 10/15/14

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

Lab Name: Vista Analytical Laboratory Extraction Batch: B4J0059-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): AQUEOUS OPR Data Filename: 141014D1-9

Ext. Date: 10-13-14 Shift: Day Analysis Date: 14-OCT-14 Time: 18:52:06

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	10.4	6.7 - 15.8 7.3 - 14.6 (2)
1,2,3,7,8-PeCDD	50	48.6	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	47.8	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	48.5	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	47.5	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	50.4	35.0 - 70.0
OCDD	100	96.0	78.0 - 144.0
2,3,7,8-TCDF	10	9.64	7.5 - 15.8 8.0 - 14.7 (2)
1,2,3,7,8-PeCDF	50	50.2	40.0 - 67.0
2,3,4,7,8-PeCDF	50	52.4	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	47.7	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	48.8	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	47.9	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	46.0	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	45.6	39.0 - 69.0
OCDF	100	96.0	63.0 - 170.0

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: M

Date: 10/15/14

FORM 8B

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory Extraction Batch: B4J0059-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): AQUEOUS OPR Data Filename: 141014D1-9

Ext. Date: 10-13-14 Shift: Day Analysis Date: 14-OCT-14 Time: 18:52:06

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	83.8	20.0 - 175.0
			25.0 - 141.0 (2)
13C-1,2,3,7,8-PeCDD	100	89.1	21.0 - 227.0
13C-1,2,3,4,7,8-HxCDD	100	74.9	21.0 - 193.0
13C-1,2,3,6,7,8-HxCDD	100	81.9	25.0 - 163.0
13C-1,2,3,7,8,9-HxCDD	100	74.7	21.0 - 193.0
13C-1,2,3,4,6,7,8-HpCDD	100	70.3	26.0 - 166.0
13C-OCDD	200	138	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	75.8	21.0 - 192.0
13C-2,3,4,7,8-PeCDF	100	74.7	13.0 - 328.0
13C-1,2,3,4,7,8-HxCDF	100	83.9	19.0 - 202.0
13C-1,2,3,6,7,8-HxCDF	100	66.3	21.0 - 159.0
13C-2,3,4,6,7,8-HxCDF	100	73.2	22.0 - 176.0
13C-1,2,3,7,8,9-HxCDF	100	79.4	17.0 - 205.0
13C-1,2,3,4,6,7,8-HpCDF	100	75.0	21.0 - 158.0
13C-1,2,3,4,7,8,9-HpCDF	100	84.0	20.0 - 186.0
13C-OCDF	200	143	26.0 - 397.0
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	42.3	12.4 - 76.4

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: MJ

Date: 10/15/14

Client ID: OPR Filename: 141014D1 S:9 Acq:14-OCT-14 18:52:06 ConCal: ST141014D1-1
Lab ID: B4J0059-BS1 GC Column ID: ZB-5MS ICal: 1613VG7-4-17-14 wt/vol: 1.000 EndCAL: ST141014D1-2

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	1.52e+06	0.75 y	1.03	27:04	1.001	10.419		*	2.5	*
	1,2,3,7,8-PeCDD	6.28e+06	0.61 y	0.84	31:32	1.000	48.580		*	2.5	*
	1,2,3,4,7,8-HxCDD	5.74e+06	1.32 y	1.05	34:52	1.000	47.797		*	2.5	*
	1,2,3,6,7,8-HxCDD	6.36e+06	1.27 y	1.04	34:60	1.001	48.509		*	2.5	*
	1,2,3,7,8,9-HxCDD	5.82e+06	1.33 y	0.90	35:18	1.000	47.454		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	5.18e+06	1.05 y	1.01	38:44	1.000	50.420		*	2.5	*
	OCDD	8.38e+06	0.89 y	1.04	42:05	1.000	95.955		*	2.5	*
	2,3,7,8-TCDF	1.85e+06	0.77 y	0.91	26:17	1.001	9.6423		*	2.5	*
	1,2,3,7,8-PeCDF	9.62e+06	1.61 y	0.97	30:22	1.000	50.242		*	2.5	*
	2,3,4,7,8-PeCDF	9.73e+06	1.62 y	0.94	31:16	1.000	52.424		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.02e+07	1.30 y	1.32	33:59	1.000	47.707		*	2.5	*
	1,2,3,6,7,8-HxCDF	9.63e+06	1.30 y	1.18	34:06	1.001	48.886		*	2.5	*
	2,3,4,6,7,8-HxCDF	9.33e+06	1.27 y	1.23	34:43	1.001	48.774		*	2.5	*
	1,2,3,7,8,9-HxCDF	7.84e+06	1.26 y	1.13	35:41	1.001	47.910		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	7.90e+06	1.08 y	1.57	37:33	1.000	45.990		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	7.62e+06	1.08 y	1.50	39:18	1.000	45.622		*	2.5	*
	OCDF	1.13e+07	0.89 y	1.05	42:19	1.000	96.029		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.42e+07	0.77 y	1.06	27:02	1.021	83.758				
IS	13C-1,2,3,7,8-PeCDD	1.54e+07	0.62 y	1.08	31:32	1.191	89.106				
IS	13C-1,2,3,4,7,8-HxCDD	1.14e+07	1.23 y	0.74	34:52	1.014	74.858				
IS	13C-1,2,3,6,7,8-HxCDD	1.26e+07	1.23 y	0.75	34:58	1.017	81.858				
IS	13C-1,2,3,7,8,9-HxCDD	1.37e+07	1.21 y	0.89	35:17	1.026	74.703				
IS	13C-1,2,3,4,6,7,8-HpCDD	1.02e+07	1.06 y	0.70	38:43	1.126	70.313				
IS	13C-OCDD	1.68e+07	0.89 y	0.59	42:04	1.223	138.13				
IS	13C-2,3,7,8-TCDF	2.11e+07	0.77 y	0.97	26:16	0.992	82.844				
IS	13C-1,2,3,7,8-PeCDF	1.97e+07	1.57 y	0.99	30:21	1.146	75.835				
IS	13C-2,3,4,7,8-PeCDF	1.98e+07	1.59 y	1.01	31:15	1.180	74.741				
IS	13C-1,2,3,4,7,8-HxCDF	1.62e+07	0.52 y	0.94	33:58	0.988	83.859				
IS	13C-1,2,3,6,7,8-HxCDF	1.68e+07	0.51 y	1.23	34:05	0.991	66.299				
IS	13C-2,3,4,6,7,8-HxCDF	1.56e+07	0.52 y	1.03	34:42	1.009	73.163				
IS	13C-1,2,3,7,8,9-HxCDF	1.45e+07	0.50 y	0.89	35:40	1.037	79.442				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.09e+07	0.44 y	0.71	37:32	1.091	75.048				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.11e+07	0.44 y	0.64	39:17	1.142	83.996				
IS	13C-OCDF	2.23e+07	0.90 y	0.76	42:18	1.230	142.92				
C/Up	37Cl-2,3,7,8-TCDD	7.02e+06		1.04	27:04	1.022	42.273				
RS/RT	13C-1,2,3,4-TCDD	1.59e+07	0.83 y	1.00	26:28	*	100.00				
RS	13C-1,2,3,4-TCDF	2.63e+07	0.77 y	1.00	25:04	*	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.06e+07	0.51 y	1.00	34:23	*	100.00				

	Name	Conc	EMPC	Qual	noise	DL
	Total Tetra-Dioxins	10.7	10.8		*	*
	Total Penta-Dioxins	48.7	49.3		*	*
	Total Hexa-Dioxins	144	145		*	*
	Total Hepta-Dioxins	51.0	52.4		*	*
	Total Tetra-Furans	9.77	9.92		*	*
	Total Penta-Furans	104.31	104.44		*	*
	Total Hexa-Furans	194	194		*	*
	Total Hepta-Furans	92.5	93.7		*	*

	Name	Rec	Qual
IS	13C-2,3,7,8-TCDD	83.8	
IS	13C-1,2,3,7,8-PeCDD	89.1	
IS	13C-1,2,3,4,7,8-HxCDD	74.9	
IS	13C-1,2,3,6,7,8-HxCDD	81.9	
IS	13C-1,2,3,7,8,9-HxCDD	74.7	
IS	13C-1,2,3,4,6,7,8-HpCDD	70.3	
IS	13C-OCDD	69.1	
IS	13C-2,3,7,8-TCDF	82.8	
IS	13C-1,2,3,7,8-PeCDF	75.8	
IS	13C-2,3,4,7,8-PeCDF	74.7	
IS	13C-1,2,3,4,7,8-HxCDF	83.9	
IS	13C-1,2,3,6,7,8-HxCDF	66.3	
IS	13C-2,3,4,6,7,8-HxCDF	73.2	
IS	13C-1,2,3,7,8,9-HxCDF	79.4	
IS	13C-1,2,3,4,6,7,8-HpCDF	75.0	
IS	13C-1,2,3,4,7,8,9-HpCDF	84.0	
IS	13C-OCDF	71.5	
C/Up	37Cl-2,3,7,8-TCDD	106	

Integrations by Analyst: MS Date: 10/15/14

Reviewed by Analyst: Date: 10/16/14

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	1.52e+06	0.75 y	1.03	27:04	1.001	208.38		*	2.5	*
	1,2,3,7,8-PeCDD	6.28e+06	0.61 y	0.84	31:32	1.000	971.61		*	2.5	*
	1,2,3,4,7,8-HxCDD	5.74e+06	1.32 y	1.05	34:52	1.000	955.93		*	2.5	*
	1,2,3,6,7,8-HxCDD	6.36e+06	1.27 y	1.04	34:60	1.001	970.17		*	2.5	*
	1,2,3,7,8,9-HxCDD	5.82e+06	1.33 y	0.90	35:18	1.000	949.07		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	5.18e+06	1.05 y	1.01	38:44	1.000	1008.4		*	2.5	*
	OCDD	8.38e+06	0.89 y	1.04	42:05	1.000	1919.1		*	2.5	*
	2,3,7,8-TCDF	1.85e+06	0.77 y	0.91	26:17	1.001	192.85		*	2.5	*
	1,2,3,7,8-PeCDF	9.62e+06	1.61 y	0.97	30:22	1.000	1004.8		*	2.5	*
	2,3,4,7,8-PeCDF	9.73e+06	1.62 y	0.94	31:16	1.000	1048.5		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.02e+07	1.30 y	1.32	33:59	1.000	954.14		*	2.5	*
	1,2,3,6,7,8-HxCDF	9.63e+06	1.30 y	1.18	34:06	1.001	977.71		*	2.5	*
	2,3,4,6,7,8-HxCDF	9.33e+06	1.27 y	1.23	34:43	1.001	975.49		*	2.5	*
	1,2,3,7,8,9-HxCDF	7.84e+06	1.26 y	1.13	35:41	1.001	958.21		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	7.90e+06	1.08 y	1.57	37:33	1.000	919.80		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	7.62e+06	1.08 y	1.50	39:18	1.000	912.43		*	2.5	*
	OCDF	1.13e+07	0.89 y	1.05	42:19	1.000	1920.6		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.42e+07	0.77 y	1.06	27:02	1.021	1675.2				
IS	13C-1,2,3,7,8-PeCDD	1.54e+07	0.62 y	1.08	31:32	1.191	1782.1				
IS	13C-1,2,3,4,7,8-HxCDD	1.14e+07	1.23 y	0.74	34:52	1.014	1497.2				
IS	13C-1,2,3,6,7,8-HxCDD	1.26e+07	1.23 y	0.75	34:58	1.017	1637.2				
IS	13C-1,2,3,7,8,9-HxCDD	1.37e+07	1.21 y	0.89	35:17	1.026	1494.1				
IS	13C-1,2,3,4,6,7,8-HpCDD	1.02e+07	1.06 y	0.70	38:43	1.126	1406.3				
IS	13C-OCDD	1.68e+07	0.89 y	0.59	42:04	1.223	2762.5				
IS	13C-2,3,7,8-TCDF	2.11e+07	0.77 y	0.97	26:16	0.992	1656.9				
IS	13C-1,2,3,7,8-PeCDF	1.97e+07	1.57 y	0.99	30:21	1.146	1516.7				
IS	13C-2,3,4,7,8-PeCDF	1.98e+07	1.59 y	1.01	31:15	1.180	1494.8				
IS	13C-1,2,3,4,7,8-HxCDF	1.62e+07	0.52 y	0.94	33:58	0.988	1677.2				
IS	13C-1,2,3,6,7,8-HxCDF	1.68e+07	0.51 y	1.23	34:05	0.991	1326.0				
IS	13C-2,3,4,6,7,8-HxCDF	1.56e+07	0.52 y	1.03	34:42	1.009	1463.3				
IS	13C-1,2,3,7,8,9-HxCDF	1.45e+07	0.50 y	0.89	35:40	1.037	1588.8				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.09e+07	0.44 y	0.71	37:32	1.091	1501.0				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.11e+07	0.44 y	0.64	39:17	1.142	1679.9				
IS	13C-OCDF	2.23e+07	0.90 y	0.76	42:18	1.230	2858.4				
C/Up	37Cl-2,3,7,8-TCDD	7.02e+06		1.04	27:04	1.022	845.46				
RS/RT	13C-1,2,3,4-TCDD	1.59e+07	0.83 y	1.00	26:28	*	2000.0				
RS	13C-1,2,3,4-TCDF	2.63e+07	0.77 y	1.00	25:04	*	2000.0				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.06e+07	0.51 y	1.00	34:23	*	2000.0				

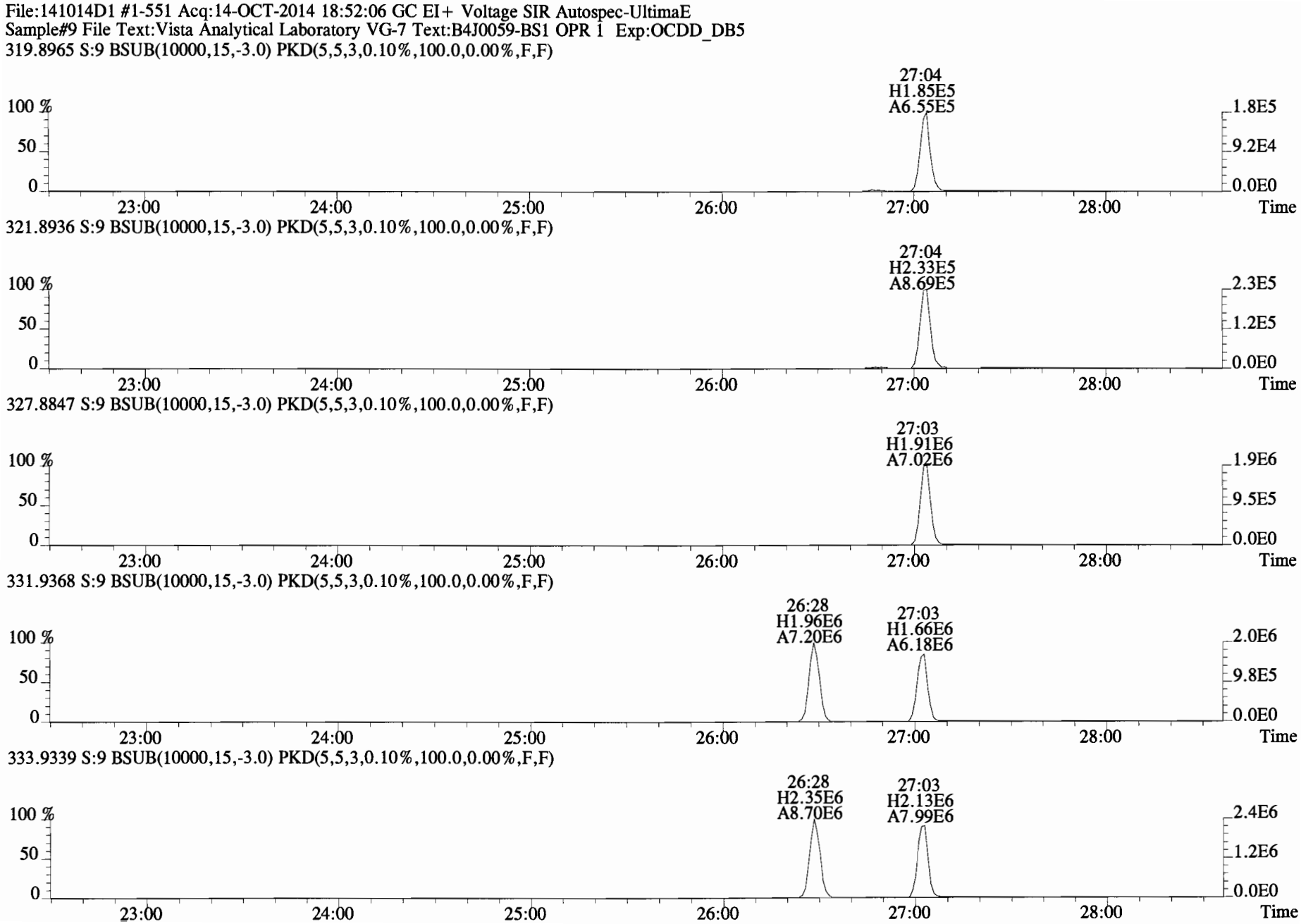
Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	214	216		*	*
Total Penta-Dioxins	973	985		*	*
Total Hexa-Dioxins	2880	2900		*	*
Total Hepta-Dioxins	1020	1050		*	*
Total Tetra-Furans	195	198		*	*
Total Penta-Furans	2086.2	2088.8		*	*
Total Hexa-Furans	3870	3880		*	*
Total Hepta-Furans	1850	1870		*	*

	Rec	Qual
IS	83.8	
IS	89.1	
IS	74.9	
IS	81.9	
IS	74.7	
IS	70.3	
IS	69.1	
IS	82.8	
IS	75.8	
IS	74.7	
IS	83.9	
IS	66.3	
IS	73.2	
IS	79.4	
IS	75.0	
IS	84.0	
IS	71.5	
C/Up	106	

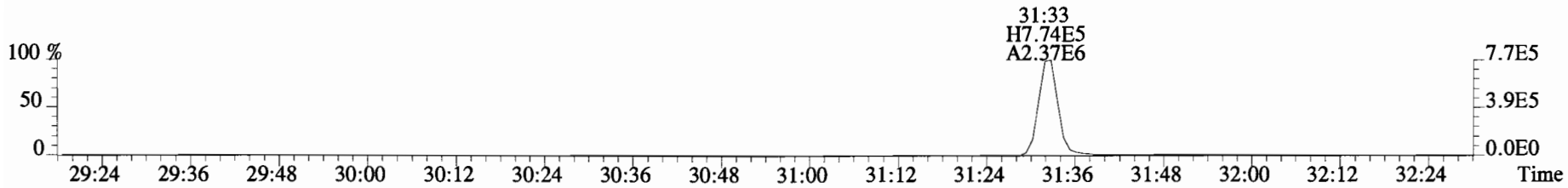
Integrations by Analyst: MM Date: 10/15/14

Reviewed by Analyst: _____ Date: _____

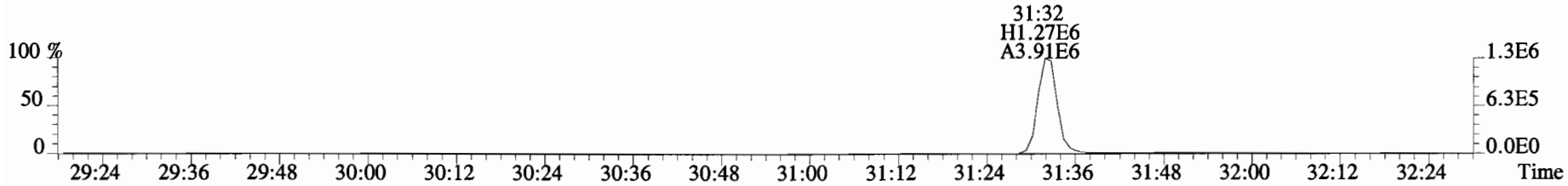
File:141014D1 #1-551 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5



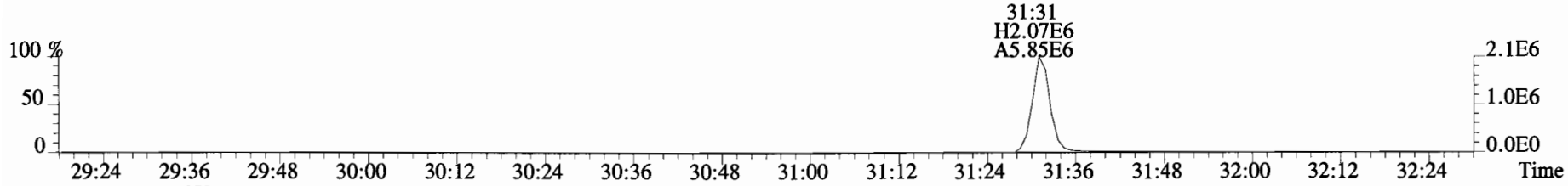
File:141014D1 #1-257 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5
353.8576 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



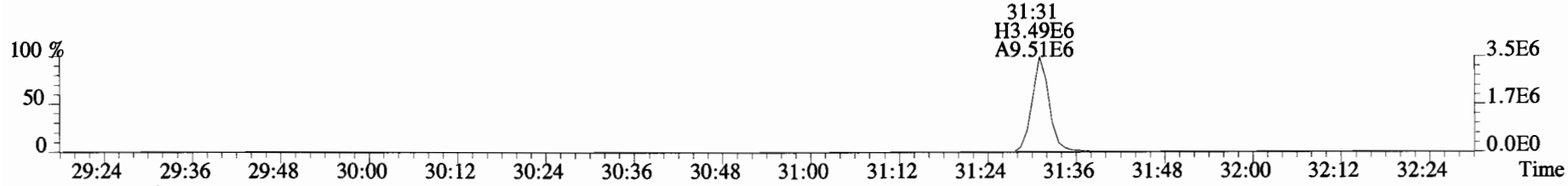
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



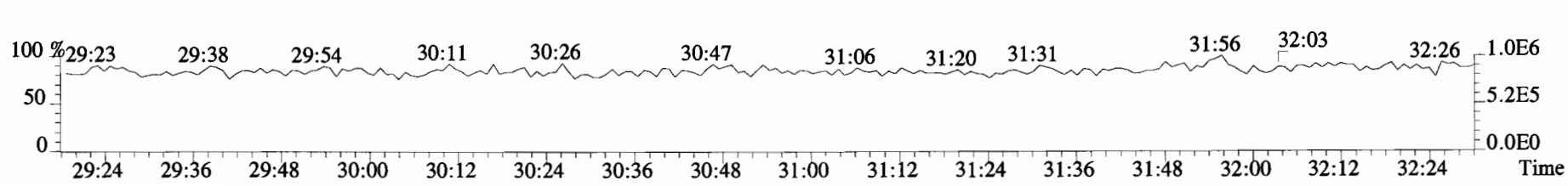
365.8978 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



367.8949 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

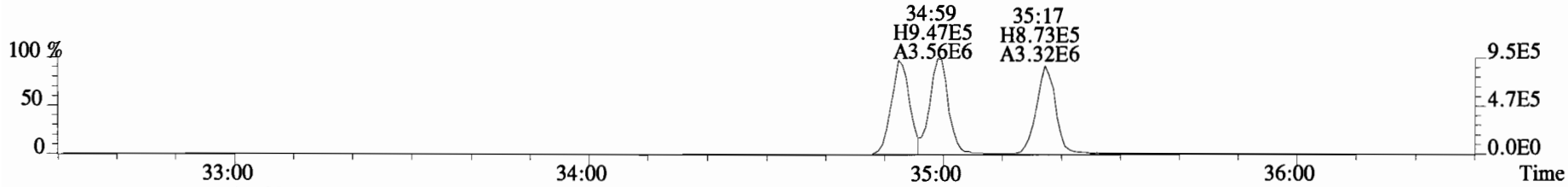


366.9792 S:9 F:2

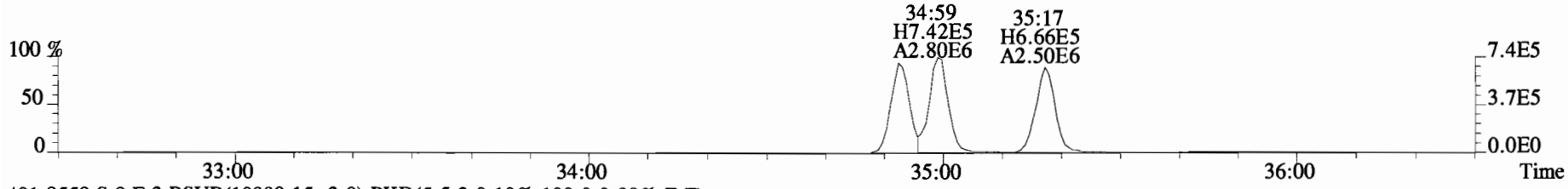


File:141014D1 #1-384 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5

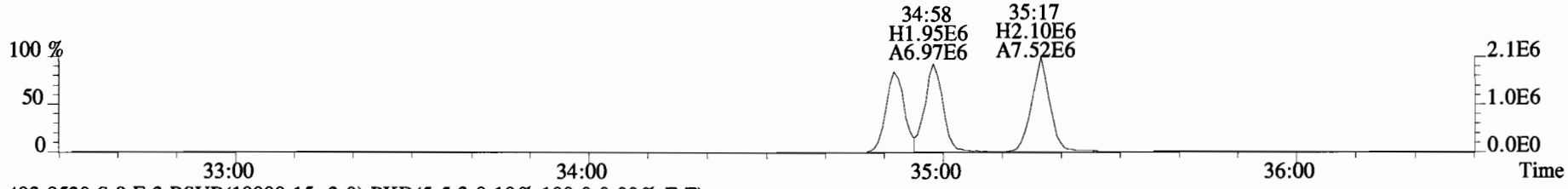
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



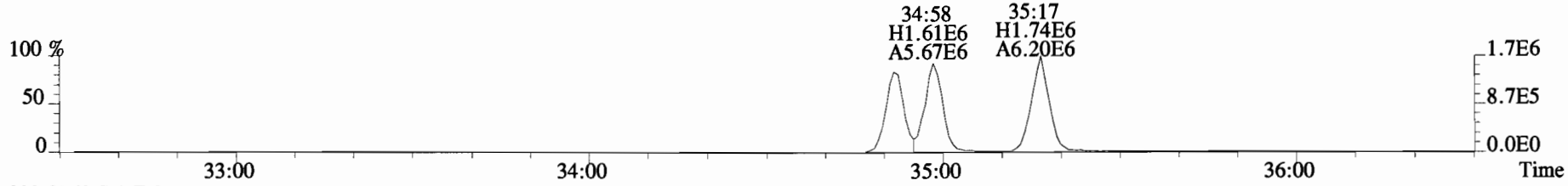
391.8127 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



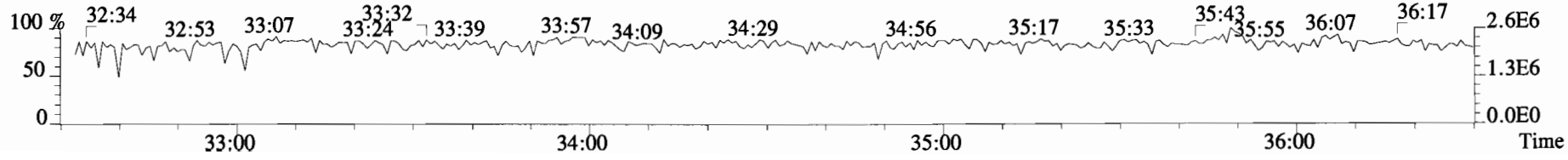
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



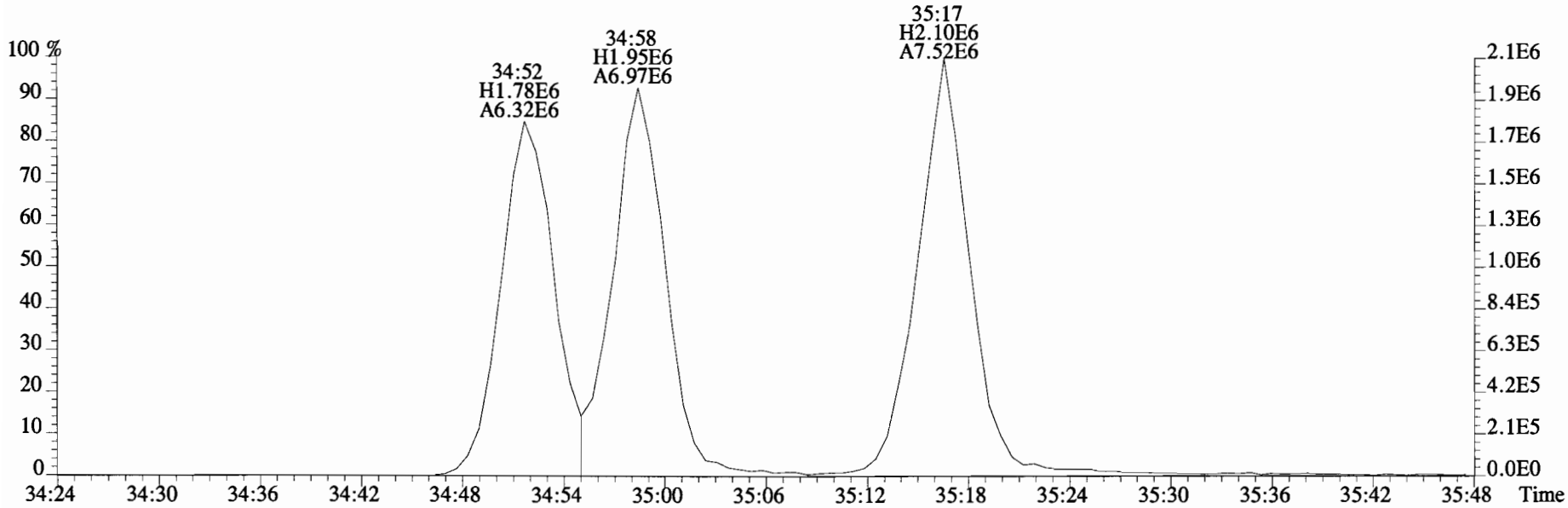
403.8530 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



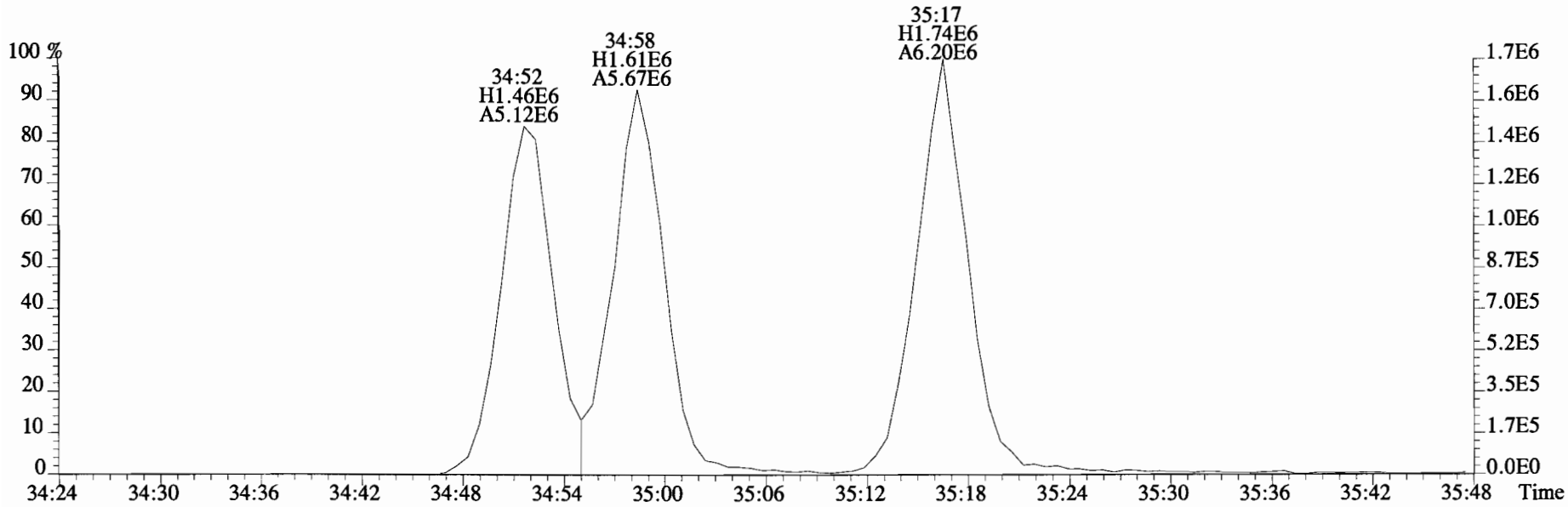
380.9760 S:9 F:3



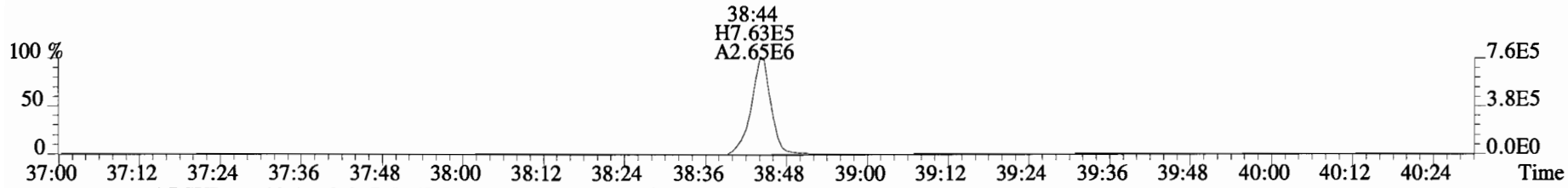
File:141014D1 #1-384 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



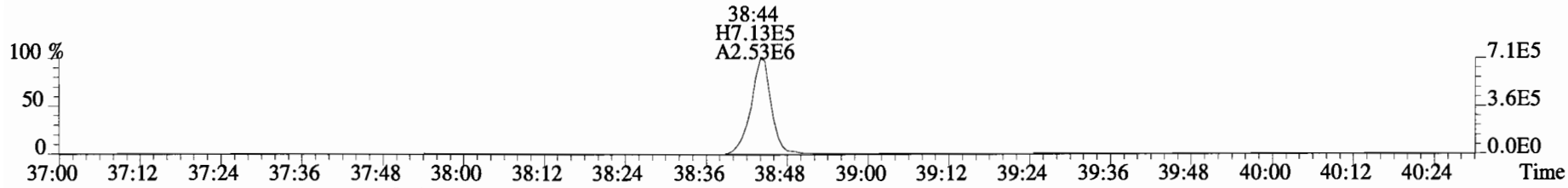
403.8530 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



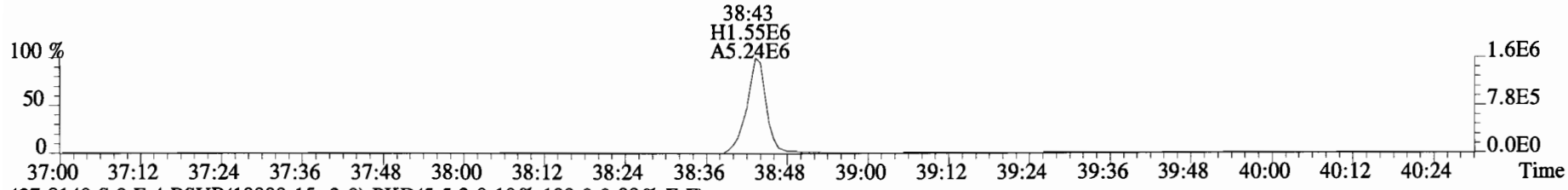
File:141014D1 #1-326 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5
423.7767 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



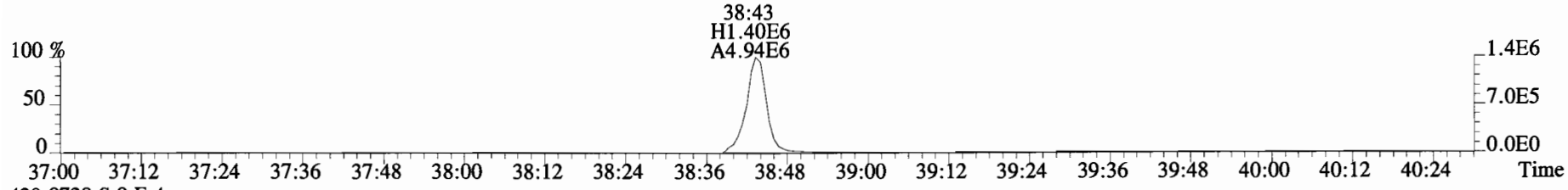
425.7737 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



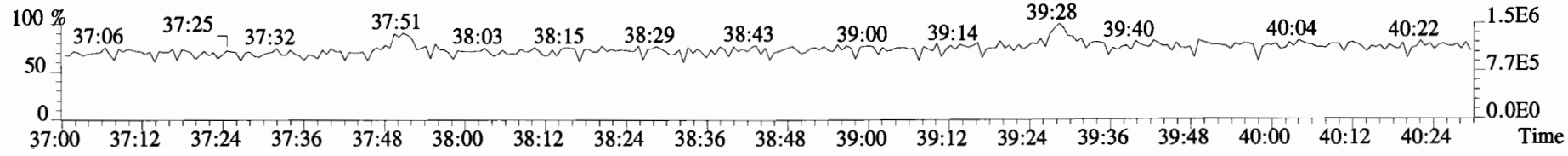
435.8169 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



437.8140 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

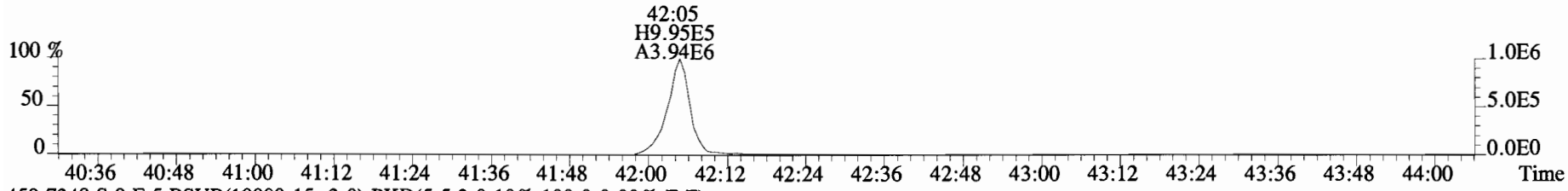


430.9728 S:9 F:4

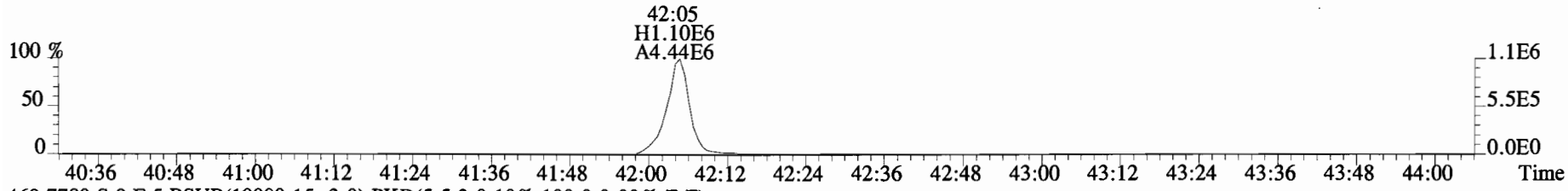


File:141014D1 #1-389 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5

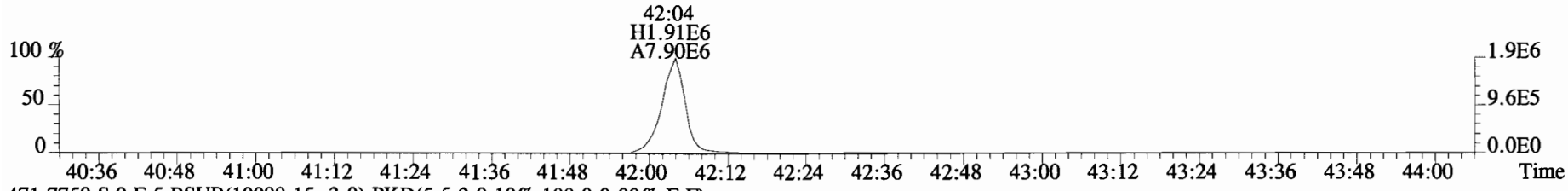
457.7377 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



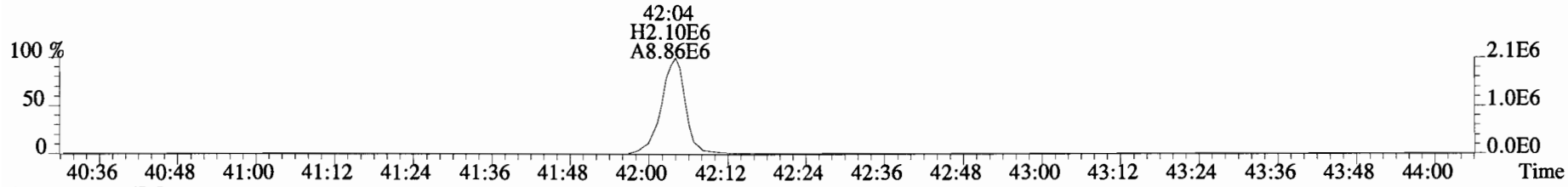
459.7348 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



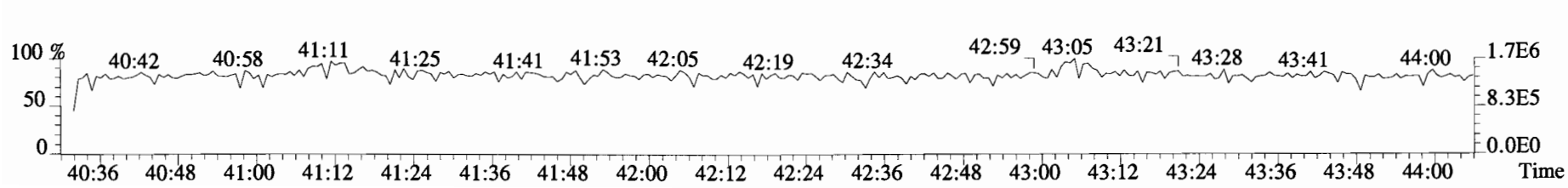
469.7780 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



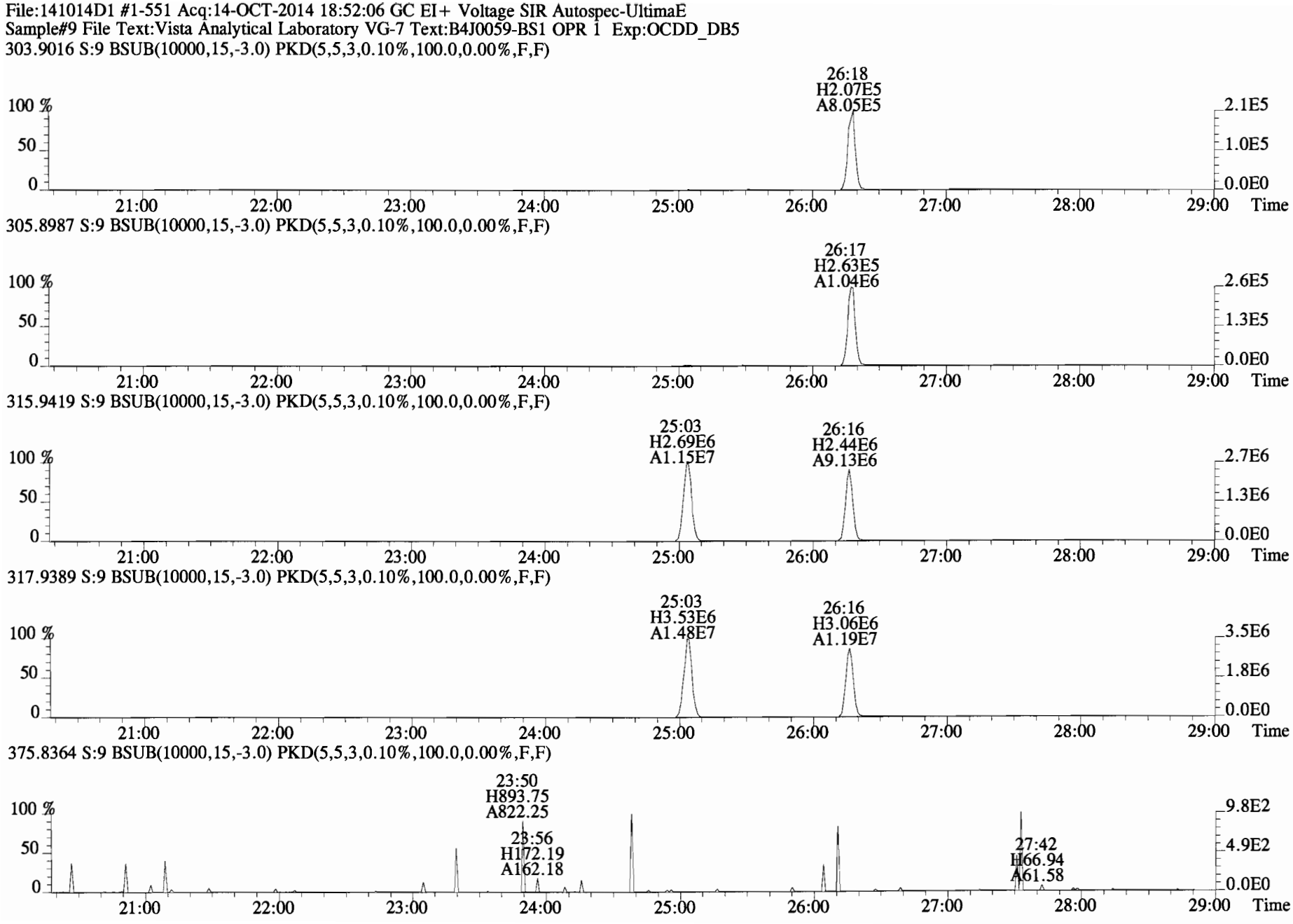
471.7750 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



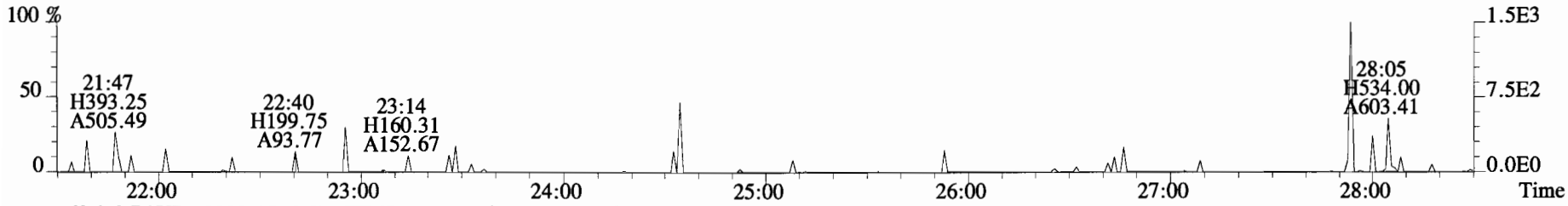
454.9728 S:9 F:5



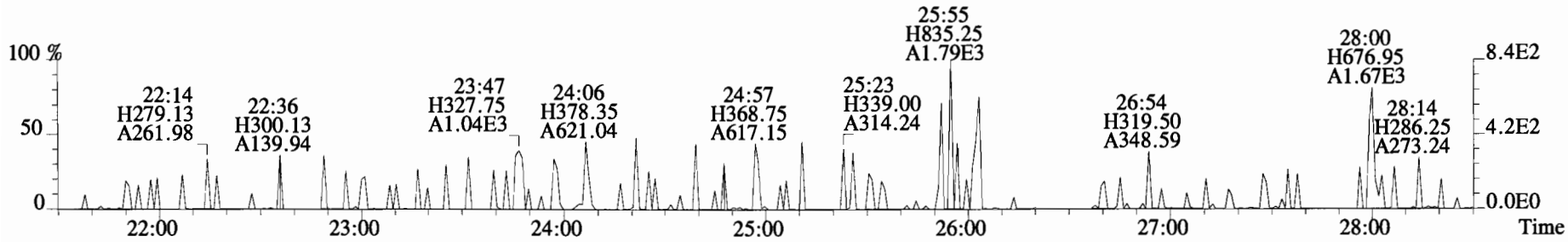
File:141014D1 #1-551 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5



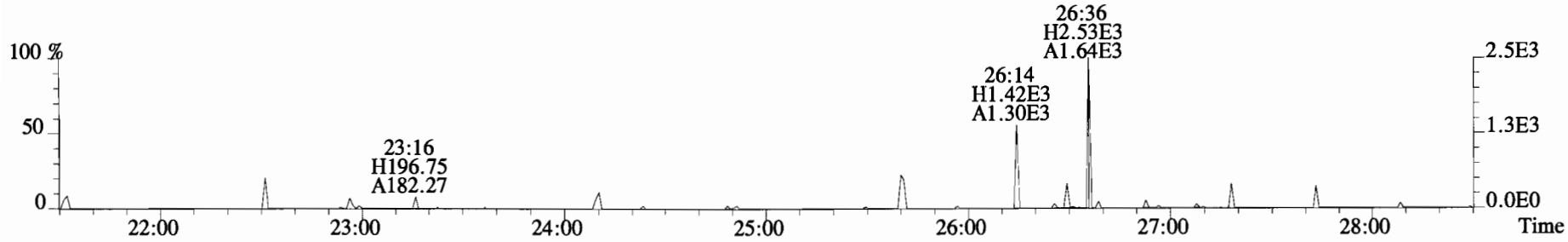
File:141014D1 #1-551 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5
339.8597 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



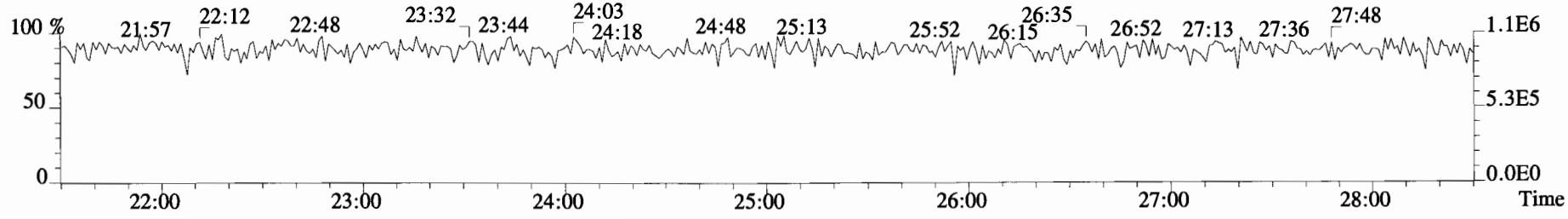
341.8568 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7974 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

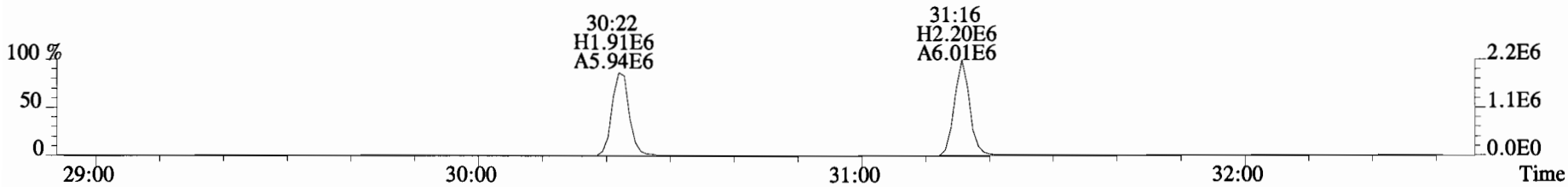


316.9824 S:9

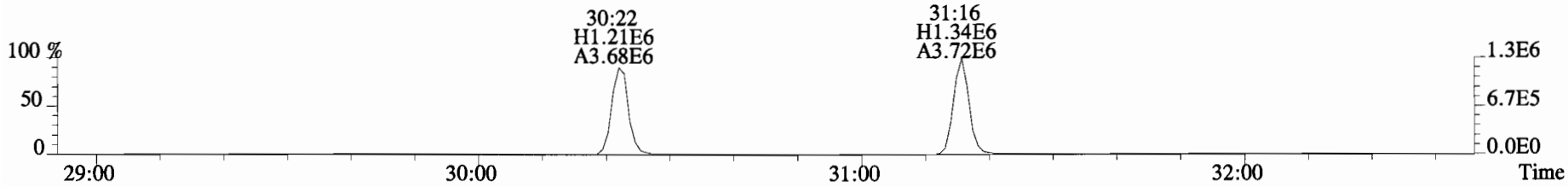


File:141014D1 #1-257 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5

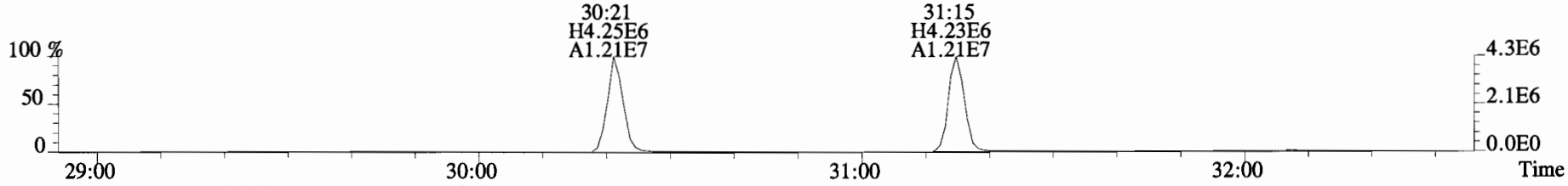
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



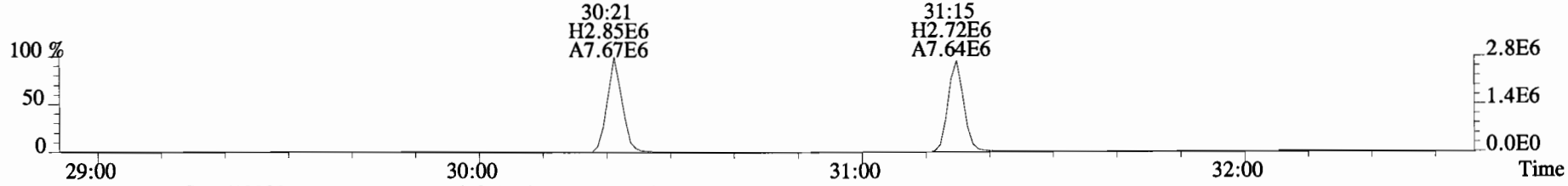
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



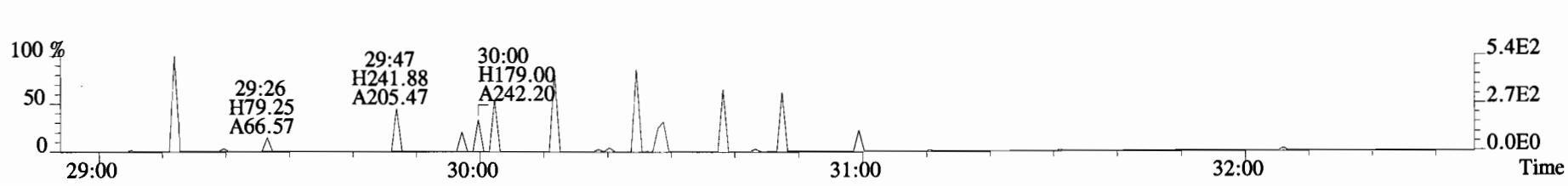
351.9000 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

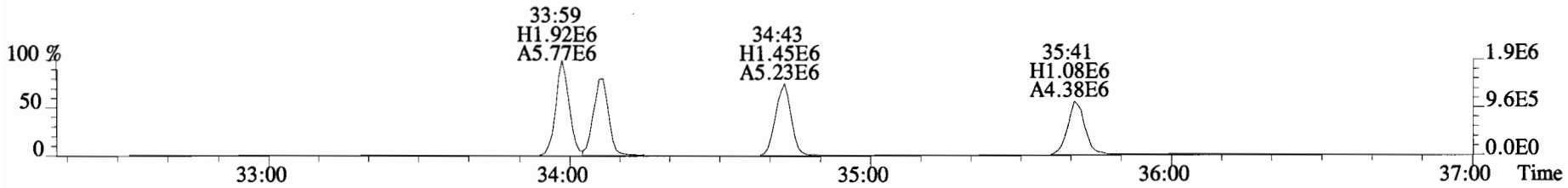


409.7974 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

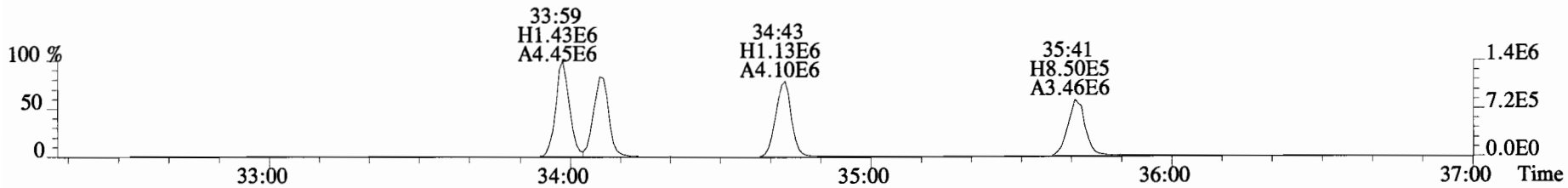


File:141014D1 #1-384 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5

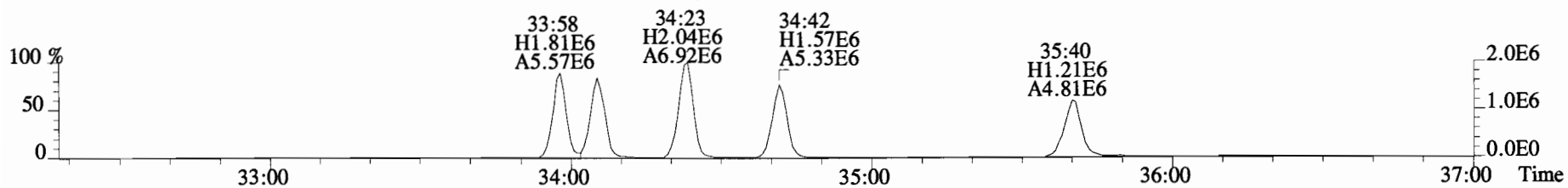
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



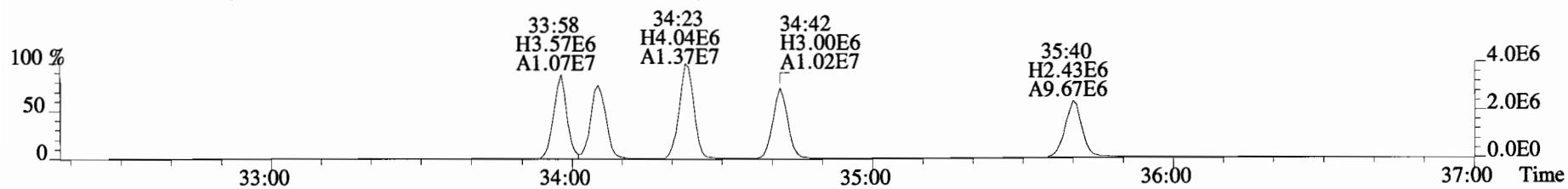
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



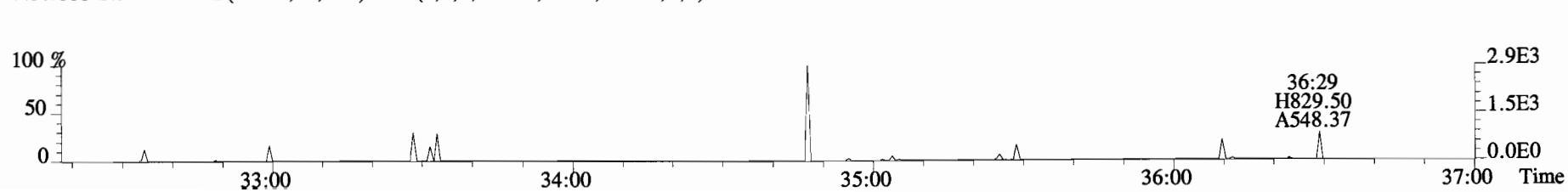
383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

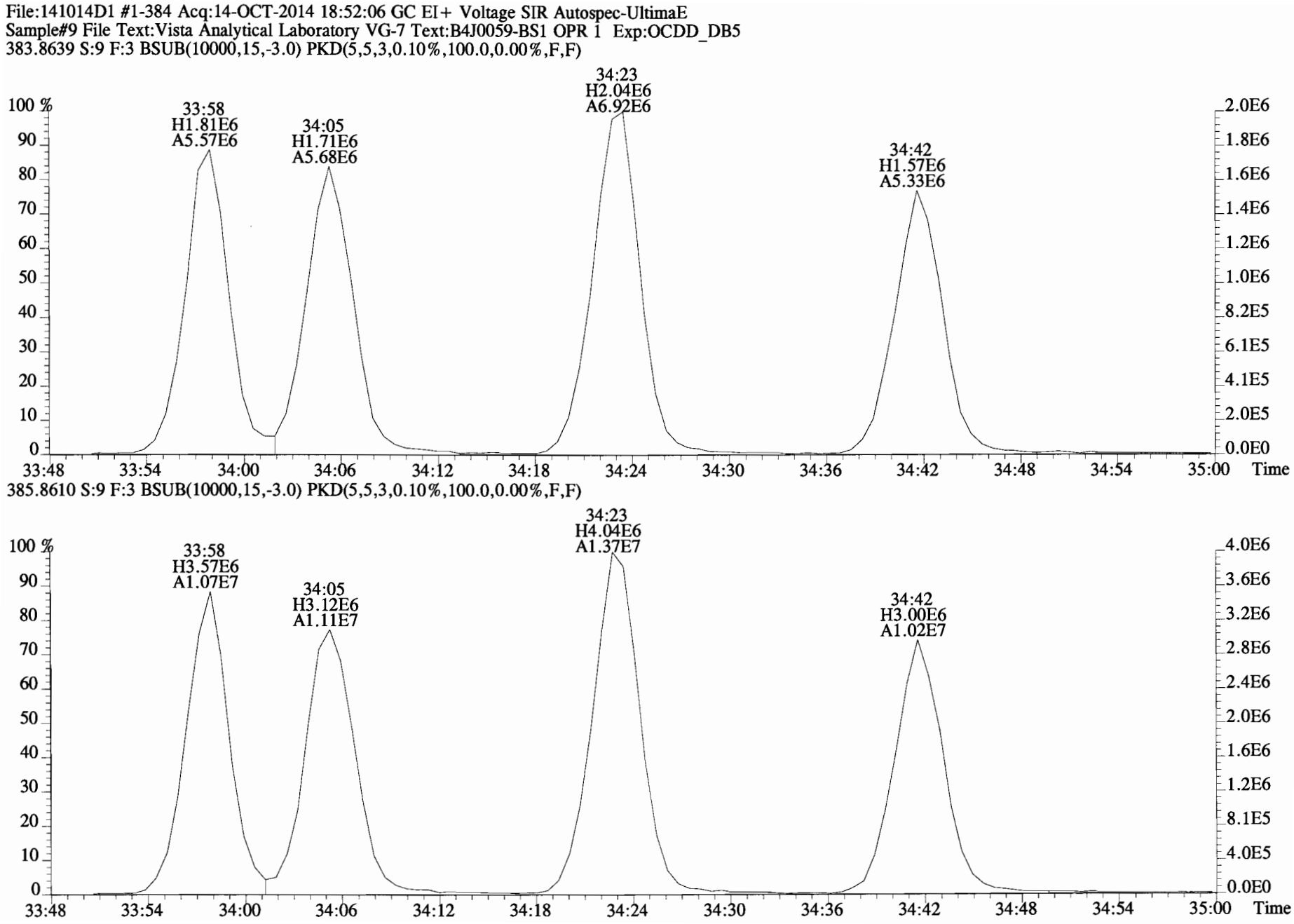


385.8610 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

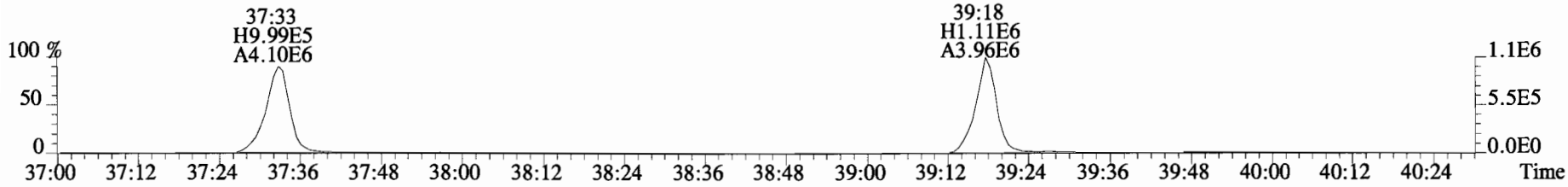


445.7555 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

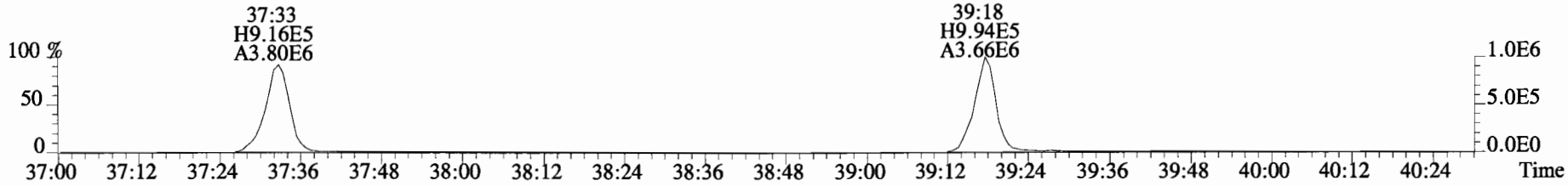



File:141014D1 #1-384 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5
383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:58
H1.81E6
A5.57E6
34:05
H1.71E6
A5.68E6
34:23
H2.04E6
A6.92E6
34:42
H1.57E6
A5.33E6
100 %
90
80
70
60
50
40
30
20
10
0
2.0E6
1.8E6
1.6E6
1.4E6
1.2E6
1.0E6
8.2E5
6.1E5
4.1E5
2.0E5
0.0E0
33:48
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
34:54
35:00
Time
385.8610 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:58
H3.57E6
A1.07E7
34:05
H3.12E6
A1.11E7
34:23
H4.04E6
A1.37E7
34:42
H3.00E6
A1.02E7
100 %
90
80
70
60
50
40
30
20
10
0
4.0E6
3.6E6
3.2E6
2.8E6
2.4E6
2.0E6
1.6E6
1.2E6
8.1E5
4.0E5
0.0E0
33:48
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
34:54
35:00
Time

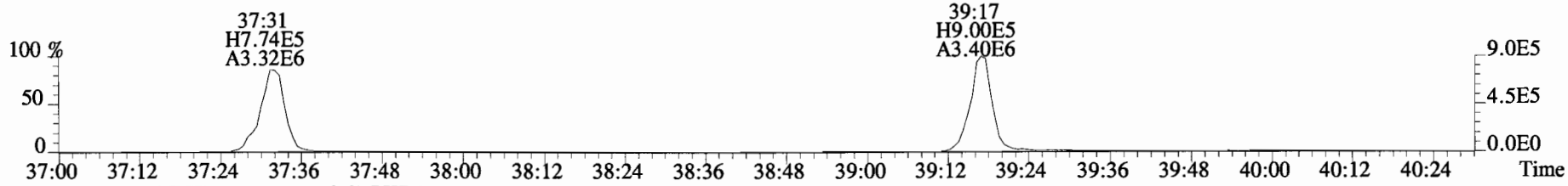
File:141014D1 #1-326 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



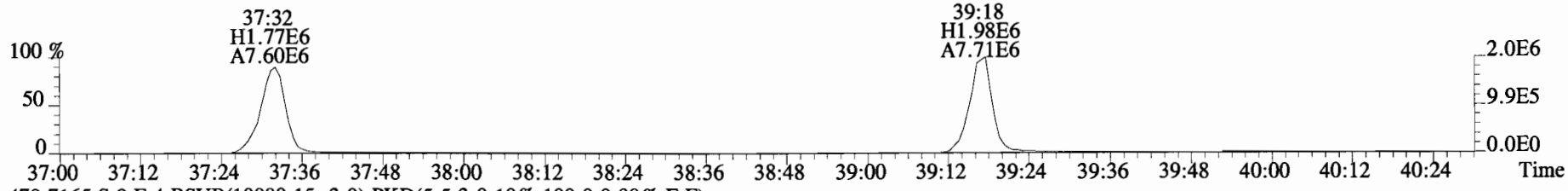
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



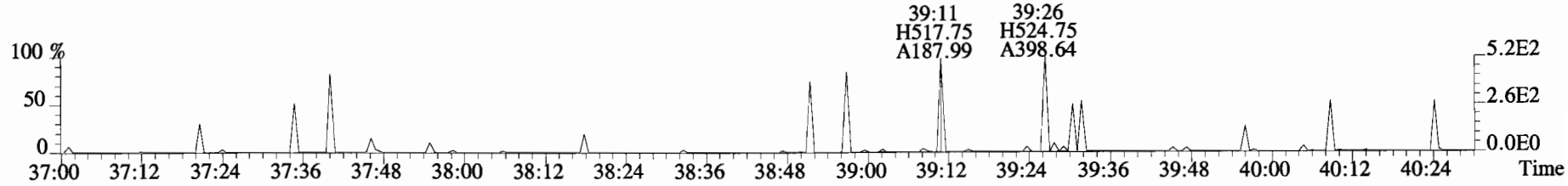
417.8253 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



419.8220 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

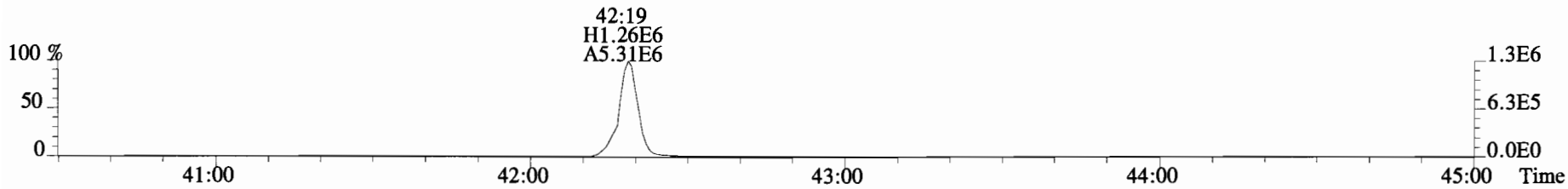


479.7165 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

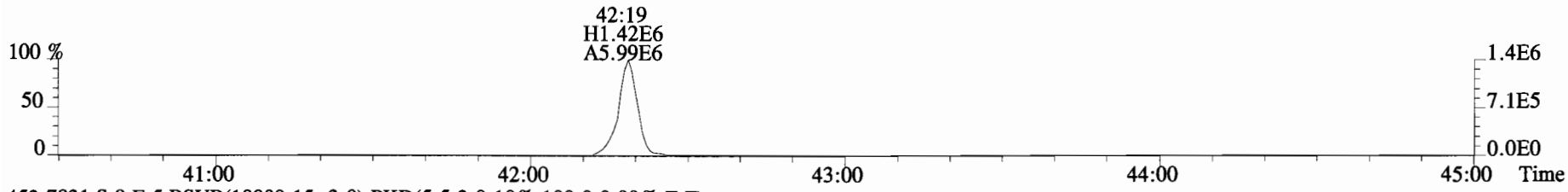


File:141014D1 #1-389 Acq:14-OCT-2014 18:52:06 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:B4J0059-BS1 OPR 1 Exp:OCDD_DB5

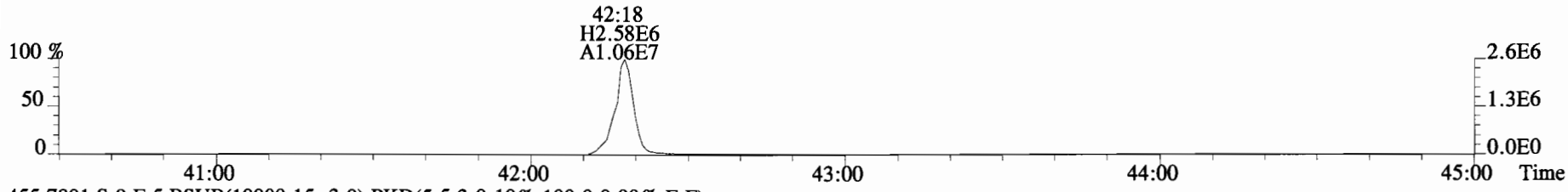
441.7428 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



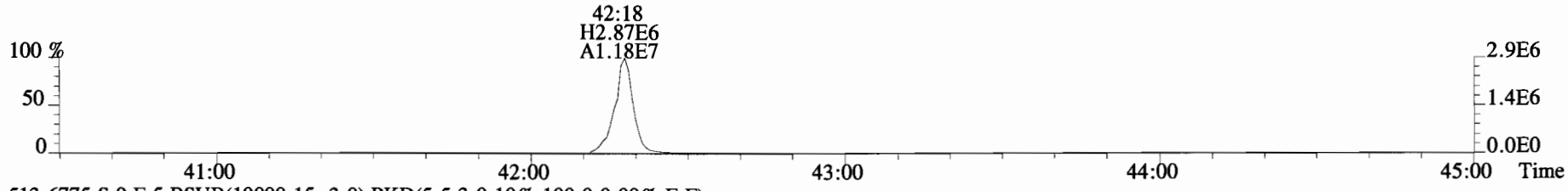
443.7398 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



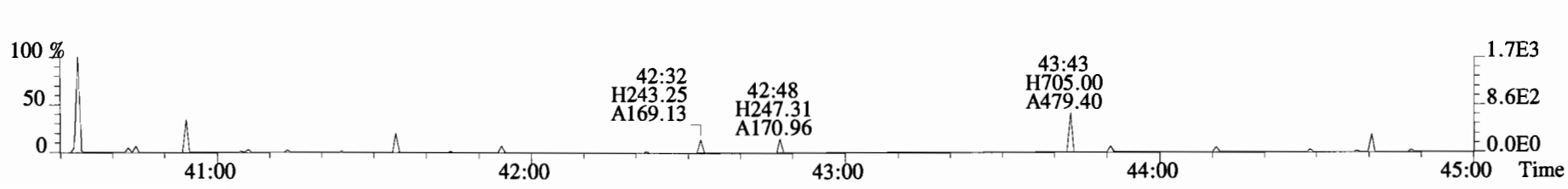
453.7831 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



	Name	Resp	RA		RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	*	*	n	1.03	NotF	*	*		732	2.5	1.63
	1,2,3,7,8-PeCDD	*	*	n	0.84	NotF	*	*		1270	2.5	2.55
	1,2,3,4,7,8-HxCDD	*	*	n	1.05	NotF	*	*		2330	1.0	3.23
	1,2,3,6,7,8-HxCDD	5.93e+04	1.07	y	1.04	34:59	1.000	10.883		*	2.5	*
	1,2,3,7,8,9-HxCDD	2.37e+04	1.86	n	0.90	35:17	1.000	4.1201		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	9.90e+05	1.05	y	1.01	38:44	1.000	205.99		*	2.5	*
	OCDD	6.33e+06	0.88	y	1.04	42:04	1.000	1276.0		*	2.5	*
	2,3,7,8-TCDF	*	*	n	0.91	NotF	*	*		605	2.5	1.17
	1,2,3,7,8-PeCDF	*	*	n	0.97	NotF	*	*		782	2.5	1.79
	2,3,4,7,8-PeCDF	*	*	n	0.94	NotF	*	*		1290	1.0	1.09
	1,2,3,4,7,8-HxCDF	1.09e+04	0.71	n	1.32	33:58	1.000	1.1982		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.04e+04	1.59	n	1.18	34:06	1.000	1.2319		*	2.5	*
	2,3,4,6,7,8-HxCDF	2.04e+04	1.13	y	1.23	34:43	1.001	2.3473		*	2.5	*
	1,2,3,7,8,9-HxCDF	*	*	n	1.13	NotF	*	*		577	2.5	1.20
	1,2,3,4,6,7,8-HpCDF	2.76e+05	1.19	y	1.57	37:32	1.000	33.083		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	1.30e+04	1.08	y	1.50	39:17	1.000	1.7056		*	2.5	*
	OCDF	4.64e+05	0.96	y	1.05	42:18	1.000	75.123		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.38e+07	0.78	y	1.06	27:02	1.021	1602.5				
IS	13C-1,2,3,7,8-PeCDD	1.39e+07	0.63	y	1.08	31:31	1.191	1591.9				
IS	13C-1,2,3,4,7,8-HxCDD	1.01e+07	1.29	y	0.74	34:52	1.014	1508.7				
IS	13C-1,2,3,6,7,8-HxCDD	1.05e+07	1.26	y	0.75	34:59	1.017	1543.6				
IS	13C-1,2,3,7,8,9-HxCDD	1.28e+07	1.26	y	0.89	35:17	1.026	1588.1				
IS	13C-1,2,3,4,6,7,8-HpCDD	9.50e+06	1.05	y	0.70	38:43	1.126	1494.6				
IS	13C-OCDD	1.90e+07	0.89	y	0.59	42:03	1.223	3562.3				
IS	13C-2,3,7,8-TCDF	1.92e+07	0.76	y	0.97	26:16	0.992	1681.1				
IS	13C-1,2,3,7,8-PeCDF	1.76e+07	1.58	y	0.99	30:21	1.147	1507.1				
IS	13C-2,3,4,7,8-PeCDF	1.77e+07	1.56	y	1.01	31:15	1.180	1494.4				
IS	13C-1,2,3,4,7,8-HxCDF	1.37e+07	0.51	y	0.94	33:58	0.988	1613.7				
IS	13C-1,2,3,6,7,8-HxCDF	1.43e+07	0.52	y	1.23	34:05	0.991	1289.5				
IS	13C-2,3,4,6,7,8-HxCDF	1.41e+07	0.51	y	1.03	34:42	1.009	1511.2				
IS	13C-1,2,3,7,8,9-HxCDF	1.20e+07	0.52	y	0.89	35:40	1.037	1499.6				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.06e+07	0.44	y	0.71	37:32	1.091	1658.7				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.01e+07	0.44	y	0.64	39:17	1.142	1743.3				
IS	13C-OCDF	2.34e+07	0.91	y	0.76	42:17	1.230	3407.4				
C/Up	37Cl-2,3,7,8-TCDD	6.68e+06			1.04	27:03	1.022	791.29				
RS/RT	13C-1,2,3,4-TCDD	1.61e+07	0.79	y	1.00	26:28	*	1995.4				
RS	13C-1,2,3,4-TCDF	2.35e+07	0.76	y	1.00	25:03	*	1995.4				
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.80e+07	0.51	y	1.00	34:23	*	1995.4				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		732	1.63
Total Penta-Dioxins	*	*		1270	2.55
Total Hexa-Dioxins	27.9	39.0		*	*
Total Hepta-Dioxins	352	352		*	*
Total Tetra-Furans	*	*		605	1.17
Total Penta-Furans	6.5008	6.5008		*	*
Total Hexa-Furans	45.4	47.9		*	*
Total Hepta-Furans	89.6	89.6		*	*

	Rec	Qual
IS	80.3	
IS	79.8	
IS	75.6	
IS	77.4	
IS	79.6	
IS	74.9	
IS	89.3	
IS	84.2	
IS	75.5	
IS	74.9	
IS	80.9	
IS	64.6	
IS	75.7	
IS	75.2	
IS	83.1	
IS	87.4	
IS	85.4	
C/Up	99.1	

Integrations by Analyst: M Date: 10/17/14

Reviewed by Analyst: Date: 10/29/14

Totals class: HxCDD EMPC Entry #: 23

Run: 12 File: 141014D2 S: 7 I: 1 F: 3
Acquired: 15-OCT-14 07:12:17 Processed: 15-OCT-14 09:16:19

Total Concentration: 39.049 Unnamed Concentration: 24.046

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
33:19	2.572e+04	1.730e+04	1.49	n	3.874e+04	7.0261	
34:09	5.141e+04	4.244e+04	1.21	y	9.385e+04	17.019	
34:59	3.061e+04	2.866e+04	1.07	y	5.927e+04	10.883	1,2,3,6,7,8-HxCDD
35:17	1.963e+04	1.057e+04	1.86	n	2.367e+04	4.1201	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 12 File: 141014D2 S: 7 I: 1 F: 4
Acquired: 15-OCT-14 07:12:17 Processed: 15-OCT-14 09:16:19

Total Concentration: 352.31 Unnamed Concentration: 146.325

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:54	3.488e+05	3.546e+05	0.98	y	7.033e+05	146.33	
38:44	5.060e+05	4.841e+05	1.05	y	9.901e+05	205.99	1,2,3,4,6,7,8-HpCDD

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

Run: 12 File: 141014D2 S: 7 I: 1 F: 1
Acquired: 15-OCT-14 07:12:17 Processed: 15-OCT-14 09:16:19

Total Concentration: 6.5008 Unnamed Concentration: 6.501

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
28:01	3.199e+04	2.299e+04	1.39	y	5.498e+04	6.5008	

Totals class: HxCDF EMPC Entry #: 33

Run: 12 File: 141014D2 S: 7 I: 1 F: 3
Acquired: 15-OCT-14 07:12:17 Processed: 15-OCT-14 09:16:19

Total Concentration: 47.856 Unnamed Concentration: 43.079

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
32:46	3.081e+04	2.342e+04	1.32	y	5.422e+04	6.5897	
32:56	9.101e+04	7.657e+04	1.19	y	1.676e+05	20.366	
33:29	7.665e+04	5.602e+04	1.37	y	1.327e+05	16.123	
33:58	6.019e+03	8.480e+03	0.71	n	1.087e+04	1.1982	1,2,3,4,7,8-HxCDF
34:06	7.359e+03	4.640e+03	1.59	n	1.039e+04	1.2319	1,2,3,6,7,8-HxCDF
34:43	1.085e+04	9.570e+03	1.13	y	2.042e+04	2.3473	2,3,4,6,7,8-HxCDF

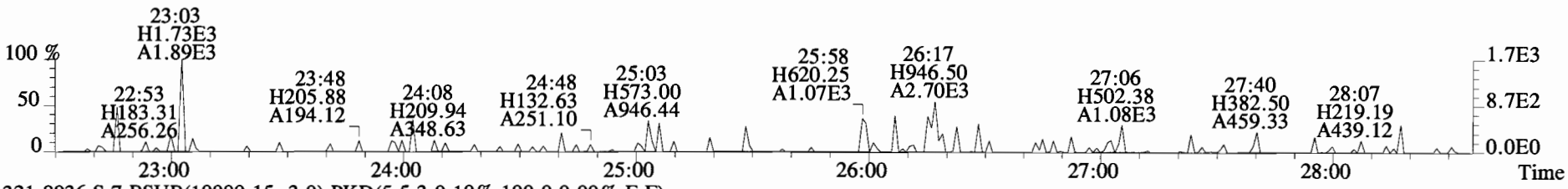
Totals class: HpCDF EMPC Entry #: 35

Run: 12 File: 141014D2 S: 7 I: 1 F: 4
Acquired: 15-OCT-14 07:12:17 Processed: 15-OCT-14 09:16:19

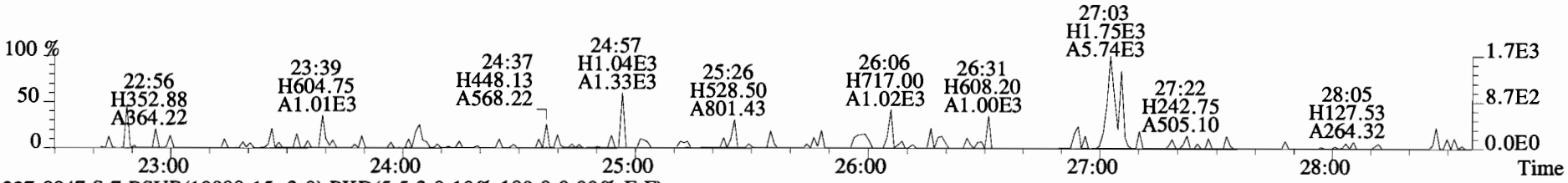
Total Concentration: 89.567 Unnamed Concentration: 54.779

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:32	1.501e+05	1.263e+05	1.19	y	2.764e+05	33.083	1,2,3,4,6,7,8-HpCDF
38:06	2.206e+05	2.175e+05	1.01	y	4.381e+05	54.779	
39:17	6.757e+03	6.258e+03	1.08	y	1.301e+04	1.7056	1,2,3,4,7,8,9-HpCDF

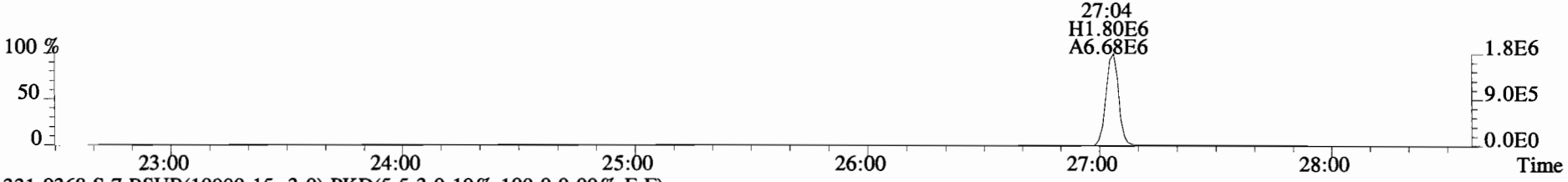
File:141014D2 #1-551 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



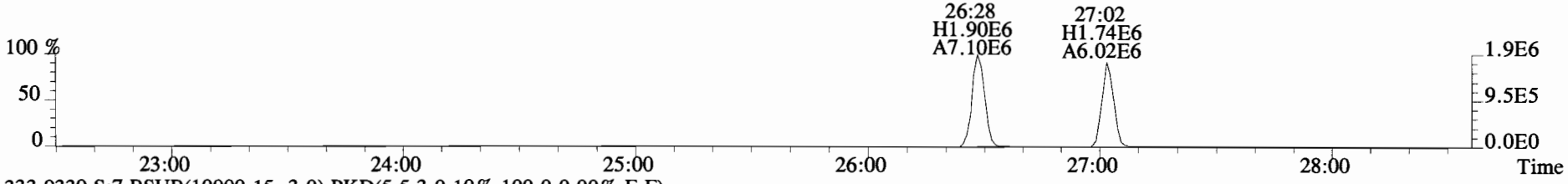
321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



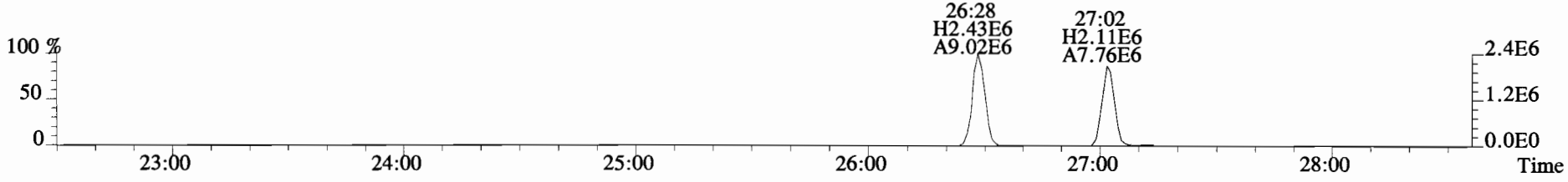
327.8847 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



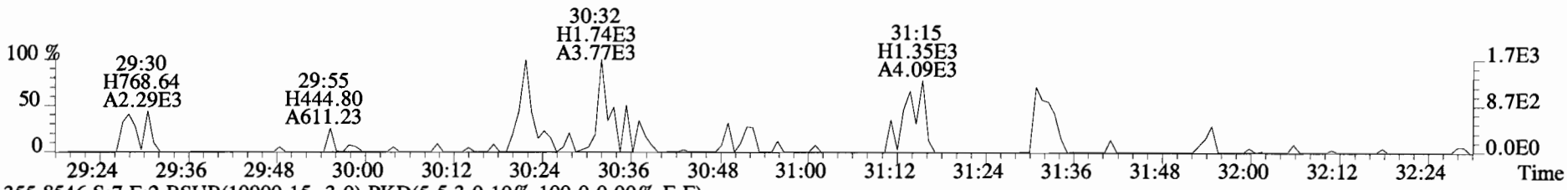
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



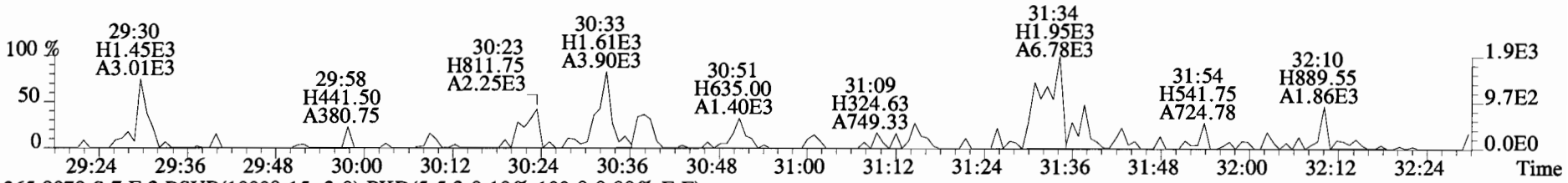
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



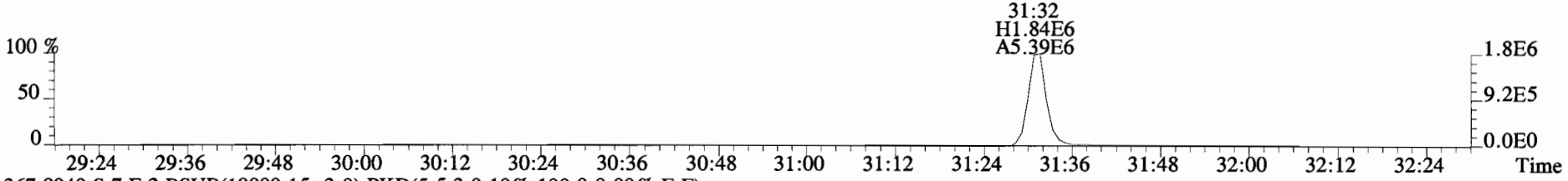
File:141014D2 #1-257 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
353.8576 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



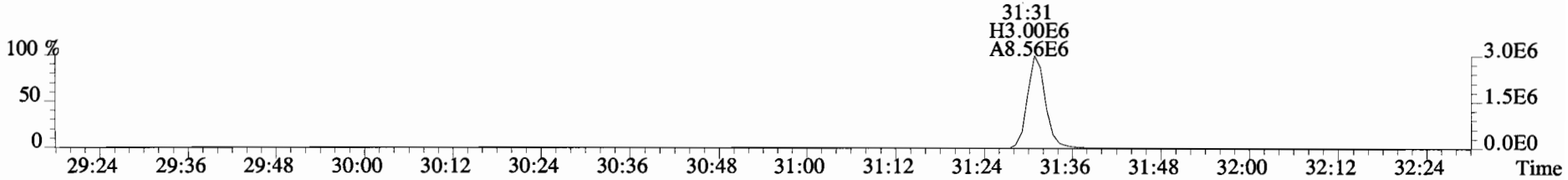
355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



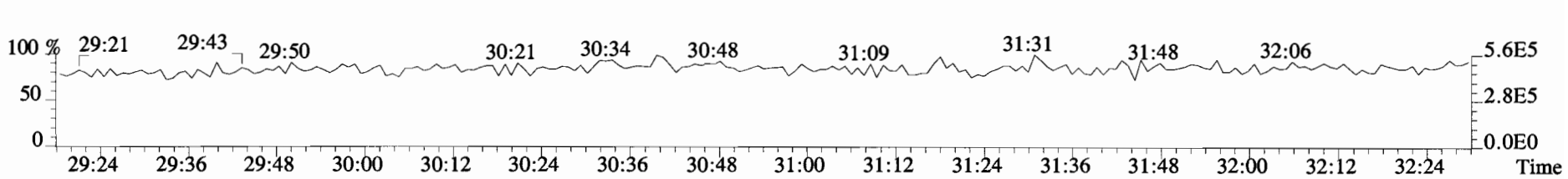
365.8978 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

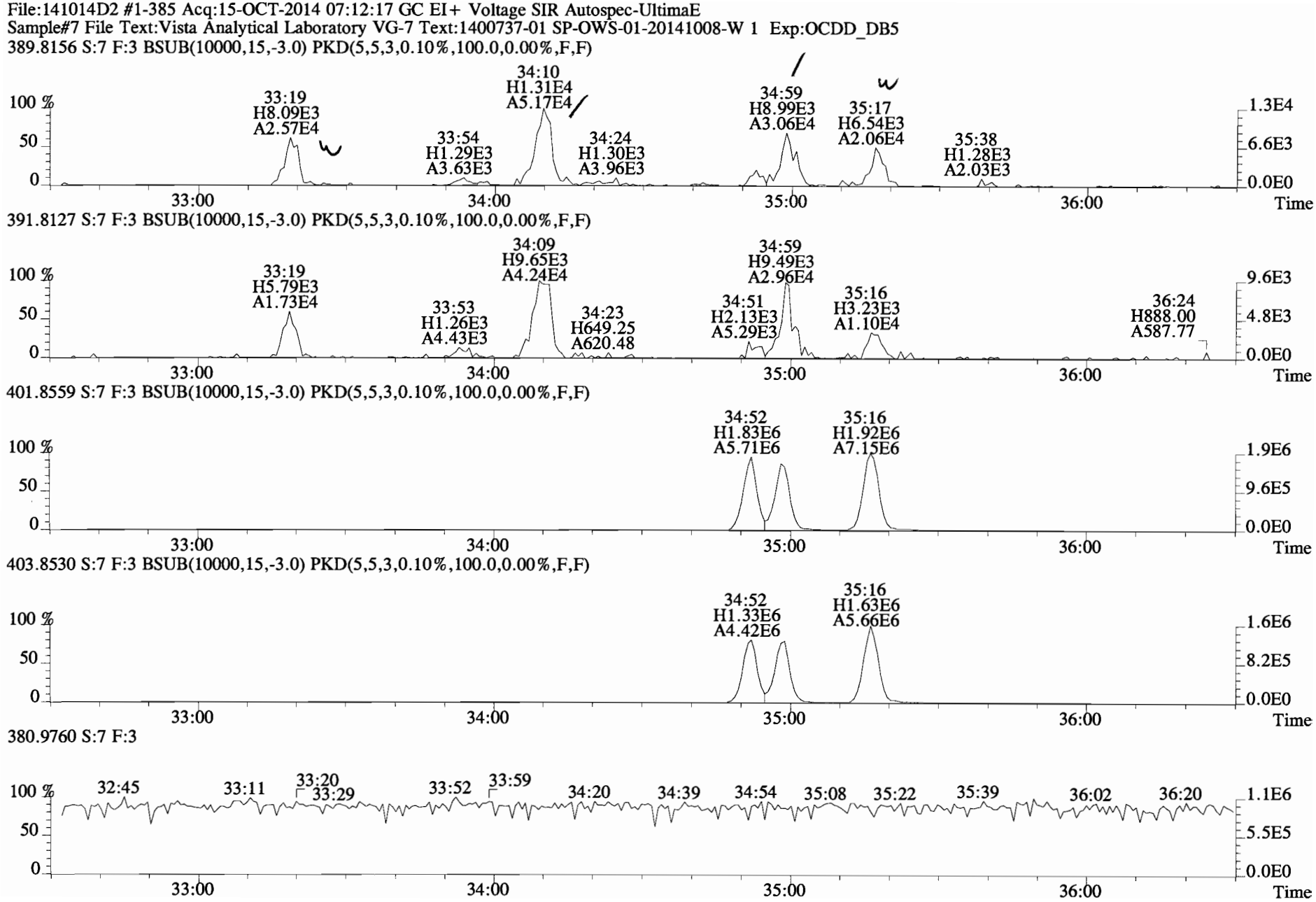


367.8949 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

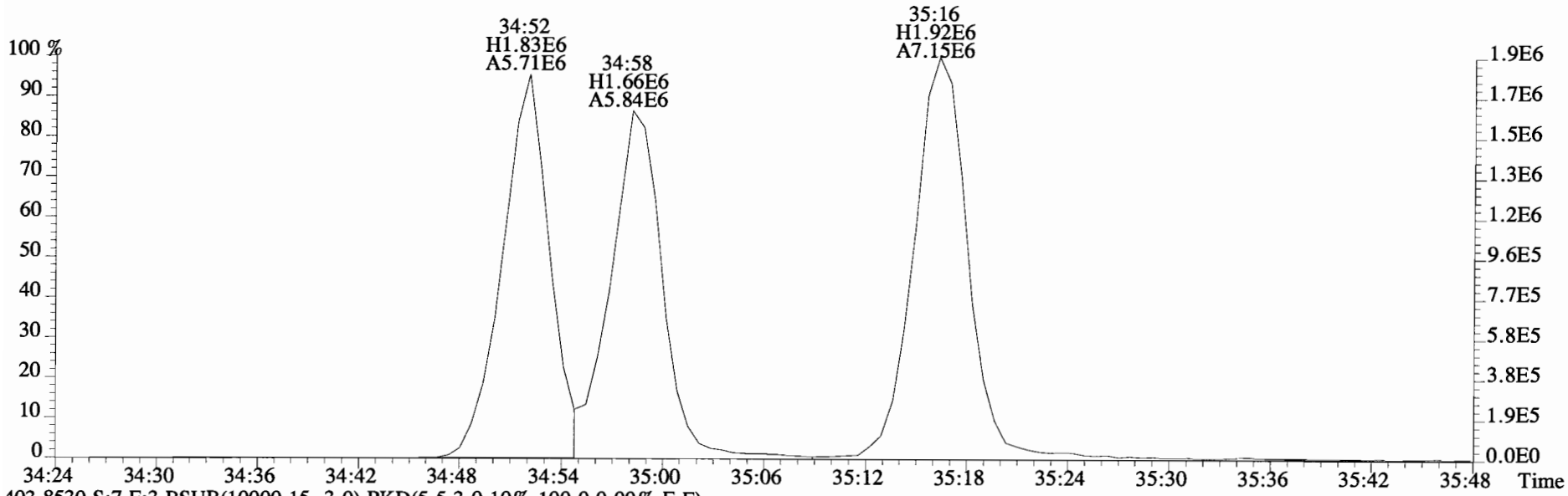


366.9792 S:7 F:2

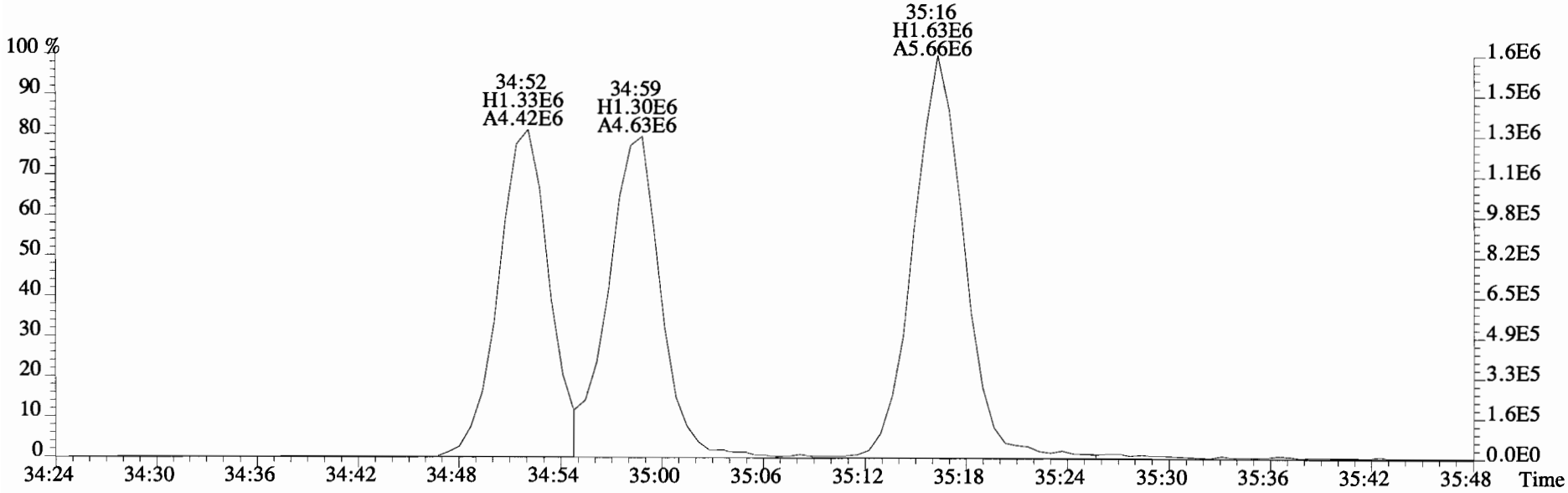



File:141014D2 #1-385 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:19 H8.09E3 A2.57E4
33:54 H1.29E3 A3.63E3
34:10 H1.31E4 A5.17E4
34:24 H1.30E3 A3.96E3
34:59 H8.99E3 A3.06E4
35:17 H6.54E3 A2.06E4
35:38 H1.28E3 A2.03E3
391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:19 H5.79E3 A1.73E4
33:53 H1.26E3 A4.43E3
34:09 H9.65E3 A4.24E4
34:23 H649.25 A620.48
34:51 H2.13E3 A5.29E3
34:59 H9.49E3 A2.96E4
35:16 H3.23E3 A1.10E4
36:24 H888.00 A587.77
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:52 H1.83E6 A5.71E6
35:16 H1.92E6 A7.15E6
403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:52 H1.33E6 A4.42E6
35:16 H1.63E6 A5.66E6
380.9760 S:7 F:3
32:45
33:11
33:20
33:29
33:52
33:59
34:20
34:39
34:54
35:08
35:22
35:39
36:02
36:20
100 %
50
0
33:00
34:00
35:00
36:00
Time
1.3E4
6.6E3
0.0E0
9.6E3
4.8E3
1.9E6
9.6E5
1.6E6
8.2E5
1.1E6
5.5E5

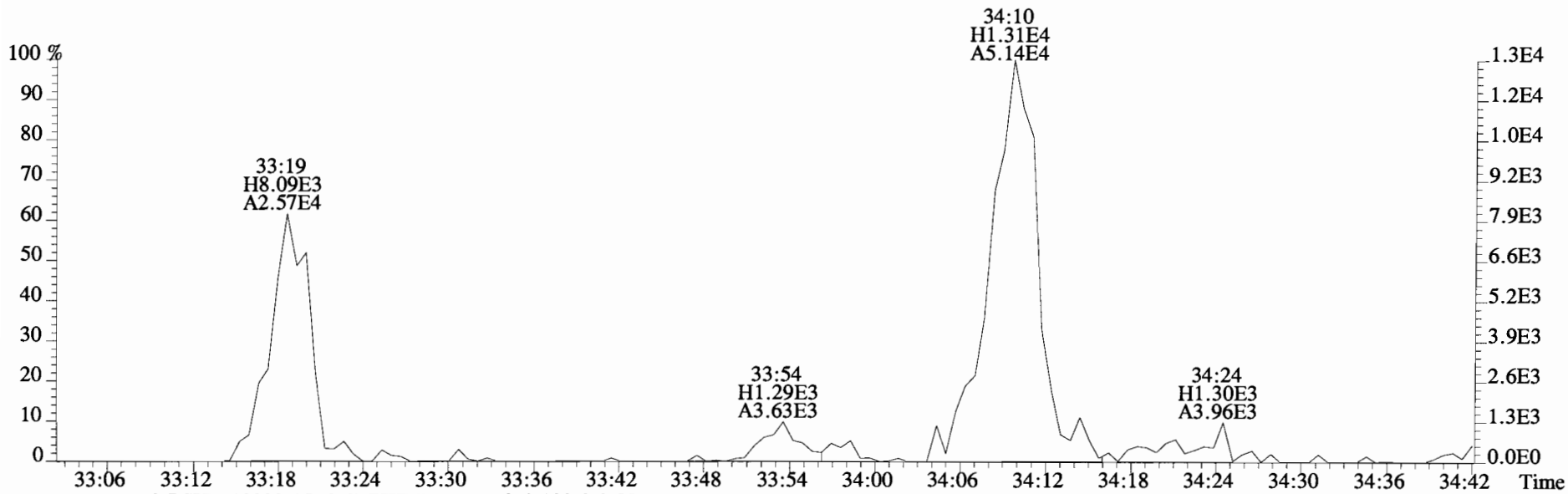
File:141014D2 #1-385 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



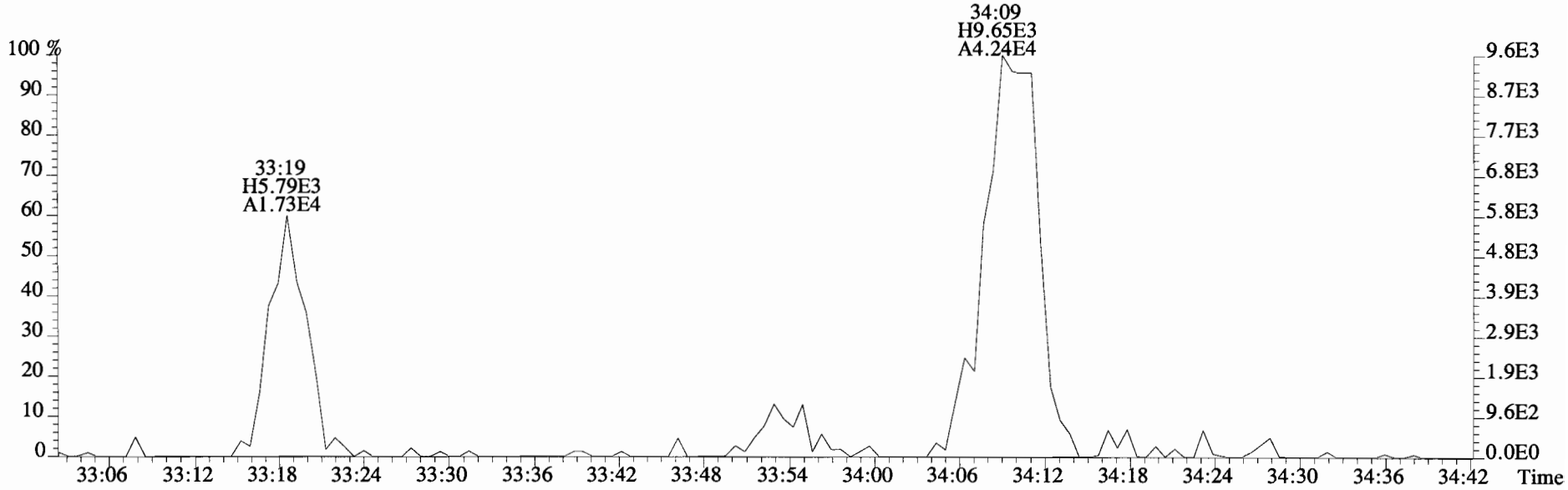
403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



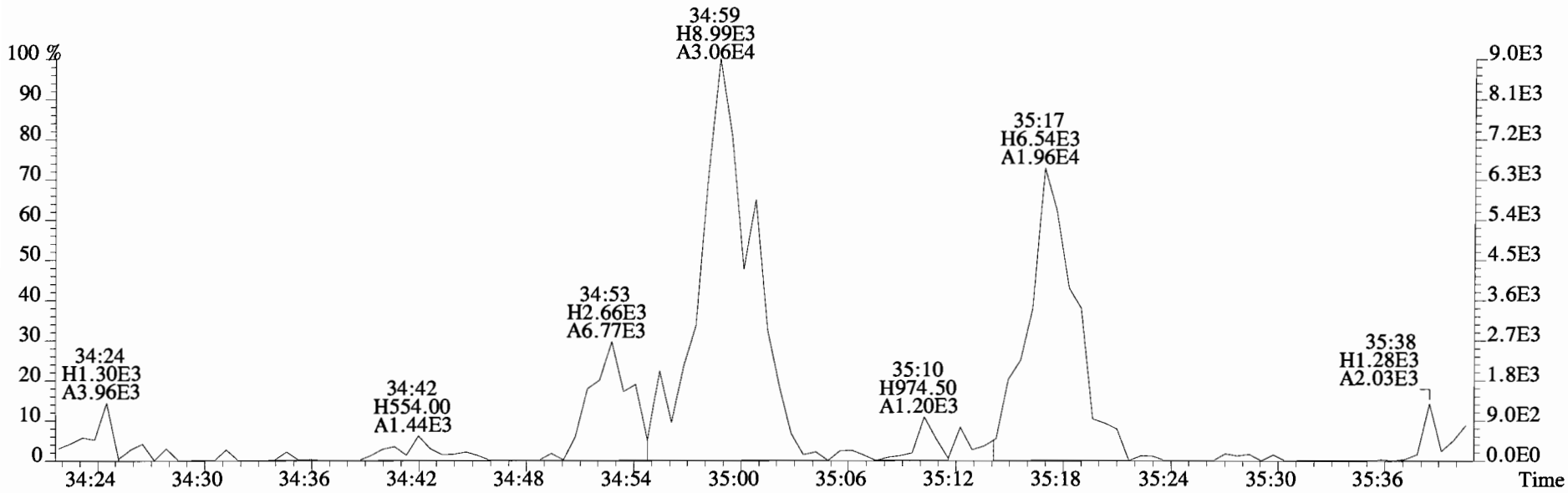
File:141014D2 #1-385 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



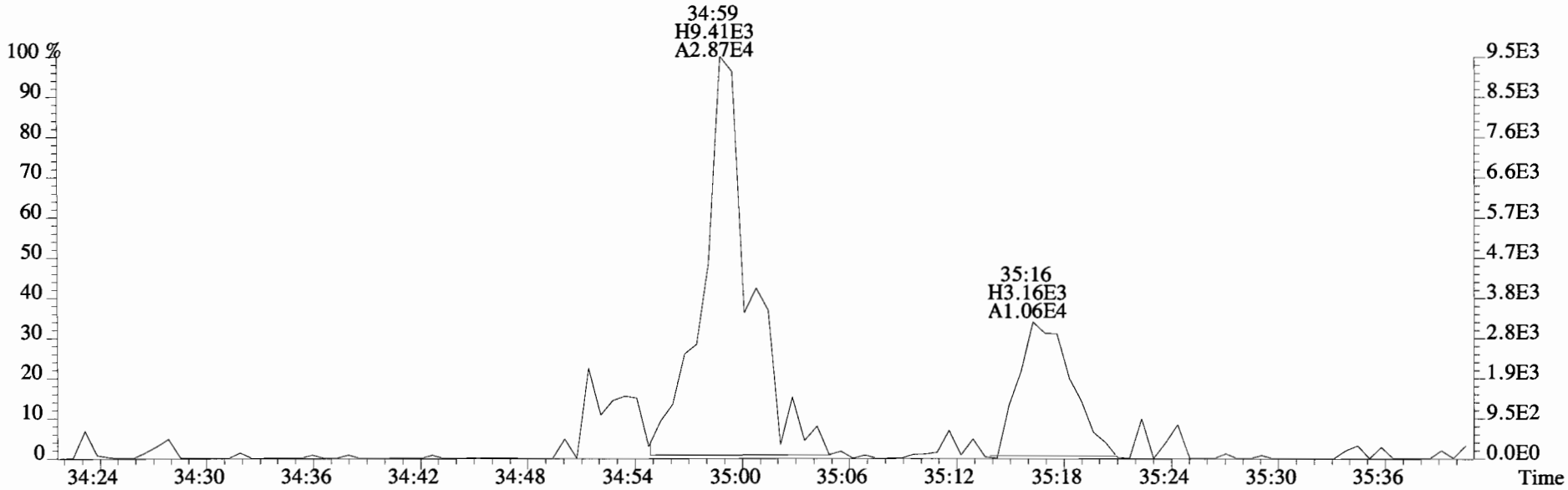
391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

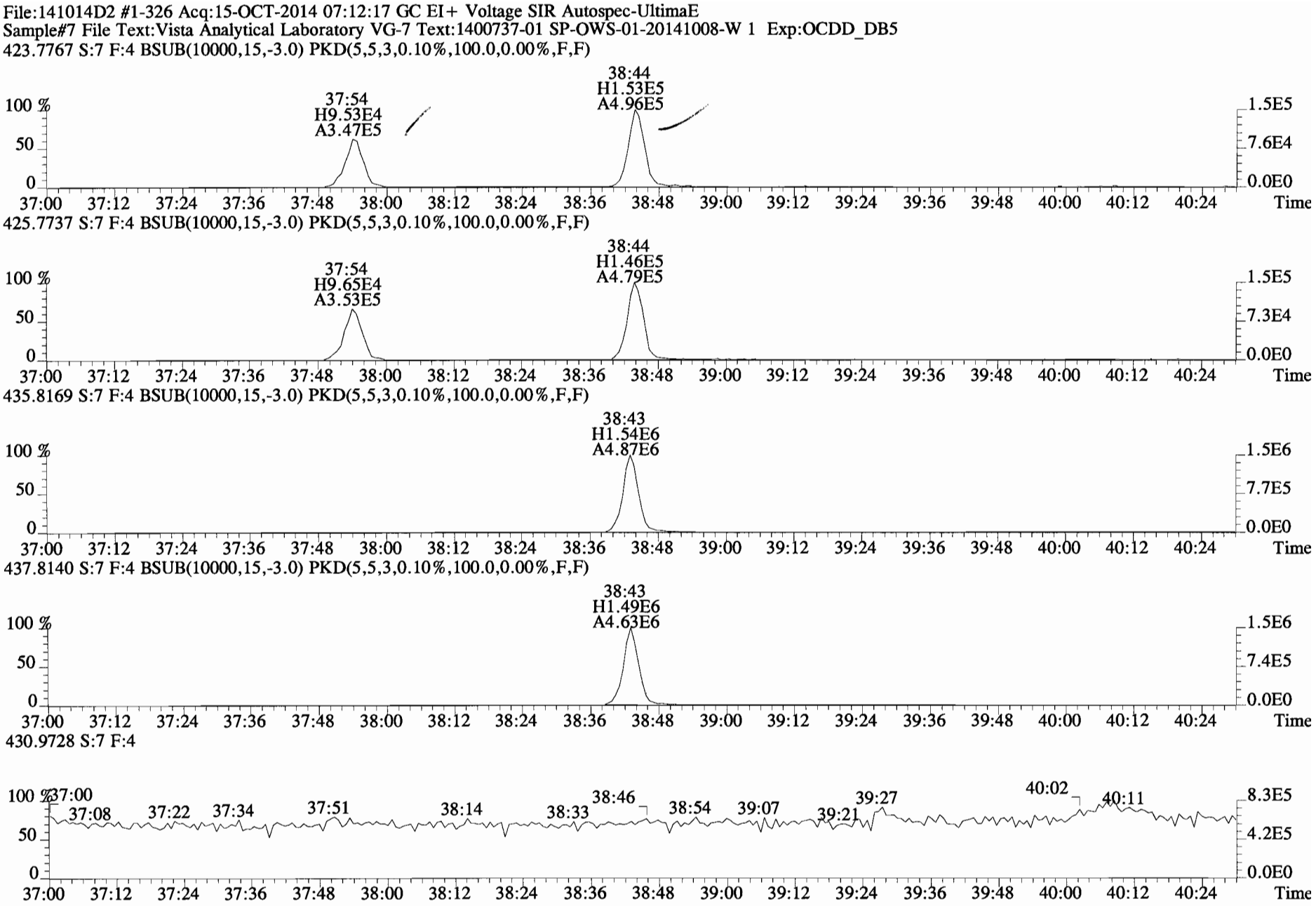


File:141014D2 #1-385 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
389.8156 S:7 F:3 BSUB(10000,15,-3.0)

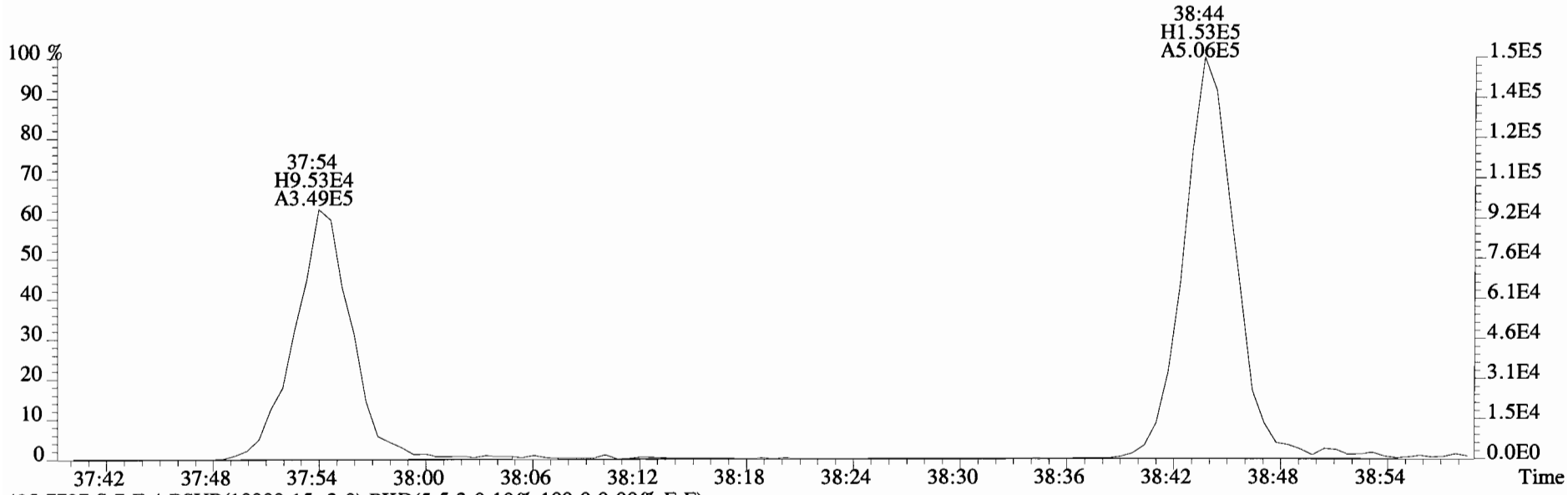


391.8127 S:7 F:3 BSUB(10000,15,-3.0)

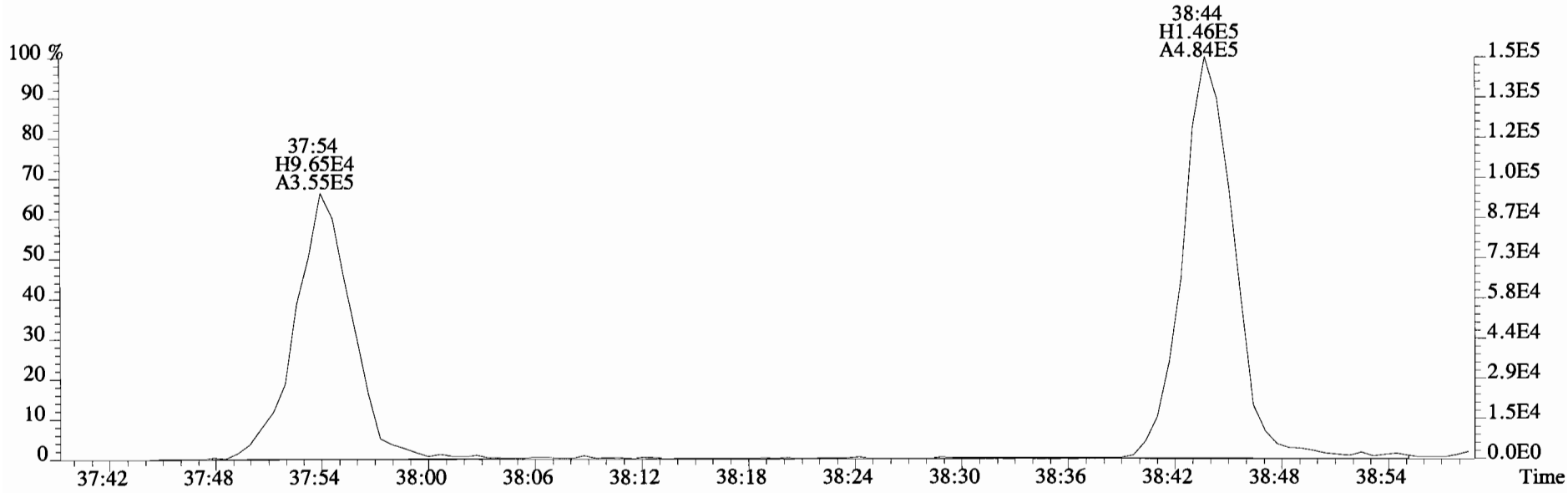



File:141014D2 #1-326 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:54 H9.53E4 A3.47E5
38:44 H1.53E5 A4.96E5
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:54 H9.65E4 A3.53E5
38:44 H1.46E5 A4.79E5
435.8169 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
38:43 H1.54E6 A4.87E6
437.8140 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
38:43 H1.49E6 A4.63E6
430.9728 S:7 F:4
37:00 37:08 37:22 37:34 37:51 38:14 38:33 38:46 38:54 39:07 39:21 39:27 40:02 40:11
100 %
50
0
37:00 37:12 37:24 37:36 37:48 38:00 38:12 38:24 38:36 38:48 39:00 39:12 39:24 39:36 39:48 40:00 40:12 40:24 Time
1.5E5
7.6E4
0.0E0
7.3E4
1.5E6
7.7E5
7.4E5
8.3E5
4.2E5

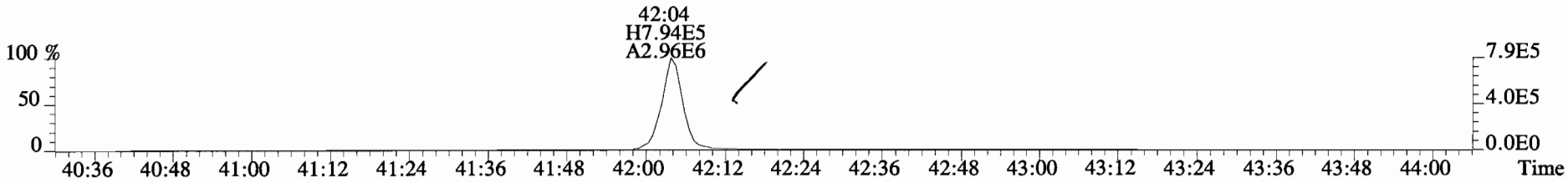
File:141014D2 #1-326 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



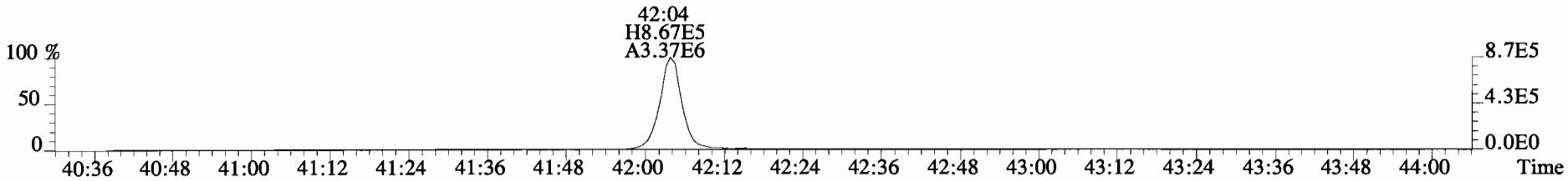
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



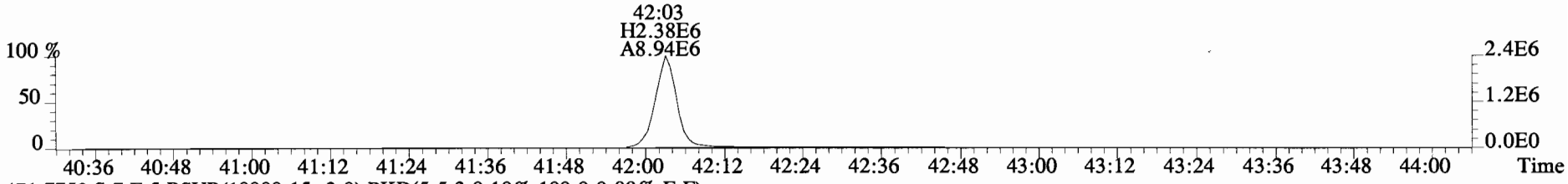
File:141014D2 #1-388 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
457.7377 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



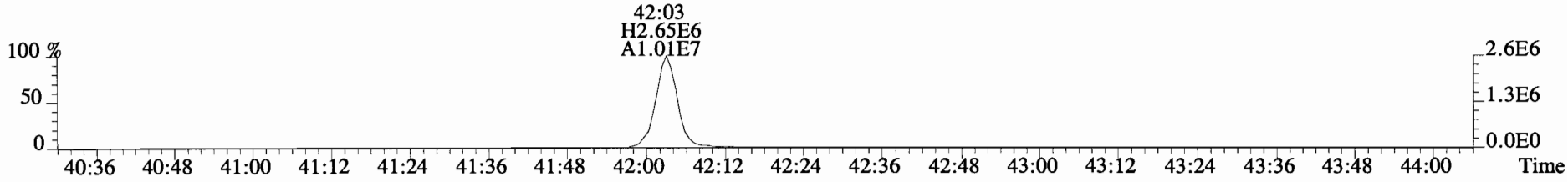
459.7348 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



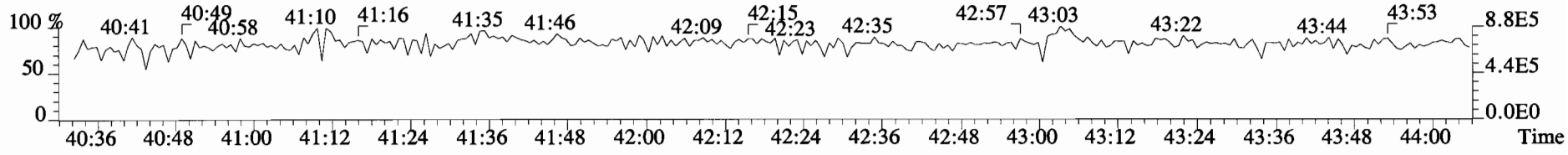
469.7780 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



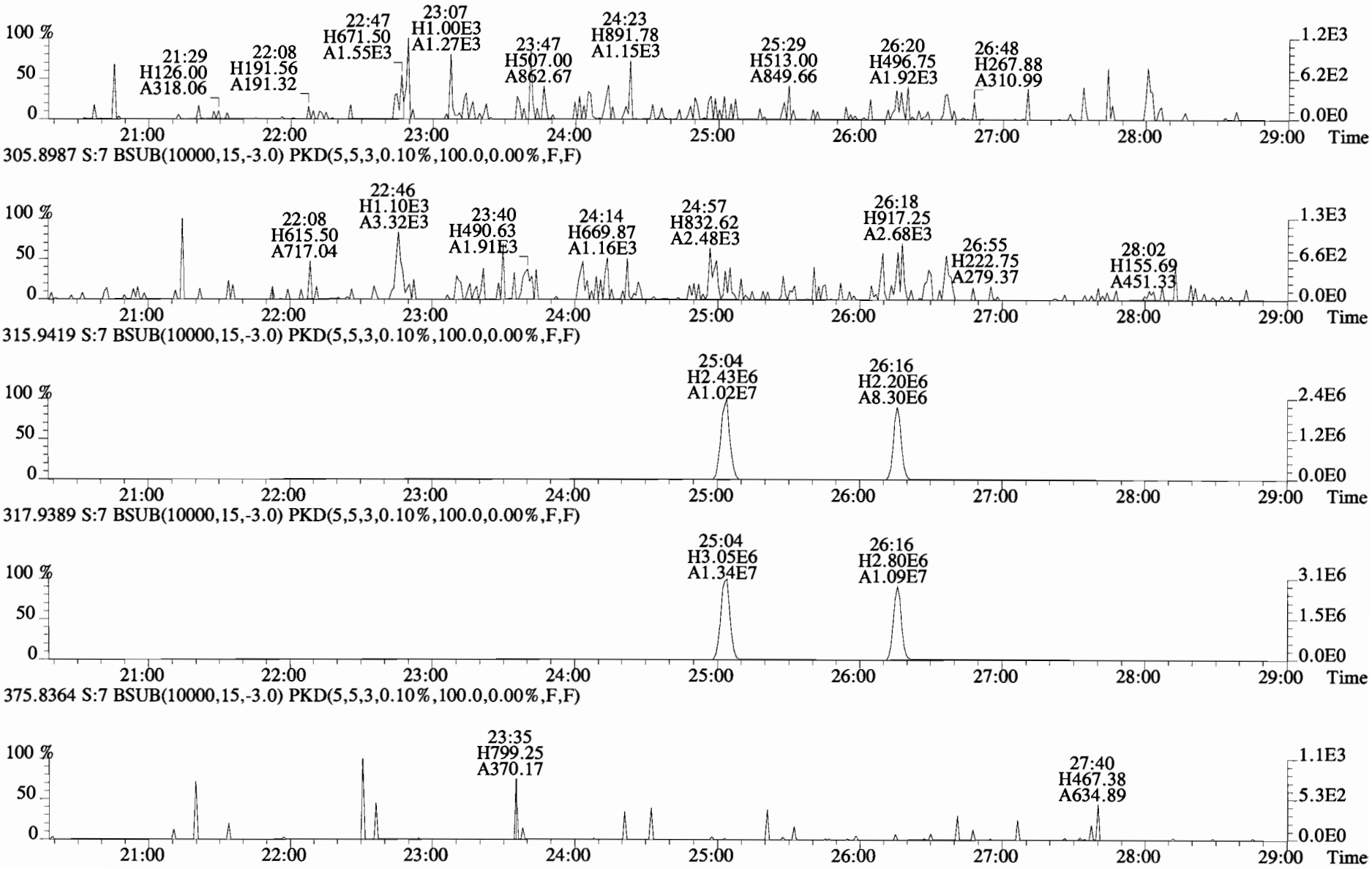
471.7750 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



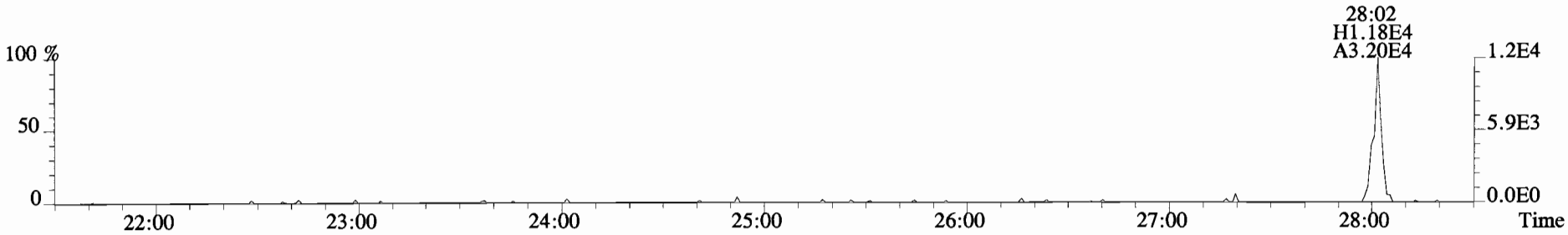
454.9728 S:7 F:5



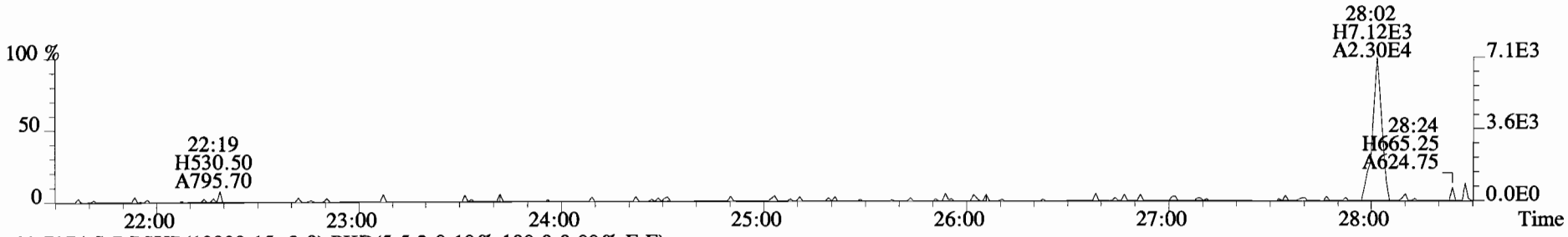
File:141014D2 #1-551 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5



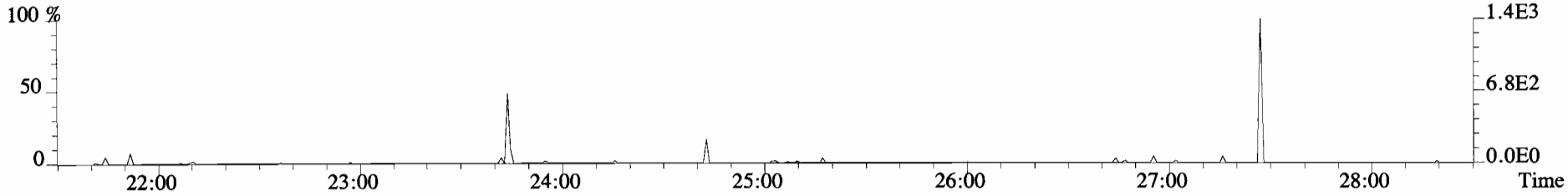
File:141014D2 #1-551 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



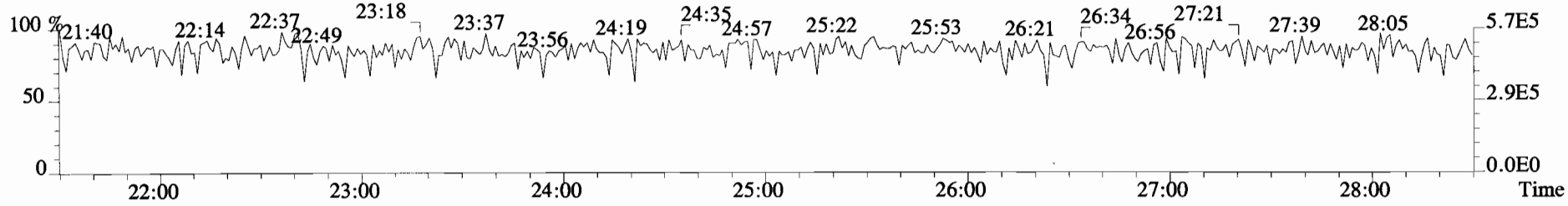
341.8568 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

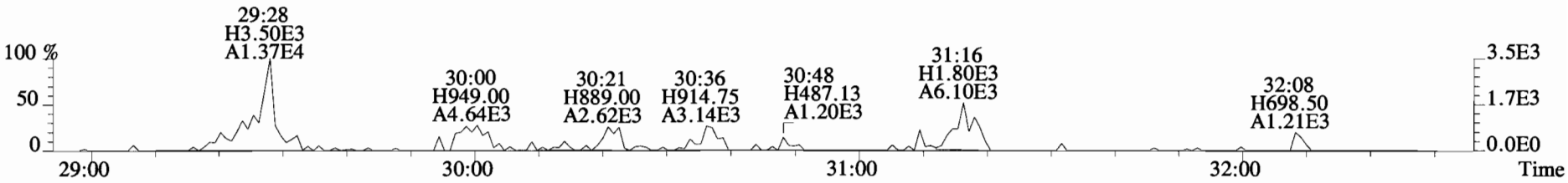


316.9824 S:7

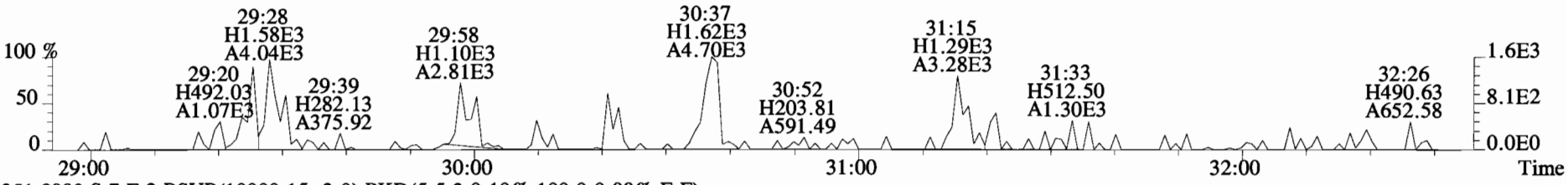


File:141014D2 #1-257 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5

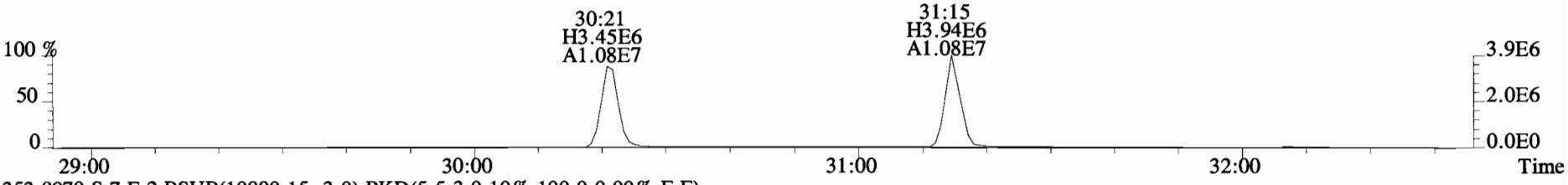
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



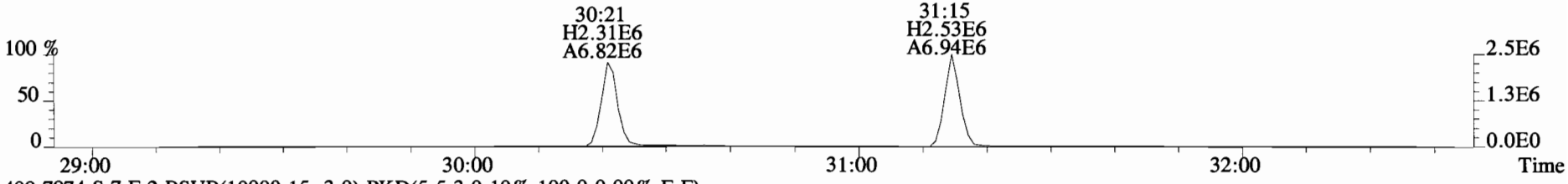
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



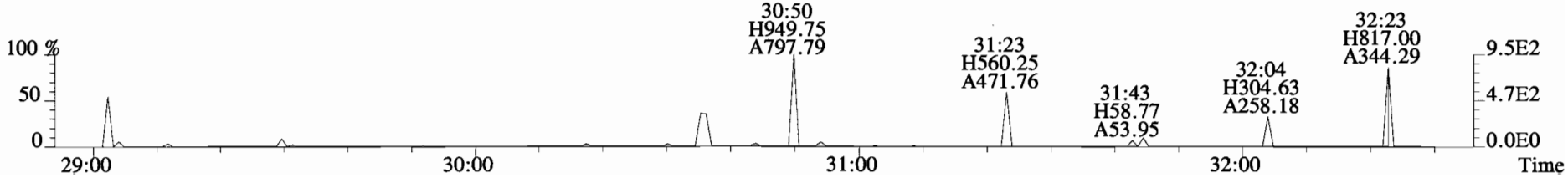
351.9000 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

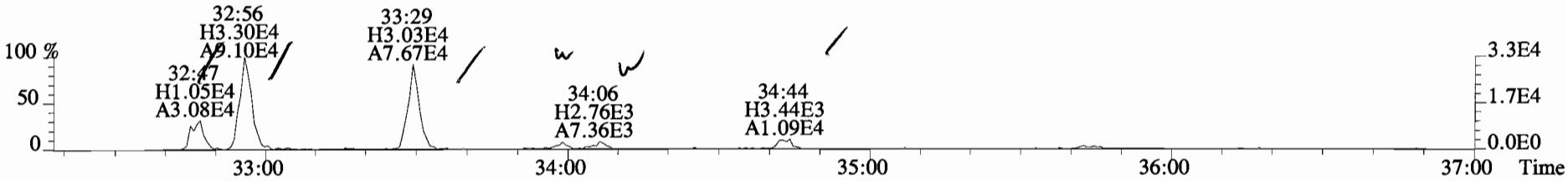


409.7974 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

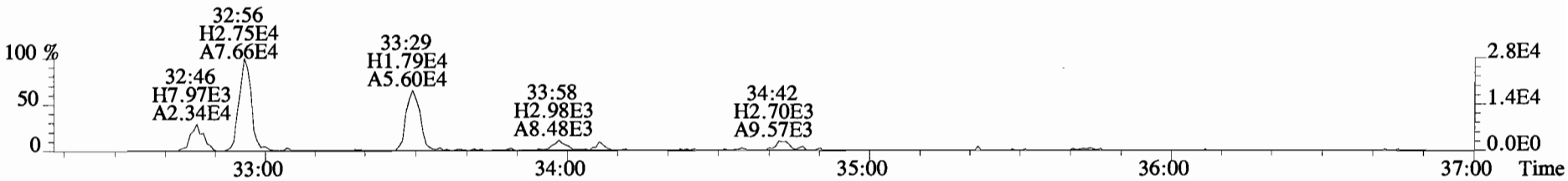


File:141014D2 #1-385 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5

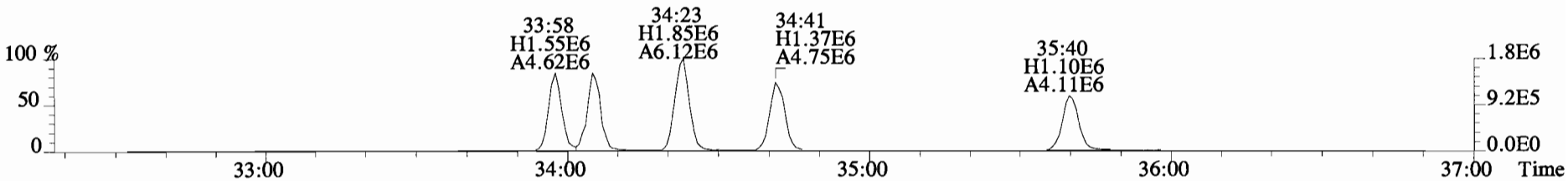
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



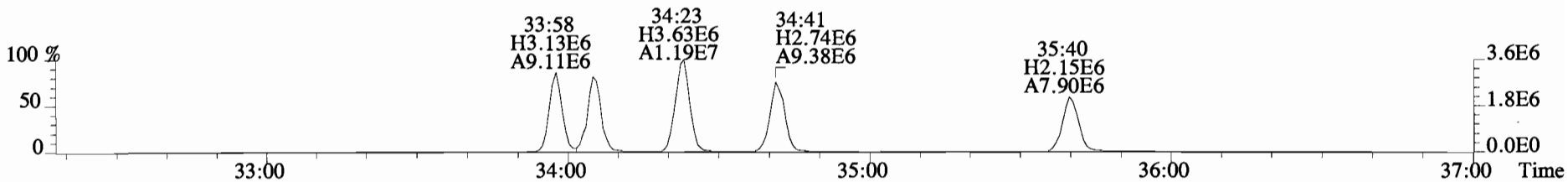
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



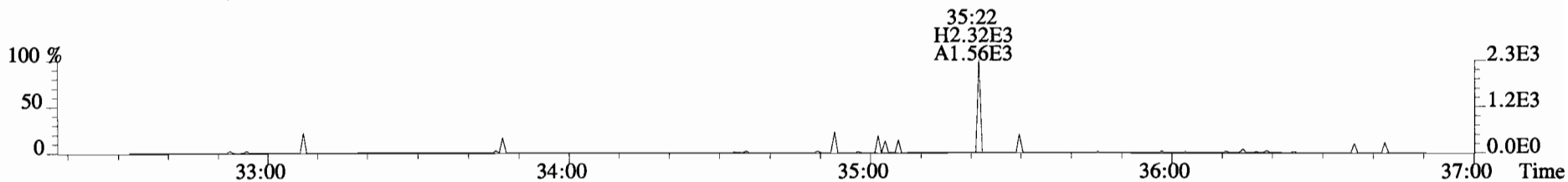
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



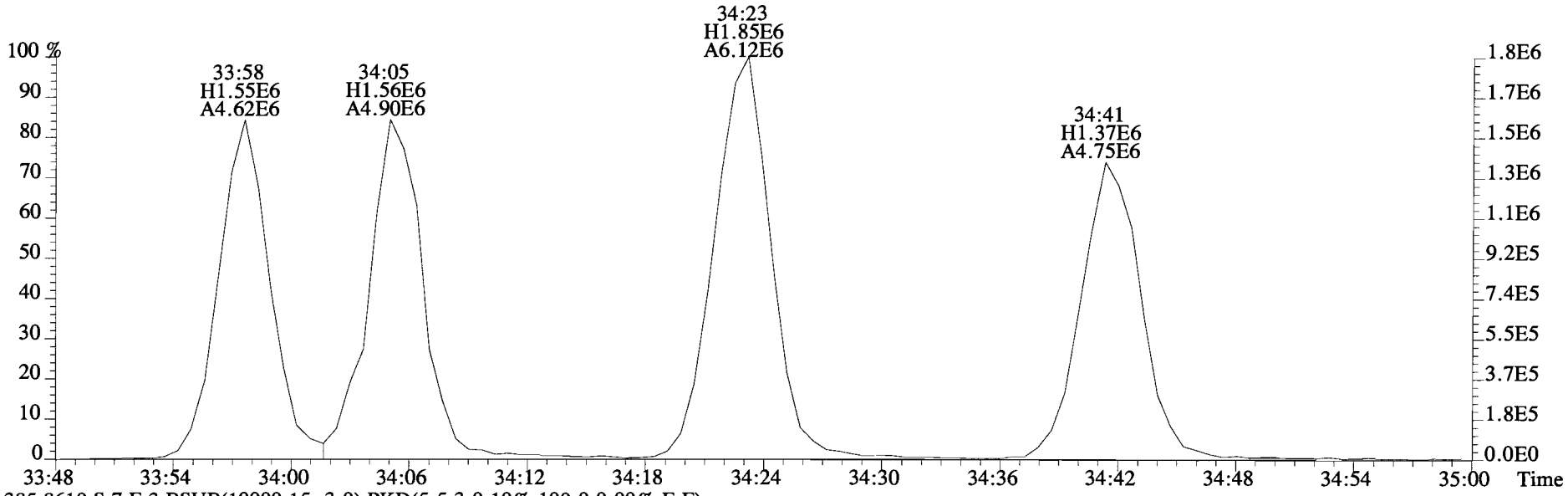
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



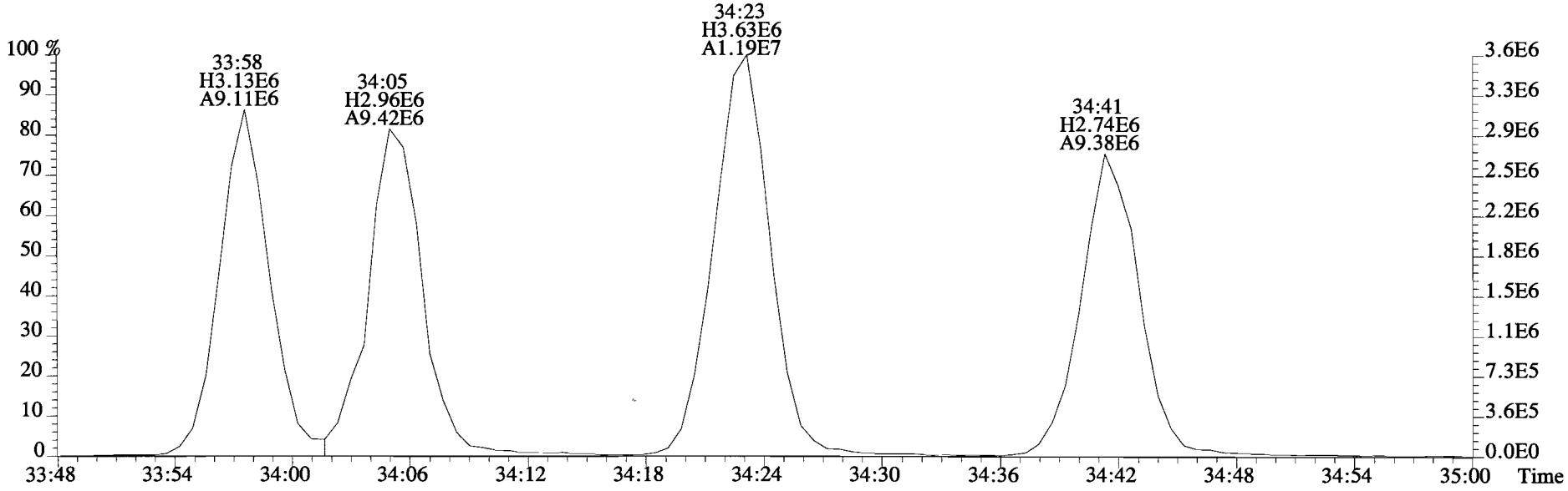
445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



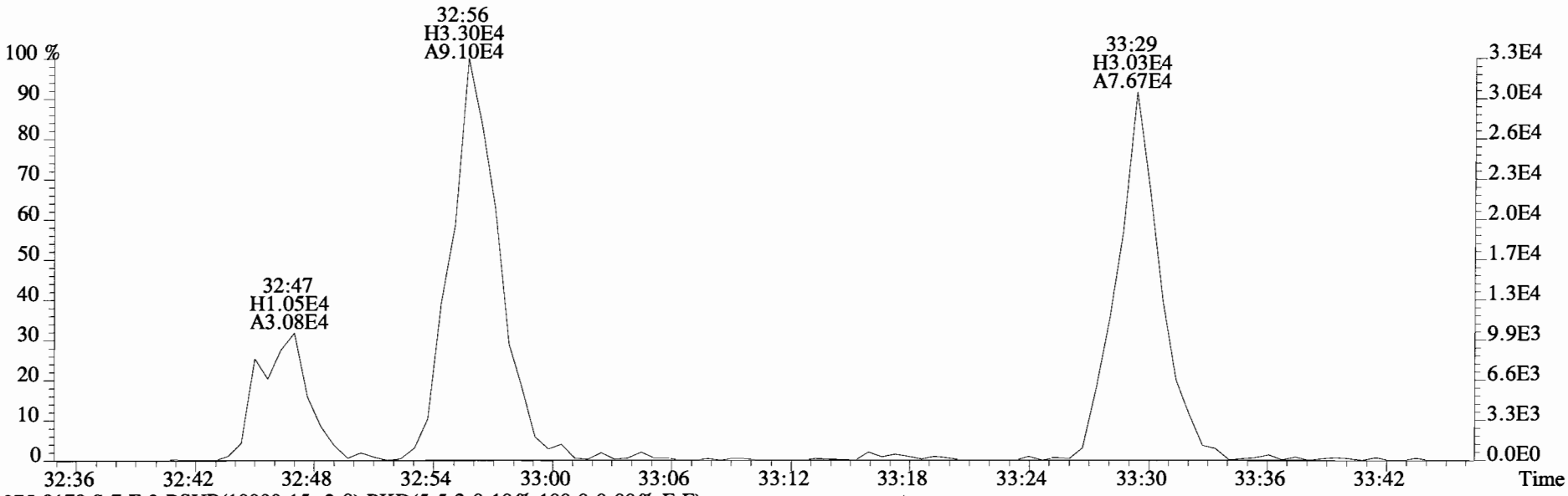
File:141014D2 #1-385 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



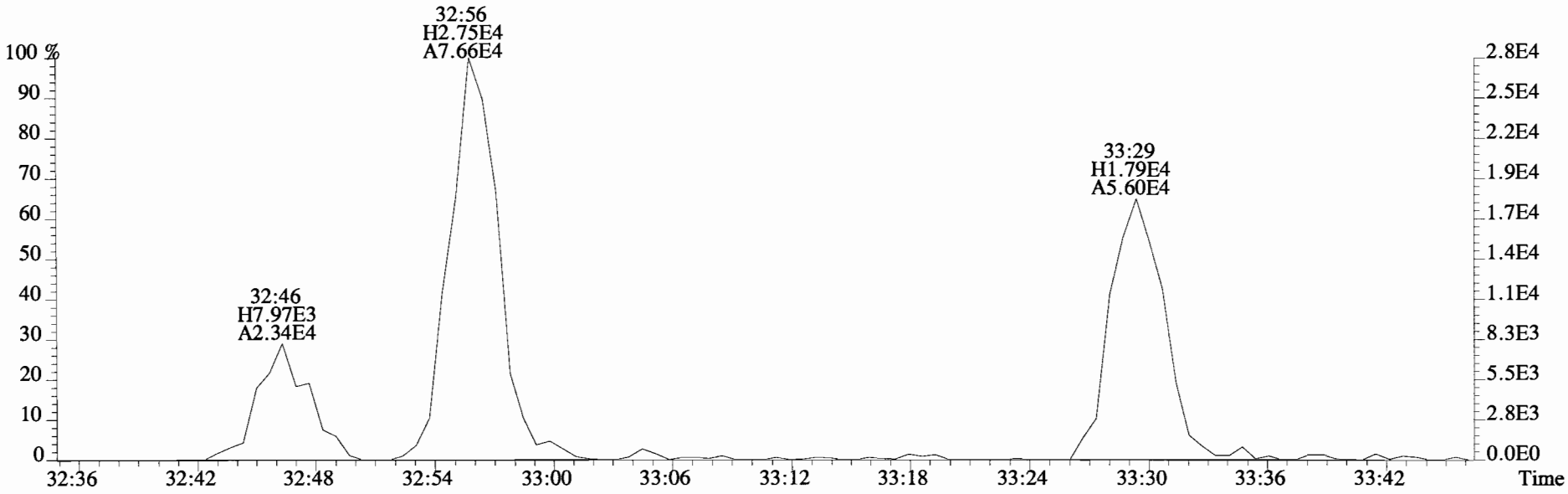
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



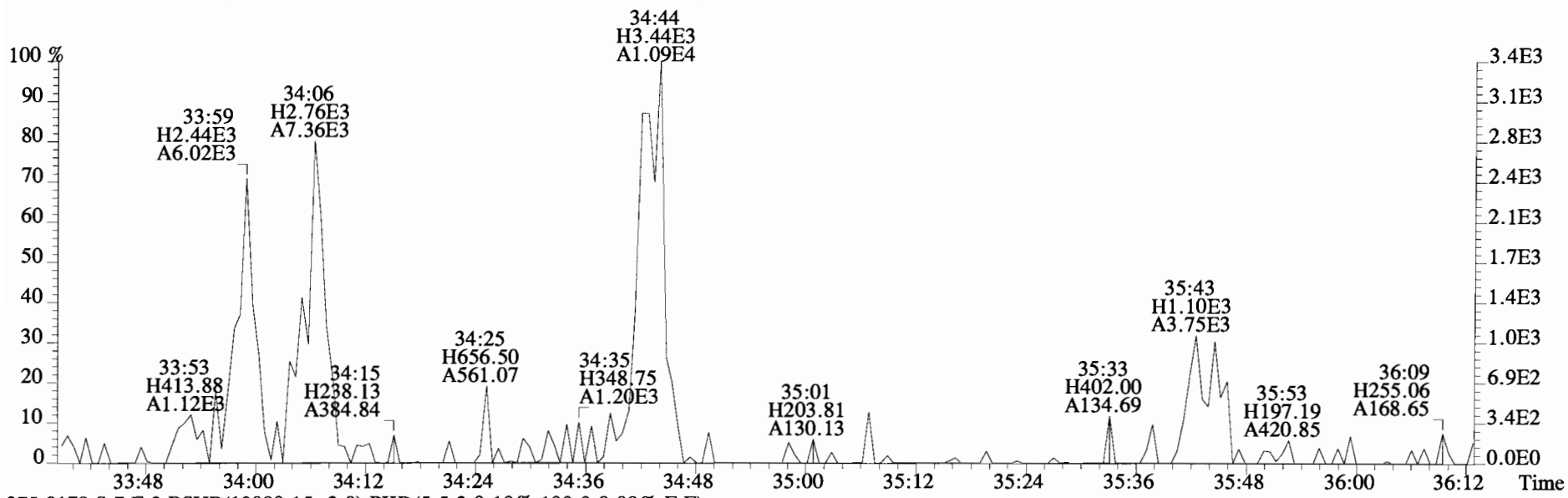
File:141014D2 #1-385 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



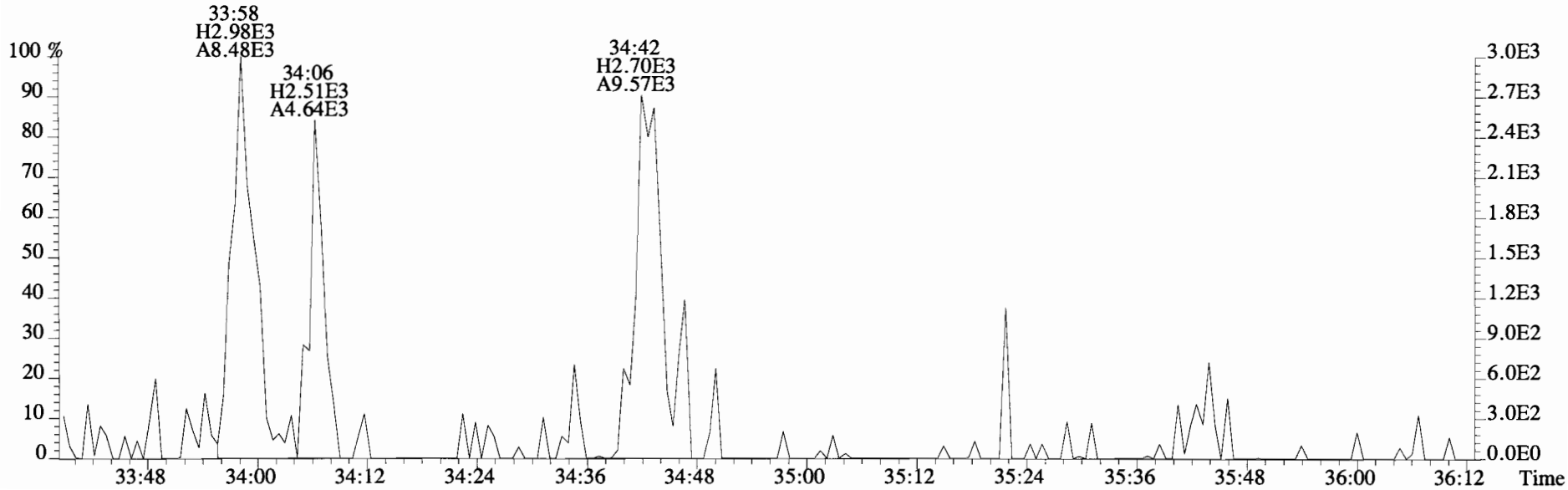
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



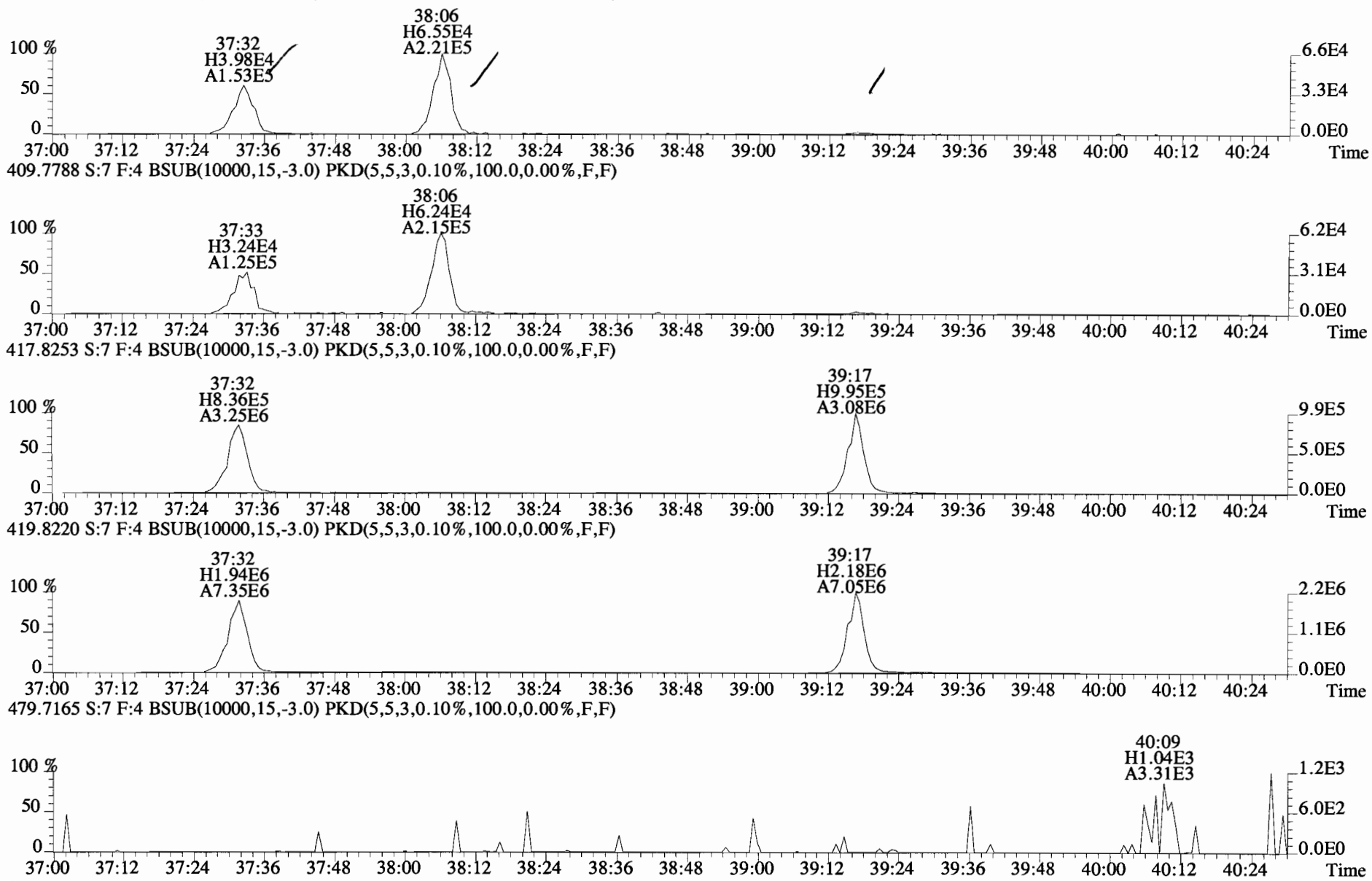
File:141014D2 #1-385 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



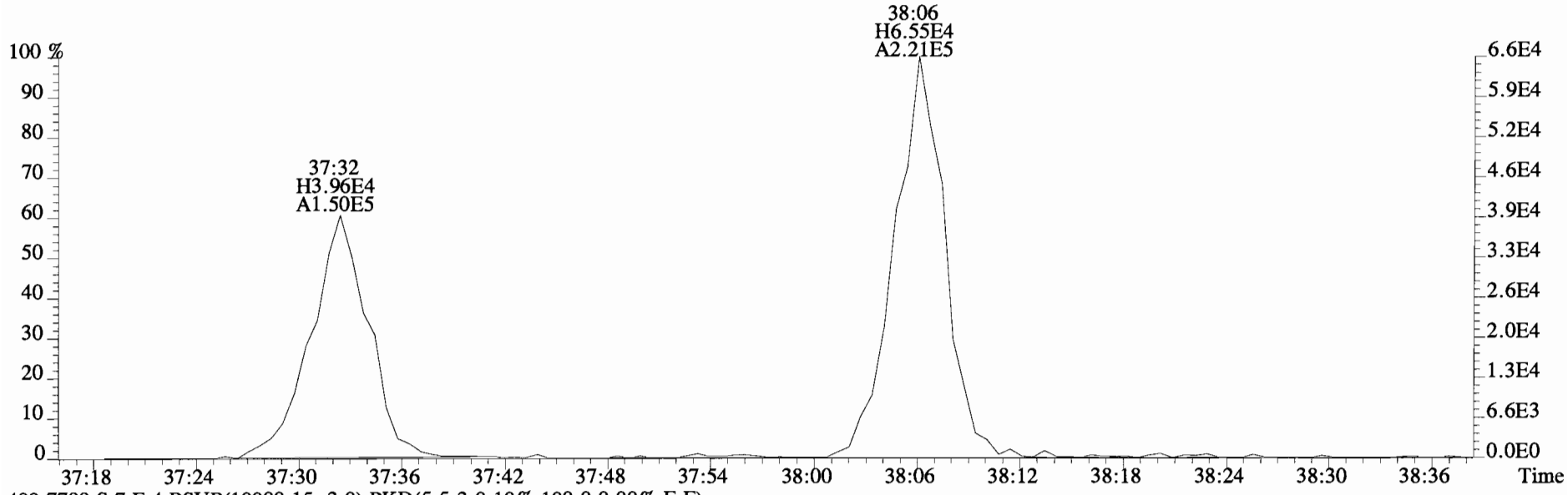
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



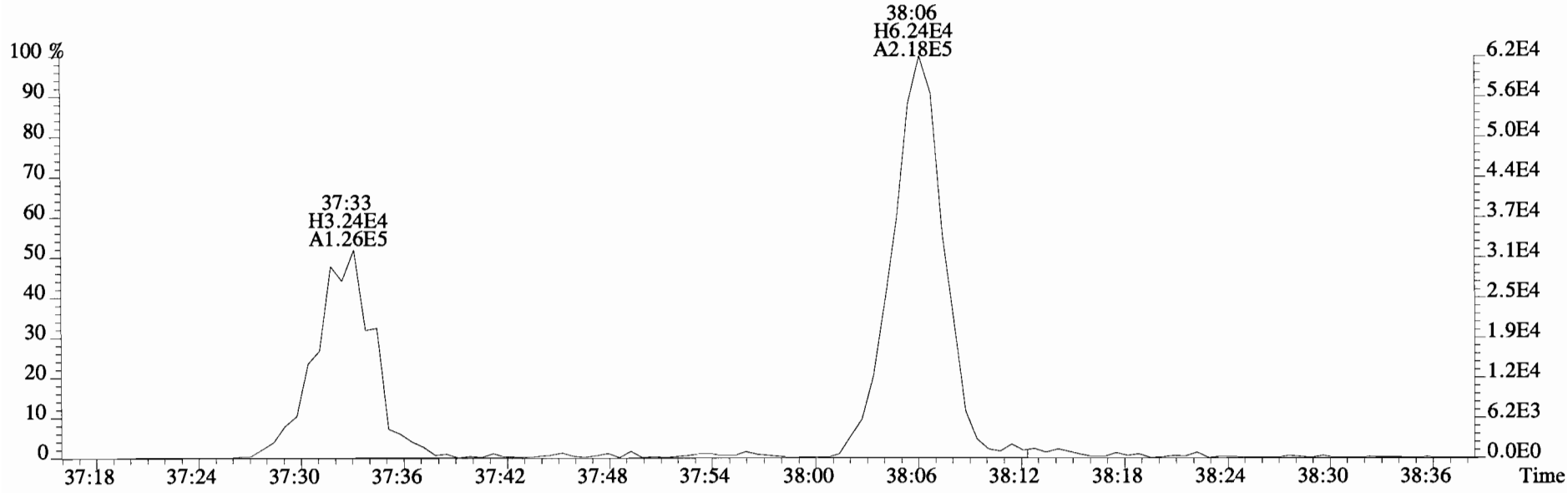
File:141014D2 #1-326 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5



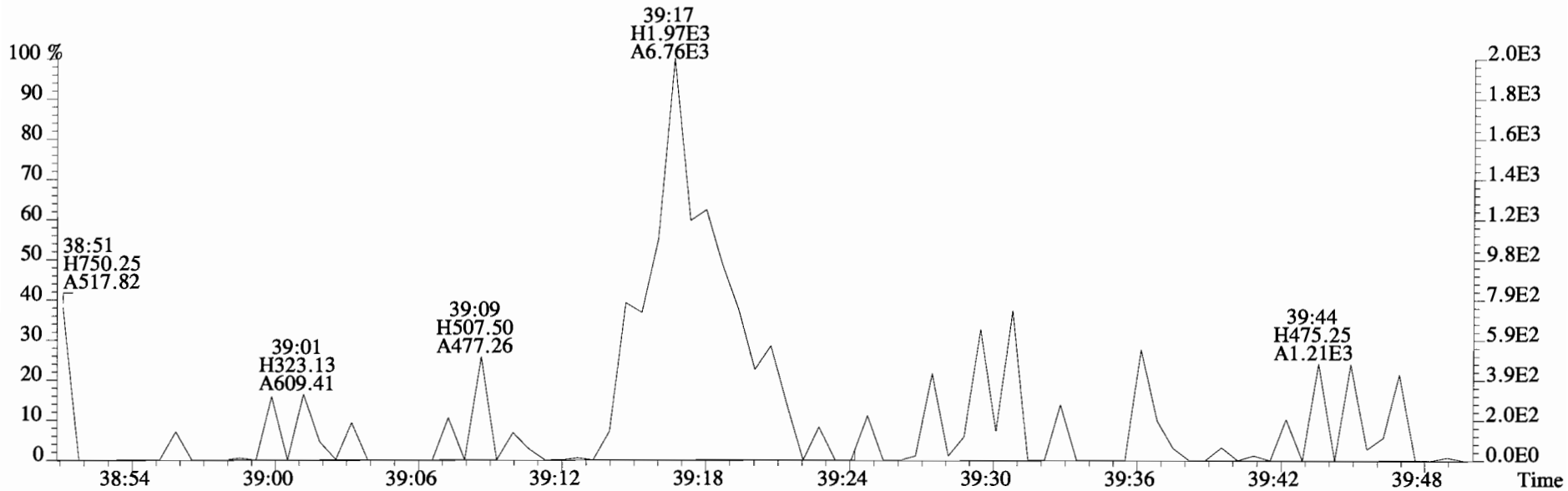
File:141014D2 #1-326 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



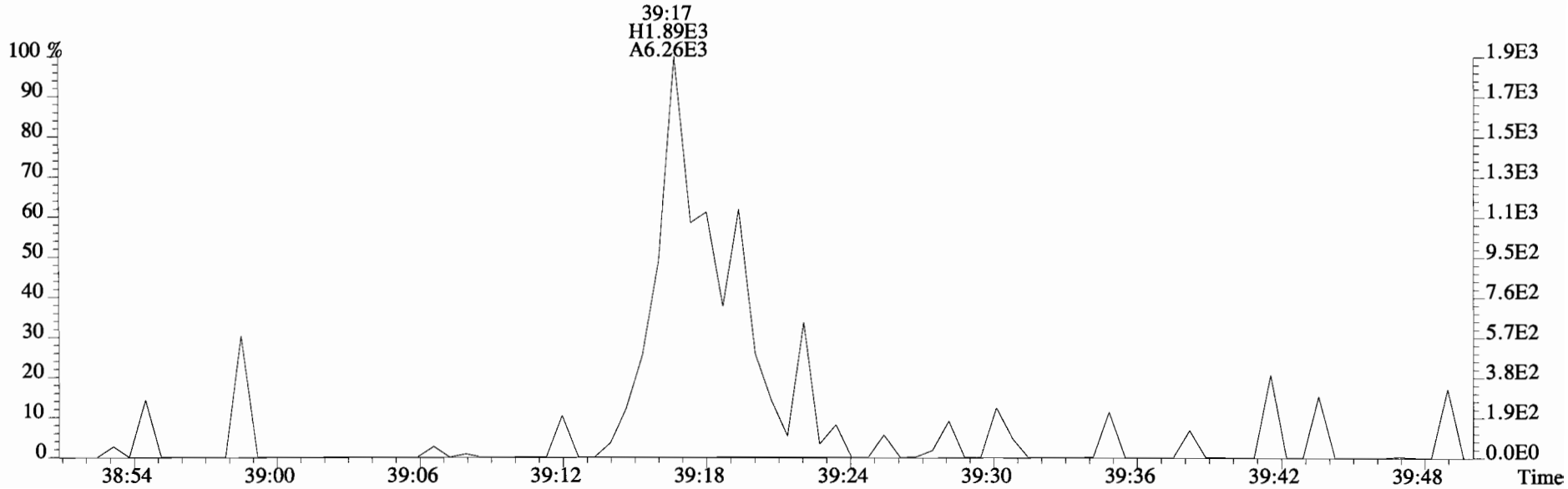
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141014D2 #1-326 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 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)

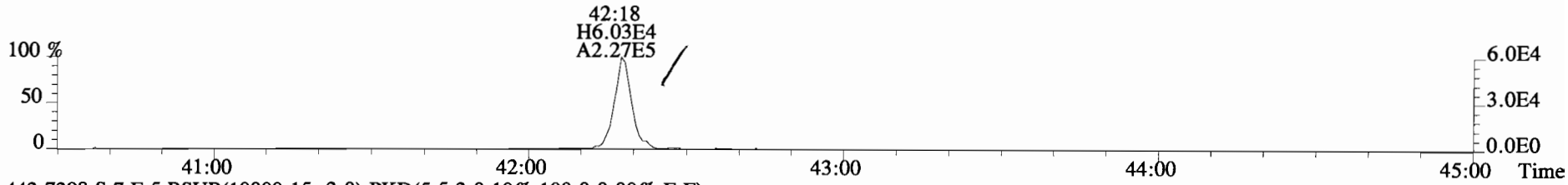


409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

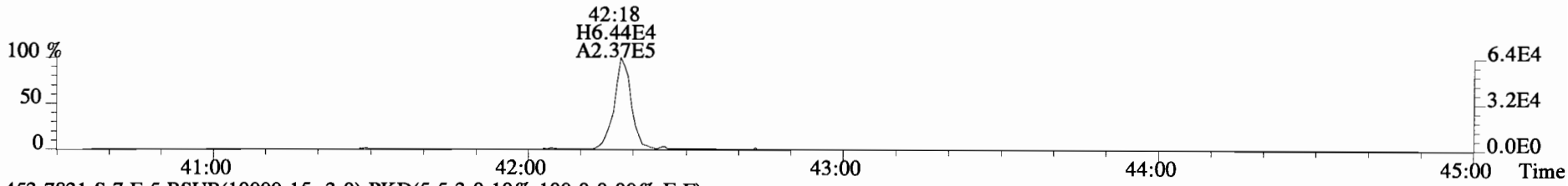


File:141014D2 #1-388 Acq:15-OCT-2014 07:12:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:OCDD_DB5

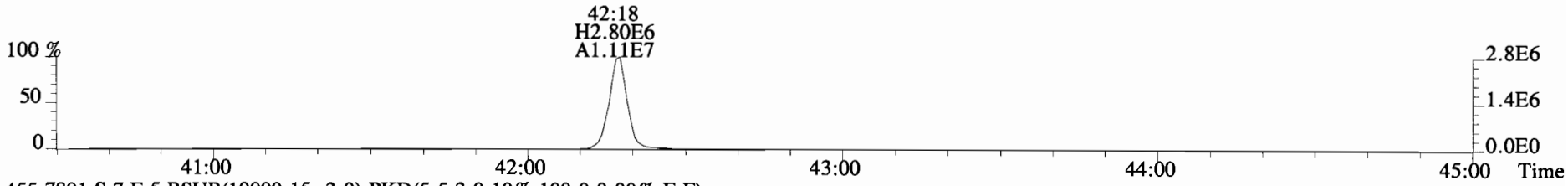
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



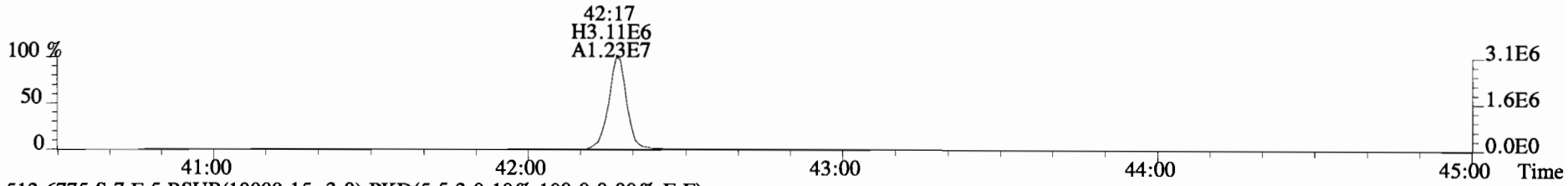
443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



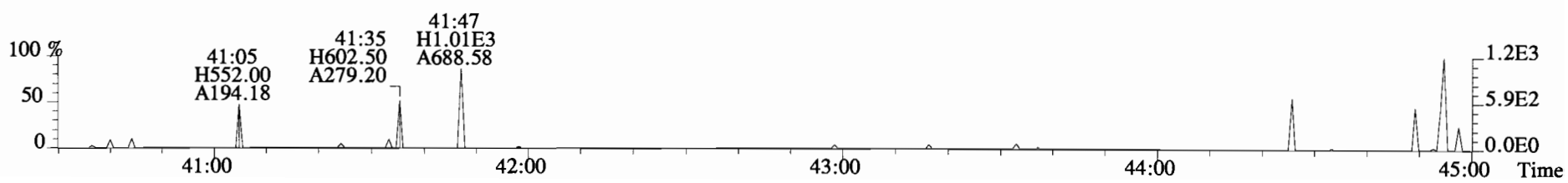
453.7831 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 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 Filename: 141014D1 S:13 Acq:14-OCT-14 22:05:43 ConCal: ST141014D1-1
Lab ID: B4J0064-BLK1 GC Column ID: ZB-5MS ICal: 1613VG7-4-17-14 wt/vol:10.000 EndCAL: ST141014D1-2

	Name	Resp	RA		RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	*	*	n	1.03	NotF¶	*	*		581	2.5	0.120
	1,2,3,7,8-PeCDD	*	*	n	0.84	NotF¶	*	*		403	2.5	0.0645
	1,2,3,4,7,8-HxCDD	*	*	n	1.05	NotF¶	*	*		434	2.5	0.117
	1,2,3,6,7,8-HxCDD	*	*	n	1.04	NotF¶	*	*		434	2.5	0.129
	1,2,3,7,8,9-HxCDD	*	*	n	0.90	NotF¶	*	*		434	2.5	0.130
	1,2,3,4,6,7,8-HpCDD	*	*	n	1.01	NotF¶	*	*		676	2.5	0.195
	OCDD	*	*	n	1.04	NotF¶	*	*		1390	1.0	0.182
	2,3,7,8-TCDF	*	*	n	0.91	NotF¶	*	*		426	2.5	0.0680
	1,2,3,7,8-PeCDF	*	*	n	0.97	NotF¶	*	*		284	2.5	0.0515
	2,3,4,7,8-PeCDF	*	*	n	0.94	NotF¶	*	*		284	2.5	0.0585
	1,2,3,4,7,8-HxCDF	*	*	n	1.32	NotF¶	*	*		406	2.5	0.0421
	1,2,3,6,7,8-HxCDF	*	*	n	1.18	NotF¶	*	*		406	2.5	0.0475
	2,3,4,6,7,8-HxCDF	*	*	n	1.23	NotF¶	*	*		253	2.5	0.0314
	1,2,3,7,8,9-HxCDF	*	*	n	1.13	NotF¶	*	*		253	2.5	0.0425
	1,2,3,4,6,7,8-HpCDF	*	*	n	1.57	NotF¶	*	*		1720	1.0	0.0935
	1,2,3,4,7,8,9-HpCDF	*	*	n	1.50	NotF¶	*	*		466	2.5	0.0618
	OCDF	*	*	n	1.05	NotF¶	*	*		430	2.5	0.110

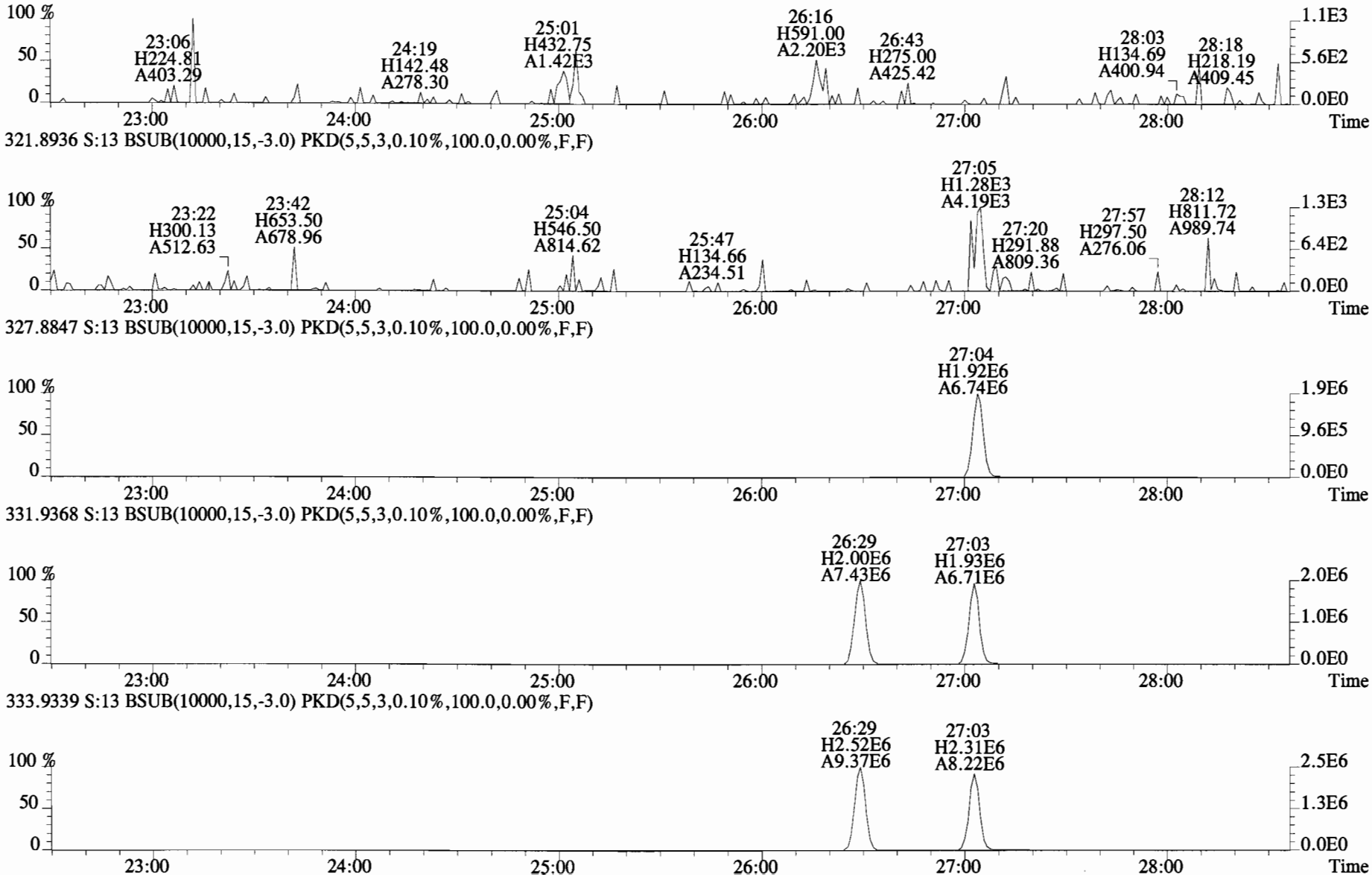
Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		581	0.120
Total Penta-Dioxins	*	*		615	0.0985
Total Hexa-Dioxins	*	*		739	0.214
Total Hepta-Dioxins	*	*		676	0.195
Total Tetra-Furans	*	*		426	0.0680
Total Penta-Furans	0.0000	0.0000		464	0.0898
Total Hexa-Furans	*	*		406	0.0512
Total Hepta-Furans	*	*		1130	0.152

								Rec	Qual
IS	13C-2,3,7,8-TCDD	1.49e+07	0.82	y	1.06	27:03	1.021	167.09	83.5	
IS	13C-1,2,3,7,8-PeCDD	1.75e+07	0.63	y	1.08	31:32	1.191	192.49	96.2	
IS	13C-1,2,3,4,7,8-HxCDD	1.31e+07	1.27	y	0.74	34:52	1.014	182.17	91.1	
IS	13C-1,2,3,6,7,8-HxCDD	1.32e+07	1.25	y	0.75	34:59	1.017	182.34	91.2	
IS	13C-1,2,3,7,8,9-HxCDD	1.58e+07	1.25	y	0.89	35:17	1.026	182.66	91.3	
IS	13C-1,2,3,4,6,7,8-HpCDD	1.19e+07	1.06	y	0.70	38:44	1.126	174.54	87.3	
IS	13C-OCDD	2.26e+07	0.90	y	0.59	42:04	1.223	395.18	98.8	
IS	13C-2,3,7,8-TCDF	2.26e+07	0.75	y	0.97	26:17	0.992	174.73	87.4	
IS	13C-1,2,3,7,8-PeCDF	2.22e+07	1.61	y	0.99	30:22	1.146	167.80	83.9	
IS	13C-2,3,4,7,8-PeCDF	2.19e+07	1.59	y	1.01	31:16	1.180	162.86	81.4	
IS	13C-1,2,3,4,7,8-HxCDF	1.73e+07	0.50	y	0.94	33:58	0.988	189.54	94.8	
IS	13C-1,2,3,6,7,8-HxCDF	1.88e+07	0.53	y	1.23	34:06	0.991	158.33	79.2	
IS	13C-2,3,4,6,7,8-HxCDF	1.77e+07	0.52	y	1.03	34:43	1.009	176.56	88.3	
IS	13C-1,2,3,7,8,9-HxCDF	1.52e+07	0.51	y	0.89	35:41	1.037	177.68	88.8	
IS	13C-1,2,3,4,6,7,8-HpCDF	1.32e+07	0.44	y	0.71	37:32	1.091	193.40	96.7	
IS	13C-1,2,3,4,7,8,9-HpCDF	1.24e+07	0.44	y	0.64	39:18	1.142	198.85	99.4	
IS	13C-OCDF	2.89e+07	0.90	y	0.76	42:18	1.230	393.27	98.3	
C/Up	37Cl-2,3,7,8-TCDD	6.74e+06			1.04	27:04	1.022	76.833	96.0	
RS/RT	13C-1,2,3,4-TCDD	1.68e+07	0.79	y	1.00	26:29	*	200.00		
RS	13C-1,2,3,4-TCDF	2.67e+07	0.77	y	1.00	25:04	*	200.00		
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.94e+07	0.52	y	1.00	34:24	*	200.00		

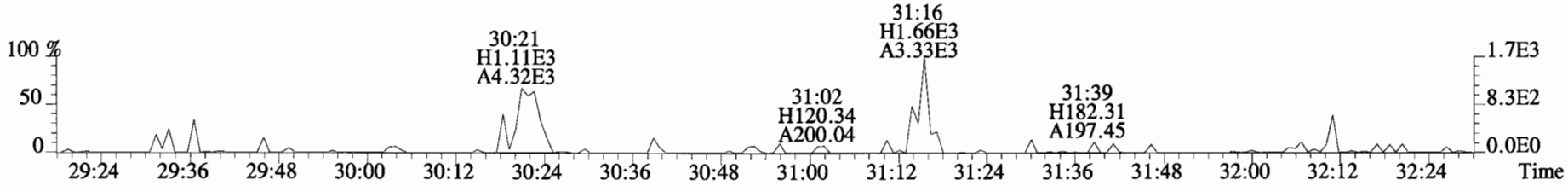
Integrations by Analyst: (M) Date: 10/15/14

Reviewed by Analyst: [signature] Date: 10/20/14

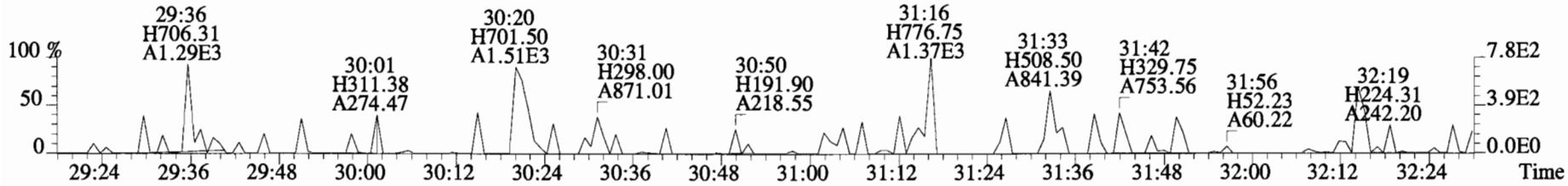
File:141014D1 #1-551 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5



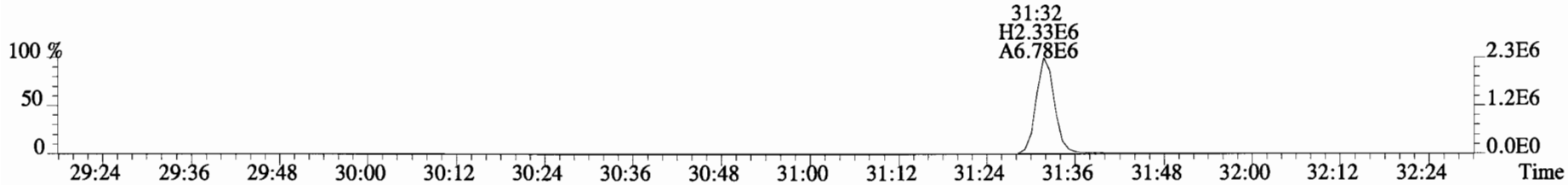
File:141014D1 #1-257 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



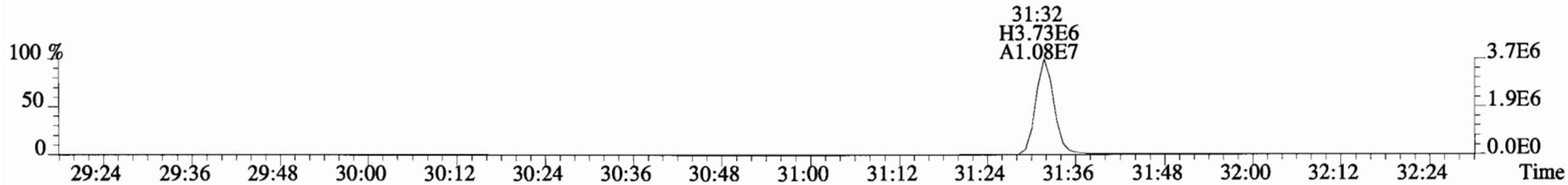
355.8546 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



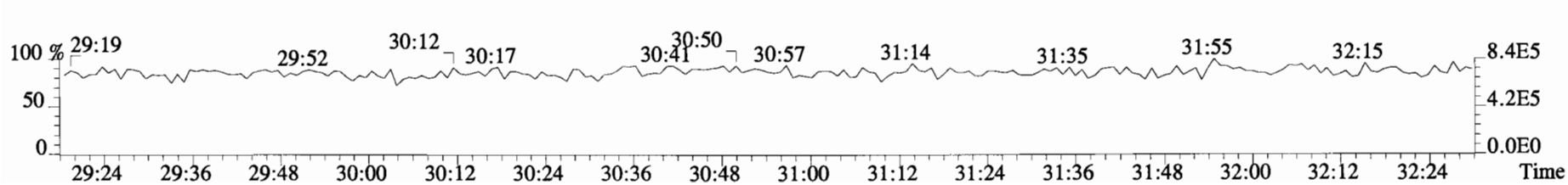
365.8978 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

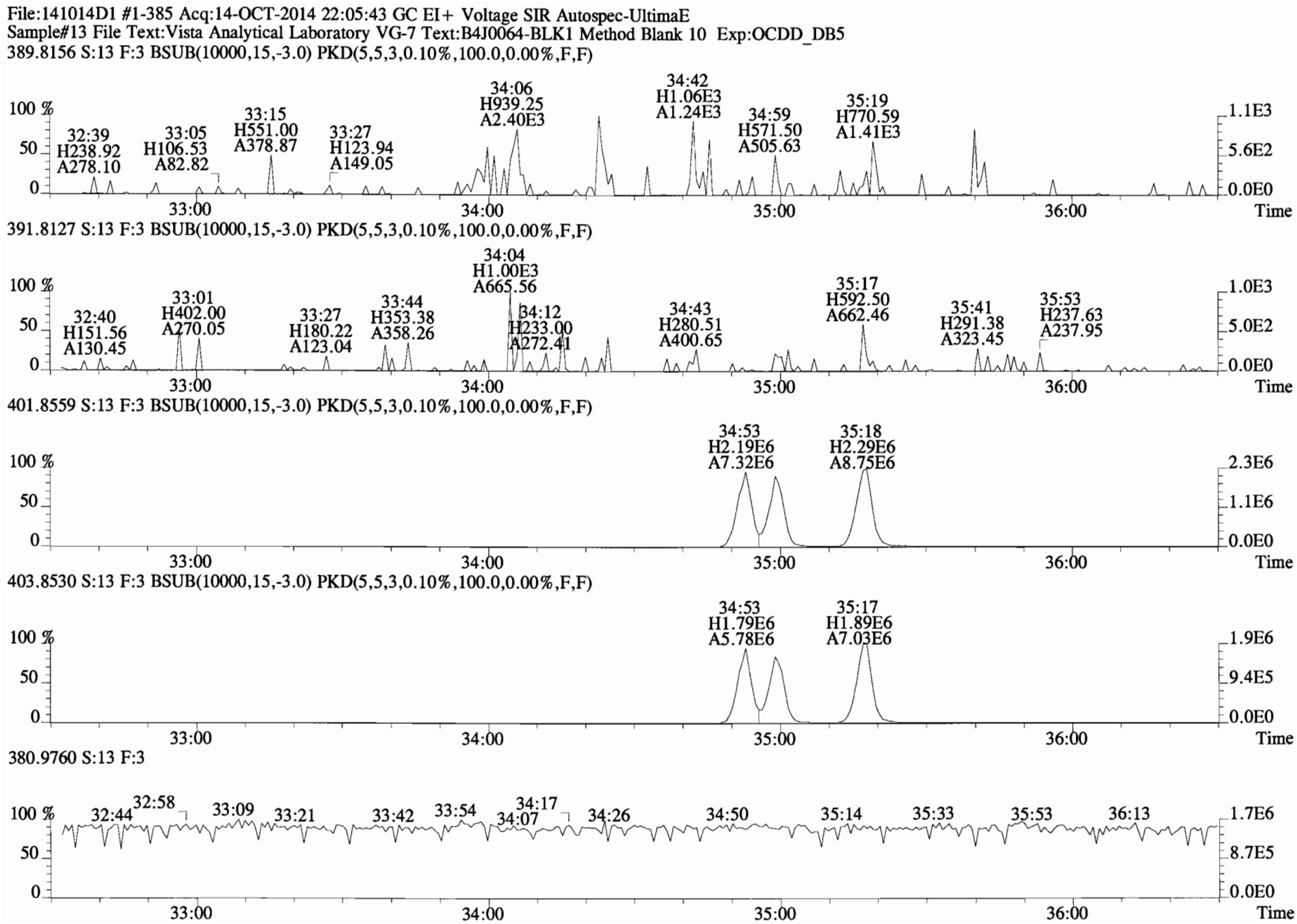


367.8949 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

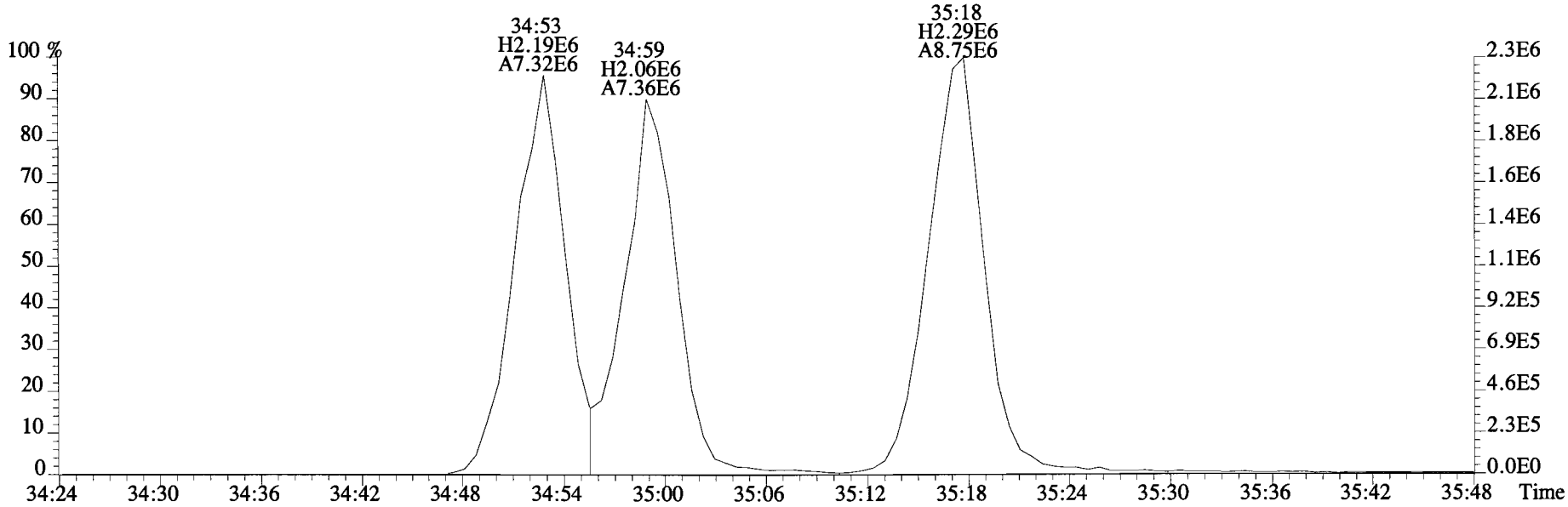


366.9792 S:13 F:2

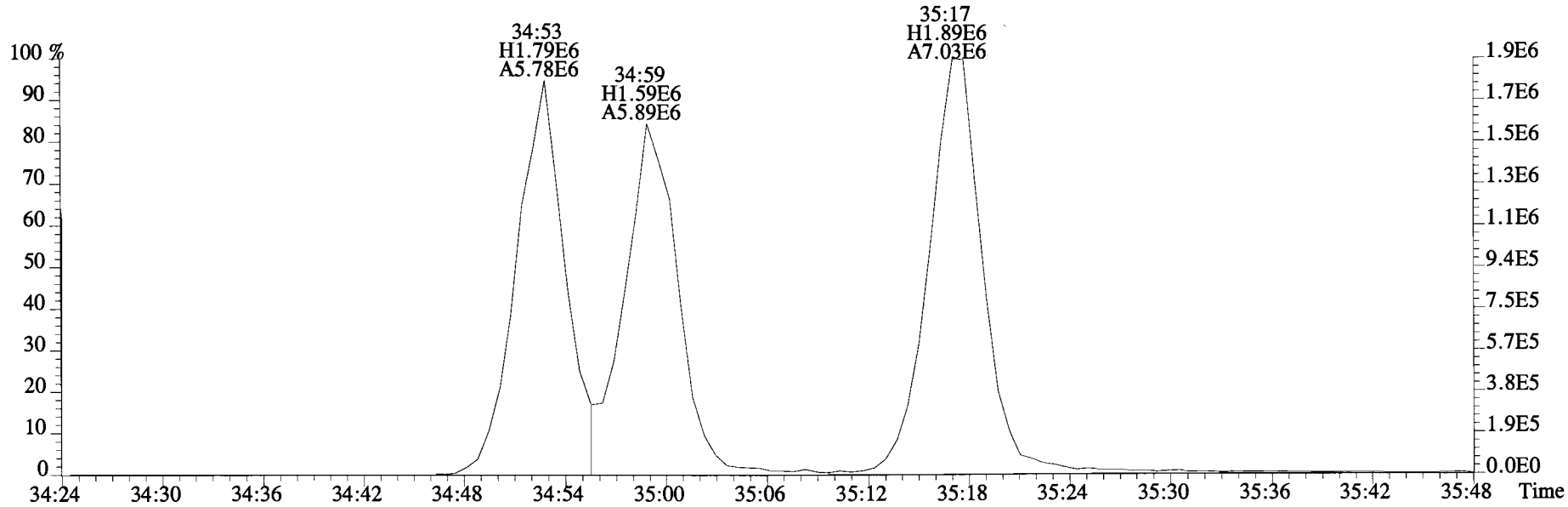



File:141014D1 #1-385 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
32:39 H238.92 A278.10
33:05 H106.53 A82.82
33:15 H551.00 A378.87
33:27 H123.94 A149.05
34:06 H939.25 A2.40E3
34:42 H1.06E3 A1.24E3
34:59 H571.50 A505.63
35:19 H770.59 A1.41E3
391.8127 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
32:40 H151.56 A130.45
33:01 H402.00 A270.05
33:27 H180.22 A123.04
33:44 H353.38 A358.26
34:04 H1.00E3 A665.56
34:12 H233.00 A272.41
34:43 H280.51 A400.65
35:17 H592.50 A662.46
35:41 H291.38 A323.45
35:53 H237.63 A237.95
401.8559 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:53 H2.19E6 A7.32E6
35:18 H2.29E6 A8.75E6
403.8530 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:53 H1.79E6 A5.78E6
35:17 H1.89E6 A7.03E6
380.9760 S:13 F:3
32:44 32:58 33:09 33:21 33:42 33:54 34:07 34:17 34:26 34:50 35:14 35:33 35:53 36:13
100 %
50
0
33:00 34:00 35:00 36:00 Time
1.1E3 5.6E2 0.0E0
1.0E3 5.0E2 0.0E0
2.3E6 1.1E6 0.0E0
1.9E6 9.4E5 0.0E0
1.7E6 8.7E5 0.0E0

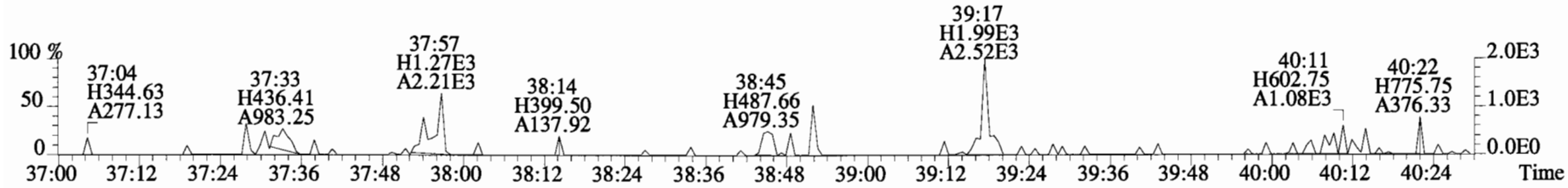
File:141014D1 #1-385 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
401.8559 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



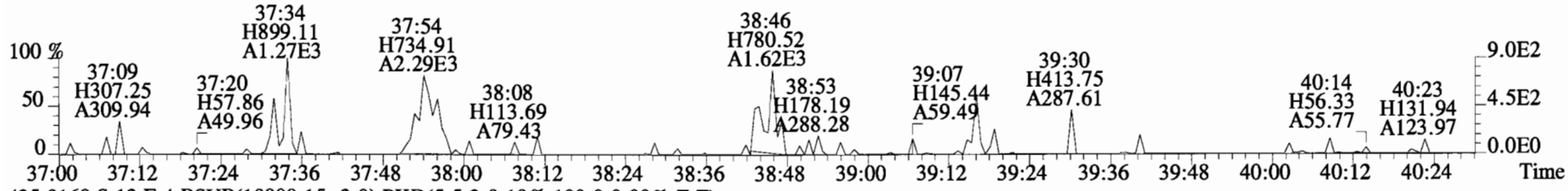
403.8530 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



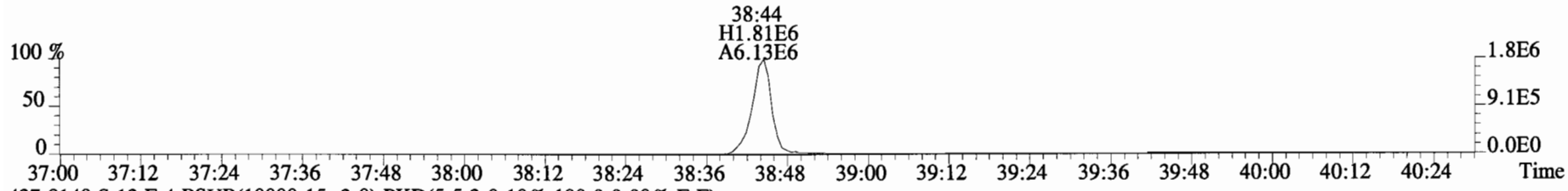
File:141014D1 #1-325 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
423.7767 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



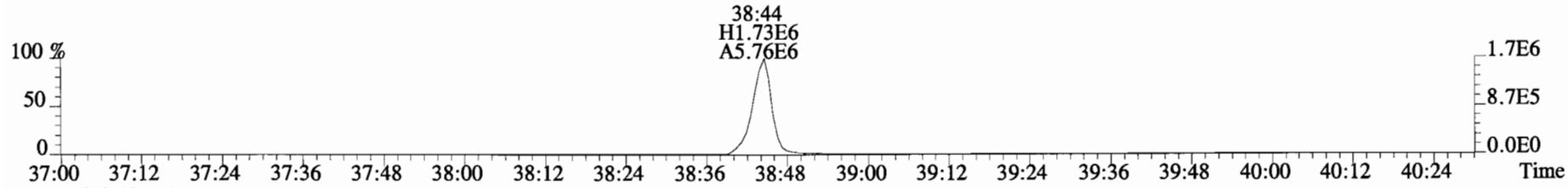
425.7737 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



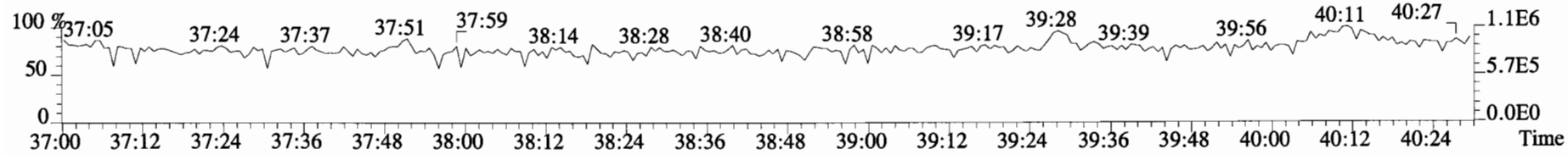
435.8169 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



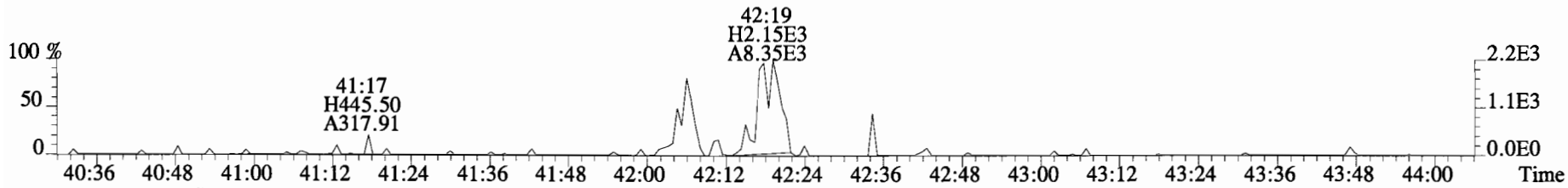
437.8140 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



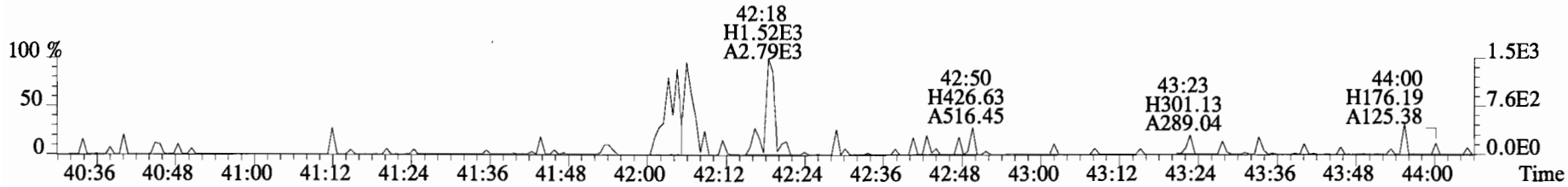
430.9728 S:13 F:4



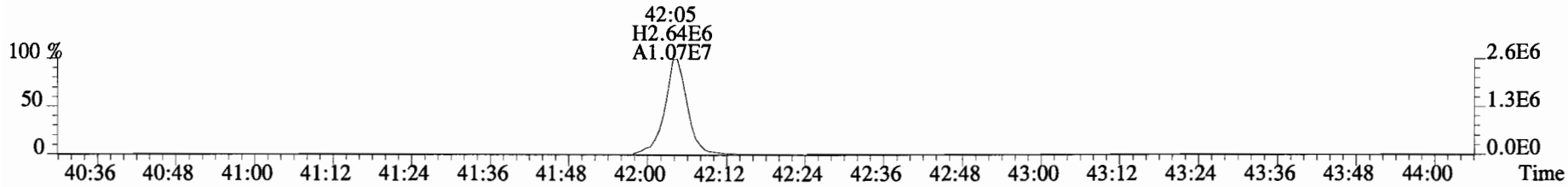
File:141014D1 #1-389 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
457.7377 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



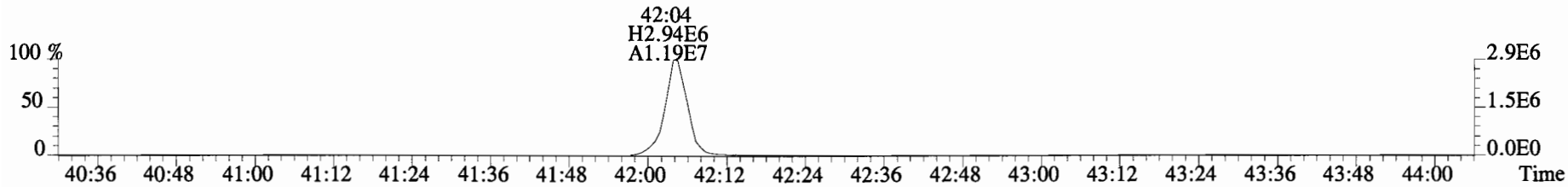
459.7348 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



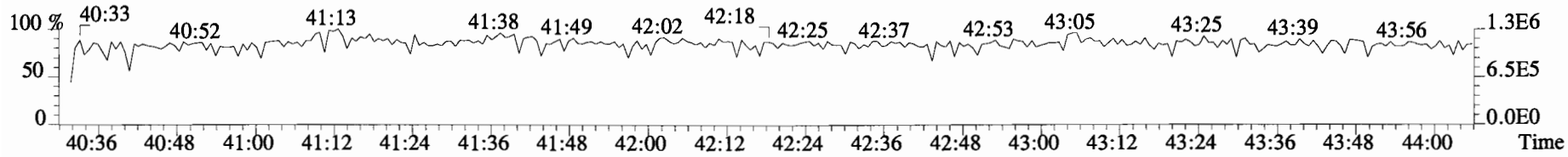
469.7780 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



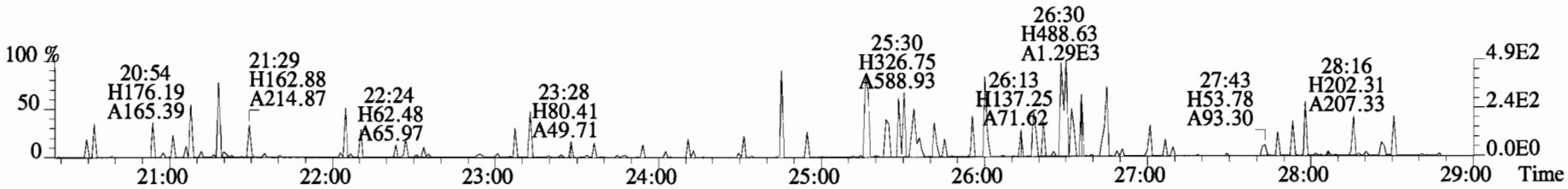
471.7750 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



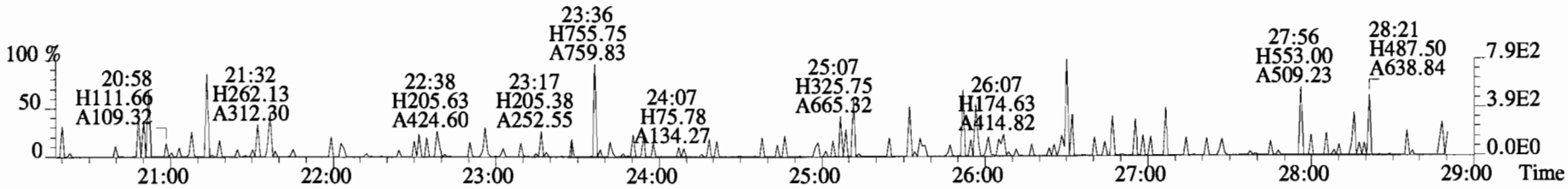
454.9728 S:13 F:5



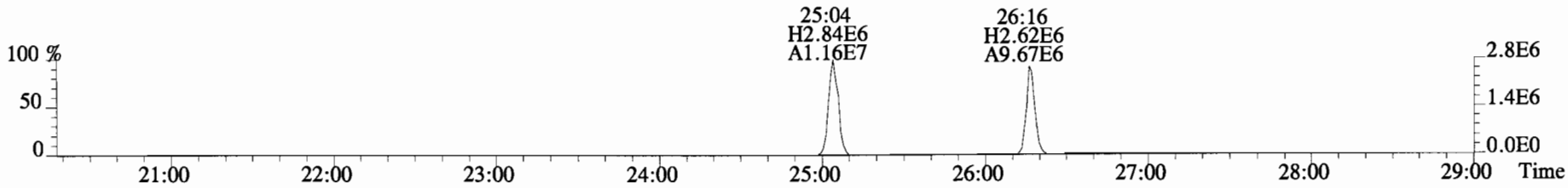
File:141014D1 #1-551 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



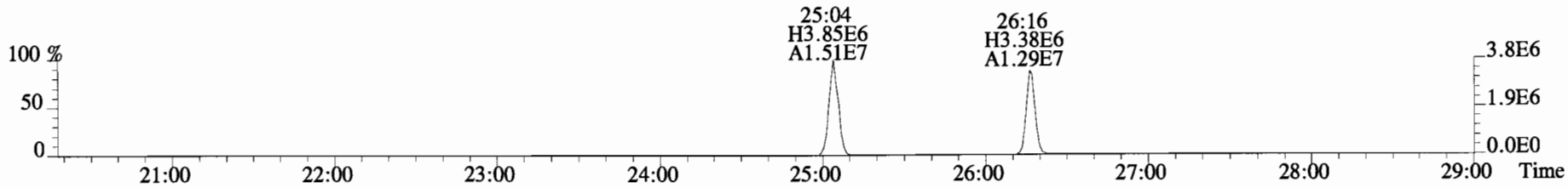
305.8987 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



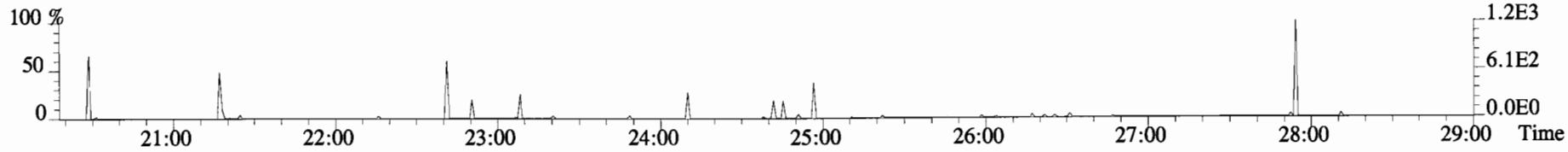
315.9419 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



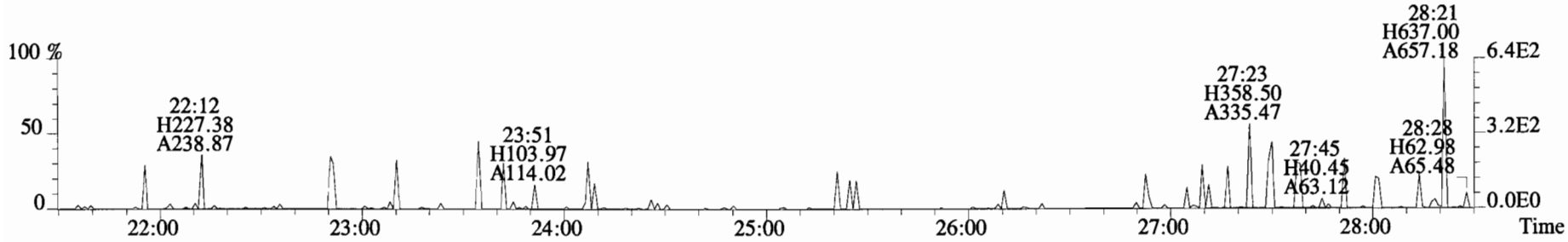
317.9389 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



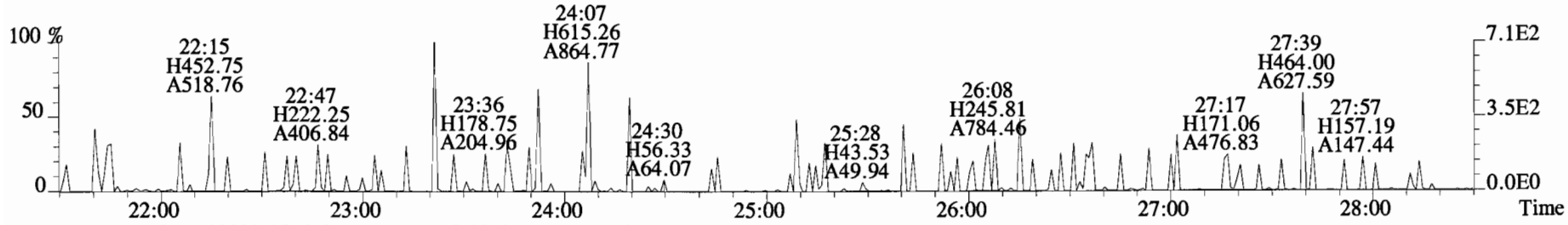
375.8364 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



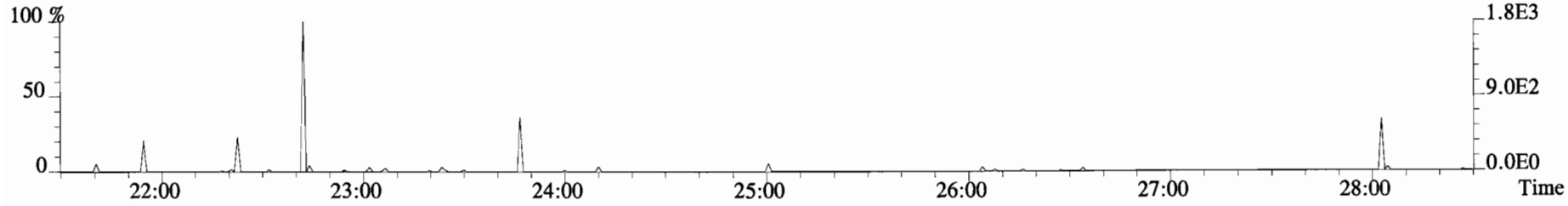
File:141014D1 #1-551 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
339.8597 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



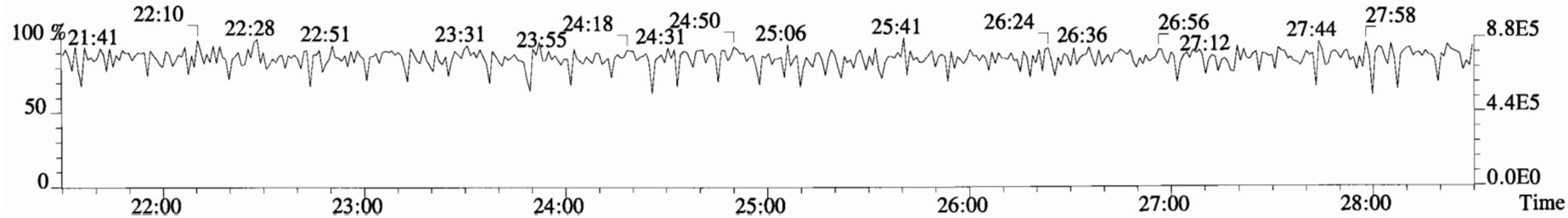
341.8568 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



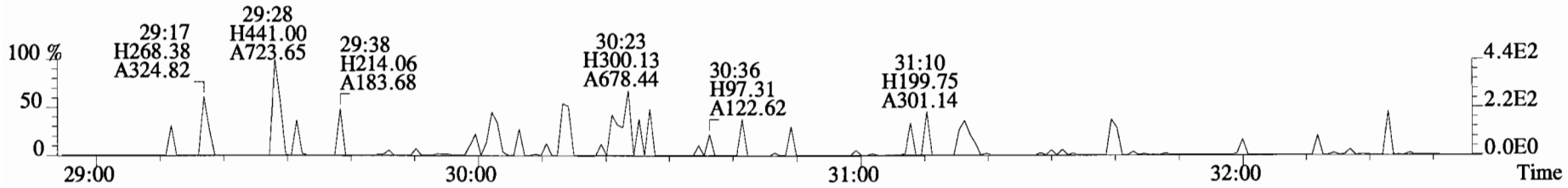
409.7974 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



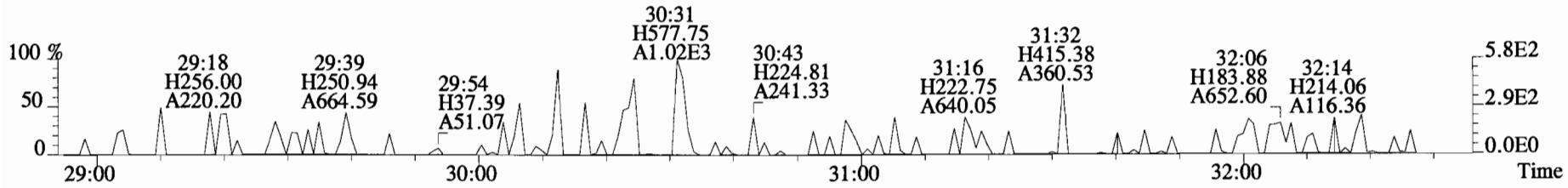
316.9824 S:13



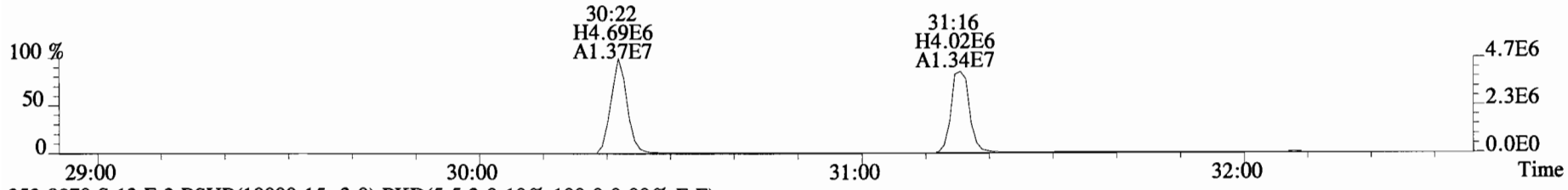
File:141014D1 #1-257 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



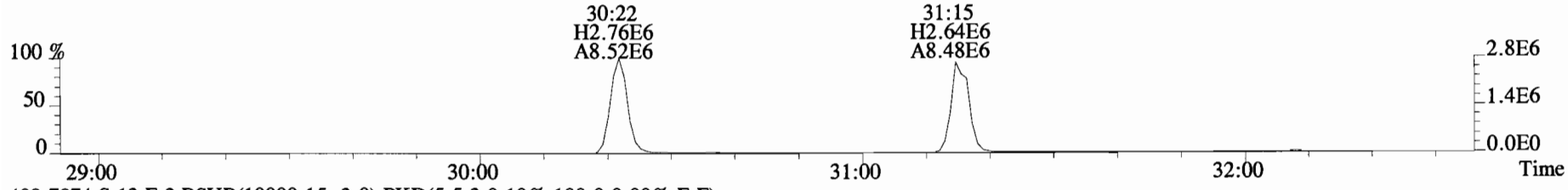
341.8568 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



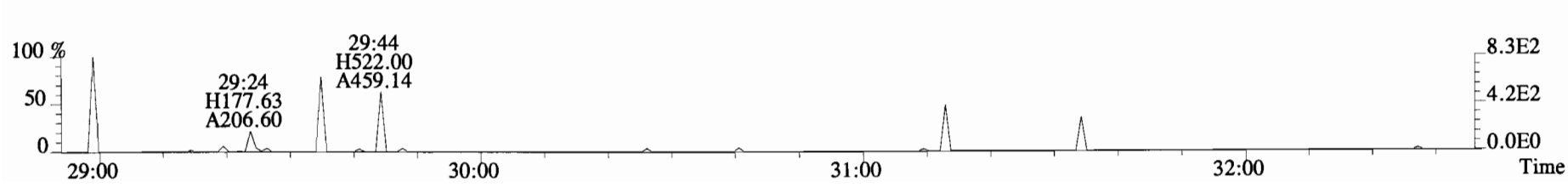
351.9000 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



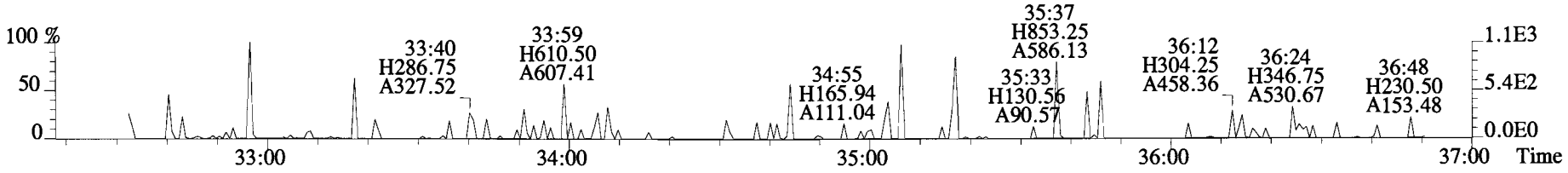
353.8970 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



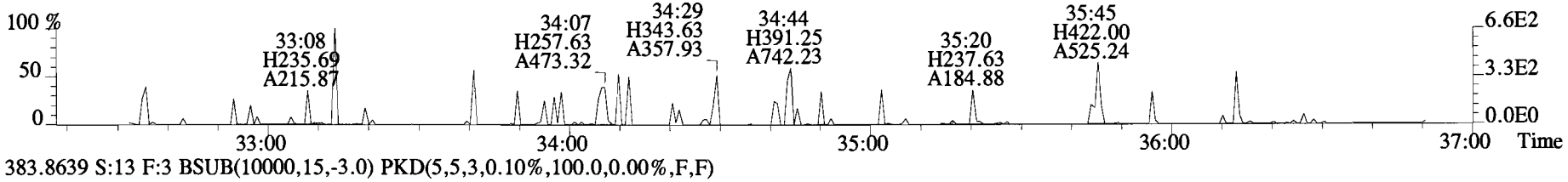
409.7974 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



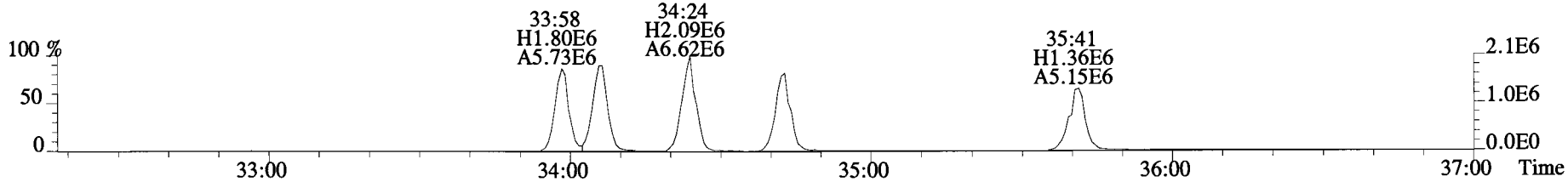
File:141014D1 #1-385 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



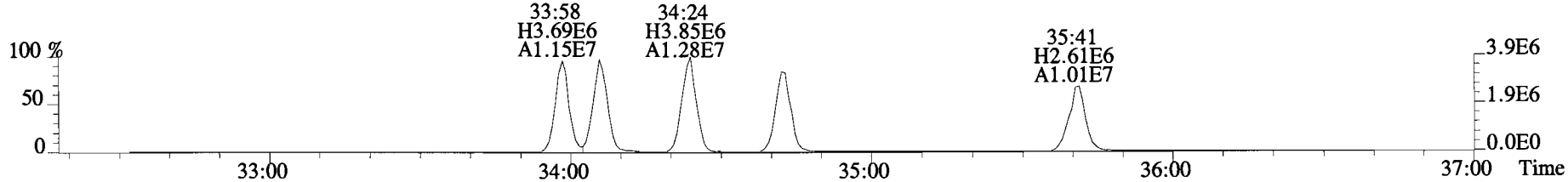
375.8178 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



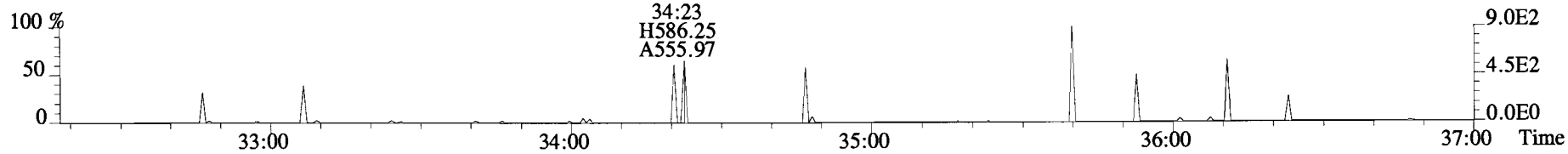
383.8639 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



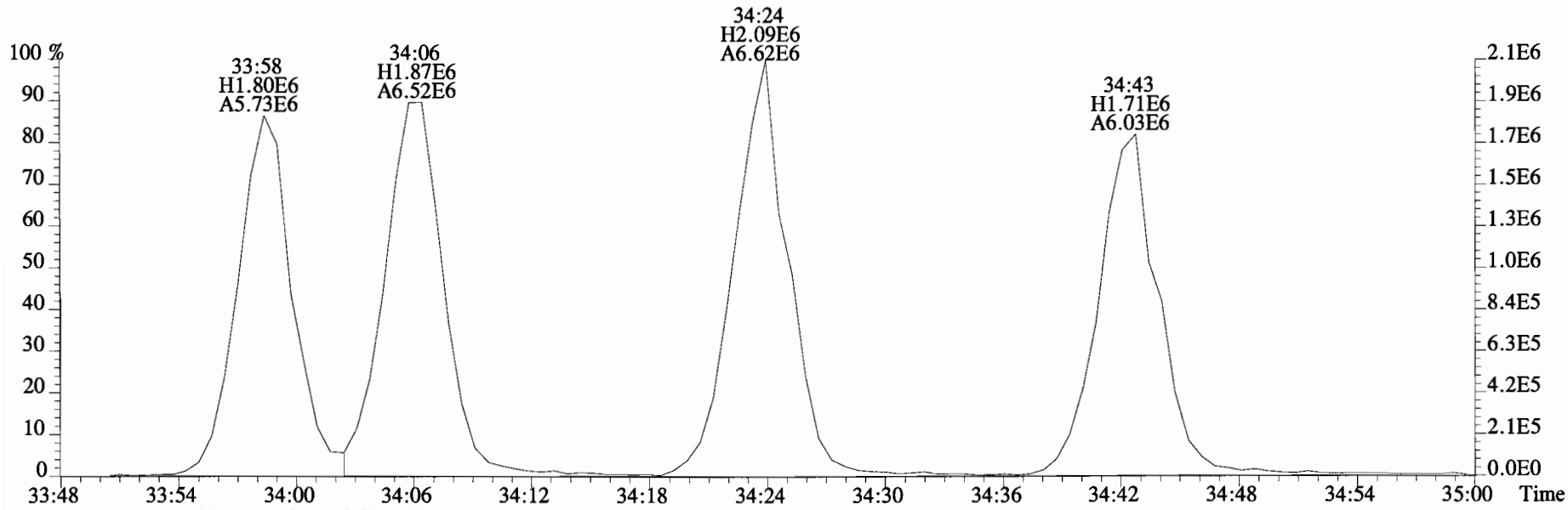
385.8610 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



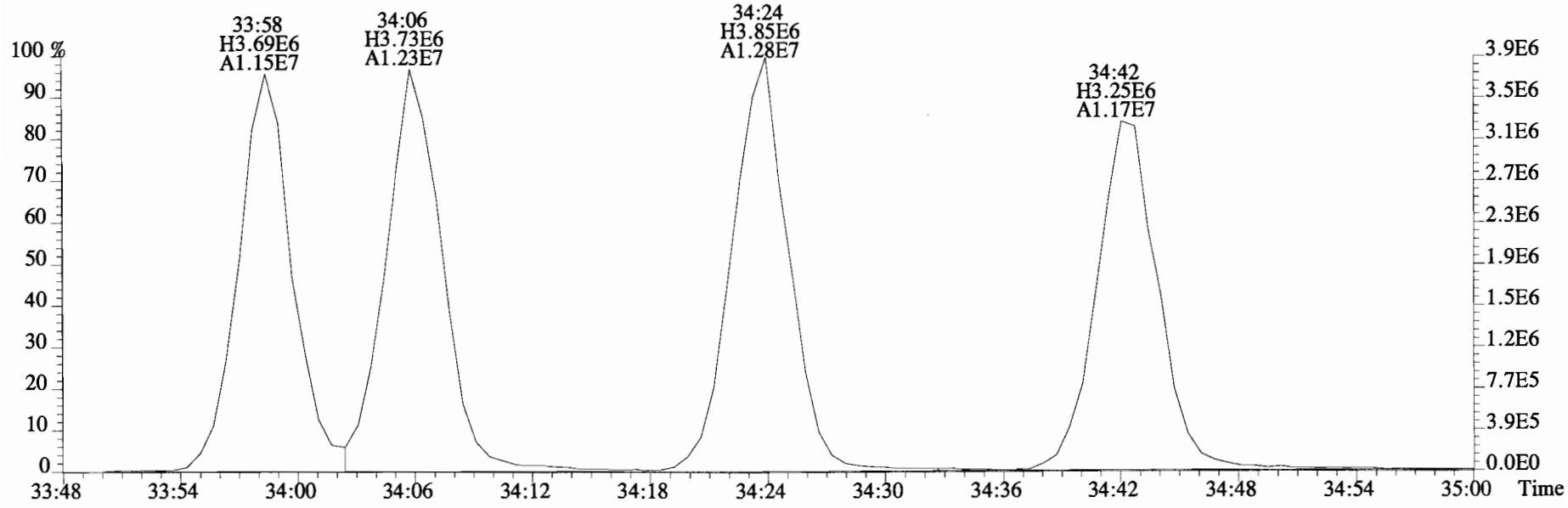
445.7555 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



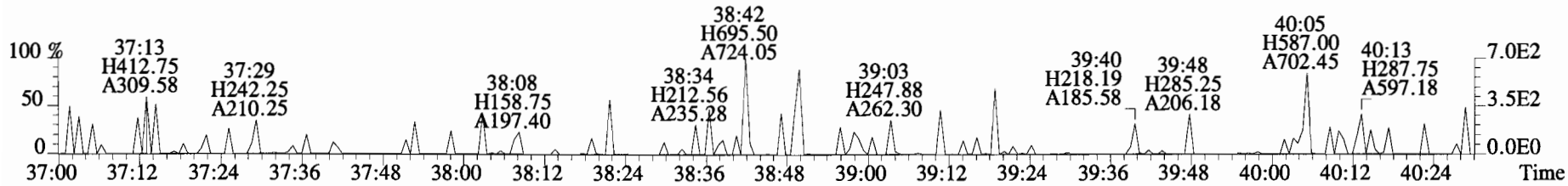
File:141014D1 #1-385 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
383.8639 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



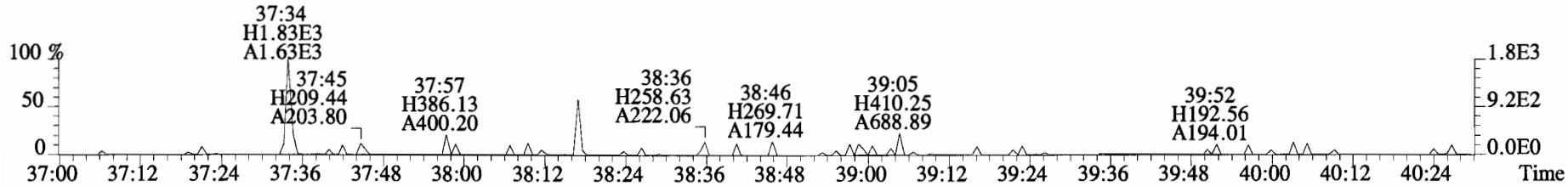
385.8610 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



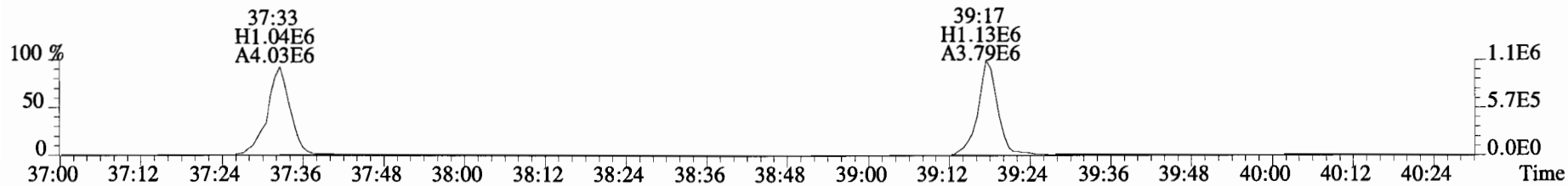
File:141014D1 #1-325 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



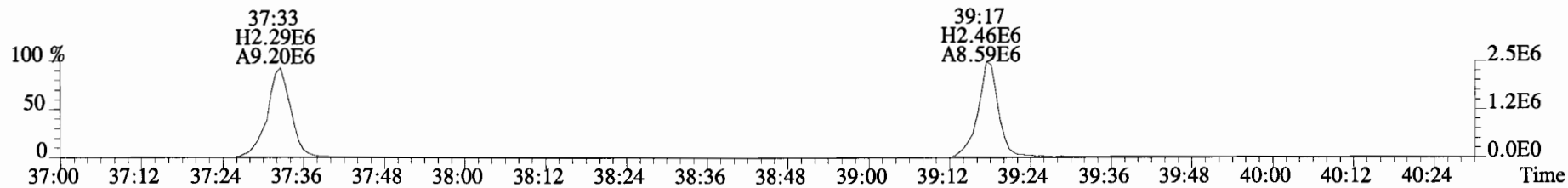
409.7788 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



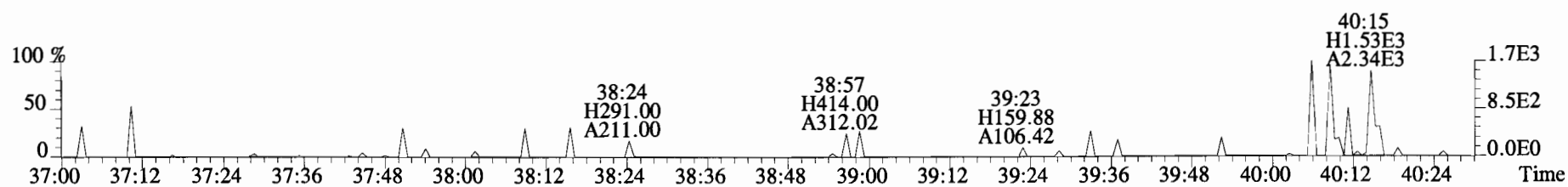
417.8253 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



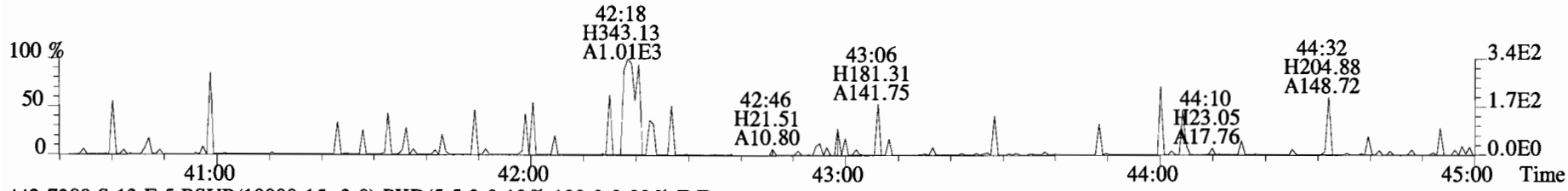
419.8220 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



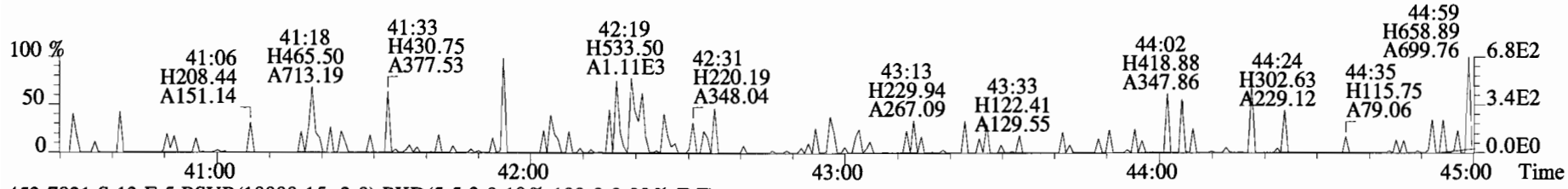
479.7165 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



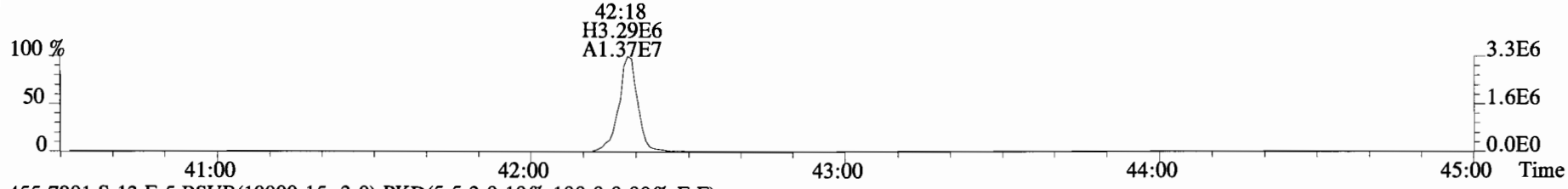
File:141014D1 #1-389 Acq:14-OCT-2014 22:05:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BLK1 Method Blank 10 Exp:OCDD_DB5
441.7428 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



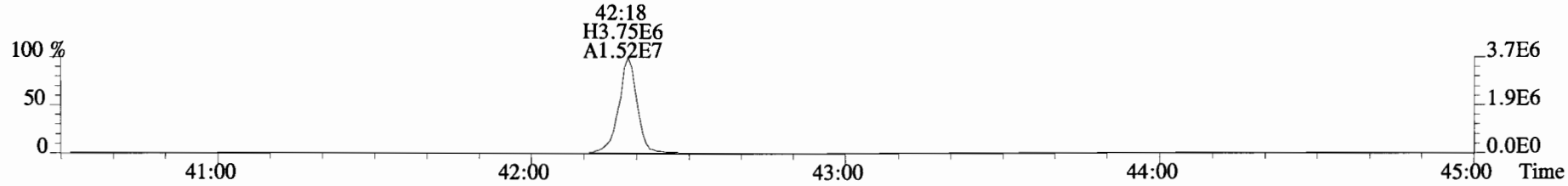
443.7398 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



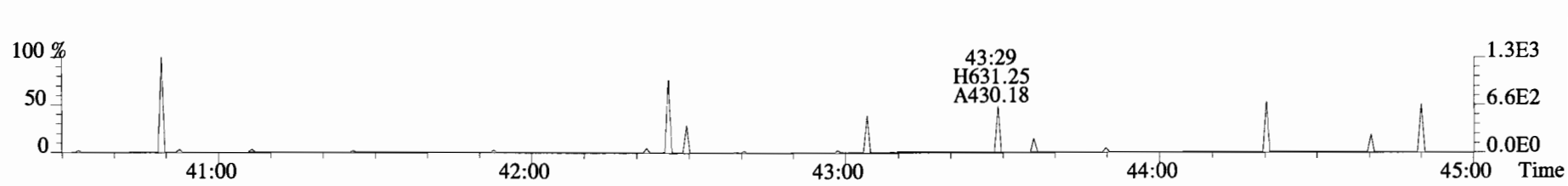
453.7831 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Name	Resp	RA	RRF	RT	Conc	Method QC Limits	Vista Historical Limits Aqueous Limits	Solid Limits
2,3,7,8-TCDD	1.57e+06	0.77 y	1.03	27:04	9.84	7.0 - 13	7.73 - 12.4	7.53 - 12.5
1,2,3,7,8-PeCDD	7.38e+06	0.61 y	0.84	31:33	46.2	35 - 65	37.8 - 57.5	40.4 - 65.1
1,2,3,4,7,8-HxCDD	6.25e+06	1.25 y	1.05	34:54	45.8	35 - 65	38.3 - 58.0	41.2 - 63.2
1,2,3,6,7,8-HxCDD	6.22e+06	1.32 y	1.04	35:00	44.7	35 - 65	38.7 - 57.0	40.8 - 65.2
1,2,3,7,8,9-HxCDD	6.21e+06	1.30 y	0.90	35:19	44.7	35 - 65	37.0 - 57.5	41.7 - 65.4
1,2,3,4,6,7,8-HpCDD	5.77e+06	1.07 y	1.01	38:45	48.6	35 - 65	39.0 - 58.5	21.3 - 87.7
OCDD	1.05e+07	0.89 y	1.04	42:05	90.9	70 - 130	83.2 - 126	0 - 400
2,3,7,8-TCDF	1.94e+06	0.78 y	0.91	26:18	9.19	7.0 - 13	7.65 - 12.4	7.82 - 12.0
1,2,3,7,8-PeCDF	1.07e+07	1.59 y	0.97	30:23	48.3	35 - 65	41.4 - 64.9	39.6 - 65.6
2,3,4,7,8-PeCDF	1.10e+07	1.57 y	0.94	31:17	48.6	35 - 65	36.9 - 56.0	40.2 - 66.5
1,2,3,4,7,8-HxCDF	1.08e+07	1.28 y	1.32	33:59	44.5	35 - 65	33.4 - 59.4	39.4 - 63.9
1,2,3,6,7,8-HxCDF	1.04e+07	1.26 y	1.18	34:07	44.8	35 - 65	38.7 - 59.0	41.1 - 62.9
2,3,4,6,7,8-HxCDF	9.75e+06	1.27 y	1.23	34:44	44.1	35 - 65	39.3 - 58.0	40.9 - 63.3
1,2,3,7,8,9-HxCDF	7.95e+06	1.27 y	1.13	35:42	45.4	35 - 65	38.8 - 58.0	39.5 - 64.9
1,2,3,4,6,7,8-HpCDF	8.81e+06	1.08 y	1.57	37:33	42.6	35 - 65	40.2 - 63.1	31.9 - 74.7
1,2,3,4,7,8,9-HpCDF	7.95e+06	1.10 y	1.50	39:18	42.0	35 - 65	40.5 - 62.2	39.8 - 63.8
OCDF	1.36e+07	0.93 y	1.05	42:19	90.4	70 - 130	80.0 - 120	69.8 - 136

						% Rec	Method QC Limits	Aqueous Limits	Solid Limits
13C-2,3,7,8-TCDD	1.55e+07	0.82 y	1.06	27:03	89.4	89.4	40 - 135	48.8 - 105	53.0 - 115
13C-1,2,3,7,8-PeCDD	1.90e+07	0.63 y	1.08	31:32	107	107	40 - 135	49.8 - 109	61.4 - 117
13C-1,2,3,4,7,8-HxCDD	1.30e+07	1.28 y	0.74	34:52	89.2	89.2	40 - 135	50.4 - 99.1	54.6 - 121
13C-1,2,3,6,7,8-HxCDD	1.34e+07	1.26 y	0.75	34:60	91.0	91.0	40 - 135	50.4 - 99.1	54.6 - 121
13C-1,2,3,7,8,9-HxCDD	1.55e+07	1.24 y	0.89	35:18	88.8	88.8	40 - 135	50.4 - 99.1	54.6 - 121
13C-1,2,3,4,6,7,8-HpCDD	1.18e+07	1.06 y	0.70	38:44	85.2	85.2	40 - 135	51.2 - 106	67.6 - 117
13C-OCDD	2.21e+07	0.89 y	0.59	42:04	191	95.6	40 - 135	30.8 - 113	14.0 - 147
13C-2,3,7,8-TCDF	2.31e+07	0.76 y	0.97	26:17	89.7	89.7	40 - 135	50.3 - 103	56.0 - 112
13C-1,2,3,7,8-PeCDF	2.29e+07	1.55 y	0.99	30:22	86.6	86.6	40 - 135	49.3 - 105	58.6 - 116
13C-2,3,4,7,8-PeCDF	2.42e+07	1.61 y	1.01	31:16	90.0	90.0	40 - 135	53.3 - 109	62.9 - 118
13C-1,2,3,4,7,8-HxCDF	1.85e+07	0.52 y	0.94	33:59	99.9	99.9	40 - 135	44.5 - 110	55.9 - 118
13C-1,2,3,6,7,8-HxCDF	1.98e+07	0.52 y	1.23	34:06	82.1	82.1	40 - 135	45.8 - 111	58.6 - 118
13C-2,3,4,6,7,8-HxCDF	1.80e+07	0.51 y	1.03	34:43	88.5	88.5	40 - 135	50.8 - 110	63.7 - 115
13C-1,2,3,7,8,9-HxCDF	1.55e+07	0.52 y	0.89	35:41	89.3	89.3	40 - 135	48.6 - 108	63.3 - 112
13C-1,2,3,4,6,7,8-HpCDF	1.31e+07	0.44 y	0.71	37:33	94.7	94.7	40 - 135	45.9 - 104	55.0 - 117
13C-1,2,3,4,7,8,9-HpCDF	1.26e+07	0.43 y	0.64	39:18	99.9	99.9	40 - 135	41.1 - 114	53.2 - 122
13C-OCDF	2.85e+07	0.92 y	0.76	42:18	191	95.7	40 - 135	36.8 - 109	48.3 - 109
37Cl-2,3,7,8-TCDD	6.32e+06		1.04	27:04	37.2	93.0	40 - 135	51.1 - 117	49.6 - 106

Analyst: MJ

Date: 10/15/14

13C-1,2,3,4-TCDD	1.63e+07	0.80 y	1.00	26:29	100
13C-1,2,3,4-TCDF	2.67e+07	0.76 y	1.00	25:04	100
13C-1,2,3,4,6,9-HxCDF	1.96e+07	0.52 y	1.00	34:24	100

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

Lab Name: Vista Analytical Laboratory Extraction Batch: B4J0064-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 141014D1-10

Ext. Date: 10-13-14 Shift: Day Analysis Date: 14-OCT-14 Time: 19:40:27

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	9.84	6.7 - 15.8 7.3 - 14.6 (2)
1,2,3,7,8-PeCDD	50	46.2	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	45.8	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	44.7	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	44.7	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	48.6	35.0 - 70.0
OCDD	100	90.9	78.0 - 144.0
2,3,7,8-TCDF	10	9.19	7.5 - 15.8 8.0 - 14.7 (2)
1,2,3,7,8-PeCDF	50	48.3	40.0 - 67.0
2,3,4,7,8-PeCDF	50	48.6	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	44.5	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	44.8	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	44.1	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	45.4	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	42.6	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	42.0	39.0 - 69.0
OCDF	100	90.4	63.0 - 170.0

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: MJ

Date: 10/15/14

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

Lab Name: Vista Analytical Laboratory Extraction Batch: B4J0064-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 141014D1-10

Ext. Date: 10-13-14 Shift: Day Analysis Date: 14-OCT-14 Time: 19:40:27

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	89.4	20.0 - 175.0
			25.0 - 141.0 (2)
13C-1,2,3,7,8-PeCDD	100	107	21.0 - 227.0
13C-1,2,3,4,7,8-HxCDD	100	89.2	21.0 - 193.0
13C-1,2,3,6,7,8-HxCDD	100	91.0	25.0 - 163.0
13C-1,2,3,7,8,9-HxCDD	100	88.8	21.0 - 193.0
13C-1,2,3,4,6,7,8-HpCDD	100	85.2	26.0 - 166.0
13C-OCDD	200	191	26.0 - 397.0
13C-2,3,7,8-TCDF	100	89.7	22.0 - 152.0
			26.0 - 126.0 (2)
13C-1,2,3,7,8-PeCDF	100	86.6	21.0 - 192.0
13C-2,3,4,7,8-PeCDF	100	90.0	13.0 - 328.0
13C-1,2,3,4,7,8-HxCDF	100	99.9	19.0 - 202.0
13C-1,2,3,6,7,8-HxCDF	100	82.1	21.0 - 159.0
13C-2,3,4,6,7,8-HxCDF	100	88.5	22.0 - 176.0
13C-1,2,3,7,8,9-HxCDF	100	89.3	17.0 - 205.0
13C-1,2,3,4,6,7,8-HpCDF	100	94.7	21.0 - 158.0
13C-1,2,3,4,7,8,9-HpCDF	100	99.9	20.0 - 186.0
13C-OCDF	200	191	26.0 - 397.0
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	37.2	12.4 - 76.4

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: MJ

Date: 10/15/14

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	1.57e+06	0.77 y	1.03	27:04	1.001	9.8396		*	2.5	*
	1,2,3,7,8-PeCDD	7.38e+06	0.61 y	0.84	31:33	1.001	46.235		*	2.5	*
	1,2,3,4,7,8-HxCDD	6.25e+06	1.25 y	1.05	34:54	1.001	45.774		*	2.5	*
	1,2,3,6,7,8-HxCDD	6.22e+06	1.32 y	1.04	35:00	1.000	44.695		*	2.5	*
	1,2,3,7,8,9-HxCDD	6.21e+06	1.30 y	0.90	35:19	1.000	44.658		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	5.77e+06	1.07 y	1.01	38:45	1.001	48.571		*	2.5	*
	OCDD	1.05e+07	0.89 y	1.04	42:05	1.000	90.947		*	2.5	*
	2,3,7,8-TCDF	1.94e+06	0.78 y	0.91	26:18	1.001	9.1881		*	2.5	*
	1,2,3,7,8-PeCDF	1.07e+07	1.59 y	0.97	30:23	1.000	48.275		*	2.5	*
	2,3,4,7,8-PeCDF	1.10e+07	1.57 y	0.94	31:17	1.000	48.552		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.08e+07	1.28 y	1.32	33:59	1.000	44.520		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.04e+07	1.26 y	1.18	34:07	1.000	44.790		*	2.5	*
	2,3,4,6,7,8-HxCDF	9.75e+06	1.27 y	1.23	34:44	1.000	44.135		*	2.5	*
	1,2,3,7,8,9-HxCDF	7.95e+06	1.27 y	1.13	35:42	1.000	45.354		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	8.81e+06	1.08 y	1.57	37:33	1.000	42.626		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	7.95e+06	1.10 y	1.50	39:18	1.000	41.974		*	2.5	*
	OCDF	1.36e+07	0.93 y	1.05	42:19	1.000	90.399		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.55e+07	0.82 y	1.06	27:03	1.021	89.401				
IS	13C-1,2,3,7,8-PeCDD	1.90e+07	0.63 y	1.08	31:32	1.191	107.41				
IS	13C-1,2,3,4,7,8-HxCDD	1.30e+07	1.28 y	0.74	34:52	1.014	89.249				
IS	13C-1,2,3,6,7,8-HxCDD	1.34e+07	1.26 y	0.75	34:60	1.017	91.048				
IS	13C-1,2,3,7,8,9-HxCDD	1.55e+07	1.24 y	0.89	35:18	1.026	88.773				
IS	13C-1,2,3,4,6,7,8-HpCDD	1.18e+07	1.06 y	0.70	38:44	1.126	85.194				
IS	13C-OCDD	2.21e+07	0.89 y	0.59	42:04	1.223	191.21				
IS	13C-2,3,7,8-TCDF	2.31e+07	0.76 y	0.97	26:17	0.992	89.702				
IS	13C-1,2,3,7,8-PeCDF	2.29e+07	1.55 y	0.99	30:22	1.146	86.555				
IS	13C-2,3,4,7,8-PeCDF	2.42e+07	1.61 y	1.01	31:16	1.180	89.966				
IS	13C-1,2,3,4,7,8-HxCDF	1.85e+07	0.52 y	0.94	33:59	0.988	99.933				
IS	13C-1,2,3,6,7,8-HxCDF	1.98e+07	0.52 y	1.23	34:06	0.991	82.080				
IS	13C-2,3,4,6,7,8-HxCDF	1.80e+07	0.51 y	1.03	34:43	1.009	88.522				
IS	13C-1,2,3,7,8,9-HxCDF	1.55e+07	0.52 y	0.89	35:41	1.037	89.281				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.31e+07	0.44 y	0.71	37:33	1.091	94.749				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.26e+07	0.43 y	0.64	39:18	1.142	99.935				
IS	13C-OCDF	2.85e+07	0.92 y	0.76	42:18	1.230	191.39				
C/Up	37Cl-2,3,7,8-TCDD	6.32e+06		1.04	27:04	1.022	37.195				
RS/RT	13C-1,2,3,4-TCDD	1.63e+07	0.80 y	1.00	26:29	*	100.00				
RS	13C-1,2,3,4-TCDF	2.67e+07	0.76 y	1.00	25:04	*	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.96e+07	0.52 y	1.00	34:24	*	100.00				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	10.2	10.3		*	*
Total Penta-Dioxins	46.3	46.3		*	*
Total Hexa-Dioxins	135	136		*	*
Total Hepta-Dioxins	49.5	50.3		*	*
Total Tetra-Furans	9.28	9.45		*	*
Total Penta-Furans	98.519	99.005		*	*
Total Hexa-Furans	179	180		*	*
Total Hepta-Furans	84.7	86.2		*	*

	Rec	Qual
IS	89.4	
IS	107	
IS	89.2	
IS	91.0	
IS	88.8	
IS	85.2	
IS	95.6	
IS	89.7	
IS	86.6	
IS	90.0	
IS	99.9	
IS	82.1	
IS	88.5	
IS	89.3	
IS	94.7	
IS	99.9	
IS	95.7	
C/Up	93.0	

Integrations by Analyst: MJ Date: 10/15/14

Reviewed by Analyst: [signature] Date: 10/20/14

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	1.57e+06	0.77 y	1.03	27:04	1.001	19.679		*	2.5	*
	1,2,3,7,8-PeCDD	7.38e+06	0.61 y	0.84	31:33	1.001	92.471		*	2.5	*
	1,2,3,4,7,8-HxCDD	6.25e+06	1.25 y	1.05	34:54	1.001	91.548		*	2.5	*
	1,2,3,6,7,8-HxCDD	6.22e+06	1.32 y	1.04	35:00	1.000	89.389		*	2.5	*
	1,2,3,7,8,9-HxCDD	6.21e+06	1.30 y	0.90	35:19	1.000	89.316		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	5.77e+06	1.07 y	1.01	38:45	1.001	97.142		*	2.5	*
	OCDD	1.05e+07	0.89 y	1.04	42:05	1.000	181.89		*	2.5	*
	2,3,7,8-TCDF	1.94e+06	0.78 y	0.91	26:18	1.001	18.376		*	2.5	*
	1,2,3,7,8-PeCDF	1.07e+07	1.59 y	0.97	30:23	1.000	96.549		*	2.5	*
	2,3,4,7,8-PeCDF	1.10e+07	1.57 y	0.94	31:17	1.000	97.104		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.08e+07	1.28 y	1.32	33:59	1.000	89.040		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.04e+07	1.26 y	1.18	34:07	1.000	89.579		*	2.5	*
	2,3,4,6,7,8-HxCDF	9.75e+06	1.27 y	1.23	34:44	1.000	88.269		*	2.5	*
	1,2,3,7,8,9-HxCDF	7.95e+06	1.27 y	1.13	35:42	1.000	90.708		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	8.81e+06	1.08 y	1.57	37:33	1.000	85.251		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	7.95e+06	1.10 y	1.50	39:18	1.000	83.949		*	2.5	*
	OCDF	1.36e+07	0.93 y	1.05	42:19	1.000	180.80		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.55e+07	0.82 y	1.06	27:03	1.021	178.80				
IS	13C-1,2,3,7,8-PeCDD	1.90e+07	0.63 y	1.08	31:32	1.191	214.83				
IS	13C-1,2,3,4,7,8-HxCDD	1.30e+07	1.28 y	0.74	34:52	1.014	178.50				
IS	13C-1,2,3,6,7,8-HxCDD	1.34e+07	1.26 y	0.75	34:60	1.017	182.10				
IS	13C-1,2,3,7,8,9-HxCDD	1.55e+07	1.24 y	0.89	35:18	1.026	177.55				
IS	13C-1,2,3,4,6,7,8-HpCDD	1.18e+07	1.06 y	0.70	38:44	1.126	170.39				
IS	13C-OCDD	2.21e+07	0.89 y	0.59	42:04	1.223	382.41				
IS	13C-2,3,7,8-TCDF	2.31e+07	0.76 y	0.97	26:17	0.992	179.40				
IS	13C-1,2,3,7,8-PeCDF	2.29e+07	1.55 y	0.99	30:22	1.146	173.11				
IS	13C-2,3,4,7,8-PeCDF	2.42e+07	1.61 y	1.01	31:16	1.180	179.93				
IS	13C-1,2,3,4,7,8-HxCDF	1.85e+07	0.52 y	0.94	33:59	0.988	199.87				
IS	13C-1,2,3,6,7,8-HxCDF	1.98e+07	0.52 y	1.23	34:06	0.991	164.16				
IS	13C-2,3,4,6,7,8-HxCDF	1.80e+07	0.51 y	1.03	34:43	1.009	177.04				
IS	13C-1,2,3,7,8,9-HxCDF	1.55e+07	0.52 y	0.89	35:41	1.037	178.56				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.31e+07	0.44 y	0.71	37:33	1.091	189.50				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.26e+07	0.43 y	0.64	39:18	1.142	199.87				
IS	13C-OCDF	2.85e+07	0.92 y	0.76	42:18	1.230	382.78				
C/Up	37Cl-2,3,7,8-TCDD	6.32e+06		1.04	27:04	1.022	74.391				
RS/RT	13C-1,2,3,4-TCDD	1.63e+07	0.80 y	1.00	26:29	*	200.00				
RS	13C-1,2,3,4-TCDF	2.67e+07	0.76 y	1.00	25:04	*	200.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.96e+07	0.52 y	1.00	34:24	*	200.00				

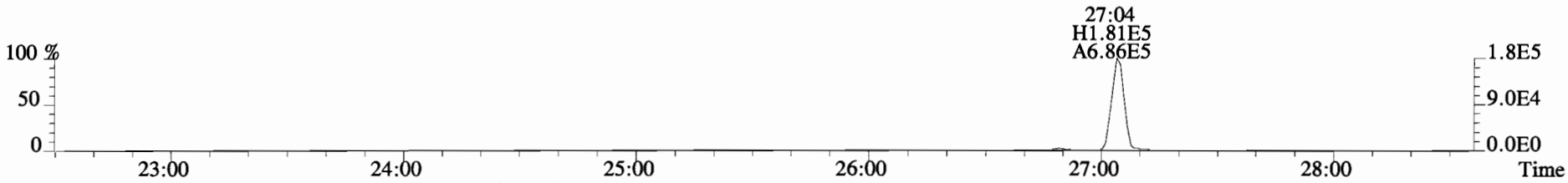
Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	20.4	20.5		*	*
Total Penta-Dioxins	92.6	92.7		*	*
Total Hexa-Dioxins	271	272		*	*
Total Hepta-Dioxins	99.1	101		*	*
Total Tetra-Furans	18.6	18.9		*	*
Total Penta-Furans	197.04	198.01		*	*
Total Hexa-Furans	358	359		*	*
Total Hepta-Furans	169	172		*	*

	Rec	Qual
IS	89.4	
IS	107	
IS	89.2	
IS	91.0	
IS	88.8	
IS	85.2	
IS	95.6	
IS	89.7	
IS	86.6	
IS	90.0	
IS	99.9	
IS	82.1	
IS	88.5	
IS	89.3	
IS	94.7	
IS	99.9	
IS	95.7	
C/Up	93.0	

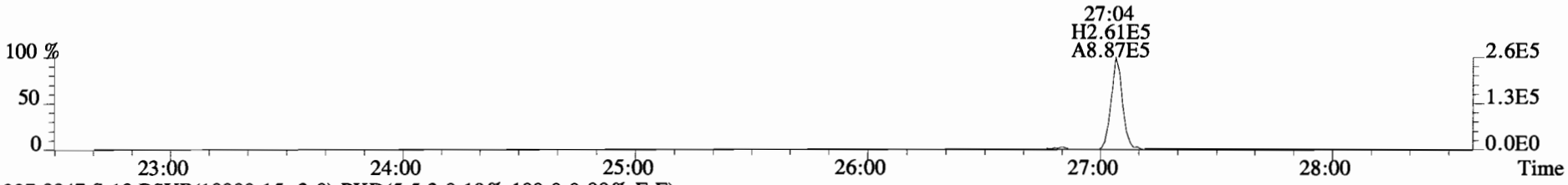
Integrations by Analyst: MS Date: 10/15/14

Reviewed by Analyst: _____ Date: _____

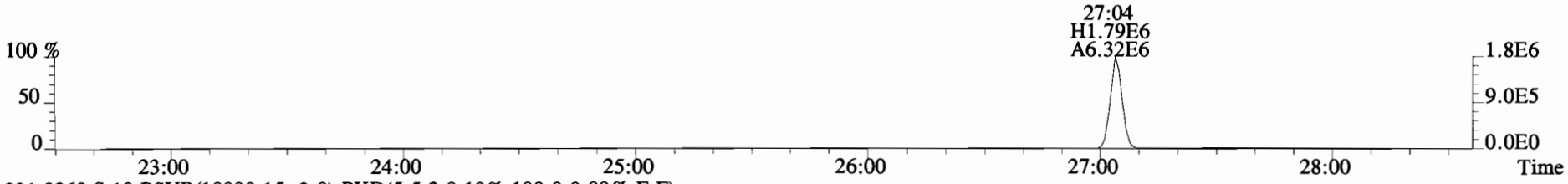
File:141014D1 #1-551 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



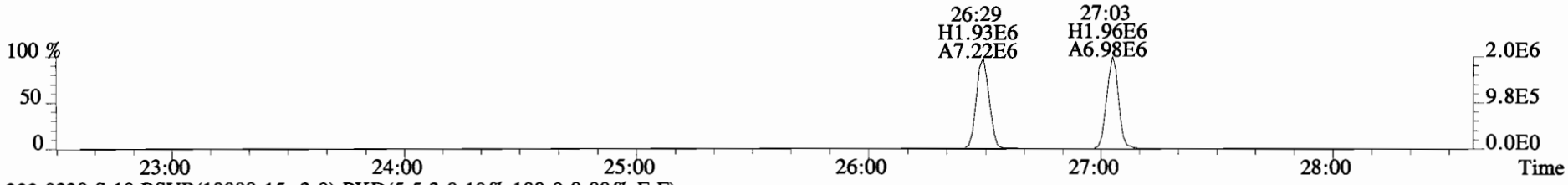
321.8936 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



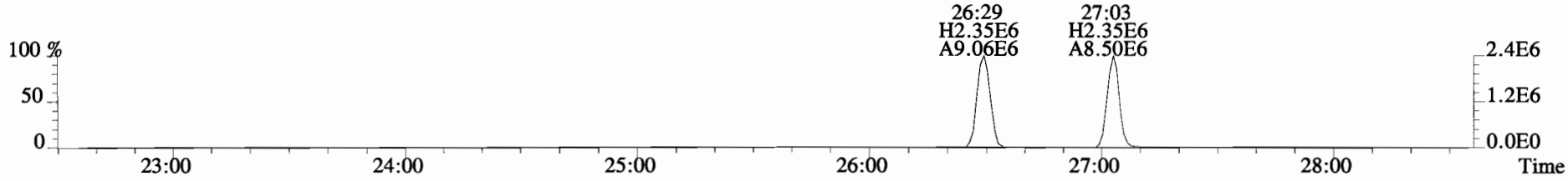
327.8847 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



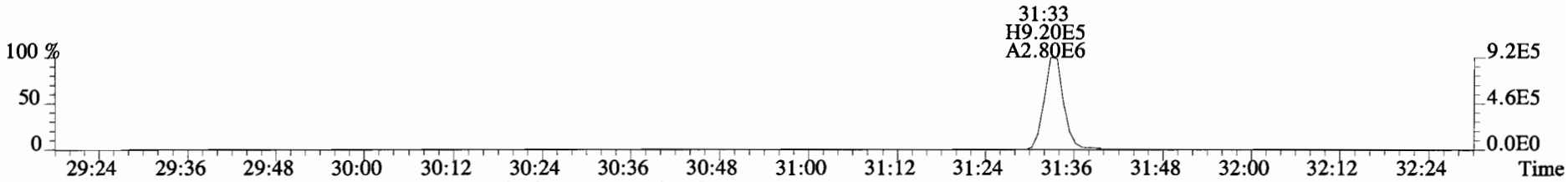
331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



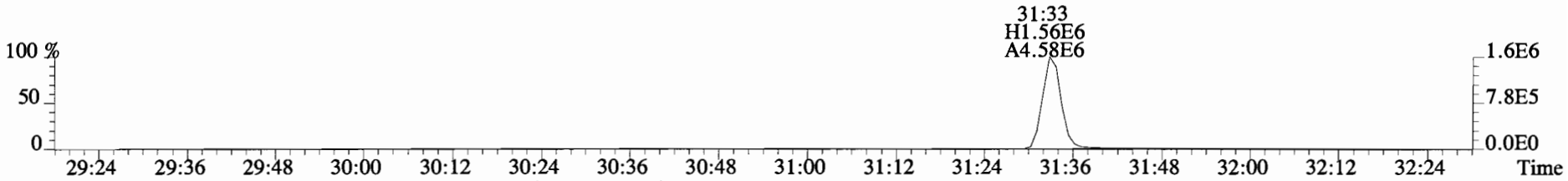
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



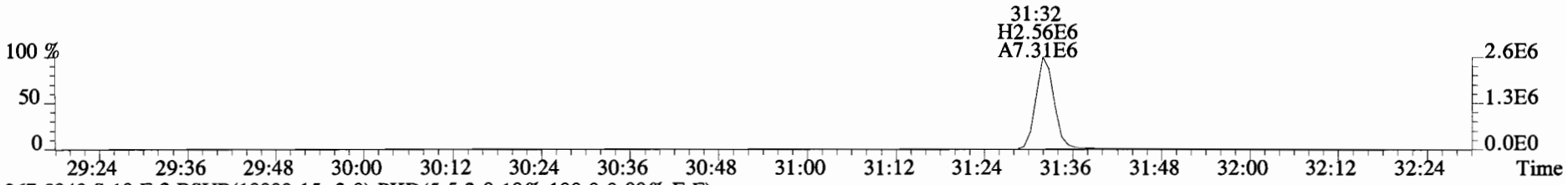
File:141014D1 #1-257 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
353.8576 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



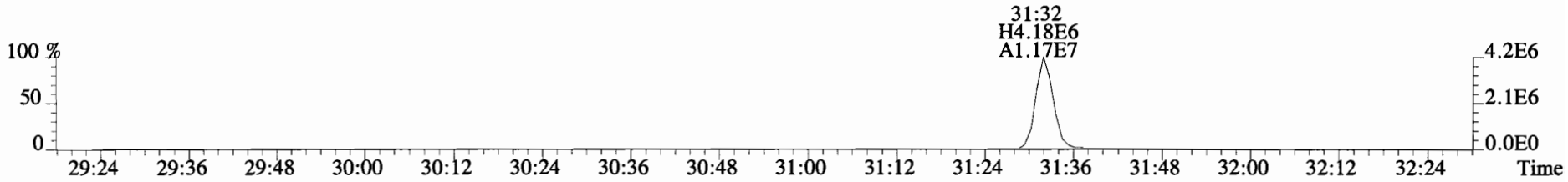
355.8546 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



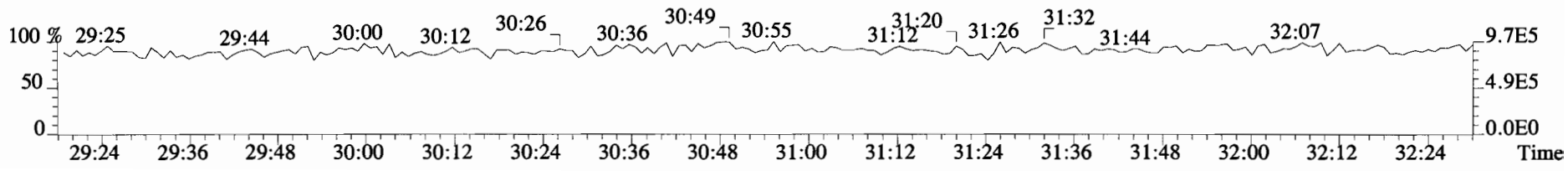
365.8978 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



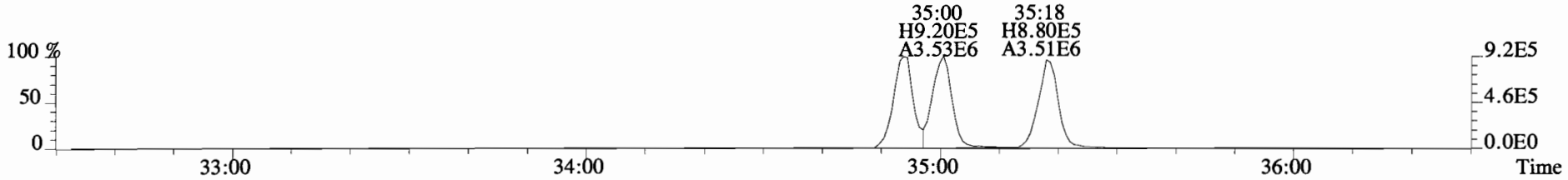
367.8949 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



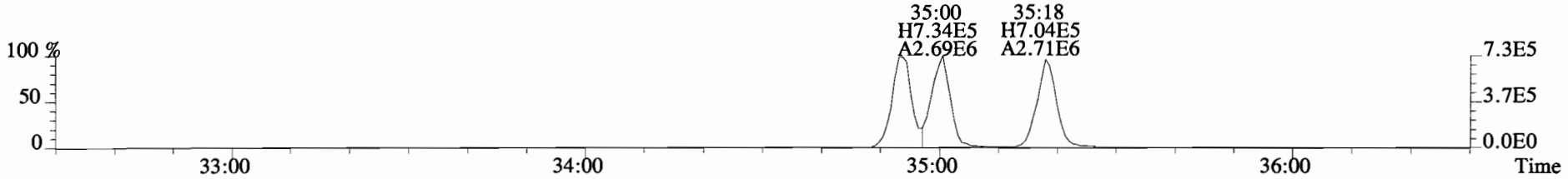
366.9792 S:10 F:2



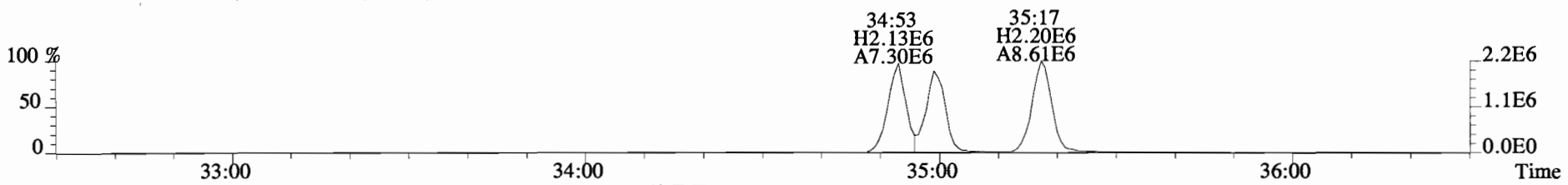
File:141014D1 #1-384 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



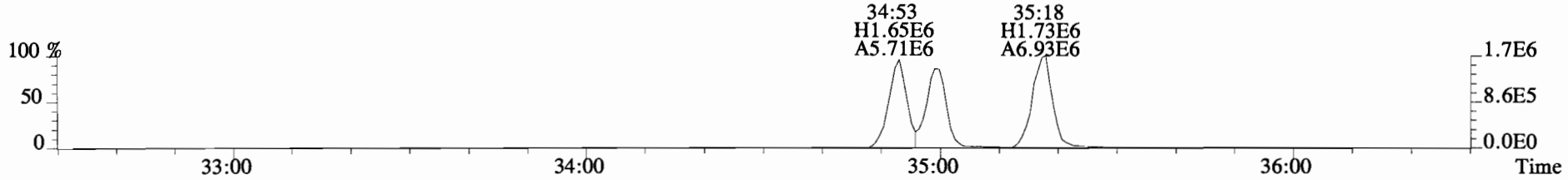
391.8127 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



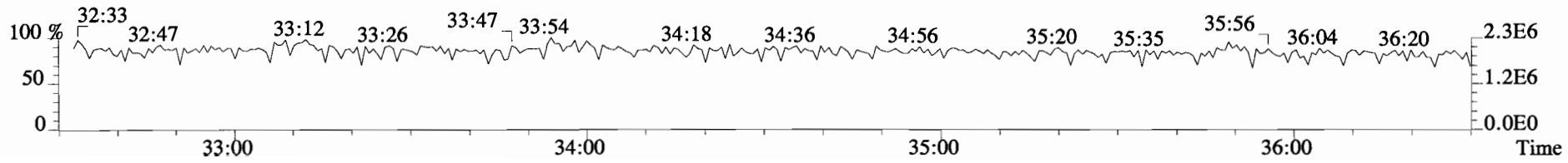
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



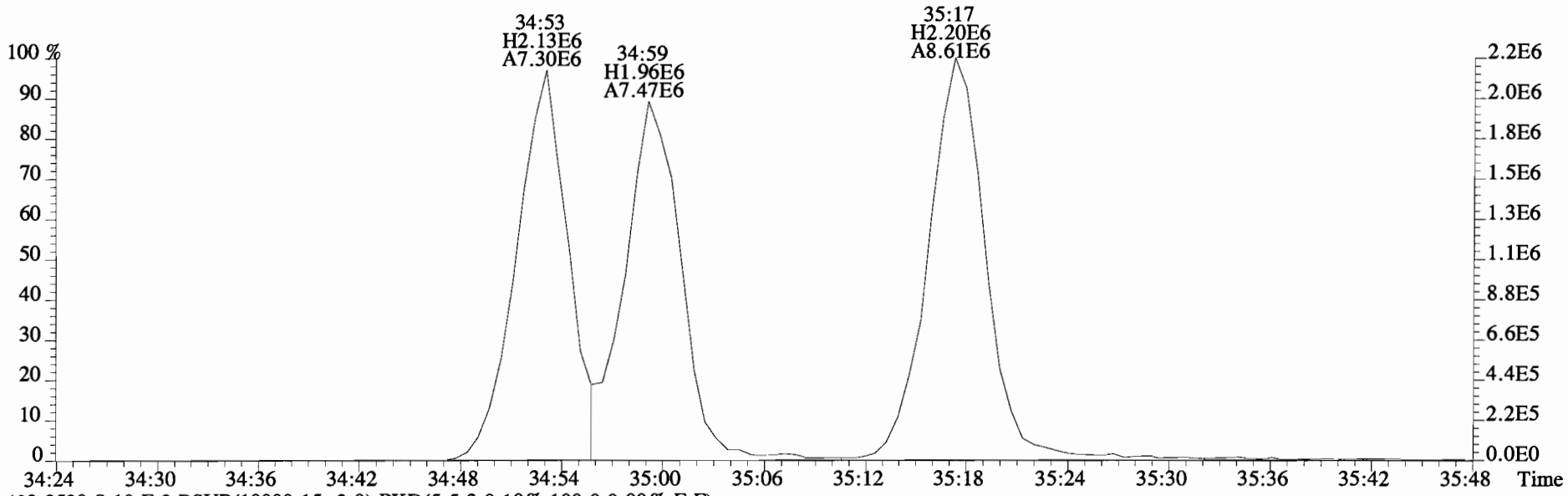
403.8530 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



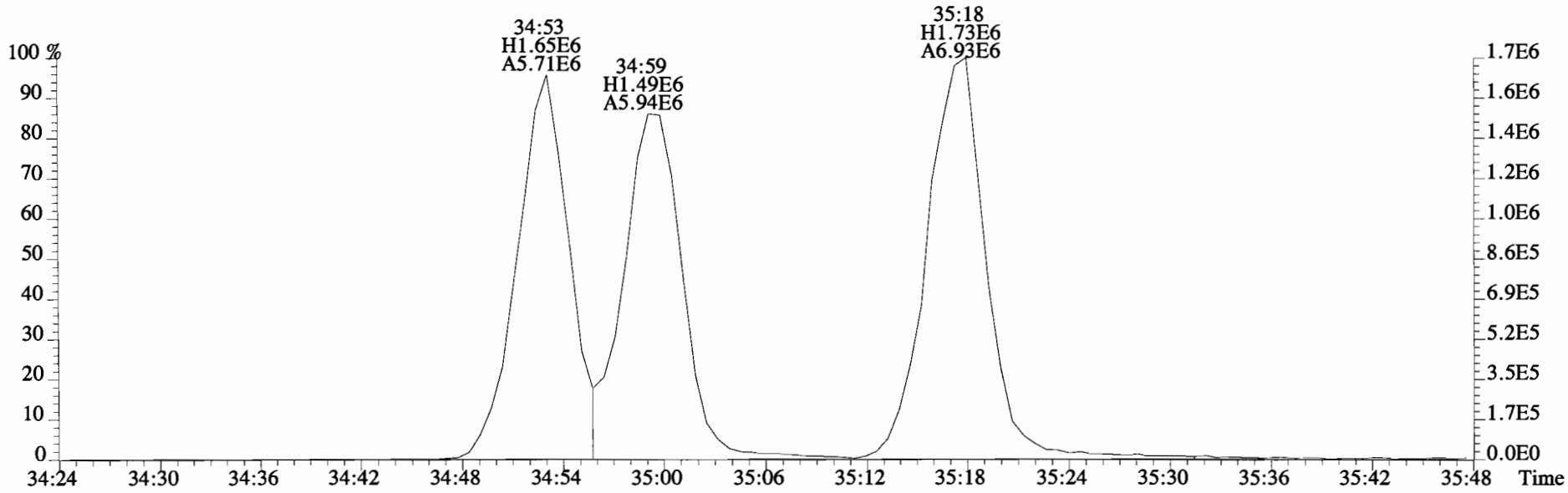
380.9760 S:10 F:3



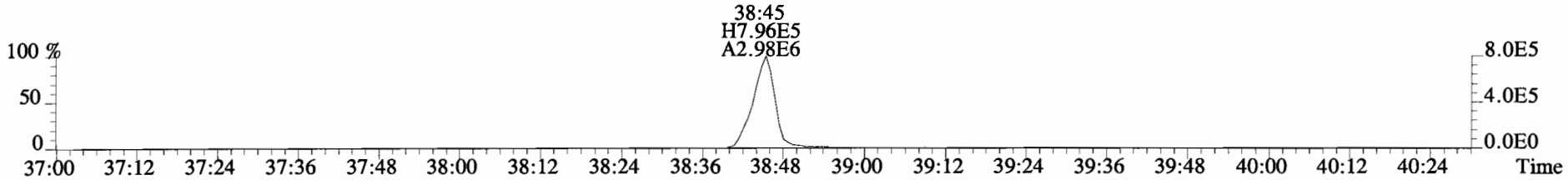
File:141014D1 #1-384 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



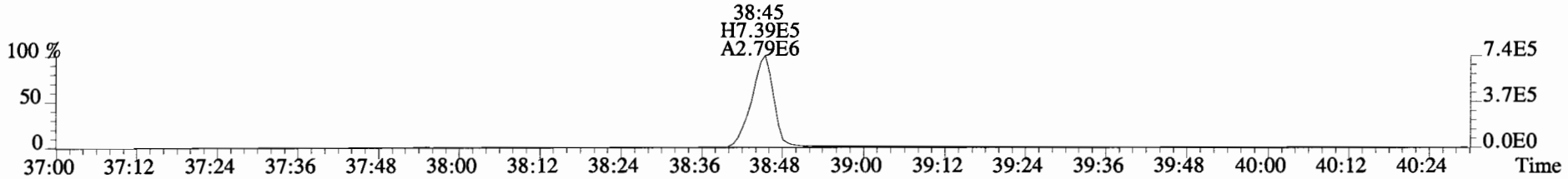
403.8530 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



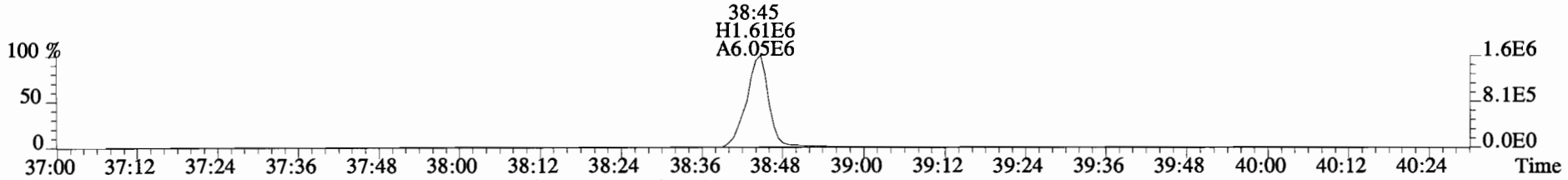
File:141014D1 #1-326 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
423.7767 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



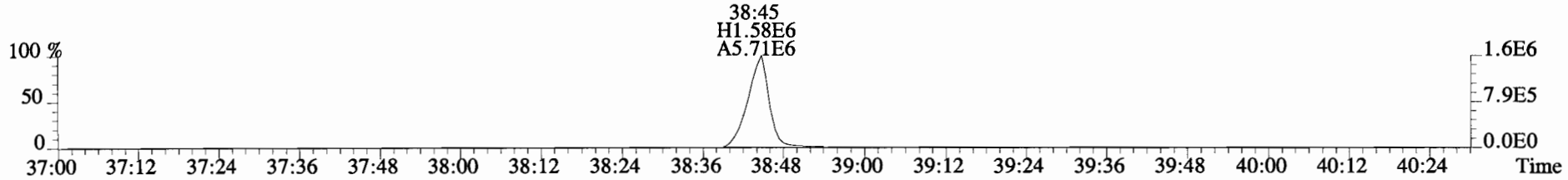
425.7737 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



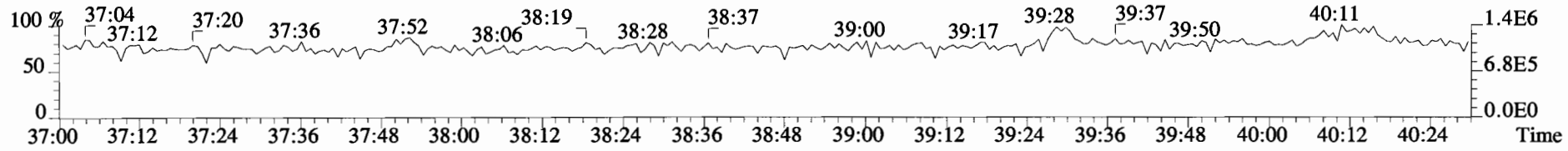
435.8169 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



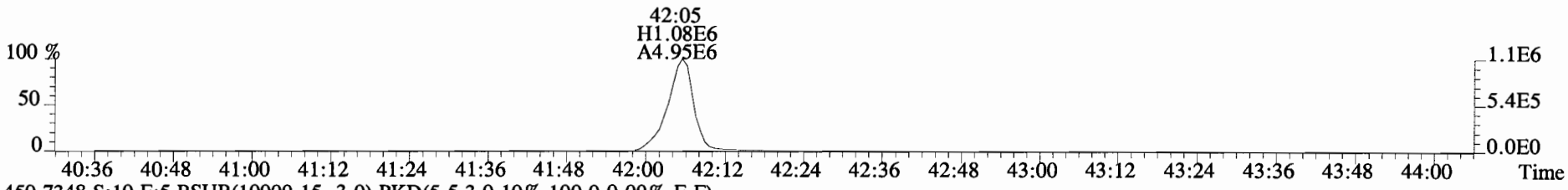
437.8140 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



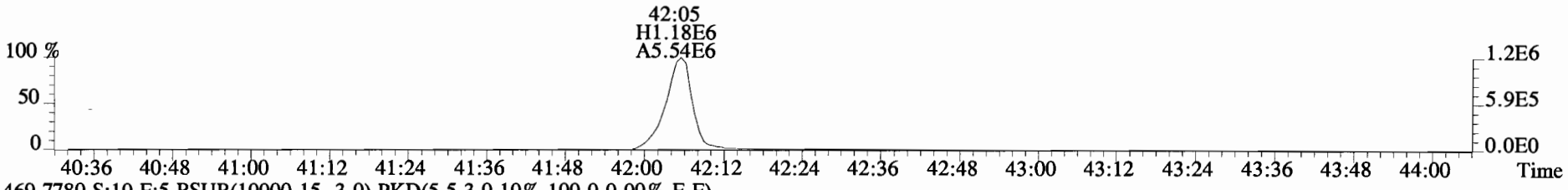
430.9728 S:10 F:4



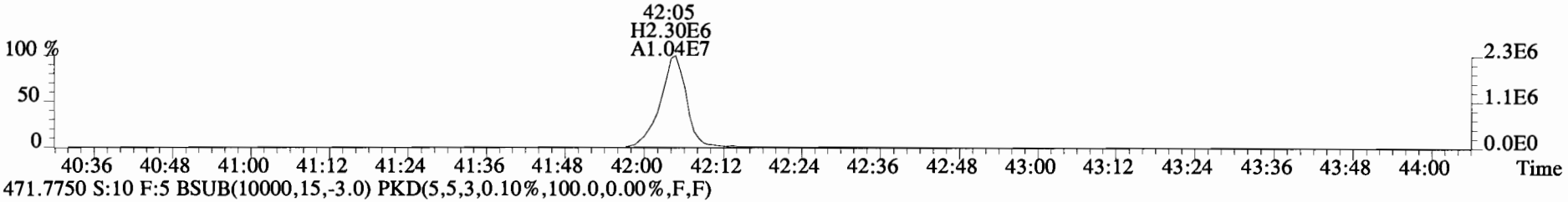
File:141014D1 #1-389 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
457.7377 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



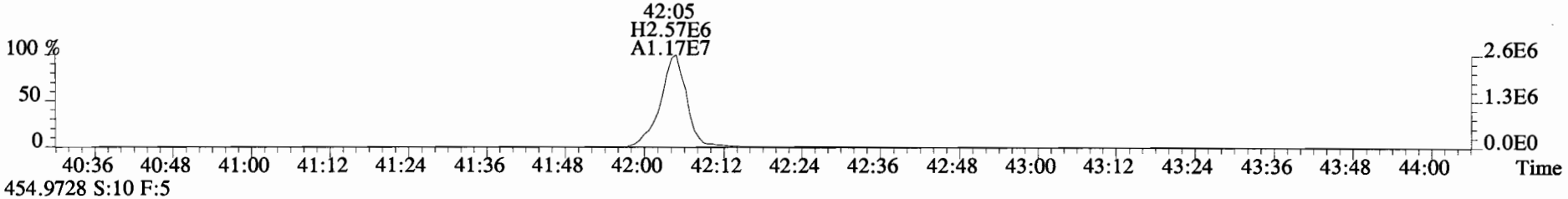
459.7348 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



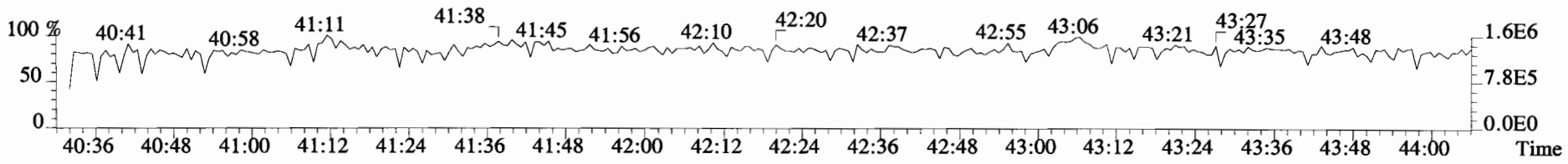
469.7780 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



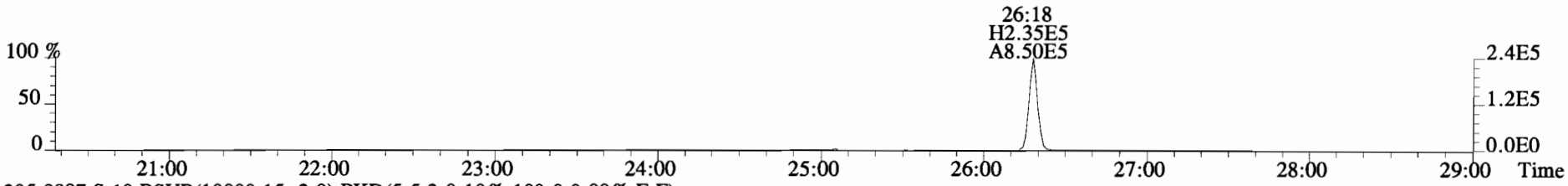
471.7750 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



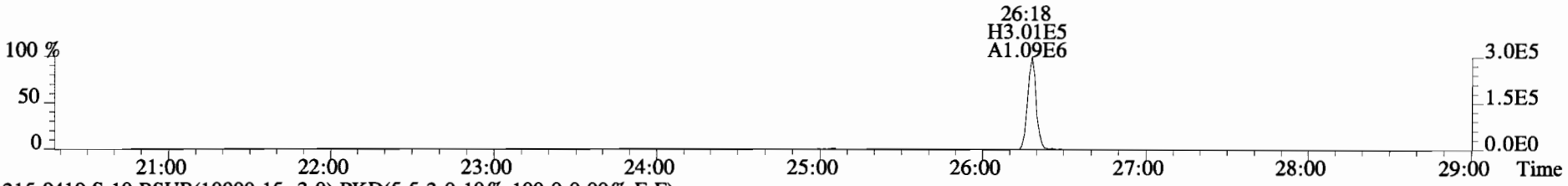
454.9728 S:10 F:5



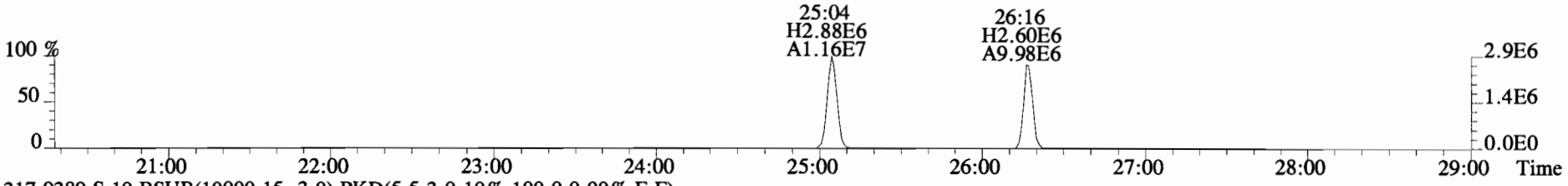
File:141014D1 #1-551 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



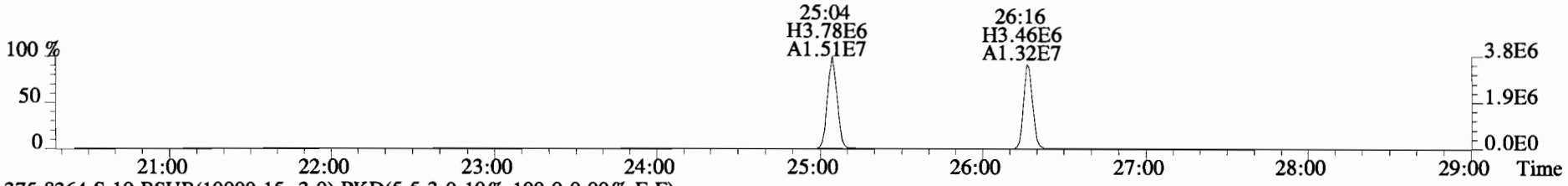
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



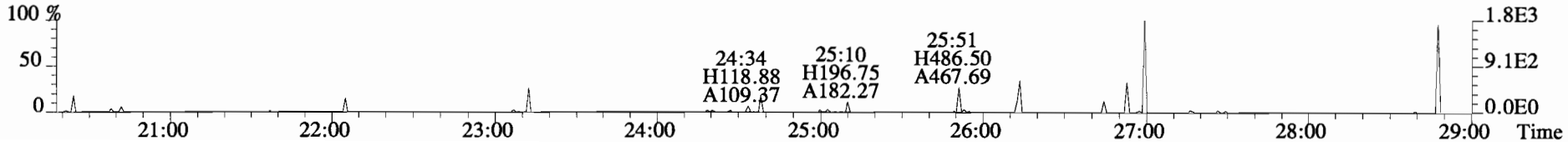
315.9419 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



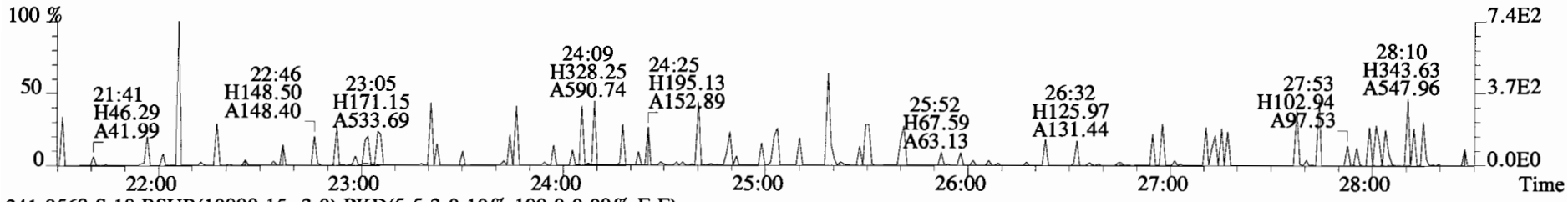
317.9389 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



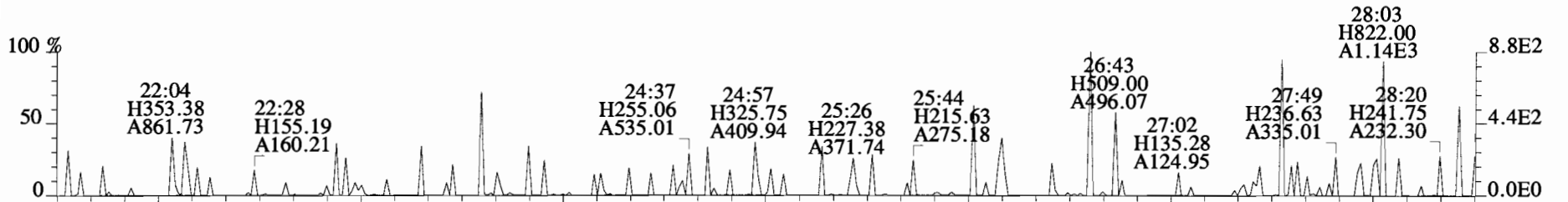
375.8364 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141014D1 #1-551 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
339.8597 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

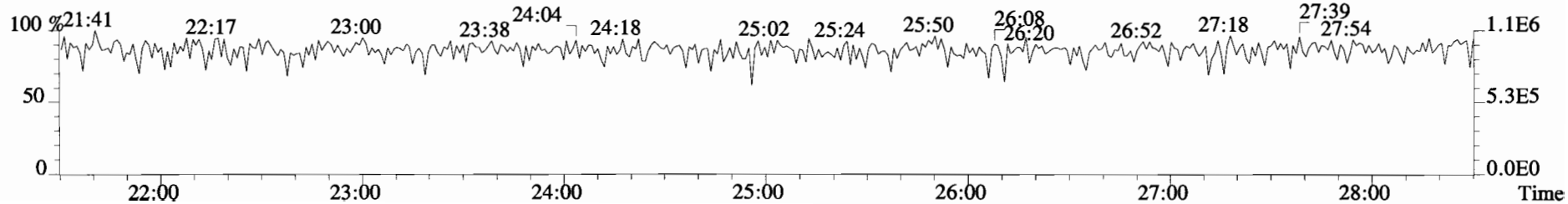


341.8568 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

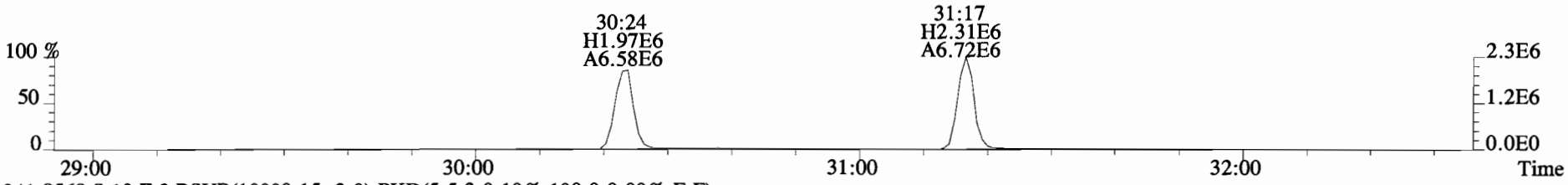


409.7974 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

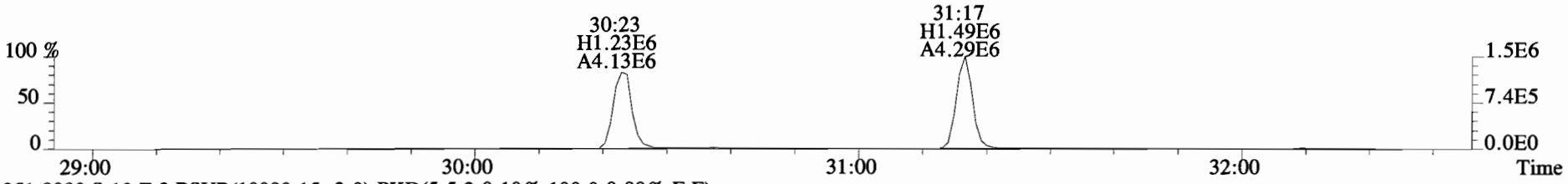
316.9824 S:10



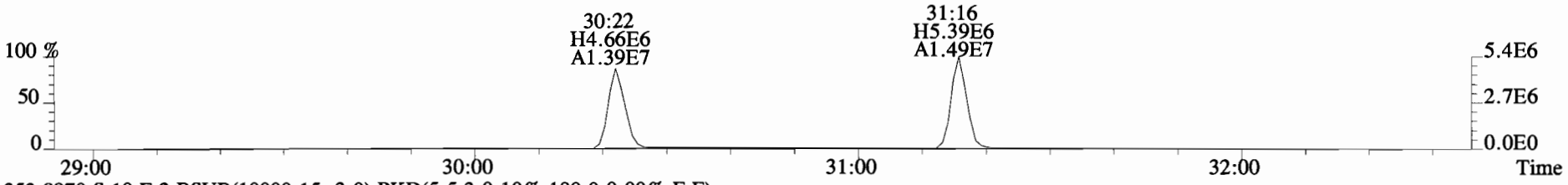
File:141014D1 #1-257 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



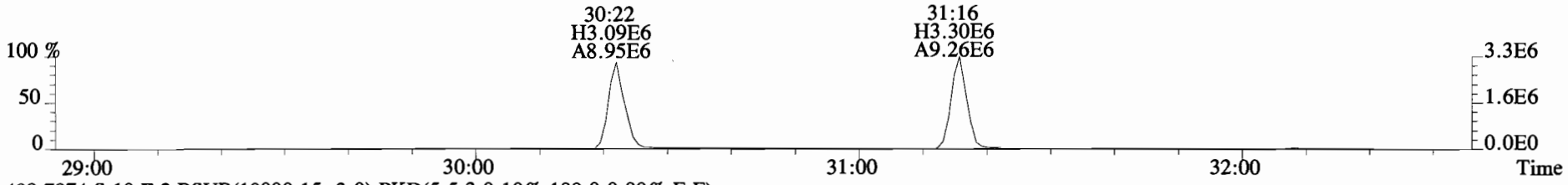
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



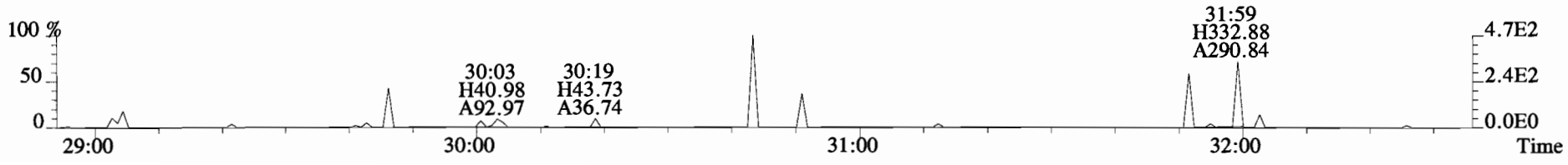
351.9000 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

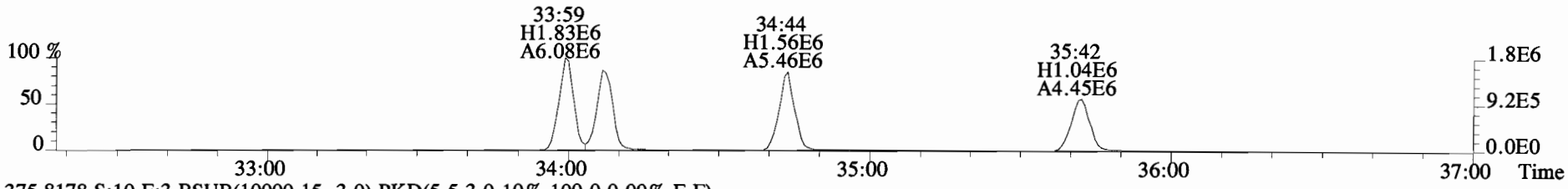


409.7974 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

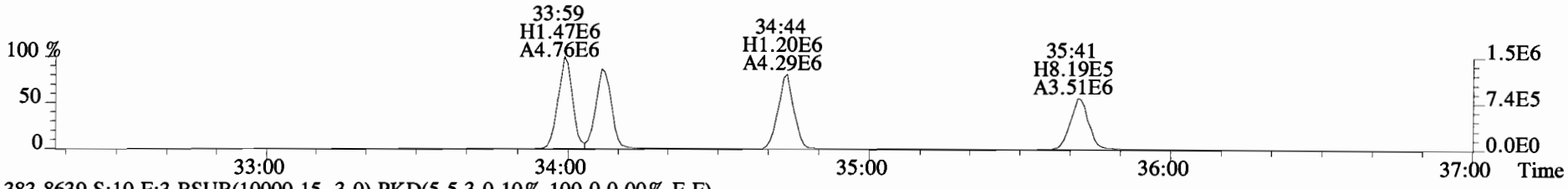


File:141014D1 #1-384 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5

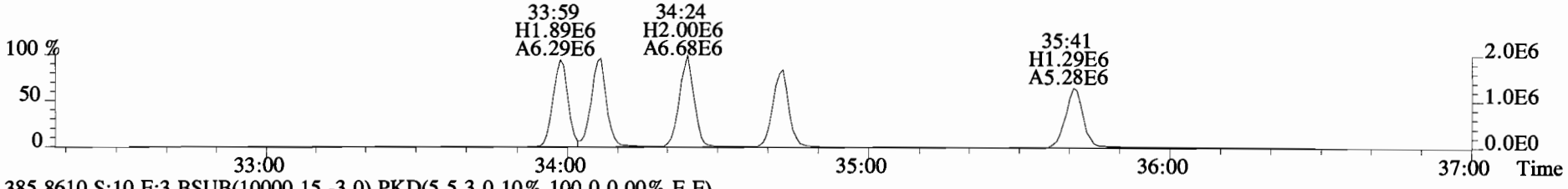
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



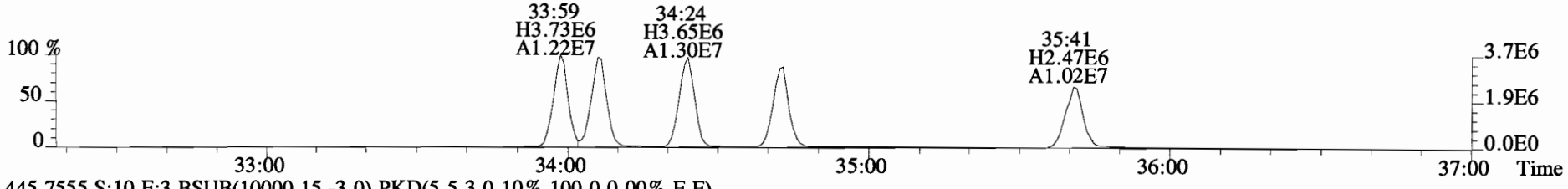
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



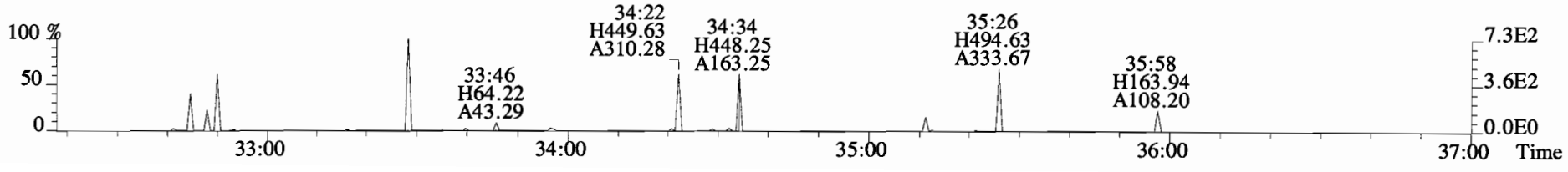
383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



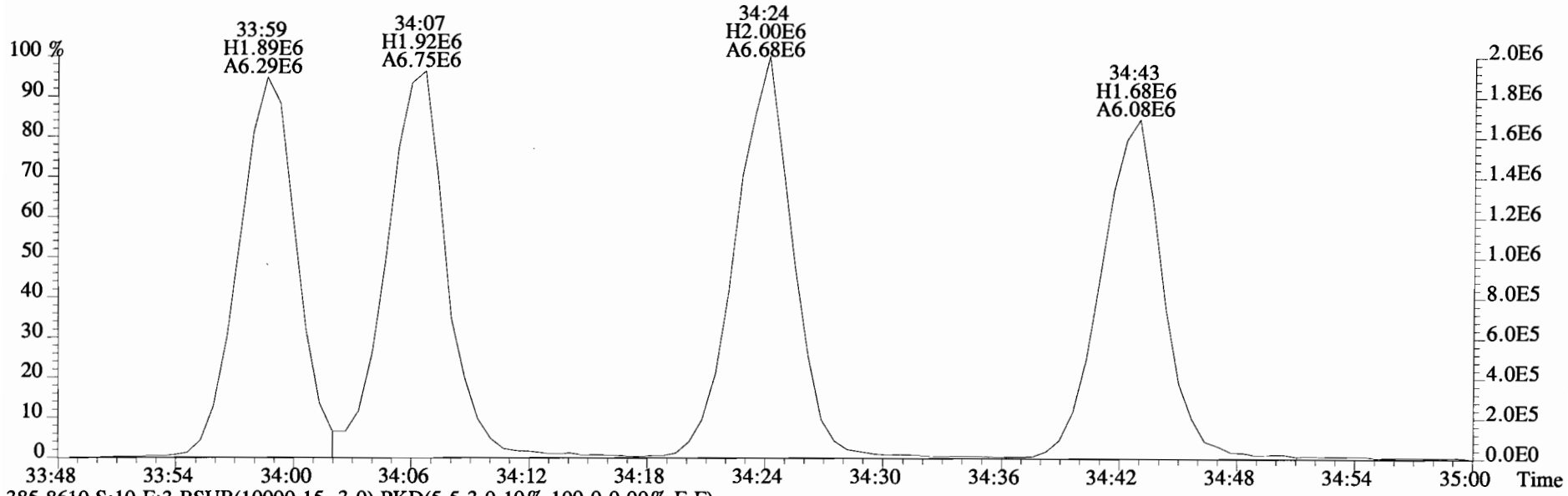
385.8610 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



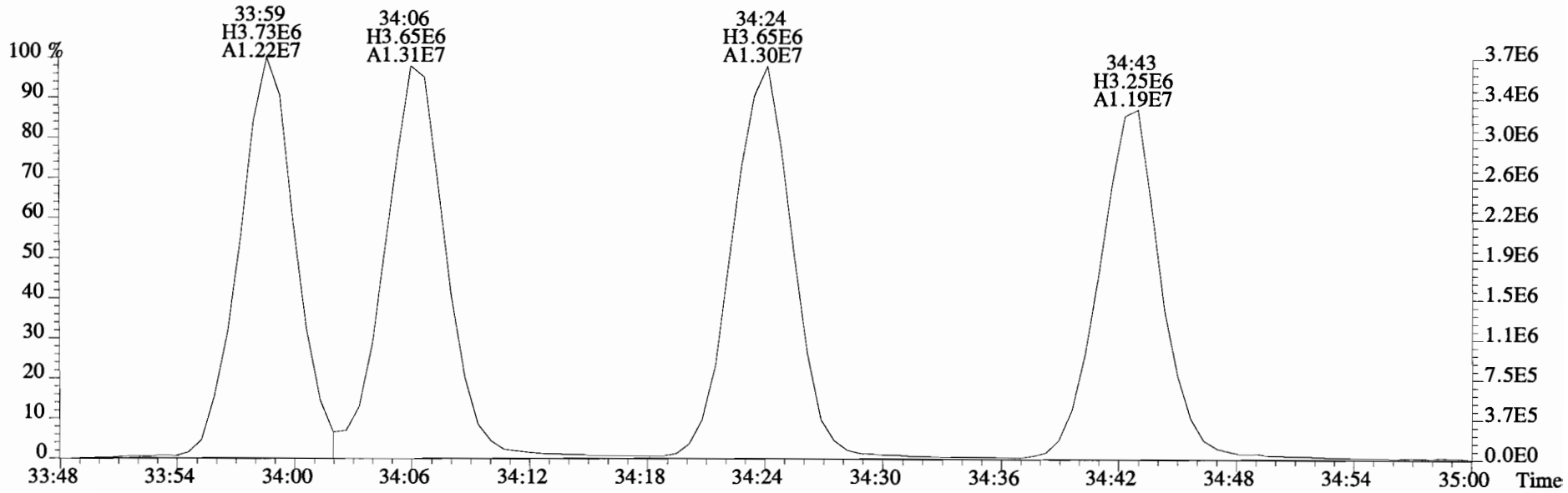
445.7555 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



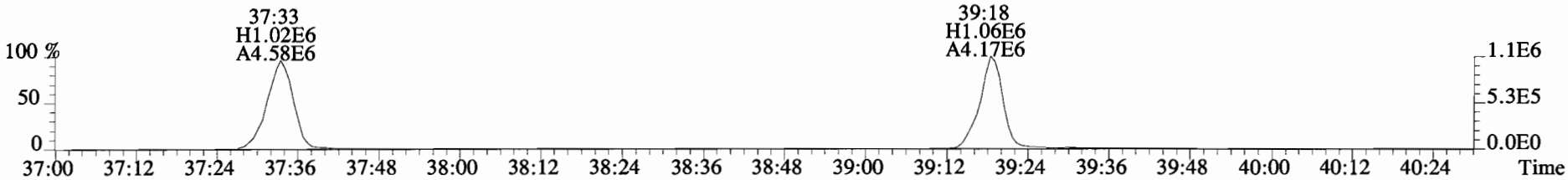
File:141014D1 #1-384 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



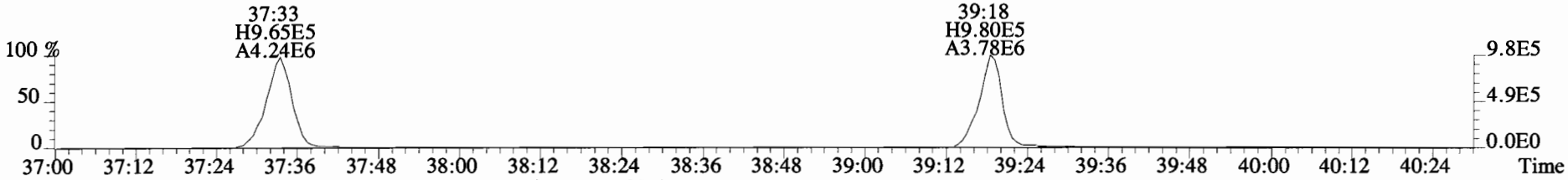
385.8610 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



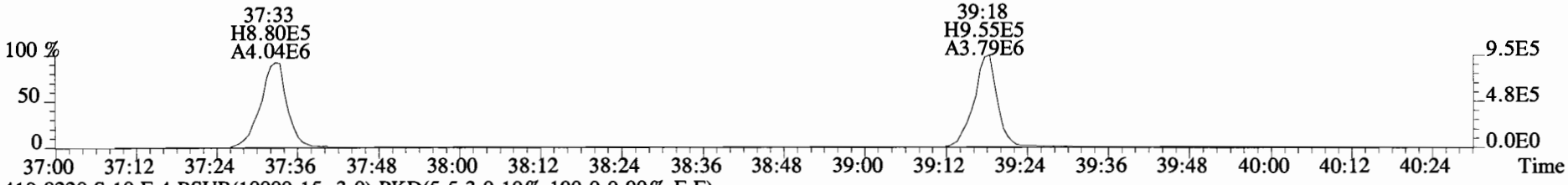
File:141014D1 #1-326 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



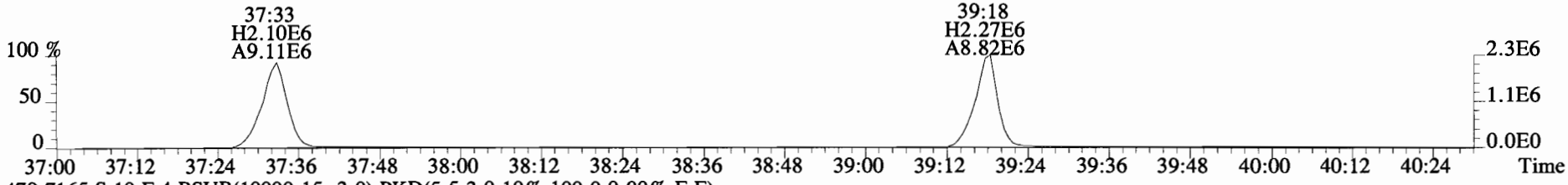
409.7788 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



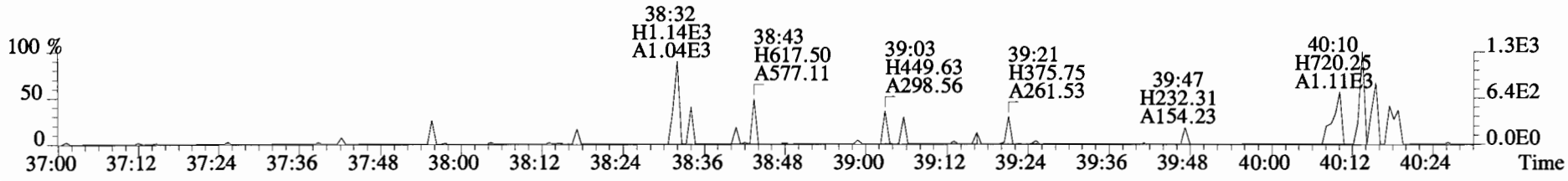
417.8253 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



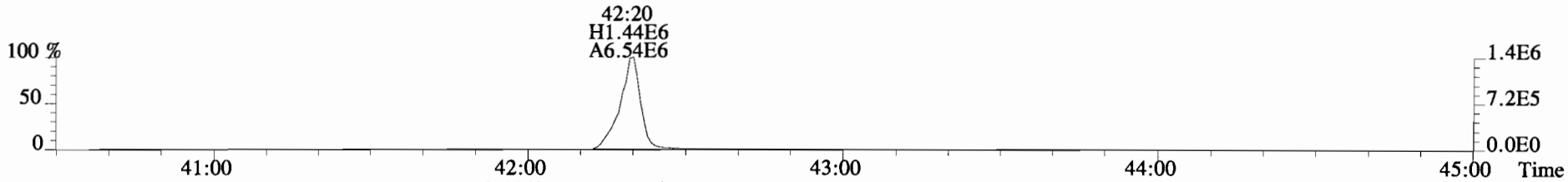
419.8220 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



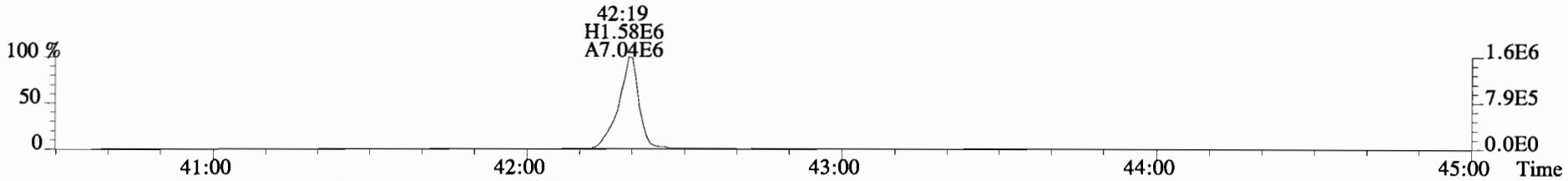
479.7165 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



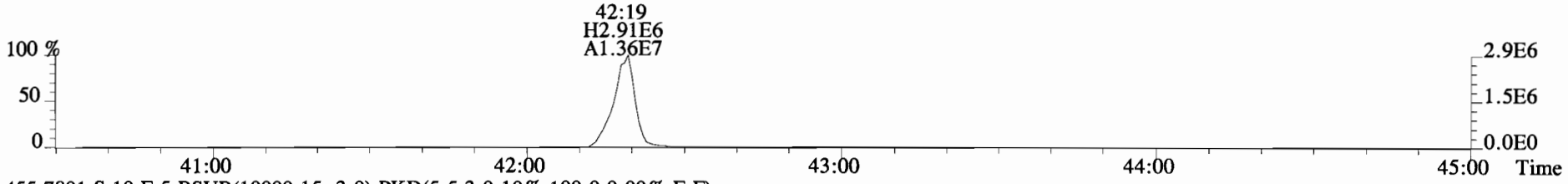
File:141014D1 #1-389 Acq:14-OCT-2014 19:40:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:B4J0064-BS1 OPR 10 Exp:OCDD_DB5
441.7428 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



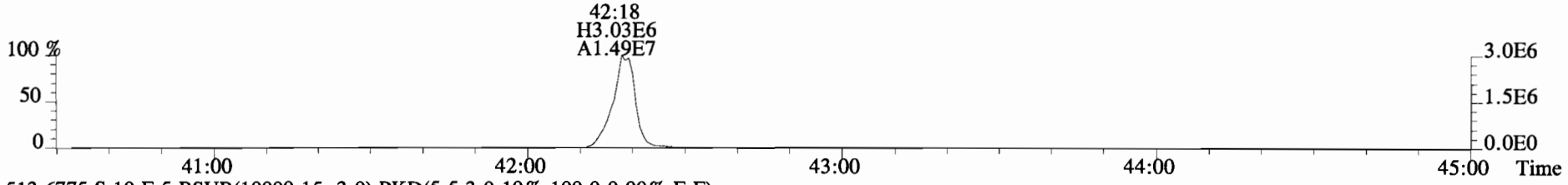
443.7398 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



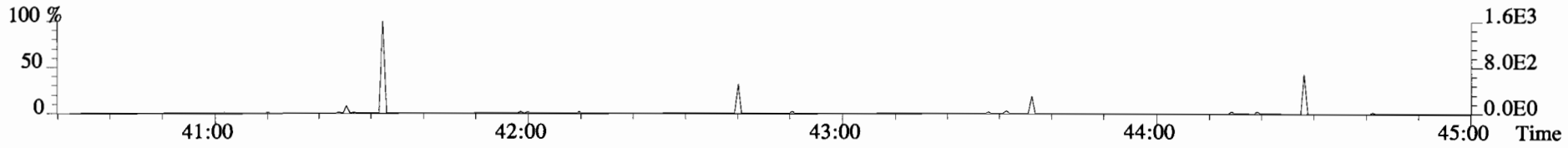
453.7831 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



	Name	Resp	RA		RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	2.16e+06	0.73	y	1.03	27:03	1.001	19.280		*	2.5	*
	1,2,3,7,8-PeCDD	1.26e+07	0.60	y	0.84	31:31	1.000	134.22		*	2.5	*
	1,2,3,4,7,8-HxCDD	2.29e+07	1.22	y	1.05	34:52	1.000	244.71		*	2.5	*
	1,2,3,6,7,8-HxCDD	8.46e+07	1.24	y	1.04	34:58	1.000	870.92		*	2.5	*
	1,2,3,7,8,9-HxCDD	5.89e+07	1.24	y	0.90	35:17	1.000	608.82		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	3.59e+09	1.03	y	1.01	38:45	1.000	30440		*	2.5	*
	OCDD	*	*	n	1.04	NotF	*	484130.		*	2.5	*
	2,3,7,8-TCDF	3.44e+06	0.81	y	0.91	26:17	1.001	27.361	ok	*	2.5	*
	1,2,3,7,8-PeCDF	4.86e+06	1.58	y	0.97	30:21	1.001	35.286		*	2.5	*
	2,3,4,7,8-PeCDF	7.32e+06	1.56	y	0.94	31:14	1.000	54.466		*	2.5	*
	1,2,3,4,7,8-HxCDF	2.47e+07	1.26	y	1.32	33:58	1.000	165.65		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.70e+07	1.25	y	1.18	34:05	1.000	117.65		*	2.5	*
	2,3,4,6,7,8-HxCDF	2.28e+07	1.28	y	1.23	34:42	1.000	166.92		*	2.5	*
	1,2,3,7,8,9-HxCDF	1.91e+06	1.22	y	1.13	35:40	1.000	17.082		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	6.01e+08	1.07	y	1.57	37:32	1.000	3828.9		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	2.35e+07	1.09	y	1.50	39:17	1.000	179.94		*	2.5	*
	OCDF	1.62e+09	0.90	y	1.05	42:23	1.000	13957		*	2.5	*
IS	13C-2,3,7,8-TCDD	2.11e+07	0.80	y	1.06	27:02	1.021	159.35				
IS	13C-1,2,3,7,8-PeCDD	2.18e+07	0.63	y	1.08	31:31	1.191	161.06				
IS	13C-1,2,3,4,7,8-HxCDD	1.73e+07	1.26	y	0.74	34:51	1.014	177.00				
IS	13C-1,2,3,6,7,8-HxCDD	1.82e+07	1.24	y	0.75	34:58	1.017	184.06				
IS	13C-1,2,3,7,8,9-HxCDD	2.10e+07	1.27	y	0.89	35:16	1.026	178.91				
IS	13C-1,2,3,4,6,7,8-HpCDD	2.27e+07	1.03	y	0.70	38:44	1.127	245.35				
IS	13C-OCDD	4.34e+07	1.02	y	0.59	42:10	1.227	559.09				
IS	13C-2,3,7,8-TCDF	2.68e+07	0.75	y	0.97	26:16	0.992	166.55				
IS	13C-1,2,3,7,8-PeCDF	2.75e+07	1.58	y	0.99	30:20	1.146	167.05				
IS	13C-2,3,4,7,8-PeCDF	2.78e+07	1.57	y	1.01	31:14	1.180	165.87				
IS	13C-1,2,3,4,7,8-HxCDF	2.20e+07	0.51	y	0.94	33:57	0.988	177.29				
IS	13C-1,2,3,6,7,8-HxCDF	2.38e+07	0.51	y	1.23	34:05	0.992	147.27				
IS	13C-2,3,4,6,7,8-HxCDF	2.16e+07	0.52	y	1.03	34:41	1.009	158.51				
IS	13C-1,2,3,7,8,9-HxCDF	1.93e+07	0.51	y	0.89	35:40	1.038	165.24				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.94e+07	0.45	y	0.71	37:31	1.092	208.51				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.69e+07	0.43	y	0.64	39:16	1.143	199.62				
IS	13C-OCDF	4.29e+07	0.91	y	0.76	42:23	1.233	429.62				
C/Up	37Cl-2,3,7,8-TCDD	8.14e+06			1.04	27:03	1.022	62.551				
RS/RT	13C-1,2,3,4-TCDD	2.42e+07	0.78	y	1.00	26:28	*	194.44				
RS	13C-1,2,3,4-TCDF	3.24e+07	0.77	y	1.00	25:04	*	194.44				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.56e+07	0.52	y	1.00	34:22	*	194.44				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	126	126		*	*
Total Penta-Dioxins	589	589		*	*
Total Hexa-Dioxins	5220	5220		*	*
Total Hepta-Dioxins	56000	56000		*	*
Total Tetra-Furans	339	339	P	*	*
Total Penta-Furans	1179.4	1179.4	P	*	*
Total Hexa-Furans	4670	4670		*	*
Total Hepta-Furans	12700	12700		*	*

	Rec	Qual
IS	82.0	
IS	82.8	
IS	91.0	
IS	94.7	
IS	92.0	
IS	126	
IS	144	
IS	85.7	
IS	85.9	
IS	85.3	
IS	91.2	
IS	75.7	
IS	81.5	
IS	85.0	
IS	107	
IS	103	
IS	110	
C/Up	80.4	

+1:20

136^

Integrations by Analyst: M Date: 10/20/14

Reviewed by Analyst: [illegible] Date: 10/20/14

Totals class: TCDD EMPC Entry #: 19

Run: 14 File: 141014D2 S: 9 I: 1 F: 1
Acquired: 15-OCT-14 08:49:04 Processed: 15-OCT-14 09:43:19

Total Concentration: 125.98 Unnamed Concentration: 106.702

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
23:41	6.624e+05	8.939e+05	0.74	y	1.556e+06	13.874	
24:02	5.654e+05	7.339e+05	0.77	y	1.299e+06	11.583	
24:27	3.658e+05	4.824e+05	0.76	y	8.482e+05	7.5613	
25:11	1.994e+05	2.612e+05	0.76	y	4.606e+05	4.1063	
25:24	3.561e+05	4.740e+05	0.75	y	8.300e+05	7.3993	
25:35	9.661e+05	1.284e+06	0.75	y	2.250e+06	20.056	
25:45	1.902e+05	2.359e+05	0.81	y	4.261e+05	3.7985	
25:59	1.465e+05	1.833e+05	0.80	y	3.298e+05	2.9400	
26:08	3.418e+05	4.413e+05	0.77	y	7.831e+05	6.9809	
26:28	2.740e+05	3.563e+05	0.77	y	6.302e+05	5.6183	
26:34	4.308e+04	5.320e+04	0.81	y	9.628e+04	0.85833	
26:47	2.723e+05	3.690e+05	0.74	y	6.413e+05	5.7171	
26:55	1.050e+05	1.456e+05	0.72	y	2.506e+05	2.2337	
27:03	9.092e+05	1.254e+06	0.73	y	2.163e+06	19.280	2,3,7,8-TCDD
27:20	4.029e+05	5.510e+05	0.73	y	9.539e+05	8.5037	
27:28	6.376e+04	7.980e+04	0.80	y	1.436e+05	1.2798	
27:54	2.095e+05	2.606e+05	0.80	y	4.702e+05	4.1913	

Totals class: PeCDD EMPC Entry #: 21

Run: 14 File: 141014D2 S: 9 I: 1 F: 2
Acquired: 15-OCT-14 08:49:04 Processed: 15-OCT-14 09:43:19

Total Concentration: 589.22 Unnamed Concentration: 454.998

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
29:28	4.057e+06	6.700e+06	0.61 y	1.076e+07	114.24	
29:56	1.156e+06	1.959e+06	0.59 y	3.114e+06	33.077	
30:22	1.428e+06	2.356e+06	0.61 y	3.785e+06	40.194	
30:32	3.964e+06	6.558e+06	0.60 y	1.052e+07	111.76	
30:37	1.690e+06	2.769e+06	0.61 y	4.459e+06	47.362	
30:49	2.106e+06	3.393e+06	0.62 y	5.499e+06	58.402	
31:08	3.148e+05	4.900e+05	0.64 y	8.048e+05	8.5471	
31:31	4.759e+06	7.879e+06	0.60 y	1.264e+07	134.22	1,2,3,7,8-PeCDD
31:36	6.010e+05	9.478e+05	0.63 y	1.549e+06	16.450	
31:53	8.720e+05	1.478e+06	0.59 y	2.350e+06	24.961	

Totals class: HxCDD EMPC Entry #: 23

Run: 14 File: 141014D2 S: 9 I: 1 F: 3
Acquired: 15-OCT-14 08:49:04 Processed: 15-OCT-14 09:43:19

Total Concentration: 5219.1 Unnamed Concentration: 3494.643

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
33:18	6.154e+07	4.921e+07	1.25 y	1.108e+08	1156.7	
33:53	9.285e+06	7.573e+06	1.23 y	1.686e+07	176.06	
34:09	1.048e+08	8.510e+07	1.23 y	1.900e+08	1983.8	
34:17	5.993e+06	4.922e+06	1.22 y	1.091e+07	113.99	
34:52	1.256e+07	1.032e+07	1.22 y	2.288e+07	244.71	1,2,3,4,7,8-HxCDD
34:58	4.688e+07	3.769e+07	1.24 y	8.457e+07	870.92	1,2,3,6,7,8-HxCDD
35:10	3.371e+06	2.773e+06	1.22 y	6.144e+06	64.166	
35:17	3.266e+07	2.625e+07	1.24 y	5.891e+07	608.82	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 14 File: 141014D2 S: 9 I: 1 F: 4
Acquired: 15-OCT-14 08:49:04 Processed: 15-OCT-14 09:43:19

Total Concentration: 55984 Unnamed Concentration: 25544.124

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:55	1.523e+09	1.491e+09	1.02 y	3.014e+09	25544	
38:45	1.824e+09	1.768e+09	1.03 y	3.591e+09	30440	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 14 File: 141014D2 S: 9 I: 1 F: 1
Acquired: 15-OCT-14 08:49:04 Processed: 15-OCT-14 09:43:19

Total Concentration: 338.65 Unnamed Concentration: 311.289

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
21:33	2.449e+05	3.083e+05	0.79	y	5.532e+05	4.3977	
22:08	4.665e+05	6.178e+05	0.76	y	1.084e+06	8.6190	
22:46	2.500e+06	3.150e+06	0.79	y	5.650e+06	44.909	
23:16	1.389e+06	1.763e+06	0.79	y	3.151e+06	25.050	
23:40	1.463e+06	1.823e+06	0.80	y	3.286e+06	26.123	
24:05	1.302e+06	1.658e+06	0.79	y	2.960e+06	23.527	
24:12	5.062e+05	6.342e+05	0.80	y	1.140e+06	9.0649	
24:22	6.114e+05	8.158e+05	0.75	y	1.427e+06	11.345	
24:43	1.903e+05	2.284e+05	0.83	y	4.187e+05	3.3280	
24:50	5.184e+05	6.709e+05	0.77	y	1.189e+06	9.4532	
24:58	1.451e+06	1.798e+06	0.81	y	3.249e+06	25.825	
25:05	1.379e+06	1.793e+06	0.77	y	3.172e+06	25.216	
25:29	1.117e+06	1.439e+06	0.78	y	2.556e+06	20.317	
25:44	3.951e+05	5.463e+05	0.72	y	9.414e+05	7.4833	
25:54	3.962e+05	4.788e+05	0.83	y	8.750e+05	6.9549	
26:05	3.458e+05	4.753e+05	0.73	y	8.211e+05	6.5271	
26:11	4.487e+05	5.499e+05	0.82	y	9.986e+05	7.9378	
26:17	1.540e+06	1.902e+06	0.81	y	3.442e+06	27.361	2,3,7,8-TCDF
26:36	1.891e+06	2.464e+06	0.77	y	4.355e+06	34.618	
26:50	8.045e+04	1.121e+05	0.72	y	1.926e+05	1.5308	
27:04	4.107e+04	5.450e+04	0.75	y	9.557e+04	0.75965	
27:35	3.024e+04	4.533e+04	0.67	y	7.557e+04	0.60071	
27:44	2.002e+04	2.308e+04	0.87	y	4.309e+04	0.34254	
28:02	4.307e+05	4.951e+05	0.87	y	9.258e+05	7.3590	

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

Run: 14 File: 141014D2 S: 9 I: 1 F: 1
Acquired: 15-OCT-14 08:49:04 Processed: 15-OCT-14 09:43:19

Total Concentration: 619.80 Unnamed Concentration: 619.802

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
28:01	5.084e+07	3.345e+07	1.52 y	8.429e+07	619.80	

Totals class: PeCDF EMPC Entry #: 31

Run: 14 File: 141014D2 S: 9 I: 1 F: 2
Acquired: 15-OCT-14 08:49:04 Processed: 15-OCT-14 09:43:19

Total Concentration: 559.57 Unnamed Concentration: 469.815

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:19	2.575e+06	1.661e+06	1.55	y	4.236e+06	31.148	
29:27	1.822e+07	1.159e+07	1.57	y	2.981e+07	219.23	
29:48	3.655e+05	2.120e+05	1.72	y	5.776e+05	4.2472	
29:59	6.549e+06	4.136e+06	1.58	y	1.069e+07	78.577	
30:11	1.301e+06	8.089e+05	1.61	y	2.110e+06	15.514	
30:21	2.976e+06	1.880e+06	1.58	y	4.856e+06	35.286	1,2,3,7,8-PeCDF
30:36	4.921e+06	3.127e+06	1.57	y	8.048e+06	59.180	
30:44	9.625e+04	6.428e+04	1.50	y	1.605e+05	1.1805	
30:49	8.157e+04	4.874e+04	1.67	y	1.303e+05	0.95820	
31:03	1.373e+05	9.070e+04	1.51	y	2.280e+05	1.6765	
31:09	1.055e+06	6.826e+05	1.55	y	1.738e+06	12.781	
31:14	4.464e+06	2.856e+06	1.56	y	7.320e+06	54.466	2,3,4,7,8-PeCDF
31:18	3.242e+06	2.034e+06	1.59	y	5.276e+06	38.798	
31:31	1.209e+05	7.700e+04	1.57	y	1.979e+05	1.4550	
32:07	4.274e+05	2.624e+05	1.63	y	6.898e+05	5.0725	

Totals class: HxCDF EMPC Entry #: 33

Run: 14 File: 141014D2 S: 9 I: 1 F: 3
Acquired: 15-OCT-14 08:49:04 Processed: 15-OCT-14 09:43:19

Total Concentration: 4667.3 Unnamed Concentration: 4199.976

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
32:45	4.107e+07	3.213e+07	1.28 y	7.320e+07	541.89	
32:55	1.359e+08	1.078e+08	1.26 y	2.436e+08	1803.6	
33:08	7.702e+05	5.960e+05	1.29 y	1.366e+06	10.114	
33:17	2.319e+06	1.786e+06	1.30 y	4.105e+06	30.392	
33:29	1.313e+08	1.043e+08	1.26 y	2.356e+08	1744.3	
33:52	2.203e+06	1.789e+06	1.23 y	3.993e+06	29.557	
33:58	1.377e+07	1.092e+07	1.26 y	2.469e+07	165.65	1,2,3,4,7,8-HxCDF
34:05	9.425e+06	7.527e+06	1.25 y	1.695e+07	117.65	1,2,3,6,7,8-HxCDF
34:15	1.903e+05	1.644e+05	1.16 y	3.546e+05	2.6254	
34:23	4.224e+05	3.194e+05	1.32 y	7.417e+05	5.4910	
34:32	6.739e+05	4.982e+05	1.35 y	1.172e+06	8.6771	
34:42	1.279e+07	9.986e+06	1.28 y	2.278e+07	166.92	2,3,4,6,7,8-HxCDF
35:40	1.053e+06	8.605e+05	1.22 y	1.914e+06	17.082	1,2,3,7,8,9-HxCDF
35:44	1.765e+06	1.377e+06	1.28 y	3.143e+06	23.265	

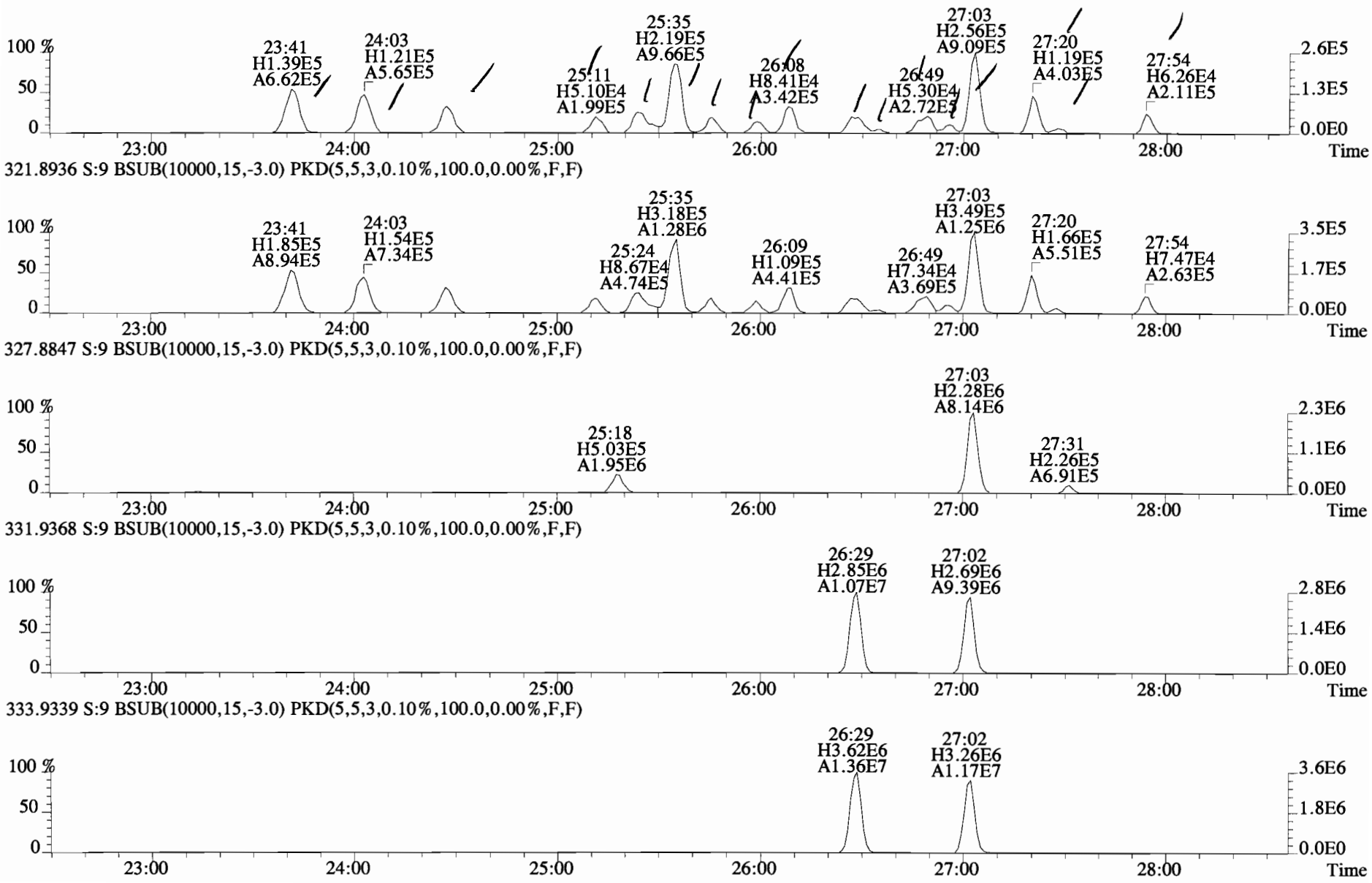
Totals class: HpCDF EMPC Entry #: 35

Run: 14 File: 141014D2 S: 9 I: 1 F: 4
Acquired: 15-OCT-14 08:49:04 Processed: 15-OCT-14 09:43:19

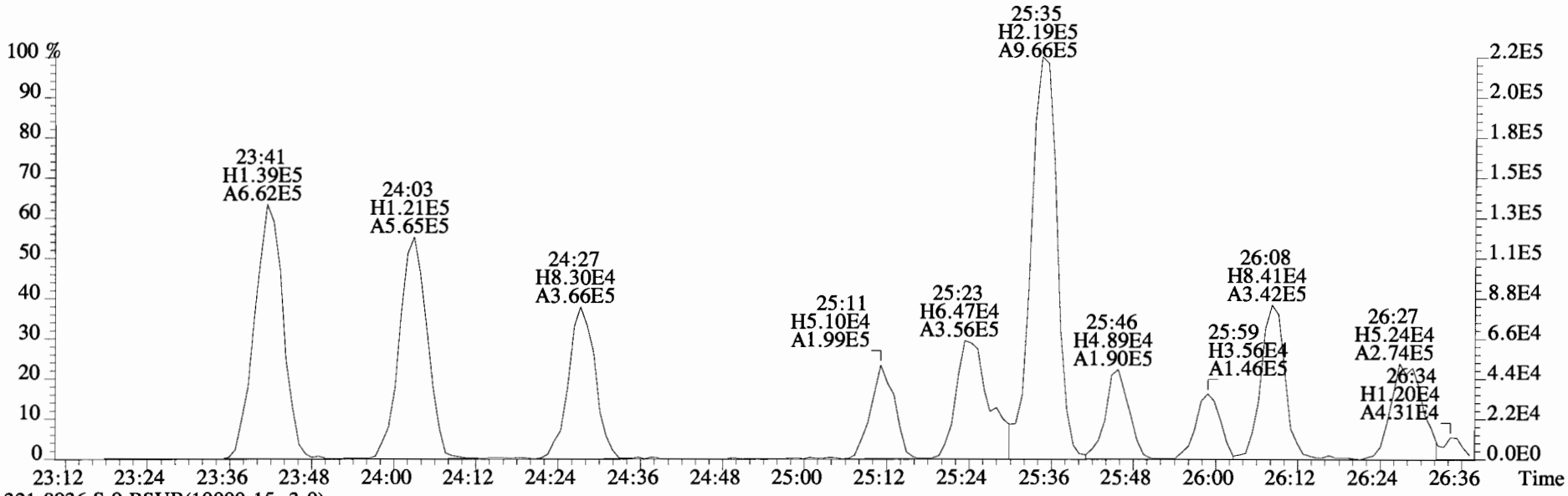
Total Concentration: 12731 Unnamed Concentration: 8722.381

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:32	3.112e+08	2.901e+08	1.07	y	6.013e+08	3828.9	1,2,3,4,6,7,8-HpCDF
37:54	5.036e+06	4.606e+06	1.09	y	9.642e+06	67.061	
38:06	6.450e+08	5.994e+08	1.08	y	1.244e+09	8655.3	
39:17	1.228e+07	1.122e+07	1.09	y	2.351e+07	179.94	1,2,3,4,7,8,9-HpCDF

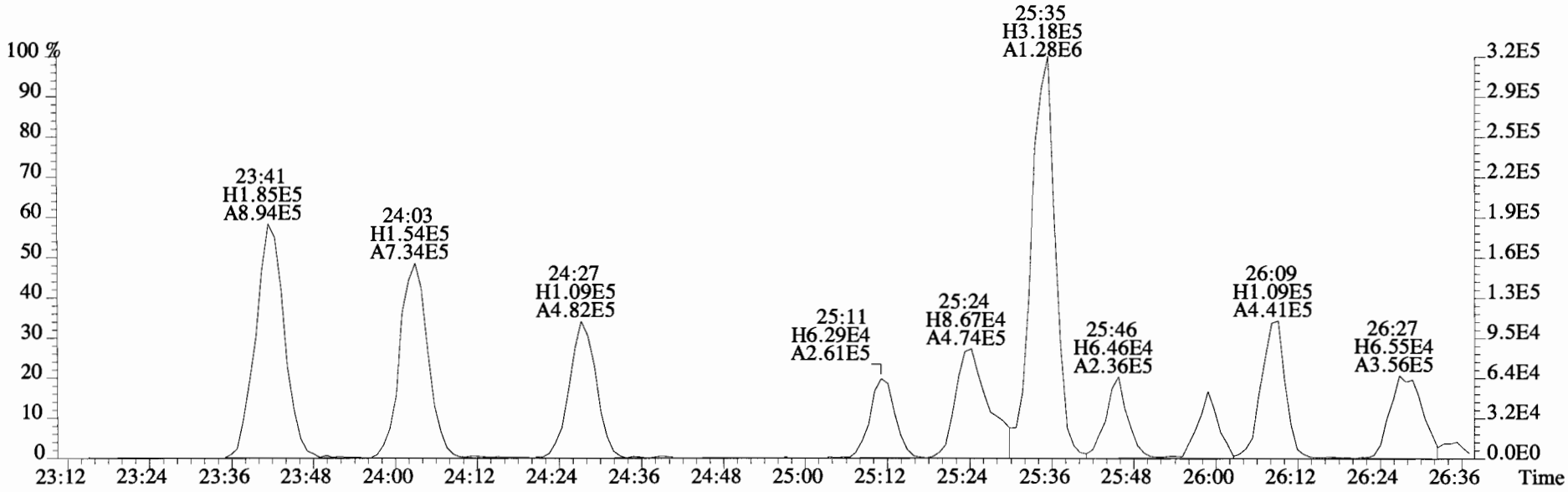
File:141014D2 #1-551 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5



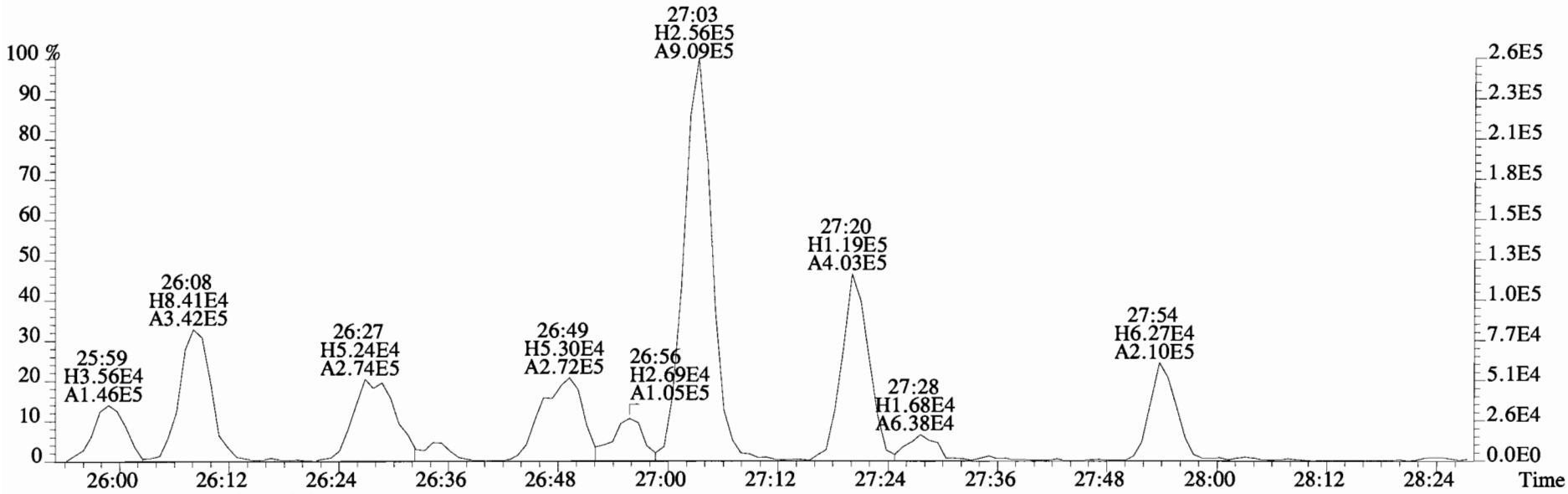
File:141014D2 #1-551 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
319.8965 S:9 BSUB(10000,15,-3.0)



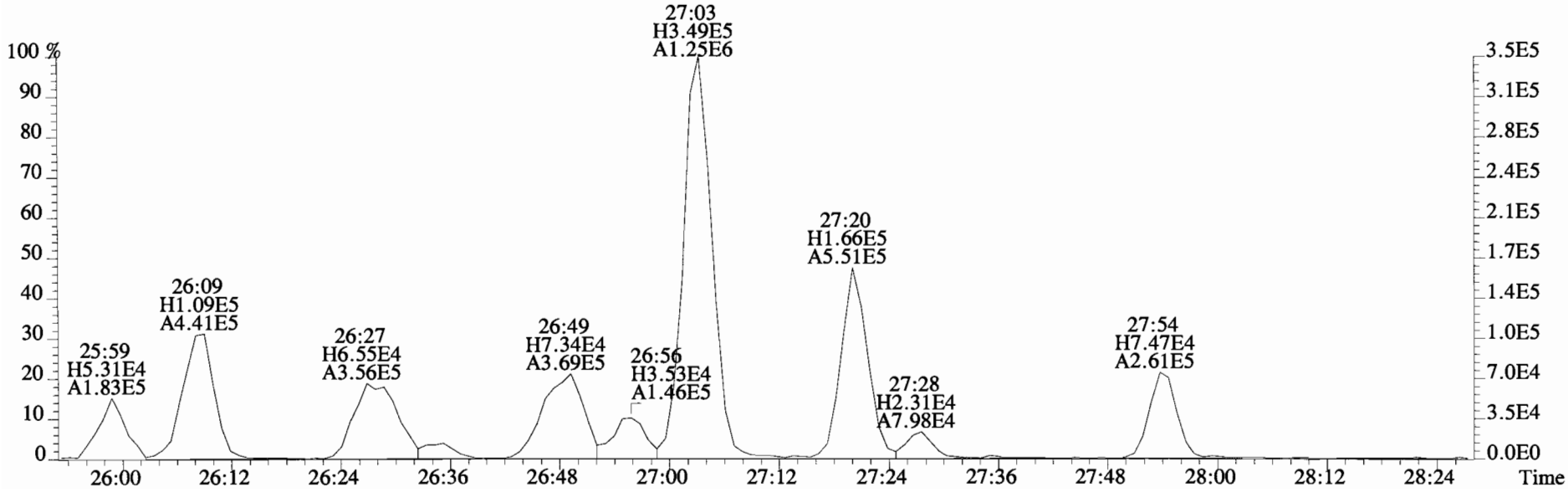
321.8936 S:9 BSUB(10000,15,-3.0)



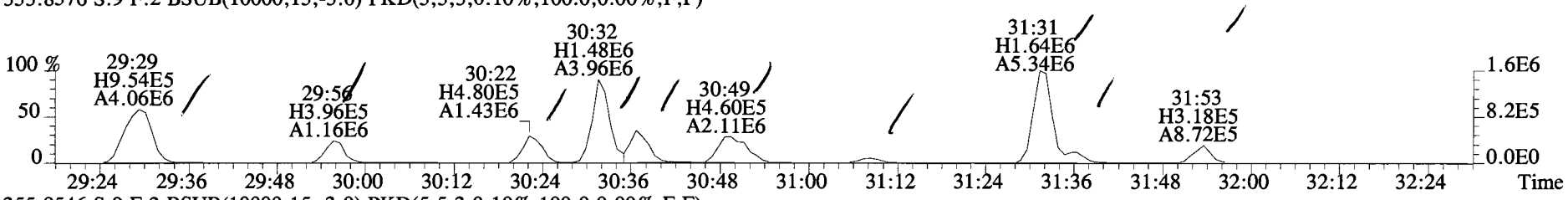
File:141014D2 #1-551 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
319.8965 S:9 BSUB(10000,15,-3.0)



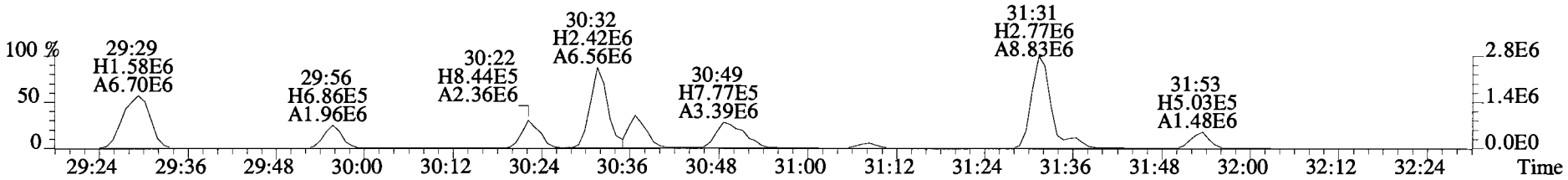
321.8936 S:9 BSUB(10000,15,-3.0)



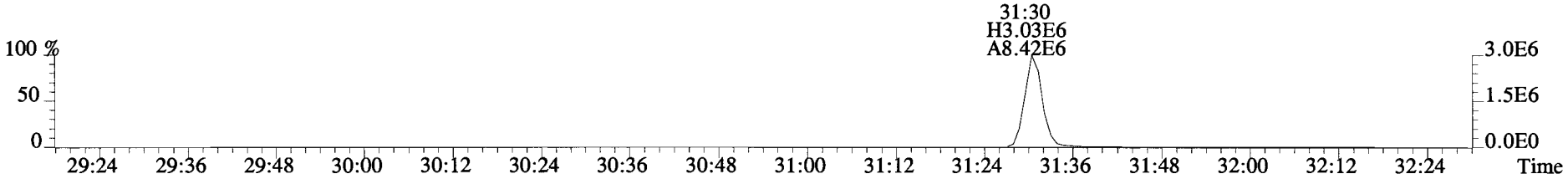
File:141014D2 #1-256 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
353.8576 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



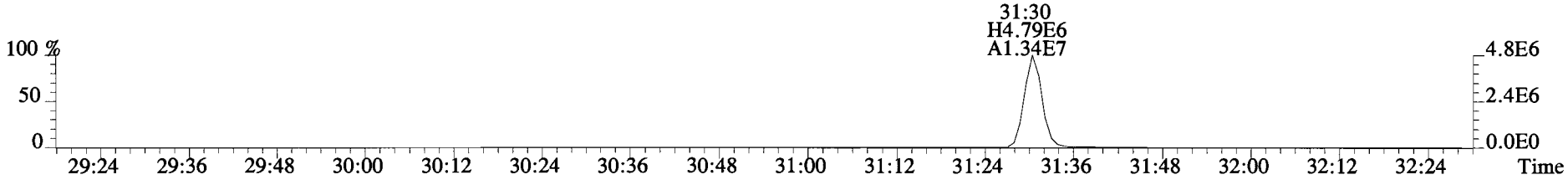
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



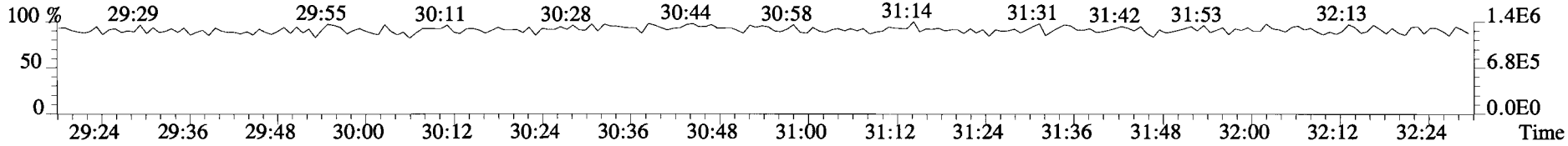
365.8978 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



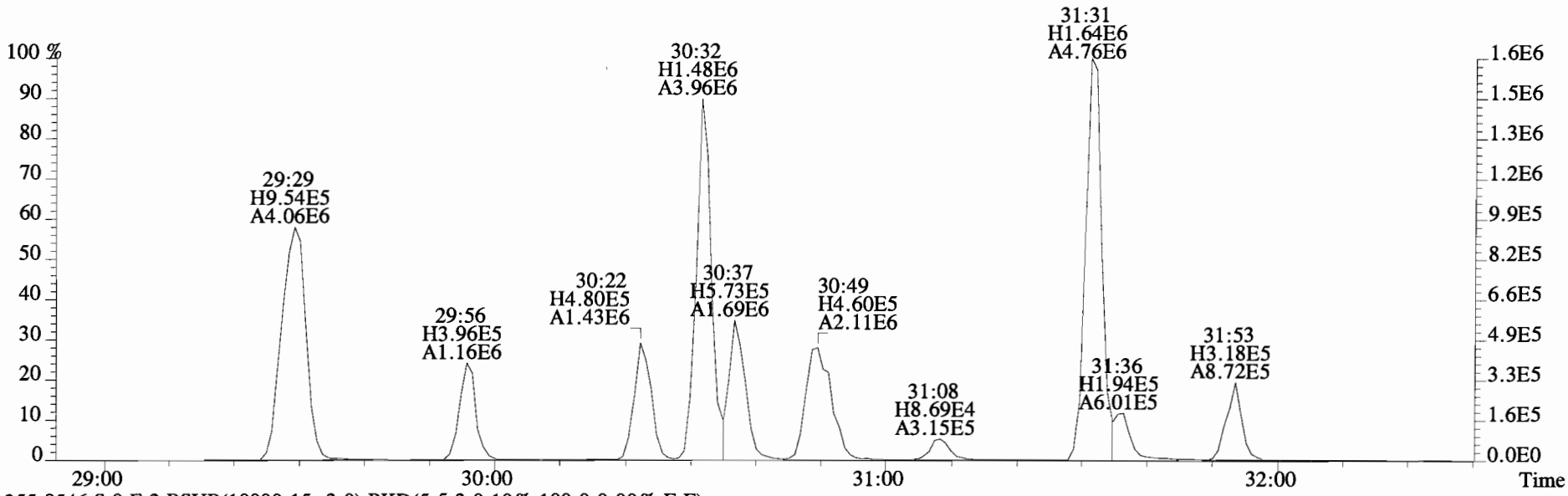
367.8949 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



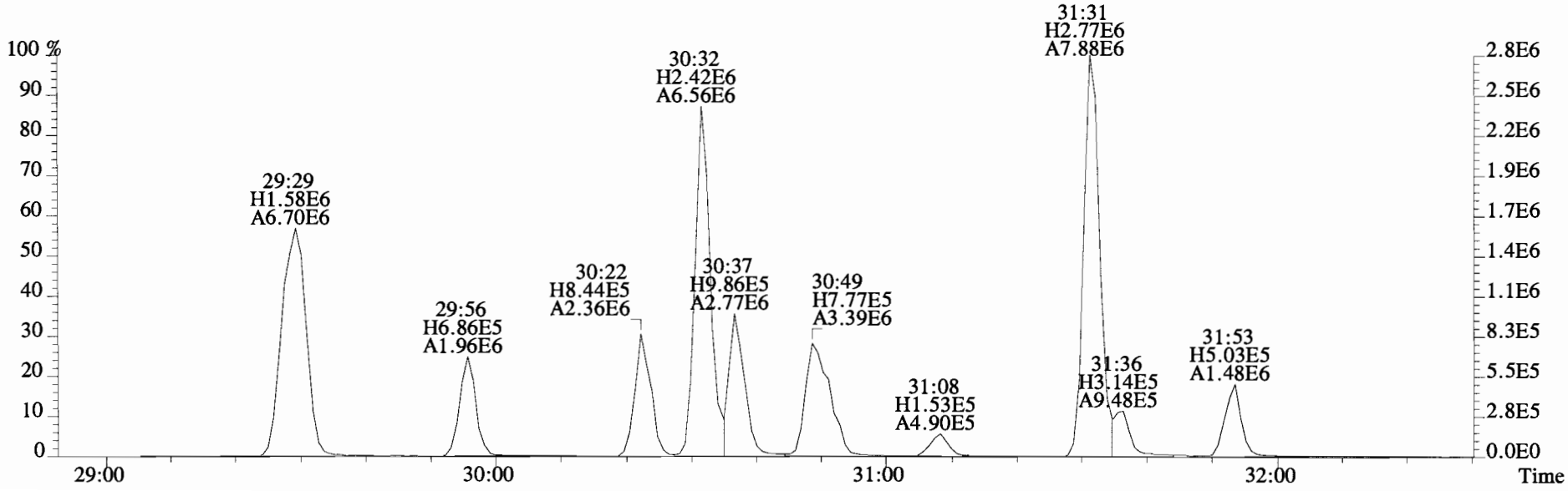
366.9792 S:9 F:2



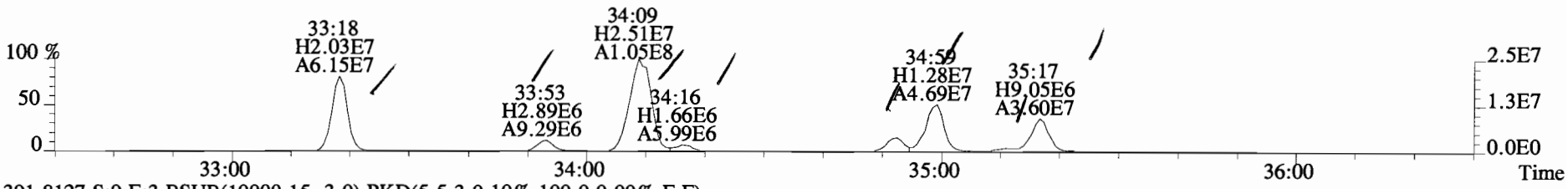
File:141014D2 #1-256 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
353.8576 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



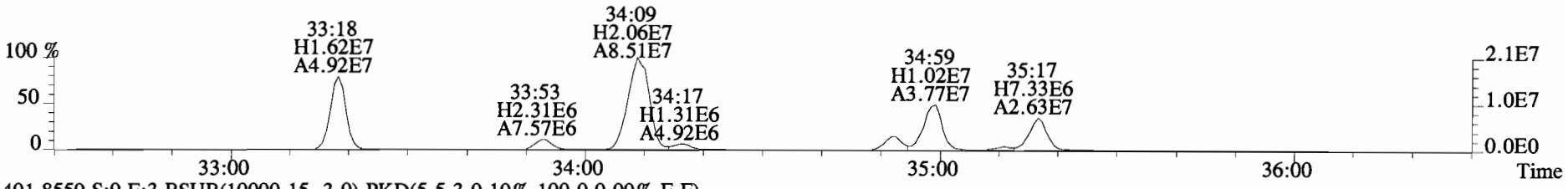
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



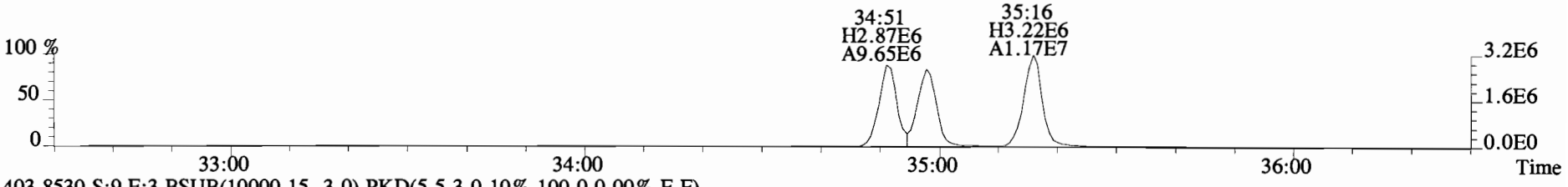
File:141014D2 #1-385 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



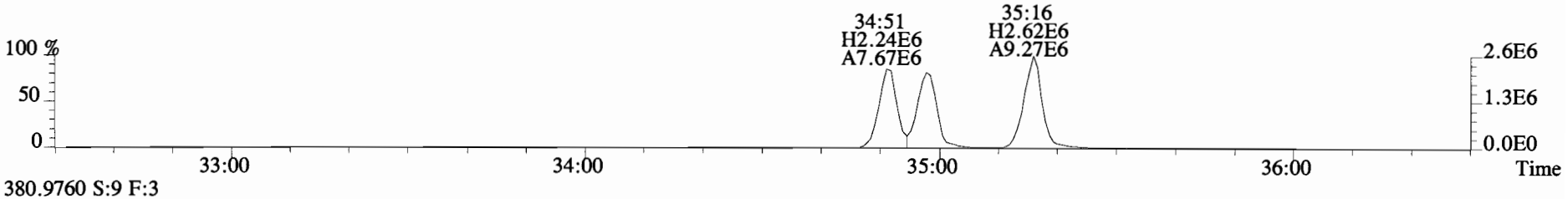
391.8127 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



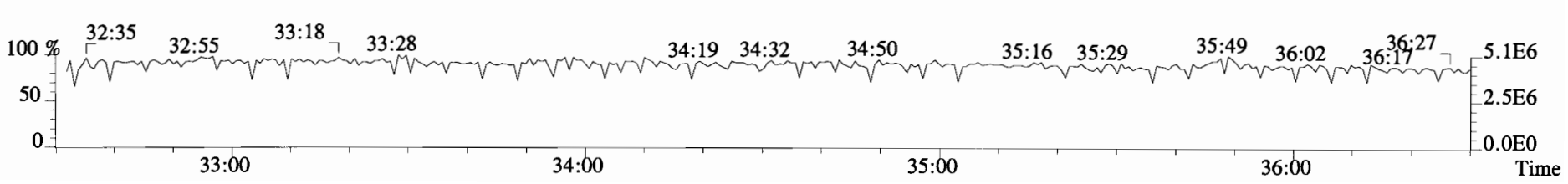
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



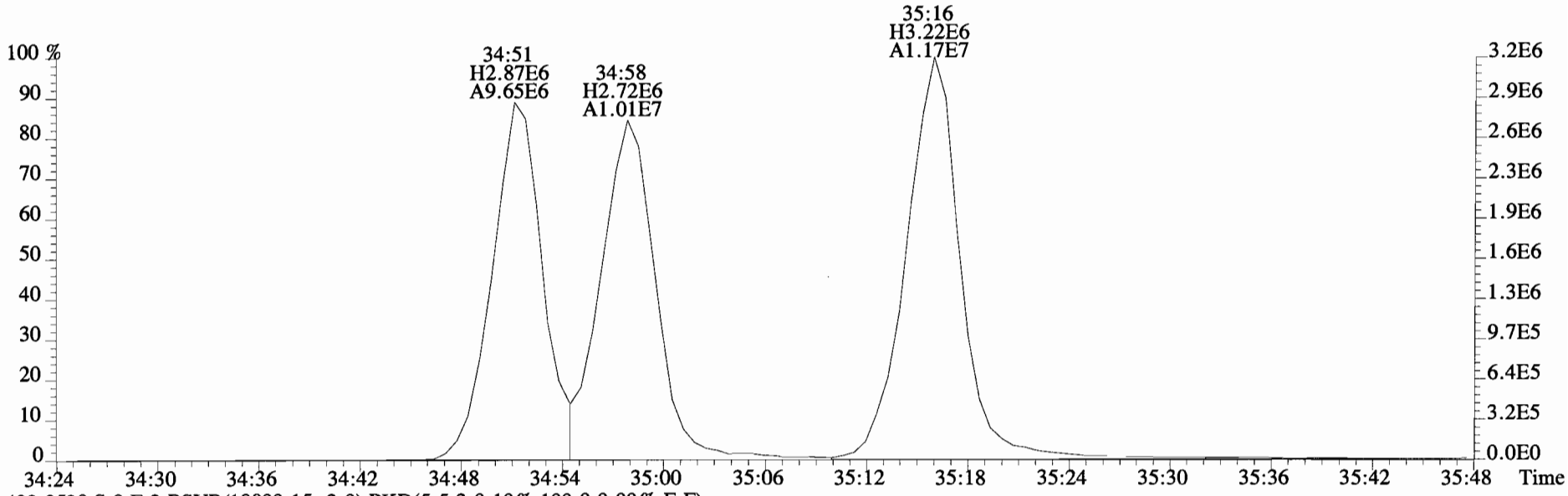
403.8530 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



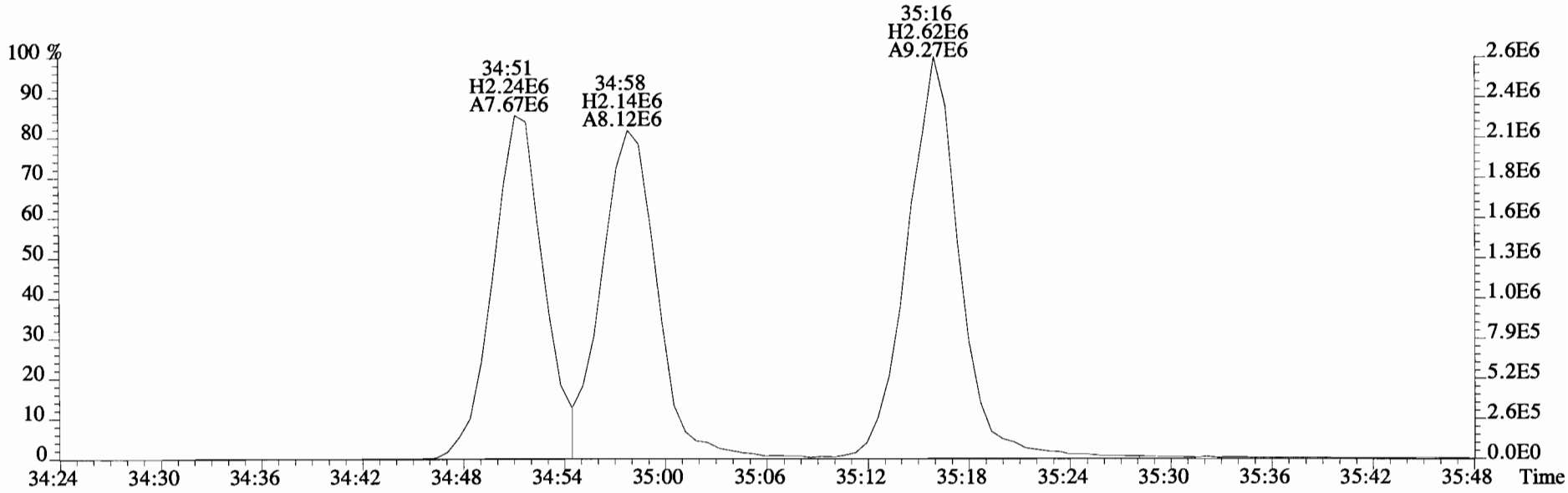
380.9760 S:9 F:3



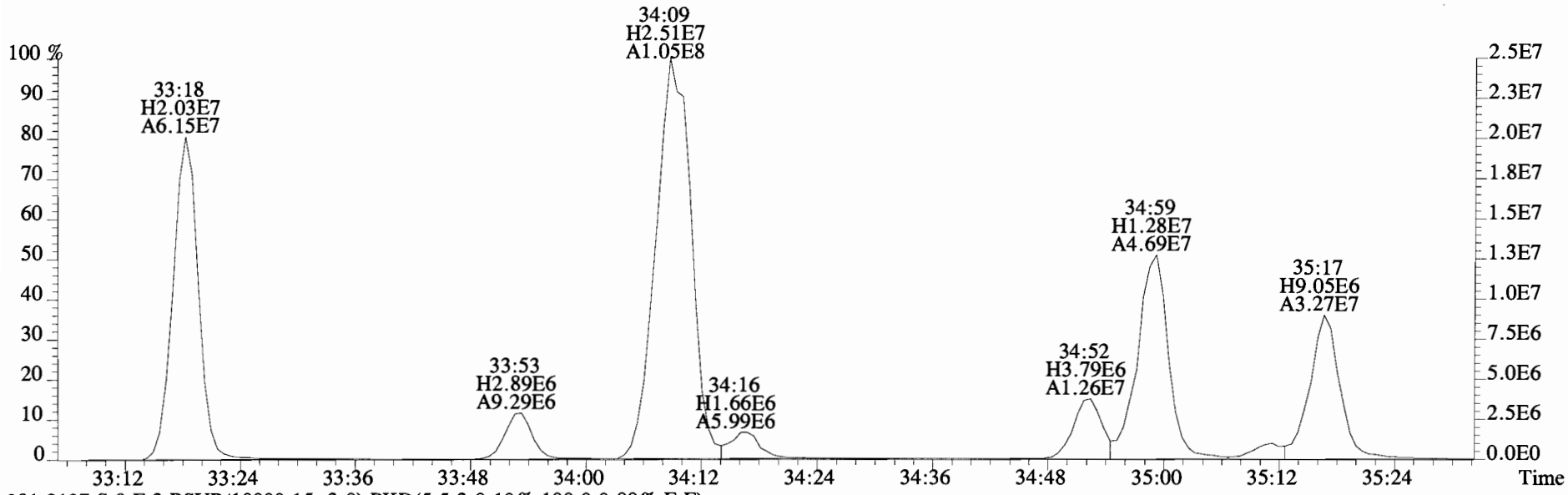
File:141014D2 #1-385 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



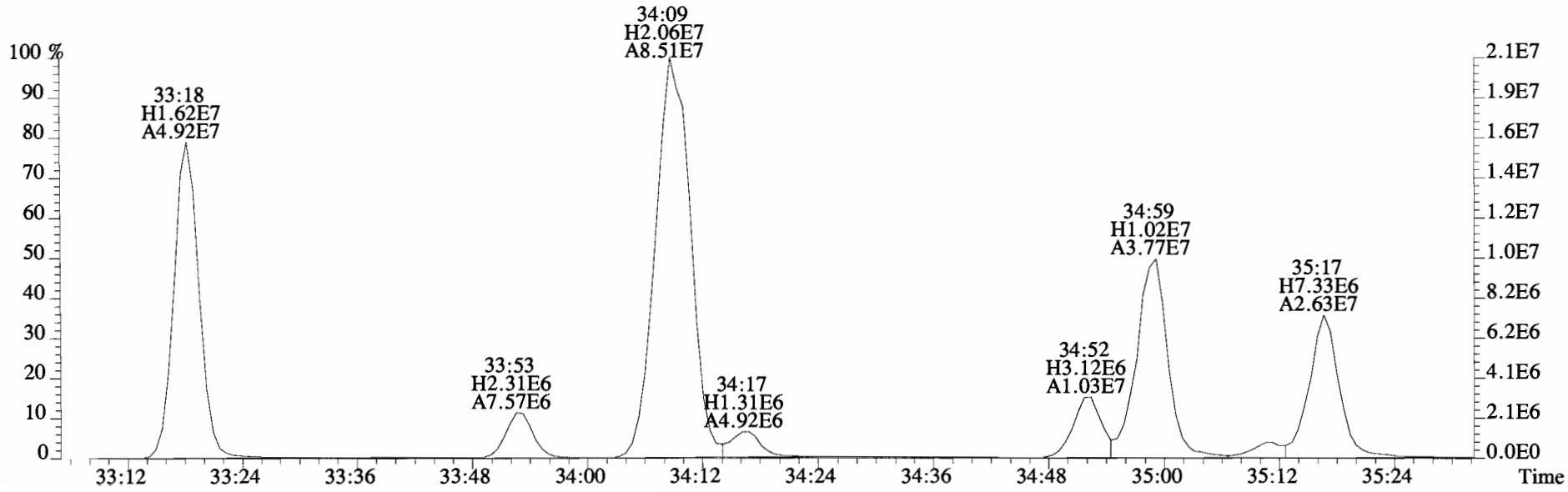
403.8530 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



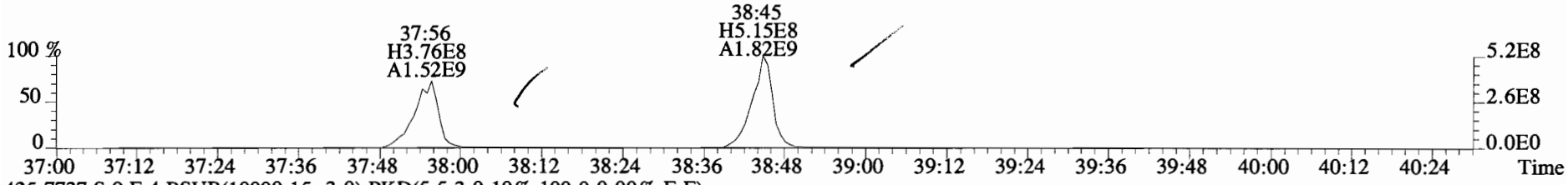
File:141014D2 #1-385 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



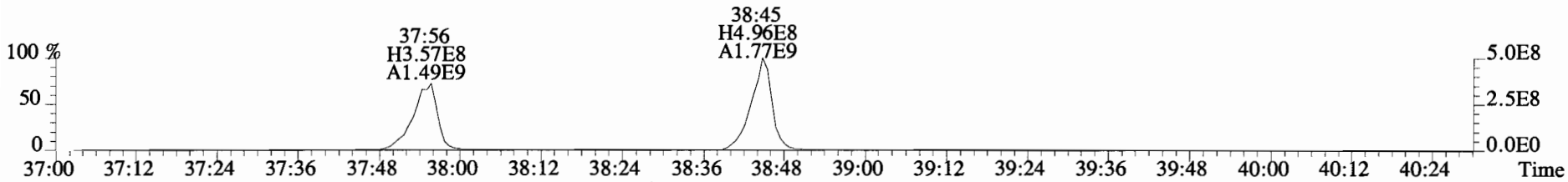
391.8127 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



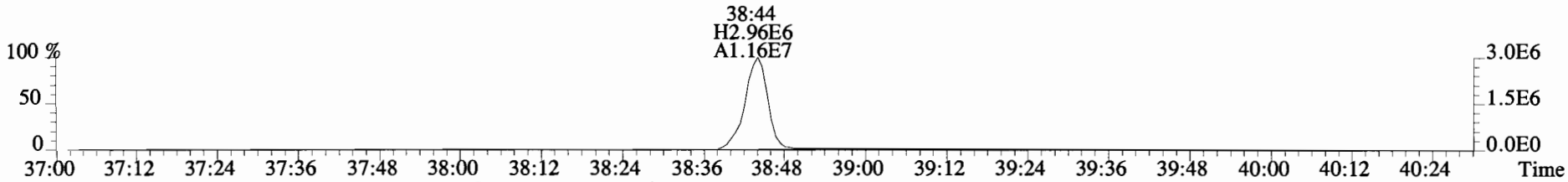
File:141014D2 #1-326 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
423.7767 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



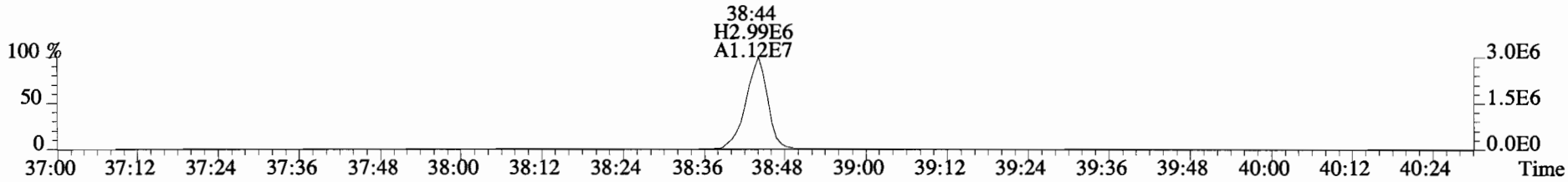
425.7737 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



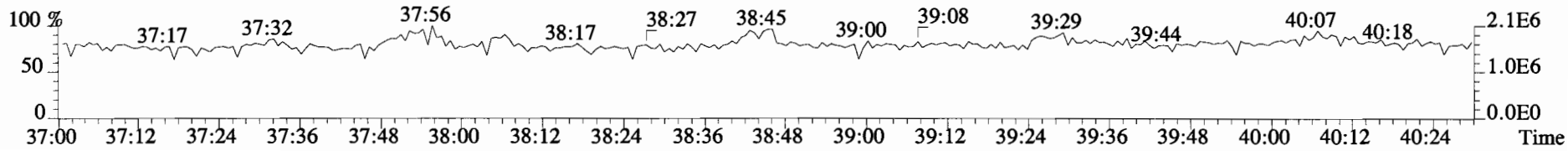
435.8169 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



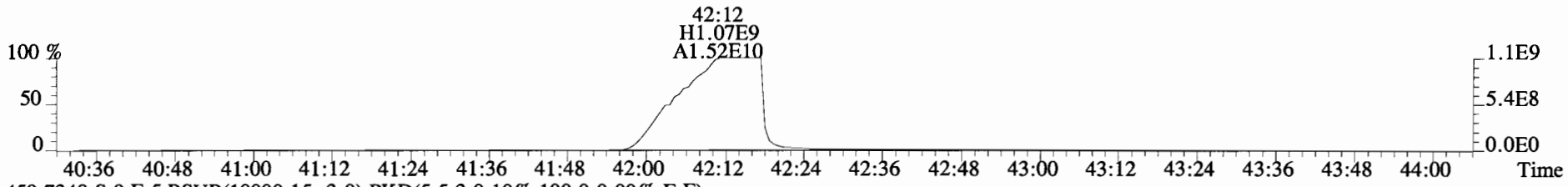
437.8140 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



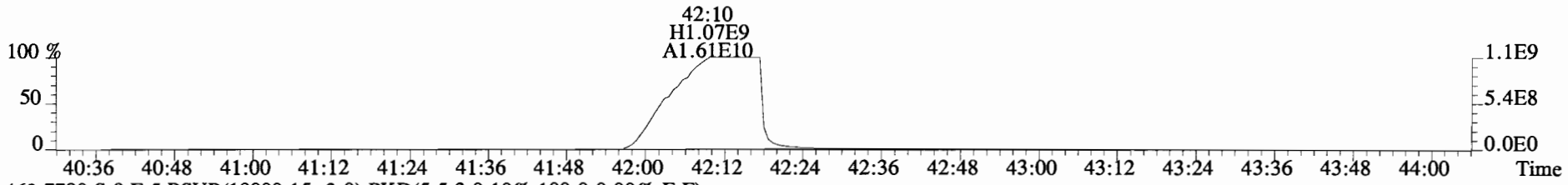
430.9728 S:9 F:4



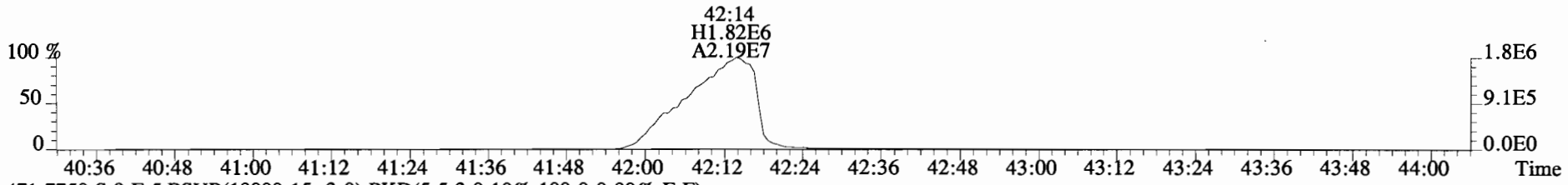
File:141014D2 #1-388 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
457.7377 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



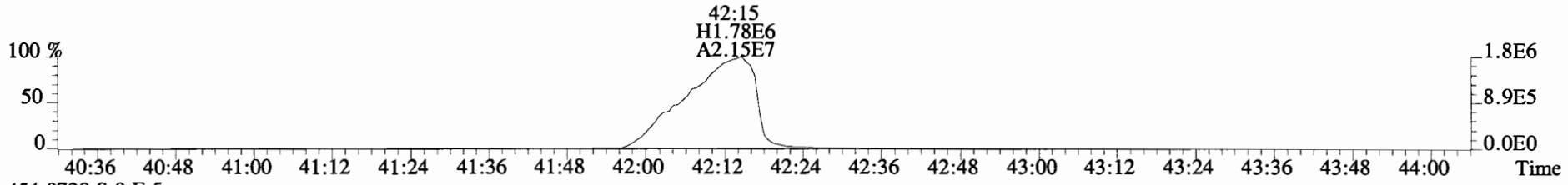
459.7348 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



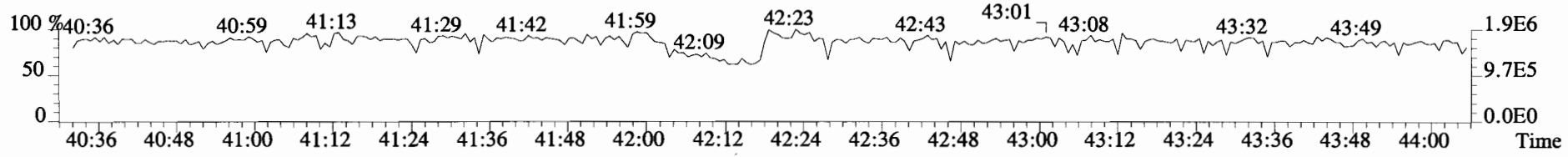
469.7780 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

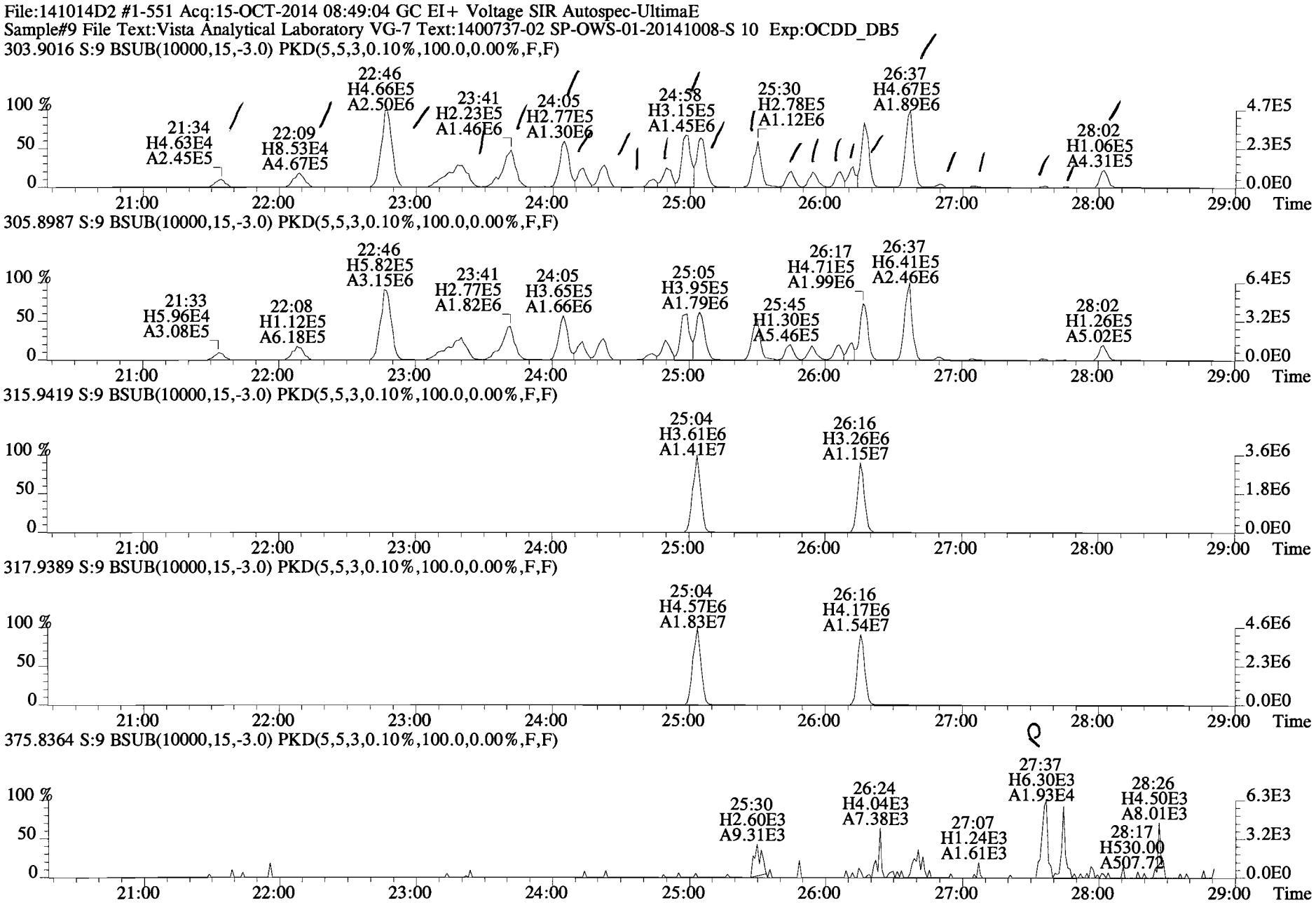


471.7750 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

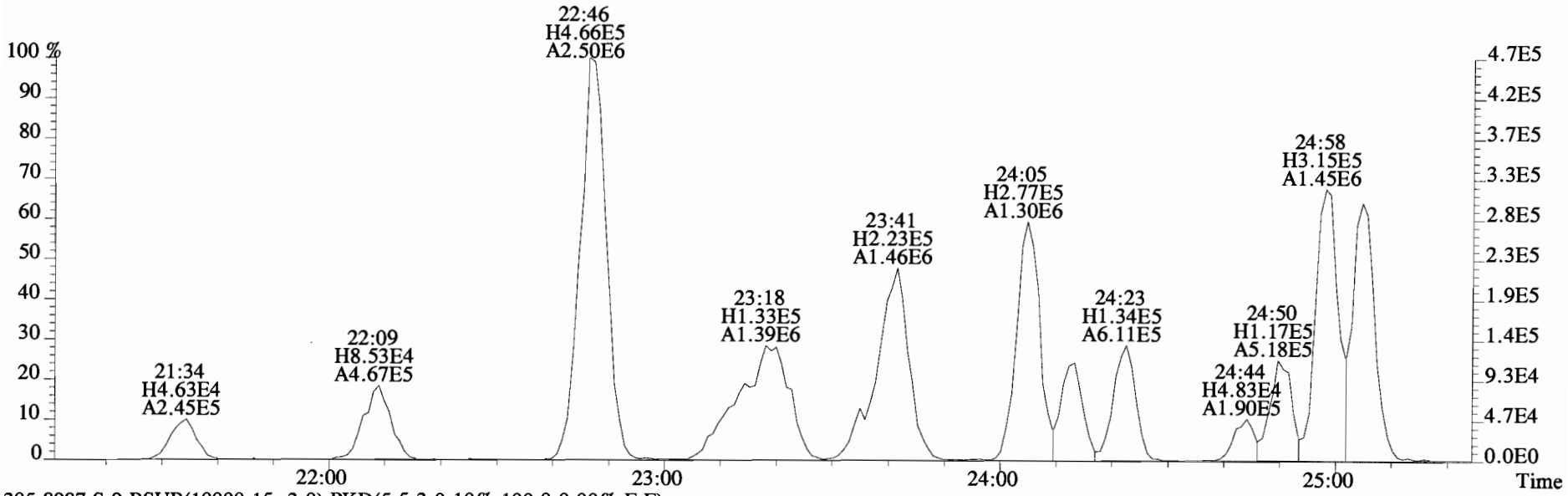


454.9728 S:9 F:5

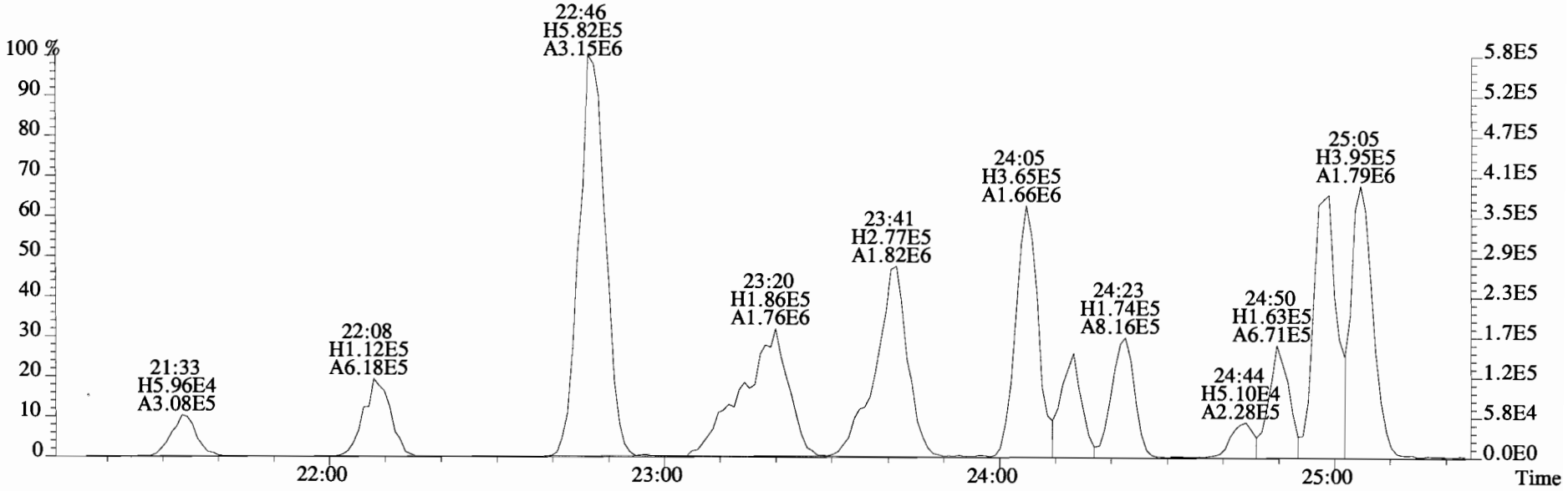



File:141014D2 #1-551 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:34 H4.63E4 A2.45E5
22:09 H8.53E4 A4.67E5
22:46 H4.66E5 A2.50E6
23:41 H2.23E5 A1.46E6
24:05 H2.77E5 A1.30E6
24:58 H3.15E5 A1.45E6
25:30 H2.78E5 A1.12E6
26:37 H4.67E5 A1.89E6
28:02 H1.06E5 A4.31E5
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:33 H5.96E4 A3.08E5
22:08 H1.12E5 A6.18E5
22:46 H5.82E5 A3.15E6
23:41 H2.77E5 A1.82E6
24:05 H3.65E5 A1.66E6
25:05 H3.95E5 A1.79E6
25:45 H1.30E5 A5.46E5
26:17 H4.71E5 A1.99E6
26:37 H6.41E5 A2.46E6
28:02 H1.26E5 A5.02E5
315.9419 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:04 H3.61E6 A1.41E7
26:16 H3.26E6 A1.15E7
317.9389 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:04 H4.57E6 A1.83E7
26:16 H4.17E6 A1.54E7
375.8364 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:30 H2.60E3 A9.31E3
26:24 H4.04E3 A7.38E3
27:07 H1.24E3 A1.61E3
27:37 H6.30E3 A1.93E4
28:17 H530.00 A507.72
28:26 H4.50E3 A8.01E3
100 %
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
28:00
29:00
Time
4.7E5
2.3E5
0.0E0
6.4E5
3.2E5
3.6E6
1.8E6
4.6E6
2.3E6
6.3E3
3.2E3

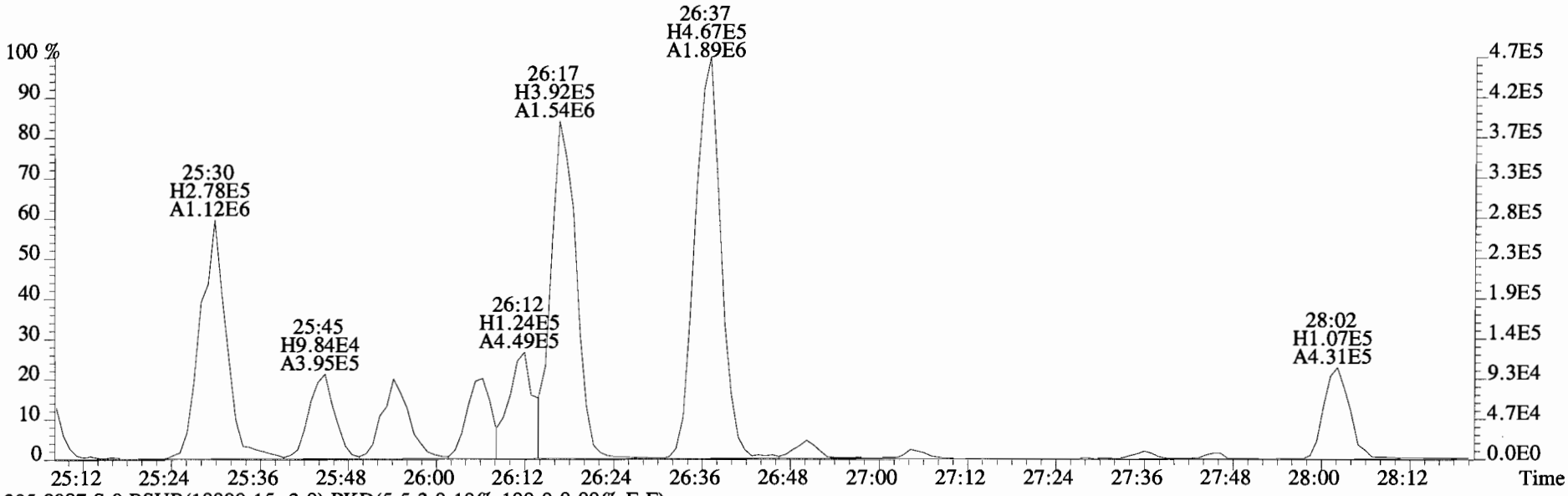
File:141014D2 #1-551 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



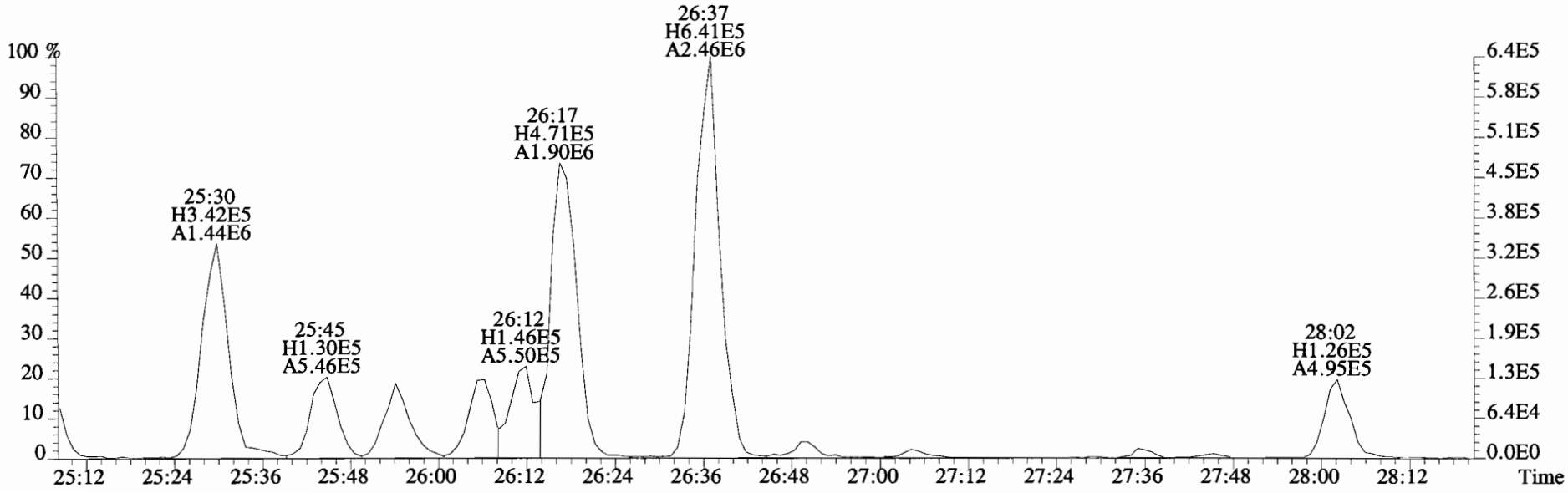
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

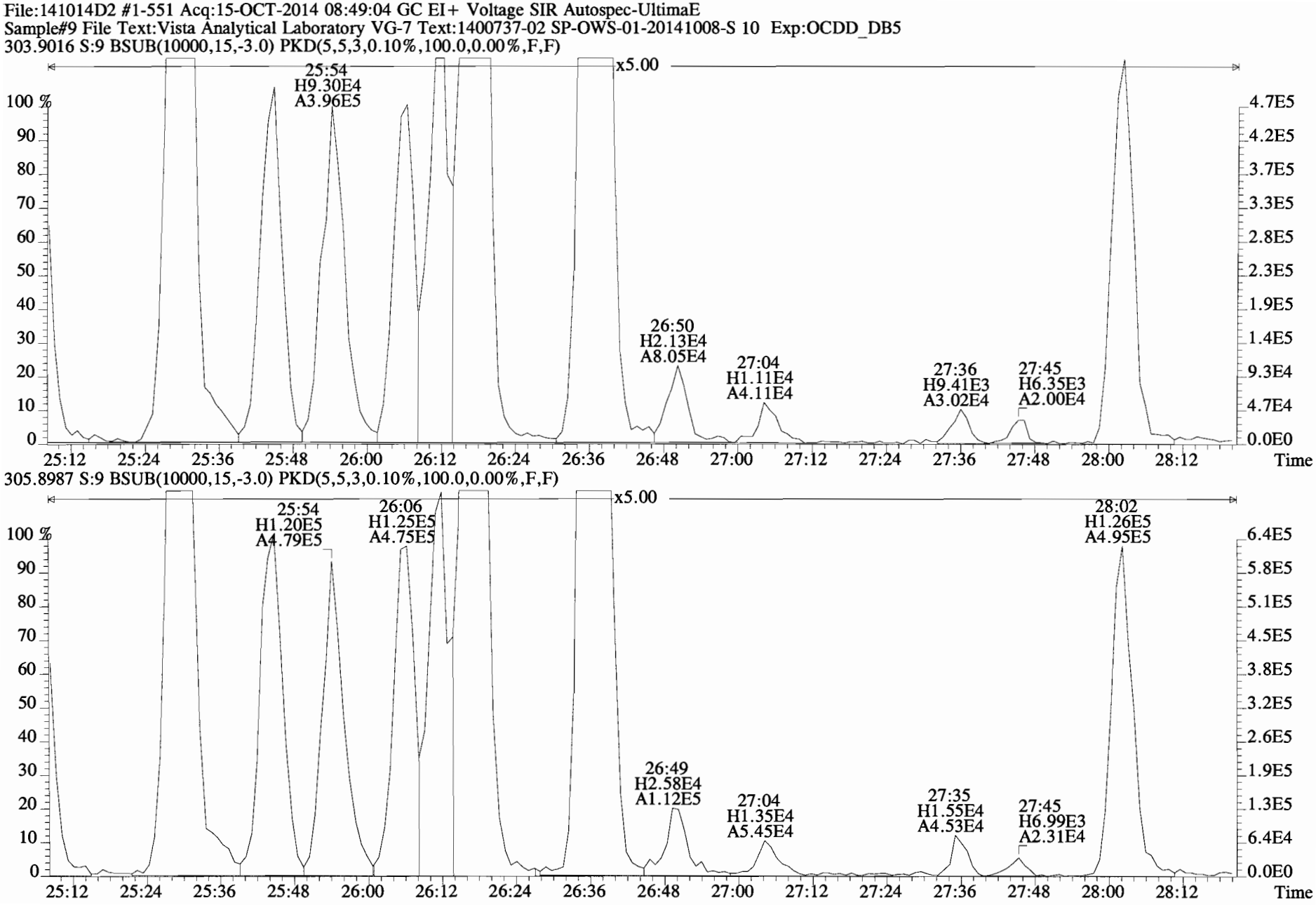


File:141014D2 #1-551 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

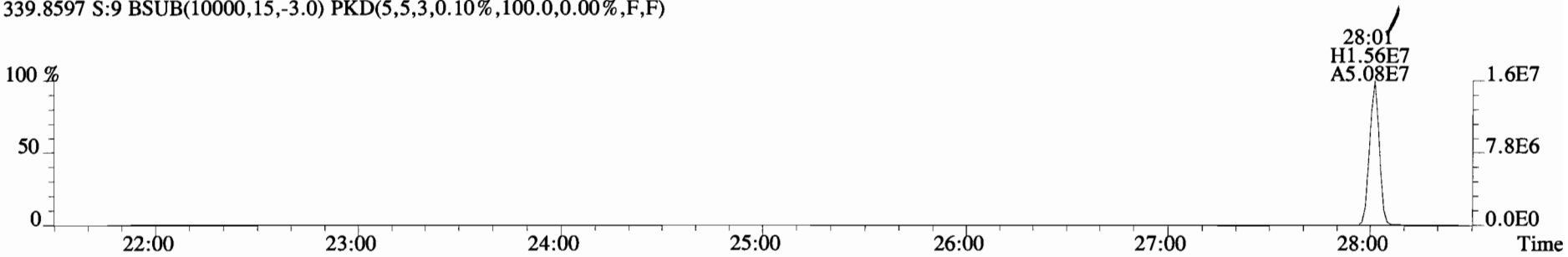


305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

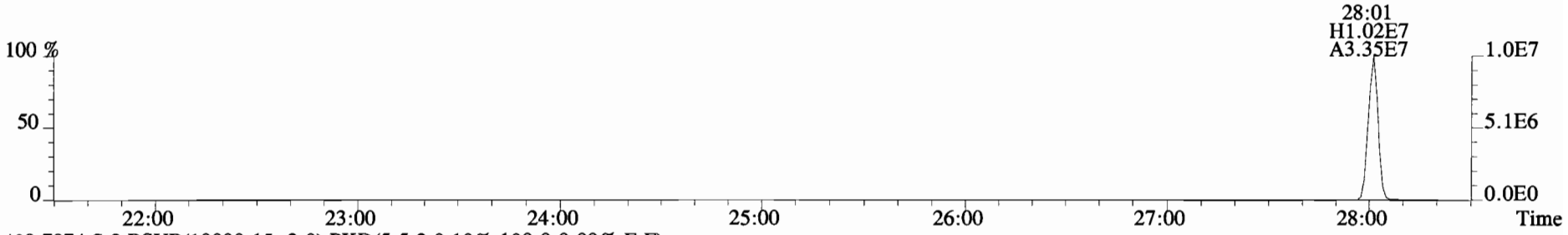



File:141014D2 #1-551 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
25:54
H9.30E4
A3.96E5
26:50
H2.13E4
A8.05E4
27:04
H1.11E4
A4.11E4
27:36
H9.41E3
A3.02E4
27:45
H6.35E3
A2.00E4
100 %
90
80
70
60
50
40
30
20
10
0
4.7E5
4.2E5
3.7E5
3.3E5
2.8E5
2.3E5
1.9E5
1.4E5
9.3E4
4.7E4
0.0E0
25:12
25:24
25:36
25:48
26:00
26:12
26:24
26:36
26:48
27:00
27:12
27:24
27:36
27:48
28:00
28:12
Time
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
25:54
H1.20E5
A4.79E5
26:06
H1.25E5
A4.75E5
26:49
H2.58E4
A1.12E5
27:04
H1.35E4
A5.45E4
27:35
H1.55E4
A4.53E4
27:45
H6.99E3
A2.31E4
28:02
H1.26E5
A4.95E5
100 %
90
80
70
60
50
40
30
20
10
0
6.4E5
5.8E5
5.1E5
4.5E5
3.8E5
3.2E5
2.6E5
1.9E5
1.3E5
6.4E4
0.0E0
25:12
25:24
25:36
25:48
26:00
26:12
26:24
26:36
26:48
27:00
27:12
27:24
27:36
27:48
28:00
28:12
Time

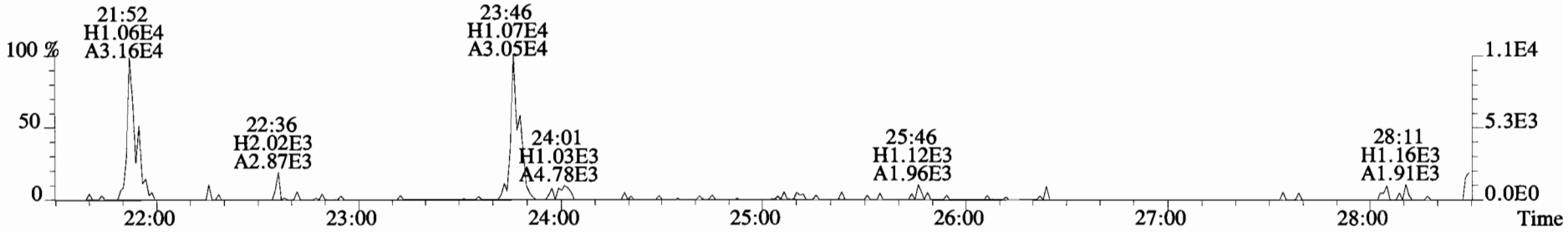
File:141014D2 #1-551 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
339.8597 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



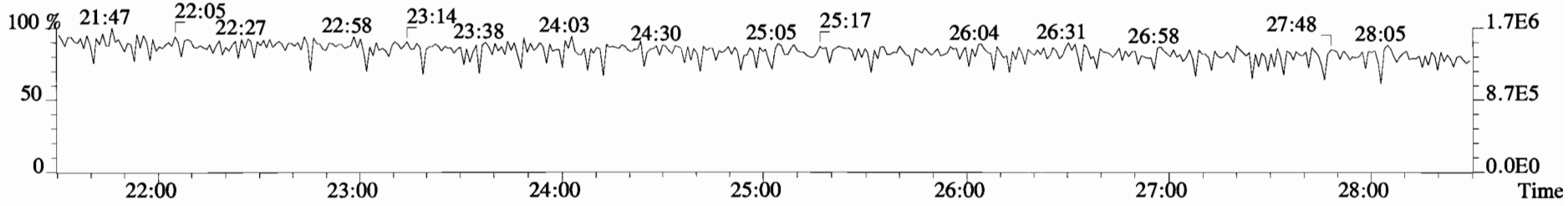
341.8568 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



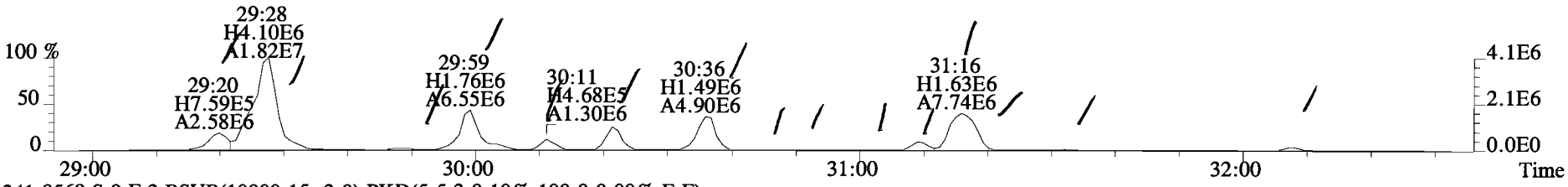
409.7974 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



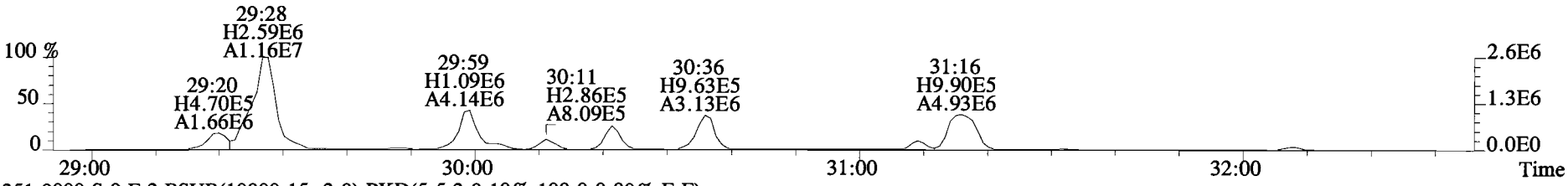
316.9824 S:9



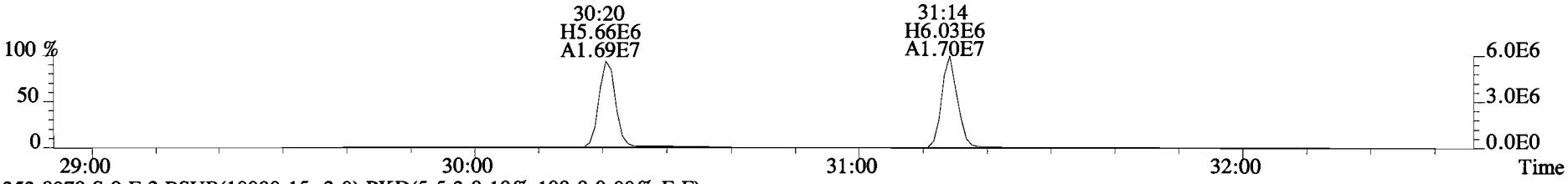
File:141014D2 #1-256 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



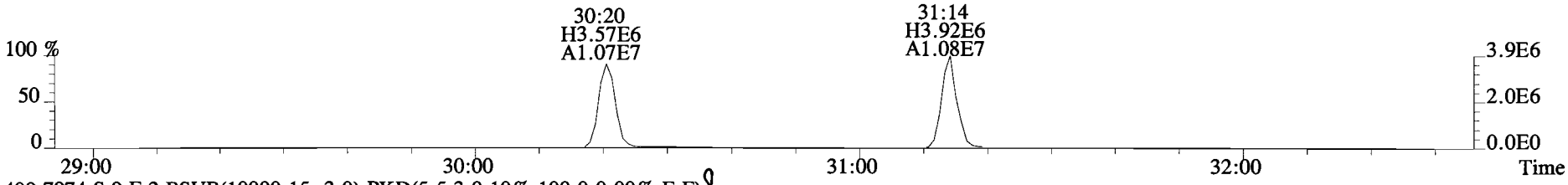
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



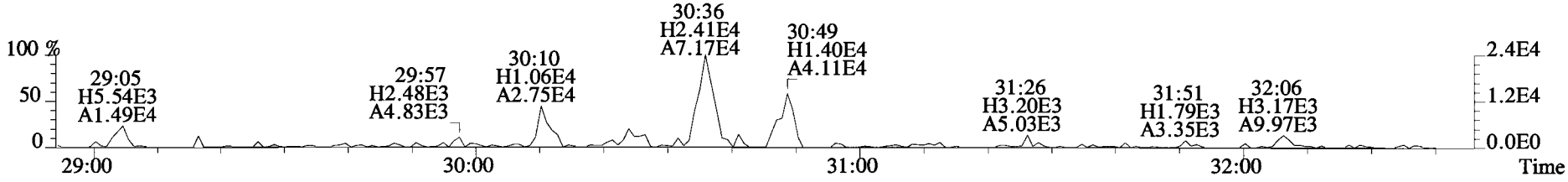
351.9000 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

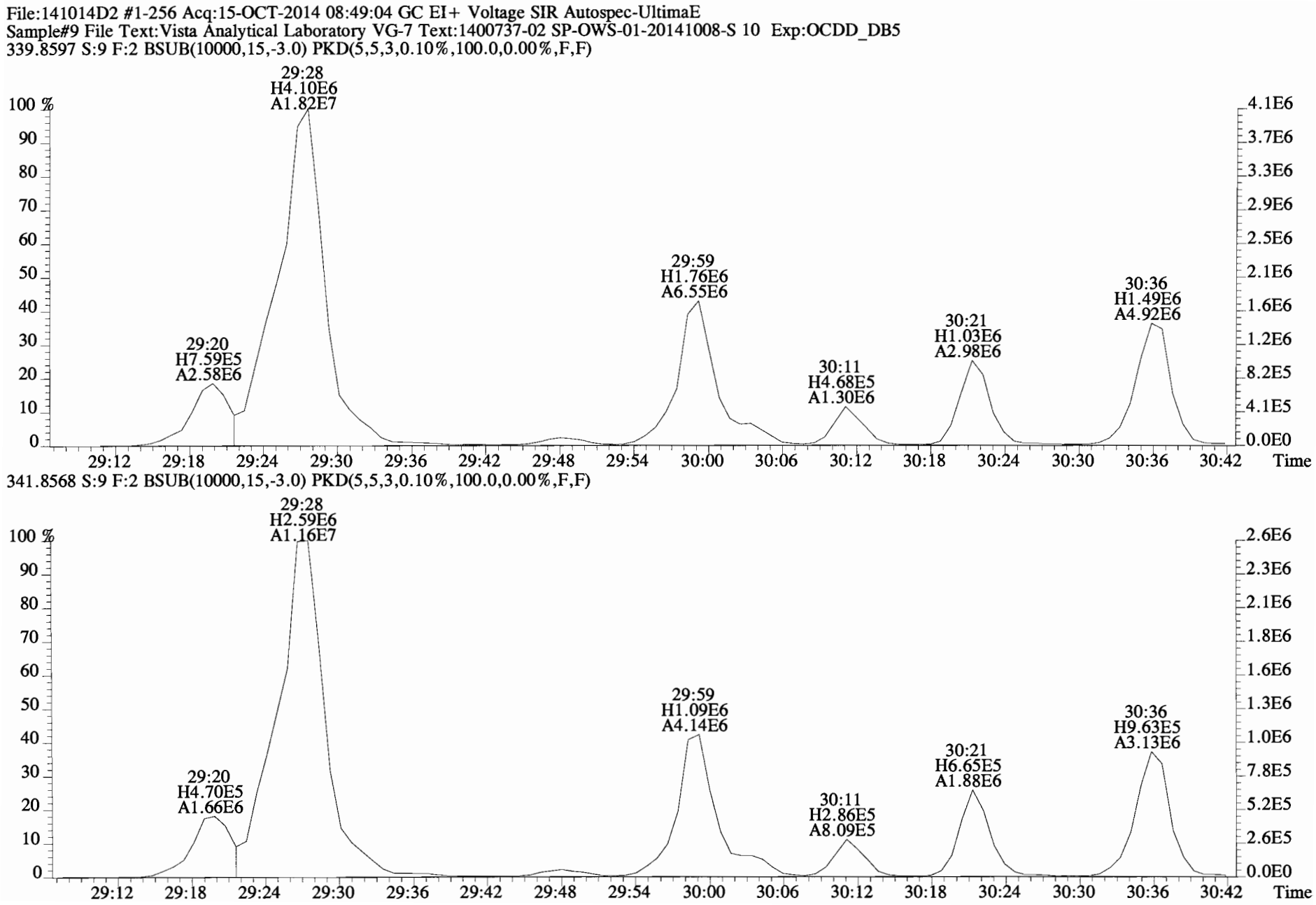


353.8970 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

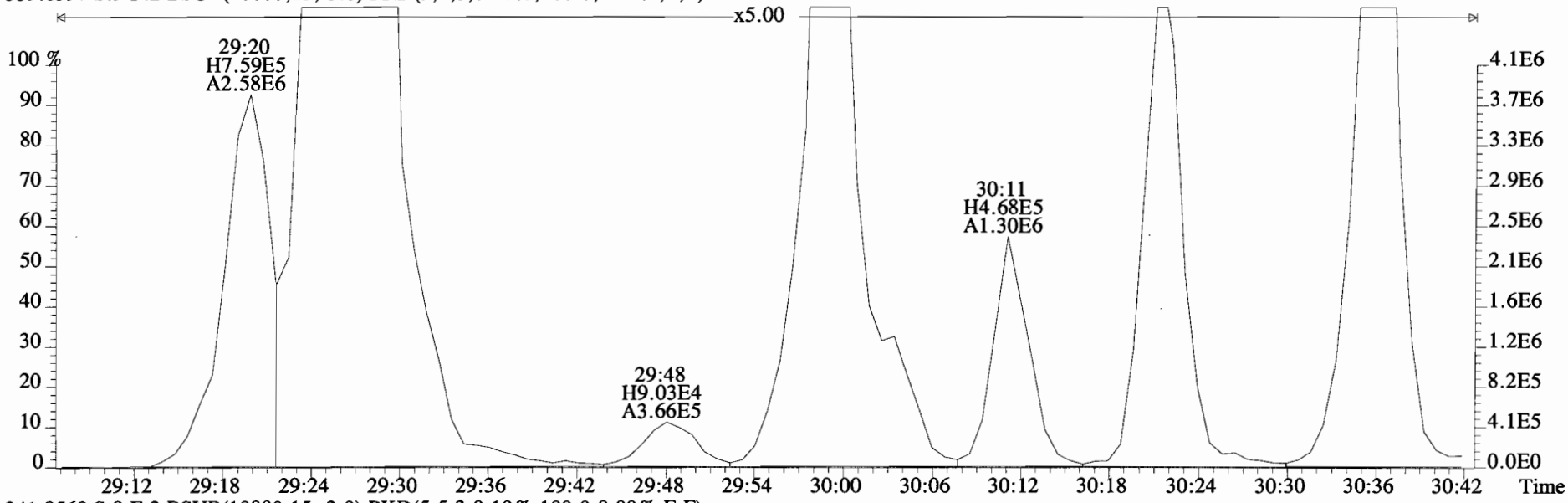


409.7974 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

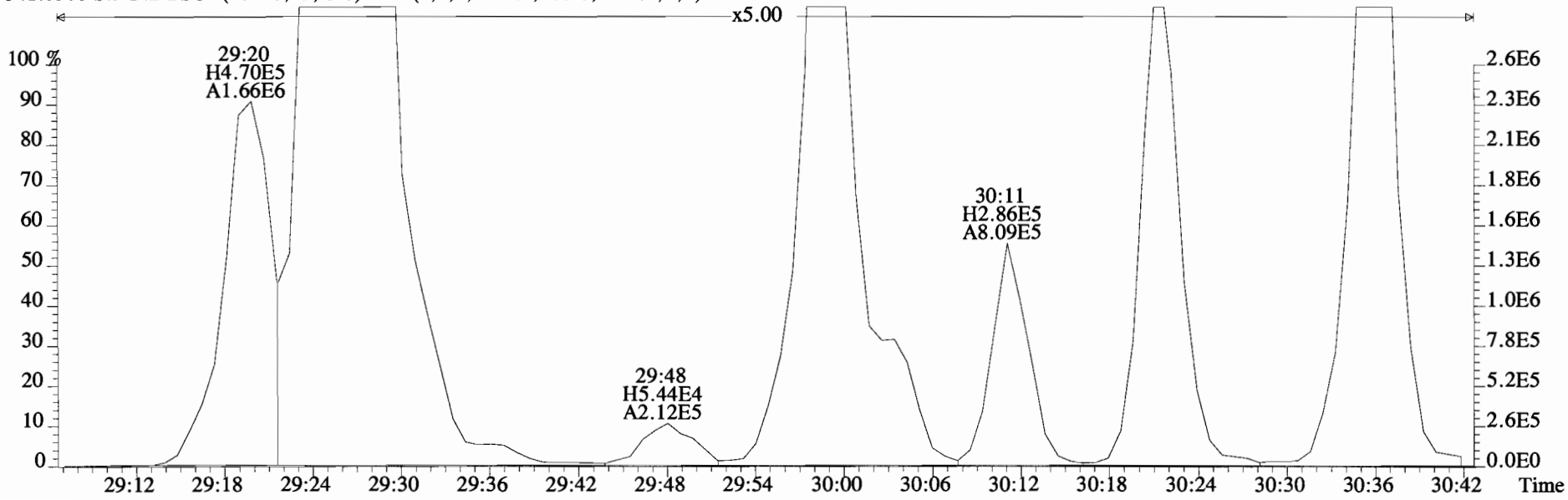



File:141014D2 #1-256 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:28
H4.10E6
A1.82E7
29:20
H7.59E5
A2.58E6
29:59
H1.76E6
A6.55E6
30:11
H4.68E5
A1.30E6
30:21
H1.03E6
A2.98E6
30:36
H1.49E6
A4.92E6
100 %
Time
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:28
H2.59E6
A1.16E7
29:20
H4.70E5
A1.66E6
29:59
H1.09E6
A4.14E6
30:11
H2.86E5
A8.09E5
30:21
H6.65E5
A1.88E6
30:36
H9.63E5
A3.13E6
100 %
Time

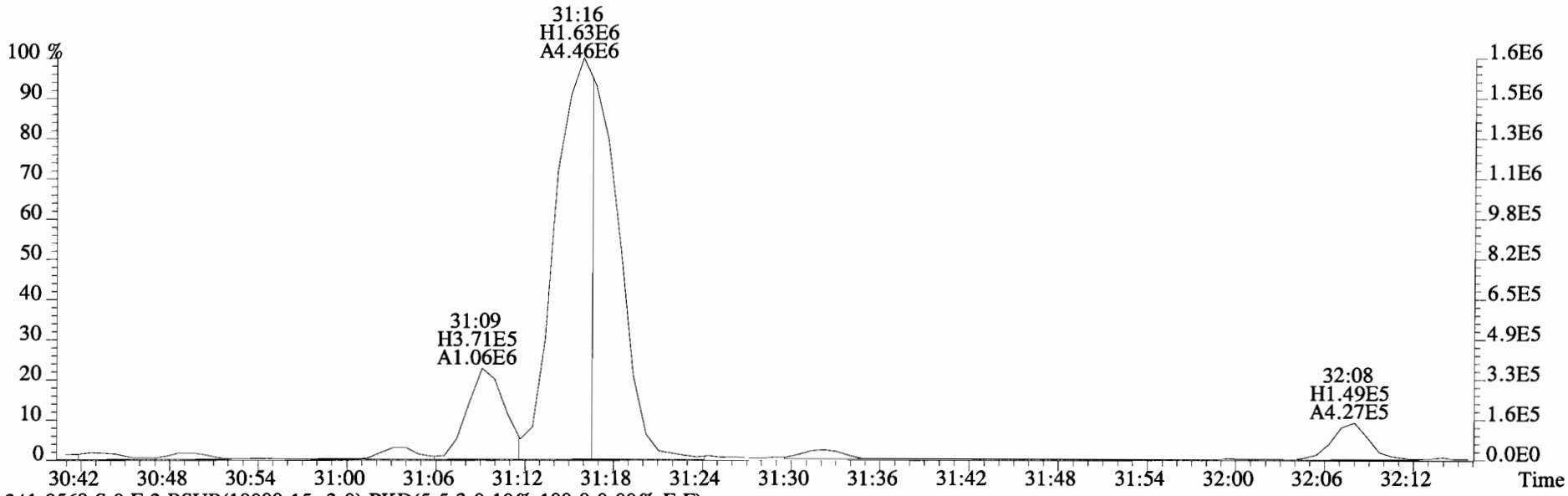
File:141014D2 #1-256 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



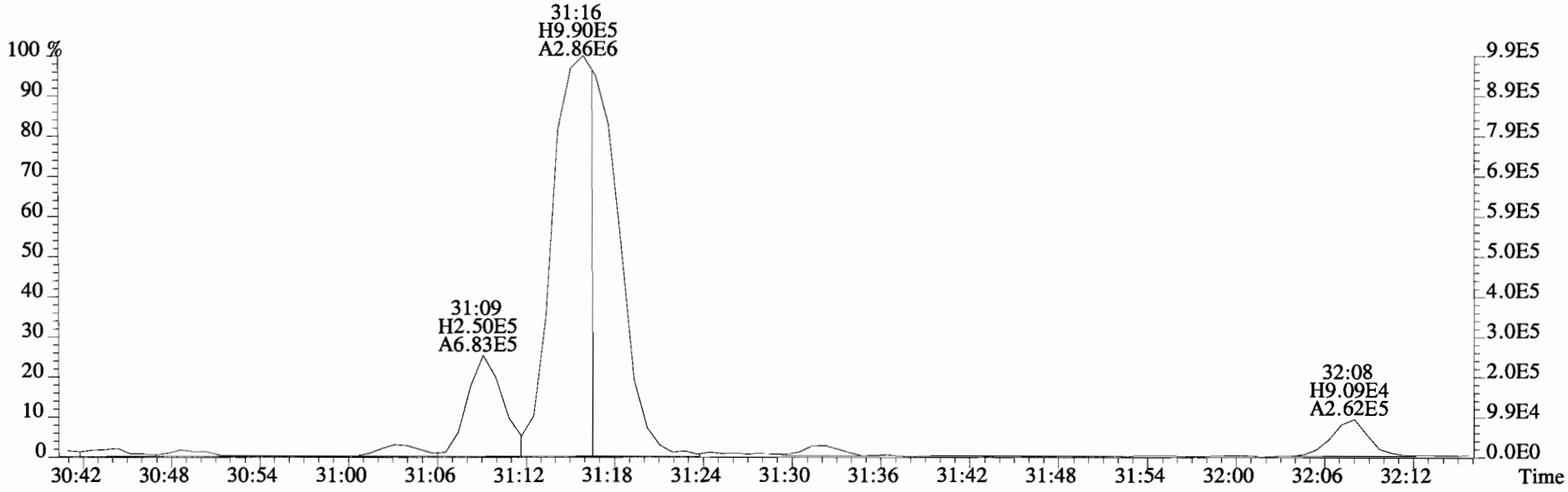
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



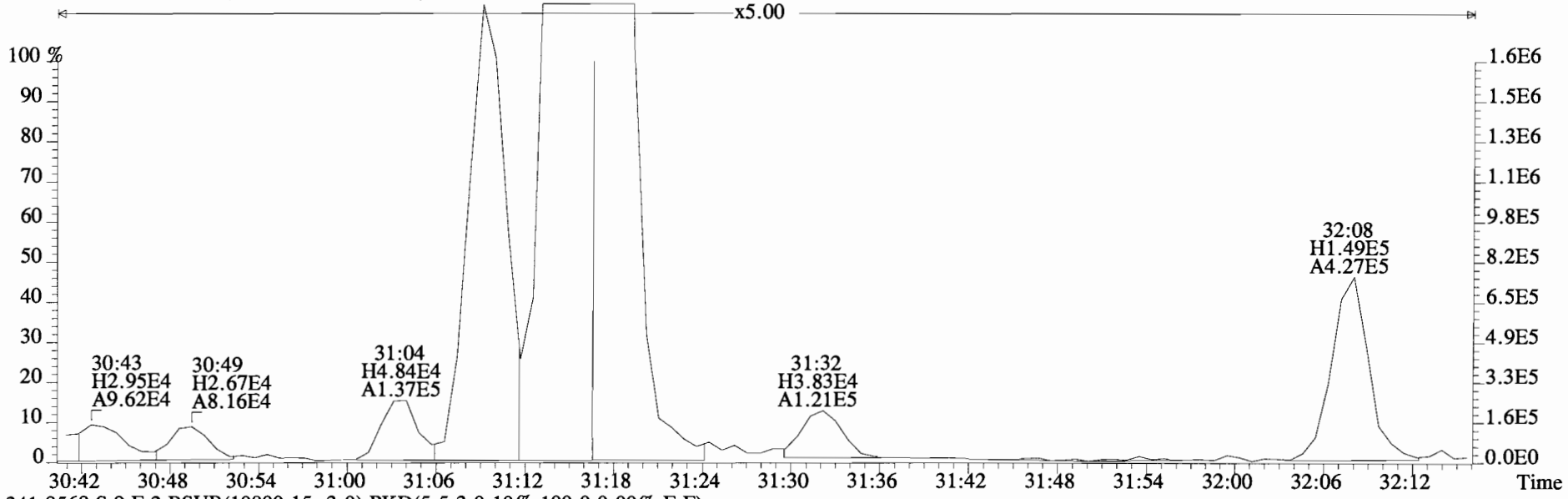
File:141014D2 #1-256 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



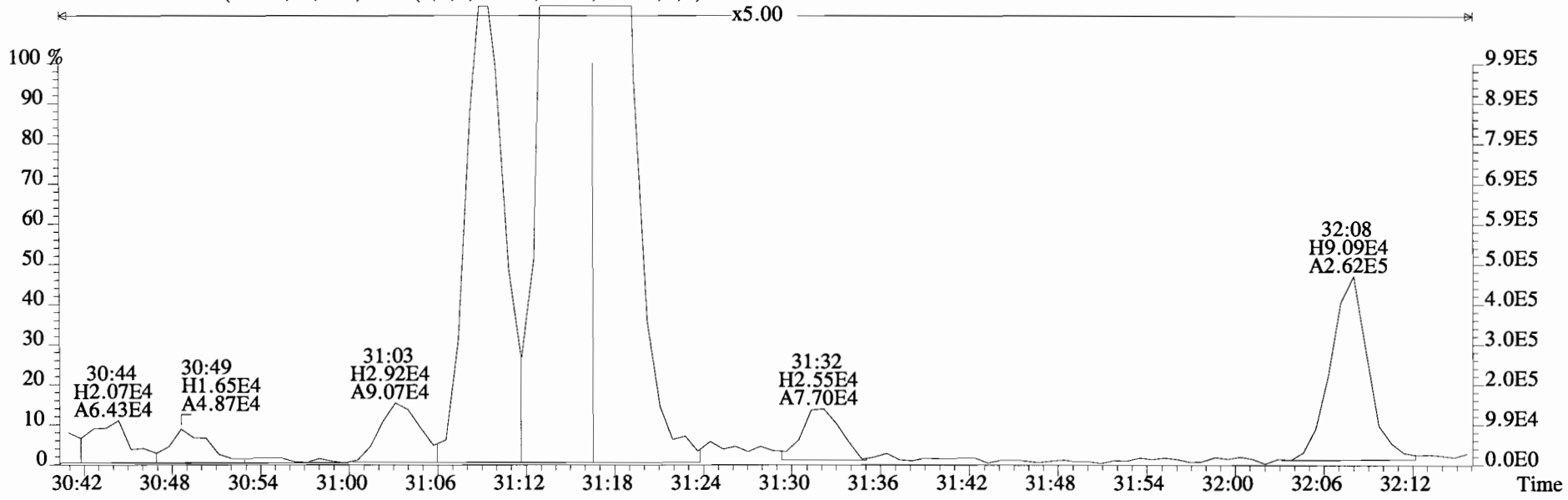
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141014D2 #1-256 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

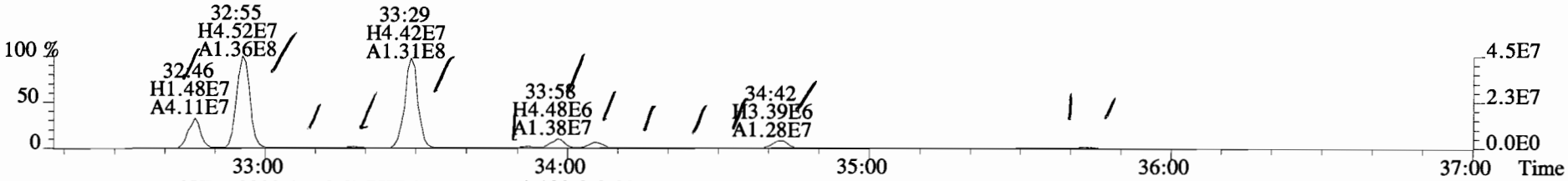


341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

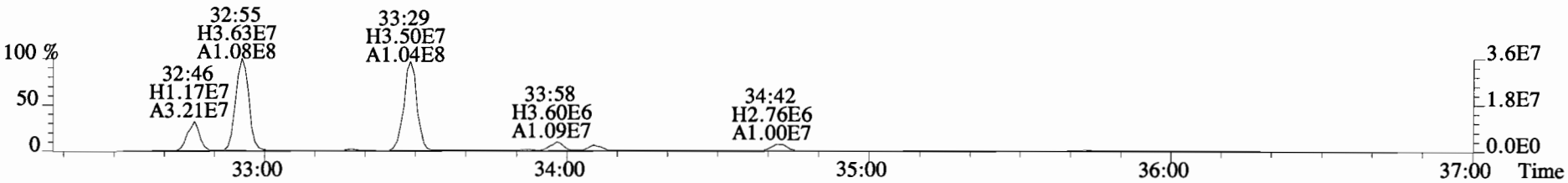


File:141014D2 #1-385 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5

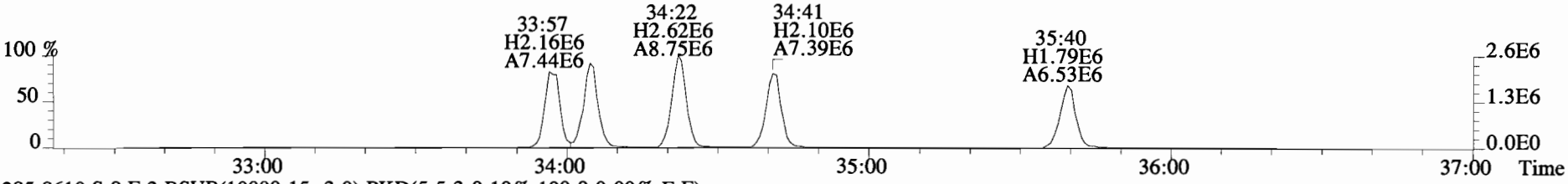
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



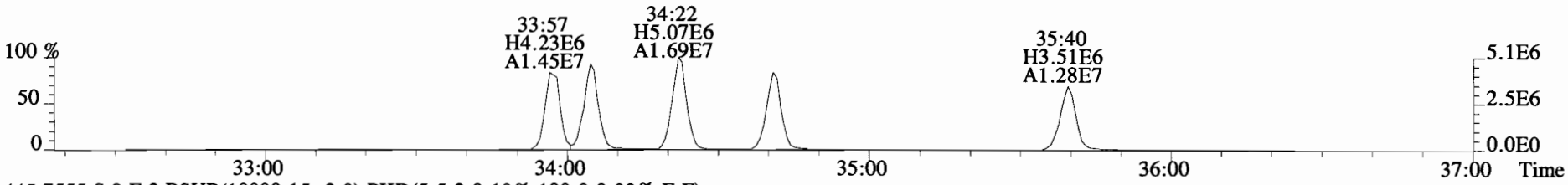
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



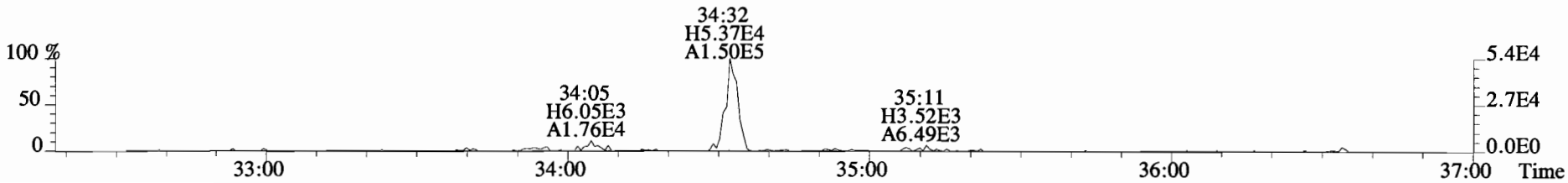
383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



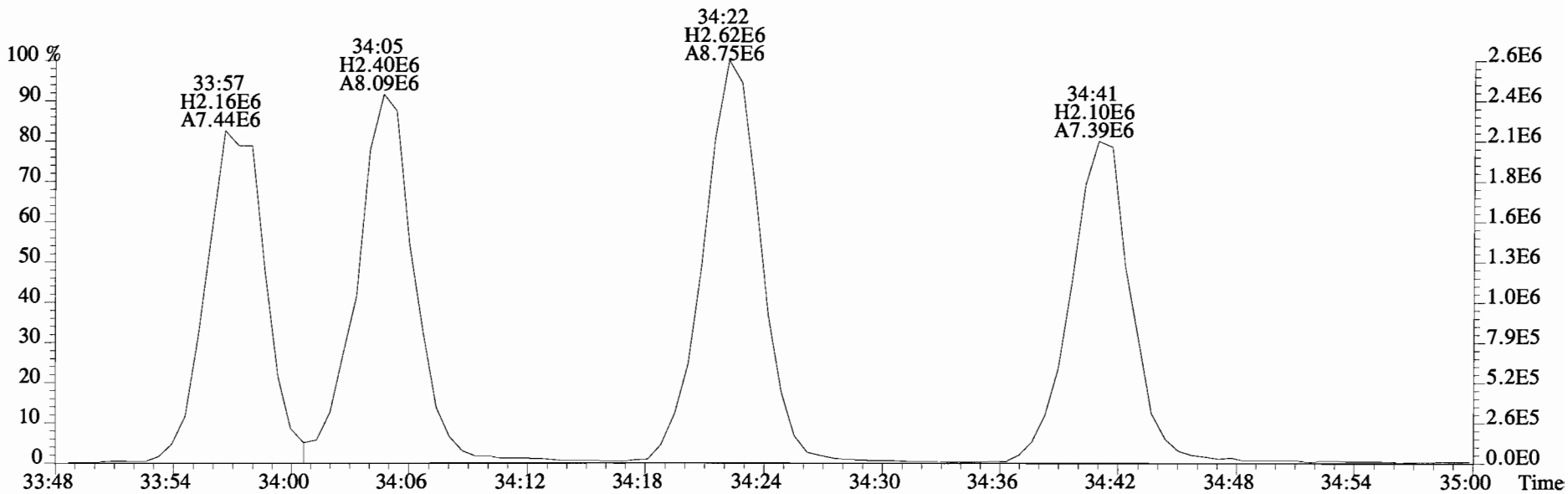
385.8610 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



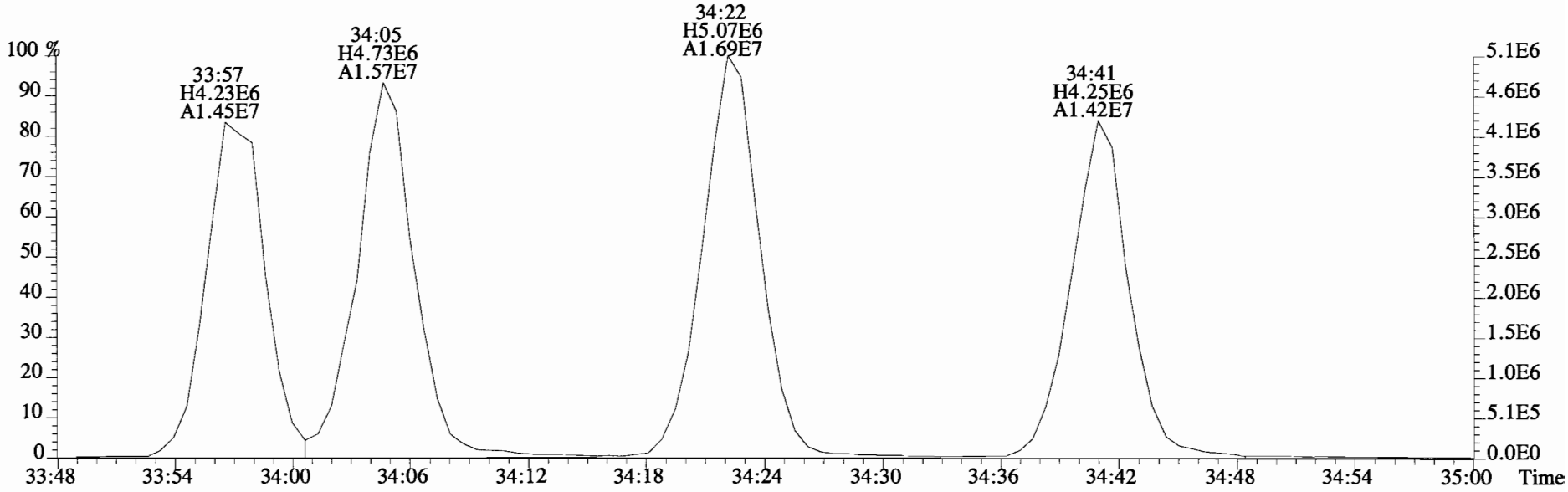
445.7555 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



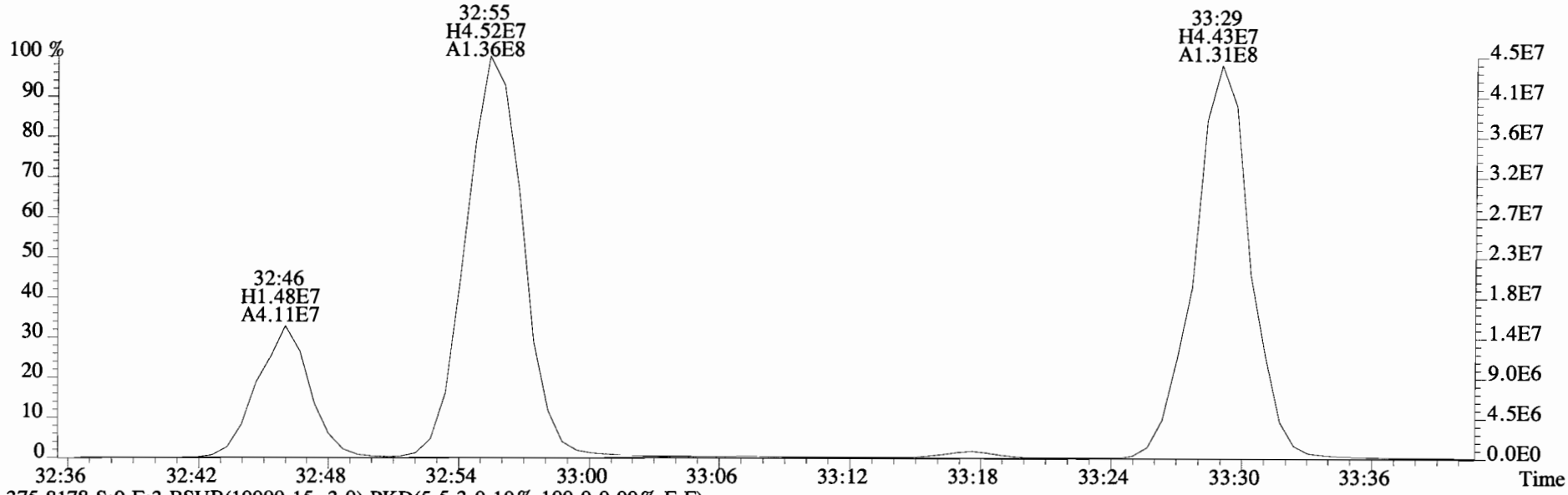
File:141014D2 #1-385 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



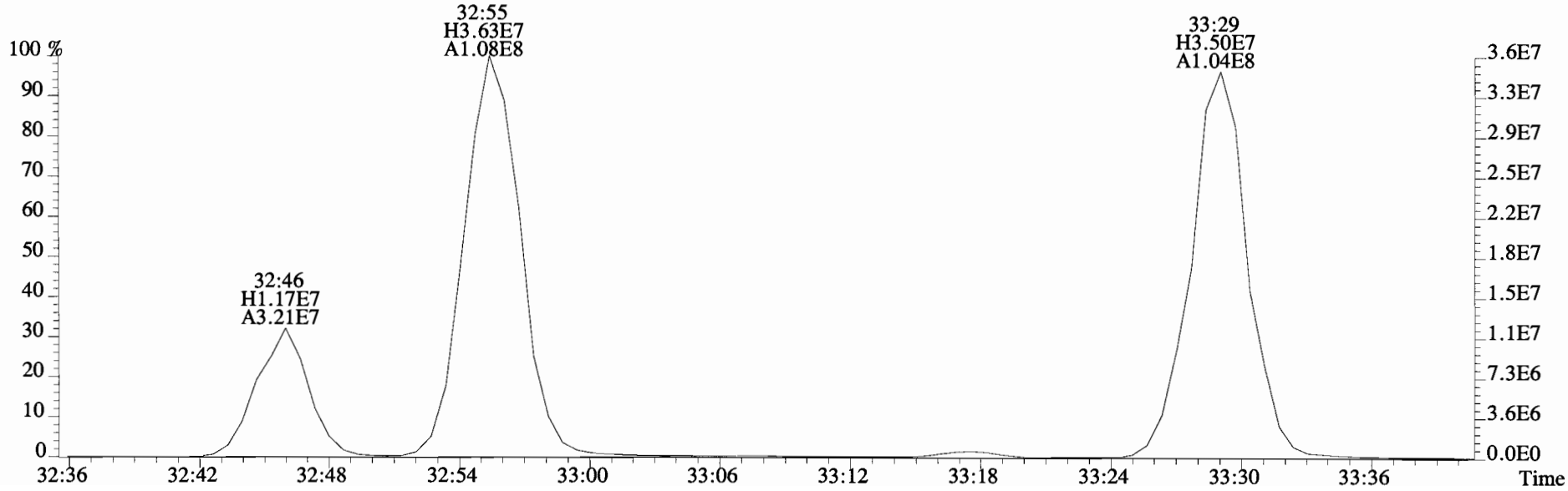
385.8610 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



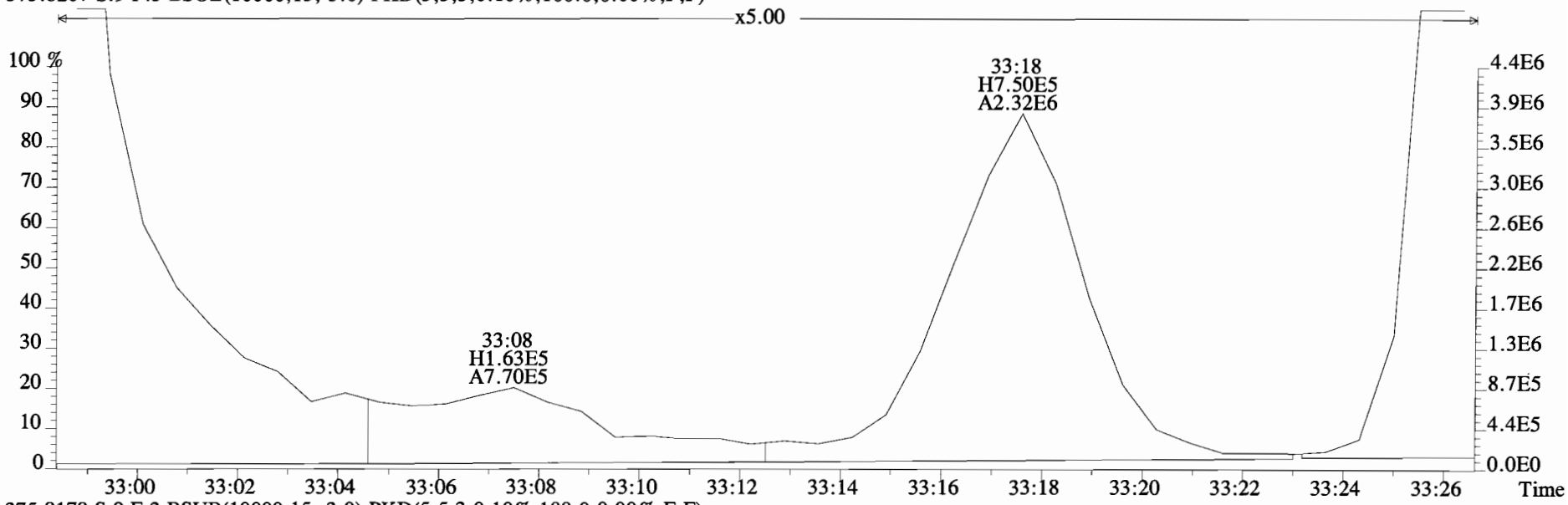
File:141014D2 #1-385 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



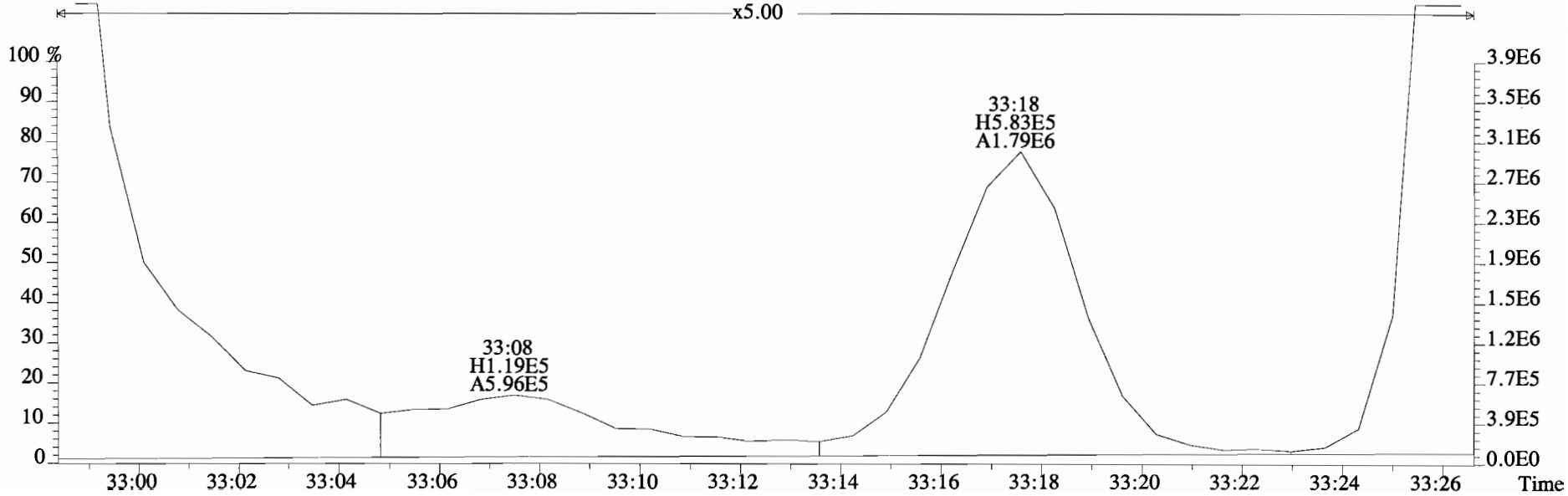
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



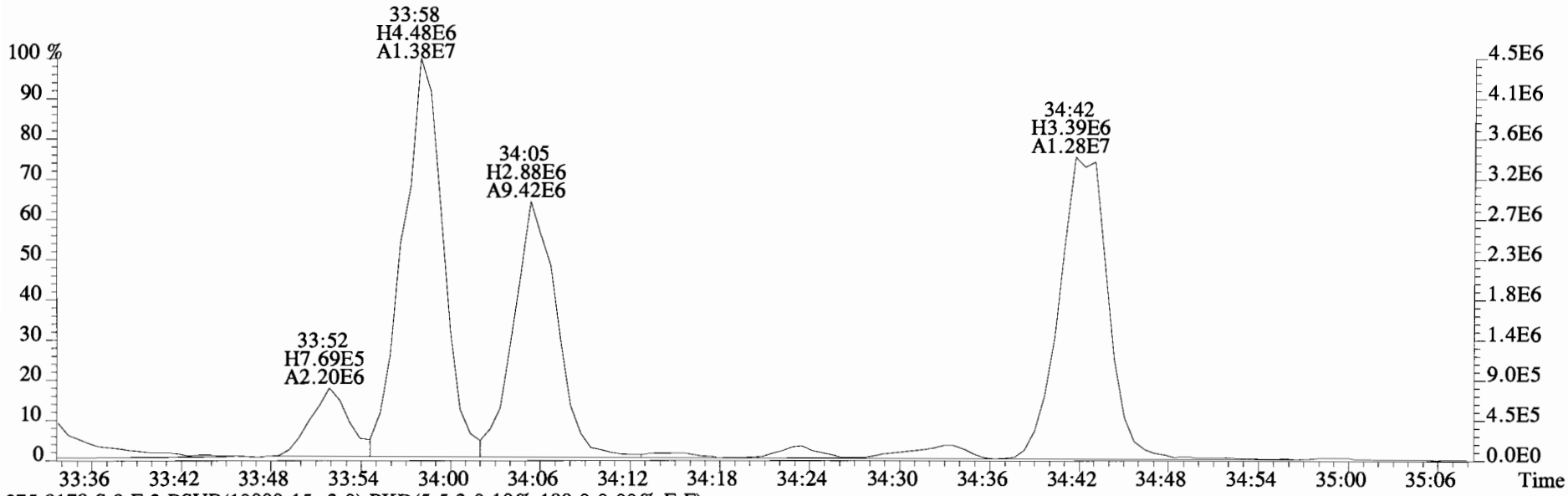
File:141014D2 #1-385 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



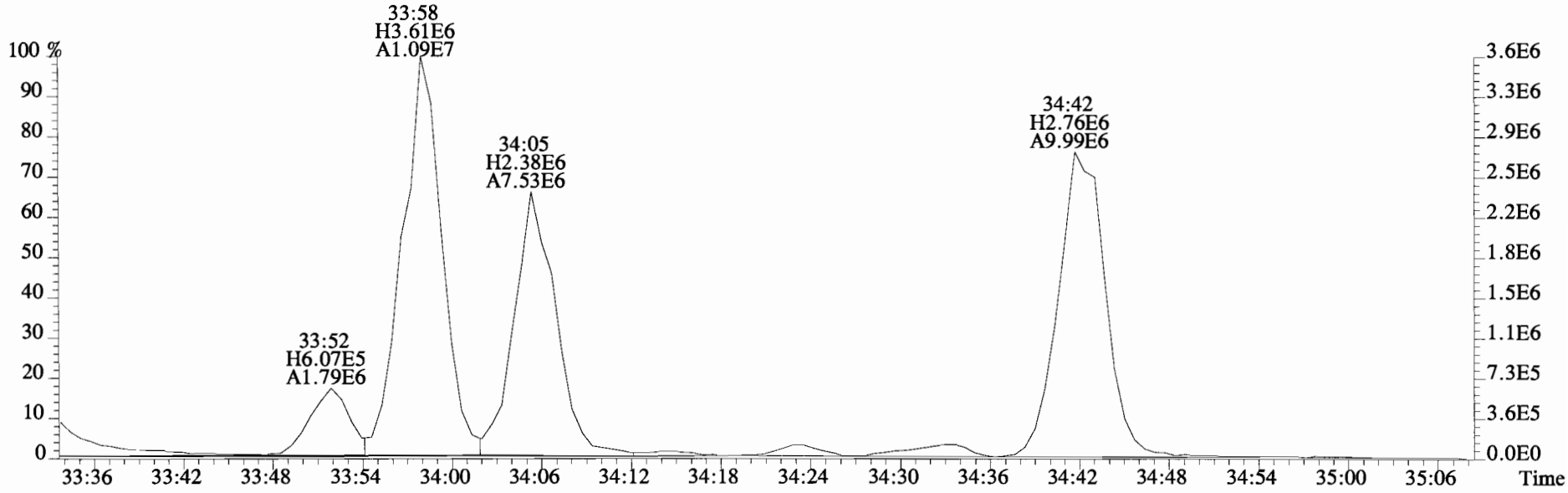
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



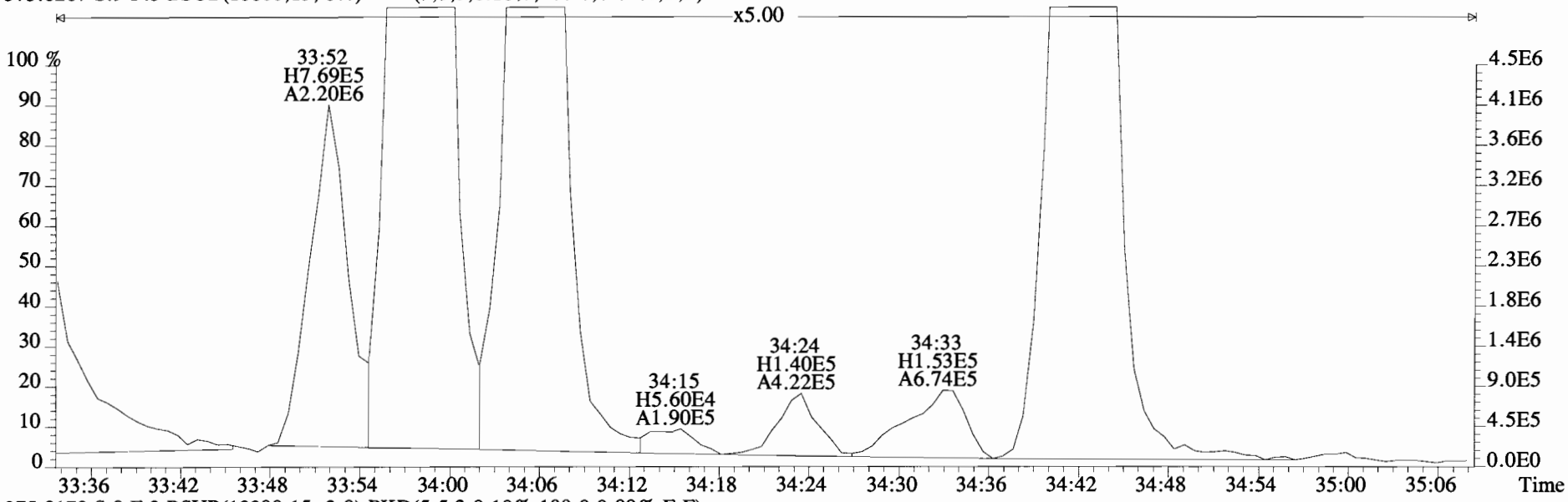
File:141014D2 #1-385 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



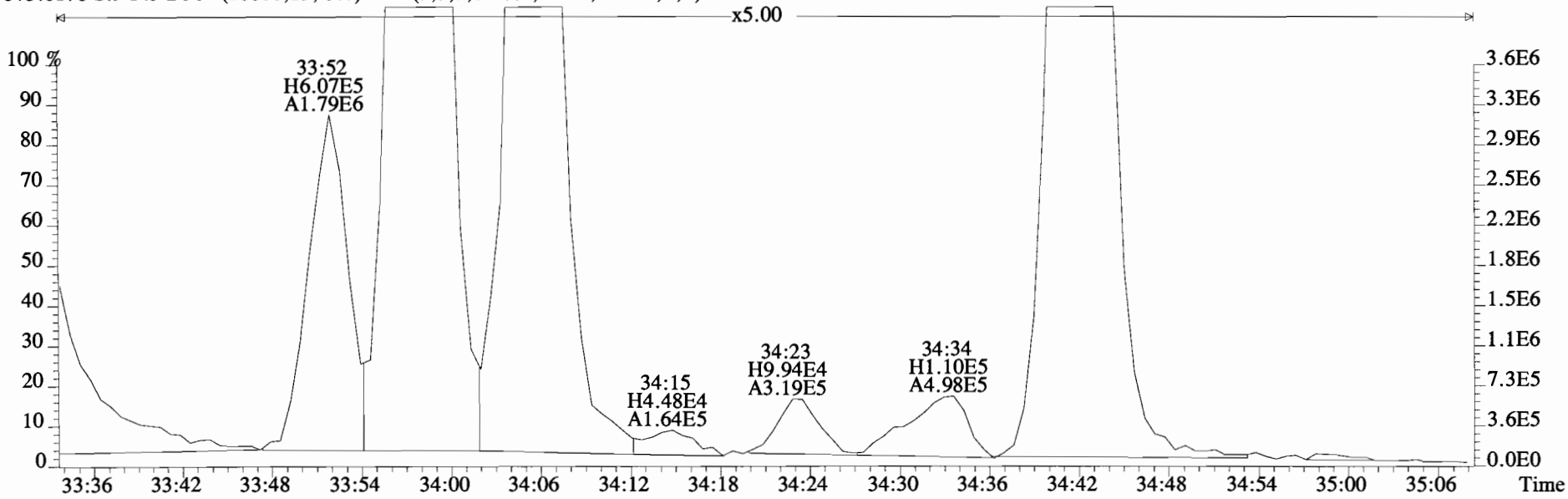
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



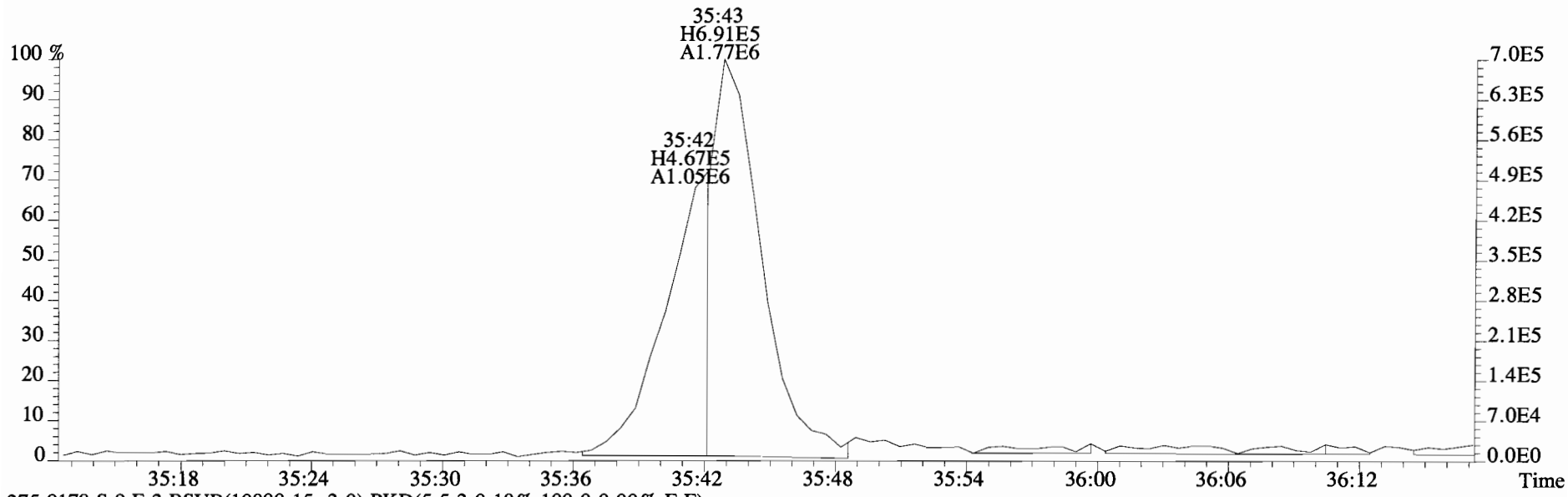
File:141014D2 #1-385 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



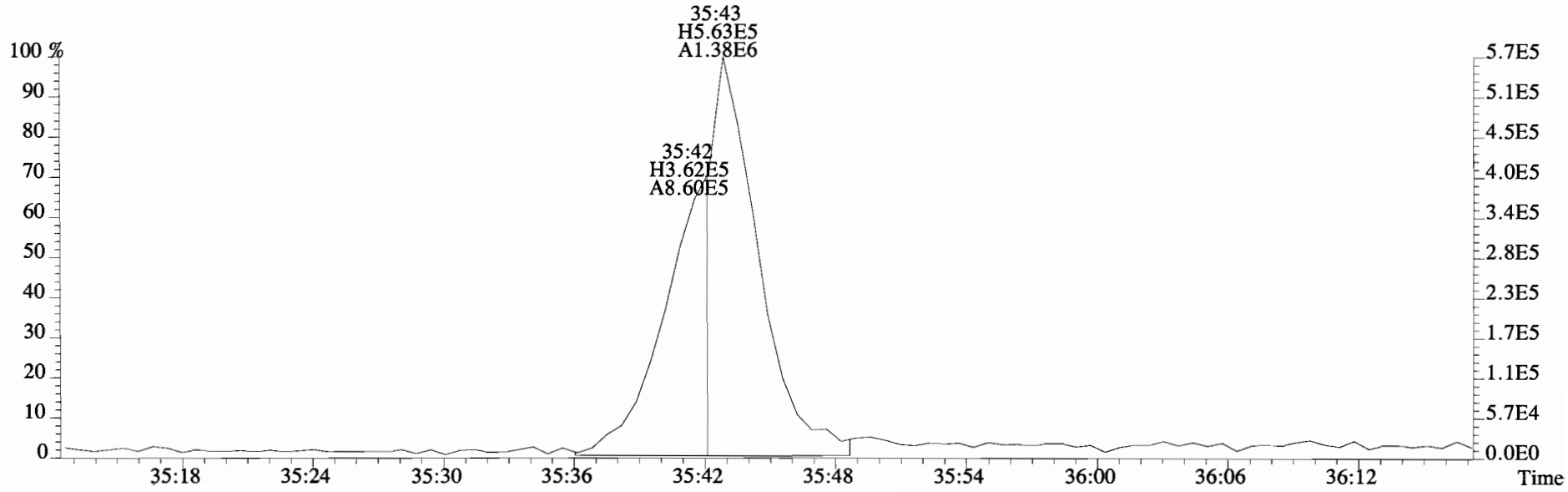
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



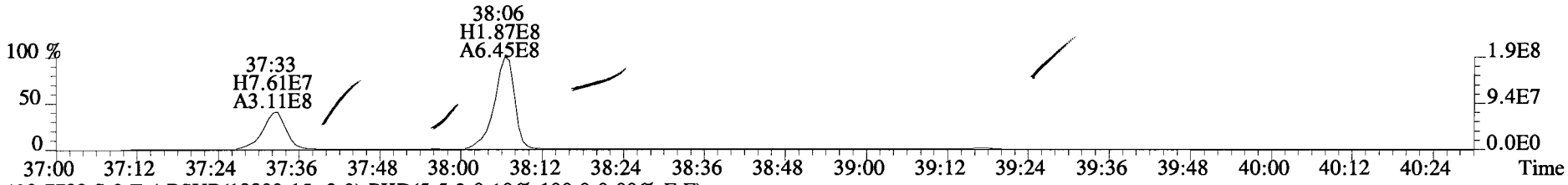
File:141014D2 #1-385 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



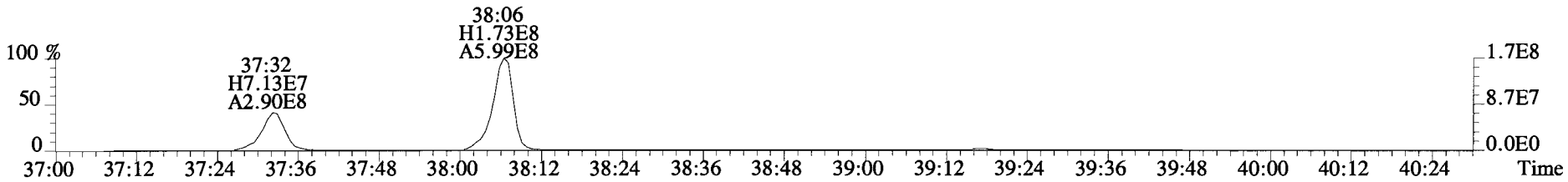
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



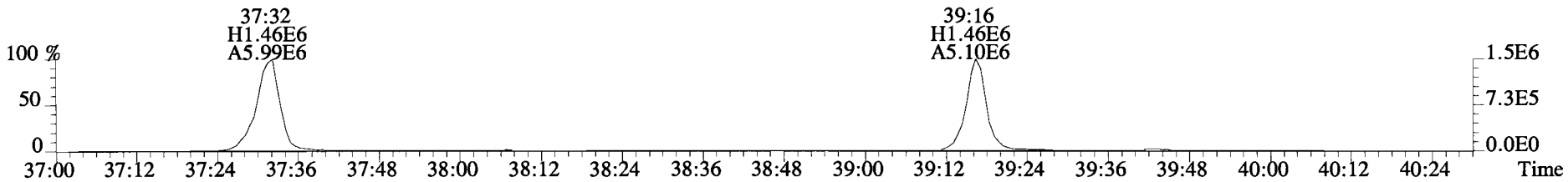
File:141014D2 #1-326 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



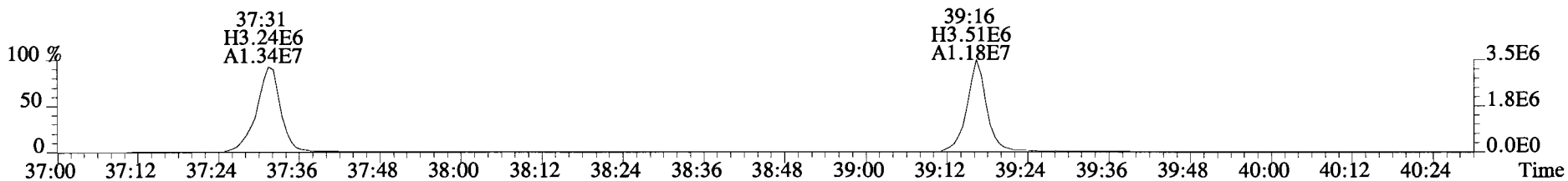
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



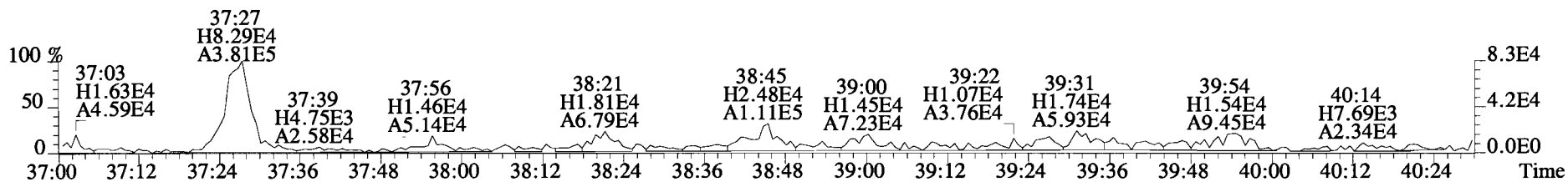
417.8253 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



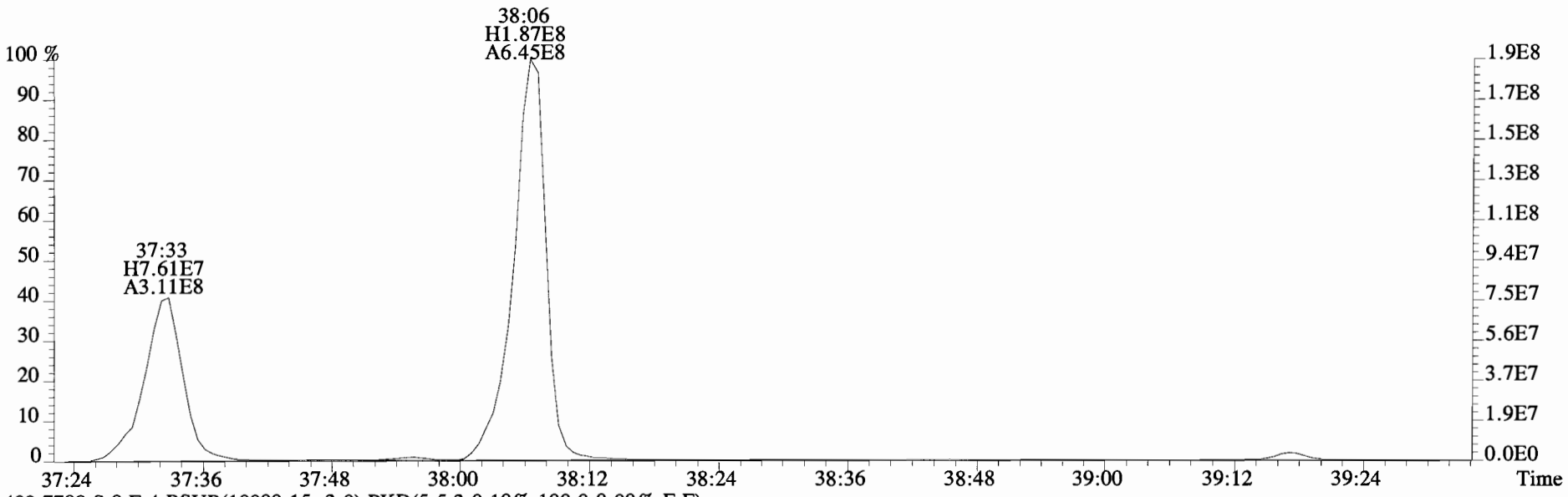
419.8220 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



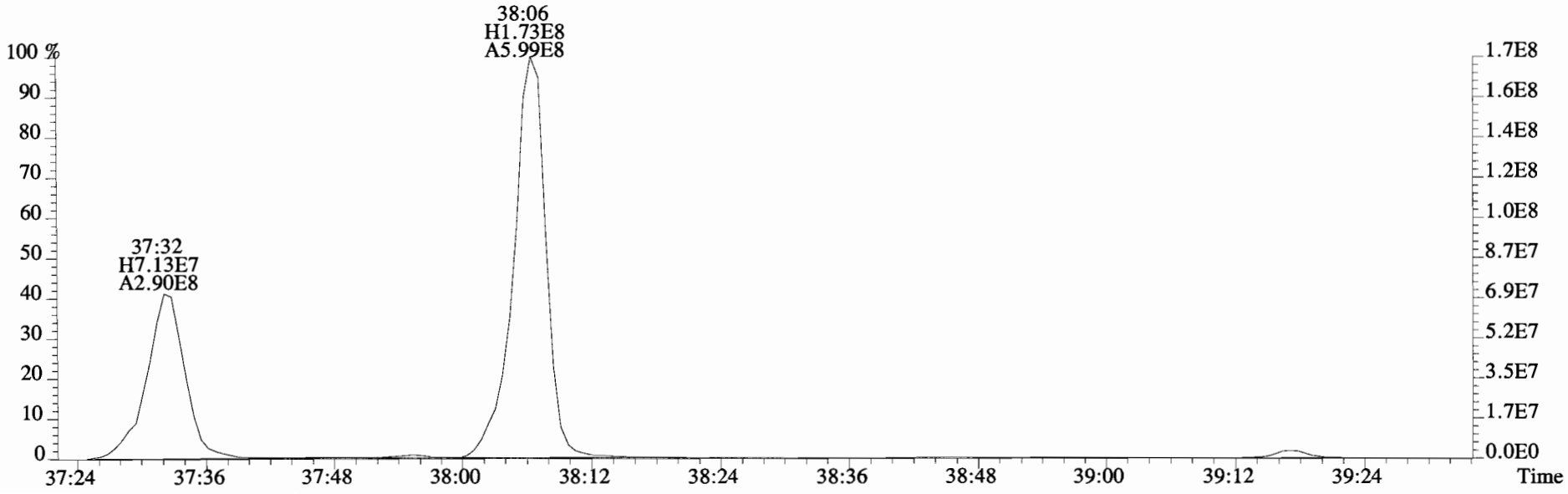
479.7165 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



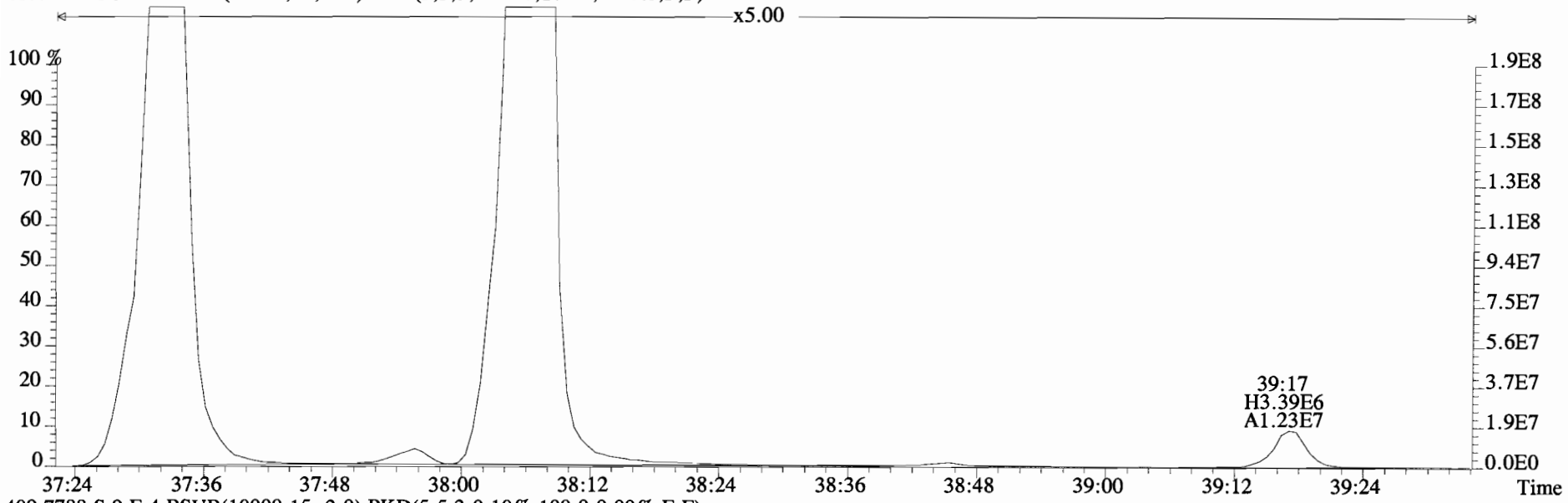
File:141014D2 #1-326 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



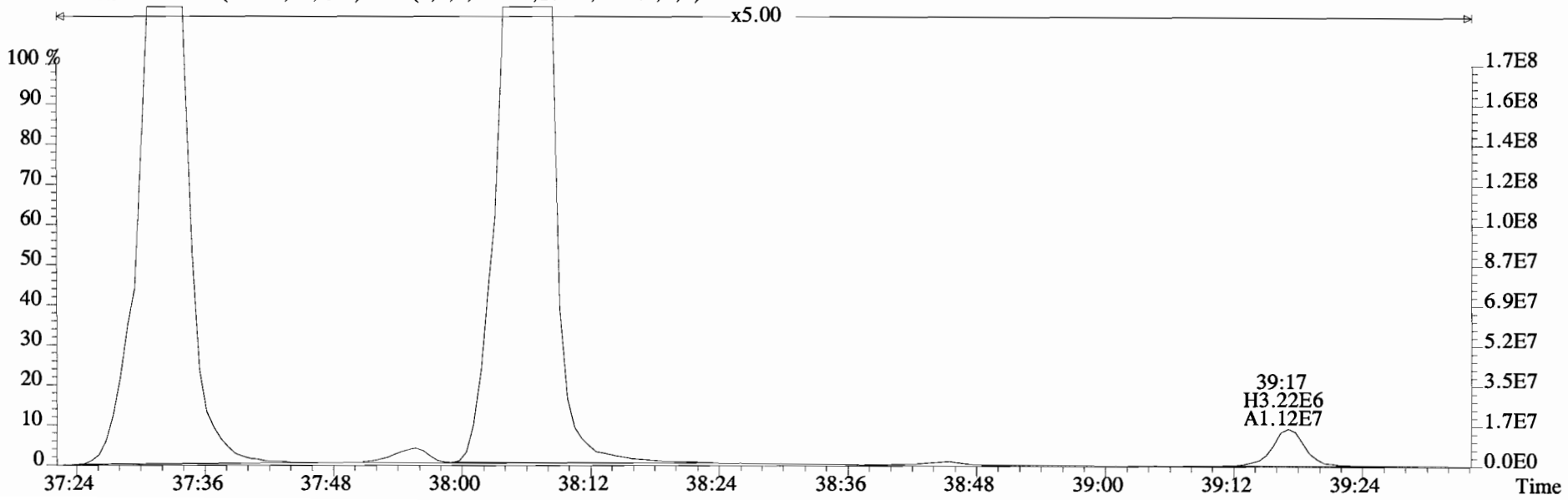
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



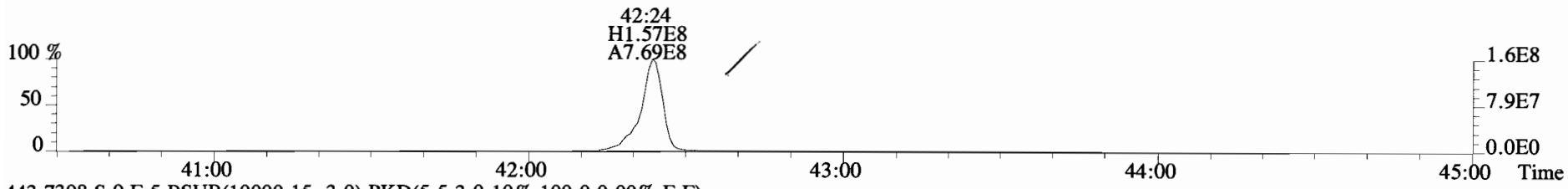
File:141014D2 #1-326 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



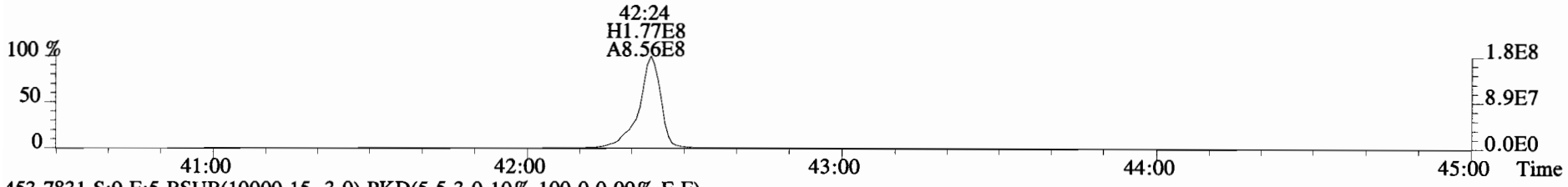
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



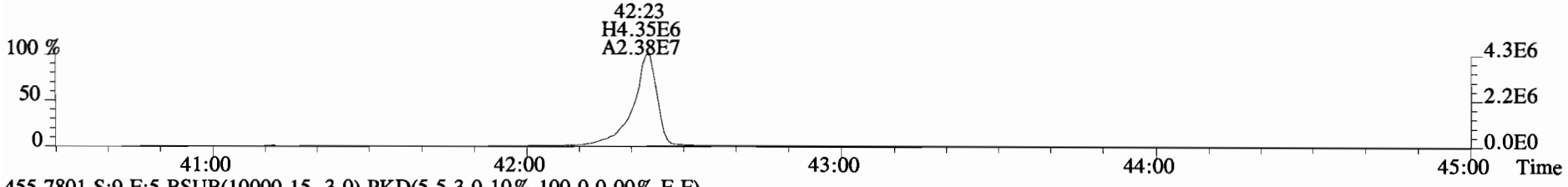
File:141014D2 #1-388 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
441.7428 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



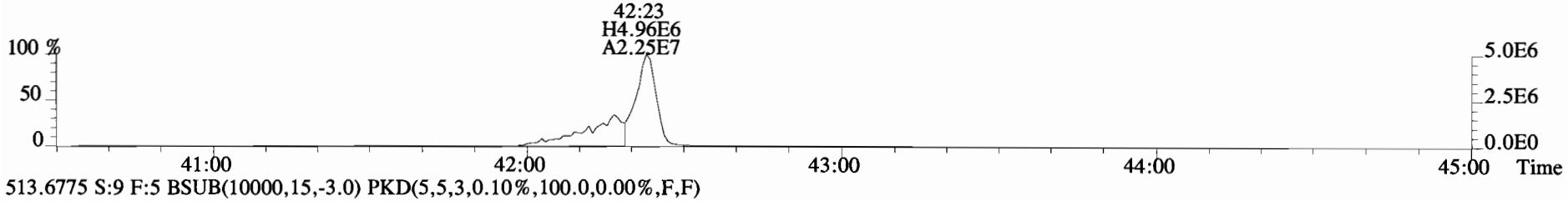
443.7398 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



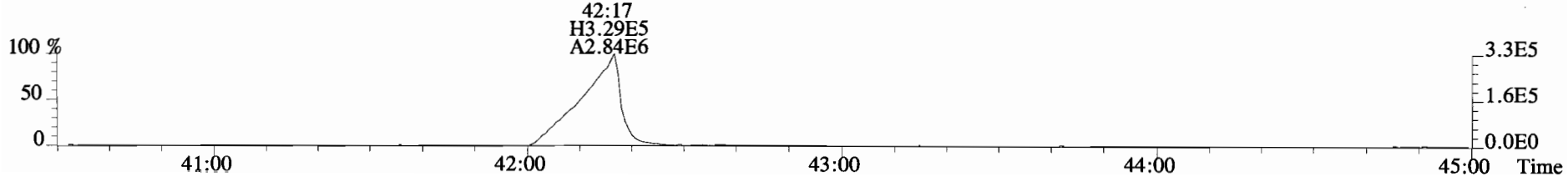
453.7831 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



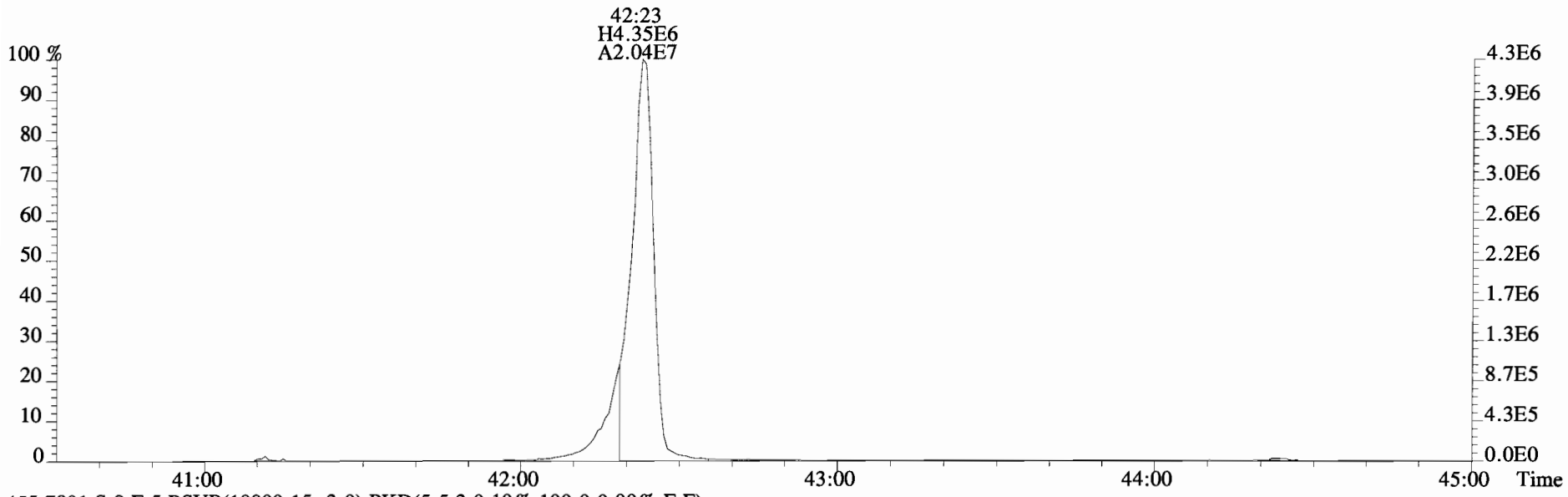
455.7801 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



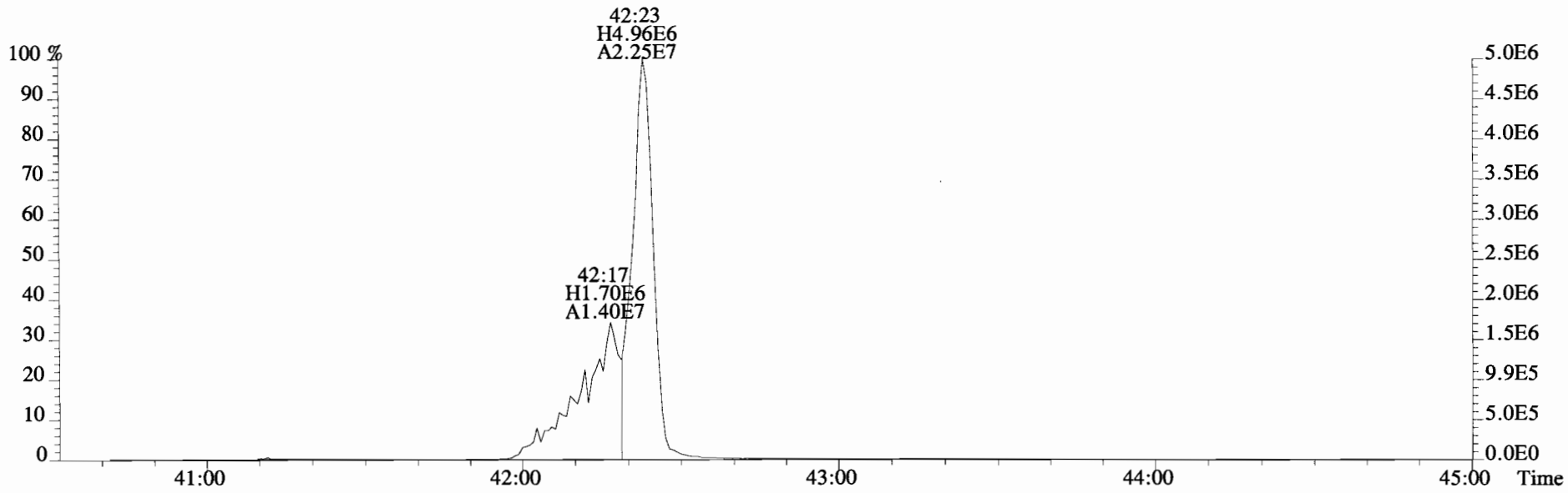
513.6775 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141014D2 #1-388 Acq:15-OCT-2014 08:49:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 10 Exp:OCDD_DB5
453.7831 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	4.02e+04	0.77 y	1.03	27:02	1.001	21.998		*	2.5	*
	1,2,3,7,8-PeCDD	2.53e+05	0.66 y	0.84	31:32	1.001	140.09		*	2.5	*
	1,2,3,4,7,8-HxCDD	4.54e+05	1.20 y	1.05	34:51	1.000	286.46		*	2.5	*
	1,2,3,6,7,8-HxCDD	1.47e+06	1.27 y	1.04	34:58	1.000	1062.1		*	2.5	*
	1,2,3,7,8,9-HxCDD	1.07e+06	1.17 y	0.90	35:16	1.000	625.44		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	5.37e+07	1.03 y	1.01	38:43	1.000	37067		*	2.5	*
	OCDD	9.53e+08	0.89 y	1.04	42:03	1.000	484130		*	2.5	*
	2,3,7,8-TCDF	6.15e+04	0.70 y	0.91	26:16	1.001	31.030		*	2.5	*
	1,2,3,7,8-PeCDF	1.02e+05	1.56 y	0.97	30:21	1.001	40.477		*	2.5	*
	2,3,4,7,8-PeCDF	2.02e+05	1.75 y	0.94	31:16	1.001	91.463		*	2.5	*
	1,2,3,4,7,8-HxCDF	4.88e+05	1.30 y	1.32	33:57	1.000	172.06		*	2.5	*
	1,2,3,6,7,8-HxCDF	3.23e+05	1.25 y	1.18	34:05	1.000	123.80		*	2.5	*
	2,3,4,6,7,8-HxCDF	4.23e+05	1.43 n	1.23	34:42	1.001	165.56		*	2.5	*
	1,2,3,7,8,9-HxCDF	1.15e+05	1.27 y	1.13	35:42	1.001	65.468		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	1.08e+07	1.06 y	1.57	37:31	1.001	4145.1		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	4.67e+05	1.11 y	1.50	39:16	1.001	217.88		*	2.5	*
	OCDF	2.74e+07	0.90 y	1.05	42:17	1.000	14816		*	2.5	*
IS	13C-2,3,7,8-TCDD	3.44e+05	0.74 y	1.06	27:01	1.021	160.39				
IS	13C-1,2,3,7,8-PeCDD	4.18e+05	0.61 y	1.08	31:30	1.191	191.09				
IS	13C-1,2,3,4,7,8-HxCDD	2.94e+05	1.08 y	0.74	34:50	1.014	168.22				
IS	13C-1,2,3,6,7,8-HxCDD	2.60e+05	1.46 n	0.75	34:57	1.017	147.21				
IS	13C-1,2,3,7,8,9-HxCDD	3.72e+05	1.18 y	0.89	35:15	1.026	177.51				
IS	13C-1,2,3,4,6,7,8-HpCDD	2.79e+05	1.07 y	0.70	38:42	1.126	168.72				
IS	13C-OCDD	7.34e+05	0.89 y	0.59	42:02	1.223	529.61				
IS	13C-2,3,7,8-TCDF	4.23e+05	0.94 n	0.97	26:15	0.992	139.07				
IS	13C-1,2,3,7,8-PeCDF	5.02e+05	1.63 y	0.99	30:21	1.147	161.36				
IS	13C-2,3,4,7,8-PeCDF	4.58e+05	1.63 y	1.01	31:14	1.181	144.76				
IS	13C-1,2,3,4,7,8-HxCDF	4.18e+05	0.50 y	0.94	33:56	0.988	188.97				
IS	13C-1,2,3,6,7,8-HxCDF	4.32e+05	0.52 y	1.23	34:04	0.992	149.61				
IS	13C-2,3,4,6,7,8-HxCDF	4.05e+05	0.50 y	1.03	34:40	1.009	166.35				
IS	13C-1,2,3,7,8,9-HxCDF	3.02e+05	0.54 y	0.89	35:39	1.038	145.17				
IS	13C-1,2,3,4,6,7,8-HpCDF	3.23e+05	0.44 y	0.71	37:29	1.091	194.59				
IS	13C-1,2,3,4,7,8,9-HpCDF	2.77e+05	0.43 y	0.64	39:15	1.142	183.48				
IS	13C-OCDF	6.82e+05	0.81 y	0.76	42:16	1.230	382.31				
C/Up	37Cl-2,3,7,8-TCDD	1.61e+05		1.04	27:02	1.022	76.330				
RS/RT	13C-1,2,3,4-TCDD	3.92e+05	0.85 y	1.00	26:27	*	194.44				
RS	13C-1,2,3,4-TCDF	6.11e+05	0.74 y	1.00	25:02	*	194.44				
RS/RT	13C-1,2,3,4,6,9-HxCDF	4.57e+05	0.56 y	1.00	34:22	*	194.44				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	80.9	138		*	*
Total Penta-Dioxins	554	568		*	*
Total Hexa-Dioxins	5800	5870		*	*
Total Hepta-Dioxins	71600	71800		*	*
Total Tetra-Furans	295	403		*	*
Total Penta-Furans	1184.7	1211.2		*	*
Total Hexa-Furans	4810	5020		*	*
Total Hepta-Furans	13500	13500		*	*

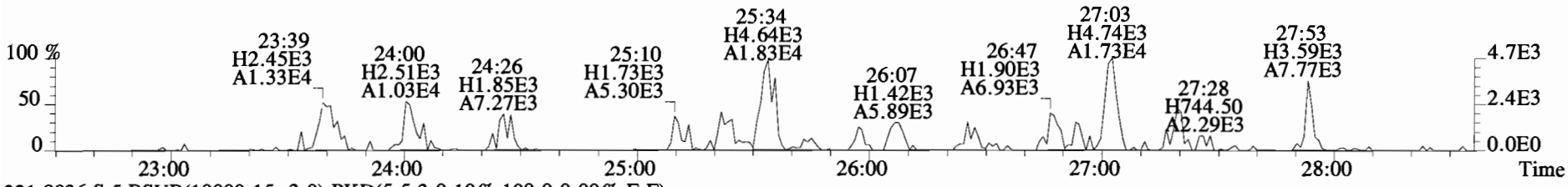
	Rec	Qual
IS	82.5	
IS	98.3	
IS	86.5	
IS	75.7	
IS	91.3	
IS	86.8	
IS	136	
IS	71.5	
IS	83.0	
IS	74.5	
IS	97.2	
IS	76.9	
IS	85.6	
IS	74.7	
IS	100	
IS	94.4	
IS	98.3	
C/Up	98.1	

* use only

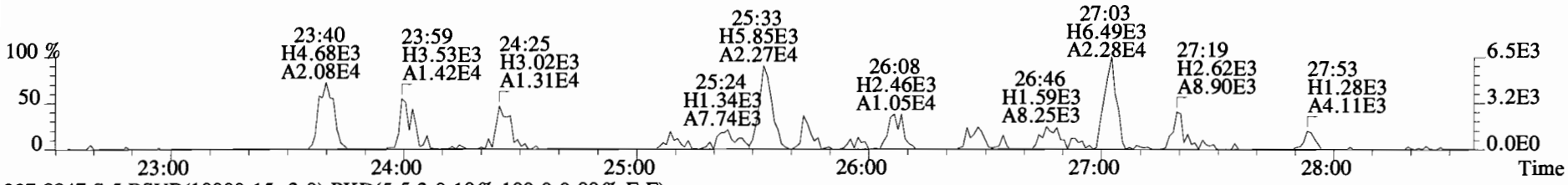
Integrations by Analyst: [illegible] Date: 10/29/14

Reviewed by Analyst: [illegible] Date: 10/20/14

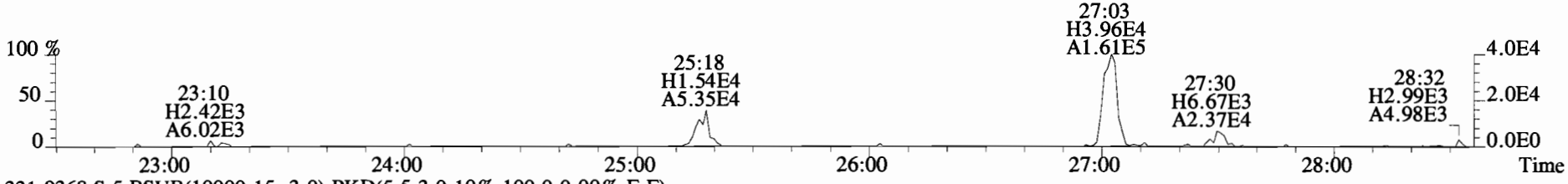
File:141018D1 #1-551 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



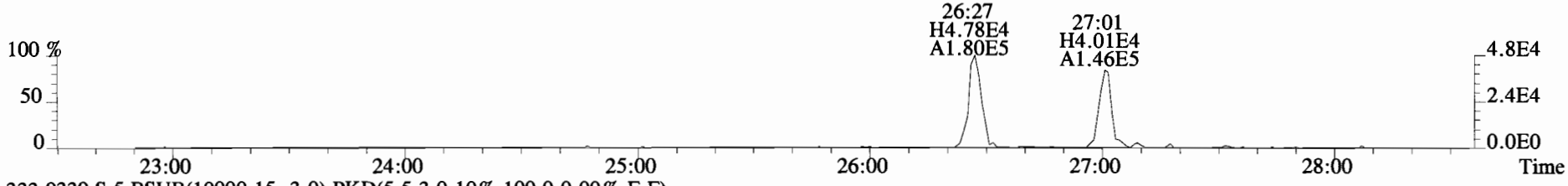
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



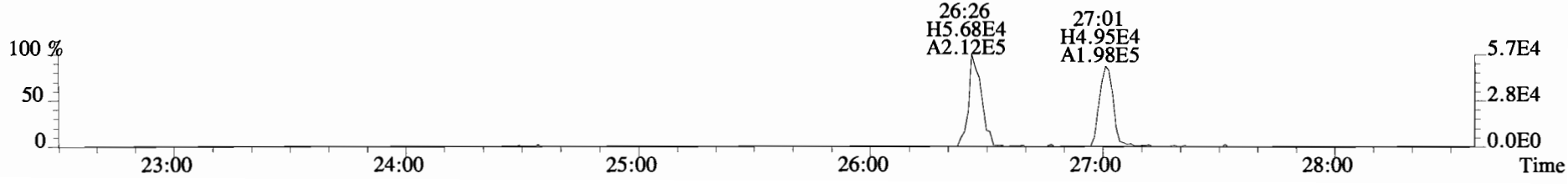
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



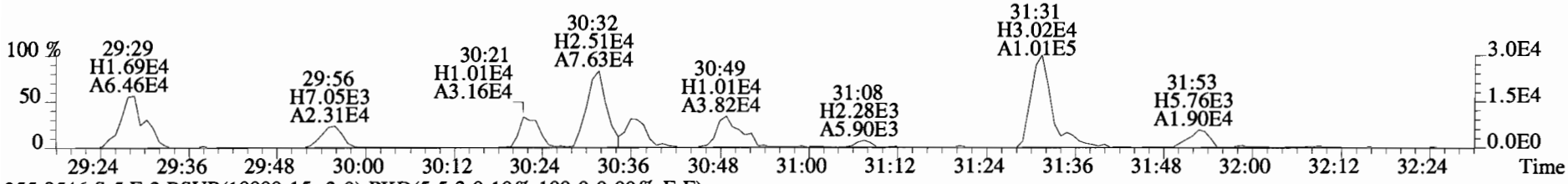
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



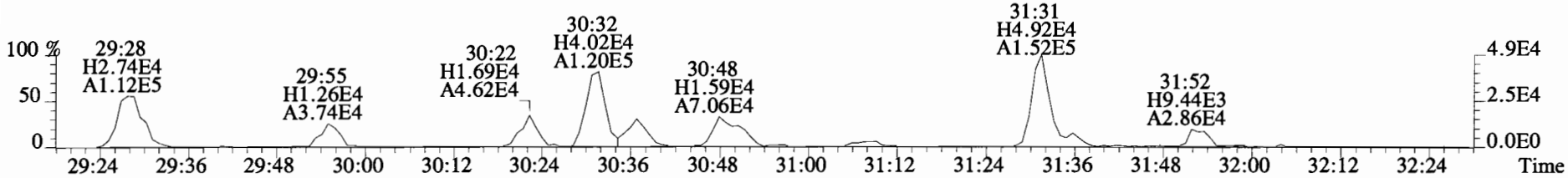
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



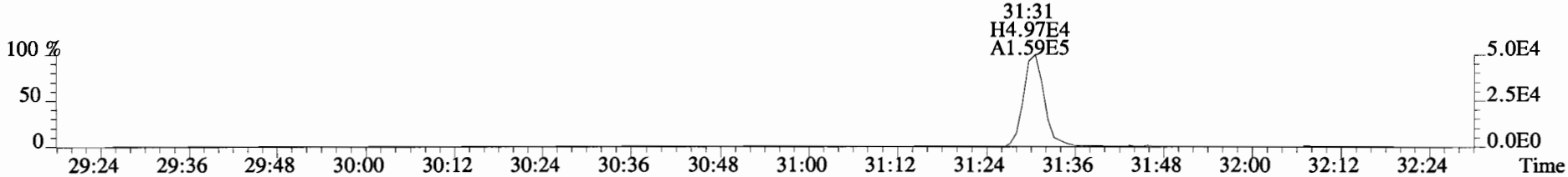
File:141018D1 #1-257 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5
353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



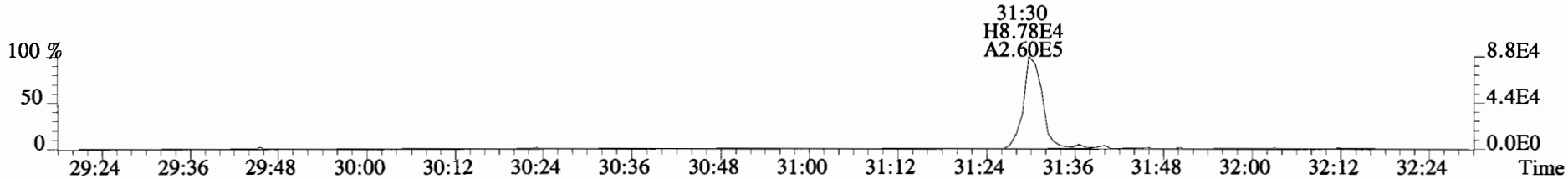
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



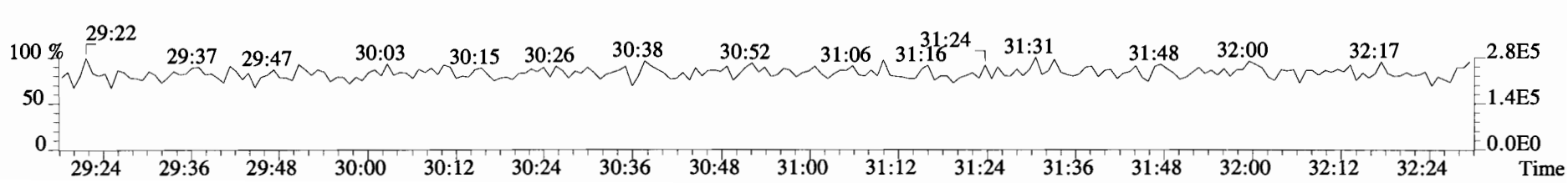
365.8978 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



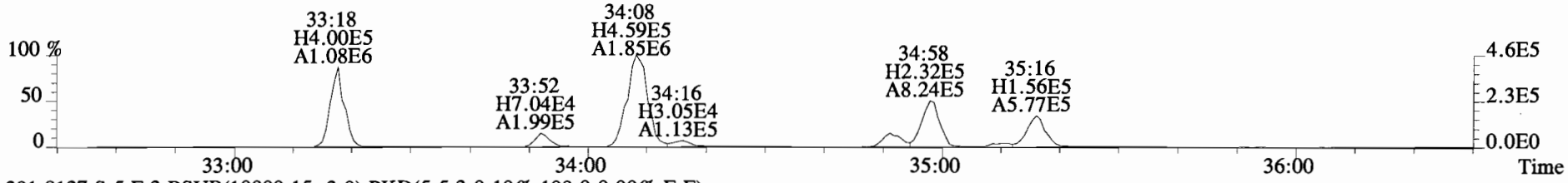
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



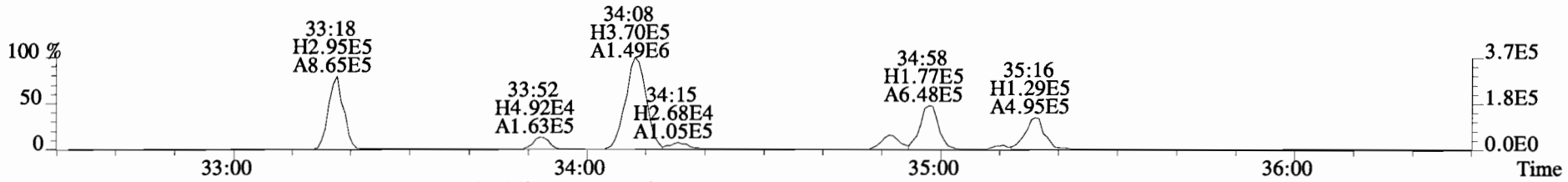
366.9792 S:5 F:2



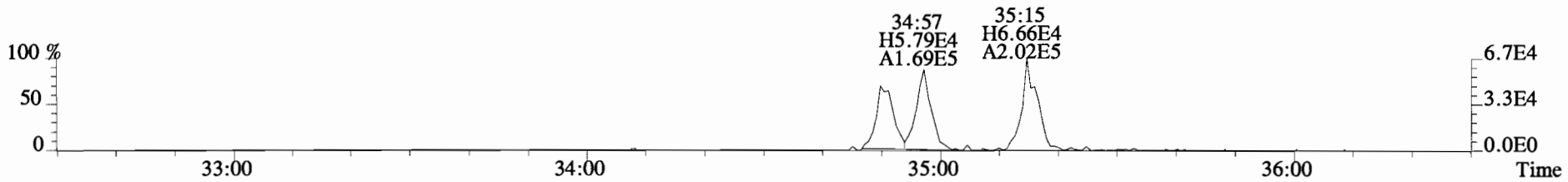
File:141018D1 #1-385 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



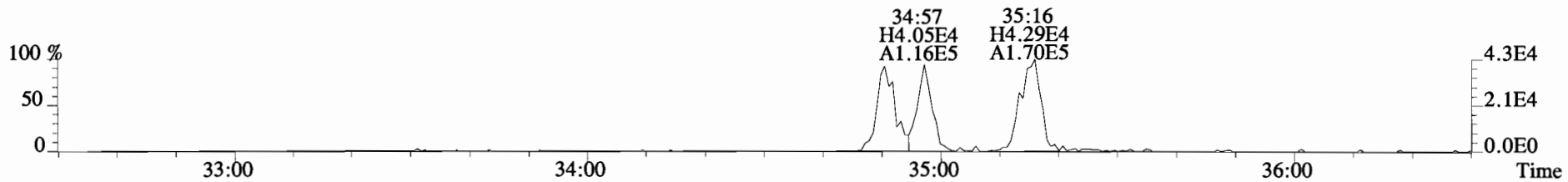
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



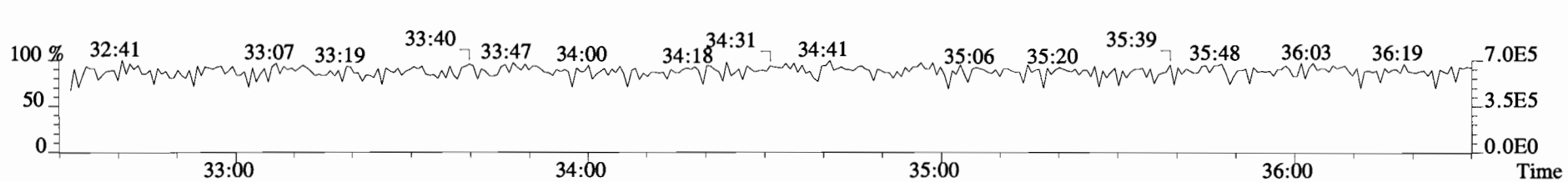
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



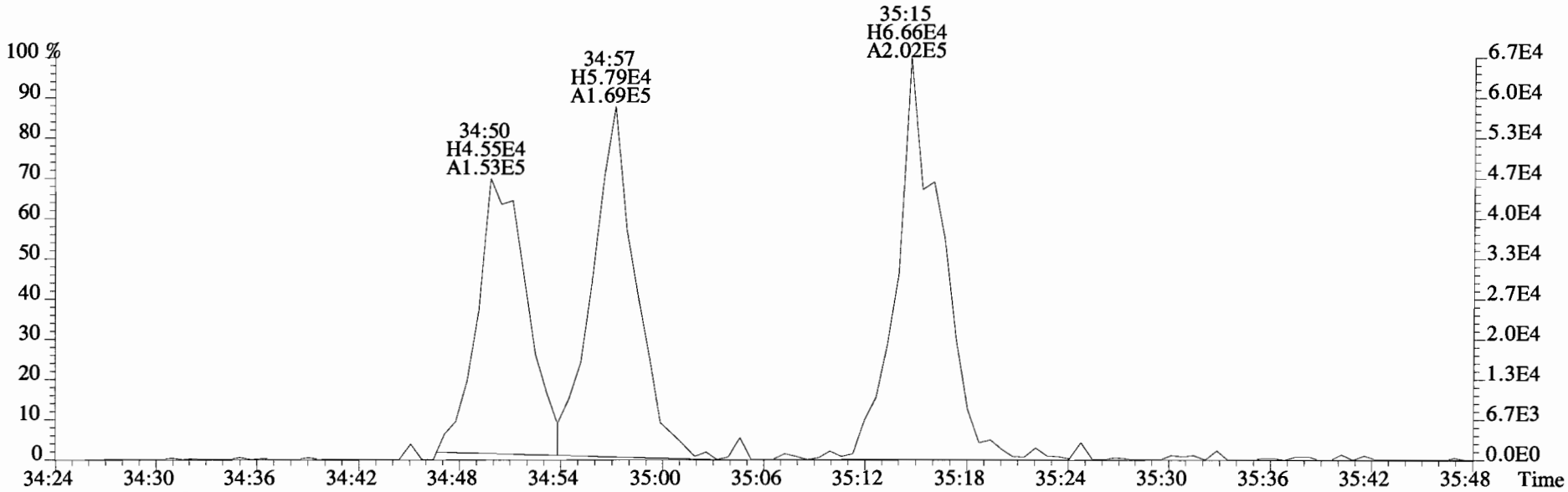
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



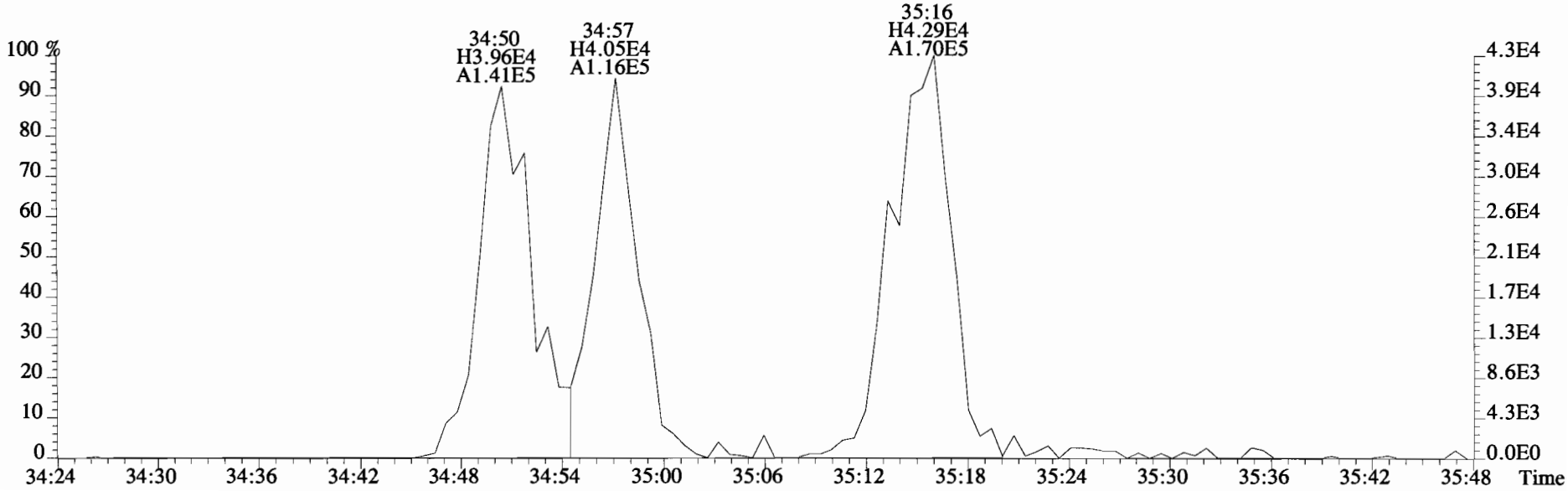
380.9760 S:5 F:3



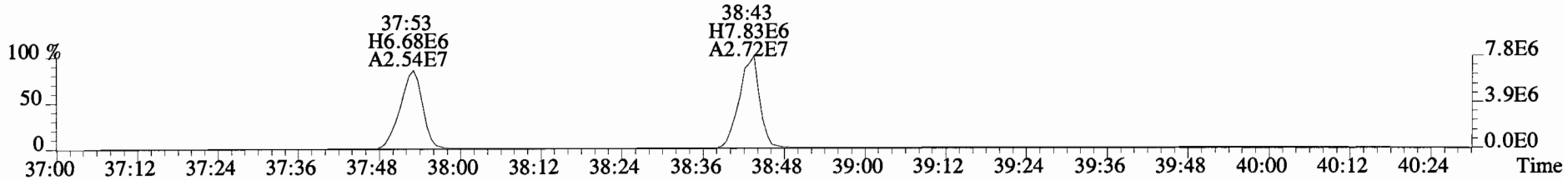
File:141018D1 #1-385 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



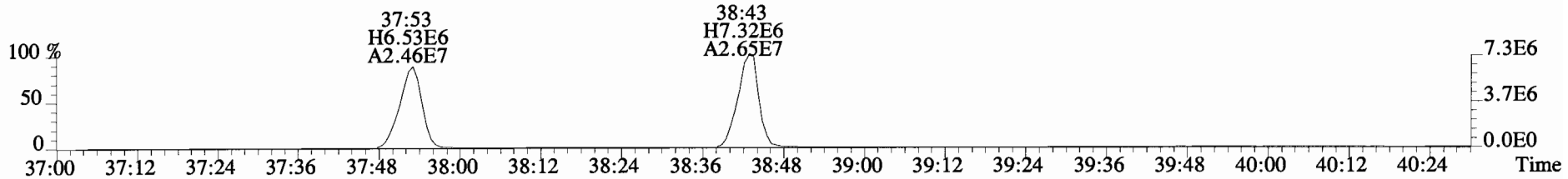
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



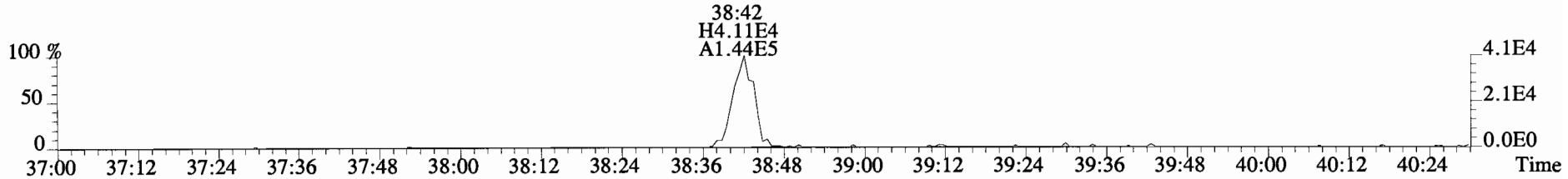
File:141018D1 #1-326 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



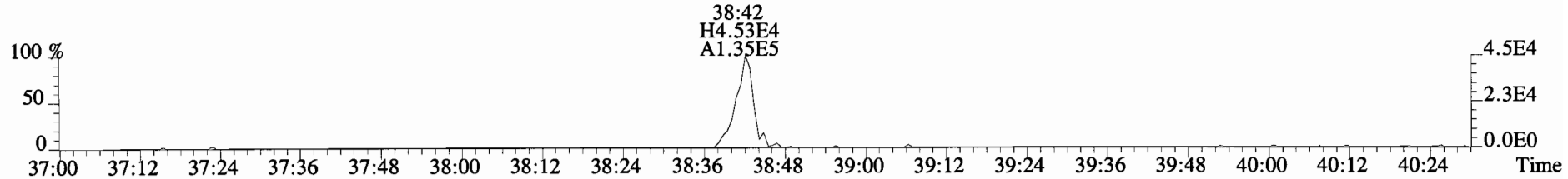
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



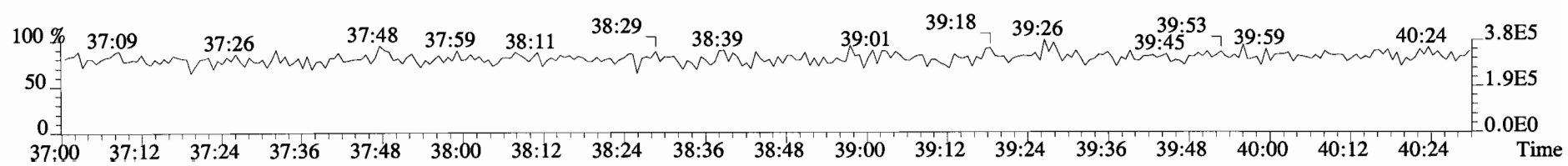
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



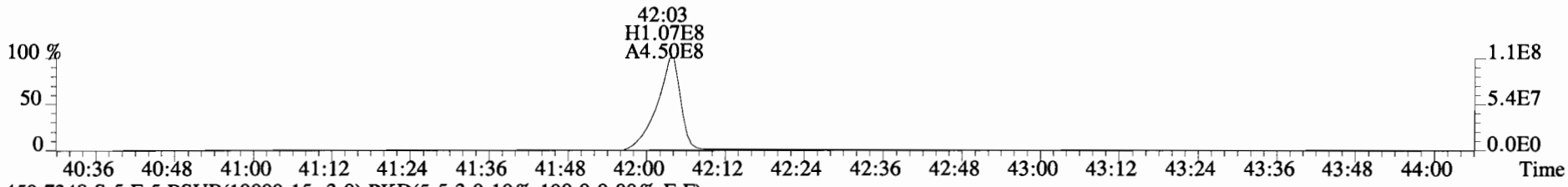
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



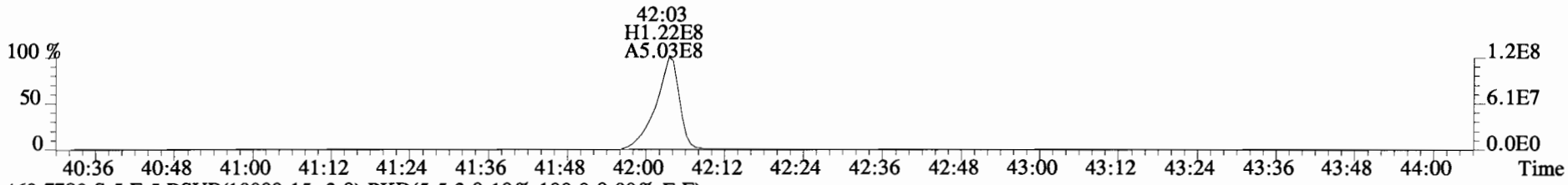
430.9728 S:5 F:4



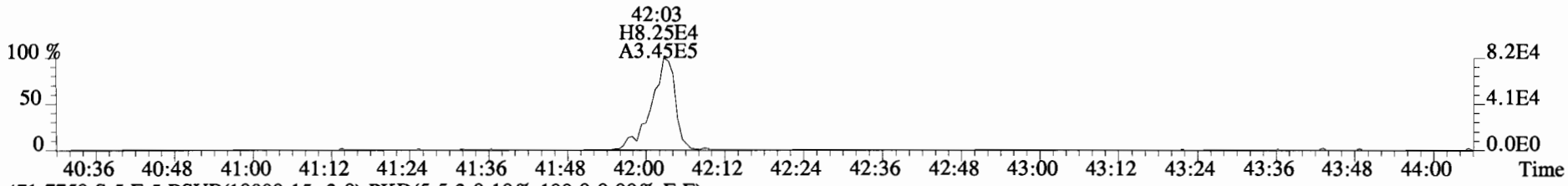
File:141018D1 #1-389 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



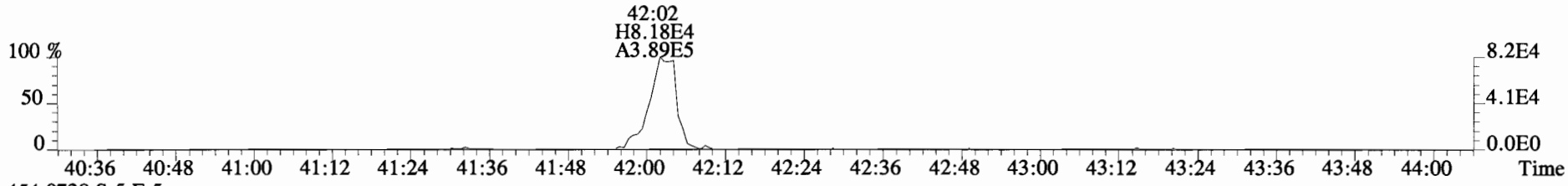
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



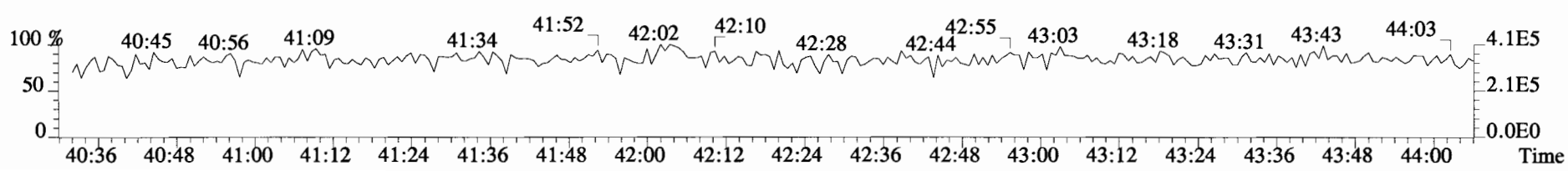
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



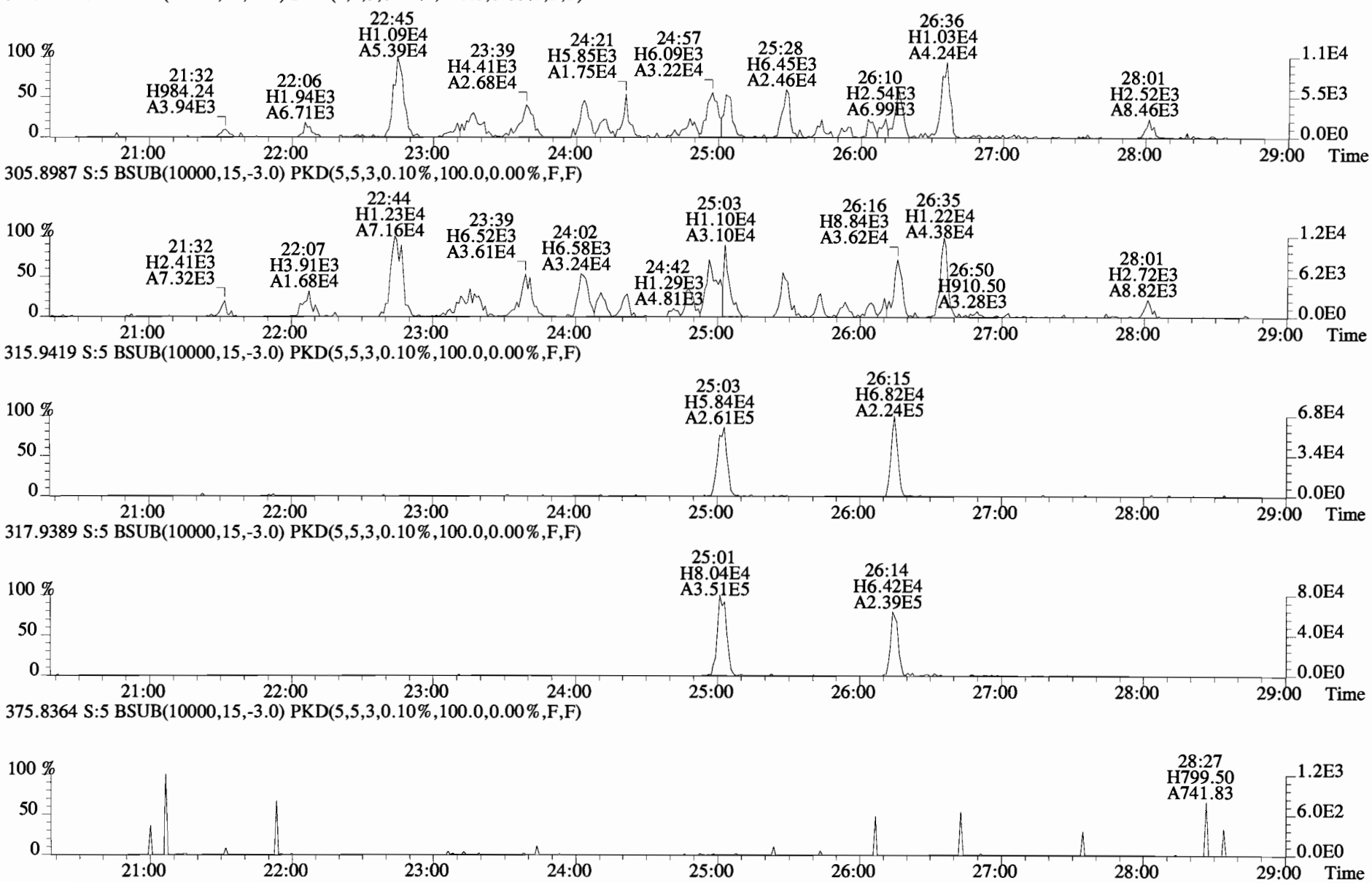
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



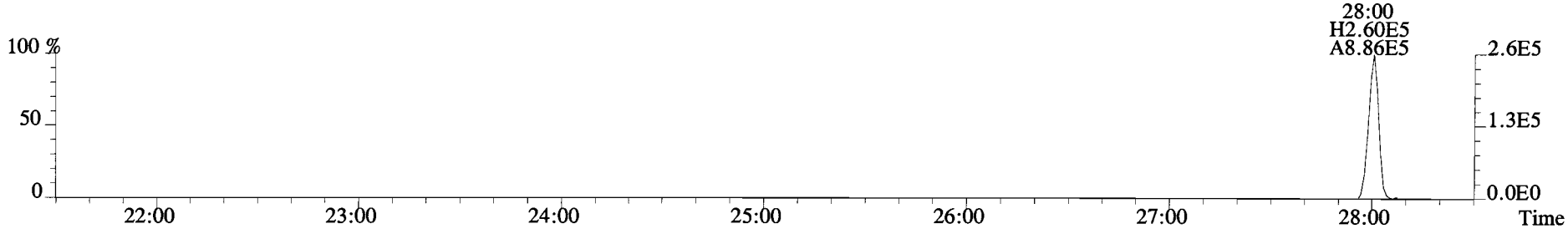
454.9728 S:5 F:5



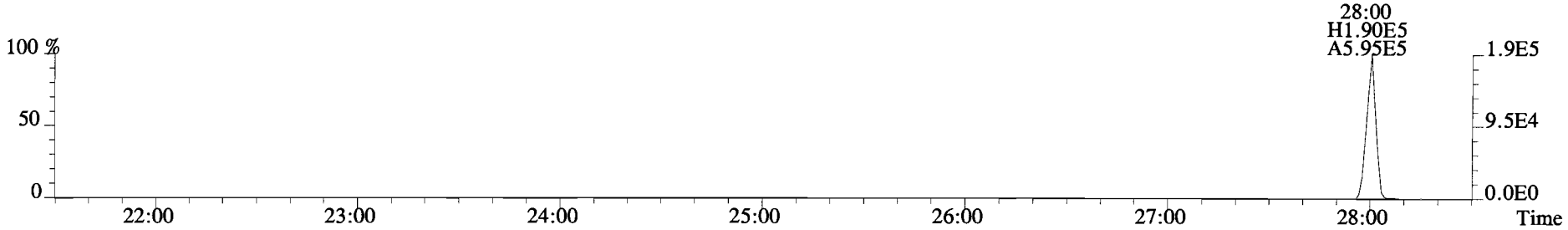
File:141018D1 #1-551 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5



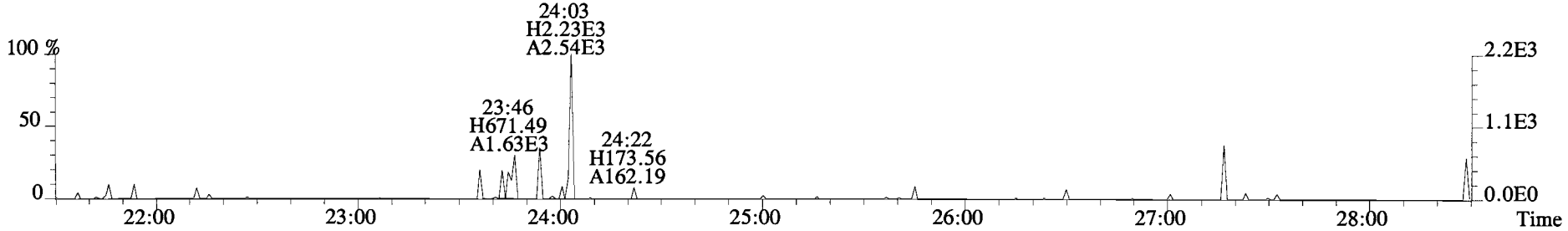
File:141018D1 #1-551 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



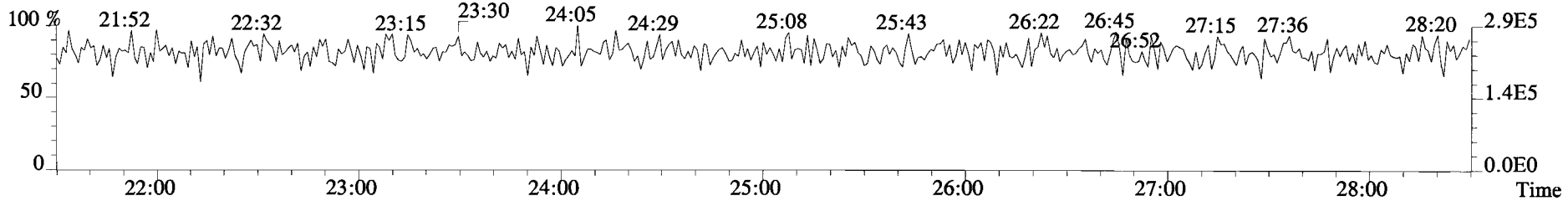
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



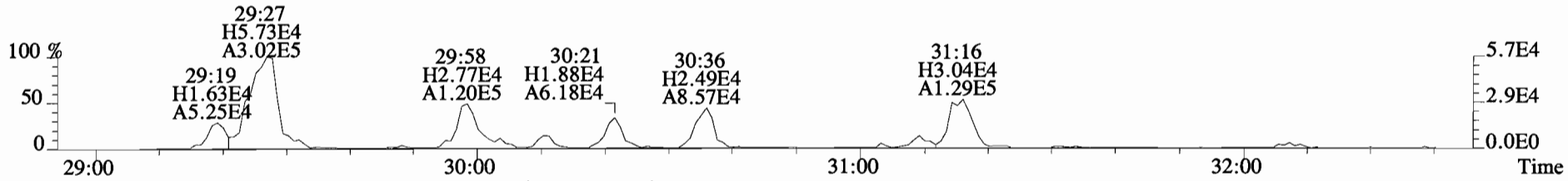
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



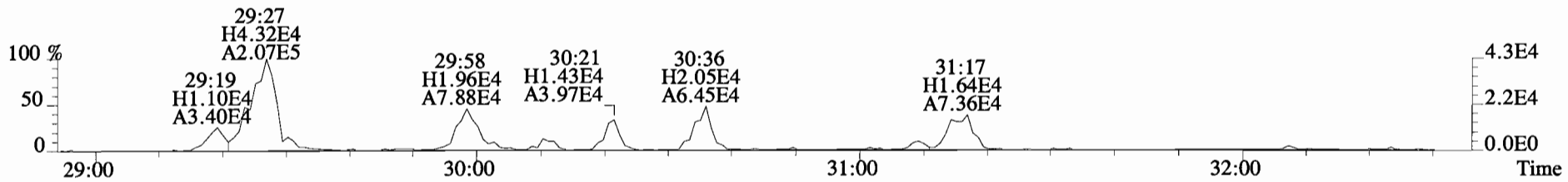
316.9824 S:5



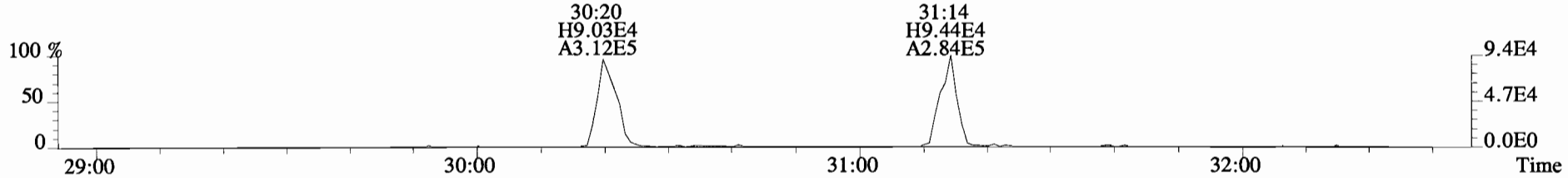
File:141018D1 #1-257 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



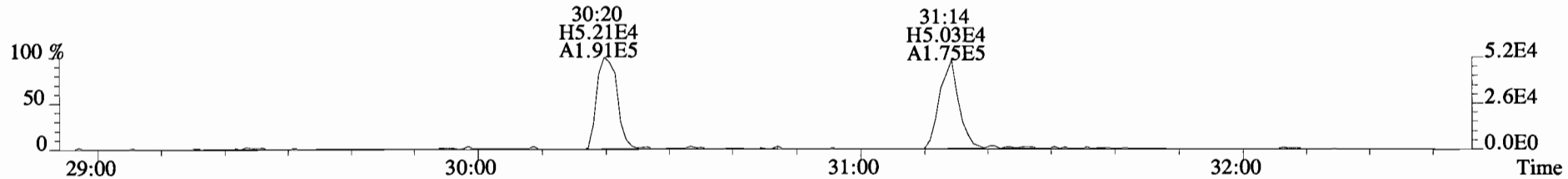
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



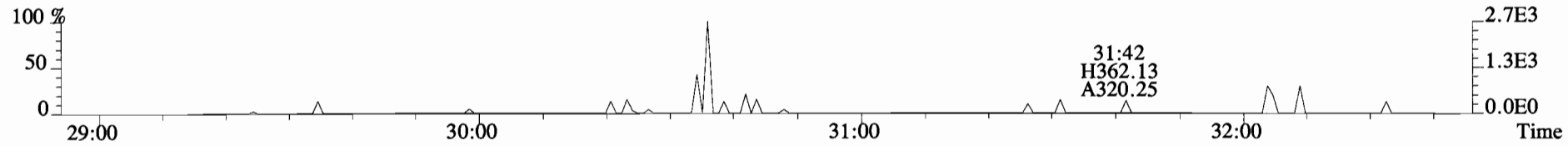
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



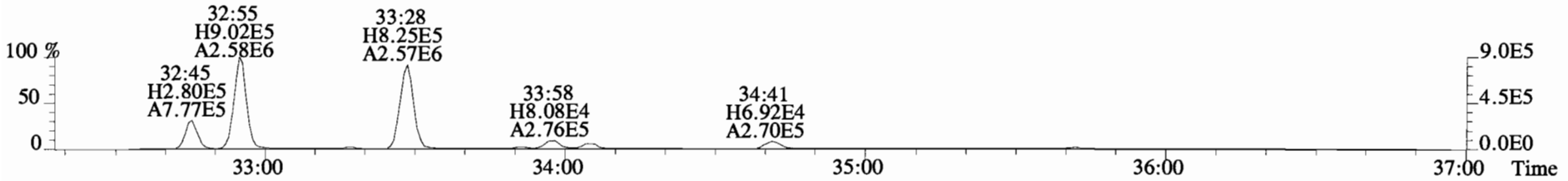
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



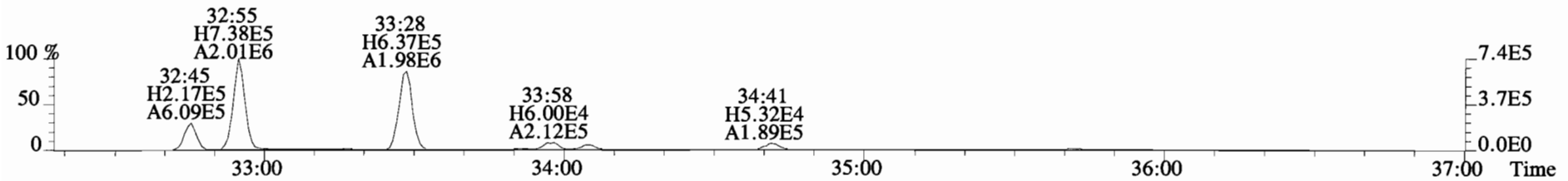
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



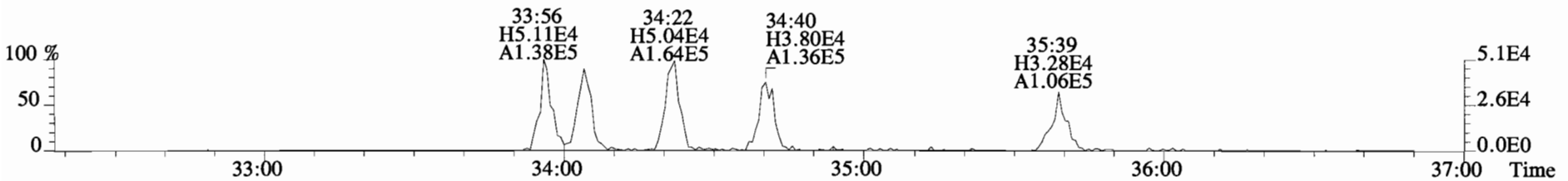
File:141018D1 #1-385 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



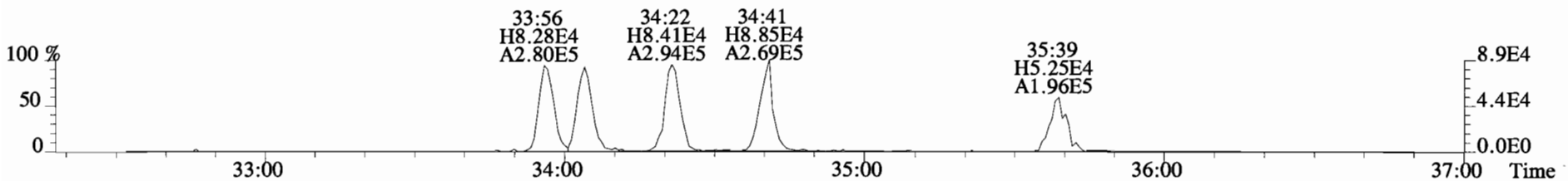
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



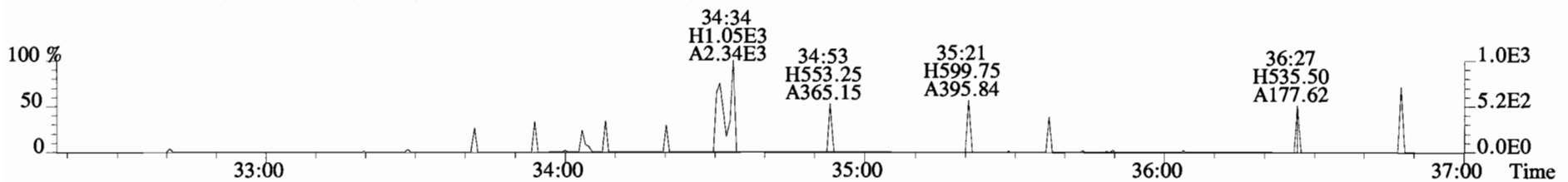
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

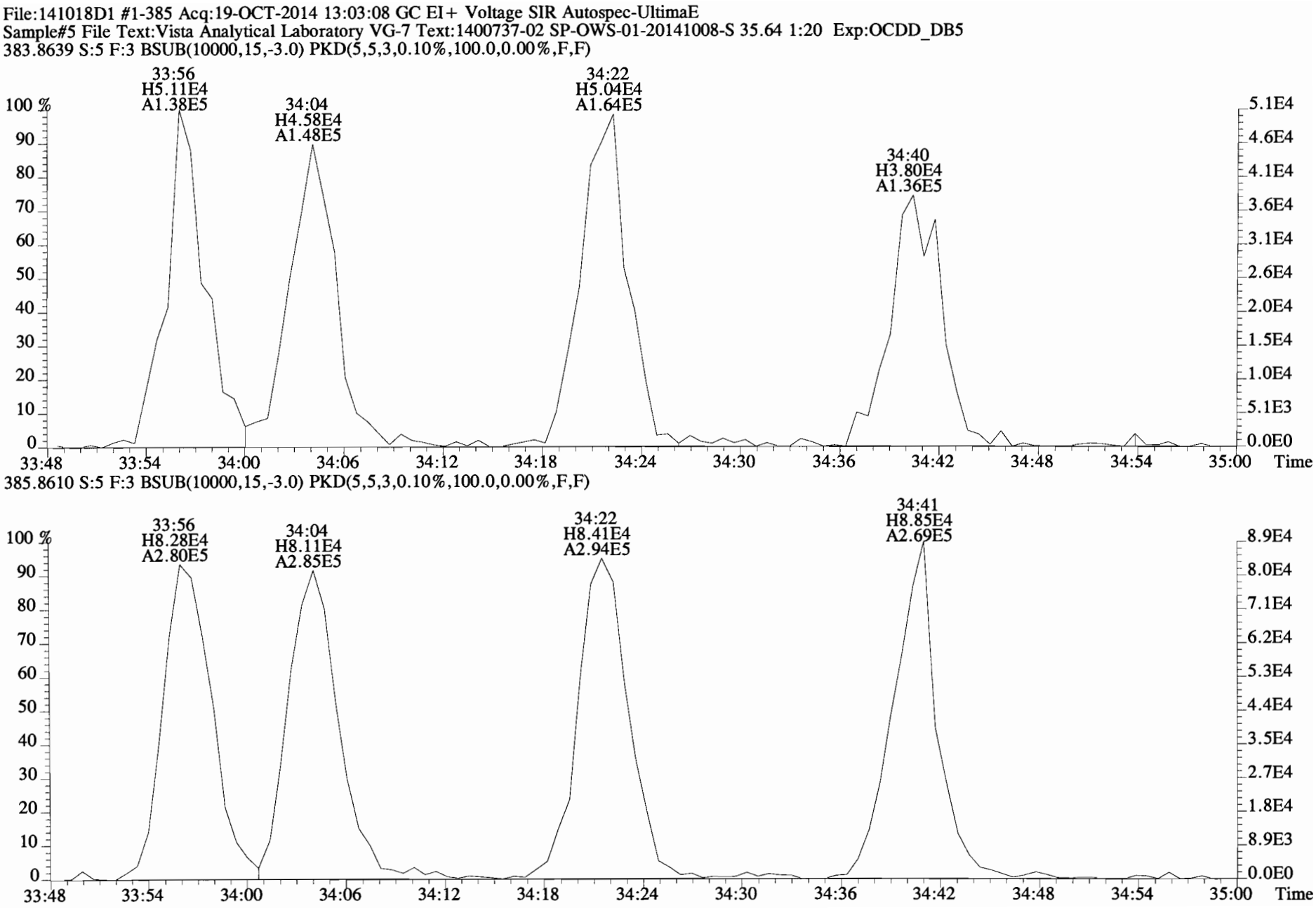


385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

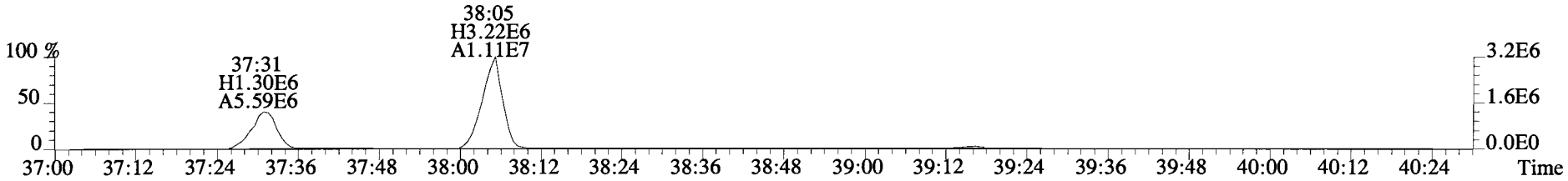


445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

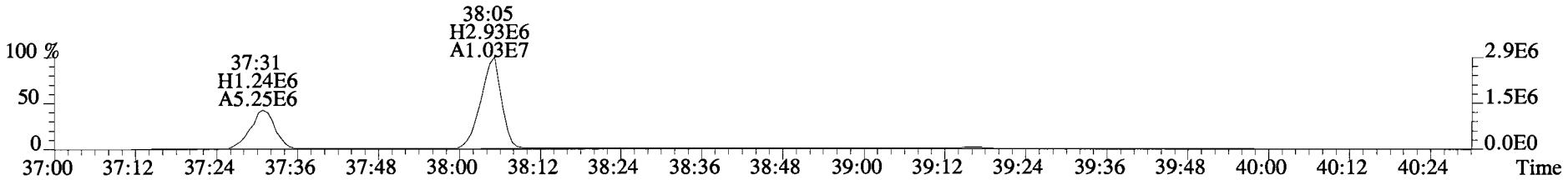



File:141018D1 #1-385 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:56
H5.11E4
A1.38E5
34:04
H4.58E4
A1.48E5
34:22
H5.04E4
A1.64E5
34:40
H3.80E4
A1.36E5
100 %
90
80
70
60
50
40
30
20
10
0
5.1E4
4.6E4
4.1E4
3.6E4
3.1E4
2.6E4
2.0E4
1.5E4
1.0E4
5.1E3
0.0E0
33:48
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
34:54
35:00
Time
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:56
H8.28E4
A2.80E5
34:04
H8.11E4
A2.85E5
34:22
H8.41E4
A2.94E5
34:41
H8.85E4
A2.69E5
100 %
90
80
70
60
50
40
30
20
10
0
8.9E4
8.0E4
7.1E4
6.2E4
5.3E4
4.4E4
3.5E4
2.7E4
1.8E4
8.9E3
0.0E0
33:48
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
34:54
35:00
Time

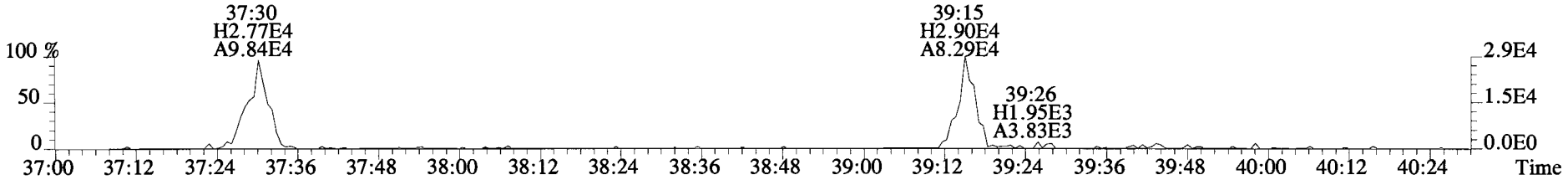
File:141018D1 #1-326 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



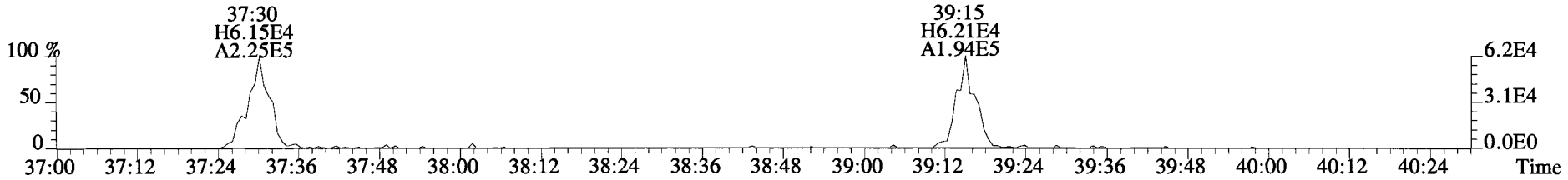
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



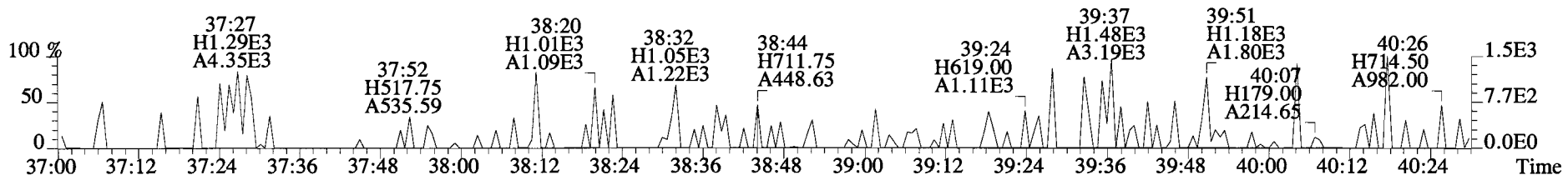
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

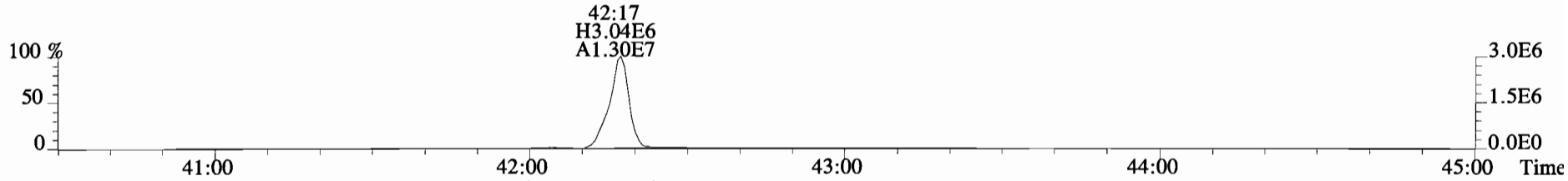


479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

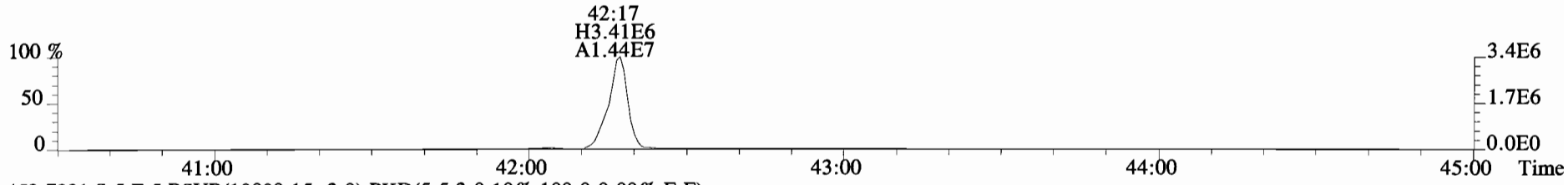


File:141018D1 #1-389 Acq:19-OCT-2014 13:03:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400737-02 SP-OWS-01-20141008-S 35.64 1:20 Exp:OCDD_DB5

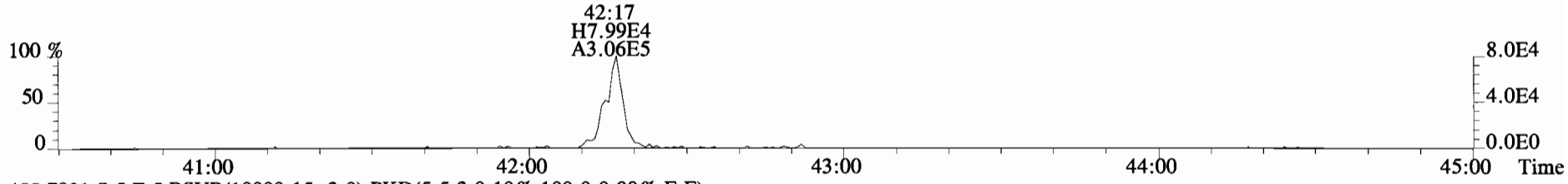
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



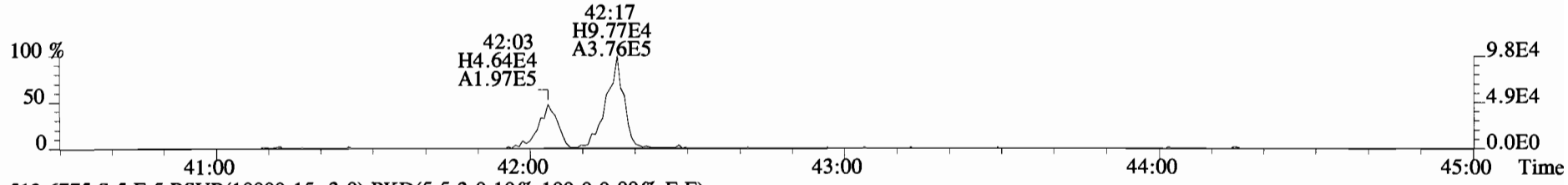
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



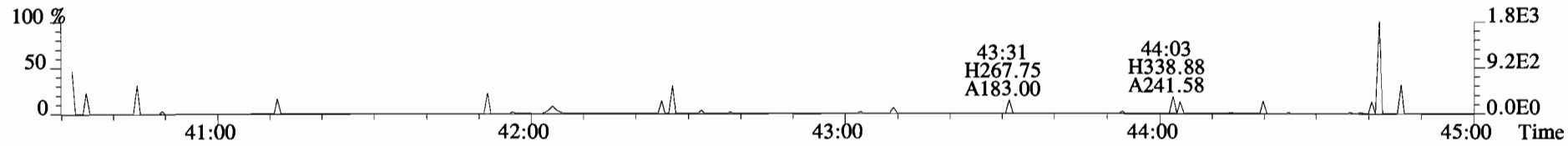
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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



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



	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	1.98e+05	0.66 y	1.03	27:04	1.001	2.0278		*	2.5	*
	1,2,3,7,8-PeCDD	9.93e+05	0.58 y	0.84	31:32	1.000	11.717		*	2.5	*
	1,2,3,4,7,8-HxCDD	1.69e+06	1.25 y	1.05	34:53	1.000	20.868		*	2.5	*
	1,2,3,6,7,8-HxCDD	4.24e+06	1.24 y	1.04	34:59	1.000	51.766		*	2.5	*
	1,2,3,7,8,9-HxCDD	3.17e+06	1.24 y	0.90	35:18	1.000	37.437		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	1.33e+08	1.03 y	1.01	38:44	1.000	1654.4		*	2.5	*
	OCDD	1.77e+09	0.89 y	1.04	42:05	1.000	19831		*	2.5	*
	2,3,7,8-TCDF	9.10e+05	0.75 y	0.91	26:18	1.001	7.8980	OK	*	2.5	*
	1,2,3,7,8-PeCDF	5.63e+05	1.54 y	0.97	30:22	1.000	4.6621		*	2.5	*
	2,3,4,7,8-PeCDF	1.27e+06	1.59 y	0.94	31:15	1.000	10.489		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.91e+06	1.24 y	1.32	33:59	1.000	14.797		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.74e+06	1.25 y	1.18	34:06	1.000	13.774		*	2.5	*
	2,3,4,6,7,8-HxCDF	2.27e+06	1.33 y	1.23	34:43	1.000	18.533		*	2.5	*
	1,2,3,7,8,9-HxCDF	1.16e+05	1.07 y	1.13	35:40	1.000	1.1770		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	3.14e+07	1.07 y	1.57	37:32	1.000	255.82		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	1.84e+06	1.10 y	1.50	39:18	1.000	15.666		*	2.5	*
	OCDF	7.83e+07	0.90 y	1.05	42:19	1.000	875.75		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.84e+07	0.80 y	1.06	27:03	1.021	158.06				81.1
IS	13C-1,2,3,7,8-PeCDD	1.96e+07	0.62 y	1.08	31:32	1.191	165.43				84.9
IS	13C-1,2,3,4,7,8-HxCDD	1.51e+07	1.26 y	0.74	34:52	1.014	159.51				81.8
IS	13C-1,2,3,6,7,8-HxCDD	1.54e+07	1.24 y	0.75	34:59	1.017	161.20				82.7
IS	13C-1,2,3,7,8,9-HxCDD	1.84e+07	1.25 y	0.89	35:17	1.026	162.39				83.3
IS	13C-1,2,3,4,6,7,8-HpCDD	1.55e+07	1.03 y	0.70	38:44	1.127	173.28				88.9
IS	13C-OCDD	3.34e+07	0.90 y	0.59	42:04	1.223	445.16				114
IS	13C-2,3,7,8-TCDF	2.46e+07	0.76 y	0.97	26:17	0.992	167.38				85.9
IS	13C-1,2,3,7,8-PeCDF	2.42e+07	1.59 y	0.99	30:22	1.147	160.94				82.6
IS	13C-2,3,4,7,8-PeCDF	2.51e+07	1.60 y	1.01	31:15	1.180	163.82				84.1
IS	13C-1,2,3,4,7,8-HxCDF	1.91e+07	0.52 y	0.94	33:58	0.988	159.32				81.7
IS	13C-1,2,3,6,7,8-HxCDF	2.09e+07	0.52 y	1.23	34:06	0.992	134.03				68.8
IS	13C-2,3,4,6,7,8-HxCDF	1.94e+07	0.51 y	1.03	34:42	1.009	147.91				75.9
IS	13C-1,2,3,7,8,9-HxCDF	1.69e+07	0.51 y	0.89	35:40	1.037	150.42				77.2
IS	13C-1,2,3,4,6,7,8-HpCDF	1.52e+07	0.44 y	0.71	37:32	1.092	169.22				86.8
IS	13C-1,2,3,4,7,8,9-HpCDF	1.52e+07	0.46 y	0.64	39:17	1.143	186.56				95.7
IS	13C-OCDF	3.31e+07	0.91 y	0.76	42:18	1.230	342.74				87.9
C/Up	37Cl-2,3,7,8-TCDD	6.91e+06		1.04	27:04	1.022	60.491				77.6
RS/RT	13C-1,2,3,4-TCDD	2.13e+07	0.78 y	1.00	26:29	*	194.89				
RS	13C-1,2,3,4-TCDF	2.96e+07	0.74 y	1.00	25:04	*	194.89				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.48e+07	0.51 y	1.00	34:23	*	194.89				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	31.4	31.4		*	*
Total Penta-Dioxins	86.1	86.1		*	*
Total Hexa-Dioxins	479	479		*	*
Total Hepta-Dioxins	3620	3620		*	*
Total Tetra-Furans	127	130		*	*
Total Penta-Furans	230.20	230.20		*	*
Total Hexa-Furans	360	360		*	*
Total Hepta-Furans	718	718		*	*

Integrations by Analyst: [signature] Date: 10/20/14

Reviewed by Analyst: [signature] Date: 10/20/14

Totals class: TCDD EMPC Entry #: 19

Run: 15 File: 141014D2 S: 10 I: 1 F: 1
Acquired: 15-OCT-14 09:37:26 Processed: 15-OCT-14 13:39:13

Total Concentration: 31.400 Unnamed Concentration: 29.372

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
23:42	2.577e+05	3.542e+05	0.73	y	6.118e+05	6.2771	
24:03	1.671e+05	2.204e+05	0.76	y	3.875e+05	3.9756	
24:28	6.078e+04	8.148e+04	0.75	y	1.423e+05	1.4594	
25:11	2.670e+04	3.521e+04	0.76	y	6.191e+04	0.63515	
25:25	9.761e+04	1.291e+05	0.76	y	2.267e+05	2.3261	
25:35	1.537e+05	1.822e+05	0.84	y	3.360e+05	3.4469	
25:46	5.438e+04	6.302e+04	0.86	y	1.174e+05	1.2044	
25:59	2.421e+04	3.662e+04	0.66	y	6.083e+04	0.62406	
26:08	5.832e+04	7.352e+04	0.79	y	1.318e+05	1.3526	
26:30	7.878e+04	9.188e+04	0.86	y	1.707e+05	1.7508	
26:49	1.486e+05	2.002e+05	0.74	y	3.488e+05	3.5782	
26:56	2.065e+04	2.927e+04	0.71	y	4.992e+04	0.51214	
27:04	7.863e+04	1.190e+05	0.66	y	1.977e+05	2.0278	2,3,7,8-TCDD
27:20	5.546e+04	8.460e+04	0.66	y	1.401e+05	1.4368	
27:28	1.300e+04	1.898e+04	0.68	y	3.198e+04	0.32804	
27:54	1.868e+04	2.662e+04	0.70	y	4.530e+04	0.46480	

Totals class: PeCDD EMPC Entry #: 21

Run: 15 File: 141014D2 S: 10 I: 1 F: 2
Acquired: 15-OCT-14 09:37:26 Processed: 15-OCT-14 13:39:13

Total Concentration: 86.055 Unnamed Concentration: 74.337

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:29	6.169e+05	1.018e+06	0.61	y	1.635e+06	19.301	
29:57	1.765e+05	3.079e+05	0.57	y	4.843e+05	5.7169	
30:23	2.609e+05	4.289e+05	0.61	y	6.899e+05	8.1430	
30:33	4.344e+05	7.074e+05	0.61	y	1.142e+06	13.477	
30:38	2.919e+05	4.583e+05	0.64	y	7.501e+05	8.8543	
30:51	3.613e+05	5.574e+05	0.65	y	9.186e+05	10.843	
31:08	8.961e+04	1.467e+05	0.61	y	2.363e+05	2.7891	
31:32	3.635e+05	6.292e+05	0.58	y	9.927e+05	11.717	1,2,3,7,8-PeCDD
31:37	6.470e+04	1.099e+05	0.59	y	1.746e+05	2.0605	
31:54	1.041e+05	1.631e+05	0.64	y	2.671e+05	3.1532	

Totals class: HxCDD EMPC Entry #: 23

Run: 15 File: 141014D2 S: 10 I: 1 F: 3
Acquired: 15-OCT-14 09:37:26 Processed: 15-OCT-14 13:39:13

Total Concentration: 478.88 Unnamed Concentration: 368.812

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
33:19	6.753e+06	5.349e+06	1.26 y	1.210e+07	146.59	
33:53	1.343e+06	1.070e+06	1.26 y	2.413e+06	29.226	
34:10	7.853e+06	6.307e+06	1.25 y	1.416e+07	171.52	
34:17	5.368e+05	4.318e+05	1.24 y	9.686e+05	11.733	
34:53	9.393e+05	7.537e+05	1.25 y	1.693e+06	20.868	1,2,3,4,7,8-HxCDD
34:59	2.344e+06	1.895e+06	1.24 y	4.238e+06	51.766	1,2,3,6,7,8-HxCDD
35:11	4.563e+05	3.481e+05	1.31 y	8.044e+05	9.7443	
35:18	1.751e+06	1.415e+06	1.24 y	3.166e+06	37.437	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 15 File: 141014D2 S: 10 I: 1 F: 4
Acquired: 15-OCT-14 09:37:26 Processed: 15-OCT-14 13:39:13

Total Concentration: 3620.9 Unnamed Concentration: 1966.541

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:55	8.033e+07	7.745e+07	1.04 y	1.578e+08	1966.5	
38:44	6.726e+07	6.547e+07	1.03 y	1.327e+08	1654.4	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 15 File: 141014D2 S: 10 I: 1 F: 1
Acquired: 15-OCT-14 09:37:26 Processed: 15-OCT-14 13:39:13

Total Concentration: 129.57 Unnamed Concentration: 121.673

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
21:34	9.639e+04	1.347e+05	0.72	y	2.311e+05	2.0069	
22:08	1.994e+05	2.717e+05	0.73	y	4.711e+05	4.0906	
22:47	9.607e+05	1.252e+06	0.77	y	2.213e+06	19.217	
23:17	5.175e+05	6.963e+05	0.74	y	1.214e+06	10.539	
23:40	4.914e+05	6.586e+05	0.75	y	1.150e+06	9.9851	
24:05	5.201e+05	6.488e+05	0.80	y	1.169e+06	10.149	
24:13	2.020e+05	2.686e+05	0.75	y	4.706e+05	4.0858	
24:22	2.336e+05	2.804e+05	0.83	y	5.140e+05	4.4631	
24:43	9.101e+04	1.050e+05	0.87	y	1.960e+05	1.7016	
24:50	2.127e+05	2.779e+05	0.77	y	4.907e+05	4.2603	
24:58	6.018e+05	7.486e+05	0.80	y	1.350e+06	11.725	
25:06	3.693e+05	4.843e+05	0.76	y	8.536e+05	7.4117	
25:30	3.015e+05	3.636e+05	0.83	y	6.651e+05	5.7753	
25:44	1.697e+05	2.251e+05	0.75	y	3.948e+05	3.4279	
25:54	1.292e+05	1.624e+05	0.80	y	2.916e+05	2.5323	
26:06	1.404e+05	1.598e+05	0.88	y	3.001e+05	2.6061	
26:11	1.165e+05	1.733e+05	0.67	y	2.899e+05	2.5168	
26:18	3.901e+05	5.196e+05	0.75	y	9.096e+05	7.8980	2,3,7,8-TCDF
26:37	6.482e+05	8.191e+05	0.79	y	1.467e+06	12.740	
26:50	2.033e+04	3.330e+04	0.61	n	4.674e+04	0.40584	
27:05	1.616e+04	1.927e+04	0.84	y	3.543e+04	0.30763	
28:02	1.220e+05	1.124e+05	1.09	n	1.989e+05	1.7267	

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

Run: 15 File: 141014D2 S: 10 I: 1 F: 1
Acquired: 15-OCT-14 09:37:26 Processed: 15-OCT-14 13:39:13

Total Concentration: 101.66 Unnamed Concentration: 101.660

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
28:02	7.498e+06	4.788e+06	1.57 y	1.229e+07	101.66	

Totals class: PeCDF EMPC Entry #: 31

Run: 15 File: 141014D2 S: 10 I: 1 F: 2
Acquired: 15-OCT-14 09:37:26 Processed: 15-OCT-14 13:39:13

Total Concentration: 128.54 Unnamed Concentration: 113.389

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:20	8.674e+05	5.627e+05	1.54	y	1.430e+06	11.833	
29:28	3.988e+06	2.569e+06	1.55	y	6.558e+06	54.260	
29:48	1.475e+05	9.106e+04	1.62	y	2.386e+05	1.9739	
29:59	1.497e+06	9.705e+05	1.54	y	2.467e+06	20.416	
30:12	1.599e+05	1.020e+05	1.57	y	2.619e+05	2.1667	
30:22	3.414e+05	2.216e+05	1.54	y	5.631e+05	4.6621	1,2,3,7,8-PeCDF
30:36	7.960e+05	5.329e+05	1.49	y	1.329e+06	10.996	
31:04	4.452e+04	2.918e+04	1.53	y	7.369e+04	0.60978	
31:10	3.524e+05	2.401e+05	1.47	y	5.925e+05	4.9024	
31:15	7.793e+05	4.889e+05	1.59	y	1.268e+06	10.489	2,3,4,7,8-PeCDF
31:19	4.160e+05	2.637e+05	1.58	y	6.797e+05	5.6243	
32:08	4.241e+04	3.098e+04	1.37	y	7.339e+04	0.60728	

Totals class: HxCDF EMPC Entry #: 33

Run: 15 File: 141014D2 S: 10 I: 1 F: 3
Acquired: 15-OCT-14 09:37:26 Processed: 15-OCT-14 13:39:13

Total Concentration: 360.42 Unnamed Concentration: 312.138

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
32:46	2.864e+06	2.252e+06	1.27 y	5.117e+06	43.089	
32:56	1.028e+07	8.045e+06	1.28 y	1.832e+07	154.31	
33:08	1.021e+05	8.910e+04	1.15 y	1.912e+05	1.6099	
33:18	2.454e+05	1.739e+05	1.41 y	4.194e+05	3.5316	
33:30	6.714e+06	5.247e+06	1.28 y	1.196e+07	100.73	
33:52	3.675e+05	2.844e+05	1.29 y	6.519e+05	5.4898	
33:59	1.055e+06	8.533e+05	1.24 y	1.909e+06	14.797	1,2,3,4,7,8-HxCDF
34:06	9.662e+05	7.729e+05	1.25 y	1.739e+06	13.774	1,2,3,6,7,8-HxCDF
34:24	7.076e+04	6.318e+04	1.12 y	1.339e+05	1.1280	
34:43	1.295e+06	9.772e+05	1.33 y	2.272e+06	18.533	2,3,4,6,7,8-HxCDF
35:40	5.974e+04	5.583e+04	1.07 y	1.156e+05	1.1770	1,2,3,7,8,9-HxCDF
35:44	1.484e+05	1.194e+05	1.24 y	2.678e+05	2.2556	

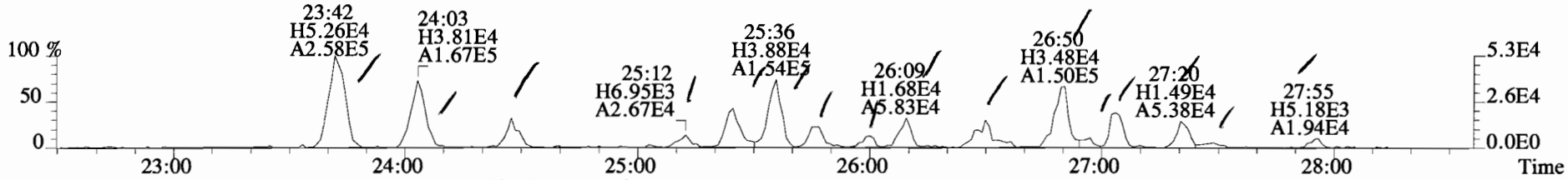
Totals class: HpCDF EMPC Entry #: 35

Run: 15 File: 141014D2 S: 10 I: 1 F: 4
Acquired: 15-OCT-14 09:37:26 Processed: 15-OCT-14 13:39:13

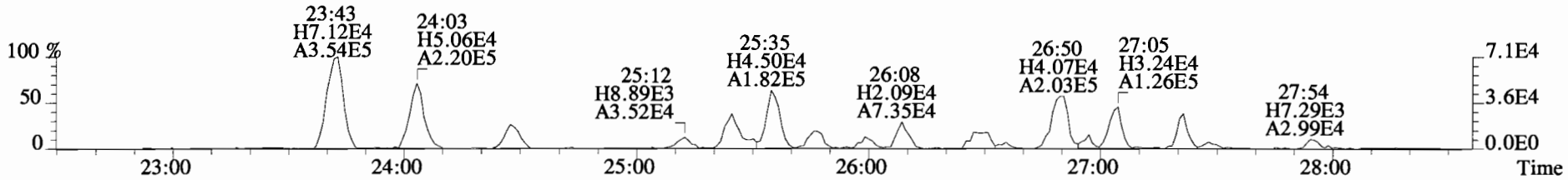
Total Concentration: 717.62 Unnamed Concentration: 446.140

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:32	1.625e+07	1.514e+07	1.07 y	3.140e+07	255.82	1,2,3,4,6,7,8-HpCDF
37:55	3.549e+05	3.642e+05	0.97 y	7.191e+05	5.9785	
38:06	2.752e+07	2.542e+07	1.08 y	5.294e+07	440.16	
39:18	9.652e+05	8.764e+05	1.10 y	1.842e+06	15.666	1,2,3,4,7,8,9-HpCDF

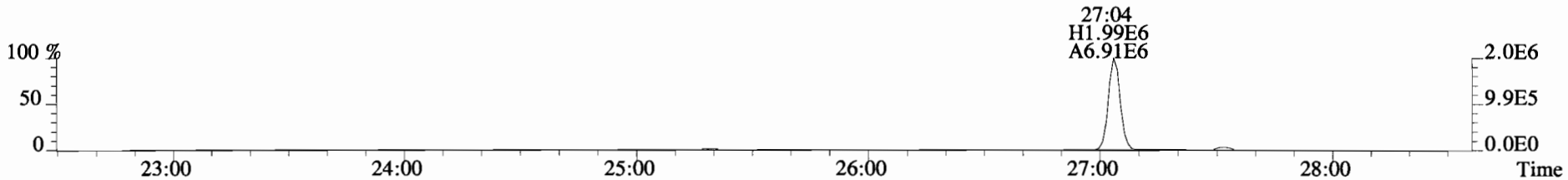
File:141014D2 #1-551 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



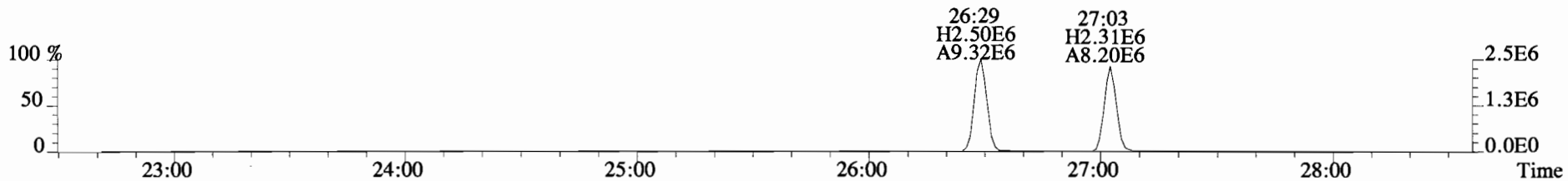
321.8936 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



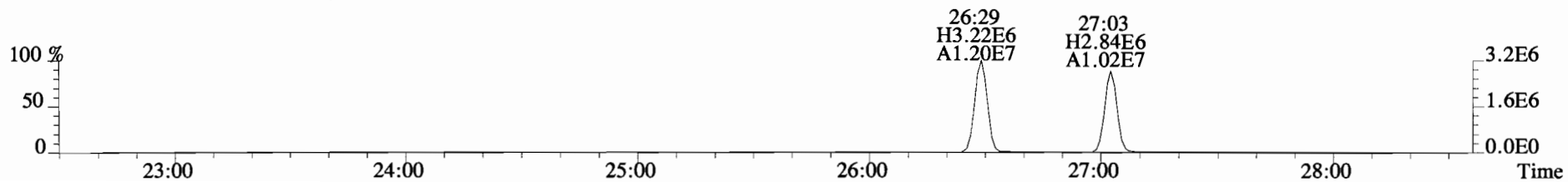
327.8847 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



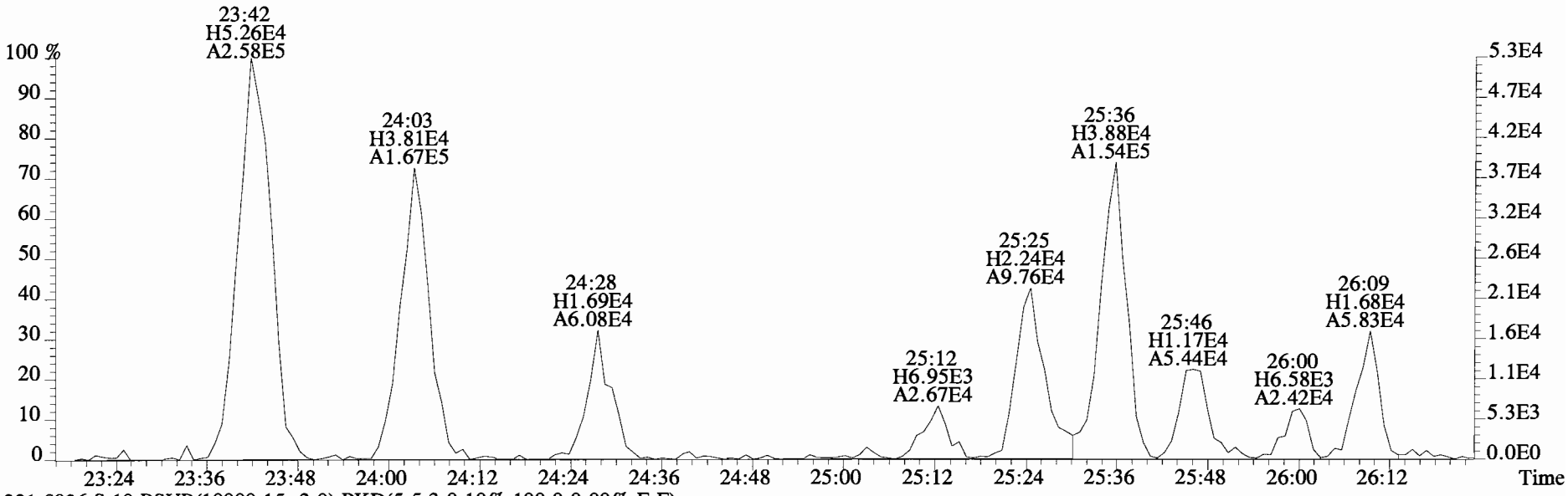
331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



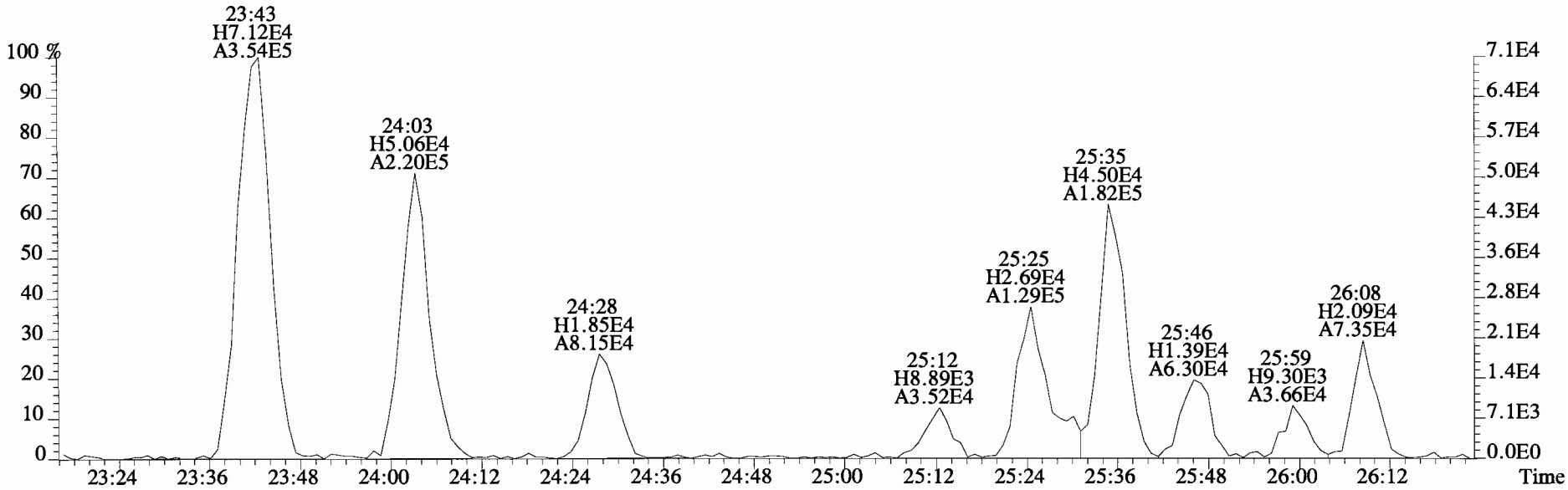
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



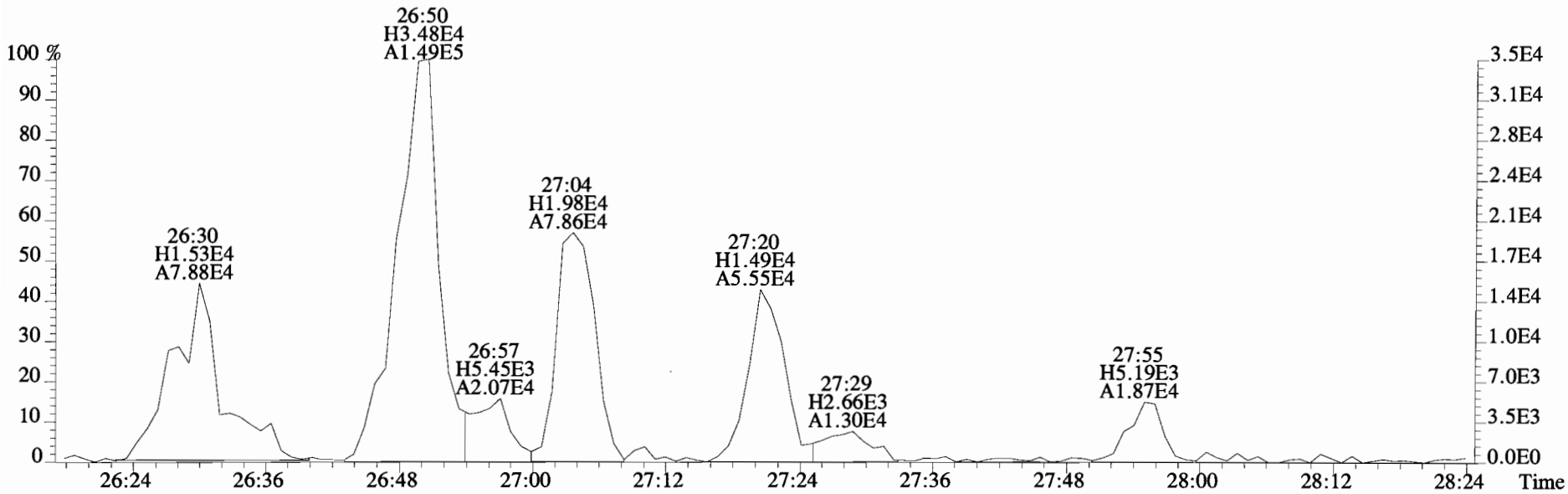
File:141014D2 #1-551 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



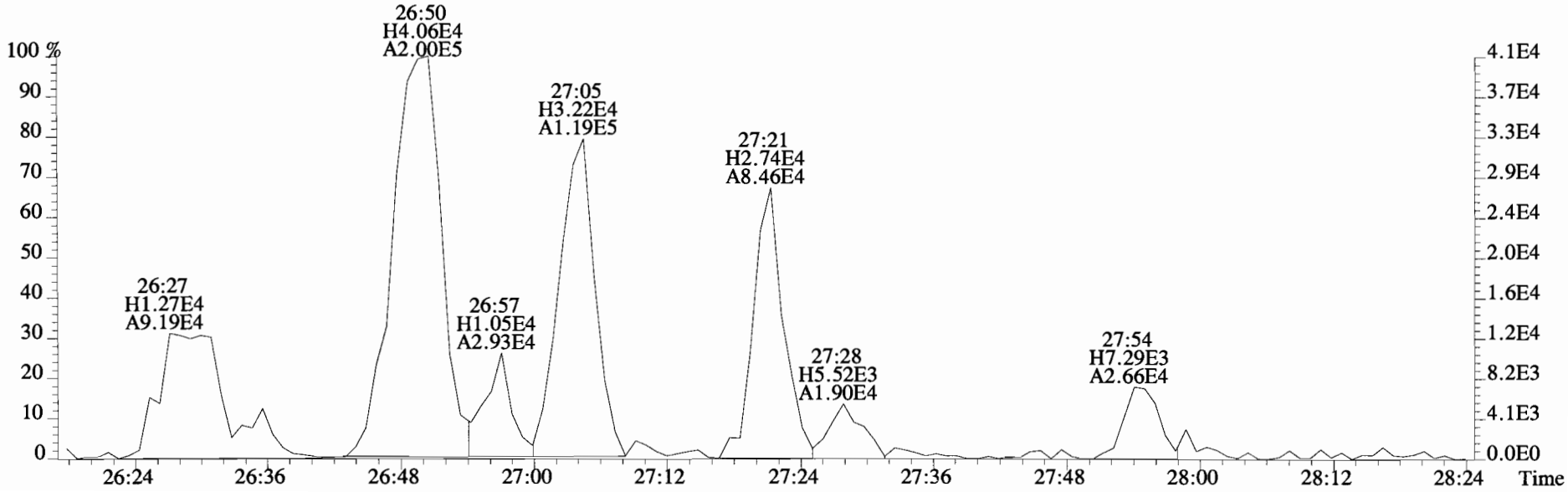
321.8936 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



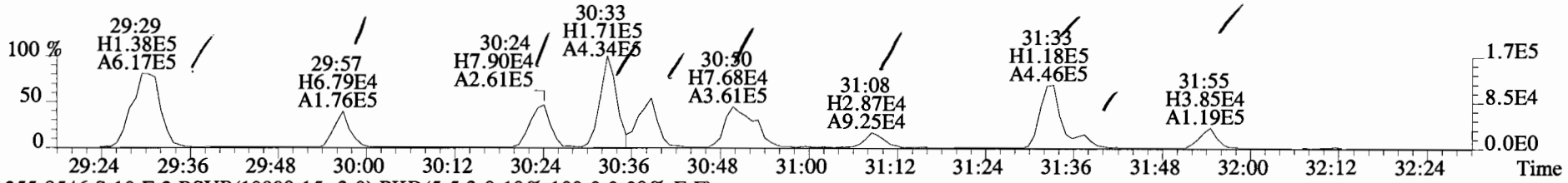
File:141014D2 #1-551 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



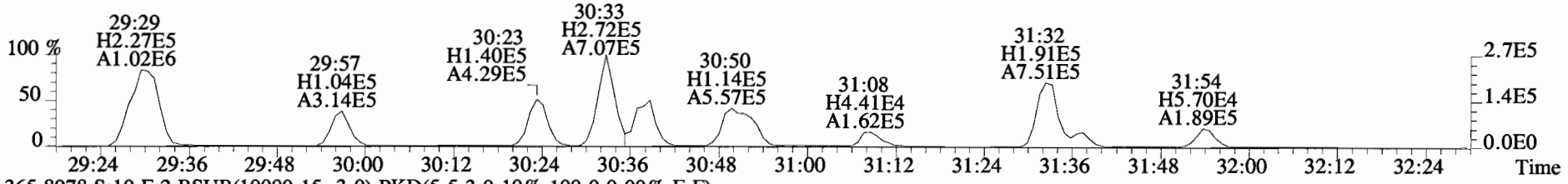
321.8936 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



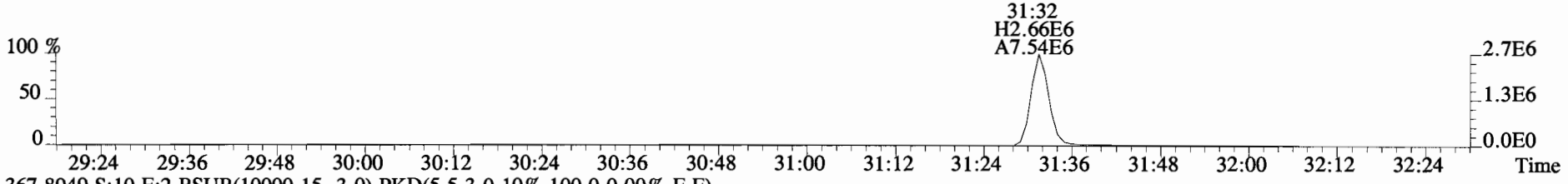
File:141014D2 #1-257 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
353.8576 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



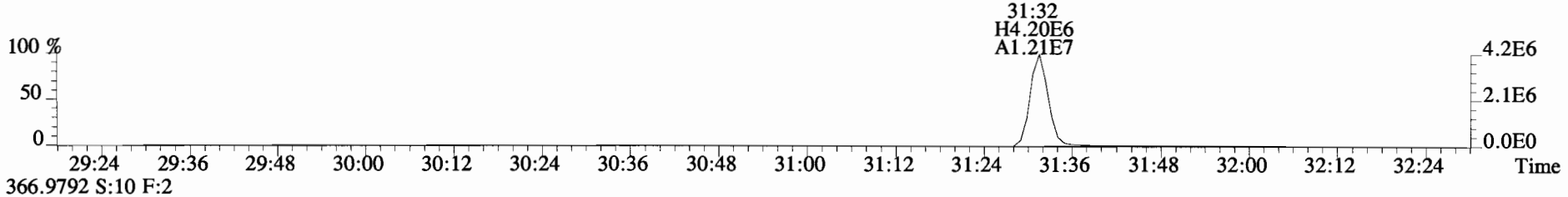
355.8546 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



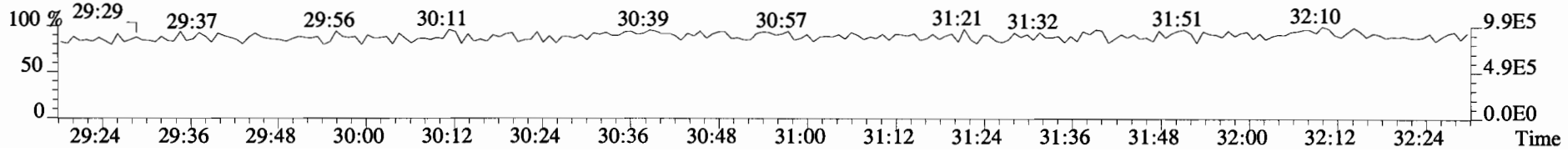
365.8978 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



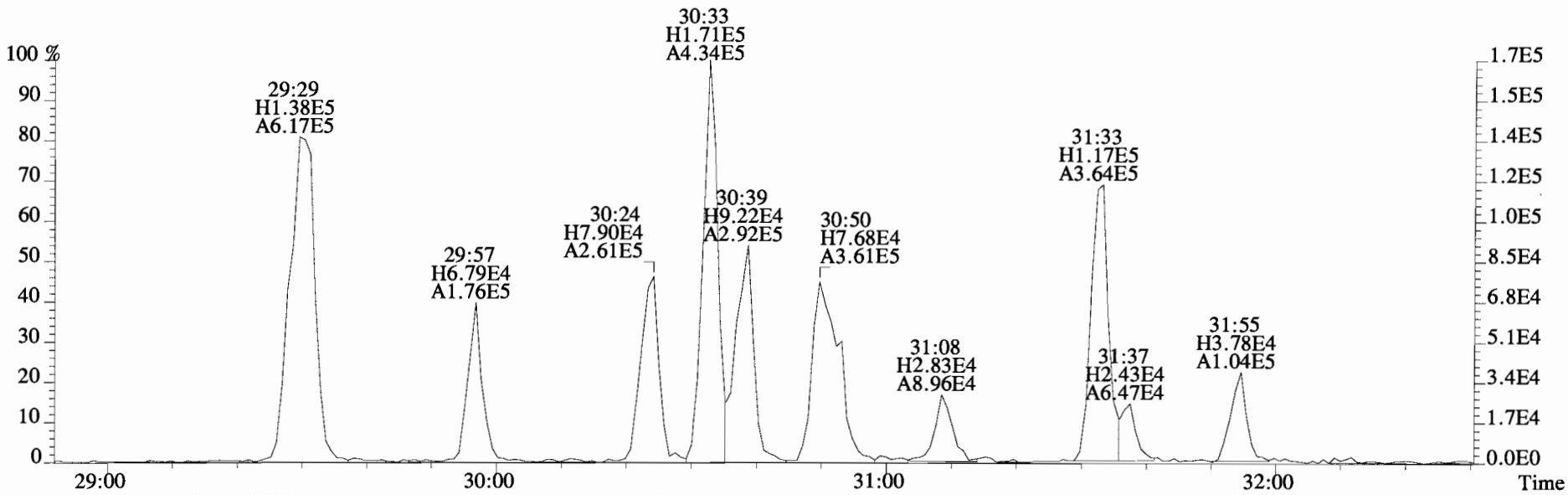
367.8949 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



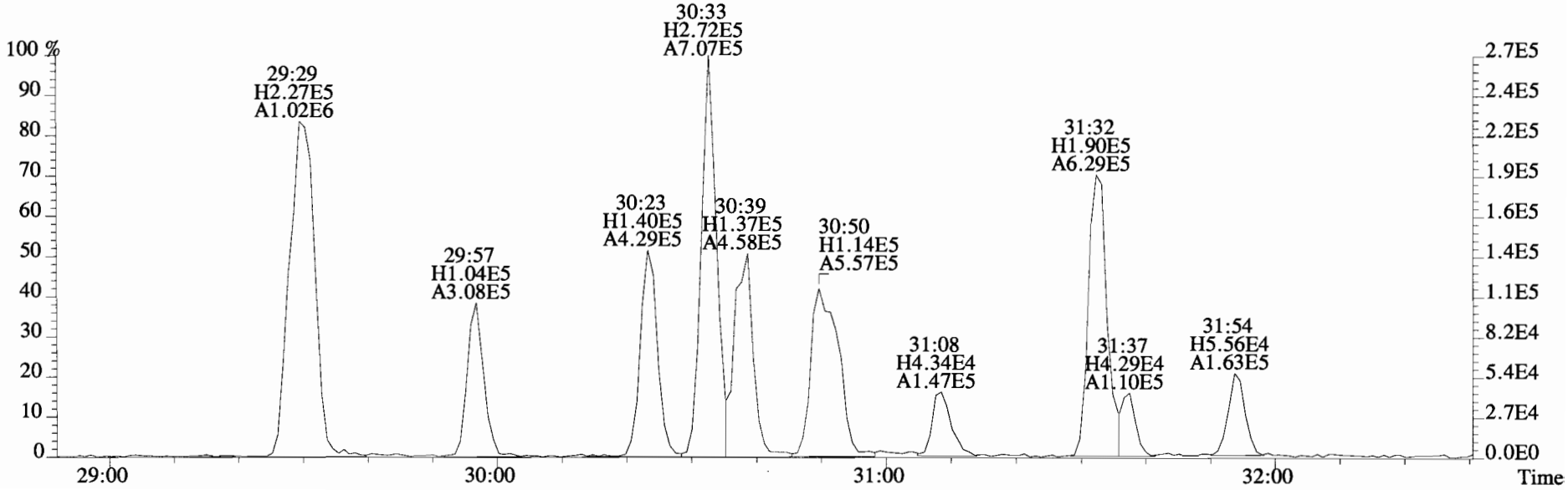
366.9792 S:10 F:2

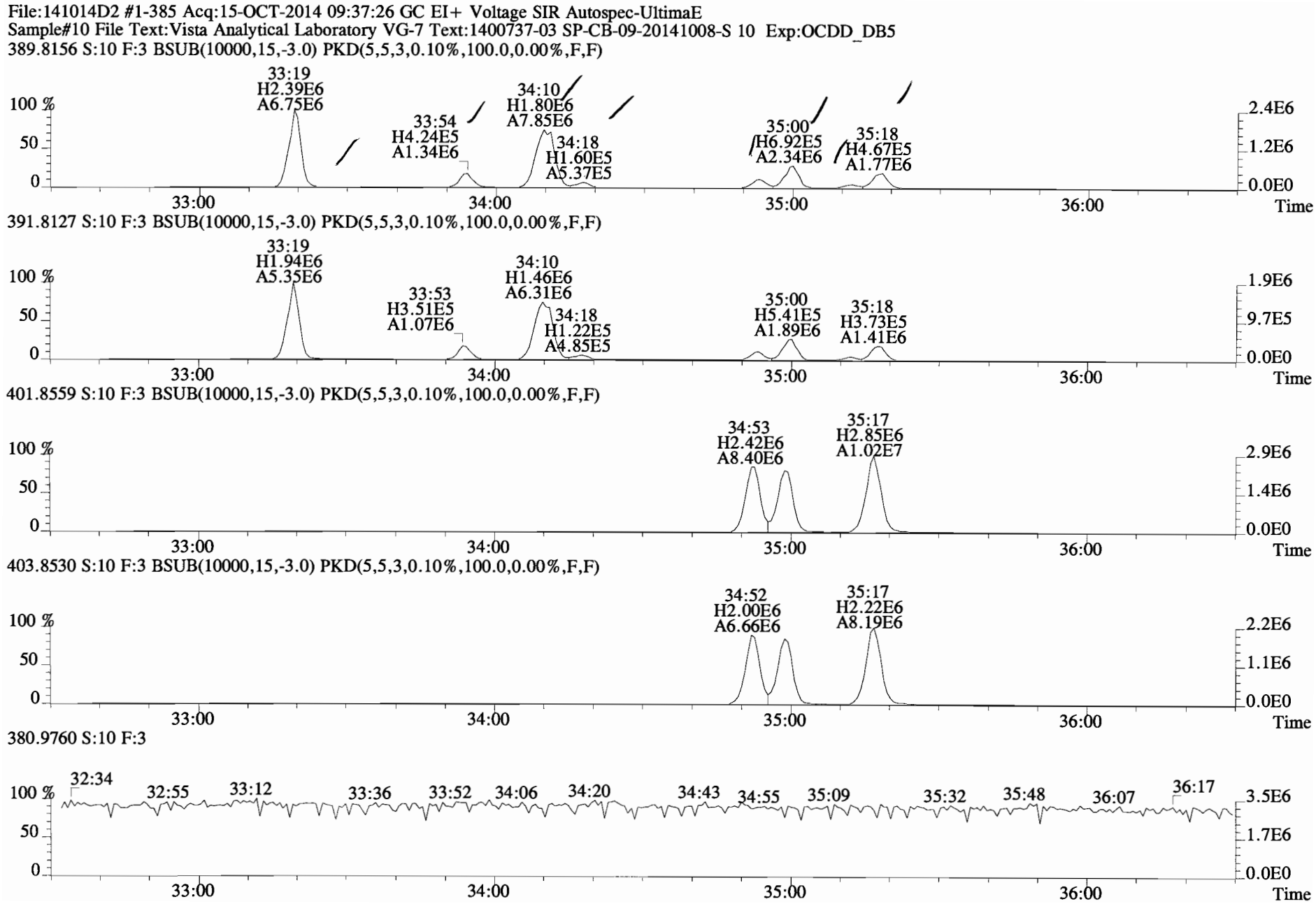


File:141014D2 #1-257 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
353.8576 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

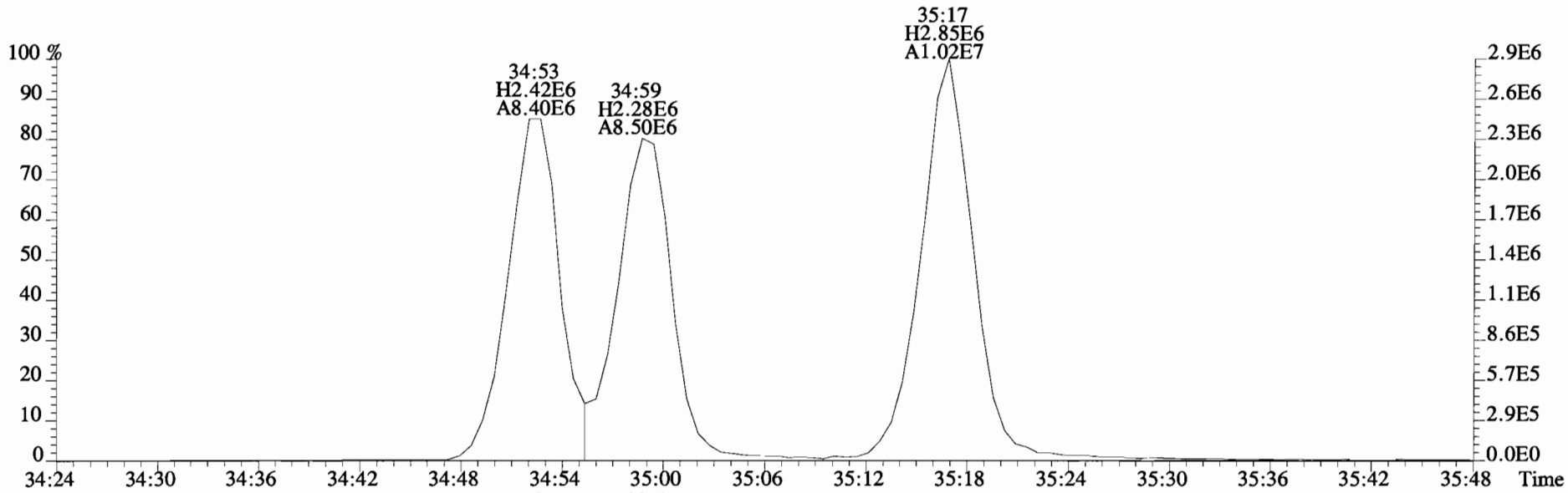


355.8546 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

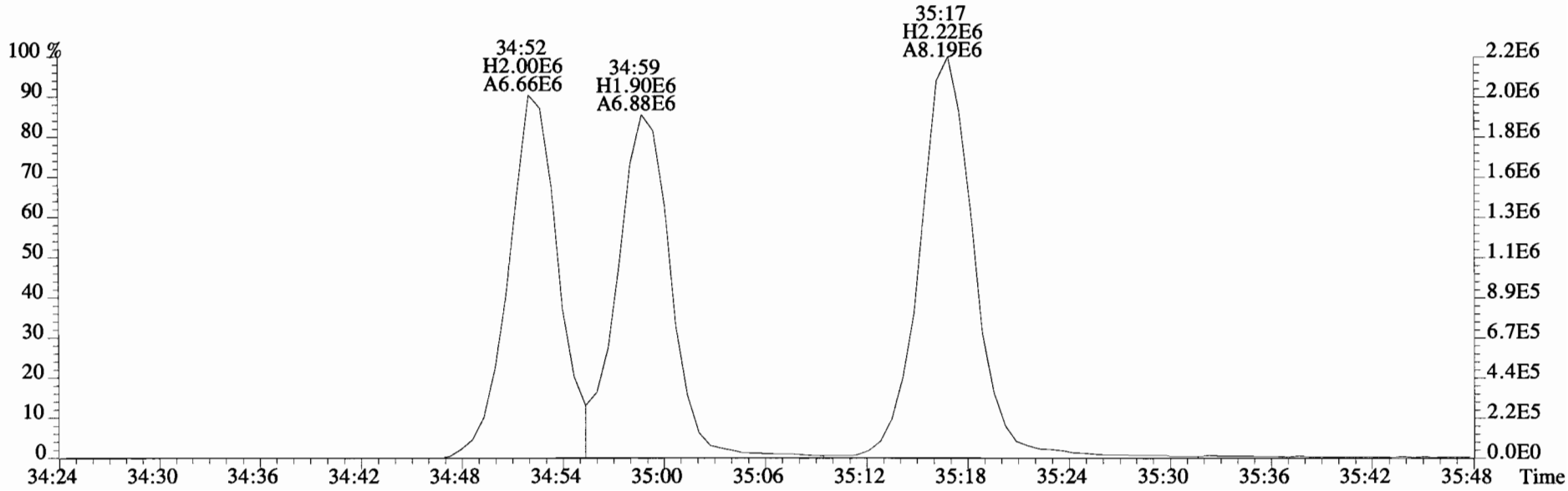



File:141014D2 #1-385 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:19 H2.39E6 A6.75E6
33:54 H4.24E5 A1.34E6
34:10 H1.80E6 A7.85E6
34:18 H1.60E5 A5.37E5
35:00 H6.92E5 A2.34E6
35:18 H4.67E5 A1.77E6
391.8127 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:19 H1.94E6 A5.35E6
33:53 H3.51E5 A1.07E6
34:10 H1.46E6 A6.31E6
34:18 H1.22E5 A4.85E5
35:00 H5.41E5 A1.89E6
35:18 H3.73E5 A1.41E6
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:53 H2.42E6 A8.40E6
35:17 H2.85E6 A1.02E7
403.8530 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:52 H2.00E6 A6.66E6
35:17 H2.22E6 A8.19E6
380.9760 S:10 F:3
32:34
32:55
33:12
33:36
33:52
34:06
34:20
34:43
34:55
35:09
35:32
35:48
36:07
36:17
100 %
50
0
33:00
34:00
35:00
36:00
Time
2.4E6
1.2E6
0.0E0
1.9E6
9.7E5
2.9E6
1.4E6
2.2E6
1.1E6
3.5E6
1.7E6

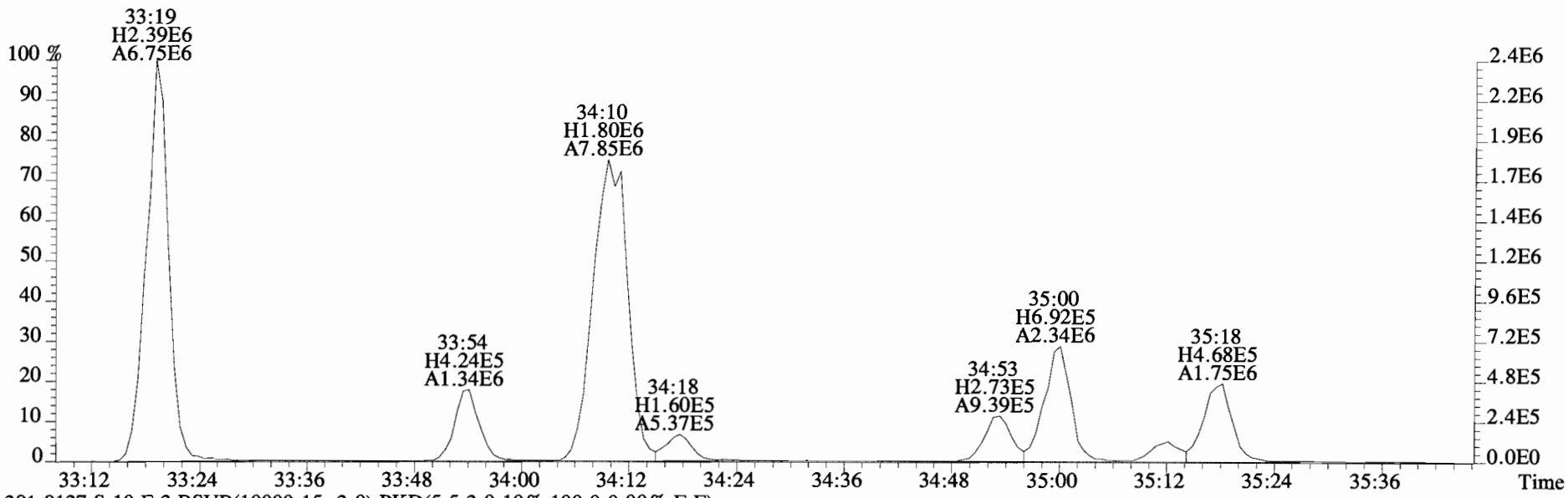
File:141014D2 #1-385 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



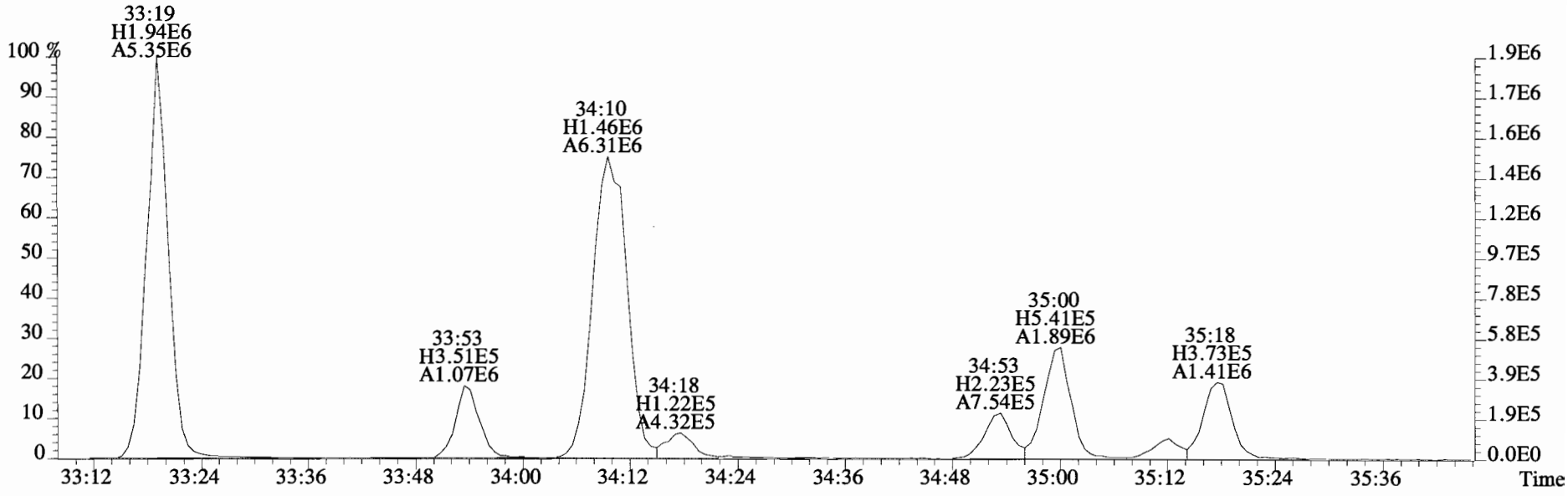
403.8530 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



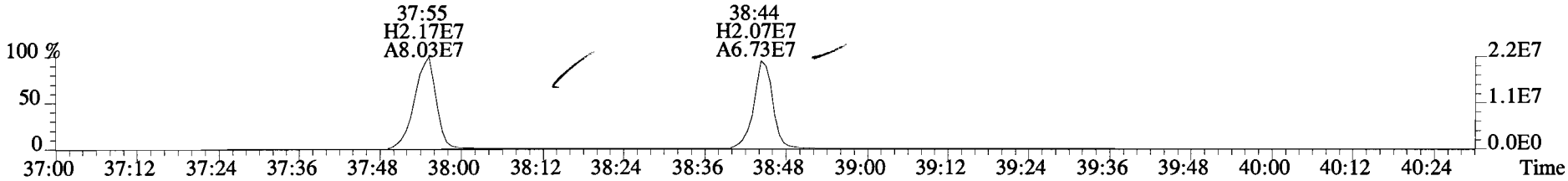
File:141014D2 #1-385 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



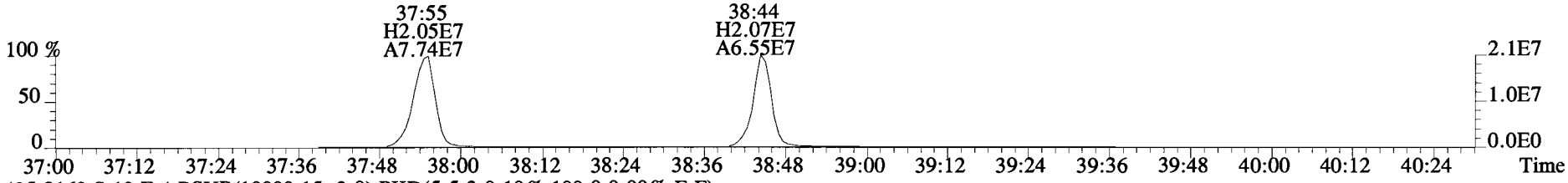
391.8127 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



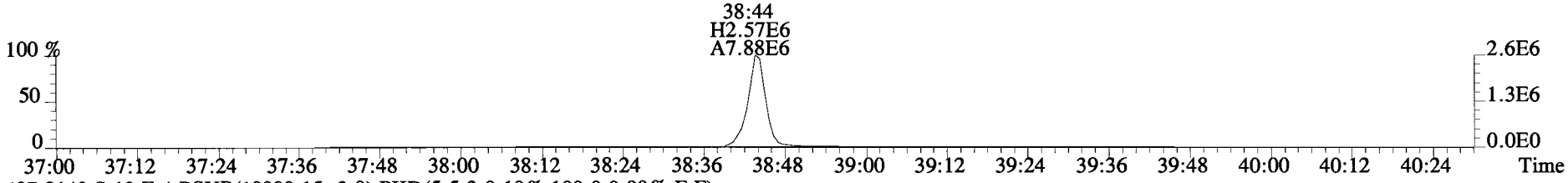
File:141014D2 #1-326 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
423.7767 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



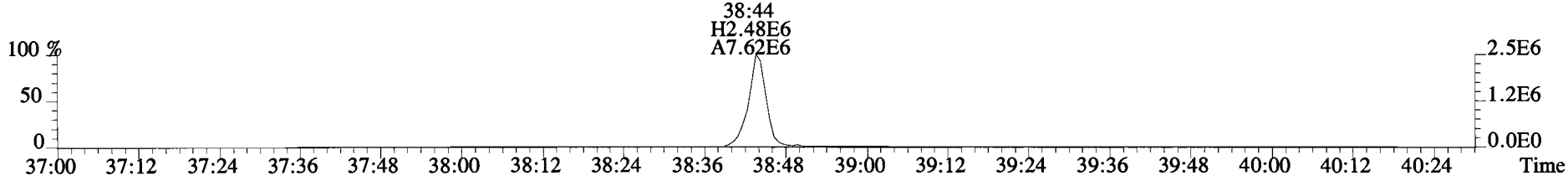
425.7737 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



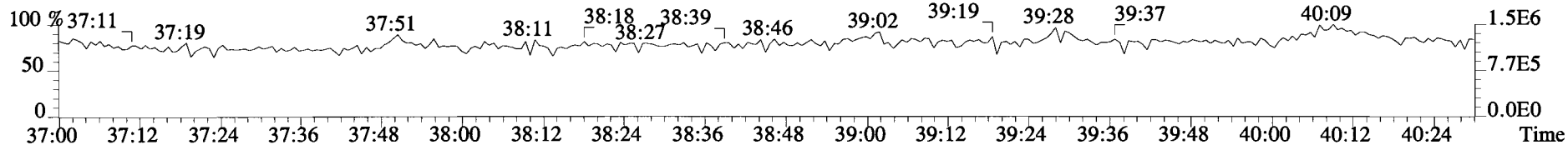
435.8169 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



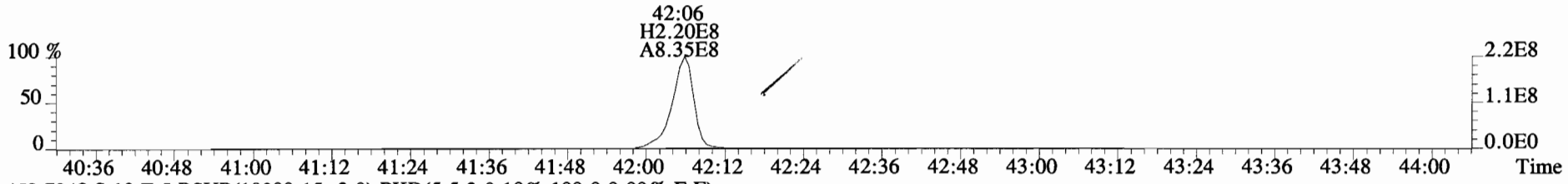
437.8140 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



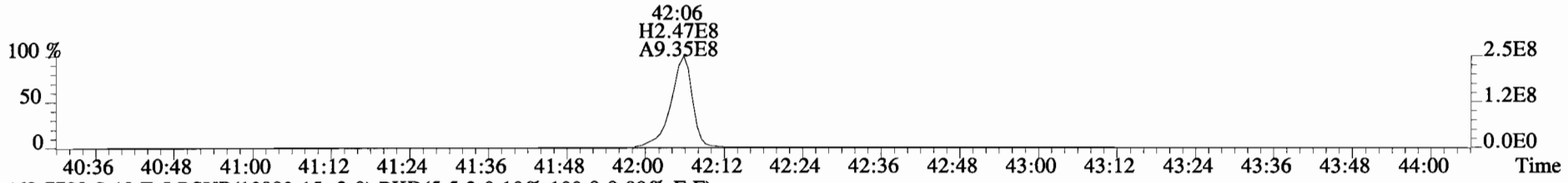
430.9728 S:10 F:4



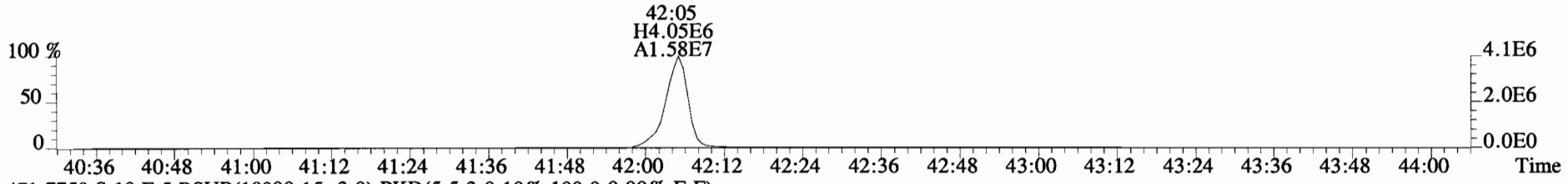
File:141014D2 #1-388 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
457.7377 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



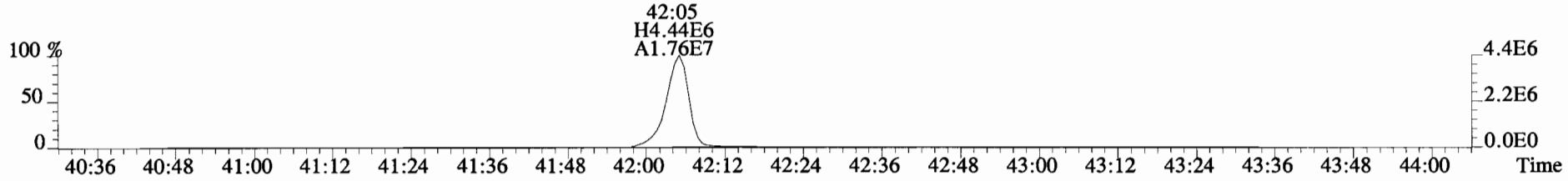
459.7348 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



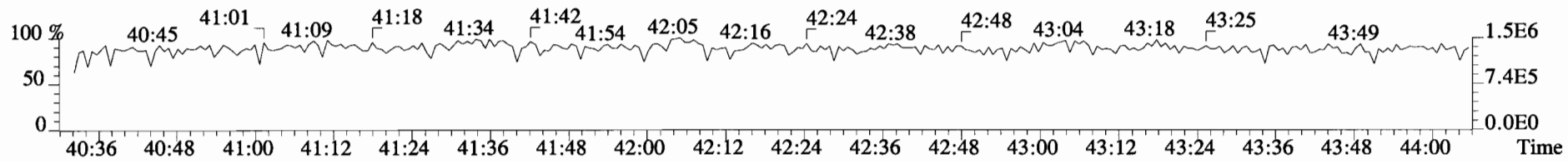
469.7780 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



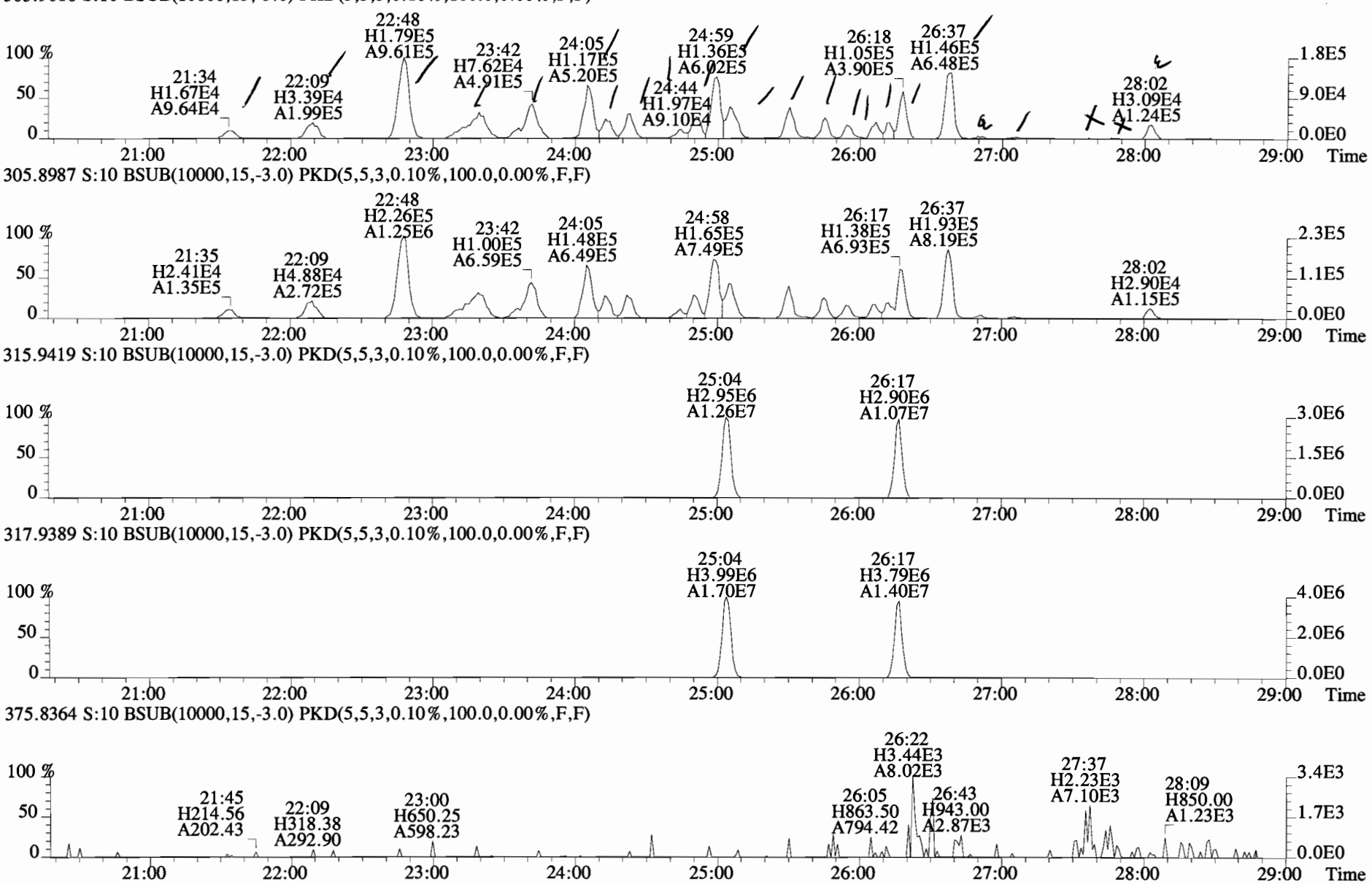
471.7750 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



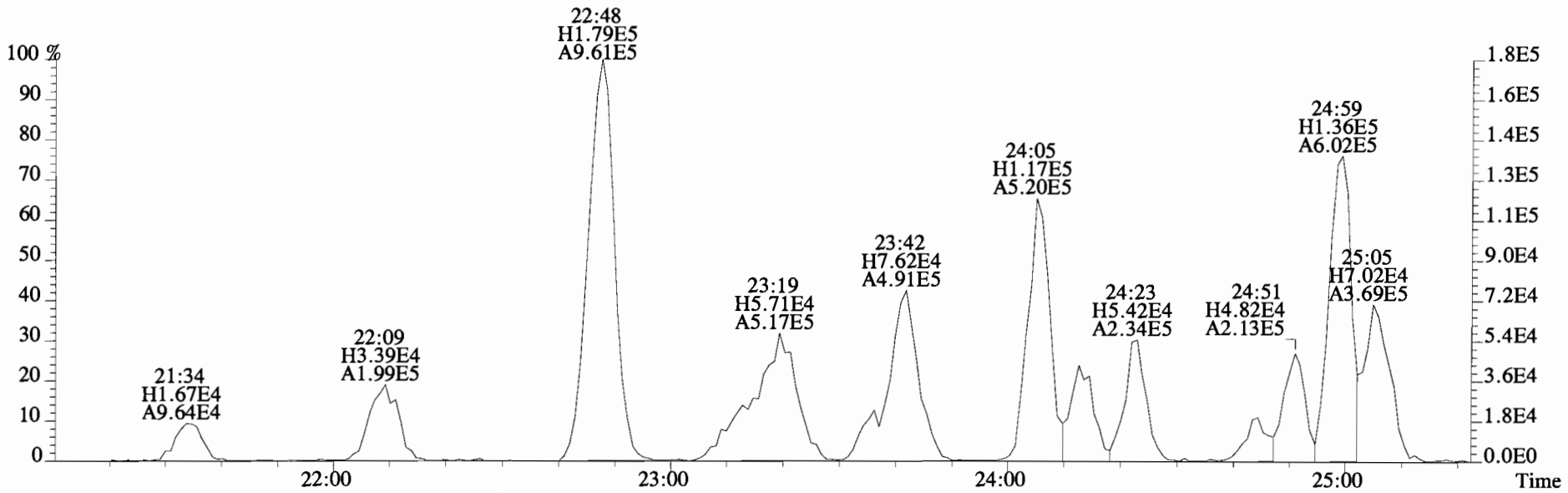
454.9728 S:10 F:5



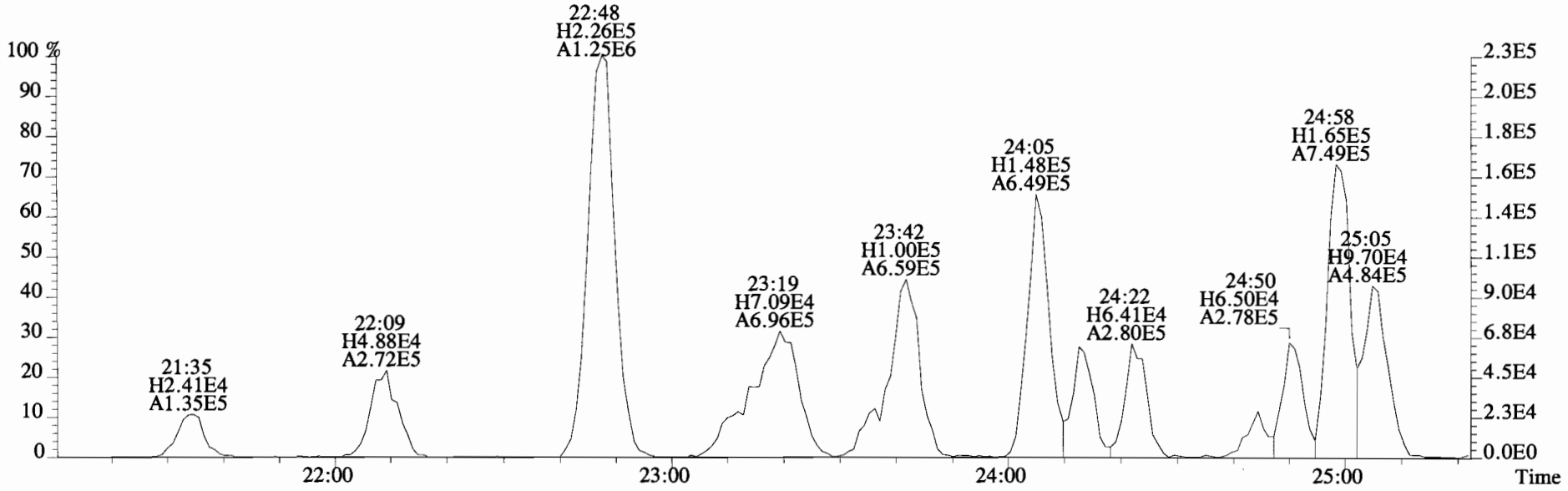
File:141014D2 #1-551 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5



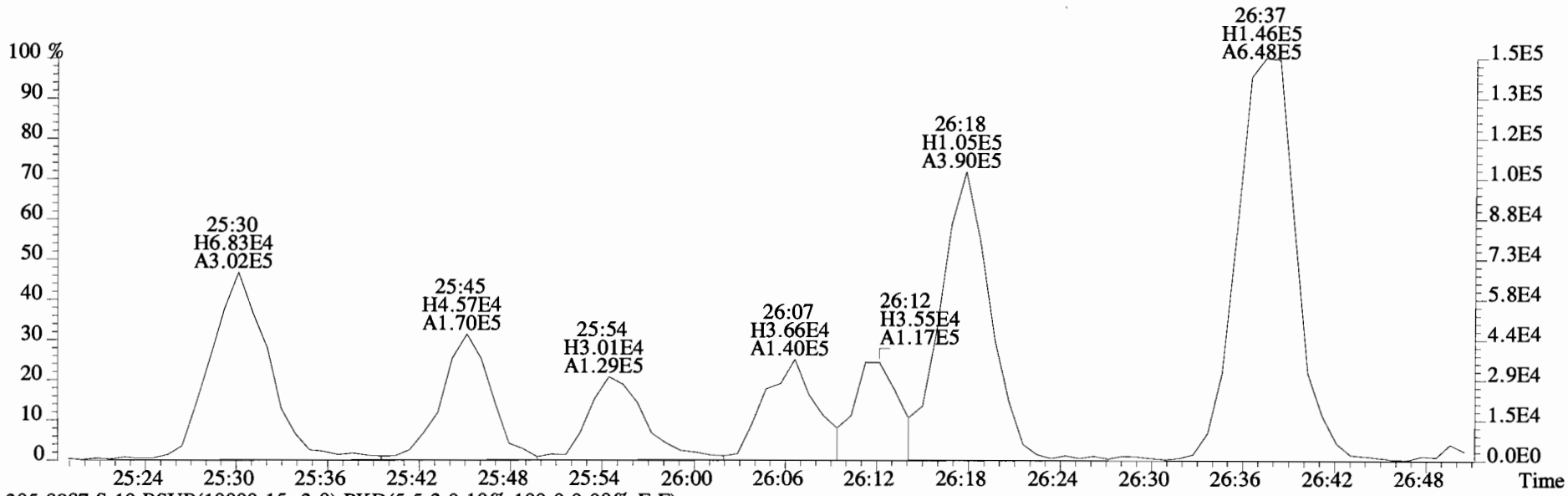
File:141014D2 #1-551 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



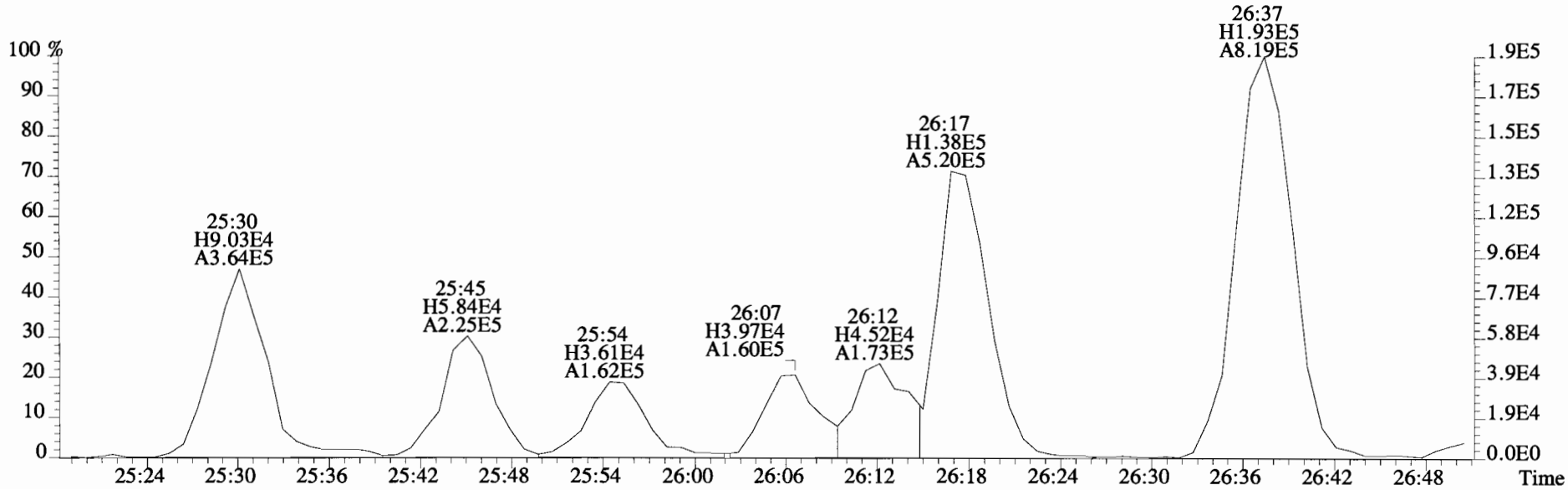
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



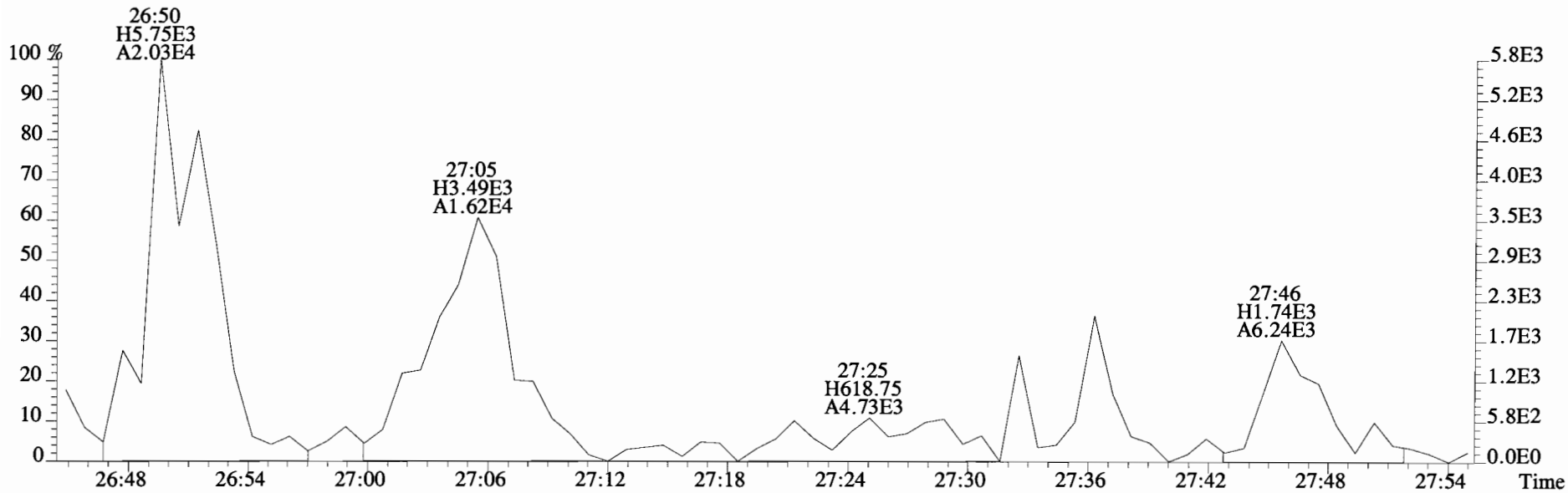
File:141014D2 #1-551 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



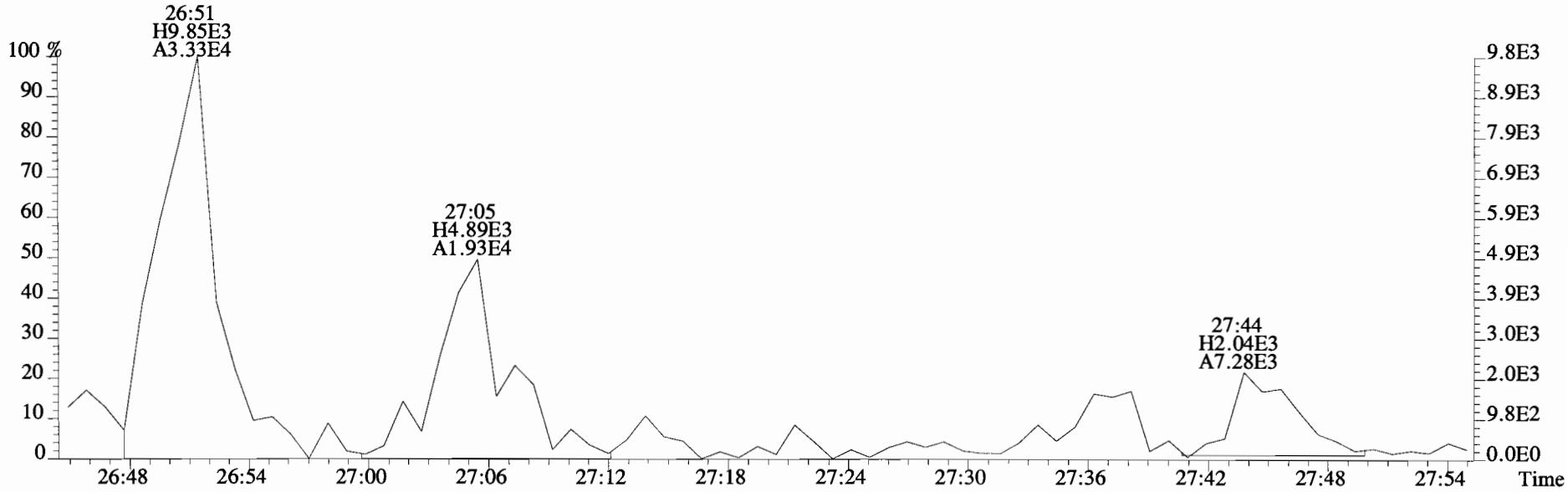
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



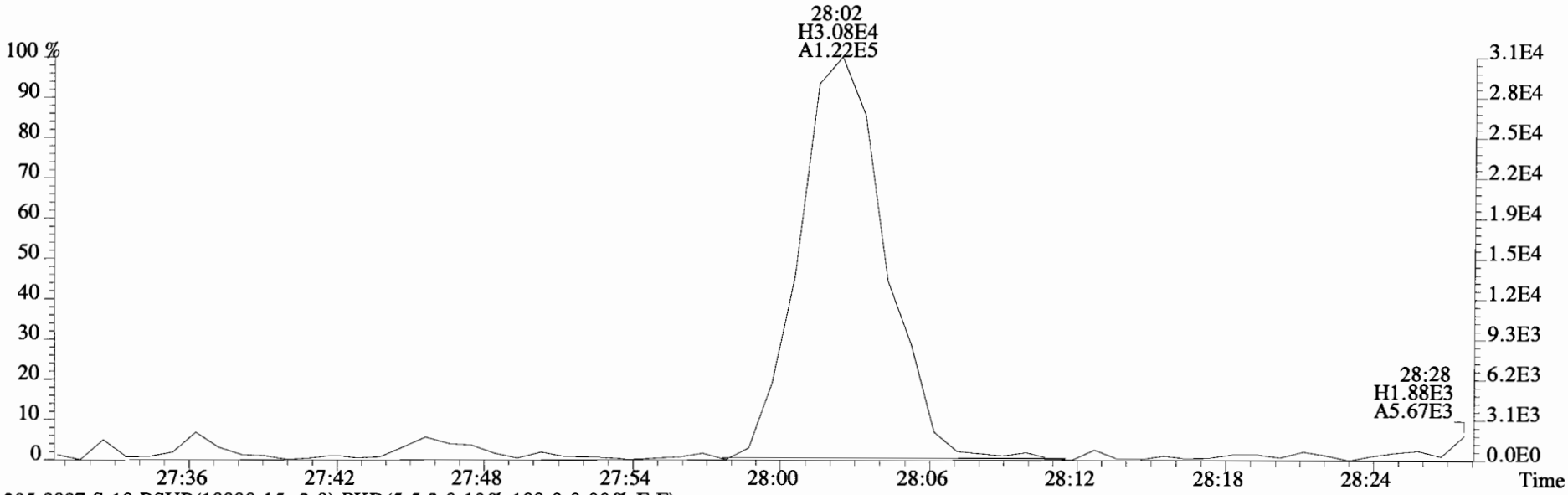
File:141014D2 #1-551 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



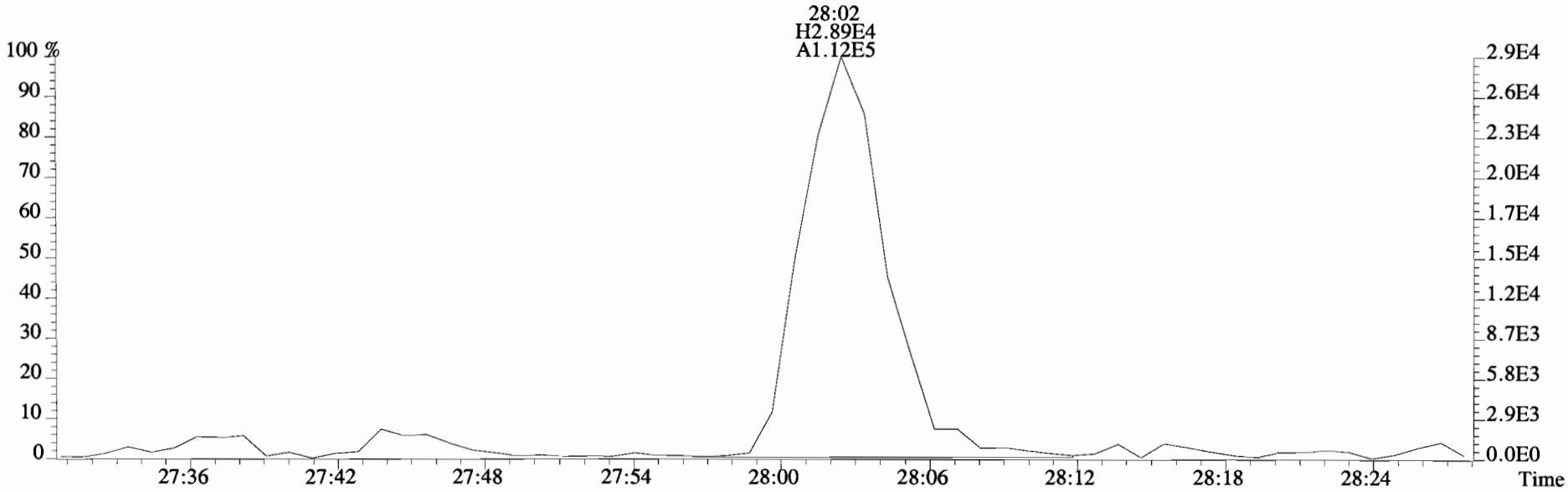
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



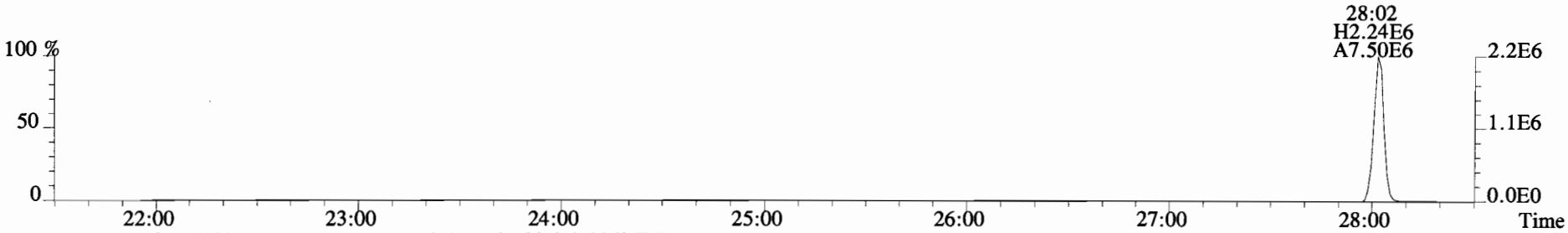
File:141014D2 #1-551 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



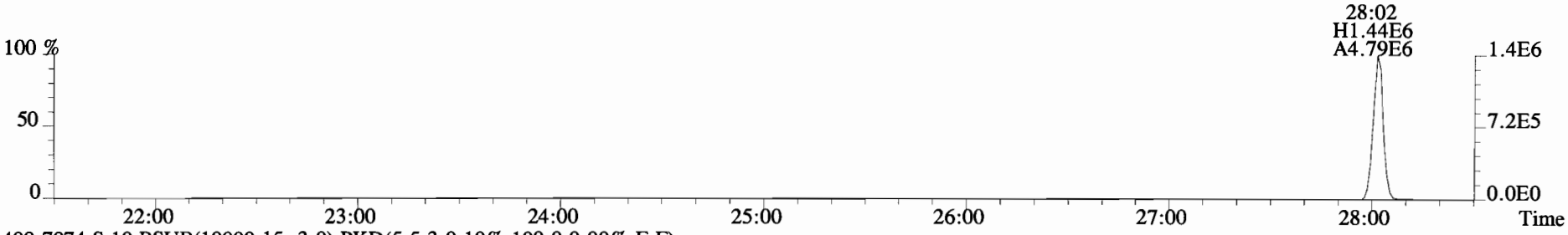
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



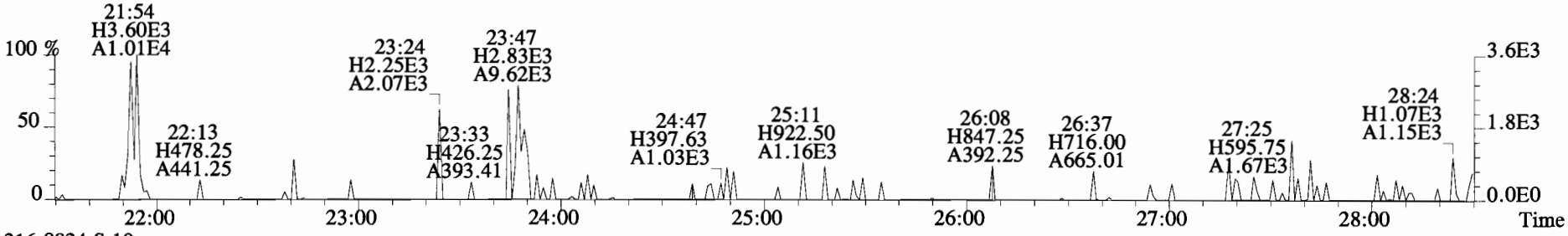
File:141014D2 #1-551 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
339.8597 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



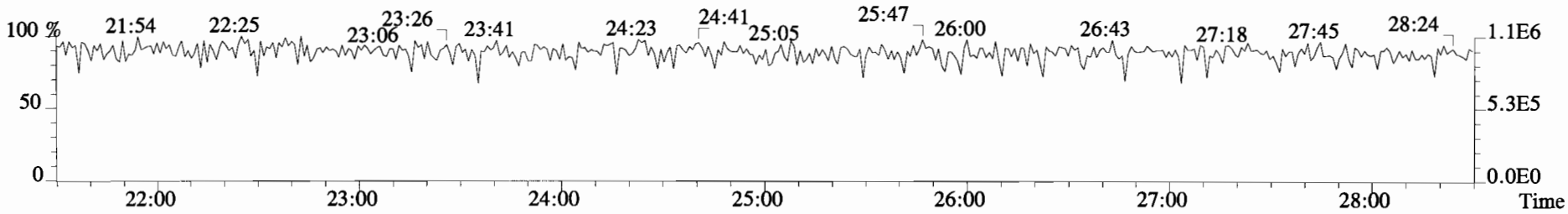
341.8568 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7974 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

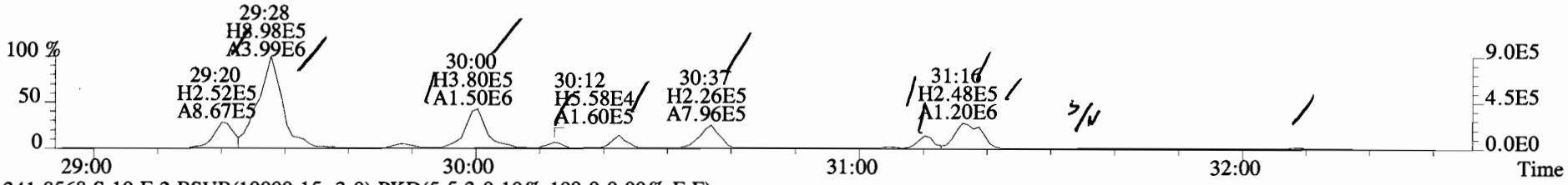


316.9824 S:10

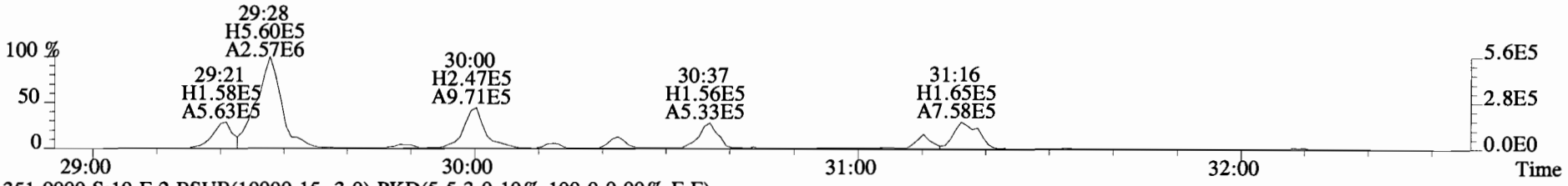


File:141014D2 #1-257 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5

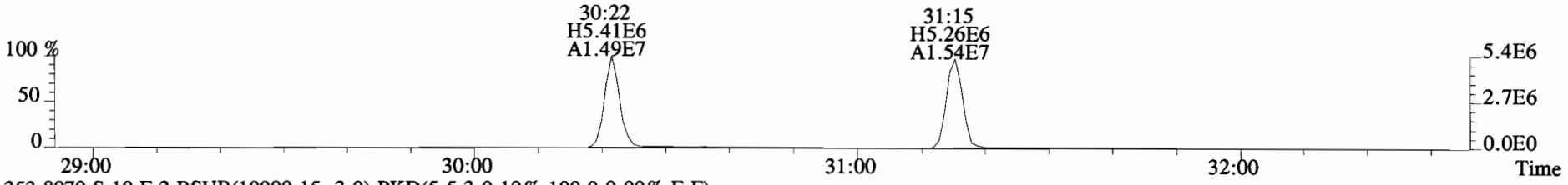
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



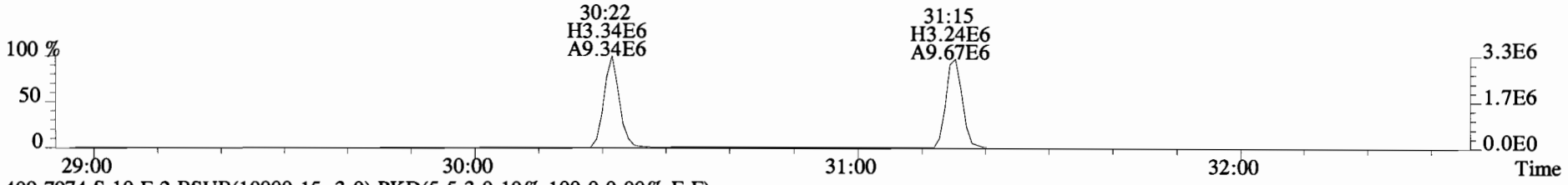
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



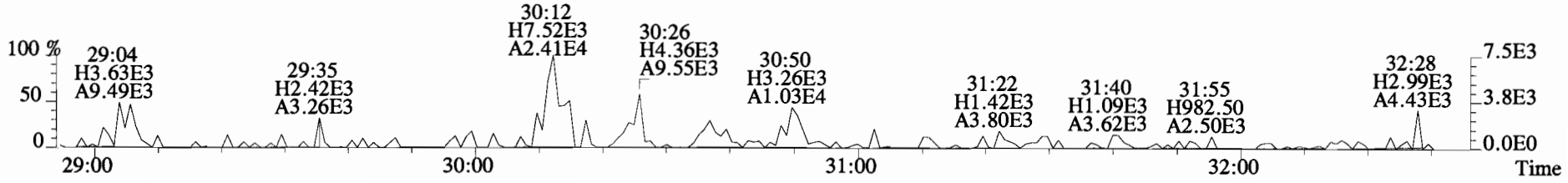
351.9000 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



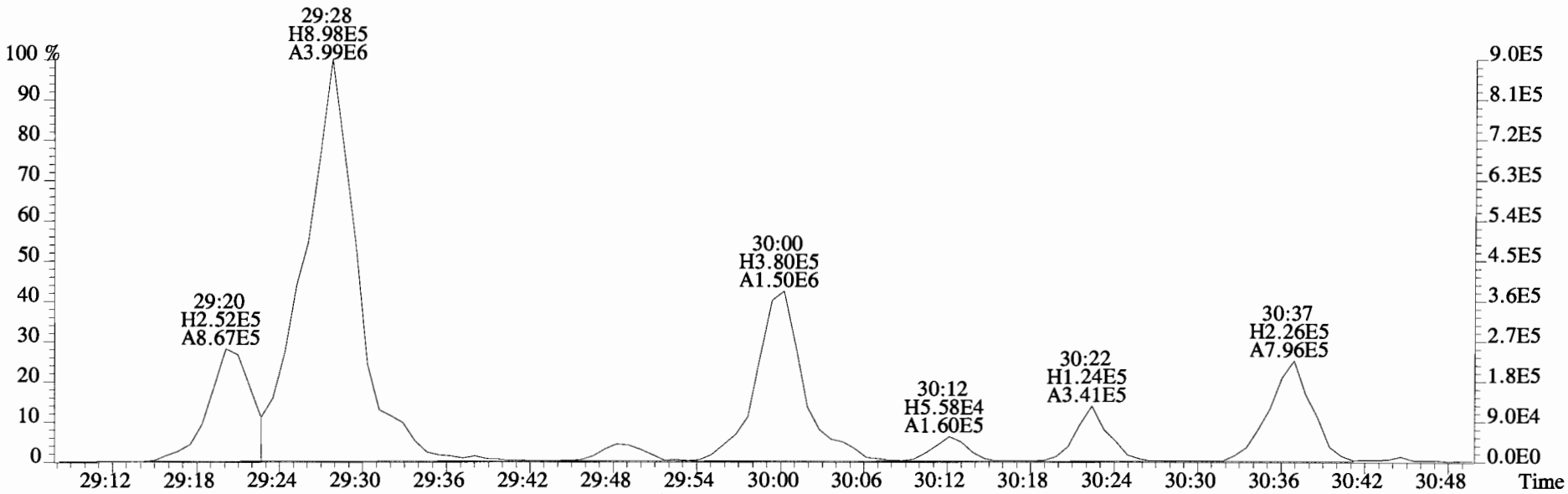
353.8970 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



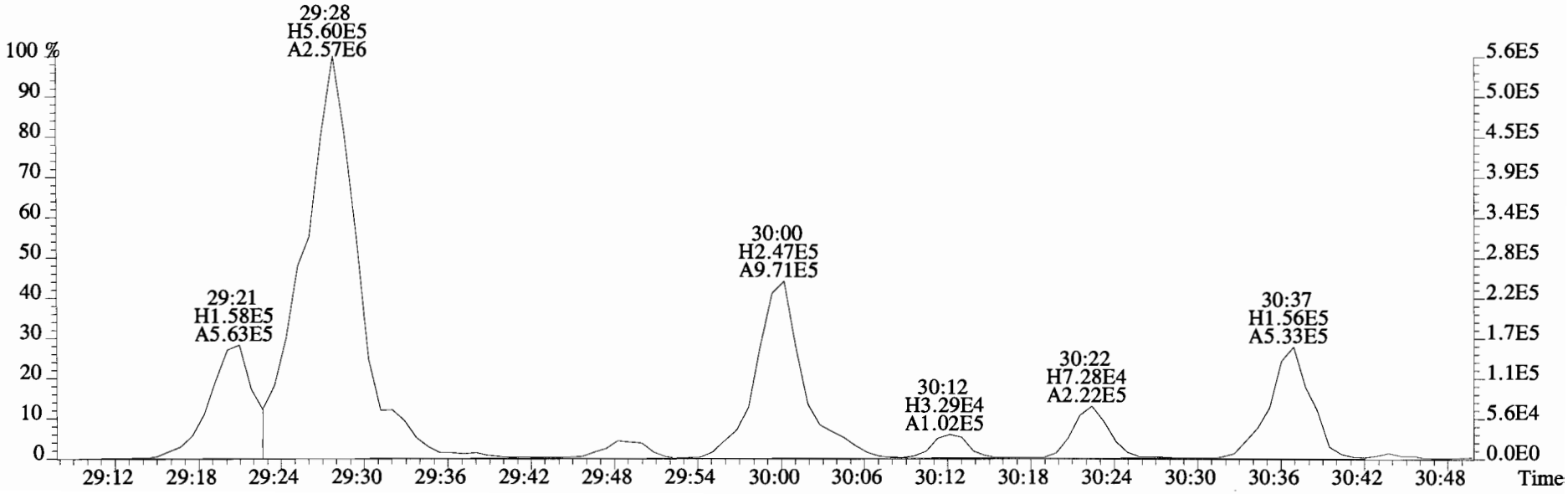
409.7974 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



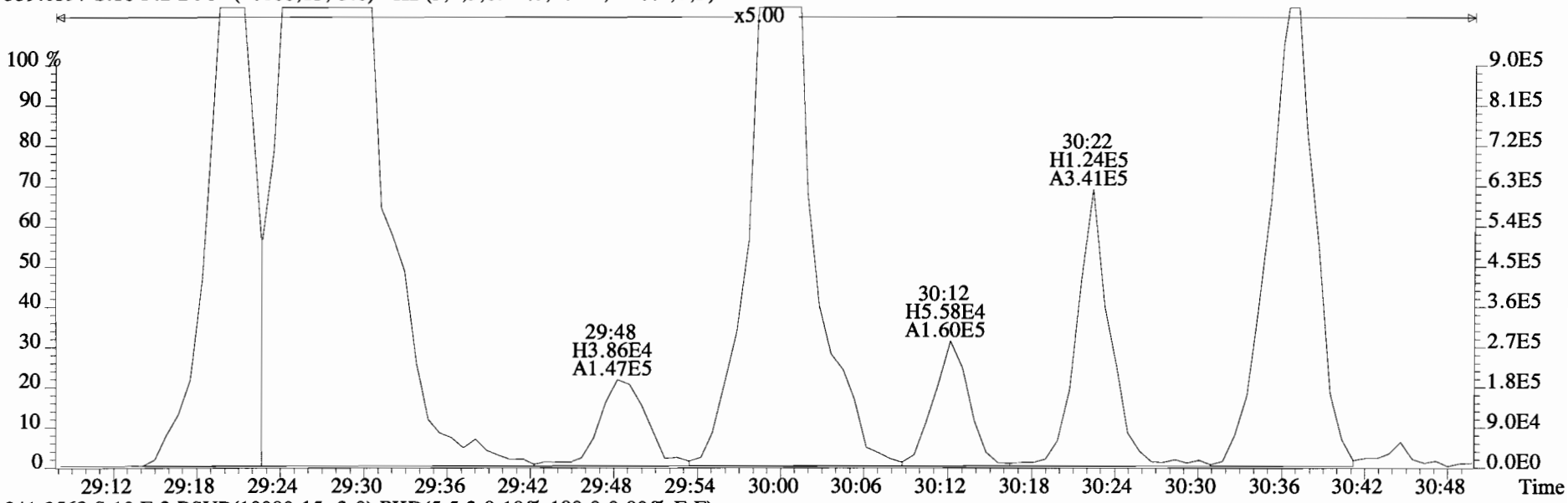
File:141014D2 #1-257 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



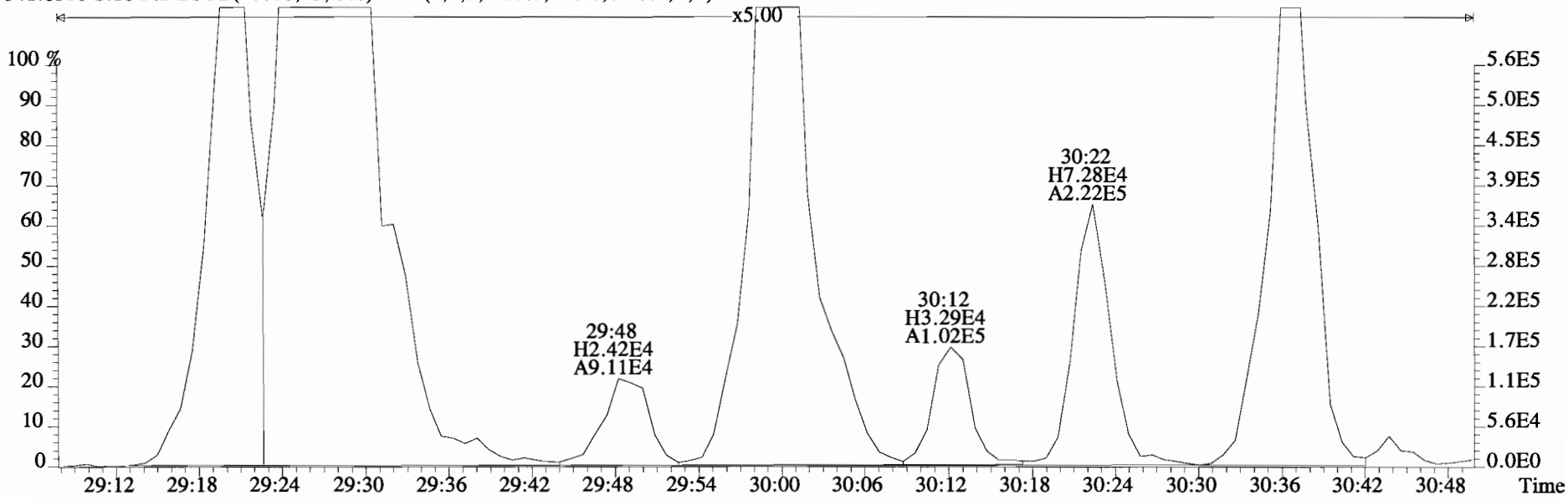
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



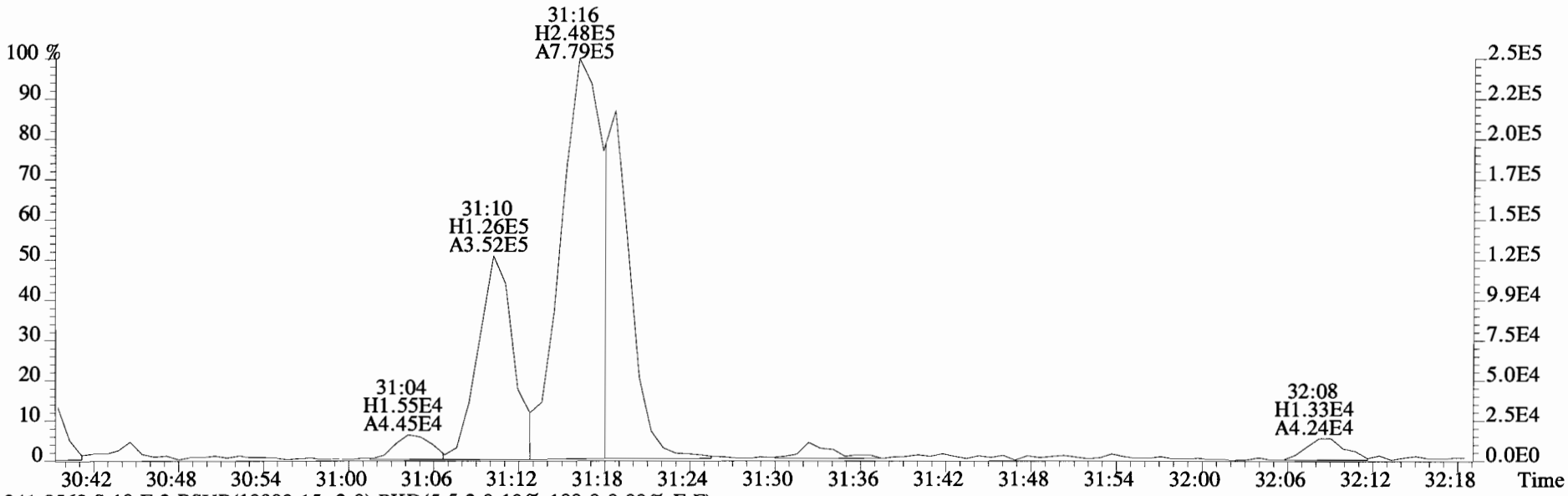
File:141014D2 #1-257 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



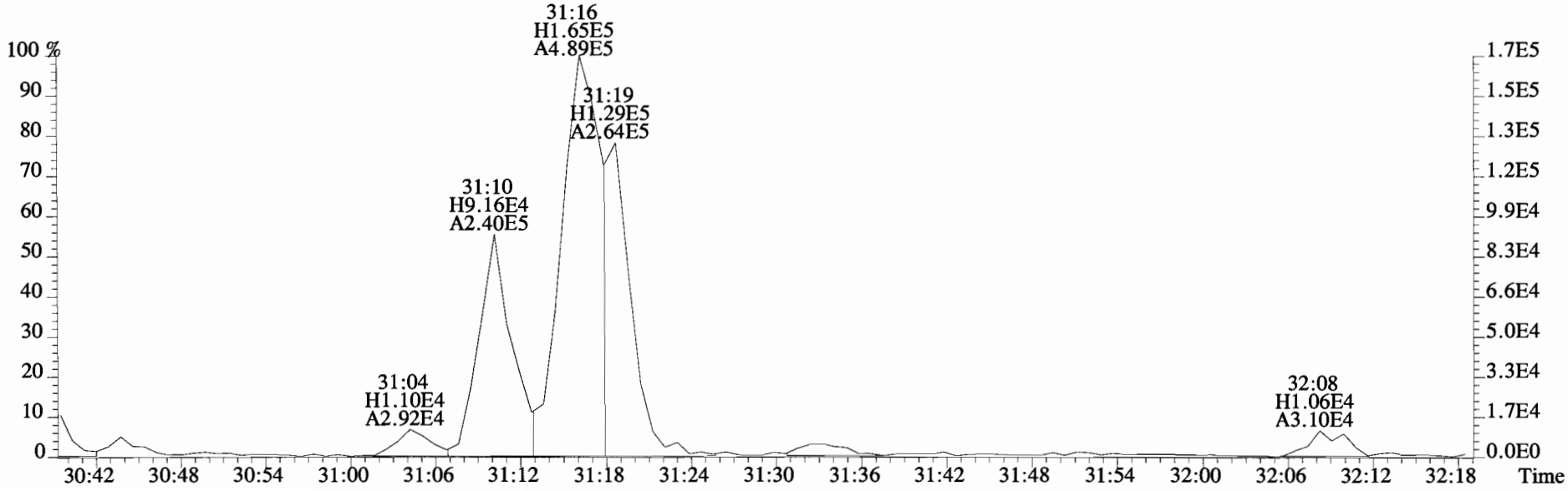
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



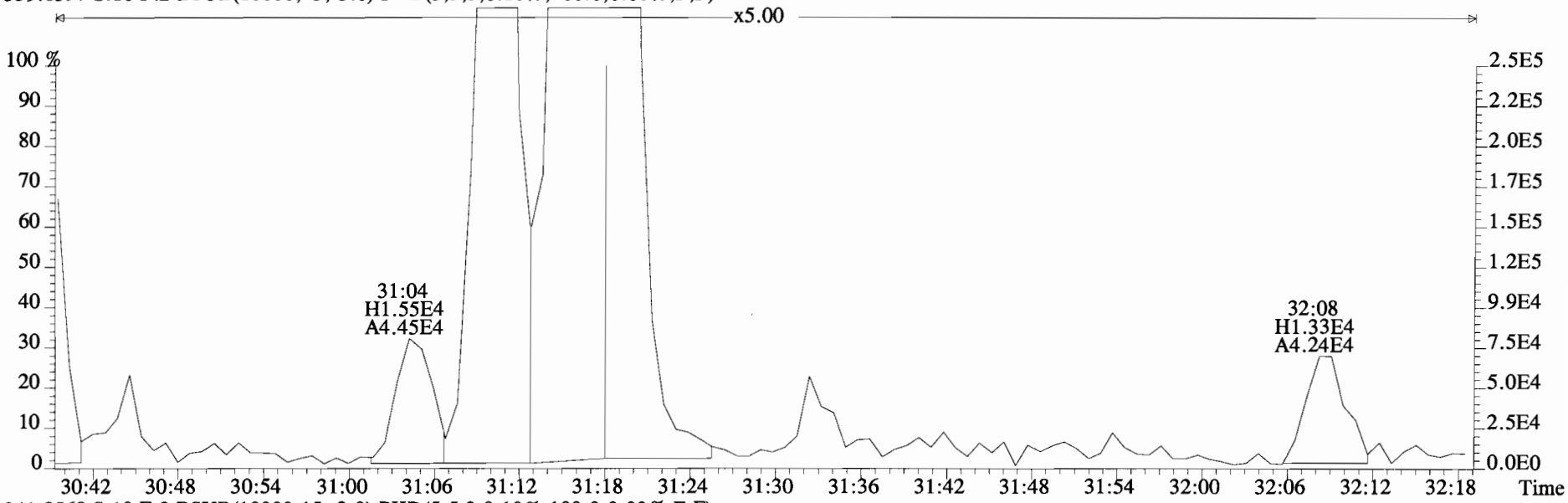
File:141014D2 #1-257 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



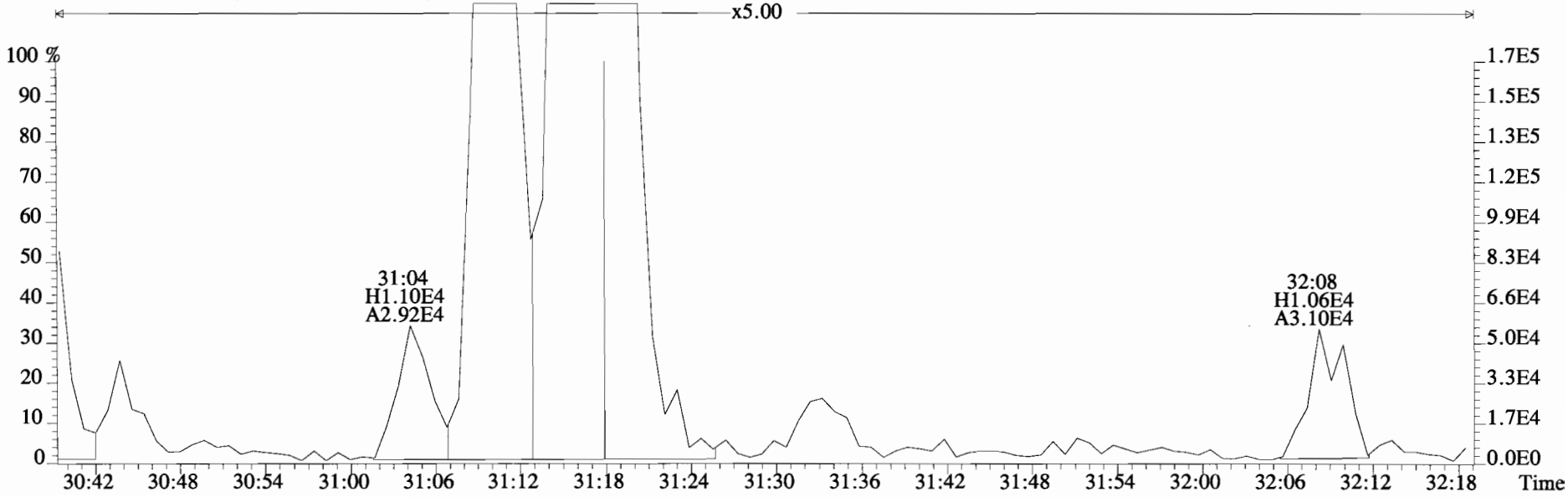
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



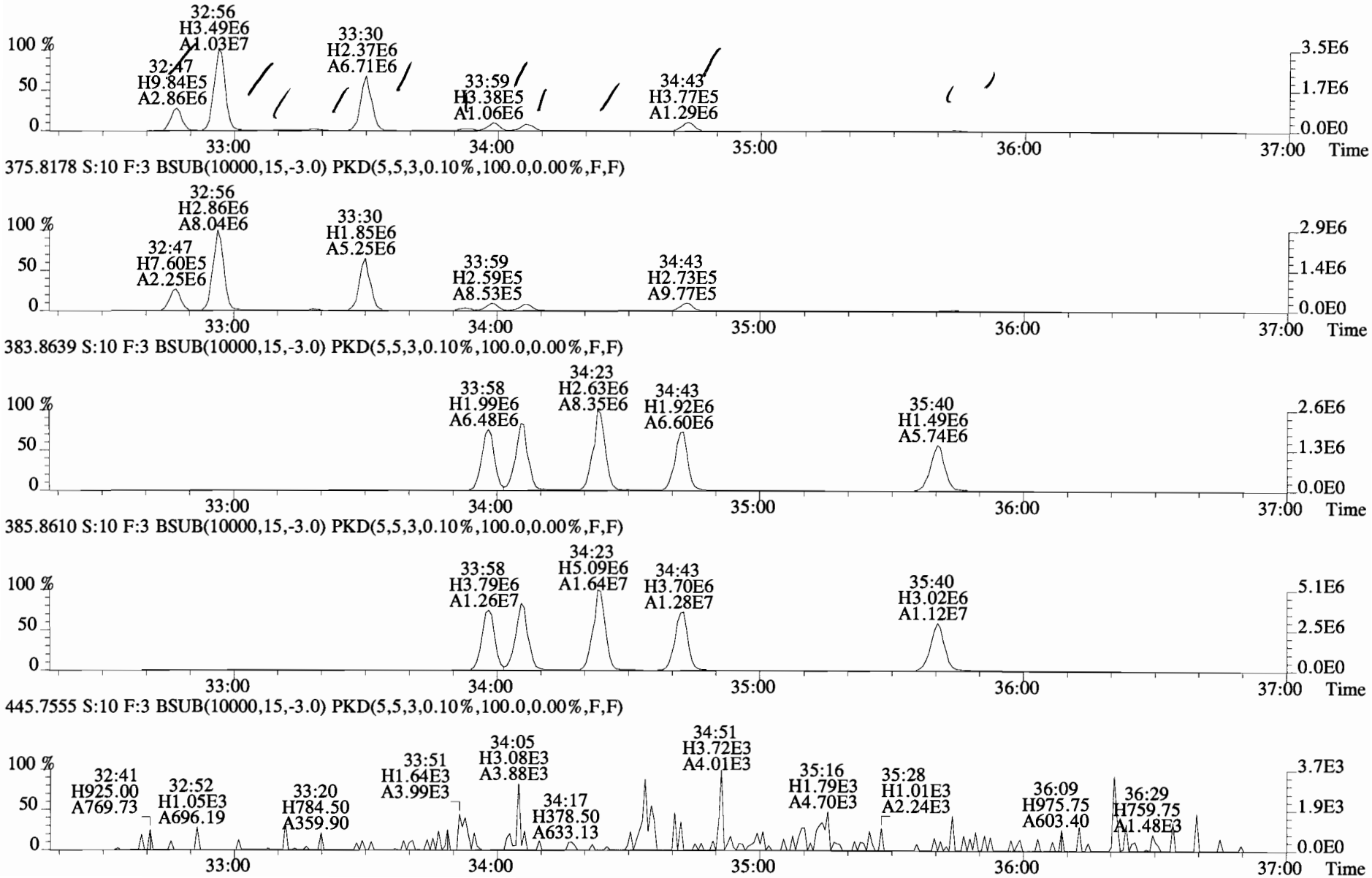
File:141014D2 #1-257 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



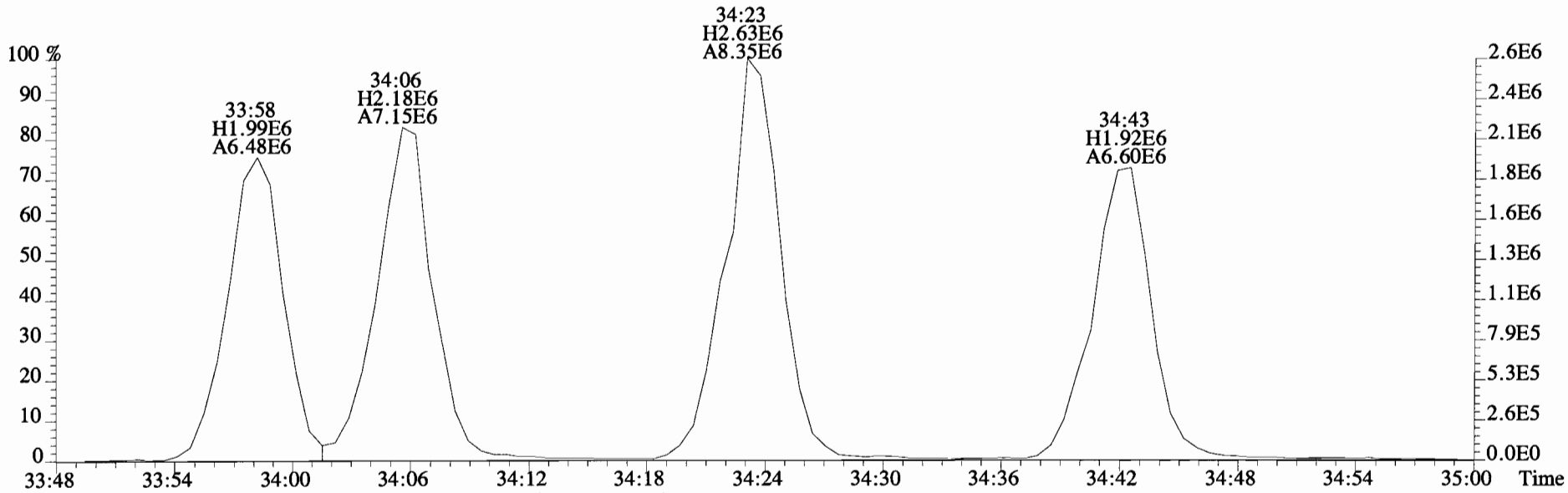
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



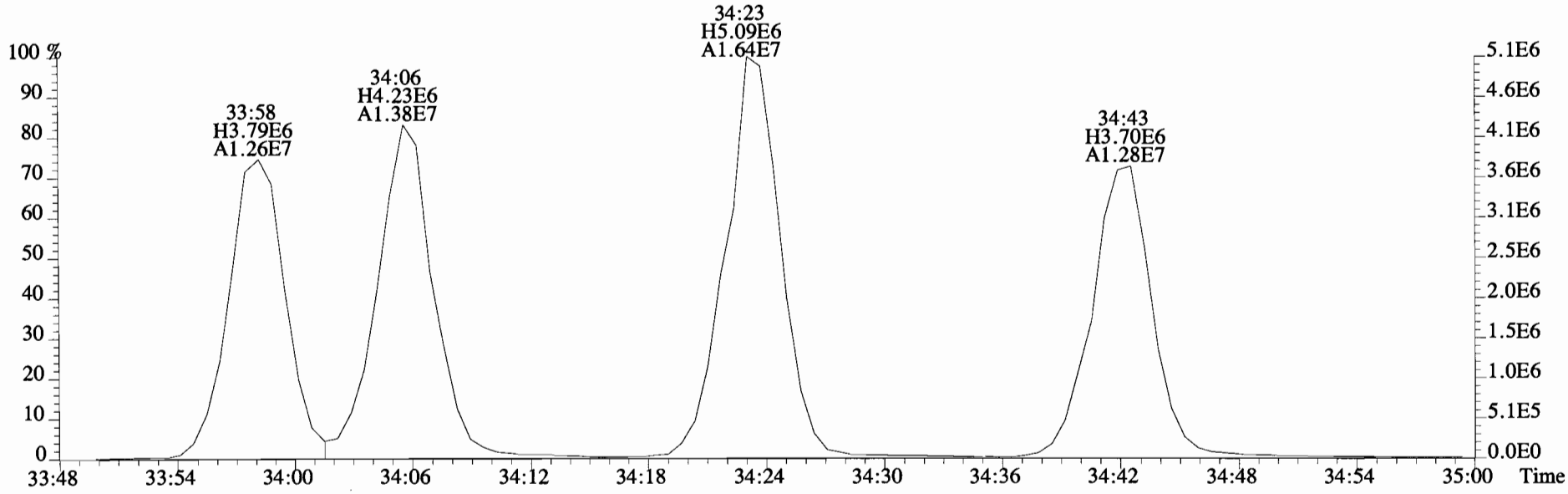
File:141014D2 #1-385 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5



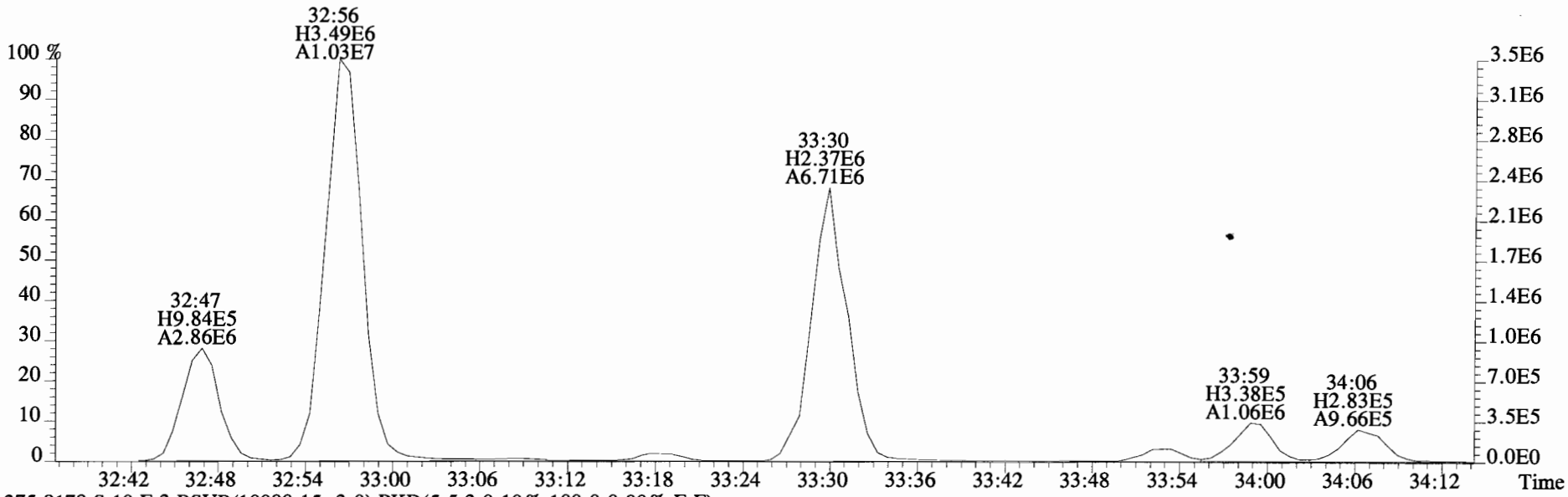
File:141014D2 #1-385 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



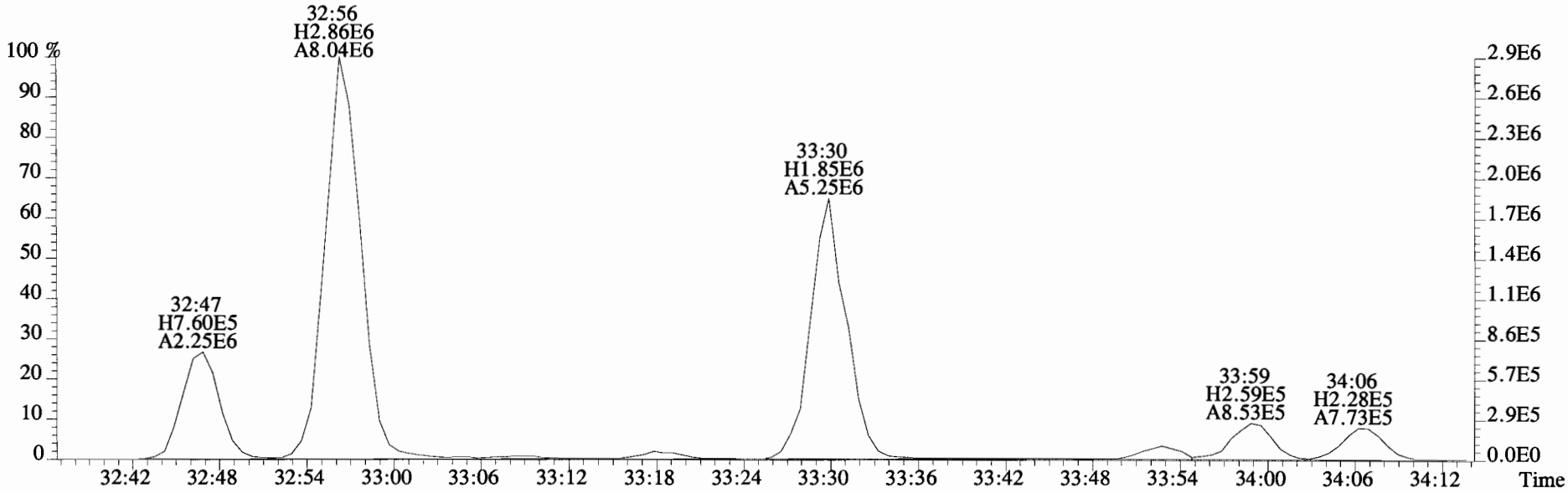
385.8610 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



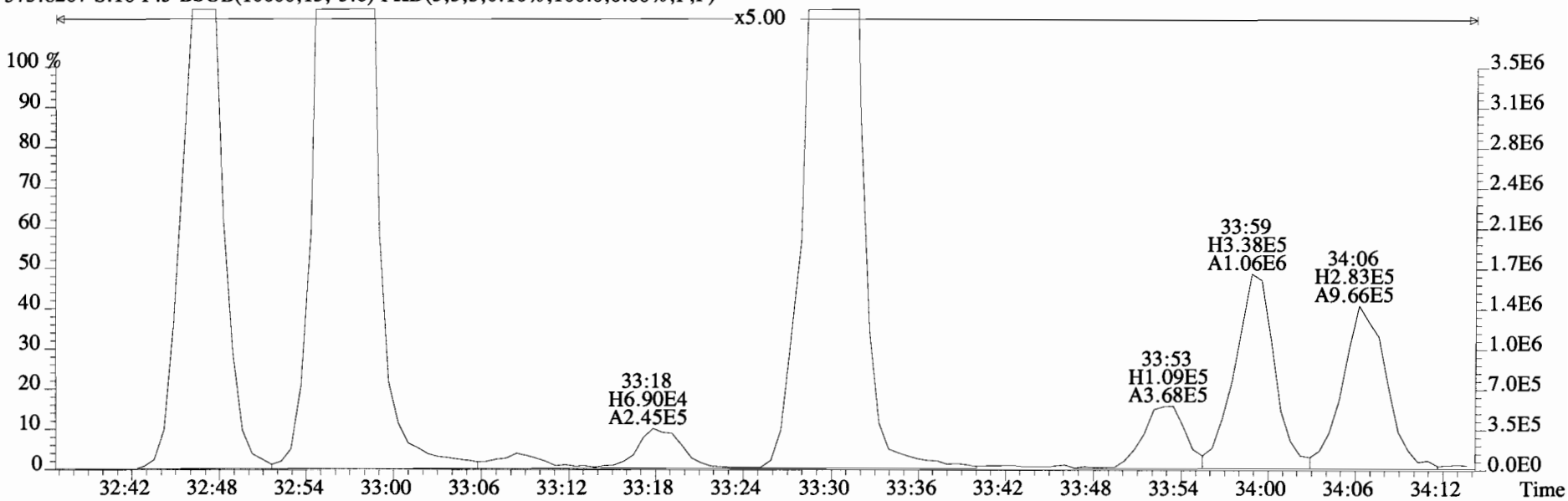
File:141014D2 #1-385 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



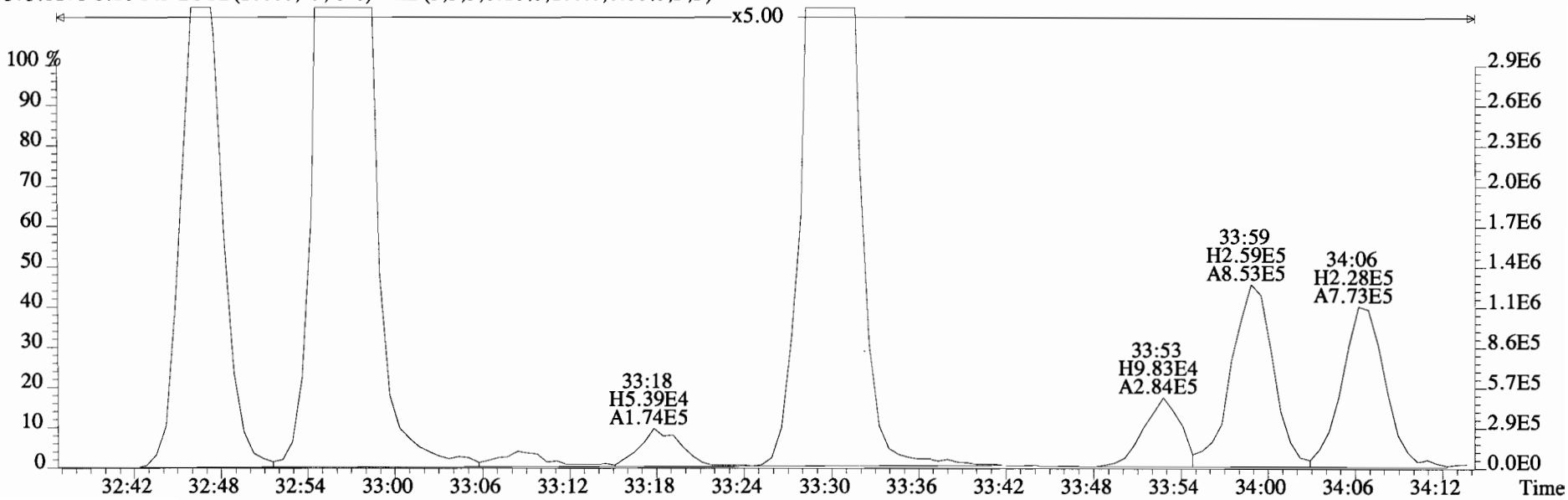
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



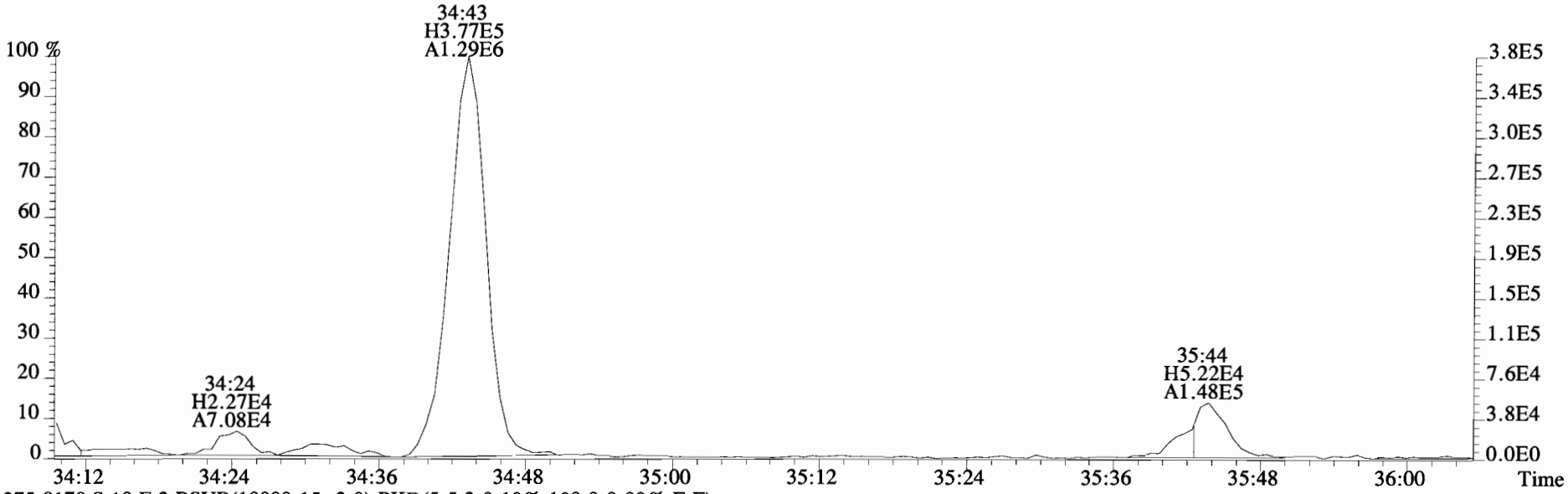
File:141014D2 #1-385 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



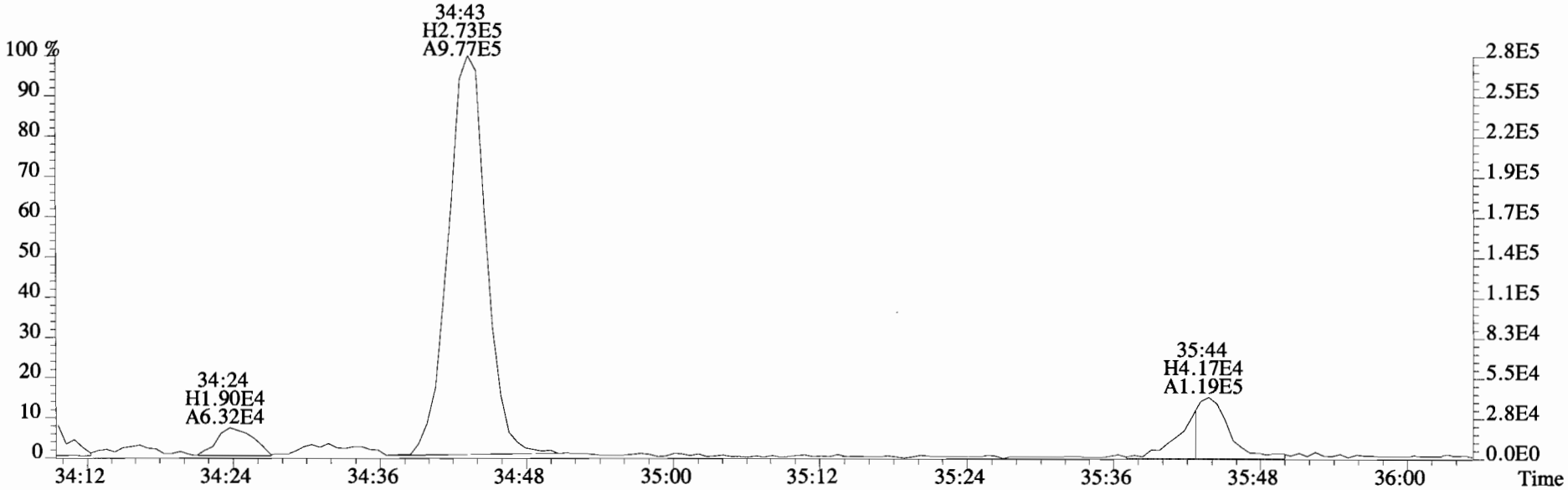
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



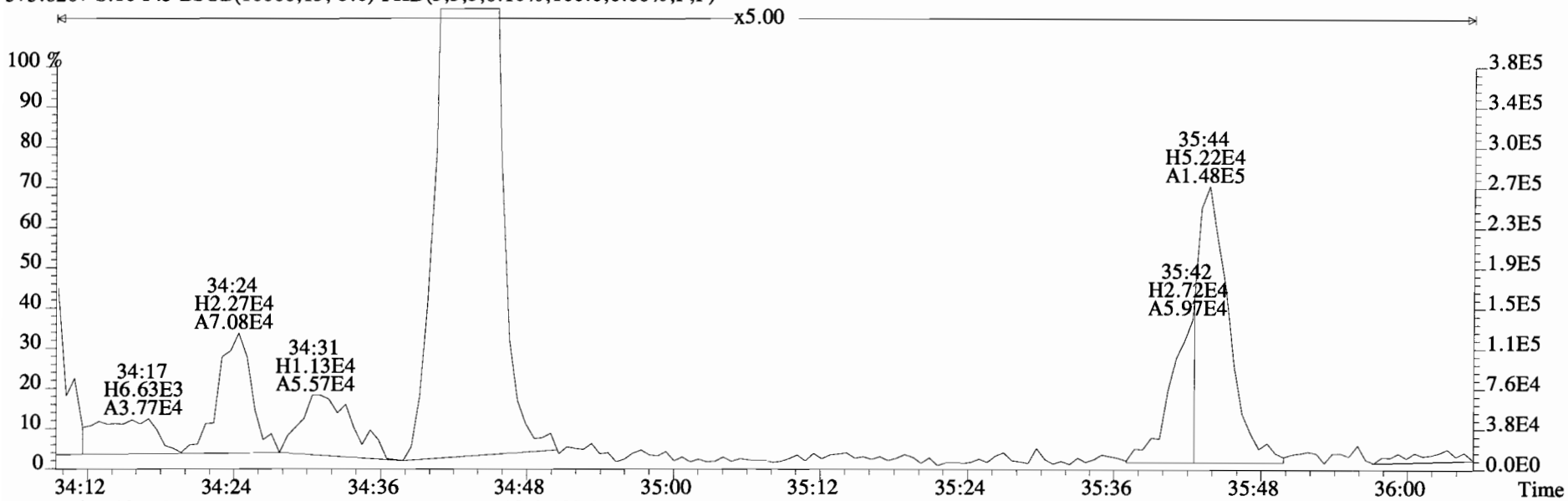
File:141014D2 #1-385 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



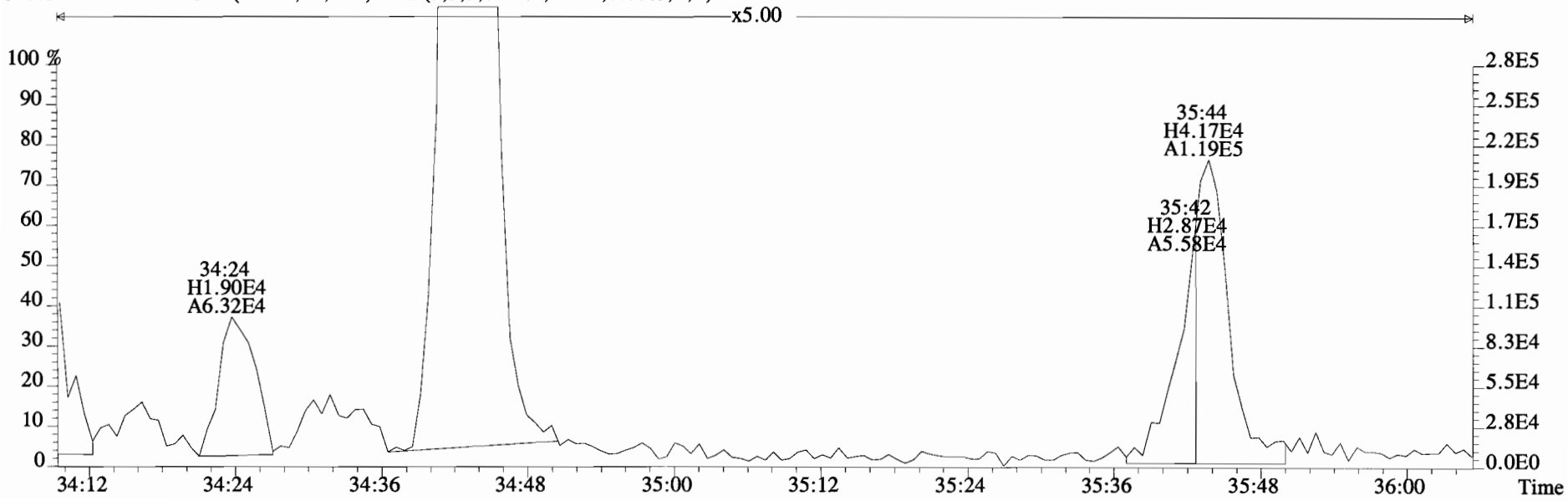
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



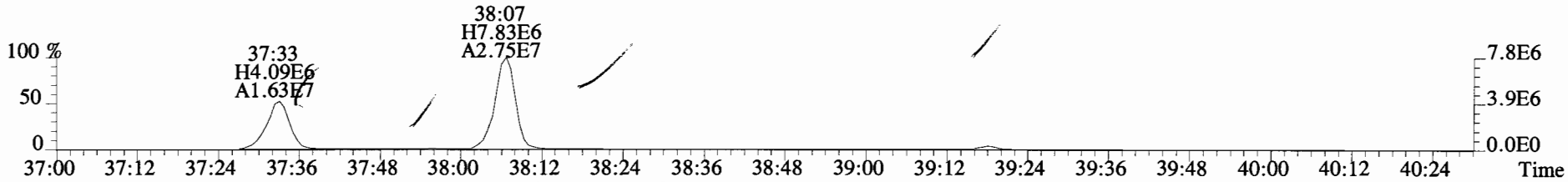
File:141014D2 #1-385 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



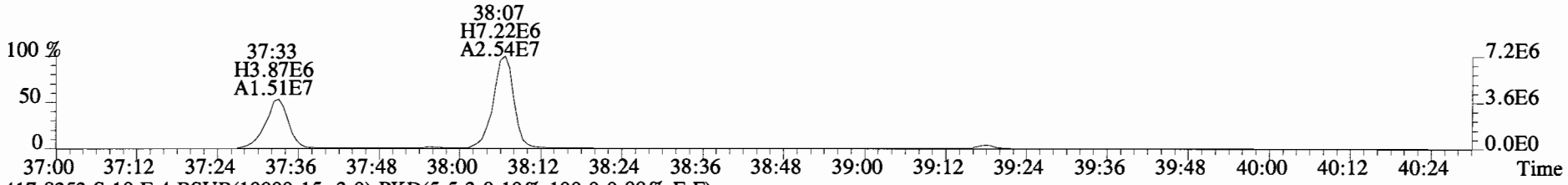
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



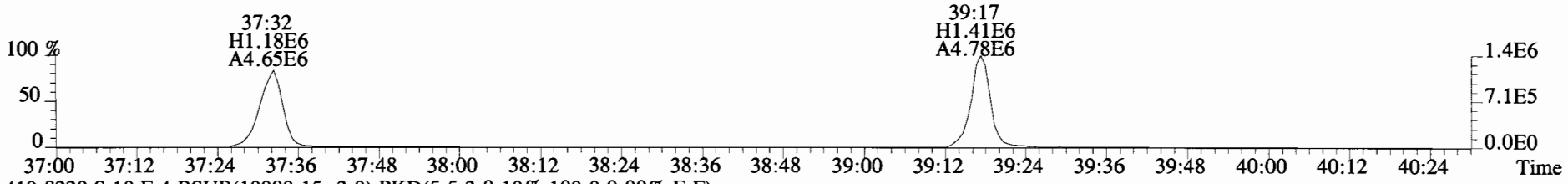
File:141014D2 #1-326 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



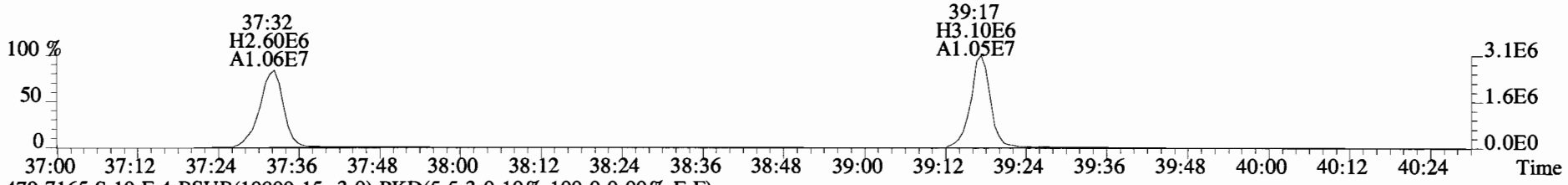
409.7788 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



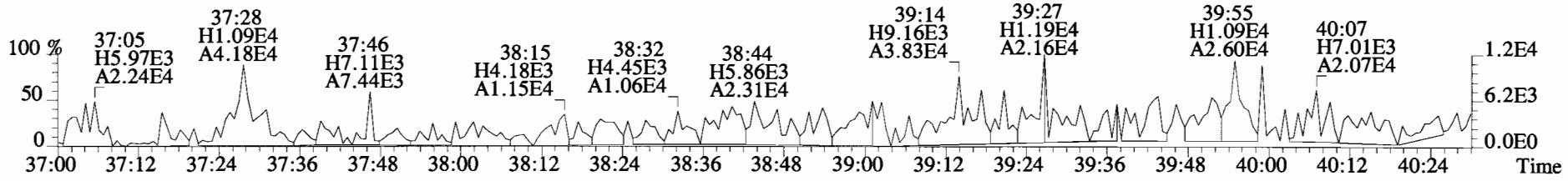
417.8253 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



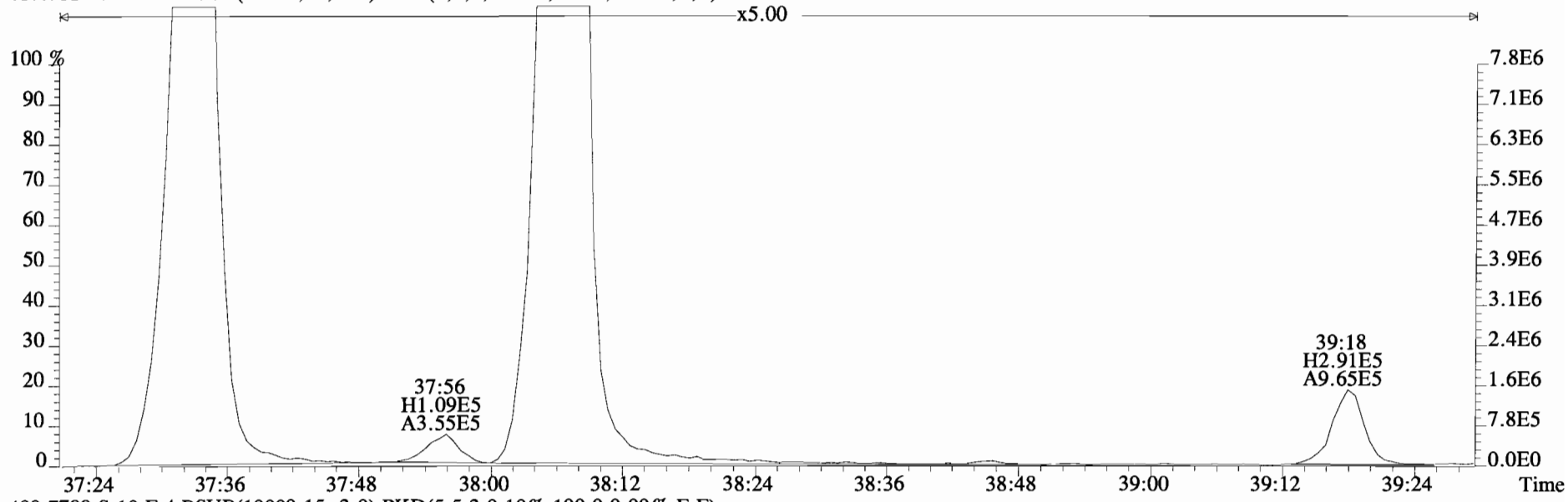
419.8220 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



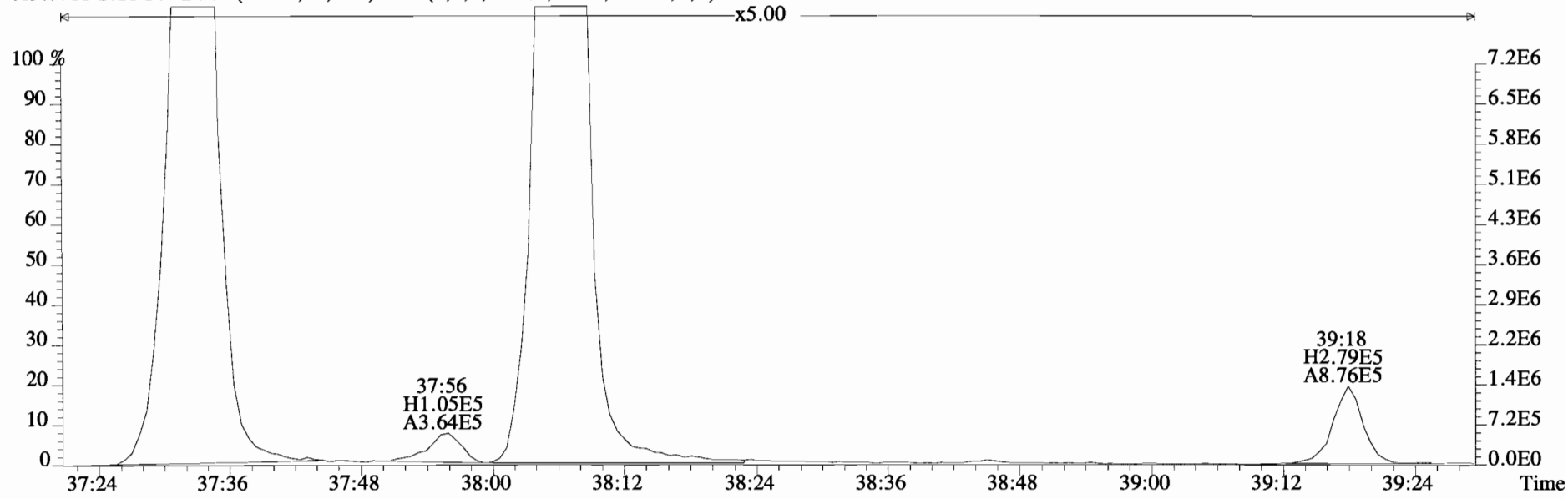
479.7165 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



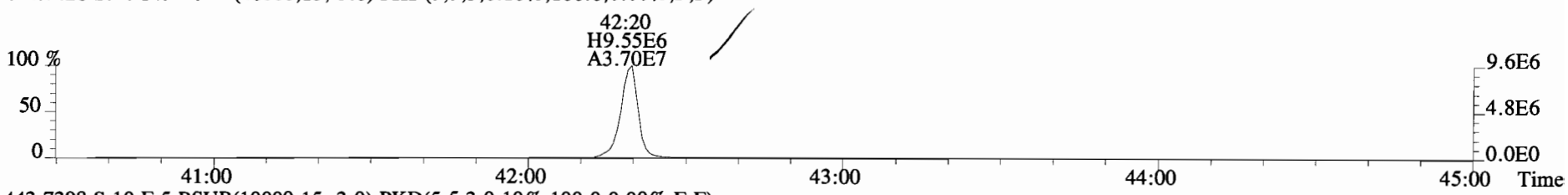
File:141014D2 #1-326 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



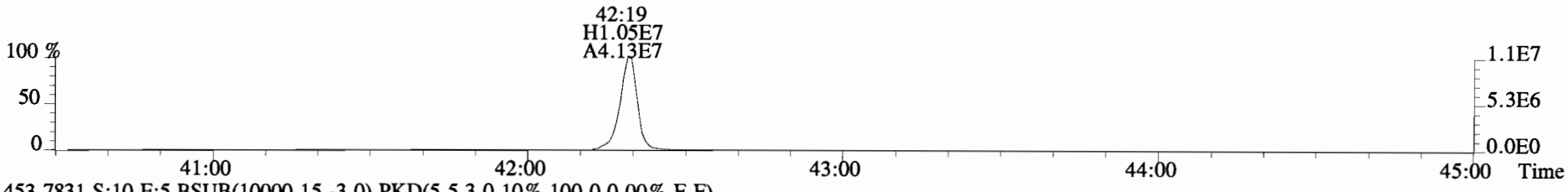
409.7788 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



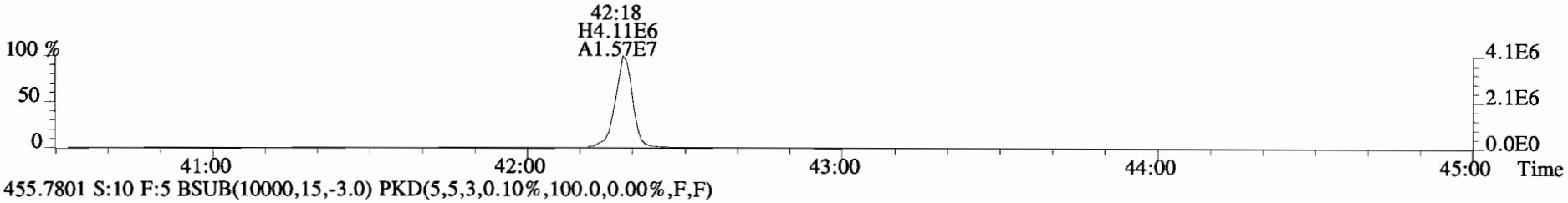
File:141014D2 #1-388 Acq:15-OCT-2014 09:37:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-7 Text:1400737-03 SP-CB-09-20141008-S 10 Exp:OCDD_DB5
441.7428 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



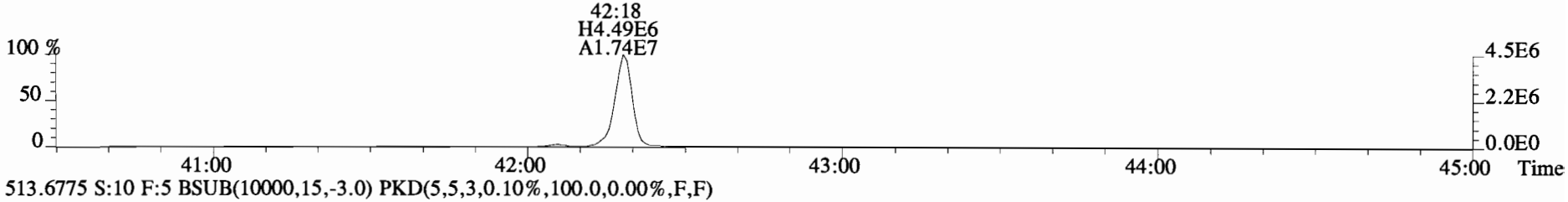
443.7398 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



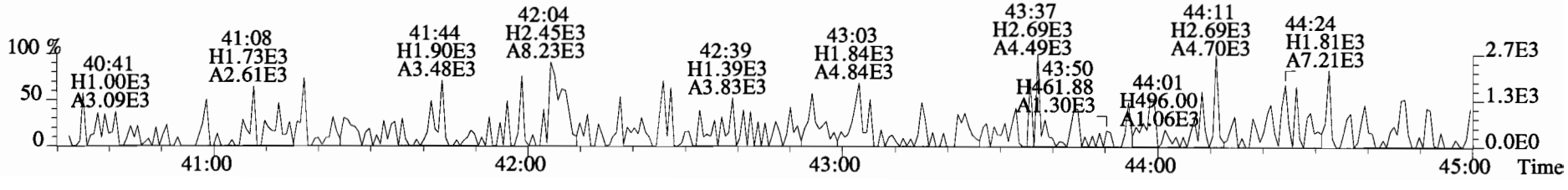
453.7831 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:10 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 Filename: 141020E1 S:5 Acq:20-OCT-14 16:23:46 ConCal: ST141020E1-1
Lab ID: B4J0088-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n	NotF¶	1.25	*		4300	2.5	2.02	*	0.996	1.006
Mono	PCB-2	*	*	n	NotF¶	1.18	*		4300	2.5	2.31	*	0.983	0.993
Mono	PCB-3	*	*	n	NotF¶	1.22	*		4300	2.5	2.24	*	0.996	1.006
Di	PCB-4/10	*	*	n	NotF¶	1.55	*		18200	2.5	8.41	*	0.998	1.008
Di	PCB-7/9	*	*	n	NotF¶	1.27	*		18200	2.5	6.98	*	0.865	0.873
Di	PCB-6	*	*	n	NotF¶	1.26	*		18200	2.5	7.03	*	0.890	0.899
Di	PCB-5/8	*	*	n	NotF¶	1.23	*		18200	2.5	7.18	*	0.906	0.916
Di	PCB-14	*	*	n	NotF¶	1.23	*		18200	2.5	6.24	*	0.949	0.959
Di	PCB-11	2.38e+06	1.53	y	25:16	1.16	34.4		*	2.5	*	1.001	0.996	1.006
Di	PCB-12/13	*	*	n	NotF¶	1.10	*		18200	2.5	7.00	*	1.010	1.020
Di	PCB-15	*	*	n	NotF¶	1.21	*		18200	2.5	6.37	*	1.024	1.034
Tri	PCB-19	*	*	n	NotF¶	1.30	*		1770	2.5	1.00	*	0.996	1.006
Tri	PCB-30	*	*	n	NotF¶	1.83	*		1770	2.5	0.708	*	1.032	1.042
Tri	PCB-18	1.26e+05	1.21	n	25:54	0.86	3.53	R	*	2.5	*	0.954	0.949	0.959
Tri	PCB-17	4.35e+04	1.36	n	26:04	0.90	1.16	R	*	2.5	*	0.960	0.955	0.965
Tri	PCB-24/27	*	*	n	NotF¶	1.18	*		1770	2.5	0.745	*	0.976	0.986
Tri	PCB-16/32	1.40e+05	1.08	y	27:09	1.03	3.26		*	2.5	*	1.000	0.995	1.005
Tri	PCB-34	*	*	n	NotF¶	1.26	*		2770	2.5	0.999	*	0.956	0.966
Tri	PCB-23	*	*	n	NotF¶	1.31	*		2770	2.5	0.960	*	0.959	0.969
Tri	PCB-29	*	*	n	NotF¶	1.33	*		2770	2.5	0.948	*	0.967	0.977
Tri	PCB-26	*	*	n	NotF¶	1.29	*		2770	2.5	0.975	*	0.974	0.984
Tri	PCB-25	*	*	n	NotF¶	1.34	*		2770	2.5	0.938	*	0.980	0.990
Tri	PCB-31	2.27e+05	0.90	y	29:01	1.42	2.94		*	2.5	*	0.997	0.992	1.002
Tri	PCB-28	1.92e+05	0.82	n	29:08	1.38	2.56	R	*	2.5	*	1.001	0.996	1.006
Tri	PCB-20/21/33	1.70e+05	1.13	y	29:46	1.31	2.39		*	2.5	*	1.023	1.017	1.027
Tri	PCB-22	7.81e+04	0.79	n	30:12	1.32	1.09	R	*	2.5	*	1.037	1.032	1.042
Tri	PCB-36	*	*	n	NotF¶	1.38	*		2770	2.5	0.939	*	0.929	0.939
Tri	PCB-39	*	*	n	NotF¶	1.42	*		2770	2.5	0.910	*	0.943	0.953
Tri	PCB-38	*	*	n	NotF¶	1.35	*		2770	2.5	0.954	*	0.967	0.976
Tri	PCB-35	*	*	n	NotF¶	1.38	*		2770	2.5	0.939	*	0.982	0.992
Tri	PCB-37	*	*	n	NotF¶	1.39	*		2770	2.5	0.929	*	0.996	1.006
Tetra	PCB-54	*	*	n	NotF¶	1.20	*		2680	2.5	1.29	*	0.996	1.006
Tetra	PCB-50	*	*	n	NotF¶	0.97	*		2680	2.5	1.60	*	1.037	1.047
Tetra	PCB-53	*	*	n	NotF¶	1.19	*		2680	2.5	1.57	*	0.941	0.951
Tetra	PCB-51	*	*	n	NotF¶	1.15	*		2680	2.5	1.62	*	0.952	0.962
Tetra	PCB-45	*	*	n	NotF¶	0.97	*		2680	2.5	1.94	*	0.966	0.976
Tetra	PCB-46	*	*	n	NotF¶	0.95	*		2680	2.5	1.97	*	0.982	0.992

Integrations by:

Analyst: DMS

Date: 10/24/14

Reviewed by: [signature] Date: 10/25/14

Client ID: Method Blank Filename: 141020E1 S:5 Acq:20-OCT-14 16:23:46 ConCal: ST141020E1-1
Lab ID: B4J0088-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	1.51e+05	0.85	y	31:32	1.28	3.92		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-73	*	*	n	NotFd	1.37	*		2680	2.5	1.36	*	1.000	1.010
Tetra	PCB-43/49	*	*	n	NotFd	1.11	*		2680	2.5	1.68	*	1.005	1.015
Tetra	PCB-47	*	*	n	NotFd	1.13	*		2680	2.5	1.65	*	0.996	1.006
Tetra	PCB-48/75	*	*	n	NotFd	1.30	*		2680	2.5	1.43	*	0.999	1.009
Tetra	PCB-65	*	*	n	NotFd	1.33	*		2680	2.5	1.40	*	1.007	1.017
Tetra	PCB-62	*	*	n	NotFd	1.29	*		2680	2.5	1.44	*	1.011	1.021
Tetra	PCB-44	*	*	n	NotFd	0.94	*		2680	2.5	1.98	*	1.020	1.030
Tetra	PCB-42/59	*	*	n	NotFd	1.22	*		2680	2.5	1.53	*	1.028	1.038
Tetra	PCB-41/64/71/72	1.22e+05	0.75	y	33:40	1.31	3.05		*	2.5	*	1.051	1.046	1.056
Tetra	PCB-68	*	*	n	NotFd	1.49	*		2680	2.5	1.26	*	1.054	1.064
Tetra	PCB-40	*	*	n	NotFd	0.82	*		2680	2.5	2.28	*	1.061	1.071
Tetra	PCB-57	*	*	n	NotFd	1.11	*		2680	2.5	1.23	*	0.965	0.975
Tetra	PCB-67	*	*	n	NotFd	1.07	*		2680	2.5	1.27	*	0.974	0.984
Tetra	PCB-58	*	*	n	NotFd	1.10	*		2680	2.5	1.24	*	0.977	0.987
Tetra	PCB-63	*	*	n	NotFd	1.12	*		2680	2.5	1.22	*	0.982	0.992
Tetra	PCB-74	7.23e+04	0.89	n	35:21	1.20	1.38	R	*	2.5	*	0.995	0.990	1.000
Tetra	PCB-61/70	1.23e+05	1.02	n	35:33	1.08	2.62	R	*	2.5	*	1.000	0.994	1.004
Tetra	PCB-76/66	8.24e+04	1.00	n	35:45	1.14	1.67	R	*	2.5	*	1.006	1.001	1.011
Tetra	PCB-80	*	*	n	NotFd	1.28	*		2680	2.5	1.04	*	0.996	1.006
Tetra	PCB-55	*	*	n	NotFd	1.11	*		2680	2.5	1.20	*	1.005	1.015
Tetra	PCB-56/60	7.63e+04	0.78	y	36:48	1.09	1.57		*	2.5	*	1.024	1.018	1.028
Tetra	PCB-79	*	*	n	NotFd	1.12	*		2680	2.5	1.18	*	1.048	1.058
Tetra	PCB-78	*	*	n	NotFd	1.24	*		2680	2.5	1.23	*	0.982	0.992
Tetra	PCB-81	*	*	n	NotFd	1.38	*		2680	2.5	1.10	*	0.995	1.005
Tetra	PCB-77	*	*	n	NotFd	1.21	*		2680	2.5	1.21	*	0.995	1.005
Penta	PCB-104	*	*	n	NotFd	1.26	*		2330	2.5	3.25	*	0.996	1.006
Penta	PCB-96	*	*	n	NotFd	1.09	*		2330	2.5	3.74	*	1.034	1.044
Penta	PCB-103	*	*	n	NotFd	0.93	*		2330	2.5	4.38	*	1.050	1.060
Penta	PCB-100	*	*	n	NotFd	1.00	*		2330	2.5	4.08	*	1.061	1.071
Penta	PCB-94	*	*	n	NotFd	1.11	*		2330	2.5	4.73	*	0.981	0.991
Penta	PCB-95/98/102	1.34e+05	1.58	y	35:52	1.21	7.49		*	2.5	*	1.001	0.994	1.004
Penta	PCB-93	*	*	n	NotFd	1.13	*		2330	2.5	4.64	*	0.998	1.008
Penta	PCB-88/91	*	*	n	NotFd	1.02	*		2330	2.5	5.14	*	1.006	1.016
Penta	PCB-121	*	*	n	NotFd	1.90	*		2330	2.5	2.75	*	1.009	1.019
Penta	PCB-84/92	*	*	n	NotFd	1.05	*		2330	2.5	4.55	*	0.986	0.996
Penta	PCB-89	*	*	n	NotFd	1.02	*		2330	2.5	4.71	*	0.991	1.001

Analyst: DMS

Date: 10/24/14

Client ID: Method Blank Filename: 141020E1 S:5 Acq:20-OCT-14 16:23:46 ConCal: ST141020E1-1
Lab ID: B4J0088-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	1.63e+05	1.61	y	37:33	1.19	8.61		*	2.5	*	1.001	0.996	1.006
Penta	PCB-113	*	*	n	NotFnd	1.35	*		2330	2.5	3.54	*	1.002	1.012
Penta	PCB-99	*	*	n	NotFnd	1.29	*		2330	2.5	3.72	*	1.005	1.015
Penta	PCB-119	*	*	n	NotFnd	1.72	*		2330	2.5	3.13	*	0.982	0.992
Penta	PCB-108/112	*	*	n	NotFnd	1.29	*		2330	2.5	4.19	*	0.986	0.996
Penta	PCB-83	*	*	n	NotFnd	1.52	*		2330	2.5	3.55	*	0.991	1.001
Penta	PCB-97	*	*	n	NotFnd	1.25	*		2330	2.5	4.32	*	0.996	1.006
Penta	PCB-86	*	*	n	NotFnd	1.02	*		2330	2.5	5.28	*	1.000	1.010
Penta	PCB-87/117/125	*	*	n	NotFnd	1.56	*		2330	2.5	3.46	*	1.002	1.012
Penta	PCB-111/115	*	*	n	NotFnd	1.75	*		2330	2.5	3.08	*	1.007	1.017
Penta	PCB-85/116	*	*	n	NotFnd	1.30	*		2330	2.5	4.14	*	1.010	1.020
Penta	PCB-120	*	*	n	NotFnd	1.78	*		2330	2.5	3.03	*	1.016	1.026
Penta	PCB-110	8.71e+04	1.58	y	39:47	1.68	3.61		*	2.5	*	1.025	1.020	1.030
Penta	PCB-82	*	*	n	NotFnd	0.74	*		2330	2.5	5.31	*	0.972	0.982
Penta	PCB-124	*	*	n	NotFnd	1.32	*		2330	2.5	2.96	*	0.988	0.998
Penta	PCB-107/109	*	*	n	NotFnd	1.22	*		2330	2.5	3.21	*	0.991	1.001
Penta	PCB-123	*	*	n	NotFnd	1.22	*		2330	2.5	3.22	*	0.995	1.005
Penta	PCB-106/118	6.84e+04	1.58	y	41:35	1.22	2.75		*	2.5	*	1.001	0.996	1.006
Penta	PCB-114	*	*	n	NotFnd	1.36	*		2620	2.5	1.76	*	0.995	1.005
Penta	PCB-122	*	*	n	NotFnd	1.24	*		2620	2.5	1.93	*	0.999	1.009
Penta	PCB-105	*	*	n	NotFnd	1.28	*		2620	2.5	1.81	*	0.995	1.005
Penta	PCB-127	*	*	n	NotFnd	1.14	*		2620	2.5	1.82	*	0.995	1.005
Penta	PCB-126	*	*	n	NotFnd	1.28	*		2620	2.5	2.04	*	0.995	1.005
Hexa	PCB-155	*	*	n	NotFnd	1.14	*		2150	2.5	4.92	*	0.966	1.006
Hexa	PCB-150	*	*	n	NotFnd	1.06	*		2150	2.5	5.25	*	1.030	1.040
Hexa	PCB-152	*	*	n	NotFnd	1.10	*		2150	2.5	5.08	*	1.043	1.053
Hexa	PCB-145	*	*	n	NotFnd	1.09	*		2150	2.5	5.11	*	1.055	1.065
Hexa	PCB-136	*	*	n	NotFnd	1.08	*		2150	2.5	5.15	*	1.064	1.074
Hexa	PCB-148	*	*	n	NotFnd	0.74	*		2150	2.5	7.53	*	1.066	1.076
Hexa	PCB-154	*	*	n	NotFnd	0.88	*		2150	2.5	6.32	*	1.079	1.089
Hexa	PCB-151	*	*	n	NotFnd	0.81	*		2150	2.5	6.90	*	1.097	1.107
Hexa	PCB-135	*	*	n	NotFnd	0.78	*		2150	2.5	7.16	*	1.101	1.113
Hexa	PCB-144	*	*	n	NotFnd	0.82	*		2150	2.5	6.81	*	1.105	1.116
Hexa	PCB-147	*	*	n	NotFnd	0.83	*		2150	2.5	6.74	*	1.011	1.120
Hexa	PCB-139/149	9.49e+04	1.47	n	41:32	0.84	10.3	R	*	2.5	*	1.121	1.115	1.127
Hexa	PCB-140	*	*	n	NotFnd	0.79	*		2150	2.5	7.11	*	1.120	1.132
Hexa	PCB-134/143	*	*	n	NotFnd	0.93	*		2300	2.5	2.67	*	0.970	0.980

Analyst: DMJ

Date: 10/24/14

Client ID: Method Blank Filename: 141020E1 S:5 Acq:20-OCT-14 16:23:46 ConCal: ST141020E1-1
Lab ID: B4J0088-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Hexa	PCB-133/142	*	*	n NotF	0.95	*		2300	2.5	2.61	*	0.977-0.987
Hexa	PCB-131	*	*	n NotF	0.91	*		2300	2.5	2.70	*	0.981-0.991
Hexa	PCB-146/165	*	*	n NotF	1.16	*		2300	2.5	2.14	*	0.986-0.996
Hexa	PCB-132/161	*	*	n NotF	1.11	*		2300	2.5	2.22	*	0.992-1.002
Hexa	PCB-153	2.82e+05	1.06	y 43:15	1.18	8.97		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-168	*	*	n NotF	1.37	*		2300	2.5	1.80	*	1.000-1.010
Hexa	PCB-141	*	*	n NotF	0.97	*		2300	2.5	2.74	*	0.996-1.005
Hexa	PCB-137	*	*	n NotF	1.07	*		2300	2.5	2.49	*	1.004-1.014
Hexa	PCB-130	*	*	n NotF	0.85	*		2300	2.5	3.15	*	1.007-1.017
Hexa	PCB-138/163/164	2.39e+05	1.20	y 44:51	1.23	7.52		*	2.5	*	1.001	0.996-1.006
Hexa	PCB-158/160	*	*	n NotF	1.29	*		2300	2.5	2.01	*	1.001-1.011
Hexa	PCB-129	*	*	n NotF	0.92	*		2300	2.5	2.81	*	1.007-1.017
Hexa	PCB-166	*	*	n NotF	1.12	*		2300	2.5	2.06	*	0.988-0.998
Hexa	PCB-159	*	*	n NotF	1.16	*		2300	2.5	1.97	*	0.995-1.005
Hexa	PCB-128/162	*	*	n NotF	1.02	*		2300	2.5	2.26	*	1.002-1.012
Hexa	PCB-167	*	*	n NotF	1.06	*		2300	2.5	1.98	*	0.995-1.005
Hexa	PCB-156	*	*	n NotF	1.18	*		2300	2.5	1.87	*	0.995-1.005
Hexa	PCB-157	*	*	n NotF	1.08	*		2300	2.5	2.01	*	0.995-1.005
Hexa	PCB-169	*	*	n NotF	1.11	*		2300	2.5	2.18	*	0.995-1.005
Hepta	PCB-188	*	*	n NotF	1.40	*		1950	2.5	1.67	*	0.995-1.005
Hepta	PCB-184	*	*	n NotF	1.24	*		1950	2.5	1.90	*	1.006-1.016
Hepta	PCB-179	*	*	n NotF	1.30	*		1950	2.5	1.80	*	1.024-1.034
Hepta	PCB-176	*	*	n NotF	1.36	*		1950	2.5	1.73	*	1.035-1.045
Hepta	PCB-186	*	*	n NotF	1.28	*		1950	2.5	1.84	*	1.049-1.059
Hepta	PCB-178	*	*	n NotF	0.94	*		1950	2.5	2.51	*	1.061-1.071
Hepta	PCB-175	*	*	n NotF	0.97	*		1950	2.5	2.43	*	1.069-1.079
Hepta	PCB-182/187	*	*	n NotF	1.01	*		1950	2.5	2.32	*	1.073-1.083
Hepta	PCB-183	*	*	n NotF	1.08	*		1950	2.5	2.17	*	1.080-1.090
Hepta	PCB-185	*	*	n NotF	1.34	*		1950	2.5	2.44	*	0.951-0.961
Hepta	PCB-174	*	*	n NotF	1.34	*		1950	2.5	2.44	*	0.958-0.968
Hepta	PCB-181	*	*	n NotF	1.36	*		1950	2.5	2.40	*	0.961-0.971
Hepta	PCB-177	*	*	n NotF	1.24	*		1950	2.5	2.64	*	0.964-0.974
Hepta	PCB-171	*	*	n NotF	1.31	*		1950	2.5	2.49	*	0.970-0.980
Hepta	PCB-173	*	*	n NotF	1.16	*		1950	2.5	2.82	*	0.979-0.989
Hepta	PCB-172	*	*	n NotF	1.22	*		1950	2.5	2.68	*	0.988-0.998
Hepta	PCB-192	*	*	n NotF	1.53	*		1950	2.5	2.14	*	0.991-1.001
Hepta	PCB-180	*	*	n NotF	1.43	*		1950	2.5	2.29	*	0.995-1.005

Analyst: DMS

Date: 10/24/14

Client ID: Method Blank Filename: 141020E1 S:5 Acq:20-OCT-14 16:23:46 ConCal: ST141020E1-1
Lab ID: B4J0088-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	*	*	n	NotF	1.65	*		1950	2.5	1.98	*	0.999	1.009
Hepta	PCB-191	*	*	n	NotF	1.67	*		1950	2.5	1.96	*	1.004	1.014
Hepta	PCB-170	*	*	n	NotF	1.50	*		1950	2.5	2.54	*	0.995	1.005
Hepta	PCB-190	*	*	n	NotF	2.02	*		1950	2.5	1.89	*	0.998	1.008
Hepta	PCB-189	*	*	n	NotF	1.54	*		1950	2.5	1.88	*	0.995	1.005
Octa	PCB-202	*	*	n	NotF	1.04	*		1880	2.5	3.93	*	0.995	1.005
Octa	PCB-201	*	*	n	NotF	1.10	*		1880	2.5	3.71	*	1.006	1.016
Octa	PCB-204	*	*	n	NotF	0.99	*		1880	2.5	4.12	*	1.009	1.019
Octa	PCB-197	*	*	n	NotF	1.07	*		1880	2.5	3.81	*	1.015	1.025
Octa	PCB-200	*	*	n	NotF	1.02	*		1880	2.5	4.02	*	1.032	1.044
Octa	PCB-198	*	*	n	NotF	0.74	*		1880	2.5	5.50	*	1.058	1.068
Octa	PCB-199	*	*	n	NotF	0.73	*		1880	2.5	5.61	*	1.060	1.070
Octa	PCB-196/203	*	*	n	NotF	0.77	*		1880	2.5	5.29	*	1.066	1.076
Octa	PCB-195	*	*	n	NotF	1.20	*		1600	2.5	1.67	*	0.979	0.989
Octa	PCB-194	*	*	n	NotF	1.25	*		1600	2.5	1.61	*	0.995	1.005
Octa	PCB-205	*	*	n	NotF	1.41	*		1600	2.5	1.42	*	1.001	1.011
Nona	PCB-208	*	*	n	NotF	0.96	*		1430	2.5	1.22	*	0.995	1.005
Nona	PCB-207	*	*	n	NotF	0.92	*		1430	2.5	1.28	*	1.001	1.011
Nona	PCB-206	*	*	n	NotF	1.03	*		1430	2.5	2.68	*	0.995	1.005
Deca	PCB-209	*	*	n	NotF	1.18	*		1190	2.5	3.84	*	0.995	1.005

Analyst: DMS

Date: 10/24/14

Client ID: Method Blank Filename: 141020E1 S:5 Acq:20-OCT-14 16:23:46 ConCal: ST141020E1-1
Lab ID: B4J0088-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	*	*	n	NotFnd	1.22	*	
Total Di-PCB	2.38e+06	1.53	y	25:16	1.21	34.4016	
Total Tri-PCB	1.40e+05	1.08	y	27:09	1.16	3.26268	
Total Tri-PCB	3.97e+05	0.90	y	29:01	1.35	5.32678	Sum:8.58946
Total Tetra-PCB	3.49e+05	0.85	y	31:32	1.17	8.54143	
Total Penta-PCB	4.52e+05	1.58	y	35:52	1.21	22.4512	
Total Penta-PCB	*	*	n	NotFnd	1.26	*	Sum:22.4512
Total Hexa-PCB	*	*	n	NotFnd	0.92	*	
Total Hexa-PCB	5.21e+05	1.06	y	43:15	1.08	16.4883	Sum:16.4883
Total Hepta-PCB	*	*	n	NotFnd	1.27	*	
Total Octa-PCB	*	*	n	NotFnd	0.92	*	
Total Octa-PCB	*	*	n	NotFnd	1.29	*	Sum:0.00000
Total Nona-PCB	*	*	n	NotFnd	0.96	*	
Total Deca-PCB	*	*	n	NotFnd	1.18	*	

Total PCB Conc:114.775133000

Integrations
by
Analyst: DMS

Date: 10/24/14

Client ID: Method Blank Filename: 141020E1 S:5 Acq:20-OCT-14 16:23:46 ConCal: ST141020E1-1
Lab ID: B4J0088-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:1.0000 EndCAL: NA

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.09e+08	3.16	y	0.89	16:07	0.621	0.622	0.628	1300	64.8
13C-PCB-3	1.09e+08	3.35	y	0.93	18:44	0.722	0.721	0.729	1250	62.5
13C-PCB-4	6.29e+07	1.59	y	0.55	20:05	0.773	0.772	0.780	1220	61.0
13C-PCB-9	9.54e+07	1.62	y	0.83	21:52	0.842	0.840	0.848	1230	61.4
13C-PCB-11	1.20e+08	1.60	y	0.94	25:15	0.973	0.968	0.978	1360	67.8
13C-PCB-19	5.28e+07	1.11	y	0.53	24:14	0.934	0.929	0.939	1050	52.7
13C-PCB-28	1.09e+08	1.07	y	0.89	29:07	1.004	0.999	1.009	1470	73.5
13C-PCB-32	8.34e+07	1.12	y	0.81	27:09	1.046	1.041	1.051	1090	54.5
13C-PCB-37	1.10e+08	1.08	y	0.83	32:59	1.137	1.131	1.143	1590	79.7
13C-PCB-47	6.07e+07	0.80	y	0.74	32:02	0.871	0.867	0.875	1390	69.6
13C-PCB-52	6.03e+07	0.81	y	0.71	31:31	0.857	0.853	0.861	1450	72.7
13C-PCB-54	6.98e+07	0.81	y	0.85	27:60	0.761	0.758	0.766	1400	70.1
13C-PCB-70	8.68e+07	0.80	y	0.94	35:32	0.966	0.961	0.971	1570	78.4
13C-PCB-77	8.60e+07	0.82	y	0.89	39:40	1.078	1.073	1.083	1640	82.1
13C-PCB-80	8.94e+07	0.80	y	0.96	35:57	0.977	0.972	0.982	1580	79.2
13C-PCB-81	8.06e+07	0.82	y	0.84	39:04	1.062	1.057	1.067	1640	82.0
13C-PCB-95	2.95e+07	1.66	y	0.74	35:50	0.913	0.908	0.918	1550	77.5
13C-PCB-97	2.88e+07	1.68	y	0.69	38:50	0.989	0.984	0.994	1630	81.6
13C-PCB-101	3.18e+07	1.69	y	0.79	37:31	0.956	0.951	0.961	1580	79.1
13C-PCB-104	3.80e+07	1.73	y	1.00	32:41	0.833	0.829	0.837	1490	74.7
13C-PCB-105	7.58e+07	1.61	y	1.24	43:05	0.929	0.924	0.934	2240	112
13C-PCB-114	7.28e+07	1.63	y	1.21	42:13	0.910	0.905	0.915	2210	110
13C-PCB-118	4.07e+07	1.69	y	0.98	41:34	1.059	1.054	1.064	1620	80.8
13C-PCB-123	3.98e+07	1.68	y	0.95	41:23	1.054	1.049	1.059	1640	81.9
13C-PCB-126	7.25e+07	1.64	y	1.16	45:19	0.977	0.972	0.982	2280	114
13C-PCB-127	8.39e+07	1.63	y	1.34	43:25	0.936	0.931	0.941	2290	114
13C-PCB-138	5.19e+07	1.32	y	1.04	44:49	0.966	0.961	0.971	1820	91.0
13C-PCB-141	4.97e+07	1.30	y	1.07	43:59	0.948	0.943	0.953	1700	84.9
13C-PCB-153	5.34e+07	1.28	y	1.11	43:14	0.932	0.927	0.937	1760	87.8
13C-PCB-155	2.18e+07	1.30	y	0.83	37:04	0.944	0.939	0.949	1030	51.4
13C-PCB-156	6.13e+07	1.29	y	1.24	48:05	1.037	1.032	1.042	1800	90.2
13C-PCB-157	6.41e+07	1.32	y	1.31	48:21	1.042	1.037	1.047	1790	89.5
13C-PCB-159	5.87e+07	1.32	y	1.20	46:06	0.994	0.989	0.999	1790	89.6
13C-PCB-167	6.50e+07	1.30	y	1.32	46:47	1.009	1.004	1.014	1800	90.0
13C-PCB-169	5.82e+07	1.29	y	1.22	50:32	1.090	1.082	1.092	1750	87.7
13C-PCB-170	1.79e+07	0.46	y	0.54	50:55	1.098	1.089	1.101	1230	61.3
13C-PCB-180	2.32e+07	0.47	y	0.67	49:22	1.064	1.059	1.069	1260	63.1
13C-PCB-188	3.04e+07	0.47	y	0.94	42:52	0.924	0.919	0.929	1190	59.5
13C-PCB-189	2.53e+07	0.47	y	0.72	52:28	1.131	1.120	1.132	1300	64.8
13C-PCB-194	3.92e+07	0.94	y	0.81	54:00	0.995	0.990	1.000	1690	84.3
13C-PCB-202	2.25e+07	0.96	y	0.83	48:18	1.041	1.036	1.046	991	49.5
13C-PCB-206	2.73e+07	0.78	y	0.66	55:37	1.025	1.021	1.031	1450	72.3
13C-PCB-208	4.53e+07	0.78	y	1.12	53:16	0.981	0.976	0.986	1410	70.3
13C-PCB-209	1.99e+07	1.25	y	0.61	56:57	1.049	1.044	1.054	1130	56.7

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.20e+08	0.80	y	1.01	37:50	1.028	1.023	1.033	2040	102
13C-PCB-178	2.70e+07	0.47	y	0.63	45:39	0.984	0.979	0.989	1570	78.5

PS vs. IS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.20e+08	0.80	y	1.20	37:50	0.968	0.963	0.973	2490	124
13C-PCB-178	2.70e+07	0.47	y	0.94	45:39	0.925	0.920	0.930	2490	124

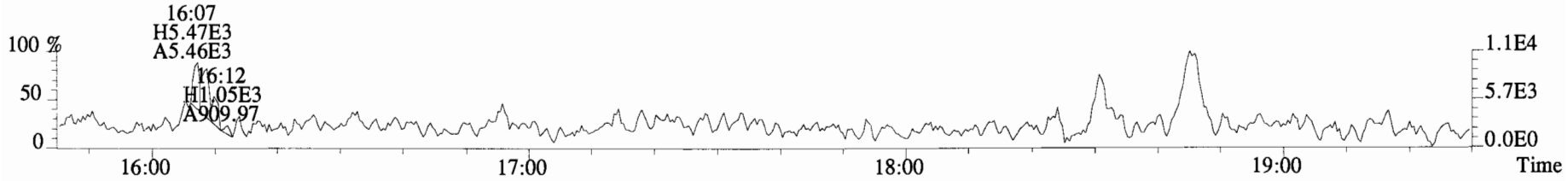
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.88e+08	1.60	y	1.00	25:58	2000
13C-PCB-31	1.67e+08	1.06	y	1.00	29:00	2000
13C-PCB-60	1.17e+08	0.81	y	1.00	36:47	2000
13C-PCB-111	5.11e+07	1.70	y	1.00	39:15	2000
13C-PCB-128	5.46e+07	1.30	y	1.00	46:23	2000
13C-PCB-205	5.74e+07	0.92	y	1.00	54:16	2000

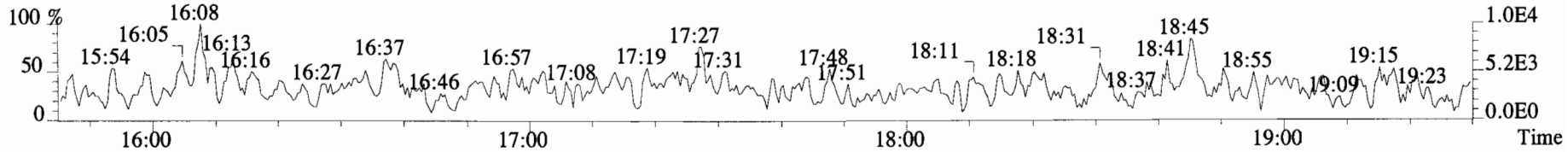
Analyst: DMS

Date: 10/24/14

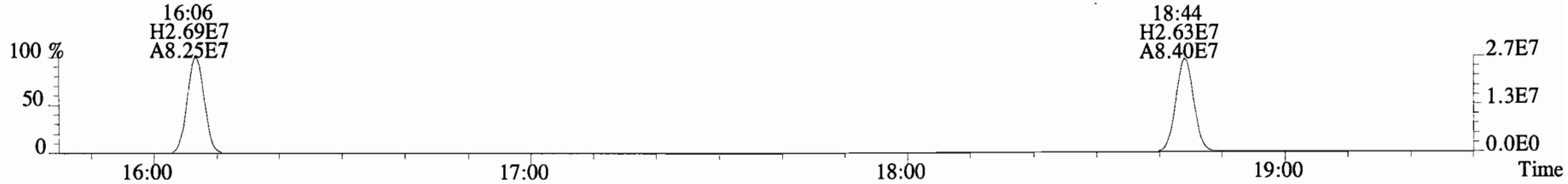
File:141020E1 #1-728 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
188.0393 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3156.0,0.00%,F,F)



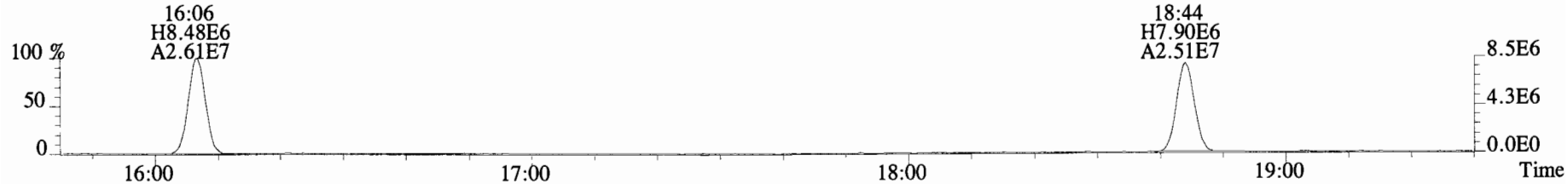
190.0363 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4304.0,0.00%,F,F)



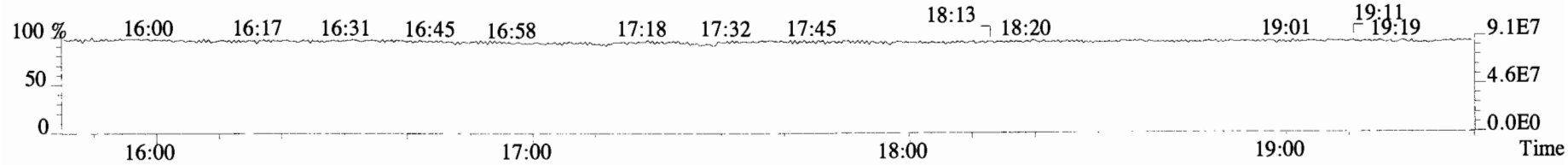
200.0795 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6908.0,0.00%,F,F)



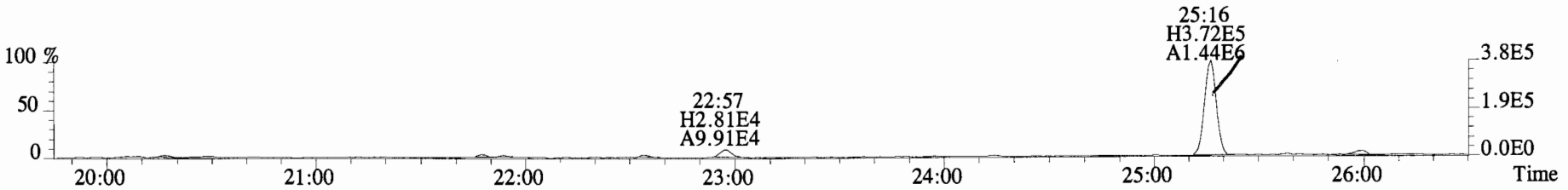
202.0766 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,80144.0,0.00%,F,F)



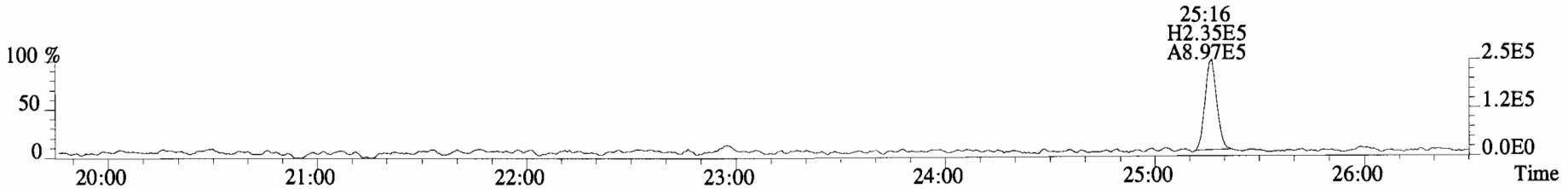
180.9880 S:5



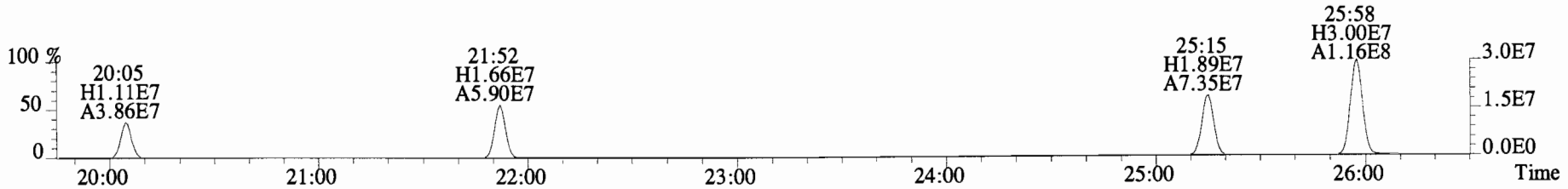
File:141020E1 #1-758 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
222.0003 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3580.0,0.00%,F,F)



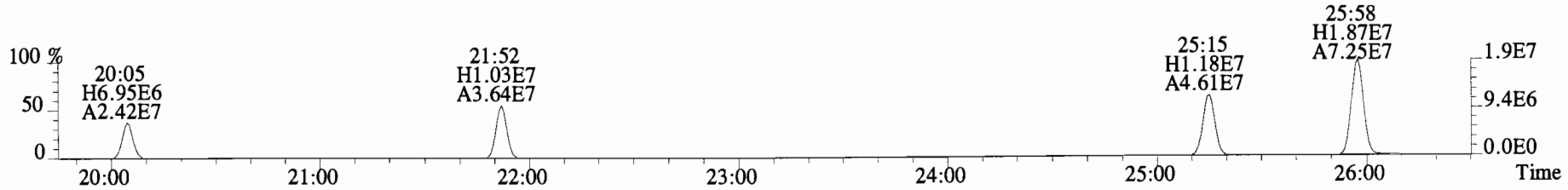
223.9974 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18212.0,0.00%,F,F)



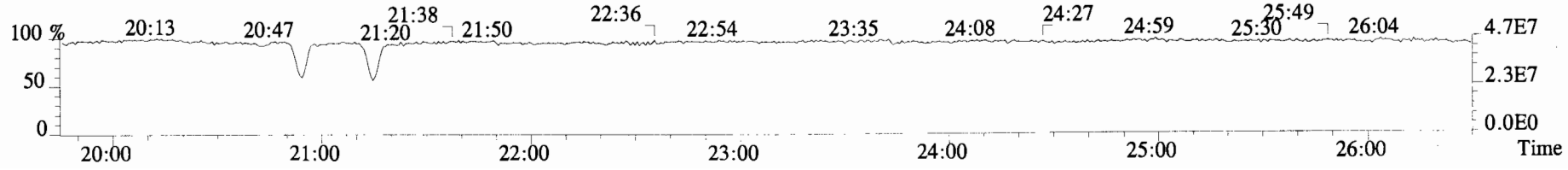
234.0406 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6316.0,0.00%,F,F)



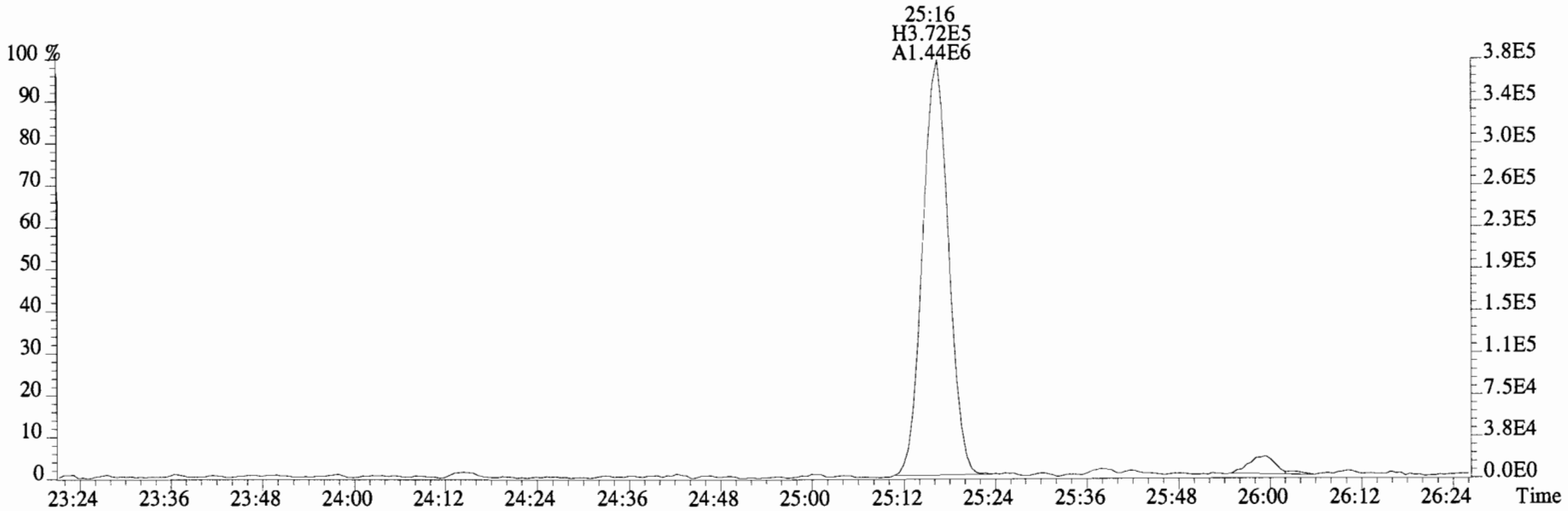
236.0376 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5748.0,0.00%,F,F)



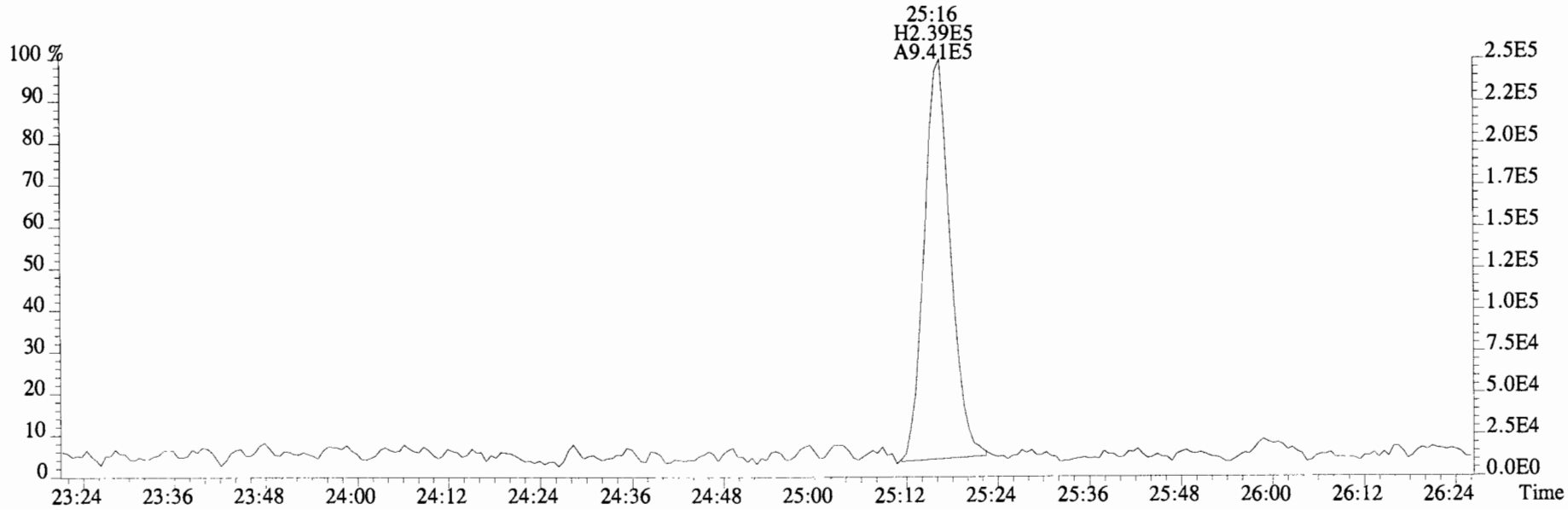
230.9856 S:5 F:2



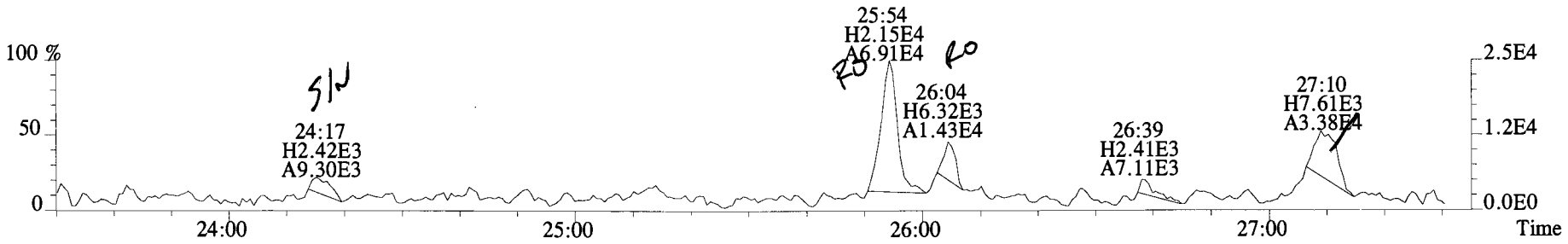
File:141020E1 #1-758 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
222.0003 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3580.0,0.00%,F,F)



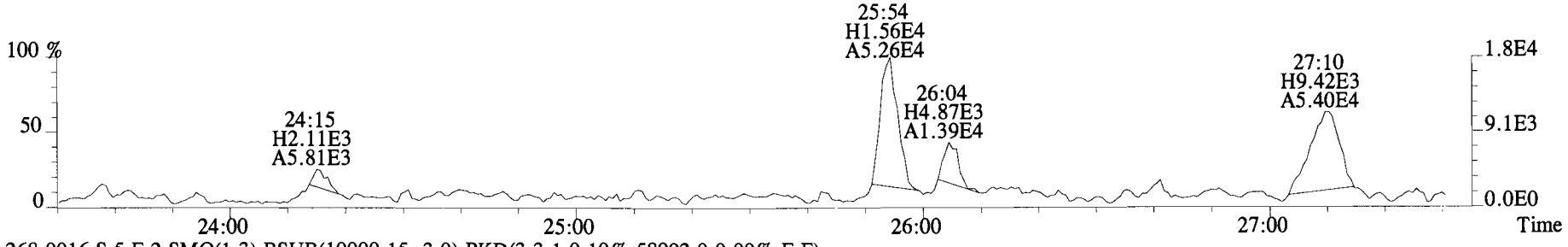
223.9974 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18212.0,0.00%,F,F)



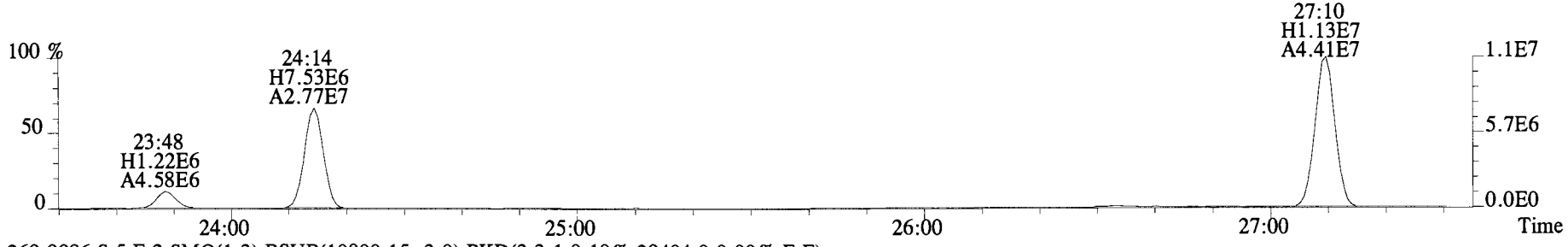
File:141020E1 #1-758 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2784.0,0.00%,F,F)



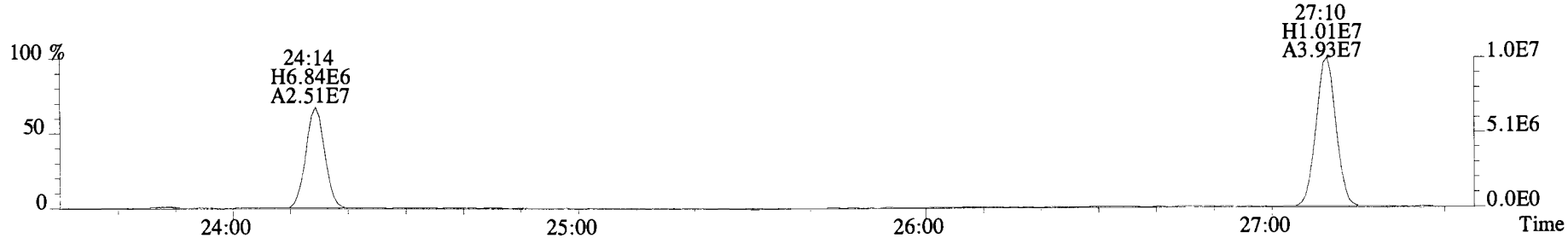
257.9584 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1768.0,0.00%,F,F)



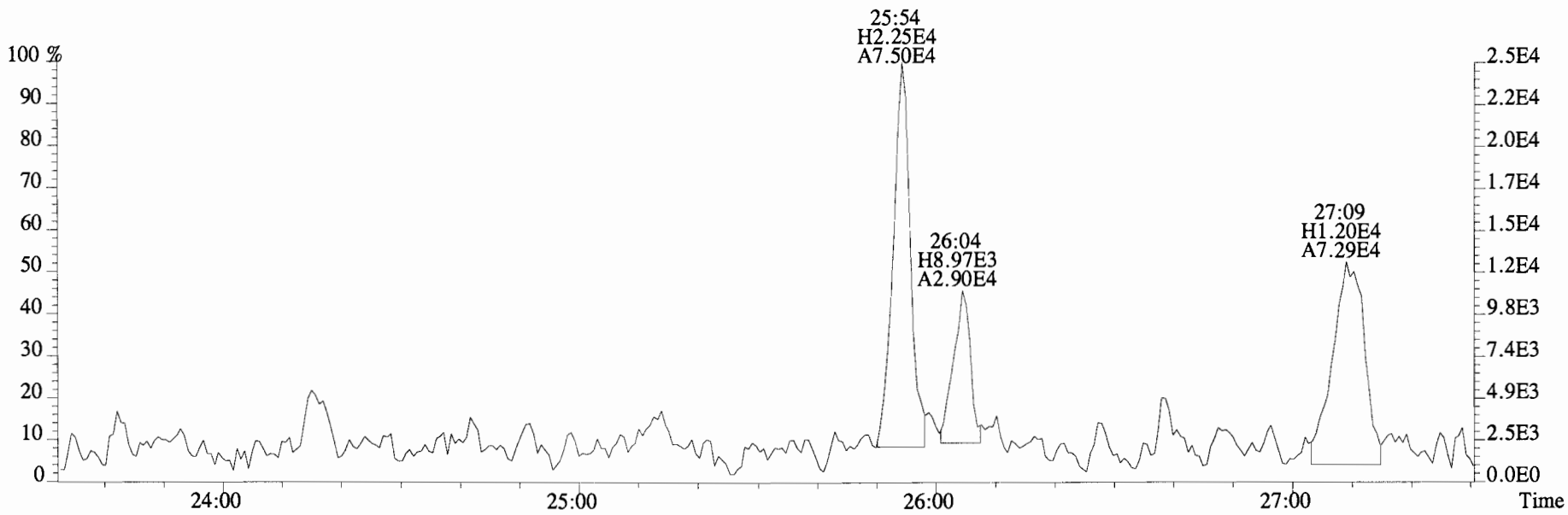
268.0016 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,58992.0,0.00%,F,F)



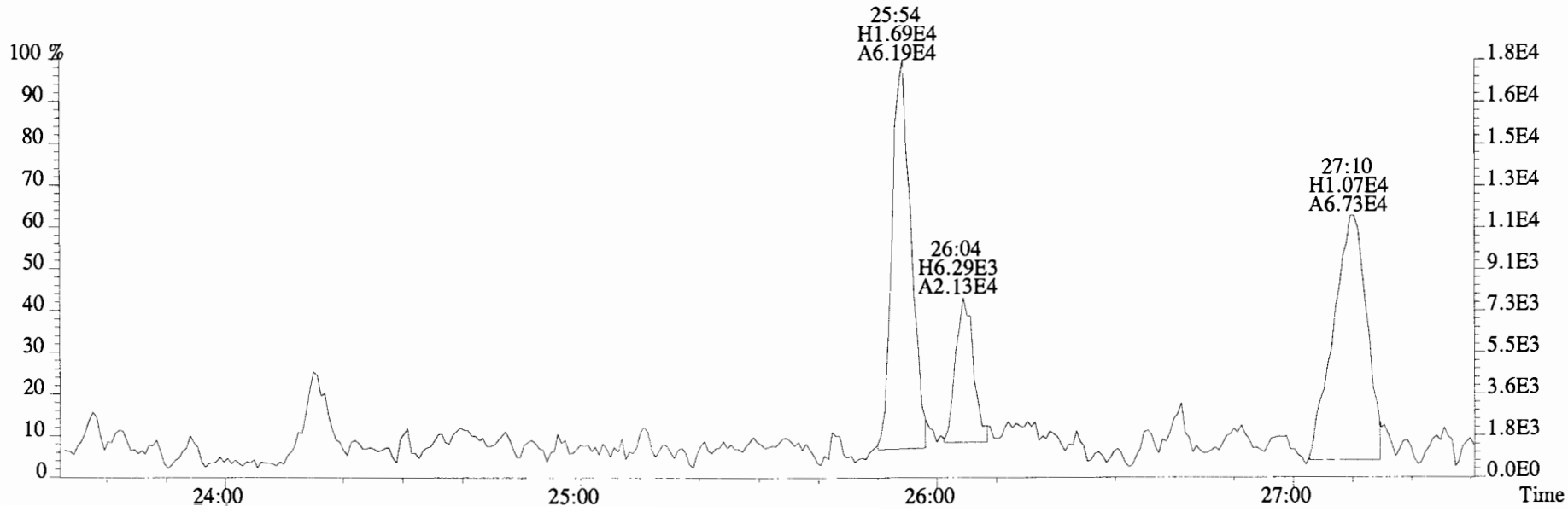
269.9986 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,29404.0,0.00%,F,F)



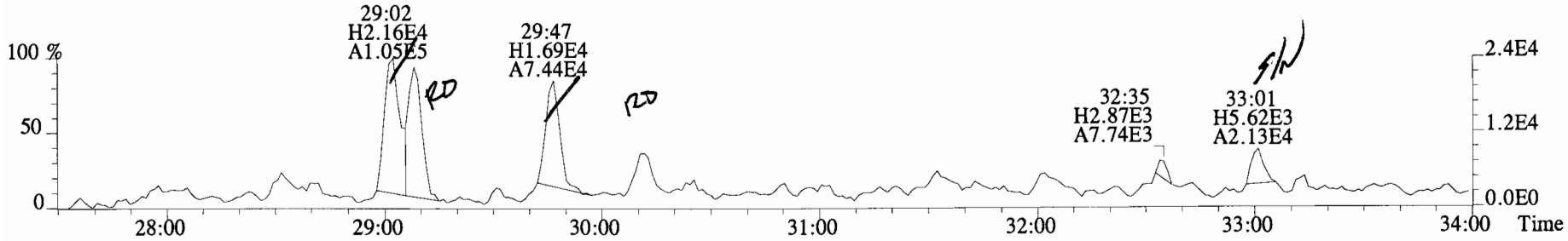
File:141020E1 #1-758 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2784.0,0.00%,F,F)



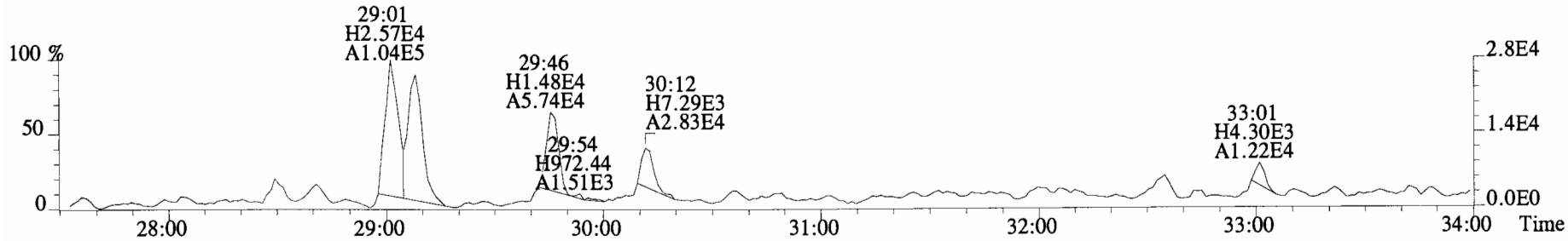
257.9584 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1768.0,0.00%,F,F)



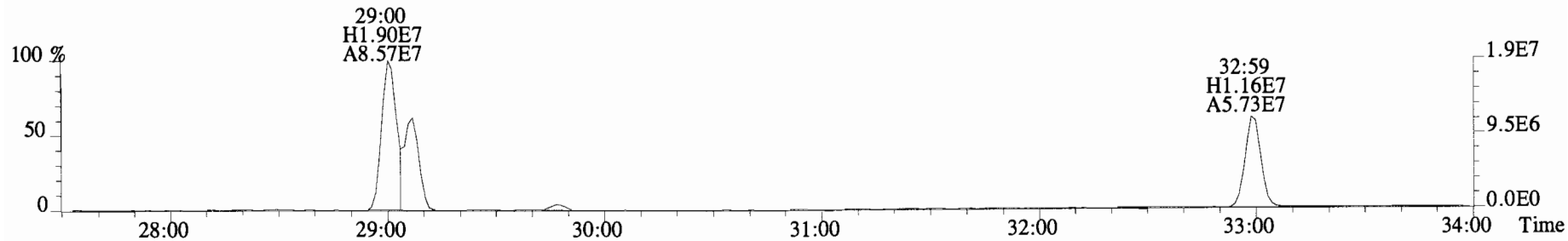
File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3372.0,0.00%,F,F)



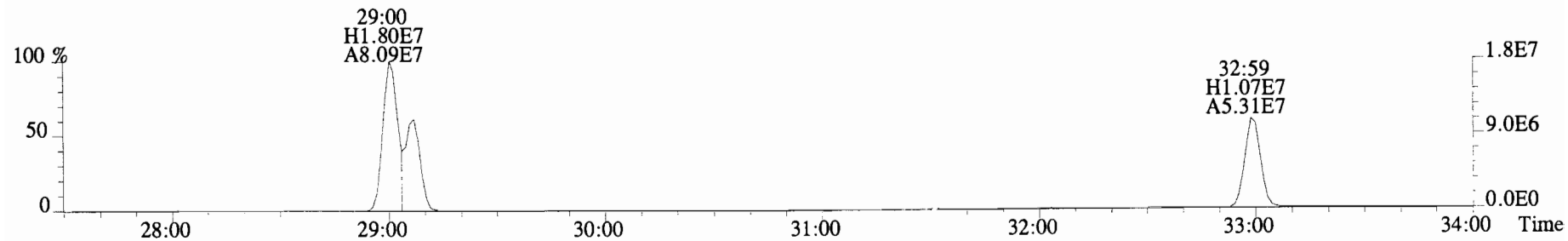
257.9584 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2772.0,0.00%,F,F)

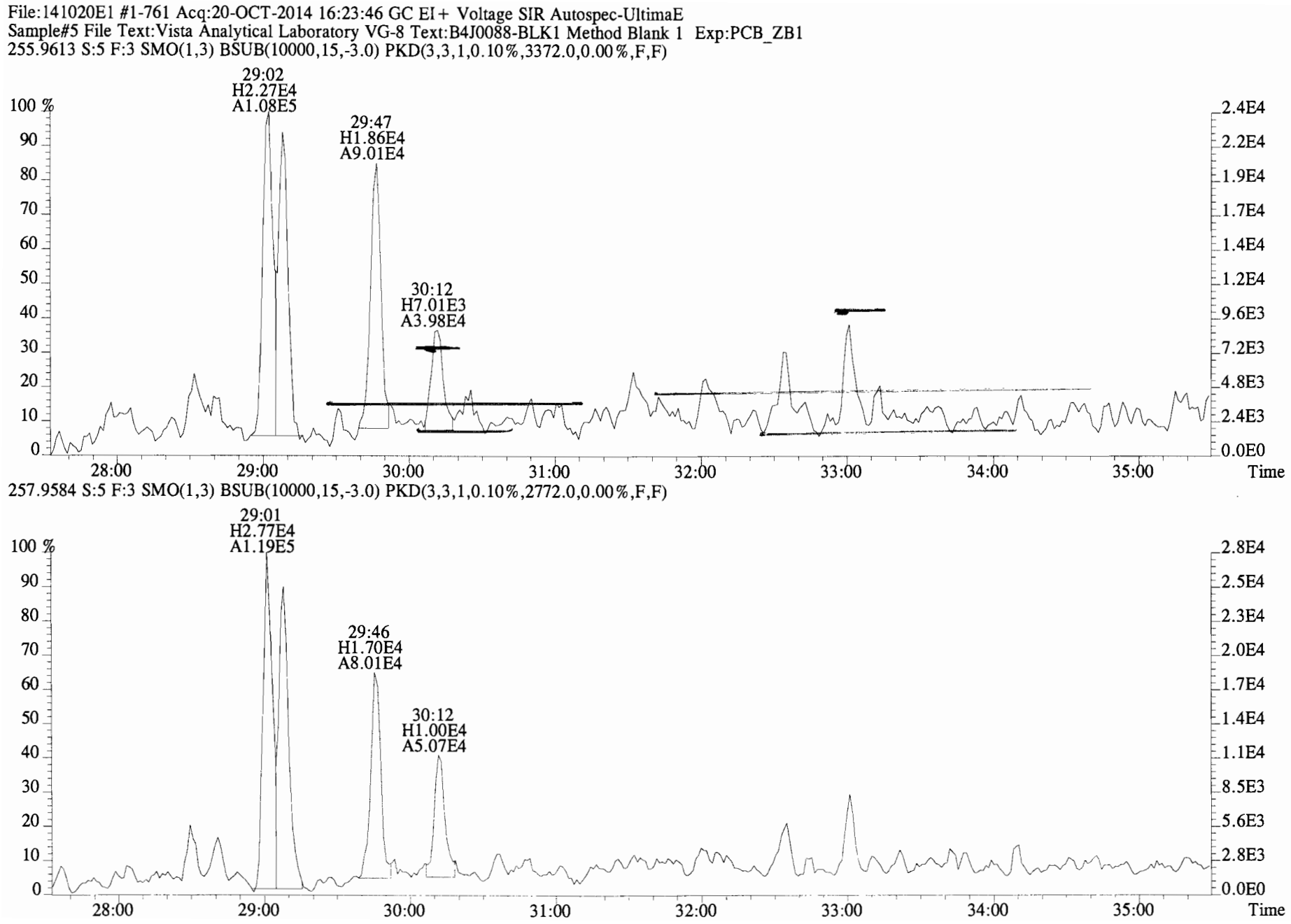


268.0016 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,48756.0,0.00%,F,F)

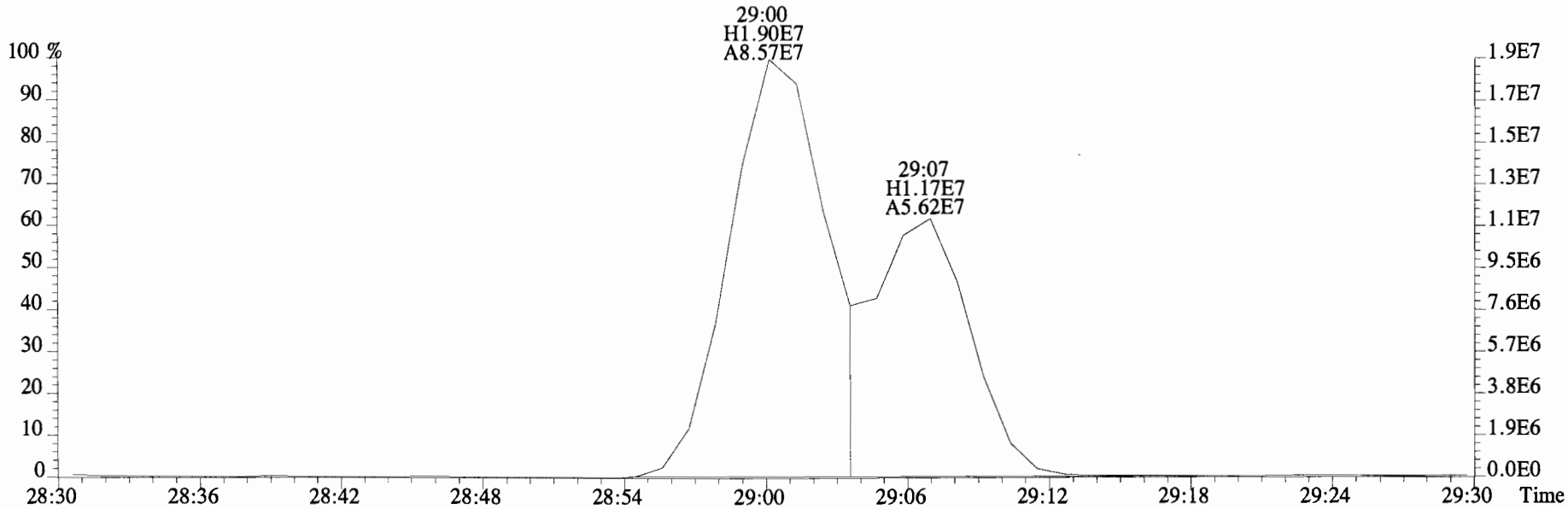


269.9986 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,21956.0,0.00%,F,F)

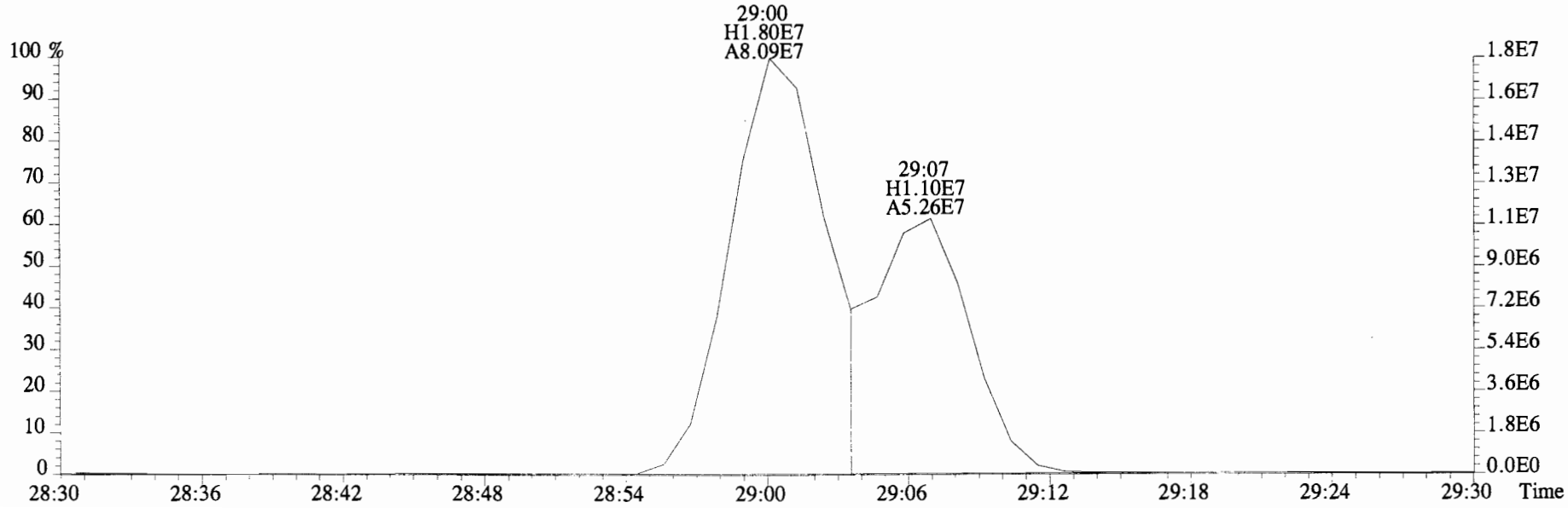



File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3372.0,0.00%,F,F)
29:02
H2.27E4
A1.08E5
29:47
H1.86E4
A9.01E4
30:12
H7.01E3
A3.98E4
100 %
90
80
70
60
50
40
30
20
10
0
2.4E4
2.2E4
1.9E4
1.7E4
1.4E4
1.2E4
9.6E3
7.2E3
4.8E3
2.4E3
0.0E0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
Time
257.9584 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2772.0,0.00%,F,F)
29:01
H2.77E4
A1.19E5
29:46
H1.70E4
A8.01E4
30:12
H1.00E4
A5.07E4
100 %
90
80
70
60
50
40
30
20
10
0
2.8E4
2.5E4
2.3E4
2.0E4
1.7E4
1.4E4
1.1E4
8.5E3
5.6E3
2.8E3
0.0E0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
Time

File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
268.0016 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,48756.0,0.00%,F,F)

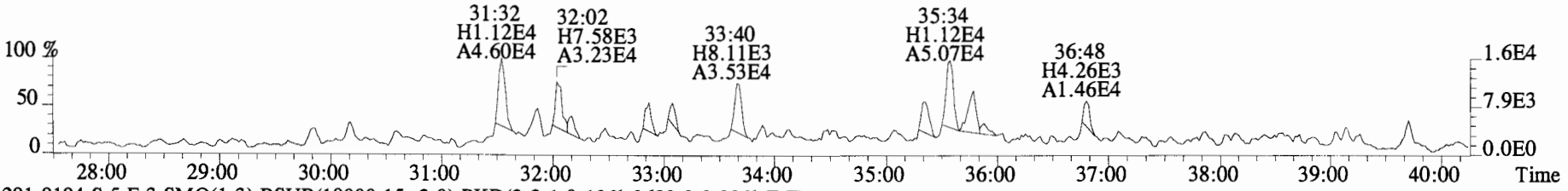


269.9986 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,21956.0,0.00%,F,F)

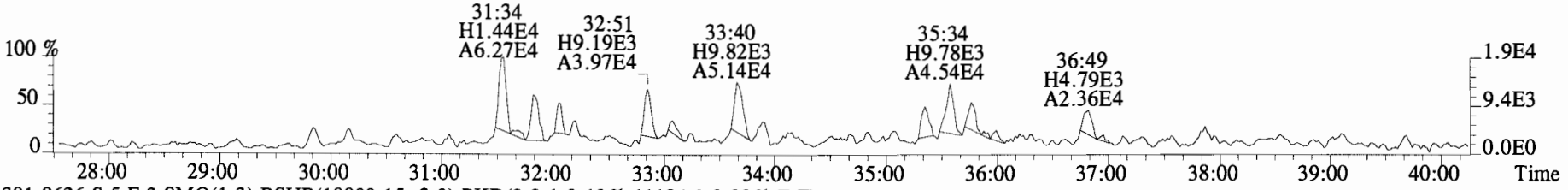


File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1

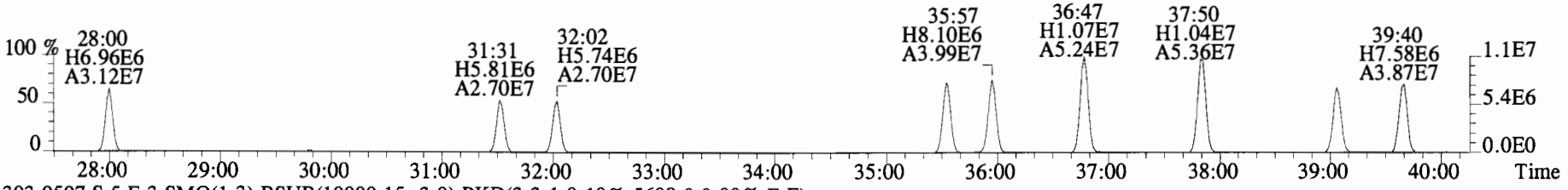
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2996.0,0.00%,F,F)



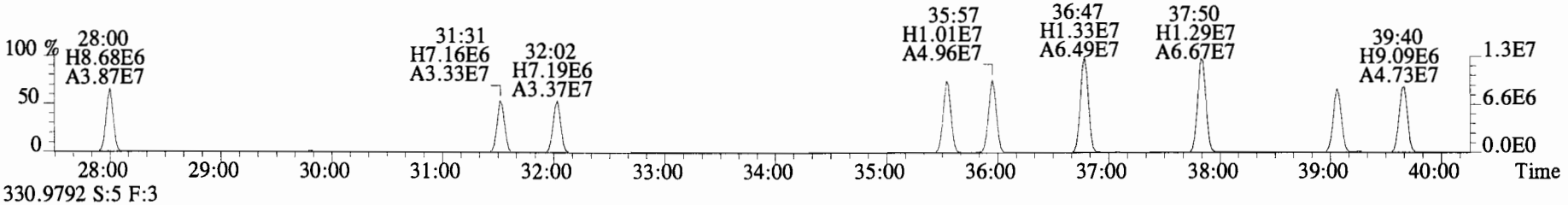
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2680.0,0.00%,F,F)



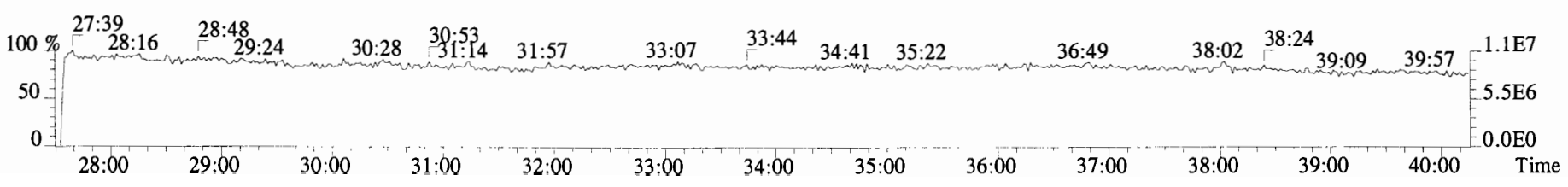
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11184.0,0.00%,F,F)

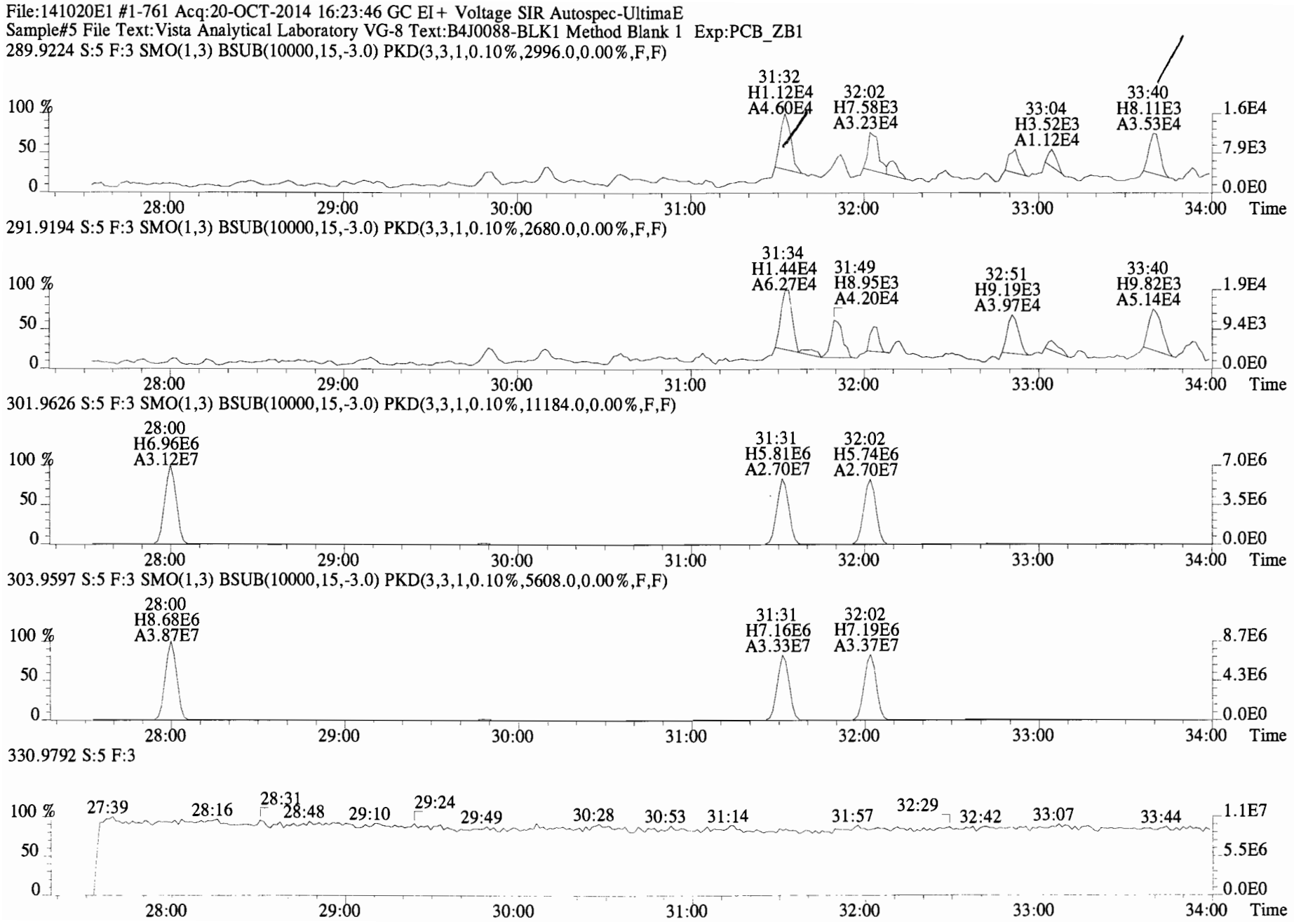


303.9597 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5608.0,0.00%,F,F)

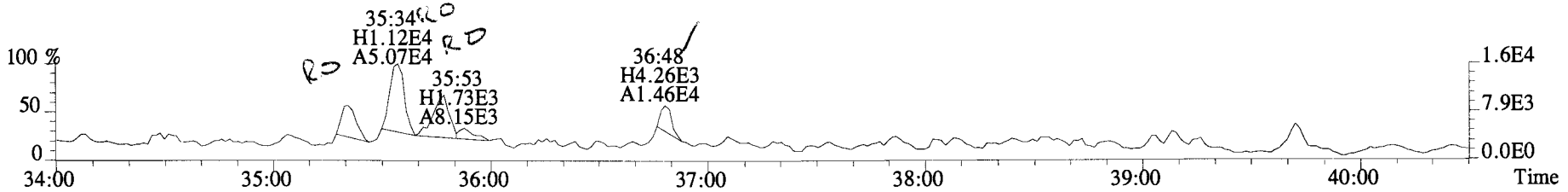


330.9792 S:5 F:3

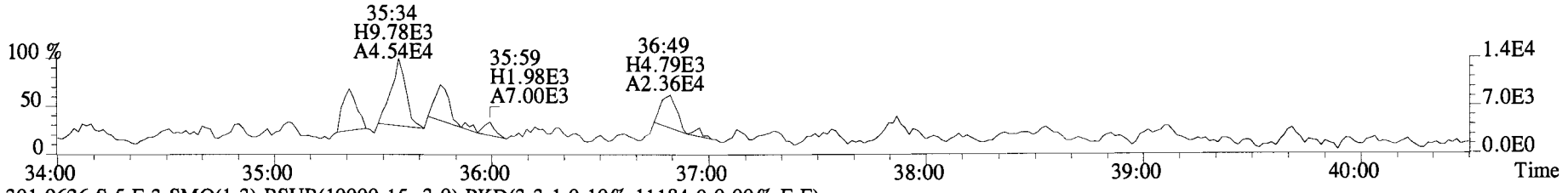



File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2996.0,0.00%,F,F)
31:32 H1.12E4 A4.60E4
32:02 H7.58E3 A3.23E4
33:04 H3.52E3 A1.12E4
33:40 H8.11E3 A3.53E4
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2680.0,0.00%,F,F)
31:34 H1.44E4 A6.27E4
31:49 H8.95E3 A4.20E4
32:51 H9.19E3 A3.97E4
33:40 H9.82E3 A5.14E4
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11184.0,0.00%,F,F)
28:00 H6.96E6 A3.12E7
31:31 H5.81E6 A2.70E7
32:02 H5.74E6 A2.70E7
303.9597 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5608.0,0.00%,F,F)
28:00 H8.68E6 A3.87E7
31:31 H7.16E6 A3.33E7
32:02 H7.19E6 A3.37E7
330.9792 S:5 F:3
27:39
28:16
28:31
28:48
29:10
29:24
29:49
30:28
30:53
31:14
31:57
32:29
32:42
33:07
33:44
100 %
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
1.6E4
7.9E3
0.0E0
1.9E4
9.4E3
7.0E6
3.5E6
8.7E6
4.3E6
1.1E7
5.5E6

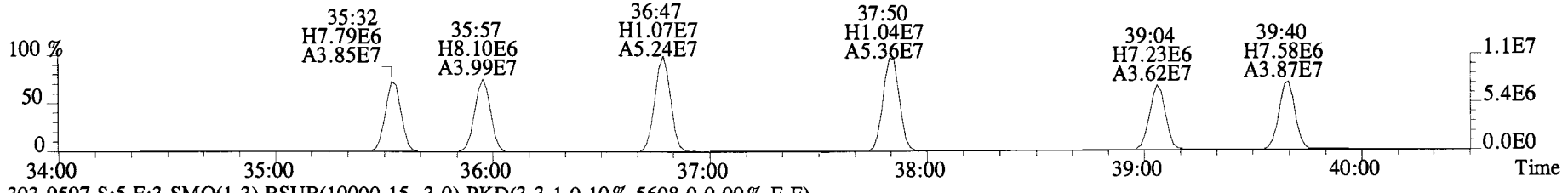
File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2996.0,0.00%,F,F)



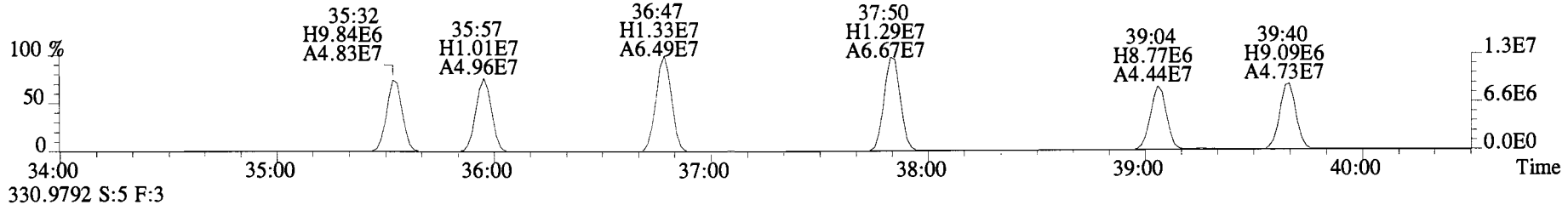
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2680.0,0.00%,F,F)



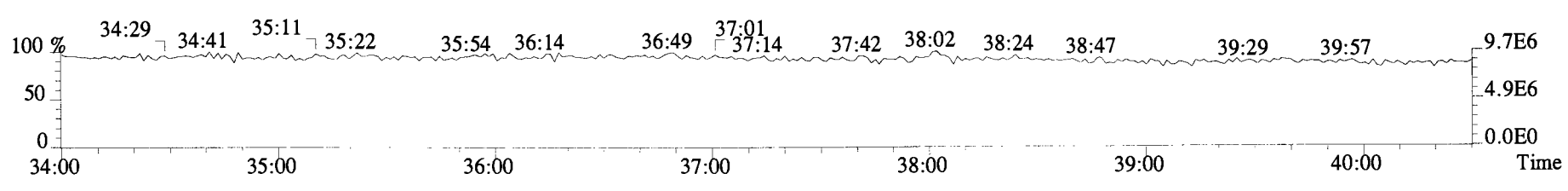
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11184.0,0.00%,F,F)



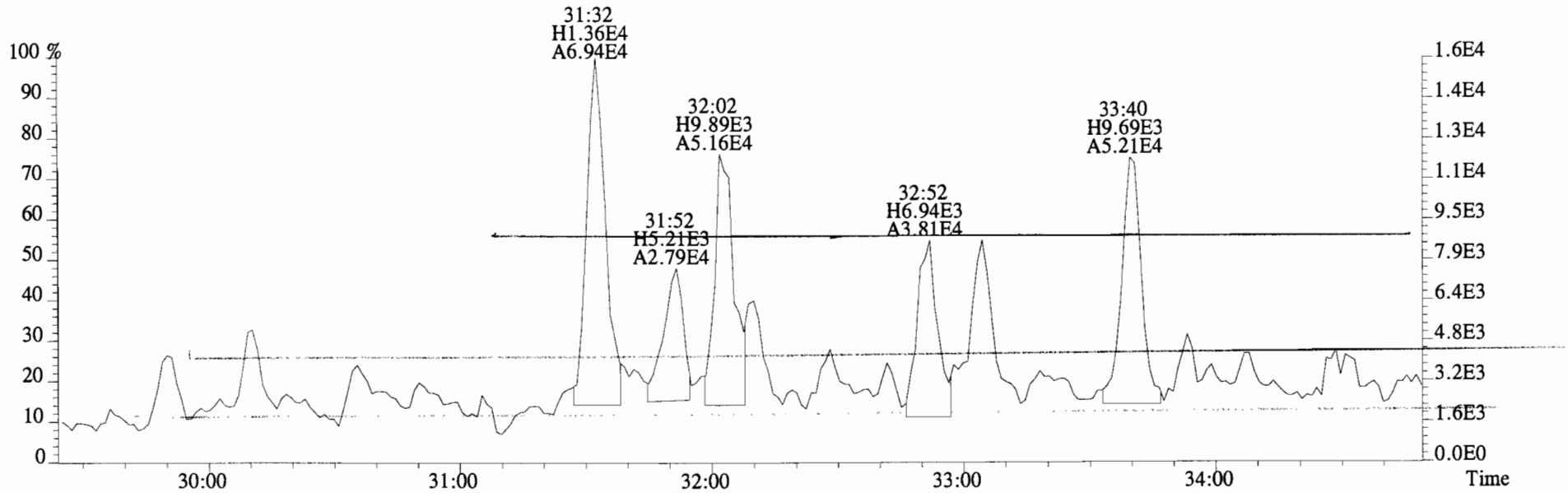
303.9597 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5608.0,0.00%,F,F)



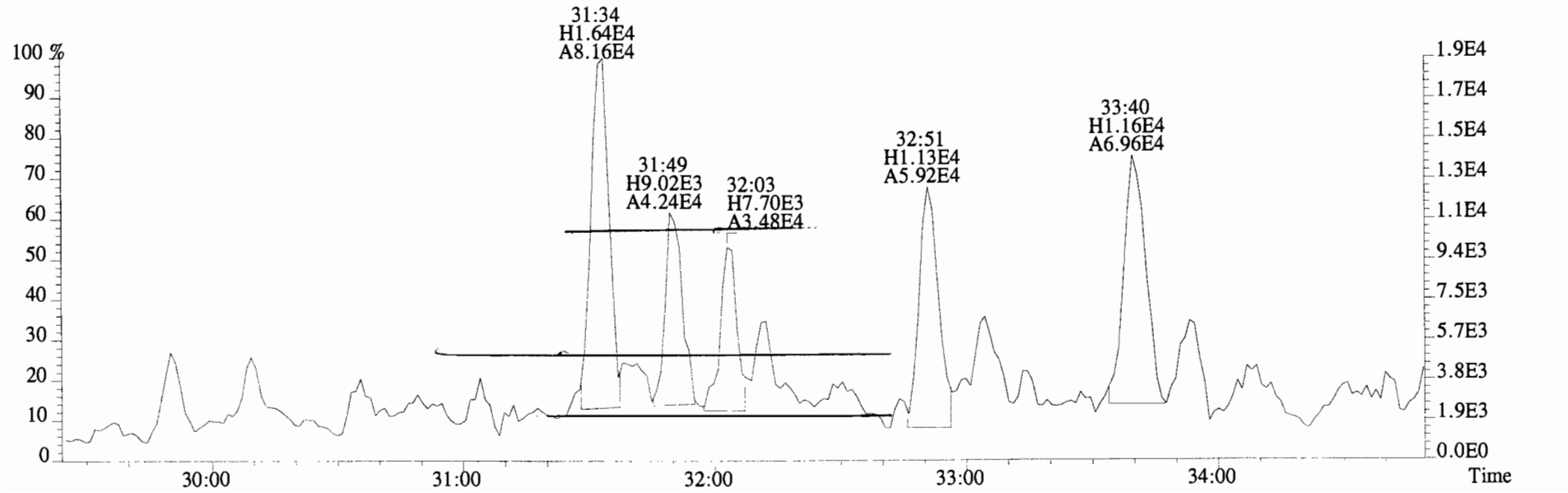
330.9792 S:5 F:3



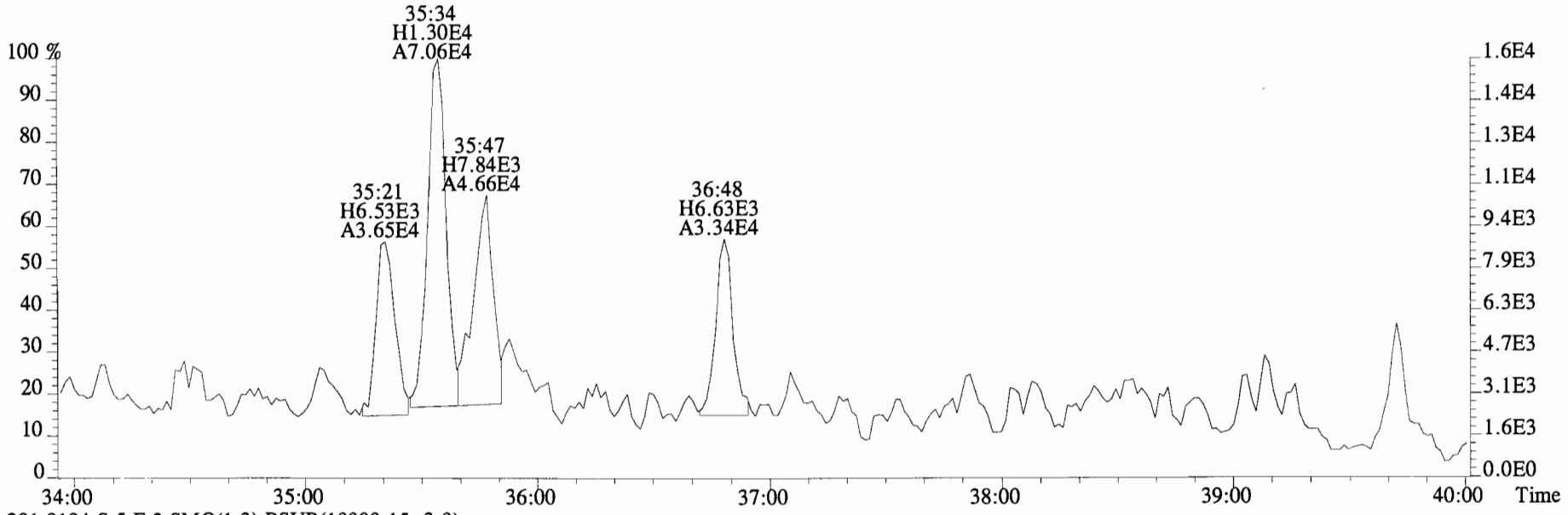
File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0)



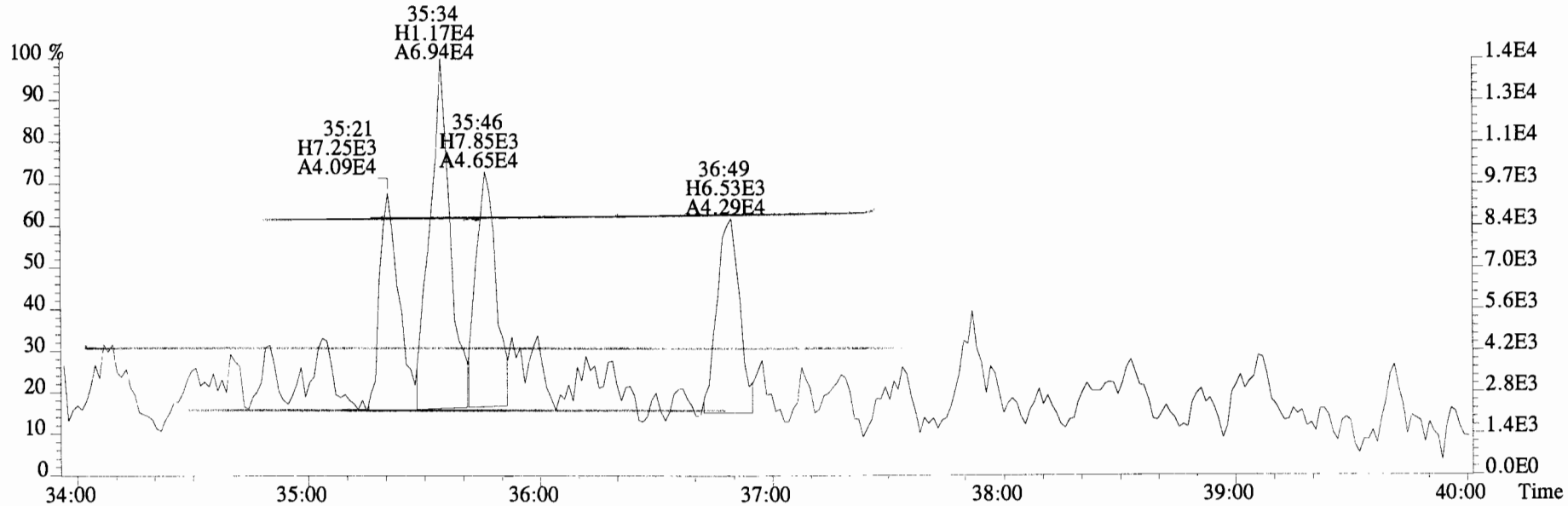
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0)

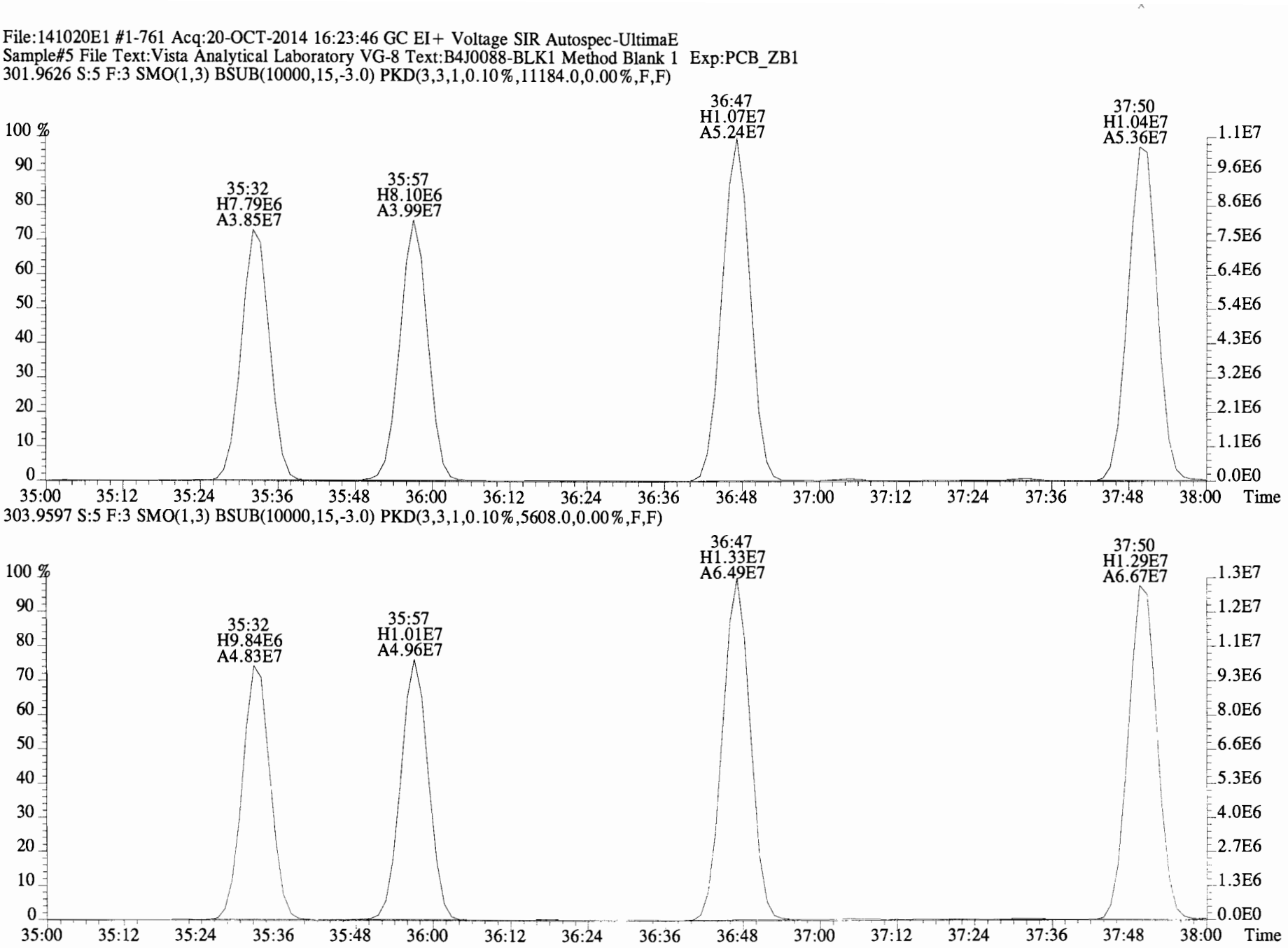


File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0)

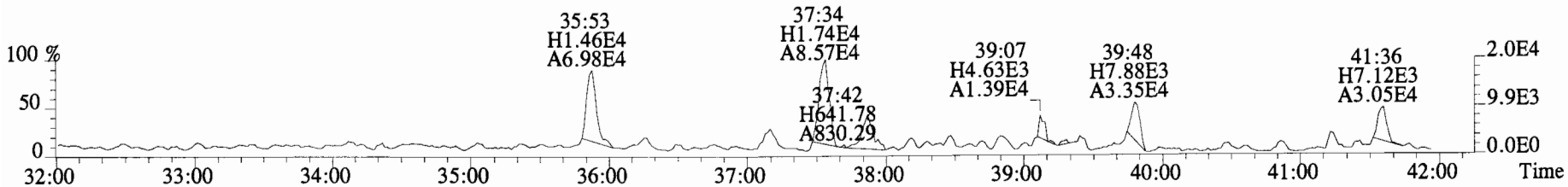


291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0)

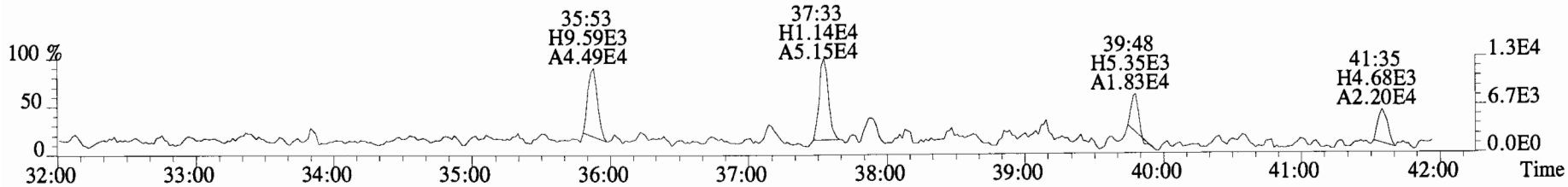



File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11184.0,0.00%,F,F)
35:32 H7.79E6 A3.85E7
35:57 H8.10E6 A3.99E7
36:47 H1.07E7 A5.24E7
37:50 H1.04E7 A5.36E7
100 %
Time
303.9597 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5608.0,0.00%,F,F)
35:32 H9.84E6 A4.83E7
35:57 H1.01E7 A4.96E7
36:47 H1.33E7 A6.49E7
37:50 H1.29E7 A6.67E7
100 %
Time

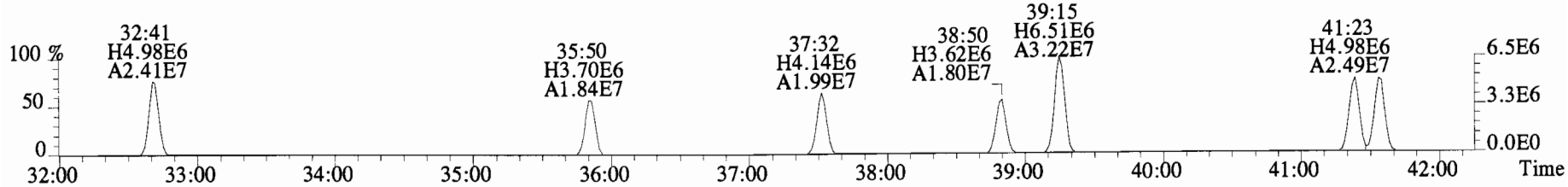
File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2364.0,0.00%,F,F)



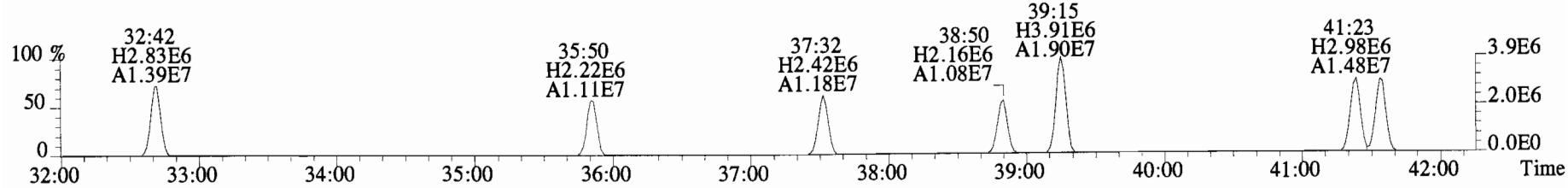
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2332.0,0.00%,F,F)



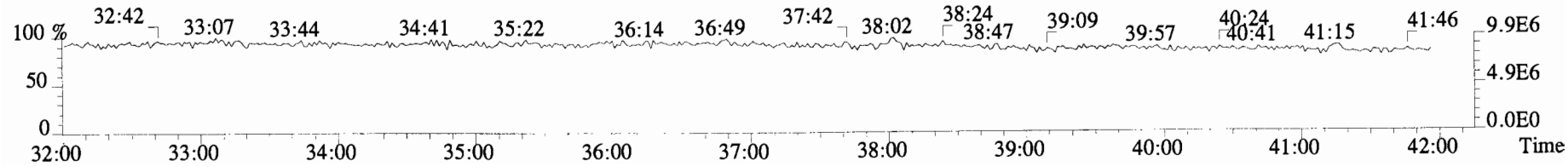
337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2652.0,0.00%,F,F)



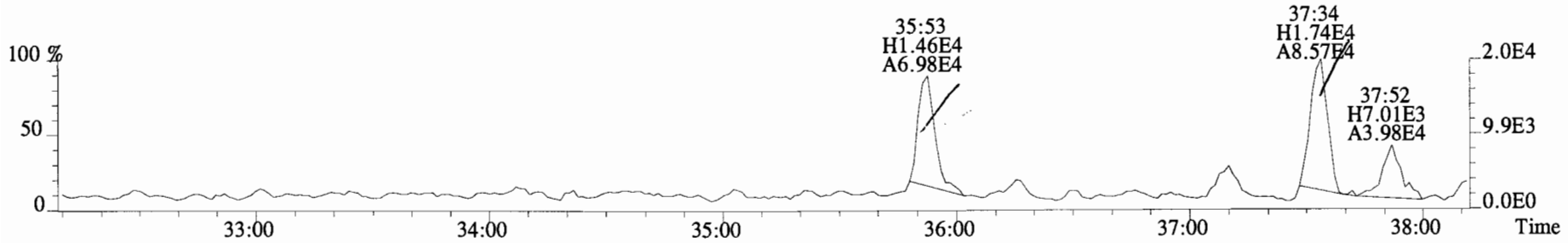
339.9177 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2628.0,0.00%,F,F)



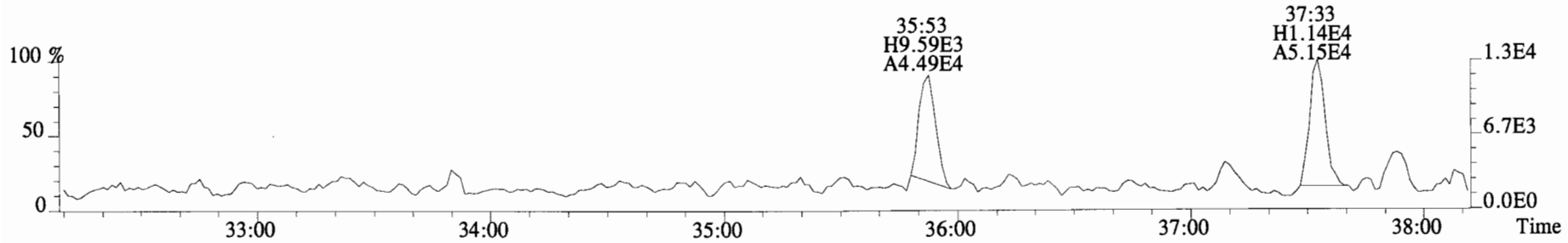
330.9792 S:5 F:3



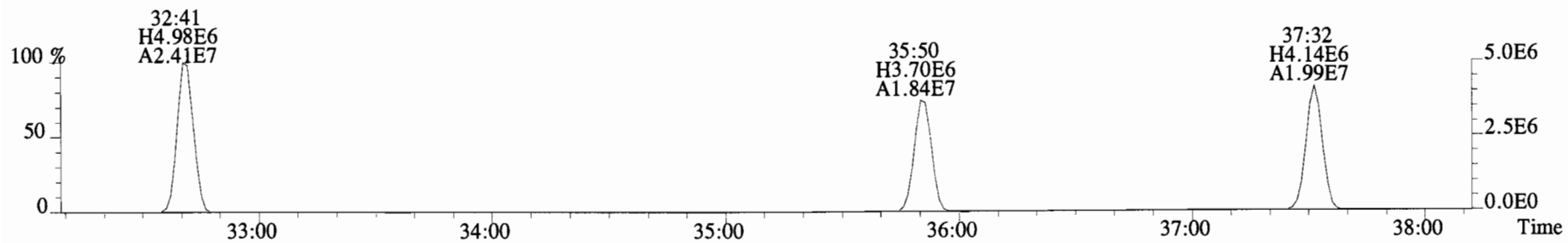
File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2364.0,0.00%,F,F)



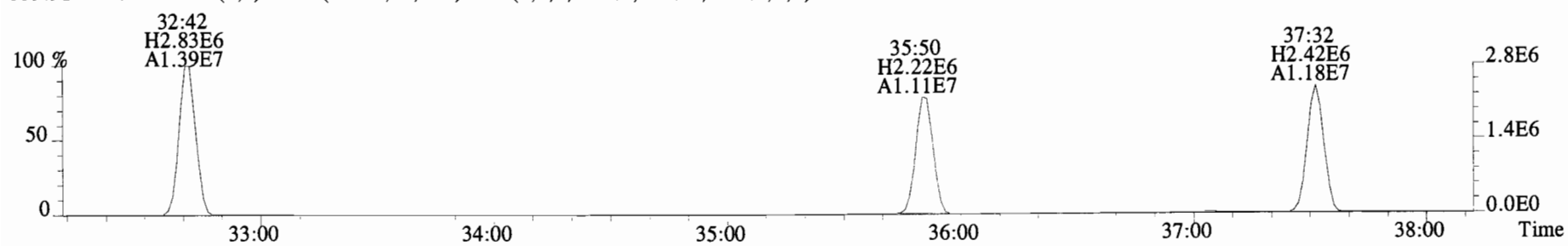
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2332.0,0.00%,F,F)

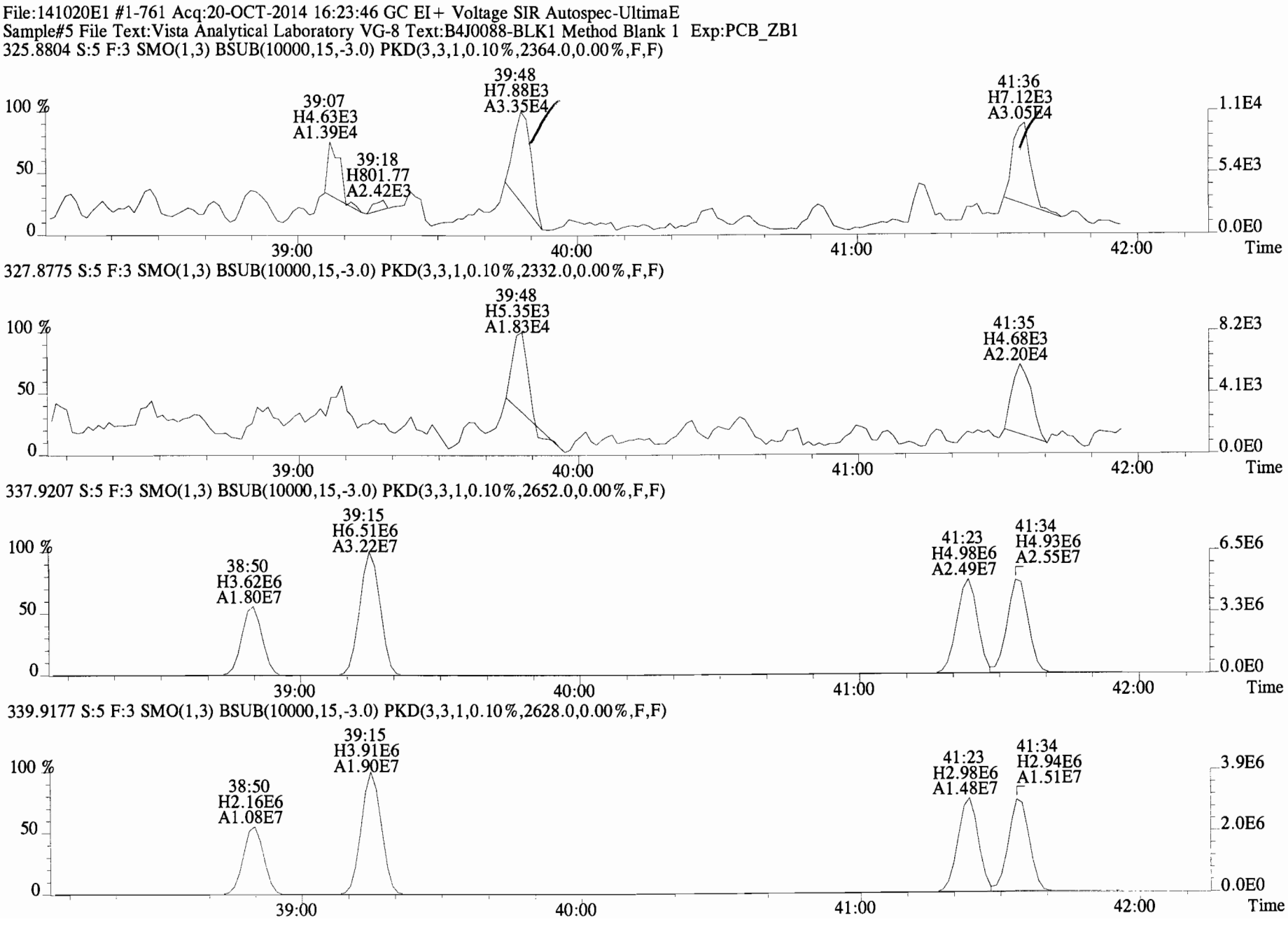


337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2652.0,0.00%,F,F)

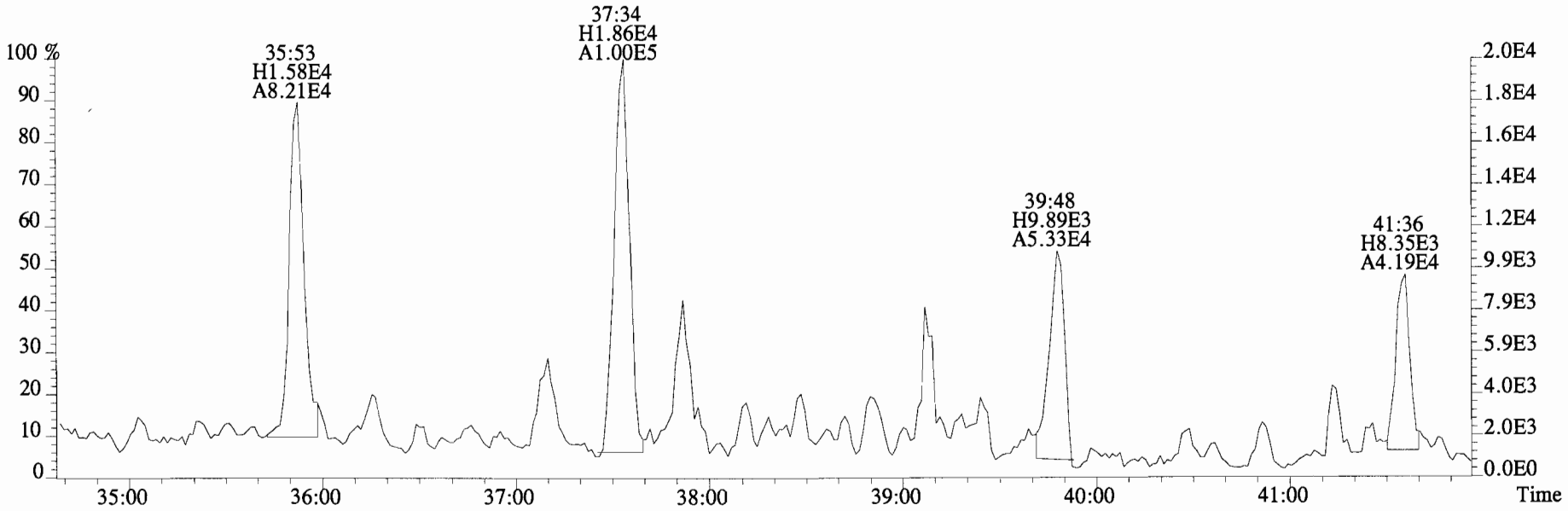


339.9177 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2628.0,0.00%,F,F)

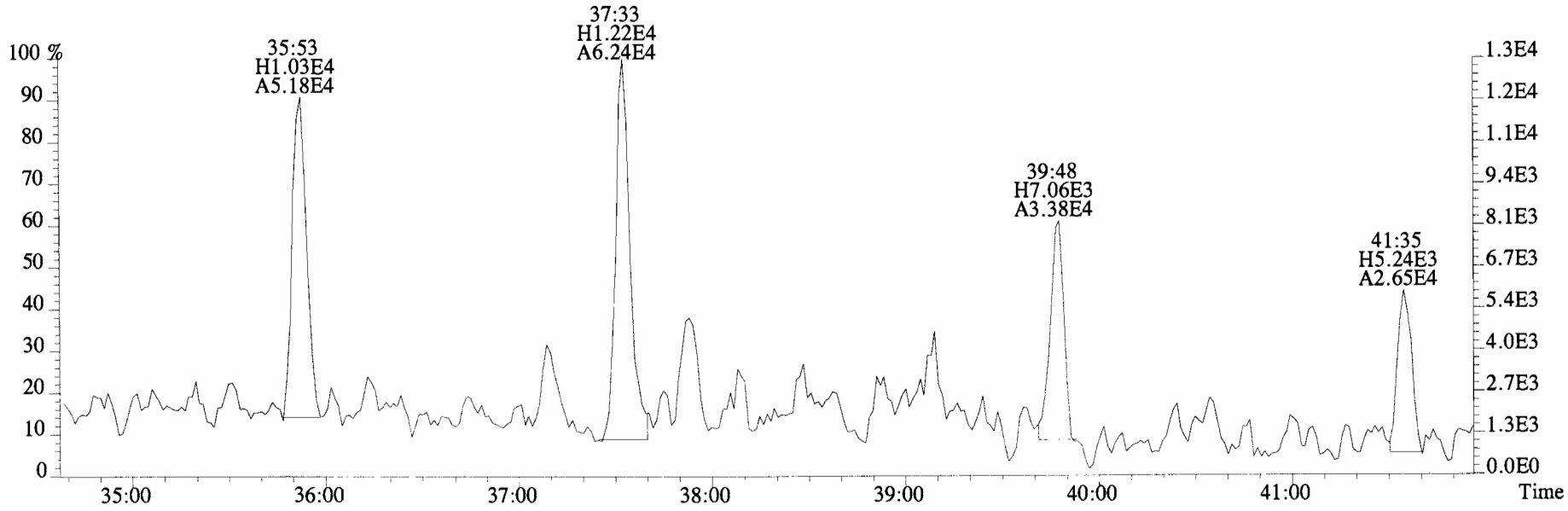



File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2364.0,0.00%,F,F)
39:07 H4.63E3 A1.39E4
39:18 H801.77 A2.42E3
39:48 H7.88E3 A3.35E4
41:36 H7.12E3 A3.05E4
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2332.0,0.00%,F,F)
39:48 H5.35E3 A1.83E4
41:35 H4.68E3 A2.20E4
337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2652.0,0.00%,F,F)
38:50 H3.62E6 A1.80E7
39:15 H6.51E6 A3.22E7
41:23 H4.98E6 A2.49E7
41:34 H4.93E6 A2.55E7
339.9177 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2628.0,0.00%,F,F)
38:50 H2.16E6 A1.08E7
39:15 H3.91E6 A1.90E7
41:23 H2.98E6 A1.48E7
41:34 H2.94E6 A1.51E7
100 %
50
0
39:00
40:00
41:00
42:00
Time
1.1E4
5.4E3
0.0E0
8.2E3
4.1E3
6.5E6
3.3E6
3.9E6
2.0E6

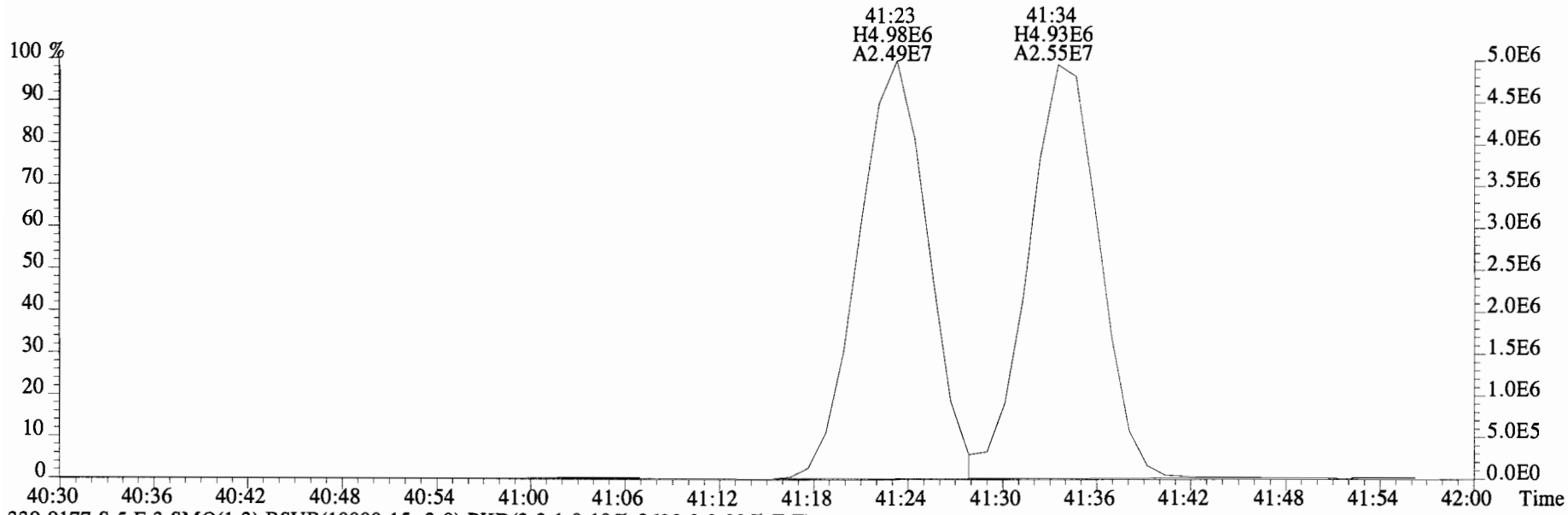
File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0)



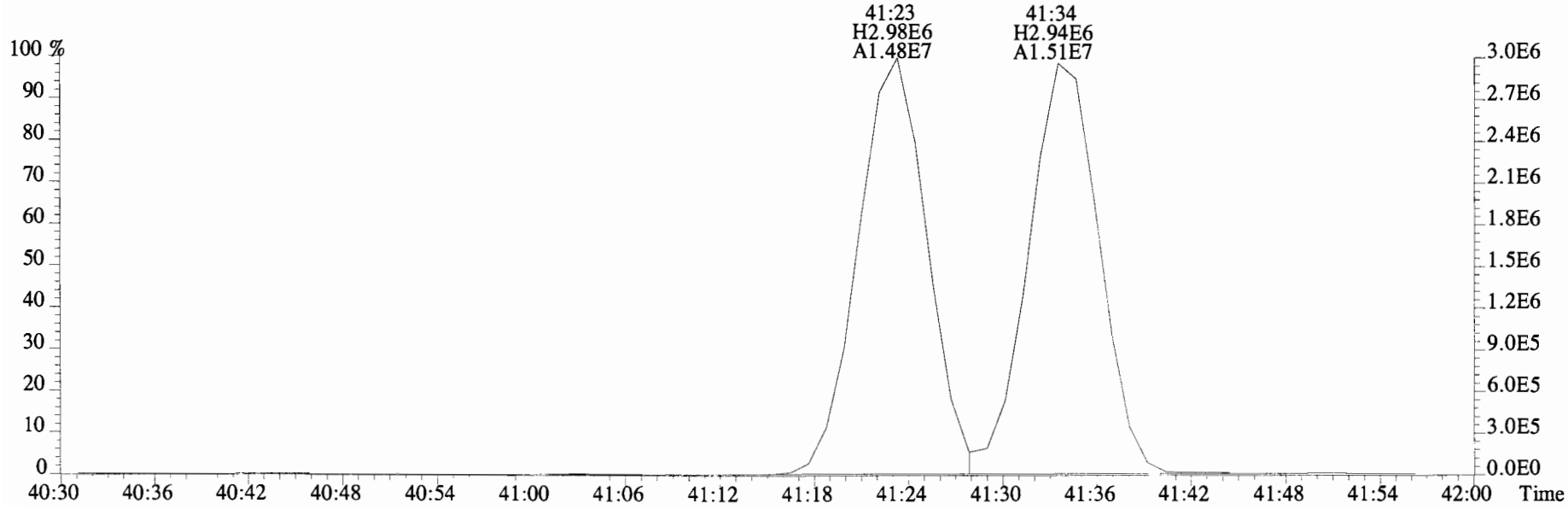
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2332.0,0.00%,F,F)



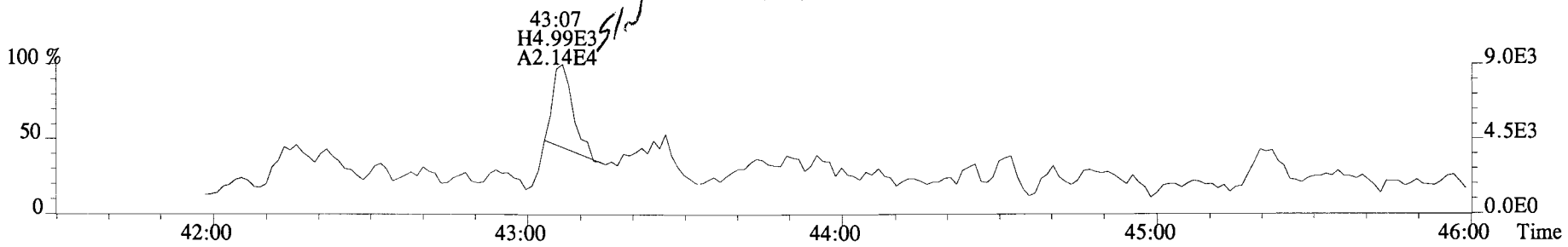
File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2652.0,0.00%,F,F)



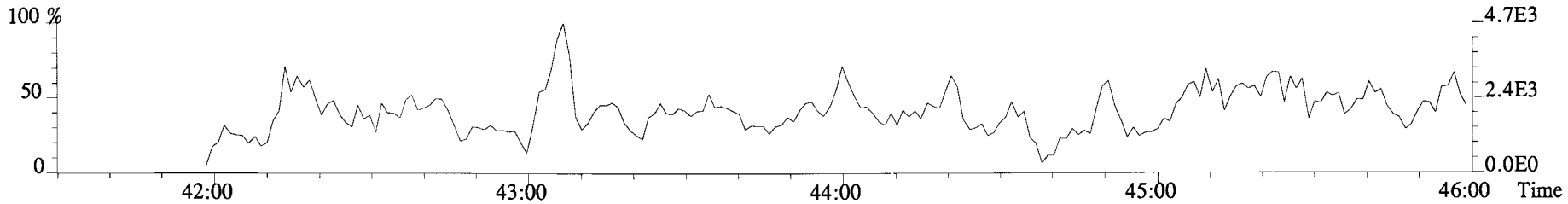
339.9177 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2628.0,0.00%,F,F)



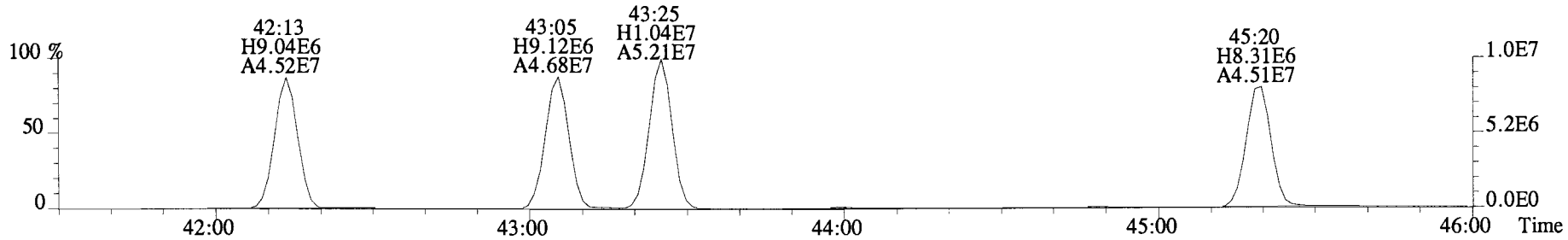
File:141020E1 #1-561 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3292.0,0.00%,F,F)



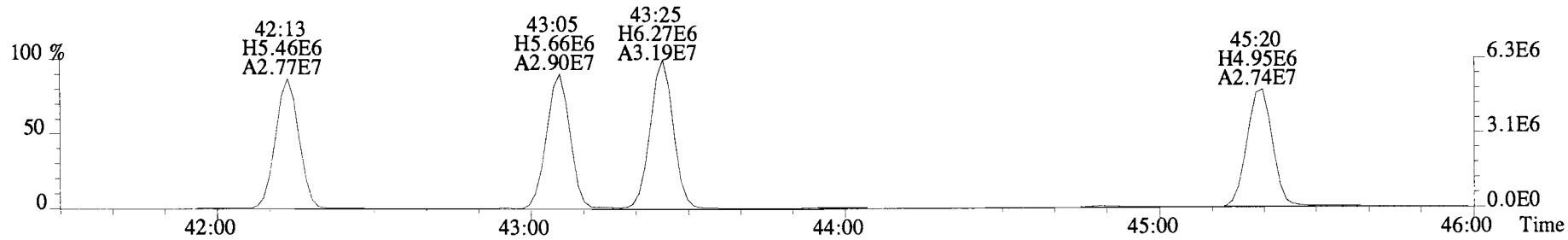
327.8775 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2620.0,0.00%,F,F)



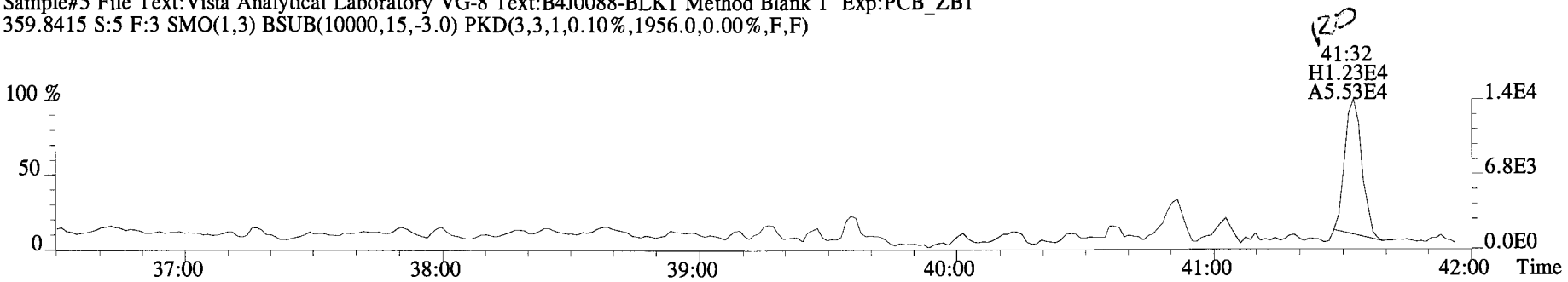
337.9207 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10532.0,0.00%,F,F)



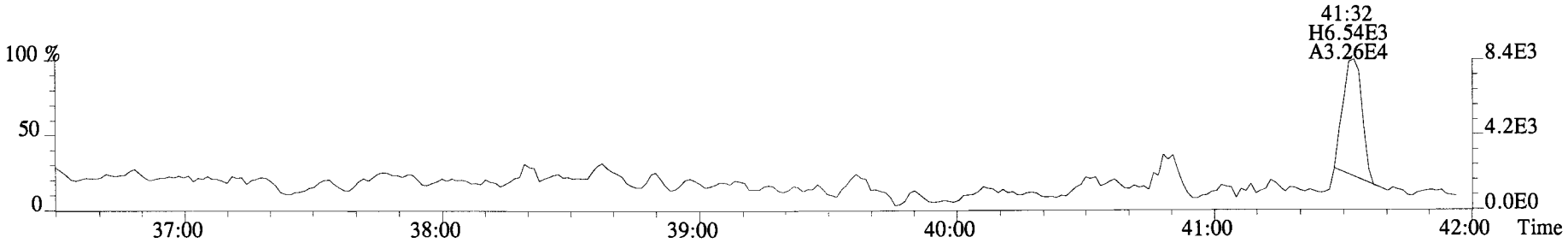
339.9177 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6100.0,0.00%,F,F)



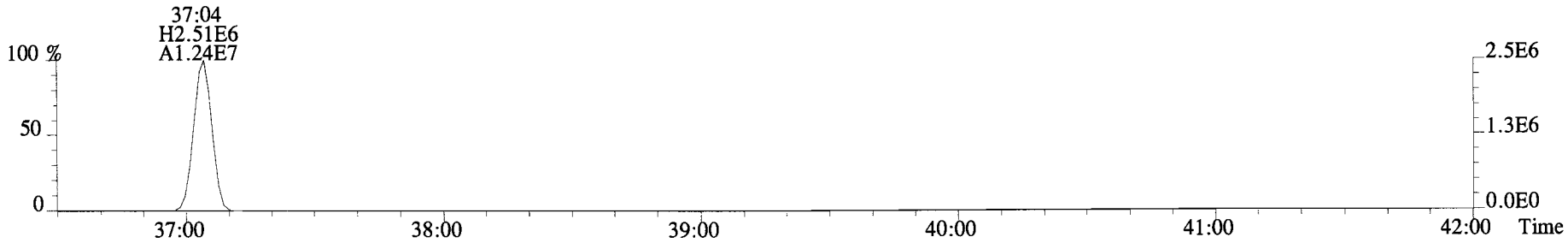
File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1956.0,0.00%,F,F)



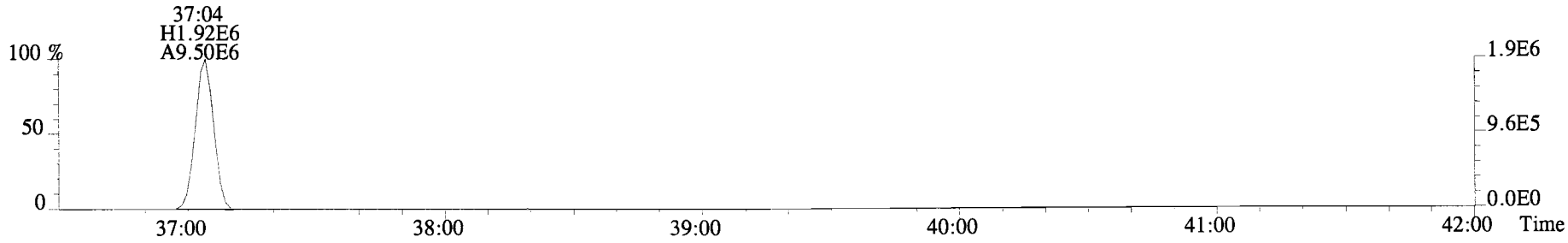
361.8385 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2148.0,0.00%,F,F)



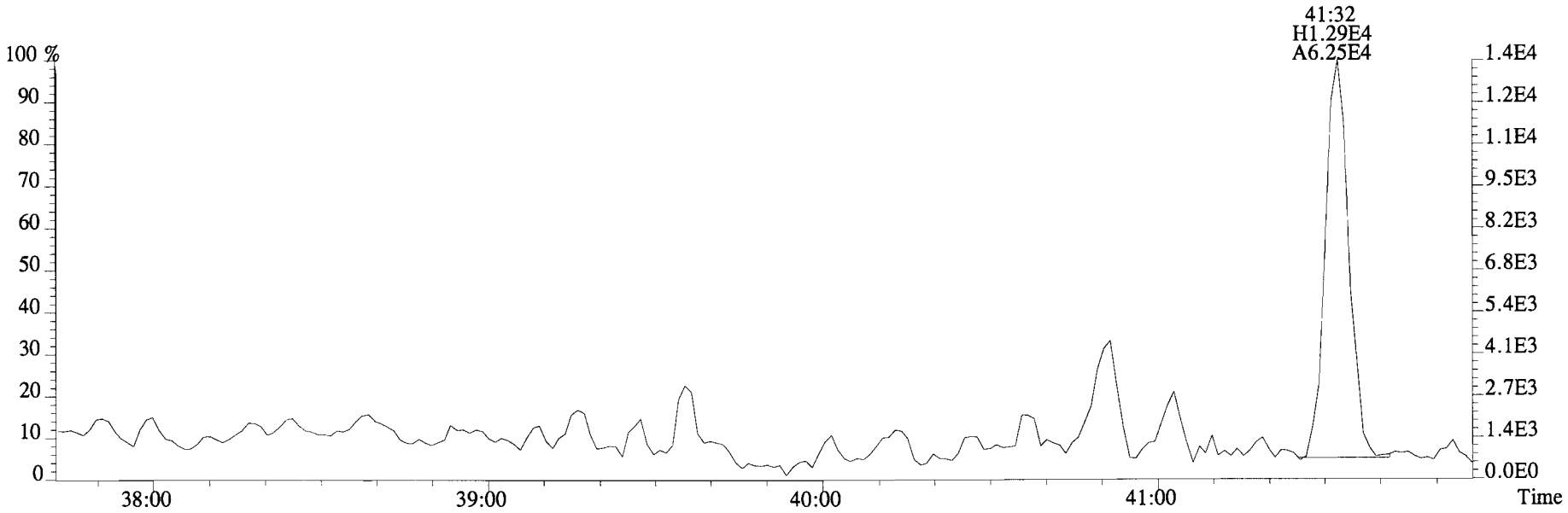
371.8817 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2024.0,0.00%,F,F)



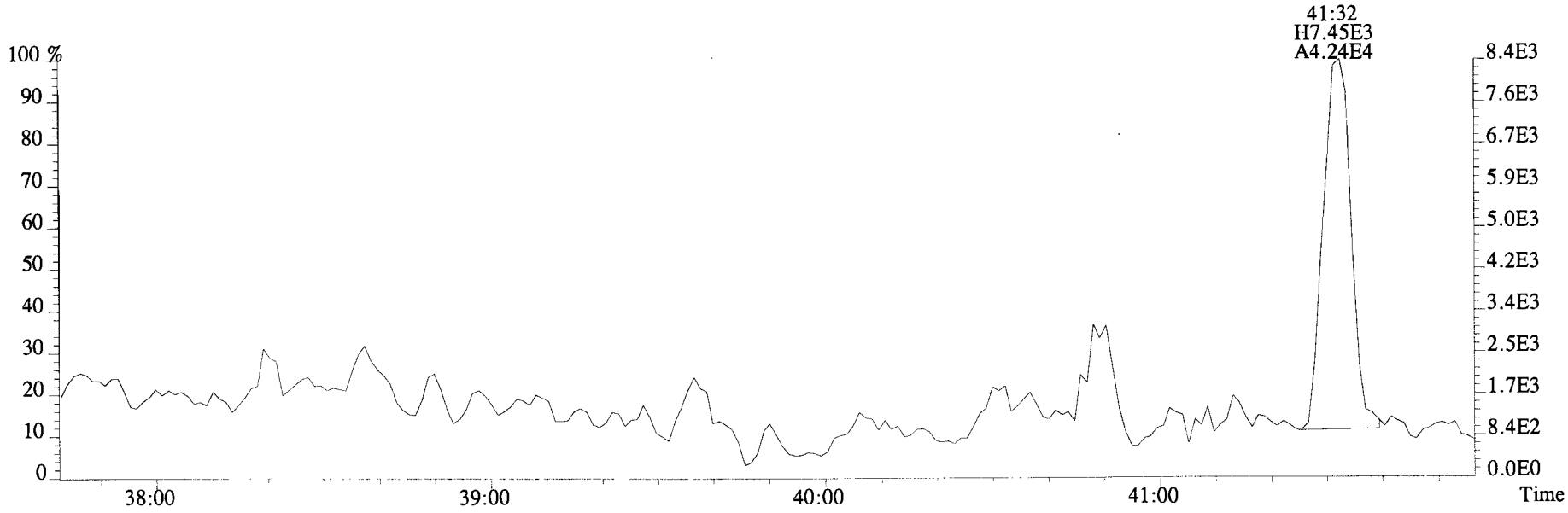
373.8788 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2188.0,0.00%,F,F)



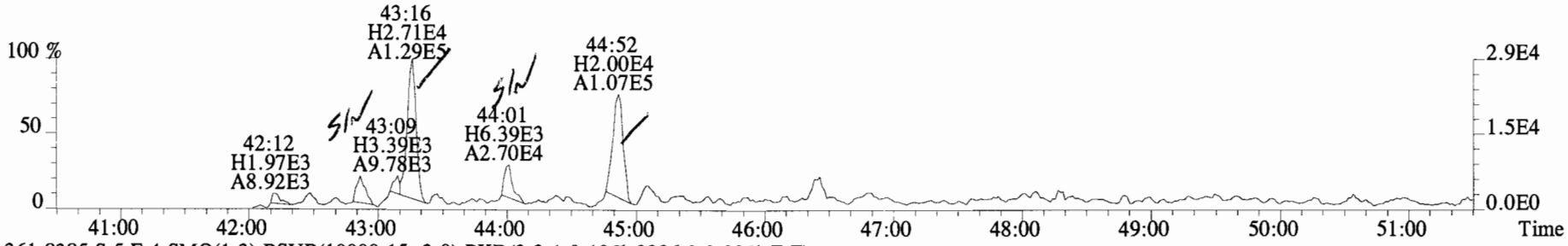
File:141020E1 #1-761 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1956.0,0.00%,F,F)



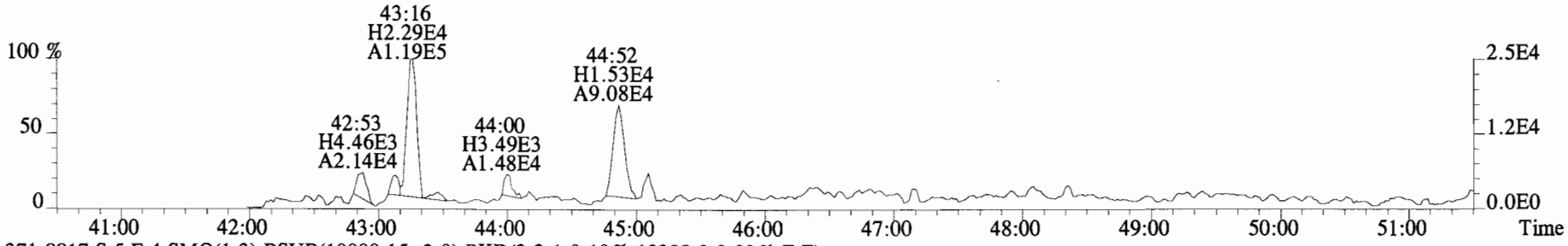
361.8385 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2148.0,0.00%,F,F)



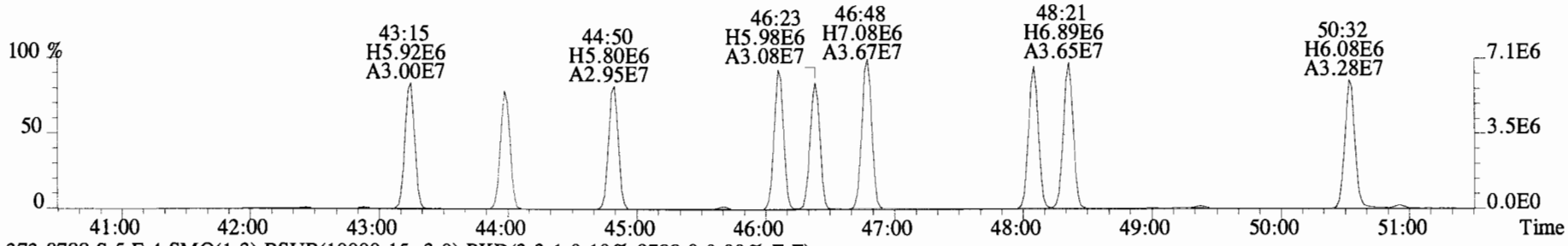
File:141020E1 #1-561 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2240.0,0.00%,F,F)



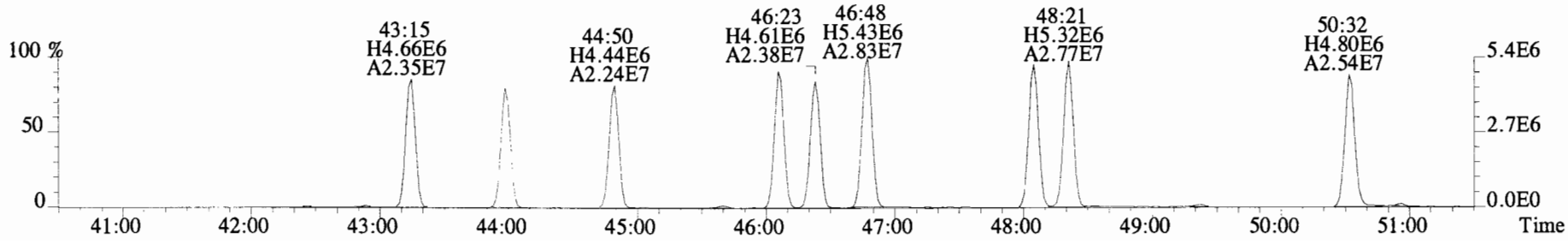
361.8385 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2296.0,0.00%,F,F)



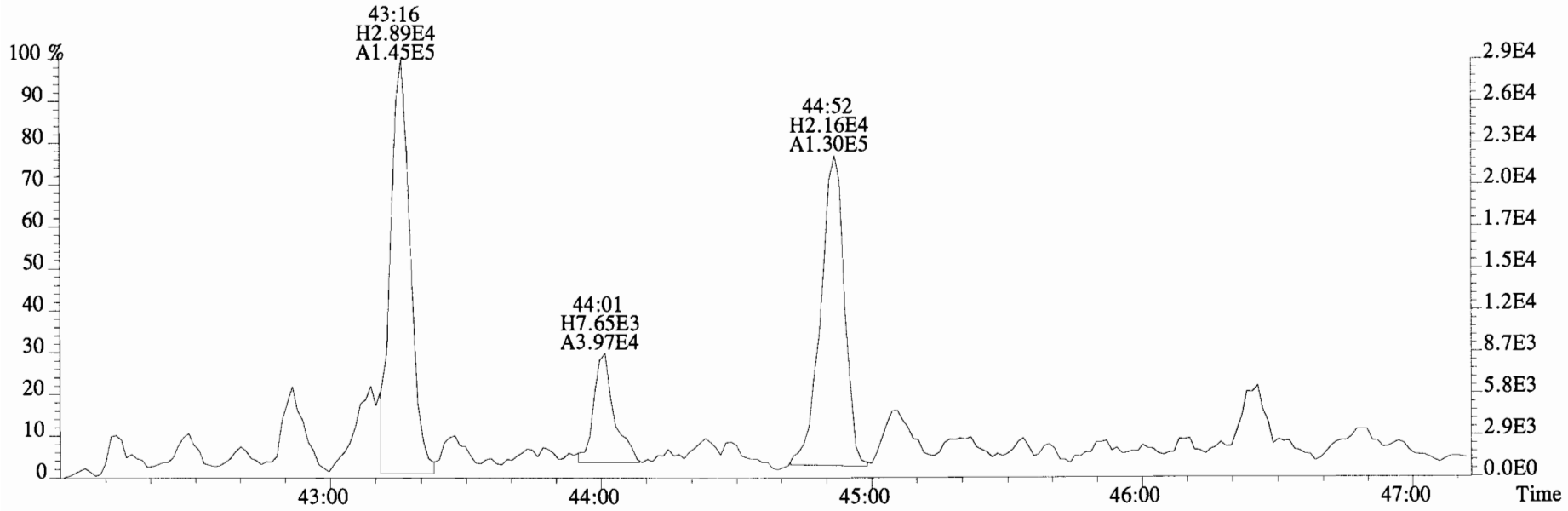
371.8817 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12388.0,0.00%,F,F)



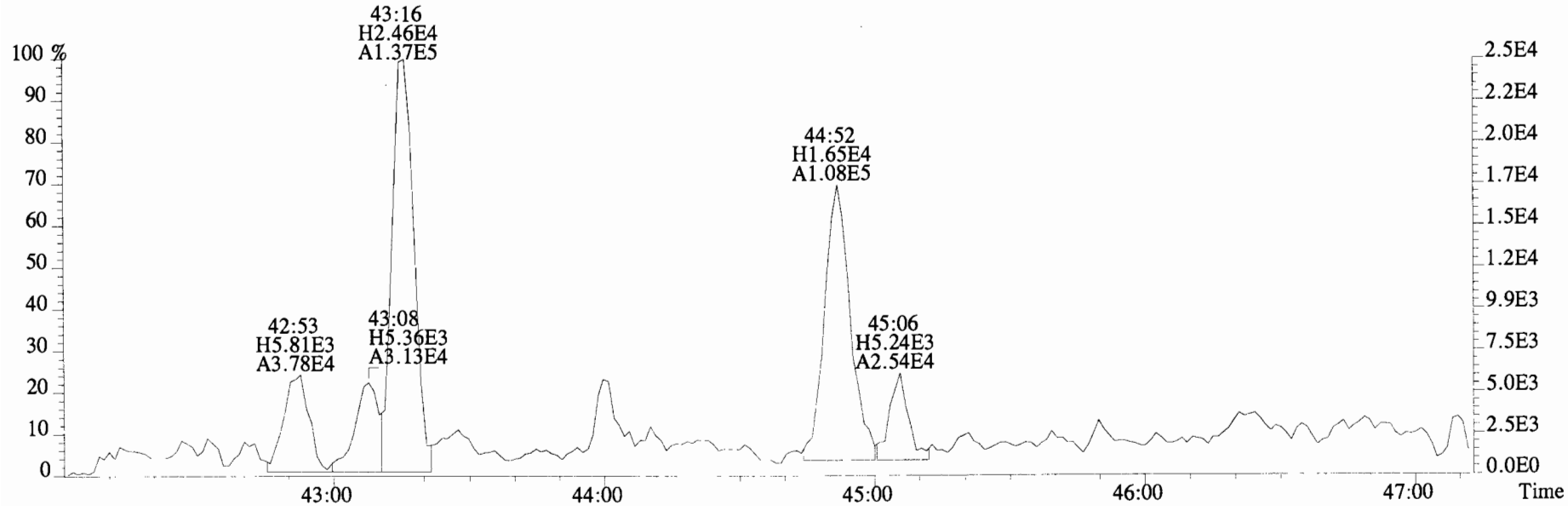
373.8788 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9788.0,0.00%,F,F)



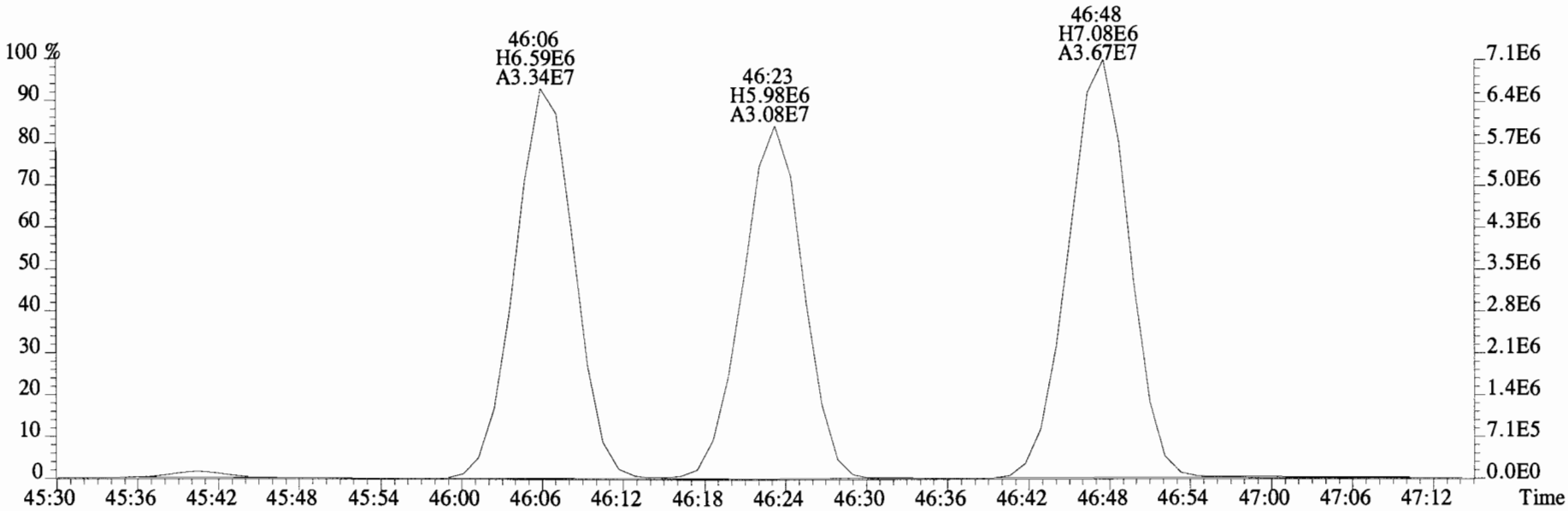
File:141020E1 #1-561 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0)



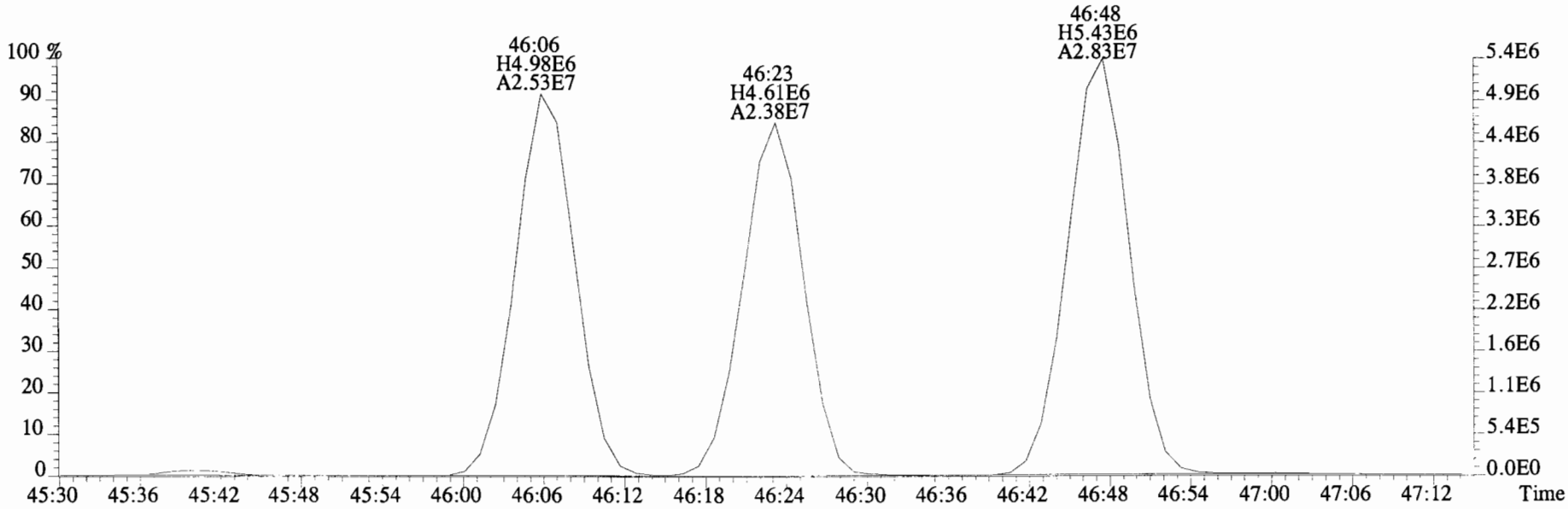
361.8385 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0)



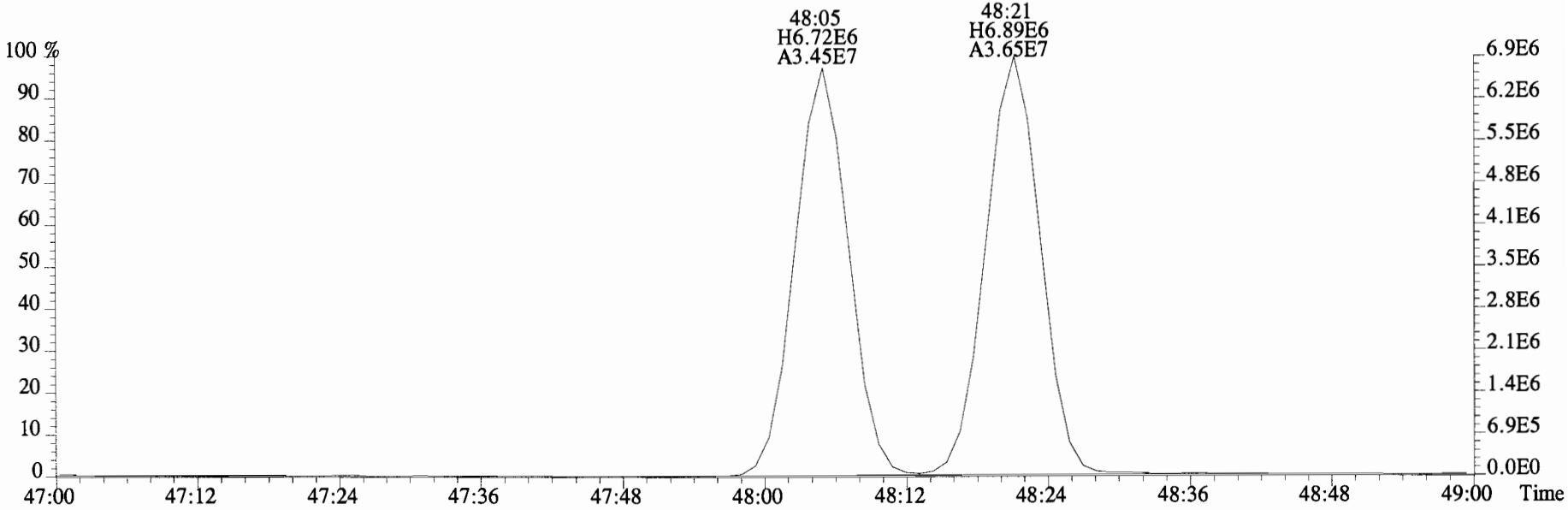
File:141020E1 #1-561 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
371.8817 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12388.0,0.00%,F,F)



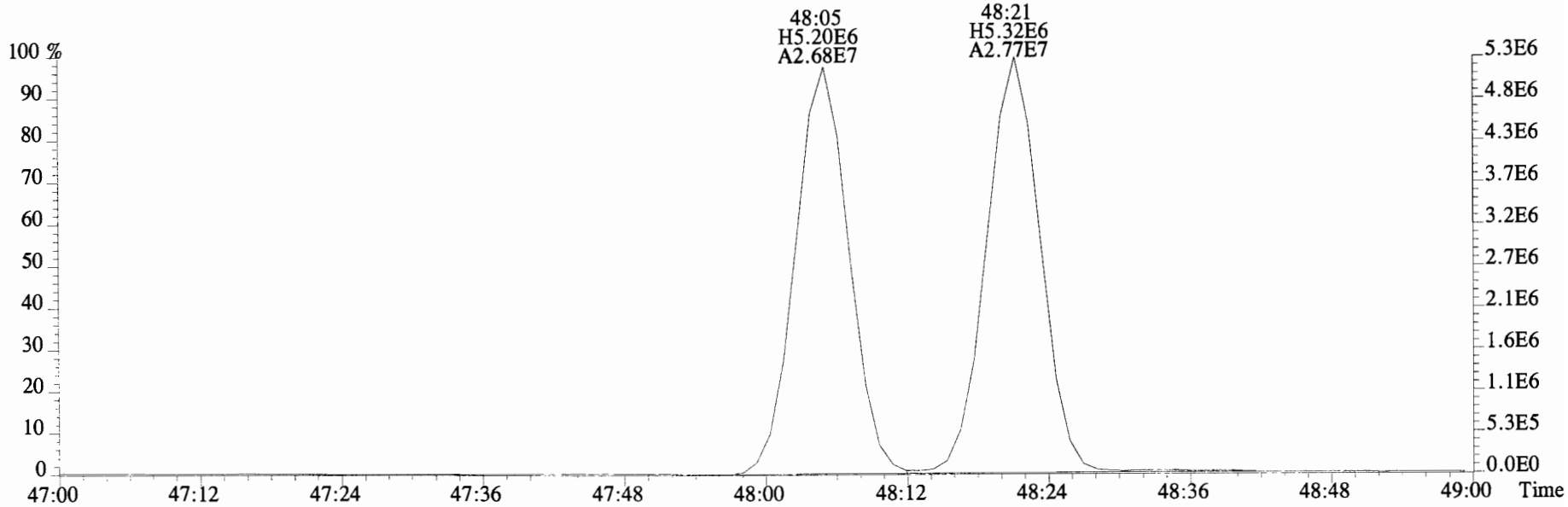
373.8788 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9788.0,0.00%,F,F)



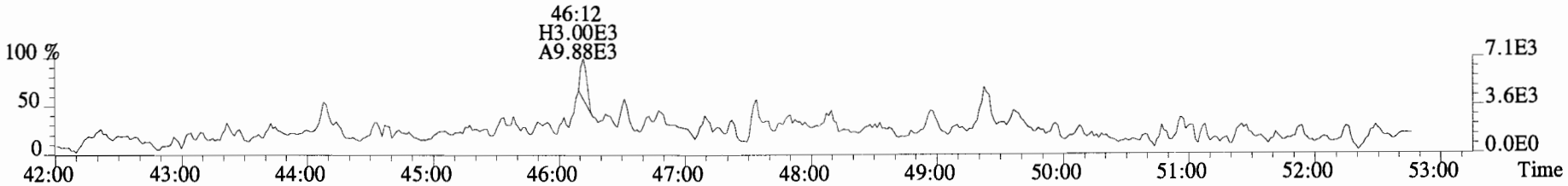
File:141020E1 #1-561 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
371.8817 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12388.0,0.00%,F,F)



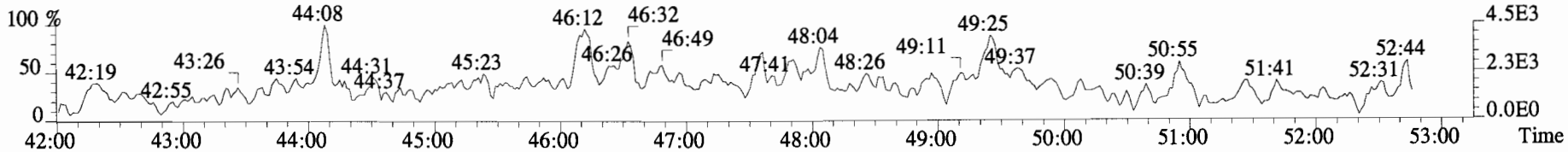
373.8788 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9788.0,0.00%,F,F)



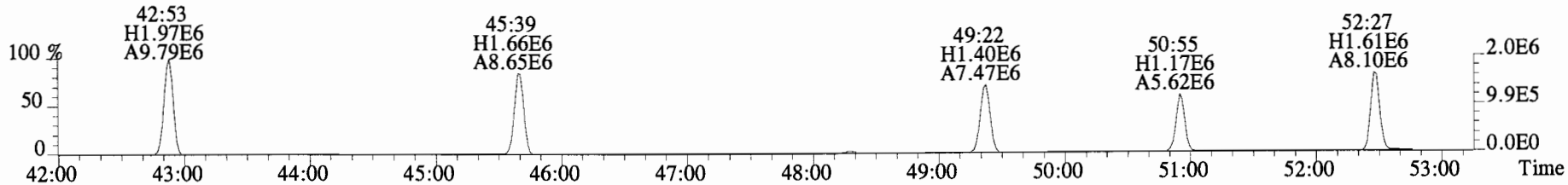
File:141020E1 #1-561 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
393.8025 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2076.0,0.00%,F,F)



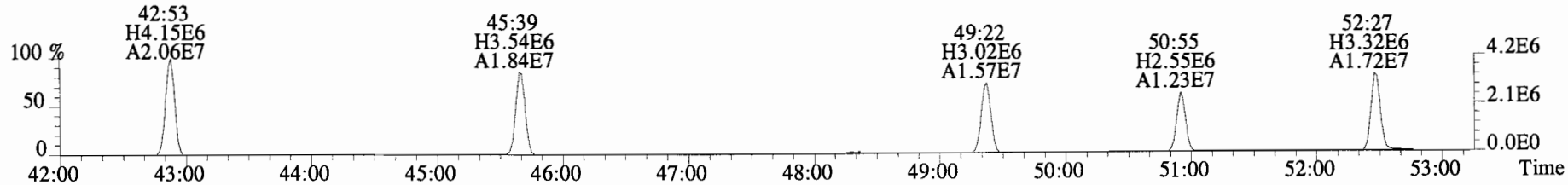
395.7995 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1952.0,0.00%,F,F)



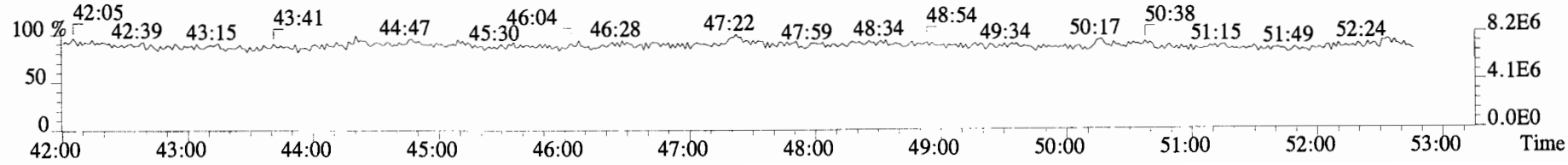
403.8457 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3552.0,0.00%,F,F)



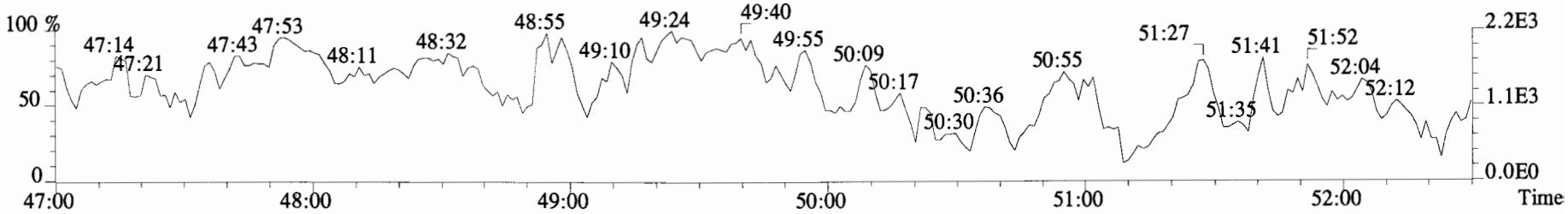
405.8428 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6548.0,0.00%,F,F)



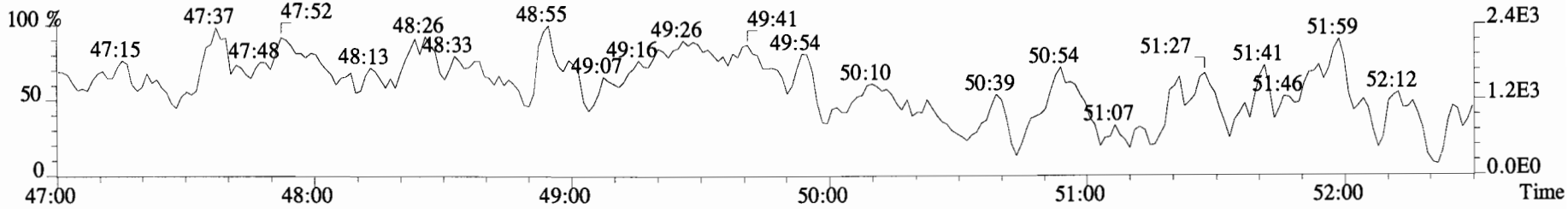
380.9760 S:5 F:4



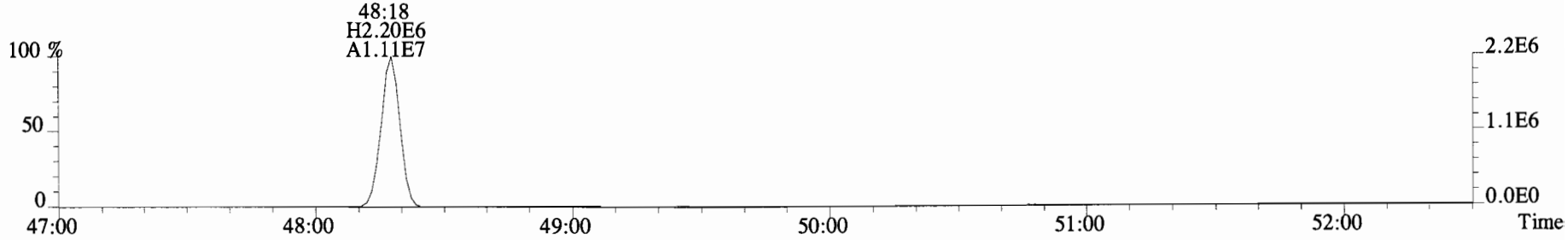
File:141020E1 #1-561 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
427.7635 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1792.0,0.00%,F,F)



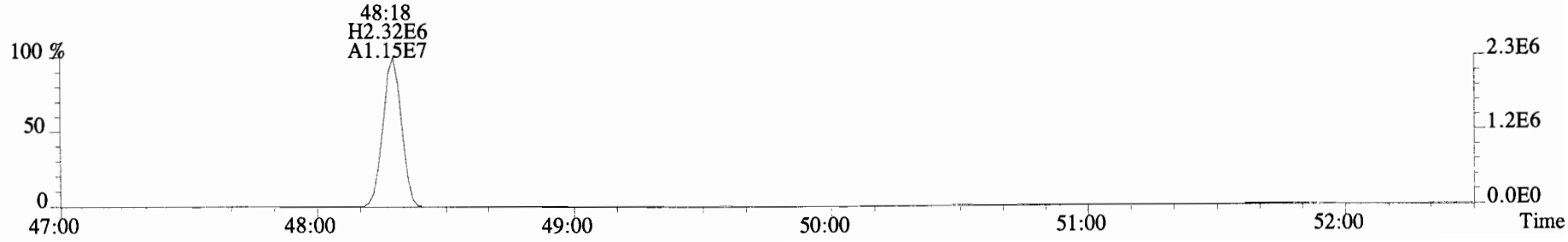
429.7606 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1884.0,0.00%,F,F)



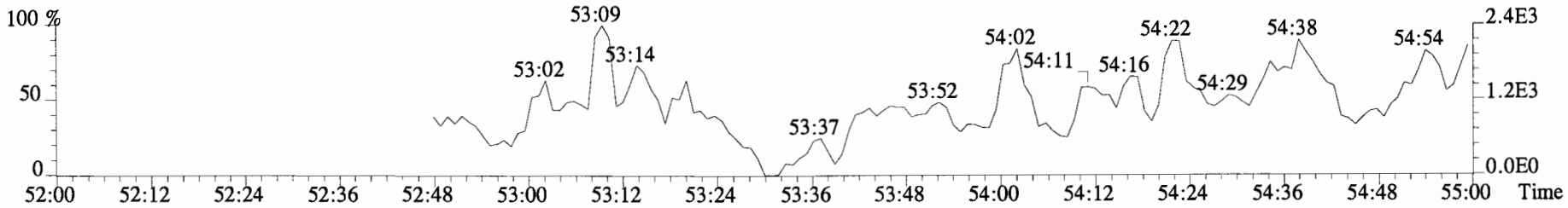
439.8038 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2168.0,0.00%,F,F)



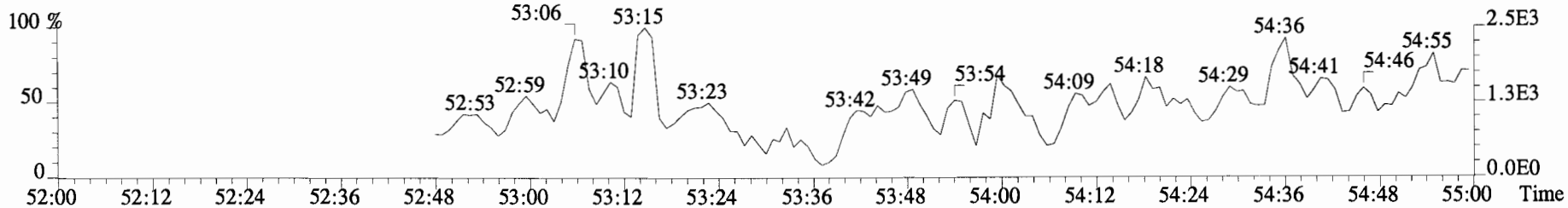
441.8008 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1580.0,0.00%,F,F)



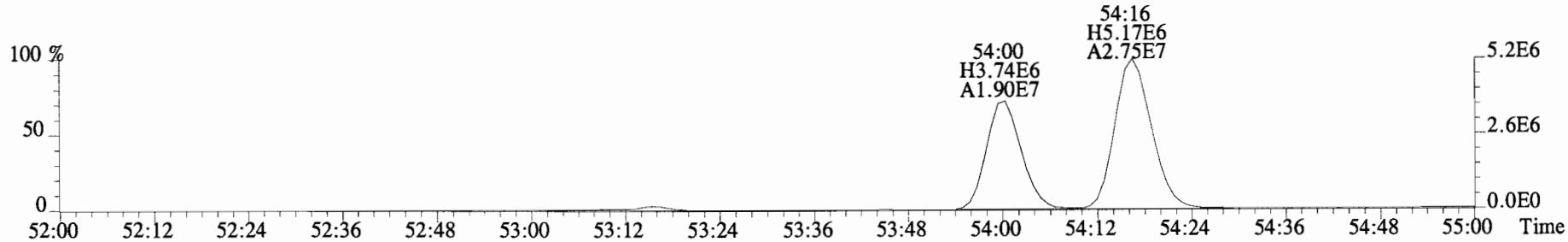
File:141020E1 #1-418 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
427.7635 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1424.0,0.00%,F,F)



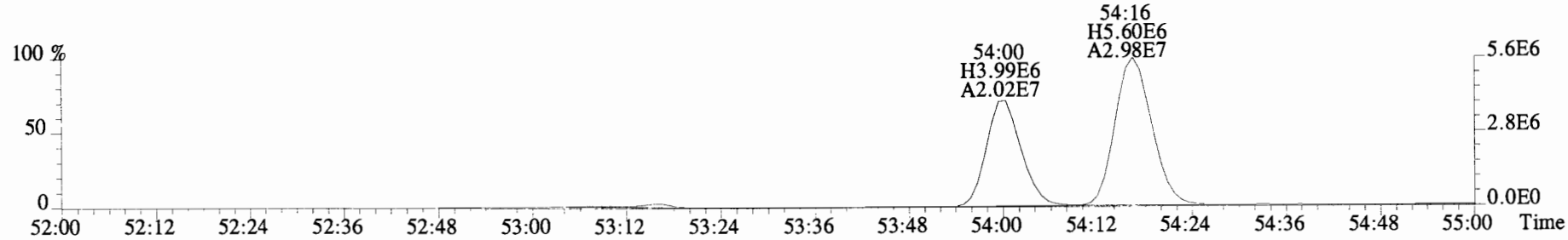
429.7606 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1596.0,0.00%,F,F)



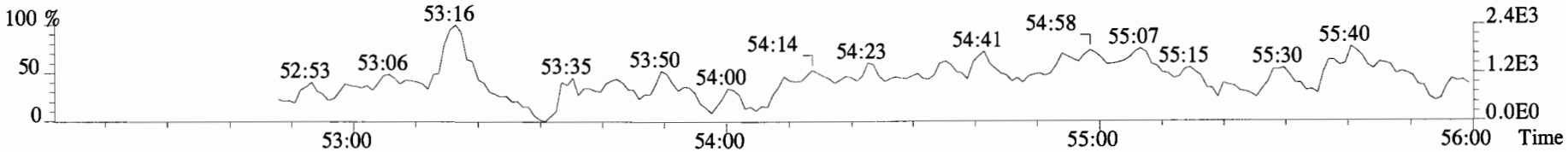
439.8038 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5728.0,0.00%,F,F)



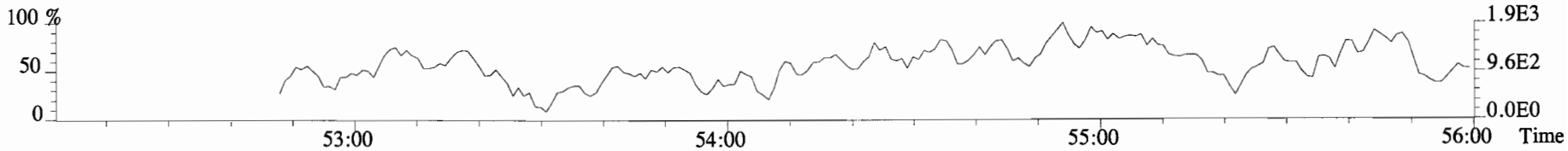
441.8008 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8004.0,0.00%,F,F)



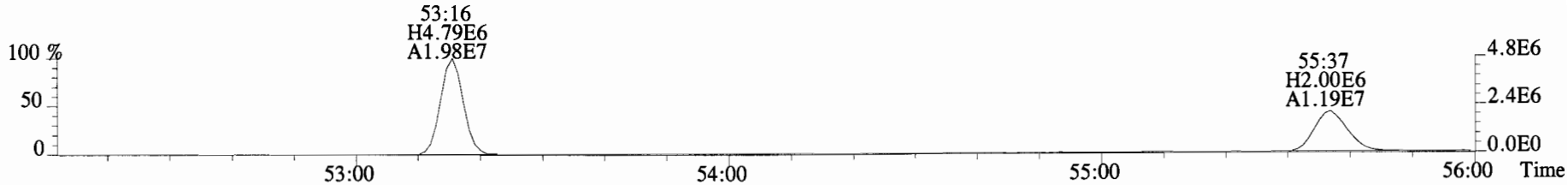
File:141020E1 #1-418 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
463.7216 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1260.0,0.00%,F,F)



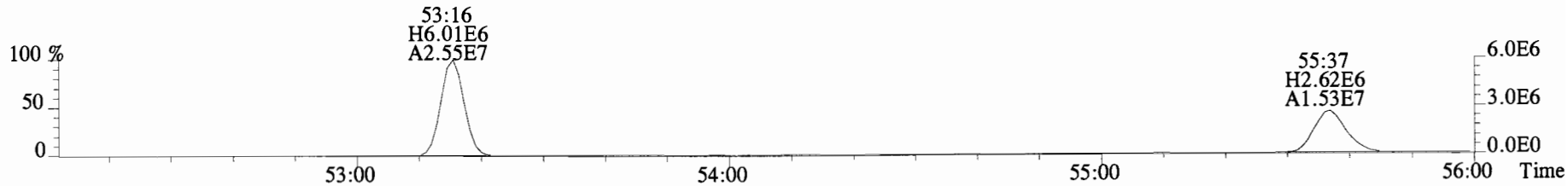
465.7186 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1432.0,0.00%,F,F)



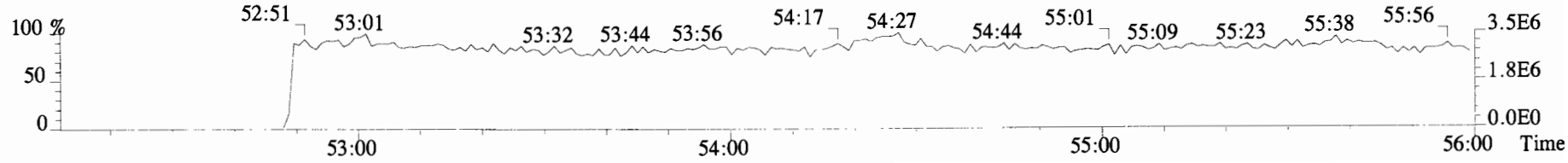
473.7648 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,17392.0,0.00%,F,F)



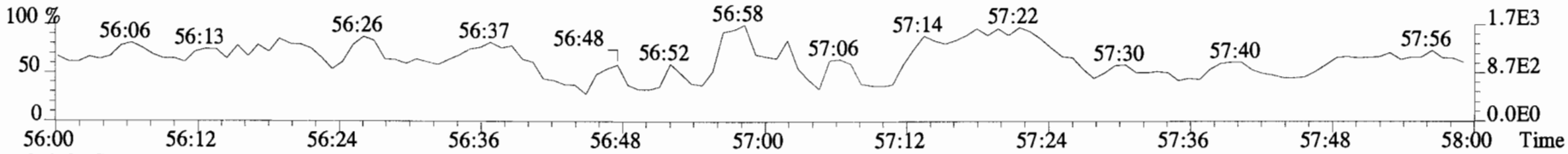
475.7619 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,17256.0,0.00%,F,F)



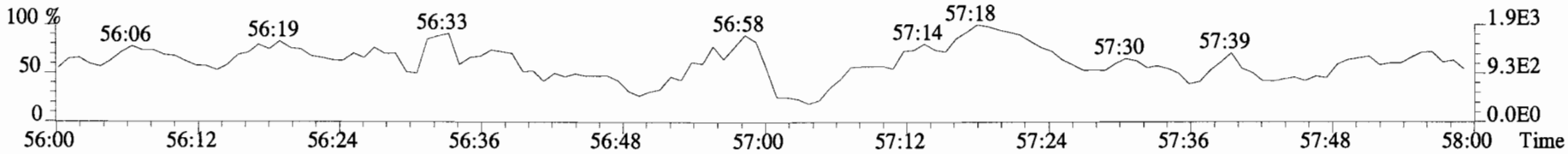
492.9697 S:5 F:5



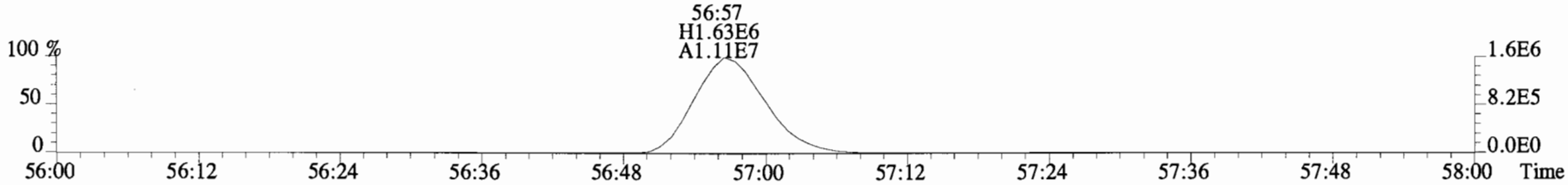
File:141020E1 #1-418 Acq:20-OCT-2014 16:23:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BLK1 Method Blank 1 Exp:PCB_ZB1
497.6826 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1444.0,0.00%,F,F)



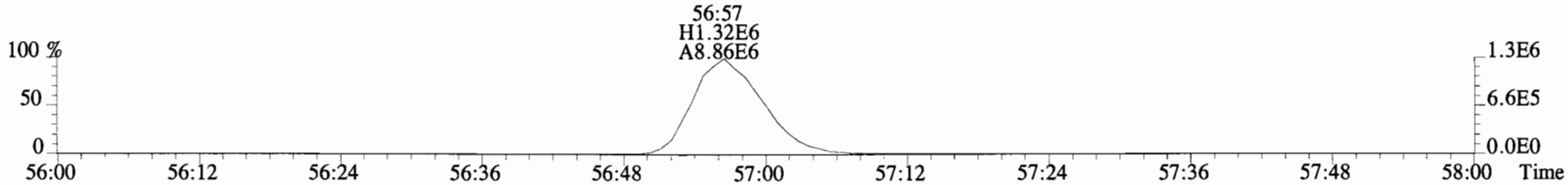
499.6797 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1484.0,0.00%,F,F)



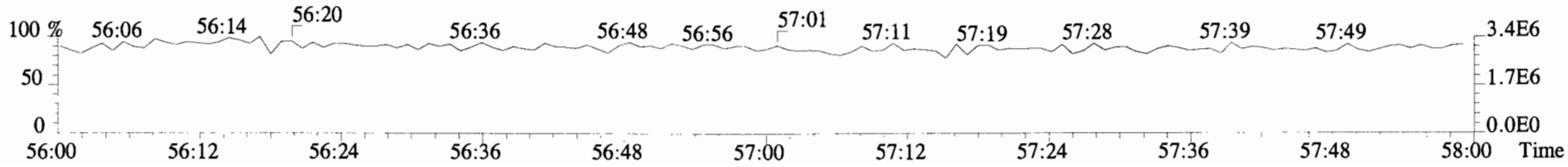
509.7229 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1616.0,0.00%,F,F)



511.7199 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1504.0,0.00%,F,F)



492.9697 S:5 F:5



EPA METHOD 1668C PCB ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory OPR Data Filename: B4J0088-BS1

Matrix : AQUEOUS Ext. Date: 10-16-14 Analysis Date: 20-OCT-14 Time: 14:14:44

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)
PCB-1	50	56.5	30.0-67.5	13C-PCB-1	100	58.0	15-145	13C-PCB-79	100	93.4	40-145
PCB-3	50	56.3	30.0-67.5	13C-PCB-3	100	60.8	15-145	13C-PCB-178	100	79.8	40-145
PCB-4/10	200	229.9	120-270	13C-PCB-4	100	59.6	15-145				
PCB-15	100	111.8	60.0-135	13C-PCB-11	100	71.2	15-145				
PCB-19	50	56.0	30.0-67.5	13C-PCB-19	100	57.7	15-145				
PCB-37	50	53.6	30.0-67.5	13C-PCB-37	100	77.1	15-145				
PCB-54	50	55.5	30.0-67.5	13C-PCB-54	100	73.0	15-145				
PCB-81	50	56.7	30.0-67.5	13C-PCB-81	100	87.4	40-145				
PCB-77	50	55.9	30.0-67.5	13C-PCB-77	100	88.0	40-145				
PCB-104	50	58.2	30.0-67.5	13C-PCB-104	100	73.1	40-145				
PCB-123	50	59.3	30.0-67.5	13C-PCB-123	100	85.6	40-145				
PCB-106/118	100	114.9	60.0-135	13C-PCB-118	100	86.8	40-145				
PCB-114	50	59.6	30.0-67.5	13C-PCB-114	100	105.6	40-145				
PCB-105	50	59.3	30.0-67.5	13C-PCB-105	100	106.5	40-145				
PCB-126	50	58.8	30.0-67.5	13C-PCB-126	100	107.2	40-145				
PCB-155	50	60.6	30.0-67.5	13C-PCB-155	100	58.1	40-145				
PCB-167	50	60.3	30.0-67.5	13C-PCB-167	100	91.5	40-145				
PCB-156	50	60.3	30.0-67.5	13C-PCB-156	100	90.3	40-145				
PCB-157	50	60.3	30.0-67.5	13C-PCB-157	100	89.0	40-145				
PCB-169	50	59.8	30.0-67.5	13C-PCB-169	100	87.7	40-145				
PCB-188	50	58.9	30.0-67.5	13C-PCB-188	100	68.2	40-145				
PCB-189	50	62.1	30.0-67.5	13C-PCB-189	100	68.9	40-145				
PCB-202	50	56.7	30.0-67.5	13C-PCB-202	100	61.5	40-145				
PCB-205	50	57.9	30.0-67.5	13C-PCB-194	100	87.6	40-145				
PCB-208	50	53.4	30.0-67.5	13C-PCB-208	100	79.0	40-145				
PCB-206	50	54.3	30.0-67.5	13C-PCB-206	100	78.0	40-145				
PCB-209	50	59.5	30.0-67.5	13C-PCB-209	100	66.1	40-145				

Analyst: DMS

Date: 10/24/14

EPA METHOD 1668A PCB ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory OPR Data Filename: B4J0088-BS1

Matrix : AQUEOUS Ext. Date: 10-16-14 Analysis Date: 20-OCT-14 Time: 14:14:44

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)
PCB-1	50	56.5	25.0-75.0	13C-PCB-1	100	58.0	15-140	13C-PCB-79	100	93.4	40-125
PCB-3	50	56.3	25.0-75.0	13C-PCB-3	100	60.8	15-140	13C-PCB-178	100	79.8	40-125
PCB-4/10	200	229.9	100-300	13C-PCB-4	100	59.6	30-140				
PCB-15	100	111.8	50.0-150	13C-PCB-11	100	71.2	30-140				
PCB-19	50	56.0	25.0-75.0	13C-PCB-19	100	57.7	30-140				
PCB-37	50	53.6	25.0-75.0	13C-PCB-37	100	77.1	30-140				
PCB-54	50	55.5	25.0-75.0	13C-PCB-54	100	73.0	30-140				
PCB-81	50	56.7	25.0-75.0	13C-PCB-81	100	87.4	30-140				
PCB-77	50	55.9	25.0-75.0	13C-PCB-77	100	88.0	30-140				
PCB-104	50	58.2	25.0-75.0	13C-PCB-104	100	73.1	30-140				
PCB-123	50	59.3	25.0-75.0	13C-PCB-123	100	85.6	30-140				
PCB-106/118	100	114.9	50.0-150	13C-PCB-118	100	86.8	30-140				
PCB-114	50	59.6	25.0-75.0	13C-PCB-114	100	105.6	30-140				
PCB-105	50	59.3	25.0-75.0	13C-PCB-105	100	106.5	30-140				
PCB-126	50	58.8	25.0-75.0	13C-PCB-126	100	107.2	30-140				
PCB-155	50	60.6	25.0-75.0	13C-PCB-155	100	58.1	30-140				
PCB-167	50	60.3	25.0-75.0	13C-PCB-167	100	91.5	30-140				
PCB-156	50	60.3	25.0-75.0	13C-PCB-156	100	90.3	30-140				
PCB-157	50	60.3	25.0-75.0	13C-PCB-157	100	89.0	30-140				
PCB-169	50	59.8	25.0-75.0	13C-PCB-169	100	87.7	30-140				
PCB-188	50	58.9	25.0-75.0	13C-PCB-188	100	68.2	30-140				
PCB-189	50	62.1	25.0-75.0	13C-PCB-189	100	68.9	30-140				
PCB-202	50	56.7	25.0-75.0	13C-PCB-202	100	61.5	30-140				
PCB-205	50	57.9	25.0-75.0	13C-PCB-194	100	87.6	30-140				
PCB-208	50	53.4	25.0-75.0	13C-PCB-208	100	79.0	30-140				
PCB-206	50	54.3	25.0-75.0	13C-PCB-206	100	78.0	30-140				
PCB-209	50	59.5	25.0-75.0	13C-PCB-209	100	66.1	30-140				

Analyst: DMS

Date: 10/24/14

Client ID: OPR Filename: 141020E1 S:3 Acq:20-OCT-14 14:14:44 ConCal: ST141020E1-1
Lab ID: B4J0088-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-1	7.21e+07	3.01	y	1.25	16:08	1.001	0.996	1.006	56.5066
	PCB-2	7.66e+07	3.01	y	1.18	18:31	0.988	0.983	0.993	58.3446
	PCB-3	7.63e+07	3.00	y	1.22	18:45	1.001	0.996	1.006	56.2901
	PCB-4/10	2.30e+08	1.63	y	1.55	20:08	1.003	0.998	1.008	229.947
	PCB-7/9	2.94e+08	1.63	y	1.27	21:55	0.868	0.865	0.873	225.705
	PCB-6	1.51e+08	1.62	y	1.26	22:33	0.893	0.890	0.899	116.464
	PCB-5/8	3.07e+08	1.63	y	1.23	22:59	0.910	0.906	0.916	242.266
	PCB-14	1.74e+08	1.64	y	1.23	24:04	0.953	0.949	0.959	107.420
	PCB-11	1.72e+08	1.65	y	1.16	25:16	1.001	0.996	1.006	112.760
	PCB-12/13	3.33e+08	1.64	y	1.10	25:39	1.016	1.010	1.020	230.742
	PCB-15	1.78e+08	1.66	y	1.21	25:58	1.029	1.024	1.034	111.771
	PCB-19	4.39e+07	1.07	y	1.30	24:16	1.001	0.996	1.006	55.9559
	PCB-30	6.45e+07	1.07	y	1.83	25:09	1.037	1.032	1.042	58.2089
	PCB-18	4.77e+07	1.06	y	0.86	25:54	0.954	0.949	0.959	55.1889
	PCB-17	4.99e+07	1.07	y	0.90	26:04	0.960	0.955	0.965	55.0977
	PCB-24/27	1.36e+08	1.07	y	1.18	26:39	0.981	0.976	0.986	114.827
-	PCB-16/32	1.19e+08	1.07	y	1.03	27:10	1.000	0.995	1.005	114.931
-	PCB-34	7.88e+07	1.04	y	1.26	27:57	0.960	0.956	0.966	60.1067
	PCB-23	7.38e+07	1.07	y	1.31	28:03	0.964	0.959	0.969	54.1096
	PCB-29	7.74e+07	1.07	y	1.33	28:18	0.972	0.967	0.977	55.9929
	PCB-26	7.93e+07	1.07	y	1.29	28:30	0.979	0.974	0.984	59.0326
	PCB-25	8.16e+07	1.07	y	1.34	28:40	0.985	0.980	0.990	58.4355
	PCB-31	7.56e+07	1.05	y	1.42	29:01	0.997	0.992	1.002	51.2479
	PCB-28	9.03e+07	1.08	y	1.38	29:08	1.001	0.996	1.006	63.0719
	PCB-20/21/33	2.38e+08	1.08	y	1.31	29:44	1.021	1.017	1.027	174.280
	PCB-22	8.66e+07	1.07	y	1.32	30:11	1.037	1.032	1.042	62.9922
	PCB-36	8.10e+07	1.06	y	1.38	30:48	0.934	0.929	0.939	51.2168
	PCB-39	8.58e+07	1.06	y	1.42	31:16	0.948	0.943	0.953	52.5531
	PCB-38	8.03e+07	1.06	y	1.35	32:03	0.972	0.967	0.976	51.5853
	PCB-35	8.62e+07	1.06	y	1.38	32:33	0.987	0.982	0.992	54.4672
	PCB-37	8.56e+07	1.05	y	1.39	32:59	1.000	0.996	1.006	53.5581
	PCB-54	5.38e+07	0.77	y	1.20	28:01	1.001	0.996	1.006	55.5113
	PCB-50	4.24e+07	0.76	y	0.97	29:10	1.042	1.037	1.047	54.1237
	PCB-53	4.37e+07	0.77	y	1.19	29:50	0.946	0.941	0.951	51.2883
	PCB-51	4.65e+07	0.78	y	1.15	30:09	0.956	0.952	0.962	56.2619
	PCB-45	3.61e+07	0.77	y	0.97	30:35	0.970	0.966	0.976	52.1680
	PCB-46	3.52e+07	0.76	y	0.95	31:05	0.986	0.982	0.992	51.6711

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	1.03e+08	0.76	y	1.28	31:33	1.001	0.996	1.006	112.418
PCB-73	5.70e+07	0.77	y	1.37	31:40	1.005	1.000	1.010	57.9856
PCB-43/49	8.67e+07	0.77	y	1.11	31:50	1.010	1.005	1.015	108.810
PCB-47	3.87e+07	0.77	y	1.13	32:01	1.000	0.996	1.006	48.2272
PCB-48/75	1.07e+08	0.76	y	1.30	32:08	1.003	0.999	1.009	115.126
PCB-65	5.37e+07	0.76	y	1.33	32:25	1.012	1.007	1.017	56.7959
PCB-62	5.38e+07	0.77	y	1.29	32:31	1.015	1.011	1.021	58.6898
PCB-44	3.91e+07	0.75	y	0.94	32:50	1.025	1.020	1.030	58.6543
PCB-42/59	1.01e+08	0.78	y	1.22	33:04	1.033	1.028	1.038	117.213
PCB-41/64/71/72	2.29e+08	0.77	y	1.31	33:39	1.051	1.046	1.056	245.483
PCB-68	6.54e+07	0.78	y	1.49	33:54	1.059	1.054	1.064	62.0996
PCB-40	3.53e+07	0.78	y	0.82	34:08	1.066	1.061	1.071	60.7373
PCB-57	6.52e+07	0.78	y	1.11	34:28	0.970	0.965	0.975	58.3615
PCB-67	5.98e+07	0.75	y	1.07	34:46	0.978	0.974	0.984	55.5614
PCB-58	6.03e+07	0.76	y	1.10	34:54	0.982	0.977	0.987	54.5383
PCB-63	6.44e+07	0.77	y	1.12	35:03	0.986	0.982	0.992	57.4211
PCB-74	6.59e+07	0.77	y	1.20	35:20	0.994	0.990	1.000	54.5970
PCB-61/70	1.21e+08	0.75	y	1.08	35:31	0.999	0.994	1.004	111.697
PCB-76/66	1.28e+08	0.76	y	1.14	35:44	1.005	1.001	1.011	111.982
PCB-80	7.46e+07	0.77	y	1.28	35:58	1.001	0.996	1.006	56.4672
PCB-55	6.76e+07	0.76	y	1.11	36:17	1.009	1.005	1.015	58.9377
PCB-56/60	1.27e+08	0.76	y	1.09	36:47	1.023	1.018	1.028	112.780
PCB-79	6.59e+07	0.77	y	1.12	37:50	1.053	1.048	1.058	56.7538
PCB-78	6.42e+07	0.77	y	1.24	38:32	0.987	0.982	0.992	54.3096
PCB-81	7.49e+07	0.78	y	1.38	39:04	1.000	0.995	1.005	56.7065
PCB-77	6.93e+07	0.77	y	1.21	39:39	1.000	0.995	1.005	55.9206
PCB-104	3.60e+07	1.60	y	1.26	32:42	1.001	0.996	1.006	58.2240
PCB-96	3.33e+07	1.59	y	1.09	33:57	1.039	1.034	1.044	62.0473
PCB-103	2.86e+07	1.61	y	0.93	34:29	1.055	1.050	1.060	62.5202
PCB-100	2.94e+07	1.62	y	1.00	34:51	1.066	1.061	1.071	59.6605
PCB-94	2.50e+07	1.61	y	1.11	35:19	0.985	0.981	0.991	57.4246
PCB-95/98/102	8.24e+07	1.57	y	1.21	35:49	0.999	0.994	1.004	172.883
PCB-93	2.56e+07	1.61	y	1.13	35:57	1.003	0.998	1.008	57.6074
PCB-88/91	4.86e+07	1.62	y	1.02	36:13	1.010	1.006	1.016	121.370
PCB-121	4.20e+07	1.58	y	1.90	36:19	1.013	1.009	1.019	56.1808
PCB-84/92	5.16e+07	1.59	y	1.05	37:09	0.990	0.986	0.996	114.965
PCB-89	2.55e+07	1.57	y	1.02	37:21	0.996	0.991	1.001	58.8294

RL: MONO, TRI - DECA: ——

RL: DI : ——

Integrations by Analyst: DMS Date: 10/24/14

Reviewed by Analyst: [signature] Date: 10/25/14

Client ID: OPR Filename: 141020E1 S:3 Acq:20-OCT-14 14:14:44 ConCal: ST141020E1-1

Lab ID: B4J0088-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-90/101	5.73e+07	1.59	y	1.19	37:31	1.000	0.996	1.006	112.776
	PCB-113	3.33e+07	1.58	y	1.35	37:46	1.007	1.002	1.012	57.6698
	PCB-99	3.16e+07	1.60	y	1.29	37:51	1.009	1.005	1.015	57.5574
	PCB-119	3.84e+07	1.58	y	1.72	38:19	0.987	0.982	0.992	57.6460
	PCB-108/112	5.73e+07	1.56	y	1.29	38:29	0.991	0.986	0.996	114.771
	PCB-83	3.43e+07	1.58	y	1.52	38:38	0.995	0.991	1.001	58.2795
	PCB-97	2.86e+07	1.61	y	1.25	38:51	1.001	0.996	1.006	59.1862
	PCB-86	2.35e+07	1.59	y	1.02	38:59	1.004	1.000	1.010	59.4311
	B-87/117/125	1.06e+08	1.61	y	1.56	39:06	1.007	1.002	1.012	175.439
	PCB-111/115	7.64e+07	1.61	y	1.75	39:16	1.011	1.007	1.017	112.515
	PCB-85/116	6.08e+07	1.59	y	1.30	39:24	1.015	1.010	1.020	120.473
	PCB-120	4.05e+07	1.56	y	1.78	39:37	1.020	1.016	1.026	58.6629
	PCB-110	3.94e+07	1.62	y	1.68	39:46	1.024	1.020	1.030	60.5288
	PCB-82	2.31e+07	1.61	y	0.74	40:25	0.977	0.972	0.982	56.9534
	PCB-124	4.30e+07	1.66	y	1.32	41:05	0.993	0.988	0.998	59.2472
	PCB-107/109	8.33e+07	1.61	y	1.22	41:14	0.996	0.991	1.001	124.404
	PCB-123	3.96e+07	1.61	y	1.22	41:24	1.000	0.995	1.005	59.2818
-	PCB-106/118	8.12e+07	1.60	y	1.22	41:35	1.000	0.996	1.006	114.892
-	PCB-114	6.54e+07	1.58	y	1.36	42:14	1.000	0.995	1.005	59.5843
	PCB-122	6.21e+07	1.61	y	1.24	42:23	1.004	0.999	1.009	61.9774
	PCB-105	6.37e+07	1.60	y	1.28	43:06	1.000	0.995	1.005	59.2530
	PCB-127	6.00e+07	1.60	y	1.14	43:26	1.000	0.995	1.005	56.8053
	PCB-126	5.98e+07	1.66	y	1.28	45:20	1.000	0.995	1.005	58.8063
	PCB-155	2.24e+07	1.27	y	1.14	37:05	1.001	0.966	1.006	60.6151
	PCB-150	2.21e+07	1.27	y	1.06	38:21	1.035	1.030	1.040	63.6269
	PCB-152	2.27e+07	1.29	y	1.10	38:49	1.048	1.043	1.053	63.2772
	PCB-145	2.28e+07	1.29	y	1.09	39:16	1.060	1.055	1.065	63.8576
	PCB-136	2.39e+07	1.30	y	1.08	39:36	1.068	1.064	1.074	67.4701
	PCB-148	1.50e+07	1.30	y	0.74	39:42	1.071	1.066	1.076	62.0615
	PCB-154	1.88e+07	1.30	y	0.88	40:11	1.084	1.079	1.089	65.2938
	PCB-151	1.68e+07	1.30	y	0.81	40:50	1.102	1.097	1.107	63.8472
	PCB-135	1.61e+07	1.27	y	0.78	41:02	1.107	1.101	1.113	63.4205
	PCB-144	1.72e+07	1.30	y	0.82	41:09	1.110	1.105	1.116	64.2103
	PCB-147	2.01e+07	1.28	y	0.83	41:17	1.114	1.011	1.120	74.2726
	PCB-139/149	3.67e+07	1.30	y	0.84	41:33	1.121	1.115	1.127	133.472
-	PCB-140	1.66e+07	1.29	y	0.79	41:44	1.126	1.120	1.132	64.8714
-	PCB-134/143	6.86e+07	1.25	y	0.93	42:10	0.975	0.970	0.980	116.468

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	6.88e+07	1.26	y	0.95	42:28	0.982	0.977	0.987	114.442
PCB-131	3.26e+07	1.20	y	0.91	42:38	0.986	0.981	0.991	56.0744
PCB-146/165	8.61e+07	1.24	y	1.16	42:51	0.991	0.986	0.996	117.133
PCB-132/161	8.45e+07	1.26	y	1.11	43:06	0.997	0.992	1.002	119.442
PCB-153	4.44e+07	1.25	y	1.18	43:15	1.000	0.995	1.005	59.2203
PCB-168	5.09e+07	1.26	y	1.37	43:28	1.005	1.000	1.010	58.4989
PCB-141	3.61e+07	1.24	y	0.97	44:00	1.001	0.996	1.005	59.4074
PCB-137	4.17e+07	1.25	y	1.07	44:22	1.009	1.004	1.014	62.5359
PCB-130	3.60e+07	1.27	y	0.85	44:29	1.012	1.007	1.017	68.2265
PCB-138/163/164	1.37e+08	1.25	y	1.23	44:51	1.001	0.996	1.006	184.135
PCB-158/160	9.85e+07	1.24	y	1.29	45:06	1.006	1.001	1.011	126.123
PCB-129	3.25e+07	1.27	y	0.92	45:20	1.012	1.007	1.017	57.9578
PCB-166	4.82e+07	1.26	y	1.12	45:48	0.993	0.988	0.998	62.3245
PCB-159	5.18e+07	1.23	y	1.16	46:07	1.001	0.995	1.005	64.1477
PCB-128/162	8.52e+07	1.24	y	1.02	46:25	1.007	1.002	1.012	120.624
PCB-167	4.92e+07	1.25	y	1.06	46:48	1.000	0.995	1.005	60.2796
PCB-156	5.09e+07	1.26	y	1.18	48:06	1.000	0.995	1.005	60.3434
PCB-157	4.84e+07	1.27	y	1.08	48:22	1.000	0.995	1.005	60.2881
PCB-169	4.48e+07	1.25	y	1.11	50:33	1.000	0.995	1.005	59.7860
PCB-188	3.35e+07	1.08	y	1.40	42:53	1.000	0.995	1.005	58.8746
PCB-184	3.06e+07	1.08	y	1.24	43:20	1.011	1.006	1.016	61.0171
PCB-179	3.28e+07	1.07	y	1.30	44:07	1.029	1.024	1.034	62.0482
PCB-176	3.41e+07	1.10	y	1.36	44:35	1.040	1.035	1.045	61.7272
PCB-186	3.28e+07	1.08	y	1.28	45:12	1.054	1.049	1.059	63.4285
PCB-178	2.36e+07	1.09	y	0.94	45:41	1.066	1.061	1.071	62.2541
PCB-175	2.52e+07	1.07	y	0.97	46:02	1.074	1.069	1.079	64.1148
PCB-182/187	5.21e+07	1.08	y	1.01	46:12	1.078	1.073	1.083	126.745
PCB-183	2.69e+07	1.05	y	1.08	46:31	1.085	1.080	1.090	61.2966
PCB-185	2.43e+07	1.08	y	1.34	47:11	0.956	0.951	0.961	62.2803
PCB-174	2.56e+07	1.07	y	1.34	47:32	0.963	0.958	0.968	65.9062
PCB-181	2.61e+07	1.09	y	1.36	47:39	0.965	0.961	0.971	66.0479
PCB-177	2.29e+07	1.09	y	1.24	47:49	0.969	0.964	0.974	63.4617
PCB-171	2.31e+07	1.07	y	1.31	48:07	0.975	0.970	0.980	60.5965
PCB-173	2.09e+07	1.09	y	1.16	48:32	0.983	0.979	0.989	61.9085
PCB-172	2.18e+07	1.08	y	1.22	48:59	0.992	0.988	0.998	61.2713
PCB-192	2.84e+07	1.08	y	1.53	49:10	0.996	0.991	1.001	64.0000
PCB-180	2.49e+07	1.05	y	1.43	49:23	1.000	0.995	1.005	59.9951

RL: MONO, TRI - DECA: ———

Integrations by Analyst: DMS

Date: 10/24/14

Client ID: OPR Filename: 141020E1 S:3 Acq:20-OCT-14 14:14:44 ConCal: ST141020E1-1

Lab ID: B4J0088-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-193	3.03e+07	1.10	y	1.65	49:36	1.005	0.999	1.009	63.0852
	PCB-191	3.01e+07	1.08	y	1.67	49:51	1.010	1.004	1.014	62.0357
	PCB-170	2.08e+07	1.07	y	1.50	50:56	1.000	0.995	1.005	58.9151
	PCB-190	2.90e+07	1.06	y	2.02	51:07	1.004	0.998	1.008	61.0159
	PCB-189	3.00e+07	1.07	y	1.54	52:29	1.000	0.995	1.005	62.0732
	PCB-202	1.92e+07	0.93	y	1.04	48:18	1.000	0.995	1.005	56.7248
	PCB-201	2.12e+07	0.93	y	1.10	48:48	1.011	1.006	1.016	59.0630
	PCB-204	1.86e+07	0.90	y	0.99	48:57	1.014	1.009	1.019	57.3423
	PCB-197	2.04e+07	0.94	y	1.07	49:15	1.020	1.015	1.025	58.5468
	PCB-200	2.00e+07	0.90	y	1.02	50:10	1.039	1.032	1.044	60.4737
	PCB-198	1.33e+07	0.93	y	0.74	51:33	1.067	1.058	1.068	54.7585
	PCB-199	1.40e+07	0.93	y	0.73	51:40	1.070	1.060	1.070	59.0840
-	PCB-196/203	2.89e+07	0.92	y	0.77	51:56	1.075	1.066	1.076	114.820
-	PCB-195	2.87e+07	0.91	y	1.20	53:08	0.984	0.979	0.989	58.0335
	PCB-194	2.89e+07	0.90	y	1.25	54:00	1.000	0.995	1.005	56.2890
	PCB-205	3.37e+07	0.92	y	1.41	54:17	1.005	1.001	1.011	57.8734
	PCB-208	2.65e+07	1.33	y	0.96	53:16	1.000	0.995	1.005	53.4250
	PCB-207	2.62e+07	1.32	y	0.92	53:35	1.006	1.001	1.011	55.4630
	PCB-206	1.67e+07	1.33	y	1.03	55:37	1.000	0.995	1.005	54.3354
	PCB-209	1.65e+07	1.18	y	1.18	56:57	1.000	0.995	1.005	59.4929

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	2.25e+08	3.01	y	16:08	1.22	171.141	
Total Di-PCB	1.84e+09	1.63	y	20:08	1.21	1379.30	
Total Tri-PCB	4.61e+08	1.07	y	24:16	1.16	454.209	
Total Tri-PCB	1.33e+09	1.04	y	27:57	1.35	926.735	Sum:1380.94
Total Tetra-PCB	2.32e+09	0.77	y	28:01	1.17	2361.22	
Total Penta-PCB	1.33e+09	1.60	y	32:42	1.21	2405.08	
Total Penta-PCB	3.39e+08	1.58	y	42:14	1.26	322.893	Sum:2727.97
Total Hexa-PCB	2.71e+08	1.27	y	37:05	0.92	910.348	
Total Hexa-PCB	1.21e+09	1.25	y	42:10	1.08	1701.15	Sum:2611.50
Total Hepta-PCB	6.57e+08	1.08	y	42:53	1.27	1510.72	
Total Octa-PCB	1.56e+08	0.93	y	48:18	0.92	520.813	
Total Octa-PCB	9.38e+07	0.91	y	53:08	1.29	176.993	Sum:697.806
Total Nona-PCB	6.97e+07	1.33	y	53:16	0.96	164.135	
Total Deca-PCB	1.65e+07	1.18	y	56:57	1.18	59.4929	

Total PCB Conc:12987.0691260

RL: MONO, TRI - DECA: ——

Integrations by Analyst: DMS

Date: 10/24/14

Client ID: OPR Filename: 141020E1 S:3 Acq:20-OCT-14 14:14:44 ConCal: ST141020E1-1
Lab ID: B4J0088-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:1.0000 EndCAL: NA

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.02e+08	3.33	y	0.89	16:07	0.621	0.622	0.628	58.0	58.0
13C-PCB-3	1.11e+08	3.41	y	0.93	18:44	0.722	0.721	0.729	60.8	60.8
13C-PCB-4	6.43e+07	1.58	y	0.55	20:05	0.773	0.772	0.780	59.6	59.6
13C-PCB-9	1.03e+08	1.57	y	0.83	21:52	0.842	0.840	0.848	63.2	63.2
13C-PCB-11	1.31e+08	1.56	y	0.94	25:15	0.972	0.968	0.978	71.2	71.2
13C-PCB-19	6.06e+07	1.07	y	0.53	24:14	0.934	0.929	0.939	57.7	57.7
13C-PCB-28	1.04e+08	1.06	y	0.89	29:06	1.003	0.999	1.009	65.3	65.3
13C-PCB-32	1.01e+08	1.09	y	0.81	27:09	1.046	1.041	1.051	62.7	62.7
13C-PCB-37	1.15e+08	1.06	y	0.83	32:59	1.137	1.131	1.143	77.1	77.1
13C-PCB-47	7.09e+07	0.80	y	0.74	32:01	0.871	0.867	0.875	73.1	73.1
13C-PCB-52	7.16e+07	0.81	y	0.71	31:31	0.857	0.853	0.861	77.6	77.6
13C-PCB-54	8.10e+07	0.80	y	0.85	27:59	0.761	0.758	0.766	73.0	73.0
13C-PCB-70	1.00e+08	0.79	y	0.94	35:32	0.966	0.961	0.971	81.4	81.4
13C-PCB-77	1.03e+08	0.80	y	0.89	39:39	1.078	1.073	1.083	88.0	88.0
13C-PCB-80	1.03e+08	0.81	y	0.96	35:57	0.977	0.972	0.982	82.4	82.4
13C-PCB-81	9.55e+07	0.81	y	0.84	39:03	1.062	1.057	1.067	87.4	87.4
13C-PCB-95	3.93e+07	1.64	y	0.74	35:51	0.913	0.908	0.918	78.2	78.2
13C-PCB-97	3.88e+07	1.64	y	0.69	38:49	0.989	0.984	0.994	83.3	83.3
13C-PCB-101	4.27e+07	1.66	y	0.79	37:31	0.956	0.951	0.961	80.5	80.5
13C-PCB-104	4.91e+07	1.64	y	1.00	32:41	0.833	0.829	0.837	73.1	73.1
13C-PCB-105	8.37e+07	1.60	y	1.24	43:05	0.929	0.924	0.934	106	106
13C-PCB-114	8.10e+07	1.59	y	1.21	42:13	0.910	0.905	0.915	106	106
13C-PCB-118	5.77e+07	1.68	y	0.98	41:34	1.059	1.054	1.064	86.8	86.8
13C-PCB-123	5.48e+07	1.68	y	0.95	41:23	1.055	1.049	1.059	85.6	85.6
13C-PCB-126	7.91e+07	1.61	y	1.16	45:19	0.977	0.972	0.982	107	107
13C-PCB-127	9.27e+07	1.59	y	1.34	43:25	0.936	0.931	0.941	109	109
13C-PCB-138	6.06e+07	1.29	y	1.04	44:49	0.966	0.961	0.971	91.4	91.4
13C-PCB-141	6.23e+07	1.28	y	1.07	43:58	0.948	0.943	0.953	91.5	91.5
13C-PCB-153	6.36e+07	1.27	y	1.11	43:14	0.932	0.927	0.937	89.9	89.9
13C-PCB-155	3.26e+07	1.27	y	0.83	37:04	0.944	0.939	0.949	58.1	58.1
13C-PCB-156	7.14e+07	1.28	y	1.24	48:04	1.037	1.032	1.042	90.3	90.3
13C-PCB-157	7.42e+07	1.30	y	1.31	48:21	1.042	1.037	1.047	89.0	89.0
13C-PCB-159	6.93e+07	1.30	y	1.20	46:06	0.994	0.989	0.999	90.9	90.9
13C-PCB-167	7.68e+07	1.26	y	1.32	46:47	1.009	1.004	1.014	91.5	91.5
13C-PCB-169	6.77e+07	1.27	y	1.22	50:32	1.090	1.082	1.092	87.7	87.7
13C-PCB-170	2.36e+07	0.49	y	0.54	50:55	1.098	1.089	1.101	69.3	69.3
13C-PCB-180	2.90e+07	0.49	y	0.67	49:22	1.064	1.059	1.069	67.8	67.8
13C-PCB-188	4.05e+07	0.47	y	0.94	42:52	0.924	0.919	0.929	68.2	68.2
13C-PCB-189	3.13e+07	0.48	y	0.72	52:28	1.131	1.120	1.132	68.9	68.9
13C-PCB-194	4.12e+07	0.93	y	0.81	53:60	0.995	0.990	1.000	87.6	87.6
13C-PCB-202	3.25e+07	0.95	y	0.83	48:17	1.041	1.036	1.046	61.5	61.5
13C-PCB-206	2.98e+07	0.79	y	0.66	55:36	1.025	1.021	1.031	78.0	78.0
13C-PCB-208	5.15e+07	0.78	y	1.12	53:15	0.981	0.976	0.986	79.0	79.0
13C-PCB-209	2.35e+07	1.22	y	0.61	56:56	1.049	1.044	1.054	66.1	66.1

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.23e+08	0.77	y	1.01	37:50	1.029	1.023	1.033	93.4	93.4
13C-PCB-178	3.20e+07	0.48	y	0.63	45:40	0.985	0.979	0.989	79.8	79.8

PS vs. IS

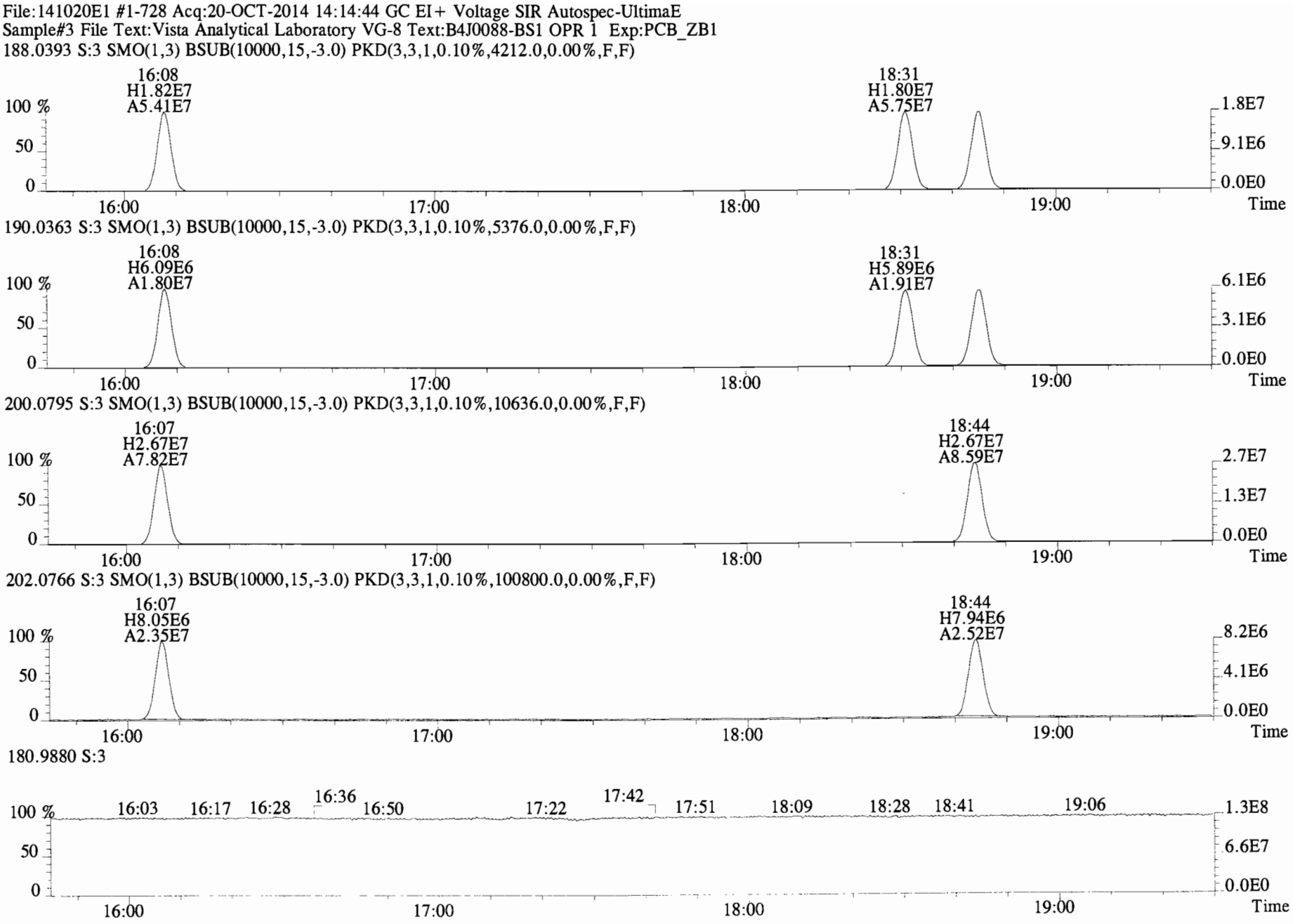
Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.23e+08	0.77	y	1.20	37:50	0.969	0.963	0.973	107	107
13C-PCB-178	3.20e+07	0.48	y	0.94	45:40	0.925	0.920	0.930	118	118

RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.97e+08	1.60	y	1.00	25:58	100
13C-PCB-31	1.79e+08	1.06	y	1.00	29:00	100
13C-PCB-60	1.30e+08	0.79	y	1.00	36:47	100
13C-PCB-111	6.75e+07	1.64	y	1.00	39:14	100
13C-PCB-128	6.35e+07	1.26	y	1.00	46:23	100
13C-PCB-205	5.80e+07	0.92	y	1.00	54:16	100

Analyst: DMS

Date: 10/24/14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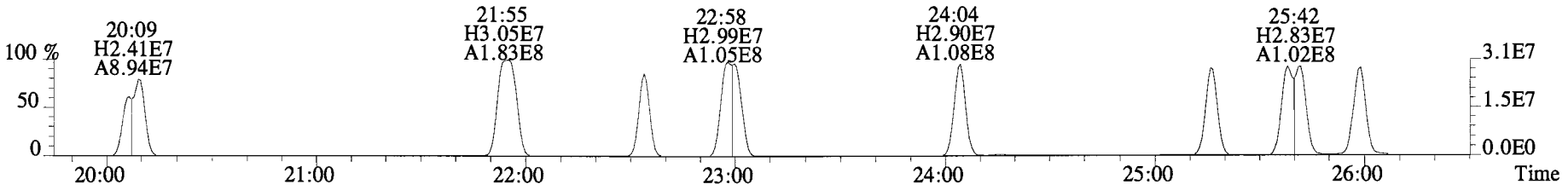
188.0393 S:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4212.0,0.00%,F,F)
16:08
H1.82E7
A5.41E7
18:31
H1.80E7
A5.75E7
100 %
50
0
1.8E7
9.1E6
0.0E0
16:00
17:00
18:00
19:00
Time
190.0363 S:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5376.0,0.00%,F,F)
16:08
H6.09E6
A1.80E7
18:31
H5.89E6
A1.91E7
6.1E6
3.1E6
0.0E0
200.0795 S:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10636.0,0.00%,F,F)
16:07
H2.67E7
A7.82E7
18:44
H2.67E7
A8.59E7
2.7E7
1.3E7
0.0E0
202.0766 S:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,100800.0,0.00%,F,F)
16:07
H8.05E6
A2.35E7
18:44
H7.94E6
A2.52E7
8.2E6
4.1E6
0.0E0
180.9880 S:3
16:03
16:17
16:28
16:36
16:50
17:22
17:42
17:51
18:09
18:28
18:41
19:06
1.3E8
6.6E7
0.0E0

File:141020E1 #1-757 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
222.0003 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10808.0,0.00%,F,F)



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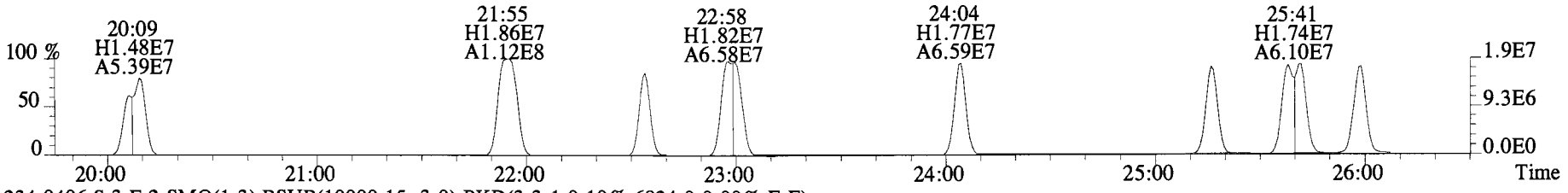
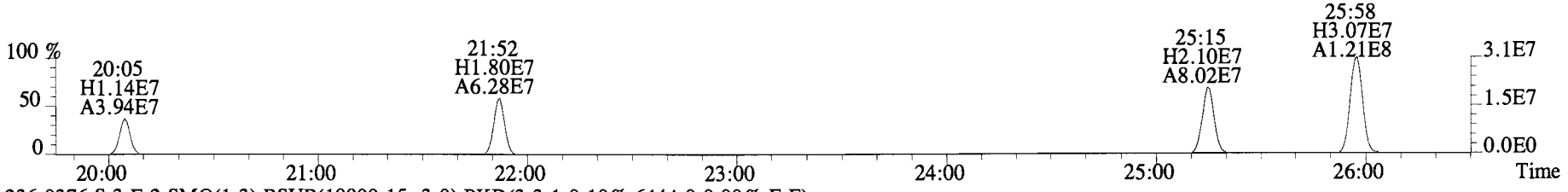
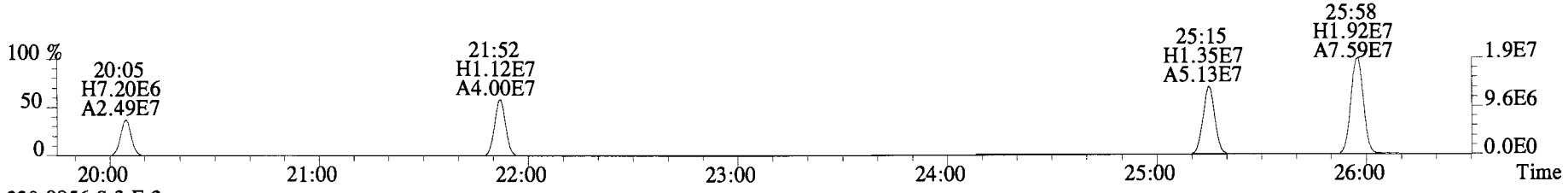


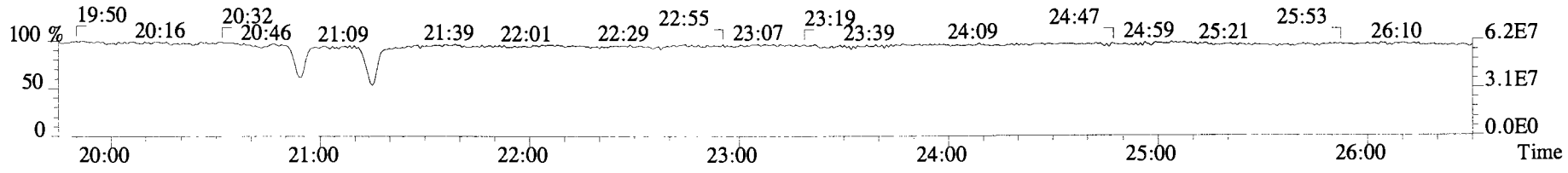
234.0406 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6824.0,0.00%,F,F)

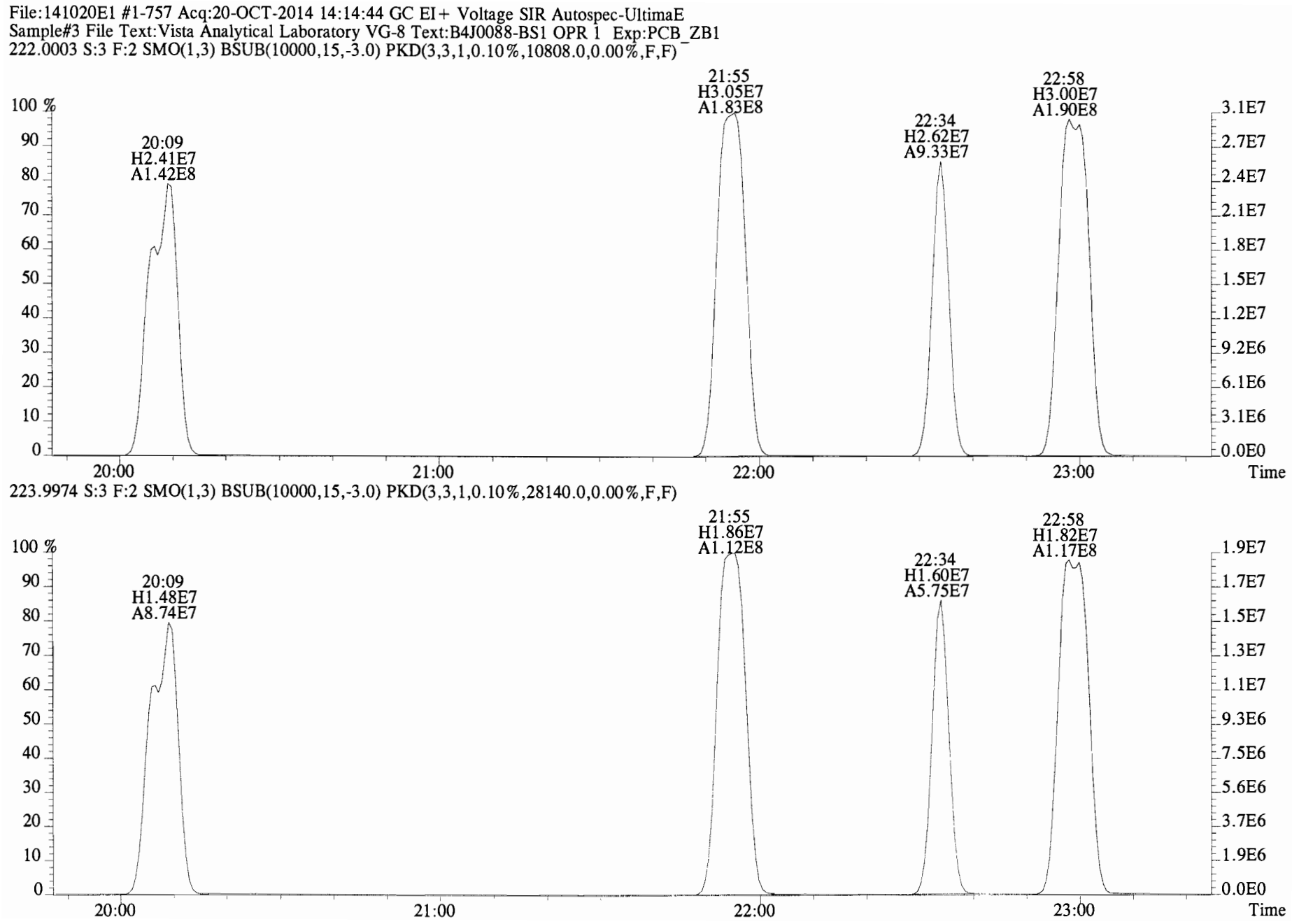


236.0376 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6444.0,0.00%,F,F)

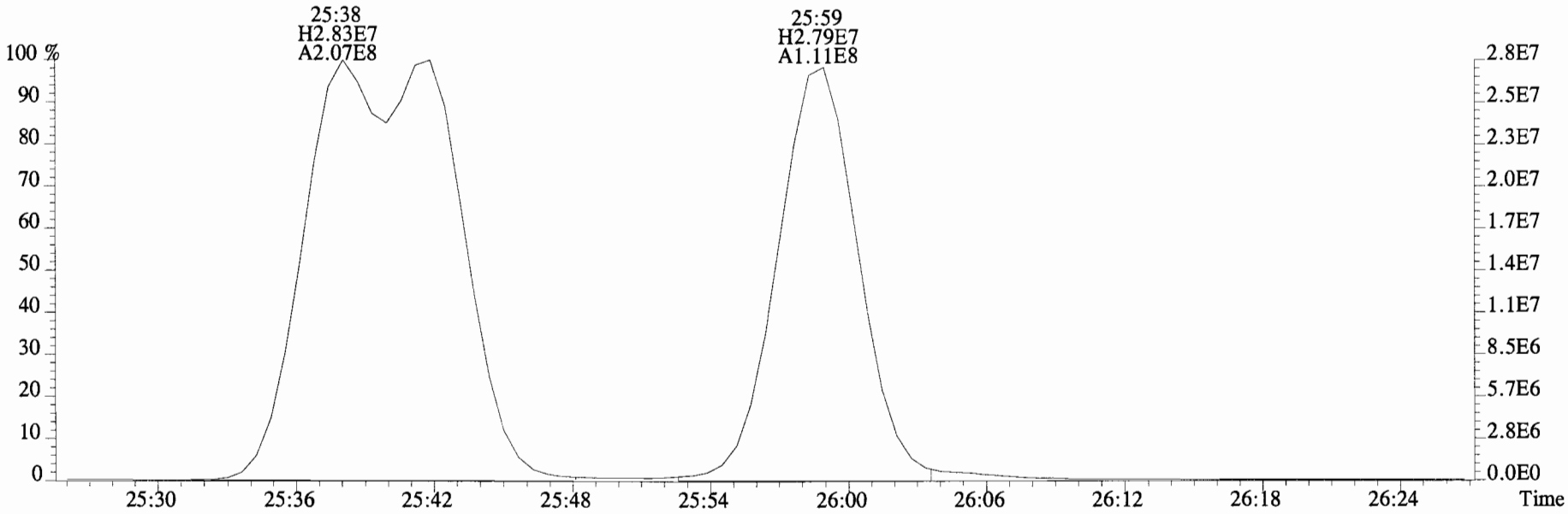


230.9856 S:3 F:2

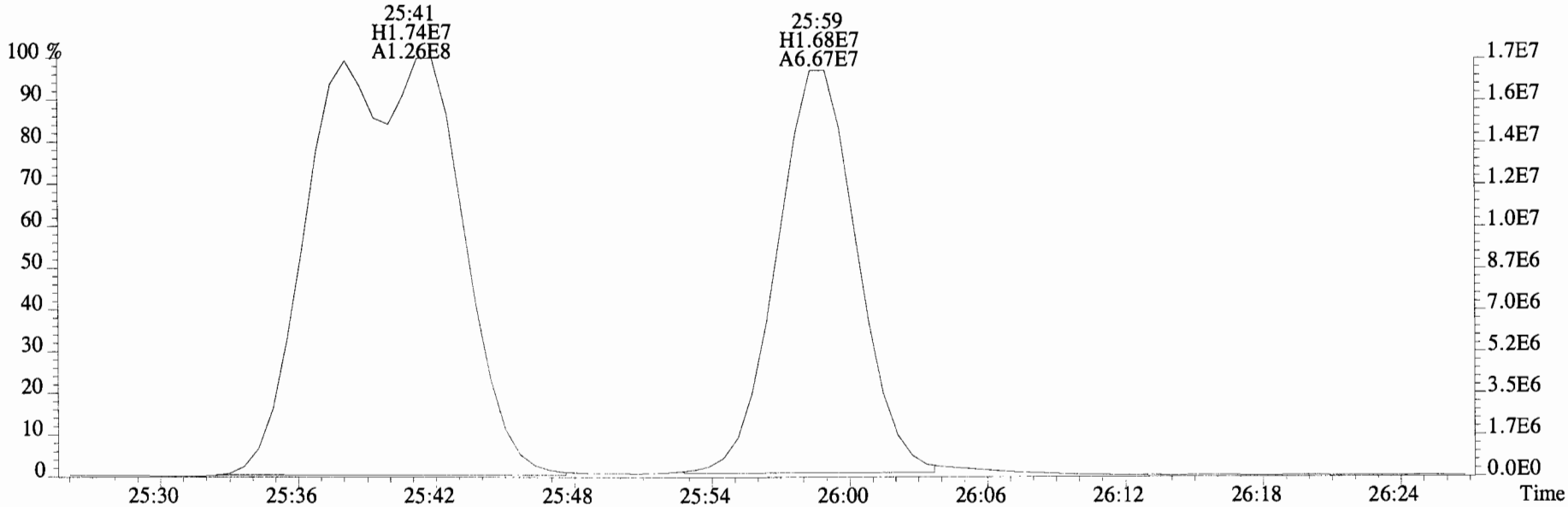



File:141020E1 #1-757 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
222.0003 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10808.0,0.00%,F,F)
20:09
H2.41E7
A1.42E8
21:55
H3.05E7
A1.83E8
22:34
H2.62E7
A9.33E7
22:58
H3.00E7
A1.90E8
100 %
90
80
70
60
50
40
30
20
10
0
3.1E7
2.7E7
2.4E7
2.1E7
1.8E7
1.5E7
1.2E7
9.2E6
6.1E6
3.1E6
0.0E0
20:00
21:00
22:00
23:00
Time
223.9974 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,28140.0,0.00%,F,F)
20:09
H1.48E7
A8.74E7
21:55
H1.86E7
A1.12E8
22:34
H1.60E7
A5.75E7
22:58
H1.82E7
A1.17E8
100 %
90
80
70
60
50
40
30
20
10
0
1.9E7
1.7E7
1.5E7
1.3E7
1.1E7
9.3E6
7.5E6
5.6E6
3.7E6
1.9E6
0.0E0
20:00
21:00
22:00
23:00
Time

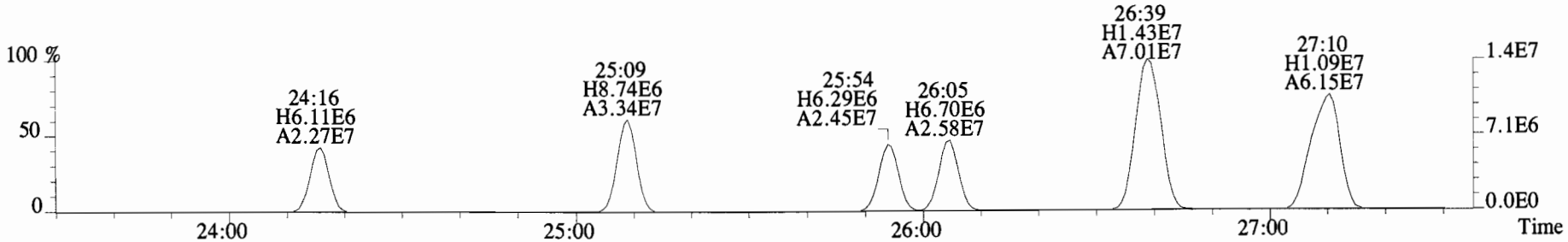
File:141020E1 #1-757 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
222.0003 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10808.0,0.00%,F,F)



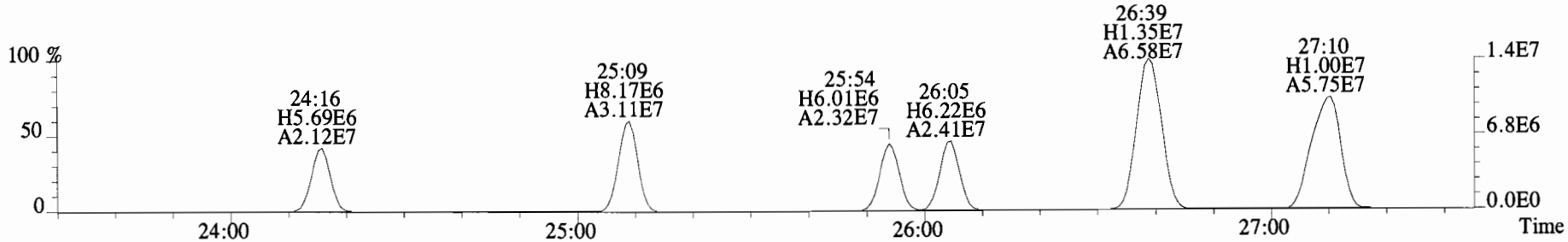
223.9974 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,28140.0,0.00%,F,F)



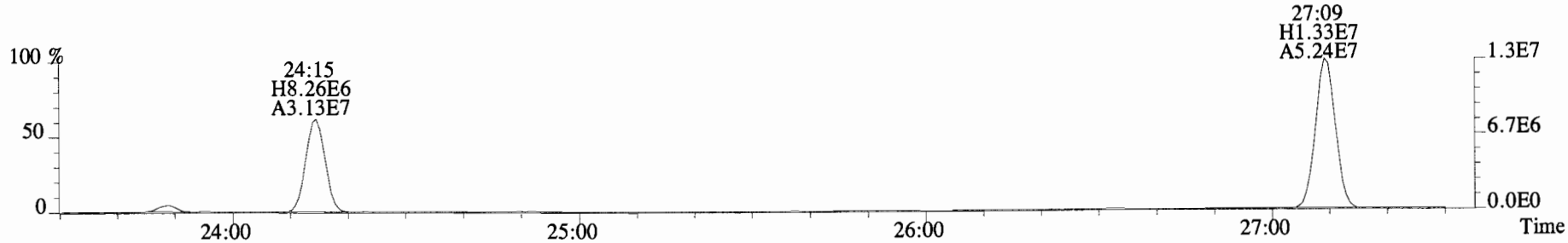
File:141020E1 #1-757 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4844.0,0.00%,F,F)



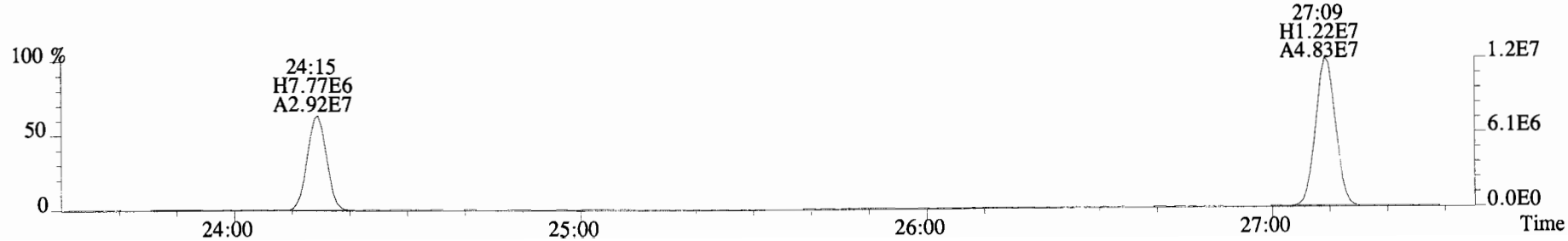
257.9584 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2872.0,0.00%,F,F)



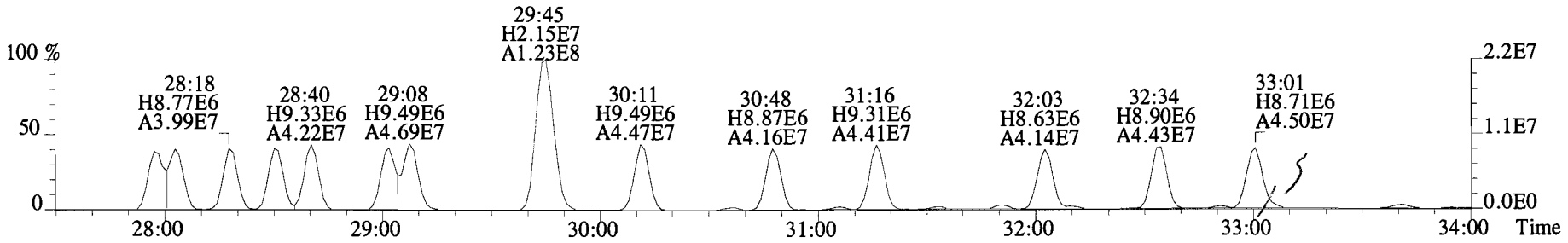
268.0016 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,74092.0,0.00%,F,F)



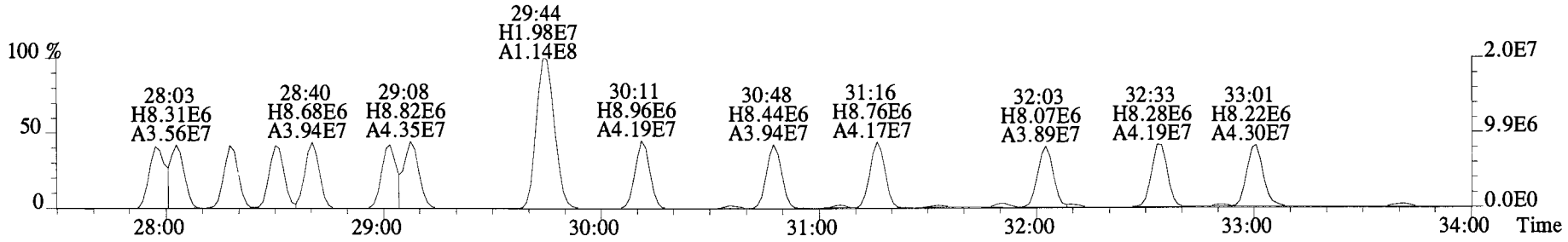
269.9986 S:3 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,32268.0,0.00%,F,F)



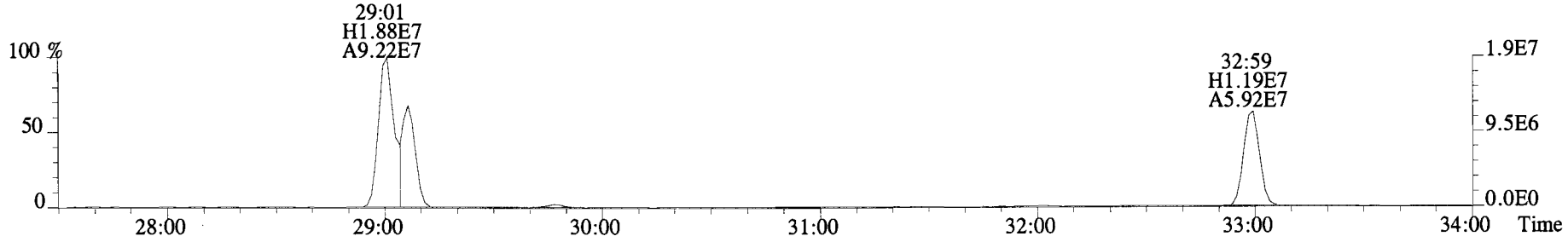
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35496.0,0.00%,F,F)



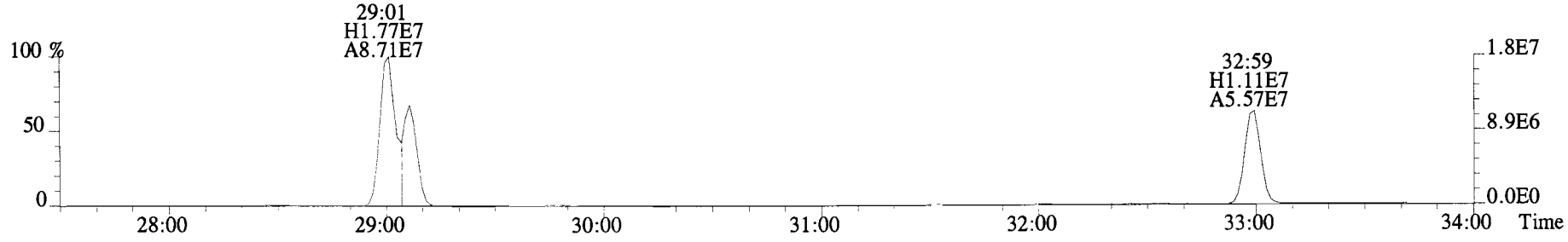
257.9584 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26328.0,0.00%,F,F)



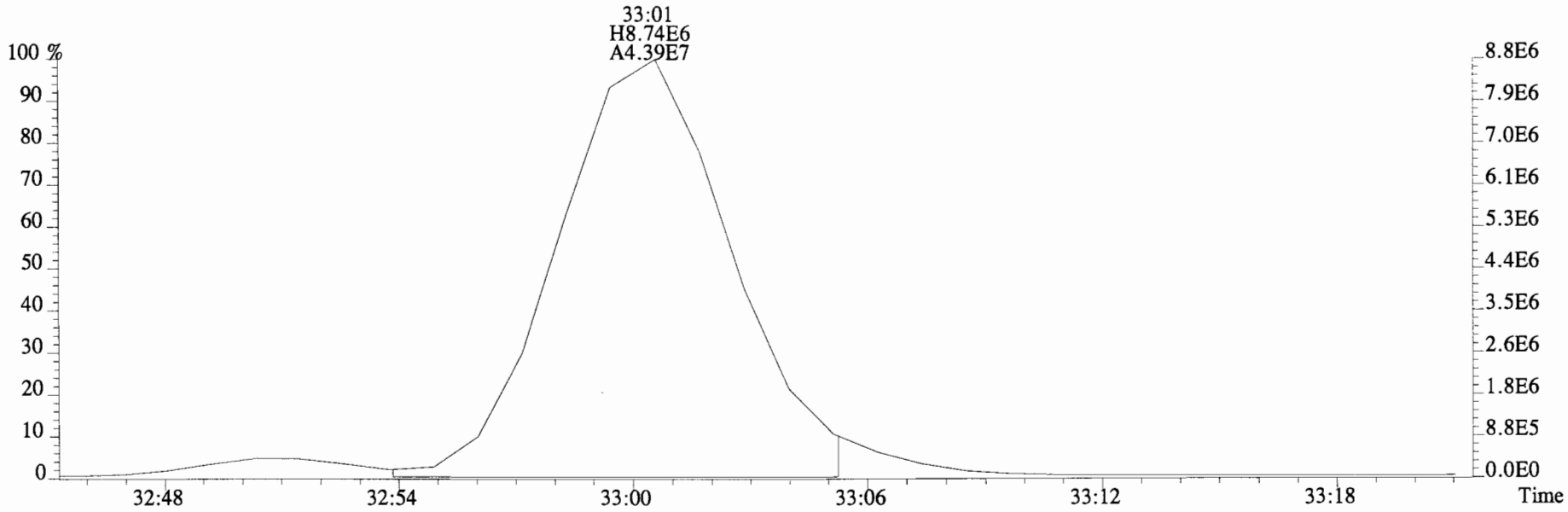
268.0016 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,62904.0,0.00%,F,F)



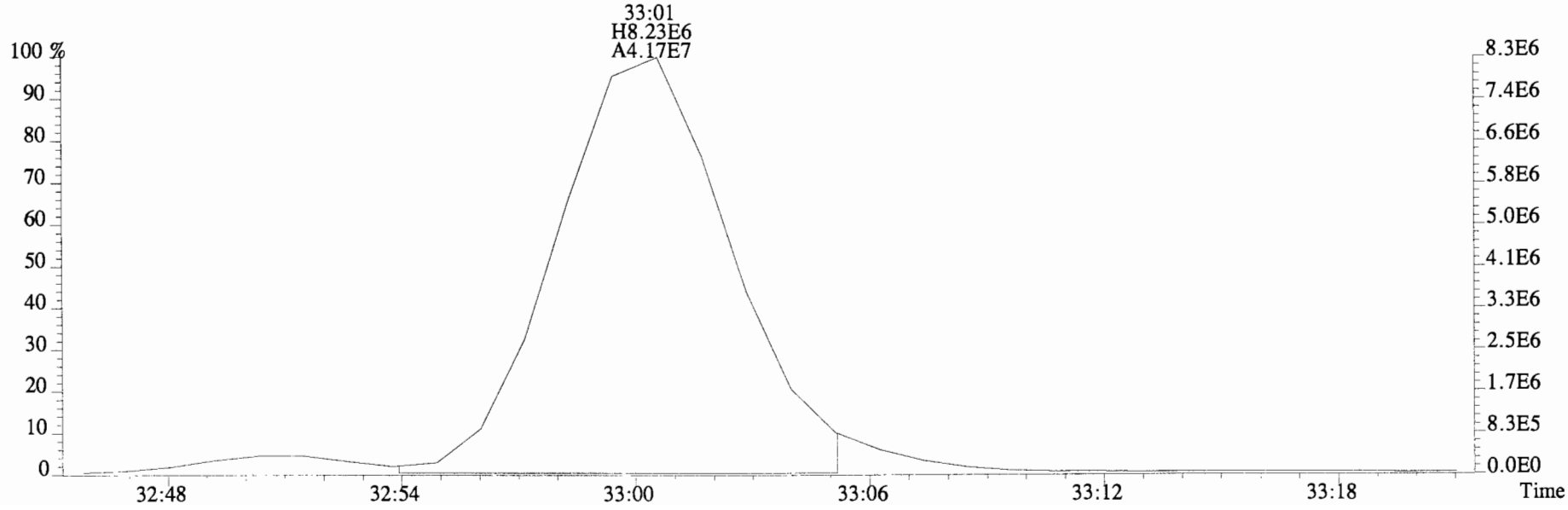
269.9986 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26952.0,0.00%,F,F)



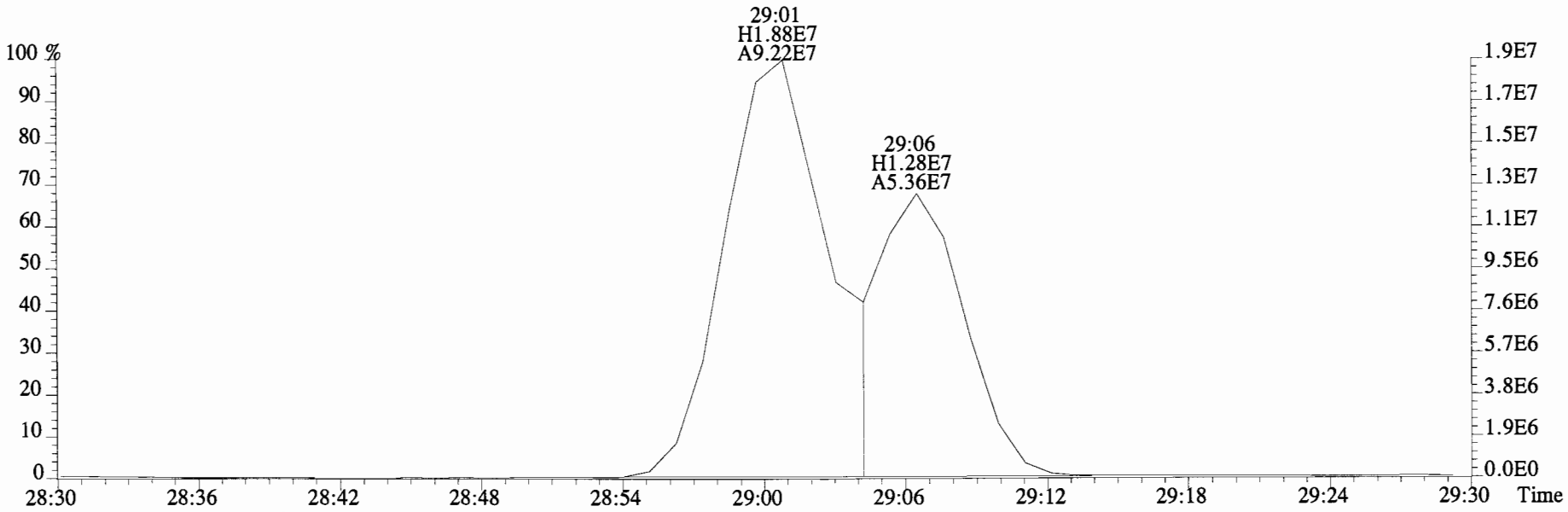
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35496.0,0.00%,F,F)



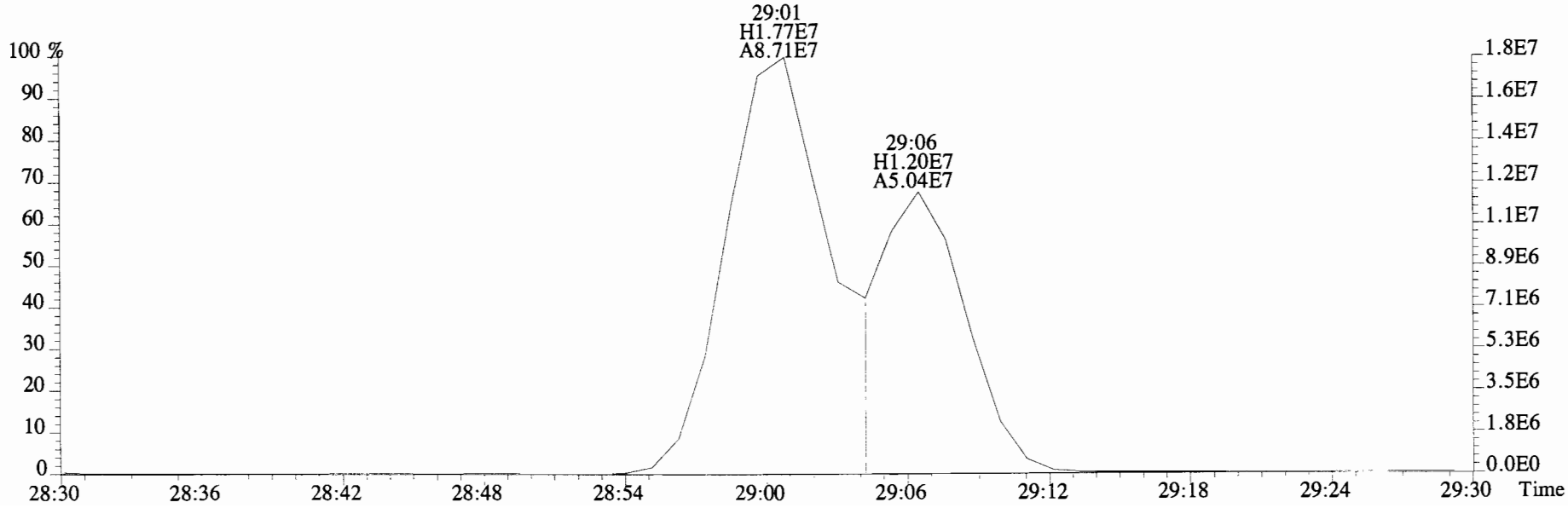
257.9584 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26328.0,0.00%,F,F)



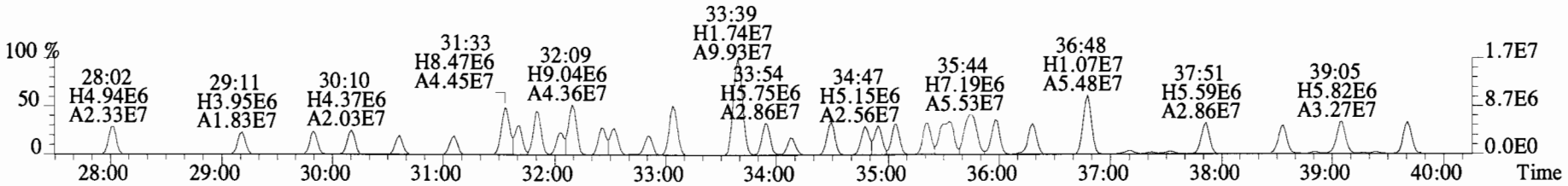
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
268.0016 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,62904.0,0.00%,F,F)



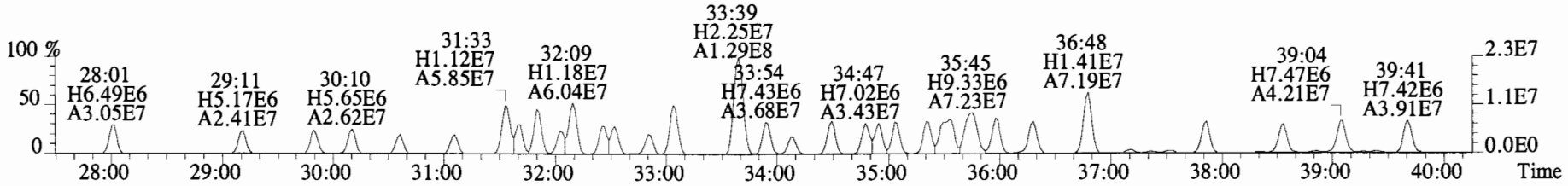
269.9986 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26952.0,0.00%,F,F)



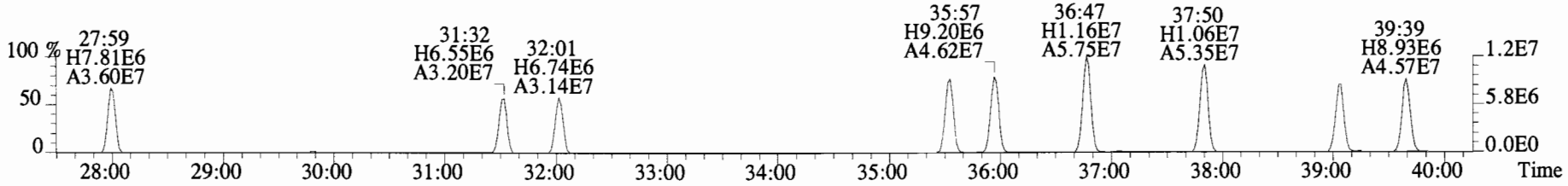
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,27692.0,0.00%,F,F)



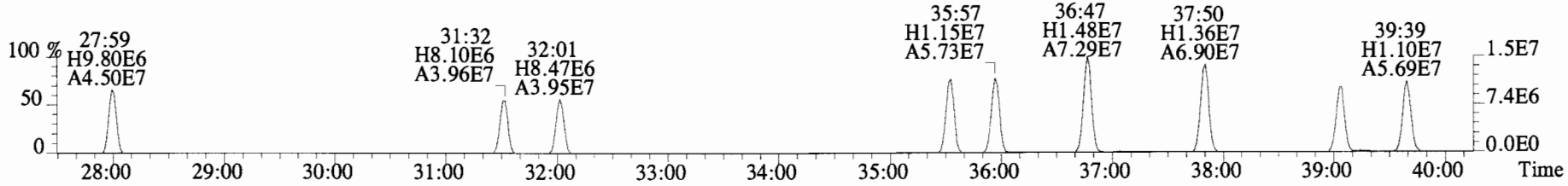
291.9194 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,34992.0,0.00%,F,F)



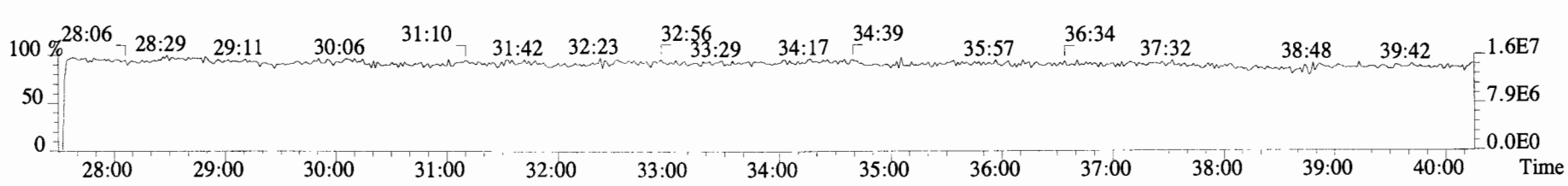
301.9626 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10832.0,0.00%,F,F)



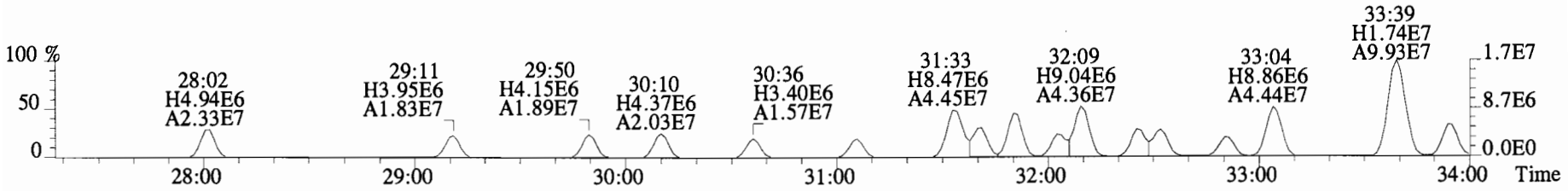
303.9597 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8232.0,0.00%,F,F)



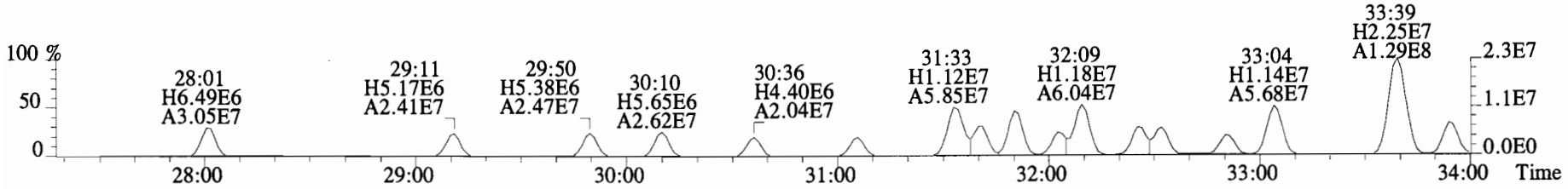
330.9792 S:3 F:3



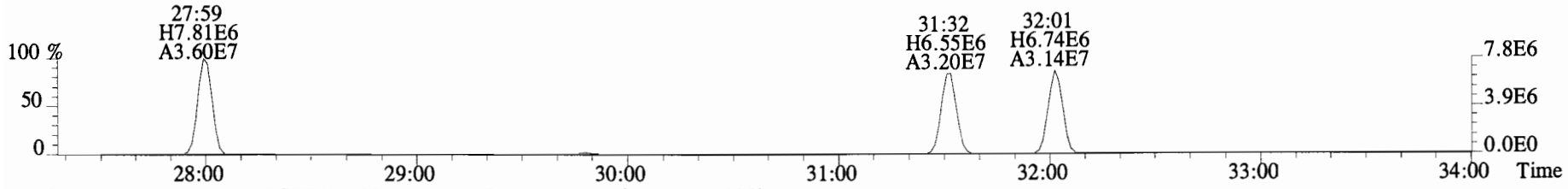
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,27692.0,0.00%,F,F)



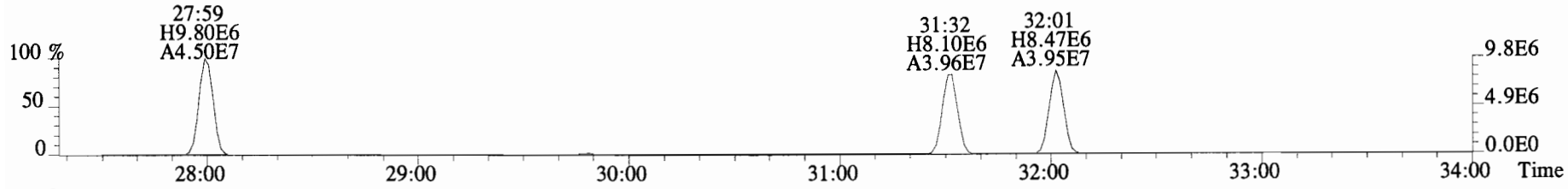
291.9194 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,34992.0,0.00%,F,F)



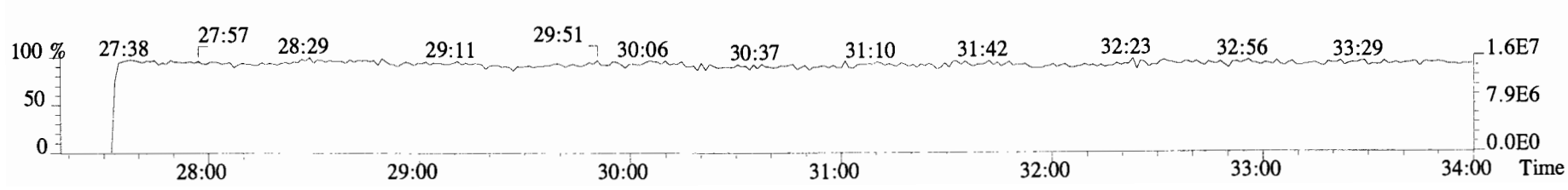
301.9626 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10832.0,0.00%,F,F)



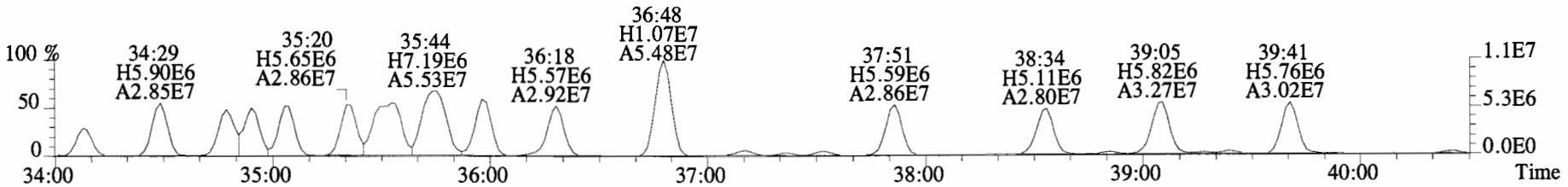
303.9597 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8232.0,0.00%,F,F)



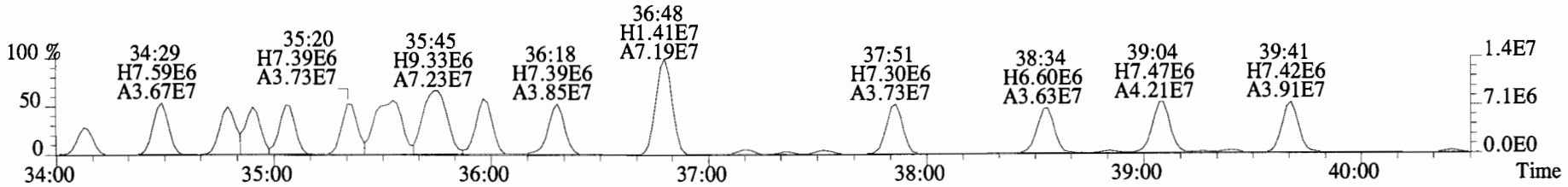
330.9792 S:3 F:3



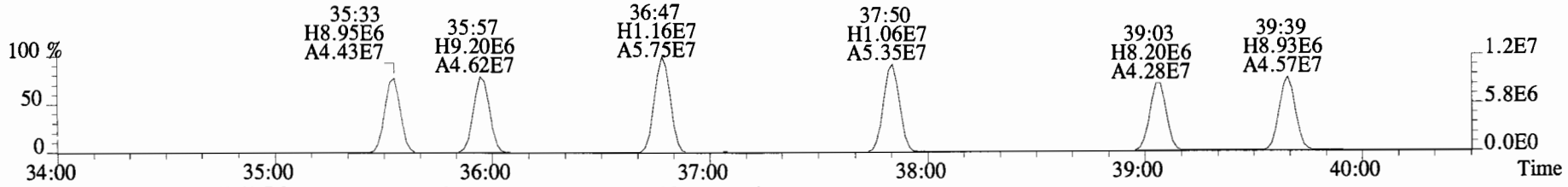
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,27692.0,0.00%,F,F)



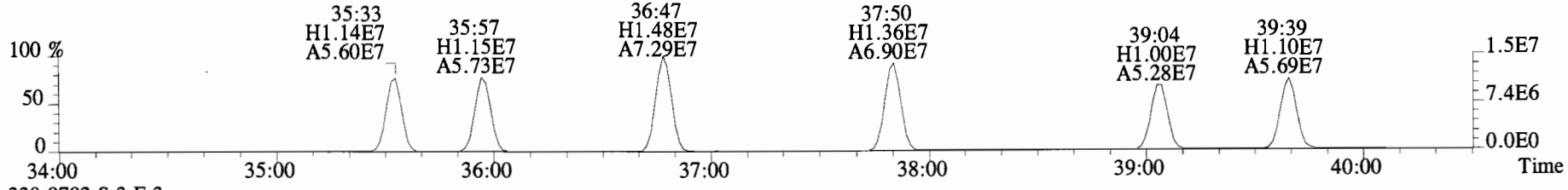
291.9194 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,34992.0,0.00%,F,F)



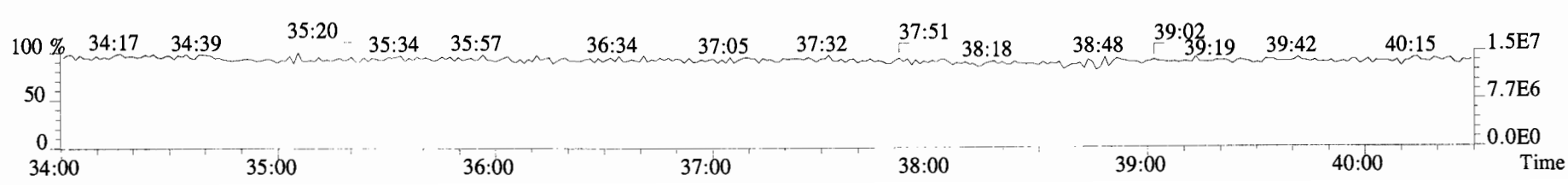
301.9626 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10832.0,0.00%,F,F)



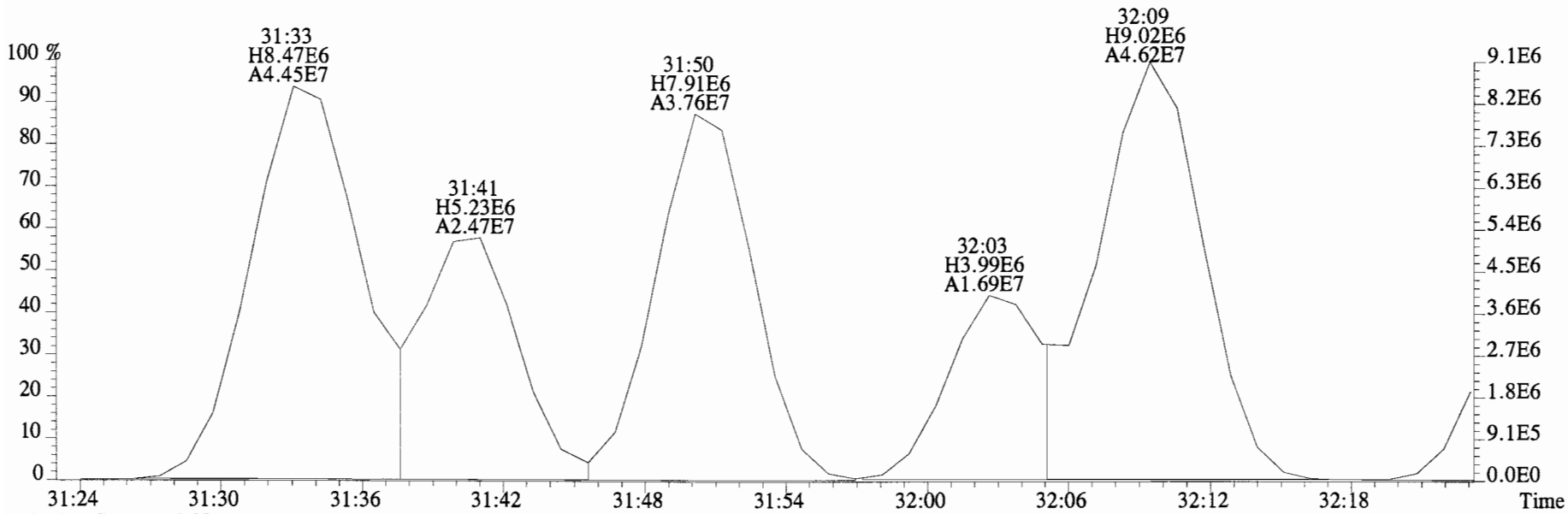
303.9597 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8232.0,0.00%,F,F)



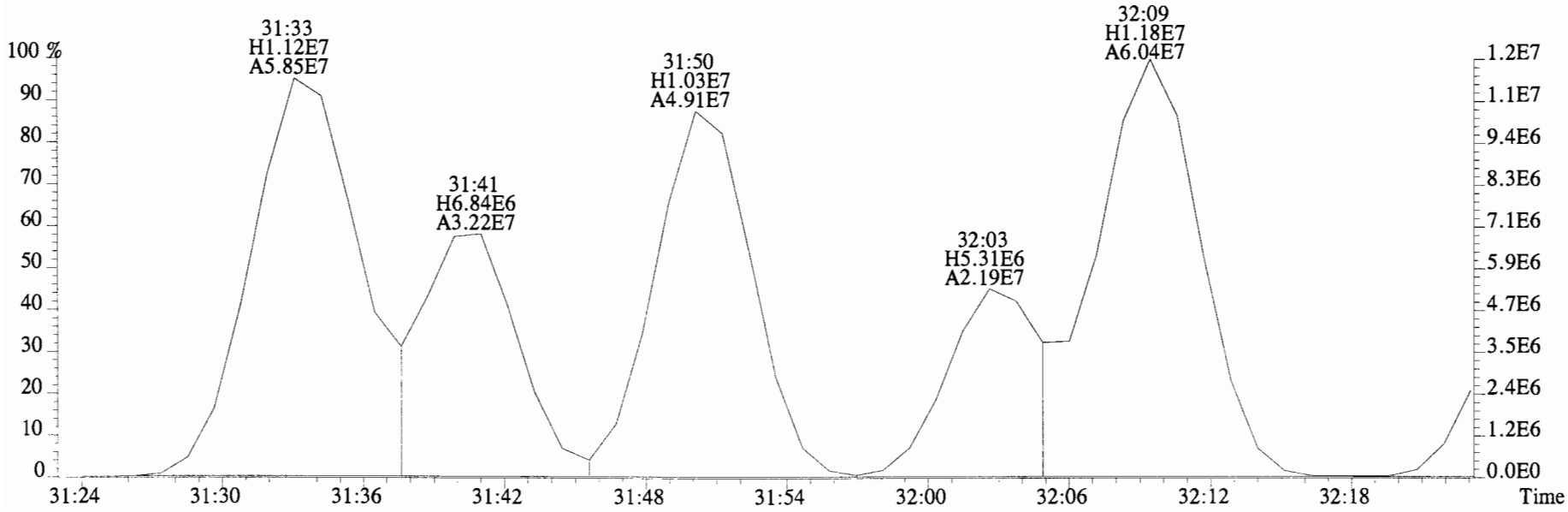
330.9792 S:3 F:3



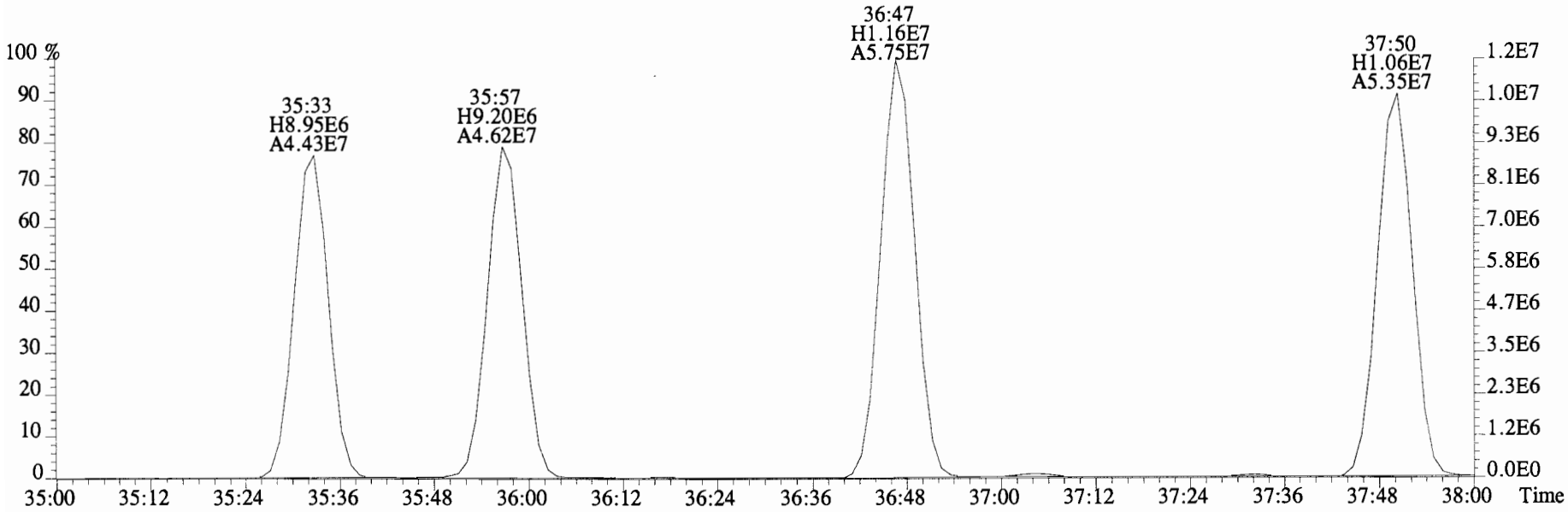
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,27692.0,0.00%,F,F)



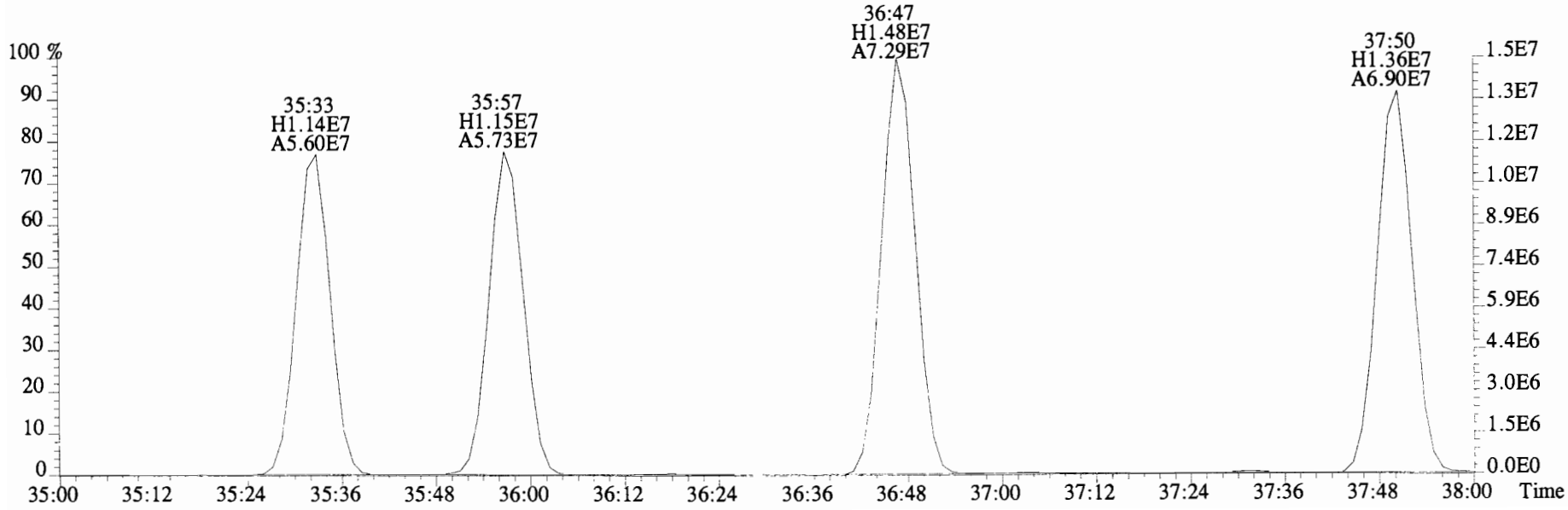
291.9194 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,34992.0,0.00%,F,F)

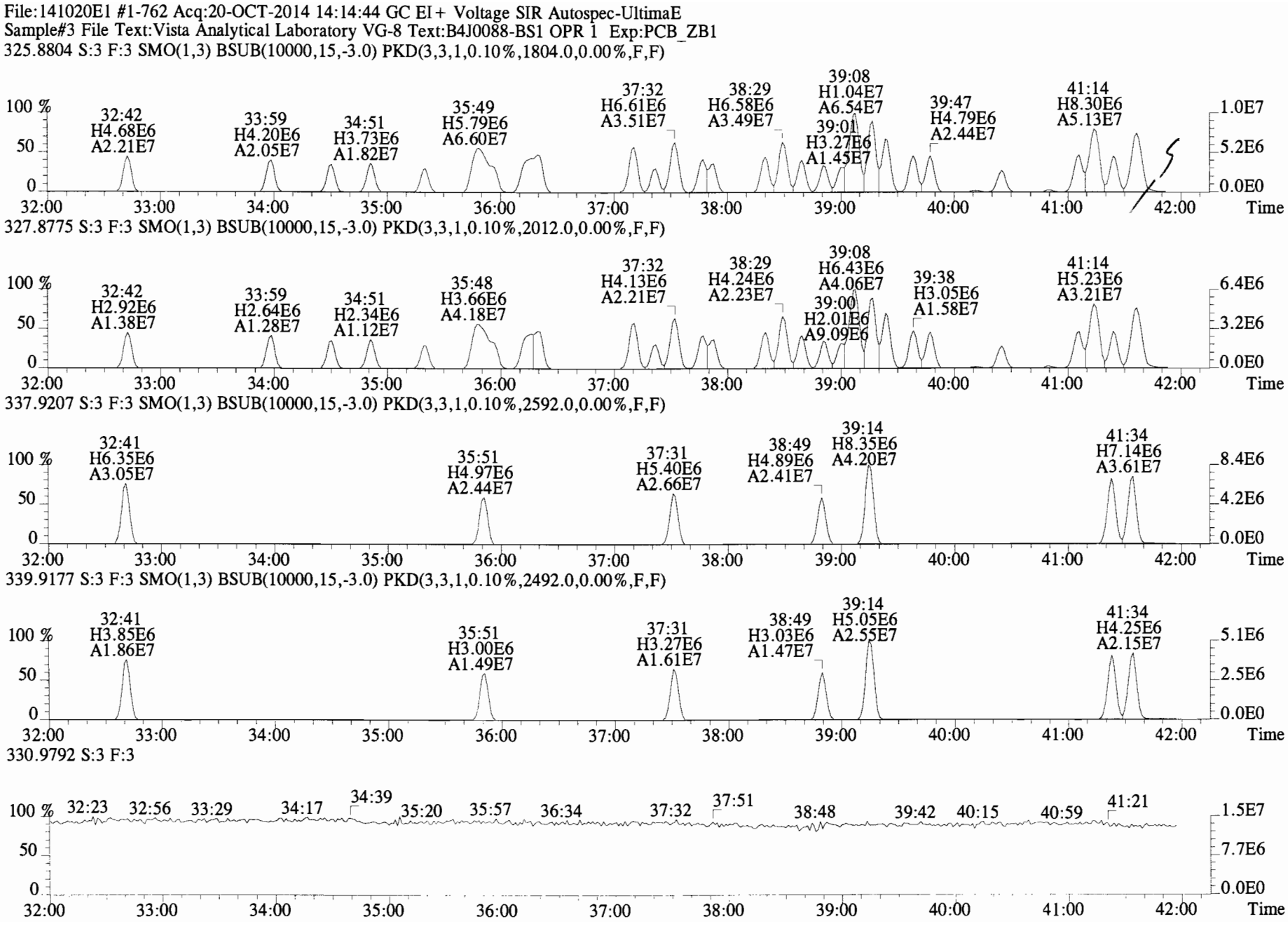


File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
301.9626 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10832.0,0.00%,F,F)

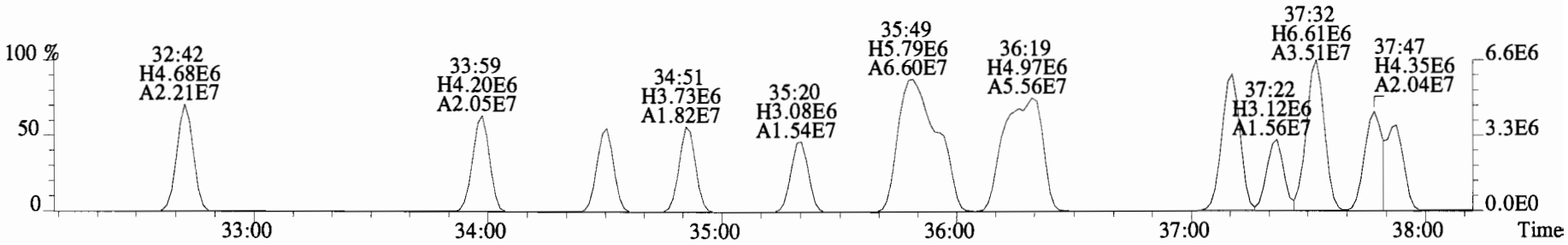


303.9597 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8232.0,0.00%,F,F)

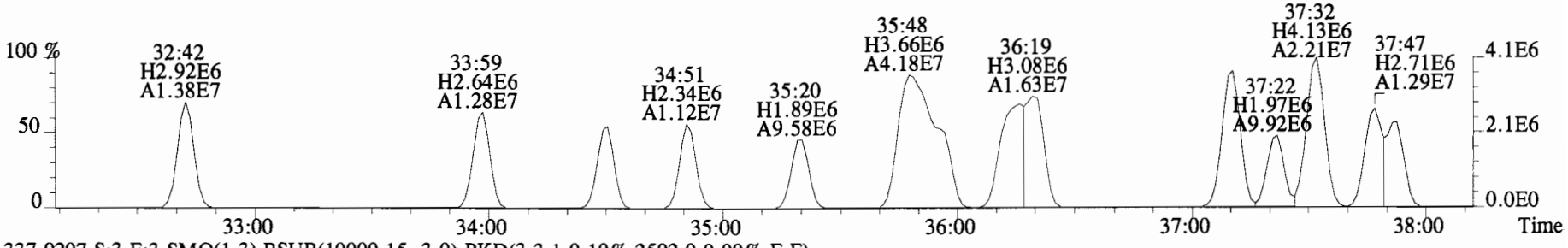



File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1804.0,0.00%,F,F)
32:42 H4.68E6 A2.21E7
33:59 H4.20E6 A2.05E7
34:51 H3.73E6 A1.82E7
35:49 H5.79E6 A6.60E7
37:32 H6.61E6 A3.51E7
38:29 H6.58E6 A3.49E7
39:01 H3.27E6 A1.45E7
39:08 H1.04E7 A6.54E7
39:47 H4.79E6 A2.44E7
41:14 H8.30E6 A5.13E7
327.8775 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2012.0,0.00%,F,F)
32:42 H2.92E6 A1.38E7
33:59 H2.64E6 A1.28E7
34:51 H2.34E6 A1.12E7
35:48 H3.66E6 A4.18E7
37:32 H4.13E6 A2.21E7
38:29 H4.24E6 A2.23E7
39:00 H2.01E6 A9.09E6
39:08 H6.43E6 A4.06E7
39:38 H3.05E6 A1.58E7
41:14 H5.23E6 A3.21E7
337.9207 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2592.0,0.00%,F,F)
32:41 H6.35E6 A3.05E7
35:51 H4.97E6 A2.44E7
37:31 H5.40E6 A2.66E7
38:49 H4.89E6 A2.41E7
39:14 H8.35E6 A4.20E7
41:34 H7.14E6 A3.61E7
339.9177 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2492.0,0.00%,F,F)
32:41 H3.85E6 A1.86E7
35:51 H3.00E6 A1.49E7
37:31 H3.27E6 A1.61E7
38:49 H3.03E6 A1.47E7
39:14 H5.05E6 A2.55E7
41:34 H4.25E6 A2.15E7
330.9792 S:3 F:3
32:23 32:56 33:29 34:17 34:39 35:20 35:57 36:34 37:32 37:51 38:48 39:42 40:15 40:59 41:21
100 %
50
0
32:00 33:00 34:00 35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 Time
1.0E7 5.2E6 0.0E0
6.4E6 3.2E6 0.0E0
8.4E6 4.2E6 0.0E0
5.1E6 2.5E6 0.0E0
1.5E7 7.7E6 0.0E0

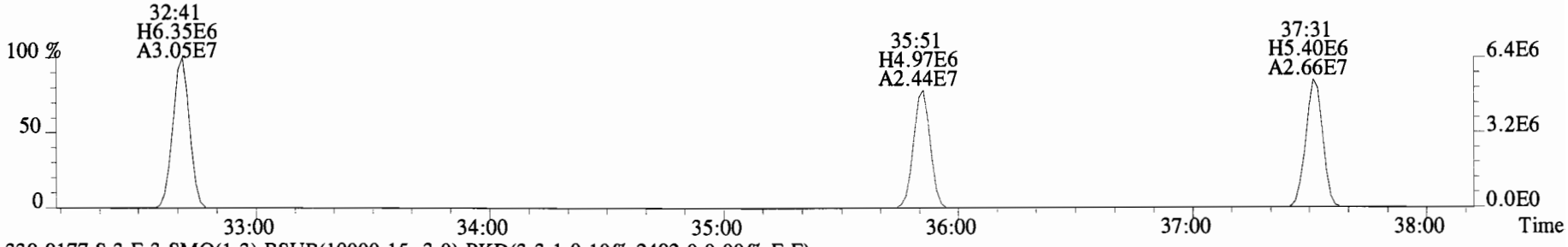
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1804.0,0.00%,F,F)



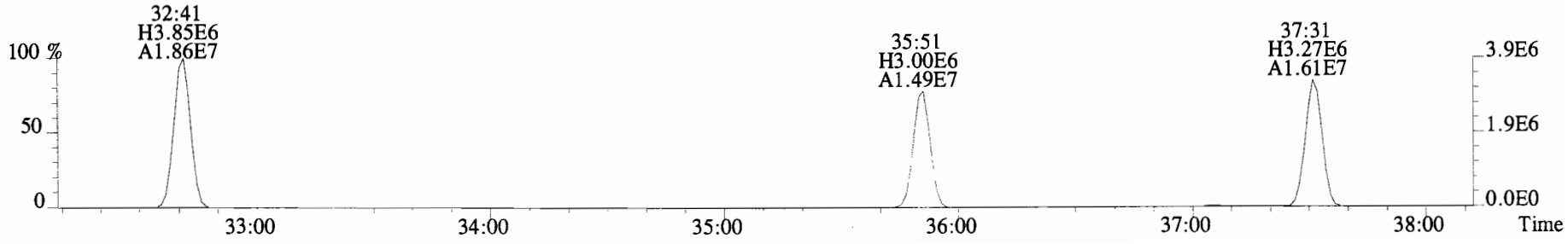
327.8775 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2012.0,0.00%,F,F)



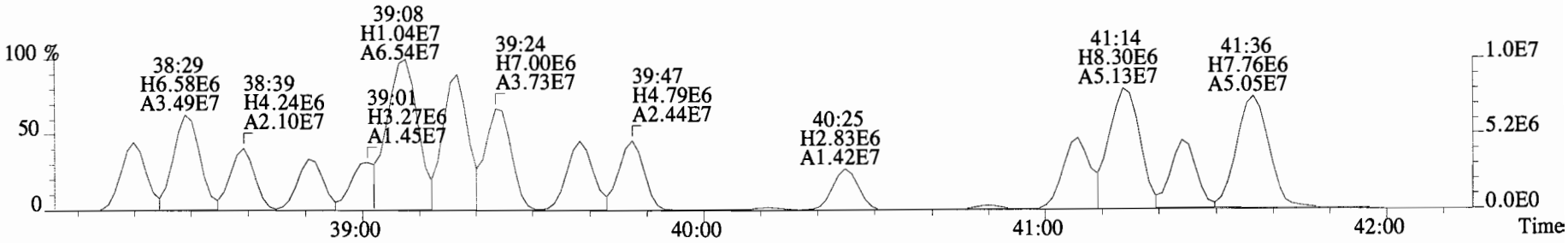
337.9207 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2592.0,0.00%,F,F)



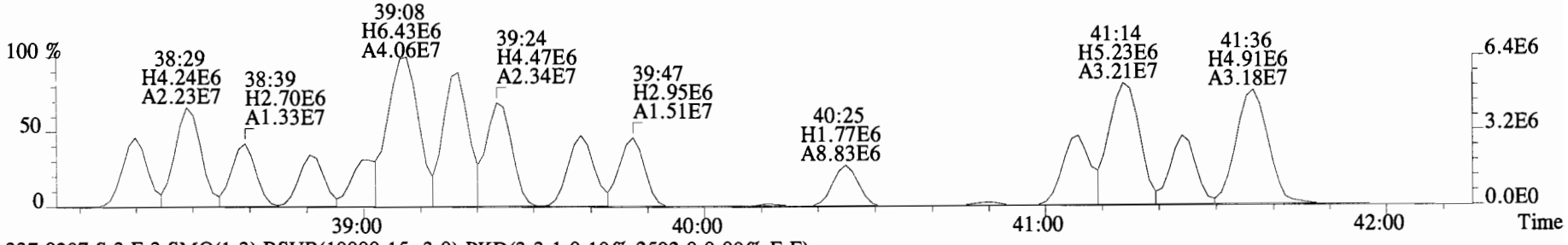
339.9177 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2492.0,0.00%,F,F)



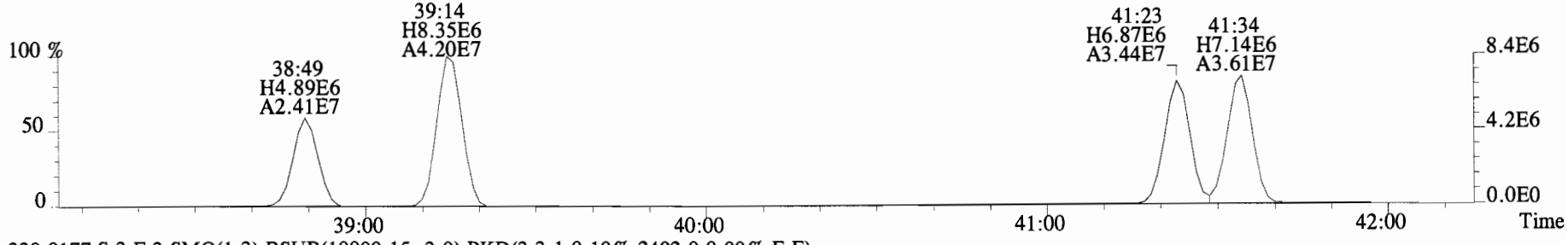
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1804.0,0.00%,F,F)



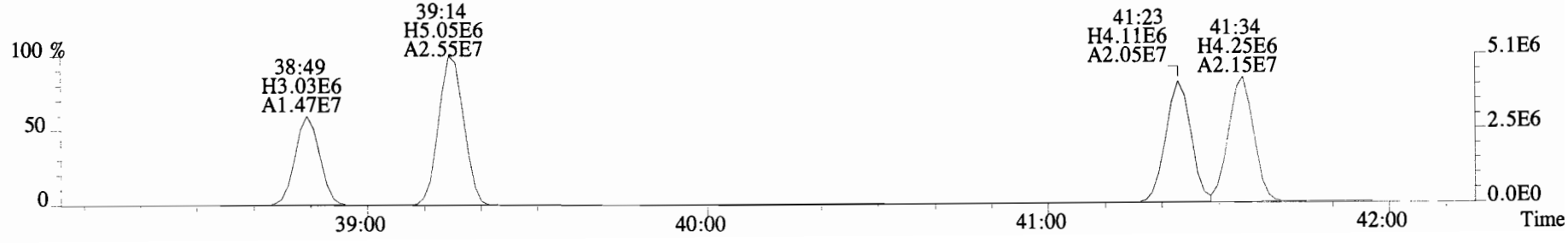
327.8775 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2012.0,0.00%,F,F)



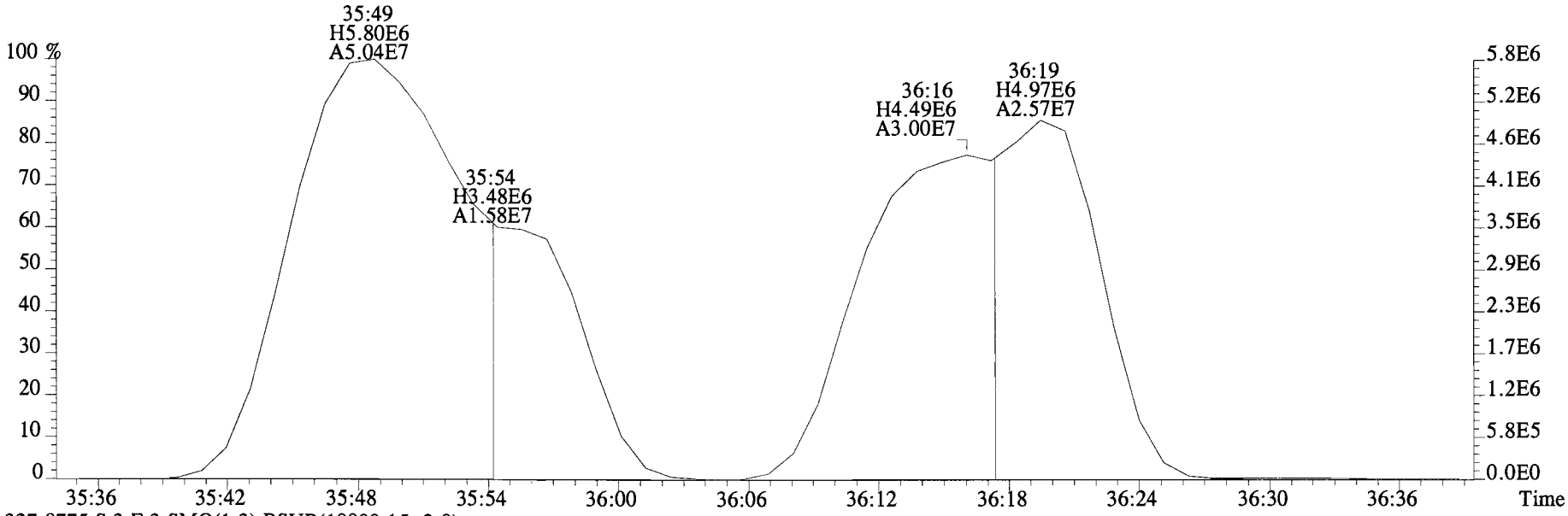
337.9207 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2592.0,0.00%,F,F)



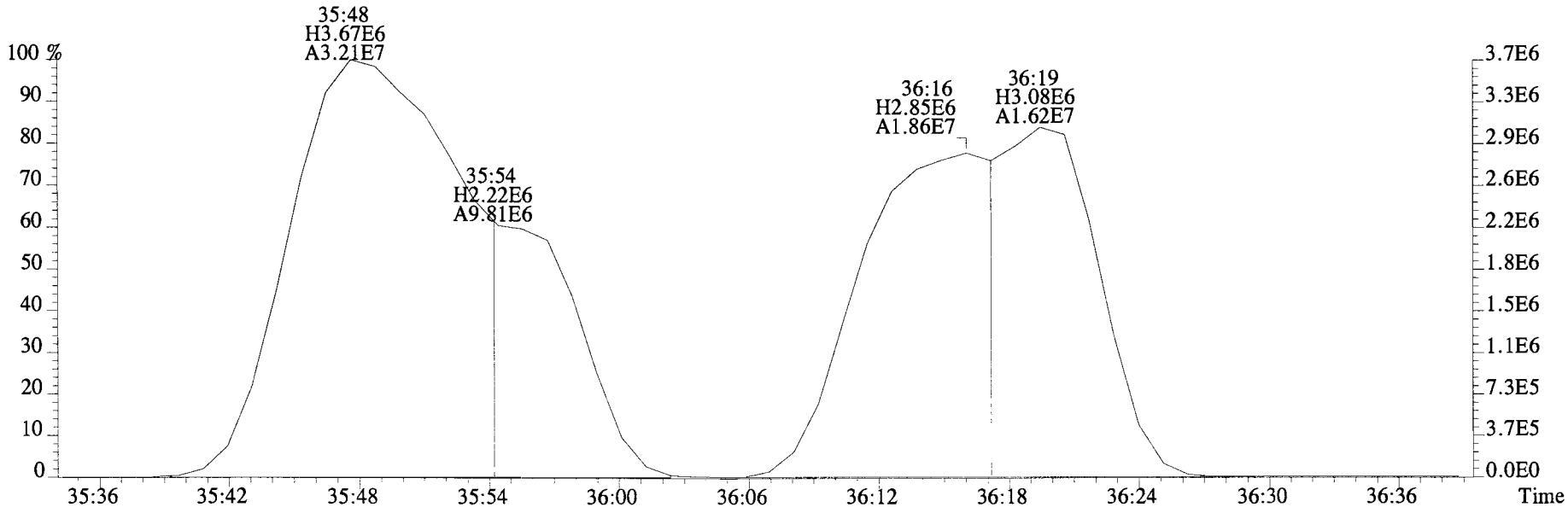
339.9177 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2492.0,0.00%,F,F)



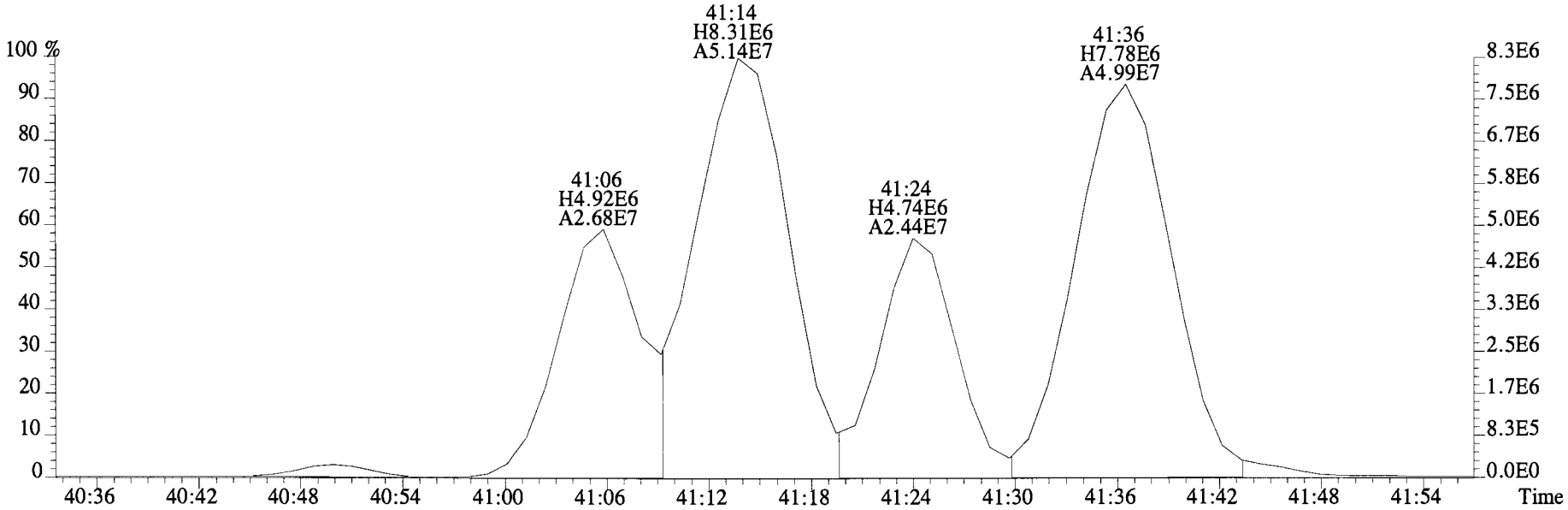
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0)



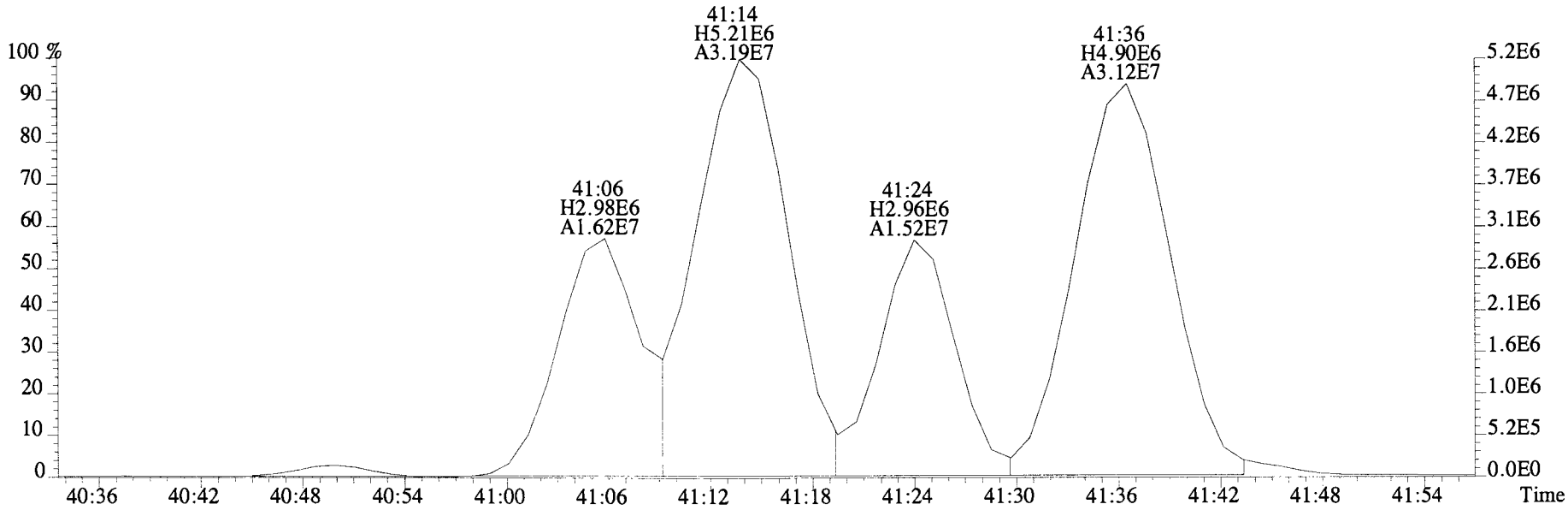
327.8775 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0)



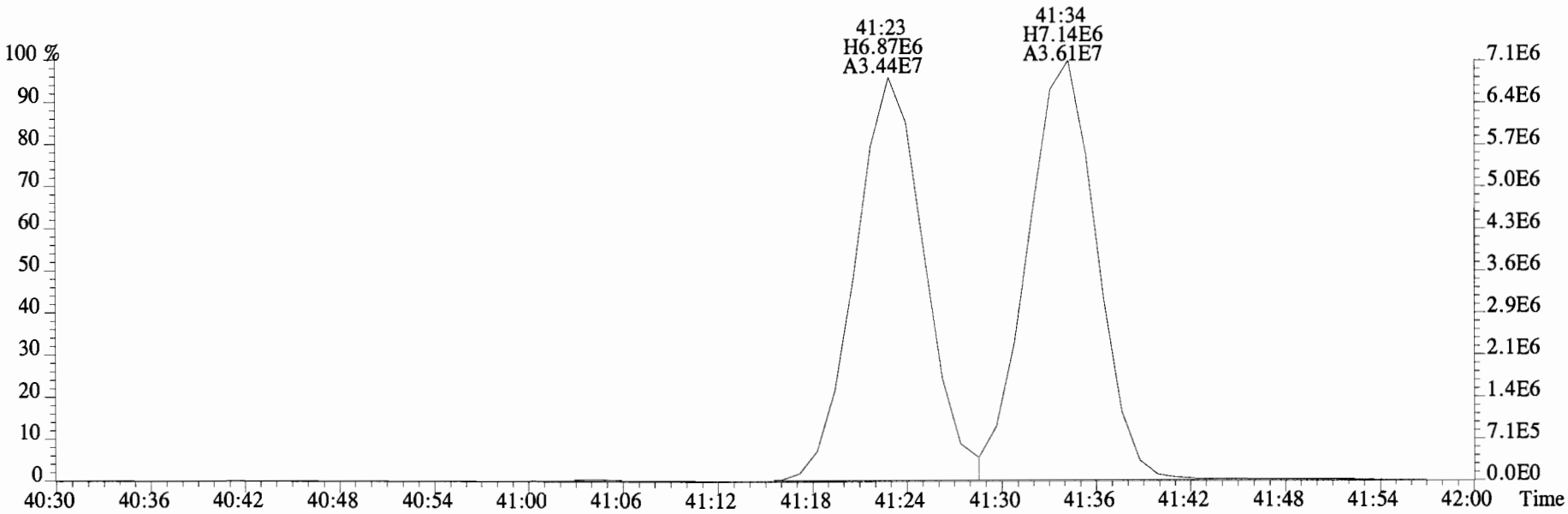
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0)



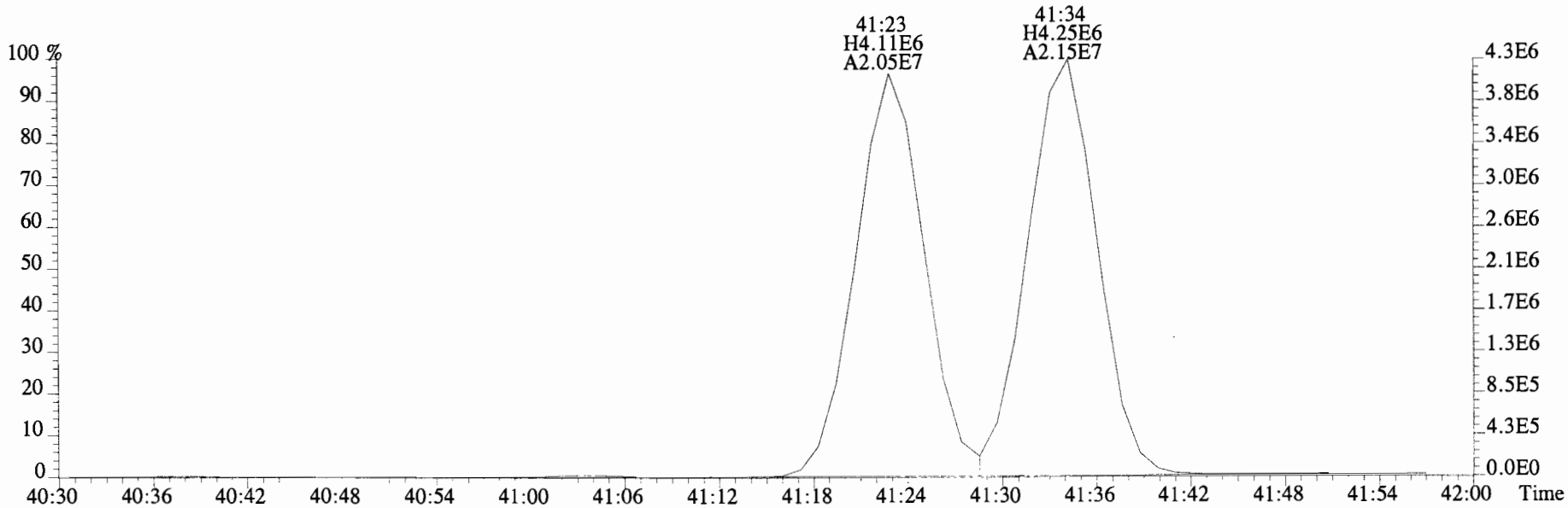
327.8775 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0)



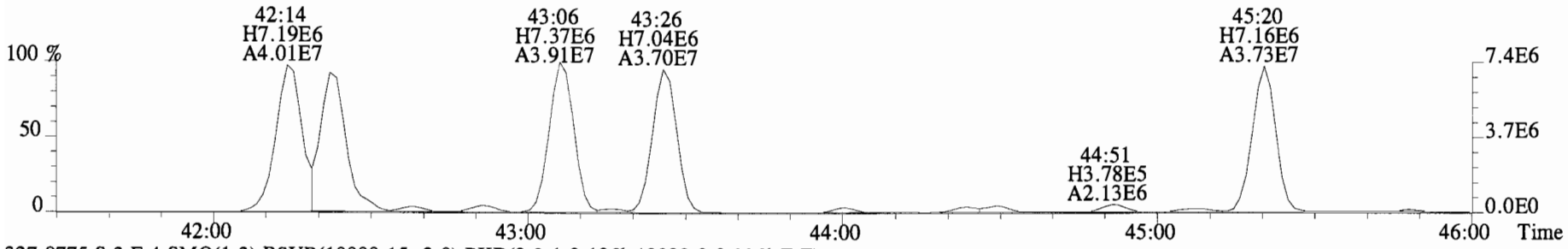
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
337.9207 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2592.0,0.00%,F,F)



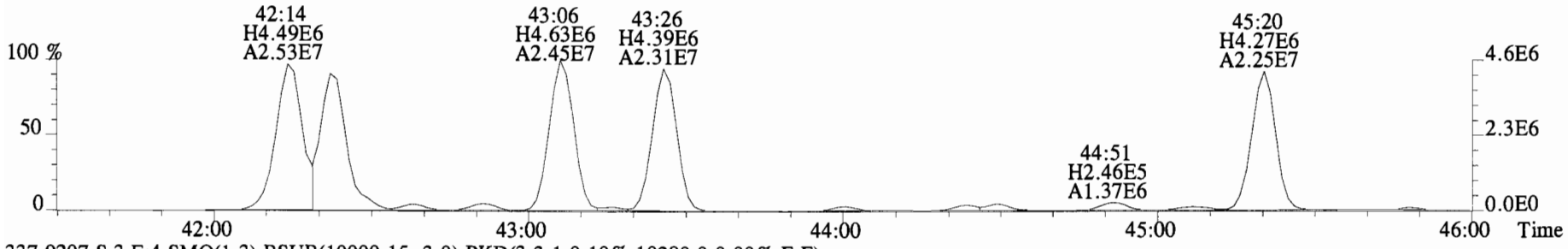
339.9177 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2492.0,0.00%,F,F)



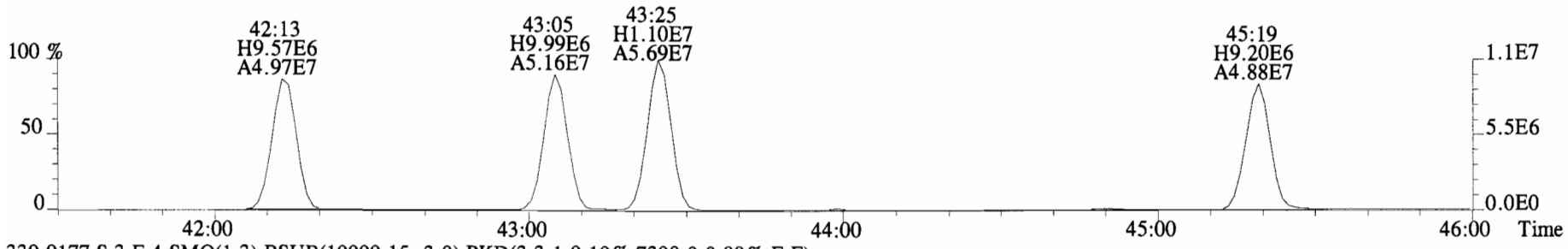
File:141020E1 #1-560 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16852.0,0.00%,F,F)



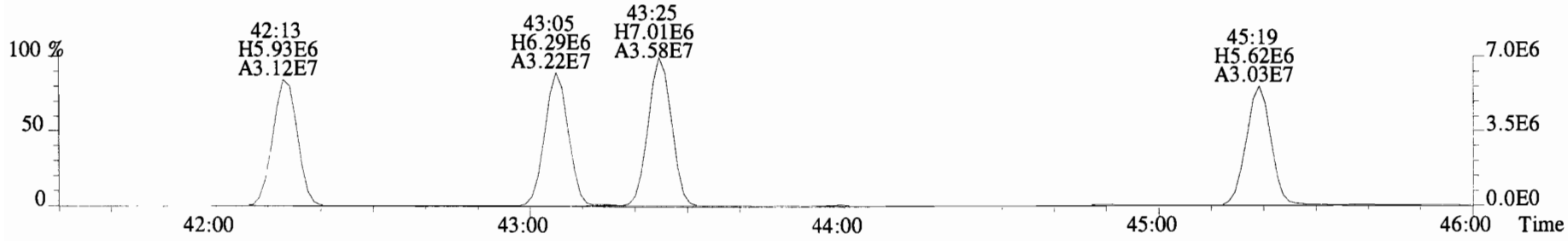
327.8775 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12928.0,0.00%,F,F)



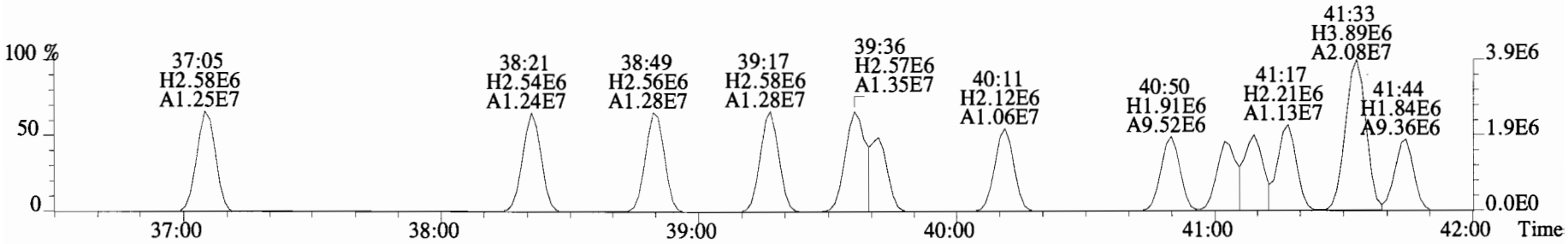
337.9207 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10280.0,0.00%,F,F)



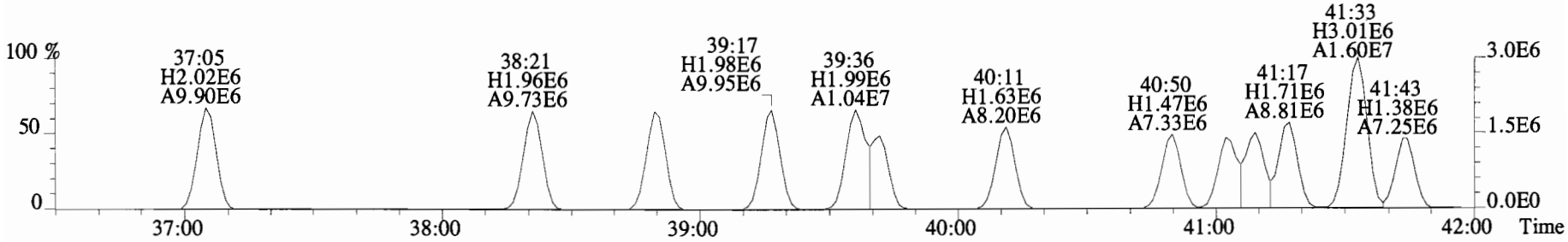
339.9177 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7300.0,0.00%,F,F)



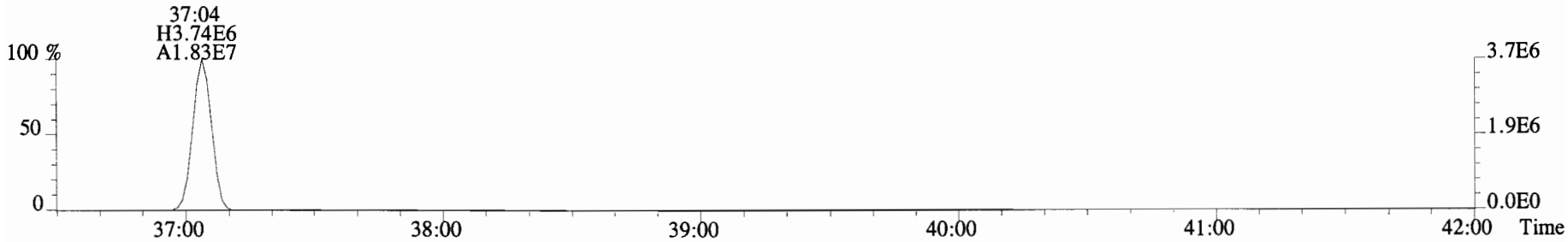
File:141020E1 #1-762 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1944.0,0.00%,F,F)



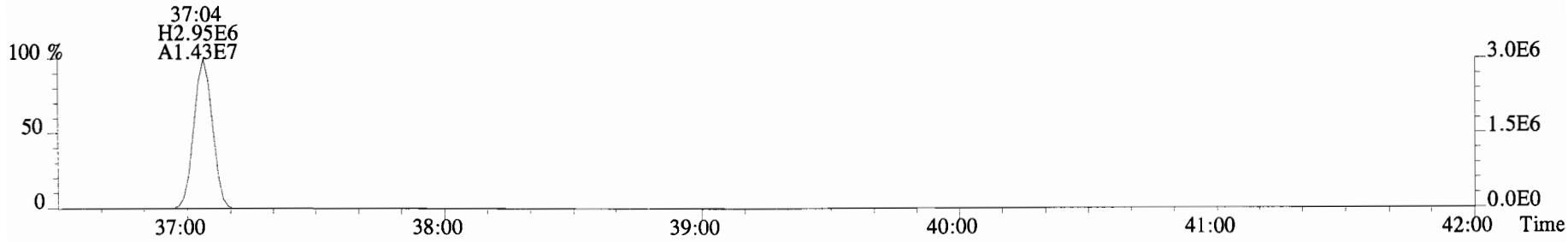
361.8385 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1952.0,0.00%,F,F)

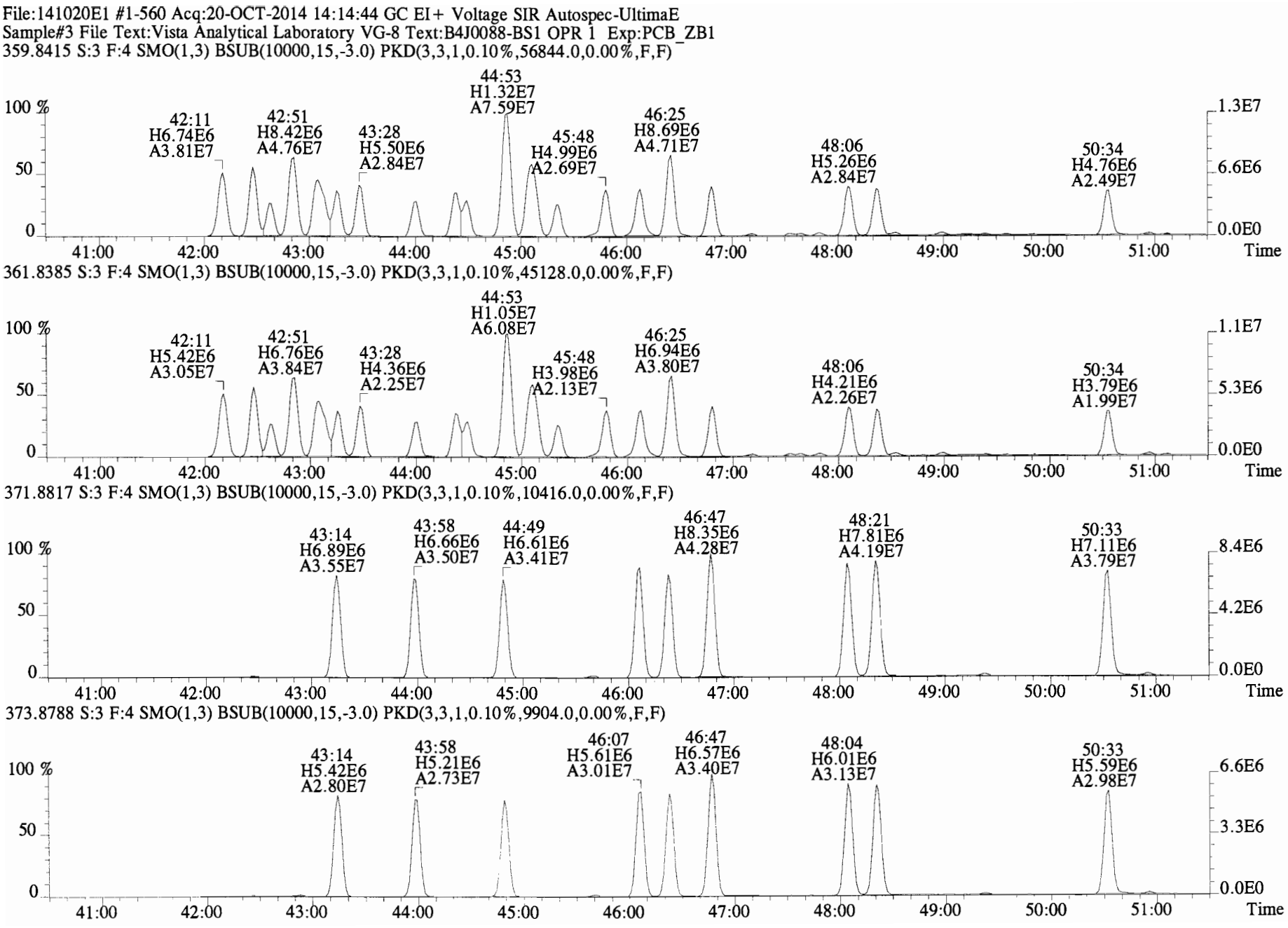


371.8817 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2196.0,0.00%,F,F)

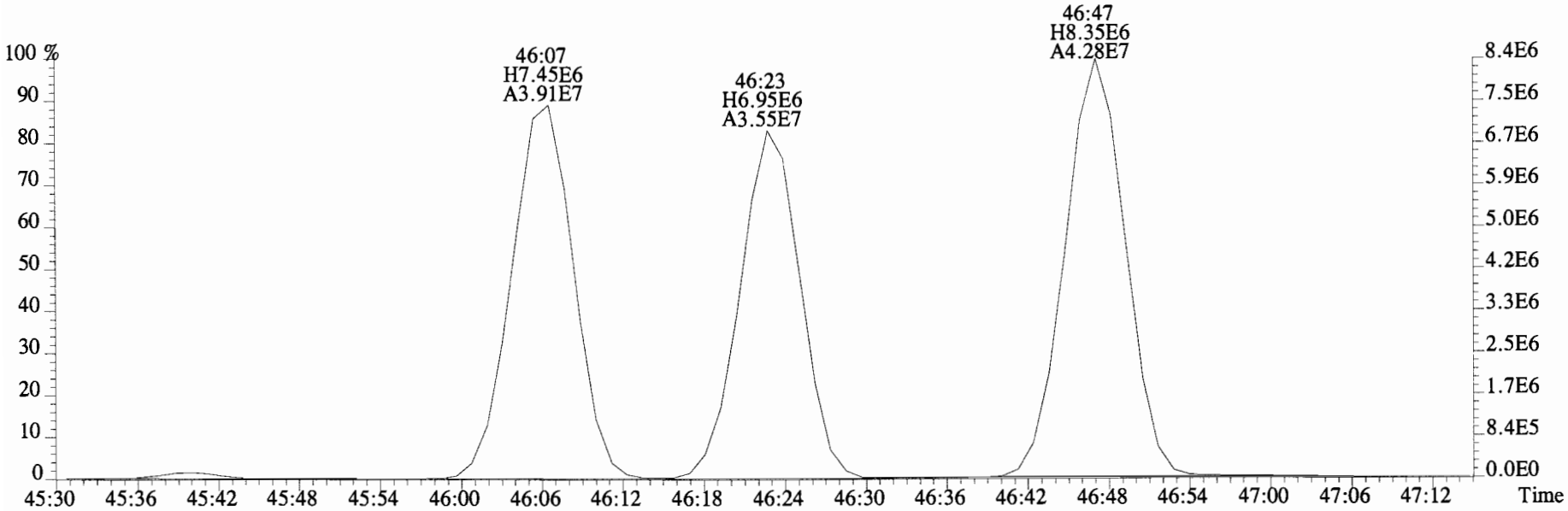


373.8788 S:3 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2392.0,0.00%,F,F)

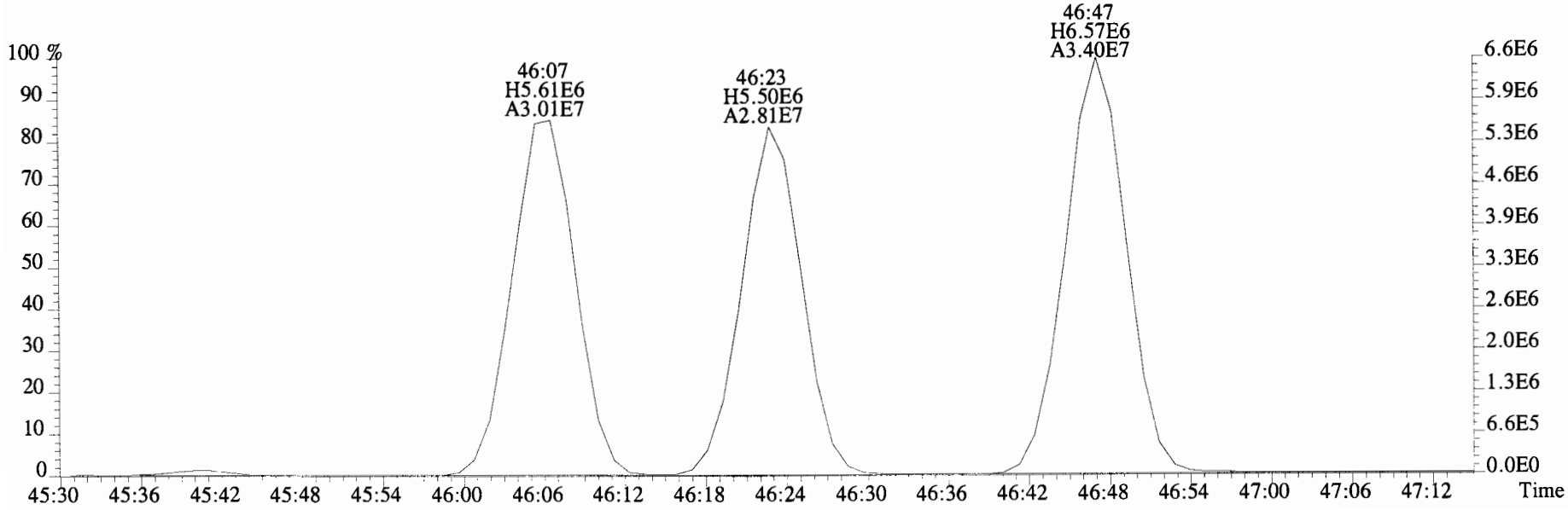


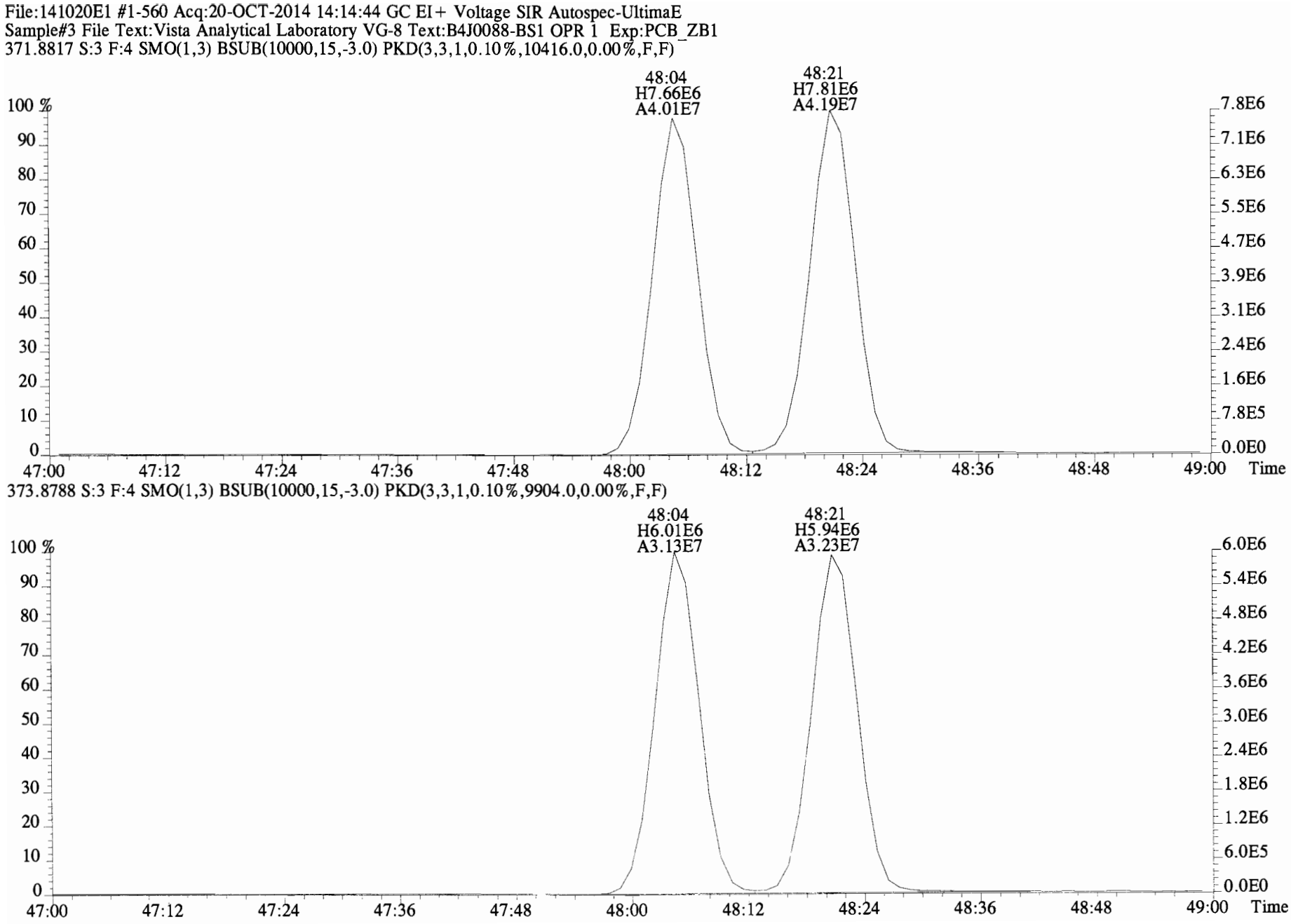

File:141020E1 #1-560 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,56844.0,0.00%,F,F)
42:11 H6.74E6 A3.81E7
42:51 H8.42E6 A4.76E7
43:28 H5.50E6 A2.84E7
44:53 H1.32E7 A7.59E7
45:48 H4.99E6 A2.69E7
46:25 H8.69E6 A4.71E7
48:06 H5.26E6 A2.84E7
50:34 H4.76E6 A2.49E7
361.8385 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,45128.0,0.00%,F,F)
42:11 H5.42E6 A3.05E7
42:51 H6.76E6 A3.84E7
43:28 H4.36E6 A2.25E7
44:53 H1.05E7 A6.08E7
45:48 H3.98E6 A2.13E7
46:25 H6.94E6 A3.80E7
48:06 H4.21E6 A2.26E7
50:34 H3.79E6 A1.99E7
371.8817 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10416.0,0.00%,F,F)
43:14 H6.89E6 A3.55E7
43:58 H6.66E6 A3.50E7
44:49 H6.61E6 A3.41E7
46:47 H8.35E6 A4.28E7
48:21 H7.81E6 A4.19E7
50:33 H7.11E6 A3.79E7
373.8788 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9904.0,0.00%,F,F)
43:14 H5.42E6 A2.80E7
43:58 H5.21E6 A2.73E7
46:07 H5.61E6 A3.01E7
46:47 H6.57E6 A3.40E7
48:04 H6.01E6 A3.13E7
50:33 H5.59E6 A2.98E7
100 %
50
0
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
51:00
Time
1.3E7
6.6E6
0.0E0
1.1E7
5.3E6
8.4E6
4.2E6
6.6E6
3.3E6

File:141020E1 #1-560 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
371.8817 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10416.0,0.00%,F,F)

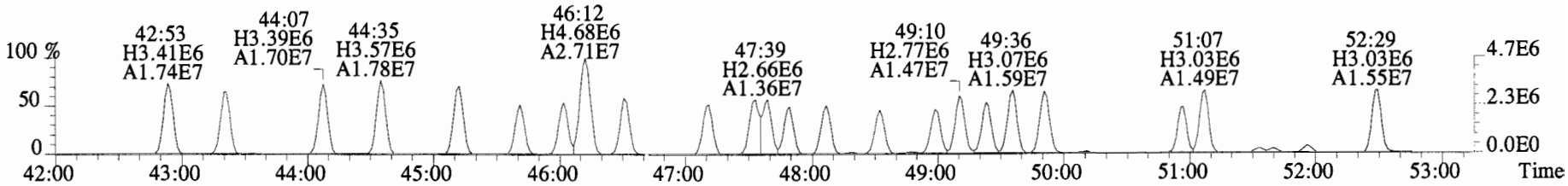


373.8788 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9904.0,0.00%,F,F)

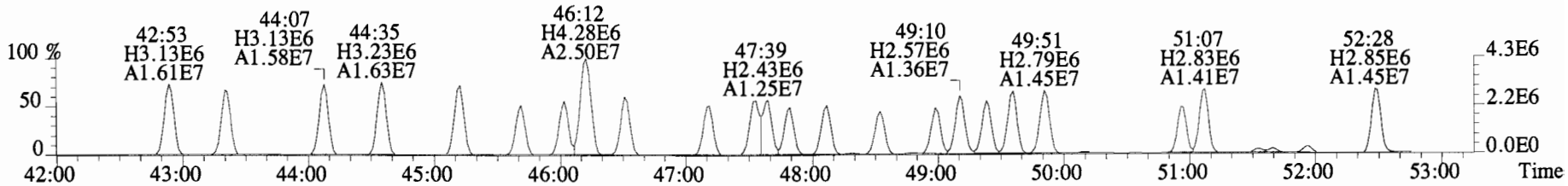



File:141020E1 #1-560 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
371.8817 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10416.0,0.00%,F,F)
48:04
H7.66E6
A4.01E7
48:21
H7.81E6
A4.19E7
100 %
90
80
70
60
50
40
30
20
10
0
7.8E6
7.1E6
6.3E6
5.5E6
4.7E6
3.9E6
3.1E6
2.4E6
1.6E6
7.8E5
0.0E0
47:00
47:12
47:24
47:36
47:48
48:00
48:12
48:24
48:36
48:48
49:00
Time
373.8788 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9904.0,0.00%,F,F)
48:04
H6.01E6
A3.13E7
48:21
H5.94E6
A3.23E7
100 %
90
80
70
60
50
40
30
20
10
0
6.0E6
5.4E6
4.8E6
4.2E6
3.6E6
3.0E6
2.4E6
1.8E6
1.2E6
6.0E5
0.0E0
47:00
47:12
47:24
47:36
47:48
48:00
48:12
48:24
48:36
48:48
49:00
Time

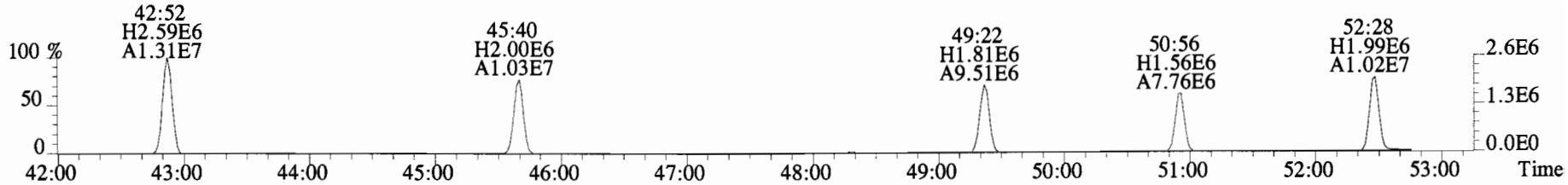
File:141020E1 #1-560 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
393.8025 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,24412.0,0.00%,F,F)



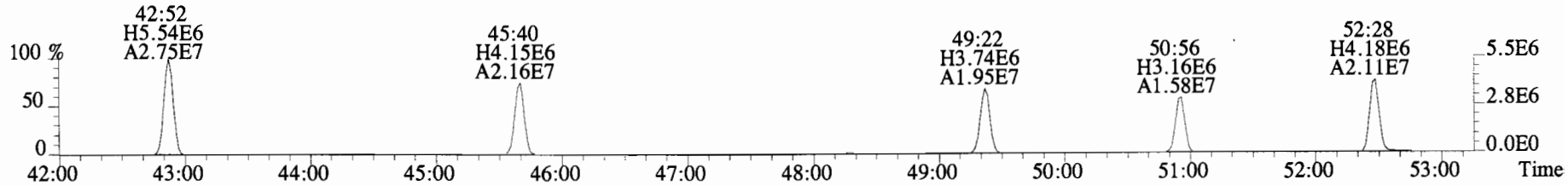
395.7995 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,23600.0,0.00%,F,F)



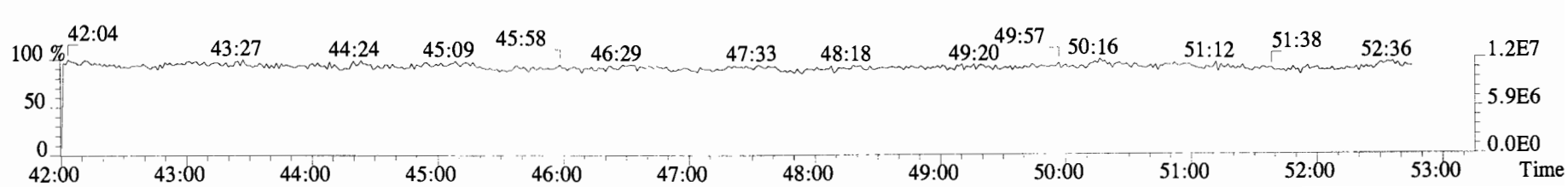
403.8457 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3904.0,0.00%,F,F)

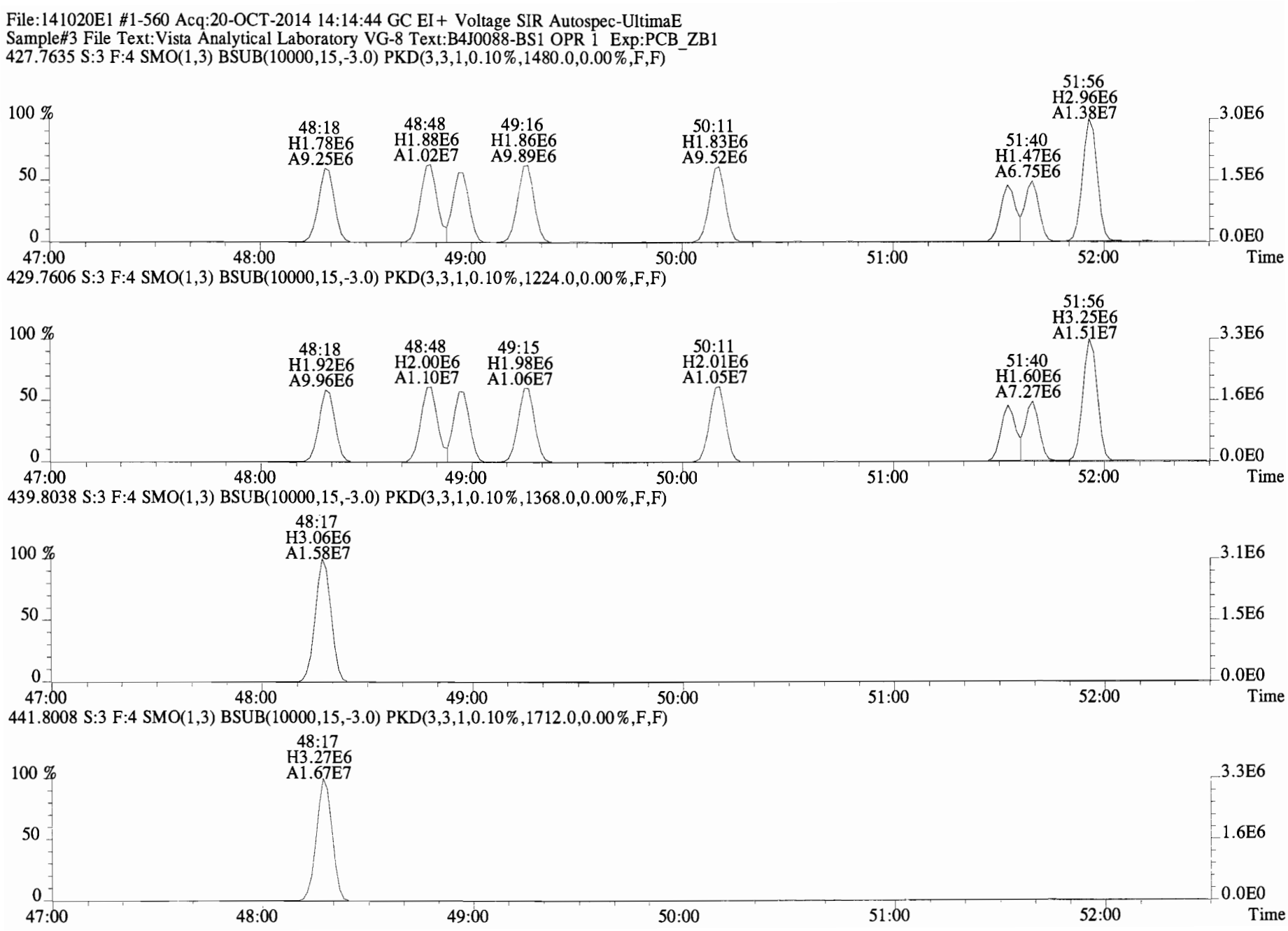


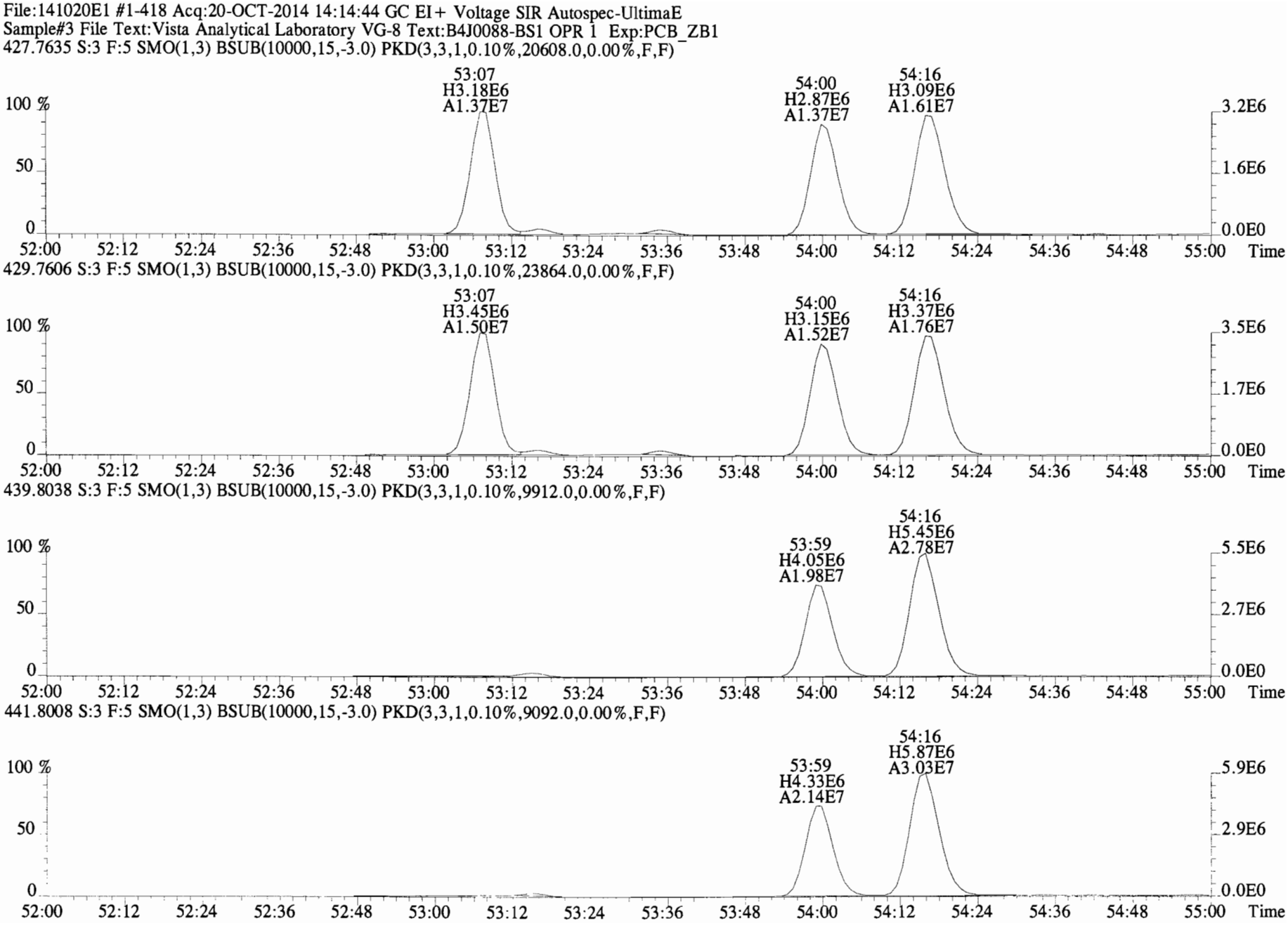
405.8428 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8092.0,0.00%,F,F)



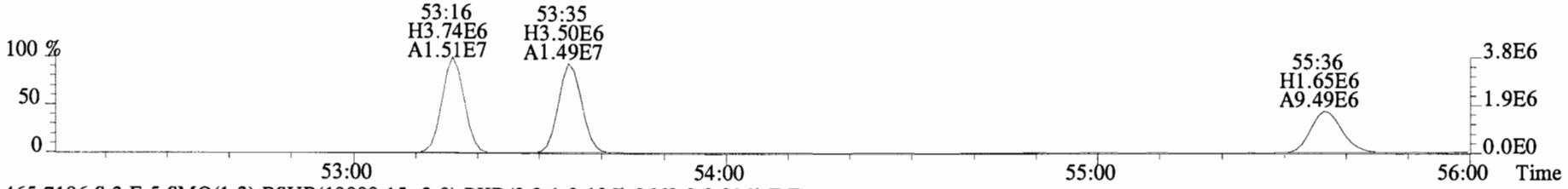
380.9760 S:3 F:4



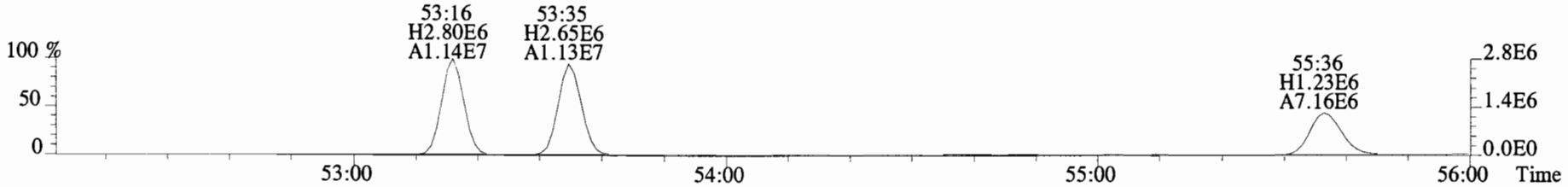

File:141020E1 #1-560 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
427.7635 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1480.0,0.00%,F,F)
48:18 H1.78E6 A9.25E6
48:48 H1.88E6 A1.02E7
49:16 H1.86E6 A9.89E6
50:11 H1.83E6 A9.52E6
51:40 H1.47E6 A6.75E6
51:56 H2.96E6 A1.38E7
429.7606 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1224.0,0.00%,F,F)
48:18 H1.92E6 A9.96E6
48:48 H2.00E6 A1.10E7
49:15 H1.98E6 A1.06E7
50:11 H2.01E6 A1.05E7
51:40 H1.60E6 A7.27E6
51:56 H3.25E6 A1.51E7
439.8038 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1368.0,0.00%,F,F)
48:17 H3.06E6 A1.58E7
441.8008 S:3 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1712.0,0.00%,F,F)
48:17 H3.27E6 A1.67E7
100 %
50
0
47:00
48:00
49:00
50:00
51:00
52:00
Time
3.0E6
1.5E6
0.0E0
3.3E6
1.6E6
3.1E6


File:141020E1 #1-418 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
427.7635 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,20608.0,0.00%,F,F)
53:07 H3.18E6 A1.37E7
54:00 H2.87E6 A1.37E7
54:16 H3.09E6 A1.61E7
100 %
50
0
3.2E6
1.6E6
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time
429.7606 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,23864.0,0.00%,F,F)
53:07 H3.45E6 A1.50E7
54:00 H3.15E6 A1.52E7
54:16 H3.37E6 A1.76E7
100 %
50
0
3.5E6
1.7E6
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time
439.8038 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9912.0,0.00%,F,F)
53:59 H4.05E6 A1.98E7
54:16 H5.45E6 A2.78E7
100 %
50
0
5.5E6
2.7E6
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time
441.8008 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9092.0,0.00%,F,F)
53:59 H4.33E6 A2.14E7
54:16 H5.87E6 A3.03E7
100 %
50
0
5.9E6
2.9E6
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time

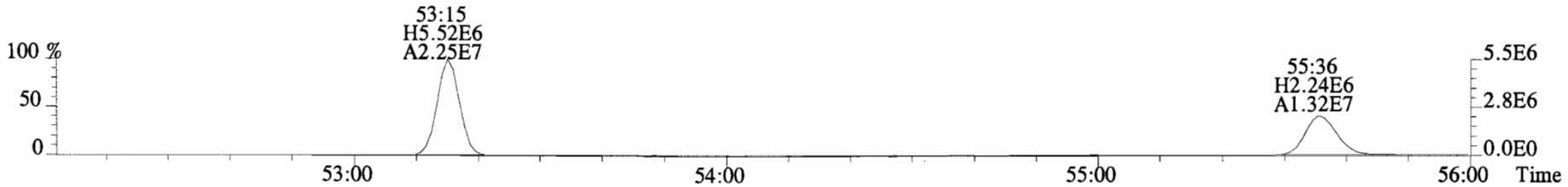
File:141020E1 #1-418 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
463.7216 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13352.0,0.00%,F,F)



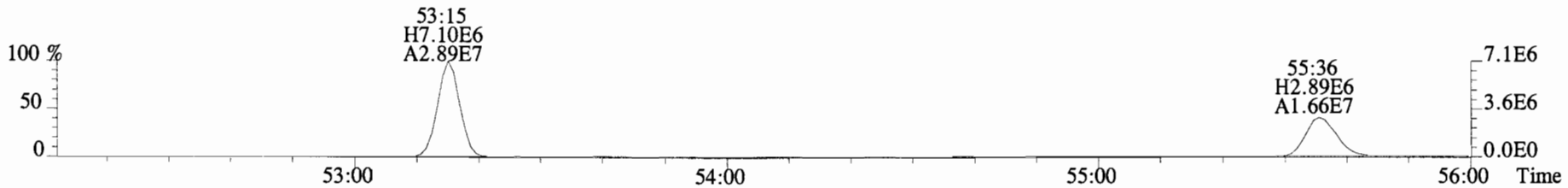
465.7186 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9668.0,0.00%,F,F)



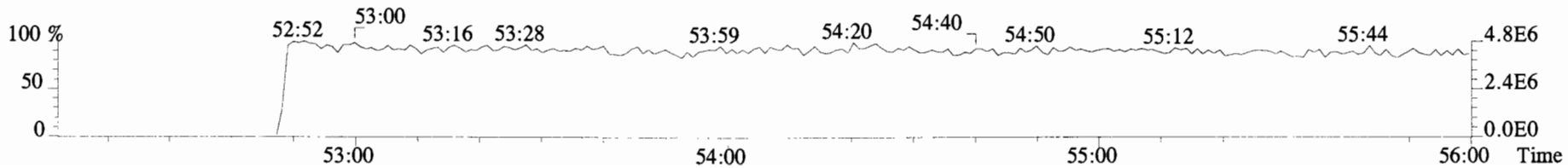
473.7648 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15328.0,0.00%,F,F)



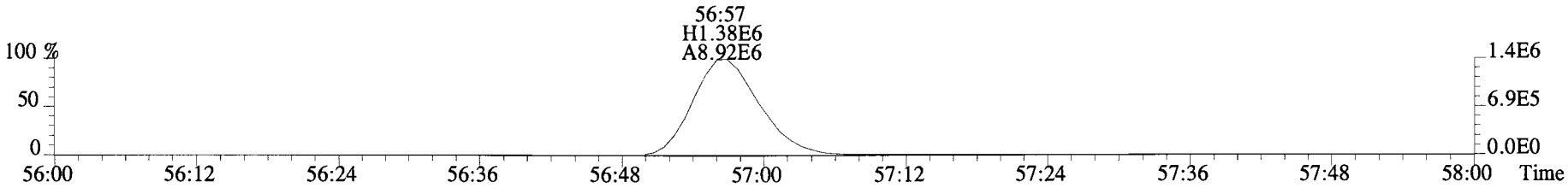
475.7619 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,19128.0,0.00%,F,F)



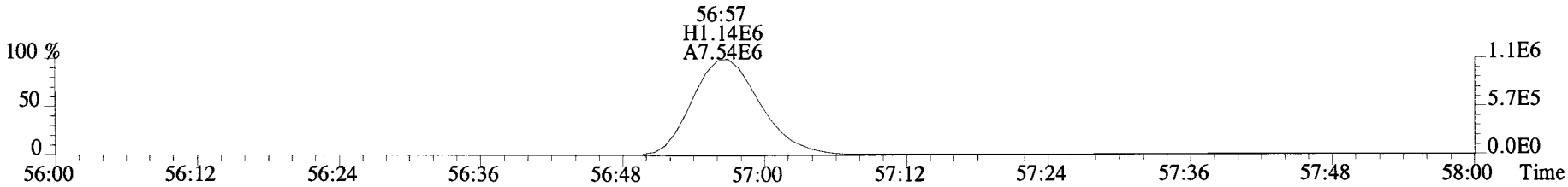
492.9697 S:3 F:5



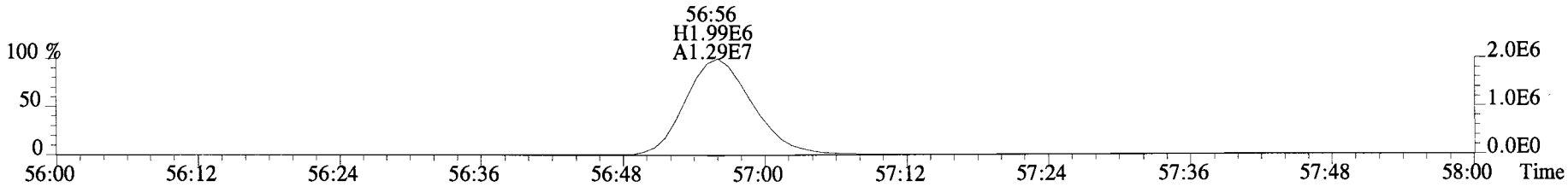
File:141020E1 #1-418 Acq:20-OCT-2014 14:14:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-8 Text:B4J0088-BS1 OPR 1 Exp:PCB_ZB1
497.6826 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1388.0,0.00%,F,F)



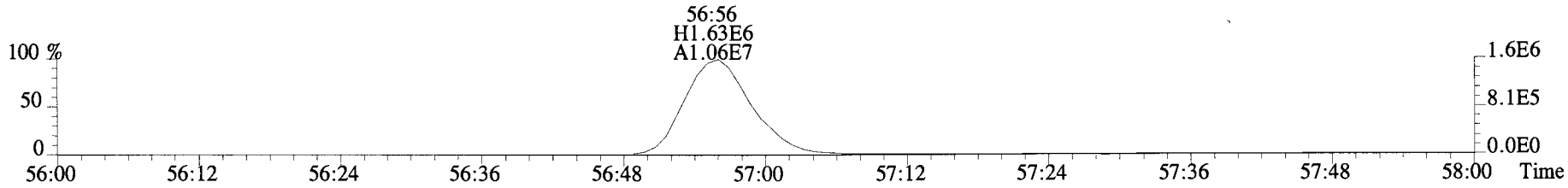
499.6797 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1420.0,0.00%,F,F)



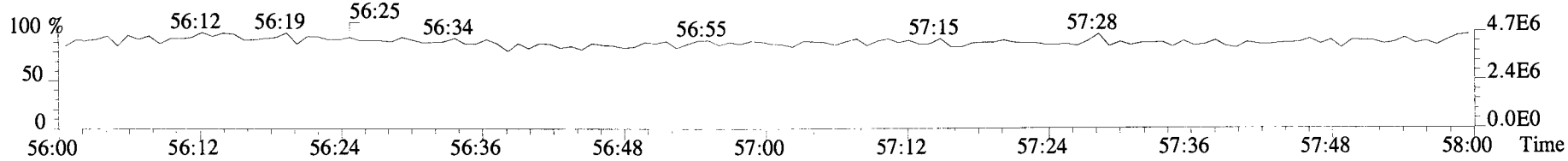
509.7229 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1672.0,0.00%,F,F)



511.7199 S:3 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1608.0,0.00%,F,F)



492.9697 S:3 F:5



Client ID: SP-OWS-01-20141008-W Filename: 141020E1 S:6 Acq:20-OCT-14 17:28:16 ConCal: ST141020E1-1
Lab ID: 1400737-01 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.978 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	9.05e+05	2.96	y 16:08	1.25	11.0		*	2.5	*	1.001	0.996	1.006
Mono	PCB-2	1.67e+05	3.02	y 18:31	1.18	2.00		*	2.5	*	0.988	0.983	0.993
Mono	PCB-3	8.32e+05	2.93	y 18:45	1.22	9.67		*	2.5	*	1.001	0.996	1.006
Di	PCB-4/10	1.50e+06	1.79	y 20:06	1.55	23.8		*	2.5	*	1.001	0.998	1.008
Di	PCB-7/9	*	*	n NotF┐	1.27	*		18300	2.5	5.22	*	0.865	0.873
Di	PCB-6	5.45e+05	1.55	y 22:34	1.26	6.83		*	2.5	*	0.893	0.890	0.899
Di	PCB-5/8	2.43e+06	1.53	y 22:58	1.23	31.0		*	2.5	*	0.909	0.906	0.916
Di	PCB-14	*	*	n NotF┐	1.23	*		18300	2.5	5.61	*	0.949	0.959
Di	PCB-11	6.63e+06	1.61	y 25:17	1.16	84.5		*	2.5	*	1.001	0.996	1.006
Di	PCB-12/13	*	*	n NotF┐	1.10	*		18300	2.5	6.29	*	1.010	1.020
Di	PCB-15	1.69e+06	1.65	y 25:59	1.21	20.7		*	2.5	*	1.028	1.024	1.034
Tri	PCB-19	5.07e+05	1.10	y 24:17	1.30	11.4		*	2.5	*	1.001	0.996	1.006
Tri	PCB-30	*	*	n NotF┐	1.83	*		2070	2.5	0.673	*	1.032	1.042
Tri	PCB-18	4.08e+06	1.06	y 25:55	0.86	92.3		*	2.5	*	0.954	0.949	0.959
Tri	PCB-17	1.29e+06	1.04	y 26:05	0.90	27.8		*	2.5	*	0.960	0.955	0.965
Tri	PCB-24/27	4.07e+05	0.97	y 26:39	1.18	6.73		*	2.5	*	0.981	0.976	0.986
Tri	PCB-16/32	2.96e+06	1.12	y 27:10	1.03	56.0		*	2.5	*	1.000	0.995	1.005
Tri	PCB-34	*	*	n NotF┐	1.26	*		2120	2.5	0.685	*	0.956	0.966
Tri	PCB-23	*	*	n NotF┐	1.31	*		2120	2.5	0.659	*	0.959	0.969
Tri	PCB-29	*	*	n NotF┐	1.33	*		2120	2.5	0.650	*	0.967	0.977
Tri	PCB-26	9.75e+05	1.05	y 28:31	1.29	12.4		*	2.5	*	0.979	0.974	0.984
Tri	PCB-25	3.66e+05	0.97	y 28:40	1.34	4.45		*	2.5	*	0.984	0.980	0.990
Tri	PCB-31	5.70e+06	1.03	y 29:02	1.42	65.7		*	2.5	*	0.997	0.992	1.002
Tri	PCB-28	5.30e+06	1.05	y 29:08	1.38	62.9		*	2.5	*	1.000	0.996	1.006
Tri	PCB-20/21/33	2.89e+06	1.07	y 29:46	1.31	36.1		*	2.5	*	1.022	1.017	1.027
Tri	PCB-22	1.79e+06	1.02	y 30:11	1.32	22.1		*	2.5	*	1.036	1.032	1.042
Tri	PCB-36	*	*	n NotF┐	1.38	*		2120	2.5	0.733	*	0.929	0.939
Tri	PCB-39	*	*	n NotF┐	1.42	*		2120	2.5	0.711	*	0.943	0.953
Tri	PCB-38	*	*	n NotF┐	1.35	*		2120	2.5	0.745	*	0.967	0.976
Tri	PCB-35	4.75e+05	1.16	y 32:35	1.38	6.27		*	2.5	*	0.987	0.982	0.992
Tri	PCB-37	2.06e+06	1.08	y 33:01	1.39	26.9		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-54	*	*	n NotF┐	1.20	*		2400	2.5	1.02	*	0.996	1.006
Tetra	PCB-50	*	*	n NotF┐	0.97	*		2400	2.5	1.26	*	1.037	1.047
Tetra	PCB-53	9.85e+05	0.79	y 29:50	1.19	25.0		*	2.5	*	0.946	0.941	0.951
Tetra	PCB-51	2.66e+05	0.70	y 30:10	1.15	6.95		*	2.5	*	0.957	0.952	0.962
Tetra	PCB-45	7.24e+05	0.75	y 30:36	0.97	22.6		*	2.5	*	0.970	0.966	0.976
Tetra	PCB-46	3.24e+05	0.69	y 31:06	0.95	10.3		*	2.5	*	0.986	0.982	0.992

Integrations by:

Analyst: DMS

Date: 10/24/14

Reviewed by: [signature] Date: 10/27/14

Client ID: SP-OWS-01-20141008-W Filename: 141020E1 S:6 Acq:20-OCT-14 17:28:16 ConCal: ST141020E1-1
Lab ID: 1400737-01 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.978 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	1.68e+07	0.77	y	31:33	1.28	396		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-73	*	*	n	NotF	1.37	*		2400	2.5	1.19	*	1.000	1.010
Tetra	PCB-43/49	5.34e+06	0.80	y	31:51	1.11	144		*	2.5	*	1.010	1.005	1.015
Tetra	PCB-47	1.49e+06	0.73	y	32:04	1.13	37.8		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-48/75	1.10e+06	0.78	y	32:11	1.30	24.1		*	2.5	*	1.004	0.999	1.009
Tetra	PCB-65	*	*	n	NotF	1.33	*		2400	2.5	1.15	*	1.007	1.017
Tetra	PCB-62	*	*	n	NotF	1.29	*		2400	2.5	1.19	*	1.011	1.021
Tetra	PCB-44	8.04e+06	0.79	y	32:52	0.94	245		*	2.5	*	1.026	1.020	1.030
Tetra	PCB-42/59	1.82e+06	0.74	y	33:05	1.22	42.7		*	2.5	*	1.032	1.028	1.038
Tetra	PCB-41/64/71/72	6.96e+06	0.75	y	33:40	1.31	152		*	2.5	*	1.051	1.046	1.056
Tetra	PCB-68	1.15e+05	0.82	y	33:55	1.49	2.21		*	2.5	*	1.058	1.054	1.064
Tetra	PCB-40	8.90e+05	0.78	y	34:09	0.82	31.1		*	2.5	*	1.066	1.061	1.071
Tetra	PCB-57	*	*	n	NotF	1.11	*		2400	2.5	1.06	*	0.965	0.975
Tetra	PCB-67	2.06e+05	0.86	y	34:48	1.07	4.05		*	2.5	*	0.979	0.974	0.984
Tetra	PCB-58	3.63e+04	0.91	n	34:55	1.10	0.694	R	*	2.5	*	0.982	0.977	0.987
Tetra	PCB-63	3.88e+05	0.79	y	35:05	1.12	7.30		*	2.5	*	0.987	0.982	0.992
Tetra	PCB-74	5.37e+06	0.78	y	35:22	1.20	93.9		*	2.5	*	0.995	0.990	1.000
Tetra	PCB-61/70	1.93e+07	0.78	y	35:34	1.08	377		*	2.5	*	1.000	0.994	1.004
Tetra	PCB-76/66	1.00e+07	0.77	y	35:47	1.14	185		*	2.5	*	1.006	1.001	1.011
Tetra	PCB-80	*	*	n	NotF	1.28	*		2400	2.5	0.943	*	0.996	1.006
Tetra	PCB-55	2.59e+05	0.93	n	36:17	1.11	4.93	R	*	2.5	*	1.009	1.005	1.015
Tetra	PCB-56/60	5.98e+06	0.79	y	36:48	1.09	117		*	2.5	*	1.023	1.018	1.028
Tetra	PCB-79	4.68e+05	0.73	y	37:53	1.12	8.81		*	2.5	*	1.053	1.048	1.058
Tetra	PCB-78	1.29e+05	0.70	y	38:31	1.24	2.48		*	2.5	*	0.986	0.982	0.992
Tetra	PCB-81	1.06e+05	1.25	n	39:05	1.38	1.82	R	*	2.5	*	1.000	0.995	1.005
Tetra	PCB-77	1.34e+06	0.82	y	39:41	1.21	25.3		*	2.5	*	1.000	0.995	1.005
Penta	PCB-104	*	*	n	NotF	1.26	*		1800	2.5	2.01	*	0.996	1.006
Penta	PCB-96	9.04e+04	2.00	n	33:58	1.09	3.66	R	*	2.5	*	1.039	1.034	1.044
Penta	PCB-103	1.04e+05	1.35	y	34:30	0.93	4.91		*	2.5	*	1.055	1.050	1.060
Penta	PCB-100	3.84e+04	1.05	n	34:52	1.00	1.69	R	*	2.5	*	1.066	1.061	1.071
Penta	PCB-94	6.56e+04	1.34	y	35:20	1.11	3.39		*	2.5	*	0.986	0.981	0.991
Penta	PCB-95/98/102	1.35e+07	1.56	y	35:52	1.21	637		*	2.5	*	1.000	0.994	1.004
Penta	PCB-93	*	*	n	NotF	1.13	*		1800	2.5	3.13	*	0.998	1.008
Penta	PCB-88/91	2.04e+06	1.62	y	36:16	1.02	115		*	2.5	*	1.012	1.006	1.016
Penta	PCB-121	*	*	n	NotF	1.90	*		1800	2.5	1.86	*	1.009	1.019
Penta	PCB-84/92	7.12e+06	1.54	y	37:11	1.05	357		*	2.5	*	0.991	0.986	0.996
Penta	PCB-89	1.12e+05	1.71	y	37:22	1.02	5.79		*	2.5	*	0.995	0.991	1.001

Analyst: DMS

Date: 10/24/14

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Penta	PCB-90/101	1.93e+07	1.59	y 37:33	1.19	854		*	2.5	*	1.000	0.996-1.006
Penta	PCB-113	*	*	n NotF	1.35	*		1800	2.5	2.40	*	1.002-1.012
Penta	PCB-99	7.69e+06	1.58	y 37:53	1.29	315		*	2.5	*	1.009	1.005-1.015
Penta	PCB-119	4.07e+05	1.50	y 38:20	1.72	13.5		*	2.5	*	0.987	0.982-0.992
Penta	PCB-108/112	9.21e+05	1.73	y 38:30	1.29	40.8		*	2.5	*	0.991	0.986-0.996
Penta	PCB-83	*	*	n NotF	1.52	*		1800	2.5	2.28	*	0.991-1.001
Penta	PCB-97	5.54e+06	1.57	y 38:52	1.25	253		*	2.5	*	1.001	0.996-1.006
Penta	PCB-86	5.39e+04	1.10	n 39:01	1.02	3.01	R	*	2.5	*	1.004	1.000-1.010
Penta	PCB-87/117/125	8.76e+06	1.58	y 39:09	1.56	321		*	2.5	*	1.008	1.002-1.012
Penta	PCB-111/115	3.57e+05	1.59	y 39:17	1.75	11.6		*	2.5	*	1.011	1.007-1.017
Penta	PCB-85/116	3.09e+06	1.56	y 39:24	1.30	135		*	2.5	*	1.014	1.010-1.020
Penta	PCB-120	7.12e+04	1.78	y 39:36	1.78	2.28		*	2.5	*	1.019	1.016-1.026
Penta	PCB-110	2.84e+07	1.60	y 39:48	1.68	966		*	2.5	*	1.025	1.020-1.030
Penta	PCB-82	1.77e+06	1.51	y 40:25	0.74	107		*	2.5	*	0.976	0.972-0.982
Penta	PCB-124	1.12e+06	1.41	y 41:06	1.32	37.8		*	2.5	*	0.993	0.988-0.998
Penta	PCB-107/109	1.45e+06	1.54	y 41:16	1.22	53.2		*	2.5	*	0.997	0.991-1.001
Penta	PCB-123	3.17e+05	1.44	y 41:25	1.22	11.6		*	2.5	*	1.000	0.995-1.005
Penta	PCB-106/118	2.15e+07	1.64	y 41:35	1.22	766		*	2.5	*	1.000	0.996-1.006
Penta	PCB-114	8.26e+05	1.49	y 42:15	1.36	17.6		*	2.5	*	1.000	0.995-1.005
Penta	PCB-122	3.07e+05	1.72	y 42:24	1.24	7.17		*	2.5	*	1.004	0.999-1.009
Penta	PCB-105	1.30e+07	1.64	y 43:07	1.28	294		*	2.5	*	1.000	0.995-1.005
Penta	PCB-127	*	*	n NotF	1.14	*		4430	2.5	3.73	*	0.995-1.005
Penta	PCB-126	2.55e+05	1.72	y 45:22	1.28	6.18		*	2.5	*	1.001	0.995-1.005
Hexa	PCB-155	*	*	n NotF	1.14	*		1500	2.5	2.47	*	0.966-1.006
Hexa	PCB-150	*	*	n NotF	1.06	*		1500	2.5	2.63	*	1.030-1.040
Hexa	PCB-152	*	*	n NotF	1.10	*		1500	2.5	2.55	*	1.043-1.053
Hexa	PCB-145	*	*	n NotF	1.09	*		1500	2.5	2.56	*	1.055-1.065
Hexa	PCB-136	1.72e+06	1.24	y 39:36	1.08	101		*	2.5	*	1.068	1.064-1.074
Hexa	PCB-148	*	*	n NotF	0.74	*		1500	2.5	3.78	*	1.066-1.076
Hexa	PCB-154	9.40e+04	1.17	y 40:13	0.88	6.74		*	2.5	*	1.085	1.079-1.089
Hexa	PCB-151	2.14e+06	1.27	y 40:50	0.81	167		*	2.5	*	1.101	1.097-1.107
Hexa	PCB-135	1.28e+06	1.21	y 41:04	0.78	104		*	2.5	*	1.107	1.101-1.113
Hexa	PCB-144	4.45e+05	1.30	y 41:10	0.82	34.4		*	2.5	*	1.110	1.105-1.116
Hexa	PCB-147	2.16e+05	1.15	y 41:17	0.83	16.6		*	2.5	*	1.113	1.011-1.120
Hexa	PCB-139/149	8.65e+06	1.32	y 41:33	0.84	649		*	2.5	*	1.120	1.115-1.127
Hexa	PCB-140	4.62e+04	1.29	y 41:45	0.79	3.73		*	2.5	*	1.126	1.120-1.132
Hexa	PCB-134/143	1.30e+06	1.31	y 42:12	0.93	50.7		*	2.5	*	0.976	0.970-0.980

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Date: 10/24/14

Client ID: SP-OWS-01-20141008-W Filename: 141020E1 S:6 Acq:20-OCT-14 17:28:16 ConCal: ST141020E1-1
Lab ID: 1400737-01 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.978 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Hexa	PCB-133/142	7.17e+05	1.23	y 42:28	0.95	27.4		*	2.5	*	0.982	0.977-0.987
Hexa	PCB-131	*	*	n NotF	0.91	*		2630	2.5	3.18	*	0.981-0.991
Hexa	PCB-146/165	3.42e+06	1.22	y 42:52	1.16	107		*	2.5	*	0.991	0.986-0.996
Hexa	PCB-132/161	7.98e+06	1.25	y 43:09	1.11	259		*	2.5	*	0.997	0.992-1.002
Hexa	PCB-153	2.49e+07	1.24	y 43:17	1.18	763		*	2.5	*	1.001	0.995-1.005
Hexa	PCB-168	*	*	n NotF	1.37	*		2630	2.5	2.12	*	1.000-1.010
Hexa	PCB-141	5.02e+06	1.24	y 44:01	0.97	195		*	2.5	*	1.000	0.996-1.005
Hexa	PCB-137	1.24e+06	1.30	y 44:24	1.07	43.7		*	2.5	*	1.009	1.004-1.014
Hexa	PCB-130	1.46e+06	1.30	y 44:31	0.85	65.5		*	2.5	*	1.012	1.007-1.017
Hexa	PCB-138/163/164	3.01e+07	1.27	y 44:52	1.23	981		*	2.5	*	1.001	0.996-1.006
Hexa	PCB-158/160	3.77e+06	1.34	y 45:05	1.29	117		*	2.5	*	1.005	1.001-1.011
Hexa	PCB-129	1.26e+06	1.20	y 45:22	0.92	54.3		*	2.5	*	1.012	1.007-1.017
Hexa	PCB-166	9.51e+04	0.87	n 45:48	1.12	2.89	R	*	2.5	*	0.993	0.988-0.998
Hexa	PCB-159	*	*	n NotF	1.16	*		2630	2.5	2.43	*	0.995-1.005
Hexa	PCB-128/162	4.75e+06	1.25	y 46:25	1.02	158		*	2.5	*	1.006	1.002-1.012
Hexa	PCB-167	1.35e+06	1.25	y 46:49	1.06	40.9		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-156	3.22e+06	1.20	y 48:07	1.18	94.0		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-157	6.60e+05	1.33	y 48:24	1.08	20.3		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-169	*	*	n NotF	1.11	*		2630	2.5	3.08	*	0.995-1.005
Hepta	PCB-188	*	*	n NotF	1.40	*		2400	2.5	1.76	*	0.995-1.005
Hepta	PCB-184	*	*	n NotF	1.24	*		2400	2.5	2.00	*	1.006-1.016
Hepta	PCB-179	1.98e+06	1.17	y 44:08	1.30	81.0		*	2.5	*	1.029	1.024-1.034
Hepta	PCB-176	6.62e+05	0.94	y 44:35	1.36	25.9		*	2.5	*	1.039	1.035-1.045
Hepta	PCB-186	*	*	n NotF	1.28	*		2400	2.5	1.94	*	1.049-1.059
Hepta	PCB-178	7.23e+05	1.17	y 45:42	0.94	41.2		*	2.5	*	1.066	1.061-1.071
Hepta	PCB-175	1.43e+05	0.91	y 46:03	0.97	7.85		*	2.5	*	1.074	1.069-1.079
Hepta	PCB-182/187	5.00e+06	1.09	y 46:12	1.01	263		*	2.5	*	1.077	1.073-1.083
Hepta	PCB-183	2.22e+06	1.07	y 46:32	1.08	109		*	2.5	*	1.085	1.080-1.090
Hepta	PCB-185	4.06e+05	1.16	y 47:11	1.34	23.0		*	2.5	*	0.955	0.951-0.961
Hepta	PCB-174	3.73e+06	1.06	y 47:33	1.34	212		*	2.5	*	0.963	0.958-0.968
Hepta	PCB-181	*	*	n NotF	1.36	*		2400	2.5	2.76	*	0.961-0.971
Hepta	PCB-177	2.00e+06	1.02	y 47:50	1.24	123		*	2.5	*	0.968	0.964-0.974
Hepta	PCB-171	9.91e+05	1.08	y 48:08	1.31	57.5		*	2.5	*	0.974	0.970-0.980
Hepta	PCB-173	8.49e+04	0.91	y 48:34	1.16	5.58		*	2.5	*	0.983	0.979-0.989
Hepta	PCB-172	6.31e+05	1.04	y 49:00	1.22	39.4		*	2.5	*	0.992	0.988-0.998
Hepta	PCB-192	*	*	n NotF	1.53	*		2400	2.5	2.46	*	0.991-1.001
Hepta	PCB-180	8.43e+06	1.07	y 49:24	1.43	450		*	2.5	*	1.000	0.995-1.005

Analyst: DMS

Date: 10/24/14

Client ID: SP-OWS-01-20141008-W Filename: 141020E1 S:6 Acq:20-OCT-14 17:28:16 ConCal: ST141020E1-1
Lab ID: 1400737-01 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.978 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	5.09e+05	1.11	y	49:37	1.65	23.5		*	2.5	*	1.004	0.999	1.009
Hepta	PCB-191	1.85e+05	1.02	y	49:52	1.67	8.44		*	2.5	*	1.009	1.004	1.014
Hepta	PCB-170	2.97e+06	1.04	y	50:57	1.50	199		*	2.5	*	1.000	0.995	1.005
Hepta	PCB-190	7.91e+05	0.97	y	51:08	2.02	39.4		*	2.5	*	1.004	0.998	1.008
Hepta	PCB-189	1.32e+05	0.92	y	52:29	1.54	7.26		*	2.5	*	1.000	0.995	1.005
Octa	PCB-202	2.95e+05	0.84	y	48:20	1.04	18.4		*	2.5	*	1.000	0.995	1.005
Octa	PCB-201	1.74e+05	1.00	y	48:49	1.10	10.2		*	2.5	*	1.010	1.006	1.016
Octa	PCB-204	*	*	n	NotFnd	0.99	*		1520	2.5	2.58	*	1.009	1.019
Octa	PCB-197	6.71e+04	0.97	y	49:16	1.07	4.06		*	2.5	*	1.020	1.015	1.025
Octa	PCB-200	1.96e+05	1.00	y	50:11	1.02	12.5		*	2.5	*	1.039	1.032	1.044
Octa	PCB-198	4.29e+04	0.89	y	51:33	0.74	3.75		*	2.5	*	1.067	1.058	1.068
Octa	PCB-199	1.06e+06	0.99	y	51:41	0.73	94.0		*	2.5	*	1.070	1.060	1.070
Octa	PCB-196/203	1.10e+06	0.89	y	51:57	0.77	92.6		*	2.5	*	1.075	1.066	1.076
Octa	PCB-195	4.98e+05	0.80	y	53:08	1.20	33.3		*	2.5	*	0.984	0.979	0.989
Octa	PCB-194	1.33e+06	0.89	y	54:02	1.25	85.4		*	2.5	*	1.000	0.995	1.005
Octa	PCB-205	8.44e+04	0.83	y	54:18	1.41	4.80		*	2.5	*	1.005	1.001	1.011
Nona	PCB-208	7.53e+04	1.22	y	53:18	0.96	4.44		*	2.5	*	1.000	0.995	1.005
Nona	PCB-207	3.75e+04	1.24	y	53:36	0.92	2.32		*	2.5	*	1.006	1.001	1.011
Nona	PCB-206	2.03e+05	1.36	y	55:38	1.03	19.6		*	2.5	*	1.000	0.995	1.005
Deca	PCB-209	7.40e+04	1.32	y	57:00	1.18	6.56		*	2.5	*	1.000	0.995	1.005

Analyst: DMS

Date: 10/24/14

Client ID: SP-OWS-01-20141008-W Filename: 141020E1 S:6 Acq:20-OCT-14 17:28:16 ConCal: ST141020E1-1
Lab ID: 1400737-01 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.9777 EndCAL: NA

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	1.90e+06	2.96	y	16:08	1.22	22.6382	
Total Di-PCB	1.28e+07	1.79	y	20:06	1.21	166.898	
Total Tri-PCB	9.24e+06	1.10	y	24:17	1.16	194.236	
Total Tri-PCB	1.96e+07	1.05	y	28:31	1.35	236.821	Sum:431.057
Total Tetra-PCB	8.81e+07	0.79	y	29:50	1.17	1959.68	
Total Penta-PCB	1.24e+08	1.35	y	34:30	1.21	5011.69	
Total Penta-PCB	1.44e+07	1.49	y	42:15	1.26	325.339	Sum:5337.03
Total Hexa-PCB	1.46e+07	1.24	y	39:36	0.92	1083.06	
Total Hexa-PCB	9.12e+07	1.31	y	42:12	1.08	2976.46	Sum:4059.53
Total Hepta-PCB	3.16e+07	1.17	y	44:08	1.27	1715.58	
Total Octa-PCB	2.93e+06	0.84	y	48:20	0.92	235.618	
Total Octa-PCB	1.91e+06	0.80	y	53:08	1.29	123.505	Sum:359.123
Total Nona-PCB	3.16e+05	1.22	y	53:18	0.96	26.3488	
Total Deca-PCB	7.40e+04	1.32	y	57:00	1.18	6.55997	

Total PCB Conc:14103.1370770

Integrations
by
Analyst: DMS

Date: 10/24/14

Client ID: SP-OWS-01-20141008-W Filename: 141020E1 S:6 Acq:20-OCT-14 17:28:16 ConCal: ST141020E1-1
Lab ID: 1400737-01 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:0.9777 EndCAL: NA

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.35e+08	3.29	y	0.89	16:07	0.620	0.622-0.628	OK	1810	88.5
13C-PCB-3	1.44e+08	3.33	y	0.93	18:44	0.721	0.721-0.729		1860	91.1
13C-PCB-4	8.31e+07	1.59	y	0.55	20:05	0.773	0.772-0.780		1820	88.7
13C-PCB-9	1.30e+08	1.61	y	0.83	21:52	0.842	0.840-0.848		1880	91.9
13C-PCB-11	1.39e+08	1.57	y	0.94	25:16	0.973	0.968-0.978		1770	86.5
13C-PCB-19	7.03e+07	1.09	y	0.53	24:15	0.934	0.929-0.939		1580	77.2
13C-PCB-28	1.25e+08	1.08	y	0.89	29:08	1.004	0.999-1.009		1870	91.5
13C-PCB-32	1.05e+08	1.10	y	0.81	27:10	1.046	1.041-1.051		1550	75.6
13C-PCB-37	1.13e+08	1.07	y	0.83	33:00	1.138	1.131-1.143		1800	88.0
13C-PCB-47	7.14e+07	0.81	y	0.74	32:03	0.871	0.867-0.875		1800	87.8
13C-PCB-52	6.80e+07	0.80	y	0.71	31:32	0.857	0.853-0.861		1800	87.8
13C-PCB-54	8.47e+07	0.82	y	0.85	28:00	0.761	0.758-0.766		1860	91.1
13C-PCB-70	9.71e+07	0.81	y	0.94	35:34	0.966	0.961-0.971		1930	94.1
13C-PCB-77	9.01e+07	0.82	y	0.89	39:41	1.078	1.073-1.083		1890	92.2
13C-PCB-80	9.67e+07	0.79	y	0.96	35:58	0.977	0.972-0.982		1880	92.0
13C-PCB-81	8.59e+07	0.80	y	0.84	39:05	1.062	1.057-1.067		1920	93.8
13C-PCB-95	3.57e+07	1.63	y	0.74	35:51	0.913	0.908-0.918		1780	86.8
13C-PCB-97	3.58e+07	1.65	y	0.69	38:51	0.989	0.984-0.994		1920	93.9
13C-PCB-101	3.88e+07	1.65	y	0.79	37:32	0.956	0.951-0.961		1820	89.2
13C-PCB-104	4.63e+07	1.63	y	1.00	32:42	0.833	0.829-0.837		1720	84.1
13C-PCB-105	7.04e+07	1.59	y	1.24	43:06	0.929	0.924-0.934		2180	107
13C-PCB-114	7.08e+07	1.64	y	1.21	42:14	0.910	0.905-0.915		2250	110
13C-PCB-118	4.69e+07	1.64	y	0.98	41:35	1.059	1.054-1.064		1760	86.1
13C-PCB-123	4.58e+07	1.65	y	0.95	41:24	1.055	1.049-1.059		1780	87.2
13C-PCB-126	6.56e+07	1.58	y	1.16	45:20	0.977	0.972-0.982		2170	106
13C-PCB-127	7.78e+07	1.59	y	1.34	43:26	0.936	0.931-0.941		2220	109
13C-PCB-138	5.13e+07	1.28	y	1.04	44:50	0.966	0.961-0.971		1890	92.1
13C-PCB-141	5.40e+07	1.33	y	1.07	44:00	0.948	0.943-0.953		1930	94.6
13C-PCB-153	5.66e+07	1.29	y	1.11	43:16	0.932	0.927-0.937		1950	95.4
13C-PCB-155	3.23e+07	1.32	y	0.83	37:05	0.944	0.939-0.949		1430	70.1
13C-PCB-156	5.93e+07	1.27	y	1.24	48:07	1.037	1.032-1.042		1830	89.4
13C-PCB-157	6.15e+07	1.30	y	1.31	48:23	1.043	1.037-1.047		1800	88.0
13C-PCB-159	6.03e+07	1.28	y	1.20	46:08	0.994	0.989-0.999		1930	94.3
13C-PCB-167	6.38e+07	1.30	y	1.32	46:49	1.009	1.004-1.014		1850	90.6
13C-PCB-169	5.16e+07	1.26	y	1.22	50:35	1.090	1.082-1.092		1630	79.7
13C-PCB-170	2.04e+07	0.45	y	0.54	50:57	1.098	1.089-1.101		1460	71.3
13C-PCB-180	2.68e+07	0.46	y	0.67	49:24	1.065	1.059-1.069		1530	74.7
13C-PCB-188	3.83e+07	0.47	y	0.94	42:53	0.924	0.919-0.929		1570	76.9
13C-PCB-189	2.41e+07	0.48	y	0.72	52:29	1.131	1.120-1.132		1290	63.2
13C-PCB-194	2.55e+07	0.91	y	0.81	54:01	0.995	0.990-1.000		1960	95.6
13C-PCB-202	3.15e+07	0.94	y	0.83	48:19	1.041	1.036-1.046		1450	71.0
13C-PCB-206	2.06e+07	0.80	y	0.66	55:38	1.025	1.021-1.031		1950	95.3
13C-PCB-208	3.61e+07	0.78	y	1.12	53:17	0.981	0.976-0.986		2000	97.7
13C-PCB-209	1.96e+07	1.26	y	0.61	56:59	1.049	1.044-1.054		1990	97.2

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.13e+08	0.79	y	1.01	37:51	1.029	1.023	1.033	2100	103
13C-PCB-178	2.92e+07	0.46	y	0.63	45:41	0.985	0.979	0.989	1780	86.8

PS vs. IS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.13e+08	0.79	y	1.20	37:51	0.969	0.963	0.973	2240	110
13C-PCB-178	2.92e+07	0.46	y	0.94	45:41	0.925	0.920	0.930	2370	116

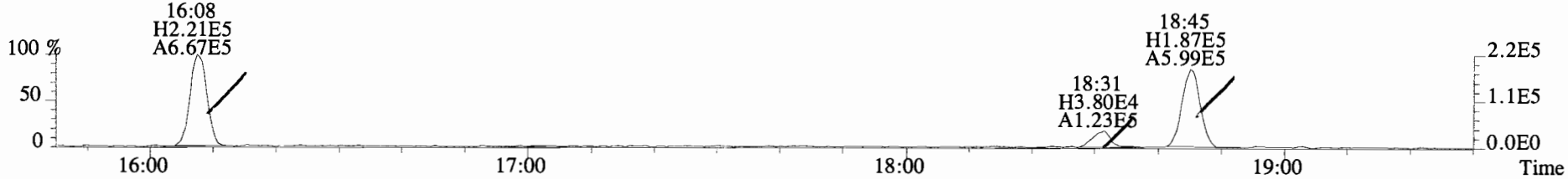
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.71e+08	1.58	y	1.00	25:58	2050
13C-PCB-31	1.54e+08	1.07	y	1.00	29:01	2050
13C-PCB-60	1.09e+08	0.80	y	1.00	36:48	2050
13C-PCB-111	5.53e+07	1.61	y	1.00	39:16	2050
13C-PCB-128	5.33e+07	1.29	y	1.00	46:24	2050
13C-PCB-205	3.29e+07	0.93	y	1.00	54:18	2050

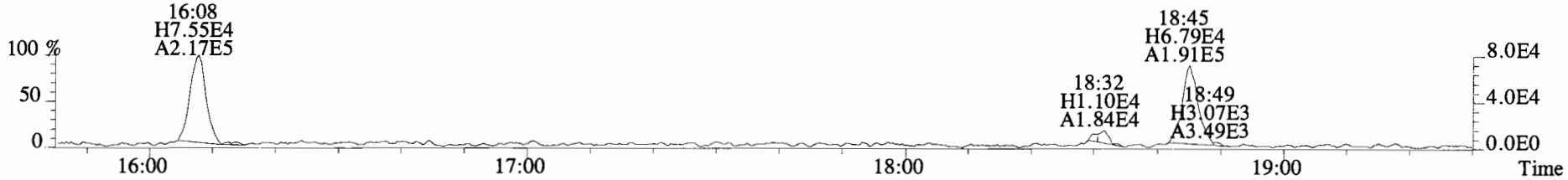
Analyst: DMS

Date: 10/24/14

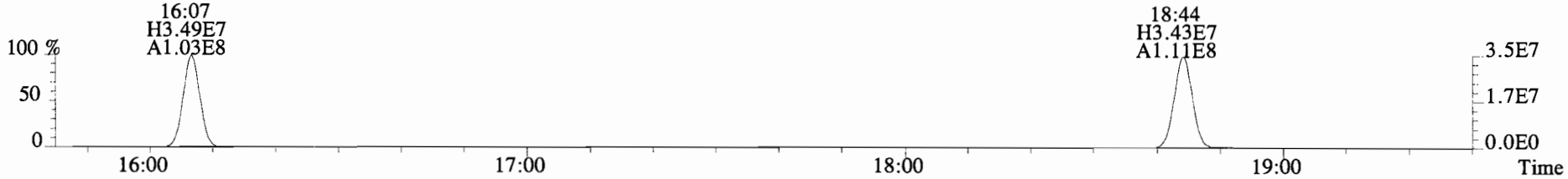
File:141020E1 #1-729 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
188.0393 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3016.0,0.00%,F,F)



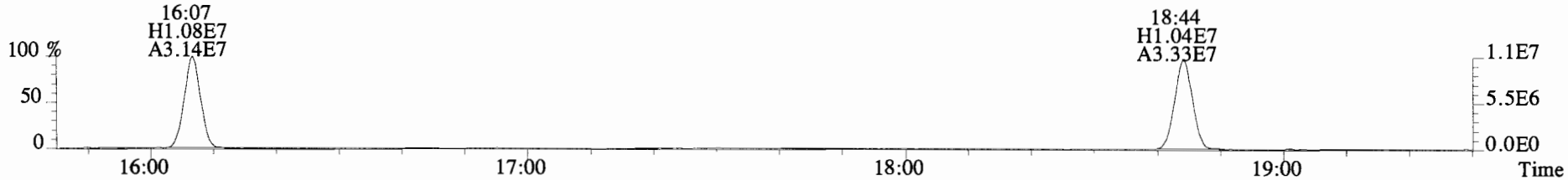
190.0363 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3884.0,0.00%,F,F)



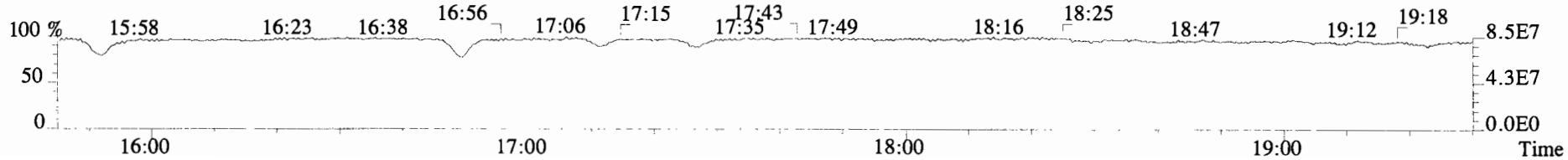
200.0795 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7284.0,0.00%,F,F)



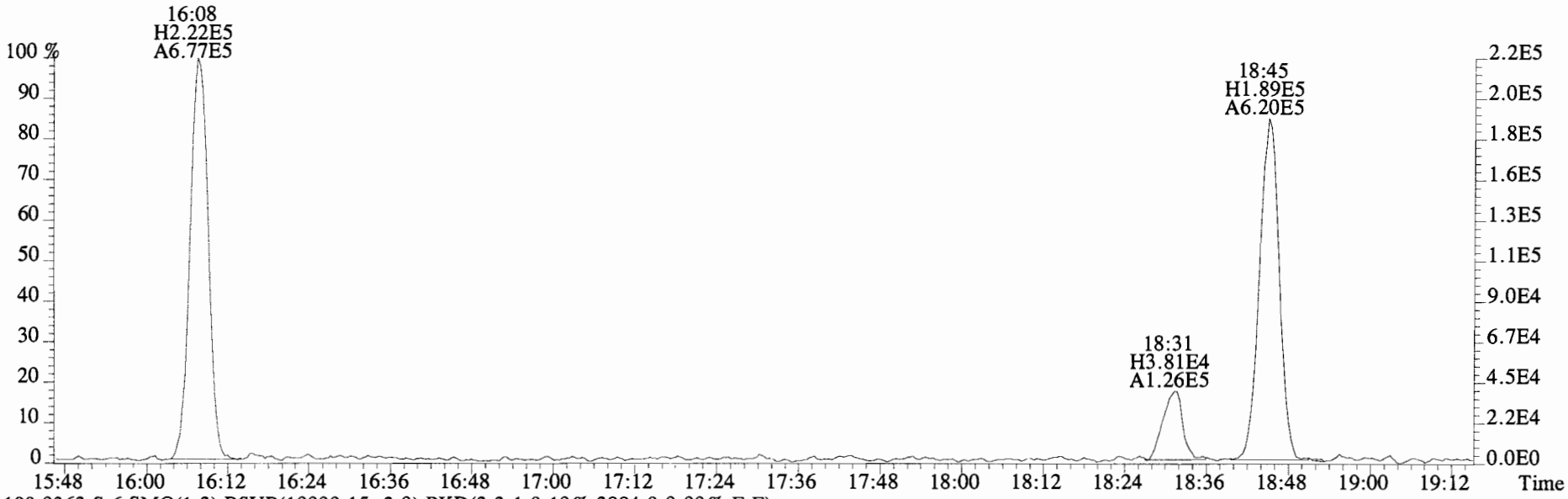
202.0766 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,90040.0,0.00%,F,F)



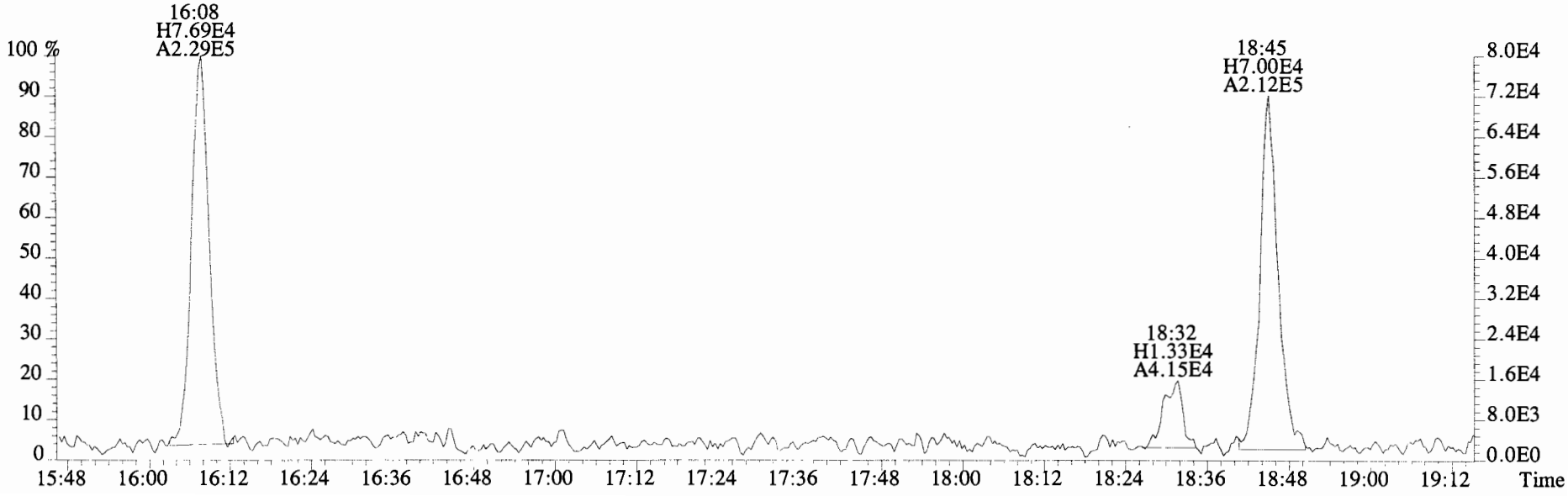
180.9880 S:6



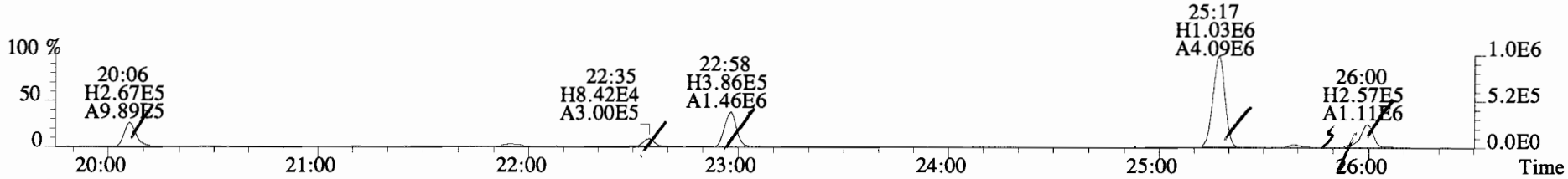
File:141020E1 #1-729 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
188.0393 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3016.0,0.00%,F,F)



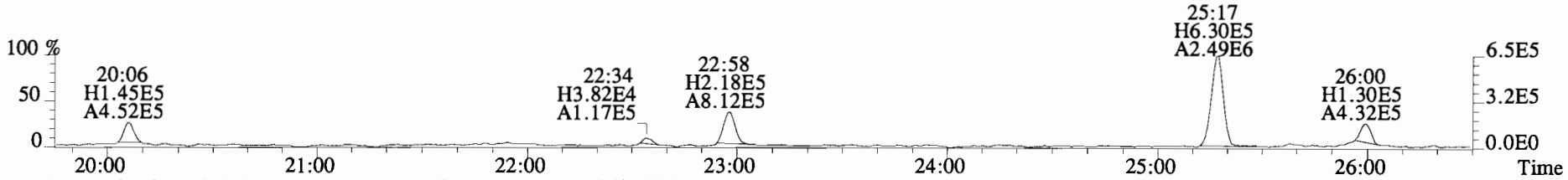
190.0363 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3884.0,0.00%,F,F)



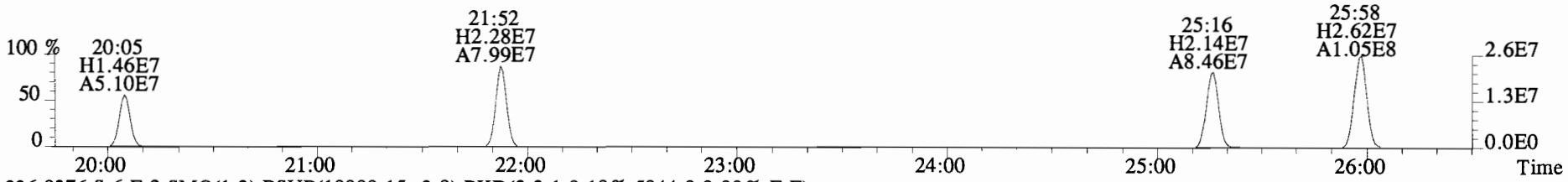
File:141020E1 #1-757 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
222.0003 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3348.0,0.00%,F,F)



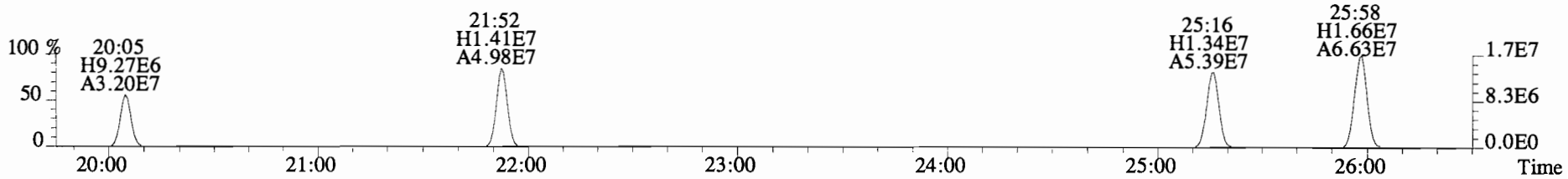
223.9974 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18268.0,0.00%,F,F)



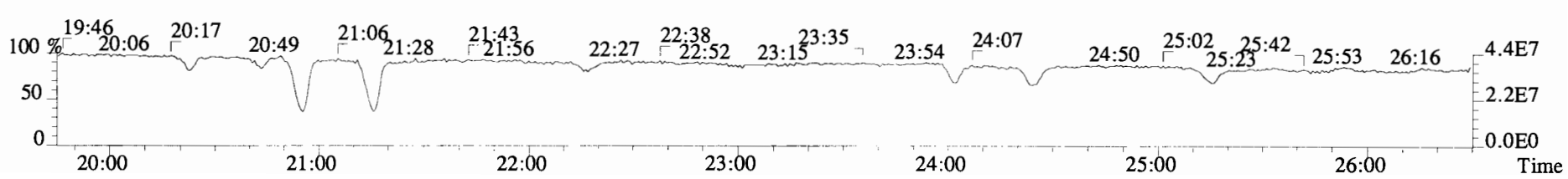
234.0406 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7292.0,0.00%,F,F)



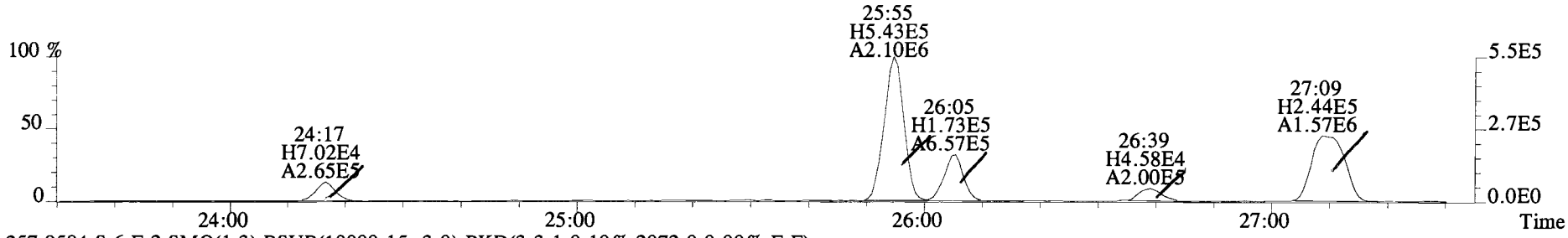
236.0376 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5044.0,0.00%,F,F)



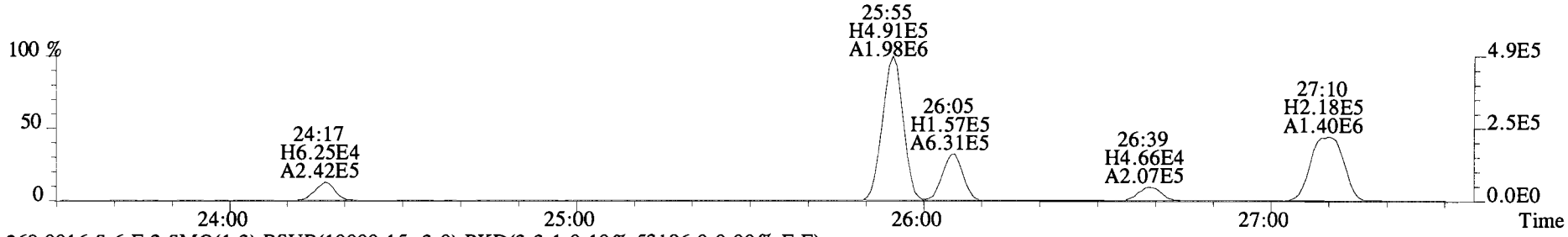
230.9856 S:6 F:2



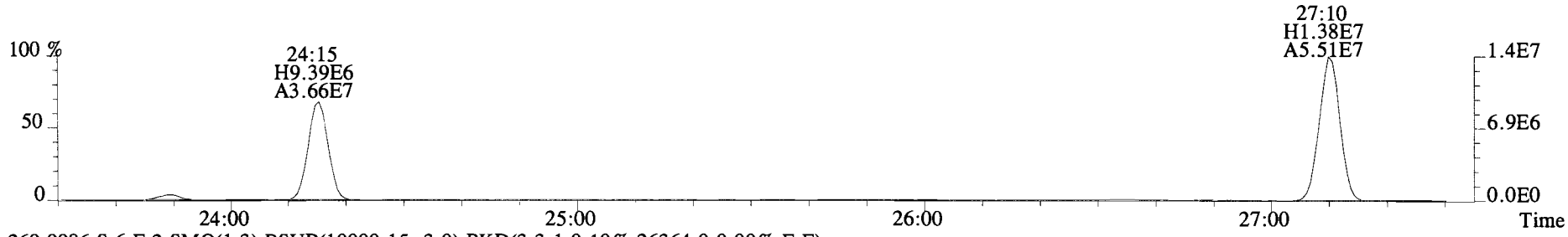
File:141020E1 #1-757 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
255.9613 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3480.0,0.00%,F,F)



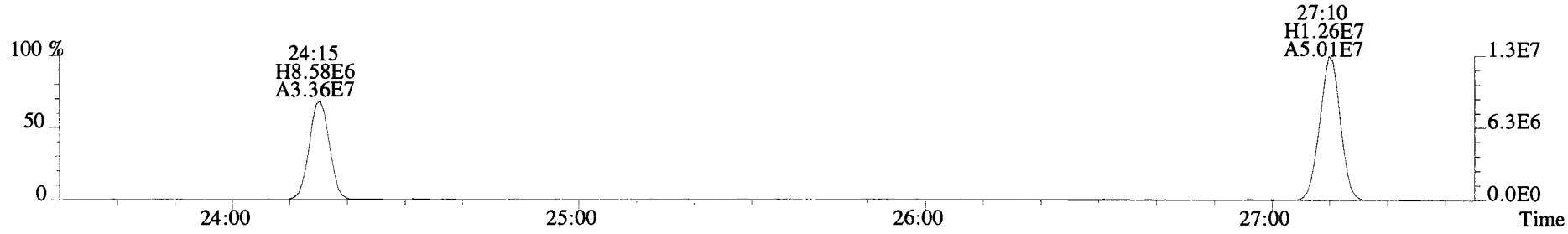
257.9584 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2072.0,0.00%,F,F)



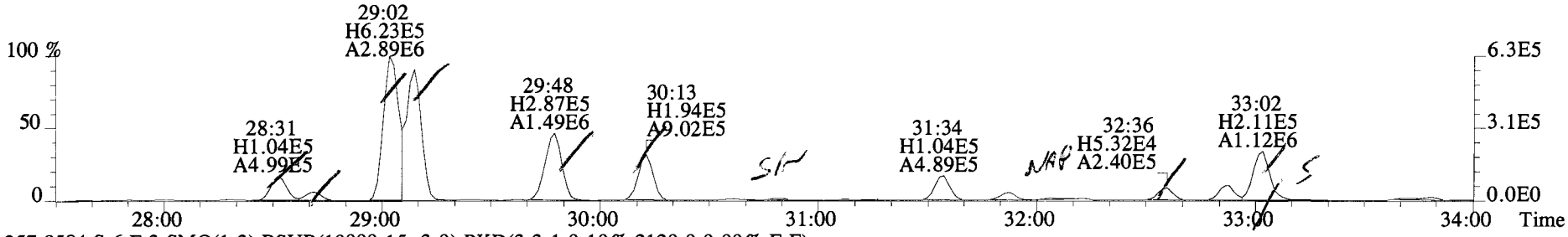
268.0016 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,53196.0,0.00%,F,F)



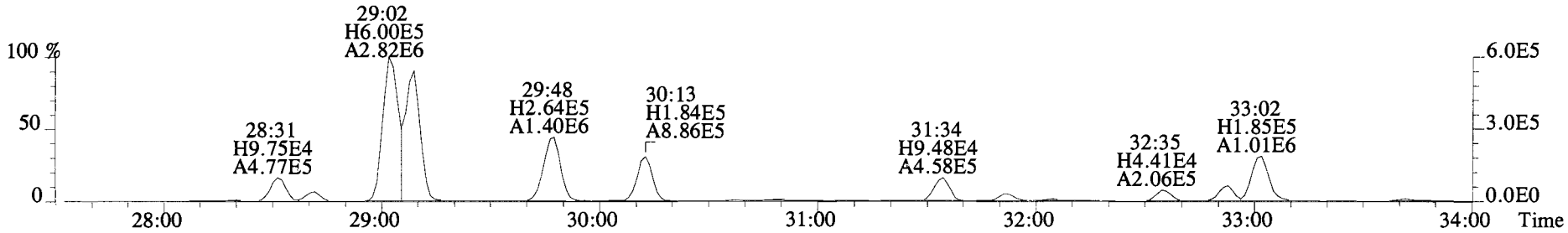
269.9986 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26364.0,0.00%,F,F)



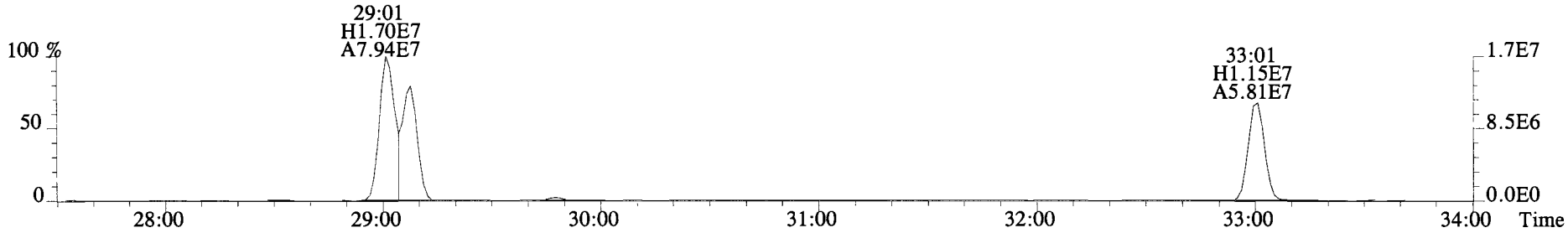
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
255.9613 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3728.0,0.00%,F,F)



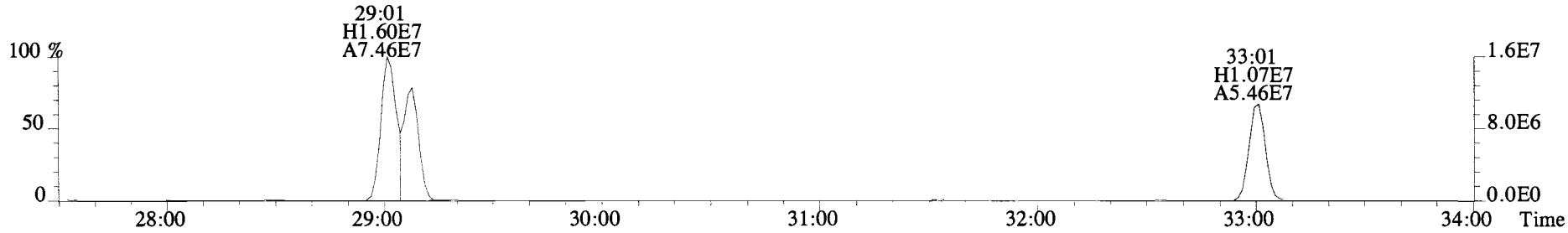
257.9584 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2120.0,0.00%,F,F)



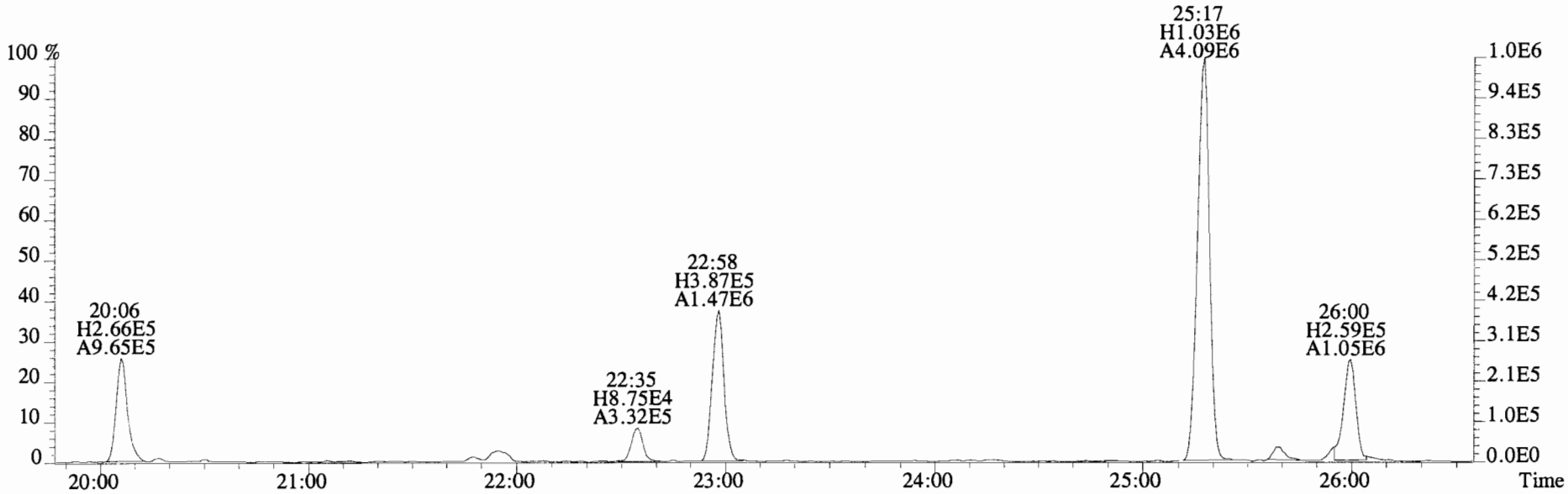
268.0016 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,45172.0,0.00%,F,F)



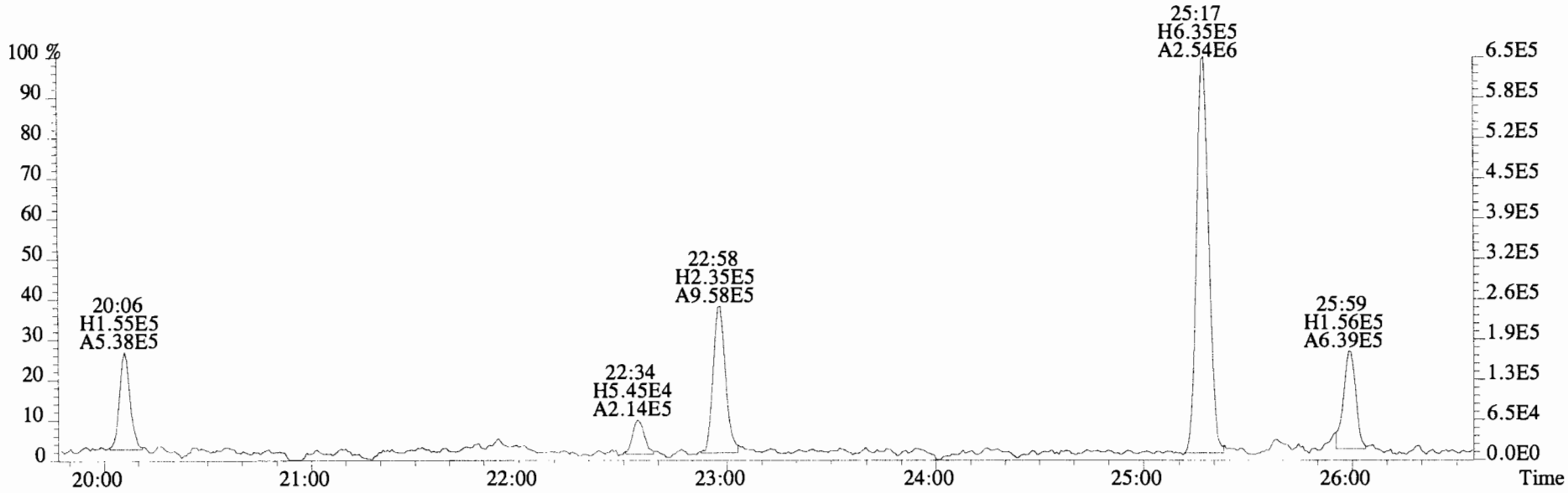
269.9986 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18832.0,0.00%,F,F)



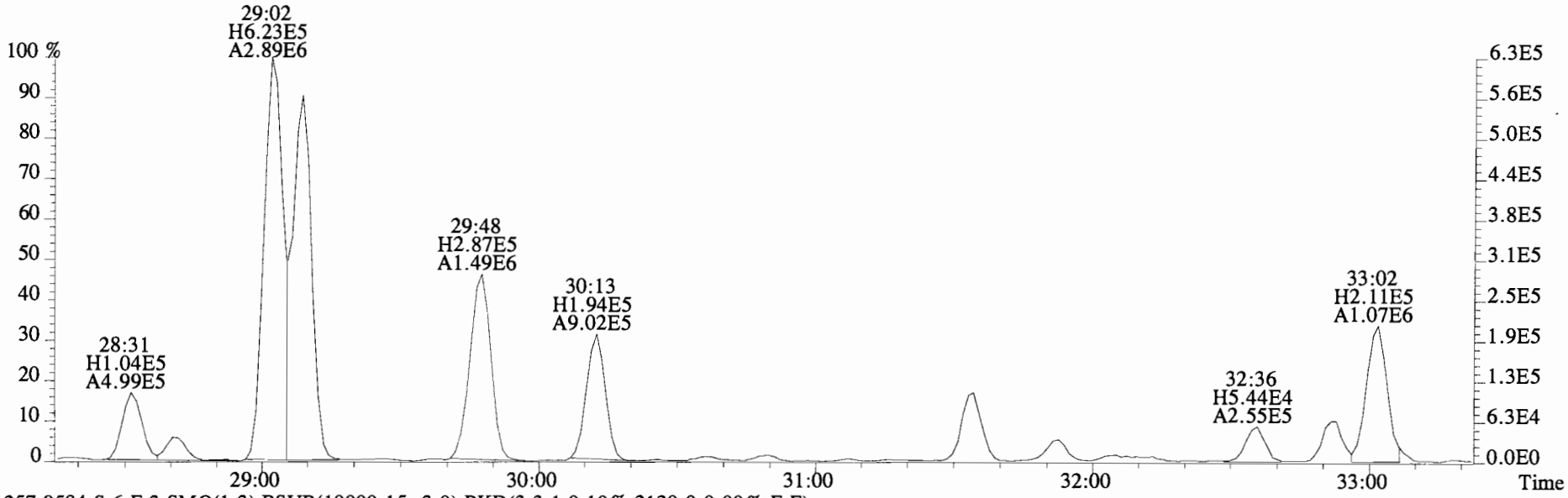
File:141020E1 #1-757 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
222.0003 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3348.0,0.00%,F,F)



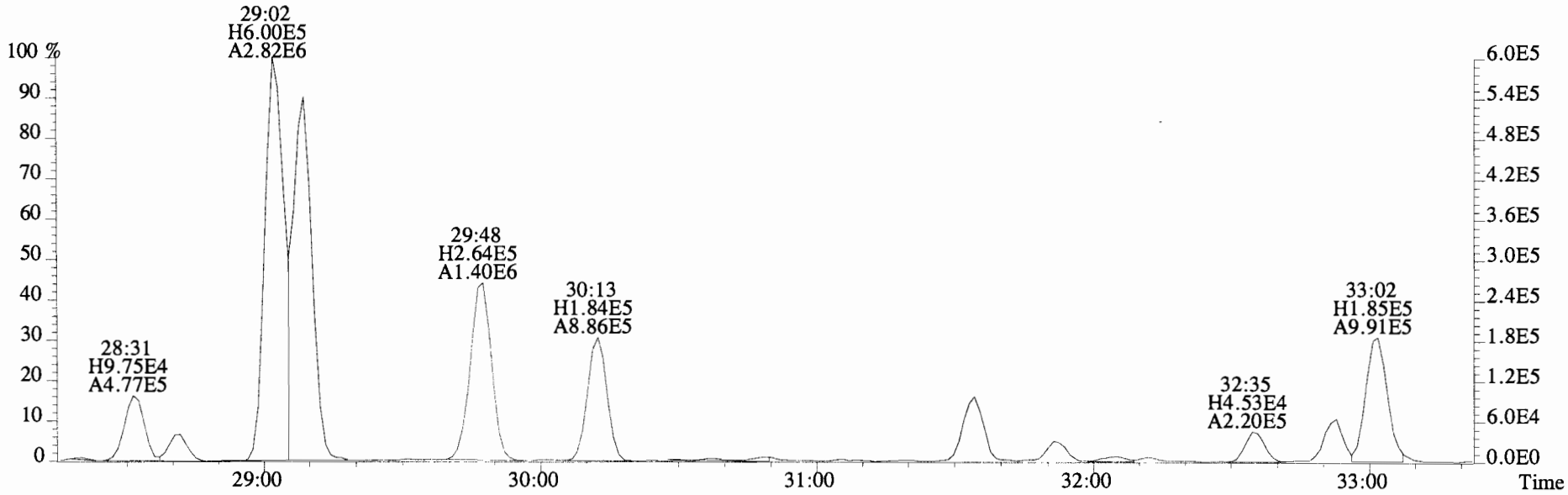
223.9974 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18268.0,0.00%,F,F)



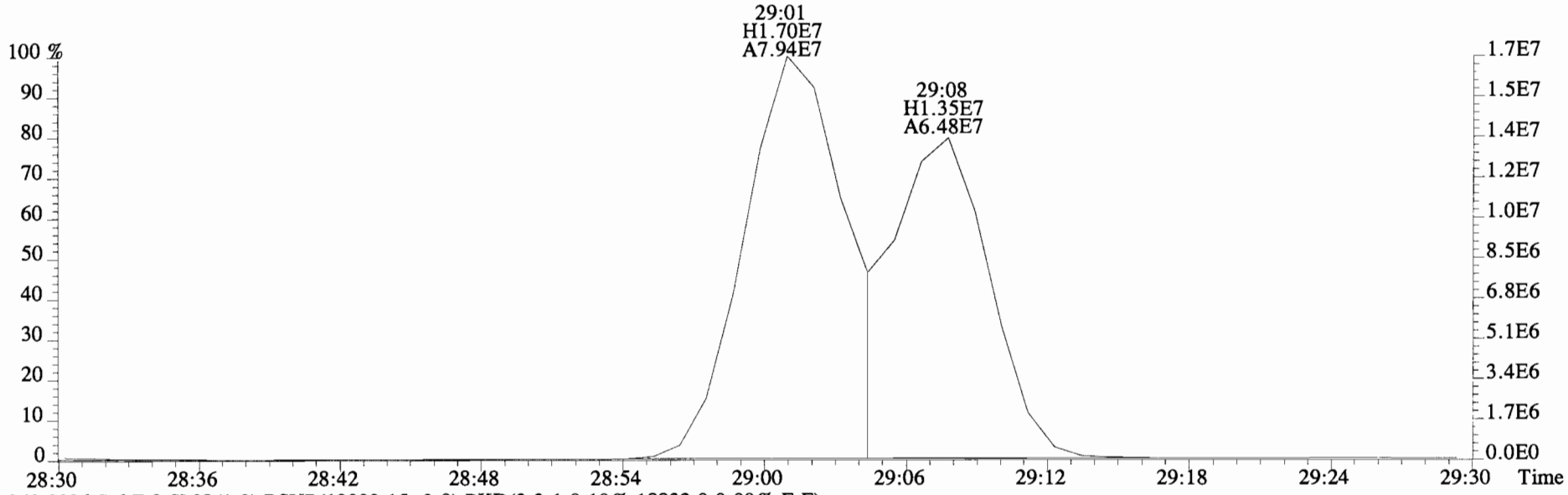
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
255.9613 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3728.0,0.00%,F,F)



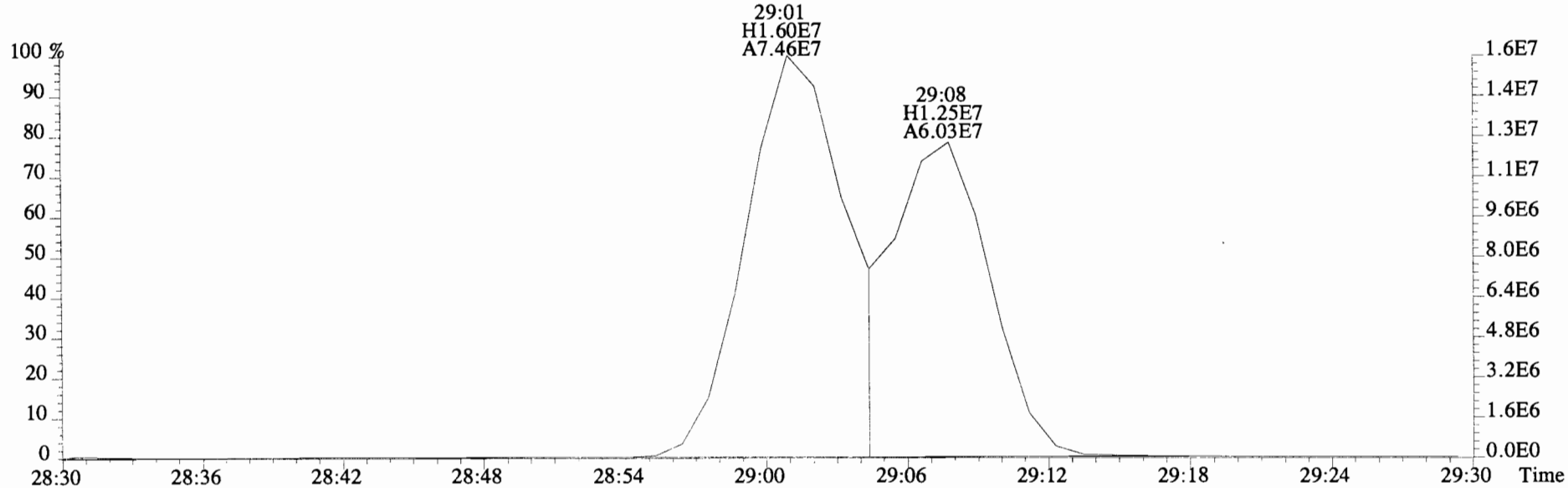
257.9584 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2120.0,0.00%,F,F)

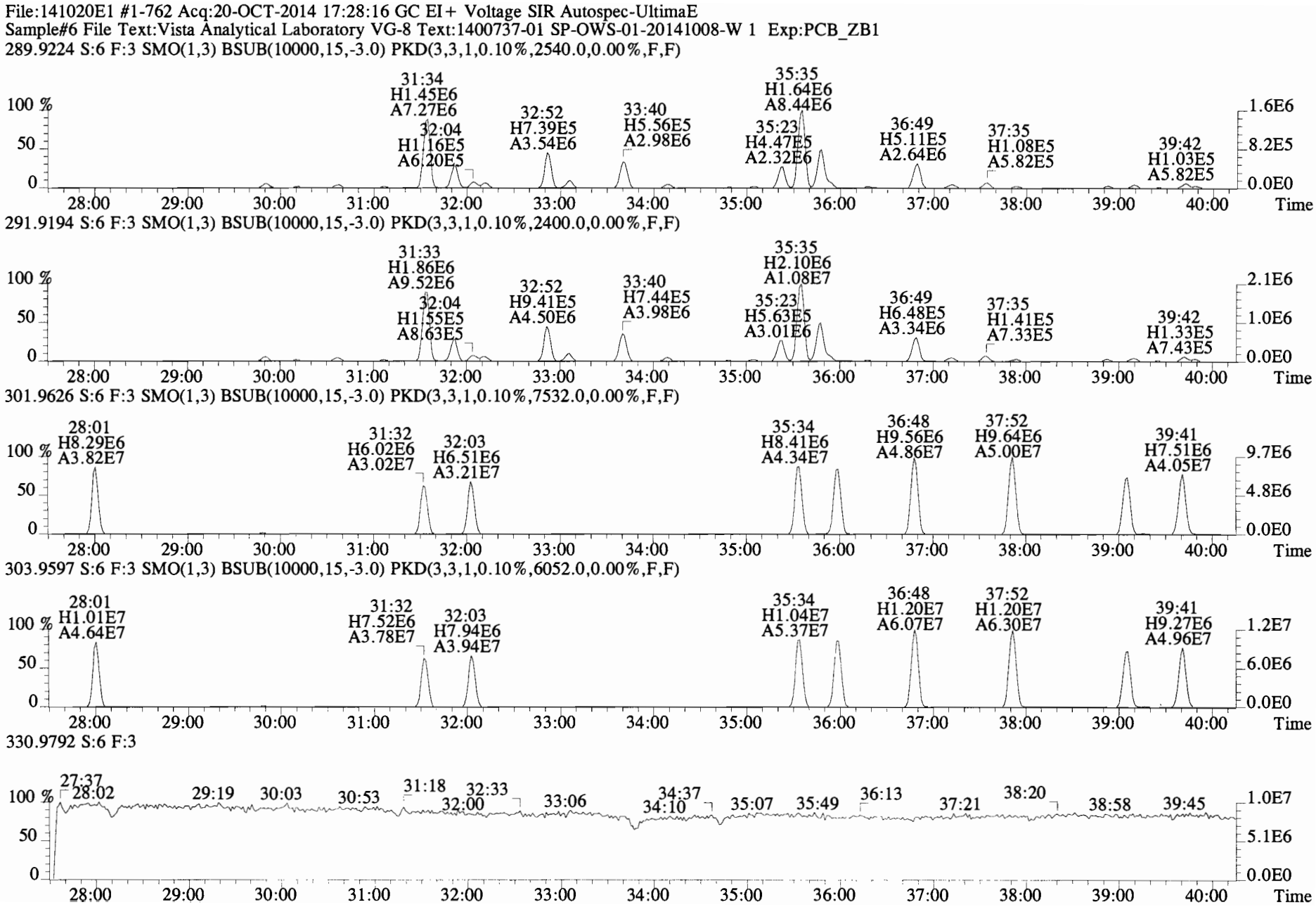


File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
268.0016 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,45172.0,0.00%,F,F)

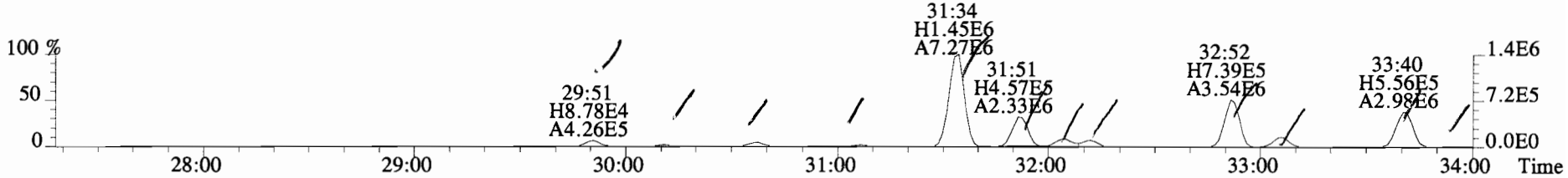


269.9986 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18832.0,0.00%,F,F)

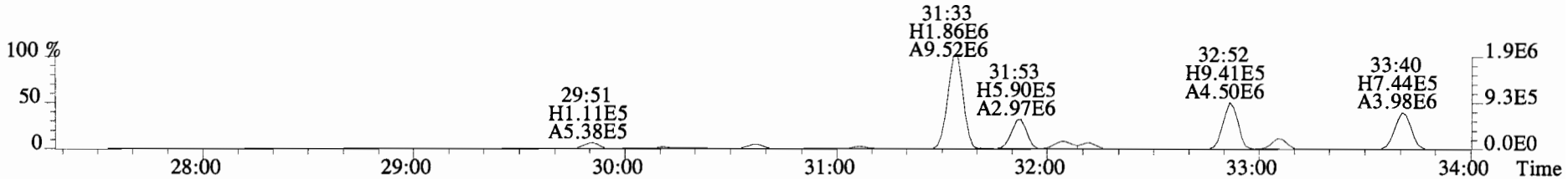



File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2540.0,0.00%,F,F)
31:34 H1.45E6 A7.27E6
32:04 H1.16E5 A6.20E5
32:52 H7.39E5 A3.54E6
33:40 H5.56E5 A2.98E6
35:35 H1.64E6 A8.44E6
35:23 H4.47E5 A2.32E6
36:49 H5.11E5 A2.64E6
37:35 H1.08E5 A5.82E5
39:42 H1.03E5 A5.82E5
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)
31:33 H1.86E6 A9.52E6
32:04 H1.55E5 A8.63E5
32:52 H9.41E5 A4.50E6
33:40 H7.44E5 A3.98E6
35:35 H2.10E6 A1.08E7
35:23 H5.63E5 A3.01E6
36:49 H6.48E5 A3.34E6
37:35 H1.41E5 A7.33E5
39:42 H1.33E5 A7.43E5
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7532.0,0.00%,F,F)
28:01 H8.29E6 A3.82E7
31:32 H6.02E6 A3.02E7
32:03 H6.51E6 A3.21E7
35:34 H8.41E6 A4.34E7
36:48 H9.56E6 A4.86E7
37:52 H9.64E6 A5.00E7
39:41 H7.51E6 A4.05E7
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6052.0,0.00%,F,F)
28:01 H1.01E7 A4.64E7
31:32 H7.52E6 A3.78E7
32:03 H7.94E6 A3.94E7
35:34 H1.04E7 A5.37E7
36:48 H1.20E7 A6.07E7
37:52 H1.20E7 A6.30E7
39:41 H9.27E6 A4.96E7
330.9792 S:6 F:3
27:37
28:02
29:19
30:03
30:53
31:18
32:00
32:33
33:06
34:10
34:37
35:07
35:49
36:13
37:21
38:20
38:58
39:45
100 %
50
0
1.6E6
8.2E5
0.0E0
2.1E6
1.0E6
9.7E6
4.8E6
1.2E7
6.0E6
1.0E7
5.1E6
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
37:00
38:00
39:00
40:00
Time

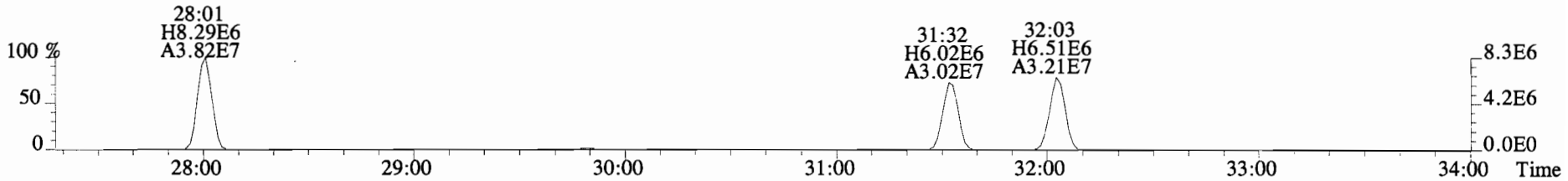
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2540.0,0.00%,F,F)



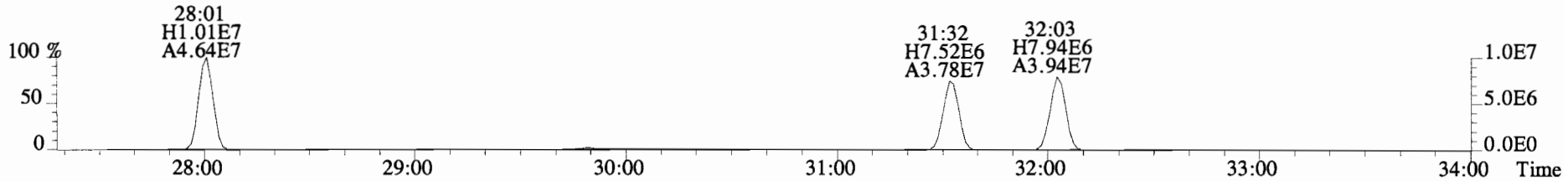
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)



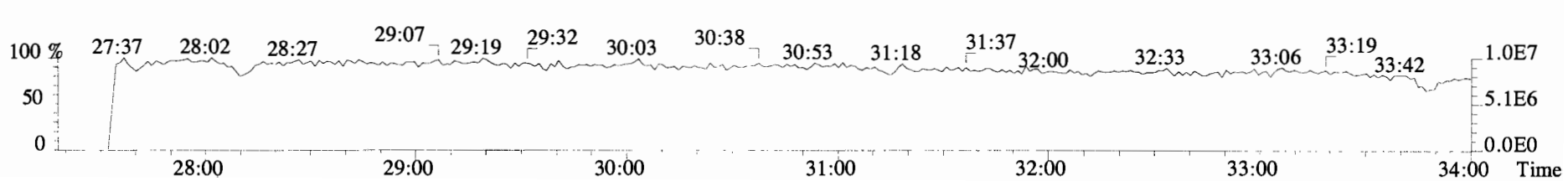
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7532.0,0.00%,F,F)



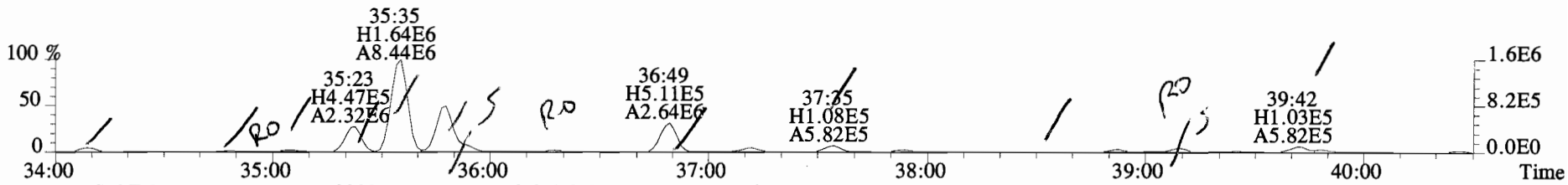
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6052.0,0.00%,F,F)



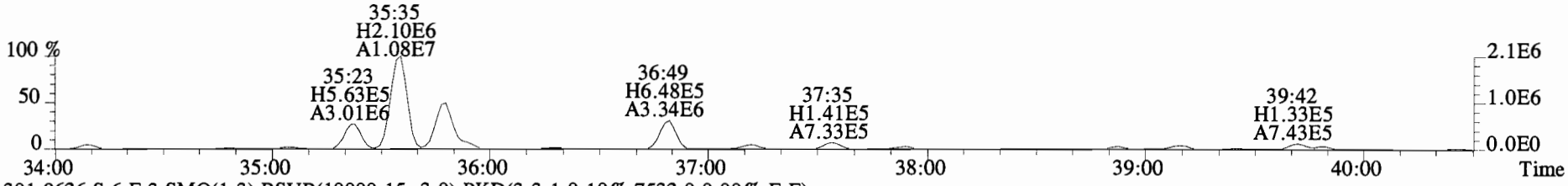
330.9792 S:6 F:3



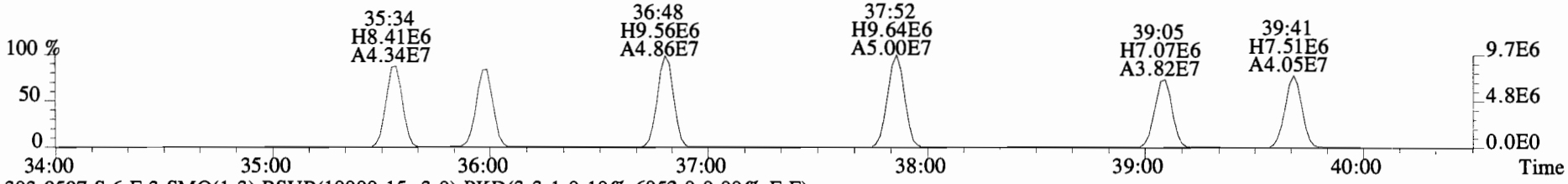
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2540.0,0.00%,F,F)



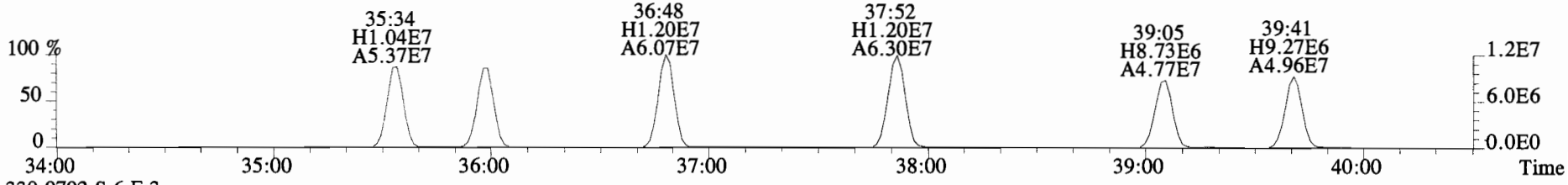
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)



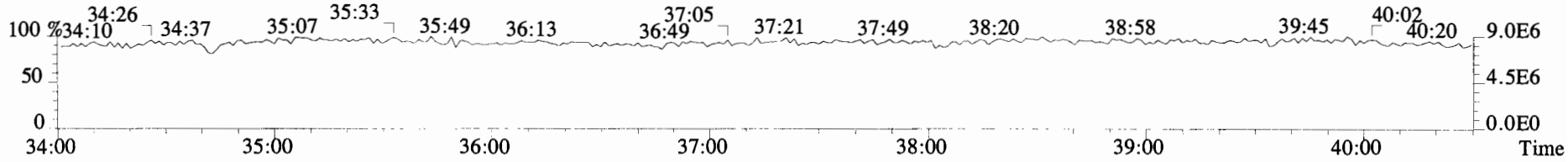
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7532.0,0.00%,F,F)



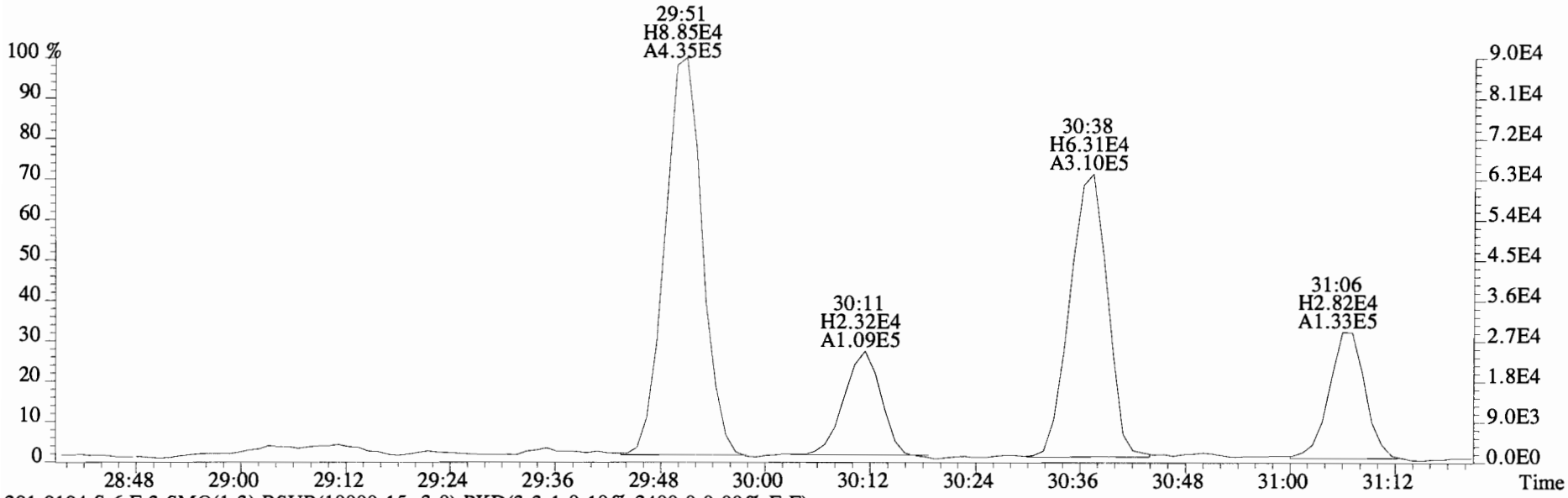
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6052.0,0.00%,F,F)



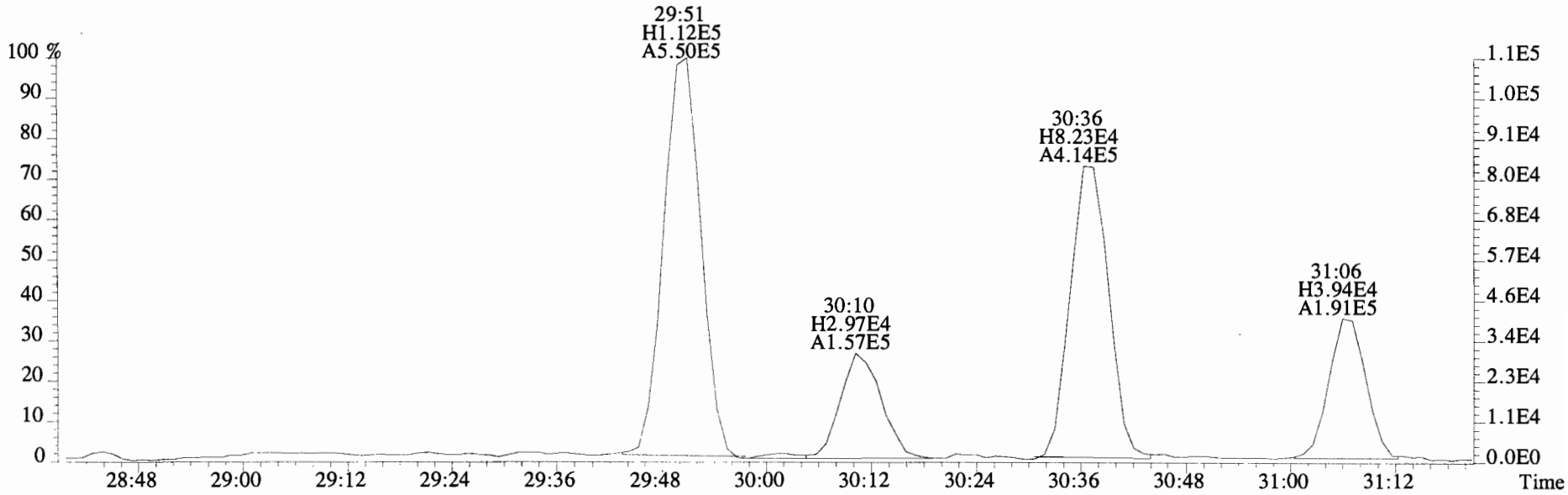
330.9792 S:6 F:3



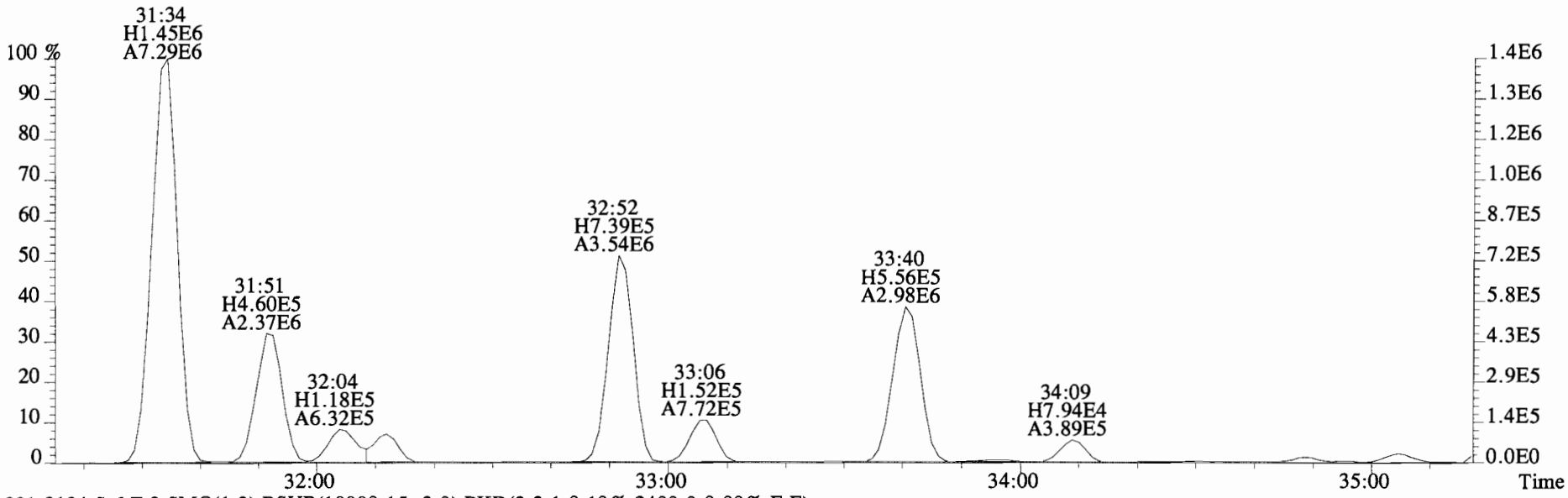
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2540.0,0.00%,F,F)



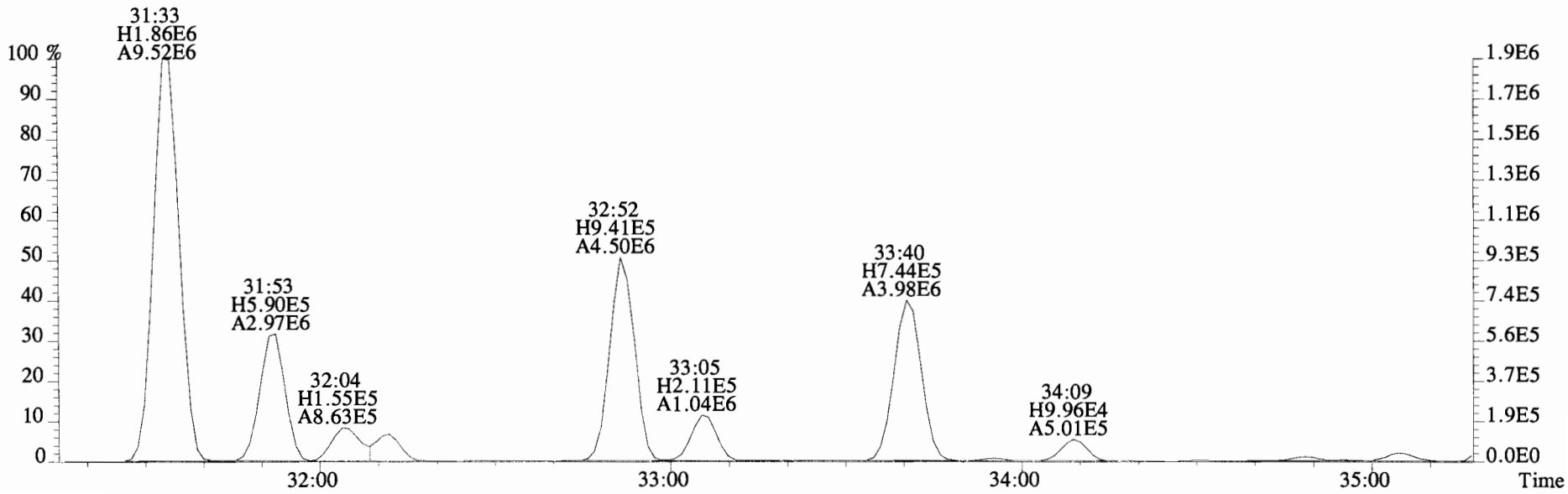
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)



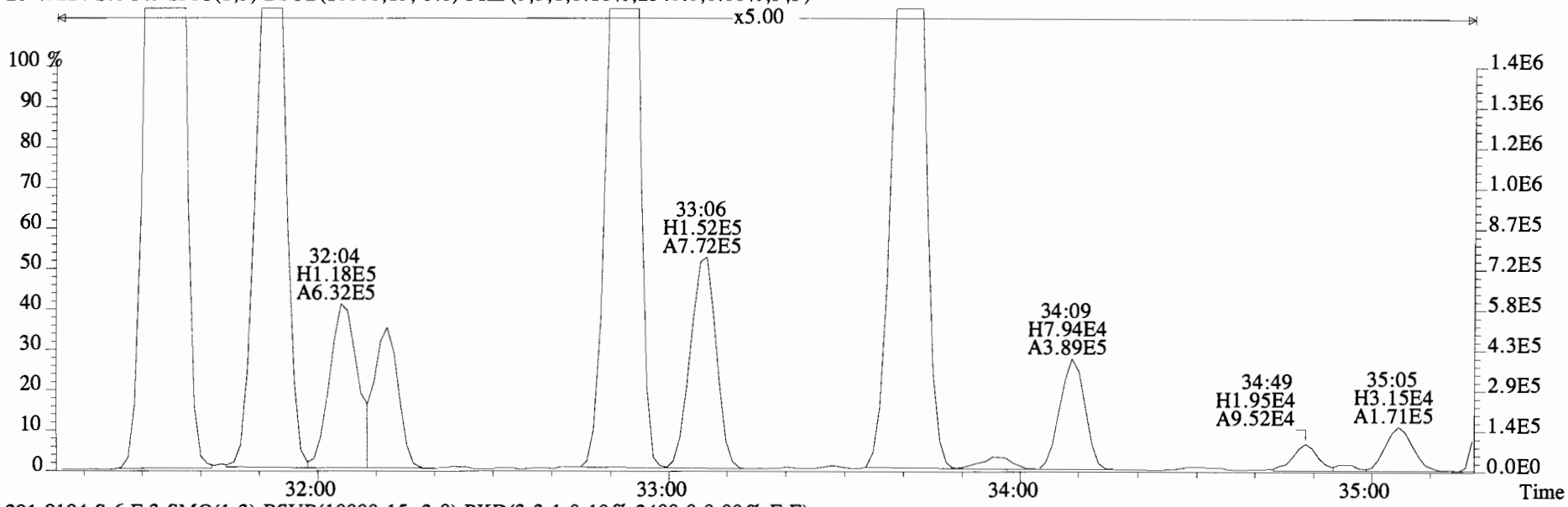
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2540.0,0.00%,F,F)



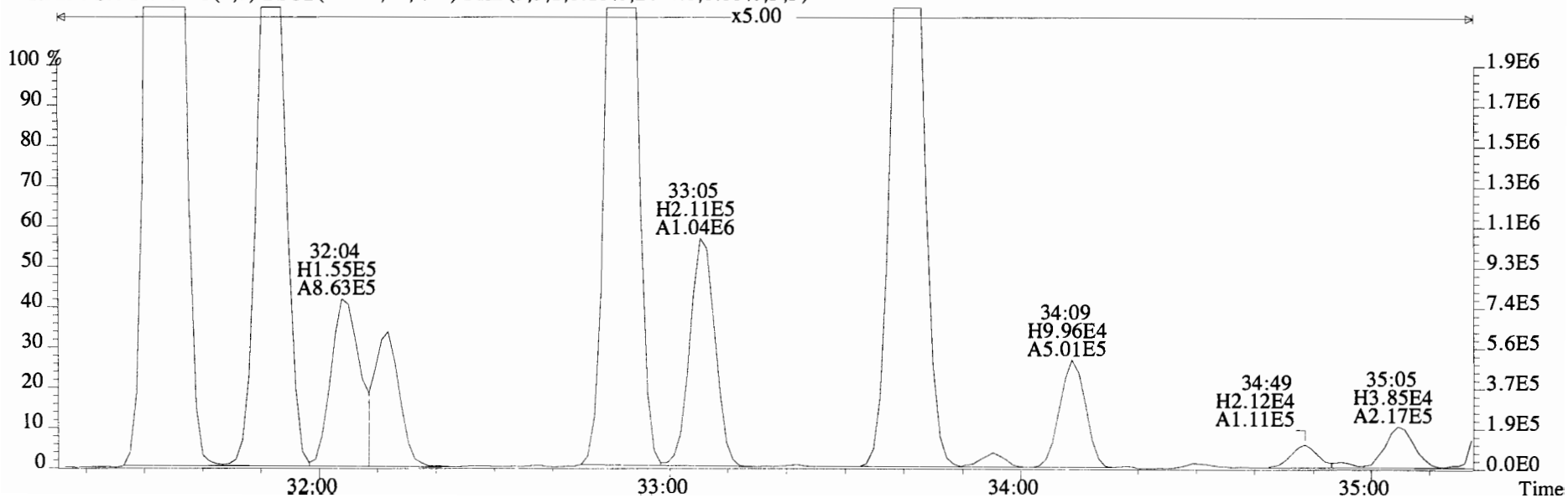
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)



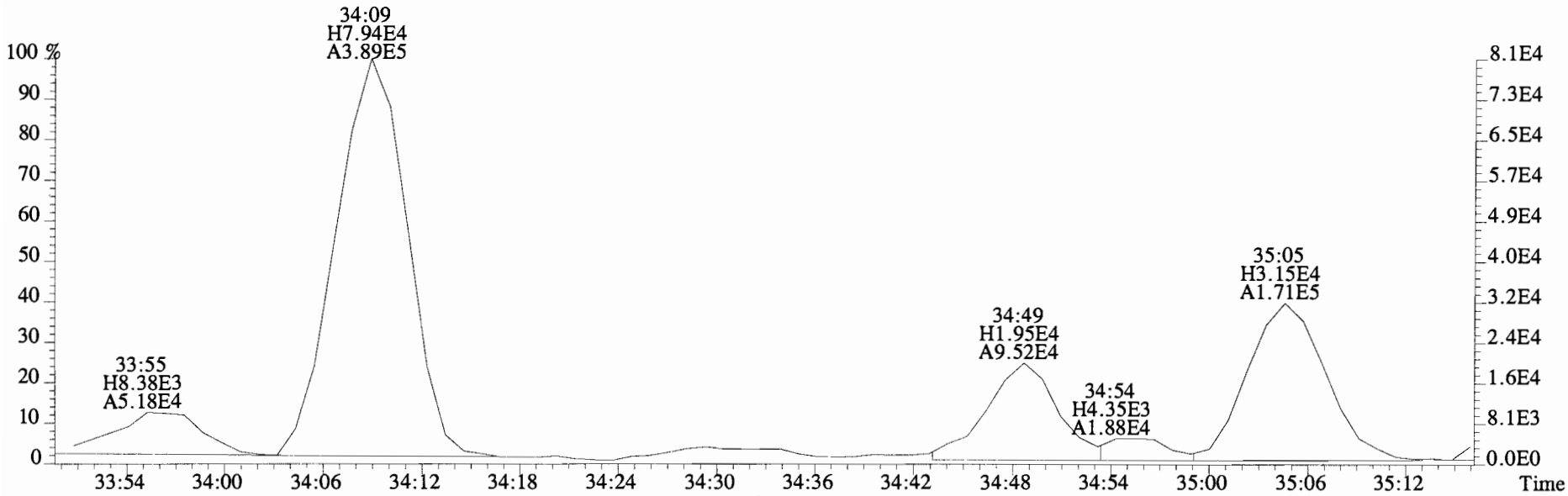
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2540.0,0.00%,F,F)



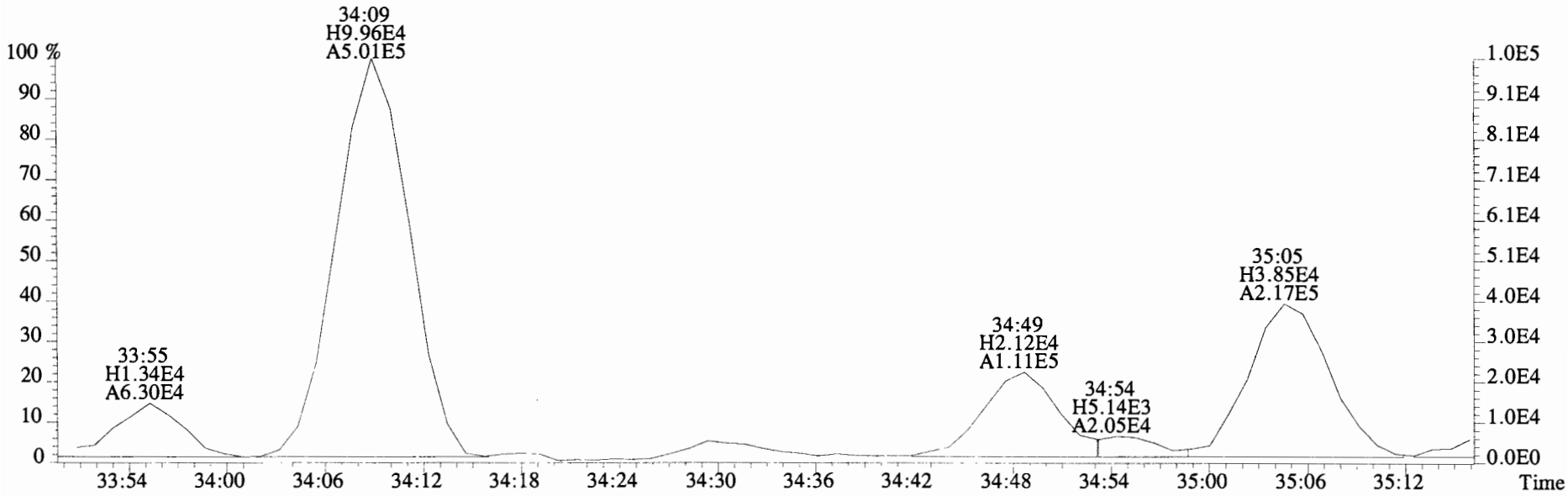
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)



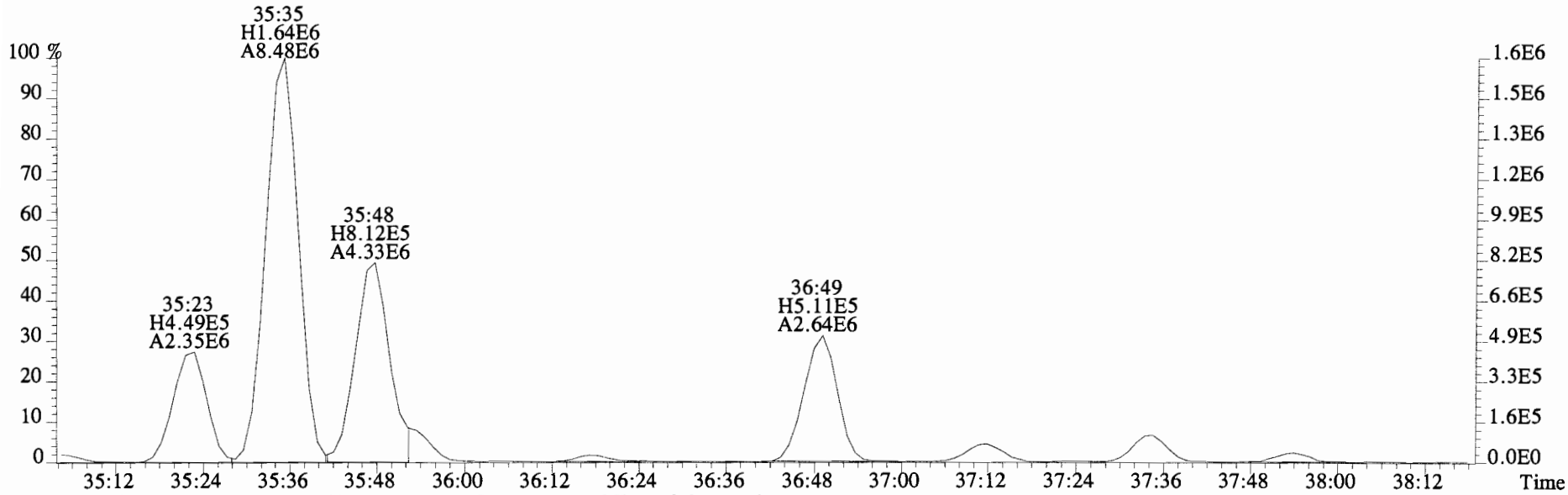
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2540.0,0.00%,F,F)



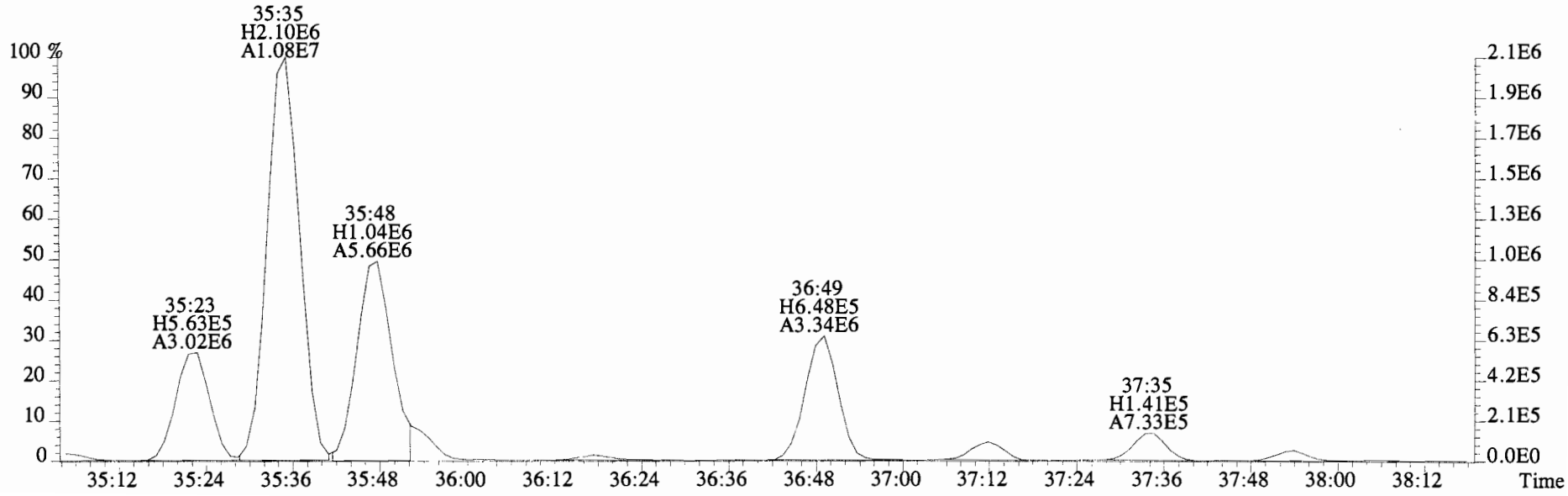
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)

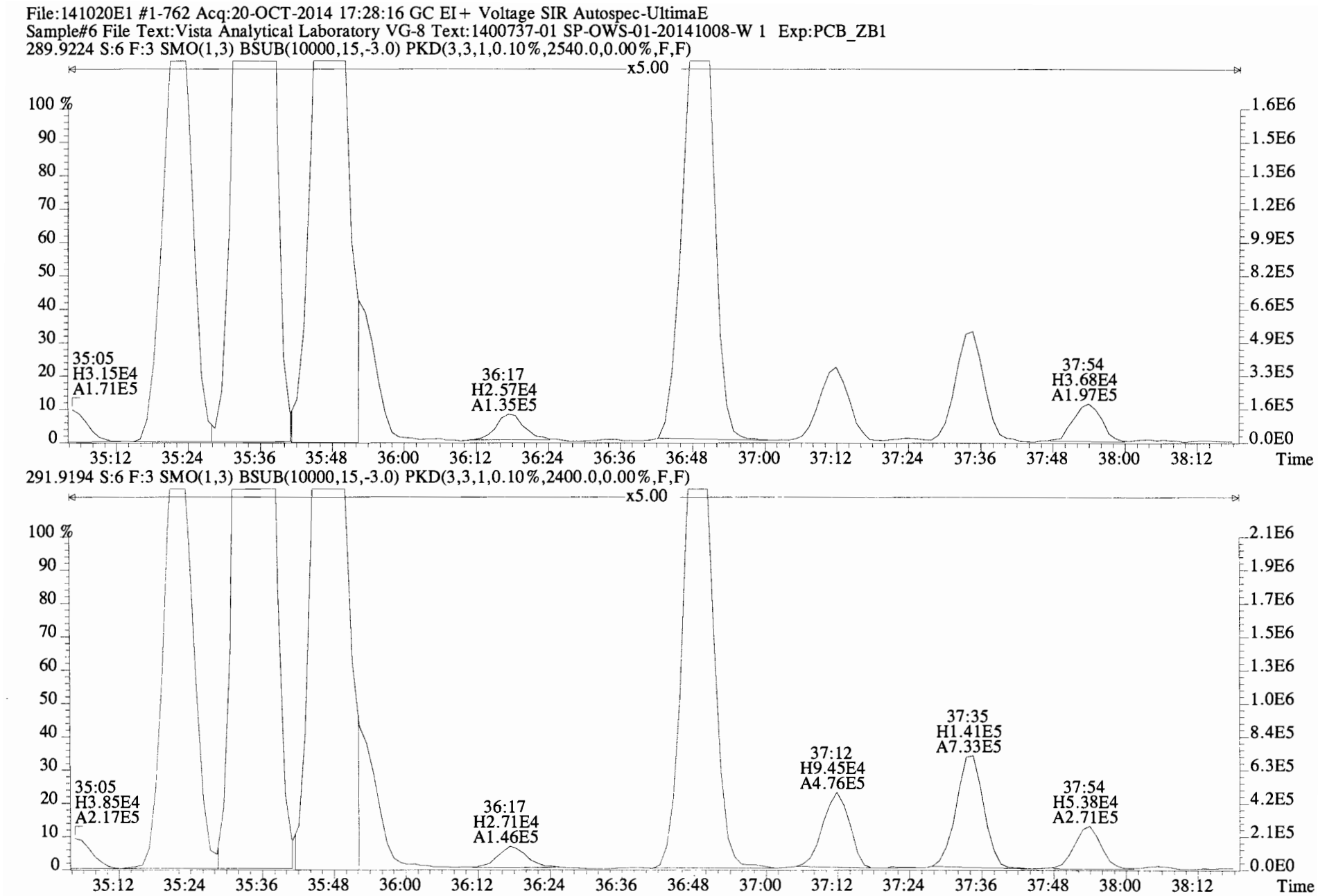


File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2540.0,0.00%,F,F)

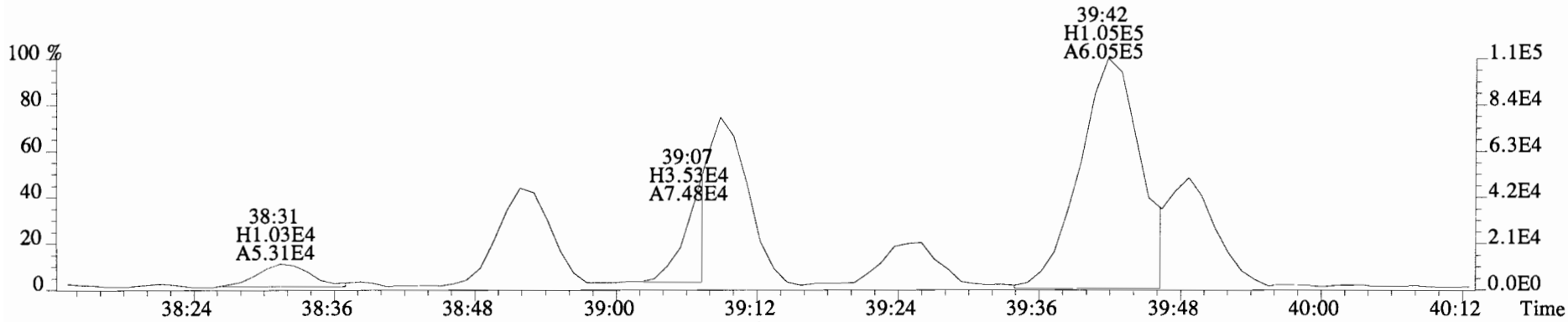


291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)

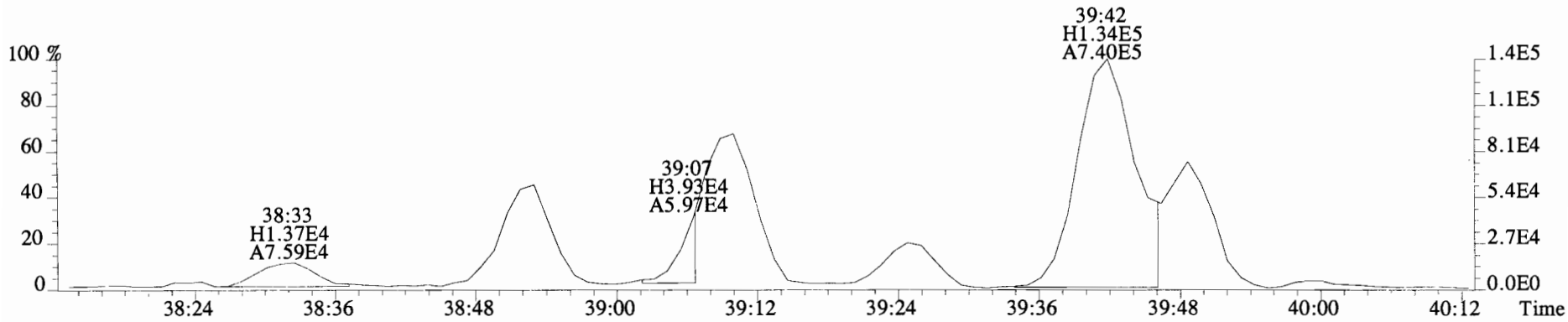



File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2540.0,0.00%,F,F)
x5.00
35:05
H3.15E4
A1.71E5
36:17
H2.57E4
A1.35E5
37:54
H3.68E4
A1.97E5
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)
x5.00
35:05
H3.85E4
A2.17E5
36:17
H2.71E4
A1.46E5
37:12
H9.45E4
A4.76E5
37:35
H1.41E5
A7.33E5
37:54
H5.38E4
A2.71E5
Time

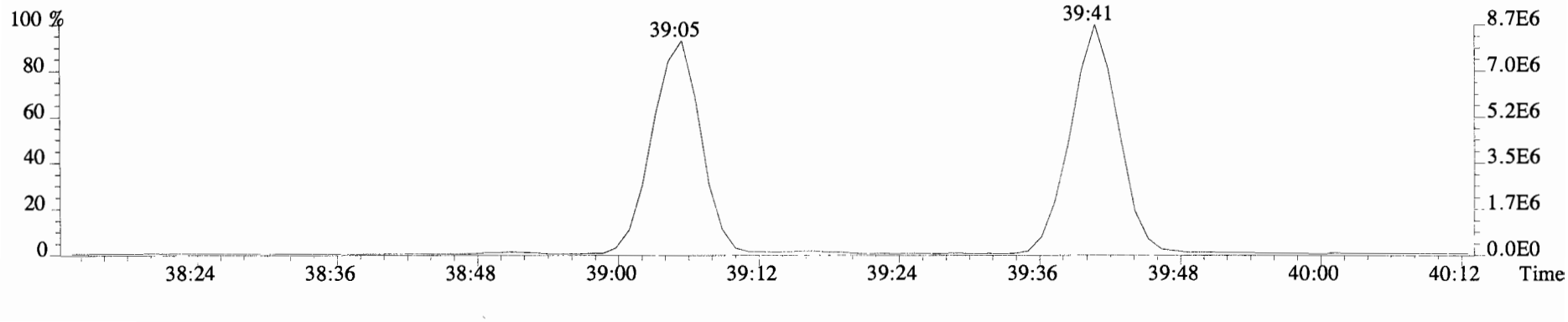
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2540.0,0.00%,F,F)



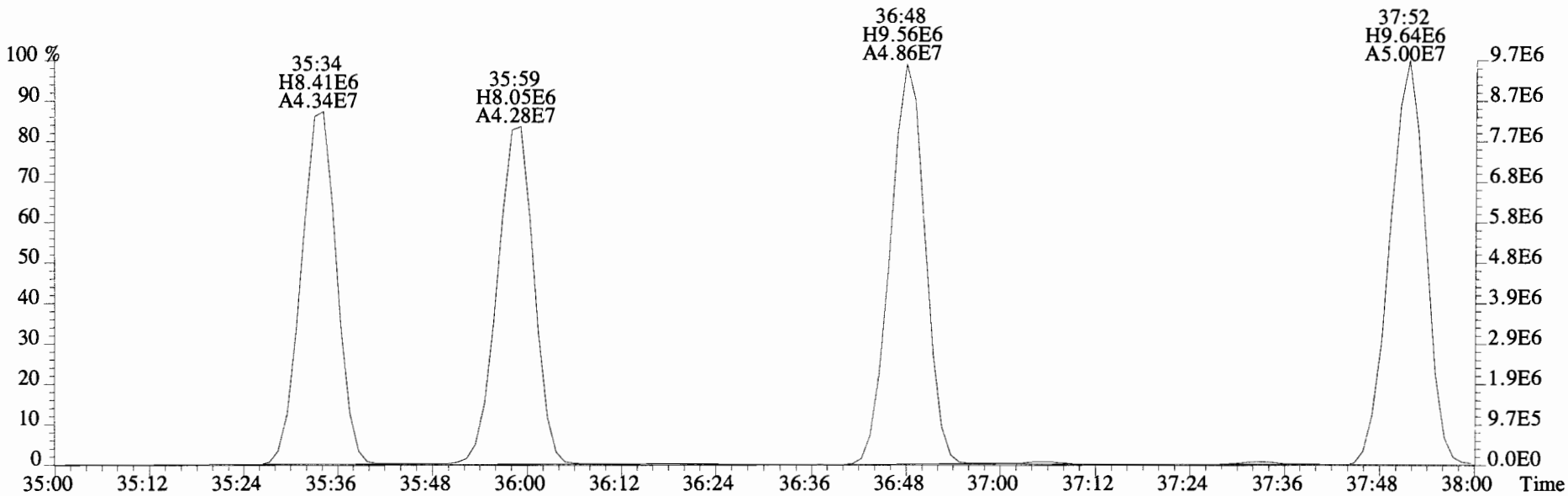
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)



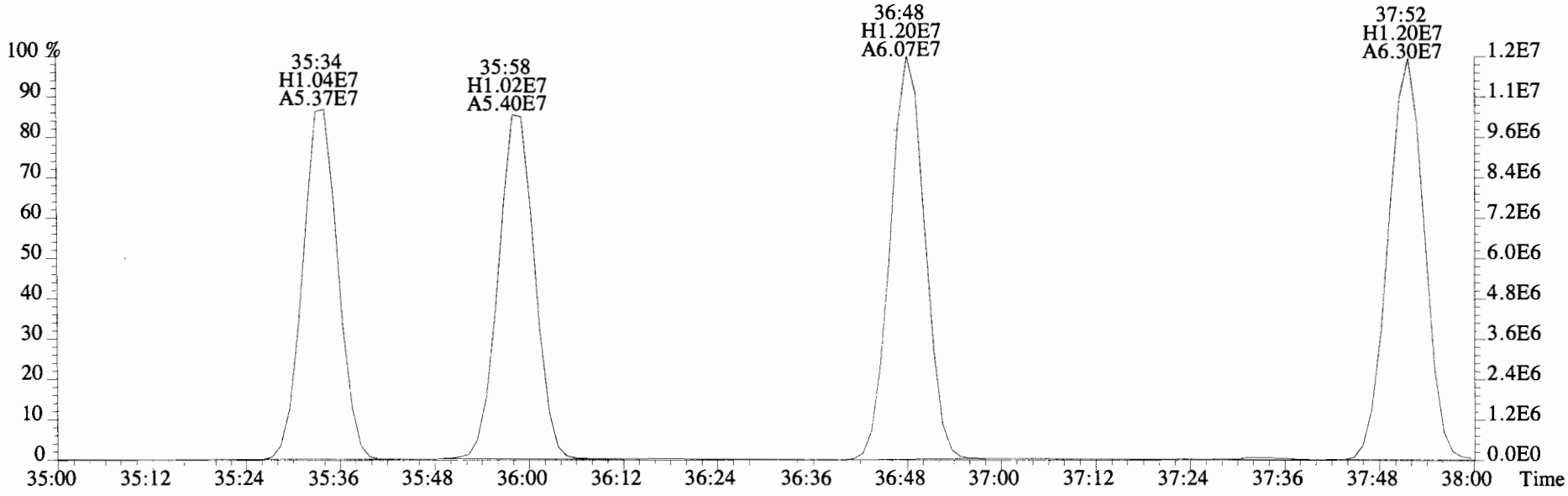
301.9626 S:6 F:3



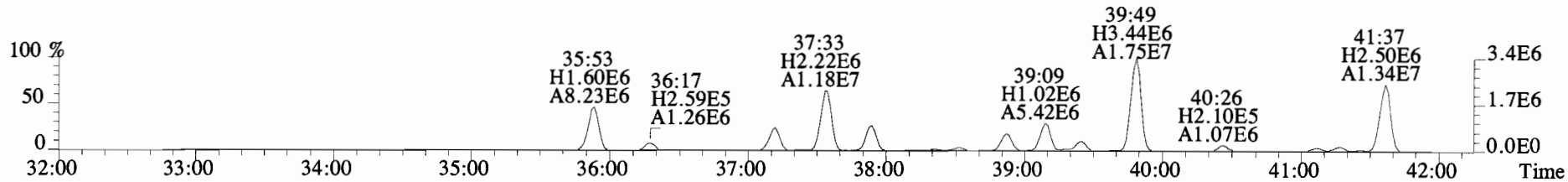
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7532.0,0.00%,F,F)



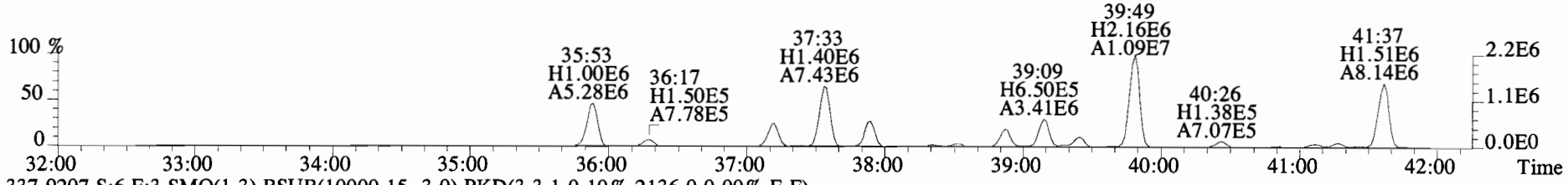
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6052.0,0.00%,F,F)



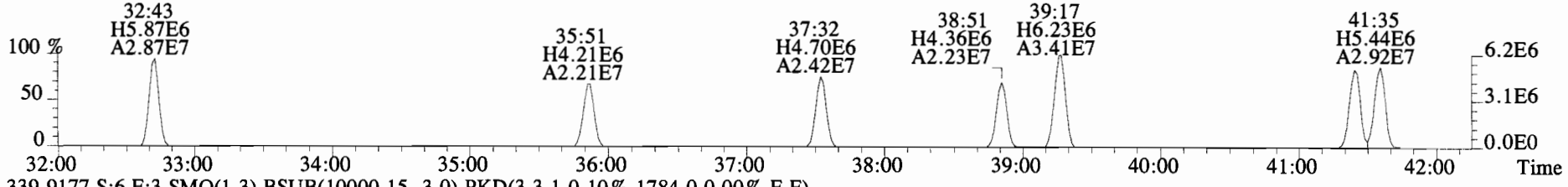
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1776.0,0.00%,F,F)



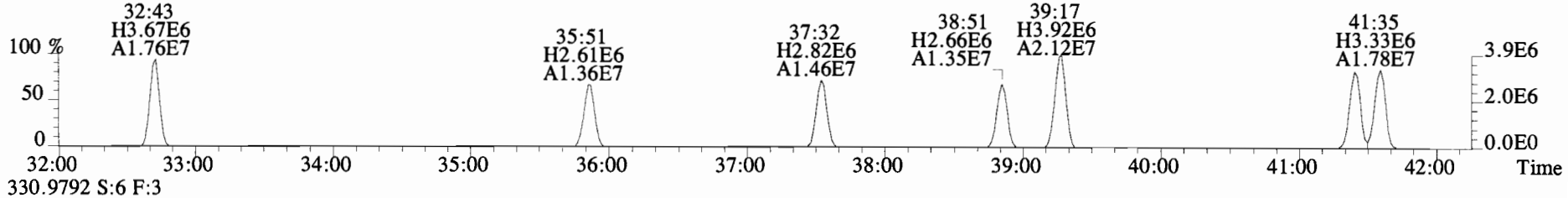
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1796.0,0.00%,F,F)



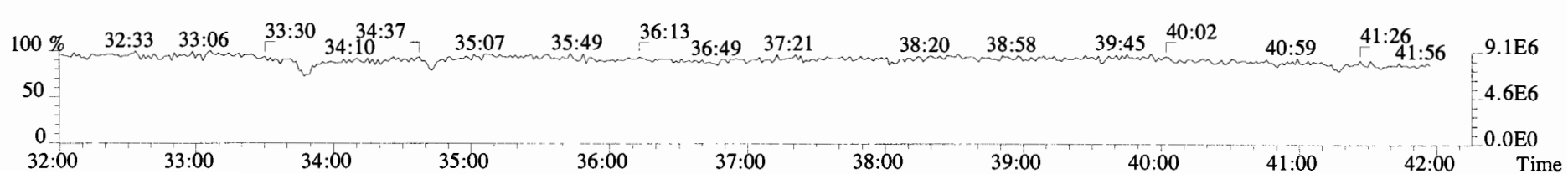
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2136.0,0.00%,F,F)



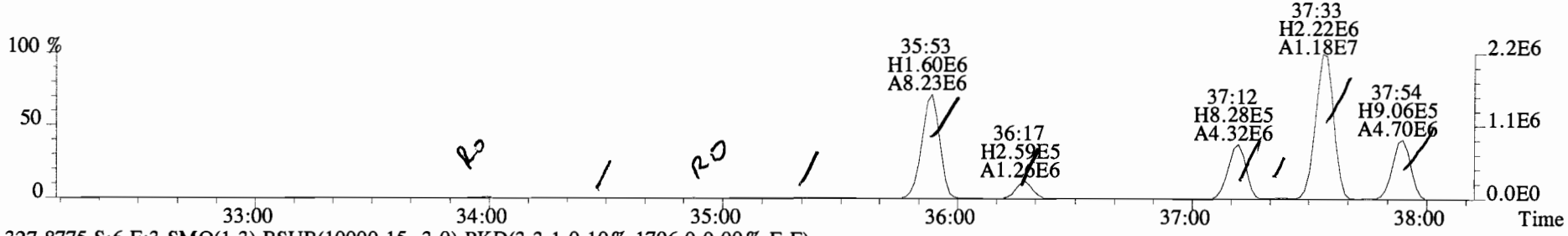
339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1784.0,0.00%,F,F)



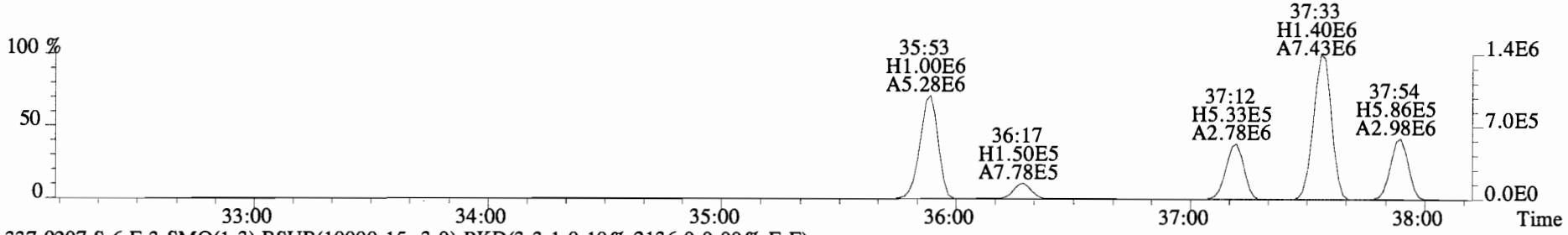
330.9792 S:6 F:3



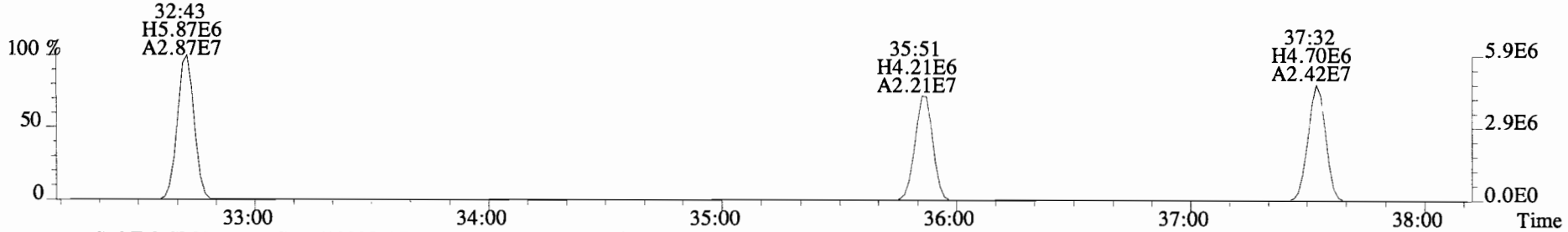
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1776.0,0.00%,F,F)



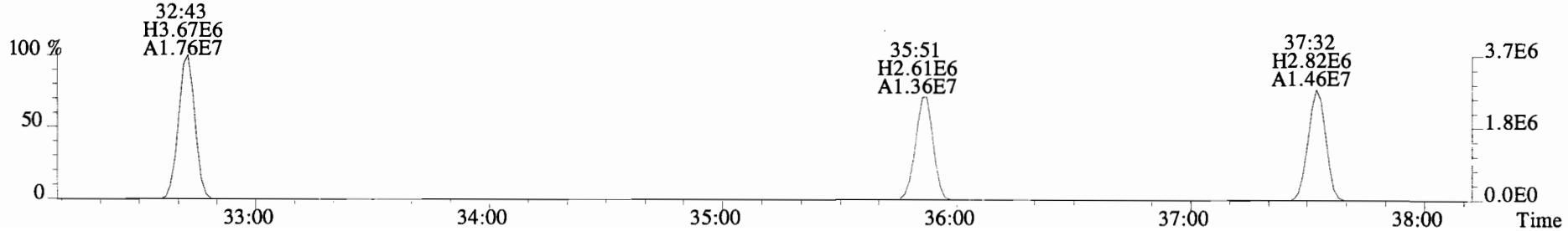
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1796.0,0.00%,F,F)



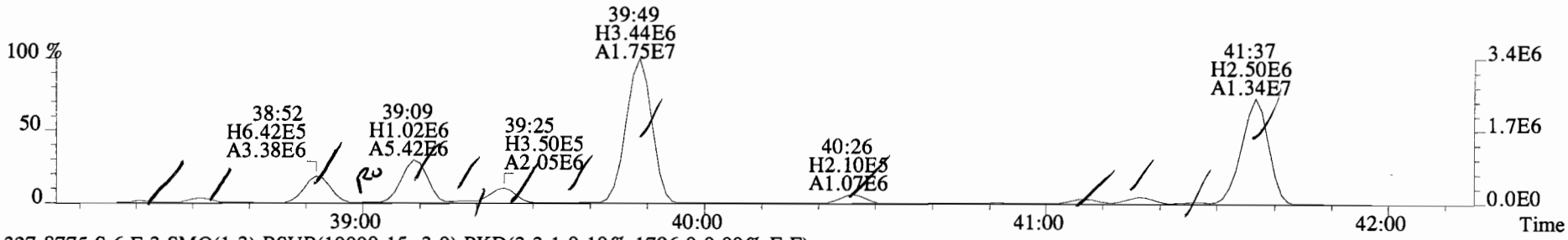
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2136.0,0.00%,F,F)



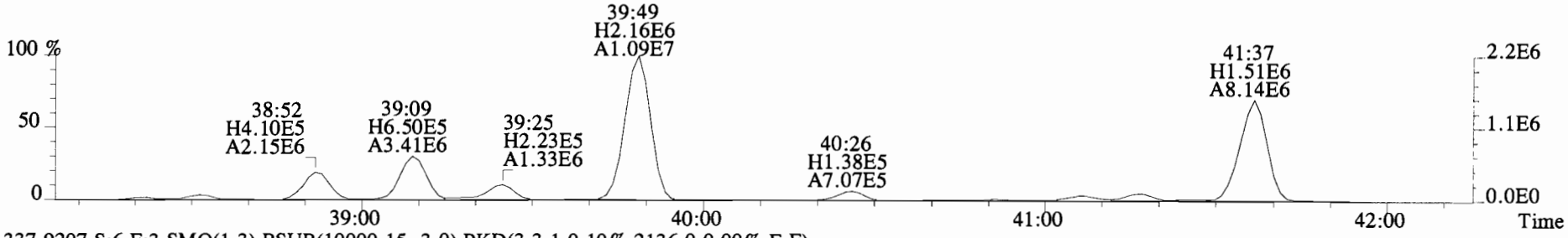
339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1784.0,0.00%,F,F)



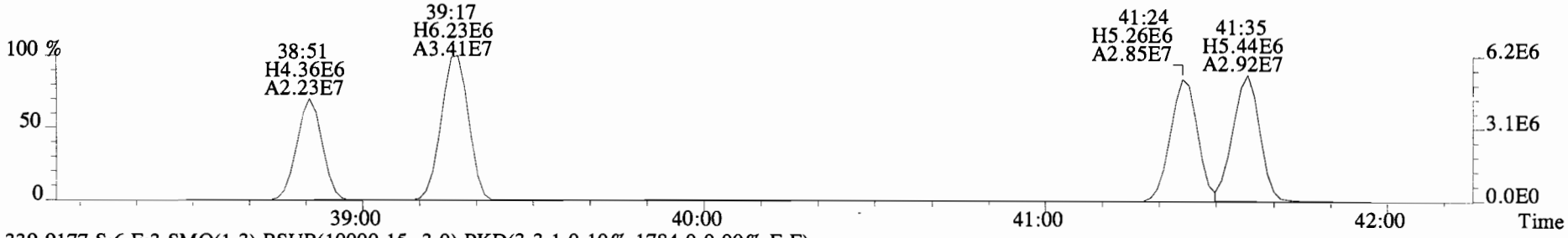
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1776.0,0.00%,F,F)



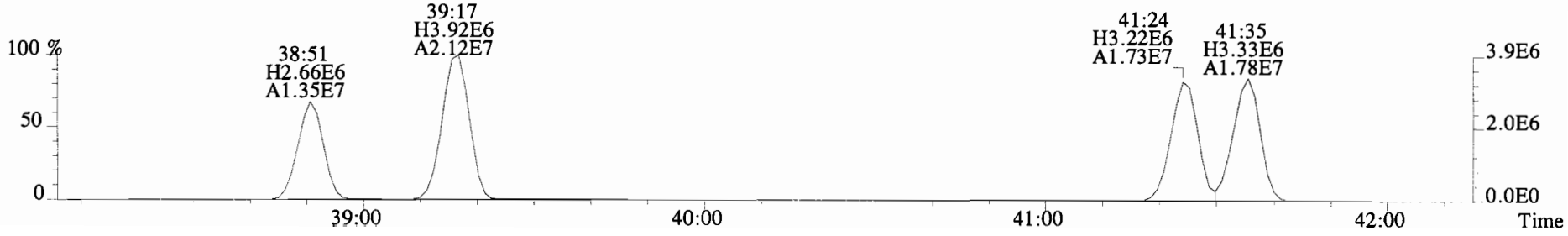
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1796.0,0.00%,F,F)



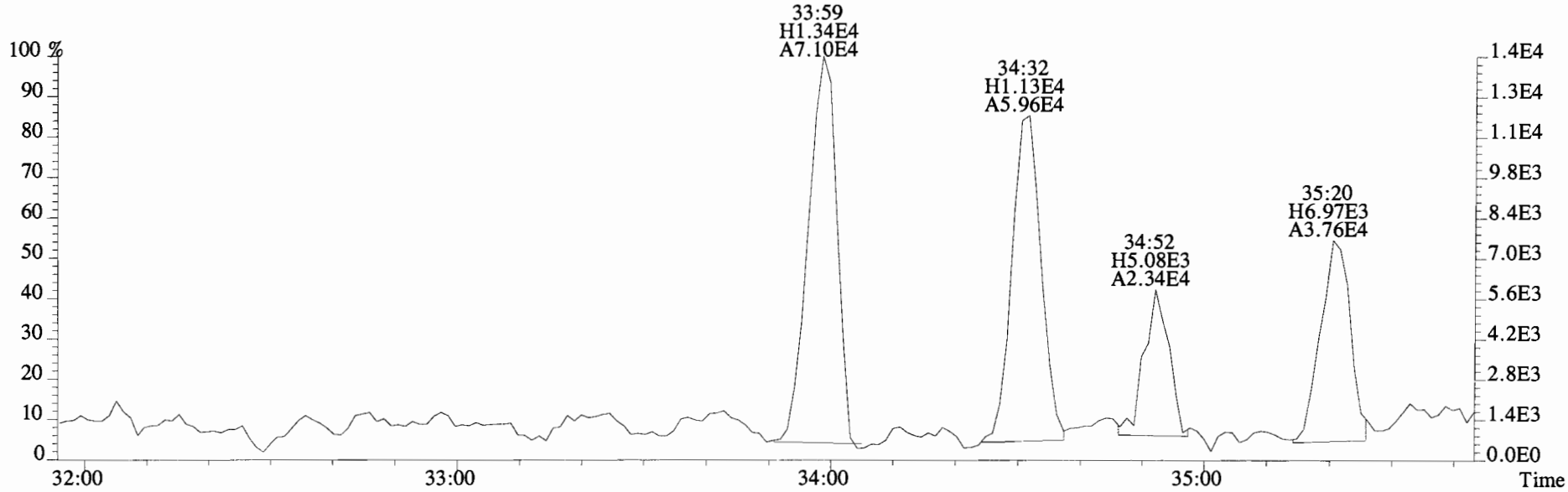
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2136.0,0.00%,F,F)



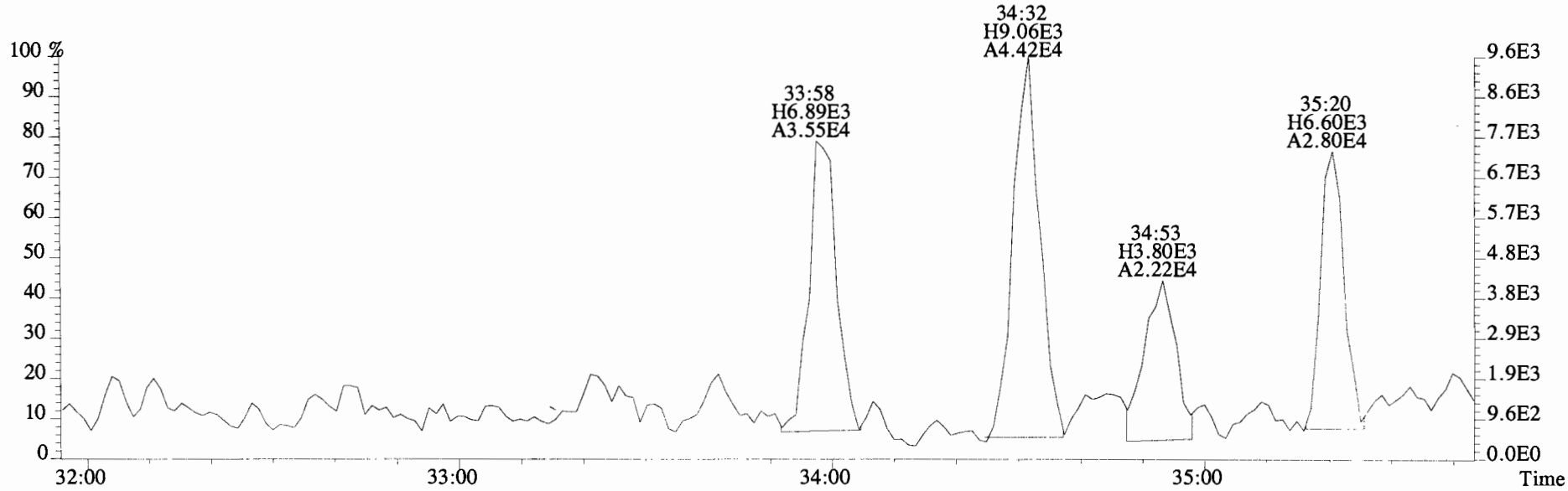
339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1784.0,0.00%,F,F)



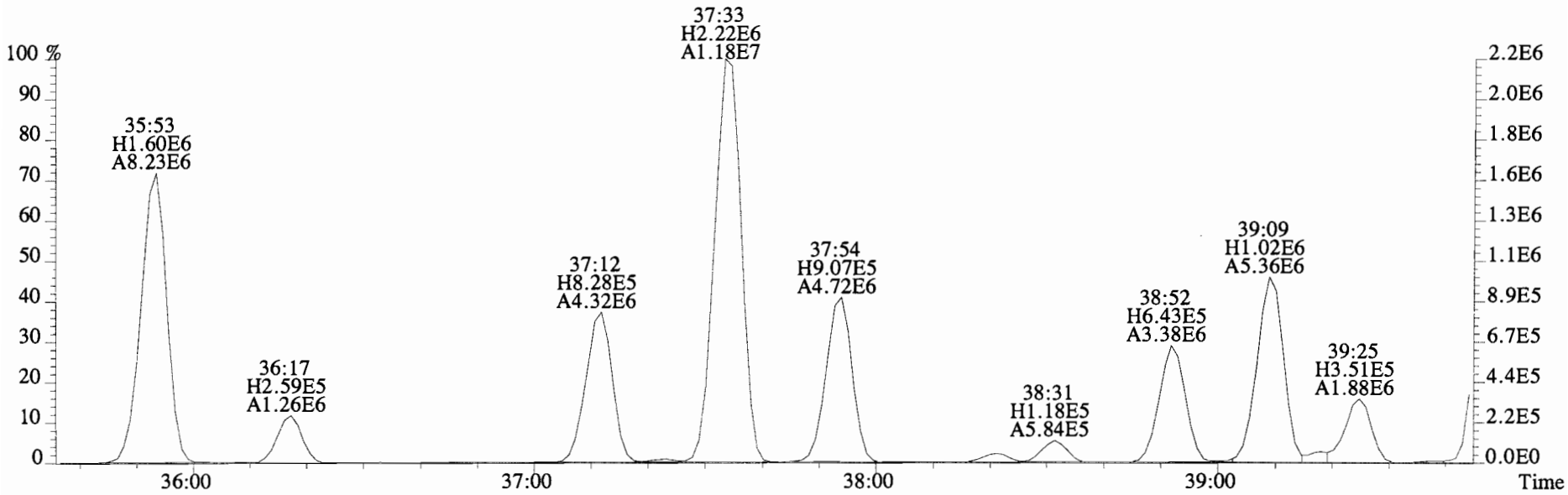
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



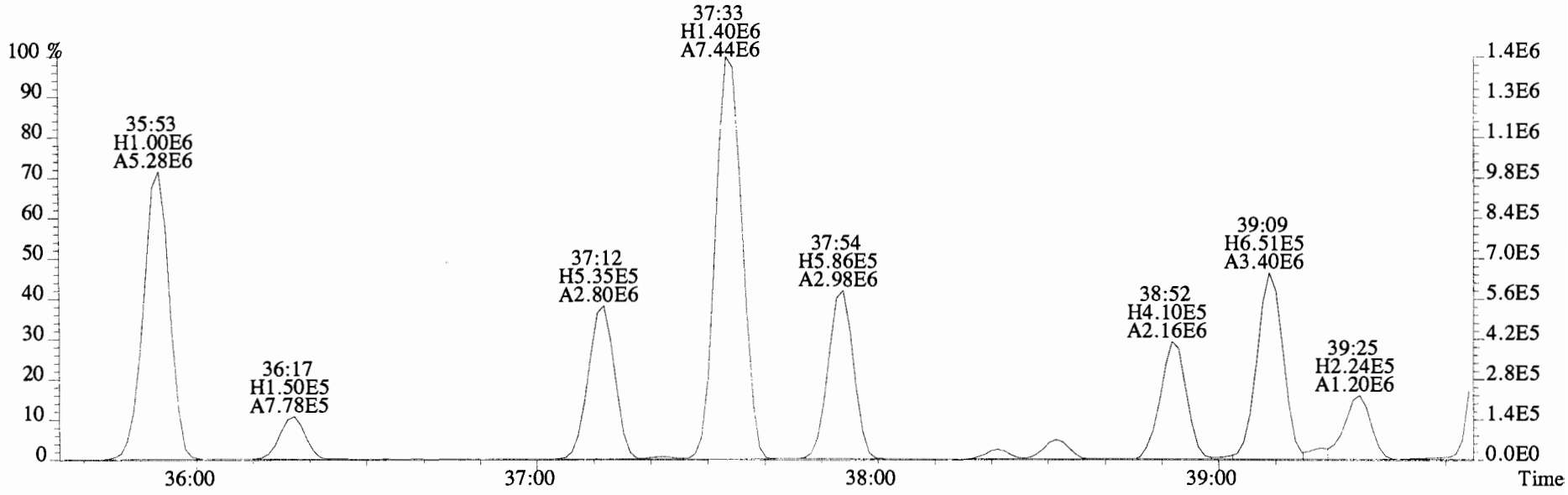
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



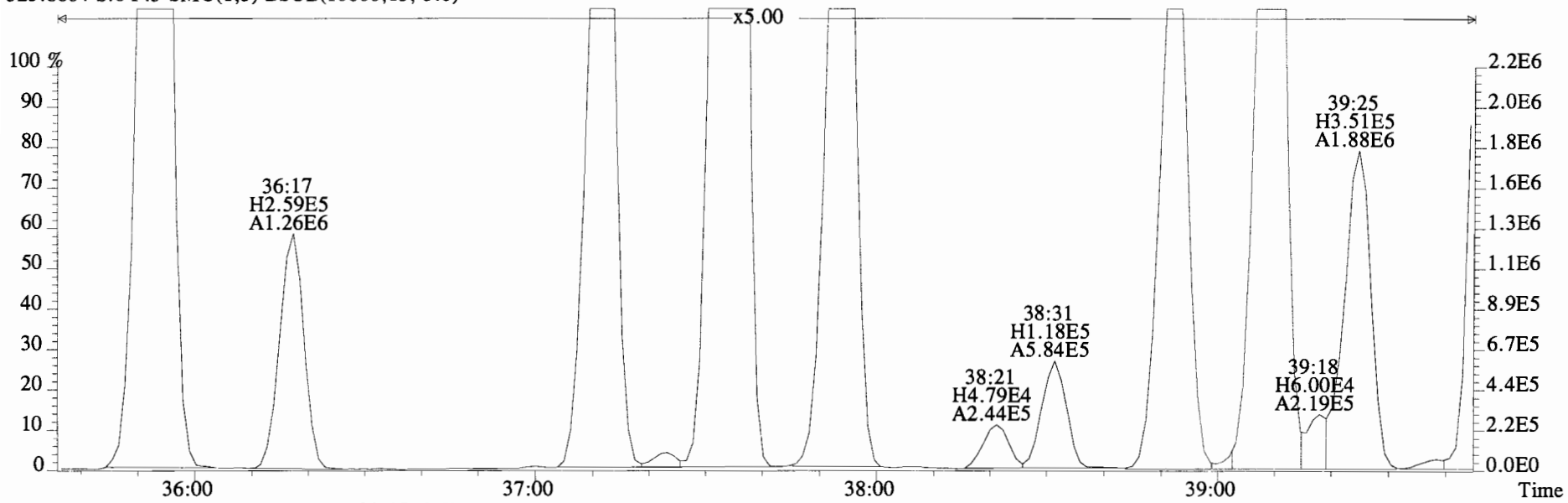
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



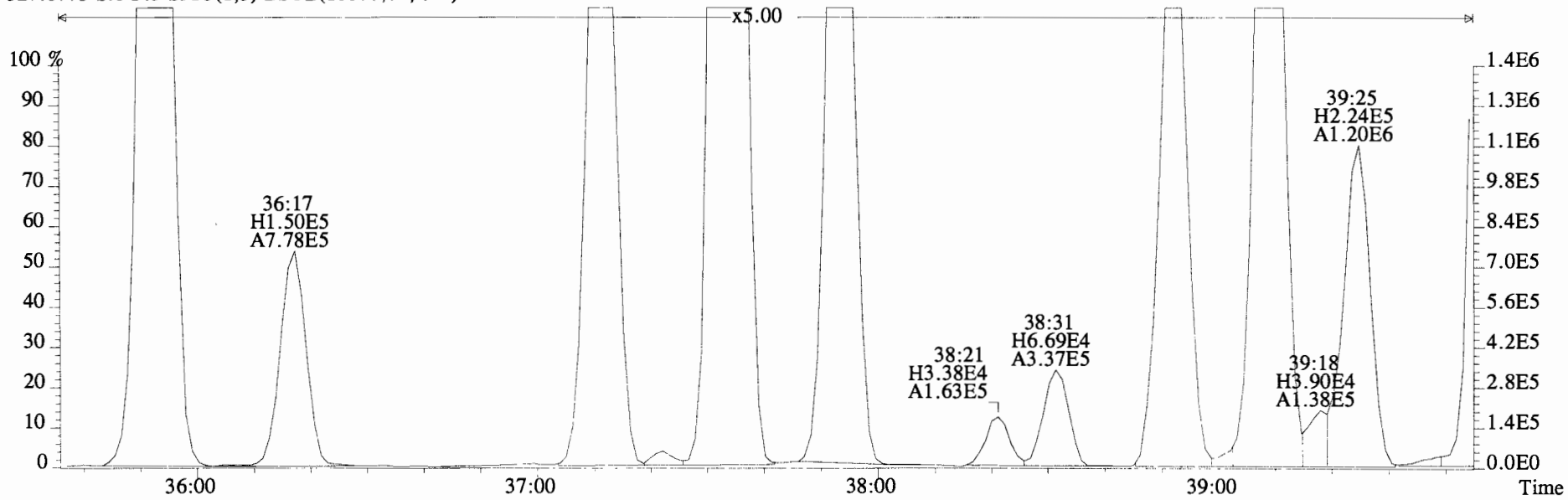
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



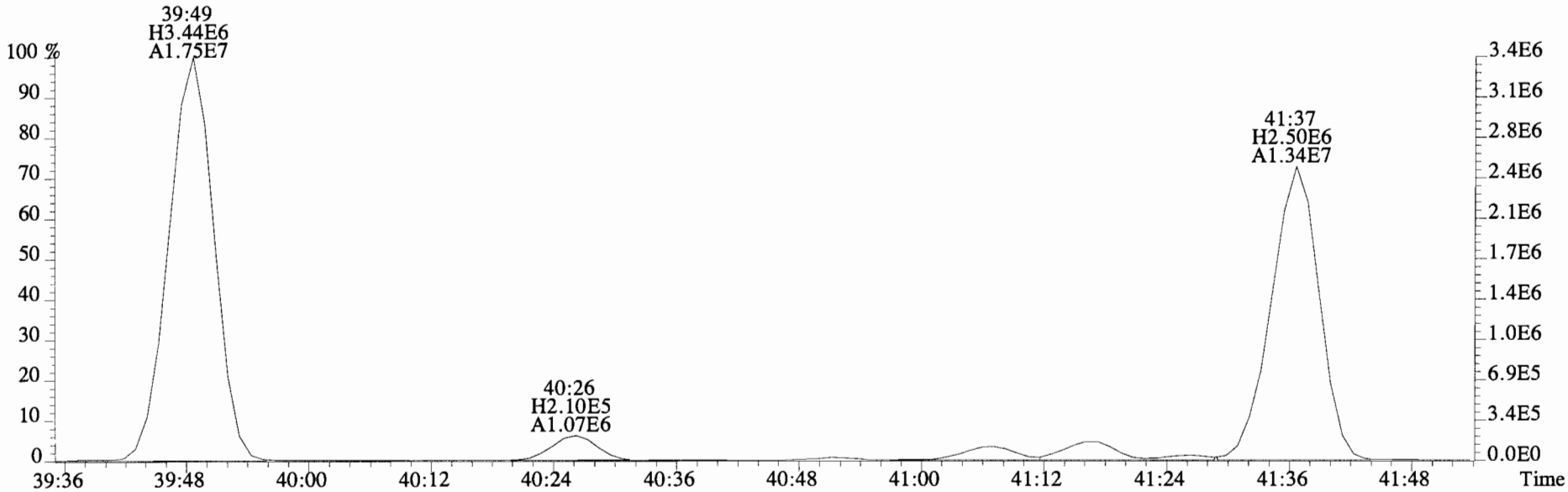
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



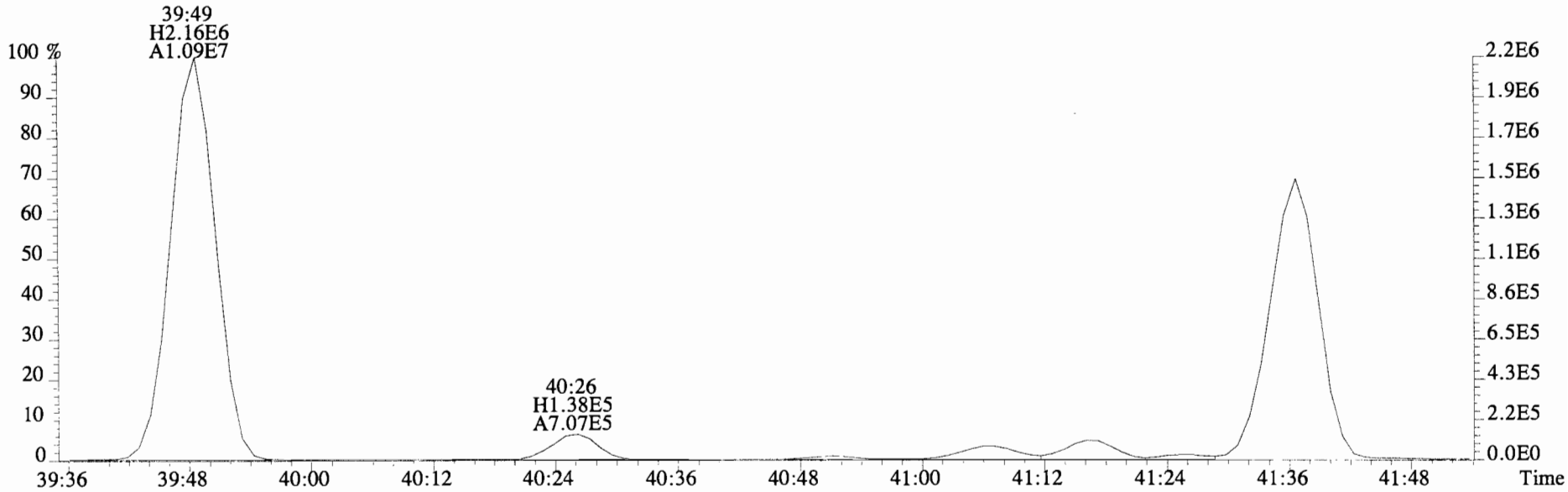
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



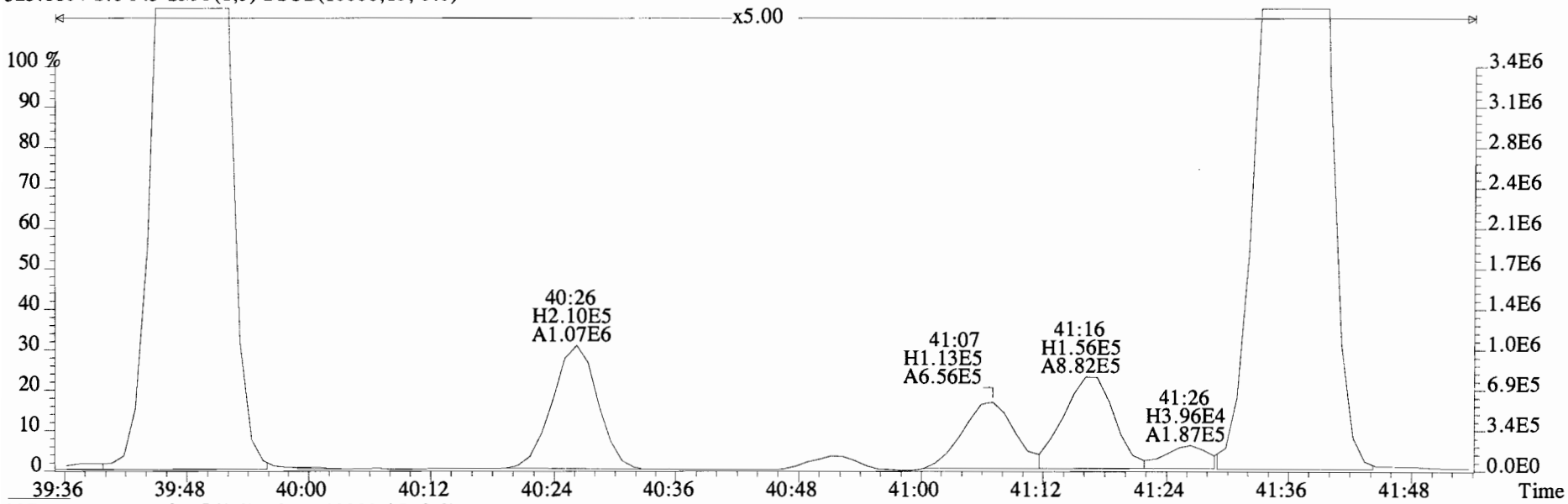
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



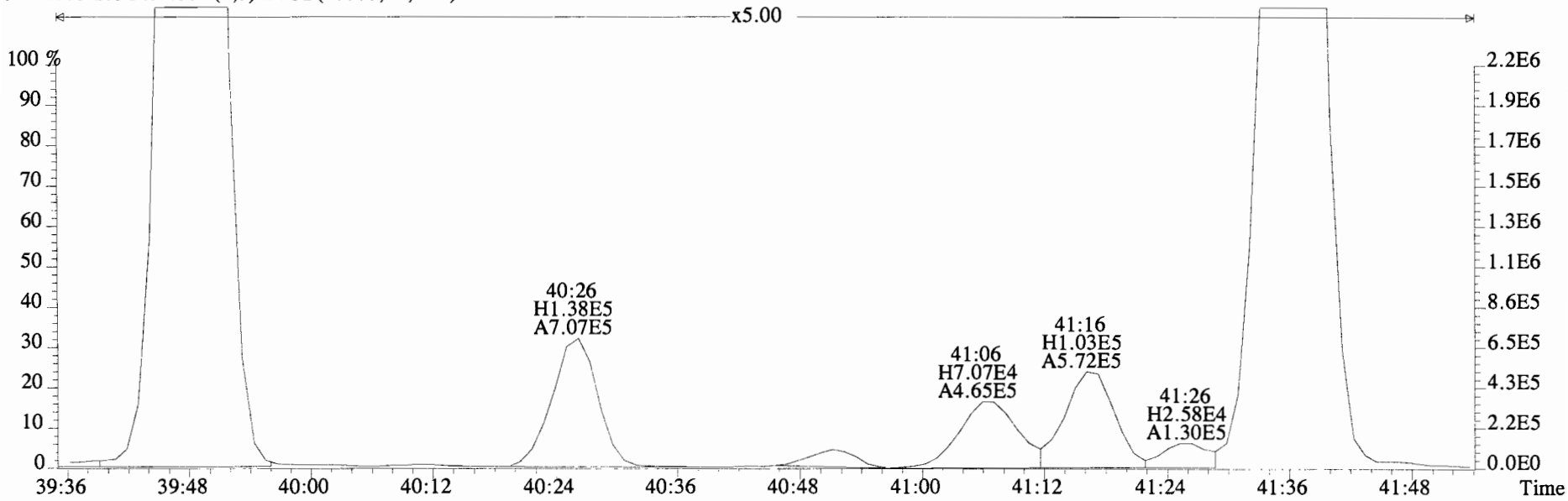
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



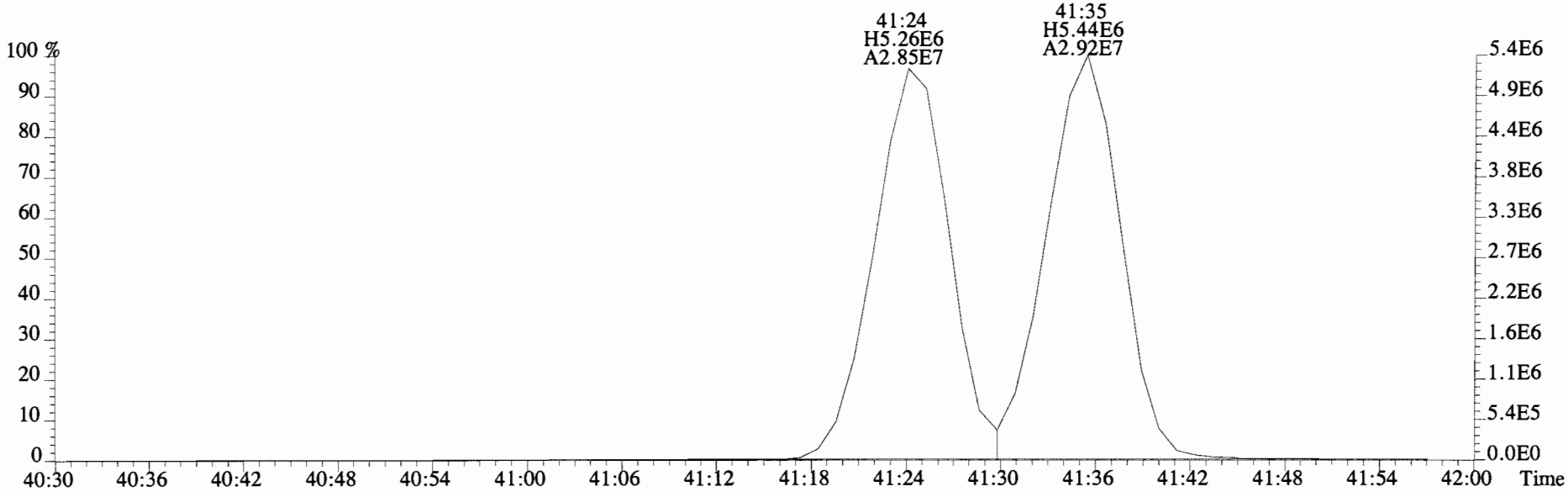
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



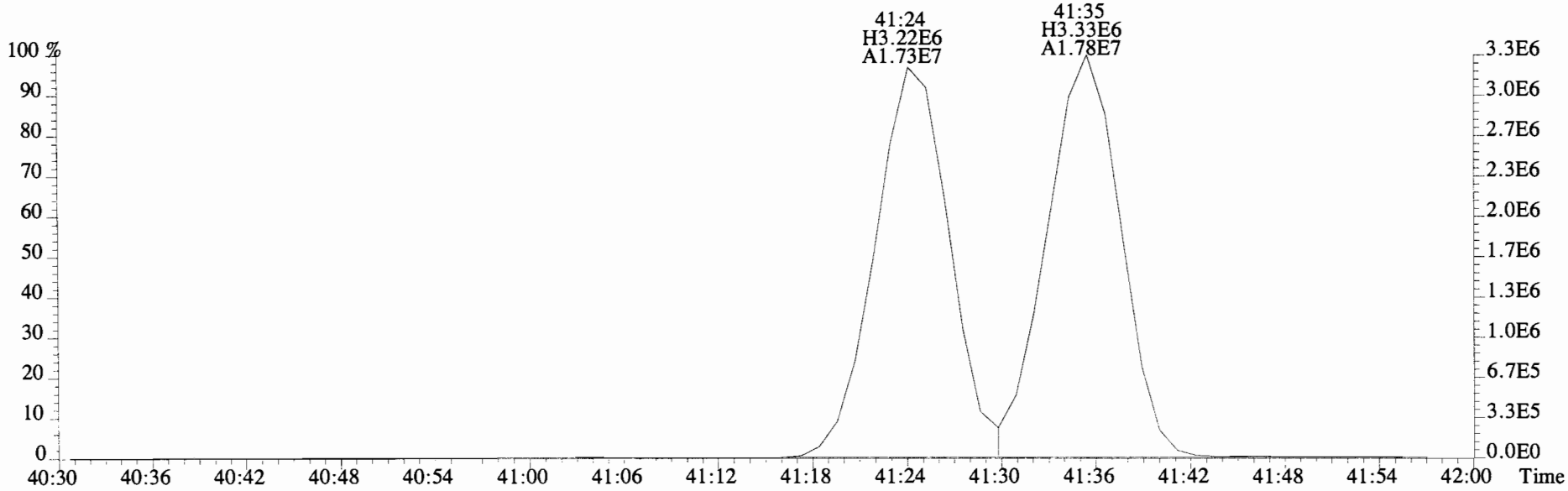
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



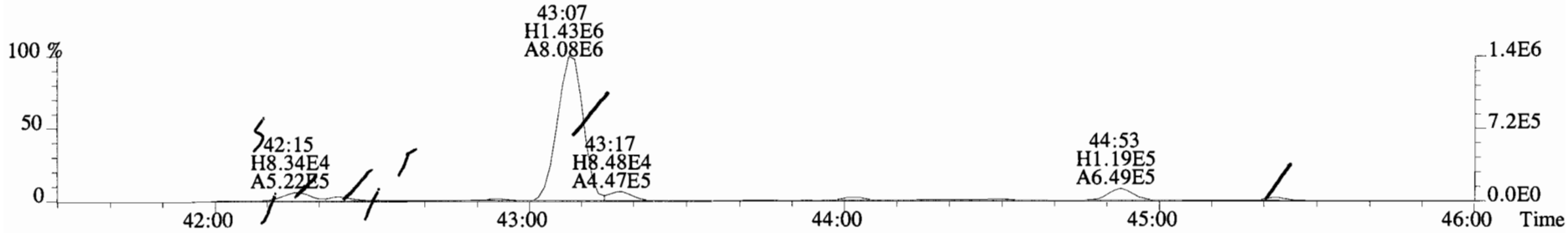
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2136.0,0.00%,F,F)



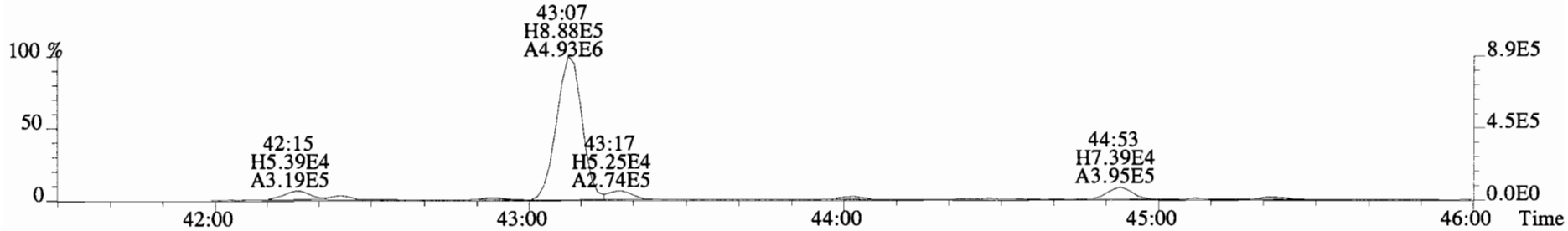
339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1784.0,0.00%,F,F)



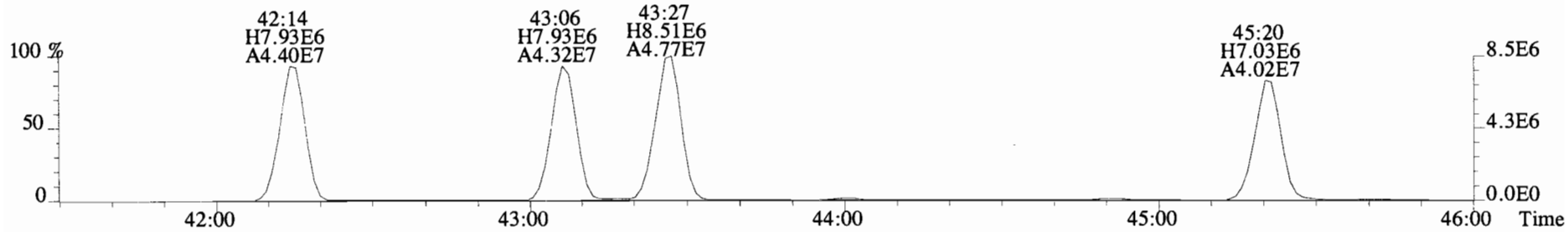
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
325.8804 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3748.0,0.00%,F,F)



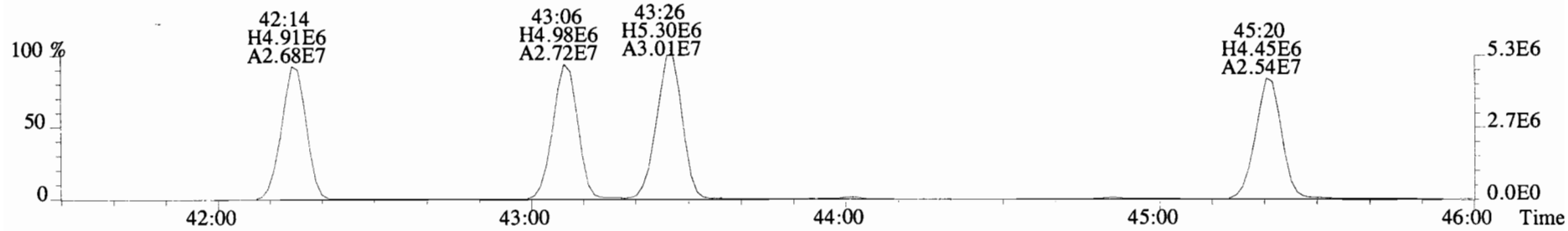
327.8775 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4428.0,0.00%,F,F)



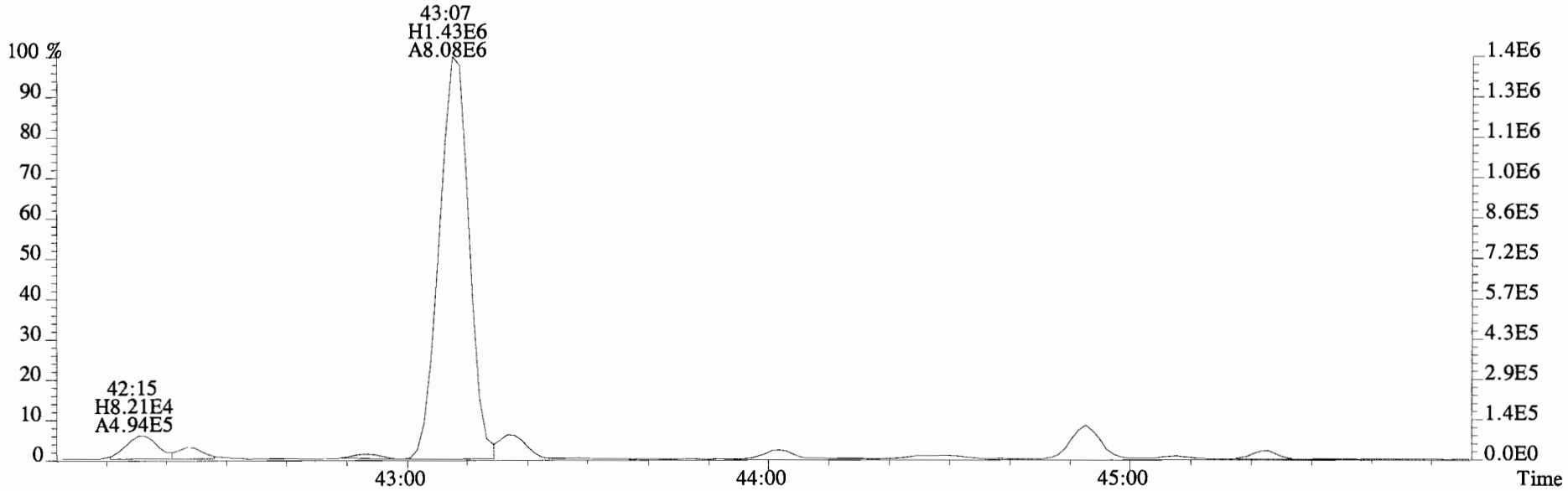
337.9207 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6844.0,0.00%,F,F)



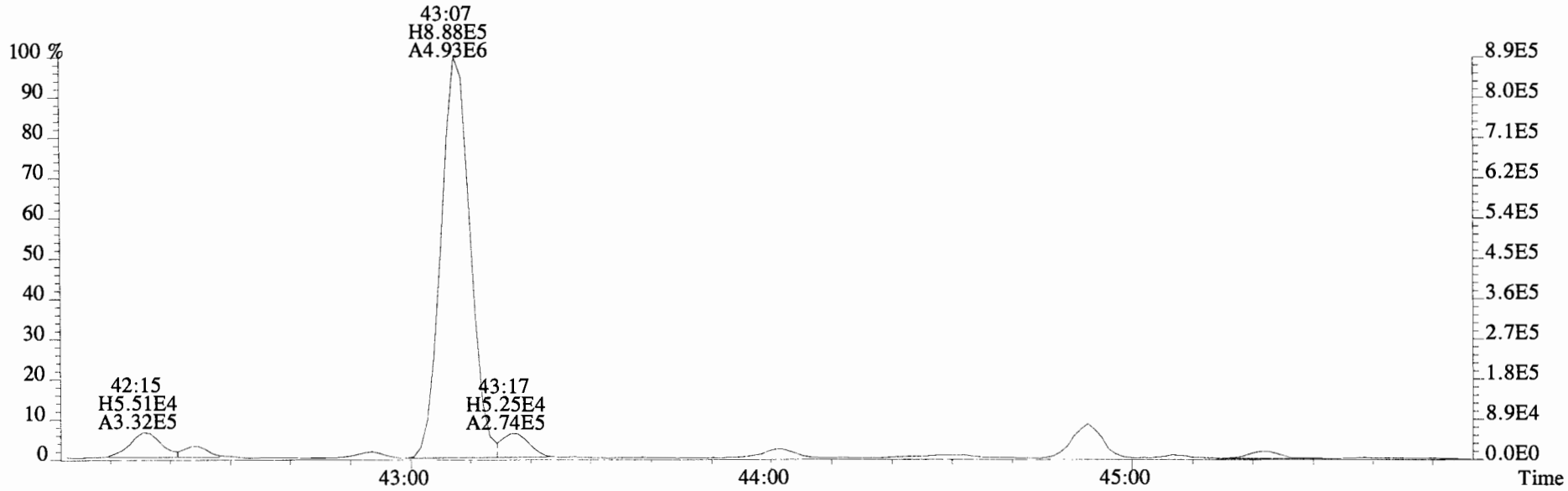
339.9177 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4936.0,0.00%,F,F)



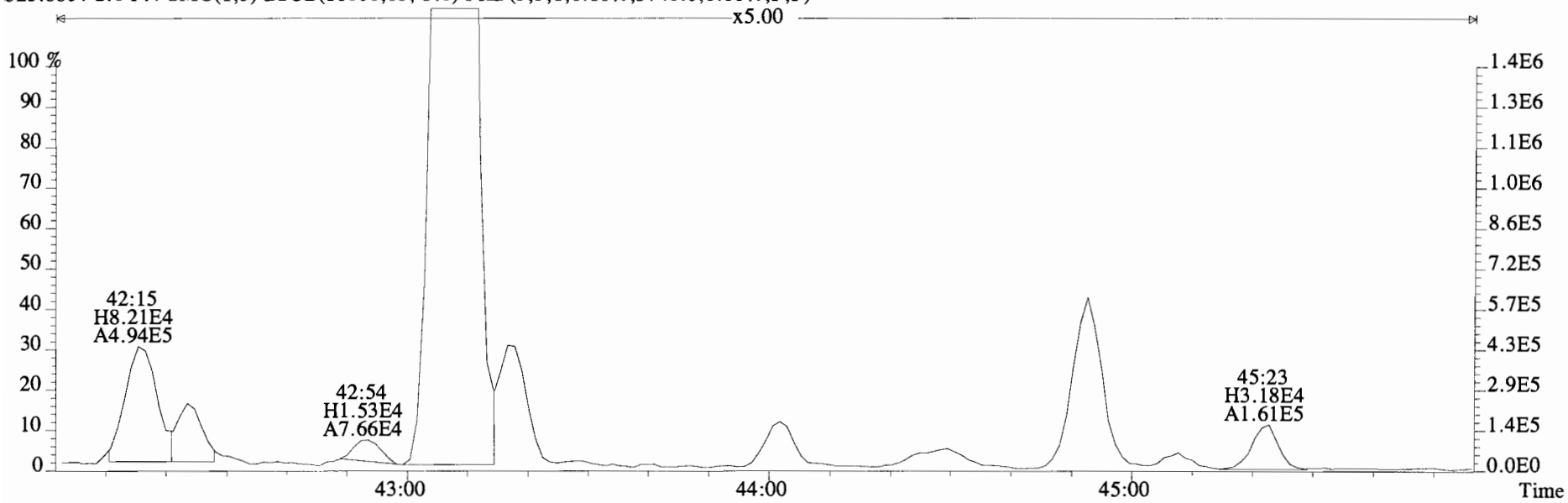
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
325.8804 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3748.0,0.00%,F,F)



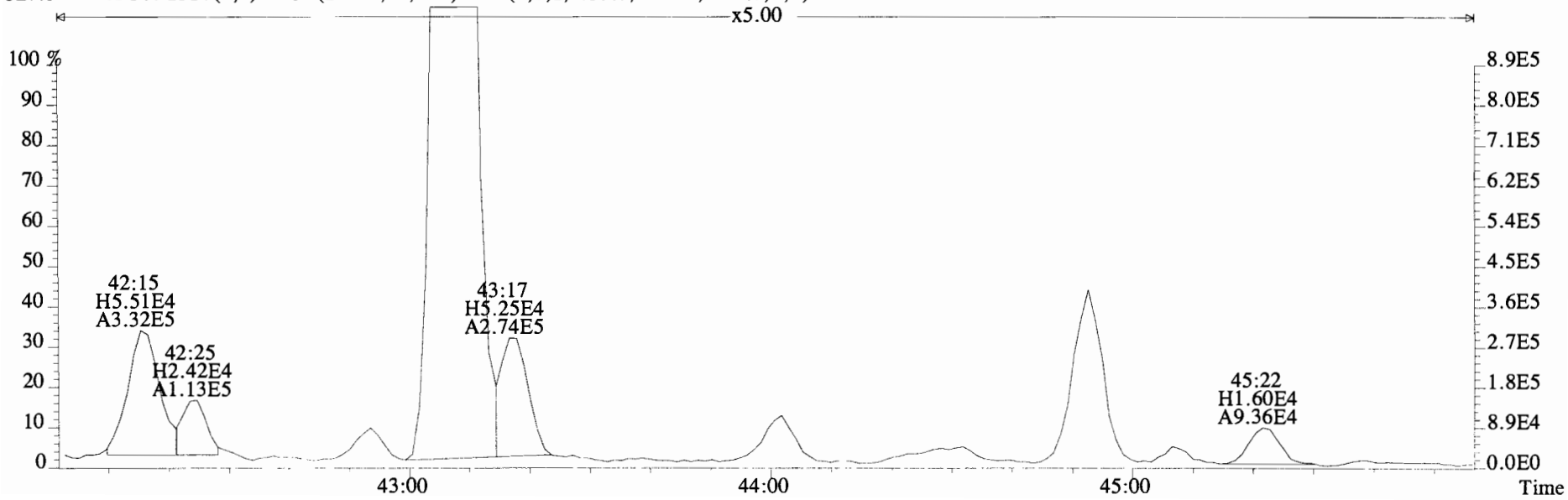
327.8775 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4428.0,0.00%,F,F)



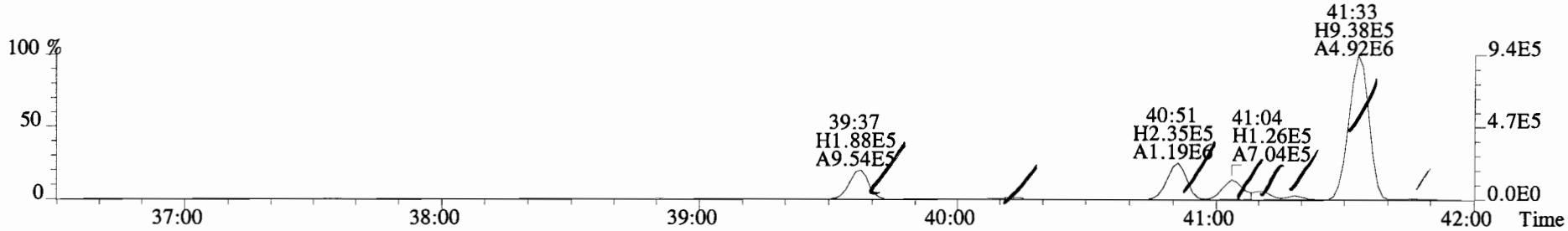
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
325.8804 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3748.0,0.00%,F,F)



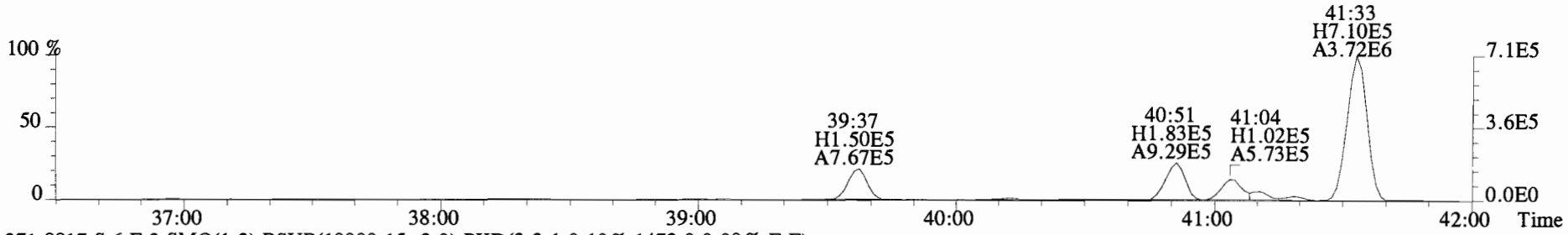
327.8775 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4428.0,0.00%,F,F)



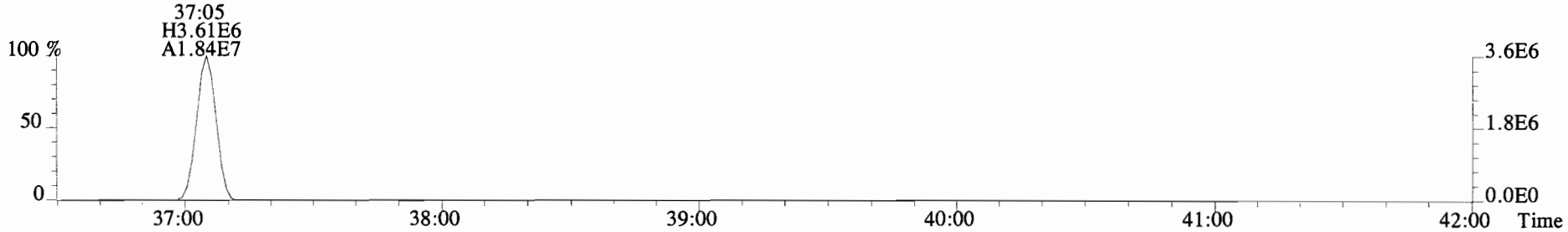
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1460.0,0.00%,F,F)



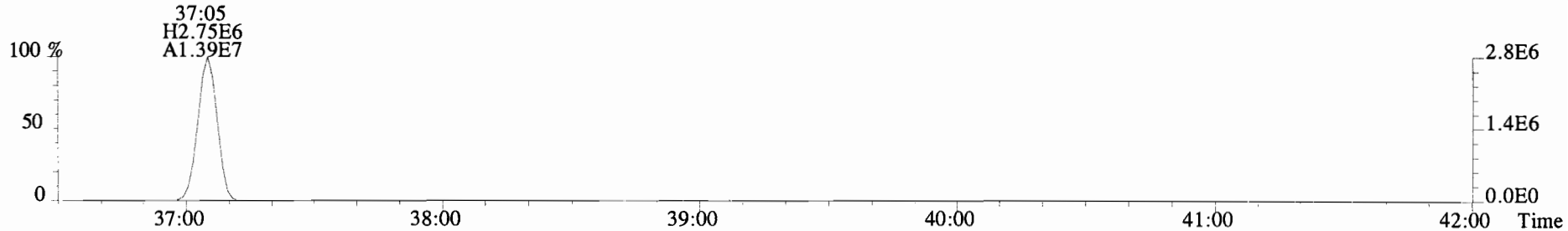
361.8385 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1504.0,0.00%,F,F)



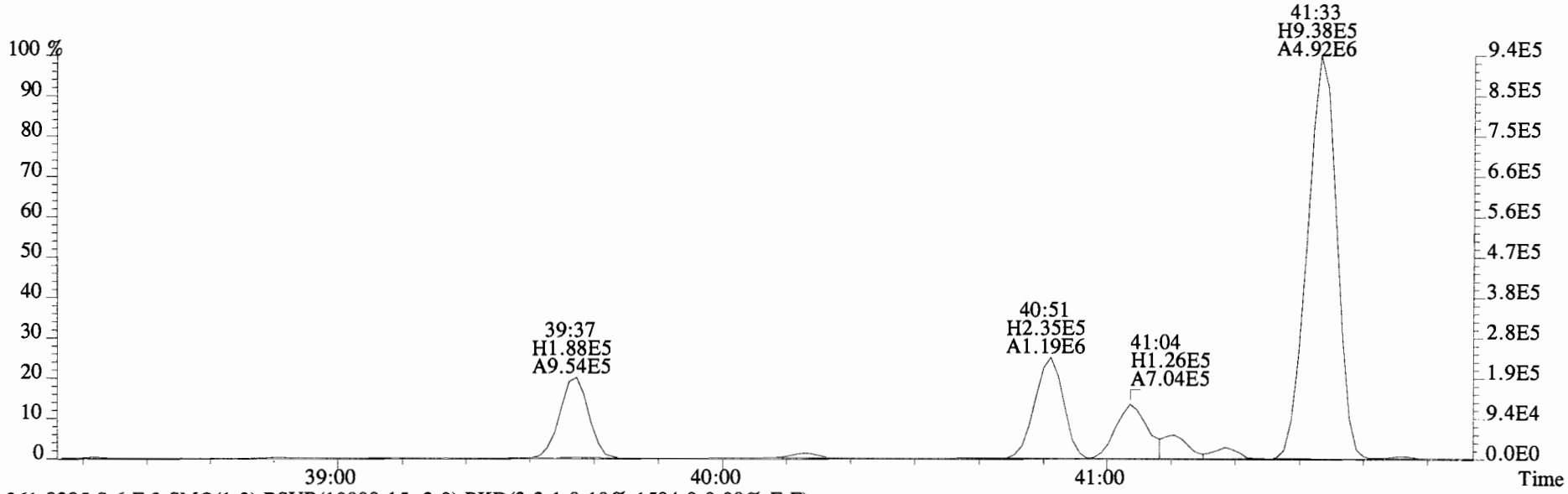
371.8817 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1472.0,0.00%,F,F)



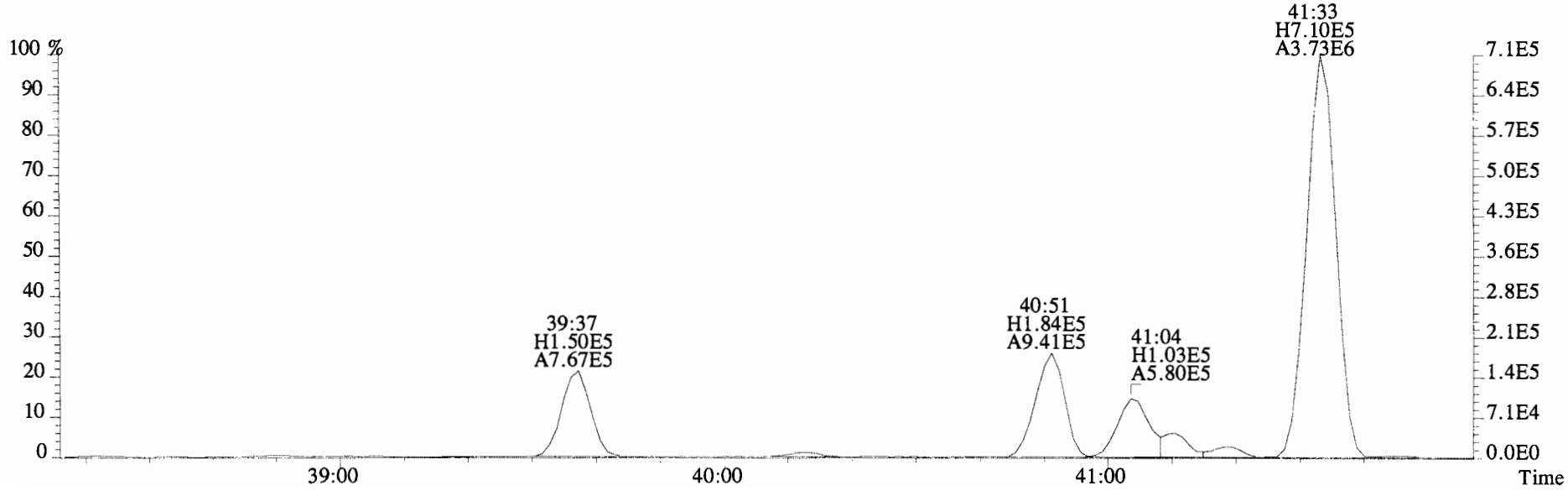
373.8788 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1724.0,0.00%,F,F)



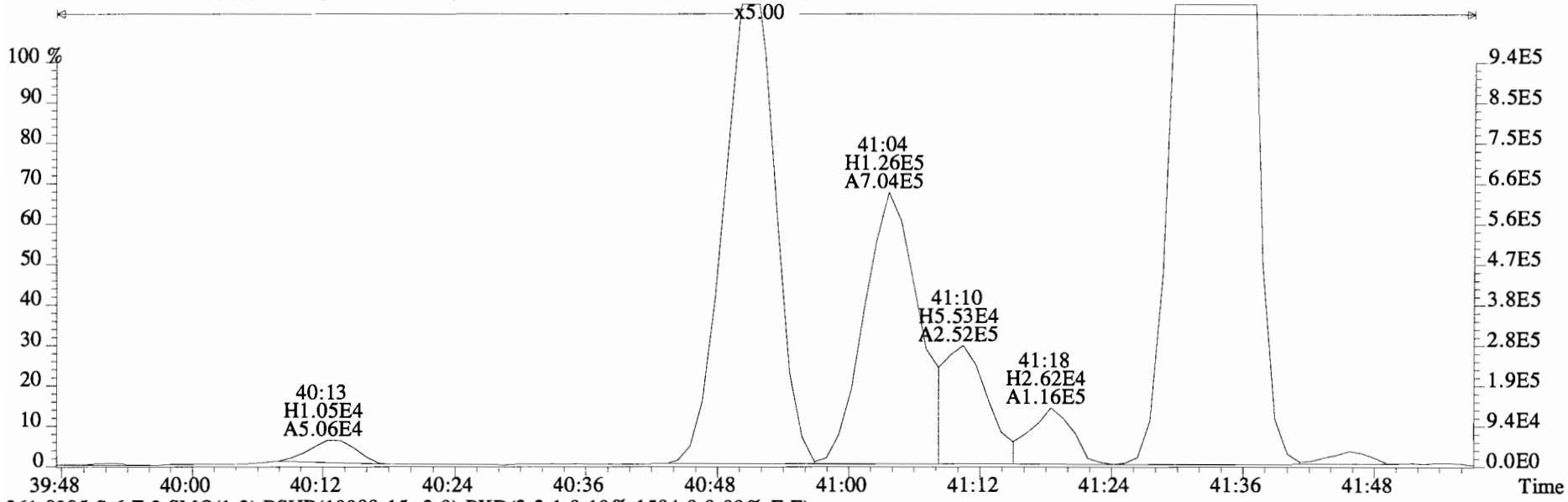
File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1460.0,0.00%,F,F)



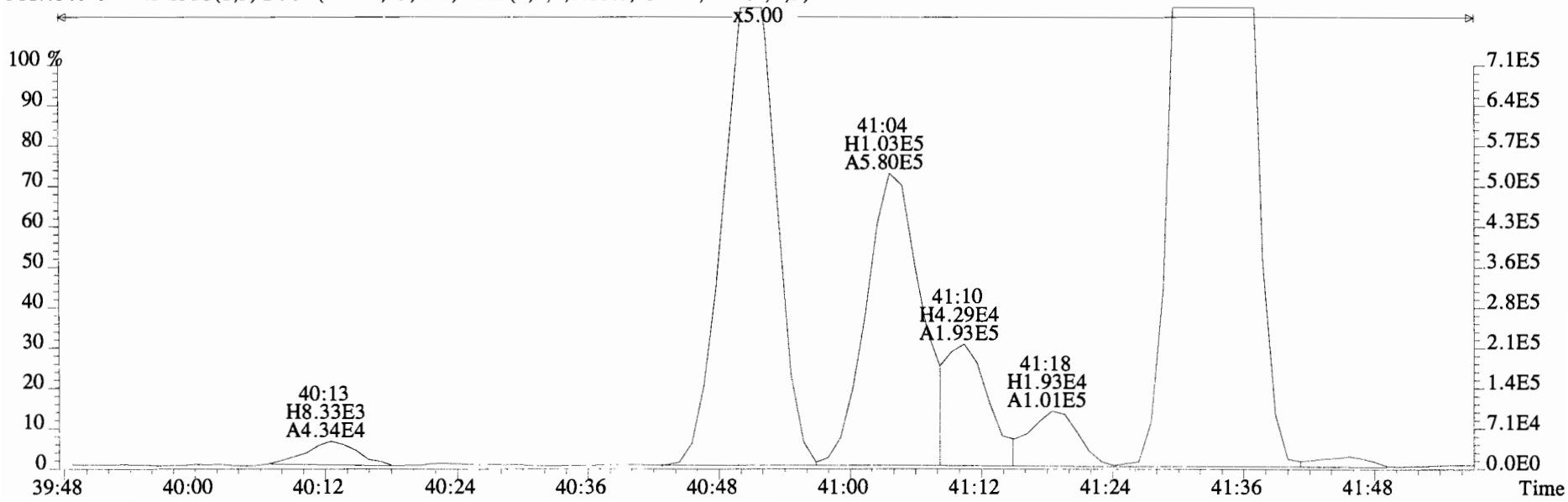
361.8385 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1504.0,0.00%,F,F)

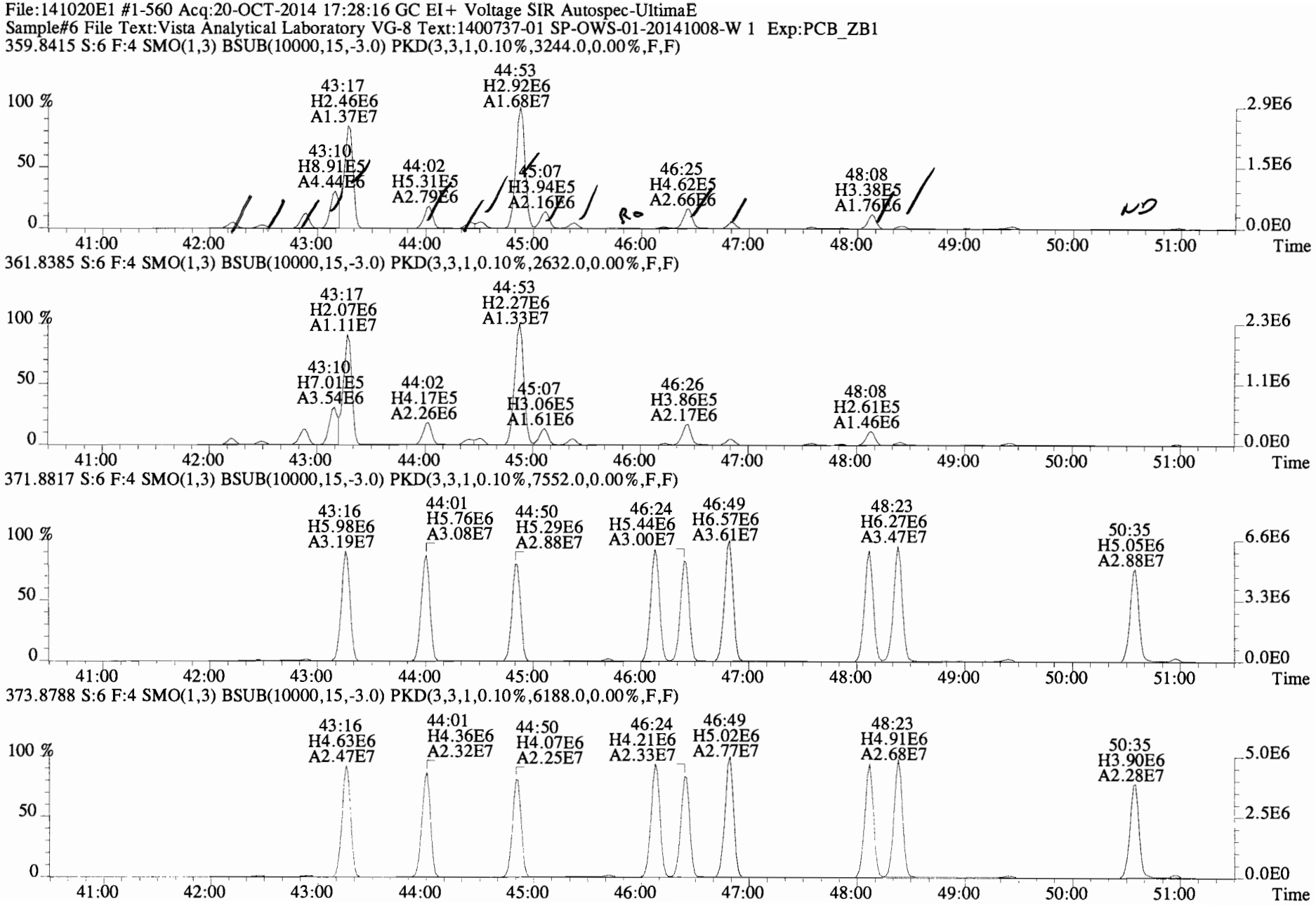


File:141020E1 #1-762 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1460.0,0.00%,F,F)

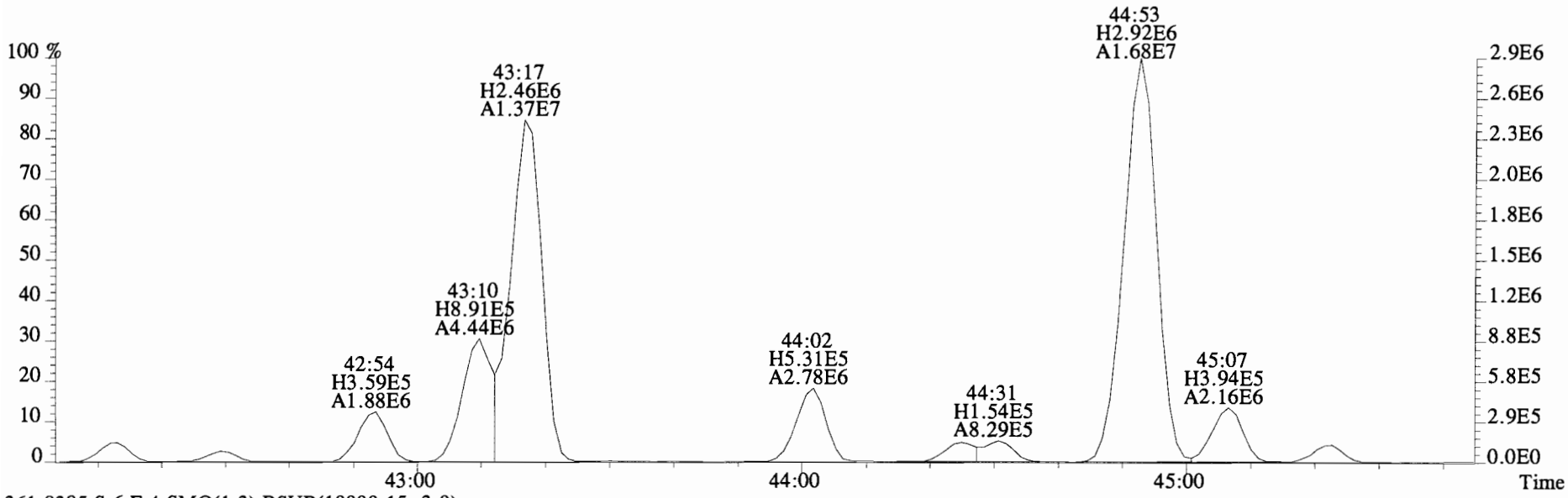


361.8385 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1504.0,0.00%,F,F)

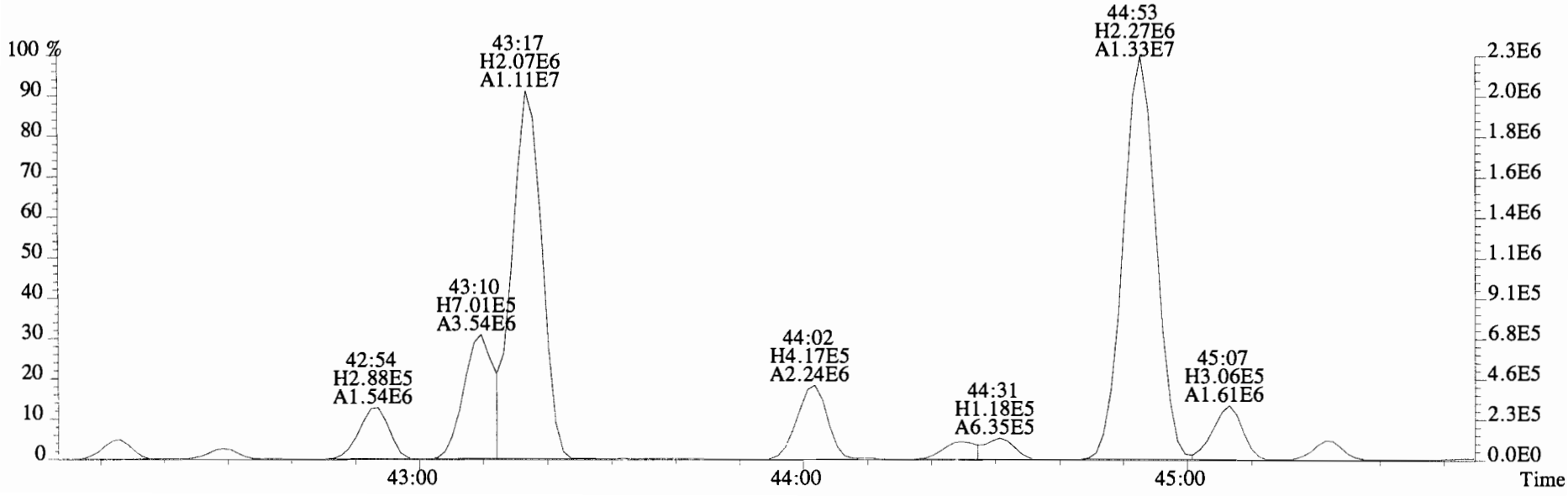



File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3244.0,0.00%,F,F)
43:17 H2.46E6 A1.37E7
44:53 H2.92E6 A1.68E7
43:10 H8.91E5 A4.44E6
44:02 H5.31E5 A2.79E6
45:07 H3.94E5 A2.16E6
46:25 H4.62E5 A2.66E6
48:08 H3.38E5 A1.76E6
RD
ND
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2632.0,0.00%,F,F)
43:17 H2.07E6 A1.11E7
44:53 H2.27E6 A1.33E7
43:10 H7.01E5 A3.54E6
44:02 H4.17E5 A2.26E6
45:07 H3.06E5 A1.61E6
46:26 H3.86E5 A2.17E6
48:08 H2.61E5 A1.46E6
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7552.0,0.00%,F,F)
43:16 H5.98E6 A3.19E7
44:01 H5.76E6 A3.08E7
44:50 H5.29E6 A2.88E7
46:24 H5.44E6 A3.00E7
46:49 H6.57E6 A3.61E7
48:23 H6.27E6 A3.47E7
50:35 H5.05E6 A2.88E7
373.8788 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6188.0,0.00%,F,F)
43:16 H4.63E6 A2.47E7
44:01 H4.36E6 A2.32E7
44:50 H4.07E6 A2.25E7
46:24 H4.21E6 A2.33E7
46:49 H5.02E6 A2.77E7
48:23 H4.91E6 A2.68E7
50:35 H3.90E6 A2.28E7
100 %
50
0
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
51:00
Time
2.9E6
1.5E6
0.0E0
2.3E6
1.1E6
6.6E6
3.3E6
5.0E6
2.5E6

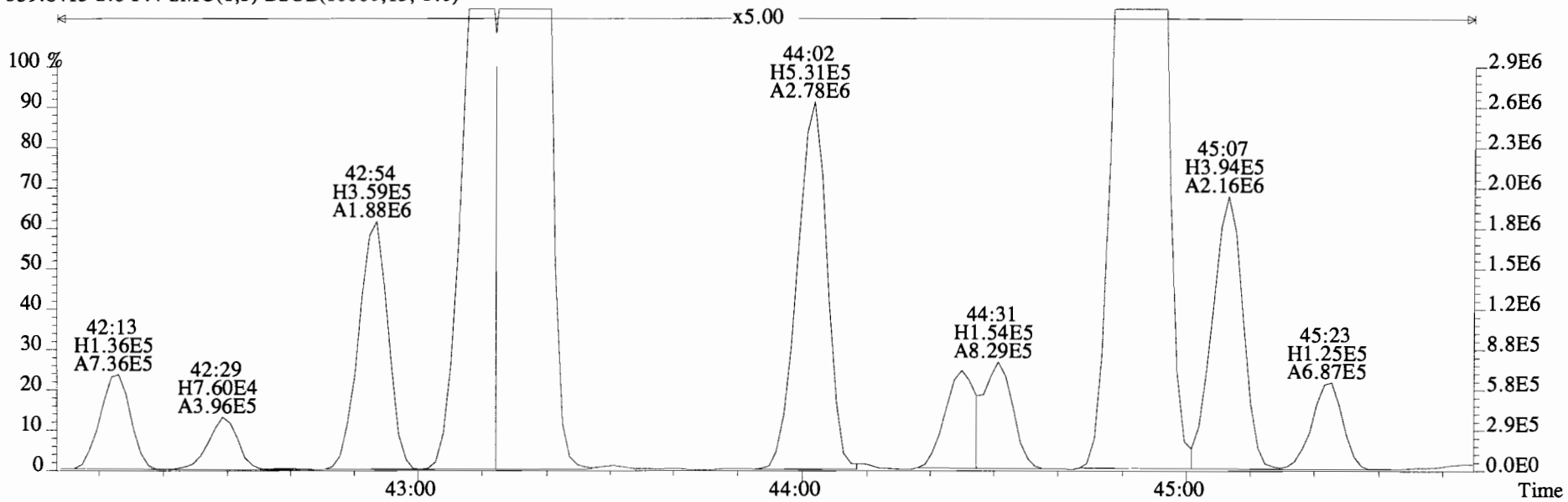
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



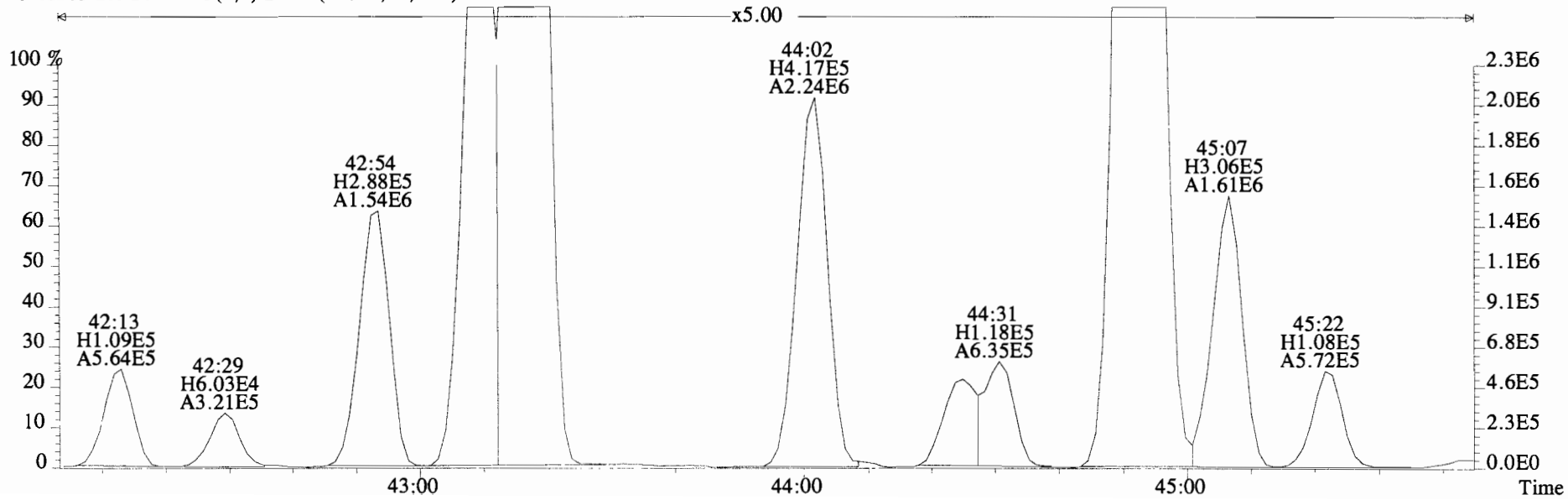
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



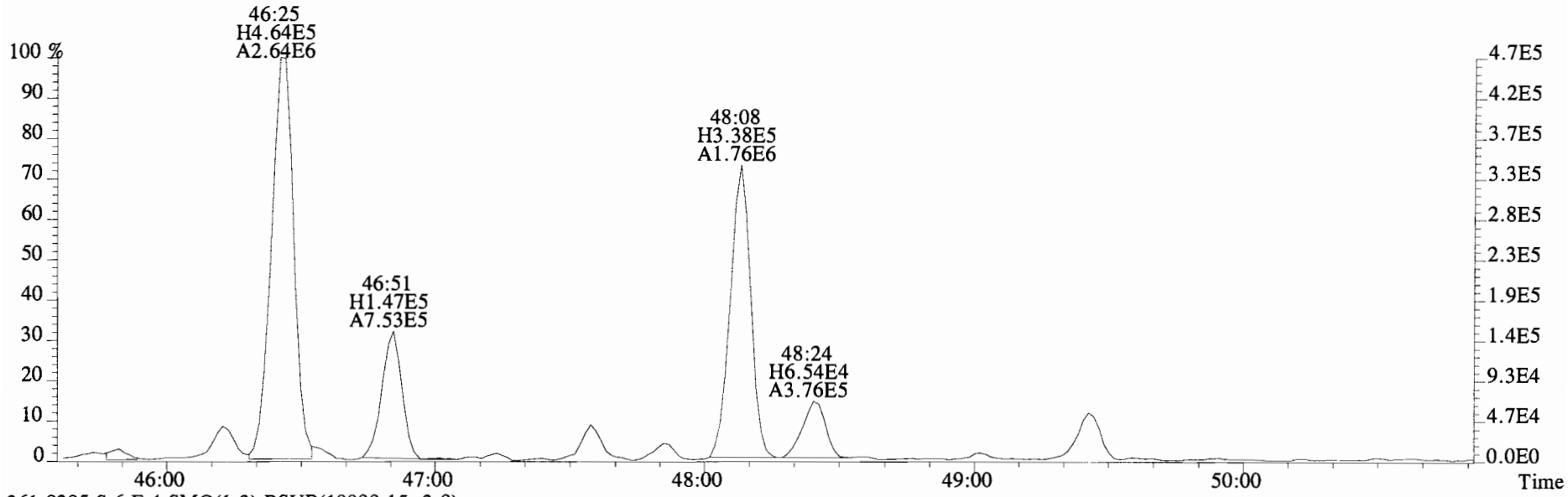
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



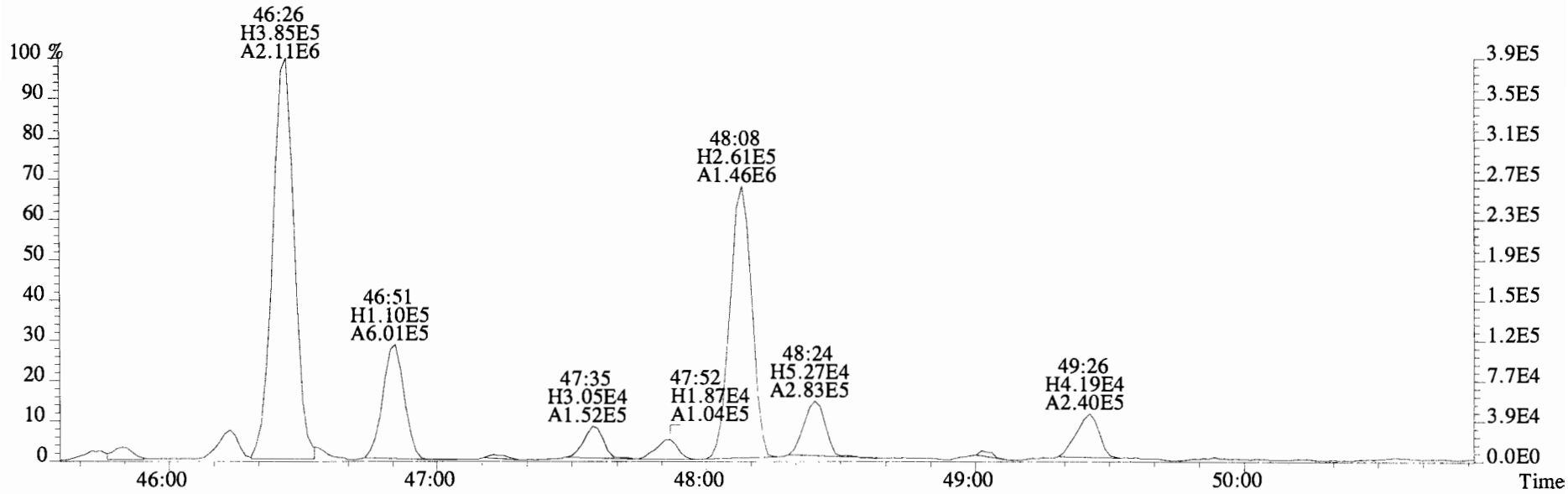
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



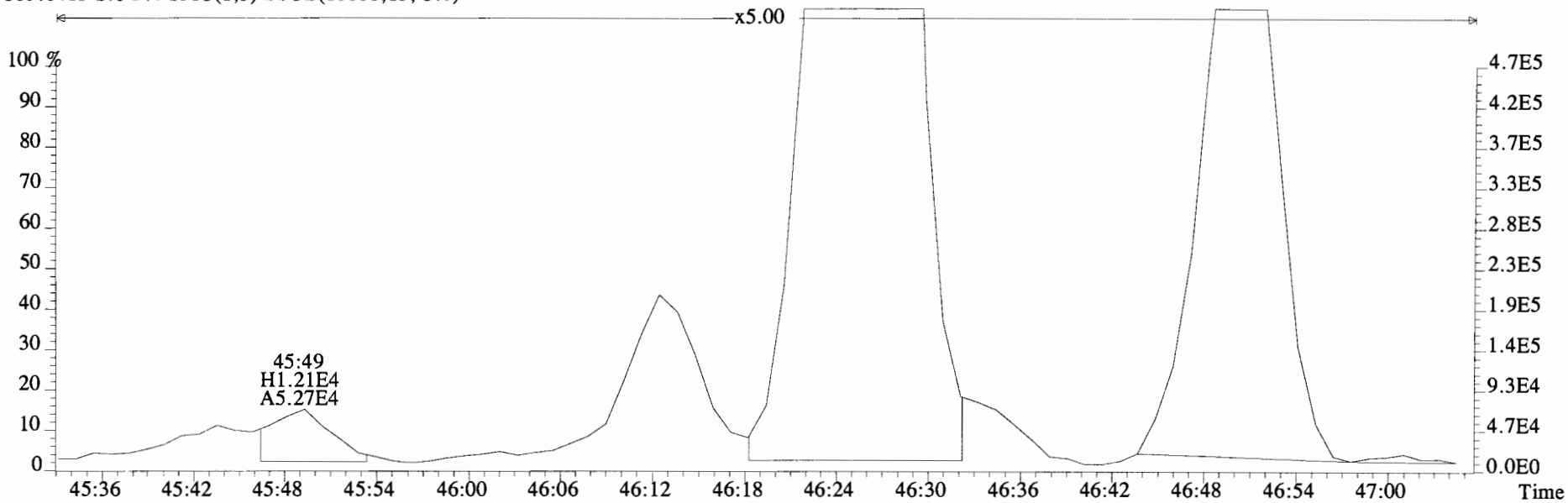
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



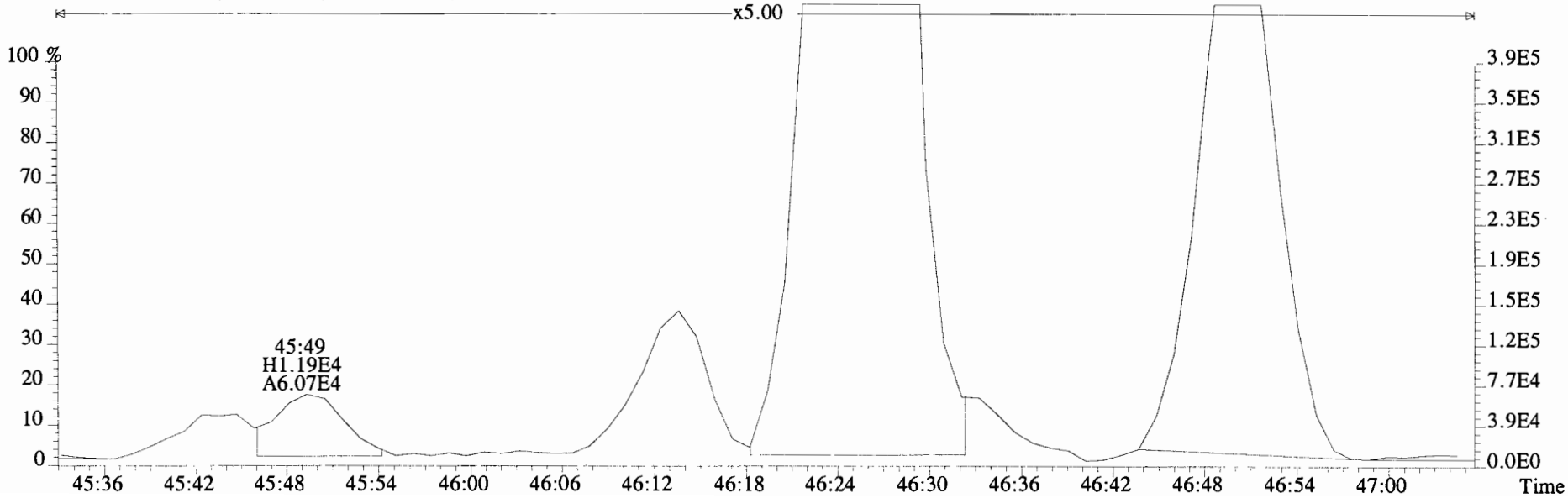
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



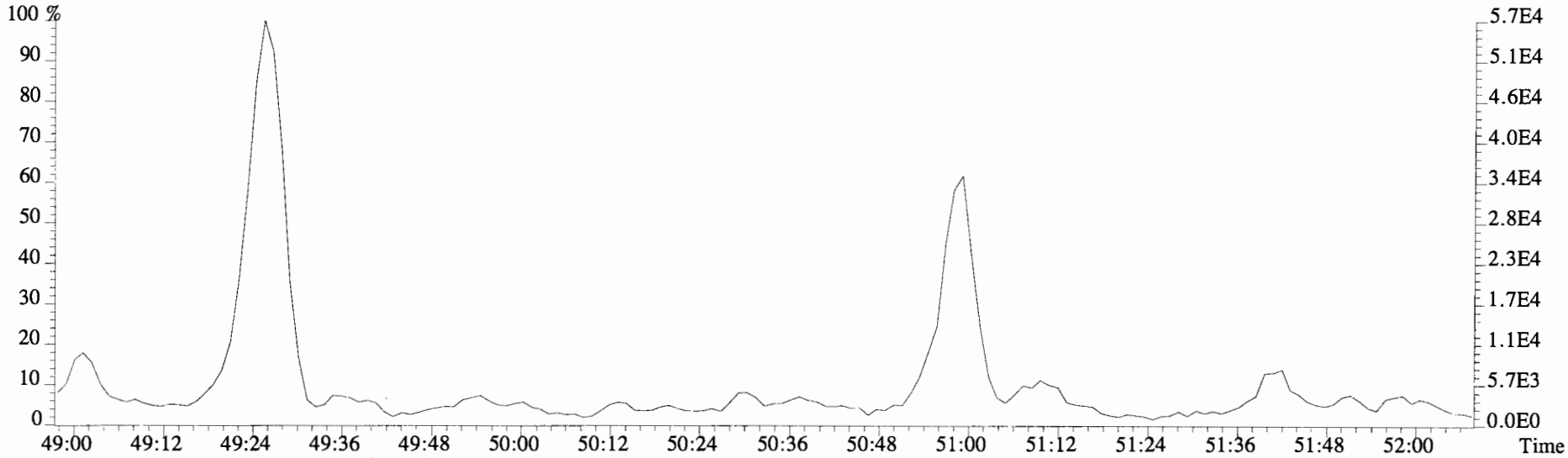
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



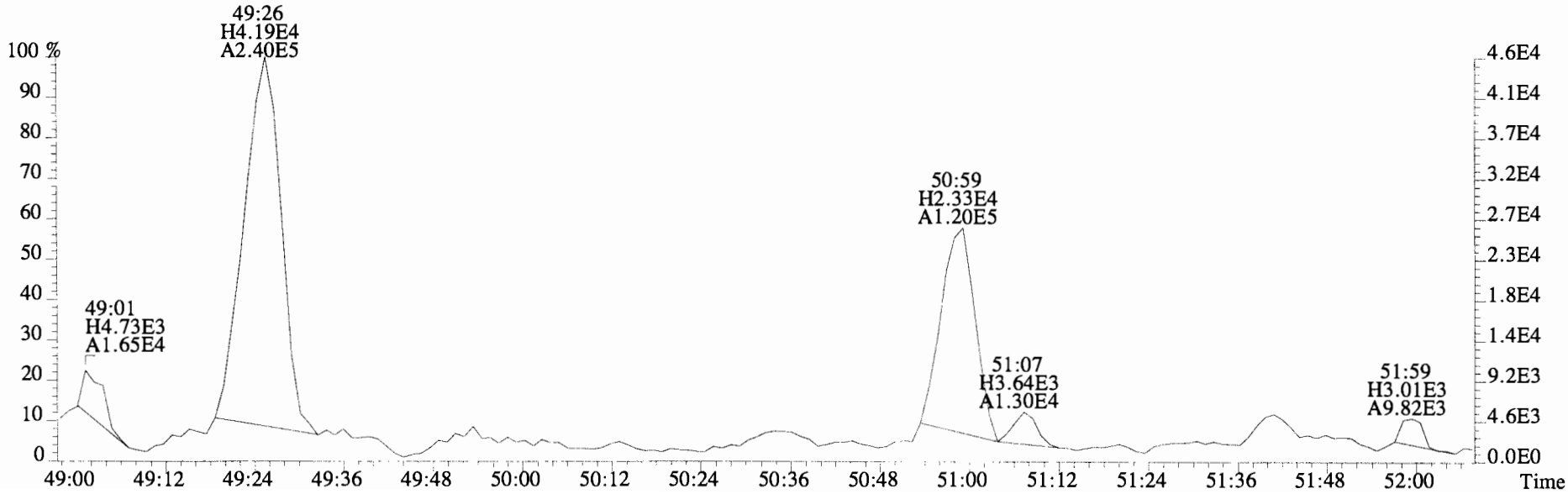
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



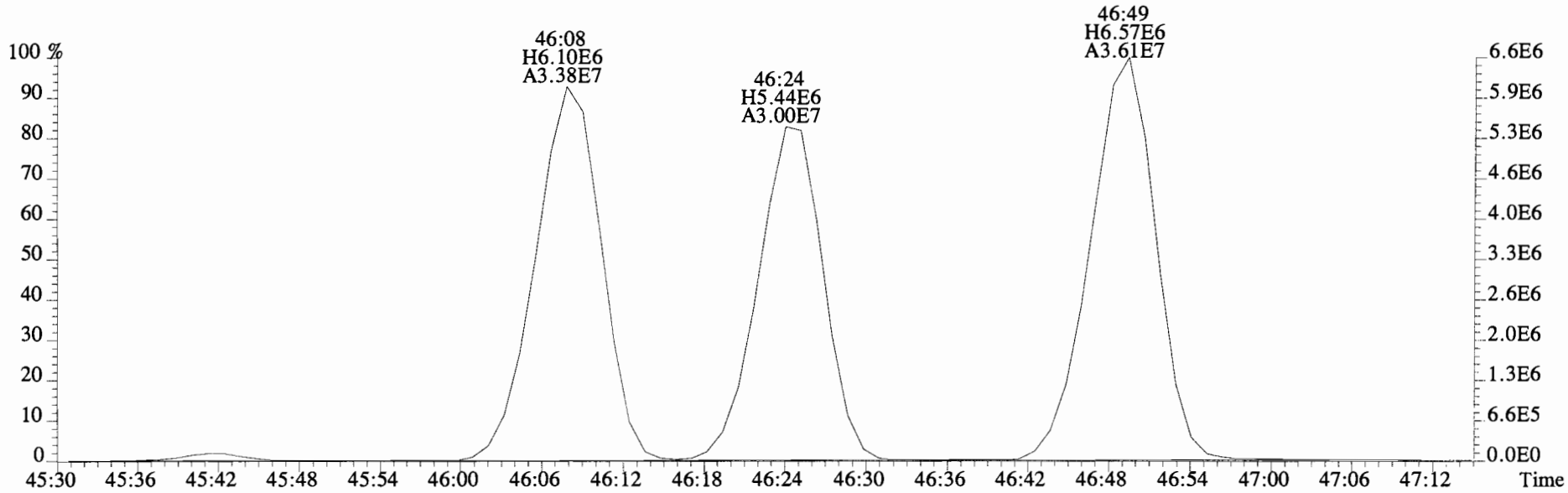
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



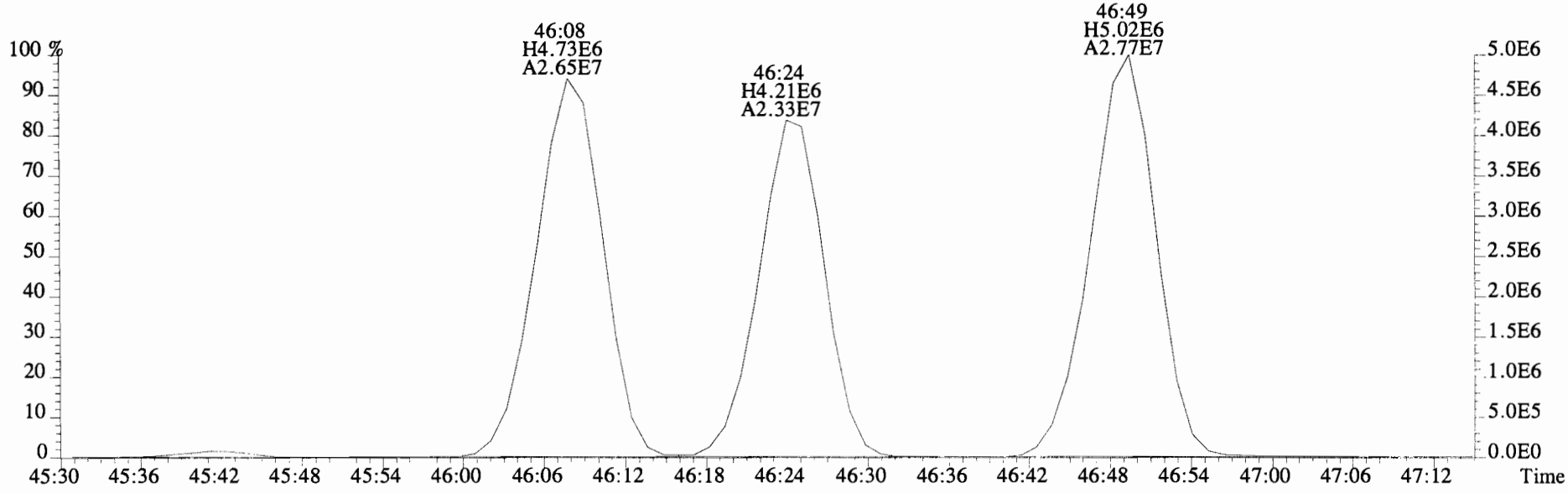
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



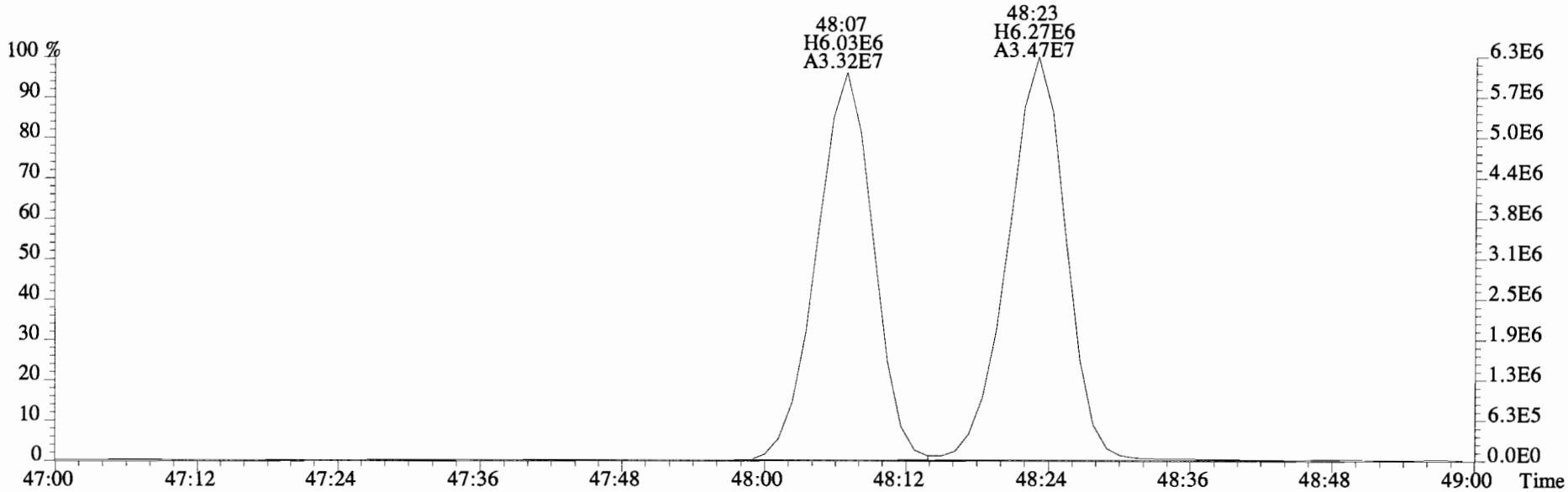
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7552.0,0.00%,F,F)



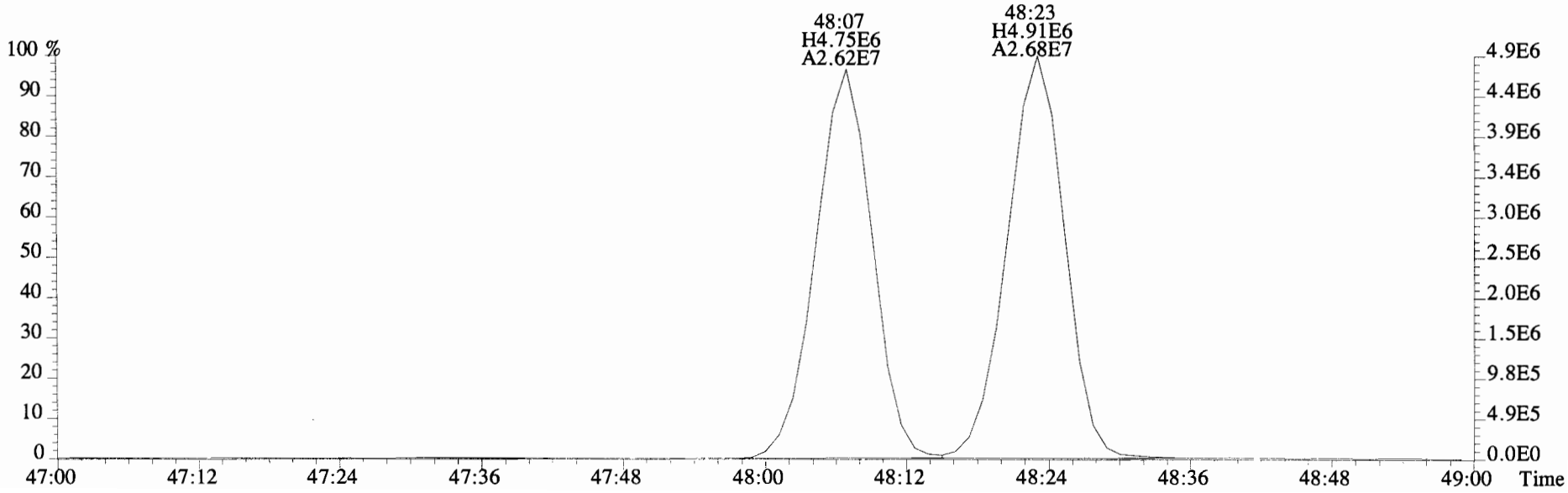
373.8788 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6188.0,0.00%,F,F)

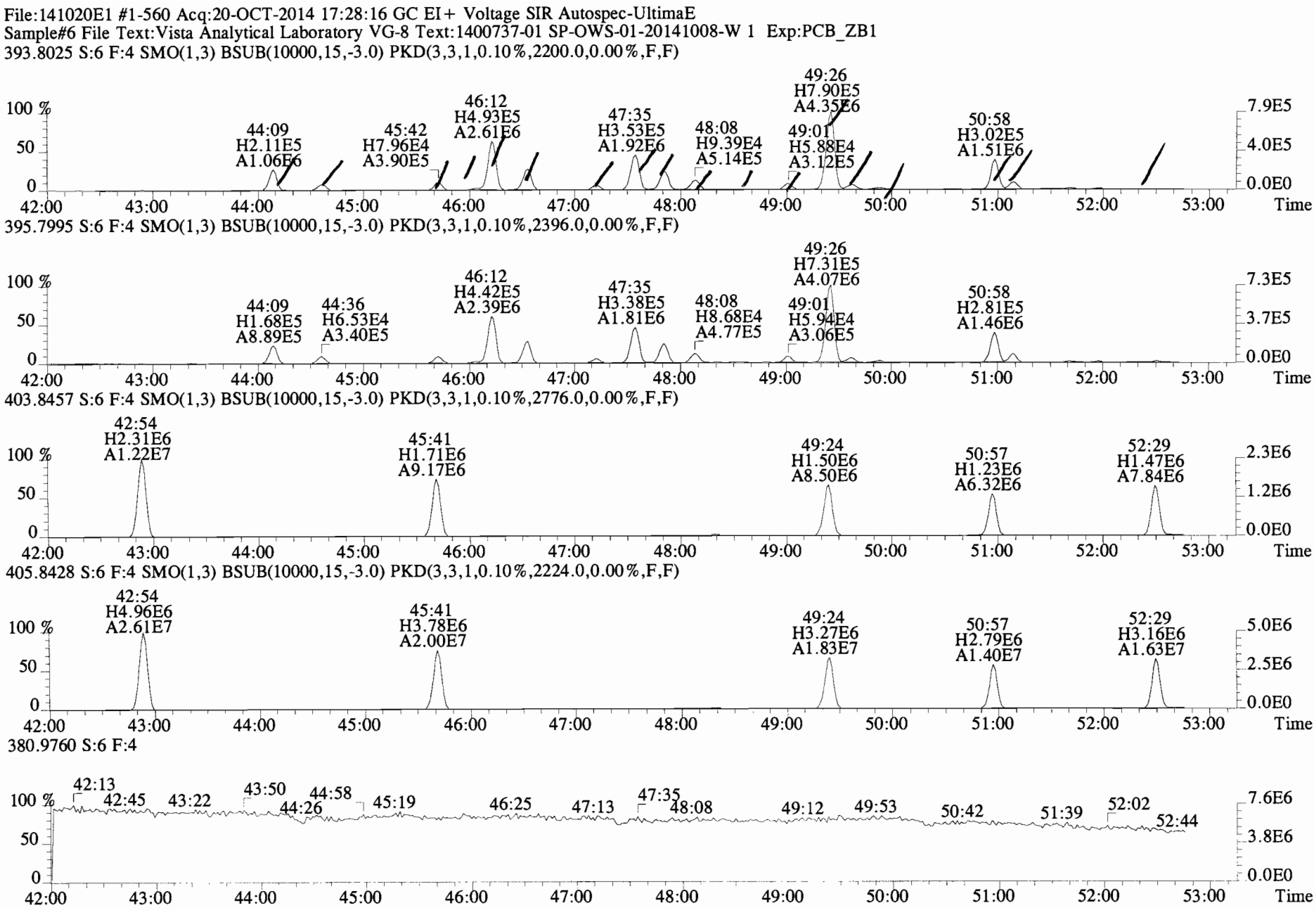


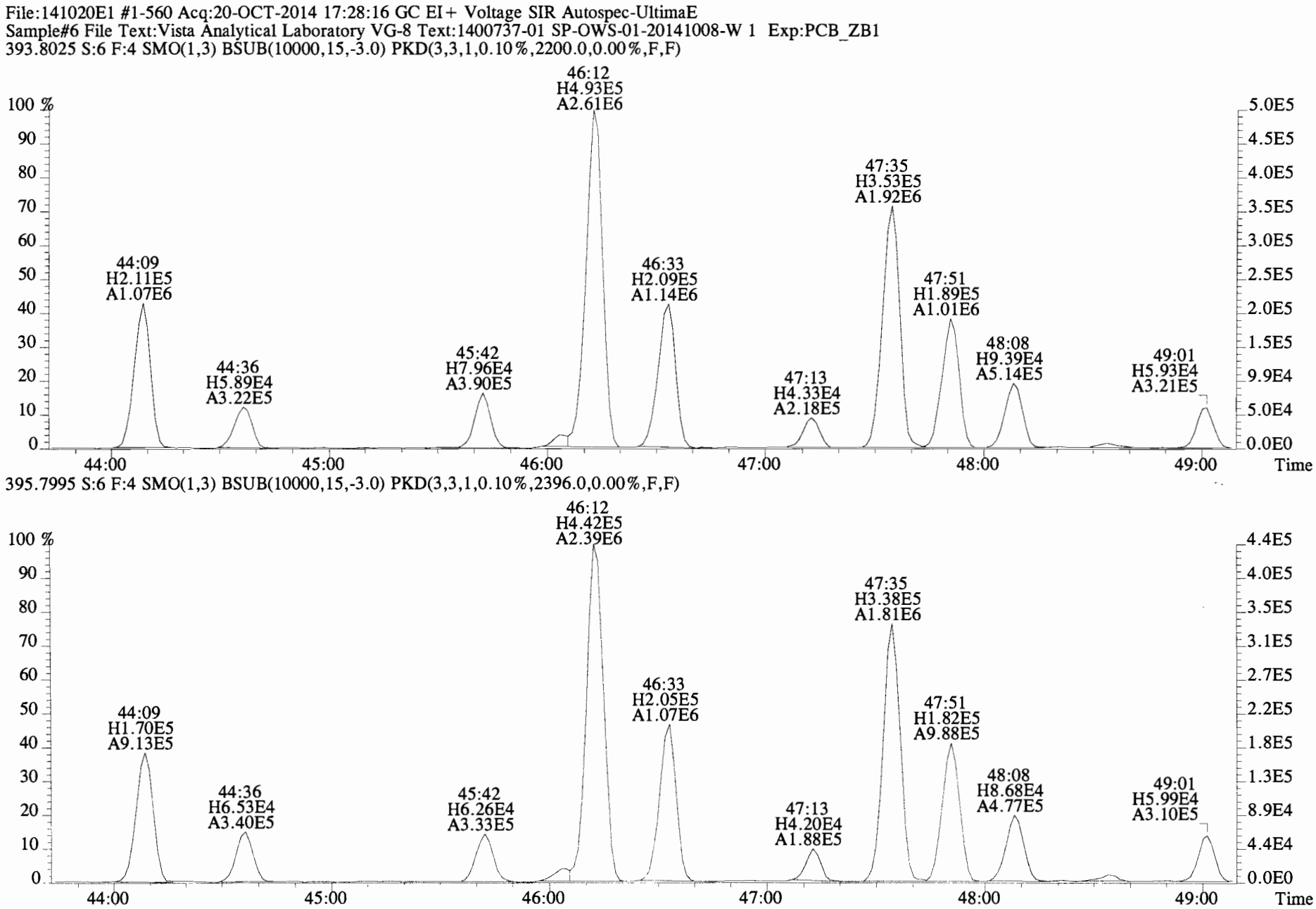
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7552.0,0.00%,F,F)



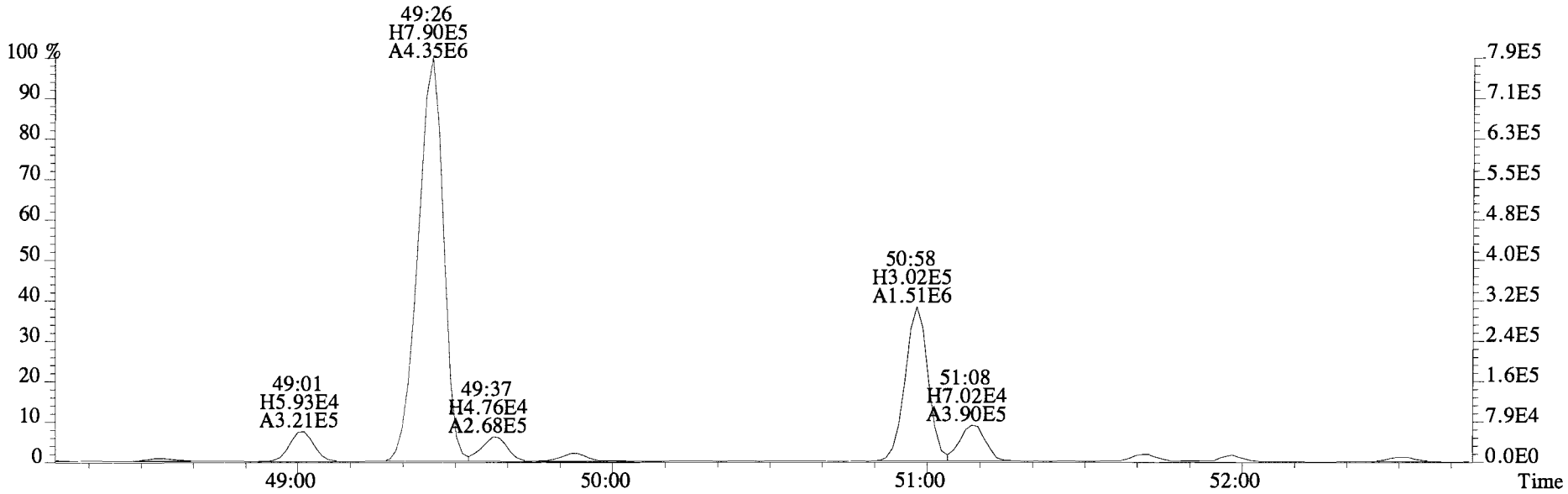
373.8788 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6188.0,0.00%,F,F)



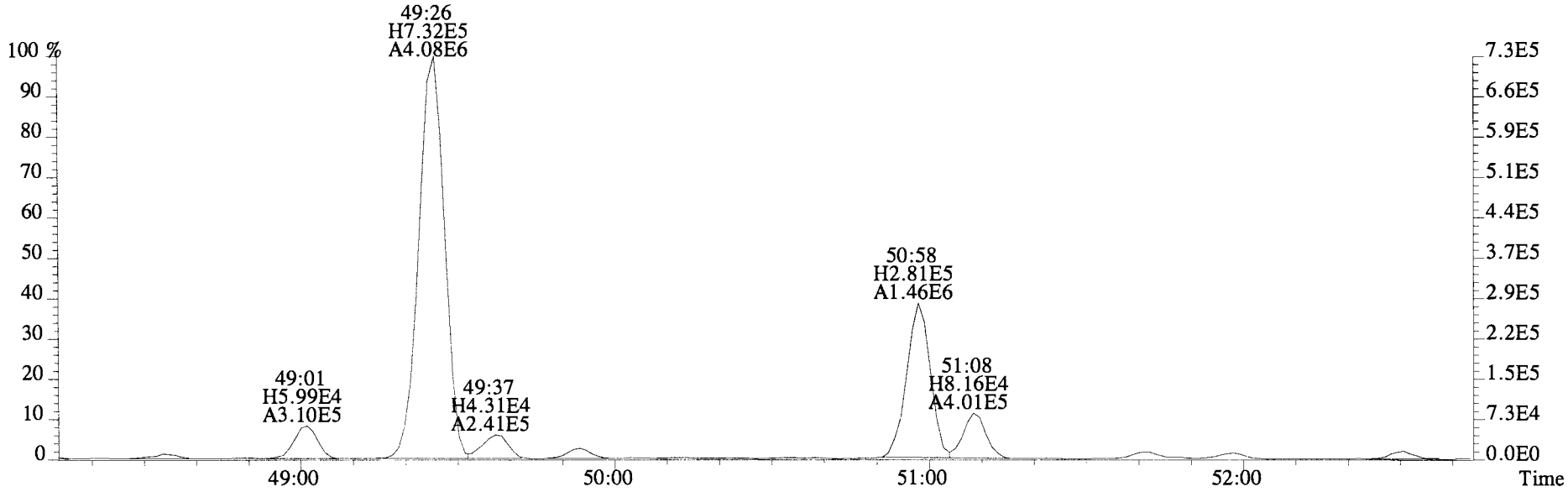

File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2200.0,0.00%,F,F)
44:09 H2.11E5 A1.06E6
45:42 H7.96E4 A3.90E5
46:12 H4.93E5 A2.61E6
47:35 H3.53E5 A1.92E6
48:08 H9.39E4 A5.14E5
49:01 H5.88E4 A3.12E5
49:26 H7.90E5 A4.35E6
50:58 H3.02E5 A1.51E6
395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2396.0,0.00%,F,F)
44:09 H1.68E5 A8.89E5
44:36 H6.53E4 A3.40E5
46:12 H4.42E5 A2.39E6
47:35 H3.38E5 A1.81E6
48:08 H8.68E4 A4.77E5
49:01 H5.94E4 A3.06E5
49:26 H7.31E5 A4.07E6
50:58 H2.81E5 A1.46E6
403.8457 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2776.0,0.00%,F,F)
42:54 H2.31E6 A1.22E7
45:41 H1.71E6 A9.17E6
49:24 H1.50E6 A8.50E6
50:57 H1.23E6 A6.32E6
52:29 H1.47E6 A7.84E6
405.8428 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2224.0,0.00%,F,F)
42:54 H4.96E6 A2.61E7
45:41 H3.78E6 A2.00E7
49:24 H3.27E6 A1.83E7
50:57 H2.79E6 A1.40E7
52:29 H3.16E6 A1.63E7
380.9760 S:6 F:4
42:13
42:45
43:22
43:50
44:26
44:58
45:19
46:25
47:13
47:35
48:08
49:12
49:53
50:42
51:39
52:02
52:44
100 %
50
0
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
51:00
52:00
53:00
Time
7.9E5
4.0E5
0.0E0
7.3E5
3.7E5
0.0E0
2.3E6
1.2E6
0.0E0
5.0E6
2.5E6
0.0E0
7.6E6
3.8E6
0.0E0


File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2200.0,0.00%,F,F)
44:09 H2.11E5 A1.07E6
44:36 H5.89E4 A3.22E5
45:42 H7.96E4 A3.90E5
46:12 H4.93E5 A2.61E6
46:33 H2.09E5 A1.14E6
47:13 H4.33E4 A2.18E5
47:35 H3.53E5 A1.92E6
47:51 H1.89E5 A1.01E6
48:08 H9.39E4 A5.14E5
49:01 H5.93E4 A3.21E5
100 %
90
80
70
60
50
40
30
20
10
0
5.0E5
4.5E5
4.0E5
3.5E5
3.0E5
2.5E5
2.0E5
1.5E5
9.9E4
5.0E4
0.0E0
44:00
45:00
46:00
47:00
48:00
49:00
Time
395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2396.0,0.00%,F,F)
44:09 H1.70E5 A9.13E5
44:36 H6.53E4 A3.40E5
45:42 H6.26E4 A3.33E5
46:12 H4.42E5 A2.39E6
46:33 H2.05E5 A1.07E6
47:13 H4.20E4 A1.88E5
47:35 H3.38E5 A1.81E6
47:51 H1.82E5 A9.88E5
48:08 H8.68E4 A4.77E5
49:01 H5.99E4 A3.10E5
100 %
90
80
70
60
50
40
30
20
10
0
4.4E5
4.0E5
3.5E5
3.1E5
2.7E5
2.2E5
1.8E5
1.3E5
8.9E4
4.4E4
0.0E0
44:00
45:00
46:00
47:00
48:00
49:00
Time

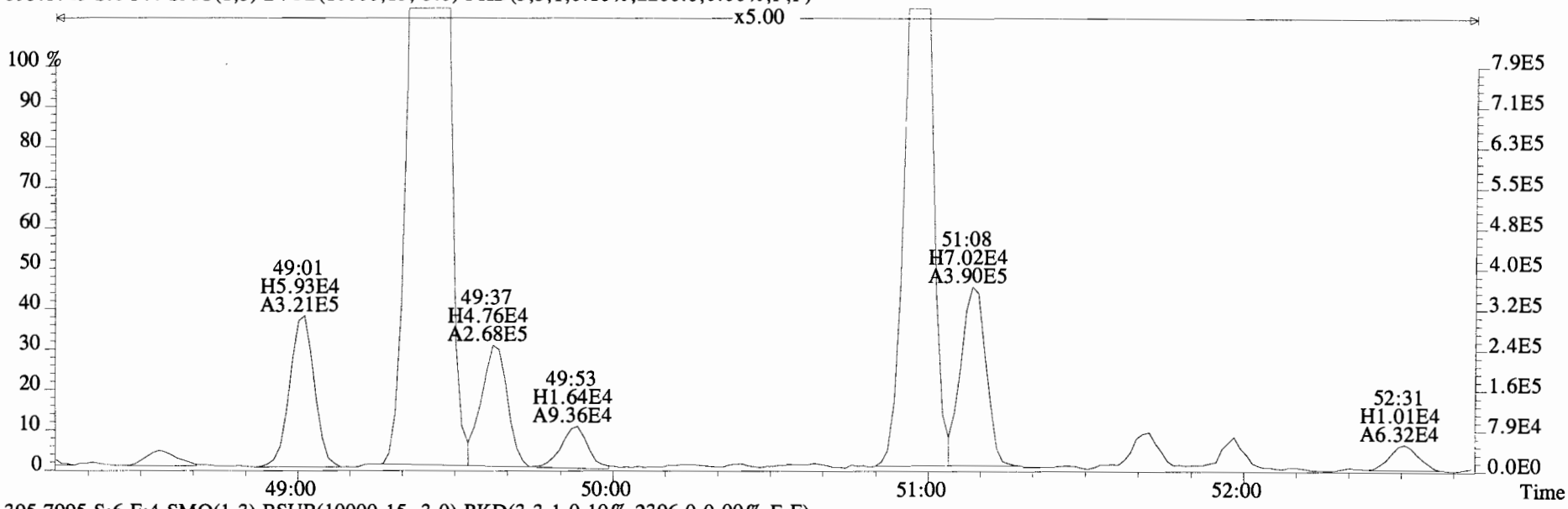
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2200.0,0.00%,F,F)



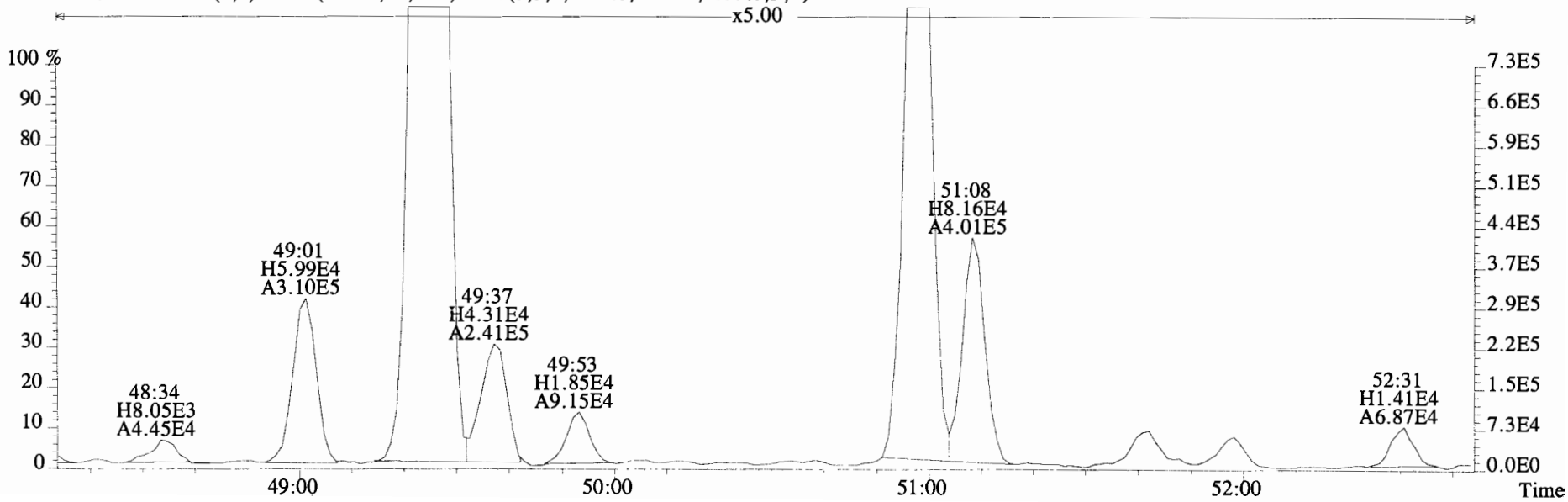
395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2396.0,0.00%,F,F)



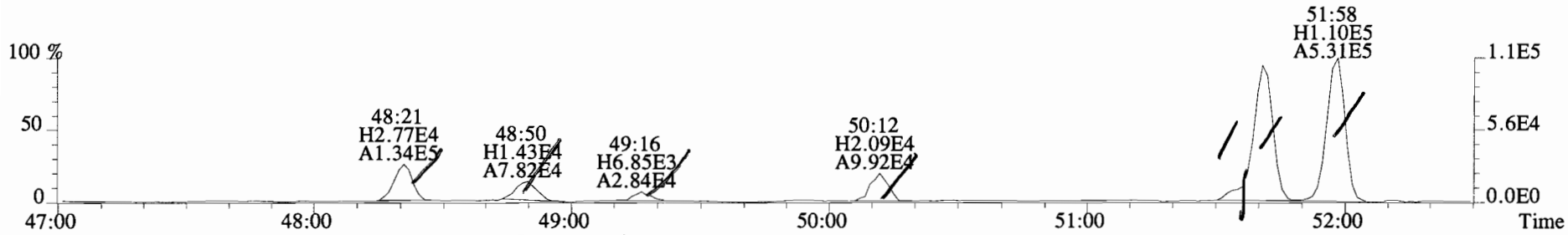
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2200.0,0.00%,F,F)



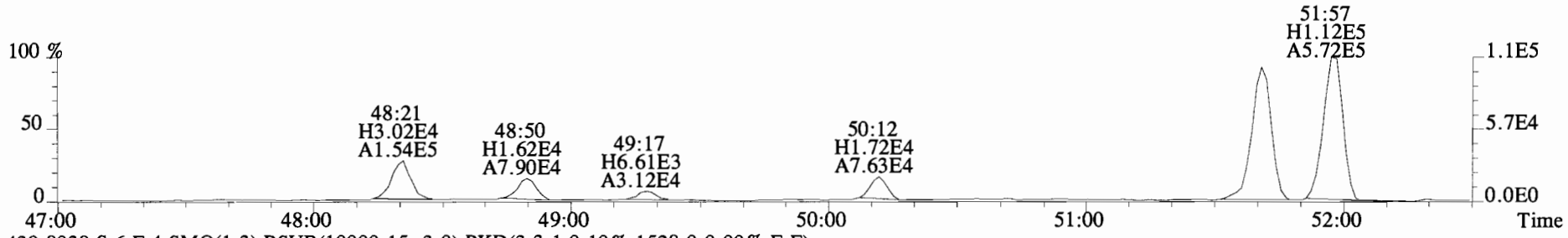
395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2396.0,0.00%,F,F)



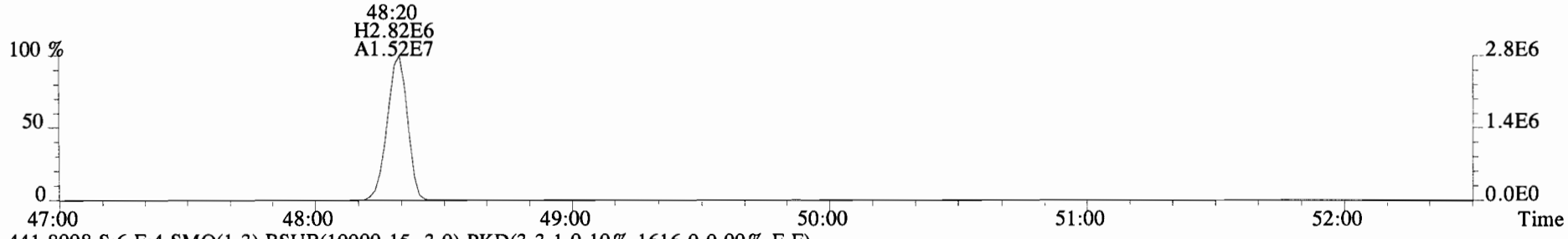
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
427.7635 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1396.0,0.00%,F,F)



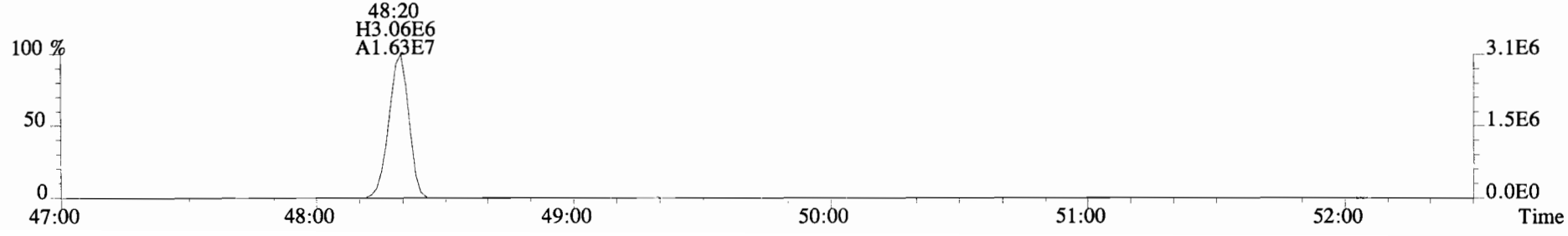
429.7606 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1520.0,0.00%,F,F)



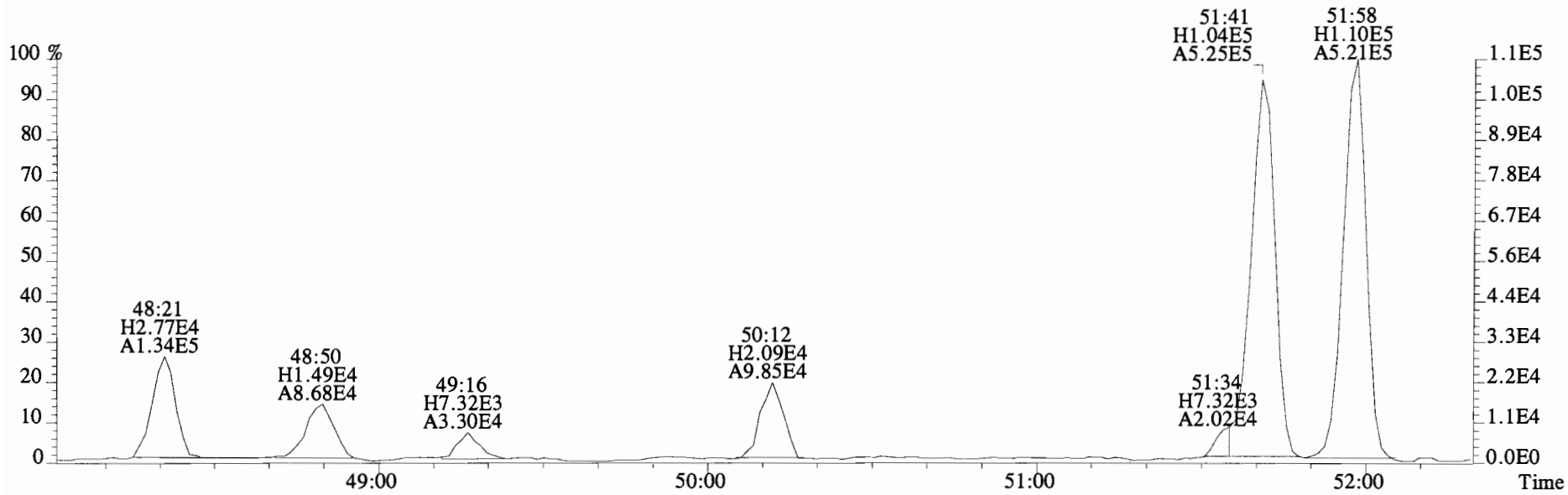
439.8038 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1528.0,0.00%,F,F)



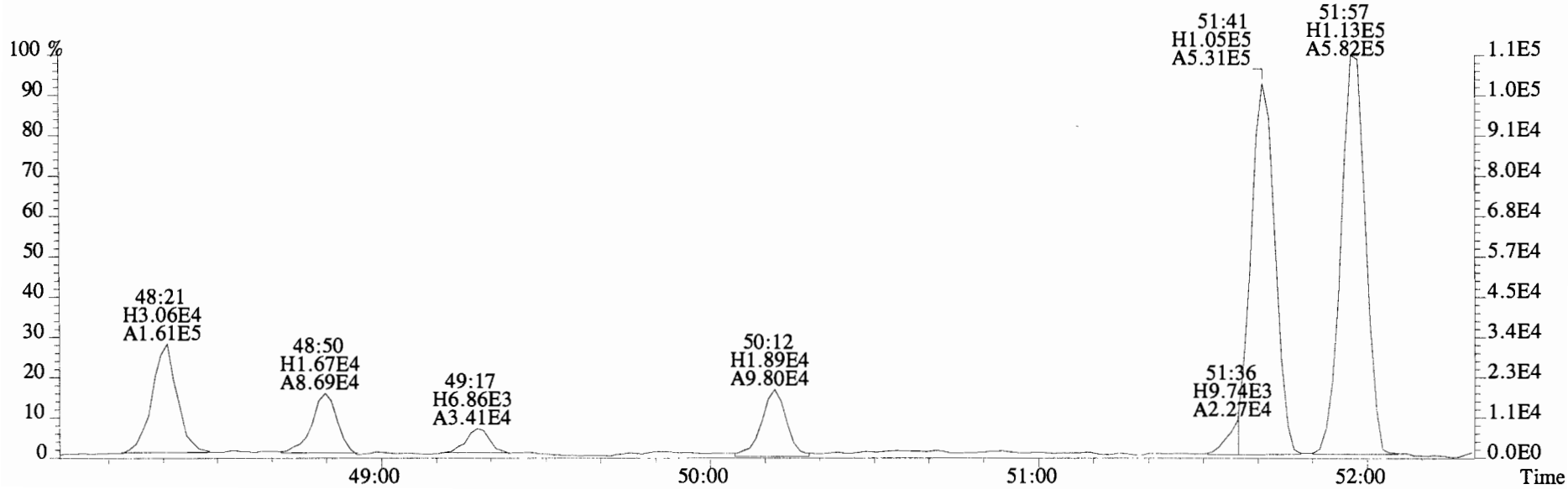
441.8008 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1616.0,0.00%,F,F)



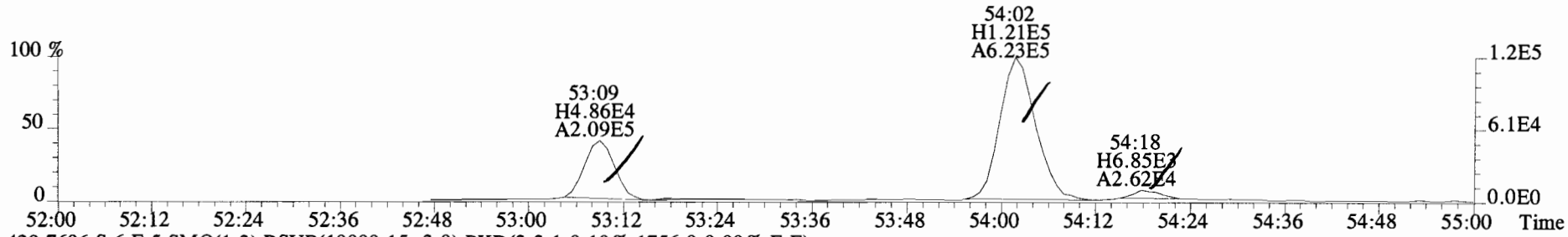
File:141020E1 #1-560 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
427.7635 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1396.0,0.00%,F,F)



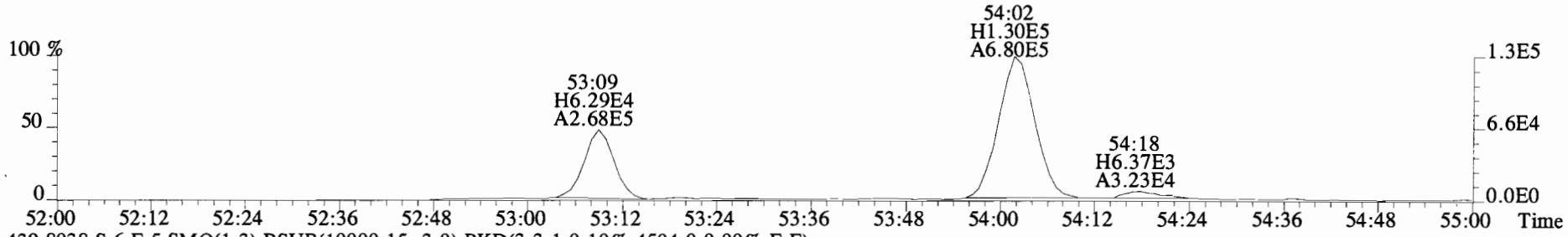
429.7606 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1520.0,0.00%,F,F)



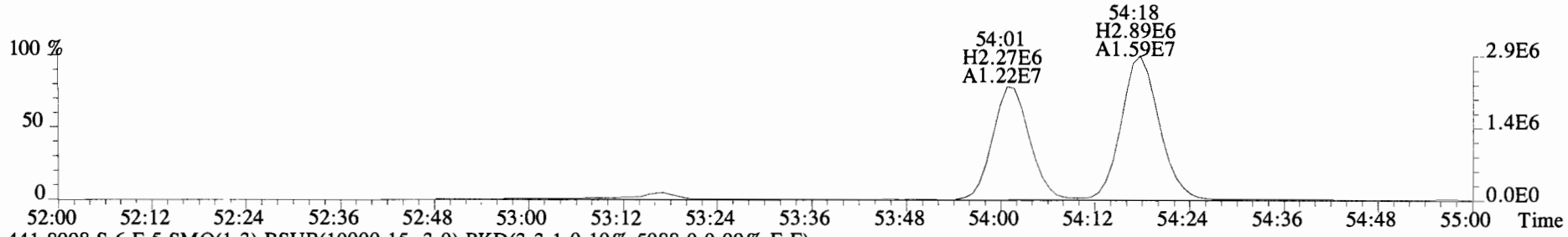
File:141020E1 #1-418 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
427.7635 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2204.0,0.00%,F,F)



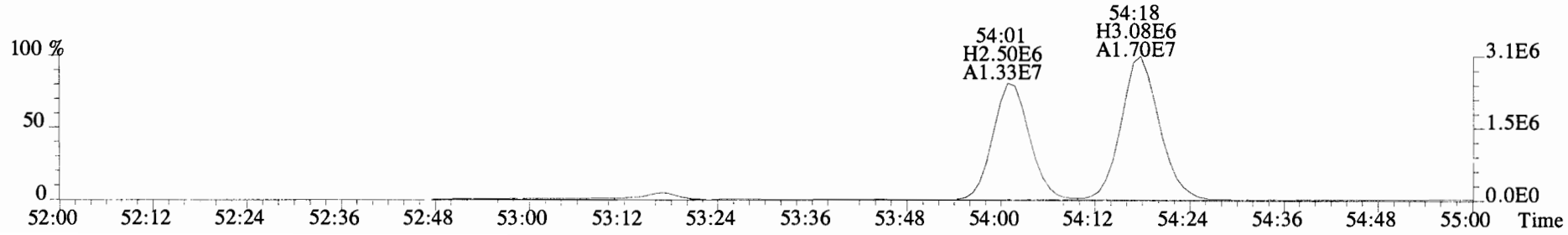
429.7606 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1756.0,0.00%,F,F)



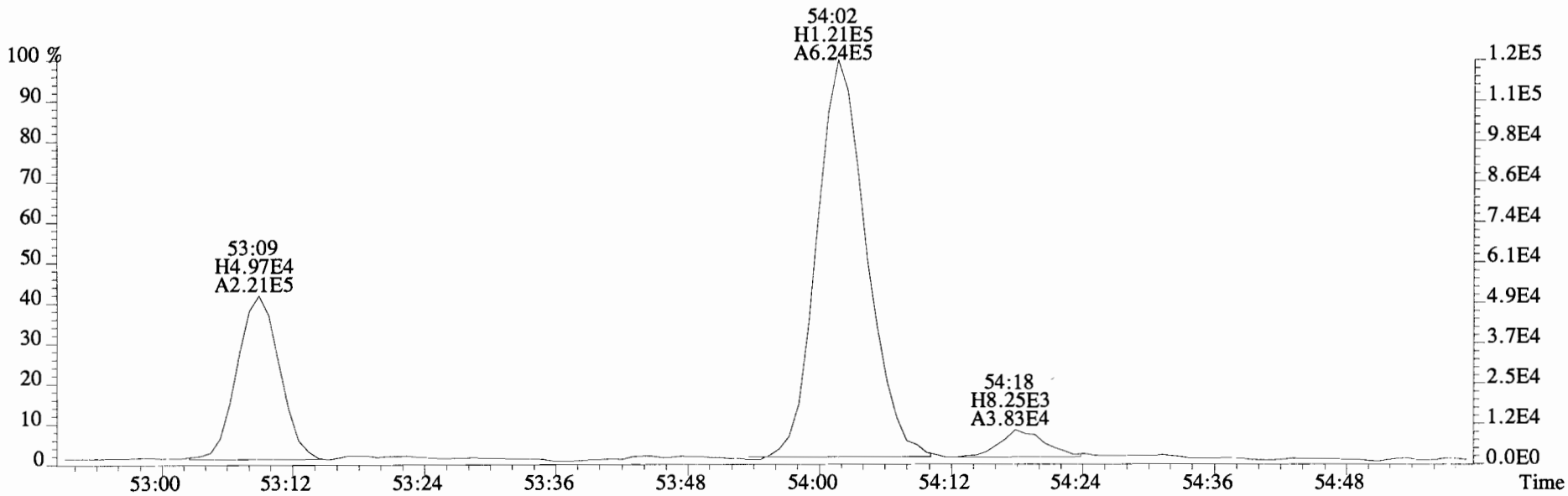
439.8038 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4504.0,0.00%,F,F)



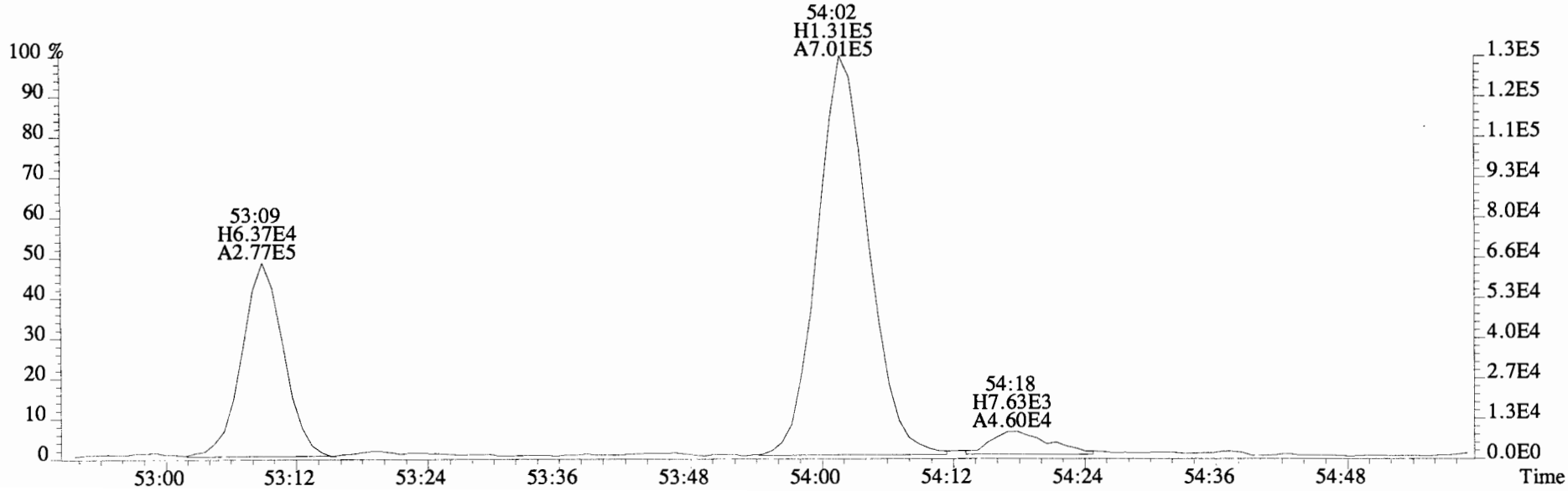
441.8008 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5088.0,0.00%,F,F)



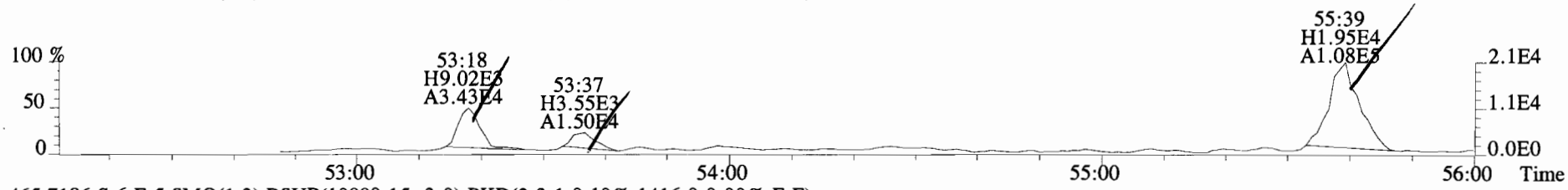
File:141020E1 #1-418 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
427.7635 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0)



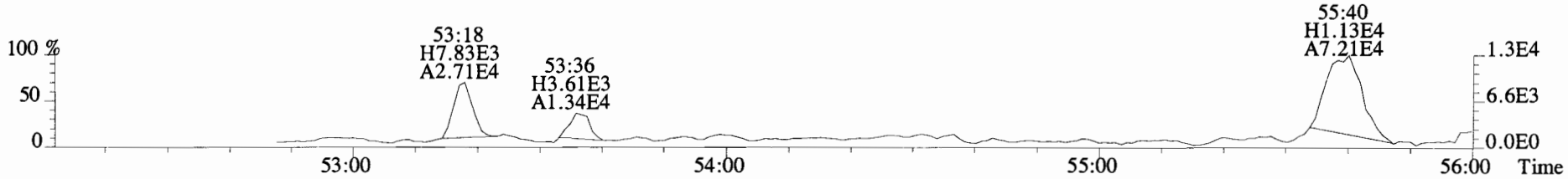
429.7606 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1756.0,0.00%,F,F)



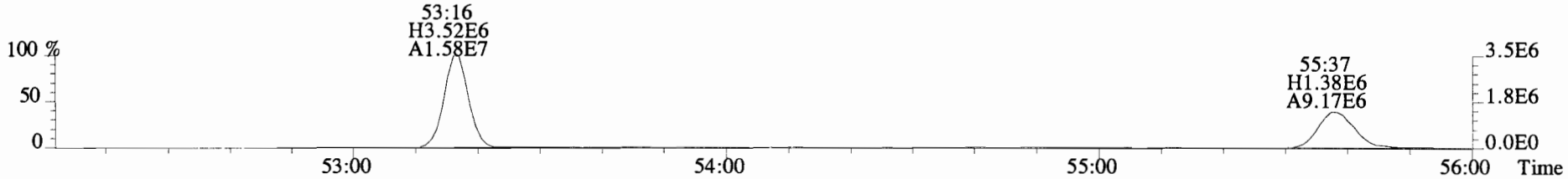
File:141020E1 #1-418 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
463.7216 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1348.0,0.00%,F,F)



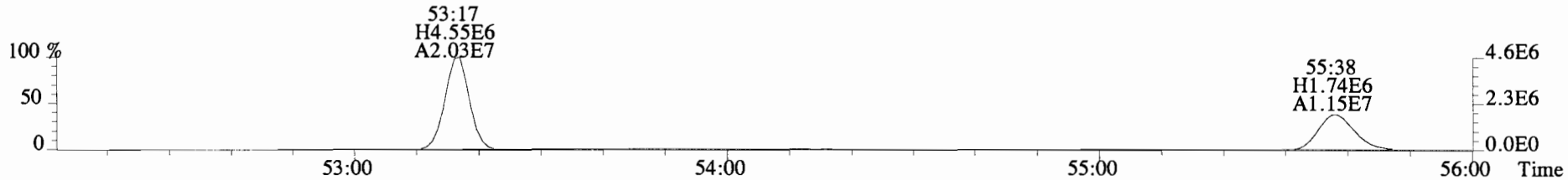
465.7186 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1416.0,0.00%,F,F)



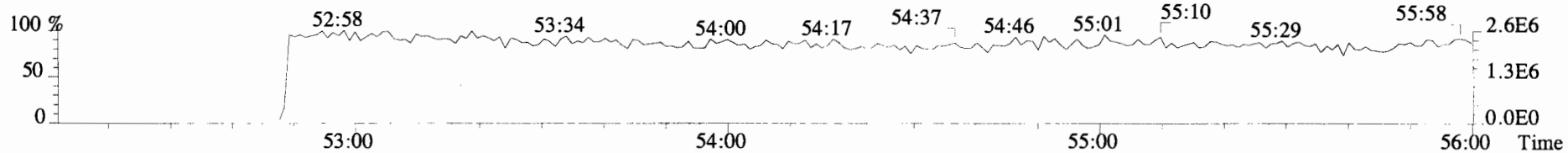
473.7648 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10408.0,0.00%,F,F)



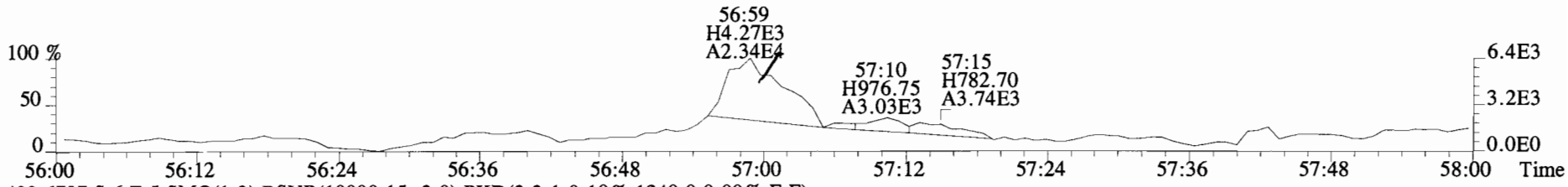
475.7619 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12800.0,0.00%,F,F)



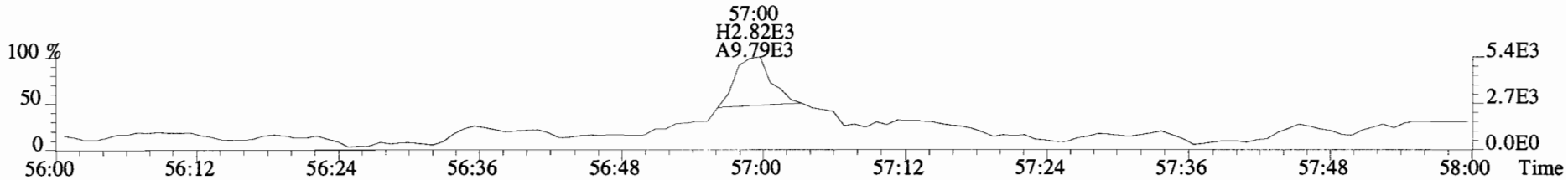
492.9697 S:6 F:5



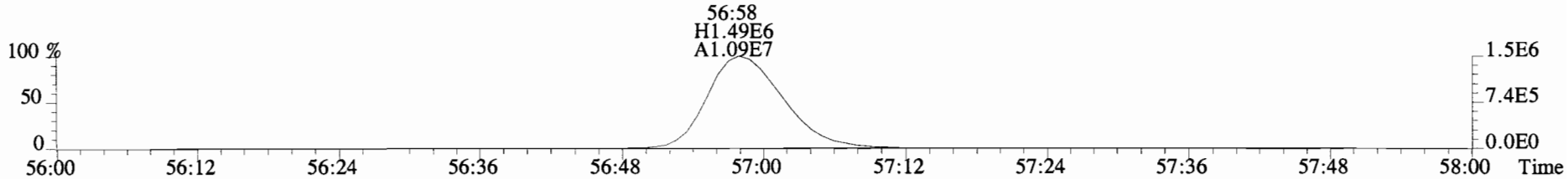
File:141020E1 #1-418 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
497.6826 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1260.0,0.00%,F,F)



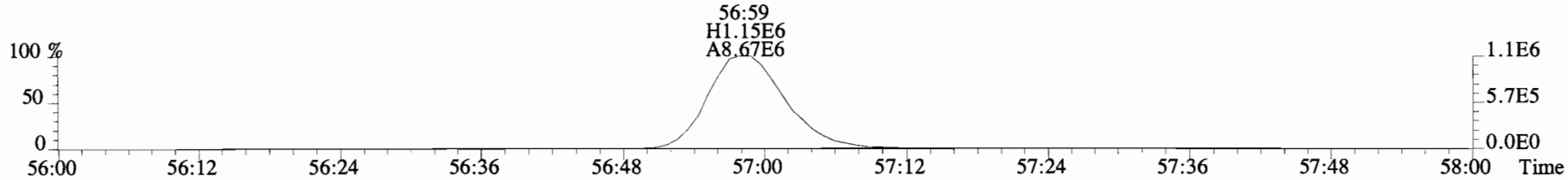
499.6797 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1240.0,0.00%,F,F)



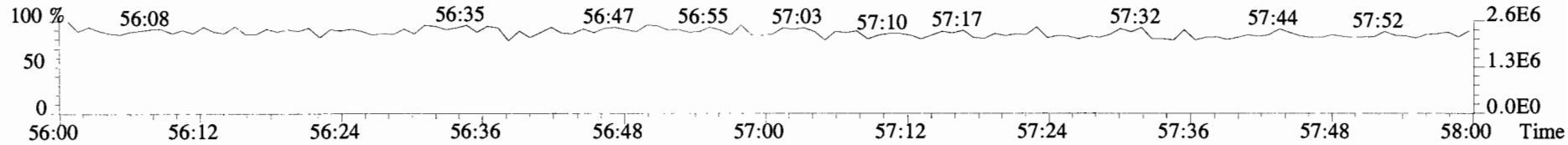
509.7229 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1444.0,0.00%,F,F)



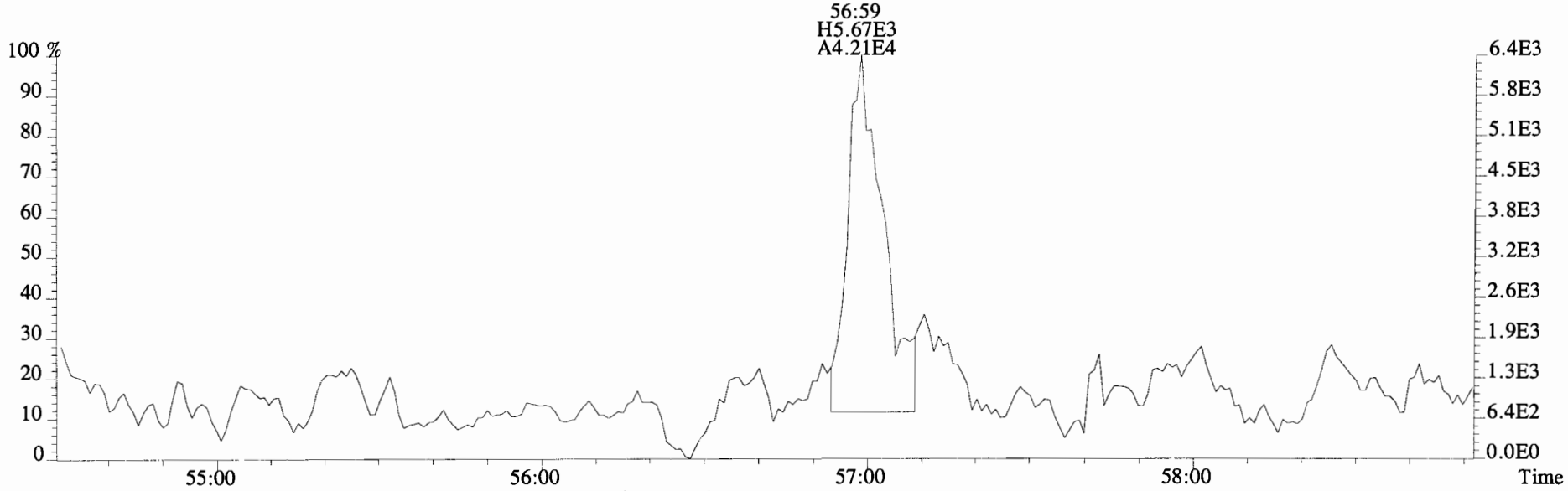
511.7199 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1392.0,0.00%,F,F)



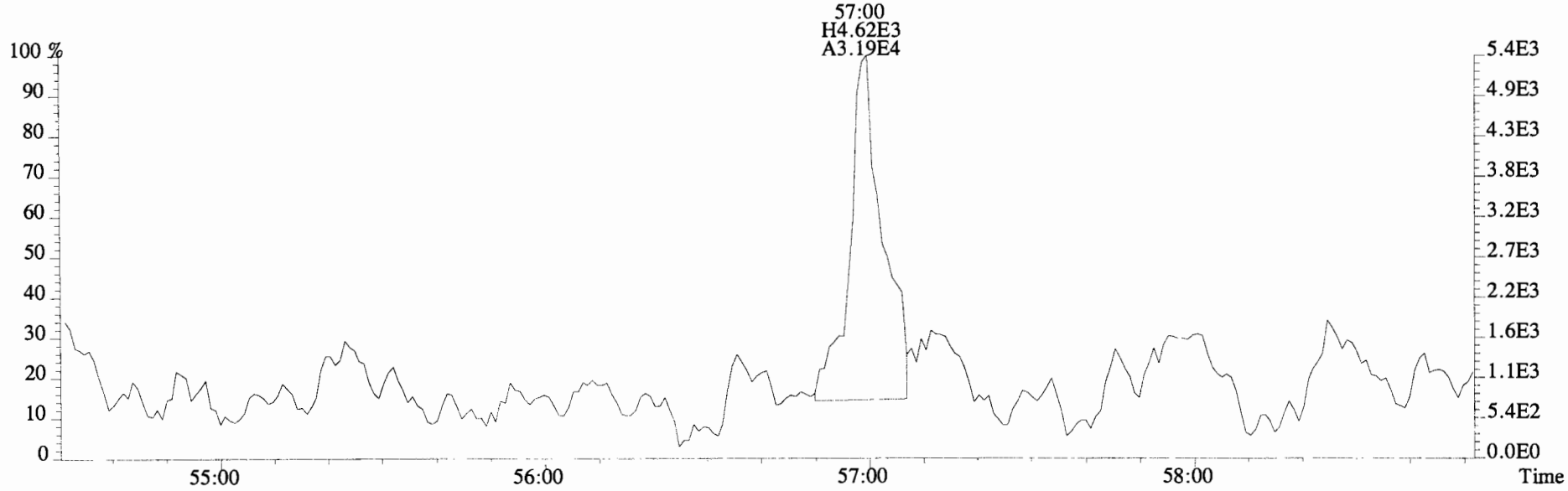
492.9697 S:6 F:5



File:141020E1 #1-418 Acq:20-OCT-2014 17:28:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-01 SP-OWS-01-20141008-W 1 Exp:PCB_ZB1
497.6826 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1260.0,0.00%,F,F)



499.6797 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1240.0,0.00%,F,F)



Client ID: Method Blank Filename: 141028E1 S:4 Acq:28-OCT-14 12:04:30 ConCal: ST141028E1-1
Lab ID: B4J0139-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.000 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n	NotF¶	1.19	*		3170	2.5	13.4	*	0.996	1.006
Mono	PCB-2	*	*	n	NotF¶	1.18	*		3170	2.5	13.0	*	0.984	0.994
Mono	PCB-3	*	*	n	NotF¶	1.43	*		3170	2.5	10.8	*	0.996	1.006
Di	PCB-4/10	*	*	n	NotF¶	1.57	*		10200	2.5	47.6	*	0.997	1.007
Di	PCB-7/9	*	*	n	NotF¶	1.21	*		10200	2.5	39.9	*	0.866	0.874
Di	PCB-6	*	*	n	NotF¶	1.30	*		10200	2.5	37.0	*	0.890	0.899
Di	PCB-5/8	*	*	n	NotF¶	1.15	*		10200	2.5	42.0	*	0.907	0.917
Di	PCB-14	*	*	n	NotF¶	1.11	*		10200	2.5	36.3	*	0.949	0.959
Di	PCB-11	*	*	n	NotF¶	1.09	*		10200	2.5	37.0	*	0.995	1.005
Di	PCB-12/13	*	*	n	NotF¶	1.19	*		10200	2.5	33.7	*	1.011	1.021
Di	PCB-15	*	*	n	NotF¶	1.28	*		10200	2.5	31.4	*	1.023	1.033
Tri	PCB-19	*	*	n	NotF¶	1.04	*		1850	2.5	8.39	*	0.996	1.006
Tri	PCB-30	*	*	n	NotF¶	1.71	*		1850	2.5	5.11	*	1.032	1.042
Tri	PCB-18	*	*	n	NotF¶	0.78	*		1850	2.5	6.57	*	0.949	0.959
Tri	PCB-17	*	*	n	NotF¶	0.92	*		1850	2.5	5.57	*	0.956	0.966
Tri	PCB-24/27	*	*	n	NotF¶	1.19	*		1850	2.5	4.32	*	0.977	0.987
Tri	PCB-16/32	1.34e+05	0.89	y	27:07	0.94	20.2		*	2.5	*	1.001	0.995	1.005
Tri	PCB-34	*	*	n	NotF¶	1.14	*		2360	2.5	8.27	*	0.955	0.965
Tri	PCB-23	*	*	n	NotF¶	1.28	*		2360	2.5	7.34	*	0.959	0.969
Tri	PCB-29	*	*	n	NotF¶	1.08	*		2360	2.5	8.70	*	0.967	0.977
Tri	PCB-26	*	*	n	NotF¶	1.21	*		2360	2.5	7.78	*	0.974	0.984
Tri	PCB-25	*	*	n	NotF¶	1.26	*		2360	2.5	7.44	*	0.979	0.989
Tri	PCB-31	7.29e+04	1.11	y	28:55	1.28	9.77		*	2.5	*	0.997	0.992	1.002
Tri	PCB-28	1.09e+05	1.06	y	29:02	1.71	10.9		*	2.5	*	1.001	0.995	1.005
Tri	PCB-20/21/33	*	*	n	NotF¶	1.08	*		2360	2.5	8.68	*	1.017	1.027
Tri	PCB-22	*	*	n	NotF¶	1.21	*		2360	2.5	7.77	*	1.032	1.042
Tri	PCB-36	*	*	n	NotF¶	1.14	*		2360	2.5	8.61	*	0.928	0.938
Tri	PCB-39	*	*	n	NotF¶	1.12	*		2360	2.5	8.81	*	0.943	0.953
Tri	PCB-38	*	*	n	NotF¶	1.20	*		2360	2.5	8.20	*	0.966	0.976
Tri	PCB-35	*	*	n	NotF¶	1.23	*		2360	2.5	7.98	*	0.982	0.992
Tri	PCB-37	6.32e+04	0.82	n	32:52	1.23	9.30	R	2360	2.5	7.99	1.000	0.995	1.005
Tetra	PCB-54	*	*	n	NotF¶	1.10	*		2200	2.5	7.05	*	0.996	1.006
Tetra	PCB-50	*	*	n	NotF¶	0.88	*		2200	2.5	8.83	*	1.037	1.047
Tetra	PCB-53	*	*	n	NotF¶	1.06	*		2200	2.5	8.21	*	0.942	0.952
Tetra	PCB-51	*	*	n	NotF¶	0.99	*		2200	2.5	8.82	*	0.952	0.962
Tetra	PCB-45	*	*	n	NotF¶	0.86	*		2200	2.5	10.1	*	0.966	0.976
Tetra	PCB-46	*	*	n	NotF¶	0.85	*		2200	2.5	10.3	*	0.981	0.991

Integrations by:

Analyst: DMS

Date: 10/29/14

Reviewed by: [signature]

Date: 10/29/14

Client ID: Method Blank Filename: 141028E1 S:4 Acq:28-OCT-14 12:04:30 ConCal: ST141028E1-1
Lab ID: B4J0139-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.000 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	7.99e+04	1.02	n	31:24	1.28	12.3	R	*	2.5	*	1.000	0.996	1.006
Tetra	PCB-73	*	*	n	NotFnd	1.35	*		2200	2.5	6.45	*	1.000	1.010
Tetra	PCB-43/49	7.35e+04	0.86	y	31:43	0.99	14.6		*	2.5	*	1.010	1.005	1.015
Tetra	PCB-47	*	*	n	NotFnd	1.06	*		2200	2.5	8.39	*	0.996	1.006
Tetra	PCB-48/75	*	*	n	NotFnd	1.23	*		2200	2.5	7.24	*	0.999	1.009
Tetra	PCB-65	*	*	n	NotFnd	1.22	*		2200	2.5	7.26	*	1.008	1.018
Tetra	PCB-62	*	*	n	NotFnd	1.22	*		2200	2.5	7.28	*	1.011	1.021
Tetra	PCB-44	*	*	n	NotFnd	0.86	*		2200	2.5	10.3	*	1.021	1.031
Tetra	PCB-42/59	*	*	n	NotFnd	1.14	*		2200	2.5	7.81	*	1.028	1.038
Tetra	PCB-41/64/71/72	1.31e+05	0.67	y	33:31	1.21	21.6		*	2.5	*	1.051	1.046	1.056
Tetra	PCB-68	*	*	n	NotFnd	1.35	*		2200	2.5	6.59	*	1.054	1.064
Tetra	PCB-40	*	*	n	NotFnd	0.70	*		2200	2.5	12.7	*	1.061	1.071
Tetra	PCB-57	*	*	n	NotFnd	0.98	*		2200	2.5	6.35	*	0.965	0.975
Tetra	PCB-67	*	*	n	NotFnd	1.11	*		2200	2.5	5.62	*	0.974	0.984
Tetra	PCB-58	*	*	n	NotFnd	0.93	*		2200	2.5	6.71	*	0.977	0.987
Tetra	PCB-63	*	*	n	NotFnd	0.95	*		2200	2.5	6.53	*	0.982	0.992
Tetra	PCB-74	1.26e+05	1.08	n	35:11	1.24	14.3	R	*	2.5	*	0.994	0.990	1.000
Tetra	PCB-61/70	2.82e+05	0.72	y	35:25	0.95	41.8		*	2.5	*	1.000	0.995	1.005
Tetra	PCB-76/66	2.52e+05	0.71	y	35:37	1.04	34.2		*	2.5	*	1.006	1.001	1.011
Tetra	PCB-80	*	*	n	NotFnd	1.19	*		2200	2.5	5.30	*	0.996	1.006
Tetra	PCB-55	*	*	n	NotFnd	1.04	*		2200	2.5	6.07	*	1.005	1.015
Tetra	PCB-56/60	2.47e+05	0.86	y	36:39	1.01	34.5		*	2.5	*	1.024	1.019	1.029
Tetra	PCB-79	*	*	n	NotFnd	1.08	*		2200	2.5	5.85	*	1.048	1.058
Tetra	PCB-78	*	*	n	NotFnd	1.27	*		2200	2.5	5.20	*	0.982	0.992
Tetra	PCB-81	*	*	n	NotFnd	1.33	*		2200	2.5	4.97	*	0.995	1.005
Tetra	PCB-77	8.01e+04	0.67	y	39:32	1.10	10.5		*	2.5	*	1.000	0.995	1.005
Penta	PCB-104	*	*	n	NotFnd	1.18	*		2300	2.5	10.3	*	0.996	1.006
Penta	PCB-96	*	*	n	NotFnd	1.14	*		2300	2.5	10.7	*	1.034	1.044
Penta	PCB-103	*	*	n	NotFnd	0.96	*		2300	2.5	12.8	*	1.050	1.060
Penta	PCB-100	*	*	n	NotFnd	0.94	*		2300	2.5	13.0	*	1.061	1.071
Penta	PCB-94	*	*	n	NotFnd	1.06	*		2300	2.5	14.8	*	0.980	0.990
Penta	PCB-95/98/102	1.44e+05	1.51	y	35:43	1.22	27.6		*	2.5	*	1.000	0.995	1.005
Penta	PCB-93	*	*	n	NotFnd	0.84	*		2300	2.5	18.5	*	0.997	1.007
Penta	PCB-88/91	*	*	n	NotFnd	1.12	*		2300	2.5	14.0	*	1.005	1.015
Penta	PCB-121	*	*	n	NotFnd	1.62	*		2300	2.5	9.68	*	1.009	1.019
Penta	PCB-84/92	*	*	n	NotFnd	1.05	*		2300	2.5	13.4	*	0.985	0.995
Penta	PCB-89	*	*	n	NotFnd	1.13	*		2300	2.5	12.4	*	0.991	1.001

Analyst: DMS

Date: 10/29/14

Client ID: Method Blank Filename: 141028E1 S:4 Acq:28-OCT-14 12:04:30 ConCal: ST141028E1-1
Lab ID: B4J0139-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.000 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	1.70e+05	1.81	n 37:23	1.10	32.1	R	*	2.5	*	1.000	0.995	1.005
Penta	PCB-113	*	*	n NotF	1.41	*		2300	2.5	9.96	*	1.002	1.012
Penta	PCB-99	8.23e+04	2.32	n 37:42	1.34	12.8	R	*	2.5	*	1.009	1.004	1.014
Penta	PCB-119	*	*	n NotF	1.53	*		2300	2.5	10.5	*	0.982	0.992
Penta	PCB-108/112	*	*	n NotF	1.28	*		2300	2.5	12.5	*	0.986	0.996
Penta	PCB-83	*	*	n NotF	1.52	*		2300	2.5	10.6	*	0.990	1.000
Penta	PCB-97	*	*	n NotF	1.18	*		2300	2.5	13.6	*	0.995	1.005
Penta	PCB-86	*	*	n NotF	0.84	*		2300	2.5	19.0	*	0.999	1.009
Penta	PCB-87/117/125	*	*	n NotF	1.55	*		2300	2.5	10.3	*	1.002	1.012
Penta	PCB-111/115	*	*	n NotF	1.63	*		2300	2.5	9.81	*	1.006	1.016
Penta	PCB-85/116	*	*	n NotF	1.30	*		2300	2.5	12.3	*	1.010	1.020
Penta	PCB-120	*	*	n NotF	1.68	*		2300	2.5	9.56	*	1.016	1.026
Penta	PCB-110	2.04e+05	1.51	y 39:38	1.56	29.9		*	2.5	*	1.025	1.020	1.030
Penta	PCB-82	*	*	n NotF	0.76	*		2300	2.5	15.8	*	0.971	0.981
Penta	PCB-124	*	*	n NotF	1.47	*		2300	2.5	8.18	*	0.988	0.998
Penta	PCB-107/109	*	*	n NotF	1.32	*		2300	2.5	9.09	*	0.991	1.001
Penta	PCB-123	*	*	n NotF	1.17	*		2300	2.5	10.3	*	0.996	1.006
Penta	PCB-106/118	2.90e+05	1.34	y 41:26	1.17	40.6		*	2.5	*	1.000	0.996	1.006
Penta	PCB-114	*	*	n NotF	1.30	*		2320	2.5	11.2	*	0.995	1.005
Penta	PCB-122	*	*	n NotF	1.12	*		2320	2.5	12.9	*	0.999	1.009
Penta	PCB-105	1.63e+05	1.56	y 42:58	1.30	26.2		*	2.5	*	1.000	0.995	1.005
Penta	PCB-127	*	*	n NotF	1.33	*		2320	2.5	10.1	*	0.996	1.006
Penta	PCB-126	*	*	n NotF	1.18	*		2320	2.5	13.0	*	0.995	1.005
Hexa	PCB-155	*	*	n NotF	1.11	*		2050	2.5	7.68	*	0.966	1.006
Hexa	PCB-150	*	*	n NotF	1.00	*		2050	2.5	8.57	*	1.030	1.040
Hexa	PCB-152	*	*	n NotF	1.12	*		2050	2.5	7.67	*	1.043	1.053
Hexa	PCB-145	*	*	n NotF	1.20	*		2050	2.5	7.12	*	1.055	1.065
Hexa	PCB-136	*	*	n NotF	1.18	*		2050	2.5	7.26	*	1.064	1.074
Hexa	PCB-148	*	*	n NotF	0.74	*		2050	2.5	11.5	*	1.066	1.076
Hexa	PCB-154	*	*	n NotF	0.86	*		2050	2.5	9.97	*	1.080	1.090
Hexa	PCB-151	4.49e+04	0.92	n 40:41	0.75	9.81	R	*	2.5	*	1.102	1.097	1.107
Hexa	PCB-135	*	*	n NotF	0.79	*		2050	2.5	10.8	*	1.103	1.113
Hexa	PCB-144	*	*	n NotF	0.76	*		2050	2.5	11.2	*	1.105	1.117
Hexa	PCB-147	*	*	n NotF	0.82	*		2050	2.5	10.4	*	1.109	1.121
Hexa	PCB-139/149	1.89e+05	1.14	y 41:23	0.76	40.5		*	2.5	*	1.121	1.116	1.128
Hexa	PCB-140	*	*	n NotF	0.72	*		2050	2.5	11.8	*	1.121	1.133
Hexa	PCB-134/143	*	*	n NotF	0.92	*		2290	2.5	13.0	*	0.970	0.980

Analyst: DMS

Date: 10/29/14

Client ID: Method Blank Filename: 141028E1 S:4 Acq:28-OCT-14 12:04:30 ConCal: ST141028E1-1

Lab ID: B4J0139-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.000 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	*	*	n	NotF¶	0.82	*		2290	2.5	14.5	*	0.977	0.987
Hexa	PCB-131	*	*	n	NotF¶	0.91	*		2290	2.5	13.1	*	0.981	0.991
Hexa	PCB-146/165	*	*	n	NotF¶	1.25	*		2290	2.5	9.56	*	0.986	0.996
Hexa	PCB-132/161	*	*	n	NotF¶	1.10	*		2290	2.5	10.8	*	0.992	1.002
Hexa	PCB-153	2.64e+05	1.28	y	43:06	1.25	40.6		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-168	*	*	n	NotF¶	1.45	*		2290	2.5	8.22	*	1.001	1.011
Hexa	PCB-141	*	*	n	NotF¶	1.09	*		2290	2.5	12.0	*	0.995	1.005
Hexa	PCB-137	*	*	n	NotF¶	1.06	*		2290	2.5	12.2	*	1.004	1.014
Hexa	PCB-130	*	*	n	NotF¶	0.96	*		2290	2.5	13.5	*	1.006	1.016
Hexa	PCB-138/163/164	2.46e+05	1.10	y	44:43	1.29	38.1		*	2.5	*	1.000	0.996	1.006
Hexa	PCB-158/160	*	*	n	NotF¶	1.34	*		2290	2.5	9.49	*	1.001	1.011
Hexa	PCB-129	*	*	n	NotF¶	0.85	*		2290	2.5	14.9	*	1.007	1.017
Hexa	PCB-166	*	*	n	NotF¶	1.19	*		2290	2.5	8.95	*	0.988	0.998
Hexa	PCB-159	*	*	n	NotF¶	1.11	*		2290	2.5	9.53	*	0.996	1.006
Hexa	PCB-128/162	*	*	n	NotF¶	1.05	*		2290	2.5	10.1	*	1.002	1.012
Hexa	PCB-167	*	*	n	NotF¶	1.20	*		2290	2.5	8.09	*	0.995	1.005
Hexa	PCB-156	*	*	n	NotF¶	1.14	*		2290	2.5	9.18	*	0.996	1.006
Hexa	PCB-157	*	*	n	NotF¶	1.16	*		2290	2.5	8.64	*	0.995	1.005
Hexa	PCB-169	*	*	n	NotF¶	1.12	*		2290	2.5	8.76	*	0.995	1.005
Hepta	PCB-188	*	*	n	NotF¶	1.58	*		2170	2.5	4.76	*	0.996	1.006
Hepta	PCB-184	*	*	n	NotF¶	1.63	*		2170	2.5	4.62	*	1.006	1.016
Hepta	PCB-179	*	*	n	NotF¶	1.30	*		2170	2.5	5.78	*	1.024	1.034
Hepta	PCB-176	*	*	n	NotF¶	1.48	*		2170	2.5	5.10	*	1.035	1.045
Hepta	PCB-186	*	*	n	NotF¶	1.45	*		2170	2.5	5.18	*	1.050	1.060
Hepta	PCB-178	*	*	n	NotF¶	1.03	*		2170	2.5	7.28	*	1.061	1.071
Hepta	PCB-175	*	*	n	NotF¶	1.01	*		2170	2.5	7.44	*	1.069	1.079
Hepta	PCB-182/187	*	*	n	NotF¶	1.25	*		2170	2.5	6.02	*	1.073	1.083
Hepta	PCB-183	*	*	n	NotF¶	1.21	*		2170	2.5	6.23	*	1.081	1.091
Hepta	PCB-185	*	*	n	NotF¶	1.80	*		2170	2.5	5.39	*	0.951	0.961
Hepta	PCB-174	*	*	n	NotF¶	1.38	*		2170	2.5	7.05	*	0.958	0.968
Hepta	PCB-181	*	*	n	NotF¶	1.38	*		2170	2.5	7.04	*	0.960	0.970
Hepta	PCB-177	*	*	n	NotF¶	1.26	*		2170	2.5	7.74	*	0.963	0.973
Hepta	PCB-171	*	*	n	NotF¶	1.58	*		2170	2.5	6.14	*	0.970	0.980
Hepta	PCB-173	*	*	n	NotF¶	1.11	*		2170	2.5	8.76	*	0.978	0.988
Hepta	PCB-172	*	*	n	NotF¶	1.63	*		2170	2.5	5.94	*	0.987	0.997
Hepta	PCB-192	*	*	n	NotF¶	1.74	*		2170	2.5	5.58	*	0.991	1.001
Hepta	PCB-180	*	*	n	NotF¶	1.34	*		2170	2.5	7.23	*	0.995	1.005

Analyst: DMS

Date: 10/29/14

Client ID: Method Blank Filename: 141028E1 S:4 Acq:28-OCT-14 12:04:30 ConCal: ST141028E1-1
Lab ID: B4J0139-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.000 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	*	*	n	NotF¶	1.72	*		2170	2.5	5.66	*	0.999	1.009
Hepta	PCB-191	*	*	n	NotF¶	1.69	*		2170	2.5	5.74	*	1.004	1.014
Hepta	PCB-170	*	*	n	NotF¶	1.60	*		2170	2.5	6.89	*	0.995	1.005
Hepta	PCB-190	*	*	n	NotF¶	2.21	*		2170	2.5	4.99	*	0.998	1.008
Hepta	PCB-189	*	*	n	NotF¶	1.55	*		2170	2.5	5.96	*	0.995	1.005
Octa	PCB-202	*	*	n	NotF¶	1.08	*		1900	2.5	6.89	*	0.995	1.005
Octa	PCB-201	*	*	n	NotF¶	1.15	*		1900	2.5	6.49	*	1.005	1.015
Octa	PCB-204	*	*	n	NotF¶	1.14	*		1900	2.5	6.55	*	1.008	1.018
Octa	PCB-197	*	*	n	NotF¶	1.07	*		1900	2.5	6.95	*	1.015	1.025
Octa	PCB-200	*	*	n	NotF¶	1.06	*		1900	2.5	7.01	*	1.032	1.044
Octa	PCB-198	*	*	n	NotF¶	0.76	*		1900	2.5	9.88	*	1.059	1.069
Octa	PCB-199	*	*	n	NotF¶	0.80	*		1900	2.5	9.35	*	1.061	1.071
Octa	PCB-196/203	*	*	n	NotF¶	0.80	*		1900	2.5	9.31	*	1.066	1.076
Octa	PCB-195	*	*	n	NotF¶	1.23	*		1720	2.5	11.8	*	0.979	0.989
Octa	PCB-194	*	*	n	NotF¶	1.21	*		1720	2.5	12.0	*	0.995	1.005
Octa	PCB-205	*	*	n	NotF¶	1.54	*		1720	2.5	9.42	*	1.001	1.011
Nona	PCB-208	*	*	n	NotF¶	0.93	*		1360	2.5	5.82	*	0.995	1.005
Nona	PCB-207	*	*	n	NotF¶	1.08	*		1360	2.5	5.00	*	1.001	1.011
Nona	PCB-206	*	*	n	NotF¶	1.02	*		1360	2.5	14.1	*	0.995	1.005
Deca	PCB-209	*	*	n	NotF¶	1.17	*		1300	2.5	17.5	*	0.995	1.005

Analyst: DMS

Date: 10/29/14

Client ID: Method Blank Filename: 141028E1 S:4 Acq:28-OCT-14 12:04:30 ConCal: ST141028E1-1
Lab ID: B4J0139-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	*	*	n	NotFnd	1.27	*	
Total Di-PCB	*	*	n	NotFnd	1.21	*	
Total Tri-PCB	1.34e+05	0.89	y	27:07	1.10	20.1800	
Total Tri-PCB	1.82e+05	1.11	y	28:55	1.21	20.7150	Sum:40.8950
Total Tetra-PCB	1.07e+06	0.86	y	31:43	1.09	157.234	
Total Penta-PCB	6.39e+05	1.51	y	35:43	1.18	98.1448	
Total Penta-PCB	1.63e+05	1.56	y	42:58	1.25	26.2395	Sum:124.384
Total Hexa-PCB	1.89e+05	1.14	y	41:23	0.90	40.5408	
Total Hexa-PCB	5.10e+05	1.28	y	43:06	1.11	78.6975	Sum:119.238
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	*	*	n	NotFnd	1.17	*	

Total PCB Conc: ~~532.351~~ 443000
442

Integrations by Analyst: DMS
Date: 10/29/14

Client ID: Method Blank Filename: 141028E1 S:4 Acq:28-OCT-14 12:04:30 ConCal: ST141028E1-1
Lab ID: B4J0139-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:1.0000 EndCAL: NA

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	3.24e+08	3.23 y	0.87	16:26	0.634	0.629	0.635	38000	76.0
13C-PCB-3	3.93e+08	3.27 y	0.91	18:55	0.730	0.725	0.733	44100	88.2
13C-PCB-4	1.73e+08	1.58 y	0.59	20:12	0.779	0.775	0.783	30100	60.2
13C-PCB-9	2.69e+08	1.57 y	0.90	21:55	0.846	0.842	0.850	30700	61.5
13C-PCB-11	3.08e+08	1.52 y	0.94	25:13	0.973	0.968	0.978	33600	67.1
13C-PCB-19	2.13e+08	1.07 y	0.53	24:15	0.936	0.930	0.940	41000	82.0
13C-PCB-28	2.90e+08	1.01 y	0.93	29:01	1.004	0.999	1.009	40000	79.9
13C-PCB-32	3.53e+08	1.07 y	0.80	27:05	1.045	1.040	1.050	45400	90.7
13C-PCB-37	2.76e+08	1.03 y	0.84	32:52	1.137	1.131	1.143	42200	84.4
13C-PCB-47	2.51e+08	0.76 y	0.81	31:54	0.870	0.866	0.874	34000	67.9
13C-PCB-52	2.53e+08	0.79 y	0.77	31:24	0.857	0.853	0.861	36000	72.0
13C-PCB-54	2.81e+08	0.78 y	0.97	27:56	0.762	0.758	0.766	31800	63.7
13C-PCB-70	3.54e+08	0.78 y	1.00	35:24	0.966	0.961	0.971	38900	77.9
13C-PCB-77	3.47e+08	0.77 y	0.94	39:31	1.078	1.073	1.083	40500	80.9
13C-PCB-80	3.55e+08	0.78 y	1.03	35:48	0.977	0.972	0.982	37800	75.7
13C-PCB-81	3.42e+08	0.78 y	0.92	38:55	1.062	1.057	1.067	40800	81.7
13C-PCB-95	2.13e+08	1.59 y	0.74	35:42	0.913	0.908	0.918	35900	71.8
13C-PCB-97	2.20e+08	1.60 y	0.70	38:40	0.989	0.984	0.994	38900	77.8
13C-PCB-101	2.40e+08	1.58 y	0.78	37:22	0.956	0.951	0.961	38300	76.5
13C-PCB-104	2.73e+08	1.61 y	1.00	32:33	0.833	0.828	0.836	34000	68.0
13C-PCB-105	2.39e+08	1.56 y	1.37	42:57	0.928	0.924	0.934	29300	58.6
13C-PCB-114	2.45e+08	1.55 y	1.36	42:05	0.910	0.905	0.915	30100	60.1
13C-PCB-118	3.05e+08	1.59 y	0.96	41:25	1.060	1.054	1.064	39600	79.2
13C-PCB-123	2.90e+08	1.60 y	0.89	41:15	1.055	1.050	1.060	40500	81.0
13C-PCB-126	2.39e+08	1.54 y	1.31	45:12	0.977	0.972	0.982	30500	61.1
13C-PCB-127	2.58e+08	1.54 y	1.47	43:17	0.936	0.931	0.941	29300	58.6
13C-PCB-138	2.50e+08	1.26 y	1.10	44:42	0.966	0.961	0.971	38000	76.1
13C-PCB-141	2.40e+08	1.27 y	1.07	43:50	0.947	0.943	0.953	37400	74.8
13C-PCB-153	2.60e+08	1.26 y	1.15	43:06	0.932	0.927	0.937	37900	75.9
13C-PCB-155	3.06e+08	1.26 y	0.84	36:55	0.945	0.939	0.949	45500	90.9
13C-PCB-156	3.11e+08	1.28 y	1.30	47:59	1.037	1.032	1.042	40000	80.0
13C-PCB-157	3.29e+08	1.28 y	1.36	48:15	1.043	1.038	1.048	40500	80.9
13C-PCB-159	2.93e+08	1.26 y	1.25	45:59	0.994	0.989	0.999	39300	78.6
13C-PCB-167	3.23e+08	1.26 y	1.35	46:40	1.009	1.004	1.014	40000	80.0
13C-PCB-169	3.33e+08	1.26 y	1.29	50:18	1.087	1.083	1.093	43300	86.5
13C-PCB-170	1.67e+08	0.45 y	0.54	50:38	1.094	1.089	1.101	51400	103
13C-PCB-180	2.04e+08	0.46 y	0.68	49:15	1.064	1.060	1.070	49800	99.6
13C-PCB-188	2.43e+08	0.45 y	0.92	42:44	0.924	0.919	0.929	44200	88.4
13C-PCB-189	2.21e+08	0.45 y	0.72	52:04	1.125	1.120	1.132	51600	103
13C-PCB-194	1.59e+08	0.90 y	0.80	53:36	0.994	0.990	1.000	40900	81.8
13C-PCB-202	2.92e+08	0.91 y	0.84	48:11	1.041	1.036	1.046	58200	116
13C-PCB-206	1.48e+08	0.78 y	0.65	55:20	1.027	1.021	1.031	47000	94.0
13C-PCB-208	2.48e+08	0.77 y	1.08	52:50	0.980	0.976	0.986	47200	94.4
13C-PCB-209	1.41e+08	1.18 y	0.61	56:36	1.050	1.045	1.055	47600	95.2

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	3.69e+08	0.78 y	1.02	37:41	1.028	1.023	1.034	39900	79.8
13C-PCB-178	1.70e+08	0.46 y	0.61	45:32	0.984	0.979	0.990	46400	92.8

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	3.69e+08	0.78 y	1.10	37:41	0.968	0.964	0.974	48800	97.6
13C-PCB-178	1.70e+08	0.46 y	0.90	45:32	0.925	0.920	0.930	46500	93.1

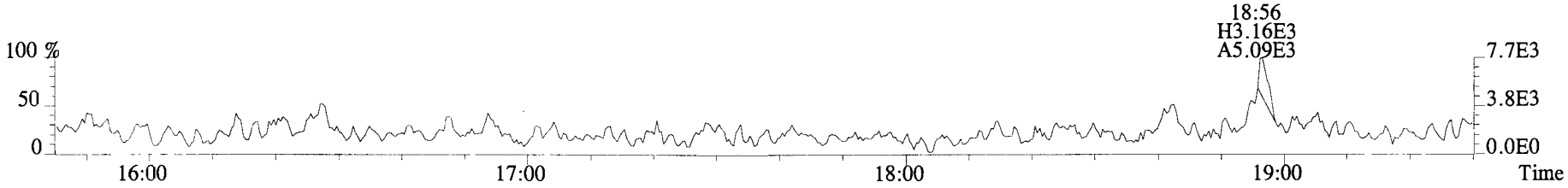
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	4.89e+08	1.53	y	1.00	25:55	50000
13C-PCB-31	3.89e+08	1.01	y	1.00	28:54	50000
13C-PCB-60	4.55e+08	0.77	y	1.00	36:39	50000
13C-PCB-111	4.01e+08	1.59	y	1.00	39:05	50000
13C-PCB-128	2.99e+08	1.26	y	1.00	46:16	50000
13C-PCB-205	2.43e+08	0.91	y	1.00	53:54	50000

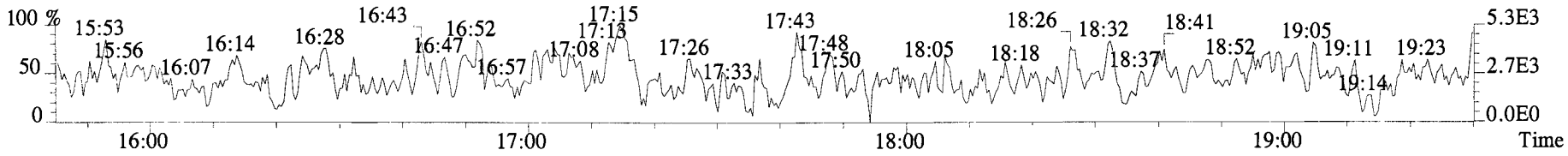
Analyst: DMS

Date: 10/29/14

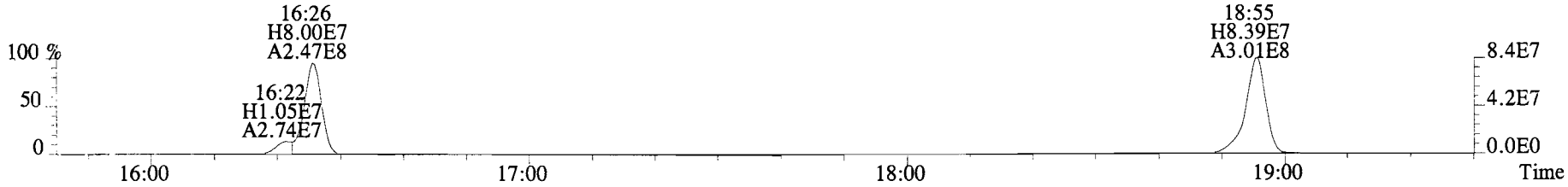
File:141028E1 #1-729 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
188.0393 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2192.0,0.00%,F,F)



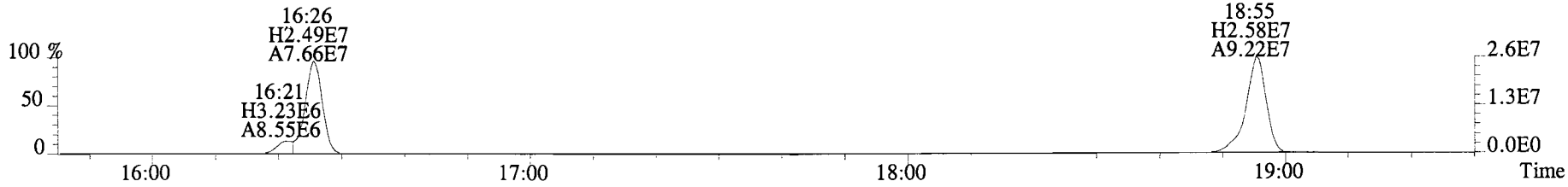
190.0363 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3172.0,0.00%,F,F)



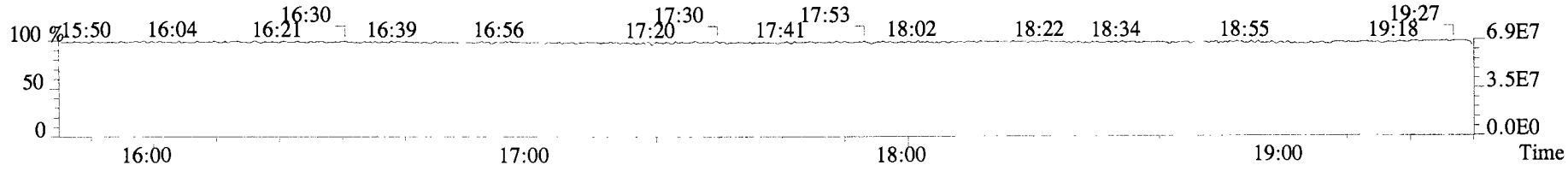
200.0795 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5924.0,0.00%,F,F)



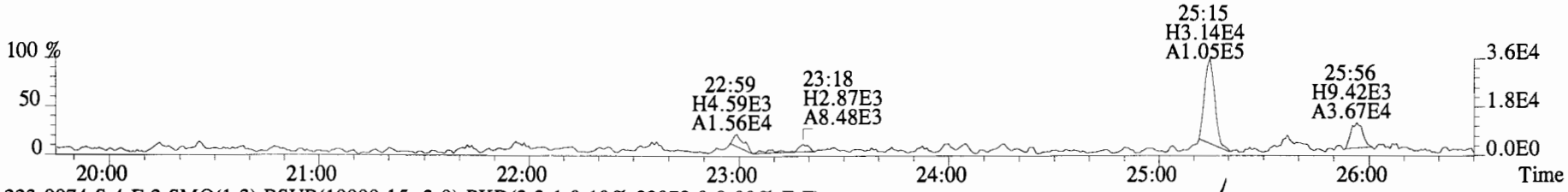
202.0766 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,31864.0,0.00%,F,F)



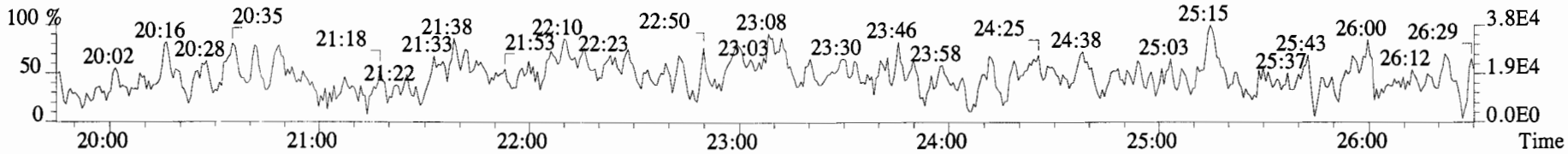
180.9880 S:4



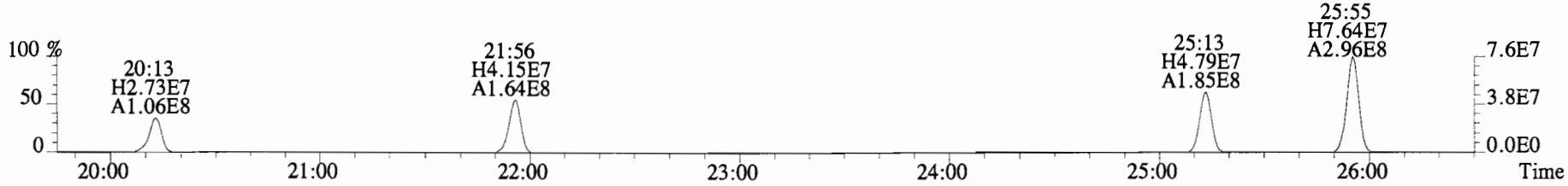
File:141028E1 #1-757 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2472.0,0.00%,F,F)



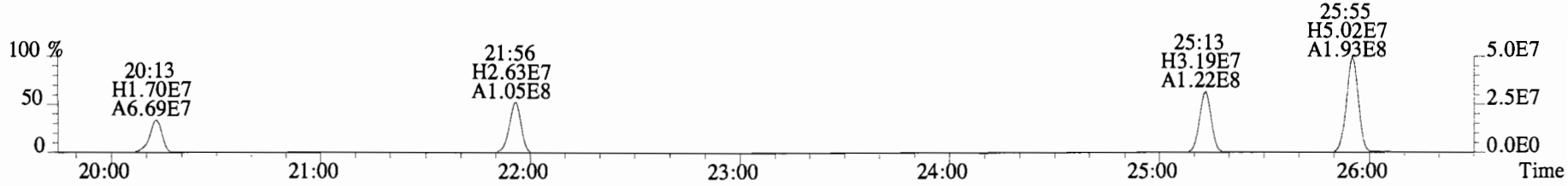
223.9974 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,22072.0,0.00%,F,F)



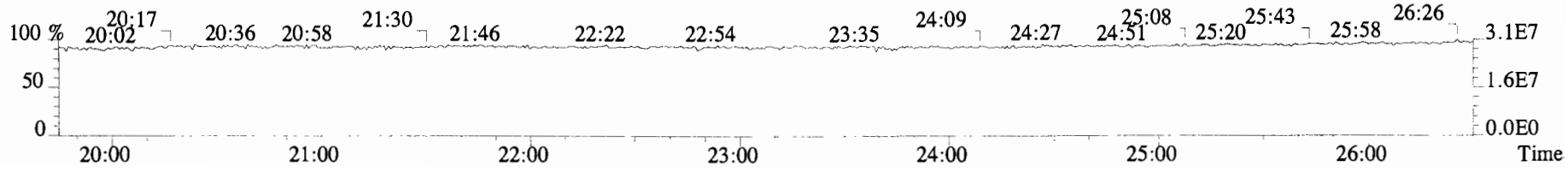
234.0406 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5608.0,0.00%,F,F)



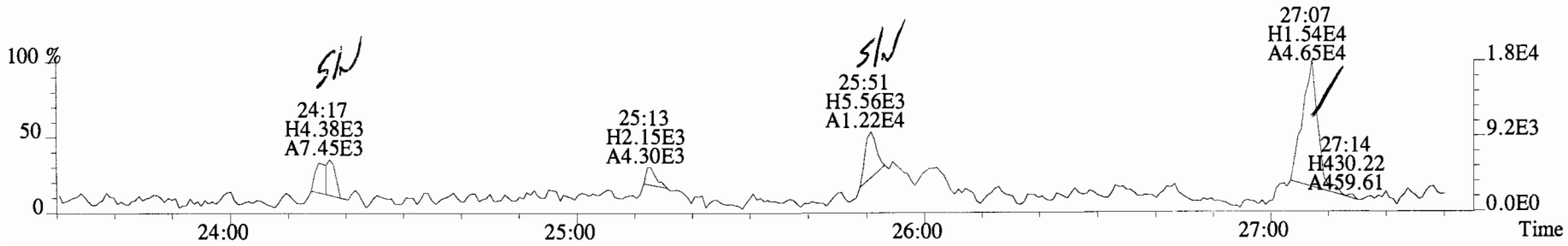
236.0376 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7028.0,0.00%,F,F)



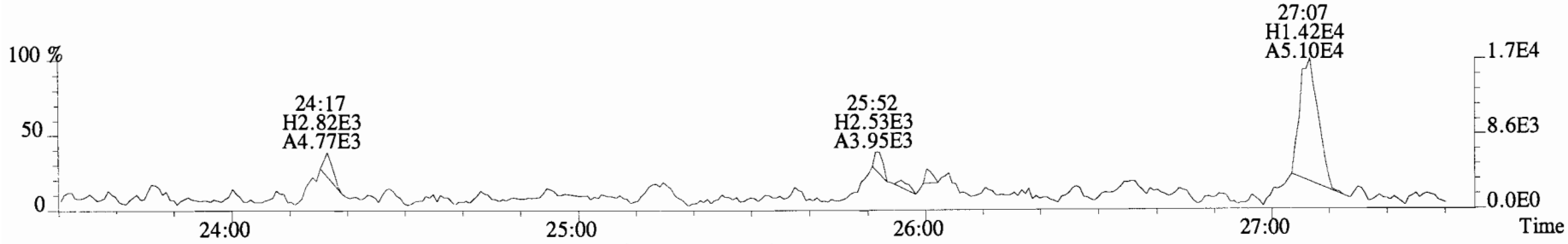
230.9856 S:4 F:2



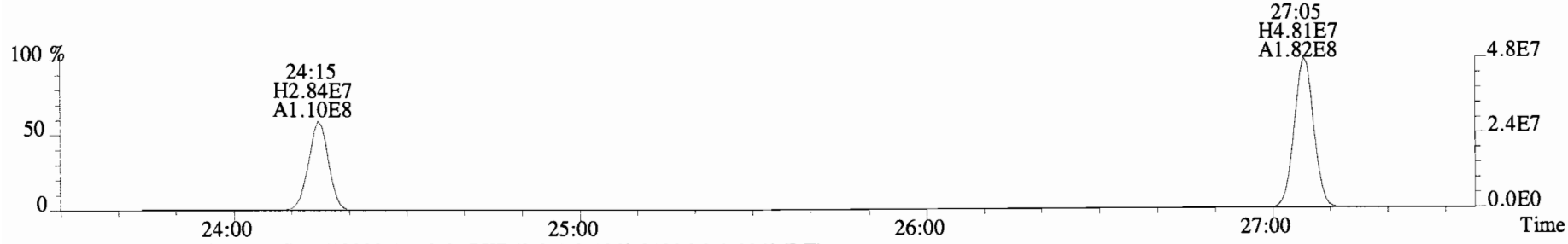
File:141028E1 #1-757 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2292.0,0.00%,F,F)



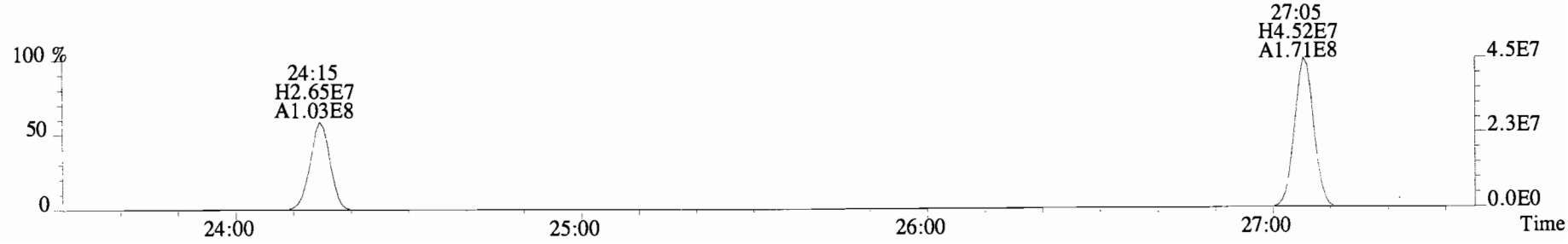
257.9584 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1852.0,0.00%,F,F)



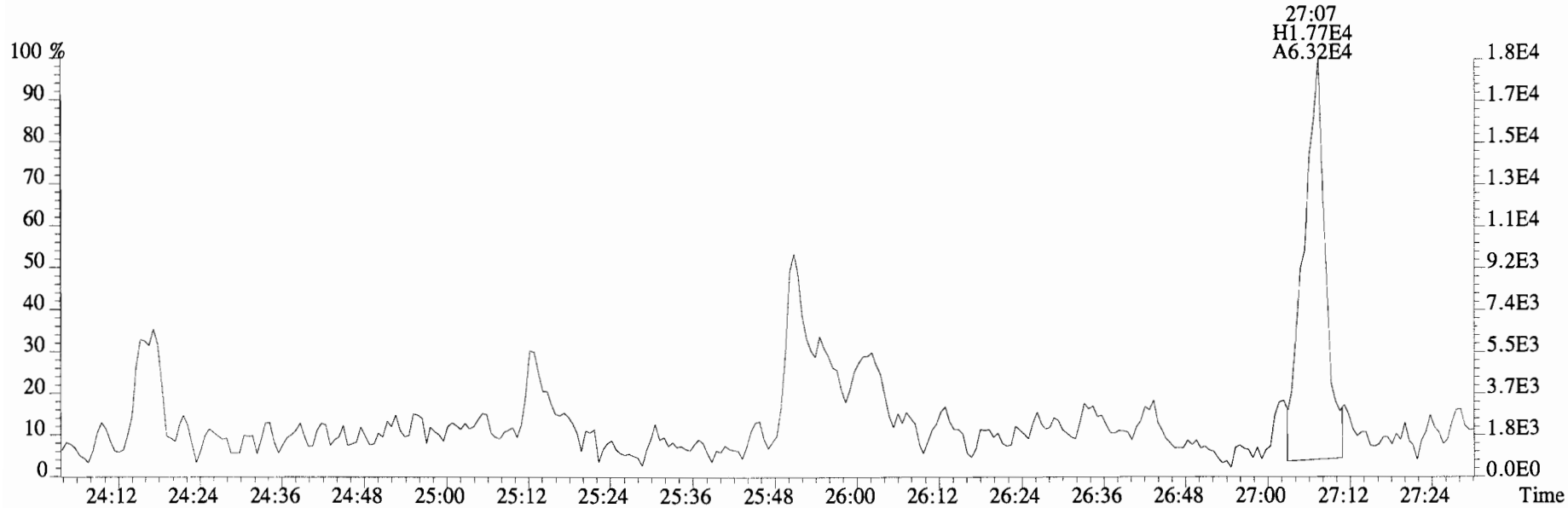
268.0016 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,56692.0,0.00%,F,F)



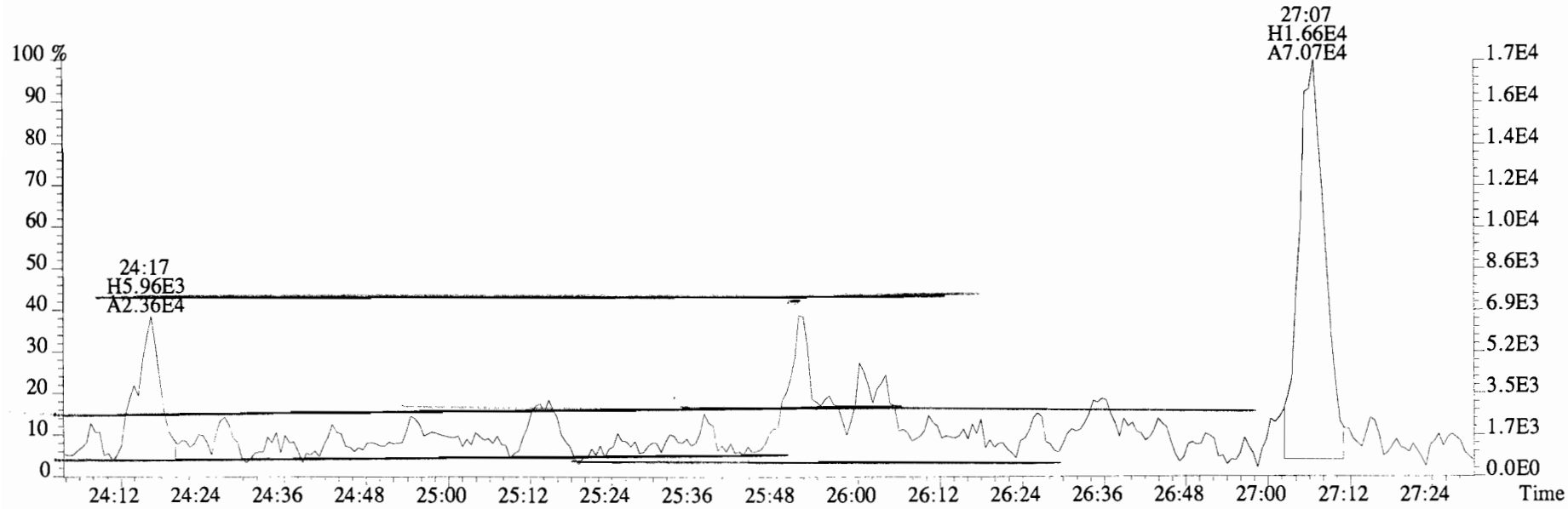
269.9986 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,31336.0,0.00%,F,F)



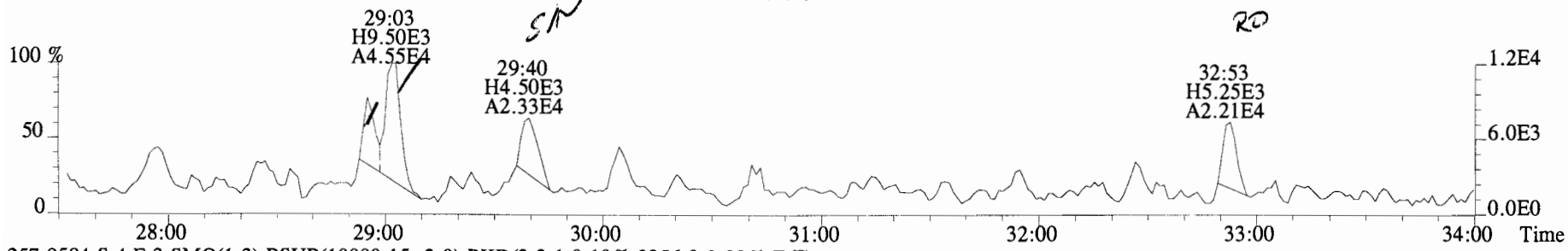
File:141028E1 #1-757 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2292.0,0.00%,F,F)



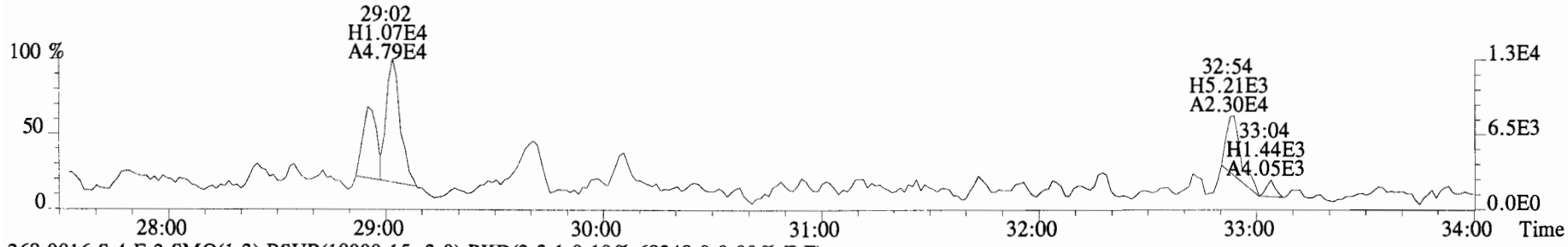
257.9584 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1852.0,0.00%,F,F)



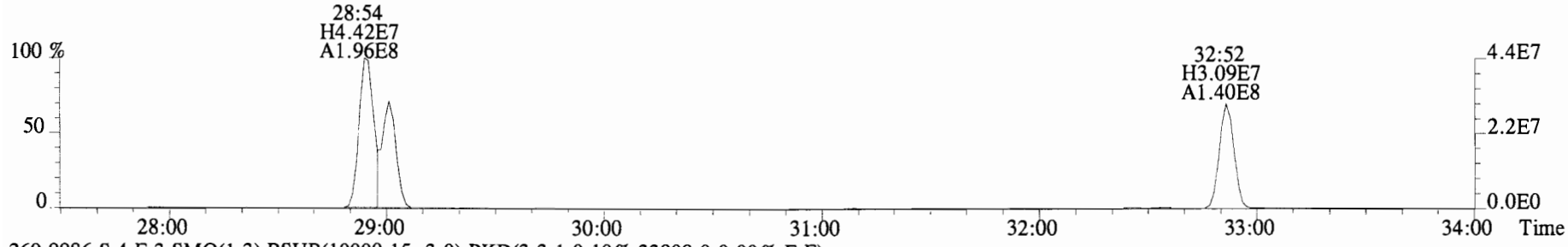
File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2336.0,0.00%,F,F)



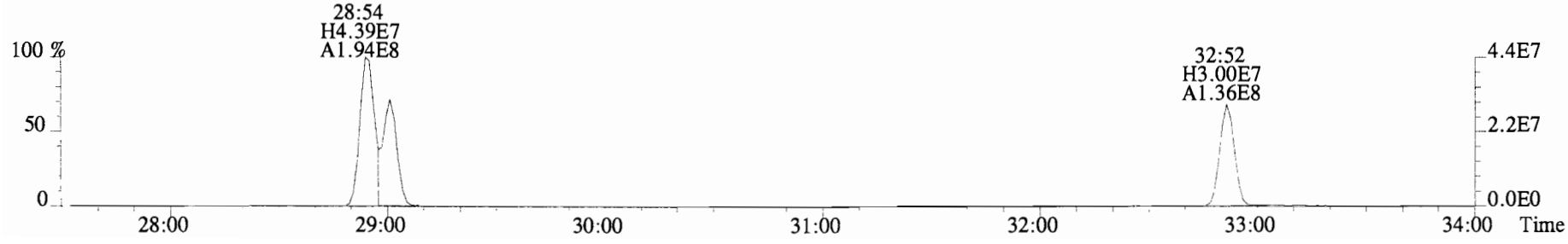
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2356.0,0.00%,F,F)

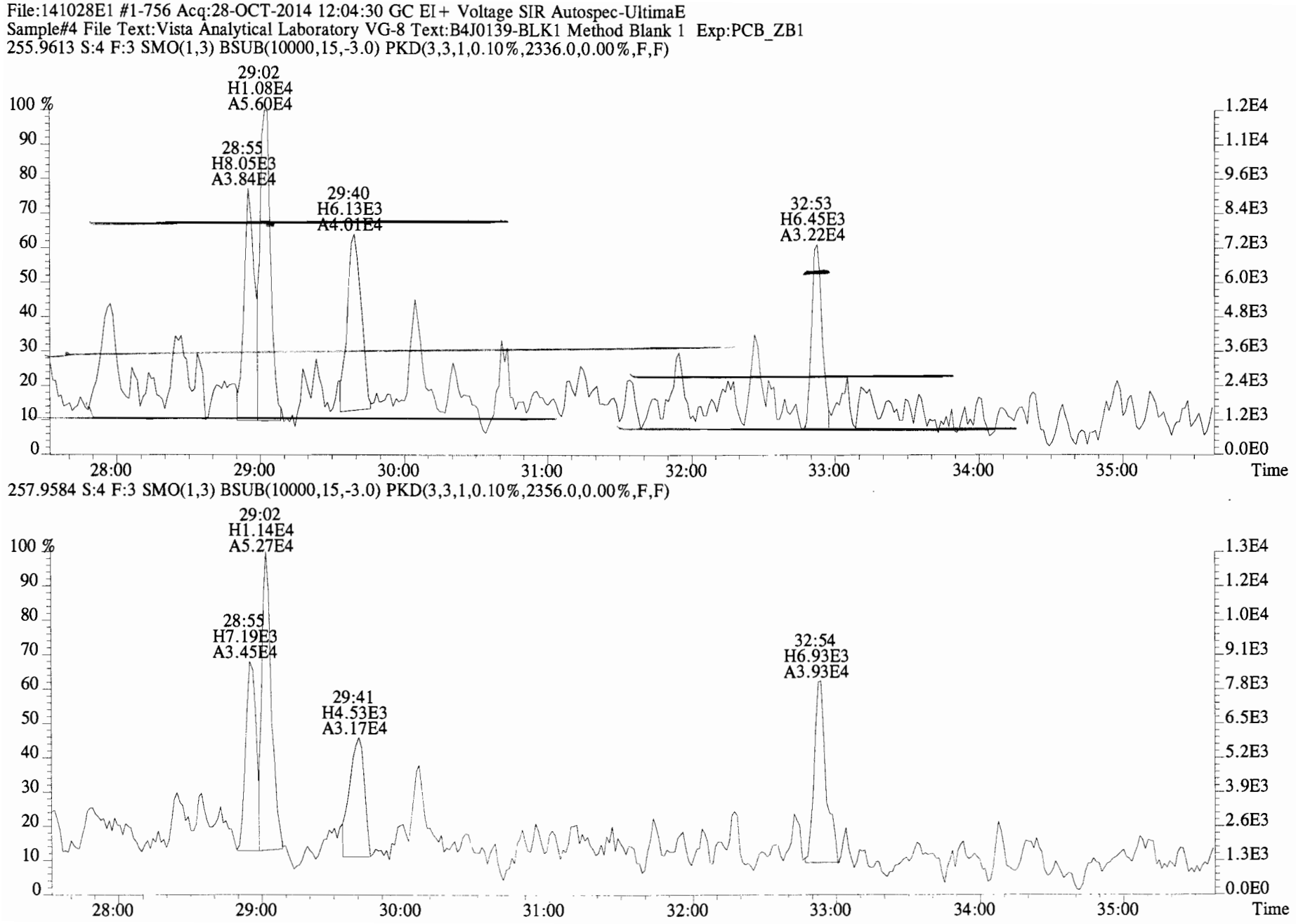


268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,68348.0,0.00%,F,F)

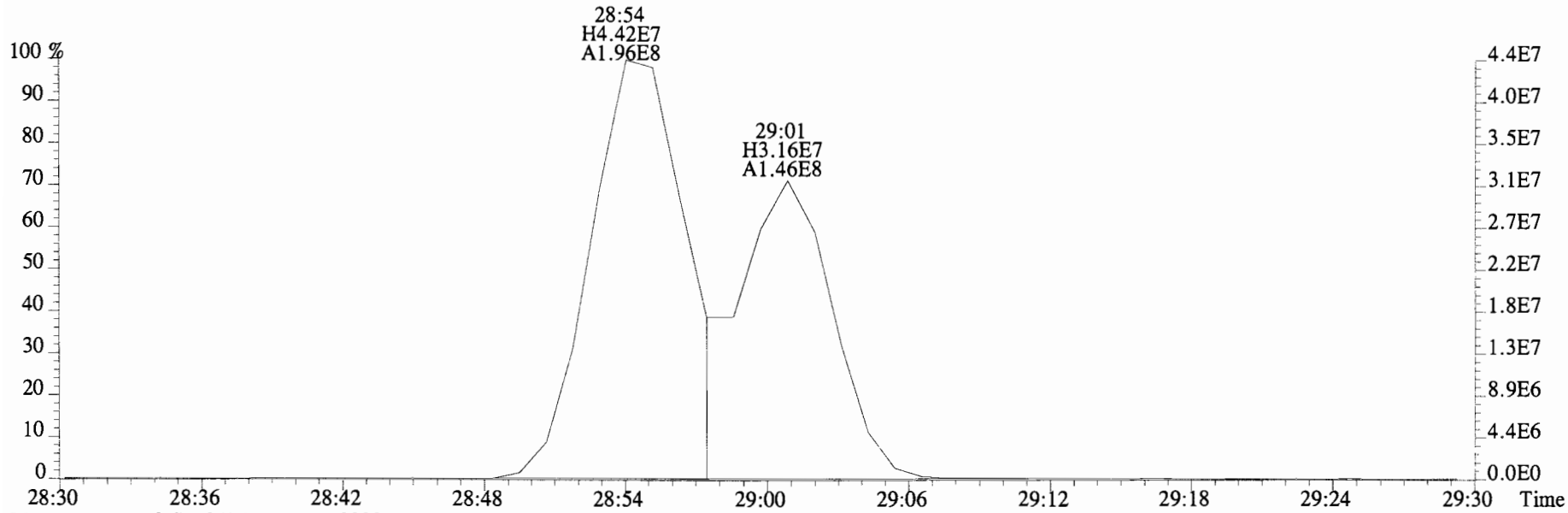


269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,33908.0,0.00%,F,F)

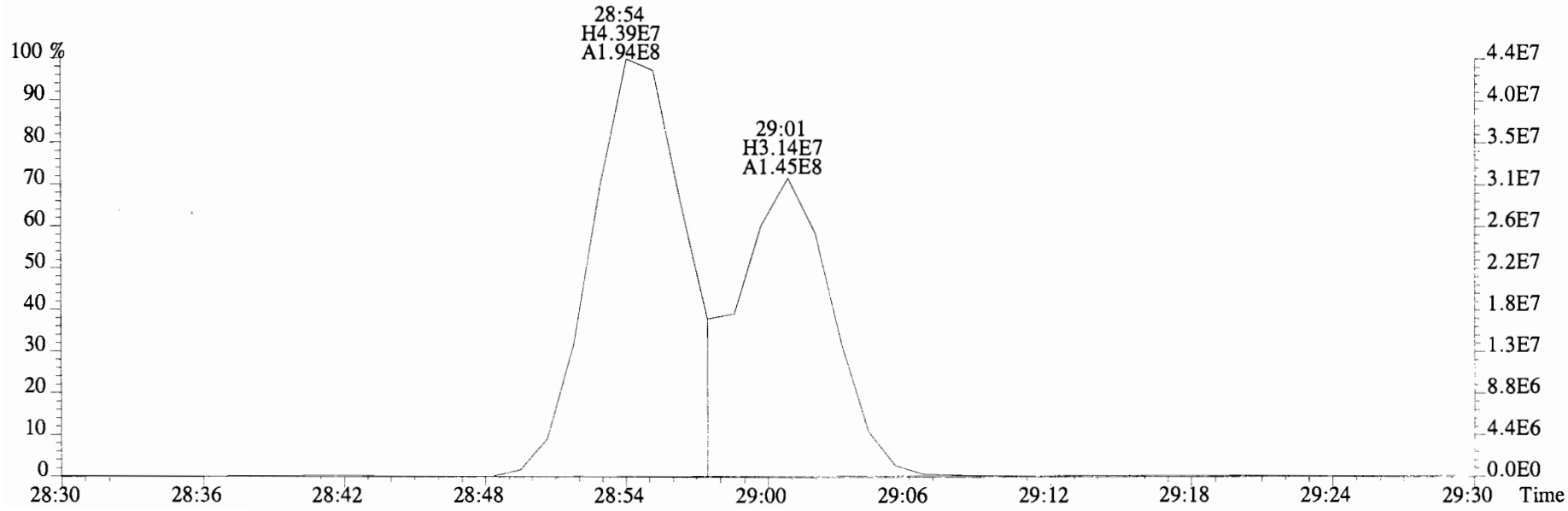


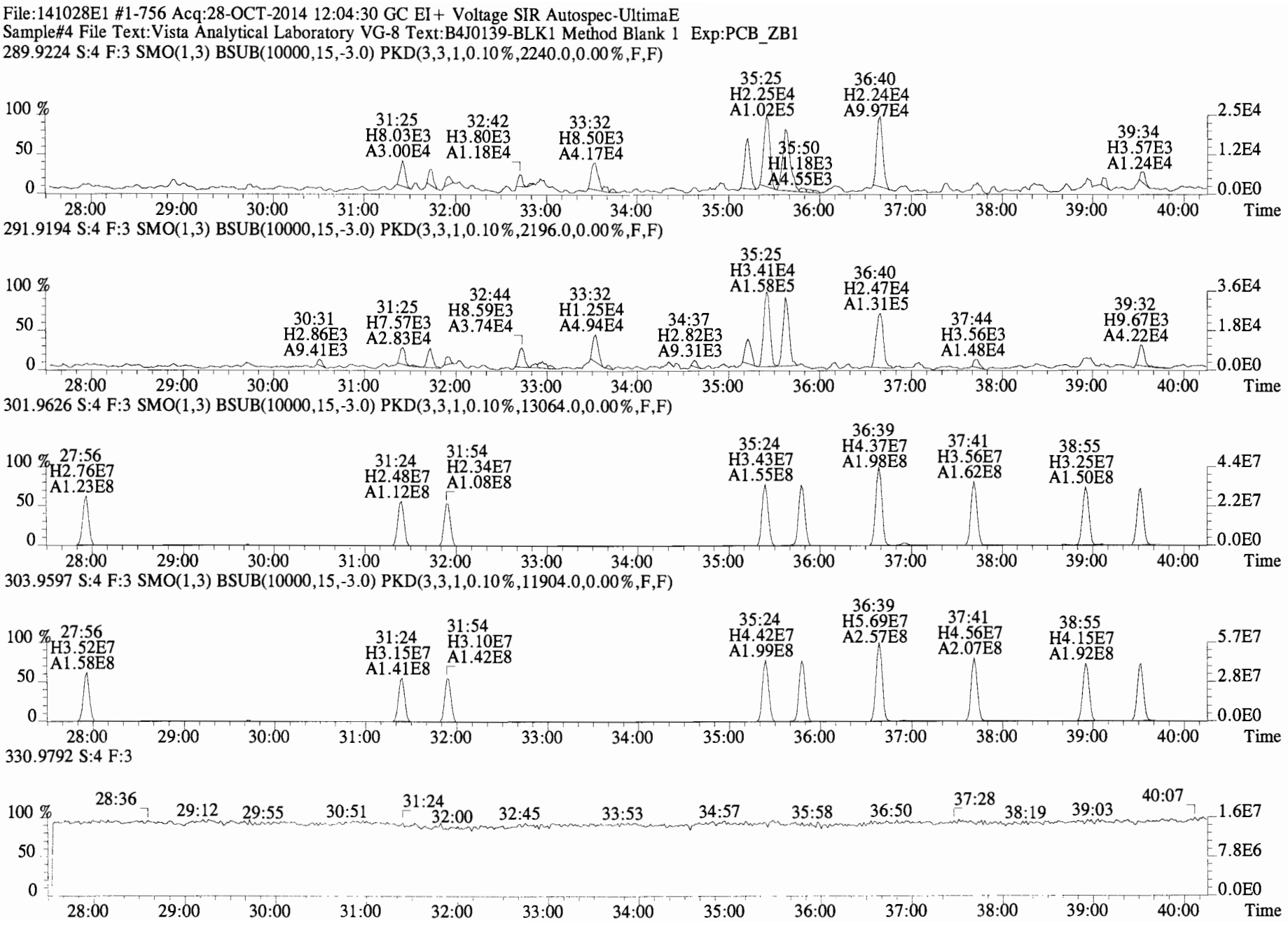

File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2336.0,0.00%,F,F)
29:02
H1.08E4
A5.60E4
28:55
H8.05E3
A3.84E4
29:40
H6.13E3
A4.01E4
32:53
H6.45E3
A3.22E4
100 %
90
80
70
60
50
40
30
20
10
0
1.2E4
1.1E4
9.6E3
8.4E3
7.2E3
6.0E3
4.8E3
3.6E3
2.4E3
1.2E3
0.0E0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
Time
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2356.0,0.00%,F,F)
29:02
H1.14E4
A5.27E4
28:55
H7.19E3
A3.45E4
29:41
H4.53E3
A3.17E4
32:54
H6.93E3
A3.93E4
100 %
90
80
70
60
50
40
30
20
10
0
1.3E4
1.2E4
1.0E4
9.1E3
7.8E3
6.5E3
5.2E3
3.9E3
2.6E3
1.3E3
0.0E0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
Time

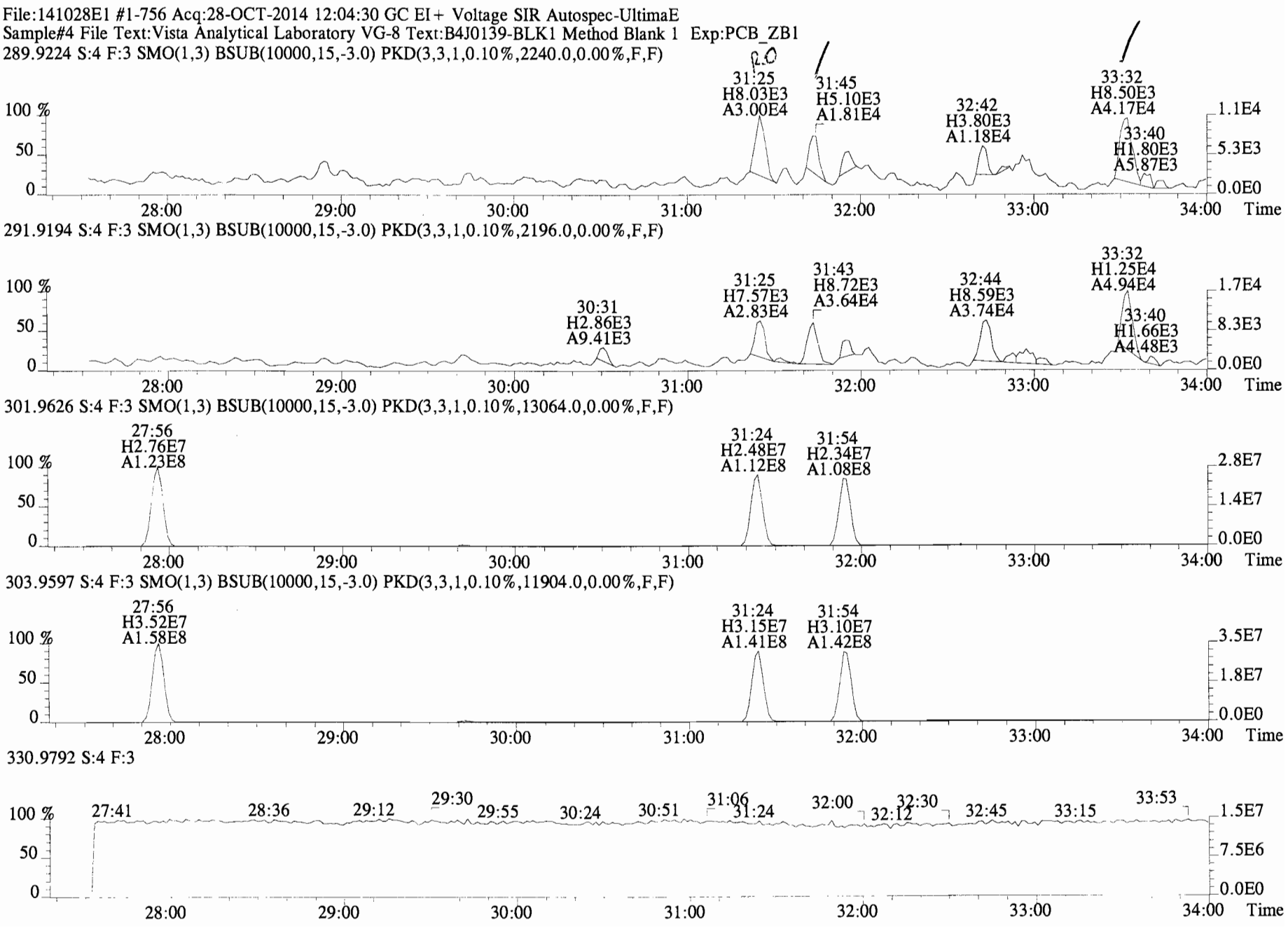
File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,68348.0,0.00%,F,F)



269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,33908.0,0.00%,F,F)

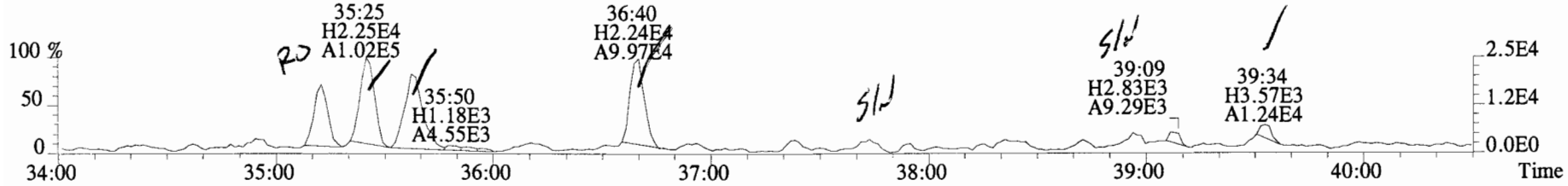



File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2240.0,0.00%,F,F)
31:25 H8.03E3 A3.00E4
32:42 H3.80E3 A1.18E4
33:32 H8.50E3 A4.17E4
35:25 H2.25E4 A1.02E5
35:50 H1.18E3 A4.55E3
36:40 H2.24E4 A9.97E4
39:34 H3.57E3 A1.24E4
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2196.0,0.00%,F,F)
30:31 H2.86E3 A9.41E3
31:25 H7.57E3 A2.83E4
32:44 H8.59E3 A3.74E4
33:32 H1.25E4 A4.94E4
34:37 H2.82E3 A9.31E3
35:25 H3.41E4 A1.58E5
36:40 H2.47E4 A1.31E5
37:44 H3.56E3 A1.48E4
39:32 H9.67E3 A4.22E4
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13064.0,0.00%,F,F)
27:56 H2.76E7 A1.23E8
31:24 H2.48E7 A1.12E8
31:54 H2.34E7 A1.08E8
35:24 H3.43E7 A1.55E8
36:39 H4.37E7 A1.98E8
37:41 H3.56E7 A1.62E8
38:55 H3.25E7 A1.50E8
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11904.0,0.00%,F,F)
27:56 H3.52E7 A1.58E8
31:24 H3.15E7 A1.41E8
31:54 H3.10E7 A1.42E8
35:24 H4.42E7 A1.99E8
36:39 H5.69E7 A2.57E8
37:41 H4.56E7 A2.07E8
38:55 H4.15E7 A1.92E8
330.9792 S:4 F:3
28:36
29:12
29:55
30:51
31:24
32:00
32:45
33:53
34:57
35:58
36:50
37:28
38:19
39:03
40:07
100 %
50
0
2.5E4
1.2E4
0.0E0
3.6E4
1.8E4
4.4E7
2.2E7
5.7E7
2.8E7
1.6E7
7.8E6
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
37:00
38:00
39:00
40:00
Time

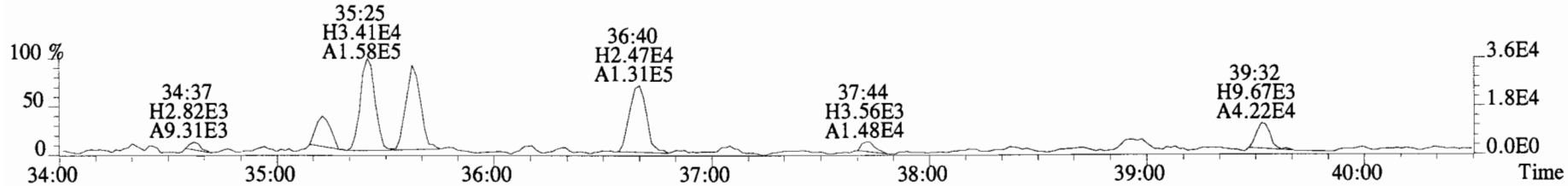

File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2240.0,0.00%,F,F)
31:25 H8.03E3 A3.00E4
31:45 H5.10E3 A1.81E4
32:42 H3.80E3 A1.18E4
33:32 H8.50E3 A4.17E4
33:40 H1.80E3 A5.87E3
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2196.0,0.00%,F,F)
30:31 H2.86E3 A9.41E3
31:25 H7.57E3 A2.83E4
31:43 H8.72E3 A3.64E4
32:44 H8.59E3 A3.74E4
33:32 H1.25E4 A4.94E4
33:40 H1.66E3 A4.48E3
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13064.0,0.00%,F,F)
27:56 H2.76E7 A1.23E8
31:24 H2.48E7 A1.12E8
31:54 H2.34E7 A1.08E8
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11904.0,0.00%,F,F)
27:56 H3.52E7 A1.58E8
31:24 H3.15E7 A1.41E8
31:54 H3.10E7 A1.42E8
330.9792 S:4 F:3
27:41
28:36
29:12
29:30
29:55
30:24
30:51
31:06
31:24
32:00
32:12
32:30
32:45
33:15
33:53
100 %
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
1.1E4
5.3E3
0.0E0
1.7E4
8.3E3
2.8E7
1.4E7
3.5E7
1.8E7
1.5E7
7.5E6

File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1

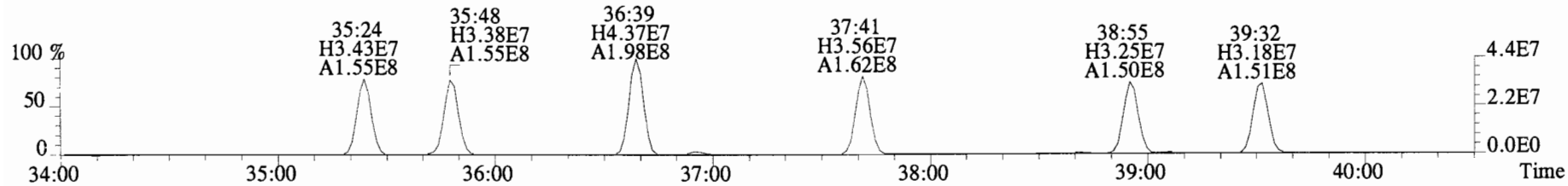
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2240.0,0.00%,F,F)



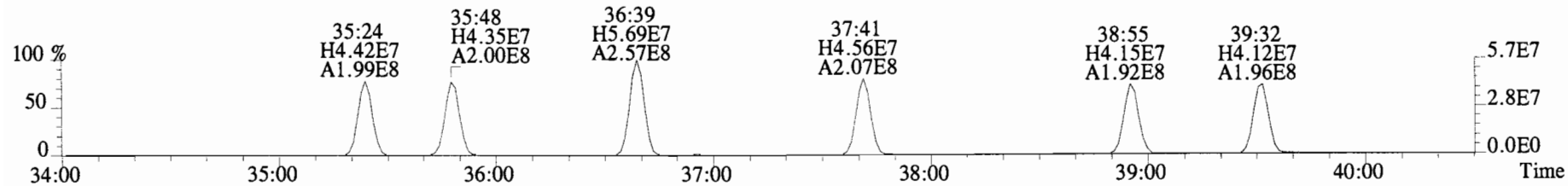
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2196.0,0.00%,F,F)



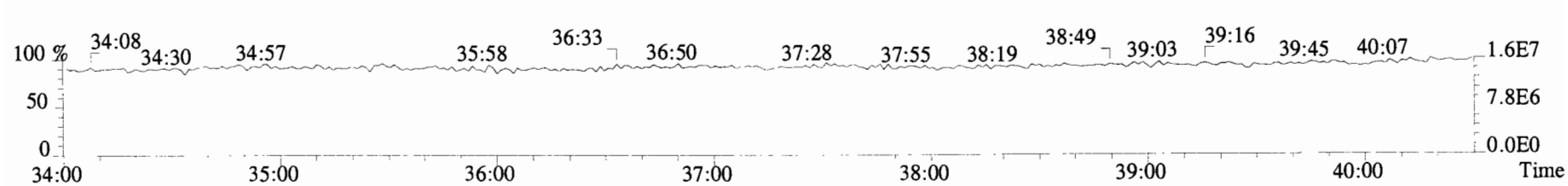
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13064.0,0.00%,F,F)



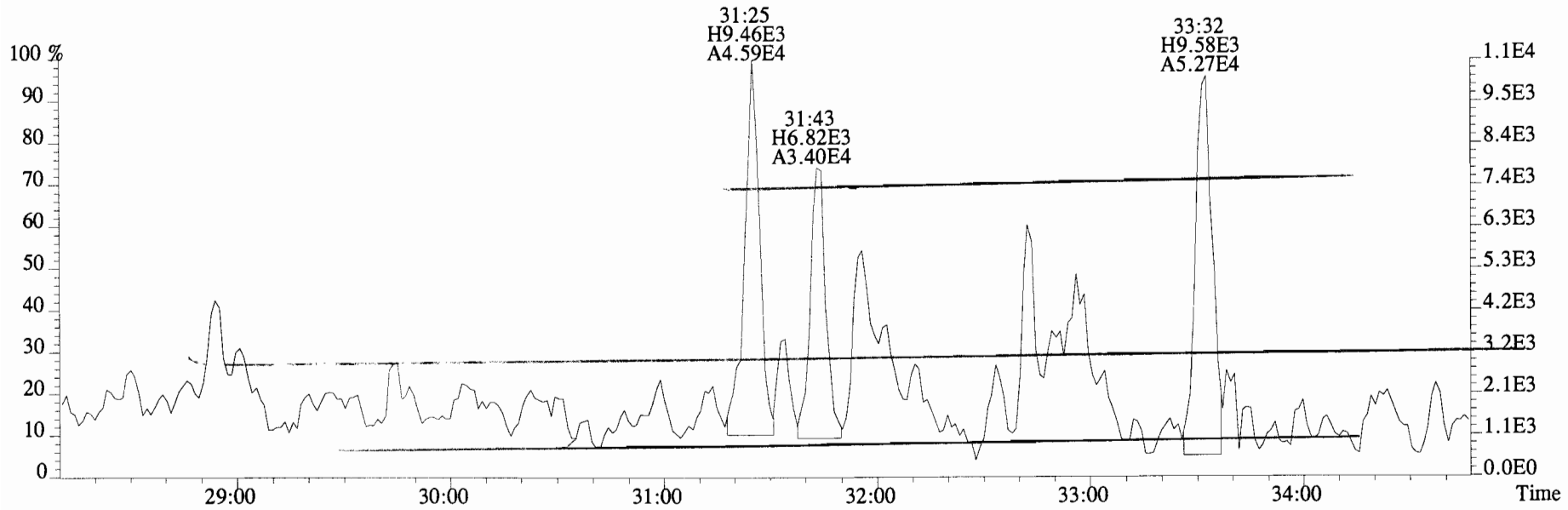
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11904.0,0.00%,F,F)



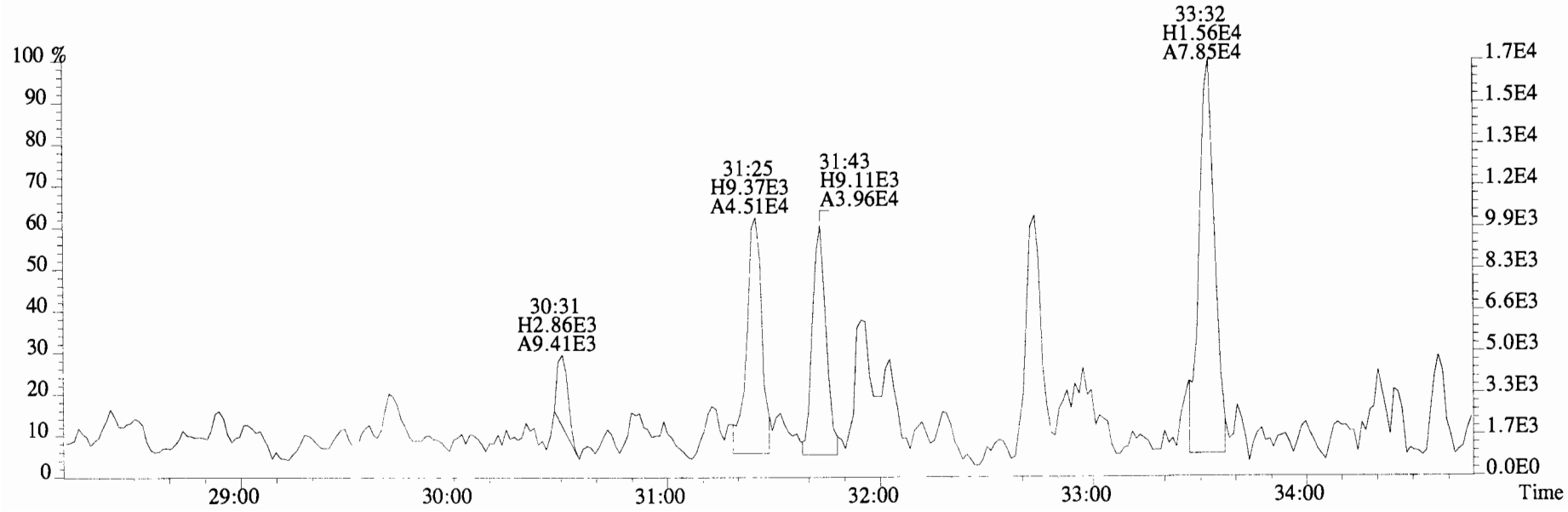
330.9792 S:4 F:3



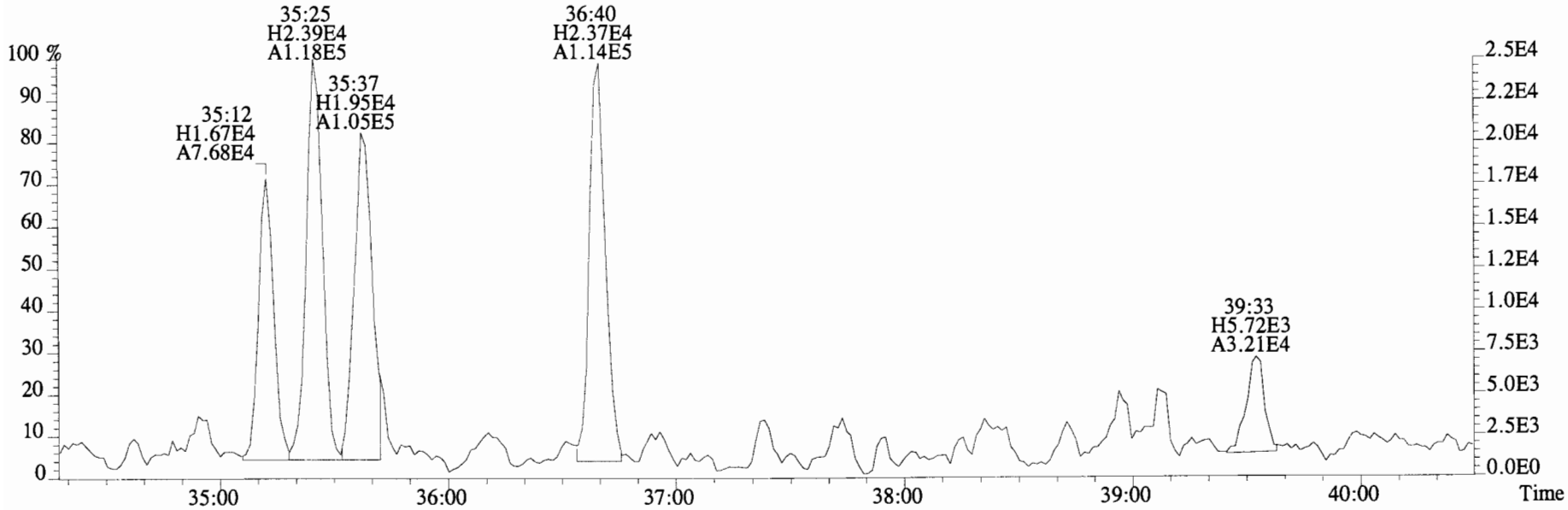
File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2240.0,0.00%,F,F)



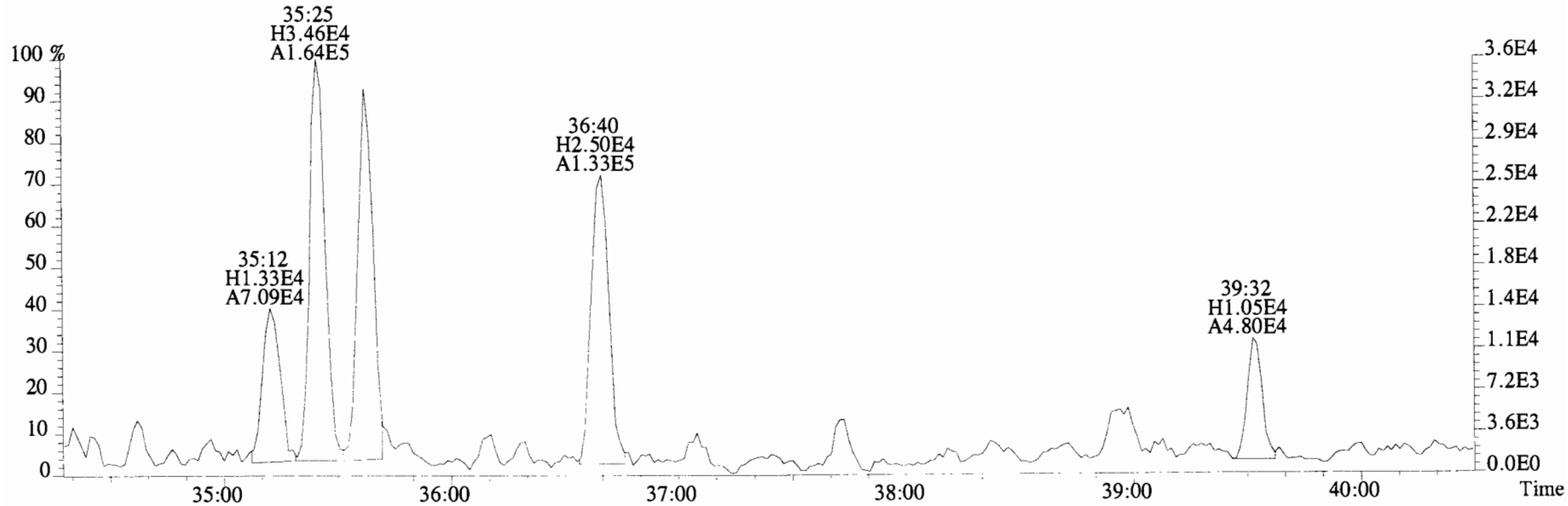
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2196.0,0.00%,F,F)



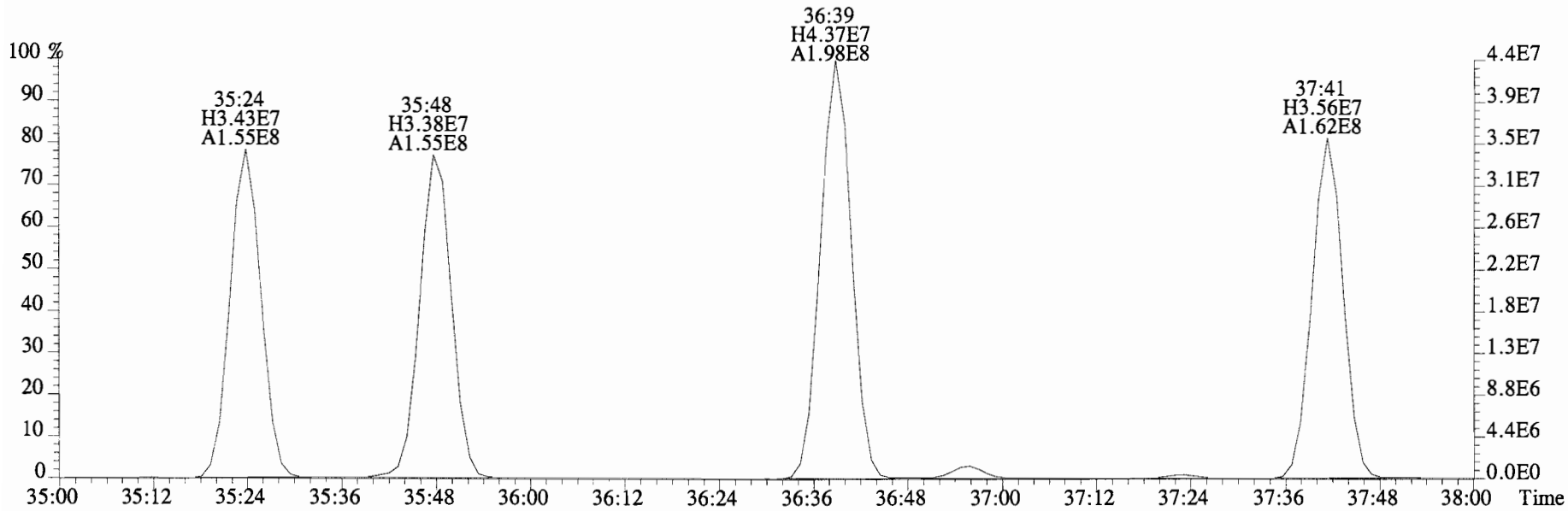
File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2240.0,0.00%,F,F)



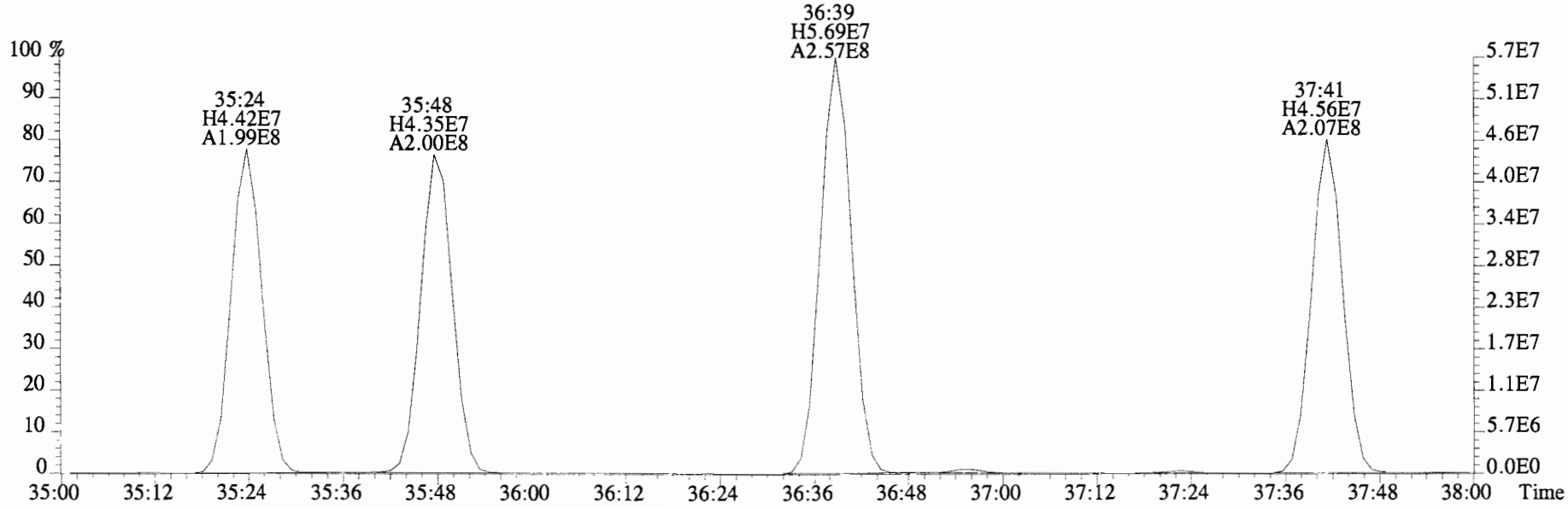
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2196.0,0.00%,F,F)

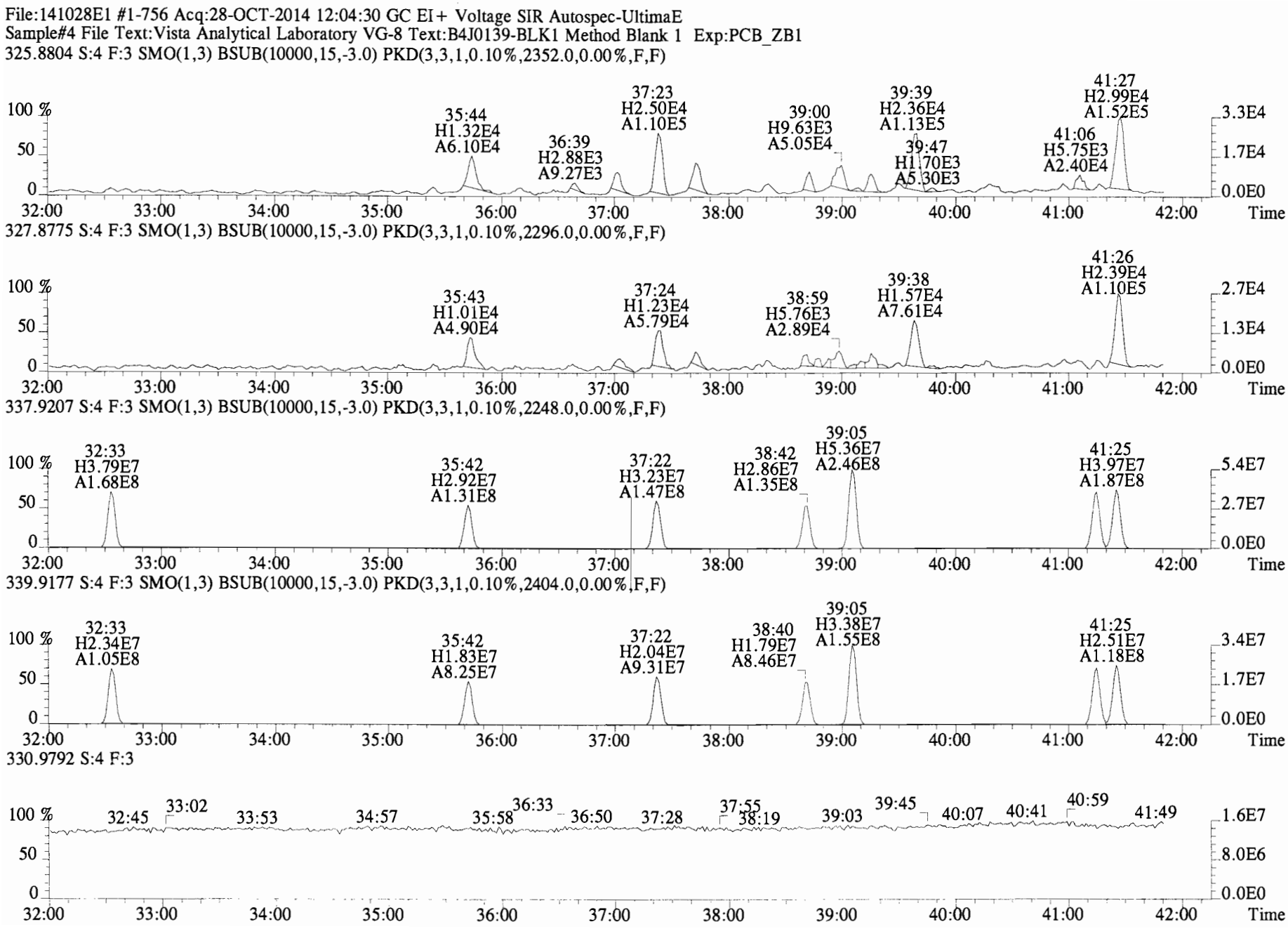


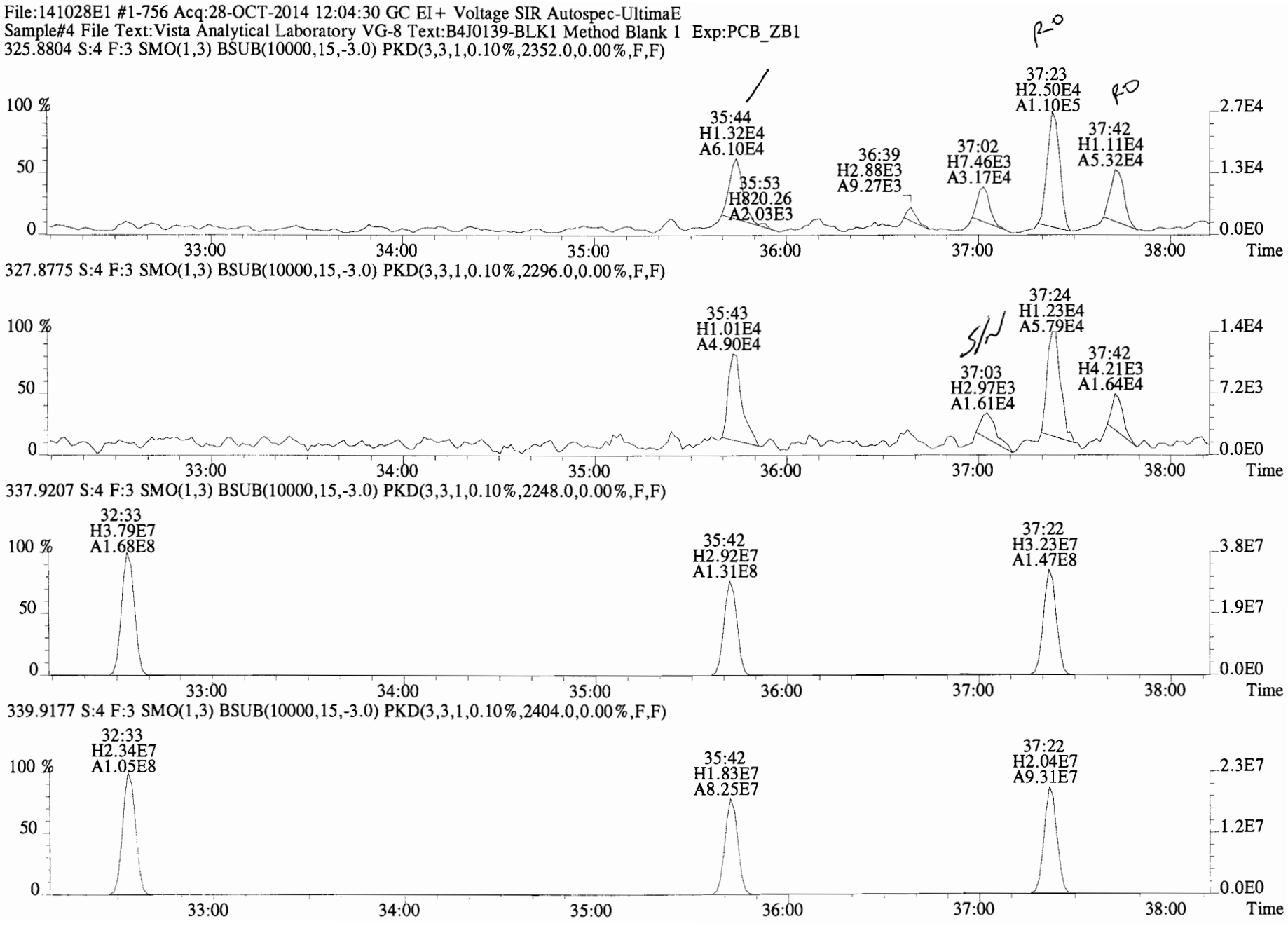
File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13064.0,0.00%,F,F)



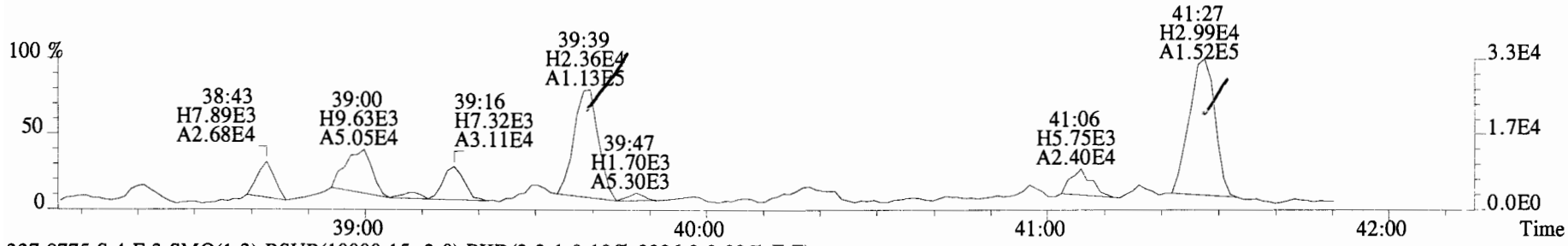
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11904.0,0.00%,F,F)



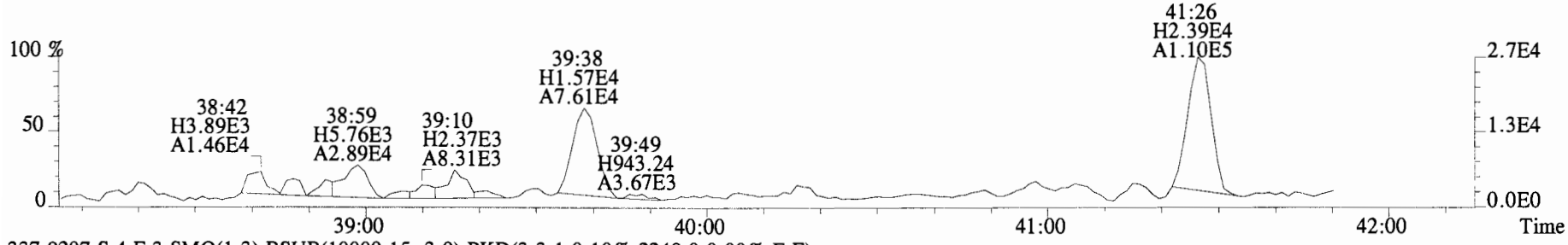

File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2352.0,0.00%,F,F)
35:44 H1.32E4 A6.10E4
36:39 H2.88E3 A9.27E3
37:23 H2.50E4 A1.10E5
39:00 H9.63E3 A5.05E4
39:39 H2.36E4 A1.13E5
39:47 H1.70E3 A5.30E3
41:06 H5.75E3 A2.40E4
41:27 H2.99E4 A1.52E5
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2296.0,0.00%,F,F)
35:43 H1.01E4 A4.90E4
37:24 H1.23E4 A5.79E4
38:59 H5.76E3 A2.89E4
39:38 H1.57E4 A7.61E4
41:26 H2.39E4 A1.10E5
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2248.0,0.00%,F,F)
32:33 H3.79E7 A1.68E8
35:42 H2.92E7 A1.31E8
37:22 H3.23E7 A1.47E8
38:42 H2.86E7 A1.35E8
39:05 H5.36E7 A2.46E8
41:25 H3.97E7 A1.87E8
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2404.0,0.00%,F,F)
32:33 H2.34E7 A1.05E8
35:42 H1.83E7 A8.25E7
37:22 H2.04E7 A9.31E7
38:40 H1.79E7 A8.46E7
39:05 H3.38E7 A1.55E8
41:25 H2.51E7 A1.18E8
330.9792 S:4 F:3
32:45 33:02 33:53 34:57 35:58 36:33 36:50 37:28 37:55 38:19 39:03 39:45 40:07 40:41 40:59 41:49
100 %
50
0
32:00 33:00 34:00 35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 Time
3.3E4 1.7E4 0.0E0
2.7E4 1.3E4 0.0E0
5.4E7 2.7E7 0.0E0
3.4E7 1.7E7 0.0E0
1.6E7 8.0E6 0.0E0


File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2352.0,0.00%,F,F)
35:44 H1.32E4 A6.10E4
35:53 H820.26 A2.03E3
36:39 H2.88E3 A9.27E3
37:02 H7.46E3 A3.17E4
37:23 H2.50E4 A1.10E5
37:42 H1.11E4 A5.32E4
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2296.0,0.00%,F,F)
35:43 H1.01E4 A4.90E4
37:03 H2.97E3 A1.61E4
37:24 H1.23E4 A5.79E4
37:42 H4.21E3 A1.64E4
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2248.0,0.00%,F,F)
32:33 H3.79E7 A1.68E8
35:42 H2.92E7 A1.31E8
37:22 H3.23E7 A1.47E8
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2404.0,0.00%,F,F)
32:33 H2.34E7 A1.05E8
35:42 H1.83E7 A8.25E7
37:22 H2.04E7 A9.31E7
100 %
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.7E4
1.3E4
0.0E0
1.4E4
7.2E3
3.8E7
1.9E7
2.3E7
1.2E7

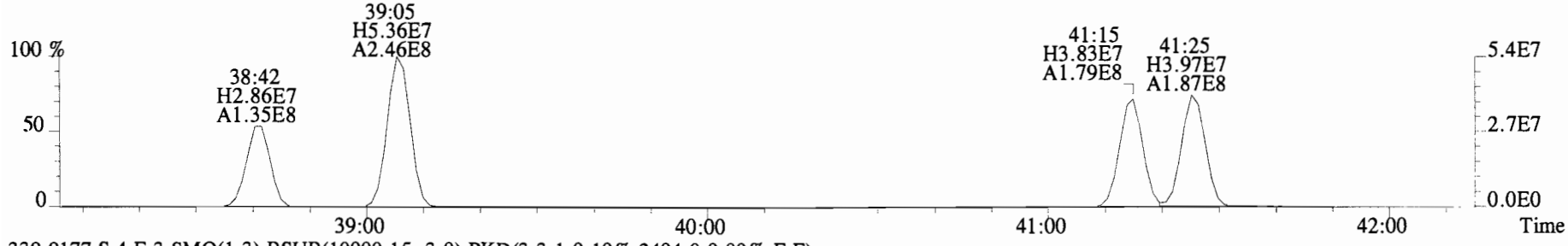
File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2352.0,0.00%,F,F)



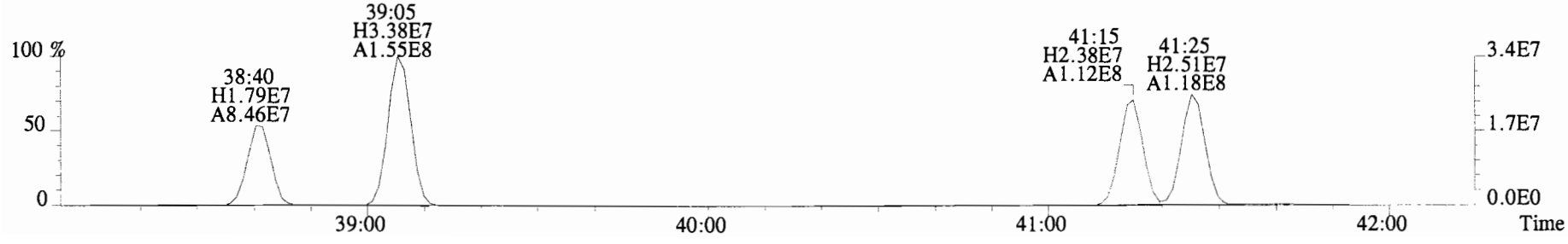
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2296.0,0.00%,F,F)



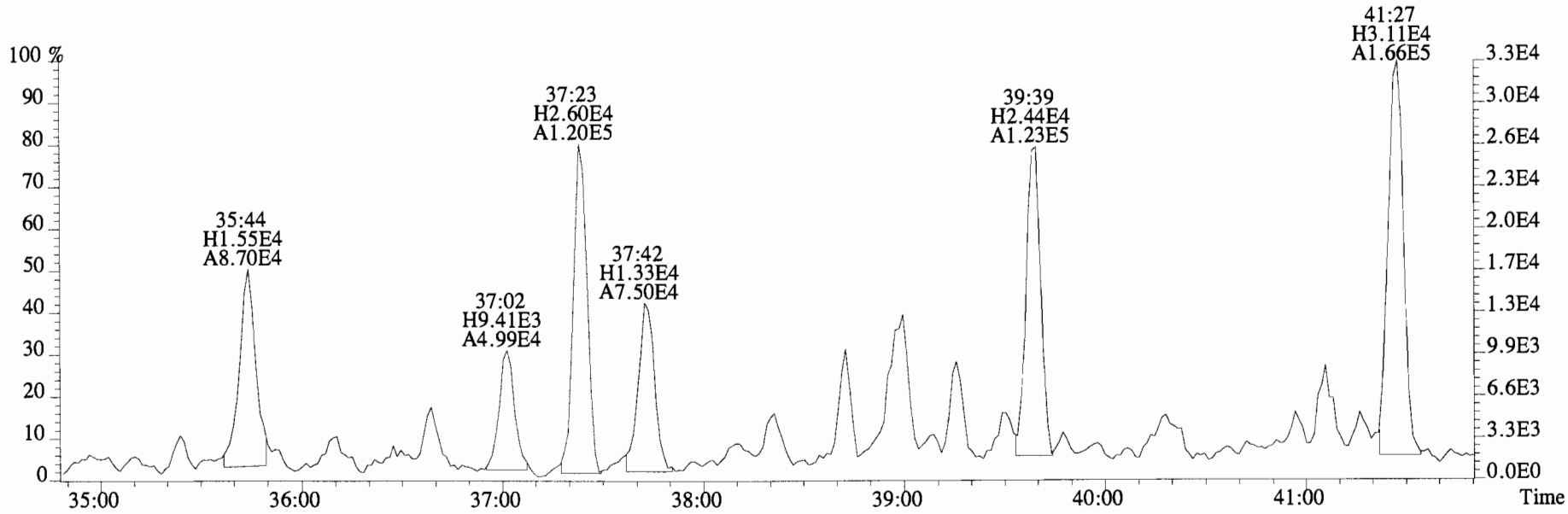
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2248.0,0.00%,F,F)



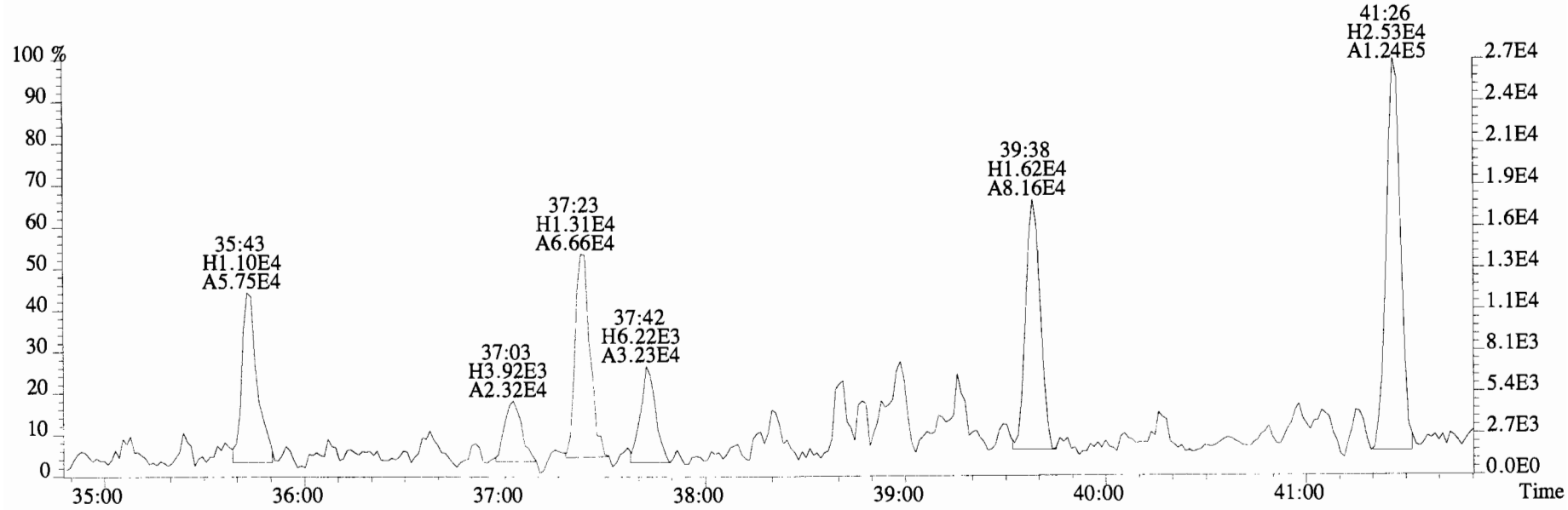
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2404.0,0.00%,F,F)



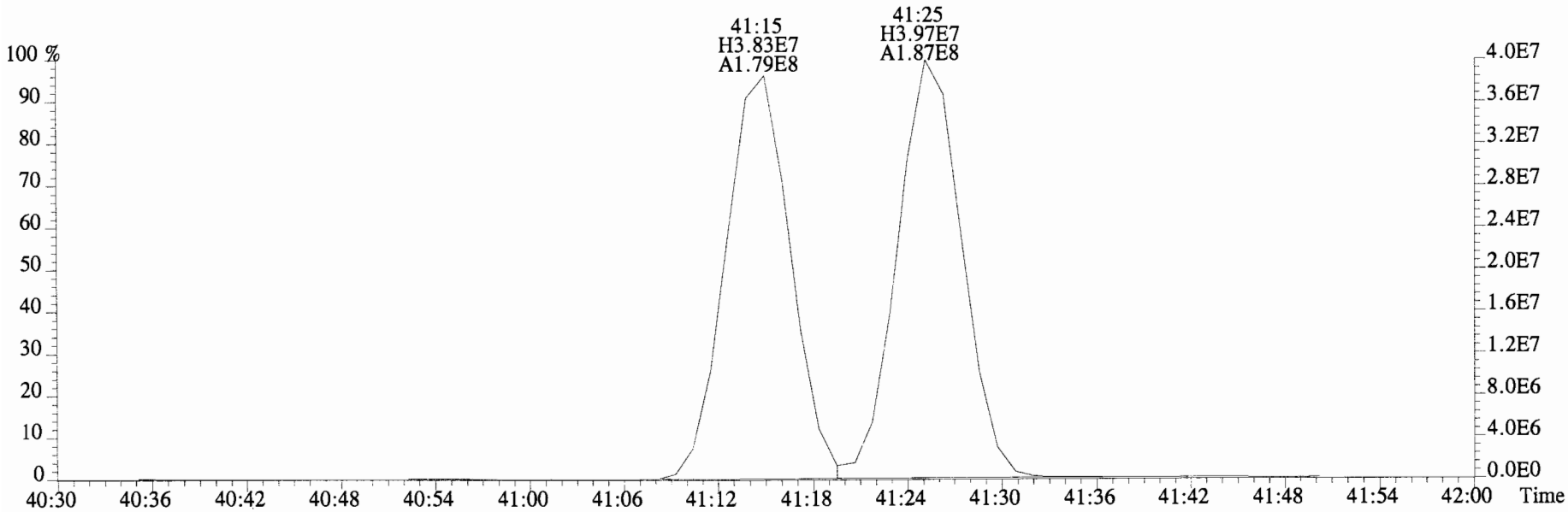
File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0)



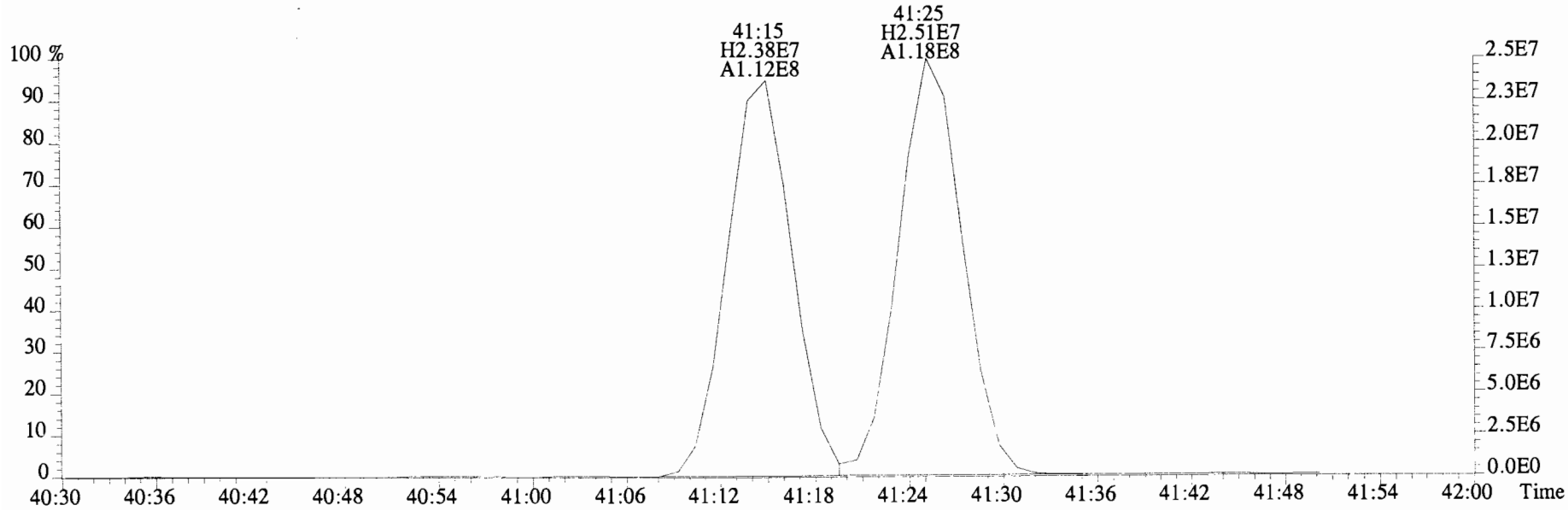
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0)



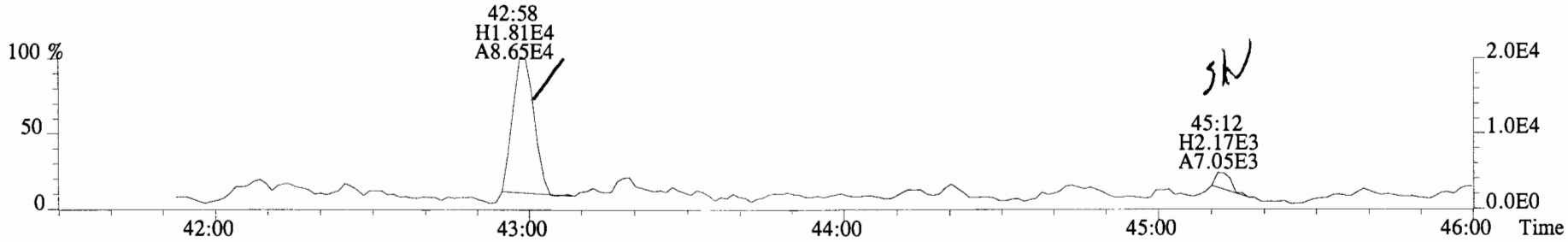
File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2248.0,0.00%,F,F)



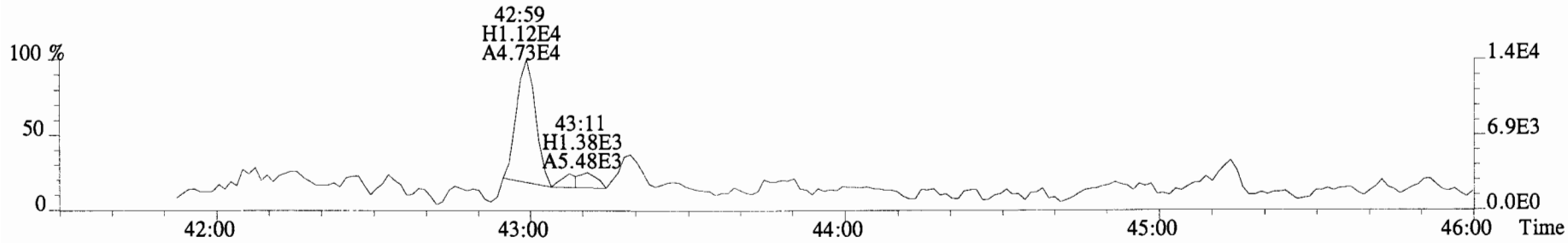
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2404.0,0.00%,F,F)



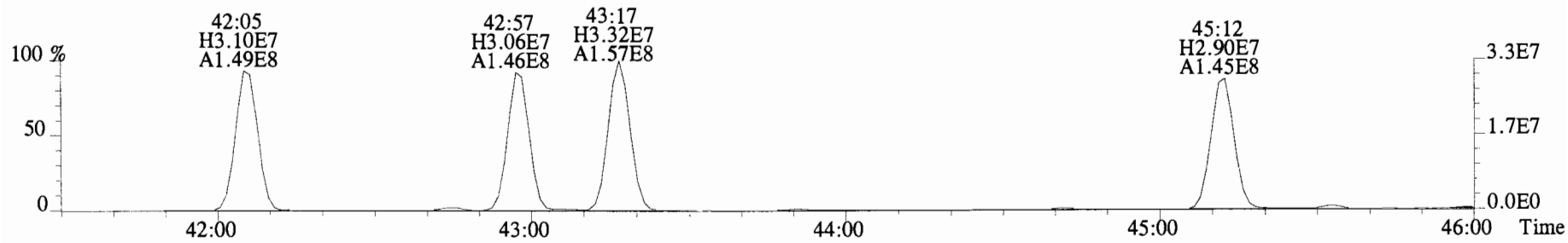
File:141028E1 #1-552 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2288.0,0.00%,F,F)



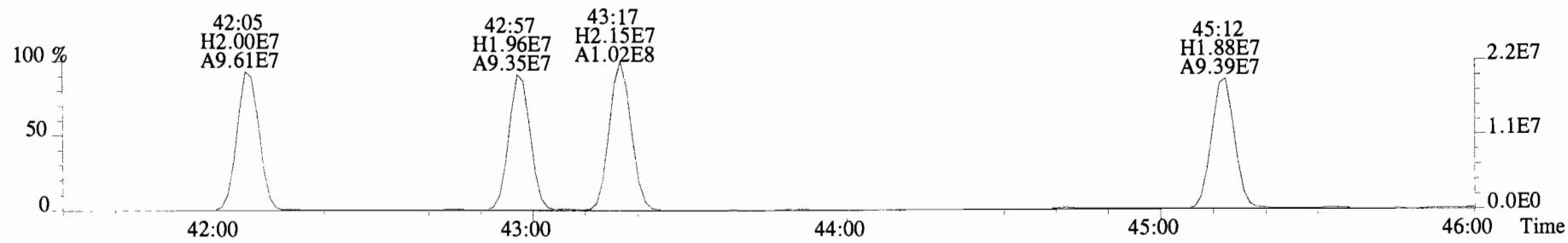
327.8775 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2316.0,0.00%,F,F)



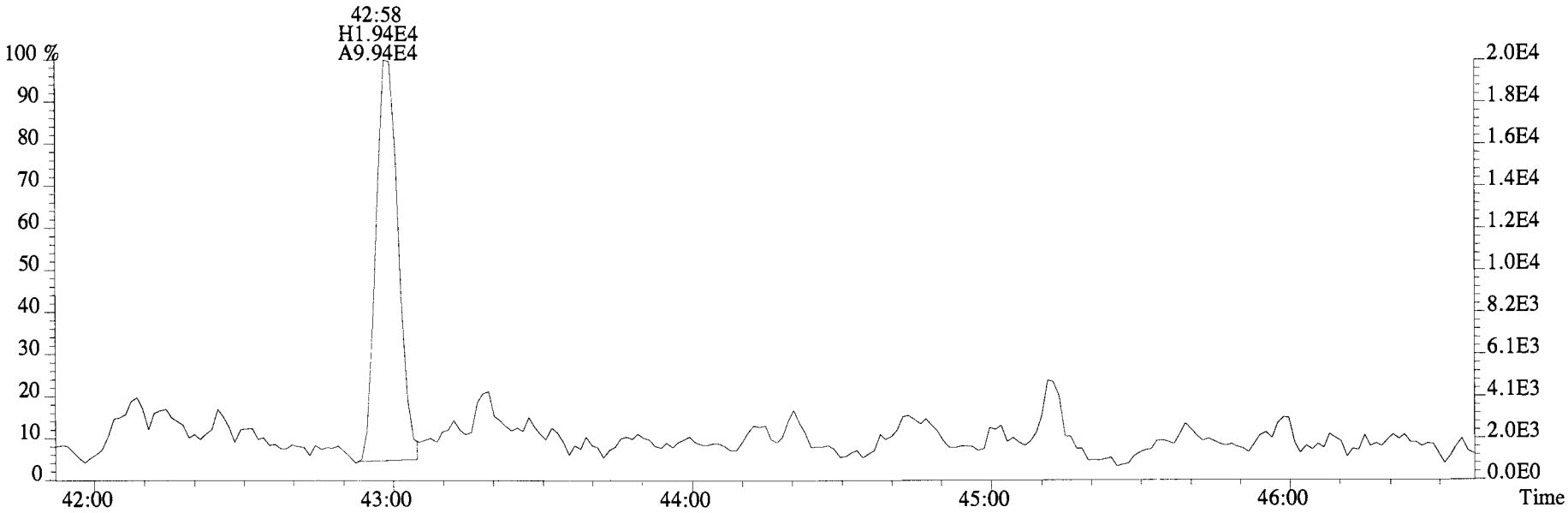
337.9207 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26904.0,0.00%,F,F)



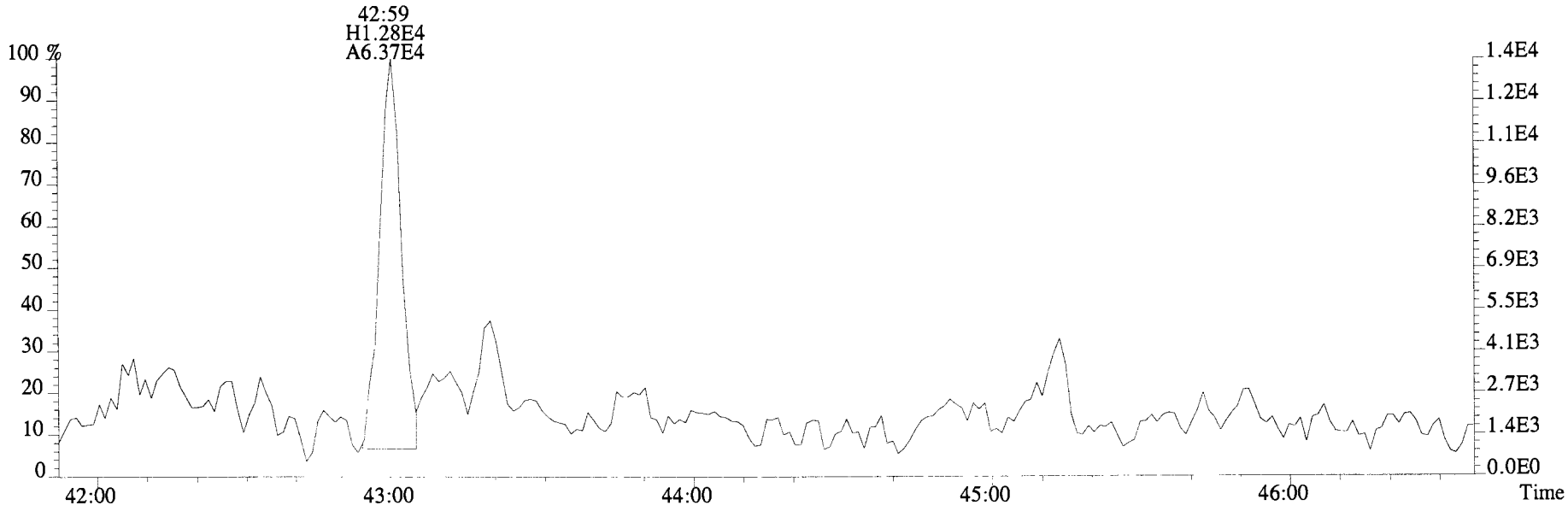
339.9177 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15280.0,0.00%,F,F)



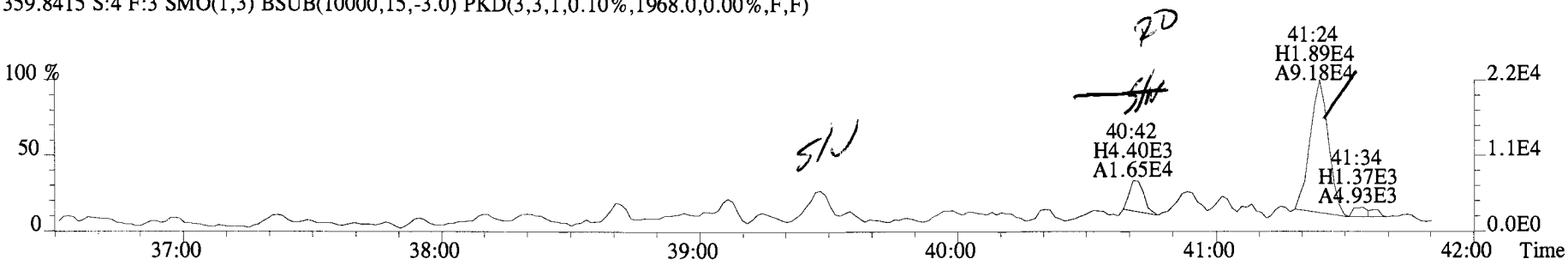
File:141028E1 #1-552 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2288.0,0.00%,F,F)



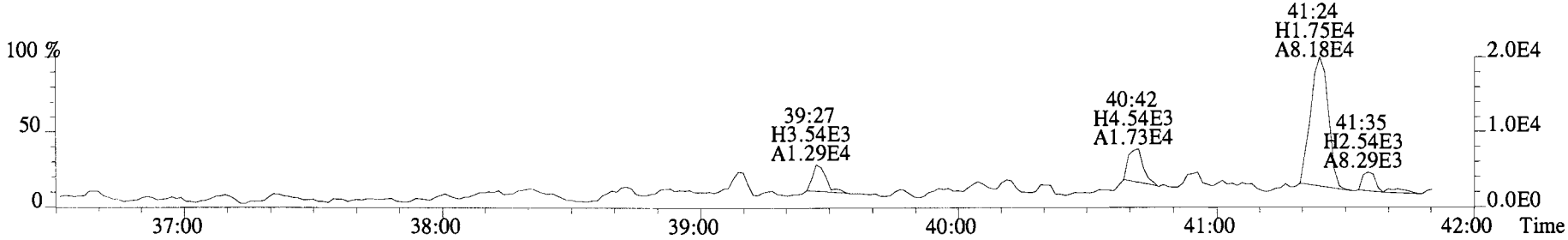
327.8775 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2316.0,0.00%,F,F)



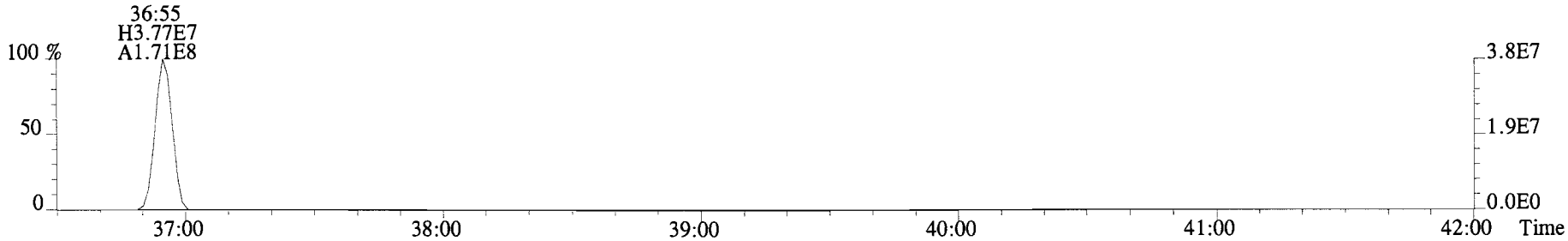
File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1968.0,0.00%,F,F)



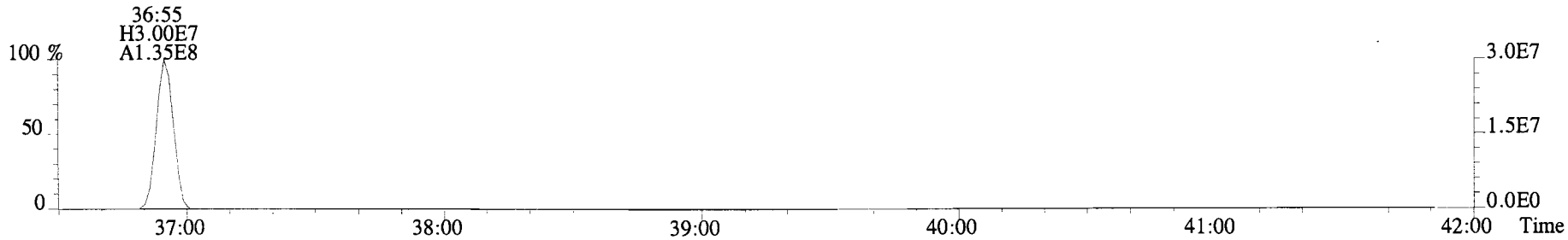
361.8385 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2048.0,0.00%,F,F)



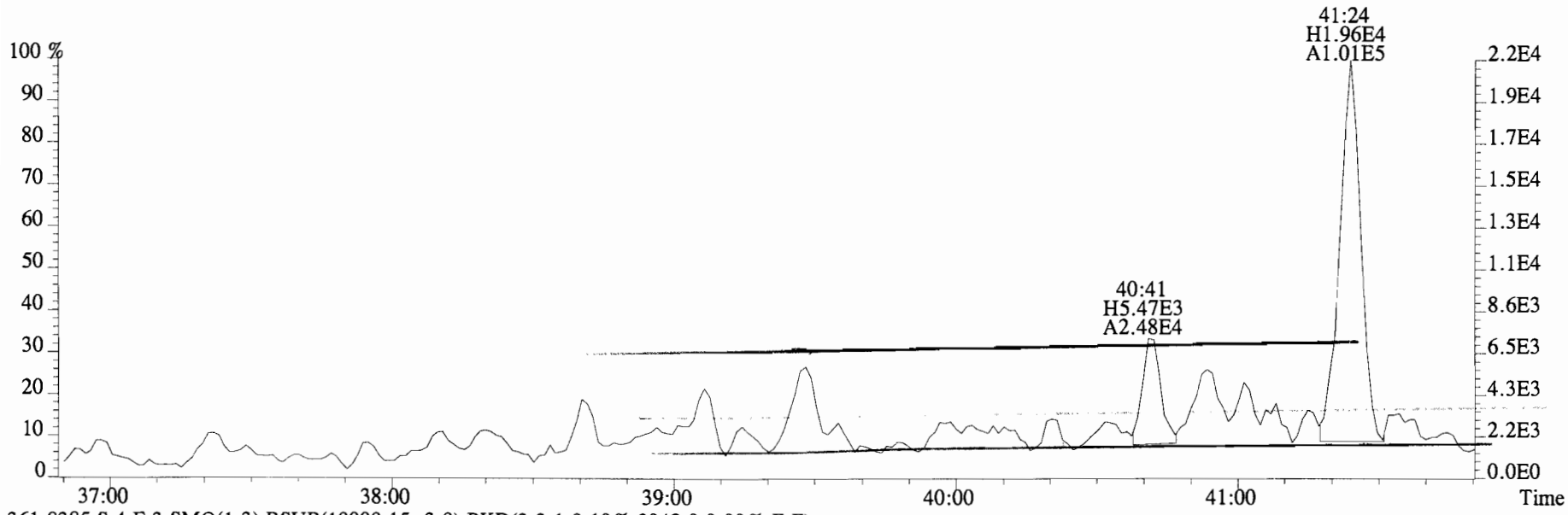
371.8817 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1712.0,0.00%,F,F)



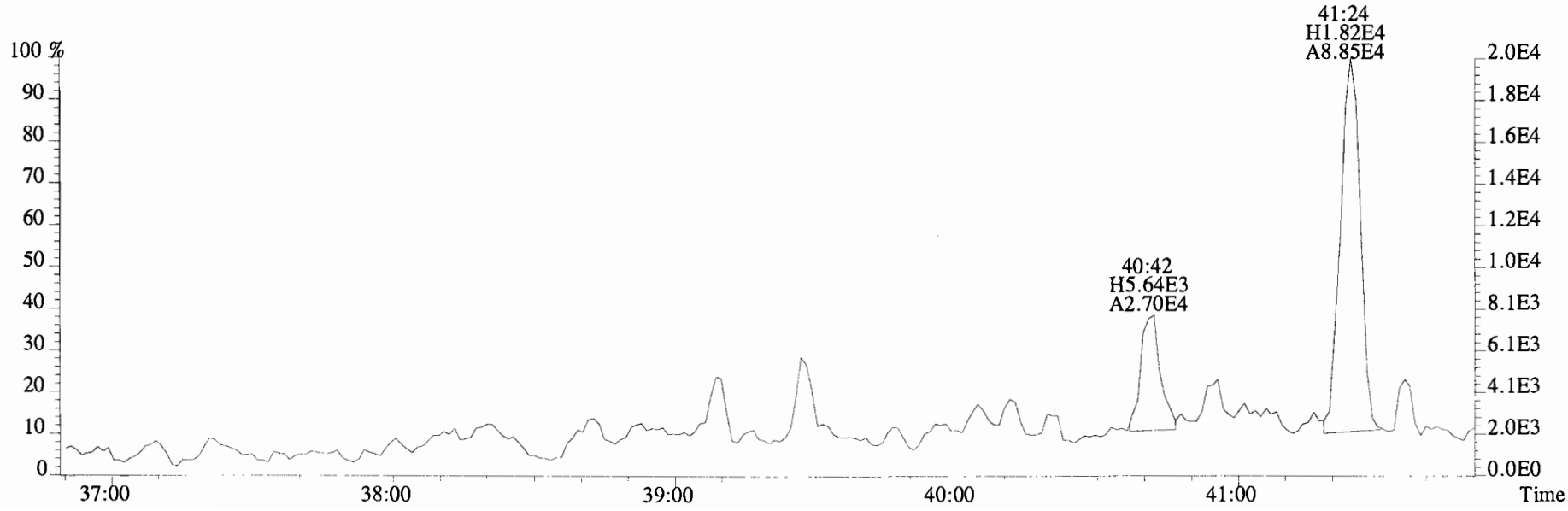
373.8788 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)

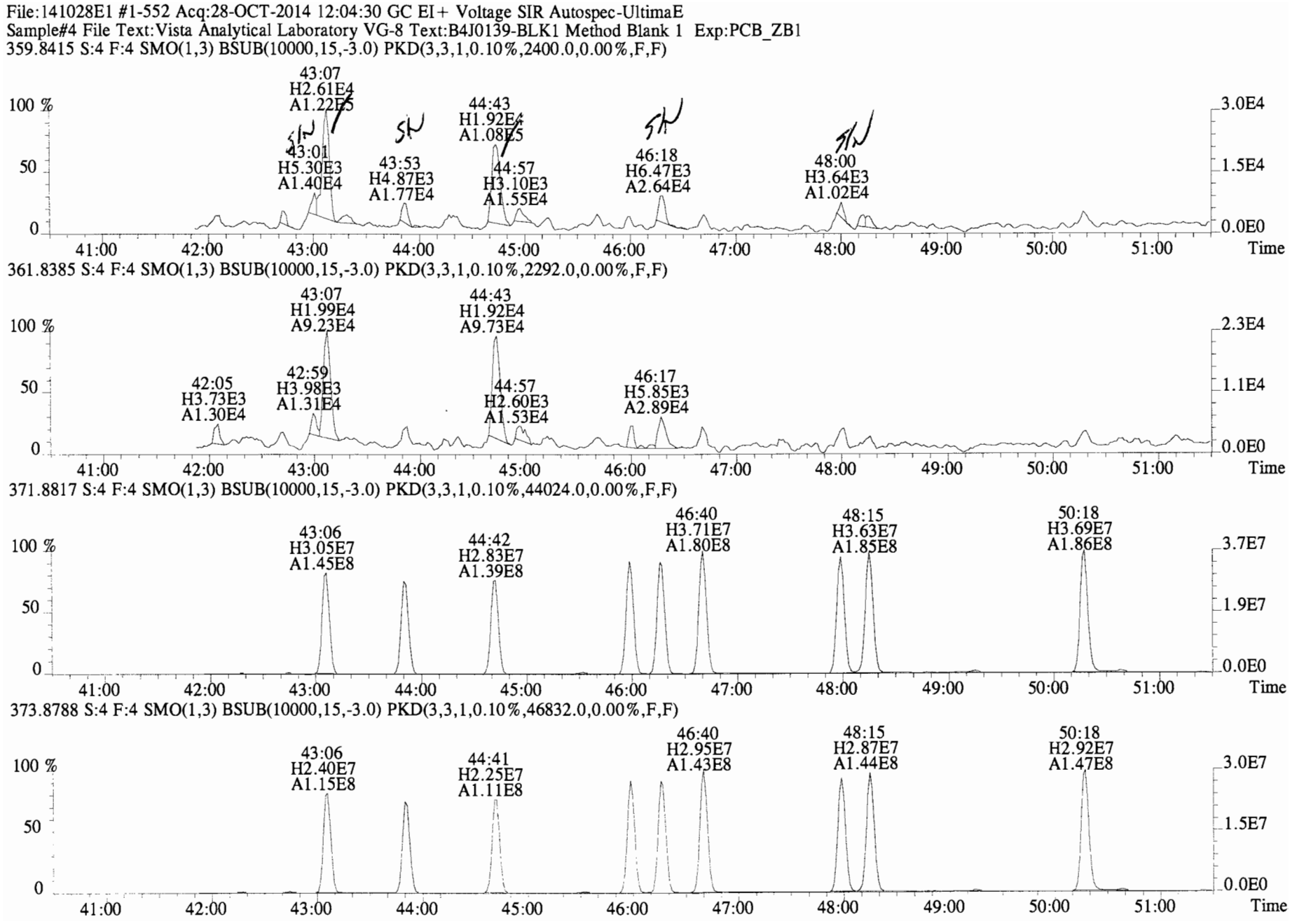


File:141028E1 #1-756 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1968.0,0.00%,F,F)

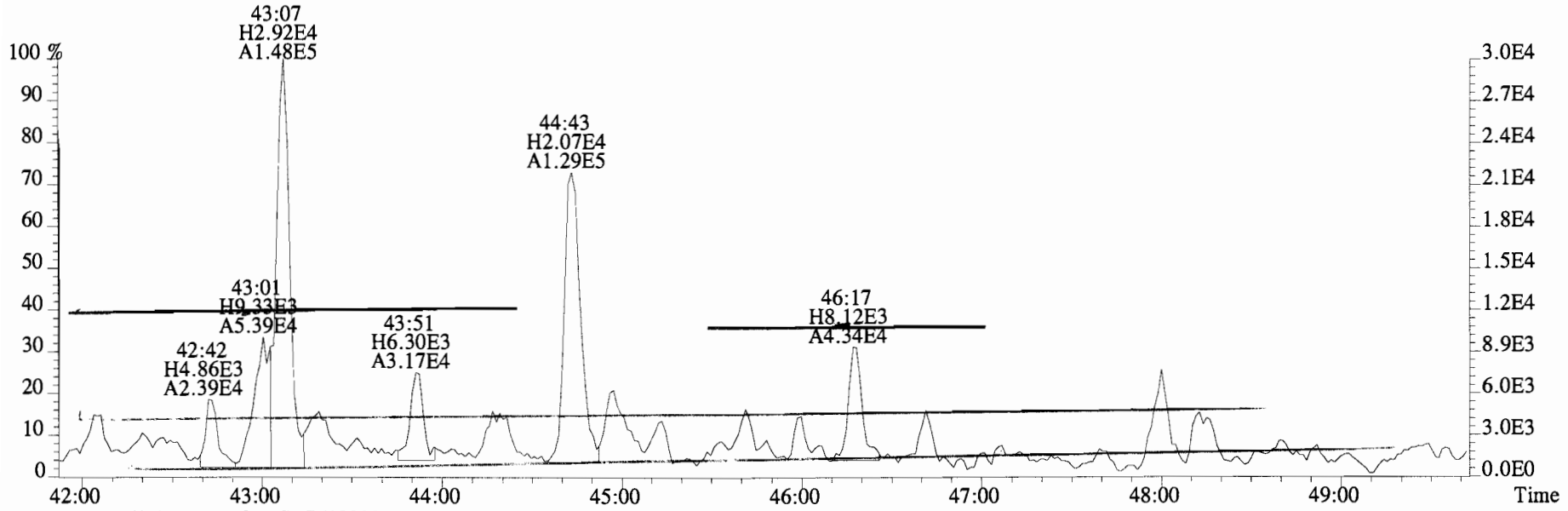


361.8385 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2048.0,0.00%,F,F)

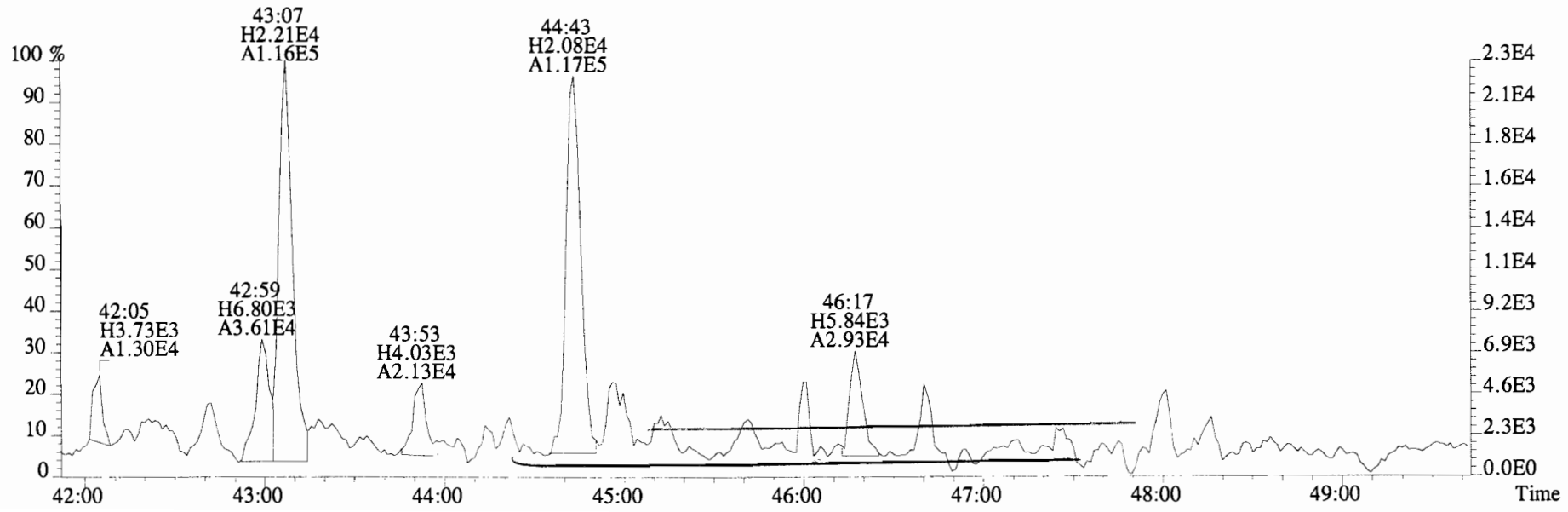



File:141028E1 #1-552 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)
43:07 H2.61E4 A1.22E5
43:01 H5.30E3 A1.40E4
43:53 H4.87E3 A1.77E4
44:43 H1.92E4 A1.08E5
44:57 H3.10E3 A1.55E4
46:18 H6.47E3 A2.64E4
48:00 H3.64E3 A1.02E4
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2292.0,0.00%,F,F)
43:07 H1.99E4 A9.23E4
42:05 H3.73E3 A1.30E4
42:59 H3.98E3 A1.31E4
44:43 H1.92E4 A9.73E4
44:57 H2.60E3 A1.53E4
46:17 H5.85E3 A2.89E4
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,44024.0,0.00%,F,F)
43:06 H3.05E7 A1.45E8
44:42 H2.83E7 A1.39E8
46:40 H3.71E7 A1.80E8
48:15 H3.63E7 A1.85E8
50:18 H3.69E7 A1.86E8
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,46832.0,0.00%,F,F)
43:06 H2.40E7 A1.15E8
44:41 H2.25E7 A1.11E8
46:40 H2.95E7 A1.43E8
48:15 H2.87E7 A1.44E8
50:18 H2.92E7 A1.47E8
100 %
50
0
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
51:00
Time
3.0E4
1.5E4
0.0E0
2.3E4
1.1E4
3.7E7
1.9E7
3.0E7
1.5E7

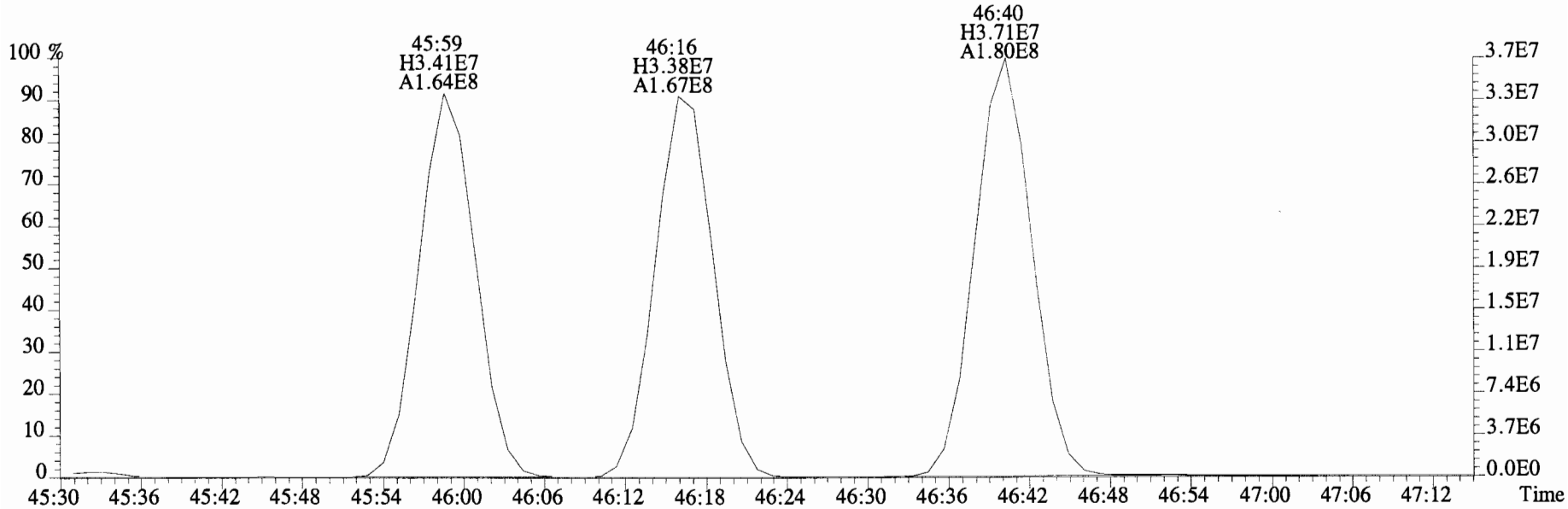
File:141028E1 #1-552 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)



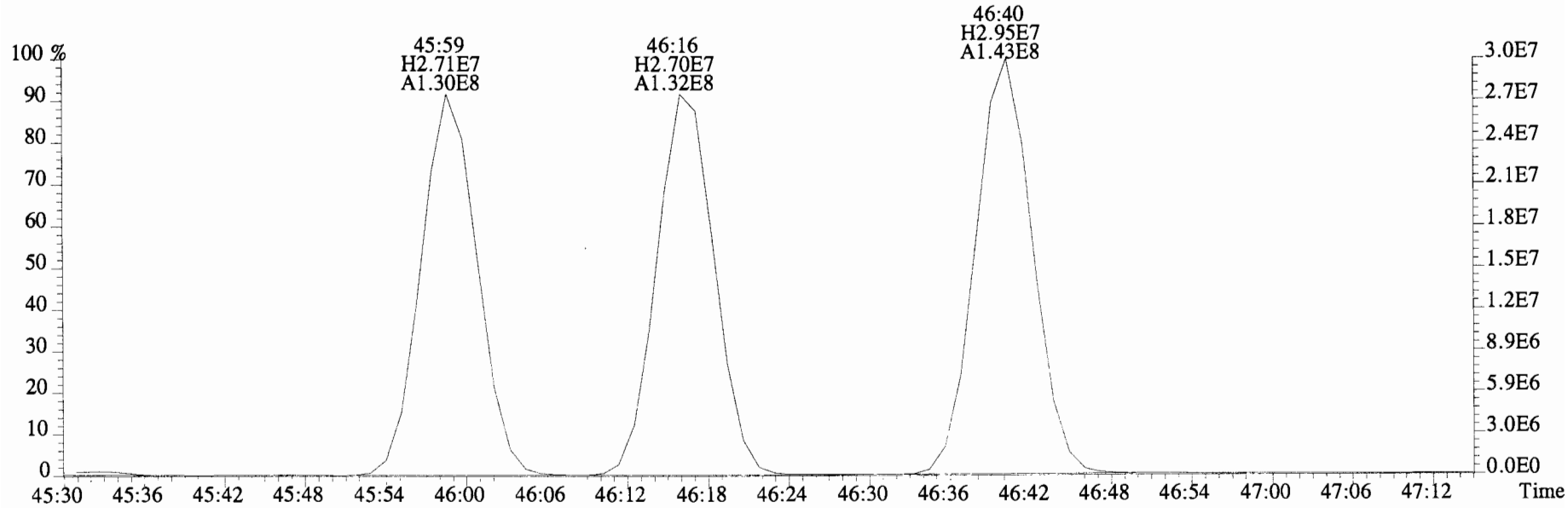
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)



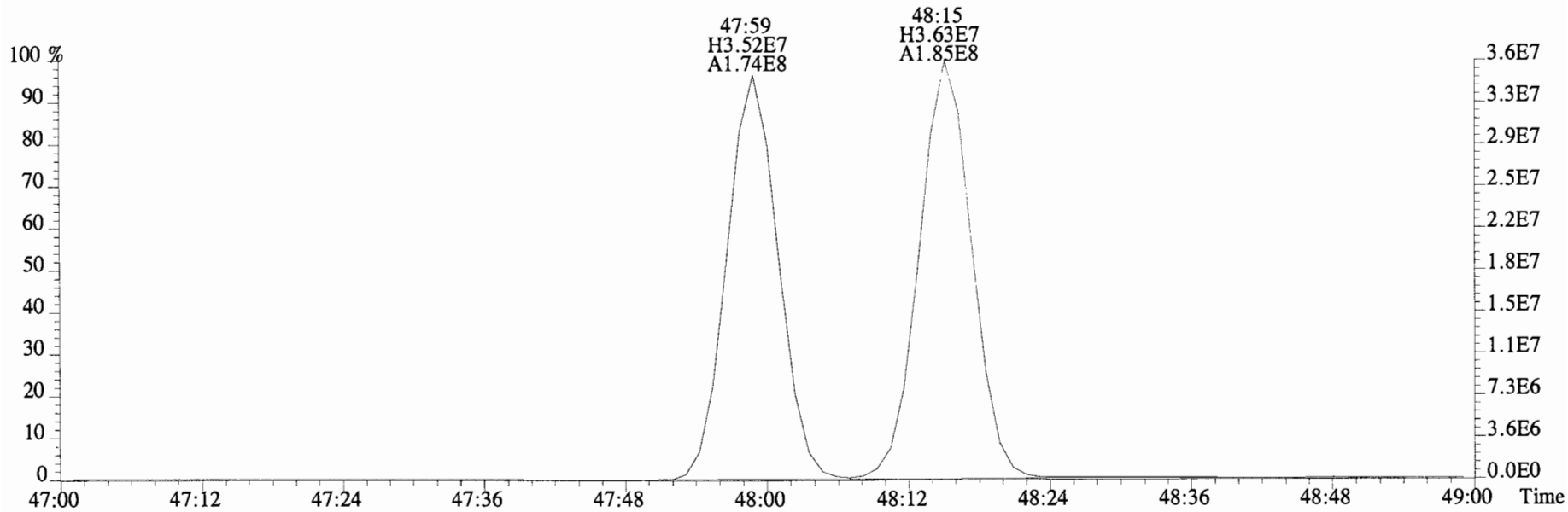
File:141028E1 #1-552 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,44024.0,0.00%,F,F)



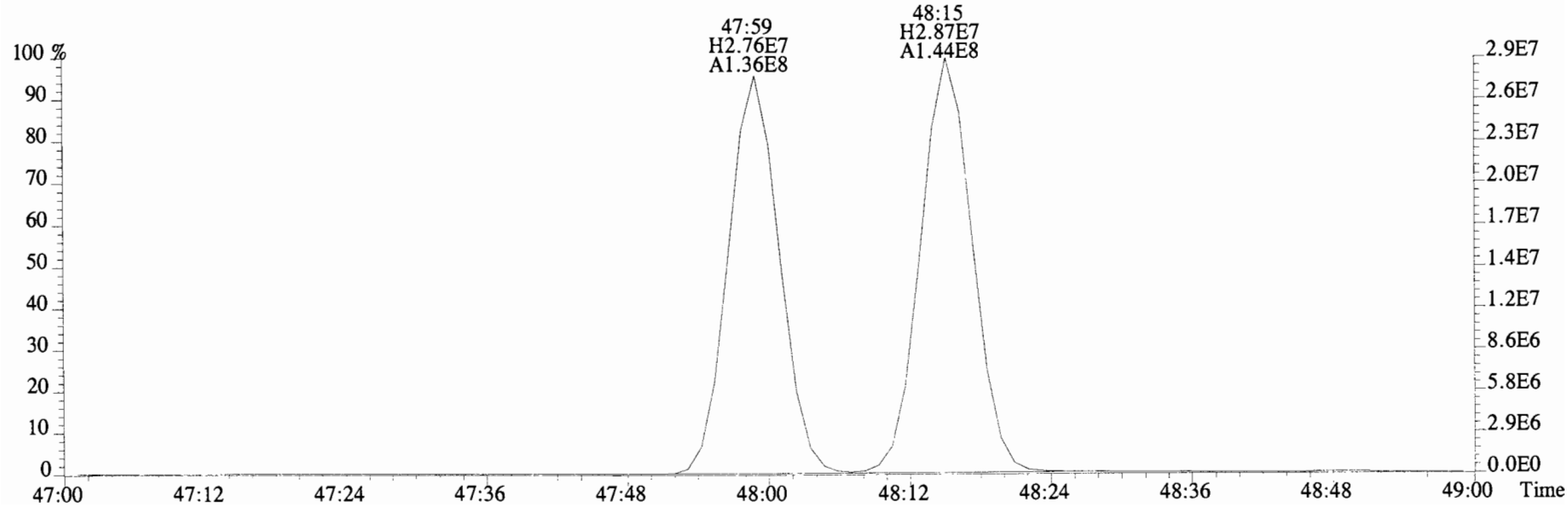
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,46832.0,0.00%,F,F)



File:141028E1 #1-552 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,44024.0,0.00%,F,F)

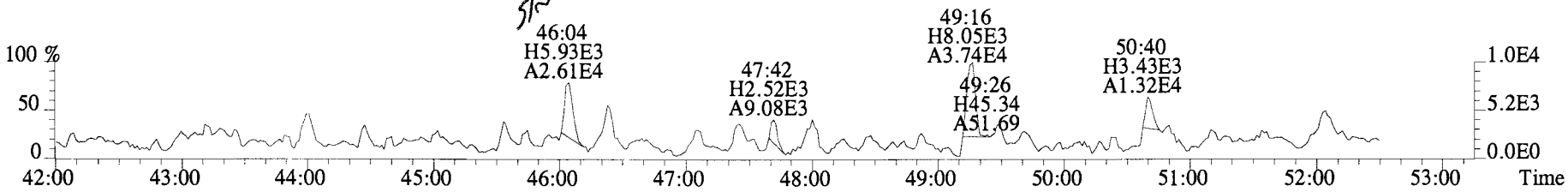


373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,46832.0,0.00%,F,F)

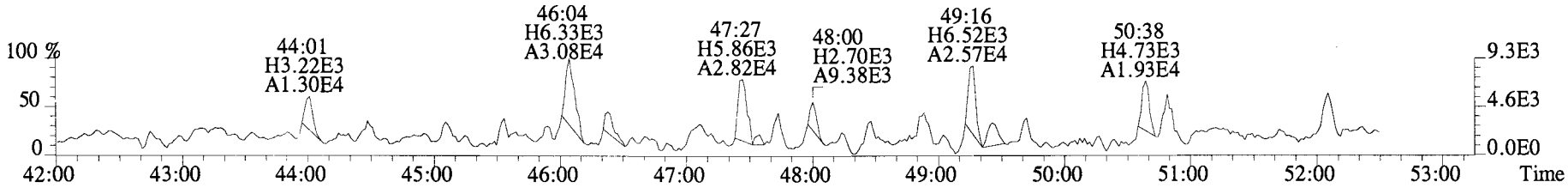


File:141028E1 #1-552 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1

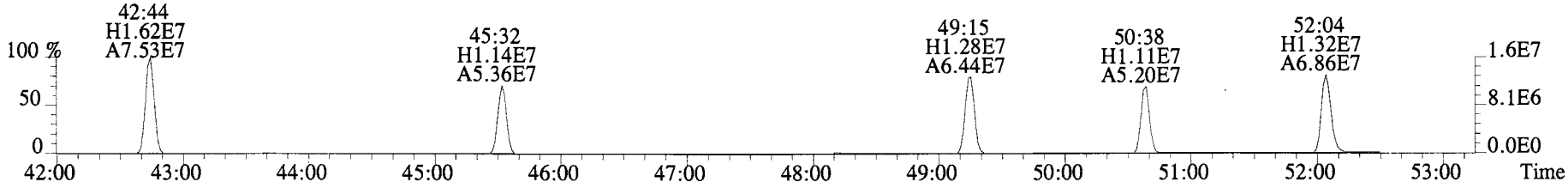
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2276.0,0.00%,F,F)



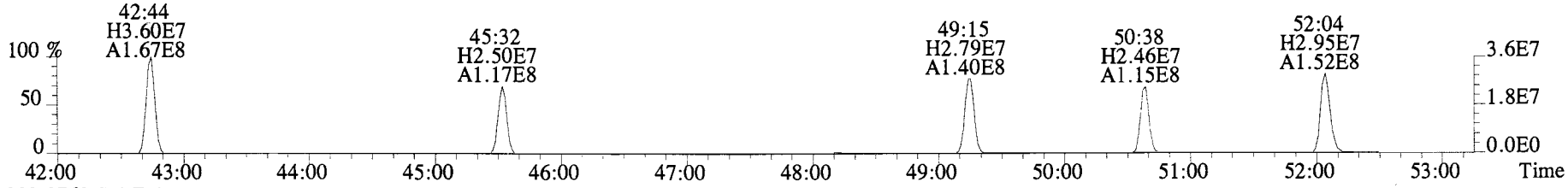
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2168.0,0.00%,F,F)



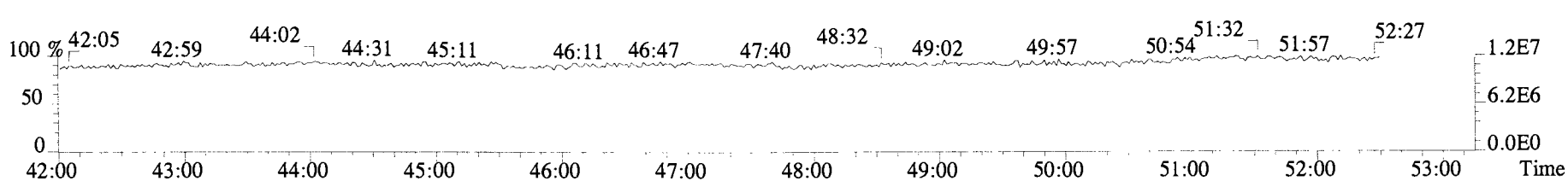
403.8457 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,22520.0,0.00%,F,F)

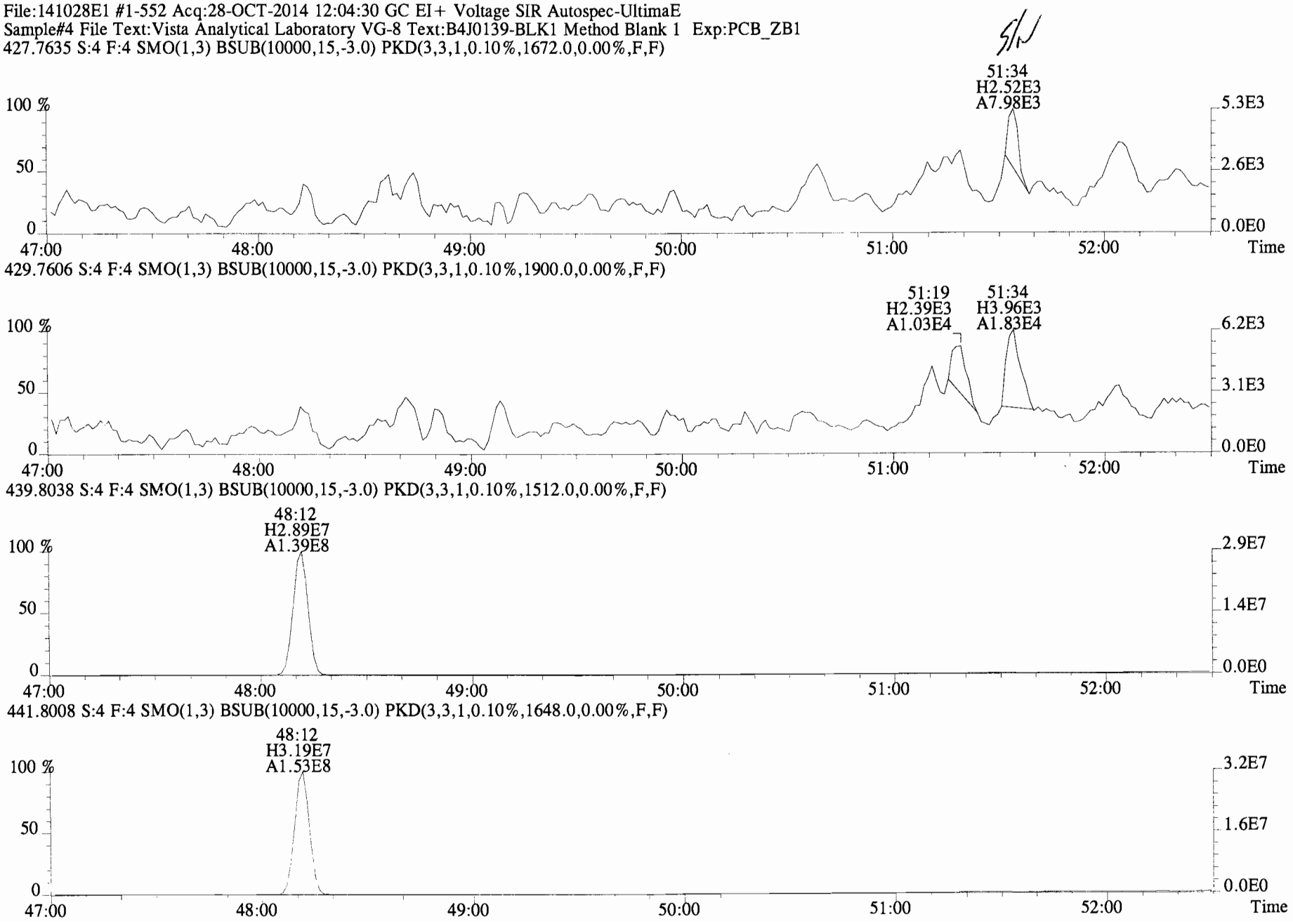


405.8428 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,38568.0,0.00%,F,F)

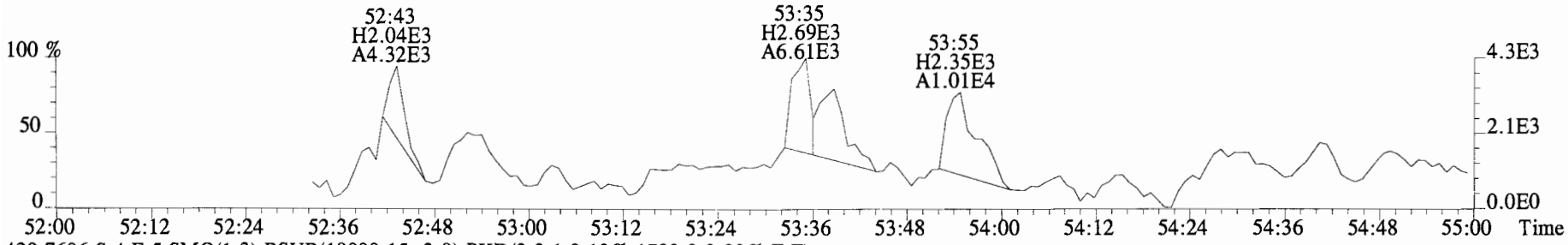


380.9760 S:4 F:4

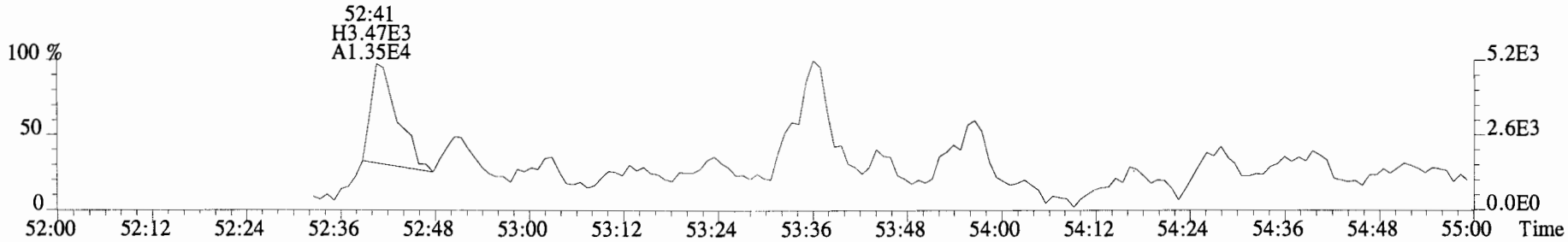



File:141028E1 #1-552 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
427.7635 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1672.0,0.00%,F,F)
51:34
H2.52E3
A7.98E3
100 %
50
0
5.3E3
2.6E3
0.0E0
47:00
48:00
49:00
50:00
51:00
52:00
Time
429.7606 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1900.0,0.00%,F,F)
51:19
H2.39E3
A1.03E4
51:34
H3.96E3
A1.83E4
100 %
50
0
6.2E3
3.1E3
0.0E0
47:00
48:00
49:00
50:00
51:00
52:00
Time
439.8038 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1512.0,0.00%,F,F)
48:12
H2.89E7
A1.39E8
100 %
50
0
2.9E7
1.4E7
0.0E0
47:00
48:00
49:00
50:00
51:00
52:00
Time
441.8008 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)
48:12
H3.19E7
A1.53E8
100 %
50
0
3.2E7
1.6E7
0.0E0
47:00
48:00
49:00
50:00
51:00
52:00
Time

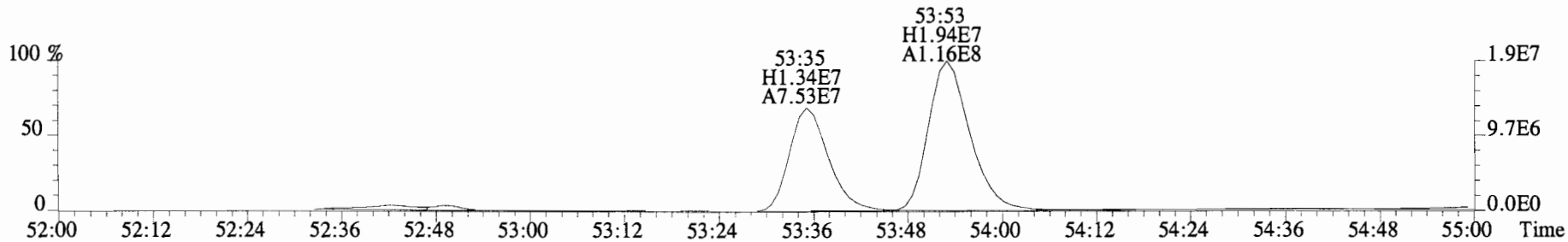
File:141028E1 #1-435 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
427.7635 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1372.0,0.00%,F,F)



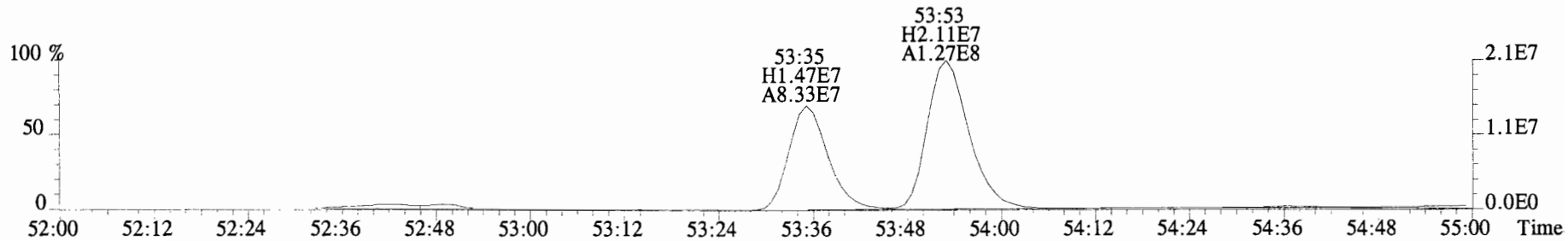
429.7606 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1720.0,0.00%,F,F)



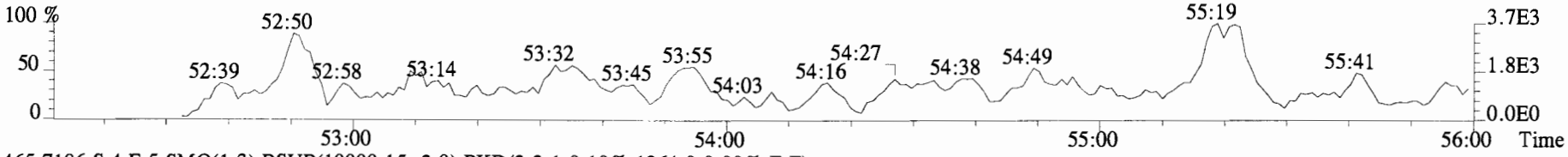
439.8038 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



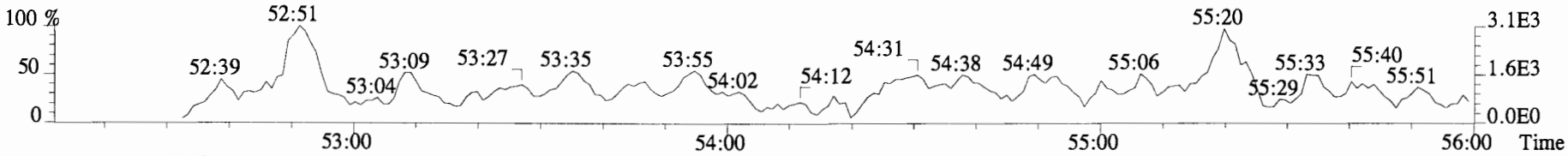
441.8008 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2128.0,0.00%,F,F)



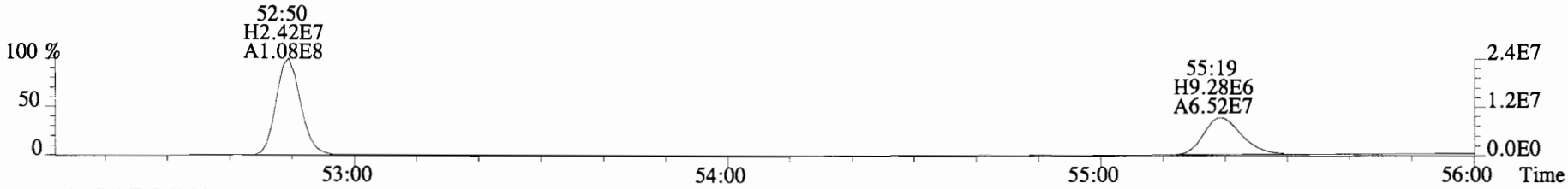
File:141028E1 #1-435 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
463.7216 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1508.0,0.00%,F,F)



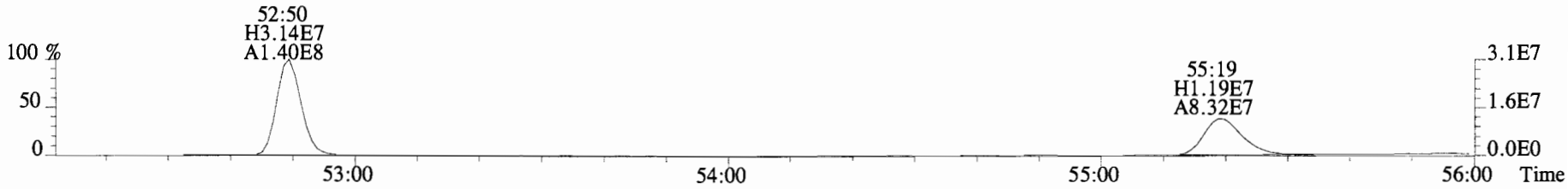
465.7186 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1364.0,0.00%,F,F)



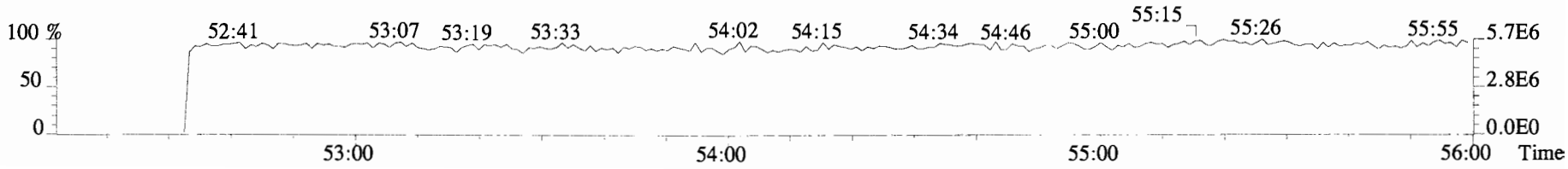
473.7648 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,51104.0,0.00%,F,F)



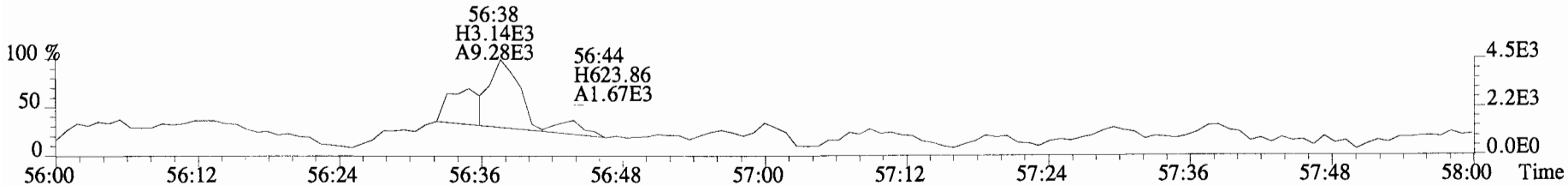
475.7619 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,109596.0,0.00%,F,F)



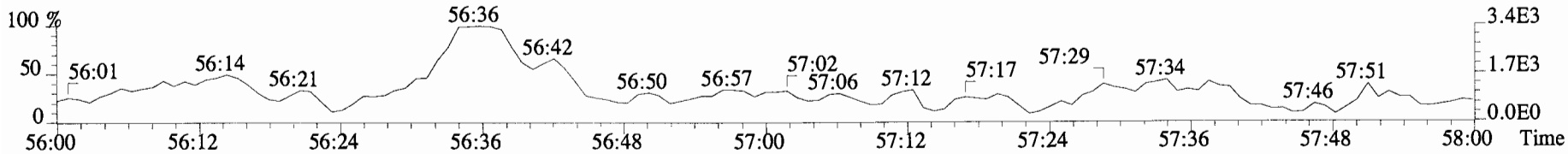
492.9697 S:4 F:5



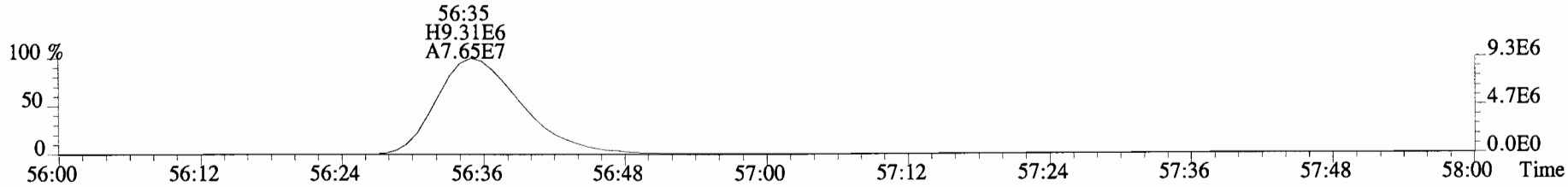
File:141028E1 #1-435 Acq:28-OCT-2014 12:04:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BLK1 Method Blank 1 Exp:PCB_ZB1
497.6826 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1136.0,0.00%,F,F)



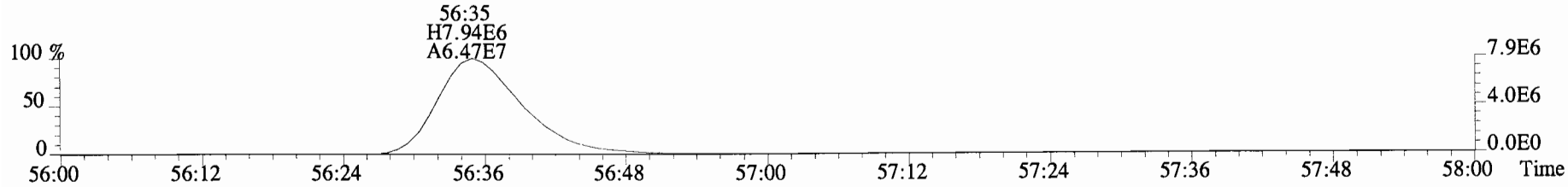
499.6797 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1180.0,0.00%,F,F)



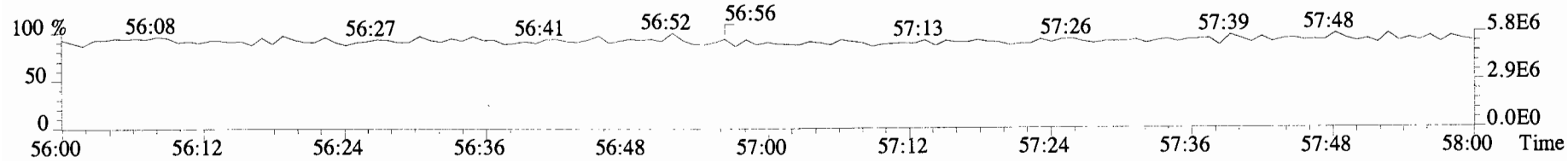
509.7229 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1332.0,0.00%,F,F)



511.7199 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1320.0,0.00%,F,F)



492.9697 S:4 F:5



EPA METHOD 1668C PCB ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory OPR Data Filename: B4J0139-BS1

Matrix : SOLID Ext. Date: 10-24-14 Analysis Date: 28-OCT-14 Time: 09:57:33

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)
PCB-1	50	38.1	30.0-67.5	13C-PCB-1	100	105.0	15-145	13C-PCB-79	100	82.8	40-145
PCB-3	50	37.6	30.0-67.5	13C-PCB-3	100	103.7	15-145	13C-PCB-178	100	104.2	40-145
PCB-4/10	200	177.8	120-270	13C-PCB-4	100	76.8	15-145				
PCB-15	100	88.4	60.0-135	13C-PCB-11	100	80.1	15-145				
PCB-19	50	44.9	30.0-67.5	13C-PCB-19	100	106.1	15-145				
PCB-37	50	46.2	30.0-67.5	13C-PCB-37	100	82.9	15-145				
PCB-54	50	45.5	30.0-67.5	13C-PCB-54	100	75.8	15-145				
PCB-81	50	45.4	30.0-67.5	13C-PCB-81	100	83.8	40-145				
PCB-77	50	46.6	30.0-67.5	13C-PCB-77	100	81.1	40-145				
PCB-104	50	45.8	30.0-67.5	13C-PCB-104	100	81.5	40-145				
PCB-123	50	44.0	30.0-67.5	13C-PCB-123	100	89.8	40-145				
PCB-106/118	100	88.6	60.0-135	13C-PCB-118	100	88.2	40-145				
PCB-114	50	47.7	30.0-67.5	13C-PCB-114	100	68.7	40-145				
PCB-105	50	47.3	30.0-67.5	13C-PCB-105	100	67.0	40-145				
PCB-126	50	49.2	30.0-67.5	13C-PCB-126	100	63.8	40-145				
PCB-155	50	45.2	30.0-67.5	13C-PCB-155	100	104.9	40-145				
PCB-167	50	45.6	30.0-67.5	13C-PCB-167	100	88.0	40-145				
PCB-156	50	45.9	30.0-67.5	13C-PCB-156	100	88.8	40-145				
PCB-157	50	44.6	30.0-67.5	13C-PCB-157	100	87.8	40-145				
PCB-169	50	43.8	30.0-67.5	13C-PCB-169	100	86.5	40-145				
PCB-188	50	45.0	30.0-67.5	13C-PCB-188	100	105.8	40-145				
PCB-189	50	43.1	30.0-67.5	13C-PCB-189	100	107.1	40-145				
PCB-202	50	45.0	30.0-67.5	13C-PCB-202	100	128.1	40-145				
PCB-205	50	42.7	30.0-67.5	13C-PCB-194	100	96.3	40-145				
PCB-208	50	46.9	30.0-67.5	13C-PCB-208	100	105.9	40-145				
PCB-206	50	45.9	30.0-67.5	13C-PCB-206	100	98.6	40-145				
PCB-209	50	47.5	30.0-67.5	13C-PCB-209	100	99.5	40-145				

Analyst: DMS

Date: 10/29/14

Client ID: OPR Filename: 141028E1 S:2 Acq:28-OCT-14 09:57:33 ConCal: ST141028E1-1
Lab ID: B4J0139-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-1	1.99e+08	2.91	y	1.19	16:26	1.001	0.996	1.006	38.1234
	PCB-2	2.04e+08	2.95	y	1.18	18:42	0.989	0.984	0.994	38.0776
	PCB-3	2.43e+08	2.93	y	1.43	18:56	1.001	0.996	1.006	37.6019
	PCB-4/10	6.01e+08	1.60	y	1.57	20:15	1.002	0.997	1.007	177.765
	PCB-7/9	7.28e+08	1.61	y	1.21	21:58	0.871	0.866	0.874	179.576
	PCB-6	3.80e+08	1.61	y	1.30	22:36	0.896	0.890	0.899	86.8092
	PCB-5/8	7.04e+08	1.61	y	1.15	23:00	0.912	0.907	0.917	182.868
	PCB-14	3.57e+08	1.62	y	1.11	24:04	0.954	0.949	0.959	89.5482
	PCB-11	3.53e+08	1.62	y	1.09	25:15	1.001	0.995	1.005	90.4274
	PCB-12/13	7.55e+08	1.61	y	1.19	25:38	1.017	1.011	1.021	176.107
	PCB-15	4.07e+08	1.60	y	1.28	25:56	1.028	1.023	1.033	88.4493
	PCB-19	1.26e+08	1.05	y	1.04	24:16	1.001	0.996	1.006	44.8889
	PCB-30	2.09e+08	1.05	y	1.71	25:08	1.036	1.032	1.042	45.3638
	PCB-18	1.50e+08	1.04	y	0.78	25:52	0.954	0.949	0.959	44.7614
	PCB-17	1.74e+08	1.05	y	0.92	26:02	0.961	0.956	0.966	44.1129
	PCB-24/27	4.53e+08	1.05	y	1.19	26:36	0.982	0.977	0.987	89.0502
-	PCB-16/32	3.60e+08	1.04	y	0.94	27:06	1.000	0.995	1.005	89.5578
-	PCB-34	1.78e+08	1.04	y	1.14	27:52	0.960	0.955	0.965	43.7900
	PCB-23	1.99e+08	1.05	y	1.28	27:58	0.964	0.959	0.969	43.4390
	PCB-29	1.75e+08	1.05	y	1.08	28:12	0.972	0.967	0.977	45.1200
	PCB-26	1.94e+08	1.04	y	1.21	28:25	0.979	0.974	0.984	44.7697
	PCB-25	2.13e+08	1.05	y	1.26	28:34	0.984	0.979	0.989	47.0935
	PCB-31	2.09e+08	1.03	y	1.28	28:56	0.997	0.992	1.002	45.2674
	PCB-28	2.78e+08	1.04	y	1.71	29:02	1.001	0.995	1.005	45.2728
	PCB-20/21/33	5.29e+08	1.03	y	1.08	29:39	1.022	1.017	1.027	136.294
	PCB-22	1.90e+08	1.03	y	1.21	30:05	1.037	1.032	1.042	43.8441
	PCB-36	1.69e+08	1.04	y	1.14	30:40	0.933	0.928	0.938	46.4994
	PCB-39	1.68e+08	1.04	y	1.12	31:09	0.948	0.943	0.953	47.3291
	PCB-38	1.64e+08	1.03	y	1.20	31:55	0.971	0.966	0.976	42.7668
	PCB-35	1.89e+08	1.05	y	1.23	32:26	0.987	0.982	0.992	48.1310
	PCB-37	1.81e+08	1.03	y	1.23	32:53	1.001	0.995	1.005	46.2165
	PCB-54	1.72e+08	0.76	y	1.10	27:57	1.001	0.996	1.006	45.5441
	PCB-50	1.45e+08	0.76	y	0.88	29:05	1.041	1.037	1.047	48.1617
	PCB-53	1.42e+08	0.77	y	1.06	29:43	0.946	0.942	0.952	45.7654
	PCB-51	1.31e+08	0.75	y	0.99	30:04	0.958	0.952	0.962	45.4607
	PCB-45	1.16e+08	0.76	y	0.86	30:30	0.971	0.966	0.976	46.1211
	PCB-46	1.15e+08	0.76	y	0.85	31:00	0.987	0.981	0.991	46.8178

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-52/69	3.46e+08	0.75	y	1.28	31:26	1.001	0.996	1.006	92.6329
	PCB-73	1.87e+08	0.77	y	1.35	31:33	1.005	1.000	1.010	47.2744
	PCB-43/49	2.66e+08	0.76	y	0.99	31:43	1.010	1.005	1.015	91.8257
	PCB-47	1.56e+08	0.75	y	1.06	31:55	1.001	0.996	1.006	46.9301
	PCB-48/75	3.58e+08	0.76	y	1.23	32:02	1.004	0.999	1.009	92.8159
	PCB-65	1.89e+08	0.75	y	1.22	32:19	1.013	1.008	1.018	49.2322
	PCB-62	1.72e+08	0.76	y	1.22	32:25	1.016	1.011	1.021	44.9078
	PCB-44	1.28e+08	0.76	y	0.86	32:43	1.026	1.021	1.031	47.4571
	PCB-42/59	3.47e+08	0.76	y	1.14	32:57	1.033	1.028	1.038	97.0562
	PCB-41/64/71/72	6.93e+08	0.76	y	1.21	33:32	1.051	1.046	1.056	182.827
	PCB-68	2.01e+08	0.76	y	1.35	33:46	1.059	1.054	1.064	47.4828
	PCB-40	1.07e+08	0.75	y	0.70	34:01	1.066	1.061	1.071	48.7248
	PCB-57	1.83e+08	0.77	y	0.98	34:21	0.970	0.965	0.975	46.5624
	PCB-67	2.05e+08	0.75	y	1.11	34:39	0.979	0.974	0.984	46.2358
	PCB-58	1.71e+08	0.77	y	0.93	34:47	0.983	0.977	0.987	46.0515
	PCB-63	1.72e+08	0.76	y	0.95	34:56	0.987	0.982	0.992	44.9525
	PCB-74	2.27e+08	0.76	y	1.24	35:13	0.995	0.990	1.000	45.5457
	PCB-61/70	3.58e+08	0.76	y	0.95	35:23	1.000	0.995	1.005	93.3965
	PCB-76/66	3.79e+08	0.76	y	1.04	35:37	1.006	1.001	1.011	90.3060
	PCB-80	2.34e+08	0.77	y	1.19	35:49	1.000	0.996	1.006	47.6580
	PCB-55	2.02e+08	0.76	y	1.04	36:10	1.010	1.005	1.015	47.1062
	PCB-56/60	3.92e+08	0.76	y	1.01	36:40	1.024	1.019	1.029	94.2871
	PCB-79	2.02e+08	0.76	y	1.08	37:43	1.054	1.048	1.058	45.3598
	PCB-78	2.09e+08	0.77	y	1.27	38:25	0.987	0.982	0.992	45.6458
	PCB-81	2.17e+08	0.78	y	1.33	38:57	1.000	0.995	1.005	45.3777
	PCB-77	1.82e+08	0.78	y	1.10	39:33	1.000	0.995	1.005	46.5632
	PCB-104	1.78e+08	1.55	y	1.18	32:35	1.001	0.996	1.006	45.8137
	PCB-96	1.65e+08	1.56	y	1.14	33:50	1.039	1.034	1.044	44.3387
	PCB-103	1.41e+08	1.56	y	0.96	34:22	1.055	1.050	1.060	45.0772
	PCB-100	1.41e+08	1.56	y	0.94	34:42	1.066	1.061	1.071	45.9947
	PCB-94	1.15e+08	1.58	y	1.06	35:11	0.986	0.980	0.990	42.9906
	PCB-95/98/102	4.13e+08	1.55	y	1.22	35:40	0.999	0.995	1.005	132.879
	PCB-93	1.00e+08	1.58	y	0.84	35:48	1.003	0.997	1.007	46.8847
	PCB-88/91	2.49e+08	1.63	y	1.12	36:05	1.011	1.005	1.015	87.9157
	PCB-121	1.95e+08	1.48	y	1.62	36:11	1.014	1.009	1.019	47.5173
	PCB-84/92	2.59e+08	1.56	y	1.05	37:01	0.991	0.985	0.995	90.7731
	PCB-89	1.36e+08	1.56	y	1.13	37:13	0.996	0.991	1.001	44.2339

RL: MONO, TRI - DECA: —

RL: DI : —

Integrations by Analyst: DMS Date: 10/29/14

Reviewed by Analyst: Date: 10/29/14

Client ID: OPR Filename: 141028E1 S:2 Acq:28-OCT-14 09:57:33 ConCal: ST141028E1-1

Lab ID: B4J0139-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-90/101	2.72e+08	1.57	y	1.10	37:22	1.000	0.995	1.005	90.6745
	PCB-113	1.64e+08	1.56	y	1.41	37:37	1.007	1.002	1.012	42.6012
	PCB-99	1.77e+08	1.58	y	1.34	37:43	1.009	1.004	1.014	48.6998
	PCB-119	1.72e+08	1.56	y	1.53	38:11	0.987	0.982	0.992	44.7244
	PCB-108/112	2.85e+08	1.57	y	1.28	38:20	0.991	0.986	0.996	88.7795
	PCB-83	1.67e+08	1.56	y	1.52	38:31	0.996	0.990	1.000	43.9104
	PCB-97	1.32e+08	1.55	y	1.18	38:42	1.000	0.995	1.005	44.5897
	PCB-86	9.09e+07	1.54	y	0.84	38:51	1.004	0.999	1.009	43.0858
	B-87/117/125	5.25e+08	1.57	y	1.55	38:58	1.007	1.002	1.012	135.244
	PCB-111/115	3.68e+08	1.56	y	1.63	39:07	1.011	1.006	1.016	89.9959
	PCB-85/116	2.90e+08	1.57	y	1.30	39:16	1.015	1.010	1.020	88.9350
	PCB-120	1.86e+08	1.57	y	1.68	39:29	1.021	1.016	1.026	44.4322
	PCB-110	1.73e+08	1.56	y	1.56	39:39	1.025	1.020	1.030	44.3254
	PCB-82	1.10e+08	1.58	y	0.76	40:16	0.976	0.971	0.981	45.0389
	PCB-124	2.09e+08	1.54	y	1.47	40:56	0.992	0.988	0.998	44.0726
	PCB-107/109	3.84e+08	1.56	y	1.32	41:05	0.996	0.991	1.001	90.0936
	PCB-123	1.65e+08	1.56	y	1.17	41:15	1.000	0.996	1.006	43.9738
-	PCB-106/118	3.53e+08	1.56	y	1.17	41:28	1.001	0.996	1.006	88.6002
-	PCB-114	1.64e+08	1.61	y	1.30	42:07	1.000	0.995	1.005	47.7039
	PCB-122	1.46e+08	1.62	y	1.12	42:15	1.004	0.999	1.009	49.0369
	PCB-105	1.59e+08	1.61	y	1.30	42:59	1.000	0.995	1.005	47.2596
	PCB-127	1.73e+08	1.63	y	1.33	43:18	1.000	0.996	1.006	46.7627
	PCB-126	1.38e+08	1.64	y	1.18	45:13	1.000	0.995	1.005	49.1733
	PCB-155	1.78e+08	1.25	y	1.11	36:56	1.000	0.966	1.006	45.1806
	PCB-150	1.63e+08	1.25	y	1.00	38:12	1.035	1.030	1.040	46.1801
	PCB-152	1.76e+08	1.25	y	1.12	38:41	1.048	1.043	1.053	44.7592
	PCB-145	1.93e+08	1.25	y	1.20	39:08	1.060	1.055	1.065	45.4283
	PCB-136	1.90e+08	1.23	y	1.18	39:27	1.069	1.064	1.074	45.6374
	PCB-148	1.21e+08	1.30	y	0.74	39:33	1.071	1.066	1.076	46.1636
	PCB-154	1.44e+08	1.25	y	0.86	40:02	1.084	1.080	1.090	47.4036
	PCB-151	1.21e+08	1.26	y	0.75	40:41	1.102	1.097	1.107	46.0164
	PCB-135	1.22e+08	1.25	y	0.79	40:54	1.108	1.103	1.113	43.5755
	PCB-144	1.39e+08	1.26	y	0.76	41:01	1.111	1.105	1.117	51.6736
	PCB-147	1.39e+08	1.25	y	0.82	41:09	1.115	1.109	1.121	48.1517
	PCB-139/149	2.56e+08	1.25	y	0.76	41:25	1.122	1.116	1.128	95.2406
-	PCB-140	1.22e+08	1.25	y	0.72	41:36	1.127	1.121	1.133	47.6206
-	PCB-134/143	2.40e+08	1.23	y	0.92	42:02	0.975	0.970	0.980	89.5982

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-133/142	2.16e+08	1.22	y	0.82	42:19	0.982	0.977	0.987	90.1177
	PCB-131	1.17e+08	1.23	y	0.91	42:30	0.986	0.981	0.991	43.9970
	PCB-146/165	3.23e+08	1.23	y	1.25	42:43	0.991	0.986	0.996	88.5539
	PCB-132/161	2.90e+08	1.23	y	1.10	42:58	0.997	0.992	1.002	89.6647
	PCB-153	1.58e+08	1.23	y	1.25	43:07	1.000	0.995	1.005	43.1369
	PCB-168	1.89e+08	1.23	y	1.45	43:20	1.005	1.001	1.011	44.5427
	PCB-141	1.30e+08	1.24	y	1.09	43:52	1.000	0.995	1.005	45.1570
	PCB-137	1.25e+08	1.24	y	1.06	44:15	1.009	1.004	1.014	44.5964
	PCB-130	1.24e+08	1.22	y	0.96	44:22	1.012	1.006	1.016	48.4500
	PCB-138/163/164	4.83e+08	1.23	y	1.29	44:44	1.001	0.996	1.006	135.077
	PCB-158/160	3.36e+08	1.23	y	1.34	44:59	1.006	1.001	1.011	90.5535
	PCB-129	1.07e+08	1.23	y	0.85	45:14	1.012	1.007	1.017	45.2426
	PCB-166	1.69e+08	1.23	y	1.19	45:42	0.994	0.988	0.998	45.7642
	PCB-159	1.59e+08	1.24	y	1.11	46:00	1.000	0.996	1.006	45.9510
	PCB-128/162	2.89e+08	1.22	y	1.05	46:18	1.007	1.002	1.012	88.7088
	PCB-167	1.85e+08	1.22	y	1.20	46:42	1.000	0.995	1.005	45.6059
	PCB-156	1.70e+08	1.22	y	1.14	48:01	1.001	0.996	1.006	45.8505
	PCB-157	1.75e+08	1.24	y	1.16	48:17	1.000	0.995	1.005	44.5807
	PCB-169	1.55e+08	1.23	y	1.12	50:18	1.000	0.995	1.005	43.8063
	PCB-188	1.96e+08	1.03	y	1.58	42:46	1.000	0.996	1.006	44.9837
	PCB-184	2.03e+08	1.05	y	1.63	43:13	1.011	1.006	1.016	45.2238
	PCB-179	1.58e+08	1.03	y	1.30	44:00	1.029	1.024	1.034	43.9834
	PCB-176	1.77e+08	1.04	y	1.48	44:28	1.040	1.035	1.045	43.4803
	PCB-186	1.75e+08	1.02	y	1.45	45:05	1.055	1.050	1.060	43.6106
	PCB-178	1.27e+08	1.04	y	1.03	45:34	1.066	1.061	1.071	44.6707
	PCB-175	1.21e+08	1.02	y	1.01	45:55	1.074	1.069	1.079	43.3185
	PCB-182/187	3.00e+08	1.04	y	1.25	46:05	1.078	1.073	1.083	86.9072
	PCB-183	1.42e+08	1.03	y	1.21	46:24	1.085	1.081	1.091	42.6667
	PCB-185	1.63e+08	1.03	y	1.80	47:05	0.956	0.951	0.961	42.5732
	PCB-174	1.37e+08	1.02	y	1.38	47:27	0.963	0.958	0.968	46.7846
	PCB-181	1.25e+08	1.05	y	1.38	47:34	0.966	0.960	0.970	42.7696
	PCB-177	1.19e+08	1.03	y	1.26	47:43	0.969	0.963	0.973	44.5855
	PCB-171	1.45e+08	1.03	y	1.58	48:01	0.975	0.970	0.980	43.3130
	PCB-173	1.05e+08	1.03	y	1.11	48:27	0.984	0.978	0.988	44.4451
	PCB-172	1.56e+08	1.04	y	1.63	48:54	0.993	0.987	0.997	44.9328
	PCB-192	1.66e+08	1.03	y	1.74	49:05	0.997	0.991	1.001	45.0260
	PCB-180	1.25e+08	1.03	y	1.34	49:17	1.001	0.995	1.005	43.9721

RL: MONO, TRI - DECA: ———

Integrations by Analyst: DMS

Date: 12/29/14

Client ID: OPR | Filename: 141028E1 S:2 | Acq:28-OCT-14 09:57:33 | ConCal: ST141028E1-1 |

Lab ID: B4J0139-BS1 | GC Column ID: ZB-1 | ICal: PCBVG8-6-23-14 | wt/vol: 1.0000 | EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-193	1.55e+08	1.03	y	1.72	49:27	1.004	0.999	1.009	42.5283
	PCB-191	1.53e+08	1.03	y	1.69	49:41	1.009	1.004	1.014	42.6577
	PCB-170	1.20e+08	1.03	y	1.60	50:40	1.000	0.995	1.005	44.3464
	PCB-190	1.61e+08	1.03	y	2.21	50:49	1.003	0.998	1.008	43.2376
	PCB-189	1.45e+08	1.04	y	1.55	52:06	1.000	0.995	1.005	43.0855
	PCB-202	1.49e+08	0.90	y	1.08	48:13	1.000	0.995	1.005	45.0319
	PCB-201	1.57e+08	0.90	y	1.15	48:42	1.010	1.005	1.015	44.8807
	PCB-204	1.60e+08	0.90	y	1.14	48:51	1.013	1.008	1.018	46.0850
	PCB-197	1.48e+08	0.90	y	1.07	49:09	1.020	1.015	1.025	45.2416
	PCB-200	1.47e+08	0.90	y	1.06	49:58	1.037	1.032	1.044	45.3286
	PCB-198	1.01e+08	0.89	y	0.76	51:13	1.063	1.059	1.069	43.9103
	PCB-199	1.12e+08	0.90	y	0.80	51:19	1.065	1.061	1.071	46.3011
-	PCB-196/203	2.22e+08	0.90	y	0.80	51:34	1.070	1.066	1.076	91.0674
-	PCB-195	1.01e+08	0.91	y	1.23	52:43	0.984	0.979	0.989	49.6360
	PCB-194	8.96e+07	0.91	y	1.21	53:37	1.000	0.995	1.005	44.7285
	PCB-205	1.09e+08	0.92	y	1.54	53:55	1.006	1.001	1.011	42.6983
	PCB-208	1.08e+08	1.31	y	0.93	52:51	1.000	0.995	1.005	46.9308
	PCB-207	1.24e+08	1.33	y	1.08	53:10	1.006	1.001	1.011	46.5897
	PCB-206	6.48e+07	1.30	y	1.02	55:22	1.000	0.995	1.005	45.8965
	PCB-209	7.27e+07	1.17	y	1.17	56:37	1.000	0.995	1.005	47.4772

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	6.46e+08	2.91	y	16:26	1.27	113.803	
Total Di-PCB	4.29e+09	1.60	y	20:15	1.21	1074.29	
Total Tri-PCB	1.47e+09	1.05	y	24:16	1.10	357.735	
Total Tri-PCB	3.07e+09	1.04	y	27:52	1.21	733.776	Sum:1091.51
Total Tetra-PCB	7.37e+09	0.76	y	27:57	1.09	1970.68	
Total Penta-PCB	6.33e+09	1.55	y	32:35	1.18	1840.14	
Total Penta-PCB	8.41e+08	1.61	y	42:07	1.25	258.733	Sum:2098.87
Total Hexa-PCB	2.06e+09	1.25	y	36:56	0.90	653.031	
Total Hexa-PCB	4.21e+09	1.23	y	42:02	1.11	1279.21	Sum:1932.24
Total Hepta-PCB	3.62e+09	1.03	y	42:46	1.42	1065.51	
Total Octa-PCB	1.20e+09	0.90	y	48:13	0.96	407.847	
Total Octa-PCB	3.02e+08	0.91	y	52:43	1.33	138.420	Sum:546.267
Total Nona-PCB	3.02e+08	1.31	y	52:51	1.01	142.052	
Total Deca-PCB	7.27e+07	1.17	y	56:37	1.17	47.4772	

Total PCB Conc:9994.03153300

RL: MONO, TRI - DECA: ———

Integrations by Analyst: DMS

Date: 10/29/14

Client ID: OPR Filename: 141028E1 S:2 Acq:28-OCT-14 09:57:33 ConCal: ST141028E1-1
Lab ID: B4J0139-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:1.0000 EndCAL: NA

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	4.38e+08	3.21	y	0.87	16:25	0.633	0.629	0.635	105	105
13C-PCB-3	4.52e+08	3.22	y	0.91	18:55	0.730	0.725	0.733	104	104
13C-PCB-4	2.16e+08	1.56	y	0.59	20:13	0.780	0.775	0.783	76.8	76.8
13C-PCB-9	3.35e+08	1.57	y	0.90	21:56	0.846	0.842	0.850	78.1	78.1
13C-PCB-11	3.59e+08	1.55	y	0.94	25:13	0.973	0.968	0.978	80.1	80.1
13C-PCB-19	2.70e+08	1.07	y	0.53	24:15	0.936	0.930	0.940	106	106
13C-PCB-28	3.59e+08	1.05	y	0.93	29:01	1.003	0.999	1.009	83.9	83.9
13C-PCB-32	4.29e+08	1.06	y	0.80	27:06	1.046	1.040	1.050	112	112
13C-PCB-37	3.19e+08	1.06	y	0.84	32:52	1.137	1.131	1.143	82.9	82.9
13C-PCB-47	3.14e+08	0.78	y	0.81	31:54	0.870	0.866	0.874	83.0	83.0
13C-PCB-52	2.92e+08	0.77	y	0.77	31:24	0.857	0.853	0.861	81.2	81.2
13C-PCB-54	3.43e+08	0.79	y	0.97	27:56	0.762	0.758	0.766	75.8	75.8
13C-PCB-70	4.02e+08	0.79	y	1.00	35:24	0.966	0.961	0.971	86.4	86.4
13C-PCB-77	3.56e+08	0.79	y	0.94	39:32	1.079	1.073	1.083	81.1	81.1
13C-PCB-80	4.12e+08	0.79	y	1.03	35:48	0.977	0.972	0.982	85.7	85.7
13C-PCB-81	3.60e+08	0.78	y	0.92	38:56	1.062	1.057	1.067	83.8	83.8
13C-PCB-95	2.54e+08	1.59	y	0.74	35:42	0.913	0.908	0.918	85.5	85.5
13C-PCB-97	2.50e+08	1.60	y	0.70	38:41	0.989	0.984	0.994	88.6	88.6
13C-PCB-101	2.73e+08	1.59	y	0.78	37:22	0.956	0.951	0.961	86.7	86.7
13C-PCB-104	3.28e+08	1.58	y	1.00	32:34	0.833	0.828	0.836	81.5	81.5
13C-PCB-105	2.60e+08	1.54	y	1.37	42:58	0.929	0.924	0.934	67.0	67.0
13C-PCB-114	2.66e+08	1.57	y	1.36	42:06	0.910	0.905	0.915	68.7	68.7
13C-PCB-118	3.40e+08	1.61	y	0.96	41:26	1.060	1.054	1.064	88.2	88.2
13C-PCB-123	3.22e+08	1.59	y	0.89	41:15	1.055	1.050	1.060	89.8	89.8
13C-PCB-126	2.37e+08	1.56	y	1.31	45:13	0.977	0.972	0.982	63.8	63.8
13C-PCB-127	2.77e+08	1.55	y	1.47	43:17	0.936	0.931	0.941	66.3	66.3
13C-PCB-138	2.77e+08	1.27	y	1.10	44:42	0.966	0.961	0.971	88.7	88.7
13C-PCB-141	2.65e+08	1.28	y	1.07	43:51	0.948	0.943	0.953	86.8	86.8
13C-PCB-153	2.93e+08	1.28	y	1.15	43:06	0.932	0.927	0.937	90.0	90.0
13C-PCB-155	3.53e+08	1.27	y	0.84	36:55	0.944	0.939	0.949	105	105
13C-PCB-156	3.27e+08	1.26	y	1.30	47:59	1.037	1.032	1.042	88.8	88.8
13C-PCB-157	3.38e+08	1.28	y	1.36	48:16	1.043	1.038	1.048	87.8	87.8
13C-PCB-159	3.12e+08	1.26	y	1.25	45:59	0.994	0.989	0.999	88.0	88.0
13C-PCB-167	3.38e+08	1.25	y	1.35	46:41	1.009	1.004	1.014	88.0	88.0
13C-PCB-169	3.16e+08	1.27	y	1.29	50:18	1.087	1.083	1.093	86.5	86.5
13C-PCB-170	1.69e+08	0.45	y	0.54	50:39	1.095	1.089	1.101	110	110
13C-PCB-180	2.12e+08	0.46	y	0.68	49:15	1.064	1.060	1.070	109	109
13C-PCB-188	2.75e+08	0.46	y	0.92	42:45	0.924	0.919	0.929	106	106
13C-PCB-189	2.18e+08	0.45	y	0.72	52:05	1.126	1.120	1.132	107	107
13C-PCB-194	1.65e+08	0.91	y	0.80	53:36	0.994	0.990	1.000	96.3	96.3
13C-PCB-202	3.05e+08	0.91	y	0.84	48:12	1.042	1.036	1.046	128	128
13C-PCB-206	1.38e+08	0.77	y	0.65	55:21	1.027	1.021	1.031	98.6	98.6
13C-PCB-208	2.46e+08	0.77	y	1.08	52:50	0.980	0.976	0.986	106	106
13C-PCB-209	1.31e+08	1.19	y	0.61	56:36	1.050	1.045	1.055	99.5	99.5

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	3.92e+08	0.78	y	1.02	37:42	1.029	1.023	1.034	82.8	82.8
13C-PCB-178	1.82e+08	0.45	y	0.61	45:33	0.985	0.979	0.990	104	104

PS vs. IS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	3.92e+08	0.78	y	1.10	37:42	0.968	0.964	0.974	98.7	98.7
13C-PCB-178	1.82e+08	0.45	y	0.90	45:33	0.925	0.920	0.930	95.3	95.3

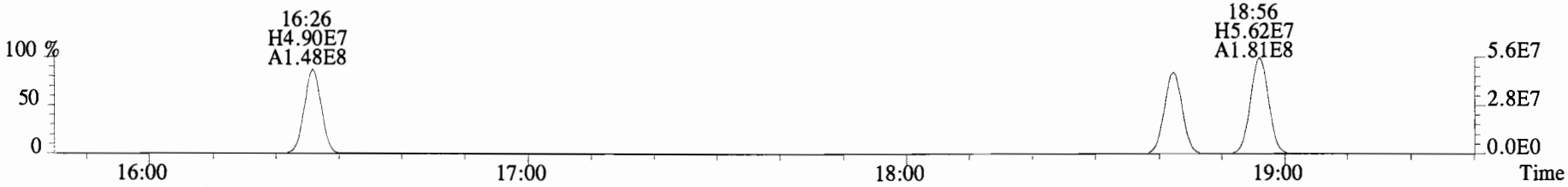
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	4.78e+08	1.56	y	1.00	25:55	100
13C-PCB-31	4.58e+08	1.04	y	1.00	28:55	100
13C-PCB-60	4.66e+08	0.78	y	1.00	36:39	100
13C-PCB-111	4.01e+08	1.59	y	1.00	39:06	100
13C-PCB-128	2.84e+08	1.27	y	1.00	46:16	100
13C-PCB-205	2.15e+08	0.90	y	1.00	53:54	100

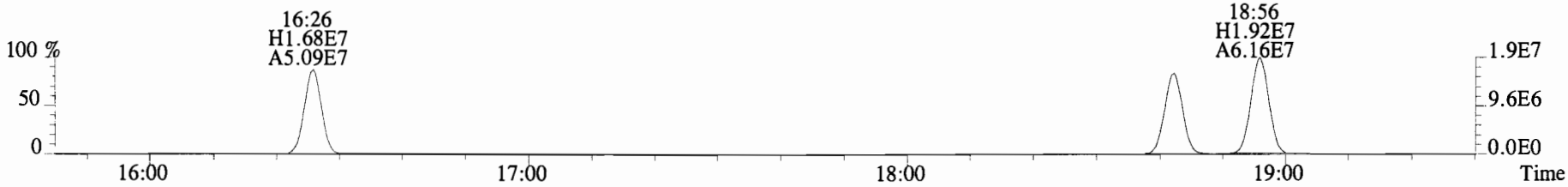
Analyst: DMS

Date: 10/27/14

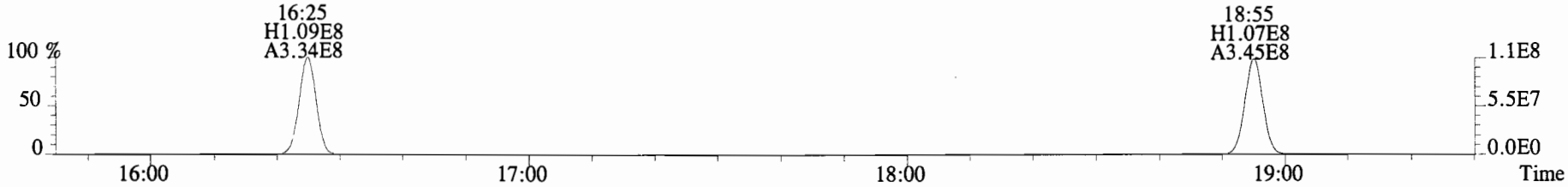
File:141028E1 #1-728 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
188.0393 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2892.0,0.00%,F,F)



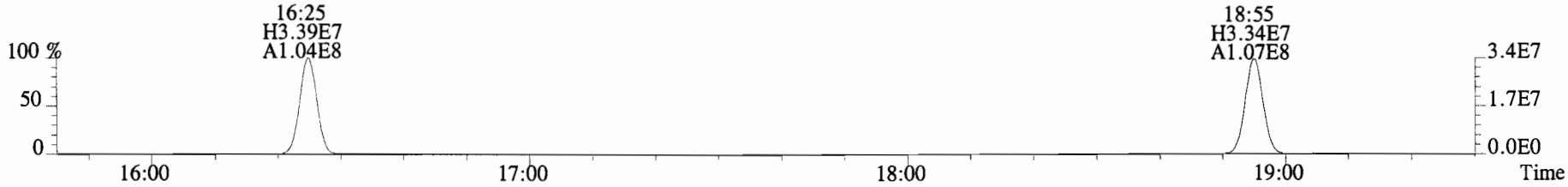
190.0363 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2824.0,0.00%,F,F)



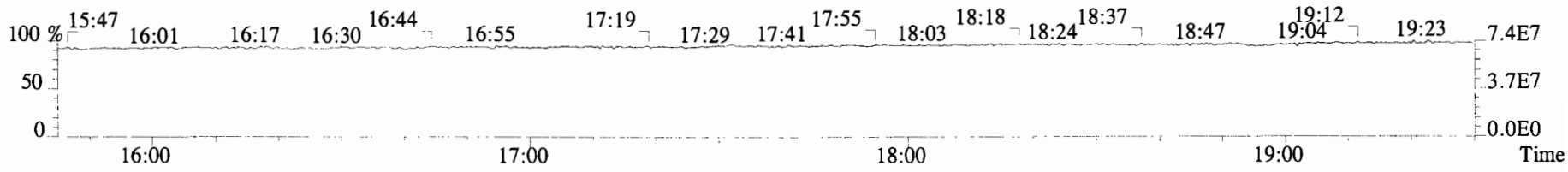
200.0795 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5112.0,0.00%,F,F)



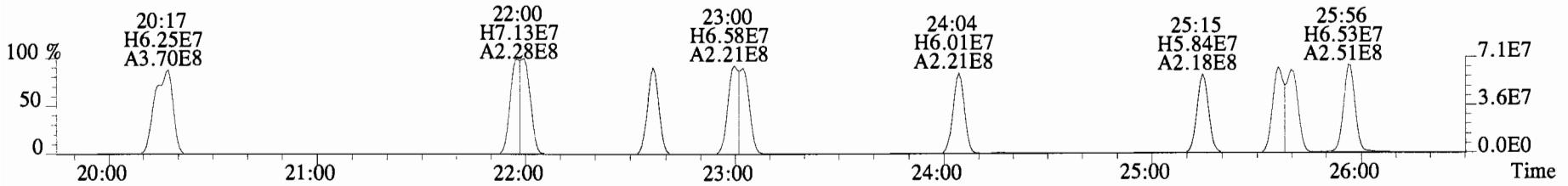
202.0766 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35080.0,0.00%,F,F)



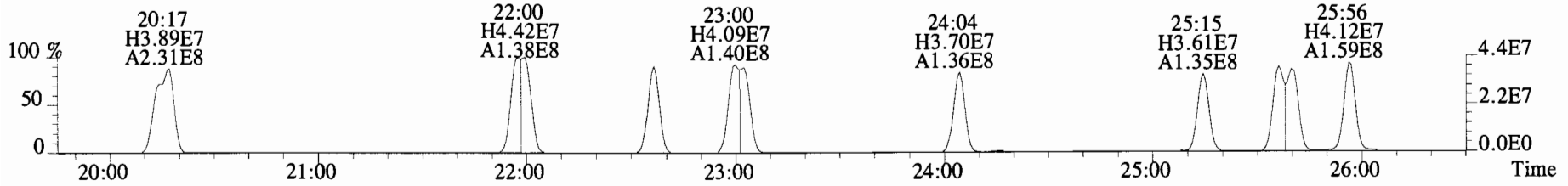
180.9880 S:2



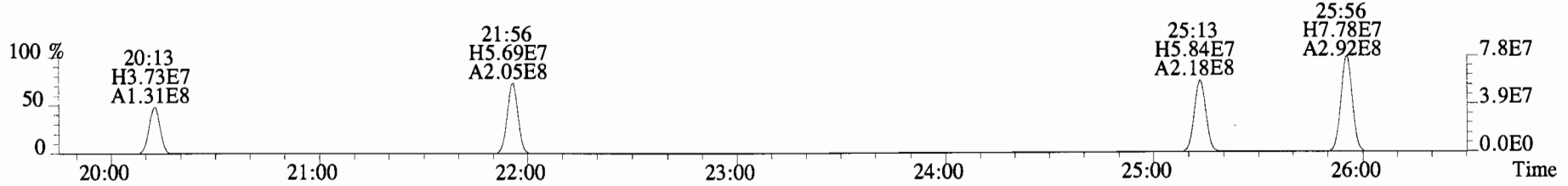
File:141028E1 #1-758 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
222.0003 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,38172.0,0.00%,F,F)



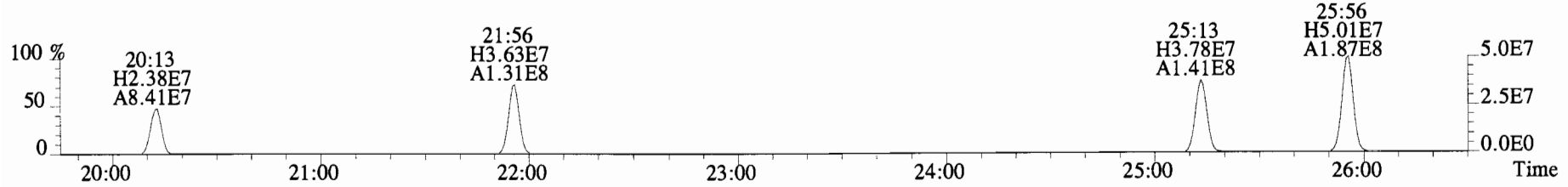
223.9974 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,46584.0,0.00%,F,F)



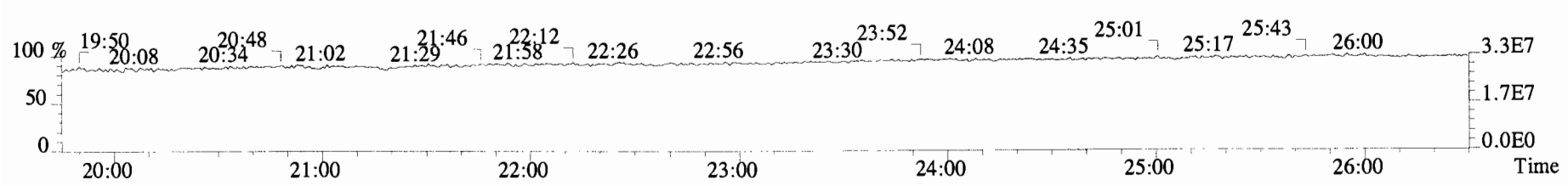
234.0406 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15940.0,0.00%,F,F)



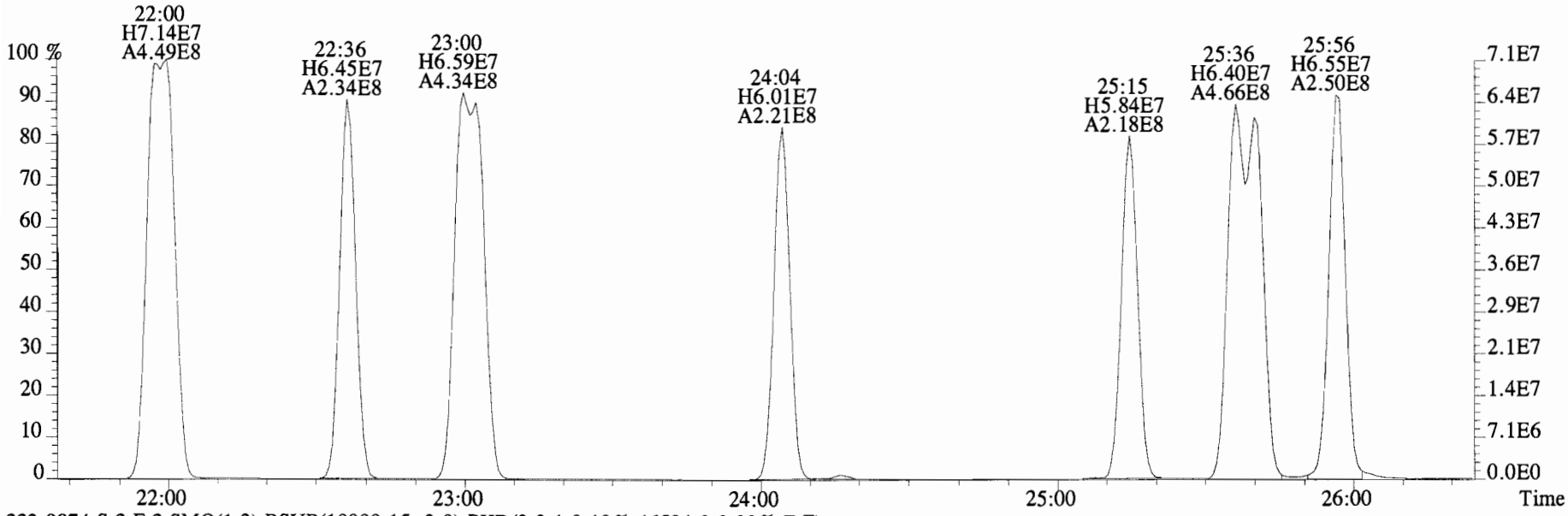
236.0376 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12188.0,0.00%,F,F)



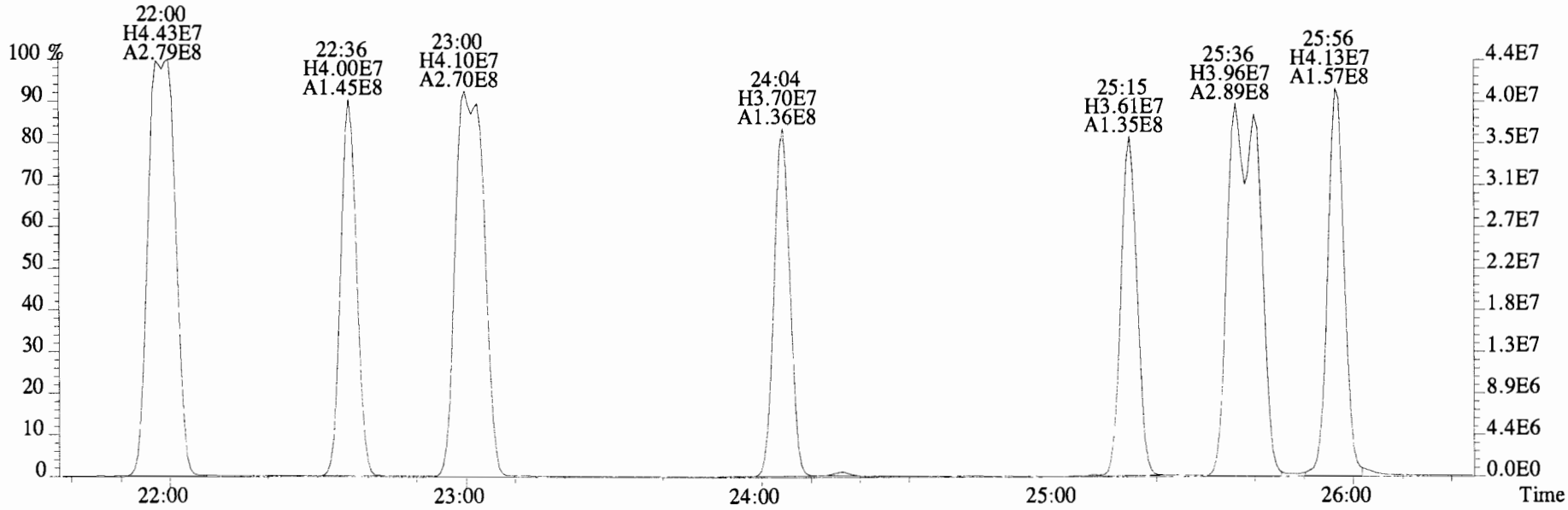
230.9856 S:2 F:2



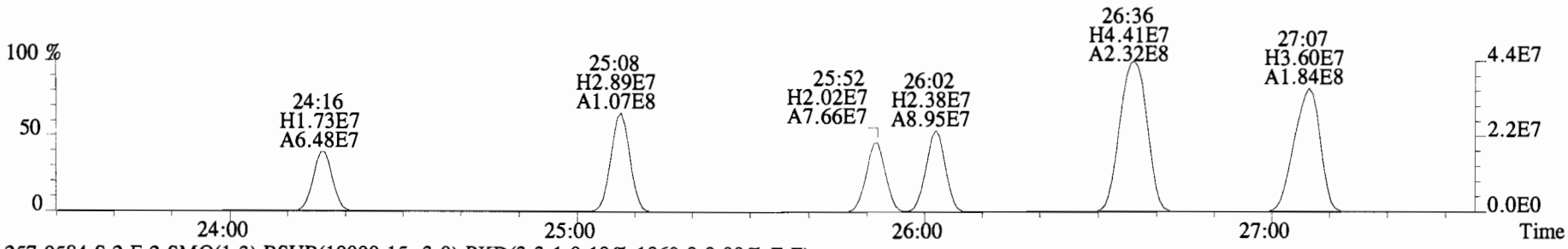
File:141028E1 #1-758 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
222.0003 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,38172.0,0.00%,F,F)



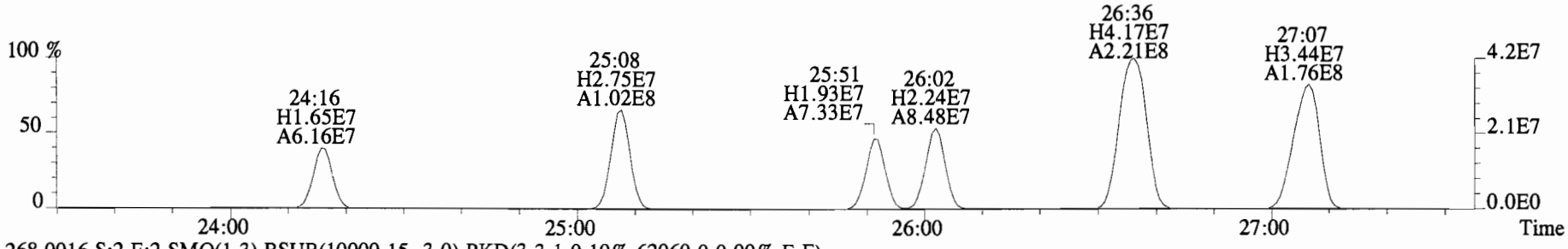
223.9974 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,46584.0,0.00%,F,F)



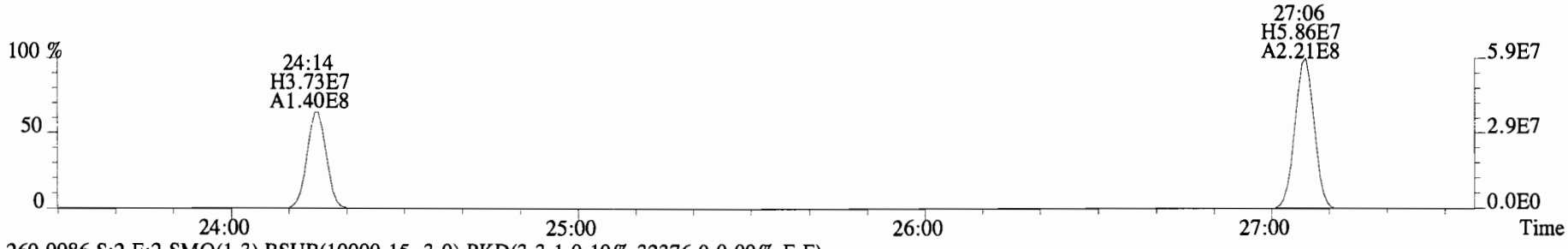
File:141028E1 #1-758 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2268.0,0.00%,F,F)



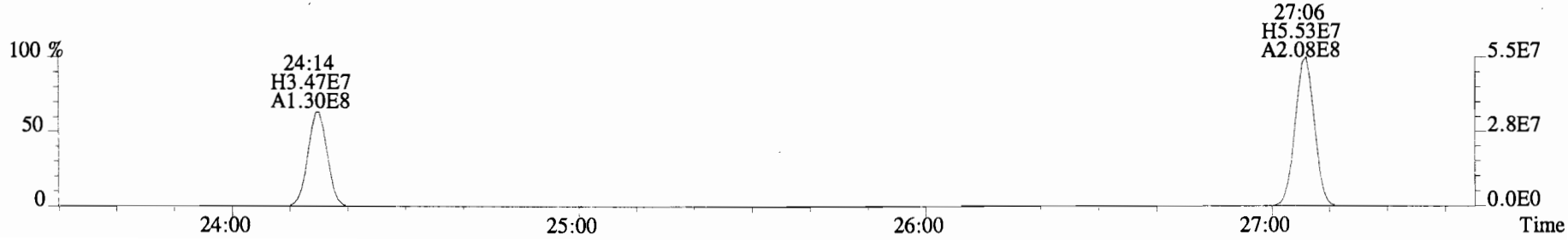
257.9584 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1960.0,0.00%,F,F)



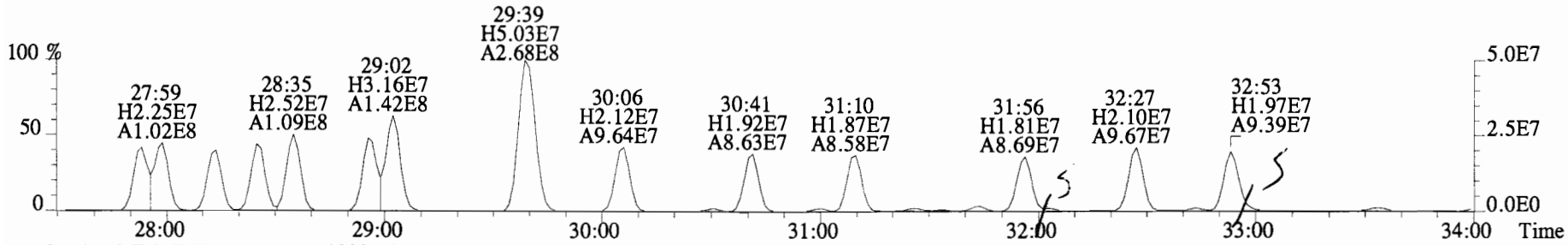
268.0016 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,62060.0,0.00%,F,F)



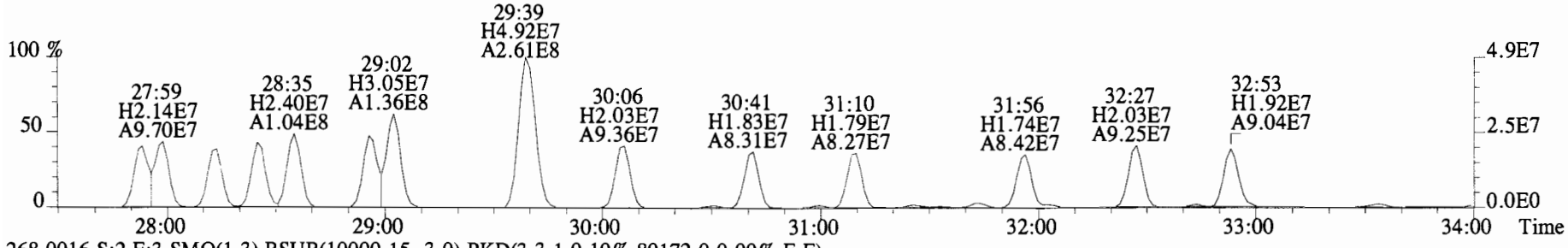
269.9986 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,32376.0,0.00%,F,F)



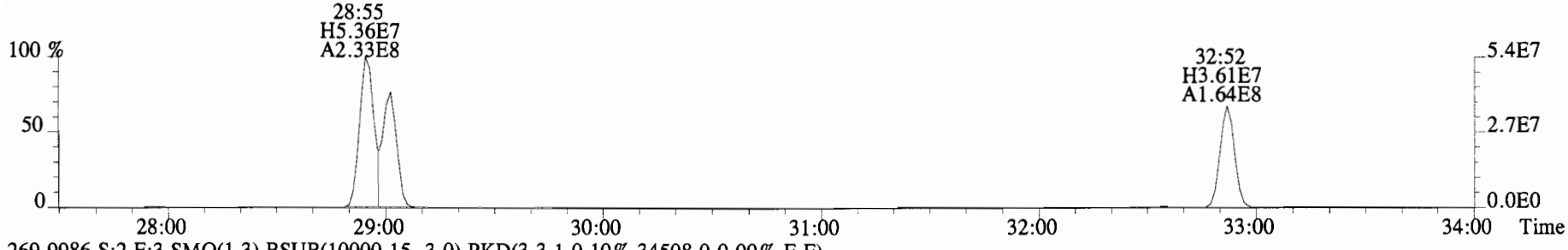
File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,75968.0,0.00%,F,F)



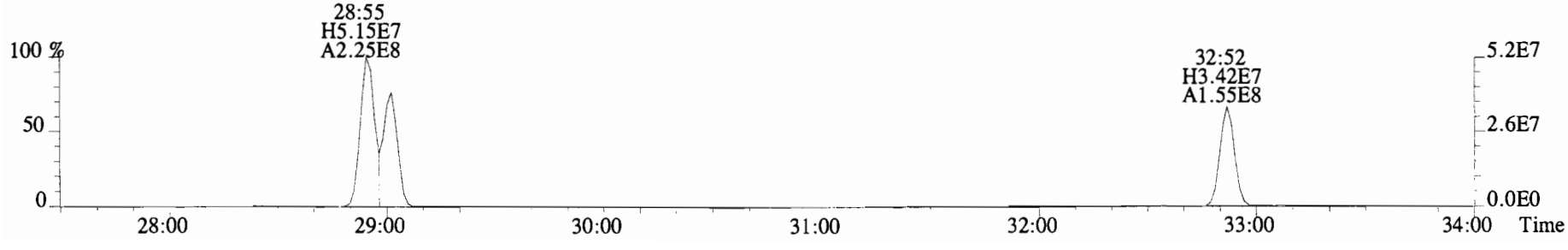
257.9584 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,89600.0,0.00%,F,F)



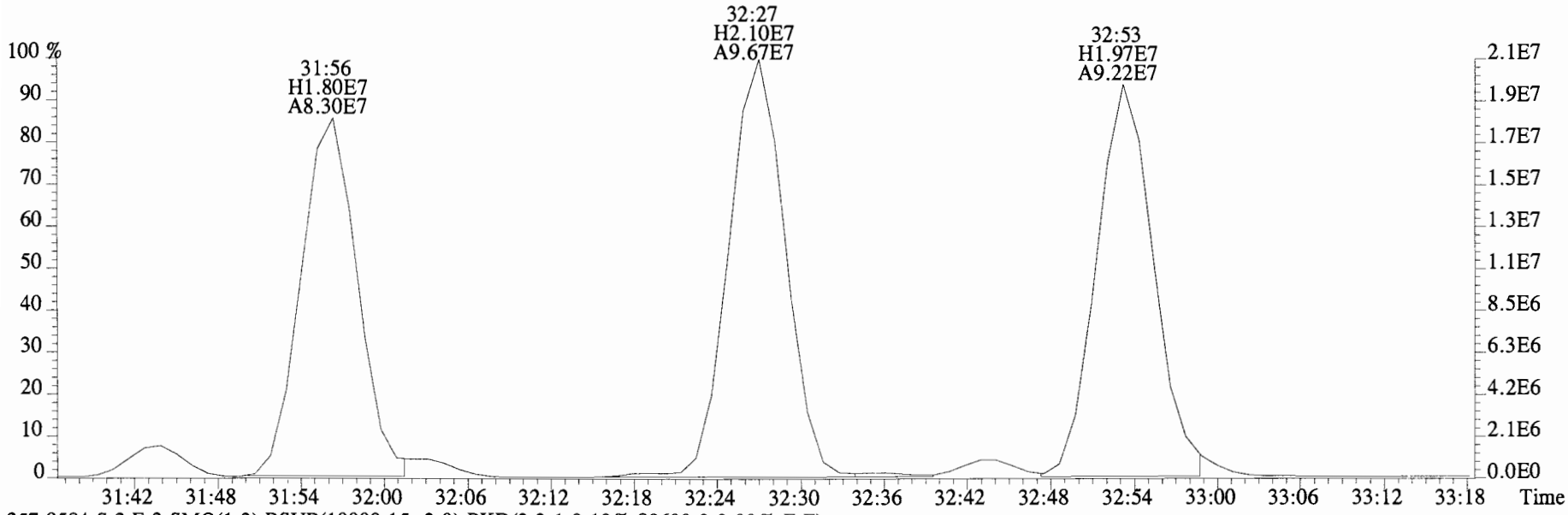
268.0016 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,80172.0,0.00%,F,F)



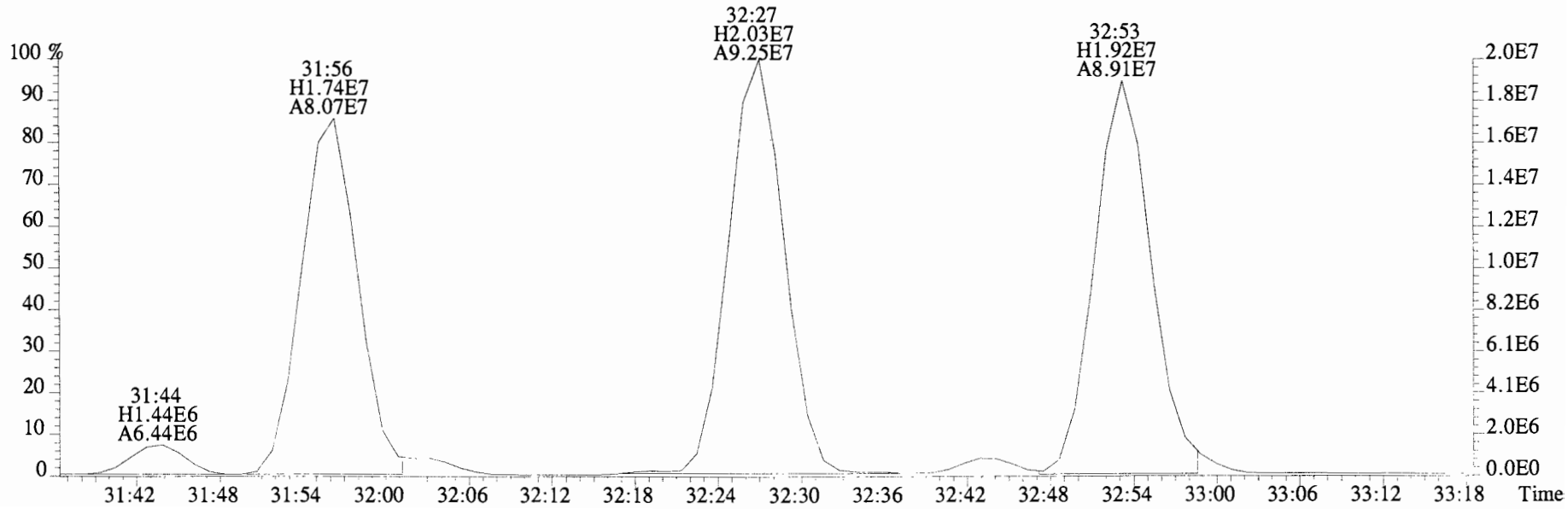
269.9986 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,34508.0,0.00%,F,F)



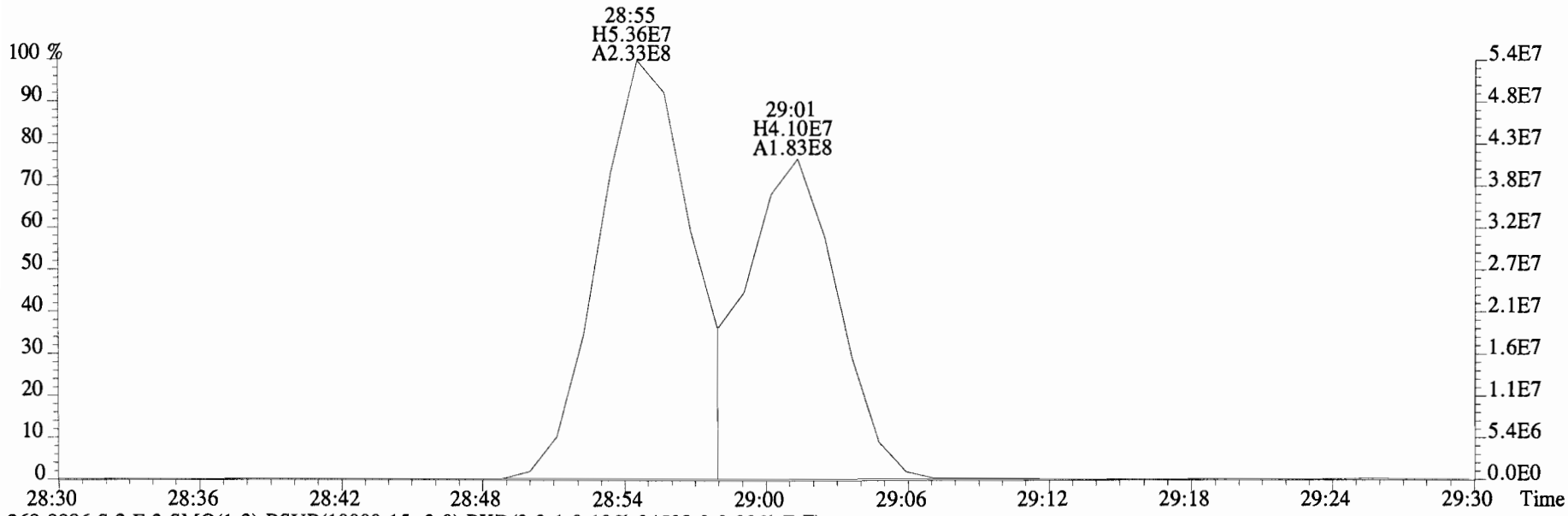
File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,75968.0,0.00%,F,F)



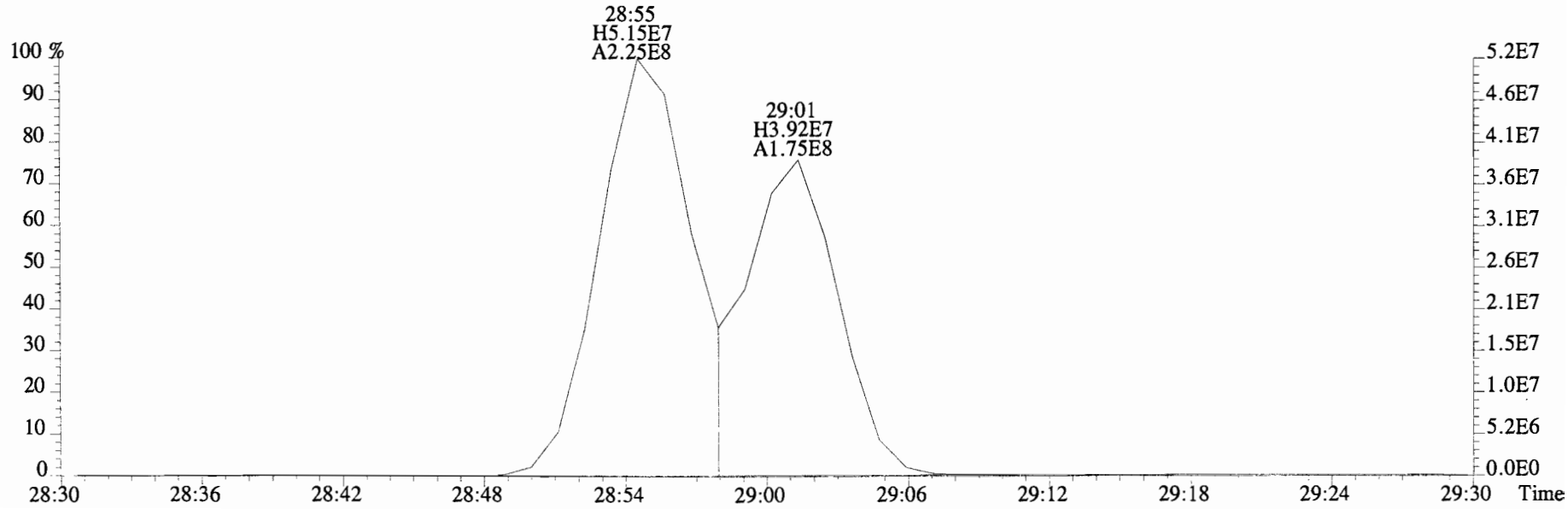
257.9584 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,89600.0,0.00%,F,F)

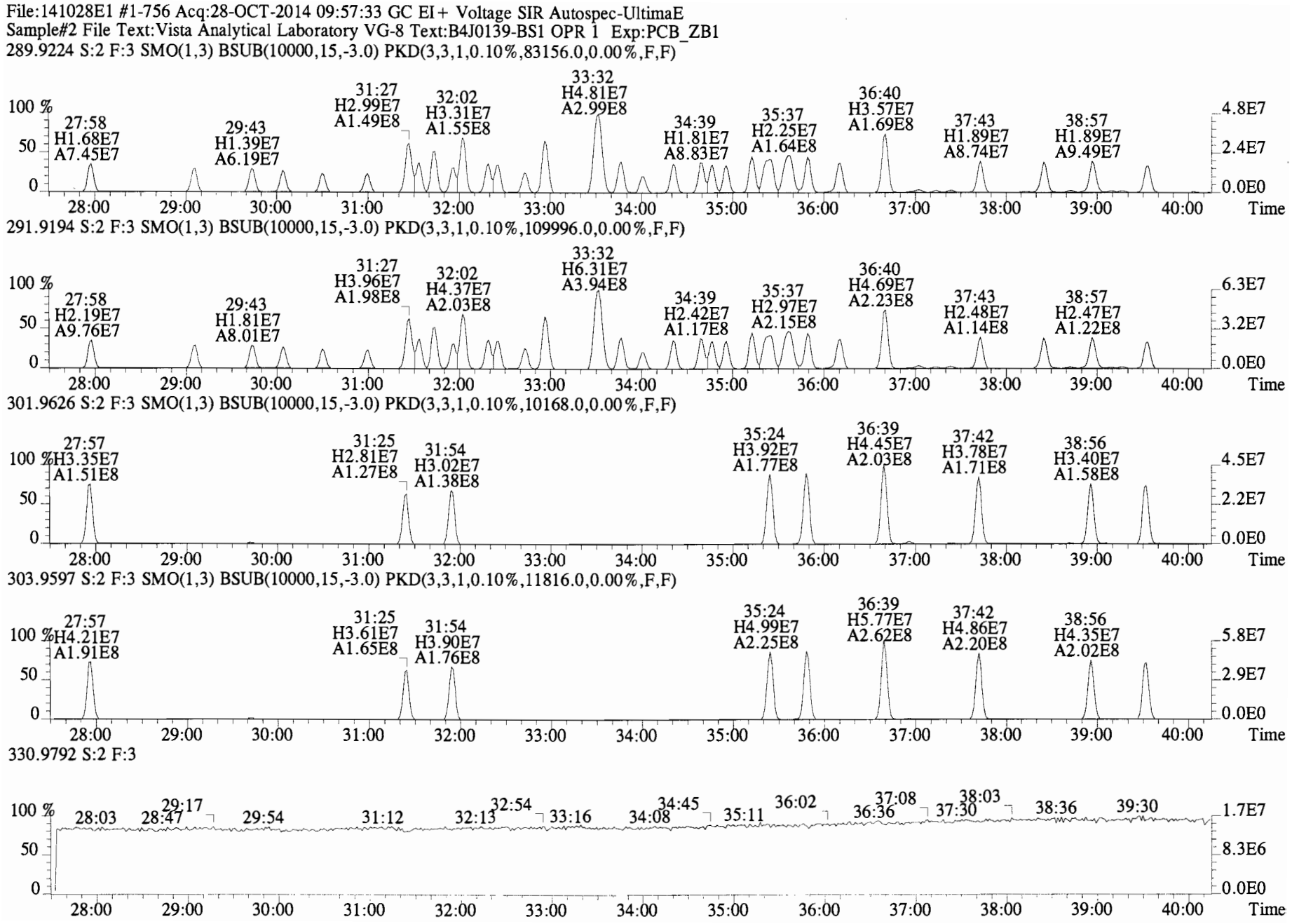


File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
268.0016 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,80172.0,0.00%,F,F)

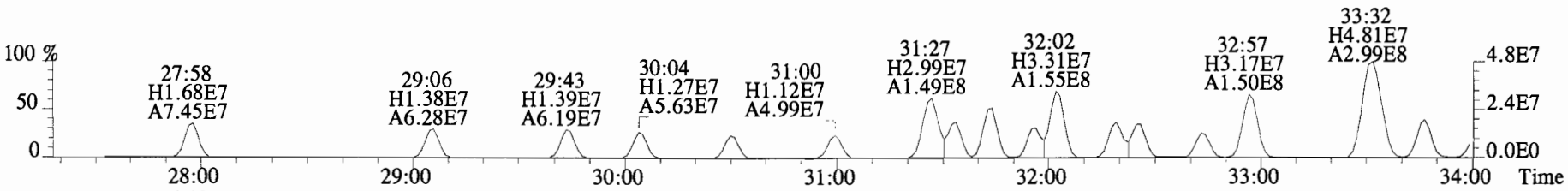


269.9986 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,34508.0,0.00%,F,F)

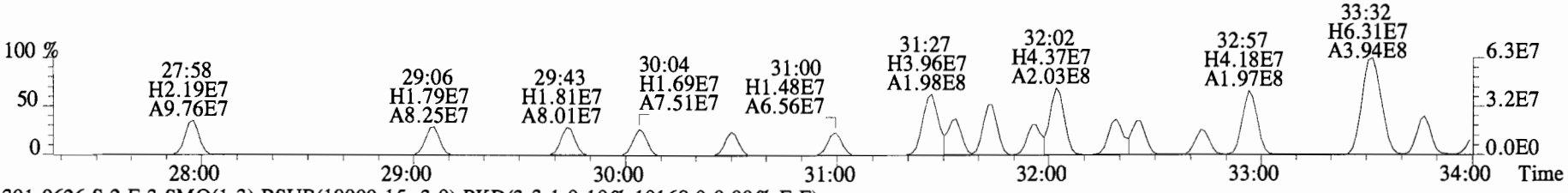



File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,83156.0,0.00%,F,F)
27:58 H1.68E7 A7.45E7
29:43 H1.39E7 A6.19E7
31:27 H2.99E7 A1.49E8
32:02 H3.31E7 A1.55E8
33:32 H4.81E7 A2.99E8
34:39 H1.81E7 A8.83E7
35:37 H2.25E7 A1.64E8
36:40 H3.57E7 A1.69E8
37:43 H1.89E7 A8.74E7
38:57 H1.89E7 A9.49E7
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,109996.0,0.00%,F,F)
27:58 H2.19E7 A9.76E7
29:43 H1.81E7 A8.01E7
31:27 H3.96E7 A1.98E8
32:02 H4.37E7 A2.03E8
33:32 H6.31E7 A3.94E8
34:39 H2.42E7 A1.17E8
35:37 H2.97E7 A2.15E8
36:40 H4.69E7 A2.23E8
37:43 H2.48E7 A1.14E8
38:57 H2.47E7 A1.22E8
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10168.0,0.00%,F,F)
27:57 H3.35E7 A1.51E8
31:25 H2.81E7 A1.27E8
31:54 H3.02E7 A1.38E8
35:24 H3.92E7 A1.77E8
36:39 H4.45E7 A2.03E8
37:42 H3.78E7 A1.71E8
38:56 H3.40E7 A1.58E8
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11816.0,0.00%,F,F)
27:57 H4.21E7 A1.91E8
31:25 H3.61E7 A1.65E8
31:54 H3.90E7 A1.76E8
35:24 H4.99E7 A2.25E8
36:39 H5.77E7 A2.62E8
37:42 H4.86E7 A2.20E8
38:56 H4.35E7 A2.02E8
330.9792 S:2 F:3
28:03 28:47 29:17 29:54 31:12 32:13 32:54 33:16 34:08 34:45 35:11 36:02 36:36 37:08 37:30 38:03 38:36 39:30
100 %
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 37:00 38:00 39:00 40:00 Time
4.8E7 2.4E7 0.0E0
6.3E7 3.2E7 0.0E0
4.5E7 2.2E7 0.0E0
5.8E7 2.9E7 0.0E0
1.7E7 8.3E6 0.0E0

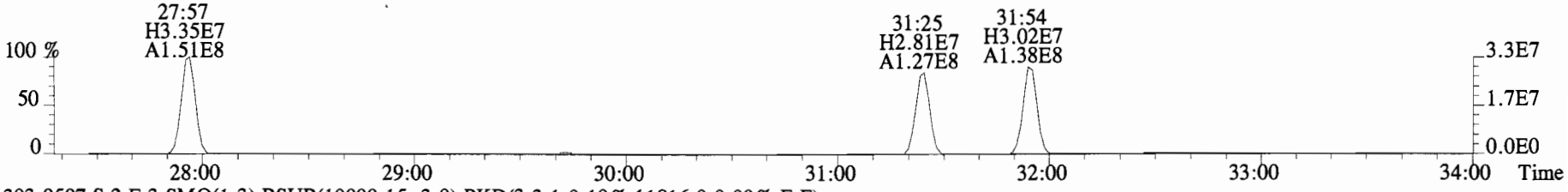
File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,83156.0,0.00%,F,F)



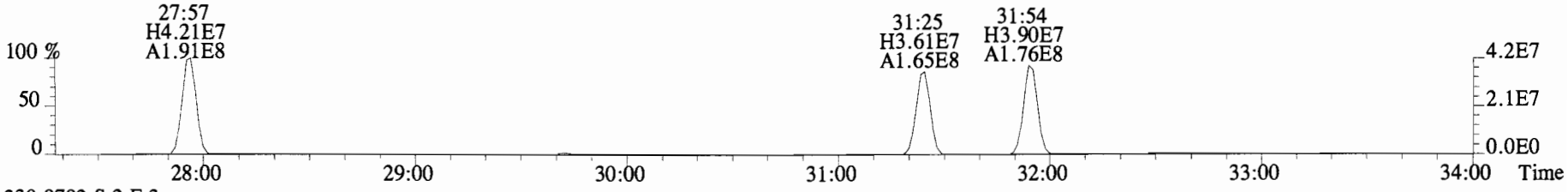
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,109996.0,0.00%,F,F)



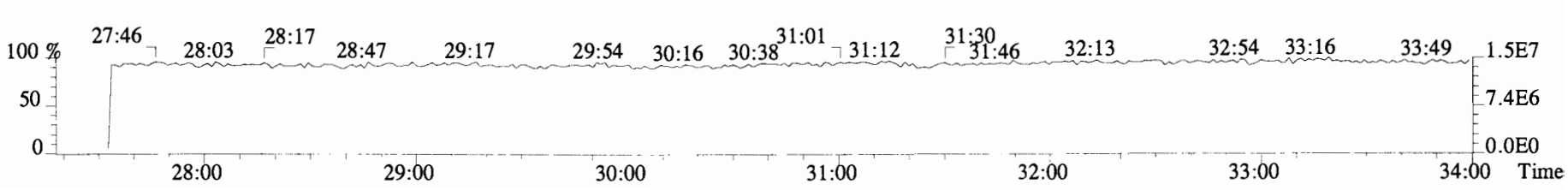
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10168.0,0.00%,F,F)



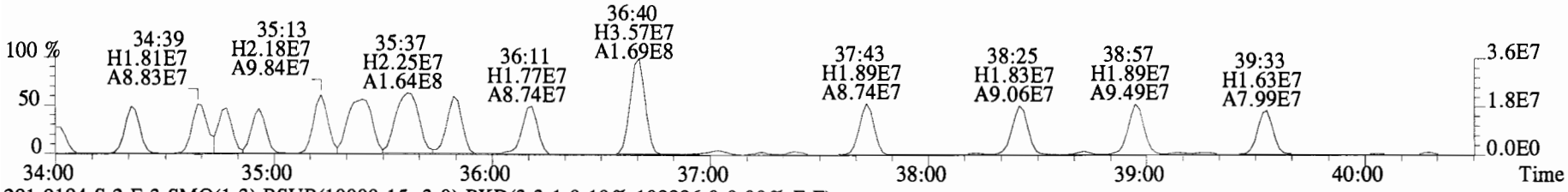
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11816.0,0.00%,F,F)



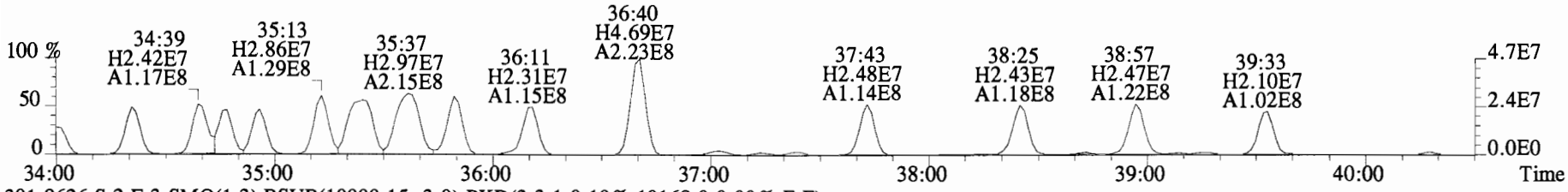
330.9792 S:2 F:3



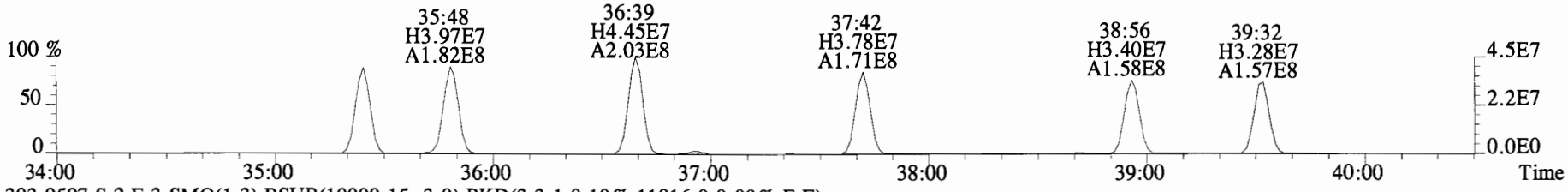
File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,83156.0,0.00%,F,F)



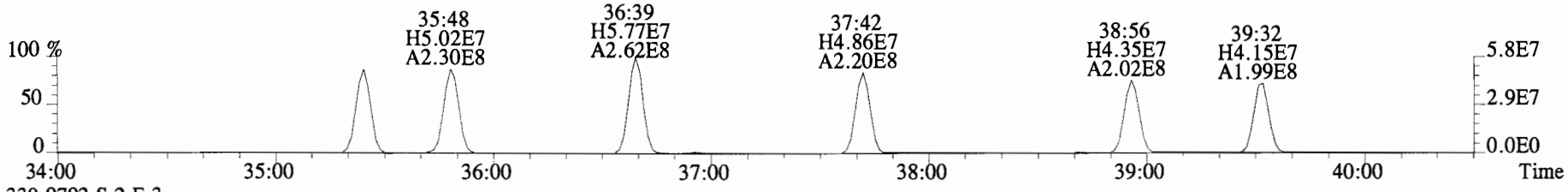
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,109996.0,0.00%,F,F)



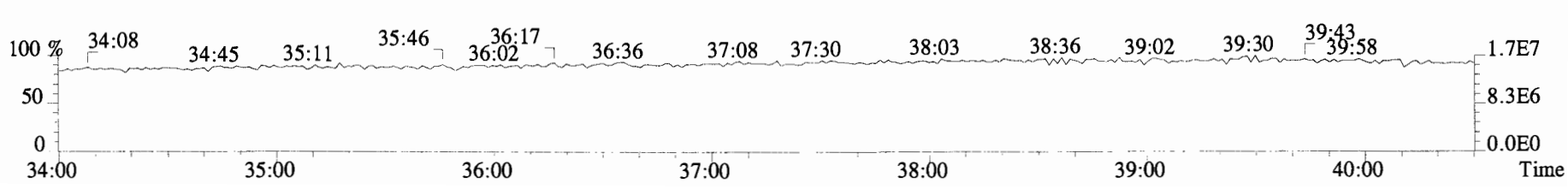
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10168.0,0.00%,F,F)



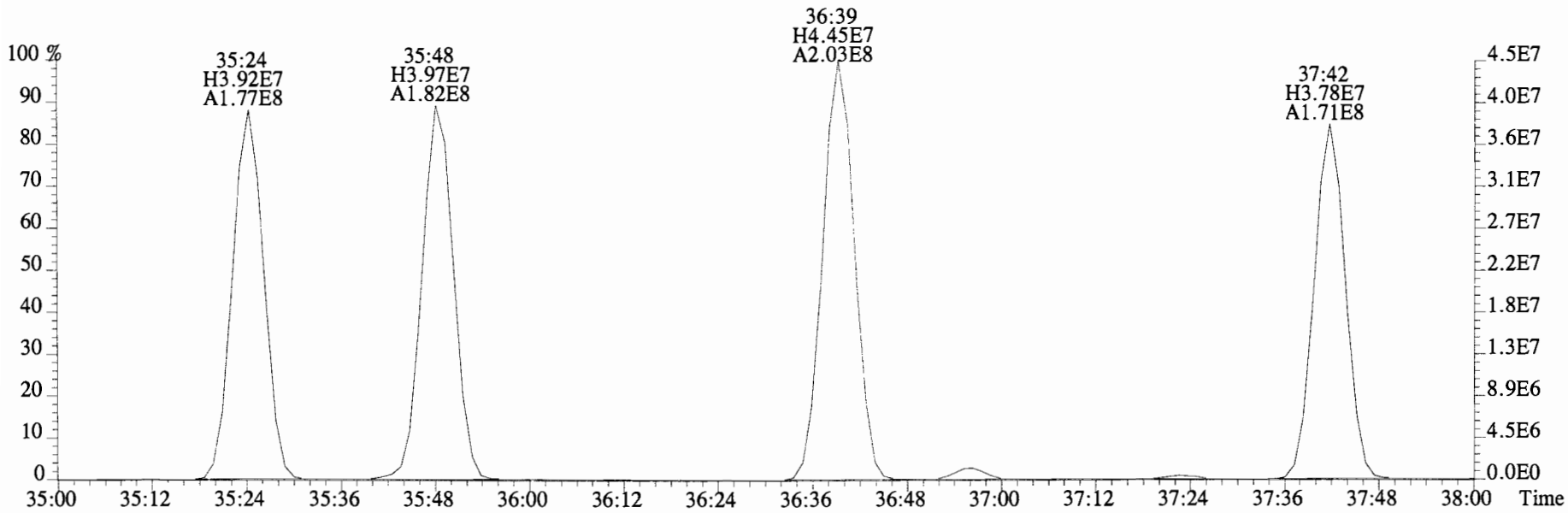
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11816.0,0.00%,F,F)



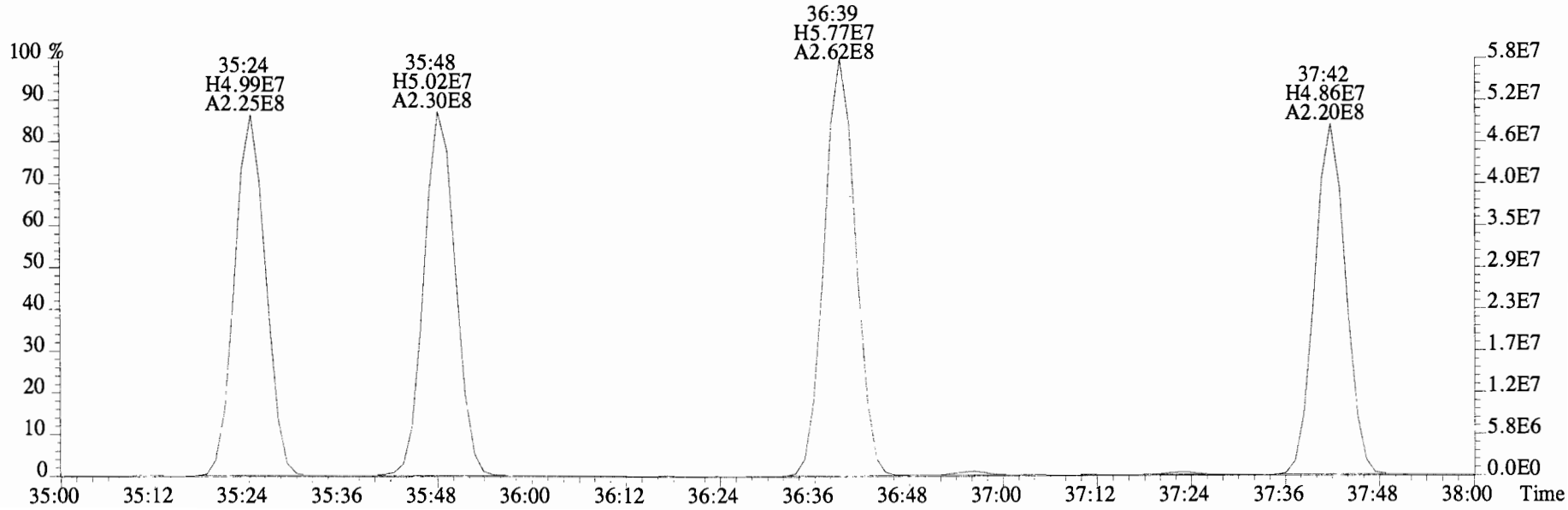
330.9792 S:2 F:3

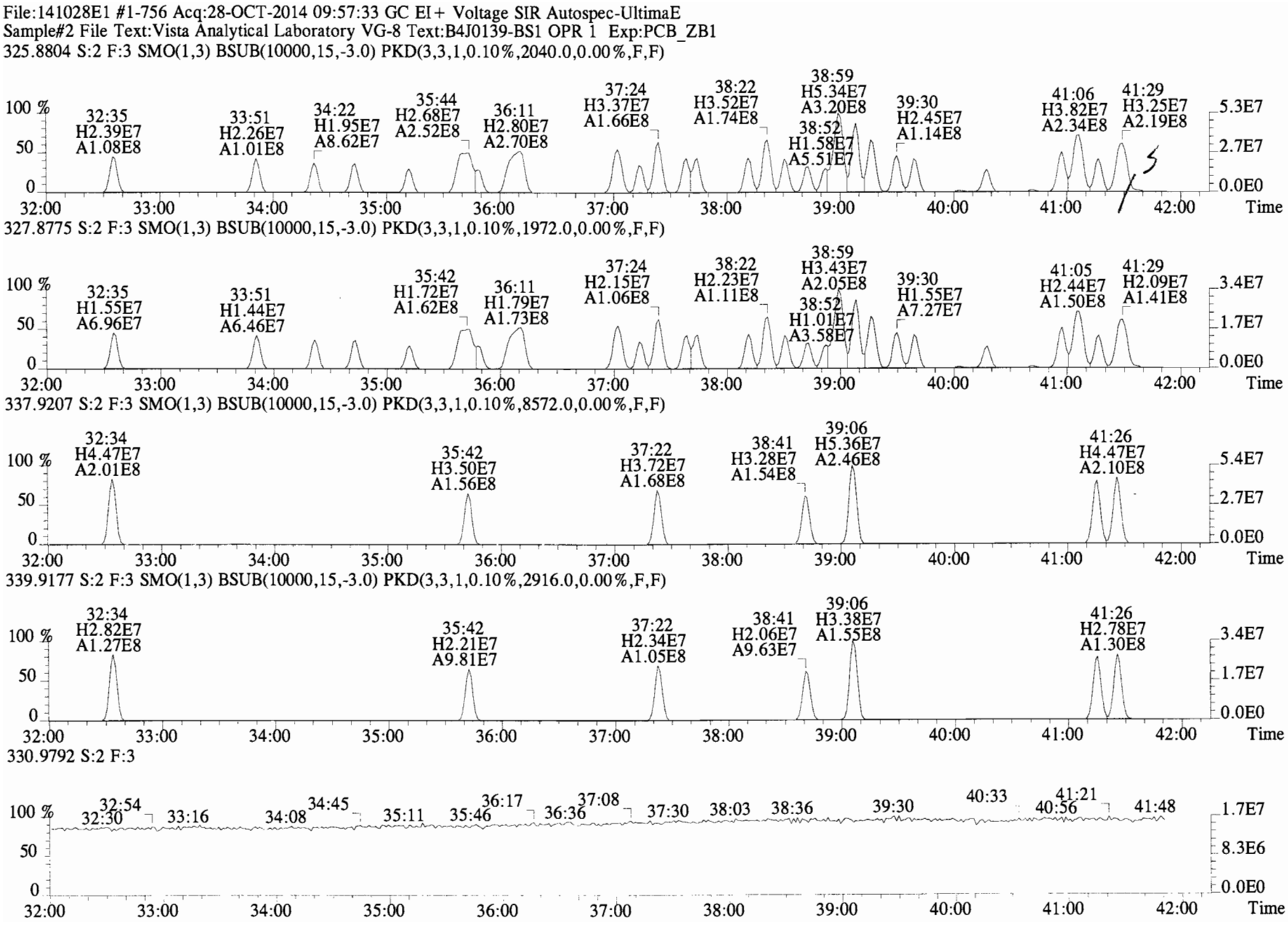


File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10168.0,0.00%,F,F)

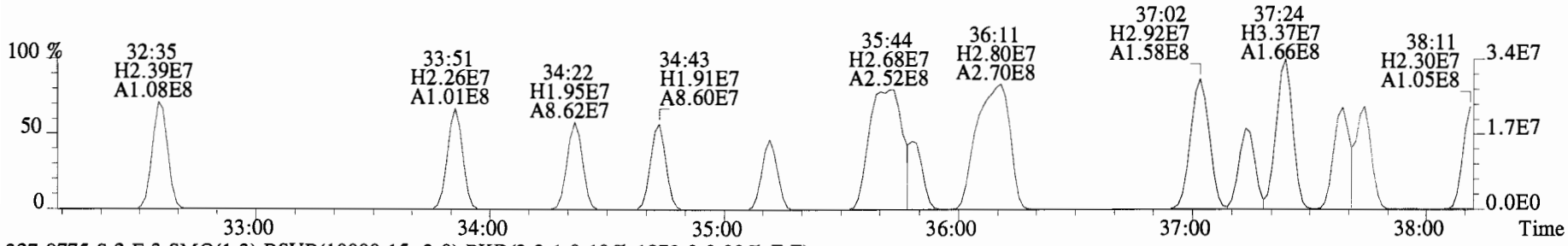


303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11816.0,0.00%,F,F)

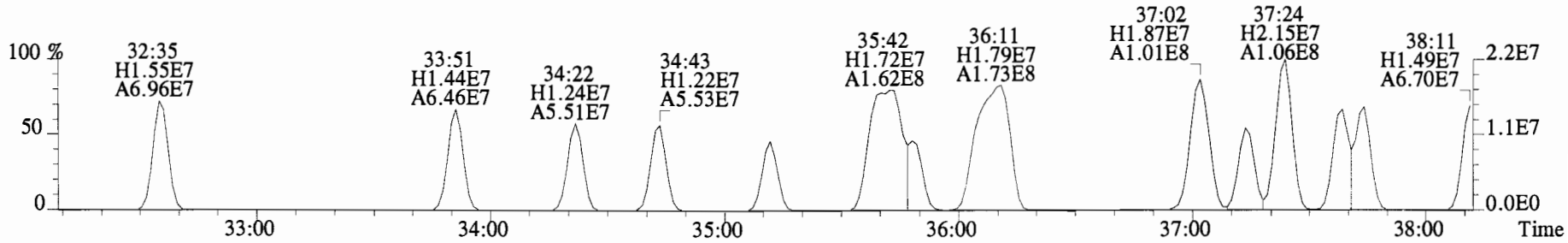



File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)
32:35 H2.39E7 A1.08E8
33:51 H2.26E7 A1.01E8
34:22 H1.95E7 A8.62E7
35:44 H2.68E7 A2.52E8
36:11 H2.80E7 A2.70E8
37:24 H3.37E7 A1.66E8
38:22 H3.52E7 A1.74E8
38:59 H5.34E7 A3.20E8
38:52 H1.58E7 A5.51E7
39:30 H2.45E7 A1.14E8
41:06 H3.82E7 A2.34E8
41:29 H3.25E7 A2.19E8
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1972.0,0.00%,F,F)
32:35 H1.55E7 A6.96E7
33:51 H1.44E7 A6.46E7
35:42 H1.72E7 A1.62E8
36:11 H1.79E7 A1.73E8
37:24 H2.15E7 A1.06E8
38:22 H2.23E7 A1.11E8
38:59 H3.43E7 A2.05E8
38:52 H1.01E7 A3.58E7
39:30 H1.55E7 A7.27E7
41:05 H2.44E7 A1.50E8
41:29 H2.09E7 A1.41E8
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8572.0,0.00%,F,F)
32:34 H4.47E7 A2.01E8
35:42 H3.50E7 A1.56E8
37:22 H3.72E7 A1.68E8
38:41 H3.28E7 A1.54E8
39:06 H5.36E7 A2.46E8
41:26 H4.47E7 A2.10E8
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)
32:34 H2.82E7 A1.27E8
35:42 H2.21E7 A9.81E7
37:22 H2.34E7 A1.05E8
38:41 H2.06E7 A9.63E7
39:06 H3.38E7 A1.55E8
41:26 H2.78E7 A1.30E8
330.9792 S:2 F:3
32:30 32:54 33:16 34:08 34:45 35:11 35:46 36:17 36:36 37:08 37:30 38:03 38:36 39:30 40:33 40:56 41:21 41:48
100 %
50
0
1.7E7
8.3E6
0.0E0
32:00 33:00 34:00 35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 Time

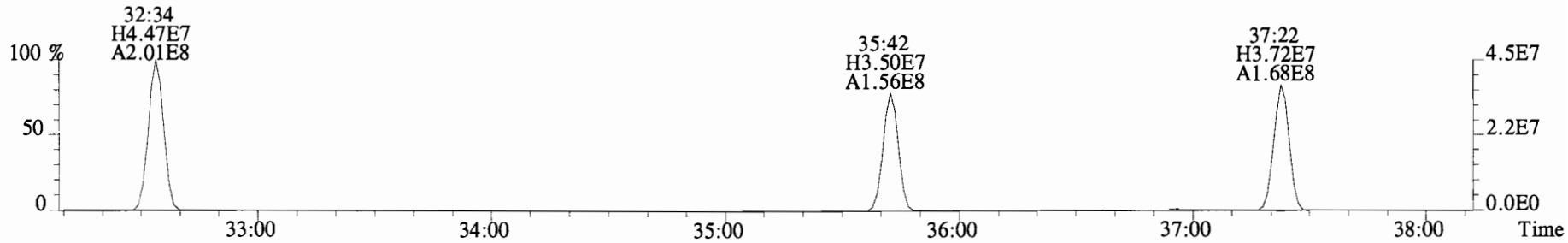
File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)



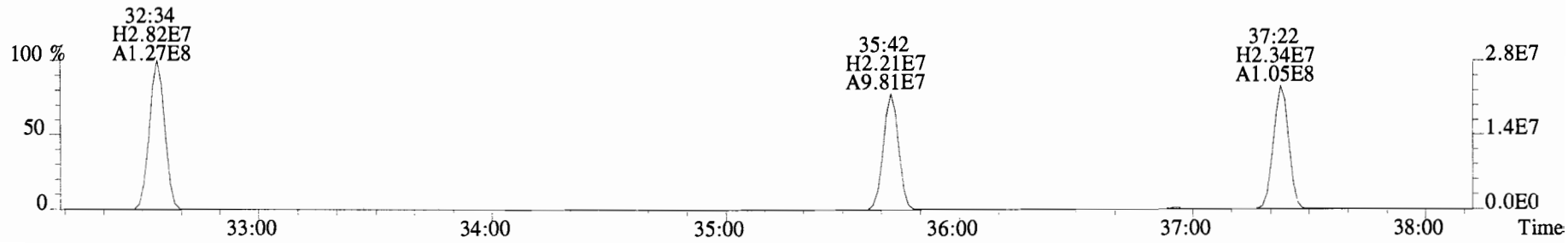
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1972.0,0.00%,F,F)



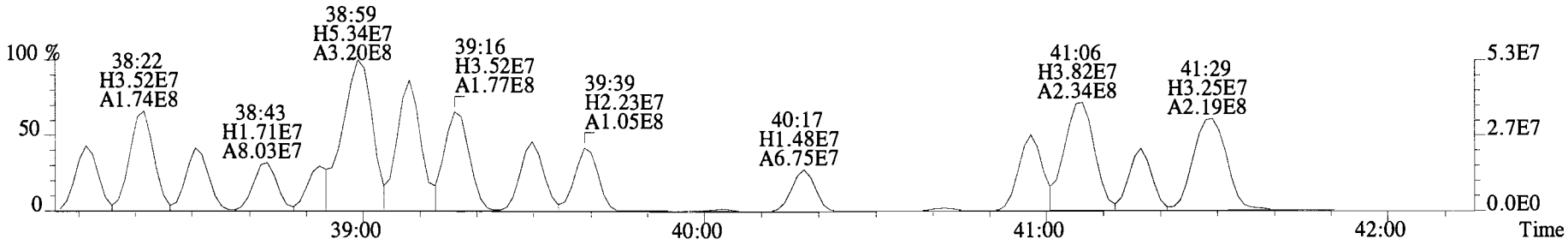
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8572.0,0.00%,F,F)



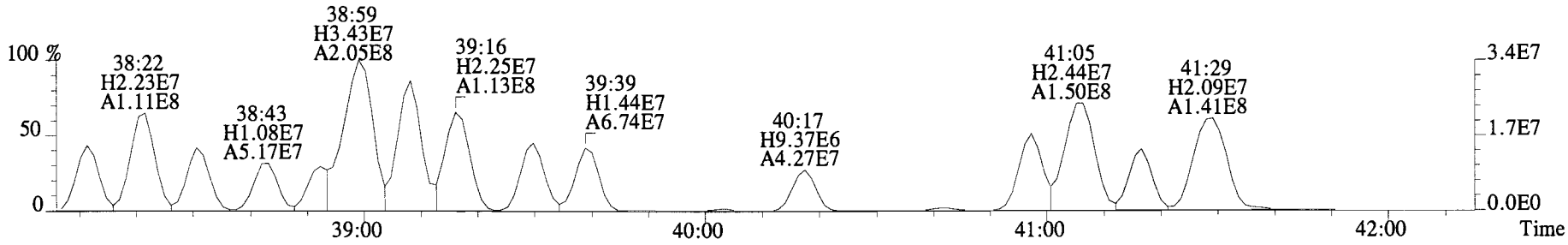
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



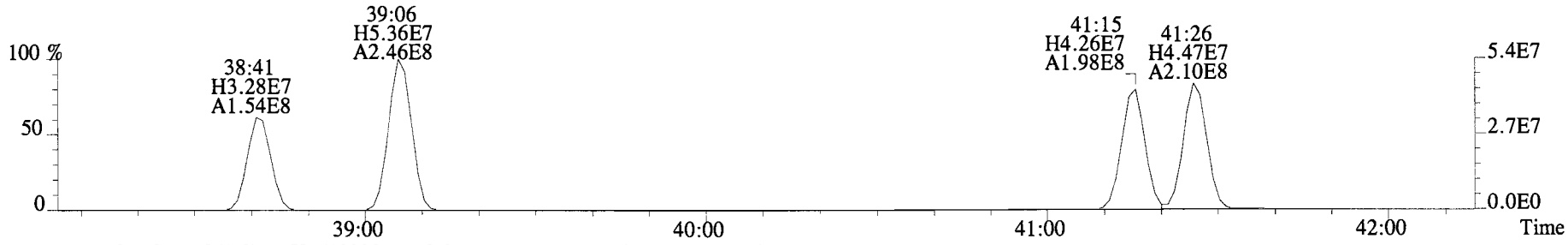
File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)



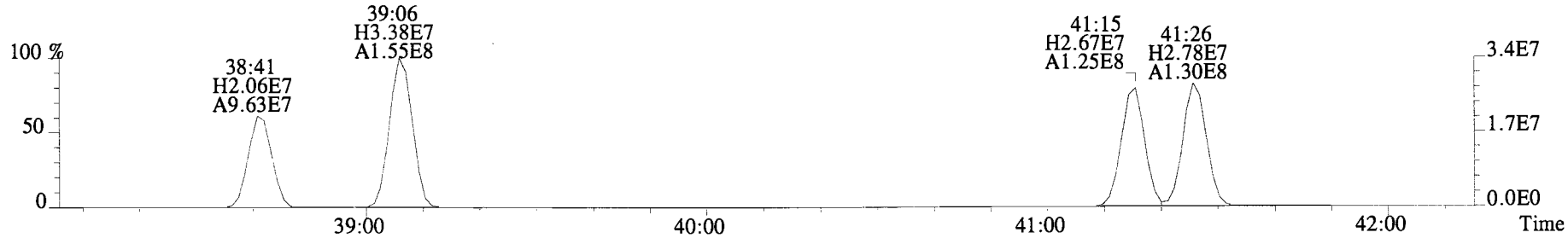
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1972.0,0.00%,F,F)

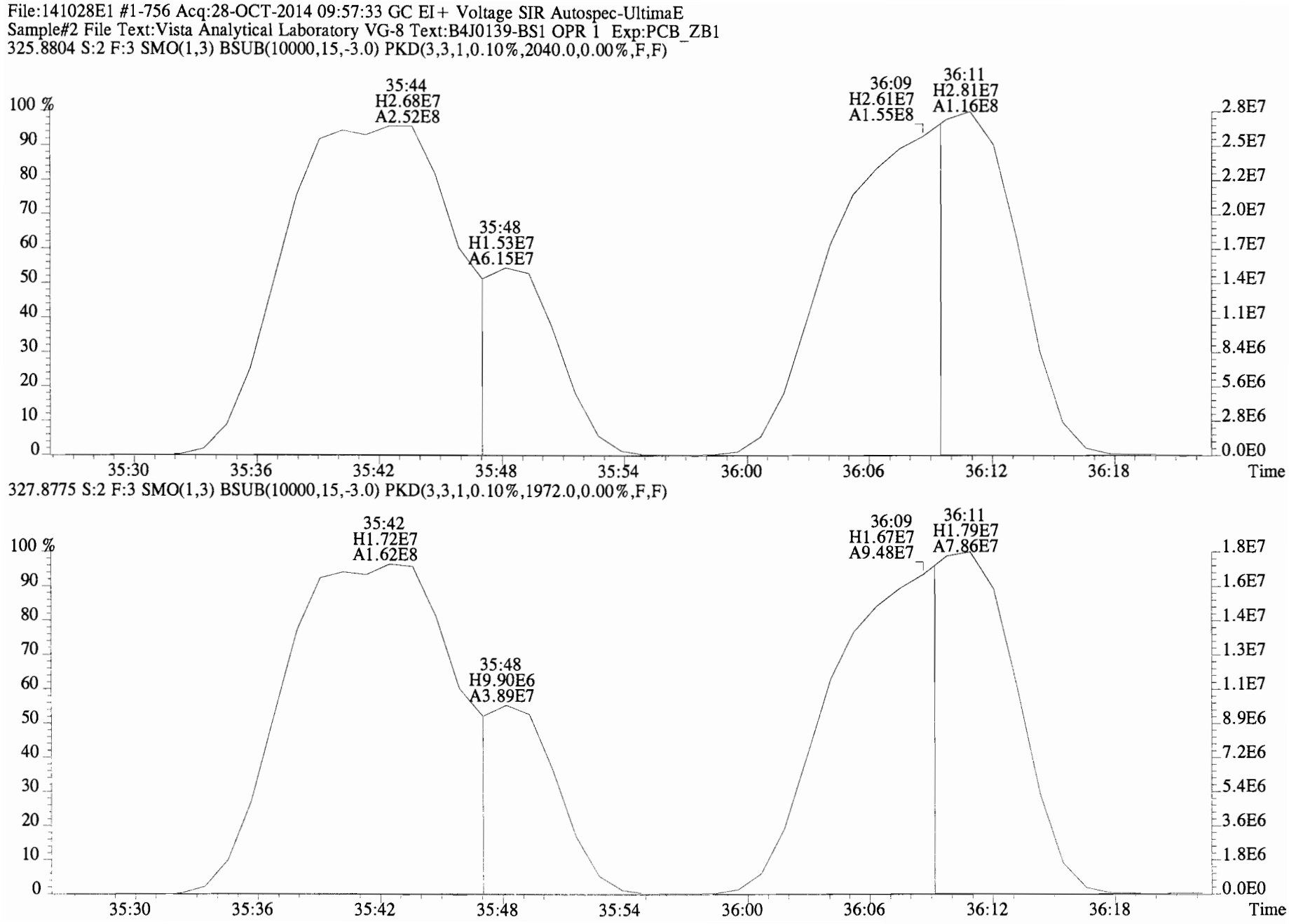


337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8572.0,0.00%,F,F)

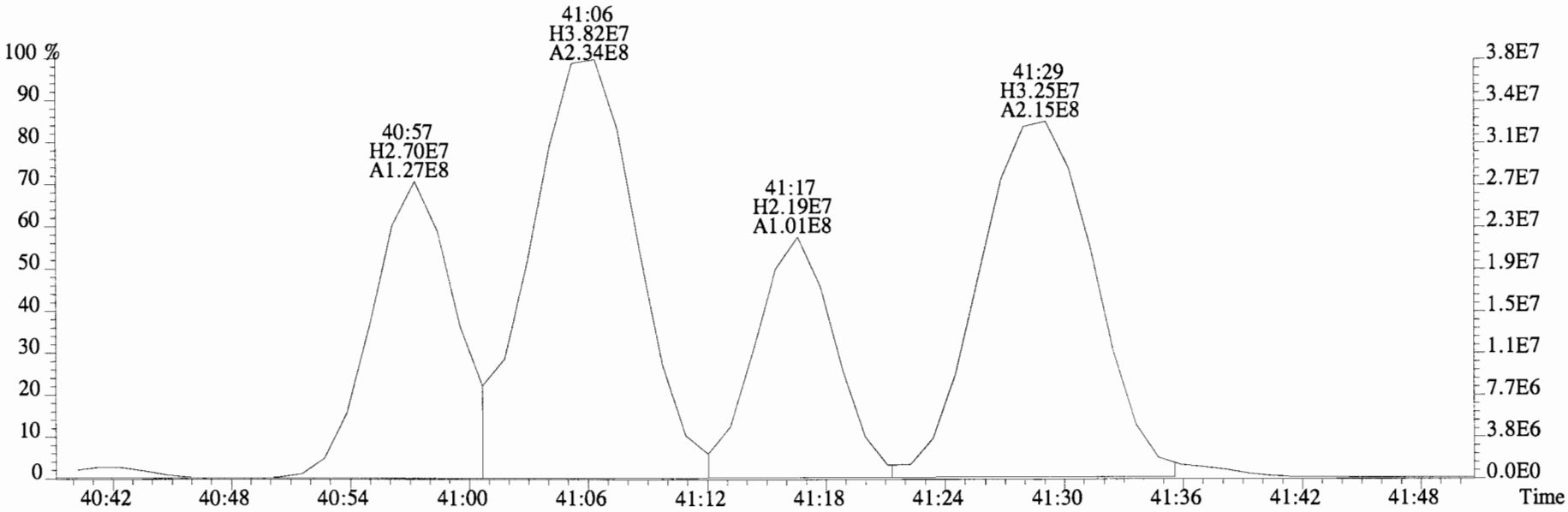


339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)

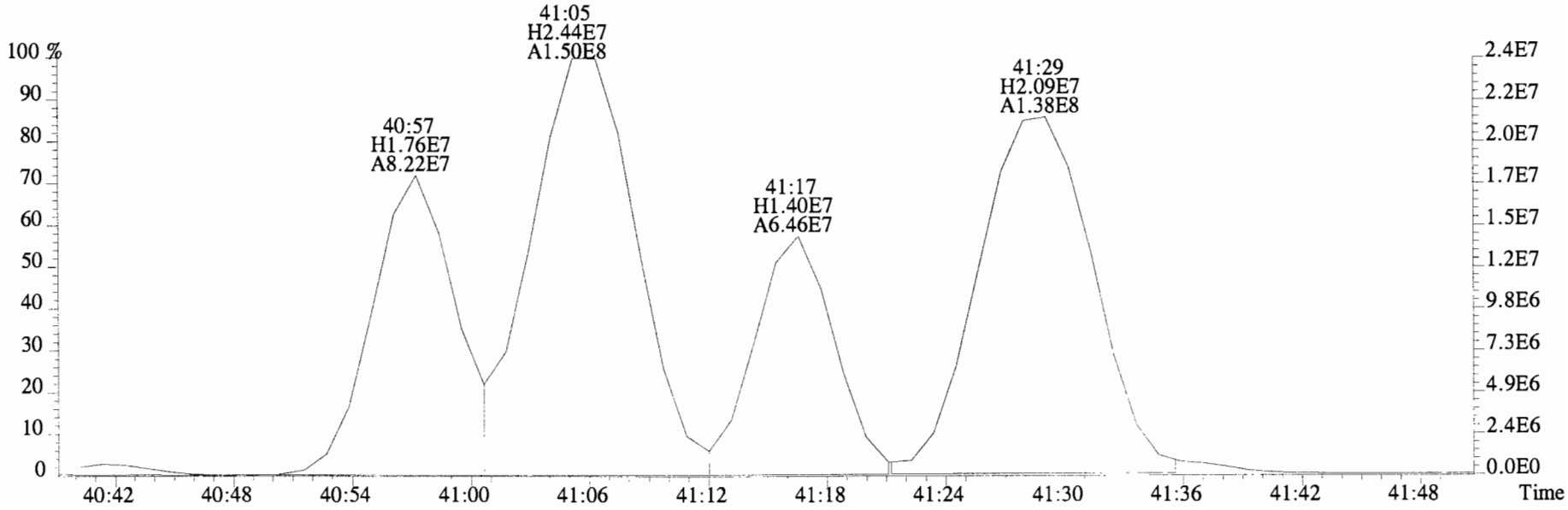



File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)
35:44
H2.68E7
A2.52E8
35:48
H1.53E7
A6.15E7
36:09
H2.61E7
A1.55E8
36:11
H2.81E7
A1.16E8
100 %
90
80
70
60
50
40
30
20
10
0
2.8E7
2.5E7
2.2E7
2.0E7
1.7E7
1.4E7
1.1E7
8.4E6
5.6E6
2.8E6
0.0E0
35:30
35:36
35:42
35:48
35:54
36:00
36:06
36:12
36:18
Time
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1972.0,0.00%,F,F)
35:42
H1.72E7
A1.62E8
35:48
H9.90E6
A3.89E7
36:09
H1.67E7
A9.48E7
36:11
H1.79E7
A7.86E7
100 %
90
80
70
60
50
40
30
20
10
0
1.8E7
1.6E7
1.4E7
1.3E7
1.1E7
8.9E6
7.2E6
5.4E6
3.6E6
1.8E6
0.0E0
35:30
35:36
35:42
35:48
35:54
36:00
36:06
36:12
36:18
Time

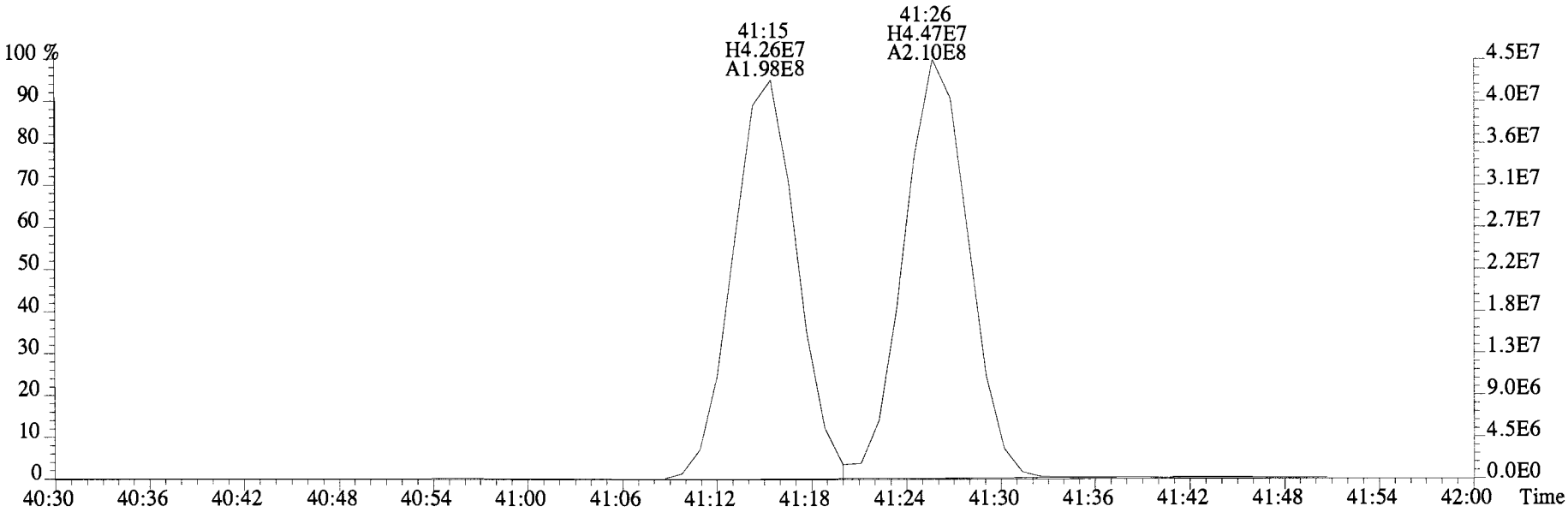
File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)



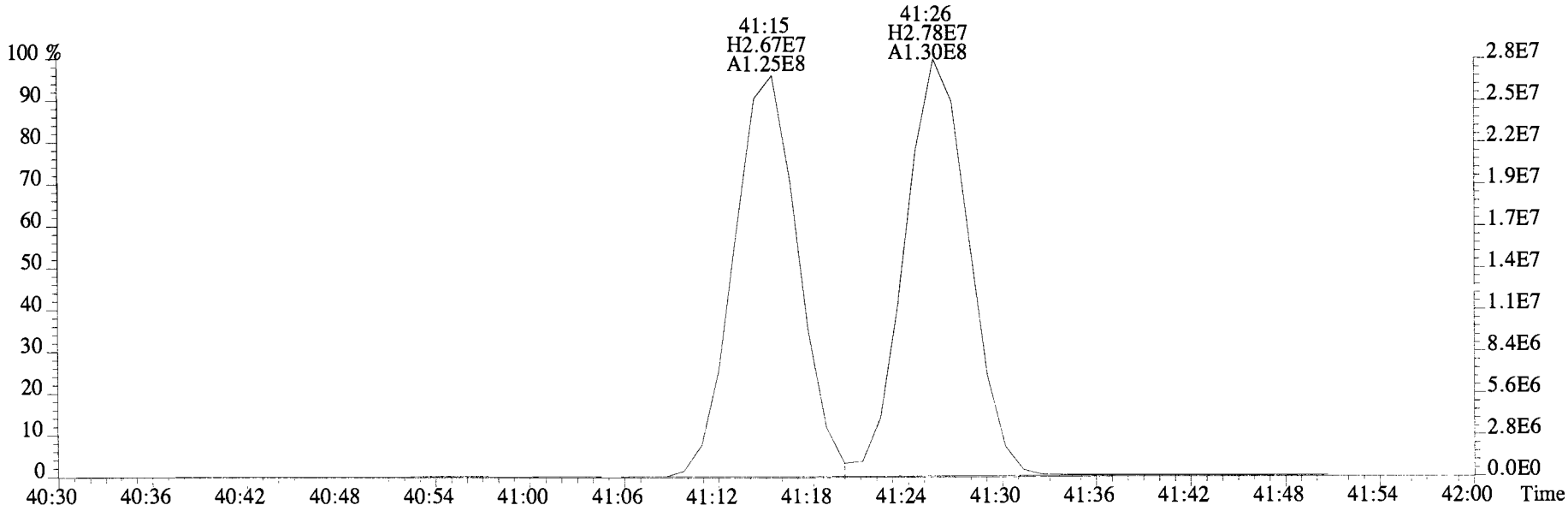
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1972.0,0.00%,F,F)



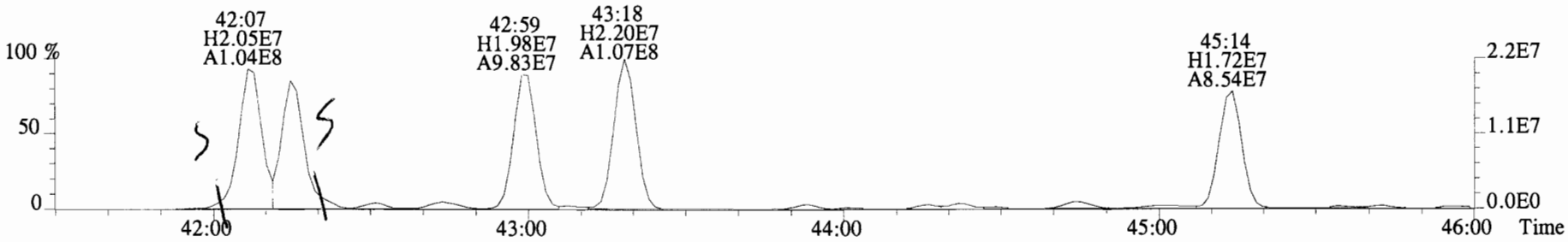
File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8572.0,0.00%,F,F)



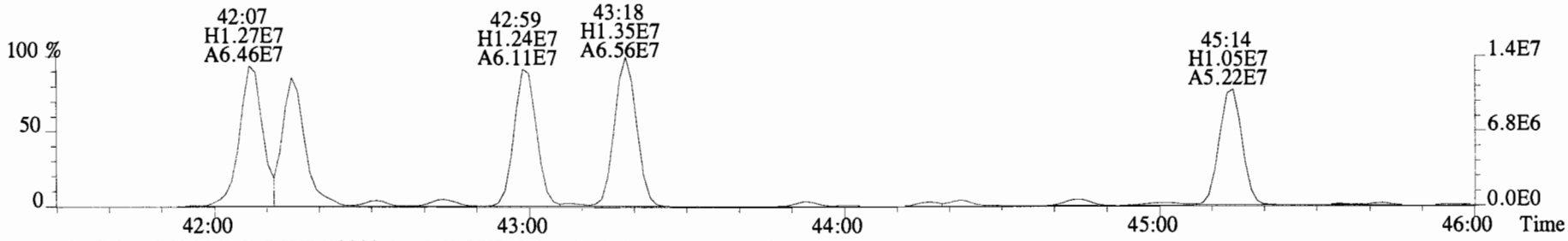
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



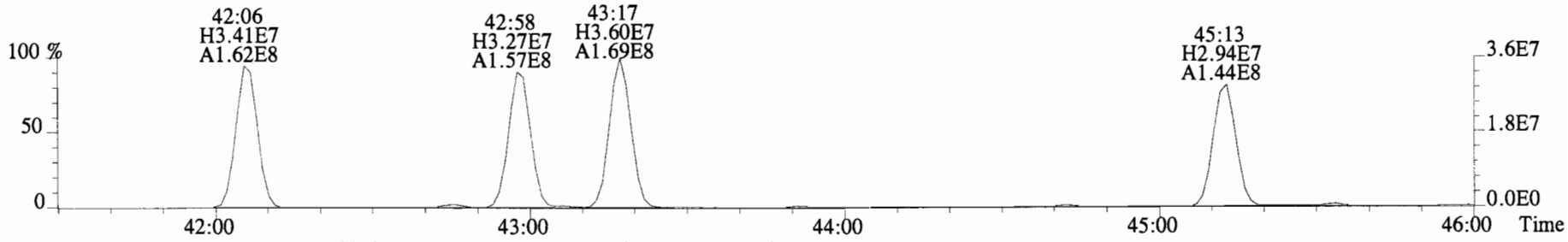
File:141028E1 #1-552 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,29988.0,0.00%,F,F)



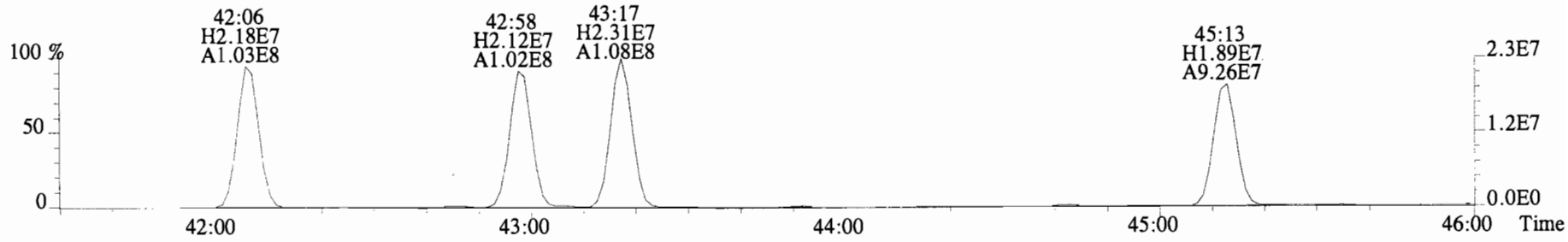
327.8775 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15880.0,0.00%,F,F)



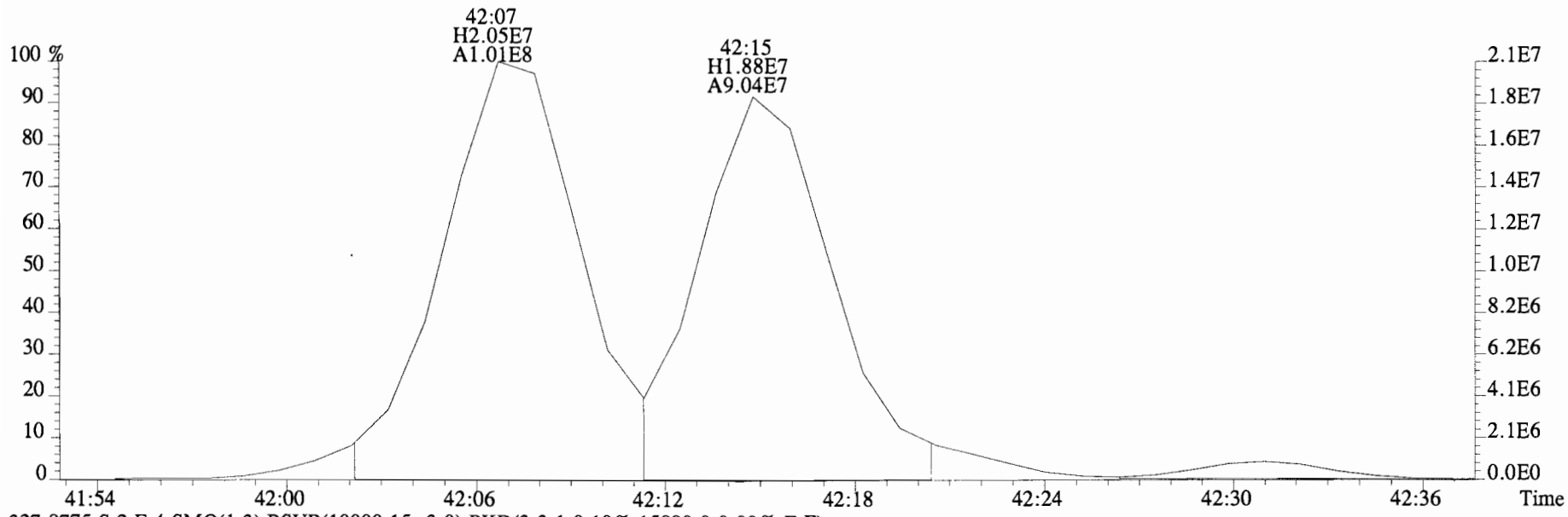
337.9207 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,21552.0,0.00%,F,F)



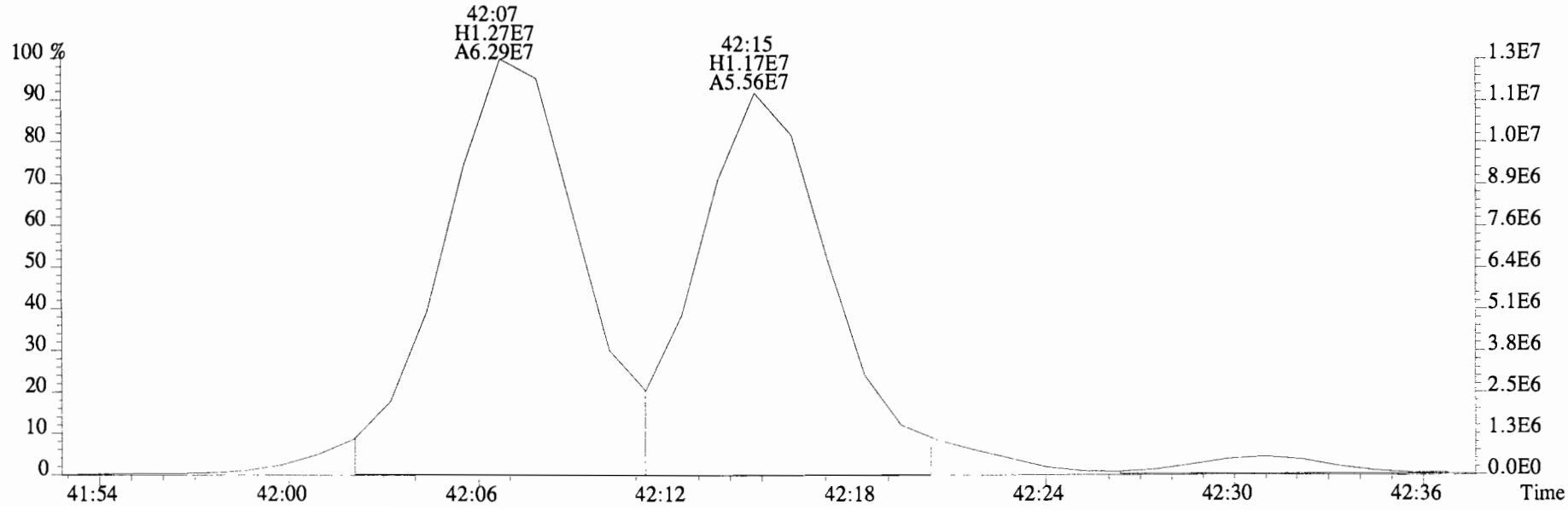
339.9177 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16348.0,0.00%,F,F)



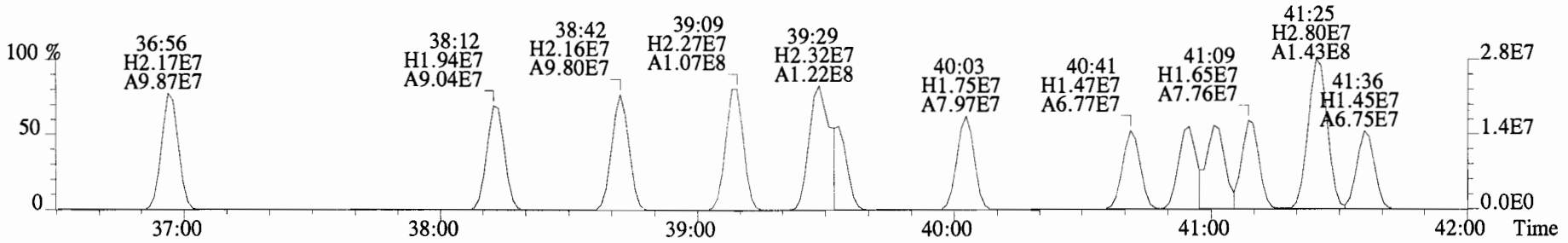
File:141028E1 #1-552 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,29988.0,0.00%,F,F)



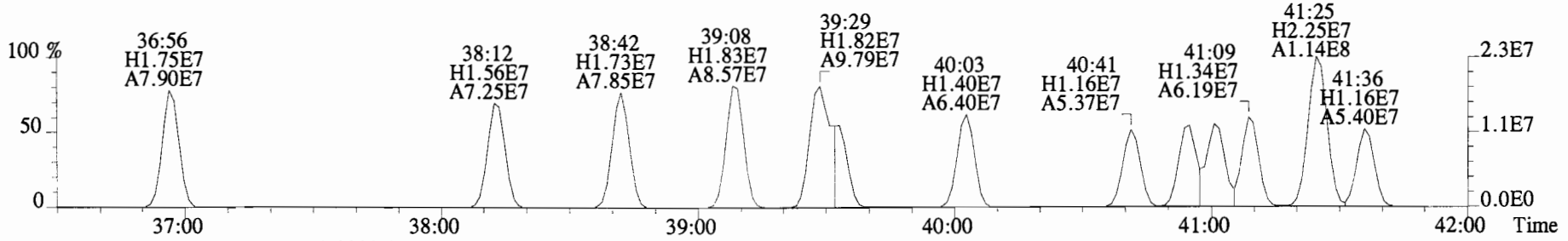
327.8775 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15880.0,0.00%,F,F)



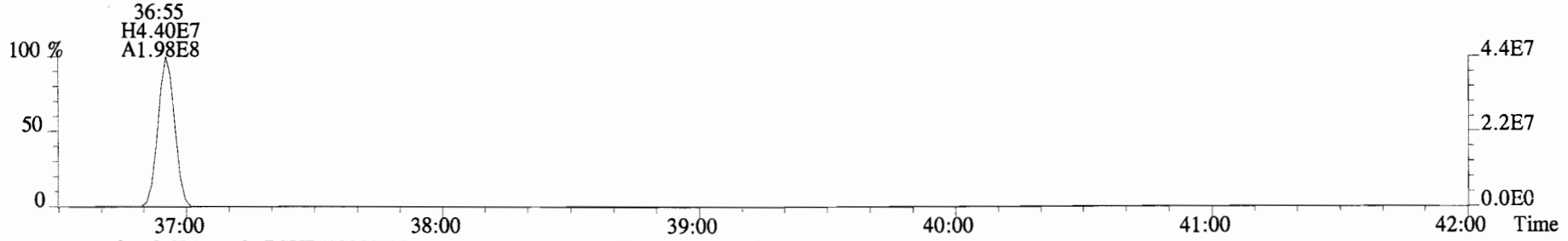
File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1384.0,0.00%,F,F)



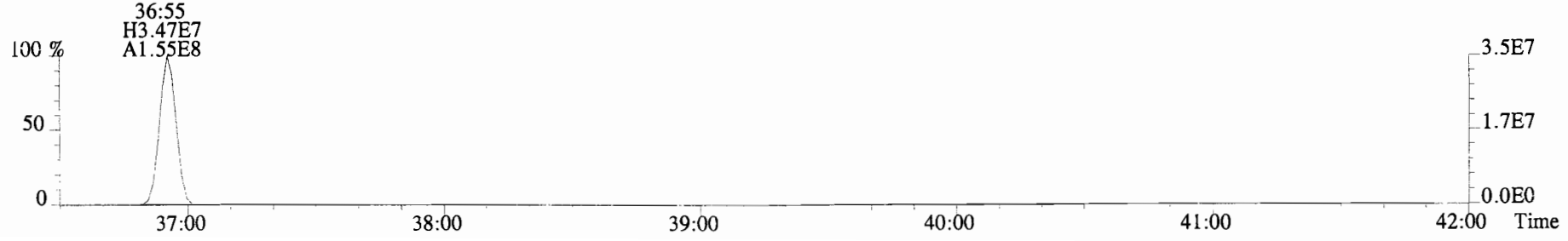
361.8385 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1444.0,0.00%,F,F)



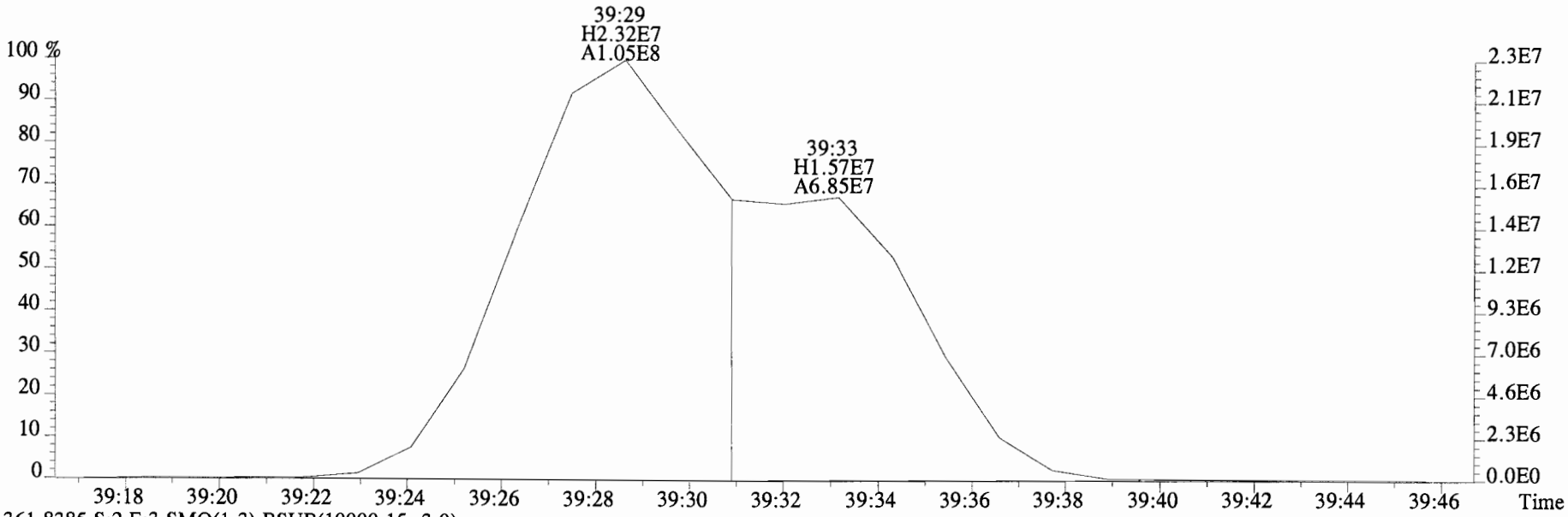
371.8817 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1868.0,0.00%,F,F)



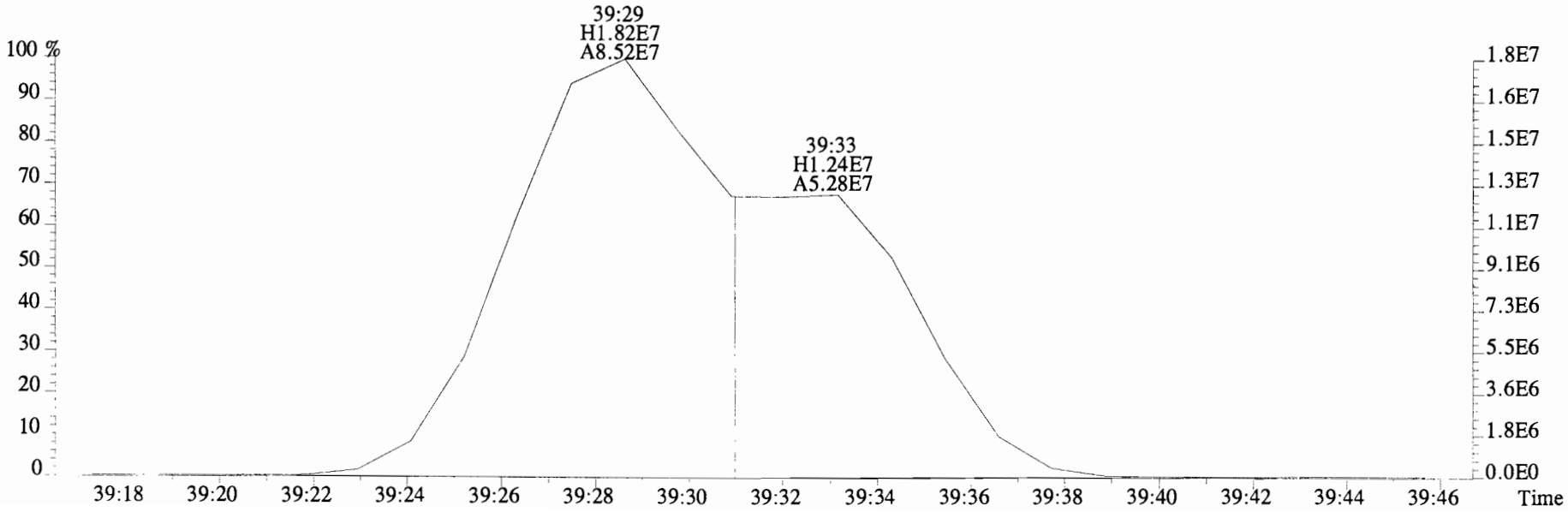
373.8788 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1864.0,0.00%,F,F)



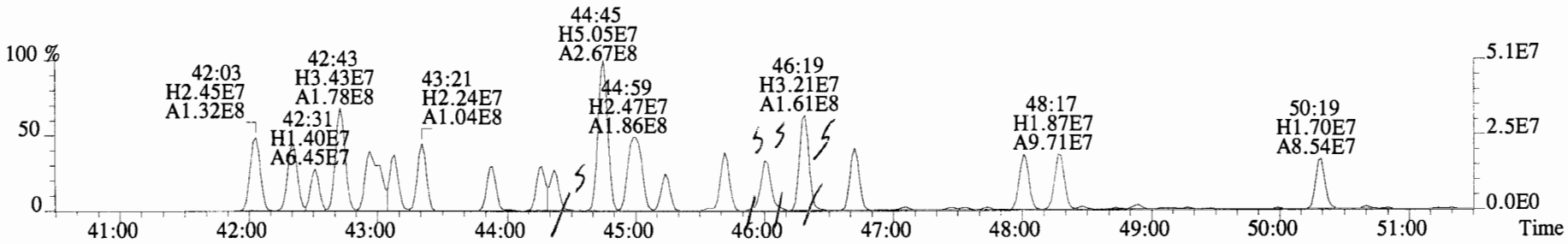
File:141028E1 #1-756 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0)



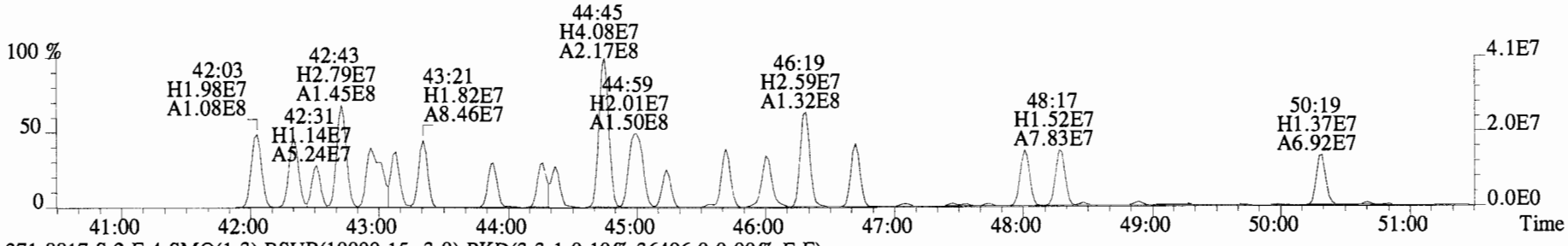
361.8385 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0)



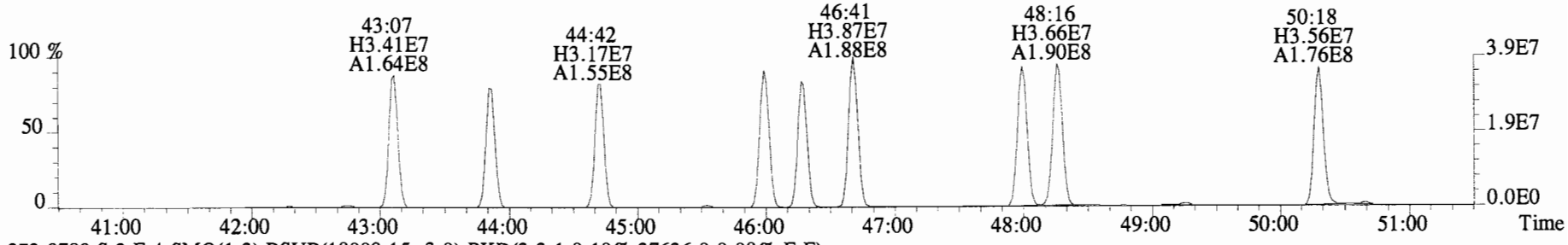
File:141028E1 #1-552 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,147320.0,0.00%,F,F)



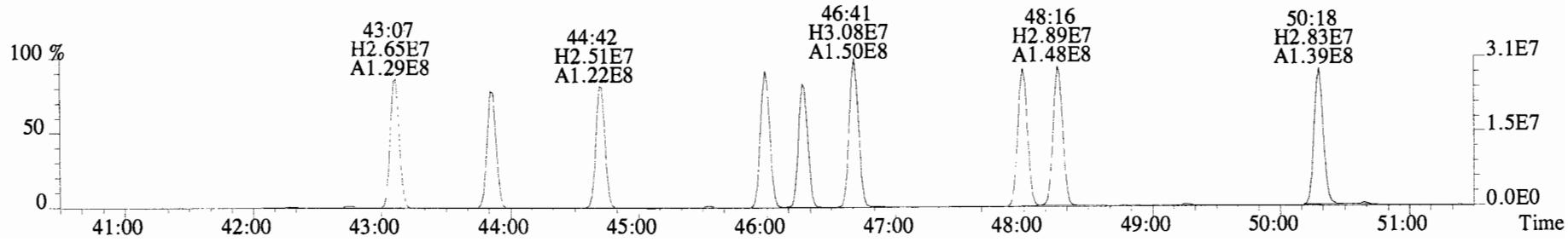
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,116296.0,0.00%,F,F)



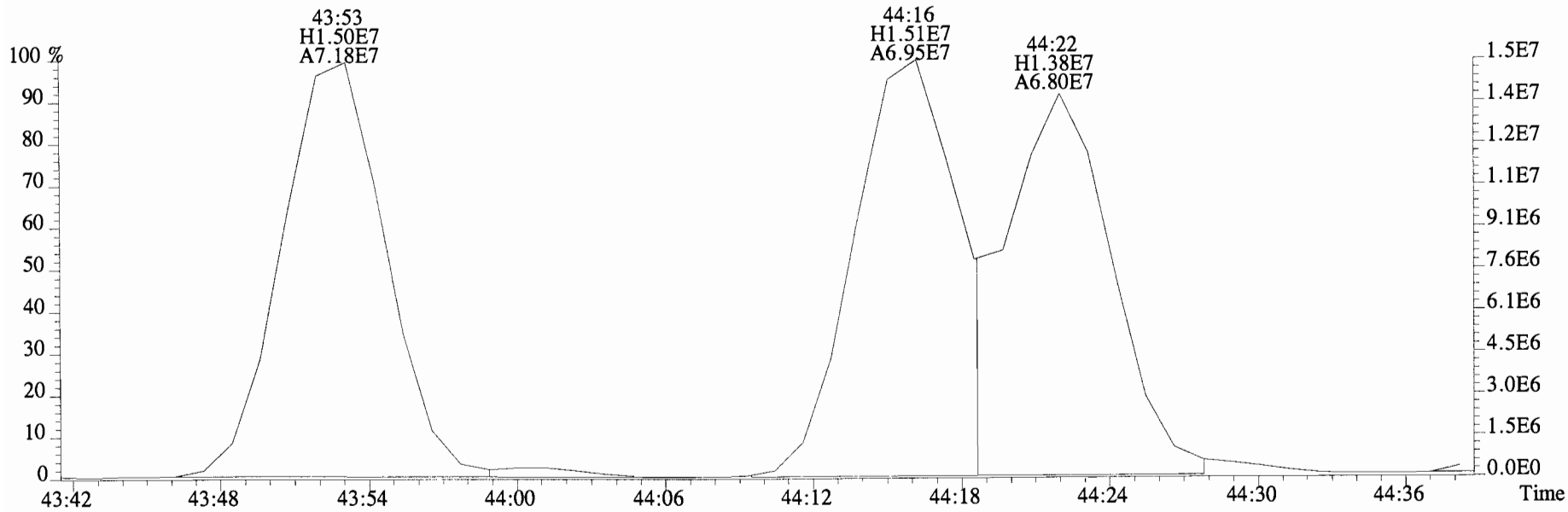
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,36496.0,0.00%,F,F)



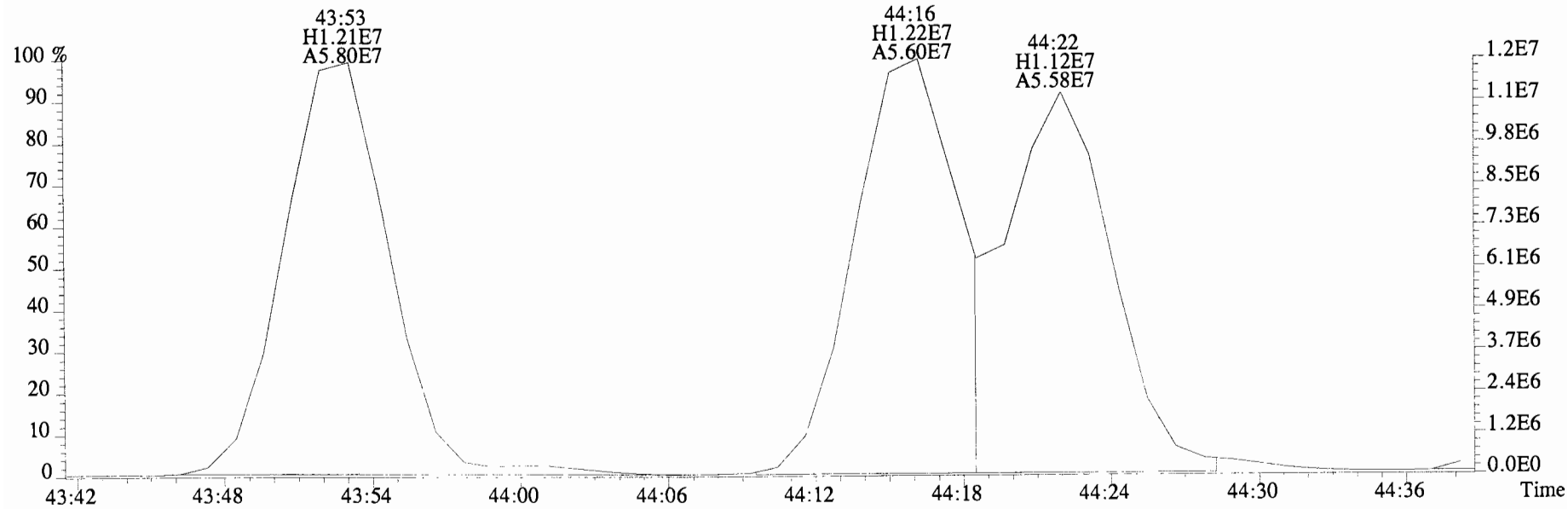
373.8788 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,37636.0,0.00%,F,F)



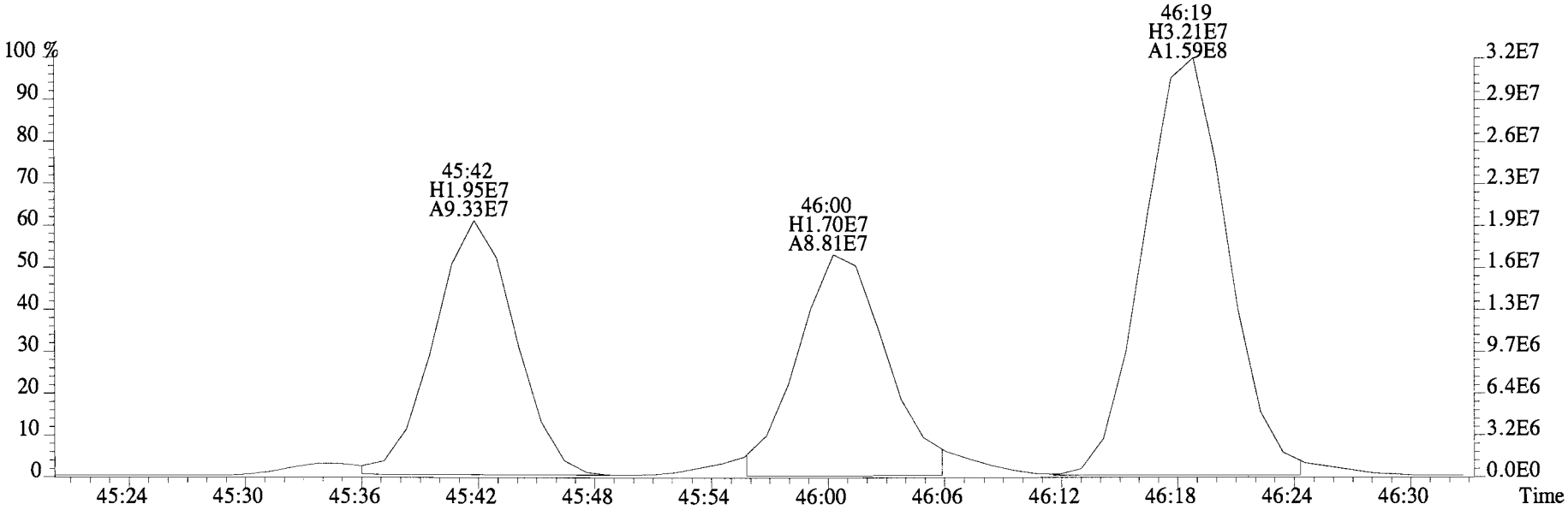
File:141028E1 #1-552 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,147320.0,0.00%,F,F)



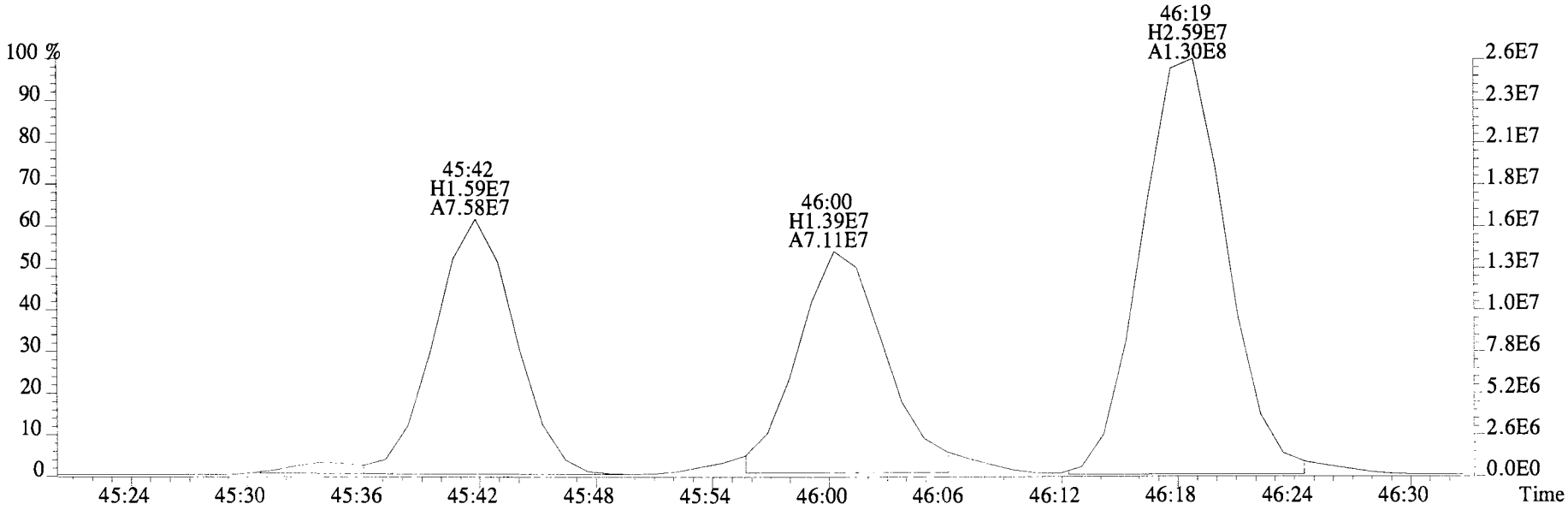
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,116296.0,0.00%,F,F)



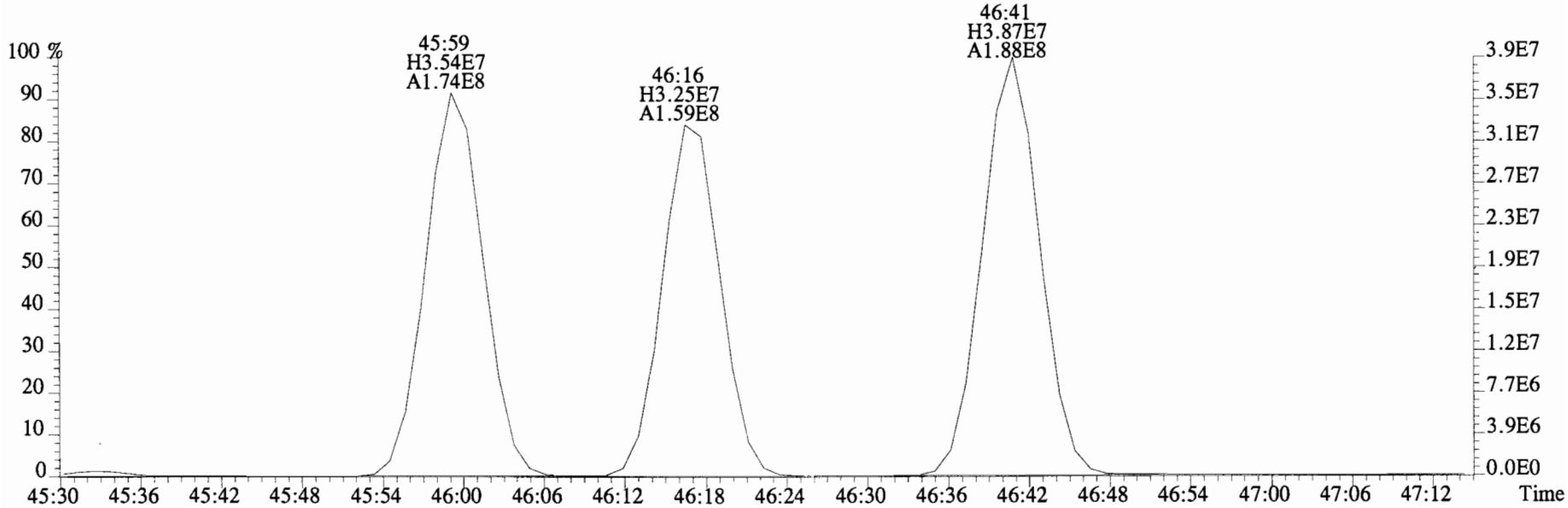
File:141028E1 #1-552 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,147320.0,0.00%,F,F)



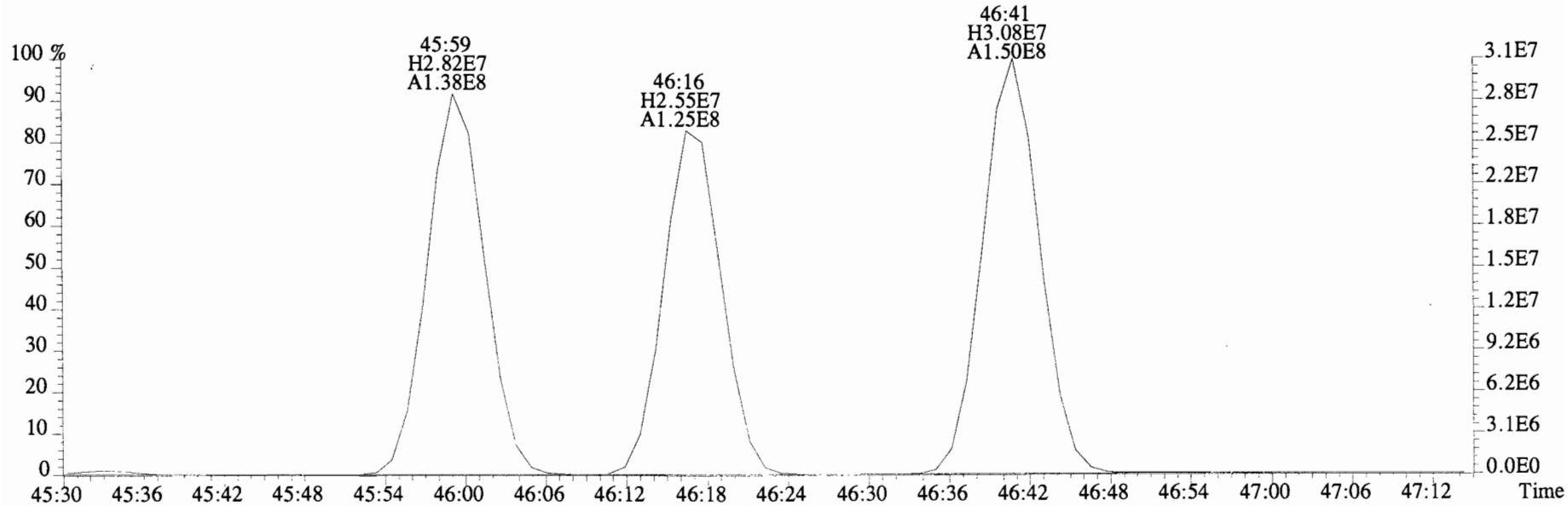
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,116296.0,0.00%,F,F)

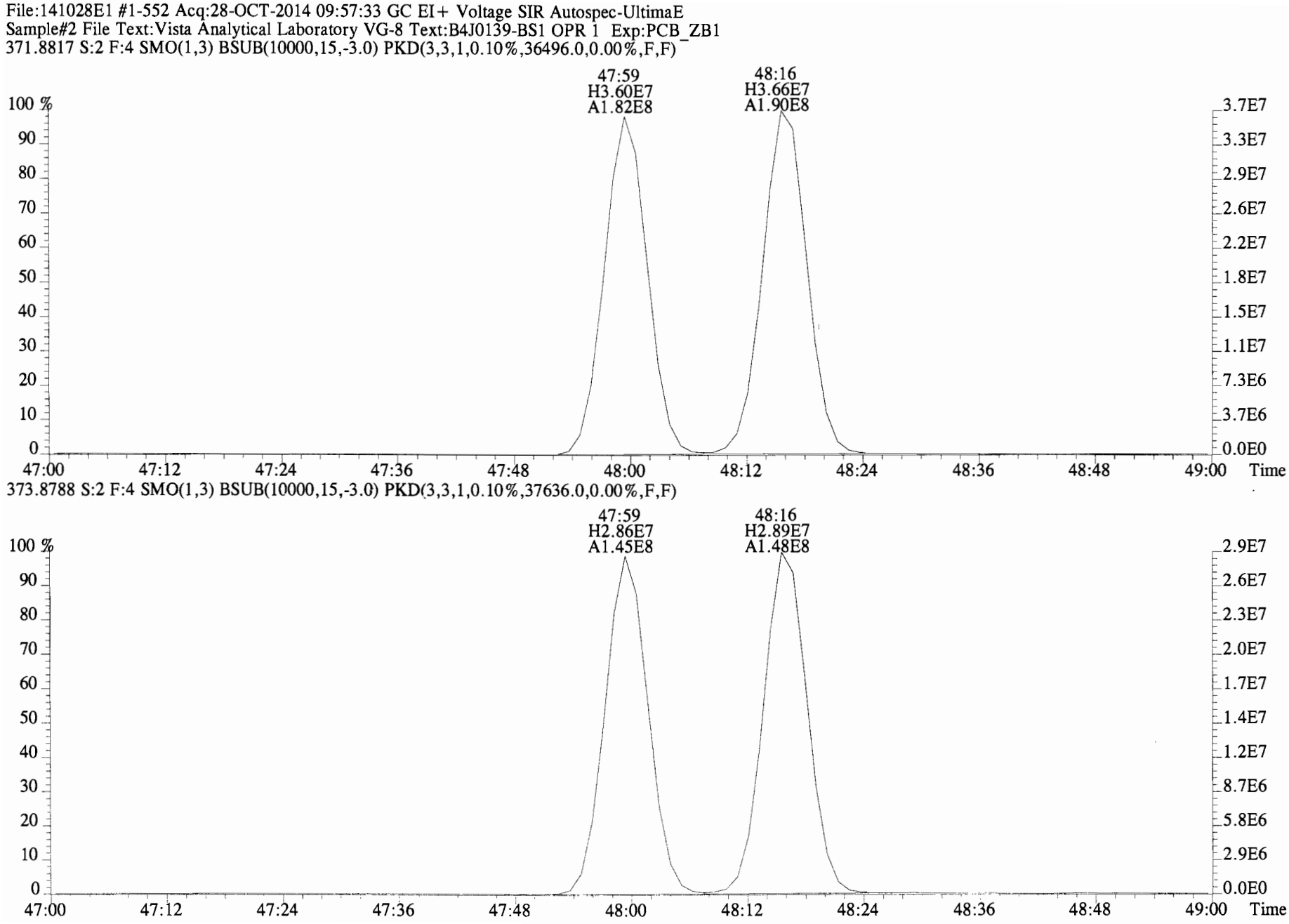


File:141028E1 #1-552 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,36496.0,0.00%,F,F)

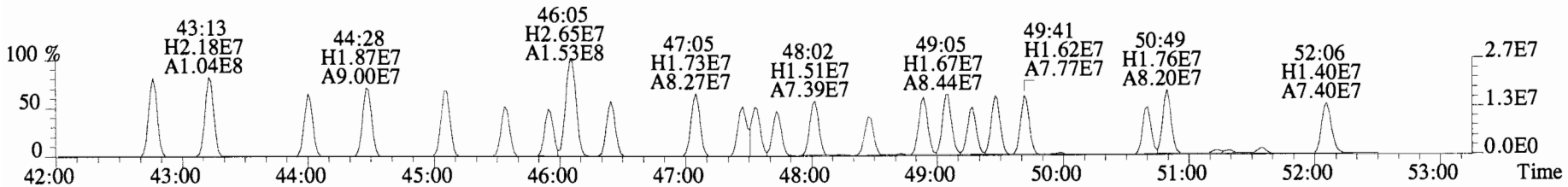


373.8788 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,37636.0,0.00%,F,F)

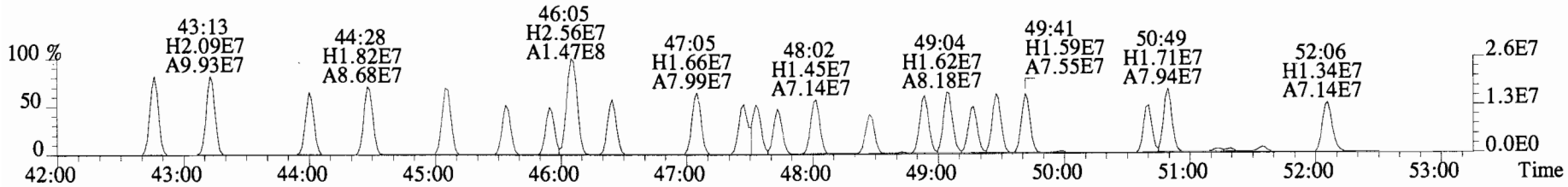



File:141028E1 #1-552 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,36496.0,0.00%,F,F)
47:59
H3.60E7
A1.82E8
48:16
H3.66E7
A1.90E8
100 %
90
80
70
60
50
40
30
20
10
0
3.7E7
3.3E7
2.9E7
2.6E7
2.2E7
1.8E7
1.5E7
1.1E7
7.3E6
3.7E6
0.0E0
47:00
47:12
47:24
47:36
47:48
48:00
48:12
48:24
48:36
48:48
49:00
Time
373.8788 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,37636.0,0.00%,F,F)
47:59
H2.86E7
A1.45E8
48:16
H2.89E7
A1.48E8
100 %
90
80
70
60
50
40
30
20
10
0
2.9E7
2.6E7
2.3E7
2.0E7
1.7E7
1.4E7
1.2E7
8.7E6
5.8E6
2.9E6
0.0E0
47:00
47:12
47:24
47:36
47:48
48:00
48:12
48:24
48:36
48:48
49:00
Time

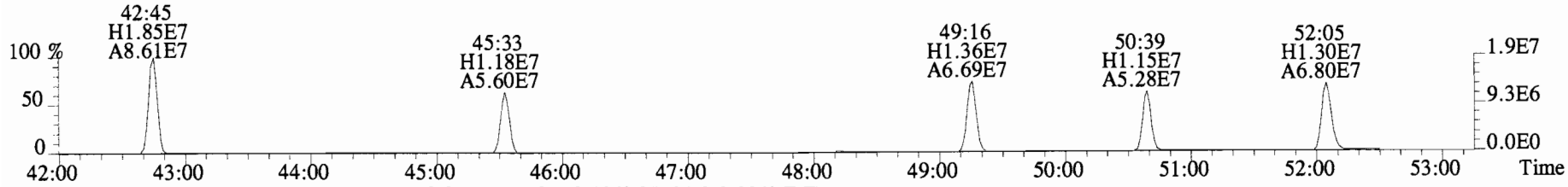
File:141028E1 #1-552 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
393.8025 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,46728.0,0.00%,F,F)



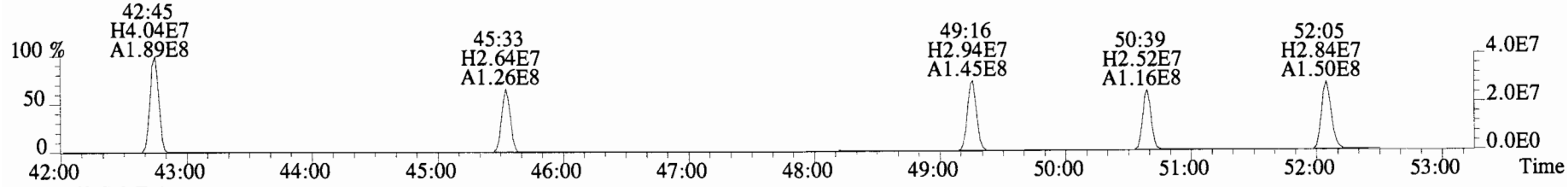
395.7995 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,42144.0,0.00%,F,F)



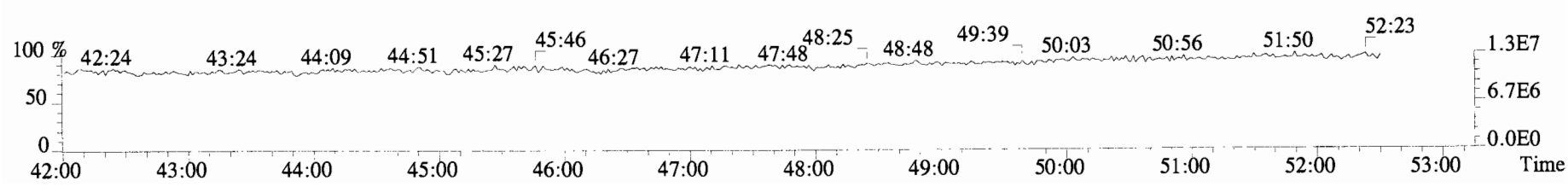
403.8457 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,21056.0,0.00%,F,F)



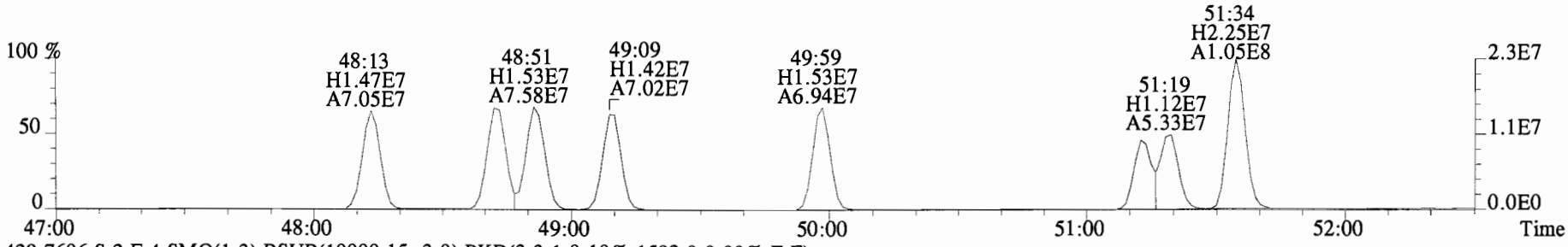
405.8428 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,37724.0,0.00%,F,F)



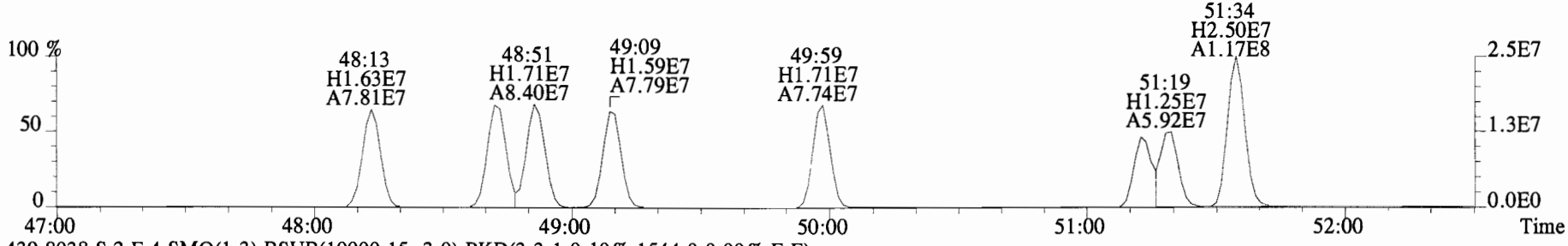
380.9760 S:2 F:4



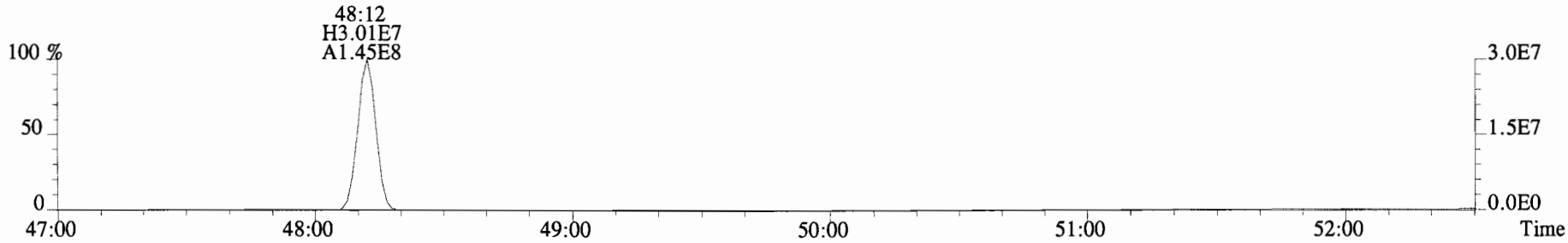
File:141028E1 #1-552 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
427.7635 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1792.0,0.00%,F,F)



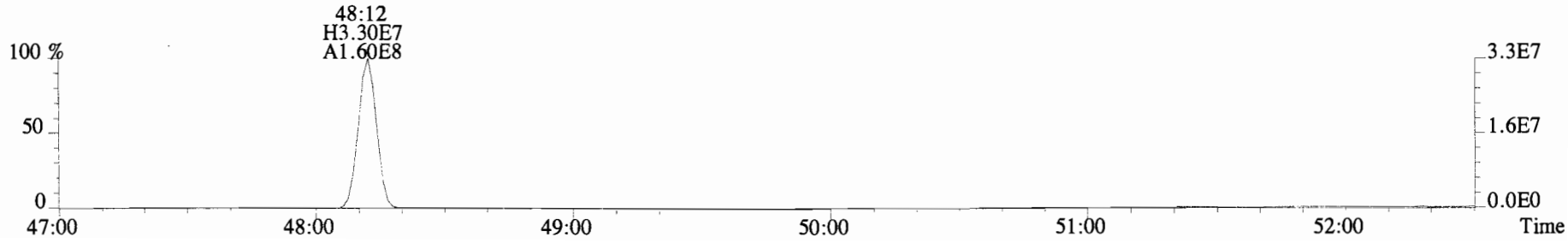
429.7606 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1592.0,0.00%,F,F)



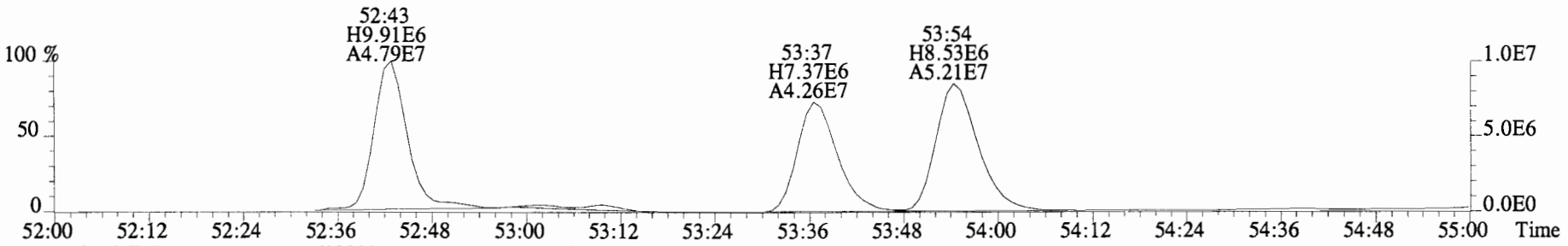
439.8038 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1544.0,0.00%,F,F)



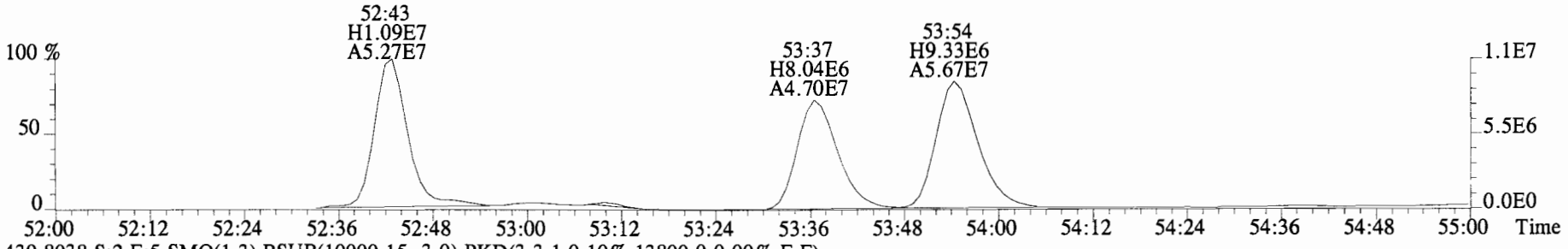
441.8008 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1660.0,0.00%,F,F)



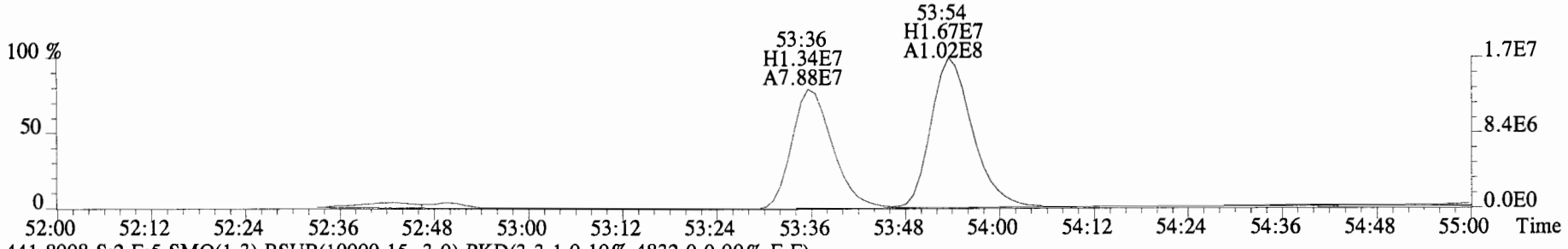
File:141028E1 #1-434 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
427.7635 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,70096.0,0.00%,F,F)



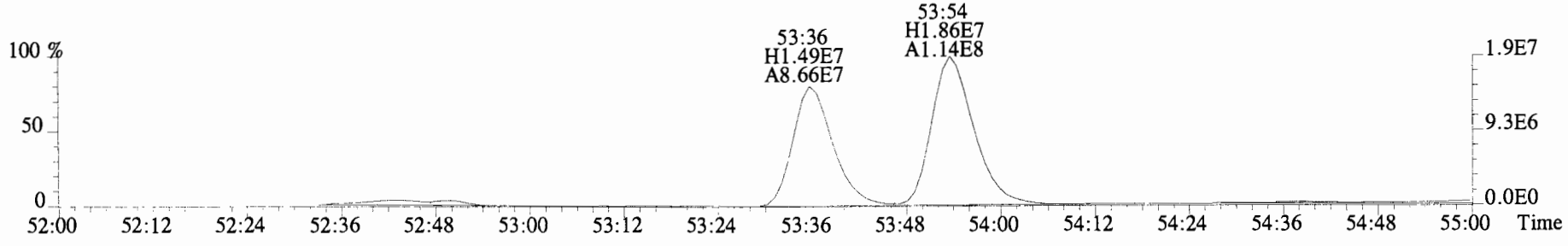
429.7606 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,93112.0,0.00%,F,F)



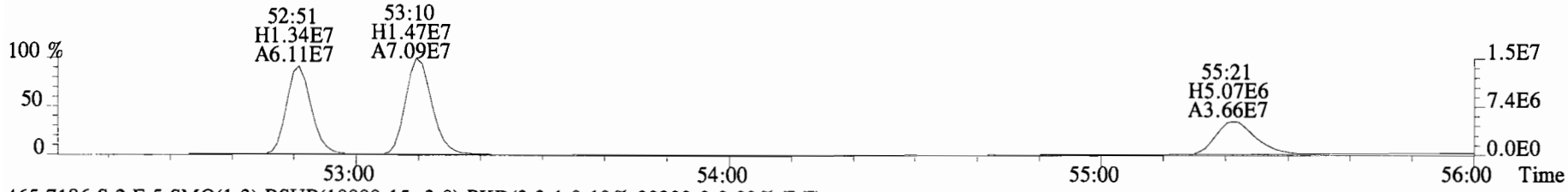
439.8038 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13800.0,0.00%,F,F)



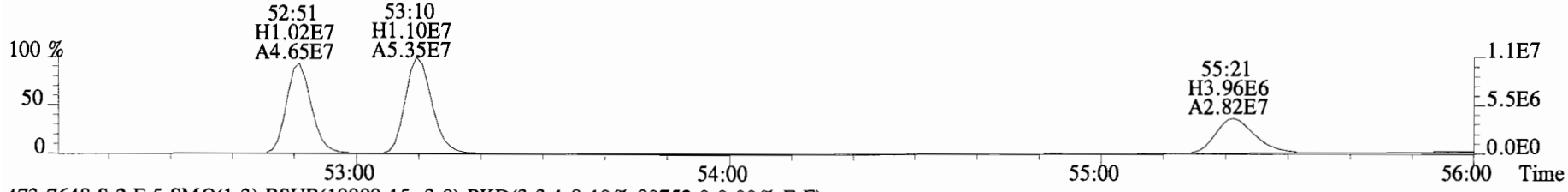
441.8008 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4832.0,0.00%,F,F)



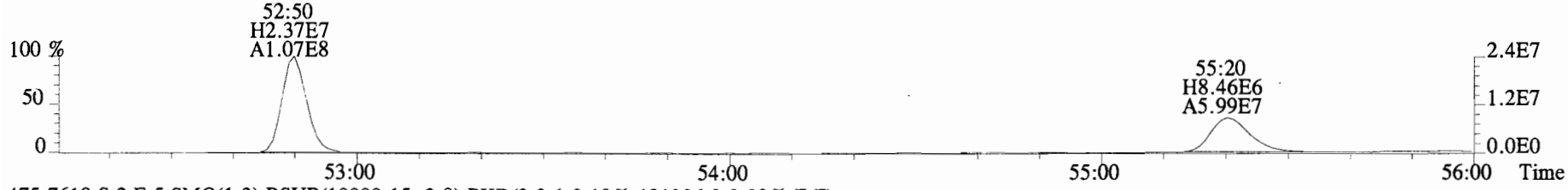
File:141028E1 #1-434 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
463.7216 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,38328.0,0.00%,F,F)



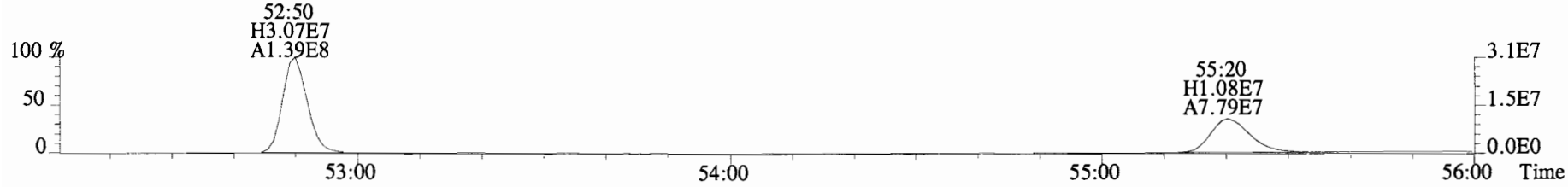
465.7186 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30200.0,0.00%,F,F)



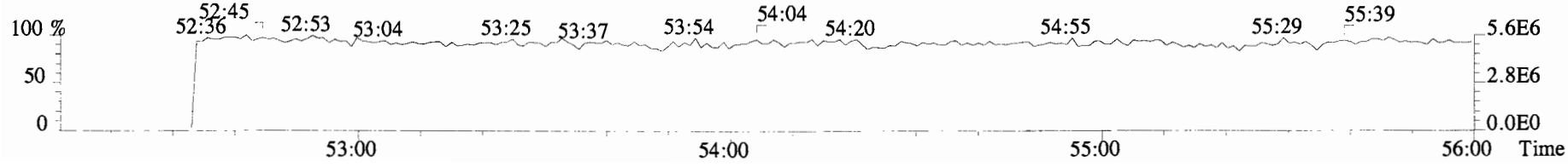
473.7648 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,90752.0,0.00%,F,F)



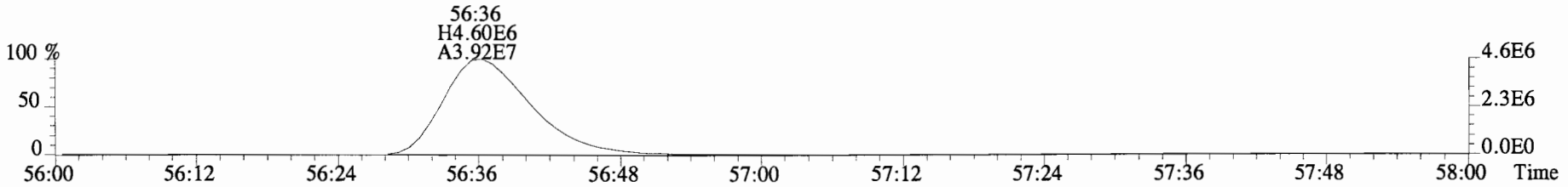
475.7619 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,121396.0,0.00%,F,F)



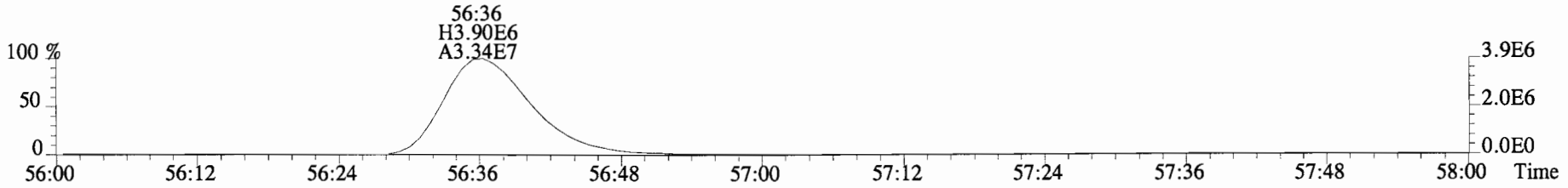
492.9697 S:2 F:5



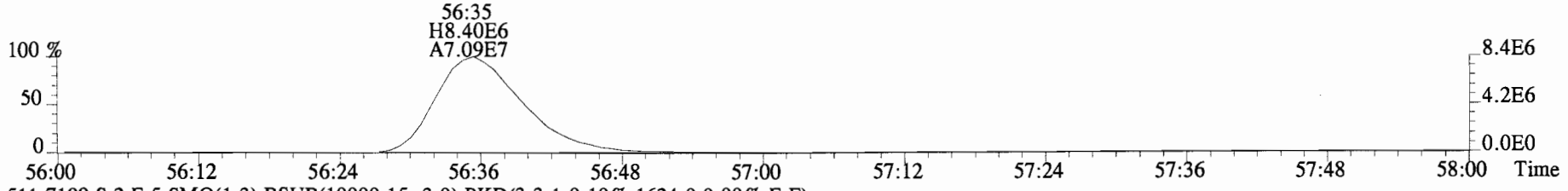
File:141028E1 #1-434 Acq:28-OCT-2014 09:57:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0139-BS1 OPR 1 Exp:PCB_ZB1
497.6826 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1328.0,0.00%,F,F)



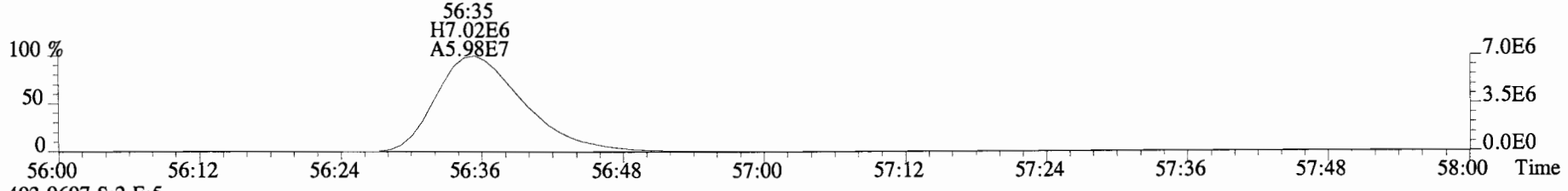
499.6797 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1580.0,0.00%,F,F)



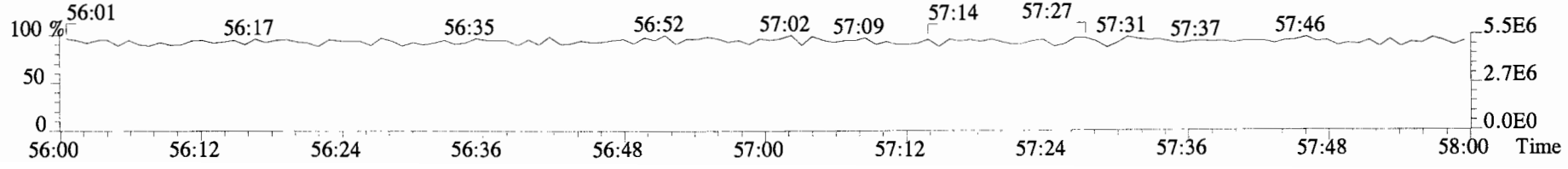
509.7229 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1684.0,0.00%,F,F)



511.7199 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1624.0,0.00%,F,F)



492.9697 S:2 F:5



Client ID: SP-OWS-01-20141008-S Filename: 141028E1 S:6 Acq:28-OCT-14 14:11:29 ConCal: ST141028E1-1
Lab ID: 1400737-02RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.074 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n NotF¶	1.19	*		3240	2.5	1050	*	0.996	1.006
Mono	PCB-2	*	*	n NotF¶	1.18	*		3240	2.5	986	*	0.984	0.994
Mono	PCB-3	*	*	n NotF¶	1.43	*		3240	2.5	819	*	0.996	1.006
Di	PCB-4/10	*	*	n NotF¶	1.57	*		10700	2.5	3450	*	0.997	1.007
Di	PCB-7/9	*	*	n NotF¶	1.21	*		10700	2.5	2900	*	0.866	0.874
Di	PCB-6	*	*	n NotF¶	1.30	*		10700	2.5	2690	*	0.890	0.899
Di	PCB-5/8	4.34e+05	1.43	y 22:59	1.15	5380		*	2.5	*	0.911	0.907	0.917
Di	PCB-14	*	*	n NotF¶	1.11	*		10700	2.5	3250	*	0.949	0.959
Di	PCB-11	4.54e+05	1.21	n 25:14	1.09	5590	R	*	2.5	*	1.001	0.995	1.005
Di	PCB-12/13	*	*	n NotF¶	1.19	*		10700	2.5	3020	*	1.011	1.021
Di	PCB-15	4.06e+05	1.36	y 25:56	1.28	4240		*	2.5	*	1.028	1.023	1.033
Tri	PCB-19	9.50e+04	1.09	y 24:16	1.04	1760		*	2.5	*	1.001	0.996	1.006
Tri	PCB-30	*	*	n NotF¶	1.71	*		2130	2.5	460	*	1.032	1.042
Tri	PCB-18	1.33e+06	1.00	y 25:51	0.78	21000		*	2.5	*	0.954	0.949	0.959
Tri	PCB-17	4.44e+05	1.01	y 26:01	0.92	5970		*	2.5	*	0.961	0.956	0.966
Tri	PCB-24/27	1.38e+05	0.92	y 26:34	1.19	1440		*	2.5	*	0.981	0.977	0.987
Tri	PCB-16/32	9.56e+05	1.03	y 27:05	0.94	12600		*	2.5	*	1.000	0.995	1.005
Tri	PCB-34	*	*	n NotF¶	1.14	*		2320	2.5	805	*	0.955	0.965
Tri	PCB-23	*	*	n NotF¶	1.28	*		2320	2.5	715	*	0.959	0.969
Tri	PCB-29	*	*	n NotF¶	1.08	*		2320	2.5	847	*	0.967	0.977
Tri	PCB-26	2.88e+05	1.15	y 28:24	1.21	3890		*	2.5	*	0.979	0.974	0.984
Tri	PCB-25	9.41e+04	0.90	y 28:34	1.26	1210		*	2.5	*	0.985	0.979	0.989
Tri	PCB-31	1.78e+06	1.00	y 28:56	1.28	22600		*	2.5	*	0.998	0.992	1.002
Tri	PCB-28	1.64e+06	1.03	y 29:01	1.71	15600		*	2.5	*	1.001	0.995	1.005
Tri	PCB-20/21/33	1.00e+06	1.04	y 29:40	1.08	15100		*	2.5	*	1.023	1.017	1.027
Tri	PCB-22	7.20e+05	1.04	y 30:05	1.21	9700		*	2.5	*	1.037	1.032	1.042
Tri	PCB-36	*	*	n NotF¶	1.14	*		2320	2.5	868	*	0.928	0.938
Tri	PCB-39	*	*	n NotF¶	1.12	*		2320	2.5	889	*	0.943	0.953
Tri	PCB-38	*	*	n NotF¶	1.20	*		2320	2.5	826	*	0.966	0.976
Tri	PCB-35	1.04e+05	1.19	y 32:26	1.23	1400		*	2.5	*	0.987	0.982	0.992
Tri	PCB-37	8.33e+05	1.10	y 32:52	1.23	11200		*	2.5	*	1.001	0.995	1.005
Tetra	PCB-54	*	*	n NotF¶	1.10	*		1070	2.5	289	*	0.996	1.006
Tetra	PCB-50	*	*	n NotF¶	0.88	*		1070	2.5	361	*	1.037	1.047
Tetra	PCB-53	3.31e+05	0.78	y 29:43	1.06	5890		*	2.5	*	0.947	0.942	0.952
Tetra	PCB-51	1.08e+05	0.80	y 30:03	0.99	2070		*	2.5	*	0.958	0.952	0.962
Tetra	PCB-45	2.92e+05	0.68	y 30:29	0.86	6420		*	2.5	*	0.971	0.966	0.976
Tetra	PCB-46	1.48e+05	0.77	y 30:58	0.85	3330		*	2.5	*	0.987	0.981	0.991

Integrations by:
Analyst: DMS
Date: 10/29/14

Reviewed by: MK Date: 10/29/14

Client ID: SP-OWS-01-20141008-S Filename: 141028E1 S:6 Acq:28-OCT-14 14:11:29 ConCal: ST141028E1-1
Lab ID: 1400737-02RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.074 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	5.50e+06	0.77	y 31:25	1.28	81400		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-73	*	*	n NotF	1.35	*		3460	2.5	963	*	1.000	1.010
Tetra	PCB-43/49	2.24e+06	0.78	y 31:43	0.99	42600		*	2.5	*	1.011	1.005	1.015
Tetra	PCB-47	6.32e+05	0.79	y 31:55	1.06	10600		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-48/75	6.60e+05	0.67	y 32:02	1.23	9580		*	2.5	*	1.004	0.999	1.009
Tetra	PCB-65	*	*	n NotF	1.22	*		3460	2.5	975	*	1.008	1.018
Tetra	PCB-62	*	*	n NotF	1.22	*		3460	2.5	978	*	1.011	1.021
Tetra	PCB-44	3.21e+06	0.74	y 32:42	0.86	66400		*	2.5	*	1.025	1.021	1.031
Tetra	PCB-42/59	9.48e+05	0.72	y 32:57	1.14	14800		*	2.5	*	1.033	1.028	1.038
Tetra	PCB-41/64/71/72	3.40e+06	0.73	y 33:31	1.21	50100		*	2.5	*	1.051	1.046	1.056
Tetra	PCB-68	*	*	n NotF	1.35	*		3460	2.5	887	*	1.054	1.064
Tetra	PCB-40	4.50e+05	0.78	y 34:00	0.70	11400		*	2.5	*	1.066	1.061	1.071
Tetra	PCB-57	*	*	n NotF	0.98	*		3460	2.5	1040	*	0.965	0.975
Tetra	PCB-67	1.01e+05	0.72	y 34:39	1.11	1350		*	2.5	*	0.979	0.974	0.984
Tetra	PCB-58	*	*	n NotF	0.93	*		3460	2.5	1100	*	0.977	0.987
Tetra	PCB-63	1.88e+05	0.66	y 34:55	0.95	2920		*	2.5	*	0.986	0.982	0.992
Tetra	PCB-74	2.55e+06	0.74	y 35:12	1.24	30400		*	2.5	*	0.994	0.990	1.000
Tetra	PCB-61/70	8.02e+06	0.74	y 35:24	0.95	124000		*	2.5	*	1.000	0.995	1.005
Tetra	PCB-76/66	5.03e+06	0.74	y 35:37	1.04	71200		*	2.5	*	1.006	1.001	1.011
Tetra	PCB-80	*	*	n NotF	1.19	*		3460	2.5	841	*	0.996	1.006
Tetra	PCB-55	1.35e+05	0.80	y 36:07	1.04	1860		*	2.5	*	1.009	1.005	1.015
Tetra	PCB-56/60	3.81e+06	0.71	y 36:39	1.01	54100		*	2.5	*	1.024	1.019	1.029
Tetra	PCB-79	1.75e+05	0.85	y 37:43	1.08	2330		*	2.5	*	1.054	1.048	1.058
Tetra	PCB-78	*	*	n NotF	1.27	*		3460	2.5	847	*	0.982	0.992
Tetra	PCB-81	6.41e+04	0.60	n 38:56	1.33	702	R	*	2.5	*	1.000	0.995	1.005
Tetra	PCB-77	8.97e+05	0.68	y 39:32	1.10	11700		*	2.5	*	1.000	0.995	1.005
Penta	PCB-104	*	*	n NotF	1.18	*		1300	2.5	519	*	0.996	1.006
Penta	PCB-96	8.54e+04	1.39	y 33:50	1.14	1280		*	2.5	*	1.039	1.034	1.044
Penta	PCB-103	5.75e+04	1.35	y 34:21	0.96	1030		*	2.5	*	1.055	1.050	1.060
Penta	PCB-100	*	*	n NotF	0.94	*		1300	2.5	657	*	1.061	1.071
Penta	PCB-94	4.55e+04	1.16	n 35:11	1.06	1060	R	*	2.5	*	0.986	0.980	0.990
Penta	PCB-95/98/102	7.76e+06	1.49	y 35:42	1.22	156000		*	2.5	*	1.000	0.995	1.005
Penta	PCB-93	*	*	n NotF	0.84	*		1300	2.5	1120	*	0.997	1.007
Penta	PCB-88/91	1.18e+06	1.50	y 36:06	1.12	26100		*	2.5	*	1.011	1.005	1.015
Penta	PCB-121	*	*	n NotF	1.62	*		1300	2.5	587	*	1.009	1.019
Penta	PCB-84/92	4.30e+06	1.57	y 37:01	1.05	81300		*	2.5	*	0.991	0.985	0.995
Penta	PCB-89	1.25e+05	1.41	y 37:12	1.13	2190		*	2.5	*	0.996	0.991	1.001

Analyst: DMS

Date: 10/29/14

Client ID: SP-OWS-01-20141008-S Filename: 141028E1 S:6 Acq:28-OCT-14 14:11:29 ConCal: ST141028E1-1
Lab ID: 1400737-02RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.074 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	1.12e+07	1.59	y	37:22	1.10	201000		*	2.5	*	1.000	0.995	1.005
Penta	PCB-113	*	*	n	NotF	1.41	*		1300	2.5	548	*	1.002	1.012
Penta	PCB-99	4.29e+06	1.59	y	37:43	1.34	63600		*	2.5	*	1.009	1.004	1.014
Penta	PCB-119	2.40e+05	1.37	y	38:10	1.53	3230		*	2.5	*	0.987	0.982	0.992
Penta	PCB-108/112	5.48e+05	1.55	y	38:20	1.28	8840		*	2.5	*	0.991	0.986	0.996
Penta	PCB-83	*	*	n	NotF	1.52	*		1300	2.5	502	*	0.990	1.000
Penta	PCB-97	3.25e+06	1.55	y	38:42	1.18	56800		*	2.5	*	1.000	0.995	1.005
Penta	PCB-86	5.44e+04	1.39	y	38:50	0.84	1330		*	2.5	*	1.004	0.999	1.009
Penta	PCB-87/117/125	5.37e+06	1.54	y	38:59	1.55	71700		*	2.5	*	1.008	1.002	1.012
Penta	PCB-111/115	3.09e+05	1.46	y	39:07	1.63	3910		*	2.5	*	1.011	1.006	1.016
Penta	PCB-85/116	1.95e+06	1.62	y	39:15	1.30	30900		*	2.5	*	1.015	1.010	1.020
Penta	PCB-120	4.37e+04	1.90	n	39:27	1.68	538	R	*	2.5	*	1.020	1.016	1.026
Penta	PCB-110	1.59e+07	1.55	y	39:38	1.56	211000		*	2.5	*	1.025	1.020	1.030
Penta	PCB-82	1.23e+06	1.49	y	40:16	0.76	26900		*	2.5	*	0.977	0.971	0.981
Penta	PCB-124	7.00e+05	1.39	y	40:56	1.47	7930		*	2.5	*	0.993	0.988	0.998
Penta	PCB-107/109	9.72e+05	1.64	y	41:06	1.32	12300		*	2.5	*	0.997	0.991	1.001
Penta	PCB-123	2.27e+05	1.53	y	41:15	1.17	3240		*	2.5	*	1.000	0.996	1.006
Penta	PCB-106/118	1.31e+07	1.56	y	41:26	1.17	169000		*	2.5	*	1.000	0.996	1.006
Penta	PCB-114	2.79e+05	1.39	y	42:06	1.30	4700		*	2.5	*	1.000	0.995	1.005
Penta	PCB-122	1.26e+05	1.82	n	42:14	1.12	2450		*	2.5	*	1.004	0.999	1.009
Penta	PCB-105	4.74e+06	1.64	y	42:59	1.30	85500		*	2.5	*	1.000	0.995	1.005
Penta	PCB-127	*	*	n	NotF	1.33	*		2510	2.5	1140	*	0.996	1.006
Penta	PCB-126	1.11e+05	1.51	y	45:13	1.18	2190		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-155	*	*	n	NotF	1.11	*		1820	2.5	625	*	0.966	1.006
Hexa	PCB-150	*	*	n	NotF	1.00	*		1820	2.5	697	*	1.030	1.040
Hexa	PCB-152	2.25e+04	0.88	n	38:41	1.12	316	R	*	2.5	*	1.048	1.043	1.053
Hexa	PCB-145	1.23e+04	0.91	n	39:09	1.20	160	R	*	2.5	*	1.060	1.055	1.065
Hexa	PCB-136	2.08e+06	1.30	y	39:27	1.18	27700		*	2.5	*	1.069	1.064	1.074
Hexa	PCB-148	*	*	n	NotF	0.74	*		1820	2.5	935	*	1.066	1.076
Hexa	PCB-154	1.09e+05	1.25	y	40:02	0.86	1990		*	2.5	*	1.084	1.080	1.090
Hexa	PCB-151	2.67e+06	1.30	y	40:40	0.75	56000		*	2.5	*	1.102	1.097	1.107
Hexa	PCB-135	1.43e+06	1.28	y	40:54	0.79	28300		*	2.5	*	1.108	1.103	1.113
Hexa	PCB-144	5.81e+05	0.94	n	41:01	0.76	11900	R	*	2.5	*	1.111	1.105	1.117
Hexa	PCB-147	2.05e+05	1.40	y	41:09	0.82	3920		*	2.5	*	1.115	1.109	1.121
Hexa	PCB-139/149	1.01e+07	1.27	y	41:23	0.76	208000		*	2.5	*	1.121	1.116	1.128
Hexa	PCB-140	7.88e+04	1.06	y	41:35	0.72	1710		*	2.5	*	1.126	1.121	1.133
Hexa	PCB-134/143	6.67e+05	1.24	y	42:03	0.92	12800		*	2.5	*	0.976	0.970	0.980

Analyst: DMS

Date: 10/29/14

Client ID: SP-OWS-01-20141008-S Filename: 141028E1 S:6 Acq:28-OCT-14 14:11:29 ConCal: ST141028E1-1
Lab ID: 1400737-02RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.074 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	3.42e+05	1.17	y 42:19	0.82	7380		*	2.5	*	0.982	0.977	0.987
Hexa	PCB-131	*	*	n NotF┐	0.91	*		1890	2.5	985	*	0.981	0.991
Hexa	PCB-146/165	1.96e+06	1.17	y 42:43	1.25	27800		*	2.5	*	0.991	0.986	0.996
Hexa	PCB-132/161	3.72e+06	1.28	y 42:59	1.10	59500		*	2.5	*	0.997	0.992	1.002
Hexa	PCB-153	1.46e+07	1.20	y 43:07	1.25	206000		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-168	*	*	n NotF┐	1.45	*		1890	2.5	618	*	1.001	1.011
Hexa	PCB-141	2.99e+06	1.19	y 43:52	1.09	57400		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-137	6.37e+05	1.21	y 44:15	1.06	12500		*	2.5	*	1.009	1.004	1.014
Hexa	PCB-130	7.62e+05	1.26	y 44:21	0.96	16500		*	2.5	*	1.011	1.006	1.016
Hexa	PCB-138/163/164	1.64e+07	1.23	y 44:43	1.29	264000		*	2.5	*	1.000	0.996	1.006
Hexa	PCB-158/160	2.07e+06	1.27	y 44:57	1.34	32000		*	2.5	*	1.006	1.001	1.011
Hexa	PCB-129	5.60e+05	1.38	y 45:13	0.85	13600		*	2.5	*	1.012	1.007	1.017
Hexa	PCB-166	*	*	n NotF┐	1.19	*		1890	2.5	757	*	0.988	0.998
Hexa	PCB-159	*	*	n NotF┐	1.11	*		1890	2.5	812	*	0.996	1.006
Hexa	PCB-128/162	2.28e+06	1.28	y 46:18	1.05	36800		*	2.5	*	1.007	1.002	1.012
Hexa	PCB-167	6.88e+05	1.28	y 46:41	1.20	8960		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-156	1.79e+06	1.32	y 47:59	1.14	24700		*	2.5	*	1.000	0.996	1.006
Hexa	PCB-157	3.86e+05	1.09	y 48:16	1.16	5330		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-169	*	*	n NotF┐	1.12	*		1890	2.5	927	*	0.995	1.005
Hepta	PCB-188	*	*	n NotF┐	1.58	*		1820	2.5	395	*	0.996	1.006
Hepta	PCB-184	*	*	n NotF┐	1.63	*		1820	2.5	383	*	1.006	1.016
Hepta	PCB-179	2.47e+06	1.04	y 43:59	1.30	37900		*	2.5	*	1.029	1.024	1:034
Hepta	PCB-176	7.34e+05	1.08	y 44:27	1.48	9940		*	2.5	*	1.040	1.035	1.045
Hepta	PCB-186	*	*	n NotF┐	1.45	*		1820	2.5	430	*	1.050	1.060
Hepta	PCB-178	8.59e+05	1.01	y 45:33	1.03	16600		*	2.5	*	1.066	1.061	1.071
Hepta	PCB-175	1.72e+05	0.91	y 45:53	1.01	3400		*	2.5	*	1.074	1.069	1.079
Hepta	PCB-182/187	5.50e+06	1.04	y 46:04	1.25	87900		*	2.5	*	1.078	1.073	1.083
Hepta	PCB-183	2.47e+06	1.01	y 46:23	1.21	40900		*	2.5	*	1.085	1.081	1.091
Hepta	PCB-185	5.35e+05	0.96	y 47:04	1.80	7860		*	2.5	*	0.956	0.951	0.961
Hepta	PCB-174	4.62e+06	1.08	y 47:26	1.38	88700		*	2.5	*	0.963	0.958	0.968
Hepta	PCB-181	*	*	n NotF┐	1.38	*		1820	2.5	624	*	0.960	0.970
Hepta	PCB-177	2.27e+06	1.08	y 47:42	1.26	47900		*	2.5	*	0.969	0.963	0.973
Hepta	PCB-171	1.09e+06	0.99	y 48:01	1.58	18300		*	2.5	*	0.975	0.970	0.980
Hepta	PCB-173	9.15e+04	0.94	y 48:27	1.11	2180		*	2.5	*	0.984	0.978	0.988
Hepta	PCB-172	6.63e+05	1.03	y 48:53	1.63	10700		*	2.5	*	0.993	0.987	0.997
Hepta	PCB-192	*	*	n NotF┐	1.74	*		1820	2.5	494	*	0.991	1.001
Hepta	PCB-180	1.03e+07	1.06	y 49:16	1.34	203000		*	2.5	*	1.000	0.995	1.005

Analyst: DMS

Date: 10/29/14

Client ID: SP-OWS-01-20141008-S Filename: 141028E1 S:6 Acq:28-OCT-14 14:11:29 ConCal: ST141028E1-1
Lab ID: 1400737-02RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.074 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Hepta	PCB-193	6.14e+05	1.10	y 49:27	1.72	9470		*	2.5	*	1.004	0.999-1.009
Hepta	PCB-191	1.85e+05	1.28	n 49:40	1.69	2890	R	*	2.5	*	1.008	1.004-1.014
Hepta	PCB-170	3.54e+06	1.07	y 50:39	1.60	73600		*	2.5	*	1.000	0.995-1.005
Hepta	PCB-190	1.01e+06	1.07	y 50:48	2.21	15200		*	2.5	*	1.003	0.998-1.008
Hepta	PCB-189	1.46e+05	0.79	n 52:05	1.55	2580	R	*	2.5	*	1.000	0.995-1.005
Octa	PCB-202	4.79e+05	0.94	y 48:12	1.08	8460		*	2.5	*	1.000	0.995-1.005
Octa	PCB-201	3.68e+05	0.93	y 48:41	1.15	6120		*	2.5	*	1.010	1.005-1.015
Octa	PCB-204	*	*	n NotF¶	1.14	*		1880	2.5	712	*	1.008-1.018
Octa	PCB-197	1.02e+05	0.98	y 49:08	1.07	1820		*	2.5	*	1.020	1.015-1.025
Octa	PCB-200	3.31e+05	0.82	y 49:57	1.06	5950		*	2.5	*	1.037	1.032-1.044
Octa	PCB-198	6.78e+04	0.88	y 51:11	0.76	1720		*	2.5	*	1.062	1.059-1.069
Octa	PCB-199	2.07e+06	0.89	y 51:18	0.80	49700		*	2.5	*	1.065	1.061-1.071
Octa	PCB-196/203	2.27e+06	0.92	y 51:33	0.80	54200		*	2.5	*	1.070	1.066-1.076
Octa	PCB-195	6.31e+05	0.88	y 52:42	1.23	17700		*	2.5	*	0.983	0.979-0.989
Octa	PCB-194	1.63e+06	0.90	y 53:36	1.21	46000		*	2.5	*	1.000	0.995-1.005
Octa	PCB-205	7.69e+04	0.86	y 53:53	1.54	1710		*	2.5	*	1.005	1.001-1.011
Nona	PCB-208	1.04e+05	1.02	n 52:50	0.93	2470	R	*	2.5	*	1.000	0.995-1.005
Nona	PCB-207	7.13e+04	1.11	n 53:10	1.08	1460	R	*	2.5	*	1.006	1.001-1.011
Nona	PCB-206	3.04e+05	1.39	y 55:21	1.02	11600		*	2.5	*	1.000	0.995-1.005
Deca	PCB-209	8.96e+04	1.24	y 56:37	1.17	3350		*	2.5	*	1.000	0.995-1.005

Analyst: DMS

Date: 10/29/14

Client ID: SP-OWS-01-20141008-S Filename: 141028E1 S:6 Acq:28-OCT-14 14:11:29 ConCal: ST141028E1-1
Lab ID: 1400737-02RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0736 EndCAL: NA

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	*	*	n	NotFnd	1.27	*	
Total Di-PCB	8.40e+05	1.43	y	22:59	1.21	9620.15	
Total Tri-PCB	2.96e+06	1.09	y	24:16	1.10	42780.5	
Total Tri-PCB	6.47e+06	1.15	y	28:24	1.21	80711.1	Sum:123492
Total Tetra-PCB	3.88e+07	0.78	y	29:43	1.09	604983	
Total Penta-PCB	7.28e+07	1.39	y	33:50	1.18	1139530	
Total Penta-PCB	5.13e+06	1.39	y	42:06	1.25	92432.8	Sum:1231960
Total Hexa-PCB	1.67e+07	1.30	y	39:27	0.90	327818	
Total Hexa-PCB	4.99e+07	1.24	y	42:03	1.11	785159	Sum:1112980
Total Hepta-PCB	3.69e+07	1.04	y	43:59	1.42	673123	
Total Octa-PCB	5.70e+06	0.94	y	48:12	0.96	128011	
Total Octa-PCB	2.34e+06	0.88	y	52:42	1.33	65383.3	Sum:193394
Total Nona-PCB	3.04e+05	1.39	y	55:21	1.01	11590.5	
Total Deca-PCB	8.96e+04	1.24	y	56:37	1.17	3347.88	

Total PCB Conc: ~~3996656.85655~~ 3960.000

Integrations by Analyst: DMS

Date: 10/30/14

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	3.94e+06	3.20 y	0.87	16:25	0.633	0.629	0.635	39300	84.4
13C-PCB-3	4.60e+06	3.20 y	0.91	18:55	0.730	0.725	0.733	44000	94.4
13C-PCB-4	2.10e+06	1.52 y	0.59	20:13	0.780	0.775	0.783	31300	67.1
13C-PCB-9	3.27e+06	1.52 y	0.90	21:55	0.846	0.842	0.850	31800	68.2
13C-PCB-11	3.48e+06	1.58 y	0.94	25:13	0.973	0.968	0.978	32300	69.4
13C-PCB-19	2.41e+06	1.00 y	0.53	24:14	0.935	0.930	0.940	39600	84.9
13C-PCB-28	2.86e+06	1.18 y	0.93	29:00	1.004	0.999	1.009	34500	74.2
13C-PCB-32	3.76e+06	1.13 y	0.80	27:05	1.045	1.040	1.050	41200	88.4
13C-PCB-37	2.81e+06	1.11 y	0.84	32:51	1.137	1.131	1.143	37700	80.9
13C-PCB-47	2.62e+06	0.74 y	0.81	31:54	0.870	0.866	0.874	34100	73.1
13C-PCB-52	2.46e+06	0.81 y	0.77	31:23	0.856	0.853	0.861	33700	72.3
13C-PCB-54	2.99e+06	0.76 y	0.97	27:55	0.762	0.758	0.766	32600	70.0
13C-PCB-70	3.15e+06	0.72 y	1.00	35:24	0.966	0.961	0.971	33300	71.5
13C-PCB-77	3.24e+06	0.73 y	0.94	39:31	1.078	1.073	1.083	36400	78.2
13C-PCB-80	3.25e+06	0.78 y	1.03	35:48	0.977	0.972	0.982	33300	71.5
13C-PCB-81	3.20e+06	0.79 y	0.92	38:56	1.062	1.057	1.067	36700	78.7
13C-PCB-95	1.90e+06	1.66 y	0.74	35:42	0.913	0.908	0.918	29700	63.8
13C-PCB-97	2.25e+06	1.51 y	0.70	38:41	0.989	0.984	0.994	37100	79.7
13C-PCB-101	2.36e+06	1.60 y	0.78	37:22	0.956	0.951	0.961	34900	75.0
13C-PCB-104	2.72e+06	1.44 y	1.00	32:33	0.832	0.828	0.836	31500	67.7
13C-PCB-105	1.99e+06	1.59 y	1.37	42:58	0.929	0.924	0.934	22500	48.2
13C-PCB-114	2.13e+06	1.61 y	1.36	42:05	0.910	0.905	0.915	24200	52.0
13C-PCB-118	3.06e+06	1.56 y	0.96	41:26	1.060	1.054	1.064	37100	79.6
13C-PCB-123	2.80e+06	1.72 y	0.89	41:14	1.055	1.050	1.060	36300	77.9
13C-PCB-126	1.99e+06	1.48 y	1.31	45:12	0.977	0.972	0.982	23600	50.6
13C-PCB-127	2.29e+06	1.41 y	1.47	43:17	0.936	0.931	0.941	24000	51.5
13C-PCB-138	2.24e+06	1.15 y	1.10	44:42	0.966	0.961	0.971	31500	67.7
13C-PCB-141	2.23e+06	1.35 y	1.07	43:51	0.948	0.943	0.953	32100	69.0
13C-PCB-153	2.64e+06	1.34 y	1.15	43:06	0.932	0.927	0.937	35600	76.3
13C-PCB-155	2.97e+06	1.13 y	0.84	36:55	0.944	0.939	0.949	41100	88.3
13C-PCB-156	2.97e+06	1.29 y	1.30	47:59	1.037	1.032	1.042	35400	76.1
13C-PCB-157	2.90e+06	1.31 y	1.36	48:15	1.043	1.038	1.048	33000	70.9
13C-PCB-159	2.76e+06	1.32 y	1.25	45:59	0.994	0.989	0.999	34200	73.4
13C-PCB-167	2.98e+06	1.29 y	1.35	46:40	1.009	1.004	1.014	34100	73.2
13C-PCB-169	2.66e+06	1.40 y	1.29	50:18	1.087	1.083	1.093	32000	68.7
13C-PCB-170	1.40e+06	0.45 y	0.54	50:38	1.094	1.089	1.101	39900	85.8
13C-PCB-180	1.76e+06	0.44 y	0.68	49:15	1.064	1.060	1.070	39800	85.4
13C-PCB-188	2.33e+06	0.50 y	0.92	42:44	0.924	0.919	0.929	39200	84.2
13C-PCB-189	1.70e+06	0.40 y	0.72	52:04	1.125	1.120	1.132	36600	78.7
13C-PCB-194	1.36e+06	0.95 y	0.80	53:36	0.994	0.990	1.000	36200	77.7
13C-PCB-202	2.44e+06	0.85 y	0.84	48:11	1.041	1.036	1.046	44900	96.5
13C-PCB-206	1.19e+06	0.88 y	0.65	55:21	1.027	1.021	1.031	39000	83.8
13C-PCB-208	2.10e+06	0.78 y	1.08	52:50	0.980	0.976	0.986	41300	88.6
13C-PCB-209	1.07e+06	0.99 y	0.61	56:37	1.050	1.045	1.055	37100	79.6

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	3.28e+06	0.75 y	1.02	37:41	1.028	1.023	1.034	34200	73.4
13C-PCB-178	1.38e+06	0.51 y	0.61	45:32	0.984	0.979	0.990	34700	74.6

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	3.28e+06	0.75 y	1.10	37:41	0.968	0.964	0.974	43400	93.2
13C-PCB-178	1.38e+06	0.51 y	0.90	45:32	0.925	0.920	0.930	40600	87.3

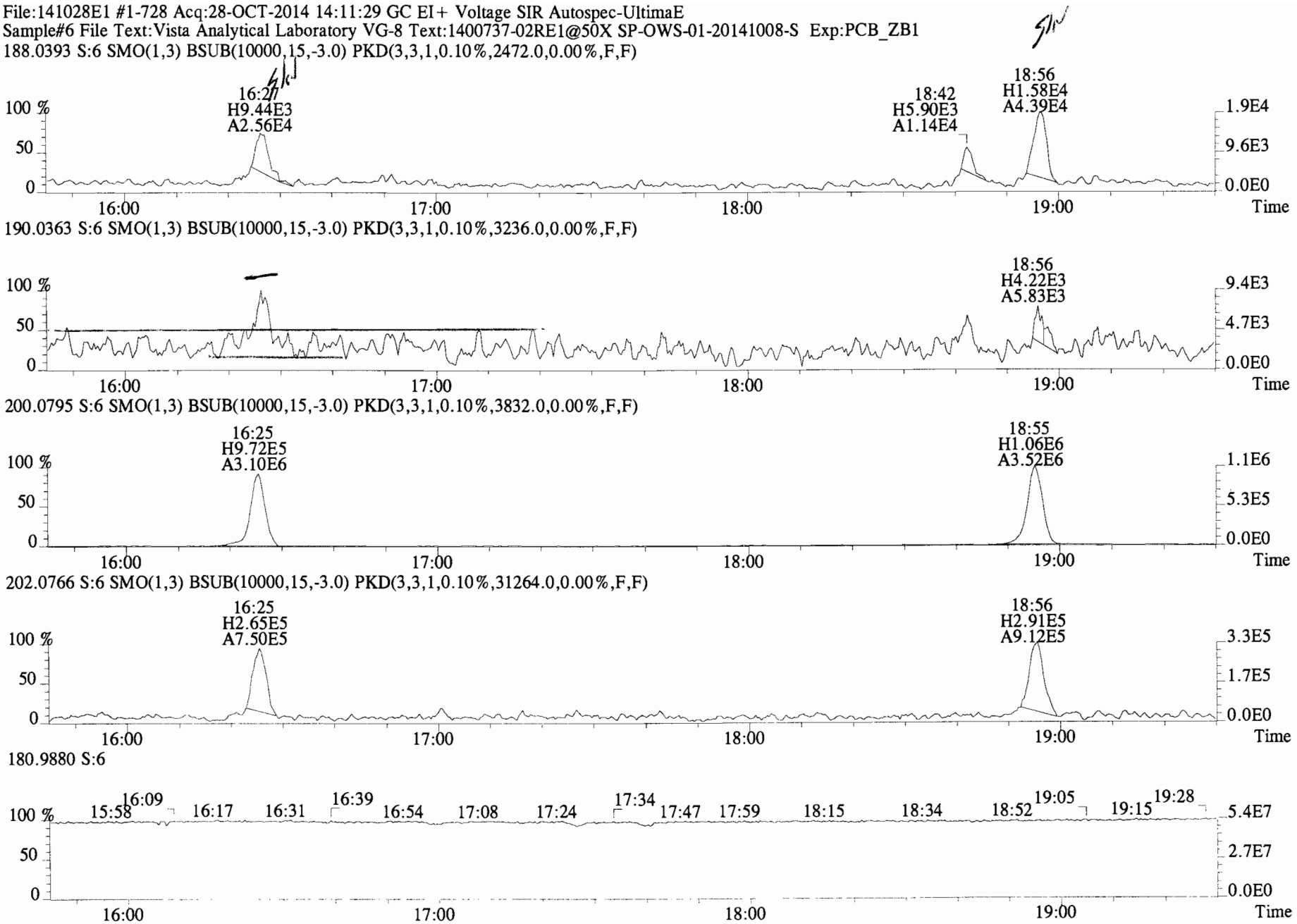
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	5.34e+06	1.53	y	1.00	25:55	46600
13C-PCB-31	4.14e+06	1.06	y	1.00	28:53	46600
13C-PCB-60	4.40e+06	0.74	y	1.00	36:39	46600
13C-PCB-111	4.01e+06	1.47	y	1.00	39:06	46600
13C-PCB-128	3.01e+06	1.27	y	1.00	46:16	46600
13C-PCB-205	2.19e+06	0.88	y	1.00	53:54	46600

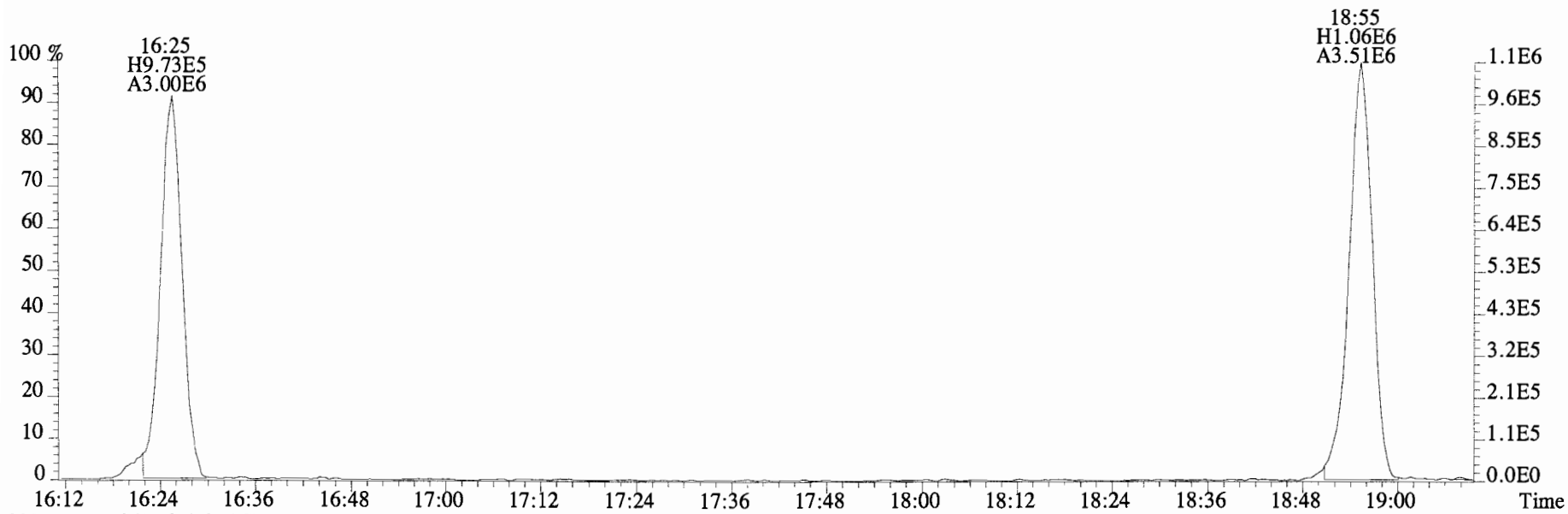
Analyst: DMJ

Date: 10/29/14

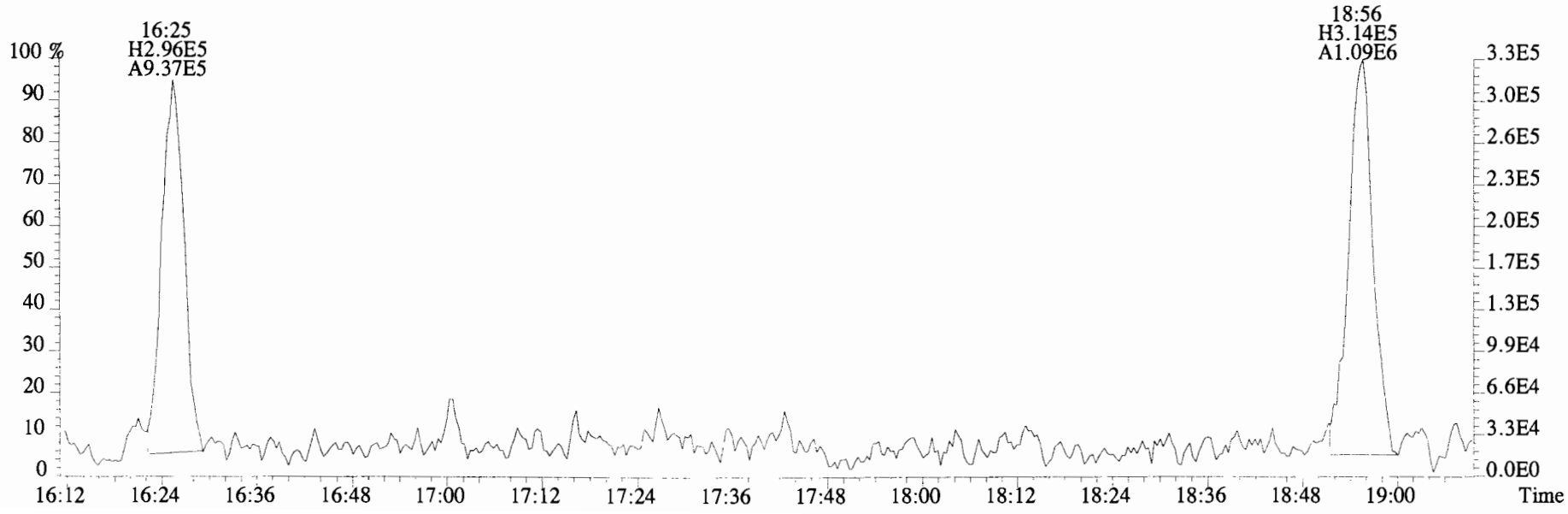
File:141028E1 #1-728 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1

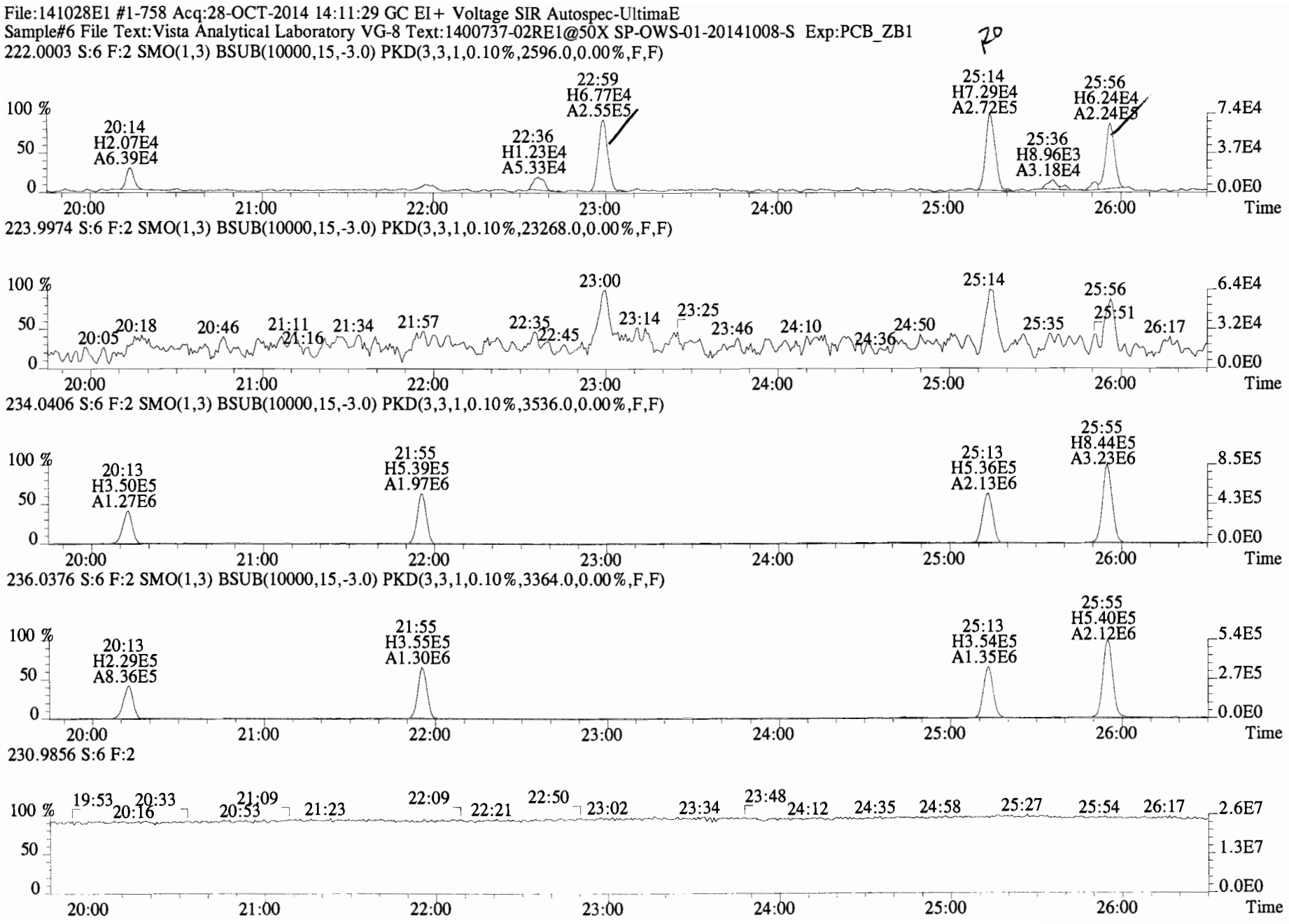


File:141028E1 #1-728 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
200.0795 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3832.0,0.00%,F,F)

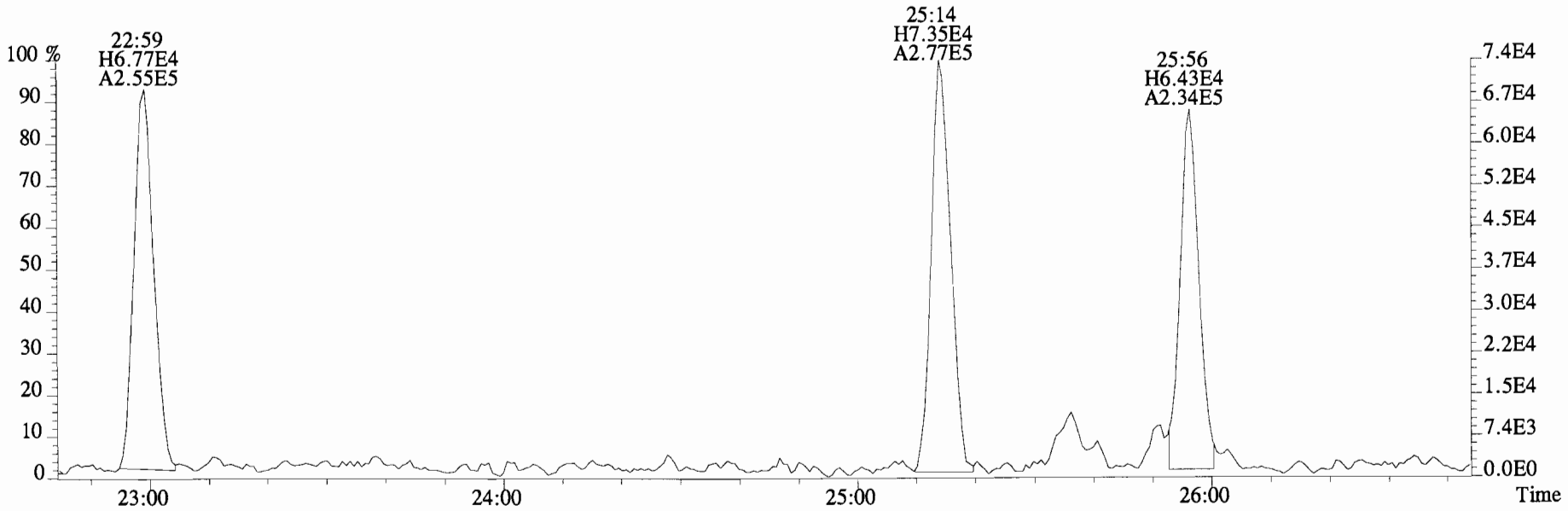


202.0766 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,31264.0,0.00%,F,F)

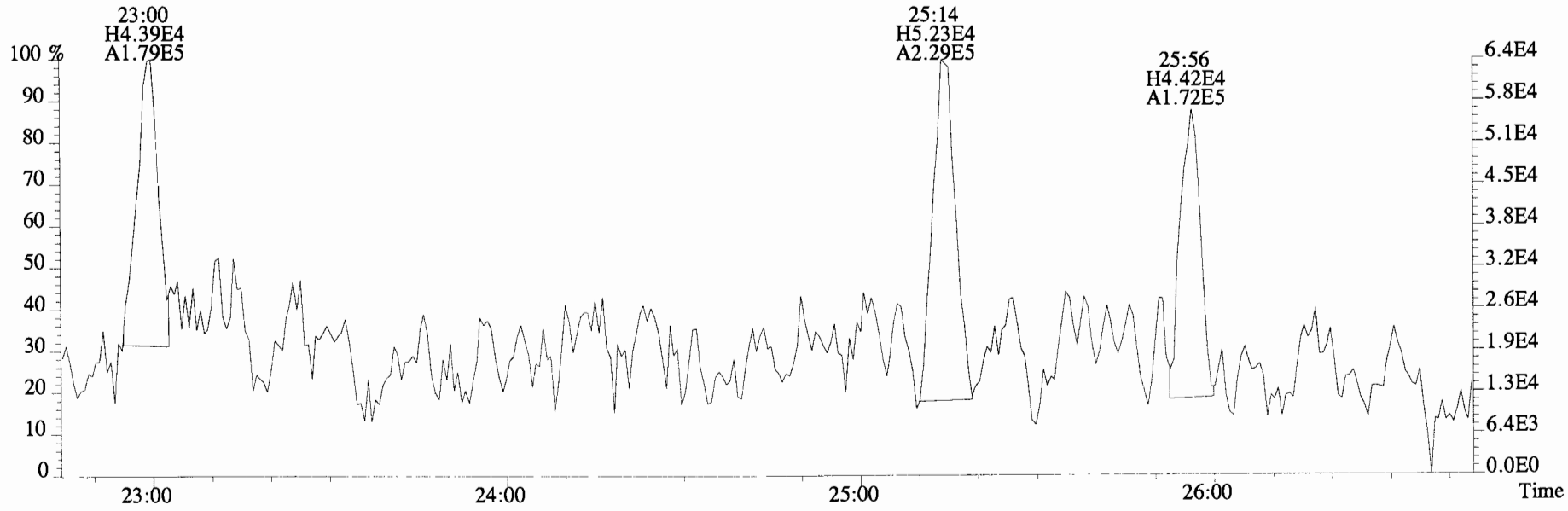


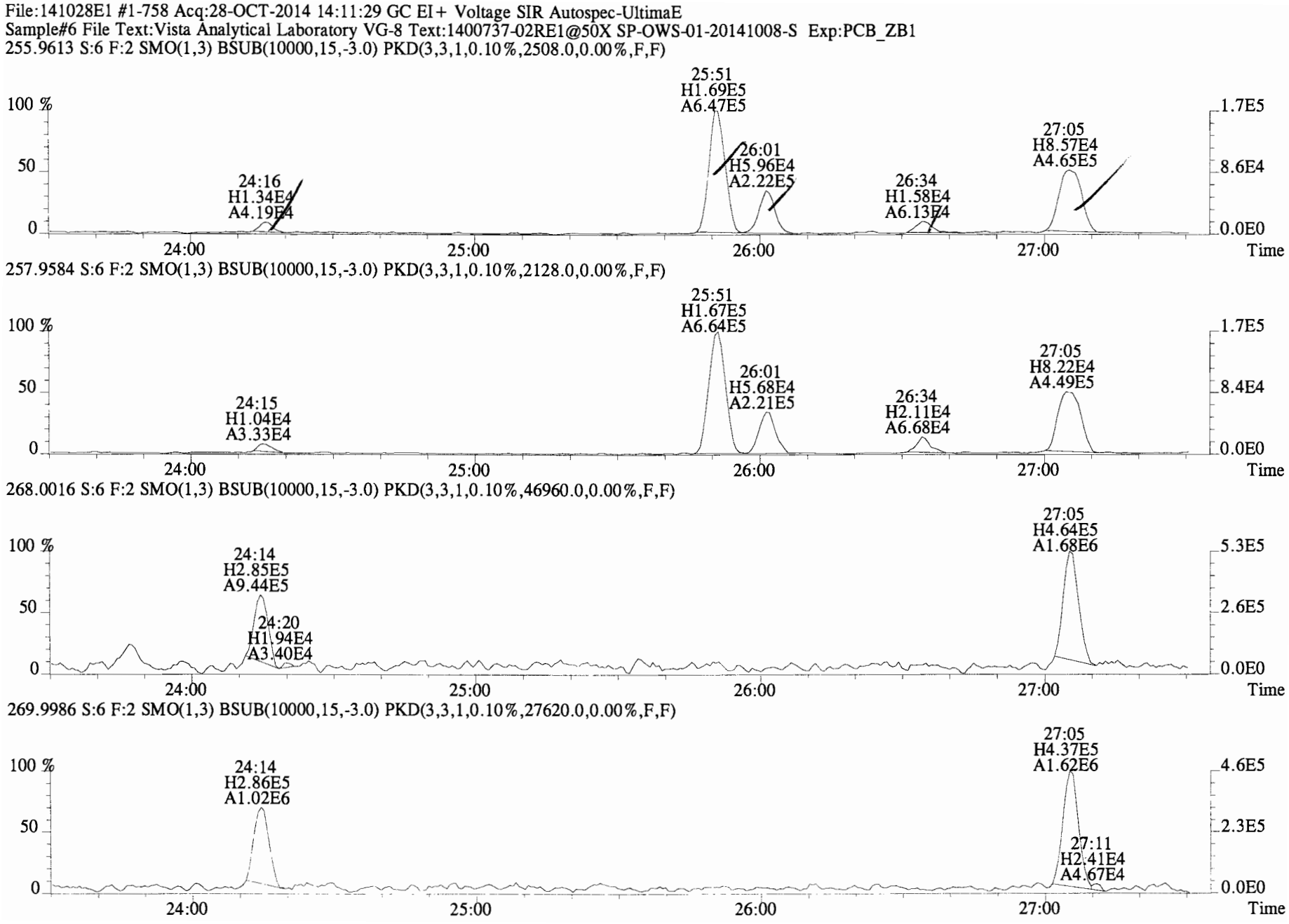

File:141028E1 #1-758 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
222.0003 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2596.0,0.00%,F,F)
20:14 H2.07E4 A6.39E4
22:36 H1.23E4 A5.33E4
22:59 H6.77E4 A2.55E5
25:14 H7.29E4 A2.72E5
25:36 H8.96E3 A3.18E4
25:56 H6.24E4 A2.24E5
223.9974 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,23268.0,0.00%,F,F)
234.0406 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3536.0,0.00%,F,F)
20:13 H3.50E5 A1.27E6
21:55 H5.39E5 A1.97E6
25:13 H5.36E5 A2.13E6
25:55 H8.44E5 A3.23E6
236.0376 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3364.0,0.00%,F,F)
20:13 H2.29E5 A8.36E5
21:55 H3.55E5 A1.30E6
25:13 H3.54E5 A1.35E6
25:55 H5.40E5 A2.12E6
230.9856 S:6 F:2
100 %
50
0
20:00
21:00
22:00
23:00
24:00
25:00
26:00
Time
7.4E4
3.7E4
0.0E0
6.4E4
3.2E4
8.5E5
4.3E5
5.4E5
2.7E5
2.6E7
1.3E7

File:141028E1 #1-758 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
222.0003 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2596.0,0.00%,F,F)

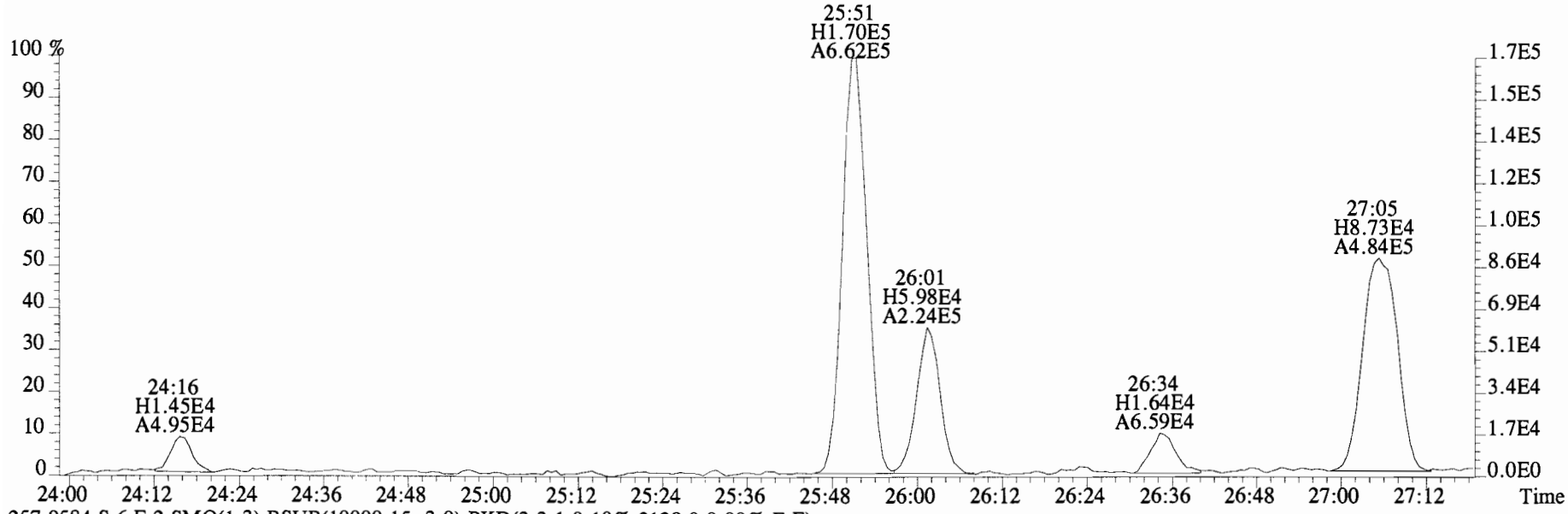


223.9974 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,23268.0,0.00%,F,F)

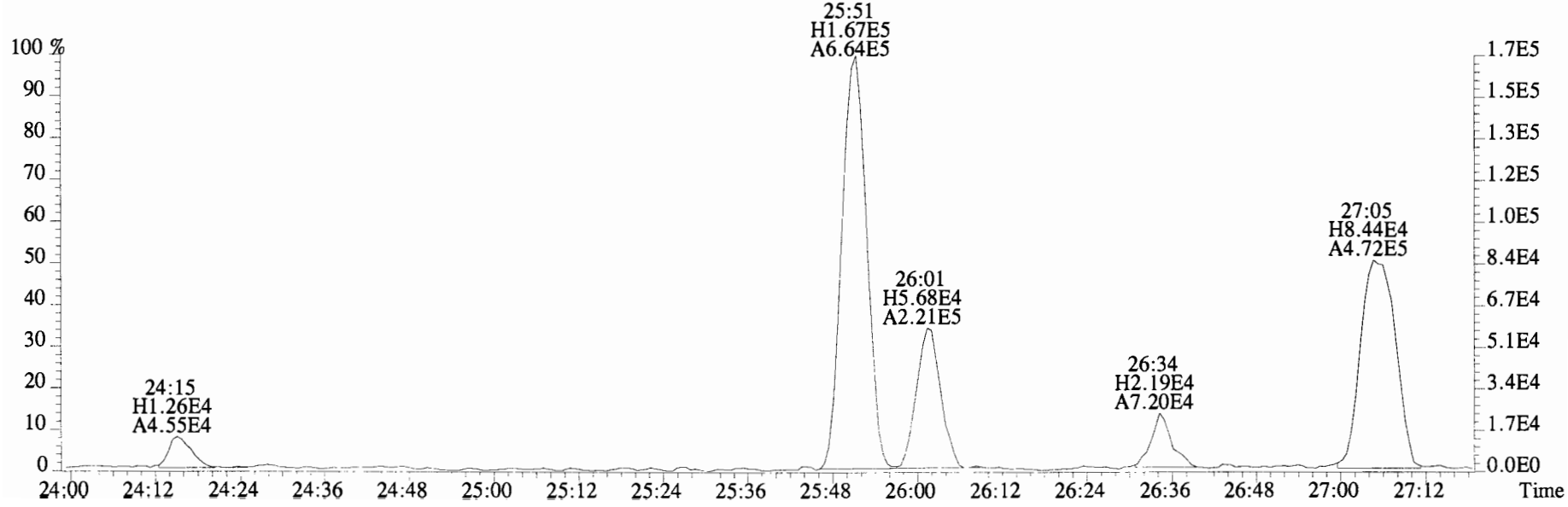



File:141028E1 #1-758 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
255.9613 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2508.0,0.00%,F,F)
25:51 H1.69E5 A6.47E5
26:01 H5.96E4 A2.22E5
24:16 H1.34E4 A4.19E4
26:34 H1.58E4 A6.13E4
27:05 H8.57E4 A4.65E5
100 %
50
0
1.7E5
8.6E4
0.0E0
24:00
25:00
26:00
27:00
Time
257.9584 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2128.0,0.00%,F,F)
25:51 H1.67E5 A6.64E5
26:01 H5.68E4 A2.21E5
24:15 H1.04E4 A3.33E4
26:34 H2.11E4 A6.68E4
27:05 H8.22E4 A4.49E5
100 %
50
0
1.7E5
8.4E4
0.0E0
24:00
25:00
26:00
27:00
Time
268.0016 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,46960.0,0.00%,F,F)
27:05 H4.64E5 A1.68E6
24:14 H2.85E5 A9.44E5
24:20 H1.94E4 A3.40E4
100 %
50
0
5.3E5
2.6E5
0.0E0
24:00
25:00
26:00
27:00
Time
269.9986 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,27620.0,0.00%,F,F)
27:05 H4.37E5 A1.62E6
24:14 H2.86E5 A1.02E6
27:11 H2.41E4 A4.67E4
100 %
50
0
4.6E5
2.3E5
0.0E0
24:00
25:00
26:00
27:00
Time

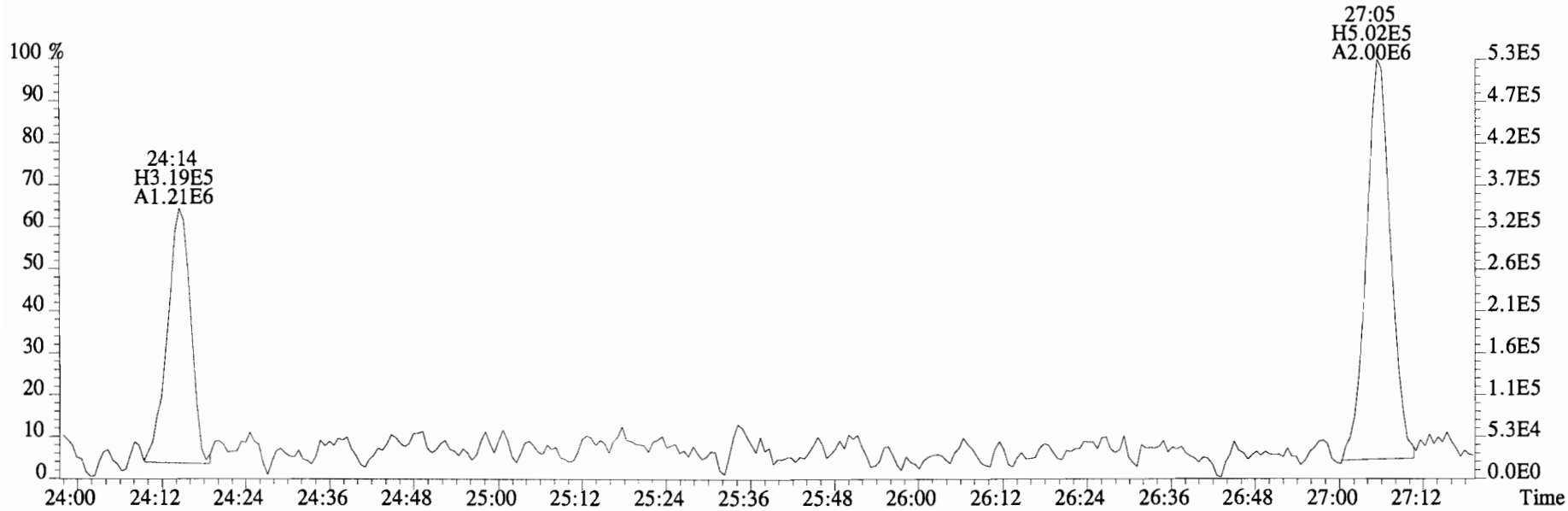
File:141028E1 #1-758 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
255.9613 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2508.0,0.00%,F,F)



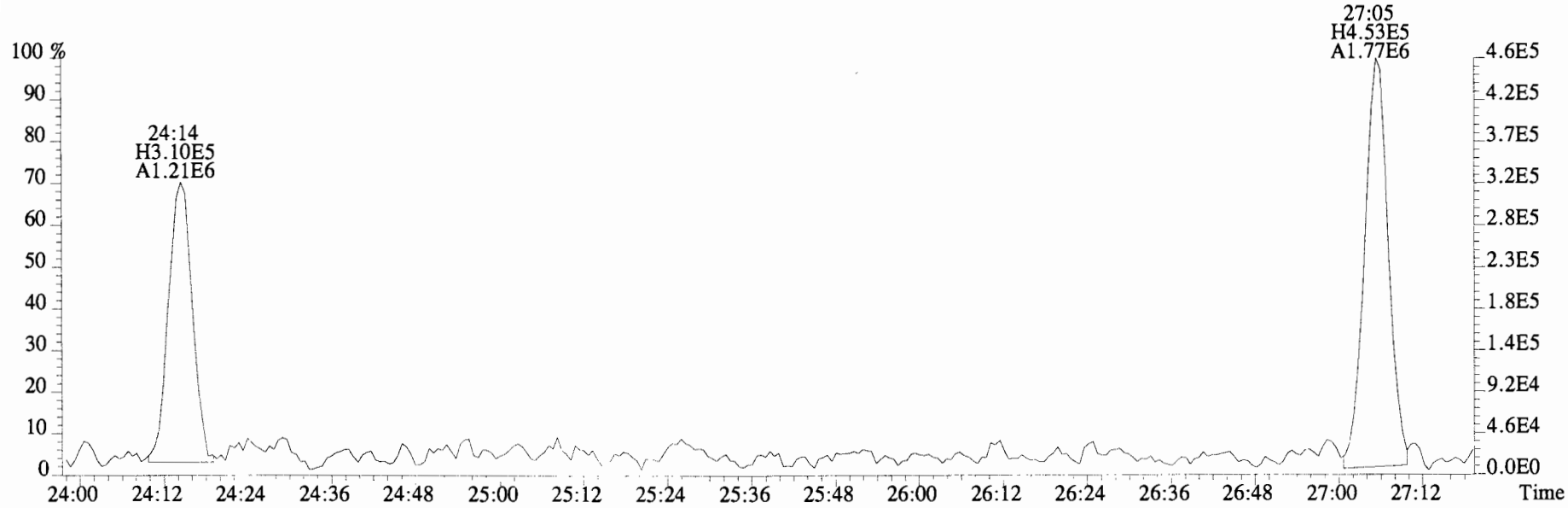
257.9584 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2128.0,0.00%,F,F)

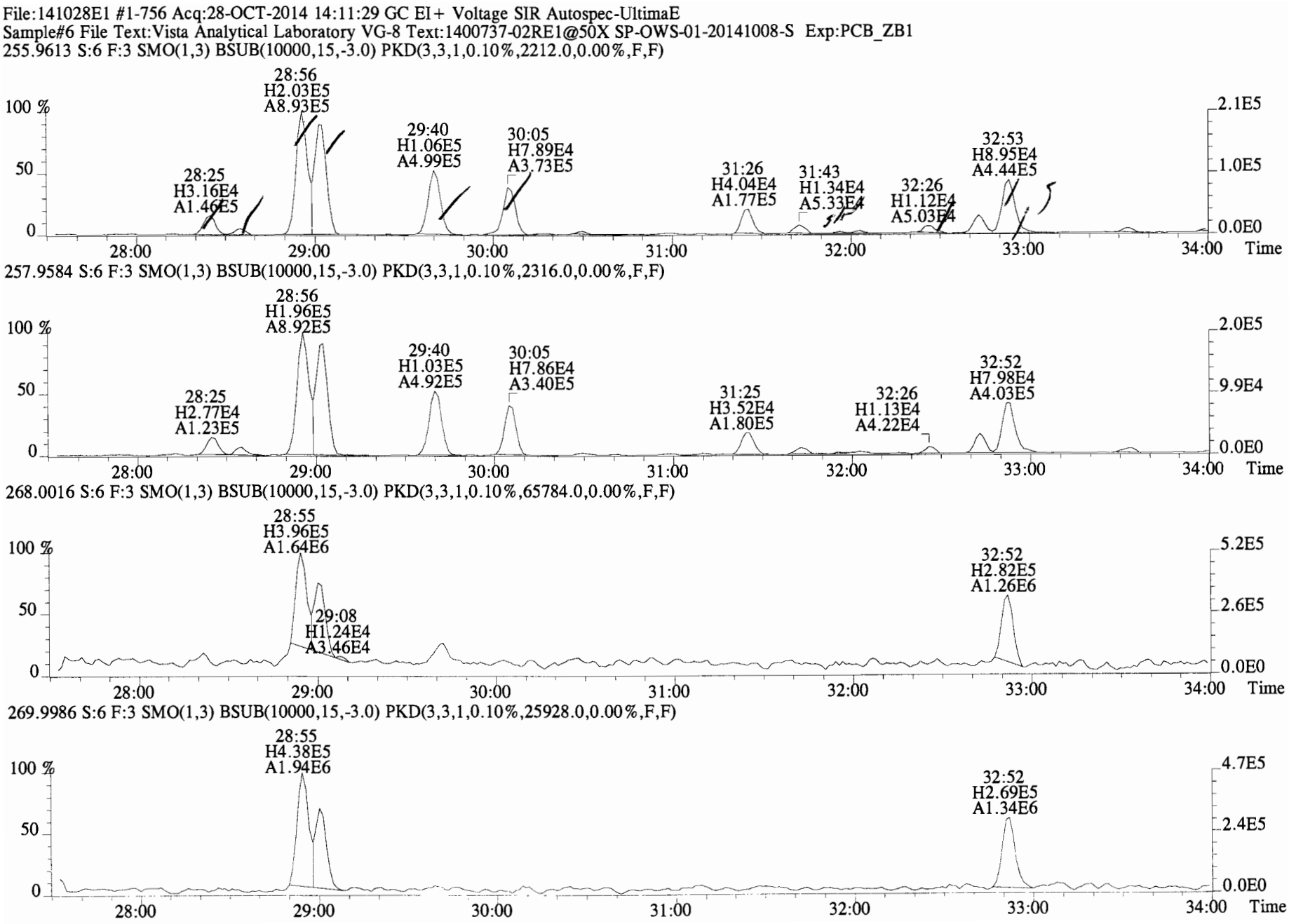


File:141028E1 #1-758 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
268.0016 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,46960.0,0.00%,F,F)

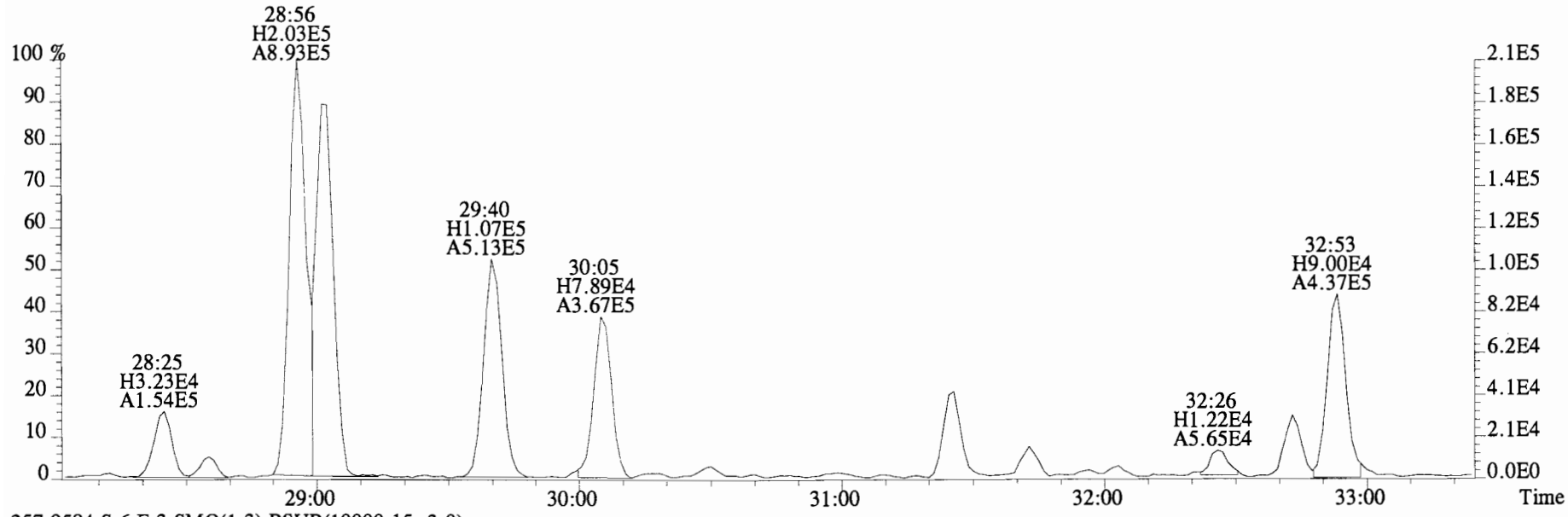


269.9986 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,27620.0,0.00%,F,F)

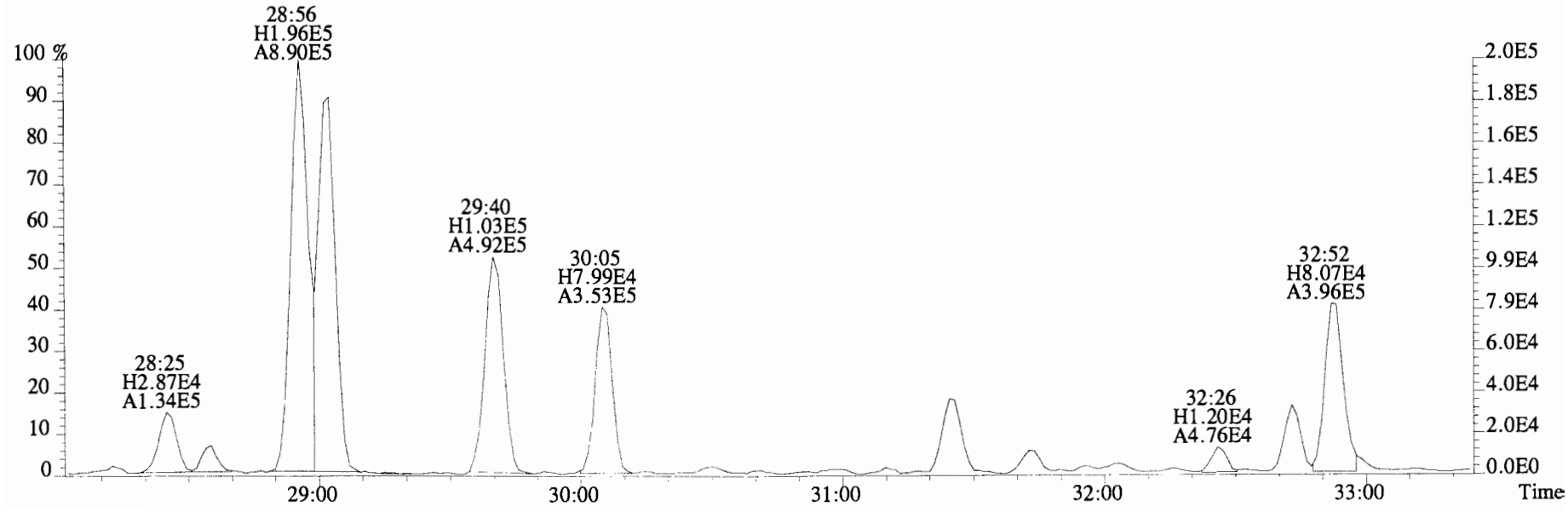



File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
255.9613 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2212.0,0.00%,F,F)
28:56 H2.03E5 A8.93E5
29:40 H1.06E5 A4.99E5
30:05 H7.89E4 A3.73E5
28:25 H3.16E4 A1.46E5
31:26 H4.04E4 A1.77E5
31:43 H1.34E4 A5.33E4
32:26 H1.12E4 A5.03E4
32:53 H8.95E4 A4.44E5
257.9584 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2316.0,0.00%,F,F)
28:56 H1.96E5 A8.92E5
29:40 H1.03E5 A4.92E5
30:05 H7.86E4 A3.40E5
28:25 H2.77E4 A1.23E5
31:25 H3.52E4 A1.80E5
32:26 H1.13E4 A4.22E4
32:52 H7.98E4 A4.03E5
268.0016 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,65784.0,0.00%,F,F)
28:55 H3.96E5 A1.64E6
29:08 H1.24E4 A3.46E4
32:52 H2.82E5 A1.26E6
269.9986 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25928.0,0.00%,F,F)
28:55 H4.38E5 A1.94E6
32:52 H2.69E5 A1.34E6
100 %
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
2.1E5
1.0E5
0.0E0
2.0E5
9.9E4
5.2E5
2.6E5
4.7E5
2.4E5

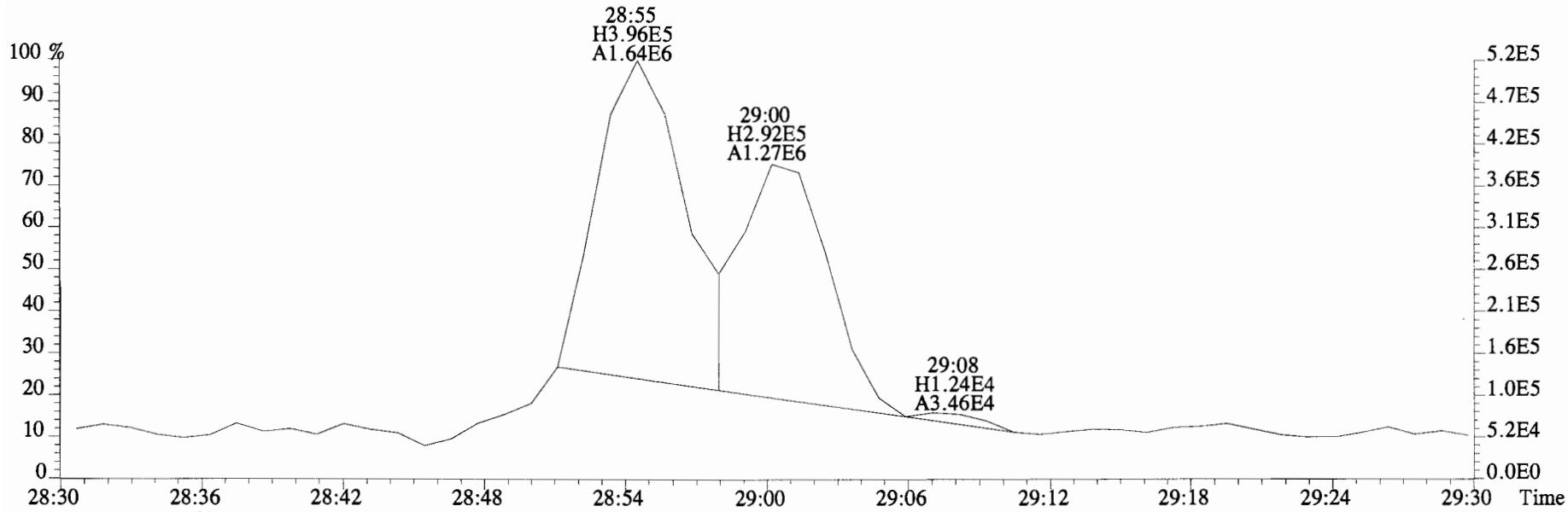
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
255.9613 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



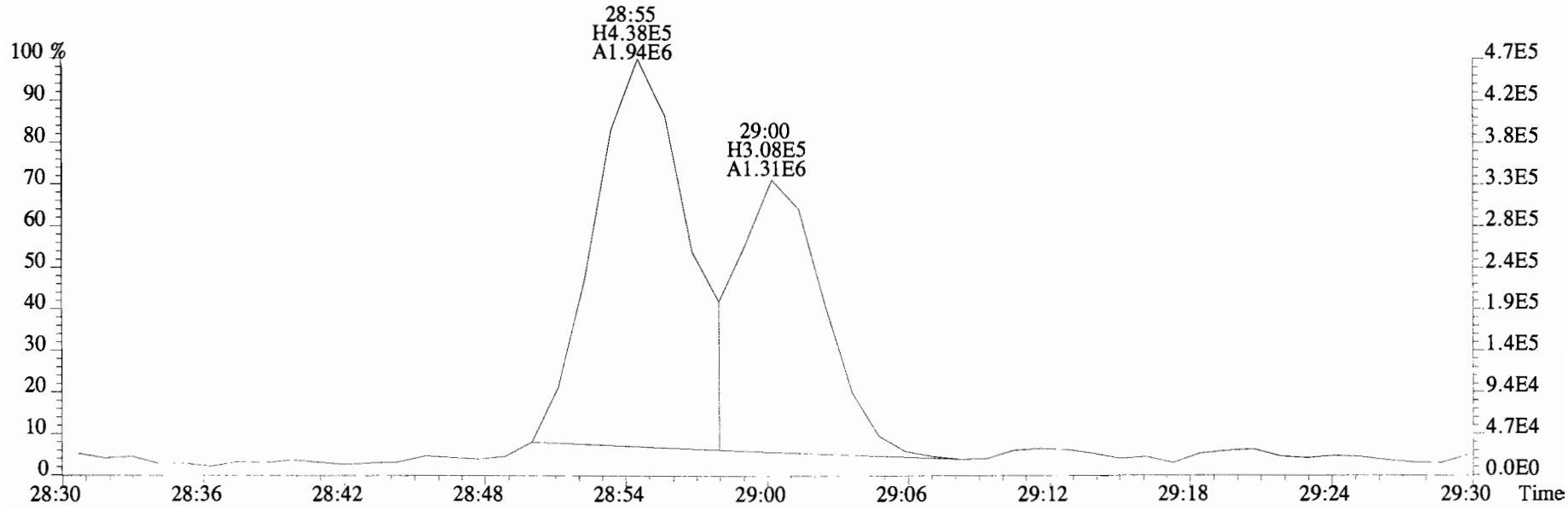
257.9584 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



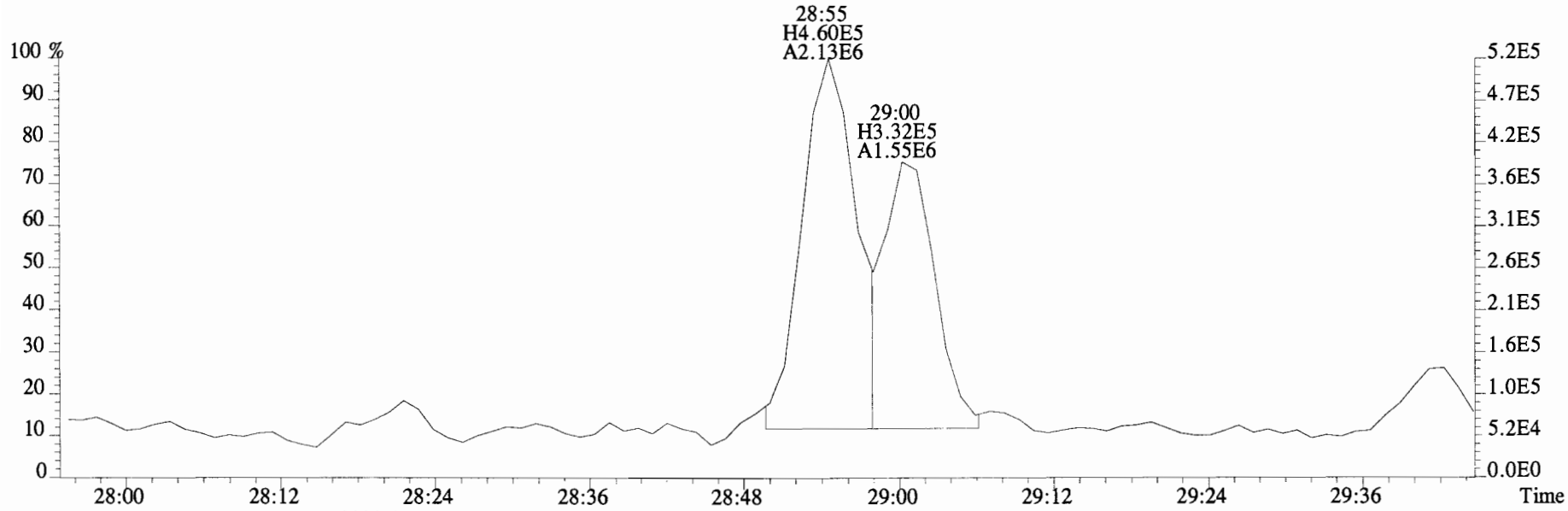
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
268.0016 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,65784.0,0.00%,F,F)



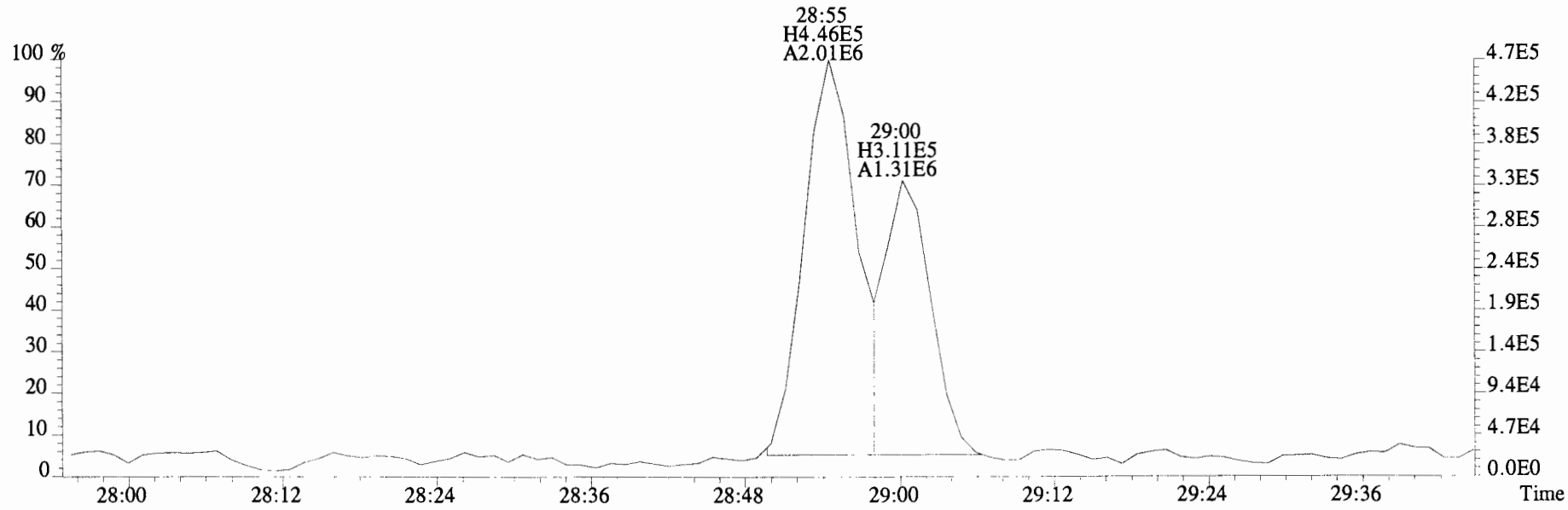
269.9986 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25928.0,0.00%,F,F)



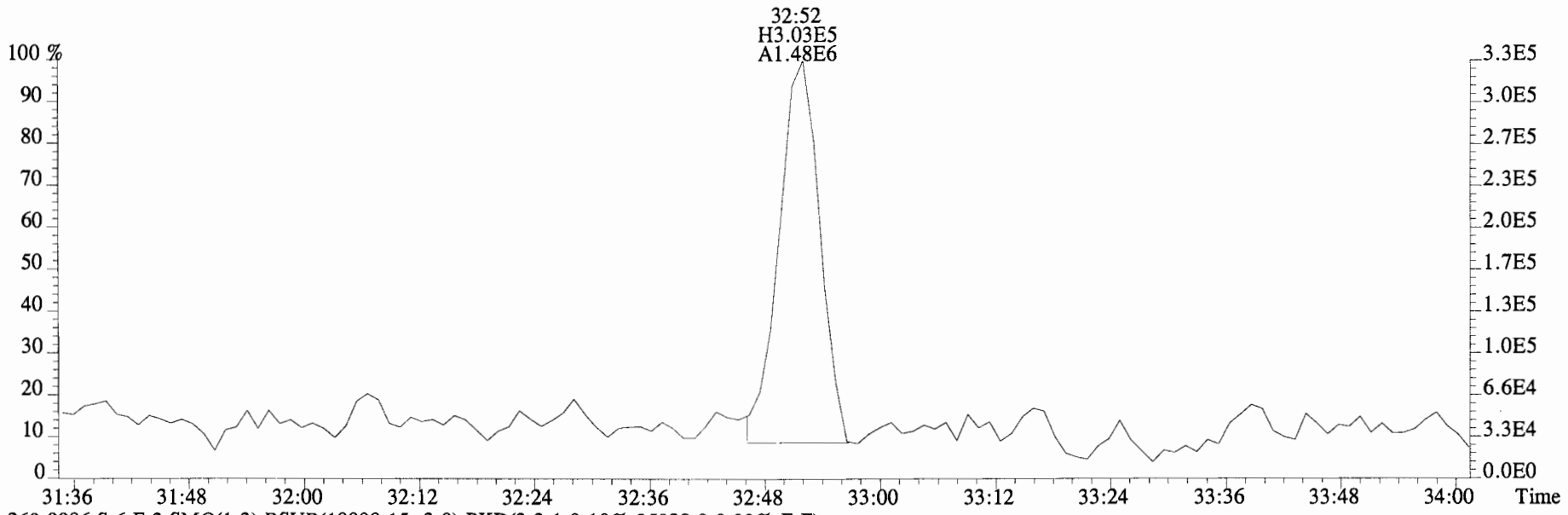
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
268.0016 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,65784.0,0.00%,F,F)



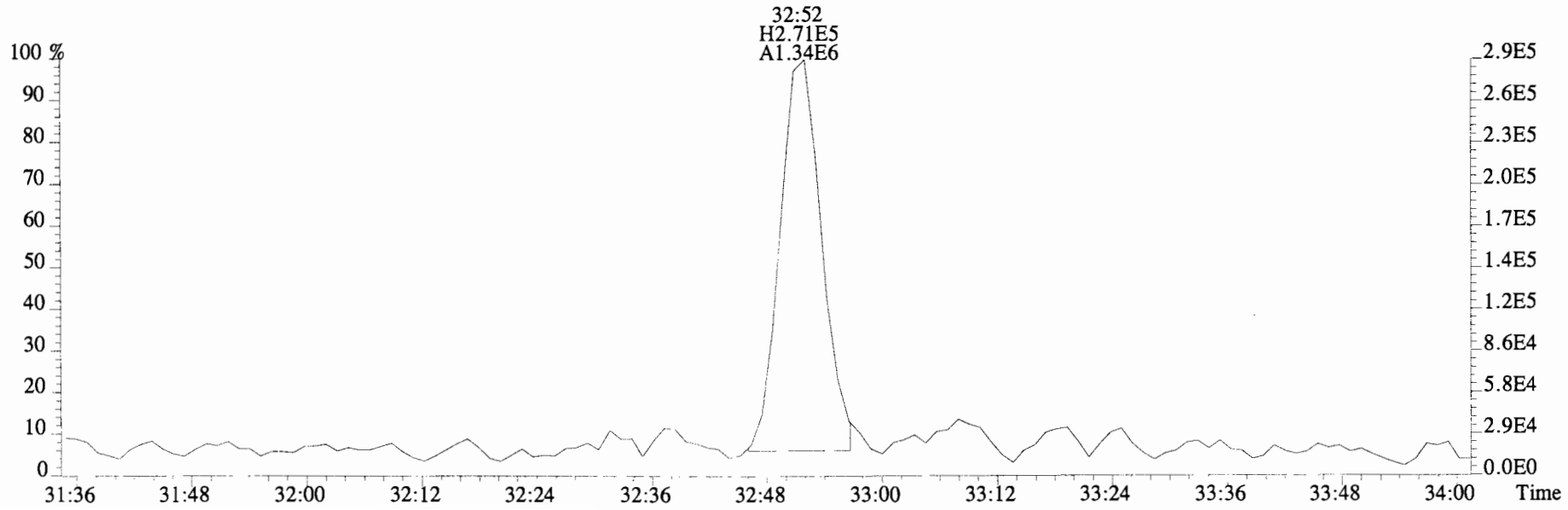
269.9986 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25928.0,0.00%,F,F)



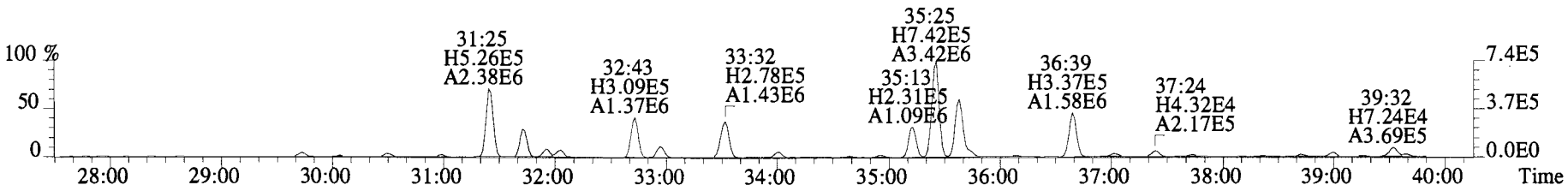
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
268.0016 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,65784.0,0.00%,F,F)



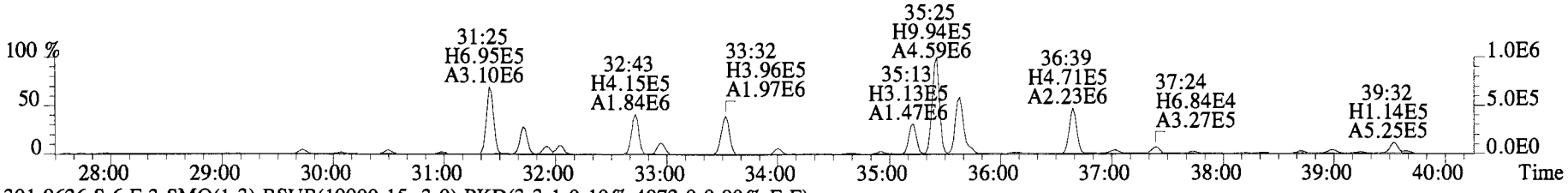
269.9986 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25928.0,0.00%,F,F)



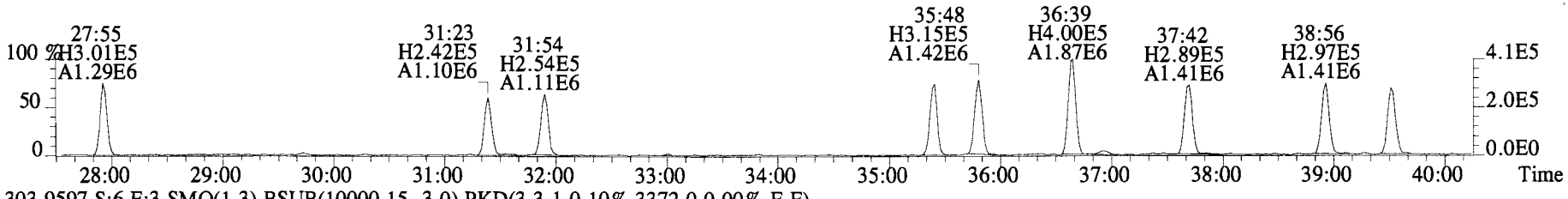
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2544.0,0.00%,F,F)



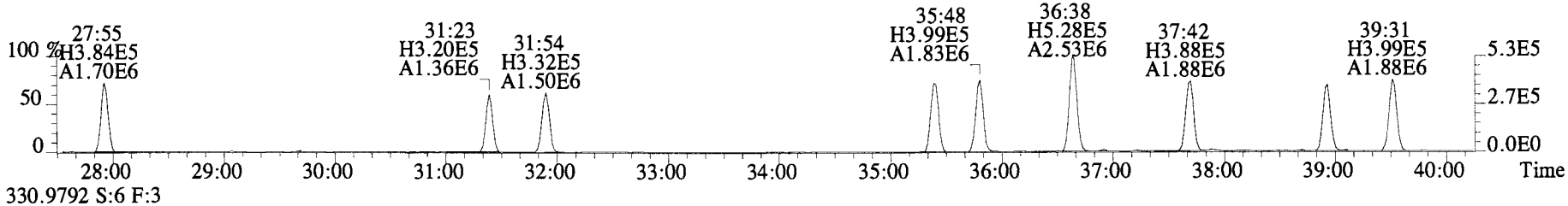
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3464.0,0.00%,F,F)



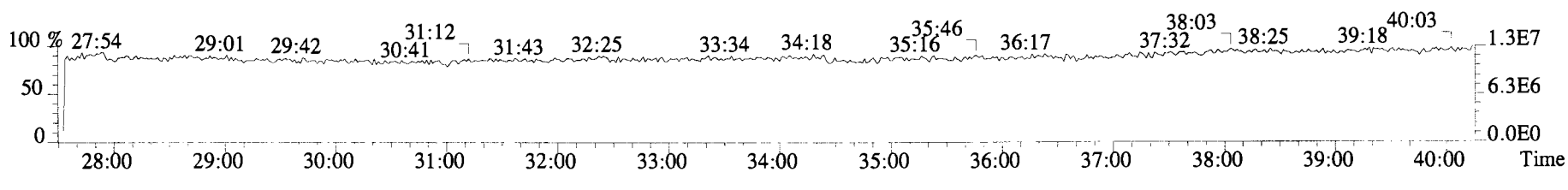
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4972.0,0.00%,F,F)



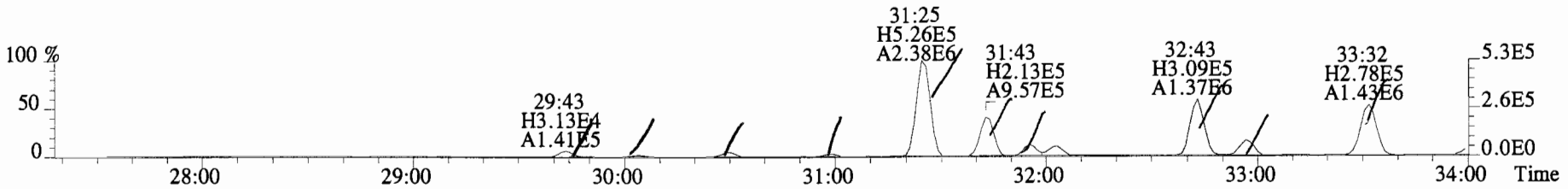
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3372.0,0.00%,F,F)



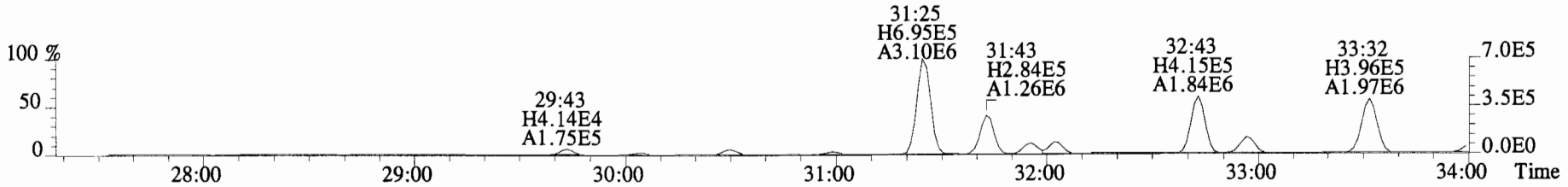
330.9792 S:6 F:3



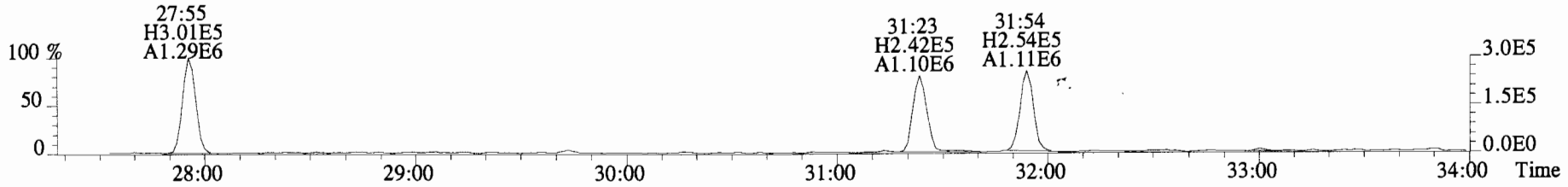
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2544.0,0.00%,F,F)



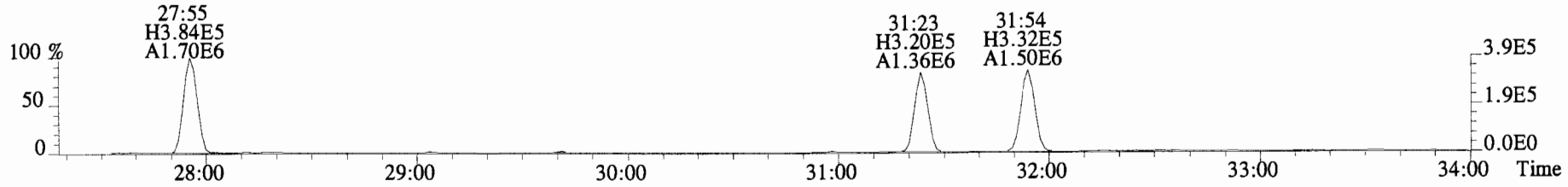
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3464.0,0.00%,F,F)



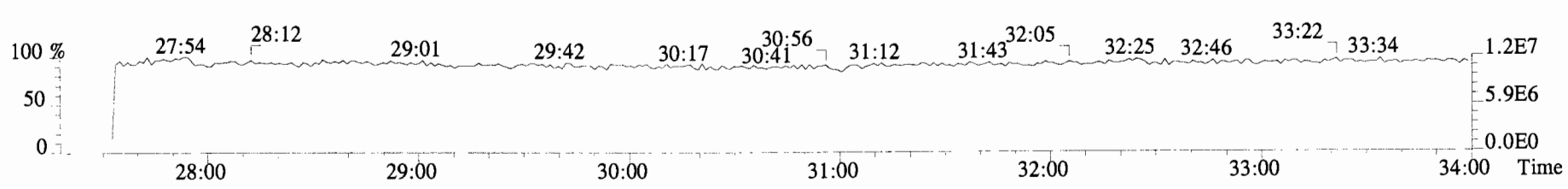
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4972.0,0.00%,F,F)



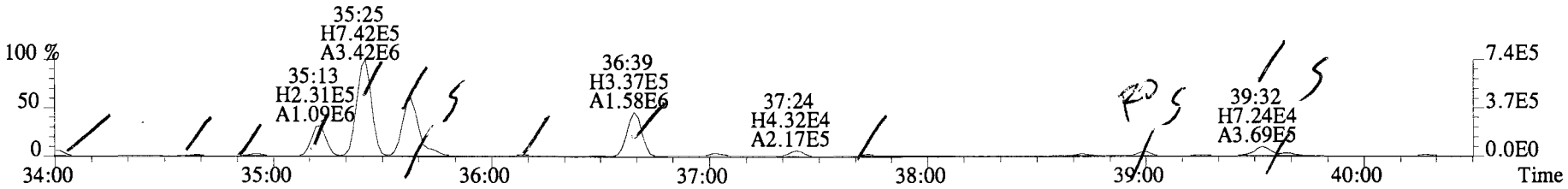
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3372.0,0.00%,F,F)



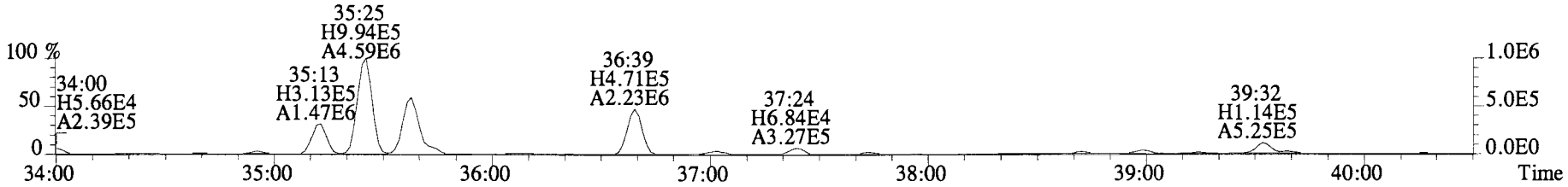
330.9792 S:6 F:3



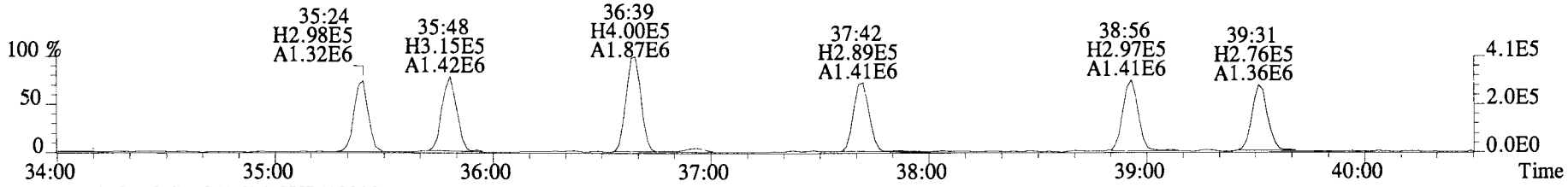
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2544.0,0.00%,F,F)



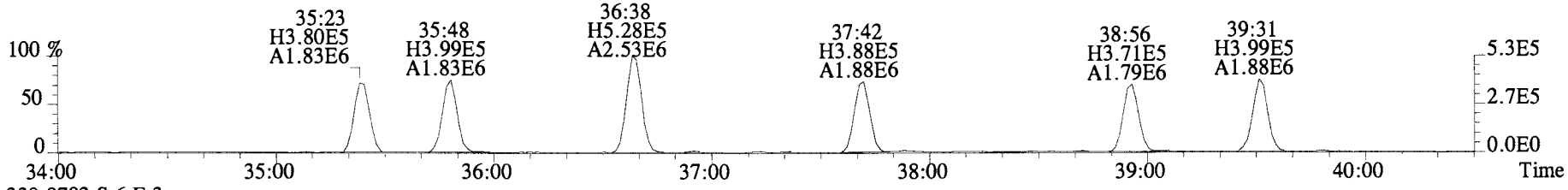
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3464.0,0.00%,F,F)



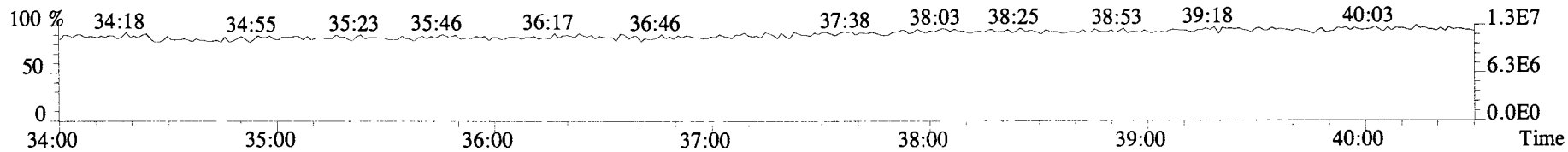
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4972.0,0.00%,F,F)

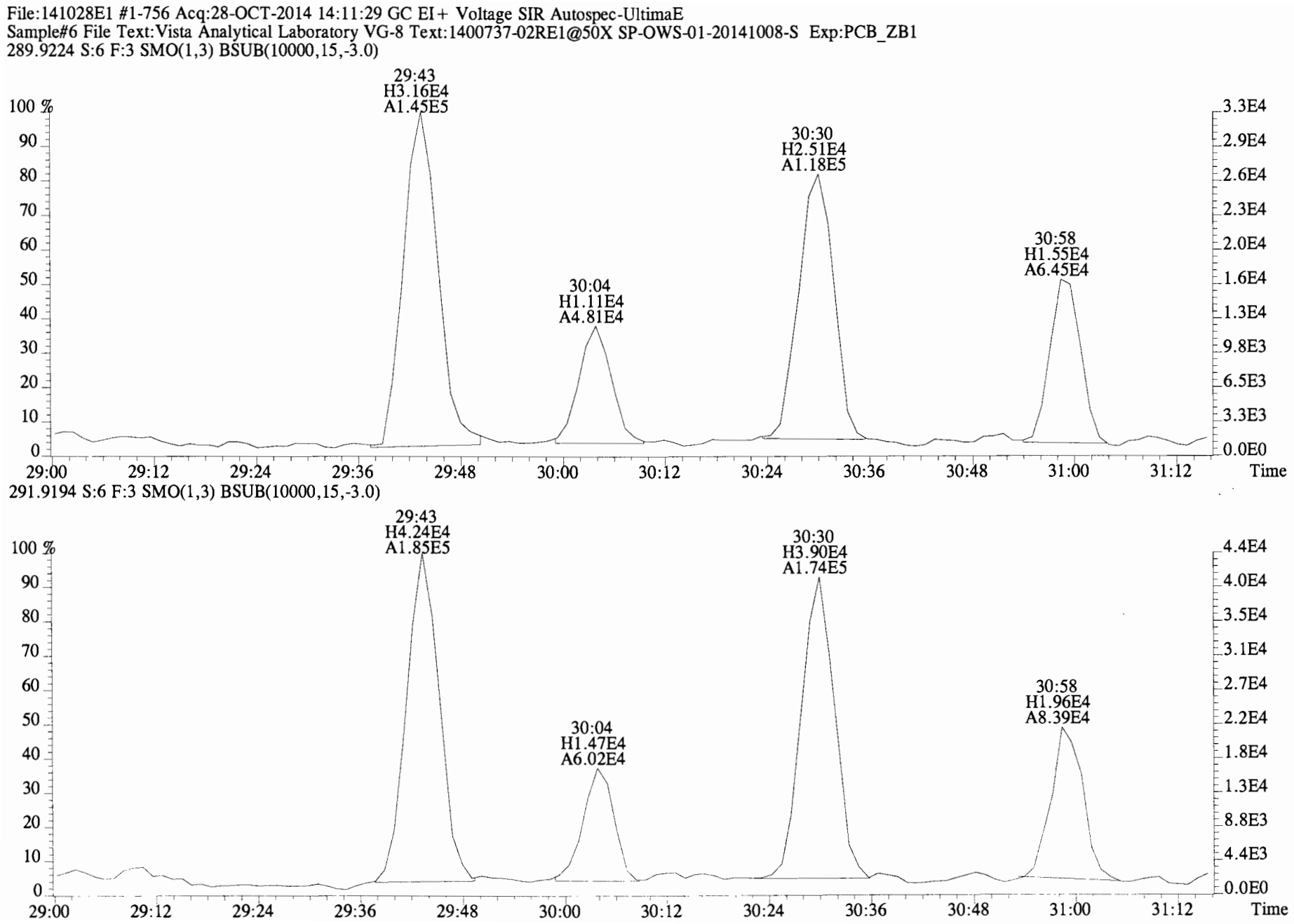


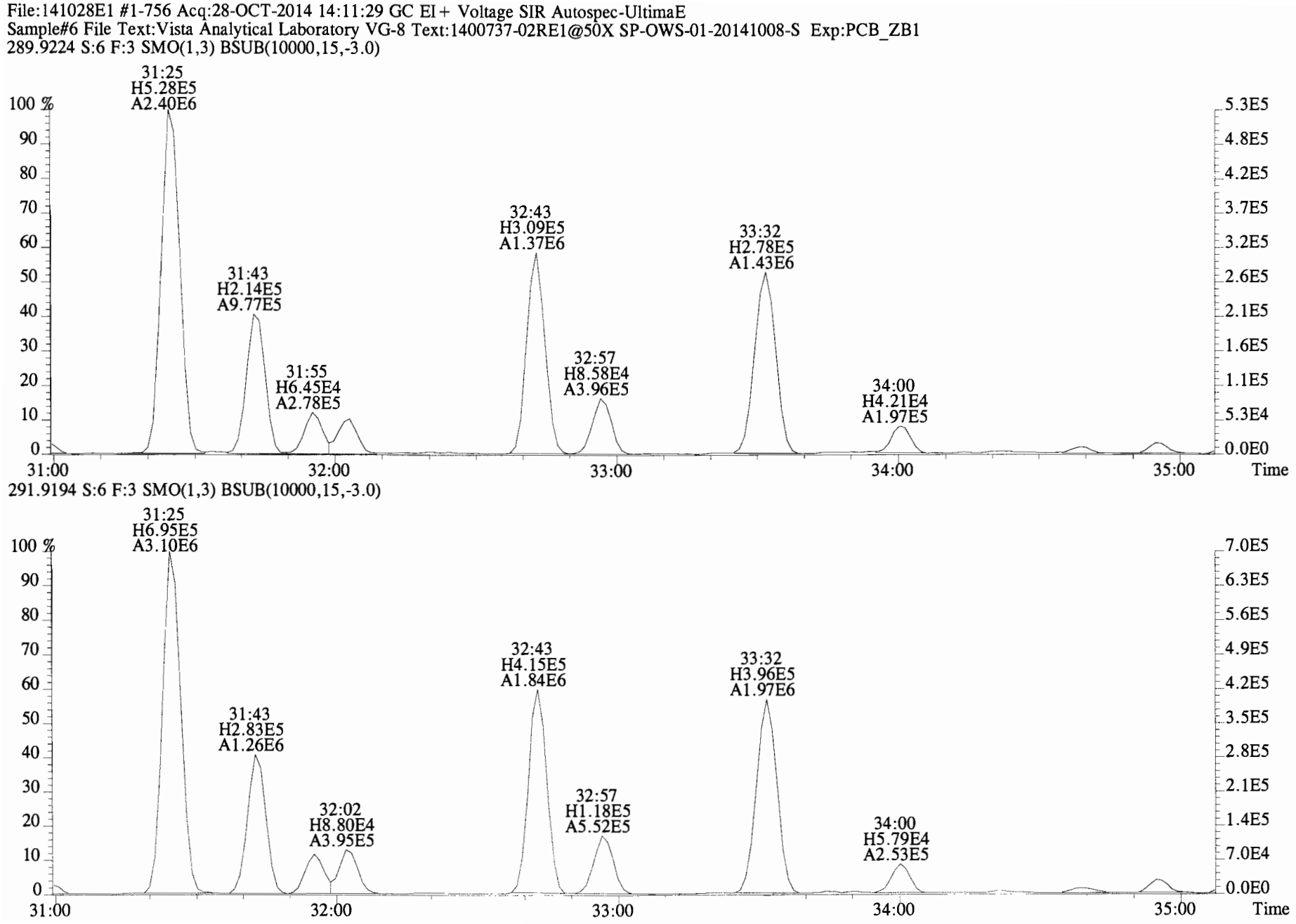
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3372.0,0.00%,F,F)

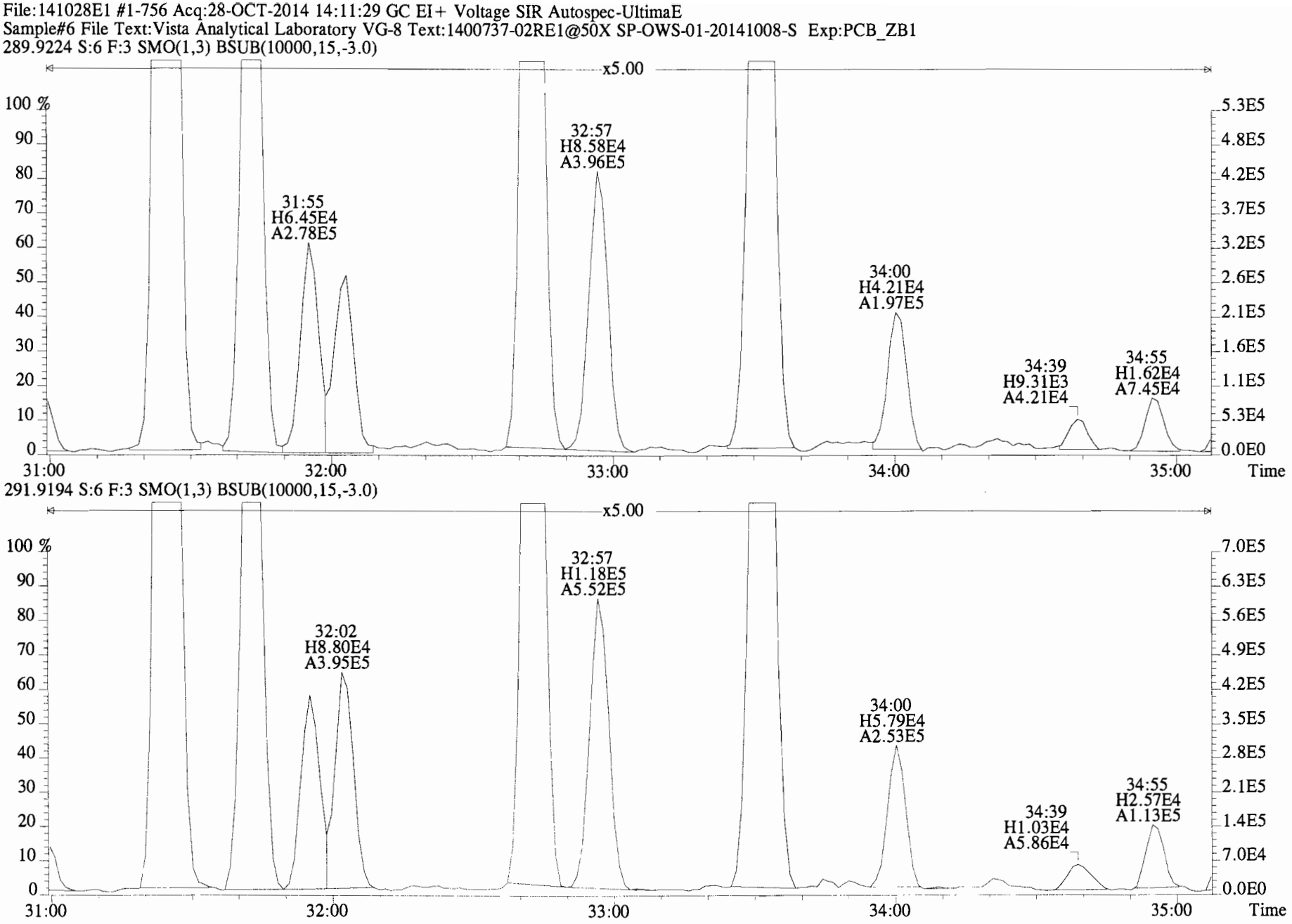


330.9792 S:6 F:3

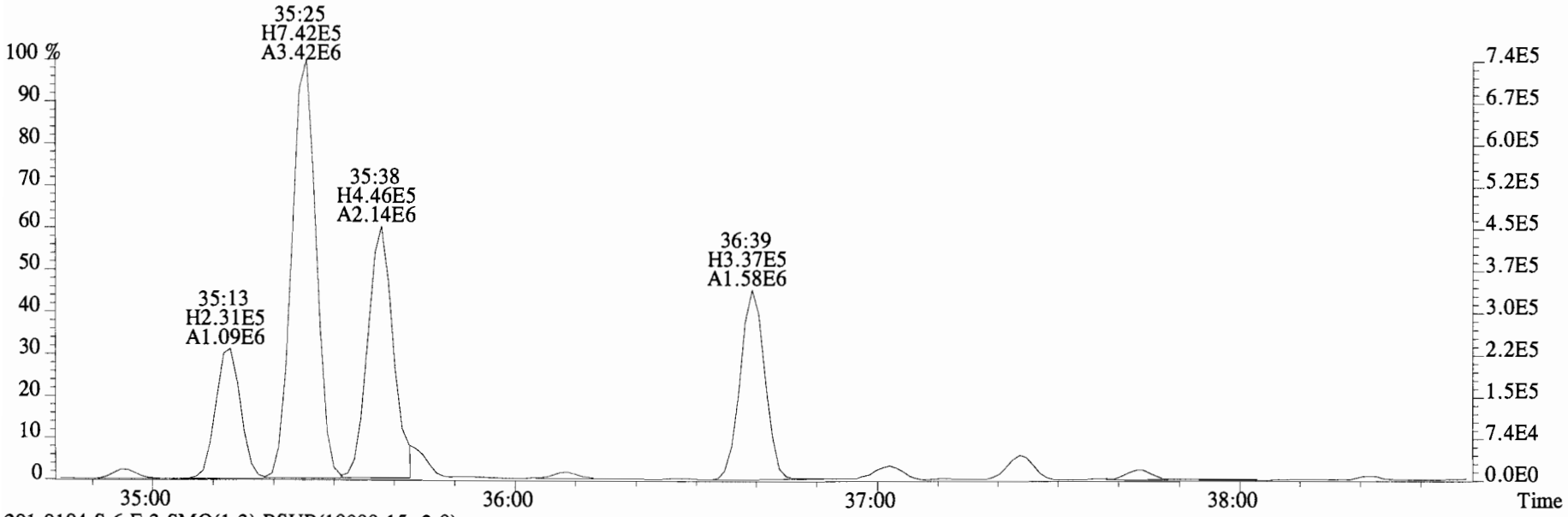



File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)
29:43
H3.16E4
A1.45E5
30:30
H2.51E4
A1.18E5
30:58
H1.55E4
A6.45E4
30:04
H1.11E4
A4.81E4
100 %
Time
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)
29:43
H4.24E4
A1.85E5
30:30
H3.90E4
A1.74E5
30:58
H1.96E4
A8.39E4
30:04
H1.47E4
A6.02E4
100 %
Time

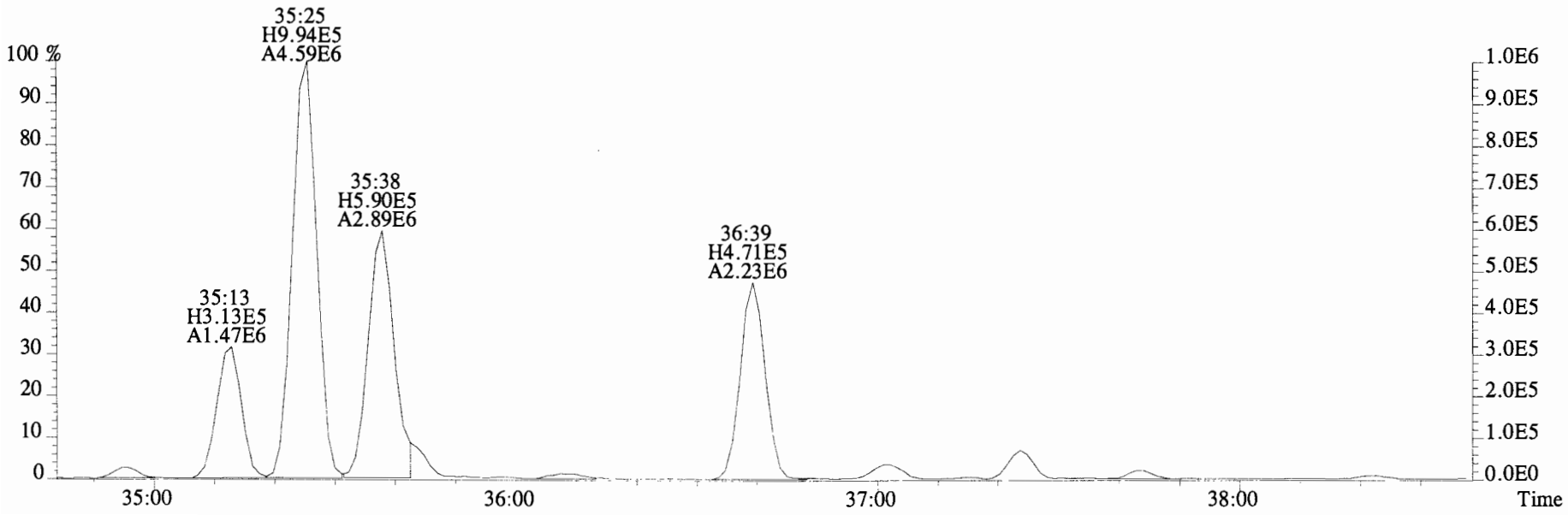

File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)
31:25 H5.28E5 A2.40E6
31:43 H2.14E5 A9.77E5
31:55 H6.45E4 A2.78E5
32:43 H3.09E5 A1.37E6
32:57 H8.58E4 A3.96E5
33:32 H2.78E5 A1.43E6
34:00 H4.21E4 A1.97E5
100 %
90
80
70
60
50
40
30
20
10
0
5.3E5
4.8E5
4.2E5
3.7E5
3.2E5
2.6E5
2.1E5
1.6E5
1.1E5
5.3E4
0.0E0
31:00
32:00
33:00
34:00
35:00
Time
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)
31:25 H6.95E5 A3.10E6
31:43 H2.83E5 A1.26E6
32:02 H8.80E4 A3.95E5
32:43 H4.15E5 A1.84E6
32:57 H1.18E5 A5.52E5
33:32 H3.96E5 A1.97E6
34:00 H5.79E4 A2.53E5
100 %
90
80
70
60
50
40
30
20
10
0
7.0E5
6.3E5
5.6E5
4.9E5
4.2E5
3.5E5
2.8E5
2.1E5
1.4E5
7.0E4
0.0E0
31:00
32:00
33:00
34:00
35:00
Time

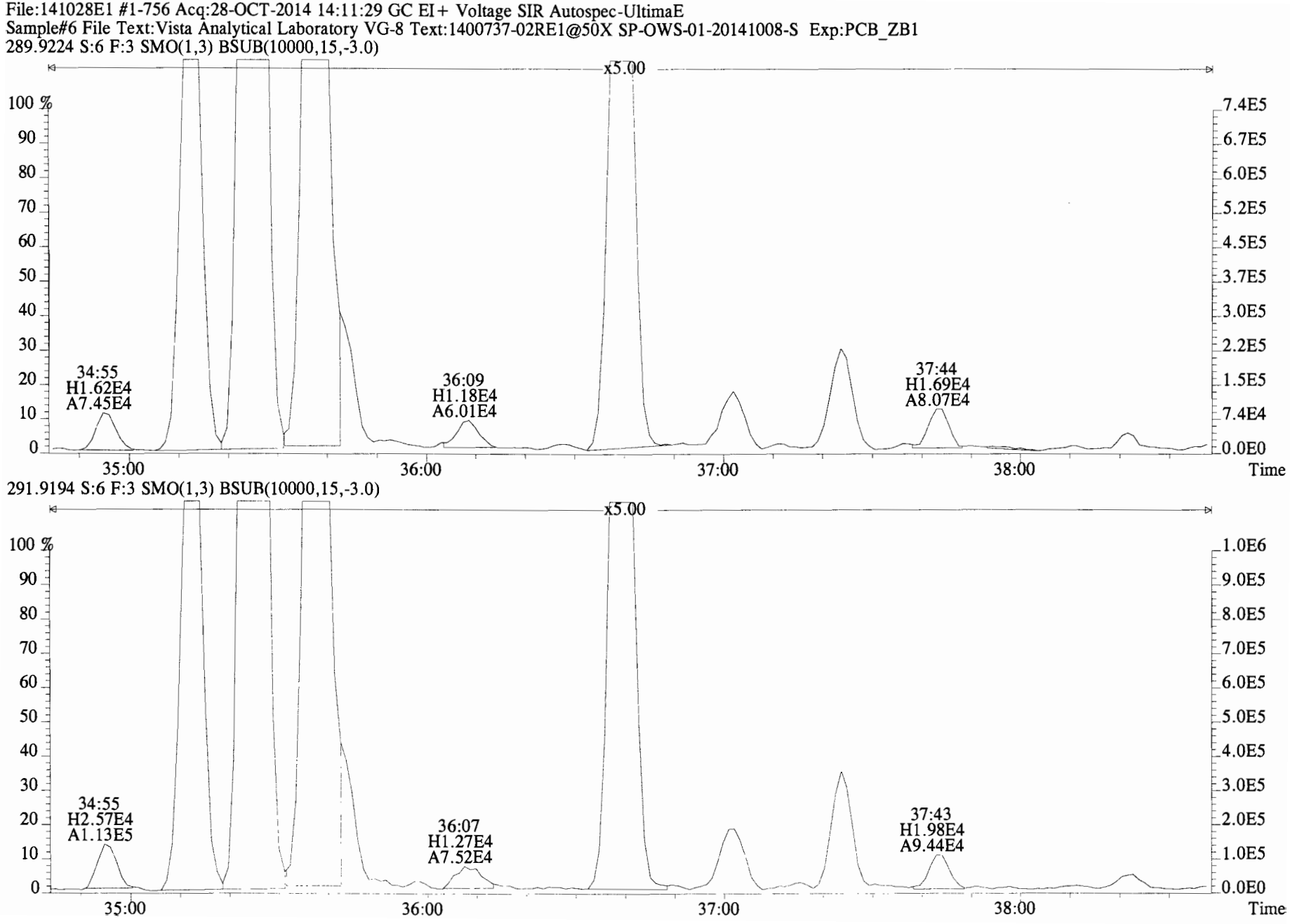

File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
100 %
31:55
H6.45E4
A2.78E5
32:57
H8.58E4
A3.96E5
34:00
H4.21E4
A1.97E5
34:39
H9.31E3
A4.21E4
34:55
H1.62E4
A7.45E4
5.3E5
4.8E5
4.2E5
3.7E5
3.2E5
2.6E5
2.1E5
1.6E5
1.1E5
5.3E4
0.0E0
31:00
32:00
33:00
34:00
35:00
Time
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
100 %
32:02
H8.80E4
A3.95E5
32:57
H1.18E5
A5.52E5
34:00
H5.79E4
A2.53E5
34:39
H1.03E4
A5.86E4
34:55
H2.57E4
A1.13E5
7.0E5
6.3E5
5.6E5
4.9E5
4.2E5
3.5E5
2.8E5
2.1E5
1.4E5
7.0E4
0.0E0
31:00
32:00
33:00
34:00
35:00
Time

File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)

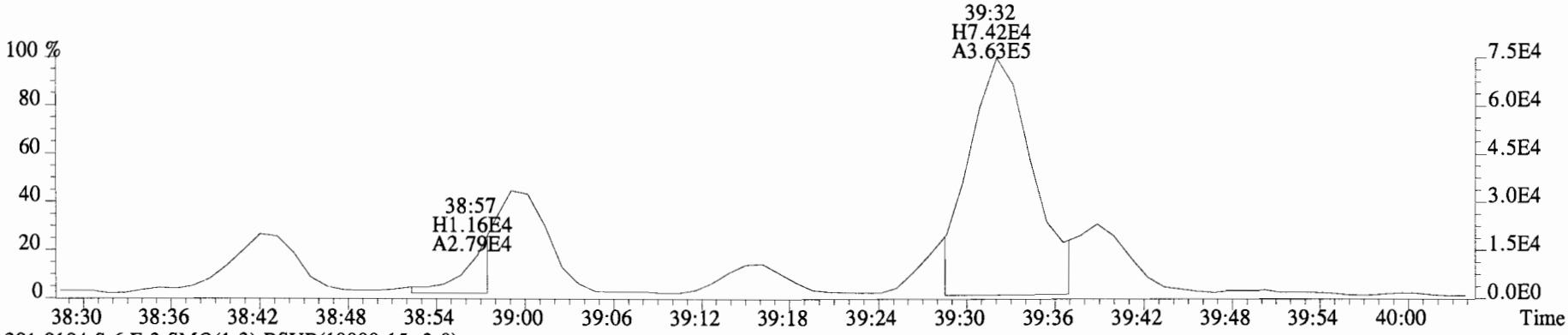


291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)

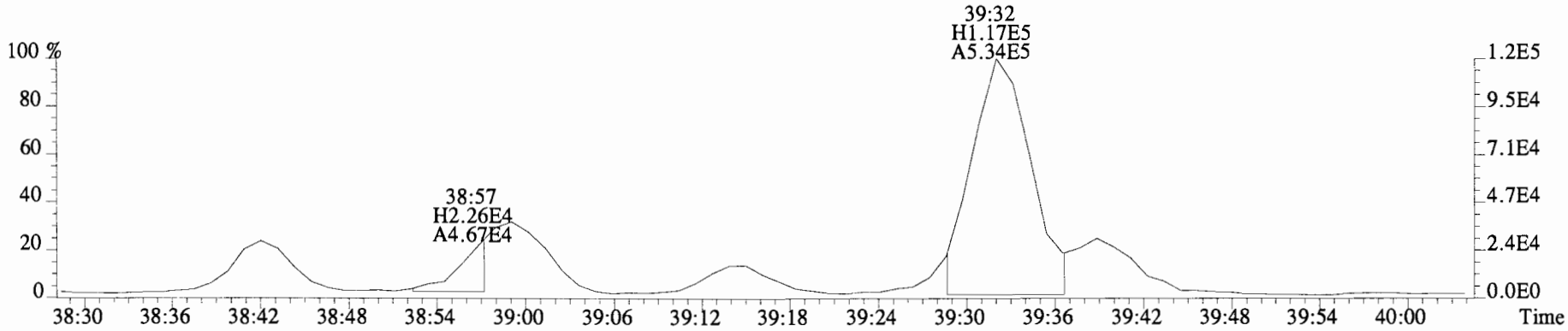



File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
7.4E5
6.7E5
6.0E5
5.2E5
4.5E5
3.7E5
3.0E5
2.2E5
1.5E5
7.4E4
0.0E0
34:55
H1.62E4
A7.45E4
36:09
H1.18E4
A6.01E4
37:44
H1.69E4
A8.07E4
35:00
36:00
37:00
38:00
Time
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
1.0E6
9.0E5
8.0E5
7.0E5
6.0E5
5.0E5
4.0E5
3.0E5
2.0E5
1.0E5
0.0E0
34:55
H2.57E4
A1.13E5
36:07
H1.27E4
A7.52E4
37:43
H1.98E4
A9.44E4
35:00
36:00
37:00
38:00
Time

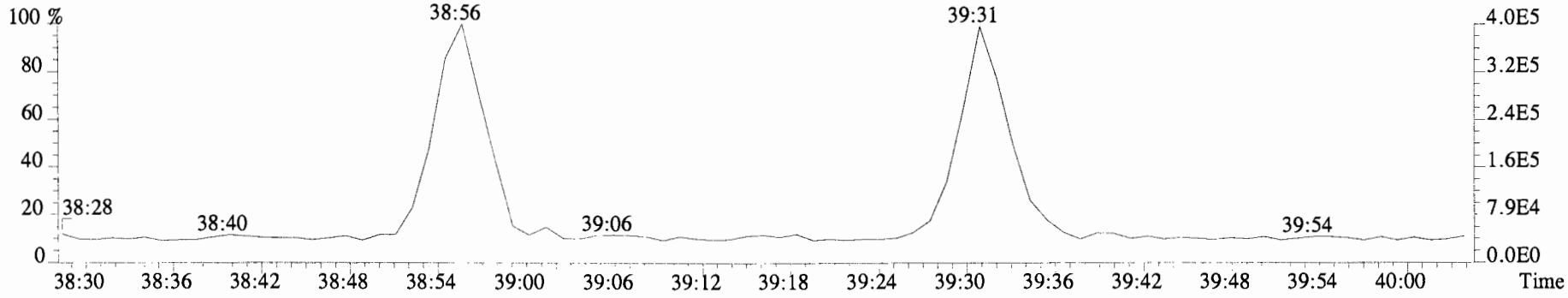
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



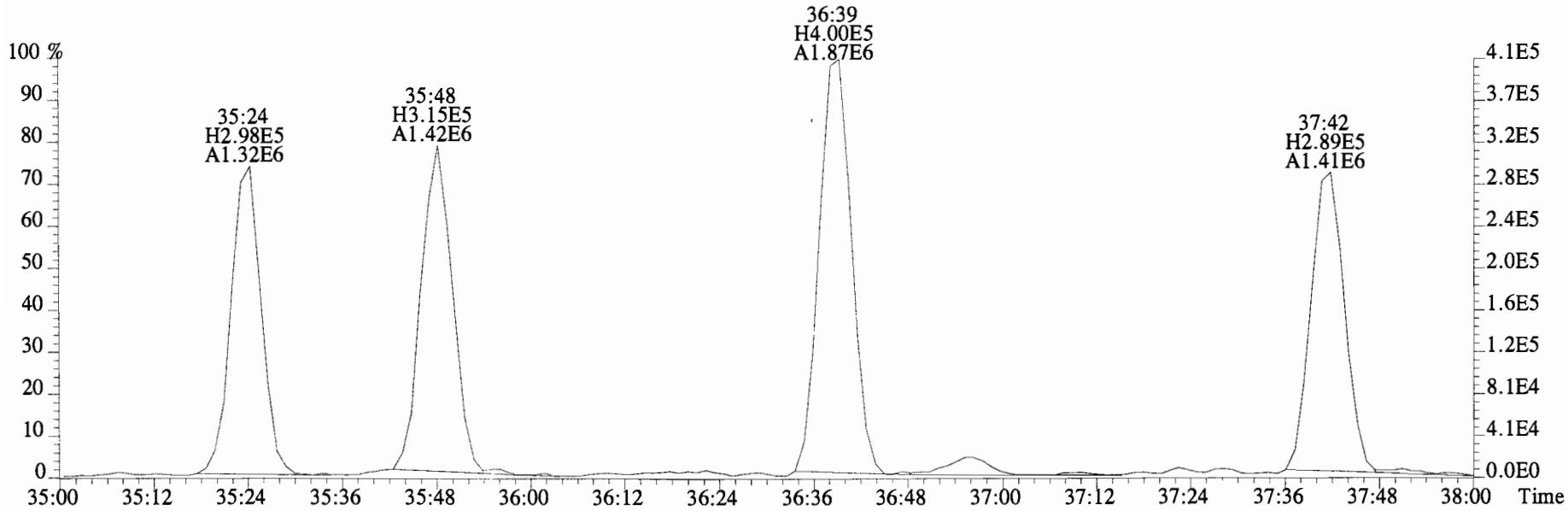
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0)



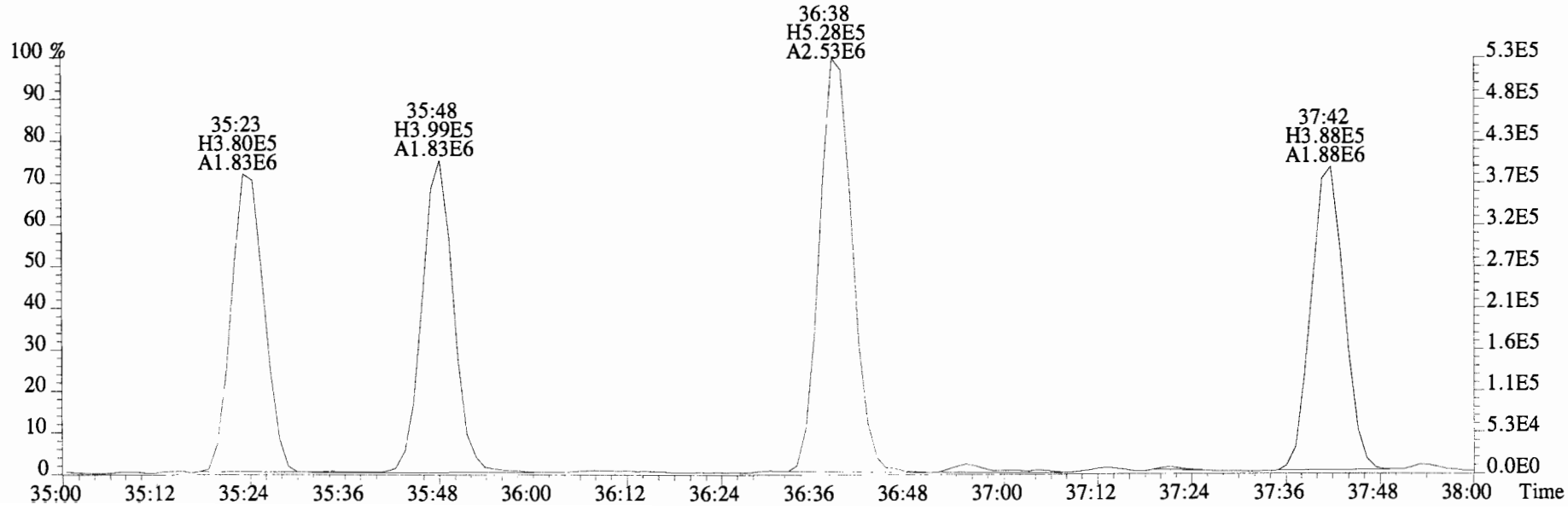
301.9626 S:6 F:3



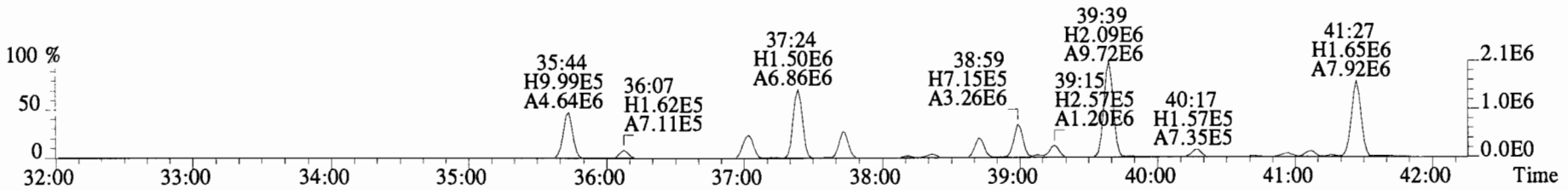
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4972.0,0.00%,F,F)



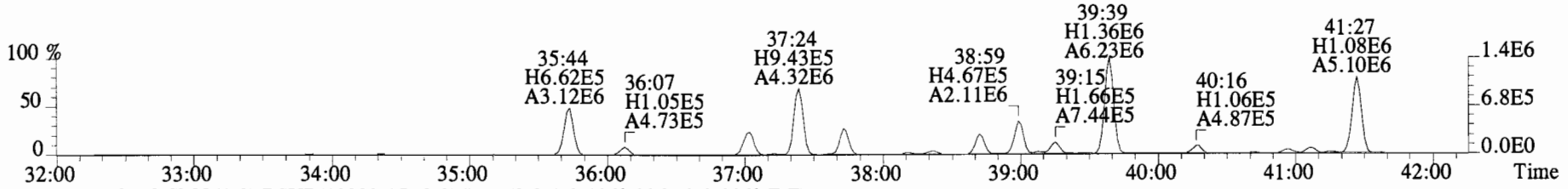
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3372.0,0.00%,F,F)



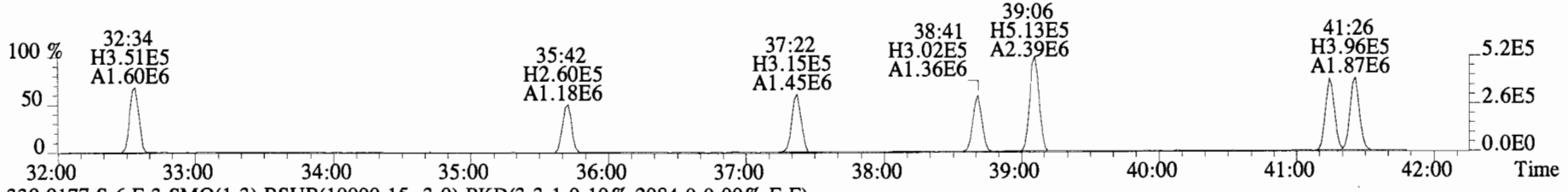
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)



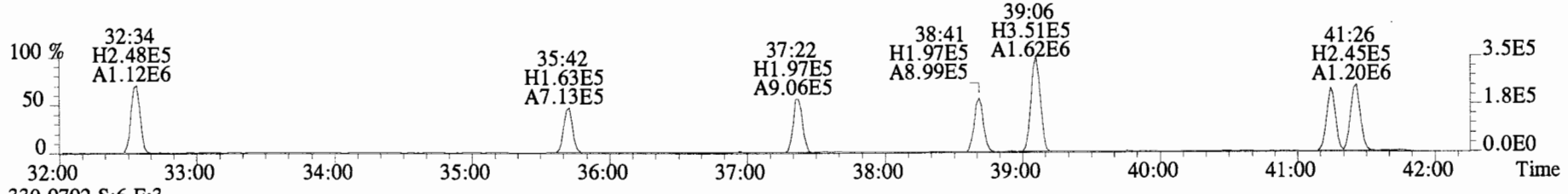
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)



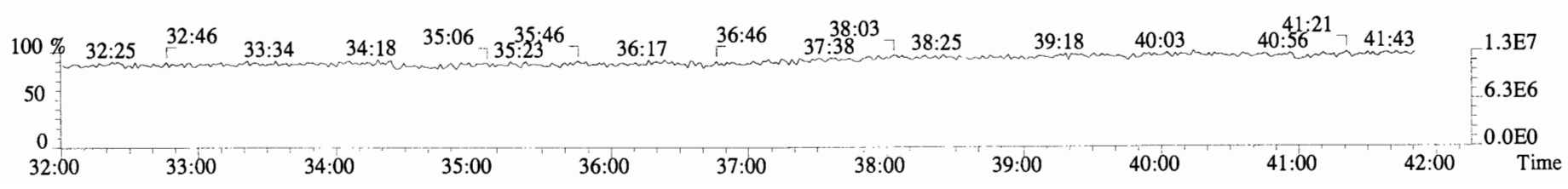
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2264.0,0.00%,F,F)

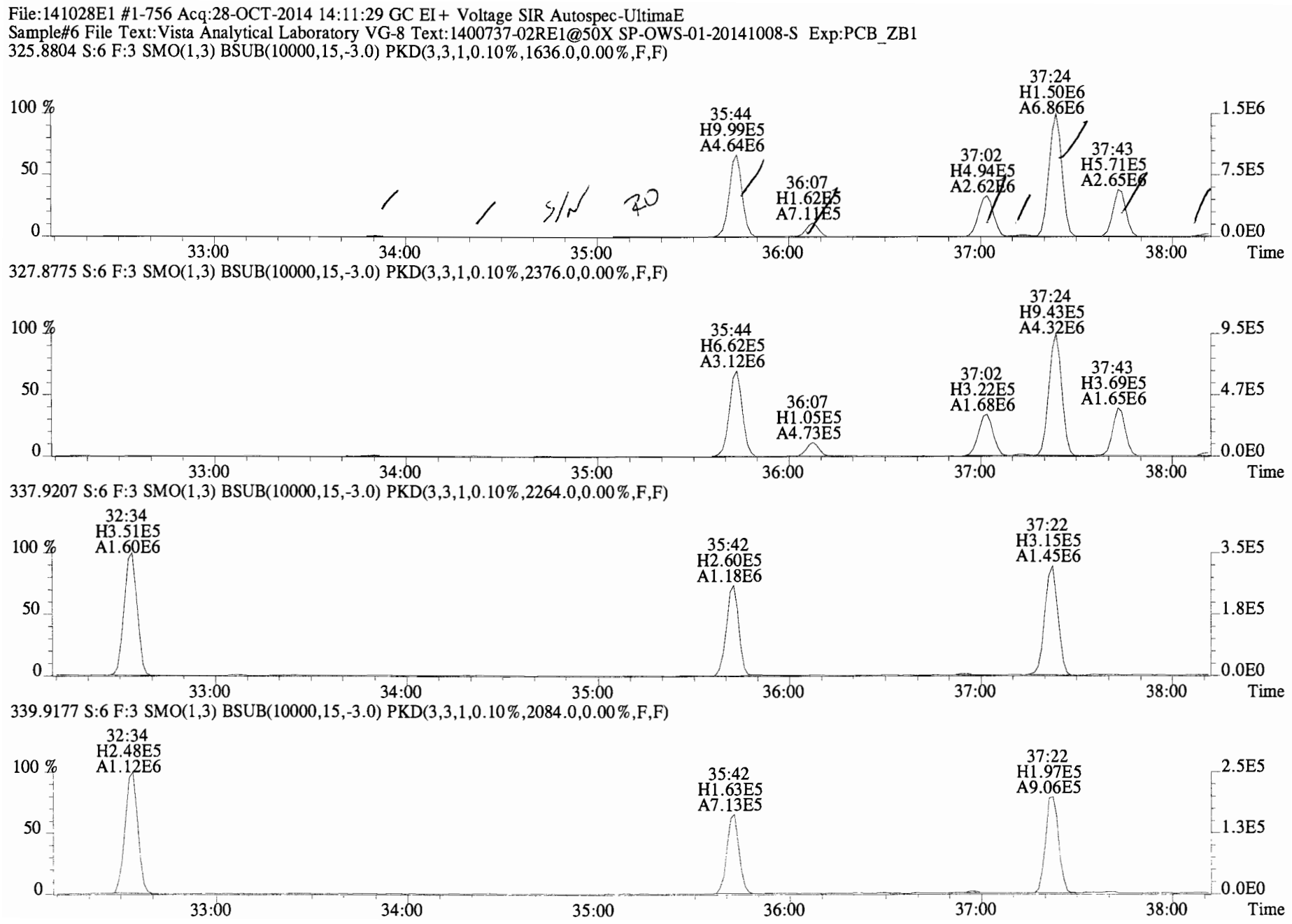


339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2084.0,0.00%,F,F)

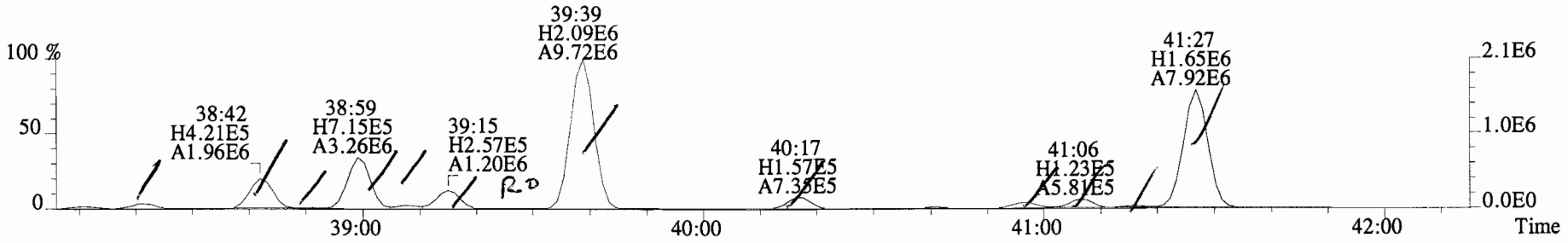


330.9792 S:6 F:3

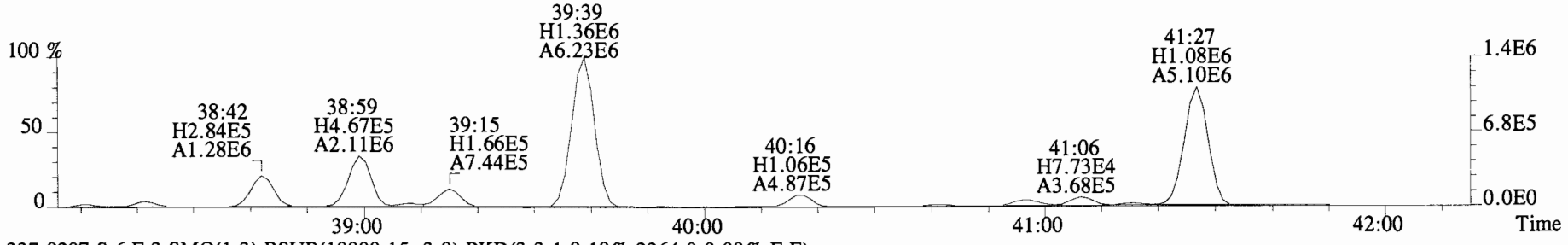



File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)
35:44 H9.99E5 A4.64E6
36:07 H1.62E5 A7.1E5
37:02 H4.94E5 A2.62E6
37:24 H1.50E6 A6.86E6
37:43 H5.71E5 A2.65E6
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)
35:44 H6.62E5 A3.12E6
36:07 H1.05E5 A4.73E5
37:02 H3.22E5 A1.68E6
37:24 H9.43E5 A4.32E6
37:43 H3.69E5 A1.65E6
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2264.0,0.00%,F,F)
32:34 H3.51E5 A1.60E6
35:42 H2.60E5 A1.18E6
37:22 H3.15E5 A1.45E6
339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2084.0,0.00%,F,F)
32:34 H2.48E5 A1.12E6
35:42 H1.63E5 A7.13E5
37:22 H1.97E5 A9.06E5
100 %
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.5E6
7.5E5
0.0E0
9.5E5
4.7E5
3.5E5
1.8E5
2.5E5
1.3E5

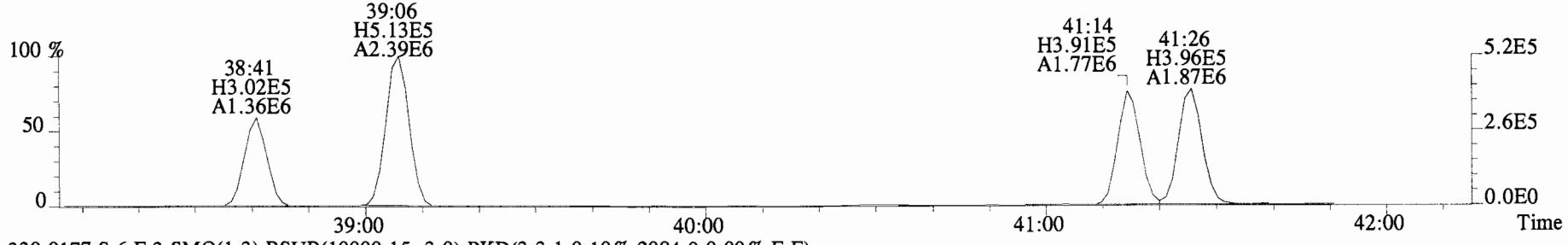
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)



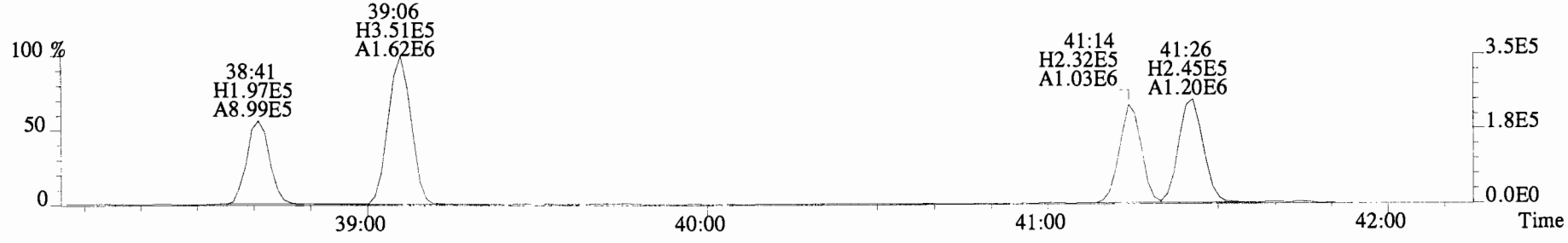
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)



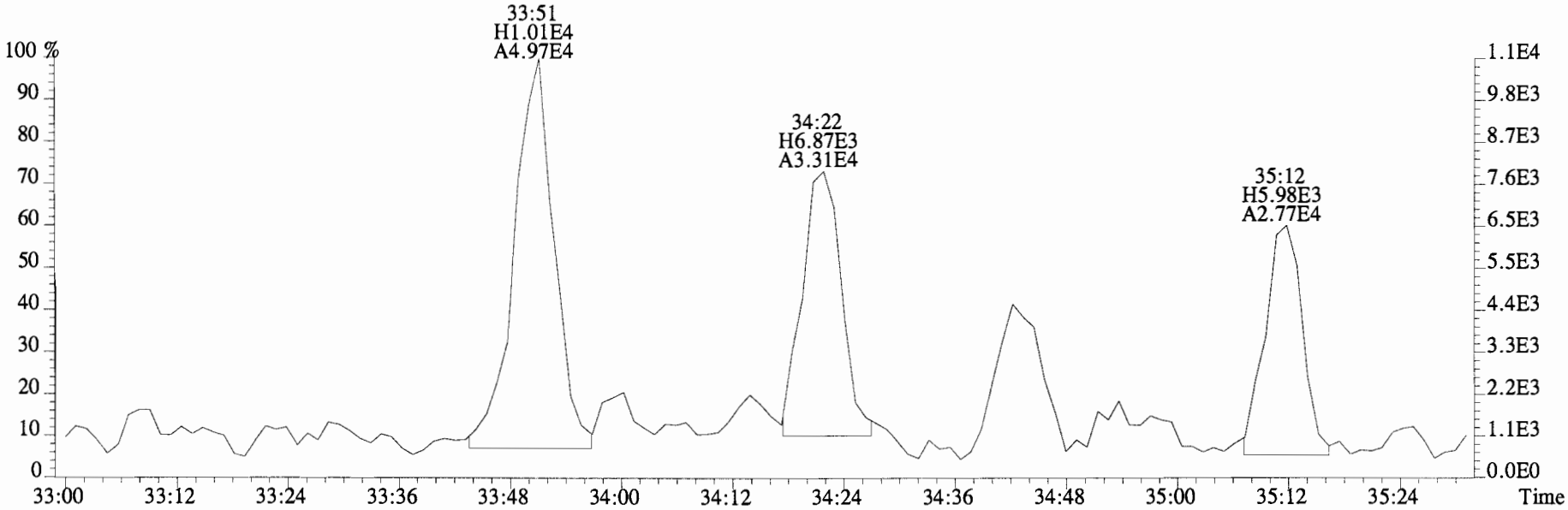
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2264.0,0.00%,F,F)



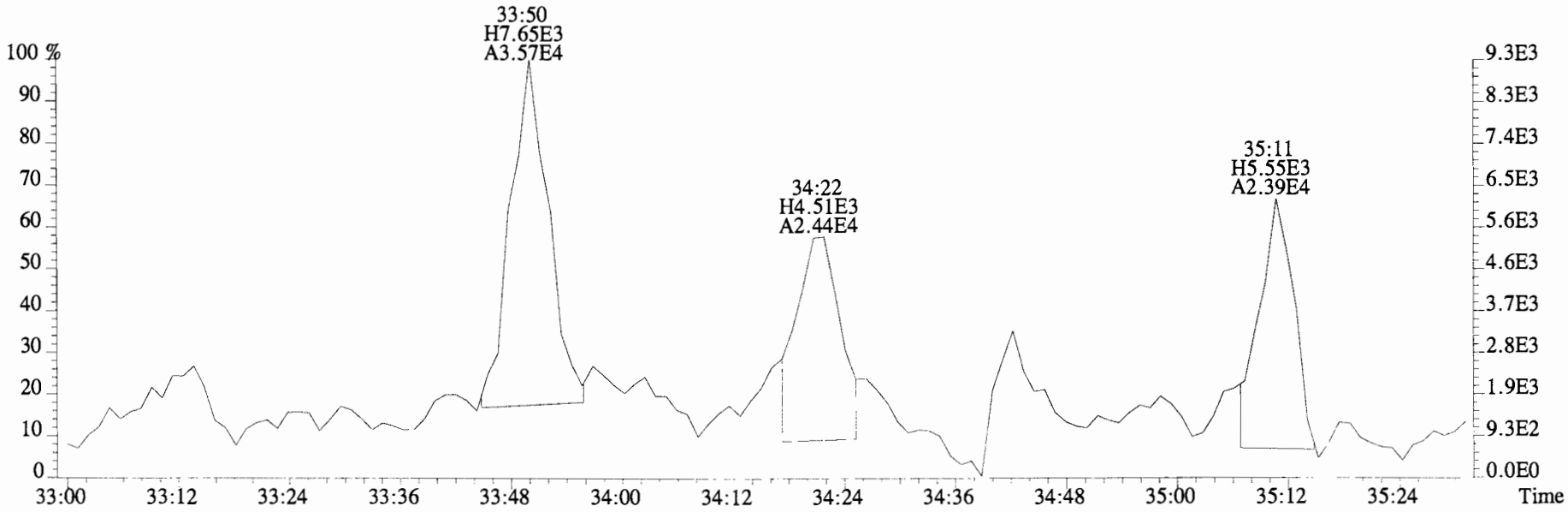
339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2084.0,0.00%,F,F)



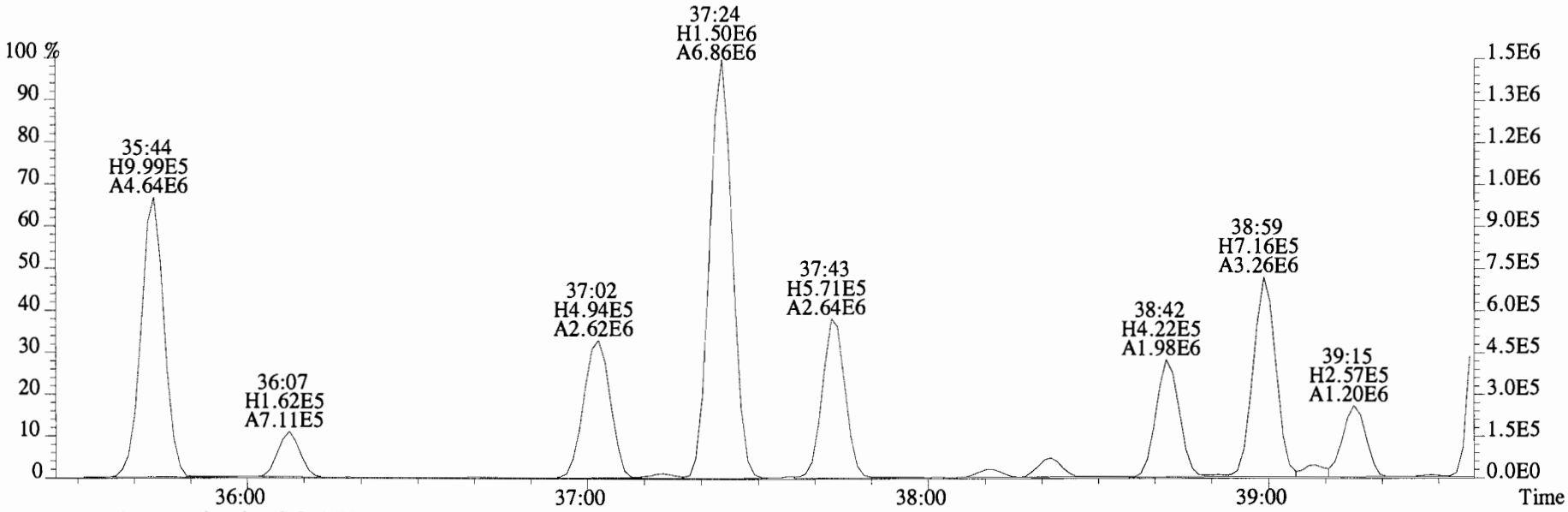
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)



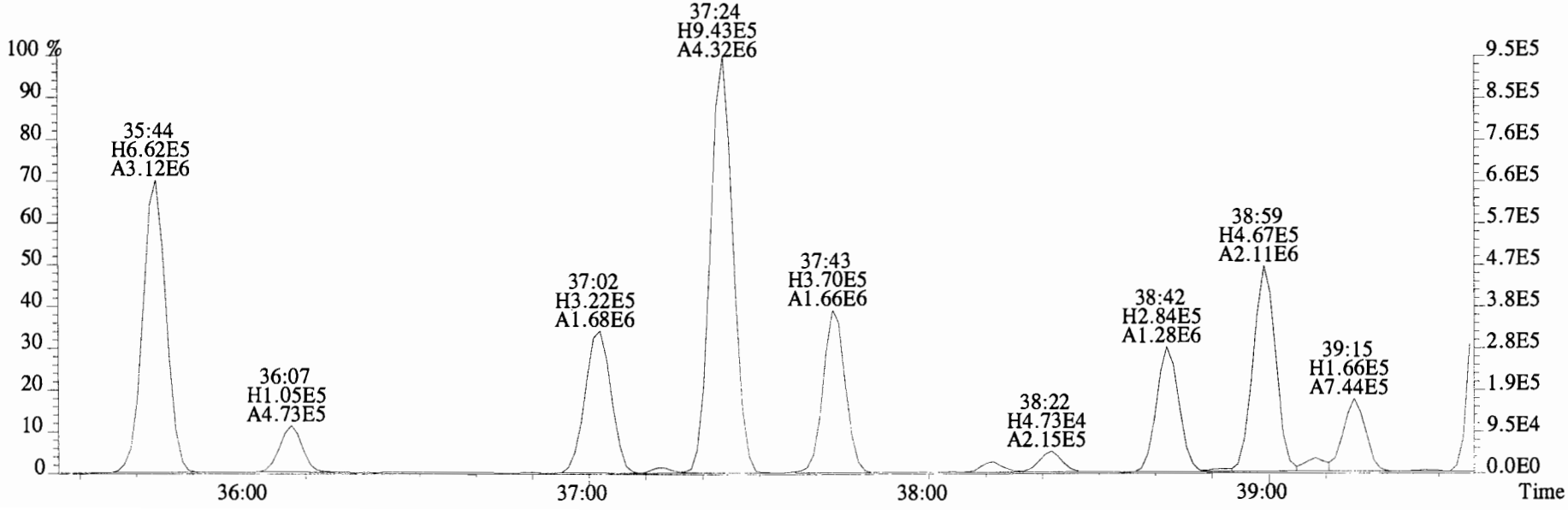
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)

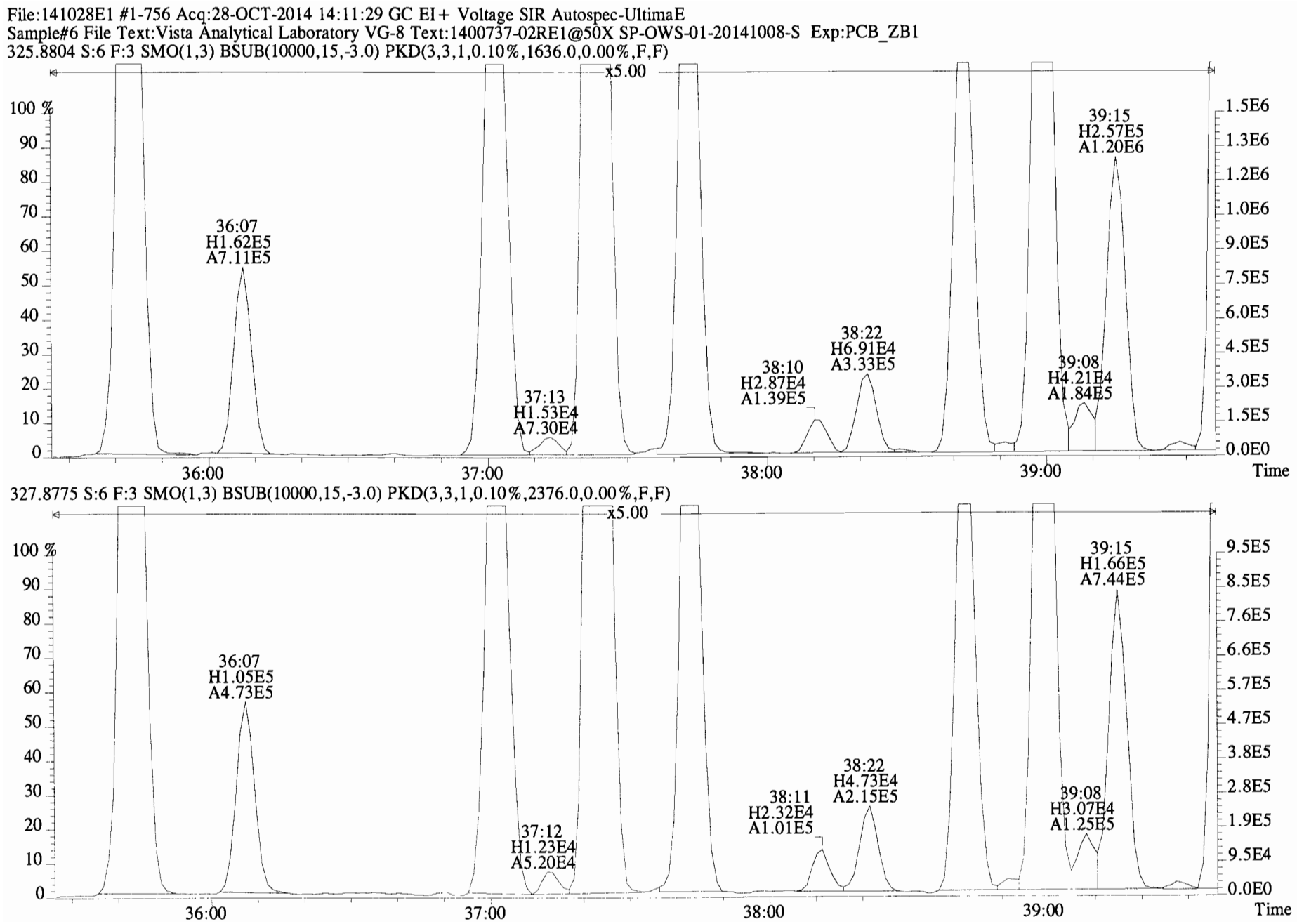


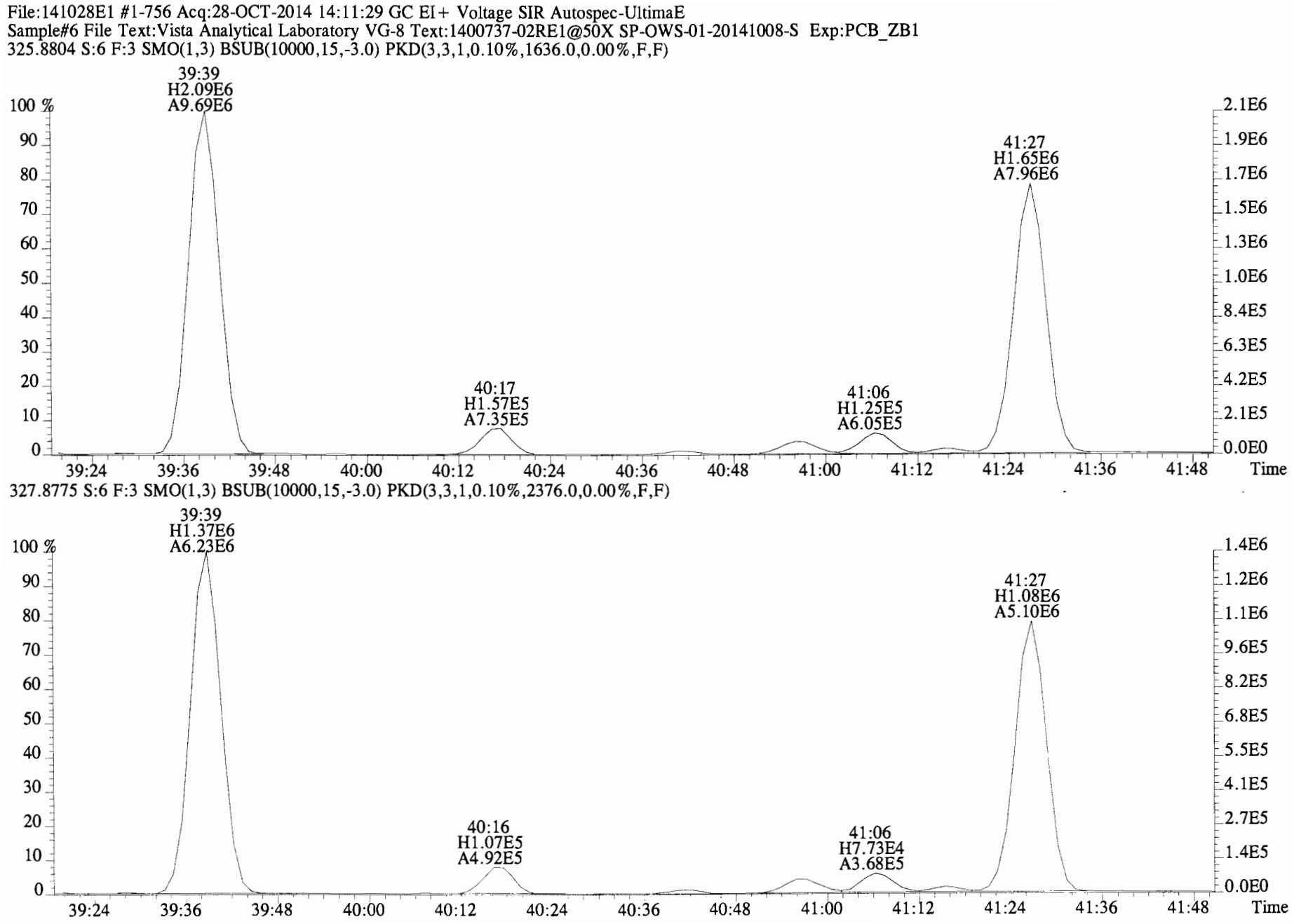
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)

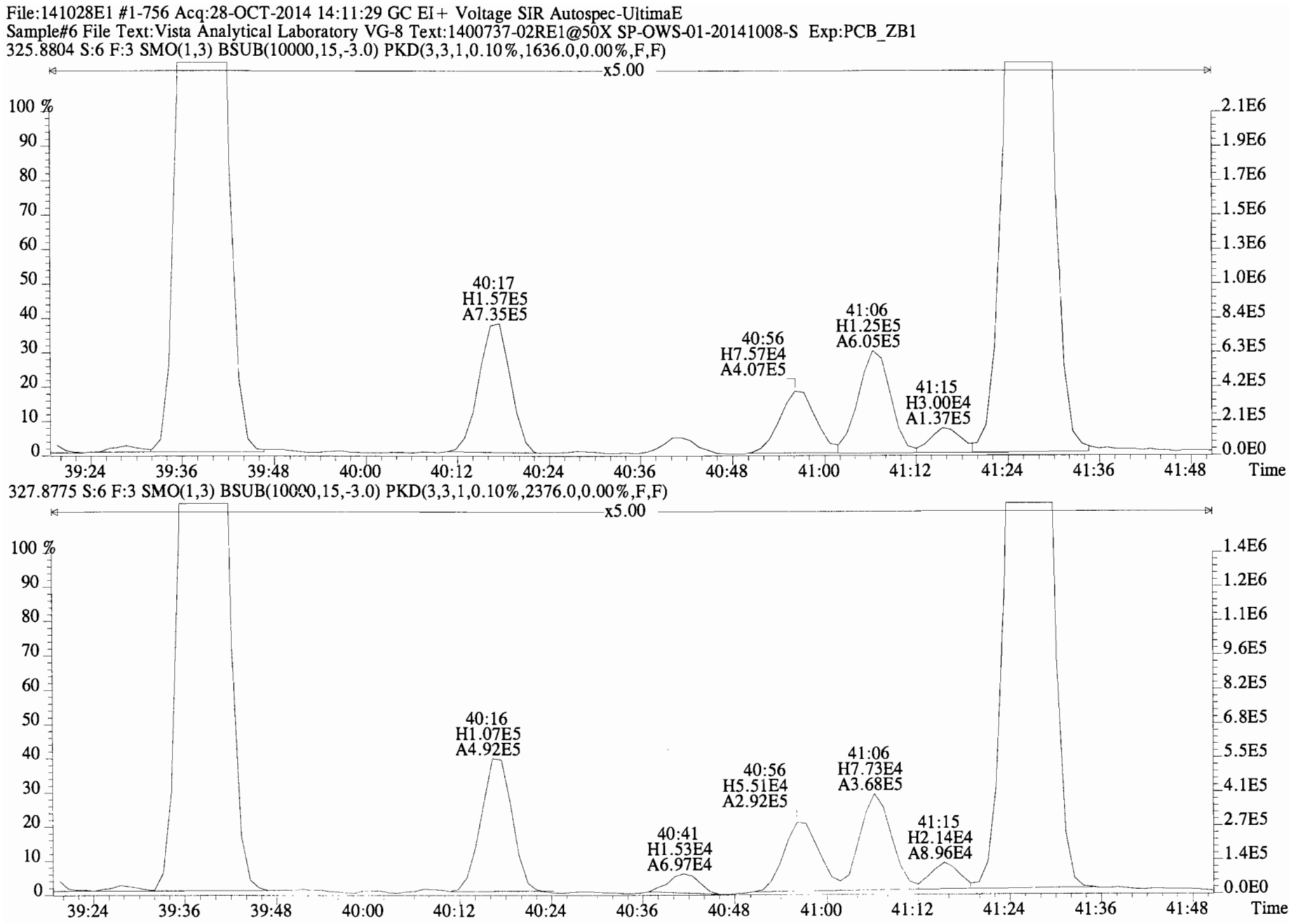


327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)

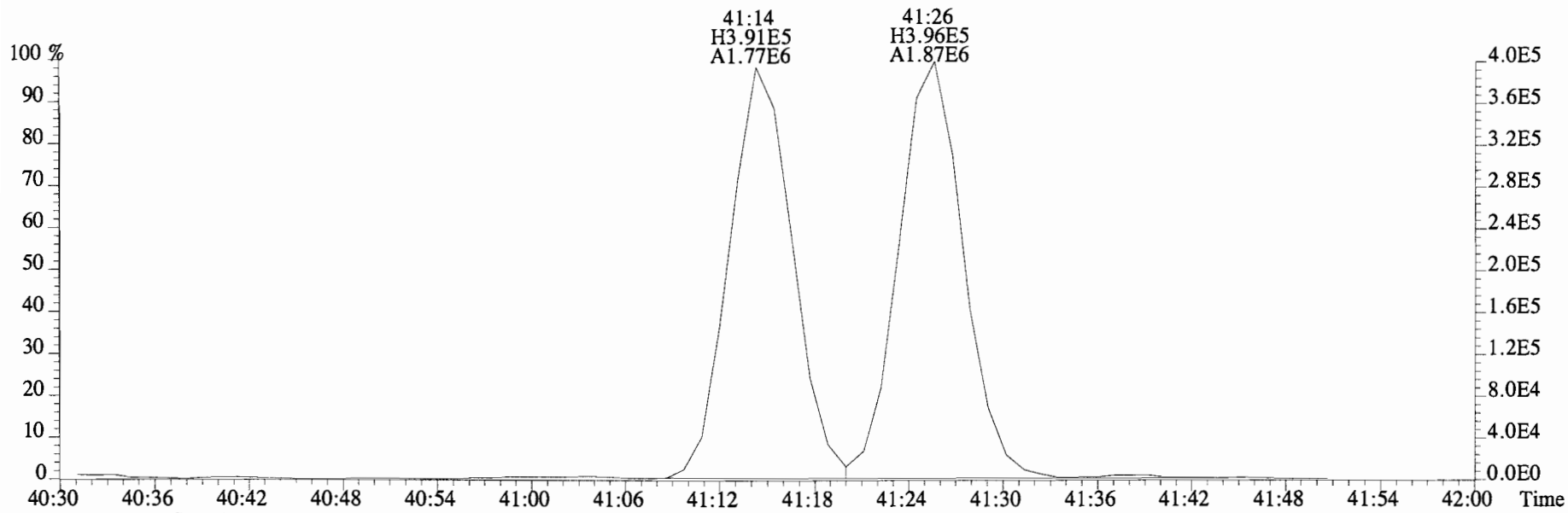



File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)
x5.00
36:07
H1.62E5
A7.11E5
37:13
H1.53E4
A7.30E4
38:10
H2.87E4
A1.39E5
38:22
H6.91E4
A3.33E5
39:08
H4.21E4
A1.84E5
39:15
H2.57E5
A1.20E6
Time
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)
x5.00
36:07
H1.05E5
A4.73E5
37:12
H1.23E4
A5.20E4
38:11
H2.32E4
A1.01E5
38:22
H4.73E4
A2.15E5
39:08
H3.07E4
A1.25E5
39:15
H1.66E5
A7.44E5
Time

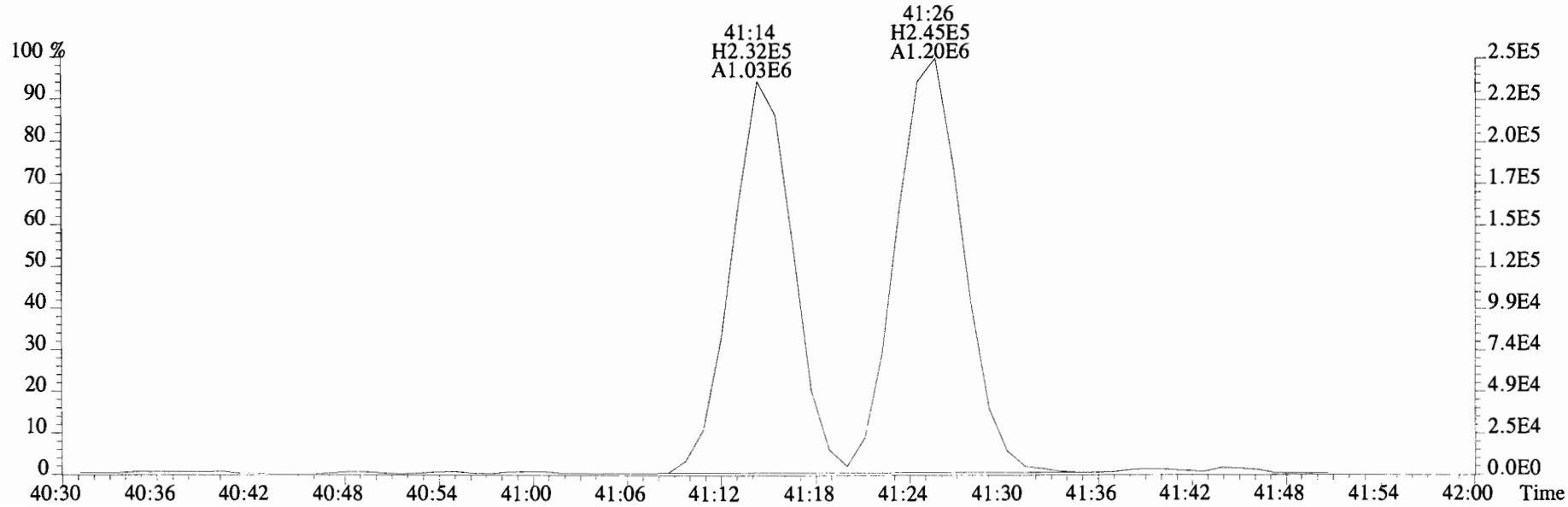

File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)
39:39
H2.09E6
A9.69E6
40:17
H1.57E5
A7.35E5
41:06
H1.25E5
A6.05E5
41:27
H1.65E6
A7.96E6
100 %
90
80
70
60
50
40
30
20
10
0
2.1E6
1.9E6
1.7E6
1.5E6
1.3E6
1.0E6
8.4E5
6.3E5
4.2E5
2.1E5
0.0E0
39:24
39:36
39:48
40:00
40:12
40:24
40:36
40:48
41:00
41:12
41:24
41:36
41:48
Time
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)
39:39
H1.37E6
A6.23E6
40:16
H1.07E5
A4.92E5
41:06
H7.73E4
A3.68E5
41:27
H1.08E6
A5.10E6
100 %
90
80
70
60
50
40
30
20
10
0
1.4E6
1.2E6
1.1E6
9.6E5
8.2E5
6.8E5
5.5E5
4.1E5
2.7E5
1.4E5
0.0E0
39:24
39:36
39:48
40:00
40:12
40:24
40:36
40:48
41:00
41:12
41:24
41:36
41:48
Time


File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
2.1E6
1.9E6
1.7E6
1.5E6
1.3E6
1.0E6
8.4E5
6.3E5
4.2E5
2.1E5
0.0E0
40:17
H1.57E5
A7.35E5
40:56
H7.57E4
A4.07E5
41:06
H1.25E5
A6.05E5
41:15
H3.00E4
A1.37E5
39:24
39:36
39:48
40:00
40:12
40:24
40:36
40:48
41:00
41:12
41:24
41:36
41:48
Time
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
1.4E6
1.2E6
1.1E6
9.6E5
8.2E5
6.8E5
5.5E5
4.1E5
2.7E5
1.4E5
0.0E0
40:16
H1.07E5
A4.92E5
40:41
H1.53E4
A6.97E4
40:56
H5.51E4
A2.92E5
41:06
H7.73E4
A3.68E5
41:15
H2.14E4
A8.96E4
39:24
39:36
39:48
40:00
40:12
40:24
40:36
40:48
41:00
41:12
41:24
41:36
41:48
Time

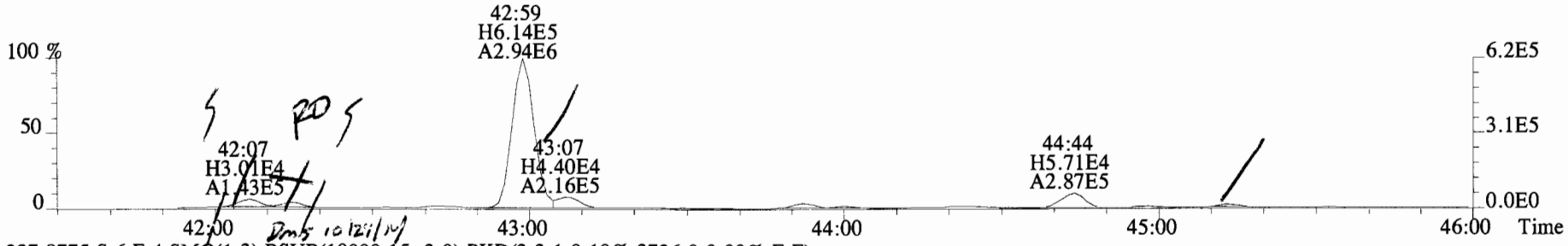
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2264.0,0.00%,F,F)



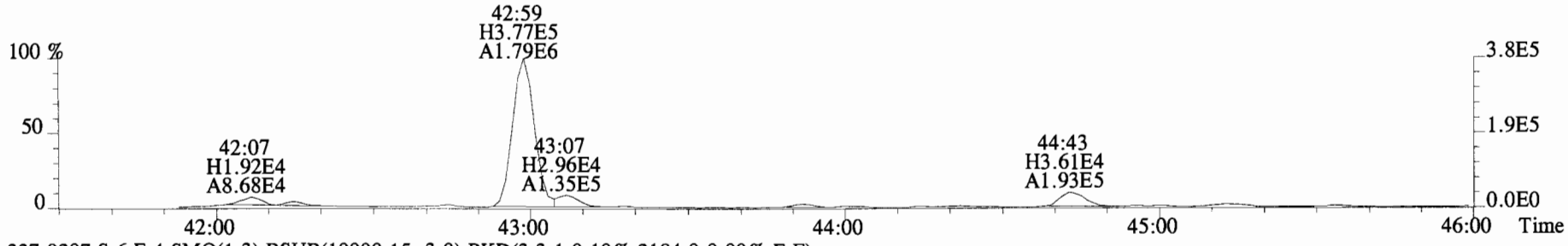
339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2084.0,0.00%,F,F)



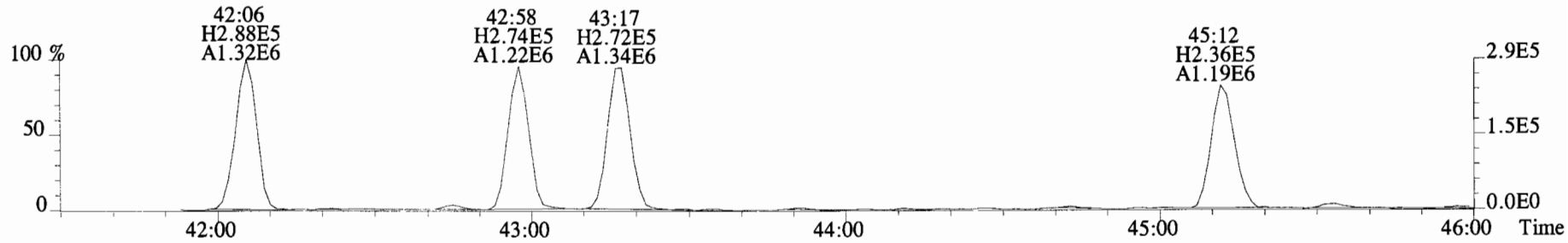
File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
325.8804 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4164.0,0.00%,F,F)



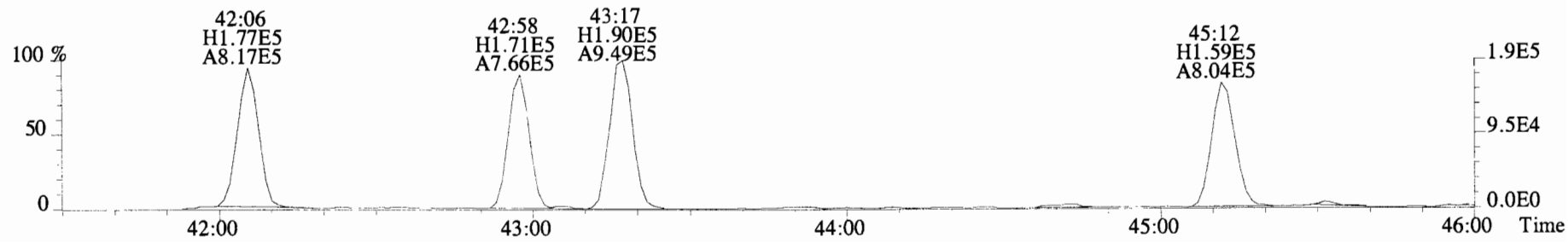
327.8775 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3736.0,0.00%,F,F)



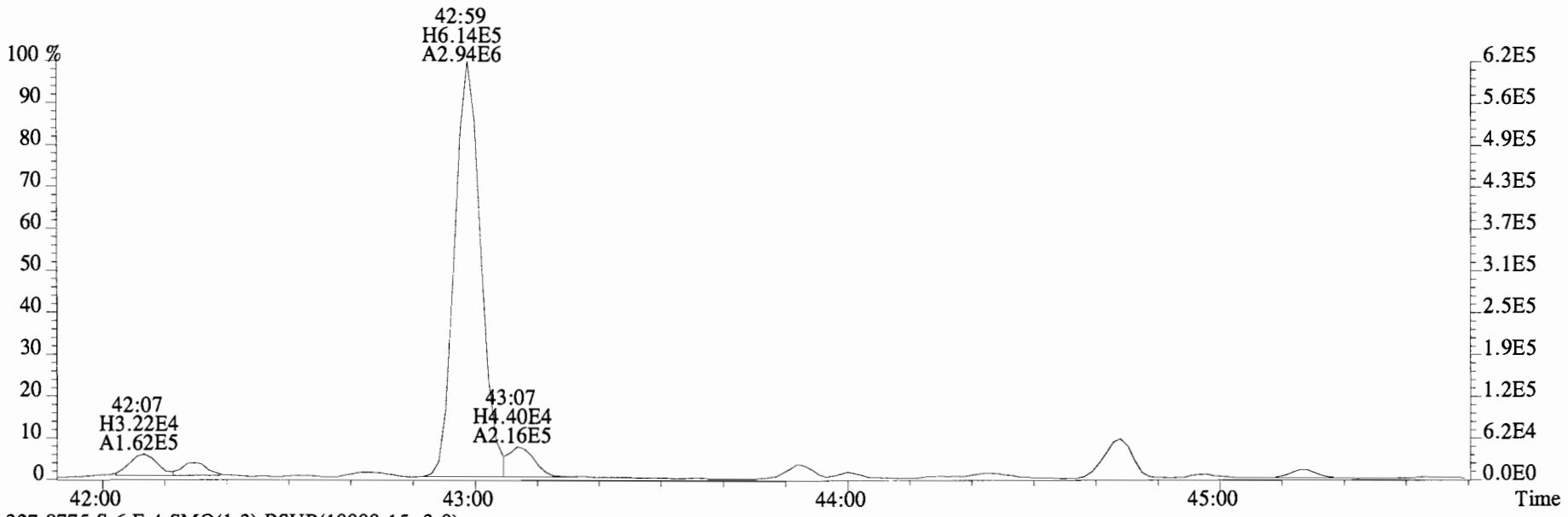
337.9207 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2184.0,0.00%,F,F)



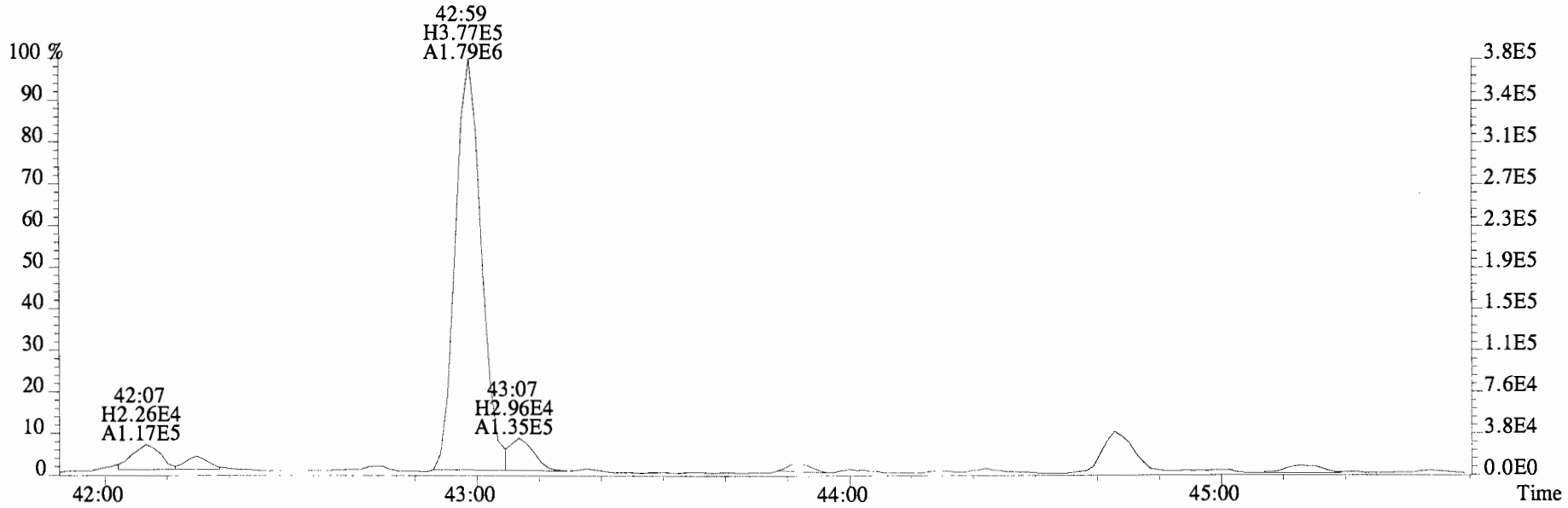
339.9177 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1736.0,0.00%,F,F)



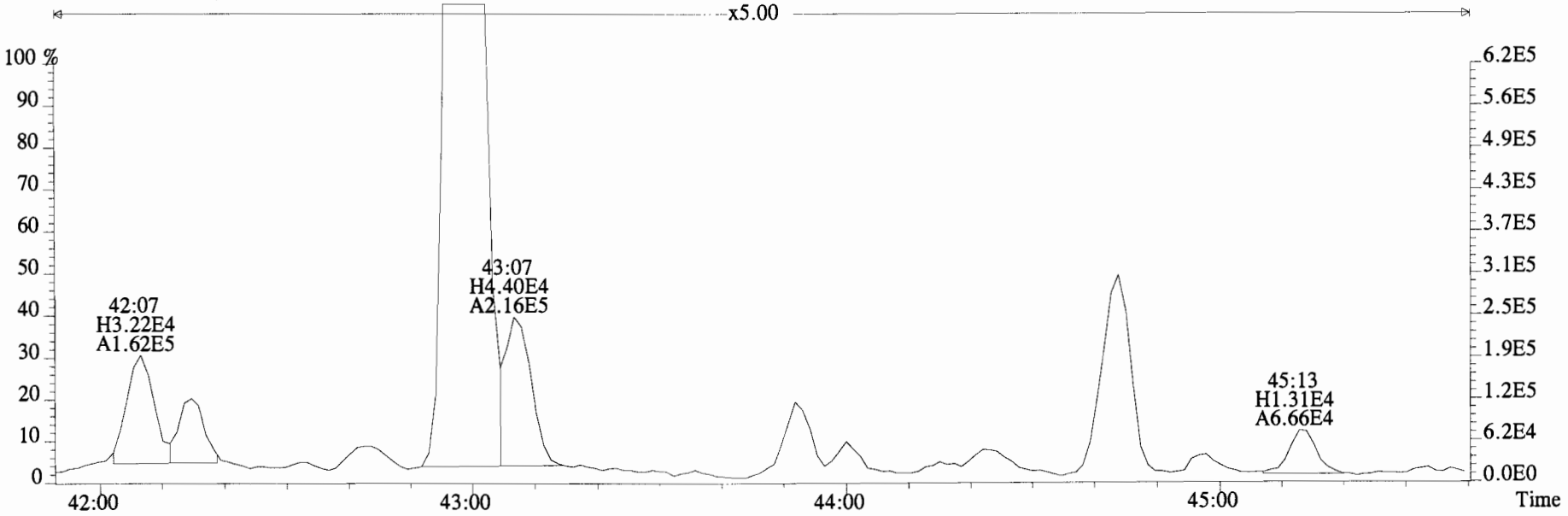
File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
325.8804 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



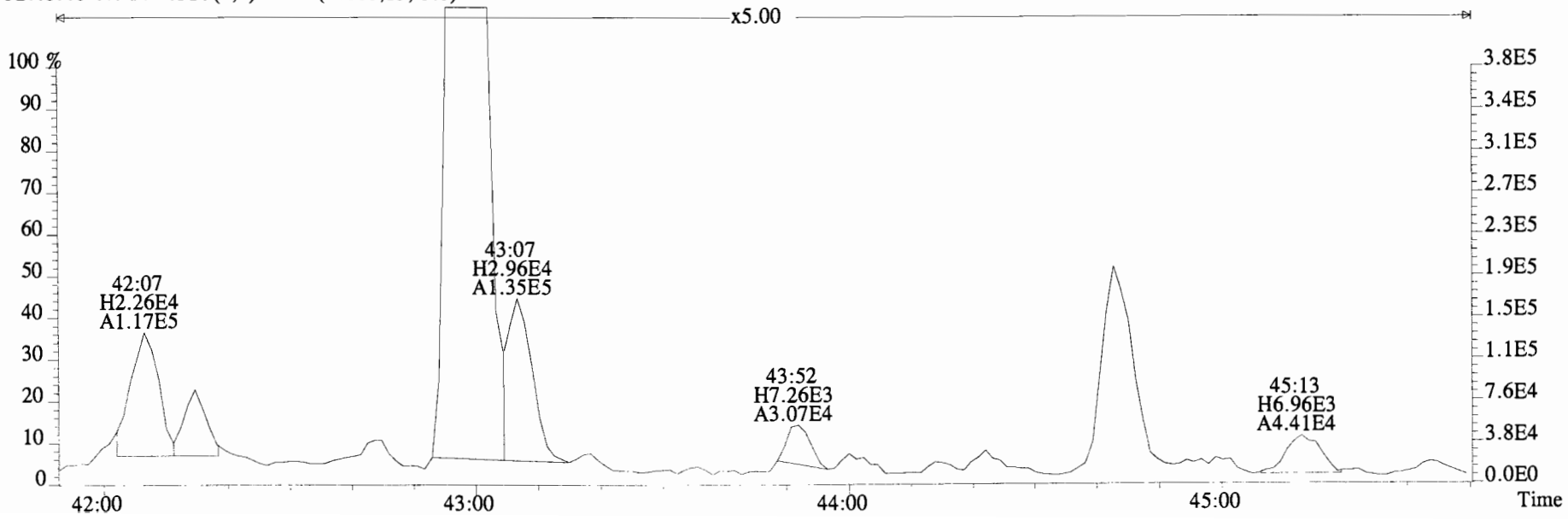
327.8775 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)

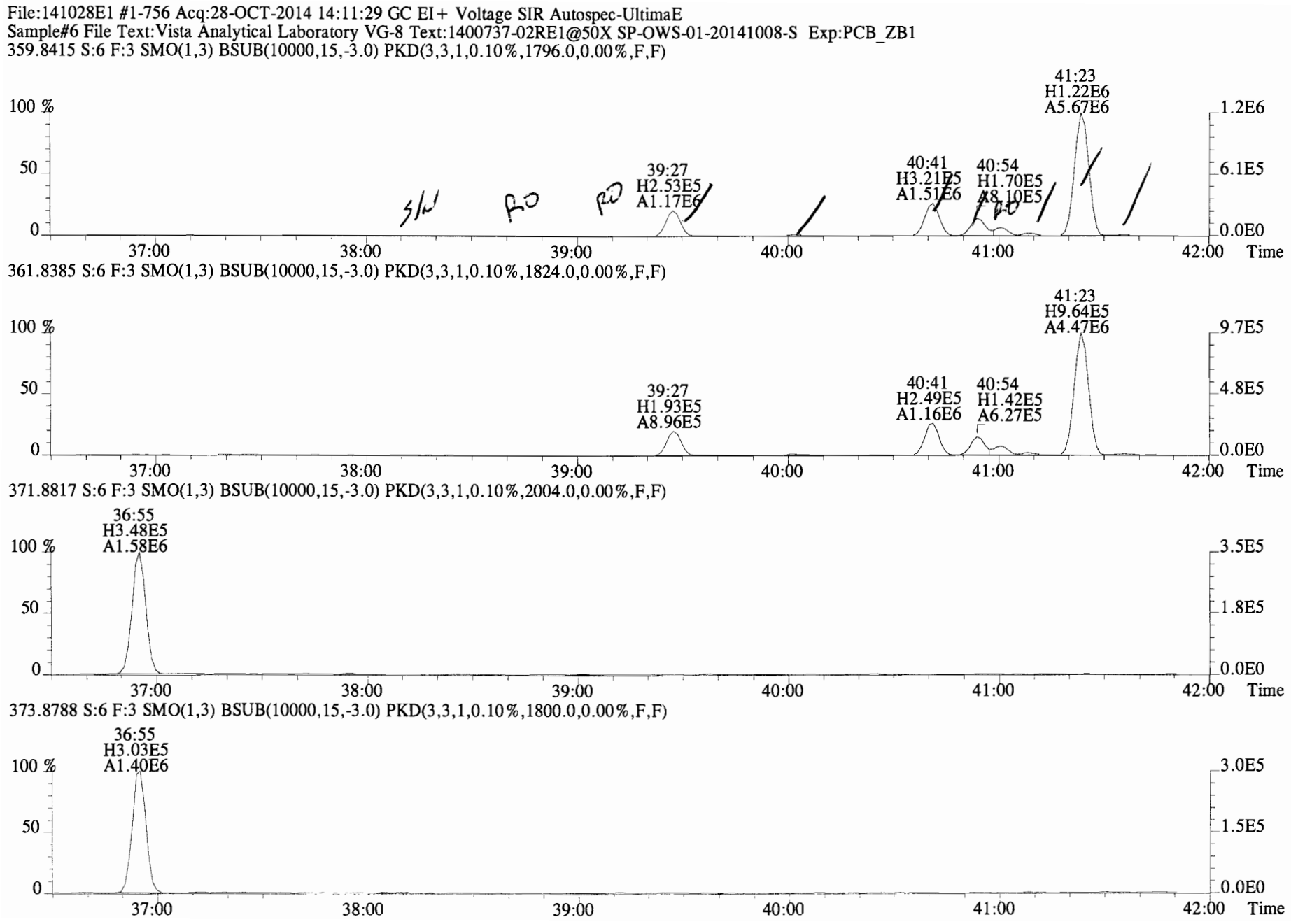


File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
325.8804 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)

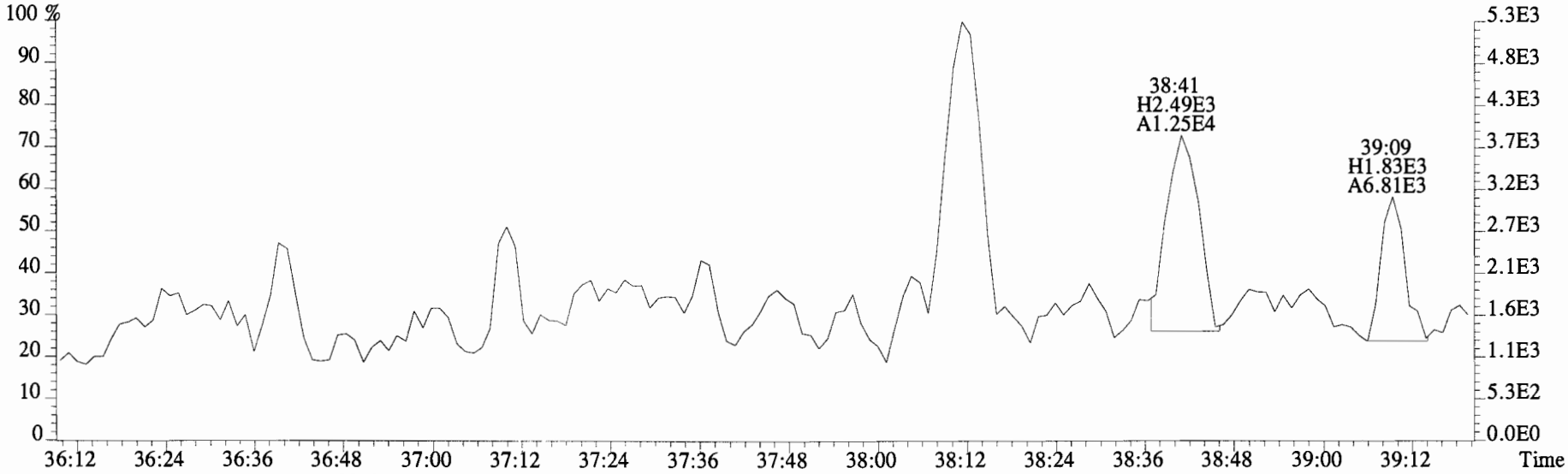


327.8775 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)

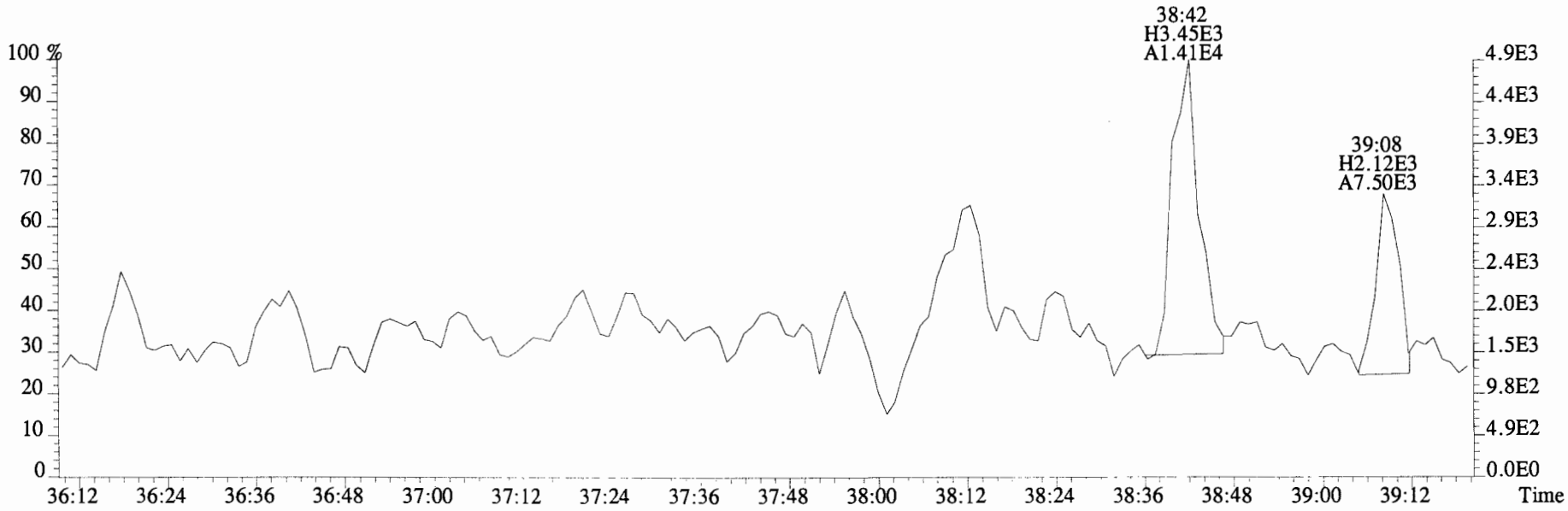



File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1796.0,0.00%,F,F)
41:23
H1.22E6
A5.67E6
39:27
H2.53E5
A1.17E6
40:41
H3.21E5
A1.51E6
40:54
H1.70E5
A8.10E5
100 %
50
0
1.2E6
6.1E5
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time
361.8385 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1824.0,0.00%,F,F)
41:23
H9.64E5
A4.47E6
39:27
H1.93E5
A8.96E5
40:41
H2.49E5
A1.16E6
40:54
H1.42E5
A6.27E5
100 %
50
0
9.7E5
4.8E5
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time
371.8817 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2004.0,0.00%,F,F)
36:55
H3.48E5
A1.58E6
100 %
50
0
3.5E5
1.8E5
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time
373.8788 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1800.0,0.00%,F,F)
36:55
H3.03E5
A1.40E6
100 %
50
0
3.0E5
1.5E5
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time

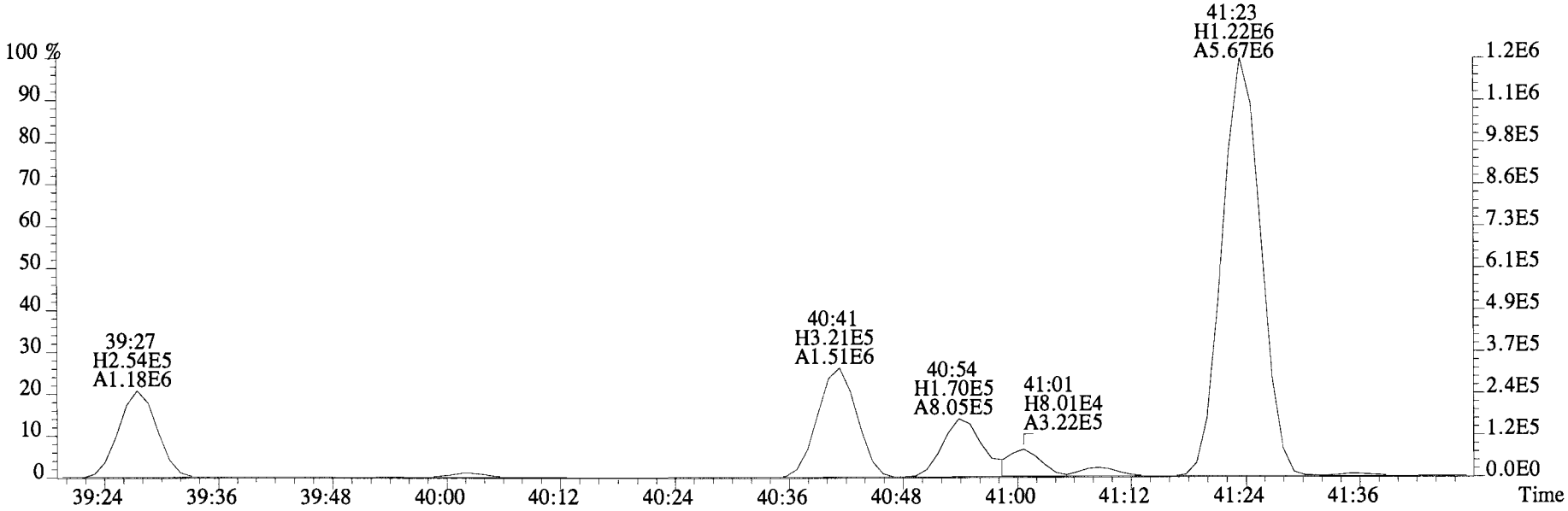
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1796.0,0.00%,F,F)



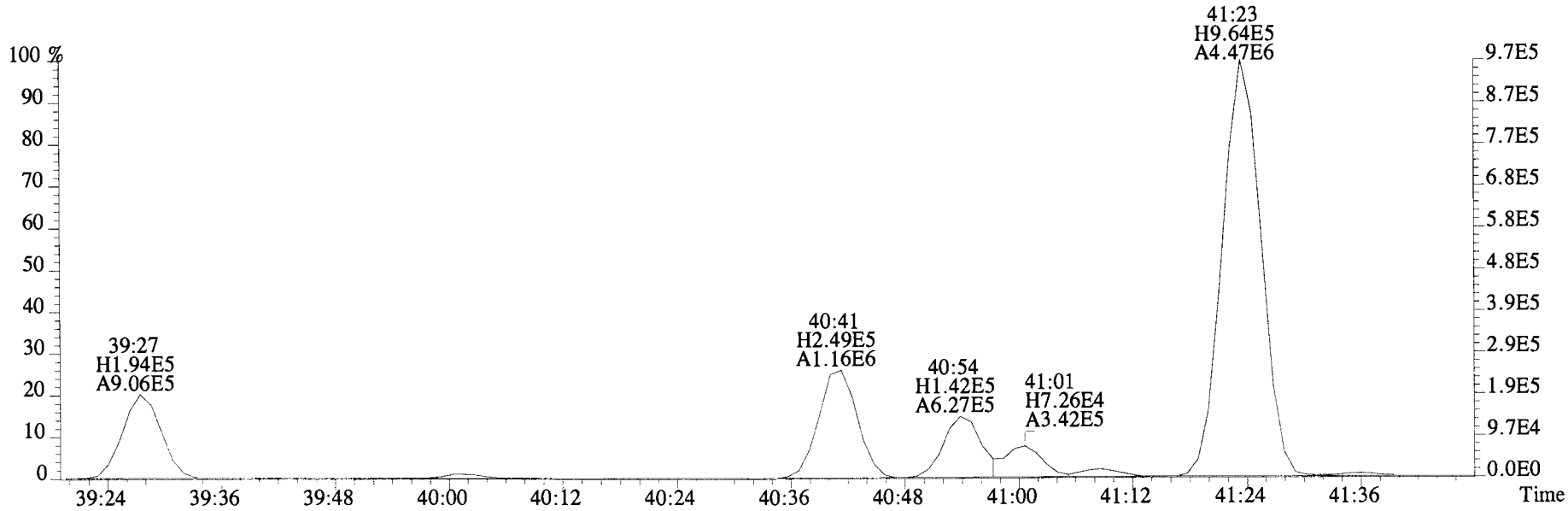
361.8385 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1824.0,0.00%,F,F)

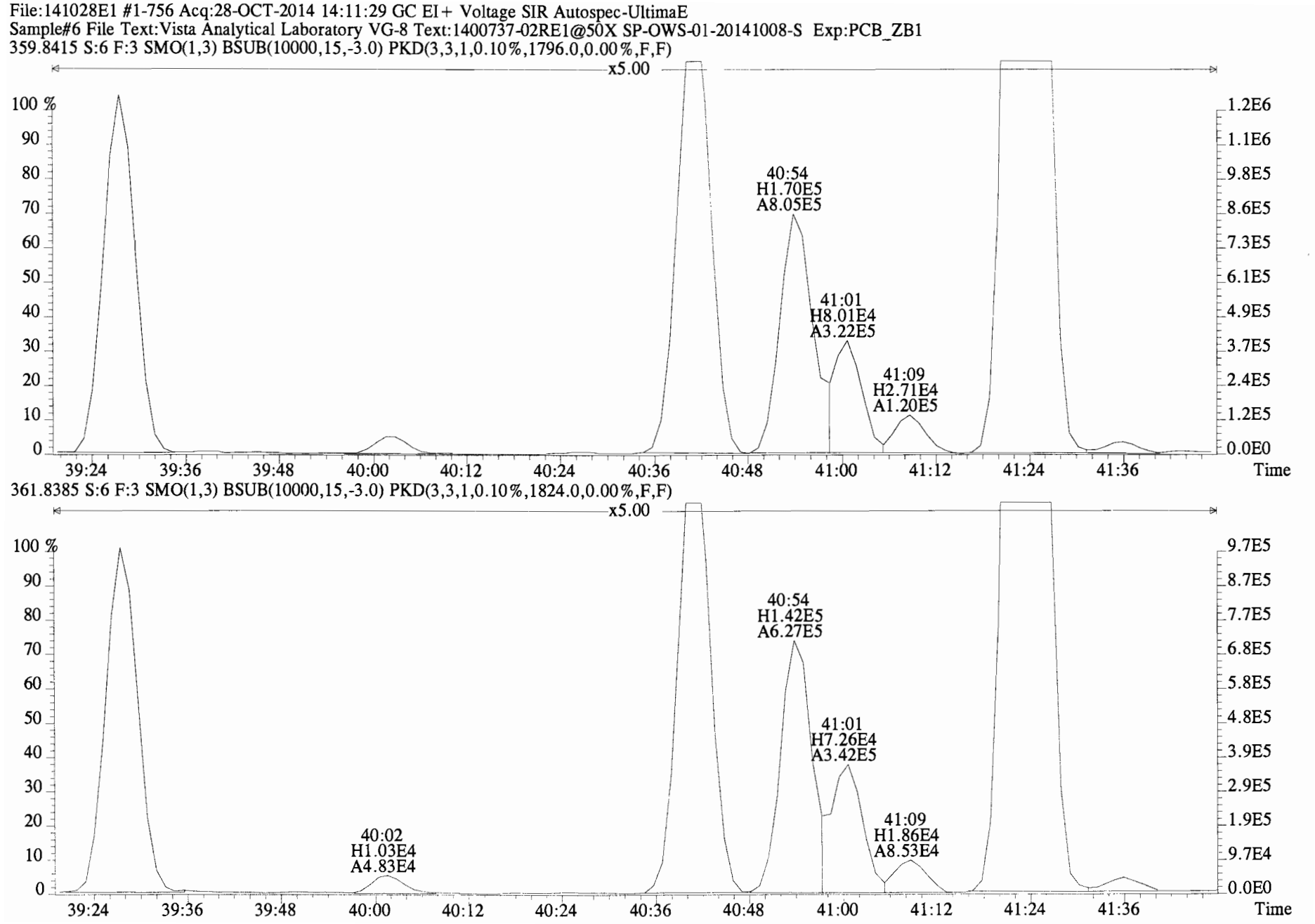


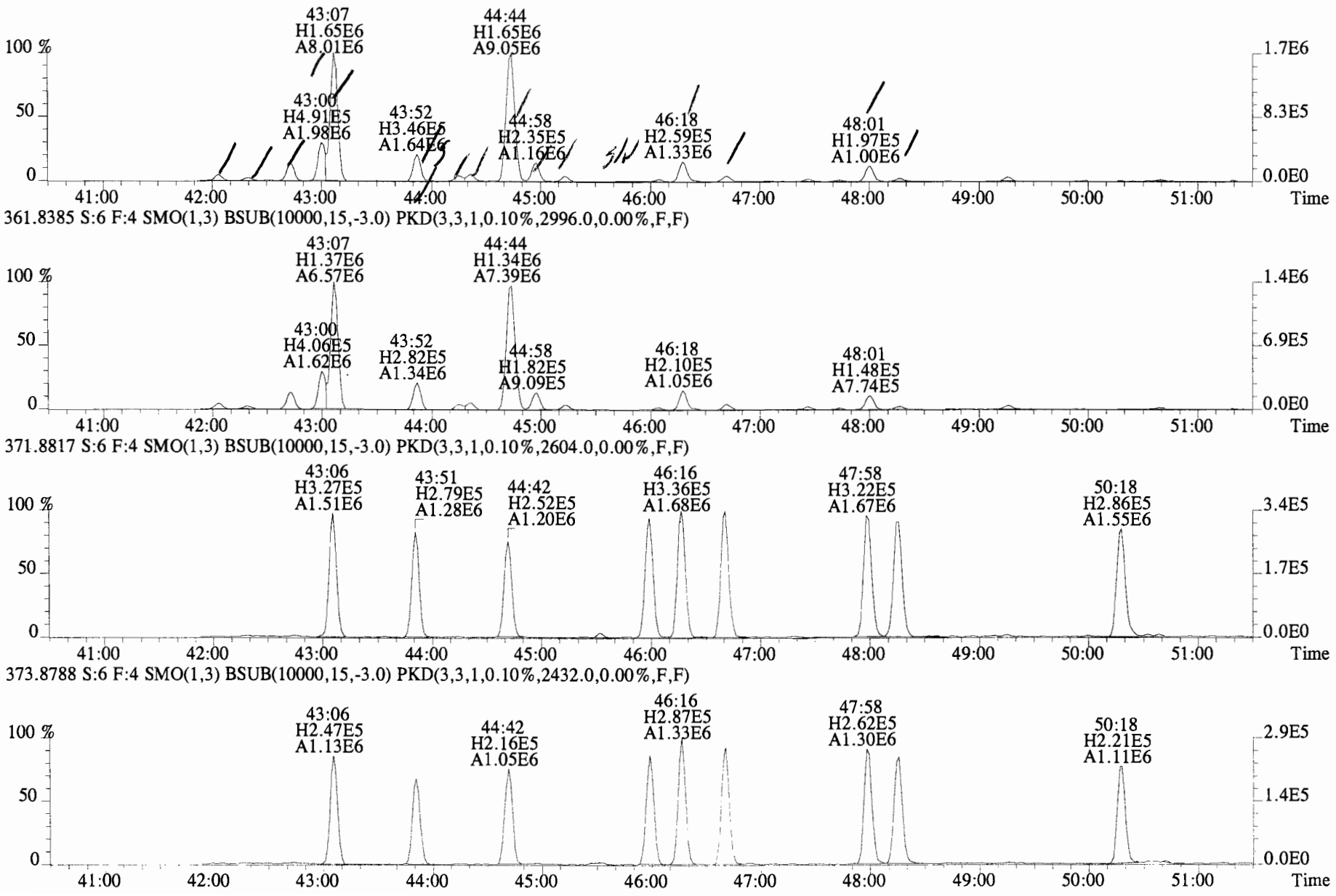
File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1796.0,0.00%,F,F)



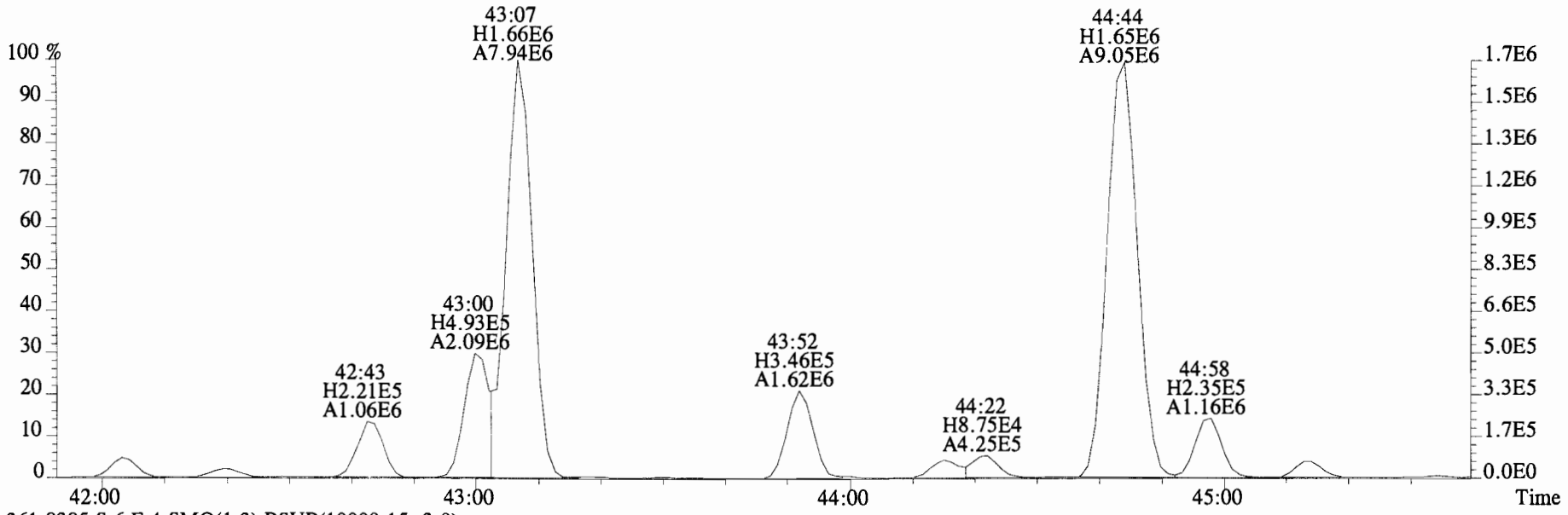
361.8385 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1824.0,0.00%,F,F)



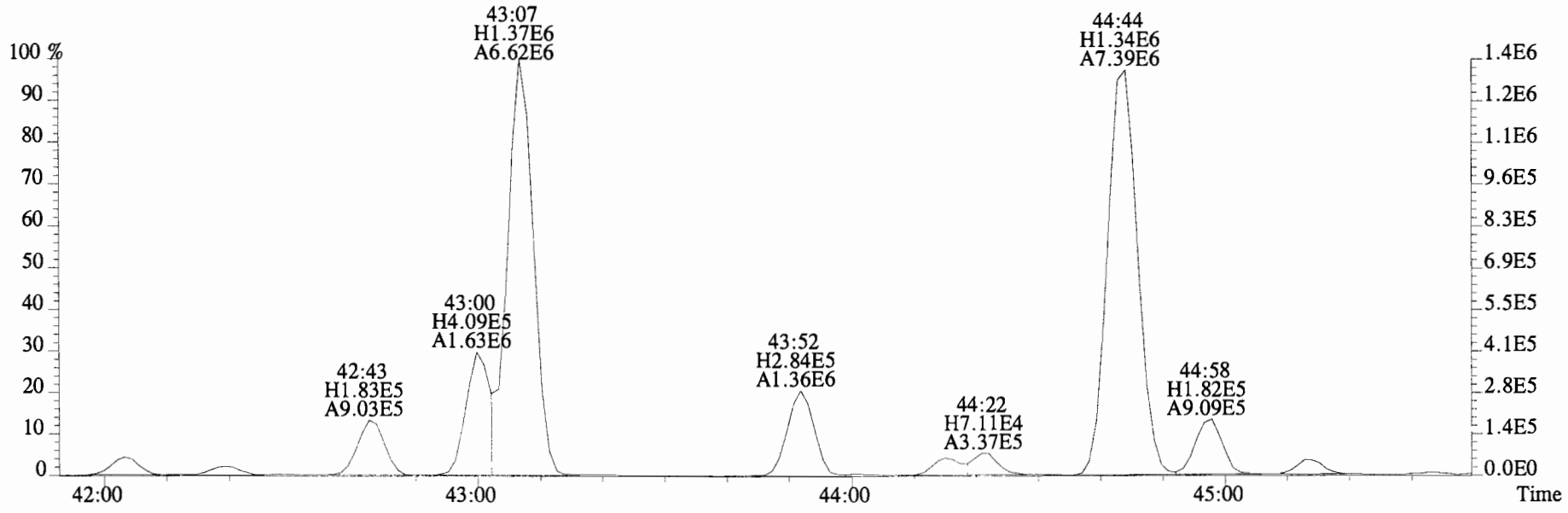

File:141028E1 #1-756 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1796.0,0.00%,F,F)
x5.00
40:54
H1.70E5
A8.05E5
41:01
H8.01E4
A3.22E5
41:09
H2.71E4
A1.20E5
Time
361.8385 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1824.0,0.00%,F,F)
x5.00
40:02
H1.03E4
A4.83E4
40:54
H1.42E5
A6.27E5
41:01
H7.26E4
A3.42E5
41:09
H1.86E4
A8.53E4
Time


File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3456.0,0.00%,F,F)
43:07 H1.65E6 A8.01E6
44:44 H1.65E6 A9.05E6
43:00 H4.91E5 A1.98E6
43:52 H3.46E5 A1.64E6
44:58 H2.35E5 A1.16E6
46:18 H2.59E5 A1.33E6
48:01 H1.97E5 A1.00E6
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2996.0,0.00%,F,F)
43:07 H1.37E6 A6.57E6
44:44 H1.34E6 A7.39E6
43:00 H4.06E5 A1.62E6
43:52 H2.82E5 A1.34E6
44:58 H1.82E5 A9.09E5
46:18 H2.10E5 A1.05E6
48:01 H1.48E5 A7.74E5
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2604.0,0.00%,F,F)
43:06 H3.27E5 A1.51E6
43:51 H2.79E5 A1.28E6
44:42 H2.52E5 A1.20E6
46:16 H3.36E5 A1.68E6
47:58 H3.22E5 A1.67E6
50:18 H2.86E5 A1.55E6
373.8788 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2432.0,0.00%,F,F)
43:06 H2.47E5 A1.13E6
44:42 H2.16E5 A1.05E6
46:16 H2.87E5 A1.33E6
47:58 H2.62E5 A1.30E6
50:18 H2.21E5 A1.11E6
100 %
50
0
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
51:00
Time
1.7E6
8.3E5
0.0E0
1.4E6
6.9E5
3.4E5
1.7E5
2.9E5
1.4E5

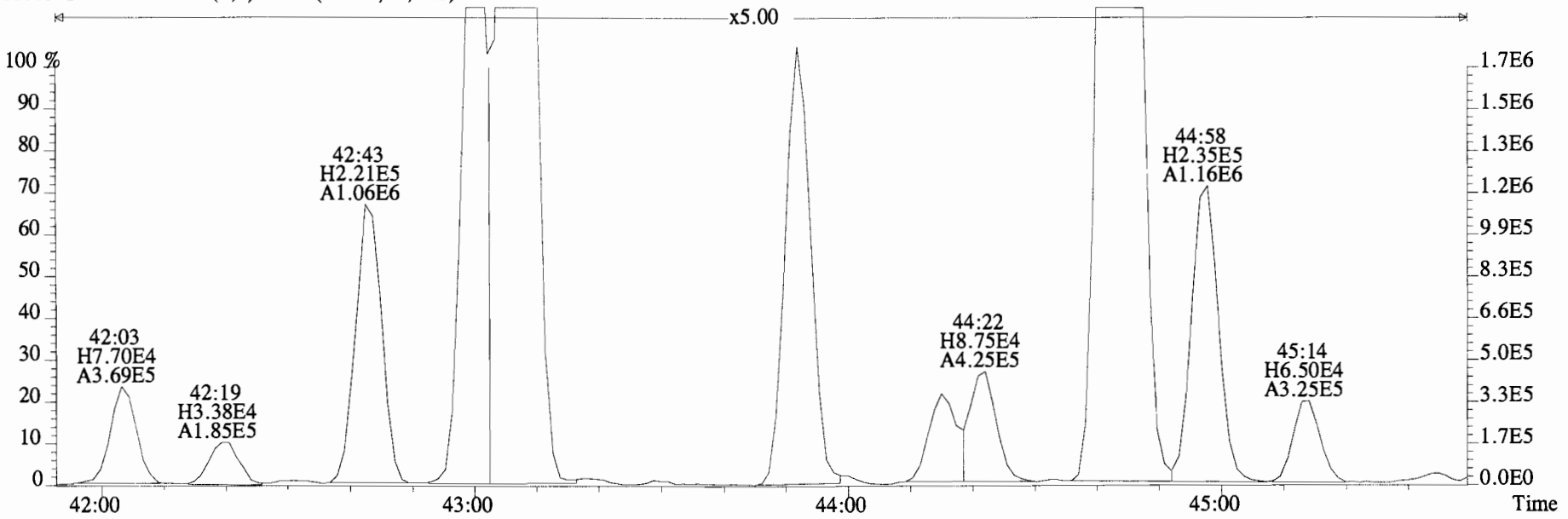
File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)



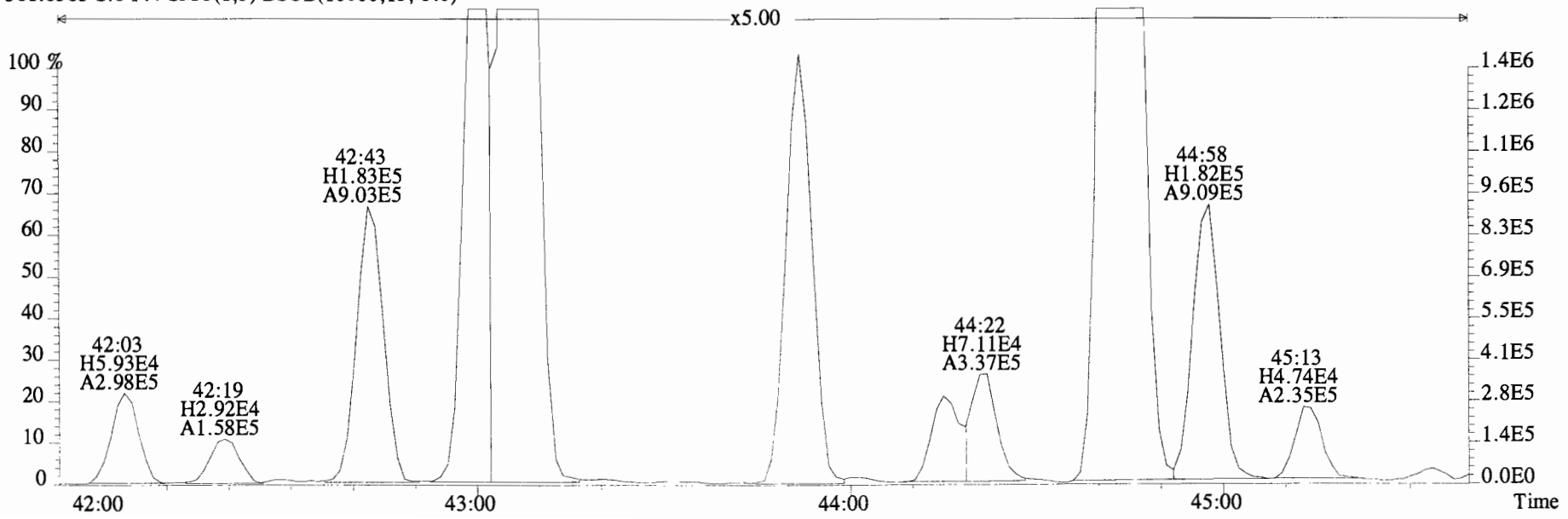
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)

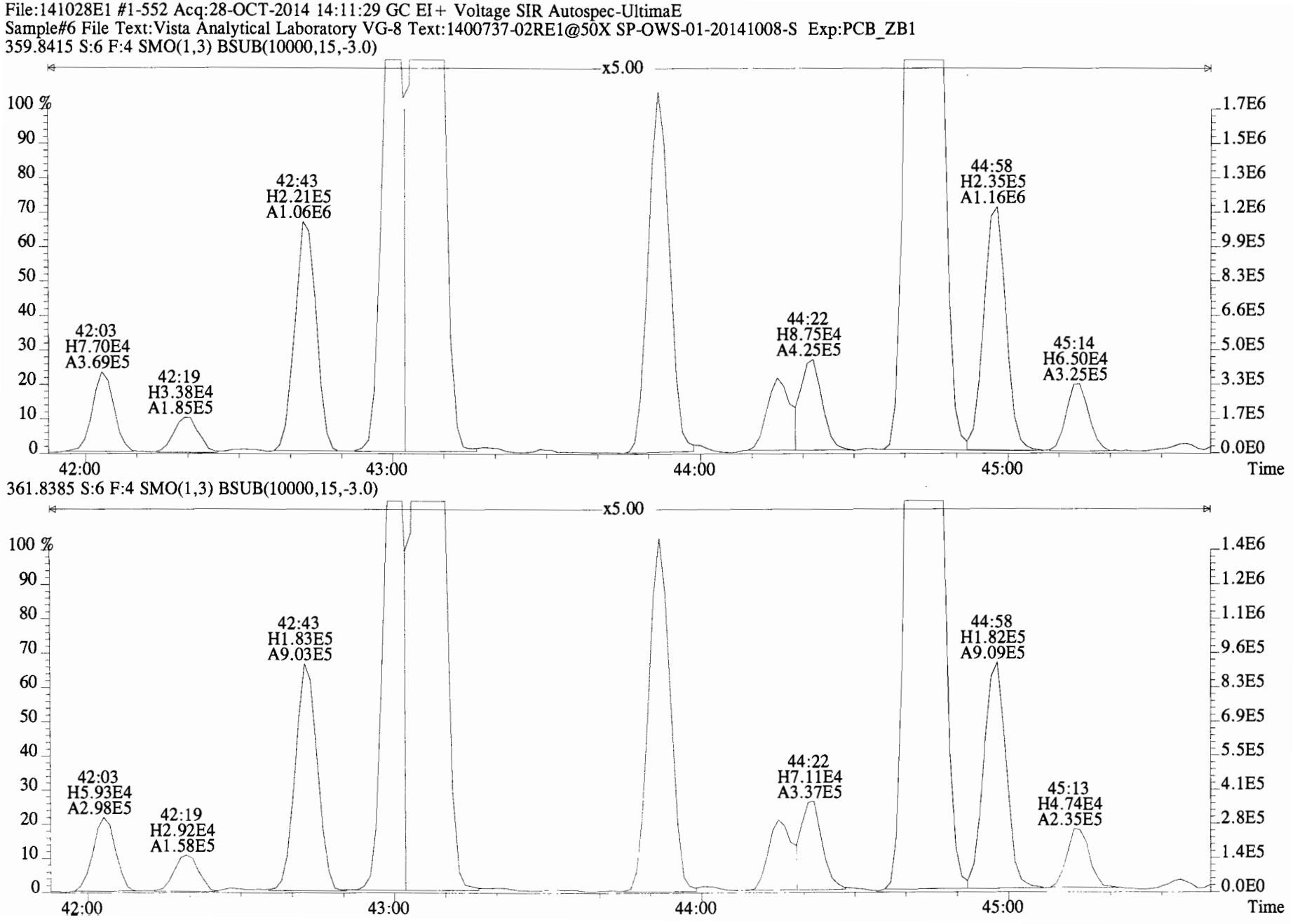


File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)

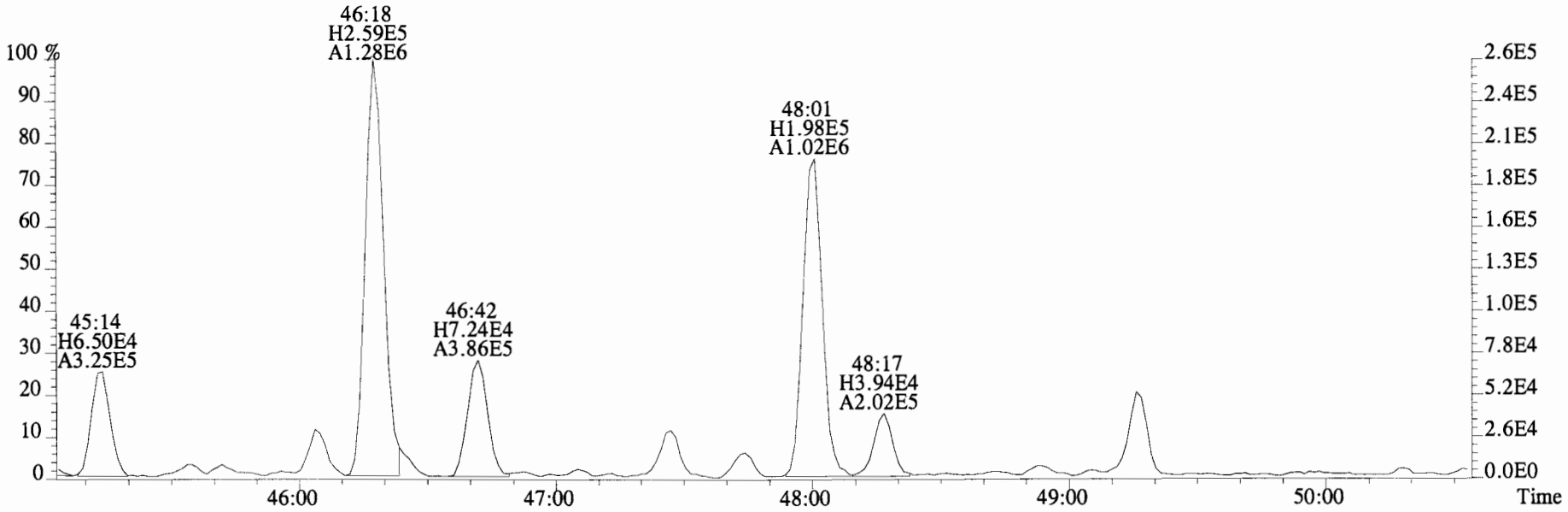


361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)

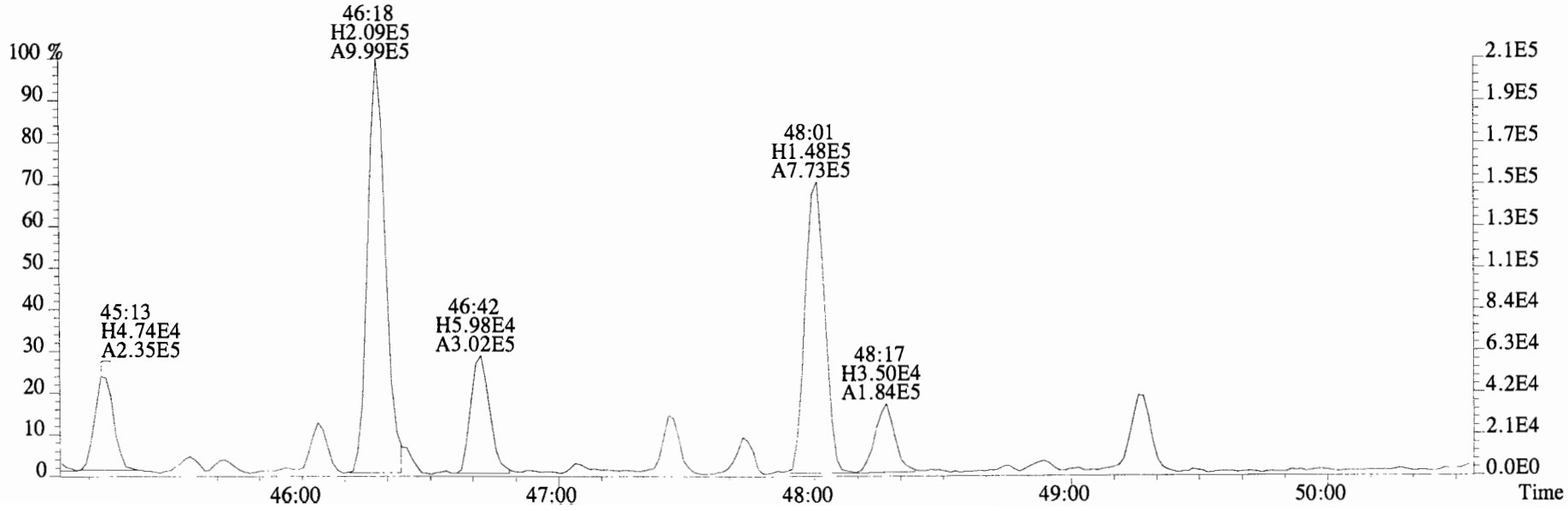


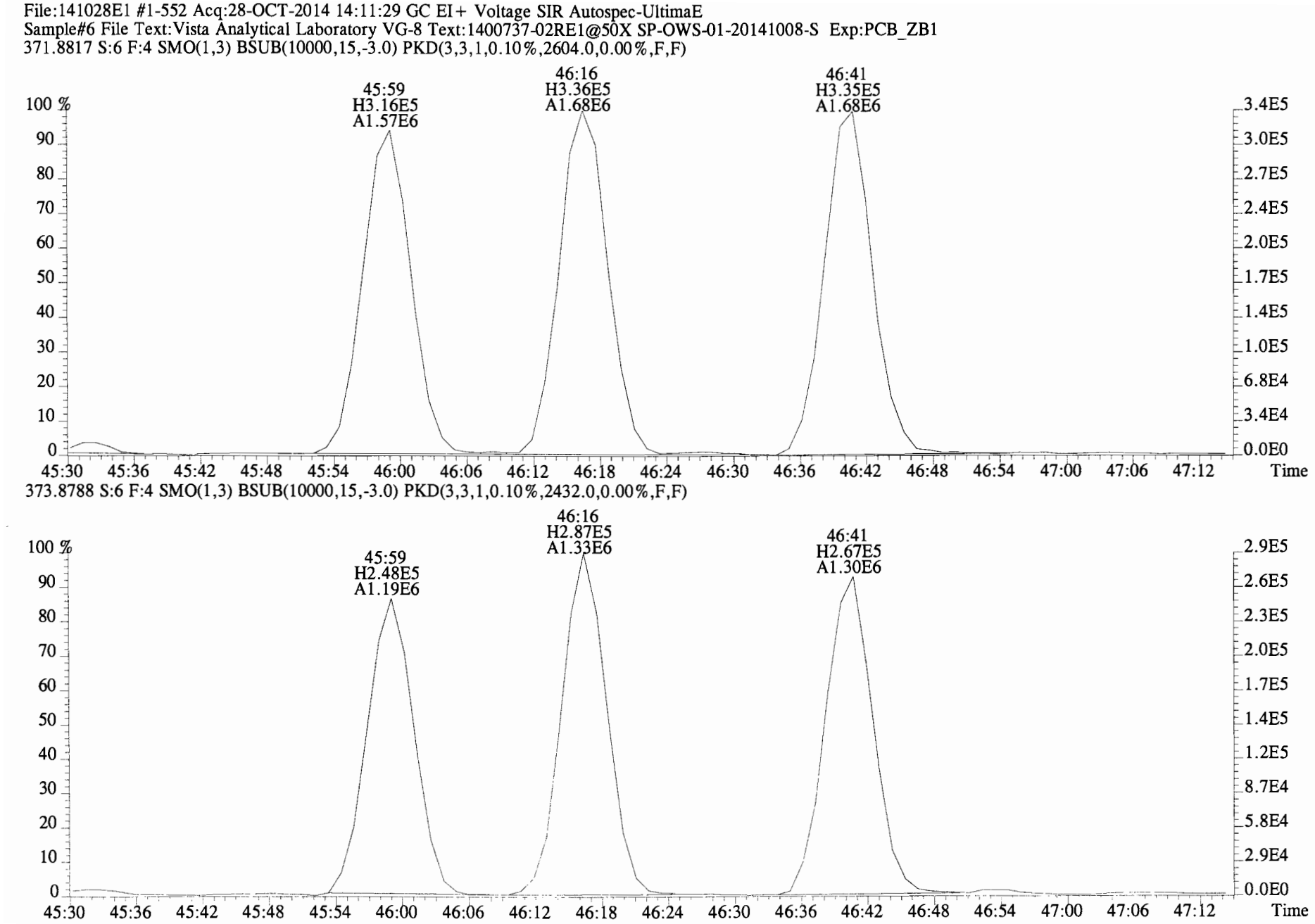

File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
1.7E6
1.5E6
1.3E6
1.2E6
9.9E5
8.3E5
6.6E5
5.0E5
3.3E5
1.7E5
0.0E0
42:03
H7.70E4
A3.69E5
42:19
H3.38E4
A1.85E5
42:43
H2.21E5
A1.06E6
44:22
H8.75E4
A4.25E5
44:58
H2.35E5
A1.16E6
45:14
H6.50E4
A3.25E5
42:00
43:00
44:00
45:00
Time
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
1.4E6
1.2E6
1.1E6
9.6E5
8.3E5
6.9E5
5.5E5
4.1E5
2.8E5
1.4E5
0.0E0
42:03
H5.93E4
A2.98E5
42:19
H2.92E4
A1.58E5
42:43
H1.83E5
A9.03E5
44:22
H7.11E4
A3.37E5
44:58
H1.82E5
A9.09E5
45:13
H4.74E4
A2.35E5
42:00
43:00
44:00
45:00
Time

File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)

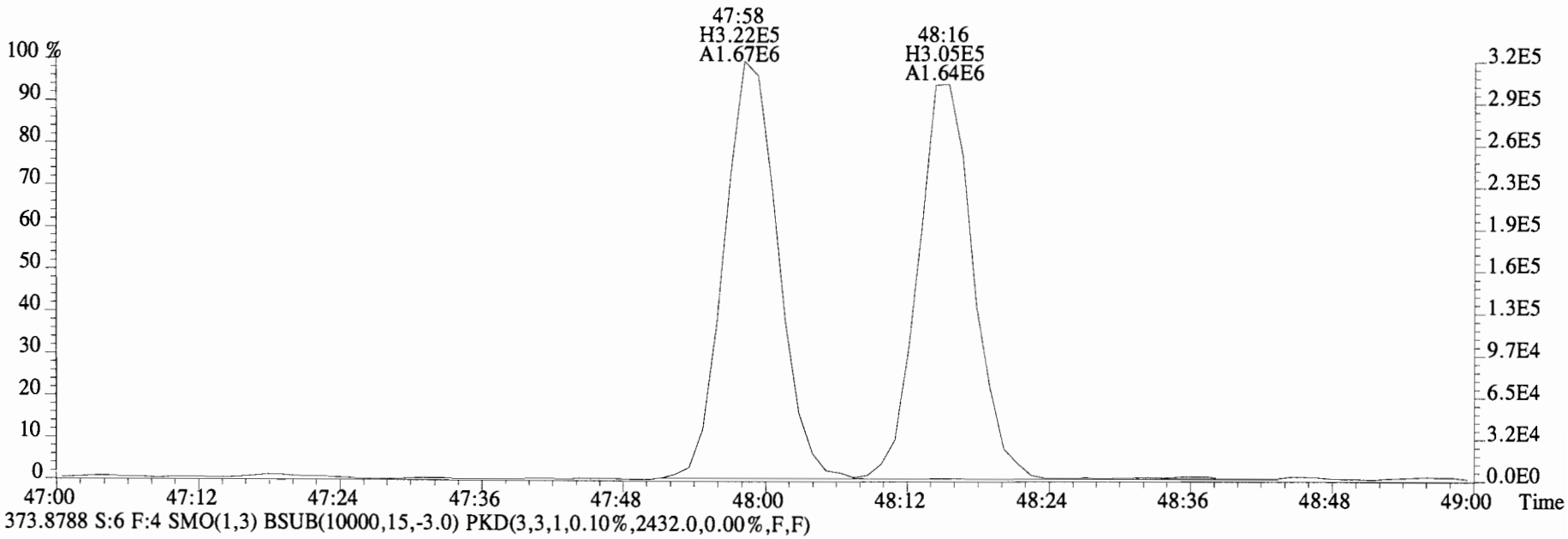


361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0)

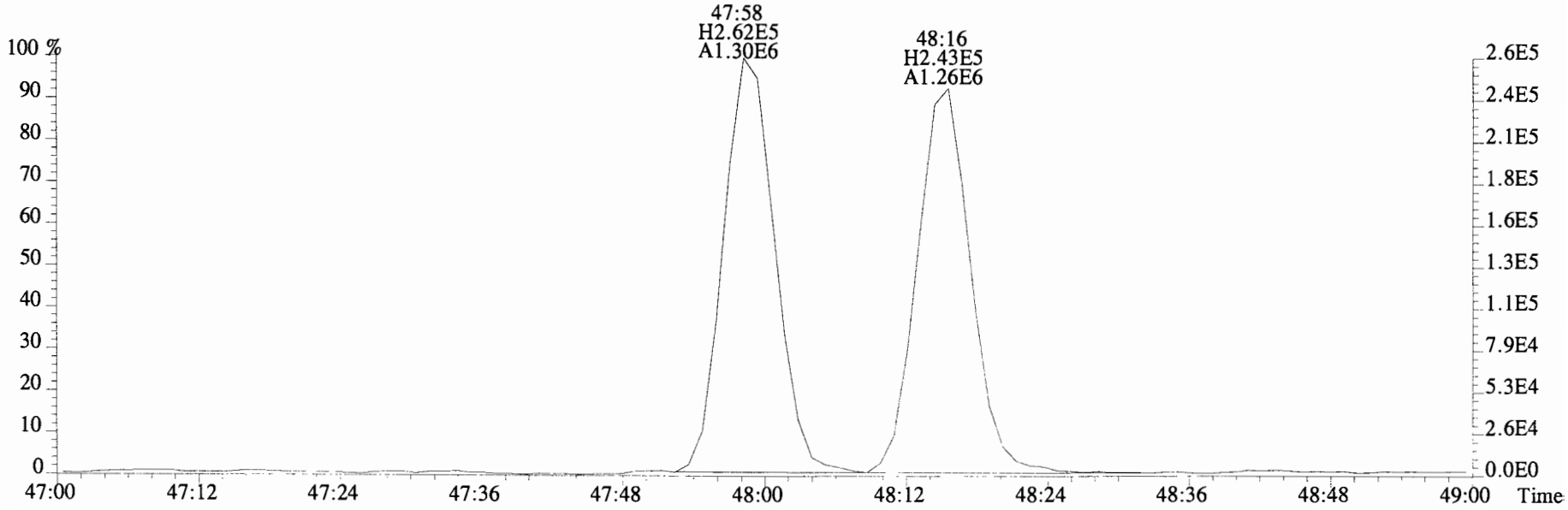



File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2604.0,0.00%,F,F)
45:59
H3.16E5
A1.57E6
46:16
H3.36E5
A1.68E6
46:41
H3.35E5
A1.68E6
100 %
90
80
70
60
50
40
30
20
10
0
3.4E5
3.0E5
2.7E5
2.4E5
2.0E5
1.7E5
1.4E5
1.0E5
6.8E4
3.4E4
0.0E0
45:30
45:36
45:42
45:48
45:54
46:00
46:06
46:12
46:18
46:24
46:30
46:36
46:42
46:48
46:54
47:00
47:06
47:12
Time
373.8788 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2432.0,0.00%,F,F)
45:59
H2.48E5
A1.19E6
46:16
H2.87E5
A1.33E6
46:41
H2.67E5
A1.30E6
100 %
90
80
70
60
50
40
30
20
10
0
2.9E5
2.6E5
2.3E5
2.0E5
1.7E5
1.4E5
1.2E5
8.7E4
5.8E4
2.9E4
0.0E0
45:30
45:36
45:42
45:48
45:54
46:00
46:06
46:12
46:18
46:24
46:30
46:36
46:42
46:48
46:54
47:00
47:06
47:12
Time

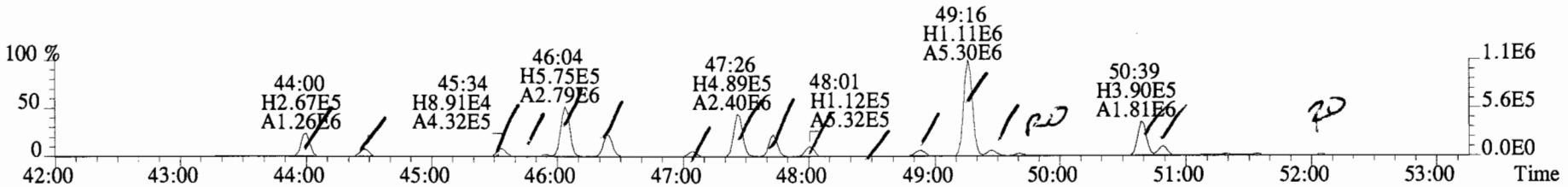
File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2604.0,0.00%,F,F)



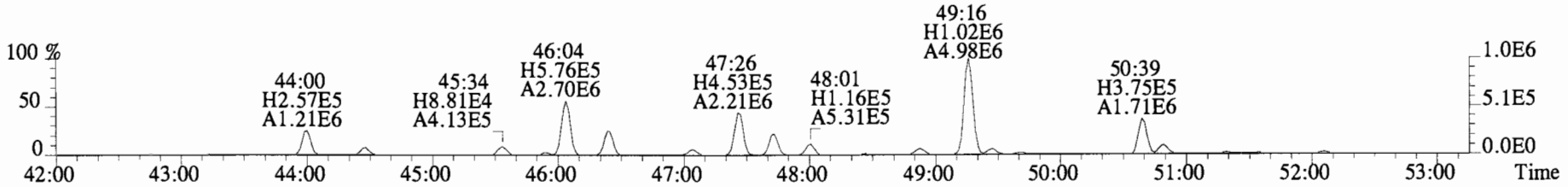
373.8788 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2432.0,0.00%,F,F)



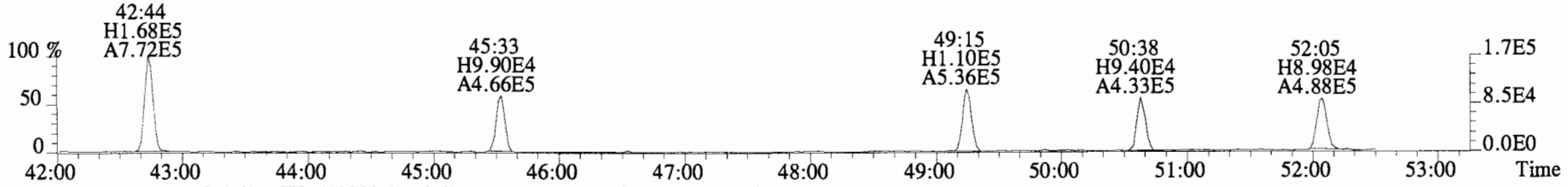
File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2120.0,0.00%,F,F)



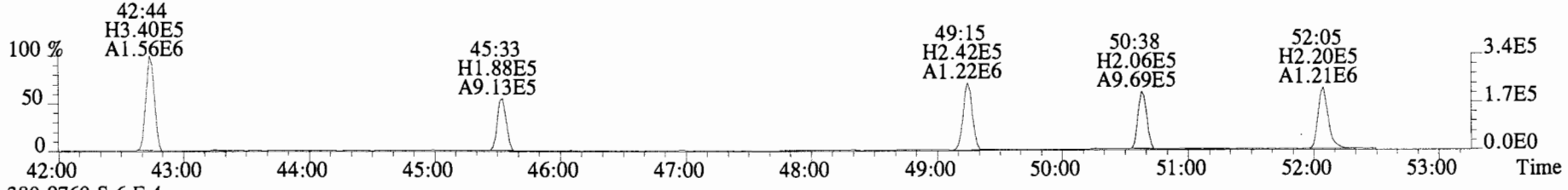
395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1820.0,0.00%,F,F)



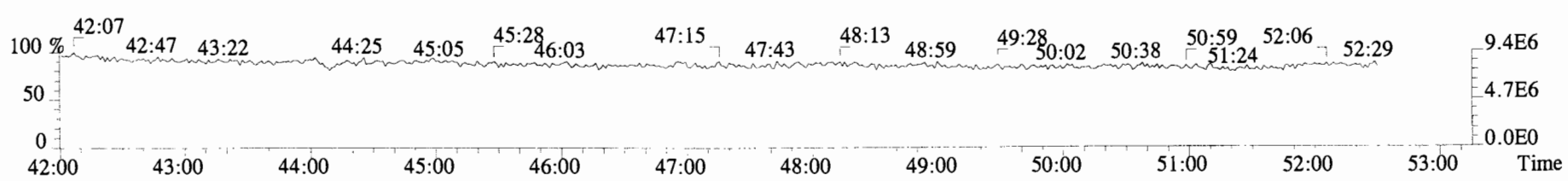
403.8457 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2020.0,0.00%,F,F)



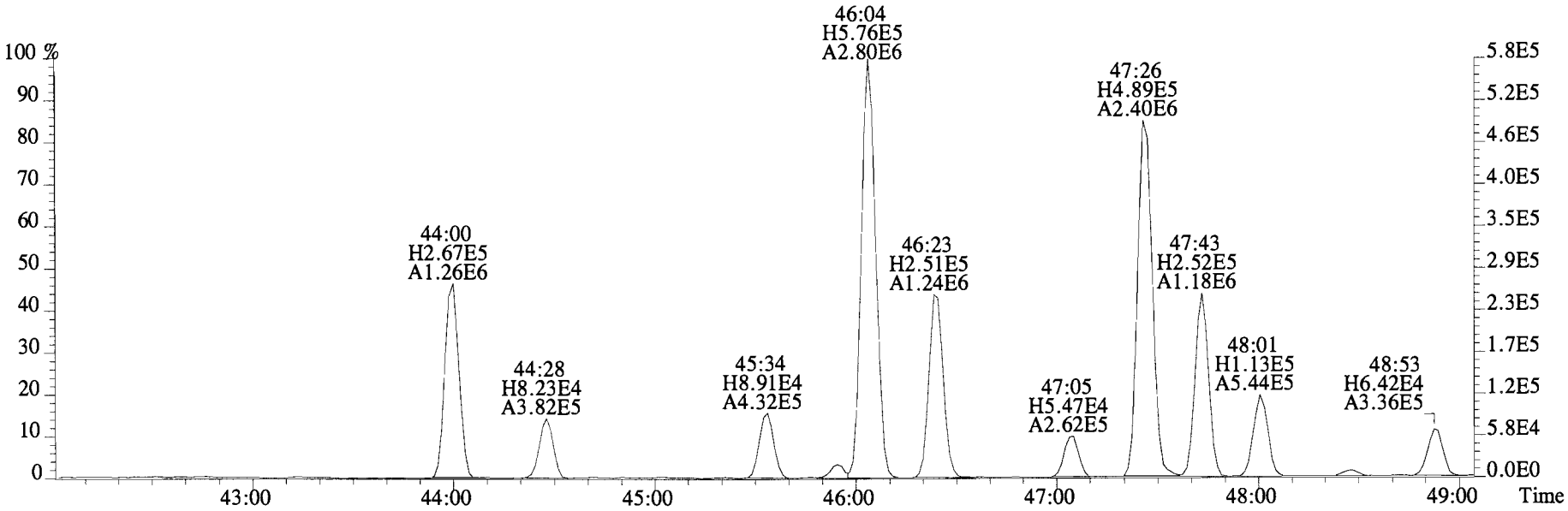
405.8428 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2328.0,0.00%,F,F)



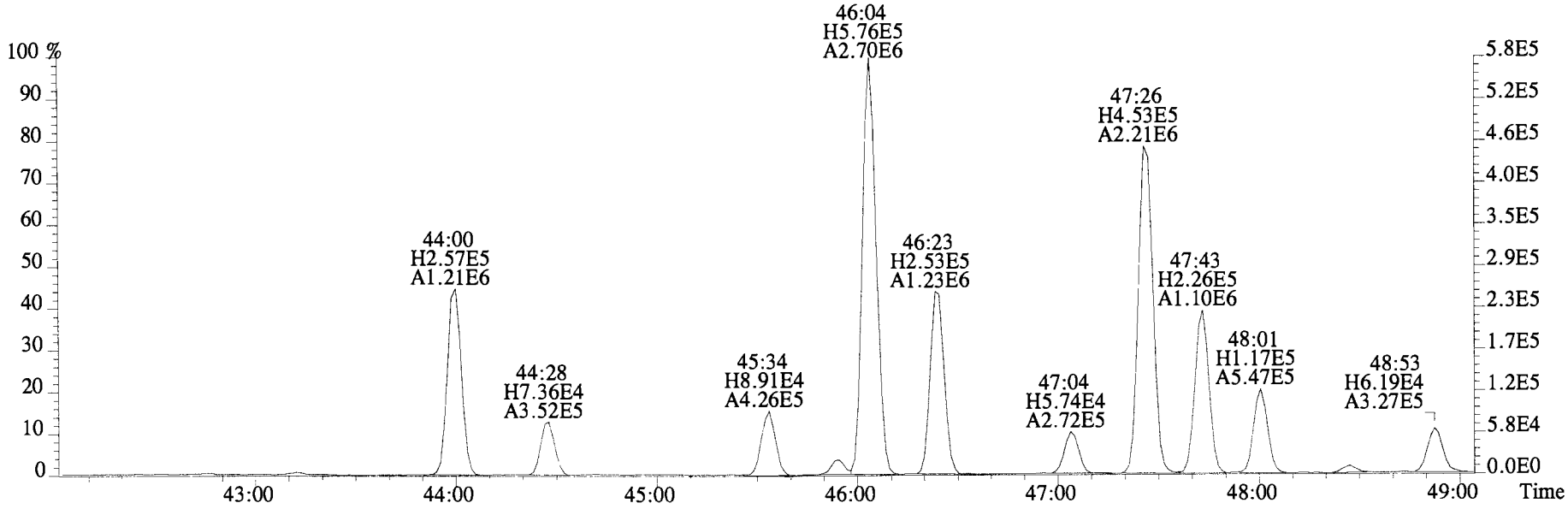
380.9760 S:6 F:4

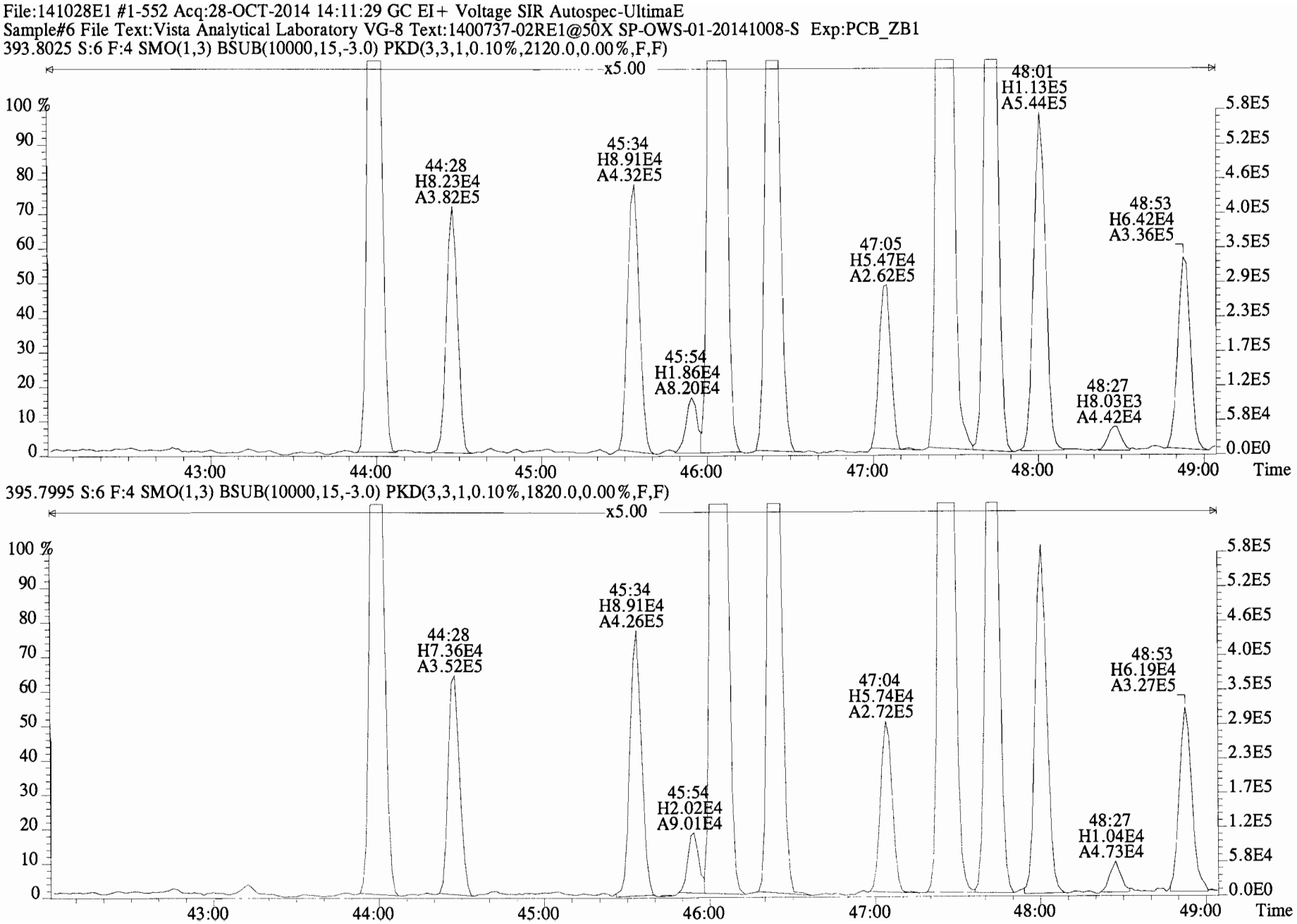


File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2120.0,0.00%,F,F)

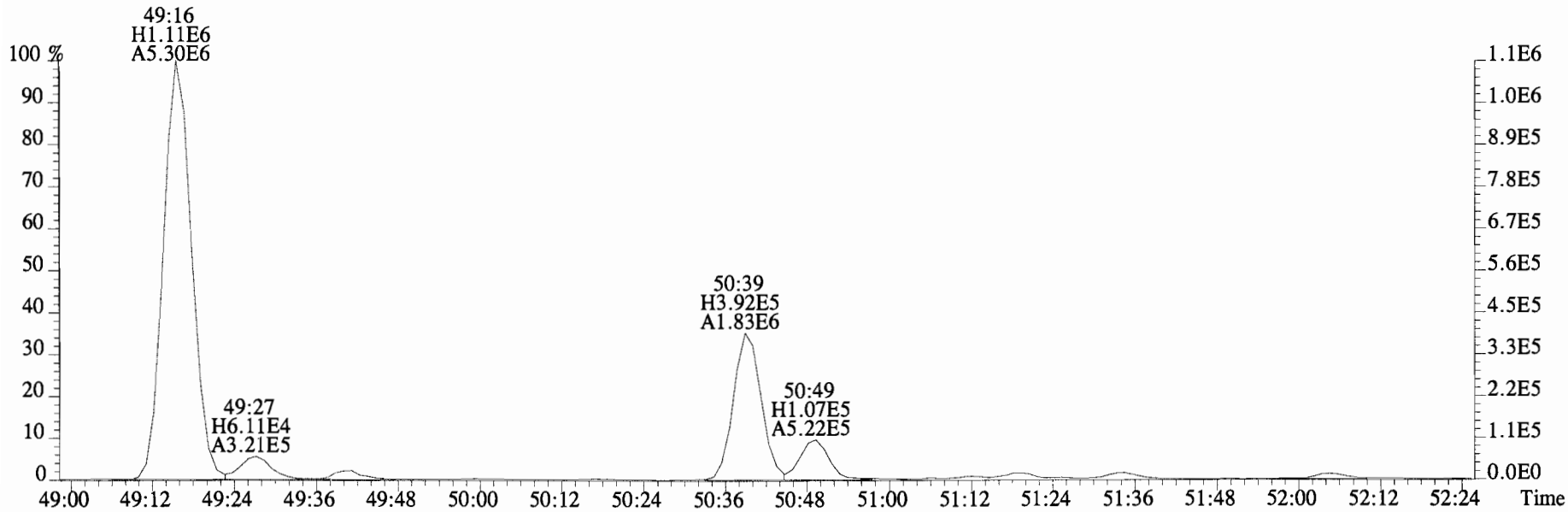


395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1820.0,0.00%,F,F)

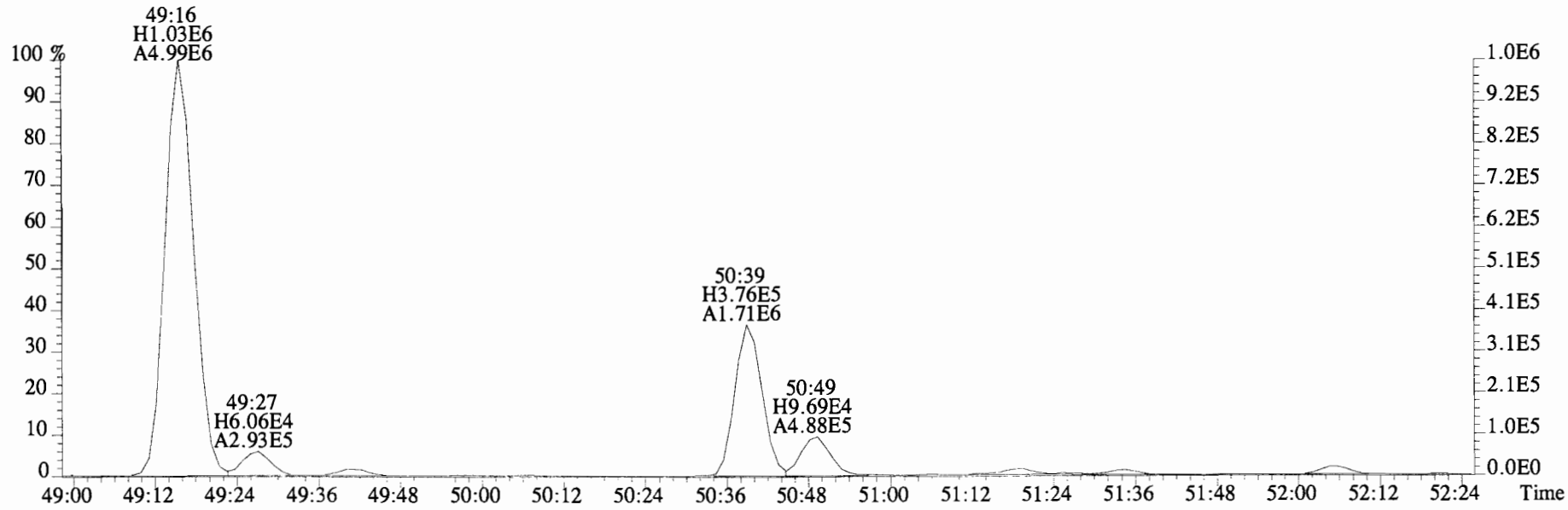


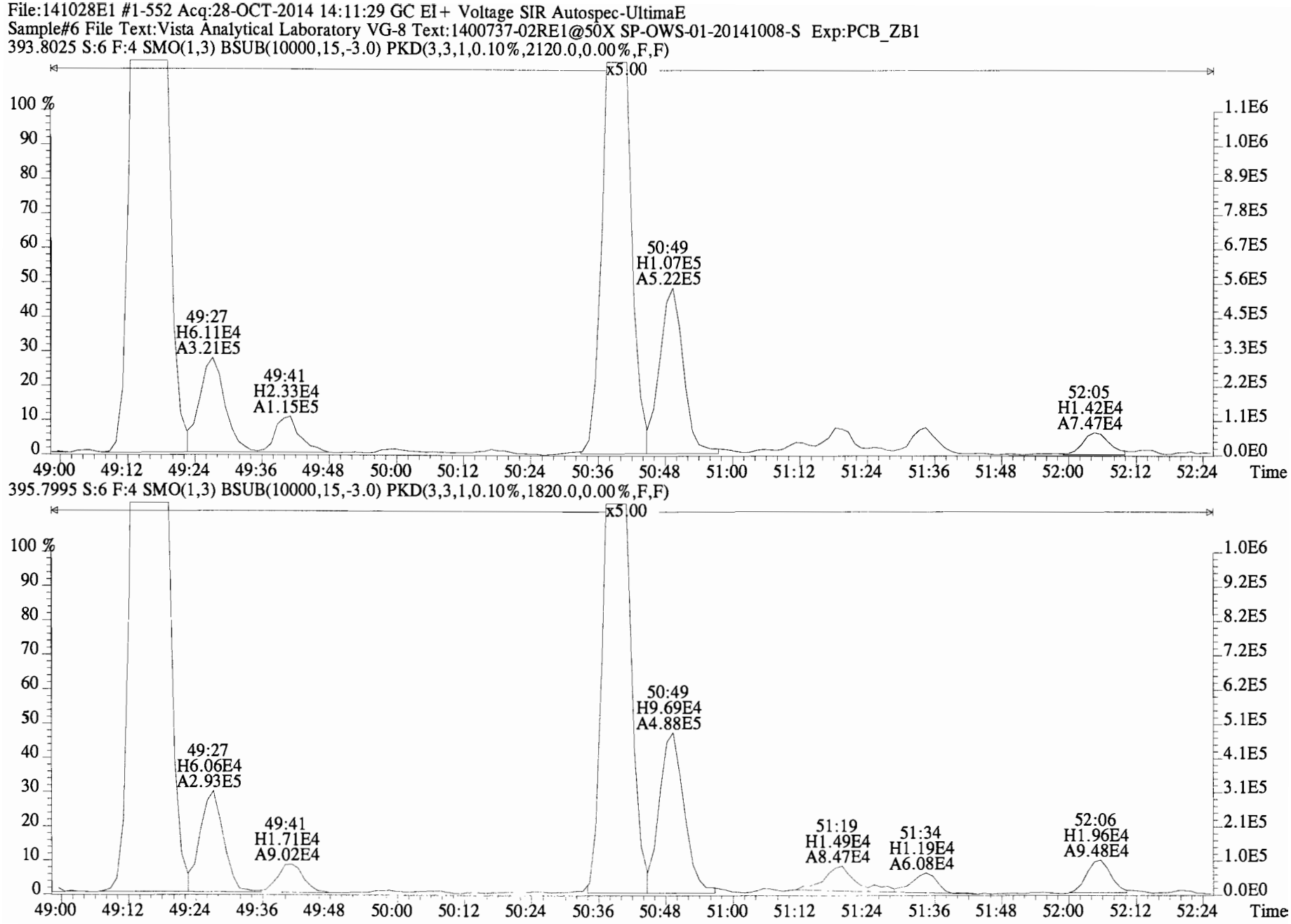

File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2120.0,0.00%,F,F)
x5.00
44:28 H8.23E4 A3.82E5
45:34 H8.91E4 A4.32E5
45:54 H1.86E4 A8.20E4
47:05 H5.47E4 A2.62E5
48:01 H1.13E5 A5.44E5
48:27 H8.03E3 A4.42E4
48:53 H6.42E4 A3.36E5
100 %
90
80
70
60
50
40
30
20
10
0
5.8E5
5.2E5
4.6E5
4.0E5
3.5E5
2.9E5
2.3E5
1.7E5
1.2E5
5.8E4
0.0E0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1820.0,0.00%,F,F)
x5.00
44:28 H7.36E4 A3.52E5
45:34 H8.91E4 A4.26E5
45:54 H2.02E4 A9.01E4
47:04 H5.74E4 A2.72E5
48:27 H1.04E4 A4.73E4
48:53 H6.19E4 A3.27E5
100 %
90
80
70
60
50
40
30
20
10
0
5.8E5
5.2E5
4.6E5
4.0E5
3.5E5
2.9E5
2.3E5
1.7E5
1.2E5
5.8E4
0.0E0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2120.0,0.00%,F,F)

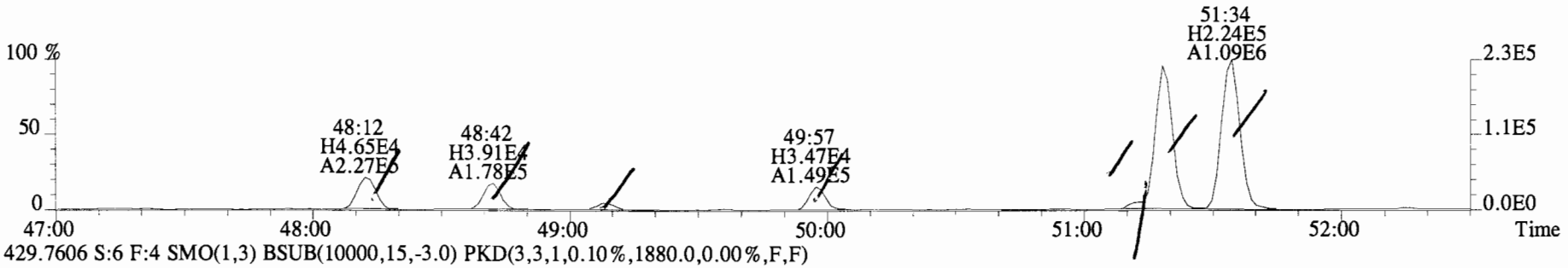


395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1820.0,0.00%,F,F)

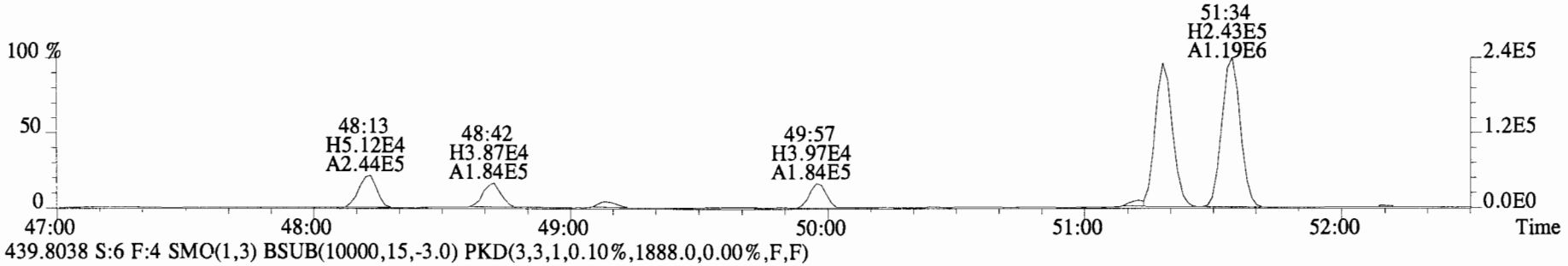



File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2120.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
1.1E6
1.0E6
8.9E5
7.8E5
6.7E5
5.6E5
4.5E5
3.3E5
2.2E5
1.1E5
0.0E0
49:27
H6.11E4
A3.21E5
49:41
H2.33E4
A1.15E5
50:49
H1.07E5
A5.22E5
52:05
H1.42E4
A7.47E4
49:00
49:12
49:24
49:36
49:48
50:00
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
52:24
Time
395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1820.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
1.0E6
9.2E5
8.2E5
7.2E5
6.2E5
5.1E5
4.1E5
3.1E5
2.1E5
1.0E5
0.0E0
49:27
H6.06E4
A2.93E5
49:41
H1.71E4
A9.02E4
50:49
H9.69E4
A4.88E5
51:19
H1.49E4
A8.47E4
51:34
H1.19E4
A6.08E4
52:06
H1.96E4
A9.48E4
49:00
49:12
49:24
49:36
49:48
50:00
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
52:24
Time

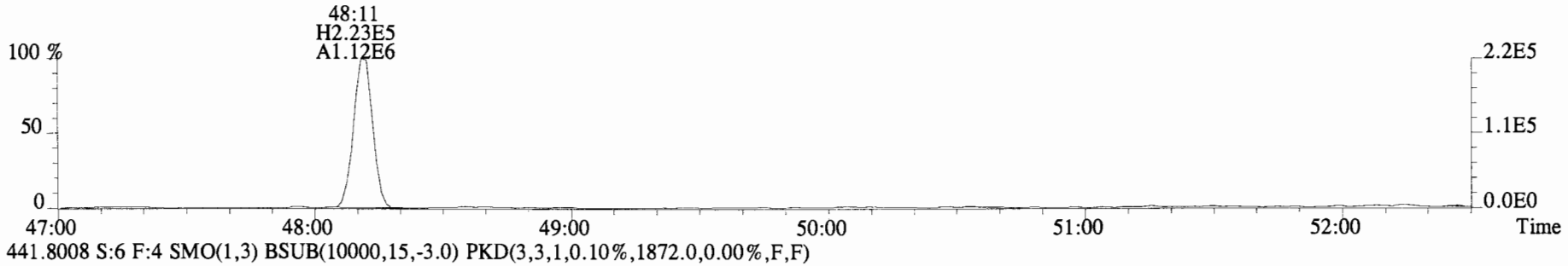
File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
427.7635 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)



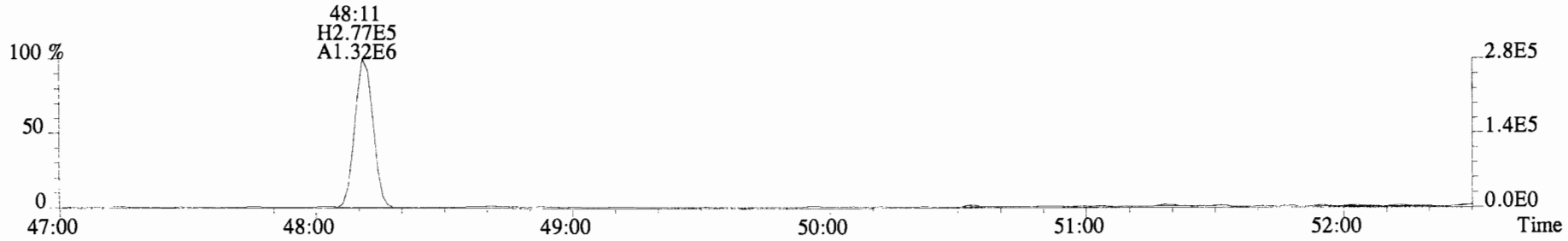
429.7606 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1880.0,0.00%,F,F)



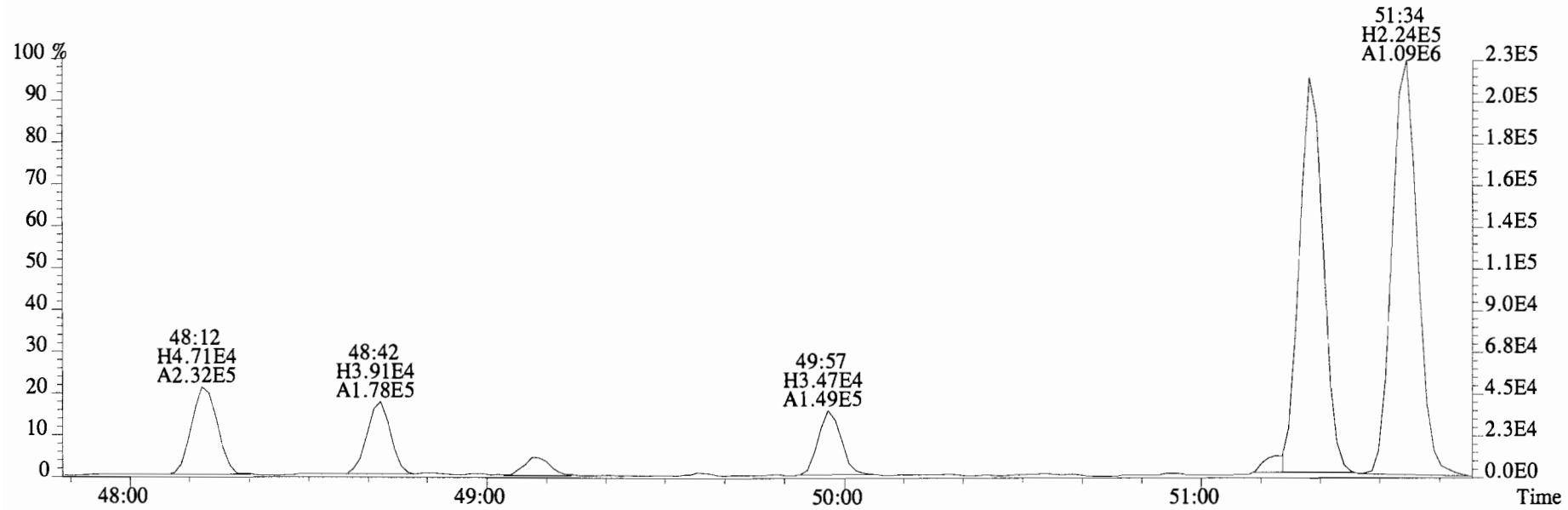
439.8038 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1888.0,0.00%,F,F)



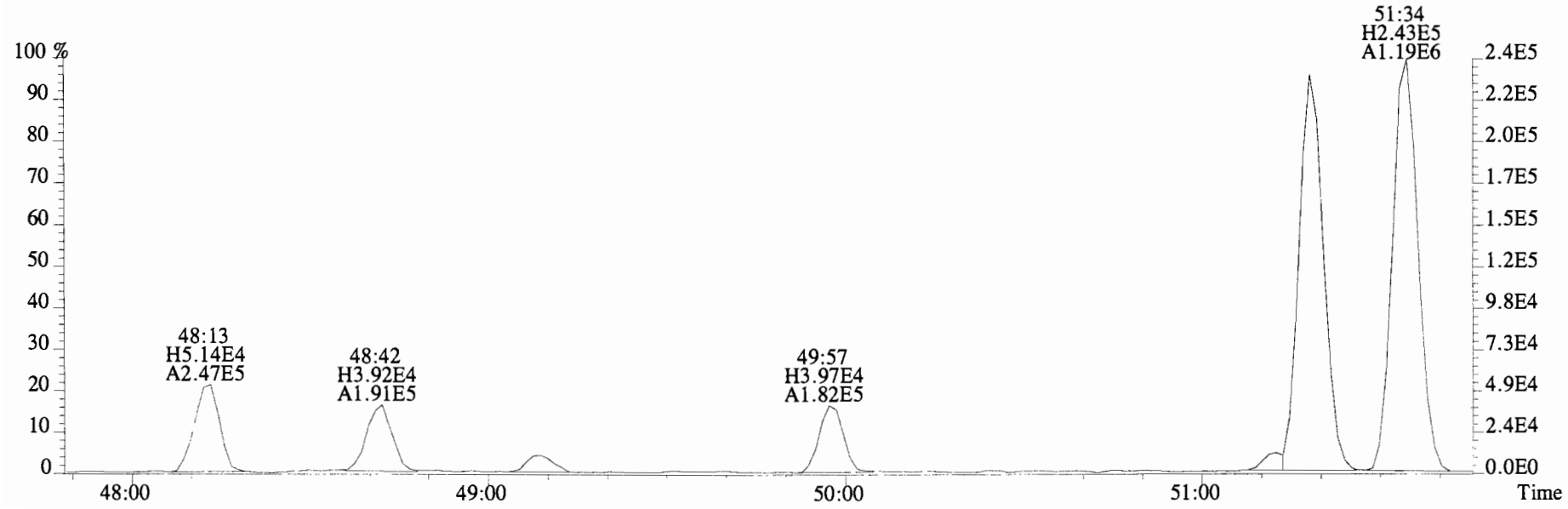
441.8008 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1872.0,0.00%,F,F)

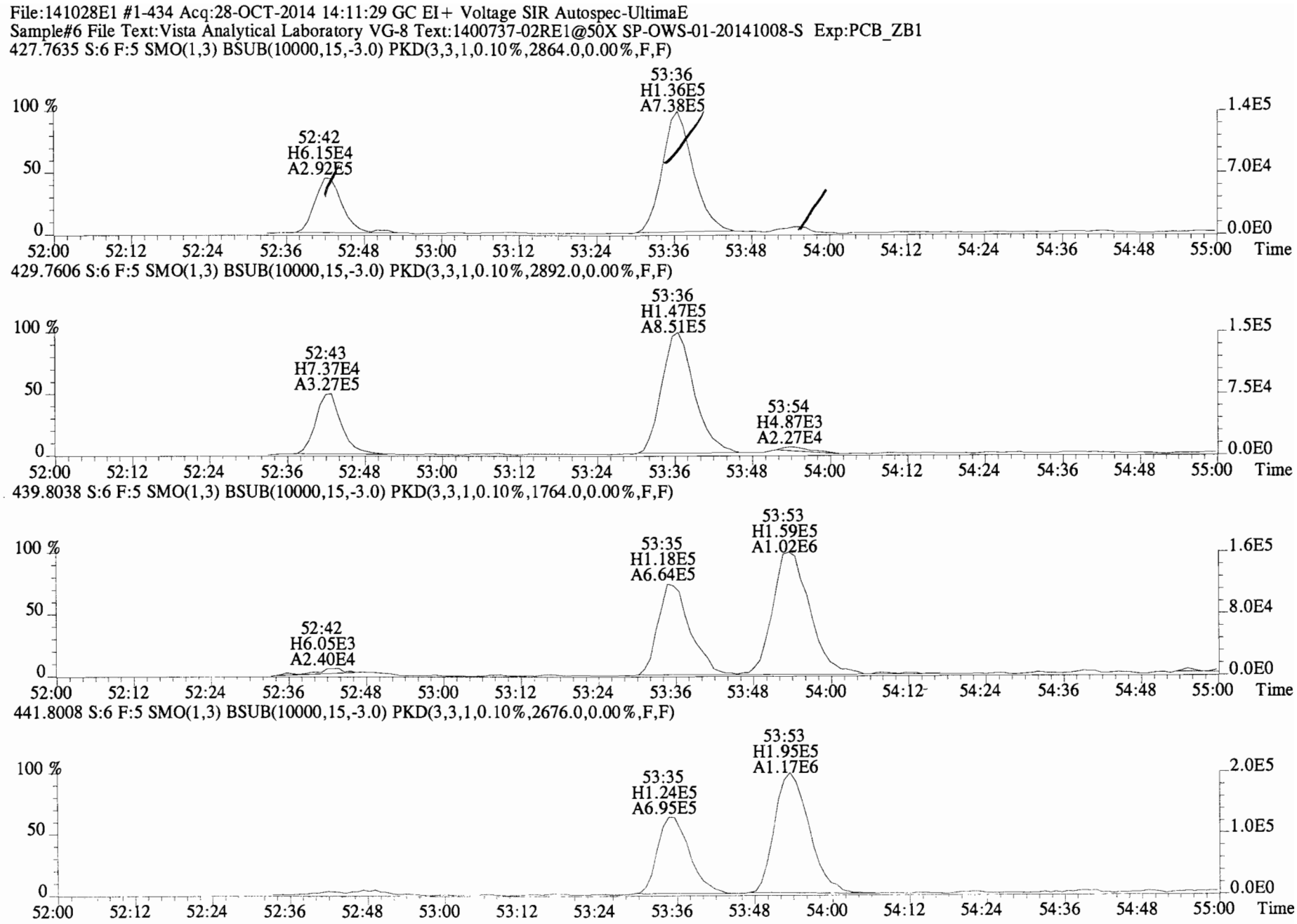


File:141028E1 #1-552 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
427.7635 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)

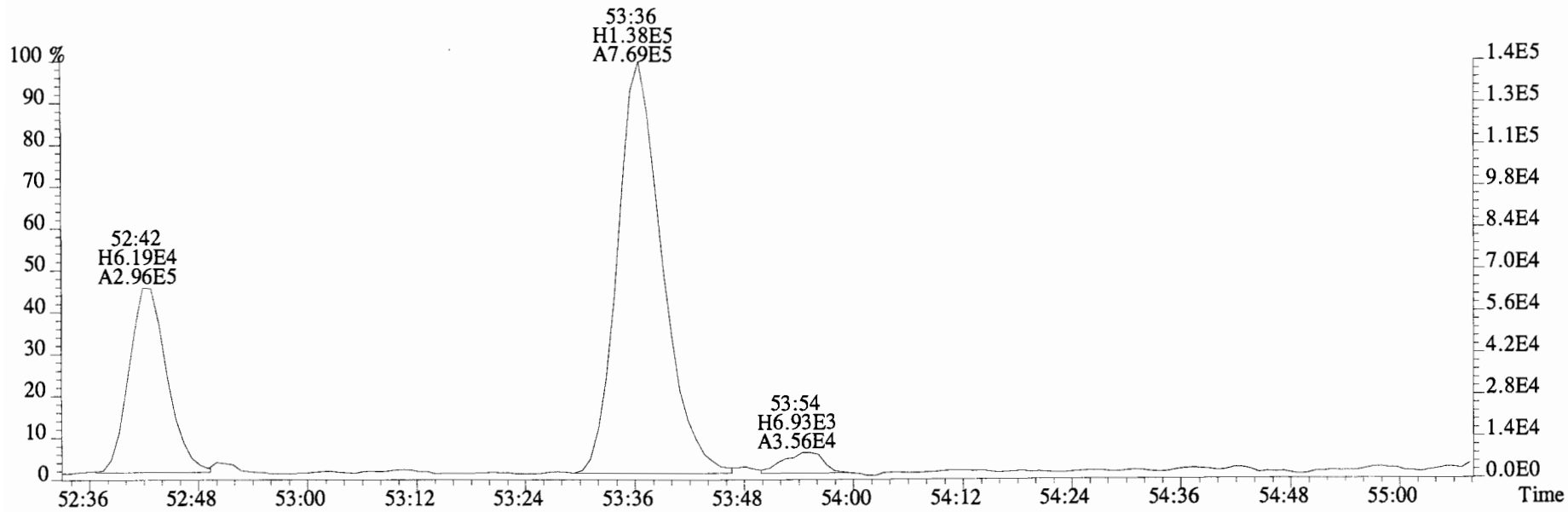


429.7606 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1880.0,0.00%,F,F)

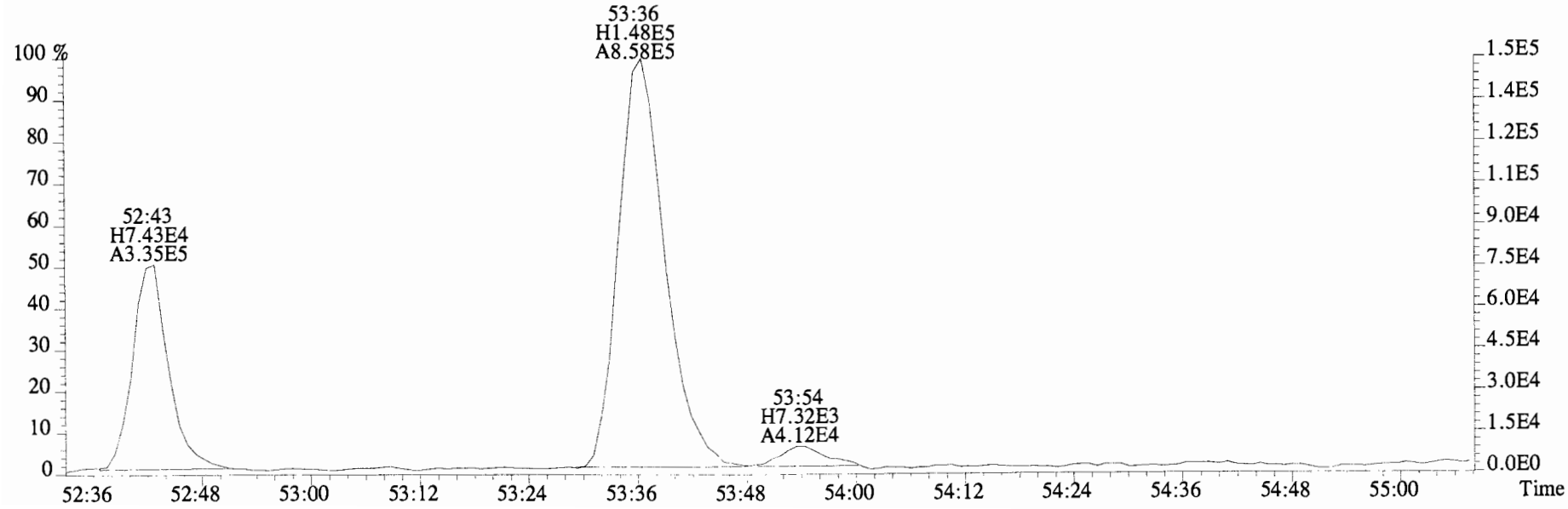



File:141028E1 #1-434 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
427.7635 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2864.0,0.00%,F,F)
53:36
H1.36E5
A7.38E5
52:42
H6.15E4
A2.92E5
100 %
50
0
1.4E5
7.0E4
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time
429.7606 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2892.0,0.00%,F,F)
53:36
H1.47E5
A8.51E5
52:43
H7.37E4
A3.27E5
53:54
H4.87E3
A2.27E4
100 %
50
0
1.5E5
7.5E4
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time
439.8038 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1764.0,0.00%,F,F)
53:53
H1.59E5
A1.02E6
53:35
H1.18E5
A6.64E5
52:42
H6.05E3
A2.40E4
100 %
50
0
1.6E5
8.0E4
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time
441.8008 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2676.0,0.00%,F,F)
53:53
H1.95E5
A1.17E6
53:35
H1.24E5
A6.95E5
100 %
50
0
2.0E5
1.0E5
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time

File:141028E1 #1-434 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
427.7635 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2864.0,0.00%,F,F)

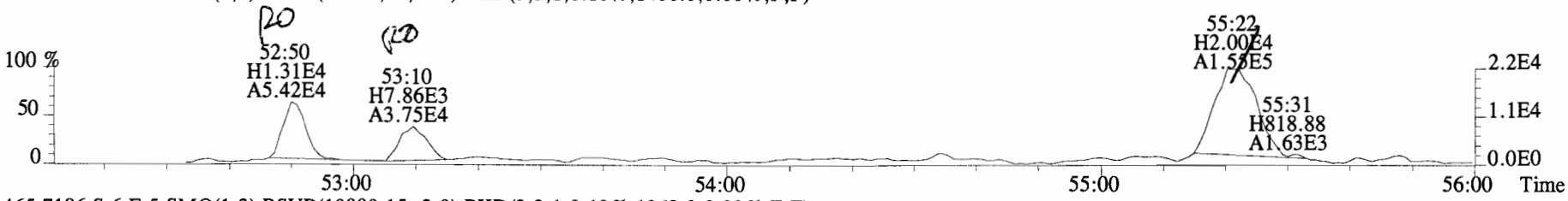


429.7606 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2892.0,0.00%,F,F)

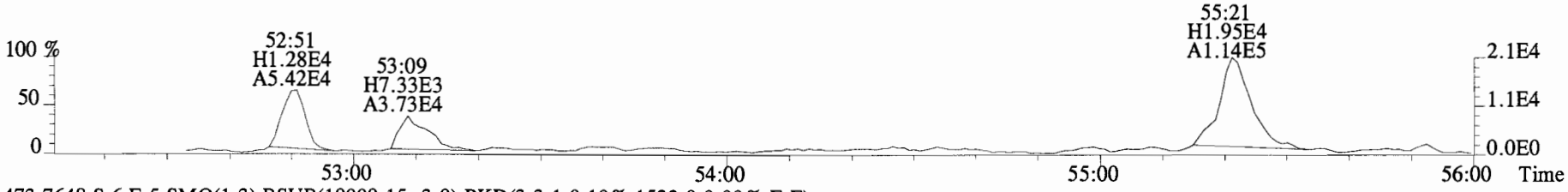


File:141028E1 #1-434 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1

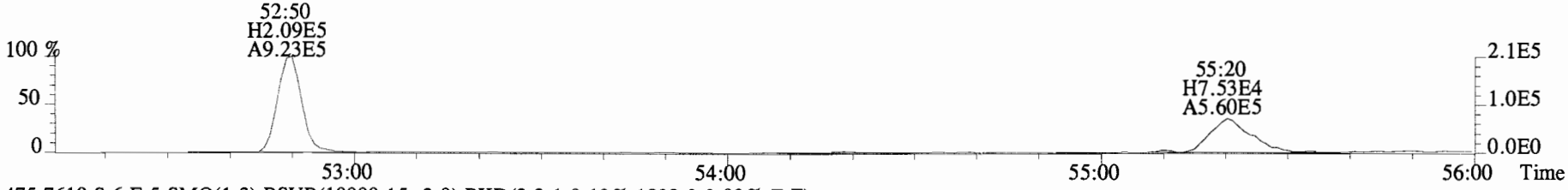
463.7216 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1408.0,0.00%,F,F)



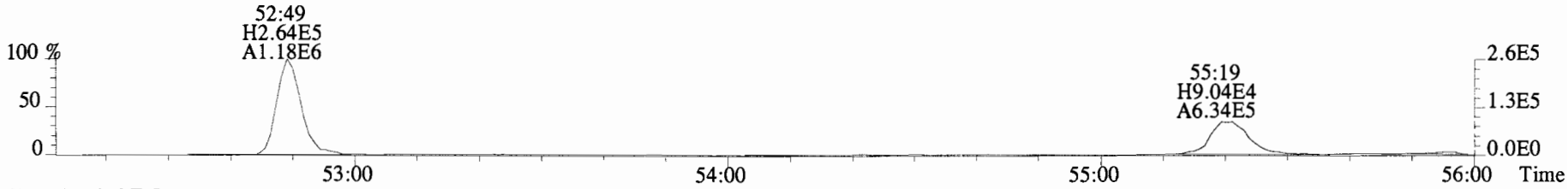
465.7186 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1268.0,0.00%,F,F)



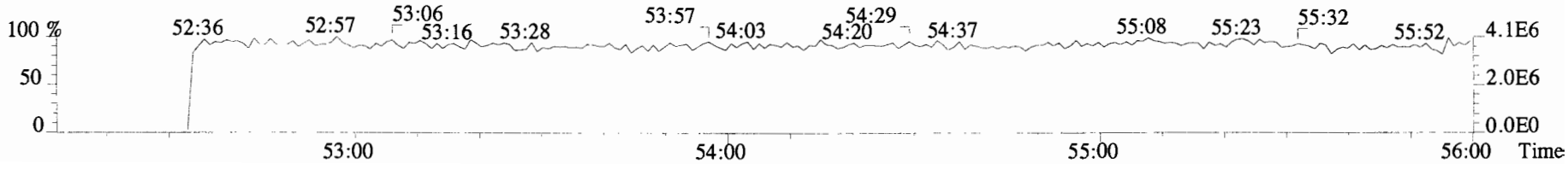
473.7648 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1532.0,0.00%,F,F)



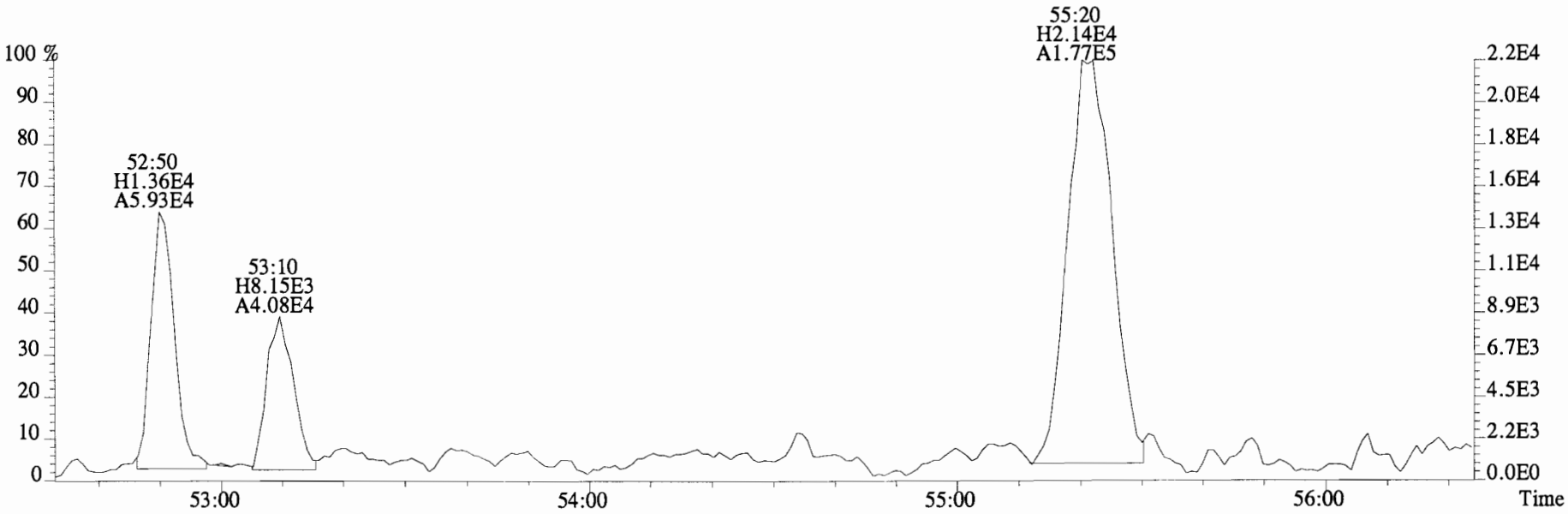
475.7619 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1828.0,0.00%,F,F)



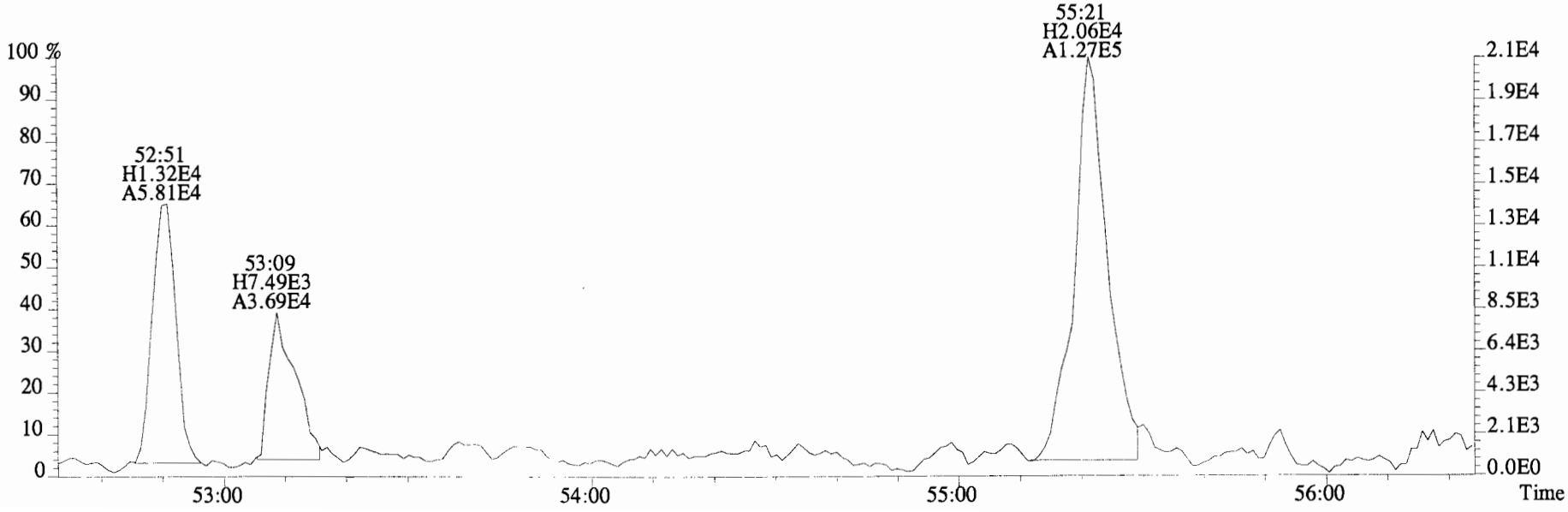
492.9697 S:6 F:5



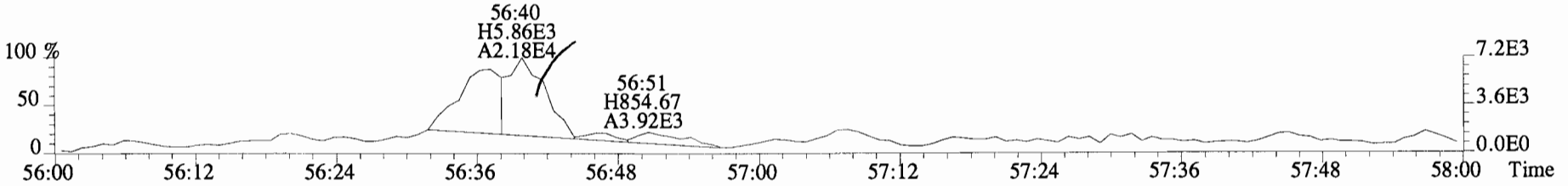
File:141028E1 #1-434 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
463.7216 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1408.0,0.00%,F,F)



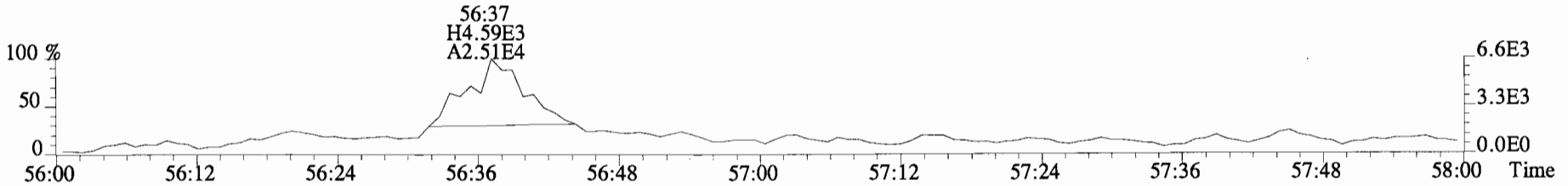
465.7186 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1268.0,0.00%,F,F)



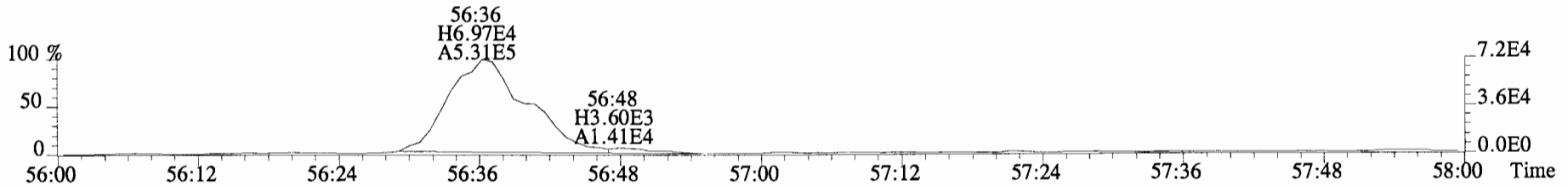
File:141028E1 #1-434 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
497.6826 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1348.0,0.00%,F,F)



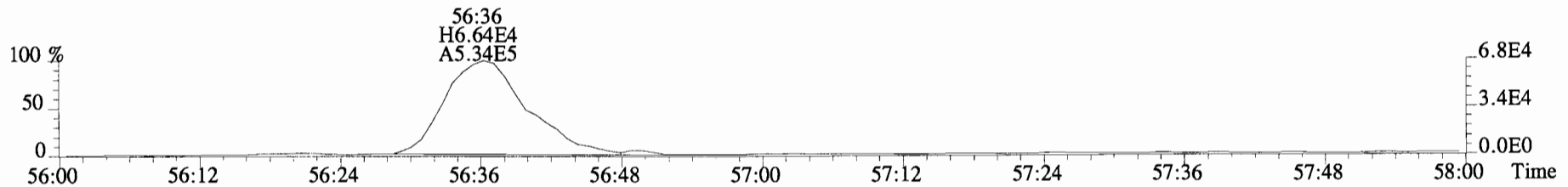
499.6797 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1408.0,0.00%,F,F)



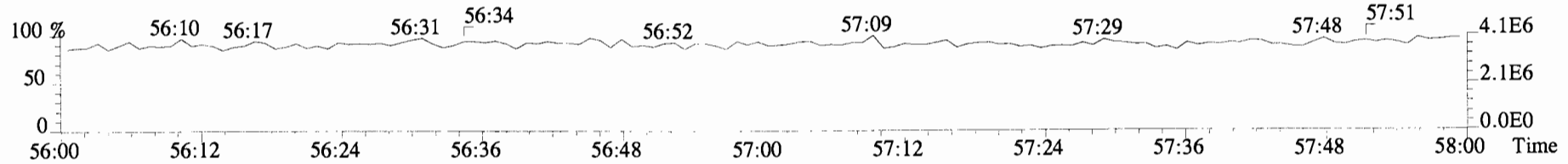
509.7229 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1396.0,0.00%,F,F)



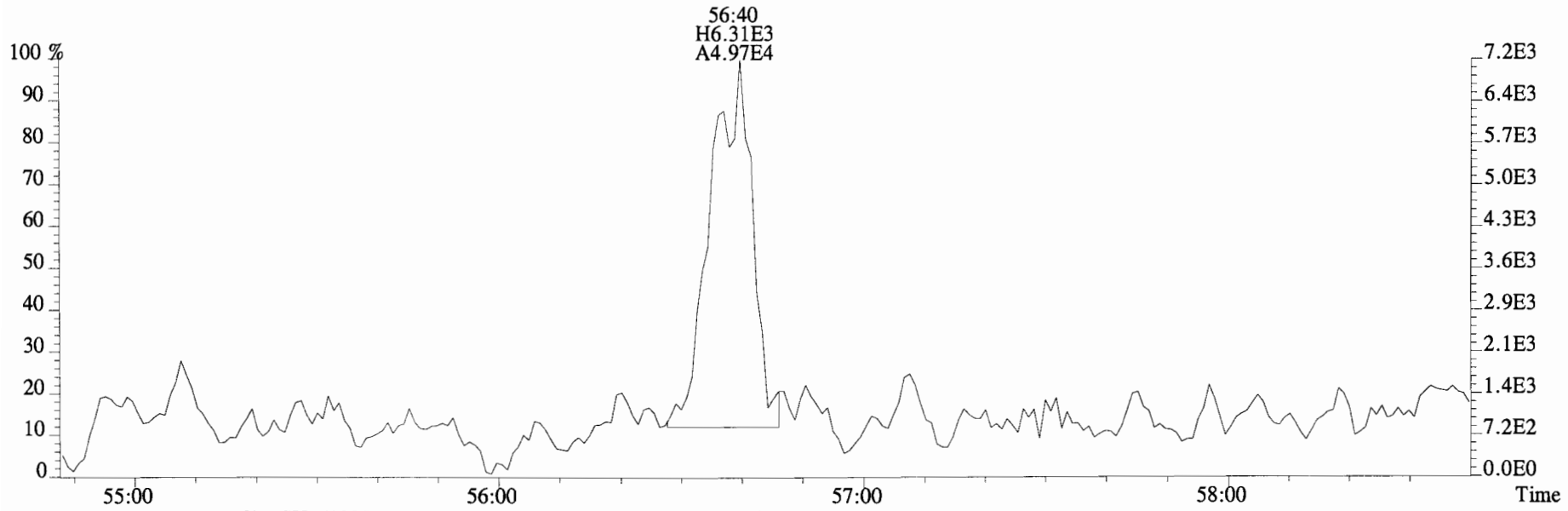
511.7199 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1480.0,0.00%,F,F)



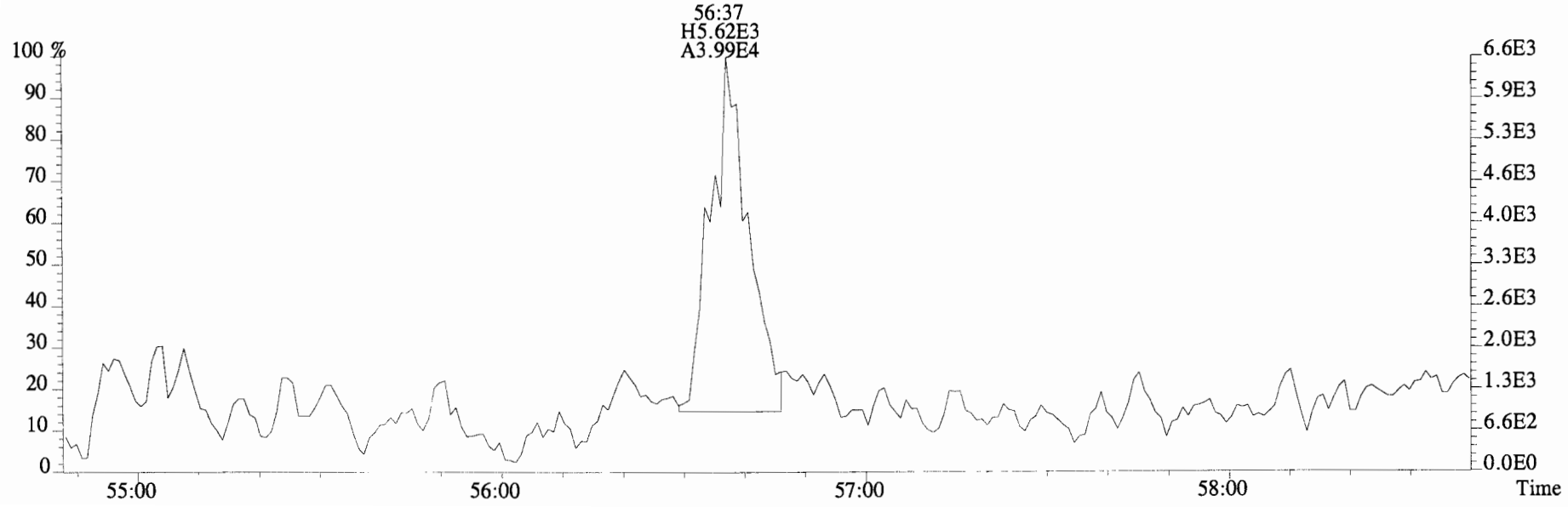
492.9697 S:6 F:5



File:141028E1 #1-434 Acq:28-OCT-2014 14:11:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400737-02RE1@50X SP-OWS-01-20141008-S Exp:PCB_ZB1
497.6826 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1348.0,0.00%,F,F)



499.6797 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1408.0,0.00%,F,F)



Client ID: SP-CB-09-20141008-S Filename: 141028E1 S:8 Acq:28-OCT-14 16:18:27 ConCal: ST141028E1-1

Lab ID: 1400737-03RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.106 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n	NotF¶	1.19	*		1390	2.5	979	*	0.996	1.006
Mono	PCB-2	*	*	n	NotF¶	1.18	*		1390	2.5	1010	*	0.984	0.994
Mono	PCB-3	*	*	n	NotF¶	1.43	*		1390	2.5	843	*	0.996	1.006
Di	PCB-4/10	*	*	n	NotF¶	1.57	*		5900	2.5	4250	*	0.997	1.007
Di	PCB-7/9	*	*	n	NotF¶	1.21	*		5900	2.5	3420	*	0.866	0.874
Di	PCB-6	*	*	n	NotF¶	1.30	*		5900	2.5	3170	*	0.890	0.899
Di	PCB-5/8	8.00e+04	0.90	n	22:58	1.15	2020	R	*	2.5	*	0.911	0.907	0.917
Di	PCB-14	*	*	n	NotF¶	1.11	*		5900	2.5	3510	*	0.949	0.959
Di	PCB-11	2.01e+05	1.70	y	25:13	1.09	5210		*	2.5	*	1.000	0.995	1.005
Di	PCB-12/13	*	*	n	NotF¶	1.19	*		5900	2.5	3270	*	1.011	1.021
Di	PCB-15	*	*	n	NotF¶	1.28	*		5660	2.5	2920	*	1.023	1.033
Tri	PCB-19	*	*	n	NotF¶	1.04	*		1640	2.5	1190	*	0.996	1.006
Tri	PCB-30	*	*	n	NotF¶	1.71	*		1640	2.5	726	*	1.032	1.042
Tri	PCB-18	9.78e+04	1.15	y	25:51	0.78	3290		*	2.5	*	0.954	0.949	0.959
Tri	PCB-17	*	*	n	NotF¶	0.92	*		1640	2.5	981	*	0.956	0.966
Tri	PCB-24/27	*	*	n	NotF¶	1.19	*		1640	2.5	761	*	0.977	0.987
Tri	PCB-16/32	7.97e+04	1.04	y	27:05	0.94	2230		*	2.5	*	1.000	0.995	1.005
Tri	PCB-34	*	*	n	NotF¶	1.14	*		871	2.5	669	*	0.955	0.965
Tri	PCB-23	*	*	n	NotF¶	1.28	*		871	2.5	595	*	0.959	0.969
Tri	PCB-29	*	*	n	NotF¶	1.08	*		871	2.5	704	*	0.967	0.977
Tri	PCB-26	*	*	n	NotF¶	1.21	*		871	2.5	630	*	0.974	0.984
Tri	PCB-25	*	*	n	NotF¶	1.26	*		871	2.5	603	*	0.979	0.989
Tri	PCB-31	7.93e+04	1.18	y	28:55	1.28	2360		*	2.5	*	0.998	0.992	1.002
Tri	PCB-28	8.13e+04	1.09	y	29:01	1.71	1810		*	2.5	*	1.001	0.995	1.005
Tri	PCB-20/21/33	5.27e+04	1.08	y	29:38	1.08	1860		*	2.5	*	1.022	1.017	1.027
Tri	PCB-22	4.63e+04	1.17	y	30:05	1.21	1460		*	2.5	*	1.038	1.032	1.042
Tri	PCB-36	*	*	n	NotF¶	1.14	*		1190	2.5	926	*	0.928	0.938
Tri	PCB-39	*	*	n	NotF¶	1.12	*		1190	2.5	950	*	0.943	0.953
Tri	PCB-38	*	*	n	NotF¶	1.20	*		1190	2.5	883	*	0.966	0.976
Tri	PCB-35	*	*	n	NotF¶	1.23	*		1190	2.5	860	*	0.982	0.992
Tri	PCB-37	6.34e+04	1.18	y	32:52	1.23	1940		*	2.5	*	1.001	0.995	1.005
Tetra	PCB-54	*	*	n	NotF¶	1.10	*		1570	2.5	1010	*	0.996	1.006
Tetra	PCB-50	*	*	n	NotF¶	0.88	*		1570	2.5	1270	*	1.037	1.047
Tetra	PCB-53	*	*	n	NotF¶	1.06	*		1570	2.5	1320	*	0.942	0.952
Tetra	PCB-51	*	*	n	NotF¶	0.99	*		1570	2.5	1420	*	0.952	0.962
Tetra	PCB-45	*	*	n	NotF¶	0.86	*		1570	2.5	1630	*	0.966	0.976
Tetra	PCB-46	*	*	n	NotF¶	0.85	*		1570	2.5	1670	*	0.981	0.991

Integrations by:

Analyst: DMS

Date: 10/29/14

Reviewed by: [signature] Date: 10/29/14

Client ID: SP-CB-09-20141008-S Filename: 141028E1 S:8 Acq:28-OCT-14 16:18:27 ConCal: ST141028E1-1
Lab ID: 1400737-03RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.106 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	2.64e+05	0.87	y 31:23	1.28	9730		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-73	*	*	n NotF╗	1.35	*		1570	2.5	1040	*	1.000	1.010
Tetra	PCB-43/49	1.03e+05	0.71	y 31:42	0.99	4880		*	2.5	*	1.011	1.005	1.015
Tetra	PCB-47	*	*	n NotF╗	1.06	*		1570	2.5	1110	*	0.996	1.006
Tetra	PCB-48/75	*	*	n NotF╗	1.23	*		1570	2.5	959	*	0.999	1.009
Tetra	PCB-65	*	*	n NotF╗	1.22	*		1570	2.5	961	*	1.008	1.018
Tetra	PCB-62	*	*	n NotF╗	1.22	*		1570	2.5	964	*	1.011	1.021
Tetra	PCB-44	1.18e+05	0.63	n 32:42	0.86	5480	R	*	2.5	*	1.026	1.021	1.031
Tetra	PCB-42/59	*	*	n NotF╗	1.14	*		1570	2.5	1030	*	1.028	1.038
Tetra	PCB-41/64/71/72	1.60e+05	0.85	y 33:31	1.21	5280		*	2.5	*	1.051	1.046	1.056
Tetra	PCB-68	*	*	n NotF╗	1.35	*		1570	2.5	874	*	1.054	1.064
Tetra	PCB-40	*	*	n NotF╗	0.70	*		1570	2.5	1680	*	1.061	1.071
Tetra	PCB-57	*	*	n NotF╗	0.98	*		1570	2.5	1080	*	0.965	0.975
Tetra	PCB-67	*	*	n NotF╗	1.11	*		1570	2.5	957	*	0.974	0.984
Tetra	PCB-58	*	*	n NotF╗	0.93	*		1570	2.5	1140	*	0.977	0.987
Tetra	PCB-63	*	*	n NotF╗	0.95	*		1570	2.5	1110	*	0.982	0.992
Tetra	PCB-74	9.88e+04	0.67	y 35:11	1.24	2470		*	2.5	*	0.995	0.990	1.000
Tetra	PCB-61/70	3.30e+05	0.82	y 35:24	0.95	10800		*	2.5	*	1.001	0.995	1.005
Tetra	PCB-76/66	1.64e+05	0.88	y 35:37	1.04	4880		*	2.5	*	1.007	1.001	1.011
Tetra	PCB-80	*	*	n NotF╗	1.19	*		1570	2.5	747	*	0.996	1.006
Tetra	PCB-55	*	*	n NotF╗	1.04	*		1570	2.5	855	*	1.005	1.015
Tetra	PCB-56/60	1.27e+05	0.73	y 36:38	1.01	3710		*	2.5	*	1.024	1.019	1.029
Tetra	PCB-79	*	*	n NotF╗	1.08	*		1570	2.5	825	*	1.048	1.058
Tetra	PCB-78	*	*	n NotF╗	1.27	*		1570	2.5	954	*	0.982	0.992
Tetra	PCB-81	*	*	n NotF╗	1.33	*		1570	2.5	911	*	0.995	1.005
Tetra	PCB-77	6.54e+04	0.83	y 39:30	1.10	2220		*	2.5	*	1.000	0.995	1.005
Penta	PCB-104	*	*	n NotF╗	1.18	*		1620	2.5	1430	*	0.996	1.006
Penta	PCB-96	*	*	n NotF╗	1.14	*		1620	2.5	1480	*	1.034	1.044
Penta	PCB-103	*	*	n NotF╗	0.96	*		1620	2.5	1770	*	1.050	1.060
Penta	PCB-100	*	*	n NotF╗	0.94	*		1620	2.5	1800	*	1.061	1.071
Penta	PCB-94	*	*	n NotF╗	1.06	*		1620	2.5	1960	*	0.980	0.990
Penta	PCB-95/98/102	4.31e+05	1.50	y 35:42	1.22	16400		*	2.5	*	1.000	0.995	1.005
Penta	PCB-93	*	*	n NotF╗	0.84	*		1620	2.5	2460	*	0.997	1.007
Penta	PCB-88/91	7.74e+04	1.76	y 36:06	1.12	3230		*	2.5	*	1.012	1.005	1.015
Penta	PCB-121	*	*	n NotF╗	1.62	*		1620	2.5	1280	*	1.009	1.019
Penta	PCB-84/92	2.73e+05	1.33	y 37:01	1.05	11400		*	2.5	*	0.991	0.985	0.995
Penta	PCB-89	*	*	n NotF╗	1.13	*		1620	2.5	1950	*	0.991	1.001

Analyst: DMS

Date: 10/29/14

Client ID: SP-CB-09-20141008-S Filename: 141028E1 S:8 Acq:28-OCT-14 16:18:27 ConCal: ST141028E1-1
Lab ID: 1400737-03RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.106 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	7.89e+05	1.40	y 37:22	1.10	31400		*	2.5	*	1.000	0.995	1.005
Penta	PCB-113	*	*	n NotF	1.41	*		1620	2.5	1570	*	1.002	1.012
Penta	PCB-99	2.41e+05	1.36	y 37:42	1.34	7910		*	2.5	*	1.009	1.004	1.014
Penta	PCB-119	*	*	n NotF	1.53	*		1620	2.5	1450	*	0.982	0.992
Penta	PCB-108/112	*	*	n NotF	1.28	*		1620	2.5	1730	*	0.986	0.996
Penta	PCB-83	*	*	n NotF	1.52	*		1620	2.5	1460	*	0.990	1.000
Penta	PCB-97	1.92e+05	1.69	y 38:41	1.18	7020		*	2.5	*	1.000	0.995	1.005
Penta	PCB-86	*	*	n NotF	0.84	*		1620	2.5	2630	*	0.999	1.009
Penta	PCB-87/117/125	3.48e+05	1.59	y 38:58	1.55	9690		*	2.5	*	1.008	1.002	1.012
Penta	PCB-111/115	*	*	n NotF	1.63	*		1620	2.5	1360	*	1.006	1.016
Penta	PCB-85/116	1.00e+05	1.54	y 39:14	1.30	3330		*	2.5	*	1.015	1.010	1.020
Penta	PCB-120	*	*	n NotF	1.68	*		1620	2.5	1320	*	1.016	1.026
Penta	PCB-110	1.14e+06	1.51	y 39:38	1.56	31700		*	2.5	*	1.025	1.020	1.030
Penta	PCB-82	8.97e+04	1.71	y 40:15	0.76	4430		*	2.5	*	0.977	0.971	0.981
Penta	PCB-124	6.68e+04	1.38	y 40:56	1.47	1700		*	2.5	*	0.993	0.988	0.998
Penta	PCB-107/109	7.38e+04	1.65	y 41:05	1.32	2090		*	2.5	*	0.997	0.991	1.001
Penta	PCB-123	*	*	n NotF	1.17	*		1620	2.5	1670	*	0.996	1.006
Penta	PCB-106/118	9.17e+05	1.42	y 41:26	1.17	27800		*	2.5	*	1.001	0.996	1.006
Penta	PCB-114	*	*	n NotF	1.30	*		1030	2.5	1190	*	0.995	1.005
Penta	PCB-122	*	*	n NotF	1.12	*		1030	2.5	1390	*	0.999	1.009
Penta	PCB-105	3.52e+05	1.73	y 42:58	1.30	12400		*	2.5	*	1.000	0.995	1.005
Penta	PCB-127	*	*	n NotF	1.33	*		1030	2.5	1060	*	0.996	1.006
Penta	PCB-126	*	*	n NotF	1.18	*		1030	2.5	1490	*	0.995	1.005
Hexa	PCB-155	*	*	n NotF	1.11	*		1470	2.5	1110	*	0.966	1.006
Hexa	PCB-150	*	*	n NotF	1.00	*		1470	2.5	1240	*	1.030	1.040
Hexa	PCB-152	*	*	n NotF	1.12	*		1470	2.5	1110	*	1.043	1.053
Hexa	PCB-145	*	*	n NotF	1.20	*		1470	2.5	1030	*	1.055	1.065
Hexa	PCB-136	2.37e+05	1.18	y 39:26	1.18	6700		*	2.5	*	1.069	1.064	1.074
Hexa	PCB-148	*	*	n NotF	0.74	*		1470	2.5	1670	*	1.066	1.076
Hexa	PCB-154	*	*	n NotF	0.86	*		1470	2.5	1450	*	1.080	1.090
Hexa	PCB-151	3.96e+05	1.11	y 40:40	0.75	17700		*	2.5	*	1.102	1.097	1.107
Hexa	PCB-135	2.30e+05	1.20	y 40:53	0.79	9690		*	2.5	*	1.108	1.103	1.113
Hexa	PCB-144	1.08e+05	1.38	y 40:59	0.76	4720		*	2.5	*	1.111	1.105	1.117
Hexa	PCB-147	*	*	n NotF	0.82	*		1470	2.5	1510	*	1.109	1.121
Hexa	PCB-139/149	1.44e+06	1.31	y 41:22	0.76	63200		*	2.5	*	1.121	1.116	1.128
Hexa	PCB-140	*	*	n NotF	0.72	*		1470	2.5	1720	*	1.121	1.133
Hexa	PCB-134/143	7.07e+04	1.15	y 42:02	0.92	3360		*	2.5	*	0.976	0.970	0.980

Analyst: DMS

Date: 10/29/14

Client ID: SP-CB-09-20141008-S Filename: 141028E1 S:8 Acq:28-OCT-14 16:18:27 ConCal: ST141028E1-1

Lab ID: 1400737-03RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.106 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	4.90e+04	1.19	y 42:18	0.82	2600		*	2.5	*	0.982	0.977	0.987
Hexa	PCB-131	*	*	n NotF	0.91	*		619	2.5	781	*	0.981	0.991
Hexa	PCB-146/165	3.06e+05	1.32	y 42:41	1.25	10700		*	2.5	*	0.991	0.986	0.996
Hexa	PCB-132/161	4.56e+05	1.23	y 42:59	1.10	18000		*	2.5	*	0.998	0.992	1.002
Hexa	PCB-153	1.87e+06	1.18	y 43:06	1.25	65400		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-168	*	*	n NotF	1.45	*		619	2.5	490	*	1.001	1.011
Hexa	PCB-141	4.33e+05	1.18	y 43:51	1.09	19200		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-137	6.19e+04	1.15	y 44:14	1.06	2810		*	2.5	*	1.009	1.004	1.014
Hexa	PCB-130	1.06e+05	1.20	y 44:21	0.96	5280		*	2.5	*	1.012	1.006	1.016
Hexa	PCB-138/163/164	2.09e+06	1.23	y 44:43	1.29	72400		*	2.5	*	1.001	0.996	1.006
Hexa	PCB-158/160	2.41e+05	1.22	y 44:57	1.34	8030		*	2.5	*	1.006	1.001	1.011
Hexa	PCB-129	7.54e+04	1.03	n 45:12	0.85	3950	R	*	2.5	*	1.012	1.007	1.017
Hexa	PCB-166	*	*	n NotF	1.19	*		619	2.5	473	*	0.988	0.998
Hexa	PCB-159	*	*	n NotF	1.11	*		619	2.5	504	*	0.996	1.006
Hexa	PCB-128/162	2.34e+05	1.08	y 46:16	1.05	7890		*	2.5	*	1.007	1.002	1.012
Hexa	PCB-167	9.76e+04	1.57	n 46:41	1.20	2980	R	*	2.5	*	1.000	0.995	1.005
Hexa	PCB-156	1.92e+05	1.37	y 47:58	1.14	6100		*	2.5	*	1.000	0.996	1.006
Hexa	PCB-157	4.87e+04	1.26	y 48:16	1.16	1500		*	2.5	*	1.001	0.995	1.005
Hexa	PCB-169	*	*	n NotF	1.12	*		619	2.5	583	*	0.995	1.005
Hepta	PCB-188	*	*	n NotF	1.58	*		903	2.5	411	*	0.996	1.006
Hepta	PCB-184	*	*	n NotF	1.63	*		903	2.5	398	*	1.006	1.016
Hepta	PCB-179	3.93e+05	1.04	y 43:59	1.30	12800		*	2.5	*	1.030	1.024	1.034
Hepta	PCB-176	1.19e+05	1.14	y 44:27	1.48	3410		*	2.5	*	1.041	1.035	1.045
Hepta	PCB-186	*	*	n NotF	1.45	*		903	2.5	447	*	1.050	1.060
Hepta	PCB-178	1.79e+05	1.07	y 45:32	1.03	7350		*	2.5	*	1.066	1.061	1.071
Hepta	PCB-175	3.26e+04	1.14	y 45:53	1.01	1370		*	2.5	*	1.074	1.069	1.079
Hepta	PCB-182/187	1.04e+06	1.06	y 46:03	1.25	35200		*	2.5	*	1.078	1.073	1.083
Hepta	PCB-183	4.63e+05	0.96	y 46:22	1.21	16200		*	2.5	*	1.085	1.081	1.091
Hepta	PCB-185	9.34e+04	0.98	y 47:03	1.80	2830		*	2.5	*	0.956	0.951	0.961
Hepta	PCB-174	8.68e+05	0.98	y 47:26	1.38	34300		*	2.5	*	0.963	0.958	0.968
Hepta	PCB-181	*	*	n NotF	1.38	*		1130	2.5	840	*	0.960	0.970
Hepta	PCB-177	4.53e+05	1.05	y 47:42	1.26	19700		*	2.5	*	0.969	0.963	0.973
Hepta	PCB-171	1.76e+05	0.94	y 47:59	1.58	6070		*	2.5	*	0.975	0.970	0.980
Hepta	PCB-173	*	*	n NotF	1.11	*		1130	2.5	1050	*	0.978	0.988
Hepta	PCB-172	1.67e+05	1.17	y 48:51	1.63	5560		*	2.5	*	0.992	0.987	0.997
Hepta	PCB-192	*	*	n NotF	1.74	*		1130	2.5	667	*	0.991	1.001
Hepta	PCB-180	2.06e+06	1.05	y 49:15	1.34	83600		*	2.5	*	1.000	0.995	1.005

Analyst: DMS

Date: 10/29/14

Client ID: SP-CB-09-20141008-S Filename: 141028E1 S:8 Acq:28-OCT-14 16:18:27 ConCal: ST141028E1-1
Lab ID: 1400737-03RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.106 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	1.33e+05	1.01	y 49:26	1.72	4210		*	2.5	*	1.004	0.999	1.009
Hepta	PCB-191	5.38e+04	1.37	n 49:40	1.69	1730	R	*	2.5	*	1.009	1.004	1.014
Hepta	PCB-170	7.57e+05	0.97	y 50:38	1.60	27800		*	2.5	*	1.000	0.995	1.005
Hepta	PCB-190	2.16e+05	1.00	y 50:48	2.21	5730		*	2.5	*	1.003	0.998	1.008
Hepta	PCB-189	3.94e+04	1.08	y 52:04	1.55	1300		*	2.5	*	1.000	0.995	1.005
Octa	PCB-202	8.95e+04	0.98	y 48:12	1.08	2850		*	2.5	*	1.000	0.995	1.005
Octa	PCB-201	5.26e+04	0.84	y 48:40	1.15	1580		*	2.5	*	1.010	1.005	1.015
Octa	PCB-204	*	*	n NotF┐	1.14	*		1120	2.5	773	*	1.008	1.018
Octa	PCB-197	*	*	n NotF┐	1.07	*		1120	2.5	823	*	1.015	1.025
Octa	PCB-200	6.98e+04	0.77	y 49:56	1.06	2260		*	2.5	*	1.036	1.032	1.044
Octa	PCB-198	*	*	n NotF┐	0.76	*		1120	2.5	1170	*	1.059	1.069
Octa	PCB-199	3.77e+05	0.89	y 51:17	0.80	16300		*	2.5	*	1.064	1.061	1.071
Octa	PCB-196/203	4.11e+05	0.93	y 51:33	0.80	17700		*	2.5	*	1.070	1.066	1.076
Octa	PCB-195	1.13e+05	1.01	y 52:42	1.23	6390		*	2.5	*	0.983	0.979	0.989
Octa	PCB-194	2.83e+05	0.89	y 53:36	1.21	16200		*	2.5	*	1.000	0.995	1.005
Octa	PCB-205	*	*	n NotF┐	1.54	*		1310	2.5	1670	*	1.001	1.011
Nona	PCB-208	1.80e+04	0.75	n 52:49	0.93	851	R	*	2.5	*	1.000	0.995	1.005
Nona	PCB-207	*	*	n NotF┐	1.08	*		1080	2.5	877	*	1.001	1.011
Nona	PCB-206	7.18e+04	1.24	y 55:20	1.02	5460		*	2.5	*	1.000	0.995	1.005
Deca	PCB-209	*	*	n NotF┐	1.17	*		650	2.5	1920	*	0.995	1.005

Analyst: DMS

Date: 10/29/14

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	*	*	n	NotFnd	1.27	*	
Total Di-PCB	2.01e+05	1.70	y	25:13	1.21	5213.39	
Total Tri-PCB	1.77e+05	1.15	y	25:51	1.10	5517.25	
Total Tri-PCB	3.23e+05	1.18	y	28:55	1.21	9428.61	Sum:14945.9
Total Tetra-PCB	1.31e+06	0.87	y	31:23	1.09	43926.5	
Total Penta-PCB	4.74e+06	1.50	y	35:42	1.18	157973	
Total Penta-PCB	3.52e+05	1.73	y	42:58	1.25	12361.2	Sum:170335
Total Hexa-PCB	2.41e+06	1.18	y	39:26	0.90	101998	
Total Hexa-PCB	6.16e+06	1.15	y	42:02	1.11	223215	Sum:325213
Total Hepta-PCB	7.19e+06	1.04	y	43:59	1.42	267604	
Total Octa-PCB	9.99e+05	0.98	y	48:12	0.96	40684.9	
Total Octa-PCB	3.95e+05	1.01	y	52:42	1.33	22578.7	Sum:63263.6
Total Nona-PCB	7.18e+04	1.24	y	55:20	1.01	5459.03	
Total Deca-PCB	*	*	n	NotFnd	1.17	*	

Total PCB Conc: ~~912975~~ 899667

899600

Integrations by Analyst: DMS

Date: 10/29/14

Client ID: SP-CB-09-20141008-S Filename: 141028E1 S:8 Acq:28-OCT-14 16:18:27 ConCal: ST141028E1-1
Lab ID: 1400737-03RE1@50X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:1.1063 EndCAL: NA

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.76e+06	3.26	y	0.87	16:25	0.634	0.629	0.635	43200	95.6
13C-PCB-3	2.00e+06	3.34	y	0.91	18:55	0.730	0.725	0.733	47000	104
13C-PCB-4	9.47e+05	1.74	y	0.59	20:12	0.780	0.775	0.783	34600	76.6
13C-PCB-9	1.56e+06	1.61	y	0.90	21:55	0.846	0.842	0.850	37300	82.4
13C-PCB-11	1.60e+06	1.55	y	0.94	25:13	0.974	0.968	0.978	36700	81.1
13C-PCB-19	1.24e+06	1.16	y	0.53	24:14	0.936	0.930	0.940	49900	110
13C-PCB-28	1.18e+06	1.19	y	0.93	28:59	1.003	0.999	1.009	40500	89.7
13C-PCB-32	1.72e+06	1.17	y	0.80	27:05	1.046	1.040	1.050	46300	103
13C-PCB-37	1.20e+06	0.91	y	0.84	32:51	1.137	1.131	1.143	45600	101
13C-PCB-47	1.13e+06	0.68	y	0.81	31:53	0.870	0.866	0.874	36100	79.9
13C-PCB-52	9.55e+05	0.71	y	0.77	31:22	0.856	0.853	0.861	32000	70.8
13C-PCB-54	1.26e+06	0.79	y	0.97	27:54	0.762	0.758	0.766	33400	74.0
13C-PCB-70	1.45e+06	0.89	y	1.00	35:22	0.965	0.961	0.971	37600	83.3
13C-PCB-77	1.21e+06	0.77	y	0.94	39:30	1.078	1.073	1.083	33200	73.5
13C-PCB-80	1.53e+06	0.66	y	1.03	35:47	0.977	0.972	0.982	38400	85.0
13C-PCB-81	1.22e+06	0.82	y	0.92	38:54	1.062	1.057	1.067	34300	75.9
13C-PCB-95	9.70e+05	1.55	y	0.74	35:41	0.913	0.908	0.918	34600	76.5
13C-PCB-97	1.05e+06	1.78	y	0.70	38:40	0.989	0.984	0.994	39300	86.9
13C-PCB-101	1.03e+06	1.74	y	0.78	37:21	0.956	0.951	0.961	34800	77.1
13C-PCB-104	1.25e+06	1.59	y	1.00	32:33	0.833	0.828	0.836	32900	72.7
13C-PCB-105	9.92e+05	1.46	y	1.37	42:57	0.929	0.924	0.934	27600	61.2
13C-PCB-114	9.88e+05	1.78	y	1.36	42:05	0.910	0.905	0.915	27600	61.0
13C-PCB-118	1.27e+06	1.60	y	0.96	41:24	1.059	1.054	1.064	35000	77.5
13C-PCB-123	1.21e+06	1.72	y	0.89	41:13	1.055	1.050	1.060	35600	78.8
13C-PCB-126	8.37e+05	1.56	y	1.31	45:12	0.977	0.972	0.982	24400	53.9
13C-PCB-127	1.06e+06	1.60	y	1.47	43:16	0.935	0.931	0.941	27400	60.7
13C-PCB-138	1.01e+06	1.23	y	1.10	44:41	0.966	0.961	0.971	35000	77.4
13C-PCB-141	9.37e+05	1.31	y	1.07	43:50	0.948	0.943	0.953	33200	73.5
13C-PCB-153	1.04e+06	1.28	y	1.15	43:05	0.932	0.927	0.937	34400	76.2
13C-PCB-155	1.36e+06	1.28	y	0.84	36:54	0.944	0.939	0.949	42600	94.3
13C-PCB-156	1.25e+06	1.12	y	1.30	47:58	1.037	1.032	1.042	36800	81.3
13C-PCB-157	1.26e+06	1.33	y	1.36	48:14	1.043	1.038	1.048	35400	78.4
13C-PCB-159	1.28e+06	1.11	y	1.25	45:58	0.994	0.989	0.999	39000	86.2
13C-PCB-167	1.23e+06	1.23	y	1.35	46:40	1.009	1.004	1.014	34700	76.7
13C-PCB-169	1.20e+06	1.20	y	1.29	50:17	1.087	1.083	1.093	35400	78.4
13C-PCB-170	7.70e+05	0.46	y	0.54	50:38	1.095	1.089	1.101	54000	120
13C-PCB-180	8.29e+05	0.51	y	0.68	49:14	1.065	1.060	1.070	46100	102
13C-PCB-188	1.06e+06	0.41	y	0.92	42:43	0.924	0.919	0.929	44200	97.7
13C-PCB-189	8.82e+05	0.47	y	0.72	52:04	1.126	1.120	1.132	46900	104
13C-PCB-194	6.51e+05	1.00	y	0.80	53:36	0.995	0.990	1.000	41000	90.8
13C-PCB-202	1.31e+06	0.91	y	0.84	48:11	1.042	1.036	1.046	59500	132
13C-PCB-206	5.81e+05	0.84	y	0.65	55:20	1.027	1.021	1.031	44900	99.4
13C-PCB-208	1.03e+06	0.83	y	1.08	52:49	0.980	0.976	0.986	47900	106
13C-PCB-209	5.53e+05	1.30	y	0.61	56:35	1.050	1.045	1.055	45500	101

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.49e+06	0.76	y	1.02	37:41	1.029	1.023	1.034	37800	83.7
13C-PCB-178	7.36e+05	0.49	y	0.61	45:31	0.984	0.979	0.990	45600	101

PS vs. IS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.49e+06	0.76	y	1.10	37:41	0.969	0.964	0.974	49800	110
13C-PCB-178	7.36e+05	0.49	y	0.90	45:31	0.925	0.920	0.930	44700	98.9

RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	2.11e+06	1.50	y	1.00	25:54	45200
13C-PCB-31	1.42e+06	0.92	y	1.00	28:53	45200
13C-PCB-60	1.75e+06	0.65	y	1.00	36:38	45200
13C-PCB-111	1.71e+06	1.58	y	1.00	39:05	45200
13C-PCB-128	1.19e+06	1.36	y	1.00	46:15	45200
13C-PCB-205	9.00e+05	0.89	y	1.00	53:53	45200

Analyst: DMS

Date: 10/29/14

File:141028E1 #1-728 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
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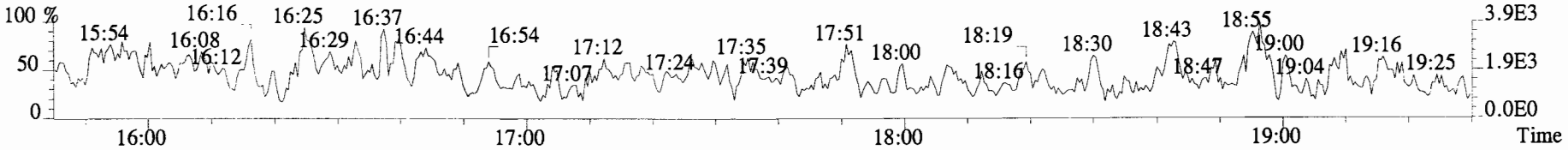
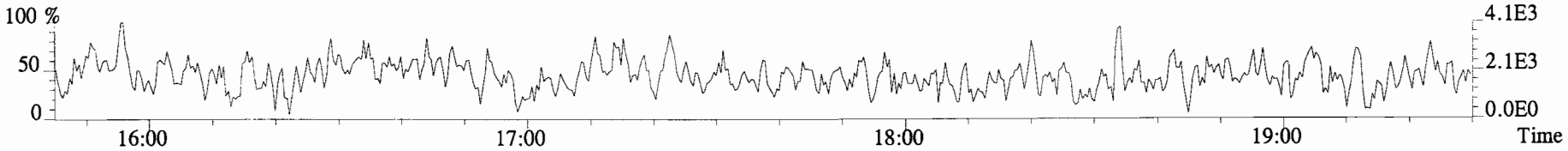


190.0363 S:8 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2324.0,0.00%,F,F)



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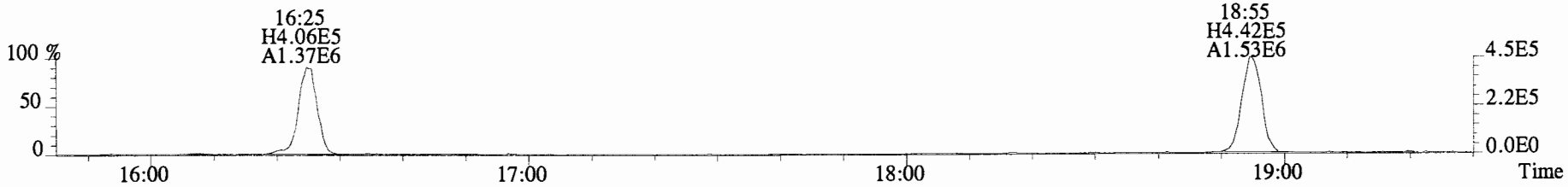

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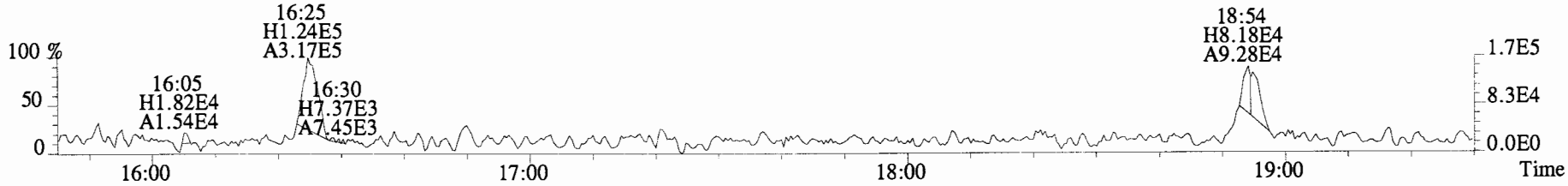
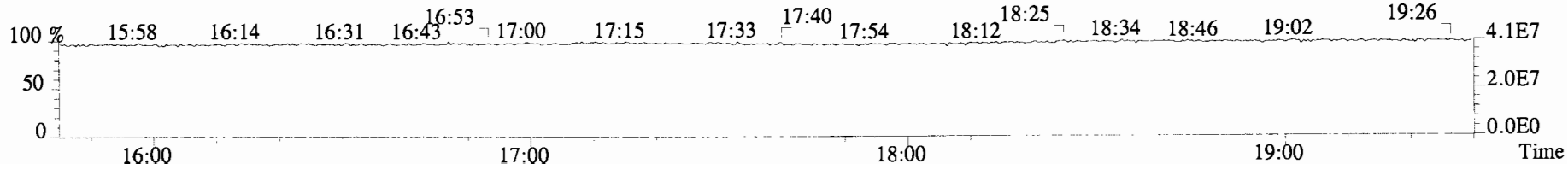
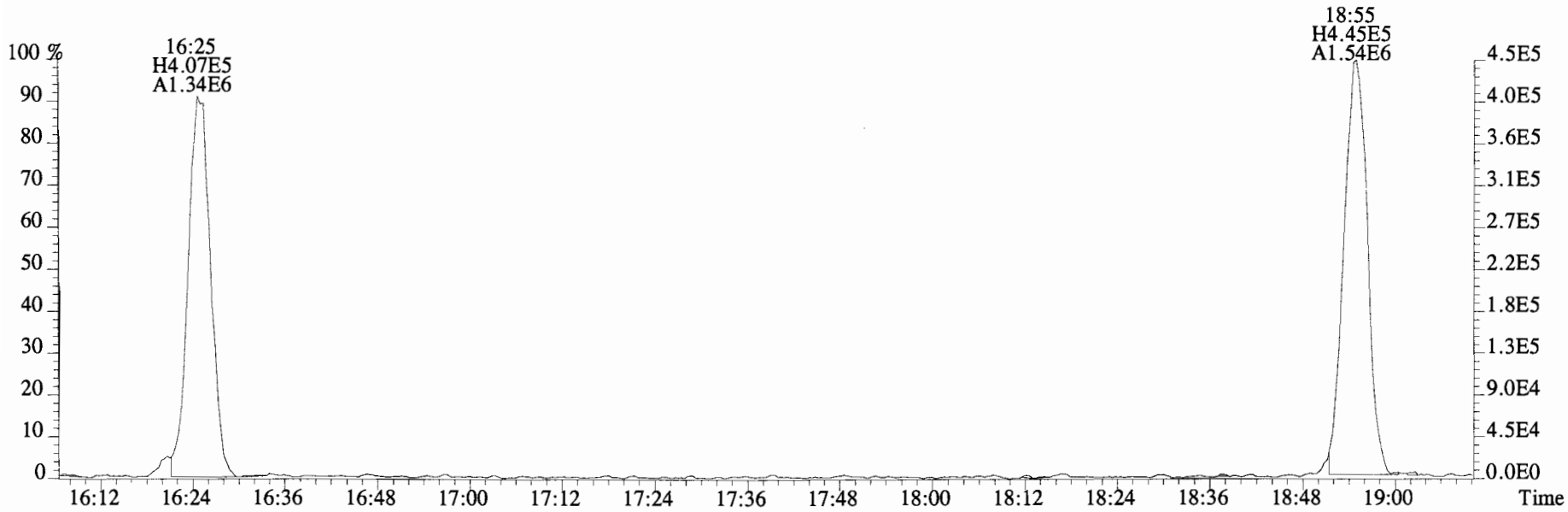


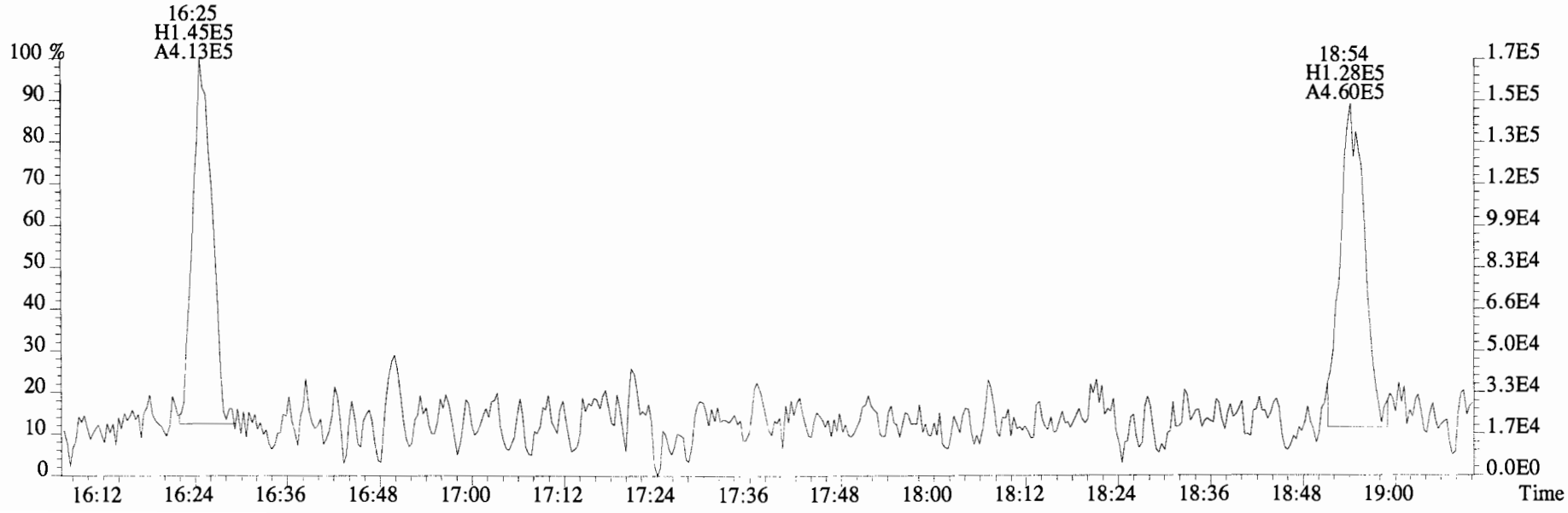
180.9880 S:8



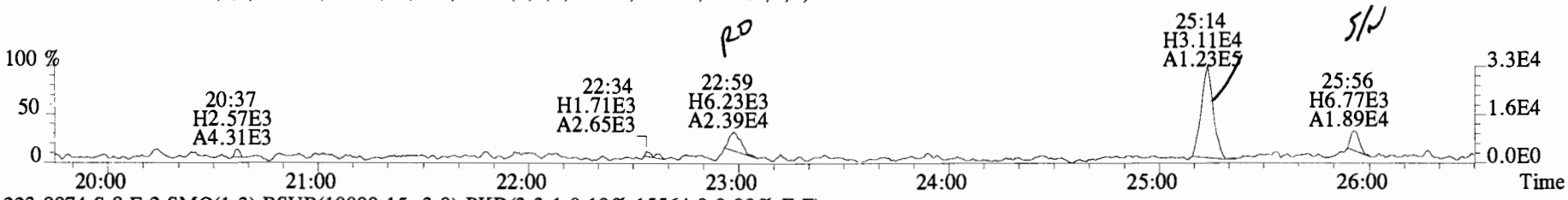
File:141028E1 #1-728 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
200.0795 S:8 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2836.0,0.00%,F,F)



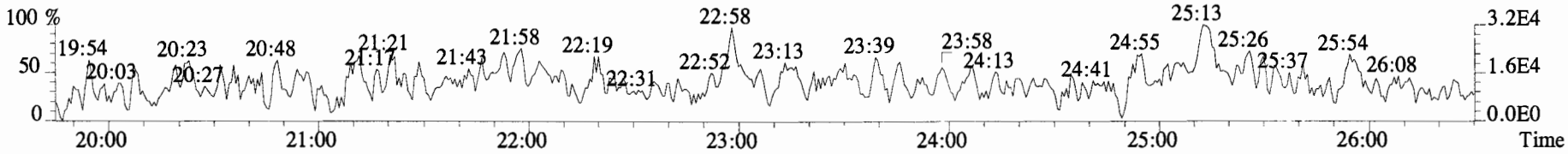
202.0766 S:8 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,28836.0,0.00%,F,F)



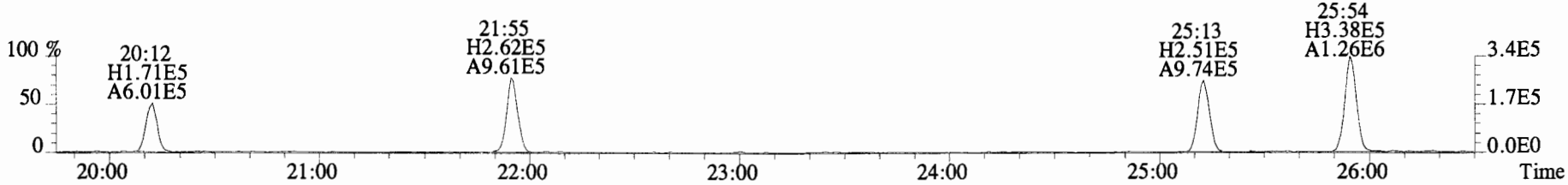
File:141028E1 #1-758 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
222.0003 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2516.0,0.00%,F,F)



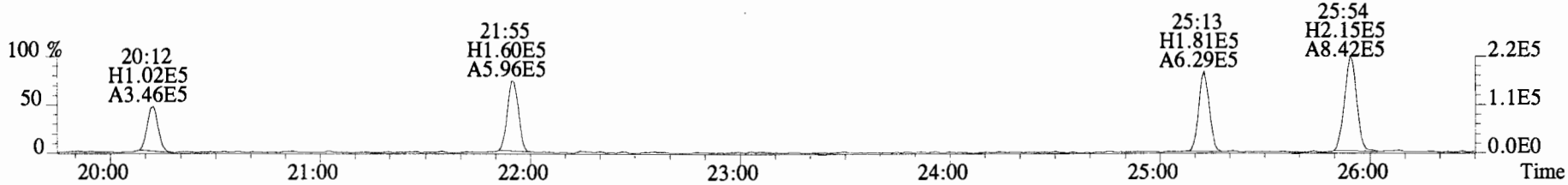
223.9974 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15564.0,0.00%,F,F)



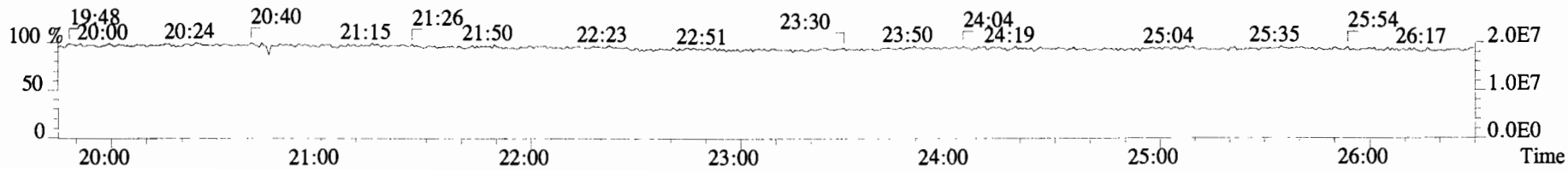
234.0406 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2500.0,0.00%,F,F)

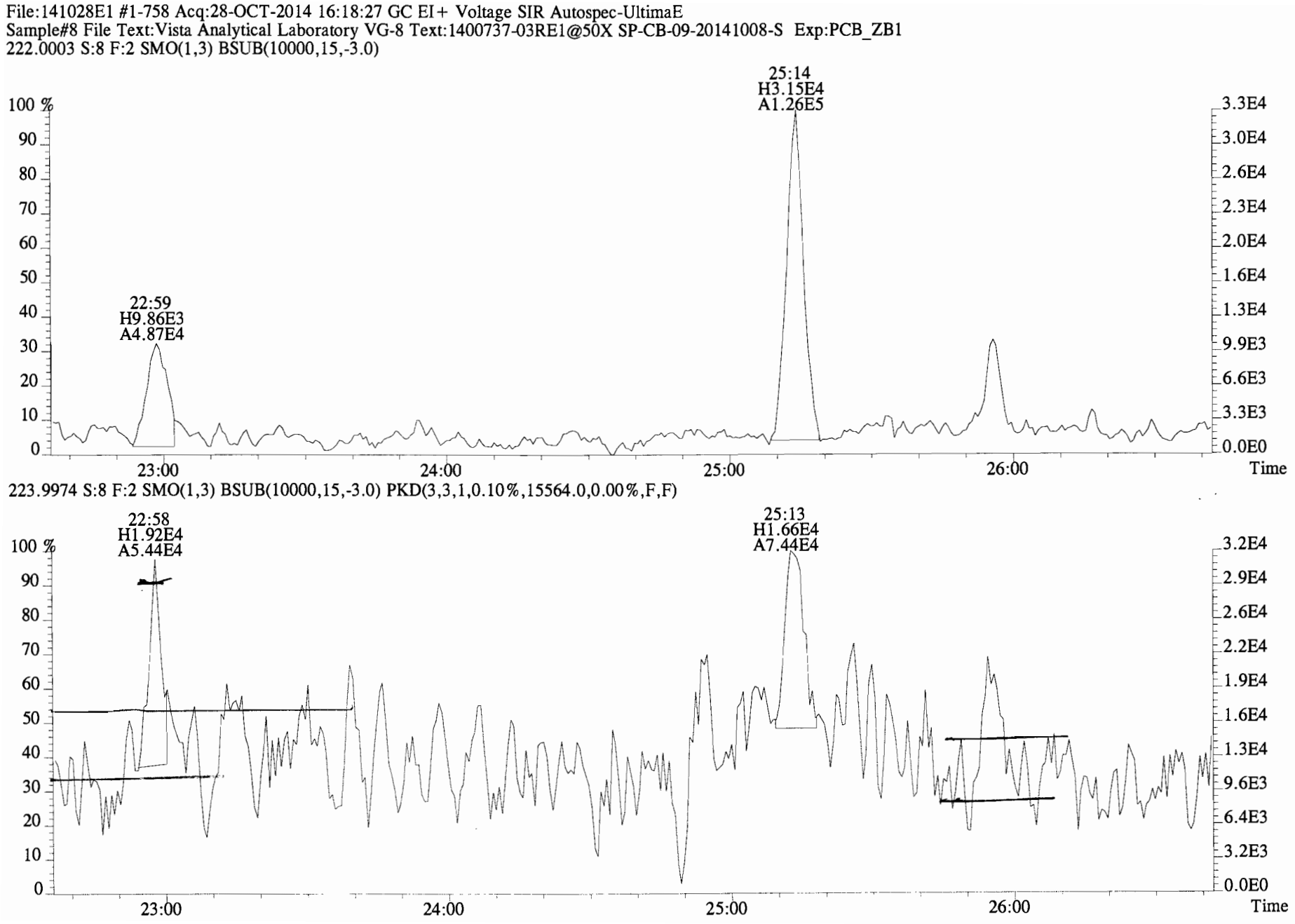


236.0376 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3344.0,0.00%,F,F)

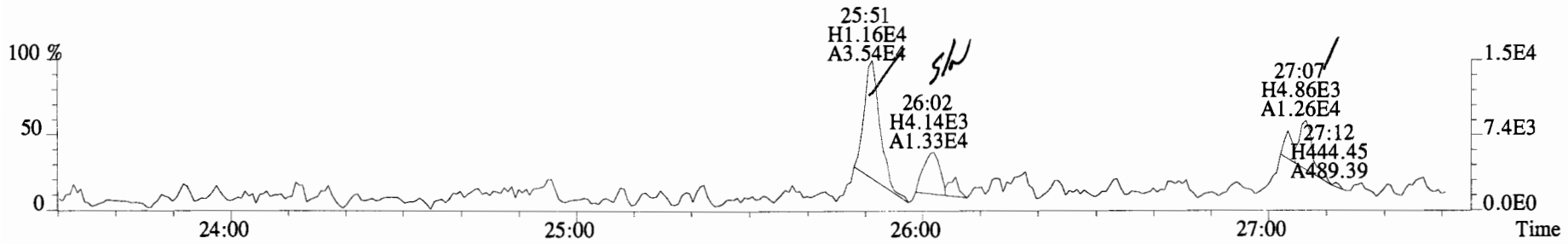


230.9856 S:8 F:2

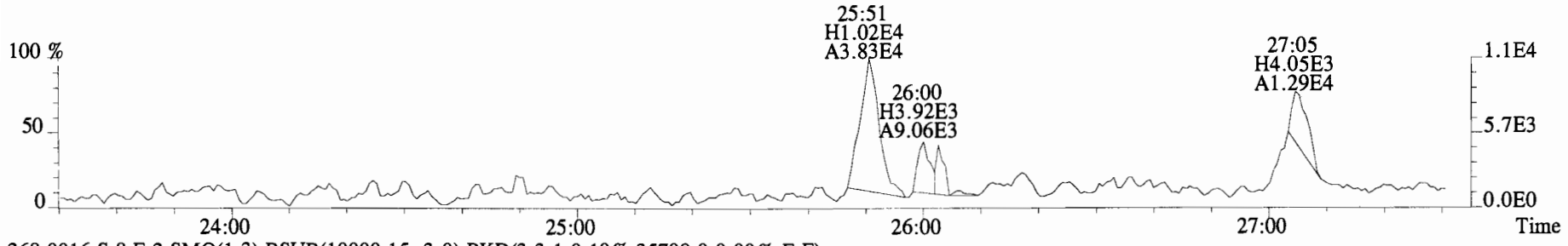



File:141028E1 #1-758 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
222.0003 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0)
25:14
H3.15E4
A1.26E5
22:59
H9.86E3
A4.87E4
100 %
90
80
70
60
50
40
30
20
10
0
3.3E4
3.0E4
2.6E4
2.3E4
2.0E4
1.6E4
1.3E4
9.9E3
6.6E3
3.3E3
0.0E0
23:00
24:00
25:00
26:00
Time
223.9974 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15564.0,0.00%,F,F)
22:58
H1.92E4
A5.44E4
25:13
H1.66E4
A7.44E4
100 %
90
80
70
60
50
40
30
20
10
0
3.2E4
2.9E4
2.6E4
2.2E4
1.9E4
1.6E4
1.3E4
9.6E3
6.4E3
3.2E3
0.0E0
23:00
24:00
25:00
26:00
Time

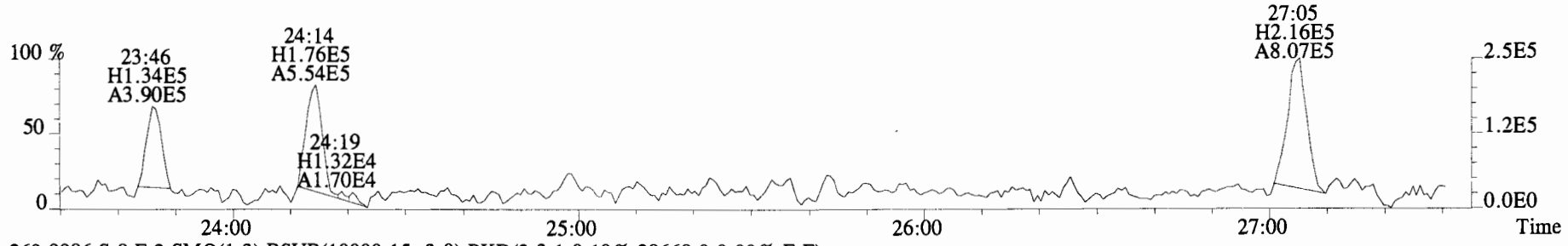
File:141028E1 #1-758 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
255.9613 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2156.0,0.00%,F,F)



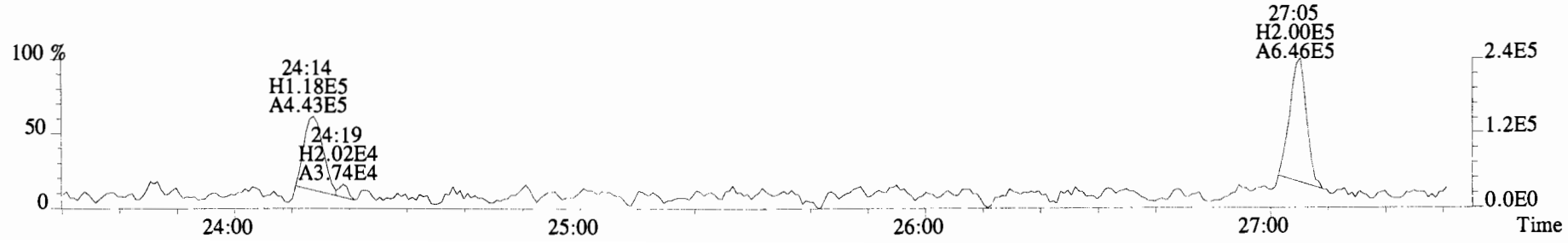
257.9584 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1644.0,0.00%,F,F)



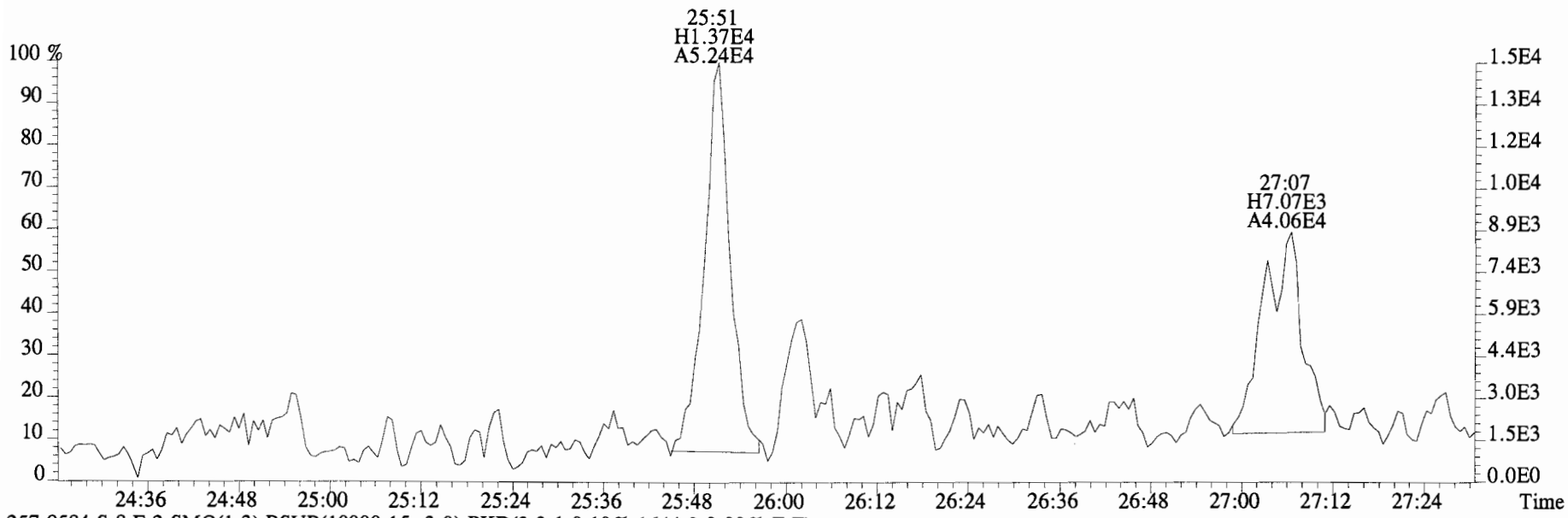
268.0016 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35708.0,0.00%,F,F)



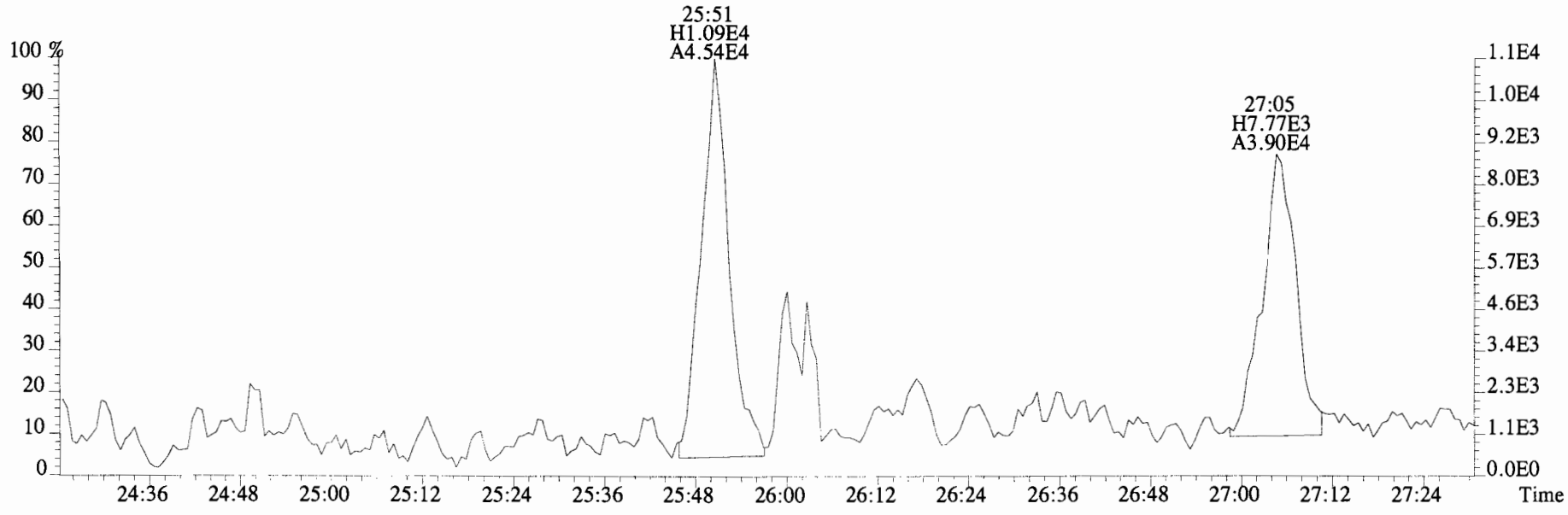
269.9986 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,28668.0,0.00%,F,F)



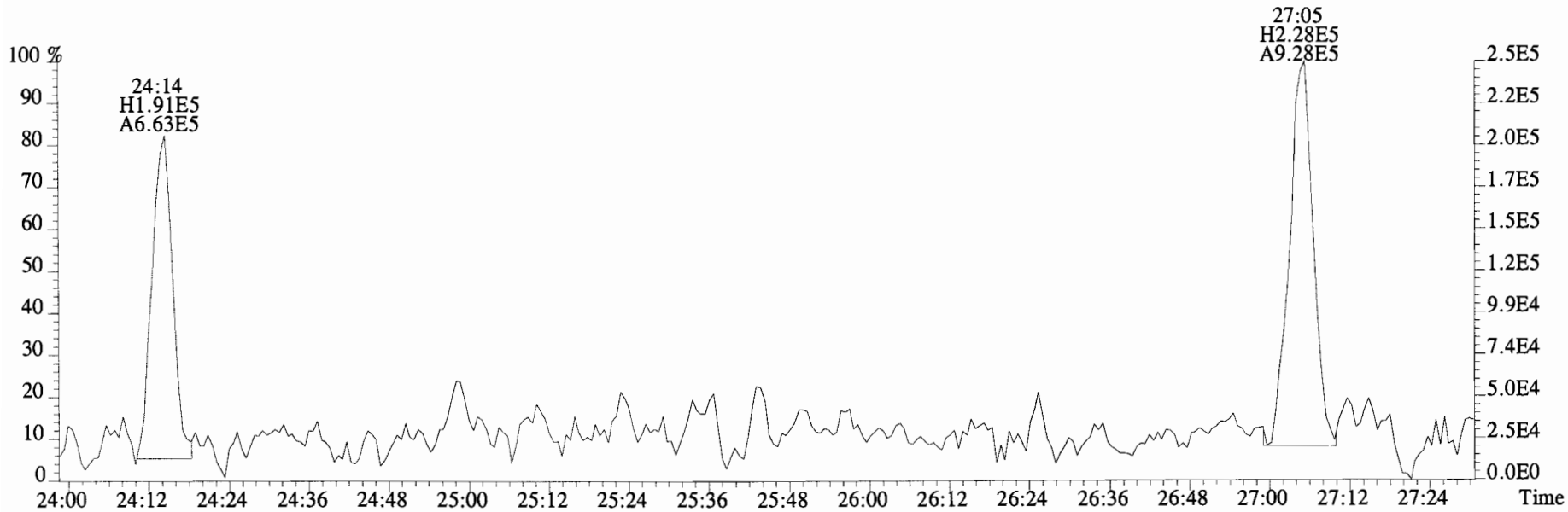
File:141028E1 #1-758 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
255.9613 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2156.0,0.00%,F,F)



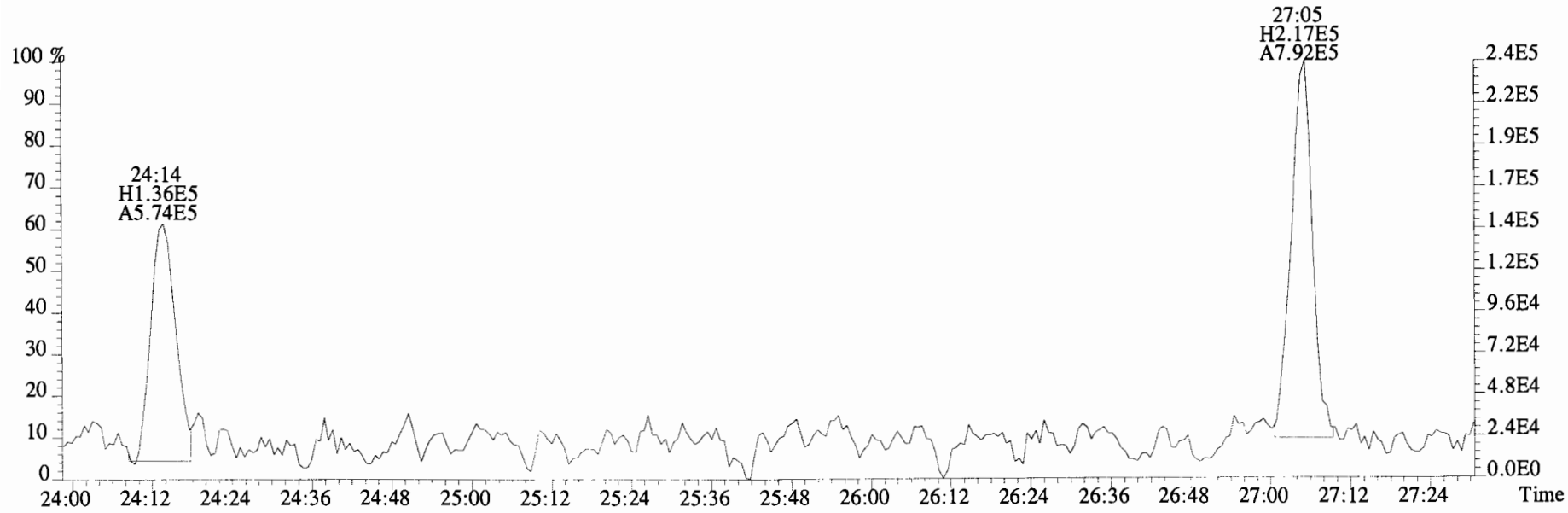
257.9584 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1644.0,0.00%,F,F)

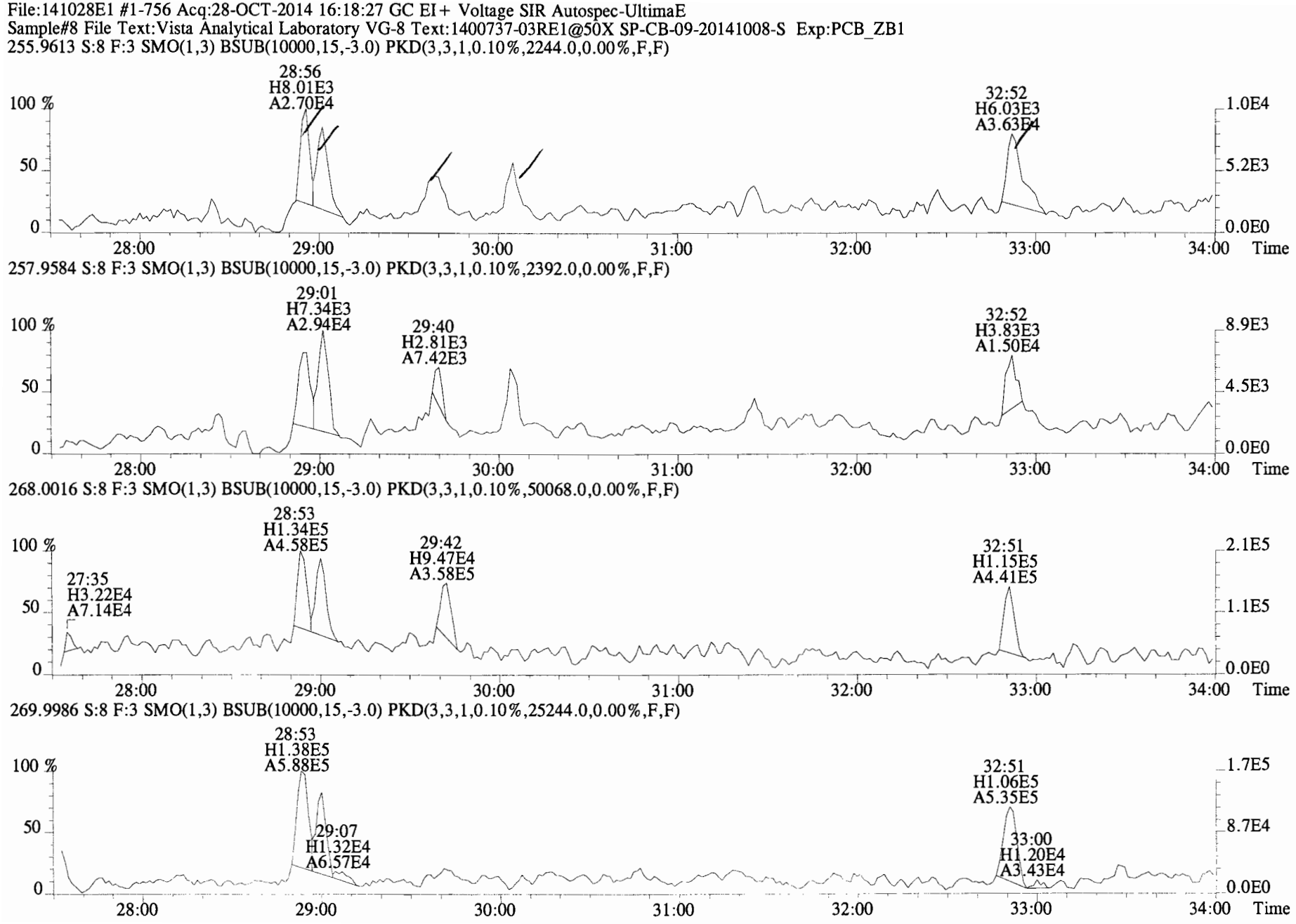


File:141028E1 #1-758 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
268.0016 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35708.0,0.00%,F,F)

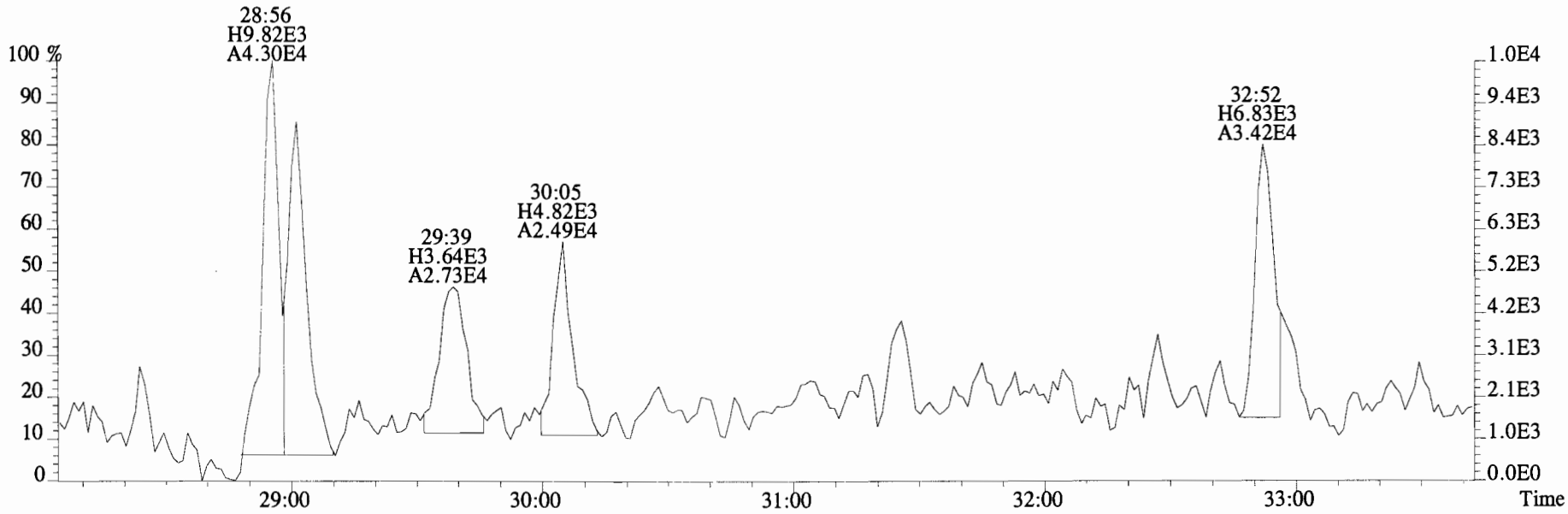


269.9986 S:8 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,28668.0,0.00%,F,F)

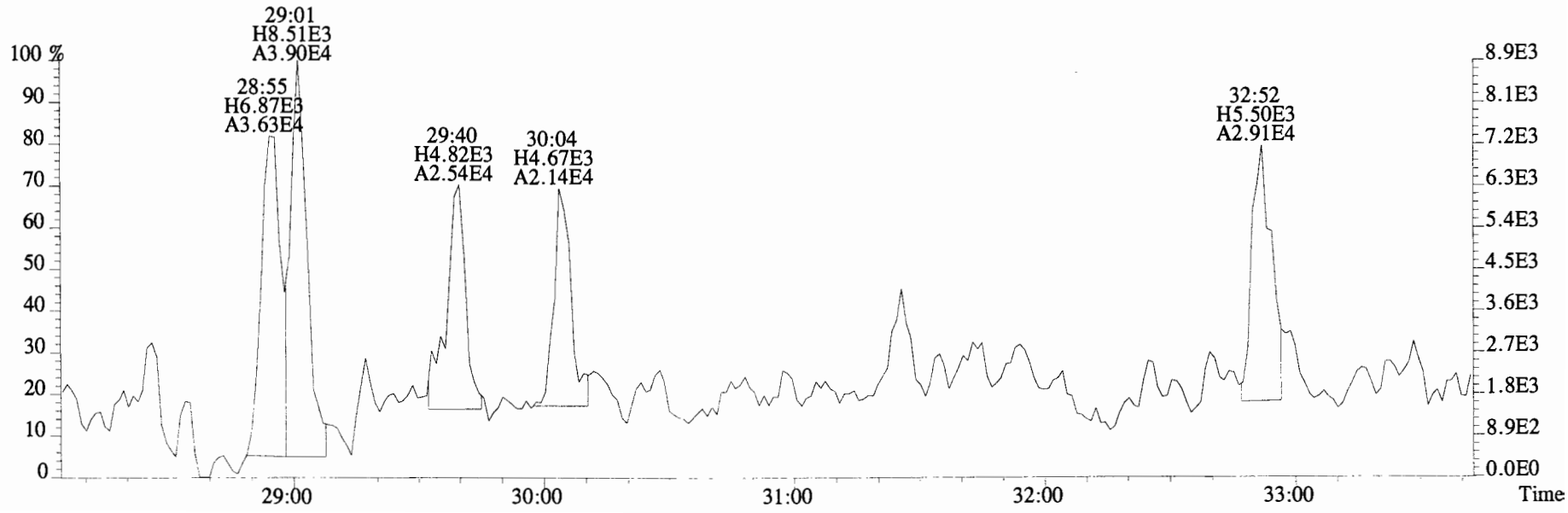



File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
255.9613 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2244.0,0.00%,F,F)
28:56
H8.01E3
A2.70E4
32:52
H6.03E3
A3.63E4
100 %
50
0
1.0E4
5.2E3
0.0E0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
257.9584 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2392.0,0.00%,F,F)
29:01
H7.34E3
A2.94E4
29:40
H2.81E3
A7.42E3
32:52
H3.83E3
A1.50E4
8.9E3
4.5E3
0.0E0
268.0016 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,50068.0,0.00%,F,F)
28:53
H1.34E5
A4.58E5
29:42
H9.47E4
A3.58E5
27:35
H3.22E4
A7.14E4
32:51
H1.15E5
A4.41E5
2.1E5
1.1E5
0.0E0
269.9986 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25244.0,0.00%,F,F)
28:53
H1.38E5
A5.88E5
29:07
H1.32E4
A6.57E4
32:51
H1.06E5
A5.35E5
33:00
H1.20E4
A3.43E4
1.7E5
8.7E4
0.0E0

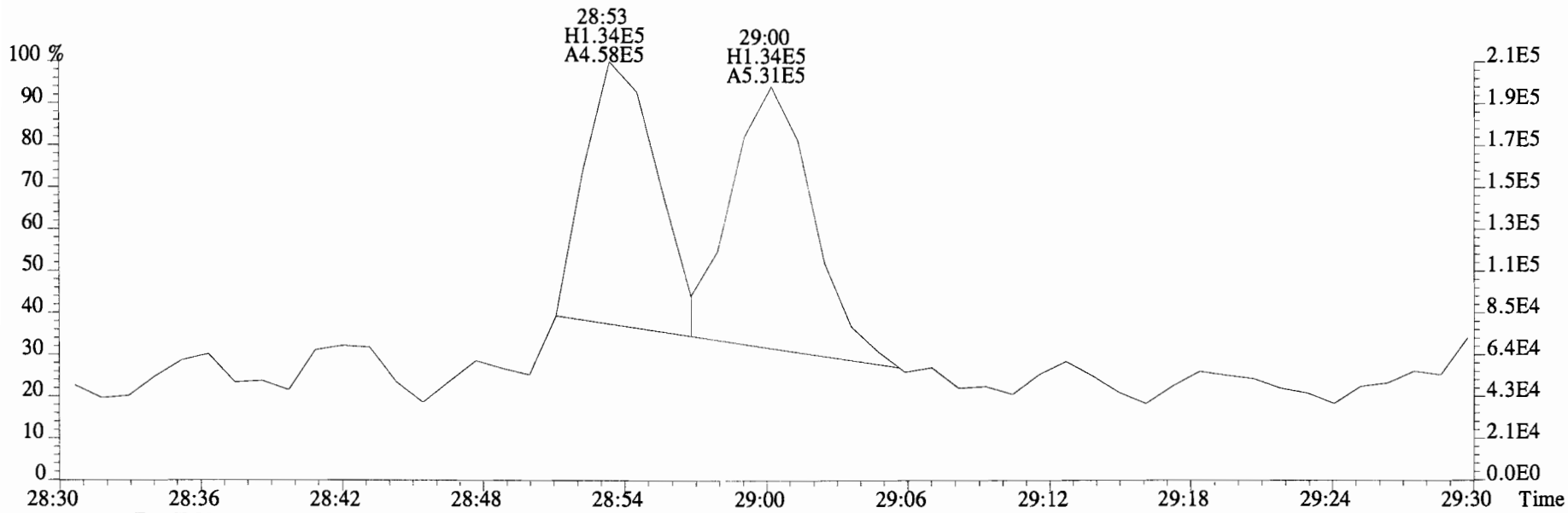
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
255.9613 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2244.0,0.00%,F,F)



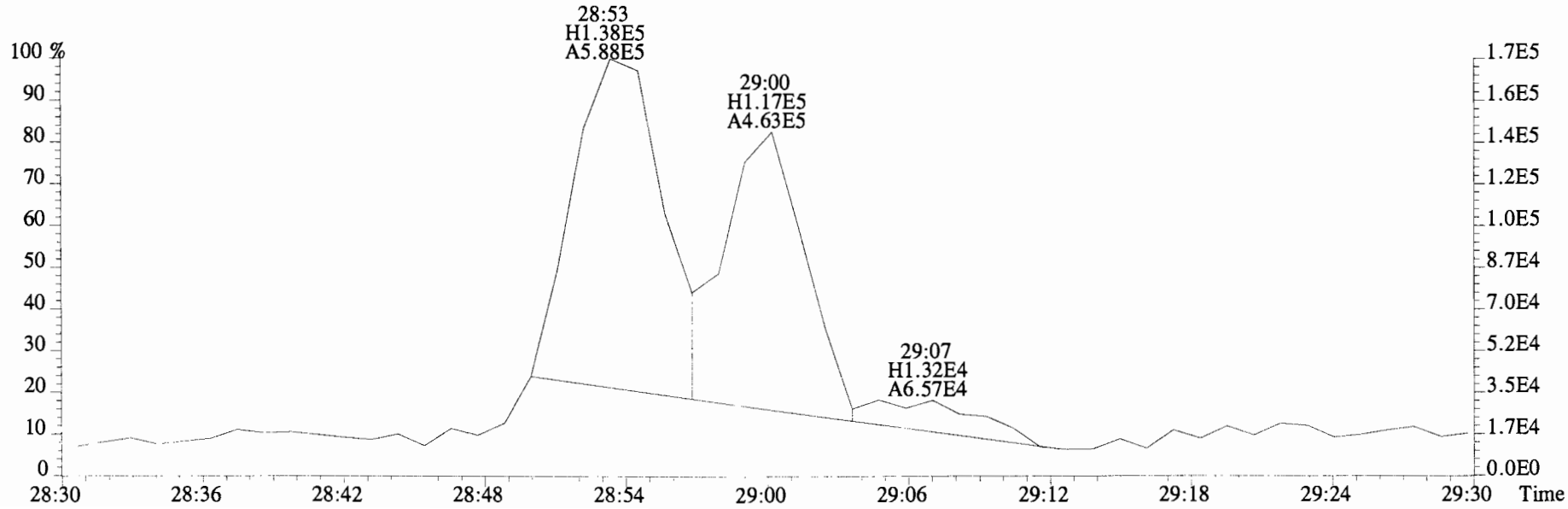
257.9584 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2392.0,0.00%,F,F)



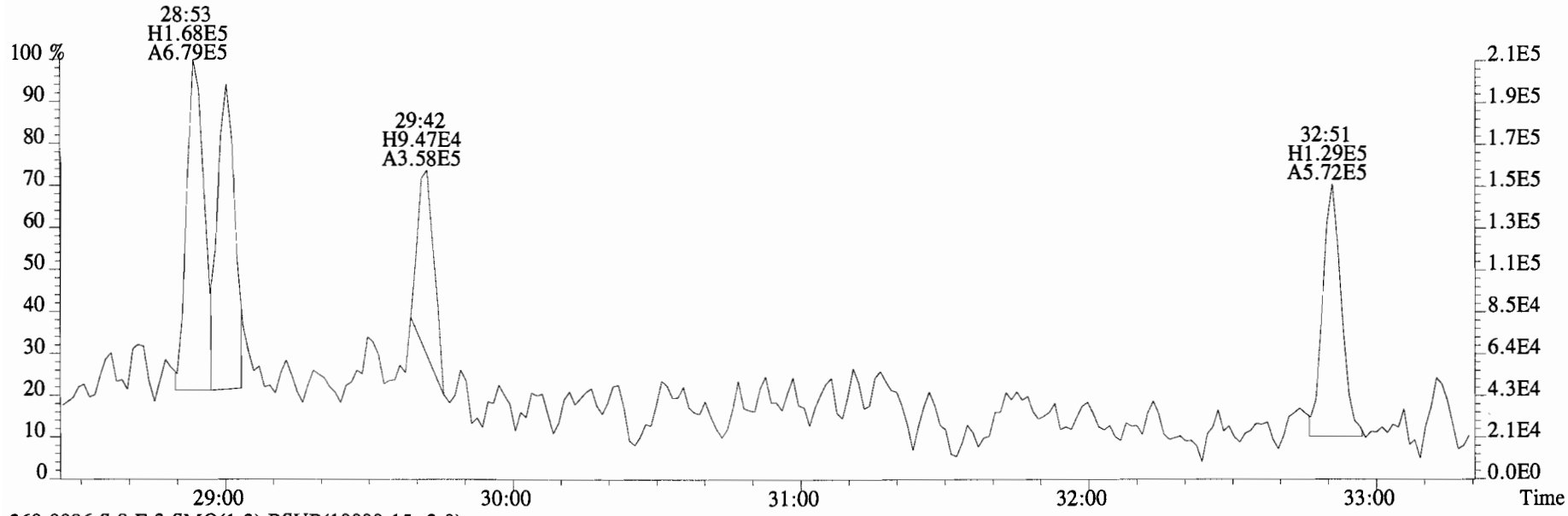
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
268.0016 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,50068.0,0.00%,F,F)



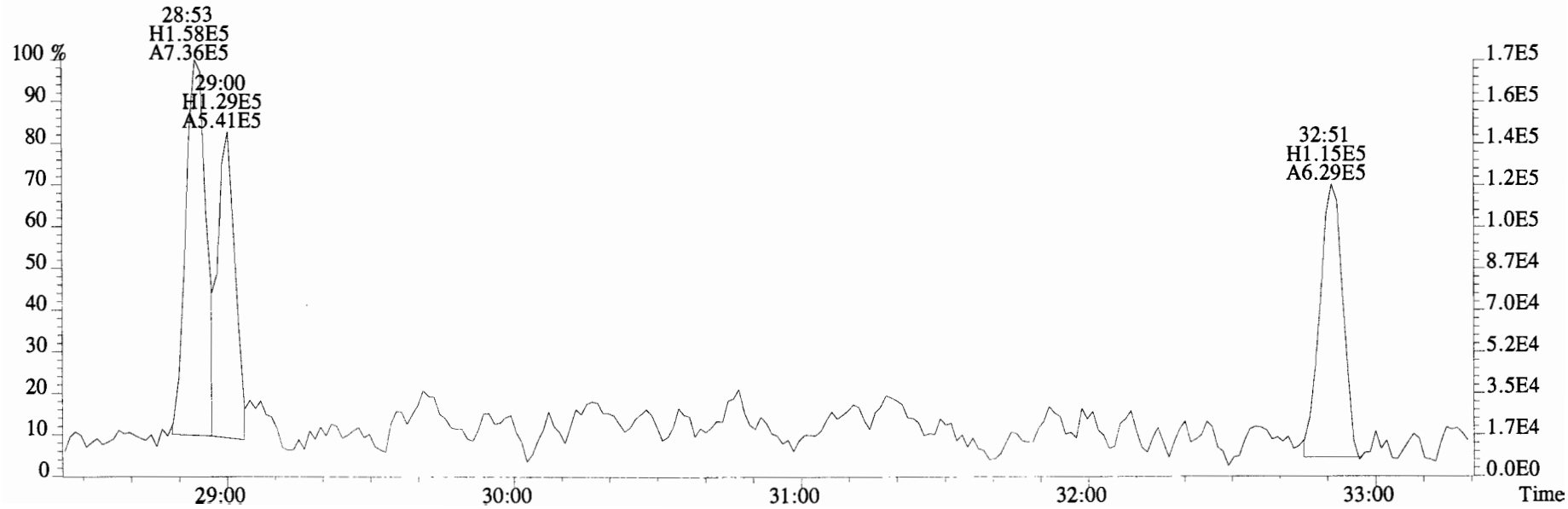
269.9986 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25244.0,0.00%,F,F)

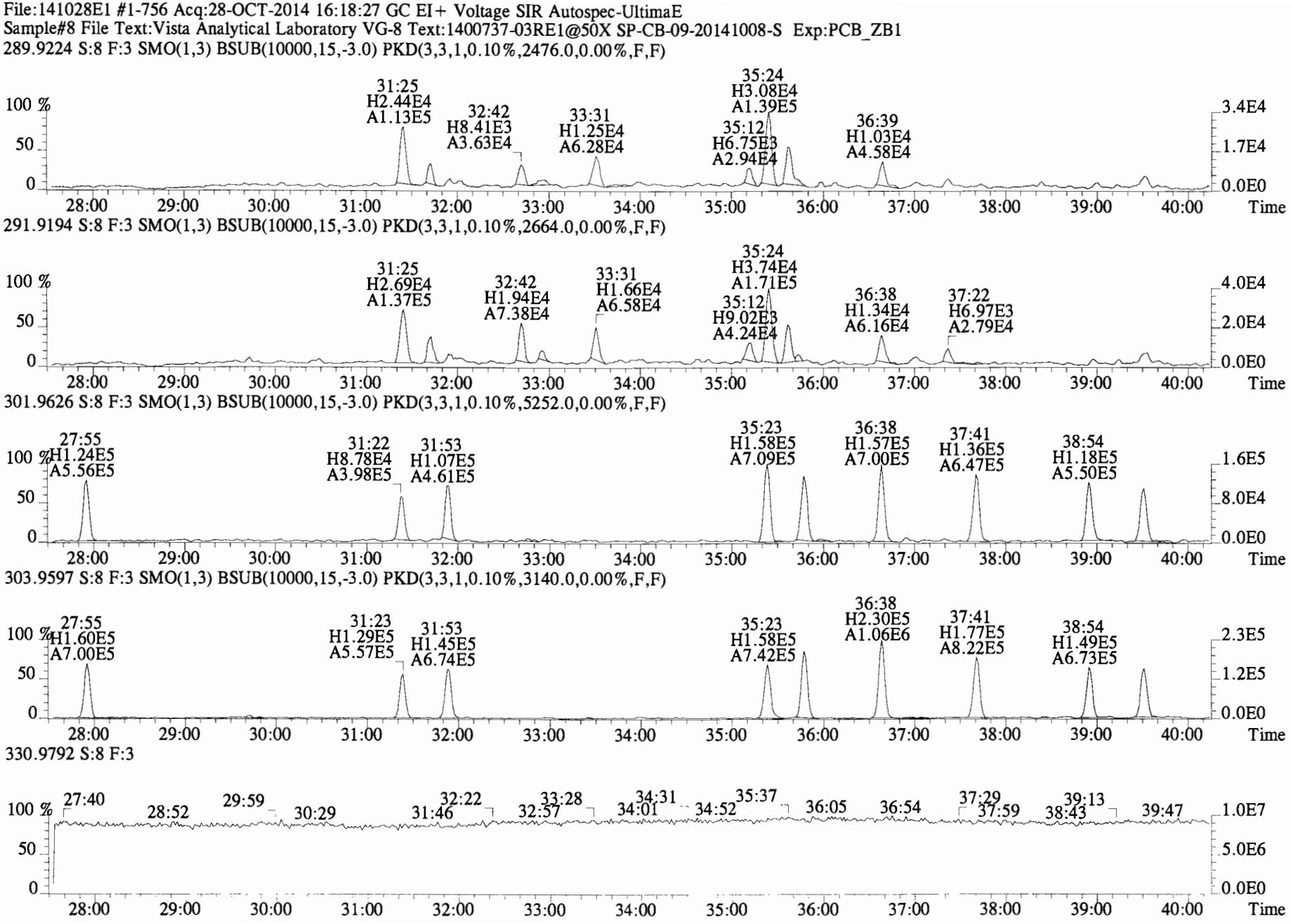


File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
268.0016 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)

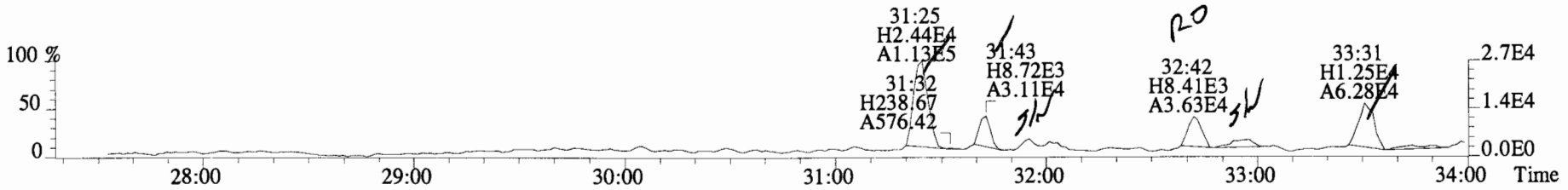


269.9986 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)

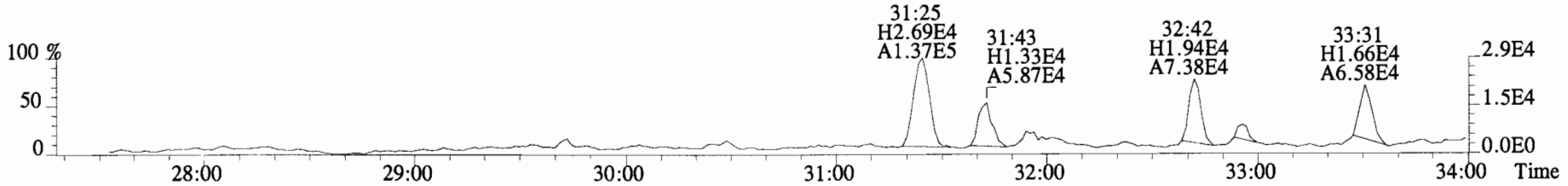



File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
289.9224 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2476.0,0.00%,F,F)
31:25 H2.44E4 A1.13E5
32:42 H8.41E3 A3.63E4
33:31 H1.25E4 A6.28E4
35:24 H3.08E4 A1.39E5
35:12 H6.75E3 A2.94E4
36:39 H1.03E4 A4.58E4
291.9194 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2664.0,0.00%,F,F)
31:25 H2.69E4 A1.37E5
32:42 H1.94E4 A7.38E4
33:31 H1.66E4 A6.58E4
35:24 H3.74E4 A1.71E5
35:12 H9.02E3 A4.24E4
36:38 H1.34E4 A6.16E4
37:22 H6.97E3 A2.79E4
301.9626 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5252.0,0.00%,F,F)
27:55 H1.24E5 A5.56E5
31:22 H8.78E4 A3.98E5
31:53 H1.07E5 A4.61E5
35:23 H1.58E5 A7.09E5
36:38 H1.57E5 A7.00E5
37:41 H1.36E5 A6.47E5
38:54 H1.18E5 A5.50E5
303.9597 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3140.0,0.00%,F,F)
27:55 H1.60E5 A7.00E5
31:23 H1.29E5 A5.57E5
31:53 H1.45E5 A6.74E5
35:23 H1.58E5 A7.42E5
36:38 H2.30E5 A1.06E6
37:41 H1.77E5 A8.22E5
38:54 H1.49E5 A6.73E5
330.9792 S:8 F:3
27:40
28:52
29:59
30:29
31:46
32:22
32:57
33:28
34:01
34:31
34:52
35:37
36:05
36:54
37:29
37:59
38:43
39:13
39:47
100 %
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
37:00
38:00
39:00
40:00
Time
3.4E4
1.7E4
0.0E0
4.0E4
2.0E4
1.6E5
8.0E4
2.3E5
1.2E5
1.0E7
5.0E6

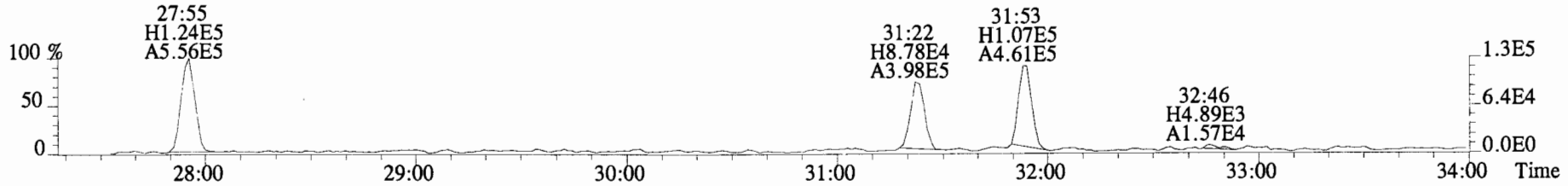
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
289.9224 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2476.0,0.00%,F,F)



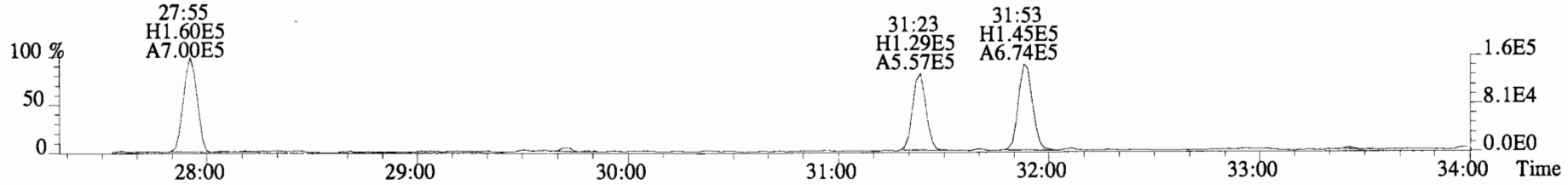
291.9194 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2664.0,0.00%,F,F)



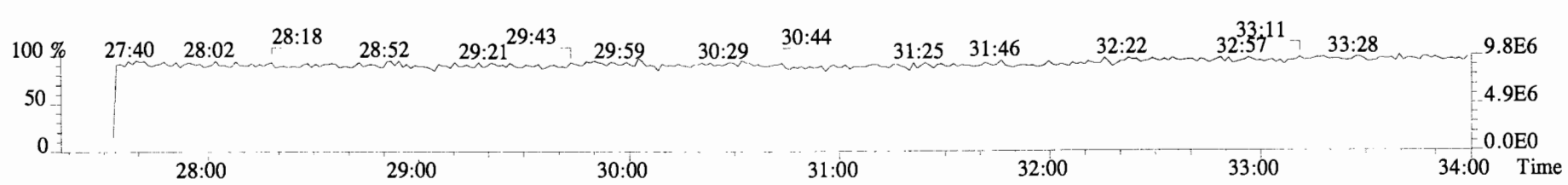
301.9626 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5252.0,0.00%,F,F)



303.9597 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3140.0,0.00%,F,F)

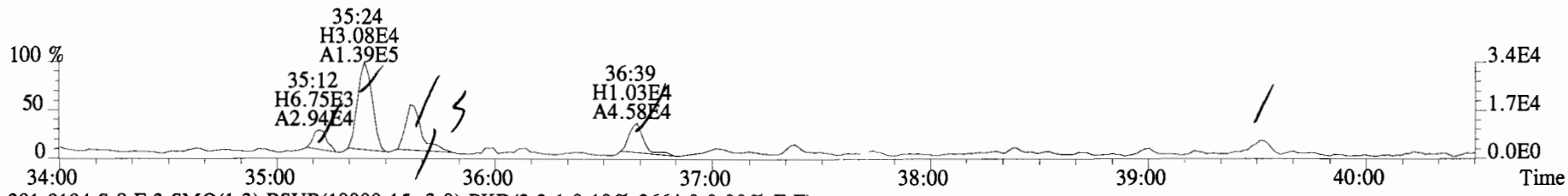


330.9792 S:8 F:3

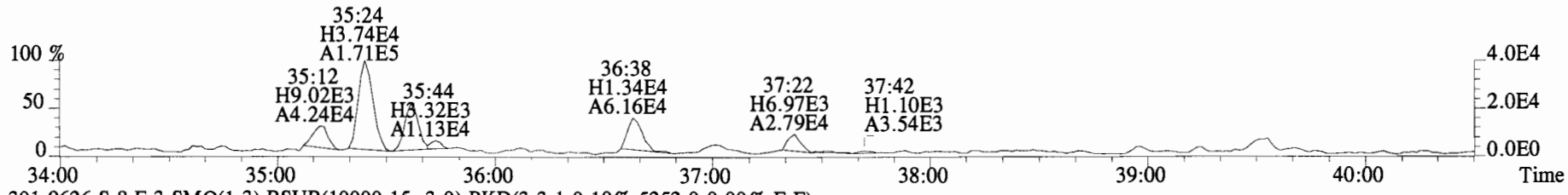


File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1

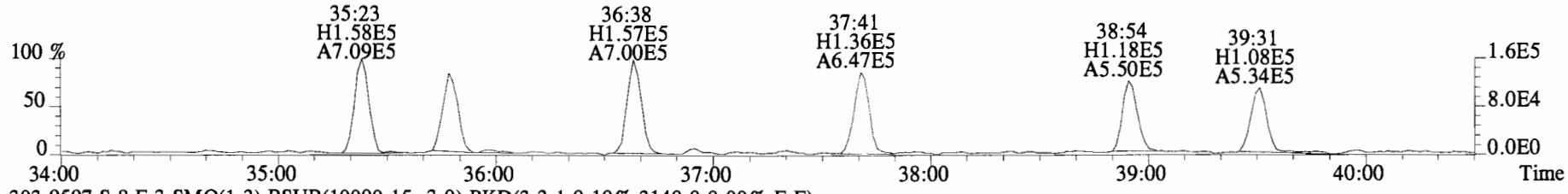
289.9224 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2476.0,0.00%,F,F)



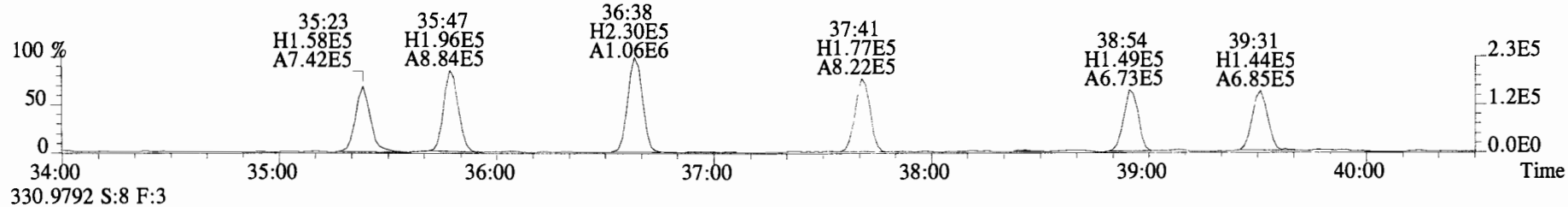
291.9194 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2664.0,0.00%,F,F)



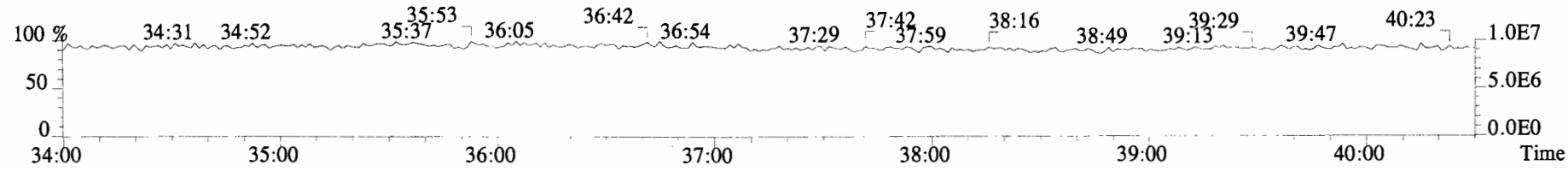
301.9626 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5252.0,0.00%,F,F)



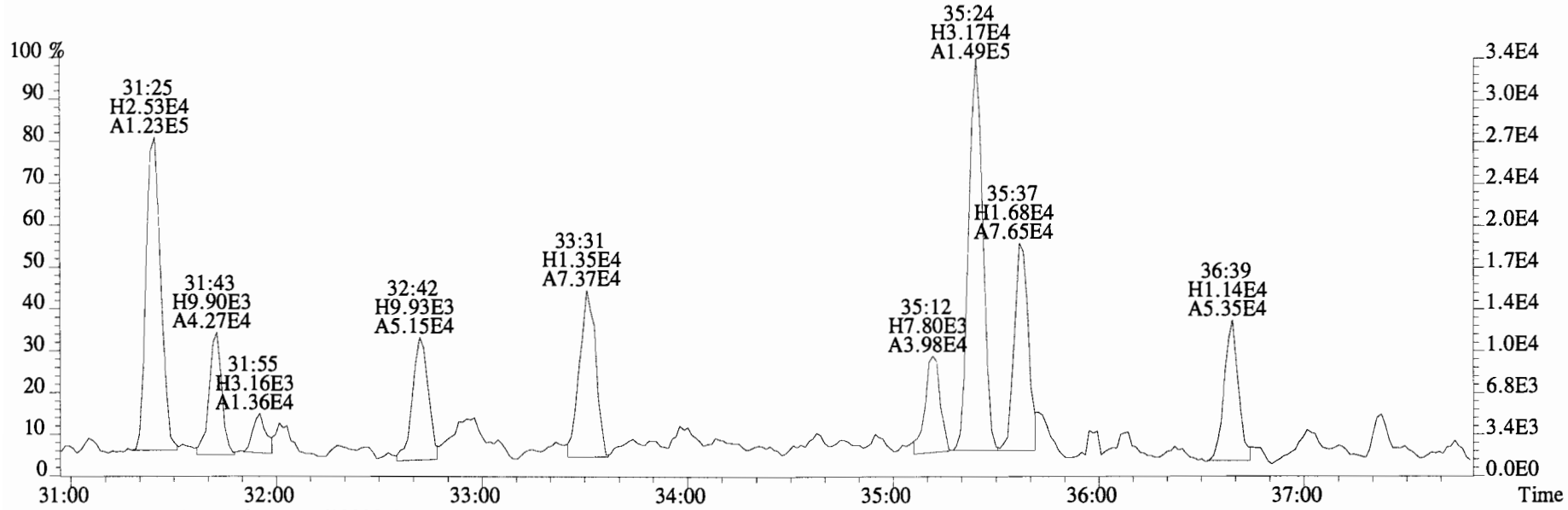
303.9597 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3140.0,0.00%,F,F)



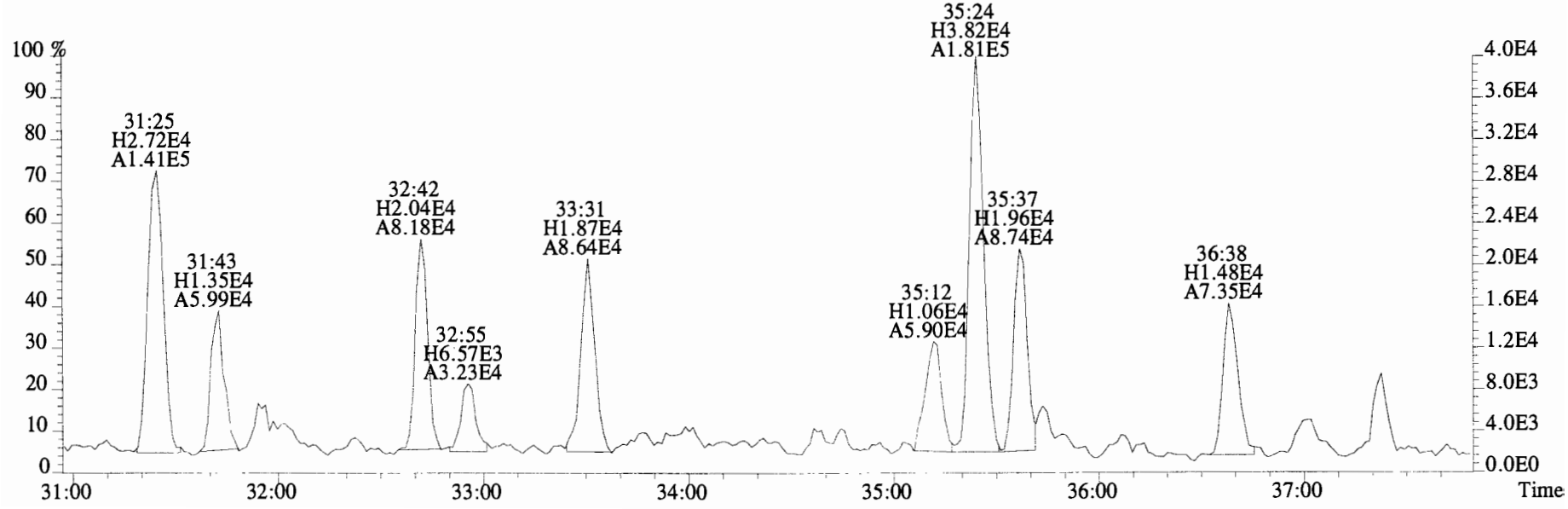
330.9792 S:8 F:3



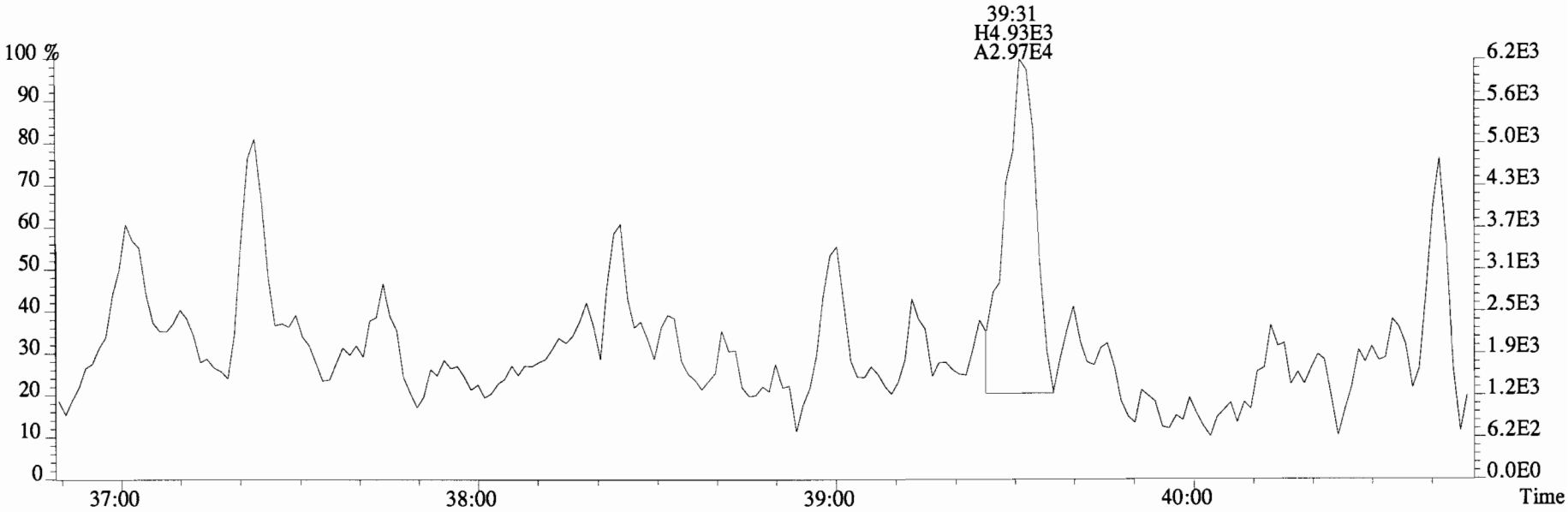
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
289.9224 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



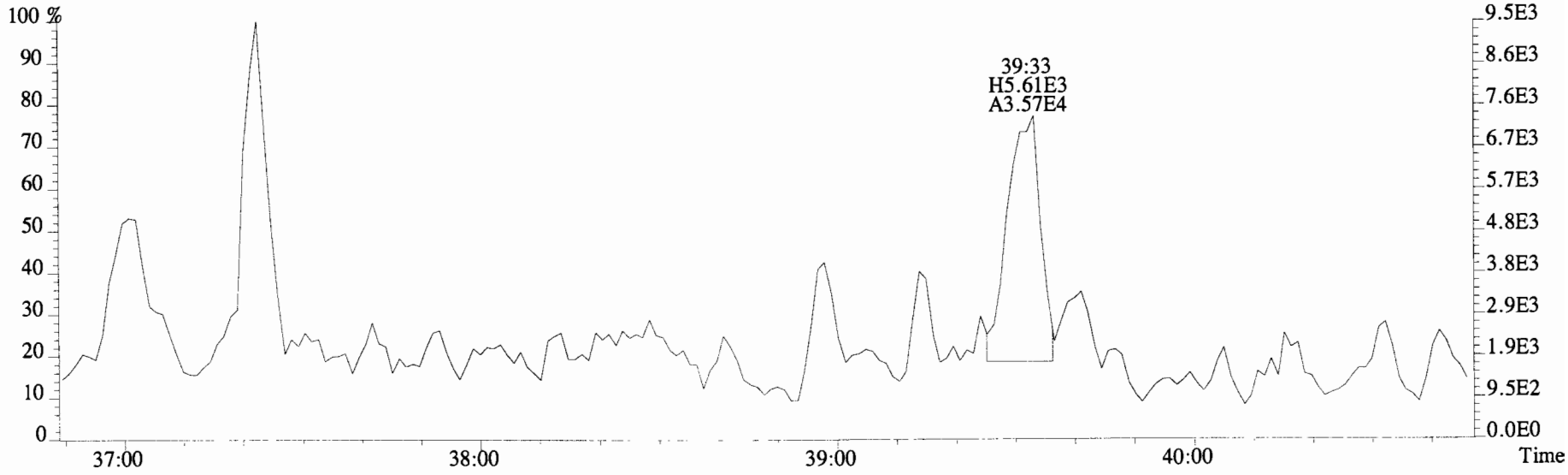
291.9194 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)

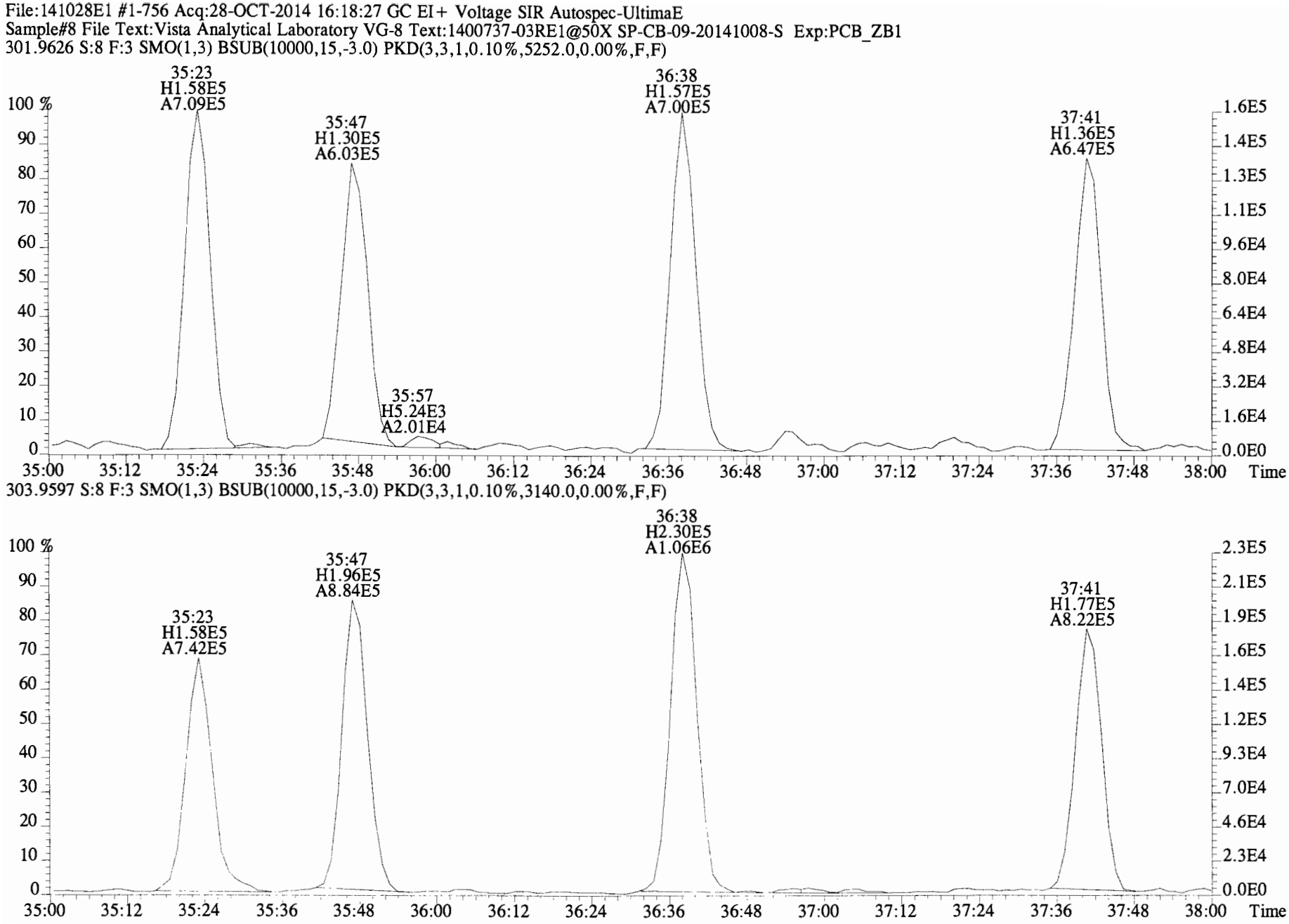


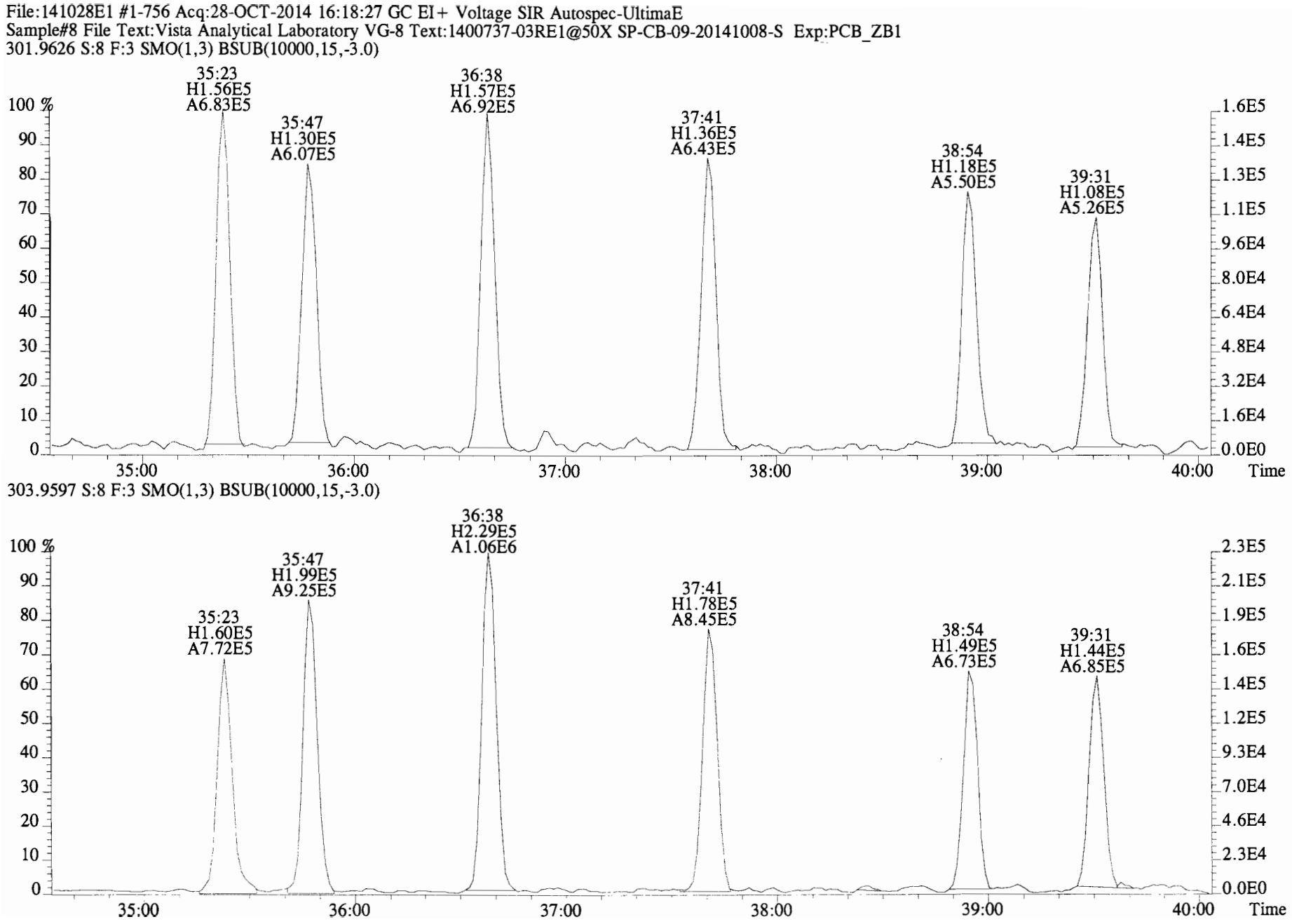
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
289.9224 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



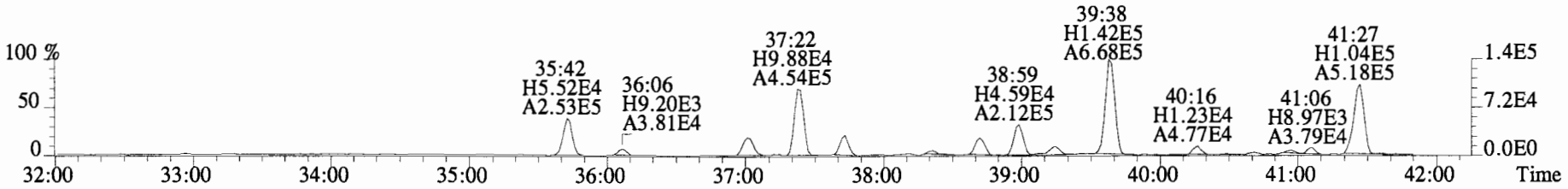
291.9194 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



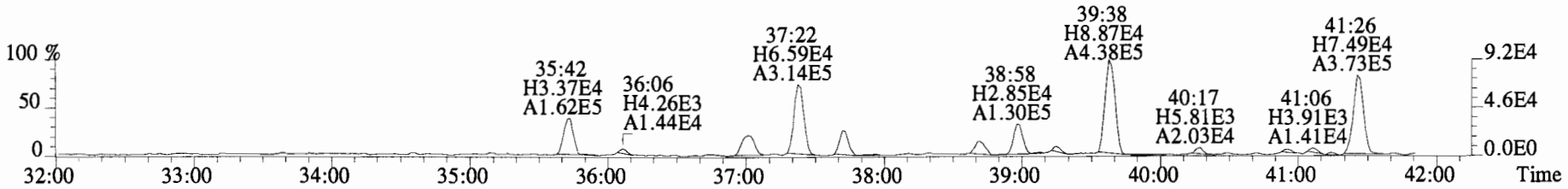

File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
301.9626 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5252.0,0.00%,F,F)
35:23
H1.58E5
A7.09E5
35:47
H1.30E5
A6.03E5
35:57
H5.24E3
A2.01E4
36:38
H1.57E5
A7.00E5
37:41
H1.36E5
A6.47E5
100 %
Time
303.9597 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3140.0,0.00%,F,F)
35:23
H1.58E5
A7.42E5
35:47
H1.96E5
A8.84E5
36:38
H2.30E5
A1.06E6
37:41
H1.77E5
A8.22E5
100 %
Time


File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
301.9626 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)
35:23 H1.56E5 A6.83E5
35:47 H1.30E5 A6.07E5
36:38 H1.57E5 A6.92E5
37:41 H1.36E5 A6.43E5
38:54 H1.18E5 A5.50E5
39:31 H1.08E5 A5.26E5
100 %
1.6E5
1.4E5
1.3E5
1.1E5
9.6E4
8.0E4
6.4E4
4.8E4
3.2E4
1.6E4
0.0E0
35:00
36:00
37:00
38:00
39:00
40:00
Time
303.9597 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)
35:23 H1.60E5 A7.72E5
35:47 H1.99E5 A9.25E5
36:38 H2.29E5 A1.06E6
37:41 H1.78E5 A8.45E5
38:54 H1.49E5 A6.73E5
39:31 H1.44E5 A6.85E5
100 %
2.3E5
2.1E5
1.9E5
1.6E5
1.4E5
1.2E5
9.3E4
7.0E4
4.6E4
2.3E4
0.0E0
35:00
36:00
37:00
38:00
39:00
40:00
Time

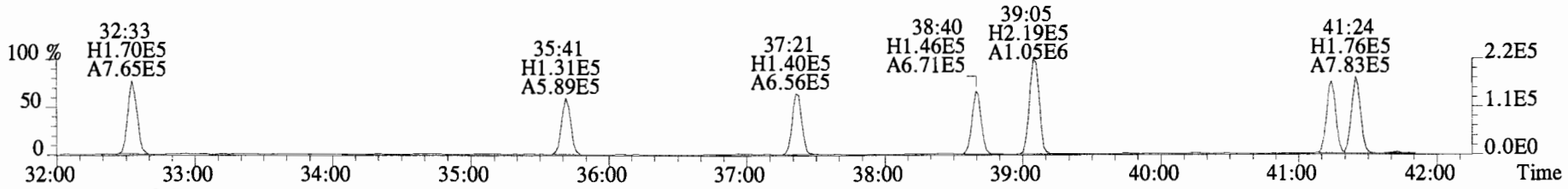
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
325.8804 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2320.0,0.00%,F,F)



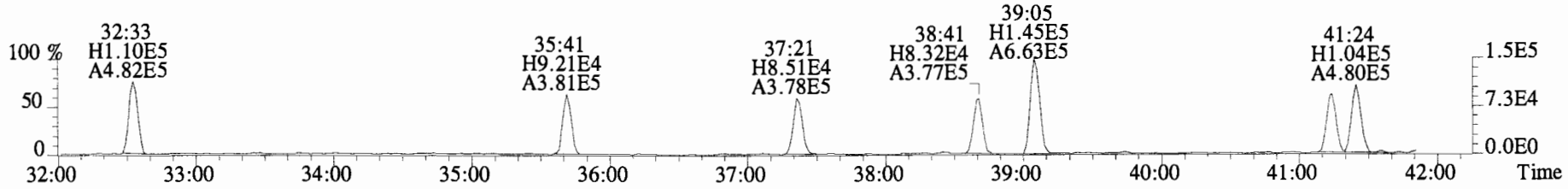
327.8775 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)



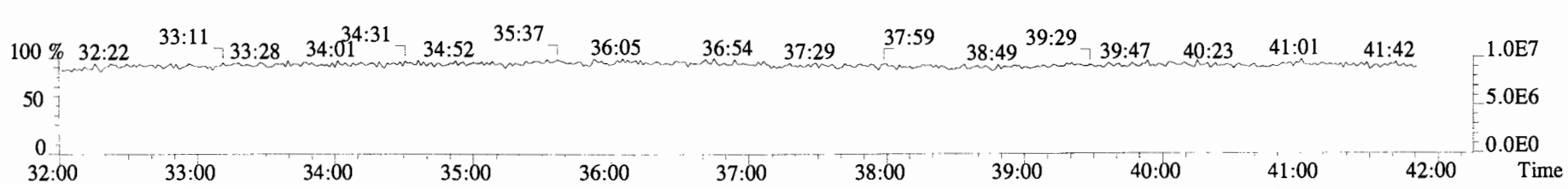
337.9207 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2284.0,0.00%,F,F)



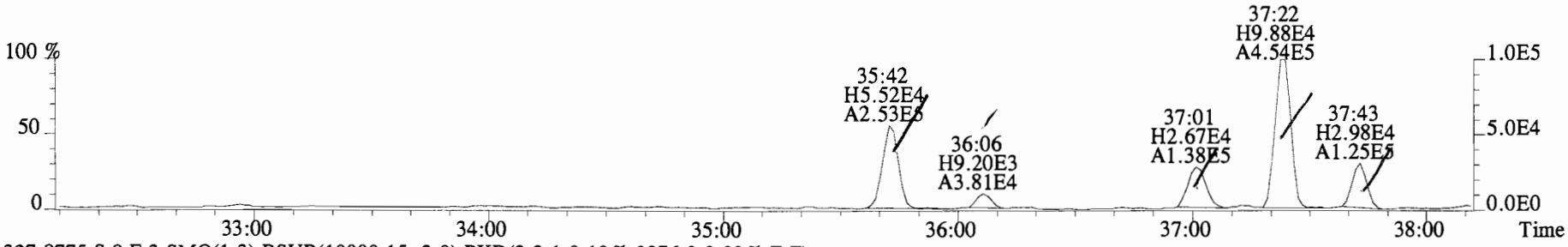
339.9177 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2324.0,0.00%,F,F)



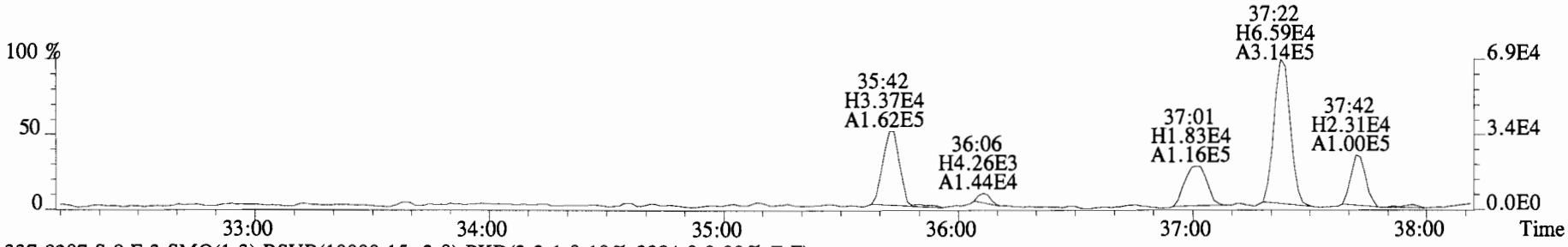
330.9792 S:8 F:3



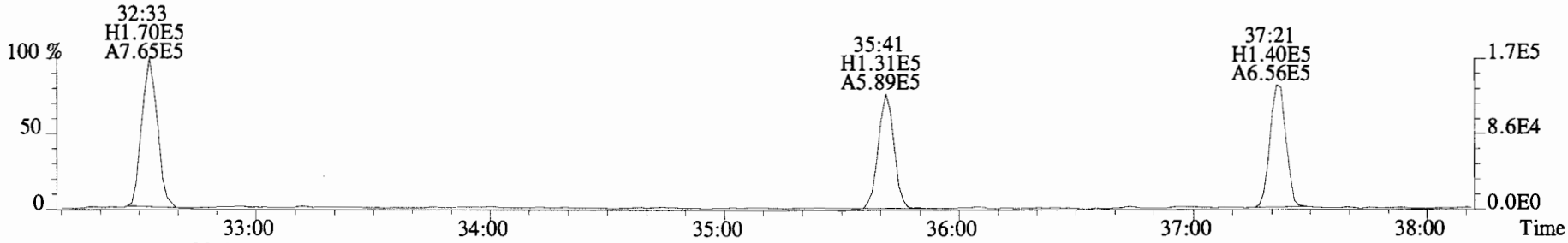
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
325.8804 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2320.0,0.00%,F,F)



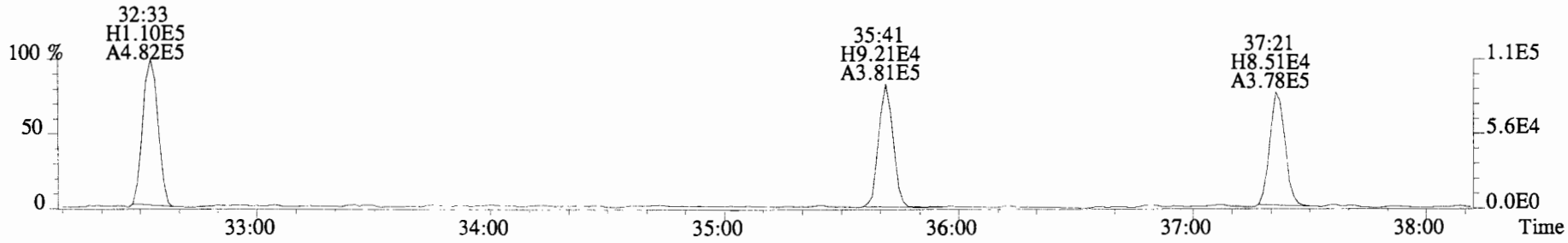
327.8775 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)



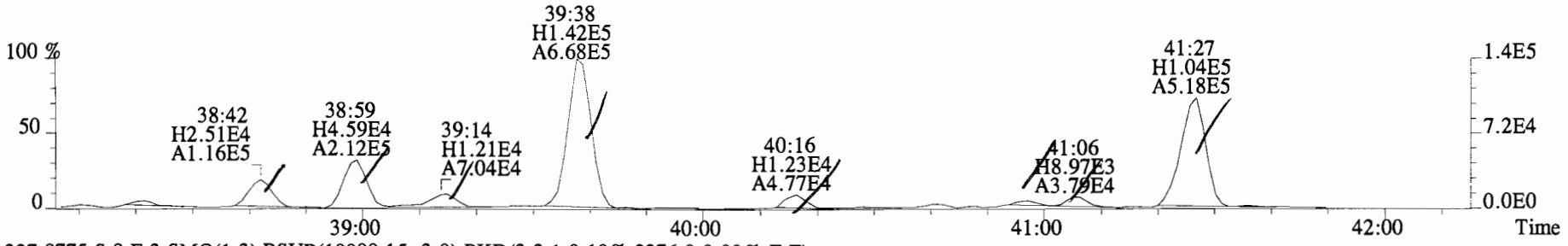
337.9207 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2284.0,0.00%,F,F)



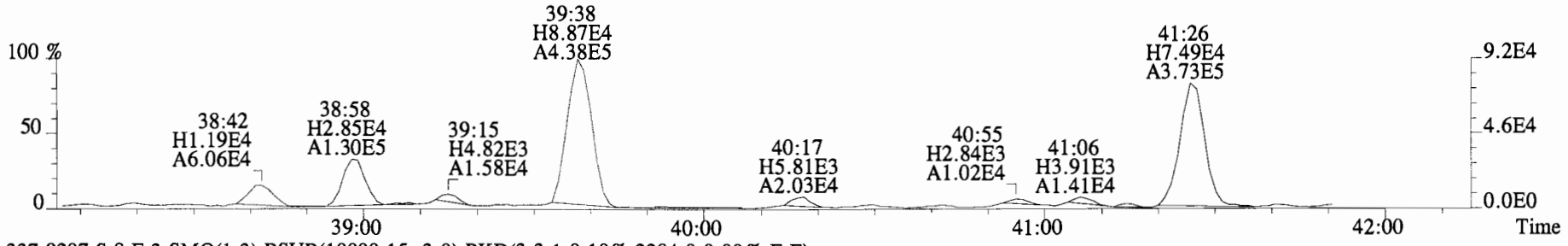
339.9177 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2324.0,0.00%,F,F)



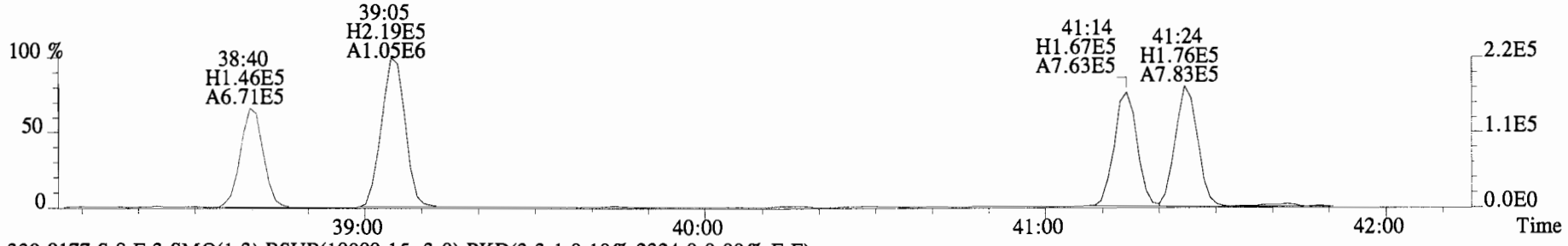
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
325.8804 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2320.0,0.00%,F,F)



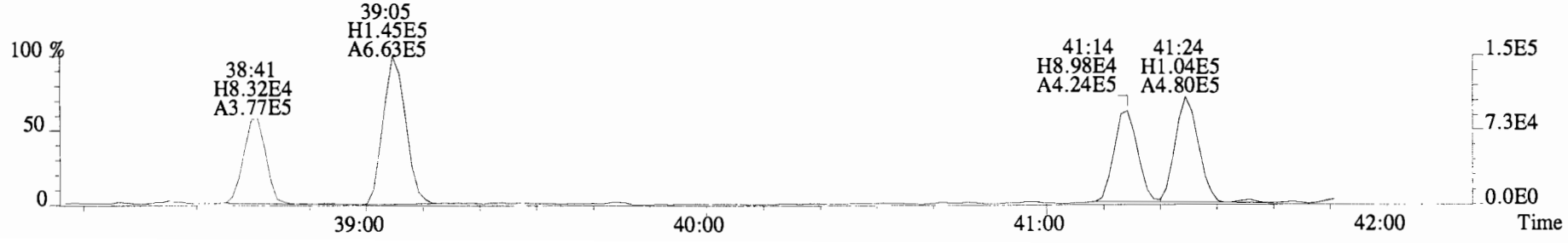
327.8775 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2376.0,0.00%,F,F)

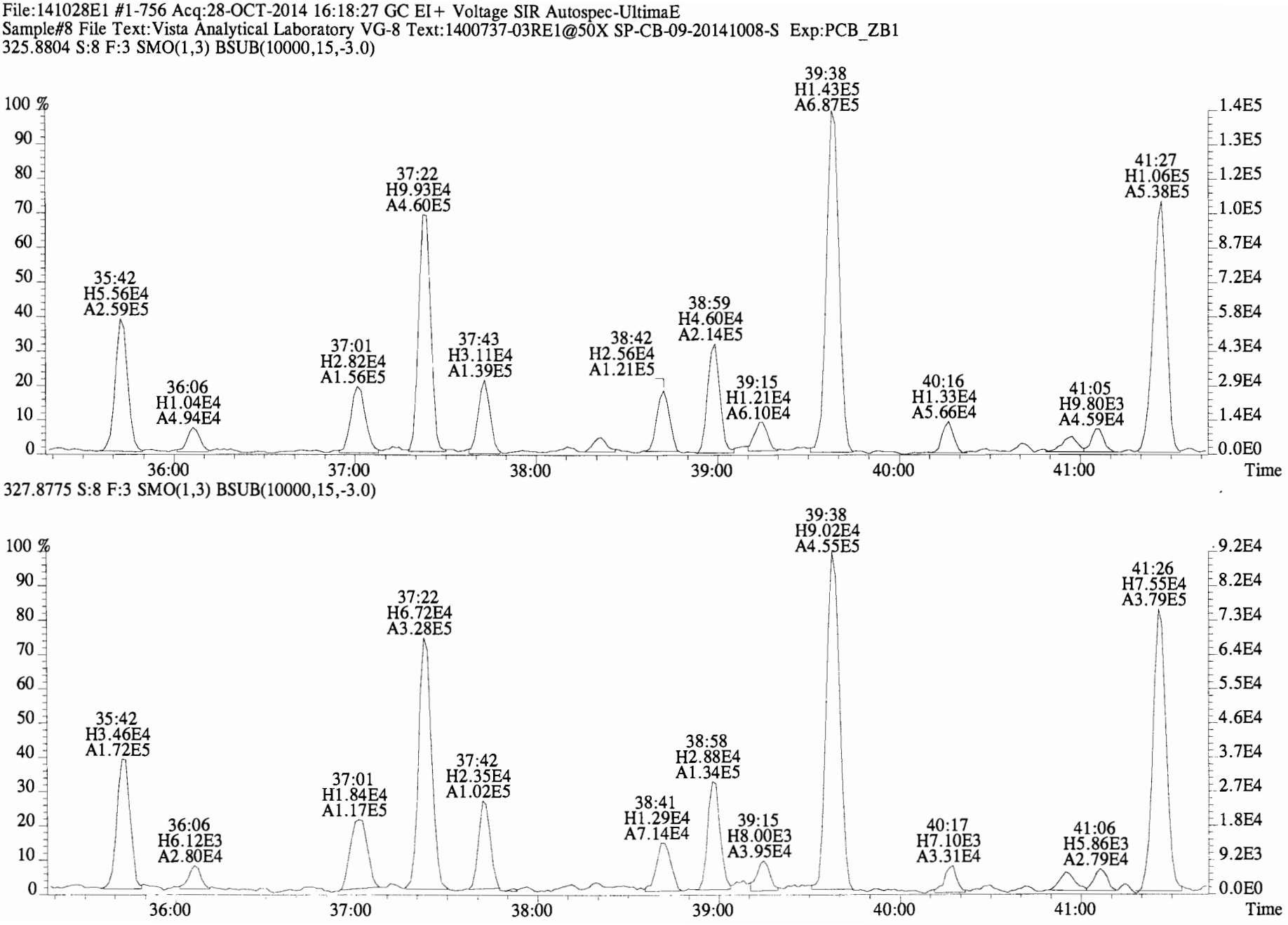


337.9207 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2284.0,0.00%,F,F)

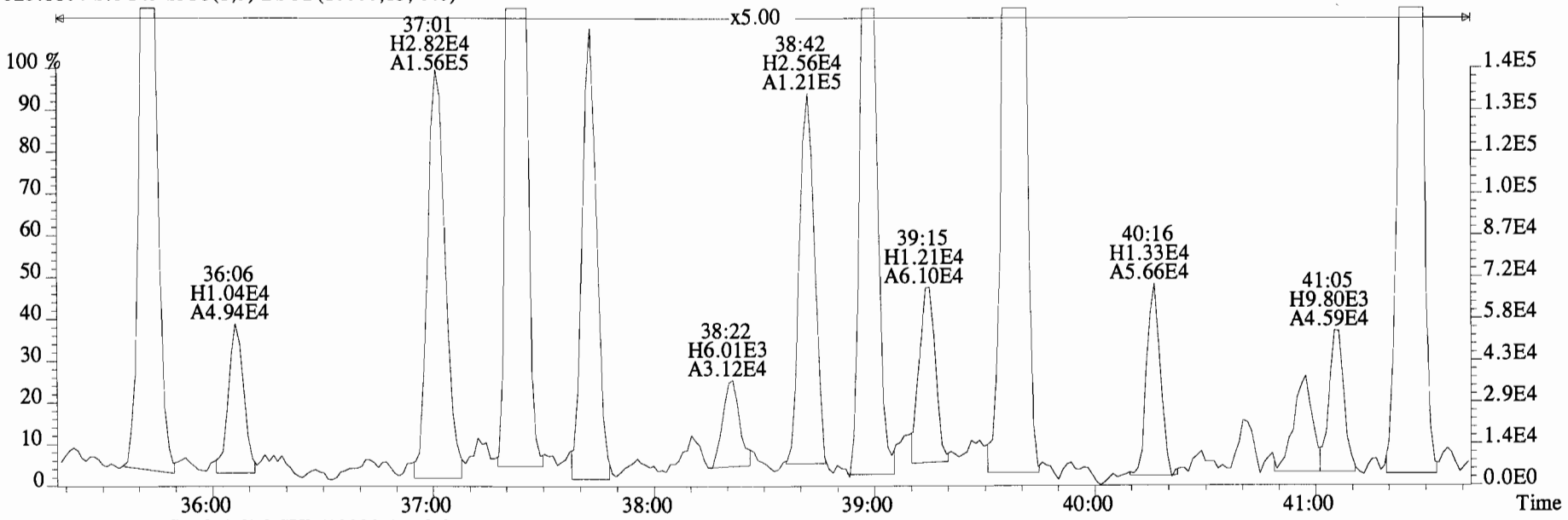


339.9177 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2324.0,0.00%,F,F)

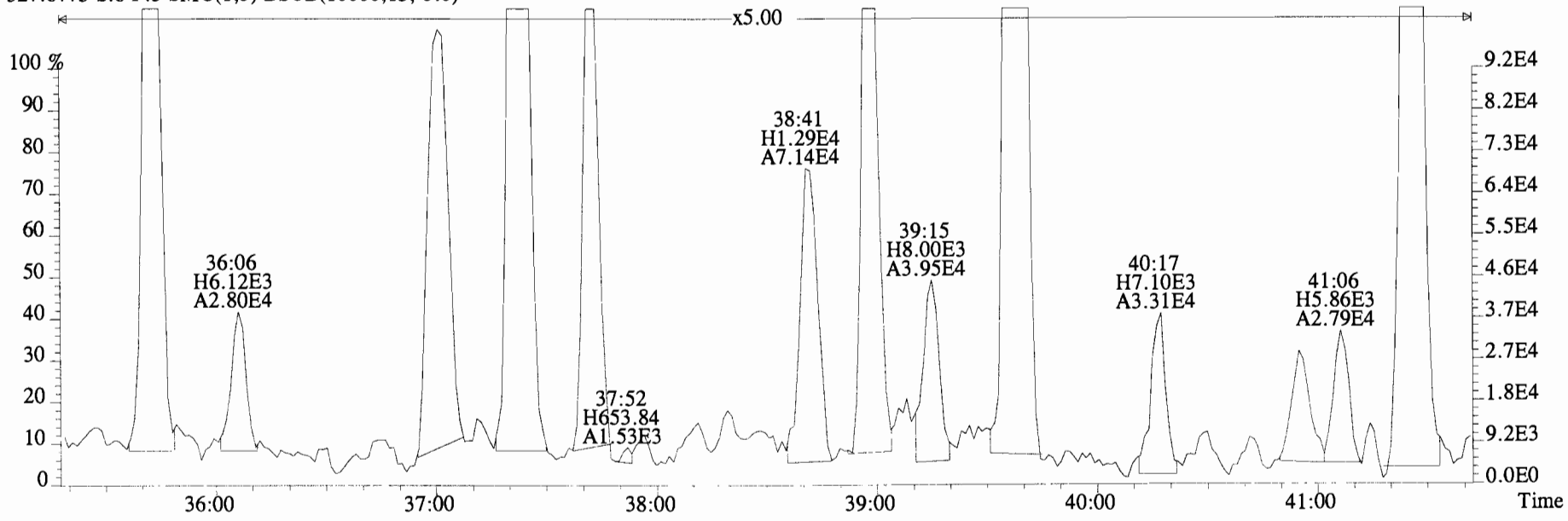



File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
325.8804 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)
35:42 H5.56E4 A2.59E5
36:06 H1.04E4 A4.94E4
37:01 H2.82E4 A1.56E5
37:22 H9.93E4 A4.60E5
37:43 H3.11E4 A1.39E5
38:42 H2.56E4 A1.21E5
38:59 H4.60E4 A2.14E5
39:15 H1.21E4 A6.10E4
39:38 H1.43E5 A6.87E5
40:16 H1.33E4 A5.66E4
41:05 H9.80E3 A4.59E4
41:27 H1.06E5 A5.38E5
100 %
Time
327.8775 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)
35:42 H3.46E4 A1.72E5
36:06 H6.12E3 A2.80E4
37:01 H1.84E4 A1.17E5
37:22 H6.72E4 A3.28E5
37:42 H2.35E4 A1.02E5
38:41 H1.29E4 A7.14E4
38:58 H2.88E4 A1.34E5
39:15 H8.00E3 A3.95E4
39:38 H9.02E4 A4.55E5
40:17 H7.10E3 A3.31E4
41:06 H5.86E3 A2.79E4
41:26 H7.55E4 A3.79E5
100 %
Time

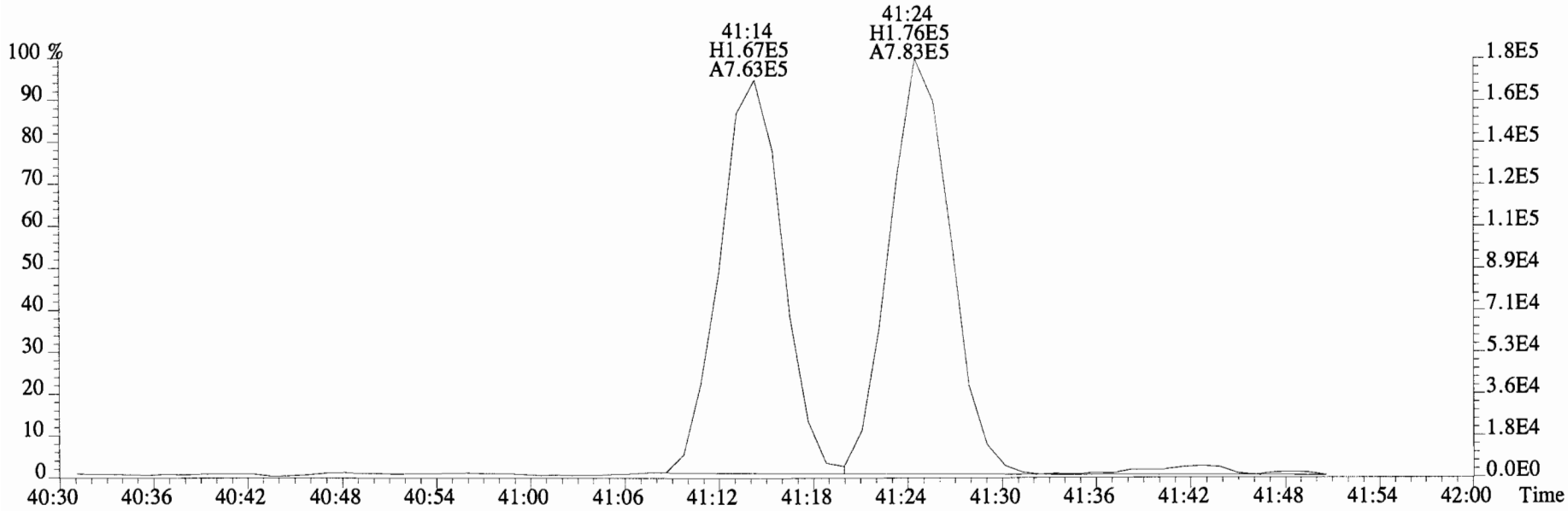
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
325.8804 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



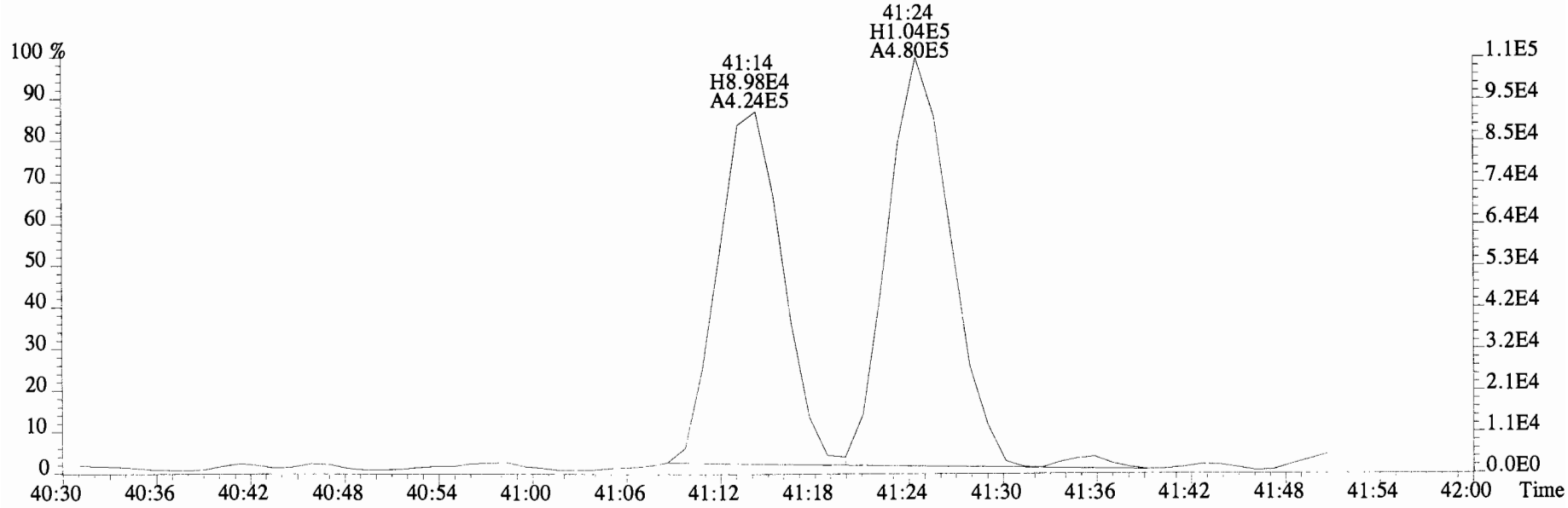
327.8775 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0)



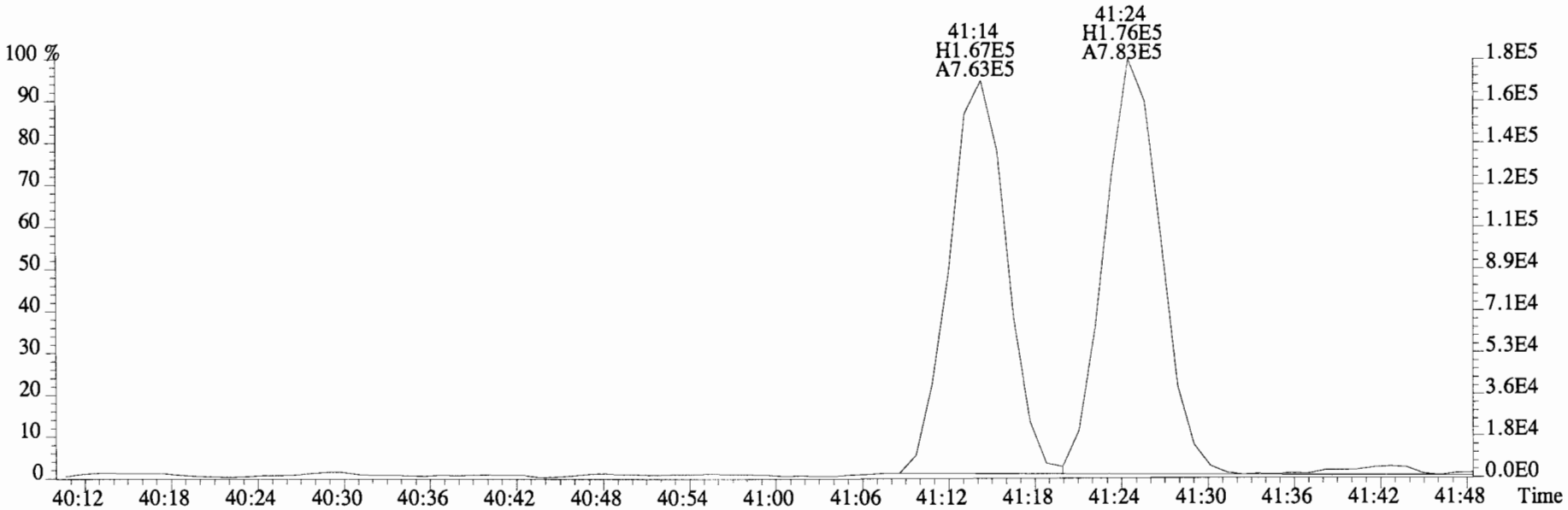
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
337.9207 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2284.0,0.00%,F,F)



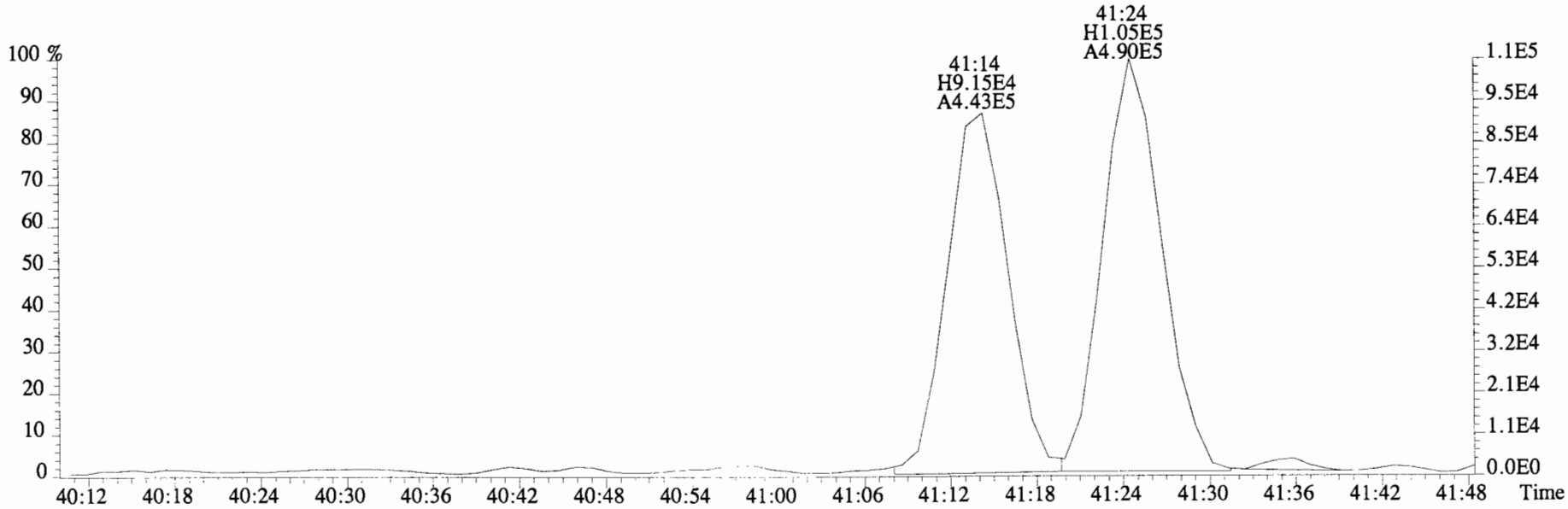
339.9177 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2324.0,0.00%,F,F)



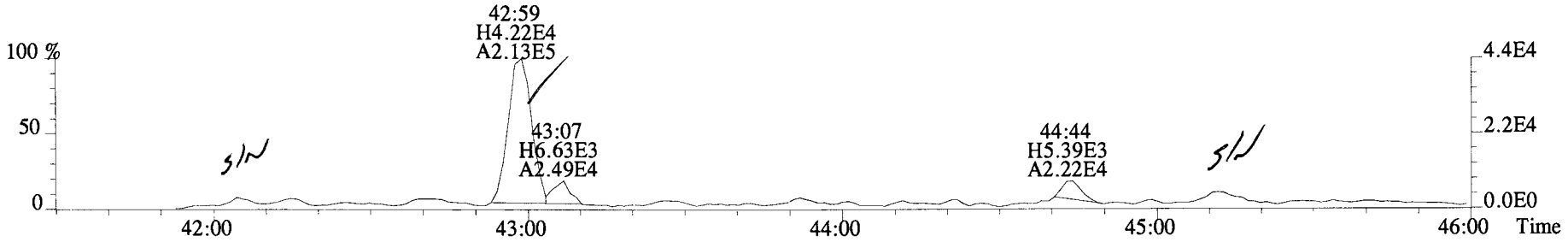
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
337.9207 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2284.0,0.00%,F,F)



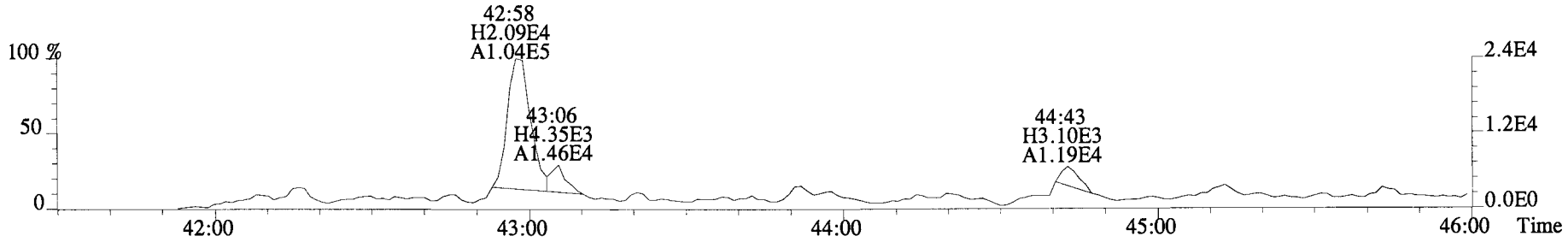
339.9177 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2324.0,0.00%,F,F)



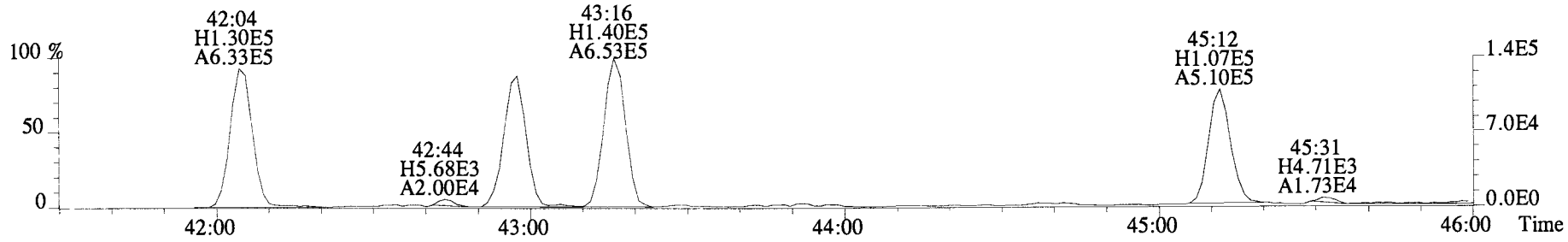
File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
325.8804 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2440.0,0.00%,F,F)



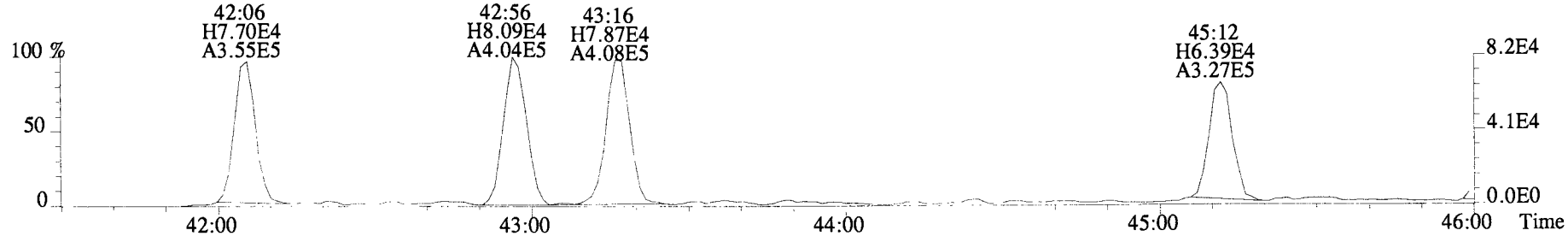
327.8775 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2440.0,0.00%,F,F)



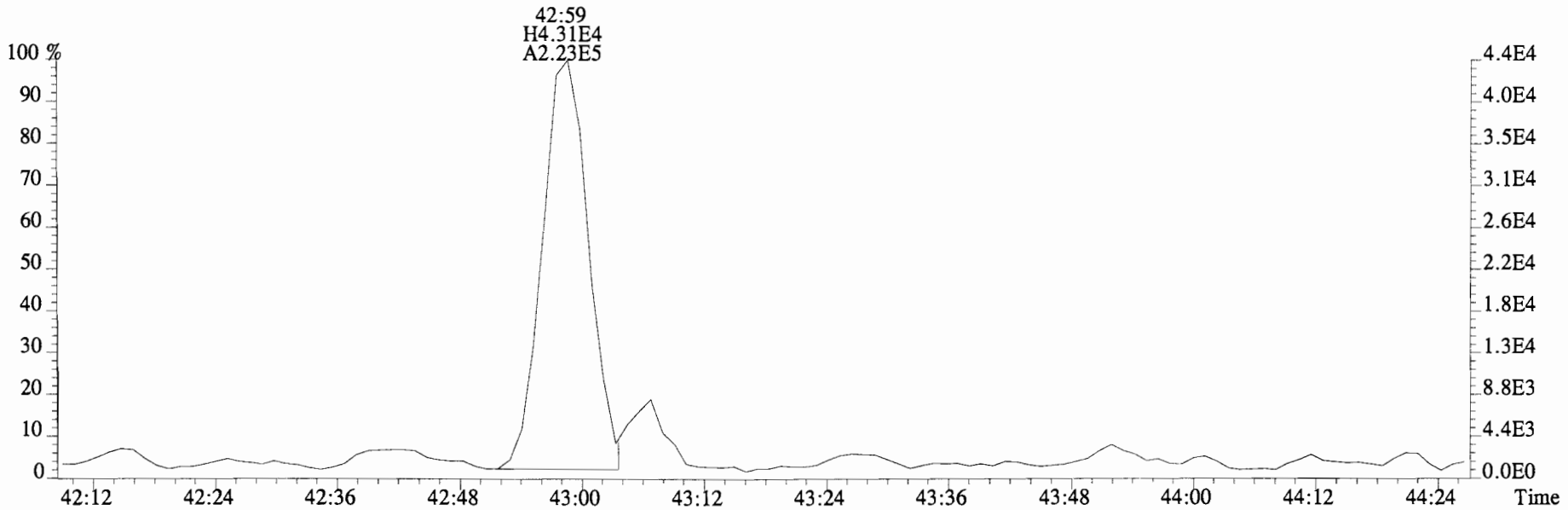
337.9207 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2668.0,0.00%,F,F)



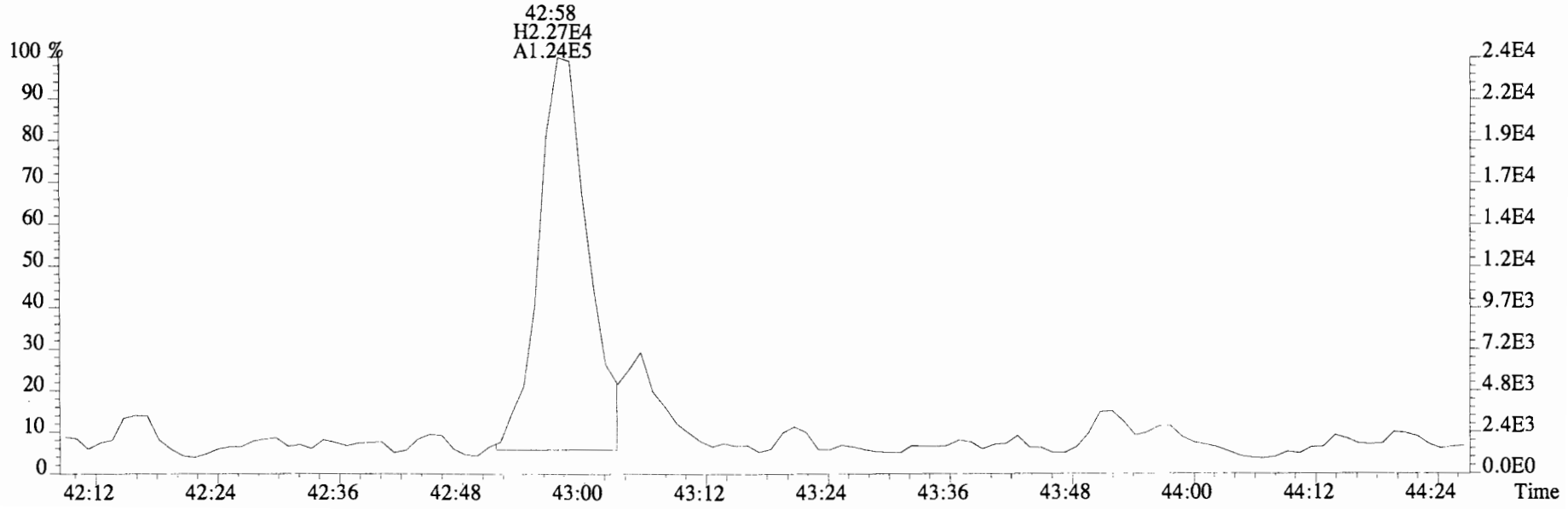
339.9177 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2412.0,0.00%,F,F)



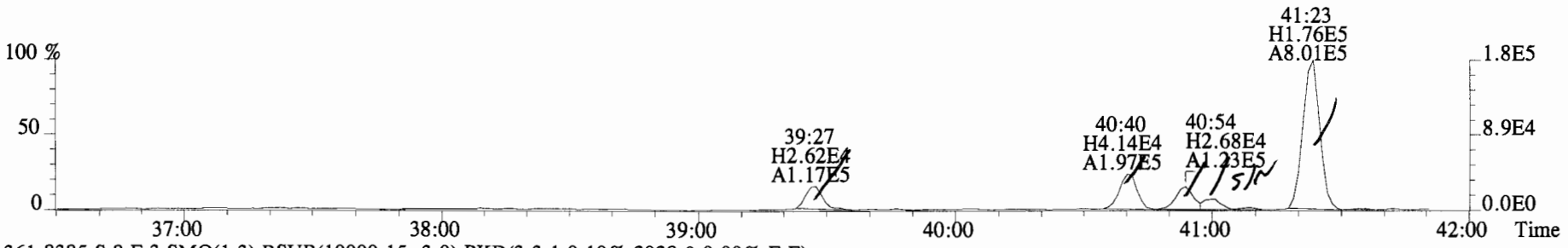
File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
325.8804 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2440.0,0.00%,F,F)



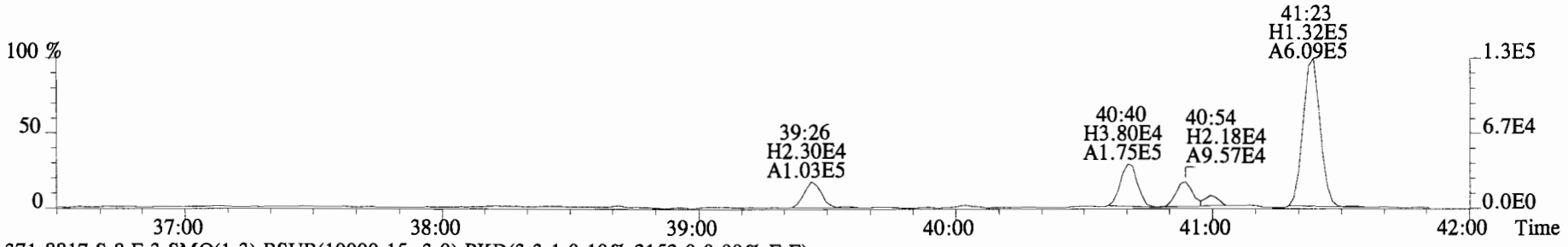
327.8775 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2440.0,0.00%,F,F)



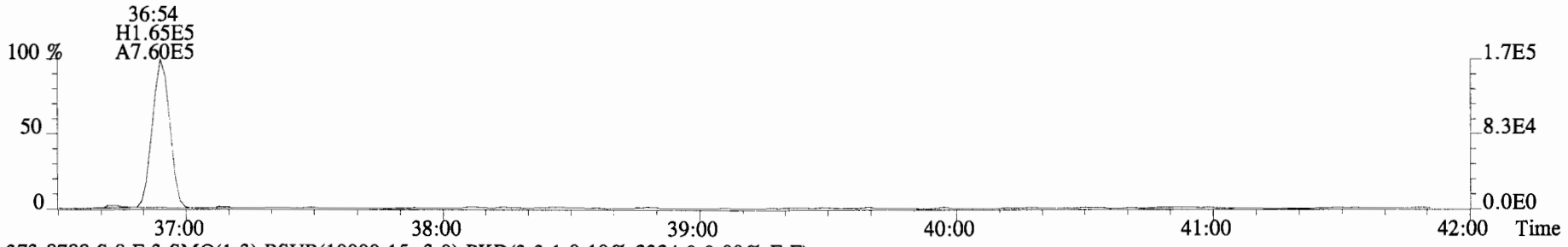
File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
359.8415 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2192.0,0.00%,F,F)



361.8385 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2028.0,0.00%,F,F)

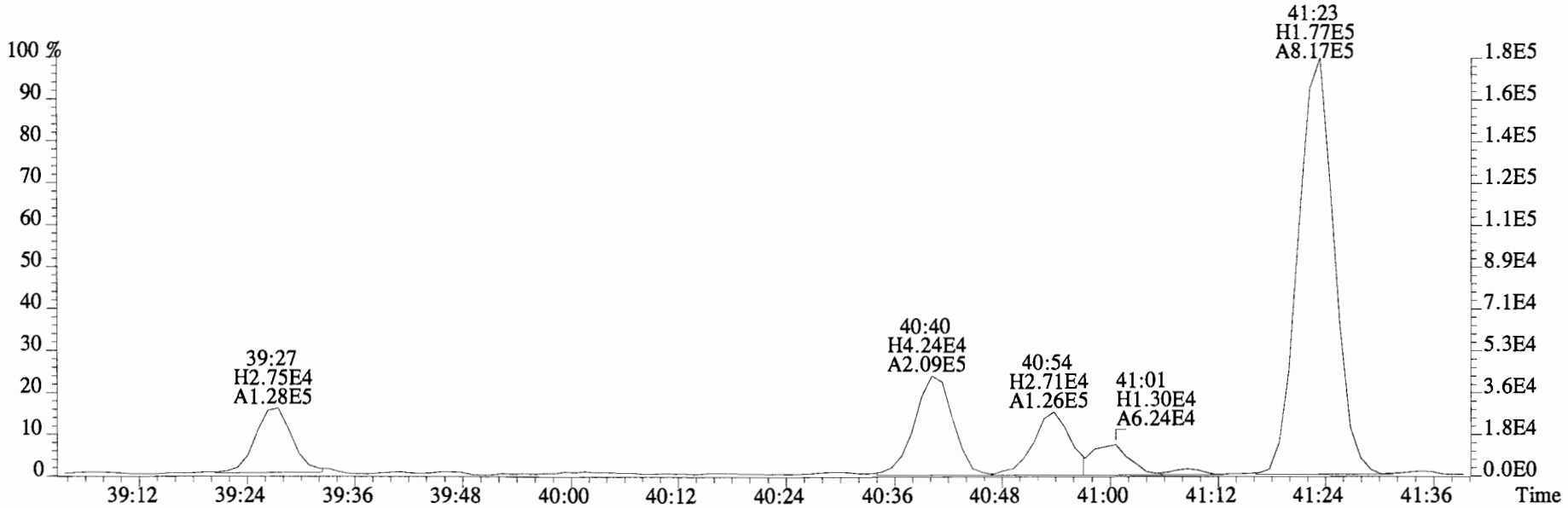


371.8817 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2152.0,0.00%,F,F)

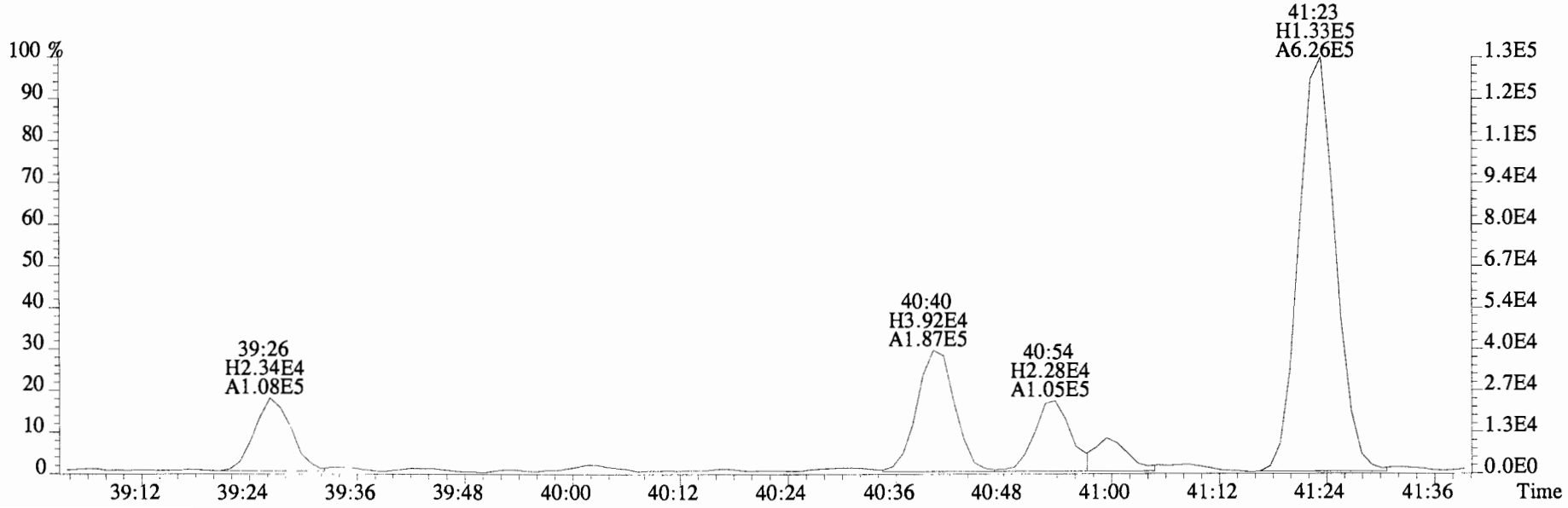


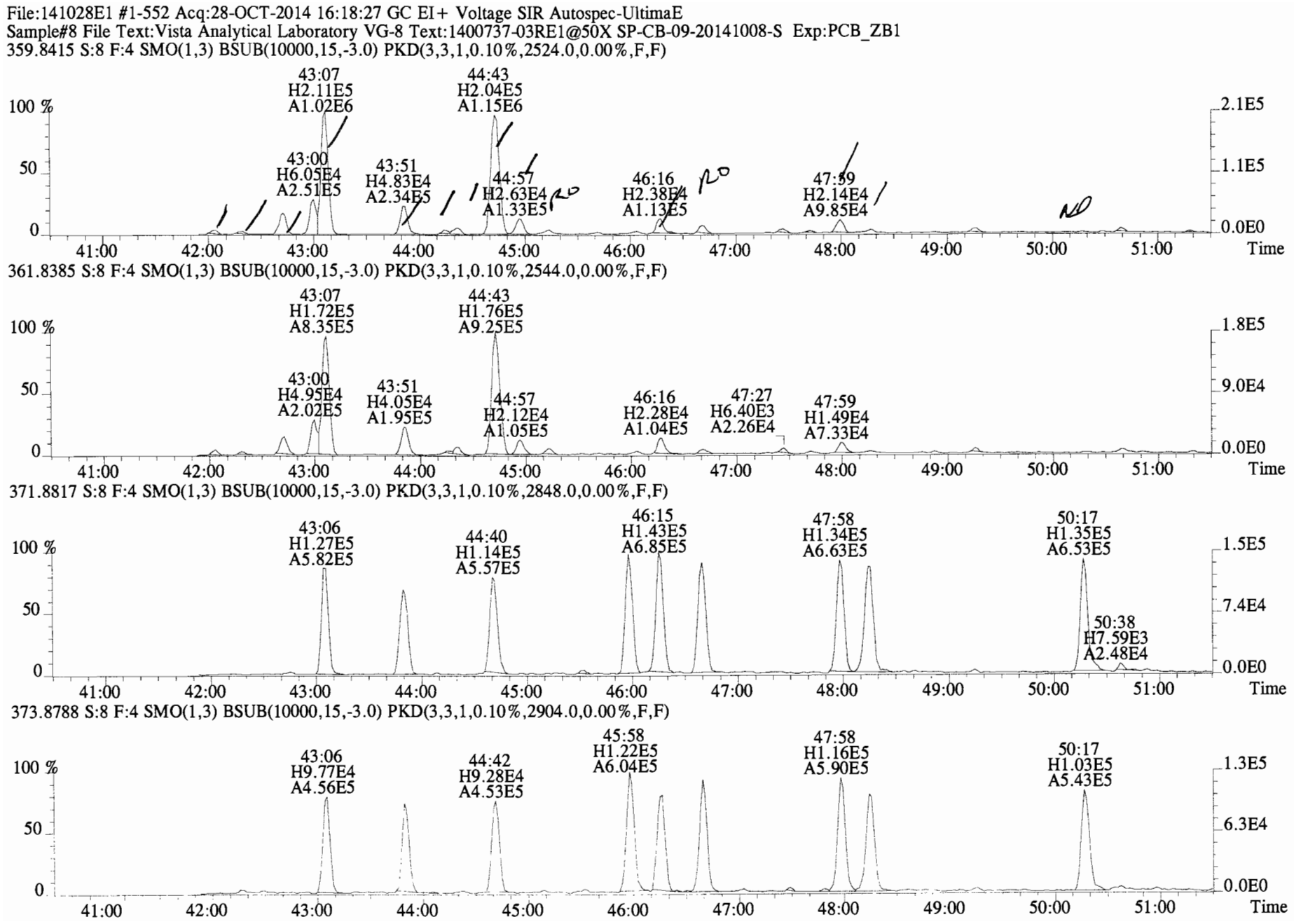
373.8788 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2324.0,0.00%,F,F)

File:141028E1 #1-756 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
359.8415 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2192.0,0.00%,F,F)

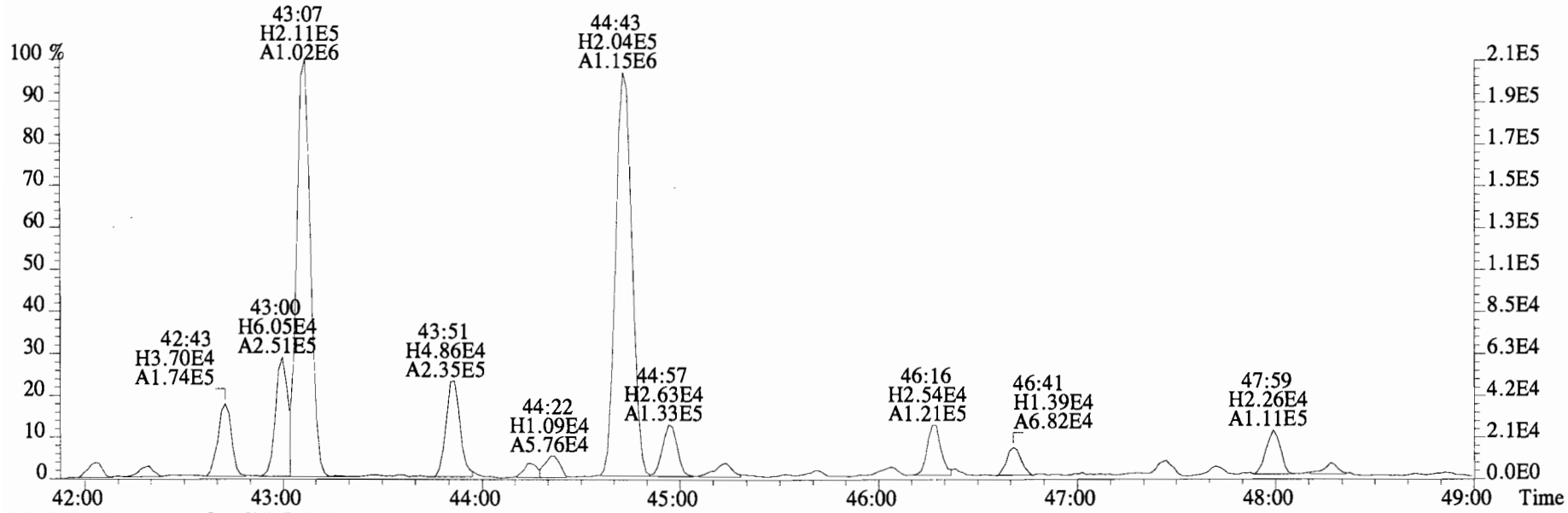


361.8385 S:8 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2028.0,0.00%,F,F)

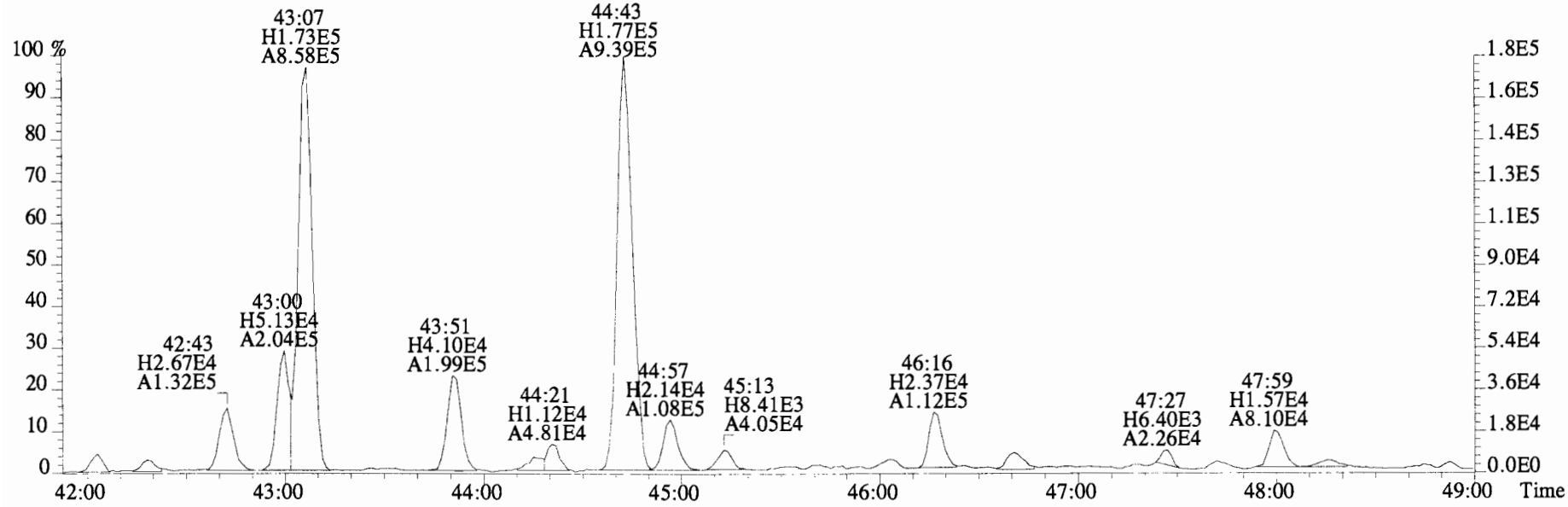


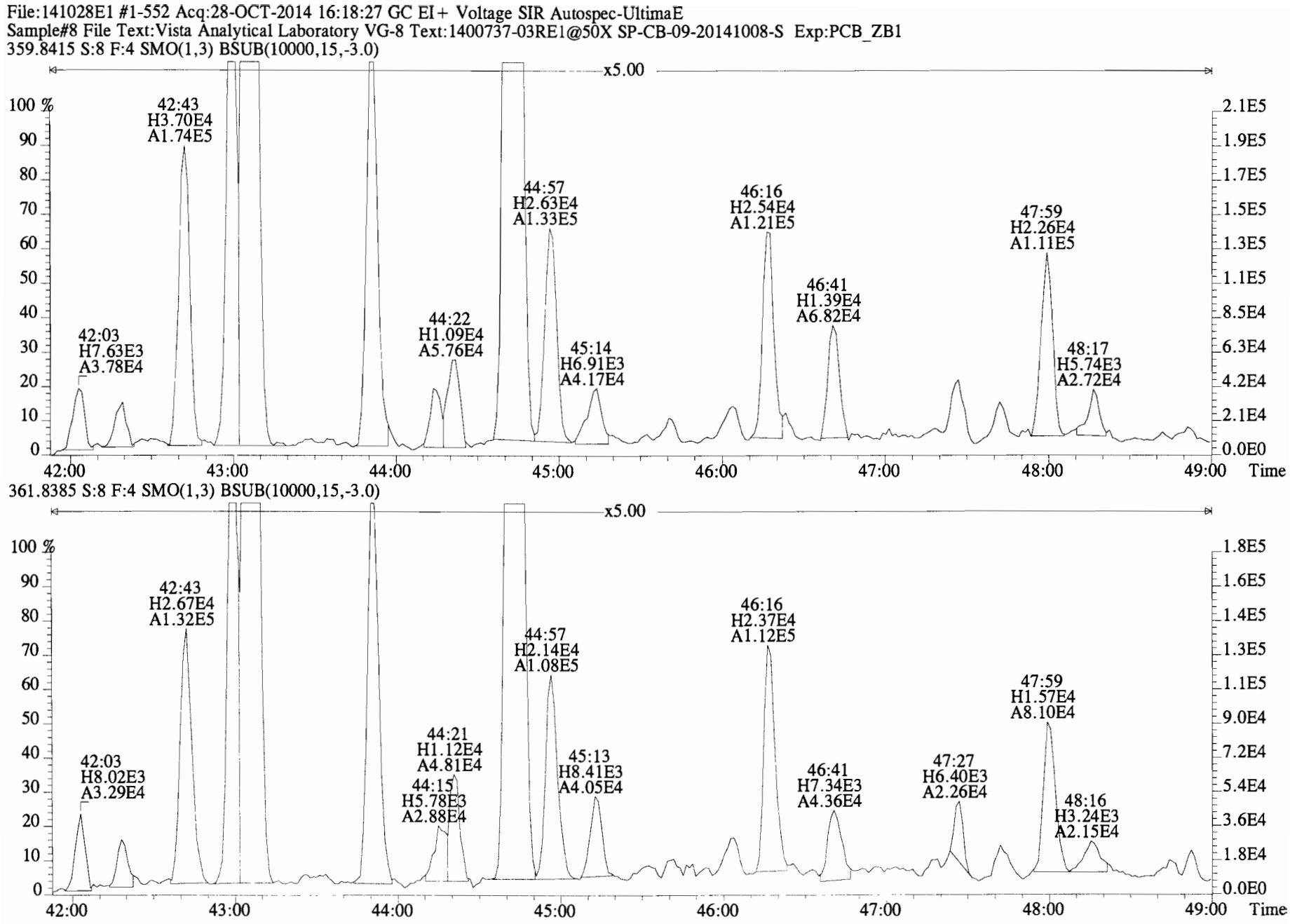

File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
359.8415 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2524.0,0.00%,F,F)
43:07 H2.11E5 A1.02E6
44:43 H2.04E5 A1.15E6
43:00 H6.05E4 A2.51E5
43:51 H4.83E4 A2.34E5
44:57 H2.63E4 A1.33E5
46:16 H2.38E4 A1.13E5
47:59 H2.14E4 A9.85E4
100 %
50
0
2.1E5
1.1E5
0.0E0
41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 51:00 Time
361.8385 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2544.0,0.00%,F,F)
43:07 H1.72E5 A8.35E5
44:43 H1.76E5 A9.25E5
43:00 H4.95E4 A2.02E5
43:51 H4.05E4 A1.95E5
44:57 H2.12E4 A1.05E5
46:16 H2.28E4 A1.04E5
47:27 H6.40E3 A2.26E4
47:59 H1.49E4 A7.33E4
100 %
50
0
1.8E5
9.0E4
0.0E0
41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 51:00 Time
371.8817 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2848.0,0.00%,F,F)
43:06 H1.27E5 A5.82E5
44:40 H1.14E5 A5.57E5
46:15 H1.43E5 A6.85E5
47:58 H1.34E5 A6.63E5
50:17 H1.35E5 A6.53E5
50:38 H7.59E3 A2.48E4
100 %
50
0
1.5E5
7.4E4
0.0E0
41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 51:00 Time
373.8788 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2904.0,0.00%,F,F)
43:06 H9.77E4 A4.56E5
44:42 H9.28E4 A4.53E5
45:58 H1.22E5 A6.04E5
47:58 H1.16E5 A5.90E5
50:17 H1.03E5 A5.43E5
100 %
50
0
1.3E5
6.3E4
0.0E0
41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 51:00 Time

File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
359.8415 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0)

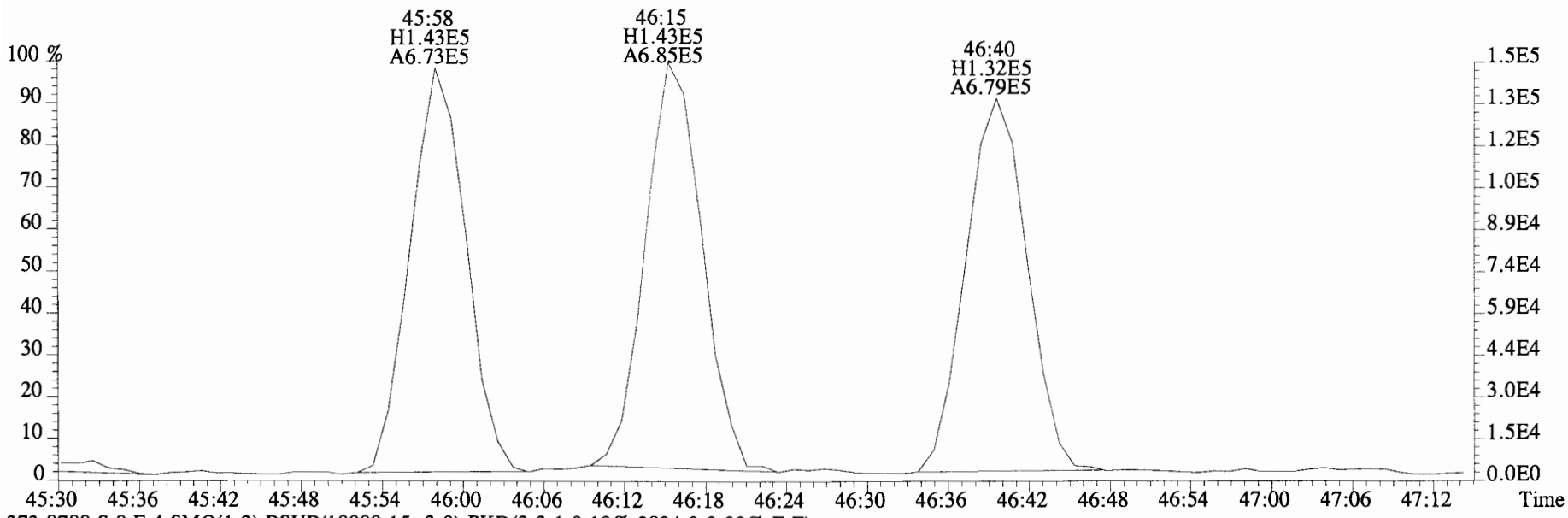


361.8385 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0)

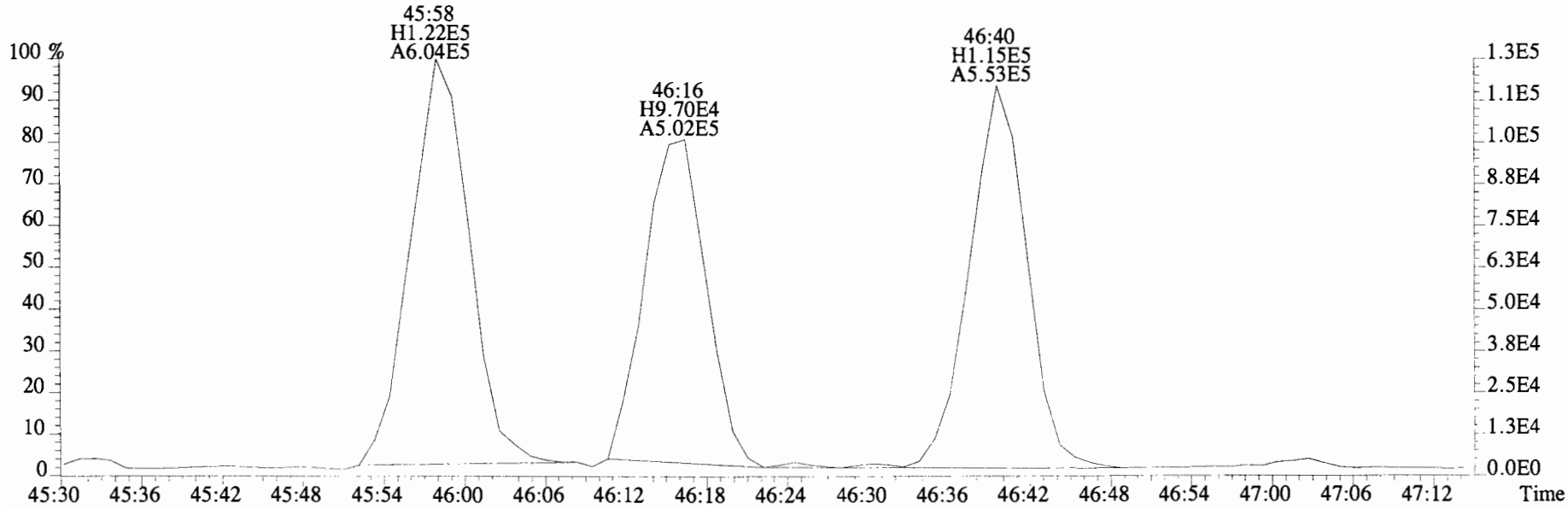



File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
359.8415 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
100 %
42:43
H3.70E4
A1.74E5
44:57
H2.63E4
A1.33E5
46:16
H2.54E4
A1.21E5
47:59
H2.26E4
A1.11E5
46:41
H1.39E4
A6.82E4
44:22
H1.09E4
A5.76E4
42:03
H7.63E3
A3.78E4
45:14
H6.91E3
A4.17E4
48:17
H5.74E3
A2.72E4
2.1E5
1.9E5
1.7E5
1.5E5
1.3E5
1.1E5
8.5E4
6.3E4
4.2E4
2.1E4
0.0E0
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
361.8385 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
100 %
42:43
H2.67E4
A1.32E5
44:57
H2.14E4
A1.08E5
46:16
H2.37E4
A1.12E5
47:59
H1.57E4
A8.10E4
44:21
H1.12E4
A4.81E4
45:13
H8.41E3
A4.05E4
46:41
H7.34E3
A4.36E4
47:27
H6.40E3
A2.26E4
44:15
H5.78E3
A2.88E4
42:03
H8.02E3
A3.29E4
48:16
H3.24E3
A2.15E4
1.8E5
1.6E5
1.4E5
1.3E5
1.1E5
9.0E4
7.2E4
5.4E4
3.6E4
1.8E4
0.0E0
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

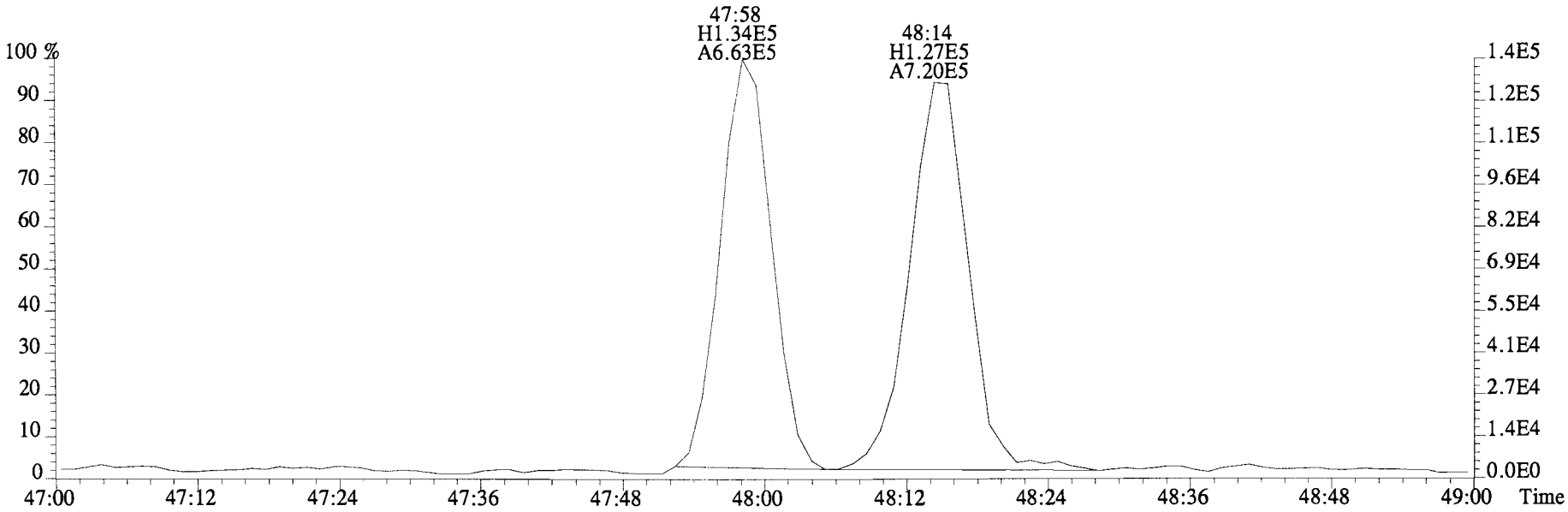
File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
371.8817 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2848.0,0.00%,F,F)



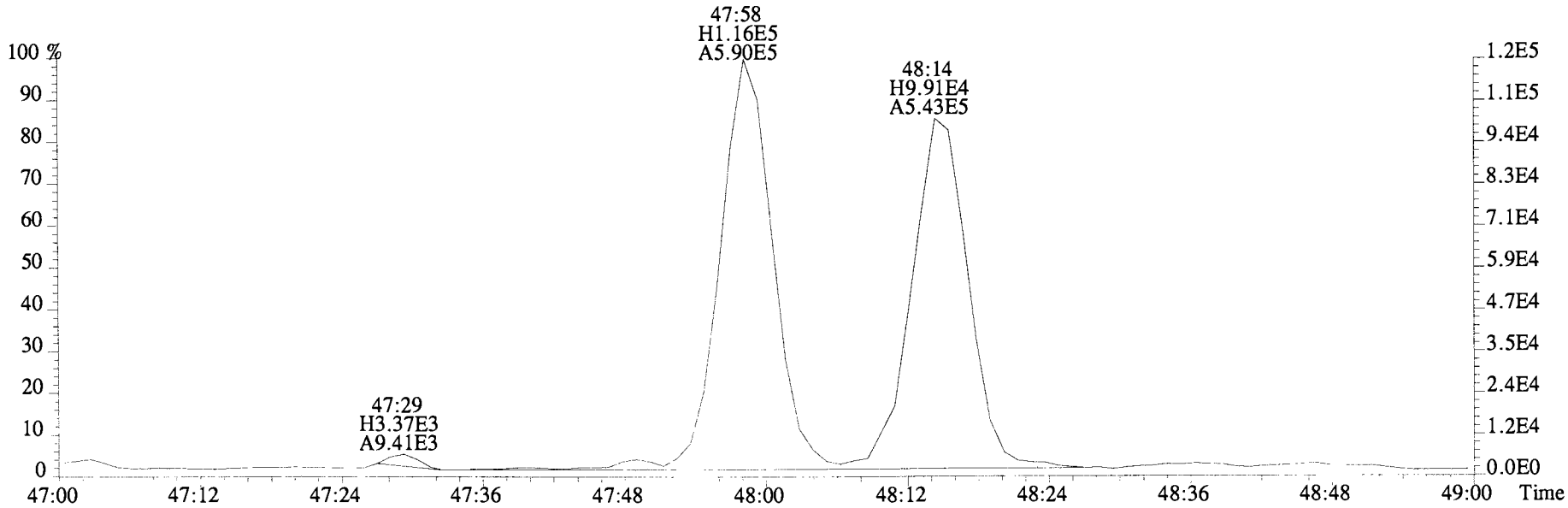
373.8788 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2904.0,0.00%,F,F)



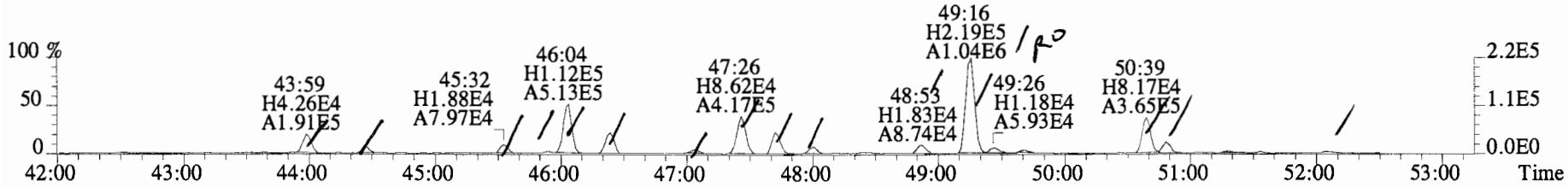
File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
371.8817 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2848.0,0.00%,F,F)



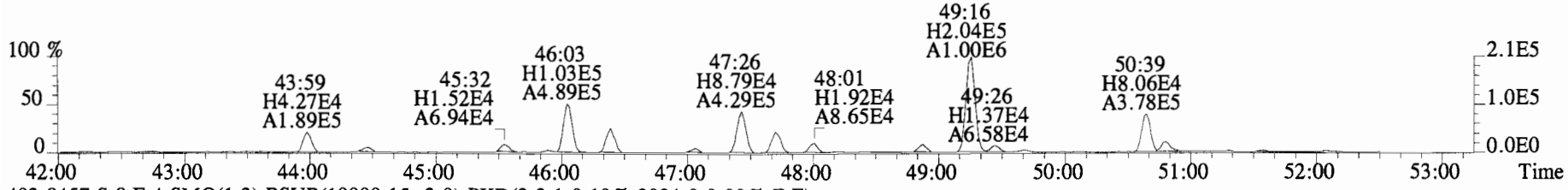
373.8788 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2904.0,0.00%,F,F)



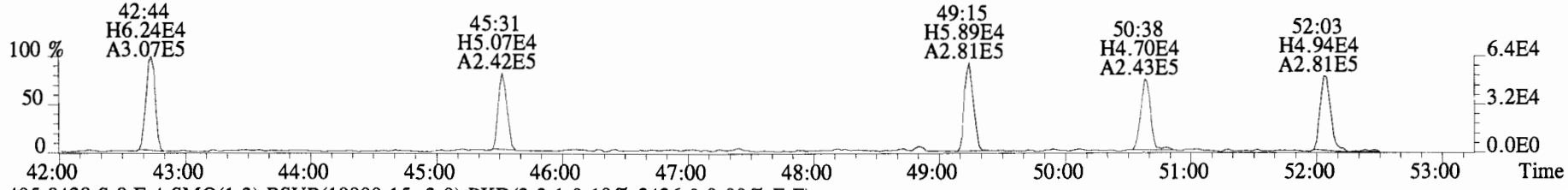
File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
393.8025 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2712.0,0.00%,F,F)



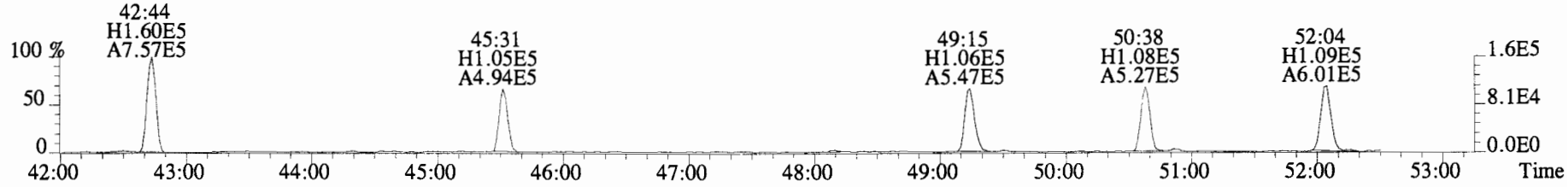
395.7995 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2684.0,0.00%,F,F)



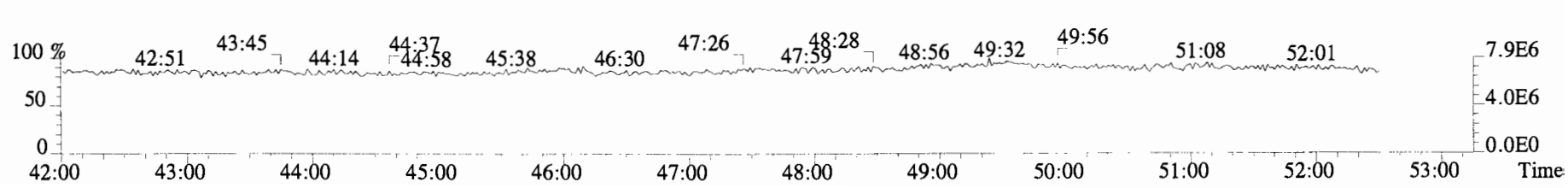
403.8457 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2024.0,0.00%,F,F)



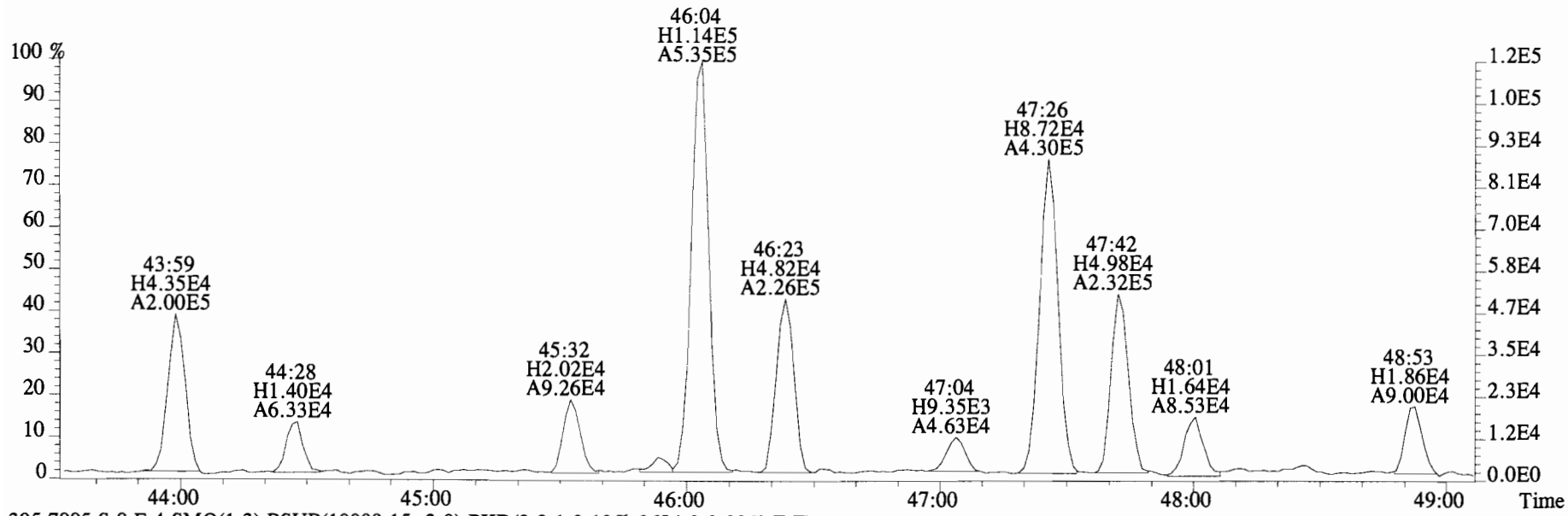
405.8428 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2436.0,0.00%,F,F)



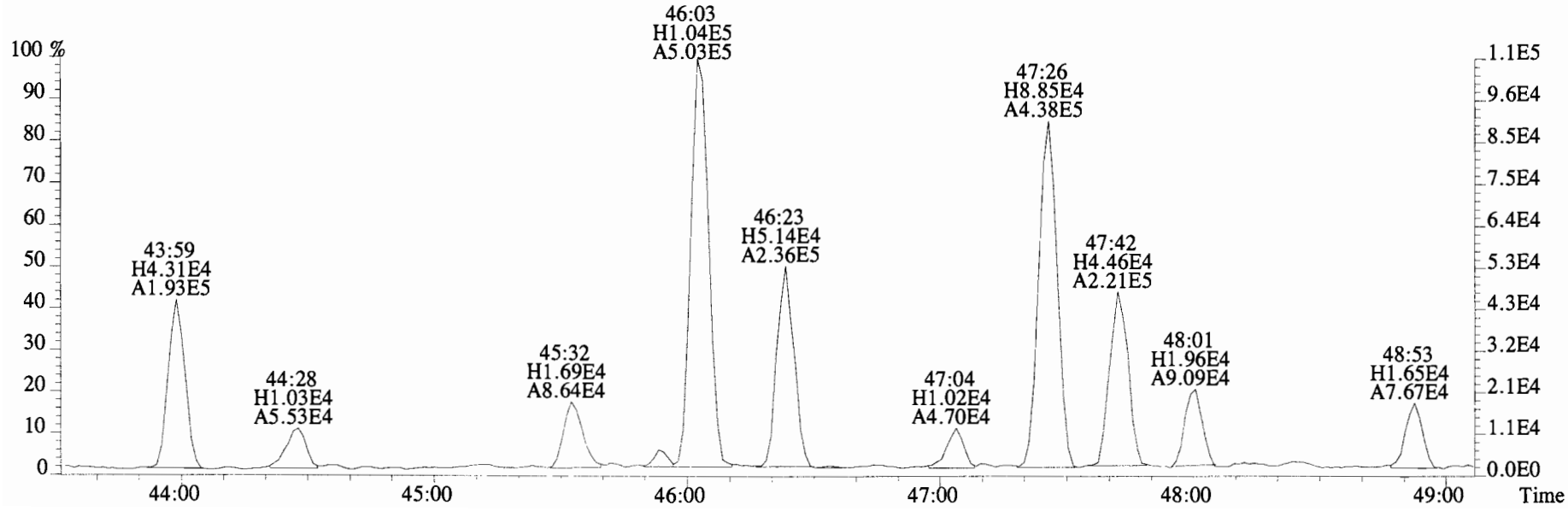
380.9760 S:8 F:4



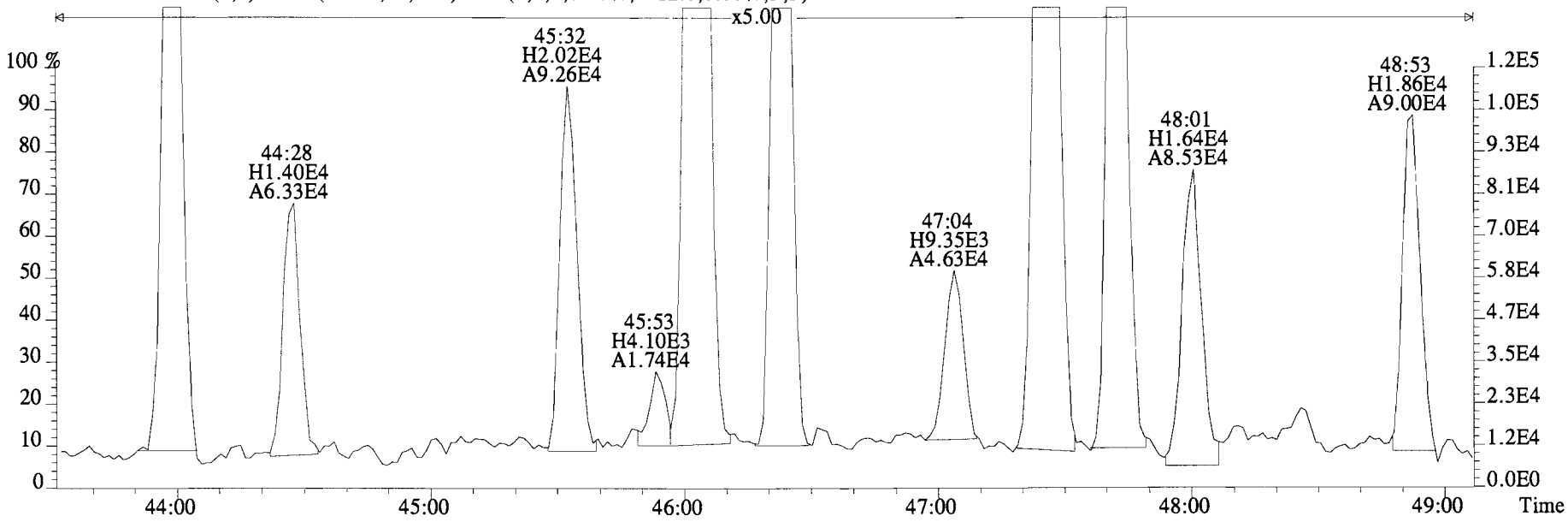
File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
393.8025 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2712.0,0.00%,F,F)



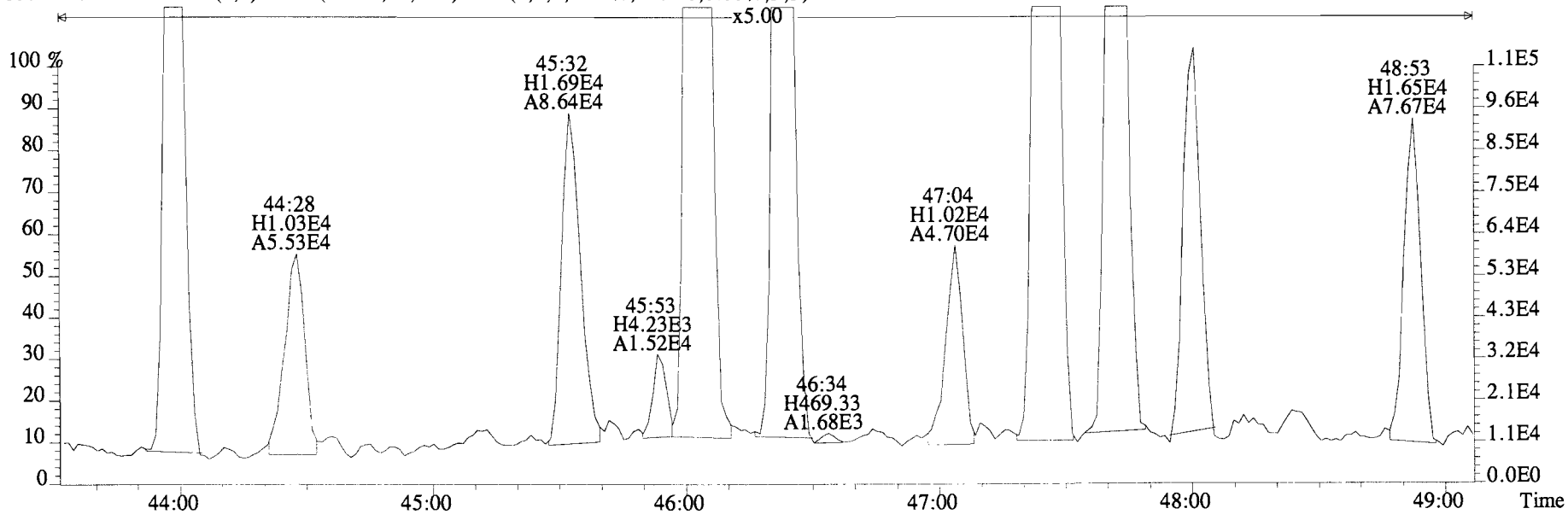
395.7995 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2684.0,0.00%,F,F)



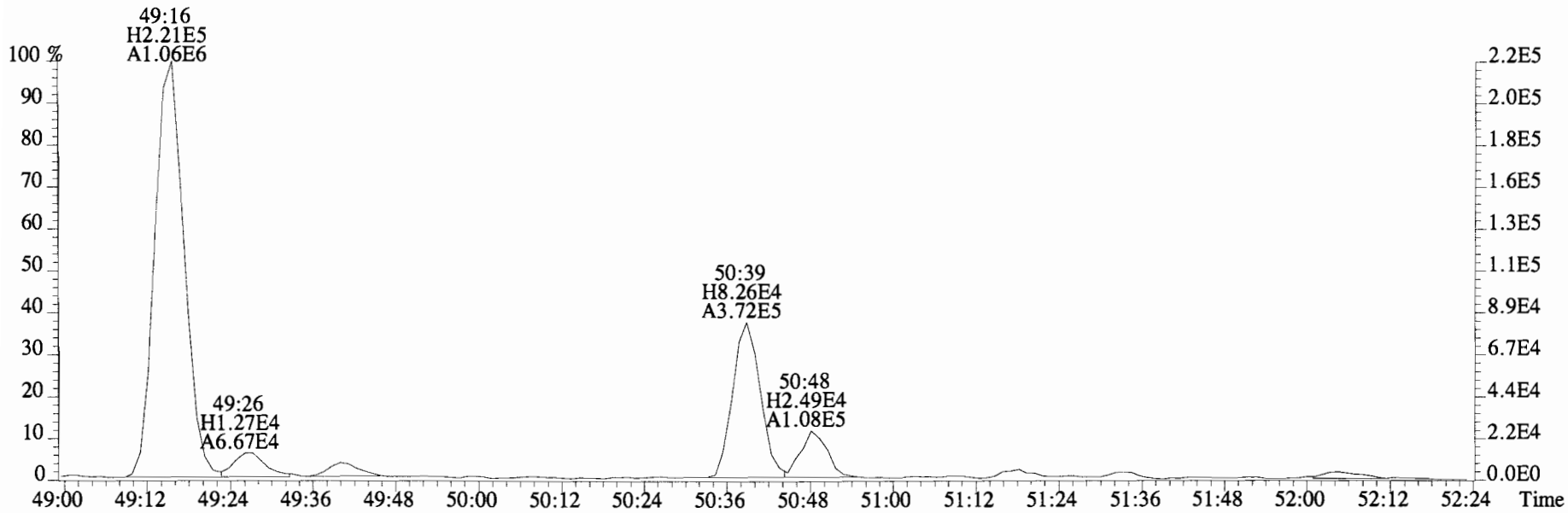
File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
393.8025 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2712.0,0.00%,F,F)



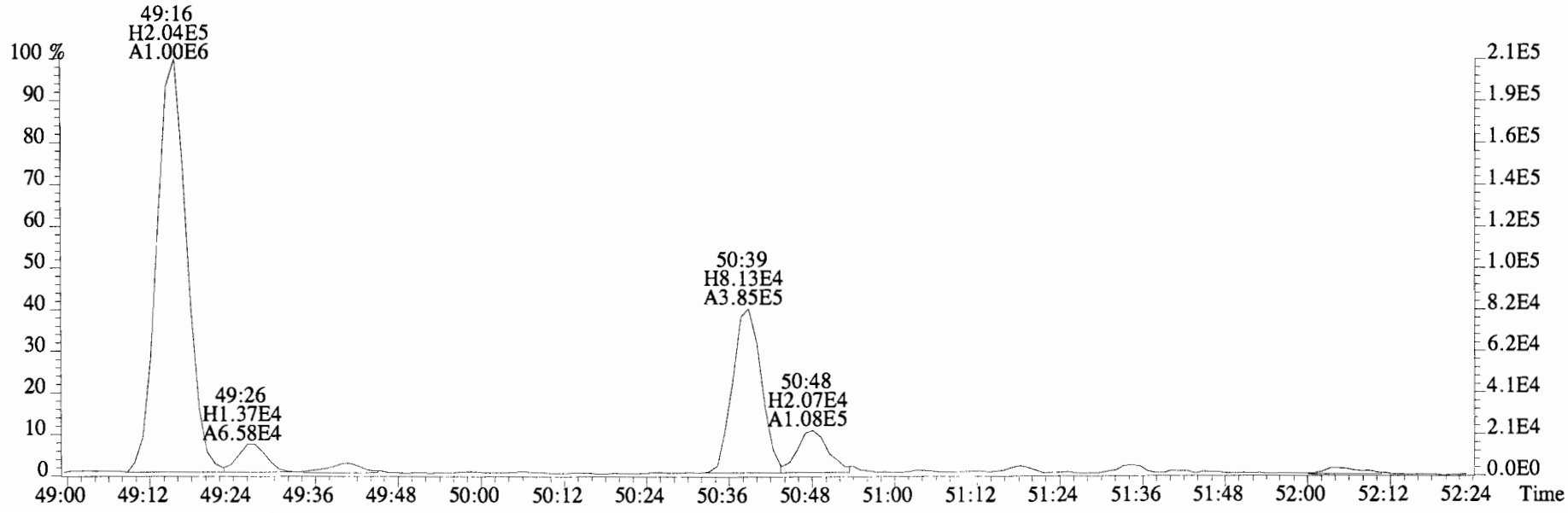
395.7995 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2684.0,0.00%,F,F)

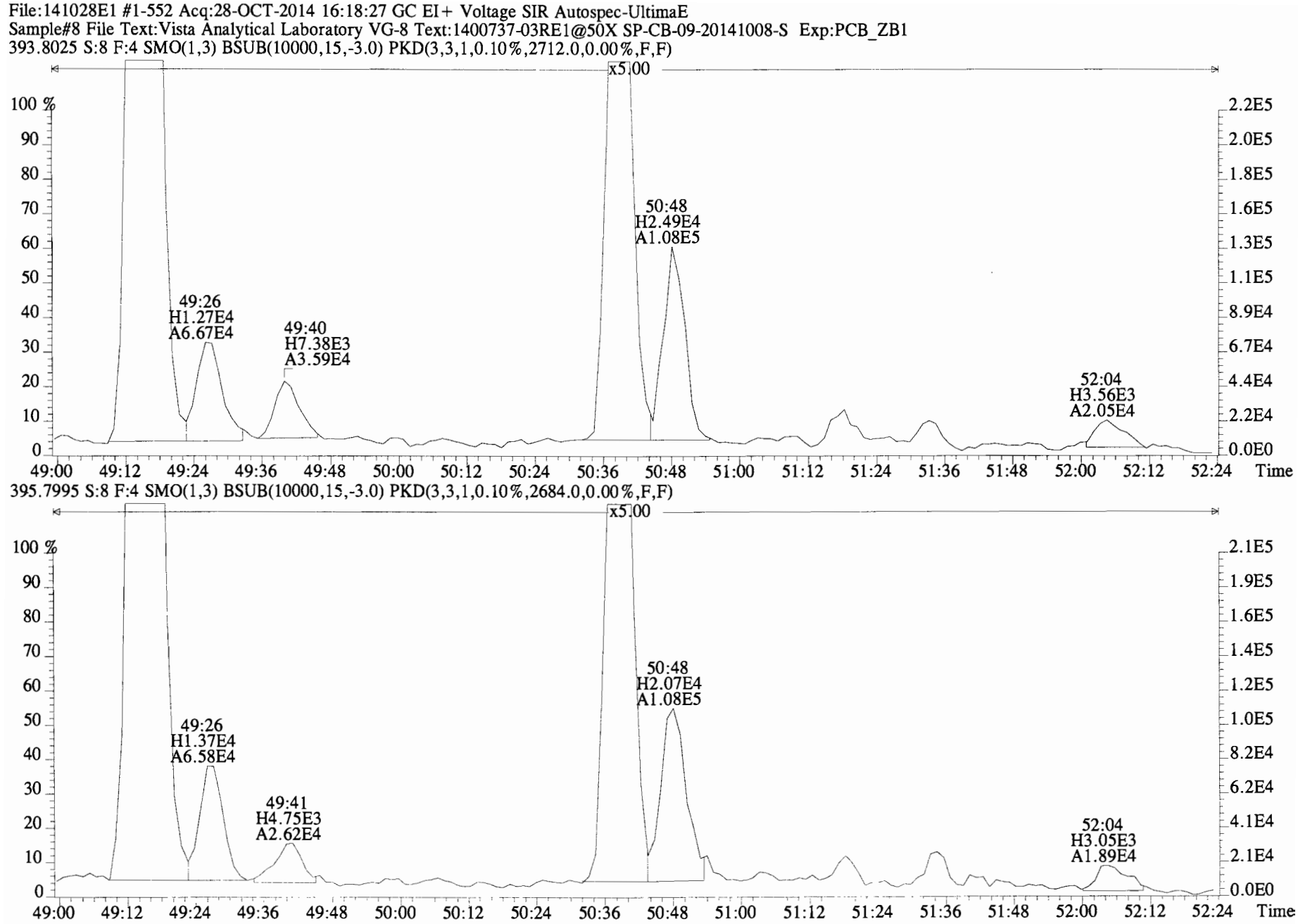


File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
393.8025 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2712.0,0.00%,F,F)



395.7995 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2684.0,0.00%,F,F)




File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
393.8025 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2712.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
2.2E5
2.0E5
1.8E5
1.6E5
1.3E5
1.1E5
8.9E4
6.7E4
4.4E4
2.2E4
0.0E0
49:26
H1.27E4
A6.67E4
49:40
H7.38E3
A3.59E4
50:48
H2.49E4
A1.08E5
52:04
H3.56E3
A2.05E4
49:00
49:12
49:24
49:36
49:48
50:00
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
52:24
Time
395.7995 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2684.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
2.1E5
1.9E5
1.6E5
1.4E5
1.2E5
1.0E5
8.2E4
6.2E4
4.1E4
2.1E4
0.0E0
49:26
H1.37E4
A6.58E4
49:41
H4.75E3
A2.62E4
50:48
H2.07E4
A1.08E5
52:04
H3.05E3
A1.89E4
49:00
49:12
49:24
49:36
49:48
50:00
50:12
50:24
50:36
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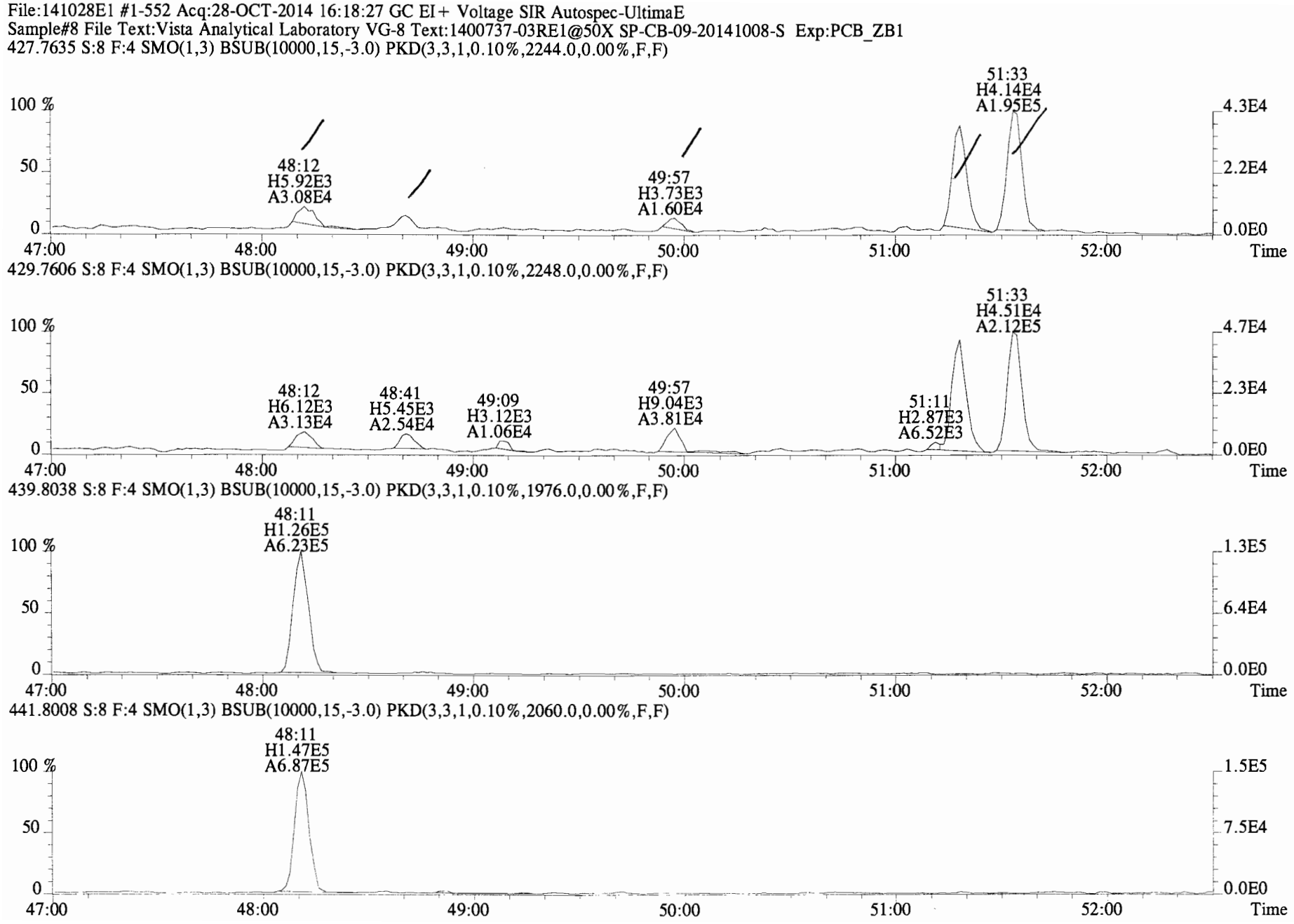
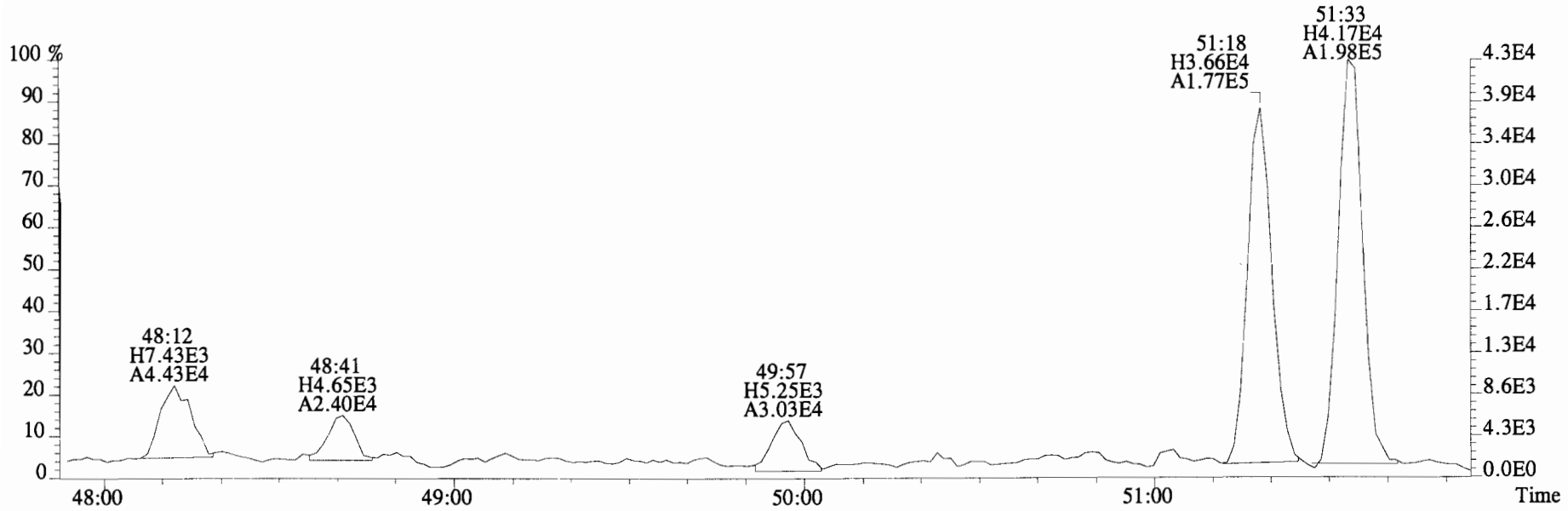
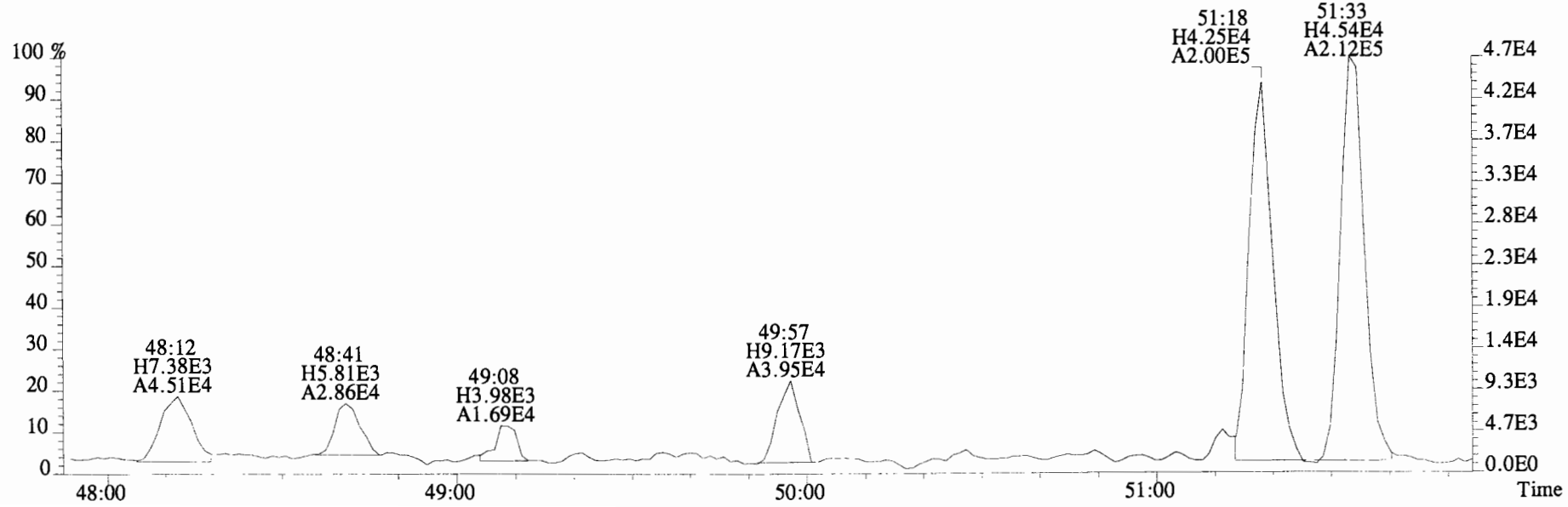
52:00
52:12
52:24
Time


File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
427.7635 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2244.0,0.00%,F,F)
48:12 H5.92E3 A3.08E4
49:57 H3.73E3 A1.60E4
51:33 H4.14E4 A1.95E5
429.7606 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2248.0,0.00%,F,F)
48:12 H6.12E3 A3.13E4
48:41 H5.45E3 A2.54E4
49:09 H3.12E3 A1.06E4
49:57 H9.04E3 A3.81E4
51:11 H2.87E3 A6.52E3
51:33 H4.51E4 A2.12E5
439.8038 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1976.0,0.00%,F,F)
48:11 H1.26E5 A6.23E5
441.8008 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2060.0,0.00%,F,F)
48:11 H1.47E5 A6.87E5
100 %
50
0
47:00
48:00
49:00
50:00
51:00
52:00
Time
4.3E4
2.2E4
0.0E0
4.7E4
2.3E4
1.3E5
6.4E4
1.5E5
7.5E4

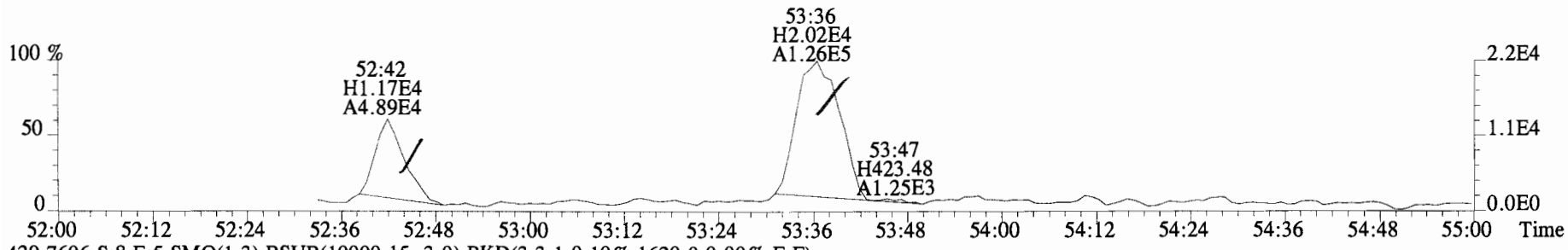
File:141028E1 #1-552 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
427.7635 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2244.0,0.00%,F,F)



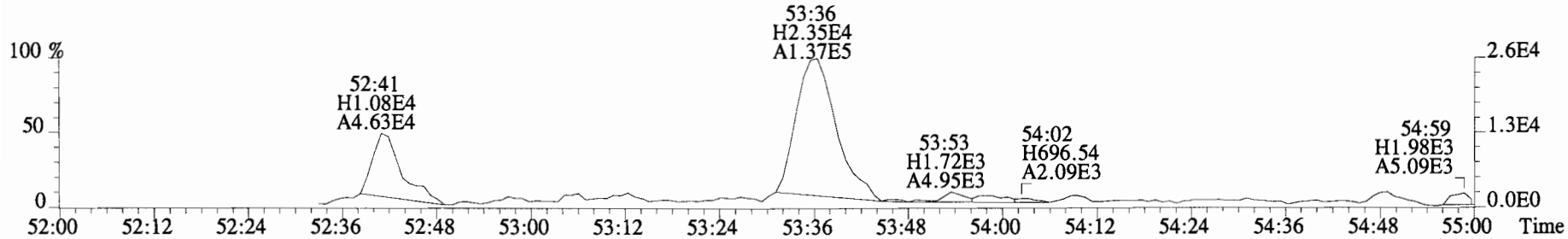
429.7606 S:8 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2248.0,0.00%,F,F)



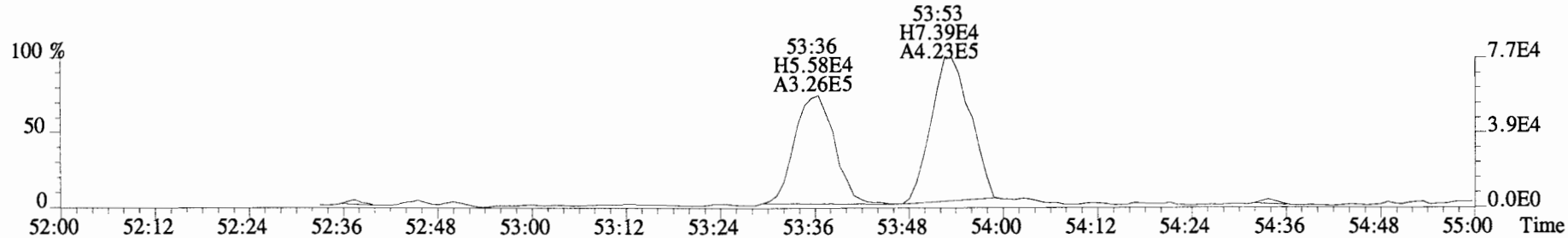
File:141028E1 #1-434 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
427.7635 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1608.0,0.00%,F,F)



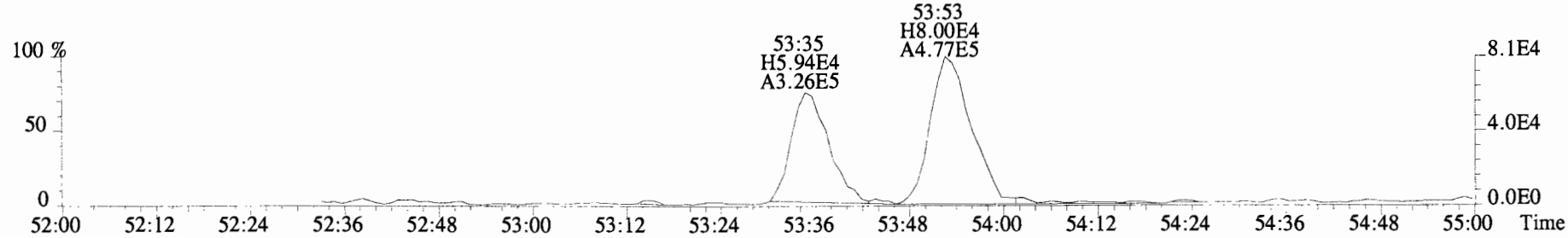
429.7606 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1620.0,0.00%,F,F)



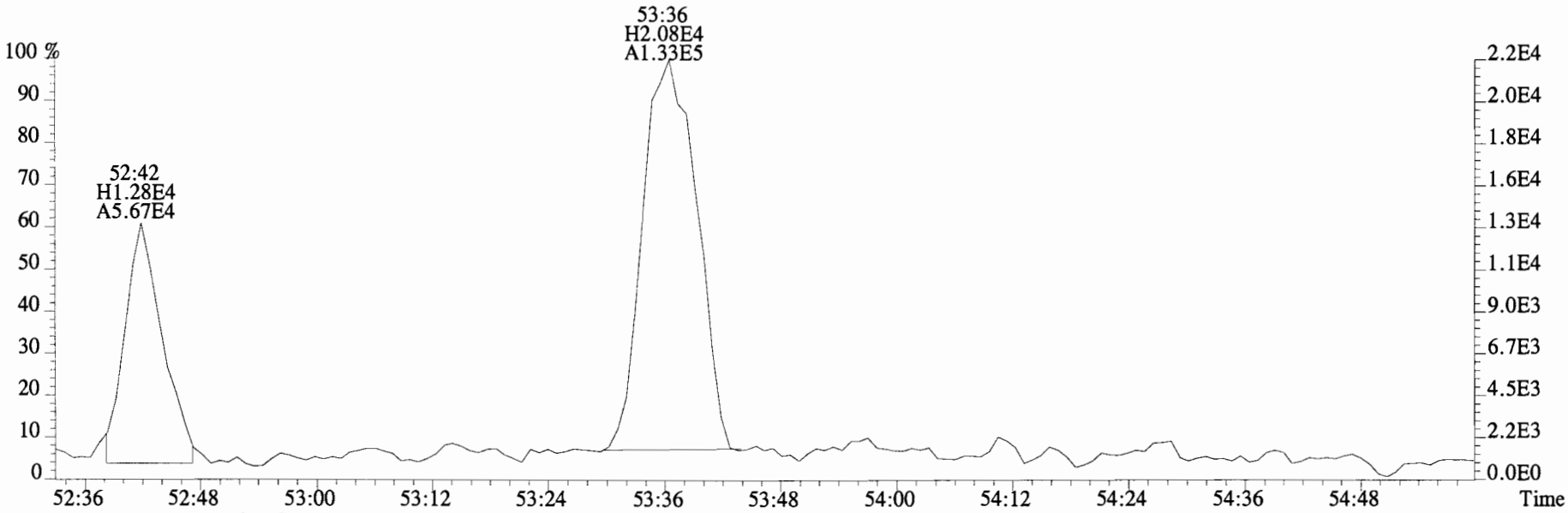
439.8038 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1608.0,0.00%,F,F)



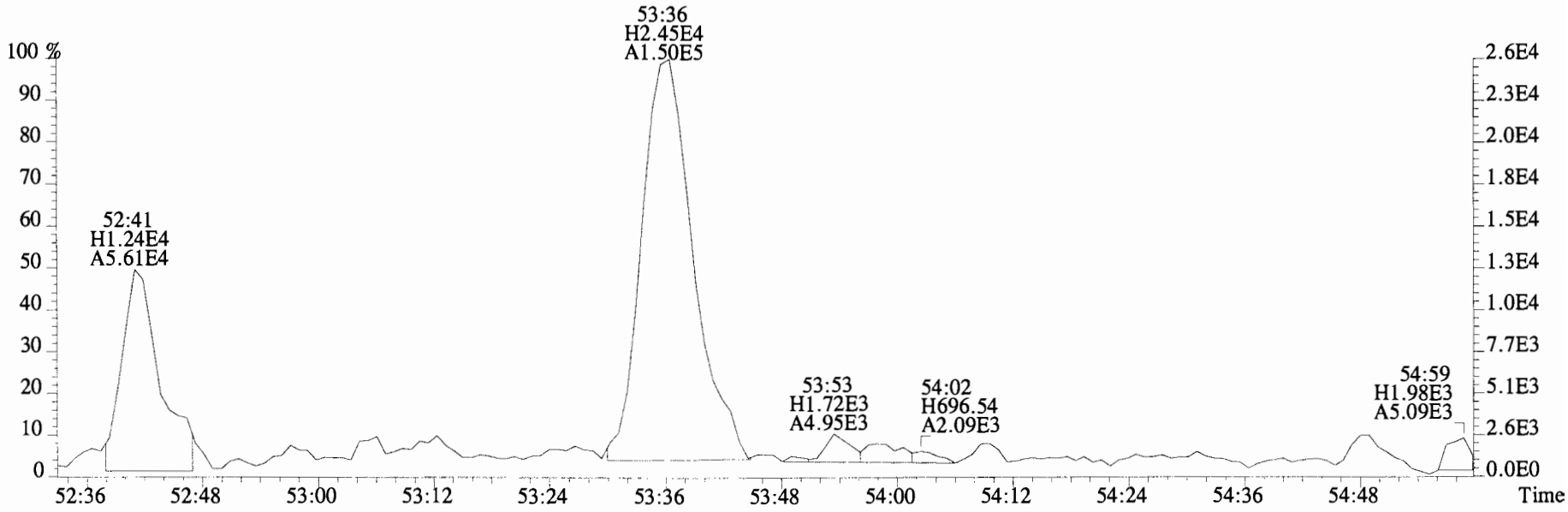
441.8008 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1864.0,0.00%,F,F)



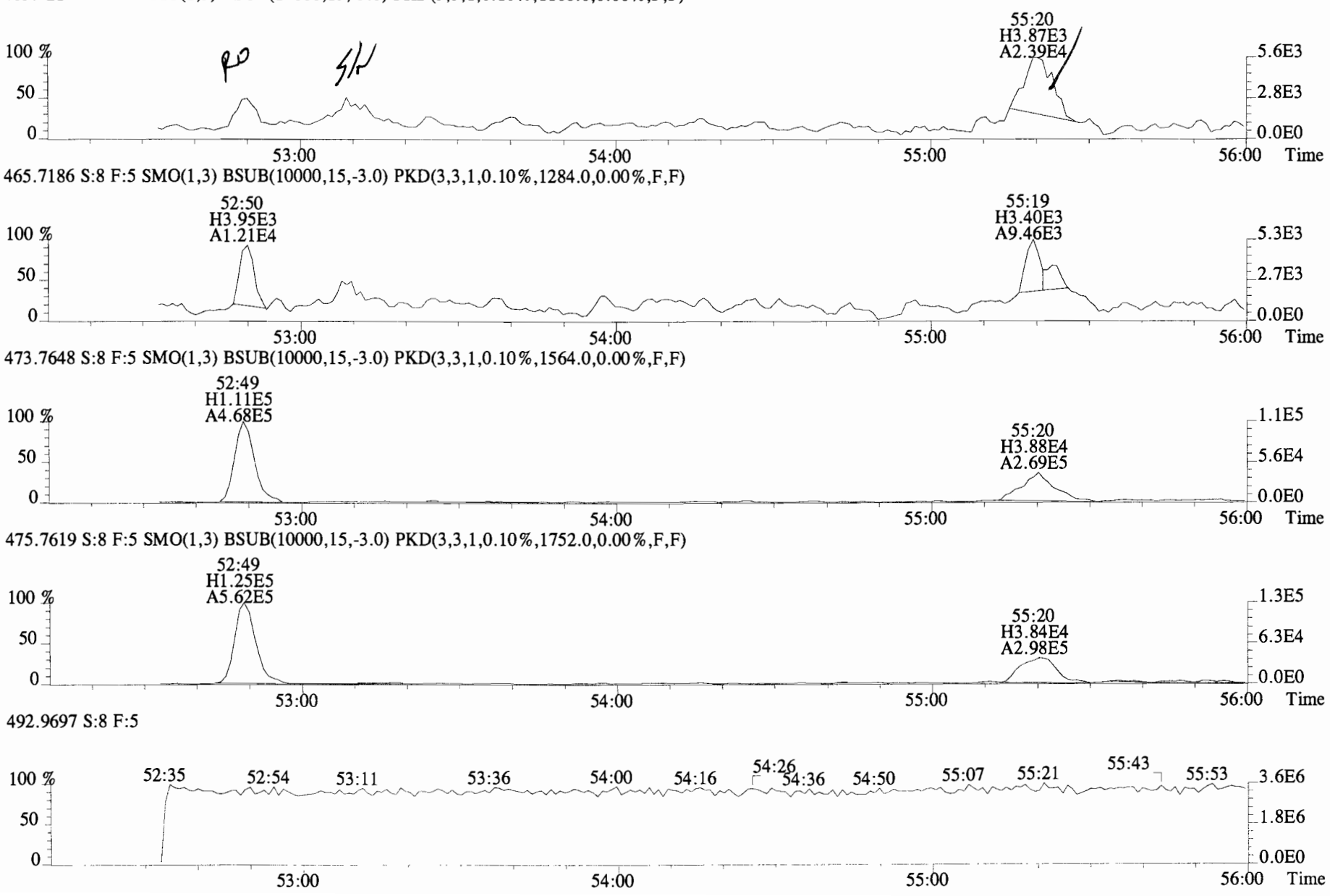
File:141028E1 #1-434 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
427.7635 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1608.0,0.00%,F,F)



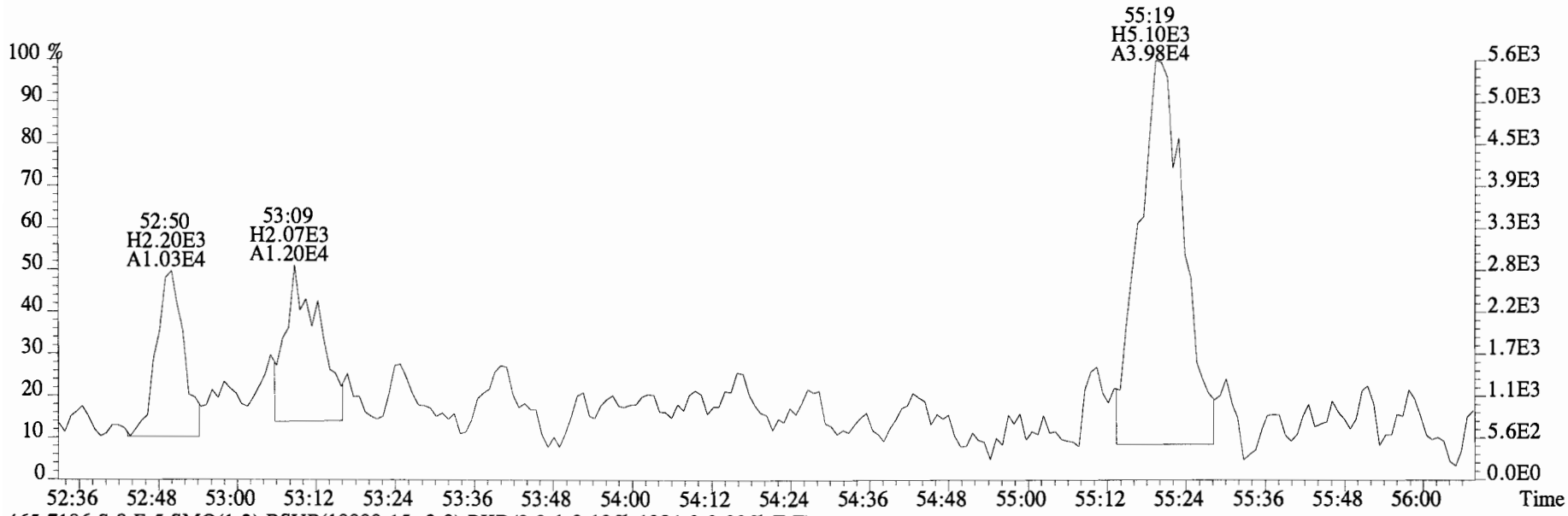
429.7606 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1620.0,0.00%,F,F)



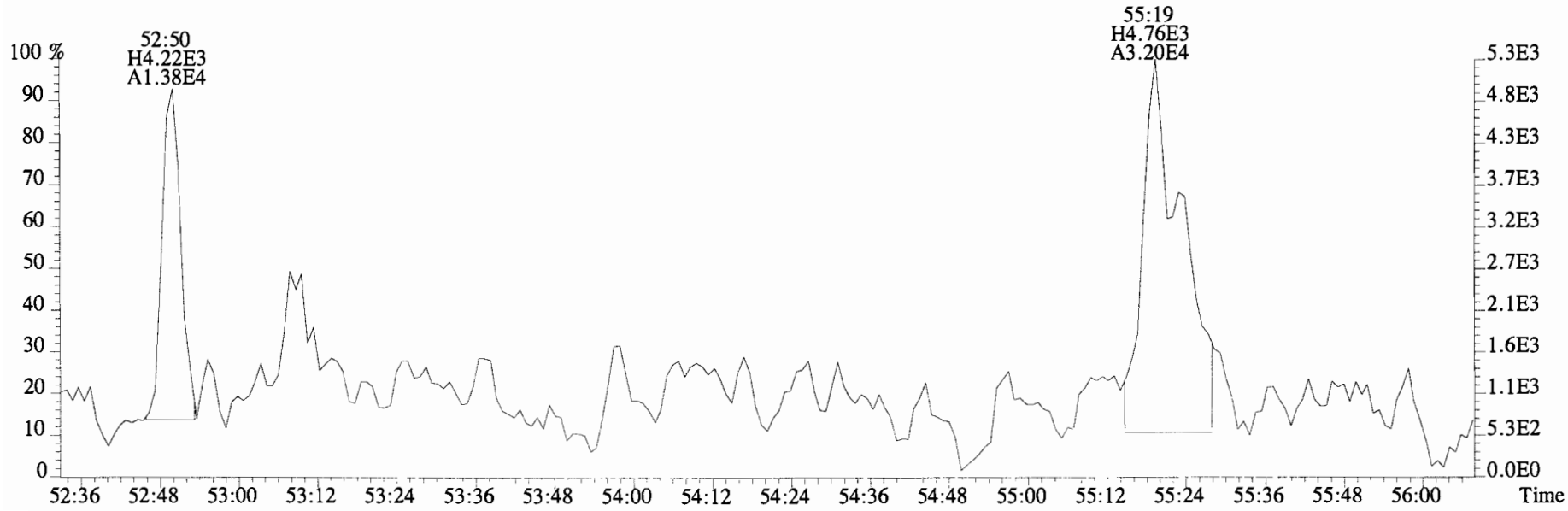
File:141028E1 #1-434 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1



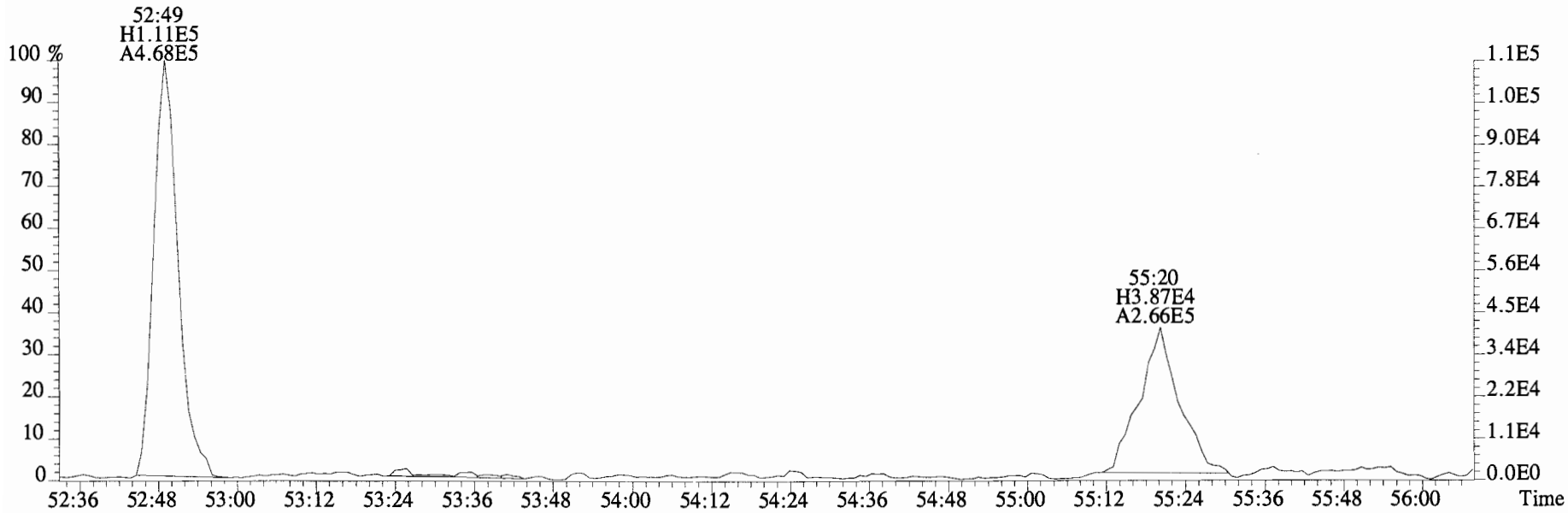
File:141028E1 #1-434 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
463.7216 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1168.0,0.00%,F,F)



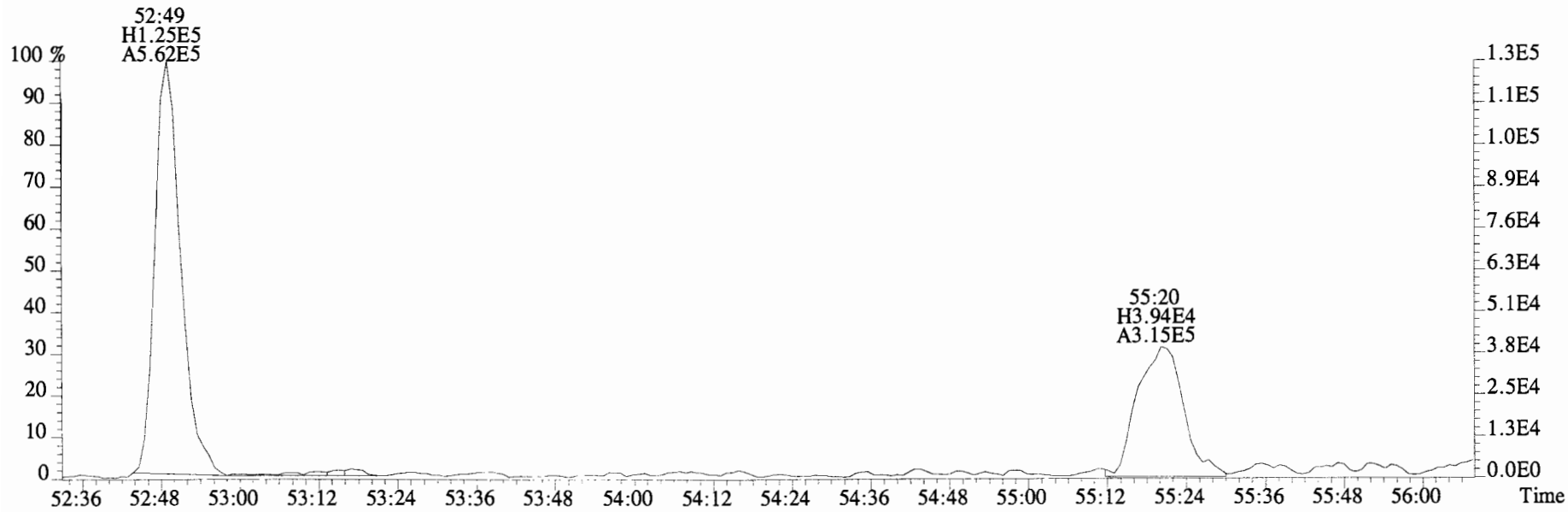
465.7186 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1284.0,0.00%,F,F)



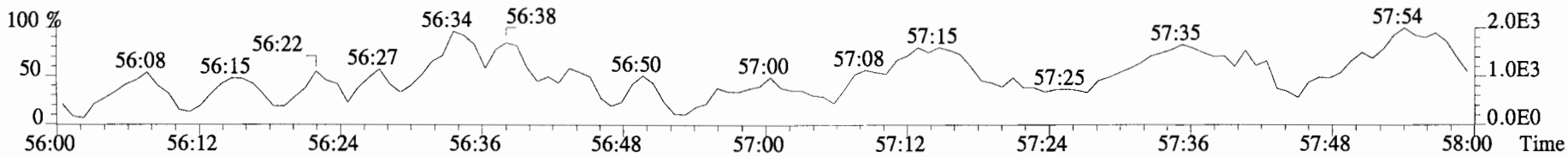
File:141028E1 #1-434 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
473.7648 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0)



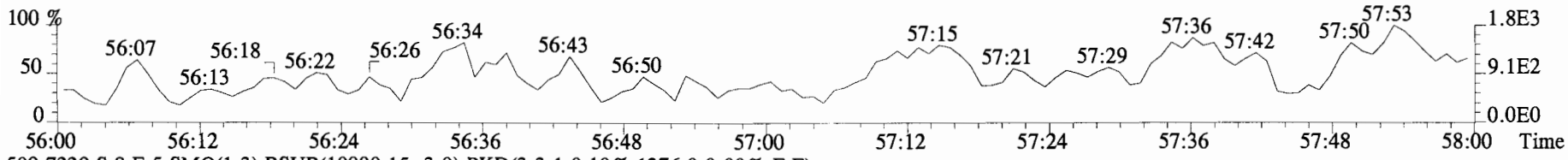
475.7619 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0)



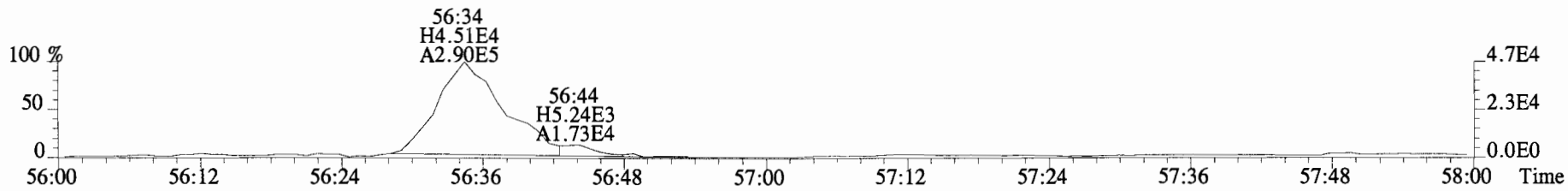
File:141028E1 #1-434 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
497.6826 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1404.0,0.00%,F,F)



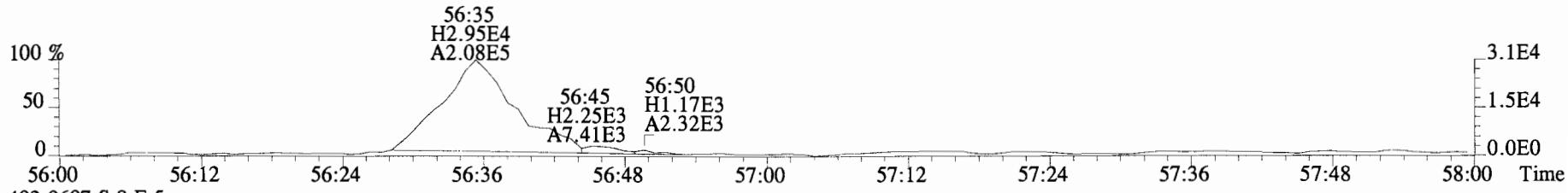
499.6797 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1328.0,0.00%,F,F)



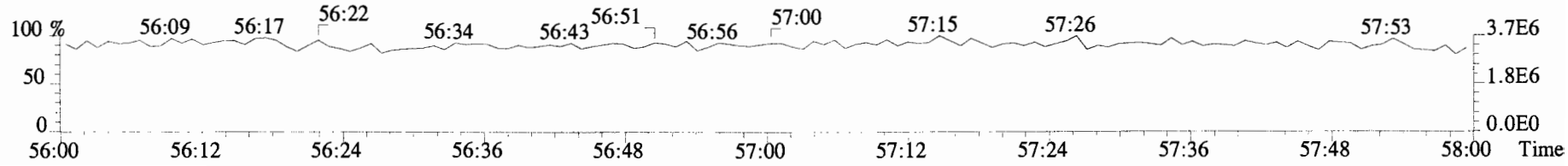
509.7229 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1376.0,0.00%,F,F)



511.7199 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1140.0,0.00%,F,F)



492.9697 S:8 F:5



File:141028E1 #1-434 Acq:28-OCT-2014 16:18:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Vista Analytical Laboratory VG-8 Text:1400737-03RE1@50X SP-CB-09-20141008-S Exp:PCB_ZB1
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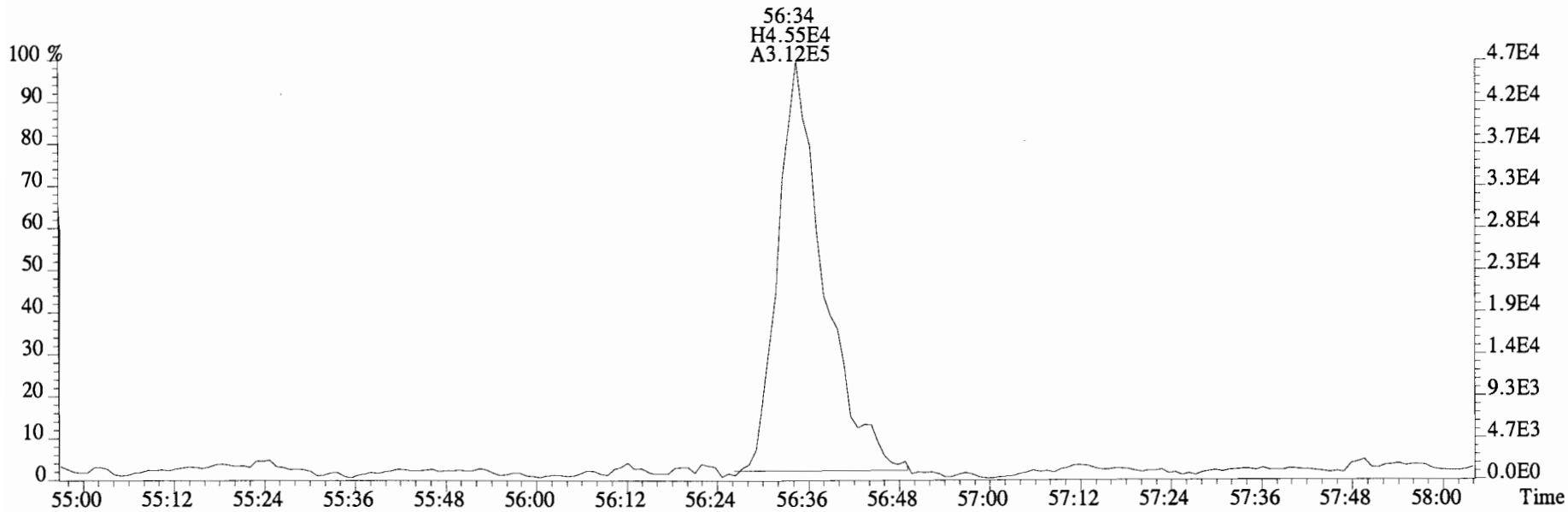
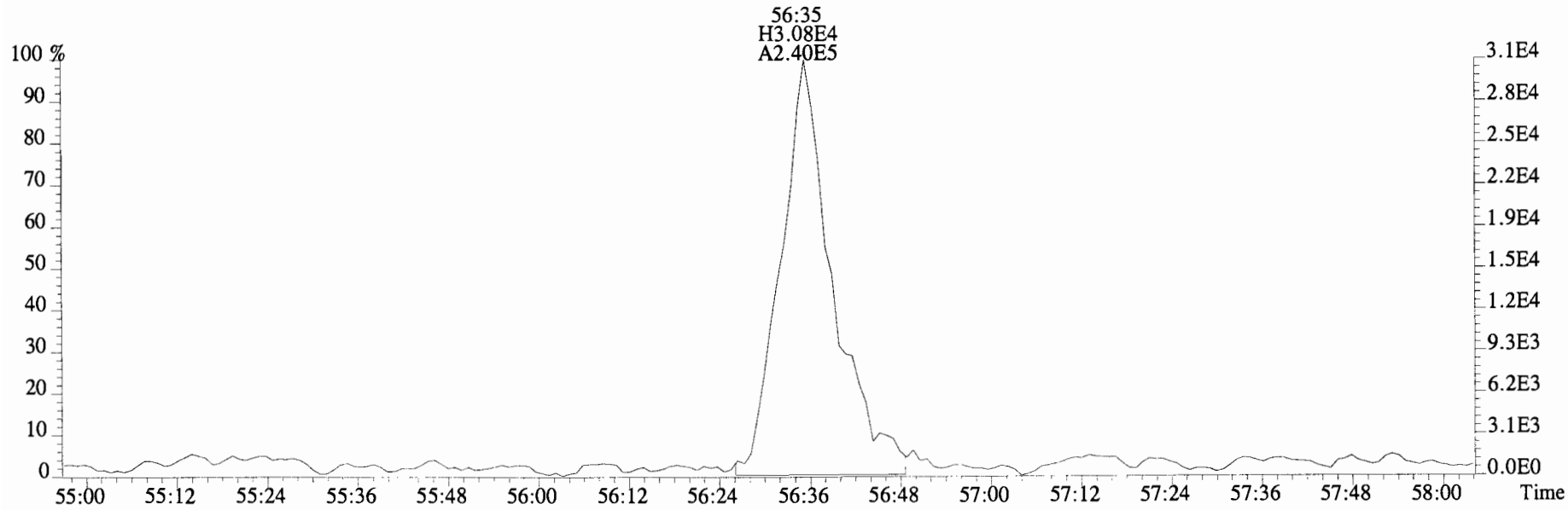


511.7199 S:8 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1140.0,0.00%,F,F)



CONFIRMATION

Dataset: C:\MassLynx\Default.pro\Results\141016F2\141016F2_5.qld

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Printed: Friday, October 17, 2014 10:25:33 Pacific Daylight Time

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Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-7-1-14.cdb 02 Jul 2014 07:18:51

Name: 141016F2_5, Date: 16-Oct-2014, Time: 17:04:40, ID: 1400737-02RE1 SP-OWS-01-20141008-S CF 35.64, Description: SP-OWS-01-20141008-S CF

	#-Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	2.21e4	0.79	NO	0.916	10.286	17.56	29.144		1.64
2	2 13C-2,3,7,8-TCDF	1.61e5	0.81	NO	0.987	10.286	17.56	145.91	75.0	1.83
3	3 13C-1,2,3,4-TCDF	2.17e5	0.77	NO	1.00	10.286	15.25	194.44	100	1.80

CJS 10/17/14

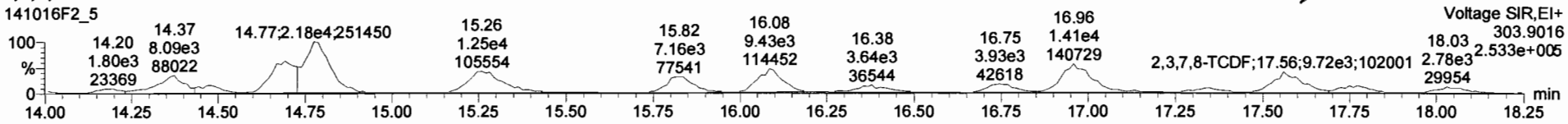
CL 10/20/14

Dataset: Untitled

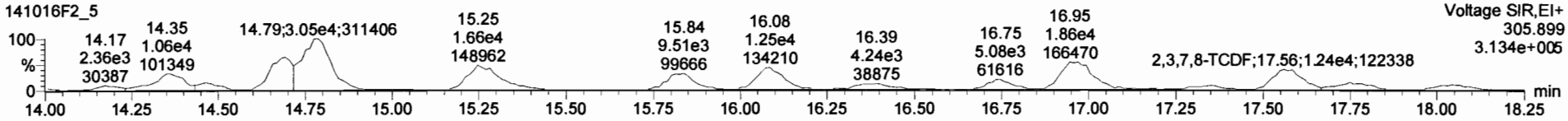
Last Altered: Friday, October 17, 2014 09:01:35 Pacific Daylight Time
Printed: Friday, October 17, 2014 09:02:21 Pacific Daylight Time

Name: 141016F2_5, Date: 16-Oct-2014, Time: 17:04:40, ID: 1400737-02RE1 SP-OWS-01-20141008-S CF 35.64, Description: SP-OWS-01-20141008-S CF

2,3,7,8-TCDF



2,3,7,8-TCDF



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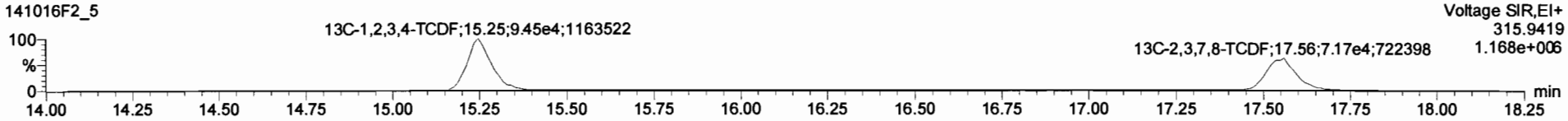
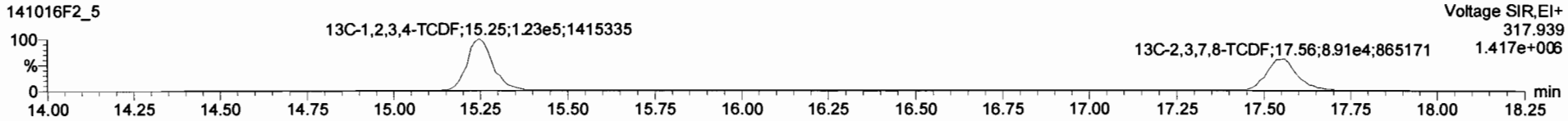


13C-2,3,7,8-TCDF



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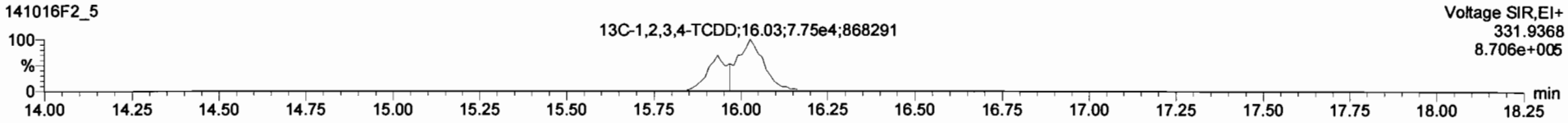
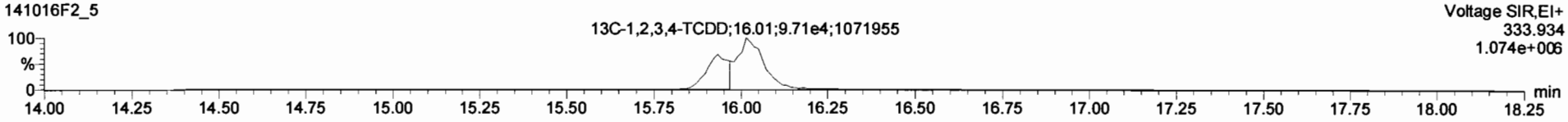
Printed: Friday, October 17, 2014 09:02:21 Pacific Daylight Time

Name: 141016F2_5, Date: 16-Oct-2014, Time: 17:04:40, ID: 1400737-02RE1 SP-OWS-01-20141008-S CF 35.64, Description: SP-OWS-01-20141008-S CF

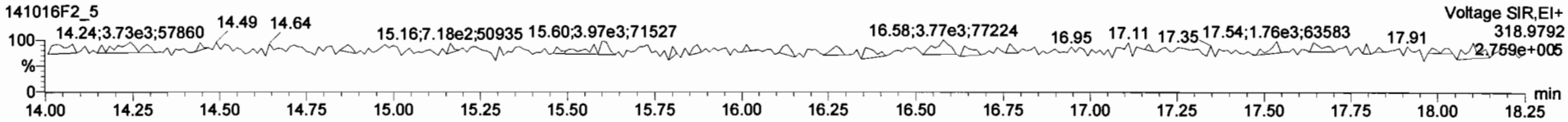
13C-1,2,3,4-TCDD



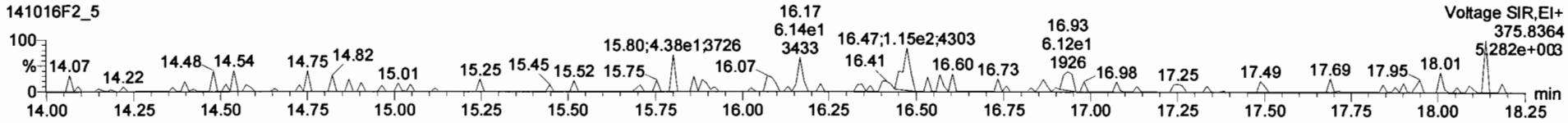
13C-1,2,3,4-TCDD



PFK1



DPE1



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Printed: Friday, October 17, 2014 15:17:17 Pacific Daylight Time

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Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-7-1-14.cdb 02 Jul 2014 07:18:51

Name: 141017F1_5, Date: 17-Oct-2014, Time: 12:21:33, ID: 1400737-03RE1 SP-CB-09-20141008-S CF 24.77, Description: SP-CB-09-20141008-S CF

	#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1	2,3,7,8-TCDF	1.58e4	0.83	NO	0.916	10.263	17.57	8.2817		0.422
2	2	13C-2,3,7,8-TCDF	4.07e5	0.79	NO	0.987	10.263	17.55	152.50	78.3	0.719
3	3	13C-1,2,3,4-TCDF	5.27e5	0.79	NO	1.00	10.263	15.27	194.87	100	0.710

10/17/14

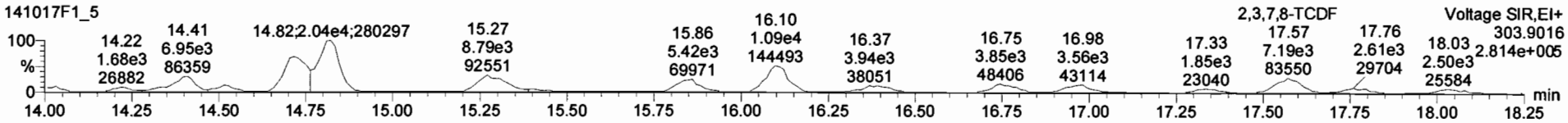
10/20/14

Dataset: Untitled

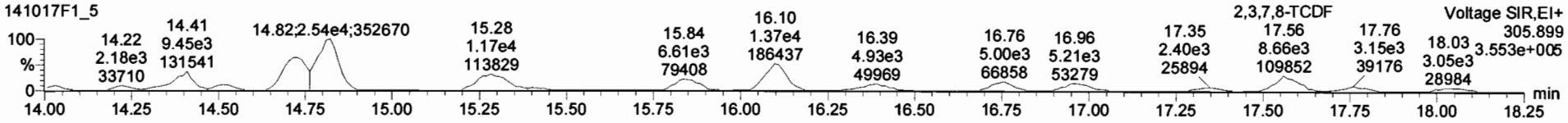
Last Altered: Friday, October 17, 2014 15:14:55 Pacific Daylight Time
Printed: Friday, October 17, 2014 15:15:14 Pacific Daylight Time

Name: 141017F1_5, Date: 17-Oct-2014, Time: 12:21:33, ID: 1400737-03RE1 SP-CB-09-20141008-S CF 24.77, Description: SP-CB-09-20141008-S CF

2,3,7,8-TCDF



2,3,7,8-TCDF



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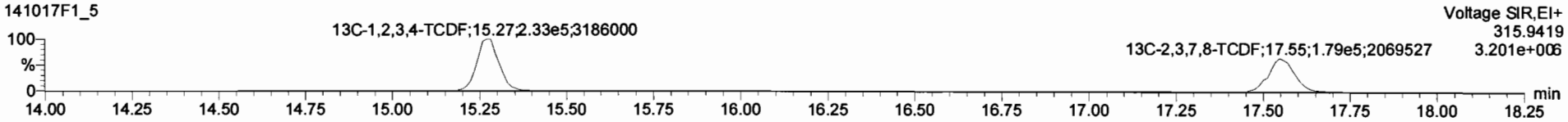

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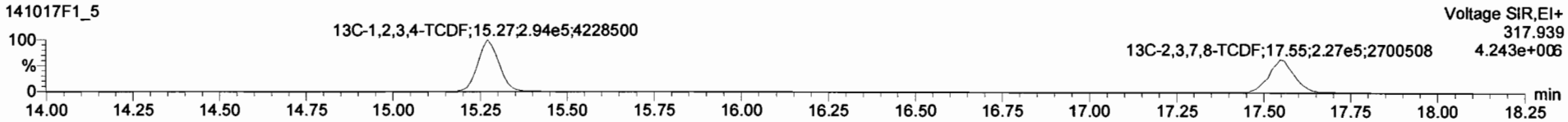

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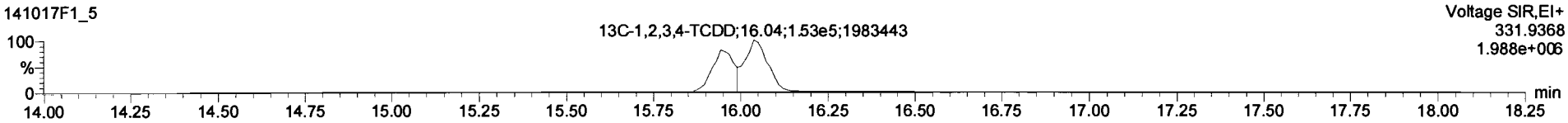
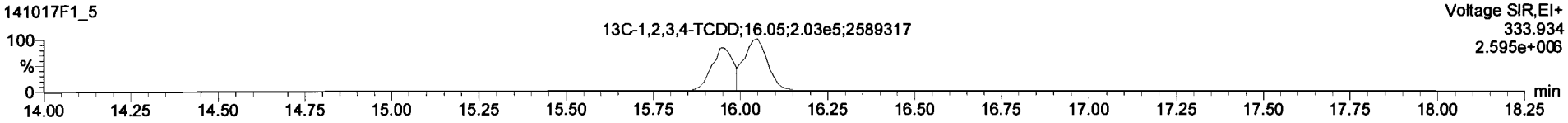
Printed: Friday, October 17, 2014 15:15:14 Pacific Daylight Time

Name: 141017F1_5, Date: 17-Oct-2014, Time: 12:21:33, ID: 1400737-03RE1 SP-CB-09-20141008-S CF 24.77, Description: SP-CB-09-20141008-S CF

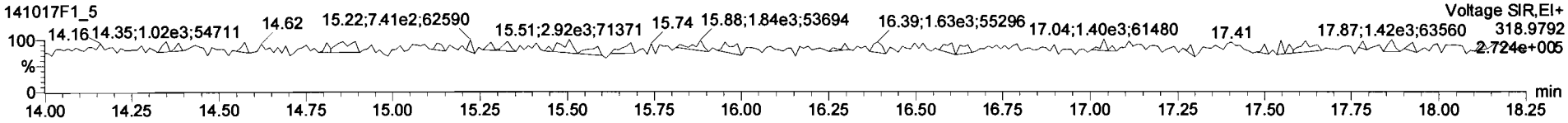
13C-1,2,3,4-TCDD



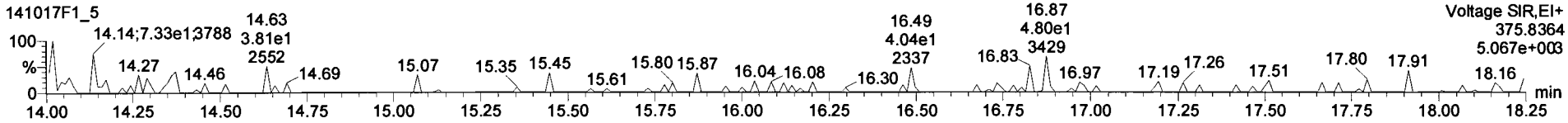
13C-1,2,3,4-TCDD



PFK1



DPE1



CONTINUING CALIBRATION

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST141014D1-1

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D1 S#1 Analysis Date: 14-OCT-14 Time: 12:24:31

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	10.4	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	50.0	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	48.9	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	50.2	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.32	1.05-1.43	y	49.9	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	51.3	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	95.1	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	9.83	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.63	1.32-1.78	y	50.1	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.65	1.32-1.78	y	52.6	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	49.2	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43	y	49.1	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	49.3	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.30	1.05-1.43	y	50.0	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.07	0.88-1.20	y	45.8	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.07	0.88-1.20	y	46.4	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	97.2	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: JN

Date: 10/15/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D1 S#1 Analysis Date: 14-OCT-14 Time: 12:24:31

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	y	98.4	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.64	0.54-0.72	y	89.2	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	89.7	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	95.8	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	y	91.5	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	91.5	72.0 - 138.0
13C-OCDD	M/M+2	0.88	0.76-1.02	y	193	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.75	0.65-0.89	y	103	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	y	84.9	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	82.7	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	98.4	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	87.7	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	92.6	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	93.5	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.43	0.37-0.51	y	100	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.44	0.37-0.51	y	98.2	77.0 - 129.0
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	192	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					10.7	7.9 - 12.7

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified

(3) No ion abundance ratio; report concentration found.

Analyst: MJ

Date: 10/15/14

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST141014D1-1

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D1 S#1 Analysis Date: 14-OCT-14 Time: 12:24:31

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	10.4	8.00 - 12.0
1,2,3,7,8-PeCDD	M/M+2	0.61	0.54-0.72	y	50.0	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	48.9	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	50.2	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.32	1.05-1.43	y	49.9	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	51.3	40.0 - 60.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	95.1	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	9.83	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.63	1.32-1.78	y	50.1	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.65	1.32-1.78	y	52.6	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	49.2	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43	y	49.1	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	49.3	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.30	1.05-1.43	y	50.0	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.07	0.88-1.20	y	45.8	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.07	0.88-1.20	y	46.4	40.0 - 60.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	97.2	80.0 - 120

Analyst: MJ

Date: 10/15/14

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D1 S#1 Analysis Date: 14-OCT-14 Time: 12:24:31

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	y	98.4	70.0 - 130
13C-1,2,3,7,8-PeCDD	M/M+2	0.64	0.54-0.72	y	89.2	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	89.7	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	95.8	70.0 - 130
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	y	91.5	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	91.5	70.0 - 130
13C-OCDD	M+2/M+4	0.88	0.76-1.02	y	193	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.75	0.65-0.89	y	103	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	y	84.9	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	82.7	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	98.4	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	87.7	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	92.6	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	93.5	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.43	0.37-0.51	y	100	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	98.2	70.0 - 130
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	192	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					10.7	7.00 - 13.0

Analyst: VM

Date: 10/15/14

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 4-17-14

RT Window Data Filename: 141014D1 S#1 Analysis Date: 14-OCT-14 Time: 12:24:31

ZB-5MS IS Data Filename: 141014D1 S#1 Analysis Date: 14-OCT-14 Time: 12:24:31

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)	23:36	1,3,6,8-TCDF (F)	21:26
1,2,8,9-TCDD (L)	27:51	1,2,8,9-TCDF (L)	28:01
1,2,4,7,9-PeCDD (F)	29:27	1,3,4,6,8-PeCDF (F)	27:57
1,2,3,8,9-PeCDD (L)	31:52	1,2,3,8,9-PeCDF (L)	32:07
1,2,4,6,7,9-HxCDD (F)	33:17	1,2,3,4,6,8-HxCDF (F)	32:45
1,2,3,7,8,9-HxCDD (L)	35:16	1,2,3,7,8,9-HxCDF (L)	35:40
1,2,3,4,6,7,9-HpCDD (F)	37:53	1,2,3,4,6,7,8-HpCDF (F)	37:30
1,2,3,4,6,7,8-HpCDD (L)	38:43	1,2,3,4,7,8,9-HpCDF (L)	39:16

(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%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: MJ

Date: 10/15/14

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D1 S#1 Analysis Date: 14-OCT-14 Time: 12:24:31

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.192	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.992	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.148	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.182	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

Analyst: M)

Date: 10/15/14

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D1 S#1 Analysis Date: 14-OCT-14 Time: 12:24:31

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	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.001	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	1.038	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.026	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.091	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.143	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.127	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.223	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.230	1.091-1.371

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: [signature]

Date: 10/15/14

Client ID: 1613 CS3 14F1201 Filename: 141014D1 S:1 Acq:14-OCT-14 12:24:31 ConCal: ST141014D1-1

Lab ID: ST141014D1-1 GC Column ID: ZB-5MS ICal: 1613VG7-4-17-14 wt/vol: 1.000 EndCAL: ST141014D1-2

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	2.25e+06	0.76 y	1.03	27:00	1.001	10.366		*	2.5	*
	1,2,3,7,8-PeCDD	8.17e+06	0.61 y	0.84	31:31	1.000	49.999		*	2.5	*
	1,2,3,4,7,8-HxCDD	7.05e+06	1.29 y	1.05	34:51	1.000	48.905		*	2.5	*
	1,2,3,6,7,8-HxCDD	7.71e+06	1.26 y	1.04	34:57	1.000	50.151		*	2.5	*
	1,2,3,7,8,9-HxCDD	7.53e+06	1.32 y	0.90	35:16	1.001	49.944		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	6.88e+06	1.02 y	1.01	38:43	1.000	51.343		*	2.5	*
	OCDD	1.16e+07	0.89 y	1.04	42:03	1.000	95.094		*	2.5	*
	2,3,7,8-TCDF	2.74e+06	0.77 y	0.91	26:14	1.001	9.8317		*	2.5	*
	1,2,3,7,8-PeCDF	1.25e+07	1.63 y	0.97	30:20	1.000	50.112		*	2.5	*
	2,3,4,7,8-PeCDF	1.26e+07	1.65 y	0.94	31:14	1.000	52.646		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.24e+07	1.28 y	1.32	33:57	1.000	49.213		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.28e+07	1.30 y	1.18	34:05	1.001	49.104		*	2.5	*
	2,3,4,6,7,8-HxCDF	1.20e+07	1.29 y	1.23	34:41	1.001	49.276		*	2.5	*
	1,2,3,7,8,9-HxCDF	9.65e+06	1.30 y	1.13	35:40	1.001	50.017		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	1.05e+07	1.07 y	1.57	37:30	1.000	45.802		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	9.09e+06	1.07 y	1.50	39:16	1.000	46.423		*	2.5	*
	OCDF	1.54e+07	0.91 y	1.05	42:17	1.000	97.169		*	2.5	*
IS	13C-2,3,7,8-TCDD	2.10e+07	0.80 y	1.06	26:59	1.022	98.417				
IS	13C-1,2,3,7,8-PeCDD	1.94e+07	0.64 y	1.08	31:30	1.192	89.202				
IS	13C-1,2,3,4,7,8-HxCDD	1.37e+07	1.24 y	0.74	34:50	1.014	89.684				
IS	13C-1,2,3,6,7,8-HxCDD	1.48e+07	1.25 y	0.75	34:57	1.017	95.758				
IS	13C-1,2,3,7,8,9-HxCDD	1.68e+07	1.22 y	0.89	35:15	1.026	91.520				
IS	13C-1,2,3,4,6,7,8-HpCDD	1.33e+07	1.04 y	0.70	38:42	1.127	91.495				
IS	13C-OCDD	2.34e+07	0.88 y	0.59	42:02	1.223	192.57				
IS	13C-2,3,7,8-TCDF	3.05e+07	0.75 y	0.97	26:12	0.992	103.44				
IS	13C-1,2,3,7,8-PeCDF	2.57e+07	1.54 y	0.99	30:19	1.148	84.944				
IS	13C-2,3,4,7,8-PeCDF	2.54e+07	1.56 y	1.01	31:13	1.182	82.743				
IS	13C-1,2,3,4,7,8-HxCDF	1.91e+07	0.52 y	0.94	33:56	0.988	98.434				
IS	13C-1,2,3,6,7,8-HxCDF	2.22e+07	0.52 y	1.23	34:04	0.992	87.736				
IS	13C-2,3,4,6,7,8-HxCDF	1.98e+07	0.51 y	1.03	34:40	1.009	92.591				
IS	13C-1,2,3,7,8,9-HxCDF	1.71e+07	0.51 y	0.89	35:38	1.038	93.464				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.46e+07	0.43 y	0.71	37:29	1.091	100.13				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.30e+07	0.44 y	0.64	39:15	1.143	98.210				
IS	13C-OCDF	3.00e+07	0.89 y	0.76	42:16	1.230	191.68				
C/Up	37Cl-2,3,7,8-TCDD	2.24e+06		1.04	26:60	1.022	10.664				
RS/RT	13C-1,2,3,4-TCDD	2.01e+07	0.80 y	1.00	26:25	*	100.00				
RS	13C-1,2,3,4-TCDF	3.05e+07	0.76 y	1.00	24:59	*	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.06e+07	0.52 y	1.00	34:21	*	100.00				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	58.0	58.5		*	*
Total Penta-Dioxins	160	160		*	*
Total Hexa-Dioxins	195	197		*	*
Total Hepta-Dioxins	128	129		*	*
Total Tetra-Furans	30.8	31.5		*	*
Total Penta-Furans	217.67	218.17		*	*
Total Hexa-Furans	249	249		*	*
Total Hepta-Furans	93.0	94.3		*	*

	Rec	Qual
IS	98.4	
IS	89.2	
IS	89.7	
IS	95.8	
IS	91.5	
IS	91.5	
IS	96.3	
IS	103	
IS	84.9	
IS	82.7	
IS	98.4	
IS	87.7	
IS	92.6	
IS	93.5	
IS	100	
IS	98.2	
IS	95.8	
C/Up	26.7	

Integrations by Analyst: (M) Date: 10/15/14

Reviewed by Analyst: Date: 10/15/14

Vista Analytical Laboratory - Injection Log Run file: 141014D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141014D1	1	ST141014D1-1	MAS	14-OCT-14	12:24:31	ST141014D1-1	ST141014D1-2
141014D1	2	B4J0051-BS1	MAS	14-OCT-14	13:13:18	ST141014D1-1	NA
141014D1	3	SOLVENT BLANK	MAS	14-OCT-14	14:01:45	NA	NA
141014D1	4	B4J0051-BLK1	MAS	14-OCT-14	14:50:06	ST141014D1-1	NA
141014D1	5	1400732-01	MAS	14-OCT-14	15:38:34	ST141014D1-1	NA
141014D1	6	1400736-01	MAS	14-OCT-14	16:27:01	ST141014D1-1	NA
141014D1	7	1400730-01	MAS	14-OCT-14	17:15:22	ST141014D1-1	ST141014D1-2
141014D1	8	SOLVENT BLANK	MAS	14-OCT-14	18:03:44	NA	NA
141014D1	9	B4J0059-BS1	MAS	14-OCT-14	18:52:06	ST141014D1-1	ST141014D1-2
141014D1	10	B4J0064-BS1	MAS	14-OCT-14	19:40:27	ST141014D1-1	ST141014D1-2
141014D1	11	SOLVENT BLANK	MAS	14-OCT-14	20:28:54	NA	NA
141014D1	12	B4J0059-BLK1	MAS	14-OCT-14	21:17:18	ST141014D1-1	ST141014D1-2
141014D1	13	B4J0064-BLK1	MAS	14-OCT-14	22:05:43	ST141014D1-1	ST141014D1-2
141014D1	14	1400743-01	MAS	14-OCT-14	22:54:08	ST141014D1-1	NA
141014D1	15	1400740-01	MAS	14-OCT-14	23:42:32	ST141014D1-1	ST141014D1-2
141014D1	16	SOLVENT BLANK	MAS	15-OCT-14	00:30:54	NA	NA
141014D1	17	ST141014D1-2	MAS	15-OCT-14	01:19:19	ST141014D1-1	ST141014D1-2

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST141014D1-1 End Calibration ID: ST141014D1-2

	Beg.	End
Ion abundance within QC limits?	✓	✓
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?	y	n

	Beg.	End
Mass resolution > 10,000? ▪ Method 1614 > 5,000; CARB 429 > 8,000	✓	✓
TCDD/TCDF valleys < 25%?	✓	✓
Peaks integrated correctly?	✓	✓
Manual integrations included?	✓	✓
8280 CS1 Ending Standard		
-Ratios within limits	NA	
-S/N > 2.5:1	✓	
-CS1 within 12-hour clock	✓	

Comments:

Reviewed by: ✓ 10/15/14
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

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST141014D2-1

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D2 S#1 Analysis Date: 15-OCT-14 Time: 02:21:58

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	9.69	7.8 - 12.9
						8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M/M+2	0.62	0.54-0.72	y	51.4	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.20	1.05-1.43	y	46.4	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	48.8	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	47.6	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	y	51.1	43.0 - 58.0
OCDD	M+2/M+4	0.88	0.76-1.02	y	94.6	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	9.96	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	53.5	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	53.3	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43	y	48.7	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.30	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	48.5	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.29	1.05-1.43	y	50.1	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.09	0.88-1.20	y	45.8	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.08	0.88-1.20	y	45.6	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	97.4	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: MJ

Date: 10/15/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D2 S#1 Analysis Date: 15-OCT-14 Time: 02:21:58

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.1	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	87.5	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	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	101	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	y	101	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	100	72.0 - 138.0
13C-OCDD	M/M+2	0.88	0.76-1.02	y	244	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.75	0.65-0.89	y	106	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	90.5	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	89.0	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	100	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	86.0	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	96.9	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.50	0.43-0.59	y	96.9	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	y	110	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.42	0.37-0.51	y	117	77.0 - 129.0
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	233	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.65	7.9 - 12.7

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified

(3) No ion abundance ratio; report concentration found.

Analyst: M

Date: 10/15/14

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST141014D2-1

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D2 S#1 Analysis Date: 15-OCT-14 Time: 02:21:58

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	9.69	8.00 - 12.0
1,2,3,7,8-PeCDD	M/M+2	0.62	0.54-0.72	y	51.4	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.20	1.05-1.43	y	46.4	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	48.8	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	47.6	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	y	51.1	40.0 - 60.0
OCDD	M+2/M+4	0.88	0.76-1.02	y	94.6	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	9.96	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	53.5	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	53.3	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43	y	48.7	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.30	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	48.5	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.29	1.05-1.43	y	50.1	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.09	0.88-1.20	y	45.8	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.08	0.88-1.20	y	45.6	40.0 - 60.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	97.4	80.0 - 120

Analyst: MJ

Date: 10/15/14

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D2 S#1 Analysis Date: 15-OCT-14 Time: 02:21:58

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.1	70.0 - 130
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	87.5	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	102	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	101	70.0 - 130
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	y	101	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	100	70.0 - 130
13C-OCDD	M+2/M+4	0.88	0.76-1.02	y	244	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.75	0.65-0.89	y	106	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	90.5	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	89.0	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	100	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	86.0	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	96.9	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.50	0.43-0.59	y	96.9	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	110	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.42	0.37-0.51	y	117	70.0 - 130
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	233	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					9.65	7.00 - 13.0

Analyst: MJ

Date: 10/15/14

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 4-17-14

RT Window Data Filename: 141014D2 S#1 Analysis Date: 15-OCT-14 Time: 02:21:58

ZB-5MS IS Data Filename: 141014D2 S#1 Analysis Date: 15-OCT-14 Time: 02:21:58

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)	23:39	1,3,6,8-TCDF (F)	21:30
1,2,8,9-TCDD (L)	27:53	1,2,8,9-TCDF (L)	28:02
1,2,4,7,9-PeCDD (F)	29:28	1,3,4,6,8-PeCDF (F)	27:58
1,2,3,8,9-PeCDD (L)	31:53	1,2,3,8,9-PeCDF (L)	32:08
1,2,4,6,7,9-HxCDD (F)	33:18	1,2,3,4,6,8-HxCDF (F)	32:45
1,2,3,7,8,9-HxCDD (L)	35:17	1,2,3,7,8,9-HxCDF (L)	35:40
1,2,3,4,6,7,9-HpCDD (F)	37:54	1,2,3,4,6,7,8-HpCDF (F)	37:32
1,2,3,4,6,7,8-HpCDD (L)	38:44	1,2,3,4,7,8,9-HpCDF (L)	39:17

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: MD

Date: 10/15/14

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D2 S#1 Analysis Date: 15-OCT-14 Time: 02:21:58

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.192	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.992	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.147	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.182	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: MS

Date: 10/15/14

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141014D2 S#1 Analysis Date: 15-OCT-14 Time: 02:21:58

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	1.001	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	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	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	1.126	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

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

Analyst: (M)

Date: 10/15/14

Client ID: 1613 CS3 14F1201 Filename: 141014D2 S:1 Acq:15-OCT-14 02:21:58 ConCal: ST141014D2-1

Lab ID: ST141014D2-1 GC Column ID: ZB-5MS ICal: 1613VG7-4-17-14 wt/vol: 1.000 EndCAL: ST141014D2-2

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	1.67e+06	0.77 y	1.03	27:01	1.001	9.6879		*	2.5	*
	1,2,3,7,8-PeCDD	6.61e+06	0.62 y	0.84	31:31	1.000	51.358		*	2.5	*
	1,2,3,4,7,8-HxCDD	6.30e+06	1.20 y	1.05	34:52	1.000	46.400		*	2.5	*
	1,2,3,6,7,8-HxCDD	6.54e+06	1.26 y	1.04	34:59	1.000	48.785		*	2.5	*
	1,2,3,7,8,9-HxCDD	6.56e+06	1.23 y	0.90	35:17	1.000	47.583		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	6.20e+06	1.03 y	1.01	38:44	1.000	51.059		*	2.5	*
	OCDD	1.21e+07	0.88 y	1.04	42:04	1.000	94.621		*	2.5	*
	2,3,7,8-TCDF	2.22e+06	0.78 y	0.91	26:15	1.001	9.9587		*	2.5	*
	1,2,3,7,8-PeCDF	1.11e+07	1.58 y	0.97	30:21	1.001	53.478		*	2.5	*
	2,3,4,7,8-PeCDF	1.07e+07	1.58 y	0.94	31:14	1.000	53.277		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.03e+07	1.30 y	1.32	33:58	1.001	48.728		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.06e+07	1.30 y	1.18	34:05	1.000	50.193		*	2.5	*
	2,3,4,6,7,8-HxCDF	1.02e+07	1.31 y	1.23	34:42	1.000	48.474		*	2.5	*
	1,2,3,7,8,9-HxCDF	8.29e+06	1.29 y	1.13	35:40	1.000	50.108		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	9.55e+06	1.09 y	1.57	37:32	1.001	45.761		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	8.76e+06	1.08 y	1.50	39:17	1.000	45.636		*	2.5	*
	OCDF	1.55e+07	0.91 y	1.05	42:18	1.000	97.372		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.67e+07	0.79 y	1.06	27:00	1.022	97.143				
IS	13C-1,2,3,7,8-PeCDD	1.53e+07	0.63 y	1.08	31:30	1.192	87.479				
IS	13C-1,2,3,4,7,8-HxCDD	1.29e+07	1.25 y	0.74	34:51	1.014	102.16				
IS	13C-1,2,3,6,7,8-HxCDD	1.29e+07	1.23 y	0.75	34:58	1.017	100.92				
IS	13C-1,2,3,7,8,9-HxCDD	1.54e+07	1.25 y	0.89	35:16	1.026	101.25				
IS	13C-1,2,3,4,6,7,8-HpCDD	1.20e+07	1.06 y	0.70	38:43	1.126	100.25				
IS	13C-OCDD	2.45e+07	0.88 y	0.59	42:03	1.224	243.51				
IS	13C-2,3,7,8-TCDF	2.45e+07	0.75 y	0.97	26:14	0.992	105.88				
IS	13C-1,2,3,7,8-PeCDF	2.14e+07	1.60 y	0.99	30:20	1.147	90.531				
IS	13C-2,3,4,7,8-PeCDF	2.14e+07	1.61 y	1.01	31:14	1.182	88.984				
IS	13C-1,2,3,4,7,8-HxCDF	1.61e+07	0.51 y	0.94	33:57	0.988	100.06				
IS	13C-1,2,3,6,7,8-HxCDF	1.80e+07	0.52 y	1.23	34:05	0.991	85.957				
IS	13C-2,3,4,6,7,8-HxCDF	1.71e+07	0.53 y	1.03	34:41	1.009	96.907				
IS	13C-1,2,3,7,8,9-HxCDF	1.46e+07	0.50 y	0.89	35:39	1.037	96.925				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.33e+07	0.44 y	0.71	37:31	1.091	110.02				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.28e+07	0.42 y	0.64	39:16	1.143	116.55				
IS	13C-OCDF	3.02e+07	0.91 y	0.76	42:17	1.230	233.30				
C/Up	37Cl-2,3,7,8-TCDD	1.62e+06		1.04	27:01	1.022	9.6502				
RS/RT	13C-1,2,3,4-TCDD	1.61e+07	0.79 y	1.00	26:26	*	100.00				
RS	13C-1,2,3,4-TCDF	2.39e+07	0.74 y	1.00	25:01	*	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.71e+07	0.53 y	1.00	34:22	*	100.00				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	56.5	56.6		*	*
Total Penta-Dioxins	158	158		*	*
Total Hexa-Dioxins	183	184		*	*
Total Hepta-Dioxins	128	128		*	*
Total Tetra-Furans	31.1	31.2		*	*
Total Penta-Furans	217.38	217.58		*	*
Total Hexa-Furans	245	246		*	*
Total Hepta-Furans	91.7	92.4		*	*

	Rec	Qual
IS	97.1	
IS	87.5	
IS	102	
IS	101	
IS	101	
IS	100	
IS	122	
IS	106	
IS	90.5	
IS	89.0	
IS	100	
IS	86.0	
IS	96.9	
IS	96.9	
IS	110	
IS	117	
IS	117	
C/Up	24.1	

Integrations by Analyst: VM Date: 10/15/14

Reviewed by Analyst: [signature] Date: 10/16/14

Vista Analytical Laboratory - Injection Log Run file: 141014D2 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141014D2	1	ST141014D2-1	MAS	15-OCT-14	02:21:58	ST141014D2-1	ST141014D2-2
141014D2	2	B4J0063-BS1	MAS	15-OCT-14	03:10:16	ST141014D2-1	ST141014D2-2
141014D2	3	SOLVENT BLANK	MAS	15-OCT-14	03:58:38	NA	NA
141014D2	4	B4J0063-BLK1	MAS	15-OCT-14	04:46:57	ST141014D2-1	ST141014D2-2
141014D2	5	B4J0059-BS2	MAS	15-OCT-14	05:35:21	ST141014D2-1	ST141014D2-2
141014D2	6	B4J0064-BS2	MAS	15-OCT-14	06:23:49	ST141014D2-1	ST141014D2-2
141014D2	7	1400737-01	MAS	15-OCT-14	07:12:17	ST141014D2-1	NA
141014D2	8	1400741-01	MAS	15-OCT-14	08:00:41	ST141014D2-1	NA
141014D2	9	1400737-02	MAS	15-OCT-14	08:49:04	ST141014D2-1	NA
141014D2	10	1400737-03	MAS	15-OCT-14	09:37:26	ST141014D2-1	NA
141014D2	11	1400735-01	MAS	15-OCT-14	10:25:53	ST141014D2-1	NA
141014D2	12	SOLVENT BLANK	MAS	15-OCT-14	11:14:19	NA	NA
141014D2	13	SOLVENT BLANK	MAS	15-OCT-14	12:02:45	NA	NA
141014D2	14	ST141014D2-2	MAS	15-OCT-14	12:51:11	ST141014D2-1	ST141014D2-2

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST 14101402-1 End Calibration ID: ST 14101402-2

	Beg.	End
Ion abundance within QC limits?	✓	✓
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?	y	n

	Beg.	End
Mass resolution > 10,000? ▪ Method 1614 > 5,000; CARB 429 > 8,000	✓	✓*
TCDD/TCDF valleys < 25%?	✓	✓
Peaks integrated correctly?	✓	✓
Manual integrations included?	✓	✓
8280 CS1 Ending Standard		
-Ratios within limits		NA
-S/N > 2.5:1		✓
-CS1 within 12-hour clock		✓

Comments: * SIOs dropped out during and resolution check. Three functions printed. MW 10/16/14

Reviewed by: MW 10/16/14
Initials & Date

** Ending standard criteria applicable to 8290 only.*

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 mh

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST141018D1-1

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141018D1 S#1 Analysis Date: 19-OCT-14 Time: 09:49:26

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.71	0.65-0.89	y	9.96	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M/M+2	0.60	0.54-0.72	y	44.9	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	49.2	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	50.6	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.21	1.05-1.43	y	48.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	52.3	43.0 - 58.0
OCDD	M+2/M+4	0.88	0.76-1.02	y	98.0	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	y	10.1	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.63	1.32-1.78	y	47.9	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	50.6	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	48.7	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43	y	51.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.32	1.05-1.43	y	50.4	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.31	1.05-1.43	y	49.3	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.07	0.88-1.20	y	49.9	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.07	0.88-1.20	y	49.5	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	98.7	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: [signature]

Date: 10/19/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141018D1 S#1 Analysis Date: 19-OCT-14 Time: 09:49:26

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	96.4	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.60	0.54-0.72	y	92.1	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	96.4	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	100	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	101	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	98.3	72.0 - 138.0
13C-OCDD	M/M+2	0.88	0.76-1.02	y	232	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.76	0.65-0.89	y	93.2	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	77.3	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	81.1	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	113	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	90.7	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	96.5	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	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	111	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.42	0.37-0.51	y	111	77.0 - 129.0
13C-OCDF	M+2/M+4	0.88	0.76-1.02	y	231	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					10.8	7.9 - 12.7

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified

(3) No ion abundance ratio; report concentration found.

Analyst: [signature]

Date: 10/29/14

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 4-17-14

RT Window Data Filename: 141018D1 S#1 Analysis Date: 19-OCT-14 Time: 09:49:26

ZB-5MS IS Data Filename: 141018D1 S#1 Analysis Date: 19-OCT-14 Time: 09:49:26

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)	23:36	1,3,6,8-TCDF (F)	21:26
1,2,8,9-TCDD (L)	27:52	1,2,8,9-TCDF (L)	28:00
1,2,4,7,9-PeCDD (F)	29:27	1,3,4,6,8-PeCDF (F)	27:57
1,2,3,8,9-PeCDD (L)	31:52	1,2,3,8,9-PeCDF (L)	32:07
1,2,4,6,7,9-HxCDD (F)	33:17	1,2,3,4,6,8-HxCDF (F)	32:45
1,2,3,7,8,9-HxCDD (L)	35:16	1,2,3,7,8,9-HxCDF (L)	35:40
1,2,3,4,6,7,9-HpCDD (F)	37:53	1,2,3,4,6,7,8-HpCDF (F)	37:31
1,2,3,4,6,7,8-HpCDD (L)	38:43	1,2,3,4,7,8,9-HpCDF (L)	39:17

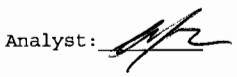
(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: 

Date: 10/19/14

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141018D1 S#1 Analysis Date: 19-OCT-14 Time: 09:49:26

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.021	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.192	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.992	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.148	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.182	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst:

Date: 10/19/14

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

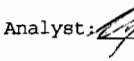
Initial Calibration Date: 4-17-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141018D1 S#1 Analysis Date: 19-OCT-14 Time: 09:49:26

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	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.001	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	0.991	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	1.092	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

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: 

Date: 10/19/14

Client ID: 1613 CS3 14F1201 Filename: 141018D1 S:1 Acq:19-OCT-14 09:49:26 ConCal: ST141018D1-1

Lab ID: ST141018D1-1 GC Column ID: ZB-5MS ICal: 1613VG7-4-17-14 wt/vol: 1.000 EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	7.25e+05	0.71 y	1.03	27:00	1.001	9.9601		*	2.5	*
	1,2,3,7,8-PeCDD	2.60e+06	0.60 y	0.84	31:31	1.000	44.913		*	2.5	*
	1,2,3,4,7,8-HxCDD	2.72e+06	1.22 y	1.05	34:51	1.001	49.206		*	2.5	*
	1,2,3,6,7,8-HxCDD	2.90e+06	1.26 y	1.04	34:58	1.001	50.568		*	2.5	*
	1,2,3,7,8,9-HxCDD	2.90e+06	1.21 y	0.90	35:16	1.001	48.662		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	2.69e+06	1.02 y	1.01	38:43	1.000	52.335		*	2.5	*
	OCDD	5.14e+06	0.88 y	1.04	42:03	1.000	97.978		*	2.5	*
	2,3,7,8-TCDF	9.15e+05	0.80 y	0.91	26:13	1.001	10.052		*	2.5	*
	1,2,3,7,8-PeCDF	3.94e+06	1.63 y	0.97	30:20	1.001	47.853		*	2.5	*
	2,3,4,7,8-PeCDF	4.30e+06	1.61 y	0.94	31:14	1.000	50.603		*	2.5	*
	1,2,3,4,7,8-HxCDF	5.01e+06	1.28 y	1.32	33:57	1.000	48.655		*	2.5	*
	1,2,3,6,7,8-HxCDF	4.95e+06	1.30 y	1.18	34:05	1.001	51.353		*	2.5	*
	2,3,4,6,7,8-HxCDF	4.55e+06	1.32 y	1.23	34:41	1.001	50.448		*	2.5	*
	1,2,3,7,8,9-HxCDF	3.74e+06	1.31 y	1.13	35:40	1.001	49.334		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	4.53e+06	1.07 y	1.57	37:31	1.000	49.916		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	3.89e+06	1.07 y	1.50	39:17	1.000	49.470		*	2.5	*
	OCDF	6.71e+06	0.92 y	1.05	42:17	1.000	98.722		*	2.5	*
IS	13C-2,3,7,8-TCDD	7.05e+06	0.77 y	1.06	26:59	1.021	96.414				
IS	13C-1,2,3,7,8-PeCDD	6.87e+06	0.60 y	1.08	31:30	1.192	92.150				
IS	13C-1,2,3,4,7,8-HxCDD	5.26e+06	1.28 y	0.74	34:50	1.014	96.397				
IS	13C-1,2,3,6,7,8-HxCDD	5.52e+06	1.27 y	0.75	34:57	1.017	100.11				
IS	13C-1,2,3,7,8,9-HxCDD	6.65e+06	1.24 y	0.89	35:15	1.026	101.40				
IS	13C-1,2,3,4,6,7,8-HpCDD	5.09e+06	1.06 y	0.70	38:42	1.127	98.333				
IS	13C-OCDD	1.01e+07	0.88 y	0.59	42:02	1.224	232.27				
IS	13C-2,3,7,8-TCDF	9.99e+06	0.76 y	0.97	26:12	0.992	93.174				
IS	13C-1,2,3,7,8-PeCDF	8.49e+06	1.56 y	0.99	30:19	1.148	77.335				
IS	13C-2,3,4,7,8-PeCDF	9.06e+06	1.57 y	1.01	31:13	1.182	81.129				
IS	13C-1,2,3,4,7,8-HxCDF	7.81e+06	0.51 y	0.94	33:56	0.988	112.83				
IS	13C-1,2,3,6,7,8-HxCDF	8.20e+06	0.52 y	1.23	34:03	0.991	90.693				
IS	13C-2,3,4,6,7,8-HxCDF	7.34e+06	0.53 y	1.03	34:40	1.009	96.495				
IS	13C-1,2,3,7,8,9-HxCDF	6.72e+06	0.51 y	0.89	35:38	1.037	103.14				
IS	13C-1,2,3,4,6,7,8-HpCDF	5.77e+06	0.44 y	0.71	37:30	1.092	110.95				
IS	13C-1,2,3,4,7,8,9-HpCDF	5.23e+06	0.42 y	0.64	39:16	1.143	110.73				
IS	13C-OCDF	1.29e+07	0.88 y	0.76	42:16	1.230	231.00				
C/Up	37Cl-2,3,7,8-TCDD	7.78e+05		1.04	26:60	1.022	10.826				
RS/RT	13C-1,2,3,4-TCDD	6.88e+06	0.80 y	1.00	26:25	*	100.00				
RS	13C-1,2,3,4-TCDF	1.11e+07	0.79 y	1.00	24:59	*	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	7.36e+06	0.51 y	1.00	34:21	*	100.00				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	57.8	58.2		*	*
Total Penta-Dioxins	143	143		*	*
Total Hexa-Dioxins	193	194		*	*
Total Hepta-Dioxins	134	136		*	*
Total Tetra-Furans	34.7	35.3		*	*
Total Penta-Furans	215.53	217.44		*	*
Total Hexa-Furans	249	250		*	*
Total Hepta-Furans	99.4	101		*	*

	Name	Rec	Qual
IS	13C-2,3,7,8-TCDD	96.4	
IS	13C-1,2,3,7,8-PeCDD	92.1	
IS	13C-1,2,3,4,7,8-HxCDD	96.4	
IS	13C-1,2,3,6,7,8-HxCDD	100	
IS	13C-1,2,3,7,8,9-HxCDD	101	
IS	13C-1,2,3,4,6,7,8-HpCDD	98.3	
IS	13C-OCDD	116	
IS	13C-2,3,7,8-TCDF	93.2	
IS	13C-1,2,3,7,8-PeCDF	77.3	
IS	13C-2,3,4,7,8-PeCDF	81.1	
IS	13C-1,2,3,4,7,8-HxCDF	113	
IS	13C-1,2,3,6,7,8-HxCDF	90.7	
IS	13C-2,3,4,6,7,8-HxCDF	96.5	
IS	13C-1,2,3,7,8,9-HxCDF	103	
IS	13C-1,2,3,4,6,7,8-HpCDF	111	
IS	13C-1,2,3,4,7,8,9-HpCDF	111	
IS	13C-OCDF	116	
C/Up	37Cl-2,3,7,8-TCDD	108	

Integrations by Analyst: _____ Date: 10/19/14

Reviewed by Analyst: CJ Date: 10/20/14

Vista Analytical Laboratory - Injection Log Run file: 141018D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141018D1	1	ST141018D1-1	WJL	19-OCT-14	09:49:26	ST141018D1-1	NA
141018D1	2	SOLVENT BLANK	WJL	19-OCT-14	10:37:51	ST141018D1-1	NA
141018D1	3	1400673-06 1:20	WJL	19-OCT-14	11:26:18	ST141018D1-1	NA
141018D1	4	1400680-02 1:10	WJL	19-OCT-14	12:14:45	ST141018D1-1	NA
141018D1	5	1400737-02 1:20	WJL	19-OCT-14	13:03:08	ST141018D1-1	NA
141018D1	6	SOLVENT BLANK	WJL	19-OCT-14	13:51:33	ST141018D1-1	NA
141018D1	7	SOLVENT BLANK	WJL	19-OCT-14	14:39:58	ST141018D1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: 141018D1-1 End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	✓	NA
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?	(y)	n

	Beg.	End
Mass resolution > 10,000? ▪ Method 1614 > 5,000; CARB 429 > 8,000	✓	✓
TCDD/TCDF valleys < 25%?	✓	NA
Peaks integrated correctly?	✓	
Manual integrations included?	✓	
8280 CS1 Ending Standard		
-Ratios within limits		
-S/N > 2.5:1		
-CS1 within 12-hour clock		✓

Comments:

Reviewed by: CJ 10/20/14
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

Vista Analytical Laboratory — CCAL ID: ST141016F2-1
Initial Calibration Date: 07/01/2014
Instrument ID: VG-9 — GC Column ID: DB-225
VER Data file name: 141016F2_3 — Analysis Date: 16-Oct-14 — Analysis Time: 16:01:05

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABOUND. RATIO	QC LIMITS (2)	Flag	CONC. FOUND	CONC. RANGE (3) (ng/ml) 1613 Min	CONC. RANGE (3) (ng/ml) 1613 Max		CONC. RANGE (ng/ml) 8290 Min	CONC. RANGE (ng/ml) 8290 Max	
2,3,7,8-TCDF	M/M+2	0.82	0.65-0.89	NO	10.6	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: CJ
Date: 10/17/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Vista Analytical Laboratory
CCAL ID: ST141016F2-1
Initial Calibration Date: 07/01/2014
Instrument ID: VG-9
GC Column ID: DB-225
VER Data file name: 141016F2_3
Analysis Date: 16-Oct-14
Analysis Time: 16:01:05

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABOUND. RATIO	QC LIMITS (2)	Flag	CONC. FOUND	CONC. RANGE (3) (ng/ml) 1613 Min	CONC. RANGE (3) (ng/ml) 1613 Max		CONC. RANGE (ng/ml) 8290 Min	CONC. RANGE (ng/ml) 8290 Max	
13C-2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	NO	93.3	71.0 76.0	140.0 131.0 (5)	Yes	70.0	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: CJ
Date: 10/17/14

Dataset: C:\MassLynx\Default.pro\Results\141016F2\141016F2_3.qld

Last Altered: Friday, October 17, 2014 09:15:53 Pacific Daylight Time
Printed: Friday, October 17, 2014 09:17:05 Pacific Daylight Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 26 Sep 2014 10:06:46
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-7-1-14.cdb 02 Jul 2014 07:18:51

Name: 141016F2_3, Date: 16-Oct-2014, Time: 16:01:05, ID: ST141016F2-1 1613 CS3 14F1201, Description: 1613 CS3 141201

	#-Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	2.35e4	0.82	NO	0.916	1.000	17.55	10.626	106	0.271
2	2 13C-2,3,7,8-TCDF	2.42e5	0.77	NO	0.987	1.000	17.54	93.262	93.3	0.747
3	3 13C-1,2,3,4-TCDF	2.63e5	0.77	NO	1.00	1.000	15.22	100.00	100	0.737
4	4 13C-1,2,3,4-TCDD	1.89e5	0.75	NO		1.000	16.00			

dfs 10/17/14

Quantify Compound Summary Report **MassLynx 4.1**
Vista Analytical Laboratory VG-9

Dataset: Untitled

Last Altered: Friday, October 17, 2014 09:01:35 Pacific Daylight Time
Printed: Friday, October 17, 2014 09:02:50 Pacific Daylight Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 26 Sep 2014 10:06:46
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-7-1-14.cdb 02 Jul 2014 07:18:51

Compound name: 13C-1,2,3,4-TCDF

	Name	ID	Acq.Date	Acq.Time
1	141016F2_1	SOLVENT BLANK	16-Oct-14	14:59:16
2	141016F2_2	CP141016F2-1 DB-225 CPSM	16-Oct-14	15:29:17
3	141016F2_3	ST141016F2-1 1613 CS3 14F1201	16-Oct-14	16:01:05
4	141016F2_4	SOLVENT BLANK	16-Oct-14	16:32:53
5	141016F2_5	1400737-02RE1 SP-OWS-01-20141008-S CF ...	16-Oct-14	17:04:40
6	141016F2_6	1400737-03RE1 SP-CB-09-20141008-S CF 2...	16-Oct-14	17:36:27
7	141016F2_7	1400735-01RE1 1410099-01 CF 19.27	16-Oct-14	18:08:14
8	141016F2_8	SOLVENT BLANK	16-Oct-14	18:40:02

(A) Sensitivity low. RI. gls 10/17/14

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST14D16F2-1 End Calibration ID: N/A

	Beg.	End
Ion abundance within QC limits?	✓	N/A
Concentration within range?	✓	
First and last eluters present?	N/A	
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?	(y)	n

	Beg.	End
Mass resolution > 10,000? ▪ Method 1614 > 5,000; CARB 429 > 8,000	✓	✓ *
TCDD/TCDF valleys < 25%?	✓	N/A
Peaks integrated correctly?	✓	
Manual integrations included?	✓	
8280 CS1 Ending Standard		
-Ratios within limits		
-S/N > 2.5:1		
-CS1 within 12-hour clock		↓

Comments:
(*) PFK drain on some masses. cfs 10/17/14
PFK cfs 10/17/14

Reviewed by: AC 10/17/14
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

Vista Analytical Laboratory
CCAL ID: ST141017F1-1
Initial Calibration Date: 07/01/2014
Instrument ID: VG-9
GC Column ID: DB-225
VER Data file name: 141017F1_2
Analysis Date: 17-Oct-14
Analysis Time: 10:46:00

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABOUND. RATIO	QC LIMITS (2)	Flag	CONC. FOUND	CONC. RANGE (3) (ng/ml) 1613 Min	CONC. RANGE (3) (ng/ml) 1613 Max		CONC. RANGE (ng/ml) 8290 Min	CONC. RANGE (ng/ml) 8290 Max	
2,3,7,8-TCDF	M/M+2	0.83	0.65-0.89	NO	10.7	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: CG
Date: 10/17/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Vista Analytical Laboratory
CCAL ID: ST141017F1-1
Initial Calibration Date: 07/01/2014
Instrument ID: VG-9
GC Column ID: DB-225
VER Data file name: 141017F1_2
Analysis Date: 17-Oct-14
Analysis Time: 10:46:00

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABOUND. RATIO	QC LIMITS (2)	Flag	CONC. FOUND	CONC. RANGE (3) (ng/ml) 1613 Min	CONC. RANGE (3) (ng/ml) 1613 Max		CONC. RANGE (ng/ml) 8290 Min	CONC. RANGE (ng/ml) 8290 Max	
13C-2,3,7,8-TCDF	M/M+2	0.81	0.65-0.89	NO	102	71.0 76.0	140.0 131.0 (5)	Yes	70.0	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: CJ
Date: 10/17/14

Dataset: C:\MassLynx\Default.pro\Results\141017F1\141017F1_2.qld

Last Altered: Friday, October 17, 2014 12:03:39 Pacific Daylight Time
Printed: Friday, October 17, 2014 12:04:36 Pacific Daylight Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 26 Sep 2014 10:06:46
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-7-1-14.cdb 02 Jul 2014 07:18:51

Name: 141017F1_2, Date: 17-Oct-2014, Time: 10:46:00, ID: ST141017F1-1 1613 CS3 14F1201, Description: 1613 CS3 141201

	#-Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	2.24e4	0.83	NO	0.916	1.000	17.56	10.697	107	0.301
2	2 13C-2,3,7,8-TCDF	2.29e5	0.81	NO	0.987	1.000	17.55	101.75	102	1.00
3	3 13C-1,2,3,4-TCDF	2.28e5	0.79	NO	1.00	1.000	15.23	100.00	100	0.990
4	4 13C-1,2,3,4-TCDD	1.73e5	0.79	NO		1.000	16.00			

CG 10/17/14

Vista Analytical Laboratory VG-9

Dataset: Untitled

Last Altered: Friday, October 17, 2014 15:18:45 Pacific Daylight Time
Printed: Friday, October 17, 2014 15:18:58 Pacific Daylight Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 26 Sep 2014 10:06:46
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-7-1-14.cdb 02 Jul 2014 07:18:51

Compound name: 2,3,7,8-TCDF

	Name	ID	Acq.Date	Acq.Time
1	141017F1_1	CP141017F1-1 DB-225 CPSM	17-Oct-14	10:15:15
2	141017F1_2	ST141017F1-1 1613 CS3 14F1201	17-Oct-14	10:46:00
3	141017F1_3	SOLVENT BLANK	17-Oct-14	11:17:49
4	141017F1_4	1400735-01RE1 1410099-01 CF 19.27	17-Oct-14	11:49:40
5	141017F1_5	1400737-03RE1 SP-CB-09-20141008-S CF 2...	17-Oct-14	12:21:33

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST141017F1-1 End Calibration ID: N/A

	Beg.	End
Ion abundance within QC limits?	✓	NA
Concentration within range?	✓	
First and last eluters present?	NA	
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?	(y)	n

	Beg.	End
Mass resolution > 10,000? ▪ Method 1614 > 5,000; CARB 429 > 8,000	✓	✓
TCDD/TCDF valleys < 25%?	✓	NA
Peaks integrated correctly?	✓	
Manual integrations included?	✓	
8280 CS1 Ending Standard		
-Ratios within limits		
-S/N > 2.5:1		
-CS1 within 12-hour clock		✓

Comments:

Reviewed by: AC 10/17/14
Initials & Date

* *Ending standard criteria applicable to 8290 only.*

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 rmh

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141020E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141020E1 S#1 Analysis Date: 20-OCT-14 Time: 12:05:43

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-1	2.93	2.66-3.60	y	47.6	37.5-62.5
PCB-2	2.96	2.66-3.60	y	48.8	37.5-62.5
PCB-3	2.95	2.66-3.60	y	47.5	37.5-62.5
PCB-4/10	1.61	1.33-1.79	y	201.6	150-250
PCB-7/9	1.61	1.33-1.79	y	198.9	150-250
PCB-6	1.62	1.33-1.79	y	96.4	75.0-125
PCB-5/8	1.62	1.33-1.79	y	203.3	150-250
PCB-14	1.62	1.33-1.79	y	99.9	75.0-125
PCB-11	1.64	1.33-1.79	y	98.7	75.0-125
PCB-12/13	1.61	1.33-1.79	y	202.1	150-250
PCB-15	1.59	1.33-1.79	y	96.5	75.0-125
PCB-19	1.05	0.88-1.20	y	49.3	37.5-62.5
PCB-30	1.05	0.88-1.20	y	52.4	37.5-62.5
PCB-18	1.05	0.88-1.20	y	49.6	37.5-62.5
PCB-17	1.05	0.88-1.20	y	50.9	37.5-62.5
PCB-24/27	1.05	0.88-1.20	y	103.5	75.0-125
PCB-16/32	1.05	0.88-1.20	y	100.8	75.0-125
PCB-34	1.01	0.88-1.20	y	50.8	37.5-62.5
PCB-23	1.05	0.88-1.20	y	44.3	37.5-62.5
PCB-29	1.03	0.88-1.20	y	47.6	37.5-62.5
PCB-26	1.02	0.88-1.20	y	44.4	37.5-62.5
PCB-25	1.04	0.88-1.20	y	43.5	37.5-62.5
PCB-31	1.00	0.88-1.20	y	38.3	37.5-62.5
PCB-28	1.03	0.88-1.20	y	47.3	37.5-62.5
PCB-20/21/33	1.02	0.88-1.20	y	132.0	112.5-225
PCB-22	1.03	0.88-1.20	y	46.3	37.5-62.5
PCB-36	1.02	0.88-1.20	y	46.4	37.5-62.5
PCB-39	1.03	0.88-1.20	y	46.5	37.5-62.5
PCB-38	1.04	0.88-1.20	y	49.5	37.5-62.5
PCB-35	1.04	0.88-1.20	y	46.2	37.5-62.5
PCB-37	1.05	0.88-1.20	y	46.5	37.5-62.5
PCB-54	0.76	0.65-0.89	y	48.1	37.5-62.5
PCB-50	0.75	0.65-0.89	y	46.6	37.5-62.5
PCB-53	0.75	0.65-0.89	y	46.4	37.5-62.5
PCB-51	0.74	0.65-0.89	y	48.2	37.5-62.5
PCB-45	0.74	0.65-0.89	y	50.3	37.5-62.5
PCB-46	0.74	0.65-0.89	y	44.9	37.5-62.5
PCB-52/69	0.75	0.65-0.89	y	97.7	75.0-125
PCB-73	0.76	0.65-0.89	y	50.3	37.5-62.5
PCB-43/49	0.75	0.65-0.89	y	96.1	75.0-125
PCB-47	0.74	0.65-0.89	y	49.6	37.5-62.5
PCB-48/75	0.76	0.65-0.89	y	96.4	75.0-125
PCB-65	0.75	0.65-0.89	y	45.6	37.5-62.5
PCB-62	0.75	0.65-0.89	y	48.0	37.5-62.5
PCB-44	0.75	0.65-0.89	y	46.5	37.5-62.5
PCB-42/59	0.76	0.65-0.89	y	93.7	75.0-125
PCB-41/64/71/72	0.75	0.65-0.89	y	191.7	150-250
PCB-68	0.75	0.65-0.89	y	50.4	37.5-62.5
PCB-40	0.75	0.65-0.89	y	47.1	37.5-62.5
PCB-57	0.75	0.65-0.89	y	49.0	37.5-62.5
PCB-67	0.74	0.65-0.89	y	48.5	37.5-62.5
PCB-58	0.75	0.65-0.89	y	49.3	37.5-62.5
PCB-63	0.76	0.65-0.89	y	51.0	37.5-62.5
PCB-74	0.75	0.65-0.89	y	49.7	37.5-62.5
PCB-61/70	0.76	0.65-0.89	y	100.9	75.0-125
PCB-76/66	0.76	0.65-0.89	y	98.9	75.0-125
PCB-80	0.76	0.65-0.89	y	48.1	37.5-62.5
PCB-55	0.74	0.65-0.89	y	48.5	37.5-62.5
PCB-56/60	0.75	0.65-0.89	y	93.7	75.0-125
PCB-79	0.76	0.65-0.89	y	50.4	37.5-62.5
PCB-78	0.76	0.65-0.89	y	50.1	37.5-62.5
PCB-81	0.76	0.65-0.89	y	49.1	37.5-62.5
PCB-77	0.78	0.65-0.89	y	48.8	37.5-62.5
PCB-104	1.58	1.32-1.78	y	51.0	37.5-62.5
PCB-96	1.57	1.32-1.78	y	52.2	37.5-62.5
PCB-103	1.57	1.32-1.78	y	53.3	37.5-62.5
PCB-100	1.61	1.32-1.78	y	53.4	37.5-62.5
PCB-94	1.57	1.32-1.78	y	52.0	37.5-62.5
PCB-95/98/102	1.62	1.32-1.78	y	164.8	112.5-225
PCB-93	1.43	1.32-1.78	y	38.0	37.5-62.5
PCB-88/91	1.48	1.32-1.78	y	97.9	75.0-125
PCB-121	1.68	1.32-1.78	y	51.6	37.5-62.5

Analyst: DMS

Date: 10/24/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141020E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141020E1 S#1 Analysis Date: 20-OCT-14 Time: 12:05:43

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)	ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-84/92	1.58	1.32-1.78	y	101.5	75.0-125	PCB-140	1.28	1.05-1.43	y	49.3	37.5-62.5
PCB-89	1.59	1.32-1.78	y	51.2	37.5-62.5	PCB-134/143	1.22	1.05-1.43	y	104.7	75.0-125
PCB-90/101	1.59	1.32-1.78	y	101.6	75.0-125	PCB-133/142	1.26	1.05-1.43	y	103.3	75.0-125
PCB-113	1.61	1.32-1.78	y	54.3	37.5-62.5	PCB-131	1.21	1.05-1.43	y	51.3	37.5-62.5
PCB-99	1.57	1.32-1.78	y	50.4	37.5-62.5	PCB-146/165	1.24	1.05-1.43	y	106.3	75.0-125
PCB-119	1.57	1.32-1.78	y	52.0	37.5-62.5	PCB-132/161	1.24	1.05-1.43	y	106.2	75.0-125
PCB-108/112	1.58	1.32-1.78	y	105.4	75.0-125	PCB-153	1.25	1.05-1.43	y	53.2	37.5-62.5
PCB-83	1.60	1.32-1.78	y	53.5	37.5-62.5	PCB-168	1.24	1.05-1.43	y	52.0	37.5-62.5
PCB-97	1.58	1.32-1.78	y	51.0	37.5-62.5	PCB-141	1.24	1.05-1.43	y	53.3	37.5-62.5
PCB-86	1.56	1.32-1.78	y	50.4	37.5-62.5	PCB-137	1.23	1.05-1.43	y	51.5	37.5-62.5
PCB-87/117/125	1.58	1.32-1.78	y	152.7	112.5-225	PCB-130	1.24	1.05-1.43	y	58.5	37.5-62.5
PCB-111/115	1.57	1.32-1.78	y	98.9	75.0-125	PCB-138/163/164	1.23	1.05-1.43	y	162.1	112.5-225
PCB-85/116	1.59	1.32-1.78	y	109.3	75.0-125	PCB-158/160	1.24	1.05-1.43	y	112.1	75.0-125
PCB-120	1.58	1.32-1.78	y	51.5	37.5-62.5	PCB-129	1.23	1.05-1.43	y	50.9	37.5-62.5
PCB-110	1.59	1.32-1.78	y	51.9	37.5-62.5	PCB-166	1.25	1.05-1.43	y	55.1	37.5-62.5
PCB-82	1.56	1.32-1.78	y	52.5	37.5-62.5	PCB-159	1.25	1.05-1.43	y	53.9	37.5-62.5
PCB-124	1.57	1.32-1.78	y	52.3	37.5-62.5	PCB-128/162	1.23	1.05-1.43	y	104.5	75.0-125
PCB-107/109	1.58	1.32-1.78	y	102.6	75.0-125	PCB-167	1.23	1.05-1.43	y	54.3	37.5-62.5
PCB-123	1.57	1.32-1.78	y	52.6	37.5-62.5	PCB-156	1.24	1.05-1.43	y	53.3	37.5-62.5
PCB-106/118	1.57	1.32-1.78	y	102.4	75.0-125	PCB-157	1.24	1.05-1.43	y	54.5	37.5-62.5
PCB-114	1.61	1.32-1.78	y	53.1	37.5-62.5	PCB-169	1.25	1.05-1.43	y	53.5	37.5-62.5
PCB-122	1.62	1.32-1.78	y	52.5	37.5-62.5	PCB-188	1.06	0.89-1.21	y	52.9	37.5-62.5
PCB-105	1.62	1.32-1.78	y	53.6	37.5-62.5	PCB-184	1.06	0.89-1.21	y	53.7	37.5-62.5
PCB-127	1.61	1.32-1.78	y	52.6	37.5-62.5	PCB-179	1.05	0.89-1.21	y	53.0	37.5-62.5
PCB-126	1.64	1.32-1.78	y	53.7	37.5-62.5	PCB-176	1.06	0.89-1.21	y	52.7	37.5-62.5
PCB-155	1.26	1.05-1.43	y	53.2	37.5-62.5	PCB-186	1.06	0.89-1.21	y	54.4	37.5-62.5
PCB-150	1.26	1.05-1.43	y	53.4	37.5-62.5	PCB-178	1.07	0.89-1.21	y	52.6	37.5-62.5
PCB-152	1.26	1.05-1.43	y	51.4	37.5-62.5	PCB-175	1.06	0.89-1.21	y	54.6	37.5-62.5
PCB-145	1.26	1.05-1.43	y	51.0	37.5-62.5	PCB-182/187	1.07	0.89-1.21	y	108.1	75.0-125
PCB-136	1.28	1.05-1.43	y	52.4	37.5-62.5	PCB-183	1.07	0.89-1.21	y	51.2	37.5-62.5
PCB-148	1.29	1.05-1.43	y	51.9	37.5-62.5	PCB-185	1.07	0.89-1.21	y	55.1	37.5-62.5
PCB-154	1.27	1.05-1.43	y	52.5	37.5-62.5	PCB-174	1.07	0.89-1.21	y	53.9	37.5-62.5
PCB-151	1.28	1.05-1.43	y	49.2	37.5-62.5	PCB-181	1.06	0.89-1.21	y	55.9	37.5-62.5
PCB-135	1.26	1.05-1.43	y	47.7	37.5-62.5	PCB-177	1.07	0.89-1.21	y	55.6	37.5-62.5
PCB-144	1.37	1.05-1.43	y	51.3	37.5-62.5	PCB-171	1.07	0.89-1.21	y	53.5	37.5-62.5
PCB-147	1.20	1.05-1.43	y	48.5	37.5-62.5	PCB-173	1.06	0.89-1.21	y	54.1	37.5-62.5
PCB-139/149	1.27	1.05-1.43	y	99.2	75.0-125	PCB-172	1.06	0.89-1.21	y	54.8	37.5-62.5

Analyst: DMS

Date: 10/24/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141020E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141020E1 S#1 Analysis Date: 20-OCT-14 Time: 12:05:43

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-192	1.05	0.89-1.21	y	56.4	37.5-62.5
PCB-180	1.06	0.89-1.21	y	52.9	37.5-62.5
PCB-193	1.06	0.89-1.21	y	56.1	37.5-62.5
PCB-191	1.08	0.89-1.21	y	55.0	37.5-62.5
PCB-170	1.07	0.89-1.21	y	53.7	37.5-62.5
PCB-190	1.06	0.89-1.21	y	56.4	37.5-62.5
PCB-189	1.07	0.89-1.21	y	55.5	37.5-62.5
PCB-202	0.90	0.76-1.02	y	51.3	37.5-62.5
PCB-201	0.90	0.76-1.02	y	51.8	37.5-62.5
PCB-204	0.89	0.76-1.02	y	54.1	37.5-62.5
PCB-197	0.91	0.76-1.02	y	52.7	37.5-62.5
PCB-200	0.90	0.76-1.02	y	53.6	37.5-62.5
PCB-198	0.90	0.76-1.02	y	49.6	37.5-62.5
PCB-199	0.91	0.76-1.02	y	54.1	37.5-62.5
PCB-196/203	0.91	0.76-1.02	y	104.1	75.0-125
PCB-195	0.91	0.76-1.02	y	55.3	37.5-62.5
PCB-194	0.90	0.76-1.02	y	51.6	37.5-62.5
PCB-205	0.90	0.76-1.02	y	54.4	37.5-62.5
PCB-208	1.33	1.14-1.54	y	49.0	37.5-62.5
PCB-207	1.35	1.14-1.54	y	51.0	37.5-62.5
PCB-206	1.33	1.14-1.54	y	49.8	37.5-62.5
PCB-209	1.19	0.99-1.33	y	53.6	37.5-62.5

Analyst: DMS

Date: 10/24/14

NATIVE PCB CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141020E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141020E1 S#1 Analysis Date: 20-OCT-14 Time: 12:05:43

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)	ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-1	2.93	2.66-3.60	y	47.6	35.0-65.0	PCB-52/69	0.75	0.65-0.89	y	97.7	70.0-130
PCB-2	2.96	2.66-3.60	y	48.8	35.0-65.0	PCB-73	0.76	0.65-0.89	y	50.3	35.0-65.0
PCB-3	2.95	2.66-3.60	y	47.5	35.0-65.0	PCB-43/49	0.75	0.65-0.89	y	96.1	70.0-130
PCB-4/10	1.61	1.33-1.79	y	201.6	140-260	PCB-47	0.74	0.65-0.89	y	49.6	35.0-65.0
PCB-7/9	1.61	1.33-1.79	y	198.9	140-260	PCB-48/75	0.76	0.65-0.89	y	96.4	70.0-130
PCB-6	1.62	1.33-1.79	y	96.4	70.0-130	PCB-65	0.75	0.65-0.89	y	45.6	35.0-65.0
PCB-5/8	1.62	1.33-1.79	y	203.3	140-260	PCB-62	0.75	0.65-0.89	y	48.0	35.0-65.0
PCB-14	1.62	1.33-1.79	y	99.9	70.0-130	PCB-44	0.75	0.65-0.89	y	46.5	35.0-65.0
PCB-11	1.64	1.33-1.79	y	98.7	70.0-130	PCB-42/59	0.76	0.65-0.89	y	93.7	70.0-130
PCB-12/13	1.61	1.33-1.79	y	202.1	140-260	PCB-41/64/71/72	0.75	0.65-0.89	y	191.7	140-260
PCB-15	1.59	1.33-1.79	y	96.5	70.0-130	PCB-68	0.75	0.65-0.89	y	50.4	35.0-65.0
PCB-19	1.05	0.88-1.20	y	49.3	35.0-65.0	PCB-40	0.75	0.65-0.89	y	47.1	35.0-65.0
PCB-30	1.05	0.88-1.20	y	52.4	35.0-65.0	PCB-57	0.75	0.65-0.89	y	49.0	35.0-65.0
PCB-18	1.05	0.88-1.20	y	49.6	35.0-65.0	PCB-67	0.74	0.65-0.89	y	48.5	35.0-65.0
PCB-17	1.05	0.88-1.20	y	50.9	35.0-65.0	PCB-58	0.75	0.65-0.89	y	49.3	35.0-65.0
PCB-24/27	1.05	0.88-1.20	y	103.5	70.0-130	PCB-63	0.76	0.65-0.89	y	51.0	35.0-65.0
PCB-16/32	1.05	0.88-1.20	y	100.8	70.0-130	PCB-74	0.75	0.65-0.89	y	49.7	35.0-65.0
PCB-34	1.01	0.88-1.20	y	50.8	35.0-65.0	PCB-61/70	0.76	0.65-0.89	y	100.9	70.0-130
PCB-23	1.05	0.88-1.20	y	44.3	35.0-65.0	PCB-76/66	0.76	0.65-0.89	y	98.9	70.0-130
PCB-29	1.03	0.88-1.20	y	47.6	35.0-65.0	PCB-80	0.76	0.65-0.89	y	48.1	35.0-65.0
PCB-26	1.02	0.88-1.20	y	44.4	35.0-65.0	PCB-55	0.74	0.65-0.89	y	48.5	35.0-65.0
PCB-25	1.04	0.88-1.20	y	43.5	35.0-65.0	PCB-56/60	0.75	0.65-0.89	y	93.7	70.0-130
PCB-31	1.00	0.88-1.20	y	38.3	35.0-65.0	PCB-79	0.76	0.65-0.89	y	50.4	35.0-65.0
PCB-28	1.03	0.88-1.20	y	47.3	35.0-65.0	PCB-78	0.76	0.65-0.89	y	50.1	35.0-65.0
PCB-20/21/33	1.02	0.88-1.20	y	132.0	105-195	PCB-81	0.76	0.65-0.89	y	49.1	35.0-65.0
PCB-22	1.03	0.88-1.20	y	46.3	35.0-65.0	PCB-77	0.78	0.65-0.89	y	48.8	35.0-65.0
PCB-36	1.02	0.88-1.20	y	46.4	35.0-65.0	PCB-104	1.58	1.32-1.78	y	51.0	35.0-65.0
PCB-39	1.03	0.88-1.20	y	46.5	35.0-65.0	PCB-96	1.57	1.32-1.78	y	52.2	35.0-65.0
PCB-38	1.04	0.88-1.20	y	49.5	35.0-65.0	PCB-103	1.57	1.32-1.78	y	53.3	35.0-65.0
PCB-35	1.04	0.88-1.20	y	46.2	35.0-65.0	PCB-100	1.61	1.32-1.78	y	53.4	35.0-65.0
PCB-37	1.05	0.88-1.20	y	46.5	35.0-65.0	PCB-94	1.57	1.32-1.78	y	52.0	35.0-65.0
PCB-54	0.76	0.65-0.89	y	48.1	35.0-65.0	PCB-95/98/102	1.62	1.32-1.78	y	164.8	105-195
PCB-50	0.75	0.65-0.89	y	46.6	35.0-65.0	PCB-93	1.43	1.32-1.78	y	38.0	35.0-65.0
PCB-53	0.75	0.65-0.89	y	46.4	35.0-65.0	PCB-88/91	1.48	1.32-1.78	y	97.9	70.0-130
PCB-51	0.74	0.65-0.89	y	48.2	35.0-65.0	PCB-121	1.68	1.32-1.78	y	51.6	35.0-65.0
PCB-45	0.74	0.65-0.89	y	50.3	35.0-65.0						
PCB-46	0.74	0.65-0.89	y	44.9	35.0-65.0						

Analyst: DMS

Date: 10/24/14

NATIVE PCB CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141020E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141020E1 S#1 Analysis Date: 20-OCT-14 Time: 12:05:43

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)	ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-84/92	1.58	1.32-1.78	y	101.5	70.0-130	PCB-140	1.28	1.05-1.43	y	49.3	35.0-65.0
PCB-89	1.59	1.32-1.78	y	51.2	35.0-65.0	PCB-134/143	1.22	1.05-1.43	y	104.7	70.0-130
PCB-90/101	1.59	1.32-1.78	y	101.6	70.0-130	PCB-133/142	1.26	1.05-1.43	y	103.3	70.0-130
PCB-113	1.61	1.32-1.78	y	54.3	35.0-65.0	PCB-131	1.21	1.05-1.43	y	51.3	35.0-65.0
PCB-99	1.57	1.32-1.78	y	50.4	35.0-65.0	PCB-146/165	1.24	1.05-1.43	y	106.3	70.0-130
PCB-119	1.57	1.32-1.78	y	52.0	35.0-65.0	PCB-132/161	1.24	1.05-1.43	y	106.2	70.0-130
PCB-108/112	1.58	1.32-1.78	y	105.4	70.0-130	PCB-153	1.25	1.05-1.43	y	53.2	35.0-65.0
PCB-83	1.60	1.32-1.78	y	53.5	35.0-65.0	PCB-168	1.24	1.05-1.43	y	52.0	35.0-65.0
PCB-97	1.58	1.32-1.78	y	51.0	35.0-65.0	PCB-141	1.24	1.05-1.43	y	53.3	35.0-65.0
PCB-86	1.56	1.32-1.78	y	50.4	35.0-65.0	PCB-137	1.23	1.05-1.43	y	51.5	35.0-65.0
PCB-87/117/125	1.58	1.32-1.78	y	152.7	105-195	PCB-130	1.24	1.05-1.43	y	58.5	35.0-65.0
PCB-111/115	1.57	1.32-1.78	y	98.9	70.0-130	PCB-138/163/164	1.23	1.05-1.43	y	162.1	105-195
PCB-85/116	1.59	1.32-1.78	y	109.3	70.0-130	PCB-158/160	1.24	1.05-1.43	y	112.1	70.0-130
PCB-120	1.58	1.32-1.78	y	51.5	35.0-65.0	PCB-129	1.23	1.05-1.43	y	50.9	35.0-65.0
PCB-110	1.59	1.32-1.78	y	51.9	35.0-65.0	PCB-166	1.25	1.05-1.43	y	55.1	35.0-65.0
PCB-82	1.56	1.32-1.78	y	52.5	35.0-65.0	PCB-159	1.25	1.05-1.43	y	53.9	35.0-65.0
PCB-124	1.57	1.32-1.78	y	52.3	35.0-65.0	PCB-128/162	1.23	1.05-1.43	y	104.5	70.0-130
PCB-107/109	1.58	1.32-1.78	y	102.6	70.0-130	PCB-167	1.23	1.05-1.43	y	54.3	35.0-65.0
PCB-123	1.57	1.32-1.78	y	52.6	35.0-65.0	PCB-156	1.24	1.05-1.43	y	53.3	35.0-65.0
PCB-106/118	1.57	1.32-1.78	y	102.4	70.0-130	PCB-157	1.24	1.05-1.43	y	54.5	35.0-65.0
PCB-114	1.61	1.32-1.78	y	53.1	35.0-65.0	PCB-169	1.25	1.05-1.43	y	53.5	35.0-65.0
PCB-122	1.62	1.32-1.78	y	52.5	35.0-65.0	PCB-188	1.06	0.89-1.21	y	52.9	35.0-65.0
PCB-105	1.62	1.32-1.78	y	53.6	35.0-65.0	PCB-184	1.06	0.89-1.21	y	53.7	35.0-65.0
PCB-127	1.61	1.32-1.78	y	52.6	35.0-65.0	PCB-179	1.05	0.89-1.21	y	53.0	35.0-65.0
PCB-126	1.64	1.32-1.78	y	53.7	35.0-65.0	PCB-176	1.06	0.89-1.21	y	52.7	35.0-65.0
PCB-155	1.26	1.05-1.43	y	53.2	35.0-65.0	PCB-186	1.06	0.89-1.21	y	54.4	35.0-65.0
PCB-150	1.26	1.05-1.43	y	53.4	35.0-65.0	PCB-178	1.07	0.89-1.21	y	52.6	35.0-65.0
PCB-152	1.26	1.05-1.43	y	51.4	35.0-65.0	PCB-175	1.06	0.89-1.21	y	54.6	35.0-65.0
PCB-145	1.26	1.05-1.43	y	51.0	35.0-65.0	PCB-182/187	1.07	0.89-1.21	y	108.1	70.0-130
PCB-136	1.28	1.05-1.43	y	52.4	35.0-65.0	PCB-183	1.07	0.89-1.21	y	51.2	35.0-65.0
PCB-148	1.29	1.05-1.43	y	51.9	35.0-65.0	PCB-185	1.07	0.89-1.21	y	55.1	35.0-65.0
PCB-154	1.27	1.05-1.43	y	52.5	35.0-65.0	PCB-174	1.07	0.89-1.21	y	53.9	35.0-65.0
PCB-151	1.28	1.05-1.43	y	49.2	35.0-65.0	PCB-181	1.06	0.89-1.21	y	55.9	35.0-65.0
PCB-135	1.26	1.05-1.43	y	47.7	35.0-65.0	PCB-177	1.07	0.89-1.21	y	55.6	35.0-65.0
PCB-144	1.37	1.05-1.43	y	51.3	35.0-65.0	PCB-171	1.07	0.89-1.21	y	53.5	35.0-65.0
PCB-147	1.20	1.05-1.43	y	48.5	35.0-65.0	PCB-173	1.06	0.89-1.21	y	54.1	35.0-65.0
PCB-139/149	1.27	1.05-1.43	y	99.2	70.0-130	PCB-172	1.06	0.89-1.21	y	54.8	35.0-65.0

Analyst: DMS

Date: 10/24/14

NATIVE PCB CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141020E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141020E1 S#1 Analysis Date: 20-OCT-14 Time: 12:05:43

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-192	1.05	0.89-1.21	y	56.4	35.0-65.0
PCB-180	1.06	0.89-1.21	y	52.9	35.0-65.0
PCB-193	1.06	0.89-1.21	y	56.1	35.0-65.0
PCB-191	1.08	0.89-1.21	y	55.0	35.0-65.0
PCB-170	1.07	0.89-1.21	y	53.7	35.0-65.0
PCB-190	1.06	0.89-1.21	y	56.4	35.0-65.0
PCB-189	1.07	0.89-1.21	y	55.5	35.0-65.0
PCB-202	0.90	0.76-1.02	y	51.3	35.0-65.0
PCB-201	0.90	0.76-1.02	y	51.8	35.0-65.0
PCB-204	0.89	0.76-1.02	y	54.1	35.0-65.0
PCB-197	0.91	0.76-1.02	y	52.7	35.0-65.0
PCB-200	0.90	0.76-1.02	y	53.6	35.0-65.0
PCB-198	0.90	0.76-1.02	y	49.6	35.0-65.0
PCB-199	0.91	0.76-1.02	y	54.1	35.0-65.0
PCB-196/203	0.91	0.76-1.02	y	104.1	70.0-130
PCB-195	0.91	0.76-1.02	y	55.3	35.0-65.0
PCB-194	0.90	0.76-1.02	y	51.6	35.0-65.0
PCB-205	0.90	0.76-1.02	y	54.4	35.0-65.0
PCB-208	1.33	1.14-1.54	y	49.0	35.0-65.0
PCB-207	1.35	1.14-1.54	y	51.0	35.0-65.0
PCB-206	1.33	1.14-1.54	y	49.8	35.0-65.0
PCB-209	1.19	0.99-1.34	y	53.6	35.0-65.0

Analyst: DMS

Date: 10/24/14

LABELED 1668A CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141020E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141020E1 S#1 Analysis Date: 20-OCT-14 Time: 12:05:43

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-1	3.28	2.66-3.60	y	120.2	50.0-150
13C-PCB-3	3.27	2.66-3.60	y	120.2	50.0-150
13C-PCB-4	1.58	1.33-1.79	y	97.4	50.0-150
13C-PCB-9	1.57	1.33-1.79	y	99.6	50.0-150
13C-PCB-11	1.55	1.33-1.79	y	100.6	50.0-150
13C-PCB-19	1.07	0.88-1.20	y	106.8	50.0-150
13C-PCB-32	1.07	0.88-1.20	y	107.1	50.0-150
13C-PCB-28	1.06	0.88-1.20	y	107.5	50.0-150
13C-PCB-37	1.06	0.88-1.20	y	105.7	50.0-150
13C-PCB-54	0.79	0.65-0.89	y	96.8	50.0-150
13C-PCB-52	0.77	0.65-0.89	y	97.4	50.0-150
13C-PCB-47	0.78	0.65-0.89	y	98.3	50.0-150
13C-PCB-70	0.79	0.65-0.89	y	101.2	50.0-150
13C-PCB-80	0.78	0.65-0.89	y	99.1	50.0-150
13C-PCB-81	0.79	0.65-0.89	y	101.6	50.0-150
13C-PCB-77	0.80	0.65-0.89	y	101.5	50.0-150
13C-PCB-104	1.63	1.32-1.78	y	94.2	50.0-150
13C-PCB-95	1.60	1.32-1.78	y	96.2	50.0-150
13C-PCB-101	1.63	1.32-1.78	y	95.8	50.0-150
13C-PCB-97	1.63	1.32-1.78	y	97.8	50.0-150
13C-PCB-123	1.62	1.32-1.78	y	93.5	50.0-150
13C-PCB-118	1.64	1.32-1.78	y	93.8	50.0-150
13C-PCB-114	1.57	1.32-1.78	y	105.0	50.0-150
13C-PCB-105	1.57	1.32-1.78	y	104.2	50.0-150
13C-PCB-127	1.57	1.32-1.78	y	104.8	50.0-150
13C-PCB-126	1.58	1.32-1.78	y	103.7	50.0-150
13C-PCB-155	1.27	1.05-1.43	y	95.5	50.0-150
13C-PCB-153	1.27	1.05-1.43	y	104.7	50.0-150
13C-PCB-141	1.30	1.05-1.43	y	104.0	50.0-150
13C-PCB-138	1.27	1.05-1.43	y	105.4	50.0-150
13C-PCB-159	1.26	1.05-1.43	y	104.7	50.0-150
13C-PCB-167	1.28	1.05-1.43	y	103.7	50.0-150
13C-PCB-156	1.27	1.05-1.43	y	104.2	50.0-150
13C-PCB-157	1.29	1.05-1.43	y	102.3	50.0-150

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-169	1.29	1.05-1.43	y	100.1	50 - 150
13C-PCB-188	0.47	0.38-0.52	y	99.8	50 - 150
13C-PCB-180	0.47	0.38-0.52	y	95.0	50 - 150
13C-PCB-170	0.47	0.38-0.52	y	93.7	50 - 150
13C-PCB-189	0.48	0.38-0.52	y	94.2	50 - 150
13C-PCB-202	0.92	0.76-1.02	y	99.9	50 - 150
13C-PCB-194	0.92	0.76-1.02	y	95.5	50 - 150
13C-PCB-208	0.76	0.65-0.89	y	97.9	50 - 150
13C-PCB-206	0.80	0.65-0.89	y	101.9	50 - 150
13C-PCB-209	1.20	0.99-1.33	y	101.9	50 - 150

CRS vs. RS

13C-PCB-79	0.78	0.65-0.89	y	104.1	60 - 130
13C-PCB-178	0.46	0.38-0.52	y	99.2	60 - 130

PS vs. IS

13C-PCB-79	0.78	0.65-0.89	y	102.4	60 - 130
13C-PCB-178	0.46	0.38-0.52	y	104.4	60 - 130

Analyst: DMS

Date: 10/20/14

LABELED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141020E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141020E1 S#1 Analysis Date: 20-OCT-14 Time: 12:05:43

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-1	3.28	2.66-3.60	y	120.2	50.0-145
13C-PCB-3	3.27	2.66-3.60	y	120.2	50.0-145
13C-PCB-4	1.58	1.33-1.79	y	97.4	50.0-145
13C-PCB-9	1.57	1.33-1.79	y	99.6	50.0-145
13C-PCB-11	1.55	1.33-1.79	y	100.6	50.0-145
13C-PCB-19	1.07	0.88-1.20	y	106.8	50.0-145
13C-PCB-32	1.07	0.88-1.20	y	107.1	50.0-145
13C-PCB-28	1.06	0.88-1.20	y	107.5	50.0-145
13C-PCB-37	1.06	0.88-1.20	y	105.7	50.0-145
13C-PCB-54	0.79	0.65-0.89	y	96.8	50.0-145
13C-PCB-52	0.77	0.65-0.89	y	97.4	50.0-145
13C-PCB-47	0.78	0.65-0.89	y	98.3	50.0-145
13C-PCB-70	0.79	0.65-0.89	y	101.2	50.0-145
13C-PCB-80	0.78	0.65-0.89	y	99.1	50.0-145
13C-PCB-81	0.79	0.65-0.89	y	101.6	50.0-145
13C-PCB-77	0.80	0.65-0.89	y	101.5	50.0-145
13C-PCB-104	1.63	1.32-1.78	y	94.2	50.0-145
13C-PCB-95	1.60	1.32-1.78	y	96.2	50.0-145
13C-PCB-101	1.63	1.32-1.78	y	95.8	50.0-145
13C-PCB-97	1.63	1.32-1.78	y	97.8	50.0-145
13C-PCB-123	1.62	1.32-1.78	y	93.5	50.0-145
13C-PCB-118	1.64	1.32-1.78	y	93.8	50.0-145
13C-PCB-114	1.57	1.32-1.78	y	105.0	50.0-145
13C-PCB-105	1.57	1.32-1.78	y	104.2	50.0-145
13C-PCB-127	1.57	1.32-1.78	y	104.8	50.0-145
13C-PCB-126	1.58	1.32-1.78	y	103.7	50.0-145
13C-PCB-155	1.27	1.05-1.43	y	95.5	50.0-145
13C-PCB-153	1.27	1.05-1.43	y	104.7	50.0-145
13C-PCB-141	1.30	1.05-1.43	y	104.0	50.0-145
13C-PCB-138	1.27	1.05-1.43	y	105.4	50.0-145
13C-PCB-159	1.26	1.05-1.43	y	104.7	50.0-145
13C-PCB-167	1.28	1.05-1.43	y	103.7	50.0-145
13C-PCB-156	1.27	1.05-1.43	y	104.2	50.0-145
13C-PCB-157	1.29	1.05-1.43	y	102.3	50.0-145

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-169	1.29	1.05-1.43	y	100.1	50 - 145
13C-PCB-188	0.47	0.38-0.52	y	99.8	50 - 145
13C-PCB-180	0.47	0.38-0.52	y	95.0	50 - 145
13C-PCB-170	0.47	0.38-0.52	y	93.7	50 - 145
13C-PCB-189	0.48	0.38-0.52	y	94.2	50 - 145
13C-PCB-202	0.92	0.76-1.02	y	99.9	50 - 145
13C-PCB-194	0.92	0.76-1.02	y	95.5	50 - 145
13C-PCB-208	0.76	0.65-0.89	y	97.9	50 - 145
13C-PCB-206	0.80	0.65-0.89	y	101.9	50 - 145
13C-PCB-209	1.20	0.99-1.33	y	101.9	50 - 145

CRS vs. RS

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-79	0.78	0.65-0.89	y	104.1	75 - 125
13C-PCB-178	0.46	0.38-0.52	y	99.2	75 - 125

Analyst: DMS

Date: 10/20/14

Client ID: PCB CS3 14I1807 Filename: 141020E1 S:1 Acq:20-OCT-14 12:05:43 ConCal: ST141020E1-1

Lab ID: ST141020E1-1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-1	2.66e+08	2.93	y	1.25	16:06	1.001	0.996	1.006	47.6328
	PCB-2	2.68e+08	2.96	y	1.18	18:29	0.988	0.983	0.993	48.8430
	PCB-3	2.69e+08	2.95	y	1.22	18:44	1.001	0.996	1.006	47.5481
	PCB-4/10	6.96e+08	1.61	y	1.55	20:07	1.003	0.998	1.008	201.580
	PCB-7/9	8.64e+08	1.61	y	1.27	21:53	0.868	0.865	0.873	198.860
	PCB-6	4.16e+08	1.62	y	1.26	22:32	0.894	0.890	0.899	96.3645
	PCB-5/8	8.60e+08	1.62	y	1.23	22:57	0.910	0.906	0.916	203.350
	PCB-14	4.83e+08	1.62	y	1.23	24:03	0.954	0.949	0.959	99.8957
	PCB-11	4.49e+08	1.64	y	1.16	25:15	1.001	0.996	1.006	98.7089
	PCB-12/13	8.73e+08	1.61	y	1.10	25:38	1.017	1.010	1.020	202.130
	PCB-15	4.58e+08	1.59	y	1.21	25:57	1.029	1.024	1.034	96.4991
	PCB-19	1.51e+08	1.05	y	1.30	24:14	1.001	0.996	1.006	49.3119
	PCB-30	2.27e+08	1.05	y	1.83	25:08	1.037	1.032	1.042	52.3779
	PCB-18	1.55e+08	1.05	y	0.86	25:53	0.954	0.949	0.959	49.5903
	PCB-17	1.66e+08	1.05	y	0.90	26:03	0.960	0.955	0.965	50.9231
	PCB-24/27	4.42e+08	1.05	y	1.18	26:38	0.982	0.976	0.986	103.481
-	PCB-16/32	3.77e+08	1.05	y	1.03	27:08	1.000	0.995	1.005	100.800
-	PCB-34	2.02e+08	1.01	y	1.26	27:56	0.960	0.956	0.966	50.7978
	PCB-23	1.83e+08	1.05	y	1.31	28:02	0.964	0.959	0.969	44.2701
	PCB-29	2.00e+08	1.03	y	1.33	28:16	0.972	0.967	0.977	47.6369
	PCB-26	1.81e+08	1.02	y	1.29	28:29	0.979	0.974	0.984	44.3503
	PCB-25	1.84e+08	1.04	y	1.34	28:39	0.985	0.980	0.990	43.4911
	PCB-31	1.72e+08	1.00	y	1.42	29:00	0.997	0.992	1.002	38.3019
	PCB-28	2.06e+08	1.03	y	1.38	29:07	1.001	0.996	1.006	47.2913
	PCB-20/21/33	5.47e+08	1.02	y	1.31	29:43	1.022	1.017	1.027	132.006
	PCB-22	1.93e+08	1.03	y	1.32	30:10	1.037	1.032	1.042	46.3018
	PCB-36	1.86e+08	1.02	y	1.38	30:47	0.934	0.929	0.939	46.3815
	PCB-39	1.92e+08	1.03	y	1.42	31:15	0.948	0.943	0.953	46.4838
	PCB-38	1.95e+08	1.04	y	1.35	32:02	0.972	0.967	0.976	49.4805
	PCB-35	1.85e+08	1.04	y	1.38	32:32	0.987	0.982	0.992	46.1842
	PCB-37	1.88e+08	1.05	y	1.39	32:58	1.000	0.996	1.006	46.5216
	PCB-54	1.59e+08	0.76	y	1.20	27:59	1.000	0.996	1.006	48.0719
	PCB-50	1.25e+08	0.75	y	0.97	29:09	1.042	1.037	1.047	46.5867
	PCB-53	1.28e+08	0.75	y	1.19	29:49	0.946	0.941	0.951	46.3582
	PCB-51	1.29e+08	0.74	y	1.15	30:09	0.957	0.952	0.962	48.2390
	PCB-45	1.13e+08	0.74	y	0.97	30:34	0.970	0.966	0.976	50.3043
	PCB-46	9.90e+07	0.74	y	0.95	31:04	0.986	0.982	0.992	44.8602

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-52/69	2.90e+08	0.75	y	1.28	31:32	1.001	0.996	1.006	97.7042
	PCB-73	1.60e+08	0.76	y	1.37	31:39	1.005	1.000	1.010	50.3347
	PCB-43/49	2.48e+08	0.75	y	1.11	31:49	1.010	1.005	1.015	96.0509
	PCB-47	1.38e+08	0.74	y	1.13	32:02	1.001	0.996	1.006	49.5897
	PCB-48/75	3.09e+08	0.76	y	1.30	32:08	1.004	0.999	1.009	96.4129
	PCB-65	1.50e+08	0.75	y	1.33	32:24	1.012	1.007	1.017	45.5970
	PCB-62	1.53e+08	0.75	y	1.29	32:30	1.015	1.011	1.021	48.0111
	PCB-44	1.07e+08	0.75	y	0.94	32:49	1.025	1.020	1.030	46.4537
	PCB-42/59	2.80e+08	0.76	y	1.22	33:03	1.033	1.028	1.038	93.6529
	PCB-41/64/71/72	6.19e+08	0.75	y	1.31	33:38	1.051	1.046	1.056	191.685
	PCB-68	1.84e+08	0.75	y	1.49	33:53	1.059	1.054	1.064	50.3501
	PCB-40	9.49e+07	0.75	y	0.82	34:07	1.066	1.061	1.071	47.1298
	PCB-57	1.75e+08	0.75	y	1.11	34:28	0.970	0.965	0.975	48.9899
	PCB-67	1.67e+08	0.74	y	1.07	34:46	0.979	0.974	0.984	48.4783
	PCB-58	1.75e+08	0.75	y	1.10	34:53	0.982	0.977	0.987	49.2925
	PCB-63	1.83e+08	0.76	y	1.12	35:02	0.986	0.982	0.992	51.0370
	PCB-74	1.93e+08	0.75	y	1.20	35:19	0.994	0.990	1.000	49.7420
	PCB-61/70	3.50e+08	0.76	y	1.08	35:29	0.999	0.994	1.004	100.853
	PCB-76/66	3.61e+08	0.76	y	1.14	35:43	1.005	1.001	1.011	98.8676
	PCB-80	1.97e+08	0.76	y	1.28	35:57	1.001	0.996	1.006	48.0711
	PCB-55	1.72e+08	0.74	y	1.11	36:16	1.009	1.005	1.015	48.4928
	PCB-56/60	3.27e+08	0.75	y	1.09	36:47	1.024	1.018	1.028	93.7407
	PCB-79	1.81e+08	0.76	y	1.12	37:49	1.053	1.048	1.058	50.3546
	PCB-78	1.78e+08	0.76	y	1.24	38:31	0.986	0.982	0.992	50.1482
	PCB-81	1.94e+08	0.76	y	1.38	39:03	1.000	0.995	1.005	49.0865
	PCB-77	1.80e+08	0.78	y	1.21	39:39	1.000	0.995	1.005	48.8437
	PCB-104	1.32e+08	1.58	y	1.26	32:41	1.001	0.996	1.006	51.0091
	PCB-96	1.18e+08	1.57	y	1.09	33:56	1.039	1.034	1.044	52.1914
	PCB-103	1.02e+08	1.57	y	0.93	34:28	1.055	1.050	1.060	53.2603
	PCB-100	1.10e+08	1.61	y	1.00	34:50	1.066	1.061	1.071	53.3755
	PCB-94	9.06e+07	1.57	y	1.11	35:18	0.985	0.981	0.991	51.9657
	PCB-95/98/102	3.15e+08	1.62	y	1.21	35:48	0.999	0.994	1.004	164.783
	PCB-93	6.76e+07	1.43	y	1.13	35:56	1.003	0.998	1.008	38.0094
	PCB-88/91	1.57e+08	1.48	y	1.02	36:12	1.010	1.006	1.016	97.9073
	PCB-121	1.55e+08	1.68	y	1.90	36:18	1.013	1.009	1.019	51.5978
	PCB-84/92	1.77e+08	1.58	y	1.05	37:08	0.990	0.986	0.996	101.451
	PCB-89	8.63e+07	1.59	y	1.02	37:20	0.996	0.991	1.001	51.2397

RL: MONO, TRI - DECA: ~~_____~~

RL: DI : ~~_____~~

Integrations by Analyst: DMS Date: 10/24/14

Reviewed by Analyst:_____ Date:_____

Client ID: PCB CS3 14I1807 Filename: 141020E1 S:1 Acq:20-OCT-14 12:05:43 ConCal: ST141020E1-1

Lab ID: ST141020E1-1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-90/101	2.00e+08	1.59	y	1.19	37:30	1.000	0.996	1.006	101.634
	PCB-113	1.22e+08	1.61	y	1.35	37:45	1.007	1.002	1.012	54.3384
	PCB-99	1.07e+08	1.57	y	1.29	37:52	1.010	1.005	1.015	50.3534
	PCB-119	1.33e+08	1.57	y	1.72	38:19	0.987	0.982	0.992	51.9944
	PCB-108/112	2.01e+08	1.58	y	1.29	38:28	0.991	0.986	0.996	105.386
	PCB-83	1.21e+08	1.60	y	1.52	38:37	0.995	0.991	1.001	53.5385
	PCB-97	9.44e+07	1.58	y	1.25	38:49	1.000	0.996	1.006	50.9621
	PCB-86	7.64e+07	1.56	y	1.02	38:57	1.004	1.000	1.010	50.3701
	B-87/117/125	3.53e+08	1.58	y	1.56	39:05	1.007	1.002	1.012	152.672
	PCB-111/115	2.57e+08	1.57	y	1.75	39:14	1.011	1.007	1.017	98.8780
	PCB-85/116	2.11e+08	1.59	y	1.30	39:22	1.014	1.010	1.020	109.295
	PCB-120	1.36e+08	1.58	y	1.78	39:37	1.021	1.016	1.026	51.4690
	PCB-110	1.29e+08	1.59	y	1.68	39:45	1.024	1.020	1.030	51.9146
	PCB-82	7.57e+07	1.56	y	0.74	40:24	0.977	0.972	0.982	52.4802
	PCB-124	1.35e+08	1.57	y	1.32	41:04	0.993	0.988	0.998	52.2704
	PCB-107/109	2.45e+08	1.58	y	1.22	41:13	0.996	0.991	1.001	102.640
	PCB-123	1.25e+08	1.57	y	1.22	41:23	1.001	0.995	1.005	52.6059
-	PCB-106/118	2.55e+08	1.57	y	1.22	41:34	1.000	0.996	1.006	102.443
-	PCB-114	1.51e+08	1.61	y	1.36	42:13	1.000	0.995	1.005	53.0758
	PCB-122	1.36e+08	1.62	y	1.24	42:21	1.004	0.999	1.009	52.5469
	PCB-105	1.47e+08	1.62	y	1.28	43:05	1.000	0.995	1.005	53.6239
	PCB-127	1.40e+08	1.61	y	1.14	43:25	1.001	0.995	1.005	52.5897
	PCB-126	1.37e+08	1.64	y	1.28	45:19	1.000	0.995	1.005	53.6809
	PCB-155	1.06e+08	1.26	y	1.14	37:04	1.001	0.966	1.006	53.2267
	PCB-150	9.94e+07	1.26	y	1.06	38:20	1.035	1.030	1.040	53.3958
	PCB-152	9.87e+07	1.26	y	1.10	38:48	1.048	1.043	1.053	51.3789
	PCB-145	9.74e+07	1.26	y	1.09	39:16	1.060	1.055	1.065	50.9539
	PCB-136	9.94e+07	1.28	y	1.08	39:35	1.069	1.064	1.074	52.3867
	PCB-148	6.73e+07	1.29	y	0.74	39:41	1.071	1.066	1.076	51.9460
	PCB-154	8.11e+07	1.27	y	0.88	40:10	1.084	1.079	1.089	52.4710
	PCB-151	6.96e+07	1.28	y	0.81	40:49	1.102	1.097	1.107	49.1762
	PCB-135	6.49e+07	1.26	y	0.78	41:01	1.107	1.101	1.113	47.6564
	PCB-144	7.35e+07	1.37	y	0.82	41:08	1.110	1.105	1.116	51.2560
	PCB-147	7.03e+07	1.20	y	0.83	41:16	1.114	1.011	1.120	48.5176
	PCB-139/149	1.46e+08	1.27	y	0.84	41:32	1.121	1.115	1.127	99.2411
-	PCB-140	6.77e+07	1.28	y	0.79	41:43	1.126	1.120	1.132	49.2893
-	PCB-134/143	1.87e+08	1.22	y	0.93	42:08	0.975	0.970	0.980	104.691

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	1.88e+08	1.26	y	0.95	42:27	0.982	0.977	0.987	103.254
PCB-131	9.04e+07	1.21	y	0.91	42:36	0.986	0.981	0.991	51.3027
PCB-146/165	2.37e+08	1.24	y	1.16	42:49	0.991	0.986	0.996	106.304
PCB-132/161	2.28e+08	1.24	y	1.11	43:04	0.996	0.992	1.002	106.213
PCB-153	1.21e+08	1.25	y	1.18	43:14	1.000	0.995	1.005	53.1512
PCB-168	1.37e+08	1.24	y	1.37	43:27	1.005	1.000	1.010	52.0394
PCB-141	9.59e+07	1.24	y	0.97	43:58	1.000	0.996	1.005	53.3184
PCB-137	1.02e+08	1.23	y	1.07	44:21	1.009	1.004	1.014	51.4672
PCB-130	9.14e+07	1.24	y	0.85	44:27	1.011	1.007	1.017	58.4613
PCB-138/163/164	3.61e+08	1.23	y	1.23	44:50	1.001	0.996	1.006	162.098
PCB-158/160	2.63e+08	1.24	y	1.29	45:04	1.006	1.001	1.011	112.087
PCB-129	8.57e+07	1.23	y	0.92	45:19	1.012	1.007	1.017	50.9418
PCB-166	1.28e+08	1.25	y	1.12	45:46	0.993	0.988	0.998	55.1322
PCB-159	1.30e+08	1.25	y	1.16	46:05	1.000	0.995	1.005	53.8724
PCB-128/162	2.21e+08	1.23	y	1.02	46:23	1.007	1.002	1.012	104.513
PCB-167	1.31e+08	1.23	y	1.06	46:47	1.000	0.995	1.005	54.2707
PCB-156	1.35e+08	1.24	y	1.18	48:05	1.001	0.995	1.005	53.3221
PCB-157	1.31e+08	1.24	y	1.08	48:21	1.000	0.995	1.005	54.4984
PCB-169	1.19e+08	1.25	y	1.11	50:31	1.000	0.995	1.005	53.4776
PCB-188	1.15e+08	1.06	y	1.40	42:52	1.000	0.995	1.005	52.9454
PCB-184	1.03e+08	1.06	y	1.24	43:19	1.011	1.006	1.016	53.7460
PCB-179	1.07e+08	1.05	y	1.30	44:06	1.029	1.024	1.034	52.9962
PCB-176	1.11e+08	1.06	y	1.36	44:34	1.040	1.035	1.045	52.6807
PCB-186	1.07e+08	1.06	y	1.28	45:11	1.054	1.049	1.059	54.4441
PCB-178	7.61e+07	1.07	y	0.94	45:40	1.066	1.061	1.071	52.5804
PCB-175	8.16e+07	1.06	y	0.97	46:01	1.074	1.069	1.079	54.5563
PCB-182/187	1.69e+08	1.07	y	1.01	46:11	1.078	1.073	1.083	108.086
PCB-183	8.56e+07	1.07	y	1.08	46:30	1.085	1.080	1.090	51.2044
PCB-185	7.84e+07	1.07	y	1.34	47:10	0.956	0.951	0.961	55.1000
PCB-174	7.63e+07	1.07	y	1.34	47:31	0.963	0.958	0.968	53.8502
PCB-181	8.06e+07	1.06	y	1.36	47:38	0.965	0.961	0.971	55.8775
PCB-177	7.30e+07	1.07	y	1.24	47:48	0.969	0.964	0.974	55.5577
PCB-171	7.44e+07	1.07	y	1.31	48:05	0.975	0.970	0.980	53.4970
PCB-173	6.65e+07	1.06	y	1.16	48:31	0.983	0.979	0.989	54.0976
PCB-172	7.10e+07	1.06	y	1.22	48:58	0.992	0.988	0.998	54.8251
PCB-192	9.13e+07	1.05	y	1.53	49:09	0.996	0.991	1.001	56.4446
PCB-180	8.00e+07	1.06	y	1.43	49:22	1.000	0.995	1.005	52.8574

Integrations by Analyst: DMS

RL: MONO, TRI - DECA: ———

Date: 10/24/14

Client ID: PCB CS3 14I1807 Filename: 141020E1 S:1 Acq:20-OCT-14 12:05:43 ConCal: ST141020E1-1

Lab ID: ST141020E1-1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-193	9.82e+07	1.06	y	1.65	49:34	1.005	0.999	1.009	56.0520
	PCB-191	9.75e+07	1.08	y	1.67	49:50	1.010	1.004	1.014	55.0343
	PCB-170	6.69e+07	1.07	y	1.50	50:55	1.000	0.995	1.005	53.7416
	PCB-190	9.44e+07	1.06	y	2.02	51:06	1.004	0.998	1.008	56.4348
	PCB-189	9.54e+07	1.07	y	1.54	52:28	1.000	0.995	1.005	55.4996
	PCB-202	7.35e+07	0.90	y	1.04	48:17	1.000	0.995	1.005	51.2911
	PCB-201	7.86e+07	0.90	y	1.10	48:46	1.010	1.006	1.016	51.7822
	PCB-204	7.40e+07	0.89	y	0.99	48:55	1.014	1.009	1.019	54.1063
	PCB-197	7.78e+07	0.91	y	1.07	49:14	1.020	1.015	1.025	52.6574
	PCB-200	7.51e+07	0.90	y	1.02	50:08	1.039	1.032	1.044	53.6323
	PCB-198	5.08e+07	0.90	y	0.74	51:32	1.067	1.058	1.068	49.6434
	PCB-199	5.42e+07	0.91	y	0.73	51:38	1.070	1.060	1.070	54.0521
-	PCB-196/203	1.11e+08	0.91	y	0.77	51:55	1.075	1.066	1.076	104.051
-	PCB-195	7.18e+07	0.91	y	1.20	53:07	0.984	0.979	0.989	55.2634
	PCB-194	6.98e+07	0.90	y	1.25	53:60	1.000	0.995	1.005	51.6485
	PCB-205	8.32e+07	0.90	y	1.41	54:16	1.005	1.001	1.011	54.3652
	PCB-208	7.26e+07	1.33	y	0.96	53:15	1.000	0.995	1.005	48.9729
	PCB-207	7.21e+07	1.35	y	0.92	53:34	1.006	1.001	1.011	51.0390
	PCB-206	4.82e+07	1.33	y	1.03	55:36	1.000	0.995	1.005	49.8449
	PCB-209	5.52e+07	1.19	y	1.18	56:56	1.000	0.995	1.005	53.5901

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	8.03e+08	2.93	y	16:06	1.22	144.024	
Total Di-PCB	5.11e+09	1.61	y	20:07	1.21	1200.85	
Total Tri-PCB	1.52e+09	1.05	y	24:14	1.16	406.484	
Total Tri-PCB	3.09e+09	1.01	y	27:56	1.35	747.174	Sum:1153.66
Total Tetra-PCB	6.58e+09	0.76	y	27:59	1.17	2054.03	
Total Penta-PCB	4.50e+09	1.58	y	32:41	1.21	2116.80	
Total Penta-PCB	7.68e+08	1.61	y	42:13	1.26	286.663	Sum:2403.47
Total Hexa-PCB	1.14e+09	1.26	y	37:04	0.92	710.895	
Total Hexa-PCB	3.23e+09	1.22	y	42:08	1.08	1515.46	Sum:2226.35
Total Hepta-PCB	2.12e+09	1.06	y	42:52	1.27	1314.76	
Total Octa-PCB	5.95e+08	0.90	y	48:17	0.92	471.216	
Total Octa-PCB	2.32e+08	0.91	y	53:07	1.29	166.768	Sum:637.983
Total Nona-PCB	1.93e+08	1.33	y	53:15	0.96	150.274	
Total Deca-PCB	5.52e+07	1.19	y	56:56	1.18	53.5901	

Total PCB Conc:11231.6967340

RL: MONO, TRI - DECA: ———

Integrations by Analyst: DMS

Date: 10/24/14

Client ID: PCB CS3 14I1807 Filename: 141020E1 S:1 Acq:20-OCT-14 12:05:43 ConCal: ST141020E1-1
Lab ID: ST141020E1-1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:1.0000 EndCAL: NA

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	4.45e+08	3.28 y	0.89	16:05	0.620	0.622	0.628	120	120
13C-PCB-3	4.64e+08	3.27 y	0.93	18:43	0.721	0.721	0.729	120	120
13C-PCB-4	2.22e+08	1.58 y	0.55	20:03	0.773	0.772	0.780	97.4	97.4
13C-PCB-9	3.43e+08	1.57 y	0.83	21:51	0.842	0.840	0.848	99.6	99.6
13C-PCB-11	3.93e+08	1.55 y	0.94	25:14	0.973	0.968	0.978	101	101
13C-PCB-19	2.37e+08	1.07 y	0.53	24:13	0.934	0.929	0.939	107	107
13C-PCB-28	3.16e+08	1.06 y	0.89	29:05	1.004	0.999	1.009	107	107
13C-PCB-32	3.63e+08	1.07 y	0.81	27:08	1.046	1.041	1.051	107	107
13C-PCB-37	2.91e+08	1.06 y	0.83	32:58	1.138	1.131	1.143	106	106
13C-PCB-47	2.46e+08	0.78 y	0.74	32:00	0.871	0.867	0.875	98.3	98.3
13C-PCB-52	2.32e+08	0.77 y	0.71	31:30	0.857	0.853	0.861	97.4	97.4
13C-PCB-54	2.77e+08	0.79 y	0.85	27:58	0.761	0.758	0.766	96.8	96.8
13C-PCB-70	3.21e+08	0.79 y	0.94	35:32	0.966	0.961	0.971	101	101
13C-PCB-77	3.05e+08	0.80 y	0.89	39:38	1.078	1.073	1.083	101	101
13C-PCB-80	3.21e+08	0.78 y	0.96	35:56	0.977	0.972	0.982	99.1	99.1
13C-PCB-81	2.86e+08	0.79 y	0.84	39:03	1.062	1.057	1.067	102	102
13C-PCB-95	1.57e+08	1.60 y	0.74	35:50	0.913	0.908	0.918	96.2	96.2
13C-PCB-97	1.48e+08	1.63 y	0.69	38:48	0.989	0.984	0.994	97.8	97.8
13C-PCB-101	1.66e+08	1.63 y	0.79	37:30	0.956	0.951	0.961	95.8	95.8
13C-PCB-104	2.06e+08	1.63 y	1.00	32:40	0.833	0.829	0.837	94.2	94.2
13C-PCB-105	2.14e+08	1.57 y	1.24	43:04	0.929	0.924	0.934	104	104
13C-PCB-114	2.10e+08	1.57 y	1.21	42:12	0.910	0.905	0.915	105	105
13C-PCB-118	2.03e+08	1.64 y	0.98	41:33	1.059	1.054	1.064	93.8	93.8
13C-PCB-123	1.95e+08	1.62 y	0.95	41:22	1.055	1.049	1.059	93.5	93.5
13C-PCB-126	1.99e+08	1.58 y	1.16	45:18	0.977	0.972	0.982	104	104
13C-PCB-127	2.33e+08	1.57 y	1.34	43:24	0.936	0.931	0.941	105	105
13C-PCB-138	1.82e+08	1.27 y	1.04	44:48	0.966	0.961	0.971	105	105
13C-PCB-141	1.84e+08	1.30 y	1.07	43:57	0.948	0.943	0.953	104	104
13C-PCB-153	1.93e+08	1.27 y	1.11	43:13	0.932	0.927	0.937	105	105
13C-PCB-155	1.75e+08	1.27 y	0.83	37:03	0.944	0.939	0.949	95.5	95.5
13C-PCB-156	2.15e+08	1.27 y	1.24	48:03	1.037	1.032	1.042	104	104
13C-PCB-157	2.22e+08	1.29 y	1.31	48:20	1.042	1.037	1.047	102	102
13C-PCB-159	2.08e+08	1.26 y	1.20	46:05	0.994	0.989	0.999	105	105
13C-PCB-167	2.26e+08	1.28 y	1.32	46:46	1.009	1.004	1.014	104	104
13C-PCB-169	2.01e+08	1.29 y	1.22	50:31	1.090	1.082	1.092	100	100
13C-PCB-170	8.30e+07	0.47 y	0.54	50:54	1.098	1.089	1.101	93.7	93.7
13C-PCB-180	1.06e+08	0.47 y	0.67	49:21	1.064	1.059	1.069	95.0	95.0
13C-PCB-188	1.54e+08	0.47 y	0.94	42:51	0.924	0.919	0.929	99.8	99.8
13C-PCB-189	1.11e+08	0.48 y	0.72	52:27	1.131	1.120	1.132	94.2	94.2
13C-PCB-194	1.08e+08	0.92 y	0.81	53:59	0.995	0.990	1.000	95.5	95.5
13C-PCB-202	1.38e+08	0.92 y	0.83	48:16	1.041	1.036	1.046	99.9	99.9
13C-PCB-206	9.40e+07	0.80 y	0.66	55:35	1.025	1.021	1.031	102	102
13C-PCB-208	1.54e+08	0.76 y	1.12	53:14	0.981	0.976	0.986	97.9	97.9
13C-PCB-209	8.76e+07	1.20 y	0.61	56:55	1.049	1.044	1.054	102	102

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	3.52e+08	0.78 y	1.01	37:49	1.029	1.023	1.033	104	104
13C-PCB-178	1.04e+08	0.46 y	0.63	45:38	0.984	0.979	0.989	99.2	99.2

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	3.52e+08	0.78 y	1.20	37:49	0.969	0.963	0.973	102	102
13C-PCB-178	1.04e+08	0.46 y	0.94	45:38	0.925	0.920	0.930	104	104

RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	4.17e+08	1.56	y	1.00	25:56	100
13C-PCB-31	3.31e+08	1.04	y	1.00	28:59	100
13C-PCB-60	3.36e+08	0.78	y	1.00	36:46	100
13C-PCB-111	2.20e+08	1.61	y	1.00	39:13	100
13C-PCB-128	1.65e+08	1.28	y	1.00	46:22	100
13C-PCB-205	1.40e+08	0.90	y	1.00	54:15	100

Analyst: DMS

Date: 10/20/14

Vista Analytical Laboratory - Injection Log Run file: 141020E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141020E1	1	ST141020E1-1	DMS	20-OCT-14	12:05:43	ST141020E1-1	NA
141020E1	2	ST141020E1-2	DMS	20-OCT-14	13:10:17	ST141020E1-2	NA
141020E1	3	B4J0088-BS1	DMS	20-OCT-14	14:14:44	ST141020E1-1	NA
141020E1	4	SOLVENT BLANK	DMS	20-OCT-14	15:19:13	ST141020E1-1	NA
141020E1	5	B4J0088-BLK1	DMS	20-OCT-14	16:23:46	ST141020E1-1	NA
141020E1	6	1400737-01	DMS	20-OCT-14	17:28:16	ST141020E1-1	NA
141020E1	7	1400738-03	DMS	20-OCT-14	18:32:44	ST141020E1-1	NA
141020E1	8	1400757-01	DMS	20-OCT-14	19:37:14	ST141020E1-1	NA
141020E1	9	1400706-05RE3@100x	DMS	20-OCT-14	20:41:41	ST141020E1-2	NA
141020E1	10	SOLVENT BLANK	DMS	20-OCT-14	21:46:16	ST141020E1-1	NA
141020E1	11	SOLVENT BLANK	DMS	20-OCT-14	22:50:49	ST141020E1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST141020E1-1 End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	✓	NA
Concentration within range?	✓	
First and last eluters present?	✓	
Retention Times within criteria?	DMS 10/29/14	
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?	y	n

	Beg.	End
Mass resolution > 10,000? ▪ Method 1614 > 5,000; CARB 429 > 8,000	✓	✓
TCDD/TCDF valleys < 25%?	NA	NA
Peaks integrated correctly?	✓	
Manual integrations included?	✓	
8280 CS1 Ending Standard		
-Ratios within limits		
-S/N > 2.5:1		
-CS1 within 12-hour clock		

Comments:

Reviewed by: MJ 10/21/14
Initials & Date

* *Ending standard criteria applicable to 8290 only.*

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 rmh

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141028E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 141028E1 S#1 Analysis Date: 28-OCT-14 Time: 08:54:00

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-1	2.93	2.66-3.60	y	38.9	37.5-62.5
PCB-2	2.95	2.66-3.60	y	38.4	37.5-62.5
PCB-3	2.93	2.66-3.60	y	37.8	37.5-62.5
PCB-4/10	1.61	1.33-1.79	y	182.4	150-250
PCB-7/9	1.62	1.33-1.79	y	185.4	150-250
PCB-6	1.62	1.33-1.79	y	88.5	75.0-125
PCB-5/8	1.63	1.33-1.79	y	186.3	150-250
PCB-14	1.61	1.33-1.79	y	92.3	75.0-125
PCB-11	1.63	1.33-1.79	y	92.5	75.0-125
PCB-12/13	1.61	1.33-1.79	y	181.5	150-250
PCB-15	1.58	1.33-1.79	y	90.5	75.0-125
PCB-19	1.04	0.88-1.20	y	45.7	37.5-62.5
PCB-30	1.05	0.88-1.20	y	46.1	37.5-62.5
PCB-18	1.05	0.88-1.20	y	45.9	37.5-62.5
PCB-17	1.04	0.88-1.20	y	45.3	37.5-62.5
PCB-24/27	1.05	0.88-1.20	y	91.6	75.0-125
PCB-16/32	1.05	0.88-1.20	y	91.0	75.0-125
PCB-34	1.07	0.88-1.20	y	51.9	37.5-62.5
PCB-23	1.07	0.88-1.20	y	47.4	37.5-62.5
PCB-29	1.07	0.88-1.20	y	50.5	37.5-62.5
PCB-26	1.06	0.88-1.20	y	49.9	37.5-62.5
PCB-25	1.08	0.88-1.20	y	53.3	37.5-62.5
PCB-31	1.07	0.88-1.20	y	52.3	37.5-62.5
PCB-28	1.07	0.88-1.20	y	49.9	37.5-62.5
PCB-20/21/33	1.04	0.88-1.20	y	154.3	112.5-225
PCB-22	1.05	0.88-1.20	y	51.3	37.5-62.5
PCB-36	1.06	0.88-1.20	y	48.8	37.5-62.5
PCB-39	1.05	0.88-1.20	y	49.3	37.5-62.5
PCB-38	1.06	0.88-1.20	y	46.0	37.5-62.5
PCB-35	1.05	0.88-1.20	y	51.1	37.5-62.5
PCB-37	1.06	0.88-1.20	y	49.2	37.5-62.5
PCB-54	0.77	0.65-0.89	y	47.4	37.5-62.5
PCB-50	0.76	0.65-0.89	y	49.8	37.5-62.5
PCB-53	0.77	0.65-0.89	y	46.0	37.5-62.5
PCB-51	0.77	0.65-0.89	y	46.2	37.5-62.5
PCB-45	0.77	0.65-0.89	y	47.8	37.5-62.5
PCB-46	0.78	0.65-0.89	y	47.2	37.5-62.5
PCB-52/69	0.77	0.65-0.89	y	98.9	75.0-125
PCB-73	0.77	0.65-0.89	y	47.9	37.5-62.5
PCB-43/49	0.76	0.65-0.89	y	96.0	75.0-125
PCB-47	0.76	0.65-0.89	y	50.2	37.5-62.5
PCB-48/75	0.77	0.65-0.89	y	92.8	75.0-125
PCB-65	0.76	0.65-0.89	y	46.4	37.5-62.5
PCB-62	0.77	0.65-0.89	y	50.5	37.5-62.5
PCB-44	0.77	0.65-0.89	y	48.7	37.5-62.5
PCB-42/59	0.77	0.65-0.89	y	98.1	75.0-125
PCB-41/64/71/72	0.77	0.65-0.89	y	195.2	150-250
PCB-68	0.77	0.65-0.89	y	50.3	37.5-62.5
PCB-40	0.76	0.65-0.89	y	51.7	37.5-62.5
PCB-57	0.76	0.65-0.89	y	49.6	37.5-62.5
PCB-67	0.75	0.65-0.89	y	46.8	37.5-62.5
PCB-58	0.77	0.65-0.89	y	53.0	37.5-62.5
PCB-63	0.77	0.65-0.89	y	48.4	37.5-62.5
PCB-74	0.77	0.65-0.89	y	49.2	37.5-62.5
PCB-61/70	0.76	0.65-0.89	y	99.2	75.0-125
PCB-76/66	0.77	0.65-0.89	y	95.7	75.0-125
PCB-80	0.77	0.65-0.89	y	49.7	37.5-62.5
PCB-55	0.76	0.65-0.89	y	48.5	37.5-62.5
PCB-56/60	0.77	0.65-0.89	y	98.5	75.0-125
PCB-79	0.77	0.65-0.89	y	48.8	37.5-62.5
PCB-78	0.77	0.65-0.89	y	46.4	37.5-62.5
PCB-81	0.77	0.65-0.89	y	45.9	37.5-62.5
PCB-77	0.78	0.65-0.89	y	47.3	37.5-62.5
PCB-104	1.57	1.32-1.78	y	47.0	37.5-62.5
PCB-96	1.58	1.32-1.78	y	47.4	37.5-62.5
PCB-103	1.55	1.32-1.78	y	48.2	37.5-62.5
PCB-100	1.57	1.32-1.78	y	48.7	37.5-62.5
PCB-94	1.58	1.32-1.78	y	46.0	37.5-62.5
PCB-95/98/102	1.55	1.32-1.78	y	139.5	112.5-225
PCB-93	1.60	1.32-1.78	y	45.9	37.5-62.5
PCB-88/91	1.61	1.32-1.78	y	103.0	75.0-125
PCB-121	1.53	1.32-1.78	y	41.2	37.5-62.5

Analyst: DMS

Date: 10/28/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141028E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 141028E1 S#1 Analysis Date: 28-OCT-14 Time: 08:54:00

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)	ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-84/92	1.59	1.32-1.78	y	90.7	75.0-125	PCB-140	1.25	1.05-1.43	y	50.7	37.5-62.5
PCB-89	1.52	1.32-1.78	y	45.3	37.5-62.5	PCB-134/143	1.21	1.05-1.43	y	92.7	75.0-125
PCB-90/101	1.57	1.32-1.78	y	91.2	75.0-125	PCB-133/142	1.23	1.05-1.43	y	92.7	75.0-125
PCB-113	1.54	1.32-1.78	y	44.2	37.5-62.5	PCB-131	1.22	1.05-1.43	y	45.5	37.5-62.5
PCB-99	1.59	1.32-1.78	y	48.1	37.5-62.5	PCB-146/165	1.23	1.05-1.43	y	92.2	75.0-125
PCB-119	1.55	1.32-1.78	y	46.1	37.5-62.5	PCB-132/161	1.27	1.05-1.43	y	92.3	75.0-125
PCB-108/112	1.56	1.32-1.78	y	90.6	75.0-125	PCB-153	1.17	1.05-1.43	y	45.5	37.5-62.5
PCB-83	1.55	1.32-1.78	y	45.3	37.5-62.5	PCB-168	1.22	1.05-1.43	y	46.4	37.5-62.5
PCB-97	1.59	1.32-1.78	y	45.9	37.5-62.5	PCB-141	1.23	1.05-1.43	y	46.2	37.5-62.5
PCB-86	1.52	1.32-1.78	y	46.7	37.5-62.5	PCB-137	1.19	1.05-1.43	y	45.4	37.5-62.5
PCB-87/117/125	1.56	1.32-1.78	y	139.1	112.5-225	PCB-130	1.23	1.05-1.43	y	50.4	37.5-62.5
PCB-111/115	1.55	1.32-1.78	y	87.9	75.0-125	PCB-138/163/164	1.24	1.05-1.43	y	140.0	112.5-225
PCB-85/116	1.57	1.32-1.78	y	97.6	75.0-125	PCB-158/160	1.23	1.05-1.43	y	95.8	75.0-125
PCB-120	1.54	1.32-1.78	y	46.6	37.5-62.5	PCB-129	1.21	1.05-1.43	y	47.9	37.5-62.5
PCB-110	1.56	1.32-1.78	y	46.0	37.5-62.5	PCB-166	1.23	1.05-1.43	y	46.0	37.5-62.5
PCB-82	1.56	1.32-1.78	y	45.4	37.5-62.5	PCB-159	1.21	1.05-1.43	y	47.7	37.5-62.5
PCB-124	1.57	1.32-1.78	y	45.7	37.5-62.5	PCB-128/162	1.23	1.05-1.43	y	92.8	75.0-125
PCB-107/109	1.58	1.32-1.78	y	91.7	75.0-125	PCB-167	1.24	1.05-1.43	y	47.5	37.5-62.5
PCB-123	1.57	1.32-1.78	y	45.5	37.5-62.5	PCB-156	1.23	1.05-1.43	y	48.4	37.5-62.5
PCB-106/118	1.56	1.32-1.78	y	92.2	75.0-125	PCB-157	1.23	1.05-1.43	y	46.3	37.5-62.5
PCB-114	1.59	1.32-1.78	y	48.9	37.5-62.5	PCB-169	1.22	1.05-1.43	y	45.5	37.5-62.5
PCB-122	1.60	1.32-1.78	y	49.7	37.5-62.5	PCB-188	1.03	0.89-1.21	y	45.7	37.5-62.5
PCB-105	1.60	1.32-1.78	y	48.9	37.5-62.5	PCB-184	1.04	0.89-1.21	y	46.3	37.5-62.5
PCB-127	1.62	1.32-1.78	y	48.7	37.5-62.5	PCB-179	1.04	0.89-1.21	y	46.0	37.5-62.5
PCB-126	1.63	1.32-1.78	y	50.7	37.5-62.5	PCB-176	1.04	0.89-1.21	y	45.1	37.5-62.5
PCB-155	1.24	1.05-1.43	y	47.0	37.5-62.5	PCB-186	1.03	0.89-1.21	y	46.0	37.5-62.5
PCB-150	1.25	1.05-1.43	y	48.2	37.5-62.5	PCB-178	1.02	0.89-1.21	y	47.1	37.5-62.5
PCB-152	1.26	1.05-1.43	y	47.4	37.5-62.5	PCB-175	1.03	0.89-1.21	y	48.1	37.5-62.5
PCB-145	1.26	1.05-1.43	y	47.4	37.5-62.5	PCB-182/187	1.02	0.89-1.21	y	95.8	75.0-125
PCB-136	1.27	1.05-1.43	y	49.4	37.5-62.5	PCB-183	1.02	0.89-1.21	y	48.1	37.5-62.5
PCB-148	1.27	1.05-1.43	y	47.3	37.5-62.5	PCB-185	1.02	0.89-1.21	y	44.3	37.5-62.5
PCB-154	1.25	1.05-1.43	y	50.5	37.5-62.5	PCB-174	1.01	0.89-1.21	y	47.9	37.5-62.5
PCB-151	1.26	1.05-1.43	y	49.3	37.5-62.5	PCB-181	1.04	0.89-1.21	y	44.7	37.5-62.5
PCB-135	1.24	1.05-1.43	y	46.7	37.5-62.5	PCB-177	1.03	0.89-1.21	y	46.1	37.5-62.5
PCB-144	1.26	1.05-1.43	y	54.5	37.5-62.5	PCB-171	1.02	0.89-1.21	y	44.8	37.5-62.5
PCB-147	1.26	1.05-1.43	y	50.5	37.5-62.5	PCB-173	1.02	0.89-1.21	y	45.9	37.5-62.5
PCB-139/149	1.25	1.05-1.43	y	101.0	75.0-125	PCB-172	1.04	0.89-1.21	y	46.4	37.5-62.5

Analyst: DMS

Date: 10/28/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141028E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 141028E1 S#1 Analysis Date: 28-OCT-14 Time: 08:54:00

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-192	1.04	0.89-1.21	y	47.1	37.5-62.5
PCB-180	1.05	0.89-1.21	y	44.9	37.5-62.5
PCB-193	1.04	0.89-1.21	y	45.3	37.5-62.5
PCB-191	1.04	0.89-1.21	y	45.4	37.5-62.5
PCB-170	1.02	0.89-1.21	y	44.9	37.5-62.5
PCB-190	1.01	0.89-1.21	y	45.5	37.5-62.5
PCB-189	1.03	0.89-1.21	y	45.1	37.5-62.5
PCB-202	0.88	0.76-1.02	y	47.0	37.5-62.5
PCB-201	0.89	0.76-1.02	y	47.6	37.5-62.5
PCB-204	0.89	0.76-1.02	y	47.6	37.5-62.5
PCB-197	0.90	0.76-1.02	y	47.7	37.5-62.5
PCB-200	0.90	0.76-1.02	y	48.5	37.5-62.5
PCB-198	1.03	0.76-1.02	n	43.6	37.5-62.5
PCB-199	0.79	0.76-1.02	y	51.6	37.5-62.5
PCB-196/203	0.88	0.76-1.02	y	99.7	75.0-125
PCB-195	0.94	0.76-1.02	y	51.2	37.5-62.5
PCB-194	0.91	0.76-1.02	y	46.5	37.5-62.5
PCB-205	0.92	0.76-1.02	y	47.3	37.5-62.5
PCB-208	1.32	1.14-1.54	y	49.1	37.5-62.5
PCB-207	1.30	1.14-1.54	y	49.0	37.5-62.5
PCB-206	1.32	1.14-1.54	y	49.2	37.5-62.5
PCB-209	1.20	0.99-1.33	y	49.5	37.5-62.5

Analyst: DMS

Date: 10/28/14

LABELED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141028E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 141028E1 S#1 Analysis Date: 28-OCT-14 Time: 08:54:00

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-1	3.20	2.66-3.60	y	139.4	50.0-145
13C-PCB-3	3.25	2.66-3.60	y	140.1	50.0-145
13C-PCB-4	1.56	1.33-1.79	y	94.5	50.0-145
13C-PCB-9	1.56	1.33-1.79	y	95.2	50.0-145
13C-PCB-11	1.58	1.33-1.79	y	97.9	50.0-145
13C-PCB-19	1.05	0.88-1.20	y	127.0	50.0-145
13C-PCB-32	1.06	0.88-1.20	y	130.1	50.0-145
13C-PCB-28	1.06	0.88-1.20	y	93.7	50.0-145
13C-PCB-37	1.06	0.88-1.20	y	103.4	50.0-145
13C-PCB-54	0.80	0.65-0.89	y	86.3	50.0-145
13C-PCB-52	0.78	0.65-0.89	y	94.0	50.0-145
13C-PCB-47	0.78	0.65-0.89	y	93.8	50.0-145
13C-PCB-70	0.79	0.65-0.89	y	96.3	50.0-145
13C-PCB-80	0.77	0.65-0.89	y	97.0	50.0-145
13C-PCB-81	0.79	0.65-0.89	y	101.6	50.0-145
13C-PCB-77	0.78	0.65-0.89	y	101.0	50.0-145
13C-PCB-104	1.58	1.32-1.78	y	91.6	50.0-145
13C-PCB-95	1.59	1.32-1.78	y	94.8	50.0-145
13C-PCB-101	1.60	1.32-1.78	y	96.8	50.0-145
13C-PCB-97	1.64	1.32-1.78	y	99.0	50.0-145
13C-PCB-123	1.59	1.32-1.78	y	103.6	50.0-145
13C-PCB-118	1.61	1.32-1.78	y	101.9	50.0-145
13C-PCB-114	1.56	1.32-1.78	y	73.7	50.0-145
13C-PCB-105	1.58	1.32-1.78	y	73.5	50.0-145
13C-PCB-127	1.58	1.32-1.78	y	74.0	50.0-145
13C-PCB-126	1.55	1.32-1.78	y	75.0	50.0-145
13C-PCB-155	1.26	1.05-1.43	y	114.2	50.0-145
13C-PCB-153	1.27	1.05-1.43	y	92.3	50.0-145
13C-PCB-141	1.29	1.05-1.43	y	90.2	50.0-145
13C-PCB-138	1.29	1.05-1.43	y	91.8	50.0-145
13C-PCB-159	1.28	1.05-1.43	y	96.9	50.0-145
13C-PCB-167	1.28	1.05-1.43	y	98.2	50.0-145
13C-PCB-156	1.27	1.05-1.43	y	100.6	50.0-145
13C-PCB-157	1.27	1.05-1.43	y	100.0	50.0-145

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-169	1.26	1.05-1.43	y	106.4	50 - 145
13C-PCB-188	0.46	0.38-0.52	y	106.2	50 - 145
13C-PCB-180	0.45	0.38-0.52	y	118.5	50 - 145
13C-PCB-170	0.46	0.38-0.52	y	122.9	50 - 145
13C-PCB-189	0.45	0.38-0.52	y	124.6	50 - 145
13C-PCB-202	0.91	0.76-1.02	y	136.4	50 - 145
13C-PCB-194	0.90	0.76-1.02	y	98.0	50 - 145
13C-PCB-208	0.78	0.65-0.89	y	106.8	50 - 145
13C-PCB-206	0.78	0.65-0.89	y	103.9	50 - 145
13C-PCB-209	1.17	0.99-1.33	y	107.6	50 - 145

CRS vs. RS

13C-PCB-79	0.77	0.65-0.89	y	98.0	75 - 125
13C-PCB-178	0.46	0.38-0.52	y	111.0	75 - 125

Analyst: DMS

Date: 10/28/14

Client ID: PCB CS3 14F1302 Filename: 141028E1 S:1 Acq:28-OCT-14 08:54:00 ConCal: ST141028E1-1

Lab ID: ST141028E1-1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-1	1.01e+08	2.93	y	1.19	16:25	1.001	0.996	1.006	38.8614
	PCB-2	1.04e+08	2.95	y	1.18	18:41	0.989	0.984	0.994	38.4082
	PCB-3	1.23e+08	2.93	y	1.43	18:55	1.001	0.996	1.006	37.8457
	PCB-4/10	2.83e+08	1.61	y	1.57	20:14	1.002	0.997	1.007	182.413
	PCB-7/9	3.41e+08	1.62	y	1.21	21:57	0.871	0.866	0.874	185.360
	PCB-6	1.76e+08	1.62	y	1.30	22:35	0.896	0.890	0.899	88.4948
	PCB-5/8	3.26e+08	1.63	y	1.15	23:00	0.913	0.907	0.917	186.320
	PCB-14	1.68e+08	1.61	y	1.11	24:03	0.954	0.949	0.959	92.3386
	PCB-11	1.65e+08	1.63	y	1.09	25:13	1.001	0.995	1.005	92.5259
	PCB-12/13	3.54e+08	1.61	y	1.19	25:37	1.016	1.011	1.021	181.469
	PCB-15	1.90e+08	1.58	y	1.28	25:55	1.028	1.023	1.033	90.4890
	PCB-19	5.74e+07	1.04	y	1.04	24:15	1.001	0.996	1.006	45.6687
	PCB-30	9.51e+07	1.05	y	1.71	25:06	1.036	1.032	1.042	46.1208
	PCB-18	6.63e+07	1.05	y	0.78	25:51	0.954	0.949	0.959	45.9348
	PCB-17	7.72e+07	1.04	y	0.92	26:01	0.961	0.956	0.966	45.3106
	PCB-24/27	2.01e+08	1.05	y	1.19	26:35	0.982	0.977	0.987	91.6174
-	PCB-16/32	1.58e+08	1.05	y	0.94	27:05	1.000	0.995	1.005	90.9540
-	PCB-34	8.64e+07	1.07	y	1.14	27:52	0.961	0.955	0.965	51.8648
	PCB-23	8.89e+07	1.07	y	1.28	27:57	0.964	0.959	0.969	47.3827
	PCB-29	8.00e+07	1.07	y	1.08	28:12	0.972	0.967	0.977	50.5424
	PCB-26	8.82e+07	1.06	y	1.21	28:23	0.979	0.974	0.984	49.8742
	PCB-25	9.86e+07	1.08	y	1.26	28:34	0.985	0.979	0.989	53.2849
	PCB-31	9.86e+07	1.07	y	1.28	28:55	0.997	0.992	1.002	52.3271
	PCB-28	1.25e+08	1.07	y	1.71	29:01	1.000	0.995	1.005	49.8710
	PCB-20/21/33	2.45e+08	1.04	y	1.08	29:38	1.022	1.017	1.027	154.330
	PCB-22	9.10e+07	1.05	y	1.21	30:04	1.037	1.032	1.042	51.3241
	PCB-36	8.12e+07	1.06	y	1.14	30:40	0.933	0.928	0.938	48.7548
	PCB-39	8.01e+07	1.05	y	1.12	31:08	0.948	0.943	0.953	49.2539
	PCB-38	8.05e+07	1.06	y	1.20	31:55	0.971	0.966	0.976	46.0378
	PCB-35	9.18e+07	1.05	y	1.23	32:25	0.987	0.982	0.992	51.0990
	PCB-37	8.82e+07	1.06	y	1.23	32:52	1.000	0.995	1.005	49.1971
	PCB-54	7.58e+07	0.77	y	1.10	27:56	1.001	0.996	1.006	47.4119
	PCB-50	6.36e+07	0.76	y	0.88	29:04	1.041	1.037	1.047	49.8135
	PCB-53	6.14e+07	0.77	y	1.06	29:43	0.947	0.942	0.952	46.0393
	PCB-51	5.74e+07	0.77	y	0.99	30:03	0.958	0.952	0.962	46.1704
	PCB-45	5.18e+07	0.77	y	0.86	30:29	0.972	0.966	0.976	47.8317
	PCB-46	5.01e+07	0.78	y	0.85	30:59	0.987	0.981	0.991	47.1933

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-52/69	1.59e+08	0.77	y	1.28	31:25	1.001	0.996	1.006	98.8862
	PCB-73	8.13e+07	0.77	y	1.35	31:33	1.005	1.000	1.010	47.9082
	PCB-43/49	1.20e+08	0.76	y	0.99	31:42	1.010	1.005	1.015	95.9701
	PCB-47	7.00e+07	0.76	y	1.06	31:55	1.001	0.996	1.006	50.1700
	PCB-48/75	1.50e+08	0.77	y	1.23	32:02	1.004	0.999	1.009	92.8005
	PCB-65	7.48e+07	0.76	y	1.22	32:17	1.012	1.008	1.018	46.3609
	PCB-62	8.12e+07	0.77	y	1.22	32:24	1.016	1.011	1.021	50.4751
	PCB-44	5.52e+07	0.77	y	0.86	32:42	1.026	1.021	1.031	48.7132
	PCB-42/59	1.47e+08	0.77	y	1.14	32:56	1.033	1.028	1.038	98.0635
	PCB-41/64/71/72	3.11e+08	0.77	y	1.21	33:31	1.051	1.046	1.056	195.152
	PCB-68	8.93e+07	0.77	y	1.35	33:46	1.059	1.054	1.064	50.3098
	PCB-40	4.77e+07	0.76	y	0.70	33:60	1.066	1.061	1.071	51.6581
	PCB-57	8.08e+07	0.76	y	0.98	34:20	0.970	0.965	0.975	49.6454
	PCB-67	8.61e+07	0.75	y	1.11	34:38	0.979	0.974	0.984	46.7853
	PCB-58	8.18e+07	0.77	y	0.93	34:45	0.982	0.977	0.987	53.0450
	PCB-63	7.67e+07	0.77	y	0.95	34:55	0.987	0.982	0.992	48.4242
	PCB-74	1.02e+08	0.77	y	1.24	35:12	0.995	0.990	1.000	49.2058
	PCB-61/70	1.57e+08	0.76	y	0.95	35:23	1.000	0.995	1.005	99.2149
	PCB-76/66	1.66e+08	0.77	y	1.04	35:36	1.006	1.001	1.011	95.6585
	PCB-80	1.03e+08	0.77	y	1.19	35:49	1.001	0.996	1.006	49.6576
	PCB-55	8.75e+07	0.76	y	1.04	36:09	1.010	1.005	1.015	48.5228
	PCB-56/60	1.72e+08	0.77	y	1.01	36:39	1.024	1.019	1.029	98.4632
	PCB-79	9.12e+07	0.77	y	1.08	37:42	1.053	1.048	1.058	48.7736
	PCB-78	9.55e+07	0.77	y	1.27	38:24	0.987	0.982	0.992	46.3876
	PCB-81	9.90e+07	0.77	y	1.33	38:56	1.000	0.995	1.005	45.9203
	PCB-77	8.58e+07	0.78	y	1.10	39:32	1.000	0.995	1.005	47.3144
	PCB-104	7.30e+07	1.57	y	1.18	32:34	1.000	0.996	1.006	46.9837
	PCB-96	7.08e+07	1.58	y	1.14	33:49	1.039	1.034	1.044	47.3781
	PCB-103	6.05e+07	1.55	y	0.96	34:20	1.055	1.050	1.060	48.1846
	PCB-100	5.99e+07	1.57	y	0.94	34:42	1.066	1.061	1.071	48.6903
	PCB-94	4.88e+07	1.58	y	1.06	35:10	0.985	0.980	0.990	45.9512
	PCB-95/98/102	1.72e+08	1.55	y	1.22	35:40	0.999	0.995	1.005	139.489
	PCB-93	3.89e+07	1.60	y	0.84	35:48	1.003	0.997	1.007	45.9016
	PCB-88/91	1.16e+08	1.61	y	1.12	36:05	1.011	1.005	1.015	103.037
	PCB-121	6.69e+07	1.53	y	1.62	36:10	1.013	1.009	1.019	41.2314
	PCB-84/92	1.03e+08	1.59	y	1.05	37:00	0.990	0.985	0.995	90.6995
	PCB-89	5.55e+07	1.52	y	1.13	37:13	0.996	0.991	1.001	45.2861

RL: MONO, TRI - DECA: ———

RL: DI : ———

Integrations by Analyst: DMS

Date: 10/28/14

Reviewed by Analyst: _____

Date: _____

Client ID: PCB CS3 14F1302 Filename: 141028E1 S:1 Acq:28-OCT-14 08:54:00 ConCal: ST141028E1-1

Lab ID: ST141028E1-1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-90/101	1.09e+08	1.57	y	1.10	37:22	1.000	0.995	1.005	91.1922
	PCB-113	6.76e+07	1.54	y	1.41	37:37	1.007	1.002	1.012	44.1723
	PCB-99	6.97e+07	1.59	y	1.34	37:42	1.009	1.004	1.014	48.0972
	PCB-119	7.05e+07	1.55	y	1.53	38:10	0.987	0.982	0.992	46.0622
	PCB-108/112	1.16e+08	1.56	y	1.28	38:20	0.991	0.986	0.996	90.5555
	PCB-83	6.86e+07	1.55	y	1.52	38:30	0.996	0.990	1.000	45.2654
	PCB-97	5.42e+07	1.59	y	1.18	38:42	1.001	0.995	1.005	45.8827
	PCB-86	3.92e+07	1.52	y	0.84	38:51	1.005	0.999	1.009	46.6548
	B-87/117/125	2.15e+08	1.56	y	1.55	38:57	1.007	1.002	1.012	139.145
	PCB-111/115	1.43e+08	1.55	y	1.63	39:07	1.011	1.006	1.016	87.9409
	PCB-85/116	1.27e+08	1.57	y	1.30	39:16	1.015	1.010	1.020	97.5650
	PCB-120	7.80e+07	1.54	y	1.68	39:28	1.021	1.016	1.026	46.5996
	PCB-110	7.14e+07	1.56	y	1.56	39:38	1.025	1.020	1.030	45.9554
	PCB-82	4.57e+07	1.56	y	0.76	40:16	0.976	0.971	0.981	45.4196
	PCB-124	8.90e+07	1.57	y	1.47	40:56	0.993	0.988	0.998	45.6759
	PCB-107/109	1.61e+08	1.58	y	1.32	41:05	0.996	0.991	1.001	91.6660
	PCB-123	7.05e+07	1.57	y	1.17	41:15	1.000	0.996	1.006	45.5489
-	PCB-106/118	1.51e+08	1.56	y	1.17	41:27	1.001	0.996	1.006	92.1595
-	PCB-114	7.09e+07	1.59	y	1.30	42:06	1.000	0.995	1.005	48.8650
	PCB-122	6.23e+07	1.60	y	1.12	42:14	1.004	0.999	1.009	49.7044
	PCB-105	7.09e+07	1.60	y	1.30	42:58	1.000	0.995	1.005	48.8921
	PCB-127	7.88e+07	1.62	y	1.33	43:18	1.000	0.996	1.006	48.7149
	PCB-126	6.54e+07	1.63	y	1.18	45:12	1.000	0.995	1.005	50.7141
	PCB-155	7.18e+07	1.24	y	1.11	36:56	1.001	0.966	1.006	47.0201
	PCB-150	6.60e+07	1.25	y	1.00	38:12	1.035	1.030	1.040	48.1886
	PCB-152	7.25e+07	1.26	y	1.12	38:40	1.048	1.043	1.053	47.3785
	PCB-145	7.81e+07	1.26	y	1.20	39:08	1.060	1.055	1.065	47.3838
	PCB-136	7.98e+07	1.27	y	1.18	39:27	1.069	1.064	1.074	49.3961
	PCB-148	4.83e+07	1.27	y	0.74	39:33	1.071	1.066	1.076	47.3271
	PCB-154	5.94e+07	1.25	y	0.86	40:01	1.084	1.080	1.090	50.4602
	PCB-151	5.05e+07	1.26	y	0.75	40:41	1.102	1.097	1.107	49.2848
	PCB-135	5.08e+07	1.24	y	0.79	40:53	1.108	1.103	1.113	46.7467
	PCB-144	5.69e+07	1.26	y	0.76	41:00	1.111	1.105	1.117	54.5132
	PCB-147	5.68e+07	1.26	y	0.82	41:08	1.114	1.109	1.121	50.5159
	PCB-139/149	1.06e+08	1.25	y	0.76	41:24	1.122	1.116	1.128	100.983
-	PCB-140	5.03e+07	1.25	y	0.72	41:35	1.127	1.121	1.133	50.7422
-	PCB-134/143	1.00e+08	1.21	y	0.92	42:02	0.975	0.970	0.980	92.6530

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-133/142	8.94e+07	1.23	y	0.82	42:19	0.982	0.977	0.987	92.6529
	PCB-131	4.86e+07	1.22	y	0.91	42:29	0.986	0.981	0.991	45.4711
	PCB-146/165	1.35e+08	1.23	y	1.25	42:42	0.991	0.986	0.996	92.2272
	PCB-132/161	1.20e+08	1.27	y	1.10	42:57	0.997	0.992	1.002	92.3020
	PCB-153	6.69e+07	1.17	y	1.25	43:06	1.000	0.995	1.005	45.4601
	PCB-168	7.92e+07	1.22	y	1.45	43:19	1.005	1.001	1.011	46.3947
	PCB-141	5.41e+07	1.23	y	1.09	43:51	1.000	0.995	1.005	46.2229
	PCB-137	5.20e+07	1.19	y	1.06	44:15	1.009	1.004	1.014	45.4078
	PCB-130	5.24e+07	1.23	y	0.96	44:20	1.011	1.006	1.016	50.3671
	PCB-138/163/164	2.03e+08	1.24	y	1.29	44:43	1.001	0.996	1.006	139.996
	PCB-158/160	1.44e+08	1.23	y	1.34	44:58	1.006	1.001	1.011	95.7578
	PCB-129	4.59e+07	1.21	y	0.85	45:14	1.012	1.007	1.017	47.9099
	PCB-166	7.33e+07	1.23	y	1.19	45:41	0.994	0.988	0.998	46.0012
	PCB-159	7.13e+07	1.21	y	1.11	46:00	1.001	0.996	1.006	47.6698
	PCB-128/162	1.31e+08	1.23	y	1.05	46:17	1.007	1.002	1.012	92.7926
	PCB-167	8.42e+07	1.24	y	1.20	46:41	1.000	0.995	1.005	47.5343
	PCB-156	7.98e+07	1.23	y	1.14	48:00	1.000	0.996	1.006	48.4040
	PCB-157	8.14e+07	1.23	y	1.16	48:16	1.000	0.995	1.005	46.3300
	PCB-169	7.75e+07	1.22	y	1.12	50:18	1.000	0.995	1.005	45.5179
	PCB-188	7.83e+07	1.03	y	1.58	42:45	1.001	0.996	1.006	45.6709
	PCB-184	8.19e+07	1.04	y	1.63	43:12	1.011	1.006	1.016	46.2547
	PCB-179	6.50e+07	1.04	y	1.30	43:60	1.029	1.024	1.034	45.9748
	PCB-176	7.23e+07	1.04	y	1.48	44:27	1.040	1.035	1.045	45.1247
	PCB-186	7.25e+07	1.03	y	1.45	45:05	1.055	1.050	1.060	46.0021
	PCB-178	5.29e+07	1.02	y	1.03	45:33	1.066	1.061	1.071	47.1142
	PCB-175	5.28e+07	1.03	y	1.01	45:54	1.074	1.069	1.079	48.0618
	PCB-182/187	1.30e+08	1.02	y	1.25	46:05	1.078	1.073	1.083	95.8326
	PCB-183	6.31e+07	1.02	y	1.21	46:24	1.086	1.081	1.091	48.1328
	PCB-185	7.19e+07	1.02	y	1.80	47:04	0.956	0.951	0.961	44.2596
	PCB-174	5.95e+07	1.01	y	1.38	47:26	0.963	0.958	0.968	47.8521
	PCB-181	5.56e+07	1.04	y	1.38	47:33	0.966	0.960	0.970	44.6509
	PCB-177	5.21e+07	1.03	y	1.26	47:43	0.969	0.963	0.973	46.0502
	PCB-171	6.39e+07	1.02	y	1.58	48:01	0.975	0.970	0.980	44.7864
	PCB-173	4.59e+07	1.02	y	1.11	48:27	0.984	0.978	0.988	45.9125
	PCB-172	6.83e+07	1.04	y	1.63	48:53	0.993	0.987	0.997	46.3534
	PCB-192	7.39e+07	1.04	y	1.74	49:04	0.996	0.991	1.001	47.1094
	PCB-180	5.44e+07	1.05	y	1.34	49:16	1.000	0.995	1.005	44.8745

RL: MONO, TRI - DECA: ———

Integrations by Analyst: DMS

Date: 10/28/14

Client ID: PCB CS3 14F1302 Filename: 141028E1 S:1 Acq:28-OCT-14 08:54:00 ConCal: ST141028E1-1

Lab ID: ST141028E1-1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-193	7.00e+07	1.04	y	1.72	49:27	1.004	0.999	1.009	45.2505
	PCB-191	6.93e+07	1.04	y	1.69	49:41	1.009	1.004	1.014	45.4011
	PCB-170	5.32e+07	1.02	y	1.60	50:39	1.000	0.995	1.005	44.9317
	PCB-190	7.45e+07	1.01	y	2.21	50:49	1.003	0.998	1.008	45.4563
	PCB-189	6.94e+07	1.03	y	1.55	52:05	1.000	0.995	1.005	45.1178
	PCB-202	6.47e+07	0.88	y	1.08	48:13	1.000	0.995	1.005	46.9946
	PCB-201	6.96e+07	0.89	y	1.15	48:42	1.010	1.005	1.015	47.5589
	PCB-204	6.89e+07	0.89	y	1.14	48:51	1.014	1.008	1.018	47.5900
	PCB-197	6.52e+07	0.90	y	1.07	49:08	1.020	1.015	1.025	47.7011
	PCB-200	6.57e+07	0.90	y	1.06	49:58	1.037	1.032	1.044	48.5349
	PCB-198	4.19e+07	1.03	n	0.76	51:12	1.062	1.059	1.069	43.6027
	PCB-199	5.23e+07	0.79	y	0.80	51:18	1.065	1.061	1.071	51.5766
-	PCB-196/203	1.02e+08	0.88	y	0.80	51:34	1.070	1.066	1.076	99.6905
-	PCB-195	4.68e+07	0.94	y	1.23	52:42	0.984	0.979	0.989	51.2011
	PCB-194	4.21e+07	0.91	y	1.21	53:36	1.000	0.995	1.005	46.5321
	PCB-205	5.45e+07	0.92	y	1.54	53:54	1.006	1.001	1.011	47.3424
	PCB-208	5.04e+07	1.32	y	0.93	52:50	1.000	0.995	1.005	49.1440
	PCB-207	5.84e+07	1.30	y	1.08	53:09	1.006	1.001	1.011	48.9674
	PCB-206	3.25e+07	1.32	y	1.02	55:20	1.000	0.995	1.005	49.2298
	PCB-209	3.63e+07	1.20	y	1.17	56:36	1.000	0.995	1.005	49.4675

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	3.27e+08	2.93	y	16:25	1.27	115.115	
Total Di-PCB	2.00e+09	1.61	y	20:14	1.21	1100.52	
Total Tri-PCB	6.55e+08	1.04	y	24:15	1.10	365.606	
Total Tri-PCB	1.43e+09	1.07	y	27:52	1.21	811.612	Sum:1177.22
Total Tetra-PCB	3.26e+09	0.77	y	27:56	1.09	2055.99	
Total Penta-PCB	2.62e+09	1.57	y	32:34	1.18	1902.63	
Total Penta-PCB	3.77e+08	1.59	y	42:06	1.25	267.083	Sum:2169.71
Total Hexa-PCB	8.47e+08	1.24	y	36:56	0.90	689.970	
Total Hexa-PCB	1.83e+09	1.21	y	42:02	1.11	1334.95	Sum:2024.92
Total Hepta-PCB	1.57e+09	1.03	y	42:45	1.42	1121.69	
Total Octa-PCB	4.88e+08	0.88	y	48:13	0.96	389.647	
Total Octa-PCB	1.43e+08	0.94	y	52:42	1.33	145.076	Sum:534.722
Total Nona-PCB	1.44e+08	1.32	y	52:50	1.01	150.408	
Total Deca-PCB	3.63e+07	1.20	y	56:36	1.17	49.4675	

Total PCB Conc:10446.8255230

RL: MONO, TRI - DECA: ———

Integrations by Analyst: DMS

Date: 10/28/14

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	2.17e+08	3.20 y	0.87	16:24	0.633	0.629	0.635	139	139
13C-PCB-3	2.28e+08	3.25 y	0.91	18:54	0.729	0.725	0.733	140	140
13C-PCB-4	9.89e+07	1.56 y	0.59	20:11	0.779	0.775	0.783	94.5	94.5
13C-PCB-9	1.52e+08	1.56 y	0.90	21:55	0.846	0.842	0.850	95.2	95.2
13C-PCB-11	1.64e+08	1.58 y	0.94	25:12	0.973	0.968	0.978	97.9	97.9
13C-PCB-19	1.20e+08	1.05 y	0.53	24:14	0.935	0.930	0.940	127	127
13C-PCB-28	1.47e+08	1.06 y	0.93	29:00	1.004	0.999	1.009	93.7	93.7
13C-PCB-32	1.85e+08	1.06 y	0.80	27:05	1.045	1.040	1.050	130	130
13C-PCB-37	1.46e+08	1.06 y	0.84	32:51	1.137	1.131	1.143	103	103
13C-PCB-47	1.32e+08	0.78 y	0.81	31:54	0.870	0.866	0.874	93.8	93.8
13C-PCB-52	1.25e+08	0.78 y	0.77	31:23	0.856	0.853	0.861	94.0	94.0
13C-PCB-54	1.45e+08	0.80 y	0.97	27:55	0.762	0.758	0.766	86.3	86.3
13C-PCB-70	1.66e+08	0.79 y	1.00	35:23	0.966	0.961	0.971	96.3	96.3
13C-PCB-77	1.65e+08	0.78 y	0.94	39:31	1.078	1.073	1.083	101	101
13C-PCB-80	1.73e+08	0.77 y	1.03	35:48	0.977	0.972	0.982	97.0	97.0
13C-PCB-81	1.62e+08	0.79 y	0.92	38:55	1.062	1.057	1.067	102	102
13C-PCB-95	1.00e+08	1.59 y	0.74	35:42	0.913	0.908	0.918	94.8	94.8
13C-PCB-97	9.99e+07	1.64 y	0.70	38:40	0.989	0.984	0.994	99.0	99.0
13C-PCB-101	1.09e+08	1.60 y	0.78	37:22	0.956	0.951	0.961	96.8	96.8
13C-PCB-104	1.31e+08	1.58 y	1.00	32:33	0.833	0.828	0.836	91.6	91.6
13C-PCB-105	1.12e+08	1.58 y	1.37	42:57	0.928	0.924	0.934	73.5	73.5
13C-PCB-114	1.12e+08	1.56 y	1.36	42:05	0.909	0.905	0.915	73.7	73.7
13C-PCB-118	1.40e+08	1.61 y	0.96	41:25	1.060	1.054	1.064	102	102
13C-PCB-123	1.33e+08	1.59 y	0.89	41:14	1.055	1.050	1.060	104	104
13C-PCB-126	1.09e+08	1.55 y	1.31	45:12	0.977	0.972	0.982	75.0	75.0
13C-PCB-127	1.21e+08	1.58 y	1.47	43:17	0.935	0.931	0.941	74.0	74.0
13C-PCB-138	1.12e+08	1.29 y	1.10	44:41	0.966	0.961	0.971	91.8	91.8
13C-PCB-141	1.08e+08	1.29 y	1.07	43:50	0.947	0.943	0.953	90.2	90.2
13C-PCB-153	1.18e+08	1.27 y	1.15	43:06	0.931	0.927	0.937	92.3	92.3
13C-PCB-155	1.37e+08	1.26 y	0.84	36:55	0.944	0.939	0.949	114	114
13C-PCB-156	1.45e+08	1.27 y	1.30	47:59	1.037	1.032	1.042	101	101
13C-PCB-157	1.51e+08	1.27 y	1.36	48:15	1.043	1.038	1.048	100.0	100.0
13C-PCB-159	1.34e+08	1.28 y	1.25	45:59	0.994	0.989	0.999	96.9	96.9
13C-PCB-167	1.48e+08	1.28 y	1.35	46:40	1.009	1.004	1.014	98.2	98.2
13C-PCB-169	1.52e+08	1.26 y	1.29	50:18	1.087	1.083	1.093	106	106
13C-PCB-170	7.42e+07	0.46 y	0.54	50:38	1.094	1.089	1.101	123	123
13C-PCB-180	9.02e+07	0.45 y	0.68	49:15	1.064	1.060	1.070	118	118
13C-PCB-188	1.08e+08	0.46 y	0.92	42:44	0.923	0.919	0.929	106	106
13C-PCB-189	9.94e+07	0.45 y	0.72	52:04	1.125	1.120	1.132	125	125
13C-PCB-194	7.47e+07	0.90 y	0.80	53:35	0.994	0.990	1.000	98.0	98.0
13C-PCB-202	1.27e+08	0.91 y	0.84	48:11	1.041	1.036	1.046	136	136
13C-PCB-206	6.44e+07	0.78 y	0.65	55:19	1.027	1.021	1.031	104	104
13C-PCB-208	1.10e+08	0.78 y	1.08	52:49	0.980	0.976	0.986	107	107
13C-PCB-209	6.27e+07	1.17 y	0.61	56:36	1.050	1.045	1.055	108	108

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.72e+08	0.77 y	1.02	37:41	1.028	1.023	1.034	98.0	98.0
13C-PCB-178	7.58e+07	0.46 y	0.61	45:32	0.984	0.979	0.990	111	111

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.72e+08	0.77 y	1.10	37:41	0.968	0.964	0.974	96.5	96.5
13C-PCB-178	7.58e+07	0.46 y	0.90	45:32	0.925	0.920	0.930	93.6	93.6

RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.78e+08	1.57	y	1.00	25:54	100
13C-PCB-31	1.68e+08	1.06	y	1.00	28:54	100
13C-PCB-60	1.73e+08	0.77	y	1.00	36:39	100
13C-PCB-111	1.43e+08	1.60	y	1.00	39:05	100
13C-PCB-128	1.11e+08	1.25	y	1.00	46:17	100
13C-PCB-205	9.55e+07	0.90	y	1.00	53:53	100

Analyst: DMS

Date: 10/28/14

Vista Analytical Laboratory - Injection Log Run file: 141028E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141028E1	1	ST141028E1-1	DMS	28-OCT-14	08:54:00	ST141028E1-1	NA
141028E1	2	B4J0139-BS1	DMS	28-OCT-14	09:57:33	ST141028E1-1	NA
141028E1	3	SOLVENT BLANK	DMS	28-OCT-14	11:01:02	ST141028E1-1	NA
141028E1	4	B4J0139-BLK1	DMS	28-OCT-14	12:04:30	ST141028E1-1	NA
141028E1	5	1400737-02RE1@100X	DMS	28-OCT-14	13:08:00	ST141028E1-1	NA
141028E1	6	1400737-02RE1@50X	DMS	28-OCT-14	14:11:29	ST141028E1-1	NA
141028E1	7	1400737-03RE1@100X	DMS	28-OCT-14	15:14:58	ST141028E1-1	NA
141028E1	8	1400737-03RE1@50X	DMS	28-OCT-14	16:18:27	ST141028E1-1	NA
141028E1	9	SOLVENT BLANK	DMS	28-OCT-14	17:21:56	ST141028E1-1	NA
141028E1	10	SOLVENT BLANK	DMS	28-OCT-14	18:25:24	ST141028E1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST141028E1-1 End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	✓	NA
Concentration within range?	✓	
First and last eluters present?	✓	
Retention Times within criteria?	DMS 10/29/14	
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?	y	n

	Beg.	End
Mass resolution > 10,000? ▪ Method 1614 > 5,000; CARB 429 > 8,000	-	-
TCDD/TCDF valleys < 25%?	NA	NA
Peaks integrated correctly?	✓	
Manual integrations included?	✓	
8280 CS1 Ending Standard		
-Ratios within limits		
-S/N > 2.5:1		
-CS1 within 12-hour clock		✓

Comments:

Reviewed by: MD 10/29/14
Initials & Date

* *Ending standard criteria applicable to 8290 only.*

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 mh

INITIAL CALIBRATION

Initial Calibration RRF Summary (ICAL) Vista Analytical Laboratory
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Inst. ID. VG-7

Data filename: 141016D1

			Samp# 1	Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 7
			10	0.25	0.50	2.0	40	200
Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
2,3,7,8-TCDD	1.18	8.84 %	1.11	1.36	1.22	1.06	1.16	1.20
1,2,3,7,8-PeCDD	0.92	4.24 %	0.93	0.94	0.93	0.84	0.93	0.95
1,2,3,4,7,8-HxCDD	1.09	5.48 %	1.08	1.18	1.07	1.00	1.08	1.12
1,2,3,6,7,8-HxCDD	1.07	5.59 %	1.06	1.06	1.07	0.96	1.13	1.12
1,2,3,7,8,9-HxCDD	0.93	4.12 %	0.92	0.98	0.95	0.86	0.93	0.94
1,2,3,4,6,7,8-HpCDD	1.12	4.25 %	1.12	1.04	1.14	1.07	1.14	1.17
OCDD	0.95	4.99 %	0.97	0.96	0.97	0.85	0.97	0.98
2,3,7,8-TCDF	1.08	6.64 %	1.00	1.16	1.15	0.99	1.08	1.08
1,2,3,7,8-PeCDF	1.09	5.09 %	1.10	1.13	1.05	1.00	1.11	1.14
2,3,4,7,8-PeCDF	1.04	3.90 %	1.05	1.04	1.06	0.96	1.07	1.08
1,2,3,4,7,8-HxCDF	1.39	3.27 %	1.40	1.42	1.37	1.31	1.42	1.42
1,2,3,6,7,8-HxCDF	1.26	5.39 %	1.26	1.34	1.29	1.14	1.26	1.30
2,3,4,6,7,8-HxCDF	1.30	4.20 %	1.28	1.30	1.33	1.20	1.34	1.35
1,2,3,7,8,9-HxCDF	1.19	3.60 %	1.16	1.25	1.18	1.13	1.20	1.23
1,2,3,4,6,7,8-HpCDF	1.62	4.07 %	1.59	1.67	1.66	1.49	1.64	1.64
1,2,3,4,7,8,9-HpCDF	1.53	4.58 %	1.54	1.58	1.55	1.39	1.53	1.57
OCDF	1.10	4.20 %	1.11	1.09	1.13	1.01	1.13	1.14
13C-2,3,7,8-TCDD	1.07	5.97 %	1.05	1.00	1.07	1.04	1.10	1.18
13C-1,2,3,7,8-PeCDD	1.24	12.79 %	1.06	1.09	1.23	1.23	1.34	1.49
13C-1,2,3,4,7,8-HxCDD	0.72	7.50 %	0.70	0.69	0.70	0.70	0.73	0.83
13C-1,2,3,6,7,8-HxCDD	0.74	6.26 %	0.72	0.71	0.71	0.71	0.73	0.83
13C-1,2,3,7,8,9-HxCDD	0.86	6.66 %	0.83	0.81	0.83	0.83	0.86	0.97
13C-1,2,3,4,6,7,8-HpCDD	0.64	7.66 %	0.63	0.61	0.61	0.62	0.66	0.74
13C-OCDD	0.78	10.54 %	0.70	0.73	0.76	0.77	0.79	0.94
13C-2,3,7,8-TCDF	0.92	3.07 %	0.93	0.89	0.91	0.91	0.94	0.97
13C-1,2,3,7,8-PeCDF	0.95	10.44 %	0.86	0.87	0.90	0.95	1.01	1.12
13C-2,3,4,7,8-PeCDF	0.97	10.58 %	0.89	0.89	0.91	0.96	1.02	1.15
13C-1,2,3,4,7,8-HxCDF	0.99	7.56 %	0.92	0.94	0.96	0.98	1.01	1.13
13C-1,2,3,6,7,8-HxCDF	1.10	7.86 %	1.07	1.00	1.05	1.09	1.12	1.25
13C-2,3,4,6,7,8-HxCDF	1.03	5.39 %	0.97	1.00	1.02	1.01	1.04	1.13
13C-1,2,3,7,8,9-HxCDF	0.86	7.21 %	0.84	0.82	0.82	0.83	0.87	0.98
13C-1,2,3,4,6,7,8-HpCDF	0.71	7.44 %	0.70	0.69	0.67	0.69	0.72	0.82
13C-1,2,3,4,7,8,9-HpCDF	0.71	9.22 %	0.65	0.69	0.67	0.67	0.74	0.83
13C-OCDF	0.87	11.25 %	0.82	0.80	0.83	0.85	0.88	1.06
37Cl-2,3,7,8-TCDD	1.21	11.67 %	1.22	1.08	1.03	1.24	1.27	1.43
13C-1,2,3,4-TCDD	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	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 10/17/14
CG 10/17/14

Filename: 141016D1 S: 1 Acquired: 16-OCT-14 11:05:57
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-1 1613 CS3 14I1102

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	10.00	2.08e+06	0.73 y	26:60	-	1.11
2	Unk	1,2,3,7,8-PeCDD	50.00	8.78e+06	0.61 y	31:30	-	0.93
3	Unk	1,2,3,4,7,8-HxCDD	50.00	7.82e+06	1.26 y	34:50	-	1.08
4	Unk	1,2,3,6,7,8-HxCDD	50.00	7.94e+06	1.25 y	34:57	-	1.06
5	Unk	1,2,3,7,8,9-HxCDD	50.00	7.97e+06	1.24 y	35:15	-	0.92
6	Unk	1,2,3,4,6,7,8-HpCDD	50.00	7.29e+06	1.04 y	38:42	-	1.12
7	Unk	OCDD	100.00	1.40e+07	0.89 y	42:02	-	0.97
8	Unk	2,3,7,8-TCDF	10.00	2.78e+06	0.80 y	26:13	-	1.00
9	Unk	1,2,3,7,8-PeCDF	50.00	1.40e+07	1.59 y	30:20	-	1.10
10	Unk	2,3,4,7,8-PeCDF	50.00	1.38e+07	1.59 y	31:14	-	1.05
11	Unk	1,2,3,4,7,8-HxCDF	50.00	1.34e+07	1.29 y	33:56	-	1.40
12	Unk	1,2,3,6,7,8-HxCDF	50.00	1.40e+07	1.29 y	34:04	-	1.26
13	Unk	2,3,4,6,7,8-HxCDF	50.00	1.29e+07	1.31 y	34:40	-	1.28
14	Unk	1,2,3,7,8,9-HxCDF	50.00	1.01e+07	1.27 y	35:39	-	1.16
15	Unk	1,2,3,4,6,7,8-HpCDF	50.00	1.16e+07	1.08 y	37:30	-	1.59
16	Unk	1,2,3,4,7,8,9-HpCDF	50.00	1.04e+07	1.07 y	39:16	-	1.54
17	Unk	OCDF	100.00	1.88e+07	0.91 y	42:16	-	1.11
36	IS	13C-2,3,7,8-TCDD	100.00	1.87e+07	0.79 y	26:58	-	1.05
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.90e+07	0.63 y	31:29	-	1.06
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.44e+07	1.25 y	34:49	-	0.70
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.50e+07	1.25 y	34:56	-	0.72
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	1.72e+07	1.23 y	35:14	-	0.83
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.30e+07	1.07 y	38:42	-	0.63
42	IS	13C-OCDD	200.00	2.89e+07	0.89 y	42:02	-	0.70
43	IS	13C-2,3,7,8-TCDF	100.00	2.77e+07	0.74 y	26:12	-	0.93
44	IS	13C-1,2,3,7,8-PeCDF	100.00	2.54e+07	1.55 y	30:19	-	0.86
45	IS	13C-2,3,4,7,8-PeCDF	100.00	2.63e+07	1.61 y	31:13	-	0.89
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.92e+07	0.51 y	33:55	-	0.92
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	2.23e+07	0.50 y	34:03	-	1.07
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	2.02e+07	0.52 y	34:39	-	0.97
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.73e+07	0.51 y	35:38	-	0.84
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.46e+07	0.43 y	37:29	-	0.70
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.35e+07	0.45 y	39:15	-	0.65
52	IS	13C-OCDF	200.00	3.39e+07	0.92 y	42:15	-	0.82
53	C/Up	37Cl-2,3,7,8-TCDD	10.00	2.18e+06		26:59	-	1.22
54	RS/RT	13C-1,2,3,4-TCDD	100.00	1.79e+07	0.80 y	26:24	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	2.97e+07	0.78 y	24:58	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	2.08e+07	0.51 y	34:21	-	1.00

Filename: 141016D1 S: 3 Acquired: 16-OCT-14 12:42:43
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-2 1613 CS0 14I1819

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
1	Unk	2,3,7,8-TCDD	0.25	5.01e+04	0.71	y	27:03	-	1.36
2	Unk	1,2,3,7,8-PeCDD	1.25	1.89e+05	0.58	y	31:32	-	0.94
3	Unk	1,2,3,4,7,8-HxCDD	1.25	1.80e+05	1.38	y	34:52	-	1.18
4	Unk	1,2,3,6,7,8-HxCDD	1.25	1.66e+05	1.38	y	34:59	-	1.06
5	Unk	1,2,3,7,8,9-HxCDD	1.25	1.76e+05	1.42	y	35:17	-	0.98
6	Unk	1,2,3,4,6,7,8-HpCDD	1.25	1.40e+05	0.92	y	38:44	-	1.04
7	Unk	OCDD	2.50	3.13e+05	0.92	y	42:04	-	0.96
8	Unk	2,3,7,8-TCDF	0.25	6.52e+04	0.82	y	26:17	-	1.16
9	Unk	1,2,3,7,8-PeCDF	1.25	3.11e+05	1.49	y	30:22	-	1.13
10	Unk	2,3,4,7,8-PeCDF	1.25	2.91e+05	1.54	y	31:15	-	1.04
11	Unk	1,2,3,4,7,8-HxCDF	1.25	2.95e+05	1.36	y	33:58	-	1.42
12	Unk	1,2,3,6,7,8-HxCDF	1.25	2.95e+05	1.26	y	34:06	-	1.34
13	Unk	2,3,4,6,7,8-HxCDF	1.25	2.89e+05	1.31	y	34:43	-	1.30
14	Unk	1,2,3,7,8,9-HxCDF	1.25	2.25e+05	1.36	y	35:41	-	1.25
15	Unk	1,2,3,4,6,7,8-HpCDF	1.25	2.54e+05	1.14	y	37:32	-	1.67
16	Unk	1,2,3,4,7,8,9-HpCDF	1.25	2.39e+05	1.08	y	39:18	-	1.58
17	Unk	OCDF	2.50	3.84e+05	0.91	y	42:18	-	1.09
36	IS	13C-2,3,7,8-TCDD	100.00	1.47e+07	0.79	y	27:02	-	1.00
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.61e+07	0.64	y	31:32	-	1.09
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.22e+07	1.24	y	34:51	-	0.69
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.25e+07	1.31	y	34:58	-	0.71
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	1.44e+07	1.29	y	35:16	-	0.81
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.07e+07	1.03	y	38:43	-	0.61
42	IS	13C-OCDD	200.00	2.60e+07	0.89	y	42:03	-	0.73
43	IS	13C-2,3,7,8-TCDF	100.00	2.24e+07	0.75	y	26:16	-	0.89
44	IS	13C-1,2,3,7,8-PeCDF	100.00	2.20e+07	1.59	y	30:21	-	0.87
45	IS	13C-2,3,4,7,8-PeCDF	100.00	2.24e+07	1.61	y	31:15	-	0.89
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.66e+07	0.52	y	33:57	-	0.94
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.77e+07	0.51	y	34:05	-	1.00
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.77e+07	0.51	y	34:42	-	1.00
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.45e+07	0.52	y	35:40	-	0.82
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.22e+07	0.44	y	37:31	-	0.69
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.21e+07	0.43	y	39:17	-	0.69
52	IS	13C-OCDF	200.00	2.81e+07	0.92	y	42:17	-	0.80
53	C/Up	37Cl-2,3,7,8-TCDD	0.25	4.00e+04			27:03	-	1.08
54	RS/RT	13C-1,2,3,4-TCDD	100.00	1.48e+07	0.80	y	26:28	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	2.52e+07	0.78	y	25:03	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	1.77e+07	0.53	y	34:23	-	1.00

Filename: 141016D1 S: 4 Acquired: 16-OCT-14 13:31:08
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-3 1613 CS1 14I1820

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
1	Unk	2,3,7,8-TCDD	0.50	9.47e+04	0.71	y	27:03	-	1.22
2	Unk	1,2,3,7,8-PeCDD	2.50	4.17e+05	0.58	y	31:32	-	0.93
3	Unk	1,2,3,4,7,8-HxCDD	2.50	3.52e+05	1.23	y	34:52	-	1.07
4	Unk	1,2,3,6,7,8-HxCDD	2.50	3.60e+05	1.19	y	34:59	-	1.07
5	Unk	1,2,3,7,8,9-HxCDD	2.50	3.72e+05	1.18	y	35:16	-	0.95
6	Unk	1,2,3,4,6,7,8-HpCDD	2.50	3.28e+05	1.04	y	38:44	-	1.14
7	Unk	OCDD	5.00	7.00e+05	0.91	y	42:03	-	0.97
8	Unk	2,3,7,8-TCDF	0.50	1.35e+05	0.76	y	26:17	-	1.15
9	Unk	1,2,3,7,8-PeCDF	2.50	6.14e+05	1.75	y	30:22	-	1.05
10	Unk	2,3,4,7,8-PeCDF	2.50	6.26e+05	1.44	y	31:15	-	1.06
11	Unk	1,2,3,4,7,8-HxCDF	2.50	6.24e+05	1.23	y	33:58	-	1.37
12	Unk	1,2,3,6,7,8-HxCDF	2.50	6.42e+05	1.32	y	34:06	-	1.29
13	Unk	2,3,4,6,7,8-HxCDF	2.50	6.41e+05	1.24	y	34:42	-	1.33
14	Unk	1,2,3,7,8,9-HxCDF	2.50	4.56e+05	1.22	y	35:40	-	1.18
15	Unk	1,2,3,4,6,7,8-HpCDF	2.50	5.24e+05	1.07	y	37:32	-	1.66
16	Unk	1,2,3,4,7,8,9-HpCDF	2.50	4.91e+05	1.14	y	39:17	-	1.55
17	Unk	OCDF	5.00	8.91e+05	0.93	y	42:17	-	1.13
36	IS	13C-2,3,7,8-TCDD	100.00	1.56e+07	0.78	y	27:02	-	1.07
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.79e+07	0.63	y	31:31	-	1.23
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.32e+07	1.27	y	34:51	-	0.70
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.35e+07	1.26	y	34:58	-	0.71
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	1.56e+07	1.27	y	35:16	-	0.83
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.15e+07	1.05	y	38:43	-	0.61
42	IS	13C-OCDD	200.00	2.89e+07	0.89	y	42:03	-	0.76
43	IS	13C-2,3,7,8-TCDF	100.00	2.36e+07	0.78	y	26:16	-	0.91
44	IS	13C-1,2,3,7,8-PeCDF	100.00	2.34e+07	1.58	y	30:21	-	0.90
45	IS	13C-2,3,4,7,8-PeCDF	100.00	2.37e+07	1.54	y	31:14	-	0.91
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.82e+07	0.52	y	33:57	-	0.96
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.99e+07	0.52	y	34:05	-	1.05
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.93e+07	0.52	y	34:41	-	1.02
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.55e+07	0.53	y	35:40	-	0.82
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.26e+07	0.43	y	37:31	-	0.67
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.27e+07	0.44	y	39:16	-	0.67
52	IS	13C-OCDF	200.00	3.15e+07	0.89	y	42:17	-	0.83
53	C/Up	37Cl-2,3,7,8-TCDD	0.50	7.54e+04			27:03	-	1.03
54	RS/RT	13C-1,2,3,4-TCDD	100.00	1.46e+07	0.79	y	26:28	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	2.60e+07	0.77	y	25:03	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	1.89e+07	0.52	y	34:22	-	1.00

Filename: 141016D1 S: 5 Acquired: 16-OCT-14 14:19:34
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-4 1613 CS2 14I1821

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
1	Unk	2,3,7,8-TCDD	2.00	3.13e+05	0.82	y	27:03	-	1.06
2	Unk	1,2,3,7,8-PeCDD	10.00	1.47e+06	0.59	y	31:32	-	0.84
3	Unk	1,2,3,4,7,8-HxCDD	10.00	1.26e+06	1.28	y	34:52	-	1.00
4	Unk	1,2,3,6,7,8-HxCDD	10.00	1.24e+06	1.26	y	34:59	-	0.96
5	Unk	1,2,3,7,8,9-HxCDD	10.00	1.30e+06	1.28	y	35:17	-	0.86
6	Unk	1,2,3,4,6,7,8-HpCDD	10.00	1.21e+06	1.04	y	38:44	-	1.07
7	Unk	OCDD	20.00	2.38e+06	0.87	y	42:03	-	0.85
8	Unk	2,3,7,8-TCDF	2.00	4.47e+05	0.78	y	26:17	-	0.99
9	Unk	1,2,3,7,8-PeCDF	10.00	2.35e+06	1.55	y	30:22	-	1.00
10	Unk	2,3,4,7,8-PeCDF	10.00	2.32e+06	1.57	y	31:15	-	0.96
11	Unk	1,2,3,4,7,8-HxCDF	10.00	2.31e+06	1.29	y	33:58	-	1.31
12	Unk	1,2,3,6,7,8-HxCDF	10.00	2.24e+06	1.28	y	34:06	-	1.14
13	Unk	2,3,4,6,7,8-HxCDF	10.00	2.19e+06	1.30	y	34:42	-	1.20
14	Unk	1,2,3,7,8,9-HxCDF	10.00	1.69e+06	1.33	y	35:41	-	1.13
15	Unk	1,2,3,4,6,7,8-HpCDF	10.00	1.86e+06	1.10	y	37:32	-	1.49
16	Unk	1,2,3,4,7,8,9-HpCDF	10.00	1.69e+06	1.09	y	39:17	-	1.39
17	Unk	OCDF	20.00	3.11e+06	0.93	y	42:17	-	1.01
36	IS	13C-2,3,7,8-TCDD	100.00	1.47e+07	0.79	y	27:02	-	1.04
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.74e+07	0.63	y	31:31	-	1.23
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.26e+07	1.28	y	34:51	-	0.70
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.29e+07	1.24	y	34:58	-	0.71
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	1.51e+07	1.23	y	35:16	-	0.83
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.13e+07	1.05	y	38:43	-	0.62
42	IS	13C-OCDD	200.00	2.79e+07	0.88	y	42:03	-	0.77
43	IS	13C-2,3,7,8-TCDF	100.00	2.26e+07	0.77	y	26:16	-	0.91
44	IS	13C-1,2,3,7,8-PeCDF	100.00	2.36e+07	1.54	y	30:21	-	0.95
45	IS	13C-2,3,4,7,8-PeCDF	100.00	2.40e+07	1.57	y	31:14	-	0.96
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.77e+07	0.50	y	33:57	-	0.98
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.97e+07	0.51	y	34:05	-	1.09
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.83e+07	0.52	y	34:41	-	1.01
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.50e+07	0.52	y	35:40	-	0.83
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.24e+07	0.43	y	37:31	-	0.69
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.22e+07	0.43	y	39:16	-	0.67
52	IS	13C-OCDF	200.00	3.07e+07	0.90	y	42:17	-	0.85
53	C/Up	37Cl-2,3,7,8-TCDD	2.00	3.51e+05			27:03	-	1.24
54	RS/RT	13C-1,2,3,4-TCDD	100.00	1.41e+07	0.80	y	26:28	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	2.49e+07	0.77	y	25:03	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	1.80e+07	0.52	y	34:22	-	1.00

Filename: 141016D1 S: 6 Acquired: 16-OCT-14 15:08:00
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-5 1613 CS4 14I1822

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	40.00	6.36e+06	0.79 y	27:03	-	1.16
2	Unk	1,2,3,7,8-PeCDD	200.00	3.08e+07	0.61 y	31:32	-	0.93
3	Unk	1,2,3,4,7,8-HxCDD	200.00	2.57e+07	1.25 y	34:52	-	1.08
4	Unk	1,2,3,6,7,8-HxCDD	200.00	2.66e+07	1.26 y	34:59	-	1.13
5	Unk	1,2,3,7,8,9-HxCDD	200.00	2.59e+07	1.24 y	35:17	-	0.93
6	Unk	1,2,3,4,6,7,8-HpCDD	200.00	2.46e+07	1.04 y	38:44	-	1.14
7	Unk	OCDD	400.00	5.00e+07	0.89 y	42:03	-	0.97
8	Unk	2,3,7,8-TCDF	40.00	8.92e+06	0.77 y	26:17	-	1.08
9	Unk	1,2,3,7,8-PeCDF	200.00	4.90e+07	1.58 y	30:22	-	1.11
10	Unk	2,3,4,7,8-PeCDF	200.00	4.76e+07	1.60 y	31:15	-	1.07
11	Unk	1,2,3,4,7,8-HxCDF	200.00	4.66e+07	1.28 y	33:58	-	1.42
12	Unk	1,2,3,6,7,8-HxCDF	200.00	4.56e+07	1.28 y	34:06	-	1.26
13	Unk	2,3,4,6,7,8-HxCDF	200.00	4.54e+07	1.26 y	34:42	-	1.34
14	Unk	1,2,3,7,8,9-HxCDF	200.00	3.40e+07	1.28 y	35:40	-	1.20
15	Unk	1,2,3,4,6,7,8-HpCDF	200.00	3.84e+07	1.09 y	37:32	-	1.64
16	Unk	1,2,3,4,7,8,9-HpCDF	200.00	3.69e+07	1.08 y	39:17	-	1.53
17	Unk	OCDF	400.00	6.50e+07	0.92 y	42:18	-	1.13
36	IS	13C-2,3,7,8-TCDD	100.00	1.37e+07	0.81 y	27:02	-	1.10
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.66e+07	0.63 y	31:31	-	1.34
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.19e+07	1.25 y	34:51	-	0.73
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.18e+07	1.26 y	34:58	-	0.73
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	1.40e+07	1.24 y	35:16	-	0.86
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.08e+07	1.07 y	38:43	-	0.66
42	IS	13C-OCDD	200.00	2.58e+07	0.89 y	42:03	-	0.79
43	IS	13C-2,3,7,8-TCDF	100.00	2.07e+07	0.77 y	26:16	-	0.94
44	IS	13C-1,2,3,7,8-PeCDF	100.00	2.21e+07	1.61 y	30:21	-	1.01
45	IS	13C-2,3,4,7,8-PeCDF	100.00	2.23e+07	1.57 y	31:14	-	1.02
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.64e+07	0.51 y	33:57	-	1.01
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.82e+07	0.50 y	34:05	-	1.12
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.69e+07	0.51 y	34:41	-	1.04
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.41e+07	0.52 y	35:40	-	0.87
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.17e+07	0.45 y	37:31	-	0.72
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.20e+07	0.44 y	39:16	-	0.74
52	IS	13C-OCDF	200.00	2.87e+07	0.89 y	42:17	-	0.88
53	C/Up	37Cl-2,3,7,8-TCDD	40.00	6.31e+06		27:03	-	1.27
54	RS/RT	13C-1,2,3,4-TCDD	100.00	1.24e+07	0.82 y	26:28	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	2.19e+07	0.79 y	25:03	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	1.63e+07	0.51 y	34:22	-	1.00

Filename: 141016D1 S: 7 Acquired: 16-OCT-14 15:56:26
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-6 1613 CS5 14I1823

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	200.00	3.39e+07	0.77 y	27:03	-	1.20
2	Unk	1,2,3,7,8-PeCDD	1000.00	1.69e+08	0.62 y	31:32	-	0.95
3	Unk	1,2,3,4,7,8-HxCDD	1000.00	1.51e+08	1.26 y	34:52	-	1.12
4	Unk	1,2,3,6,7,8-HxCDD	1000.00	1.51e+08	1.26 y	34:59	-	1.12
5	Unk	1,2,3,7,8,9-HxCDD	1000.00	1.48e+08	1.26 y	35:17	-	0.94
6	Unk	1,2,3,4,6,7,8-HpCDD	1000.00	1.39e+08	1.04 y	38:43	-	1.17
7	Unk	OCDD	2000.00	2.98e+08	0.90 y	42:03	-	0.98
8	Unk	2,3,7,8-TCDF	200.00	4.44e+07	0.78 y	26:17	-	1.08
9	Unk	1,2,3,7,8-PeCDF	1000.00	2.73e+08	1.58 y	30:22	-	1.14
10	Unk	2,3,4,7,8-PeCDF	1000.00	2.66e+08	1.60 y	31:15	-	1.08
11	Unk	1,2,3,4,7,8-HxCDF	1000.00	2.60e+08	1.27 y	33:58	-	1.42
12	Unk	1,2,3,6,7,8-HxCDF	1000.00	2.64e+08	1.27 y	34:06	-	1.30
13	Unk	2,3,4,6,7,8-HxCDF	1000.00	2.48e+08	1.29 y	34:42	-	1.35
14	Unk	1,2,3,7,8,9-HxCDF	1000.00	1.95e+08	1.28 y	35:40	-	1.23
15	Unk	1,2,3,4,6,7,8-HpCDF	1000.00	2.17e+08	1.09 y	37:32	-	1.64
16	Unk	1,2,3,4,7,8,9-HpCDF	1000.00	2.10e+08	1.10 y	39:17	-	1.57
17	Unk	OCDF	2000.00	3.92e+08	0.91 y	42:17	-	1.14
36	IS	13C-2,3,7,8-TCDD	100.00	1.41e+07	0.77 y	27:02	-	1.18
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.78e+07	0.65 y	31:31	-	1.49
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.35e+07	1.26 y	34:51	-	0.83
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.34e+07	1.26 y	34:58	-	0.83
40	IS	13C-1,2,3,7,8,9-HxCDD	100.00	1.57e+07	1.27 y	35:15	-	0.97
41	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.19e+07	1.05 y	38:43	-	0.74
42	IS	13C-OCDD	200.00	3.03e+07	0.87 y	42:03	-	0.94
43	IS	13C-2,3,7,8-TCDF	100.00	2.06e+07	0.74 y	26:15	-	0.97
44	IS	13C-1,2,3,7,8-PeCDF	100.00	2.39e+07	1.59 y	30:21	-	1.12
45	IS	13C-2,3,4,7,8-PeCDF	100.00	2.46e+07	1.62 y	31:14	-	1.15
46	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.83e+07	0.52 y	33:57	-	1.13
47	IS	13C-1,2,3,6,7,8-HxCDF	100.00	2.03e+07	0.52 y	34:05	-	1.25
48	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.84e+07	0.51 y	34:41	-	1.13
49	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.59e+07	0.51 y	35:39	-	0.98
50	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.32e+07	0.43 y	37:31	-	0.82
51	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.34e+07	0.44 y	39:16	-	0.83
52	IS	13C-OCDF	200.00	3.45e+07	0.89 y	42:17	-	1.06
53	C/Up	37Cl-2,3,7,8-TCDD	200.00	3.41e+07		27:03	-	1.43
54	RS/RT	13C-1,2,3,4-TCDD	100.00	1.19e+07	0.82 y	26:28	-	1.00
55	RS	13C-1,2,3,4-TCDF	100.00	2.14e+07	0.76 y	25:03	-	1.00
56	RS/RT	13C-1,2,3,4,6,9-HxCDF	100.00	1.62e+07	0.52 y	34:22	-	1.00

Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Inst. ID. VG-7

Data filename: 141016D1			Samp# 1	Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 7
			10	0.25	0.50	2.0	40	200
	RRT Limits							
Name	Lower	Upper	RRT#1	RRT#2	RRT#3	RRT#4	RRT#5	RRT#6
2,3,7,8-TCDD	0.999	-1.002	1.001	1.001	1.001	1.001	1.001	1.001
1,2,3,7,8-PeCDD	0.999	-1.002	1.000	1.000	1.000	1.000	1.000	1.000
1,2,3,4,7,8-HxCDD	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
1,2,3,6,7,8-HxCDD	0.998	-1.004	1.001	1.000	1.000	1.000	1.000	1.000
1,2,3,7,8,9-HxCDD	0.998	-1.004	1.000	1.000	1.000	1.000	1.000	1.001
1,2,3,4,6,7,8-HpCDD	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
OCDD	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
2,3,7,8-TCDF	0.999	-1.003	1.001	1.001	1.001	1.001	1.001	1.001
1,2,3,7,8-PeCDF	0.999	-1.002	1.000	1.001	1.000	1.000	1.000	1.000
2,3,4,7,8-PeCDF	0.999	-1.002	1.000	1.000	1.000	1.000	1.000	1.000
1,2,3,4,7,8-HxCDF	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.001
1,2,3,6,7,8-HxCDF	0.997	-1.005	1.001	1.000	1.001	1.001	1.001	1.000
2,3,4,6,7,8-HxCDF	0.999	-1.001	1.001	1.000	1.000	1.001	1.001	1.000
1,2,3,7,8,9-HxCDF	0.999	-1.001	1.000	1.000	1.000	1.001	1.000	1.000
1,2,3,4,6,7,8-HpCDF	0.999	-1.001	1.000	1.001	1.000	1.000	1.000	1.000
1,2,3,4,7,8,9-HpCDF	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
OCDF	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
13C-2,3,7,8-TCDD	0.976	-1.043	1.021	1.021	1.021	1.021	1.021	1.021
13C-1,2,3,7,8-PeCDD	1.000	-1.567	1.192	1.191	1.191	1.191	1.191	1.191
13C-1,2,3,4,7,8-HxCDD	1.002	-1.026	1.014	1.014	1.014	1.014	1.014	1.014
13C-1,2,3,6,7,8-HxCDD	1.007	-1.029	1.017	1.017	1.017	1.017	1.017	1.017
13C-1,2,3,7,8,9-HxCDD	1.014	-1.038	1.026	1.026	1.026	1.026	1.026	1.026
13C-1,2,3,4,6,7,8-HpCDD	1.117	-1.141	1.127	1.126	1.126	1.126	1.126	1.126
13C-OCDD	1.085	-1.365	1.224	1.223	1.223	1.223	1.223	1.223
13C-2,3,7,8-TCDF	0.923	-1.103	0.992	0.992	0.992	0.992	0.992	0.992
13C-1,2,3,7,8-PeCDF	1.000	-1.425	1.148	1.147	1.147	1.147	1.147	1.147
13C-2,3,4,7,8-PeCDF	1.011	-1.526	1.182	1.181	1.180	1.180	1.180	1.181
13C-1,2,3,4,7,8-HxCDF	0.975	-1.001	0.988	0.988	0.988	0.988	0.988	0.988
13C-1,2,3,6,7,8-HxCDF	0.979	-1.005	0.991	0.991	0.992	0.992	0.992	0.992
13C-2,3,4,6,7,8-HxCDF	1.001	-1.020	1.009	1.009	1.009	1.009	1.009	1.009
13C-1,2,3,7,8,9-HxCDF	1.002	-1.072	1.037	1.037	1.038	1.038	1.037	1.037
13C-1,2,3,4,6,7,8-HpCDF	1.069	-1.111	1.091	1.091	1.091	1.091	1.091	1.091
13C-1,2,3,4,7,8,9-HpCDF	1.098	-1.192	1.143	1.142	1.143	1.143	1.143	1.142
13C-OCDF	1.091	-1.371	1.230	1.230	1.230	1.230	1.230	1.230
37Cl-2,3,7,8-TCDD	0.989	-1.052	1.022	1.022	1.022	1.022	1.022	1.022
13C-1,2,3,4-TCDD	0.000	-0.000	*	*	*	*	*	*
13C-1,2,3,4-TCDF	0.000	-0.000	*	*	*	*	*	*
13C-1,2,3,4,6,9-HxCDF	0.000	-0.000	*	*	*	*	*	*

Filename: 141016D1 S: 1 Acquired: 16-OCT-14 11:05:57
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-1 1613 CS3 14I1102

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.11
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.11
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.93
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	0.93
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.02
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.02
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.12
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	1.12
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.00
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.00
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	1.07
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	1.07
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	1.07
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	1.07
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.28
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.28
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.57
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.57

Filename: 141016D1 S: 3 Acquired: 16-OCT-14 12:42:43
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-2 1613 CS0 14I1819

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.36
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.36
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.94
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	0.94
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.07
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	1.07
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.04
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.04
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.16
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	1.16
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	1.08
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	1.08
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	1.08
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	1.08
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.33
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.33
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.62
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.62

Filename: 141016D1 S: 4 Acquired: 16-OCT-14 13:31:08
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-3 1613 CS1 14I1820

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.22
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.22
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.93
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	0.93
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.03
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	1.03
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.14
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.14
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.15
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	1.15
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	1.05
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	1.05
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	1.05
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	1.05
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.30
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.30
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.60
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.60

Filename: 141016D1 S: 5 Acquired: 16-OCT-14 14:19:34
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-4 1613 CS2 14I1821

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.06
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.06
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.84
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	0.84
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	0.94
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	0.94
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.07
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.07
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	0.99
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	0.99
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	0.98
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	0.98
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	0.98
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	0.98
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.19
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.19
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.44
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.44

Filename: 141016D1 S: 6 Acquired: 16-OCT-14 15:08:00
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-5 1613 CS4 14I1822

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.16
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.16
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.93
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	0.93
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.04
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	1.04
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.14
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.14
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.08
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	1.08
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	1.09
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	1.09
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	1.09
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	1.09
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.31
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.31
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.59
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.59

Filename: 141016D1 S: 7 Acquired: 16-OCT-14 15:56:26
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-6 1613 CS5 14I1823

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.20
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.20
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.95
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	0.95
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.06
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	1.06
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.17
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.17
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.08
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	1.08
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	1.11
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	1.11
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	1.11
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	1.11
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.32
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.32
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.60
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.60

Run: 141016D1 Analyte: Cal: 1613VG7-10-16-1 Inst. ID. VG-7

Data filename: 141016D1

Name	Mean RRF	%RSD	Samp# 1 10 RRF#1	Samp# 3 0.25 RRF#2	Samp# 4 0.50 RRF#3	Samp# 5 2.0 RRF#4	Samp# 6 40 RRF#5	Samp# 7 200 RRF#6
Total Tetra-Dioxins	1.18	8.84 %	1.11	1.36	1.22	1.06	1.16	1.20
TCDD EMPC	1.18	8.84 %	1.11	1.36	1.22	1.06	1.16	1.20
Total Penta-Dioxins	0.92	4.24 %	0.93	0.94	0.93	0.84	0.93	0.95
PeCDD EMPC	0.92	4.24 %	0.93	0.94	0.93	0.84	0.93	0.95
Total Hexa-Dioxins	1.02	4.51 %	1.02	1.07	1.03	0.94	1.04	1.06
HxCDD EMPC	1.02	4.51 %	1.02	1.07	1.03	0.94	1.04	1.06
Total Hepta-Dioxins	1.12	4.25 %	1.12	1.04	1.14	1.07	1.14	1.17
HpCDD EMPC	1.12	4.25 %	1.12	1.04	1.14	1.07	1.14	1.17
Total Tetra-Furans	1.08	6.64 %	1.00	1.16	1.15	0.99	1.08	1.08
TCDF EMPC	1.08	6.64 %	1.00	1.16	1.15	0.99	1.08	1.08
1st Func. Penta-Furans	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
1st Func. PeCDF EMPC	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
Total Penta-Furans	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
PeCDF EMPC	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
Total Hexa-Furans	1.29	3.86 %	1.28	1.33	1.30	1.19	1.31	1.32
HxCDF EMPC	1.29	3.86 %	1.28	1.33	1.30	1.19	1.31	1.32
Total Hepta-Furans	1.57	4.23 %	1.57	1.62	1.60	1.44	1.59	1.60
HpCDF EMPC	1.57	4.23 %	1.57	1.62	1.60	1.44	1.59	1.60

Vista Analytical Laboratory - Injection Log Run file: 141016D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141016D1	1	ST141016D1-1	MAS	16-OCT-14	11:05:57	ST141016D1-1	NA
141016D1	2	SOLVENT BLANK	MAS	16-OCT-14	11:54:17	ST141016D1-1	NA
141016D1	3	ST141016D1-2	MAS	16-OCT-14	12:42:43	ST141016D1-1	NA
141016D1	4	ST141016D1-3	MAS	16-OCT-14	13:31:08	ST141016D1-1	NA
141016D1	5	ST141016D1-4	MAS	16-OCT-14	14:19:34	ST141016D1-1	NA
141016D1	6	ST141016D1-5	MAS	16-OCT-14	15:08:00	ST141016D1-1	NA
141016D1	7	ST141016D1-6	MAS	16-OCT-14	15:56:26	ST141016D1-1	NA
141016D1	8	SOLVENT BLANK	MAS	16-OCT-14	16:44:52	ST141016D1-1	NA
141016D1	9	SS141016D1-1	MAS	16-OCT-14	17:33:17	ST141016D1-1	NA
141016D1	10	SOLVENT BLANK	MAS	16-OCT-14	18:21:38	ST141016D1-1	NA

Vista Analytical Laboratory VG-9

Dataset: C:\MassLynx\Default.pro\Results\140701F1\140701F1_crv.qld

Last Altered: Wednesday, July 02, 2014 07:18:51 Pacific Daylight Time
Printed: Wednesday, July 02, 2014 07:20:56 Pacific Daylight Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 01 Jul 2014 15:50:35
Calibration: C:\MassLynx\Default.pro\Curvedb\db-225_1613TCDFvg9-7-1-14.cdb 02 Jul 2014 07:18:51

Compound name: 2,3,7,8-TCDF
Response Factor: 0.916439
RRF SD: 0.0849787, Relative SD: 9.2727
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 140701F1_2	0.250	0.74	NO	16.49	4.76e3	2.17e6	0.239	0.876
2	2 140701F1_3	0.500	0.72	NO	16.46	6.12e3	1.40e6	0.476	0.872
3	3 140701F1_4	2.00	0.76	NO	16.46	3.35e4	2.05e6	1.79	0.818
4	4 140701F1_5	10.0	0.76	NO	16.46	4.31e4	4.82e5	9.77	0.895
5	5 140701F1_11	40.0	0.77	NO	16.46	5.53e5	1.39e6	43.3	0.992
6	6 140701F1_7	200	0.78	NO	16.46	4.45e6	2.13e6	228	1.05

CC 7/2/14

Compound name: 13C-2,3,7,8-TCDF
Response Factor: 0.986637
RRF SD: 0.0146992, Relative SD: 1.48983
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 140701F1_2	100	0.79	NO	16.46	2.17e6	2.24e6	98.4	0.971
2	2 140701F1_3	100	0.81	NO	16.44	1.40e6	1.45e6	98.0	0.967
3	3 140701F1_4	100	0.79	NO	16.45	2.05e6	2.05e6	101	0.997
4	4 140701F1_5	100	0.79	NO	16.44	4.82e5	4.90e5	99.8	0.984
5	5 140701F1_11	100	0.79	NO	16.45	1.39e6	1.40e6	101	0.998
6	6 140701F1_7	100	0.79	NO	16.44	2.13e6	2.13e6	101	1.00

- Bad injection on CS4, RI. See log CC 7/2/14

CC 7/2/14

Vista Analytical Laboratory VG-9

Dataset: C:\MassLynx\Default.pro\Results\140701F1\140701F1_crv.qld

Last Altered: Wednesday, July 02, 2014 07:18:51 Pacific Daylight Time
Printed: Wednesday, July 02, 2014 07:20:56 Pacific Daylight 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	140701F1_2	100	0.78	NO	14.29	2.24e6	2.24e6	100	1.00
2	2	140701F1_3	100	0.80	NO	14.28	1.45e6	1.45e6	100	1.00
3	3	140701F1_4	100	0.79	NO	14.28	2.05e6	2.05e6	100	1.00
4	4	140701F1_5	100	0.80	NO	14.27	4.90e5	4.90e5	100	1.00
5	5	140701F1_11	100	0.79	NO	14.28	1.40e6	1.40e6	100	1.00
6	6	140701F1_7	100	0.79	NO	14.29	2.13e6	2.13e6	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	140701F1_2	0.000	0.79	NO	15.03	1.89e6			0.000
2	2	140701F1_3	0.000	0.78	NO	15.02	1.19e6			0.000
3	3	140701F1_4	0.000	0.79	NO	15.02	1.62e6			0.000
4	4	140701F1_5	0.000	0.71	NO	15.01	4.32e5			0.000
5	5	140701F1_11	0.000	0.80	NO	15.02	1.22e6			0.000
6	6	140701F1_7	0.000	0.79	NO	15.02	1.62e6			0.000

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Vista Analytical Laboratory
CCAL ID: ST140701F1-4
Initial Calibration Date: 07/01/2014
Instrument ID: VG-9
GC Column ID: DB-225
VER Data file name: 140701F1_5
Analysis Date: 01-Jul-14
Analysis Time: 15:48:57

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABOUND. RATIO	QC LIMITS (2)	Flag	CONC. FOUND	CONC. RANGE (3) (ng/ml) 1613 Min	CONC. RANGE (3) (ng/ml) 1613 Max		CONC. RANGE (ng/ml) 8290 Min	CONC. RANGE (ng/ml) 8290 Max	
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	NO	9.77	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: _____

Date: 7/2/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Vista Analytical Laboratory — CCAL ID: ST140701F1-4
Initial Calibration Date: 07/01/2014
Instrument ID: VG-9 — GC Column ID: DB-225
VER Data file name: 140701F1_5 — Analysis Date: 01-Jul-14 — Analysis Time: 15:48:57

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABOUND. RATIO	QC LIMITS (2)	Flag	CONC. FOUND	CONC. RANGE (3) (ng/ml) 1613 Min	CONC. RANGE (3) (ng/ml) 1613 Max		CONC. RANGE (ng/ml) 8290 Min	CONC. RANGE (ng/ml) 8290 Max	
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	NO	99.8	71.0 76.0	140.0 131.0 (5)	Yes	70.0	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: CP
Date: 7/2/14

Dataset: C:\MassLynx\Default.pro\Results\140701F1\140701F1_crv.qld

Last Altered: Wednesday, July 02, 2014 07:18:51 Pacific Daylight Time
Printed: Wednesday, July 02, 2014 07:19:32 Pacific Daylight Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 01 Jul 2014 15:50:35
Calibration: 02 Jul 2014 07:18:51

Name: 140701F1_5, Date: 01-Jul-2014, Time: 15:48:57, ID: ST140701F1-4 1613 CS3 14L1811, Description: 1613 CS3 14L1811

	#-Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	4.31e4	0.76	NO	0.916	1.000	16.46	9.7659	97.7	0.735
2	2 13C-2,3,7,8-TCDF	4.82e5	0.79	NO	0.987	1.000	16.44	99.760	99.8	34.9
3	3 13C-1,2,3,4-TCDF	4.90e5	0.80	NO	1.00	1.000	14.27	100.00	100	34.4
4	4 13C-1,2,3,4-TCDD	4.32e5	0.71	NO		1.000	15.01			

7/1/14

Vista Analytical Laboratory VG-9

Dataset: Untitled

Last Altered: Wednesday, July 02, 2014 07:22:30 Pacific Daylight Time
Printed: Wednesday, July 02, 2014 07:22:44 Pacific Daylight Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 01 Jul 2014 15:50:35
Calibration: C:\MassLynx\Default.pro\Curvedb\db-225_1613TCDFvg9-7-1-14.cdb 02 Jul 2014 07:18:51

Compound name: 2,3,7,8-TCDF

	Name	ID	Acq.Date	Acq.Time
1	140701F1_1	CP140701F1-1 DB-225 CPSM	01-Jul-14	13:43:37
2	140701F1_2	ST140701F1-1 1613 CS0 14L1808	01-Jul-14	14:14:40
3	140701F1_3	ST140701F1-2 1613 CS1 14L1809	01-Jul-14	14:46:03
4	140701F1_4	ST140701F1-3 1613 CS2 14B1101	01-Jul-14	15:17:30
5	140701F1_5	ST140701F1-4 1613 CS3 14L1811	01-Jul-14	15:48:57
6	140701F1_6	ST140701F1-5 1613 CS4 14L1812 (A)	01-Jul-14	16:20:23
7	140701F1_7	ST140701F1-6 1613 CS5 1B1102	01-Jul-14	16:51:49
8	140701F1_8	SOLVENT BLANK	01-Jul-14	17:23:10
9	140701F1_9	SS140701F1-1 1613 SSS 13J3107	01-Jul-14	17:54:30
10	140701F1_10	SOLVENT BLANK	01-Jul-14	18:27:42
11	140701F1_11	ST140701F1-7 1613 CS4 14L1812	01-Jul-14	18:57:50

(A) Bad injection. RT as 140701_11 CP 7/2/14

Initial Calibration RRF Summary (ICAL) Vista Analytical Laboratory

Run: 140620E1 Analyte: Cal: PCBVG8-6-20-14 Inst. ID. VG-8

Data filename: 140620E1

			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	1.25	8.70 %	1.37	1.26	1.26	1.31	1.05	1.27
PCB-2	1.18	8.61 %	1.27	1.26	1.14	1.24	1.00	1.18
PCB-3	1.22	8.48 %	1.31	1.29	1.23	1.26	1.02	1.20
PCB-4/10	1.55	8.01 %	1.67	1.64	1.55	1.61	1.32	1.54
PCB-7/9	1.27	8.90 %	1.43	1.30	1.26	1.30	1.08	1.25
PCB-6	1.26	11.24 %	1.49	1.29	1.26	1.26	1.06	1.20
PCB-5/8	1.23	6.34 %	1.29	1.29	1.23	1.28	1.08	1.23
PCB-14	1.23	11.07 %	1.45	1.24	1.21	1.27	1.03	1.20
PCB-11	1.16	9.82 %	1.33	1.19	1.16	1.18	0.97	1.13
PCB-12/13	1.10	7.82 %	1.20	1.12	1.10	1.14	0.94	1.09
PCB-15	1.21	10.03 %	1.40	1.19	1.22	1.24	1.02	1.18
PCB-19	1.30	14.66 %	1.63	1.31	1.26	1.28	1.05	1.23
PCB-30	1.83	9.12 %	2.06	1.88	1.82	1.87	1.54	1.82
PCB-18	0.86	12.65 %	1.03	0.90	0.85	0.87	0.70	0.81
PCB-17	0.90	11.34 %	1.04	0.96	0.89	0.92	0.74	0.86
PCB-24/27	1.18	9.77 %	1.33	1.20	1.18	1.22	0.98	1.15
PCB-16/32	1.03	12.28 %	1.23	1.08	1.02	1.03	0.84	0.98
PCB-34	1.26	11.67 %	1.47	1.39	1.25	1.23	1.07	1.16
PCB-23	1.31	14.20 %	1.54	1.27	1.41	1.44	1.02	1.19
PCB-29	1.33	17.31 %	1.74	1.32	1.32	1.36	1.06	1.18
PCB-26	1.29	15.40 %	1.62	1.31	1.32	1.31	1.03	1.16
PCB-25	1.34	13.58 %	1.63	1.37	1.36	1.38	1.09	1.21
PCB-31	1.42	18.76 %	1.87	1.40	1.46	1.41	1.05	1.32
PCB-28	1.38	11.74 %	1.60	1.43	1.41	1.45	1.18	1.20
PCB-20/21/33	1.31	12.96 %	1.59	1.33	1.32	1.34	1.08	1.21
PCB-22	1.32	10.73 %	1.50	1.38	1.35	1.39	1.09	1.23
PCB-36	1.38	8.85 %	1.47	1.49	1.38	1.43	1.16	1.32
PCB-39	1.42	9.22 %	1.58	1.49	1.41	1.46	1.19	1.39
PCB-38	1.35	7.47 %	1.39	1.45	1.36	1.41	1.16	1.35
PCB-35	1.38	8.01 %	1.52	1.38	1.35	1.44	1.19	1.38
PCB-37	1.39	9.07 %	1.58	1.40	1.39	1.41	1.18	1.39
PCB-54	1.20	8.53 %	1.29	1.28	1.18	1.24	1.01	1.18
PCB-50	0.97	9.30 %	1.08	1.01	0.96	0.99	0.81	0.95
PCB-53	1.19	11.55 %	1.42	1.24	1.14	1.19	1.00	1.14
PCB-51	1.15	7.40 %	1.21	1.18	1.17	1.23	0.99	1.14
PCB-45	0.97	8.59 %	1.04	0.99	1.00	1.02	0.81	0.93
PCB-46	0.95	15.50 %	1.21	0.98	0.90	0.95	0.77	0.88
PCB-52/69	1.28	8.47 %	1.35	1.33	1.33	1.35	1.07	1.23
PCB-73	1.37	6.52 %	1.42	1.39	1.31	1.43	1.22	1.45
PCB-43/49	1.11	10.59 %	1.30	1.13	1.10	1.13	0.94	1.08
PCB-47	1.13	11.84 %	1.34	1.18	1.04	1.20	0.96	1.07

DMS 6/23/14

6/23/14

PCB-48/75	1.30	10.70 %	1.52	1.28	1.33	1.31	1.08	1.30
PCB-65	1.33	13.12 %	1.67	1.30	1.28	1.32	1.15	1.30
PCB-62	1.29	10.74 %	1.39	1.40	1.30	1.38	1.03	1.25
PCB-44	0.94	10.79 %	1.08	0.90	0.98	0.98	0.78	0.92
PCB-42/59	1.22	9.45 %	1.36	1.25	1.21	1.26	1.01	1.21
PCB-41/64/71/72	1.31	8.83 %	1.48	1.32	1.28	1.35	1.12	1.33
PCB-68	1.49	9.40 %	1.63	1.59	1.48	1.51	1.23	1.46
PCB-40	0.82	12.75 %	0.99	0.83	0.82	0.83	0.67	0.78
PCB-57	1.11	10.20 %	1.26	1.18	1.11	1.15	0.92	1.07
PCB-67	1.07	9.89 %	1.05	1.20	1.12	1.15	0.90	1.03
PCB-58	1.10	11.05 %	1.29	1.13	1.12	1.09	0.91	1.07

PCB-63	1.12	7.49 %	1.17	1.17	1.14	1.16	0.95	1.12
PCB-74	1.20	8.89 %	1.31	1.27	1.22	1.25	1.00	1.18
PCB-61/70	1.08	8.22 %	1.18	1.13	1.08	1.10	0.92	1.06
PCB-76/66	1.14	10.54 %	1.31	1.18	1.12	1.17	0.94	1.10
PCB-80	1.28	9.96 %	1.46	1.33	1.28	1.28	1.07	1.24
PCB-55	1.11	7.19 %	1.16	1.17	1.10	1.14	0.96	1.12
PCB-56/60	1.09	10.58 %	1.26	1.12	1.07	1.09	0.91	1.07
PCB-79	1.12	8.90 %	1.26	1.11	1.12	1.15	0.95	1.13
PCB-78	1.24	11.08 %	1.43	1.32	1.20	1.27	1.02	1.18
PCB-81	1.38	9.94 %	1.51	1.50	1.41	1.41	1.14	1.31
PCB-77	1.21	8.98 %	1.33	1.26	1.22	1.25	1.02	1.17
PCB-104	1.26	10.21 %	1.42	1.31	1.28	1.27	1.03	1.22
PCB-96	1.09	9.49 %	1.24	1.12	1.08	1.10	0.92	1.10
PCB-103	0.93	8.17 %	1.00	0.98	0.89	0.95	0.80	0.98
PCB-100	1.00	7.45 %	1.03	1.08	0.97	1.01	0.87	1.05
PCB-94	1.11	11.35 %	1.31	1.11	1.11	1.13	0.91	1.08
PCB-95/98/102	1.21	9.28 %	1.36	1.25	1.18	1.30	1.04	1.17
PCB-93	1.13	18.48 %	1.36	1.34	1.21	0.95	0.84	1.08
PCB-88/91	1.02	8.29 %	1.00	1.06	1.02	1.15	0.89	1.00
PCB-121	1.90	16.11 %	2.27	2.21	1.94	1.69	1.46	1.85
PCB-84/92	1.05	9.56 %	1.15	1.13	1.05	1.09	0.87	1.02
PCB-89	1.02	10.73 %	1.15	1.04	1.02	1.08	0.83	0.98
PCB-90/101	1.19	9.91 %	1.34	1.26	1.19	1.21	0.99	1.15
PCB-113	1.35	10.72 %	1.54	1.26	1.32	1.51	1.16	1.33
PCB-99	1.29	12.88 %	1.43	1.48	1.35	1.20	1.03	1.24
PCB-119	1.72	7.60 %	1.78	1.88	1.72	1.73	1.48	1.73
PCB-108/112	1.29	7.44 %	1.31	1.39	1.29	1.33	1.10	1.30
PCB-83	1.52	7.96 %	1.66	1.53	1.51	1.58	1.30	1.54
PCB-97	1.25	8.07 %	1.35	1.26	1.27	1.32	1.06	1.23
PCB-86	1.02	10.03 %	1.19	0.96	1.05	0.98	0.90	1.06
PCB-87/117/125	1.56	6.32 %	1.67	1.60	1.55	1.59	1.37	1.57
PCB-111/115	1.75	13.48 %	2.16	1.80	1.69	1.76	1.43	1.66
PCB-85/116	1.30	6.67 %	1.30	1.35	1.33	1.34	1.13	1.35
PCB-120	1.78	10.02 %	2.08	1.80	1.76	1.75	1.52	1.77
PCB-110	1.68	10.37 %	1.90	1.78	1.65	1.72	1.38	1.64
PCB-82	0.74	11.58 %	0.83	0.83	0.73	0.73	0.60	0.71
PCB-124	1.32	11.30 %	1.54	1.34	1.33	1.32	1.07	1.33
PCB-107/109	1.22	8.01 %	1.35	1.31	1.18	1.24	1.08	1.17
PCB-123	1.22	9.00 %	1.30	1.30	1.23	1.28	1.01	1.20
PCB-106/118	1.22	9.57 %	1.37	1.27	1.25	1.26	1.01	1.19
PCB-114	1.36	10.69 %	1.57	1.37	1.36	1.37	1.11	1.35
PCB-122	1.24	10.69 %	1.41	1.32	1.20	1.25	1.02	1.22
PCB-105	1.28	7.83 %	1.36	1.29	1.33	1.34	1.09	1.28
PCB-127	1.14	11.20 %	1.33	1.18	1.14	1.16	0.94	1.09
PCB-126	1.28	9.08 %	1.46	1.28	1.28	1.32	1.10	1.27
PCB-155	1.14	7.40 %	1.11	1.20	1.18	1.20	0.98	1.15
PCB-150	1.06	7.11 %	1.15	1.04	1.05	1.11	0.94	1.10
PCB-152	1.10	11.78 %	1.32	1.08	1.06	1.12	0.92	1.09
PCB-145	1.09	12.69 %	1.35	1.06	1.05	1.11	0.92	1.08
PCB-136	1.08	11.65 %	1.25	1.02	1.08	1.14	0.88	1.14

PCB-148	0.74	7.71 %	0.84	0.75	0.68	0.75	0.70	0.72
PCB-154	0.88	8.65 %	0.96	0.88	0.88	0.93	0.74	0.91
PCB-151	0.81	9.63 %	0.91	0.82	0.78	0.86	0.68	0.81
PCB-135	0.78	6.32 %	0.83	0.75	0.76	0.81	0.70	0.82
PCB-144	0.82	10.98 %	0.93	0.81	0.78	0.90	0.68	0.82
PCB 147	0.83	12.38 %	1.00	0.76	0.78	0.88	0.70	0.85
PCB-139/149	0.84	7.77 %	0.91	0.82	0.83	0.91	0.73	0.86
PCB-140	0.79	11.18 %	0.91	0.73	0.76	0.86	0.66	0.80
PCB-134/143	0.93	12.49 %	1.13	0.94	0.90	0.94	0.78	0.87
PCB-133/142	0.95	11.69 %	1.12	0.98	0.91	0.96	0.79	0.90
PCB-131	0.91	13.39 %	1.11	0.96	0.90	0.90	0.74	0.87

PCB-146/165	1.16	9.91 %	1.33	1.19	1.14	1.16	0.97	1.13
PCB-132/161	1.11	10.87 %	1.31	1.14	1.09	1.13	0.93	1.07
PCB-153	1.18	8.19 %	1.21	1.24	1.26	1.18	0.99	1.18
PCB-168	1.37	10.18 %	1.56	1.44	1.37	1.37	1.14	1.35
PCB-141	0.97	8.49 %	1.08	1.00	0.97	0.99	0.83	0.99
PCB-137	1.07	6.76 %	1.12	1.16	1.05	1.03	0.96	1.11
PCB-130	0.85	9.16 %	0.85	0.83	0.87	0.94	0.71	0.89
PCB-138/163/164	1.23	7.23 %	1.30	1.28	1.22	1.26	1.05	1.24
PCB-158/160	1.29	7.06 %	1.37	1.33	1.29	1.34	1.11	1.29
PCB-129	0.92	10.90 %	1.06	0.98	0.93	0.93	0.76	0.88
PCB-166	1.12	8.09 %	1.17	1.21	1.11	1.13	0.94	1.13
PCB-159	1.16	9.05 %	1.24	1.24	1.18	1.17	0.96	1.20
PCB-128/162	1.02	8.78 %	1.10	1.03	1.04	1.07	0.85	1.03
PCB-167	1.06	9.67 %	1.20	1.04	1.10	1.09	0.88	1.05
PCB-156	1.18	12.60 %	1.44	1.20	1.18	1.17	0.98	1.12
PCB-157	1.08	8.46 %	1.17	1.12	1.13	1.11	0.91	1.06
PCB-169	1.11	8.78 %	1.24	1.15	1.12	1.11	0.94	1.09
PCB-188	1.40	9.77 %	1.59	1.44	1.43	1.43	1.17	1.37
PCB-184	1.24	9.34 %	1.35	1.30	1.25	1.28	1.02	1.23
PCB-179	1.30	11.40 %	1.50	1.37	1.32	1.31	1.05	1.28
PCB-176	1.36	12.01 %	1.55	1.47	1.35	1.38	1.07	1.34
PCB-186	1.28	10.58 %	1.46	1.30	1.25	1.31	1.05	1.29
PCB-178	0.94	10.89 %	0.99	1.05	0.96	0.96	0.75	0.92
PCB-175	0.97	9.63 %	1.03	1.01	0.98	1.02	0.78	0.99
PCB-182/187	1.01	8.25 %	1.07	1.03	1.01	1.06	0.85	1.07
PCB-183	1.08	11.32 %	1.18	1.17	1.08	1.10	0.85	1.12
PCB-185	1.34	11.43 %	1.58	1.37	1.30	1.36	1.10	1.35
PCB-174	1.34	6.35 %	1.41	1.36	1.36	1.32	1.18	1.40
PCB-181	1.36	12.64 %	1.56	1.48	1.28	1.43	1.08	1.33
PCB-177	1.24	12.38 %	1.50	1.23	1.20	1.28	1.03	1.21
PCB-171	1.31	10.27 %	1.52	1.33	1.34	1.31	1.10	1.28
PCB-173	1.16	12.99 %	1.43	1.13	1.15	1.17	0.97	1.11
PCB-172	1.22	11.23 %	1.47	1.18	1.22	1.24	1.05	1.18
PCB-192	1.53	7.91 %	1.69	1.58	1.49	1.56	1.33	1.51
PCB-180	1.43	12.38 %	1.72	1.48	1.44	1.42	1.18	1.34
PCB-193	1.65	9.91 %	1.90	1.71	1.65	1.68	1.40	1.59
PCB-191	1.67	12.03 %	2.04	1.63	1.65	1.68	1.43	1.61
PCB-170	1.50	10.78 %	1.66	1.67	1.51	1.50	1.23	1.44
PCB-190	2.02	10.04 %	2.33	2.09	1.97	2.04	1.70	1.98
PCB-189	1.54	8.43 %	1.70	1.58	1.55	1.59	1.30	1.54
PCB-202	1.04	12.36 %	1.24	1.11	1.01	1.04	0.85	0.99
PCB-201	1.10	11.84 %	1.33	1.11	1.06	1.11	0.92	1.09
PCB-204	0.99	8.55 %	1.10	0.99	0.99	1.04	0.84	1.00
PCB-197	1.07	11.41 %	1.28	1.04	1.04	1.12	0.90	1.06
PCB-200	1.02	8.06 %	1.11	1.02	1.02	1.07	0.87	1.02
PCB-198	0.74	13.95 %	0.90	0.81	0.69	0.77	0.60	0.70
PCB-199	0.73	6.67 %	0.75	0.75	0.73	0.77	0.63	0.74
PCB-196/203	0.77	7.49 %	0.82	0.80	0.75	0.81	0.67	0.79
PCB-195	1.20	7.95 %	1.32	1.23	1.17	1.25	1.04	1.19
PCB-194	1.25	15.62 %	1.61	1.21	1.22	1.24	1.02	1.17

PCB-205	1.41	12.03 %	1.70	1.44	1.41	1.41	1.17	1.36
PCB-208	0.96	16.01 %	1.25	0.95	0.93	0.95	0.78	0.91
PCB-207	0.92	8.32 %	0.99	0.97	0.91	0.93	0.78	0.91
PCB-206	1.03	12.39 %	1.24	1.05	1.03	1.02	0.84	0.98
PCB-209	1.18	8.31 %	1.27	1.19	1.21	1.23	0.99	1.16
Total Mono-PCB	1.22	8.44 %	1.32	1.27	1.21	1.27	1.02	1.22
Total Di-PCB	1.21	8.72 %	1.35	1.24	1.21	1.25	1.03	1.19
Total Tri-PCB	1.16	11.17 %	1.36	1.20	1.15	1.18	0.96	1.12

Total Tri-PCB	1.35	11.56 %	1.58	1.38	1.36	1.39	1.11	1.26
Total Tetra-PCB	1.17	9.20 %	1.32	1.21	1.17	1.21	0.99	1.15
Total Penta-PCB	1.21	8.50 %	1.33	1.27	1.21	1.24	1.03	1.21
Total Penta-PCB	1.26	9.64 %	1.42	1.29	1.26	1.29	1.05	1.24
Total Hexa-PCB	0.92	8.86 %	1.03	0.90	0.89	0.96	0.78	0.93
Total Hexa-PCB	1.08	8.82 %	1.20	1.12	1.08	1.10	0.91	1.07
Total Hepta-PCB	1.27	10.02 %	1.44	1.31	1.27	1.30	1.05	1.26
Total Octa-PCB	0.92	9.46 %	1.04	0.94	0.89	0.95	0.77	0.91
Total Octa-PCB	1.29	11.68 %	1.54	1.29	1.26	1.30	1.08	1.24
Total Nona-PCB	0.96	11.85 %	1.15	0.98	0.94	0.96	0.79	0.93
Total Deca-PCB	1.18	8.31 %	1.27	1.19	1.21	1.23	0.99	1.16
13C-PCB-1	0.89	8.16 %	0.97	0.94	0.91	0.88	0.88	0.76
13C-PCB-3	0.93	4.27 %	0.98	0.94	0.94	0.93	0.91	0.86
13C-PCB-4	0.55	3.55 %	0.56	0.57	0.56	0.55	0.53	0.52
13C-PCB-9	0.83	2.91 %	0.84	0.85	0.84	0.82	0.80	0.79
13C-PCB-11	0.94	1.99 %	0.94	0.96	0.96	0.92	0.93	0.91
13C-PCB-19	0.53	4.01 %	0.55	0.55	0.55	0.53	0.52	0.50
13C-PCB-32	0.81	1.81 %	0.83	0.82	0.83	0.81	0.81	0.79
13C-PCB-28	0.89	8.44 %	0.79	0.91	0.83	0.85	0.96	0.98
13C-PCB-37	0.83	4.85 %	0.80	0.83	0.80	0.80	0.87	0.89
13C-PCB-54	0.85	5.64 %	0.86	0.89	0.91	0.84	0.83	0.77
13C-PCB-52	0.71	4.89 %	0.72	0.74	0.75	0.70	0.68	0.66
13C-PCB-47	0.74	4.31 %	0.74	0.78	0.78	0.73	0.73	0.70
13C-PCB-70	0.94	2.25 %	0.96	0.97	0.96	0.93	0.94	0.91
13C-PCB-80	0.96	2.89 %	0.96	1.00	0.99	0.95	0.95	0.92
13C-PCB-81	0.84	2.20 %	0.83	0.82	0.84	0.82	0.86	0.86
13C-PCB-77	0.89	1.89 %	0.88	0.87	0.90	0.88	0.91	0.91
13C-PCB-104	1.00	6.42 %	0.99	1.06	1.07	0.98	0.96	0.90
13C-PCB-95	0.74	2.70 %	0.74	0.78	0.75	0.73	0.74	0.72
13C-PCB-101	0.79	2.14 %	0.79	0.81	0.79	0.77	0.78	0.77
13C-PCB-97	0.69	1.41 %	0.70	0.69	0.70	0.69	0.69	0.67
13C-PCB-123	0.95	4.62 %	0.88	0.92	0.98	1.00	0.95	0.97
13C-PCB-118	0.98	3.93 %	0.92	0.95	0.99	1.03	1.01	0.99
13C-PCB-114	1.21	3.28 %	1.26	1.20	1.21	1.18	1.25	1.15
13C-PCB-105	1.24	3.05 %	1.26	1.24	1.25	1.20	1.29	1.19
13C-PCB-127	1.34	2.73 %	1.37	1.34	1.38	1.29	1.36	1.30
13C-PCB-126	1.16	2.72 %	1.16	1.17	1.20	1.12	1.19	1.14
13C-PCB-155	0.83	3.93 %	0.86	0.87	0.84	0.83	0.81	0.78
13C-PCB-153	1.11	2.81 %	1.14	1.11	1.13	1.10	1.15	1.06
13C-PCB-141	1.07	3.72 %	1.13	1.09	1.09	1.06	1.06	1.01
13C-PCB-138	1.04	2.24 %	1.06	1.05	1.06	1.02	1.06	1.01
13C-PCB-159	1.20	1.72 %	1.21	1.19	1.22	1.17	1.22	1.19
13C-PCB-167	1.32	1.88 %	1.32	1.33	1.36	1.29	1.32	1.31
13C-PCB-156	1.24	1.98 %	1.23	1.25	1.28	1.21	1.26	1.24
13C-PCB-157	1.31	1.61 %	1.31	1.31	1.34	1.28	1.33	1.29
13C-PCB-169	1.22	1.81 %	1.22	1.21	1.25	1.19	1.22	1.20
13C-PCB-188	0.94	3.81 %	0.97	0.93	0.93	0.93	0.98	0.88
13C-PCB-180	0.67	2.62 %	0.71	0.67	0.67	0.67	0.67	0.65
13C-PCB-170	0.54	1.49 %	0.55	0.54	0.54	0.53	0.54	0.52
13C-PCB-189	0.72	1.73 %	0.72	0.70	0.73	0.73	0.71	0.70
13C-PCB-202	0.83	2.31 %	0.86	0.83	0.83	0.84	0.84	0.80

13C-PCB-194	0.81	1.33 %	0.82	0.82	0.82	0.80	0.81	0.79
13C-PCB-208	1.12	2.11 %	1.10	1.14	1.13	1.14	1.14	1.09
13C-PCB-206	0.66	3.31 %	0.63	0.65	0.66	0.70	0.65	0.65
13C-PCB-209	0.61	2.62 %	0.59	0.60	0.62	0.64	0.61	0.62
13C-PCB-15	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-31	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-60	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-111	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-128	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-205	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00

13C-PCB-79	1.01	4.78 %	0.97	0.97	0.99	1.09	0.99	1.02
13C-PCB-178	0.63	4.30 %	0.62	0.61	0.62	0.69	0.62	0.62
13C-PCB-79	1.20	5.38 %	1.18	1.18	1.17	1.33	1.15	1.19
13C-PCB-178	0.94	5.01 %	0.88	0.91	0.92	1.02	0.93	0.96

Filename: 140620E1 S: 1 Acquired: 20-JUN-14 09:31:44
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-1 PCB CS0 13H1202

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	0.25	4.35e+05	2.82 y	16:14	-	1.37
2	Mono	PCB-2	0.25	4.10e+05	3.17 y	18:35	-	1.27
3	Mono	PCB-3	0.25	4.22e+05	2.92 y	18:49	-	1.31
4	Di	PCB-4/10	1.00	1.23e+06	1.61 y	20:10	-	1.67
5	Di	PCB-7/9	1.00	1.58e+06	1.70 y	21:56	-	1.43
6	Di	PCB-6	0.50	8.23e+05	1.36 y	22:35	-	1.49
7	Di	PCB-5/8	1.00	1.42e+06	1.76 y	23:00	-	1.29
8	Di	PCB-14	0.50	8.96e+05	1.59 y	24:05	-	1.45
9	Di	PCB-11	0.50	8.18e+05	1.39 y	25:16	-	1.33
10	Di	PCB-12/13	1.00	1.48e+06	1.71 y	25:40	-	1.20
11	Di	PCB-15	0.50	8.65e+05	1.43 y	25:58	-	1.40
12	Tri	PCB-19	0.25	2.94e+05	1.11 y	24:16	-	1.63
13	Tri	PCB-30	0.25	3.70e+05	0.89 y	25:09	-	2.06
14	Tri	PCB-18	0.25	2.78e+05	1.19 y	25:54	-	1.03
15	Tri	PCB-17	0.25	2.82e+05	0.94 y	26:04	-	1.04
16	Tri	PCB-24/27	0.50	7.21e+05	1.01 y	26:38	-	1.33
17	Tri	PCB-16/32	0.50	6.64e+05	1.06 y	27:09	-	1.23
18	Tri	PCB-34	0.25	3.70e+05	1.06 y	27:56	-	1.47
19	Tri	PCB-23	0.25	3.85e+05	1.19 y	28:02	-	1.54
20	Tri	PCB-29	0.25	4.36e+05	1.18 y	28:17	-	1.74
21	Tri	PCB-26	0.25	4.07e+05	0.97 y	28:29	-	1.62
22	Tri	PCB-25	0.25	4.10e+05	1.07 y	28:39	-	1.63
23	Tri	PCB-31	0.25	4.70e+05	1.15 y	29:00	-	1.87
24	Tri	PCB-28	0.25	4.03e+05	1.12 y	29:07	-	1.60
25	Tri	PCB-20/21/33	0.75	1.20e+06	1.11 y	29:43	-	1.59
26	Tri	PCB-22	0.25	3.76e+05	1.05 y	30:10	-	1.50
27	Tri	PCB-36	0.25	3.74e+05	1.12 y	30:47	-	1.47
28	Tri	PCB-39	0.25	3.99e+05	1.02 y	31:14	-	1.58
29	Tri	PCB-38	0.25	3.51e+05	1.20 y	32:00	-	1.39
30	Tri	PCB-35	0.25	3.85e+05	1.07 y	32:32	-	1.52
31	Tri	PCB-37	0.25	4.00e+05	0.99 y	32:58	-	1.58
32	Tetra	PCB-54	0.25	3.02e+05	0.84 y	27:59	-	1.29
33	Tetra	PCB-50	0.25	2.51e+05	0.85 y	29:09	-	1.08
34	Tetra	PCB-53	0.25	2.75e+05	0.70 y	29:47	-	1.42
35	Tetra	PCB-51	0.25	2.35e+05	0.68 y	30:08	-	1.21
36	Tetra	PCB-45	0.25	2.02e+05	0.82 y	30:34	-	1.04
37	Tetra	PCB-46	0.25	2.36e+05	0.75 y	31:04	-	1.21
38	Tetra	PCB-52/69	0.50	5.24e+05	0.82 y	31:32	-	1.35
39	Tetra	PCB-73	0.25	2.76e+05	0.88 y	31:39	-	1.42
40	Tetra	PCB-43/49	0.50	5.07e+05	0.72 y	31:49	-	1.30

41	Tetra	PCB-47	0.25	2.69e+05	0.78 y	32:00	-	1.34
42	Tetra	PCB-48/75	0.50	6.11e+05	0.75 y	32:07	-	1.52
43	Tetra	PCB-65	0.25	3.35e+05	0.81 y	32:23	-	1.67
44	Tetra	PCB-62	0.25	2.78e+05	0.66 y	32:30	-	1.39
45	Tetra	PCB-44	0.25	2.18e+05	0.67 y	32:48	-	1.08
46	Tetra	PCB-42/59	0.50	5.48e+05	0.72 y	33:02	-	1.36
47	Tetra	PCB-41/64/71/72	1.00	1.19e+06	0.71 y	33:37	-	1.48
48	Tetra	PCB-68	0.25	3.28e+05	0.80 y	33:52	-	1.63
49	Tetra	PCB-40	0.25	1.99e+05	0.82 y	34:05	-	0.99
50	Tetra	PCB-57	0.25	3.26e+05	0.66 y	34:27	-	1.26
51	Tetra	PCB-67	0.25	2.73e+05	0.74 y	34:45	-	1.05

52	Tetra	PCB-58	0.25	3.35e+05	0.79	y	34:52	-	1.29
53	Tetra	PCB-63	0.25	3.04e+05	0.78	y	35:01	-	1.17
54	Tetra	PCB-74	0.25	3.39e+05	0.76	y	35:18	-	1.31
55	Tetra	PCB-61/70	0.50	6.13e+05	0.75	y	35:29	-	1.18
56	Tetra	PCB-76/66	0.50	6.79e+05	0.81	y	35:42	-	1.31
57	Tetra	PCB-80	0.25	3.81e+05	0.73	y	35:56	-	1.46
58	Tetra	PCB-55	0.25	3.04e+05	0.81	y	36:16	-	1.16
59	Tetra	PCB-56/60	0.50	6.61e+05	0.75	y	36:46	-	1.26
60	Tetra	PCB-79	0.25	3.31e+05	0.86	y	37:48	-	1.26
61	Tetra	PCB-78	0.25	3.20e+05	0.80	y	38:30	-	1.43
62	Tetra	PCB-81	0.25	3.39e+05	0.75	y	39:02	-	1.51
63	Tetra	PCB-77	0.25	3.19e+05	0.68	y	39:38	-	1.33
64	Penta	PCB-104	0.25	2.39e+05	1.52	y	32:40	-	1.42
65	Penta	PCB-96	0.25	2.08e+05	1.62	y	33:56	-	1.24
66	Penta	PCB-103	0.25	1.68e+05	1.38	y	34:27	-	1.00
67	Penta	PCB-100	0.25	1.73e+05	1.61	y	34:49	-	1.03
68	Penta	PCB-94	0.25	1.64e+05	1.42	y	35:17	-	1.31
69	Penta	PCB-95/98/102	0.75	5.11e+05	1.73	y	35:45	-	1.36
70	Penta	PCB-93	0.25	1.71e+05	1.64	y	35:54	-	1.36
71	Penta	PCB-88/91	0.50	2.51e+05	1.76	y	36:10	-	1.00
72	Penta	PCB-121	0.25	2.86e+05	1.39	y	36:17	-	2.27
73	Penta	PCB-84/92	0.50	3.08e+05	1.45	y	37:07	-	1.15
74	Penta	PCB-89	0.25	1.54e+05	1.32	y	37:19	-	1.15
75	Penta	PCB-90/101	0.50	3.59e+05	1.43	y	37:29	-	1.34
76	Penta	PCB-113	0.25	2.06e+05	1.63	y	37:44	-	1.54
77	Penta	PCB-99	0.25	1.92e+05	1.34	y	37:49	-	1.43
78	Penta	PCB-119	0.25	2.11e+05	1.49	y	38:18	-	1.78
79	Penta	PCB-108/112	0.50	3.11e+05	1.68	y	38:27	-	1.31
80	Penta	PCB-83	0.25	1.96e+05	1.33	y	38:37	-	1.66
81	Penta	PCB-97	0.25	1.60e+05	1.69	y	38:48	-	1.35
82	Penta	PCB-86	0.25	1.41e+05	1.52	y	38:56	-	1.19
83	Penta	PCB-87/117/125	0.75	5.92e+05	1.55	y	39:04	-	1.67
84	Penta	PCB-111/115	0.50	5.11e+05	1.55	y	39:14	-	2.16
85	Penta	PCB-85/116	0.50	3.09e+05	1.69	y	39:22	-	1.30
86	Penta	PCB-120	0.25	2.47e+05	1.58	y	39:35	-	2.08
87	Penta	PCB-110	0.25	2.26e+05	1.34	y	39:44	-	1.90
88	Penta	PCB-82	0.25	1.23e+05	1.66	y	40:23	-	0.83
89	Penta	PCB-124	0.25	2.30e+05	1.74	y	41:02	-	1.54
90	Penta	PCB-107/109	0.50	4.02e+05	1.57	y	41:12	-	1.35
91	Penta	PCB-123	0.25	1.93e+05	1.66	y	41:22	-	1.30
92	Penta	PCB-106/118	0.50	4.29e+05	1.45	y	41:33	-	1.37
93	Penta	PCB-114	0.25	2.76e+05	1.56	y	42:12	-	1.57
94	Penta	PCB-122	0.25	2.48e+05	1.55	y	42:20	-	1.41
95	Penta	PCB-105	0.25	2.42e+05	1.73	y	43:04	-	1.36
96	Penta	PCB-127	0.25	2.56e+05	1.65	y	43:24	-	1.33
97	Penta	PCB-126	0.25	2.38e+05	1.59	y	45:17	-	1.46
98	Hexa	PCB-155	0.25	1.62e+05	1.06	y	37:03	-	1.11
99	Hexa	PCB-150	0.25	1.67e+05	1.15	y	38:19	-	1.15
100	Hexa	PCB-152	0.25	1.92e+05	1.35	y	38:47	-	1.32
101	Hexa	PCB-145	0.25	1.95e+05	1.19	y	39:13	-	1.35

102	Hexa	PCB-136	0.25	1.82e+05	1.10	y	39:34	-	1.25
103	Hexa	PCB-148	0.25	1.22e+05	1.18	y	39:39	-	0.84
104	Hexa	PCB-154	0.25	1.40e+05	1.29	y	40:09	-	0.96
105	Hexa	PCB-151	0.25	1.32e+05	1.38	y	40:47	-	0.91
106	Hexa	PCB-135	0.25	1.21e+05	1.08	y	40:59	-	0.83
107	Hexa	PCB-144	0.25	1.35e+05	1.36	y	41:07	-	0.93
108	Hexa	PCB-147	0.25	1.45e+05	1.24	y	41:14	-	1.00
109	Hexa	PCB-139/149	0.50	2.63e+05	1.42	y	41:30	-	0.91
110	Hexa	PCB-140	0.25	1.32e+05	1.26	y	41:41	-	0.91
111	Hexa	PCB-134/143	0.50	3.60e+05	1.29	y	42:07	-	1.13
112	Hexa	PCB-133/142	0.50	3.59e+05	1.27	y	42:25	-	1.12

113	Hexa	PCB-131	0.25	1.78e-05	1.22 y	42:35	-	1.11
114	Hexa	PCB-146/165	0.50	4.25e+05	1.38 y	42:48	-	1.33
115	Hexa	PCB-132/161	0.50	4.18e+05	1.33 y	43:03	-	1.31
116	Hexa	PCB-153	0.25	1.94e+05	1.33 y	43:13	-	1.21
117	Hexa	PCB-168	0.25	2.50e+05	1.10 y	43:25	-	1.56
118	Hexa	PCB-141	0.25	1.70e+05	1.16 y	43:57	-	1.08
119	Hexa	PCB-137	0.25	1.76e+05	1.34 y	44:20	-	1.12
120	Hexa	PCB-130	0.25	1.34e+05	1.41 y	44:26	-	0.85
121	Hexa	PCB-138/163/164	0.75	5.80e+05	1.22 y	44:49	-	1.30
122	Hexa	PCB-158/160	0.50	4.07e+05	1.26 y	45:04	-	1.37
123	Hexa	PCB-129	0.25	1.58e+05	1.11 y	45:18	-	1.06
124	Hexa	PCB-166	0.25	1.98e+05	1.26 y	45:46	-	1.17
125	Hexa	PCB-159	0.25	2.11e+05	1.18 y	46:04	-	1.24
126	Hexa	PCB-128/162	0.50	3.74e+05	1.26 y	46:22	-	1.10
127	Hexa	PCB-167	0.25	2.22e+05	1.41 y	46:46	-	1.20
128	Hexa	PCB-156	0.25	2.47e+05	1.24 y	48:03	-	1.44
129	Hexa	PCB-157	0.25	2.16e+05	1.36 y	48:20	-	1.17
130	Hexa	PCB-169	0.25	2.12e+05	1.07 y	50:23	-	1.24
131	Hepta	PCB-188	0.25	2.17e+05	1.02 y	42:51	-	1.59
132	Hepta	PCB-184	0.25	1.84e+05	0.94 y	43:18	-	1.35
133	Hepta	PCB-179	0.25	2.05e+05	1.05 y	44:04	-	1.50
134	Hepta	PCB-176	0.25	2.12e+05	1.04 y	44:32	-	1.55
135	Hepta	PCB-186	0.25	2.00e+05	0.97 y	45:09	-	1.46
136	Hepta	PCB-178	0.25	1.35e+05	0.98 y	45:38	-	0.99
137	Hepta	PCB-175	0.25	1.41e+05	1.08 y	45:58	-	1.03
138	Hepta	PCB-182/187	0.50	2.91e+05	0.90 y	46:09	-	1.07
139	Hepta	PCB-183	0.25	1.61e+05	0.95 y	46:29	-	1.18
140	Hepta	PCB-185	0.25	1.56e+05	0.97 y	47:08	-	1.58
141	Hepta	PCB-174	0.25	1.40e+05	1.03 y	47:30	-	1.41
142	Hepta	PCB-181	0.25	1.55e+05	1.17 y	47:37	-	1.56
143	Hepta	PCB-177	0.25	1.49e+05	1.09 y	47:46	-	1.50
144	Hepta	PCB-171	0.25	1.51e+05	0.93 y	48:05	-	1.52
145	Hepta	PCB-173	0.25	1.42e+05	0.96 y	48:30	-	1.43
146	Hepta	PCB-172	0.25	1.45e+05	1.13 y	48:55	-	1.47
147	Hepta	PCB-192	0.25	1.68e+05	0.90 y	49:08	-	1.69
148	Hepta	PCB-180	0.25	1.70e+05	0.97 y	49:20	-	1.72
149	Hepta	PCB-193	0.25	1.88e+05	1.13 y	49:31	-	1.90
150	Hepta	PCB-191	0.25	2.02e+05	1.05 y	49:45	-	2.04
151	Hepta	PCB-170	0.25	1.27e+05	1.19 y	50:44	-	1.66
152	Hepta	PCB-190	0.25	1.78e+05	0.91 y	50:55	-	2.33
153	Hepta	PCB-189	0.25	1.70e+05	1.20 y	52:11	-	1.70
154	Octa	PCB-202	0.25	1.49e+05	0.98 y	48:16	-	1.24
155	Octa	PCB-201	0.25	1.60e+05	1.02 y	48:45	-	1.33
156	Octa	PCB-204	0.25	1.33e+05	0.77 y	48:54	-	1.10
157	Octa	PCB-197	0.25	1.54e+05	0.92 y	49:13	-	1.28
158	Octa	PCB-200	0.25	1.34e+05	1.01 y	50:02	-	1.11
159	Octa	PCB-198	0.25	1.08e+05	0.88 y	51:19	-	0.90
160	Octa	PCB-199	0.25	9.08e+04	0.94 y	51:25	-	0.75
161	Octa	PCB-196/203	0.50	1.98e+05	0.81 y	51:40	-	0.82
162	Octa	PCB-195	0.25	1.39e+05	0.81 y	52:48	-	1.32

163	Octa		PCB-194	0.25	1.70e+05	0.85	y	53:40	- 1.61
164	Octa		PCB-205	0.25	1.79e+05	0.98	y	53:57	- 1.70
165	Nona		PCB-208	0.25	1.78e+05	1.17	y	52:57	- 1.25
166	Nona		PCB-207	0.25	1.41e+05	1.37	y	53:14	- 0.99
167	Nona		PCB-206	0.25	1.02e+05	1.41	y	55:20	- 1.24
168	Deca		PCB-209	0.25	9.69e+04	1.15	y	56:37	- 1.27
169	Tot ╗	Total Mono-PCB		0.00	-	-	n	-	- 1.32
170	Tot ╗	Total Di-PCB		0.00	-	-	n	-	- 1.35

171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.36
172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.58
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.32
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.33
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.42
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.03
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.20
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.44
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.04
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.54
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	1.15
182	Tot ╗	Total Deca-PCB	0.25	9.69e+04	1.15	y	56:37	-	1.27
183	Mono╗	13C-PCB-1	100.00	1.27e+08	3.28	y	16:13	-	0.97
184	Mono╗	13C-PCB-3	100.00	1.29e+08	3.32	y	18:48	-	0.98
185	Di-IS	13C-PCB-4	100.00	7.37e+07	1.59	y	20:07	-	0.56
186	Di-IS	13C-PCB-9	100.00	1.10e+08	1.57	y	21:53	-	0.84
187	Di-IS	13C-PCB-11	100.00	1.24e+08	1.57	y	25:15	-	0.94
188	Tri-╗	13C-PCB-19	100.00	7.18e+07	1.06	y	24:15	-	0.55
189	Tri-╗	13C-PCB-32	100.00	1.08e+08	1.08	y	27:09	-	0.83
190	Tri-╗	13C-PCB-28	100.00	1.00e+08	1.05	y	29:05	-	0.79
191	Tri-╗	13C-PCB-37	100.00	1.01e+08	1.07	y	32:57	-	0.80
192	Tetr╗	13C-PCB-54	100.00	9.33e+07	0.80	y	27:59	-	0.86
193	Tetr╗	13C-PCB-52	100.00	7.77e+07	0.81	y	31:30	-	0.72
194	Tetr╗	13C-PCB-47	100.00	8.03e+07	0.78	y	32:00	-	0.74
195	Tetr╗	13C-PCB-70	100.00	1.04e+08	0.80	y	35:31	-	0.96
196	Tetr╗	13C-PCB-80	100.00	1.05e+08	0.80	y	35:55	-	0.96
197	Tetr╗	13C-PCB-81	100.00	8.95e+07	0.80	y	39:02	-	0.83
198	Tetr╗	13C-PCB-77	100.00	9.58e+07	0.80	y	39:37	-	0.88
199	Pent╗	13C-PCB-104	100.00	6.72e+07	1.63	y	32:39	-	0.99
200	Pent╗	13C-PCB-95	100.00	5.03e+07	1.61	y	35:49	-	0.74
201	Pent╗	13C-PCB-101	100.00	5.37e+07	1.61	y	37:29	-	0.79
202	Pent╗	13C-PCB-97	100.00	4.74e+07	1.63	y	38:47	-	0.70
203	Pent╗	13C-PCB-123	100.00	5.97e+07	1.63	y	41:21	-	0.88
204	Pent╗	13C-PCB-118	100.00	6.28e+07	1.61	y	41:32	-	0.92
205	Pent╗	13C-PCB-114	100.00	7.04e+07	1.59	y	42:11	-	1.26
206	Pent╗	13C-PCB-105	100.00	7.09e+07	1.60	y	43:03	-	1.26
207	Pent╗	13C-PCB-127	100.00	7.69e+07	1.57	y	43:22	-	1.37
208	Pent╗	13C-PCB-126	100.00	6.51e+07	1.55	y	45:17	-	1.16
209	Hexa╗	13C-PCB-155	100.00	5.81e+07	1.27	y	37:02	-	0.86
210	Hexa╗	13C-PCB-153	100.00	6.40e+07	1.30	y	43:12	-	1.14
211	Hexa╗	13C-PCB-141	100.00	6.31e+07	1.28	y	43:56	-	1.13
212	Hexa	13C-PCB-138	100.00	5.96e+07	1.29	y	44:47	-	1.06
213	Hexa╗	13C-PCB-159	100.00	6.79e+07	1.28	y	46:04	-	1.21
214	Hexa╗	13C-PCB-167	100.00	7.42e+07	1.28	y	46:45	-	1.32
215	Hexa╗	13C-PCB-156	100.00	6.87e+07	1.28	y	48:02	-	1.23
216	Hexa╗	13C-PCB-157	100.00	7.37e+07	1.28	y	48:18	-	1.31
217	Hexa╗	13C-PCB-169	100.00	6.83e+07	1.27	y	50:23	-	1.22
218	Hept╗	13C-PCB-188	100.00	5.45e+07	0.46	y	42:50	-	0.97
219	Hept╗	13C-PCB-180	100.00	3.96e+07	0.47	y	49:19	-	0.71
220	Hept╗	13C-PCB-170	100.00	3.06e+07	0.46	y	50:44	-	0.55
221	Hept╗	13C-PCB-189	100.00	4.02e+07	0.46	y	52:11	-	0.72

222	Octa¶	13C-PCB-202	100.00	4.83e+07	0.91	y	48:15	-	0.86
223	Octa¶	13C-PCB-194	100.00	4.22e+07	0.90	y	53:39	-	0.82
224	Nona¶	13C-PCB-208	100.00	5.69e+07	0.78	y	52:56	-	1.10
225	Nona¶	13C-PCB-206	100.00	3.28e+07	0.79	y	55:19	-	0.63
226	Deca¶	13C-PCB-209	100.00	3.05e+07	1.17	y	56:36	-	0.59
227	DI-RS	13C-PCB-15	100.00	1.31e+08	1.57	y	25:58	-	1.00
228	Tri-¶	13C-PCB-31	100.00	1.27e+08	1.06	y	28:59	-	1.00
229	Tetr¶	13C-PCB-60	100.00	1.09e+08	0.78	y	36:45	-	1.00
230	Penta	13C-PCB-111	100.00	6.79e+07	1.58	y	39:12	-	1.00
231	Hexa¶	13C-PCB-128	100.00	5.60e+07	1.28	y	46:20	-	1.00

232	Octa╗	13C-PCB-205	100.00	5.17e+07	0.93	y	53:56	-	1.00
233	CRS	13C-PCB-79	100.00	1.05e+08	0.80	y	37:48	-	0.97
234	CRS	13C-PCB-178	100.00	3.50e+07	0.45	y	45:37	-	0.62
235	PS	13C-PCB-79	100.00	1.05e+08	0.80	y	37:48	-	1.18
236	PS	13C-PCB-178	100.00	3.50e+07	0.45	y	45:37	-	0.88

Filename: 140620E1 S: 2 Acquired: 20-JUN-14 10:35:42
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-2 PCB CS1 13H1204

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	1.00	1.98e+06	3.08 y	16:16	-	1.26
2	Mono	PCB-2	1.00	1.97e+06	2.92 y	18:37	-	1.26
3	Mono	PCB-3	1.00	2.01e+06	3.12 y	18:51	-	1.29
4	Di	PCB-4/10	4.00	6.16e+06	1.55 y	20:12	-	1.64
5	Di	PCB-7/9	4.00	7.32e+06	1.64 y	21:57	-	1.30
6	Di	PCB-6	2.00	3.65e+06	1.60 y	22:37	-	1.29
7	Di	PCB-5/8	4.00	7.27e+06	1.61 y	23:01	-	1.29
8	Di	PCB-14	2.00	3.94e+06	1.66 y	24:06	-	1.24
9	Di	PCB-11	2.00	3.77e+06	1.68 y	25:17	-	1.19
10	Di	PCB-12/13	4.00	7.13e+06	1.61 y	25:41	-	1.12
11	Di	PCB-15	2.00	3.79e+06	1.72 y	26:00	-	1.19
12	Tri	PCB-19	1.00	1.20e+06	1.12 y	24:17	-	1.31
13	Tri	PCB-30	1.00	1.72e+06	1.12 y	25:10	-	1.88
14	Tri	PCB-18	1.00	1.24e+06	1.05 y	25:55	-	0.90
15	Tri	PCB-17	1.00	1.31e+06	1.07 y	26:05	-	0.96
16	Tri	PCB-24/27	2.00	3.29e+06	1.07 y	26:40	-	1.20
17	Tri	PCB-16/32	2.00	2.95e+06	1.04 y	27:10	-	1.08
18	Tri	PCB-34	1.00	1.94e+06	1.06 y	27:58	-	1.39
19	Tri	PCB-23	1.00	1.78e+06	1.00 y	28:04	-	1.27
20	Tri	PCB-29	1.00	1.84e+06	1.07 y	28:18	-	1.32
21	Tri	PCB-26	1.00	1.83e+06	1.06 y	28:31	-	1.31
22	Tri	PCB-25	1.00	1.92e+06	1.07 y	28:40	-	1.37
23	Tri	PCB-31	1.00	1.96e+06	1.10 y	29:02	-	1.40
24	Tri	PCB-28	1.00	2.00e+06	1.03 y	29:07	-	1.43
25	Tri	PCB-20/21/33	3.00	5.56e+06	1.09 y	29:45	-	1.33
26	Tri	PCB-22	1.00	1.93e+06	1.07 y	30:11	-	1.38
27	Tri	PCB-36	1.00	1.90e+06	1.15 y	30:47	-	1.49
28	Tri	PCB-39	1.00	1.91e+06	1.10 y	31:16	-	1.49
29	Tri	PCB-38	1.00	1.86e+06	1.05 y	32:02	-	1.45
30	Tri	PCB-35	1.00	1.77e+06	1.19 y	32:33	-	1.38
31	Tri	PCB-37	1.00	1.80e+06	1.09 y	32:59	-	1.40
32	Tetra	PCB-54	1.00	1.51e+06	0.77 y	28:01	-	1.28
33	Tetra	PCB-50	1.00	1.19e+06	0.86 y	29:11	-	1.01
34	Tetra	PCB-53	1.00	1.21e+06	0.82 y	29:49	-	1.24
35	Tetra	PCB-51	1.00	1.15e+06	0.86 y	30:10	-	1.18
36	Tetra	PCB-45	1.00	9.70e+05	0.76 y	30:36	-	0.99
37	Tetra	PCB-46	1.00	9.57e+05	0.75 y	31:05	-	0.98
38	Tetra	PCB-52/69	2.00	2.60e+06	0.79 y	31:33	-	1.33
39	Tetra	PCB-73	1.00	1.36e+06	0.84 y	31:40	-	1.39
40	Tetra	PCB-43/49	2.00	2.21e+06	0.81 y	31:50	-	1.13
41	Tetra	PCB-47	1.00	1.22e+06	0.72 y	32:02	-	1.18

42	Tetra	PCB-48/75	2.00	2.64e+06	0.76	y	32:09	- 1.28
43	Tetra	PCB-65	1.00	1.34e+06	0.76	y	32:25	- 1.30
44	Tetra	PCB-62	1.00	1.44e+06	0.77	y	32:32	- 1.40
45	Tetra	PCB-44	1.00	9.24e+05	0.78	y	32:50	- 0.90
46	Tetra	PCB-42/59	2.00	2.58e+06	0.75	y	33:04	- 1.25
47	Tetra	PCB-41/64/71/72	4.00	5.45e+06	0.78	y	33:39	- 1.32
48	Tetra	PCB-68	1.00	1.64e+06	0.79	y	33:54	- 1.59
49	Tetra	PCB-40	1.00	8.54e+05	0.76	y	34:07	- 0.83
50	Tetra	PCB-57	1.00	1.51e+06	0.73	y	34:29	- 1.18
51	Tetra	PCB-67	1.00	1.53e+06	0.78	y	34:47	- 1.20
52	Tetra	PCB-58	1.00	1.45e+06	0.75	y	34:54	- 1.13

53	Tetra	PCB-63	1.00	1.51e+06	0.75 y	35:03	-	1.17
54	Tetra	PCB-74	1.00	1.62e+06	0.77 y	35:20	-	1.27
55	Tetra	PCB-61/70	2.00	2.91e+06	0.80 y	35:31	-	1.13
56	Tetra	PCB-76/66	2.00	3.02e+06	0.75 y	35:44	-	1.18
57	Tetra	PCB-80	1.00	1.75e+06	0.82 y	35:57	-	1.33
58	Tetra	PCB-55	1.00	1.55e+06	0.78 y	36:17	-	1.17
59	Tetra	PCB-56/60	2.00	2.96e+06	0.79 y	36:47	-	1.12
60	Tetra	PCB-79	1.00	1.47e+06	0.75 y	37:50	-	1.11
61	Tetra	PCB-78	1.00	1.43e+06	0.78 y	38:32	-	1.32
62	Tetra	PCB-81	1.00	1.62e+06	0.82 y	39:04	-	1.50
63	Tetra	PCB-77	1.00	1.46e+06	0.80 y	39:40	-	1.26
64	Penta	PCB-104	1.00	1.12e+06	1.57 y	32:42	-	1.31
65	Penta	PCB-96	1.00	9.56e+05	1.70 y	33:57	-	1.12
66	Penta	PCB-103	1.00	8.44e+05	1.51 y	34:29	-	0.98
67	Penta	PCB-100	1.00	9.21e+05	1.69 y	34:50	-	1.08
68	Penta	PCB-94	1.00	6.94e+05	1.57 y	35:18	-	1.11
69	Penta	PCB-95/98/102	3.00	2.34e+06	1.61 y	35:47	-	1.25
70	Penta	PCB-93	1.00	8.35e+05	1.78 y	35:55	-	1.34
71	Penta	PCB-88/91	2.00	1.32e+06	1.53 y	36:12	-	1.06
72	Penta	PCB-121	1.00	1.38e+06	1.59 y	36:18	-	2.21
73	Penta	PCB-84/92	2.00	1.48e+06	1.69 y	37:09	-	1.13
74	Penta	PCB-89	1.00	6.78e+05	1.51 y	37:20	-	1.04
75	Penta	PCB-90/101	2.00	1.64e+06	1.61 y	37:31	-	1.26
76	Penta	PCB-113	1.00	8.19e+05	1.58 y	37:44	-	1.26
77	Penta	PCB-99	1.00	9.67e+05	1.59 y	37:50	-	1.48
78	Penta	PCB-119	1.00	1.04e+06	1.76 y	38:18	-	1.88
79	Penta	PCB-108/112	2.00	1.54e+06	1.59 y	38:27	-	1.39
80	Penta	PCB-83	1.00	8.48e+05	1.61 y	38:38	-	1.53
81	Penta	PCB-97	1.00	7.01e+05	1.71 y	38:49	-	1.26
82	Penta	PCB-86	1.00	5.31e+05	1.42 y	38:58	-	0.96
83	Penta	PCB-87/117/125	3.00	2.66e+06	1.67 y	39:05	-	1.60
84	Penta	PCB-111/115	2.00	2.00e+06	1.53 y	39:15	-	1.80
85	Penta	PCB-85/116	2.00	1.50e+06	1.61 y	39:23	-	1.35
86	Penta	PCB-120	1.00	1.00e+06	1.51 y	39:37	-	1.80
87	Penta	PCB-110	1.00	9.88e+05	1.74 y	39:46	-	1.78
88	Penta	PCB-82	1.00	6.18e+05	1.61 y	40:23	-	0.83
89	Penta	PCB-124	1.00	9.98e+05	1.74 y	41:03	-	1.34
90	Penta	PCB-107/109	2.00	1.94e+06	1.58 y	41:12	-	1.31
91	Penta	PCB-123	1.00	9.67e+05	1.61 y	41:22	-	1.30
92	Penta	PCB-106/118	2.00	1.95e+06	1.71 y	41:35	-	1.27
93	Penta	PCB-114	1.00	1.19e+06	1.64 y	42:13	-	1.37
94	Penta	PCB-122	1.00	1.14e+06	1.68 y	42:21	-	1.32
95	Penta	PCB-105	1.00	1.16e+06	1.68 y	43:05	-	1.29
96	Penta	PCB-127	1.00	1.14e+06	1.58 y	43:24	-	1.18
97	Penta	PCB-126	1.00	1.08e+06	1.48 y	45:19	-	1.28
98	Hexa	PCB-155	1.00	8.43e+05	1.23 y	37:03	-	1.20
99	Hexa	PCB-150	1.00	7.33e+05	1.34 y	38:20	-	1.04
100	Hexa	PCB-152	1.00	7.58e+05	1.20 y	38:48	-	1.08
101	Hexa	PCB-145	1.00	7.48e+05	1.15 y	39:15	-	1.06
102	Hexa	PCB-136	1.00	7.19e+05	1.34 y	39:33	-	1.02

103	Hexa	PCB-148	1.00	5.31e-05	1.18	y	39:40	-	0.75
104	Hexa	PCB-154	1.00	6.17e+05	1.37	y	40:10	-	0.88
105	Hexa	PCB-151	1.00	5.78e+05	1.33	y	40:48	-	0.82
106	Hexa	PCB-135	1.00	5.29e+05	1.36	y	41:01	-	0.75
107	Hexa	PCB-144	1.00	5.73e+05	1.29	y	41:08	-	0.81
108	Hexa	PCB-147	1.00	5.38e+05	1.32	y	41:16	-	0.76
109	Hexa	PCB-139/149	2.00	1.16e+06	1.33	y	41:30	-	0.82
110	Hexa	PCB-140	1.00	5.12e+05	1.26	y	41:42	-	0.73
111	Hexa	PCB-134/143	2.00	1.51e+06	1.24	y	42:09	-	0.94
112	Hexa	PCB-133/142	2.00	1.57e+06	1.37	y	42:26	-	0.98
113	Hexa	PCB-131	1.00	7.67e+05	1.32	y	42:36	-	0.96

114	Hexa	PCB-146/165	2.00	1.91e+06	1.21 y	42:48	-	1.19
115	Hexa	PCB-132/161	2.00	1.82e+06	1.22 y	43:03	-	1.14
116	Hexa	PCB-153	1.00	9.94e+05	1.17 y	43:14	-	1.24
117	Hexa	PCB-168	1.00	1.15e+06	1.10 y	43:27	-	1.44
118	Hexa	PCB-141	1.00	7.87e+05	1.28 y	43:58	-	1.00
119	Hexa	PCB-137	1.00	9.10e+05	1.29 y	44:21	-	1.16
120	Hexa	PCB-130	1.00	6.47e+05	1.23 y	44:28	-	0.83
121	Hexa	PCB-138/163/164	3.00	2.92e+06	1.18 y	44:50	-	1.28
122	Hexa	PCB-158/160	2.00	2.01e+06	1.38 y	45:05	-	1.33
123	Hexa	PCB-129	1.00	7.44e+05	1.17 y	45:19	-	0.98
124	Hexa	PCB-166	1.00	1.04e+06	1.28 y	45:46	-	1.21
125	Hexa	PCB-159	1.00	1.07e+06	1.23 y	46:05	-	1.24
126	Hexa	PCB-128/162	2.00	1.76e+06	1.16 y	46:22	-	1.03
127	Hexa	PCB-167	1.00	1.00e+06	1.19 y	46:47	-	1.04
128	Hexa	PCB-156	1.00	1.09e+06	1.12 y	48:04	-	1.20
129	Hexa	PCB-157	1.00	1.06e+06	1.22 y	48:20	-	1.12
130	Hexa	PCB-169	1.00	1.01e+06	1.16 y	50:24	-	1.15
131	Hepta	PCB-188	1.00	9.64e+05	1.15 y	42:52	-	1.44
132	Hepta	PCB-184	1.00	8.74e+05	0.93 y	43:18	-	1.30
133	Hepta	PCB-179	1.00	9.19e+05	1.16 y	44:06	-	1.37
134	Hepta	PCB-176	1.00	9.89e+05	1.02 y	44:34	-	1.47
135	Hepta	PCB-186	1.00	8.74e+05	1.12 y	45:09	-	1.30
136	Hepta	PCB-178	1.00	7.05e+05	1.02 y	45:38	-	1.05
137	Hepta	PCB-175	1.00	6.78e+05	0.95 y	45:59	-	1.01
138	Hepta	PCB-182/187	2.00	1.38e+06	0.98 y	46:11	-	1.03
139	Hepta	PCB-183	1.00	7.83e+05	1.07 y	46:29	-	1.17
140	Hepta	PCB-185	1.00	6.66e+05	0.96 y	47:09	-	1.37
141	Hepta	PCB-174	1.00	6.57e+05	1.07 y	47:31	-	1.36
142	Hepta	PCB-181	1.00	7.19e+05	0.90 y	47:36	-	1.48
143	Hepta	PCB-177	1.00	5.95e+05	0.98 y	47:47	-	1.23
144	Hepta	PCB-171	1.00	6.43e+05	1.06 y	48:04	-	1.33
145	Hepta	PCB-173	1.00	5.49e+05	1.09 y	48:31	-	1.13
146	Hepta	PCB-172	1.00	5.72e+05	1.17 y	48:57	-	1.18
147	Hepta	PCB-192	1.00	7.66e+05	1.07 y	49:09	-	1.58
148	Hepta	PCB-180	1.00	7.16e+05	1.13 y	49:20	-	1.48
149	Hepta	PCB-193	1.00	8.30e+05	1.09 y	49:32	-	1.71
150	Hepta	PCB-191	1.00	7.89e+05	1.14 y	49:46	-	1.63
151	Hepta	PCB-170	1.00	6.49e+05	1.09 y	50:45	-	1.67
152	Hepta	PCB-190	1.00	8.09e+05	1.12 y	50:55	-	2.09
153	Hepta	PCB-189	1.00	8.02e+05	1.19 y	52:12	-	1.58
154	Octa	PCB-202	1.00	6.64e+05	0.98 y	48:17	-	1.11
155	Octa	PCB-201	1.00	6.64e+05	0.96 y	48:46	-	1.11
156	Octa	PCB-204	1.00	5.92e+05	0.96 y	48:55	-	0.99
157	Octa	PCB-197	1.00	6.20e+05	0.87 y	49:13	-	1.04
158	Octa	PCB-200	1.00	6.09e+05	0.92 y	50:03	-	1.02
159	Octa	PCB-198	1.00	4.81e+05	0.77 y	51:20	-	0.81
160	Octa	PCB-199	1.00	4.49e+05	0.78 y	51:25	-	0.75
161	Octa	PCB-196/203	2.00	9.60e+05	0.87 y	51:40	-	0.80
162	Octa	PCB-195	1.00	6.50e+05	0.91 y	52:49	-	1.23
163	Octa	PCB-194	1.00	6.42e+05	1.01 y	53:40	-	1.21

164	Octa		PCB-205	1.00	7.63e+05	0.88	y	53:57	-	1.44
165	Nona		PCB-208	1.00	7.07e+05	1.32	y	52:57	-	0.95
166	Nona		PCB-207	1.00	7.22e+05	1.40	y	53:16	-	0.97
167	Nona		PCB-206	1.00	4.47e+05	1.26	y	55:21	-	1.05
168	Deca		PCB-209	1.00	4.65e+05	1.13	y	56:37	-	1.19
169	Tot ╗	Total	Mono-PCB	0.00	-	-	n	-	-	1.27
170	Tot ╗	Total	Di-PCB	0.00	-	-	n	-	-	1.24
171	Tot ╗	Total	Tri-PCB	0.00	-	-	n	-	-	1.20

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.38
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.21
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.27
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.29
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.90
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.12
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.31
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.94
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.29
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	0.98
182	Tot ╗	Total Deca-PCB	1.00	4.65e+05	1.13	y	56:37	-	1.19
183	Mono╗	13C-PCB-1	100.00	1.56e+08	3.23	y	16:15	-	0.94
184	Mono╗	13C-PCB-3	100.00	1.56e+08	3.29	y	18:50	-	0.94
185	Di-IS	13C-PCB-4	100.00	9.40e+07	1.58	y	20:09	-	0.57
186	Di-IS	13C-PCB-9	100.00	1.41e+08	1.60	y	21:55	-	0.85
187	Di-IS	13C-PCB-11	100.00	1.59e+08	1.57	y	25:17	-	0.96
188	Tri-╗	13C-PCB-19	100.00	9.18e+07	1.06	y	24:16	-	0.55
189	Tri-╗	13C-PCB-32	100.00	1.37e+08	1.08	y	27:10	-	0.82
190	Tri-╗	13C-PCB-28	100.00	1.40e+08	1.05	y	29:07	-	0.91
191	Tri-╗	13C-PCB-37	100.00	1.28e+08	1.06	y	32:59	-	0.83
192	Tetr╗	13C-PCB-54	100.00	1.18e+08	0.81	y	28:00	-	0.89
193	Tetr╗	13C-PCB-52	100.00	9.78e+07	0.79	y	31:30	-	0.74
194	Tetr╗	13C-PCB-47	100.00	1.03e+08	0.79	y	32:01	-	0.78
195	Tetr╗	13C-PCB-70	100.00	1.28e+08	0.80	y	35:31	-	0.97
196	Tetr╗	13C-PCB-80	100.00	1.32e+08	0.81	y	35:56	-	1.00
197	Tetr╗	13C-PCB-81	100.00	1.09e+08	0.81	y	39:03	-	0.82
198	Tetr╗	13C-PCB-77	100.00	1.16e+08	0.80	y	39:38	-	0.87
199	Pent╗	13C-PCB-104	100.00	8.57e+07	1.62	y	32:41	-	1.06
200	Pent╗	13C-PCB-95	100.00	6.25e+07	1.56	y	35:50	-	0.78
201	Pent╗	13C-PCB-101	100.00	6.52e+07	1.58	y	37:30	-	0.81
202	Pent╗	13C-PCB-97	100.00	5.55e+07	1.65	y	38:48	-	0.69
203	Pent╗	13C-PCB-123	100.00	7.42e+07	1.57	y	41:21	-	0.92
204	Pent╗	13C-PCB-118	100.00	7.69e+07	1.66	y	41:33	-	0.95
205	Pent╗	13C-PCB-114	100.00	8.65e+07	1.61	y	42:12	-	1.20
206	Pent╗	13C-PCB-105	100.00	8.97e+07	1.59	y	43:03	-	1.24
207	Pent╗	13C-PCB-127	100.00	9.70e+07	1.57	y	43:23	-	1.34
208	Pent╗	13C-PCB-126	100.00	8.43e+07	1.60	y	45:18	-	1.17
209	Hexa╗	13C-PCB-155	100.00	7.04e+07	1.28	y	37:03	-	0.87
210	Hexa╗	13C-PCB-153	100.00	8.00e+07	1.28	y	43:13	-	1.11
211	Hexa╗	13C-PCB-141	100.00	7.84e+07	1.29	y	43:57	-	1.09
212	Hexa	13C-PCB-138	100.00	7.60e+07	1.27	y	44:48	-	1.05
213	Hexa╗	13C-PCB-159	100.00	8.60e+07	1.28	y	46:05	-	1.19
214	Hexa╗	13C-PCB-167	100.00	9.61e+07	1.31	y	46:45	-	1.33
215	Hexa╗	13C-PCB-156	100.00	9.01e+07	1.28	y	48:03	-	1.25
216	Hexa╗	13C-PCB-157	100.00	9.47e+07	1.27	y	48:19	-	1.31
217	Hexa╗	13C-PCB-169	100.00	8.76e+07	1.27	y	50:24	-	1.21
218	Hept╗	13C-PCB-188	100.00	6.71e+07	0.47	y	42:51	-	0.93
219	Hept╗	13C-PCB-180	100.00	4.84e+07	0.47	y	49:19	-	0.67
220	Hept╗	13C-PCB-170	100.00	3.88e+07	0.48	y	50:45	-	0.54
221	Hept╗	13C-PCB-189	100.00	5.08e+07	0.46	y	52:10	-	0.70
222	Octa╗	13C-PCB-202	100.00	5.96e+07	0.91	y	48:16	-	0.83

223	Octa¶	13C-PCB-194	100.00	5.30e+07	0.91	y	53:40	-	0.82
224	Nona¶	13C-PCB-208	100.00	7.41e+07	0.77	y	52:56	-	1.14
225	Nona¶	13C-PCB-206	100.00	4.24e+07	0.79	y	55:20	-	0.65
226	Deca¶	13C-PCB-209	100.00	3.91e+07	1.19	y	56:37	-	0.60
227	DI-RS	13C-PCB-15	100.00	1.66e+08	1.58	y	25:59	-	1.00
228	Tri-¶	13C-PCB-31	100.00	1.54e+08	1.06	y	29:00	-	1.00
229	Tetr¶	13C-PCB-60	100.00	1.33e+08	0.79	y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	8.06e+07	1.63	y	39:14	-	1.00
231	Hexa¶	13C-PCB-128	100.00	7.22e+07	1.30	y	46:21	-	1.00
232	Octa¶	13C-PCB-205	100.00	6.47e+07	0.91	y	53:57	-	1.00

233	CRS		13C-PCB-79	100.00	1.28e+08	0.81	y	37:49	- 0.97
234	CRS		13C-PCB-178	100.00	4.42e+07	0.46	y	45:38	- 0.61
235	PS		13C-PCB-79	100.00	1.28e+08	0.81	y	37:49	- 1.18
236	PS		13C-PCB-178	100.00	4.42e+07	0.46	y	45:38	- 0.91

Filename: 140620E1 S: 3 Acquired: 20-JUN-14 11:39:47
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-3 PCB CS2 13H1205

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	2.50	1.09e+07	2.94 y	16:15	-	1.26
2	Mono	PCB-2	2.50	1.01e+07	3.00 y	18:37	-	1.14
3	Mono	PCB-3	2.50	1.09e+07	3.06 y	18:51	-	1.23
4	Di	PCB-4/10	10.00	3.30e+07	1.63 y	20:12	-	1.55
5	Di	PCB-7/9	10.00	4.03e+07	1.63 y	21:58	-	1.26
6	Di	PCB-6	5.00	2.02e+07	1.66 y	22:36	-	1.26
7	Di	PCB-5/8	10.00	3.95e+07	1.65 y	23:01	-	1.23
8	Di	PCB-14	5.00	2.20e+07	1.65 y	24:06	-	1.21
9	Di	PCB-11	5.00	2.10e+07	1.68 y	25:18	-	1.16
10	Di	PCB-12/13	10.00	3.98e+07	1.61 y	25:41	-	1.10
11	Di	PCB-15	5.00	2.21e+07	1.67 y	25:59	-	1.22
12	Tri	PCB-19	2.50	6.55e+06	1.07 y	24:18	-	1.26
13	Tri	PCB-30	2.50	9.41e+06	1.06 y	25:11	-	1.82
14	Tri	PCB-18	2.50	6.63e+06	1.06 y	25:55	-	0.85
15	Tri	PCB-17	2.50	6.98e+06	1.08 y	26:06	-	0.89
16	Tri	PCB-24/27	5.00	1.85e+07	1.06 y	26:40	-	1.18
17	Tri	PCB-16/32	5.00	1.59e+07	1.07 y	27:10	-	1.02
18	Tri	PCB-34	2.50	9.58e+06	1.09 y	27:57	-	1.25
19	Tri	PCB-23	2.50	1.08e+07	1.09 y	28:03	-	1.41
20	Tri	PCB-29	2.50	1.02e+07	1.10 y	28:18	-	1.32
21	Tri	PCB-26	2.50	1.02e+07	1.06 y	28:30	-	1.32
22	Tri	PCB-25	2.50	1.04e+07	1.14 y	28:40	-	1.36
23	Tri	PCB-31	2.50	1.12e+07	1.09 y	29:02	-	1.46
24	Tri	PCB-28	2.50	1.08e+07	1.11 y	29:08	-	1.41
25	Tri	PCB-20/21/33	7.50	3.04e+07	1.09 y	29:45	-	1.32
26	Tri	PCB-22	2.50	1.03e+07	1.06 y	30:11	-	1.35
27	Tri	PCB-36	2.50	1.02e+07	1.08 y	30:48	-	1.38
28	Tri	PCB-39	2.50	1.04e+07	1.08 y	31:16	-	1.41
29	Tri	PCB-38	2.50	1.00e+07	1.09 y	32:03	-	1.36
30	Tri	PCB-35	2.50	9.94e+06	1.07 y	32:33	-	1.35
31	Tri	PCB-37	2.50	1.02e+07	1.12 y	32:59	-	1.39
32	Tetra	PCB-54	2.50	7.98e+06	0.79 y	28:02	-	1.18
33	Tetra	PCB-50	2.50	6.47e+06	0.77 y	29:11	-	0.96
34	Tetra	PCB-53	2.50	6.40e+06	0.77 y	29:50	-	1.14
35	Tetra	PCB-51	2.50	6.58e+06	0.81 y	30:10	-	1.17
36	Tetra	PCB-45	2.50	5.60e+06	0.78 y	30:36	-	1.00
37	Tetra	PCB-46	2.50	5.09e+06	0.75 y	31:05	-	0.90
38	Tetra	PCB-52/69	5.00	1.50e+07	0.79 y	31:33	-	1.33
39	Tetra	PCB-73	2.50	7.36e+06	0.75 y	31:40	-	1.31
40	Tetra	PCB-43/49	5.00	1.23e+07	0.78 y	31:50	-	1.10
41	Tetra	PCB-47	2.50	6.07e+06	0.76 y	32:02	-	1.04

42	Tetra	PCB-48/75	5.00	1.55e+07	0.77	y	32:09	- 1.33
43	Tetra	PCB-65	2.50	7.45e+06	0.79	y	32:25	- 1.28
44	Tetra	PCB-62	2.50	7.60e+06	0.79	y	32:32	- 1.30
45	Tetra	PCB-44	2.50	5.73e+06	0.74	y	32:50	- 0.98
46	Tetra	PCB-42/59	5.00	1.41e+07	0.77	y	33:04	- 1.21
47	Tetra	PCB-41/64/71/72	10.00	2.98e+07	0.78	y	33:39	- 1.28
48	Tetra	PCB-68	2.50	8.64e+06	0.79	y	33:54	- 1.48
49	Tetra	PCB-40	2.50	4.77e+06	0.77	y	34:07	- 0.82
50	Tetra	PCB-57	2.50	7.93e+06	0.79	y	34:28	- 1.11
51	Tetra	PCB-67	2.50	8.04e+06	0.68	y	34:46	- 1.12
52	Tetra	PCB-58	2.50	8.03e+06	0.88	y	34:53	- 1.12

53	Tetra	PCB-63	2.50	8.15e+06	0.80 y	35:03	-	1.14
54	Tetra	PCB-74	2.50	8.76e+06	0.78 y	35:20	-	1.22
55	Tetra	PCB-61/70	5.00	1.56e+07	0.76 y	35:31	-	1.08
56	Tetra	PCB-76/66	5.00	1.60e+07	0.79 y	35:44	-	1.12
57	Tetra	PCB-80	2.50	9.48e+06	0.78 y	35:58	-	1.28
58	Tetra	PCB-55	2.50	8.11e+06	0.77 y	36:17	-	1.10
59	Tetra	PCB-56/60	5.00	1.58e+07	0.77 y	36:47	-	1.07
60	Tetra	PCB-79	2.50	8.31e+06	0.75 y	37:50	-	1.12
61	Tetra	PCB-78	2.50	7.55e+06	0.77 y	38:32	-	1.20
62	Tetra	PCB-81	2.50	8.89e+06	0.79 y	39:04	-	1.41
63	Tetra	PCB-77	2.50	8.13e+06	0.82 y	39:39	-	1.22
64	Penta	PCB-104	2.50	6.23e+06	1.51 y	32:41	-	1.28
65	Penta	PCB-96	2.50	5.23e+06	1.55 y	33:57	-	1.08
66	Penta	PCB-103	2.50	4.30e+06	1.55 y	34:29	-	0.89
67	Penta	PCB-100	2.50	4.69e+06	1.55 y	34:50	-	0.97
68	Penta	PCB-94	2.50	3.79e+06	1.67 y	35:18	-	1.11
69	Penta	PCB-95/98/102	7.50	1.21e+07	1.60 y	35:48	-	1.18
70	Penta	PCB-93	2.50	4.14e+06	1.71 y	35:56	-	1.21
71	Penta	PCB-88/91	5.00	6.98e+06	1.52 y	36:13	-	1.02
72	Penta	PCB-121	2.50	6.62e+06	1.66 y	36:18	-	1.94
73	Penta	PCB-84/92	5.00	7.58e+06	1.59 y	37:08	-	1.05
74	Penta	PCB-89	2.50	3.69e+06	1.55 y	37:20	-	1.02
75	Penta	PCB-90/101	5.00	8.58e+06	1.58 y	37:30	-	1.19
76	Penta	PCB-113	2.50	4.74e+06	1.59 y	37:45	-	1.32
77	Penta	PCB-99	2.50	4.85e+06	1.65 y	37:50	-	1.35
78	Penta	PCB-119	2.50	5.47e+06	1.52 y	38:19	-	1.72
79	Penta	PCB-108/112	5.00	8.21e+06	1.65 y	38:28	-	1.29
80	Penta	PCB-83	2.50	4.81e+06	1.57 y	38:38	-	1.51
81	Penta	PCB-97	2.50	4.05e+06	1.59 y	38:49	-	1.27
82	Penta	PCB-86	2.50	3.35e+06	1.53 y	38:57	-	1.05
83	Penta	PCB-87/117/125	7.50	1.48e+07	1.59 y	39:05	-	1.55
84	Penta	PCB-111/115	5.00	1.08e+07	1.58 y	39:14	-	1.69
85	Penta	PCB-85/116	5.00	8.48e+06	1.60 y	39:22	-	1.33
86	Penta	PCB-120	2.50	5.59e+06	1.63 y	39:37	-	1.76
87	Penta	PCB-110	2.50	5.26e+06	1.59 y	39:45	-	1.65
88	Penta	PCB-82	2.50	3.23e+06	1.69 y	40:24	-	0.73
89	Penta	PCB-124	2.50	5.89e+06	1.57 y	41:04	-	1.33
90	Penta	PCB-107/109	5.00	1.04e+07	1.65 y	41:13	-	1.18
91	Penta	PCB-123	2.50	5.43e+06	1.52 y	41:23	-	1.23
92	Penta	PCB-106/118	5.00	1.13e+07	1.59 y	41:34	-	1.25
93	Penta	PCB-114	2.50	6.81e+06	1.68 y	42:13	-	1.36
94	Penta	PCB-122	2.50	6.01e+06	1.59 y	42:21	-	1.20
95	Penta	PCB-105	2.50	6.91e+06	1.69 y	43:05	-	1.33
96	Penta	PCB-127	2.50	6.53e+06	1.64 y	43:25	-	1.14
97	Penta	PCB-126	2.50	6.39e+06	1.68 y	45:18	-	1.28
98	Hexa	PCB-155	2.50	4.51e+06	1.22 y	37:04	-	1.18
99	Hexa	PCB-150	2.50	4.00e+06	1.22 y	38:20	-	1.05
100	Hexa	PCB-152	2.50	4.04e+06	1.22 y	38:48	-	1.06
101	Hexa	PCB-145	2.50	4.00e+06	1.28 y	39:14	-	1.05
102	Hexa	PCB-136	2.50	4.13e+06	1.32 y	39:34	-	1.08

103	Hexa	PCB-148	2.50	2.58e-06	1.36 y	39:41	-	0.68
104	Hexa	PCB-154	2.50	3.37e+06	1.28 y	40:09	-	0.88
105	Hexa	PCB-151	2.50	2.97e+06	1.35 y	40:48	-	0.78
106	Hexa	PCB-135	2.50	2.92e+06	1.29 y	41:00	-	0.76
107	Hexa	PCB-144	2.50	2.97e+06	1.28 y	41:07	-	0.78
108	Hexa	PCB-147	2.50	2.99e+06	1.23 y	41:15	-	0.78
109	Hexa	PCB-139/149	5.00	6.36e+06	1.23 y	41:31	-	0.83
110	Hexa	PCB-140	2.50	2.90e+06	1.28 y	41:42	-	0.76
111	Hexa	PCB-134/143	5.00	8.39e+06	1.23 y	42:08	-	0.90
112	Hexa	PCB-133/142	5.00	8.52e+06	1.22 y	42:26	-	0.91
113	Hexa	PCB-131	2.50	4.20e+06	1.24 y	42:36	-	0.90

114	Hexa	PCB-146/165	5.00	1.07e+07	1.23 y	42:49	-	1.14
115	Hexa	PCB-132/161	5.00	1.02e+07	1.22 y	43:04	-	1.09
116	Hexa	PCB-153	2.50	5.91e+06	1.25 y	43:13	-	1.26
117	Hexa	PCB-168	2.50	6.38e+06	1.17 y	43:26	-	1.37
118	Hexa	PCB-141	2.50	4.37e+06	1.21 y	43:58	-	0.97
119	Hexa	PCB-137	2.50	4.74e+06	1.24 y	44:21	-	1.05
120	Hexa	PCB-130	2.50	3.95e+06	1.26 y	44:27	-	0.87
121	Hexa	PCB-138/163/164	7.50	1.61e+07	1.23 y	44:50	-	1.22
122	Hexa	PCB-158/160	5.00	1.14e+07	1.26 y	45:04	-	1.29
123	Hexa	PCB-129	2.50	4.07e+06	1.27 y	45:19	-	0.93
124	Hexa	PCB-166	2.50	5.65e+06	1.19 y	45:46	-	1.11
125	Hexa	PCB-159	2.50	5.99e+06	1.25 y	46:05	-	1.18
126	Hexa	PCB-128/162	5.00	1.06e+07	1.20 y	46:23	-	1.04
127	Hexa	PCB-167	2.50	6.20e+06	1.24 y	46:46	-	1.10
128	Hexa	PCB-156	2.50	6.26e+06	1.23 y	48:04	-	1.18
129	Hexa	PCB-157	2.50	6.28e+06	1.27 y	48:20	-	1.13
130	Hexa	PCB-169	2.50	5.82e+06	1.20 y	50:24	-	1.12
131	Hepta	PCB-188	2.50	5.50e+06	1.08 y	42:52	-	1.43
132	Hepta	PCB-184	2.50	4.81e+06	1.08 y	43:19	-	1.25
133	Hepta	PCB-179	2.50	5.06e+06	1.03 y	44:06	-	1.32
134	Hepta	PCB-176	2.50	5.19e+06	1.06 y	44:34	-	1.35
135	Hepta	PCB-186	2.50	4.80e+06	1.01 y	45:11	-	1.25
136	Hepta	PCB-178	2.50	3.68e+06	1.04 y	45:40	-	0.96
137	Hepta	PCB-175	2.50	3.76e+06	1.07 y	46:00	-	0.98
138	Hepta	PCB-182/187	5.00	7.80e+06	1.03 y	46:11	-	1.01
139	Hepta	PCB-183	2.50	4.14e+06	1.08 y	46:30	-	1.08
140	Hepta	PCB-185	2.50	3.61e+06	1.06 y	47:09	-	1.30
141	Hepta	PCB-174	2.50	3.80e+06	1.05 y	47:31	-	1.36
142	Hepta	PCB-181	2.50	3.56e+06	1.02 y	47:38	-	1.28
143	Hepta	PCB-177	2.50	3.33e+06	1.02 y	47:47	-	1.20
144	Hepta	PCB-171	2.50	3.72e+06	1.05 y	48:04	-	1.34
145	Hepta	PCB-173	2.50	3.21e+06	1.03 y	48:31	-	1.15
146	Hepta	PCB-172	2.50	3.40e+06	1.05 y	48:57	-	1.22
147	Hepta	PCB-192	2.50	4.16e+06	1.05 y	49:09	-	1.49
148	Hepta	PCB-180	2.50	4.01e+06	1.10 y	49:21	-	1.44
149	Hepta	PCB-193	2.50	4.60e+06	1.04 y	49:32	-	1.65
150	Hepta	PCB-191	2.50	4.58e+06	1.05 y	49:46	-	1.65
151	Hepta	PCB-170	2.50	3.36e+06	1.02 y	50:45	-	1.51
152	Hepta	PCB-190	2.50	4.37e+06	1.06 y	50:55	-	1.97
153	Hepta	PCB-189	2.50	4.66e+06	1.06 y	52:12	-	1.55
154	Octa	PCB-202	2.50	3.48e+06	0.98 y	48:17	-	1.01
155	Octa	PCB-201	2.50	3.65e+06	0.94 y	48:46	-	1.06
156	Octa	PCB-204	2.50	3.41e+06	0.91 y	48:55	-	0.99
157	Octa	PCB-197	2.50	3.58e+06	0.96 y	49:14	-	1.04
158	Octa	PCB-200	2.50	3.52e+06	0.95 y	50:03	-	1.02
159	Octa	PCB-198	2.50	2.39e+06	0.96 y	51:19	-	0.69
160	Octa	PCB-199	2.50	2.50e+06	0.94 y	51:25	-	0.73
161	Octa	PCB-196/203	5.00	5.16e+06	0.89 y	51:41	-	0.75
162	Octa	PCB-195	2.50	3.62e+06	0.88 y	52:48	-	1.17
163	Octa	PCB-194	2.50	3.77e+06	0.94 y	53:40	-	1.22

164	Octa	PCB-205	2.50	4.34e+06	0.90	y	53:57	-	1.41
165	Nona	PCB-208	2.50	3.94e+06	1.36	y	52:56	-	0.93
166	Nona	PCB-207	2.50	3.87e+06	1.29	y	53:15	-	0.91
167	Nona	PCB-206	2.50	2.57e+06	1.40	y	55:20	-	1.03
168	Deca	PCB-209	2.50	2.82e+06	1.17	y	56:37	-	1.21
169	Tot ╗	Total Mono-PCB	0.00	-	-	n	-	-	1.21
170	Tot ╗	Total Di-PCB	0.00	-	-	n	-	-	1.21
171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.15

172	Tot ╕	Total Tri-PCB	0.00	-	-	n	-	-	1.36
173	Tot ╕	Total Tetra-PCB	0.00	-	-	n	-	-	1.17
174	Tot ╕	Total Penta-PCB	0.00	-	-	n	-	-	1.21
175	Tot ╕	Total Penta-PCB	0.00	-	-	n	-	-	1.26
176	Tot ╕	Total Hexa-PCB	0.00	-	-	n	-	-	0.89
177	Tot ╕	Total Hexa-PCB	0.00	-	-	n	-	-	1.08
178	Tot ╕	Total Hepta-PCB	0.00	-	-	n	-	-	1.27
179	Tot ╕	Total Octa-PCB	0.00	-	-	n	-	-	0.89
180	Tot ╕	Total Octa-PCB	0.00	-	-	n	-	-	1.26
181	Tot ╕	Total Nona-PCB	0.00	-	-	n	-	-	0.94
182	Tot ╕	Total Deca-PCB	2.50	2.82e+06	1.17	y	56:37	-	1.21
183	Mono╕	13C-PCB-1	100.00	3.46e+08	3.25	y	16:14	-	0.91
184	Mono╕	13C-PCB-3	100.00	3.56e+08	3.24	y	18:50	-	0.94
185	Di-IS	13C-PCB-4	100.00	2.13e+08	1.57	y	20:09	-	0.56
186	Di-IS	13C-PCB-9	100.00	3.20e+08	1.57	y	21:55	-	0.84
187	Di-IS	13C-PCB-11	100.00	3.64e+08	1.57	y	25:16	-	0.96
188	Tri-╕	13C-PCB-19	100.00	2.07e+08	1.06	y	24:16	-	0.55
189	Tri-╕	13C-PCB-32	100.00	3.14e+08	1.08	y	27:10	-	0.83
190	Tri-╕	13C-PCB-28	100.00	3.07e+08	1.06	y	29:07	-	0.83
191	Tri-╕	13C-PCB-37	100.00	2.95e+08	1.07	y	32:58	-	0.80
192	Tetr╕	13C-PCB-54	100.00	2.71e+08	0.81	y	28:00	-	0.91
193	Tetr╕	13C-PCB-52	100.00	2.25e+08	0.80	y	31:31	-	0.75
194	Tetr╕	13C-PCB-47	100.00	2.33e+08	0.79	y	32:01	-	0.78
195	Tetr╕	13C-PCB-70	100.00	2.87e+08	0.80	y	35:32	-	0.96
196	Tetr╕	13C-PCB-80	100.00	2.96e+08	0.81	y	35:56	-	0.99
197	Tetr╕	13C-PCB-81	100.00	2.52e+08	0.80	y	39:03	-	0.84
198	Tetr╕	13C-PCB-77	100.00	2.67e+08	0.80	y	39:38	-	0.90
199	Pent╕	13C-PCB-104	100.00	1.94e+08	1.60	y	32:40	-	1.07
200	Pent╕	13C-PCB-95	100.00	1.37e+08	1.60	y	35:50	-	0.75
201	Pent╕	13C-PCB-101	100.00	1.44e+08	1.61	y	37:30	-	0.79
202	Pent╕	13C-PCB-97	100.00	1.27e+08	1.61	y	38:48	-	0.70
203	Pent╕	13C-PCB-123	100.00	1.77e+08	1.58	y	41:22	-	0.98
204	Pent╕	13C-PCB-118	100.00	1.80e+08	1.61	y	41:33	-	0.99
205	Pent╕	13C-PCB-114	100.00	2.01e+08	1.59	y	42:12	-	1.21
206	Pent╕	13C-PCB-105	100.00	2.08e+08	1.59	y	43:04	-	1.25
207	Pent╕	13C-PCB-127	100.00	2.30e+08	1.60	y	43:23	-	1.38
208	Pent╕	13C-PCB-126	100.00	2.00e+08	1.58	y	45:18	-	1.20
209	Hexa╕	13C-PCB-155	100.00	1.53e+08	1.28	y	37:03	-	0.84
210	Hexa╕	13C-PCB-153	100.00	1.87e+08	1.28	y	43:13	-	1.13
211	Hexa╕	13C-PCB-141	100.00	1.81e+08	1.27	y	43:57	-	1.09
212	Hexa	13C-PCB-138	100.00	1.75e+08	1.26	y	44:48	-	1.06
213	Hexa╕	13C-PCB-159	100.00	2.03e+08	1.26	y	46:04	-	1.22
214	Hexa╕	13C-PCB-167	100.00	2.26e+08	1.29	y	46:46	-	1.36
215	Hexa╕	13C-PCB-156	100.00	2.13e+08	1.27	y	48:03	-	1.28
216	Hexa╕	13C-PCB-157	100.00	2.22e+08	1.29	y	48:20	-	1.34
217	Hexa╕	13C-PCB-169	100.00	2.08e+08	1.29	y	50:23	-	1.25
218	Hept╕	13C-PCB-188	100.00	1.54e+08	0.47	y	42:51	-	0.93
219	Hept╕	13C-PCB-180	100.00	1.11e+08	0.47	y	49:20	-	0.67
220	Hept╕	13C-PCB-170	100.00	8.90e+07	0.47	y	50:44	-	0.54
221	Hept╕	13C-PCB-189	100.00	1.21e+08	0.46	y	52:11	-	0.73
222	Octa╕	13C-PCB-202	100.00	1.38e+08	0.91	y	48:16	-	0.83

223	Octa╗	13C-PCB-194	100.00	1.24e+08	0.92 y	53:39	-	0.82
224	Nona╗	13C-PCB-208	100.00	1.70e+08	0.78 y	52:56	-	1.13
225	Nona╗	13C-PCB-206	100.00	1.00e+08	0.81 y	55:19	-	0.66
226	Deca╗	13C-PCB-209	100.00	9.32e+07	1.21 y	56:36	-	0.62
227	DI-RS	13C-PCB-15	100.00	3.79e+08	1.56 y	25:59	-	1.00
228	Tri-╗	13C-PCB-31	100.00	3.70e+08	1.06 y	29:01	-	1.00
229	Tetr╗	13C-PCB-60	100.00	2.98e+08	0.79 y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	1.81e+08	1.61 y	39:13	-	1.00
231	Hexa╗	13C-PCB-128	100.00	1.66e+08	1.28 y	46:22	-	1.00
232	Octa╗	13C-PCB-205	100.00	1.51e+08	0.90 y	53:56	-	1.00

233	CRS		13C-PCB-79	100.00	2.94e+08	0.79	y	37:49	- 0.99
234	CRS		13C-PCB-178	100.00	1.02e+08	0.47	y	45:38	- 0.62
235	PS		13C-PCB-79	100.00	2.94e+08	0.79	y	37:49	- 1.17
236	PS		13C-PCB-178	100.00	1.02e+08	0.47	y	45:38	- 0.92

Filename: 140620E1 S: 4 Acquired: 20-JUN-14 12:43:46
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-4 PCB CS3 14F1901

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	50.00	7.81e+07	2.96 y	16:15	-	1.31
2	Mono	PCB-2	50.00	7.76e+07	2.98 y	18:36	-	1.24
3	Mono	PCB-3	50.00	7.92e+07	2.99 y	18:50	-	1.26
4	Di	PCB-4/10	200.00	2.38e+08	1.63 y	20:12	-	1.61
5	Di	PCB-7/9	200.00	2.89e+08	1.64 y	21:57	-	1.30
6	Di	PCB-6	100.00	1.40e+08	1.64 y	22:36	-	1.26
7	Di	PCB-5/8	200.00	2.85e+08	1.64 y	23:01	-	1.28
8	Di	PCB-14	100.00	1.58e+08	1.64 y	24:06	-	1.27
9	Di	PCB-11	100.00	1.47e+08	1.66 y	25:17	-	1.18
10	Di	PCB-12/13	200.00	2.83e+08	1.65 y	25:41	-	1.14
11	Di	PCB-15	100.00	1.54e+08	1.67 y	26:00	-	1.24
12	Tri	PCB-19	50.00	4.61e+07	1.05 y	24:17	-	1.28
13	Tri	PCB-30	50.00	6.74e+07	1.06 y	25:10	-	1.87
14	Tri	PCB-18	50.00	4.73e+07	1.06 y	25:55	-	0.87
15	Tri	PCB-17	50.00	4.99e+07	1.05 y	26:05	-	0.92
16	Tri	PCB-24/27	100.00	1.33e+08	1.06 y	26:40	-	1.22
17	Tri	PCB-16/32	100.00	1.13e+08	1.05 y	27:10	-	1.03
18	Tri	PCB-34	50.00	6.57e+07	1.09 y	27:57	-	1.23
19	Tri	PCB-23	50.00	7.68e+07	1.09 y	28:02	-	1.44
20	Tri	PCB-29	50.00	7.27e+07	1.09 y	28:18	-	1.36
21	Tri	PCB-26	50.00	7.01e+07	1.08 y	28:30	-	1.31
22	Tri	PCB-25	50.00	7.40e+07	1.09 y	28:40	-	1.38
23	Tri	PCB-31	50.00	7.56e+07	1.08 y	29:02	-	1.41
24	Tri	PCB-28	50.00	7.73e+07	1.11 y	29:07	-	1.45
25	Tri	PCB-20/21/33	150.00	2.14e+08	1.09 y	29:45	-	1.34
26	Tri	PCB-22	50.00	7.44e+07	1.09 y	30:11	-	1.39
27	Tri	PCB-36	50.00	7.19e+07	1.09 y	30:47	-	1.43
28	Tri	PCB-39	50.00	7.33e+07	1.08 y	31:16	-	1.46
29	Tri	PCB-38	50.00	7.08e+07	1.08 y	32:02	-	1.41
30	Tri	PCB-35	50.00	7.21e+07	1.11 y	32:33	-	1.44
31	Tri	PCB-37	50.00	7.05e+07	1.09 y	32:59	-	1.41
32	Tetra	PCB-54	50.00	5.75e+07	0.77 y	28:01	-	1.24
33	Tetra	PCB-50	50.00	4.62e+07	0.77 y	29:11	-	0.99
34	Tetra	PCB-53	50.00	4.60e+07	0.78 y	29:49	-	1.19
35	Tetra	PCB-51	50.00	4.72e+07	0.78 y	30:10	-	1.23
36	Tetra	PCB-45	50.00	3.93e+07	0.78 y	30:36	-	1.02
37	Tetra	PCB-46	50.00	3.68e+07	0.76 y	31:04	-	0.95
38	Tetra	PCB-52/69	100.00	1.04e+08	0.77 y	31:33	-	1.35
39	Tetra	PCB-73	50.00	5.52e+07	0.77 y	31:39	-	1.43
40	Tetra	PCB-43/49	100.00	8.70e+07	0.78 y	31:50	-	1.13
41	Tetra	PCB-47	50.00	4.87e+07	0.76 y	32:02	-	1.20

42	Tetra	PCB-48/75	100.00	1.06e-08	0.78 y	32:09	-	1.31
43	Tetra	PCB-65	50.00	5.35e-07	0.77 y	32:25	-	1.32
44	Tetra	PCB-62	50.00	5.60e+07	0.77 y	32:32	-	1.38
45	Tetra	PCB-44	50.00	3.98e+07	0.78 y	32:49	-	0.98
46	Tetra	PCB-42/59	100.00	1.02e+08	0.77 y	33:02	-	1.26
47	Tetra	PCB-41/64/71/72	200.00	2.19e+08	0.78 y	33:38	-	1.35
48	Tetra	PCB-68	50.00	6.14e+07	0.78 y	33:54	-	1.51
49	Tetra	PCB-40	50.00	3.36e+07	0.77 y	34:06	-	0.83
50	Tetra	PCB-57	50.00	5.91e+07	0.77 y	34:28	-	1.15
51	Tetra	PCB-67	50.00	5.87e+07	0.78 y	34:46	-	1.15
52	Tetra	PCB-58	50.00	5.57e+07	0.78 y	34:53	-	1.09

53	Tetra	PCB-63	50.00	5.92e+07	0.76 y	35:03	-	1.16
54	Tetra	PCB-74	50.00	6.39e+07	0.77 y	35:20	-	1.25
55	Tetra	PCB-61/70	100.00	1.13e+08	0.78 y	35:30	-	1.10
56	Tetra	PCB-76/66	100.00	1.20e+08	0.77 y	35:43	-	1.17
57	Tetra	PCB-80	50.00	6.75e+07	0.78 y	35:56	-	1.28
58	Tetra	PCB-55	50.00	6.01e+07	0.77 y	36:17	-	1.14
59	Tetra	PCB-56/60	100.00	1.15e+08	0.77 y	36:46	-	1.09
60	Tetra	PCB-79	50.00	6.07e+07	0.78 y	37:50	-	1.15
61	Tetra	PCB-78	50.00	5.78e+07	0.78 y	38:32	-	1.27
62	Tetra	PCB-81	50.00	6.42e+07	0.78 y	39:03	-	1.41
63	Tetra	PCB-77	50.00	6.12e+07	0.79 y	39:39	-	1.25
64	Penta	PCB-104	50.00	4.42e+07	1.62 y	32:41	-	1.27
65	Penta	PCB-96	50.00	3.85e+07	1.59 y	33:57	-	1.10
66	Penta	PCB-103	50.00	3.30e+07	1.58 y	34:29	-	0.95
67	Penta	PCB-100	50.00	3.53e+07	1.61 y	34:49	-	1.01
68	Penta	PCB-94	50.00	2.93e+07	1.58 y	35:18	-	1.13
69	Penta	PCB-95/98/102	150.00	1.01e+08	1.60 y	35:47	-	1.30
70	Penta	PCB-93	50.00	2.46e+07	1.63 y	35:56	-	0.95
71	Penta	PCB-88/91	100.00	5.97e+07	1.61 y	36:12	-	1.15
72	Penta	PCB-121	50.00	4.37e+07	1.56 y	36:19	-	1.69
73	Penta	PCB-84/92	100.00	5.90e+07	1.59 y	37:08	-	1.09
74	Penta	PCB-89	50.00	2.93e+07	1.61 y	37:19	-	1.08
75	Penta	PCB-90/101	100.00	6.59e+07	1.60 y	37:31	-	1.21
76	Penta	PCB-113	50.00	4.09e+07	1.59 y	37:45	-	1.51
77	Penta	PCB-99	50.00	3.25e+07	1.60 y	37:51	-	1.20
78	Penta	PCB-119	50.00	4.22e+07	1.61 y	38:18	-	1.73
79	Penta	PCB-108/112	100.00	6.46e+07	1.63 y	38:27	-	1.33
80	Penta	PCB-83	50.00	3.86e+07	1.62 y	38:38	-	1.58
81	Penta	PCB-97	50.00	3.20e+07	1.59 y	38:49	-	1.32
82	Penta	PCB-86	50.00	2.38e+07	1.53 y	38:58	-	0.98
83	Penta	PCB-87/117/125	150.00	1.16e+08	1.58 y	39:05	-	1.59
84	Penta	PCB-111/115	100.00	8.59e+07	1.72 y	39:15	-	1.76
85	Penta	PCB-85/116	100.00	6.54e+07	1.46 y	39:23	-	1.34
86	Penta	PCB-120	50.00	4.27e+07	1.57 y	39:37	-	1.75
87	Penta	PCB-110	50.00	4.19e+07	1.60 y	39:46	-	1.72
88	Penta	PCB-82	50.00	2.58e+07	1.60 y	40:23	-	0.73
89	Penta	PCB-124	50.00	4.68e+07	1.60 y	41:03	-	1.32
90	Penta	PCB-107/109	100.00	8.79e+07	1.59 y	41:12	-	1.24
91	Penta	PCB-123	50.00	4.52e+07	1.59 y	41:22	-	1.28
92	Penta	PCB-106/118	100.00	9.20e+07	1.60 y	41:35	-	1.26
93	Penta	PCB-114	50.00	5.39e+07	1.62 y	42:13	-	1.37
94	Penta	PCB-122	50.00	4.95e+07	1.62 y	42:21	-	1.25
95	Penta	PCB-105	50.00	5.39e+07	1.63 y	43:05	-	1.34
96	Penta	PCB-127	50.00	5.03e+07	1.65 y	43:24	-	1.16
97	Penta	PCB-126	50.00	4.94e+07	1.62 y	45:19	-	1.32
98	Hexa	PCB-155	50.00	3.50e+07	1.27 y	37:03	-	1.20
99	Hexa	PCB-150	50.00	3.24e+07	1.28 y	38:20	-	1.11
100	Hexa	PCB-152	50.00	3.29e+07	1.26 y	38:48	-	1.12
101	Hexa	PCB-145	50.00	3.24e+07	1.26 y	39:15	-	1.11
102	Hexa	PCB-136	50.00	3.34e+07	1.27 y	39:35	-	1.14

103	Hexa	PCB-148	50.00	2.20e-07	1.30 y	39:40	-	0.75
104	Hexa	PCB-154	50.00	2.71e+07	1.26 y	40:10	-	0.93
105	Hexa	PCB-151	50.00	2.51e+07	1.30 y	40:47	-	0.86
106	Hexa	PCB-135	50.00	2.36e+07	1.28 y	41:01	-	0.81
107	Hexa	PCB-144	50.00	2.64e+07	1.36 y	41:08	-	0.90
108	Hexa	PCB-147	50.00	2.56e+07	1.18 y	41:16	-	0.88
109	Hexa	PCB-139/149	100.00	5.31e+07	1.27 y	41:30	-	0.91
110	Hexa	PCB-140	50.00	2.51e+07	1.27 y	41:42	-	0.86
111	Hexa	PCB-134/143	100.00	6.92e+07	1.24 y	42:08	-	0.94
112	Hexa	PCB-133/142	100.00	7.07e+07	1.23 y	42:26	-	0.96
113	Hexa	PCB-131	50.00	3.31e+07	1.22 y	42:36	-	0.90

114	Hexa	PCB-146/165	100.00	8.55e+07	1.24	y	42:48	- 1.16
115	Hexa	PCB-132/161	100.00	8.32e+07	1.22	y	43:03	- 1.13
116	Hexa	PCB-153	50.00	4.33e+07	1.22	y	43:14	- 1.18
117	Hexa	PCB-168	50.00	5.02e+07	1.21	y	43:27	- 1.37
118	Hexa	PCB-141	50.00	3.51e+07	1.21	y	43:58	- 0.99
119	Hexa	PCB-137	50.00	3.65e+07	1.26	y	44:21	- 1.03
120	Hexa	PCB-130	50.00	3.32e+07	1.23	y	44:27	- 0.94
121	Hexa	PCB-138/163/164	150.00	1.29e+08	1.23	y	44:50	- 1.26
122	Hexa	PCB-158/160	100.00	9.17e+07	1.23	y	45:05	- 1.34
123	Hexa	PCB-129	50.00	3.18e+07	1.24	y	45:19	- 0.93
124	Hexa	PCB-166	50.00	4.43e+07	1.22	y	45:46	- 1.13
125	Hexa	PCB-159	50.00	4.56e+07	1.22	y	46:05	- 1.17
126	Hexa	PCB-128/162	100.00	8.34e+07	1.23	y	46:22	- 1.07
127	Hexa	PCB-167	50.00	4.70e+07	1.21	y	46:47	- 1.09
128	Hexa	PCB-156	50.00	4.75e+07	1.22	y	48:04	- 1.17
129	Hexa	PCB-157	50.00	4.75e+07	1.22	y	48:20	- 1.11
130	Hexa	PCB-169	50.00	4.39e+07	1.23	y	50:24	- 1.11
131	Hepta	PCB-188	50.00	4.42e+07	1.02	y	42:52	- 1.43
132	Hepta	PCB-184	50.00	3.95e+07	1.05	y	43:18	- 1.28
133	Hepta	PCB-179	50.00	4.06e+07	1.05	y	44:06	- 1.31
134	Hepta	PCB-176	50.00	4.27e+07	1.05	y	44:34	- 1.38
135	Hepta	PCB-186	50.00	4.05e+07	1.04	y	45:10	- 1.31
136	Hepta	PCB-178	50.00	2.95e+07	1.05	y	45:39	- 0.96
137	Hepta	PCB-175	50.00	3.17e+07	1.05	y	46:00	- 1.02
138	Hepta	PCB-182/187	100.00	6.54e+07	1.04	y	46:11	- 1.06
139	Hepta	PCB-183	50.00	3.41e+07	1.05	y	46:29	- 1.10
140	Hepta	PCB-185	50.00	3.05e+07	1.05	y	47:09	- 1.36
141	Hepta	PCB-174	50.00	2.96e+07	1.04	y	47:31	- 1.32
142	Hepta	PCB-181	50.00	3.21e+07	1.07	y	47:37	- 1.43
143	Hepta	PCB-177	50.00	2.87e+07	1.06	y	47:48	- 1.28
144	Hepta	PCB-171	50.00	2.95e+07	1.04	y	48:05	- 1.31
145	Hepta	PCB-173	50.00	2.63e+07	1.05	y	48:31	- 1.17
146	Hepta	PCB-172	50.00	2.77e+07	1.03	y	48:57	- 1.24
147	Hepta	PCB-192	50.00	3.49e+07	1.05	y	49:09	- 1.56
148	Hepta	PCB-180	50.00	3.18e+07	1.04	y	49:20	- 1.42
149	Hepta	PCB-193	50.00	3.77e+07	1.05	y	49:32	- 1.68
150	Hepta	PCB-191	50.00	3.78e+07	1.05	y	49:47	- 1.68
151	Hepta	PCB-170	50.00	2.67e+07	1.04	y	50:46	- 1.50
152	Hepta	PCB-190	50.00	3.64e+07	1.03	y	50:55	- 2.04
153	Hepta	PCB-189	50.00	3.89e+07	1.04	y	52:12	- 1.59
154	Octa	PCB-202	50.00	2.93e+07	0.91	y	48:17	- 1.04
155	Octa	PCB-201	50.00	3.13e+07	0.93	y	48:46	- 1.11
156	Octa	PCB-204	50.00	2.91e+07	0.88	y	48:56	- 1.04
157	Octa	PCB-197	50.00	3.14e+07	0.91	y	49:13	- 1.12
158	Octa	PCB-200	50.00	3.00e+07	0.91	y	50:03	- 1.07
159	Octa	PCB-198	50.00	2.15e+07	0.90	y	51:20	- 0.77
160	Octa	PCB-199	50.00	2.15e+07	0.89	y	51:25	- 0.77
161	Octa	PCB-196/203	100.00	4.56e+07	0.90	y	51:41	- 0.81
162	Octa	PCB-195	50.00	2.93e+07	0.91	y	52:49	- 1.25
163	Octa	PCB-194	50.00	2.92e+07	0.90	y	53:41	- 1.24

164	Octa	PCB-205	50.00	3.30e+07	0.92	y	53:58	-	1.41
165	Nona	PCB-208	50.00	3.17e+07	1.33	y	52:57	-	0.95
166	Nona	PCB-207	50.00	3.11e+07	1.32	y	53:16	-	0.93
167	Nona	PCB-206	50.00	2.08e+07	1.33	y	55:21	-	1.02
168	Deca	PCB-209	50.00	2.28e+07	1.19	y	56:38	-	1.23
169	Tot ╗	Total Mono-PCB	0.00	-	-	n	-	-	1.27
170	Tot ╗	Total Di-PCB	0.00	-	-	n	-	-	1.25
171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.18

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.39
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.21
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.24
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.29
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.96
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.10
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.30
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.95
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.30
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	0.96
182	Tot ╗	Total Deca-PCB	50.00	2.28e+07	1.19	y	56:38	-	1.23
183	Mono╗	13C-PCB-1	100.00	1.19e+08	3.24	y	16:14	-	0.88
184	Mono╗	13C-PCB-3	100.00	1.26e+08	3.30	y	18:49	-	0.93
185	Di-IS	13C-PCB-4	100.00	7.38e+07	1.60	y	20:09	-	0.55
186	Di-IS	13C-PCB-9	100.00	1.12e+08	1.59	y	21:55	-	0.82
187	Di-IS	13C-PCB-11	100.00	1.24e+08	1.58	y	25:16	-	0.92
188	Tri-╗	13C-PCB-19	100.00	7.23e+07	1.06	y	24:16	-	0.53
189	Tri-╗	13C-PCB-32	100.00	1.09e+08	1.07	y	27:10	-	0.81
190	Tri-╗	13C-PCB-28	100.00	1.07e+08	1.05	y	29:07	-	0.85
191	Tri-╗	13C-PCB-37	100.00	1.00e+08	1.07	y	32:59	-	0.80
192	Tetr╗	13C-PCB-54	100.00	9.29e+07	0.81	y	28:00	-	0.84
193	Tetr╗	13C-PCB-52	100.00	7.70e+07	0.79	y	31:30	-	0.70
194	Tetr╗	13C-PCB-47	100.00	8.12e+07	0.80	y	32:01	-	0.73
195	Tetr╗	13C-PCB-70	100.00	1.02e+08	0.79	y	35:31	-	0.93
196	Tetr╗	13C-PCB-80	100.00	1.05e+08	0.80	y	35:56	-	0.95
197	Tetr╗	13C-PCB-81	100.00	9.11e+07	0.80	y	39:03	-	0.82
198	Tetr╗	13C-PCB-77	100.00	9.78e+07	0.81	y	39:38	-	0.88
199	Pent╗	13C-PCB-104	100.00	6.97e+07	1.58	y	32:40	-	0.98
200	Pent╗	13C-PCB-95	100.00	5.18e+07	1.63	y	35:49	-	0.73
201	Pent╗	13C-PCB-101	100.00	5.42e+07	1.60	y	37:30	-	0.77
202	Pent╗	13C-PCB-97	100.00	4.87e+07	1.60	y	38:48	-	0.69
203	Pent╗	13C-PCB-123	100.00	7.09e+07	1.58	y	41:21	-	1.00
204	Pent╗	13C-PCB-118	100.00	7.31e+07	1.59	y	41:32	-	1.03
205	Pent╗	13C-PCB-114	100.00	7.90e+07	1.61	y	42:12	-	1.18
206	Pent╗	13C-PCB-105	100.00	8.02e+07	1.61	y	43:03	-	1.20
207	Pent╗	13C-PCB-127	100.00	8.65e+07	1.59	y	43:23	-	1.29
208	Pent╗	13C-PCB-126	100.00	7.48e+07	1.61	y	45:18	-	1.12
209	Hexa╗	13C-PCB-155	100.00	5.86e+07	1.27	y	37:02	-	0.83
210	Hexa╗	13C-PCB-153	100.00	7.35e+07	1.25	y	43:13	-	1.10
211	Hexa╗	13C-PCB-141	100.00	7.09e+07	1.28	y	43:57	-	1.06
212	Hexa	13C-PCB-138	100.00	6.83e+07	1.26	y	44:48	-	1.02
213	Hexa╗	13C-PCB-159	100.00	7.82e+07	1.30	y	46:05	-	1.17
214	Hexa╗	13C-PCB-167	100.00	8.59e+07	1.26	y	46:45	-	1.29
215	Hexa╗	13C-PCB-156	100.00	8.11e+07	1.27	y	48:03	-	1.21
216	Hexa╗	13C-PCB-157	100.00	8.59e+07	1.29	y	48:19	-	1.28
217	Hexa╗	13C-PCB-169	100.00	7.93e+07	1.27	y	50:24	-	1.19
218	Hept╗	13C-PCB-188	100.00	6.19e+07	0.46	y	42:51	-	0.93
219	Hept╗	13C-PCB-180	100.00	4.49e+07	0.47	y	49:19	-	0.67
220	Hept╗	13C-PCB-170	100.00	3.58e+07	0.45	y	50:45	-	0.53
221	Hept╗	13C-PCB-189	100.00	4.91e+07	0.46	y	52:11	-	0.73
222	Octa╗	13C-PCB-202	100.00	5.62e+07	0.92	y	48:16	-	0.84

223	Octa╖	13C-PCB-194	100.00	4.69e+07	0.91 y	53:40	-	0.80
224	Nona╖	13C-PCB-208	100.00	6.66e+07	0.78 y	52:56	-	1.14
225	Nona╖	13C-PCB-206	100.00	4.07e+07	0.77 y	55:20	-	0.70
226	Deca╖	13C-PCB-209	100.00	3.70e+07	1.21 y	56:37	-	0.64
227	DI-RS	13C-PCB-15	100.00	1.35e+08	1.56 y	25:58	-	1.00
228	Tri-╖	13C-PCB-31	100.00	1.25e+08	1.06 y	29:00	-	1.00
229	Tetr╖	13C-PCB-60	100.00	1.11e+08	0.80 y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	7.09e+07	1.59 y	39:14	-	1.00
231	Hexa╖	13C-PCB-128	100.00	6.69e+07	1.26 y	46:21	-	1.00
232	Octa╖	13C-PCB-205	100.00	5.82e+07	0.91 y	53:57	-	1.00

233	CRS		13C-PCB-79	100.00	1.21e+08	0.80	y	37:49	- 1.09
234	CRS		13C-PCB-178	100.00	4.58e+07	0.46	y	45:38	- 0.69
235	PS		13C-PCB-79	100.00	1.21e+08	0.80	y	37:49	- 1.33
236	PS		13C-PCB-178	100.00	4.58e+07	0.46	y	45:38	- 1.02

Filename: 140620E1 S: 5 Acquired: 20-JUN-14 13:47:50
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-5 PCB CS4 13H1206

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	400.00	6.95e+08	2.97 y	16:15	-	1.05
2	Mono	PCB-2	400.00	6.84e+08	2.99 y	18:36	-	1.00
3	Mono	PCB-3	400.00	7.00e+08	3.00 y	18:50	-	1.02
4	Di	PCB-4/10	1600.00	2.12e+09	1.63 y	20:12	-	1.32
5	Di	PCB-7/9	1600.00	2.61e+09	1.63 y	21:57	-	1.08
6	Di	PCB-6	800.00	1.28e+09	1.64 y	22:36	-	1.06
7	Di	PCB-5/8	1600.00	2.62e+09	1.64 y	23:01	-	1.08
8	Di	PCB-14	800.00	1.44e+09	1.64 y	24:06	-	1.03
9	Di	PCB-11	800.00	1.36e+09	1.65 y	25:17	-	0.97
10	Di	PCB-12/13	1600.00	2.65e+09	1.64 y	25:41	-	0.94
11	Di	PCB-15	800.00	1.43e+09	1.63 y	26:00	-	1.02
12	Tri	PCB-19	400.00	4.09e+08	1.05 y	24:17	-	1.05
13	Tri	PCB-30	400.00	5.99e+08	1.06 y	25:10	-	1.54
14	Tri	PCB-18	400.00	4.25e+08	1.06 y	25:55	-	0.70
15	Tri	PCB-17	400.00	4.49e+08	1.05 y	26:05	-	0.74
16	Tri	PCB-24/27	800.00	1.19e+09	1.05 y	26:39	-	0.98
17	Tri	PCB-16/32	800.00	1.02e+09	1.06 y	27:10	-	0.84
18	Tri	PCB-34	400.00	6.61e+08	1.09 y	27:57	-	1.07
19	Tri	PCB-23	400.00	6.32e+08	1.10 y	28:03	-	1.02
20	Tri	PCB-29	400.00	6.52e+08	1.09 y	28:18	-	1.06
21	Tri	PCB-26	400.00	6.34e+08	1.11 y	28:30	-	1.03
22	Tri	PCB-25	400.00	6.76e+08	1.08 y	28:39	-	1.09
23	Tri	PCB-31	400.00	6.48e+08	1.08 y	29:01	-	1.05
24	Tri	PCB-28	400.00	7.30e+08	1.09 y	29:08	-	1.18
25	Tri	PCB-20/21/33	1200.00	2.00e+09	1.09 y	29:44	-	1.08
26	Tri	PCB-22	400.00	6.74e+08	1.09 y	30:10	-	1.09
27	Tri	PCB-36	400.00	6.53e+08	1.09 y	30:47	-	1.16
28	Tri	PCB-39	400.00	6.69e+08	1.09 y	31:15	-	1.19
29	Tri	PCB-38	400.00	6.54e+08	1.09 y	32:02	-	1.16
30	Tri	PCB-35	400.00	6.68e+08	1.09 y	32:32	-	1.19
31	Tri	PCB-37	400.00	6.65e+08	1.09 y	33:00	-	1.18
32	Tetra	PCB-54	400.00	5.24e+08	0.78 y	28:01	-	1.01
33	Tetra	PCB-50	400.00	4.18e+08	0.77 y	29:10	-	0.81
34	Tetra	PCB-53	400.00	4.29e+08	0.78 y	29:49	-	1.00
35	Tetra	PCB-51	400.00	4.24e+08	0.77 y	30:09	-	0.99
36	Tetra	PCB-45	400.00	3.49e+08	0.77 y	30:35	-	0.81
37	Tetra	PCB-46	400.00	3.30e+08	0.78 y	31:05	-	0.77
38	Tetra	PCB-52/69	800.00	9.21e+08	0.77 y	31:32	-	1.07
39	Tetra	PCB-73	400.00	5.23e+08	0.78 y	31:39	-	1.22
40	Tetra	PCB-43/49	800.00	8.03e+08	0.77 y	31:49	-	0.94
41	Tetra	PCB-47	400.00	4.43e+08	0.77 y	32:02	-	0.96

42	Tetra	PCB-48/75	800.00	9.95e+08	0.78 y	32:08	-	1.08
43	Tetra	PCB-65	400.00	5.26e+08	0.77 y	32:24	-	1.15
44	Tetra	PCB-62	400.00	4.75e+08	0.78 y	32:31	-	1.03
45	Tetra	PCB-44	400.00	3.59e+08	0.78 y	32:49	-	0.78
46	Tetra	PCB-42/59	800.00	9.31e+08	0.78 y	33:03	-	1.01
47	Tetra	PCB-41/64/71/72	1600.00	2.06e+09	0.78 y	33:38	-	1.12
48	Tetra	PCB-68	400.00	5.66e+08	0.78 y	33:53	-	1.23
49	Tetra	PCB-40	400.00	3.06e+08	0.78 y	34:07	-	0.67
50	Tetra	PCB-57	400.00	5.45e+08	0.78 y	34:27	-	0.92
51	Tetra	PCB-67	400.00	5.29e+08	0.77 y	34:45	-	0.90
52	Tetra	PCB-58	400.00	5.39e+08	0.78 y	34:53	-	0.91

53	Tetra	PCB-63	400.00	5.63e+08	0.78 y	35:02	-	0.95
54	Tetra	PCB-74	400.00	5.92e-08	0.78 y	35:19	-	1.00
55	Tetra	PCB-61/70	800.00	1.09e+09	0.78 y	35:30	-	0.92
56	Tetra	PCB-76/66	800.00	1.11e+09	0.78 y	35:43	-	0.94
57	Tetra	PCB-80	400.00	6.36e+08	0.78 y	35:57	-	1.07
58	Tetra	PCB-55	400.00	5.70e+08	0.78 y	36:16	-	0.96
59	Tetra	PCB-56/60	800.00	1.08e+09	0.77 y	36:46	-	0.91
60	Tetra	PCB-79	400.00	5.68e+08	0.78 y	37:49	-	0.95
61	Tetra	PCB-78	400.00	5.53e+08	0.77 y	38:31	-	1.02
62	Tetra	PCB-81	400.00	6.17e+08	0.77 y	39:03	-	1.14
63	Tetra	PCB-77	400.00	5.82e+08	0.80 y	39:38	-	1.02
64	Penta	PCB-104	400.00	3.92e+08	1.60 y	32:41	-	1.03
65	Penta	PCB-96	400.00	3.47e+08	1.59 y	33:56	-	0.92
66	Penta	PCB-103	400.00	3.03e+08	1.60 y	34:28	-	0.80
67	Penta	PCB-100	400.00	3.29e+08	1.60 y	34:50	-	0.87
68	Penta	PCB-94	400.00	2.68e+08	1.60 y	35:18	-	0.91
69	Penta	PCB-95/98/102	1200.00	9.09e+08	1.60 y	35:47	-	1.04
70	Penta	PCB-93	400.00	2.47e+08	1.60 y	35:56	-	0.84
71	Penta	PCB-88/91	800.00	5.23e+08	1.56 y	36:12	-	0.89
72	Penta	PCB-121	400.00	4.29e+08	1.64 y	36:18	-	1.46
73	Penta	PCB-84/92	800.00	5.39e+08	1.60 y	37:08	-	0.87
74	Penta	PCB-89	400.00	2.55e+08	1.60 y	37:20	-	0.83
75	Penta	PCB-90/101	800.00	6.11e+08	1.59 y	37:30	-	0.99
76	Penta	PCB-113	400.00	3.59e+08	1.58 y	37:45	-	1.16
77	Penta	PCB-99	400.00	3.19e+08	1.61 y	37:50	-	1.03
78	Penta	PCB-119	400.00	4.01e+08	1.59 y	38:18	-	1.48
79	Penta	PCB-108/112	800.00	5.97e+08	1.60 y	38:28	-	1.10
80	Penta	PCB-83	400.00	3.51e+08	1.60 y	38:37	-	1.30
81	Penta	PCB-97	400.00	2.87e+08	1.60 y	38:48	-	1.06
82	Penta	PCB-86	400.00	2.42e+08	1.63 y	38:58	-	0.90
83	Penta	PCB-87/117/125	1200.00	1.11e+09	1.59 y	39:05	-	1.37
84	Penta	PCB-111/115	800.00	7.75e+08	1.58 y	39:15	-	1.43
85	Penta	PCB-85/116	800.00	6.10e+08	1.63 y	39:23	-	1.13
86	Penta	PCB-120	400.00	4.12e+08	1.59 y	39:36	-	1.52
87	Penta	PCB-110	400.00	3.74e+08	1.60 y	39:45	-	1.38
88	Penta	PCB-82	400.00	2.25e+08	1.60 y	40:23	-	0.60
89	Penta	PCB-124	400.00	4.01e+08	1.59 y	41:04	-	1.07
90	Penta	PCB-107/109	800.00	8.08e+08	1.60 y	41:12	-	1.08
91	Penta	PCB-123	400.00	3.78e+08	1.60 y	41:22	-	1.01
92	Penta	PCB-106/118	800.00	8.07e+08	1.60 y	41:34	-	1.01
93	Penta	PCB-114	400.00	4.81e+08	1.63 y	42:13	-	1.11
94	Penta	PCB-122	400.00	4.40e+08	1.59 y	42:21	-	1.02
95	Penta	PCB-105	400.00	4.86e+08	1.61 y	43:04	-	1.09
96	Penta	PCB-127	400.00	4.44e+08	1.65 y	43:24	-	0.94
97	Penta	PCB-126	400.00	4.53e+08	1.69 y	45:18	-	1.10
98	Hexa	PCB-155	400.00	3.12e+08	1.27 y	37:04	-	0.98
99	Hexa	PCB-150	400.00	2.99e+08	1.28 y	38:19	-	0.94
100	Hexa	PCB-152	400.00	2.95e+08	1.28 y	38:47	-	0.92
101	Hexa	PCB-145	400.00	2.95e+08	1.27 y	39:15	-	0.92
102	Hexa	PCB-136	400.00	2.81e+08	1.31 y	39:34	-	0.88

103	Hexa	PCB-148	400.00	2.24e+08	1.24 y	39:40	-	0.70
104	Hexa	PCB-154	400.00	2.37e+08	1.27 y	40:09	-	0.74
105	Hexa	PCB-151	400.00	2.17e+08	1.27 y	40:48	-	0.68
106	Hexa	PCB-135	400.00	2.24e+08	1.25 y	41:00	-	0.70
107	Hexa	PCB-144	400.00	2.17e+08	1.28 y	41:07	-	0.68
108	Hexa	PCB-147	400.00	2.25e+08	1.29 y	41:15	-	0.70
109	Hexa	PCB-139/149	800.00	4.68e+08	1.28 y	41:31	-	0.73
110	Hexa	PCB-140	400.00	2.12e+08	1.27 y	41:42	-	0.66
111	Hexa	PCB-134/143	800.00	6.17e+08	1.24 y	42:08	-	0.78
112	Hexa	PCB-133/142	800.00	6.26e+08	1.23 y	42:26	-	0.79
113	Hexa	PCB-131	400.00	2.95e+08	1.25 y	42:36	-	0.74

114	Hexa	PCB-146/165	800.00	7.73e+08	1.24 y	42:49	-	0.97
115	Hexa	PCB-132/161	800.00	7.41e+08	1.23 y	43:04	-	0.93
116	Hexa	PCB-153	400.00	3.95e+08	1.23 y	43:13	-	0.99
117	Hexa	PCB-168	400.00	4.52e+08	1.23 y	43:26	-	1.14
118	Hexa	PCB-141	400.00	3.03e+08	1.23 y	43:57	-	0.83
119	Hexa	PCB-137	400.00	3.53e+08	1.24 y	44:20	-	0.96
120	Hexa	PCB-130	400.00	2.61e+08	1.22 y	44:27	-	0.71
121	Hexa	PCB-138/163/164	1200.00	1.16e+09	1.23 y	44:49	-	1.05
122	Hexa	PCB-158/160	800.00	8.21e+08	1.23 y	45:04	-	1.11
123	Hexa	PCB-129	400.00	2.80e+08	1.23 y	45:18	-	0.76
124	Hexa	PCB-166	400.00	3.99e+08	1.23 y	45:46	-	0.94
125	Hexa	PCB-159	400.00	4.06e+08	1.26 y	46:06	-	0.96
126	Hexa	PCB-128/162	800.00	7.15e+08	1.23 y	46:23	-	0.85
127	Hexa	PCB-167	400.00	4.05e+08	1.22 y	46:46	-	0.88
128	Hexa	PCB-156	400.00	4.28e+08	1.23 y	48:03	-	0.98
129	Hexa	PCB-157	400.00	4.21e+08	1.24 y	48:20	-	0.91
130	Hexa	PCB-169	400.00	3.99e+08	1.23 y	50:23	-	0.94
131	Hepta	PCB-188	400.00	3.97e+08	1.04 y	42:51	-	1.17
132	Hepta	PCB-184	400.00	3.45e+08	1.05 y	43:18	-	1.02
133	Hepta	PCB-179	400.00	3.55e+08	1.05 y	44:05	-	1.05
134	Hepta	PCB-176	400.00	3.64e+08	1.05 y	44:33	-	1.07
135	Hepta	PCB-186	400.00	3.55e+08	1.05 y	45:10	-	1.05
136	Hepta	PCB-178	400.00	2.55e+08	1.05 y	45:39	-	0.75
137	Hepta	PCB-175	400.00	2.66e+08	1.05 y	46:00	-	0.78
138	Hepta	PCB-182/187	800.00	5.78e+08	1.06 y	46:10	-	0.85
139	Hepta	PCB-183	400.00	2.87e+08	1.05 y	46:29	-	0.85
140	Hepta	PCB-185	400.00	2.56e+08	1.05 y	47:09	-	1.10
141	Hepta	PCB-174	400.00	2.74e+08	1.04 y	47:30	-	1.18
142	Hepta	PCB-181	400.00	2.51e+08	1.05 y	47:37	-	1.08
143	Hepta	PCB-177	400.00	2.40e+08	1.05 y	47:47	-	1.03
144	Hepta	PCB-171	400.00	2.57e+08	1.05 y	48:05	-	1.10
145	Hepta	PCB-173	400.00	2.26e+08	1.05 y	48:30	-	0.97
146	Hepta	PCB-172	400.00	2.44e+08	1.05 y	48:57	-	1.05
147	Hepta	PCB-192	400.00	3.09e+08	1.05 y	49:08	-	1.33
148	Hepta	PCB-180	400.00	2.75e+08	1.05 y	49:20	-	1.18
149	Hepta	PCB-193	400.00	3.25e+08	1.06 y	49:31	-	1.40
150	Hepta	PCB-191	400.00	3.32e+08	1.05 y	49:46	-	1.43
151	Hepta	PCB-170	400.00	2.30e+08	1.05 y	50:45	-	1.23
152	Hepta	PCB-190	400.00	3.17e+08	1.05 y	50:55	-	1.70
153	Hepta	PCB-189	400.00	3.22e+08	1.05 y	52:11	-	1.30
154	Octa	PCB-202	400.00	2.47e+08	0.91 y	48:16	-	0.85
155	Octa	PCB-201	400.00	2.67e+08	0.90 y	48:45	-	0.92
156	Octa	PCB-204	400.00	2.45e+08	0.91 y	48:54	-	0.84
157	Octa	PCB-197	400.00	2.62e+08	0.91 y	49:13	-	0.90
158	Octa	PCB-200	400.00	2.51e+08	0.91 y	50:03	-	0.87
159	Octa	PCB-198	400.00	1.73e+08	0.90 y	51:19	-	0.60
160	Octa	PCB-199	400.00	1.84e+08	0.91 y	51:25	-	0.63
161	Octa	PCB-196/203	800.00	3.87e+08	0.90 y	51:41	-	0.67
162	Octa	PCB-195	400.00	2.55e+08	0.91 y	52:49	-	1.04
163	Octa	PCB-194	400.00	2.51e+08	0.92 y	53:40	-	1.02

164	Octa		PCB-205	400.00	2.86e+08	0.92	y	53:57	- 1.17
165	Nona		PCB-208	400.00	2.69e+08	1.32	y	52:57	- 0.78
166	Nona		PCB-207	400.00	2.66e+08	1.33	y	53:15	- 0.78
167	Nona		PCB-206	400.00	1.66e+08	1.33	y	55:21	- 0.84
168	Deca		PCB-209	400.00	1.83e+08	1.19	y	56:38	- 0.99
169	Tot ╗	Total Mono-PCB		0.00	-	-	n	-	- 1.02
170	Tot ╗	Total Di-PCB		0.00	-	-	n	-	- 1.03
171	Tot ╗	Total Tri-PCB		0.00	-	-	n	-	- 0.96

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.11
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	0.99
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.03
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.05
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.78
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.91
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.05
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.77
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.08
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	0.79
182	Tot ╗	Total Deca-PCB	400.00	1.83e+08	1.19	y	56:38	-	0.99
183	Mono╗	13C-PCB-1	100.00	1.66e+08	3.23	y	16:14	-	0.88
184	Mono╗	13C-PCB-3	100.00	1.71e+08	3.33	y	18:49	-	0.91
185	Di-IS	13C-PCB-4	100.00	1.00e+08	1.57	y	20:08	-	0.53
186	Di-IS	13C-PCB-9	100.00	1.51e+08	1.58	y	21:55	-	0.80
187	Di-IS	13C-PCB-11	100.00	1.75e+08	1.57	y	25:16	-	0.93
188	Tri-╗	13C-PCB-19	100.00	9.71e+07	1.07	y	24:16	-	0.52
189	Tri-╗	13C-PCB-32	100.00	1.52e+08	1.07	y	27:10	-	0.81
190	Tri-╗	13C-PCB-28	100.00	1.54e+08	1.06	y	29:06	-	0.96
191	Tri-╗	13C-PCB-37	100.00	1.41e+08	1.06	y	32:58	-	0.87
192	Tetr╗	13C-PCB-54	100.00	1.29e+08	0.81	y	27:60	-	0.83
193	Tetr╗	13C-PCB-52	100.00	1.07e+08	0.80	y	31:31	-	0.68
194	Tetr╗	13C-PCB-47	100.00	1.15e+08	0.80	y	32:00	-	0.73
195	Tetr╗	13C-PCB-70	100.00	1.48e+08	0.80	y	35:31	-	0.94
196	Tetr╗	13C-PCB-80	100.00	1.49e+08	0.80	y	35:56	-	0.95
197	Tetr╗	13C-PCB-81	100.00	1.35e+08	0.82	y	39:03	-	0.86
198	Tetr╗	13C-PCB-77	100.00	1.43e+08	0.81	y	39:38	-	0.91
199	Pent╗	13C-PCB-104	100.00	9.47e+07	1.61	y	32:40	-	0.96
200	Pent╗	13C-PCB-95	100.00	7.32e+07	1.57	y	35:49	-	0.74
201	Pent╗	13C-PCB-101	100.00	7.72e+07	1.62	y	37:30	-	0.78
202	Pent╗	13C-PCB-97	100.00	6.76e+07	1.59	y	38:48	-	0.69
203	Pent╗	13C-PCB-123	100.00	9.35e+07	1.62	y	41:21	-	0.95
204	Pent╗	13C-PCB-118	100.00	9.95e+07	1.59	y	41:32	-	1.01
205	Pent╗	13C-PCB-114	100.00	1.08e+08	1.58	y	42:12	-	1.25
206	Pent╗	13C-PCB-105	100.00	1.12e+08	1.60	y	43:04	-	1.29
207	Pent╗	13C-PCB-127	100.00	1.18e+08	1.58	y	43:23	-	1.36
208	Pent╗	13C-PCB-126	100.00	1.03e+08	1.56	y	45:18	-	1.19
209	Hexa╗	13C-PCB-155	100.00	7.98e+07	1.30	y	37:03	-	0.81
210	Hexa╗	13C-PCB-153	100.00	9.94e+07	1.27	y	43:12	-	1.15
211	Hexa╗	13C-PCB-141	100.00	9.18e+07	1.28	y	43:57	-	1.06
212	Hexa	13C-PCB-138	100.00	9.22e+07	1.27	y	44:48	-	1.06
213	Hexa╗	13C-PCB-159	100.00	1.06e+08	1.27	y	46:04	-	1.22
214	Hexa╗	13C-PCB-167	100.00	1.14e+08	1.27	y	46:45	-	1.32
215	Hexa╗	13C-PCB-156	100.00	1.09e+08	1.27	y	48:03	-	1.26
216	Hexa╗	13C-PCB-157	100.00	1.15e+08	1.31	y	48:19	-	1.33
217	Hexa╗	13C-PCB-169	100.00	1.06e+08	1.26	y	50:23	-	1.22
218	Hept╗	13C-PCB-188	100.00	8.49e+07	0.47	y	42:50	-	0.98
219	Hept╗	13C-PCB-180	100.00	5.82e+07	0.47	y	49:20	-	0.67
220	Hept╗	13C-PCB-170	100.00	4.66e+07	0.46	y	50:44	-	0.54
221	Hept╗	13C-PCB-189	100.00	6.18e+07	0.46	y	52:11	-	0.71
222	Octa╗	13C-PCB-202	100.00	7.25e+07	0.90	y	48:16	-	0.84

223	Octa╗	13C-PCB-194	100.00	6.13e+07	0.91 y	53:40	-	0.81
224	Nona╗	13C-PCB-208	100.00	8.58e+07	0.78 y	52:56	-	1.14
225	Nona╗	13C-PCB-206	100.00	4.92e+07	0.81 y	55:20	-	0.65
226	Deca╗	13C-PCB-209	100.00	4.62e+07	1.22 y	56:37	-	0.61
227	DI-RS	13C-PCB-15	100.00	1.89e+08	1.58 y	25:58	-	1.00
228	Tri-╗	13C-PCB-31	100.00	1.61e+08	1.07 y	28:60	-	1.00
229	Tetr╗	13C-PCB-60	100.00	1.57e+08	0.80 y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	9.86e+07	1.61 y	39:13	-	1.00
231	Hexa╗	13C-PCB-128	100.00	8.68e+07	1.28 y	46:21	-	1.00
232	Octa╗	13C-PCB-205	100.00	7.56e+07	0.92 y	53:57	-	1.00

233	CRS		13C-PCB-79	100.00	1.55e+08	0.79 y	37:49	-	0.99
234	CRS		13C-PCB-178	100.00	5.41e+07	0.47 y	45:38	-	0.62
235	PS		13C-PCB-79	100.00	1.55e+08	0.79 y	37:49	-	1.15
236	PS		13C-PCB-178	100.00	5.41e+07	0.47 y	45:38	-	0.93

Filename: 140620E1 S: 6 Acquired: 20-JUN-14 14:51:49
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-6 PCB CS5 13H1207

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	750.00	1.43e+09	2.96 y	16:15	-	1.27
2	Mono	PCB-2	750.00	1.51e+09	2.98 y	18:36	-	1.18
3	Mono	PCB-3	750.00	1.54e+09	2.98 y	18:50	-	1.20
4	Di	PCB-4/10	3000.00	4.71e+09	1.64 y	20:12	-	1.54
5	Di	PCB-7/9	3000.00	5.85e+09	1.64 y	21:57	-	1.25
6	Di	PCB-6	1500.00	2.81e+09	1.64 y	22:36	-	1.20
7	Di	PCB-5/8	3000.00	5.77e+09	1.64 y	23:01	-	1.23
8	Di	PCB-14	1500.00	3.24e+09	1.64 y	24:06	-	1.20
9	Di	PCB-11	1500.00	3.05e+09	1.65 y	25:17	-	1.13
10	Di	PCB-12/13	3000.00	5.91e+09	1.64 y	25:41	-	1.09
11	Di	PCB-15	1500.00	3.20e+09	1.64 y	26:00	-	1.18
12	Tri	PCB-19	750.00	9.08e+08	1.05 y	24:17	-	1.23
13	Tri	PCB-30	750.00	1.34e+09	1.06 y	25:10	-	1.82
14	Tri	PCB-18	750.00	9.50e+08	1.05 y	25:55	-	0.81
15	Tri	PCB-17	750.00	1.00e+09	1.05 y	26:05	-	0.86
16	Tri	PCB-24/27	1500.00	2.69e+09	1.05 y	26:40	-	1.15
17	Tri	PCB-16/32	1500.00	2.29e+09	1.06 y	27:10	-	0.98
18	Tri	PCB-34	750.00	1.45e+09	1.09 y	27:57	-	1.16
19	Tri	PCB-23	750.00	1.49e+09	1.09 y	28:03	-	1.19
20	Tri	PCB-29	750.00	1.47e+09	1.09 y	28:18	-	1.18
21	Tri	PCB-26	750.00	1.45e+09	1.10 y	28:30	-	1.16
22	Tri	PCB-25	750.00	1.51e+09	1.09 y	28:40	-	1.21
23	Tri	PCB-31	750.00	1.64e+09	1.06 y	29:01	-	1.32
24	Tri	PCB-28	750.00	1.49e+09	1.12 y	29:08	-	1.20
25	Tri	PCB-20/21/33	2250.00	4.54e+09	1.09 y	29:44	-	1.21
26	Tri	PCB-22	750.00	1.53e+09	1.09 y	30:11	-	1.23
27	Tri	PCB-36	750.00	1.49e+09	1.09 y	30:47	-	1.32
28	Tri	PCB-39	750.00	1.57e+09	1.09 y	31:15	-	1.39
29	Tri	PCB-38	750.00	1.52e+09	1.09 y	32:03	-	1.35
30	Tri	PCB-35	750.00	1.55e+09	1.09 y	32:33	-	1.38
31	Tri	PCB-37	750.00	1.56e+09	1.09 y	32:59	-	1.39
32	Tetra	PCB-54	750.00	1.18e+09	0.78 y	28:01	-	1.18
33	Tetra	PCB-50	750.00	9.47e+08	0.78 y	29:11	-	0.95
34	Tetra	PCB-53	750.00	9.66e+08	0.78 y	29:49	-	1.14
35	Tetra	PCB-51	750.00	9.67e+08	0.77 y	30:10	-	1.14
36	Tetra	PCB-45	750.00	7.90e+08	0.77 y	30:35	-	0.93
37	Tetra	PCB-46	750.00	7.50e+08	0.77 y	31:05	-	0.88
38	Tetra	PCB-52/69	1500.00	2.10e+09	0.77 y	31:33	-	1.23
39	Tetra	PCB-73	750.00	1.23e+09	0.78 y	31:40	-	1.45
40	Tetra	PCB-43/49	1500.00	1.83e+09	0.78 y	31:50	-	1.08
41	Tetra	PCB-47	750.00	9.58e+08	0.77 y	32:02	-	1.07

42	Tetra	PCB-48/75	1500.00	2.33e+09	0.78 y	32:09	-	1.30
43	Tetra	PCB-65	750.00	1.16e+09	0.77 y	32:25	-	1.30
44	Tetra	PCB-62	750.00	1.12e+09	0.78 y	32:32	-	1.25
45	Tetra	PCB-44	750.00	8.19e+08	0.78 y	32:49	-	0.92
46	Tetra	PCB-42/59	1500.00	2.16e+09	0.77 y	33:03	-	1.21
47	Tetra	PCB-41/64/71/72	3000.00	4.74e+09	0.78 y	33:38	-	1.33
48	Tetra	PCB-68	750.00	1.31e+09	0.78 y	33:54	-	1.46
49	Tetra	PCB-40	750.00	6.99e+08	0.78 y	34:07	-	0.78
50	Tetra	PCB-57	750.00	1.25e+09	0.77 y	34:28	-	1.07
51	Tetra	PCB-67	750.00	1.21e+09	0.77 y	34:46	-	1.03
52	Tetra	PCB-58	750.00	1.25e+09	0.78 y	34:53	-	1.07

53	Tetra	PCB-63	750.00	1.31e+09	0.77 y	35:03	-	1.12
54	Tetra	PCB-74	750.00	1.38e+09	0.81 y	35:20	-	1.18
55	Tetra	PCB-61/70	1500.00	2.48e+09	0.75 y	35:31	-	1.06
56	Tetra	PCB-76/66	1500.00	2.59e+09	0.78 y	35:44	-	1.10
57	Tetra	PCB-80	750.00	1.47e+09	0.78 y	35:57	-	1.24
58	Tetra	PCB-55	750.00	1.33e+09	0.78 y	36:17	-	1.12
59	Tetra	PCB-56/60	1500.00	2.53e+09	0.78 y	36:47	-	1.07
60	Tetra	PCB-79	750.00	1.34e+09	0.78 y	37:50	-	1.13
61	Tetra	PCB-78	750.00	1.30e+09	0.78 y	38:32	-	1.18
62	Tetra	PCB-81	750.00	1.44e+09	0.77 y	39:04	-	1.31
63	Tetra	PCB-77	750.00	1.37e+09	0.79 y	39:39	-	1.17
64	Penta	PCB-104	750.00	8.87e+08	1.60 y	32:41	-	1.22
65	Penta	PCB-96	750.00	7.97e+08	1.60 y	33:56	-	1.10
66	Penta	PCB-103	750.00	7.09e+08	1.60 y	34:28	-	0.98
67	Penta	PCB-100	750.00	7.64e+08	1.60 y	34:50	-	1.05
68	Penta	PCB-94	750.00	6.22e+08	1.59 y	35:18	-	1.08
69	Penta	PCB-95/98/102	2250.00	2.03e+09	1.58 y	35:47	-	1.17
70	Penta	PCB-93	750.00	6.23e+08	1.66 y	35:56	-	1.08
71	Penta	PCB-88/91	1500.00	1.15e+09	1.55 y	36:12	-	1.00
72	Penta	PCB-121	750.00	1.07e+09	1.65 y	36:18	-	1.85
73	Penta	PCB-84/92	1500.00	1.26e+09	1.59 y	37:08	-	1.02
74	Penta	PCB-89	750.00	6.06e+08	1.66 y	37:20	-	0.98
75	Penta	PCB-90/101	1500.00	1.42e+09	1.58 y	37:30	-	1.15
76	Penta	PCB-113	750.00	8.20e+08	1.61 y	37:45	-	1.33
77	Penta	PCB-99	750.00	7.64e+08	1.59 y	37:50	-	1.24
78	Penta	PCB-119	750.00	9.38e+08	1.60 y	38:18	-	1.73
79	Penta	PCB-108/112	1500.00	1.41e+09	1.59 y	38:28	-	1.30
80	Penta	PCB-83	750.00	8.35e+08	1.61 y	38:37	-	1.54
81	Penta	PCB-97	750.00	6.67e+08	1.59 y	38:49	-	1.23
82	Penta	PCB-86	750.00	5.75e+08	1.59 y	38:57	-	1.06
83	Penta	PCB-87/117/125	2250.00	2.55e+09	1.60 y	39:05	-	1.57
84	Penta	PCB-111/115	1500.00	1.80e+09	1.61 y	39:14	-	1.66
85	Penta	PCB-85/116	1500.00	1.47e+09	1.60 y	39:22	-	1.35
86	Penta	PCB-120	750.00	9.60e+08	1.60 y	39:36	-	1.77
87	Penta	PCB-110	750.00	8.91e+08	1.60 y	39:45	-	1.64
88	Penta	PCB-82	750.00	5.54e+08	1.60 y	40:23	-	0.71
89	Penta	PCB-124	750.00	1.04e+09	1.59 y	41:04	-	1.33
90	Penta	PCB-107/109	1500.00	1.83e+09	1.60 y	41:12	-	1.17
91	Penta	PCB-123	750.00	9.32e+08	1.60 y	41:23	-	1.20
92	Penta	PCB-106/118	1500.00	1.91e+09	1.60 y	41:34	-	1.19
93	Penta	PCB-114	750.00	1.21e+09	1.60 y	42:13	-	1.35
94	Penta	PCB-122	750.00	1.09e+09	1.62 y	42:22	-	1.22
95	Penta	PCB-105	750.00	1.17e+09	1.61 y	43:05	-	1.28
96	Penta	PCB-127	750.00	1.10e+09	1.63 y	43:25	-	1.09
97	Penta	PCB-126	750.00	1.11e+09	1.70 y	45:18	-	1.27
98	Hexa	PCB-155	750.00	7.23e+08	1.27 y	37:04	-	1.15
99	Hexa	PCB-150	750.00	6.95e+08	1.28 y	38:19	-	1.10
100	Hexa	PCB-152	750.00	6.85e+08	1.28 y	38:48	-	1.09
101	Hexa	PCB-145	750.00	6.77e+08	1.27 y	39:14	-	1.08
102	Hexa	PCB-136	750.00	7.15e+08	1.29 y	39:34	-	1.14

103	Hexa	PCB-148	750.00	4.56e+08	1.26 y	39:41	-	0.72
104	Hexa	PCB-154	750.00	5.75e+08	1.28 y	40:09	-	0.91
105	Hexa	PCB-151	750.00	5.08e+08	1.28 y	40:48	-	0.81
106	Hexa	PCB-135	750.00	5.16e+08	1.27 y	41:00	-	0.82
107	Hexa	PCB-144	750.00	5.14e+08	1.29 y	41:07	-	0.82
108	Hexa	PCB-147	750.00	5.36e+08	1.28 y	41:15	-	0.85
109	Hexa	PCB-139/149	1500.00	1.09e+09	1.28 y	41:31	-	0.86
110	Hexa	PCB-140	750.00	5.03e+08	1.28 y	41:42	-	0.80
111	Hexa	PCB-134/143	1500.00	1.43e+09	1.24 y	42:09	-	0.87
112	Hexa	PCB-133/142	1500.00	1.48e+09	1.23 y	42:26	-	0.90
113	Hexa	PCB-131	750.00	7.12e+08	1.24 y	42:36	-	0.87

114	Hexa	PCB-146/165	1500.00	1.86e+09	1.24 y	42:49	-	1.13
115	Hexa	PCB-132/161	1500.00	1.76e+09	1.23 y	43:04	-	1.07
116	Hexa	PCB-153	750.00	9.65e+08	1.23 y	43:14	-	1.18
117	Hexa	PCB-168	750.00	1.10e+09	1.23 y	43:27	-	1.35
118	Hexa	PCB-141	750.00	7.68e+08	1.23 y	43:58	-	0.99
119	Hexa	PCB-137	750.00	8.69e+08	1.22 y	44:21	-	1.11
120	Hexa	PCB-130	750.00	6.96e+08	1.25 y	44:28	-	0.89
121	Hexa	PCB-138/163/164	2250.00	2.89e+09	1.23 y	44:50	-	1.24
122	Hexa	PCB-158/160	1500.00	2.02e+09	1.23 y	45:05	-	1.29
123	Hexa	PCB-129	750.00	6.88e+08	1.23 y	45:19	-	0.88
124	Hexa	PCB-166	750.00	1.04e+09	1.22 y	45:46	-	1.13
125	Hexa	PCB-159	750.00	1.10e+09	1.22 y	46:05	-	1.20
126	Hexa	PCB-128/162	1500.00	1.89e+09	1.23 y	46:23	-	1.03
127	Hexa	PCB-167	750.00	1.07e+09	1.23 y	46:47	-	1.05
128	Hexa	PCB-156	750.00	1.08e+09	1.23 y	48:04	-	1.12
129	Hexa	PCB-157	750.00	1.06e+09	1.24 y	48:21	-	1.06
130	Hexa	PCB-169	750.00	1.01e+09	1.24 y	50:24	-	1.09
131	Hepta	PCB-188	750.00	9.34e+08	1.05 y	42:52	-	1.37
132	Hepta	PCB-184	750.00	8.40e+08	1.05 y	43:19	-	1.23
133	Hepta	PCB-179	750.00	8.75e+08	1.05 y	44:05	-	1.28
134	Hepta	PCB-176	750.00	9.17e+08	1.06 y	44:33	-	1.34
135	Hepta	PCB-186	750.00	8.77e+08	1.05 y	45:10	-	1.29
136	Hepta	PCB-178	750.00	6.27e+08	1.05 y	45:39	-	0.92
137	Hepta	PCB-175	750.00	6.73e+08	1.05 y	45:60	-	0.99
138	Hepta	PCB-182/187	1500.00	1.46e+09	1.05 y	46:10	-	1.07
139	Hepta	PCB-183	750.00	7.62e+08	1.05 y	46:29	-	1.12
140	Hepta	PCB-185	750.00	6.80e+08	1.05 y	47:09	-	1.35
141	Hepta	PCB-174	750.00	7.07e+08	1.04 y	47:31	-	1.40
142	Hepta	PCB-181	750.00	6.72e+08	1.06 y	47:38	-	1.33
143	Hepta	PCB-177	750.00	6.12e+08	1.05 y	47:47	-	1.21
144	Hepta	PCB-171	750.00	6.44e+08	1.05 y	48:05	-	1.28
145	Hepta	PCB-173	750.00	5.59e+08	1.05 y	48:31	-	1.11
146	Hepta	PCB-172	750.00	5.96e+08	1.04 y	48:57	-	1.18
147	Hepta	PCB-192	750.00	7.62e+08	1.05 y	49:09	-	1.51
148	Hepta	PCB-180	750.00	6.75e+08	1.05 y	49:21	-	1.34
149	Hepta	PCB-193	750.00	8.02e+08	1.05 y	49:32	-	1.59
150	Hepta	PCB-191	750.00	8.11e+08	1.05 y	49:46	-	1.61
151	Hepta	PCB-170	750.00	5.79e+08	1.05 y	50:45	-	1.44
152	Hepta	PCB-190	750.00	7.99e+08	1.05 y	50:55	-	1.98
153	Hepta	PCB-189	750.00	8.34e+08	1.05 y	52:11	-	1.54
154	Octa	PCB-202	750.00	6.16e+08	0.91 y	48:17	-	0.99
155	Octa	PCB-201	750.00	6.74e+08	0.90 y	48:46	-	1.09
156	Octa	PCB-204	750.00	6.20e+08	0.90 y	48:55	-	1.00
157	Octa	PCB-197	750.00	6.60e+08	0.90 y	49:13	-	1.06
158	Octa	PCB-200	750.00	6.36e+08	0.90 y	50:03	-	1.02
159	Octa	PCB-198	750.00	4.35e+08	0.90 y	51:19	-	0.70
160	Octa	PCB-199	750.00	4.62e+08	0.92 y	51:25	-	0.74
161	Octa	PCB-196/203	1500.00	9.78e+08	0.91 y	51:41	-	0.79
162	Octa	PCB-195	750.00	6.36e+08	0.92 y	52:48	-	1.19
163	Octa	PCB-194	750.00	6.26e+08	0.92 y	53:40	-	1.17

164	Octa		PCB-205	750.00	7.28e+08	0.91	y	53:57	- 1.36
165	Nona		PCB-208	750.00	6.70e+08	1.33	y	52:57	- 0.91
166	Nona		PCB-207	750.00	6.71e+08	1.33	y	53:15	- 0.91
167	Nona		PCB-206	750.00	4.30e+08	1.34	y	55:19	- 0.98
168	Deca		PCB-209	750.00	4.91e+08	1.19	y	56:35	- 1.16
169	Tot ╗	Total Mono-PCB		0.00	-	-	n	-	- 1.22
170	Tot ╗	Total Di-PCB		0.00	-	-	n	-	- 1.19
171	Tot ╗	Total Tri-PCB		0.00	-	-	n	-	- 1.12

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.26
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.15
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.21
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.24
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.93
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.07
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.26
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.91
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.24
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	0.93
182	Tot ╗	Total Deca-PCB	750.00	4.91e+08	1.19	y	56:35	-	1.16
183	Mono╗	13C-PCB-1	100.00	1.50e+08	3.31	y	16:14	-	0.76
184	Mono╗	13C-PCB-3	100.00	1.70e+08	3.29	y	18:49	-	0.86
185	Di-IS	13C-PCB-4	100.00	1.02e+08	1.58	y	20:08	-	0.52
186	Di-IS	13C-PCB-9	100.00	1.56e+08	1.60	y	21:55	-	0.79
187	Di-IS	13C-PCB-11	100.00	1.80e+08	1.58	y	25:16	-	0.91
188	Tri-╗	13C-PCB-19	100.00	9.83e+07	1.04	y	24:16	-	0.50
189	Tri-╗	13C-PCB-32	100.00	1.56e+08	1.07	y	27:10	-	0.79
190	Tri-╗	13C-PCB-28	100.00	1.66e+08	1.06	y	29:07	-	0.98
191	Tri-╗	13C-PCB-37	100.00	1.50e+08	1.08	y	32:58	-	0.89
192	Tetr╗	13C-PCB-54	100.00	1.33e+08	0.80	y	27:59	-	0.77
193	Tetr╗	13C-PCB-52	100.00	1.13e+08	0.80	y	31:31	-	0.66
194	Tetr╗	13C-PCB-47	100.00	1.19e+08	0.80	y	32:01	-	0.70
195	Tetr╗	13C-PCB-70	100.00	1.56e+08	0.81	y	35:31	-	0.91
196	Tetr╗	13C-PCB-80	100.00	1.58e+08	0.80	y	35:56	-	0.92
197	Tetr╗	13C-PCB-81	100.00	1.47e+08	0.81	y	39:03	-	0.86
198	Tetr╗	13C-PCB-77	100.00	1.56e+08	0.81	y	39:38	-	0.91
199	Pent╗	13C-PCB-104	100.00	9.67e+07	1.59	y	32:40	-	0.90
200	Pent╗	13C-PCB-95	100.00	7.69e+07	1.59	y	35:49	-	0.72
201	Pent╗	13C-PCB-101	100.00	8.24e+07	1.61	y	37:30	-	0.77
202	Pent╗	13C-PCB-97	100.00	7.23e+07	1.63	y	38:48	-	0.67
203	Pent╗	13C-PCB-123	100.00	1.04e+08	1.60	y	41:22	-	0.97
204	Pent╗	13C-PCB-118	100.00	1.07e+08	1.61	y	41:33	-	0.99
205	Pent╗	13C-PCB-114	100.00	1.19e+08	1.61	y	42:12	-	1.15
206	Pent╗	13C-PCB-105	100.00	1.23e+08	1.59	y	43:04	-	1.19
207	Pent╗	13C-PCB-127	100.00	1.34e+08	1.58	y	43:23	-	1.30
208	Pent╗	13C-PCB-126	100.00	1.17e+08	1.57	y	45:18	-	1.14
209	Hexa╗	13C-PCB-155	100.00	8.39e+07	1.28	y	37:03	-	0.78
210	Hexa╗	13C-PCB-153	100.00	1.09e+08	1.28	y	43:13	-	1.06
211	Hexa╗	13C-PCB-141	100.00	1.04e+08	1.29	y	43:57	-	1.01
212	Hexa	13C-PCB-138	100.00	1.04e+08	1.28	y	44:48	-	1.01
213	Hexa╗	13C-PCB-159	100.00	1.22e+08	1.26	y	46:04	-	1.19
214	Hexa╗	13C-PCB-167	100.00	1.35e+08	1.27	y	46:45	-	1.31
215	Hexa╗	13C-PCB-156	100.00	1.28e+08	1.27	y	48:03	-	1.24
216	Hexa╗	13C-PCB-157	100.00	1.33e+08	1.28	y	48:19	-	1.29
217	Hexa╗	13C-PCB-169	100.00	1.24e+08	1.28	y	50:23	-	1.20
218	Hept╗	13C-PCB-188	100.00	9.09e+07	0.46	y	42:51	-	0.88
219	Hept╗	13C-PCB-180	100.00	6.73e+07	0.47	y	49:20	-	0.65
220	Hept╗	13C-PCB-170	100.00	5.38e+07	0.46	y	50:44	-	0.52
221	Hept╗	13C-PCB-189	100.00	7.24e+07	0.47	y	52:11	-	0.70
222	Octa╗	13C-PCB-202	100.00	8.28e+07	0.92	y	48:16	-	0.80

223	Octa╗	13C-PCB-194	100.00	7.14e+07	0.92 y	53:39	-	0.79
224	Nona╗	13C-PCB-208	100.00	9.82e+07	0.76 y	52:56	-	1.09
225	Nona╗	13C-PCB-206	100.00	5.84e+07	0.80 y	55:19	-	0.65
226	Deca╗	13C-PCB-209	100.00	5.63e+07	1.21 y	56:35	-	0.62
227	DI-RS	13C-PCB-15	100.00	1.97e+08	1.56 y	25:59	-	1.00
228	Tri-╗	13C-PCB-31	100.00	1.69e+08	1.06 y	28:60	-	1.00
229	Tetr╗	13C-PCB-60	100.00	1.71e+08	0.80 y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	1.07e+08	1.60 y	39:13	-	1.00
231	Hexa╗	13C-PCB-128	100.00	1.03e+08	1.28 y	46:21	-	1.00
232	Octa╗	13C-PCB-205	100.00	9.02e+07	0.91 y	53:56	-	1.00

233	CRS		13C-PCB-79	100.00	1.75e+08	0.80 y	37:49	-	1.02
234	CRS		13C-PCB-178	100.00	6.43e+07	0.47 y	45:38	-	0.62
235	PS		13C-PCB-79	100.00	1.75e+08	0.80 y	37:49	-	1.19
236	PS		13C-PCB-178	100.00	6.43e+07	0.47 y	45:38	-	0.96

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST140620E1-4 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 140620E1 S#4 Analysis Date: 20-JUN-14 Time: 12:43:46

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-1	2.96	2.66-3.60	y	52.3	37.5-62.5
PCB-2	2.98	2.66-3.60	y	52.3	37.5-62.5
PCB-3	2.98	2.66-3.60	y	51.7	37.5-62.5
PCB-4/10	1.64	1.33-1.79	y	206.7	150-250
PCB-7/9	1.64	1.33-1.79	y	204.6	150-250
PCB-6	1.64	1.33-1.79	y	99.9	75.0-125
PCB-5/8	1.64	1.33-1.79	y	206.9	150-250
PCB-14	1.65	1.33-1.79	y	102.3	75.0-125
PCB-11	1.66	1.33-1.79	y	101.6	75.0-125
PCB-12/13	1.63	1.33-1.79	y	205.7	150-250
PCB-15	1.66	1.33-1.79	y	101.1	75.0-125
PCB-19	1.05	0.88-1.20	y	49.4	37.5-62.5
PCB-30	1.06	0.88-1.20	y	51.2	37.5-62.5
PCB-18	1.05	0.88-1.20	y	50.4	37.5-62.5
PCB-17	1.05	0.88-1.20	y	51.0	37.5-62.5
PCB-24/27	1.06	0.88-1.20	y	103.5	75.0-125
PCB-16/32	1.05	0.88-1.20	y	100.5	75.0-125
PCB-34	1.08	0.88-1.20	y	57.4	37.5-62.5
PCB-23	1.11	0.88-1.20	y	46.4	37.5-62.5
PCB-29	1.09	0.88-1.20	y	51.1	37.5-62.5
PCB-26	1.08	0.88-1.20	y	50.7	37.5-62.5
PCB-25	1.09	0.88-1.20	y	51.5	37.5-62.5
PCB-31	1.08	0.88-1.20	y	49.7	37.5-62.5
PCB-28	1.11	0.88-1.20	y	52.5	37.5-62.5
PCB-20/21/33	1.09	0.88-1.20	y	152.7	112.5-225
PCB-22	1.08	0.88-1.20	y	52.6	37.5-62.5
PCB-36	1.09	0.88-1.20	y	52.3	37.5-62.5
PCB-39	1.08	0.88-1.20	y	51.7	37.5-62.5
PCB-38	1.10	0.88-1.20	y	52.4	37.5-62.5
PCB-35	1.11	0.88-1.20	y	52.7	37.5-62.5
PCB-37	1.09	0.88-1.20	y	51.2	37.5-62.5
PCB-54	0.76	0.65-0.89	y	51.7	37.5-62.5
PCB-50	0.77	0.65-0.89	y	51.4	37.5-62.5
PCB-53	0.78	0.65-0.89	y	50.2	37.5-62.5
PCB-51	0.78	0.65-0.89	y	53.2	37.5-62.5
PCB-45	0.78	0.65-0.89	y	52.8	37.5-62.5
PCB-46	0.76	0.65-0.89	y	50.1	37.5-62.5
PCB-52/69	0.77	0.65-0.89	y	105.4	75.0-125
PCB-73	0.77	0.65-0.89	y	52.2	37.5-62.5
PCB-43/49	0.77	0.65-0.89	y	101.6	75.0-125
PCB-47	0.76	0.65-0.89	y	53.7	37.5-62.5
PCB-48/75	0.77	0.65-0.89	y	99.8	75.0-125
PCB-65	0.77	0.65-0.89	y	49.4	37.5-62.5
PCB-62	0.77	0.65-0.89	y	53.4	37.5-62.5
PCB-44	0.78	0.65-0.89	y	51.3	37.5-62.5
PCB-42/59	0.77	0.65-0.89	y	103.4	75.0-125
PCB-41/64/71/72	0.78	0.65-0.89	y	205.8	150-250
PCB-68	0.78	0.65-0.89	y	50.9	37.5-62.5
PCB-40	0.77	0.65-0.89	y	50.7	37.5-62.5
PCB-57	0.77	0.65-0.89	y	51.8	37.5-62.5
PCB-67	0.77	0.65-0.89	y	53.3	37.5-62.5
PCB-58	0.78	0.65-0.89	y	49.3	37.5-62.5
PCB-63	0.76	0.65-0.89	y	51.7	37.5-62.5
PCB-74	0.77	0.65-0.89	y	51.8	37.5-62.5
PCB-61/70	0.78	0.65-0.89	y	101.8	75.0-125
PCB-76/66	0.77	0.65-0.89	y	103.1	75.0-125
PCB-80	0.78	0.65-0.89	y	50.2	37.5-62.5
PCB-55	0.77	0.65-0.89	y	51.5	37.5-62.5
PCB-56/60	0.77	0.65-0.89	y	100.3	75.0-125
PCB-79	0.78	0.65-0.89	y	51.2	37.5-62.5
PCB-78	0.78	0.65-0.89	y	51.1	37.5-62.5
PCB-81	0.78	0.65-0.89	y	50.9	37.5-62.5
PCB-77	0.79	0.65-0.89	y	52.0	37.5-62.5
PCB-104	1.61	1.32-1.78	y	50.4	37.5-62.5
PCB-96	1.59	1.32-1.78	y	50.5	37.5-62.5
PCB-103	1.58	1.32-1.78	y	50.8	37.5-62.5
PCB-100	1.61	1.32-1.78	y	50.5	37.5-62.5
PCB-94	1.58	1.32-1.78	y	50.8	37.5-62.5
PCB-95/98/102	1.60	1.32-1.78	y	160.1	112.5-225
PCB-93	1.63	1.32-1.78	y	42.1	37.5-62.5
PCB-88/91	1.59	1.32-1.78	y	114.0	75.0-125
PCB-121	1.59	1.32-1.78	y	43.7	37.5-62.5

Analyst: DMS

Date: 6/23/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST140620E1-4 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 140620E1 S#4 Analysis Date: 20-JUN-14 Time: 12:43:46

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)	ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-84/92	1.59	1.32-1.78	y	103.4	75.0-125	PCB-140	1.28	1.05-1.43	y	54.6	37.5-62.5
PCB-89	1.61	1.32-1.78	y	53.1	37.5-62.5	PCB-134/143	1.24	1.05-1.43	y	102.9	75.0-125
PCB-90/101	1.60	1.32-1.78	y	102.1	75.0-125	PCB-133/142	1.23	1.05-1.43	y	102.0	75.0-125
PCB-113	1.58	1.32-1.78	y	56.1	37.5-62.5	PCB-131	1.22	1.05-1.43	y	49.4	37.5-62.5
PCB-99	1.64	1.32-1.78	y	46.1	37.5-62.5	PCB-146/165	1.24	1.05-1.43	y	100.9	75.0-125
PCB-119	1.61	1.32-1.78	y	50.3	37.5-62.5	PCB-132/161	1.22	1.05-1.43	y	102.0	75.0-125
PCB-108/112	1.63	1.32-1.78	y	103.0	75.0-125	PCB-153	1.22	1.05-1.43	y	50.2	37.5-62.5
PCB-83	1.62	1.32-1.78	y	52.1	37.5-62.5	PCB-168	1.21	1.05-1.43	y	50.2	37.5-62.5
PCB-97	1.60	1.32-1.78	y	52.6	37.5-62.5	PCB-141	1.21	1.05-1.43	y	50.4	37.5-62.5
PCB-86	1.58	1.32-1.78	y	48.0	37.5-62.5	PCB-137	1.24	1.05-1.43	y	48.3	37.5-62.5
PCB-87/117/125	1.60	1.32-1.78	y	154.2	112.5-225	PCB-130	1.26	1.05-1.43	y	54.3	37.5-62.5
PCB-111/115	1.68	1.32-1.78	y	102.0	75.0-125	PCB-138/163/164	1.23	1.05-1.43	y	154.4	112.5-225
PCB-85/116	1.48	1.32-1.78	y	101.9	75.0-125	PCB-158/160	1.23	1.05-1.43	y	104.2	75.0-125
PCB-120	1.57	1.32-1.78	y	49.2	37.5-62.5	PCB-129	1.25	1.05-1.43	y	50.6	37.5-62.5
PCB-110	1.61	1.32-1.78	y	51.1	37.5-62.5	PCB-166	1.22	1.05-1.43	y	51.1	37.5-62.5
PCB-82	1.59	1.32-1.78	y	49.3	37.5-62.5	PCB-159	1.23	1.05-1.43	y	52.7	37.5-62.5
PCB-124	1.60	1.32-1.78	y	49.9	37.5-62.5	PCB-128/162	1.22	1.05-1.43	y	104.6	75.0-125
PCB-107/109	1.59	1.32-1.78	y	101.7	75.0-125	PCB-167	1.21	1.05-1.43	y	51.6	37.5-62.5
PCB-123	1.59	1.32-1.78	y	52.4	37.5-62.5	PCB-156	1.22	1.05-1.43	y	49.4	37.5-62.5
PCB-106/118	1.62	1.32-1.78	y	104.7	75.0-125	PCB-157	1.22	1.05-1.43	y	51.2	37.5-62.5
PCB-114	1.64	1.32-1.78	y	50.7	37.5-62.5	PCB-169	1.22	1.05-1.43	y	49.9	37.5-62.5
PCB-122	1.64	1.32-1.78	y	51.0	37.5-62.5	PCB-188	1.02	0.89-1.21	y	50.8	37.5-62.5
PCB-105	1.62	1.32-1.78	y	51.4	37.5-62.5	PCB-184	1.04	0.89-1.21	y	51.3	37.5-62.5
PCB-127	1.64	1.32-1.78	y	51.1	37.5-62.5	PCB-179	1.04	0.89-1.21	y	50.2	37.5-62.5
PCB-126	1.62	1.32-1.78	y	51.1	37.5-62.5	PCB-176	1.04	0.89-1.21	y	50.5	37.5-62.5
PCB-155	1.27	1.05-1.43	y	52.7	37.5-62.5	PCB-186	1.04	0.89-1.21	y	51.2	37.5-62.5
PCB-150	1.28	1.05-1.43	y	51.9	37.5-62.5	PCB-178	1.04	0.89-1.21	y	50.8	37.5-62.5
PCB-152	1.27	1.05-1.43	y	51.1	37.5-62.5	PCB-175	1.04	0.89-1.21	y	52.7	37.5-62.5
PCB-145	1.26	1.05-1.43	y	50.6	37.5-62.5	PCB-182/187	1.04	0.89-1.21	y	104.2	75.0-125
PCB-136	1.27	1.05-1.43	y	52.1	37.5-62.5	PCB-183	1.04	0.89-1.21	y	50.9	37.5-62.5
PCB-148	1.30	1.05-1.43	y	51.3	37.5-62.5	PCB-185	1.04	0.89-1.21	y	50.3	37.5-62.5
PCB-154	1.25	1.05-1.43	y	52.4	37.5-62.5	PCB-174	1.03	0.89-1.21	y	49.1	37.5-62.5
PCB-151	1.30	1.05-1.43	y	52.9	37.5-62.5	PCB-181	1.06	0.89-1.21	y	52.4	37.5-62.5
PCB-135	1.28	1.05-1.43	y	51.8	37.5-62.5	PCB-177	1.05	0.89-1.21	y	51.2	37.5-62.5
PCB-144	1.36	1.05-1.43	y	55.0	37.5-62.5	PCB-171	1.04	0.89-1.21	y	49.7	37.5-62.5
PCB-147	1.18	1.05-1.43	y	52.9	37.5-62.5	PCB-173	1.05	0.89-1.21	y	49.7	37.5-62.5
PCB-139/149	1.27	1.05-1.43	y	107.6	75.0-125	PCB-172	1.02	0.89-1.21	y	49.8	37.5-62.5

Analyst: DMS

Date: 6/23/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST140620E1-4 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 140620E1 S#4 Analysis Date: 20-JUN-14 Time: 12:43:46

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC FOUND	CONC. RANGE (ng/mL)
PCB-192	1.05	0.89-1.21	y	50.5	37.5-62.5
PCB-180	1.04	0.89-1.21	y	49.1	37.5-62.5
PCB-193	1.05	0.89-1.21	y	50.4	37.5-62.5
PCB-191	1.06	0.89-1.21	y	50.0	37.5-62.5
PCB-170	1.03	0.89-1.21	y	49.6	37.5-62.5
PCB-190	1.02	0.89-1.21	y	50.5	37.5-62.5
PCB-189	1.04	0.89-1.21	y	51.7	37.5-62.5
PCB-202	0.91	0.76-1.02	y	50.0	37.5-62.5
PCB-201	0.93	0.76-1.02	y	50.4	37.5-62.5
PCB-204	0.88	0.76-1.02	y	52.0	37.5-62.5
PCB-197	0.91	0.76-1.02	y	52.0	37.5-62.5
PCB-200	0.91	0.76-1.02	y	52.4	37.5-62.5
PCB-198	0.90	0.76-1.02	y	51.5	37.5-62.5
PCB-199	0.89	0.76-1.02	y	52.5	37.5-62.5
PCB-196/203	0.90	0.76-1.02	y	104.9	75.0-125
PCB-195	0.90	0.76-1.02	y	51.9	37.5-62.5
PCB-194	0.90	0.76-1.02	y	49.9	37.5-62.5
PCB-205	0.91	0.76-1.02	y	49.6	37.5-62.5
PCB-208	1.33	1.14-1.54	y	49.5	37.5-62.5
PCB-207	1.32	1.14-1.54	y	50.8	37.5-62.5
PCB-206	1.33	1.14-1.54	y	49.7	37.5-62.5
PCB-209	1.19	0.99-1.33	y	52.5	37.5-62.5

Analyst: DMS

Date: 6/23/14

Client ID: PCB CS3 14F1901 Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46 ConCal: ST140620E1-4

Lab ID: ST140620E1-4 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: ST140620E1-8

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	7.79e+07	2.96 y	1.25	16:15	1.001	0.996	1.006	52.3077
PCB-2	7.75e+07	2.98 y	1.18	18:36	0.988	0.983	0.993	52.2846
PCB-3	7.90e+07	2.98 y	1.22	18:50	1.001	0.996	1.006	51.6788
PCB-4/10	2.37e+08	1.64 y	1.55	20:12	1.003	0.998	1.008	206.748
PCB-7/9	2.89e+08	1.64 y	1.27	21:57	0.869	0.865	0.873	204.628
PCB-6	1.40e+08	1.64 y	1.26	22:36	0.894	0.890	0.899	99.9095
PCB-5/8	2.84e+08	1.64 y	1.23	23:01	0.911	0.906	0.916	206.862
PCB-14	1.57e+08	1.65 y	1.23	24:06	0.954	0.949	0.959	102.294
PCB-11	1.47e+08	1.66 y	1.16	25:17	1.000	0.996	1.006	101.627
PCB-12/13	2.82e+08	1.63 y	1.10	25:41	1.016	1.010	1.020	205.694
PCB-15	1.52e+08	1.66 y	1.21	26:00	1.029	1.024	1.034	101.148
PCB-19	4.60e+07	1.05 y	1.30	24:17	1.001	0.996	1.006	49.3886
PCB-30	6.73e+07	1.06 y	1.83	25:10	1.037	1.032	1.042	51.1589
PCB-18	4.72e+07	1.05 y	0.86	25:55	0.954	0.949	0.959	50.4475
PCB-17	5.00e+07	1.05 y	0.90	26:05	0.960	0.955	0.965	50.9703
PCB-24/27	1.33e+08	1.06 y	1.18	26:40	0.981	0.976	0.986	103.472
- PCB-16/32	1.13e+08	1.05 y	1.03	27:10	1.000	0.995	1.005	100.505
- PCB-34	7.74e+07	1.08 y	1.26	27:58	0.961	0.956	0.966	57.3995
PCB-23	6.51e+07	1.11 y	1.31	28:04	0.964	0.959	0.969	46.4036
PCB-29	7.26e+07	1.09 y	1.33	28:18	0.972	0.967	0.977	51.0903
PCB-26	7.01e+07	1.08 y	1.29	28:30	0.979	0.974	0.984	50.7150
PCB-25	7.40e+07	1.09 y	1.34	28:40	0.985	0.980	0.990	51.5314
PCB-31	7.55e+07	1.08 y	1.42	29:02	0.997	0.992	1.002	49.7377
PCB-28	7.73e+07	1.11 y	1.38	29:07	1.000	0.996	1.006	52.4521
PCB-20/21/33	2.14e+08	1.09 y	1.31	29:45	1.022	1.017	1.027	152.731
PCB-22	7.44e+07	1.08 y	1.32	30:11	1.037	1.032	1.042	52.6344
PCB-36	7.16e+07	1.09 y	1.38	30:47	0.933	0.929	0.939	52.3141
PCB-39	7.29e+07	1.08 y	1.42	31:16	0.948	0.943	0.953	51.6606
PCB-38	7.06e+07	1.10 y	1.35	32:02	0.971	0.967	0.976	52.4183
PCB-35	7.21e+07	1.11 y	1.38	32:33	0.987	0.982	0.992	52.6668
PCB-37	7.08e+07	1.09 y	1.39	32:59	1.000	0.996	1.006	51.1869
PCB-54	5.75e+07	0.76 y	1.20	28:01	1.001	0.996	1.006	51.7229
PCB-50	4.61e+07	0.77 y	0.97	29:11	1.042	1.037	1.047	51.4094
PCB-53	4.59e+07	0.78 y	1.19	29:49	0.946	0.941	0.951	50.2276
PCB-51	4.72e+07	0.78 y	1.15	30:10	0.957	0.952	0.962	53.1558
PCB-45	3.92e+07	0.78 y	0.97	30:35	0.971	0.966	0.976	52.7585
PCB-46	3.67e+07	0.76 y	0.95	31:04	0.986	0.982	0.992	50.0611

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	1.04e+08	0.77 y	1.28	31:33	1.001	0.996	1.006	105.426
PCB-73	5.51e+07	0.77 y	1.37	31:39	1.005	1.000	1.010	52.1810
PCB-43/49	8.70e+07	0.77 y	1.11	31:50	1.010	1.005	1.015	101.562
PCB-47	4.93e+07	0.76 y	1.13	32:02	1.000	0.996	1.006	53.6979
PCB-48/75	1.06e+08	0.77 y	1.30	32:09	1.004	0.999	1.009	99.7567
PCB-65	5.34e+07	0.77 y	1.33	32:25	1.012	1.007	1.017	49.3948
PCB-62	5.60e+07	0.77 y	1.29	32:32	1.016	1.011	1.021	53.4188
PCB-44	3.91e+07	0.78 y	0.94	32:50	1.025	1.020	1.030	51.2578
PCB-42/59	1.02e+08	0.77 y	1.22	33:02	1.032	1.028	1.038	103.394
PCB-41/64/71/72	2.19e+08	0.78 y	1.31	33:38	1.050	1.046	1.056	205.816
PCB-68	6.14e+07	0.78 y	1.49	33:54	1.059	1.054	1.064	50.9457
PCB-40	3.37e+07	0.77 y	0.82	34:06	1.065	1.061	1.071	50.7163
PCB-57	5.90e+07	0.77 y	1.11	34:28	0.970	0.965	0.975	51.7966
PCB-67	5.86e+07	0.77 y	1.07	34:46	0.979	0.974	0.984	53.3170
PCB-58	5.56e+07	0.78 y	1.10	34:53	0.982	0.977	0.987	49.2975
PCB-63	5.91e+07	0.76 y	1.12	35:03	0.987	0.982	0.992	51.7181
PCB-74	6.38e+07	0.77 y	1.20	35:20	0.995	0.990	1.000	51.8367
PCB-61/70	1.12e+08	0.78 y	1.08	35:30	0.999	0.994	1.004	101.842
PCB-76/66	1.20e+08	0.77 y	1.14	35:43	1.005	1.001	1.011	103.088
PCB-80	6.74e+07	0.78 y	1.28	35:56	1.000	0.996	1.006	50.2410
PCB-55	6.01e+07	0.77 y	1.11	36:17	1.010	1.005	1.015	51.5207
PCB-56/60	1.15e+08	0.77 y	1.09	36:46	1.023	1.018	1.028	100.313
PCB-79	6.04e+07	0.78 y	1.12	37:50	1.053	1.048	1.058	51.1728
PCB-78	5.76e+07	0.78 y	1.24	38:32	0.987	0.982	0.992	51.0794
PCB-81	6.41e+07	0.78 y	1.38	39:03	1.000	0.995	1.005	50.9258
PCB-77	6.12e+07	0.79 y	1.21	39:39	1.000	0.995	1.005	51.9669
PCB-104	4.41e+07	1.61 y	1.26	32:41	1.000	0.996	1.006	50.3835
PCB-96	3.84e+07	1.59 y	1.09	33:57	1.039	1.034	1.044	50.4976
PCB-103	3.30e+07	1.58 y	0.93	34:29	1.055	1.050	1.060	50.7622
PCB-100	3.52e+07	1.61 y	1.00	34:49	1.066	1.061	1.071	50.4670
PCB-94	2.91e+07	1.58 y	1.11	35:18	0.985	0.981	0.991	50.7908
PCB-95/98/102	1.01e+08	1.60 y	1.21	35:47	0.999	0.994	1.004	160.143
PCB-93	2.46e+07	1.63 y	1.13	35:56	1.003	0.998	1.008	42.0683
PCB-88/91	6.02e+07	1.59 y	1.02	36:12	1.010	1.006	1.016	114.032
PCB-121	4.31e+07	1.59 y	1.90	36:19	1.014	1.009	1.019	43.6820
PCB-84/92	5.90e+07	1.59 y	1.05	37:08	0.990	0.986	0.996	103.399
PCB-89	2.93e+07	1.61 y	1.02	37:19	0.995	0.991	1.001	53.0820

RL: MONO, TRI - DECA: —

RL: DI : —

Integrations by Analyst: DMS Date: 6/23/14

Reviewed by Analyst: _____ Date: _____

Client ID: PCB CS3 14F1901 Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46 ConCal: ST140620E1-4

Lab ID: ST140620E1-4 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: ST140620E1-8

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-90/101	6.59e+07	1.60	y	1.19	37:31	1.001	0.996	1.006	102.056
	PCB-113	4.11e+07	1.58	y	1.35	37:45	1.007	1.002	1.012	56.0520
	PCB-99	3.22e+07	1.64	y	1.29	37:51	1.010	1.005	1.015	46.1415
	PCB-119	4.21e+07	1.61	y	1.72	38:18	0.987	0.982	0.992	50.2990
	PCB-108/112	6.45e+07	1.63	y	1.29	38:27	0.991	0.986	0.996	102.978
	PCB-83	3.85e+07	1.62	y	1.52	38:38	0.996	0.991	1.001	52.0737
	PCB-97	3.19e+07	1.60	y	1.25	38:49	1.000	0.996	1.006	52.5654
	PCB-86	2.39e+07	1.58	y	1.02	38:58	1.004	1.000	1.010	48.0340
	B-87/117/125	1.17e+08	1.60	y	1.56	39:05	1.007	1.002	1.012	154.194
	PCB-111/115	8.69e+07	1.68	y	1.75	39:15	1.012	1.007	1.017	101.981
	PCB-85/116	6.45e+07	1.48	y	1.30	39:23	1.015	1.010	1.020	101.910
	PCB-120	4.26e+07	1.57	y	1.78	39:37	1.021	1.016	1.026	49.1740
	PCB-110	4.18e+07	1.61	y	1.68	39:46	1.025	1.020	1.030	51.1450
	PCB-82	2.58e+07	1.59	y	0.74	40:23	0.976	0.972	0.982	49.2945
	PCB-124	4.68e+07	1.60	y	1.32	41:03	0.993	0.988	0.998	49.9220
	PCB-107/109	8.79e+07	1.59	y	1.22	41:12	0.996	0.991	1.001	101.669
	PCB-123	4.52e+07	1.59	y	1.22	41:22	1.000	0.995	1.005	52.4448
-	PCB-106/118	9.37e+07	1.62	y	1.22	41:35	1.001	0.996	1.006	104.679
-	PCB-114	5.41e+07	1.64	y	1.36	42:13	1.000	0.995	1.005	50.6622
	PCB-122	4.97e+07	1.64	y	1.24	42:21	1.004	0.999	1.009	50.9693
	PCB-105	5.28e+07	1.62	y	1.28	43:05	1.001	0.995	1.005	51.3611
	PCB-127	5.04e+07	1.64	y	1.14	43:24	1.000	0.995	1.005	51.1125
	PCB-126	4.91e+07	1.62	y	1.28	45:19	1.001	0.995	1.005	51.0683
	PCB-155	3.50e+07	1.27	y	1.14	37:04	1.001	0.966	1.006	52.6727
	PCB-150	3.23e+07	1.28	y	1.06	38:20	1.035	1.030	1.040	51.8920
	PCB-152	3.28e+07	1.27	y	1.10	38:49	1.048	1.043	1.053	51.0615
	PCB-145	3.24e+07	1.26	y	1.09	39:15	1.060	1.055	1.065	50.6281
	PCB-136	3.31e+07	1.27	y	1.08	39:35	1.069	1.064	1.074	52.0720
	PCB-148	2.22e+07	1.30	y	0.74	39:40	1.071	1.066	1.076	51.2670
	PCB-154	2.71e+07	1.25	y	0.88	40:10	1.084	1.079	1.089	52.4052
	PCB-151	2.51e+07	1.30	y	0.81	40:48	1.102	1.097	1.107	52.9183
	PCB-135	2.36e+07	1.28	y	0.78	41:01	1.107	1.101	1.113	51.8361
	PCB-144	2.64e+07	1.36	y	0.82	41:08	1.110	1.105	1.116	54.9912
	PCB-147	2.56e+07	1.18	y	0.83	41:16	1.114	1.011	1.120	52.8823
	PCB-139/149	5.32e+07	1.27	y	0.84	41:31	1.121	1.115	1.127	107.613
-	PCB-140	2.51e+07	1.28	y	0.79	41:43	1.126	1.120	1.132	54.6052
-	PCB-134/143	7.01e+07	1.24	y	0.93	42:08	0.975	0.970	0.980	102.949

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	7.08e+07	1.23	y	0.95	42:26	0.982	0.977	0.987	102.037
PCB-131	3.32e+07	1.22	y	0.91	42:36	0.986	0.981	0.991	49.4221
PCB-146/165	8.56e+07	1.24	y	1.16	42:48	0.991	0.986	0.996	100.884
PCB-132/161	8.34e+07	1.22	y	1.11	43:03	0.996	0.992	1.002	102.031
PCB-153	4.34e+07	1.22	y	1.18	43:14	1.001	0.995	1.005	50.1872
PCB-168	5.04e+07	1.21	y	1.37	43:27	1.006	1.000	1.010	50.1556
PCB-141	3.48e+07	1.21	y	0.97	43:58	1.001	0.996	1.005	50.4291
PCB-137	3.66e+07	1.24	y	1.07	44:21	1.009	1.004	1.014	48.2814
PCB-130	3.25e+07	1.26	y	0.85	44:27	1.012	1.007	1.017	54.2556
PCB-138/163/164	1.29e+08	1.23	y	1.23	44:50	1.001	0.996	1.006	154.435
PCB-158/160	9.17e+07	1.23	y	1.29	45:05	1.007	1.001	1.011	104.238
PCB-129	3.19e+07	1.25	y	0.92	45:19	1.012	1.007	1.017	50.5660
PCB-166	4.45e+07	1.22	y	1.12	45:46	0.993	0.988	0.998	51.1070
PCB-159	4.79e+07	1.23	y	1.16	46:05	1.000	0.995	1.005	52.6640
PCB-128/162	8.32e+07	1.22	y	1.02	46:22	1.006	1.002	1.012	104.591
PCB-167	4.69e+07	1.21	y	1.06	46:47	1.001	0.995	1.005	51.5594
PCB-156	4.73e+07	1.22	y	1.18	48:04	1.000	0.995	1.005	49.4312
PCB-157	4.74e+07	1.22	y	1.08	48:20	1.000	0.995	1.005	51.2216
PCB-169	4.38e+07	1.22	y	1.11	50:24	1.000	0.995	1.005	49.8867
PCB-188	4.41e+07	1.02	y	1.40	42:52	1.000	0.995	1.005	50.7803
PCB-184	3.92e+07	1.04	y	1.24	43:18	1.011	1.006	1.016	51.2869
PCB-179	4.05e+07	1.04	y	1.30	44:06	1.029	1.024	1.034	50.2126
PCB-176	4.26e+07	1.04	y	1.36	44:34	1.040	1.035	1.045	50.5434
PCB-186	4.04e+07	1.04	y	1.28	45:10	1.054	1.049	1.059	51.1676
PCB-178	2.94e+07	1.04	y	0.94	45:39	1.066	1.061	1.071	50.8281
PCB-175	3.16e+07	1.04	y	0.97	46:00	1.074	1.069	1.079	52.7165
PCB-182/187	6.54e+07	1.04	y	1.01	46:11	1.078	1.073	1.083	104.234
PCB-183	3.41e+07	1.04	y	1.08	46:29	1.085	1.080	1.090	50.9232
PCB-185	3.03e+07	1.04	y	1.34	47:09	0.956	0.951	0.961	50.2993
PCB-174	2.95e+07	1.03	y	1.34	47:31	0.963	0.958	0.968	49.0649
PCB-181	3.20e+07	1.06	y	1.36	47:37	0.966	0.961	0.971	52.3684
PCB-177	2.85e+07	1.05	y	1.24	47:48	0.969	0.964	0.974	51.2147
PCB-171	2.93e+07	1.04	y	1.31	48:05	0.975	0.970	0.980	49.7433
PCB-173	2.59e+07	1.05	y	1.16	48:31	0.984	0.979	0.989	49.7232
PCB-172	2.73e+07	1.02	y	1.22	48:57	0.993	0.988	0.998	49.7746
PCB-192	3.46e+07	1.05	y	1.53	49:09	0.996	0.991	1.001	50.4921
PCB-180	3.15e+07	1.04	y	1.43	49:20	1.000	0.995	1.005	49.0865

RL: MONO, TRI - DECA: ———

Integrations by Analyst: DMS

Date: 6/23/14

Client ID: PCB CS3 14F1901 Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46 ConCal: ST140620E1-4

Lab ID: ST140620E1-4 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: ST140620E1-8

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-193	3.74e+07	1.05	y	1.65	49:32	1.004	0.999	1.009	50.3769
	PCB-191	3.75e+07	1.06	y	1.67	49:47	1.009	1.004	1.014	49.9945
	PCB-170	2.66e+07	1.03	y	1.50	50:46	1.000	0.995	1.005	49.6074
	PCB-190	3.64e+07	1.02	y	2.02	50:55	1.003	0.998	1.008	50.4804
	PCB-189	3.90e+07	1.04	y	1.54	52:12	1.000	0.995	1.005	51.6684
	PCB-202	2.92e+07	0.91	y	1.04	48:17	1.000	0.995	1.005	49.9695
	PCB-201	3.12e+07	0.93	y	1.10	48:46	1.011	1.006	1.016	50.3688
	PCB-204	2.91e+07	0.88	y	0.99	48:56	1.014	1.009	1.019	52.0459
	PCB-197	3.14e+07	0.91	y	1.07	49:13	1.020	1.015	1.025	51.9828
	PCB-200	3.00e+07	0.91	y	1.02	50:03	1.037	1.032	1.044	52.4432
	PCB-198	2.15e+07	0.90	y	0.74	51:20	1.063	1.058	1.068	51.5297
	PCB-199	2.15e+07	0.89	y	0.73	51:25	1.065	1.060	1.070	52.5143
-	PCB-196/203	4.56e+07	0.90	y	0.77	51:41	1.071	1.066	1.076	104.918
-	PCB-195	2.91e+07	0.90	y	1.20	52:49	0.984	0.979	0.989	51.8965
	PCB-194	2.91e+07	0.90	y	1.25	53:41	1.000	0.995	1.005	49.8808
	PCB-205	3.28e+07	0.91	y	1.41	53:58	1.006	1.001	1.011	49.5944
	PCB-208	3.18e+07	1.33	y	0.96	52:57	1.000	0.995	1.005	49.4830
	PCB-207	3.10e+07	1.32	y	0.92	53:16	1.006	1.001	1.011	50.7809
	PCB-206	2.07e+07	1.33	y	1.03	55:21	1.000	0.995	1.005	49.7349
	PCB-209	2.28e+07	1.19	y	1.18	56:38	1.000	0.995	1.005	52.4674

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	2.34e+08	2.96	y	16:15	1.22	156.271	
Total Di-PCB	1.69e+09	1.64	y	20:12	1.21	1228.91	
Total Tri-PCB	4.56e+08	1.05	y	24:17	1.16	405.942	
Total Tri-PCB	1.17e+09	1.08	y	27:58	1.35	834.371	Sum:1240.31
Total Tetra-PCB	2.26e+09	0.76	y	28:01	1.17	2169.09	
Total Penta-PCB	1.49e+09	1.61	y	32:41	1.21	2099.97	
Total Penta-PCB	2.69e+08	1.64	y	42:13	1.26	267.736	Sum:2367.71
Total Hexa-PCB	3.94e+08	1.27	y	37:04	0.92	736.844	
Total Hexa-PCB	1.17e+09	1.24	y	42:08	1.08	1448.04	Sum:2184.88
Total Hepta-PCB	8.19e+08	1.02	y	42:52	1.27	1225.74	
Total Octa-PCB	2.40e+08	0.91	y	48:17	0.92	465.773	
Total Octa-PCB	9.28e+07	0.90	y	52:49	1.29	154.410	Sum:620.183
Total Nona-PCB	8.35e+07	1.33	y	52:57	0.96	149.999	
Total Deca-PCB	2.28e+07	1.19	y	56:38	1.18	52.4674	

Total PCB Conc:11327.5526340

RL: MONO, TRI - DECA: —

Integrations by Analyst: DMS

Date: 6/23/14

Client ID: PCB CS3 14F1901 Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46 ConCal: ST140620E1-4

Lab ID: ST140620E1-4 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000 EndCAL: ST140620E1-8

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.19e+08	3.24 y	0.89	16:14	0.625	0.622	0.628	98.9	98.9
13C-PCB-3	1.25e+08	3.32 y	0.93	18:49	0.725	0.721	0.729	100	100
13C-PCB-4	7.38e+07	1.60 y	0.55	20:09	0.776	0.772	0.780	99.9	99.9
13C-PCB-9	1.11e+08	1.59 y	0.83	21:55	0.844	0.840	0.848	100.0	100.0
13C-PCB-11	1.25e+08	1.58 y	0.94	25:16	0.973	0.968	0.978	98.6	98.6
13C-PCB-19	7.19e+07	1.04 y	0.53	24:16	0.934	0.929	0.939	100	100
13C-PCB-28	1.07e+08	1.05 y	0.89	29:07	1.004	0.999	1.009	96.1	96.1
13C-PCB-32	1.09e+08	1.07 y	0.81	27:10	1.046	1.041	1.051	99.3	99.3
13C-PCB-37	9.94e+07	1.06 y	0.83	32:59	1.137	1.131	1.143	95.3	95.3
13C-PCB-47	8.11e+07	0.81 y	0.74	32:01	0.871	0.867	0.875	98.7	98.7
13C-PCB-52	7.70e+07	0.79 y	0.71	31:30	0.857	0.853	0.861	98.5	98.5
13C-PCB-54	9.29e+07	0.81 y	0.85	28:00	0.762	0.758	0.766	99.0	99.0
13C-PCB-70	1.02e+08	0.79 y	0.94	35:31	0.966	0.961	0.971	98.1	98.1
13C-PCB-77	9.74e+07	0.81 y	0.89	39:38	1.078	1.073	1.083	98.7	98.7
13C-PCB-80	1.05e+08	0.80 y	0.96	35:56	0.977	0.972	0.982	99.0	99.0
13C-PCB-81	9.10e+07	0.80 y	0.84	39:03	1.062	1.057	1.067	98.4	98.4
13C-PCB-95	5.18e+07	1.63 y	0.74	35:49	0.913	0.908	0.918	98.4	98.4
13C-PCB-97	4.86e+07	1.60 y	0.69	38:48	0.989	0.984	0.994	99.7	99.7
13C-PCB-101	5.42e+07	1.60 y	0.79	37:30	0.956	0.951	0.961	97.6	97.6
13C-PCB-104	6.97e+07	1.58 y	1.00	32:40	0.833	0.829	0.837	99.0	99.0
13C-PCB-105	8.01e+07	1.61 y	1.24	43:03	0.929	0.924	0.934	96.7	96.7
13C-PCB-114	7.88e+07	1.61 y	1.21	42:12	0.910	0.905	0.915	97.6	97.6
13C-PCB-118	7.31e+07	1.59 y	0.98	41:32	1.059	1.054	1.064	105	105
13C-PCB-123	7.08e+07	1.58 y	0.95	41:21	1.054	1.049	1.059	105	105
13C-PCB-126	7.48e+07	1.61 y	1.16	45:18	0.977	0.972	0.982	96.2	96.2
13C-PCB-127	8.64e+07	1.59 y	1.34	43:23	0.936	0.931	0.941	96.3	96.3
13C-PCB-138	6.82e+07	1.26 y	1.04	44:48	0.966	0.961	0.971	97.7	97.7
13C-PCB-141	7.08e+07	1.28 y	1.07	43:57	0.948	0.943	0.953	98.8	98.8
13C-PCB-153	7.34e+07	1.25 y	1.11	43:13	0.932	0.927	0.937	98.6	98.6
13C-PCB-155	5.85e+07	1.27 y	0.83	37:02	0.944	0.939	0.949	99.4	99.4
13C-PCB-156	8.09e+07	1.27 y	1.24	48:03	1.037	1.032	1.042	97.2	97.2
13C-PCB-157	8.55e+07	1.28 y	1.31	48:19	1.042	1.037	1.047	97.5	97.5
13C-PCB-159	7.80e+07	1.30 y	1.20	46:05	0.994	0.989	0.999	97.3	97.3
13C-PCB-167	8.57e+07	1.25 y	1.32	46:45	1.009	1.004	1.014	97.0	97.0
13C-PCB-169	7.92e+07	1.27 y	1.22	50:24	1.087	1.082	1.092	97.5	97.5
13C-PCB-170	3.58e+07	0.46 y	0.54	50:45	1.095	1.089	1.101	99.9	99.9
13C-PCB-180	4.49e+07	0.47 y	0.67	49:19	1.064	1.059	1.069	99.6	99.6
13C-PCB-188	6.18e+07	0.46 y	0.94	42:51	0.924	0.919	0.929	98.8	98.8
13C-PCB-189	4.90e+07	0.46 y	0.72	52:11	1.126	1.120	1.132	102	102
13C-PCB-194	4.68e+07	0.91 y	0.81	53:40	0.995	0.990	1.000	99.2	99.2
13C-PCB-202	5.62e+07	0.92 y	0.83	48:16	1.041	1.036	1.046	101	101
13C-PCB-206	4.05e+07	0.78 y	0.66	55:20	1.026	1.021	1.031	106	106
13C-PCB-208	6.67e+07	0.78 y	1.12	52:56	0.981	0.976	0.986	102	102
13C-PCB-209	3.70e+07	1.21 y	0.61	56:37	1.049	1.044	1.054	103	103

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.21e+08	0.80 y	1.01	37:49	1.028	1.023	1.033	109	109
13C-PCB-178	4.58e+07	0.46 y	0.63	45:38	0.984	0.979	0.989	109	109

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.21e+08	0.80 y	1.20	37:49	0.968	0.963	0.973	110	110
13C-PCB-178	4.58e+07	0.46 y	0.94	45:38	0.925	0.920	0.930	109	109

RS

Name	Resp	RA	RRF	RT	Conc
13C-PCB-15	1.35e+08	1.56 y	1.00	25:58	100
13C-PCB-31	1.25e+08	1.07 y	1.00	29:00	100
13C-PCB-60	1.10e+08	0.80 y	1.00	36:46	100
13C-PCB-111	7.08e+07	1.59 y	1.00	39:14	100
13C-PCB-128	6.69e+07	1.27 y	1.00	46:21	100
13C-PCB-205	5.82e+07	0.91 y	1.00	53:57	100

Analyst: DMS

Date: 6/23/14

Vista Analytical Laboratory - Injection Log Run file: 140620E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
140620E1	1	ST140620E1-1	DMS	20-JUN-14	09:31:44	NA	NA
140620E1	2	ST140620E1-2	DMS	20-JUN-14	10:35:42	NA	NA
140620E1	3	ST140620E1-3	DMS	20-JUN-14	11:39:47	NA	NA
140620E1	4	ST140620E1-4	DMS	20-JUN-14	12:43:46	ST140620E1-4	ST140620E1-8
140620E1	5	ST140620E1-5	DMS	20-JUN-14	13:47:50	NA	NA
140620E1	6	ST140620E1-6	DMS	20-JUN-14	14:51:49	NA	NA
140620E1	8	ST140620E1-7	DMS	20-JUN-14	15:57:15	NA	NA
140620E1	9	B4F0047-BS1	DMS	20-JUN-14	17:01:12	ST140620E1-4	ST140620E1-8
140620E1	10	SOLVENT BLANK	DMS	20-JUN-14	18:05:10	NA	NA
140620E1	11	B4F0047-BLK1	DMS	20-JUN-14	19:09:06	ST140620E1-4	ST140620E1-8
140620E1	12	1400406-01	DMS	20-JUN-14	20:13:09	ST140620E1-4	ST140620E1-8
140620E1	13	1400434-01	DMS	20-JUN-14	21:17:10	ST140620E1-4	NA
140620E1	14	1400434-02	DMS	20-JUN-14	22:21:13	ST140620E1-4	NA
140620E1	15	1400434-03	DMS	20-JUN-14	23:25:09	ST140620E1-4	NA
140620E1	16	SOLVENT BLANK	DMS	21-JUN-14	00:29:07	ST140620E1-4	NA
140620E1	17	ST140620E1-8	DMS	21-JUN-14	01:33:10	ST140620E1-4	ST140620E1-8

Initial Calibration RRF Summary (ICAL) Vista Analytical Laboratory
Run: 140623E2 Analyte: PCBNEW Cal: PCBVG8-6-23-14 Inst. ID: VG 8

Data filename: 140623E2

Name	Mean RRF	%RSD	Samp# 1 0.25 RRF#1	Samp# 2 1.0 RRF#2	Samp# 3 2.5 RRF#3	Samp# 4 50 RRF#4	Samp# 5 400 RRF#5	Samp# 6 750 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 ╗	Total Mono-PCB	0.00	-	-	n	-	-	1.15
170	Tot ╗	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	Mono╗	13C-PCB-1	100.00	1.84e+08	3.30	y	16:23	-	1.00
184	Mono╗	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	Tetr╗	13C-PCB-54	100.00	1.29e+08	0.80	y	27:54	-	0.96
193	Tetr╗	13C-PCB-52	100.00	1.08e+08	0.80	y	31:23	-	0.80
194	Tetr╗	13C-PCB-47	100.00	1.14e+08	0.80	y	31:53	-	0.85
195	Tetr╗	13C-PCB-70	100.00	1.38e+08	0.80	y	35:24	-	1.03
196	Tetr╗	13C-PCB-80	100.00	1.41e+08	0.80	y	35:48	-	1.05
197	Tetr╗	13C-PCB-81	100.00	1.22e+08	0.80	y	38:55	-	0.91
198	Tetr╗	13C-PCB-77	100.00	1.28e+08	0.80	y	39:31	-	0.95
199	Pent╗	13C-PCB-104	100.00	9.53e+07	1.55	y	32:33	-	1.02
200	Pent╗	13C-PCB-95	100.00	6.94e+07	1.58	y	35:42	-	0.74
201	Pent╗	13C-PCB-101	100.00	7.42e+07	1.61	y	37:22	-	0.79
202	Pent╗	13C-PCB-97	100.00	6.72e+07	1.62	y	38:40	-	0.72
203	Pent╗	13C-PCB-123	100.00	8.66e+07	1.59	y	41:15	-	0.92
204	Pent╗	13C-PCB-118	100.00	9.00e+07	1.59	y	41:25	-	0.96
205	Pent╗	13C-PCB-114	100.00	9.79e+07	1.62	y	42:05	-	1.33
206	Pent╗	13C-PCB-105	100.00	9.84e+07	1.62	y	42:57	-	1.34
207	Pent╗	13C-PCB-127	100.00	1.04e+08	1.60	y	43:17	-	1.42
208	Pent╗	13C-PCB-126	100.00	9.44e+07	1.59	y	45:11	-	1.29
209	Hexa╗	13C-PCB-155	100.00	8.36e+07	1.29	y	36:55	-	0.89
210	Hexa╗	13C-PCB-153	100.00	8.47e+07	1.26	y	43:06	-	1.15
211	Hexa╗	13C-PCB-141	100.00	7.81e+07	1.26	y	43:50	-	1.07
212	Hexa	13C-PCB-138	100.00	8.05e+07	1.27	y	44:41	-	1.10
213	Hexa╗	13C-PCB-159	100.00	9.21e+07	1.27	y	45:58	-	1.26
214	Hexa╗	13C-PCB-167	100.00	9.97e+07	1.26	y	46:40	-	1.36
215	Hexa╗	13C-PCB-156	100.00	9.50e+07	1.29	y	47:58	-	1.30
216	Hexa╗	13C-PCB-157	100.00	1.00e+08	1.32	y	48:14	-	1.37
217	Hexa╗	13C-PCB-169	100.00	9.71e+07	1.27	y	50:19	-	1.32
218	Hept╗	13C-PCB-188	100.00	7.00e+07	0.47	y	42:44	-	0.95
219	Hept╗	13C-PCB-180	100.00	5.49e+07	0.46	y	49:15	-	0.75
220	Hept╗	13C-PCB-170	100.00	4.33e+07	0.46	y	50:40	-	0.59
221	Hept╗	13C-PCB-189	100.00	5.61e+07	0.46	y	52:07	-	0.77

222	Octa¬	13C-PCB-202	100.00	6.86e+07	0.93	y	48:10	-	0.94
223	Octa¬	13C-PCB-194	100.00	5.37e+07	0.93	y	53:37	-	0.79
224	Nona¬	13C-PCB-208	100.00	7.40e+07	0.78	y	52:53	-	1.09
225	Nona¬	13C-PCB-206	100.00	4.38e+07	0.78	y	55:20	-	0.65
226	Deca¬	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-¬	13C-PCB-31	100.00	1.69e+08	1.07	y	28:54	-	1.00
229	Tetr¬	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¬	13C-PCB-128	100.00	7.33e+07	1.25	y	46:16	-	1.00

232	Octa¶	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 ₫	Total Mono-PCB	0.00	-	-	n	-	-	1.21
170	Tot ₫	Total Di-PCB	0.00	-	-	n	-	-	1.18
171	Tot ₫	Total Tri-PCB	0.00	-	-	n	-	-	1.08

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.23
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.10
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.16
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.24
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.87
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.08
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.40
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.93
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.31
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	1.00
182	Tot ╗	Total Deca-PCB	1.00	4.74e+05	1.30	y	56:37	-	1.12
183	Mono╗	13C-PCB-1	100.00	1.69e+08	3.26	y	16:23	-	0.92
184	Mono╗	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-╗	13C-PCB-19	100.00	1.03e+08	1.08	y	24:13	-	0.56
189	Tri-╗	13C-PCB-32	100.00	1.51e+08	1.08	y	27:05	-	0.82
190	Tri-╗	13C-PCB-28	100.00	1.49e+08	1.05	y	29:01	-	0.91
191	Tri-╗	13C-PCB-37	100.00	1.36e+08	1.07	y	32:51	-	0.84
192	Tetr╗	13C-PCB-54	100.00	1.25e+08	0.80	y	27:55	-	0.96
193	Tetr╗	13C-PCB-52	100.00	1.00e+08	0.79	y	31:24	-	0.77
194	Tetr╗	13C-PCB-47	100.00	1.04e+08	0.79	y	31:54	-	0.80
195	Tetr╗	13C-PCB-70	100.00	1.29e+08	0.80	y	35:24	-	0.99
196	Tetr╗	13C-PCB-80	100.00	1.33e+08	0.79	y	35:49	-	1.02
197	Tetr╗	13C-PCB-81	100.00	1.18e+08	0.79	y	38:55	-	0.91
198	Tetr╗	13C-PCB-77	100.00	1.20e+08	0.79	y	39:30	-	0.93
199	Pent╗	13C-PCB-104	100.00	9.09e+07	1.57	y	32:33	-	1.02
200	Pent╗	13C-PCB-95	100.00	6.52e+07	1.56	y	35:42	-	0.73
201	Pent╗	13C-PCB-101	100.00	7.00e+07	1.57	y	37:22	-	0.79
202	Pent╗	13C-PCB-97	100.00	6.28e+07	1.60	y	38:40	-	0.71
203	Pent╗	13C-PCB-123	100.00	8.04e+07	1.57	y	41:15	-	0.90
204	Pent╗	13C-PCB-118	100.00	8.60e+07	1.62	y	41:25	-	0.97
205	Pent╗	13C-PCB-114	100.00	9.51e+07	1.64	y	42:05	-	1.33
206	Pent╗	13C-PCB-105	100.00	9.62e+07	1.60	y	42:57	-	1.34
207	Pent╗	13C-PCB-127	100.00	1.06e+08	1.61	y	43:17	-	1.48
208	Pent╗	13C-PCB-126	100.00	9.30e+07	1.60	y	45:11	-	1.30
209	Hexa╗	13C-PCB-155	100.00	7.57e+07	1.27	y	36:55	-	0.85
210	Hexa╗	13C-PCB-153	100.00	8.33e+07	1.30	y	43:06	-	1.16
211	Hexa╗	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	Hexa╗	13C-PCB-159	100.00	9.11e+07	1.28	y	45:59	-	1.27
214	Hexa╗	13C-PCB-167	100.00	9.84e+07	1.27	y	46:40	-	1.37
215	Hexa╗	13C-PCB-156	100.00	9.34e+07	1.28	y	47:58	-	1.30
216	Hexa╗	13C-PCB-157	100.00	9.73e+07	1.29	y	48:14	-	1.36
217	Hexa╗	13C-PCB-169	100.00	9.18e+07	1.27	y	50:19	-	1.28
218	Hept╗	13C-PCB-188	100.00	6.44e+07	0.46	y	42:44	-	0.90
219	Hept╗	13C-PCB-180	100.00	5.02e+07	0.46	y	49:15	-	0.70
220	Hept╗	13C-PCB-170	100.00	4.02e+07	0.48	y	50:40	-	0.56
221	Hept╗	13C-PCB-189	100.00	5.29e+07	0.47	y	52:06	-	0.74
222	Octa╗	13C-PCB-202	100.00	6.22e+07	0.90	y	48:10	-	0.87

223	Octa¬	13C-PCB-194	100.00	5.51e+07	0.92 y	53:37	-	0.81
224	Nona¬	13C-PCB-208	100.00	7.43e+07	0.77 y	52:53	-	1.09
225	Nona¬	13C-PCB-206	100.00	4.47e+07	0.79 y	55:19	-	0.66
226	Deca¬	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-¬	13C-PCB-31	100.00	1.63e+08	1.05 y	28:54	-	1.00
229	Tetr¬	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¬	13C-PCB-128	100.00	7.17e+07	1.30 y	46:16	-	1.00
232	Octa¬	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 ╗	Total Mono-PCB	0.00	-	-	n	-	-	1.24
170	Tot ╗	Total Di-PCB	0.00	-	-	n	-	-	1.20
171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.09

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.24
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.08
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.17
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.26
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.88
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.10
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.42
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.95
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.32
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	0.98
182	Tot ╗	Total Deca-PCB	2.50	1.17e+06	1.22	y	56:39	-	1.17
183	Mono╗	13C-PCB-1	100.00	1.61e+08	3.34	y	16:23	-	0.91
184	Mono╗	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-╗	13C-PCB-19	100.00	9.81e+07	1.09	y	24:13	-	0.56
189	Tri-╗	13C-PCB-32	100.00	1.41e+08	1.10	y	27:05	-	0.80
190	Tri-╗	13C-PCB-28	100.00	1.45e+08	1.05	y	29:00	-	0.93
191	Tri-╗	13C-PCB-37	100.00	1.23e+08	1.05	y	32:51	-	0.79
192	Tetr╗	13C-PCB-54	100.00	1.19e+08	0.80	y	27:55	-	0.97
193	Tetr╗	13C-PCB-52	100.00	9.54e+07	0.79	y	31:24	-	0.77
194	Tetr╗	13C-PCB-47	100.00	9.99e+07	0.78	y	31:53	-	0.81
195	Tetr╗	13C-PCB-70	100.00	1.22e+08	0.79	y	35:24	-	0.99
196	Tetr╗	13C-PCB-80	100.00	1.26e+08	0.79	y	35:48	-	1.02
197	Tetr╗	13C-PCB-81	100.00	1.13e+08	0.80	y	38:55	-	0.92
198	Tetr╗	13C-PCB-77	100.00	1.13e+08	0.81	y	39:31	-	0.92
199	Pent╗	13C-PCB-104	100.00	8.51e+07	1.58	y	32:33	-	1.01
200	Pent╗	13C-PCB-95	100.00	6.16e+07	1.60	y	35:42	-	0.73
201	Pent╗	13C-PCB-101	100.00	6.46e+07	1.61	y	37:22	-	0.77
202	Pent╗	13C-PCB-97	100.00	5.95e+07	1.56	y	38:40	-	0.71
203	Pent╗	13C-PCB-123	100.00	7.57e+07	1.60	y	41:14	-	0.90
204	Pent╗	13C-PCB-118	100.00	7.96e+07	1.58	y	41:25	-	0.95
205	Pent╗	13C-PCB-114	100.00	9.23e+07	1.63	y	42:05	-	1.35
206	Pent╗	13C-PCB-105	100.00	9.25e+07	1.61	y	42:57	-	1.36
207	Pent╗	13C-PCB-127	100.00	1.01e+08	1.61	y	43:17	-	1.48
208	Pent╗	13C-PCB-126	100.00	8.91e+07	1.60	y	45:11	-	1.31
209	Hexa╗	13C-PCB-155	100.00	7.08e+07	1.28	y	36:55	-	0.84
210	Hexa╗	13C-PCB-153	100.00	7.84e+07	1.29	y	43:06	-	1.15
211	Hexa╗	13C-PCB-141	100.00	7.40e+07	1.27	y	43:50	-	1.09
212	Hexa	13C-PCB-138	100.00	7.43e+07	1.26	y	44:41	-	1.09
213	Hexa╗	13C-PCB-159	100.00	8.52e+07	1.28	y	45:58	-	1.25
214	Hexa╗	13C-PCB-167	100.00	9.23e+07	1.29	y	46:40	-	1.35
215	Hexa╗	13C-PCB-156	100.00	8.80e+07	1.30	y	47:58	-	1.29
216	Hexa╗	13C-PCB-157	100.00	9.23e+07	1.29	y	48:14	-	1.35
217	Hexa╗	13C-PCB-169	100.00	8.83e+07	1.28	y	50:19	-	1.29
218	Hept╗	13C-PCB-188	100.00	6.20e+07	0.47	y	42:44	-	0.91
219	Hept╗	13C-PCB-180	100.00	4.56e+07	0.47	y	49:15	-	0.67
220	Hept╗	13C-PCB-170	100.00	3.64e+07	0.46	y	50:40	-	0.53
221	Hept╗	13C-PCB-189	100.00	4.86e+07	0.48	y	52:07	-	0.71
222	Octa╗	13C-PCB-202	100.00	5.66e+07	0.90	y	48:10	-	0.83

223	Octa¶	13C-PCB-194	100.00	5.12e+07	0.92	y	53:38	-	0.80
224	Nona¶	13C-PCB-208	100.00	6.94e+07	0.78	y	52:53	-	1.09
225	Nona¶	13C-PCB-206	100.00	4.16e+07	0.79	y	55:20	-	0.65
226	Deca¶	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-¶	13C-PCB-31	100.00	1.55e+08	1.05	y	28:54	-	1.00
229	Tetr¶	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¶	13C-PCB-128	100.00	6.82e+07	1.27	y	46:16	-	1.00
232	Octa¶	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	1.66 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 ╗	Total Mono-PCB	0.00	-	-	n	-	-	1.31
170	Tot ╗	Total Di-PCB	0.00	-	-	n	-	-	1.21
171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.10

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.21
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.06
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.18
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.23
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.88
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.09
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.41
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.96
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.32
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	1.00
182	Tot ╗	Total Deca-PCB	50.00	2.30e+07	1.21	y	56:38	-	1.20
183	Mono╗	13C-PCB-1	100.00	1.53e+08	3.37	y	16:24	-	0.86
184	Mono╗	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-╗	13C-PCB-19	100.00	9.46e+07	1.07	y	24:14	-	0.53
189	Tri-╗	13C-PCB-32	100.00	1.39e+08	1.09	y	27:06	-	0.78
190	Tri-╗	13C-PCB-28	100.00	1.40e+08	1.06	y	29:01	-	0.92
191	Tri-╗	13C-PCB-37	100.00	1.20e+08	1.07	y	32:52	-	0.79
192	Tetr╗	13C-PCB-54	100.00	1.23e+08	0.81	y	27:55	-	0.98
193	Tetr╗	13C-PCB-52	100.00	9.72e+07	0.80	y	31:24	-	0.78
194	Tetr╗	13C-PCB-47	100.00	1.02e+08	0.79	y	31:54	-	0.82
195	Tetr╗	13C-PCB-70	100.00	1.22e+08	0.78	y	35:25	-	0.98
196	Tetr╗	13C-PCB-80	100.00	1.27e+08	0.80	y	35:49	-	1.01
197	Tetr╗	13C-PCB-81	100.00	1.12e+08	0.79	y	38:56	-	0.89
198	Tetr╗	13C-PCB-77	100.00	1.14e+08	0.78	y	39:32	-	0.91
199	Pent╗	13C-PCB-104	100.00	8.52e+07	1.57	y	32:34	-	1.00
200	Pent╗	13C-PCB-95	100.00	6.27e+07	1.59	y	35:43	-	0.74
201	Pent╗	13C-PCB-101	100.00	6.57e+07	1.54	y	37:23	-	0.77
202	Pent╗	13C-PCB-97	100.00	5.89e+07	1.59	y	38:42	-	0.69
203	Pent╗	13C-PCB-123	100.00	7.37e+07	1.61	y	41:15	-	0.87
204	Pent╗	13C-PCB-118	100.00	7.79e+07	1.58	y	41:26	-	0.92
205	Pent╗	13C-PCB-114	100.00	9.33e+07	1.60	y	42:06	-	1.35
206	Pent╗	13C-PCB-105	100.00	9.17e+07	1.60	y	42:58	-	1.32
207	Pent╗	13C-PCB-127	100.00	1.00e+08	1.57	y	43:17	-	1.45
208	Pent╗	13C-PCB-126	100.00	9.05e+07	1.58	y	45:12	-	1.31
209	Hexa╗	13C-PCB-155	100.00	7.08e+07	1.29	y	36:55	-	0.83
210	Hexa╗	13C-PCB-153	100.00	7.92e+07	1.29	y	43:07	-	1.14
211	Hexa╗	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	Hexa╗	13C-PCB-159	100.00	8.48e+07	1.27	y	45:59	-	1.22
214	Hexa╗	13C-PCB-167	100.00	9.22e+07	1.30	y	46:40	-	1.33
215	Hexa╗	13C-PCB-156	100.00	8.85e+07	1.29	y	47:58	-	1.28
216	Hexa╗	13C-PCB-157	100.00	9.20e+07	1.29	y	48:15	-	1.33
217	Hexa╗	13C-PCB-169	100.00	8.62e+07	1.27	y	50:19	-	1.24
218	Hept╗	13C-PCB-188	100.00	6.40e+07	0.46	y	42:45	-	0.92
219	Hept╗	13C-PCB-180	100.00	4.63e+07	0.47	y	49:15	-	0.67
220	Hept╗	13C-PCB-170	100.00	3.66e+07	0.47	y	50:40	-	0.53
221	Hept╗	13C-PCB-189	100.00	4.78e+07	0.47	y	52:07	-	0.69
222	Octa╗	13C-PCB-202	100.00	5.65e+07	0.94	y	48:11	-	0.81

223	Octa┐	13C-PCB-194	100.00	5.16e+07	0.92 y	53:36	-	0.79
224	Nona┐	13C-PCB-208	100.00	7.00e+07	0.78 y	52:53	-	1.08
225	Nona┐	13C-PCB-206	100.00	4.23e+07	0.78 y	55:19	-	0.65
226	Deca┐	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-┐	13C-PCB-31	100.00	1.52e+08	1.05 y	28:55	-	1.00
229	Tetr┐	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┐	13C-PCB-128	100.00	6.93e+07	1.27 y	46:16	-	1.00
232	Octa┐	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 ╗	Total Mono-PCB	0.00	-	-	n	-	-	1.35
170	Tot ╗	Total Di-PCB	0.00	-	-	n	-	-	1.22
171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.10

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.15
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.06
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.18
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.23
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.90
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.11
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.41
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.99
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.32
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	1.02
182	Tot ╗	Total Deca-PCB	400.00	2.00e+08	1.19	y	56:35	-	1.17
183	Mono╗	13C-PCB-1	100.00	1.43e+08	3.35	y	16:24	-	0.77
184	Mono╗	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-╗	13C-PCB-19	100.00	9.04e+07	1.10	y	24:14	-	0.48
189	Tri-╗	13C-PCB-32	100.00	1.43e+08	1.10	y	27:06	-	0.77
190	Tri-╗	13C-PCB-28	100.00	1.36e+08	1.05	y	29:02	-	0.89
191	Tri-╗	13C-PCB-37	100.00	1.26e+08	1.06	y	32:52	-	0.82
192	Tetr╗	13C-PCB-54	100.00	1.26e+08	0.81	y	27:55	-	0.97
193	Tetr╗	13C-PCB-52	100.00	9.82e+07	0.78	y	31:24	-	0.76
194	Tetr╗	13C-PCB-47	100.00	1.05e+08	0.77	y	31:55	-	0.81
195	Tetr╗	13C-PCB-70	100.00	1.29e+08	0.79	y	35:25	-	1.00
196	Tetr╗	13C-PCB-80	100.00	1.35e+08	0.80	y	35:50	-	1.04
197	Tetr╗	13C-PCB-81	100.00	1.20e+08	0.78	y	38:56	-	0.93
198	Tetr╗	13C-PCB-77	100.00	1.27e+08	0.80	y	39:32	-	0.98
199	Pent╗	13C-PCB-104	100.00	8.83e+07	1.55	y	32:34	-	1.00
200	Pent╗	13C-PCB-95	100.00	6.77e+07	1.62	y	35:43	-	0.77
201	Pent╗	13C-PCB-101	100.00	7.03e+07	1.56	y	37:23	-	0.80
202	Pent╗	13C-PCB-97	100.00	6.24e+07	1.61	y	38:42	-	0.71
203	Pent╗	13C-PCB-123	100.00	7.82e+07	1.58	y	41:16	-	0.88
204	Pent╗	13C-PCB-118	100.00	8.64e+07	1.60	y	41:26	-	0.98
205	Pent╗	13C-PCB-114	100.00	1.01e+08	1.61	y	42:06	-	1.37
206	Pent╗	13C-PCB-105	100.00	1.02e+08	1.58	y	42:58	-	1.38
207	Pent╗	13C-PCB-127	100.00	1.09e+08	1.60	y	43:18	-	1.48
208	Pent╗	13C-PCB-126	100.00	9.62e+07	1.57	y	45:12	-	1.30
209	Hexa╗	13C-PCB-155	100.00	7.37e+07	1.30	y	36:56	-	0.83
210	Hexa╗	13C-PCB-153	100.00	8.26e+07	1.29	y	43:07	-	1.12
211	Hexa╗	13C-PCB-141	100.00	7.81e+07	1.29	y	43:51	-	1.06
212	Hexa	13C-PCB-138	100.00	8.07e+07	1.29	y	44:42	-	1.09
213	Hexa╗	13C-PCB-159	100.00	9.15e+07	1.26	y	46:00	-	1.24
214	Hexa╗	13C-PCB-167	100.00	1.01e+08	1.25	y	46:40	-	1.37
215	Hexa╗	13C-PCB-156	100.00	9.58e+07	1.27	y	47:59	-	1.30
216	Hexa╗	13C-PCB-157	100.00	1.01e+08	1.31	y	48:15	-	1.36
217	Hexa╗	13C-PCB-169	100.00	9.47e+07	1.29	y	50:19	-	1.28
218	Hept╗	13C-PCB-188	100.00	6.72e+07	0.46	y	42:45	-	0.91
219	Hept╗	13C-PCB-180	100.00	4.95e+07	0.46	y	49:15	-	0.67
220	Hept╗	13C-PCB-170	100.00	3.88e+07	0.47	y	50:41	-	0.53
221	Hept╗	13C-PCB-189	100.00	5.10e+07	0.48	y	52:07	-	0.69
222	Octa╗	13C-PCB-202	100.00	5.93e+07	0.90	y	48:11	-	0.80

223	Octa¬	13C-PCB-194	100.00	5.48e+07	0.91 y	53:37	-	0.80
224	Nona¬	13C-PCB-208	100.00	7.31e+07	0.78 y	52:53	-	1.07
225	Nona¬	13C-PCB-206	100.00	4.59e+07	0.80 y	55:18	-	0.67
226	Deca¬	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-¬	13C-PCB-31	100.00	1.53e+08	1.05 y	28:55	-	1.00
229	Tetr¬	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¬	13C-PCB-128	100.00	7.38e+07	1.22 y	46:17	-	1.00
232	Octa¬	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 ╗	Total Mono-PCB		0.00	-	-	n	-	- 1.36
170	Tot ╗	Total Di-PCB		0.00	-	-	n	-	- 1.25
171	Tot ╗	Total Tri-PCB		0.00	-	-	n	-	- 1.15

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.12
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.09
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.23
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.25
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.96
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.14
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.46
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.03
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.36
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	1.03
182	Tot ╗	Total Deca-PCB	750.00	3.89e+08	1.19	y	56:40	-	1.22
183	Mono╗	13C-PCB-1	100.00	1.51e+08	3.37	y	16:24	-	0.77
184	Mono╗	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-╗	13C-PCB-19	100.00	9.33e+07	1.09	y	24:14	-	0.48
189	Tri-╗	13C-PCB-32	100.00	1.45e+08	1.09	y	27:05	-	0.74
190	Tri-╗	13C-PCB-28	100.00	1.37e+08	1.03	y	29:01	-	1.02
191	Tri-╗	13C-PCB-37	100.00	1.25e+08	1.07	y	32:52	-	0.93
192	Tetr╗	13C-PCB-54	100.00	1.30e+08	0.80	y	27:56	-	0.98
193	Tetr╗	13C-PCB-52	100.00	9.99e+07	0.80	y	31:25	-	0.75
194	Tetr╗	13C-PCB-47	100.00	1.04e+08	0.77	y	31:55	-	0.78
195	Tetr╗	13C-PCB-70	100.00	1.35e+08	0.78	y	35:24	-	1.02
196	Tetr╗	13C-PCB-80	100.00	1.39e+08	0.80	y	35:49	-	1.05
197	Tetr╗	13C-PCB-81	100.00	1.30e+08	0.79	y	38:56	-	0.98
198	Tetr╗	13C-PCB-77	100.00	1.29e+08	0.80	y	39:32	-	0.97
199	Pent╗	13C-PCB-104	100.00	8.83e+07	1.59	y	32:34	-	0.96
200	Pent╗	13C-PCB-95	100.00	6.79e+07	1.55	y	35:43	-	0.74
201	Pent╗	13C-PCB-101	100.00	7.25e+07	1.55	y	37:23	-	0.79
202	Pent╗	13C-PCB-97	100.00	6.44e+07	1.57	y	38:42	-	0.70
203	Pent╗	13C-PCB-123	100.00	8.18e+07	1.58	y	41:16	-	0.89
204	Pent╗	13C-PCB-118	100.00	9.11e+07	1.59	y	41:27	-	0.99
205	Pent╗	13C-PCB-114	100.00	1.10e+08	1.61	y	42:06	-	1.45
206	Pent╗	13C-PCB-105	100.00	1.10e+08	1.59	y	42:58	-	1.45
207	Pent╗	13C-PCB-127	100.00	1.18e+08	1.61	y	43:18	-	1.54
208	Pent╗	13C-PCB-126	100.00	1.02e+08	1.57	y	45:13	-	1.34
209	Hexa╗	13C-PCB-155	100.00	7.27e+07	1.27	y	36:56	-	0.79
210	Hexa╗	13C-PCB-153	100.00	8.79e+07	1.29	y	43:07	-	1.15
211	Hexa╗	13C-PCB-141	100.00	8.18e+07	1.28	y	43:52	-	1.07
212	Hexa	13C-PCB-138	100.00	8.32e+07	1.27	y	44:43	-	1.09
213	Hexa╗	13C-PCB-159	100.00	9.51e+07	1.28	y	45:59	-	1.25
214	Hexa╗	13C-PCB-167	100.00	1.01e+08	1.26	y	46:41	-	1.33
215	Hexa╗	13C-PCB-156	100.00	1.01e+08	1.27	y	47:59	-	1.32
216	Hexa╗	13C-PCB-157	100.00	1.05e+08	1.31	y	48:15	-	1.38
217	Hexa╗	13C-PCB-169	100.00	9.82e+07	1.28	y	50:20	-	1.29
218	Hept╗	13C-PCB-188	100.00	6.91e+07	0.47	y	42:45	-	0.91
219	Hept╗	13C-PCB-180	100.00	4.94e+07	0.48	y	49:16	-	0.65
220	Hept╗	13C-PCB-170	100.00	3.94e+07	0.46	y	50:41	-	0.52
221	Hept╗	13C-PCB-189	100.00	5.34e+07	0.46	y	52:08	-	0.70
222	Octa╗	13C-PCB-202	100.00	5.91e+07	0.90	y	48:12	-	0.78

223	Octa┐	13C-PCB-194	100.00	5.78e+07	0.93	y	53:39	-	0.79
224	Nona┐	13C-PCB-208	100.00	7.83e+07	0.77	y	52:54	-	1.07
225	Nona┐	13C-PCB-206	100.00	4.57e+07	0.77	y	55:21	-	0.62
226	Deca┐	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-┐	13C-PCB-31	100.00	1.34e+08	1.04	y	28:55	-	1.00
229	Tetr┐	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┐	13C-PCB-128	100.00	7.63e+07	1.27	y	46:17	-	1.00
232	Octa┐	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

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 ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)	ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (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
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
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						

Analyst: DMS

Date: 6/24/14

NATIVE 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

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)	ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
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
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
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

Analyst: DMS

Date: 6/24/14

NATIVE 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

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (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: DMS

Date: 6/24/14

LABELED 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

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-1	3.37	2.66-3.60	y	98.7	50.0-145
13C-PCB-3	3.41	2.66-3.60	y	94.8	50.0-145
13C-PCB-4	1.58	1.33-1.79	y	99.7	50.0-145
13C-PCB-9	1.59	1.33-1.79	y	99.2	50.0-145
13C-PCB-11	1.57	1.33-1.79	y	98.2	50.0-145
13C-PCB-19	1.07	0.88-1.20	y	99.8	50.0-145
13C-PCB-32	1.09	0.88-1.20	y	98.2	50.0-145
13C-PCB-28	1.06	0.88-1.20	y	98.7	50.0-145
13C-PCB-37	1.07	0.88-1.20	y	94.4	50.0-145
13C-PCB-54	0.81	0.65-0.89	y	100.9	50.0-145
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
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-118	1.58	1.32-1.78	y	95.4	50.0-145
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

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-169	1.27	1.05-1.43	y	96.7	50 - 145
13C-PCB-188	0.46	0.38-0.52	y	100.6	50 - 145
13C-PCB-180	0.47	0.38-0.52	y	97.7	50 - 145
13C-PCB-170	0.47	0.38-0.52	y	97.2	50 - 145
13C-PCB-189	0.47	0.38-0.52	y	96.3	50 - 145
13C-PCB-202	0.94	0.76-1.02	y	97.2	50 - 145
13C-PCB-194	0.92	0.76-1.02	y	99.4	50 - 145
13C-PCB-208	0.78	0.65-0.89	y	99.5	50 - 145
13C-PCB-206	0.78	0.65-0.89	y	100.0	50 - 145
13C-PCB-209	1.23	0.99-1.33	y	96.9	50 - 145

CRS vs. RS

13C-PCB-79	0.79	0.65-0.89	y	98.3	75 - 125
13C-PCB-178	0.46	0.38-0.52	y	101.1	75 - 125

Analyst: DMS

Date: 6/24/14

Client ID: PCB CS3 14F1302 Filename: 140623E2 S:4 Acq:23-JUN-14 14:53:49 ConCal: NA

Lab ID: ST140623E2-4 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

	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-2	9.45e+07	3.01 y	1.18	18:41	0.989	0.984	0.994	51.8481
	PCB-3	1.13e+08	3.01 y	1.43	18:55	1.001	0.996	1.006	51.3028
	PCB-4/10	3.27e+08	1.65 y	1.57	20:14	1.002	0.997	1.007	200.078
	PCB-7/9	3.82e+08	1.65 y	1.21	21:57	0.870	0.866	0.874	199.310
	PCB-6	2.07e+08	1.66 y	1.30	22:35	0.895	0.890	0.899	100.033
	PCB-5/8	3.65e+08	1.64 y	1.15	23:00	0.912	0.907	0.917	200.175
	PCB-14	1.87e+08	1.66 y	1.11	24:04	0.954	0.949	0.959	102.750
	PCB-11	1.81e+08	1.65 y	1.09	25:14	1.000	0.995	1.005	101.723
	PCB-12/13	3.92e+08	1.65 y	1.19	25:38	1.016	1.011	1.021	200.431
	PCB-15	2.11e+08	1.66 y	1.28	25:56	1.028	1.023	1.033	100.196
	PCB-19	4.92e+07	1.05 y	1.04	24:15	1.001	0.996	1.006	49.8495
	PCB-30	7.99e+07	1.06 y	1.71	25:07	1.037	1.032	1.042	49.3635
	PCB-18	5.58e+07	1.05 y	0.78	25:51	0.954	0.949	0.959	51.2756
	PCB-17	6.48e+07	1.05 y	0.92	26:02	0.961	0.956	0.966	50.4844
	PCB-24/27	1.68e+08	1.05 y	1.19	26:36	0.982	0.977	0.987	101.312
-	PCB-16/32	1.31e+08	1.06 y	0.94	27:06	1.000	0.995	1.005	100.158
-	PCB-34	7.59e+07	1.03 y	1.14	27:52	0.960	0.955	0.965	47.8540
	PCB-23	8.55e+07	1.06 y	1.28	27:58	0.964	0.959	0.969	47.9079
	PCB-29	7.42e+07	1.04 y	1.08	28:13	0.972	0.967	0.977	49.2142
	PCB-26	8.24e+07	1.04 y	1.21	28:25	0.979	0.974	0.984	48.9217
	PCB-25	8.85e+07	1.06 y	1.26	28:34	0.984	0.979	0.989	50.2567
	PCB-31	8.64e+07	1.02 y	1.28	28:56	0.997	0.992	1.002	48.1924
	PCB-28	1.19e+08	1.04 y	1.71	29:02	1.000	0.995	1.005	49.7990
	PCB-20/21/33	2.26e+08	1.03 y	1.08	29:39	1.022	1.017	1.027	149.601
	PCB-22	8.60e+07	1.04 y	1.21	30:05	1.037	1.032	1.042	50.9455
	PCB-36	7.12e+07	1.03 y	1.14	30:40	0.933	0.928	0.938	51.8469
	PCB-39	7.20e+07	1.02 y	1.12	31:09	0.948	0.943	0.953	53.6838
	PCB-38	7.37e+07	1.03 y	1.20	31:55	0.971	0.966	0.976	51.1156
	PCB-35	7.10e+07	1.03 y	1.23	32:26	0.987	0.982	0.992	47.9376
	PCB-37	7.16e+07	1.02 y	1.23	32:53	1.000	0.995	1.005	48.3854
	PCB-54	6.73e+07	0.78 y	1.10	27:57	1.001	0.996	1.006	49.6981
	PCB-50	5.38e+07	0.77 y	0.88	29:05	1.042	1.037	1.047	49.7280
	PCB-53	5.23e+07	0.75 y	1.06	29:44	0.947	0.942	0.952	50.5493
	PCB-51	4.77e+07	0.77 y	0.99	30:04	0.957	0.952	0.962	49.5846
	PCB-45	4.32e+07	0.77 y	0.86	30:30	0.971	0.966	0.976	51.4204
	PCB-46	4.05e+07	0.76 y	0.85	30:59	0.986	0.981	0.991	49.2764

	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
	PCB-52/69	1.24e+08	0.76 y	1.28	31:27	1.001	0.996	1.006	99.8332
	PCB-73	6.71e+07	0.78 y	1.35	31:34	1.005	1.000	1.010	51.0170
	PCB-43/49	9.43e+07	0.76 y	0.99	31:44	1.010	1.005	1.015	97.5221
	PCB-47	5.35e+07	0.76 y	1.06	31:55	1.001	0.996	1.006	49.2976
	PCB-48/75	1.20e+08	0.77 y	1.23	32:02	1.004	0.999	1.009	95.5705
	PCB-65	6.30e+07	0.76 y	1.22	32:19	1.013	1.008	1.018	50.1860
	PCB-62	5.58e+07	0.76 y	1.22	32:26	1.016	1.011	1.021	44.5973
	PCB-44	4.12e+07	0.77 y	0.86	32:43	1.026	1.021	1.031	46.6811
	PCB-42/59	1.11e+08	0.76 y	1.14	32:57	1.033	1.028	1.038	95.2591
	PCB-41/64/71/72	2.33e+08	0.77 y	1.21	33:32	1.051	1.046	1.056	187.913
	PCB-68	6.63e+07	0.76 y	1.35	33:47	1.059	1.054	1.064	47.9757
	PCB-40	3.48e+07	0.77 y	0.70	34:00	1.066	1.061	1.071	48.4517
	PCB-57	6.06e+07	0.76 y	0.98	34:22	0.970	0.965	0.975	50.6920
	PCB-67	6.65e+07	0.76 y	1.11	34:40	0.979	0.974	0.984	49.1755
	PCB-58	5.67e+07	0.79 y	0.93	34:47	0.982	0.977	0.987	50.1141
	PCB-63	5.70e+07	0.76 y	0.95	34:56	0.987	0.982	0.992	48.9977
	PCB-74	7.34e+07	0.77 y	1.24	35:13	0.995	0.990	1.000	48.3011
	PCB-61/70	1.16e+08	0.77 y	0.95	35:24	1.000	0.995	1.005	99.8888
	PCB-76/66	1.26e+08	0.77 y	1.04	35:37	1.006	1.001	1.011	99.0361
	PCB-80	7.72e+07	0.77 y	1.19	35:50	1.001	0.996	1.006	51.1089
	PCB-55	6.84e+07	0.77 y	1.04	36:10	1.010	1.005	1.015	51.7926
	PCB-56/60	1.27e+08	0.77 y	1.01	36:40	1.024	1.019	1.029	98.8614
	PCB-79	6.79e+07	0.78 y	1.08	37:43	1.053	1.048	1.058	49.6313
	PCB-78	6.97e+07	0.77 y	1.27	38:25	0.987	0.982	0.992	49.0861
	PCB-81	7.20e+07	0.78 y	1.33	38:57	1.000	0.995	1.005	48.4278
	PCB-77	6.19e+07	0.79 y	1.10	39:33	1.000	0.995	1.005	49.2464
	PCB-104	5.11e+07	1.57 y	1.18	32:35	1.001	0.996	1.006	50.6145
	PCB-96	4.80e+07	1.56 y	1.14	33:50	1.039	1.034	1.044	49.4868
	PCB-103	3.98e+07	1.56 y	0.96	34:22	1.055	1.050	1.060	48.8016
	PCB-100	3.93e+07	1.58 y	0.94	34:42	1.066	1.061	1.071	49.1824
	PCB-94	3.18e+07	1.55 y	1.06	35:11	0.985	0.980	0.990	48.0705
	PCB-95/98/102	1.14e+08	1.55 y	1.22	35:42	1.000	0.995	1.005	149.073
	PCB-93	2.65e+07	1.58 y	0.84	35:48	1.002	0.997	1.007	50.1439
	PCB-88/91	7.03e+07	1.58 y	1.12	36:05	1.010	1.005	1.015	100.529
	PCB-121	5.08e+07	1.60 y	1.62	36:12	1.014	1.009	1.019	50.2163
	PCB-84/92	6.82e+07	1.56 y	1.05	37:01	0.990	0.985	0.995	99.2072
	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 Filename: 140623E2 S:4 Acq:23-JUN-14 14:53:49 ConCal: NA

Lab ID: ST140623E2-4 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

	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-113	4.88e+07	1.57	y	1.41	37:39	1.007	1.002	1.012	52.6770
	PCB-99	4.19e+07	1.60	y	1.34	37:44	1.009	1.004	1.014	47.7406
	PCB-119	4.49e+07	1.56	y	1.53	38:12	0.987	0.982	0.992	49.7646
	PCB-108/112	7.56e+07	1.58	y	1.28	38:21	0.991	0.986	0.996	100.241
	PCB-83	4.40e+07	1.57	y	1.52	38:31	0.995	0.990	1.000	49.2175
	PCB-97	3.44e+07	1.55	y	1.18	38:42	1.000	0.995	1.005	49.3584
	PCB-86	2.35e+07	1.55	y	0.84	38:51	1.004	0.999	1.009	47.2868
	B-87/117/125	1.40e+08	1.62	y	1.55	38:58	1.007	1.002	1.012	153.661
	PCB-111/115	9.49e+07	1.51	y	1.63	39:08	1.011	1.006	1.016	98.7316
	PCB-85/116	7.71e+07	1.58	y	1.30	39:16	1.015	1.010	1.020	100.601
	PCB-120	4.81e+07	1.59	y	1.68	39:30	1.021	1.016	1.026	48.6800
	PCB-110	4.58e+07	1.57	y	1.56	39:39	1.025	1.020	1.030	50.0059
	PCB-82	2.78e+07	1.55	y	0.76	40:17	0.976	0.971	0.981	49.7616
	PCB-124	5.28e+07	1.58	y	1.47	40:57	0.993	0.988	0.998	48.7175
	PCB-107/109	9.93e+07	1.59	y	1.32	41:05	0.996	0.991	1.001	102.042
	PCB-123	4.35e+07	1.59	y	1.17	41:17	1.001	0.996	1.006	50.5524
-	PCB-106/118	9.15e+07	1.59	y	1.17	41:28	1.001	0.996	1.006	100.161
-	PCB-114	6.12e+07	1.65	y	1.30	42:07	1.000	0.995	1.005	50.6258
	PCB-122	5.19e+07	1.66	y	1.12	42:15	1.004	0.999	1.009	49.6469
	PCB-105	5.88e+07	1.64	y	1.30	42:59	1.000	0.995	1.005	49.4039
	PCB-127	6.36e+07	1.67	y	1.33	43:19	1.001	0.996	1.006	47.5787
	PCB-126	5.32e+07	1.63	y	1.18	45:13	1.000	0.995	1.005	49.7195
	PCB-155	3.92e+07	1.27	y	1.11	36:57	1.001	0.966	1.006	49.6608
	PCB-150	3.54e+07	1.29	y	1.00	38:13	1.035	1.030	1.040	50.0537
	PCB-152	3.90e+07	1.30	y	1.12	38:42	1.048	1.043	1.053	49.3510
	PCB-145	4.21e+07	1.28	y	1.20	39:08	1.060	1.055	1.065	49.5203
	PCB-136	4.09e+07	1.29	y	1.18	39:28	1.069	1.064	1.074	48.9891
	PCB-148	2.62e+07	1.30	y	0.74	39:33	1.071	1.066	1.076	49.6483
	PCB-154	2.94e+07	1.28	y	0.86	40:03	1.085	1.080	1.090	48.3589
	PCB-151	2.53e+07	1.29	y	0.75	40:42	1.102	1.097	1.107	47.8747
	PCB-135	2.73e+07	1.26	y	0.79	40:55	1.108	1.103	1.113	48.6888
	PCB-144	2.52e+07	1.30	y	0.76	41:02	1.111	1.105	1.117	46.6300
	PCB-147	2.80e+07	1.30	y	0.82	41:09	1.115	1.109	1.121	48.1949
	PCB-139/149	5.22e+07	1.28	y	0.76	41:25	1.122	1.116	1.128	96.7904
-	PCB-140	2.47e+07	1.27	y	0.72	41:36	1.127	1.121	1.133	48.2707
-	PCB-134/143	7.05e+07	1.25	y	0.92	42:02	0.975	0.970	0.980	97.1084

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	6.32e+07	1.24	y	0.82	42:20	0.982	0.977	0.987	97.4225
PCB-131	3.53e+07	1.23	y	0.91	42:30	0.986	0.981	0.991	49.1208
PCB-146/165	9.72e+07	1.25	y	1.25	42:43	0.991	0.986	0.996	98.5088
PCB-132/161	8.58e+07	1.31	y	1.10	42:58	0.997	0.992	1.002	98.0024
PCB-153	4.86e+07	1.16	y	1.25	43:08	1.000	0.995	1.005	49.1545
PCB-168	5.75e+07	1.25	y	1.45	43:21	1.006	1.001	1.011	50.0689
PCB-141	3.94e+07	1.24	y	1.09	43:52	1.000	0.995	1.005	48.7397
PCB-137	3.90e+07	1.23	y	1.06	44:15	1.009	1.004	1.014	49.2894
PCB-130	3.61e+07	1.23	y	0.96	44:21	1.011	1.006	1.016	50.1859
PCB-138/163/164	1.47e+08	1.24	y	1.29	44:44	1.001	0.996	1.006	147.764
PCB-158/160	1.03e+08	1.23	y	1.34	44:59	1.006	1.001	1.011	99.9483
PCB-129	3.23e+07	1.24	y	0.85	45:13	1.012	1.007	1.017	49.1140
PCB-166	4.98e+07	1.24	y	1.19	45:41	0.993	0.988	0.998	49.5492
PCB-159	4.70e+07	1.23	y	1.11	46:01	1.001	0.996	1.006	49.8539
PCB-128/162	8.65e+07	1.23	y	1.05	46:18	1.007	1.002	1.012	97.4214
PCB-167	5.55e+07	1.22	y	1.20	46:41	1.000	0.995	1.005	50.1954
PCB-156	5.05e+07	1.25	y	1.14	48:00	1.001	0.996	1.006	50.3349
PCB-157	5.18e+07	1.24	y	1.16	48:16	1.000	0.995	1.005	48.3867
PCB-169	4.66e+07	1.27	y	1.12	50:20	1.000	0.995	1.005	48.3941
PCB-188	4.99e+07	1.05	y	1.58	42:46	1.001	0.996	1.006	49.3061
PCB-184	5.13e+07	1.06	y	1.63	43:13	1.011	1.006	1.016	49.1029
PCB-179	4.15e+07	1.06	y	1.30	44:00	1.029	1.024	1.034	49.7059
PCB-176	4.68e+07	1.04	y	1.48	44:28	1.040	1.035	1.045	49.4886
PCB-186	4.64e+07	1.05	y	1.45	45:05	1.055	1.050	1.060	49.8177
PCB-178	3.27e+07	1.05	y	1.03	45:34	1.066	1.061	1.071	49.3595
PCB-175	3.22e+07	1.05	y	1.01	45:55	1.074	1.069	1.079	49.6213
PCB-182/187	7.77e+07	1.05	y	1.25	46:05	1.078	1.073	1.083	96.9439
PCB-183	3.68e+07	1.05	y	1.21	46:24	1.086	1.081	1.091	47.6012
PCB-185	4.12e+07	1.07	y	1.80	47:04	0.956	0.951	0.961	49.3457
PCB-174	3.30e+07	1.02	y	1.38	47:26	0.963	0.958	0.968	51.6599
PCB-181	3.14e+07	1.06	y	1.38	47:33	0.965	0.960	0.970	49.1713
PCB-177	2.91e+07	1.05	y	1.26	47:42	0.968	0.963	0.973	50.0451
PCB-171	3.69e+07	1.07	y	1.58	48:00	0.975	0.970	0.980	50.3499
PCB-173	2.61e+07	1.04	y	1.11	48:26	0.983	0.978	0.988	50.8218
PCB-172	3.80e+07	1.07	y	1.63	48:53	0.992	0.987	0.997	50.2115
PCB-192	4.11e+07	1.06	y	1.74	49:04	0.996	0.991	1.001	51.0155
PCB-180	3.12e+07	1.05	y	1.34	49:17	1.000	0.995	1.005	50.1142

RL: MONO, TRI - DECA: _____

Integrations by Analyst: DMS

Date: 6/24/14

Client ID: PCB CS3 14F1302 Filename: 140623E2 S:4 Acq:23-JUN-14 14:53:49 ConCal: NA
Lab ID: ST140623E2-4 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.0000 EndCAL: NA

	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 Tri-PCB	1.30e+09	1.03	y	27:52	1.21	807.063	Sum:1209.50
Total Tetra-PCB	2.49e+09	0.78	y	27:57	1.09	2080.43	
Total Penta-PCB	1.69e+09	1.57	y	32:35	1.18	2047.61	
Total Penta-PCB	3.13e+08	1.65	y	42:07	1.25	268.155	Sum:2315.77
Total Hexa-PCB	4.35e+08	1.27	y	36:57	0.90	682.032	
Total Hexa-PCB	1.26e+09	1.25	y	42:02	1.11	1398.33	Sum:2080.36
Total Hepta-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 Octa-PCB	1.04e+08	0.89	y	52:45	1.33	151.653	Sum:599.041
Total Nona-PCB	9.23e+07	1.34	y	52:53	1.01	150.101	
Total Deca-PCB	2.30e+07	1.21	y	56:38	1.17	51.1001	

Total PCB Conc:10960.1670500

RL: MONO, TRI - DECA: _____

Integrations by Analyst: DMS

Date: 6/24/14

Client ID: PCB CS3 14F1302 Filename: 140623E2 S:4 Acq:23-JUN-14 14:53:49 ConCal: NA
Lab ID: ST140623E2-4 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.000 EndCAL: NA

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-3	1.54e+08	3.41 y	0.91	18:54	0.729	0.725	0.733	94.8	94.8
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-9	1.59e+08	1.59 y	0.90	21:55	0.846	0.842	0.850	99.2	99.2
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-19	9.46e+07	1.07 y	0.53	24:14	0.935	0.930	0.940	99.8	99.8
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-32	1.39e+08	1.09 y	0.80	27:06	1.045	1.040	1.050	98.2	98.2
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-47	1.02e+08	0.79 y	0.81	31:54	0.870	0.866	0.874	101	101
13C-PCB-52	9.72e+07	0.80 y	0.77	31:24	0.857	0.853	0.861	101	101
13C-PCB-54	1.23e+08	0.81 y	0.97	27:55	0.762	0.758	0.766	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
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
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-95	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
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
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
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
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
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
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
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
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
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
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
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
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
13C-PCB-208	7.00e+07	0.78 y	1.08	52:53	0.981	0.976	0.986	99.5	99.5
13C-PCB-209	3.85e+07	1.23 y	0.61	56:37	1.050	1.045	1.055	96.9	96.9

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
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-178	4.30e+07	0.46 y	0.61	45:33	0.984	0.979	0.990	101	101

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.25e+08	0.79 y	1.10	37:42	0.968	0.963	0.973	102	102
13C-PCB-178	4.30e+07	0.46 y	0.90	45:33	0.925	0.920	0.930	103	103

RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.78e+08	1.59	y	1.00	25:55	100
13C-PCB-31	1.52e+08	1.05	y	1.00	28:55	100
13C-PCB-60	1.25e+08	0.79	y	1.00	36:39	100
13C-PCB-111	8.51e+07	1.57	y	1.00	39:07	100
13C-PCB-128	6.93e+07	1.27	y	1.00	46:16	100
13C-PCB-205	6.51e+07	0.91	y	1.00	53:54	100

Analyst: DMS

Date: 6/24/14

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