Lower Duwamish Waterway

NPDES Inspection Sampling Support 2014/2015

Prepared for

Toxics Cleanup Program
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Appendix S
South Service Center

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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S-1 Introduction and Background

Facility Name	South Service Center (Seattle City Light)
Facility/Site ID	2171
Address	400 S Spokane Street Seattle, WA 98134
NPDES Permit Type	Phase I Municipal Stormwater Permit
NPDES Permit No.	WAR044503
Permit Monitoring Requirements	Unknown
SIC Code	none
Inspection Date	December 11, 2014
Grab Samples	1 water sample; 3 solids samples
Sample ID(s)	SC-MH-20-20141211-W SC-OWS-05-20141211-S SC-CB-35-20141211-S SC-CB-24-20141211-S
Water Sample Analytes	Total metals, mercury, PCB congeners, dioxins/furans, SVOCs, alkalinity/carbonate/bicarbonate, anions, specific conductance, pH, TOC, DOC, TSS
Solids Sample Analytes	Total metals, mercury, PCB Aroclors, PCB congeners, dioxins/furans, SVOCs, VOCs (2 samples), TPH-diesel/motor oil, TPH-gasoline (2 samples), grain size, TOC
Split Samples with Facility	Yes

Seattle City Light's South Service Center is located east of the Lower Duwamish Waterway (LDW) in the Duwamish/Diagonal stormwater basin. The facility is used by Seattle City Light to store and conduct maintenance of electrical transmission equipment. The facility includes a decant area, boneyard for old equipment, a PCB building for dismantling old transformers, scrap yard, material and product storage area, and vehicle parking areas (Ecology 2015). Additional information about facility activities was not available for review. An overview of the facility is presented in Figure S-1.

S-1.1 Stormwater Conveyance

Based on the facility drainage map, stormwater is collected in a series of catch basins and conveyed offsite to the Duwamish/Diagonal Combined Sewer Overflow/Storm Drain (CSO/SD). Additional stormwater conveyance system information was not available for review.

S-1.2 Recent Compliance History

Recent compliance information was not available for review.

S-2 Inspection and Sampling

S-2.1 December 2014 Stormwater Compliance Inspection

On December 11, 2014, Ecology conducted a stormwater compliance inspection at South Service Center. 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 S-2 using geographic information system software. An inspection photographic log and field documentation are presented in Attachments S-1 and S-2, respectively.

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

- **Manhole 20 (SC-MH-20)**
- **Oil/water separator D (SC-OWS-D)**
- Catch basin 38 (SC-CB-38)
- **Catch basin 35 (SC-CB-35)**
- **Catch basin 24 (SC-CB-24).**

Locations OWS-D, CB-35, and CB-24 contained sufficient sampleable material to collect solids samples. Location MH-20 contained sufficient water to collect a water grab sample. Storm drain structure inspection locations are presented in Figure S-2.

S-2.2 Stormwater Conveyance System Sampling

Ecology collected one water sample and three solids samples from the stormwater conveyance system at the South Service Center. Sample locations, analytes, and analytical methods are listed on Table S-1. Results for water samples are presented in Tables S-2 through S-6. Results for the solids samples are provided in Tables S-7 through S-9. Chain of custody forms and the laboratory reports are provided as Attachments S-3 and S-4, respectively. Split sample results collected by the city of Seattle are provided as Attachment S-6.

S-2.2.1 Water Sample

Water sample SC-MH-20-20141211-W was collected from MH-20 (Figure S-2 and Attachment S-1). MH-20 is channelized and receives stormwater from an area that drains a paved parking lot where equipment is stored. Stormwater is conveyed to OWS-D, which then drains offsite to the Duwamish/Diagonal CSO/SD. The field team observed discharge during inspection and sample collection.

S-2.2.2 Solids Samples

Solids sample SC-OWS-05-20141211-S was collected from chamber 2 of the oil/water separator OWS-D (Figure S-2 and Attachment S-1). OWS-D contains three chambers. OWS-D chamber 2

receives stormwater from MH-20 that drains a paved parking lot where equipment is stored. Stormwater is conveyed from OWS-D offsite to the Duwamish/Diagonal CSO/SD. The sample consisted of black silty/clay sediment and organic matter and had a strong odor with a slight sheen.

Solids sample SC-CB-35-20141211-S was collected from catch basin CB-35 (Figure S-2 and Attachment S-1), which receives stormwater from CB-36 and CB-37 and paved areas adjacent to the PCB building. Stormwater is conveyed from CB-35 to a storm drain line that enters MH-17, which eventually enters OWS- D. The sample consisted of black silt and medium to fine grain sand and had a moderate odor. A slight sheen was observed during sample collection.

Solids sample SC-CB-24-20141211-S was collected from CB-24 (Figure S-2 and Attachment S-1), which is located in the east central area of the South Service Center, on the north side of a salvage/scrap storage yard. Stormwater drains from underneath the scrapyard barriers and enters CB-24. Objects stored in the scrap area include cables, conduit, and uncovered scrap metal bins. Stormwater entering CB-24 contained suspended solids and had a slight sheen. CB-24 has a sediment trap to prevent floating debris from discharging to a storm drain line that enters MH-16. The solids sample consisted of dark brown silt and fine grain sand with a slight petroleum odor.

S-3 Results

S-3.1 Chemical Analysis

Ecology collected one water and three solids samples during the December 11, 2014 stormwater compliance inspection at the South Service Center. Analytical methods, chemical results and regulatory criteria are presented in Tables S-1 through S-9.

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

Copper, lead, and zinc exceeded one or more screening levels in the water sample (Table S-4). In addition, total PCB congeners, PAHs (benzo[a]anthracene, dibenzo[a,h]anthracene), and pentachlorophenol exceeded marine chronic and/or human health water quality criteria in this sample.

Concentrations of the following chemicals exceeded the one or more screening levels in solids samples (Table S-8):

- Metals: cadmium, copper, mercury, zinc;
- PCBs: total PCB Aroclors, total PCB congeners;
- Dioxin/furan TEQ;
- PAHs: benzo(a)anthracene, benzo(a)pyrene, benzo(g,h,i)perylene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, pyrene, total benzofluoranthenes, total HPAHs, total LPAHs, and total cPAHs;

- Phthalates: bis(2-ethylhexyl)phthalate, butylbenzylphthalate, di-n-butylphthalate, dimethylphthalate;
- Phenols: 4-methylphenol, pentachlorophenol;
- Other SVOCs: benzyl alcohol, and n-nitrosodiphenylamine;
- TPH: gasoline-, diesel-, and motor oil-range hydrocarbons.

S-3.2 Inspection Results and Permit Compliance Requirements

At the time of the December 2014 inspection, Ecology reviewed site plans and information for compliance with the City of Seattle's Phase I Municipal Stormwater Permit. As part of the review, Ecology identified the following corrective actions (Ecology 2015):

- Implement best management practices (BMPs) in accordance with a complete and accurate SWPPP.
- Prevent or reduce stormwater impacts from leaks and spills as well as materials and solid wastes stored on-site.
- Update the facility SWPPP to address all areas of the facility that discharge or have the potential to discharge to the municipal separate stormwater system.
- Conduct periodic visual observations of discharges from the facility to evaluate effectiveness of BMPs.

S-4 References

Ecology. 2015. Municipal Stormwater Inspection Report: Seattle City Light South Service Center, 400 S Spokane Street, Seattle, WA 98134. January 27, 2015.

Ecology. 2013. Water Quality Permitting and Reporting Information System, Summary Information, Seattle City Light South Service Center. Online database.

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

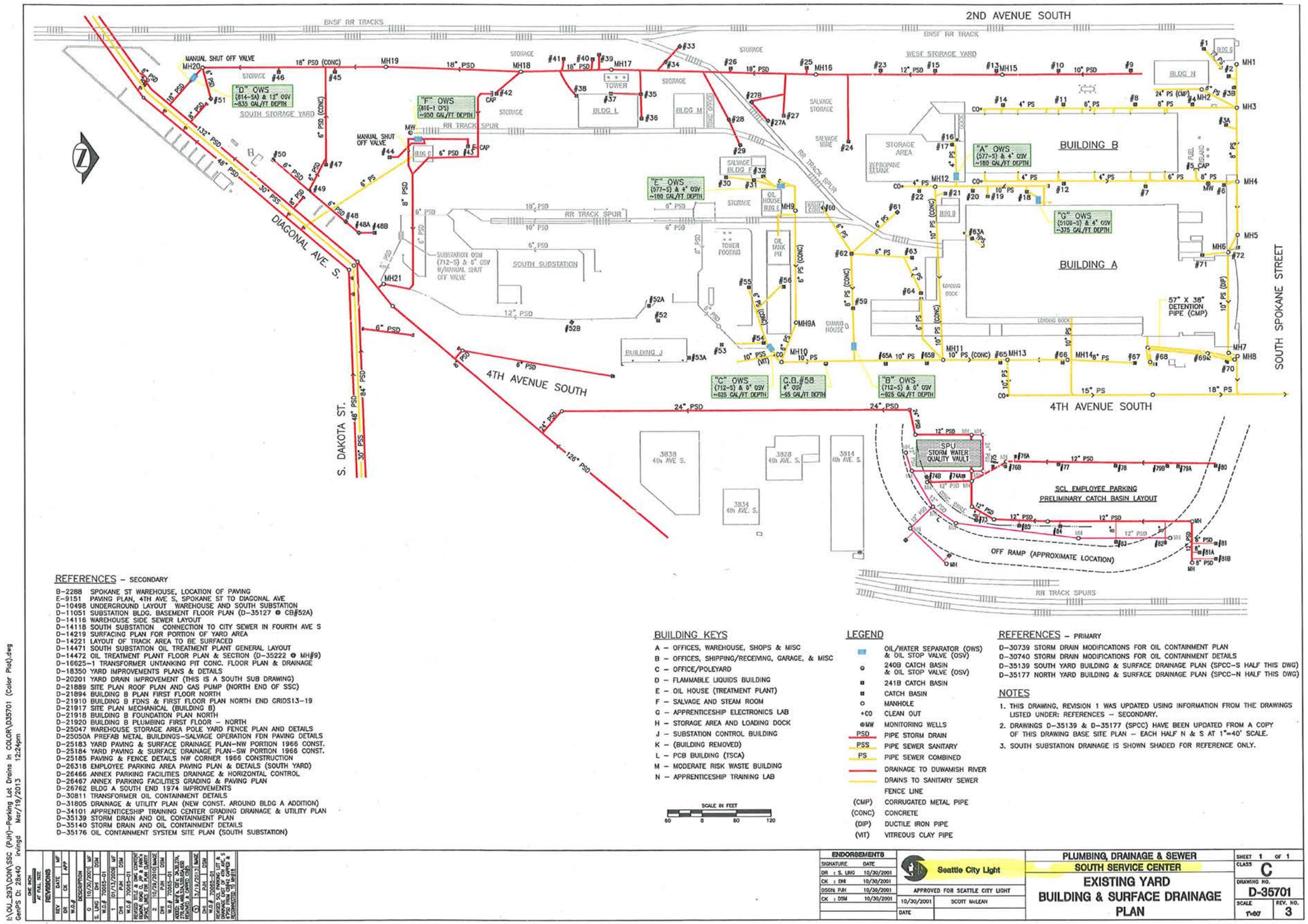
EPA. 2008. *USEPA Contract Laboratory Program, National Functional Guidelines for Organic Data Review*. EPA-540-R-08-01. Office of Emergency and Remedial Response. June 2008.

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

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

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

Figures



REFERENCES – SECONDARY

B-2288 SPOKANE ST WAREHOUSE, LOCATION OF PAVING
E-9151 PAVING PLAN, 4TH AVE S, SPOKANE ST TO DIAGONAL AVE
D-10498 UNDERGROUND LAYOUT WAREHOUSE AND SOUTH SUBSTATION
D-11051 SUBSTATION BLDG. BASEMENT FLOOR PLAN (D-35127 @ CB#52A)
D-14116 WAREHOUSE SIDE SEWER LAYOUT
D-14118 SOUTH SUBSTATION CONNECTION TO CITY SEWER IN FOURTH AVE S
D-14219 SURFACING PLAN FOR PORTION OF YARD AREA
D-14221 LAYOUT OF TRACK AREA TO BE SURFACED
D-14471 SOUTH SUBSTATION OIL TREATMENT PLANT GENERAL LAYOUT
D-14472 OIL TREATMENT PLANT FLOOR PLAN & SECTION (D-35222 @ MH#9)
D-16625-1 TRANSFORMER UNTANKING PIT CONC. FLOOR PLAN & DRAINAGE
D-18350 YARD IMPROVEMENTS PLANS & DETAILS
D-20201 YARD DRAIN IMPROVEMENT (THIS IS A SOUTH SUB DRAWING)
D-21889 SITE PLAN ROOF PLAN AND GAS PUMP (NORTH END OF SSC)
D-21894 BUILDING B PLAN FIRST FLOOR NORTH
D-21910 BUILDING B FDNS & FIRST FLOOR PLAN NORTH END GRIDS13-19
D-21917 SITE PLAN MECHANICAL (BUILDING B)
D-21918 BUILDING B FOUNDATION PLAN NORTH
D-21920 BUILDING B PLUMBING FIRST FLOOR – NORTH
D-25047 WAREHOUSE STORAGE AREA POLE YARD FENCE PLAN AND DETAILS
D-25050A PREFAB METAL BUILDINGS–SALVAGE OPERATION FDN PAVING DETAILS
D-25183 YARD PAVING & SURFACE DRAINAGE PLAN–NW PORTION 1966 CONST.
D-25184 YARD PAVING & SURFACE DRAINAGE PLAN–SW PORTION 1966 CONST.
D-25185 PAVING & FENCE DETAILS NW CORNER 1966 CONSTRUCTION
D-26318 EMPLOYEE PARKING AREA PAVING PLAN & DETAILS (SOUTH YARD)
D-26466 ANNEX PARKING FACILITIES DRAINAGE & HORIZONTAL CONTROL
D-26467 ANNEX PARKING FACILITIES GRADING & PAVING PLAN
D-26762 BLDG A SOUTH END 1974 IMPROVEMENTS
D-30811 TRANSFORMER OIL CONTAINMENT DETAILS
D-31805 DRAINAGE & UTILITY PLAN (NEW CONST. AROUND BLDG A ADDITION)
D-34101 APPRENTICESHIP TRAINING CENTER GRADING DRAINAGE & UTILITY PLAN
D-35139 STORM DRAIN AND OIL CONTAINMENT PLAN
D-35140 STORM DRAIN AND OIL CONTAINMENT DETAILS
D-35176 OIL CONTAINMENT SYSTEM SITE PLAN (SOUTH SUBSTATION)

BUILDING KEYS

A – OFFICES, WAREHOUSE, SHOPS & MISC
B – OFFICES, SHIPPING/RECEIVING, GARAGE, & MISC
C – OFFICE/POLEYARD
D – FLAMMABLE LIQUIDS BUILDING
E – OIL HOUSE (TREATMENT PLANT)
F – SALVAGE AND STEAM ROOM
G – APPRENTICESHIP ELECTRONICS LAB
H – STORAGE AREA AND LOADING DOCK
J – SUBSTATION CONTROL BUILDING
K – (BUILDING REMOVED)
L – PCB BUILDING (TSCA)
M – MODERATE RISK WASTE BUILDING
N – APPRENTICESHIP TRAINING LAB

SCALE IN FEET
60 0 60 120

LEGEND

OIL/WATER SEPARATOR (OWS) & OIL STOP VALVE (OSV)
240B CATCH BASIN & OIL STOP VALVE (OSV)
241B CATCH BASIN
CATCH BASIN
MANHOLE
CLEAN OUT
MONITORING WELLS
PSD PIPE STORM DRAIN
PSS PIPE SEWER SANITARY
PS PIPE SEWER COMBINED
DRAINAGE TO DUWAMISH RIVER
DRAINS TO SANITARY SEWER
FENCE LINE
(CMP) CORRUGATED METAL PIPE
(CONC) CONCRETE
(DIP) DUCTILE IRON PIPE
(VIT) VITREOUS CLAY PIPE

REFERENCES – PRIMARY

D-30739 STORM DRAIN MODIFICATIONS FOR OIL CONTAINMENT PLAN
D-30740 STORM DRAIN MODIFICATIONS FOR OIL CONTAINMENT DETAILS
D-35139 SOUTH YARD BUILDING & SURFACE DRAINAGE PLAN (SPCC–S HALF THIS DWG)
D-35177 NORTH YARD BUILDING & SURFACE DRAINAGE PLAN (SPCC–N HALF THIS DWG)

NOTES

1. THIS DRAWING, REVISION 1 WAS UPDATED USING INFORMATION FROM THE DRAWINGS LISTED UNDER: REFERENCES – SECONDARY.
2. DRAWINGS D-35139 & D-35177 (SPCC) HAVE BEEN UPDATED FROM A COPY OF THIS DRAWING BASE SITE PLAN – EACH HALF N & S AT 1"=40' SCALE.
3. SOUTH SUBSTATION DRAINAGE IS SHOWN SHADED FOR REFERENCE ONLY.

REVISIONS						
REV	DATE	BY	APP	DESCRIPTION		
DR	CK					
W.O.#						
0	10/30/2001	MF	DSM	ISSUED AS "FOR CONSTRUCTION"		
C. Uhl	70055-01	DSM				
W.O.#						
1	01/13/2009	MF	DSM	REVISED TO ADD A JUNCTION CHAMBER, SAND OIL & JAR & ANNEX SPACE, AND THE ANNEX CARPORT		
DR	PJH	CDM				
W.O.#	70055-01					
2	10/30/2012	MF	DSM	REVISED TO ADD A CONCRETE ROUND & CARPORT CHR		
DR	PJH	CDM				
W.O.#	70055-01					
3	1/15/2013	MF	DSM	ADDED NEW OIL WATER SEPARATOR, CONCRETE ROUND & CARPORT CHR		
DR	PJH	CDM				
W.O.#	70055-01					
4	3/19/2013	MF	DSM	REVISED OIL PIPING LAY & SPCC PLAN TO REFLECT CHANGES TO CONCRETE TO METER		
DR	PJH	CDM				
W.O.#	70055-01					

ENDORSEMENTS	
SIGNATURE	DATE
DR : S. LING	10/30/2001
CK : DIR	10/30/2001
DSGN. PJH	10/30/2001
CK : DSM	10/30/2001

Seattle City Light
APPROVED FOR SEATTLE CITY LIGHT
10/30/2001 SCOTT McLEAN
DATE

PLUMBING, DRAINAGE & SEWER
SOUTH SERVICE CENTER
EXISTING YARD BUILDING & SURFACE DRAINAGE PLAN

SHEET 1 OF 1
CLASS C
DRAWING NO. D-35701
SCALE 1"=80'
REV. NO. 3

I:\OL_293\DGN\SSC (P&H)-Parking Lot Drains in COLOR\D35701 (Color Plot).dwg
GenPS Dz: 28x40 irving4 Mar/19/2013 12:24pm

Source: SCL 2001

Figure S-1. South Service Center SWPPP Map

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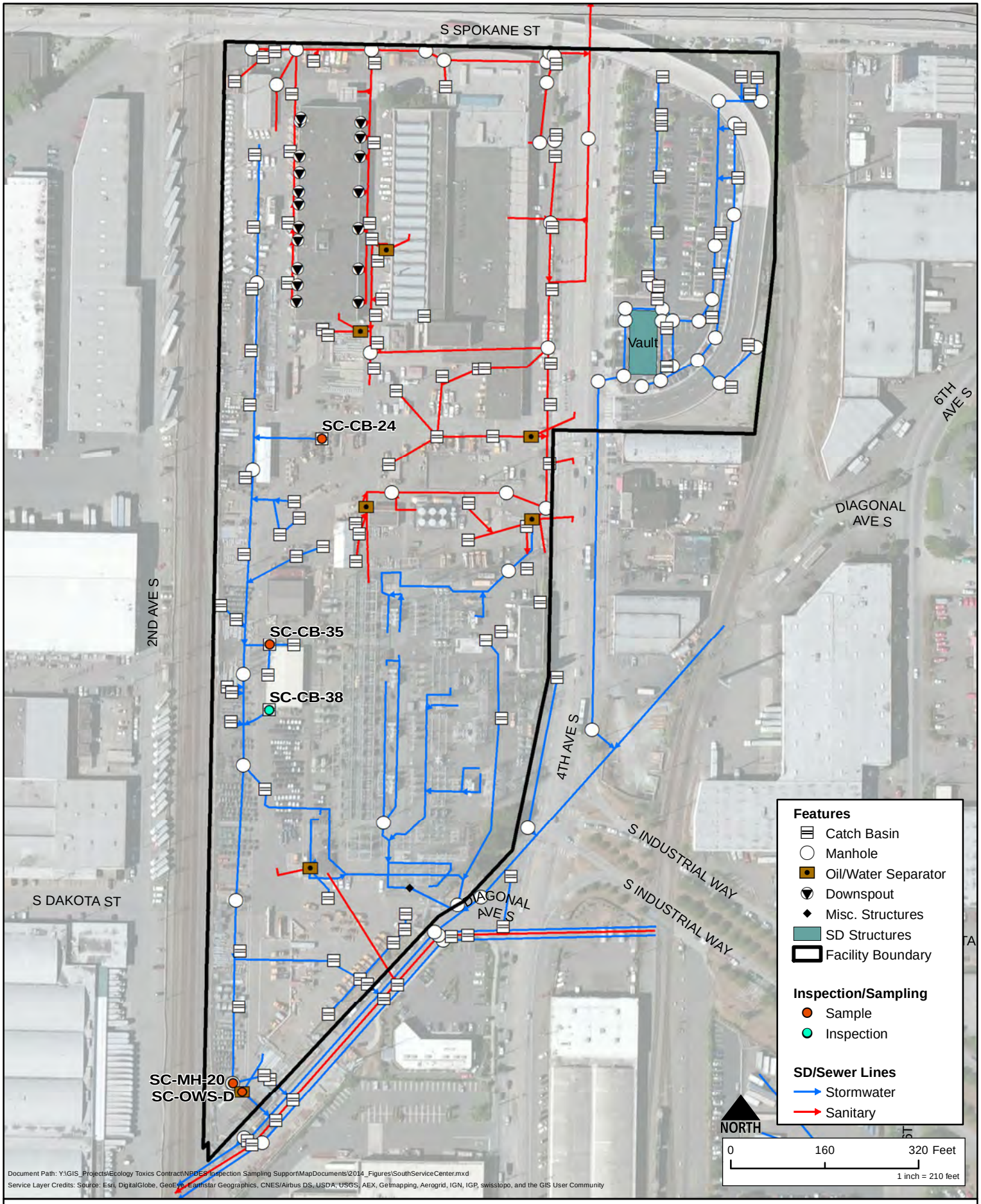

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State of Washington

Figure S-2. South Service Center
Inspection and Sampling 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 S-1
Sampling Locations and Analytical Methods
South Service Center

Analyte	Method	Sample Location / Collection Date			
		SC-CB-24 12/11/2014	SC-CB-35 12/11/2014	SC-MH-20 12/11/2014	SC-OWS-05 12/11/2014
Water Samples					
Metals (total)	EPA 200.8			●	
Mercury (total, dissolved)	EPA 245.1			●	
PCB Congeners	EPA 1668C			●	
SVOCs	SW 8270D-Low			●	
Dioxins/furans	EPA 1613B			●	
Alkalinity/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			●	
Solids Samples					
Metals (total)	SW 6020	●	●		●
Mercury	SW 7471A	●	●		●
PCB Aroclors	EPA 8082	●	●		●
PCB Congeners	EPA 1668C	●	●		●
Dioxins/furans	EPA 1613B	●	●		●
SVOCs	SW 8270D-Low	●	●		●
VOCs	SW 8260B-Low	●	●		
TPH-diesel/motor oil	NWTPH-Dx	●	●		●
TPH-gasoline	NWTPH-Gx	●	●		
Grain size	PSEP Plumb 1981	●	●		●
Total organic carbon	PSEP 9060	●	●		●

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

Table S-2. Water Quality Data - Field Measurements
South Service Center

		Location ID	**SC-MH-20**
		Collection Date	**12/11/2014**
Analyte	**ISGP Benchmark**	**Units**	**Result**
Field Parameters			
Flow	--	Yes/No	Yes
pH	5.0 to 9.0	std units	**9.6**
Conductivity	--	mS/cm	0.034 a
Temperature	--	degrees C	11.0
Total Dissolved Solids	--	mg/L	na
Turbidity	25	NTU	**27**
Oil & Grease	No visible sheen	Yes/No	No
Dissolved Oxygen	--	mg/L	11
ORP	--	mV	na

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

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

Table S-3. Water Sample Results
South Service Center

Analyte	ISGP Benchmark	WA WQC Marine Chronic	WA WQC Marine Acute	NTR WQC HHO	NR WQC HHO	Location ID: SC-MH-20 Collection Date: 12/11/2014 Result	
Total Metals (µg/L)							
Antimony	--	--	--	--	--	**0.59**	
Arsenic	150	36	69	--	--	< 1.0	U
Beryllium	--	--	--	--	--	< 0.40	U
Cadmium	2.1	9.4	42	--	--	**0.40**	
Chromium	--	--	--	--	--	**1.2**	
Chromium, hexavalent	--	--	--	--	--	na	
Copper	14	3.7	5.8	--	--	**65**	
Lead	81.6	8.5	221	--	--	**13**	
Mercury	1.4	0.025	2.1	--	--	< 0.045	U
Nickel	--	8.3	75	--	--	**1.4**	**J**
Selenium	5	71	291	--	--	< 1.0	U
Silver	3.8	--	2.2	--	--	0.03	J
Thallium	--	--	--	--	--	< 1.0	U
Zinc	117	86	95	--	--	**220**	
PCB Congeners (µg/L) [a]							
Total PCB Congeners	--	0.03	10	1.70E-04	6.40E-05	**0.052**	**J**
PCB TEQ, nd SDL*0	--	0.03	10	--	--	**5.02E-06**	
PCB TEQ, nd SDL*0.5	--	0.03	10	--	--	**5.07E-06**	
PCB TEQ, nd SDL*1	--	0.03	10	--	--	**5.11E-06**	
Dioxins and Furans (pg/L) [a]							
2,3,7,8-TCDD	--	--	--	0.014	0.0051	< 1.82	U*
1,2,3,7,8-PeCDD	--	--	--	--	--	< 12.3	U*
1,2,3,4,7,8-HxCDD	--	--	--	--	--	**42.1**	
1,2,3,6,7,8-HxCDD	--	--	--	--	--	**95.9**	
1,2,3,7,8,9-HxCDD	--	--	--	--	--	**79.2**	
1,2,3,4,6,7,8-HpCDD	--	--	--	--	--	**2690**	
OCDD	--	--	--	--	--	**21800**	
2,3,7,8-TCDF	--	--	--	--	--	**1.98**	**J**
1,2,3,7,8-PeCDF	--	--	--	--	--	**4.20**	**J**
2,3,4,7,8-PeCDF	--	--	--	--	--	**5.87**	**J**
1,2,3,4,7,8-HxCDF	--	--	--	--	--	**35.3**	
1,2,3,6,7,8-HxCDF	--	--	--	--	--	**40.4**	
1,2,3,7,8,9-HxCDF	--	--	--	--	--	**2.63**	**J**
2,3,4,6,7,8-HxCDF	--	--	--	--	--	**43.8**	
1,2,3,4,6,7,8-HpCDF	--	--	--	--	--	**1170**	
1,2,3,4,7,8,9-HpCDF	--	--	--	--	--	**59.5**	
OCDF	--	--	--	--	--	**3460**	
Total TCDD	--	--	--	--	--	< 1.82	U*
Total PeCDD	--	--	--	--	--	**45.2**	**J**
Total HxCDD	--	--	--	--	--	**654**	
Total HpCDD	--	--	--	--	--	**4910**	
Total TCDF	--	--	--	--	--	**18.1**	**J**
Total PeCDF	--	--	--	--	--	**192**	**J**
Total HxCDF	--	--	--	--	--	**1050**	
Total HpCDF	--	--	--	--	--	**2880**	
Dioxin/Furan TEQ, nd SDL*0	--	--	--	--	--	**82.8**	**J**
Dioxin/Furan TEQ, nd SDL*0.5	--	--	--	--	--	**89.9**	**J**
Dioxin/Furan TEQ, nd SDL*1	--	--	--	--	--	**96.9**	**J**

Table S-3. Water Sample Results
South Service Center

Analyte	ISGP Benchmark	WA WQC Marine Chronic	WA WQC Marine Acute	NTR WQC HHO	NR WQC HHO	Result
				Location ID		SC-MH-20
				Collection Date		12/11/2014
PAHs (µg/L)						
1-Methylnaphthalene	--	--	--	--	--	< 0.57 U
2-Chloronaphthalene	--	--	--	--	1,600	< 0.57 U
2-Methylnaphthalene	--	--	--	--	--	< 1.9 U
Acenaphthene	--	--	--	--	990	< 0.96 U
Acenaphthylene	--	--	--	--	--	< 0.77 U
Anthracene	--	--	--	110,000	40,000	< 0.38 U
Benzo(a)anthracene	--	--	--	0.031	0.018	< 0.57 U
Benzo(a)pyrene	--	--	--	0.031	0.018	**0.23 J**
Benzo(b)fluoranthene	--	--	--	0.031	0.018	< 0.77 U
Benzo(g,h,i)perylene	--	--	--	--	--	**0.24 J**
Benzo(k)fluoranthene	--	--	--	0.031	0.018	< 0.57 U
Chrysene	--	--	--	0.031	0.018	< 0.38 U
Dibenz(a,h)anthracene	--	--	--	0.031	0.018	**0.23 J**
Dibenzofuran	--	--	--	--	--	< 3.8 U
Fluoranthene	--	--	--	370	140	**0.23 J**
Fluorene	--	--	--	14,000	5,300	< 0.57 U
Indeno(1,2,3-cd)pyrene	--	--	--	0.031	0.018	< 0.57 U
Naphthalene	--	--	--	--	--	< 3.8 U
Phenanthrene	--	--	--	--	--	< 0.77 U
Pyrene	--	--	--	11,000	4,000	**0.33 J**
Total Benzofluoranthenes	--	--	--	--	--	< 0.77 U
Total HPAHs	--	--	--	--	--	**1.3 J**
Total LPAHs	--	--	--	--	--	< 3.8 U
Total PAHs	--	--	--	--	--	**1.3 J**
cPAHs, nd RL*0	--	--	--	--	--	**0.25 J**
cPAHs, nd RL*0.5	--	--	--	--	--	**0.38 J**
cPAHs, nd RL*1	--	--	--	--	--	**0.51 J**
Phthalates (µg/L)						
bis(2-Ethylhexyl)phthalate	--	--	--	5.9	2.2	< 29 U
Butylbenzylphthalate	--	--	--	--	1,900	< 5.7 U
Di-n-Butylphthalate	--	--	--	12,000	4,500	< 3.8 U
Diethylphthalate	--	--	--	120,000	44,000	< 3.8 U
Dimethylphthalate	--	--	--	2,900,000	1,100,000	< 3.8 U
Di-n-Octyl phthalate	--	--	--	--	--	< 3.8 U
Phenols (µg/L)						
2,3,4,6-Tetrachlorophenol	--	--	--	--	--	< 6.7 U
2,4,5-Trichlorophenol	--	--	--	--	3,600	< 3.8 U
2,4,6-Trichlorophenol	--	--	--	6.5	2.4	< 5.7 U
2,4-Dichlorophenol	--	--	--	790	290	< 3.8 U
2,4-Dimethylphenol	--	--	--	--	850	< 19 U
2,4-Dinitrophenol	--	--	--	14,000	5,300	< 48 U
2-Chlorophenol	--	--	--	--	150	< 3.8 U
2-Methylphenol	--	--	--	--	--	< 3.8 U
2-Nitrophenol	--	--	--	--	--	< 3.8 U
4,6-Dinitro-2-Methylphenol	--	--	--	765	280	< 38 U
4-Chloro-3-methylphenol	--	--	--	--	--	< 3.8 U
4-Methylphenol	--	--	--	--	--	< 7.7 U
4-Nitrophenol	--	--	--	--	--	< 29 U

Table S-3. Water Sample Results
South Service Center

Analyte	ISGP Benchmark	WA WQC Marine Chronic	WA WQC Marine Acute	NTR WQC HHO	NR WQC HHO	Location ID / Collection Date / Result		
						SC-MH-20		
						12/11/2014		
Pentachlorophenol	--	7.9	13	8.2	3.0	**4.5**		**J**
Phenol	--	--	--	4,600,000	860,000	<	5.7	U
Other SVOCs (µg/L)								
1,2,4-Trichlorobenzene	--	--	--	--	70	<	3.8	U
1,2-Dichlorobenzene	--	--	--	17,000	1,300	<	3.8	U
1,3-Dichlorobenzene	--	--	--	2,600	960	<	3.8	U
1,4-Dichlorobenzene	--	--	--	2,600	190	<	3.8	U
2,4-Dinitrotoluene	--	--	--	9.1	3.4	<	3.8	U
2,6-Dinitrotoluene	--	--	--	--	--	<	3.8	U
2-Nitroaniline	--	--	--	--	--	<	3.8	U
3,3'-Dichlorobenzidine	--	--	--	0.077	0.028	<	19	U
3-Nitroaniline	--	--	--	--	--	<	3.8	U
4-Bromophenyl-phenylether	--	--	--	--	--	<	3.8	U
4-Chloroaniline	--	--	--	--	--		R	
4-Chlorophenyl-phenylether	--	--	--	--	--	<	3.8	U
4-Nitroaniline	--	--	--	--	--	<	5.7	U
Benzoic Acid	--	--	--	--	--	<	29	U
Benzyl Alcohol	--	--	--	--	--	<	3.8	U
2,2'-Oxybis(1-Chloropropane)	--	--	--	170,000	65,000	<	3.8	U
bis(2-Chloroethoxy) Methane	--	--	--	--	--	<	3.8	U
Bis-(2-Chloroethyl) Ether	--	--	--	1.4	0.53	<	3.8	U
Carbazole	--	--	--	--	--	<	3.8	U
Hexachlorobenzene	--	--	--	0.00077	0.00029	<	3.8	U
Hexachlorobutadiene	--	--	--	50	18	<	5.7	U
Hexachlorocyclopentadiene	--	--	--	17,000	1,100	<	19	U
Hexachloroethane	--	--	--	8.9	3.3	<	5.7	U
Isophorone	--	--	--	600	960	<	3.8	U
Nitrobenzene	--	--	--	1,900	690	<	3.8	U
N-Nitrosodimethylamine	--	--	--	8.1	3.0	<	19	U
N-Nitroso-Di-N-Propylamine	--	--	--	--	0.51	<	3.8	U
N-Nitrosodiphenylamine	--	--	--	16	6.0	<	3.8	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

Table S-4. Water Sample Results Compared to Criteria
South Service Center

Location ID	SC-MH-20				
Collection Date	12/11/2014				
	Exceedance Factor				
Analyte	ISGP Benchmark	WA Marine Chronic	WA Marine Acute	NTR Human Health - Organisms	NR Human Health - Organisms
Total Metals					
Copper	4.6	17	11		
Lead		1.5			
Zinc	1.9	2.6	2.3		
PCB Congeners					
Total PCB Congeners		1.7		304	806
PAHs					
Benzo(a)pyrene				7.4	13
Dibenz(a,h)anthracene				7.4	13
Phenols					
Pentachlorophenol					1.5

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 S-5. Water Sample Results - PCB Congeners
South Service Center

Location ID	SC-MH-20	
Collection Date	12/11/2014	
Analyte	Result	
Total PCB Congeners (µg/L)	0.0516	J
Total PCB Congeners (pg/L)	51,600	J
Total Mono-CB (pg/L)	8.08	J
PCB-1	3.44	J
PCB-2	1.67	J
PCB-3	2.97	J
Total Di-CB (pg/L)	408	J
PCB-4/10	32.4	
PCB-5/8	88.3	
PCB-6	19.4	
PCB-7/9	7.24	J
PCB-11	96.6	
PCB-12/13	13.8	J
PCB-14	< 7.32	U
PCB-15	150	
Total Tri-CB (pg/L)	3,010	J
PCB-16/32	253	
PCB-17	102	
PCB-18	242	
PCB-19	37.6	
PCB-20/21/33	331	
PCB-22	298	
PCB-23	< 0.852	U
PCB-24/27	32.8	
PCB-25	41.8	
PCB-26	88.3	
PCB-28	579	
PCB-29	3.33	J
PCB-30	< 0.915	U
PCB-31	454	
PCB-34	1.44	J
PCB-35	23.7	
PCB-36	< 1.48	U
PCB-37	514	
PCB-38	5.95	
PCB-39	< 1.44	U
Total Tetra-CB (pg/L)	8,890	J
PCB-40	200	
PCB-41/64/71/72	856	
PCB-42/59	280	
PCB-43/49	525	
PCB-44	876	
PCB-45	96.4	
PCB-46	44.4	
PCB-47	199	
PCB-48/75	133	
PCB-50	< 1.50	U
PCB-51	34.2	
PCB-52/69	869	
PCB-53	69.9	
PCB-54	1.21	J
PCB-55	41.4	

Table S-5. Water Sample Results - PCB Congeners
South Service Center

Location ID	SC-MH-20	
Collection Date	12/11/2014	
Analyte	Result	
PCB-56/60	1,060	
PCB-57	5.84	
PCB-58	2.43	J
PCB-61/70	1,550	
PCB-62	< 1.35	U
PCB-63	39.4	
PCB-65	< 1.31	U
PCB-67	36.5	
PCB-68	10.7	
PCB-73	< 3.23	U
PCB-74	511	
PCB-76/66	1,090	
PCB-77	315	
PCB-78	< 1.21	U
PCB-79	28.2	
PCB-80	< 1.05	U
PCB-81	20.1	
Total Penta-CB (pg/L)	16,800	J
PCB-82	426	
PCB-83	< 3.72	U
PCB-84/92	892	
PCB-85/116	496	
PCB-86	8.58	
PCB-87/117/125	1,030	
PCB-88/91	310	
PCB-89	23.2	
PCB-90/101	2,220	
PCB-93	< 3.86	U
PCB-94	9.14	
PCB-95/98/102	1,450	
PCB-96	12.7	
PCB-97	772	
PCB-99	886	
PCB-100	4.27	J
PCB-103	7.68	
PCB-104	< 2.73	U
PCB-105	1,440	
PCB-106/118	2,980	
PCB-107/109	207	
PCB-108/112	111	
PCB-110	3,120	
PCB-111/115	38.6	
PCB-113	< 3.90	U
PCB-114	71.6	
PCB-119	33.0	
PCB-120	5.74	
PCB-121	< 2.29	U
PCB-122	38.3	
PCB-123	51.2	
PCB-124	127	
PCB-126	48.3	
PCB-127	< 4.40	U

Table S-5. Water Sample Results - PCB Congeners
South Service Center

Location ID	SC-MH-20	
Collection Date	12/11/2014	
Analyte	Result	
Total Hexa-CB (pg/L)	13,300	J
PCB-128/162	623	
PCB-129	175	
PCB-130	220	
PCB-131	< 3.77	U
PCB-132/161	863	
PCB-133/142	71.1	
PCB-134/143	136	
PCB-135	331	
PCB-136	267	
PCB-137	171	
PCB-138/163/164	3,360	
PCB-139/149	2,120	
PCB-140	18.8	
PCB-141	619	
PCB-144	101	
PCB-145	< 1.91	U
PCB-146/165	323	
PCB-147	50.3	
PCB-148	< 2.82	U
PCB-150	3.38	J
PCB-151	456	
PCB-152	2.56	J
PCB-153	2,350	
PCB-154	21.4	
PCB-155	< 1.84	U
PCB-156	391	
PCB-157	93.6	
PCB-158/160	399	
PCB-159	< 2.70	U
PCB-166	< 12.1	U*
PCB-167	155	
PCB-168	< 2.52	U
PCB-169	< 2.92	U
Total Hepta-CB (pg/L)	6,440	J
PCB-170	875	
PCB-171	202	
PCB-172	144	
PCB-173	16.9	
PCB-174	712	
PCB-175	35.2	
PCB-176	77.2	
PCB-177	414	
PCB-178	143	
PCB-179	250	
PCB-180	1,800	
PCB-181	< 1.29	U
PCB-182/187	934	
PCB-183	431	
PCB-184	1.84	J
PCB-185	81.0	
PCB-186	< 1.11	U

Table S-5. Water Sample Results - PCB Congeners
South Service Center

Location ID	SC-MH-20	
Collection Date	**12/11/2014**	
Analyte	**Result**	
PCB-188	3.08	J
PCB-189	33.6	
PCB-190	165	
PCB-191	33.6	
PCB-192	< 1.15	U
PCB-193	83.7	
Total Octa-CB (pg/L)	2,150	
PCB-194	475	
PCB-195	163	
PCB-196/203	637	
PCB-197	16.6	
PCB-198	21.3	
PCB-199	591	
PCB-200	59.6	
PCB-201	63.3	
PCB-202	94.1	
PCB-204	< 2.09	U
PCB-205	24.4	
Total Nona-CB (pg/L)	496	
PCB-206	360	
PCB-207	41.9	
PCB-208	94.3	
Deca-CB (pg/L)	53.5	
PCB-209	53.5	
PCB TEQ, nd SDL*0	5.02	
PCB TEQ, nd SDL*0.5	5.07	
PCB TEQ, nd SDL*1	5.11	

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

Table S-6. Water Sample Results - Conventionals
South Service Center

		Location ID	SC-MH-20	
		Collection	12/11/2014	
Analyte	ISGP Benchmark	Units	Result	
Conventionals				
Alkalinity	--	mg/L	5.3	
Bicarbonate	--	mg/L $CaCO_3$	5.3	
Carbonate	--	mg/L $CaCO_3$	< 5	U
Chloride	--	mg/L	0.66	J
Specific Conductance	--	µmhos/cm	14	
Hydroxide	--	mg/L $CaCO_3$	na	
Nitrate	--	mg/L	< 0.9	UJ
pH	5-9	std units	6.61	J
Salinity	--	mg/L	na	
Sulfate	--	mg/L	0.87	J
Dissolved Organic Carbon	--	mg/L	2.9	
Total Organic Carbon	--	mg/L	3.5	
Total Suspended Solids[a]	30	mg/L	14	
Turbidity	25	NTU	na	
Oil & Grease	--	mg/L	na	
Oil & Grease - Polar	--	mg/L	na	
Oil & Grease - Silica Gel Treated	--	mg/L	na	

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

Shaded results exceed the ISGP benchmark for that parameter.

Table S-7. Solids Sample Results
South Service Center

Analyte	SMS Criteria SCO/ LAET[a]	SMS Criteria CSL/ 2LAET	Unit	Location ID: SC-CB-24 Collection Date: 12/11/2014 Result		Location ID: SC-CB-35 Collection Date: 12/11/2014 Result		Location ID: SC-OWS-05 Collection Date: 12/11/2014 Result	
Metals (Total) (mg/kg)									
Antimony	--	--	mg/kg	**9.4**		**8.2**		**9.4**	
Arsenic	57	93	mg/kg	**10**		**14**		**14**	
Beryllium	--	--	mg/kg	**0.22**	J	**0.22**	J	**0.23**	J
Cadmium	5.1	6.7	mg/kg	**3.3**		**4.3**		**5.5**	
Chromium	260	270	mg/kg	**62**		**130**		**66**	
Copper	390	390	mg/kg	**2,500**		**990**		**740**	
Lead	450	530	mg/kg	**490**		**250**		**430**	
Mercury	0.41	0.59	mg/kg	**0.18**		**0.20**		**1.1**	
Nickel	--	--	mg/kg	**47**		**110**		**46**	
Selenium	--	--	mg/kg	**1.0**	J	**1.1**		**1.1**	J
Silver	6.1	6.1	mg/kg	**0.56**		**1.2**		**1.3**	
Thallium	--	--	mg/kg	< 0.97	U	< 0.81	U	< 1.4	U
Zinc	410	960	mg/kg	**1,600**		**2,700**		**2,000**	
PCB Aroclors (µg/kg)									
Aroclor 1016	--	--	µg/kg	< 20	U	< 18	U	< 32	U
Aroclor 1221	--	--	µg/kg	< 22	U	< 20	U	< 36	U
Aroclor 1232	--	--	µg/kg	< 22	U	< 20	U	< 36	U
Aroclor 1242	--	--	µg/kg	< 20	U	< 18	U	< 32	U
Aroclor 1248	--	--	µg/kg	**180**	J	**130**		**1,600**	
Aroclor 1254	--	--	µg/kg	< 20	U	< 18	U	< 32	U
Aroclor 1260	--	--	µg/kg	**390**		**390**	J	**1,900**	
Total PCB Aroclors	130	1,000	µg/kg	**570**	J	**520**	J	**3,500**	
PCB Congeners (µg/kg) [b]									
Total PCB Congeners	130	1,000	µg/kg	**1,320**	J	**762**	J	**7,500**	J
PCB TEQ, nd SDL*0	--	--	µg/kg	**0.149**		**0.0894**		**0.608**	
PCB TEQ, nd SDL*0.5	--	--	µg/kg	**0.152**		**0.0934**		**0.608**	
PCB TEQ, nd SDL*1	--	--	µg/kg	**0.154**		**0.0975**		**0.608**	
Dioxins and Furans (ng/kg)									
2,3,7,8-TCDD	--	--	ng/kg	< 9.7	U*	**21.6**		**49**	
1,2,3,7,8-PeCDD	--	--	ng/kg	**82.8**		**184**		**434**	
1,2,3,4,7,8-HxCDD	--	--	ng/kg	**182**		**537**		**1,030**	
1,2,3,6,7,8-HxCDD	--	--	ng/kg	**533**		**1,150**		**3,010**	
1,2,3,7,8,9-HxCDD	--	--	ng/kg	**365**		**1,060**		**1,980**	
1,2,3,4,6,7,8-HpCDD	--	--	ng/kg	**15900**		**39,400**	J	**104,000**	J
OCDD	--	--	ng/kg	**201,000**	J	**442,000**	J	**1,160,000**	J
2,3,7,8-TCDF	--	--	ng/kg	**17.9**		**15.9**		**78.6**	
1,2,3,7,8-PeCDF	--	--	ng/kg	**24.1**	J	**27.1**		**119**	
2,3,4,7,8-PeCDF	--	--	ng/kg	**33**		**26.3**		**193**	
1,2,3,4,7,8-HxCDF	--	--	ng/kg	**177**		**203**		**996**	
1,2,3,6,7,8-HxCDF	--	--	ng/kg	**125**		**158**		**931**	
1,2,3,7,8,9-HxCDF	--	--	ng/kg	**48.3**		**39.2**		**227**	
2,3,4,6,7,8-HxCDF	--	--	ng/kg	**168**		**228**		**1,180**	
1,2,3,4,6,7,8-HpCDF	--	--	ng/kg	**4,530**		**5,500**		**25,300**	J
1,2,3,4,7,8,9-HpCDF	--	--	ng/kg	**399**		**505**		**1,410**	
OCDF	--	--	ng/kg	**25,800**		**35,600**		**70,100**	J
Dioxin/Furan TEQ, nd SDL*0	25	--	ng/kg	**531**	J	**1,150**	J	**3,160**	J
Dioxin/Furan TEQ, nd SDL*0.5	25	--	ng/kg	**536**	J	**1,150**	J	**3,160**	J
Dioxin/Furan TEQ, nd SDL*1	25	--	ng/kg	**541**	J	**1,150**	J	**3,160**	J
Total TCDD	--	--	ng/kg	**53.4**	J	**105**	J	**288**	J
Total TCDF	--	--	ng/kg	**252**	J	**248**	J	**1,070**	J
Total PeCDD	--	--	ng/kg	**337**	J	**656**	J	**1,780**	J
Total PeCDF	--	--	ng/kg	**981**		**1,200**	J	**6,130**	J

Table S-7. Solids Sample Results
South Service Center

Analyte	SMS Criteria SCO/ LAET[a]	SMS Criteria CSL/ 2LAET	Unit	Location ID	SC-CB-24 Result		Location ID	SC-CB-35 Result		Location ID	SC-OWS-05 Result	
				Collection Date	12/11/2014		Collection Date	12/11/2014		Collection Date	12/11/2014	
Total HxCDD	--	--	ng/kg		**3,450**			**7,590**			**21,400**	
Total HxCDF	--	--	ng/kg		**4,710**			**5,770**			**30,700**	**J**
Total HpCDD	--	--	ng/kg		**29,400**			**62,200**			**193,000**	
Total HpCDF	--	--	ng/kg		**16,700**			**22,300**			**70,800**	
PAHs (µg/kg)												
1-Methylnaphthalene	--	--	µg/kg		**110**	**J**		**280**	**J**	<	970	U
2-Chloronaphthalene	--	--	µg/kg	<	420	U	<	370	U	<	650	U
2-Methylnaphthalene	670	1,400	µg/kg		**110**	**J**		**360**	**J**		**170**	**J**
Acenaphthene	500	730	µg/kg		**190**	**J**		**250**	**J**		**270**	**J**
Acenaphthylene	1,300	1,300	µg/kg	<	420	U	<	370	U		**170**	**J**
Anthracene	960	4,400	µg/kg		**490**		<	370	U		**820**	
Benzo(a)anthracene	1,300	1,600	µg/kg		**1,600**			**1,200**			**2,300**	
Benzo(a)pyrene	1,600	3,000	µg/kg		**1500**			**1,400**			**2,800**	
Benzo(g,h,i)perylene	670	720	µg/kg		**850**			**880**			**2,000**	
Chrysene	1,400	2,800	µg/kg		**3,400**			**2,200**			**5,400**	
Dibenz(a,h)anthracene	230	540	µg/kg	<	850	U	<	740	U		**500**	**J**
Dibenzofuran	540	700	µg/kg		**110**	**J**		**140**	**J**		**230**	**J**
Fluoranthene	1,700	2,500	µg/kg		**4,000**			**2,700**			**7,100**	
Fluorene	540	1,000	µg/kg	<	420	U		**260**	**J**		**460**	**J**
Indeno(1,2,3-cd)pyrene	600	690	µg/kg		**680**	**J**		**790**			**1,900**	
Naphthalene	2,100	2,400	µg/kg		**120**	**J**		**290**	**J**		**210**	**J**
Phenanthrene	1,500	5,400	µg/kg		**2,700**			**2,100**			**4,200**	
Pyrene	2,600	3,300	µg/kg		**4,300**			**2,800**			**7,200**	
Total Benzofluoranthenes	3,200	3,600	µg/kg		**3,700**			**3,700**			**7,000**	
Total HPAHs	12,000	17,000	µg/kg		**20,000**	**J**		**16,000**			**36,000**	**J**
Total LPAHs	5,200	13,000	µg/kg		**3,500**	**J**		**2,900**	**J**		**6,100**	**J**
cPAHs, nd RL*0	1,000	--	µg/kg		**2,100**	**J**		**2,000**			**4,000**	**J**
cPAHs, nd RL*0.5	1,000	--	µg/kg		**2,200**	**J**		**2,000**			**4,000**	**J**
cPAHs, nd RL*1	1,000	--	µg/kg		**2,200**	**J**		**2,000**			**4,000**	**J**
Phthalates (µg/kg)												
bis(2-Ethylhexyl)phthalate	1,300	1,900	µg/kg		**64,000**			**87,000**			**120,000**	
Butylbenzylphthalate	63	900	µg/kg	<	4,200	U		**6,000**			**6,100**	**J**
Di-n-Butylphthalate	1,400	5,100	µg/kg		**35,000**			**1,900**	**J**	<	16,000	U
Diethylphthalate	200	1,200	µg/kg	<	4,200	U	<	3,700	U	<	6,500	U
Dimethylphthalate	71	160	µg/kg		**1,200**	**J**		**180**	**J**		**420**	**J**
Di-n-Octyl phthalate	6,200	--	µg/kg		**4,600**	**J**		**4,900**	**J**		**5,300**	**J**
Phenols (µg/kg)												
2,4,5-Trichlorophenol	--	--	µg/kg	<	2,100	U	<	1,800	U	<	3,200	U
2,4,6-Trichlorophenol	--	--	µg/kg	<	3,200	U	<	2,800	U	<	4,900	U
2,4-Dichlorophenol	--	--	µg/kg	<	2,100	U	<	1,800	U	<	3,200	U
2,4-Dimethylphenol	29	29	µg/kg	<	2,100	U	<	1,800	U	<	3,200	U
2,4-Dinitrophenol	--	--	µg/kg	<	21,000	U	<	18,000	U	<	32,000	U
2-Chlorophenol	--	--	µg/kg	<	2,100	U	<	1,800	U	<	3,200	U
2-Methylphenol	63	63	µg/kg	<	2,100	U	<	1,800	U	<	3,200	U
2-Nitrophenol	--	--	µg/kg	<	2,100	U	<	1,800	U	<	3,200	U
4,6-Dinitro-2-Methylphenol	--	--	µg/kg	<	21,000	U	<	18,000	U	<	32,000	U
4-Chloro-3-methylphenol	--	--	µg/kg		**700**	**J**	<	1,800	U	<	3,200	U
4-Methylphenol	670	670	µg/kg	<	4,200	U		**400**	**J**		1,100	J
4-Nitrophenol	--	--	µg/kg	<	21,000	U	<	18,000	U	<	32,000	U
Pentachlorophenol	360	690	µg/kg		**1,800**	**J**		**8,100**			**9,500**	
Phenol	420	1,200	µg/kg		**520**	**J**	<	1,800	U	<	3,200	U

Table S-7. Solids Sample Results
South Service Center

Analyte	SMS Criteria SCO/ LAET[a]	SMS Criteria CSL/ 2LAET	Unit	Location ID	SC-CB-24		SC-CB-35		SC-OWS-05	
				Collection Date	12/11/2014		12/11/2014		12/11/2014	
					Result		Result		Result	
Other SVOCs (µg/kg)										
1,2,4-Trichlorobenzene	31	51	µg/kg		< 1,100	U	< 920	U	< 1,600	U
1,2-Dichlorobenzene	35	50	µg/kg		< 1,200	U	< 1,000	U	< 1,800	U
1,3-Dichlorobenzene	--	--	µg/kg		< 1,100	U	< 920	U	< 1,600	U
1,4-Dichlorobenzene	110	120	µg/kg		< 1,100	U	< 920	U	< 1,600	U
2,4-Dinitrotoluene	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
2,6-Dinitrotoluene	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
2-Nitroaniline	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
3,3'-Dichlorobenzidine	--	--	µg/kg		< 4,200	U	< 3,700	U	< 6,500	U
3-Nitroaniline	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
4-Bromophenyl-phenylether	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
4-Chloroaniline	--	--	µg/kg		< 2,100	UJ	< 1,800	UJ	< 3,200	UJ
4-Chlorophenyl-phenylether	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
4-Nitroaniline	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
Benzoic Acid	650	650	µg/kg		< 53,000	U	< 46,000	U	< 81,000	U
Benzyl Alcohol	57	73	µg/kg		< 2,100	U	**46,000**		**1,400**	**J**
2,2'-Oxybis(1-Chloropropane)	--	--	µg/kg		< 5,300	U	< 4,600	U	< 8,100	U
bis(2-Chloroethoxy) Methane	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
Bis-(2-Chloroethyl) Ether	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
Carbazole	--	--	µg/kg		**400**	**J**	< 1,800	U	**550**	**J**
Hexachlorobenzene	22	70	µg/kg		< 1,100	U	< 920	U	< 1,600	U
Hexachlorobutadiene	11	120	µg/kg		< 1,100	U	< 920	U	< 1,600	U
Hexachlorocyclopentadiene	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
Hexachloroethane	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
Isophorone	--	--	µg/kg		< 2,100	U	**110**	**J**	< 3,200	U
Nitrobenzene	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
N-Nitrosodimethylamine	--	--	µg/kg		< 21,000	U	< 18,000	U	< 32,000	U
N-Nitroso-Di-N-Propylamine	--	--	µg/kg		< 2,100	U	< 1,800	U	< 3,200	U
N-Nitrosodiphenylamine	28	40	µg/kg		**160**	**J**	< 920	U	< 1,600	U
VOCs (µg/kg)										
1,1,1,2-Tetrachloroethane	--	--	µg/kg		< 2.6	UJ	< 1.4	UJ	na	
1,1,1-Trichloroethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
1,1,2,2-Tetrachloroethane	--	--	µg/kg		< 5.2	UJ	< 2.8	UJ	na	
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
1,1,2-Trichloroethane	--	--	µg/kg		< 5.2	UJ	< 2.8	UJ	na	
1,1-Dichloroethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
1,1-Dichloroethene	--	--	µg/kg		< 13	UJ	< 7.1	U	na	
1,1-Dichloropropene	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
1,2,3-Trichlorobenzene	--	--	µg/kg		< 5.2	UJ	< 2.8	UJ	na	
1,2,3-Trichloropropane	--	--	µg/kg		< 2.6	UJ	< 1.4	UJ	na	
1,2,4-Trimethylbenzene	--	--	µg/kg		**12**	**J**	**8**	**J**	na	
1,2-Dibromo-3-chloropropane	--	--	µg/kg		< 5.2	UJ	< 2.8	UJ	na	
1,2-Dibromoethane	--	--	µg/kg		< 2.6	UJ	< 1.4	UJ	na	
1,2-Dichloroethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
1,2-Dichloropropane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
1,3,5-Trimethylbenzene	--	--	µg/kg		**7.8**	**J**	**5**	**J**	na	
1,3-Dichloropropane	--	--	µg/kg		< 5.2	UJ	< 2.8	UJ	na	
2,2-Dichloropropane	--	--	µg/kg		< 13	UJ	< 7.1	U	na	
2-Chloroethylvinylether	--	--	µg/kg		< 13	UJ	< 7.1	UJ	na	
2-Chlorotoluene	--	--	µg/kg		< 5.2	UJ	< 2.8	UJ	na	
2-Hexanone	--	--	µg/kg		< 13	UJ	**2.4**	**J**	na	
4-Chlorotoluene	--	--	µg/kg		< 5.2	UJ	< 2.8	UJ	na	
Acetone	--	--	µg/kg		**540**	**J**	**190**	**J**	na	

Table S-7. Solids Sample Results
South Service Center

Analyte	SMS Criteria SCO/ LAET[a]	SMS Criteria CSL/ 2LAET	Unit	Location ID	SC-CB-24		SC-CB-35		SC-OWS-05	
				Collection Date	12/11/2014		12/11/2014		12/11/2014	
					Result		Result		Result	
Acrolein	--	--	µg/kg		< 77	UJ	< 43	U	na	
Acrylonitrile	--	--	µg/kg		< 26	UJ	< 14	U	na	
Benzene	--	--	µg/kg		**3.0**	**J**	**0.84**	**J**	na	
Bromobenzene	--	--	µg/kg		< 5.2	UJ	< 2.8	UJ	na	
Bromochloromethane	--	--	µg/kg		< 5.2	UJ	< 2.8	U	na	
Bromoform	--	--	µg/kg		< 2.6	UJ	< 1.4	UJ	na	
Bromomethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
Carbon Disulfide	--	--	µg/kg		**2.2**	**J**	**4.8**	**J**	na	
Carbon Tetrachloride	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
Chlorobenzene	--	--	µg/kg		< 2.6	UJ	< 1.4	UJ	na	
Dibromochloromethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
Chloroethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
Chloroform	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
Chloromethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
cis-1,2-Dichloroethene	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
cis-1,3-Dichloropropene	--	--	µg/kg		< 2.6	UJ	< 1.4	UJ	na	
Dibromomethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
Bromodichloromethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
Dichlorodifluoromethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
Ethylbenzene	--	--	µg/kg		**14**	**J**	**11**	**J**	na	
Isopropylbenzene	--	--	µg/kg		**50**	**J**	**0.94**	**J**	na	
m,p-Xylene	--	--	µg/kg		**43**	**J**	**39**	**J**	na	
2-Butanone	--	--	µg/kg		< 26	UJ	**45**	**J**	na	
Iodomethane	--	--	µg/kg		< 39	UJ	< 21	U	na	
4-Methyl-2-Pentanone (MIBK)	--	--	µg/kg		**22**	**J**	**4.2**	**J**	na	
Methyl tert-Butyl Ether	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
Methylene Chloride	--	--	µg/kg		< 39	UJ	< 21	U	na	
n-Butylbenzene	--	--	µg/kg		< 5	UJ	< 3	UJ	na	
n-Propylbenzene	--	--	µg/kg		< 5.2	UJ	**1.3**	**J**	na	
o-Xylene	--	--	µg/kg		**29**	**J**	**19**	**J**	na	
4-Isopropyltoluene	--	--	µg/kg		**25**	**J**	**4.3**	**J**	na	
sec-Butylbenzene	--	--	µg/kg		**3.4**	**J**	**1.1**	**J**	na	
Styrene	--	--	µg/kg		**1.1**	**J**	**2.1**	**J**	na	
tert-Butylbenzene	--	--	µg/kg		**1.2**	**J**	< 2.8	UJ	na	
Tetrachloroethene	--	--	µg/kg		< 2.6	UJ	< 1.4	UJ	na	
Toluene	--	--	µg/kg		**26**	**J**	**17**	**J**	na	
Total Xylenes	--	--	µg/kg		**72**	**J**	**58**	**J**	na	
trans-1,2-Dichloroethene	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
trans-1,3-Dichloropropene	--	--	µg/kg		< 2.6	UJ	< 1.4	UJ	na	
trans-1,4-Dichloro-2-butene	--	--	µg/kg		< 13	UJ	< 7.1	UJ	na	
Trichloroethene	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
Trichlorofluoromethane	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
Vinyl Acetate	--	--	µg/kg		< 13	UJ	< 7.1	U	na	
Vinyl Chloride	--	--	µg/kg		< 2.6	UJ	< 1.4	U	na	
TPH (mg/kg)										
Gasoline-Range Hydrocarbons	30/100	--	mg/kg		**31**		**11**	**J**	na	
Diesel-Range Hydrocarbons	2,000	--	mg/kg		**1,700**	**J**	**4,300**	**J**	**5,900**	**J**
Motor Oil-Range Hydrocarbons	2,000	--	mg/kg		**8,900**	**J**	**5,800**	**J**	**15,000**	**J**
Grain size (%)										
Clay	--	--	%		1.5		1.5		1.8	
Silt	--	--	%		53		39		69	
Sand	--	--	%		45		59		26	

Table S-7. Solids Sample Results
South Service Center

Analyte	SMS Criteria SCO/ LAET[a]	SMS Criteria CSL/ 2LAET	Unit	Location ID: SC-CB-24 Collection Date: 12/11/2014 Result	Location ID: SC-CB-35 Collection Date: 12/11/2014 Result	Location ID: SC-OWS-05 Collection Date: 12/11/2014 Result
Gravel	--	--	%	0.85	0.29	3.5
Cobbles	--	--	%	0.0	0.0	0.0
Conventionals (%)						
Total Organic Carbon	--	--	%	14	8.4	21
Total Solids	--	--	%	47.2	53.7	30.0

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.

Table S-8. Solids Sample Results Compared to Dry Weight Criteria
South Service Center

Location ID	SC-CB-24		SC-CB-35		SC-OWS-05	
Collection Date	12/11/2014		12/11/2014		12/11/2014	
Analyte	Exceedance Factor		Exceedance Factor		Exceedance Factor	
	SCO/ LAET	CSL/ 2LAET	SCO/ LAET	CSL/ 2LAET	SCO/ LAET	CSL/ 2LAET
Metals (Total)						
Cadmium					1.1	
Copper	6.4	6.4	2.5	2.5	1.9	1.9
Mercury					2.7	1.9
Zinc	3.9	1.7	6.6	2.8	4.9	2.1
PCBs						
Total PCB Aroclors	4.4		4.0		27	
Total PCB Congeners	10	1.3	5.9		58	7.5
Dioxins and Furans						
Dioxin/Furan TEQ, nd SDL*0	21		46		126	
Dioxin/Furan TEQ, nd SDL*0.5	21		46		126	
Dioxin/Furan TEQ, nd SDL*1	22		46		126	
PAHs						
Benzo(a)anthracene	1.2				1.8	1.4
Benzo(a)pyrene					1.8	
Benzo(g,h,i)perylene	1.3	1.2	1.3	1.2	3.0	2.8
Chrysene	2.4	1.2	1.6		3.9	1.9
Dibenz(a,h)anthracene					2.2	
Fluoranthene	2.4	1.6	1.6	1.1	4.2	2.8
Indeno(1,2,3-cd)pyrene	1.1	1.0	1.3	1.1	3.2	2.8
Phenanthrene	1.8		1.4		2.8	
Pyrene	1.7	1.3	1.1		2.8	2.2
Total Benzofluoranthenes	1.2	1.0	1.2	1.0	2.2	1.9
Total HPAHs	1.7	1.2	1.3		3.0	2.1
Total LPAHs					1.2	
cPAHs, nd RL*0	2.1		2.0		4.0	
cPAHs, nd RL*0.5	2.2		2.0		4.0	
cPAHs, nd RL*1	2.2		2.0		4.0	
Phthalates						
bis(2-Ethylhexyl)phthalate	49	34	67	46	92	63
Butylbenzylphthalate			95	6.7	97	6.8
Di-n-Butylphthalate	25	6.9	1.4			
Dimethylphthalate	17	7.5	2.5	1.1	5.9	2.6
Phenols						
4-Methylphenol					1.6	1.6
Pentachlorophenol	5.0	2.6	23	12	26	14
Other SVOCs						
Benzyl Alcohol			807	630	25	19
N-Nitrosodiphenylamine	5.7	4.0				
TPH						
Gasoline-Range Hydrocarbons	1.0					
Diesel-Range Hydrocarbons			2.2		3.0	
Motor Oil-Range Hydrocarbons	4.5		2.9		7.5	

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 S-9. Solids Sample Results - PCB Congeners
South Service Center

Location ID	SC-CB-24		SC-CB-35		SC-OWS-05	
Collection Date	**12/11/2014**		**12/11/2014**		**12/11/2014**	
Analyte	**Result**		**Result**		**Result**	
Total PCB Congeners (ng/kg)[a]	1,320,000	J	762,000	J	7,500,000	J
Total Monochlorobiphenyl (ng/kg)[a]	239		< 194	U	1,020	
PCB-1	132		< 174	U	447	
PCB-2	< 161	U	< 194	U	148	
PCB-3	107		< 161	U	427	
Total Dichlorobiphenyl (ng/kg)[a]	7,270	J	6,190		79,000	
PCB-4/10	< 711	U	< 620	U	6,520	
PCB-5/8	1,170		1,480		23,400	
PCB-6	< 238	U*	< 503	U	8,660	
PCB-7/9	< 581	U	< 543	U	2,730	
PCB-11	4,330		2,860		5,450	
PCB-12/13	< 576	U	< 607	U	3,280	
PCB-14	< 620	U	< 653	U	< 695	U
PCB-15	1,770		1,850		29,000	
Total Trichlorobiphenyl (ng/kg)[a]	37,400		40,200	J	734,000	J
PCB-16/32	2,550		2,900		76,800	
PCB-17	1,160		1,320		35,300	
PCB-18	3,190		3,510		95,600	
PCB-19	323		< 377	U*	12,000	
PCB-20/21/33	5,400		5,490		70,900	
PCB-22	3,440		3,580		56,500	
PCB-23	< 105	U	< 96.5	U	< 67.1	U*
PCB-24/27	321		313		9,250	
PCB-25	475		571		16,500	
PCB-26	1,040		1,120		30,900	
PCB-28	5,010		5,570		117,000	
PCB-29	< 125	U	< 114	U	722	
PCB-30	< 75.5	U	< 106	U	< 69.3	U
PCB-31	5,530		6,020		111,000	
PCB-34	< 118	U	< 109	U	1,250	
PCB-35	565		570		3,880	
PCB-36	< 133	U	< 115	U	< 219	U
PCB-37	8,390		9,200		93,900	
PCB-38	< 126	U	< 110	U	1,570	
PCB-39	< 136	U	< 118	U	484	
Total Tetrachlorobiphenyl (ng/kg)[a]	193,000	J	133,000	J	1,790,000	
PCB-40	3,620		2,900		37,000	
PCB-41/64/71/72	15,900		11,300		150,000	
PCB-42/59	4,430		4,050		56,200	
PCB-43/49	11,600		7,480		170,000	
PCB-44	21,100		10,500		146,000	
PCB-45	1,400		1,340		26,100	
PCB-46	585		727		14,900	
PCB-47	2,850		2,420		84,600	
PCB-48/75	2,150		1,880		23,800	
PCB-50	< 201	U	< 202	U	498	
PCB-51	437		554		50,400	
PCB-52/69	25,400		9,070		175,000	
PCB-53	1,270		1,110		72,600	
PCB-54	< 160	U	< 161	U	6,040	
PCB-55	720		522		5,370	
PCB-56/60	18,600		16,900		163,000	

Table S-9. Solids Sample Results - PCB Congeners
South Service Center

Location ID	SC-CB-24		SC-CB-35		SC-OWS-05	
Collection Date	12/11/2014		12/11/2014		12/11/2014	
Analyte	Result		Result		Result	
PCB-57	< 125	U*	< 177	U	1,640	
PCB-58	< 173	U	< 187	U	740	
PCB-61/70	41,600		25,400		243,000	
PCB-62	< 181	U	< 178	U	< 263	U
PCB-63	879		784		9,050	
PCB-65	< 180	U	< 178	U	< 262	U
PCB-67	687		658		7,660	
PCB-68	< 115	U*	< 108	U*	2,060	
PCB-73	< 162	U	< 172	U	1,870	
PCB-74	9,920		7,420		75,600	
PCB-76/66	21,300		20,100		207,000	
PCB-77	7,140		7,160		50,800	
PCB-78	< 149	U	< 151	U	< 245	U
PCB-79	743		355		3,180	
PCB-80	< 136	U	< 147	U	< 247	U
PCB-81	411		183		1,380	
Total Pentachlorobiphenyl (ng/kg)[a]	469,000		194,000	J	1,880,000	J
PCB-82	10,300		5,610		40,000	
PCB-83	< 239	U	< 397	U	< 207	U*
PCB-84/92	27,200		9,260		107,000	
PCB-85/116	11,300		5,260		47,900	
PCB-86	238		< 716	U	1,440	
PCB-87/117/125	27,400		10,500		100,000	
PCB-88/91	8,670		3,060		48,200	
PCB-89	610		< 319	U*	3,350	
PCB-90/101	73,600		27,300		287,000	
PCB-93	< 457	U	< 820	U	< 489	U
PCB-94	322		< 654	U	4,170	
PCB-95/98/102	48,200		13,700		161,000	
PCB-96	430		< 389	U	4,780	
PCB-97	20,200		8,260		84,800	
PCB-99	25,000		9,620		107,000	
PCB-100	130		< 473	U	6,010	
PCB-103	319		< 463	U	4,780	
PCB-104	< 221	U	< 374	U	582	
PCB-105	35,700		18,500		138,000	
PCB-106/118	79,900		39,100		306,000	
PCB-107/109	4,900		2,490		20,000	
PCB-108/112	2,670		< 1,170	U*	13,300	
PCB-110	81,300		35,000		346,000	J
PCB-111/115	918		474		3,390	
PCB-113	< 243	U	< 479	U	< 287	U
PCB-114	1,840		836		6,880	
PCB-119	975		695		11,900	
PCB-120	137		< 360	U	< 1,060	U*
PCB-121	< 239	U	< 428	U	< 255	U
PCB-122	872		517		4,020	
PCB-123	1,350		860		4,560	
PCB-124	3,100		1,620		10,700	
PCB-126	1,440		865		5,780	
PCB-127	< 277	U	< 291	U	< 279	U

Table S-9. Solids Sample Results - PCB Congeners
South Service Center

Location ID	SC-CB-24		SC-CB-35		SC-OWS-05	
Collection Date	12/11/2014		12/11/2014		12/11/2014	
Analyte	Result		Result		Result	
Total Hexachlorobiphenyl (ng/kg)[a]	376,000	J	213,000	J	1,800,000	J
PCB-128/162	15,300		7,930		66,600	
PCB-129	5,850		2,720		21,100	
PCB-130	6,110		3,730		25,900	
PCB-131	< 285	U	< 452	U	< 78.9	U*
PCB-132/161	26,900		13,500		117,000	
PCB-133/142	2,900		1,430		13,300	
PCB-134/143	4,980		2,400		19,400	
PCB-135	8,020		5,130		46,000	
PCB-136	7,230		3,810		37,400	
PCB-137	5,280		2,100		20,400	
PCB-138/163/164	91,200		52,000		412,000	
PCB-139/149	59,900		35,800		322,000	
PCB-140	< 422	U*	< 293	U*	3,170	
PCB-141	16,500		10,500		74,600	
PCB-144	3,960		< 2,080	U*	15,600	
PCB-145	< 248	U	< 219	U	< 267	U
PCB-146/165	9,870		5,920		53,600	
PCB-147	1,330		539		11,600	
PCB-148	< 400	U	< 354	U	792	
PCB-150	< 298	U	< 264	U	1,770	
PCB-151	13,000		9,040		78,800	
PCB-152	< 267	U	< 236	U	< 663	U*
PCB-153	67,300		40,600		331,000	J
PCB-154	747		628		8,500	
PCB-155	< 267	U	< 237	U	< 288	U
PCB-156	11,400		5,850		45,200	
PCB-157	2,560		1,340		9,880	
PCB-158/160	11,400		5,990		46,000	
PCB-159	< 179	U	< 349	U	< 304	U
PCB-166	387		219		1,360	
PCB-167	4,180		2,190		17,400	
PCB-168	< 178	U	< 283	U	674	
PCB-169	< 181	U	< 271	U	279	
Total Heptachlorobiphenyl (ng/kg)[a]	171,000	J	131,000	J	950,000	J
PCB-170	20,500		16,800	J	123,000	
PCB-171	4,440		3,430		28,100	
PCB-172	3,110		2,450		16,300	
PCB-173	390		293		3,020	
PCB-174	19,400		15,500		113,000	
PCB-175	954		817		5,380	
PCB-176	2,210		1,760		12,600	
PCB-177	11,500		9,260		70,900	
PCB-178	3,870		< 2,980	U*	21,800	
PCB-179	7,370		5,720		44,200	
PCB-180	52,500		41,200		275,000	J
PCB-181	< 175	U	< 226	U	468	
PCB-182/187	22,800		17,200		122,000	
PCB-183	11,600		8,680		58,200	
PCB-184	< 61.7	U*	< 168	U	< 143	U*
PCB-185	1,700		1,260		9,050	
PCB-186	< 129	U	< 189	U	< 159	U

Table S-9. Solids Sample Results - PCB Congeners
South Service Center

Location ID	SC-CB-24	SC-CB-35	SC-OWS-05
Collection Date	**12/11/2014**	**12/11/2014**	**12/11/2014**
Analyte	**Result**	**Result**	**Result**
PCB-188	112	< 174 U	441
PCB-189	824	927	4,770
PCB-190	4,060	3,140	23,400
PCB-191	1,010	758	4,980
PCB-192	< 138 U	< 179 U	< 165 U
PCB-193	2,190	1,910	13,500
Total Octachlorobiphenyl (ng/kg)[a]	57,100 J	37,700 J	228,000
PCB-194	12,000	9,210	53,900
PCB-195	3,820	3,080	20,400
PCB-196/203	18,600	11,400	66,400
PCB-197	< 452 U*	352	2,310
PCB-198	761	< 422 U*	2,530
PCB-199	14,900	9,510	56,700
PCB-200	1,670	998	6,440
PCB-201	1,860	1,100	6,690
PCB-202	2,940	1,530	10,100
PCB-204	< 239 U	< 297 U	< 172 U
PCB-205	537	504	2,780
Total Nonachlorobiphenyl (ng/kg)[a]	12,500	5,960	39,400
PCB-206	8,950	4,250	28,300
PCB-207	1,030	458	2,920
PCB-208	2,470	1,250	8,170
Decachlorobiphenyl (ng/kg)	1,560	1,020	6,090
PCB-209	1,560	1,020	6,090
PCB TEQ, nd SDL*0	149	89.4	608
PCB TEQ, nd SDL*0.5	152	93.4	608
PCB TEQ, nd SDL*1	154	97.5	608

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 S-1
Inspection Photographic Log

Conveyance Structure Information	
Structure Identification Number: SC-OWS-5/OWS D	**N**
Structure Type: Oil Water Separator	
General Location: Southwest portion of facility	
Characteristics: 6’ to bottom of structure, 5’ to depth of water, 2-3” of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Manhole cover	
Volume Gauge: --	
Sample ID: SC-OWS-05-20141211-S	
Drainage Information:	
OWS D is located in the southwest area of the SCL South Service Center. OWS D contains 3 chambers; the sample was collected from chamber 2. OWS D chamber 1 receives stormwater from MH-20 that drains a paved parking lot area where equipment is stored. Stormwater is conveyed from OWS D offsite to the LDW.	**N**

Conveyance Structure Information	
Structure Identification Number: SC-CB-35	N🡐
Structure Type: Catch Basin	
General Location: East area of facility	
Characteristics: 4.5’ to bottom of structure, 2.5’ to depth of water, 2” of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Catch Basin Grate	
Volume Gauge: --	
Sample ID: SC-CB-35-20141211-S	
Drainage Information:	
Catch Basin CB-35 is located in the east area of the SCL South Service Center and receives stormwater from CB-36 and CB-37, paved areas adjacent to the PCB building. Stormwater is conveyed from CB-35 to a storm drain line that enters MH-17.	N🡓

Conveyance Structure Information	
Structure Identification Number: SC-CB-24	**N↑**
Structure Type: Catch Basin	
General Location: East Central area of facility	
Characteristics: 4.5' to bottom of structure, 2' to depth of water, 4-6" of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Catch Basin Grate	
Volume Gauge: --	
Sample ID: SC-CB-24-20141211-S	

Drainage Information:	
CB-24 is located in the east central area of the SCL South Service Center, on the north side of a salvage/scrap storage yard. Stormwater drains from underneath the scrapyard barriers, entering CB-24. Stormwater entering CB-24 contains suspended solids and has a slight sheen. CB-24 has a sediment trap to prevent floating debris from discharging to a storm drain line that enters MH-16.	**N↑**

Conveyance Structure Information	
Structure Identification Number: SC-MH-20	**N➔**
Structure Type: Manhole	
General Location: Southwest portion of facility	
Characteristics: 5-6’ to bottom of structure, 5’ to depth of water, no sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Manhole cover	
Volume Gauge: --	
Sample ID: SC-MD-20-20141211-W	
Drainage Information:	
MH-20 is located in the southwest area of the SCL South Service Center. MH-20 receives stormwater from an area that drains a paved parking lot area where equipment is stored. Stormwater is conveyed to OWS D that drains offsite to the LDW.	**N↖**

Attachment S-2
Field Documentation

Location S. Service Center Station Date 12/11/14

Project / Client NPDES/Ecology

0700 M. Ivancevich at storage unit prepping & loading sampling equipment.

0800 M. Ivancevich secures storage unit & departs for South Service Center Station.

0830 M. Ivancevich & C. Nancarrow arrive at S. Service Center Station, wait off property for Ecology to arrive.

0837 Leidos enters site upon confirmation that Ecology is already onsite.

0850 Leidos & Ecology meet with Seattle City Light for introductions and overview. Bob confirmed that the Seattle City Light would like split samples.

0905 C. Nancarrow conducts H&S meeting.

0918 At OWS D MH 20 N. Inlet to OWS D from MH20 from N. Chambers 1, 2, 3 for OWS D from N to S

0920 Probbing MH20. Inlet from N/NE, outlet S. Small pocket of solids near outlet. Channelized.

0931 Probbing chamber 1 of OWS D Some solids. Will collect solids from chamber 2, supplement

Location S. Service Center Station Date 12/11/14

Project / Client NPDES/Ecology

with solids from chamber 1 if necessary. Approx 6' to top of plate in Chamber 2. Water approx 1' deep. Pockets of 2-3" of Sediment.

0980 Begin setting up at OWS 5 for solids sampling. Sampling ID: SC-OWS-05-20141211-S

1018 Began sampling at OWS 5, chamber 2. Unable to collect VOAs.

1111 Mobbed to CB38. SW corner of building L. Inlet from E, ~ 4". Outlet to S, ~ 12". Approx 3' to water surface, Almost 5' to bottom. 1-2" solids across bottom, more in corners. Slight sheen observed. Roof drainage & surface runoff. Flow observed.

1125 At CB35. Inlet from E & S, 6". Outlet W. Solids on E portion, approx 2". Approx 4'½" deep. Approx 2½" to water surface.

1130 C. Wilson onsite

1145 Break for lunch.

Location S. Service Center Station Date 12/11/14

Project / Client NPDES/Ecology

1225 Leidos back onsite. At CB35 to collect solids sample. Sample ID: SC-CB-35-20141211-S

1300 Began sampling at CB35

1337 Mobbed to CB-24 to collect solids. Sample ID: SC-CB-24-20141211-S Inlets & outlets below water surface. Solids and slight sheen entering catch basin from beneath Jersey barriers to the South. Area South of location used to store cables and conduit. Storage area also has two bins open storing scrap metal and old light fixtures.

1400 Began sampling at CB24. Water surface 2 ft bgs. Depth of CB 4.5 ft to bottom of CB ~ 4-6" of solids

1425 Completed sampling at CB24. Mobbing to MH20.

1435 At MH20 to collect a water sample. Sample ID: SC-MH-20-20141211-W

1500 Began sampling at MH20.

Location S. Service Center Station Date 12/11/14

Project / Client NPDES/Ecology

Solids - OWS-5
CB-35 PCB Bldg
CB-24 Storage Area

Water - MH20 target drainage (upgradient of OWS-5)

1550 Leidos transfers split samples to Seattle City Light representative.

1605 Leidos offsite. M. Ivancevich & C. Wilson en route to storage unit.

1615 M. Ivancevich & C. Wilson arrive at storage unit, unload sampling van.

1630 C. Wilson offsite. M. Ivancevich prepping Vista samples for shipment.

1745 M. Ivancevich secures storage unit, en route to FedEx to ship Vista samples.

1800 M. Ivancevich relinquishes Vista cooler to FedEx.

1900 M. Ivancevich arrives at Bothell office, places TA cooler in refridgerator until TA courier pickup.

NAD 12/11/14

leidos

Sediment Collection Form

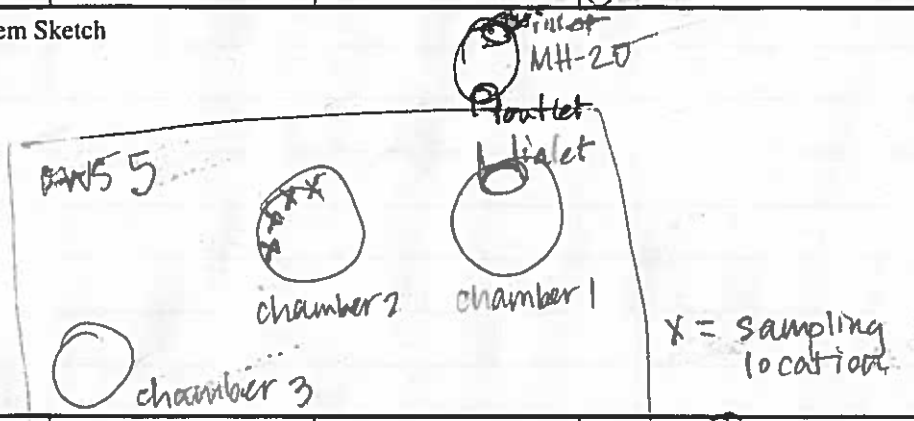
Project: NPDES Sampling Support **Location ID:** OWS-5

Facility Name: S. Service center station **Sample ID:** SC-OWS-05-20141211-S

Sampled By: MI, CN **Date:** 12 / 11 / 2014 **Time:** 1018

Structure Type:	Dimensions: Standard	Standing Water:	Flow:
OWS	W_____ L_____	(Y) / N	(Y) / N

Conveyance System Sketch



Depth to Bottom:	Depth to Water:	Depth of Sediment:	Sampled: (Y) / N
10' ft	5' ft	2-3 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: Slight sheen observed

Recorded By/Date: MI 12/11/14 **Reviewed By/Date:** 12/17/14

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Sediment Collection Form

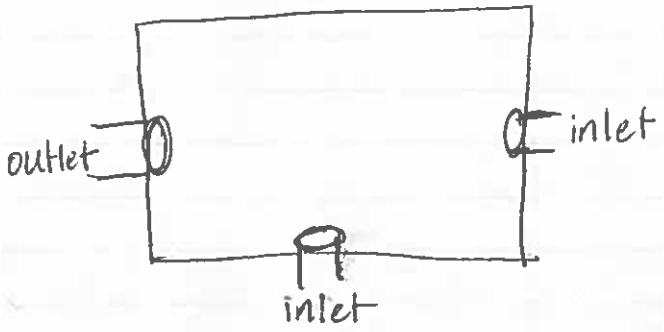
Project: NPDES Sampling Support **Location ID:** CB-35

Facility Name: S. Service Center station **Sample ID:** SC-CB-35-20141211-S

Sampled By: MI, CW **Date:** 12 / 11 / 2014 **Time:** 1300

Structure Type:	Dimensions: Standard W_____ L_____	Standing Water: (Y) N	Flow: (Y) N
CB			

Conveyance System Sketch ↑N



Depth to Bottom:	Depth to Water:	Depth of Sediment:	Sampled: (Y) N
4.5 ft	2.5 ft	2 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: Slight sheen observed.

Recorded By/Date: MI 12/11/14 **Reviewed By/Date:** 12/17/14

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Sediment Collection Form

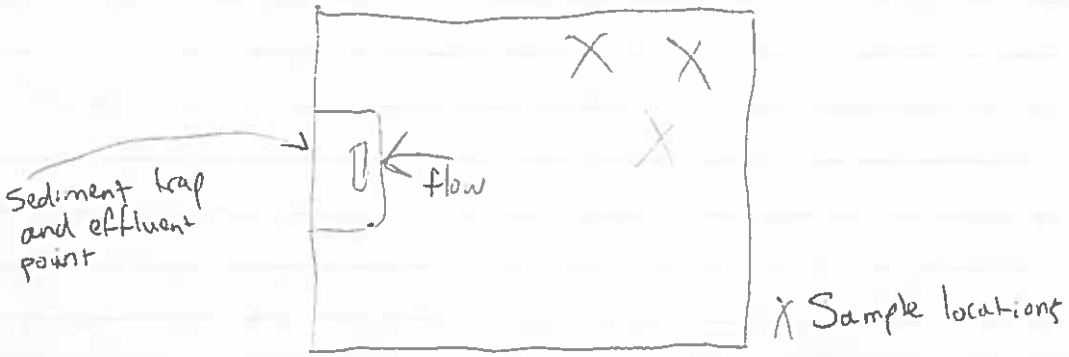
Project: NPDES Sampling Support **Location ID:** CB24

Facility Name: SCL S. Service Center **Sample ID:** SC-CB-24-20141211-S

Sampled By: CW/MT **Date:** 12 / 11 / 2014 **Time:** 1337

Structure Type:	Dimensions:	Standing Water:	Flow:
Catch Basin	W 1.5 L 2.5	(Y) / N	(Y) / N

Conveyance System Sketch ↑N



Depth to Bottom:	Depth to Water:	Depth of Sediment:	Sampled: (Y) / N
4.5 ft	2 ft	4-6 in	Discrete / Composite *(circle one)*

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

NOTES: CB-24 is located on the North side of a salvage/scrap Storage Yard at the facility. Stormwater was observed draining from underneath the scrap yard barriers and infiltrate entering the catch basin. The storm water contained suspended solids and appeared to have a slight sheen. Objects stored in the scrap area included cable, conduit, and uncovered scrap metal bins. The catch basin had a sediment trap that was used to prevent floating debris from discharging from the catch basin.

Recorded By/Date: CW 12/12/14 **Reviewed By/Date:** 12/17/14

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Water CW 12/10/14
~~Sediment~~ Collection Form

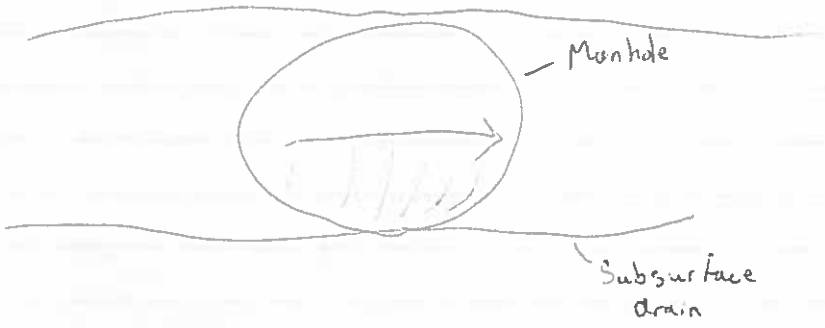
Project: NPDES Sampling Support **Location ID:** MH-20

Facility Name: SCL S. Service Center **Sample ID:** SC-MH-20-20141211-W

Sampled By: MJ / CW **Date:** 12 / 11 / 2014 **Time:** 1500

Structure Type:	Dimensions: 3' diameter W_____ L_____	Standing Water: Y / (N)	Flow: (Y) / N
Manhole			

Conveyance System Sketch ↑N



Depth to Bottom:	Depth to Water:	Depth of Sediment:	Sampled: (Y) / N
5-6 ft	5 ft	— in	Discrete / ~~Composite~~ *(circle one)*

Sediment type:	*Sediment color:*	*Sediment Odor:*	*Comments:*
Cobble	Drab olive	(None)	No solids collected
Gravel	Brown	Slight	
Sand C M F	Brown surface	Moderate	
Silt/clay	Gray	Strong	
Organic matter	Black	Overwhelming	Photo ID(s):
~~Debris~~ (None)	~~Tan~~ (None)	H_2S	GPS ID:
		Petroleum	

NOTES: Collected water sample at this location using a peristaltic pump & Stainless steel pole for SVOCs. Storm drain system contained flowing stormwater

Recorded By/Date: CW 12/12/14 **Reviewed By/Date:** 12/17/14

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leidos

SURFACE WATER SAMPLING FORM

Client: Department of Ecology Site: South Service Center Station Job #: 309382

Sample ID	TIME	DATE	Flow	pH	Electrical Conductivity	Temp (°C)	Total Dissolved Solids	Dissolved Oxygen	Turbidity (NTU)	Oil & Grease (visible?)	COMMENTS
SC-MH-20-20141211-W	1500	12/11/14	Y	9.6	0.034 ☑ mS/cm	10.95		11.3	27	No	
					☐ S/cm						
					☐ S/cm						
					☐ S/cm						
					☐ S/cm						
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Sample Date: 12 / 11 /2014

Attachment S-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:

460690

Client Contact	Project Manager: Christine Nancarrow	Site Contact: Melissa Ivancevich	Date: 12/11/14	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:
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)	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:
1	SC-OWS-05-20141211-S	12/11/14	1018	C	Sed	3										1	1	
2	SC-CB-35-20141211-S	12/11/14	1300	C	Sed	6			√	√	√	√	√	1	2	1	1	
3	SC-CB-24-20141211-S	12/11/14	1400	C	Sed	6			√	√	√	√	√	1	2	1	1	

580-46690 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.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company	Date/Time		Company	Date/Time
Relinquished by: Melissa Ivancevich	Leidos	12/11/14 1730	Received by:	TAoSEA	12/12/14 1201
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

46690

TestAmerica Laboratories, Inc.

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

Client Contact	Project Manager: Christine Nancarrow	Site Contact: Melissa Ivancevich	Date: 12/11/14	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)	Sample Specific Notes:
4- SC-MH-20-20141211-W	12/11/14	1500	G	W	8	N		2	1		2			1	1	1	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other MeOH									4					3			

Cooler/~~TB~~ ~~Dig~~/IR cor 1.6 °C unc 1.9 °C
Cooler Dsc Lg Blue/White @ Lab 1405
~~Wet~~/Packs Packing Bubble
w/cs

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.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Melissa Ivancevich [signature]	Leidos	12/11/14 1736	[signature]	TA-SEA	12/12/14 1201
			Received in Laboratory by:		

CHAIN OF CUSTODY

Vista

FOR LABORATORY USE ONLY Storage Secured

Laboratory Project ID:_____ Yes ☐ No ☐

Storage ID_____ Temp _____°C

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

Project I.D.:_____ P.O.#_____ Sampler: M. Ivancevich / C. Wilson
(Name)

Invoice to: Name Christine Nanfarrow Company DW Leidos Address 18912 N. Creek Pky, Ste 101 City Bothell State WA Zip 98011 Ph# 206-300-2144 Fax#

Relinquished by: (Signature and Printed Name) Melissa Ivancevich Date: 12/11/14 Time: 1713 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:_____

Method of Shipment: _____

Tracking No.: _____

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	EPA1614 PBDE	CARB429 PAH	CARB429 WHO-29
SC-OWS-05-20141211-S	12/11/14	1010	S. Service Center	1	A	SD		✓								✓		✓				
SC-CB-35-20141211-S	12/11/14	1300	S. Service Center	1	A	SD		✓								✓		✓				
SC-CB-24-20141211-S	12/11/14	1400	S. Service Center	1	A	SD		✓								✓		✓				
SC-MH-20-20141211-S	12/11/14	1500	S. Service Center	4	A	EF		✓								✓		✓				

Special Instructions/Comments:_____

SEND DOCUMENTATION AND RESULTS TO:

Name: Same as above
Company:_____
Address:_____
City:_____ State:_____ Zip:_____
Phone:_____ Fax:_____
Email: nancarrow@leidos.com

Container Types: A = 1 Liter Amber, G = Glass Jar
P = PUF, T = MMS 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

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

12-140

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

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

Client Contact	Project Manager:	Site Contact:	Date: 12/11/14	COC No:
Gary Lockwood - SCL	Tel/Fax:	Lab Contact:	Carrier: Courier	1 of 2 COCs

Phone 206 684-3393
FAX
Project Name: SW Inspection
Site: SSC
P O #

Analysis Turnaround Time
☑ CALENDAR DAYS ☐ WORKING DAYS
TAT if different from Below 3 Weeks
☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day

Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

	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)	PCB congeners 1668	Dioxins/Furans	% moisture	Sample Specific Notes:
1	SC-OWS-05-20141211-S	12/11/14	1018	C	Sed	4					1					1				X	
2	SC-CB-35-20141211-S	12/11/14	1300	C	Sed	7			√	√	√	√		1	2	1				↓	
3	SC-CB-24-20141211-S	12/11/14	1400	C	Sed	7			√	√	√	√		1	2	1				↓	
															6						

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other MeOH & as marked on container

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 1+ Months

Special Instructions/QC Requirements & Comments:

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

	Company	Date/Time		Company	Date/Time
Relinquished by: Melissa Ivancevich	Leidos	12/11/14 1550	Received by: Gary Lockwood	SCL	12/11/14
Relinquished by: Gary Lockwood	SCL	12/12/14 [illegible]	Received by: [illegible]	[illegible]	12/12/14 1345
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

12-140

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

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

Client Contact	Project Manager:	Site Contact:	Date: 12/11/14	COC No:
Gary Lockwood	Tel/Fax:	Lab Contact:	Carrier: Courier	2 of 2 COCs

Client Contact: Gary Lockwood
Phone 206 684-3293
FAX
Project Name: SW Inspection
Site: SSC
P O #

Analysis Turnaround Time
☒ CALENDAR DAYS ☑ WORKING DAYS
TAT if different from Below 3 Weeks
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

	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) - Total RCRA + Zn, Cu	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)	PCB Congeners	Dioxins/Furans	Sample Specific Notes:
4	SC-MH-20-20141211-W	12/11/14	1500	G	W	~~13~~ 13	N		2	1			2		1	2	1	[redacted]	[redacted]	
										4					3					

*~~Nitrates~~, Sulfates only

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other MeOH & asked marked on container

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 2+ Months

Special Instructions/QC Requirements & Comments:

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

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Melissa Ivancevich	Leidos	12/11/14 1500	[signature]	SCL	12/11/14
[signature] Gary Lockwood	SCL	12/12/14 1345	[signature]	[illegible]	12/12/14 1345
			Received in Laboratory by:	Company:	Date/Time:

Attachment S-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: 580-46690-1
Client Project/Site: NPDES Sampling Support

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

Attn: Christine Nancarrow

David Burk

Authorized for release by:
1/9/2015 2:52:04 PM
David Burk, Project Manager I
(253)248-4972
david.burk@testamericainc.com

Designee for

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Job ID: 580-46690-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 12/12/2014 12:01 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6º C.

GC/MS VOA

Method(s) 5035: No volume for MS/MSD, only one vial provided. LCSD with the batch.

SC-CB-24-20141211-S (580-46690-3), SC-CB-35-20141211-S (580-46690-2)

Method(s) 8260B: Chlorobenzene-d5 and 1,4-dichlorobenzene Internal standard (ISTD) responses for the following sample was below control limits, indicating a high bias for analytes associated with these IS groups: SC-CB-35-20141211-S (580-46690-2). Sample matrix interference is suspected. The sample was re-extracted and re-analyzed with concurring results, and therefore the original set of data has been reported.

Method(s) 8260B: Chlorobenzene-d5, fluorobenzene, and 1,4-dichlorobenzene Internal standard (ISTD) responses for the following sample was below control limits, indicating a high bias for analytes associated with these IS groups: SC-CB-24-20141211-S (580-46690-3). Sample matrix interference is suspected. The sample was re-extracted and re-analyzed with concurring results, and therefore the original set of data has been reported.

Method(s) 8260B: Surrogate recovery for the following samples was outside control limits: SC-CB-24-20141211-S (580-46690-3). Evidence of matrix interference is present and was confirmed by re-analysis; therefore the data has been reported.

Method(s) NWTPH-Gx: The method blank for batch 178406 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) 8270C, 8270D: The continuing calibration verification (CCV) associated with batch 178265 recovered above the upper control limit for 2-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCVIS 580-178265/3).

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: (580-46690-1 MS), (580-46690-1 MSD), SC-CB-24-20141211-S (580-46690-3), SC-CB-35-20141211-S (580-46690-2), SC-OWS-05-20141211-S (580-46690-1). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 178585 recovered outside relative response factor (RRF) acceptance criteria, low biased, for Nitrobenzene, Isophorone, Bis(2-chlorethoxy)methane and 2,4-Dimethylphenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8270D: 4-Chloroaniline recovered below control limits for the LCS and LCSD associated with batch 178277. This random marginal exceedance is not indicative of a systemic control problem; qualified results have been reported.

Method(s) 8270D: Surrogate recovery for the following samples was outside control limits: (580-46690-1 MS), SC-CB-24-20141211-S (580-46690-3), SC-OWS-05-20141211-S (580-46690-1). Chromatographic evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270C, 8270D: The method blank for preparation batch 178110 contained Di-n-butylphthalate above the reporting limit (RL), and Bis(2-ethylhexyl)phthalate and Butylbenzyl phthalate above the method detection limit (MDL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method(s) 8270C, 8270D: The following analytes recovered outside control limits for the LCS and/or LCSD associated with batch 178110: Bis(2-ethylhexyl)phthalate (high in LCS), 4-Chloroaniline (low in both LCS and LCSD) and 3,3'-Dichlorobenzidine (low in LCS). This is not indicative of a systematic control problem because these were random marginal exceedances. The lab SOP allows four marginal

Job ID: 580-46690-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

exceedances when a full list spike is evaluated for this method; qualified results have been reported.

Method(s) 8270C, 8270D: The continuing calibration verification (CCV) associated with batch 178374 recovered above the upper control limit for 2,4,6-Trichlorophenol, Benzoic Acid, 2,4,5-Trichlorophenol, 4-Chloro-3-methylphenol, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol and 2-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted (unaffected by high bias): (CCVIS 580-178374/3), (CCVL 580-178374/4), SC-MH-20-20141211-W (580-46690-4).

Method(s) 8270C, 8270D: The continuing calibration verification (CCV) associated with batch 178374 recovered outside relative response factor (RRF) acceptance criteria, low biased, for Nitrobenzene, Isophorone, Bis(2-chlorethoxy)methane, N-Nitroso di-n-propylamine, Hexachlorocyclopentadiene, 2,4-Dinitrophenol and 4,6-Dinitro-2-methylphenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples
were non-detect for this analyte, the data have been reported.

Method(s) 8270C, 8270D: The following samples were diluted due to the nature of the sample matrix: SC-MH-20-20141211-W (580-46690-4). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method(s) 8082: In batch 178554, the dual column RPD for Decachlorobiphenyl recoveries were >40% for samples (580-46690-2 MS), (580-46690-2 MSD), SC-CB-35-20141211-S (580-46690-2), SC-OWS-05-20141211-S (580-46690-1) and the lower values were reported. There is indcation of matrix interference from the chromatogram and similar MS/MSD recoveries.

Method(s) 8082: In batch 178554, the dual column RPD for PCB-1248 recovery was >40% for sample SC-CB-24-20141211-S (580-46690-3) and the upper values were reported.

Method(s) NWTPH-Dx: In analysis batch 178242, the following sample(s) from preparation batch 178227: The sample duplicate (DUP) precision for Motor Oil (>C24-C36) was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method(s) NWTPH-Dx: In analysis batch 178242, for the following sample(s) from preparation batch 178188: The following sample(s) contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: SC-CB-24-20141211-S (580-46690-3), SC-CB-35-20141211-S (580-46690-2), SC-OWS-05-20141211-S (580-46690-1).

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

Metals

Method(s) 200.8: The method blank for batch 178763 contained Cd above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 245.1: The method blank for batch 178190 contained Hg 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.

General Chemistry

Method(s) 300.0: The following sample was run out of hold: SC-MH-20-20141211-W (580-46690-4). It was received after the analyst concluded their shift Friday and run the following Monday.

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

Geotechnical

Job ID: 580-46690-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

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

Organic Prep

Method(s) 3546: In preparation batch 178188, the following samples contained oraganic matter and were very wet:

(580-46690-3 MS), (580-46690-3 MSD), SC-CB-24-20141211-S (580-46690-3), SC-CB-35-20141211-S (580-46690-2), SC-OWS-05-20141211-S (580-46690-1)

Method(s) 3550B: In prep batch 178279, (580-46690-2 MS), (580-46690-2 MSD), SC-CB-24-20141211-S (580-46690-3), SC-CB-35-20141211-S (580-46690-2), SC-OWS-05-20141211-S (580-46690-1) emulsified heavily during concentration by water bath.

Method(s) 3550B: In prep batch 178277, (580-46690-1 MS), (580-46690-1 MSD), SC-CB-24-20141211-S (580-46690-3), SC-CB-35-20141211-S (580-46690-2), SC-OWS-05-20141211-S (580-46690-1) emulsified heavily during concentration by water bath.

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

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
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.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
F1	MS and/or MSD Recovery exceeds the control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
*	RPD of the LCS and LCSD 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.
F1	MS and/or MSD Recovery exceeds the control limits
P	The %RPD between the primary and confirmation column/detector is >40%. The higher 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.

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.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery exceeds the control limits
B	Compound was found in the blank and sample.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 580-46690-1

Client Sample ID: SC-OWS-05-20141211-S
Date Collected: 12/11/14 10:18
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-1
Matrix: Solid
Percent Solids: 30.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1600	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
1,2-Dichlorobenzene	ND		1800	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
1,3-Dichlorobenzene	ND		1600	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
1,4-Dichlorobenzene	ND		1600	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
1-Methylnaphthalene	ND		970	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2,2'-oxybis[1-chloropropane]	ND		8100	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2,4,5-Trichlorophenol	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2,4,6-Trichlorophenol	ND		4900	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2,4-Dichlorophenol	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2,4-Dimethylphenol	ND	^	3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2,4-Dinitrophenol	ND		32000	6500	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2,4-Dinitrotoluene	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2,6-Dinitrotoluene	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2-Chloronaphthalene	ND		650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2-Chlorophenol	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2-Methylnaphthalene	**170**	**J**	650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2-Methylphenol	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2-Nitroaniline	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
2-Nitrophenol	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
3 & 4 Methylphenol	**1100**	**J**	6500	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
3,3'-Dichlorobenzidine	ND		6500	970	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
3-Nitroaniline	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
4,6-Dinitro-2-methylphenol	ND		32000	3200	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
4-Bromophenyl phenyl ether	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
4-Chloro-3-methylphenol	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
4-Chloroaniline	ND	*	3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
4-Chlorophenyl phenyl ether	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
4-Nitroaniline	ND		3200	650	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
4-Nitrophenol	ND		32000	8100	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Acenaphthene	**270**	**J**	650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Acenaphthylene	**170**	**J**	650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Anthracene	**820**		650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Benzo[a]anthracene	**2300**		650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Benzo[a]pyrene	**2800**		970	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Benzo[b]fluoranthene	**5600**		650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Benzo[g,h,i]perylene	**2000**		810	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Benzo[k]fluoranthene	**1400**		810	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Benzoic acid	ND		81000	24000	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Benzyl alcohol	**1400**	**J**	3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Bis(2-chloroethoxy)methane	ND	^	3200	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Bis(2-chloroethyl)ether	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Bis(2-ethylhexyl) phthalate	**120000**		19000	1600	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Butyl benzyl phthalate	**6100**	**J**	6500	1600	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Carbazole	**550**	**J**	3200	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Chrysene	**5400**		810	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Dibenz(a,h)anthracene	**500**	**J**	1300	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Dibenzofuran	**230**	**J**	3200	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Diethyl phthalate	ND		6500	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Dimethyl phthalate	**420**	**J**	3200	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100

Client Sample ID: SC-OWS-05-20141211-S
Date Collected: 12/11/14 10:18
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-1
Matrix: Solid
Percent Solids: 30.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		16000	1600	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Di-n-octyl phthalate	**5300**	**J**	16000	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Fluoranthene	**7100**		650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Fluorene	**460**	**J**	650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Hexachlorobenzene	ND		1600	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Hexachlorobutadiene	ND		1600	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Hexachlorocyclopentadiene	ND		3200	320	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Hexachloroethane	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Indeno[1,2,3-cd]pyrene	**1900**		1300	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Isophorone	ND	^	3200	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Naphthalene	**210**	**J**	650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Nitrobenzene	ND	^	3200	1100	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
N-Nitrosodimethylamine	ND		32000	8100	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
N-Nitrosodi-n-propylamine	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
N-Nitrosodiphenylamine	ND		1600	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Pentachlorophenol	**9500**		6500	650	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Phenanthrene	**4200**		650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Phenol	ND		3200	490	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100
Pyrene	**7200**		650	160	ug/Kg	☼	12/18/14 16:00	12/19/14 16:49	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*144*	*X*	*28 - 143*	*12/18/14 16:00*	*12/19/14 16:49*	*100*
2-Fluorobiphenyl	*104*		*42 - 140*	*12/18/14 16:00*	*12/19/14 16:49*	*100*
2-Fluorophenol	*78*		*36 - 145*	*12/18/14 16:00*	*12/19/14 16:49*	*100*
Nitrobenzene-d5	*90*		*38 - 141*	*12/18/14 16:00*	*12/19/14 16:49*	*100*
Phenol-d5	*100*		*38 - 149*	*12/18/14 16:00*	*12/19/14 16:49*	*100*
Terphenyl-d14	*127*		*42 - 151*	*12/18/14 16:00*	*12/19/14 16:49*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.032	0.010	mg/Kg	☼	12/18/14 13:20	01/06/15 14:57	1
Arochlor 1221	ND		0.036	0.026	mg/Kg	☼	12/18/14 13:20	01/06/15 14:57	1
Arochlor 1232	ND		0.036	0.023	mg/Kg	☼	12/18/14 13:20	01/06/15 14:57	1
Arochlor 1242	ND		0.032	0.0068	mg/Kg	☼	12/18/14 13:20	01/06/15 14:57	1
Arochlor 1248	**1.6**		0.032	0.0097	mg/Kg	☼	12/18/14 13:20	01/06/15 14:57	1
Arochlor 1254	ND		0.032	0.0068	mg/Kg	☼	12/18/14 13:20	01/06/15 14:57	1
Arochlor 1260	**1.9**		0.032	0.0097	mg/Kg	☼	12/18/14 13:20	01/06/15 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*69*		*45 - 135*	*12/18/14 13:20*	*01/06/15 14:57*	*1*
DCB Decachlorobiphenyl	*67*	*p*	*50 - 140*	*12/18/14 13:20*	*01/06/15 14:57*	*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)	**5900**	**Y**	82	19	mg/Kg	☼	12/15/14 13:03	12/16/14 13:00	1
Motor Oil (>C24-C36)	**15000**	**Y**	160	30	mg/Kg	☼	12/15/14 13:03	12/16/14 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*86*		*50 - 150*	*12/15/14 13:03*	*12/16/14 13:00*	*1*

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-OWS-05-20141211-S
Date Collected: 12/11/14 10:18
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-1
Matrix: Solid
Percent Solids: 30.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		1.4	0.51	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10
Lead	430		0.57	0.037	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10
Antimony	9.4		0.57	0.12	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10
Beryllium	0.23	J	0.57	0.10	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10
Cadmium	5.5		0.57	0.023	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10
Chromium	66		0.57	0.32	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10
Copper	740		1.1	0.28	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10
Nickel	46		1.4	0.23	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10
Selenium	1.1	J	2.0	0.58	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10
Silver	1.3		0.57	0.034	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10
Thallium	ND		1.4	0.37	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10
Zinc	2000		5.7	3.2	mg/Kg	☼	01/06/15 11:06	01/07/15 15:03	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.1		0.051	0.016	mg/Kg	☼	12/15/14 16:10	12/16/14 11:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	30		0.10	0.10	%			12/16/14 09:54	1
Total Organic Carbon	210000		2000	250	mg/Kg			12/22/14 08:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobbles	0.00				%			12/18/14 18:36	1
Gravel	3.5				%			12/18/14 18:36	1
Sand	26				%			12/18/14 18:36	1
Silt	69				%			12/18/14 18:36	1
Clay	1.8				%			12/18/14 18:36	1

Client Sample ID: SC-CB-35-20141211-S
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-2
Matrix: Solid
Percent Solids: 53.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*	1.4	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,1,1-Trichloroethane	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,1,2,2-Tetrachloroethane	ND	*	2.8	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.4	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,1,2-Trichloroethane	ND	*	2.8	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,1-Dichloroethane	ND		1.4	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,1-Dichloroethene	ND		7.1	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,1-Dichloropropene	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,2,3-Trichlorobenzene	ND	*	2.8	0.85	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,2,3-Trichloropropane	ND	*	1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,2,4-Trichlorobenzene	ND	*	2.8	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,2,4-Trimethylbenzene	**7.5**	*	2.8	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,2-Dibromo-3-Chloropropane	ND	*	2.8	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,2-Dibromoethane	ND	*	1.4	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,2-Dichlorobenzene	ND	*	2.8	0.85	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,2-Dichloroethane	ND		1.4	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,2-Dichloropropane	ND		1.4	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,3,5-Trimethylbenzene	**5.1**	J *	7.1	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,3-Dichlorobenzene	ND	*	2.8	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,3-Dichloropropane	ND	*	2.8	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
1,4-Dichlorobenzene	ND	*	1.4	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
2,2-Dichloropropane	ND		7.1	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
2-Butanone	**45**		14	4.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
2-Chloroethyl vinyl ether	ND	*	7.1	2.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
2-Chlorotoluene	ND	*	2.8	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
2-Hexanone	**2.4**	J *	7.1	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
4-Chlorotoluene	ND	*	2.8	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
4-Isopropyltoluene	**4.3**	*	2.8	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
4-Methyl-2-pentanone	**4.2**	J *	7.1	2.1	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Acetone	**190**		21	3.4	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Acrolein	ND		43	12	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Acrylonitrile	ND		14	4.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Benzene	**0.84**	J	1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Bromobenzene	ND	*	2.8	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Bromochloromethane	ND		2.8	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Bromodichloromethane	ND		1.4	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Bromoform	ND	*	1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Bromomethane	ND		1.4	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Carbon disulfide	**4.8**		1.4	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Carbon tetrachloride	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Chlorobenzene	ND	*	1.4	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Chlorodibromomethane	ND	*	2.8	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Chloroethane	ND		1.4	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Chloroform	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Chloromethane	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
cis-1,2-Dichloroethene	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
cis-1,3-Dichloropropene	ND	*	1.4	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Dibromomethane	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Dichlorodifluoromethane	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-CB-35-20141211-S
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-2
Matrix: Solid
Percent Solids: 53.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**11**	*	1.4	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Hexachloro-1,3-butadiene	ND	*	2.8	0.85	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Iodomethane	ND		21	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Isopropylbenzene	**0.94**	J *	2.8	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Methyl tert-butyl ether	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Methylene Chloride	ND		21	4.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
m-Xylene & p-Xylene	**39**	*	2.8	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Naphthalene	**8.1**	*	7.1	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
n-Butylbenzene	ND	*	2.8	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
N-Propylbenzene	**1.3**	J *	2.8	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
o-Xylene	**19**	*	2.8	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
sec-Butylbenzene	**1.1**	J *	2.8	0.71	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Styrene	**2.1**	J *	2.8	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
tert-Butylbenzene	ND	*	2.8	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Tetrachloroethene	ND	*	1.4	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Toluene	**17**	*	2.8	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
trans-1,2-Dichloroethene	ND		1.4	0.57	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
trans-1,3-Dichloropropene	ND	*	1.4	0.28	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
trans-1,4-Dichloro-2-butene	ND	*	7.1	2.4	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Trichloroethene	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Trichlorofluoromethane	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Vinyl acetate	ND		7.1	0.85	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1
Vinyl chloride	ND		1.4	0.43	ug/Kg	☼	12/12/14 14:25	12/16/14 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 136*	*12/12/14 14:25*	*12/16/14 15:02*	*1*
4-Bromofluorobenzene (Surr)	*152*	*X	*70 - 120*	*12/12/14 14:25*	*12/16/14 15:02*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 132*	*12/12/14 14:25*	*12/16/14 15:02*	*1*
Toluene-d8 (Surr)	*129*	*X	*80 - 120*	*12/12/14 14:25*	*12/16/14 15:02*	*1*
Trifluorotoluene (Surr)	*75*		*65 - 140*	*12/12/14 14:25*	*12/16/14 15:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		920	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
1,2-Dichlorobenzene	ND		1000	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
1,3-Dichlorobenzene	ND		920	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
1,4-Dichlorobenzene	ND		920	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
1-Methylnaphthalene	**280**	J	550	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2,2'-oxybis[1-chloropropane]	ND		4600	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2,4,5-Trichlorophenol	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2,4,6-Trichlorophenol	ND		2800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2,4-Dichlorophenol	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2,4-Dimethylphenol	ND	^	1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2,4-Dinitrophenol	ND		18000	3700	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2,4-Dinitrotoluene	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2,6-Dinitrotoluene	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2-Chloronaphthalene	ND		370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2-Chlorophenol	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2-Methylnaphthalene	**360**	J	370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2-Methylphenol	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-CB-35-20141211-S
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-2
Matrix: Solid
Percent Solids: 53.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
2-Nitrophenol	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
3 & 4 Methylphenol	**400**	**J**	3700	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
3,3'-Dichlorobenzidine	ND		3700	550	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
3-Nitroaniline	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
4,6-Dinitro-2-methylphenol	ND		18000	1800	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
4-Bromophenyl phenyl ether	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
4-Chloro-3-methylphenol	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
4-Chloroaniline	ND	*	1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
4-Chlorophenyl phenyl ether	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
4-Nitroaniline	ND		1800	370	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
4-Nitrophenol	ND		18000	4600	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Acenaphthene	**250**	**J**	370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Acenaphthylene	ND		370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Anthracene	ND		370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Benzo[a]anthracene	**1200**		370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Benzo[a]pyrene	**1400**		550	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Benzo[b]fluoranthene	**2500**		370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Benzo[g,h,i]perylene	**880**		460	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Benzo[k]fluoranthene	**970**		460	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Benzoic acid	ND		46000	14000	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Benzyl alcohol	**46000**		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Bis(2-chloroethoxy)methane	ND	^	1800	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Bis(2-chloroethyl)ether	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Bis(2-ethylhexyl) phthalate	**87000**		11000	920	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Butyl benzyl phthalate	**6000**		3700	920	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Carbazole	ND		1800	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Chrysene	**2200**		460	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Dibenz(a,h)anthracene	ND		740	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Dibenzofuran	**140**	**J**	1800	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Diethyl phthalate	ND		3700	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Dimethyl phthalate	**180**	**J**	1800	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Di-n-butyl phthalate	**1900**	**J**	9200	920	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Di-n-octyl phthalate	**4900**	**J**	9200	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Fluoranthene	**2700**		370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Fluorene	**260**	**J**	370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Hexachlorobenzene	ND		920	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Hexachlorobutadiene	ND		920	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Hexachlorocyclopentadiene	ND		1800	180	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Hexachloroethane	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Indeno[1,2,3-cd]pyrene	**790**		740	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Isophorone	**110**	**J ^**	1800	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Naphthalene	**290**	**J**	370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Nitrobenzene	ND	^	1800	630	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
N-Nitrosodimethylamine	ND		18000	4600	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
N-Nitrosodi-n-propylamine	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
N-Nitrosodiphenylamine	ND		920	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Pentachlorophenol	**8100**		3700	370	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Phenanthrene	**2100**		370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100

Client Sample ID: SC-CB-35-20141211-S
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-2
Matrix: Solid
Percent Solids: 53.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		1800	280	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100
Pyrene	**2800**		370	92	ug/Kg	☼	12/18/14 16:00	12/19/14 19:20	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*96*		*28 - 143*	*12/18/14 16:00*	*12/19/14 19:20*	*100*
2-Fluorobiphenyl	*90*		*42 - 140*	*12/18/14 16:00*	*12/19/14 19:20*	*100*
2-Fluorophenol	*91*		*36 - 145*	*12/18/14 16:00*	*12/19/14 19:20*	*100*
Nitrobenzene-d5	*83*		*38 - 141*	*12/18/14 16:00*	*12/19/14 19:20*	*100*
Phenol-d5	*96*		*38 - 149*	*12/18/14 16:00*	*12/19/14 19:20*	*100*
Terphenyl-d14	*121*		*42 - 151*	*12/18/14 16:00*	*12/19/14 19:20*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**11**	**J B**	12	1.5	mg/Kg	☼	12/17/14 12:03	12/17/14 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*50 - 150*	*12/17/14 12:03*	*12/17/14 20:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.018	0.0057	mg/Kg	☼	12/18/14 13:20	01/06/15 15:14	1
Arochlor 1221	ND		0.020	0.014	mg/Kg	☼	12/18/14 13:20	01/06/15 15:14	1
Arochlor 1232	ND		0.020	0.012	mg/Kg	☼	12/18/14 13:20	01/06/15 15:14	1
Arochlor 1242	ND		0.018	0.0037	mg/Kg	☼	12/18/14 13:20	01/06/15 15:14	1
Arochlor 1248	**0.13**		0.018	0.0053	mg/Kg	☼	12/18/14 13:20	01/06/15 15:14	1
Arochlor 1254	ND		0.018	0.0037	mg/Kg	☼	12/18/14 13:20	01/06/15 15:14	1
Arochlor 1260	**0.39**		0.018	0.0053	mg/Kg	☼	12/18/14 13:20	01/06/15 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*45 - 135*	*12/18/14 13:20*	*01/06/15 15:14*	*1*
DCB Decachlorobiphenyl	*71*	*p*	*50 - 140*	*12/18/14 13:20*	*01/06/15 15:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	**4300**	**Y**	44	10	mg/Kg	☼	12/15/14 13:03	12/16/14 13:38	1
Motor Oil (>C24-C36)	**5800**	**Y**	89	16	mg/Kg	☼	12/15/14 13:03	12/16/14 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*93*		*50 - 150*	*12/15/14 13:03*	*12/16/14 13:38*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**14**		0.81	0.29	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10
Lead	**250**		0.32	0.021	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10
Antimony	**8.2**		0.32	0.068	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10
Beryllium	**0.22**	**J**	0.32	0.057	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10
Cadmium	**4.3**		0.32	0.013	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10
Chromium	**130**		0.32	0.18	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10
Copper	**990**		0.65	0.16	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10
Nickel	**110**		0.81	0.13	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10
Selenium	**1.1**		1.1	0.33	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-CB-35-20141211-S
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-2
Matrix: Solid
Percent Solids: 53.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.2		0.32	0.019	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10
Thallium	ND		0.81	0.21	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10
Zinc	2700		3.2	1.8	mg/Kg	☼	01/06/15 11:06	01/07/15 15:29	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.029	0.0092	mg/Kg	☼	12/15/14 16:10	12/16/14 11:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	54		0.10	0.10	%			12/16/14 09:54	1
Total Organic Carbon	84000		2000	250	mg/Kg			12/20/14 14:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobbles	0.00				%			12/18/14 18:36	1
Gravel	0.29				%			12/18/14 18:36	1
Sand	59				%			12/18/14 18:36	1
Silt	39				%			12/18/14 18:36	1
Clay	1.5				%			12/18/14 18:36	1

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-CB-24-20141211-S
Date Collected: 12/11/14 14:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-3
Matrix: Solid
Percent Solids: 47.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*	2.6	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,1,1-Trichloroethane	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,1,2,2-Tetrachloroethane	ND	*	5.2	2.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	2.6	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,1,2-Trichloroethane	ND	*	5.2	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,1-Dichloroethane	ND	*	2.6	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,1-Dichloroethene	ND	*	13	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,1-Dichloropropene	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,2,3-Trichlorobenzene	ND	*	5.2	1.5	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,2,3-Trichloropropane	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,2,4-Trichlorobenzene	ND	*	5.2	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,2,4-Trimethylbenzene	**12**	*	5.2	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,2-Dibromo-3-Chloropropane	ND	*	5.2	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,2-Dibromoethane	ND	*	2.6	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,2-Dichlorobenzene	ND	*	5.2	1.5	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,2-Dichloroethane	ND	*	2.6	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,2-Dichloropropane	ND	*	2.6	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,3,5-Trimethylbenzene	**7.8**	J *	13	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,3-Dichlorobenzene	ND	*	5.2	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,3-Dichloropropane	ND	*	5.2	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
1,4-Dichlorobenzene	ND	*	2.6	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
2,2-Dichloropropane	ND	*	13	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
2-Butanone	ND	*	26	7.7	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
2-Chloroethyl vinyl ether	ND	*	13	3.6	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
2-Chlorotoluene	ND	*	5.2	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
2-Hexanone	ND	*	13	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
4-Chlorotoluene	ND	*	5.2	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
4-Isopropyltoluene	**25**	*	5.2	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
4-Methyl-2-pentanone	**22**	*	13	3.9	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Acetone	**540**	*	39	6.2	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Acrolein	ND	*	77	21	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Acrylonitrile	ND	*	26	7.2	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Benzene	**3.0**	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Bromobenzene	ND	*	5.2	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Bromochloromethane	ND	*	5.2	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Bromodichloromethane	ND	*	2.6	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Bromoform	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Bromomethane	ND	*	2.6	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Carbon disulfide	**2.2**	J *	2.6	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Carbon tetrachloride	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Chlorobenzene	ND	*	2.6	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Chlorodibromomethane	ND	*	5.2	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Chloroethane	ND	*	2.6	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Chloroform	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Chloromethane	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
cis-1,2-Dichloroethene	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
cis-1,3-Dichloropropene	ND	*	2.6	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Dibromomethane	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Dichlorodifluoromethane	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-CB-24-20141211-S
Date Collected: 12/11/14 14:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-3
Matrix: Solid
Percent Solids: 47.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**14**	*	2.6	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Hexachloro-1,3-butadiene	ND	*	5.2	1.5	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Iodomethane	ND	*	39	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Isopropylbenzene	**50**	*	5.2	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Methyl tert-butyl ether	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Methylene Chloride	ND	*	39	7.7	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
m-Xylene & p-Xylene	**43**	*	5.2	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Naphthalene	**9.0**	J *	13	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
n-Butylbenzene	ND	*	5.2	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
N-Propylbenzene	ND	*	5.2	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
o-Xylene	**29**	*	5.2	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
sec-Butylbenzene	**3.4**	J *	5.2	1.3	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Styrene	**1.1**	J *	5.2	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
tert-Butylbenzene	**1.2**	J *	5.2	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Tetrachloroethene	ND	*	2.6	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Toluene	**26**	*	5.2	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
trans-1,2-Dichloroethene	ND	*	2.6	1.0	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
trans-1,3-Dichloropropene	ND	*	2.6	0.52	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
trans-1,4-Dichloro-2-butene	ND	*	13	4.4	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Trichloroethene	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Trichlorofluoromethane	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Vinyl acetate	ND	*	13	1.5	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1
Vinyl chloride	ND	*	2.6	0.77	ug/Kg	☼	12/12/14 14:25	12/16/14 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*132*	*	*71 - 136*	*12/12/14 14:25*	*12/16/14 15:29*	*1*
4-Bromofluorobenzene (Surr)	*143*	*X	*70 - 120*	*12/12/14 14:25*	*12/16/14 15:29*	*1*
Dibromofluoromethane (Surr)	*120*	*	*75 - 132*	*12/12/14 14:25*	*12/16/14 15:29*	*1*
Toluene-d8 (Surr)	*131*	*X	*80 - 120*	*12/12/14 14:25*	*12/16/14 15:29*	*1*
Trifluorotoluene (Surr)	*72*	*	*65 - 140*	*12/12/14 14:25*	*12/16/14 15:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
1,2-Dichlorobenzene	ND		1200	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
1,3-Dichlorobenzene	ND		1100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
1,4-Dichlorobenzene	ND		1100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
1-Methylnaphthalene	**110**	J	640	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2,2'-oxybis[1-chloropropane]	ND		5300	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2,4,5-Trichlorophenol	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2,4,6-Trichlorophenol	ND		3200	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2,4-Dichlorophenol	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2,4-Dimethylphenol	ND	^	2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2,4-Dinitrophenol	ND		21000	4200	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2,4-Dinitrotoluene	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2,6-Dinitrotoluene	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2-Chloronaphthalene	ND		420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2-Chlorophenol	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2-Methylnaphthalene	**110**	J	420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2-Methylphenol	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-CB-24-20141211-S
Date Collected: 12/11/14 14:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-3
Matrix: Solid
Percent Solids: 47.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
2-Nitrophenol	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
3 & 4 Methylphenol	ND		4200	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
3,3'-Dichlorobenzidine	ND		4200	640	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
3-Nitroaniline	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
4,6-Dinitro-2-methylphenol	ND		21000	2100	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
4-Bromophenyl phenyl ether	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
4-Chloro-3-methylphenol	**700**	**J**	2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
4-Chloroaniline	ND	*	2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
4-Chlorophenyl phenyl ether	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
4-Nitroaniline	ND		2100	420	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
4-Nitrophenol	ND		21000	5300	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Acenaphthene	**190**	**J**	420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Acenaphthylene	ND		420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Anthracene	**490**		420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Benzo[a]anthracene	**1600**		420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Benzo[a]pyrene	**1500**		640	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Benzo[b]fluoranthene	**2800**		420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Benzo[g,h,i]perylene	**850**		530	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Benzo[k]fluoranthene	**900**		530	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Benzoic acid	ND		53000	16000	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Benzyl alcohol	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Bis(2-chloroethoxy)methane	ND	^	2100	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Bis(2-chloroethyl)ether	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Bis(2-ethylhexyl) phthalate	**64000**		13000	1100	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Butyl benzyl phthalate	ND		4200	1100	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Carbazole	**400**	**J**	2100	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Chrysene	**3400**		530	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Dibenz(a,h)anthracene	ND		850	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Dibenzofuran	**110**	**J**	2100	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Diethyl phthalate	ND		4200	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Dimethyl phthalate	**1200**	**J**	2100	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Di-n-butyl phthalate	**35000**		11000	1100	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Di-n-octyl phthalate	**4600**	**J**	11000	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Fluoranthene	**4000**		420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Fluorene	ND		420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Hexachlorobenzene	ND		1100	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Hexachlorobutadiene	ND		1100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Hexachlorocyclopentadiene	ND		2100	210	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Hexachloroethane	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Indeno[1,2,3-cd]pyrene	**680**	**J**	850	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Isophorone	ND	^	2100	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Naphthalene	**120**	**J**	420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Nitrobenzene	ND	^	2100	720	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
N-Nitrosodimethylamine	ND		21000	5300	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
N-Nitrosodi-n-propylamine	ND		2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
N-Nitrosodiphenylamine	**160**	**J**	1100	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Pentachlorophenol	**1800**	**J**	4200	420	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Phenanthrene	**2700**		420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100

Client Sample ID: SC-CB-24-20141211-S
Date Collected: 12/11/14 14:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-3
Matrix: Solid
Percent Solids: 47.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**520**	**J**	2100	320	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100
Pyrene	**4300**		420	110	ug/Kg	☼	12/18/14 16:00	12/19/14 20:11	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*168*	*X*	*28 - 143*	*12/18/14 16:00*	*12/19/14 20:11*	*100*
2-Fluorobiphenyl	*66*		*42 - 140*	*12/18/14 16:00*	*12/19/14 20:11*	*100*
2-Fluorophenol	*79*		*36 - 145*	*12/18/14 16:00*	*12/19/14 20:11*	*100*
Nitrobenzene-d5	*91*		*38 - 141*	*12/18/14 16:00*	*12/19/14 20:11*	*100*
Phenol-d5	*97*		*38 - 149*	*12/18/14 16:00*	*12/19/14 20:11*	*100*
Terphenyl-d14	*129*		*42 - 151*	*12/18/14 16:00*	*12/19/14 20:11*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**31**	**B**	22	2.8	mg/Kg	☼	12/17/14 12:03	12/17/14 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*50 - 150*	*12/17/14 12:03*	*12/17/14 20:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.020	0.0065	mg/Kg	☼	12/18/14 13:20	01/06/15 16:03	1
Arochlor 1221	ND		0.022	0.016	mg/Kg	☼	12/18/14 13:20	01/06/15 16:03	1
Arochlor 1232	ND		0.022	0.014	mg/Kg	☼	12/18/14 13:20	01/06/15 16:03	1
Arochlor 1242	ND		0.020	0.0043	mg/Kg	☼	12/18/14 13:20	01/06/15 16:03	1
Arochlor 1248	**0.18**	**P**	0.020	0.0061	mg/Kg	☼	12/18/14 13:20	01/06/15 16:03	1
Arochlor 1254	ND		0.020	0.0043	mg/Kg	☼	12/18/14 13:20	01/06/15 16:03	1
Arochlor 1260	**0.39**		0.020	0.0061	mg/Kg	☼	12/18/14 13:20	01/06/15 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*45 - 135*	*12/18/14 13:20*	*01/06/15 16:03*	*1*
DCB Decachlorobiphenyl	*61*		*50 - 140*	*12/18/14 13:20*	*01/06/15 16:03*	*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)	**1700**	**Y**	50	11	mg/Kg	☼	12/15/14 13:03	12/16/14 13:57	1
Motor Oil (>C24-C36)	**8900**	**Y**	100	18	mg/Kg	☼	12/15/14 13:03	12/16/14 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*80*		*50 - 150*	*12/15/14 13:03*	*12/16/14 13:57*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**10**		0.97	0.35	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10
Lead	**490**		0.39	0.025	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10
Antimony	**9.4**		0.39	0.081	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10
Beryllium	**0.22**	**J**	0.39	0.068	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10
Cadmium	**3.3**		0.39	0.015	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10
Chromium	**62**		0.39	0.22	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10
Copper	**2500**		0.77	0.19	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10
Nickel	**47**		0.97	0.16	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10
Selenium	**1.0**	**J**	1.4	0.39	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-CB-24-20141211-S
Date Collected: 12/11/14 14:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-3
Matrix: Solid
Percent Solids: 47.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.56		0.39	0.023	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10
Thallium	ND		0.97	0.25	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10
Zinc	1600		3.9	2.2	mg/Kg	☼	01/06/15 11:06	01/07/15 15:32	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.032	0.010	mg/Kg	☼	12/15/14 16:10	12/16/14 11:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	47		0.10	0.10	%			12/16/14 09:54	1
Total Organic Carbon	140000		2000	250	mg/Kg			12/20/14 14:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobbles	0.00				%			12/18/14 18:36	1
Gravel	0.85				%			12/18/14 18:36	1
Sand	45				%			12/18/14 18:36	1
Silt	53				%			12/18/14 18:36	1
Clay	1.5				%			12/18/14 18:36	1

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-MH-20-20141211-W
Date Collected: 12/11/14 15:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
1,2-Dichlorobenzene	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
1,3-Dichlorobenzene	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
1,4-Dichlorobenzene	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
1-Methylnaphthalene	ND		0.57	0.29	ug/L		12/13/14 11:42	12/17/14 22:40	10
2,2'-oxybis[1-chloropropane]	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
2,4,5-Trichlorophenol	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
2,4,6-Trichlorophenol	ND		5.7	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
2,4-Dichlorophenol	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
2,4-Dimethylphenol	ND		19	2.9	ug/L		12/13/14 11:42	12/17/14 22:40	10
2,4-Dinitrophenol	ND		48	9.6	ug/L		12/13/14 11:42	12/17/14 22:40	10
2,4-Dinitrotoluene	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
2,6-Dinitrotoluene	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
2-Chloronaphthalene	ND		0.57	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
2-Chlorophenol	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
2-Methylnaphthalene	ND		1.9	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
2-Methylphenol	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
2-Nitroaniline	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
2-Nitrophenol	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
3 & 4 Methylphenol	ND		7.7	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
3,3'-Dichlorobenzidine	ND	*	19	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
3-Nitroaniline	ND	*	3.8	1.1	ug/L		12/13/14 11:42	12/17/14 22:40	10
4,6-Dinitro-2-methylphenol	ND		38	9.6	ug/L		12/13/14 11:42	12/17/14 22:40	10
4-Bromophenyl phenyl ether	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
4-Chloro-3-methylphenol	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
4-Chloroaniline	ND	*	3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
4-Chlorophenyl phenyl ether	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
4-Nitroaniline	ND		5.7	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
4-Nitrophenol	ND		29	9.6	ug/L		12/13/14 11:42	12/17/14 22:40	10
Acenaphthene	ND		0.96	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
Acenaphthylene	ND		0.77	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
Anthracene	ND		0.38	0.096	ug/L		12/13/14 11:42	12/17/14 22:40	10
Benzo[a]anthracene	ND		0.57	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
Benzo[a]pyrene	**0.23**	**J**	0.38	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
Benzo[b]fluoranthene	ND		0.77	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
Benzo[g,h,i]perylene	**0.24**	**J**	0.57	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
Benzo[k]fluoranthene	ND		0.57	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
Benzoic acid	ND		29	5.7	ug/L		12/13/14 11:42	12/17/14 22:40	10
Benzyl alcohol	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Bis(2-chloroethoxy)methane	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Bis(2-chloroethyl)ether	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Bis(2-ethylhexyl) phthalate	ND	*	29	11	ug/L		12/13/14 11:42	12/17/14 22:40	10
Butyl benzyl phthalate	ND	*	5.7	1.9	ug/L		12/13/14 11:42	12/17/14 22:40	10
Carbazole	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Chrysene	ND		0.38	0.12	ug/L		12/13/14 11:42	12/17/14 22:40	10
Dibenz(a,h)anthracene	**0.23**	**J**	0.57	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
Dibenzofuran	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Diethyl phthalate	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Dimethyl phthalate	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-MH-20-20141211-W
Date Collected: 12/11/14 15:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		3.8	1.2	ug/L		12/13/14 11:42	12/17/14 22:40	10
Di-n-octyl phthalate	ND		3.8	1.7	ug/L		12/13/14 11:42	12/17/14 22:40	10
Fluoranthene	**0.23**	**J**	0.48	0.12	ug/L		12/13/14 11:42	12/17/14 22:40	10
Fluorene	ND		0.57	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
Hexachlorobenzene	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Hexachlorobutadiene	ND		5.7	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Hexachlorocyclopentadiene	ND		19	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Hexachloroethane	ND		5.7	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Indeno[1,2,3-cd]pyrene	ND		0.57	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
Isophorone	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Naphthalene	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Nitrobenzene	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
N-Nitrosodimethylamine	ND		19	1.9	ug/L		12/13/14 11:42	12/17/14 22:40	10
N-Nitrosodi-n-propylamine	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
N-Nitrosodiphenylamine	ND		3.8	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Pentachlorophenol	**4.5**	**J**	6.7	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Phenanthrene	ND		0.77	0.19	ug/L		12/13/14 11:42	12/17/14 22:40	10
Phenol	ND		5.7	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10
Pyrene	**0.33**	**J**	0.57	0.12	ug/L		12/13/14 11:42	12/17/14 22:40	10
2,3,4,6-Tetrachlorophenol	ND		6.7	0.96	ug/L		12/13/14 11:42	12/17/14 22:40	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*97*		*44 - 125*	*12/13/14 11:42*	*12/17/14 22:40*	*10*
2-Fluorobiphenyl	*61*		*50 - 120*	*12/13/14 11:42*	*12/17/14 22:40*	*10*
2-Fluorophenol	*59*		*30 - 134*	*12/13/14 11:42*	*12/17/14 22:40*	*10*
Nitrobenzene-d5	*76*		*59 - 120*	*12/13/14 11:42*	*12/17/14 22:40*	*10*
Phenol-d5	*60*		*52 - 120*	*12/13/14 11:42*	*12/17/14 22:40*	*10*
Terphenyl-d14	*95*		*64 - 150*	*12/13/14 11:42*	*12/17/14 22:40*	*10*

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010	0.00075	mg/L		12/22/14 14:22	12/23/14 14:44	1
Antimony	**0.00059**		0.00040	0.000080	mg/L		12/22/14 14:22	12/23/14 14:44	1
Beryllium	ND		0.00040	0.00010	mg/L		12/22/14 14:22	12/23/14 14:44	1
Cadmium	**0.00040**	**B**	0.00040	0.000028	mg/L		12/22/14 14:22	12/23/14 14:44	1
Chromium	**0.0012**		0.00040	0.00027	mg/L		12/22/14 14:22	12/23/14 14:44	1
Copper	**0.065**		0.0010	0.00011	mg/L		12/22/14 14:22	12/23/14 14:44	1
Lead	**0.013**		0.00040	0.000034	mg/L		12/22/14 14:22	12/23/14 14:44	1
Nickel	**0.0014**	**J**	0.0030	0.00040	mg/L		12/22/14 14:22	12/23/14 14:44	1
Selenium	ND		0.0010	0.00071	mg/L		12/22/14 14:22	12/23/14 14:44	1
Silver	**0.000034**	**J**	0.00040	0.000030	mg/L		12/22/14 14:22	12/23/14 14:44	1
Thallium	ND		0.0010	0.00028	mg/L		12/22/14 14:22	12/23/14 14:44	1
Zinc	**0.22**		0.0040	0.0019	mg/L		12/22/14 14:22	12/23/14 14:44	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000045**	**J B**	0.00020	0.000041	mg/L		12/15/14 13:16	12/15/14 16:33	1

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-MH-20-20141211-W
Date Collected: 12/11/14 15:00
Date Received: 12/12/14 12:01

Lab Sample ID: 580-46690-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	14		10	10	umhos/cm			12/23/14 20:10	1
Chloride	0.66	J	0.90	0.30	mg/L			12/15/14 13:41	1
Nitrate as N	ND	H	0.90	0.20	mg/L			12/15/14 13:41	1
Sulfate	0.87	J	1.2	0.40	mg/L			12/15/14 13:41	1
Alkalinity	5.3		5.0	5.0	mg/L			12/16/14 09:26	1
Bicarbonate Alkalinity as CaCO3	5.3		5.0	5.0	mg/L			12/16/14 09:26	1
Carbonate Alkalinity as CaCO3	ND		5.0	5.0	mg/L			12/16/14 09:26	1
Total Suspended Solids	14		6.7	6.7	mg/L			12/18/14 19:09	1
pH	6.61	HF	0.0100	0.0100	SU			12/15/14 19:35	1
Total Organic Carbon	3.5		1.0	0.33	mg/L			12/21/14 10:07	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	2.9		1.0	0.33	mg/L			12/21/14 10:07	1

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

Lab Sample ID: MB 580-178282/1-A
Matrix: Solid
Analysis Batch: 178291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 178282

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.90	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,1,2-Trichloroethane	ND		2.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,1-Dichloroethane	ND		1.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,1-Dichloroethene	ND		5.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,1-Dichloropropene	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,2,3-Trichlorobenzene	ND		2.0	0.60	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,2,3-Trichloropropane	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,2,4-Trimethylbenzene	ND		2.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,2-Dibromoethane	ND		1.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,2-Dichlorobenzene	ND		2.0	0.60	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,2-Dichloroethane	ND		1.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,2-Dichloropropane	ND		1.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,3,5-Trimethylbenzene	ND		5.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,3-Dichlorobenzene	ND		2.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,3-Dichloropropane	ND		2.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
1,4-Dichlorobenzene	ND		1.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
2,2-Dichloropropane	ND		5.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
2-Butanone	ND		10	3.0	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
2-Chloroethyl vinyl ether	ND		5.0	1.4	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
2-Chlorotoluene	ND		2.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
2-Hexanone	ND		5.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
4-Chlorotoluene	ND		2.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
4-Isopropyltoluene	ND		2.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
4-Methyl-2-pentanone	ND		5.0	1.5	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Acetone	ND		15	2.4	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Acrolein	ND		30	8.2	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Acrylonitrile	ND		10	2.8	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Benzene	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Bromobenzene	ND		2.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Bromochloromethane	ND		2.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Bromodichloromethane	ND		1.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Bromoform	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Bromomethane	ND		1.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Carbon disulfide	ND		1.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Carbon tetrachloride	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Chlorobenzene	ND		1.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Chlorodibromomethane	ND		2.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Chloroethane	ND		1.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Chloroform	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Chloromethane	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
cis-1,3-Dichloropropene	ND		1.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Dibromomethane	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1

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

Lab Sample ID: MB 580-178282/1-A
Matrix: Solid
Analysis Batch: 178291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 178282

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Ethylbenzene	ND		1.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Hexachloro-1,3-butadiene	ND		2.0	0.60	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Iodomethane	ND		15	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Isopropylbenzene	ND		2.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Methyl tert-butyl ether	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Methylene Chloride	ND		15	3.0	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
m-Xylene & p-Xylene	ND		2.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Naphthalene	ND		5.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
n-Butylbenzene	ND		2.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
N-Propylbenzene	ND		2.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
o-Xylene	ND		2.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
sec-Butylbenzene	ND		2.0	0.50	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Styrene	ND		2.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
tert-Butylbenzene	ND		2.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Tetrachloroethene	ND		1.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Toluene	ND		2.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
trans-1,3-Dichloropropene	ND		1.0	0.20	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
trans-1,4-Dichloro-2-butene	ND		5.0	1.7	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Trichloroethene	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Trichlorofluoromethane	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Vinyl acetate	ND		5.0	0.60	ug/Kg		12/16/14 11:56	12/16/14 12:30	1
Vinyl chloride	ND		1.0	0.30	ug/Kg		12/16/14 11:56	12/16/14 12:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*71 - 136*	*12/16/14 11:56*	*12/16/14 12:30*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 120*	*12/16/14 11:56*	*12/16/14 12:30*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 132*	*12/16/14 11:56*	*12/16/14 12:30*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*	*12/16/14 11:56*	*12/16/14 12:30*	*1*
Trifluorotoluene (Surr)	*96*		*65 - 140*	*12/16/14 11:56*	*12/16/14 12:30*	*1*

Lab Sample ID: LCS 580-178282/2-A
Matrix: Solid
Analysis Batch: 178291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 178282

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	30.0	31.9		ug/Kg		106	72 - 123
1,1,1-Trichloroethane	30.0	34.0		ug/Kg		113	63 - 135
1,1,2,2-Tetrachloroethane	30.0	31.9		ug/Kg		106	73 - 125
1,1,2-Trichloro-1,2,2-trifluoroethane	30.0	35.6		ug/Kg		119	66 - 163
1,1,2-Trichloroethane	30.0	31.4		ug/Kg		105	77 - 124
1,1-Dichloroethane	30.0	30.2		ug/Kg		101	70 - 128
1,1-Dichloroethene	30.0	35.1		ug/Kg		117	70 - 133
1,1-Dichloropropene	30.0	30.5		ug/Kg		102	77 - 125
1,2,3-Trichlorobenzene	30.0	32.8		ug/Kg		109	61 - 130
1,2,3-Trichloropropane	30.0	30.4		ug/Kg		101	77 - 123

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

Lab Sample ID: LCS 580-178282/2-A
Matrix: Solid
Analysis Batch: 178291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 178282

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	30.0	32.0		ug/Kg		107	61 - 130
1,2,4-Trimethylbenzene	30.0	30.7		ug/Kg		102	79 - 124
1,2-Dibromo-3-Chloropropane	30.0	30.4		ug/Kg		101	53 - 132
1,2-Dibromoethane	30.0	30.6		ug/Kg		102	69 - 126
1,2-Dichlorobenzene	30.0	30.2		ug/Kg		101	79 - 117
1,2-Dichloroethane	30.0	28.5		ug/Kg		95	71 - 128
1,2-Dichloropropane	30.0	30.8		ug/Kg		103	76 - 161
1,3,5-Trimethylbenzene	30.0	32.2		ug/Kg		107	80 - 125
1,3-Dichlorobenzene	30.0	30.3		ug/Kg		101	79 - 119
1,3-Dichloropropane	30.0	30.4		ug/Kg		101	77 - 123
1,4-Dichlorobenzene	30.0	29.1		ug/Kg		97	79 - 117
2,2-Dichloropropane	30.0	29.0		ug/Kg		97	56 - 144
2-Butanone	120	134		ug/Kg		111	30 - 160
2-Chloroethyl vinyl ether	30.0	23.9		ug/Kg		80	60 - 150
2-Chlorotoluene	30.0	30.1		ug/Kg		100	79 - 122
2-Hexanone	120	127		ug/Kg		106	45 - 145
4-Chlorotoluene	30.0	30.5		ug/Kg		102	80 - 122
4-Isopropyltoluene	30.0	32.3		ug/Kg		108	78 - 126
4-Methyl-2-pentanone	120	128		ug/Kg		106	45 - 145
Acetone	120	125		ug/Kg		104	20 - 160
Acrolein	178	146		ug/Kg		82	10 - 125
Acrylonitrile	300	302		ug/Kg		101	74 - 117
Benzene	30.0	30.2		ug/Kg		101	70 - 128
Bromobenzene	30.0	30.2		ug/Kg		101	80 - 120
Bromochloromethane	30.0	31.2		ug/Kg		104	78 - 123
Bromodichloromethane	30.0	31.0		ug/Kg		103	58 - 133
Bromoform	30.0	31.1		ug/Kg		104	50 - 124
Bromomethane	30.0	33.8		ug/Kg		113	57 - 148
Carbon disulfide	30.0	30.7		ug/Kg		102	45 - 160
Carbon tetrachloride	30.0	29.6		ug/Kg		99	59 - 145
Chlorobenzene	30.0	30.4		ug/Kg		101	75 - 120
Chlorodibromomethane	30.0	31.7		ug/Kg		106	42 - 129
Chloroethane	30.0	31.9		ug/Kg		106	48 - 167
Chloroform	30.0	29.5		ug/Kg		98	78 - 125
Chloromethane	30.0	39.0		ug/Kg		130	55 - 136
cis-1,2-Dichloroethene	30.0	34.8		ug/Kg		116	70 - 130
cis-1,3-Dichloropropene	30.0	31.6		ug/Kg		105	69 - 129
Dibromomethane	30.0	29.7		ug/Kg		99	78 - 126
Dichlorodifluoromethane	30.0	33.7		ug/Kg		112	38 - 150
Ethylbenzene	30.0	31.0		ug/Kg		103	78 - 126
Hexachloro-1,3-butadiene	30.0	31.9		ug/Kg		106	68 - 134
Iodomethane	30.0	35.6		ug/Kg		119	44 - 148
Isopropylbenzene	30.0	31.0		ug/Kg		103	79 - 127
Methyl tert-butyl ether	30.0	30.2		ug/Kg		101	65 - 125
Methylene Chloride	30.0	35.3		ug/Kg		118	57 - 146
m-Xylene & p-Xylene	30.0	30.8		ug/Kg		103	78 - 126
Naphthalene	30.0	32.9		ug/Kg		110	14 - 170
n-Butylbenzene	30.0	32.0		ug/Kg		107	78 - 128

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

Lab Sample ID: LCS 580-178282/2-A
Matrix: Solid
Analysis Batch: 178291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 178282

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Propylbenzene	30.0	31.0		ug/Kg		103	81 - 127
o-Xylene	30.0	30.9		ug/Kg		103	77 - 127
sec-Butylbenzene	30.0	32.3		ug/Kg		108	78 - 128
Styrene	30.0	31.3		ug/Kg		104	79 - 127
tert-Butylbenzene	30.0	29.8		ug/Kg		99	71 - 136
Tetrachloroethene	30.0	31.6		ug/Kg		105	56 - 155
Toluene	30.0	29.6		ug/Kg		99	75 - 126
trans-1,2-Dichloroethene	30.0	35.0		ug/Kg		117	76 - 131
trans-1,3-Dichloropropene	30.0	31.4		ug/Kg		105	72 - 129
trans-1,4-Dichloro-2-butene	30.0	30.8		ug/Kg		103	42 - 160
Trichloroethene	30.0	30.8		ug/Kg		103	83 - 124
Trichlorofluoromethane	30.0	35.4		ug/Kg		118	47 - 165
Vinyl acetate	60.5	55.5		ug/Kg		92	19 - 144
Vinyl chloride	30.0	35.6		ug/Kg		119	67 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*71 - 136*
4-Bromofluorobenzene (Surr)	*98*		*70 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 132*
Toluene-d8 (Surr)	*99*		*80 - 120*
Trifluorotoluene (Surr)	*97*		*65 - 140*

Lab Sample ID: LCSD 580-178282/3-A
Matrix: Solid
Analysis Batch: 178291

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 178282

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	30.0	31.4		ug/Kg		105	72 - 123	2	20
1,1,1-Trichloroethane	30.0	32.3		ug/Kg		108	63 - 135	5	20
1,1,2,2-Tetrachloroethane	30.0	31.6		ug/Kg		105	73 - 125	1	22
1,1,2-Trichloro-1,2,2-trifluoroethane	30.0	33.8		ug/Kg		113	66 - 163	5	30
1,1,2-Trichloroethane	30.0	29.9		ug/Kg		100	77 - 124	5	18
1,1-Dichloroethane	30.0	28.7		ug/Kg		96	70 - 128	5	21
1,1-Dichloroethene	30.0	32.2		ug/Kg		107	70 - 133	9	23
1,1-Dichloropropene	30.0	28.9		ug/Kg		96	77 - 125	5	16
1,2,3-Trichlorobenzene	30.0	29.8		ug/Kg		99	61 - 130	10	23
1,2,3-Trichloropropane	30.0	28.9		ug/Kg		96	77 - 123	5	23
1,2,4-Trichlorobenzene	30.0	29.4		ug/Kg		98	61 - 130	9	22
1,2,4-Trimethylbenzene	30.0	28.5		ug/Kg		95	79 - 124	7	18
1,2-Dibromo-3-Chloropropane	30.0	29.4		ug/Kg		98	53 - 132	4	27
1,2-Dibromoethane	30.0	29.5		ug/Kg		98	69 - 126	4	21
1,2-Dichlorobenzene	30.0	28.5		ug/Kg		95	79 - 117	6	17
1,2-Dichloroethane	30.0	27.1		ug/Kg		90	71 - 128	5	18
1,2-Dichloropropane	30.0	29.6		ug/Kg		99	76 - 161	4	15
1,3,5-Trimethylbenzene	30.0	29.9		ug/Kg		100	80 - 125	7	18
1,3-Dichlorobenzene	30.0	27.6		ug/Kg		92	79 - 119	9	17
1,3-Dichloropropane	30.0	29.4		ug/Kg		98	77 - 123	3	19

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

Lab Sample ID: LCSD 580-178282/3-A
Matrix: Solid
Analysis Batch: 178291

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 178282

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	30.0	27.7		ug/Kg		92	79 - 117	5	18
2,2-Dichloropropane	30.0	27.0		ug/Kg		90	56 - 144	7	21
2-Butanone	120	126		ug/Kg		105	30 - 160	6	30
2-Chloroethyl vinyl ether	30.0	21.6		ug/Kg		72	60 - 150	10	30
2-Chlorotoluene	30.0	28.5		ug/Kg		95	79 - 122	5	18
2-Hexanone	120	125		ug/Kg		104	45 - 145	2	30
4-Chlorotoluene	30.0	28.4		ug/Kg		95	80 - 122	7	18
4-Isopropyltoluene	30.0	29.6		ug/Kg		99	78 - 126	9	18
4-Methyl-2-pentanone	120	125		ug/Kg		104	45 - 145	2	30
Acetone	120	118		ug/Kg		99	20 - 160	6	30
Acrolein	178	150		ug/Kg		84	10 - 125	3	30
Acrylonitrile	300	292		ug/Kg		97	74 - 117	3	30
Benzene	30.0	28.7		ug/Kg		96	70 - 128	5	19
Bromobenzene	30.0	28.2		ug/Kg		94	80 - 120	7	19
Bromochloromethane	30.0	29.7		ug/Kg		99	78 - 123	5	19
Bromodichloromethane	30.0	28.7		ug/Kg		96	58 - 133	8	19
Bromoform	30.0	29.0		ug/Kg		97	50 - 124	7	25
Bromomethane	30.0	32.4		ug/Kg		108	57 - 148	4	29
Carbon disulfide	30.0	28.9		ug/Kg		96	45 - 160	6	30
Carbon tetrachloride	30.0	27.8		ug/Kg		93	59 - 145	6	19
Chlorobenzene	30.0	28.9		ug/Kg		96	75 - 120	5	21
Chlorodibromomethane	30.0	30.7		ug/Kg		102	42 - 129	3	23
Chloroethane	30.0	30.6		ug/Kg		102	48 - 167	4	53
Chloroform	30.0	28.3		ug/Kg		94	78 - 125	4	17
Chloromethane	30.0	37.8		ug/Kg		126	55 - 136	3	26
cis-1,2-Dichloroethene	30.0	33.8		ug/Kg		113	70 - 130	3	19
cis-1,3-Dichloropropene	30.0	29.8		ug/Kg		99	69 - 129	6	19
Dibromomethane	30.0	28.4		ug/Kg		95	78 - 126	5	18
Dichlorodifluoromethane	30.0	32.3		ug/Kg		108	38 - 150	4	26
Ethylbenzene	30.0	30.1		ug/Kg		100	78 - 126	3	23
Hexachloro-1,3-butadiene	30.0	28.1		ug/Kg		94	68 - 134	13	21
Iodomethane	30.0	33.7		ug/Kg		112	44 - 148	6	30
Isopropylbenzene	30.0	30.0		ug/Kg		100	79 - 127	3	20
Methyl tert-butyl ether	30.0	29.1		ug/Kg		97	65 - 125	4	30
Methylene Chloride	30.0	34.6		ug/Kg		115	57 - 146	2	21
m-Xylene & p-Xylene	30.0	29.8		ug/Kg		99	78 - 126	3	23
Naphthalene	30.0	30.5		ug/Kg		102	14 - 170	7	50
n-Butylbenzene	30.0	29.5		ug/Kg		98	78 - 128	8	17
N-Propylbenzene	30.0	28.6		ug/Kg		95	81 - 127	8	20
o-Xylene	30.0	30.4		ug/Kg		101	77 - 127	2	22
sec-Butylbenzene	30.0	29.5		ug/Kg		98	78 - 128	9	17
Styrene	30.0	30.8		ug/Kg		103	79 - 127	2	21
tert-Butylbenzene	30.0	27.8		ug/Kg		93	71 - 136	7	27
Tetrachloroethene	30.0	29.9		ug/Kg		100	56 - 155	5	27
Toluene	30.0	28.9		ug/Kg		96	75 - 126	2	19
trans-1,2-Dichloroethene	30.0	34.0		ug/Kg		113	76 - 131	3	18
trans-1,3-Dichloropropene	30.0	29.6		ug/Kg		99	72 - 129	6	20
trans-1,4-Dichloro-2-butene	30.0	27.8		ug/Kg		93	42 - 160	10	30

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

Lab Sample ID: LCSD 580-178282/3-A
Matrix: Solid
Analysis Batch: 178291

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 178282

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichloroethene			30.0	29.1		ug/Kg		97	83 - 124	6	17
Trichlorofluoromethane			30.0	33.1		ug/Kg		110	47 - 165	7	54
Vinyl acetate			60.5	55.0		ug/Kg		91	19 - 144	1	30
Vinyl chloride			30.0	33.8		ug/Kg		113	67 - 131	5	22

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 136*
4-Bromofluorobenzene (Surr)	*98*		*70 - 120*
Dibromofluoromethane (Surr)	*104*		*75 - 132*
Toluene-d8 (Surr)	*102*		*80 - 120*
Trifluorotoluene (Surr)	*99*		*65 - 140*

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

Lab Sample ID: MB 580-178110/1-A
Matrix: Water
Analysis Batch: 178265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 178110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
1,2-Dichlorobenzene	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
1,3-Dichlorobenzene	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
1,4-Dichlorobenzene	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
1-Methylnaphthalene	ND		0.060	0.030	ug/L		12/13/14 11:42	12/16/14 12:17	1
2,2'-oxybis[1-chloropropane]	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
2,4,5-Trichlorophenol	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
2,4,6-Trichlorophenol	ND		0.60	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
2,4-Dichlorophenol	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
2,4-Dimethylphenol	ND		2.0	0.30	ug/L		12/13/14 11:42	12/16/14 12:17	1
2,4-Dinitrophenol	ND		5.0	1.0	ug/L		12/13/14 11:42	12/16/14 12:17	1
2,4-Dinitrotoluene	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
2,6-Dinitrotoluene	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
2-Chloronaphthalene	ND		0.060	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
2-Chlorophenol	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
2-Methylphenol	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
2-Nitroaniline	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
2-Nitrophenol	ND	^	0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
3 & 4 Methylphenol	ND		0.80	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
3,3'-Dichlorobenzidine	ND		2.0	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
3-Nitroaniline	ND		0.40	0.12	ug/L		12/13/14 11:42	12/16/14 12:17	1
4,6-Dinitro-2-methylphenol	ND		4.0	1.0	ug/L		12/13/14 11:42	12/16/14 12:17	1
4-Bromophenyl phenyl ether	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
4-Chloro-3-methylphenol	ND	^	0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
4-Chloroaniline	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
4-Chlorophenyl phenyl ether	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
4-Nitroaniline	ND		0.60	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
4-Nitrophenol	ND		3.0	1.0	ug/L		12/13/14 11:42	12/16/14 12:17	1

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

Lab Sample ID: MB 580-178110/1-A
Matrix: Water
Analysis Batch: 178265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 178110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
Acenaphthylene	ND		0.080	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
Anthracene	ND		0.040	0.010	ug/L		12/13/14 11:42	12/16/14 12:17	1
Benzo[a]anthracene	ND		0.060	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
Benzo[a]pyrene	ND		0.040	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
Benzo[b]fluoranthene	ND		0.080	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
Benzo[g,h,i]perylene	ND		0.060	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
Benzo[k]fluoranthene	ND		0.060	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
Benzoic acid	ND		3.0	0.60	ug/L		12/13/14 11:42	12/16/14 12:17	1
Benzyl alcohol	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Bis(2-chloroethoxy)methane	ND	^	0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Bis(2-chloroethyl)ether	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Bis(2-ethylhexyl) phthalate	1.86	J	3.0	1.2	ug/L		12/13/14 11:42	12/16/14 12:17	1
Butyl benzyl phthalate	0.491	J	0.60	0.20	ug/L		12/13/14 11:42	12/16/14 12:17	1
Carbazole	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Chrysene	ND		0.040	0.013	ug/L		12/13/14 11:42	12/16/14 12:17	1
Dibenz(a,h)anthracene	ND		0.060	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
Dibenzofuran	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Diethyl phthalate	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Dimethyl phthalate	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Di-n-butyl phthalate	1.18		0.40	0.13	ug/L		12/13/14 11:42	12/16/14 12:17	1
Di-n-octyl phthalate	ND		0.40	0.18	ug/L		12/13/14 11:42	12/16/14 12:17	1
Fluoranthene	ND		0.050	0.013	ug/L		12/13/14 11:42	12/16/14 12:17	1
Fluorene	ND		0.060	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
Hexachlorobenzene	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Hexachlorobutadiene	ND		0.60	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Hexachlorocyclopentadiene	ND		2.0	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Hexachloroethane	ND		0.60	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Indeno[1,2,3-cd]pyrene	ND		0.060	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
Isophorone	ND	^	0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Naphthalene	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Nitrobenzene	ND	^	0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
N-Nitrosodimethylamine	ND		2.0	0.20	ug/L		12/13/14 11:42	12/16/14 12:17	1
N-Nitrosodi-n-propylamine	ND	^	0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
N-Nitrosodiphenylamine	ND		0.40	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Pentachlorophenol	ND		0.70	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Phenanthrene	ND		0.080	0.020	ug/L		12/13/14 11:42	12/16/14 12:17	1
Phenol	ND		0.60	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1
Pyrene	ND		0.060	0.013	ug/L		12/13/14 11:42	12/16/14 12:17	1
2,3,4,6-Tetrachlorophenol	ND		0.70	0.10	ug/L		12/13/14 11:42	12/16/14 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*44 - 125*	*12/13/14 11:42*	*12/16/14 12:17*	*1*
2-Fluorobiphenyl	*76*		*50 - 120*	*12/13/14 11:42*	*12/16/14 12:17*	*1*
2-Fluorophenol	*62*		*30 - 134*	*12/13/14 11:42*	*12/16/14 12:17*	*1*
Nitrobenzene-d5	*76*		*59 - 120*	*12/13/14 11:42*	*12/16/14 12:17*	*1*
Phenol-d5	*71*		*52 - 120*	*12/13/14 11:42*	*12/16/14 12:17*	*1*
Terphenyl-d14	*88*		*64 - 150*	*12/13/14 11:42*	*12/16/14 12:17*	*1*

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

Lab Sample ID: LCS 580-178110/2-A
Matrix: Water
Analysis Batch: 178265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 178110

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	2.00	1.49		ug/L		75	40 - 125
1,2-Dichlorobenzene	2.00	1.49		ug/L		74	44 - 125
1,3-Dichlorobenzene	2.00	1.38		ug/L		69	40 - 125
1,4-Dichlorobenzene	2.00	1.36		ug/L		68	40 - 125
1-Methylnaphthalene	2.00	1.62		ug/L		81	54 - 125
2,2'-oxybis[1-chloropropane]	2.00	1.18		ug/L		59	44 - 130
2,4,5-Trichlorophenol	2.00	1.85		ug/L		92	66 - 130
2,4,6-Trichlorophenol	2.00	1.93		ug/L		97	55 - 140
2,4-Dichlorophenol	2.00	1.90		ug/L		95	50 - 140
2,4-Dimethylphenol	2.00	1.54	J	ug/L		77	30 - 135
2,4-Dinitrophenol	4.00	2.81	J	ug/L		70	24 - 146
2,4-Dinitrotoluene	2.00	1.81		ug/L		90	73 - 126
2,6-Dinitrotoluene	2.00	1.83		ug/L		92	67 - 134
2-Chloronaphthalene	2.00	1.73		ug/L		86	55 - 125
2-Chlorophenol	2.00	1.91		ug/L		96	57 - 125
2-Methylnaphthalene	2.00	1.61		ug/L		81	56 - 125
2-Methylphenol	2.00	1.82		ug/L		91	60 - 130
2-Nitroaniline	2.00	1.79		ug/L		90	52 - 140
2-Nitrophenol	2.00	2.08	^	ug/L		104	55 - 140
3 & 4 Methylphenol	2.00	1.88		ug/L		94	60 - 130
3,3'-Dichlorobenzidine	4.00	0.688	J *	ug/L		17	20 - 175
3-Nitroaniline	2.00	0.698		ug/L		35	22 - 124
4,6-Dinitro-2-methylphenol	4.00	3.38	J	ug/L		84	50 - 136
4-Bromophenyl phenyl ether	2.00	1.93		ug/L		97	62 - 132
4-Chloro-3-methylphenol	2.00	1.94	^	ug/L		97	65 - 145
4-Chloroaniline	2.00	ND	*	ug/L		1	20 - 150
4-Chlorophenyl phenyl ether	2.00	1.73		ug/L		86	59 - 125
4-Nitroaniline	2.00	1.41		ug/L		71	49 - 125
4-Nitrophenol	4.00	3.28		ug/L		82	35 - 153
Acenaphthene	2.00	1.73		ug/L		87	63 - 125
Acenaphthylene	2.00	1.68		ug/L		84	62 - 125
Anthracene	2.00	1.60		ug/L		80	50 - 125
Benzo[a]anthracene	2.00	1.91		ug/L		96	65 - 125
Benzo[a]pyrene	2.00	1.46		ug/L		73	45 - 125
Benzo[b]fluoranthene	2.00	1.83		ug/L		91	70 - 129
Benzo[g,h,i]perylene	2.00	1.84		ug/L		92	65 - 153
Benzo[k]fluoranthene	2.00	1.75		ug/L		88	70 - 123
Benzoic acid	4.00	3.98		ug/L		99	20 - 144
Benzyl alcohol	2.00	1.76		ug/L		88	41 - 144
Bis(2-chloroethoxy)methane	2.00	1.77	^	ug/L		89	59 - 125
Bis(2-chloroethyl)ether	2.00	1.73		ug/L		87	55 - 125
Bis(2-ethylhexyl) phthalate	2.00	6.21	*	ug/L		311	70 - 185
Butyl benzyl phthalate	2.00	2.53		ug/L		126	60 - 167
Carbazole	2.00	1.92		ug/L		96	75 - 142
Chrysene	2.00	1.99		ug/L		100	70 - 125
Dibenz(a,h)anthracene	2.00	1.57		ug/L		79	69 - 154
Dibenzofuran	2.00	1.70		ug/L		85	60 - 125
Diethyl phthalate	2.00	1.82		ug/L		91	60 - 150

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

Lab Sample ID: LCS 580-178110/2-A
Matrix: Water
Analysis Batch: 178265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 178110

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dimethyl phthalate	2.00	1.78		ug/L		89	65 - 155
Di-n-butyl phthalate	2.00	2.20		ug/L		110	55 - 167
Di-n-octyl phthalate	2.00	1.93		ug/L		97	55 - 150
Fluoranthene	2.00	1.92		ug/L		96	70 - 145
Fluorene	2.00	1.82		ug/L		91	69 - 125
Hexachlorobenzene	2.00	2.03		ug/L		102	61 - 125
Hexachlorobutadiene	2.00	1.28		ug/L		64	25 - 125
Hexachlorocyclopentadiene	2.00	1.08	J	ug/L		54	20 - 125
Hexachloroethane	2.00	1.29		ug/L		64	30 - 125
Indeno[1,2,3-cd]pyrene	2.00	1.85		ug/L		92	70 - 136
Isophorone	2.00	1.78	^	ug/L		89	64 - 125
Naphthalene	2.00	1.60		ug/L		80	56 - 125
Nitrobenzene	2.00	1.89	^	ug/L		94	62 - 125
N-Nitrosodimethylamine	2.00	1.17	J	ug/L		58	33 - 143
N-Nitrosodi-n-propylamine	2.00	1.54	^	ug/L		77	60 - 120
N-Nitrosodiphenylamine	2.00	1.40		ug/L		70	40 - 135
Pentachlorophenol	4.00	3.14		ug/L		78	20 - 145
Phenanthrene	2.00	1.74		ug/L		87	70 - 125
Phenol	2.00	1.72		ug/L		86	53 - 130
Pyrene	2.00	1.95		ug/L		98	70 - 133
2,3,4,6-Tetrachlorophenol	2.00	1.83		ug/L		92	60 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*86*		*44 - 125*
2-Fluorobiphenyl	*81*		*50 - 120*
2-Fluorophenol	*75*		*30 - 134*
Nitrobenzene-d5	*79*		*59 - 120*
Phenol-d5	*81*		*52 - 120*
Terphenyl-d14	*92*		*64 - 150*

Lab Sample ID: LCSD 580-178110/3-A
Matrix: Water
Analysis Batch: 178265

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 178110

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	2.00	1.59		ug/L		79	40 - 125	6	20
1,2-Dichlorobenzene	2.00	1.45		ug/L		73	44 - 125	2	20
1,3-Dichlorobenzene	2.00	1.44		ug/L		72	40 - 125	4	20
1,4-Dichlorobenzene	2.00	1.49		ug/L		74	40 - 125	9	20
1-Methylnaphthalene	2.00	1.63		ug/L		82	54 - 125	1	20
2,2'-oxybis[1-chloropropane]	2.00	1.20		ug/L		60	44 - 130	1	20
2,4,5-Trichlorophenol	2.00	1.89		ug/L		94	66 - 130	2	20
2,4,6-Trichlorophenol	2.00	2.12		ug/L		106	55 - 140	9	20
2,4-Dichlorophenol	2.00	2.03		ug/L		101	50 - 140	7	20
2,4-Dimethylphenol	2.00	1.70	J	ug/L		85	30 - 135	10	20
2,4-Dinitrophenol	4.00	2.99	J	ug/L		75	24 - 146	6	20
2,4-Dinitrotoluene	2.00	1.84		ug/L		92	73 - 126	2	20
2,6-Dinitrotoluene	2.00	1.94		ug/L		97	67 - 134	5	20

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

Lab Sample ID: LCSD 580-178110/3-A
Matrix: Water
Analysis Batch: 178265

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 178110

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chloronaphthalene	2.00	1.71		ug/L		85	55 - 125	1	20
2-Chlorophenol	2.00	1.98		ug/L		99	57 - 125	4	20
2-Methylnaphthalene	2.00	1.72		ug/L		86	56 - 125	6	20
2-Methylphenol	2.00	1.75		ug/L		87	60 - 130	4	20
2-Nitroaniline	2.00	1.78		ug/L		89	52 - 140	1	20
2-Nitrophenol	2.00	2.11	^	ug/L		105	55 - 140	1	20
3 & 4 Methylphenol	2.00	1.88		ug/L		94	60 - 130	0	20
3,3'-Dichlorobenzidine	4.00	1.21	J *	ug/L		30	20 - 175	55	20
3-Nitroaniline	2.00	1.19	*	ug/L		60	22 - 124	52	20
4,6-Dinitro-2-methylphenol	4.00	3.56	J	ug/L		89	50 - 136	5	20
4-Bromophenyl phenyl ether	2.00	1.90		ug/L		95	62 - 132	2	20
4-Chloro-3-methylphenol	2.00	2.03	^	ug/L		101	65 - 145	5	20
4-Chloroaniline	2.00	ND	*	ug/L		3	20 - 150	106	20
4-Chlorophenyl phenyl ether	2.00	1.78		ug/L		89	59 - 125	3	20
4-Nitroaniline	2.00	1.52		ug/L		76	49 - 125	8	20
4-Nitrophenol	4.00	3.10		ug/L		78	35 - 153	6	20
Acenaphthene	2.00	1.72		ug/L		86	63 - 125	1	20
Acenaphthylene	2.00	1.76		ug/L		88	62 - 125	5	20
Anthracene	2.00	1.61		ug/L		81	50 - 125	1	20
Benzo[a]anthracene	2.00	1.85		ug/L		92	65 - 125	4	20
Benzo[a]pyrene	2.00	1.51		ug/L		76	45 - 125	3	20
Benzo[b]fluoranthene	2.00	1.80		ug/L		90	70 - 129	2	20
Benzo[g,h,i]perylene	2.00	1.85		ug/L		92	65 - 153	0	20
Benzo[k]fluoranthene	2.00	1.70		ug/L		85	70 - 123	3	20
Benzoic acid	4.00	4.18		ug/L		104	20 - 144	5	20
Benzyl alcohol	2.00	1.73		ug/L		87	41 - 144	2	20
Bis(2-chloroethoxy)methane	2.00	1.86	^	ug/L		93	59 - 125	5	20
Bis(2-chloroethyl)ether	2.00	1.78		ug/L		89	55 - 125	3	20
Bis(2-ethylhexyl) phthalate	2.00	3.15	*	ug/L		158	70 - 185	65	20
Butyl benzyl phthalate	2.00	3.14	*	ug/L		157	60 - 167	22	20
Carbazole	2.00	1.99		ug/L		99	75 - 142	3	20
Chrysene	2.00	1.89		ug/L		95	70 - 125	5	20
Dibenz(a,h)anthracene	2.00	1.71		ug/L		85	69 - 154	8	20
Dibenzofuran	2.00	1.75		ug/L		87	60 - 125	2	20
Diethyl phthalate	2.00	1.80		ug/L		90	60 - 150	1	20
Dimethyl phthalate	2.00	1.75		ug/L		88	65 - 155	1	20
Di-n-butyl phthalate	2.00	2.36		ug/L		118	55 - 167	7	20
Di-n-octyl phthalate	2.00	1.97		ug/L		99	55 - 150	2	20
Fluoranthene	2.00	1.99		ug/L		99	70 - 145	3	20
Fluorene	2.00	1.83		ug/L		92	69 - 125	1	20
Hexachlorobenzene	2.00	2.01		ug/L		100	61 - 125	1	20
Hexachlorobutadiene	2.00	1.46		ug/L		73	25 - 125	13	20
Hexachlorocyclopentadiene	2.00	1.22	J	ug/L		61	20 - 125	12	20
Hexachloroethane	2.00	1.32		ug/L		66	30 - 125	2	20
Indeno[1,2,3-cd]pyrene	2.00	1.72		ug/L		86	70 - 136	7	20
Isophorone	2.00	1.81	^	ug/L		90	64 - 125	1	20
Naphthalene	2.00	1.70		ug/L		85	56 - 125	6	20
Nitrobenzene	2.00	1.84	^	ug/L		92	62 - 125	3	20

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

Lab Sample ID: LCSD 580-178110/3-A
Matrix: Water
Analysis Batch: 178265

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 178110

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Nitrosodimethylamine			2.00	1.42	J	ug/L		71	33 - 143	20	20
N-Nitrosodi-n-propylamine			2.00	1.50	^	ug/L		75	60 - 120	3	20
N-Nitrosodiphenylamine			2.00	1.41		ug/L		70	40 - 135	0	20
Pentachlorophenol			4.00	2.83		ug/L		71	20 - 145	10	20
Phenanthrene			2.00	1.86		ug/L		93	70 - 125	6	20
Phenol			2.00	1.63		ug/L		81	53 - 130	5	20
Pyrene			2.00	1.92		ug/L		96	70 - 133	2	20
2,3,4,6-Tetrachlorophenol			2.00	1.98		ug/L		99	60 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*92*		*44 - 125*
2-Fluorobiphenyl	*84*		*50 - 120*
2-Fluorophenol	*80*		*30 - 134*
Nitrobenzene-d5	*85*		*59 - 120*
Phenol-d5	*84*		*52 - 120*
Terphenyl-d14	*99*		*64 - 150*

Lab Sample ID: MB 580-178277/1-A
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 178277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		5.0	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
1,2-Dichlorobenzene	ND		5.5	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
1,3-Dichlorobenzene	ND		5.0	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
1,4-Dichlorobenzene	ND		5.0	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
1-Methylnaphthalene	ND		3.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2,2'-oxybis[1-chloropropane]	ND		25	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2,4,5-Trichlorophenol	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2,4,6-Trichlorophenol	ND		15	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2,4-Dichlorophenol	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2,4-Dimethylphenol	ND	^	10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2,4-Dinitrophenol	ND		100	20	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2,4-Dinitrotoluene	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2,6-Dinitrotoluene	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2-Chloronaphthalene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2-Chlorophenol	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2-Methylnaphthalene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2-Methylphenol	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2-Nitroaniline	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
2-Nitrophenol	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
3 & 4 Methylphenol	ND		20	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
3,3'-Dichlorobenzidine	ND		20	3.0	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
3-Nitroaniline	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
4,6-Dinitro-2-methylphenol	ND		100	10	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
4-Bromophenyl phenyl ether	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
4-Chloro-3-methylphenol	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
4-Chloroaniline	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1

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

Lab Sample ID: MB 580-178277/1-A
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 178277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
4-Nitroaniline	ND		10	2.0	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
4-Nitrophenol	ND		100	25	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Acenaphthene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Acenaphthylene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Anthracene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Benzo[a]anthracene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Benzo[a]pyrene	ND		3.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Benzo[b]fluoranthene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Benzo[g,h,i]perylene	ND		2.5	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Benzo[k]fluoranthene	ND		2.5	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Benzoic acid	ND		250	75	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Benzyl alcohol	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Bis(2-chloroethoxy)methane	ND	^	10	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Bis(2-chloroethyl)ether	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Bis(2-ethylhexyl) phthalate	ND		60	5.0	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Butyl benzyl phthalate	ND		20	5.0	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Carbazole	ND		10	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Chrysene	ND		2.5	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Dibenz(a,h)anthracene	ND		4.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Dibenzofuran	ND		10	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Diethyl phthalate	ND		20	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Dimethyl phthalate	ND		10	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Di-n-butyl phthalate	ND		50	5.0	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Di-n-octyl phthalate	ND		50	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Fluoranthene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Fluorene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Hexachlorobenzene	ND		5.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Hexachlorobutadiene	ND		5.0	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Hexachlorocyclopentadiene	ND		10	1.0	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Hexachloroethane	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Indeno[1,2,3-cd]pyrene	ND		4.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Isophorone	ND	^	10	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Naphthalene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Nitrobenzene	ND	^	10	3.4	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
N-Nitrosodimethylamine	ND		100	25	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
N-Nitrosodi-n-propylamine	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
N-Nitrosodiphenylamine	ND		5.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Pentachlorophenol	ND		20	2.0	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Phenanthrene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Phenol	ND		10	1.5	ug/Kg		12/18/14 16:00	12/19/14 15:34	1
Pyrene	ND		2.0	0.50	ug/Kg		12/18/14 16:00	12/19/14 15:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*64*		*28 - 143*	*12/18/14 16:00*	*12/19/14 15:34*	*1*
2-Fluorobiphenyl	*59*		*42 - 140*	*12/18/14 16:00*	*12/19/14 15:34*	*1*
2-Fluorophenol	*62*		*36 - 145*	*12/18/14 16:00*	*12/19/14 15:34*	*1*
Nitrobenzene-d5	*60*		*38 - 141*	*12/18/14 16:00*	*12/19/14 15:34*	*1*

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

Lab Sample ID: MB 580-178277/1-A
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 178277

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5	57		38 - 149	12/18/14 16:00	12/19/14 15:34	1
Terphenyl-d14	66		42 - 151	12/18/14 16:00	12/19/14 15:34	1

Lab Sample ID: LCS 580-178277/2-A
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 178277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	100	88.1		ug/Kg		88	66 - 115
1,2-Dichlorobenzene	100	75.4		ug/Kg		75	64 - 112
1,3-Dichlorobenzene	100	73.9		ug/Kg		74	64 - 111
1,4-Dichlorobenzene	100	75.1		ug/Kg		75	65 - 110
1-Methylnaphthalene	100	85.6		ug/Kg		86	62 - 118
2,2'-oxybis[1-chloropropane]	100	72.2		ug/Kg		72	41 - 126
2,4,5-Trichlorophenol	100	92.6		ug/Kg		93	57 - 133
2,4,6-Trichlorophenol	100	82.5		ug/Kg		83	62 - 133
2,4-Dichlorophenol	100	91.2		ug/Kg		91	68 - 125
2,4-Dimethylphenol	100	87.8	^	ug/Kg		88	54 - 139
2,4-Dinitrophenol	200	135		ug/Kg		68	20 - 141
2,4-Dinitrotoluene	100	83.1		ug/Kg		83	68 - 121
2,6-Dinitrotoluene	100	84.6		ug/Kg		85	66 - 123
2-Chloronaphthalene	100	84.2		ug/Kg		84	68 - 112
2-Chlorophenol	100	79.5		ug/Kg		80	68 - 117
2-Methylnaphthalene	100	81.7		ug/Kg		82	64 - 119
2-Methylphenol	100	77.1		ug/Kg		77	71 - 116
2-Nitroaniline	100	86.2		ug/Kg		86	64 - 112
2-Nitrophenol	100	89.0		ug/Kg		89	67 - 127
3 & 4 Methylphenol	100	78.5		ug/Kg		78	70 - 116
3,3'-Dichlorobenzidine	200	99.7		ug/Kg		50	20 - 103
3-Nitroaniline	100	42.5		ug/Kg		42	27 - 103
4,6-Dinitro-2-methylphenol	200	164		ug/Kg		82	48 - 130
4-Bromophenyl phenyl ether	100	89.7		ug/Kg		90	68 - 122
4-Chloro-3-methylphenol	100	83.9		ug/Kg		84	69 - 121
4-Chloroaniline	100	17.0	*	ug/Kg		17	20 - 103
4-Chlorophenyl phenyl ether	100	79.5		ug/Kg		79	75 - 108
4-Nitroaniline	100	59.9		ug/Kg		60	58 - 108
4-Nitrophenol	200	166		ug/Kg		83	20 - 165
Acenaphthene	100	86.3		ug/Kg		86	68 - 116
Acenaphthylene	100	79.0		ug/Kg		79	68 - 120
Anthracene	100	85.4		ug/Kg		85	73 - 116
Benzo[a]anthracene	100	86.2		ug/Kg		86	76 - 119
Benzo[a]pyrene	100	95.2		ug/Kg		95	72 - 117
Benzo[b]fluoranthene	100	95.8		ug/Kg		96	63 - 132
Benzo[g,h,i]perylene	100	110		ug/Kg		110	55 - 139
Benzo[k]fluoranthene	100	86.2		ug/Kg		86	63 - 119
Benzoic acid	200	128	J	ug/Kg		64	29 - 158
Benzyl alcohol	100	80.6		ug/Kg		81	55 - 123
Bis(2-chloroethoxy)methane	100	84.3	^	ug/Kg		84	69 - 107

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

Lab Sample ID: LCS 580-178277/2-A
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 178277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	100	71.1		ug/Kg		71	62 - 110
Bis(2-ethylhexyl) phthalate	100	101		ug/Kg		101	62 - 144
Butyl benzyl phthalate	100	96.4		ug/Kg		96	69 - 142
Carbazole	100	91.6		ug/Kg		92	76 - 135
Chrysene	100	90.7		ug/Kg		91	75 - 114
Dibenz(a,h)anthracene	100	107		ug/Kg		107	56 - 134
Dibenzofuran	100	82.2		ug/Kg		82	72 - 109
Diethyl phthalate	100	77.1		ug/Kg		77	73 - 116
Dimethyl phthalate	100	81.9		ug/Kg		82	78 - 117
Di-n-butyl phthalate	100	93.7		ug/Kg		94	66 - 140
Di-n-octyl phthalate	100	98.2		ug/Kg		98	65 - 141
Fluoranthene	100	86.0		ug/Kg		86	73 - 125
Fluorene	100	81.2		ug/Kg		81	70 - 121
Hexachlorobenzene	100	91.5		ug/Kg		91	66 - 117
Hexachlorobutadiene	100	89.7		ug/Kg		90	65 - 116
Hexachlorocyclopentadiene	100	81.0		ug/Kg		81	46 - 131
Hexachloroethane	100	71.6		ug/Kg		72	62 - 120
Indeno[1,2,3-cd]pyrene	100	104		ug/Kg		104	56 - 127
Isophorone	100	83.9	^	ug/Kg		84	67 - 119
Naphthalene	100	83.5		ug/Kg		83	62 - 112
Nitrobenzene	100	85.1	^	ug/Kg		85	64 - 118
N-Nitrosodimethylamine	100	86.5	J	ug/Kg		87	38 - 133
N-Nitrosodi-n-propylamine	100	77.2		ug/Kg		77	62 - 116
N-Nitrosodiphenylamine	100	88.1		ug/Kg		88	73 - 115
Pentachlorophenol	200	155		ug/Kg		78	45 - 117
Phenanthrene	100	88.7		ug/Kg		89	73 - 106
Phenol	100	73.4		ug/Kg		73	63 - 111
Pyrene	100	86.4		ug/Kg		86	70 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*93*		*28 - 143*
2-Fluorobiphenyl	*79*		*42 - 140*
2-Fluorophenol	*87*		*36 - 145*
Nitrobenzene-d5	*83*		*38 - 141*
Phenol-d5	*78*		*38 - 149*
Terphenyl-d14	*94*		*42 - 151*

Lab Sample ID: LCSD 580-178277/3-A
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 178277

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	87.6		ug/Kg		88	66 - 115	1	28
1,2-Dichlorobenzene	100	81.1		ug/Kg		81	64 - 112	7	30
1,3-Dichlorobenzene	100	77.9		ug/Kg		78	64 - 111	5	30
1,4-Dichlorobenzene	100	80.7		ug/Kg		81	65 - 110	7	30
1-Methylnaphthalene	100	85.9		ug/Kg		86	62 - 118	0	30
2,2'-oxybis[1-chloropropane]	100	72.8		ug/Kg		73	41 - 126	1	57

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

Lab Sample ID: LCSD 580-178277/3-A
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 178277

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	100	97.8		ug/Kg		98	57 - 133	6	30
2,4,6-Trichlorophenol	100	90.3		ug/Kg		90	62 - 133	9	30
2,4-Dichlorophenol	100	92.2		ug/Kg		92	68 - 125	1	30
2,4-Dimethylphenol	100	92.2	^	ug/Kg		92	54 - 139	5	30
2,4-Dinitrophenol	200	129		ug/Kg		64	20 - 141	5	36
2,4-Dinitrotoluene	100	95.0		ug/Kg		95	68 - 121	13	30
2,6-Dinitrotoluene	100	87.8		ug/Kg		88	66 - 123	4	30
2-Chloronaphthalene	100	88.6		ug/Kg		89	68 - 112	5	25
2-Chlorophenol	100	82.5		ug/Kg		83	68 - 117	4	27
2-Methylnaphthalene	100	86.8		ug/Kg		87	64 - 119	6	27
2-Methylphenol	100	83.5		ug/Kg		83	71 - 116	8	25
2-Nitroaniline	100	84.0		ug/Kg		84	64 - 112	3	22
2-Nitrophenol	100	88.6		ug/Kg		89	67 - 127	0	30
3 & 4 Methylphenol	100	86.7		ug/Kg		87	70 - 116	10	27
3,3'-Dichlorobenzidine	200	108		ug/Kg		54	20 - 103	8	60
3-Nitroaniline	100	45.1		ug/Kg		45	27 - 103	6	33
4,6-Dinitro-2-methylphenol	200	178		ug/Kg		89	48 - 130	8	22
4-Bromophenyl phenyl ether	100	95.5		ug/Kg		95	68 - 122	6	30
4-Chloro-3-methylphenol	100	85.6		ug/Kg		86	69 - 121	2	27
4-Chloroaniline	100	17.5	*	ug/Kg		18	20 - 103	3	60
4-Chlorophenyl phenyl ether	100	87.5		ug/Kg		88	75 - 108	10	30
4-Nitroaniline	100	69.3		ug/Kg		69	58 - 108	14	32
4-Nitrophenol	200	176		ug/Kg		88	20 - 165	6	30
Acenaphthene	100	89.3		ug/Kg		89	68 - 116	3	27
Acenaphthylene	100	82.6		ug/Kg		83	68 - 120	4	28
Anthracene	100	93.5		ug/Kg		94	73 - 116	9	27
Benzo[a]anthracene	100	94.0		ug/Kg		94	76 - 119	9	27
Benzo[a]pyrene	100	97.3		ug/Kg		97	72 - 117	2	30
Benzo[b]fluoranthene	100	90.6		ug/Kg		91	63 - 132	6	30
Benzo[g,h,i]perylene	100	112		ug/Kg		112	55 - 139	3	28
Benzo[k]fluoranthene	100	94.0		ug/Kg		94	63 - 119	9	30
Benzoic acid	200	131	J	ug/Kg		66	29 - 158	3	28
Benzyl alcohol	100	73.0		ug/Kg		73	55 - 123	10	60
Bis(2-chloroethoxy)methane	100	85.8	^	ug/Kg		86	69 - 107	2	30
Bis(2-chloroethyl)ether	100	76.4		ug/Kg		76	62 - 110	7	22
Bis(2-ethylhexyl) phthalate	100	110		ug/Kg		110	62 - 144	9	30
Butyl benzyl phthalate	100	106		ug/Kg		106	69 - 142	9	30
Carbazole	100	97.0		ug/Kg		97	76 - 135	6	30
Chrysene	100	96.6		ug/Kg		97	75 - 114	6	26
Dibenz(a,h)anthracene	100	109		ug/Kg		109	56 - 134	1	30
Dibenzofuran	100	87.2		ug/Kg		87	72 - 109	6	30
Diethyl phthalate	100	81.6		ug/Kg		82	73 - 116	6	26
Dimethyl phthalate	100	88.8		ug/Kg		89	78 - 117	8	30
Di-n-butyl phthalate	100	101		ug/Kg		101	66 - 140	8	30
Di-n-octyl phthalate	100	102		ug/Kg		102	65 - 141	4	30
Fluoranthene	100	90.8		ug/Kg		91	73 - 125	5	30
Fluorene	100	88.8		ug/Kg		89	70 - 121	9	30
Hexachlorobenzene	100	101		ug/Kg		101	66 - 117	10	30

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

Lab Sample ID: LCSD 580-178277/3-A
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 178277

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene			100	93.4		ug/Kg		93	65 - 116	4	30
Hexachlorocyclopentadiene			100	84.9		ug/Kg		85	46 - 131	5	29
Hexachloroethane			100	78.2		ug/Kg		78	62 - 120	9	30
Indeno[1,2,3-cd]pyrene			100	108		ug/Kg		108	56 - 127	4	29
Isophorone			100	86.4	^	ug/Kg		86	67 - 119	3	30
Naphthalene			100	85.7		ug/Kg		86	62 - 112	3	26
Nitrobenzene			100	90.8	^	ug/Kg		91	64 - 118	7	30
N-Nitrosodimethylamine			100	90.4	J	ug/Kg		90	38 - 133	4	30
N-Nitrosodi-n-propylamine			100	84.6		ug/Kg		85	62 - 116	9	28
N-Nitrosodiphenylamine			100	95.8		ug/Kg		96	73 - 115	8	30
Pentachlorophenol			200	172		ug/Kg		86	45 - 117	10	23
Phenanthrene			100	93.7		ug/Kg		94	73 - 106	5	28
Phenol			100	79.5		ug/Kg		80	63 - 111	8	26
Pyrene			100	91.5		ug/Kg		92	70 - 120	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*97*		*28 - 143*
2-Fluorobiphenyl	*82*		*42 - 140*
2-Fluorophenol	*87*		*36 - 145*
Nitrobenzene-d5	*82*		*38 - 141*
Phenol-d5	*82*		*38 - 149*
Terphenyl-d14	*100*		*42 - 151*

Lab Sample ID: 580-46690-1 MS
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: SC-OWS-05-20141211-S
Prep Type: Total/NA
Prep Batch: 178277

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,4-Trichlorobenzene	ND		325	ND		ug/Kg	☼	NC	66 - 115		
1,2-Dichlorobenzene	ND		325	ND		ug/Kg	☼	NC	64 - 112		
1,3-Dichlorobenzene	ND		325	ND		ug/Kg	☼	NC	64 - 111		
1,4-Dichlorobenzene	ND		325	ND		ug/Kg	☼	NC	65 - 110		
1-Methylnaphthalene	ND		325	443	J F1	ug/Kg	☼	136	62 - 118		
2,2'-oxybis[1-chloropropane]	ND		325	ND		ug/Kg	☼	NC	41 - 126		
2,4,5-Trichlorophenol	ND		325	ND		ug/Kg	☼	NC	57 - 133		
2,4,6-Trichlorophenol	ND		325	ND		ug/Kg	☼	NC	62 - 133		
2,4-Dichlorophenol	ND		325	ND		ug/Kg	☼	NC	68 - 125		
2,4-Dimethylphenol	ND	^	325	ND	^	ug/Kg	☼	NC	54 - 139		
2,4-Dinitrophenol	ND		651	ND		ug/Kg	☼	NC	20 - 141		
2,4-Dinitrotoluene	ND		325	ND		ug/Kg	☼	NC	68 - 121		
2,6-Dinitrotoluene	ND		325	664	J	ug/Kg	☼	NC	66 - 123		
2-Chloronaphthalene	ND		325	326	J	ug/Kg	☼	100	68 - 112		
2-Chlorophenol	ND		325	ND		ug/Kg	☼	NC	68 - 117		
2-Methylnaphthalene	170	J	325	364	J F1	ug/Kg	☼	59	64 - 119		
2-Methylphenol	ND		325	ND		ug/Kg	☼	NC	71 - 116		
2-Nitroaniline	ND		325	ND		ug/Kg	☼	NC	64 - 112		
2-Nitrophenol	ND		325	ND		ug/Kg	☼	NC	67 - 127		
3 & 4 Methylphenol	1100	J	325	1170	J F1	ug/Kg	☼	7	70 - 116		

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

Lab Sample ID: 580-46690-1 MS
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: SC-OWS-05-20141211-S
Prep Type: Total/NA
Prep Batch: 178277

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
3,3'-Dichlorobenzidine	ND		651	ND		ug/Kg	☼	NC	20 - 103
3-Nitroaniline	ND		325	ND		ug/Kg	☼	NC	27 - 103
4,6-Dinitro-2-methylphenol	ND		651	ND		ug/Kg	☼	NC	48 - 130
4-Bromophenyl phenyl ether	ND		325	ND		ug/Kg	☼	NC	68 - 122
4-Chloro-3-methylphenol	ND		325	1020	J	ug/Kg	☼	NC	69 - 121
4-Chloroaniline	ND	*	325	ND		ug/Kg	☼	NC	20 - 103
4-Chlorophenyl phenyl ether	ND		325	ND		ug/Kg	☼	NC	75 - 108
4-Nitroaniline	ND		325	650	J	ug/Kg	☼	NC	58 - 108
4-Nitrophenol	ND		651	ND		ug/Kg	☼	NC	20 - 165
Acenaphthene	270	J	325	622	J	ug/Kg	☼	108	68 - 116
Acenaphthylene	170	J	325	450	J	ug/Kg	☼	86	68 - 120
Anthracene	820		325	892	F1	ug/Kg	☼	22	73 - 116
Benzo[a]anthracene	2300		325	2370	4	ug/Kg	☼	22	76 - 119
Benzo[a]pyrene	2800		325	2210	4	ug/Kg	☼	-178	72 - 117
Benzo[b]fluoranthene	5600		325	3560	4	ug/Kg	☼	-614	63 - 132
Benzo[g,h,i]perylene	2000		325	1600	4	ug/Kg	☼	-133	55 - 139
Benzo[k]fluoranthene	1400		325	ND	4	ug/Kg	☼	0	63 - 119
Benzoic acid	ND		651	ND		ug/Kg	☼	NC	29 - 158
Benzyl alcohol	1400	J	325	1440	J 4	ug/Kg	☼	23	55 - 123
Bis(2-chloroethoxy)methane	ND	^	325	346	J ^	ug/Kg	☼	106	69 - 107
Bis(2-chloroethyl)ether	ND		325	ND		ug/Kg	☼	NC	62 - 110
Bis(2-ethylhexyl) phthalate	120000		325	82800	4	ug/Kg	☼	-11345	62 - 144
Butyl benzyl phthalate	6100	J	325	1950	J 4	ug/Kg	☼	-1282	69 - 142
Carbazole	550	J	325	770	J F1	ug/Kg	☼	67	76 - 135
Chrysene	5400		325	2520	4	ug/Kg	☼	-886	75 - 114
Dibenz(a,h)anthracene	500	J	325	502	J F1	ug/Kg	☼	2	56 - 134
Dibenzofuran	230	J	325	482	J	ug/Kg	☼	78	72 - 109
Diethyl phthalate	ND		325	ND		ug/Kg	☼	NC	73 - 116
Dimethyl phthalate	420	J	325	452	J F1	ug/Kg	☼	10	78 - 117
Di-n-butyl phthalate	ND		325	ND		ug/Kg	☼	NC	66 - 140
Di-n-octyl phthalate	5300	J	325	4040	J 4	ug/Kg	☼	-381	65 - 141
Fluoranthene	7100		325	5480	4	ug/Kg	☼	-510	73 - 125
Fluorene	460	J	325	579	J F1	ug/Kg	☼	37	70 - 121
Hexachlorobenzene	ND		325	392	J F1	ug/Kg	☼	121	66 - 117
Hexachlorobutadiene	ND		325	ND		ug/Kg	☼	NC	65 - 116
Hexachlorocyclopentadiene	ND		325	ND		ug/Kg	☼	NC	46 - 131
Hexachloroethane	ND		325	ND		ug/Kg	☼	NC	62 - 120
Indeno[1,2,3-cd]pyrene	1900		325	1560	4	ug/Kg	☼	-95	56 - 127
Isophorone	ND	^	325	351	J ^	ug/Kg	☼	108	67 - 119
Naphthalene	210	J	325	423	J	ug/Kg	☼	67	62 - 112
Nitrobenzene	ND	^	325	ND	^	ug/Kg	☼	NC	64 - 118
N-Nitrosodimethylamine	ND		325	ND		ug/Kg	☼	NC	38 - 133
N-Nitrosodi-n-propylamine	ND		325	ND		ug/Kg	☼	NC	62 - 116
N-Nitrosodiphenylamine	ND		325	421	J F1	ug/Kg	☼	130	73 - 115
Pentachlorophenol	9500		651	8360	4	ug/Kg	☼	-179	45 - 117
Phenanthrene	4200		325	3720	4	ug/Kg	☼	-136	73 - 106
Phenol	ND		325	ND		ug/Kg	☼	NC	63 - 111

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

Lab Sample ID: 580-46690-1 MS
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: SC-OWS-05-20141211-S
Prep Type: Total/NA
Prep Batch: 178277

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Pyrene	7200		325	5490	4	ug/Kg	☼	-531	70 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol	*185*	*X*	*28 - 143*
2-Fluorobiphenyl	*81*		*42 - 140*
2-Fluorophenol	*89*		*36 - 145*
Nitrobenzene-d5	*80*		*38 - 141*
Phenol-d5	*107*		*38 - 149*
Terphenyl-d14	*179*	*X*	*42 - 151*

Lab Sample ID: 580-46690-1 MSD
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: SC-OWS-05-20141211-S
Prep Type: Total/NA
Prep Batch: 178277

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	ND		330	ND		ug/Kg	☼	NC	66 - 115	NC	28
1,2-Dichlorobenzene	ND		330	ND		ug/Kg	☼	NC	64 - 112	NC	60
1,3-Dichlorobenzene	ND		330	ND		ug/Kg	☼	NC	64 - 111	NC	60
1,4-Dichlorobenzene	ND		330	ND		ug/Kg	☼	NC	65 - 110	NC	32
1-Methylnaphthalene	ND		330	325	J F2	ug/Kg	☼	98	62 - 118	31	30
2,2'-oxybis[1-chloropropane]	ND		330	ND		ug/Kg	☼	NC	41 - 126	NC	60
2,4,5-Trichlorophenol	ND		330	ND		ug/Kg	☼	NC	57 - 133	NC	60
2,4,6-Trichlorophenol	ND		330	ND		ug/Kg	☼	NC	62 - 133	NC	60
2,4-Dichlorophenol	ND		330	ND		ug/Kg	☼	NC	68 - 125	NC	60
2,4-Dimethylphenol	ND	^	330	ND	^	ug/Kg	☼	NC	54 - 139	NC	60
2,4-Dinitrophenol	ND		660	ND		ug/Kg	☼	NC	20 - 141	NC	60
2,4-Dinitrotoluene	ND		330	561	J	ug/Kg	☼	NC	68 - 121	NC	31
2,6-Dinitrotoluene	ND		330	ND		ug/Kg	☼	NC	66 - 123	NC	60
2-Chloronaphthalene	ND		330	349	J	ug/Kg	☼	106	68 - 112	7	25
2-Chlorophenol	ND		330	ND		ug/Kg	☼	NC	68 - 117	NC	27
2-Methylnaphthalene	170	J	330	333	J F1	ug/Kg	☼	49	64 - 119	9	27
2-Methylphenol	ND		330	ND		ug/Kg	☼	NC	71 - 116	NC	25
2-Nitroaniline	ND		330	ND		ug/Kg	☼	NC	64 - 112	NC	60
2-Nitrophenol	ND		330	ND		ug/Kg	☼	NC	67 - 127	NC	60
3 & 4 Methylphenol	1100	J	330	1030	J F1	ug/Kg	☼	-34	70 - 116	12	27
3,3'-Dichlorobenzidine	ND		660	ND		ug/Kg	☼	NC	20 - 103	NC	60
3-Nitroaniline	ND		330	ND		ug/Kg	☼	NC	27 - 103	NC	60
4,6-Dinitro-2-methylphenol	ND		660	ND		ug/Kg	☼	NC	48 - 130	NC	60
4-Bromophenyl phenyl ether	ND		330	744	J	ug/Kg	☼	NC	68 - 122	NC	60
4-Chloro-3-methylphenol	ND		330	703	J F2	ug/Kg	☼	NC	69 - 121	37	27
4-Chloroaniline	ND	*	330	ND		ug/Kg	☼	NC	20 - 103	NC	60
4-Chlorophenyl phenyl ether	ND		330	ND		ug/Kg	☼	NC	75 - 108	NC	60
4-Nitroaniline	ND		330	718	J	ug/Kg	☼	NC	58 - 108	10	60
4-Nitrophenol	ND		660	ND		ug/Kg	☼	NC	20 - 165	NC	33
Acenaphthene	270	J	330	489	J F1	ug/Kg	☼	66	68 - 116	24	27
Acenaphthylene	170	J	330	398	J	ug/Kg	☼	69	68 - 120	12	28
Anthracene	820		330	1950	F1 F2	ug/Kg	☼	342	73 - 116	74	27
Benzo[a]anthracene	2300		330	3010	4	ug/Kg	☼	214	76 - 119	24	27

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

Lab Sample ID: 580-46690-1 MSD
Matrix: Solid
Analysis Batch: 178585

Client Sample ID: SC-OWS-05-20141211-S
Prep Type: Total/NA
Prep Batch: 178277

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	2800		330	3300	4 F2	ug/Kg	☼	154	72 - 117	39	30
Benzo[b]fluoranthene	5600		330	5450	4 F2	ug/Kg	☼	-33	63 - 132	42	31
Benzo[g,h,i]perylene	2000		330	1680	4	ug/Kg	☼	-107	55 - 139	5	28
Benzo[k]fluoranthene	1400		330	2140	4	ug/Kg	☼	216	63 - 119	NC	31
Benzoic acid	ND		660	ND		ug/Kg	☼	NC	29 - 158	NC	60
Benzyl alcohol	1400	J	330	1730	J 4	ug/Kg	☼	110	55 - 123	18	60
Bis(2-chloroethoxy)methane	ND	^	330	322	J ^	ug/Kg	☼	97	69 - 107	7	60
Bis(2-chloroethyl)ether	ND		330	ND		ug/Kg	☼	NC	62 - 110	NC	60
Bis(2-ethylhexyl) phthalate	120000		330	70400	4	ug/Kg	☼	-14925	62 - 144	16	60
Butyl benzyl phthalate	6100	J	330	ND	4	ug/Kg	☼	0	69 - 142	NC	60
Carbazole	550	J	330	1070	J F1	ug/Kg	☼	157	76 - 135	33	60
Chrysene	5400		330	5580	4 F2	ug/Kg	☼	54	75 - 114	76	26
Dibenz(a,h)anthracene	500	J	330	609	J F1	ug/Kg	☼	35	56 - 134	19	30
Dibenzofuran	230	J	330	440	J F1	ug/Kg	☼	64	72 - 109	9	60
Diethyl phthalate	ND		330	ND		ug/Kg	☼	NC	73 - 116	NC	26
Dimethyl phthalate	420	J	330	404	J F1	ug/Kg	☼	-5	78 - 117	11	60
Di-n-butyl phthalate	ND		330	ND		ug/Kg	☼	NC	66 - 140	NC	60
Di-n-octyl phthalate	5300	J	330	4000	J 4	ug/Kg	☼	-389	65 - 141	1	31
Fluoranthene	7100		330	5690	4	ug/Kg	☼	-442	73 - 125	4	36
Fluorene	460	J	330	672	F1	ug/Kg	☼	65	70 - 121	15	31
Hexachlorobenzene	ND		330	313	J	ug/Kg	☼	95	66 - 117	23	60
Hexachlorobutadiene	ND		330	ND		ug/Kg	☼	NC	65 - 116	NC	60
Hexachlorocyclopentadiene	ND		330	ND	F1	ug/Kg	☼	0	46 - 131	NC	60
Hexachloroethane	ND		330	ND		ug/Kg	☼	NC	62 - 120	NC	60
Indeno[1,2,3-cd]pyrene	1900		330	1570	4	ug/Kg	☼	-89	56 - 127	1	29
Isophorone	ND	^	330	313	J ^	ug/Kg	☼	95	67 - 119	11	60
Naphthalene	210	J	330	396	J F1	ug/Kg	☼	58	62 - 112	6	26
Nitrobenzene	ND	^	330	ND	^	ug/Kg	☼	NC	64 - 118	NC	60
N-Nitrosodimethylamine	ND		330	ND		ug/Kg	☼	NC	38 - 133	NC	60
N-Nitrosodi-n-propylamine	ND		330	ND		ug/Kg	☼	NC	62 - 116	NC	28
N-Nitrosodiphenylamine	ND		330	442	J F1	ug/Kg	☼	134	73 - 115	5	60
Pentachlorophenol	9500		660	8680	4	ug/Kg	☼	-128	45 - 117	4	68
Phenanthrene	4200		330	3120	4	ug/Kg	☼	-314	73 - 106	17	28
Phenol	ND		330	ND		ug/Kg	☼	NC	63 - 111	NC	26
Pyrene	7200		330	6360	4	ug/Kg	☼	-258	70 - 120	15	31

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*98*		*28 - 143*
2-Fluorobiphenyl	*79*		*42 - 140*
2-Fluorophenol	*65*		*36 - 145*
Nitrobenzene-d5	*80*		*38 - 141*
Phenol-d5	*67*		*38 - 149*
Terphenyl-d14	*78*		*42 - 151*

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

Lab Sample ID: MB 580-178388/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178406 — **Prep Batch: 178388**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	0.571	J	4.0	0.50	mg/Kg		12/17/14 12:03	12/17/14 17:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*50 - 150*	*12/17/14 12:03*	*12/17/14 17:02*	*1*

Lab Sample ID: LCS 580-178388/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178406 — **Prep Batch: 178388**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline			40.0	29.7		mg/Kg		74	68 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*50 - 150*

Lab Sample ID: LCSD 580-178388/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178406 — **Prep Batch: 178388**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline			40.0	31.1		mg/Kg		78	68 - 120	5	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*50 - 150*

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

Lab Sample ID: MB 580-178279/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 179554 — **Prep Batch: 178279**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	ND		0.010	0.0032	mg/Kg		12/18/14 13:20	01/06/15 14:07	1
Arochlor 1221	ND		0.011	0.0080	mg/Kg		12/18/14 13:20	01/06/15 14:07	1
Arochlor 1232	ND		0.011	0.0070	mg/Kg		12/18/14 13:20	01/06/15 14:07	1
Arochlor 1242	ND		0.010	0.0021	mg/Kg		12/18/14 13:20	01/06/15 14:07	1
Arochlor 1248	ND		0.010	0.0030	mg/Kg		12/18/14 13:20	01/06/15 14:07	1
Arochlor 1254	ND		0.010	0.0021	mg/Kg		12/18/14 13:20	01/06/15 14:07	1
Arochlor 1260	ND		0.010	0.0030	mg/Kg		12/18/14 13:20	01/06/15 14:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*95*		*45 - 135*	*12/18/14 13:20*	*01/06/15 14:07*	*1*
DCB Decachlorobiphenyl	*94*		*50 - 140*	*12/18/14 13:20*	*01/06/15 14:07*	*1*

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

Lab Sample ID: LCS 580-178279/2-A
Matrix: Solid
Analysis Batch: 179554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 178279

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arochlor 1016			0.100	0.107		mg/Kg		107	40 - 140		
Arochlor 1260			0.100	0.105		mg/Kg		105	60 - 130		

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

Lab Sample ID: LCSD 580-178279/3-A
Matrix: Solid
Analysis Batch: 179554

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 178279

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	2	20
Arochlor 1260			0.100	0.106		mg/Kg		106	60 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*100*		*45 - 135*
DCB Decachlorobiphenyl	*98*		*50 - 140*

Lab Sample ID: 580-46690-2 MS
Matrix: Solid
Analysis Batch: 179554

Client Sample ID: SC-CB-35-20141211-S
Prep Type: Total/NA
Prep Batch: 178279

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arochlor 1016	ND		0.180	0.176		mg/Kg	☼	98	40 - 140		
Arochlor 1260	0.39		0.180	0.394	F1	mg/Kg	☼	3	60 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*69*		*45 - 135*
DCB Decachlorobiphenyl	*62*	*p*	*50 - 140*

Lab Sample ID: 580-46690-2 MSD
Matrix: Solid
Analysis Batch: 179554

Client Sample ID: SC-CB-35-20141211-S
Prep Type: Total/NA
Prep Batch: 178279

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arochlor 1016	ND		0.182	0.182		mg/Kg	☼	100	40 - 140	3	20
Arochlor 1260	0.39		0.182	0.377	F1	mg/Kg	☼	-6	60 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*69*		*45 - 135*
DCB Decachlorobiphenyl	*62*	*p*	*50 - 140*

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

Lab Sample ID: MB 580-178188/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178242 — **Prep Batch: 178188**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25	5.7	mg/Kg		12/15/14 13:03	12/16/14 12:04	1
Motor Oil (>C24-C36)	ND		50	9.1	mg/Kg		12/15/14 13:03	12/16/14 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*92*		*50 - 150*	*12/15/14 13:03*	*12/16/14 12:04*	*1*

Lab Sample ID: LCS 580-178188/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178242 — **Prep Batch: 178188**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
#2 Diesel (C10-C24)			500	482		mg/Kg		96	70 - 125		
Motor Oil (>C24-C36)			502	471		mg/Kg		94	64 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*86*		*50 - 150*

Lab Sample ID: LCSD 580-178188/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178242 — **Prep Batch: 178188**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)			500	459		mg/Kg		92	70 - 125	5	16
Motor Oil (>C24-C36)			502	456		mg/Kg		91	64 - 127	3	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*81*		*50 - 150*

Lab Sample ID: 580-46690-3 MS — **Client Sample ID: SC-CB-24-20141211-S**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178242 — **Prep Batch: 178188**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
#2 Diesel (C10-C24)	1700	Y	1000	2720		mg/Kg	☼	106	70 - 125		
Motor Oil (>C24-C36)	8900	Y	1010	10600	4	mg/Kg	☼	167	64 - 127		

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

Lab Sample ID: 580-46690-3 MSD — **Client Sample ID: SC-CB-24-20141211-S**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178242 — **Prep Batch: 178188**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	1700	Y	1060	2620		mg/Kg	☼	92	70 - 125	3	16
Motor Oil (>C24-C36)	8900	Y	1060	10000	4	mg/Kg	☼	103	64 - 127	6	17

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

Lab Sample ID: 580-46690-3 MSD
Matrix: Solid
Analysis Batch: 178242

Client Sample ID: SC-CB-24-20141211-S
Prep Type: Total/NA
Prep Batch: 178188

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	*80*		*50 - 150*

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-178763/9-A
Matrix: Water
Analysis Batch: 178888

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 178763

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010	0.00075	mg/L		12/22/14 14:22	12/23/14 13:51	1
Antimony	ND		0.00040	0.000080	mg/L		12/22/14 14:22	12/23/14 13:51	1
Beryllium	ND		0.00040	0.00010	mg/L		12/22/14 14:22	12/23/14 13:51	1
Cadmium	0.0000365	J	0.00040	0.000028	mg/L		12/22/14 14:22	12/23/14 13:51	1
Chromium	ND		0.00040	0.00027	mg/L		12/22/14 14:22	12/23/14 13:51	1
Copper	ND		0.0010	0.00011	mg/L		12/22/14 14:22	12/23/14 13:51	1
Lead	ND		0.00040	0.000034	mg/L		12/22/14 14:22	12/23/14 13:51	1
Nickel	ND		0.0030	0.00040	mg/L		12/22/14 14:22	12/23/14 13:51	1
Selenium	ND		0.0010	0.00071	mg/L		12/22/14 14:22	12/23/14 13:51	1
Silver	ND		0.00040	0.000030	mg/L		12/22/14 14:22	12/23/14 13:51	1
Thallium	ND		0.0010	0.00028	mg/L		12/22/14 14:22	12/23/14 13:51	1
Zinc	ND		0.0040	0.0019	mg/L		12/22/14 14:22	12/23/14 13:51	1

Lab Sample ID: LCS 580-178763/10-A
Matrix: Water
Analysis Batch: 178888

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 178763

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0976		mg/L		98	85 - 115
Antimony	0.100	0.103		mg/L		103	85 - 115
Beryllium	0.100	0.0957		mg/L		96	85 - 115
Cadmium	0.100	0.103		mg/L		103	85 - 115
Chromium	0.100	0.0973		mg/L		97	85 - 115
Copper	0.100	0.0962		mg/L		96	85 - 115
Lead	0.100	0.0986		mg/L		99	85 - 115
Nickel	0.100	0.0969		mg/L		97	85 - 115
Selenium	0.100	0.102		mg/L		102	85 - 115
Silver	0.100	0.0995		mg/L		100	85 - 115
Thallium	0.100	0.0994		mg/L		99	85 - 115
Zinc	0.100	0.0965		mg/L		96	85 - 115

Lab Sample ID: LCSD 580-178763/11-A
Matrix: Water
Analysis Batch: 178888

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 178763

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.100	0.0979		mg/L		98	85 - 115	0	20
Antimony	0.100	0.103		mg/L		103	85 - 115	0	20
Beryllium	0.100	0.0959		mg/L		96	85 - 115	0	20

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

Lab Sample ID: LCSD 580-178763/11-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 178888 — **Prep Batch: 178763**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium			0.100	0.102		mg/L		102	85 - 115	1	20
Chromium			0.100	0.0978		mg/L		98	85 - 115	1	20
Copper			0.100	0.0974		mg/L		97	85 - 115	1	20
Lead			0.100	0.0986		mg/L		99	85 - 115	0	20
Nickel			0.100	0.0981		mg/L		98	85 - 115	1	20
Selenium			0.100	0.103		mg/L		103	85 - 115	0	20
Silver			0.100	0.0992		mg/L		99	85 - 115	0	20
Thallium			0.100	0.0982		mg/L		98	85 - 115	1	20
Zinc			0.100	0.0971		mg/L		97	85 - 115	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 580-178190/10-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 178257 — **Prep Batch: 178190**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000747	J	0.00020	0.000041	mg/L		12/15/14 13:16	12/15/14 16:07	1

Lab Sample ID: LCS 580-178190/11-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 178257 — **Prep Batch: 178190**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00200	0.00207		mg/L		103	85 - 115		

Lab Sample ID: LCSD 580-178190/12-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 178257 — **Prep Batch: 178190**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.00200	0.00206		mg/L		103	85 - 115	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-179557/11-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 179749 — **Prep Batch: 179557**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50	0.18	mg/Kg		01/06/15 11:07	01/07/15 14:48	10
Lead	ND		0.20	0.013	mg/Kg		01/06/15 11:07	01/07/15 14:48	10
Antimony	ND		0.20	0.042	mg/Kg		01/06/15 11:07	01/07/15 14:48	10
Beryllium	ND		0.20	0.035	mg/Kg		01/06/15 11:07	01/07/15 14:48	10
Cadmium	ND		0.20	0.0080	mg/Kg		01/06/15 11:07	01/07/15 14:48	10
Chromium	ND		0.20	0.11	mg/Kg		01/06/15 11:07	01/07/15 14:48	10
Copper	ND		0.40	0.098	mg/Kg		01/06/15 11:07	01/07/15 14:48	10
Nickel	ND		0.50	0.081	mg/Kg		01/06/15 11:07	01/07/15 14:48	10
Selenium	ND		0.70	0.20	mg/Kg		01/06/15 11:07	01/07/15 14:48	10

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

Lab Sample ID: MB 580-179557/11-A
Matrix: Solid
Analysis Batch: 179749

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 179557

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.20	0.012	mg/Kg		01/06/15 11:07	01/07/15 14:48	10
Thallium	ND		0.50	0.13	mg/Kg		01/06/15 11:07	01/07/15 14:48	10
Zinc	ND		2.0	1.1	mg/Kg		01/06/15 11:07	01/07/15 14:48	10

Lab Sample ID: LCS 580-179557/12-A
Matrix: Solid
Analysis Batch: 179749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 179557

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	196		mg/Kg		98	80 - 120
Lead	50.0	48.7		mg/Kg		97	80 - 120
Antimony	150	145		mg/Kg		96	80 - 120
Beryllium	5.00	4.79		mg/Kg		96	80 - 120
Cadmium	5.00	4.90		mg/Kg		98	80 - 120
Chromium	20.0	18.7		mg/Kg		94	80 - 120
Copper	25.0	23.7		mg/Kg		95	80 - 120
Nickel	50.0	49.3		mg/Kg		99	80 - 120
Selenium	200	195		mg/Kg		98	80 - 120
Silver	30.0	28.3		mg/Kg		94	80 - 120
Thallium	200	189		mg/Kg		95	80 - 120
Zinc	200	194		mg/Kg		97	80 - 120

Lab Sample ID: LCSD 580-179557/13-A
Matrix: Solid
Analysis Batch: 179749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 179557

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	194		mg/Kg		97	80 - 120	1	20
Lead	50.0	48.2		mg/Kg		96	80 - 120	1	20
Antimony	150	145		mg/Kg		96	80 - 120	0	20
Beryllium	5.00	4.84		mg/Kg		97	80 - 120	1	20
Cadmium	5.00	4.87		mg/Kg		97	80 - 120	1	20
Chromium	20.0	18.8		mg/Kg		94	80 - 120	0	20
Copper	25.0	23.3		mg/Kg		93	80 - 120	2	20
Nickel	50.0	49.2		mg/Kg		98	80 - 120	0	20
Selenium	200	192		mg/Kg		96	80 - 120	2	20
Silver	30.0	28.3		mg/Kg		94	80 - 120	0	20
Thallium	200	184		mg/Kg		92	80 - 120	3	20
Zinc	200	191		mg/Kg		96	80 - 120	1	20

Lab Sample ID: 580-46690-1 MS
Matrix: Solid
Analysis Batch: 179749

Client Sample ID: SC-OWS-05-20141211-S
Prep Type: Total/NA
Prep Batch: 179557

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	14		600	596		mg/Kg	☼	97	80 - 120
Lead	430		150	561		mg/Kg	☼	90	80 - 120
Antimony	9.4		450	419		mg/Kg	☼	91	80 - 120
Beryllium	0.23	J	15.0	14.5		mg/Kg	☼	95	80 - 120

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

Lab Sample ID: 580-46690-1 MS — **Client Sample ID: SC-OWS-05-20141211-S**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 179749 — **Prep Batch: 179557**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	5.5		15.0	20.7		mg/Kg	☼	101	80 - 120
Chromium	66		60.0	136		mg/Kg	☼	116	80 - 120
Copper	740		75.0	945	4	mg/Kg	☼	267	80 - 120
Nickel	46		150	199		mg/Kg	☼	102	80 - 120
Selenium	1.1	J	600	586		mg/Kg	☼	97	80 - 120
Silver	1.3		90.0	84.7		mg/Kg	☼	93	80 - 120
Thallium	ND		600	528		mg/Kg	☼	88	80 - 120
Zinc	2000		600	2690		mg/Kg	☼	116	80 - 120

Lab Sample ID: 580-46690-1 MSD — **Client Sample ID: SC-OWS-05-20141211-S**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 179749 — **Prep Batch: 179557**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	14		562	566		mg/Kg	☼	98	80 - 120	5	20
Lead	430		140	601	F1	mg/Kg	☼	124	80 - 120	7	20
Antimony	9.4		421	401		mg/Kg	☼	93	80 - 120	4	20
Beryllium	0.23	J	14.0	14.2		mg/Kg	☼	99	80 - 120	3	20
Cadmium	5.5		14.0	20.8		mg/Kg	☼	109	80 - 120	0	20
Chromium	66		56.2	145	F1	mg/Kg	☼	140	80 - 120	7	20
Copper	740		70.2	1040	4	mg/Kg	☼	425	80 - 120	10	20
Nickel	46		140	199		mg/Kg	☼	109	80 - 120	0	20
Selenium	1.1	J	562	562		mg/Kg	☼	100	80 - 120	4	20
Silver	1.3		84.2	81.4		mg/Kg	☼	95	80 - 120	4	20
Thallium	ND		562	498		mg/Kg	☼	89	80 - 120	6	20
Zinc	2000		562	2920	F1	mg/Kg	☼	165	80 - 120	8	20

Lab Sample ID: 580-46690-1 DU — **Client Sample ID: SC-OWS-05-20141211-S**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 179749 — **Prep Batch: 179557**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	14		14.0		mg/Kg	☼	3	20
Lead	430		414		mg/Kg	☼	3	20
Antimony	9.4		9.13		mg/Kg	☼	3	20
Beryllium	0.23	J	0.212	J	mg/Kg	☼	7	20
Cadmium	5.5		5.37		mg/Kg	☼	3	20
Chromium	66		63.9		mg/Kg	☼	3	20
Copper	740		728		mg/Kg	☼	2	20
Nickel	46		44.0		mg/Kg	☼	3	20
Selenium	1.1	J	1.19	J	mg/Kg	☼	8	20
Silver	1.3		1.27		mg/Kg	☼	0.4	20
Thallium	ND		ND		mg/Kg	☼	NC	20
Zinc	2000		1930		mg/Kg	☼	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-178219/15-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178288 — **Prep Batch: 178219**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0053	mg/Kg		12/15/14 16:10	12/16/14 11:17	1

Lab Sample ID: LCS 580-178219/16-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178288 — **Prep Batch: 178219**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.179		mg/Kg		107	80 - 120

Lab Sample ID: LCSD 580-178219/17-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178288 — **Prep Batch: 178219**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.167	0.180		mg/Kg		108	80 - 120	0	20

Lab Sample ID: 580-46690-1 MS — **Client Sample ID: SC-OWS-05-20141211-S**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178288 — **Prep Batch: 178219**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.1		0.458	1.60		mg/Kg	☼	117	80 - 120

Lab Sample ID: 580-46690-1 MSD — **Client Sample ID: SC-OWS-05-20141211-S**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178288 — **Prep Batch: 178219**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	1.1		0.535	1.68		mg/Kg	☼	115	80 - 120	5	20

Lab Sample ID: 580-46690-1 DU — **Client Sample ID: SC-OWS-05-20141211-S**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178288 — **Prep Batch: 178219**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	1.1		1.10		mg/Kg	☼	3	20

Method: 120.1 - Conductivity, Specific Conductance

Lab Sample ID: MB 580-178918/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 178918

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		10	10	umhos/cm			12/23/14 20:10	1

Method: 120.1 - Conductivity, Specific Conductance (Continued)

Lab Sample ID: LCS 580-178918/2
Matrix: Water
Analysis Batch: 178918

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	500	519		umhos/cm		104	90 - 110

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-178252/1
Matrix: Water
Analysis Batch: 178252

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.90	0.20	mg/L			12/15/14 12:57	1

Lab Sample ID: LCS 580-178252/2
Matrix: Water
Analysis Batch: 178252

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.80	1.84		mg/L		102	90 - 110

Lab Sample ID: LCSD 580-178252/3
Matrix: Water
Analysis Batch: 178252

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
Nitrate as N	1.80	1.84		mg/L		102	90 - 110	0	15

Lab Sample ID: 580-46690-4 MS
Matrix: Water
Analysis Batch: 178252

Client Sample ID: SC-MH-20-20141211-W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	ND	H	1.80	1.89		mg/L		105	90 - 110

Lab Sample ID: 580-46690-4 DU
Matrix: Water
Analysis Batch: 178252

Client Sample ID: SC-MH-20-20141211-W
Prep Type: Total/NA

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 580-178256/1
Matrix: Water
Analysis Batch: 178256

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			12/15/14 12:57	1
Sulfate	ND		1.2	0.40	mg/L			12/15/14 12:57	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 580-178256/2
Matrix: Water
Analysis Batch: 178256

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	9.33		mg/L		104	90 - 110
Sulfate	12.0	12.1		mg/L		101	90 - 110

Lab Sample ID: LCSD 580-178256/3
Matrix: Water
Analysis Batch: 178256

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	9.33		mg/L		104	90 - 110	0	15
Sulfate	12.0	12.5		mg/L		104	90 - 110	3	15

Lab Sample ID: 580-46690-4 MS
Matrix: Water
Analysis Batch: 178256

Client Sample ID: SC-MH-20-20141211-W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	0.66	J	9.00	9.94		mg/L		103	90 - 110
Sulfate	0.87	J	12.0	11.8		mg/L		91	90 - 110

Lab Sample ID: 580-46690-4 DU
Matrix: Water
Analysis Batch: 178256

Client Sample ID: SC-MH-20-20141211-W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	0.66	J	0.660	J	mg/L		0	10
Sulfate	0.87	J	0.860	J	mg/L		1	10

Method: 9060_PSEP - TOC (Puget Sound)

Lab Sample ID: MB 580-178703/3
Matrix: Solid
Analysis Batch: 178703

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			12/20/14 14:14	1

Lab Sample ID: LCS 580-178703/4
Matrix: Solid
Analysis Batch: 178703

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	3430		mg/Kg		120	27.8 - 170

Lab Sample ID: LCSD 580-178703/5
Matrix: Solid
Analysis Batch: 178703

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	3420		mg/Kg		120	27.8 - 170	0	35

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

TestAmerica Job ID: 580-46690-1

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 580-178255/2
Matrix: Water
Analysis Batch: 178255

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			100	97.9		mg/L		98	85 - 115		

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

Lab Sample ID: MB 580-178556/1
Matrix: Water
Analysis Batch: 178556

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			12/18/14 19:09	1

Lab Sample ID: LCS 580-178556/2
Matrix: Water
Analysis Batch: 178556

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	26.4		mg/L		88	70.6 - 120		

Lab Sample ID: 580-46690-4 DU
Matrix: Water
Analysis Batch: 178556

Client Sample ID: SC-MH-20-20141211-W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	14			14.0		mg/L				0	20

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

Lab Sample ID: MB 580-178693/1
Matrix: Water
Analysis Batch: 178693

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			12/21/14 10:07	1

Lab Sample ID: LCS 580-178693/2
Matrix: Water
Analysis Batch: 178693

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	15.3		mg/L		102	85 - 115		

Lab Chronicle

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-OWS-05-20141211-S

Lab Sample ID: 580-46690-1

Date Collected: 12/11/14 10:18
Matrix: Solid
Date Received: 12/12/14 12:01
Percent Solids: 30.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			178277	12/18/14 16:00	ALL	TAL SEA
Total/NA	Analysis	8270D		100	178585	12/19/14 16:49	ERB	TAL SEA
Total/NA	Prep	3550B			178279	12/18/14 13:20	ALL	TAL SEA
Total/NA	Analysis	8082		1	179554	01/06/15 14:57	ALC	TAL SEA
Total/NA	Prep	3546			178188	12/15/14 13:03	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	178242	12/16/14 13:00	JJP	TAL SEA
Total/NA	Prep	3050B			179557	01/06/15 11:06	PAB	TAL SEA
Total/NA	Analysis	6020		10	179749	01/07/15 15:03	FCW	TAL SEA
Total/NA	Prep	7471A			178219	12/15/14 16:10	PAB	TAL SEA
Total/NA	Analysis	7471A		1	178288	12/16/14 11:25	FCW	TAL SEA
Total/NA	Analysis	2540B		1	178260	12/16/14 09:54	RMB	TAL SEA
Total/NA	Analysis	9060_PSEP		1	178703	12/22/14 08:56	JLS	TAL SEA
Total/NA	Analysis	PSEP Plumb 1981		1	178555	12/18/14 18:36	LKC	TAL SEA

Client Sample ID: SC-CB-35-20141211-S

Lab Sample ID: 580-46690-2

Date Collected: 12/11/14 13:00
Matrix: Solid
Date Received: 12/12/14 12:01
Percent Solids: 53.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			178282	12/12/14 14:25	IWH	TAL SEA
Total/NA	Analysis	8260B		1	178291	12/16/14 15:02	CJ	TAL SEA
Total/NA	Prep	3550B			178277	12/18/14 16:00	ALL	TAL SEA
Total/NA	Analysis	8270D		100	178585	12/19/14 19:20	ERB	TAL SEA
Total/NA	Prep	5035			178388	12/17/14 12:03	ERZ	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	178406	12/17/14 20:19	CJ	TAL SEA
Total/NA	Prep	3550B			178279	12/18/14 13:20	ALL	TAL SEA
Total/NA	Analysis	8082		1	179554	01/06/15 15:14	ALC	TAL SEA
Total/NA	Prep	3546			178188	12/15/14 13:03	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	178242	12/16/14 13:38	JJP	TAL SEA
Total/NA	Prep	3050B			179557	01/06/15 11:06	PAB	TAL SEA
Total/NA	Analysis	6020		10	179749	01/07/15 15:29	FCW	TAL SEA
Total/NA	Prep	7471A			178219	12/15/14 16:10	PAB	TAL SEA
Total/NA	Analysis	7471A		1	178288	12/16/14 11:34	FCW	TAL SEA
Total/NA	Analysis	2540B		1	178260	12/16/14 09:54	RMB	TAL SEA
Total/NA	Analysis	9060_PSEP		1	178703	12/20/14 14:14	JLS	TAL SEA
Total/NA	Analysis	PSEP Plumb 1981		1	178555	12/18/14 18:36	LKC	TAL SEA

Lab Chronicle

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

TestAmerica Job ID: 580-46690-1

Client Sample ID: SC-CB-24-20141211-S

Lab Sample ID: 580-46690-3

Date Collected: 12/11/14 14:00
Matrix: Solid
Date Received: 12/12/14 12:01
Percent Solids: 47.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			178282	12/12/14 14:25	IWH	TAL SEA
Total/NA	Analysis	8260B		1	178291	12/16/14 15:29	CJ	TAL SEA
Total/NA	Prep	3550B			178277	12/18/14 16:00	ALL	TAL SEA
Total/NA	Analysis	8270D		100	178585	12/19/14 20:11	ERB	TAL SEA
Total/NA	Prep	5035			178388	12/17/14 12:03	ERZ	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	178406	12/17/14 20:53	CJ	TAL SEA
Total/NA	Prep	3550B			178279	12/18/14 13:20	ALL	TAL SEA
Total/NA	Analysis	8082		1	179554	01/06/15 16:03	ALC	TAL SEA
Total/NA	Prep	3546			178188	12/15/14 13:03	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	178242	12/16/14 13:57	JJP	TAL SEA
Total/NA	Prep	3050B			179557	01/06/15 11:06	PAB	TAL SEA
Total/NA	Analysis	6020		10	179749	01/07/15 15:32	FCW	TAL SEA
Total/NA	Prep	7471A			178219	12/15/14 16:10	PAB	TAL SEA
Total/NA	Analysis	7471A		1	178288	12/16/14 11:37	FCW	TAL SEA
Total/NA	Analysis	2540B		1	178260	12/16/14 09:54	RMB	TAL SEA
Total/NA	Analysis	9060_PSEP		1	178703	12/20/14 14:14	JLS	TAL SEA
Total/NA	Analysis	PSEP Plumb 1981		1	178555	12/18/14 18:36	LKC	TAL SEA

Client Sample ID: SC-MH-20-20141211-W

Lab Sample ID: 580-46690-4

Date Collected: 12/11/14 15:00
Matrix: Water
Date Received: 12/12/14 12:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			178110	12/13/14 11:42	RBD	TAL SEA
Total/NA	Analysis	8270D		10	178374	12/17/14 22:40	ERB	TAL SEA
Total/NA	Prep	200.8			178763	12/22/14 14:22	PAB	TAL SEA
Total/NA	Analysis	200.8		1	178888	12/23/14 14:44	FCW	TAL SEA
Total/NA	Prep	245.1			178190	12/15/14 13:16	PAB	TAL SEA
Total/NA	Analysis	245.1		1	178257	12/15/14 16:33	FCW	TAL SEA
Total/NA	Analysis	120.1		1	178918	12/23/14 20:10	LKC	TAL SEA
Total/NA	Analysis	300.0		1	178252	12/15/14 13:41	JLS	TAL SEA
Total/NA	Analysis	300.0		1	178256	12/15/14 13:41	JLS	TAL SEA
Total/NA	Analysis	SM 2320B		1	178255	12/16/14 09:26	SPP	TAL SEA
Total/NA	Analysis	SM 2540D		1	178556	12/18/14 19:09	LKC	TAL SEA
Total/NA	Analysis	SM 4500 H+ B		1	178335	12/15/14 19:35	LKC	TAL SEA
Dissolved	Analysis	SM 5310B		1	178693	12/21/14 10:07	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	178693	12/21/14 10:07	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: 580-46690-1

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: 580-46690-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-46690-1	SC-OWS-05-20141211-S	Solid	12/11/14 10:18	12/12/14 12:01
580-46690-2	SC-CB-35-20141211-S	Solid	12/11/14 13:00	12/12/14 12:01
580-46690-3	SC-CB-24-20141211-S	Solid	12/11/14 14:00	12/12/14 12:01
580-46690-4	SC-MH-20-20141211-W	Water	12/11/14 15:00	12/12/14 12:01

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

460690

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

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Christine Nancarrow	Site Contact: Melissa Ivancevich	Date: 12/11/14	COC No: 1 of 2 COCs
Leidos	Tel/Fax: 206.300.2144	Lab Contact: Kris Allen	Carrier: Courier	
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)	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:
1	SC-OWS-05-20141211-S	12/11/14	1018	C	Sed	~~3~~										1	1	
2	SC-CB-35-20141211-S	12/11/14	1300	C	Sed	6			√	√	√	√	√	1	2	1	1	
3	SC-CB-24-20141211-S	12/11/14	1400	C	Sed	6			√	√	√	√	√	1	2	1	1	

580-46690 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.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company	Date/Time		Company	Date/Time
Relinquished by: Melissa Ivancevich	Leidos	12/11/14 1736	Received by:	TAoSEA	12/12/14 1201
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

1/9/2015

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

46690

TestAmerica Laboratories, Inc.

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

Client Contact	Project Manager: Christine Nancarrow	Site Contact: Melissa Ivancevich	Date: 12/11/14	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)	Sample Specific Notes:
4- SC-MH-20-20141211-W	12/11/14	1500	G	W	8	N		2	1		2			1	1	1	
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other MeOH									4					3			

Cooler/~~TB~~ ~~Dig~~/IR cor 1.6 °C unc 1.9 °C
Cooler Dsc Lg Blue/White @ Lab 1405
~~Wet~~/Packs Packing Bubble
w/cs

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.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Melissa Ivancevich [signature]	Leidos	12/11/14 1736	[signature]	TA-SEA	12/12/14 1201
			Received in Laboratory by:		

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

1/9/2015

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 580-46690-1

Login Number: 46690

List Source: TestAmerica Seattle

List Number: 1

Creator: Abello, Andrea N

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

Vista
Analytical Laboratory

December 31, 2014

Vista Project I.D.: 1400948

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 December 12, 2014. This sample set was analyzed on a standard turn-around time.

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,

FOR

Martha Maier
Laboratory Director

ACCREDITED IN ACCORDANCE WITH nelac

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

Vista Work Order No. 1400948
Case Narrative

Sample Condition on Receipt:

One effluent samples and three sediment samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology. The analyses of the sediment samples for PCBs were cancelled on December 16, 2014.

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 aqueous Method Blank. In the Method Blank associated with the sediment samples, OCDD was detected at 60.2 pg/g, which is above the sample quantitation limit, but below the Method 1613 Minimum Level of 100 pg/g. No other analytes were detected above the sample quantitation limit in the solid Method Blank. The OPR recoveries were within the method acceptance criteria.

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

EPA Method 1668C

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

Holding Times

The sample was 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 the preparation batch. No analytes were detected above the sample quantitation limit in the Method Blank. The OPR recoveries were within the method acceptance criteria.

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

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Continuing Calibration..... 421

Initial Calibration..... 461

Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1400948-01	SC-OWS-05-20141211-S	11-Dec-14 10:10	12-Dec-14 08:53	Amber Glass, 250mL
1400948-02	SC-CB-35-20141211-S	11-Dec-14 13:00	12-Dec-14 08:53	Amber Glass, 250mL
1400948-03	SC-CB-24-20141211-S	11-Dec-14 14:00	12-Dec-14 08:53	Amber Glass, 250mL
1400948-04	SC-MH-20-20141211-S	11-Dec-14 15:00	12-Dec-14 08:53	Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L

Vista Project: 1400948

ANALYTICAL RESULTS

Sample ID: Method Blank

EPA Method 1613B

Matrix: Solid
Sample Size: 1.00 g

QC Batch: B4L0130
Date Extracted: 23-Dec-2014 12:53

Lab Sample: B4L0130-BLK1
Date Analyzed : 26-Dec-14 22:50 Column: ZB-5MS Analyst: WJL

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	ND	5.00	1.13		0.0778	
1,2,3,7,8-PeCDD	ND	25.0	0.612		0.230	
1,2,3,4,7,8-HxCDD	ND	25.0	1.98		0.231	
1,2,3,6,7,8-HxCDD	ND	25.0	1.90		0.126	
1,2,3,7,8,9-HxCDD	ND	25.0	2.09		0.173	
1,2,3,4,6,7,8-HpCDD	14.4	25.0			0.263	J
OCDD	60.2	50.0			0.167	
2,3,7,8-TCDF	ND	5.00	1.15		0.0289	
1,2,3,7,8-PeCDF	ND	25.0	0.792		0.254	
2,3,4,7,8-PeCDF	ND	25.0	0.754		0.211	
1,2,3,4,7,8-HxCDF	ND	25.0	0.587		0.154	
1,2,3,6,7,8-HxCDF	ND	25.0	0.605		0.195	
2,3,4,6,7,8-HxCDF	ND	25.0	0.700		0.0805	
1,2,3,7,8,9-HxCDF	ND	25.0	1.19		0.195	
1,2,3,4,6,7,8-HpCDF	ND	25.0	1.56		0.230	
1,2,3,4,7,8,9-HpCDF	ND	25.0	1.36		0.211	
OCDF	ND	50.0		5.06	0.470	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	55.8	25 - 164	
	13C-1,2,3,7,8-PeCDD	84.4	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	57.3	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	61.7	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	60.6	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	58.8	23 - 140	
	13C-OCDD	41.4	17 - 157	
	13C-2,3,7,8-TCDF	44.9	24 - 169	
	13C-1,2,3,7,8-PeCDF	61.5	24 - 185	
	13C-2,3,4,7,8-PeCDF	66.4	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	65.4	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	61.4	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	61.1	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	58.4	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	55.4	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	55.2	26 - 138	
	13C-OCDF	44.6	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	60.3	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	0.162

TOTALS

Total TCDD	ND	1.13		
Total PeCDD	ND	0.612		
Total HxCDD	ND	2.07		
Total HpCDD	14.4		18.9	
Total TCDF	ND	1.15		
Total PeCDF	ND	2.38		
Total HxCDF	ND	0.816		
Total HpCDF	ND		5.44	

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: B4L0130	Lab Sample: B4L0130-BS1
Sample Size: 1.00 g	Date Extracted: 23-Dec-2014 12:53	Date Analyzed: 26-Dec-14 21:12 Column: ZB-5MS Analyst: WJL

Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits		Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	186	200	93.1	67 - 158	IS	13C-2,3,7,8-TCDD	82.0	20 - 175
1,2,3,7,8-PeCDD	906	1000	90.6	70 - 142		13C-1,2,3,7,8-PeCDD	123	21 - 227
1,2,3,4,7,8-HxCDD	953	1000	95.3	70 - 164		13C-1,2,3,4,7,8-HxCDD	67.6	21 - 193
1,2,3,6,7,8-HxCDD	994	1000	99.4	76 - 134		13C-1,2,3,6,7,8-HxCDD	67.3	25 - 163
1,2,3,7,8,9-HxCDD	944	1000	94.4	64 - 162		13C-1,2,3,7,8,9-HxCDD	68.3	21 - 193
1,2,3,4,6,7,8-HpCDD	920	1000	92.0	70 - 140		13C-1,2,3,4,6,7,8-HpCDD	65.4	26 - 166
OCDD	1950	2000	97.7	78 - 144		13C-OCDD	48.0	13 - 199
2,3,7,8-TCDF	179	200	89.5	75 - 158		13C-2,3,7,8-TCDF	76.0	22 - 152
1,2,3,7,8-PeCDF	924	1000	92.4	80 - 134		13C-1,2,3,7,8-PeCDF	90.0	21 - 192
2,3,4,7,8-PeCDF	930	1000	93.0	68 - 160		13C-2,3,4,7,8-PeCDF	96.9	13 - 328
1,2,3,4,7,8-HxCDF	956	1000	95.6	72 - 134		13C-1,2,3,4,7,8-HxCDF	78.0	19 - 202
1,2,3,6,7,8-HxCDF	972	1000	97.2	84 - 130		13C-1,2,3,6,7,8-HxCDF	73.6	21 - 159
2,3,4,6,7,8-HxCDF	979	1000	97.9	70 - 156		13C-2,3,4,6,7,8-HxCDF	68.5	22 - 176
1,2,3,7,8,9-HxCDF	990	1000	99.0	78 - 130		13C-1,2,3,7,8,9-HxCDF	67.7	17 - 205
1,2,3,4,6,7,8-HpCDF	953	1000	95.3	82 - 122		13C-1,2,3,4,6,7,8-HpCDF	61.4	21 - 158
1,2,3,4,7,8,9-HpCDF	959	1000	95.9	78 - 138		13C-1,2,3,4,7,8,9-HpCDF	59.5	20 - 186
OCDF	1960	2000	97.9	63 - 170		13C-OCDF	53.0	13 - 199
					CRS	37Cl-2,3,7,8-TCDD	85.3	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: SC-OWS-05-20141211-S

EPA Method 1613B

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 10:10

Sample Data
Matrix: Sediment
Sample Size: 3.70 g
% Solids: 27.1

Laboratory Data
Lab Sample: 1400948-01 Date Received: 12-Dec-2014 8:53
QC Batch: B4L0130 Date Extracted: 23-Dec-2014 12:53
Date Analyzed : 26-Dec-14 23:39 Column: ZB-5MS Analyst: WJL
29-Dec-14 07:58 Column: DB-225 Analyst: CVG

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	49.0	4.99			0.0778	
1,2,3,7,8-PeCDD	434	25.0			0.230	
1,2,3,4,7,8-HxCDD	1030	25.0			0.231	
1,2,3,6,7,8-HxCDD	3010	25.0			0.126	
1,2,3,7,8,9-HxCDD	1980	25.0			0.173	
1,2,3,4,6,7,8-HpCDD	104000	25.0			0.263	B, E
OCDD	1160000	49.9			0.167	B, E
2,3,7,8-TCDF	78.6	4.99			0.0289	
1,2,3,7,8-PeCDF	119	25.0			0.254	
2,3,4,7,8-PeCDF	193	25.0			0.211	
1,2,3,4,7,8-HxCDF	996	25.0			0.154	
1,2,3,6,7,8-HxCDF	931	25.0			0.195	
2,3,4,6,7,8-HxCDF	1180	25.0			0.0805	
1,2,3,7,8,9-HxCDF	227	25.0			0.195	
1,2,3,4,6,7,8-HpCDF	25300	25.0			0.230	E
1,2,3,4,7,8,9-HpCDF	1410	25.0			0.211	
OCDF	70100	49.9			0.470	E

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	74.2	25 - 164	
	13C-1,2,3,7,8-PeCDD	88.8	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	62.7	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	68.9	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	66.8	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	93.3	23 - 140	
	13C-OCDD	73.1	17 - 157	
	13C-2,3,7,8-TCDF	73.2	24 - 169	
	13C-1,2,3,7,8-PeCDF	79.2	24 - 185	
	13C-2,3,4,7,8-PeCDF	78.7	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	72.0	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	70.0	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	63.7	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	67.9	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	73.4	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	67.4	26 - 138	
	13C-OCDF	64.4	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	79.1	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	3160

TOTALS				
Total TCDD	288	294		
Total PeCDD	1780	1830		
Total HxCDD	21400			
Total HpCDD	193000			B
Total TCDF	1070	1080		P
Total PeCDF	6130	6140		P
Total HxCDF	30700			P
Total HpCDF	70800			

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: SC-CB-35-20141211-S

EPA Method 1613B

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 13:00

Sample Data
Matrix: Sediment
Sample Size: 1.85 g
% Solids: 54.2

Laboratory Data
Lab Sample: 1400948-02 Date Received: 12-Dec-2014 8:53
QC Batch: B4L0130 Date Extracted: 23-Dec-2014 12:53
Date Analyzed : 27-Dec-14 00:27 Column: ZB-5MS Analyst: WJL
29-Dec-14 08:30 Column: DB-225 Analyst: CVG

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	21.6	4.99			0.0778	
1,2,3,7,8-PeCDD	184	24.9			0.230	
1,2,3,4,7,8-HxCDD	537	24.9			0.231	
1,2,3,6,7,8-HxCDD	1150	24.9			0.126	
1,2,3,7,8,9-HxCDD	1060	24.9			0.173	
1,2,3,4,6,7,8-HpCDD	39400	24.9			0.263	B, E
OCDD	442000	49.9			0.167	B, E
2,3,7,8-TCDF	15.9	4.99			0.0289	
1,2,3,7,8-PeCDF	27.1	24.9			0.254	
2,3,4,7,8-PeCDF	26.3	24.9			0.211	
1,2,3,4,7,8-HxCDF	203	24.9			0.154	
1,2,3,6,7,8-HxCDF	158	24.9			0.195	
2,3,4,6,7,8-HxCDF	228	24.9			0.0805	
1,2,3,7,8,9-HxCDF	39.2	24.9			0.195	
1,2,3,4,6,7,8-HpCDF	5500	24.9			0.230	
1,2,3,4,7,8,9-HpCDF	505	24.9			0.211	
OCDF	35600	49.9			0.470	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	83.0	25 - 164	
	13C-1,2,3,7,8-PeCDD	109	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	72.5	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	73.1	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	72.6	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	95.5	23 - 140	
	13C-OCDD	82.9	17 - 157	
	13C-2,3,7,8-TCDF	79.5	24 - 169	
	13C-1,2,3,7,8-PeCDF	86.6	24 - 185	
	13C-2,3,4,7,8-PeCDF	93.3	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	86.1	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	76.4	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	73.4	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	74.9	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	76.4	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	74.5	26 - 138	
	13C-OCDF	72.8	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	89.9	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin 1150

TOTALS

Total TCDD	105			112		
Total PeCDD	656			669		
Total HxCDD	7590					
Total HpCDD	62200					B
Total TCDF	248			276		
Total PeCDF	1200					P
Total HxCDF	5770					
Total HpCDF	22300					

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: SC-CB-24-20141211-S

EPA Method 1613B

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 14:00

Sample Data
Matrix: Sediment
Sample Size: 2.43 g
% Solids: 41.6

Laboratory Data
Lab Sample: 1400948-03 Date Received: 12-Dec-2014 8:53
QC Batch: B4L0130 Date Extracted: 23-Dec-2014 12:53
Date Analyzed : 27-Dec-14 01:16 Column: ZB-5MS Analyst: WJL
29-Dec-14 09:02 Column: DB-225 Analyst: CVG

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	ND	4.94		9.70	0.0778	
1,2,3,7,8-PeCDD	82.8	24.7			0.230	
1,2,3,4,7,8-HxCDD	182	24.7			0.231	
1,2,3,6,7,8-HxCDD	533	24.7			0.126	
1,2,3,7,8,9-HxCDD	365	24.7			0.173	
1,2,3,4,6,7,8-HpCDD	15900	24.7			0.263	B
OCDD	201000	49.4			0.167	B, E
2,3,7,8-TCDF	17.9	4.94			0.0289	
1,2,3,7,8-PeCDF	24.1	24.7			0.254	J
2,3,4,7,8-PeCDF	33.0	24.7			0.211	
1,2,3,4,7,8-HxCDF	177	24.7			0.154	
1,2,3,6,7,8-HxCDF	125	24.7			0.195	
2,3,4,6,7,8-HxCDF	168	24.7			0.0805	
1,2,3,7,8,9-HxCDF	48.3	24.7			0.195	
1,2,3,4,6,7,8-HpCDF	4530	24.7			0.230	
1,2,3,4,7,8,9-HpCDF	399	24.7			0.211	
OCDF	25800	49.4			0.470	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	81.8	25 - 164	
	13C-1,2,3,7,8-PeCDD	112	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	70.7	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	72.9	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	70.0	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	85.0	23 - 140	
	13C-OCDD	75.0	17 - 157	
	13C-2,3,7,8-TCDF	79.1	24 - 169	
	13C-1,2,3,7,8-PeCDF	90.9	24 - 185	
	13C-2,3,4,7,8-PeCDF	96.2	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	83.3	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	74.3	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	69.9	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	72.0	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	75.5	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	72.3	26 - 138	
	13C-OCDF	68.1	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	88.5	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	531

TOTALS

Total TCDD	53.4			76.1		
Total PeCDD	337			349		
Total HxCDD	3450					
Total HpCDD	29400					B
Total TCDF	252			274		
Total PeCDF	981					
Total HxCDF	4710					
Total HpCDF	16700					

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 1613B

Matrix: Aqueous
Sample Size: 1.00 L

QC Batch: B4L0090
Date Extracted: 16-Dec-2014 8:37

Lab Sample: B4L0090-BLK1
Date Analyzed : 17-Dec-14 18:51 Column: ZB-5MS Analyst: MAS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	ND	5.00	1.13		0.943	
1,2,3,7,8-PeCDD	ND	25.0	0.445		4.51	
1,2,3,4,7,8-HxCDD	ND	25.0	1.25		2.21	
1,2,3,6,7,8-HxCDD	ND	25.0	1.26		1.93	
1,2,3,7,8,9-HxCDD	ND	25.0	1.34		2.02	
1,2,3,4,6,7,8-HpCDD	ND	25.0	1.49		2.98	
OCDD	ND	50.0	4.89		3.57	
2,3,7,8-TCDF	ND	5.00	0.895		0.984	
1,2,3,7,8-PeCDF	ND	25.0	0.703		2.50	
2,3,4,7,8-PeCDF	ND	25.0	0.740		1.73	
1,2,3,4,7,8-HxCDF	ND	25.0	0.787		1.36	
1,2,3,6,7,8-HxCDF	ND	25.0	1.03		1.56	
2,3,4,6,7,8-HxCDF	ND	25.0	0.640		2.05	
1,2,3,7,8,9-HxCDF	ND	25.0	0.992		1.34	
1,2,3,4,6,7,8-HpCDF	ND	25.0	1.13		1.46	
1,2,3,4,7,8,9-HpCDF	ND	25.0	0.627		1.75	
OCDF	ND	50.0	2.28		2.98	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	80.6	25 - 164	
	13C-1,2,3,7,8-PeCDD	79.5	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	73.2	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	73.0	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	73.0	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	76.6	23 - 140	
	13C-OCDD	49.5	17 - 157	
	13C-2,3,7,8-TCDF	80.8	24 - 169	
	13C-1,2,3,7,8-PeCDF	79.0	24 - 185	
	13C-2,3,4,7,8-PeCDF	80.8	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	89.8	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	75.9	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	73.3	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	76.5	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	75.1	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	67.0	26 - 138	
	13C-OCDF	57.8	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	93.9	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	0.00

TOTALS

Total TCDD	ND	1.13
Total PeCDD	ND	0.542
Total HxCDD	ND	2.27
Total HpCDD	ND	1.49
Total TCDF	ND	0.895
Total PeCDF	ND	1.48
Total HxCDF	ND	1.11
Total HpCDF	ND	1.13

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:	B4L0090	Lab Sample:	B4L0090-BS1
Sample Size:	1.00 L	Date Extracted:	16-Dec-2014 8:37	Date Analyzed:	17-Dec-14 17:13 Column: ZB-5MS Analyst: MAS

Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits		Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	182	200	90.9	67 - 158	IS	13C-2,3,7,8-TCDD	79.7	20 - 175
1,2,3,7,8-PeCDD	970	1000	97.0	70 - 142		13C-1,2,3,7,8-PeCDD	75.8	21 - 227
1,2,3,4,7,8-HxCDD	986	1000	98.6	70 - 164		13C-1,2,3,4,7,8-HxCDD	77.0	21 - 193
1,2,3,6,7,8-HxCDD	1030	1000	103	76 - 134		13C-1,2,3,6,7,8-HxCDD	76.6	25 - 163
1,2,3,7,8,9-HxCDD	982	1000	98.2	64 - 162		13C-1,2,3,7,8,9-HxCDD	78.2	21 - 193
1,2,3,4,6,7,8-HpCDD	943	1000	94.3	70 - 140		13C-1,2,3,4,6,7,8-HpCDD	79.1	26 - 166
OCDD	1990	2000	99.6	78 - 144		13C-OCDD	53.4	13 - 199
2,3,7,8-TCDF	178	200	89.0	75 - 158		13C-2,3,7,8-TCDF	79.0	22 - 152
1,2,3,7,8-PeCDF	940	1000	94.0	80 - 134		13C-1,2,3,7,8-PeCDF	75.4	21 - 192
2,3,4,7,8-PeCDF	950	1000	95.0	68 - 160		13C-2,3,4,7,8-PeCDF	76.5	13 - 328
1,2,3,4,7,8-HxCDF	989	1000	98.9	72 - 134		13C-1,2,3,4,7,8-HxCDF	86.5	19 - 202
1,2,3,6,7,8-HxCDF	964	1000	96.4	84 - 130		13C-1,2,3,6,7,8-HxCDF	79.2	21 - 159
2,3,4,6,7,8-HxCDF	997	1000	99.7	70 - 156		13C-2,3,4,6,7,8-HxCDF	73.0	22 - 176
1,2,3,7,8,9-HxCDF	953	1000	95.3	78 - 130		13C-1,2,3,7,8,9-HxCDF	79.7	17 - 205
1,2,3,4,6,7,8-HpCDF	983	1000	98.3	82 - 122		13C-1,2,3,4,6,7,8-HpCDF	73.5	21 - 158
1,2,3,4,7,8,9-HpCDF	977	1000	97.7	78 - 138		13C-1,2,3,4,7,8,9-HpCDF	71.4	20 - 186
OCDF	1970	2000	98.3	63 - 170		13C-OCDF	60.2	13 - 199
					CRS	37Cl-2,3,7,8-TCDD	98.7	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: SC-MH-20-20141211-W

EPA Method 1613B

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 15:00

Sample Data
Matrix: Effluent
Sample Size: 0.965 L

Laboratory Data
Lab Sample: 1400948-04 Date Received: 12-Dec-2014 8:53
QC Batch: B4L0090 Date Extracted: 16-Dec-2014 8:37
Date Analyzed : 18-Dec-14 08:03 Column: ZB-5MS Analyst: MAS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	ND	5.18		1.82	0.943	
1,2,3,7,8-PeCDD	ND	25.9		12.3	4.51	
1,2,3,4,7,8-HxCDD	42.1	25.9			2.21	
1,2,3,6,7,8-HxCDD	95.9	25.9			1.93	
1,2,3,7,8,9-HxCDD	79.2	25.9			2.02	
1,2,3,4,6,7,8-HpCDD	2690	25.9			2.98	
OCDD	21800	51.8			3.57	
2,3,7,8-TCDF	1.98	5.18			0.984	J
1,2,3,7,8-PeCDF	4.20	25.9			2.50	J
2,3,4,7,8-PeCDF	5.87	25.9			1.73	J
1,2,3,4,7,8-HxCDF	35.3	25.9			1.36	
1,2,3,6,7,8-HxCDF	40.4	25.9			1.56	
2,3,4,6,7,8-HxCDF	43.8	25.9			2.05	
1,2,3,7,8,9-HxCDF	2.63	25.9			1.34	J
1,2,3,4,6,7,8-HpCDF	1170	25.9			1.46	
1,2,3,4,7,8,9-HpCDF	59.5	25.9			1.75	
OCDF	3460	51.8			2.98	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	64.4	25 - 164	
	13C-1,2,3,7,8-PeCDD	62.0	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	50.1	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	53.4	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	52.3	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	53.7	23 - 140	
	13C-OCDD	38.1	17 - 157	
	13C-2,3,7,8-TCDF	65.3	24 - 169	
	13C-1,2,3,7,8-PeCDF	60.7	24 - 185	
	13C-2,3,4,7,8-PeCDF	62.6	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	57.8	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	52.6	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	52.8	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	53.5	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	53.0	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	48.2	26 - 138	
	13C-OCDF	41.4	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	93.9	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	82.8

TOTALS

Total TCDD	ND		1.82	
Total PeCDD	45.2		59.9	
Total HxCDD	654			
Total HpCDD	4910			
Total TCDF	18.1		26.1	
Total PeCDF	192		194	
Total HxCDF	1050			
Total HpCDF	2880			

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 1668C

Matrix: Aqueous
Sample Size: 1.00 L
QC Batch: B4L0127
Date Extracted: 23-Dec-2014 8:05
Lab Sample: B4L0127-BLK1
Date Analyzed: 26-Dec-14 14:35 Column: ZB-1 Analyst: ANP

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	5.00	1.12		1.21	
PCB-2	ND	5.00	1.29		1.75	
PCB-3	ND	5.00	1.25		1.49	
PCB-4/10	ND	20.0	0.849		5.64	
PCB-5/8	ND	20.0	0.707		3.59	
PCB-6	ND	10.0	0.692		3.10	
PCB-7/9	ND	20.0	0.687		6.22	
PCB-11	ND	10.0		14.2	3.86	
PCB-12/13	ND	20.0	0.702		5.01	
PCB-14	ND	10.0	0.626		3.98	
PCB-15	ND	10.0	0.638		2.53	
PCB-16/32	ND	10.0	0.848		2.87	
PCB-17	ND	5.00	0.970		1.37	
PCB-18	ND	5.00	1.02		2.57	
PCB-19	ND	5.00	1.02		2.38	
PCB-20/21/33	ND	15.0	0.634		10.3	
PCB-22	ND	5.00	0.629		3.17	
PCB-23	ND	5.00	0.634		1.35	
PCB-24/27	ND	10.0	0.742		3.16	
PCB-25	ND	5.00	0.619		3.34	
PCB-26	ND	5.00	0.643		2.19	
PCB-28	3.18	5.00			2.90	J
PCB-29	ND	5.00	0.625		1.60	
PCB-30	ND	5.00	0.725		2.09	
PCB-31	ND	5.00	0.585		4.29	
PCB-34	ND	5.00	0.659		2.34	
PCB-35	ND	5.00	0.652		1.65	
PCB-36	ND	5.00	0.652		2.69	
PCB-37	ND	5.00	0.645		1.92	
PCB-38	ND	5.00	0.663		1.56	
PCB-39	ND	5.00	0.632		2.60	
PCB-40	ND	5.00	1.69		3.08	
PCB-41/64/71/72	ND	20.0	1.05		5.57	
PCB-42/59	ND	10.0	1.14		2.84	

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-43/49	ND	10.0	1.26		3.38	
PCB-44	ND	5.00	1.47		2.48	
PCB-45	ND	5.00	1.45		1.96	
PCB-46	ND	5.00	1.48		2.49	
PCB-47	ND	5.00	1.22		4.42	
PCB-48/75	ND	10.0	1.06		2.09	
PCB-50	ND	5.00	1.21		1.40	
PCB-51	ND	5.00	1.22		1.42	
PCB-52/69	ND	10.0	1.10		3.64	
PCB-53	ND	5.00	1.18		1.12	
PCB-54	ND	5.00	0.975		1.51	
PCB-55	ND	5.00	0.891		1.19	
PCB-56/60	ND	10.0	0.910		2.19	
PCB-57	ND	5.00	0.920		0.857	
PCB-58	ND	5.00	0.930		1.81	
PCB-61/70	ND	10.0	0.949		2.40	
PCB-62	ND	5.00	1.07		1.46	
PCB-63	ND	5.00	0.917		0.696	
PCB-65	ND	5.00	1.04		0.953	
PCB-66/76	ND	10.0	0.902		2.82	
PCB-67	ND	5.00	0.954		1.22	
PCB-68	ND	5.00	0.930		1.24	
PCB-73	ND	5.00	1.02		1.56	
PCB-74	ND	5.00	0.851		1.53	
PCB-77	ND	5.00	0.813		1.34	
PCB-78	ND	5.00	0.903		0.990	
PCB-79	ND	5.00	0.880		1.60	
PCB-80	ND	5.00	0.774		1.98	
PCB-81	ND	5.00	0.809		2.34	
PCB-82	ND	5.00	2.65		1.69	
PCB-83	ND	5.00	1.70		1.32	
PCB-84/92	ND	10.0	2.36		3.38	
PCB-85/116	ND	10.0	1.98		2.83	
PCB-86	ND	5.00	2.53		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: B4L0127
Date Extracted: 23-Dec-2014 8:05

Lab Sample: B4L0127-BLK1
Date Analyzed: 26-Dec-14 14:35 Column: ZB-1 Analyst: ANP

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-87/117/125	ND	15.0	1.66		3.79	
PCB-88/91	ND	5.00	2.59		3.25	
PCB-89	ND	5.00	2.44		1.84	
PCB-90/101	ND	10.0		5.45	1.92	
PCB-93	ND	5.00	2.33		1.47	
PCB-94	ND	5.00	2.38		1.91	
PCB-95/98/102	ND	15.0	2.17		6.58	
PCB-96	ND	5.00	1.85		2.16	
PCB-97	ND	5.00	2.07		1.24	
PCB-99	ND	5.00	1.93		1.94	
PCB-100	ND	5.00	2.01		2.03	
PCB-103	ND	5.00	2.16		2.28	
PCB-104	ND	5.00	1.60		0.931	
PCB-105	ND	5.00	0.826		2.21	
PCB-106/118	ND	10.0		3.97	2.44	
PCB-107/109	ND	10.0	1.60		1.98	
PCB-108/112	ND	10.0	2.01		1.86	
PCB-110	ND	5.00	1.54		1.94	
PCB-111/115	ND	10.0	1.47		0.768	
PCB-113	ND	5.00	1.84		1.31	
PCB-114	ND	5.00	0.835		1.81	
PCB-119	ND	5.00	1.50		0.949	
PCB-120	ND	5.00	1.45		1.01	
PCB-121	ND	5.00	1.38		1.94	
PCB-122	ND	5.00	0.915		1.84	
PCB-123	ND	5.00	1.61		1.35	
PCB-124	ND	5.00	1.48		1.79	
PCB-126	ND	5.00	0.844		2.05	
PCB-127	ND	5.00	0.848		0.808	
PCB-128/162	ND	10.0	1.81		1.68	
PCB-129	ND	5.00	2.19		1.11	
PCB-130	ND	5.00	2.35		2.21	
PCB-131	ND	5.00	2.19		1.46	
PCB-132/161	ND	10.0	1.80		2.34	
PCB-133/142	ND	10.0	2.12		2.19	
PCB-134/143	ND	10.0	2.16		2.40	
PCB-135	ND	5.00	2.27		2.90	
PCB-136	ND	5.00	1.63		2.89	
PCB-137	ND	5.00	1.86		2.08	
PCB-138/163/164	ND	15.0		6.99	2.68	
PCB-139/149	ND	10.0		4.33	7.87	
PCB-140	ND	5.00	2.25		3.52	
PCB-141	ND	5.00	2.04		1.15	
PCB-144	ND	5.00	2.16		3.22	
PCB-145	ND	5.00	1.62		1.73	
PCB-146/165	ND	10.0	1.73		1.91	
PCB-147	ND	5.00	2.13		3.62	
PCB-148	ND	5.00	2.39		1.68	
PCB-150	ND	5.00	1.66		1.14	
PCB-151	ND	5.00	2.18		3.59	
PCB-152	ND	5.00	1.61		1.82	
PCB-153	ND	5.00		9.67	1.83	
PCB-154	ND	5.00	2.00		2.78	
PCB-155	ND	5.00	1.56		1.45	
PCB-156	ND	5.00	1.42		1.74	
PCB-157	ND	5.00	1.54		1.17	
PCB-158/160	ND	10.0	1.57		1.99	
PCB-159	ND	5.00	1.58		1.20	
PCB-166	ND	5.00	1.65		0.920	
PCB-167	ND	5.00	1.46		1.65	
PCB-168	ND	5.00	1.46		0.933	
PCB-169	ND	5.00	1.49		1.12	
PCB-170	ND	5.00	1.54		1.38	
PCB-171	ND	5.00	1.51		1.61	
PCB-172	ND	5.00	1.62		1.46	
PCB-173	ND	5.00	1.71		1.49	
PCB-174	ND	5.00	1.48		1.42	
PCB-175	ND	5.00	1.66		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
Sample Size: 1.00 L

QC Batch: B4L0127
Date Extracted: 23-Dec-2014 8:05

Lab Sample: B4L0127-BLK1
Date Analyzed: 26-Dec-14 14:35 Column: ZB-1 Analyst: ANP

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-176	ND	5.00	1.18		2.17	
PCB-177	ND	5.00	1.59		1.34	
PCB-178	ND	5.00	1.72		2.25	
PCB-179	ND	5.00	1.23		1.57	
PCB-180	ND	5.00		5.50	0.610	
PCB-181	ND	5.00	1.45		1.01	
PCB-182/187	ND	10.0		4.45	6.20	
PCB-183	ND	5.00	1.49		3.29	
PCB-184	ND	5.00	1.30		1.25	
PCB-185	ND	5.00	1.47		1.47	
PCB-186	ND	5.00	1.26		2.43	
PCB-188	ND	5.00	1.15		1.08	
PCB-189	ND	5.00	1.04		1.49	
PCB-190	ND	5.00	1.15		1.70	
PCB-191	ND	5.00	1.18		1.96	
PCB-192	ND	5.00	1.30		1.69	
PCB-193	ND	5.00	1.20		1.46	
PCB-194	ND	5.00	0.637		1.71	
PCB-195	ND	5.00	0.662		1.47	
PCB-196/203	ND	10.0	2.09		6.35	
PCB-197	ND	5.00	1.50		1.80	
PCB-198	ND	5.00	2.17		3.78	
PCB-199	ND	5.00	2.21		4.05	
PCB-200	ND	5.00	1.58		1.75	
PCB-201	ND	5.00	1.46		1.02	
PCB-202	ND	5.00	1.55		1.55	
PCB-204	ND	5.00	1.62		1.48	
PCB-205	ND	5.00	0.562		1.53	
PCB-206	ND	5.00	0.806		1.32	
PCB-207	ND	5.00	0.477		1.51	
PCB-208	ND	5.00	0.454		1.34	
PCB-209	ND	5.00	1.80		1.86	
Total monoCB	ND	5.00	1.29			
Total diCB	ND	10.0		14.2		
Total triCB	3.18	5.00				J
Total tetraCB	ND	5.00	1.69			
Total pentaCB	ND	5.00		9.42		
Total hexaCB	ND	5.00		21.0		
Total heptaCB	ND	5.00		9.95		
Total octaCB	ND	5.00	2.21			
Total nonaCB	ND	5.00	0.806			
DecaCB	ND	5.00	1.80			
Total PCB	3.18	10.0				J

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: B4L0127
Date Extracted: 23-Dec-2014 8:05

Lab Sample: B4L0127-BLK1
Date Analyzed: 26-Dec-14 14:35 Column: ZB-1 Analyst: ANP

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	87.9	5 - 145	
	13C-PCB-3	84.9	5 - 145	
	13C-PCB-4	79.6	5 - 145	
	13C-PCB-11	83.6	5 - 145	
	13C-PCB-9	80.5	5 - 145	
	13C-PCB-19	75.6	5 - 145	
	13C-PCB-28	93.8	5 - 145	
	13C-PCB-32	76.1	5 - 145	
	13C-PCB-37	94.3	5 - 145	
	13C-PCB-47	81.2	5 - 145	
	13C-PCB-52	82.9	5 - 145	
	13C-PCB-54	81.8	5 - 145	
	13C-PCB-70	87.4	5 - 145	
	13C-PCB-77	102	10 - 145	
	13C-PCB-80	89.9	10 - 145	
	13C-PCB-81	97.6	10 - 145	
	13C-PCB-95	84.9	10 - 145	
	13C-PCB-97	94.1	10 - 145	
	13C-PCB-101	89.8	10 - 145	
	13C-PCB-104	80.9	10 - 145	
	13C-PCB-105	109	10 - 145	
	13C-PCB-114	103	10 - 145	
	13C-PCB-118	95.1	10 - 145	
	13C-PCB-123	95.3	10 - 145	
	13C-PCB-126	117	10 - 145	
	13C-PCB-127	110	10 - 145	
	13C-PCB-138	95.9	10 - 145	
	13C-PCB-141	96.4	10 - 145	
	13C-PCB-153	90.2	10 - 145	
	13C-PCB-155	74.4	10 - 145	
	13C-PCB-156	101	10 - 145	
	13C-PCB-157	99.9	10 - 145	
	13C-PCB-159	96.8	10 - 145	
	13C-PCB-167	101	10 - 145	
	13C-PCB-169	109	10 - 145	
	13C-PCB-170	89.1	10 - 145	
	13C-PCB-180	86.7	10 - 145	
	13C-PCB-188	75.9	10 - 145	
	13C-PCB-189	92.4	10 - 145	
	13C-PCB-194	97.4	10 - 145	
	13C-PCB-202	73.1	10 - 145	
	13C-PCB-206	88.7	10 - 145	
	13C-PCB-208	78.8	10 - 145	
	13C-PCB-209	91.7	10 - 145	
CRS	13C-PCB-79	102	10 - 145	
	13C-PCB-178	91.2	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: B4L0127
Date Extracted: 23-Dec-2014 8:05

Lab Sample: B4L0127-BS1
Date Analyzed: 26-Dec-14 12:27 Column: ZB-1 Analyst: ANP

Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits
PCB-1	1010	1000	101	60 - 135
PCB-3	1010	1000	101	60 - 135
PCB-4/10	4960	4000	124	60 - 135
PCB-15	2410	2000	120	60 - 135
PCB-19	1070	1000	107	60 - 135
PCB-37	1080	1000	108	60 - 135
PCB-54	1090	1000	109	60 - 135
PCB-77	1080	1000	108	60 - 135
PCB-81	1070	1000	107	60 - 135
PCB-104	1120	1000	112	60 - 135
PCB-105	1220	1000	122	60 - 135
PCB-106/118	2260	2000	113	60 - 135
PCB-114	1200	1000	120	60 - 135
PCB-123	1190	1000	119	60 - 135
PCB-126	1180	1000	118	60 - 135
PCB-155	1110	1000	111	60 - 135
PCB-156	1150	1000	115	60 - 135
PCB-157	1160	1000	116	60 - 135
PCB-167	1150	1000	115	60 - 135
PCB-169	1210	1000	121	60 - 135
PCB-188	1090	1000	109	60 - 135
PCB-189	1190	1000	119	60 - 135
PCB-202	1090	1000	109	60 - 135
PCB-205	1180	1000	118	60 - 135
PCB-206	1200	1000	120	60 - 135
PCB-208	1190	1000	119	60 - 135
PCB-209	1170	1000	117	60 - 135

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-1	74.0	15 - 145
IS	13C-PCB-3	71.7	15 - 145
IS	13C-PCB-4	69.1	15 - 145
IS	13C-PCB-11	76.0	15 - 145
IS	13C-PCB-9	71.3	15 - 145
IS	13C-PCB-19	65.3	15 - 145
IS	13C-PCB-28	82.7	15 - 145
IS	13C-PCB-32	67.1	15 - 145
IS	13C-PCB-37	87.8	15 - 145
IS	13C-PCB-47	77.0	15 - 145
IS	13C-PCB-52	76.1	15 - 145
IS	13C-PCB-54	74.9	15 - 145
IS	13C-PCB-70	87.4	15 - 145
IS	13C-PCB-77	94.5	40 - 145
IS	13C-PCB-80	87.5	40 - 145
IS	13C-PCB-81	93.2	40 - 145
IS	13C-PCB-95	81.7	40 - 145
IS	13C-PCB-97	91.9	40 - 145
IS	13C-PCB-101	86.8	40 - 145
IS	13C-PCB-104	74.5	40 - 145
IS	13C-PCB-105	106	40 - 145
IS	13C-PCB-114	101	40 - 145
IS	13C-PCB-118	93.2	40 - 145
IS	13C-PCB-123	90.5	40 - 145
IS	13C-PCB-126	111	40 - 145
IS	13C-PCB-127	106	40 - 145
IS	13C-PCB-138	94.1	40 - 145
IS	13C-PCB-141	91.8	40 - 145
IS	13C-PCB-153	90.3	40 - 145
IS	13C-PCB-155	71.3	40 - 145
IS	13C-PCB-156	96.4	40 - 145
IS	13C-PCB-157	95.5	40 - 145
IS	13C-PCB-159	96.5	40 - 145
IS	13C-PCB-167	95.1	40 - 145
IS	13C-PCB-169	92.5	40 - 145
IS	13C-PCB-170	86.9	40 - 145
IS	13C-PCB-180	85.8	40 - 145
IS	13C-PCB-188	74.6	40 - 145
IS	13C-PCB-189	86.2	40 - 145
IS	13C-PCB-194	92.1	40 - 145

Sample ID: OPR

EPA Method 1668C

Matrix: Aqueous
Sample Size: 1.00 L

QC Batch: B4L0127
Date Extracted: 23-Dec-2014 8:05

Lab Sample: B4L0127-BS1
Date Analyzed: 26-Dec-14 12:27 Column: ZB-1 Analyst: ANP

Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-202	71.5	40 - 145
IS	13C-PCB-206	82.2	40 - 145
IS	13C-PCB-208	70.1	40 - 145
IS	13C-PCB-209	86.9	40 - 145
CRS	13C-PCB-79	99.8	40 - 145
CRS	13C-PCB-178	88.8	40 - 145

LCL-UCL - Lower control limit - upper control limit

Sample ID: SC-MH-20-20141211-W

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 15:00

Sample Data
Matrix: Effluent
Sample Size: 0.993 L

Laboratory Data
Lab Sample: 1400948-04 Date Received: 12-Dec-2014 8:53
QC Batch: B4L0127 Date Extracted: 23-Dec-2014 8:05
Date Analyzed : 26-Dec-14 17:49 Column: ZB-1 Analyst: MAS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	3.44	5.04			1.21	J
PCB-2	1.67	5.04			1.75	J
PCB-3	2.97	5.04			1.49	J
PCB-4/10	32.4	20.1			5.64	
PCB-5/8	88.3	20.1			3.59	
PCB-6	19.4	10.1			3.10	
PCB-7/9	7.24	20.1			6.22	J
PCB-11	96.6	10.1			3.86	
PCB-12/13	13.8	20.1			5.01	J
PCB-14	ND	10.1	7.32		3.98	
PCB-15	150	10.1			2.53	
PCB-16/32	253	10.1			2.87	
PCB-17	102	5.04			1.37	
PCB-18	242	5.04			2.57	
PCB-19	37.6	5.04			2.38	
PCB-20/21/33	331	15.1			10.3	
PCB-22	298	5.04			3.17	
PCB-23	ND	5.04	0.852		1.35	
PCB-24/27	32.8	10.1			3.16	
PCB-25	41.8	5.04			3.34	
PCB-26	88.3	5.04			2.19	
PCB-28	579	5.04			2.90	B
PCB-29	3.33	5.04			1.60	J
PCB-30	ND	5.04	0.915		2.09	
PCB-31	454	5.04			4.29	
PCB-34	1.44	5.04			2.34	J
PCB-35	23.7	5.04			1.65	
PCB-36	ND	5.04	1.48		2.69	
PCB-37	514	5.04			1.92	
PCB-38	5.95	5.04			1.56	
PCB-39	ND	5.04	1.44		2.60	
PCB-40	200	5.04			3.08	
PCB-41/64/71/72	856	20.1			5.57	
PCB-42/59	280	10.1			2.84	
PCB-43/49	525	10.1			3.38	

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-44	876	5.04			2.48	
PCB-45	96.4	5.04			1.96	
PCB-46	44.4	5.04			2.49	
PCB-47	199	5.04			4.42	
PCB-48/75	133	10.1			2.09	
PCB-50	ND	5.04	1.50		1.40	
PCB-51	34.2	5.04			1.42	
PCB-52/69	869	10.1			3.64	
PCB-53	69.9	5.04			1.12	
PCB-54	1.21	5.04			1.51	J
PCB-55	41.4	5.04			1.19	
PCB-56/60	1060	10.1			2.19	
PCB-57	5.84	5.04			0.857	
PCB-58	2.43	5.04			1.81	J
PCB-61/70	1550	10.1			2.40	
PCB-62	ND	5.04	1.35		1.46	
PCB-63	39.4	5.04			0.696	
PCB-65	ND	5.04	1.31		0.953	
PCB-66/76	1090	10.1			2.82	
PCB-67	36.5	5.04			1.22	
PCB-68	10.7	5.04			1.24	
PCB-73	ND	5.04	3.23		1.56	
PCB-74	511	5.04			1.53	
PCB-77	315	5.04			1.34	
PCB-78	ND	5.04	1.21		0.990	
PCB-79	28.2	5.04			1.60	
PCB-80	ND	5.04	1.05		1.98	
PCB-81	20.1	5.04			2.34	
PCB-82	426	5.04			1.69	
PCB-83	ND	5.04	3.72		1.32	
PCB-84/92	892	10.1			3.38	
PCB-85/116	496	10.1			2.83	
PCB-86	8.58	5.04			2.34	
PCB-87/117/125	1030	15.1			3.79	
PCB-88/91	310	5.04			3.25	

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: SC-MH-20-20141211-W

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 15:00

Sample Data
Matrix: Effluent
Sample Size: 0.993 L

Laboratory Data
Lab Sample: 1400948-04 Date Received: 12-Dec-2014 8:53
QC Batch: B4L0127 Date Extracted: 23-Dec-2014 8:05
Date Analyzed : 26-Dec-14 17:49 Column: ZB-1 Analyst: MAS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-89	23.2	5.04			1.84	
PCB-90/101	2220	10.1			1.92	
PCB-93	ND	5.04	3.86		1.47	
PCB-94	9.14	5.04			1.91	
PCB-95/98/102	1450	15.1			6.58	
PCB-96	12.7	5.04			2.16	
PCB-97	772	5.04			1.24	
PCB-99	886	5.04			1.94	
PCB-100	4.27	5.04			2.03	J
PCB-103	7.68	5.04			2.28	
PCB-104	ND	5.04	2.73		0.931	
PCB-105	1440	5.04			2.21	
PCB-106/118	2980	10.1			2.44	
PCB-107/109	207	10.1			1.98	
PCB-108/112	111	10.1			1.86	
PCB-110	3120	5.04			1.94	
PCB-111/115	38.6	10.1			0.768	
PCB-113	ND	5.04	3.90		1.31	
PCB-114	71.6	5.04			1.81	
PCB-119	33.0	5.04			0.949	
PCB-120	5.74	5.04			1.01	
PCB-121	ND	5.04	2.29		1.94	
PCB-122	38.3	5.04			1.84	
PCB-123	51.2	5.04			1.35	
PCB-124	127	5.04			1.79	
PCB-126	48.3	5.04			2.05	
PCB-127	ND	5.04	4.40		0.808	
PCB-128/162	623	10.1			1.68	
PCB-129	175	5.04			1.11	
PCB-130	220	5.04			2.21	
PCB-131	ND	5.04	3.77		1.46	
PCB-132/161	863	10.1			2.34	
PCB-133/142	71.1	10.1			2.19	
PCB-134/143	136	10.1			2.40	
PCB-135	331	5.04			2.90	
PCB-136	267	5.04			2.89	
PCB-137	171	5.04			2.08	
PCB-138/163/164	3360	15.1			2.68	
PCB-139/149	2120	10.1			7.87	
PCB-140	18.8	5.04			3.52	
PCB-141	619	5.04			1.15	
PCB-144	101	5.04			3.22	
PCB-145	ND	5.04	1.91		1.73	
PCB-146/165	323	10.1			1.91	
PCB-147	50.3	5.04			3.62	
PCB-148	ND	5.04	2.82		1.68	
PCB-150	3.38	5.04			1.14	J
PCB-151	456	5.04			3.59	
PCB-152	2.56	5.04			1.82	J
PCB-153	2350	5.04			1.83	
PCB-154	21.4	5.04			2.78	
PCB-155	ND	5.04	1.84		1.45	
PCB-156	391	5.04			1.74	
PCB-157	93.6	5.04			1.17	
PCB-158/160	399	10.1			1.99	
PCB-159	ND	5.04	2.70		1.20	
PCB-166	ND	5.04		12.1	0.920	
PCB-167	155	5.04			1.65	
PCB-168	ND	5.04	2.52		0.933	
PCB-169	ND	5.04	2.92		1.12	
PCB-170	875	5.04			1.38	
PCB-171	202	5.04			1.61	
PCB-172	144	5.04			1.46	
PCB-173	16.9	5.04			1.49	
PCB-174	712	5.04			1.42	
PCB-175	35.2	5.04			3.15	
PCB-176	77.2	5.04			2.17	
PCB-177	414	5.04			1.34	
PCB-178	143	5.04			2.25	
PCB-179	250	5.04			1.57	

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: SC-MH-20-20141211-W

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 15:00

Sample Data
Matrix: Effluent
Sample Size: 0.993 L

Laboratory Data
Lab Sample: 1400948-04 Date Received: 12-Dec-2014 8:53
QC Batch: B4L0127 Date Extracted: 23-Dec-2014 8:05
Date Analyzed : 26-Dec-14 17:49 Column: ZB-1 Analyst: MAS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-180	1800	5.04			0.610	
PCB-181	ND	5.04	1.29		1.01	
PCB-182/187	934	10.1			6.20	
PCB-183	431	5.04			3.29	
PCB-184	1.84	5.04			1.25	J
PCB-185	81.0	5.04			1.47	
PCB-186	ND	5.04	1.11		2.43	
PCB-188	3.08	5.04			1.08	J
PCB-189	33.6	5.04			1.49	
PCB-190	165	5.04			1.70	
PCB-191	33.6	5.04			1.96	
PCB-192	ND	5.04	1.15		1.69	
PCB-193	83.7	5.04			1.46	
PCB-194	475	5.04			1.71	
PCB-195	163	5.04			1.47	
PCB-196/203	637	10.1			6.35	
PCB-197	16.6	5.04			1.80	
PCB-198	21.3	5.04			3.78	
PCB-199	591	5.04			4.05	
PCB-200	59.6	5.04			1.75	
PCB-201	63.3	5.04			1.02	
PCB-202	94.1	5.04			1.55	
PCB-204	ND	5.04	2.09		1.48	
PCB-205	24.4	5.04			1.53	
PCB-206	360	5.04			1.32	
PCB-207	41.9	5.04			1.51	
PCB-208	94.3	5.04			1.34	
PCB-209	53.5	5.04			1.86	
Total monoCB	8.07	5.04				
Total diCB	407	10.1				
Total triCB	3010	5.04				B
Total tetraCB	8890	5.04				
Total pentaCB	16800	5.04				
Total hexaCB	13300	5.04				
Total heptaCB	6430	5.04				
Total octaCB	2150	5.04				
Total nonaCB	496	5.04				
DecaCB	53.5	5.04				
Total PCB	51600	10.1				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: SC-MH-20-20141211-W

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 15:00

Sample Data
Matrix: Effluent
Sample Size: 0.993 L

Laboratory Data
Lab Sample: 1400948-04 Date Received: 12-Dec-2014 8:53
QC Batch: B4L0127 Date Extracted: 23-Dec-2014 8:05
Date Analyzed : 26-Dec-14 17:49 Column: ZB-1 Analyst: MAS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	87.5	5 -145	
	13C-PCB-3	88.1	5 -145	
	13C-PCB-4	89.1	5 -145	
	13C-PCB-11	107	5 -145	
	13C-PCB-9	92.6	5 -145	
	13C-PCB-19	82.0	5 -145	
	13C-PCB-28	110	5 -145	
	13C-PCB-32	92.5	5 -145	
	13C-PCB-37	114	5 -145	
	13C-PCB-47	104	5 -145	
	13C-PCB-52	104	5 -145	
	13C-PCB-54	90.4	5 -145	
	13C-PCB-70	115	5 -145	
	13C-PCB-77	118	10 -145	
	13C-PCB-80	114	10 -145	
	13C-PCB-81	120	10 -145	
	13C-PCB-95	103	10 -145	
	13C-PCB-97	116	10 -145	
	13C-PCB-101	110	10 -145	
	13C-PCB-104	95.1	10 -145	
	13C-PCB-105	117	10 -145	
	13C-PCB-114	118	10 -145	
	13C-PCB-118	119	10 -145	
	13C-PCB-123	116	10 -145	
	13C-PCB-126	116	10 -145	
	13C-PCB-127	121	10 -145	
	13C-PCB-138	121	10 -145	
	13C-PCB-141	117	10 -145	
	13C-PCB-153	119	10 -145	
	13C-PCB-155	95.3	10 -145	
	13C-PCB-156	121	10 -145	
	13C-PCB-157	121	10 -145	
	13C-PCB-159	122	10 -145	
	13C-PCB-167	122	10 -145	
	13C-PCB-169	113	10 -145	
	13C-PCB-170	116	10 -145	
	13C-PCB-180	120	10 -145	
	13C-PCB-188	107	10 -145	
	13C-PCB-189	109	10 -145	
	13C-PCB-194	117	10 -145	
	13C-PCB-202	106	10 -145	
	13C-PCB-206	115	10 -145	
	13C-PCB-208	107	10 -145	
	13C-PCB-209	144	10 -145	
CRS	13C-PCB-79	102	10 -145	
	13C-PCB-178	97.6	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

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
Laboratory Project ID: 1400948
Storage ID: WR-2
Storage Secured: Yes ☑ No ☐
Temp: 19 °C

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

Project I.D.:_____ P.O.#_____ Sampler: M. Ivancevich, C. Wilson (Name)

Invoice to: Name: Christine Nancarrow Company: Leidos Address: 18912 N. Creek Pkwy Ste 101 City: Bothell State: WA Zip: 98011 Ph#: 206-300-2144 Fax#:

Relinquished by: (Signature and Printed Name) Melissa Ivancevich Date: 12/11/14 Time: 1713 Received by: (Signature and Printed Name) Betty J. Benedict B. Benedict Date: 12/12/14 Time: 0859

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:_____

Method of Shipment: _____

Tracking No.: _____

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	EPA1614 PBDE	CARB429 PAH	CARB429 WHO-29
SC-OWS-05-20141211-S	12/11/14	1010	S. Service Center	1	A	SD		✓									✓		✓				
SC-CB-35-20141211-S	12/11/14	1300	S. Service Center	1	A	SD		✓									✓		✓				
SC-CB-24-20141211-S	12/11/14	1400	S. Service Center	1	A	SD		✓									✓		✓				
SC-MH-20-20141211-S	12/11/14	1500	S. Service Center	4	A	EF		✓									✓		✓				

Special Instructions/Comments:_____

SEND DOCUMENTATION AND RESULTS TO:

Name: same as above
Company:_____
Address:_____
City:_____ State:_____ Zip:_____
Phone:_____ Fax:_____
Email: nancarrowc@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 #: 1400948 **TAT** Std

Samples Arrival:	**Date/Time** 12/12/14 0853	**Initials:** VBB	**Location:** WR-2 **Shelf/Rack:** NA
Logged In:	**Date/Time** 12/12/14 1519	**Initials:** VBB	**Location:** WR-2 **Shelf/Rack:** C4 / E6

Delivered By:	(FedEx)	UPS	On Trac	DHL	Hand Delivered	Other
Preservation:	(Ice)	Blue Ice	Dry Ice	None		

Temp °C: 1.9 (uncorrected)	**Time:** 0859	**Thermometer ID:** IR-1	
Temp °C: 1.9 (corrected)			

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill Trk # 8064 5979 2390	✓		
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:

AQ Sample SC-MH-20-20141211-W A,B,C,D Containers

Sample Login 11/2013 ckt

Chain of Custody Anomaly/Sample Acceptance Form

Vista Analytical Laboratory

Client: Leidos
Contact: Christine Nancarrow
Email: christine.f.nancarrow@leidos.com
Phone:

Workorder Number: 1400948
Date Received: 12-Dec-14 08:53
Documented by/date: B.Benedict 12/12/2014

Please review the following information and complete the Client Authorization section. To comply with NELAC regulations, we must receive authorization before proceeding with sample analysis.

Thank you,

Martha Maier
mmaier@vista-analytical.com
916-673-1520

The following information or item is needed to proceed with analysis:

- [ ] Complete Chain-of-Custody
- [ ] Test Method Requested
- [ ] Analyte List Requested
- [ ] Other:
- [ ] Preservative
- [ ] Sample Identification
- [ ] Sample Collection Date and/or Time
- [ ] Collector's Name
- [ ] Sample Type
- [ ] Sample Location

The following anomalies were noted. Authorization is needed to proceed with analysis.

- [ ] Temperature outside < 6°C Range — Samples Affected: _____
  Temperature _____°C Ice Present? Yes No Melted
- [X] Sample ID Discrepancy
- [ ] Sample Holding Time Missed
- [ ] Custody Seals Broken
- [ ] Insufficient Sample Size
- [ ] Sample Container(s) Broken
- [ ] Incorrect Container Type

Comments: COC ID: SC-MH-20-20141211-S
Label ID: SC-MH-20-20141211-W

Client Authorization

Proceed with Analysis: YES NO Signature and Date MM 12/31/14

Client Comments/Instructions Label ID is correct, per email.

EXTRACTION INFORMATION

Process Sheet

Workorder: 1400948

RX

Prep Expiration: 12/11/2015
Client: Leidos

Workorder Due: 02-Jan-15 00:00

TAT: 21

Method: **1613 Full List**
Matrix: **Solid**
Client Matrix: Sediment
Also run: **Percent Solids**

Prep Batch: B4L0130

Prep Data Entered: 12/26/14 ES
Date and Initials

Initial Sequence: S4L0417

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400948-01	☒	SC-OWS-05-20141211-S	12-Dec-14 08:53	WR-2 E-6	
1400948-02	☒	SC-CB-35-20141211-S	12-Dec-14 08:53	WR-2 E-6	
1400948-03	☒	SC-CB-24-20141211-S	12-Dec-14 08:53	WR-2 E-6	

19

Vista PM:Martha Maier

Vial Box ID: SLP

Sample Reconciled By: ES 12/23/14

Solids estimate

Batch: B4L0100

Lab ID	Analysis	% Solids	Entered	Target weight	Weigh this much
1400948-01	Percent Solids	27.08		1.00	3.69
1400948-02	Percent Solids	54.18		1.00	1.85
1400948-03	Percent Solids	41.63		1.00	2.40

PREPARATION BENCH SHEET

Matrix: Solid

Method: 1613 Full List

B4L0130

Prepared using: HRMS - Soxhlet

Chemist: ESchneider

Prep Date/Time: 23-Dec-14 12:53

C	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	C4L0100 AP CHEM/ DATE	C4L0101 ABSG CHEM/ DATE	C4L0101 AA CHEM/ DATE	C4L0102 Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	B4L0130-BLK1	(1.00)	(1.00)	ES VO 12/23/14	ES SS 12/25/14	ES 12/25/14	ES 12/25/14	ES 12/25/14	ES 12/25/14	ES SS 12/25/14
☐	B4L0130-BS1	↓	↓	↓	↓	↓	↓	↓	↓	↓
☐	1400948-01RE1	3.69	3.70	↓	↓	↓	↓	↓	↓	↓
☐	1400948-02RE1	1.85	1.85	↓	↓	↓	↓	↓	↓	↓
☐	1400948-03RE1	2.40	2.43	↓	↓	↓	↓	↓	↓	↓

IS Name (V9)	NS Name (V13)	CRS Name (V9)	RS Name (V9)	Cycle Time	APP: SEFUN SOX (SDS)	Check Out: Chemist/Date:
PCDD/F 14H2704, 10µL	PCDD/F 13L1101, 10µL	PCDD/F 14H2705, 10µL	PCDD/F 14H2706, 10µL	Start Date/Time	SOLV: TOL	ES 12/23/14
PCB	PCB	PCB	PCB	12/23/14 15:30	Other N/A	Check In: Chemist/Date:
PAH	PAH	PAH	PAH	Stop Date/Time	Final Volume(s) 20µL	Balance ID: HRMS-2
				12/24/14 07:55	C14	

Comments:

Process Sheet

Workorder: 1400948

Prep Expiration: 12/11/2015
Client: Leidos

Workorder Due: 02-Jan-15 00:00

TAT: 21

Method: **1613 Full List**
Matrix: **Aqueous**
Client Matrix: Effluent
Also run: **Percent Solids**

Prep Batch: B4L0090

Prep Data Entered: 12/17/14 BMS
Date and Initials

Initial Sequence: 54L0034

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400948-04 "A"	☐	SC-MH-20-20141211-S "SC-MH-20-20141211-W"	12-Dec-14 08:53	WR-2 C-4	

Vista PM: Martha Maier

Vial Box ID: Malcena

Sample Reconciled By: B Smith 12/16/14

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4L0091

Analyst: B. Smith **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

HRMS-4

Date/Time IN: 12/16/14 1905 Date/Time OUT 12/17/14 1515

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	BMS 12/16/14	BMS 12/17/14			BMS 12/16/14			
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-
	1400934-01		Sample	1.31	15.86	1.31			5	NA	NA	0
	1400934-02		Sample	1.31	17.10	1.32			6			0
	1400945-01		Sample	1.31	13.61	1.33			7			0
	1400946-01		Sample	1.32	~~15.9~~ BMS 16.00	1.36			7			0
	1400948-04		Sample	1.31	15.15	1.31			5			0

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4L0091

Analyst: B. Smith **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

HRMS-4

Date/Time IN:	Date/Time OUT
12/16/14 1005	12/17/14 1515

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	BMS 12/16/14	BMS 12/17/14			BMS 12/16/14			
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-
	1400934-01		Sample	1.3100	15.8600	1.3100	0.0000	0.00	5	N/A	N/A	0
	1400934-02		Sample	1.3100	17.1000	1.3200	0.0100	0.06	6	N/A	N/A	0
	1400945-01		Sample	1.3100	13.6100	1.3300	0.0200	0.16	7	N/A	N/A	0
	1400946-01		Sample	1.3200	16.0000	1.3600	0.0400	0.27	7	N/A	N/A	0
	1400948-04		Sample	1.3100	15.1500	1.3100	0.0000	0.00	5	N/A	N/A	0

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 1613 Full List

B4L0090

Chemist: B. Smith

Prep Date/Time: 16-Dec-14 08:37

Prepared using: HRMS - SPE Extraction

							NA	C4L0068	C4L0068	C4L0069	
C	VISTA Sample ID	Bottle + Sample (mL)	Bottle Only (mL)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	1400948-04	1463.53	498.84	0.96469	BMS 12/16/14	M.T 12/17/14	NA	M.T 12/17/14	M.T 12/17/14	M.T 12/17/14	M.T 12/17/14

IS Name (V9)	NS Name (V13)	CRS Name (V9)	RS Name (V9)	Cycle Time	APP: SEFUN SOX (SDS)	Check Out:
PCDD/F 14H2704,10uL	PCDD/F 13L1101,10uL	PCDD/F 14H2705,10uL	PCDD/F 14H2706,10uL	Start Date/Time 12/16/14 1652	SOLV: Tol	Chemist/Date: BMS 12/16/14
PCB	PCB	PCB	PCB		Other SPE	Check In:
PAH	PAH	PAH	PAH	Stop Date/Time 12/17/14 9:00	Final Volume(s) 20uL	Chemist/Date: empty
					GH	Balance ID: HCMS-4

Comments:

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 1613 Full List

B4L0090

Chemist: B. Smith

Prep Date/Time: 16-Dec-14 08:37

Prepared using: HRMS - SPE Extraction

							NA	C4L0068	C4L0068	C4L0069		
C	VISTA Sample ID	Bottle + Sample (mL)	Bottle Only (mL)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE	
☐	B4L0090-BLK1	MA	MA	(1.000)	BMS BR 12/16/14	M.T 12/17/14	NA	M.T 12/17/14	M.T 12/17/14	M.T 12/17/14	M.T VB 12/17/14	
☐	B4L0090-BS1	↓	↓	↓								
☐	1400915-01	1509.84	503.26	1.00658								
☐	1400925-01	1550.86	505.62	1.04524								
☐	1400925-02	1548.53	506.28	1.04225								
☐	1400925-03	1555.63	503.48	1.05215								
☐	1400925-04	1550.76	503.00	1.04776								
☐	1400928-01	1535.60	499.65	1.03595								
☐	1400930-01	1542.17	500.64	1.04153								
☐	1400931-01	1529.92	500.02	1.0299								
☐	1400932-01	1495.67	500.57	0.9951								
☐	1400933-01	1521.98	500.71	1.02127								
☐	1400934-01	1504.91	496.26	1.00865								
☐	1400934-02	~~1515.~~ 1516.00 BMS 12/16/14	499.93	1.01607								
☐	1400945-01	1528.51	501.15	1.02736								
☐	1400946-01	1524.87	499.84	1.02503								

IS Name (V9)	NS Name (V13)	CRS Name (V9) and	RS Name (V9)	Cycle Time	APP: SEFUN SOX (SDS)	Check Out: Chemist/Date: BMS 12/16/14
PCDD/F 14H2704, 10µL	PCDD/F 13L1101, 10µL	PCDD/F 14H2705, 10	PCDD/F 14H2706, 10µL	Start Date/Time 12/16/14 1652	SOLV: Tol	Check In: Chemist/Date: empty J
PCB	PCB	PCB	PCB	Other SPE		
PAH	PAH	PAH	PAH	Stop Date/Time 12/17/14 9:00	Final Volume(s) 20µL C14	Balance ID: HRMS-4

Comments:

Process Sheet

Workorder: 1400948

Prep Expiration: 12/11/2015
Client: Leidos

Workorder Due: 02-Jan-15 00:00

TAT: 21

Method: **1668C Full List**
Matrix: **Aqueous**
Client Matrix: Effluent
Also run: **Percent Solids**

Prep Batch: B4L0127

Prep Data Entered: M.T 12/24/14
Date and Initials

Initial Sequence: S4L0046

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400948-04 "C"	☑	SC-MH-20-20141211-S	12-Dec-14 08:53	WR-2 C-4	

Vista PM:Martha Maier

Vial Box ID: Grace

Sample Reconciled By: M.T 12/23/14

D2216-90 BATCH ID B4L0126

Analyst: MJT **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

INST HRMS-4

Date/Time IN: 12/23/14 ~~9:00~~ 9:45 Date/Time OUT 12/24/14 9:00

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	MJT 12/23/14				MJT 12/23/14			
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 (A)	Cl-
	1400934-01RE1		Sample	1.31	8.02	1.31			6	3	10	0
	1400934-02RE1		Sample	1.31	12.41	1.32			7	3	10	0
	1400948-04RE1		Sample	1.30	9.69	1.30			5	3	10	0
	1400949-01		Sample	1.30	11.49	1.31			7	3	10	0
	1400949-02		Sample	1.32	7.34	1.32			7	3	10	0
	1400949-03		Sample	1.30	6.41	1.31			7	3	20	0
	1400949-04		Sample	1.31	10.00	1.32			7	3	10	0
	1400949-05		Sample	1.31	12.75	1.31			6	3	10	0
	1400958-01		Sample	1.31 ~~1.32~~	10.35	1.33			6	3	10	0
	1400958-02		Sample	1.31	9.27	1.31			6	3	10	0
	B4L0127-MB		QC						5	3	0	0
	B4L0127-OPR		QC						5	3	10	0

(A) Acid was added in drops. MJT 12/23/14

D2216-90 BATCH ID B4L0126

Analyst: MJT **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

INST HRMS-4

Date/Time IN:	Date/Time OUT
12/23/14 9:45	12/24/14 9:00

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	MJT 12/23/14	MJT 12/24/14			MJT 12/23/14			
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-
	1400934-01RE1		Sample	1.3100	8.0200	1.3100	0.0000	0.00	6	3	10	0
	1400934-02RE1		Sample	1.3100	12.4100	1.3200	0.0100	0.09	7	3	10	0
	1400948-04RE1		Sample	1.3000	9.6900	1.3000	0.0000	0.00	5	3	10	0
	1400949-01		Sample	1.3000	11.4900	1.3100	0.0100	0.10	7	3	10	0
	1400949-02		Sample	1.3200	7.3400	1.3200	0.0000	0.00	7	3	10	0
	1400949-03		Sample	1.3000	6.4100	1.3100	0.0100	0.20	7	3	20	0
	1400949-04		Sample	1.3100	10.0000	1.3200	0.0100	0.12	7	3	10	0
	1400949-05		Sample	1.3100	12.7500	1.3100	0.0000	0.00	6	3	10	0
	1400958-01		Sample	1.3100	10.3500	1.3300	0.0200	0.22	6	3	10	0
	1400958-02		Sample	1.3100	9.2700	1.3100	0.0000	0.00	6	3	10	0
	B4L0127-MB		QC						5	3	10	0
	B4L0127-OPR		QC						5	3	10	0

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 1668A Full List

Method: 1668C Full List

B4L0127

Chemist: M.T

Prep Date/Time: 23-Dec-14 08:05

Prepared using: HRMS - Separatory Funnel

							NA	C4L0098	NA	NA	
C	VISTA Sample ID	Bottle + Sample (mL)	Bottle Only (mL)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	B4L0127-BLK1 (A)	NA 1	NA	(1.000)	M.T DR 12/23/14	M.T 12/23/14	NA	M.T 12/23/14	NA	NA	M.T 12/24/14
☐	B4L0127-BS1 (A)	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
☐	1400934-01	781.61	282.80	0.49881							
☐	1400934-02	776.18	284.17	0.49201							
☐	1400948-04	1492.20	499.16	0.99304							
☐	1400949-01	1508.94	497.90	1.0104							
☐	1400949-02 (B)	1514.44	498.08	1.01636							
☐	1400949-03	1503.38	498.28	1.00510							
☐	1400949-04	1513.53	498.14	1.01539							
☐	1400949-05	1511.64	498.75	1.01289							
☐	1400958-01	1520.48	501.89	1.01859							
☐	1400958-02 (A)	1526.00	502.00	1.02400							

IS Name	NS Name	CRS Name	RS Name	Cycle Time	APP: (SEFUN) SOX SDS	Check Out:
PCDD/F 1 (V1)	PCDD/F (V1)	PCDD/F (V2)	PCDD/F (V2)	Start Date/Time 12/23/14 M.T 12/23/14 NA	SOLV: DCM	Chemist/Date: M.T 12/23/14
PCB 14A3001, 10uL	PCB 13I2503, 10uL	PCB 14A3002, 10uL	PCB 14A3003, 10uL		Other NA	Check In: Empty Chemist/Date: M.T 12/23/14
PAH	PAH	PAH	PAH	Stop Date/Time 12/23 M.T 12/23/14 NA	Final Volume(s) 20uL C9	Balance ID: HRMS-4

Comments: (A) Sample ran through Sodium Sulfate Twice due to presence of water M.T 12/23/14

(B) Sample approached dryness @ while Rotovaping @ F.V. M.T 12/24/14

SAMPLE DATA

EPA Method 1613

Client ID: Method Blank Filename: 141226D2 S:4 Acq:26-DEC-14 22:50:17 ConCal: ST141226D2-1
Lab ID: B4L0130-BLK1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	*	*	n	1.18	NotF	*	*		325	2.5	1.13
	1,2,3,7,8-PeCDD	*	*	n	0.92	NotF	*	*		349	2.5	0.612
	1,2,3,4,7,8-HxCDD	*	*	n	1.09	NotF	*	*		554	2.5	1.98
	1,2,3,6,7,8-HxCDD	*	*	n	1.07	NotF	*	*		554	2.5	1.90
	1,2,3,7,8,9-HxCDD	*	*	n	0.93	NotF	*	*		554	2.5	2.09
	1,2,3,4,6,7,8-HpCDD	7.64e+04	1.04	y	1.12	38:51	1.000	14.370		*	2.5	*
	OCDD	2.33e+05	0.94	y	0.95	42:05	1.000	60.177		*	2.5	*
	2,3,7,8-TCDF	*	*	n	1.08	NotF	*	*		403	2.5	1.15
	1,2,3,7,8-PeCDF	*	*	n	1.09	NotF	*	*		358	2.5	0.792
	2,3,4,7,8-PeCDF	*	*	n	1.04	NotF	*	*		358	2.5	0.754
	1,2,3,4,7,8-HxCDF	*	*	n	1.39	NotF	*	*		520	2.5	0.587
	1,2,3,6,7,8-HxCDF	*	*	n	1.26	NotF	*	*		520	2.5	0.605
	2,3,4,6,7,8-HxCDF	*	*	n	1.30	NotF	*	*		520	2.5	0.700
	1,2,3,7,8,9-HxCDF	*	*	n	1.19	NotF	*	*		520	2.5	1.19
	1,2,3,4,6,7,8-HpCDF	*	*	n	1.62	NotF	*	*		725	2.5	1.56
	1,2,3,4,7,8,9-HpCDF	*	*	n	1.53	NotF	*	*		622	2.5	1.36
	OCDF	2.73e+04	0.68	n	1.10	42:19	1.000	5.0563		*	2.5	*
IS	13C-2,3,7,8-TCDD	8.98e+06	0.81	y	1.07	26:57	1.023	1115.6				
IS	13C-1,2,3,7,8-PeCDD	1.57e+07	0.62	y	1.24	31:37	1.200	1687.1				
IS	13C-1,2,3,4,7,8-HxCDD	1.05e+07	1.26	y	0.72	34:56	1.014	1146.2				
IS	13C-1,2,3,6,7,8-HxCDD	1.14e+07	1.24	y	0.74	35:02	1.017	1234.0				
IS	13C-1,2,3,7,8,9-HxCDD	1.31e+07	1.22	y	0.86	35:20	1.025	1211.9				
IS	13C-1,2,3,4,6,7,8-HpCDD	9.53e+06	1.03	y	0.64	38:50	1.127	1175.3				
IS	13C-OCDD	1.63e+07	0.88	y	0.78	42:05	1.221	1655.6				
IS	13C-2,3,7,8-TCDF	1.24e+07	0.79	y	0.92	26:09	0.992	897.72				
IS	13C-1,2,3,7,8-PeCDF	1.74e+07	1.58	y	0.95	30:25	1.154	1230.6				
IS	13C-2,3,4,7,8-PeCDF	1.92e+07	1.62	y	0.97	31:20	1.189	1328.3				
IS	13C-1,2,3,4,7,8-HxCDF	1.63e+07	0.51	y	0.99	34:03	0.988	1307.3				
IS	13C-1,2,3,6,7,8-HxCDF	1.70e+07	0.52	y	1.10	34:10	0.992	1228.3				
IS	13C-2,3,4,6,7,8-HxCDF	1.59e+07	0.53	y	1.03	34:46	1.009	1221.7				
IS	13C-1,2,3,7,8,9-HxCDF	1.26e+07	0.51	y	0.86	35:44	1.037	1167.0				
IS	13C-1,2,3,4,6,7,8-HpCDF	9.96e+06	0.44	y	0.71	37:31	1.089	1108.1				
IS	13C-1,2,3,4,7,8,9-HpCDF	9.84e+06	0.44	y	0.71	39:23	1.143	1103.1				
IS	13C-OCDF	1.96e+07	0.91	y	0.87	42:19	1.228	1782.3				
C/Up	37Cl-2,3,7,8-TCDD	4.38e+06			1.21	26:58	1.024	482.14				
RS/RT	13C-1,2,3,4-TCDD	1.50e+07	0.81	y	1.00	26:21	*	2000.0				
RS	13C-1,2,3,4-TCDF	2.98e+07	0.78	y	1.00	24:49	*	2000.0				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.52e+07	0.51	y	1.00	34:28	*	2000.0				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		325	1.13
Total Penta-Dioxins	*	*		349	0.612
Total Hexa-Dioxins	*	*		575	2.07
Total Hepta-Dioxins	14.4	18.9		*	*
Total Tetra-Furans	*	*		403	1.15
Total Penta-Furans	0.0000	0.0000		1100	2.38
Total Hexa-Furans	*	*		575	0.816
Total Hepta-Furans	*	5.44		*	*

	Rec	Qual
IS	55.8	
IS	84.4	
IS	57.3	
IS	61.7	
IS	60.6	
IS	58.8	
IS	41.4	
IS	44.9	
IS	61.5	
IS	66.4	
IS	65.4	
IS	61.4	
IS	61.1	
IS	58.4	
IS	55.4	
IS	55.2	
IS	44.6	
C/Up	60.3	

Integrations by Analyst: [signature] Date: 12/27/17

Reviewed by Analyst: CT Date: 12/29/14

Totals class: HpCDD EMPC Entry #: 25

Run: 9 File: 141226D2 S: 4 I: 1 F: 4
Acquired: 26-DEC-14 22:50:17 Processed: 27-DEC-14 13:10:47

Total Concentration: 18.900 Unnamed Concentration: 4.530

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:56	1.577e+04	1.180e+04	1.34	n	2.407e+04	4.5297	
38:51	3.897e+04	3.740e+04	1.04	y	7.638e+04	14.370	1,2,3,4,6,7,8-HpCDD

Totals class: HpCDF EMPC Entry #: 35

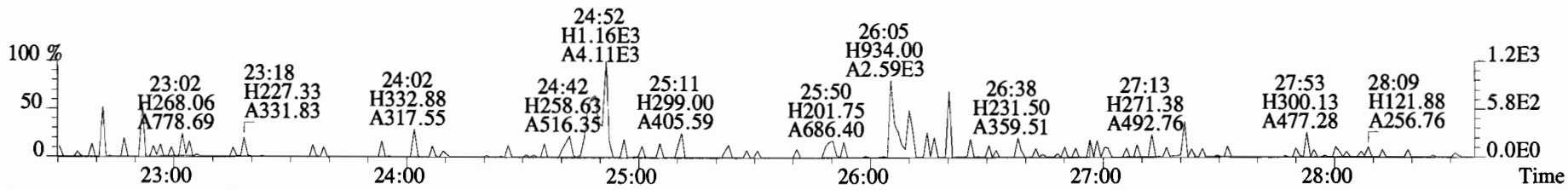
Run: 9 File: 141226D2 S: 4 I: 1 F: 4
Acquired: 26-DEC-14 22:50:17 Processed: 27-DEC-14 13:10:47

Total Concentration: 5.4381 Unnamed Concentration: *

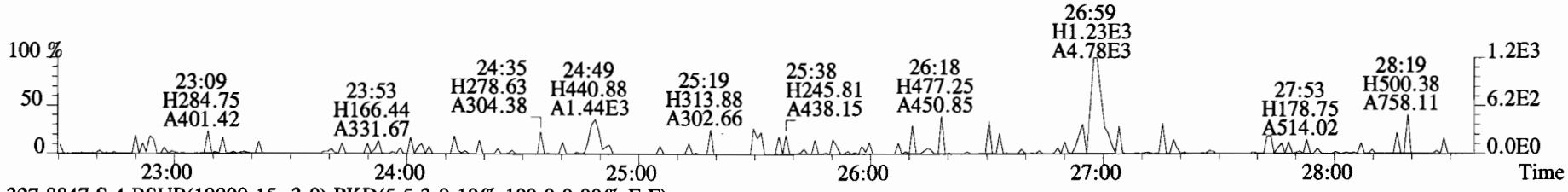
RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
38:10	2.562e+04	2.073e+04	1.24	n	4.229e+04	5.4381	1,2,3,4,6,7,8-HpCDF

File:141226D2 #1-551 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5

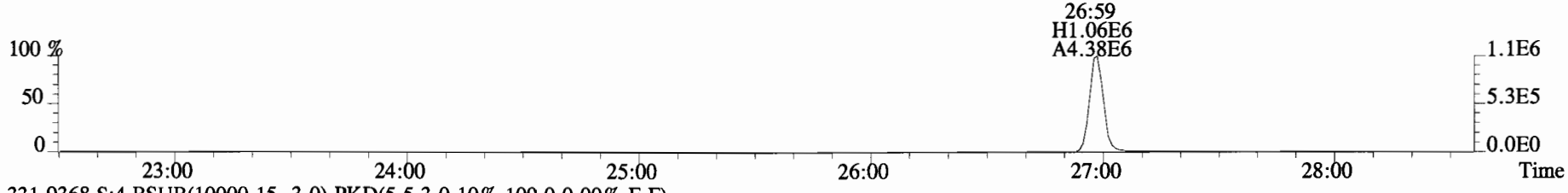
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



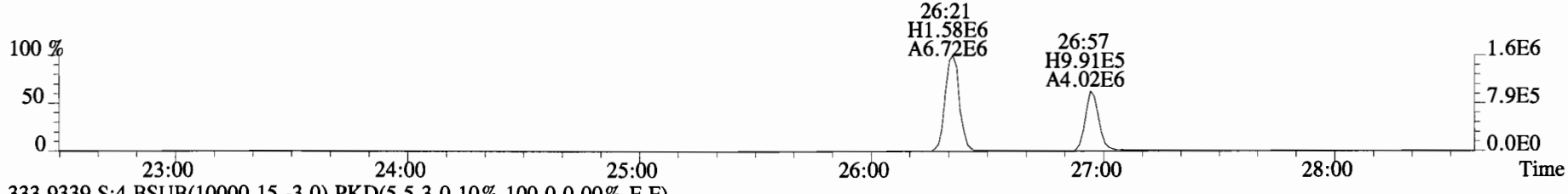
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



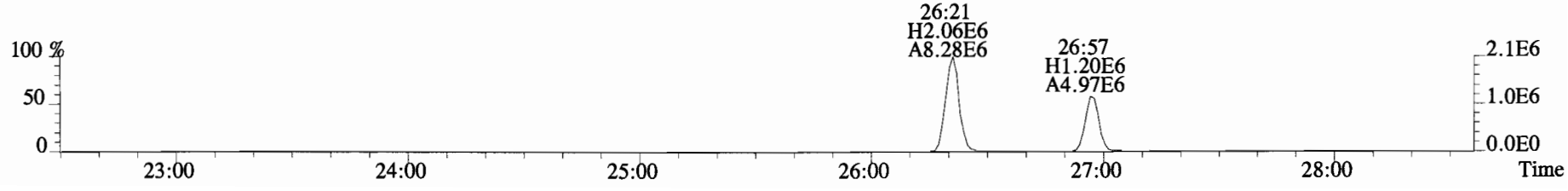
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



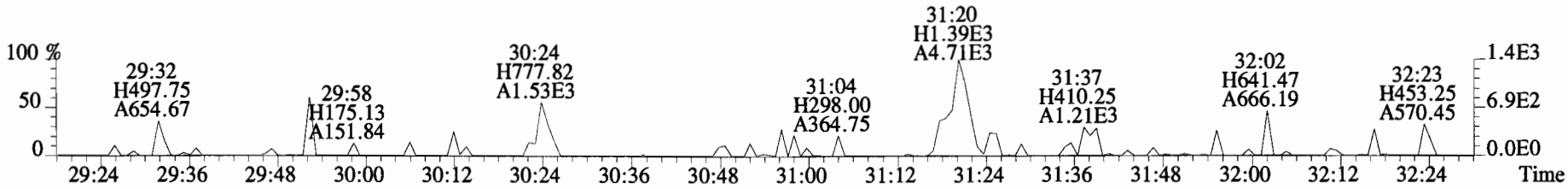
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



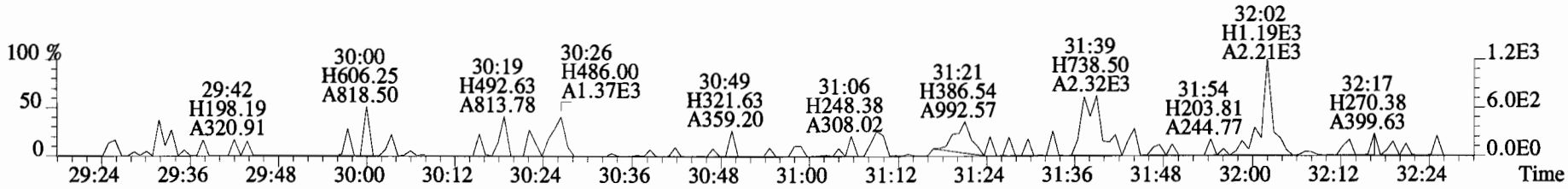
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



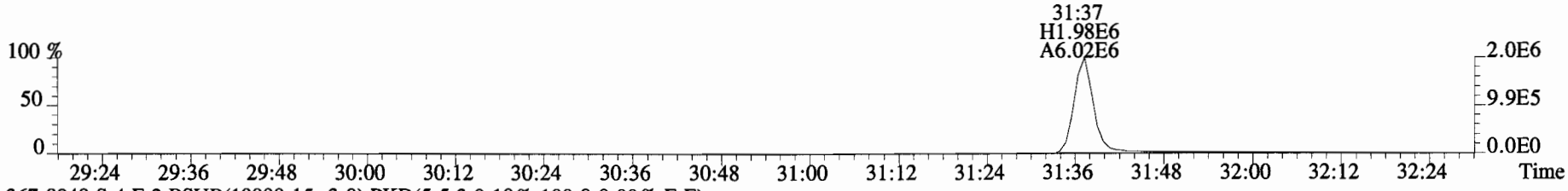
File:141226D2 #1-256 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



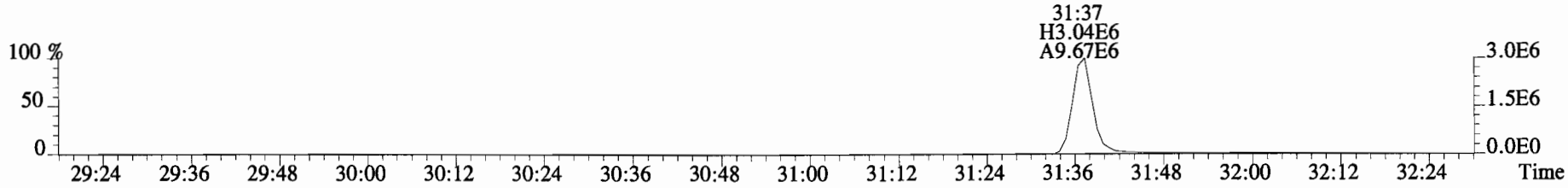
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



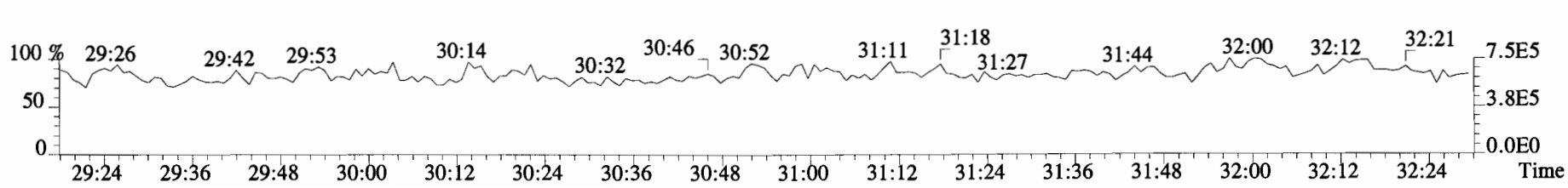
365.8978 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



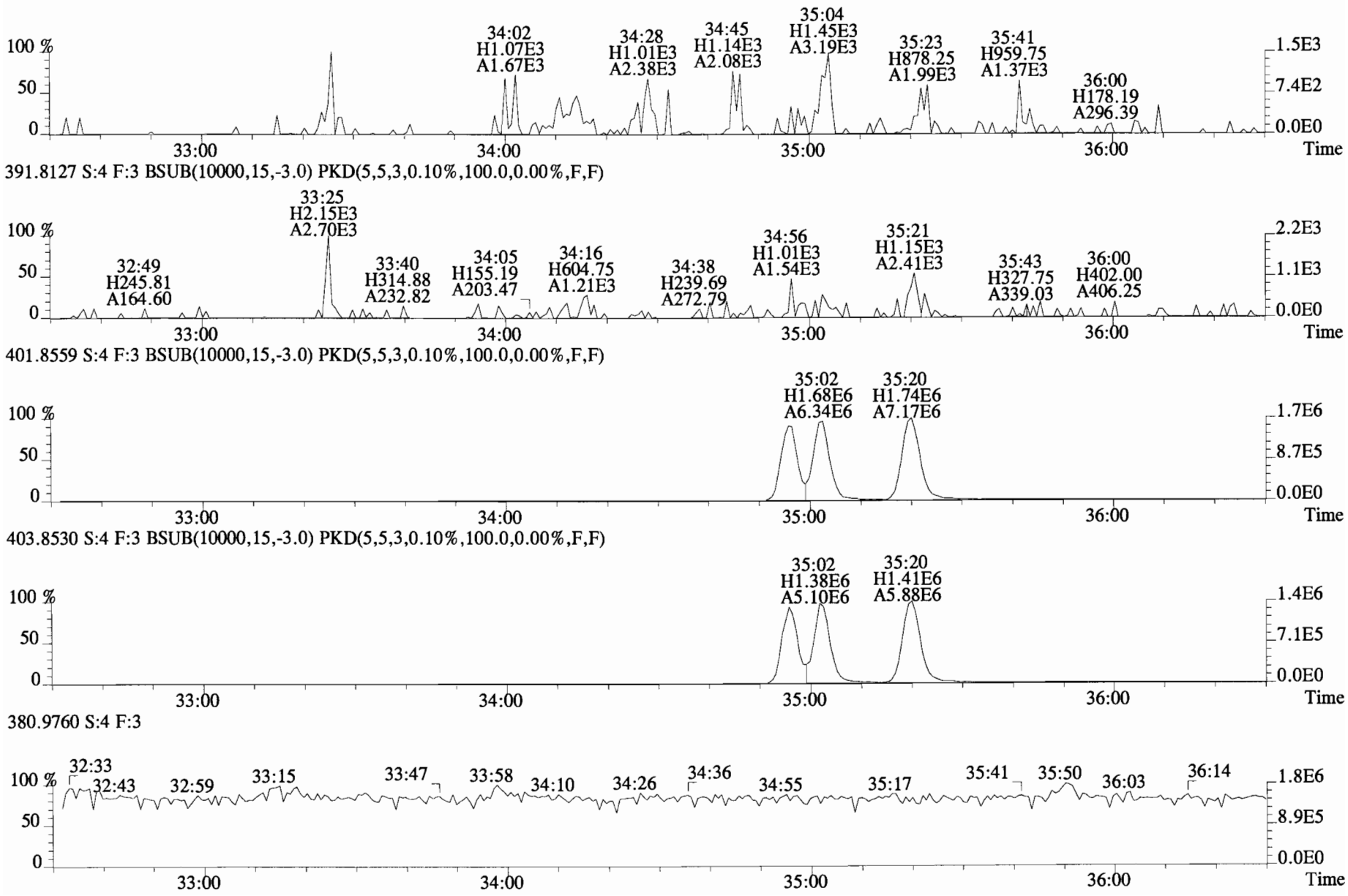
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



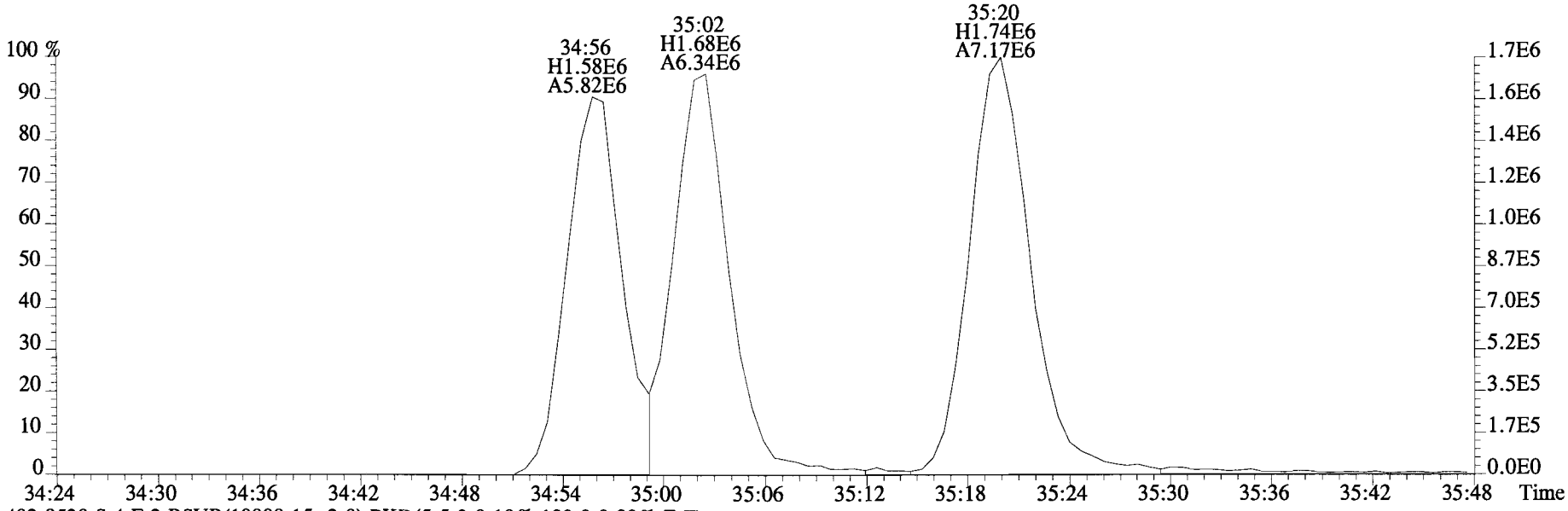
366.9792 S:4 F:2



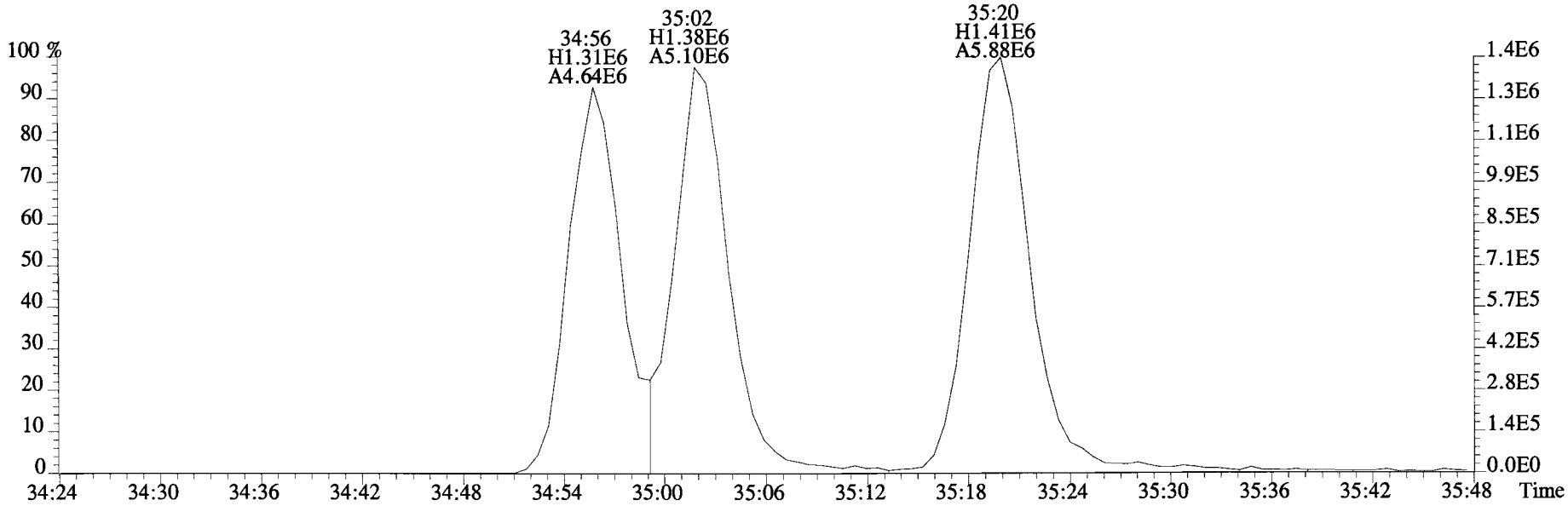
File:141226D2 #1-385 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5



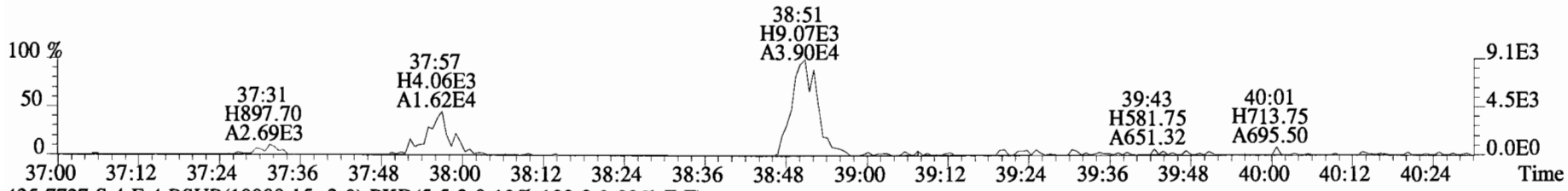
File:141226D2 #1-385 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



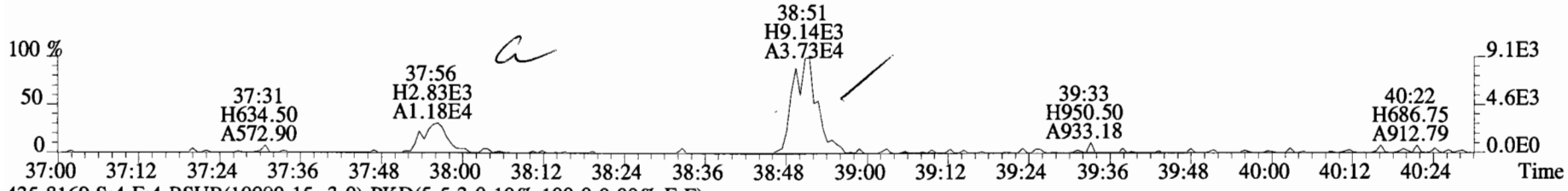
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



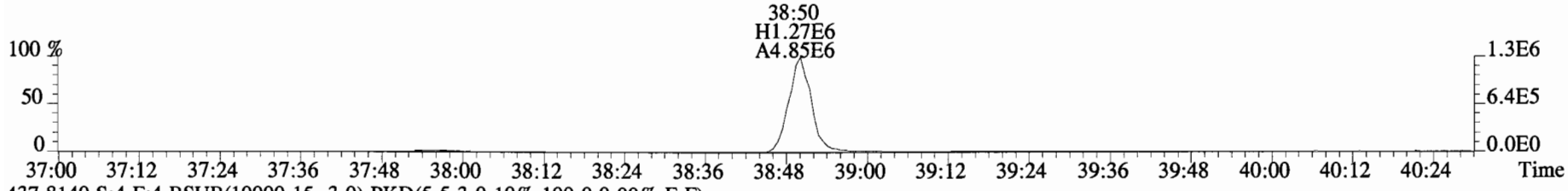
File:141226D2 #1-326 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



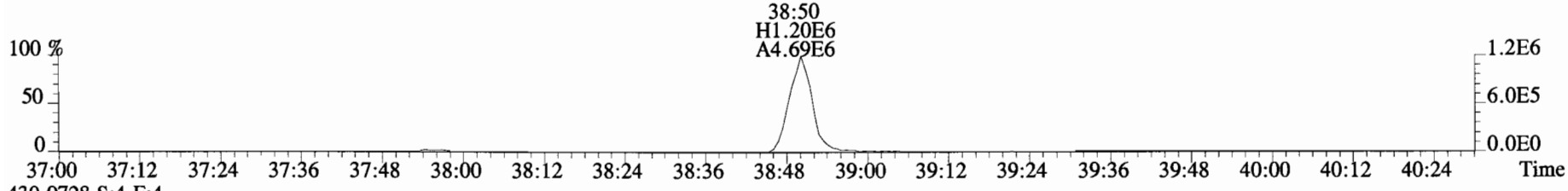
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



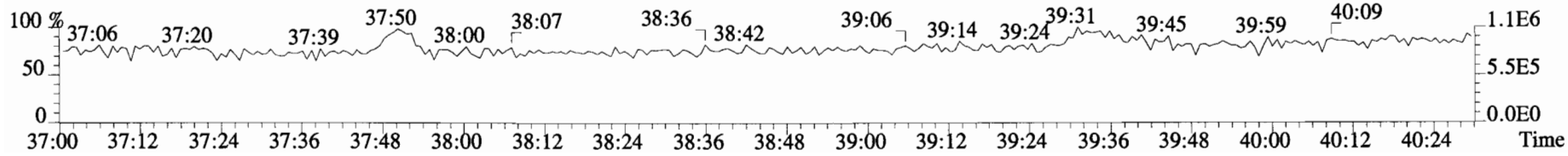
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



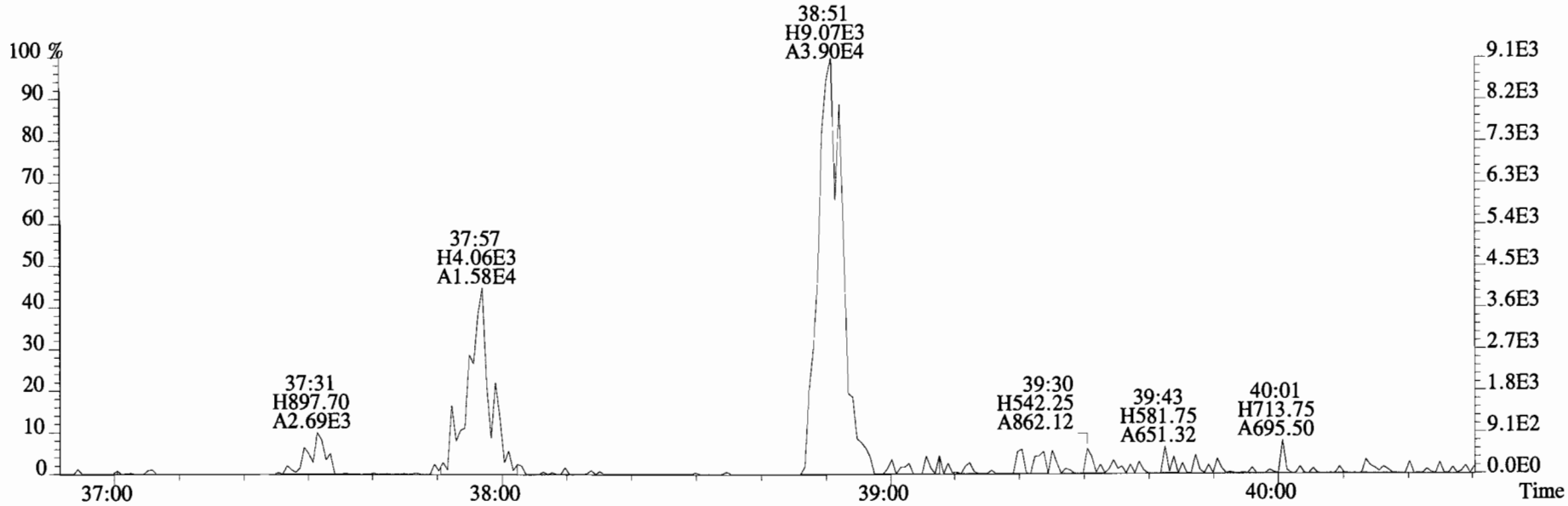
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



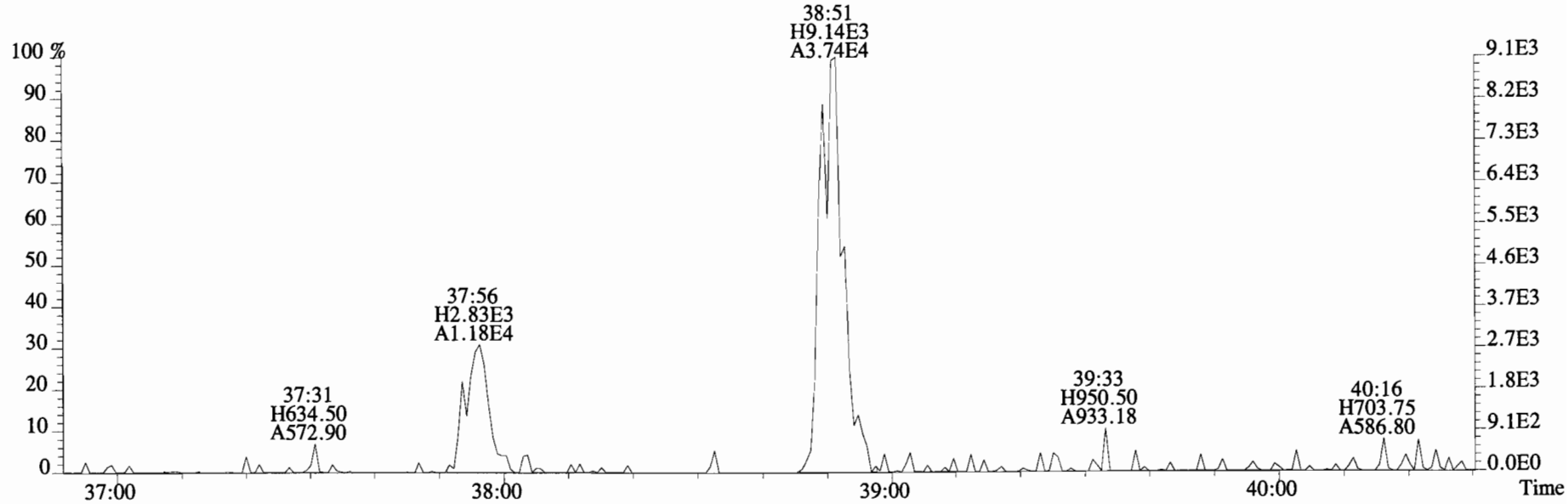
430.9728 S:4 F:4



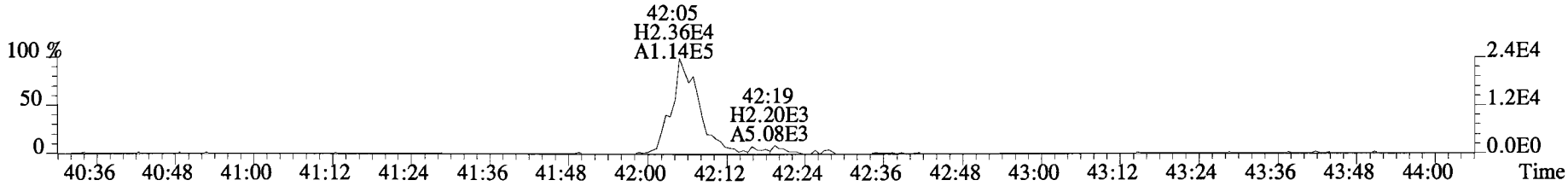
File:141226D2 #1-326 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



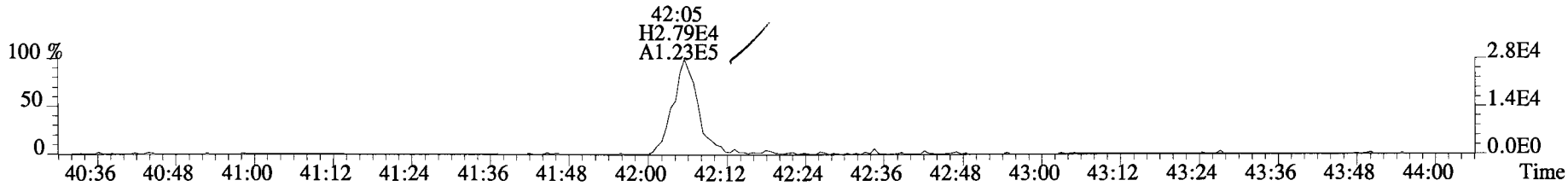
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



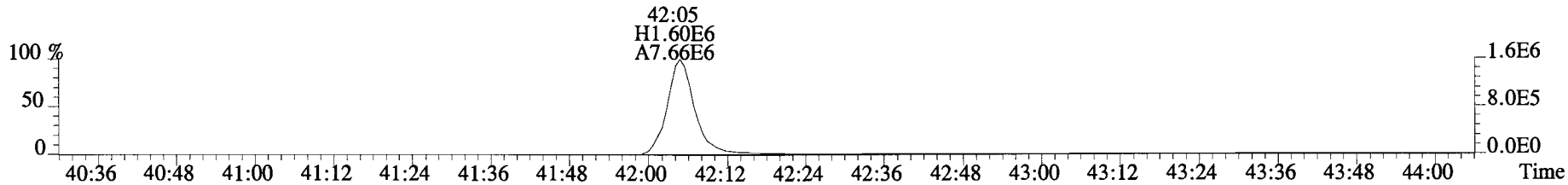
File:141226D2 #1-389 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



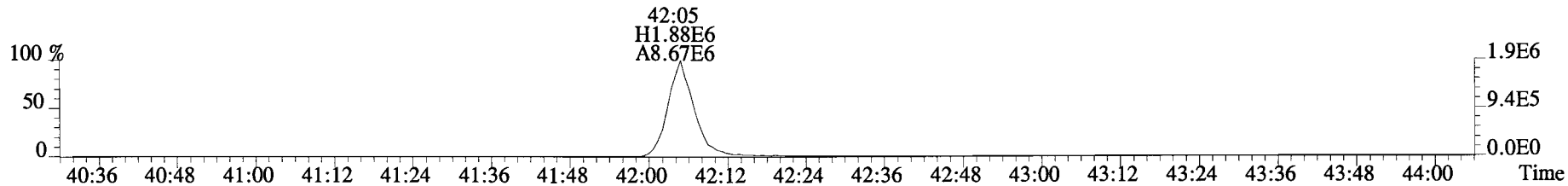
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



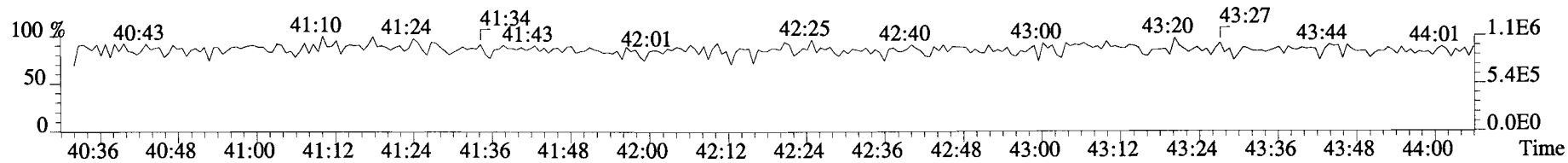
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



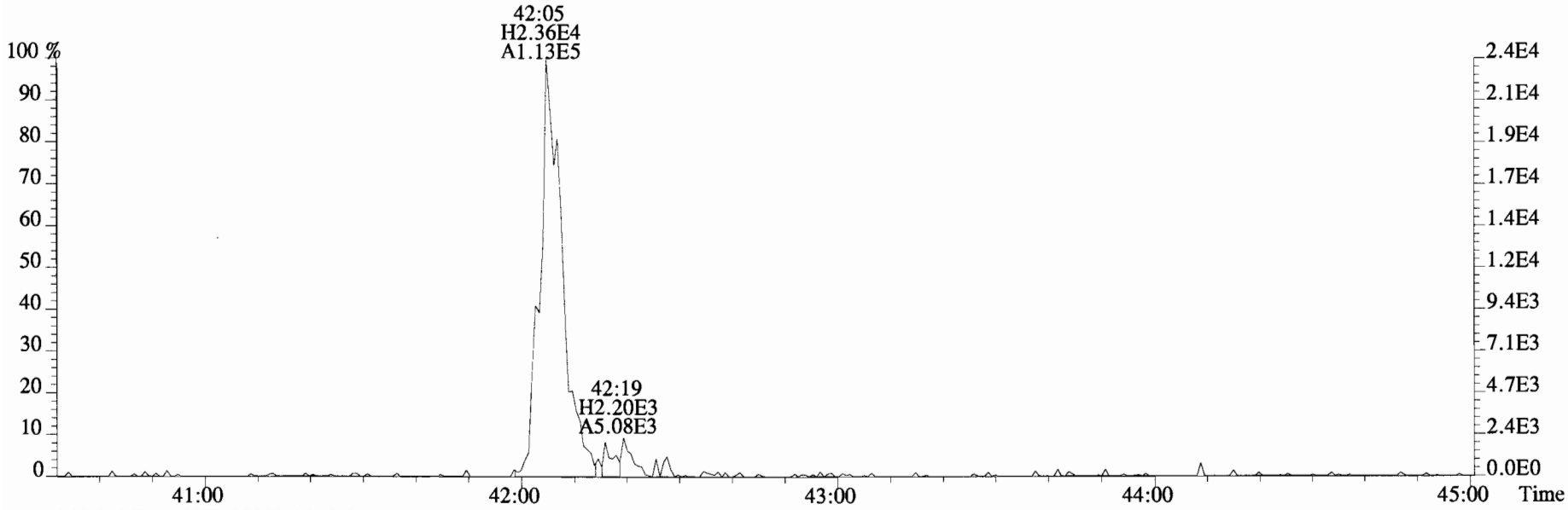
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



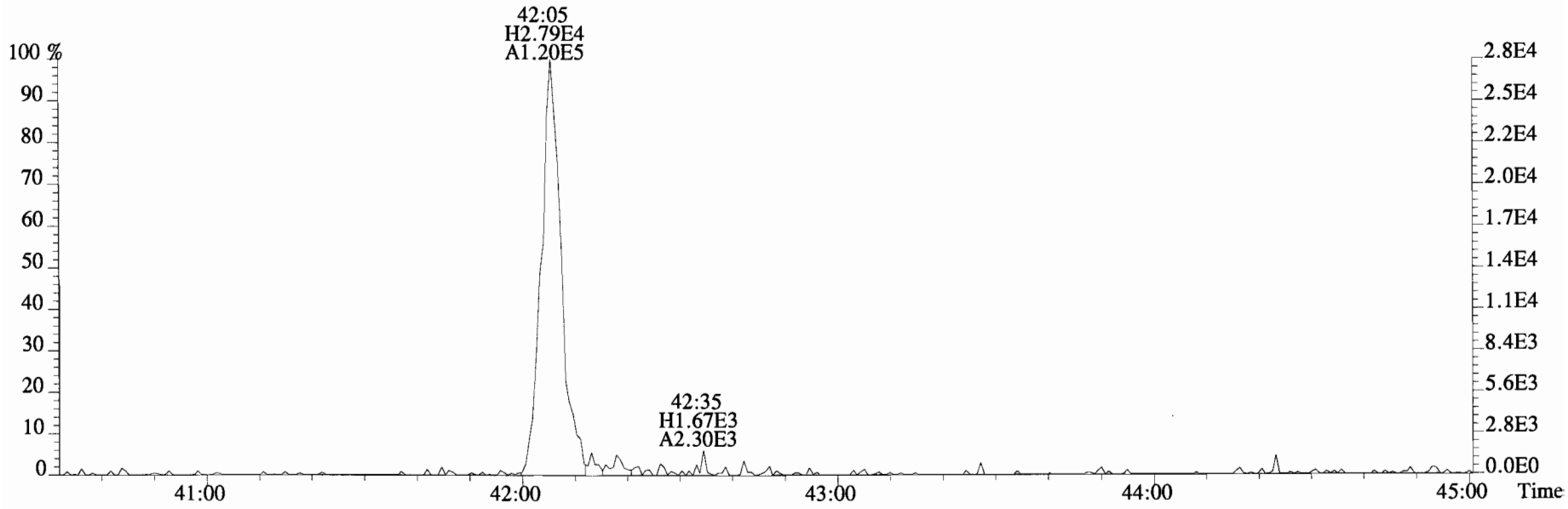
454.9728 S:4 F:5



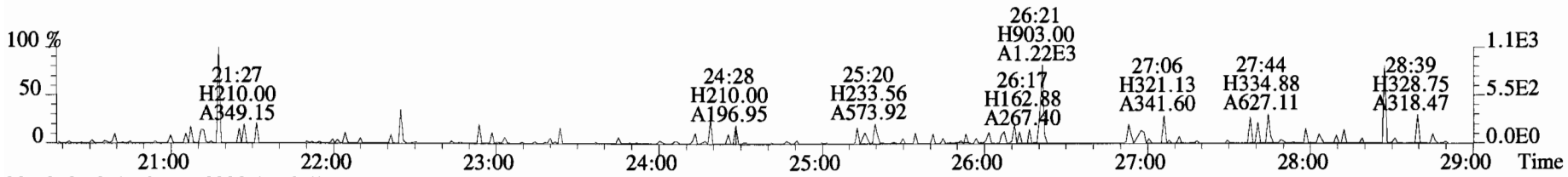
File:141226D2 #1-389 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



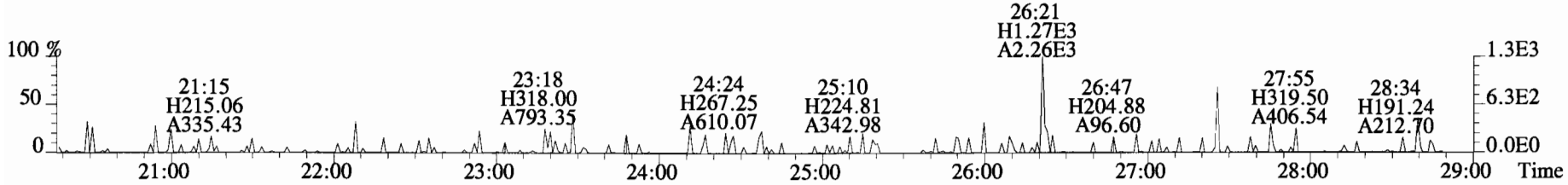
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



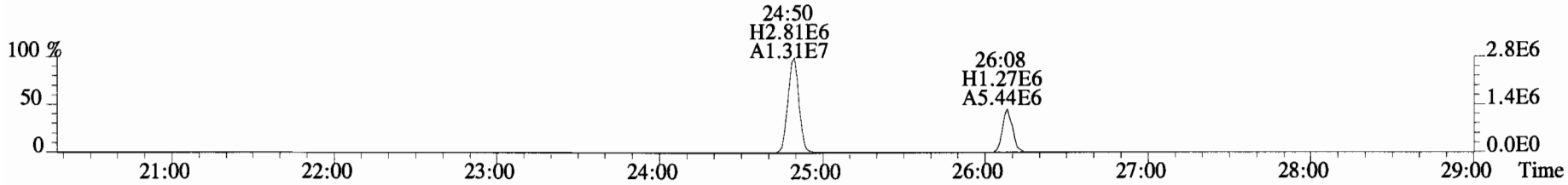
File:141226D2 #1-551 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



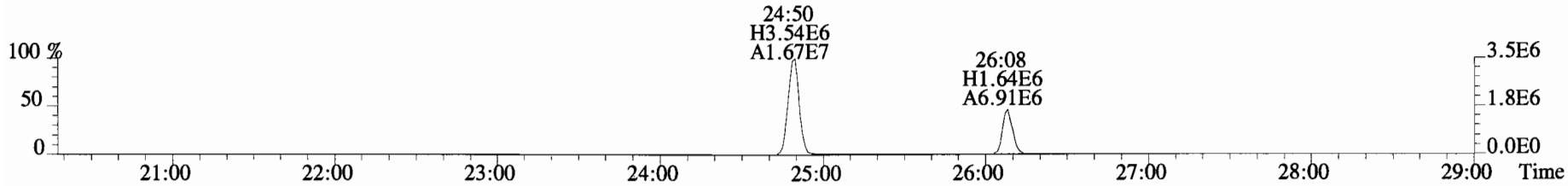
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



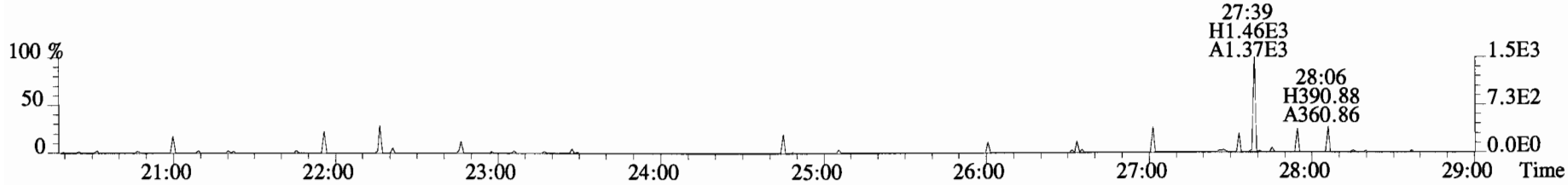
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



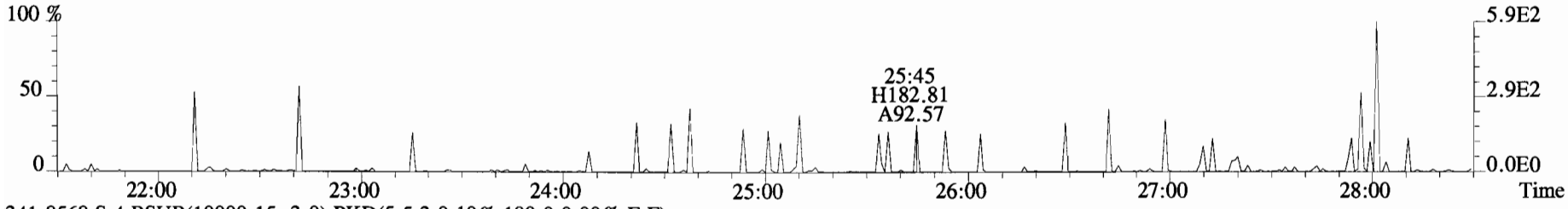
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



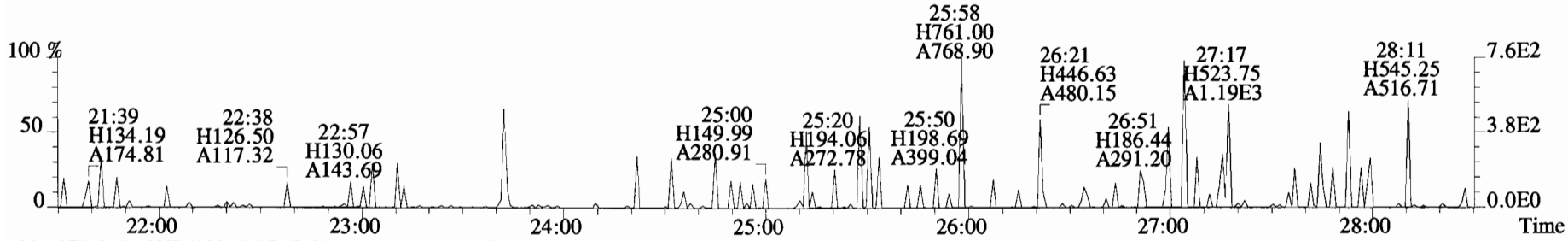
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



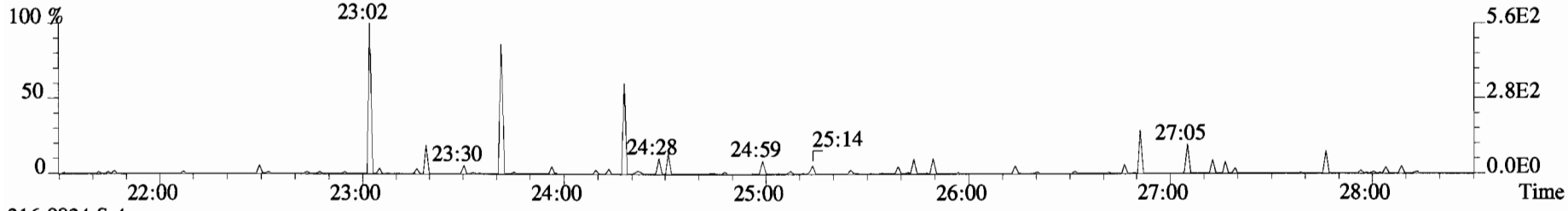
File:141226D2 #1-551 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



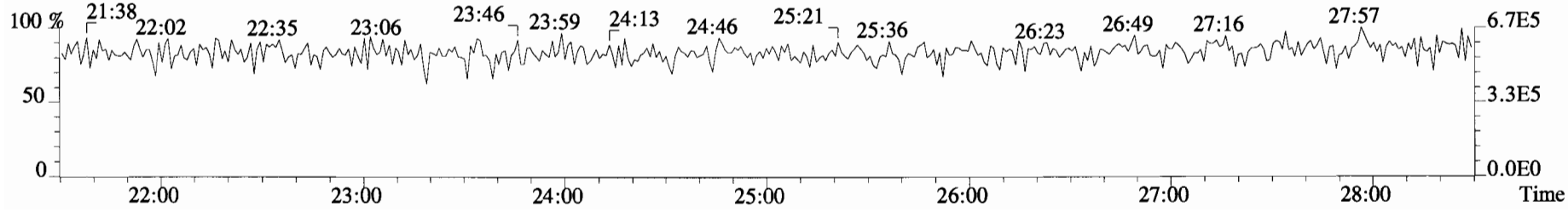
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

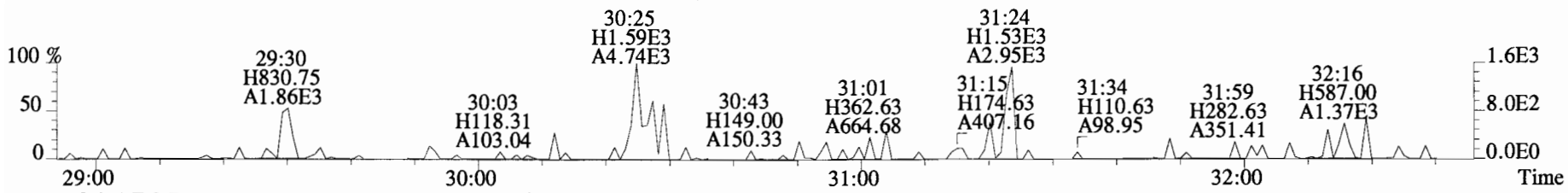


316.9824 S:4

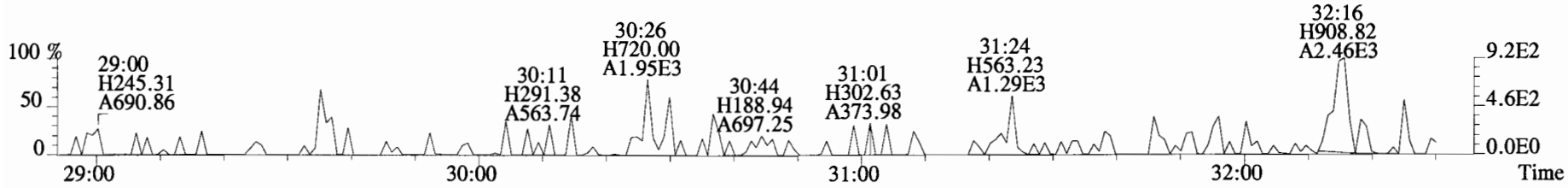


File:141226D2 #1-256 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5

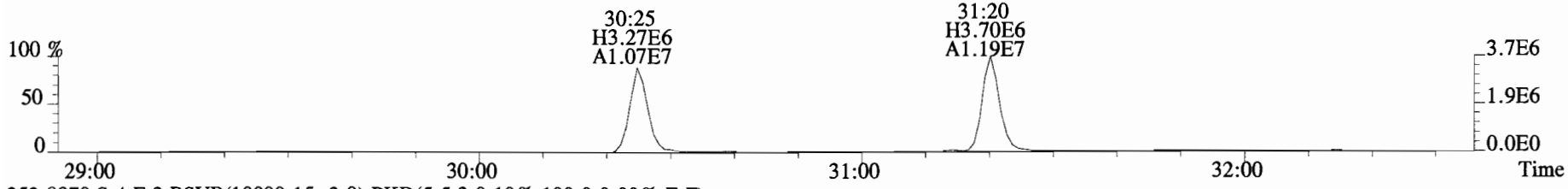
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



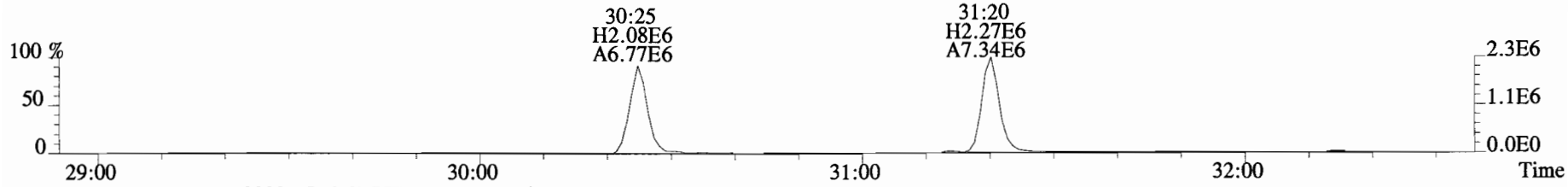
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



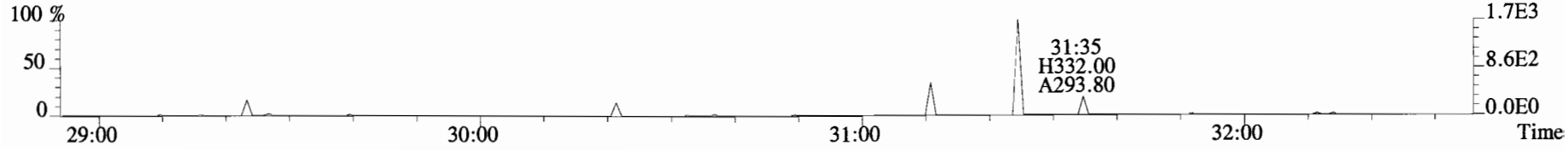
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

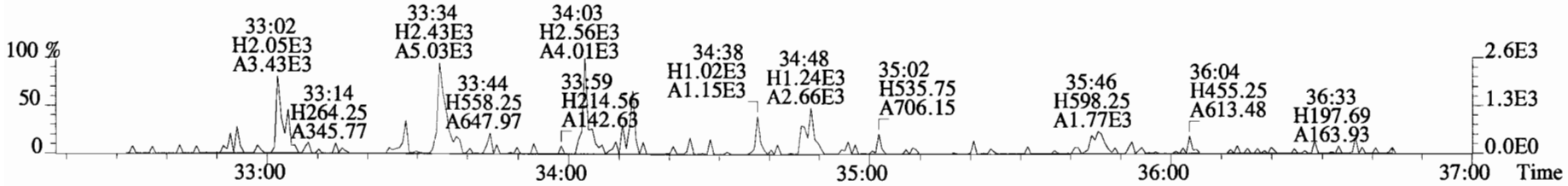


409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

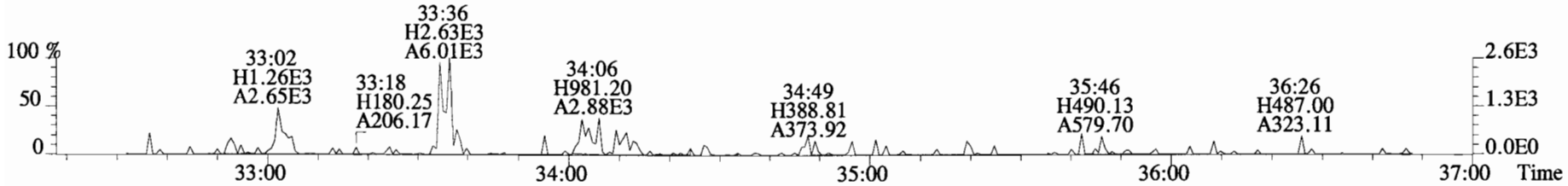


File:141226D2 #1-385 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5

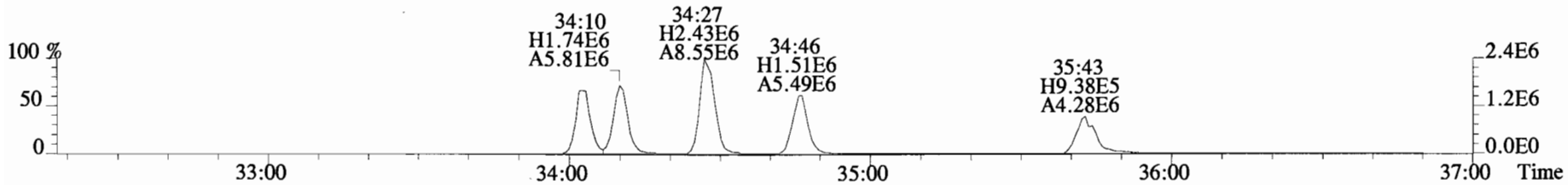
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



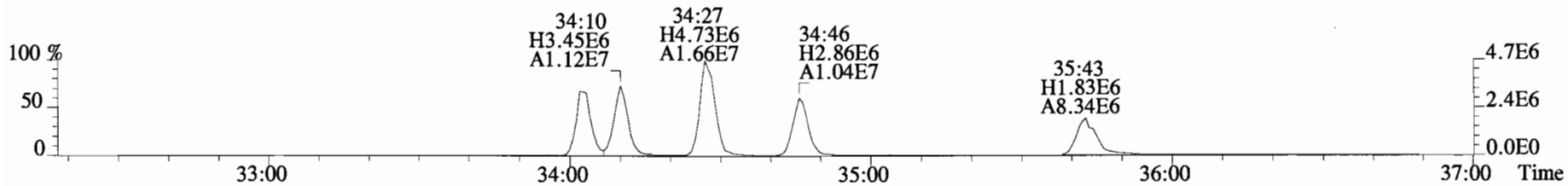
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



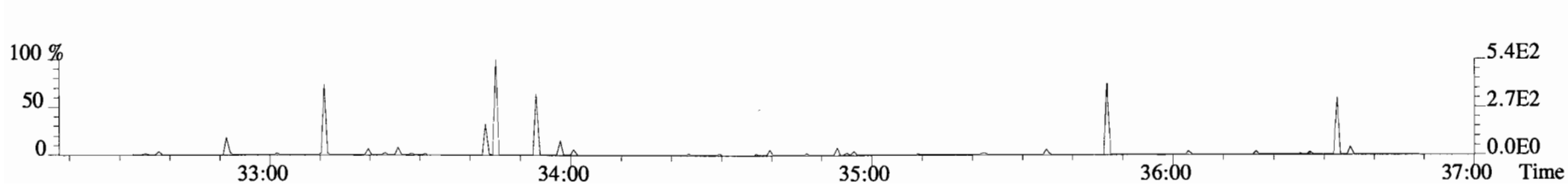
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



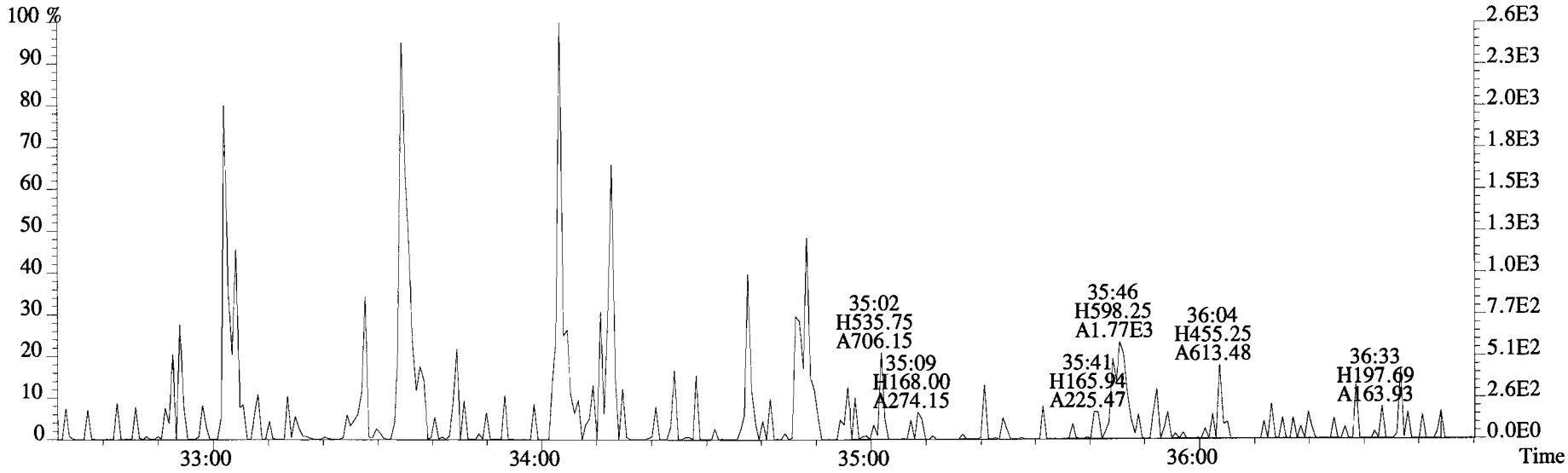
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



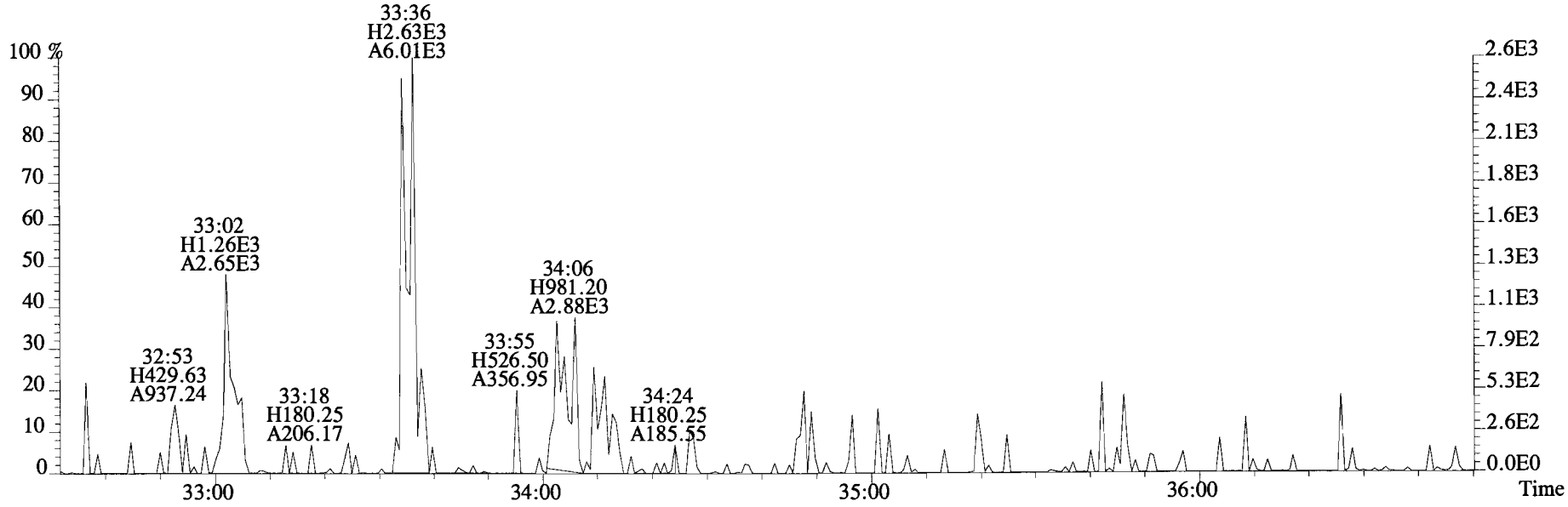
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



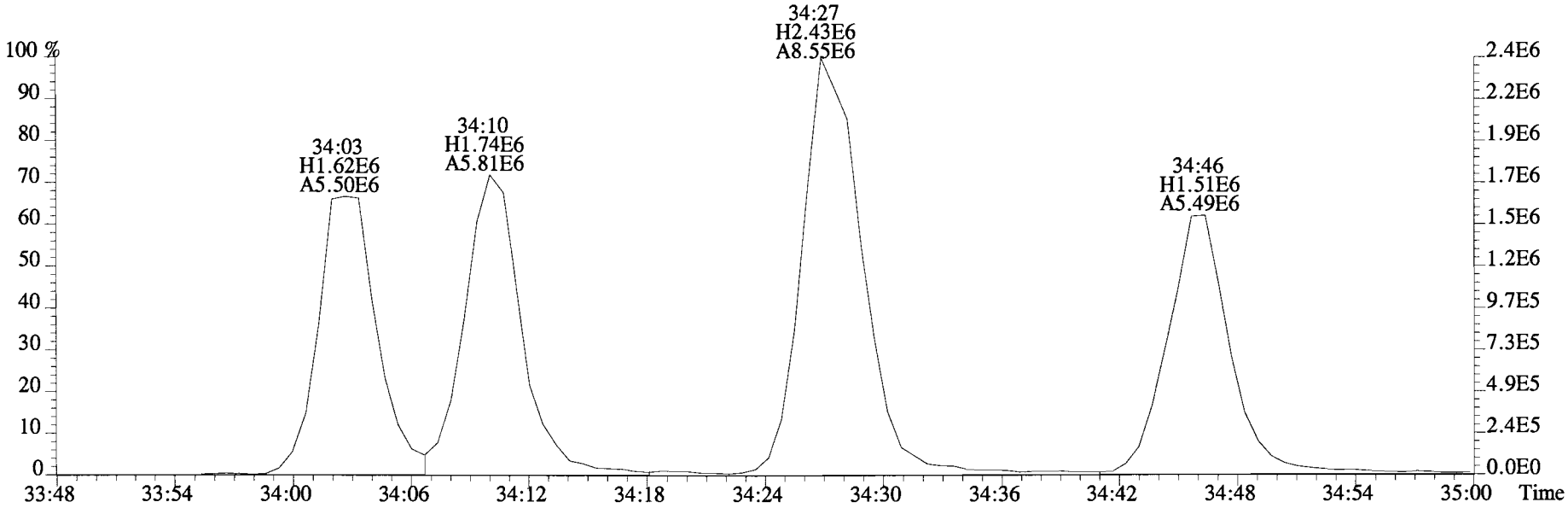
File:141226D2 #1-385 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



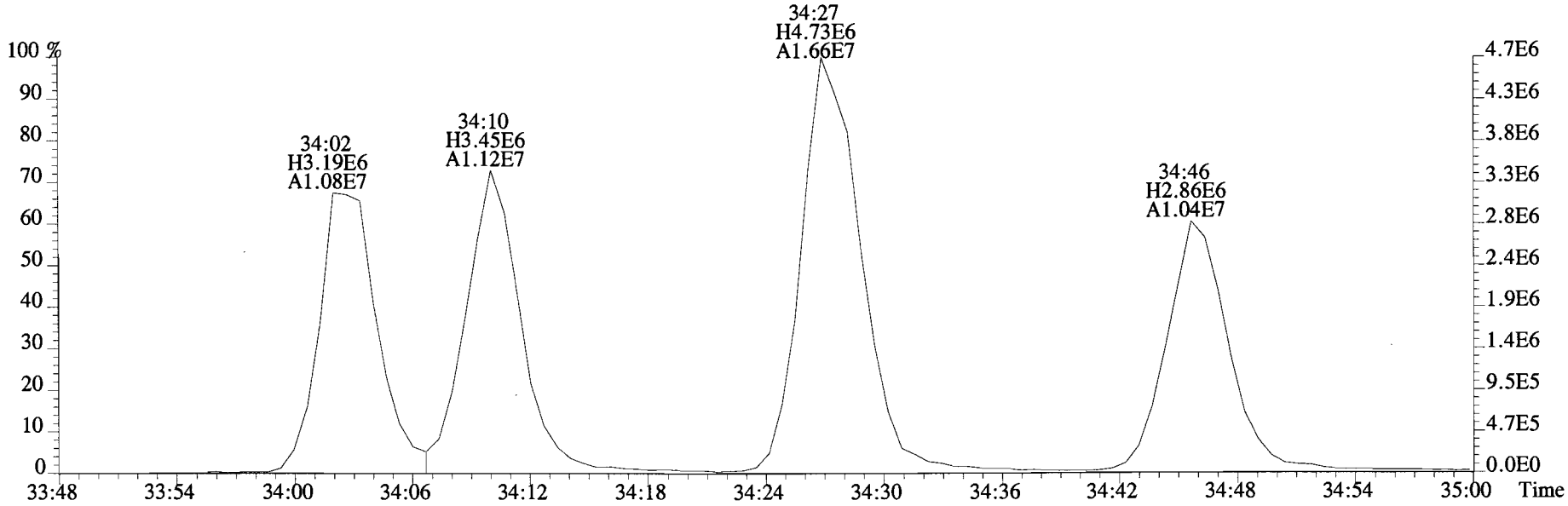
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



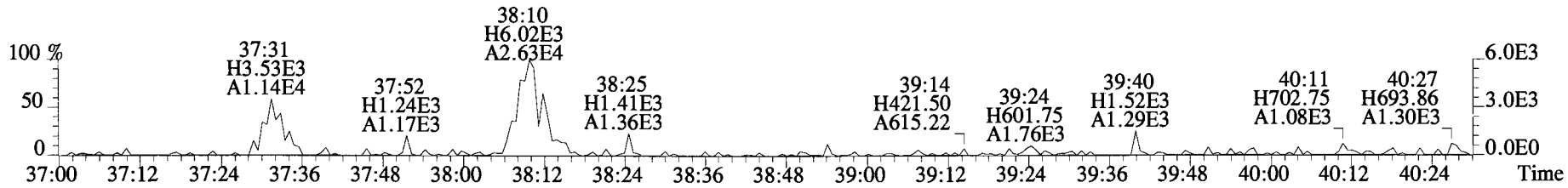
File:141226D2 #1-385 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



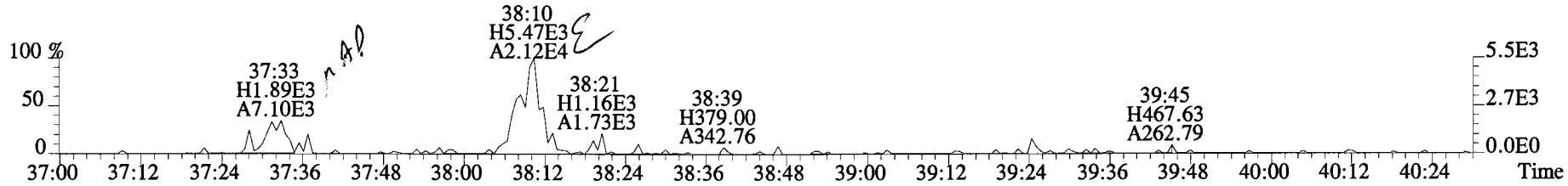
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



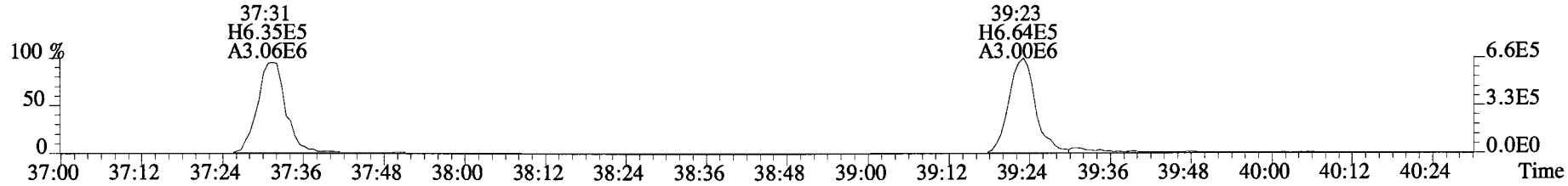
File:141226D2 #1-326 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



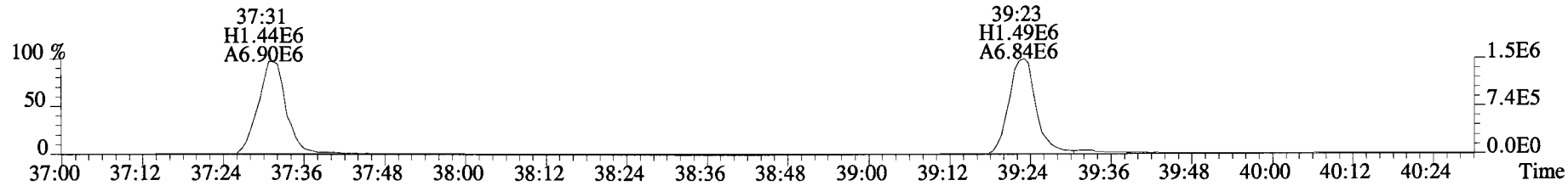
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



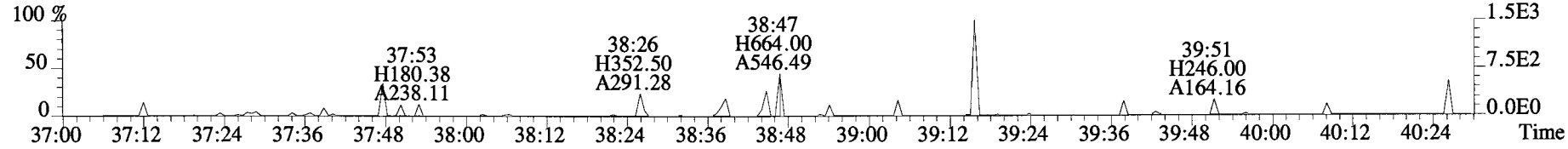
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



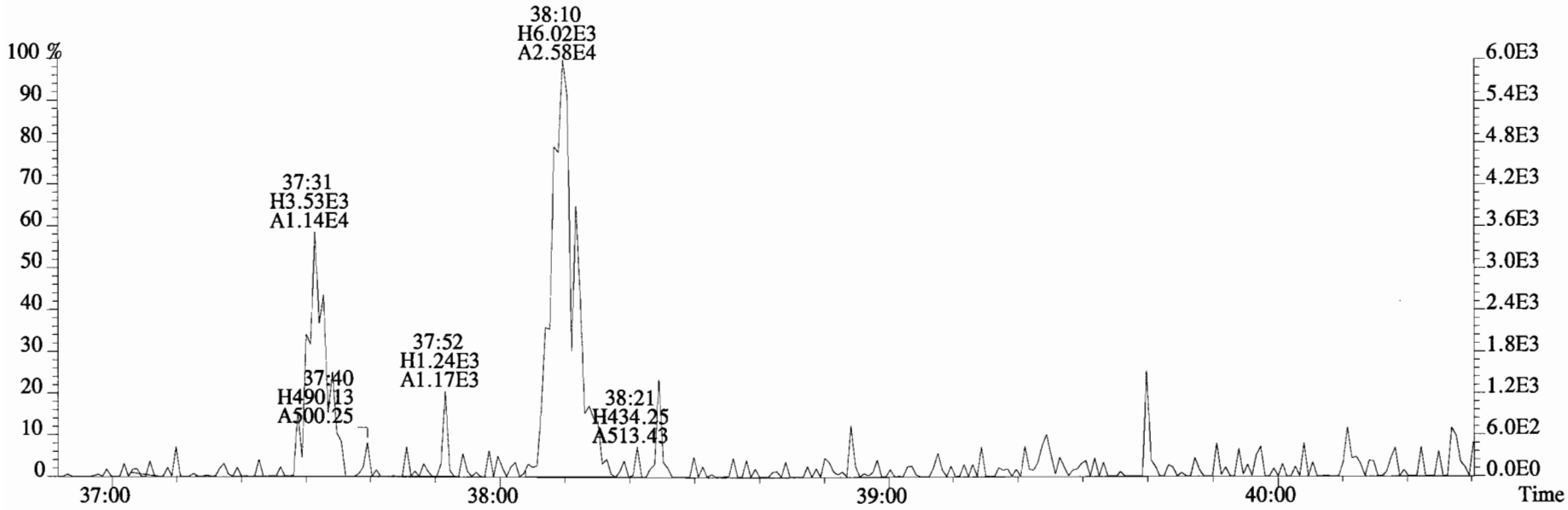
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



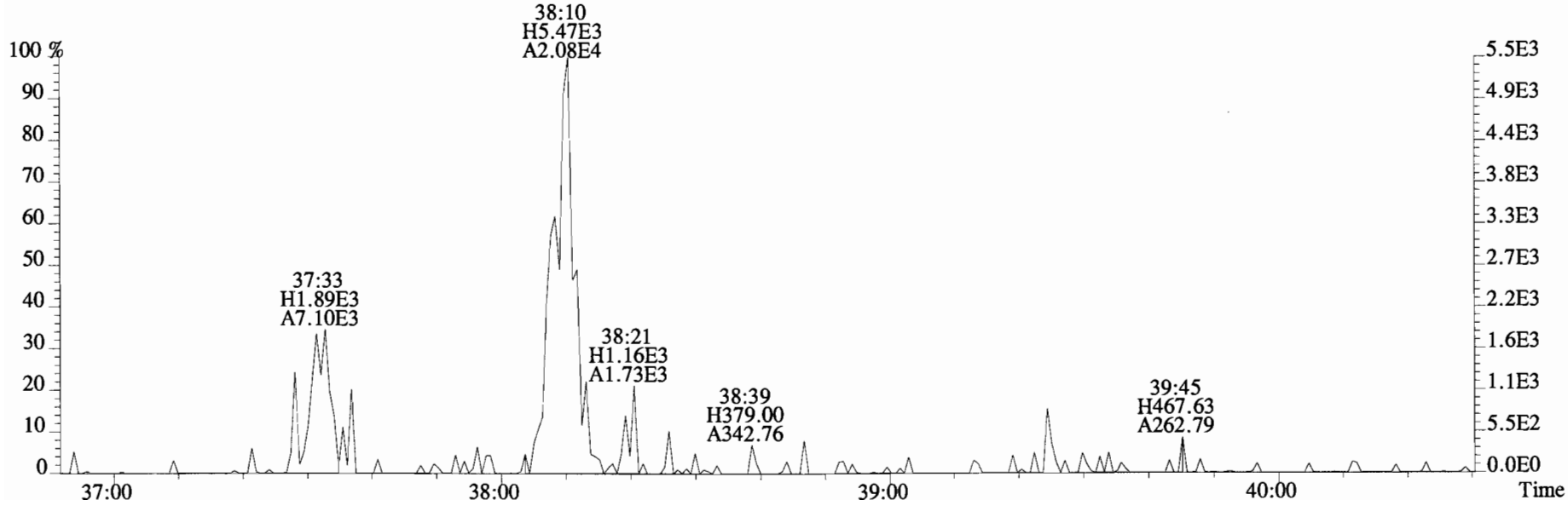
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



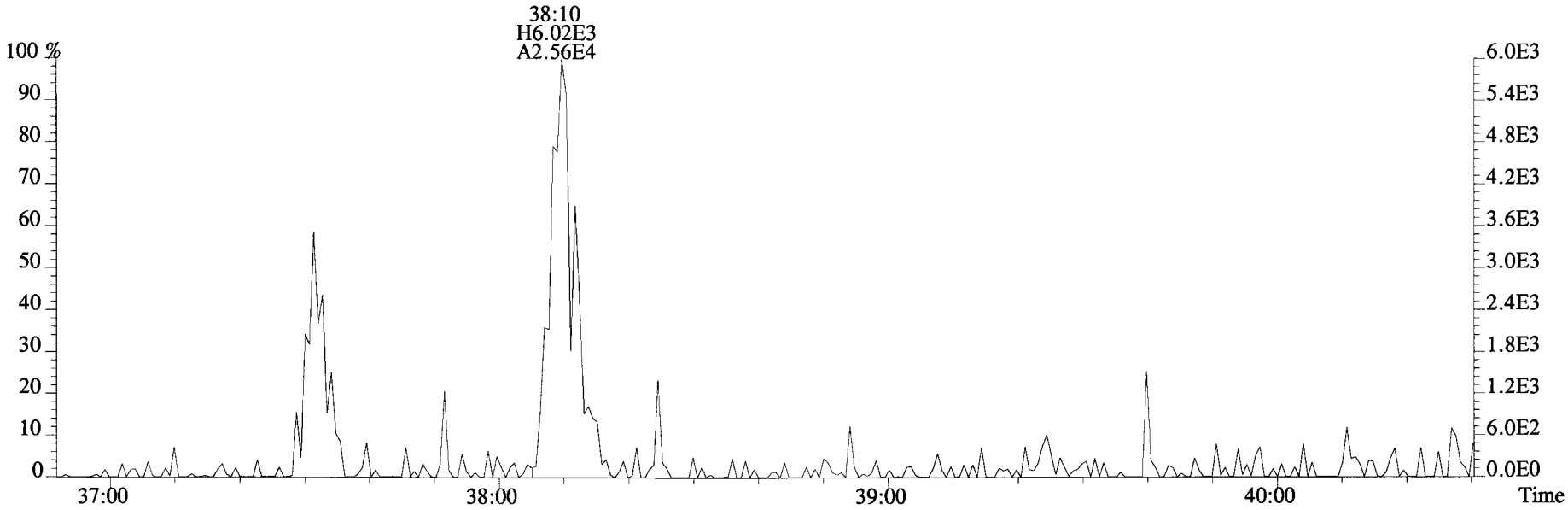
File:141226D2 #1-326 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



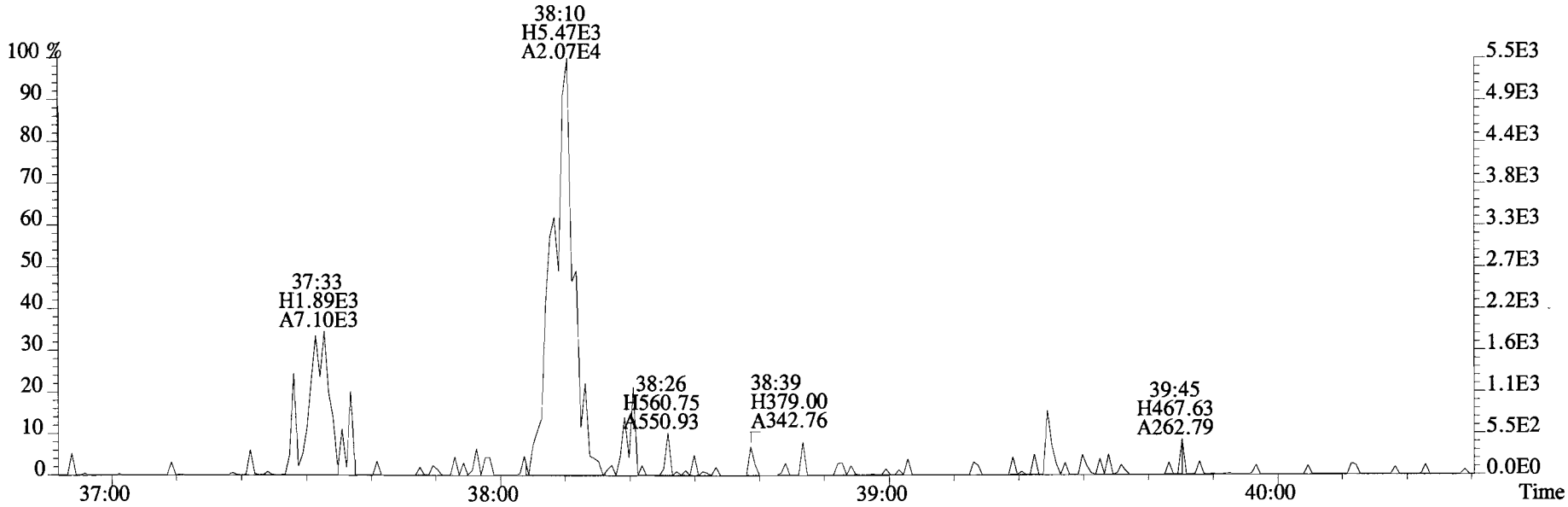
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141226D2 #1-326 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

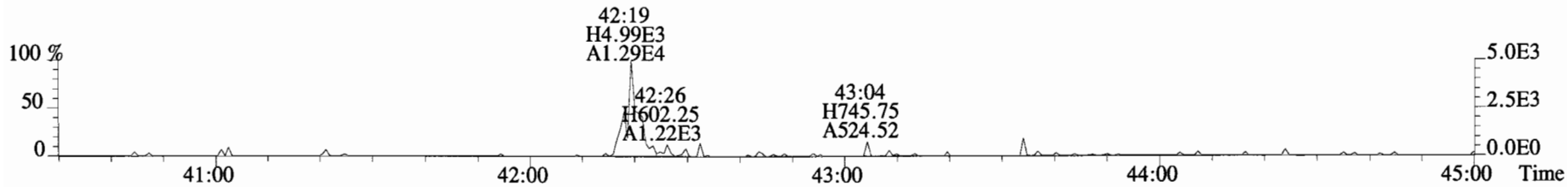


409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

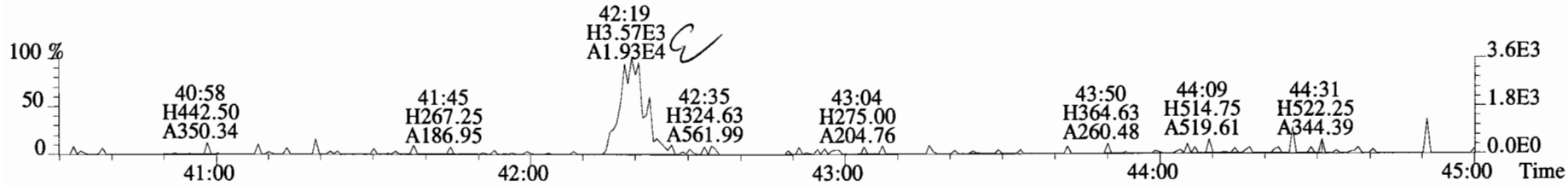


File:141226D2 #1-389 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5

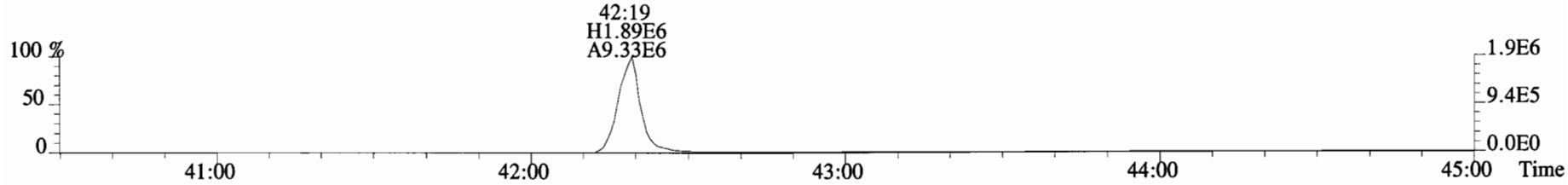
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



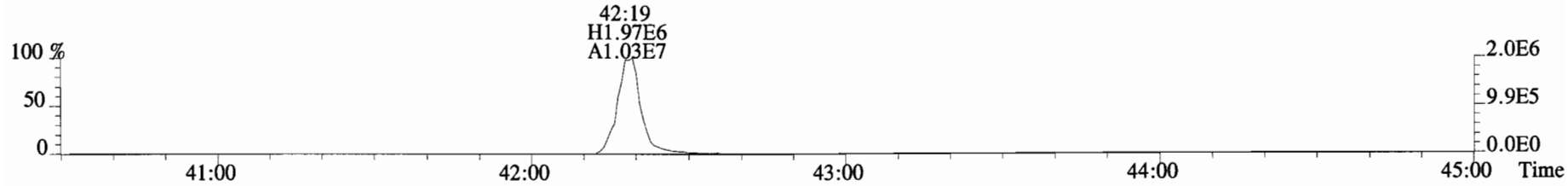
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



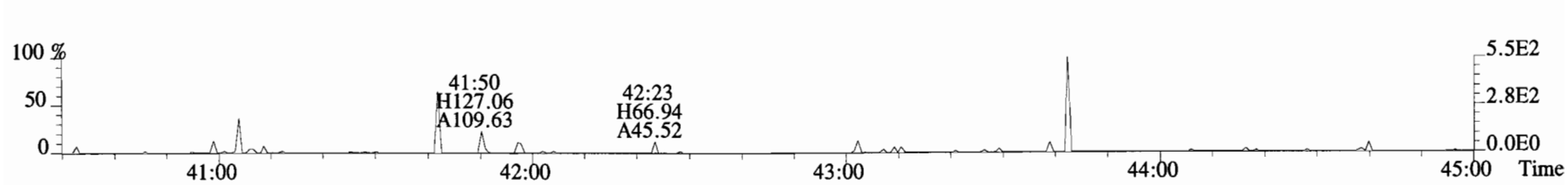
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



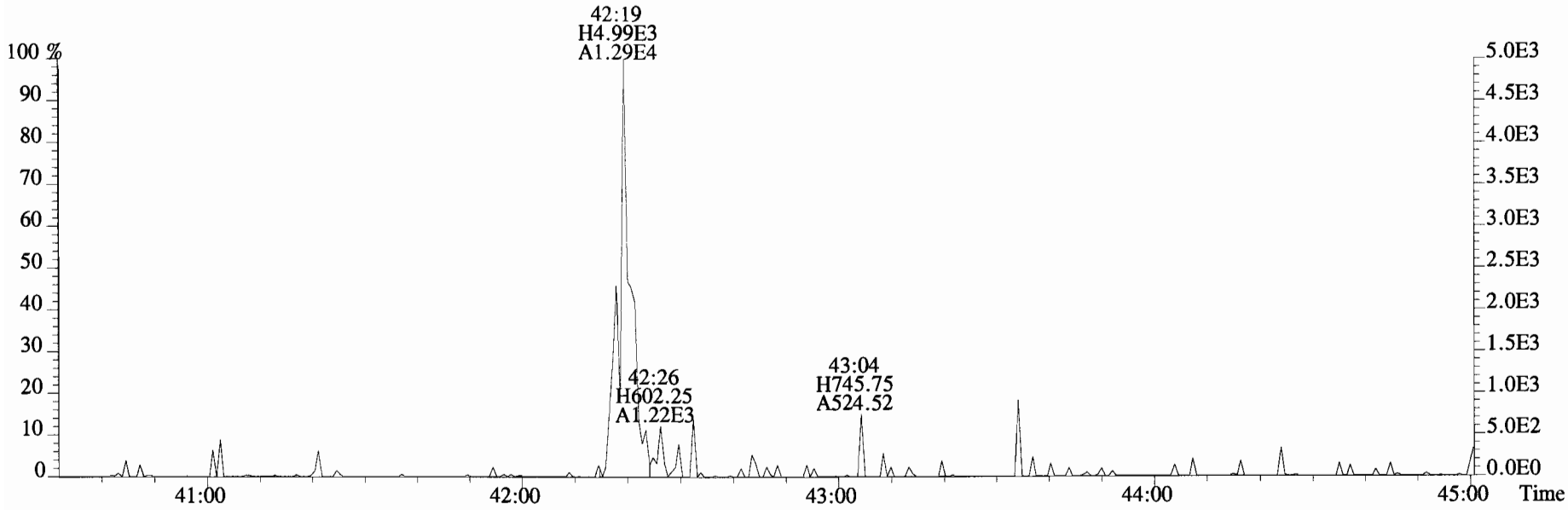
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



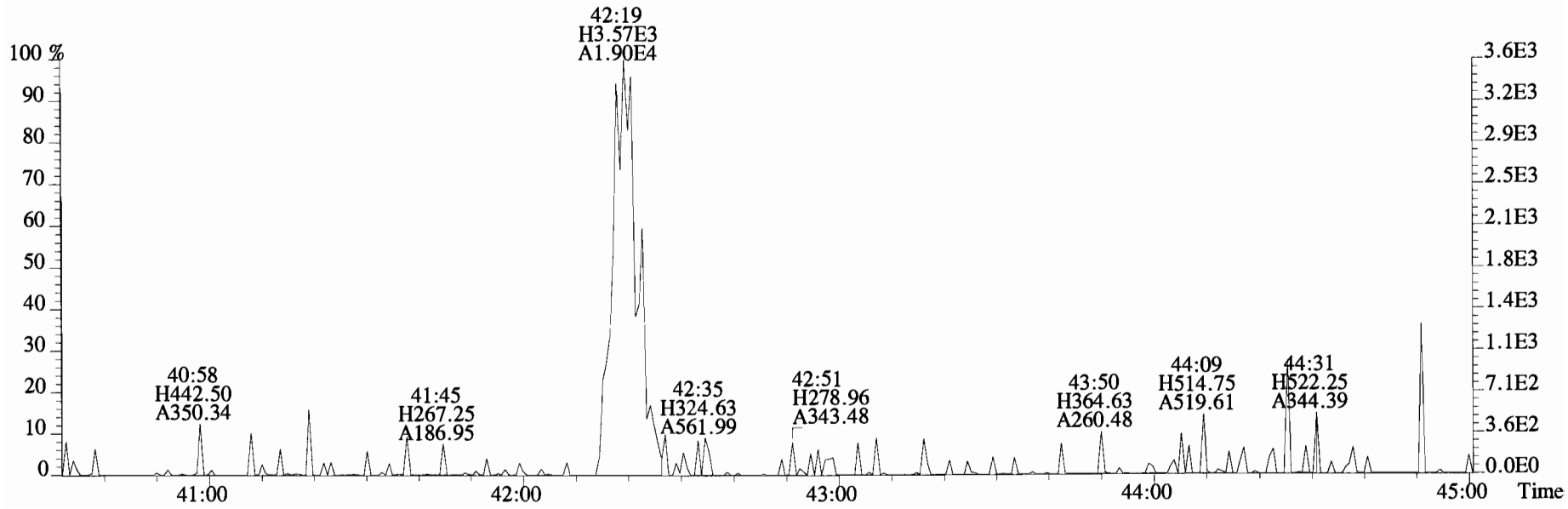
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141226D2 #1-389 Acq:26-DEC-2014 22:50:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BLK1 Method Blank 1 Exp:OCDD_DB5
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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



FORM 8A

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory Extraction Batch: B4L0130-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 141226D2-2

Ext. Date: 12-13-14 Shift: Day Analysis Date: 26-DEC-14 Time: 21:12:35

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	9.31	6.7 - 15.8 7.3 - 14.6 (2)
1,2,3,7,8-PeCDD	50	45.3	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	47.7	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	49.7	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	47.2	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	46.0	35.0 - 70.0
OCDD	100	97.7	78.0 - 144.0
2,3,7,8-TCDF	10	8.95	7.5 - 15.8 8.0 - 14.7 (2)
1,2,3,7,8-PeCDF	50	46.2	40.0 - 67.0
2,3,4,7,8-PeCDF	50	46.5	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	47.8	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	48.6	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	49.0	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	49.5	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	47.6	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	48.0	39.0 - 69.0
OCDF	100	97.9	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: [signature]

Date: 12/27/14

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

Lab Name: Vista Analytical Laboratory Extraction Batch: B4L0130-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 141226D2-2

Ext. Date: 12-13-14 Shift: Day Analysis Date: 26-DEC-14 Time: 21:12:35

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	82.0	20.0 - 175.0
			25.0 - 141.0 (2)
13C-1,2,3,7,8-PeCDD	100	123	21.0 - 227.0
13C-1,2,3,4,7,8-HxCDD	100	67.6	21.0 - 193.0
13C-1,2,3,6,7,8-HxCDD	100	67.3	25.0 - 163.0
13C-1,2,3,7,8,9-HxCDD	100	68.3	21.0 - 193.0
13C-1,2,3,4,6,7,8-HpCDD	100	65.4	26.0 - 166.0
13C-OCDD	200	95.9	26.0 - 397.0
13C-2,3,7,8-TCDF	100	76.0	22.0 - 152.0
			26.0 - 126.0 (2)
13C-1,2,3,7,8-PeCDF	100	90.0	21.0 - 192.0
13C-2,3,4,7,8-PeCDF	100	96.9	13.0 - 328.0
13C-1,2,3,4,7,8-HxCDF	100	78.0	19.0 - 202.0
13C-1,2,3,6,7,8-HxCDF	100	73.6	21.0 - 159.0
13C-2,3,4,6,7,8-HxCDF	100	68.5	22.0 - 176.0
13C-1,2,3,7,8,9-HxCDF	100	67.7	17.0 - 205.0
13C-1,2,3,4,6,7,8-HpCDF	100	61.4	21.0 - 158.0
13C-1,2,3,4,7,8,9-HpCDF	100	59.5	20.0 - 186.0
13C-OCDF	200	106	26.0 - 397.0
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	34.1	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: [signature]

Date: 12/27/14

Client ID: OPR | Filename: 141226D2 S:2 Acq:26-DEC-14 21:12:35 | ConCal: ST141226D2-1 |

Lab ID: B4L0130-BS1 | GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000 | EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	1.57e+06	0.78 y	1.18	26:58	1.001	9.3100		*	2.5	*
	1,2,3,7,8-PeCDD	1.03e+07	0.63 y	0.92	31:38	1.000	45.292		*	2.5	*
	1,2,3,4,7,8-HxCDD	7.65e+06	1.28 y	1.09	34:57	1.000	47.666		*	2.5	*
	1,2,3,6,7,8-HxCDD	7.92e+06	1.25 y	1.07	35:04	1.000	49.723		*	2.5	*
	1,2,3,7,8,9-HxCDD	7.73e+06	1.29 y	0.93	35:21	1.000	47.186		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	6.51e+06	1.06 y	1.12	38:51	1.000	46.012		*	2.5	*
	OCDD	1.05e+07	0.89 y	0.95	42:07	1.000	97.651		*	2.5	*
	2,3,7,8-TCDF	2.13e+06	0.78 y	1.08	26:10	1.001	8.9538		*	2.5	*
	1,2,3,7,8-PeCDF	1.35e+07	1.60 y	1.09	30:26	1.000	46.190		*	2.5	*
	2,3,4,7,8-PeCDF	1.43e+07	1.58 y	1.04	31:21	1.000	46.489		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.55e+07	1.31 y	1.39	34:04	1.000	47.810		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.49e+07	1.29 y	1.26	34:12	1.001	48.614		*	2.5	*
	2,3,4,6,7,8-HxCDF	1.35e+07	1.29 y	1.30	34:47	1.000	48.954		*	2.5	*
	1,2,3,7,8,9-HxCDF	1.03e+07	1.30 y	1.19	35:45	1.000	49.514		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	1.02e+07	1.08 y	1.62	37:32	1.000	47.633		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	9.29e+06	1.09 y	1.53	39:24	1.000	47.954		*	2.5	*
	OCDF	1.51e+07	0.90 y	1.10	42:20	1.000	97.886		*	2.5	*

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	9.34	9.64		*	*
Total Penta-Dioxins	45.6	46.1		*	*
Total Hexa-Dioxins	145	146		*	*
Total Hepta-Dioxins	46.3	49.3		*	*
Total Tetra-Furans	9.10	9.39		*	*
Total Penta-Furans	93.738	95.250		*	*
Total Hexa-Furans	197	198		*	*
Total Hepta-Furans	97.8	99.5		*	*

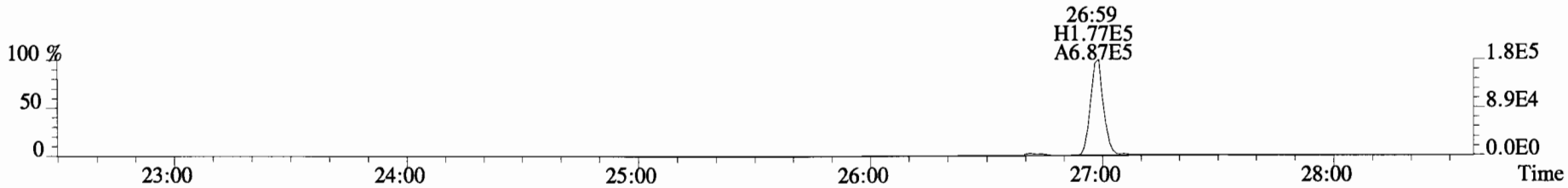
								Rec	Qual
IS	13C-2,3,7,8-TCDD	1.42e+07	0.83 y	1.07	26:57	1.023	82.008	82.0	
IS	13C-1,2,3,7,8-PeCDD	2.47e+07	0.62 y	1.24	31:38	1.200	123.13	123	
IS	13C-1,2,3,4,7,8-HxCDD	1.48e+07	1.25 y	0.72	34:56	1.014	67.593	67.6	
IS	13C-1,2,3,6,7,8-HxCDD	1.49e+07	1.24 y	0.74	35:03	1.017	67.274	67.3	
IS	13C-1,2,3,7,8,9-HxCDD	1.76e+07	1.25 y	0.86	35:20	1.025	68.272	68.3	
IS	13C-1,2,3,4,6,7,8-HpCDD	1.27e+07	1.08 y	0.64	38:50	1.127	65.352	65.4	
IS	13C-OCDD	2.26e+07	0.87 y	0.78	42:06	1.221	95.911	48.0	
IS	13C-2,3,7,8-TCDF	2.20e+07	0.77 y	0.92	26:09	0.992	76.005	76.0	
IS	13C-1,2,3,7,8-PeCDF	2.69e+07	1.58 y	0.95	30:25	1.154	89.950	90.0	
IS	13C-2,3,4,7,8-PeCDF	2.96e+07	1.55 y	0.97	31:21	1.189	96.924	96.9	
IS	13C-1,2,3,4,7,8-HxCDF	2.33e+07	0.52 y	0.99	34:03	0.988	77.970	78.0	
IS	13C-1,2,3,6,7,8-HxCDF	2.44e+07	0.53 y	1.10	34:10	0.992	73.554	73.6	
IS	13C-2,3,4,6,7,8-HxCDF	2.13e+07	0.52 y	1.03	34:47	1.009	68.514	68.5	
IS	13C-1,2,3,7,8,9-HxCDF	1.75e+07	0.51 y	0.86	35:44	1.037	67.716	67.7	
IS	13C-1,2,3,4,6,7,8-HpCDF	1.32e+07	0.44 y	0.71	37:32	1.089	61.373	61.4	
IS	13C-1,2,3,4,7,8,9-HpCDF	1.27e+07	0.44 y	0.71	39:23	1.143	59.464	59.5	
IS	13C-OCDF	2.79e+07	0.90 y	0.87	42:19	1.228	106.00	53.0	
C/Up	37Cl-2,3,7,8-TCDD	6.69e+06		1.21	26:59	1.024	34.104	85.3	
RS/RT	13C-1,2,3,4-TCDD	1.62e+07	0.81 y	1.00	26:22	*	100.00		
RS	13C-1,2,3,4-TCDF	3.14e+07	0.78 y	1.00	24:50	*	100.00		
RS/RT	13C-1,2,3,4,6,9-HxCDF	3.02e+07	0.52 y	1.00	34:28	*	100.00		

Integrations by Analyst: [signature] Date: 12/27/14

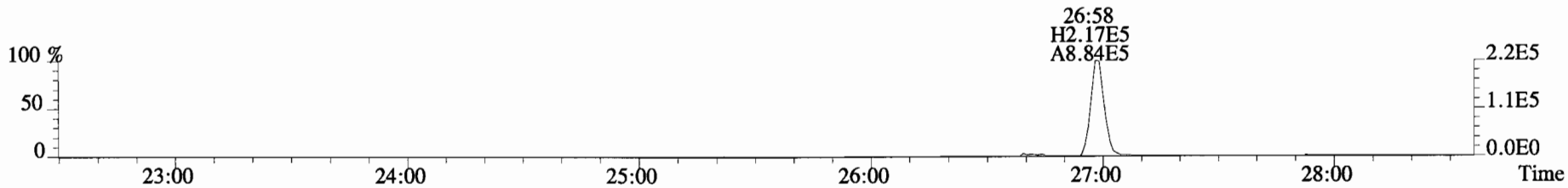
Reviewed by Analyst: CT Date: 12/29/14

File:141226D2 #1-551 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5

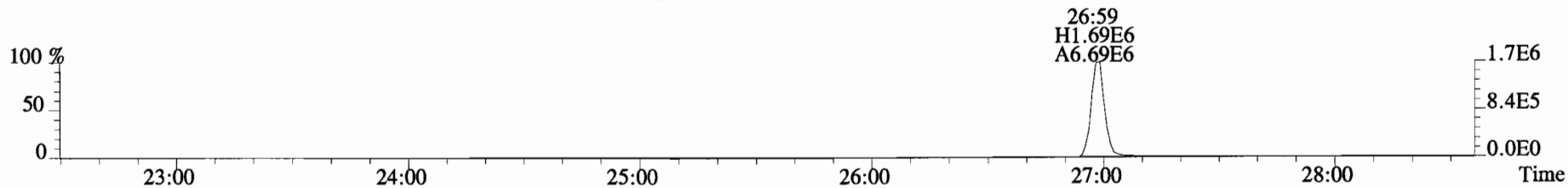
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



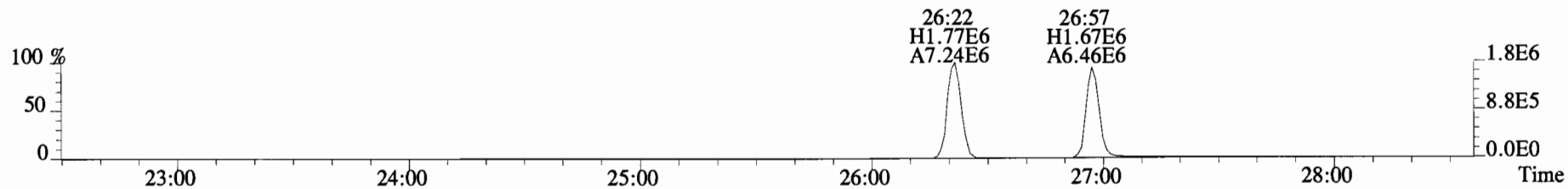
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



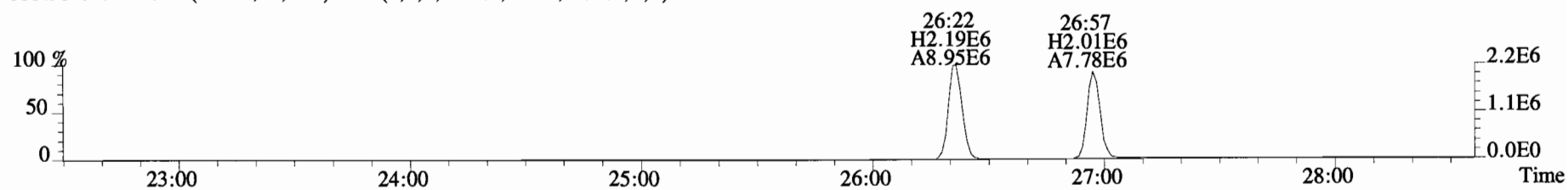
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

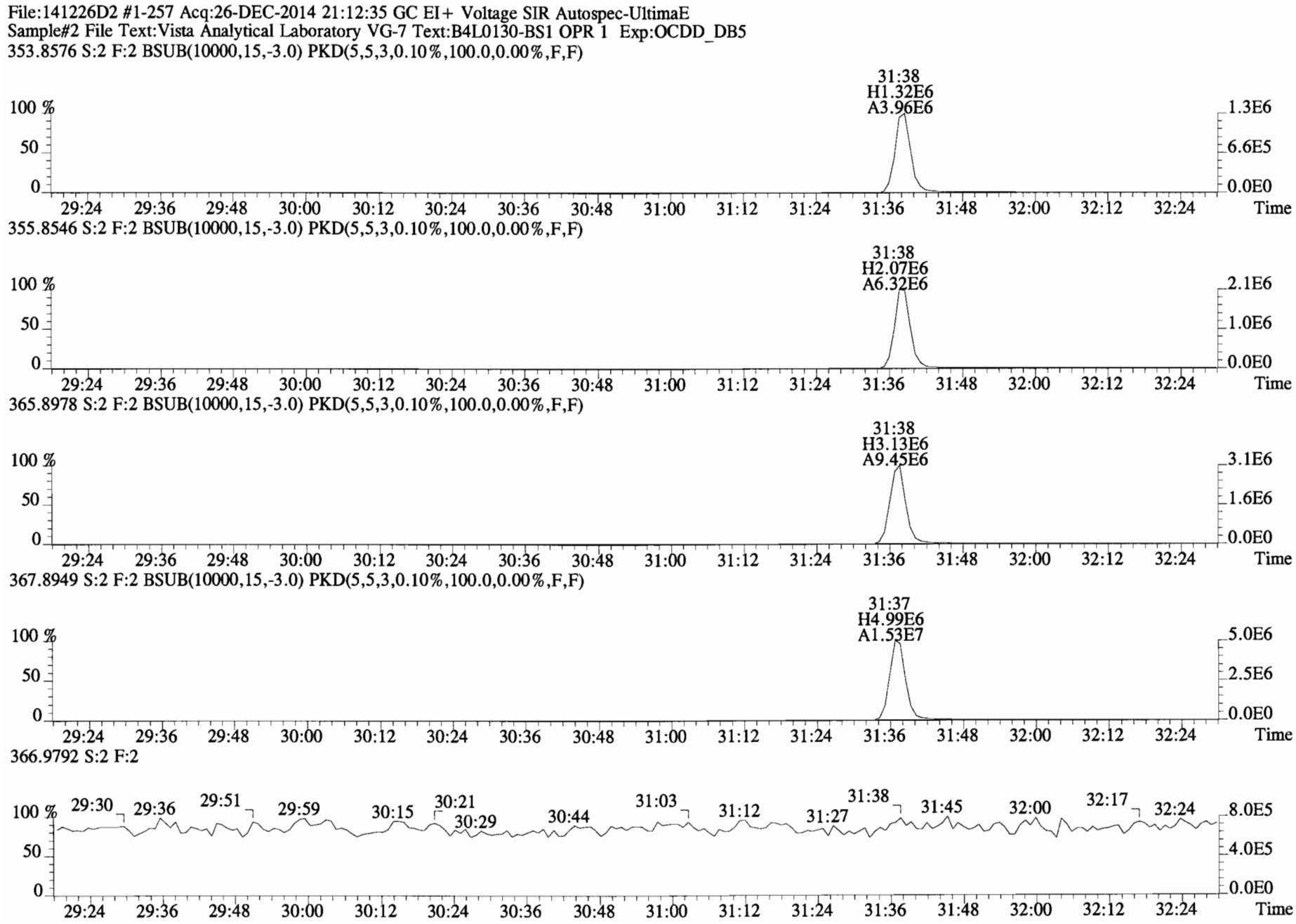


331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

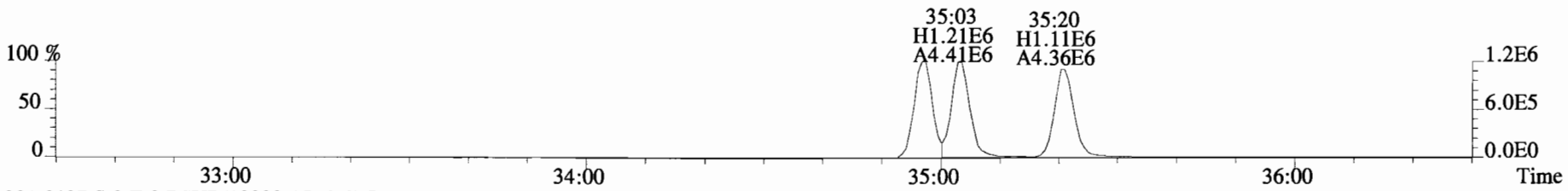


333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

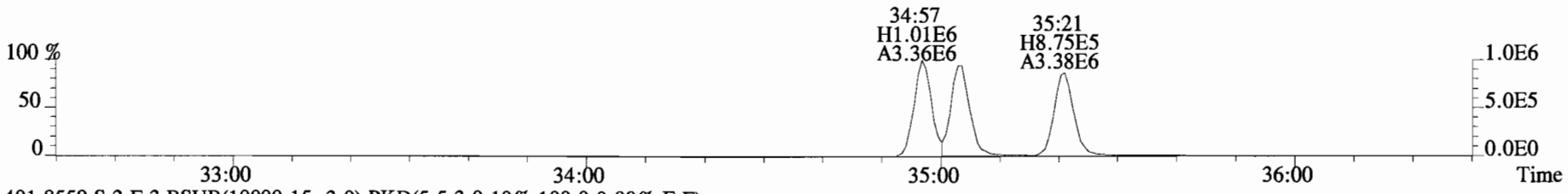



File:141226D2 #1-257 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5
353.8576 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:38
H1.32E6
A3.96E6
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:38
H2.07E6
A6.32E6
365.8978 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:38
H3.13E6
A9.45E6
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:37
H4.99E6
A1.53E7
366.9792 S:2 F:2
29:30
29:36
29:51
29:59
30:15
30:21
30:29
30:44
31:03
31:12
31:27
31:38
31:45
32:00
32:17
32:24
100 %
50
0
29:24
29:36
29:48
30:00
30:12
30:24
30:36
30:48
31:00
31:12
31:24
31:36
31:48
32:00
32:12
32:24
Time
1.3E6
6.6E5
0.0E0
2.1E6
1.0E6
3.1E6
1.6E6
5.0E6
2.5E6
8.0E5
4.0E5

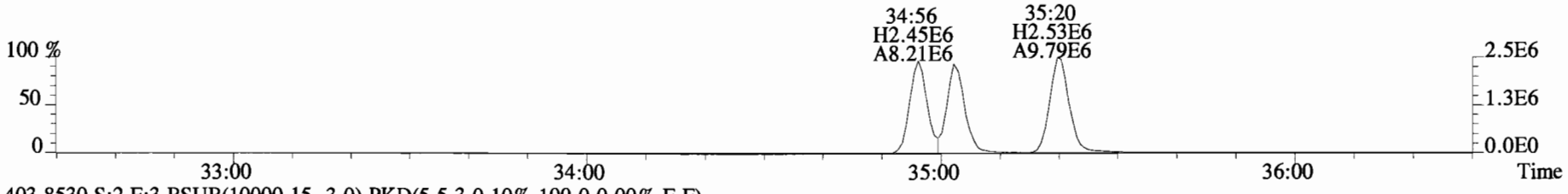
File:141226D2 #1-385 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



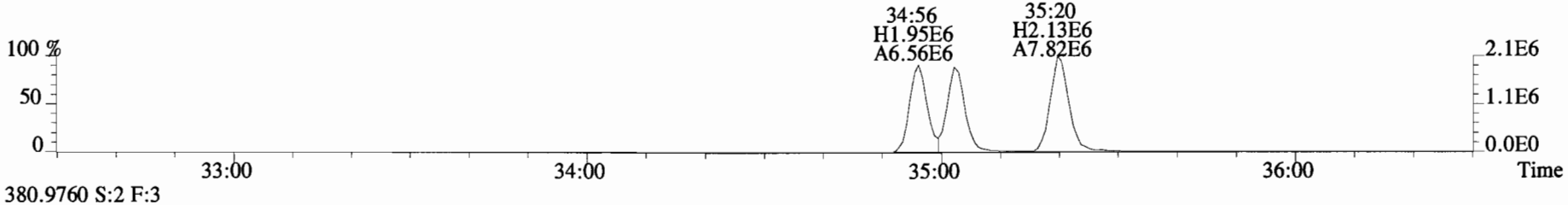
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



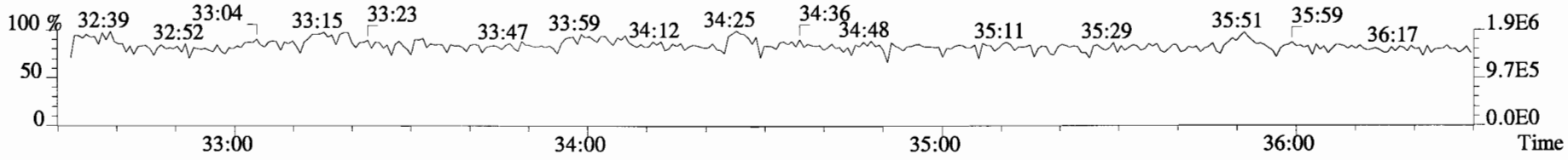
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



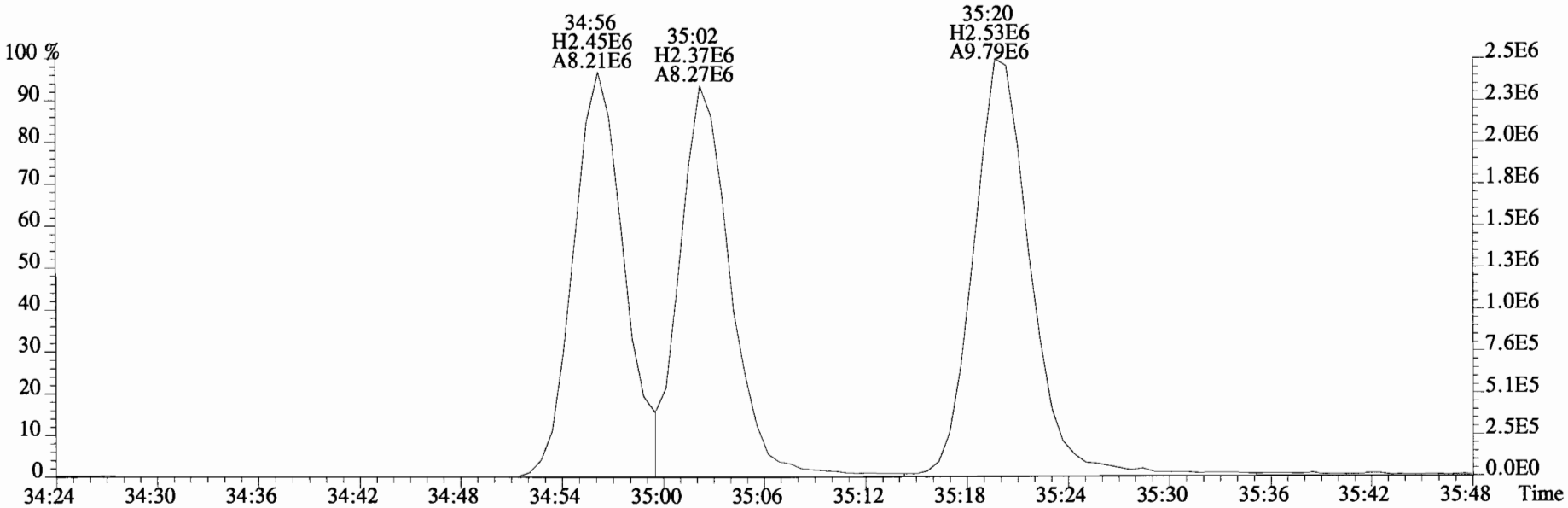
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



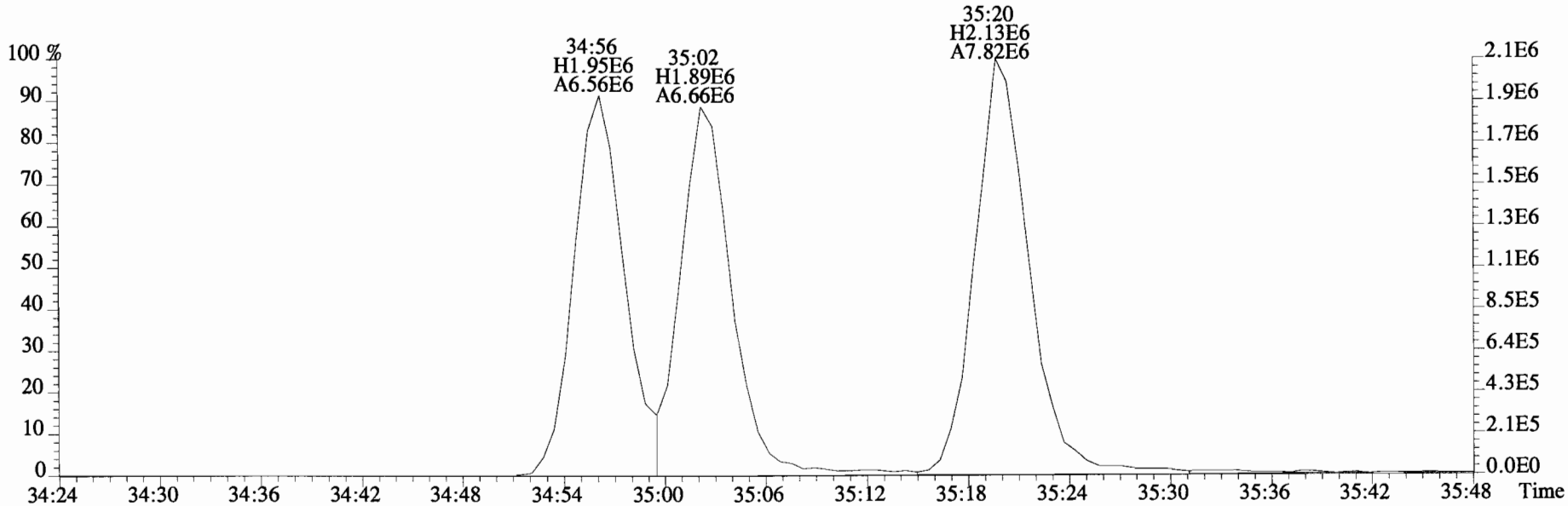
380.9760 S:2 F:3



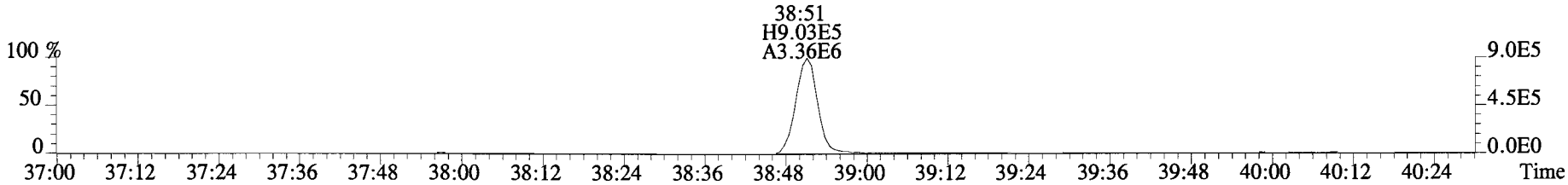
File:141226D2 #1-385 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



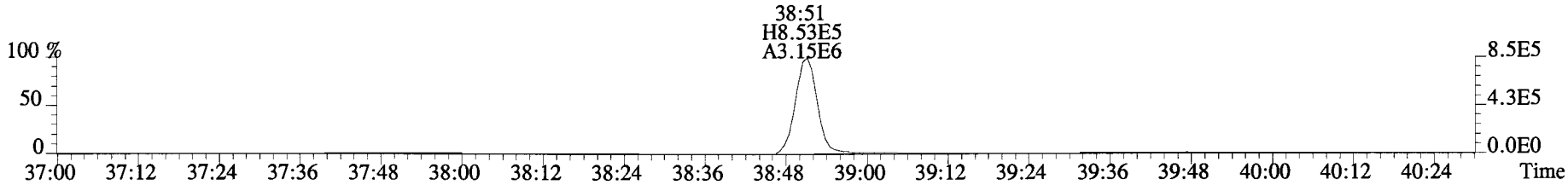
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



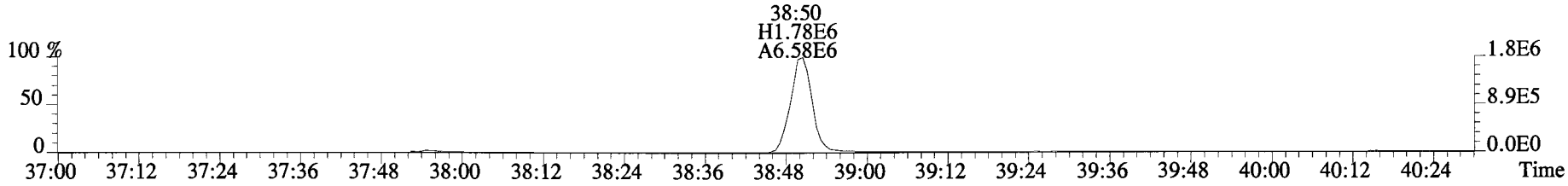
File:141226D2 #1-326 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



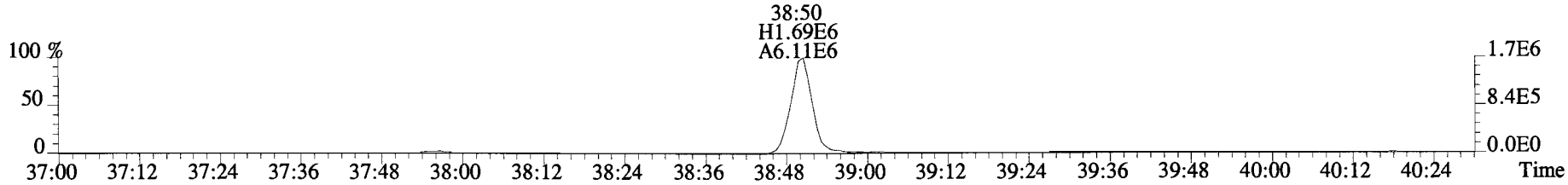
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



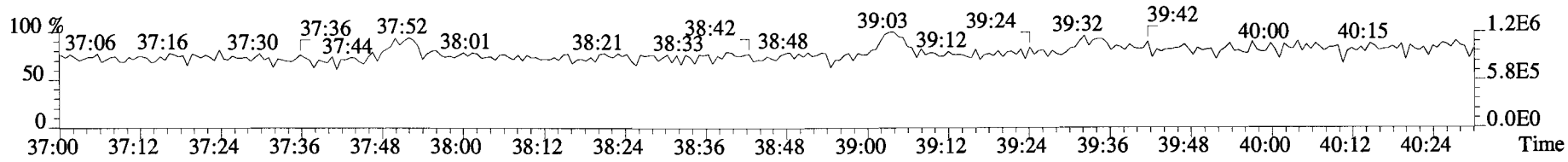
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



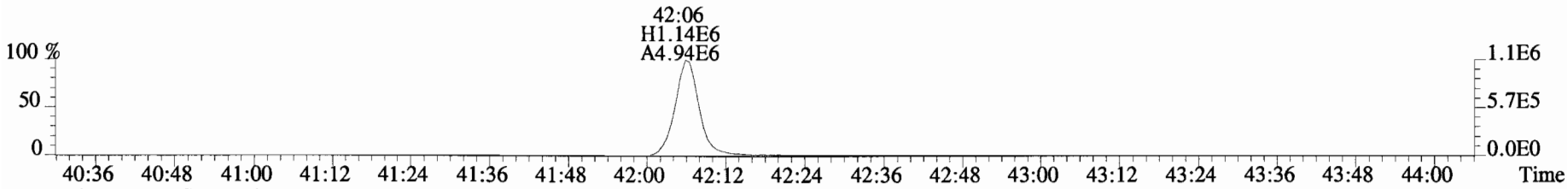
437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



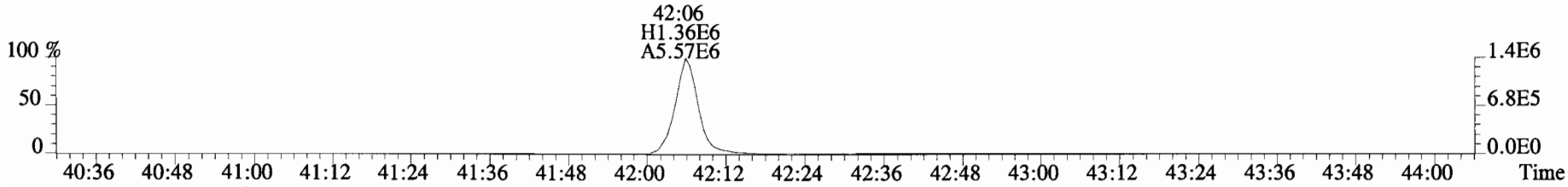
430.9728 S:2 F:4



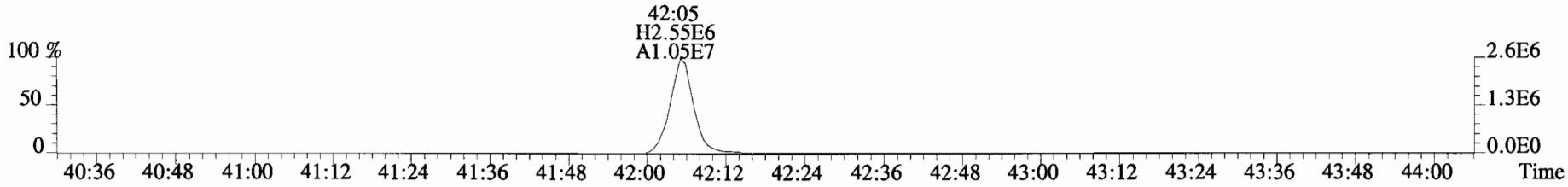
File:141226D2 #1-388 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



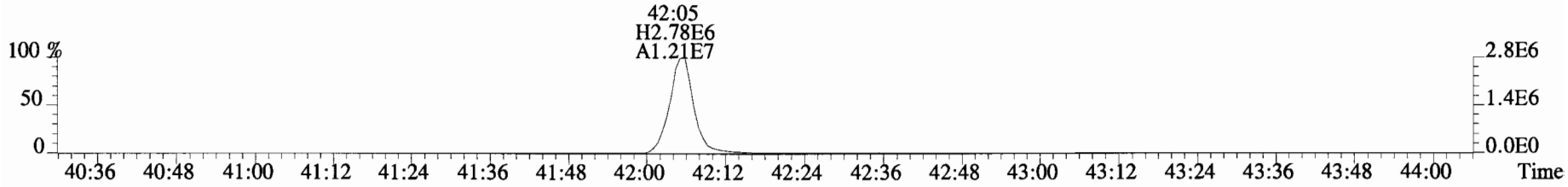
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



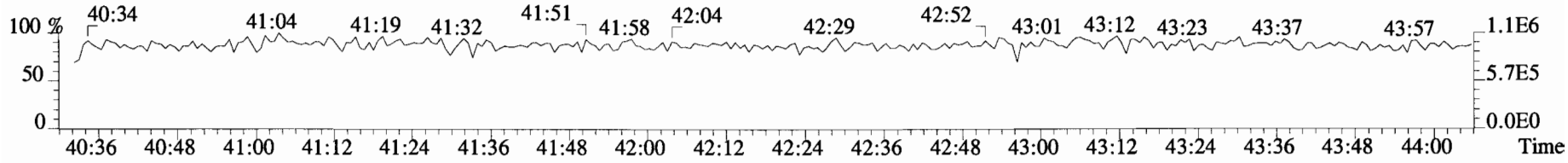
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



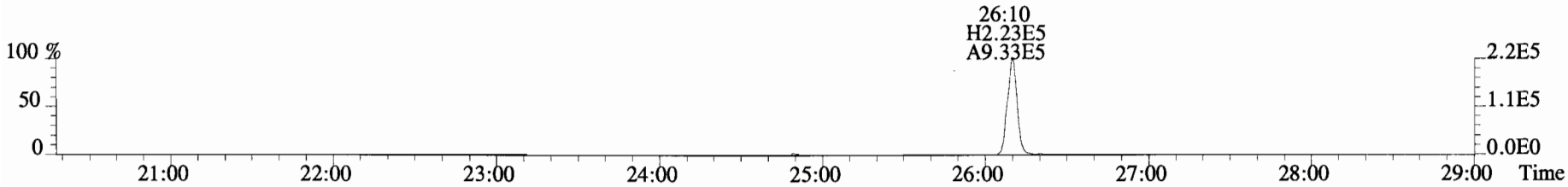
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



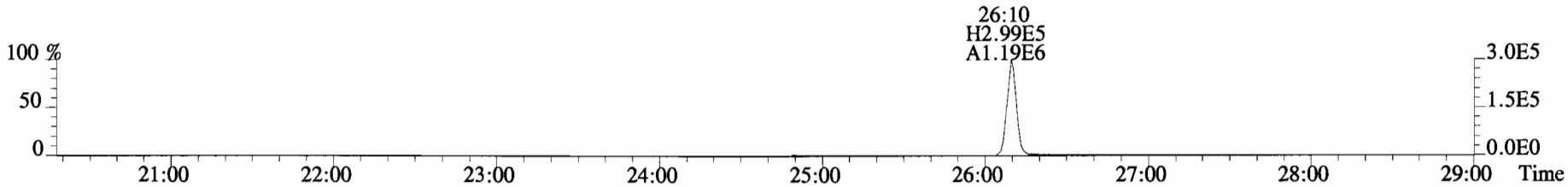
454.9728 S:2 F:5



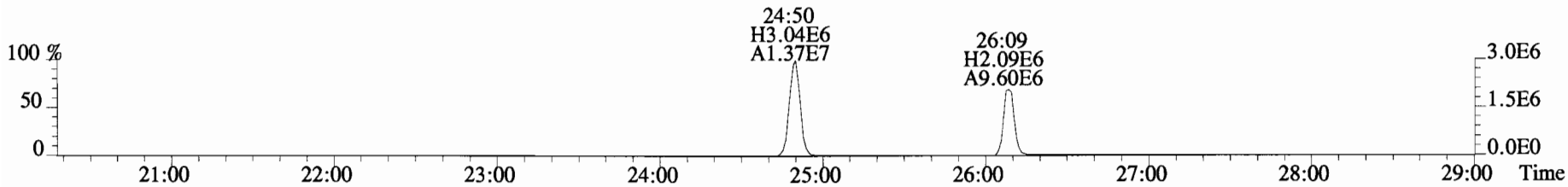
File:141226D2 #1-551 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



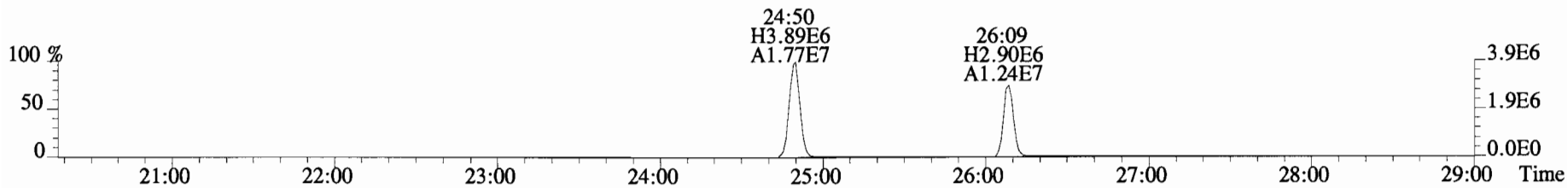
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



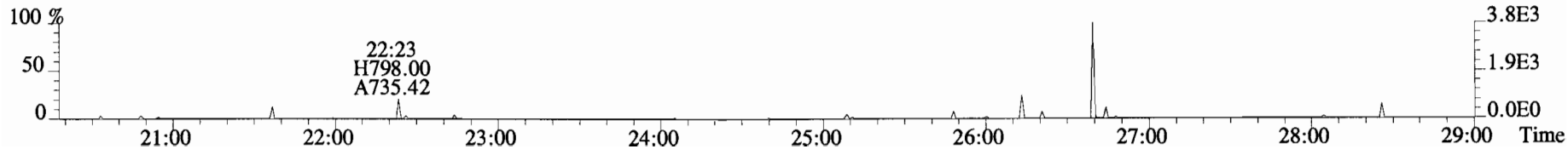
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



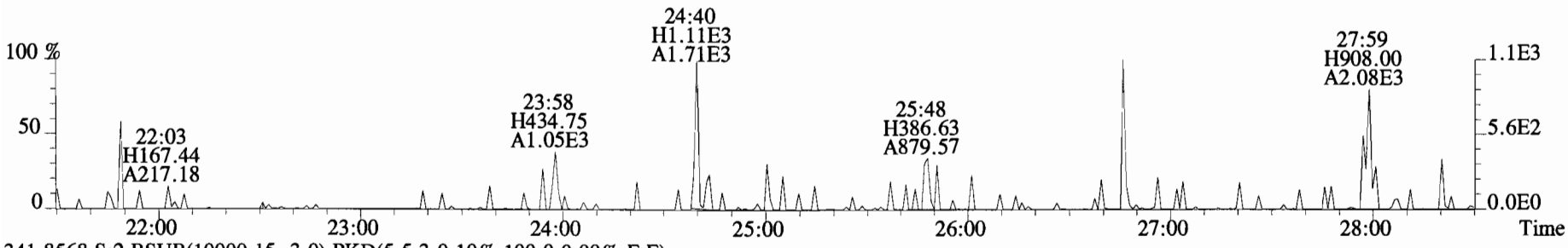
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



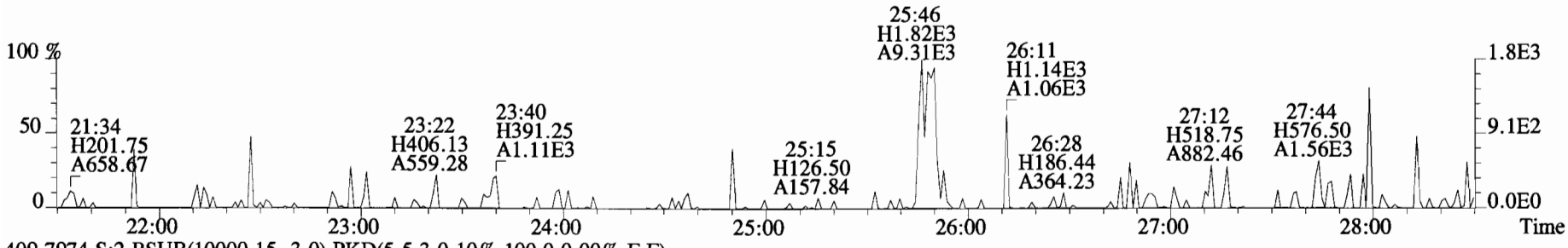
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



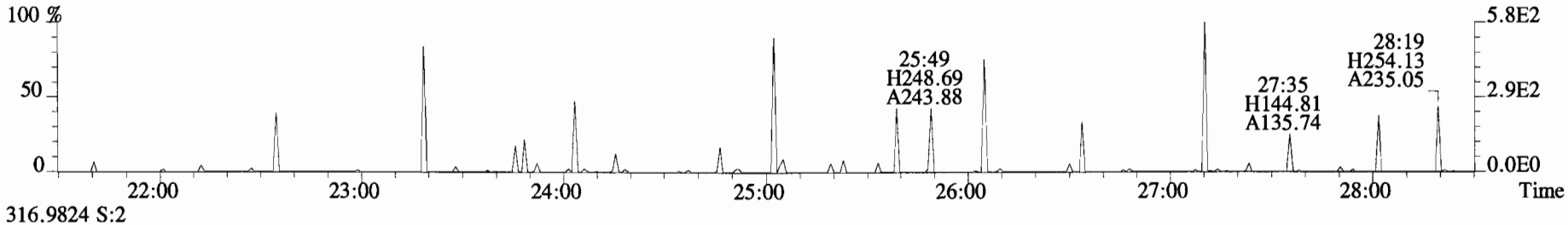
File:141226D2 #1-551 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



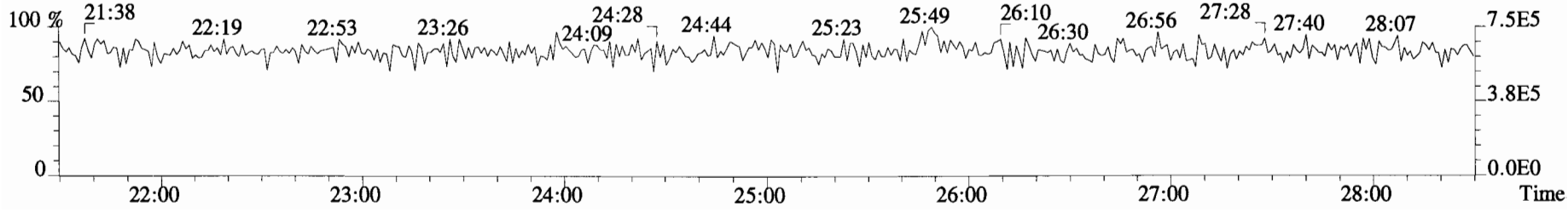
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



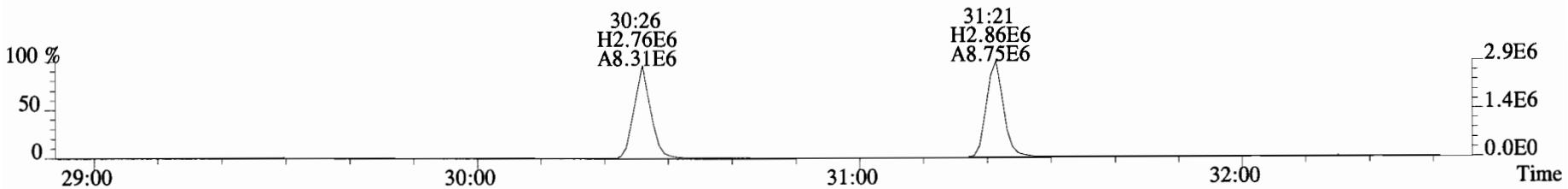
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



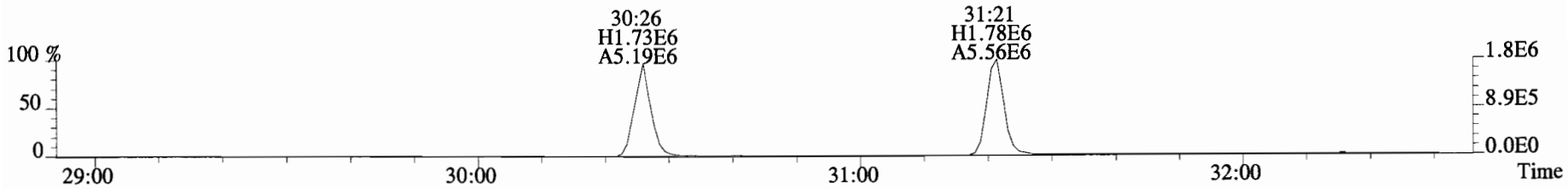
316.9824 S:2



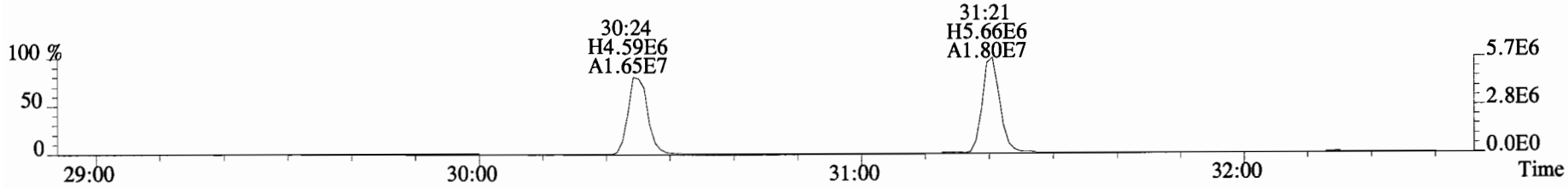
File:141226D2 #1-257 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



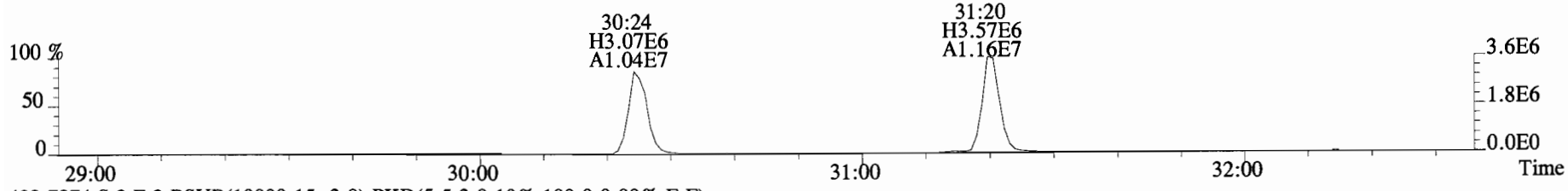
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



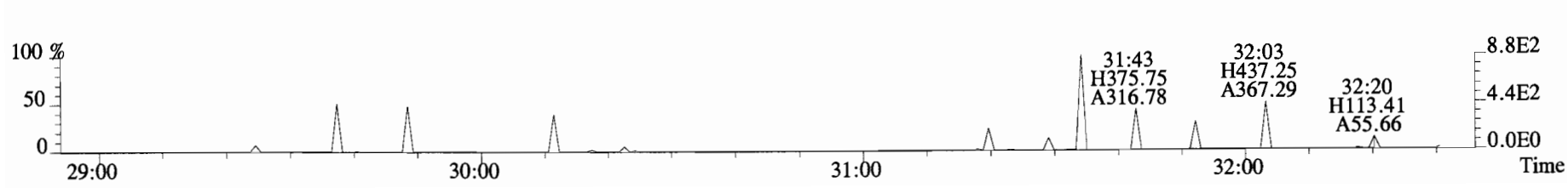
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

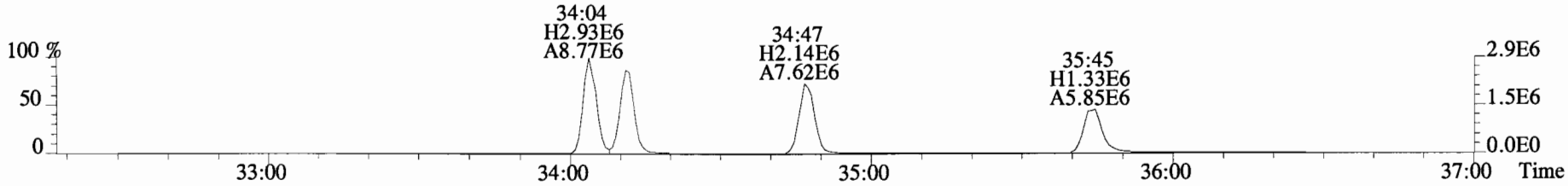


409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

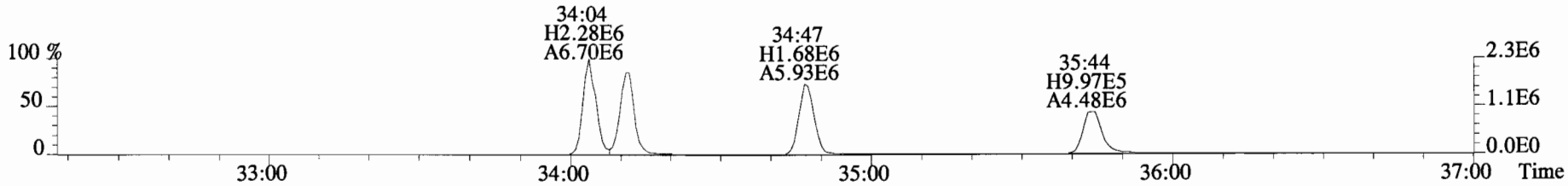


File:141226D2 #1-385 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5

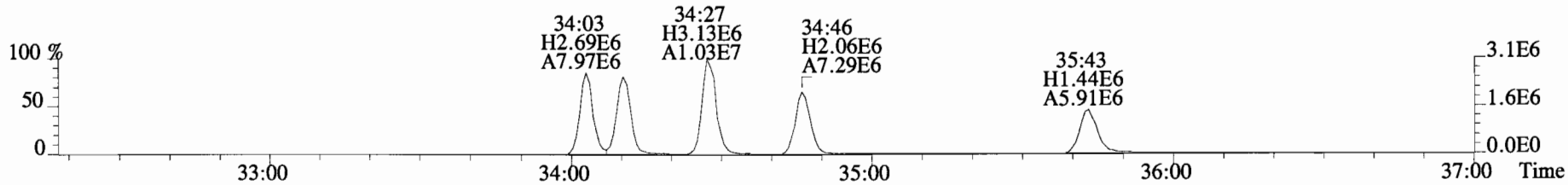
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



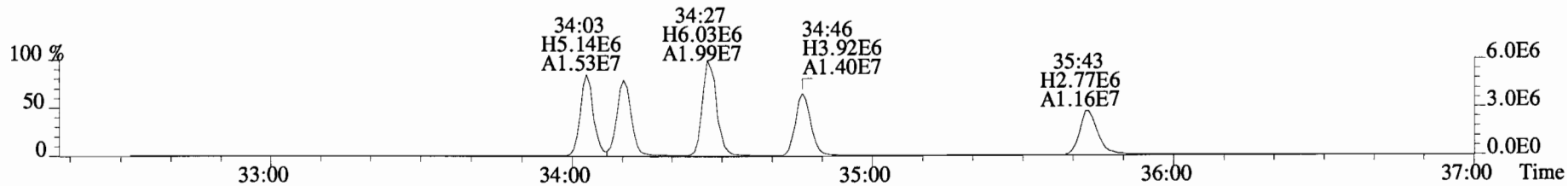
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



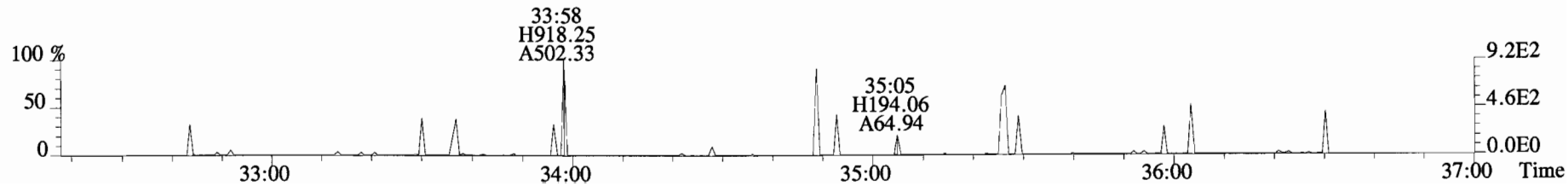
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



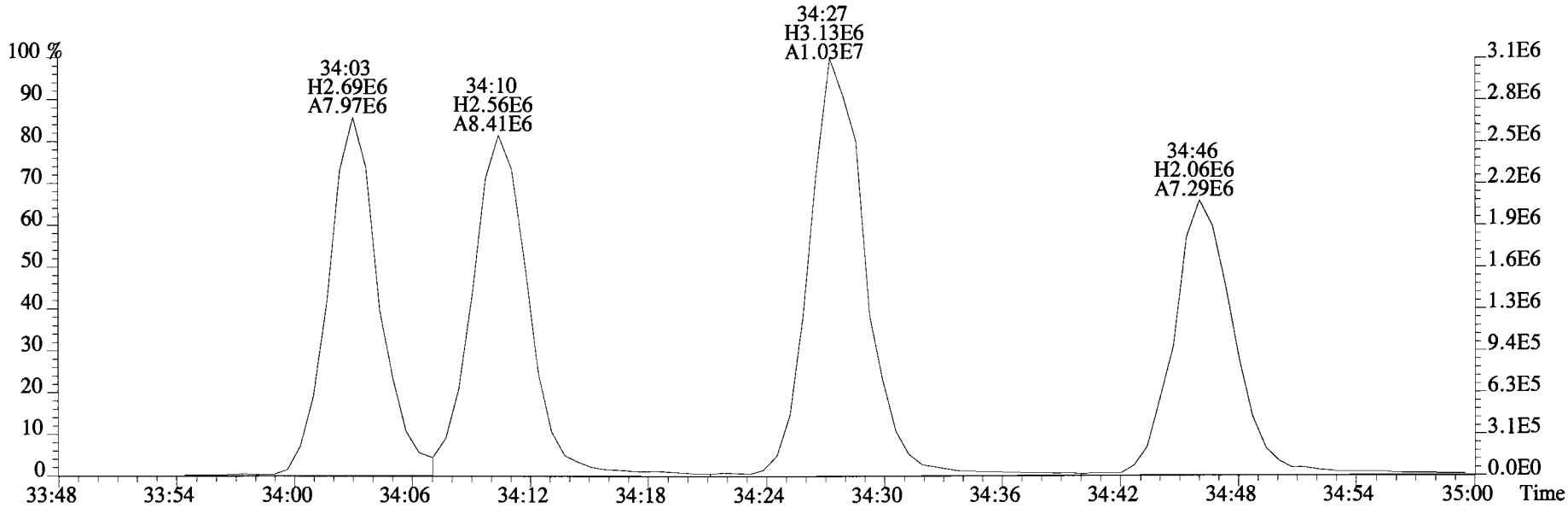
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



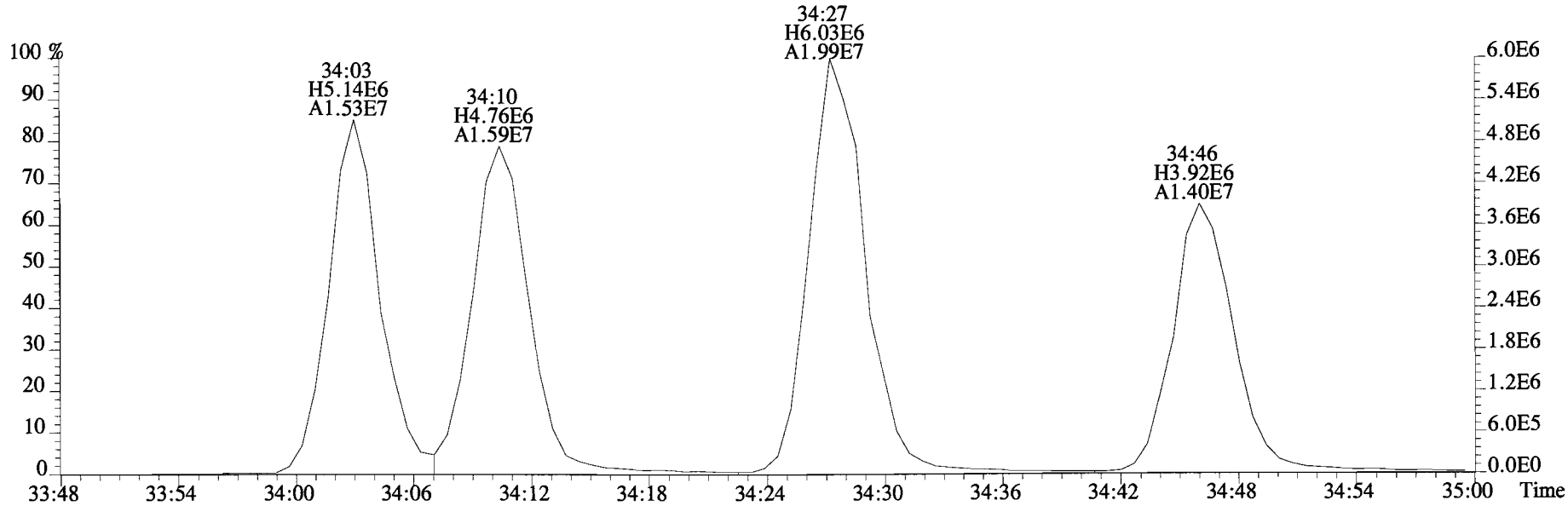
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



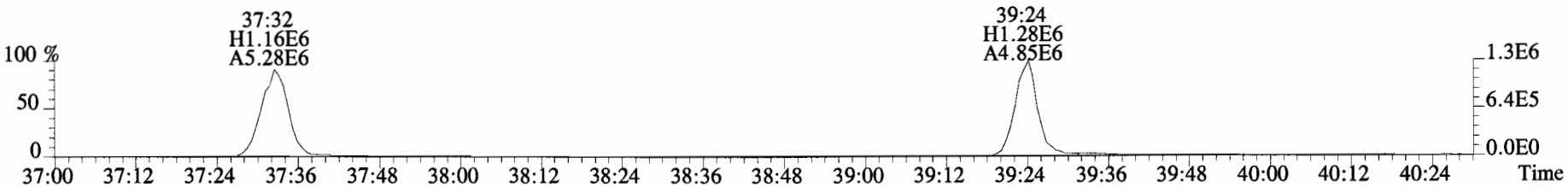
File:141226D2 #1-385 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



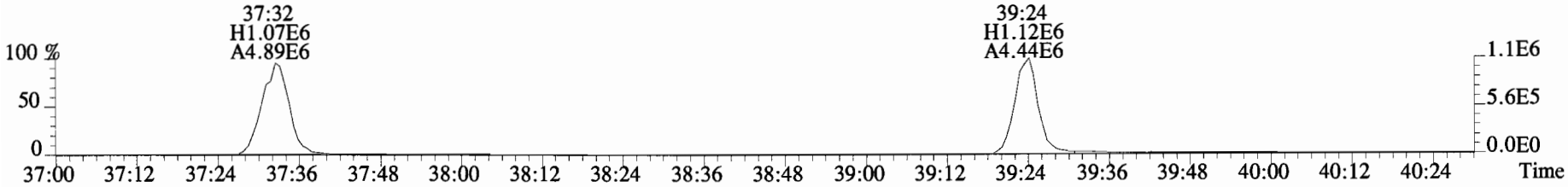
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



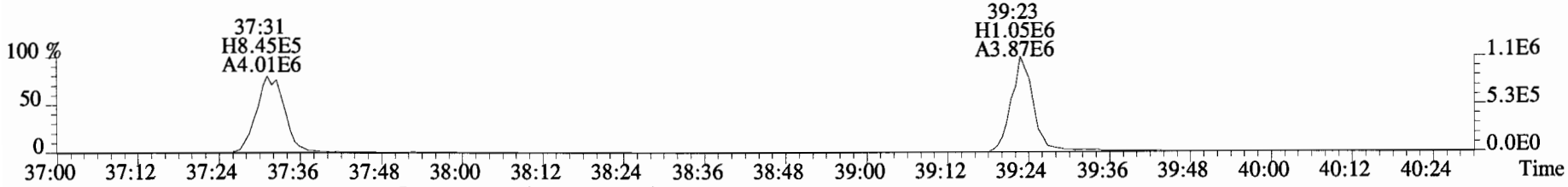
File:141226D2 #1-326 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



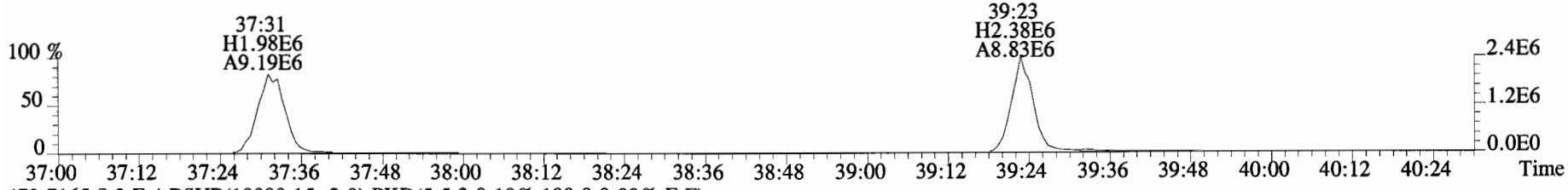
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



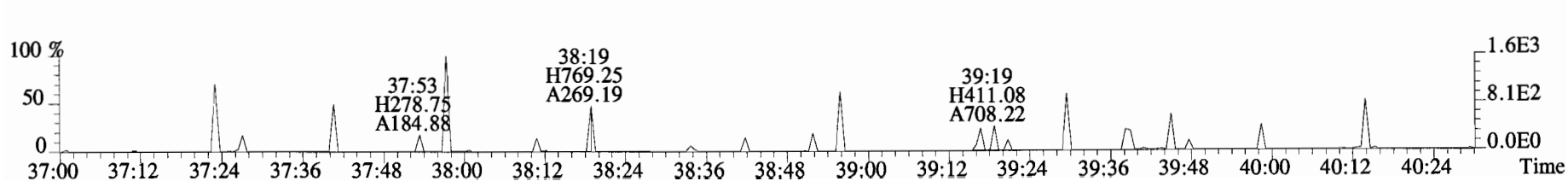
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



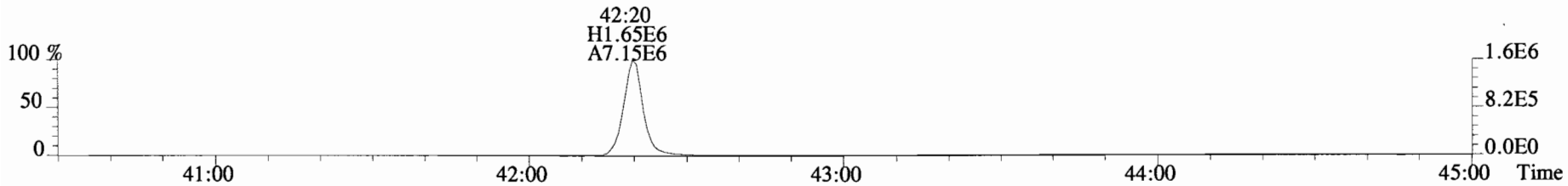
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



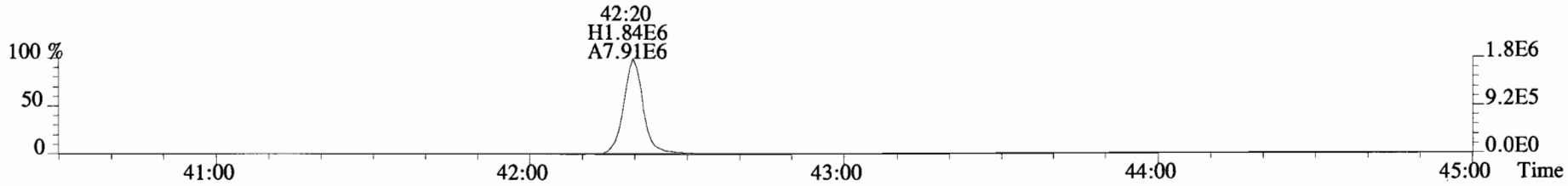
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



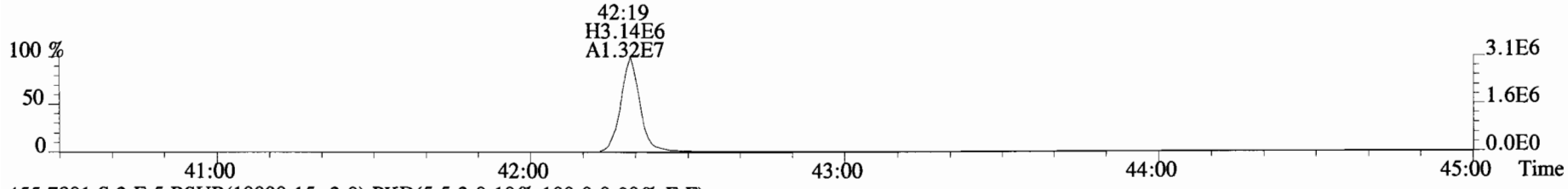
File:141226D2 #1-388 Acq:26-DEC-2014 21:12:35 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-7 Text:B4L0130-BS1 OPR 1 Exp:OCDD_DB5
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



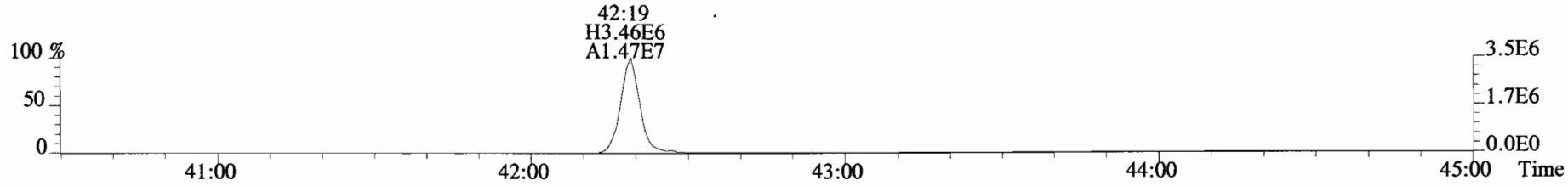
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



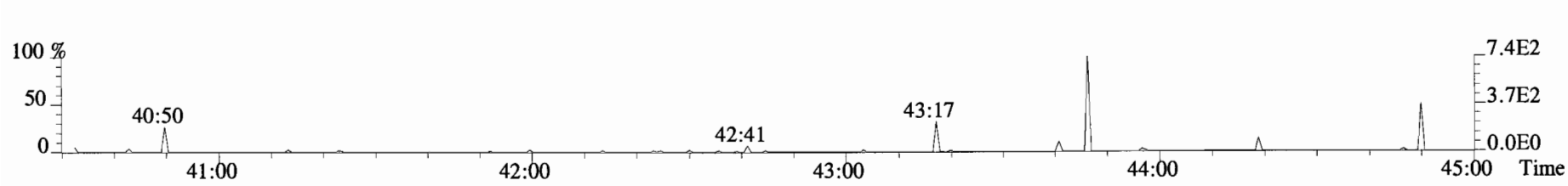
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: SC-OWS-05-20141211-S Filename: 141226D2 S:5 Acq:26-DEC-14 23:39:03 ✓ ConCal: ST141226D2-1

Lab ID: 1400948-01RE1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.002 EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	4.61e+05	0.66 y	1.18	26:58	1.001	48.980		*	2.5	*
	1,2,3,7,8-PeCDD	4.37e+06	0.62 y	0.92	31:38	1.001	433.62		*	2.5	*
	1,2,3,4,7,8-HxCDD	7.95e+06	1.23 y	1.09	34:55	1.000	1026.2		*	2.5	*
	1,2,3,6,7,8-HxCDD	2.56e+07	1.25 y	1.07	35:02	1.000	3013.2		*	2.5	*
	1,2,3,7,8,9-HxCDD	1.65e+07	1.23 y	0.93	35:20	1.000	1983.3		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	1.09e+09	1.04 y	1.12	38:50	1.000	103510		*	2.5	*
	OCDD	9.91e+09	0.89 y	0.95	42:07	1.000	1160800		*	2.5	*
	2,3,7,8-TCDF	1.03e+06	0.81 y	1.08	26:09	1.001	79.557	78.6	*	2.5	*
	1,2,3,7,8-PeCDF	1.75e+06	1.64 y	1.09	30:25	1.000	119.40		*	2.5	*
	2,3,4,7,8-PeCDF	2.75e+06	1.53 y	1.04	31:21	1.001	193.08		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.55e+07	1.30 y	1.39	34:03	1.000	995.82		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.42e+07	1.29 y	1.26	34:10	1.000	931.35		*	2.5	*
	2,3,4,6,7,8-HxCDF	1.59e+07	1.31 y	1.30	34:46	1.000	1185.0		*	2.5	*
	1,2,3,7,8,9-HxCDF	2.47e+06	1.32 y	1.19	35:45	1.001	226.76		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	3.36e+08	1.08 y	1.62	37:32	1.001	25266		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	1.61e+07	1.08 y	1.53	39:23	1.000	1408.5		*	2.5	*
	OCDF	6.82e+08	0.90 y	1.10	42:20	1.000	70116		*	2.5	*

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	288	294		*	*
Total Penta-Dioxins	1780	1830		*	*
Total Hexa-Dioxins	21400	21400		*	*
Total Hepta-Dioxins	193000	193000		*	*
Total Tetra-Furans	1070	1080	P	*	*
Total Penta-Furans	6133.9	6137.0	P	*	*
Total Hexa-Furans	30700	30700	P	*	*
Total Hepta-Furans	70800	70800		*	*

								Rec	Qual
IS	13C-2,3,7,8-TCDD	1.59e+07	0.80 y	1.07	26:57	1.023	1481.5	74.2	
IS	13C-1,2,3,7,8-PeCDD	2.19e+07	0.62 y	1.24	31:37	1.200	1771.7	88.8	
IS	13C-1,2,3,4,7,8-HxCDD	1.42e+07	1.27 y	0.72	34:55	1.014	1250.9	62.7	
IS	13C-1,2,3,6,7,8-HxCDD	1.59e+07	1.24 y	0.74	35:02	1.017	1376.0	68.9	
IS	13C-1,2,3,7,8,9-HxCDD	1.79e+07	1.24 y	0.86	35:19	1.025	1332.6	66.8	
IS	13C-1,2,3,4,6,7,8-HpCDD	1.88e+07	1.03 y	0.64	38:50	1.127	1862.9	93.3	
IS	13C-OCDD	3.59e+07	0.92 y	0.78	42:06	1.222	2918.4	73.1	
IS	13C-2,3,7,8-TCDF	2.41e+07	0.77 y	0.92	26:08	0.992	1460.2	73.2	
IS	13C-1,2,3,7,8-PeCDF	2.69e+07	1.60 y	0.95	30:24	1.154	1581.0	79.2	
IS	13C-2,3,4,7,8-PeCDF	2.73e+07	1.61 y	0.97	31:20	1.189	1570.7	78.7	
IS	13C-1,2,3,4,7,8-HxCDF	2.23e+07	0.52 y	0.99	34:02	0.988	1437.7	72.0	
IS	13C-1,2,3,6,7,8-HxCDF	2.41e+07	0.51 y	1.10	34:10	0.992	1398.1	70.0	
IS	13C-2,3,4,6,7,8-HxCDF	2.06e+07	0.51 y	1.03	34:45	1.009	1271.3	63.7	
IS	13C-1,2,3,7,8,9-HxCDF	1.82e+07	0.51 y	0.86	35:42	1.036	1355.3	67.9	
IS	13C-1,2,3,4,6,7,8-HpCDF	1.64e+07	0.44 y	0.71	37:30	1.089	1465.1	73.4	
IS	13C-1,2,3,4,7,8,9-HpCDF	1.49e+07	0.44 y	0.71	39:22	1.143	1345.0	67.4	
IS	13C-OCDF	3.52e+07	0.91 y	0.87	42:19	1.228	2569.3	64.4	
C/Up	37Cl-2,3,7,8-TCDD	7.63e+06		1.21	26:58	1.024	631.64	79.1	
RS/RT	13C-1,2,3,4-TCDD	1.99e+07	0.83 y	1.00	26:21	*	1996.0		
RS	13C-1,2,3,4-TCDF	3.57e+07	0.78 y	1.00	24:49	*	1996.0		
RS/RT	13C-1,2,3,4,6,9-HxCDF	3.13e+07	0.51 y	1.00	34:27	*	1996.0		

Integrations by Analyst: [signature] Date: 12/28/14

Reviewed by Analyst: [signature] Date: 12/29/14

Totals class: TCDD EMPC Entry #: 19

Run: 10 File: 141226D2 S: 5 I: 1 F: 1
Acquired: 26-DEC-14 23:39:03 Processed: 27-DEC-14 13:28:07

Total Concentration: 293.84 Unnamed Concentration: 244.861

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
23:19	1.234e+05	1.678e+05	0.73	y	2.912e+05	30.954	
23:43	1.009e+05	1.268e+05	0.80	y	2.277e+05	24.204	
24:10	6.000e+04	7.196e+04	0.83	y	1.320e+05	14.026	
24:58	1.852e+04	2.278e+04	0.81	y	4.130e+04	4.3897	
25:12	7.772e+04	1.118e+05	0.70	y	1.895e+05	20.142	
25:24	1.984e+05	2.524e+05	0.79	y	4.507e+05	47.910	
25:35	3.689e+04	4.863e+04	0.76	y	8.553e+04	9.0909	
25:50	3.763e+04	4.611e+04	0.82	y	8.374e+04	8.9011	
25:59	5.141e+04	7.489e+04	0.69	y	1.263e+05	13.424	
26:21	6.154e+04	8.811e+04	0.70	y	1.497e+05	15.907	
26:28	7.613e+03	7.277e+03	1.05	n	1.288e+04	1.3691	
26:42	5.600e+04	7.547e+04	0.74	y	1.315e+05	13.974	
26:50	1.315e+04	1.573e+04	0.84	y	2.888e+04	3.0695	
26:58	1.827e+05	2.781e+05	0.66	y	4.608e+05	48.980	2,3,7,8-TCDD
27:16	1.131e+05	1.443e+05	0.78	y	2.574e+05	27.358	
27:23	1.280e+04	2.239e+04	0.57	n	2.942e+04	3.1275	
27:33	8.480e+03	7.941e+03	1.07	n	1.406e+04	1.4940	
27:52	2.061e+04	3.131e+04	0.66	y	5.192e+04	5.5189	

Totals class: PeCDD EMPC Entry #: 21

Run: 10 File: 141226D2 S: 5 I: 1 F: 2
Acquired: 26-DEC-14 23:39:03 Processed: 27-DEC-14 13:28:07

Total Concentration: 1827.7 Unnamed Concentration: 1394.092

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:31	1.590e+06	2.593e+06	0.61	y	4.183e+06	415.17	
29:59	3.302e+05	5.512e+05	0.60	y	8.814e+05	87.487	
30:27	4.960e+05	7.737e+05	0.64	y	1.270e+06	126.03	
30:36	1.118e+06	1.891e+06	0.59	y	3.009e+06	298.64	
30:41	4.665e+05	7.373e+05	0.63	y	1.204e+06	119.48	
30:54	7.852e+05	1.265e+06	0.62	y	2.050e+06	203.48	
31:13	8.579e+04	1.471e+05	0.58	y	2.329e+05	23.120	
31:38	1.672e+06	2.697e+06	0.62	y	4.369e+06	433.62	1,2,3,7,8-PeCDD
31:43	1.695e+05	3.186e+05	0.53	n	4.386e+05	43.536	
31:59	2.986e+05	4.787e+05	0.62	y	7.773e+05	77.156	

Totals class: HxCDD EMPC Entry #: 23

Run: 10 File: 141226D2 S: 5 I: 1 F: 3
Acquired: 26-DEC-14 23:39:03 Processed: 27-DEC-14 13:28:07

Total Concentration: 21357 Unnamed Concentration: 15334.736

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
33:24	2.504e+07	2.032e+07	1.23 y	4.535e+07	5532.6	
33:58	3.224e+06	2.586e+06	1.25 y	5.810e+06	708.73	
34:14	3.899e+07	3.116e+07	1.25 y	7.015e+07	8557.1	
34:22	1.421e+06	1.177e+06	1.21 y	2.597e+06	316.85	
34:55	4.393e+06	3.557e+06	1.23 y	7.950e+06	1026.2	1,2,3,4,7,8-HxCDD
35:02	1.421e+07	1.137e+07	1.25 y	2.558e+07	3013.2	1,2,3,6,7,8-HxCDD
35:14	9.729e+05	8.265e+05	1.18 y	1.799e+06	219.50	
35:20	9.133e+06	7.407e+06	1.23 y	1.654e+07	1983.3	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 10 File: 141226D2 S: 5 I: 1 F: 4
Acquired: 26-DEC-14 23:39:03 Processed: 27-DEC-14 13:28:07

Total Concentration: 192820 Unnamed Concentration: 89307.350

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:56	4.762e+08	4.629e+08	1.03 y	9.391e+08	89307	
38:50	5.548e+08	5.336e+08	1.04 y	1.088e+09	103510	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 10 File: 141226D2 S: 5 I: 1 F: 1
Acquired: 26-DEC-14 23:39:03 Processed: 27-DEC-14 13:28:07

Total Concentration: 1078.1 Unnamed Concentration: 998.576

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
21:06	6.916e+04	8.210e+04	0.84	y	1.513e+05	11.628	
21:40	1.232e+05	1.595e+05	0.77	y	2.827e+05	21.733	
22:18	1.216e+06	1.538e+06	0.79	y	2.754e+06	211.72	
22:51	2.965e+05	3.762e+05	0.79	y	6.728e+05	51.720	
23:17	4.541e+05	5.498e+05	0.83	y	1.004e+06	77.175	
23:45	5.943e+05	7.774e+05	0.76	y	1.372e+06	105.45	
23:54	1.369e+05	1.745e+05	0.78	y	3.115e+05	23.943	
24:03	1.674e+05	2.089e+05	0.80	y	3.763e+05	28.929	
24:27	3.048e+04	3.134e+04	0.97	n	5.548e+04	4.2648	
24:35	8.904e+04	1.170e+05	0.76	y	2.060e+05	15.840	
24:44	5.257e+05	6.959e+05	0.76	y	1.222e+06	93.909	
24:50	4.761e+05	5.931e+05	0.80	y	1.069e+06	82.194	
25:17	2.747e+05	3.744e+05	0.73	y	6.491e+05	49.903	
25:33	9.214e+04	1.273e+05	0.72	y	2.194e+05	16.866	
25:44	5.181e+04	5.647e+04	0.92	n	9.994e+04	7.6833	
25:56	5.514e+04	7.150e+04	0.77	y	1.266e+05	9.7355	
26:02	6.444e+04	7.523e+04	0.86	y	1.397e+05	10.737	
26:09	4.632e+05	5.716e+05	0.81	y	1.035e+06	79.557	2,3,7,8-TCDF
26:30	5.351e+05	6.620e+05	0.81	y	1.197e+06	92.025	
26:44	1.820e+04	2.737e+04	0.66	y	4.556e+04	3.5027	
27:33	1.138e+05	1.631e+05	0.70	y	2.770e+05	21.291	
27:42	1.129e+05	1.402e+05	0.81	y	2.531e+05	19.454	
28:00	2.326e+05	2.730e+05	0.85	y	5.056e+05	38.867	

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

Run: 10 File: 141226D2 S: 5 I: 1 F: 1
Acquired: 26-DEC-14 23:39:03 Processed: 27-DEC-14 13:28:07

Total Concentration: 3378.2 Unnamed Concentration: 3378.162

RT	m1 Resp	m2 Resp	RA	Resp Concentration	Name
27:60	2.940e+07	1.937e+07	1.52 y	4.876e+07	3378.2

Totals class: Total Penta-Furans Entry #: 30

Run: 10 File: 141226D2 S: 5 I: 1 F: 2
Acquired: 26-DEC-14 23:39:03 Processed: 27-DEC-14 13:28:07

Total Concentration: 2755.7 Unnamed Concentration: 2443.261

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:20	1.235e+06	7.158e+05	1.72	y	1.950e+06	135.12	
29:29	1.202e+07	7.665e+06	1.57	y	1.968e+07	1363.5	
29:51	1.775e+05	1.230e+05	1.44	y	3.005e+05	20.820	
30:02	4.171e+06	2.593e+06	1.61	y	6.764e+06	468.57	
30:15	4.970e+05	3.128e+05	1.59	y	8.098e+05	56.100	
30:25	1.086e+06	6.633e+05	1.64	y	1.749e+06	119.40	1,2,3,7,8-PeCDF
30:40	1.911e+06	1.206e+06	1.58	y	3.117e+06	215.91	
30:53	9.485e+04	6.665e+04	1.42	y	1.615e+05	11.188	
31:15	2.380e+05	1.582e+05	1.50	y	3.962e+05	27.448	
31:21	1.662e+06	1.084e+06	1.53	y	2.746e+06	193.08	2,3,4,7,8-PeCDF
31:23	1.067e+06	6.292e+05	1.70	y	1.697e+06	117.53	
32:13	2.327e+05	1.576e+05	1.48	y	3.903e+05	27.039	

Totals class: Total Hexa-Furans Entry #: 32

Run: 10 File: 141226D2 S: 5 I: 1 F: 3
Acquired: 26-DEC-14 23:39:03 Processed: 27-DEC-14 13:28:07

Total Concentration: 30667 Unnamed Concentration: 27328.229

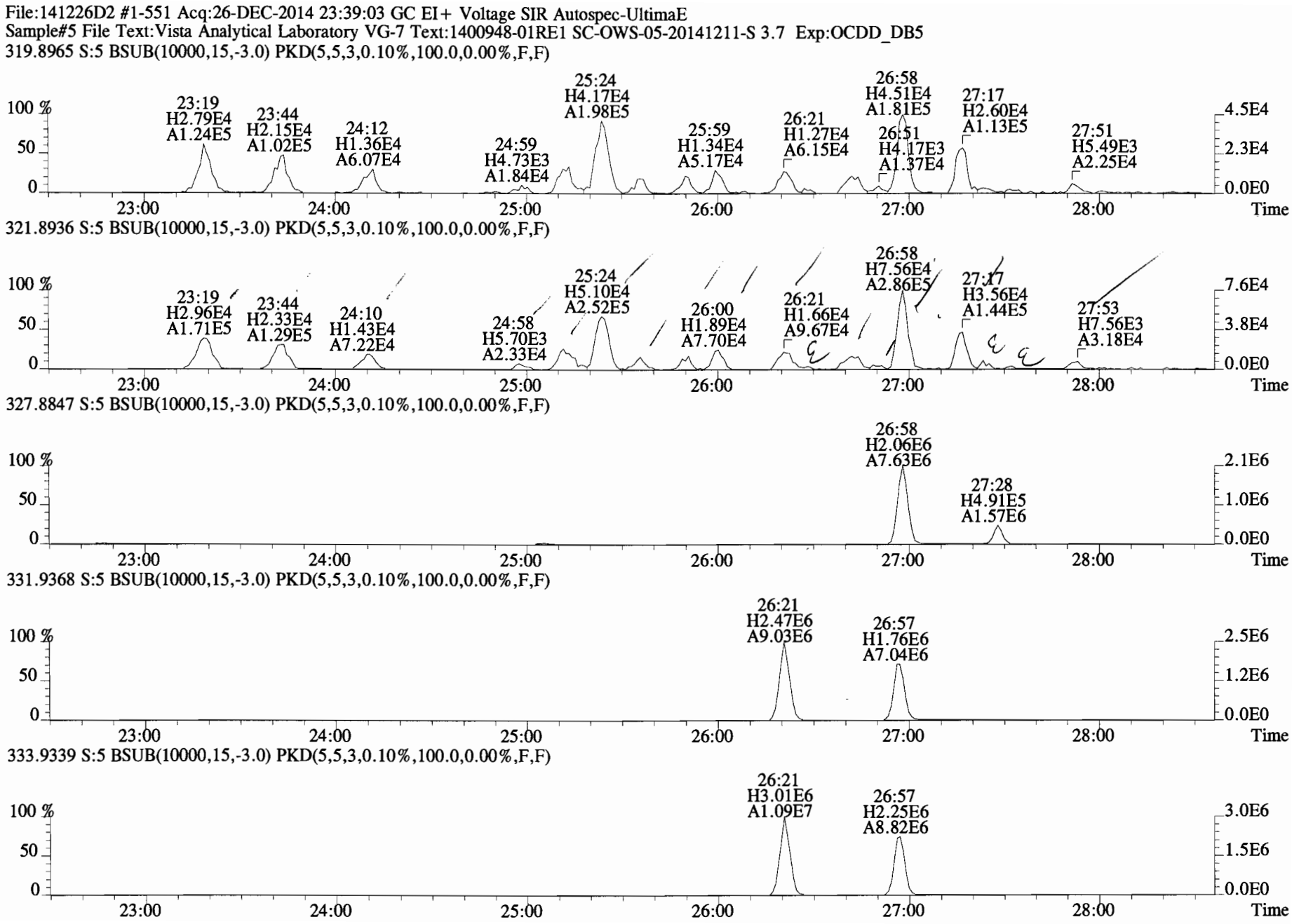
RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
32:52	2.706e+07	2.108e+07	1.28	y	4.814e+07	3500.6	
33:02	1.106e+08	8.600e+07	1.29	y	1.966e+08	14298	
33:23	9.741e+05	7.114e+05	1.37	y	1.685e+06	122.56	
33:35	7.137e+07	5.573e+07	1.28	y	1.271e+08	9241.7	
33:57	1.281e+06	9.987e+05	1.28	y	2.279e+06	165.73	
34:03	8.770e+06	6.722e+06	1.30	y	1.549e+07	995.82	1,2,3,4,7,8-HxCDF
34:10	7.988e+06	6.197e+06	1.29	y	1.418e+07	931.35	1,2,3,6,7,8-HxCDF
34:46	9.004e+06	6.861e+06	1.31	y	1.586e+07	1185.0	2,3,4,6,7,8-HxCDF
35:45	1.404e+06	1.066e+06	1.32	y	2.469e+06	226.76	1,2,3,7,8,9-HxCDF

Totals class: Total Hepta-Furans Entry #: 34

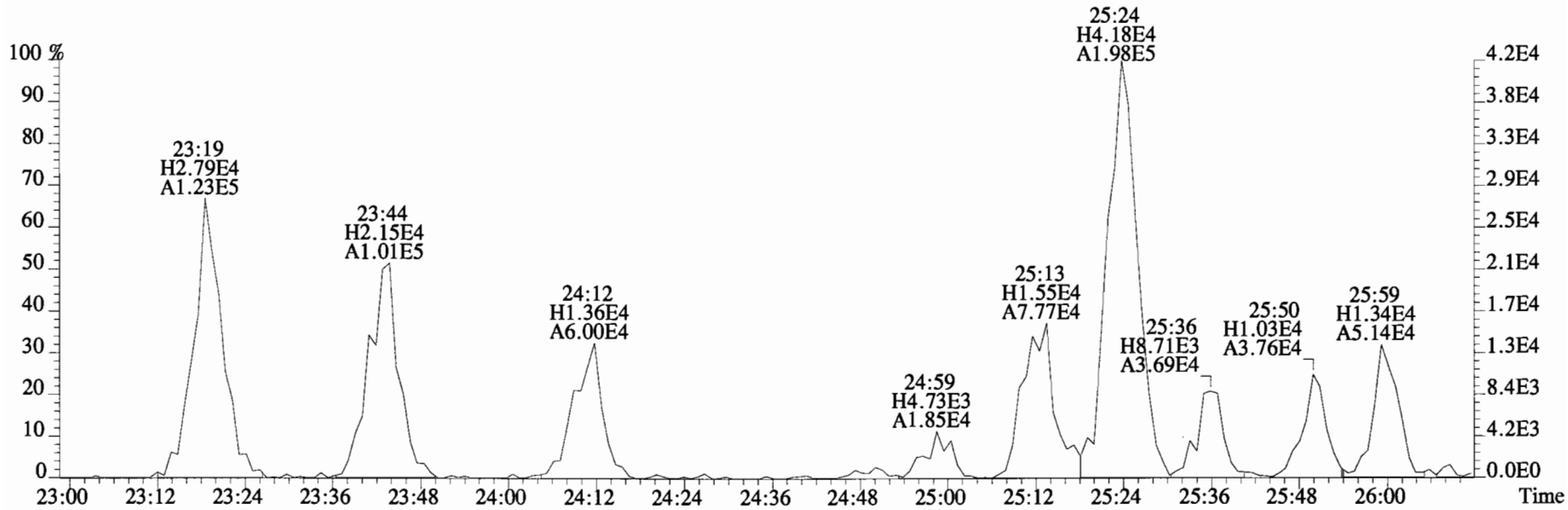
Run: 10 File: 141226D2 S: 5 I: 1 F: 4
Acquired: 26-DEC-14 23:39:03 Processed: 27-DEC-14 13:28:07

Total Concentration: 70794 Unnamed Concentration: 44119.240

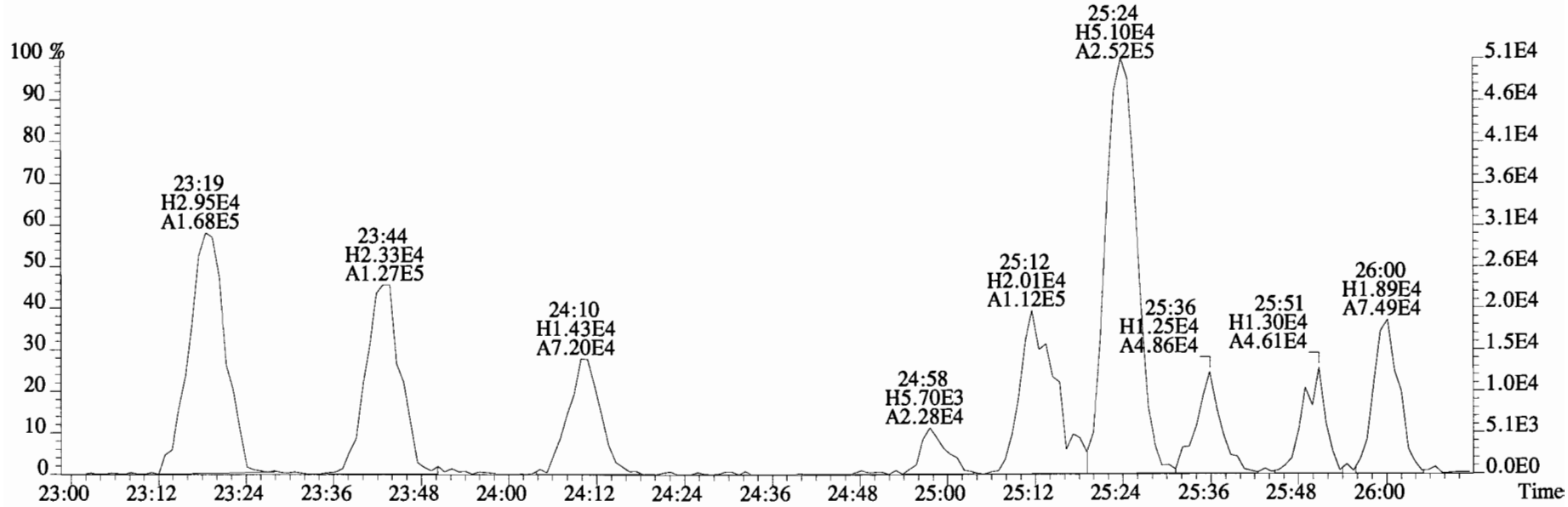
RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:32	1.739e+08	1.616e+08	1.08	y	3.355e+08	25266	1,2,3,4,6,7,8-HpCDF
37:56	3.093e+06	2.812e+06	1.10	y	5.905e+06	478.65	
38:09	2.803e+08	2.580e+08	1.09	y	5.384e+08	43641	
39:23	8.368e+06	7.723e+06	1.08	y	1.609e+07	1408.5	1,2,3,4,7,8,9-HpCDF


File:141226D2 #1-551 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:19 H2.79E4 A1.24E5
23:44 H2.15E4 A1.02E5
24:12 H1.36E4 A6.07E4
24:59 H4.73E3 A1.84E4
25:24 H4.17E4 A1.98E5
25:59 H1.34E4 A5.17E4
26:21 H1.27E4 A6.15E4
26:58 H4.51E4 A1.81E5
26:51 H4.17E3 A1.37E4
27:17 H2.60E4 A1.13E5
27:51 H5.49E3 A2.25E4
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:19 H2.96E4 A1.71E5
23:44 H2.33E4 A1.29E5
24:10 H1.43E4 A7.22E4
24:58 H5.70E3 A2.33E4
25:24 H5.10E4 A2.52E5
26:00 H1.89E4 A7.70E4
26:21 H1.66E4 A9.67E4
26:58 H7.56E4 A2.86E5
27:17 H3.56E4 A1.44E5
27:53 H7.56E3 A3.18E4
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:58 H2.06E6 A7.63E6
27:28 H4.91E5 A1.57E6
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:21 H2.47E6 A9.03E6
26:57 H1.76E6 A7.04E6
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:21 H3.01E6 A1.09E7
26:57 H2.25E6 A8.82E6
100 %
50
0
23:00
24:00
25:00
26:00
27:00
28:00
Time
4.5E4
2.3E4
0.0E0
7.6E4
3.8E4
2.1E6
1.0E6
2.5E6
1.2E6
3.0E6
1.5E6

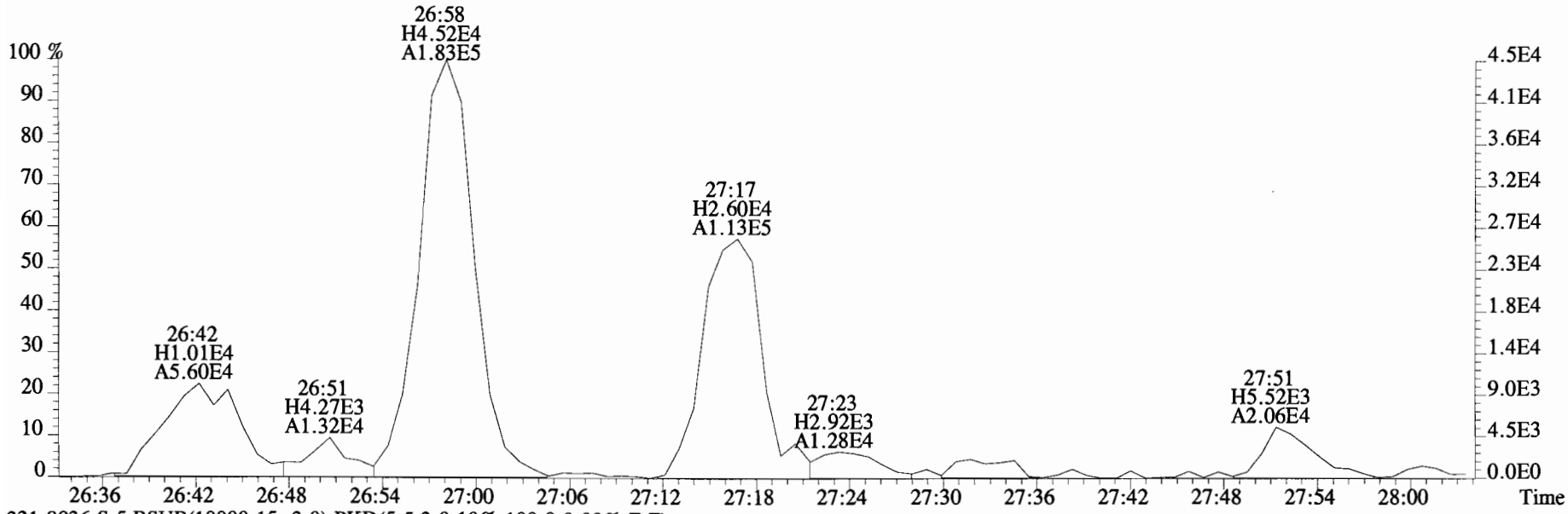
File:141226D2 #1-551 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



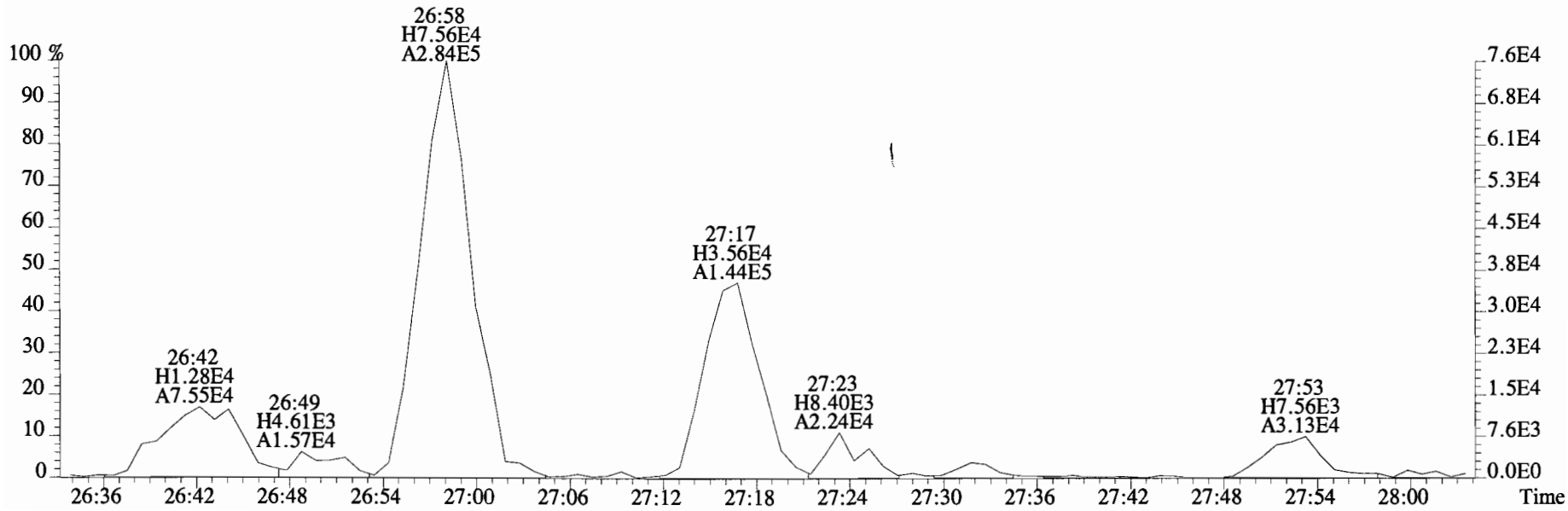
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



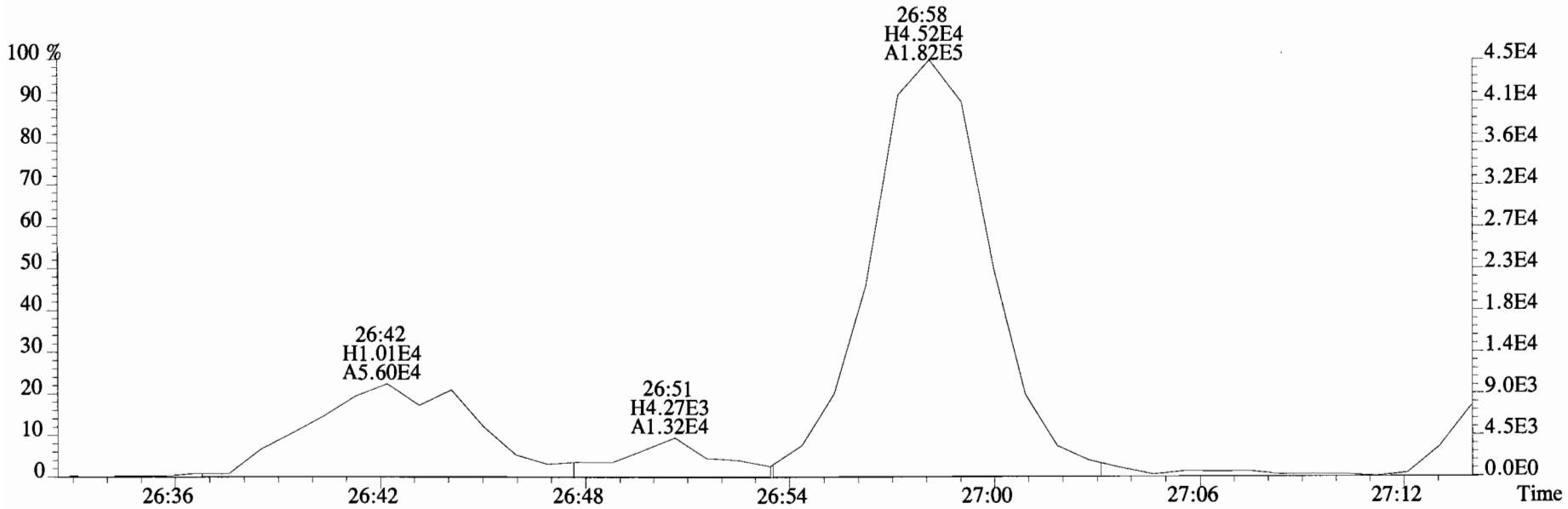
File:141226D2 #1-551 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



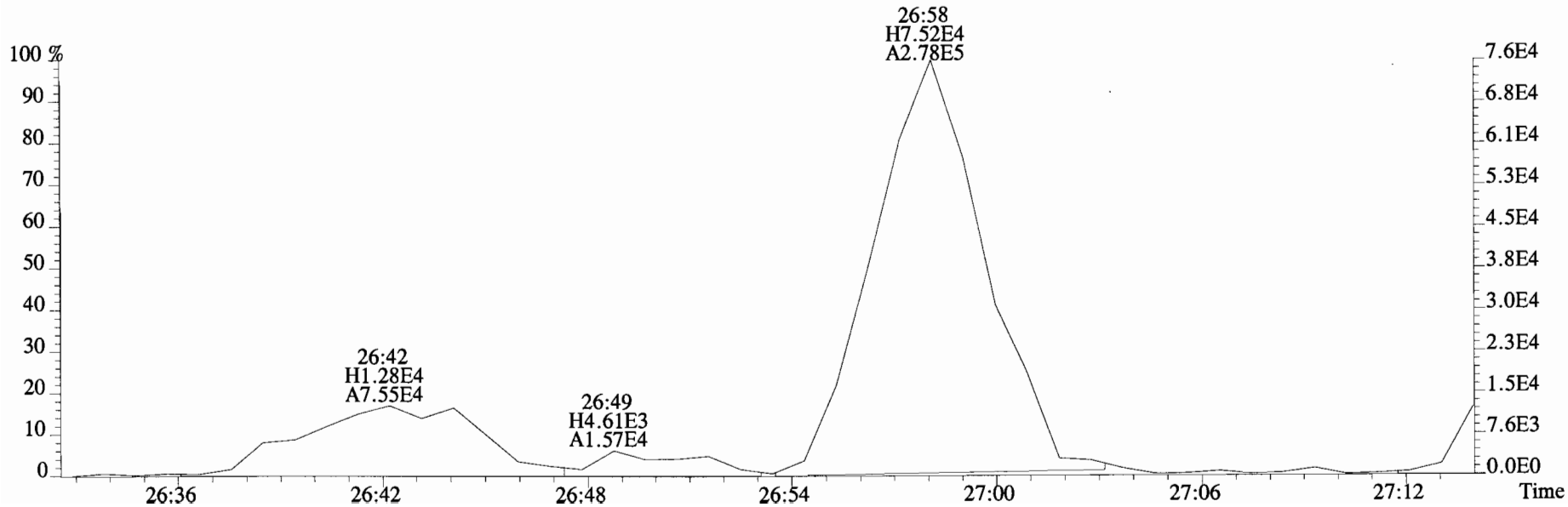
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



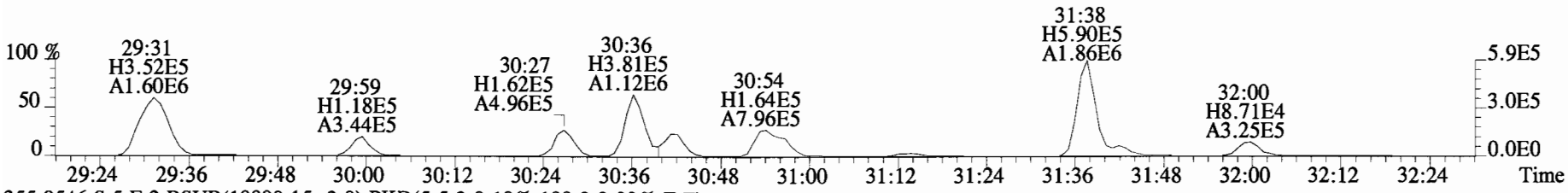
File:141226D2 #1-551 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



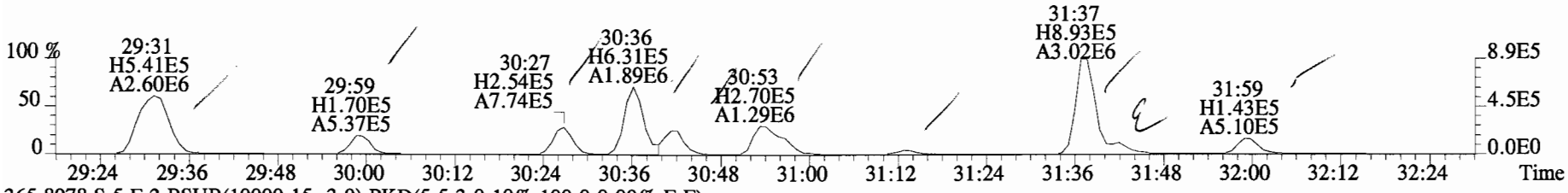
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



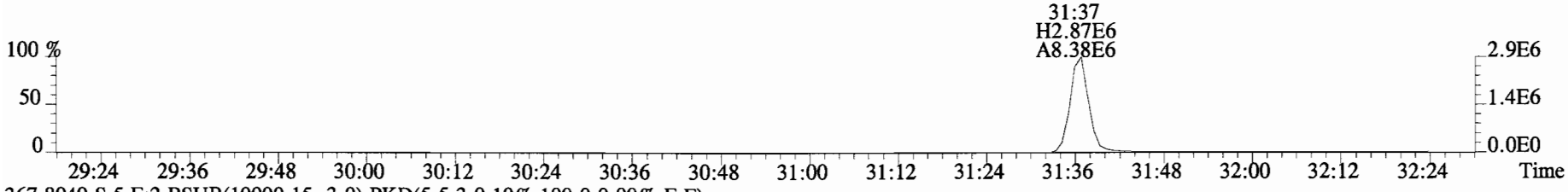
File:141226D2 #1-257 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



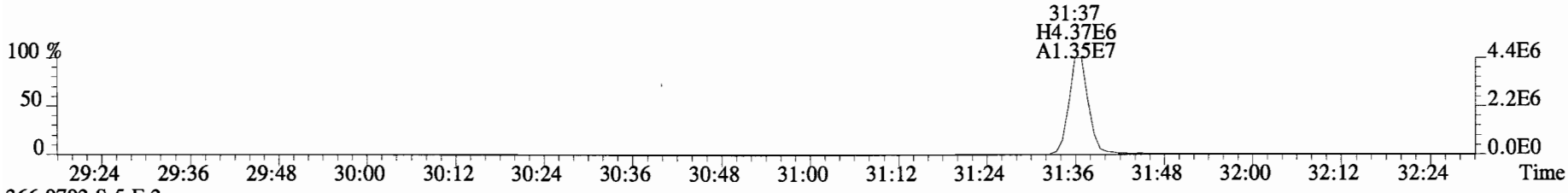
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



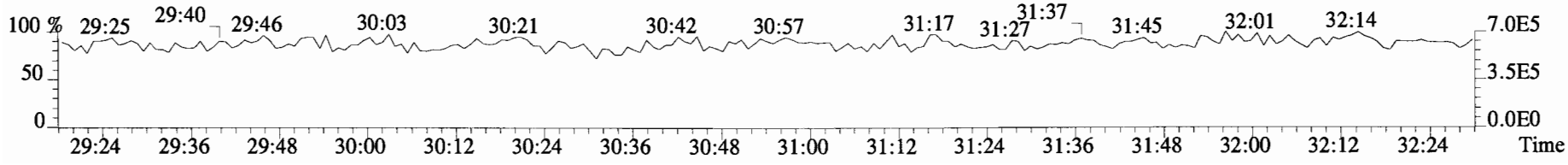
365.8978 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



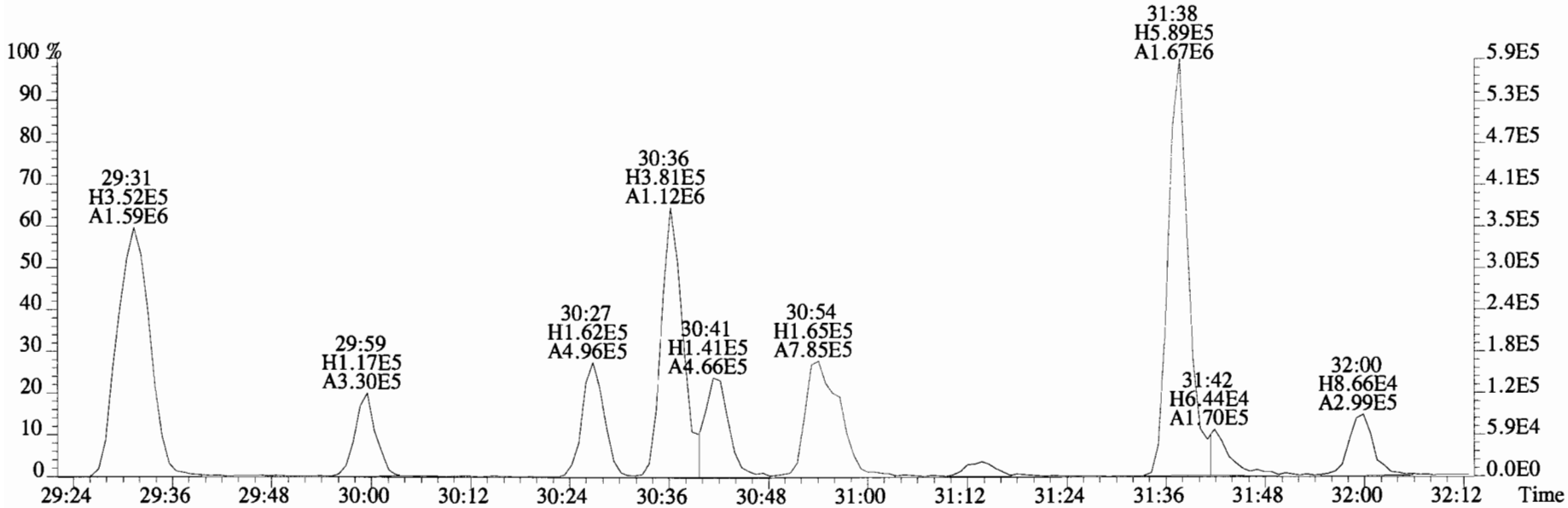
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



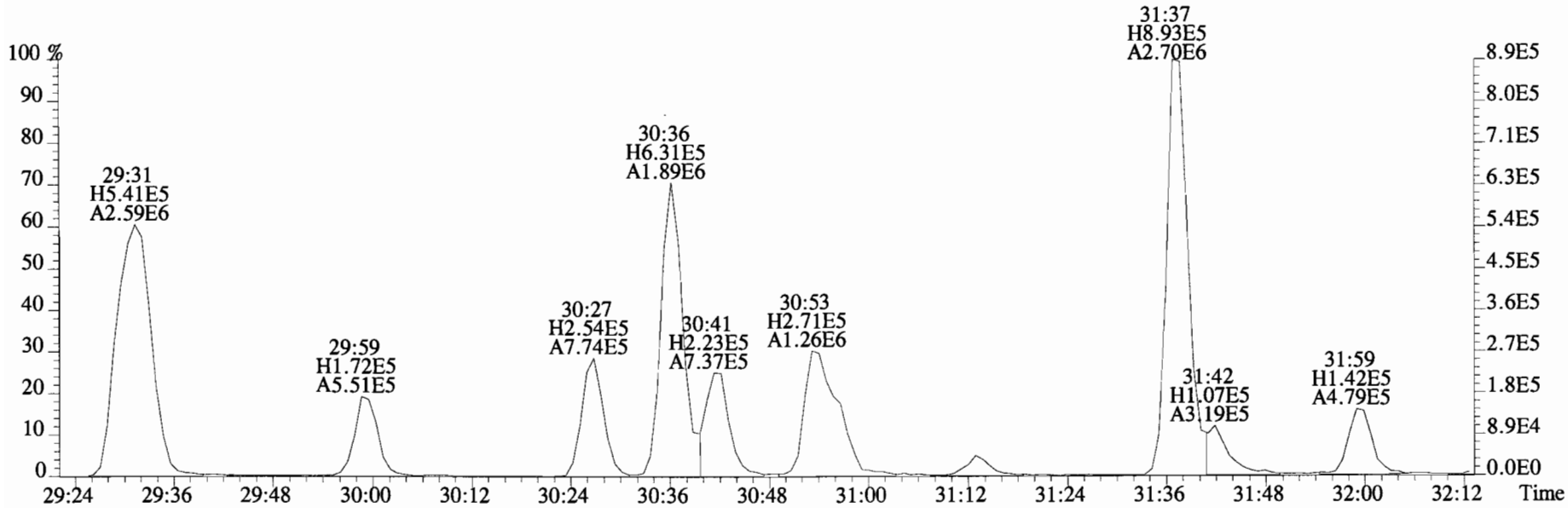
366.9792 S:5 F:2



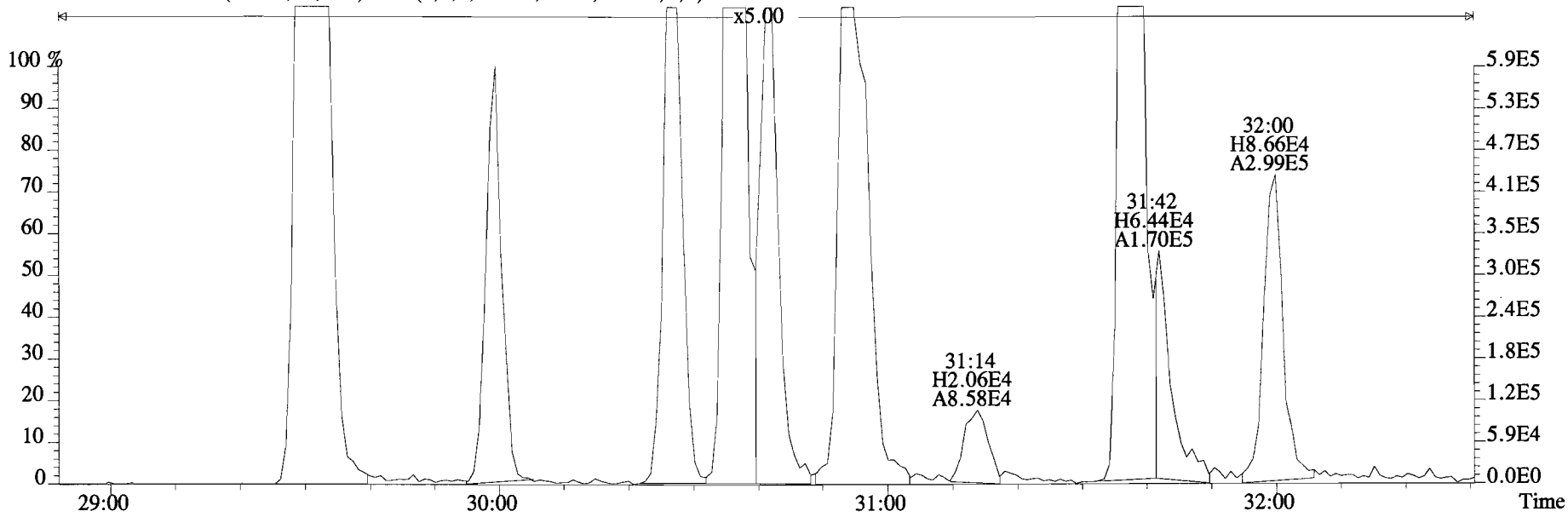
File:141226D2 #1-257 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



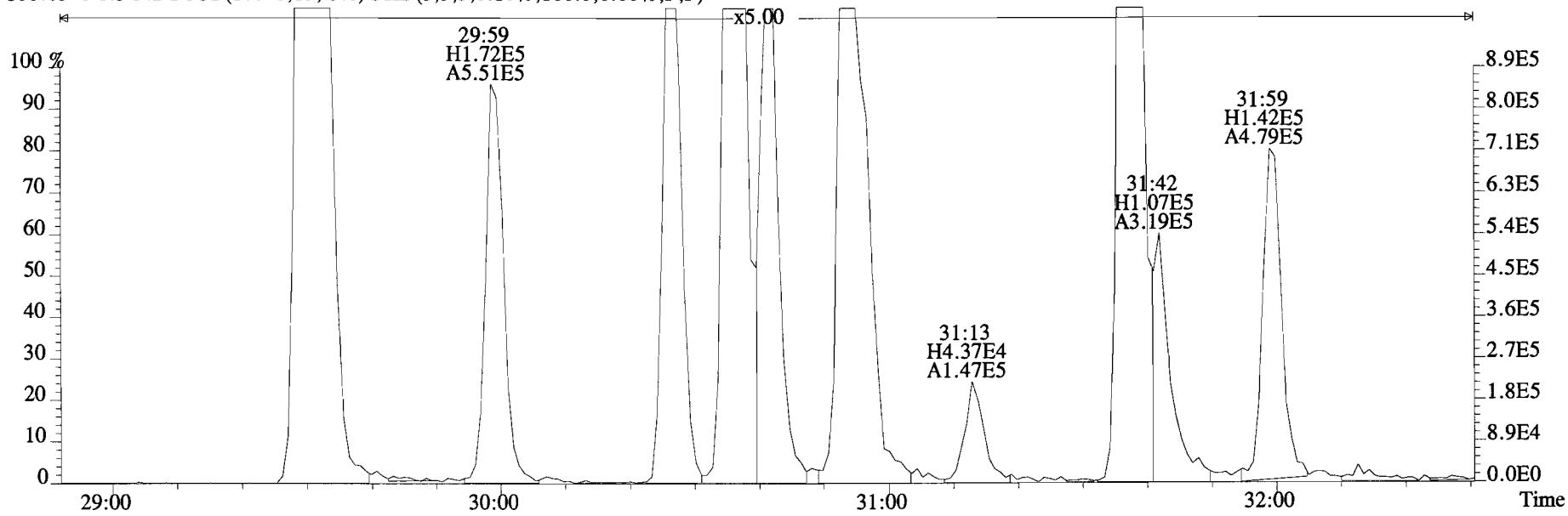
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

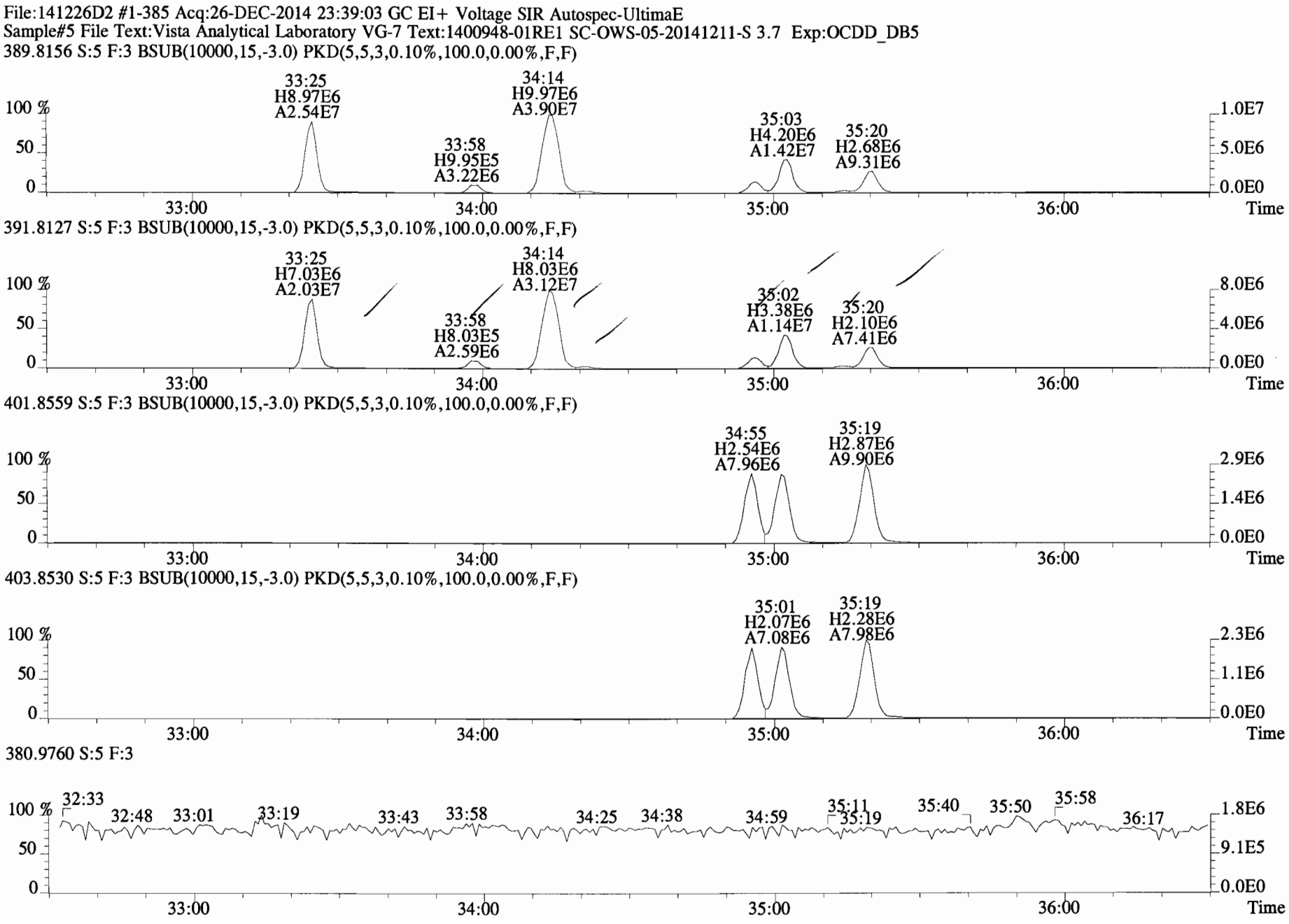


File:141226D2 #1-257 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

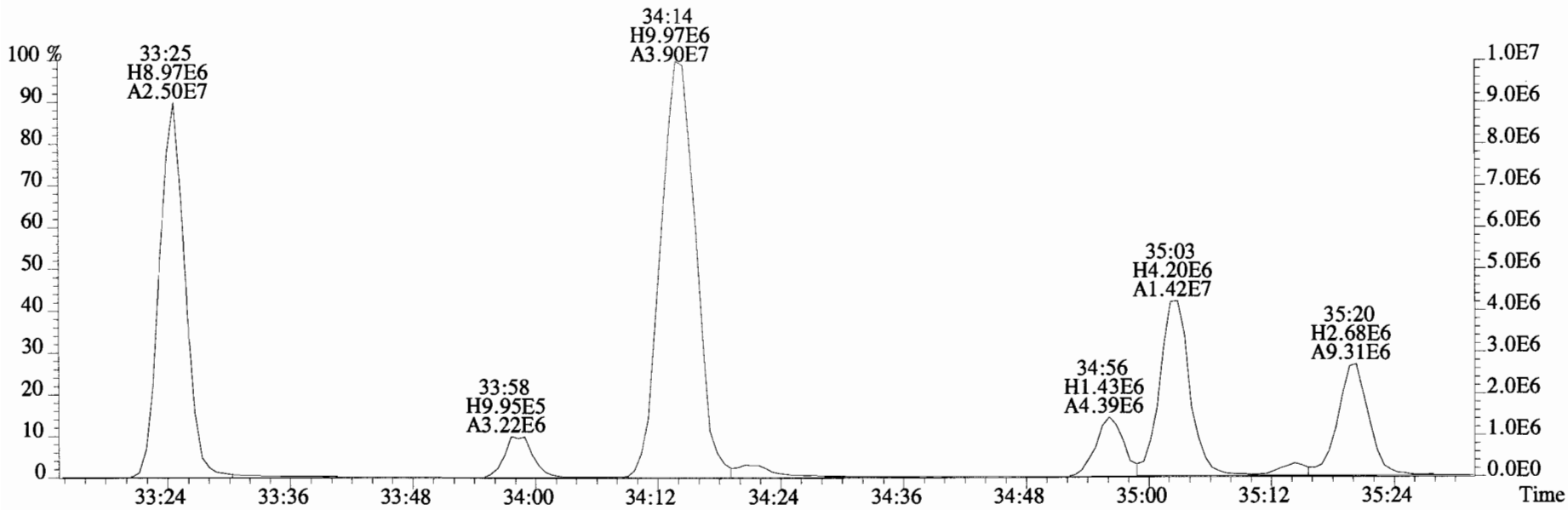


355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

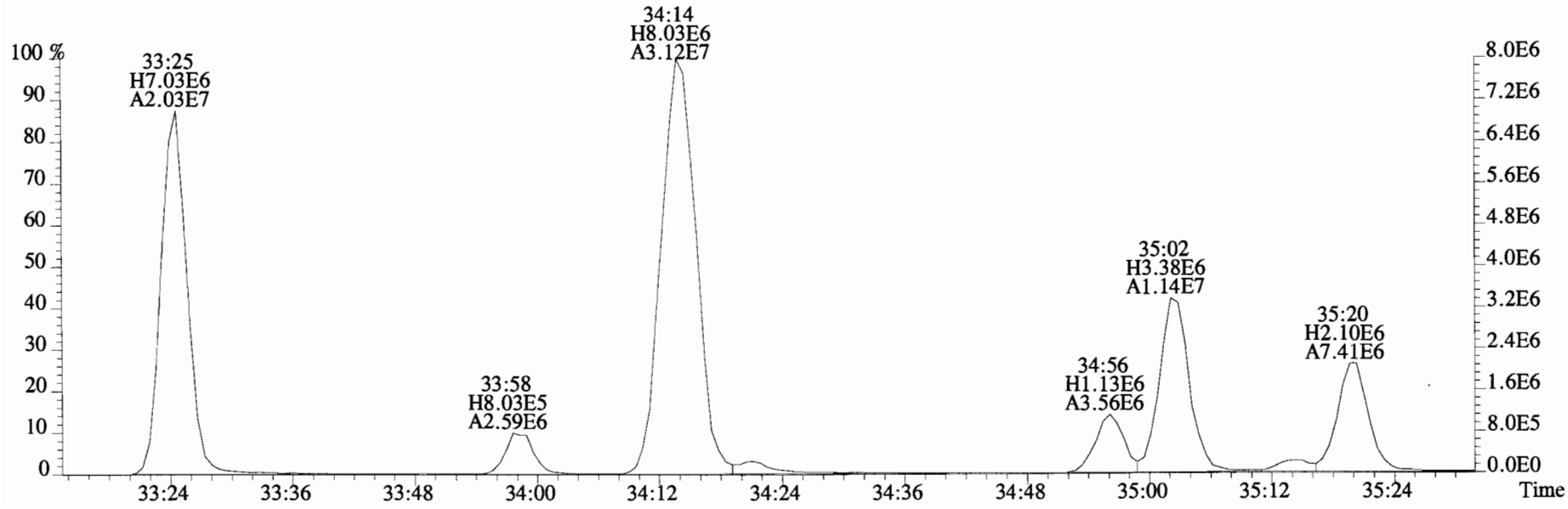



File:141226D2 #1-385 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:25 H8.97E6 A2.54E7
33:58 H9.95E5 A3.22E6
34:14 H9.97E6 A3.90E7
35:03 H4.20E6 A1.42E7
35:20 H2.68E6 A9.31E6
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:25 H7.03E6 A2.03E7
33:58 H8.03E5 A2.59E6
34:14 H8.03E6 A3.12E7
35:02 H3.38E6 A1.14E7
35:20 H2.10E6 A7.41E6
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:55 H2.54E6 A7.96E6
35:19 H2.87E6 A9.90E6
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
35:01 H2.07E6 A7.08E6
35:19 H2.28E6 A7.98E6
380.9760 S:5 F:3
32:33
32:48
33:01
33:19
33:43
33:58
34:25
34:38
34:59
35:11
35:19
35:40
35:50
35:58
36:17
100 %
50
0
33:00
34:00
35:00
36:00
Time
1.0E7
5.0E6
0.0E0
8.0E6
4.0E6
2.9E6
1.4E6
2.3E6
1.1E6
1.8E6
9.1E5

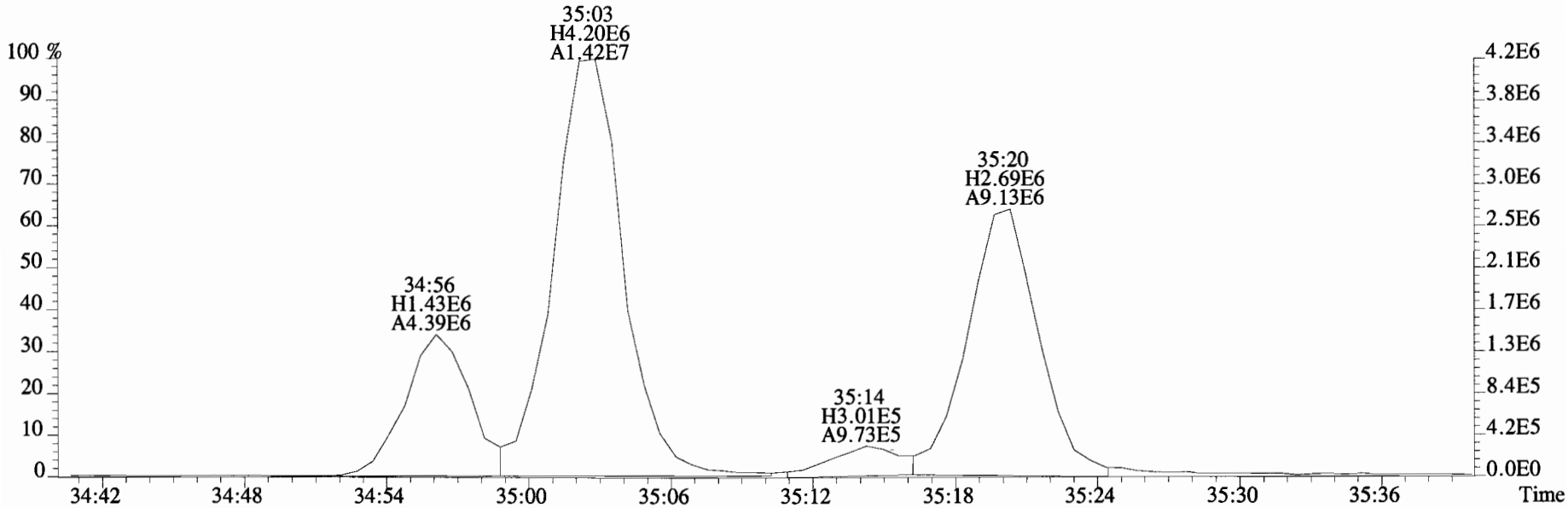
File:141226D2 #1-385 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



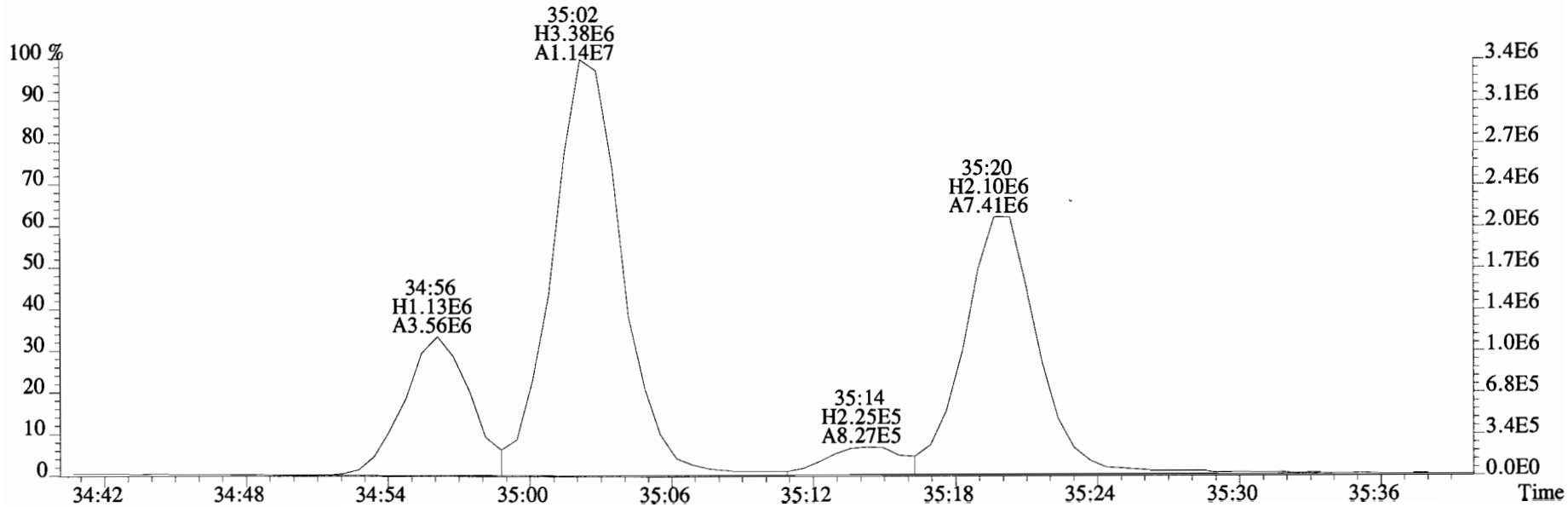
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



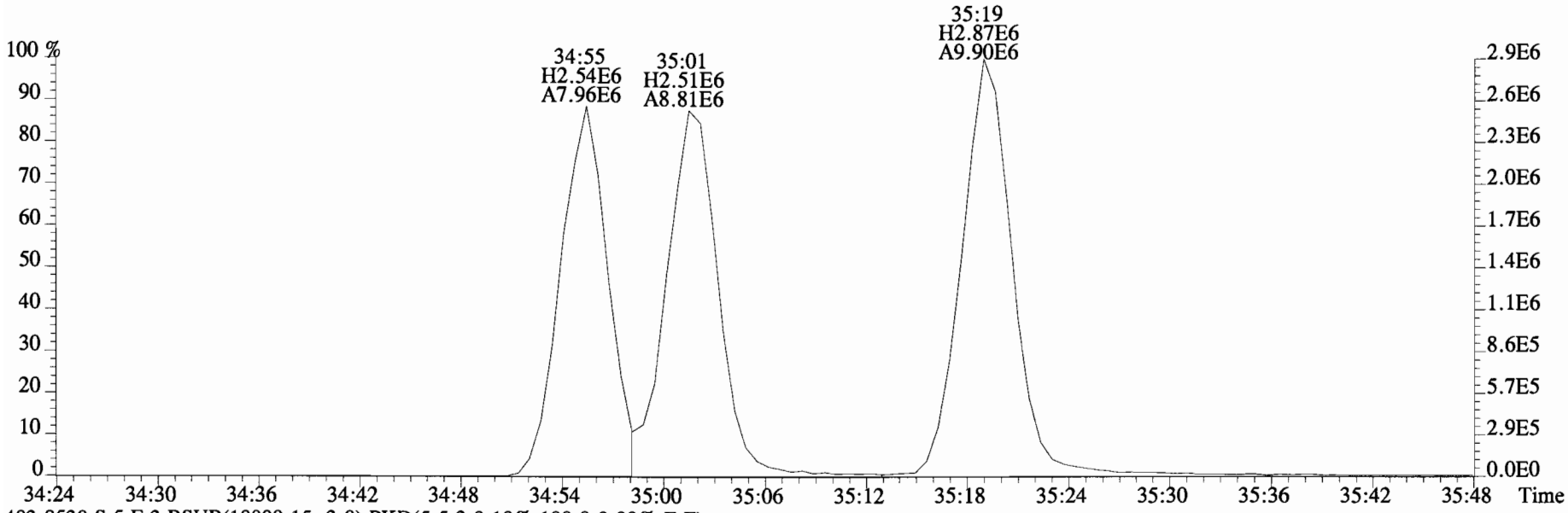
File:141226D2 #1-385 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



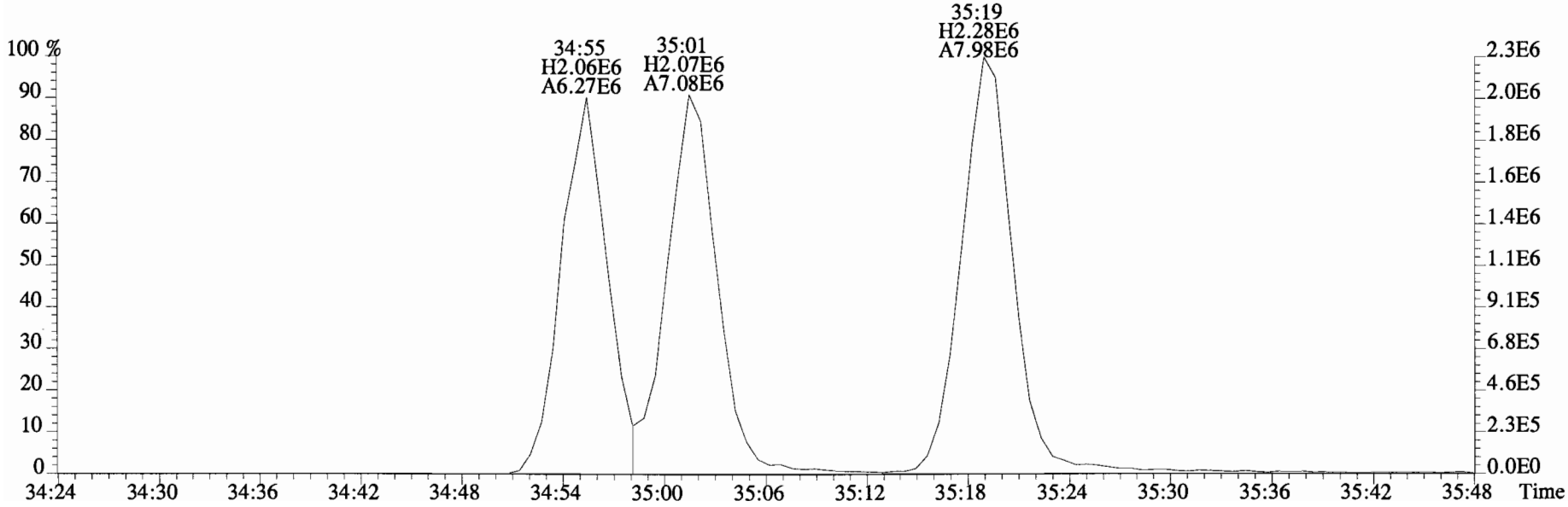
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



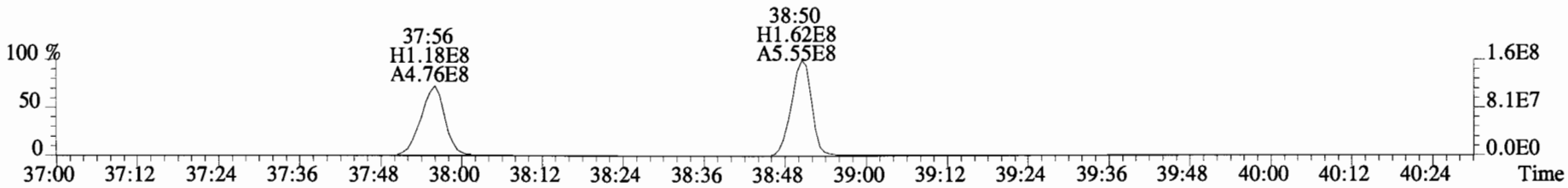
File:141226D2 #1-385 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



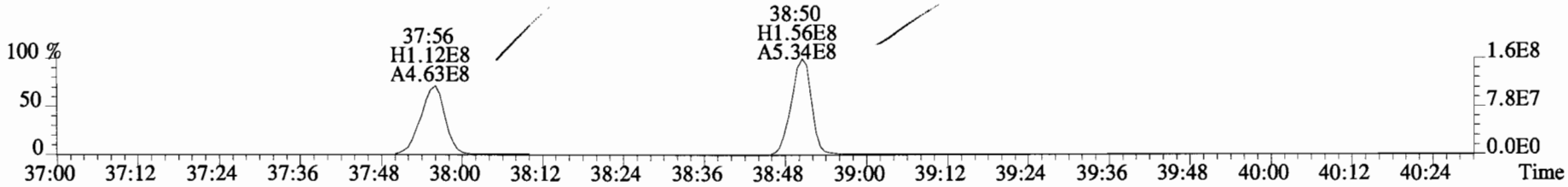
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



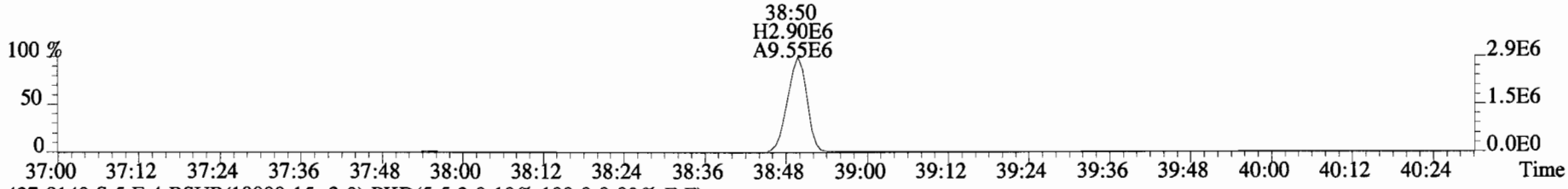
File:141226D2 #1-326 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



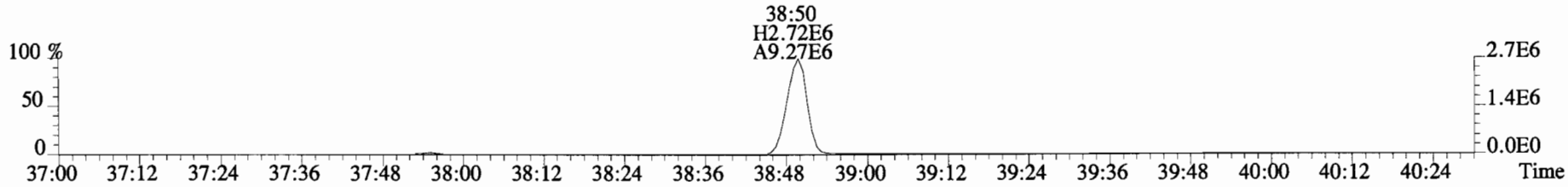
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



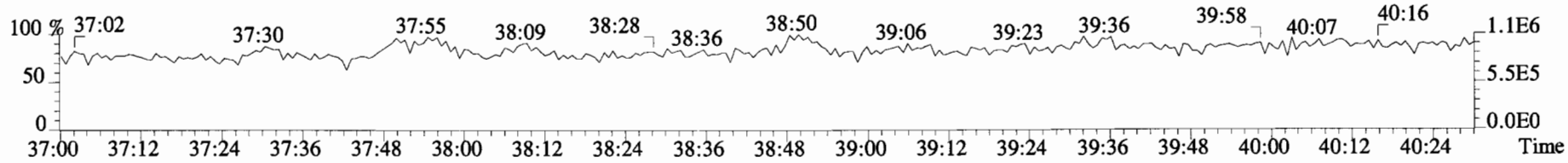
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



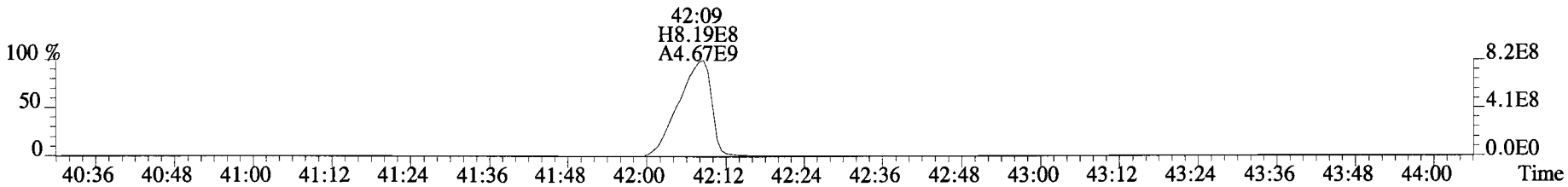
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



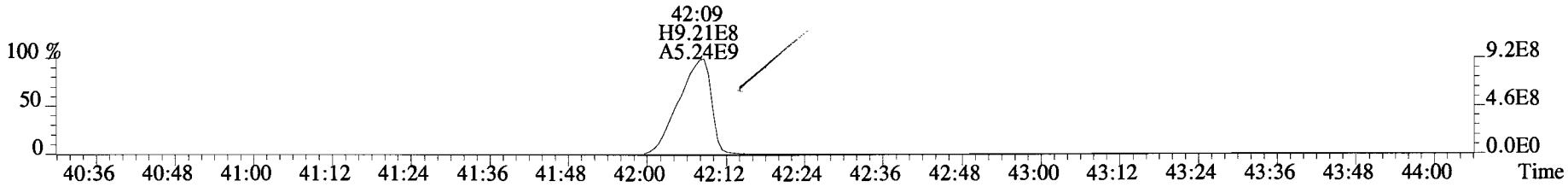
430.9728 S:5 F:4



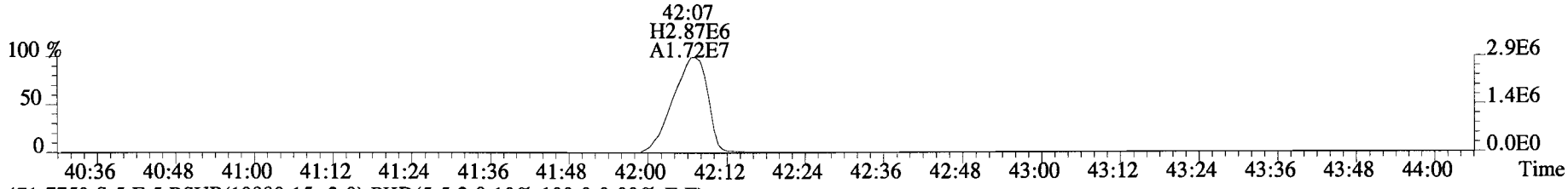
File:141226D2 #1-388 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



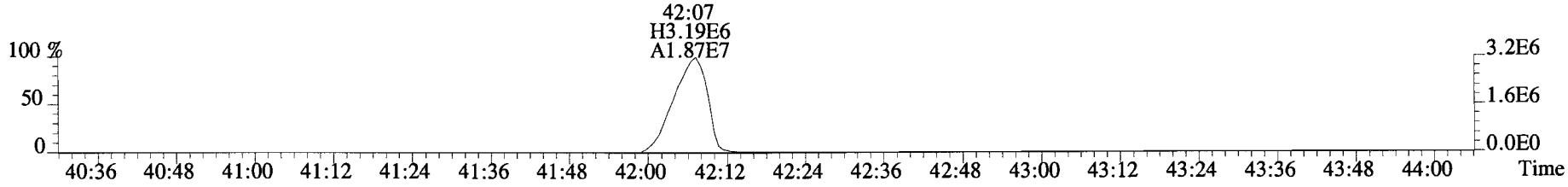
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



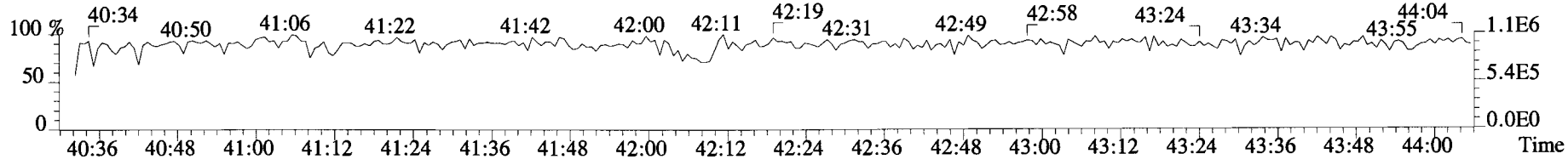
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

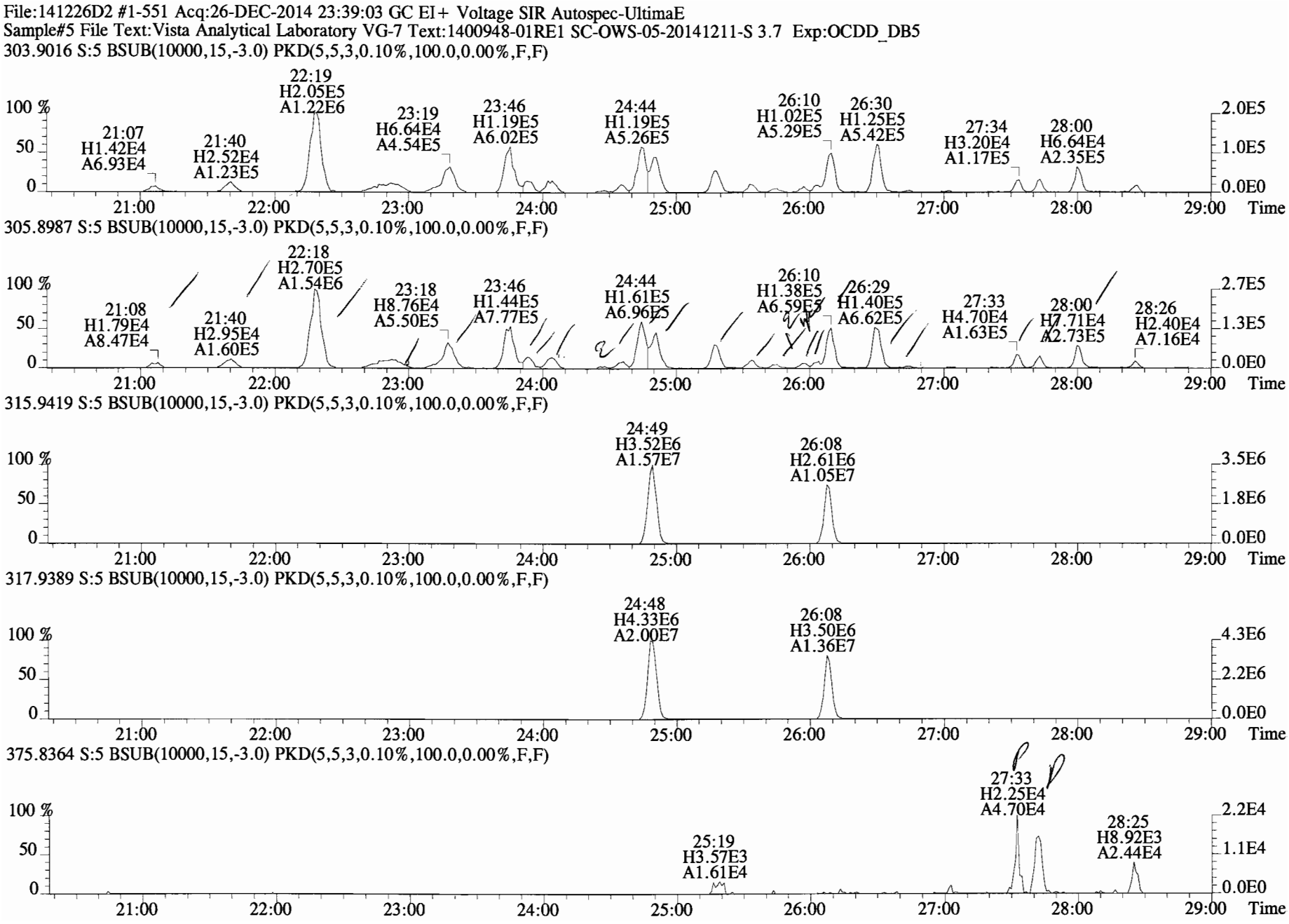


471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

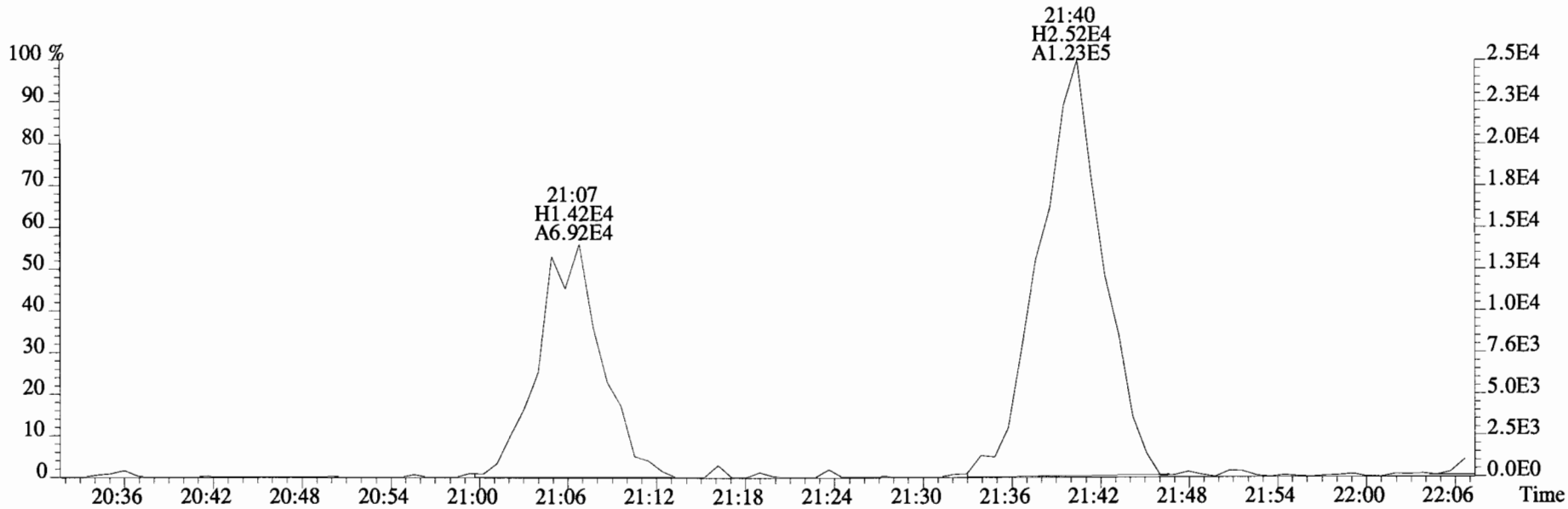


454.9728 S:5 F:5

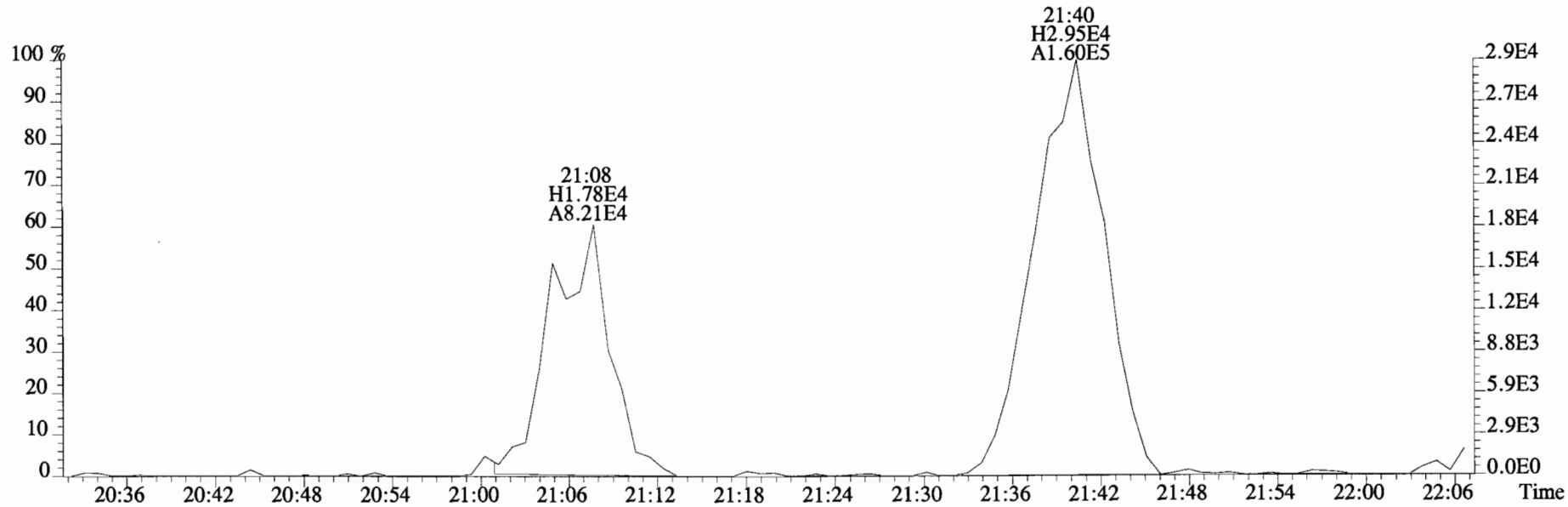



File:141226D2 #1-551 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:07 H1.42E4 A6.93E4
21:40 H2.52E4 A1.23E5
22:19 H2.05E5 A1.22E6
23:19 H6.64E4 A4.54E5
23:46 H1.19E5 A6.02E5
24:44 H1.19E5 A5.26E5
26:10 H1.02E5 A5.29E5
26:30 H1.25E5 A5.42E5
27:34 H3.20E4 A1.17E5
28:00 H6.64E4 A2.35E5
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:08 H1.79E4 A8.47E4
21:40 H2.95E4 A1.60E5
22:18 H2.70E5 A1.54E6
23:18 H8.76E4 A5.50E5
23:46 H1.44E5 A7.77E5
24:44 H1.61E5 A6.96E5
26:10 H1.38E5 A6.59E5
26:29 H1.40E5 A6.62E5
27:33 H4.70E4 A1.63E5
28:00 H7.71E4 A2.73E5
28:26 H2.40E4 A7.16E4
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:49 H3.52E6 A1.57E7
26:08 H2.61E6 A1.05E7
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:48 H4.33E6 A2.00E7
26:08 H3.50E6 A1.36E7
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:19 H3.57E3 A1.61E4
27:33 H2.25E4 A4.70E4
28:25 H8.92E3 A2.44E4
100 %
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
28:00
29:00
Time
2.0E5
1.0E5
0.0E0
2.7E5
1.3E5
0.0E0
3.5E6
1.8E6
0.0E0
4.3E6
2.2E6
0.0E0
2.2E4
1.1E4
0.0E0

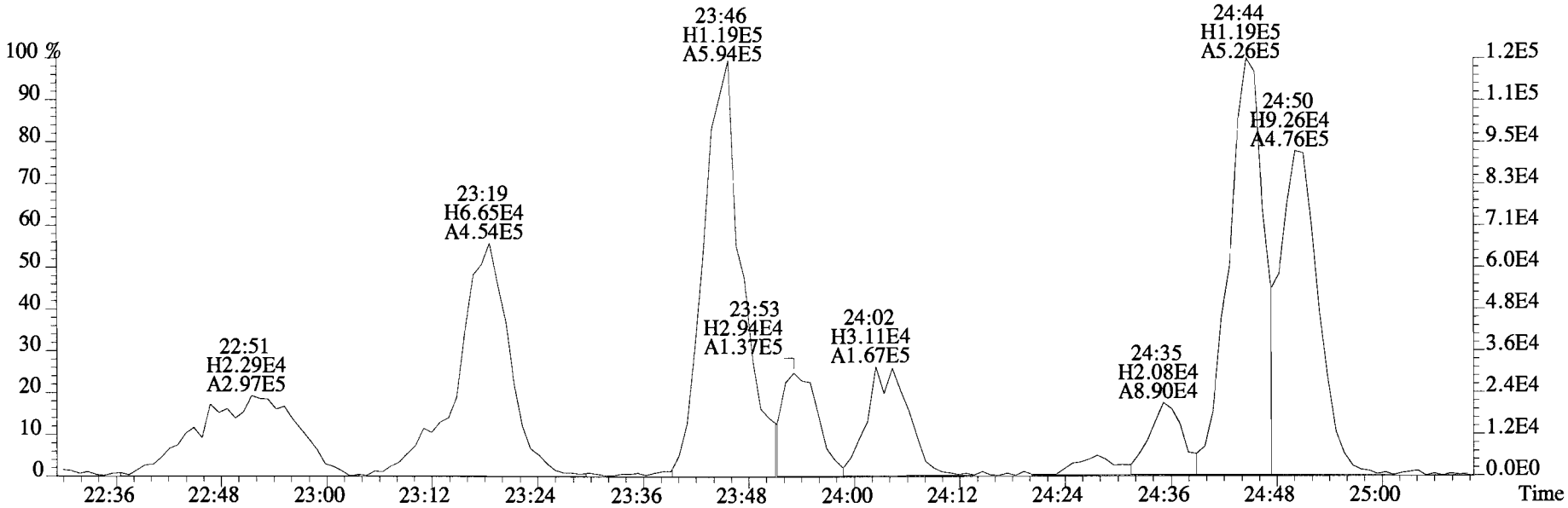
File:141226D2 #1-551 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



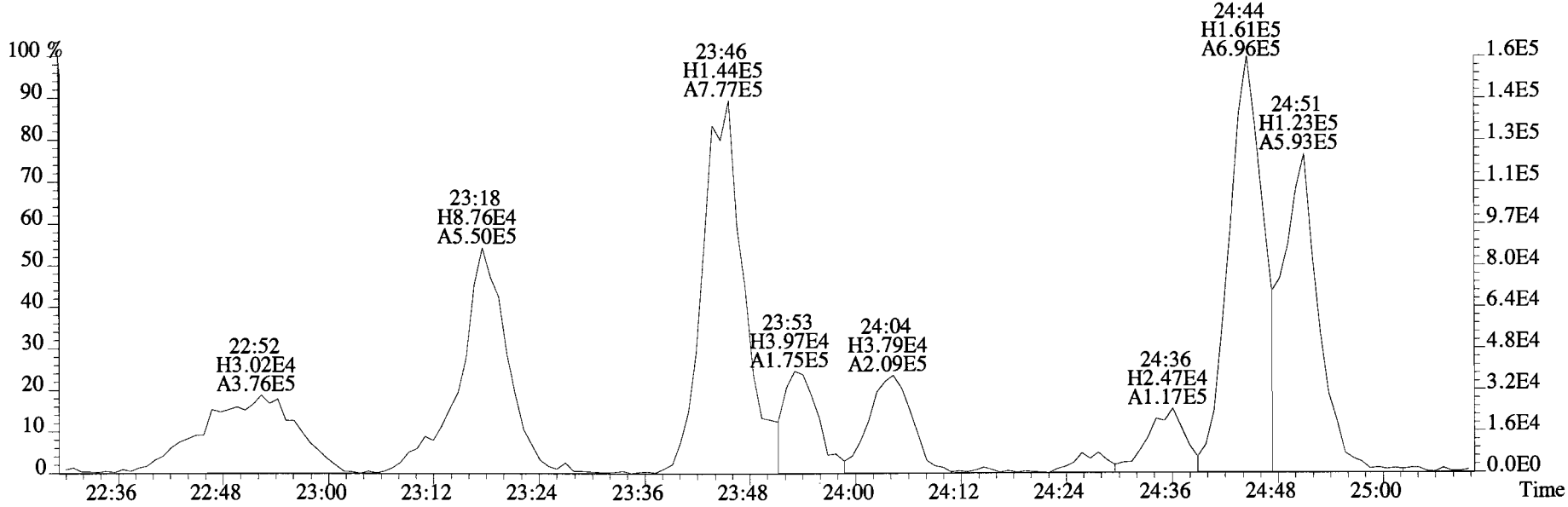
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



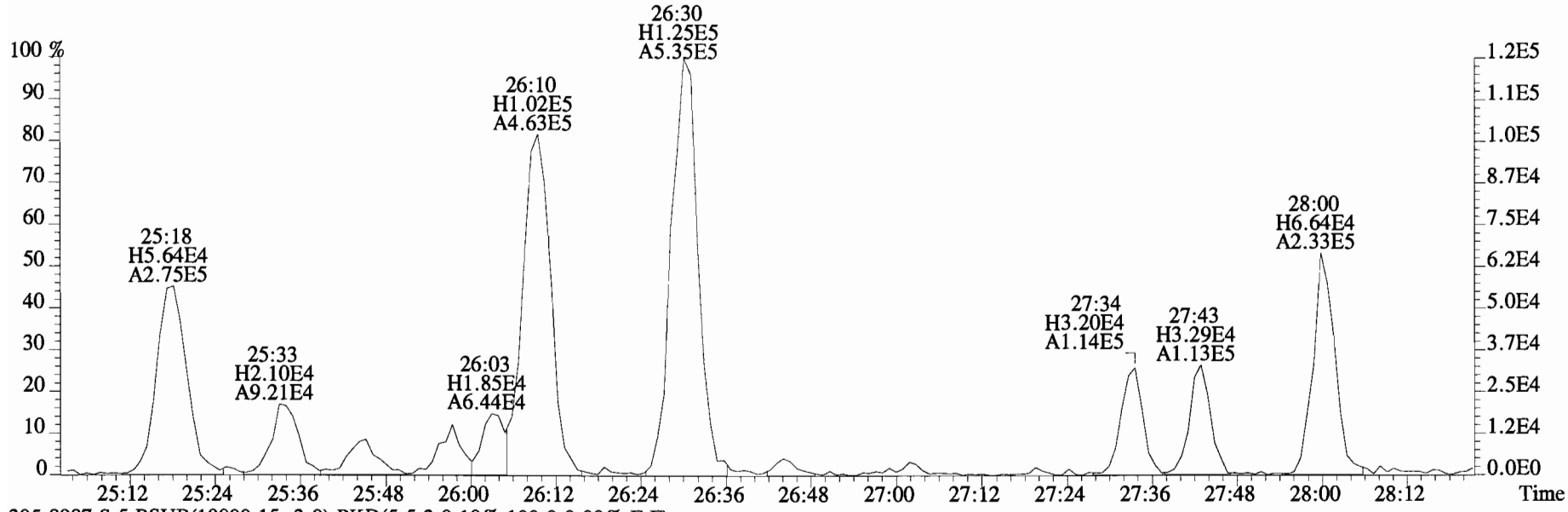
File:141226D2 #1-551 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



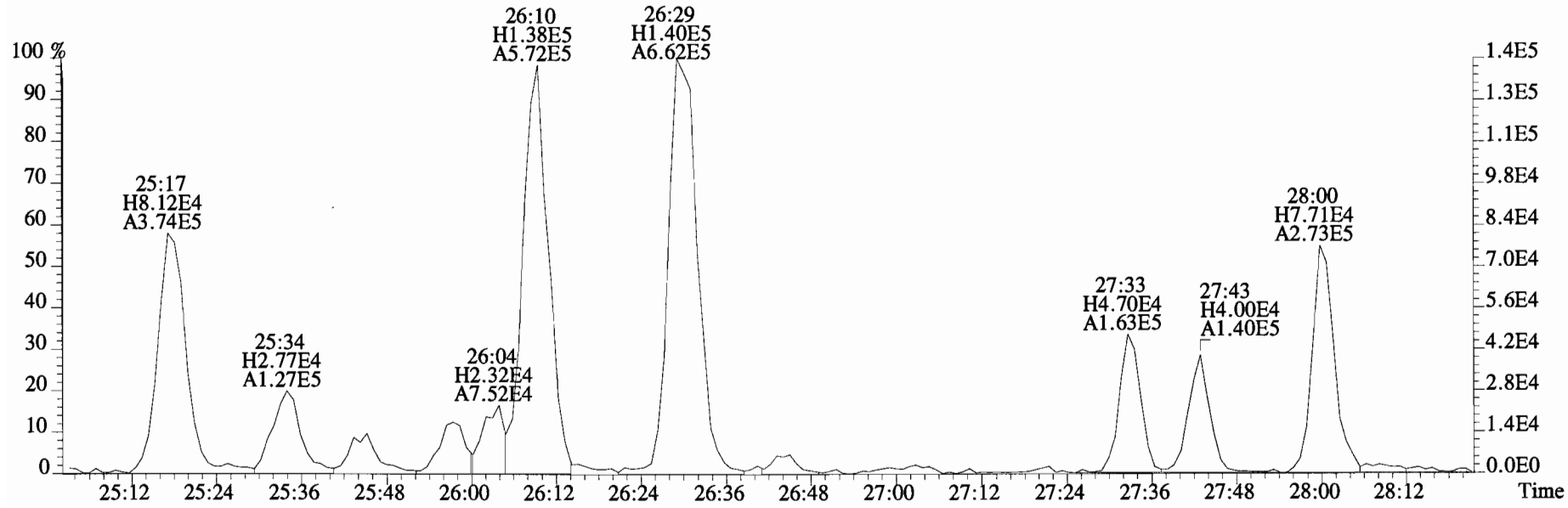
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



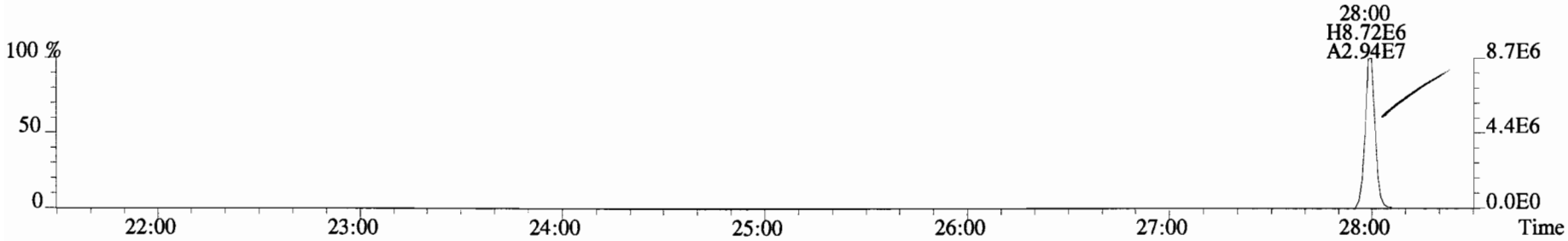
File:141226D2 #1-551 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



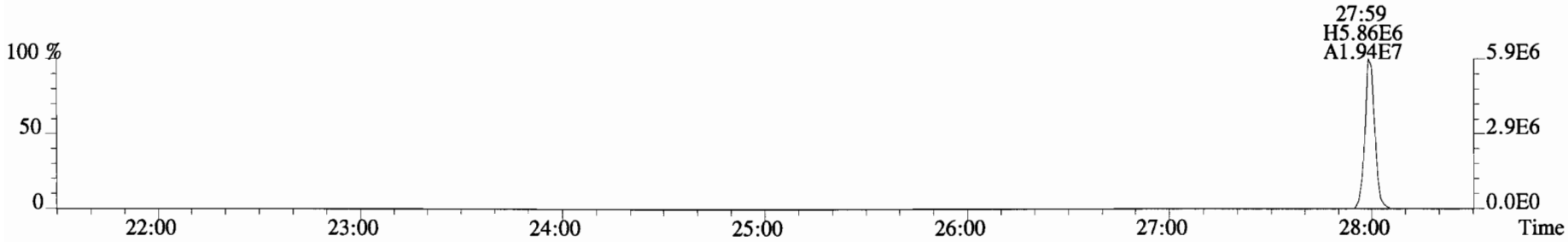
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



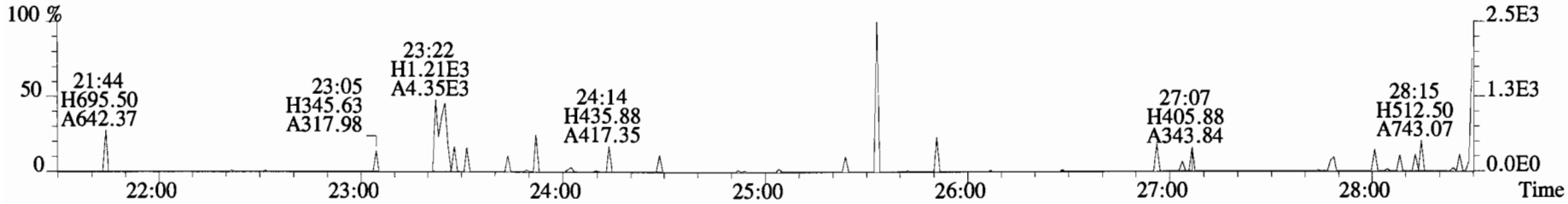
File:141226D2 #1-551 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



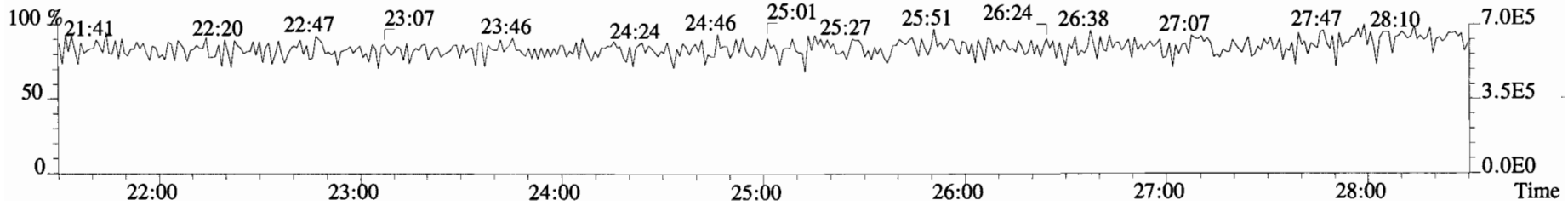
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

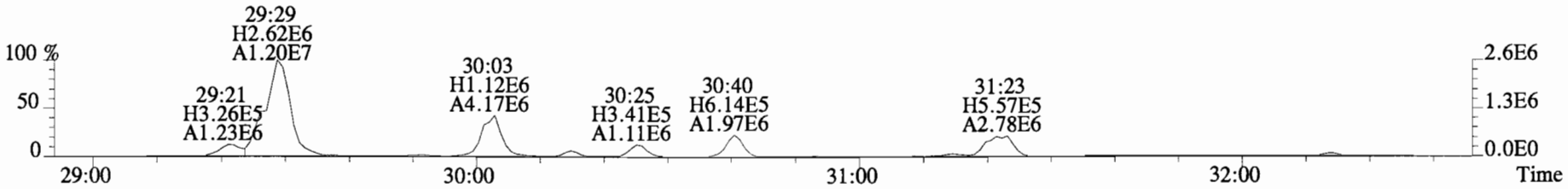


316.9824 S:5

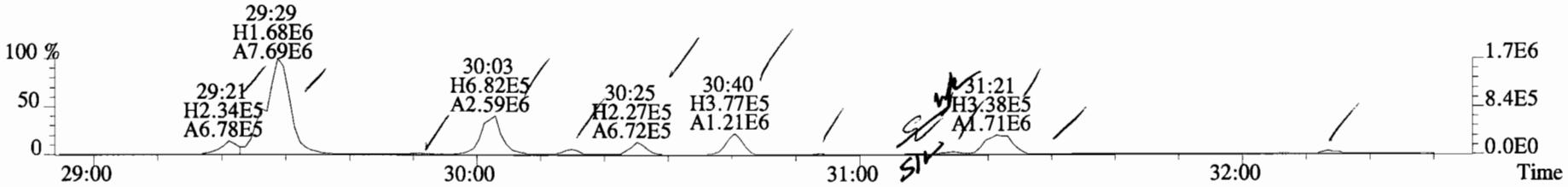


File:141226D2 #1-257 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5

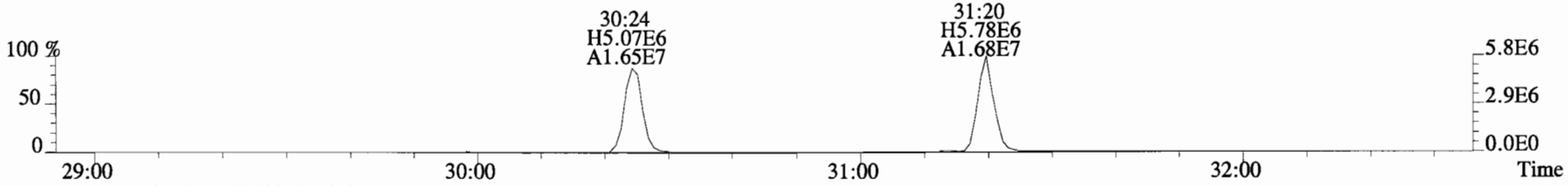
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



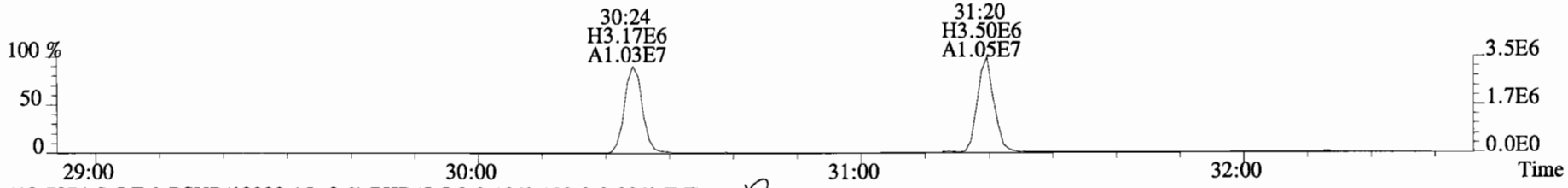
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



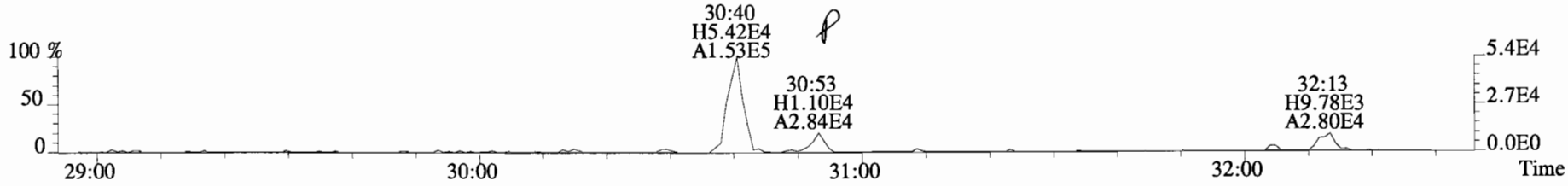
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



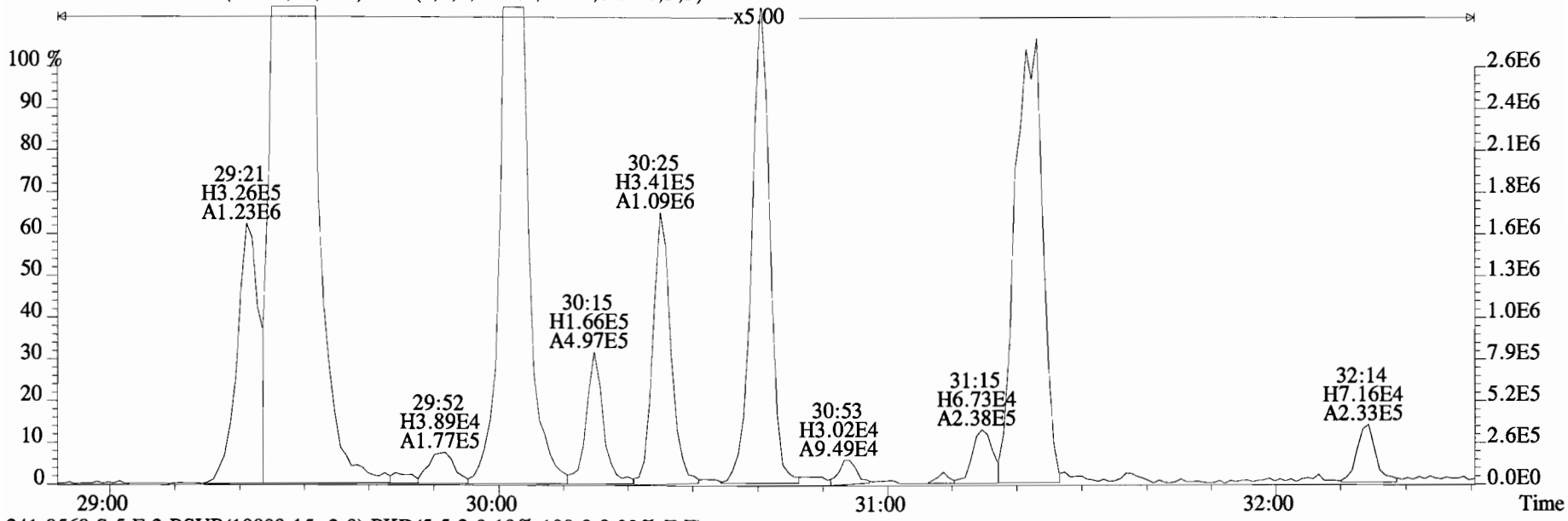
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



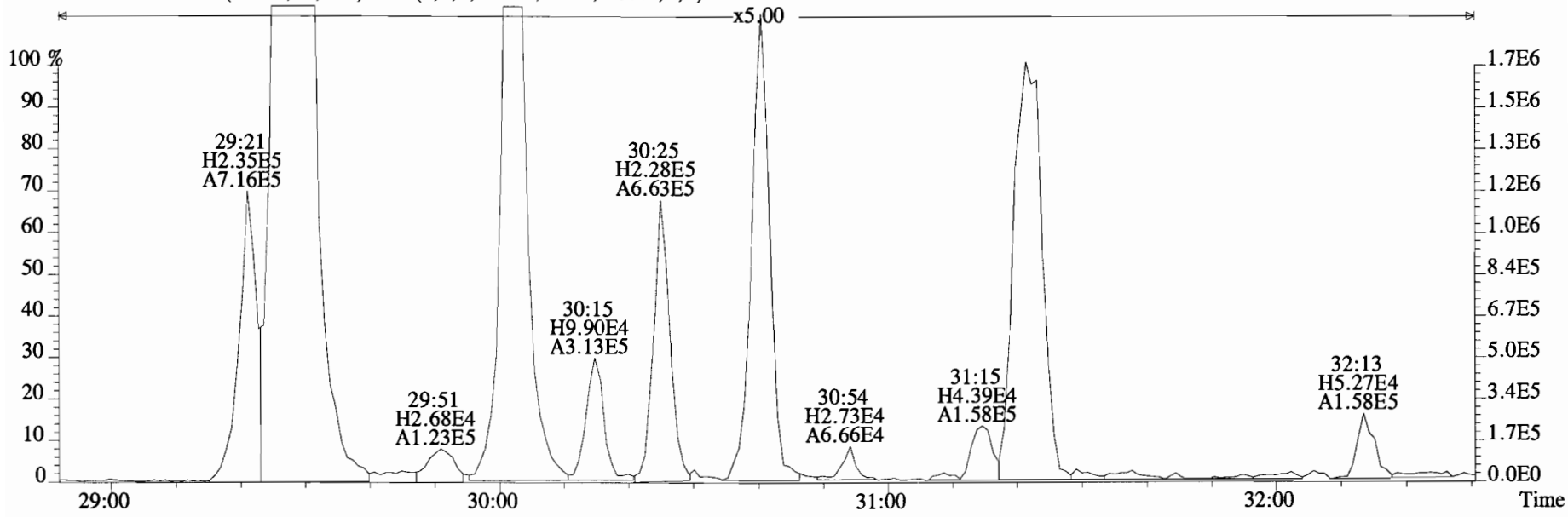
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



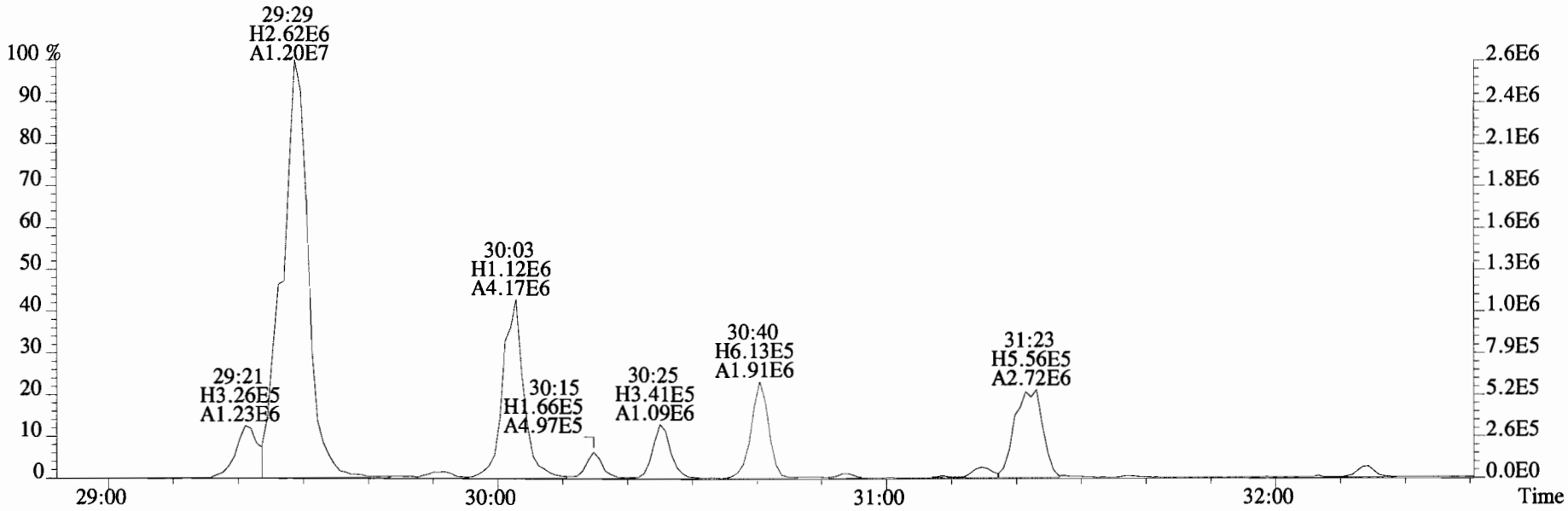
File:141226D2 #1-257 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



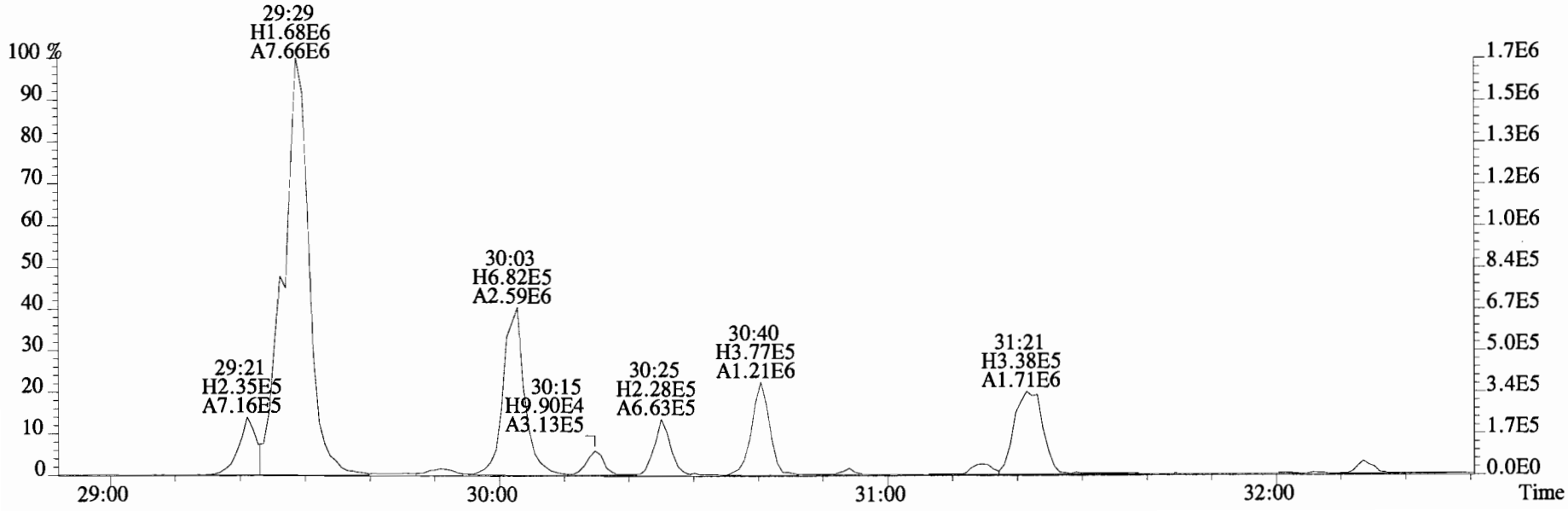
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



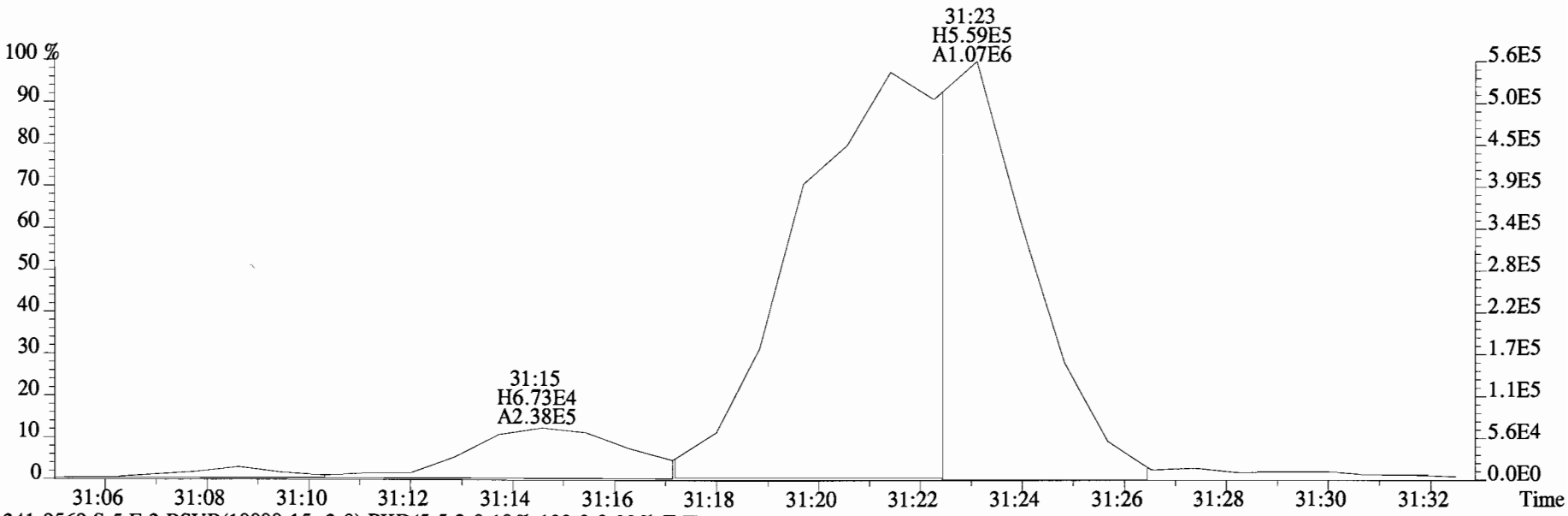
File:141226D2 #1-257 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



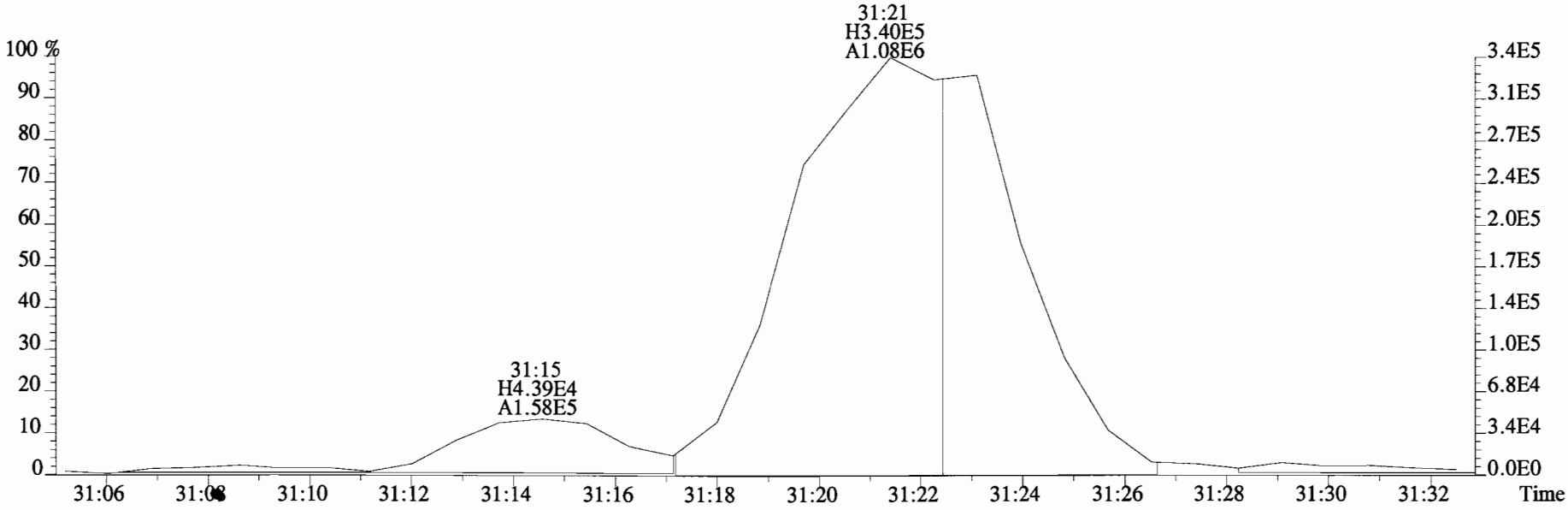
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



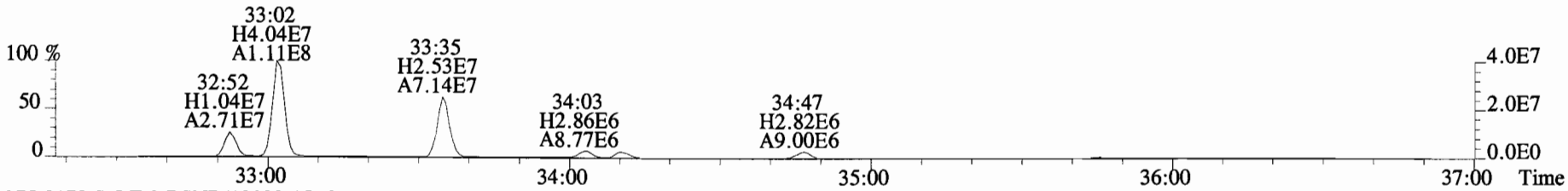
File:141226D2 #1-257 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



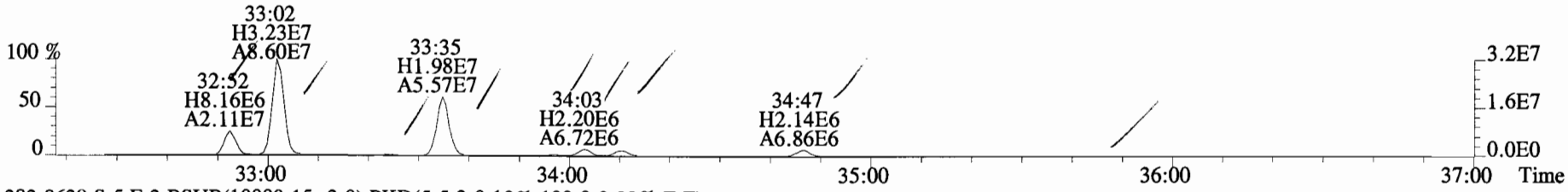
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



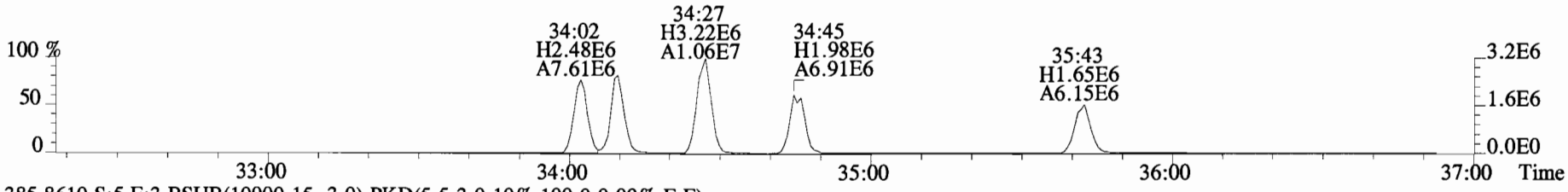
File:141226D2 #1-385 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



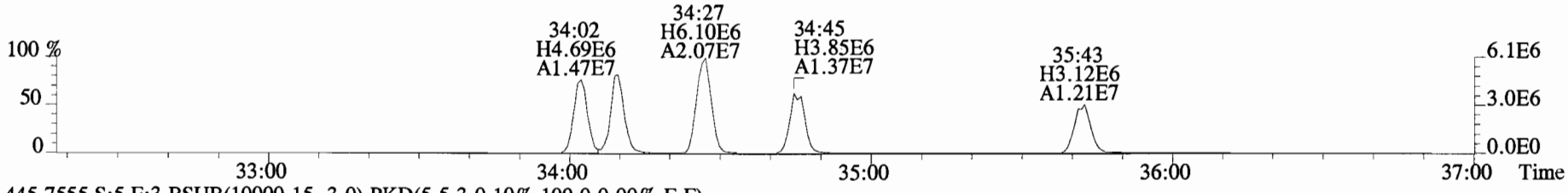
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



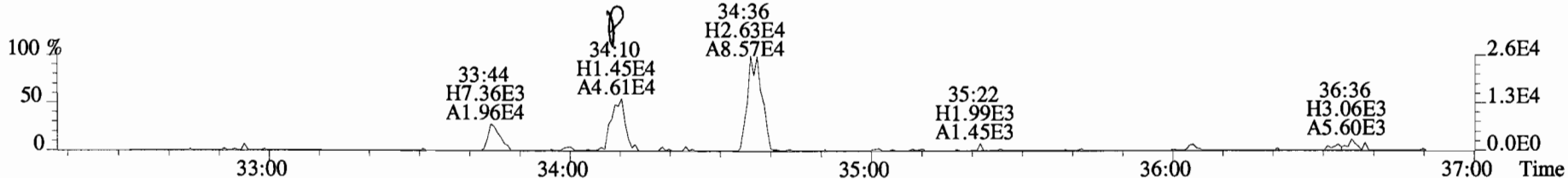
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



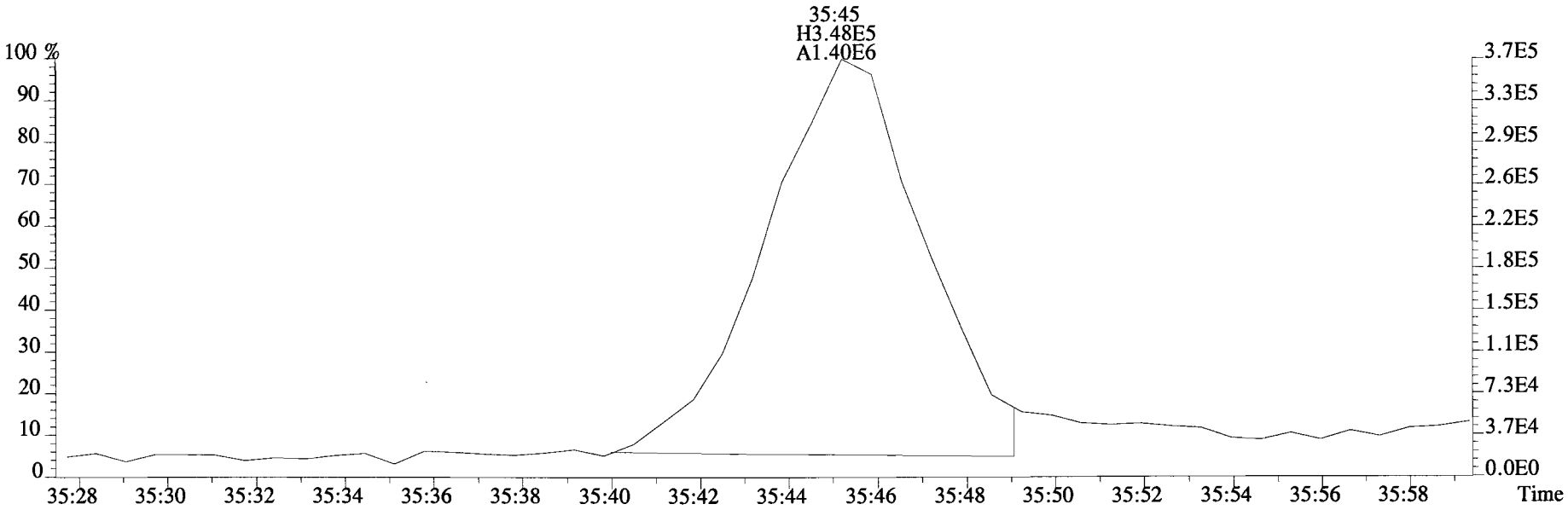
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



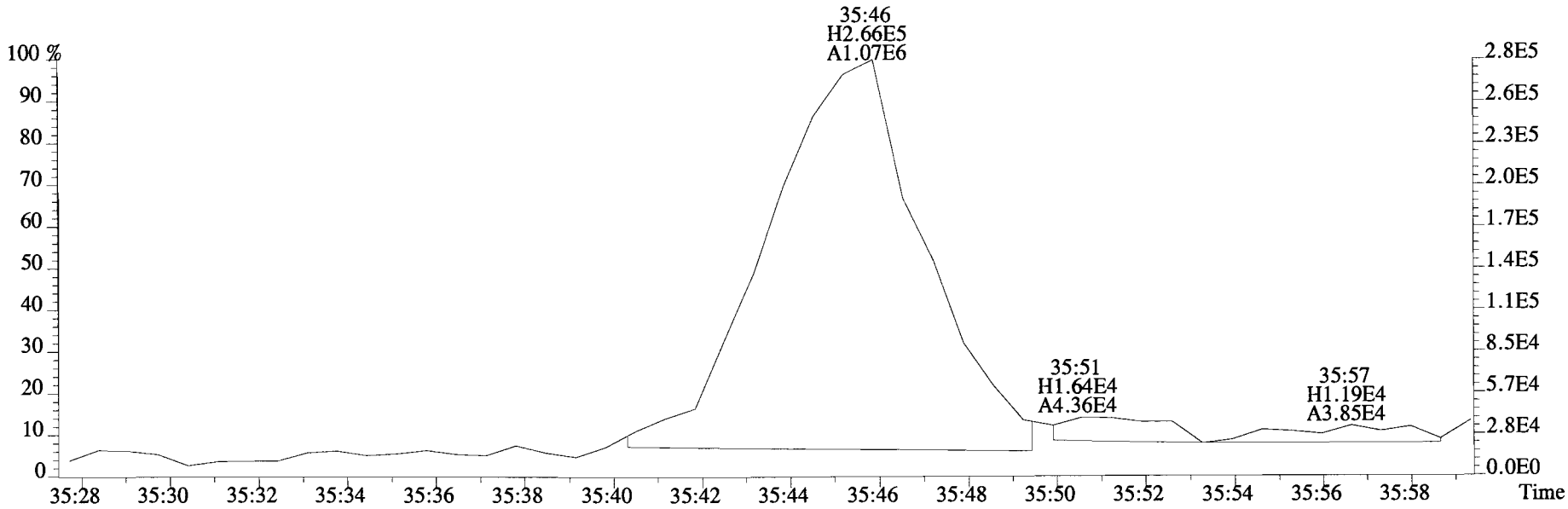
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



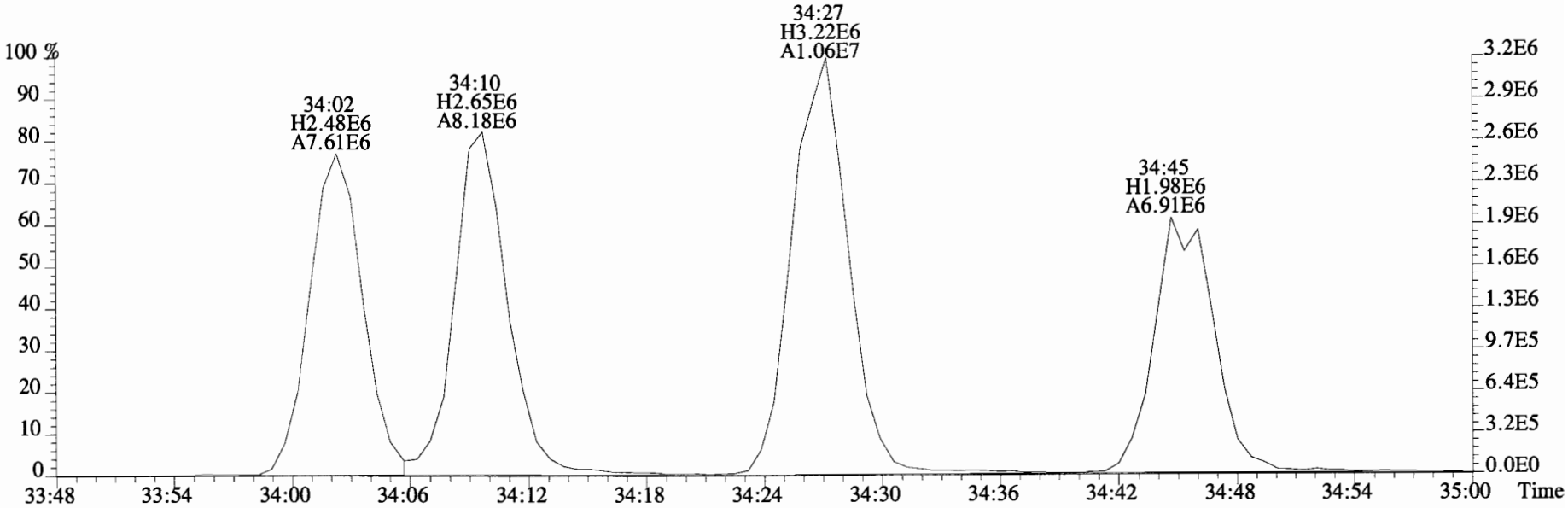
File:141226D2 #1-385 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



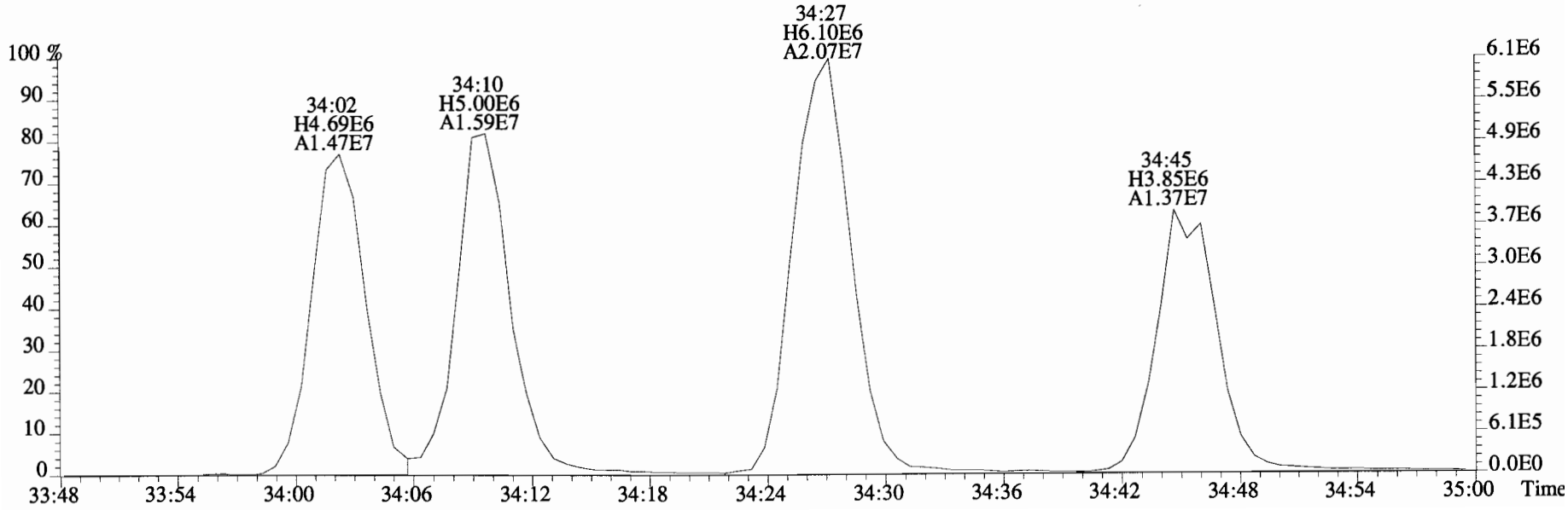
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



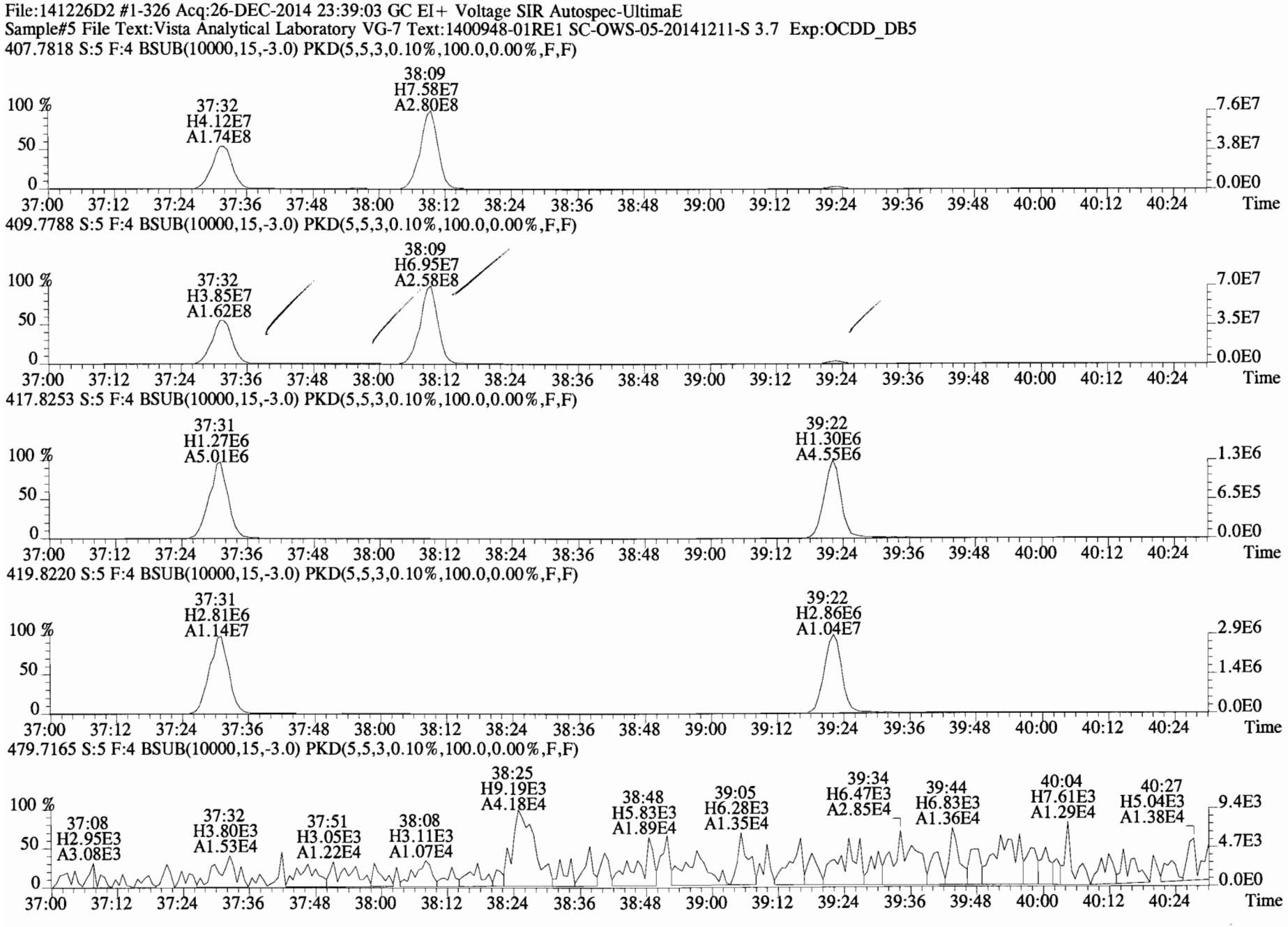
File:141226D2 #1-385 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



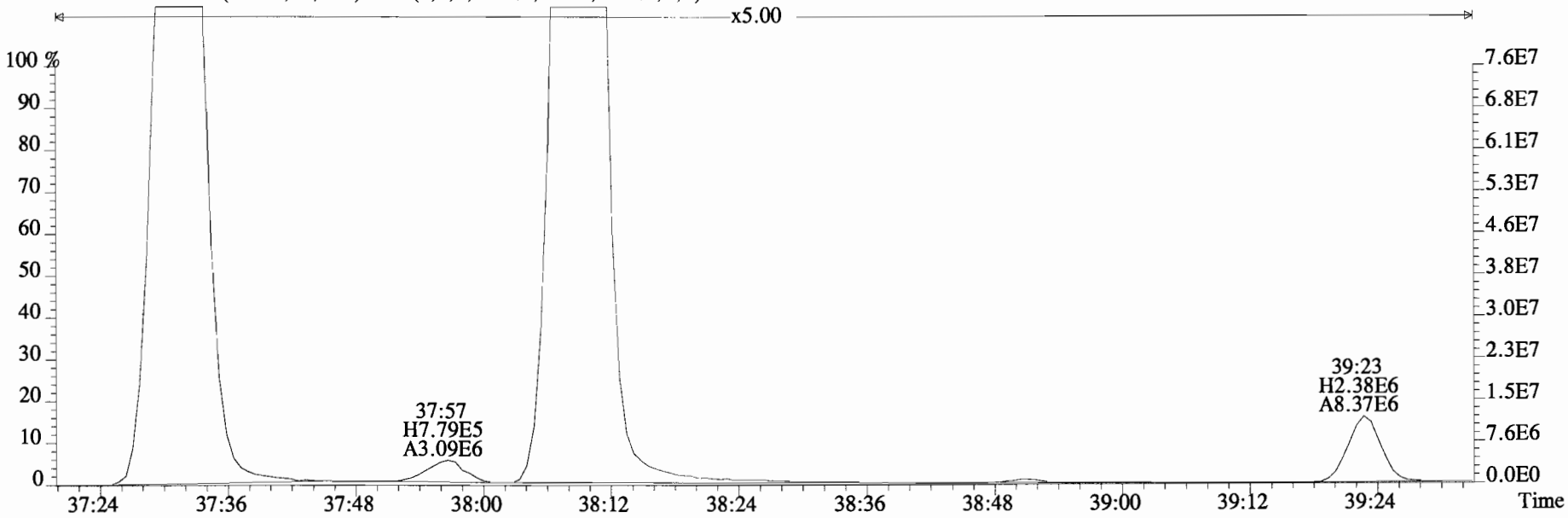
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



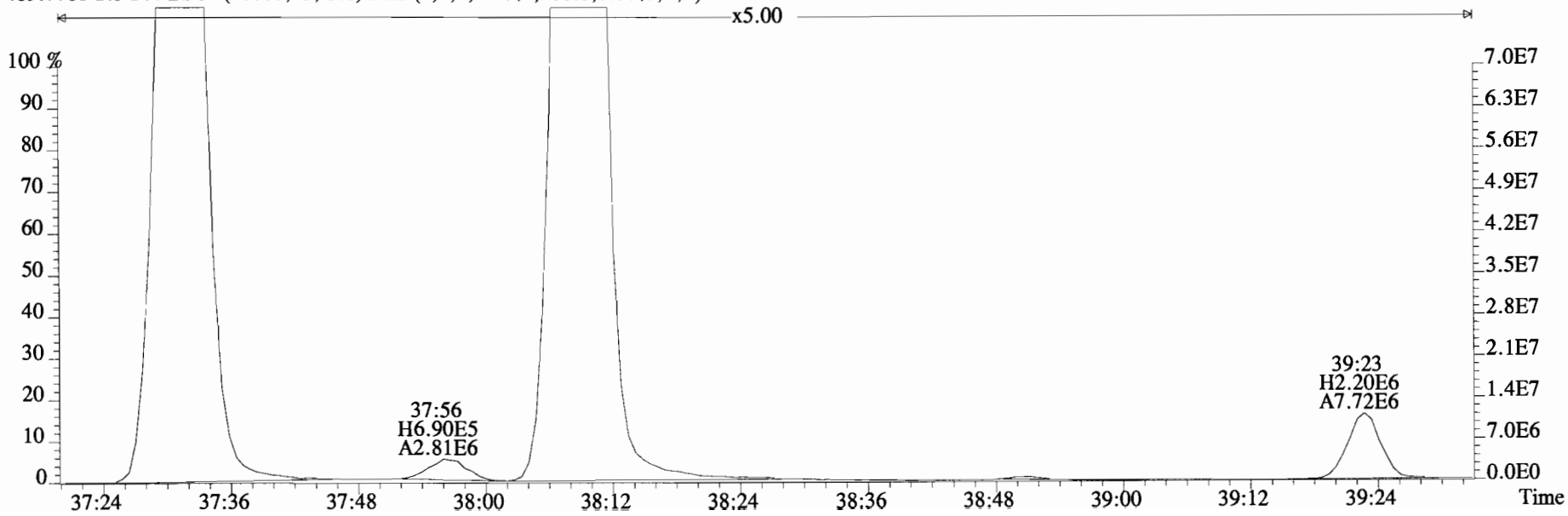
File:141226D2 #1-326 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5



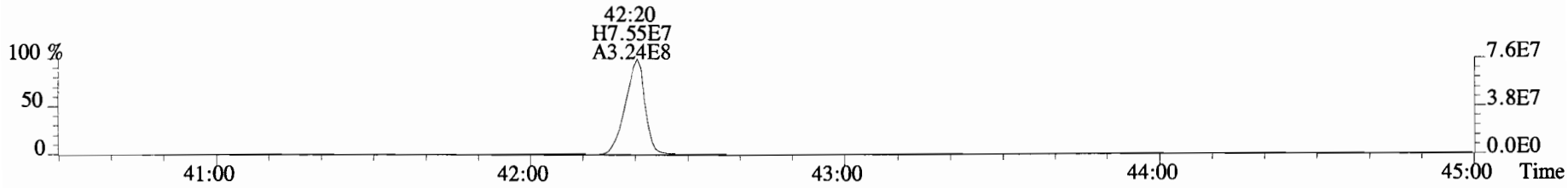
File:141226D2 #1-326 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



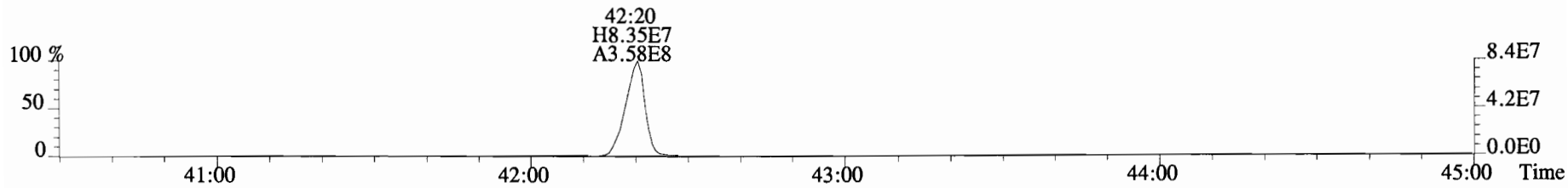
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



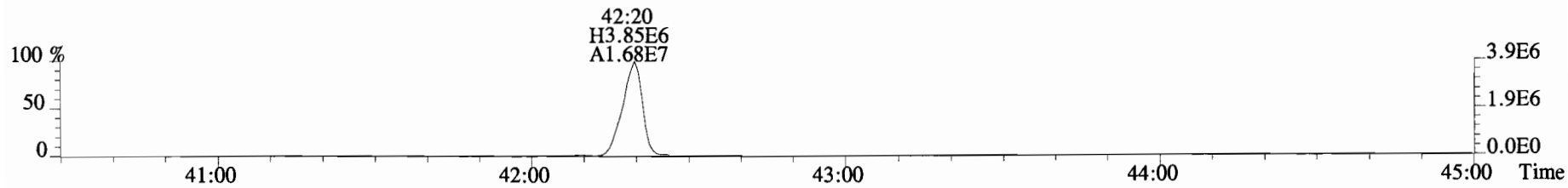
File:141226D2 #1-388 Acq:26-DEC-2014 23:39:03 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400948-01RE1 SC-OWS-05-20141211-S 3.7 Exp:OCDD_DB5
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



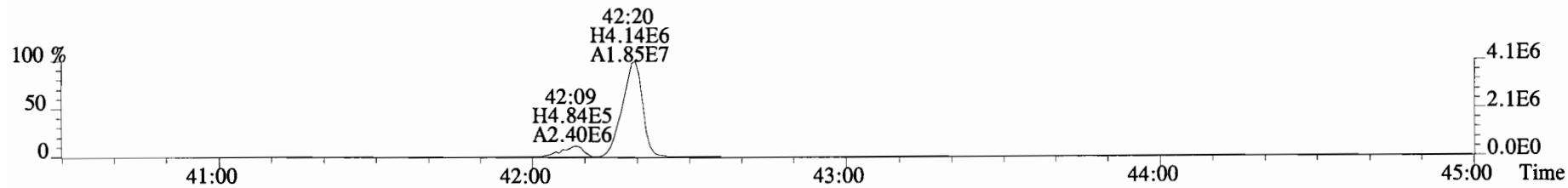
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



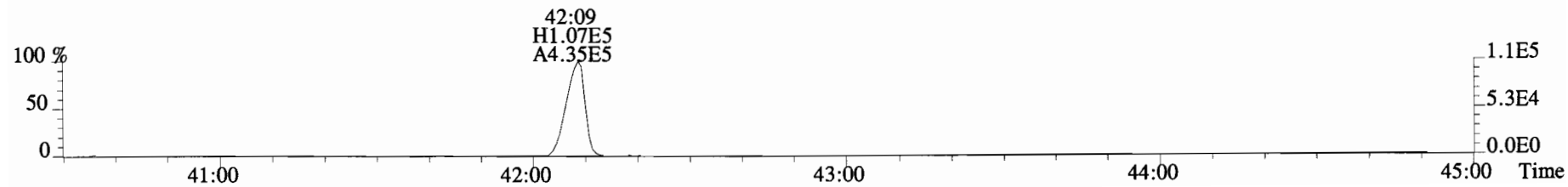
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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



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



Client ID: SC-CB-35-20141211-S Filename: 141226D2 S:6 Acq:27-DEC-14 00:27:53 ✓ ConCal: ST141226D2-1
Lab ID: 1400948-02RE1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.002 EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	2.06e+05	0.72 y	1.18	26:57	1.000	21.593		*	2.5	*
	1,2,3,7,8-PeCDD	2.06e+06	0.61 y	0.92	31:37	1.000	184.30		*	2.5	*
	1,2,3,4,7,8-HxCDD	4.62e+06	1.26 y	1.09	34:56	1.001	536.90		*	2.5	*
	1,2,3,6,7,8-HxCDD	9.92e+06	1.28 y	1.07	35:02	1.000	1149.3		*	2.5	*
	1,2,3,7,8,9-HxCDD	9.24e+06	1.24 y	0.93	35:20	1.000	1063.4		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	4.07e+08	1.03 y	1.12	38:50	1.000	39423		*	2.5	*
	OCDD	4.11e+09	0.89 y	0.95	42:06	1.000	442330		*	2.5	*
	2,3,7,8-TCDF	2.18e+05	0.81 y	1.08	26:09	1.001	16.615	15.9	*	2.5	*
	1,2,3,7,8-PeCDF	4.04e+05	1.57 y	1.09	30:25	1.000	27.130		*	2.5	*
	2,3,4,7,8-PeCDF	4.12e+05	1.58 y	1.04	31:20	1.000	26.320		*	2.5	*
	1,2,3,4,7,8-HxCDF	3.62e+06	1.37 y	1.39	34:03	1.000	202.73		*	2.5	*
	1,2,3,6,7,8-HxCDF	2.51e+06	1.27 y	1.26	34:11	1.001	157.56		*	2.5	*
	2,3,4,6,7,8-HxCDF	3.38e+06	1.33 y	1.30	34:46	1.000	228.48		*	2.5	*
	1,2,3,7,8,9-HxCDF	4.51e+05	1.26 y	1.19	35:45	1.001	39.185		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	7.29e+07	1.08 y	1.62	37:31	1.000	5502.0		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	6.12e+06	1.07 y	1.53	39:22	1.000	505.24		*	2.5	*
	OCDF	3.76e+08	0.91 y	1.10	42:19	1.000	35647		*	2.5	*

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	105	112		*	*
Total Penta-Dioxins	656	669		*	*
Total Hexa-Dioxins	7590	7590		*	*
Total Hepta-Dioxins	62200	62200		*	*
Total Tetra-Furans	248	276		*	*
Total Penta-Furans	1200.0	1204.7	P	*	*
Total Hexa-Furans	5770	5770		*	*
Total Hepta-Furans	22300	22300		*	*

								Rec	Qual
IS	13C-2,3,7,8-TCDD	1.61e+07	0.82 y	1.07	26:57	1.023	1655.2	83.0	
IS	13C-1,2,3,7,8-PeCDD	2.43e+07	0.62 y	1.24	31:37	1.200	2165.8	109	
IS	13C-1,2,3,4,7,8-HxCDD	1.58e+07	1.26 y	0.72	34:55	1.014	1446.8	72.5	
IS	13C-1,2,3,6,7,8-HxCDD	1.61e+07	1.26 y	0.74	35:02	1.017	1458.0	73.1	
IS	13C-1,2,3,7,8,9-HxCDD	1.86e+07	1.24 y	0.86	35:19	1.025	1447.7	72.6	
IS	13C-1,2,3,4,6,7,8-HpCDD	1.85e+07	1.08 y	0.64	38:49	1.127	1905.0	95.5	
IS	13C-OCDD	3.90e+07	0.90 y	0.78	42:05	1.222	3307.2	82.9	
IS	13C-2,3,7,8-TCDF	2.43e+07	0.77 y	0.92	26:08	0.992	1586.5	79.5	
IS	13C-1,2,3,7,8-PeCDF	2.73e+07	1.59 y	0.95	30:25	1.154	1728.8	86.6	
IS	13C-2,3,4,7,8-PeCDF	3.00e+07	1.56 y	0.97	31:20	1.189	1862.5	93.3	
IS	13C-1,2,3,4,7,8-HxCDF	2.56e+07	0.51 y	0.99	34:02	0.988	1718.0	86.1	
IS	13C-1,2,3,6,7,8-HxCDF	2.52e+07	0.53 y	1.10	34:10	0.992	1524.0	76.4	
IS	13C-2,3,4,6,7,8-HxCDF	2.27e+07	0.52 y	1.03	34:46	1.009	1465.6	73.4	
IS	13C-1,2,3,7,8,9-HxCDF	1.93e+07	0.51 y	0.86	35:43	1.037	1494.5	74.9	
IS	13C-1,2,3,4,6,7,8-HpCDF	1.64e+07	0.44 y	0.71	37:30	1.089	1524.1	76.4	
IS	13C-1,2,3,4,7,8,9-HpCDF	1.58e+07	0.43 y	0.71	39:22	1.143	1486.3	74.5	
IS	13C-OCDF	3.82e+07	0.89 y	0.87	42:18	1.228	2905.8	72.8	
C/Up	37Cl-2,3,7,8-TCDD	7.86e+06		1.21	26:58	1.024	717.35	89.9	
RS/RT	13C-1,2,3,4-TCDD	1.80e+07	0.80 y	1.00	26:21	*	1995.3		
RS	13C-1,2,3,4-TCDF	3.31e+07	0.78 y	1.00	24:49	*	1995.3		
RS/RT	13C-1,2,3,4,6,9-HxCDF	3.00e+07	0.51 y	1.00	34:27	*	1995.3		

Integrations by Analyst: [illegible] Date: 12/28/14

Reviewed by Analyst: CT Date: 12/29/14

Totals class: TCDD EMPC Entry #: 19

Run: 11 File: 141226D2 S: 6 I: 1 F: 1
Acquired: 27-DEC-14 00:27:53 Processed: 27-DEC-14 13:28:10

Total Concentration: 112.23 Unnamed Concentration: 90.639

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
23:19	6.190e+04	8.473e+04	0.73	y	1.466e+05	15.377	
23:42	4.293e+04	5.904e+04	0.73	y	1.020e+05	10.694	
24:10	1.368e+04	2.078e+04	0.66	y	3.445e+04	3.6133	
25:12	2.762e+04	3.759e+04	0.73	y	6.520e+04	6.8381	
25:23	9.139e+04	1.147e+05	0.80	y	2.061e+05	21.612	
25:35	1.355e+04	1.609e+04	0.84	y	2.964e+04	3.1083	
25:49	1.805e+04	1.842e+04	0.98	n	3.260e+04	3.4188	
26:00	1.694e+04	2.115e+04	0.80	y	3.809e+04	3.9946	
26:21	2.369e+04	2.930e+04	0.81	y	5.299e+04	5.5566	
26:42	1.769e+04	2.208e+04	0.80	y	3.977e+04	4.1705	
26:57	8.627e+04	1.196e+05	0.72	y	2.059e+05	21.593	2,3,7,8-TCDD
27:16	3.484e+04	4.939e+04	0.71	y	8.423e+04	8.8335	
27:32	1.299e+04	1.127e+04	1.15	n	1.994e+04	2.0913	
27:53	5.522e+03	1.071e+04	0.52	n	1.269e+04	1.3312	

Totals class: PeCDD EMPC Entry #: 21

Run: 11 File: 141226D2 S: 6 I: 1 F: 2
Acquired: 27-DEC-14 00:27:53 Processed: 27-DEC-14 13:28:10

Total Concentration: 668.95 Unnamed Concentration: 484.653

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:31	7.015e+05	1.151e+06	0.61	y	1.853e+06	165.82	
29:59	1.071e+05	1.815e+05	0.59	y	2.885e+05	25.822	
30:26	1.623e+05	2.456e+05	0.66	y	4.079e+05	36.507	
30:37	4.541e+05	7.431e+05	0.61	y	1.197e+06	107.15	
30:42	1.703e+05	3.104e+05	0.55	y	4.807e+05	43.023	
30:54	2.463e+05	4.297e+05	0.57	y	6.760e+05	60.497	
31:13	2.979e+04	4.897e+04	0.61	y	7.876e+04	7.0488	
31:37	7.809e+05	1.278e+06	0.61	y	2.059e+06	184.30	1,2,3,7,8-PeCDD
31:43	7.567e+04	8.695e+04	0.87	n	1.417e+05	12.684	
31:59	1.078e+05	1.840e+05	0.59	y	2.917e+05	26.107	

Totals class: HxCDD EMPC Entry #: 23

Run: 11 File: 141226D2 S: 6 I: 1 F: 3
Acquired: 27-DEC-14 00:27:53 Processed: 27-DEC-14 13:28:10

Total Concentration: 7592.4 Unnamed Concentration: 4842.824

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
33:24	8.502e+06	6.815e+06	1.25 y	1.532e+07	1772.9	
33:58	1.265e+06	1.036e+06	1.22 y	2.302e+06	266.41	
34:14	1.263e+07	1.003e+07	1.26 y	2.267e+07	2623.4	
34:23	4.847e+05	3.958e+05	1.22 y	8.805e+05	101.92	
34:56	2.573e+06	2.043e+06	1.26 y	4.616e+06	536.90	1,2,3,4,7,8-HxCDD
35:02	5.574e+06	4.346e+06	1.28 y	9.920e+06	1149.3	1,2,3,6,7,8-HxCDD
35:14	3.842e+05	2.912e+05	1.32 y	6.755e+05	78.181	
35:20	5.119e+06	4.125e+06	1.24 y	9.245e+06	1063.4	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 11 File: 141226D2 S: 6 I: 1 F: 4
Acquired: 27-DEC-14 00:27:53 Processed: 27-DEC-14 13:28:10

Total Concentration: 62185 Unnamed Concentration: 22762.189

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:55	1.198e+08	1.151e+08	1.04 y	2.349e+08	22762	
38:50	2.059e+08	2.008e+08	1.03 y	4.068e+08	39423	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 11 File: 141226D2 S: 6 I: 1 F: 1
Acquired: 27-DEC-14 00:27:53 Processed: 27-DEC-14 13:28:10

Total Concentration: 276.05 Unnamed Concentration: 259.437

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
21:05	2.348e+04	3.367e+04	0.70	y	5.715e+04	4.3549	
21:40	3.307e+04	4.730e+04	0.70	y	8.037e+04	6.1242	
22:18	3.382e+05	4.010e+05	0.84	y	7.392e+05	56.326	
22:50	8.575e+04	1.057e+05	0.81	y	1.915e+05	14.590	
23:17	1.410e+05	1.520e+05	0.93	n	2.691e+05	20.503	
23:44	1.870e+05	2.300e+05	0.81	y	4.170e+05	31.776	
23:53	2.805e+04	3.481e+04	0.81	y	6.286e+04	4.7903	
24:03	3.884e+04	5.881e+04	0.66	y	9.765e+04	7.4415	
24:27	1.102e+04	1.644e+04	0.67	y	2.746e+04	2.0924	
24:35	2.412e+04	3.900e+04	0.62	n	5.544e+04	4.2244	
24:44	1.723e+05	1.970e+05	0.87	y	3.693e+05	28.146	
24:50	1.417e+05	2.152e+05	0.66	y	3.569e+05	27.199	
25:18	6.585e+04	1.005e+05	0.66	y	1.663e+05	12.673	
25:33	2.598e+04	3.679e+04	0.71	y	6.277e+04	4.7830	
25:44	1.873e+04	2.468e+04	0.76	y	4.341e+04	3.3077	
25:56	1.208e+04	1.702e+04	0.71	y	2.910e+04	2.2176	
26:02	2.548e+04	2.803e+04	0.91	n	4.961e+04	3.7804	
26:09	9.790e+04	1.201e+05	0.81	y	2.180e+05	16.615	2,3,7,8-TCDF
26:29	9.418e+04	1.292e+05	0.73	y	2.233e+05	17.019	
28:00	4.740e+04	5.875e+04	0.81	y	1.061e+05	8.0888	

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

Run: 11 File: 141226D2 S: 6 I: 1 F: 1
Acquired: 27-DEC-14 00:27:53 Processed: 27-DEC-14 13:28:10

Total Concentration: 604.30 Unnamed Concentration: 604.298

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
27:59	5.543e+06	3.691e+06	1.50 y	9.233e+06	604.30	

Totals class: PeCDF EMPC Entry #: 31

Run: 11 File: 141226D2 S: 6 I: 1 F: 2
Acquired: 27-DEC-14 00:27:53 Processed: 27-DEC-14 13:28:10

Total Concentration: 600.44 Unnamed Concentration: 546.991

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:27	3.112e+06	1.991e+06	1.56	y	5.102e+06	333.93	
29:51	7.120e+04	4.361e+04	1.63	y	1.148e+05	7.5143	
30:02	9.704e+05	6.358e+05	1.53	y	1.606e+06	105.12	
30:14	1.439e+05	9.332e+04	1.54	y	2.372e+05	15.525	
30:25	2.468e+05	1.568e+05	1.57	y	4.036e+05	27.130	1,2,3,7,8-PeCDF
30:40	3.524e+05	2.145e+05	1.64	y	5.669e+05	37.104	
31:14	7.261e+04	4.744e+04	1.53	y	1.201e+05	7.8570	
31:20	2.523e+05	1.599e+05	1.58	y	4.122e+05	26.320	2,3,4,7,8-PeCDF
31:23	3.355e+05	2.019e+05	1.66	y	5.374e+05	35.173	
32:14	4.428e+04	3.380e+04	1.31	n	7.285e+04	4.7680	

Totals class: HxCDF EMPC Entry #: 33

Run: 11 File: 141226D2 S: 6 I: 1 F: 3
Acquired: 27-DEC-14 00:27:53 Processed: 27-DEC-14 13:28:10

Total Concentration: 5773.1 Unnamed Concentration: 5145.129

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
32:53	5.223e+06	4.062e+06	1.29 y	9.285e+06	619.67	
33:02	2.049e+07	1.569e+07	1.31 y	3.618e+07	2414.9	
33:23	3.973e+05	3.072e+05	1.29 y	7.045e+05	47.017	
33:35	1.708e+07	1.323e+07	1.29 y	3.030e+07	2022.5	
33:56	3.420e+05	2.729e+05	1.25 y	6.149e+05	41.039	
34:03	2.088e+06	1.529e+06	1.37 y	3.617e+06	202.73	1,2,3,4,7,8-HxCDF
34:11	1.404e+06	1.107e+06	1.27 y	2.510e+06	157.56	1,2,3,6,7,8-HxCDF
34:46	1.929e+06	1.454e+06	1.33 y	3.384e+06	228.48	2,3,4,6,7,8-HxCDF
35:45	2.515e+05	2.000e+05	1.26 y	4.515e+05	39.185	1,2,3,7,8,9-HxCDF

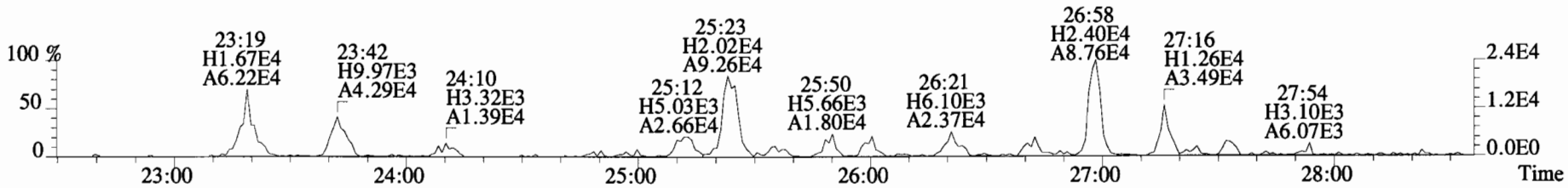
Totals class: HpCDF EMPC Entry #: 35

Run: 11 File: 141226D2 S: 6 I: 1 F: 4
Acquired: 27-DEC-14 00:27:53 Processed: 27-DEC-14 13:28:10

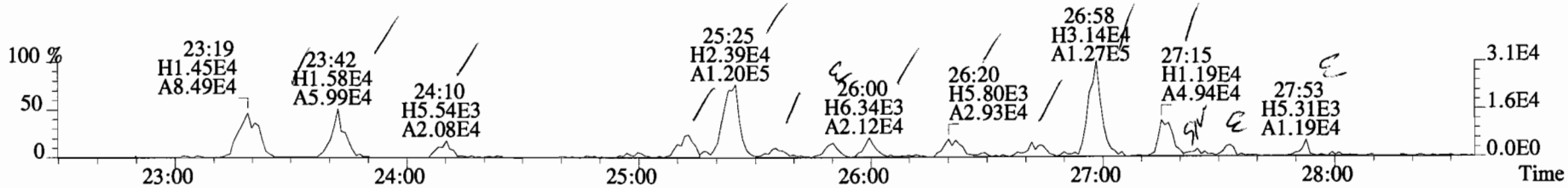
Total Concentration: 22316 Unnamed Concentration: 16308.297

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:31	3.790e+07	3.503e+07	1.08 y	7.293e+07	5502.0	1,2,3,4,6,7,8-HpCDF
37:55	8.535e+05	7.681e+05	1.11 y	1.622e+06	127.89	
38:08	1.070e+08	9.814e+07	1.09 y	2.052e+08	16180	
39:22	3.158e+06	2.962e+06	1.07 y	6.120e+06	505.24	1,2,3,4,7,8,9-HpCDF

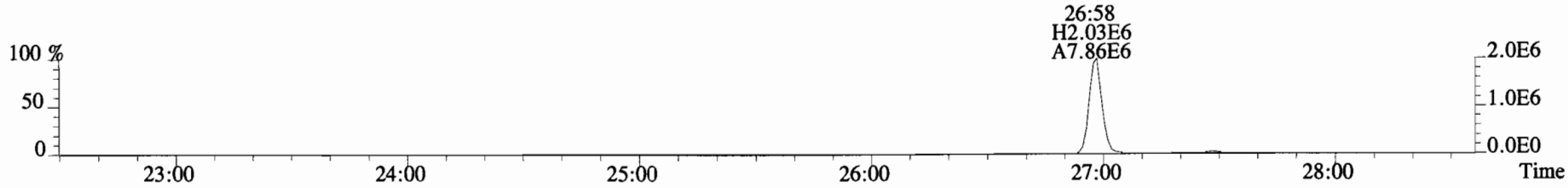
File:141226D2 #1-551 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



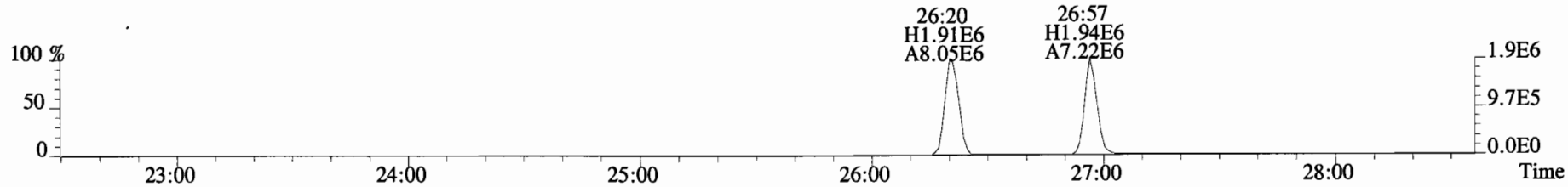
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



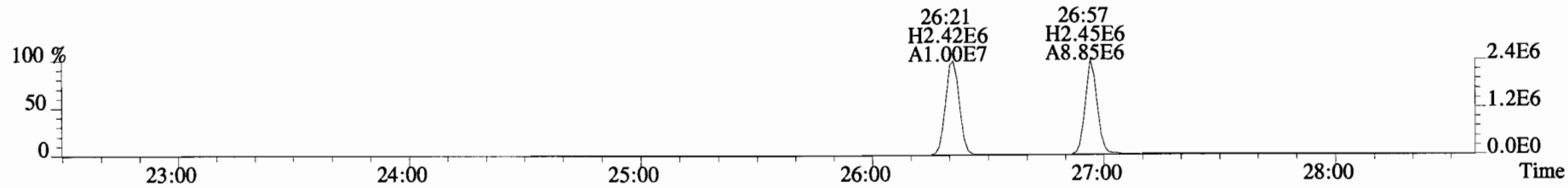
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



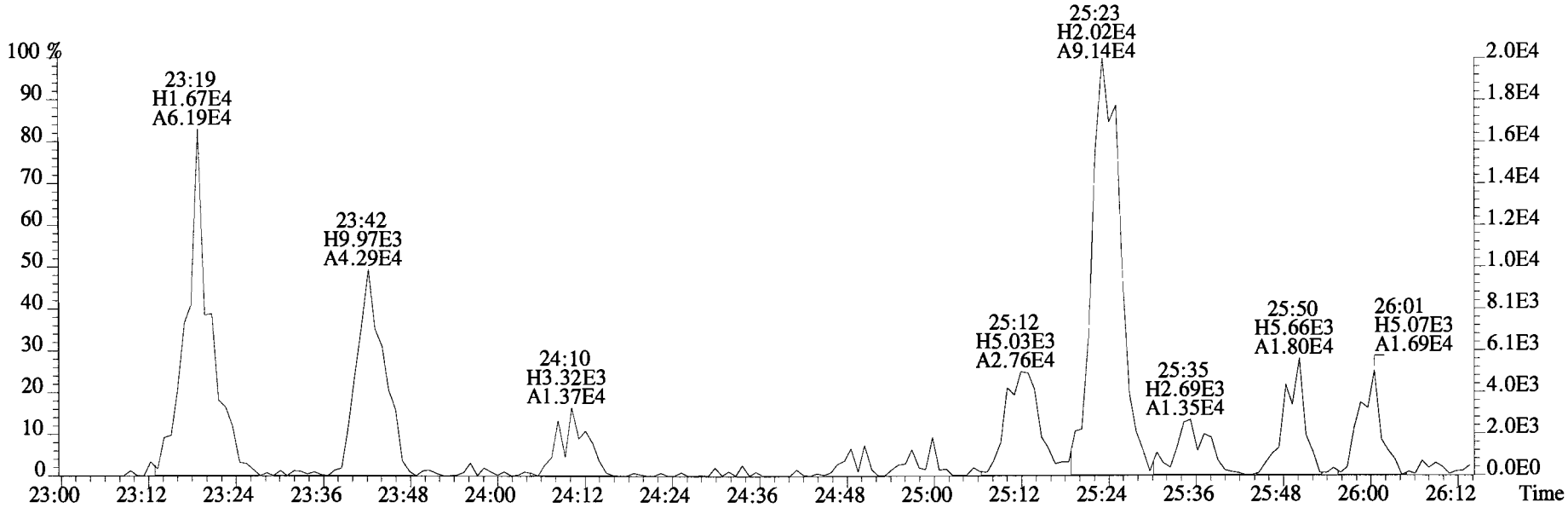
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



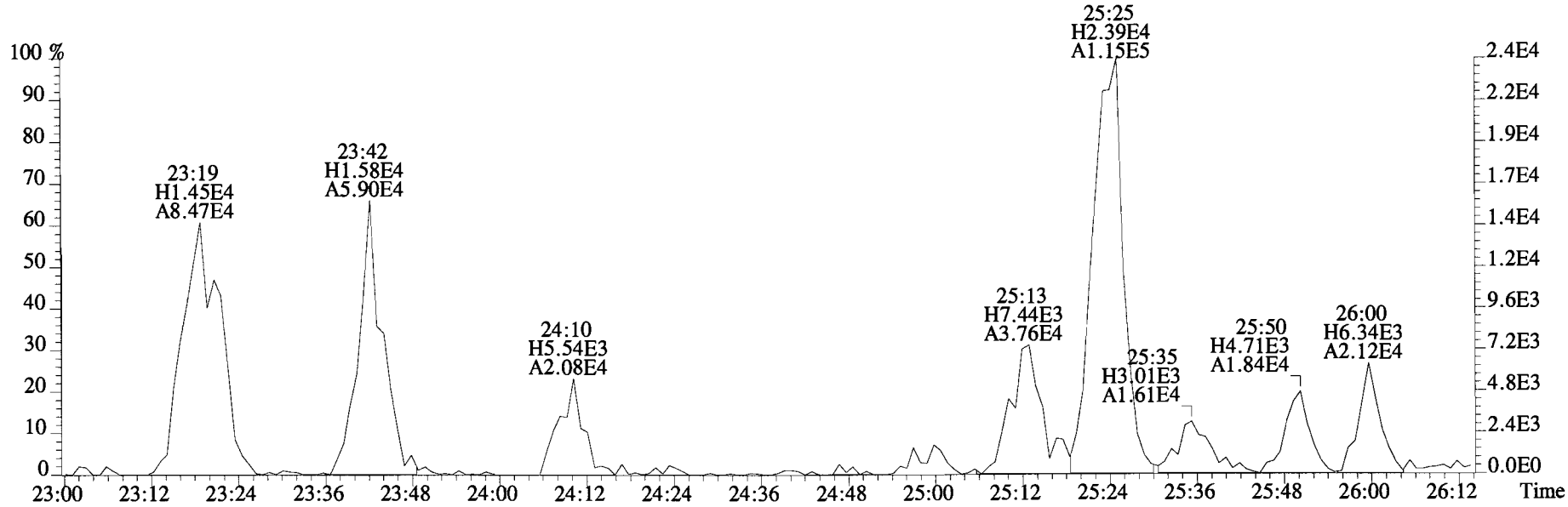
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



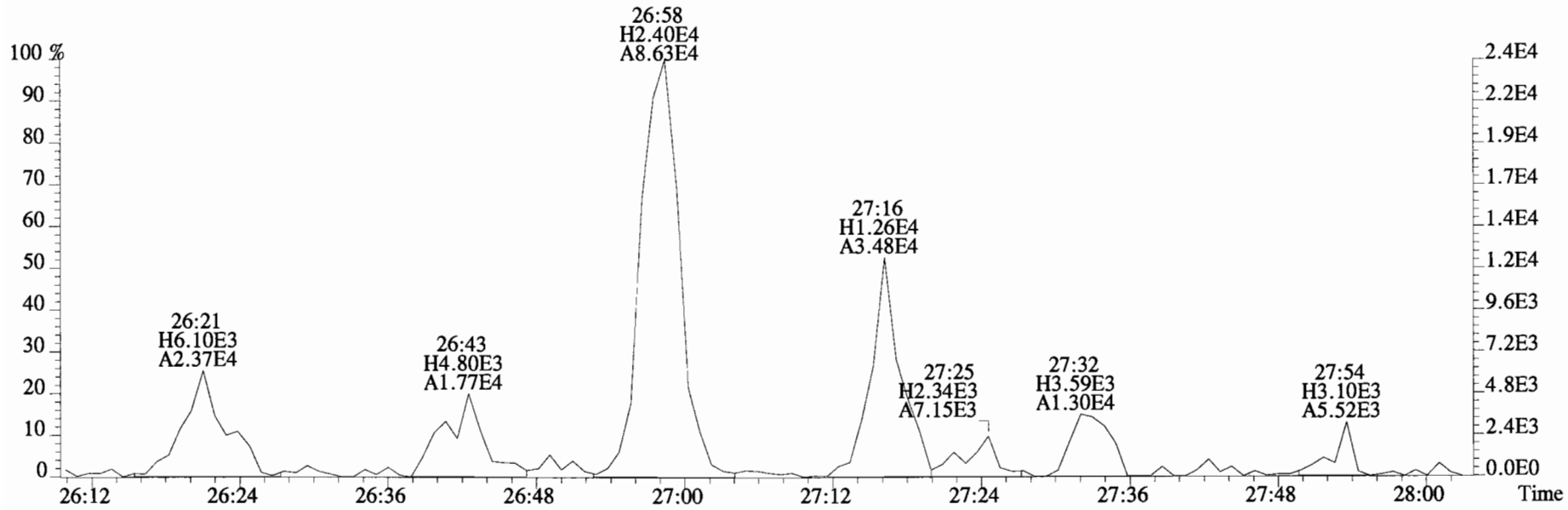
File:141226D2 #1-551 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



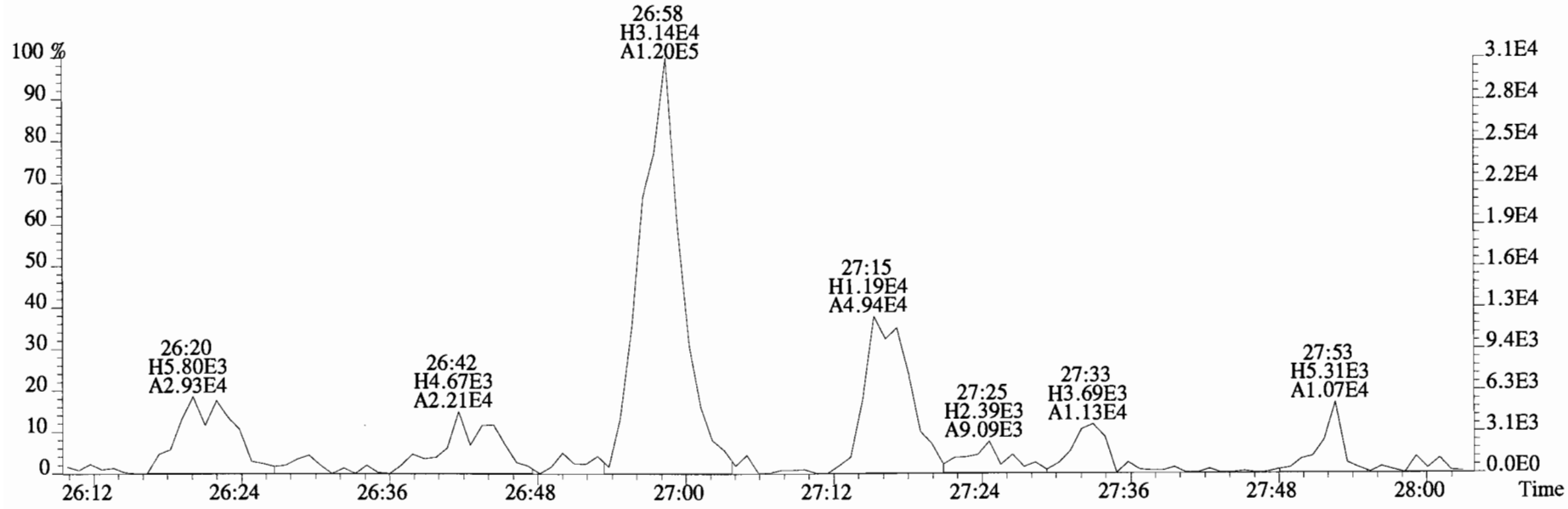
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



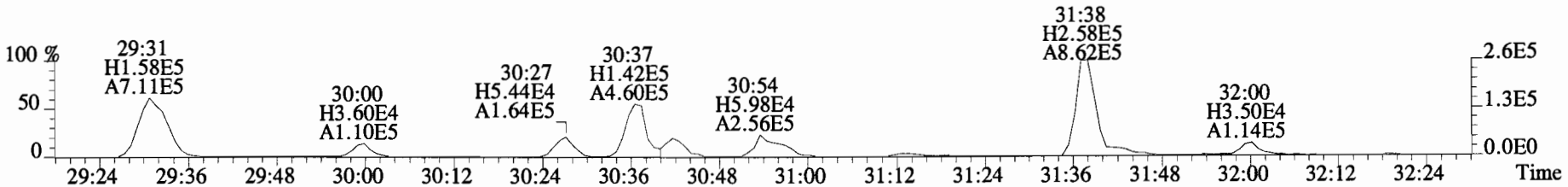
File:141226D2 #1-551 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



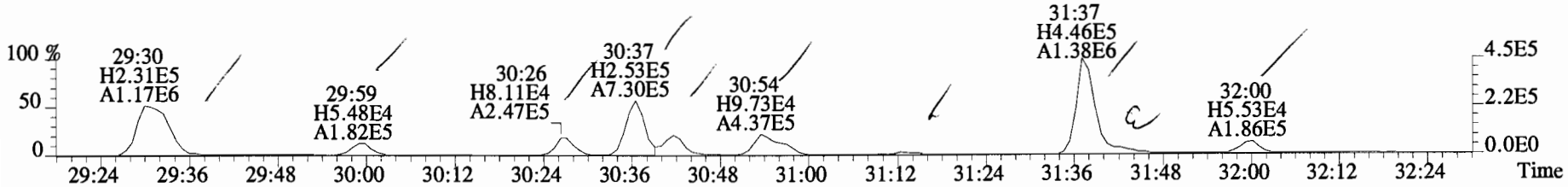
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



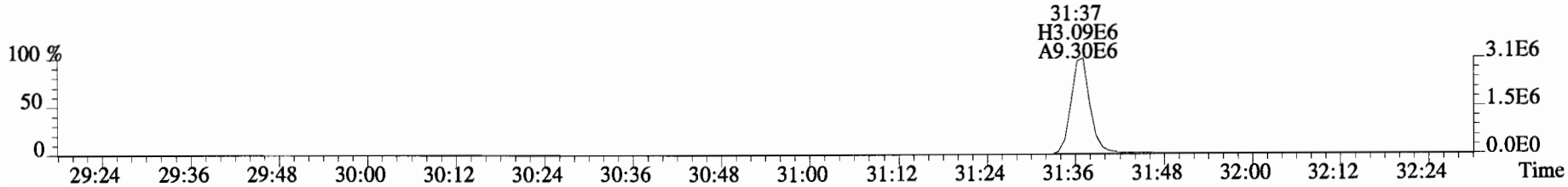
File:141226D2 #1-256 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



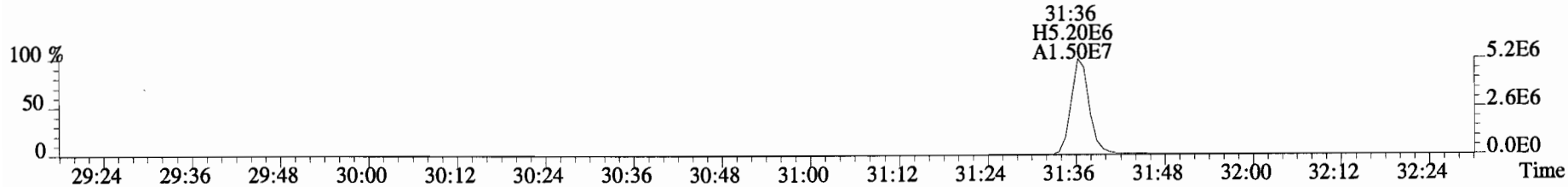
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



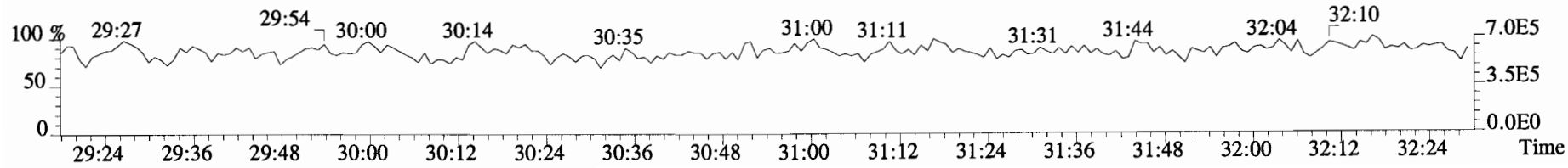
365.8978 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



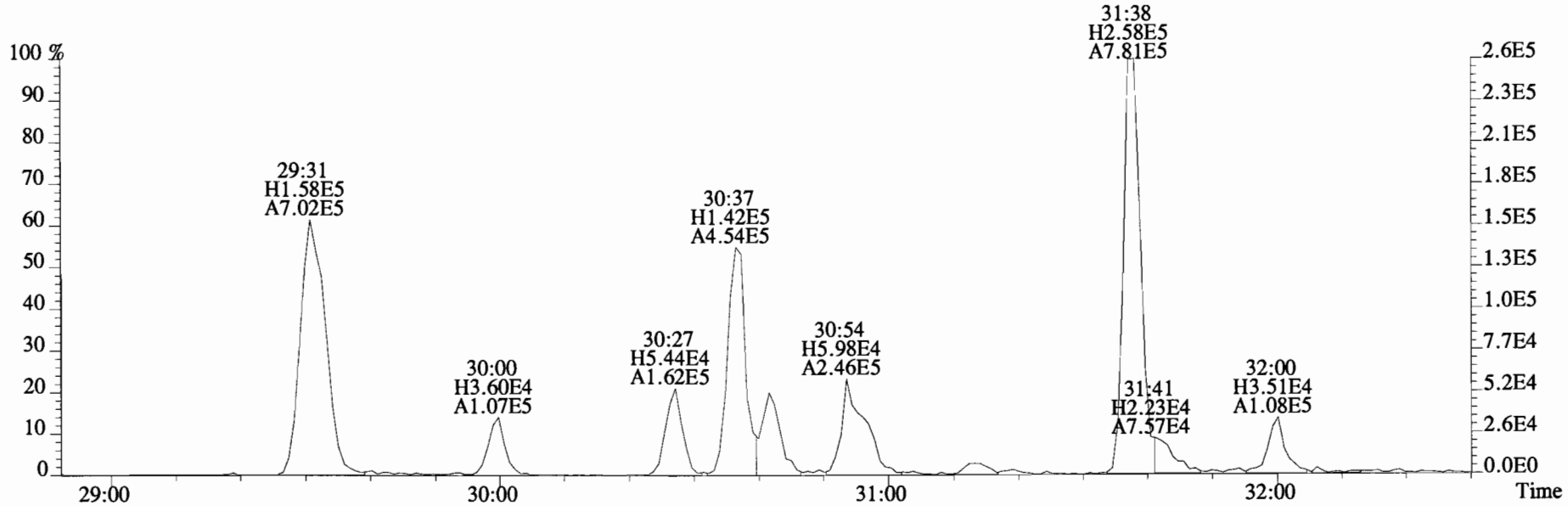
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



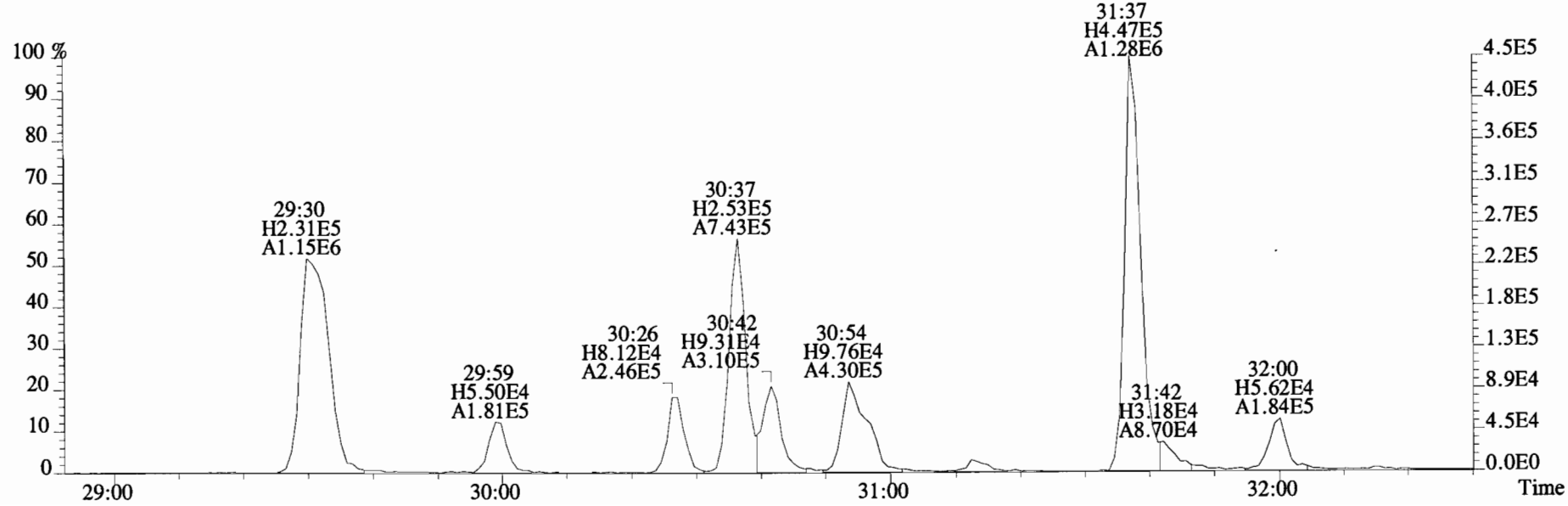
366.9792 S:6 F:2



File:141226D2 #1-256 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

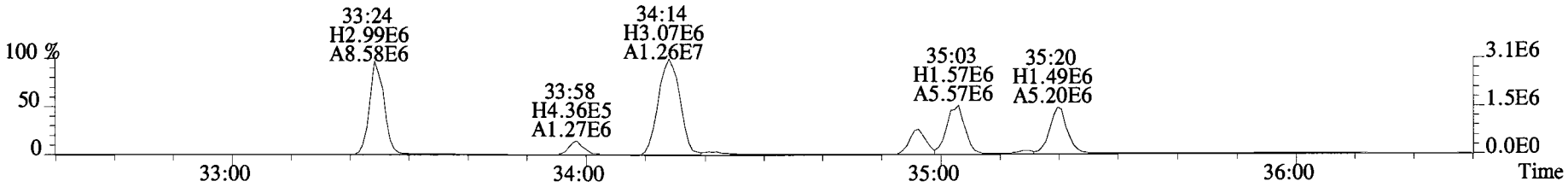


355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

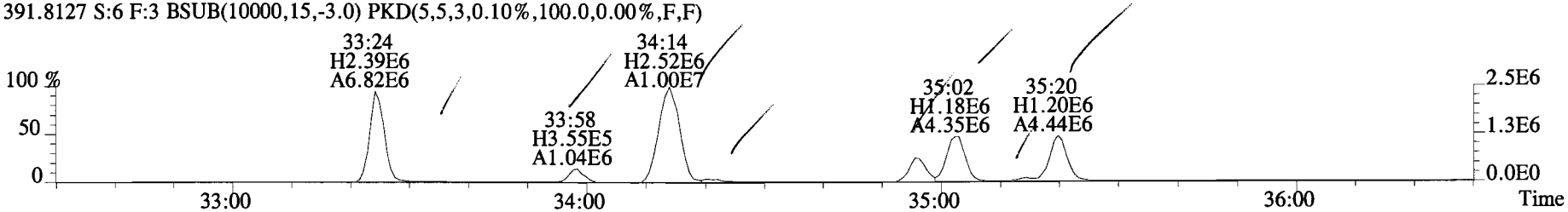


File:141226D2 #1-386 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5

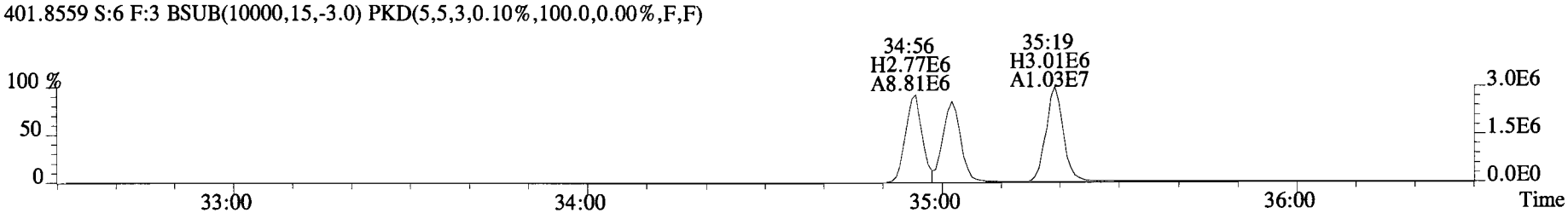
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



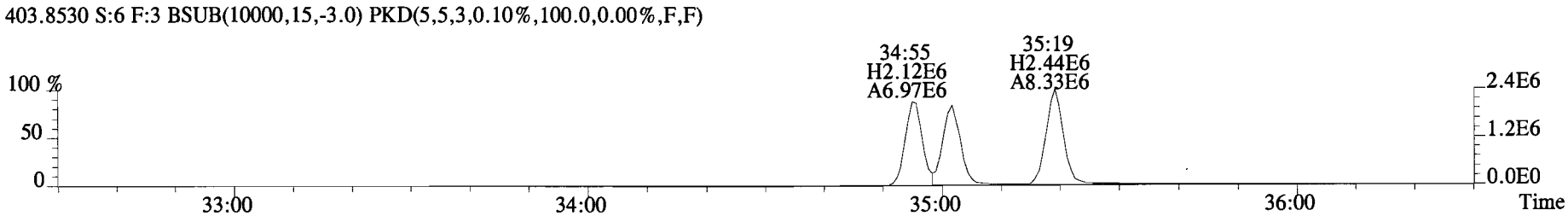
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



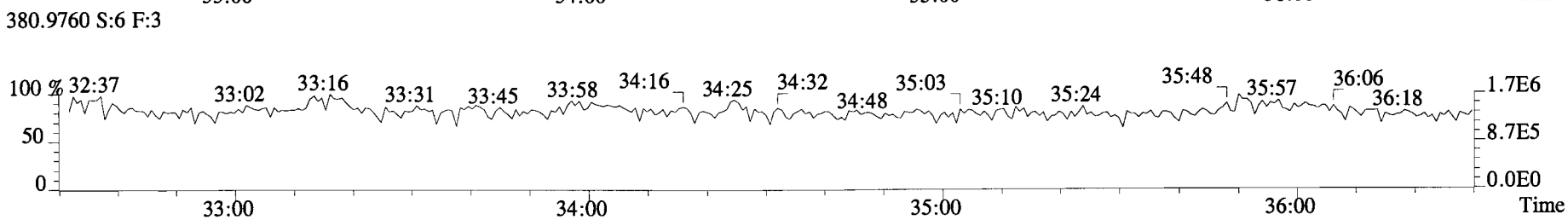
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



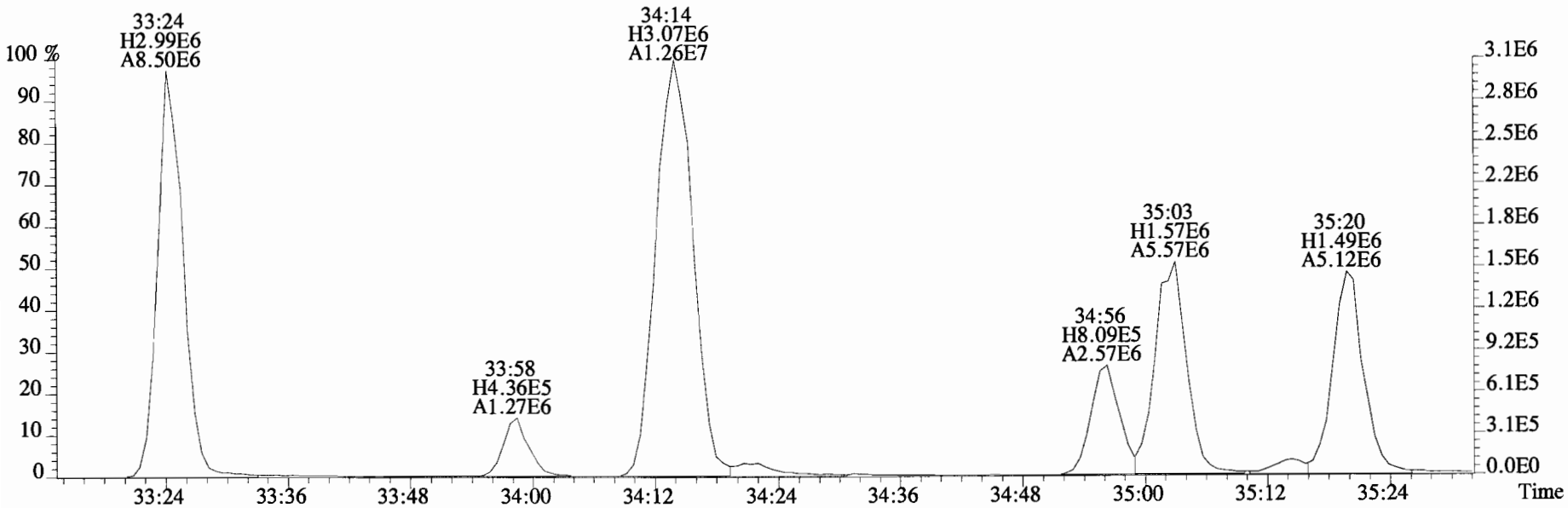
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



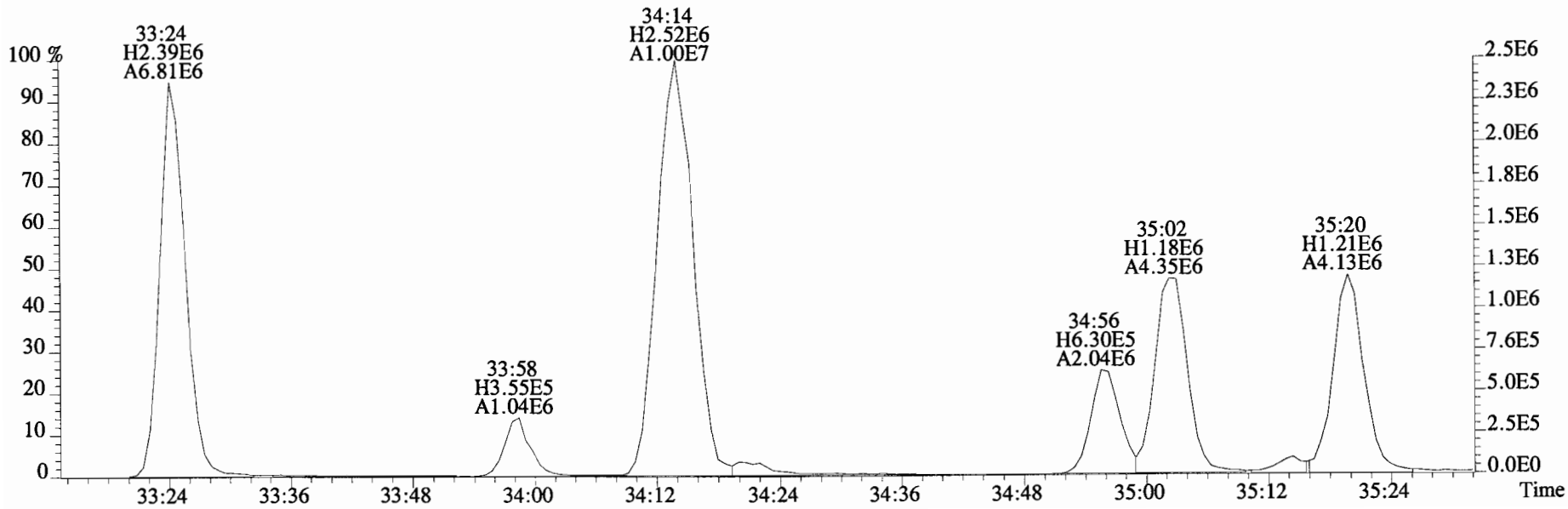
380.9760 S:6 F:3



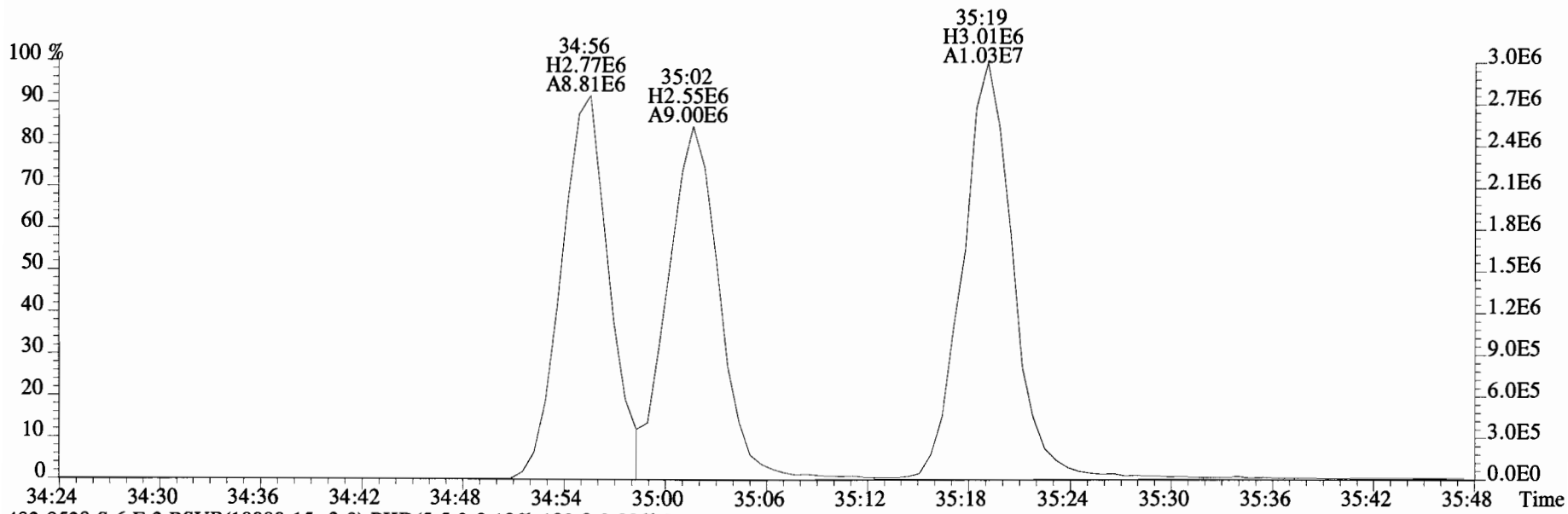
File:141226D2 #1-386 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



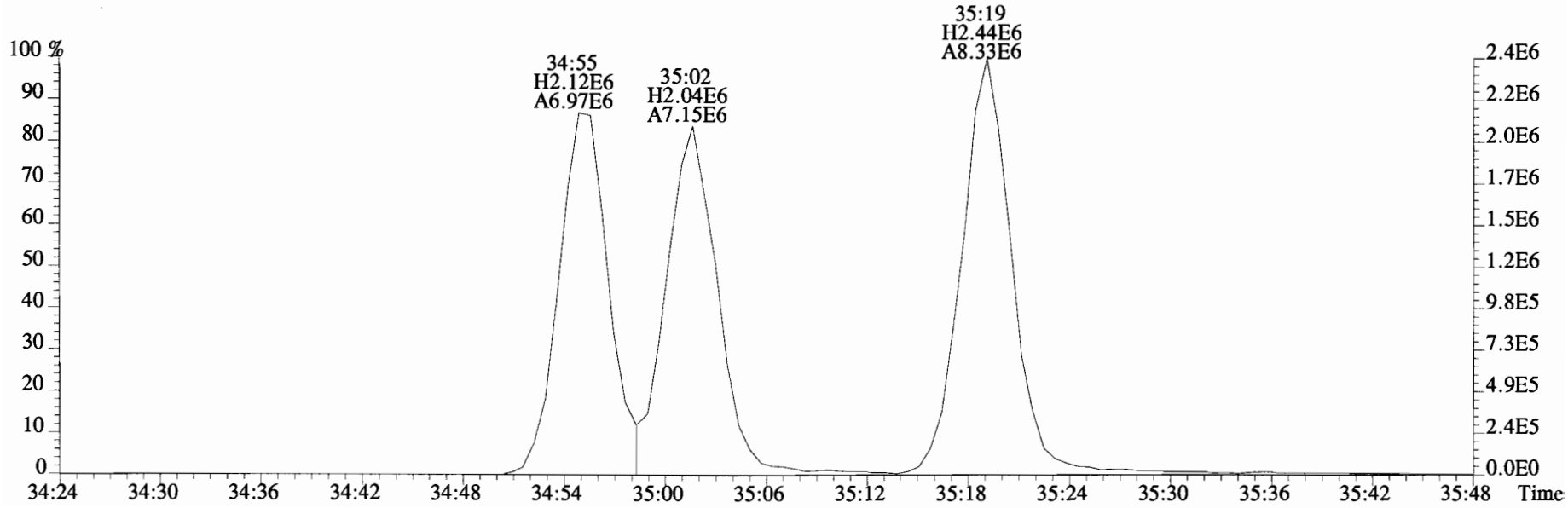
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



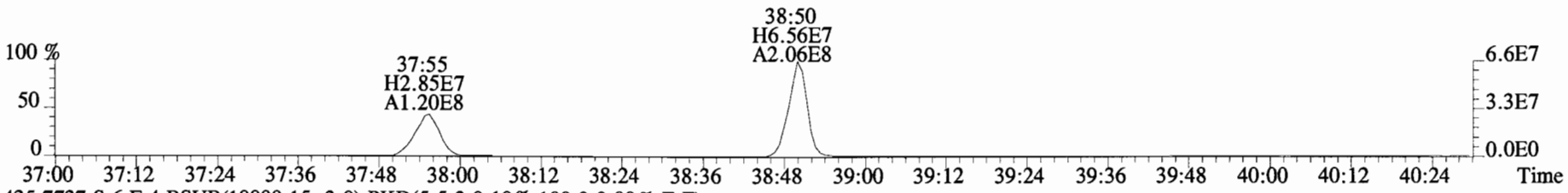
File:141226D2 #1-386 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



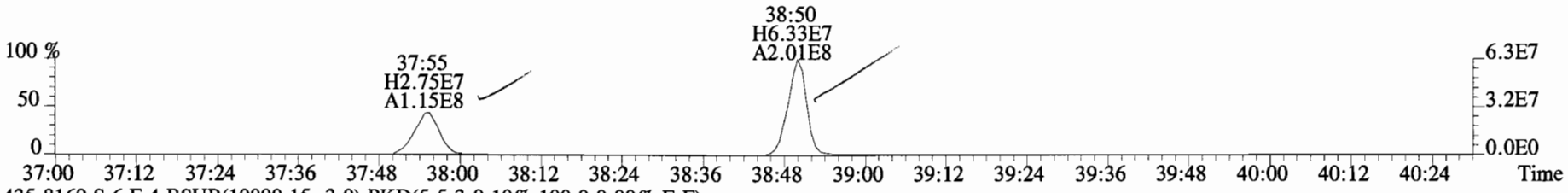
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



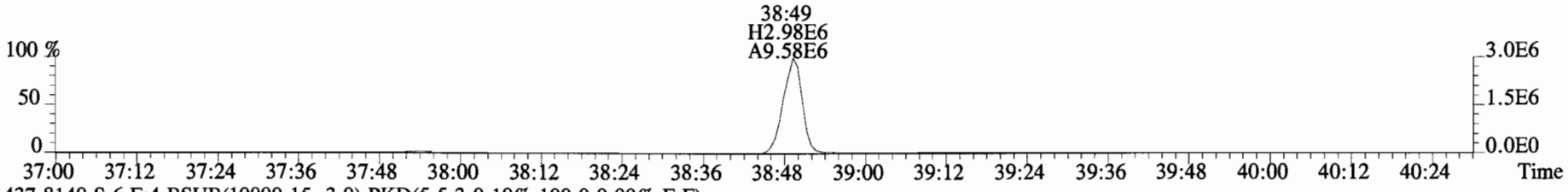
File:141226D2 #1-325 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



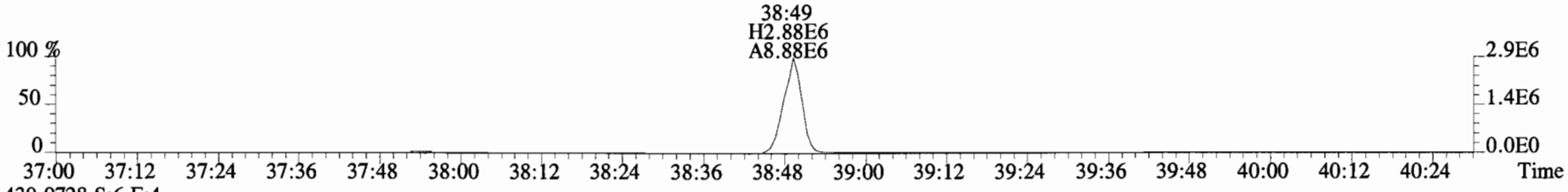
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



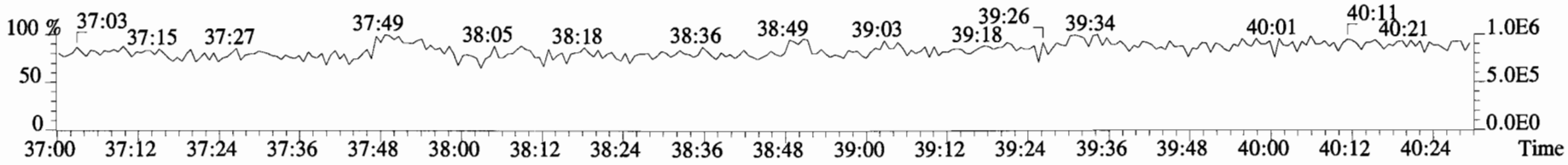
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



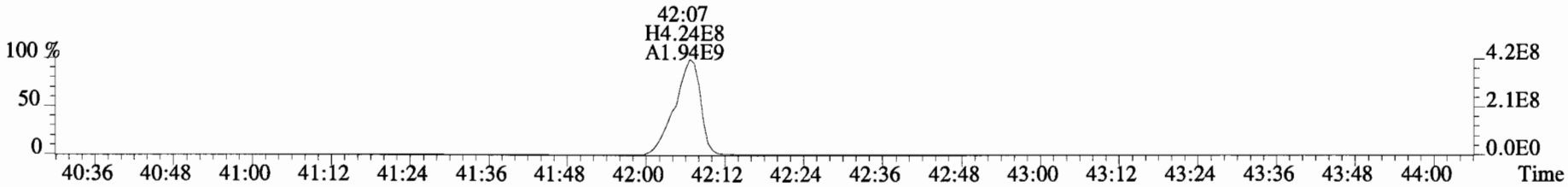
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



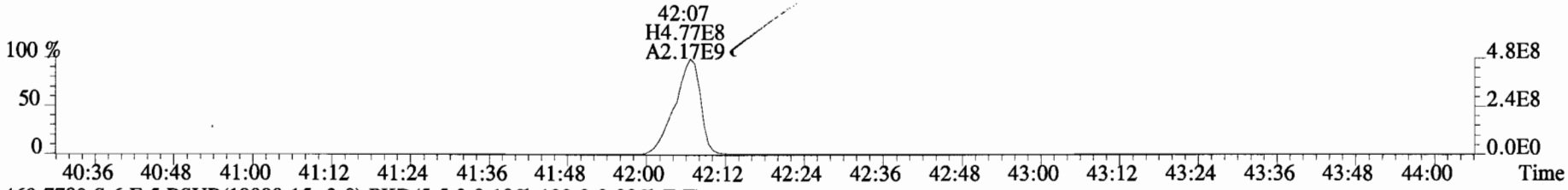
430.9728 S:6 F:4



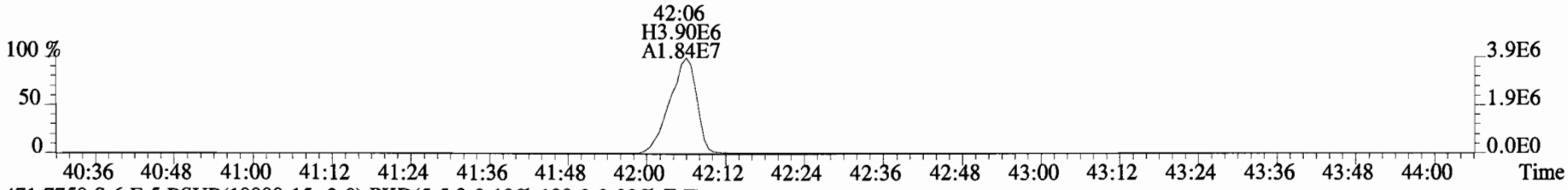
File:141226D2 #1-389 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



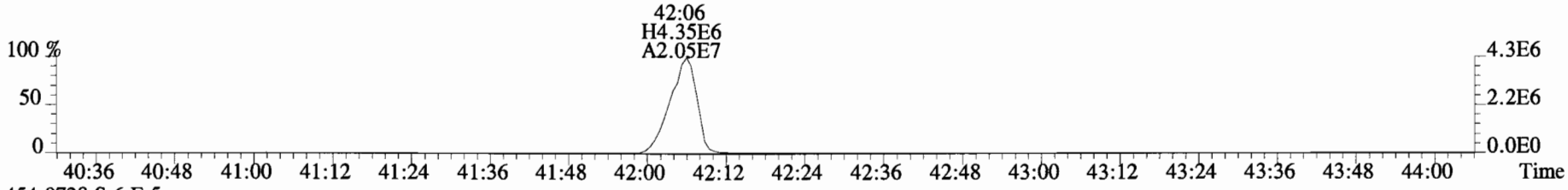
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



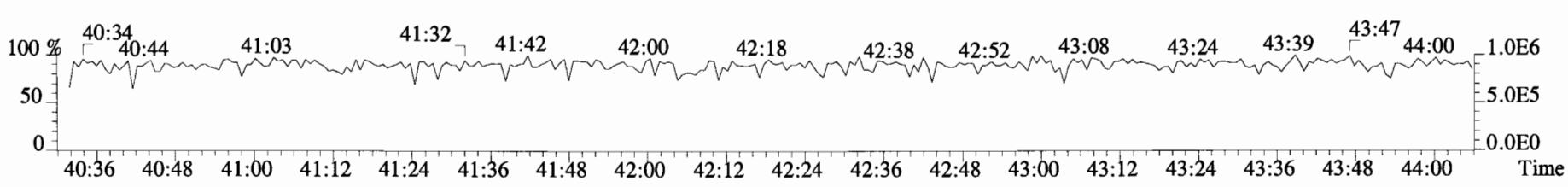
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

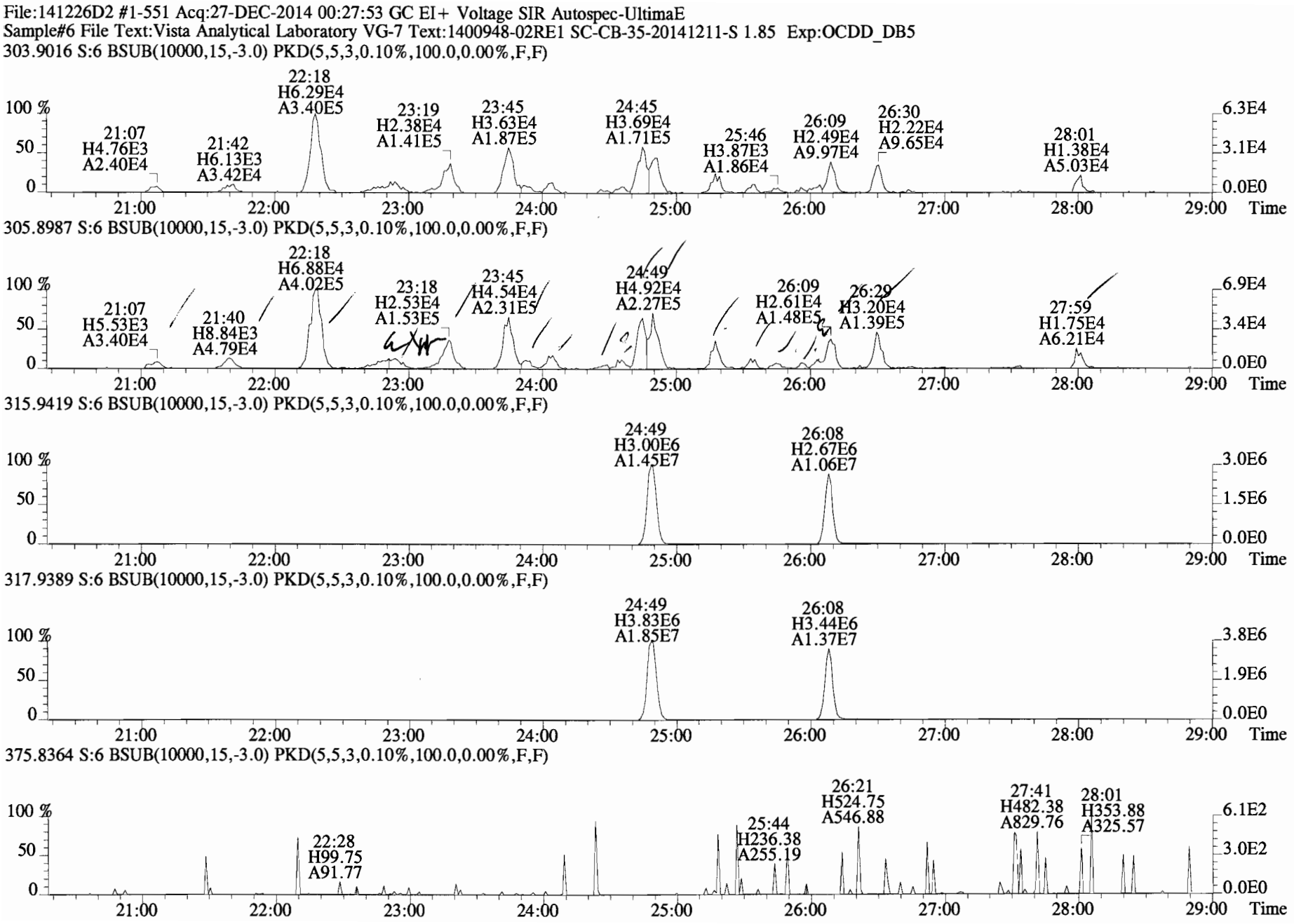


471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

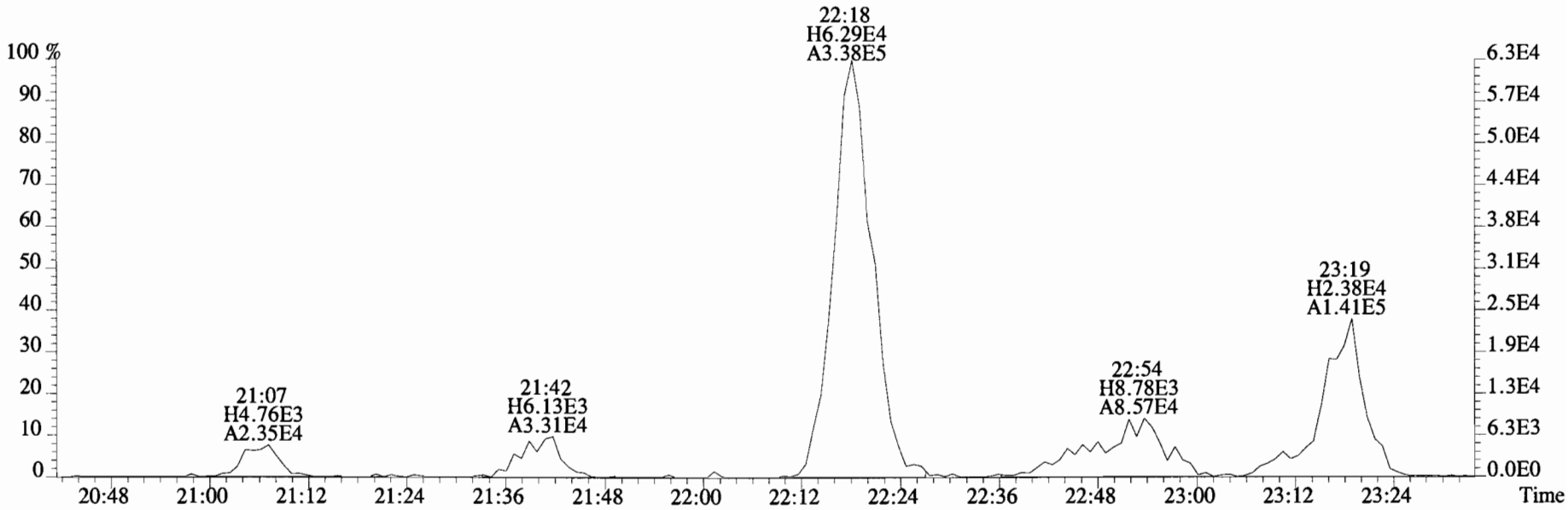


454.9728 S:6 F:5

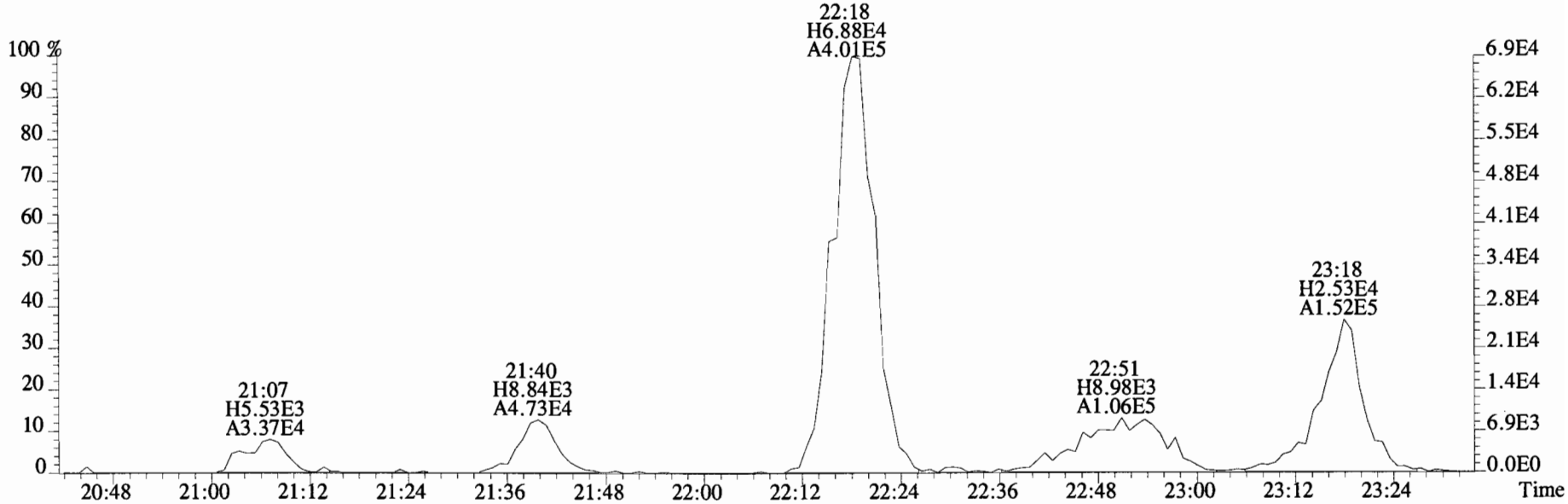



File:141226D2 #1-551 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:07 H4.76E3 A2.40E4
21:42 H6.13E3 A3.42E4
22:18 H6.29E4 A3.40E5
23:19 H2.38E4 A1.41E5
23:45 H3.63E4 A1.87E5
24:45 H3.69E4 A1.71E5
25:46 H3.87E3 A1.86E4
26:09 H2.49E4 A9.97E4
26:30 H2.22E4 A9.65E4
28:01 H1.38E4 A5.03E4
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:07 H5.53E3 A3.40E4
21:40 H8.84E3 A4.79E4
22:18 H6.88E4 A4.02E5
23:18 H2.53E4 A1.53E5
23:45 H4.54E4 A2.31E5
24:49 H4.92E4 A2.27E5
26:09 H2.61E4 A1.48E5
26:29 H3.20E4 A1.39E5
27:59 H1.75E4 A6.21E4
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:49 H3.00E6 A1.45E7
26:08 H2.67E6 A1.06E7
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:49 H3.83E6 A1.85E7
26:08 H3.44E6 A1.37E7
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
22:28 H99.75 A91.77
25:44 H236.38 A255.19
26:21 H524.75 A546.88
27:41 H482.38 A829.76
28:01 H353.88 A325.57
100 %
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
28:00
29:00
Time
6.3E4
3.1E4
0.0E0
6.9E4
3.4E4
3.0E6
1.5E6
3.8E6
1.9E6
6.1E2
3.0E2

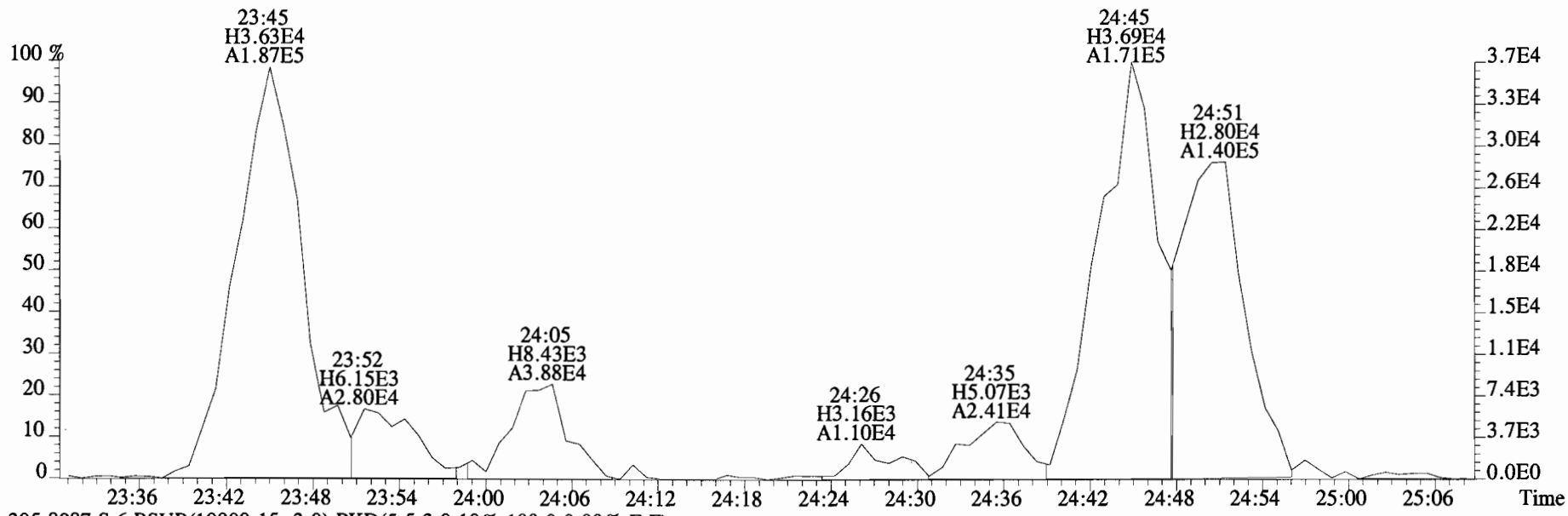
File:141226D2 #1-551 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



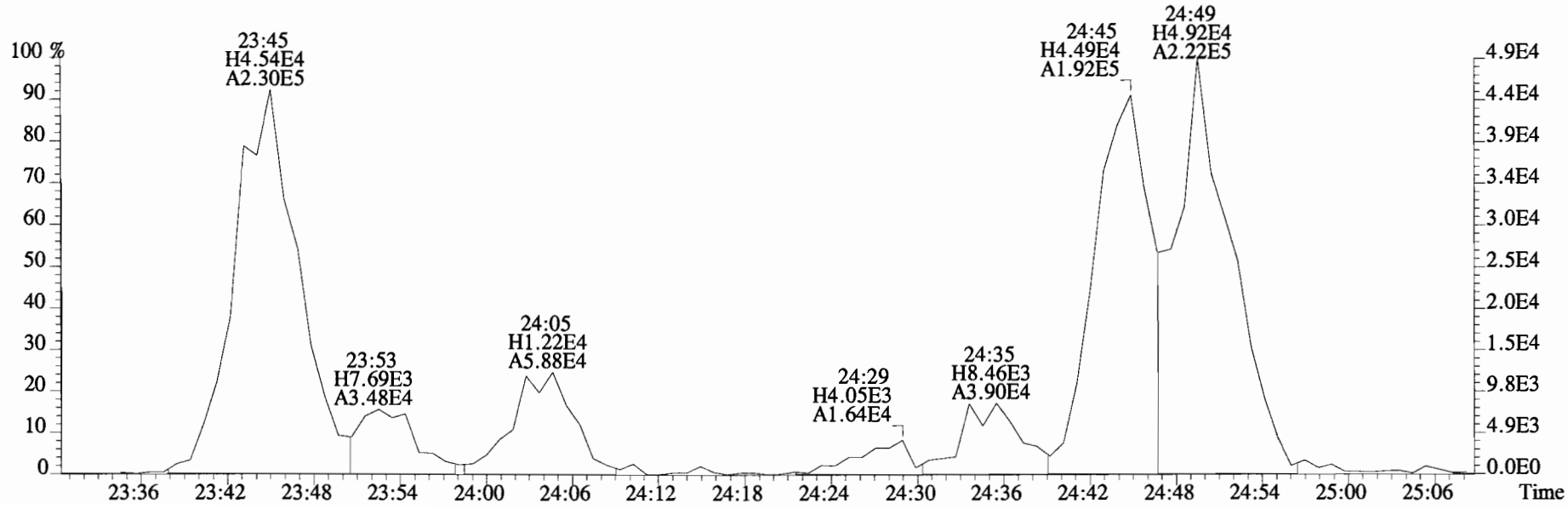
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

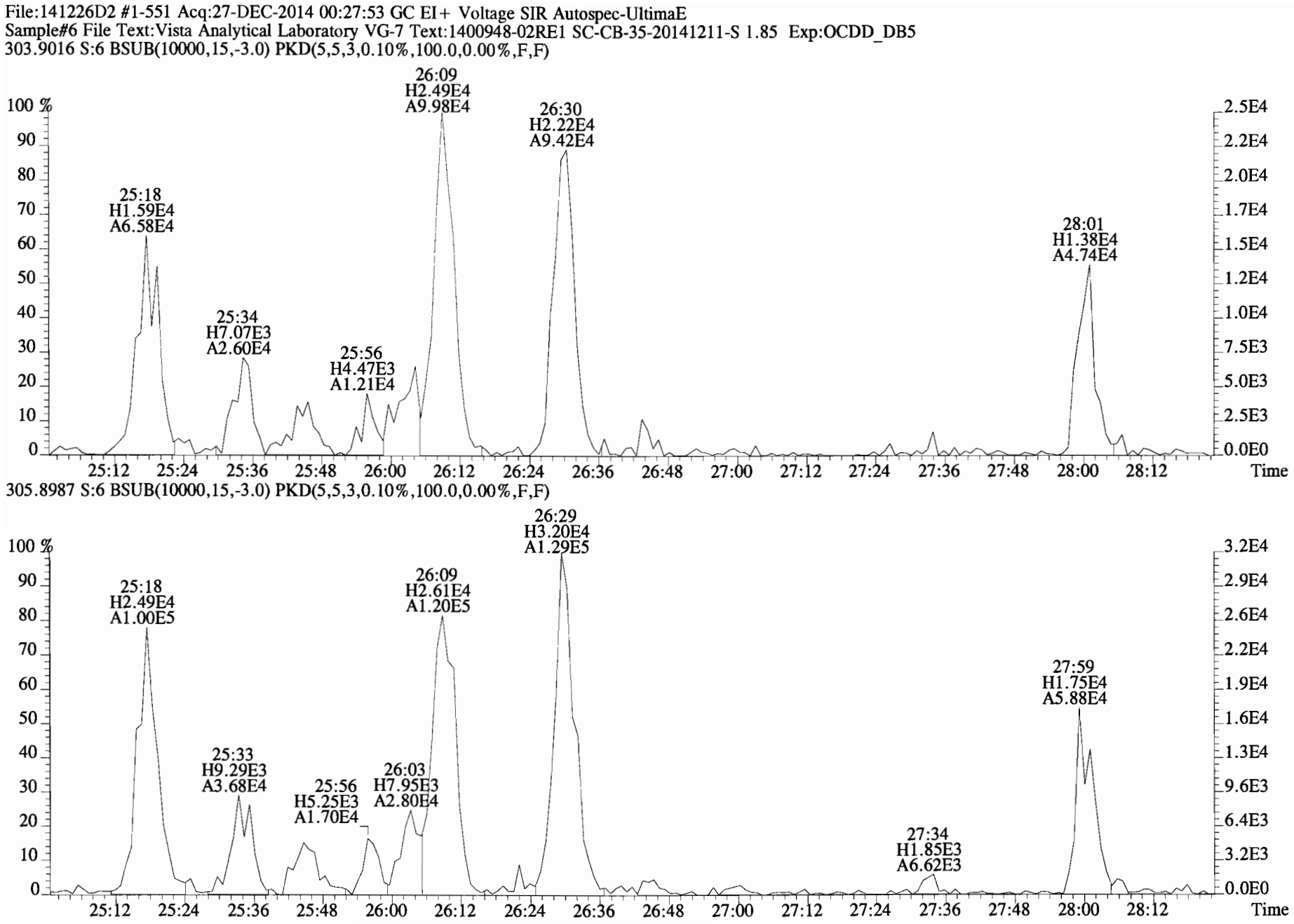


File:141226D2 #1-551 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

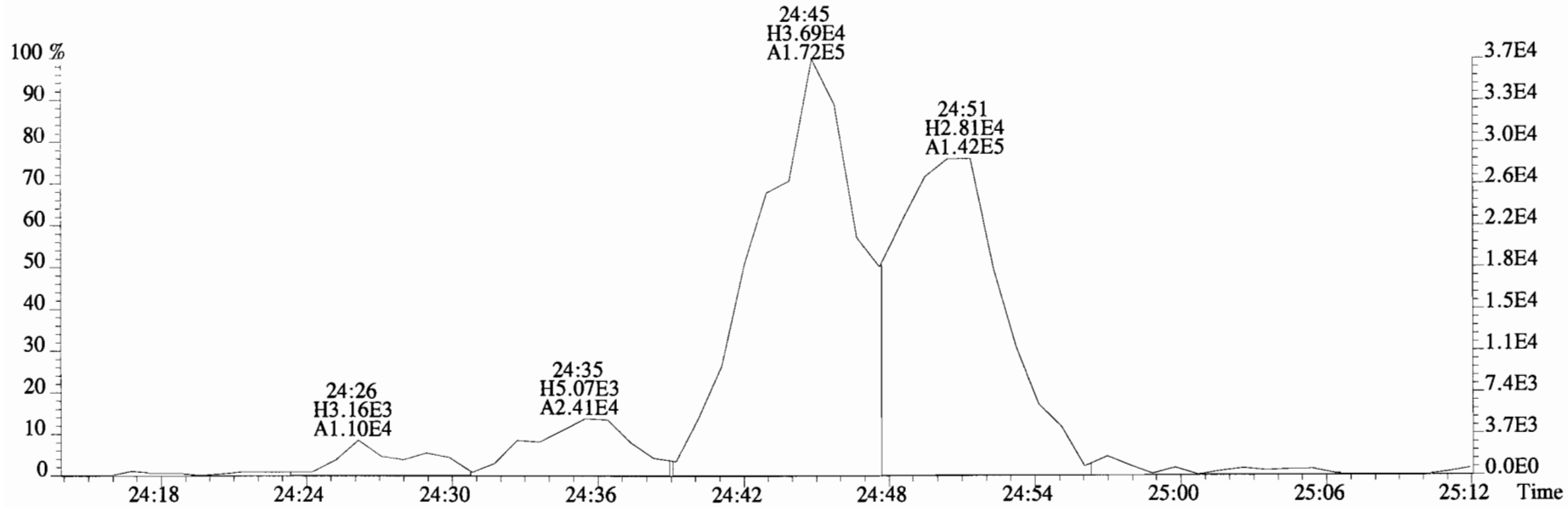


305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

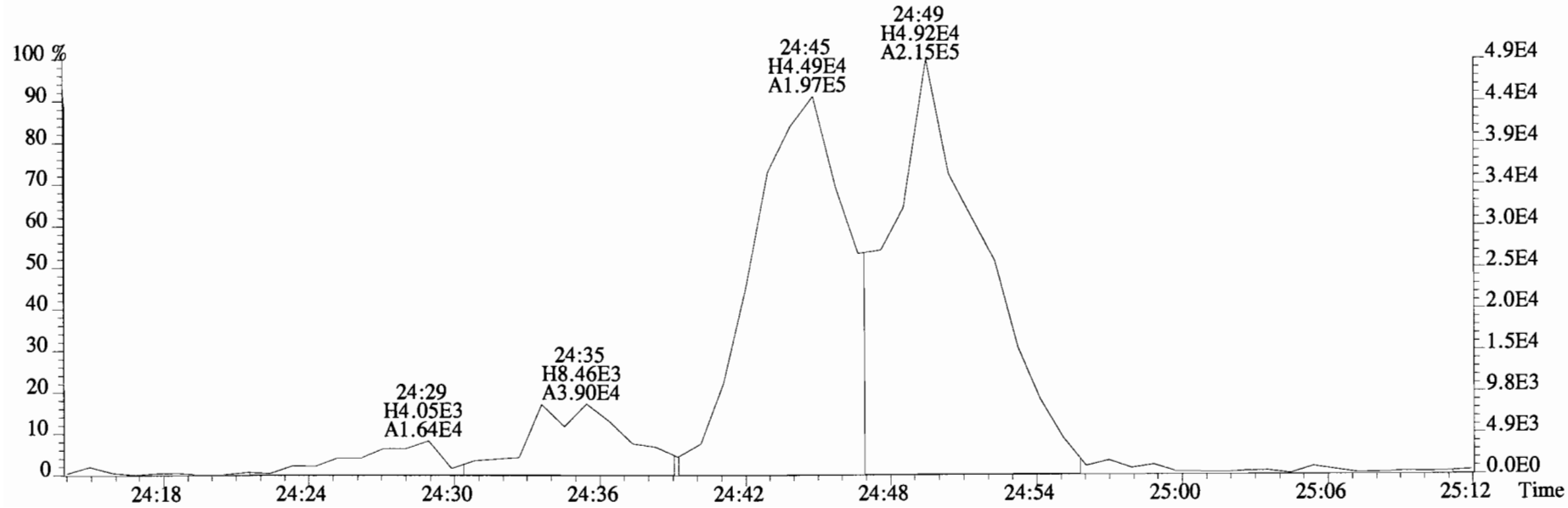



File:141226D2 #1-551 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:09 H2.49E4 A9.98E4
26:30 H2.22E4 A9.42E4
25:18 H1.59E4 A6.58E4
28:01 H1.38E4 A4.74E4
25:34 H7.07E3 A2.60E4
25:56 H4.47E3 A1.21E4
100 %
90
80
70
60
50
40
30
20
10
0
2.5E4
2.2E4
2.0E4
1.7E4
1.5E4
1.2E4
1.0E4
7.5E3
5.0E3
2.5E3
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:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:29 H3.20E4 A1.29E5
26:09 H2.61E4 A1.20E5
25:18 H2.49E4 A1.00E5
27:59 H1.75E4 A5.88E4
25:33 H9.29E3 A3.68E4
25:56 H5.25E3 A1.70E4
26:03 H7.95E3 A2.80E4
27:34 H1.85E3 A6.62E3
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
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

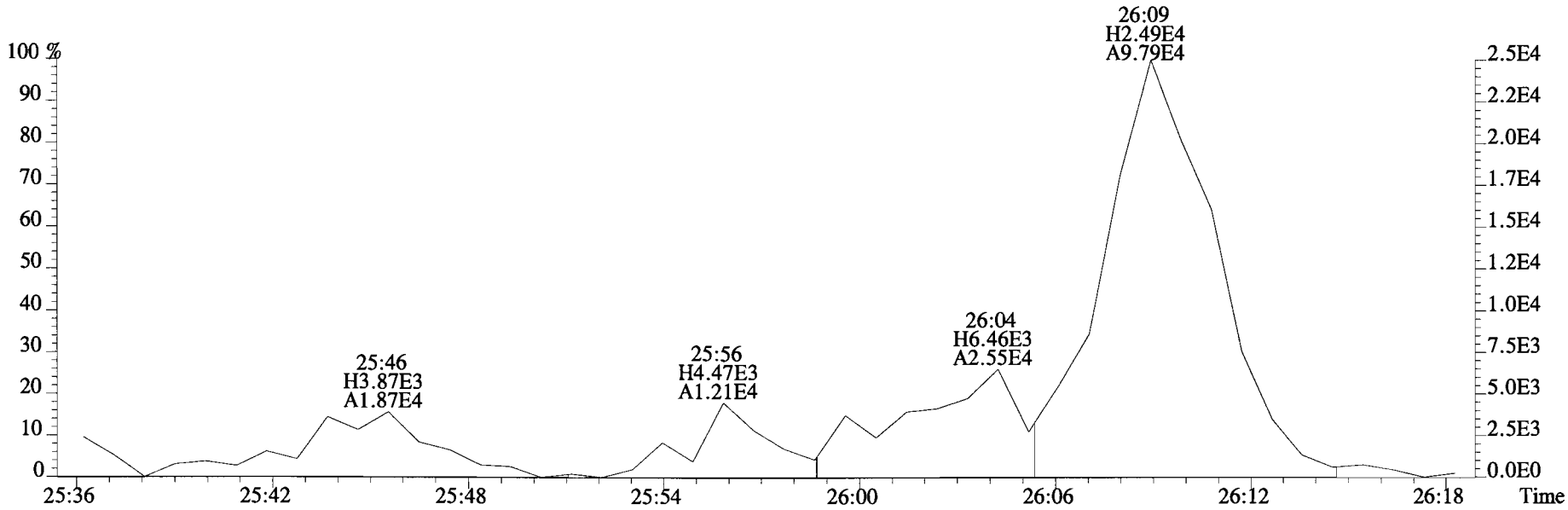
File:141226D2 #1-551 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



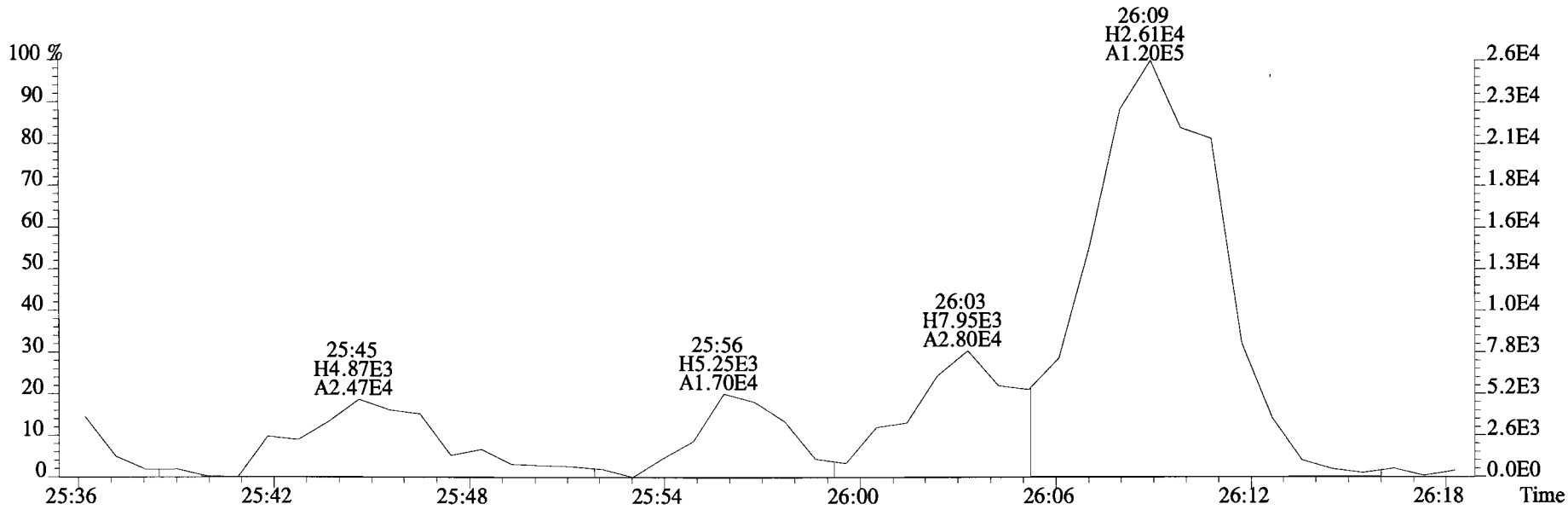
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



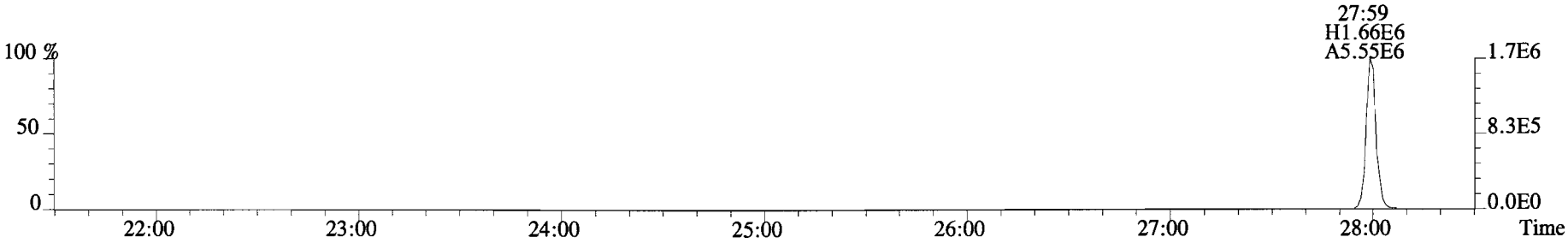
File:141226D2 #1-551 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



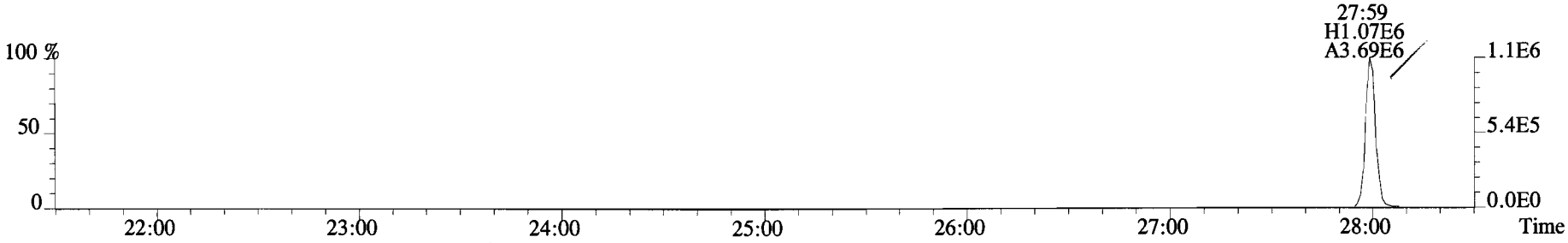
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



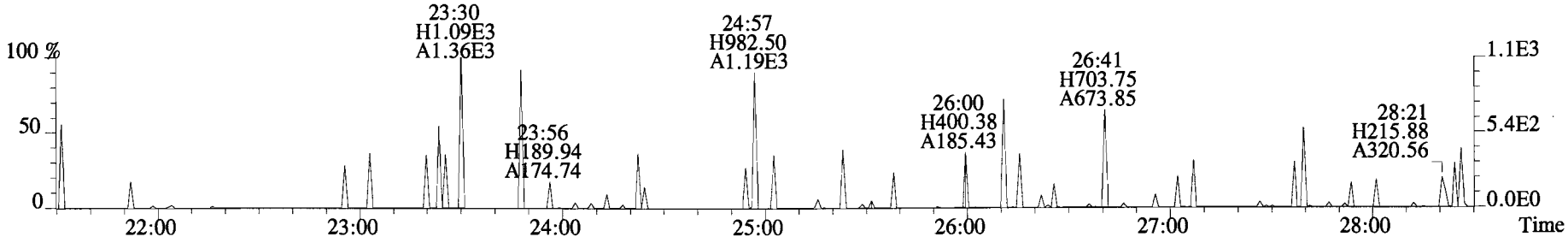
File:141226D2 #1-551 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



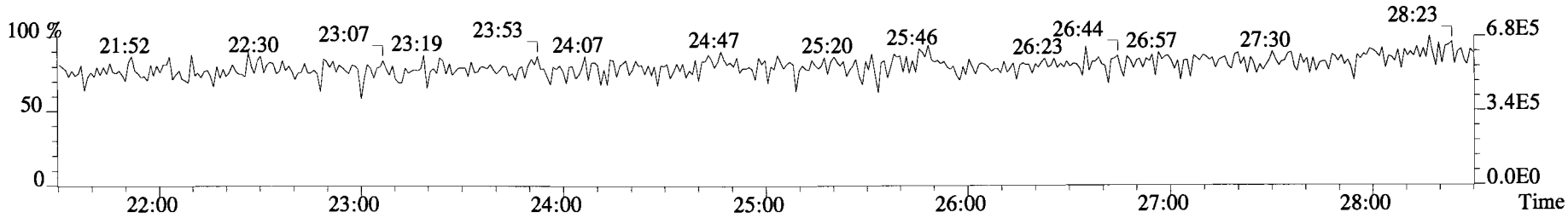
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



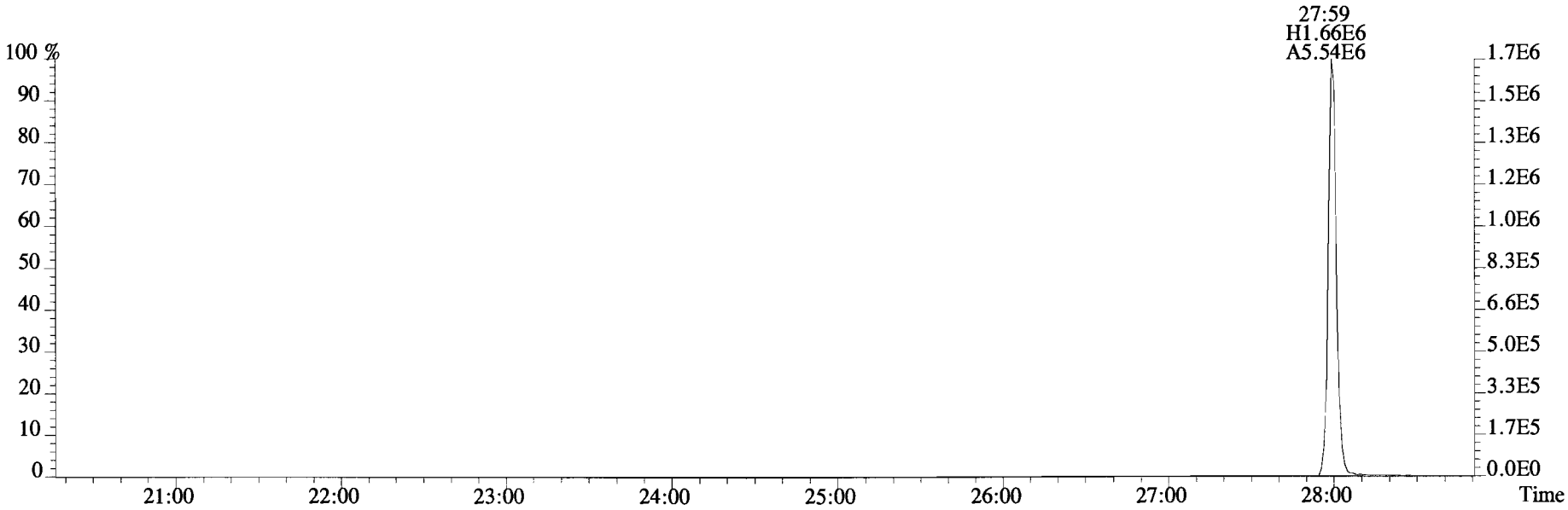
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



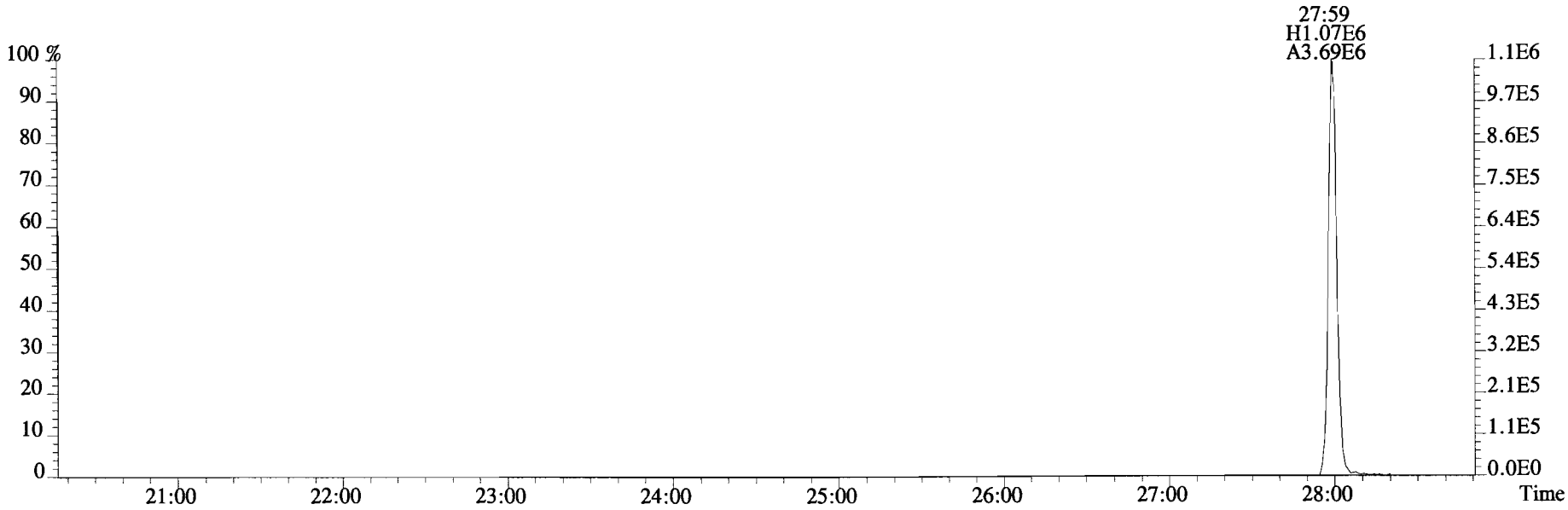
316.9824 S:6



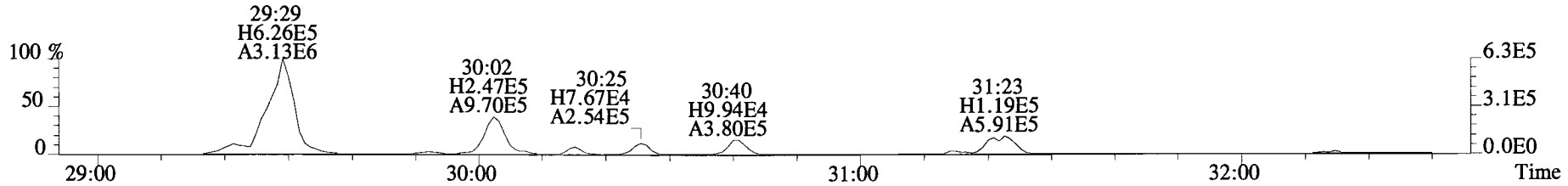
File:141226D2 #1-551 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



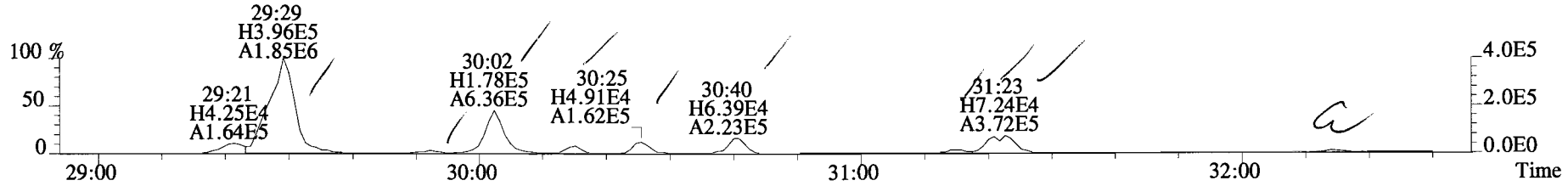
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



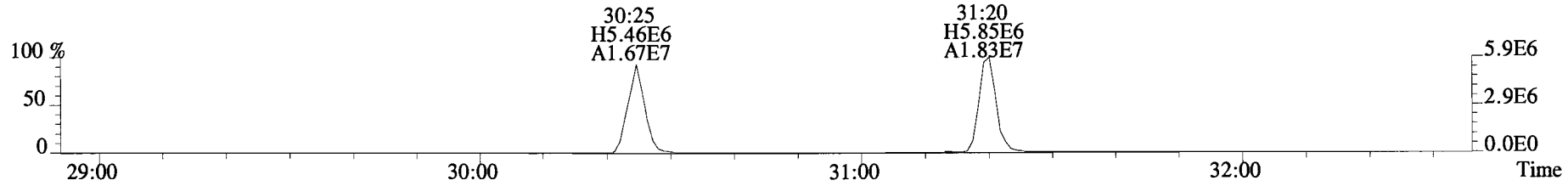
File:141226D2 #1-256 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



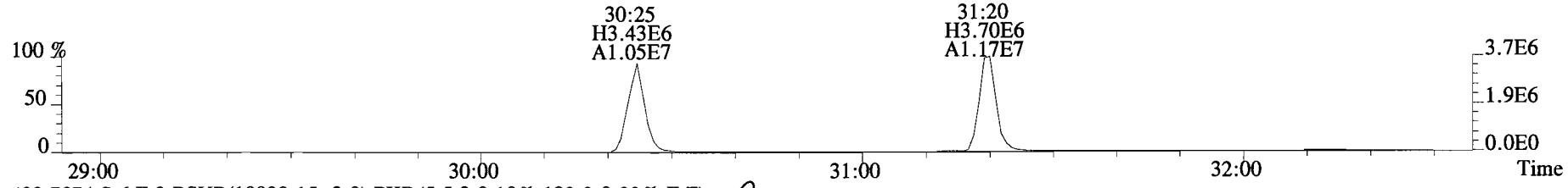
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



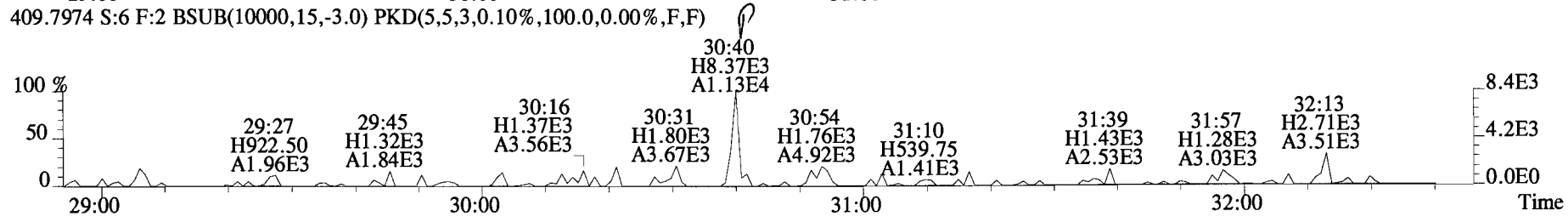
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



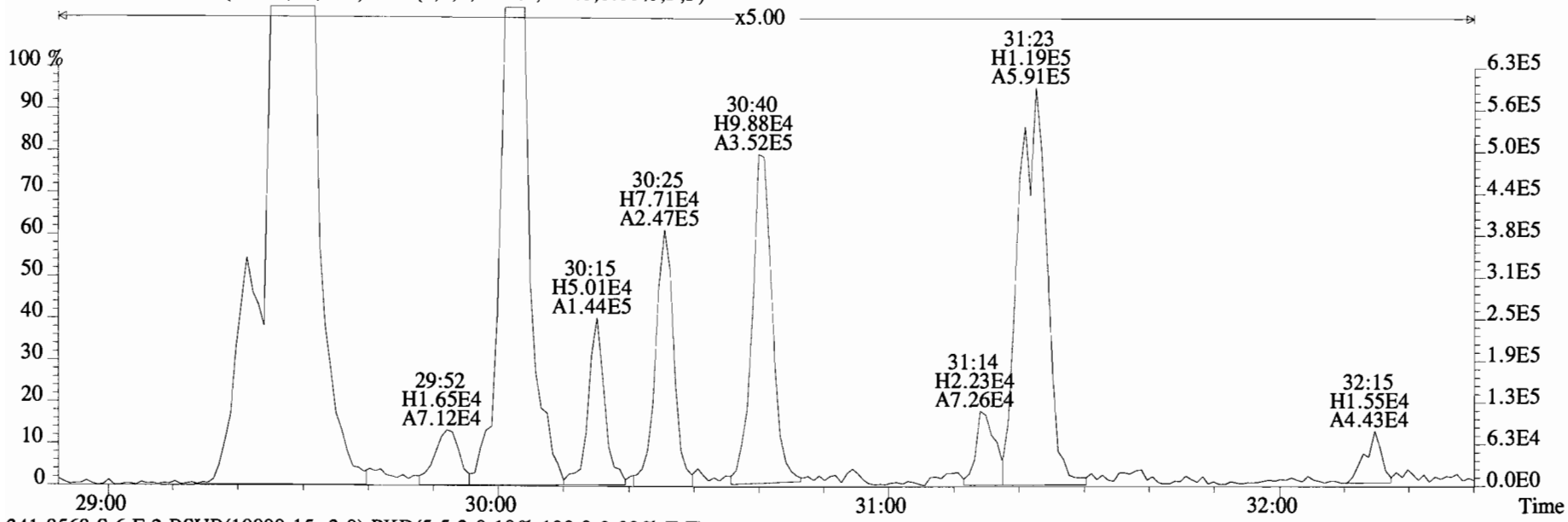
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



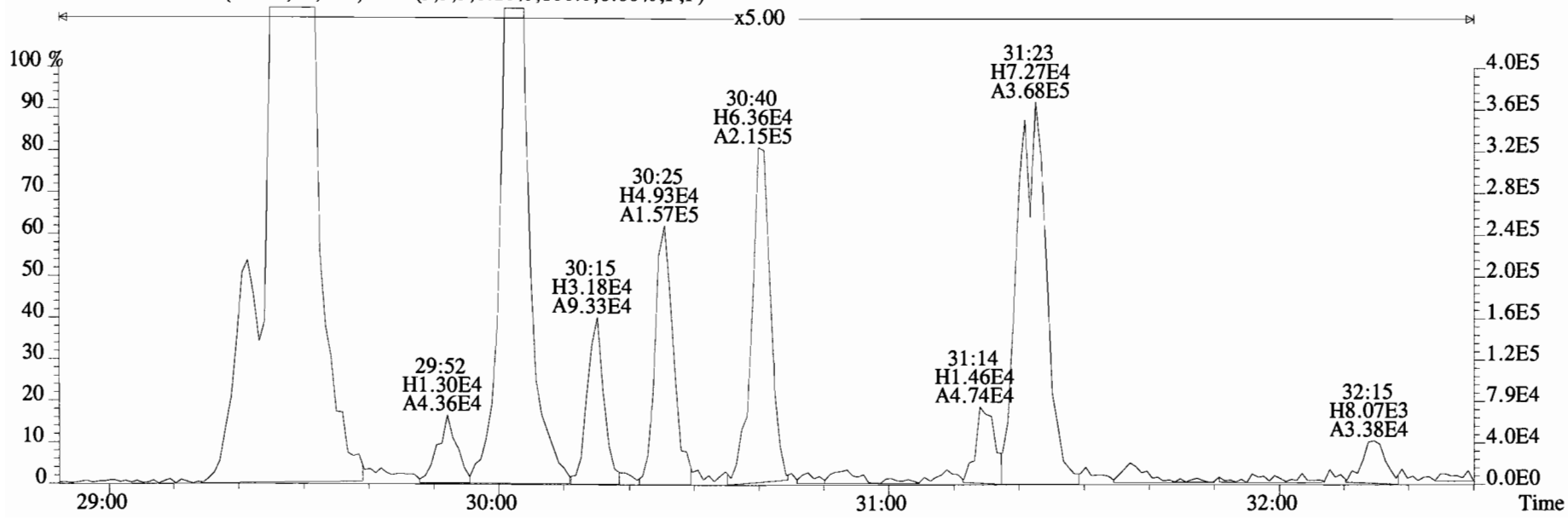
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



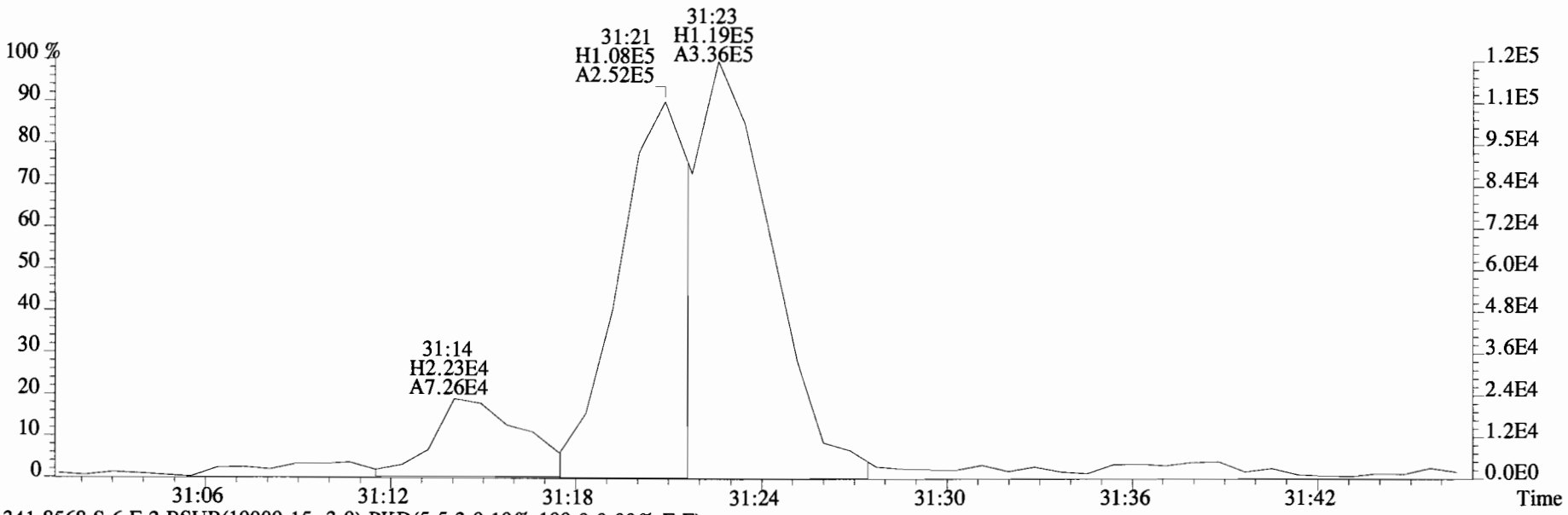
File:141226D2 #1-256 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



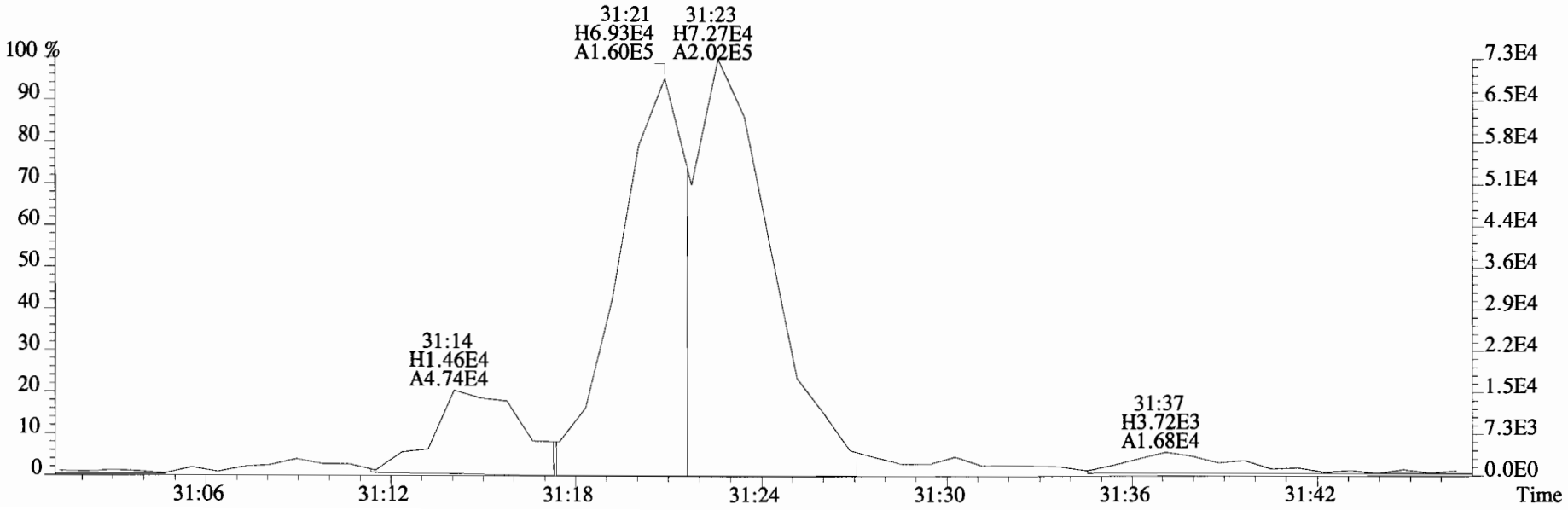
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141226D2 #1-256 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

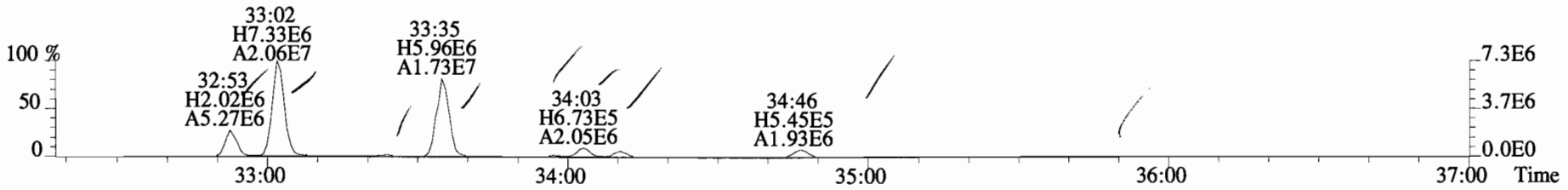


341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

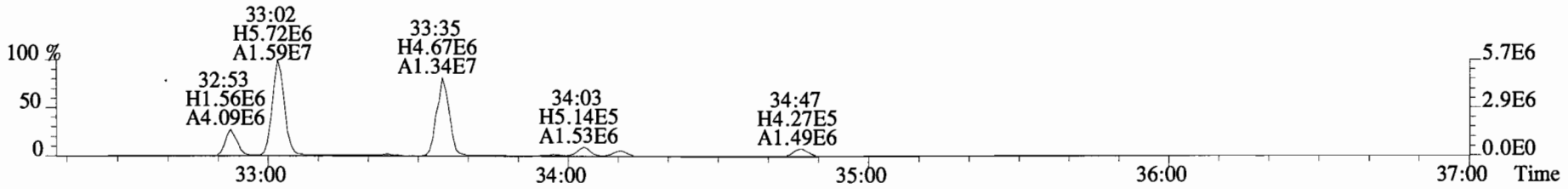


File:141226D2 #1-386 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5

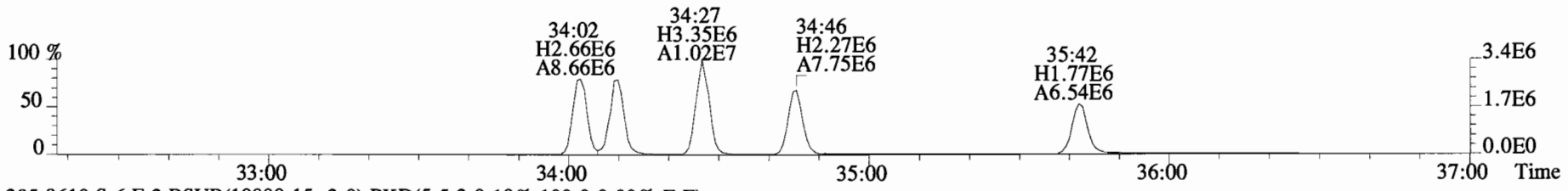
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



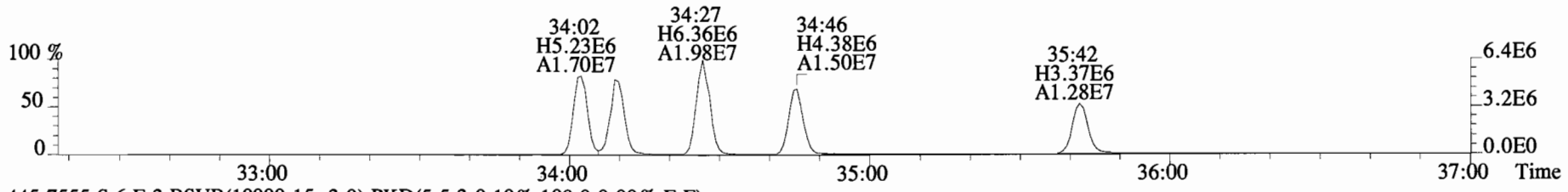
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



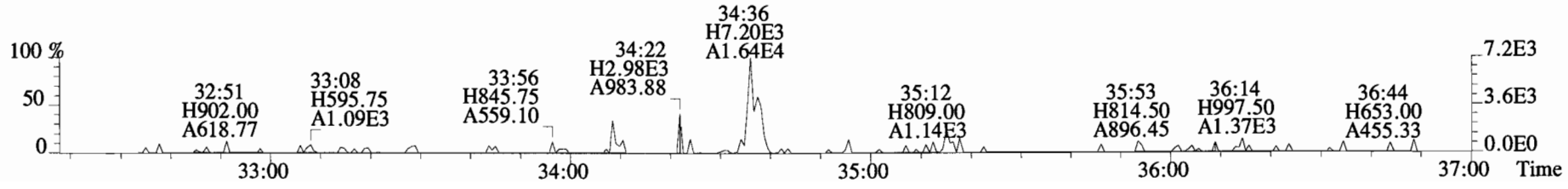
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



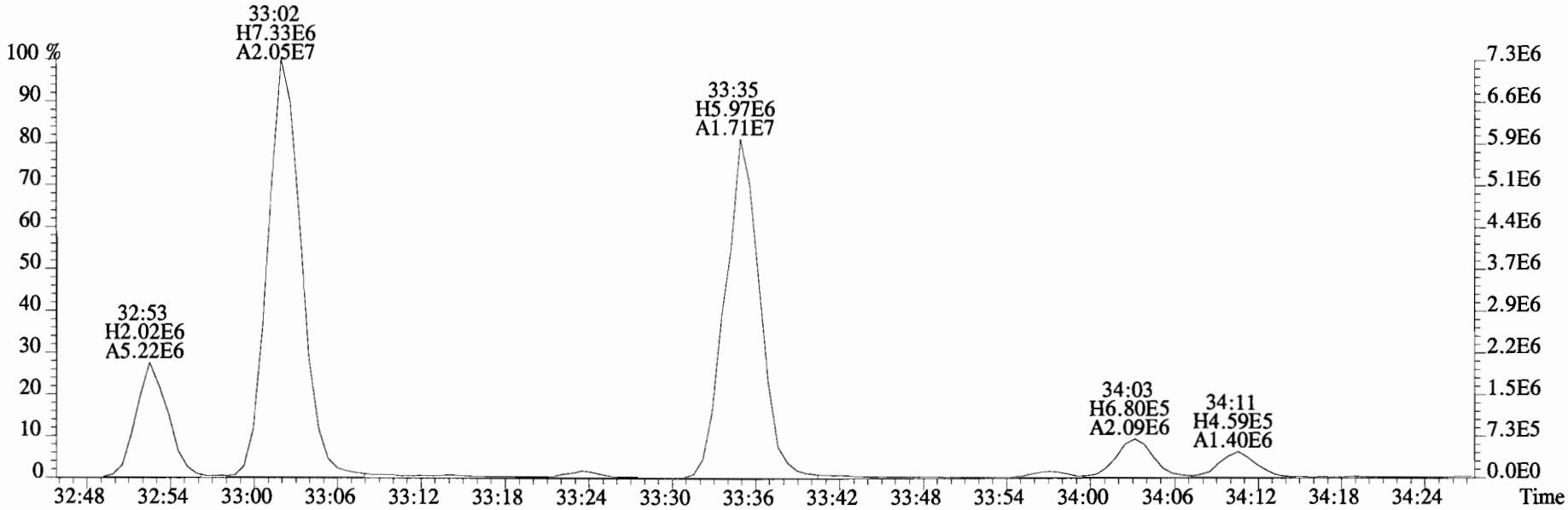
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



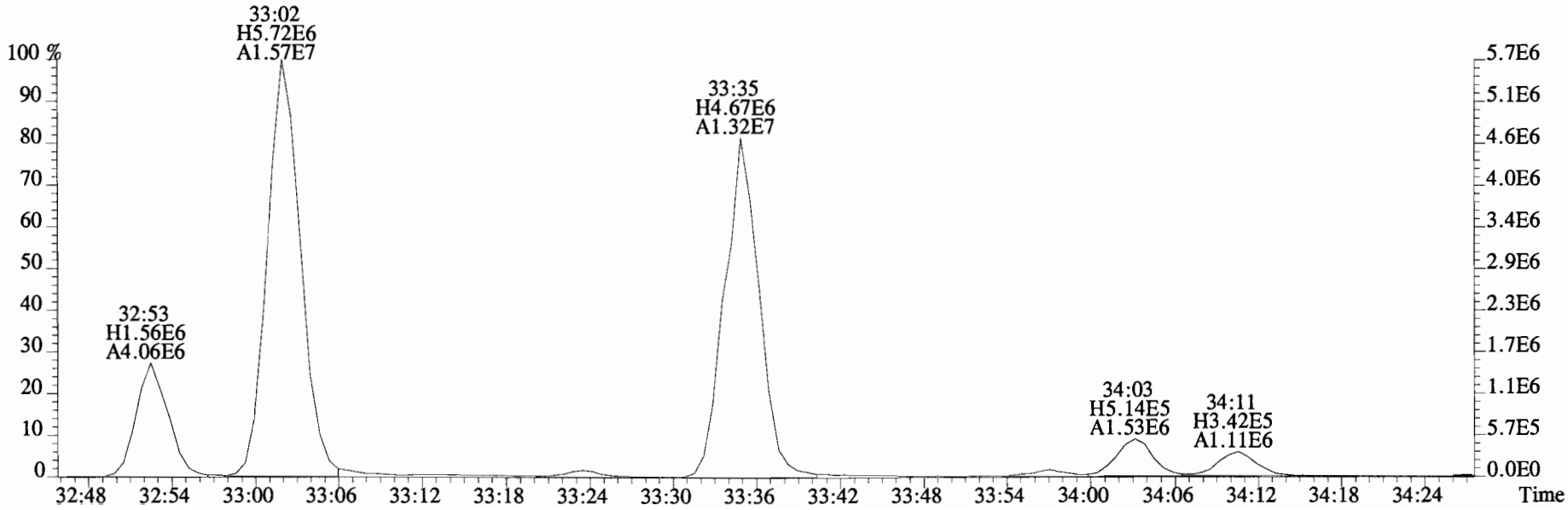
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



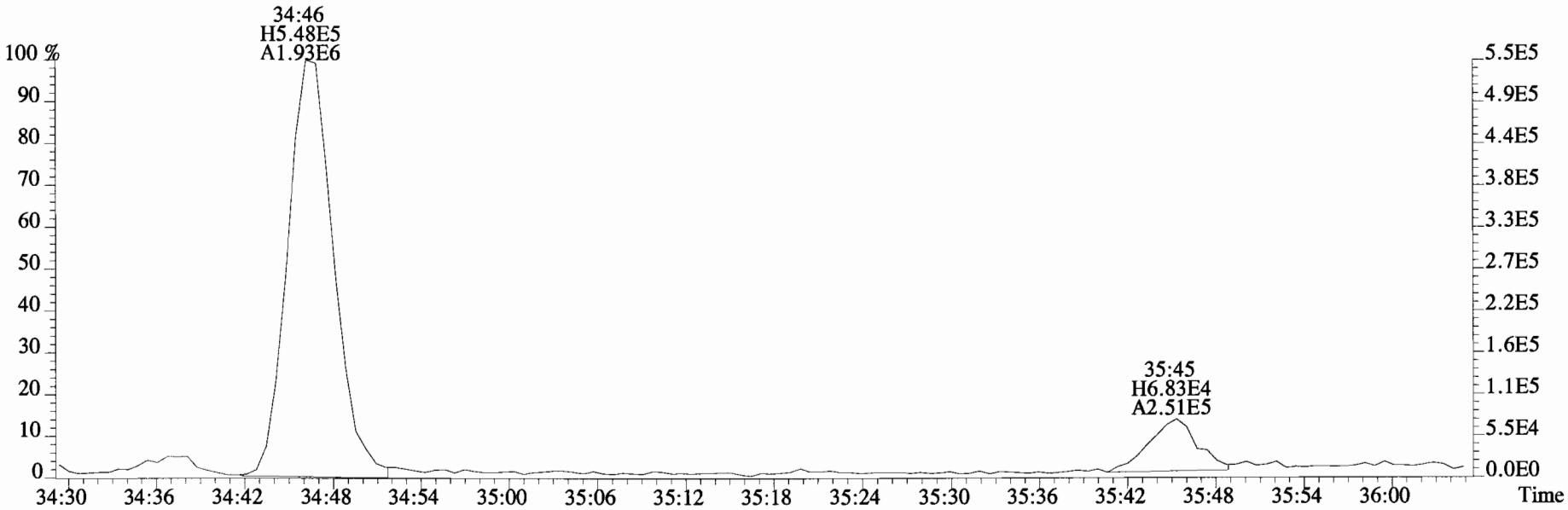
File:141226D2 #1-386 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



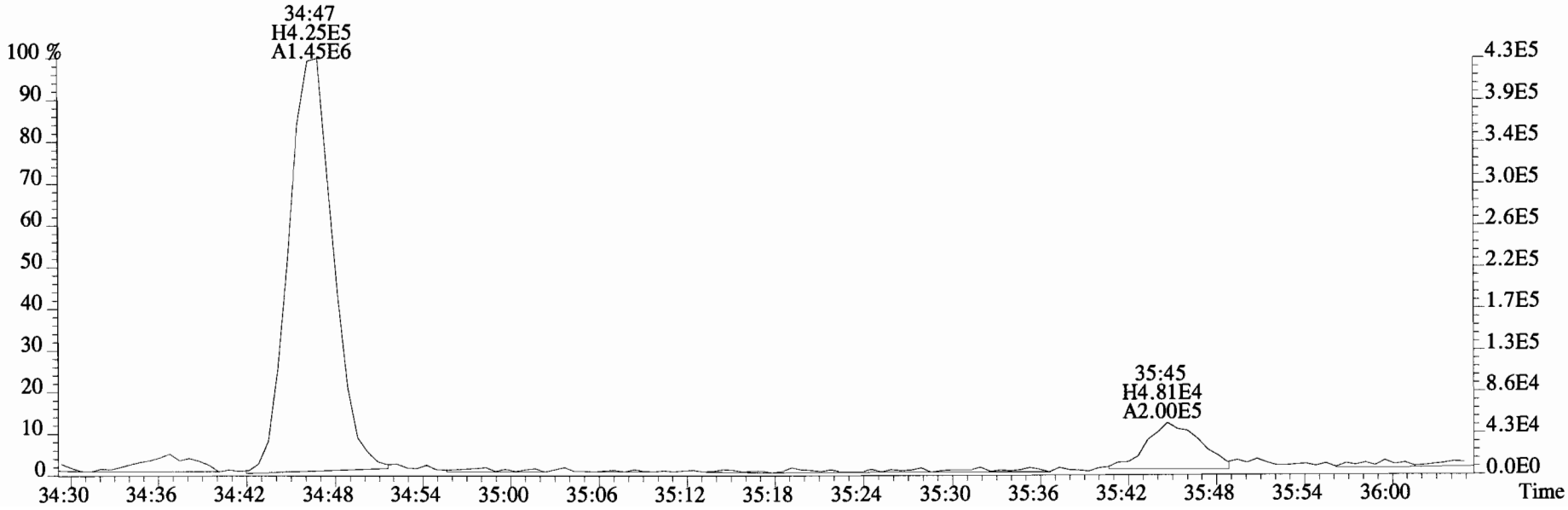
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



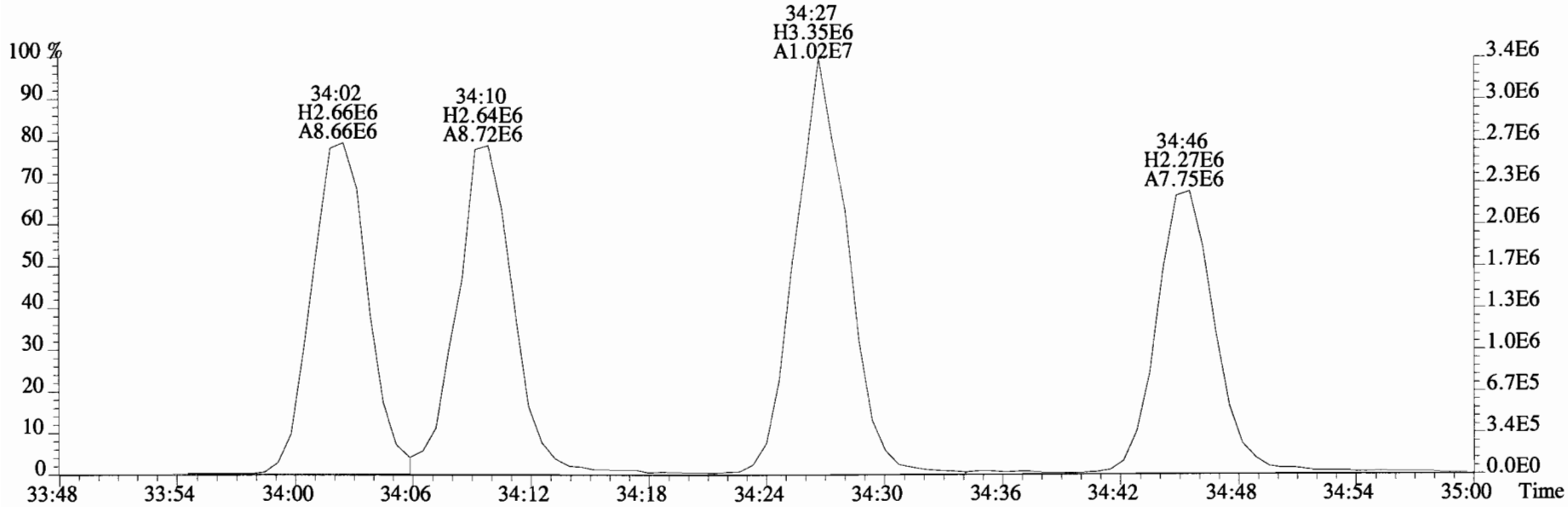
File:141226D2 #1-386 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



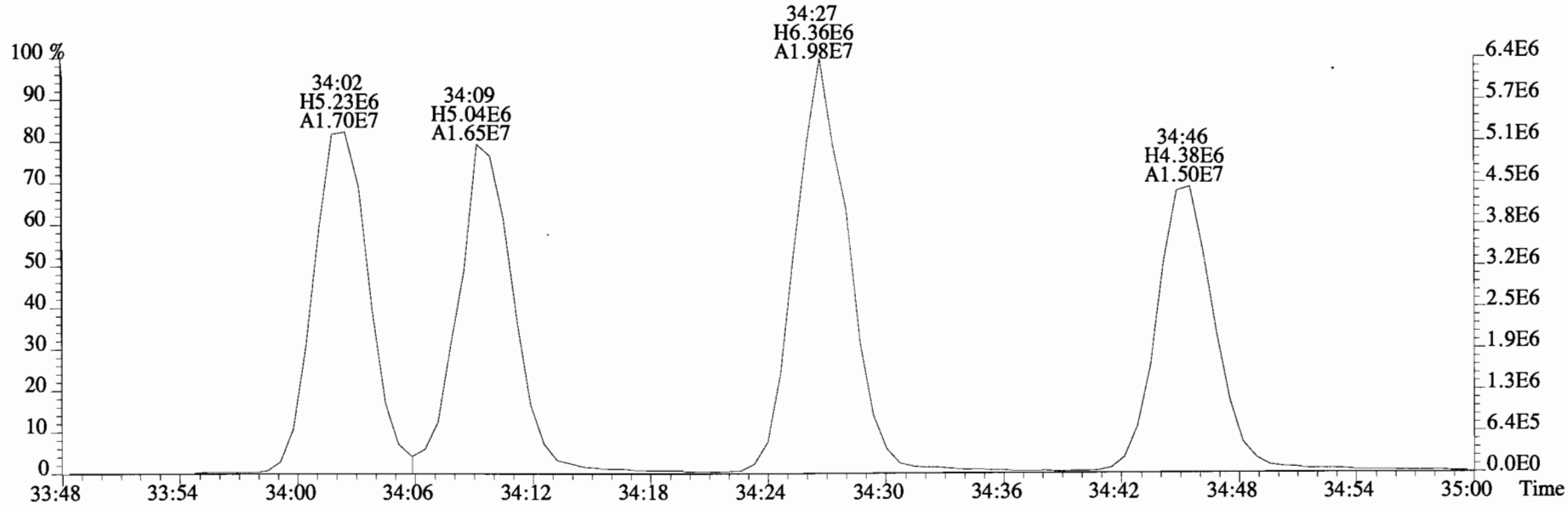
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



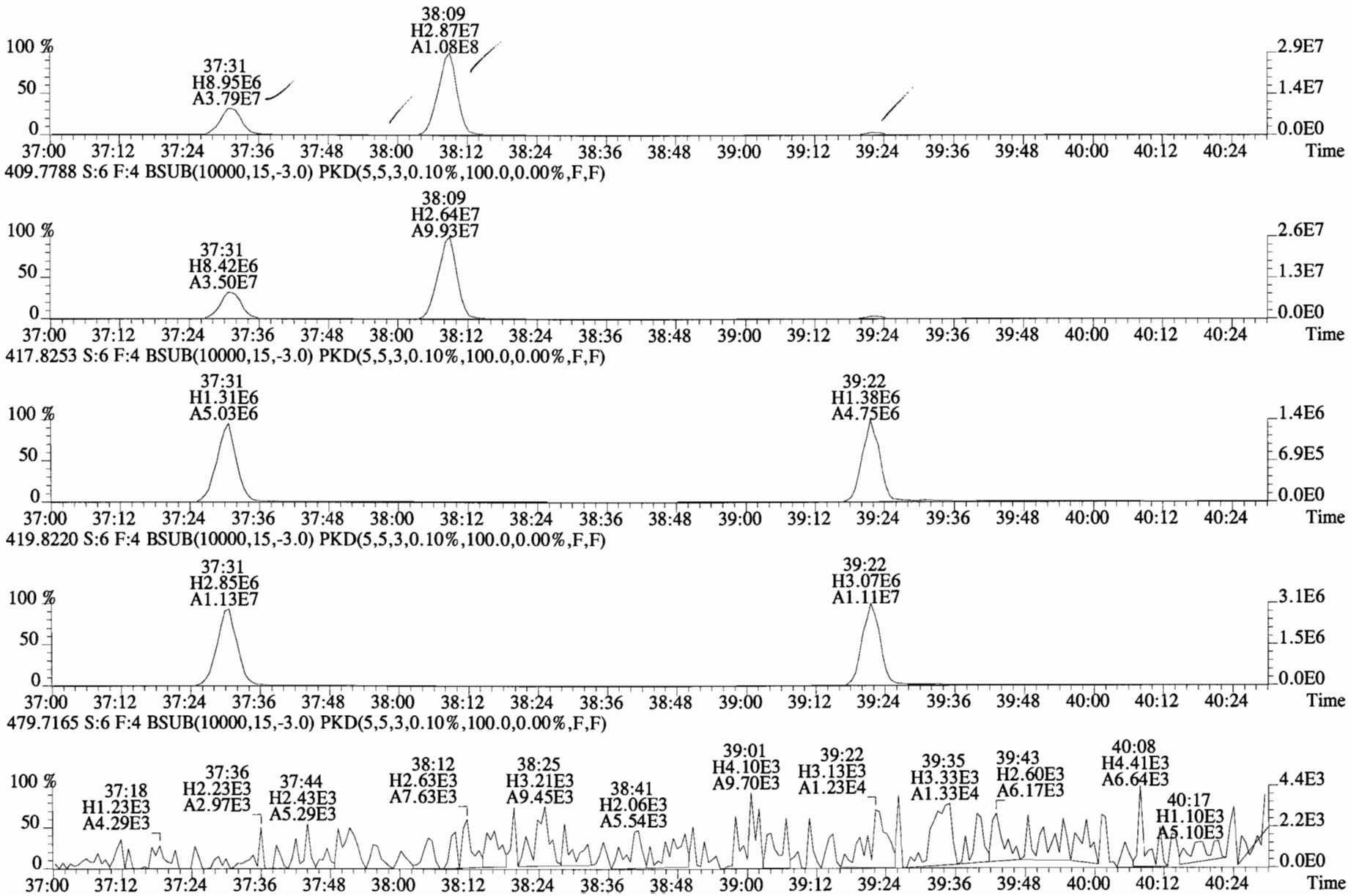
File:141226D2 #1-386 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



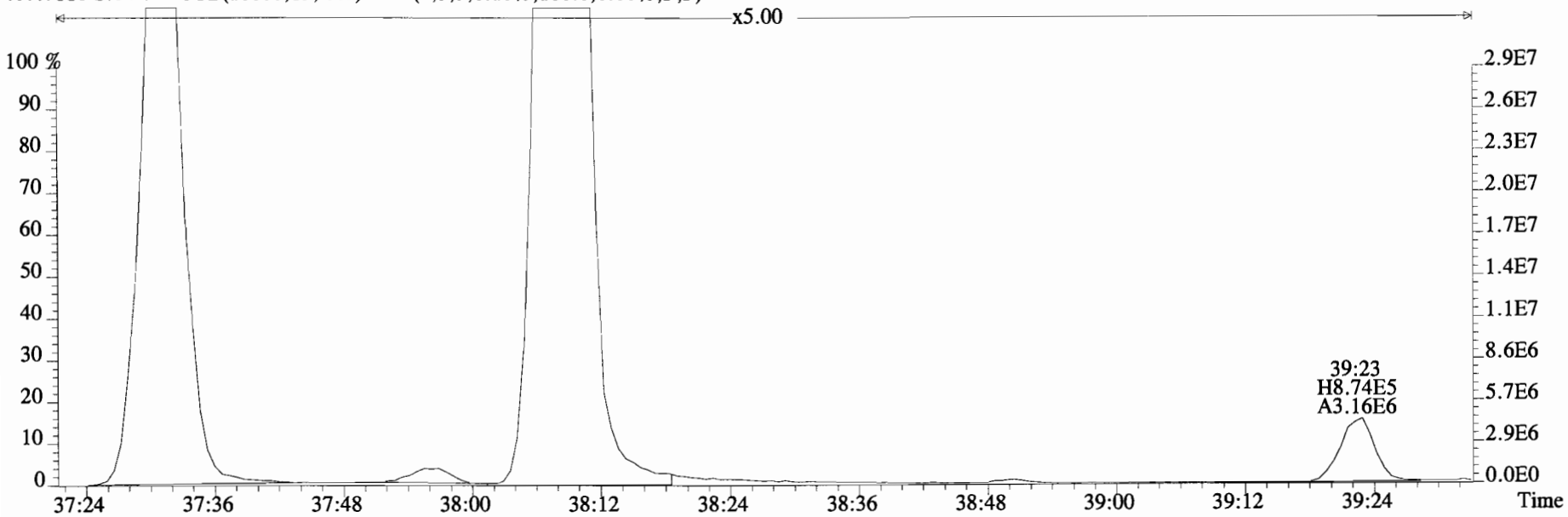
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



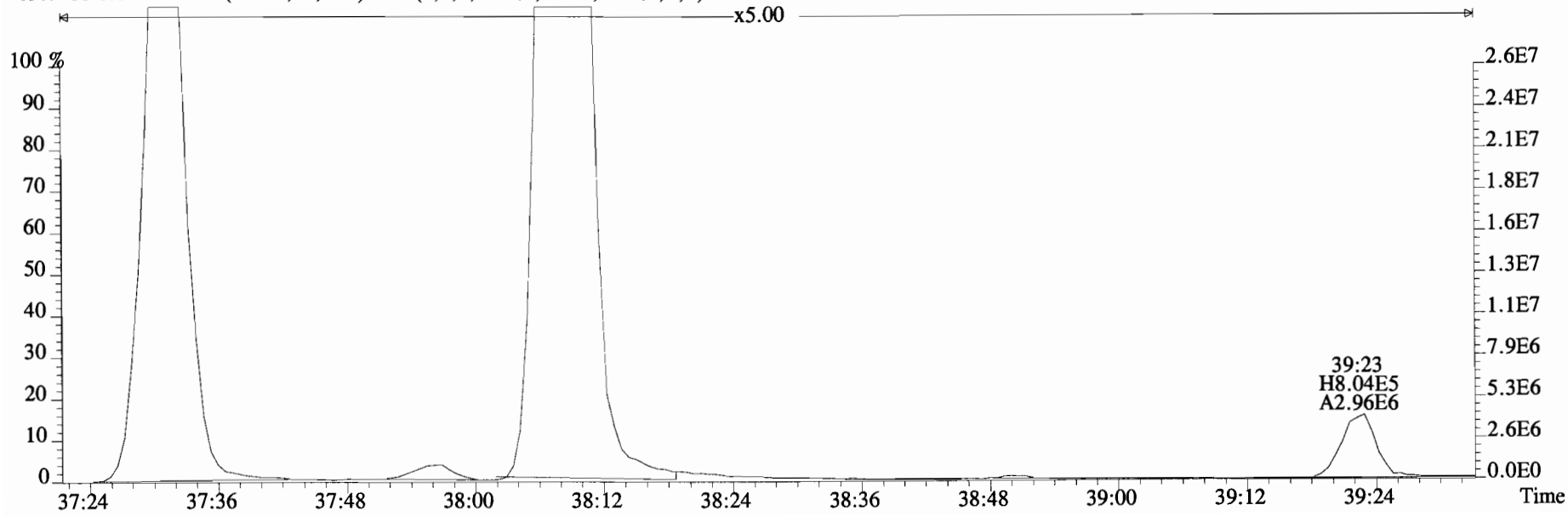
File:141226D2 #1-325 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5



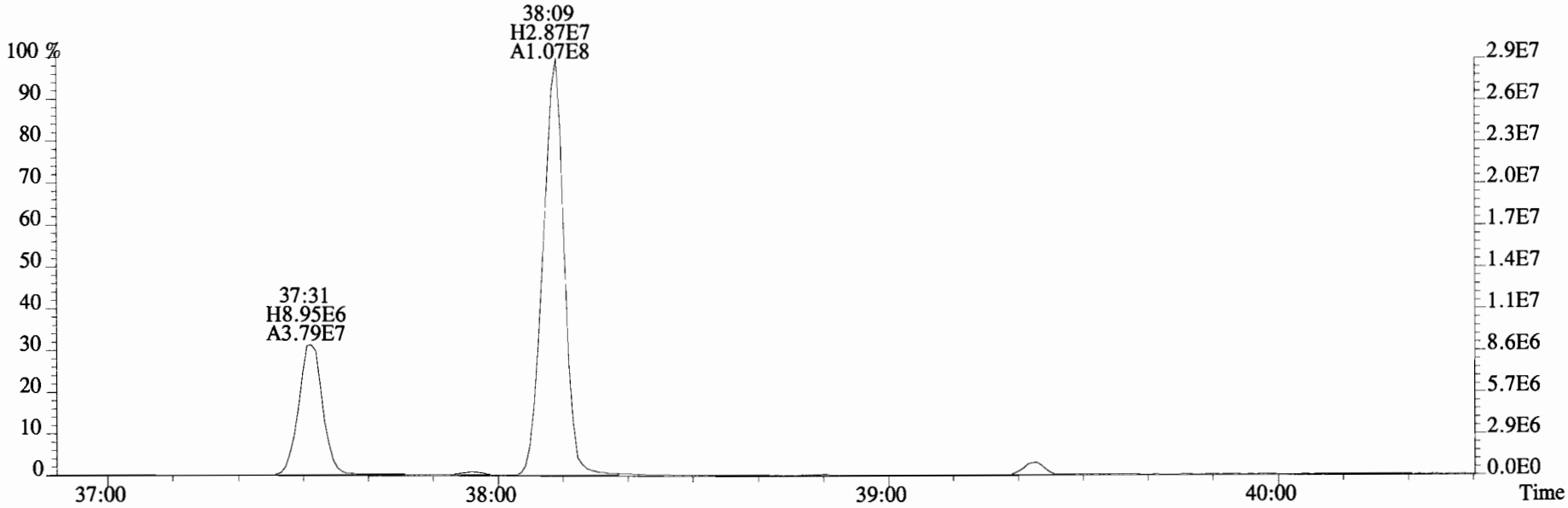
File:141226D2 #1-325 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



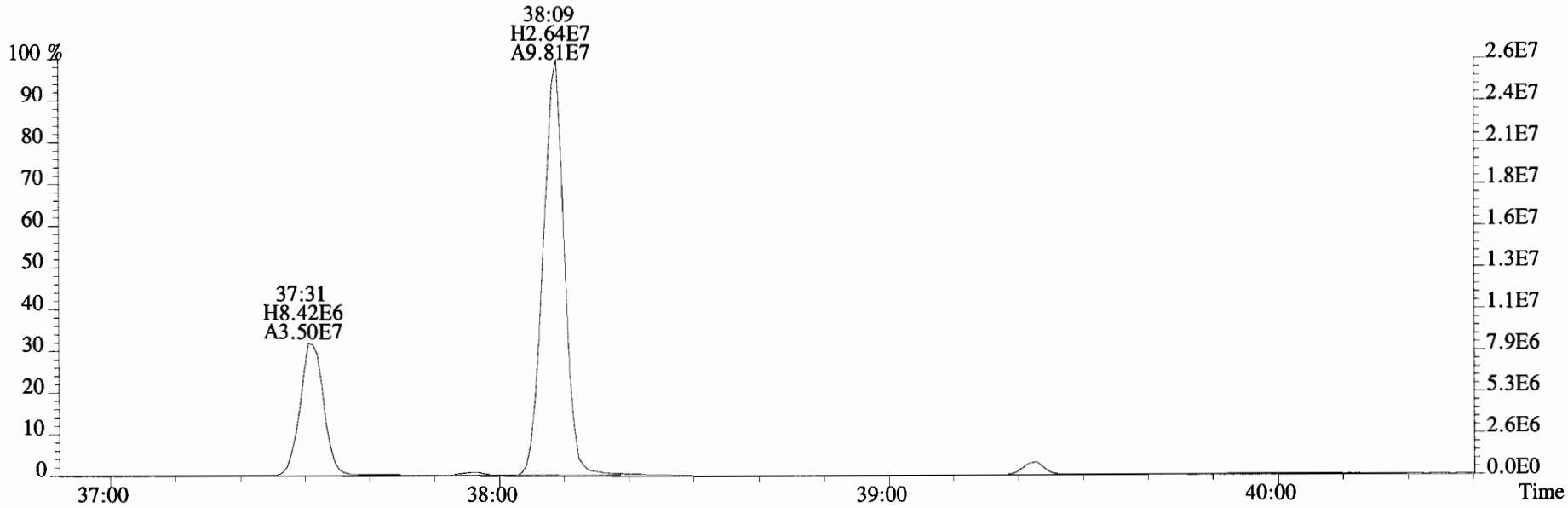
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



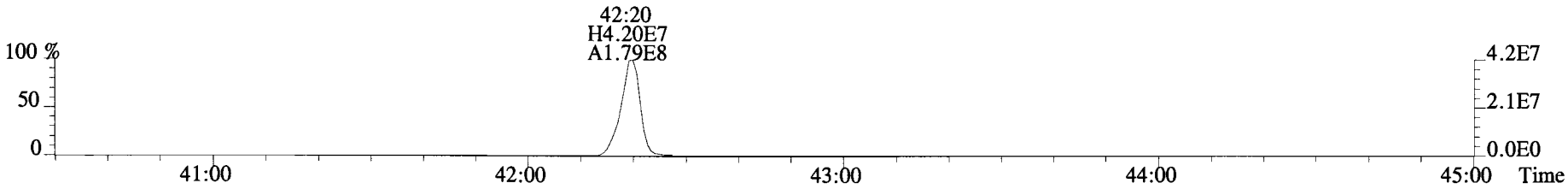
File:141226D2 #1-325 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



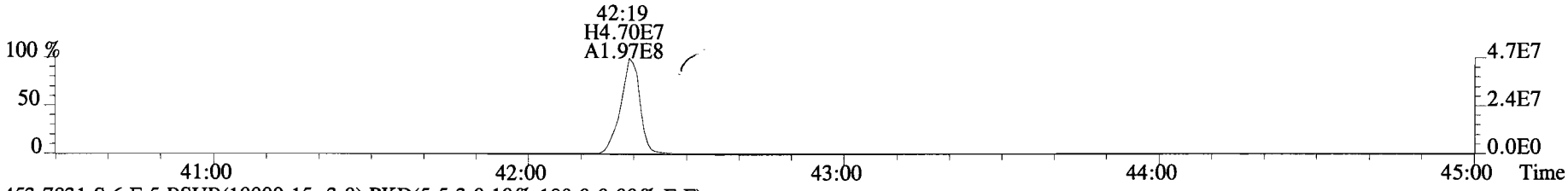
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



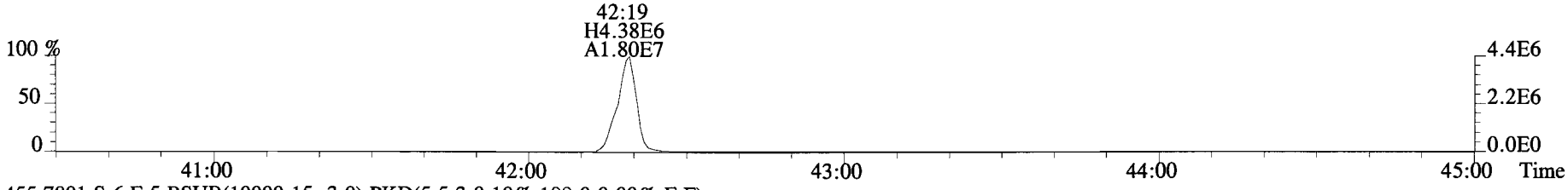
File:141226D2 #1-389 Acq:27-DEC-2014 00:27:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-02RE1 SC-CB-35-20141211-S 1.85 Exp:OCDD_DB5
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



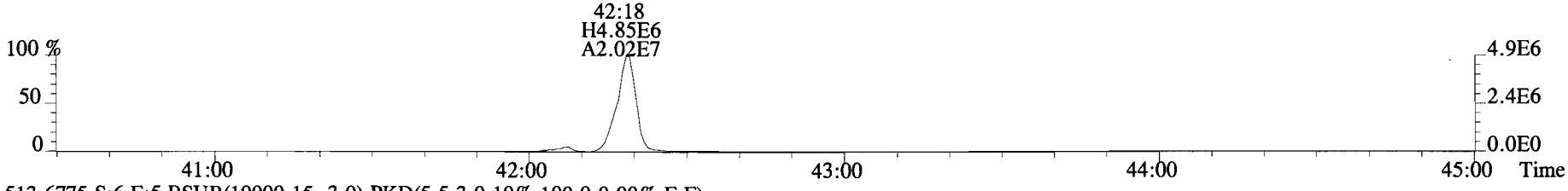
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



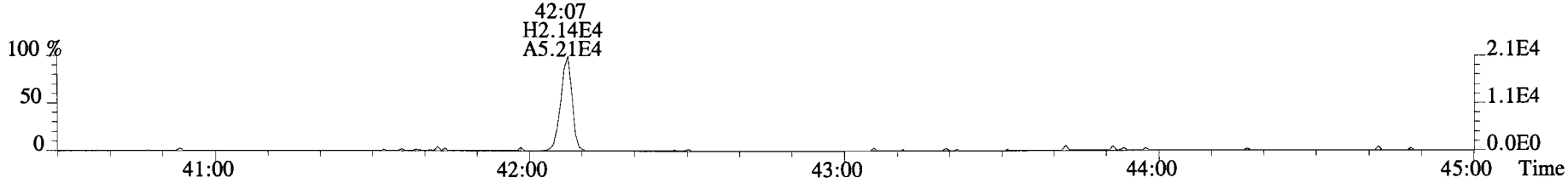
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: SC-CB-24-20141211-S Filename: 141226D2 S:7 Acq:27-DEC-14 01:16:43 ✓ ConCal: ST141226D2-1
Lab ID: 1400948-03RE1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.012 EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	8.81e+04	0.62 n	1.18	26:58	1.001	9.6960		*	2.5	*
	1,2,3,7,8-PeCDD	9.24e+05	0.60 y	0.92	31:37	1.000	82.779		*	2.5	*
	1,2,3,4,7,8-HxCDD	1.56e+06	1.23 y	1.09	34:56	1.000	182.21		*	2.5	*
	1,2,3,6,7,8-HxCDD	4.67e+06	1.27 y	1.07	35:02	1.000	533.37		*	2.5	*
	1,2,3,7,8,9-HxCDD	3.11e+06	1.21 y	0.93	35:20	1.000	364.94		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	1.48e+08	1.02 y	1.12	38:50	1.000	15867		*	2.5	*
	OCDD	1.72e+09	0.89 y	0.95	42:05	1.000	200960		*	2.5	*
	2,3,7,8-TCDF	2.34e+05	0.82 y	1.08	26:08	1.000	18.475	17.9	*	2.5	*
	1,2,3,7,8-PeCDF	3.66e+05	1.38 y	1.09	30:25	1.001	24.119		*	2.5	*
	2,3,4,7,8-PeCDF	5.17e+05	1.69 y	1.04	31:20	1.000	33.014		*	2.5	*
	1,2,3,4,7,8-HxCDF	3.10e+06	1.35 y	1.39	34:03	1.001	176.63		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.97e+06	1.30 y	1.26	34:10	1.000	124.95		*	2.5	*
	2,3,4,6,7,8-HxCDF	2.40e+06	1.27 y	1.30	34:46	1.000	167.63		*	2.5	*
	1,2,3,7,8,9-HxCDF	5.45e+05	1.11 y	1.19	35:45	1.001	48.346		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	6.05e+07	1.08 y	1.62	37:31	1.000	4534.7		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	4.77e+06	1.05 y	1.53	39:22	1.000	398.57		*	2.5	*
	OCDF	2.59e+08	0.91 y	1.10	42:19	1.000	25794		*	2.5	*

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	53.4	76.1		*	*
Total Penta-Dioxins	337	349		*	*
Total Hexa-Dioxins	3450	3450		*	*
Total Hepta-Dioxins	29400	29400		*	*
Total Tetra-Furans	252	274		*	*
Total Penta-Furans	980.65	980.65		*	*
Total Hexa-Furans	4710	4710		*	*
Total Hepta-Furans	16700	16700		*	*

								Rec	Qual
IS	13C-2,3,7,8-TCDD	1.52e+07	0.80 y	1.07	26:57	1.023	1617.5	81.8	
IS	13C-1,2,3,7,8-PeCDD	2.40e+07	0.61 y	1.24	31:36	1.200	2219.4	112	
IS	13C-1,2,3,4,7,8-HxCDD	1.55e+07	1.24 y	0.72	34:55	1.014	1398.8	70.7	
IS	13C-1,2,3,6,7,8-HxCDD	1.62e+07	1.25 y	0.74	35:02	1.017	1441.9	72.9	
IS	13C-1,2,3,7,8,9-HxCDD	1.81e+07	1.24 y	0.86	35:19	1.025	1384.3	70.0	
IS	13C-1,2,3,4,6,7,8-HpCDD	1.66e+07	1.03 y	0.64	38:49	1.127	1680.9	85.0	
IS	13C-OCDD	3.56e+07	0.89 y	0.78	42:05	1.222	2966.4	75.0	
IS	13C-2,3,7,8-TCDF	2.33e+07	0.78 y	0.92	26:08	0.992	1564.6	79.1	
IS	13C-1,2,3,7,8-PeCDF	2.75e+07	1.58 y	0.95	30:24	1.154	1797.5	90.9	
IS	13C-2,3,4,7,8-PeCDF	2.98e+07	1.60 y	0.97	31:19	1.189	1901.9	96.2	
IS	13C-1,2,3,4,7,8-HxCDF	2.50e+07	0.52 y	0.99	34:02	0.988	1646.4	83.3	
IS	13C-1,2,3,6,7,8-HxCDF	2.47e+07	0.52 y	1.10	34:10	0.992	1470.0	74.3	
IS	13C-2,3,4,6,7,8-HxCDF	2.18e+07	0.51 y	1.03	34:45	1.009	1382.2	69.9	
IS	13C-1,2,3,7,8,9-HxCDF	1.87e+07	0.52 y	0.86	35:43	1.037	1424.1	72.0	
IS	13C-1,2,3,4,6,7,8-HpCDF	1.63e+07	0.44 y	0.71	37:31	1.089	1493.5	75.5	
IS	13C-1,2,3,4,7,8,9-HpCDF	1.55e+07	0.43 y	0.71	39:22	1.143	1428.7	72.3	
IS	13C-OCDF	3.60e+07	0.89 y	0.87	42:18	1.228	2693.9	68.1	
C/Up	37Cl-2,3,7,8-TCDD	7.41e+06		1.21	26:58	1.024	700.10	88.5	
RS/RT	13C-1,2,3,4-TCDD	1.73e+07	0.82 y	1.00	26:20	*	1977.2		
RS	13C-1,2,3,4-TCDF	3.19e+07	0.77 y	1.00	24:49	*	1977.2		
RS/RT	13C-1,2,3,4,6,9-HxCDF	3.03e+07	0.52 y	1.00	34:27	*	1977.2		

Integrations by Analyst: [signature] Date: 12/20/14

Reviewed by Analyst: CT Date: 12/29/14

Totals class: TCDD EMPC Entry #: 19

Run: 12 File: 141226D2 S: 7 I: 1 F: 1
Acquired: 27-DEC-14 01:16:43 Processed: 27-DEC-14 13:28:13

Total Concentration: 76.092 Unnamed Concentration: 66.395

RT	m1 Resp	m2 Resp	RA		Resp Concentration		Name
23:19	4.138e+04	4.882e+04	0.85	y	9.020e+04	9.9250	
23:42	2.676e+04	4.004e+04	0.67	y	6.681e+04	7.3514	
24:09	1.349e+04	1.602e+04	0.84	y	2.951e+04	3.2476	
24:58	5.069e+03	8.307e+03	0.61	n	1.165e+04	1.2821	
25:12	2.475e+04	3.217e+04	0.77	y	5.692e+04	6.2637	
25:23	3.791e+04	4.958e+04	0.76	y	8.749e+04	9.6269	
25:34	1.246e+04	1.201e+04	1.04	n	2.126e+04	2.3397	
25:49	9.766e+03	1.142e+04	0.86	y	2.118e+04	2.3308	
25:59	1.349e+04	1.936e+04	0.70	y	3.286e+04	3.6157	
26:20	2.104e+04	2.650e+04	0.79	y	4.754e+04	5.2314	
26:42	1.718e+04	2.374e+04	0.72	y	4.092e+04	4.5031	
26:49	5.040e+03	6.687e+03	0.75	y	1.173e+04	1.2904	
26:58	3.833e+04	6.225e+04	0.62	n	8.811e+04	9.6960	2,3,7,8-TCDD
27:15	2.826e+04	3.120e+04	0.91	n	5.523e+04	6.0771	
27:24	4.100e+03	8.632e+03	0.47	n	9.424e+03	1.0370	
27:52	8.989e+03	1.514e+04	0.59	n	2.066e+04	2.2736	

Totals class: PeCDD EMPC Entry #: 21

Run: 12 File: 141226D2 S: 7 I: 1 F: 2
Acquired: 27-DEC-14 01:16:43 Processed: 27-DEC-14 13:28:13

Total Concentration: 348.74 Unnamed Concentration: 265.958

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:31	2.763e+05	4.137e+05	0.67	y	6.900e+05	61.790	
29:58	9.092e+04	1.531e+05	0.59	y	2.441e+05	21.855	
30:26	9.893e+04	1.677e+05	0.59	y	2.666e+05	23.875	
30:36	2.174e+05	3.661e+05	0.59	y	5.835e+05	52.251	
30:41	9.845e+04	1.578e+05	0.62	y	2.563e+05	22.949	
30:55	1.804e+05	3.107e+05	0.58	y	4.910e+05	43.973	
31:12	3.247e+04	5.835e+04	0.56	y	9.083e+04	8.1335	
31:37	3.460e+05	5.784e+05	0.60	y	9.244e+05	82.779	1,2,3,7,8-PeCDD
31:42	6.138e+04	7.949e+04	0.77	n	1.296e+05	11.602	
31:59	8.096e+04	1.371e+05	0.59	y	2.181e+05	19.529	

Totals class: HxCDD EMPC Entry #: 23

Run: 12 File: 141226D2 S: 7 I: 1 F: 3
Acquired: 27-DEC-14 01:16:43 Processed: 27-DEC-14 13:28:13

Total Concentration: 3452.0 Unnamed Concentration: 2371.513

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
33:24	3.692e+06	2.967e+06	1.24 y	6.659e+06	773.98	
33:58	6.901e+05	5.518e+05	1.25 y	1.242e+06	144.33	
34:13	6.407e+06	5.101e+06	1.26 y	1.151e+07	1337.5	
34:21	3.159e+05	2.652e+05	1.19 y	5.812e+05	67.544	
34:56	8.562e+05	6.989e+05	1.23 y	1.555e+06	182.21	1,2,3,4,7,8-HxCDD
35:02	2.618e+06	2.057e+06	1.27 y	4.675e+06	533.37	1,2,3,6,7,8-HxCDD
35:13	2.178e+05	1.966e+05	1.11 y	4.144e+05	48.167	
35:20	1.703e+06	1.412e+06	1.21 y	3.115e+06	364.94	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 12 File: 141226D2 S: 7 I: 1 F: 4
Acquired: 27-DEC-14 01:16:43 Processed: 27-DEC-14 13:28:13

Total Concentration: 29429 Unnamed Concentration: 13562.134

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:55	6.412e+07	6.265e+07	1.02	y	1.268e+08	13562	
38:50	7.498e+07	7.334e+07	1.02	y	1.483e+08	15867	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 12 File: 141226D2 S: 7 I: 1 F: 1
Acquired: 27-DEC-14 01:16:43 Processed: 27-DEC-14 13:28:13

Total Concentration: 273.73 Unnamed Concentration: 255.253

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
21:05	2.216e+04	2.323e+04	0.95	n	4.112e+04	3.2417	
21:40	3.546e+04	4.410e+04	0.80	y	7.956e+04	6.2720	
22:18	2.951e+05	3.592e+05	0.82	y	6.543e+05	51.584	
22:51	8.953e+04	1.081e+05	0.83	y	1.977e+05	15.584	
23:17	1.265e+05	1.563e+05	0.81	y	2.828e+05	22.299	
23:44	1.586e+05	2.106e+05	0.75	y	3.692e+05	29.105	
23:53	5.064e+04	5.514e+04	0.92	n	9.760e+04	7.6948	
24:03	4.371e+04	5.039e+04	0.87	y	9.410e+04	7.4184	
24:35	2.584e+04	3.432e+04	0.75	y	6.016e+04	4.7424	
24:44	1.508e+05	2.141e+05	0.70	y	3.649e+05	28.769	
24:51	1.239e+05	1.590e+05	0.78	y	2.828e+05	22.298	
25:17	7.495e+04	9.534e+04	0.79	y	1.703e+05	13.425	
25:34	2.712e+04	3.149e+04	0.86	y	5.861e+04	4.6204	
25:44	1.641e+04	2.212e+04	0.74	y	3.853e+04	3.0374	
25:56	2.114e+04	1.934e+04	1.09	n	3.422e+04	2.6981	
26:02	1.782e+04	2.456e+04	0.73	y	4.238e+04	3.3413	
26:08	1.053e+05	1.290e+05	0.82	y	2.344e+05	18.475	2,3,7,8-TCDF
26:30	1.100e+05	1.476e+05	0.75	y	2.576e+05	20.308	
27:32	7.008e+03	8.313e+03	0.84	y	1.532e+04	1.2078	
27:42	7.138e+03	1.241e+04	0.58	n	1.641e+04	1.2936	
27:59	4.048e+04	4.524e+04	0.89	n	8.008e+04	6.3132	

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

Run: 12 File: 141226D2 S: 7 I: 1 F: 1
Acquired: 27-DEC-14 01:16:43 Processed: 27-DEC-14 13:28:13

Total Concentration: 490.45 Unnamed Concentration: 490.446

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
27:58	4.578e+06	2.987e+06	1.53 y	7.565e+06	490.45	

Totals class: PeCDF EMPC Entry #: 31

Run: 12 File: 141226D2 S: 7 I: 1 F: 2
Acquired: 27-DEC-14 01:16:43 Processed: 27-DEC-14 13:28:13

Total Concentration: 490.20 Unnamed Concentration: 433.072

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
29:20	2.247e+05	1.475e+05	1.52 y	3.722e+05	24.128	
29:28	2.303e+06	1.432e+06	1.61 y	3.735e+06	242.13	
30:02	7.520e+05	4.542e+05	1.66 y	1.206e+06	78.197	
30:14	1.198e+05	7.437e+04	1.61 y	1.942e+05	12.589	
30:25	2.118e+05	1.538e+05	1.38 y	3.656e+05	24.119	1,2,3,7,8-PeCDF
30:39	3.351e+05	2.067e+05	1.62 y	5.418e+05	35.121	
31:14	5.633e+04	3.959e+04	1.42 y	9.592e+04	6.2182	
31:20	3.252e+05	1.922e+05	1.69 y	5.175e+05	33.014	2,3,4,7,8-PeCDF
31:23	2.586e+05	1.866e+05	1.39 y	4.452e+05	28.861	
32:14	5.479e+04	3.514e+04	1.56 y	8.993e+04	5.8300	

Totals class: HxCDF EMPC Entry #: 33

Run: 12 File: 141226D2 S: 7 I: 1 F: 3
Acquired: 27-DEC-14 01:16:43 Processed: 27-DEC-14 13:28:13

Total Concentration: 4711.9 Unnamed Concentration: 4194.314

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
32:52	4.256e+06	3.239e+06	1.31 y	7.495e+06	510.09	
33:02	1.499e+07	1.161e+07	1.29 y	2.659e+07	1809.8	
33:23	2.644e+05	2.175e+05	1.22 y	4.819e+05	32.799	
33:34	1.508e+07	1.149e+07	1.31 y	2.657e+07	1808.3	
33:57	2.772e+05	2.120e+05	1.31 y	4.892e+05	33.293	
34:03	1.779e+06	1.322e+06	1.35 y	3.100e+06	176.63	1,2,3,4,7,8-HxCDF
34:10	1.113e+06	8.581e+05	1.30 y	1.971e+06	124.95	1,2,3,6,7,8-HxCDF
34:46	1.346e+06	1.058e+06	1.27 y	2.404e+06	167.63	2,3,4,6,7,8-HxCDF
35:45	2.864e+05	2.586e+05	1.11 y	5.450e+05	48.346	1,2,3,7,8,9-HxCDF

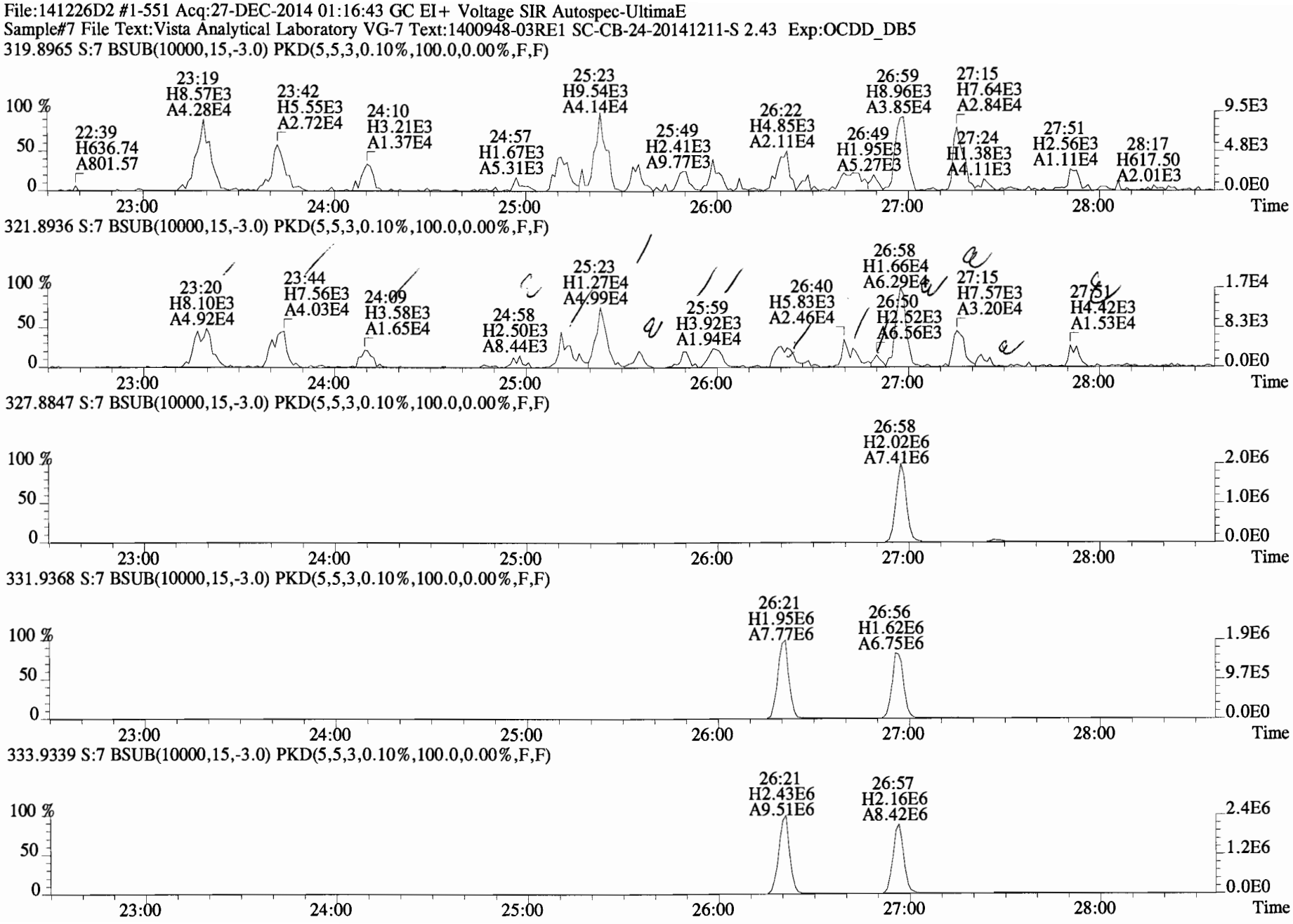
Totals class: HpCDF EMPC Entry #: 35

Run: 12 File: 141226D2 S: 7 I: 1 F: 4
Acquired: 27-DEC-14 01:16:43 Processed: 27-DEC-14 13:28:13

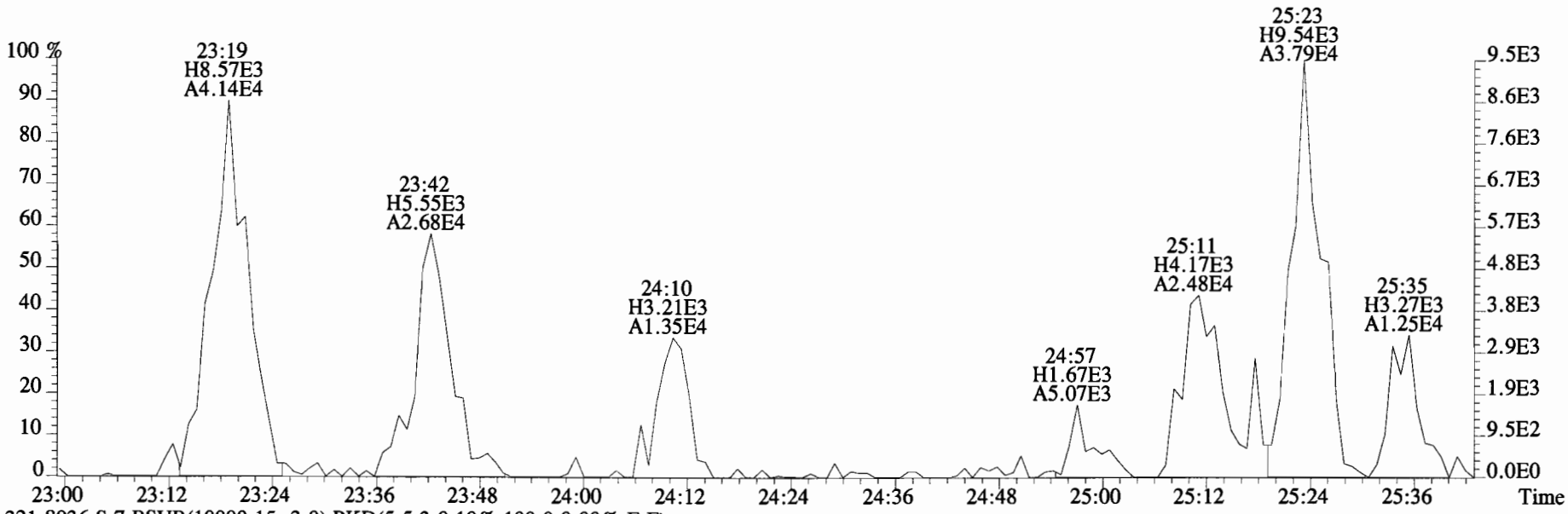
Total Concentration: 16735 Unnamed Concentration: 11802.100

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:31	3.140e+07	2.908e+07	1.08 y	6.048e+07	4534.7	1,2,3,4,6,7,8-HpCDF
37:56	6.065e+05	5.136e+05	1.18 y	1.120e+06	88.641	
38:08	7.688e+07	7.114e+07	1.08 y	1.480e+08	11713	
39:22	2.443e+06	2.322e+06	1.05 y	4.765e+06	398.57	1,2,3,4,7,8,9-HpCDF

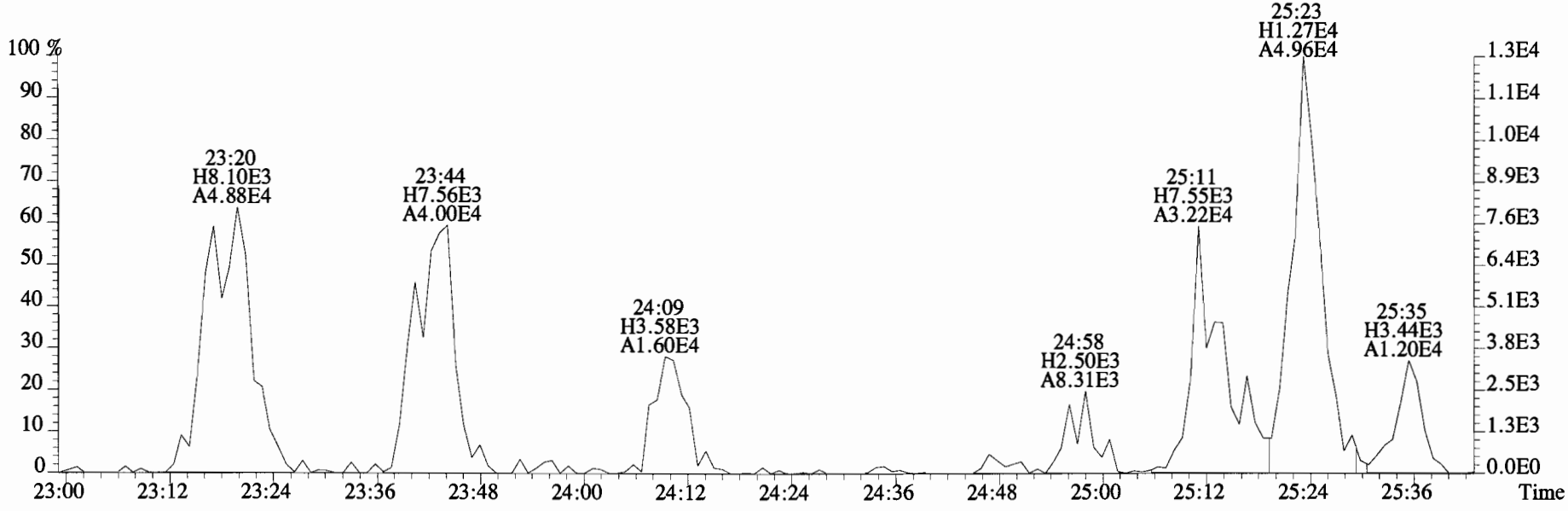
File:141226D2 #1-551 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5



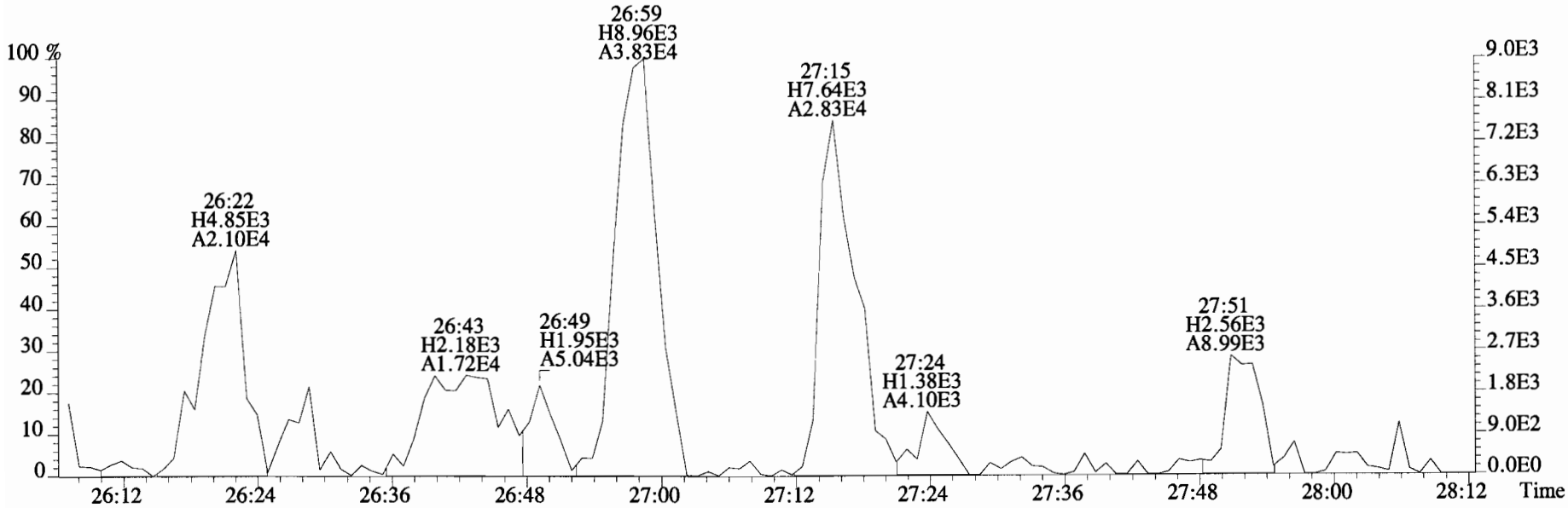
File:141226D2 #1-551 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



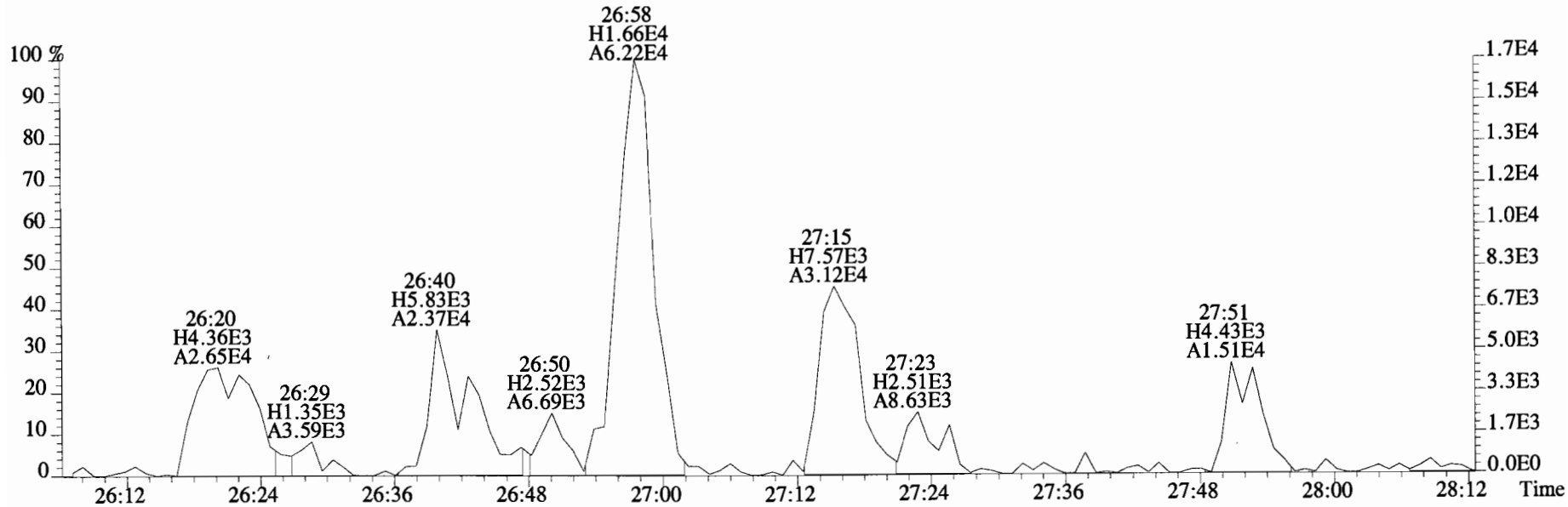
321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

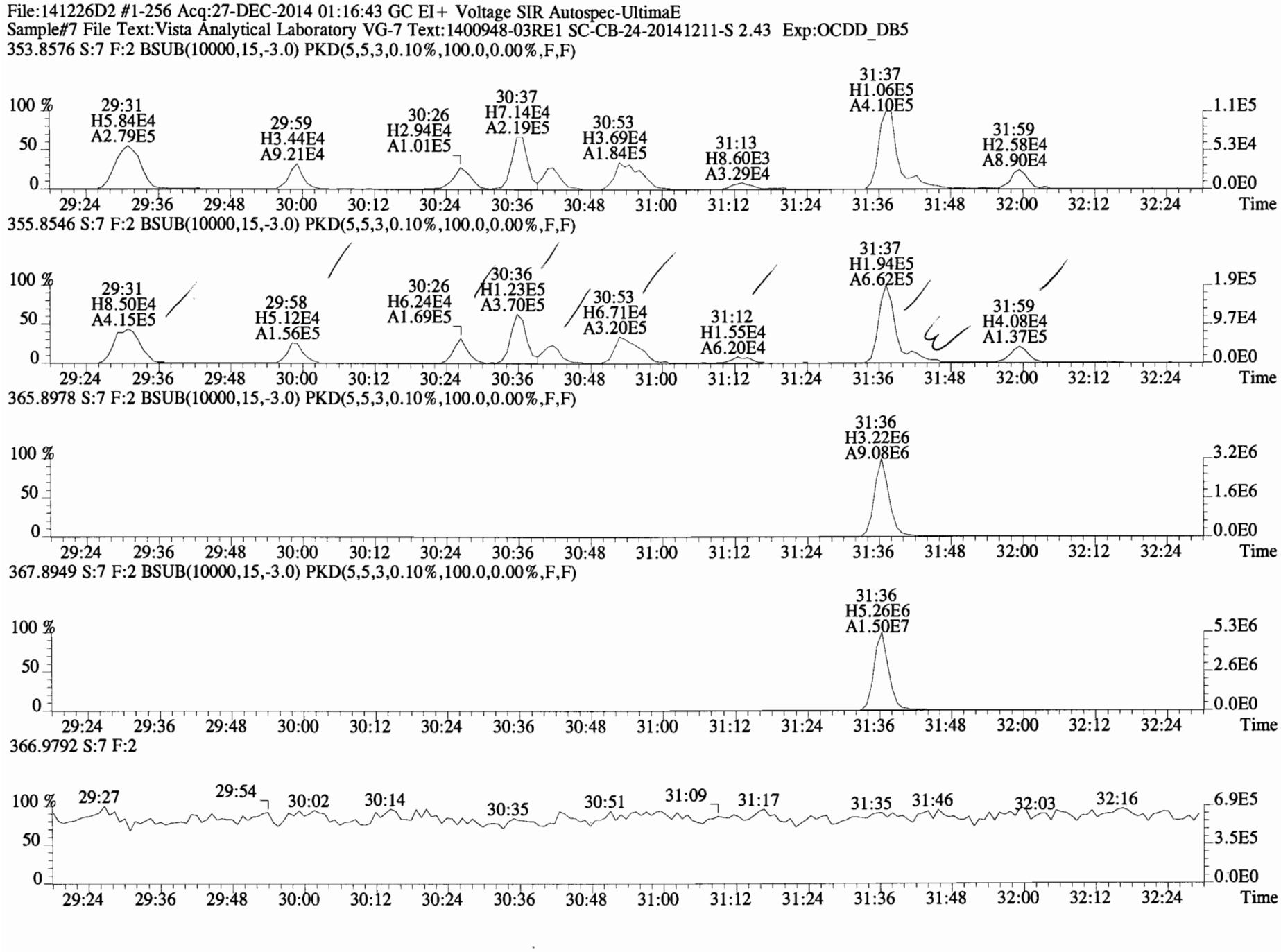


File:141226D2 #1-551 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

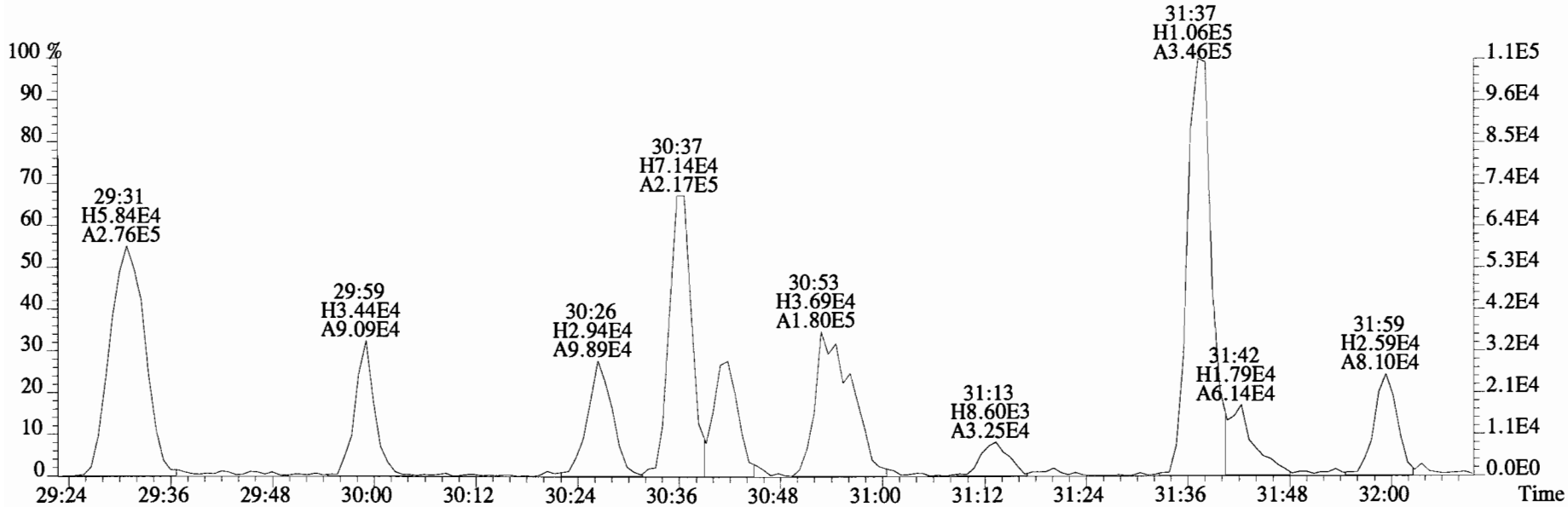


321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

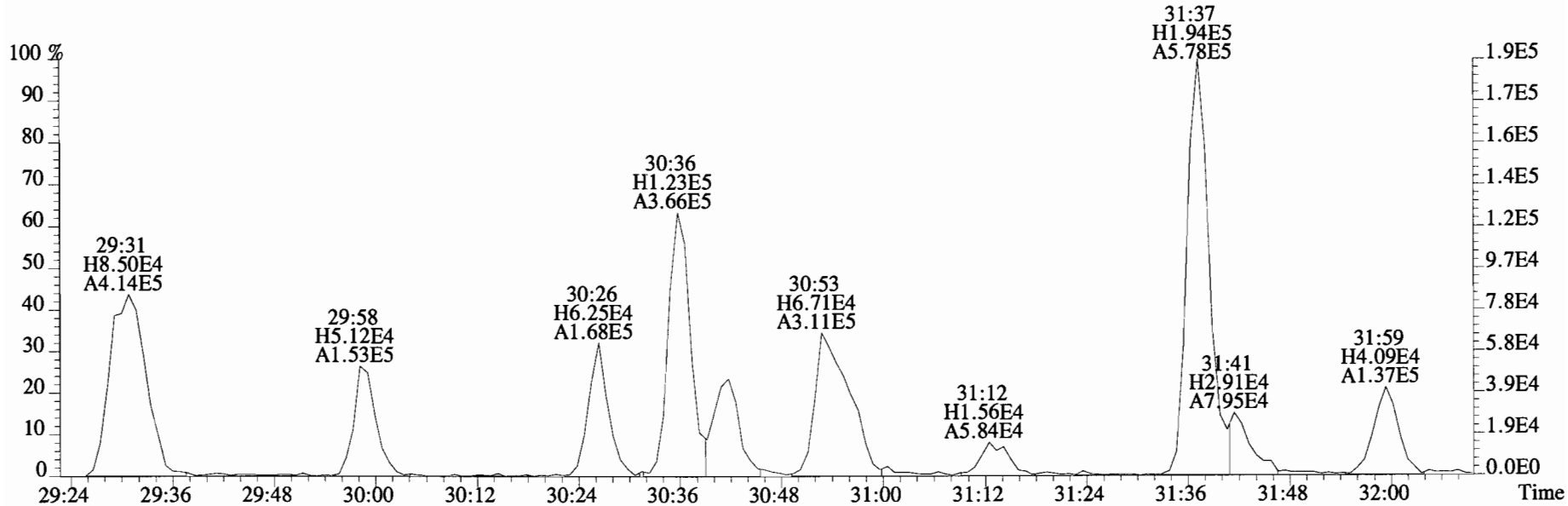



File:141226D2 #1-256 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
353.8576 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:31 H5.84E4 A2.79E5
29:59 H3.44E4 A9.21E4
30:26 H2.94E4 A1.01E5
30:37 H7.14E4 A2.19E5
30:53 H3.69E4 A1.84E5
31:13 H8.60E3 A3.29E4
31:37 H1.06E5 A4.10E5
31:59 H2.58E4 A8.90E4
355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:31 H8.50E4 A4.15E5
29:58 H5.12E4 A1.56E5
30:26 H6.24E4 A1.69E5
30:36 H1.23E5 A3.70E5
30:53 H6.71E4 A3.20E4
31:12 H1.55E4 A6.20E4
31:37 H1.94E5 A6.62E5
31:59 H4.08E4 A1.37E5
365.8978 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:36 H3.22E6 A9.08E6
367.8949 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:36 H5.26E6 A1.50E7
366.9792 S:7 F:2
29:27
29:54
30:02
30:14
30:35
30:51
31:09
31:17
31:35
31:46
32:03
32:16
100 %
50
0
Time

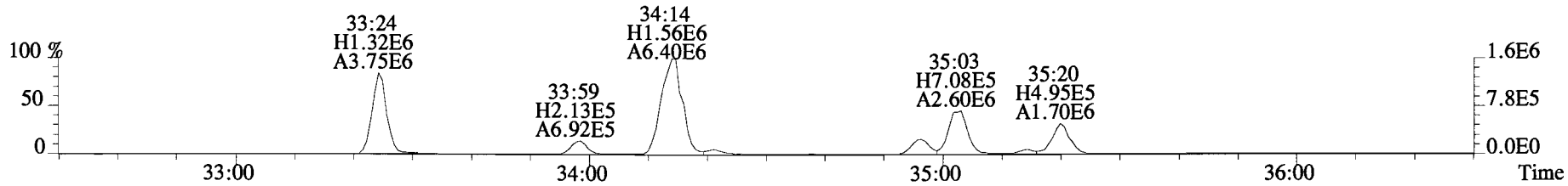
File:141226D2 #1-256 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
353.8576 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



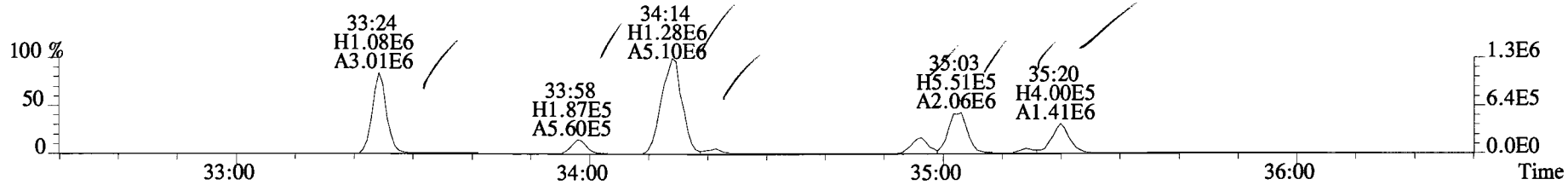
355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



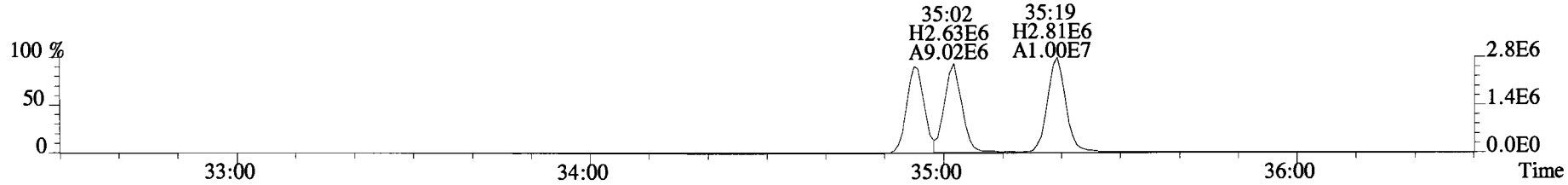
File:141226D2 #1-385 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



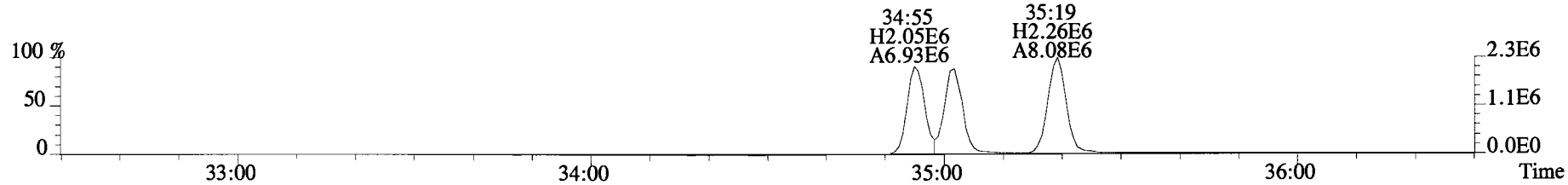
391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



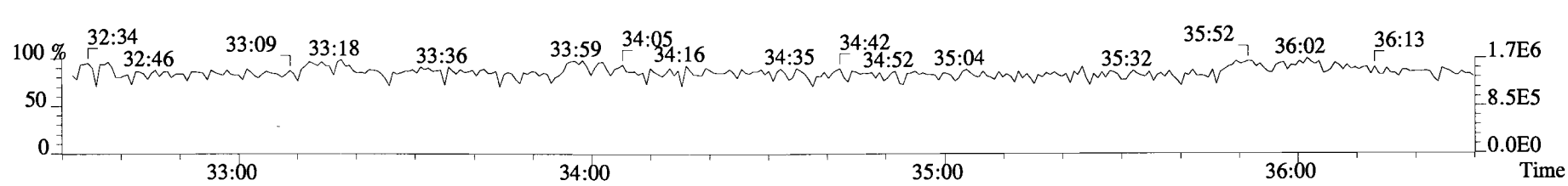
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



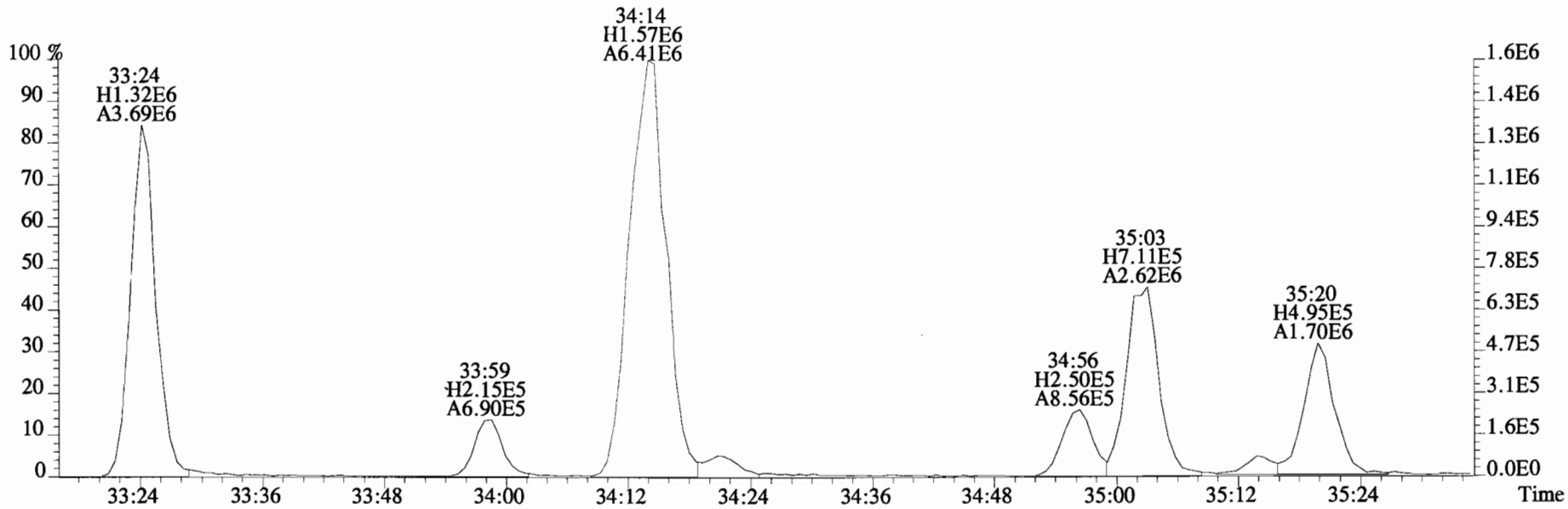
403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



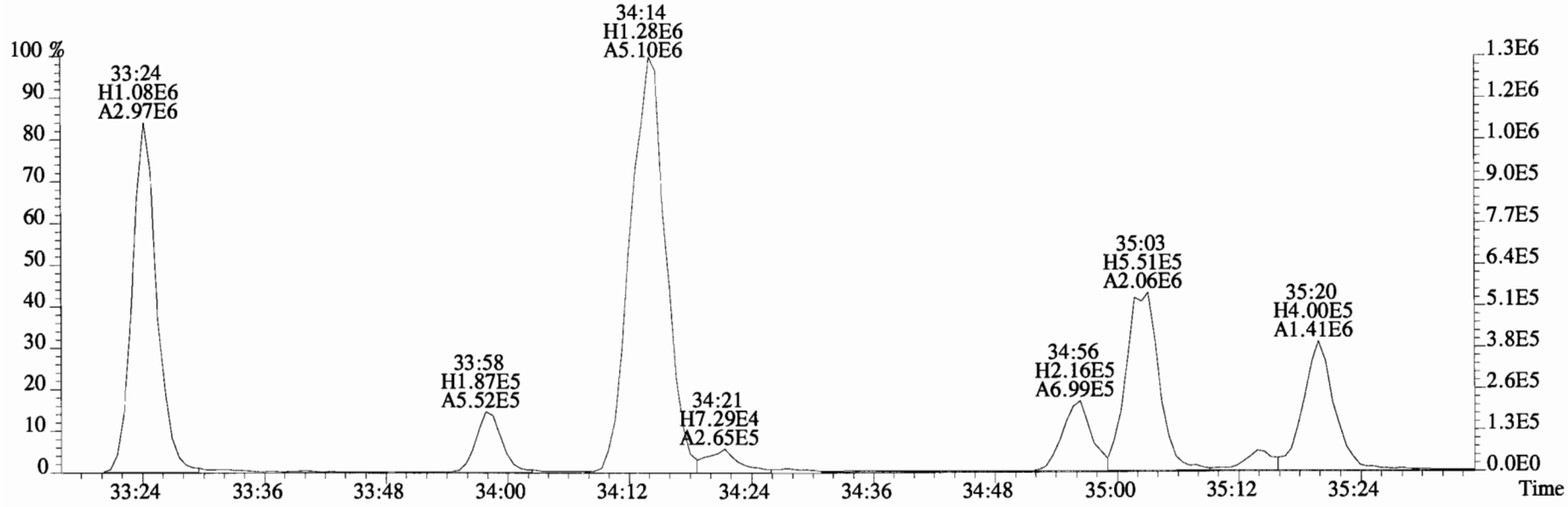
380.9760 S:7 F:3



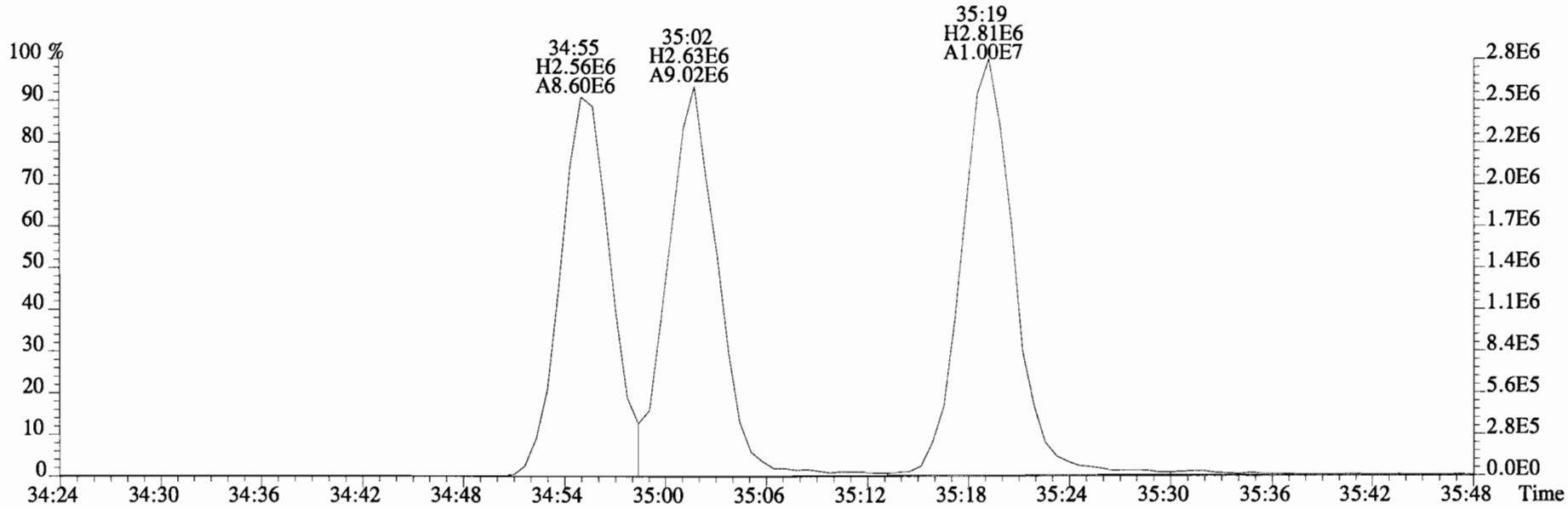
File:141226D2 #1-385 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



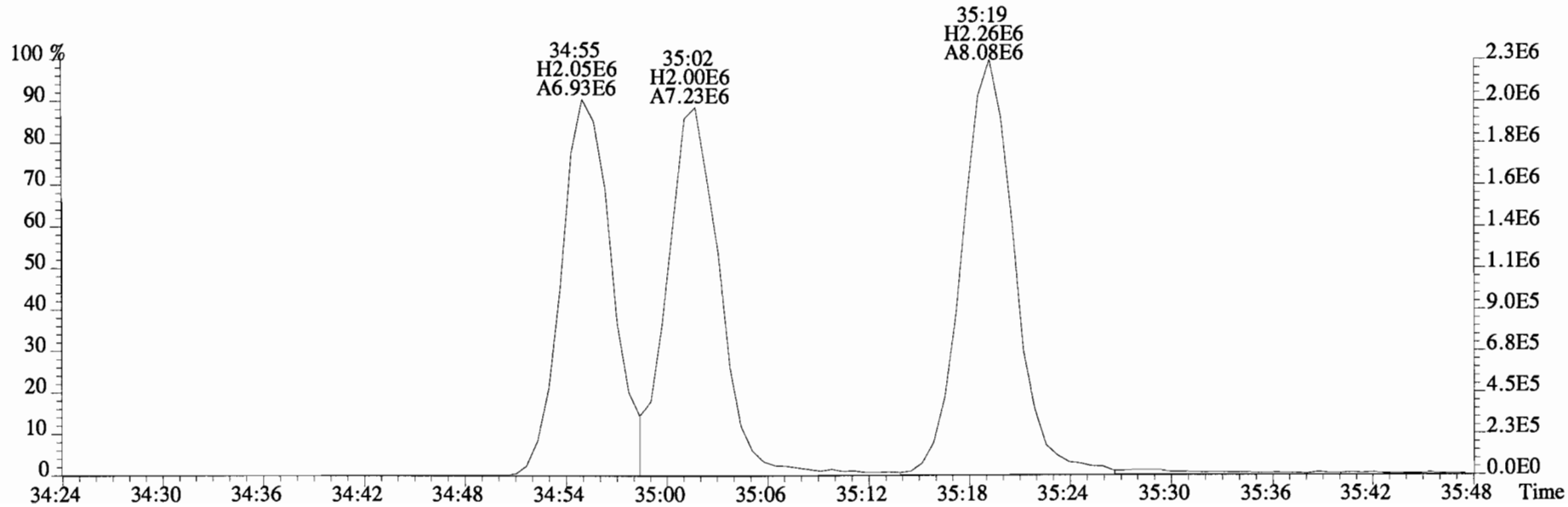
391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



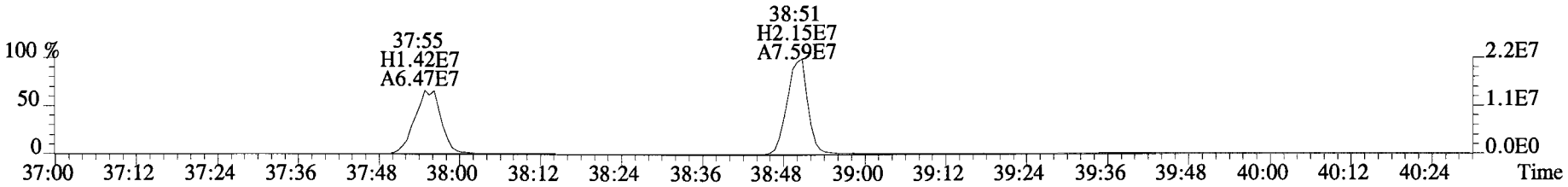
File:141226D2 #1-385 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



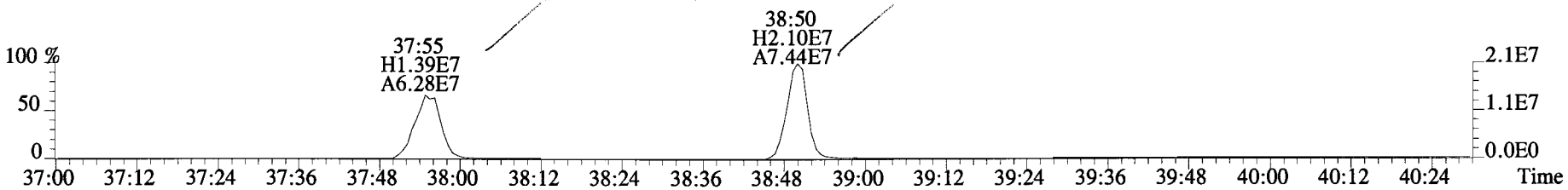
403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



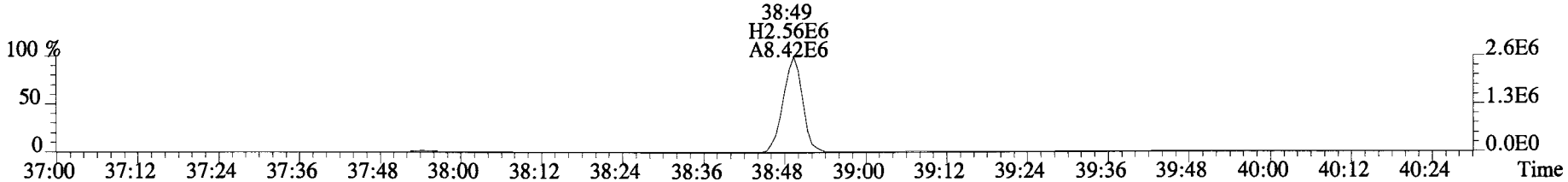
File:141226D2 #1-326 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



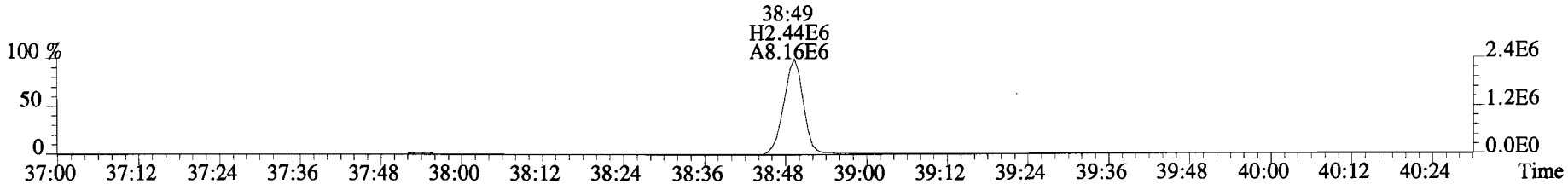
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



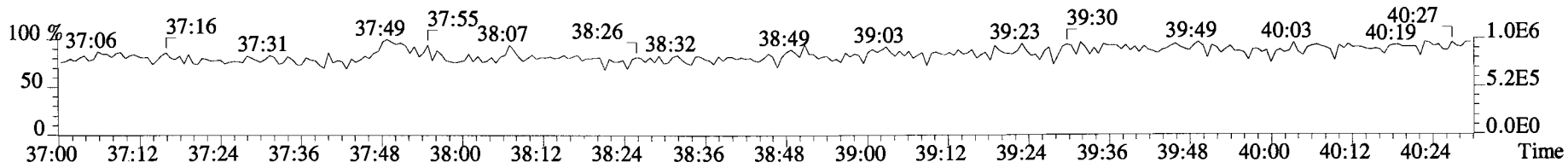
435.8169 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



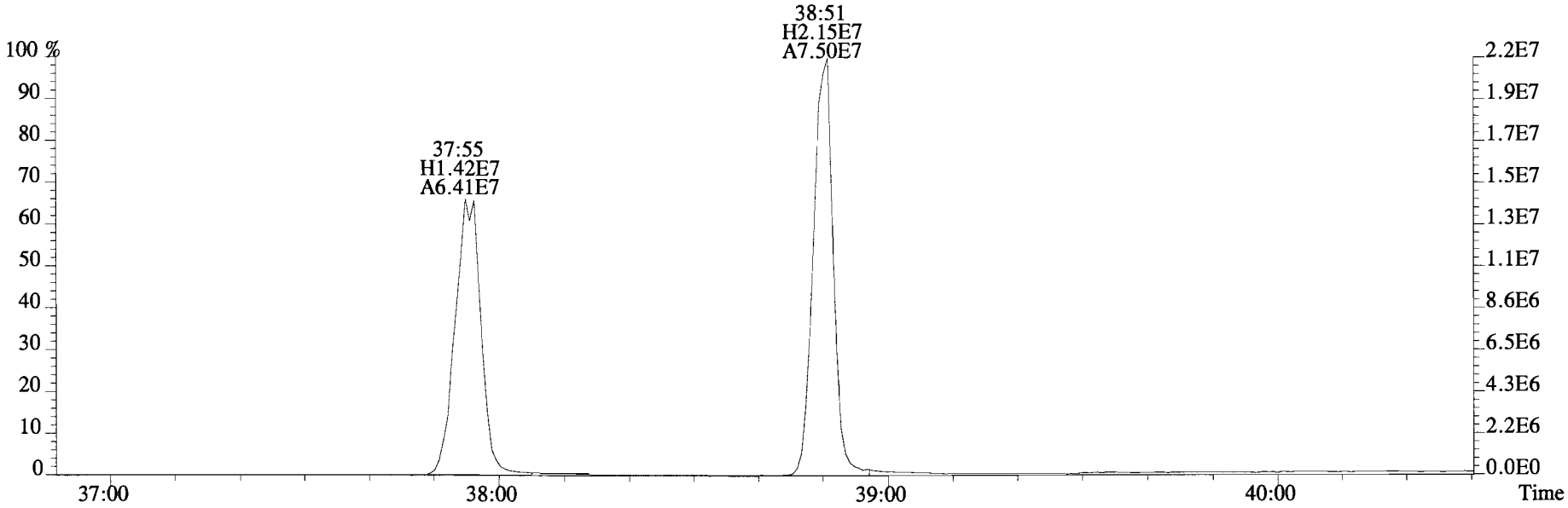
437.8140 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



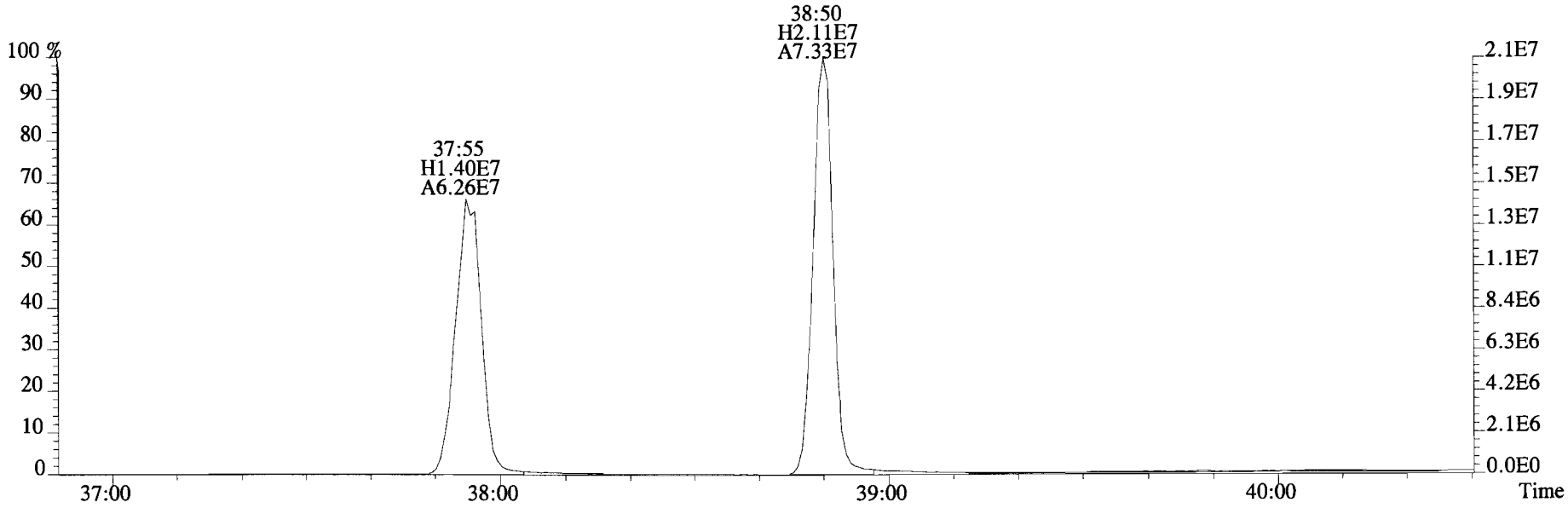
430.9728 S:7 F:4



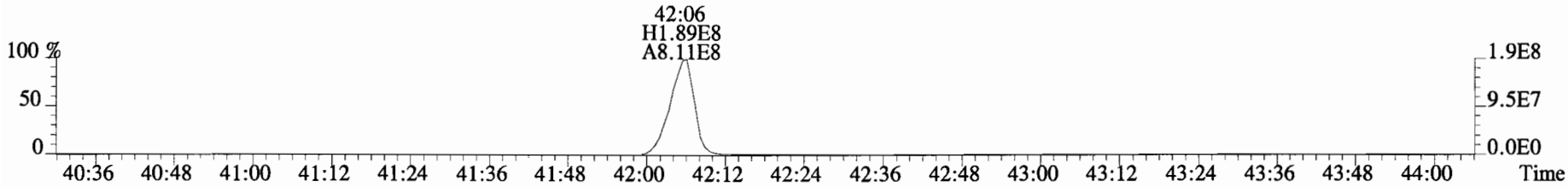
File:141226D2 #1-326 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



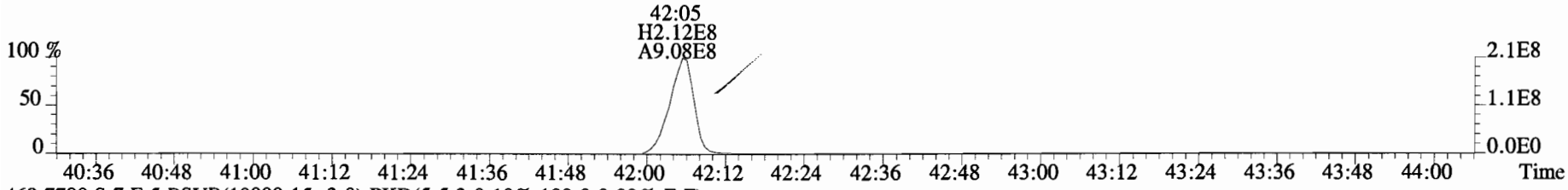
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



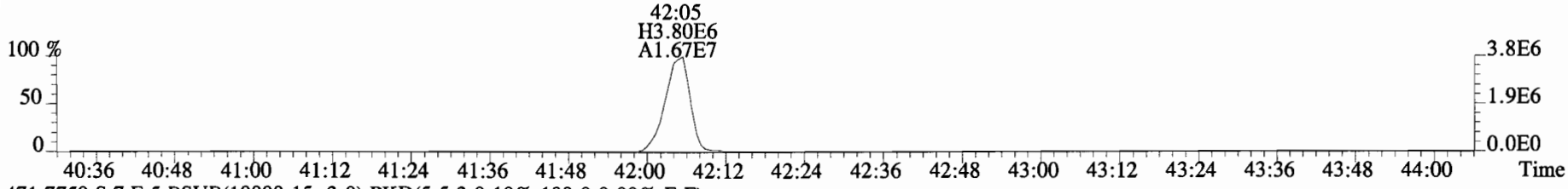
File:141226D2 #1-389 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
457.7377 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



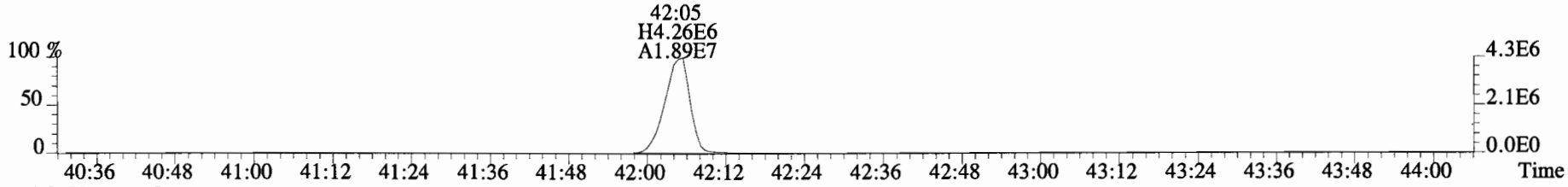
459.7348 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



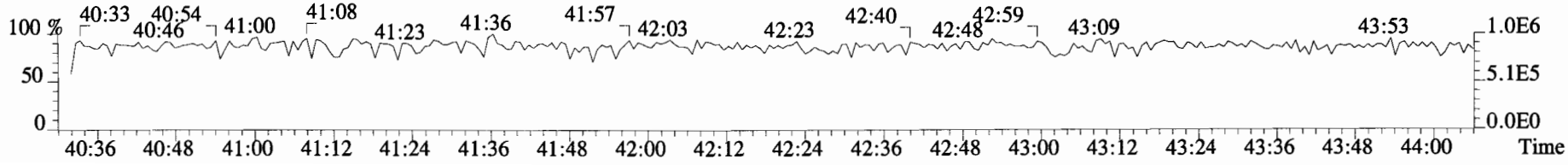
469.7780 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



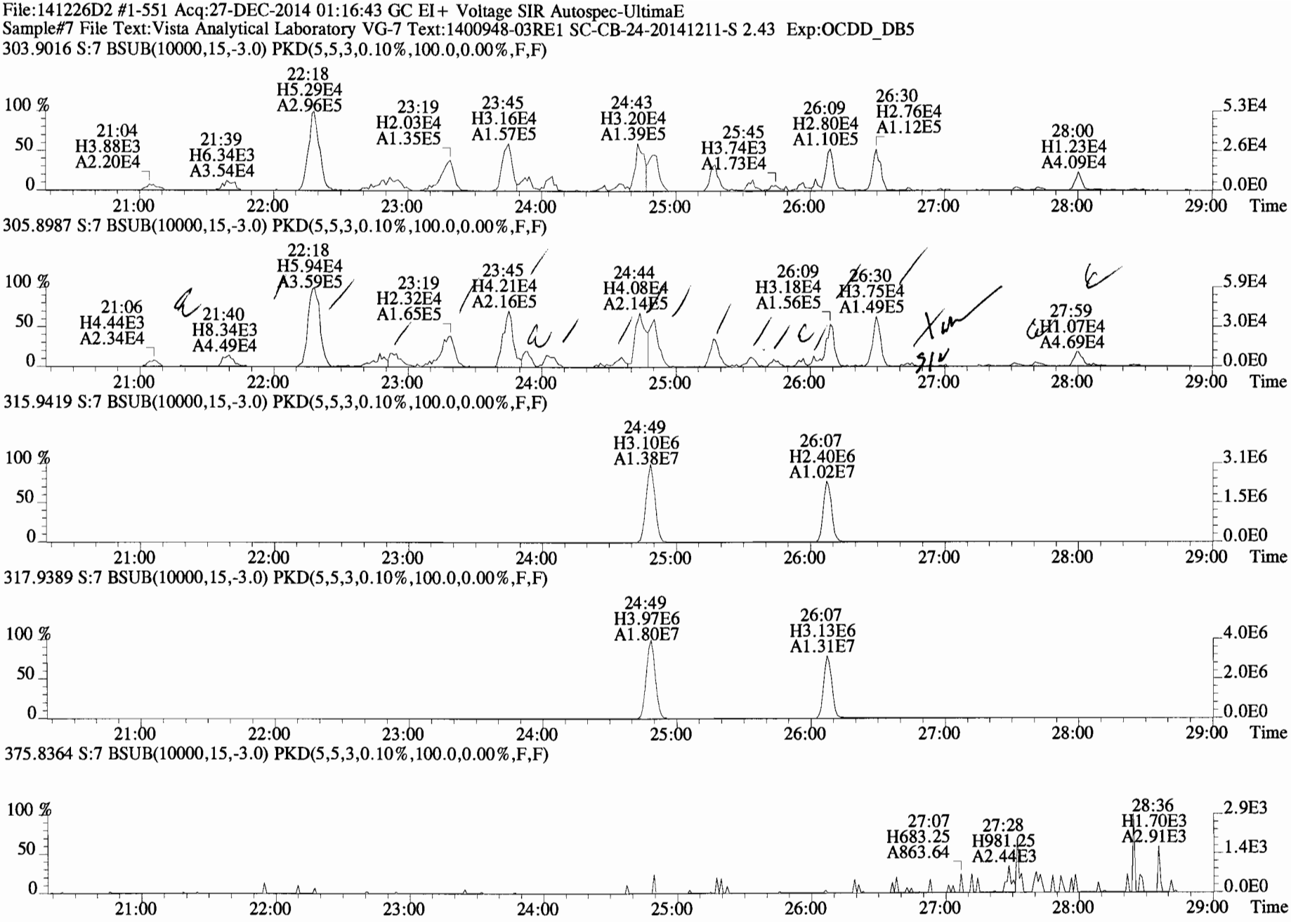
471.7750 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



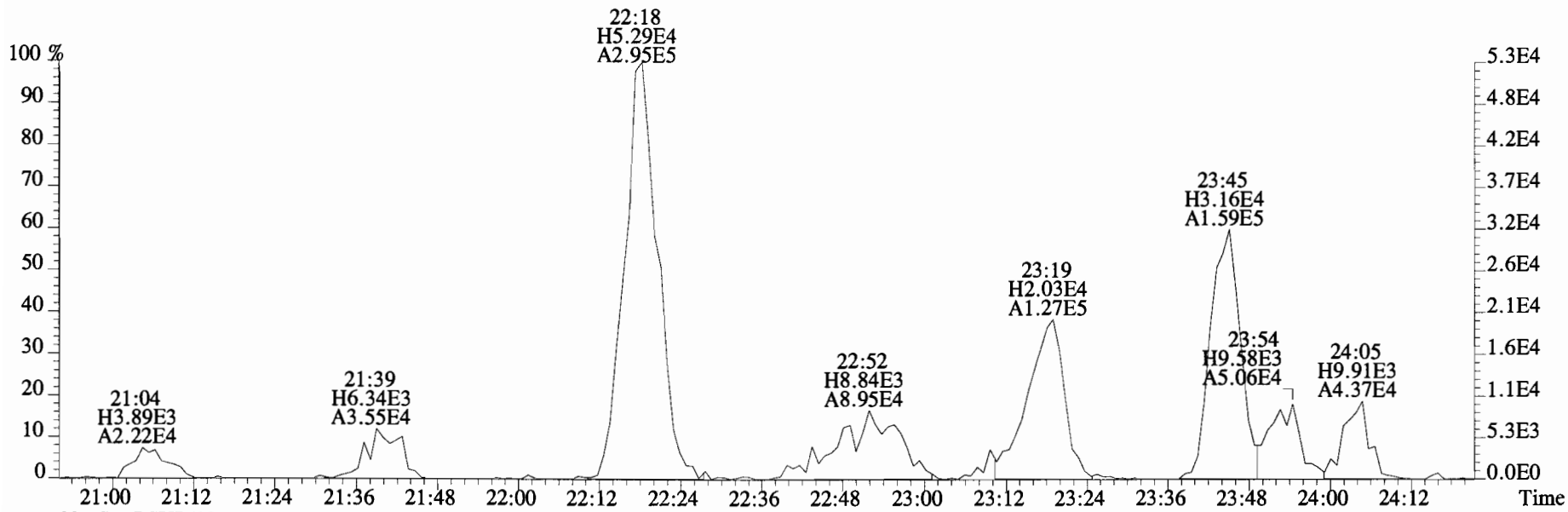
454.9728 S:7 F:5



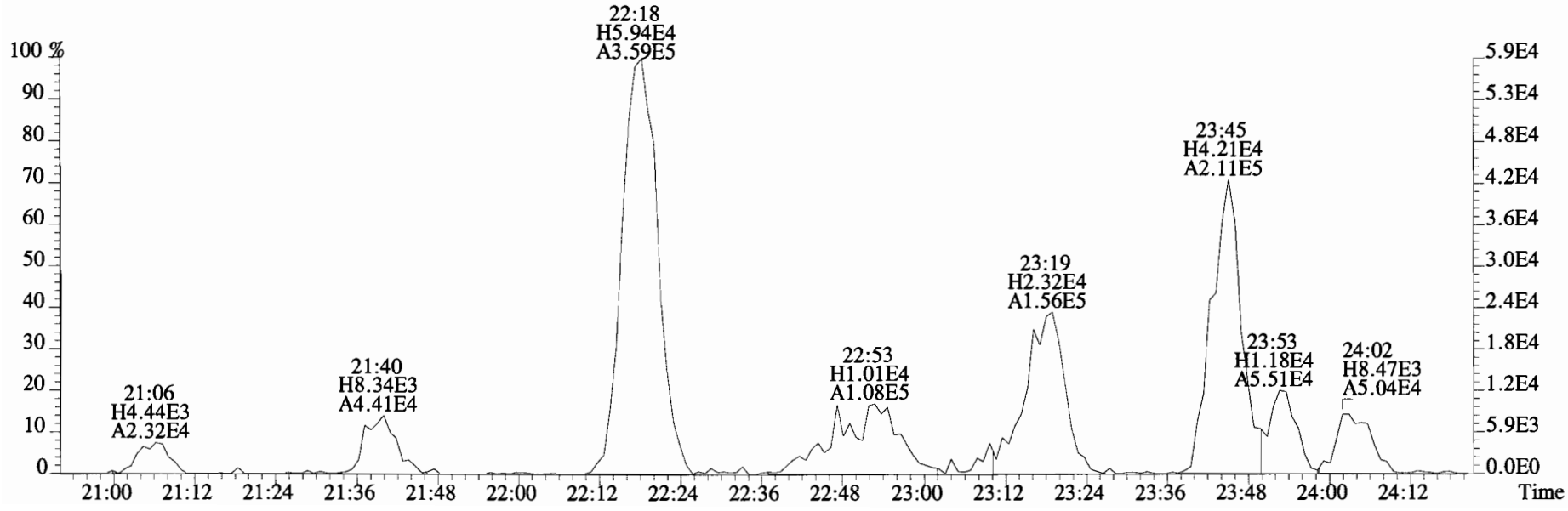
File:141226D2 #1-551 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5



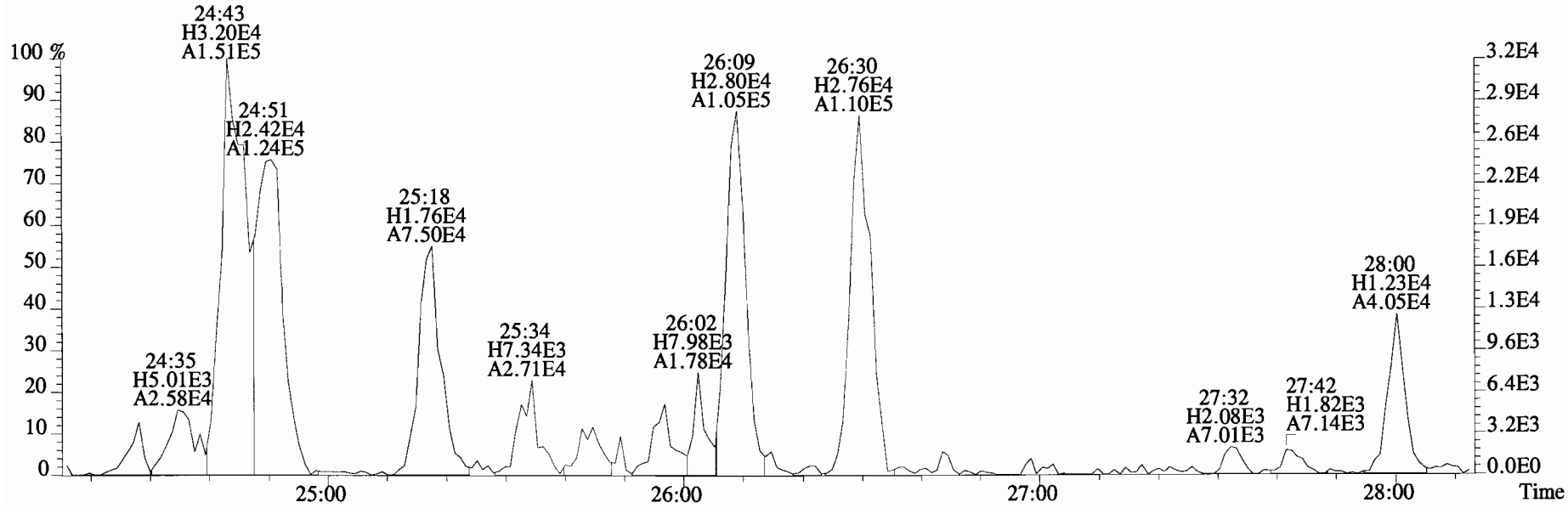
File:141226D2 #1-551 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



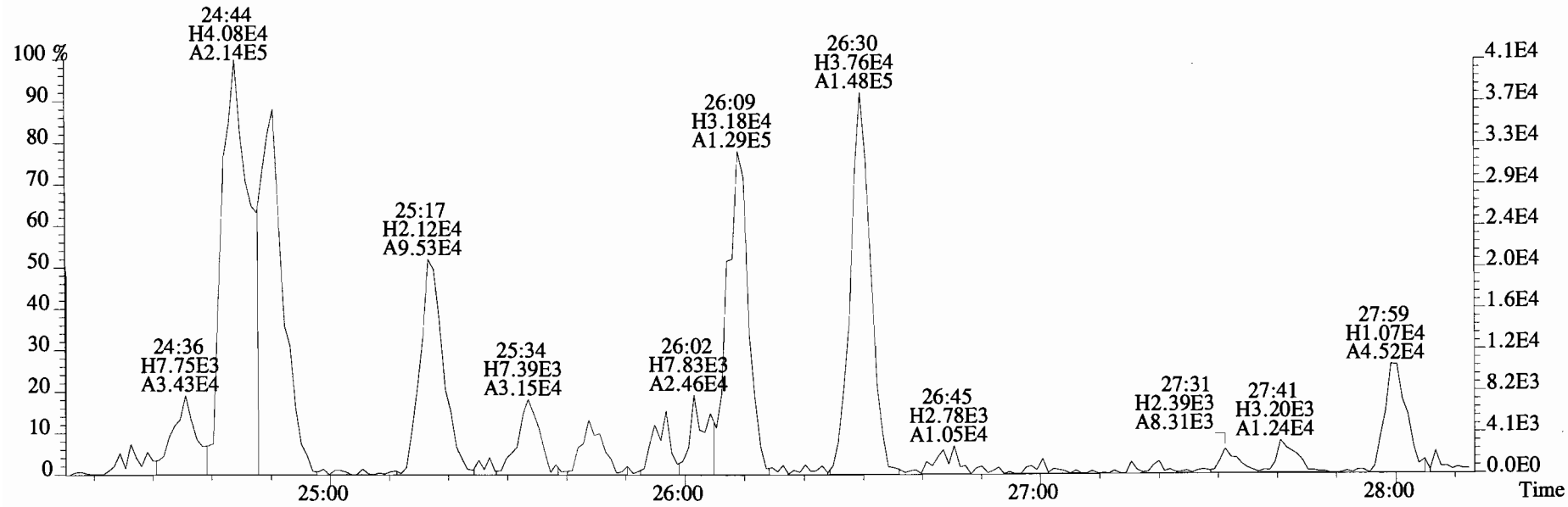
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



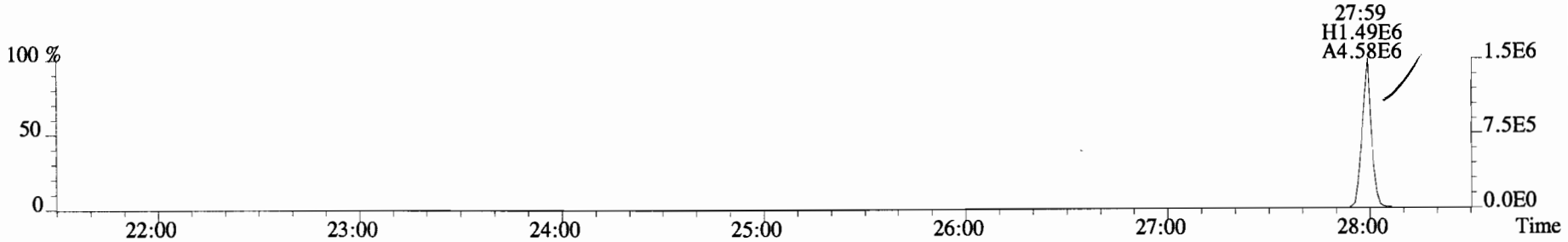
File:141226D2 #1-551 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



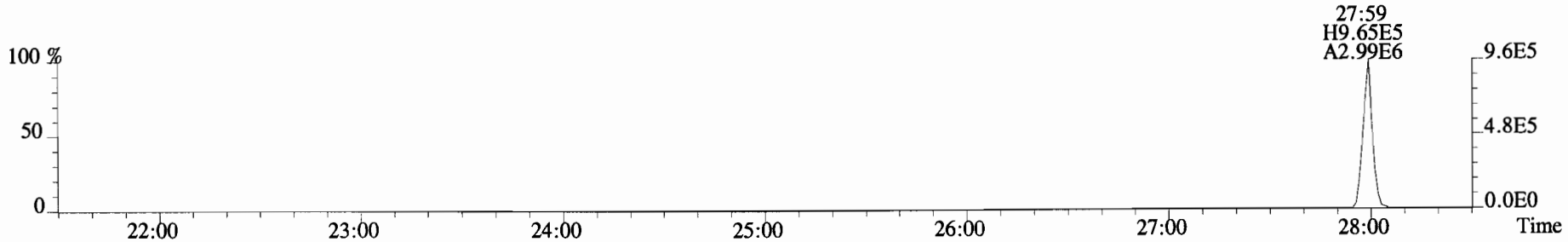
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



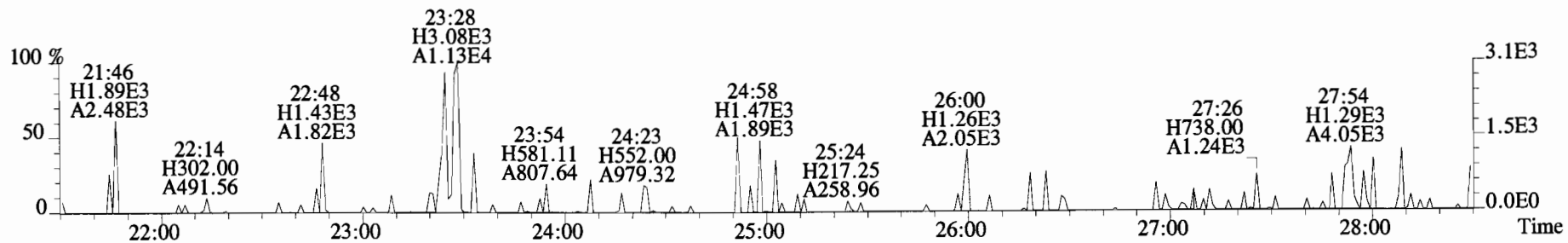
File:141226D2 #1-551 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



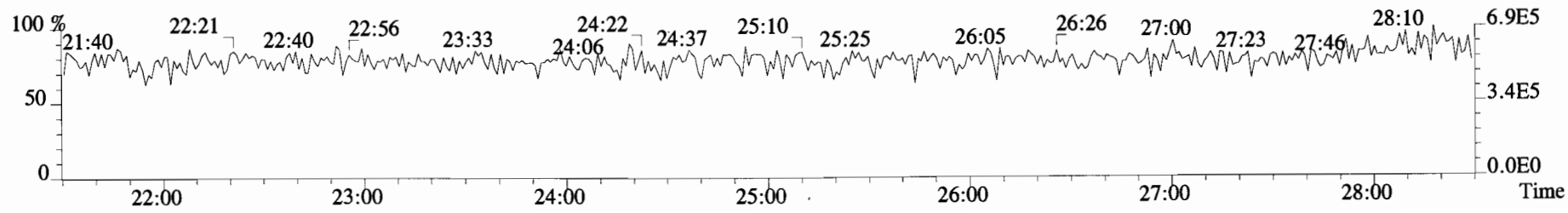
341.8568 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

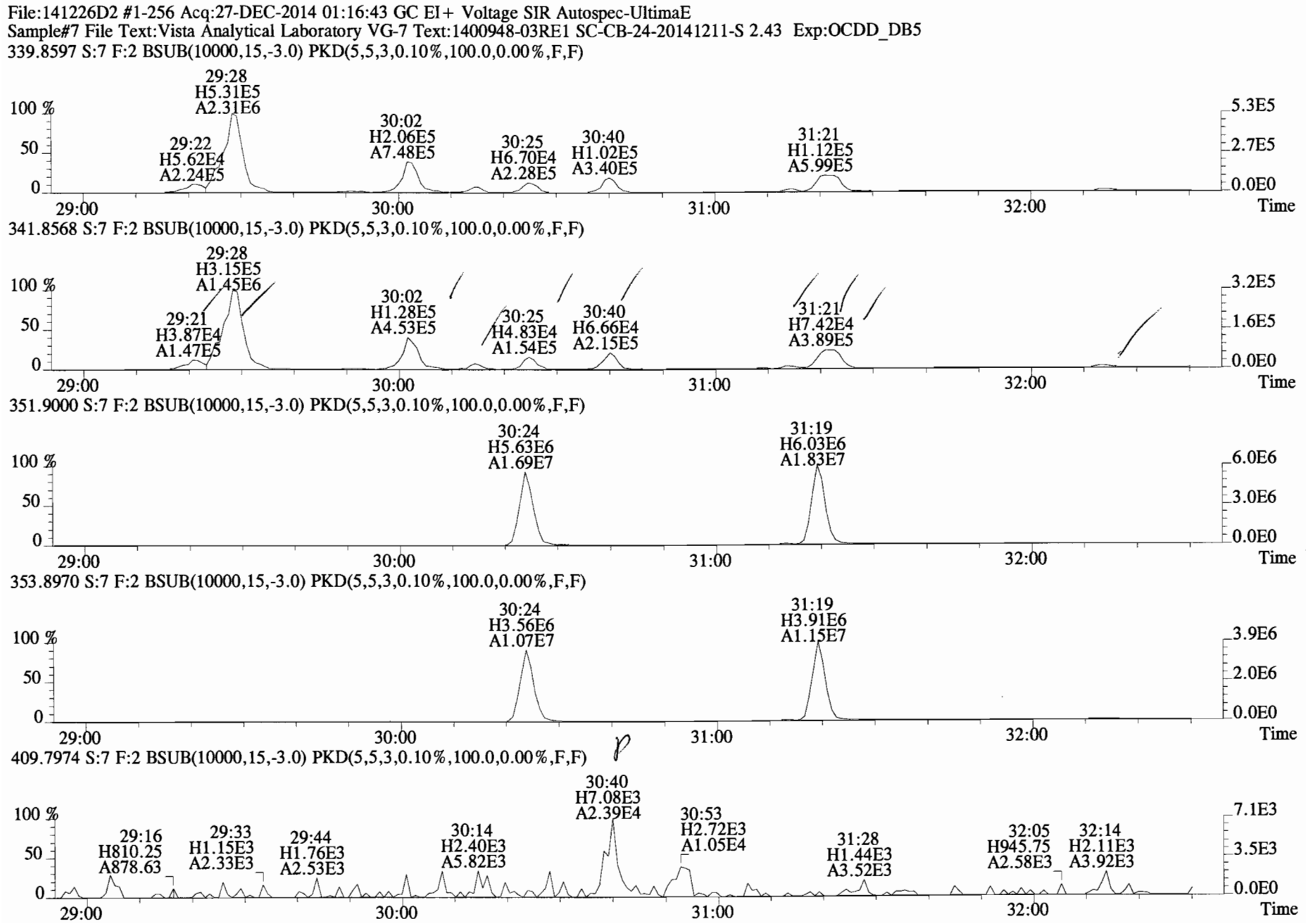


409.7974 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

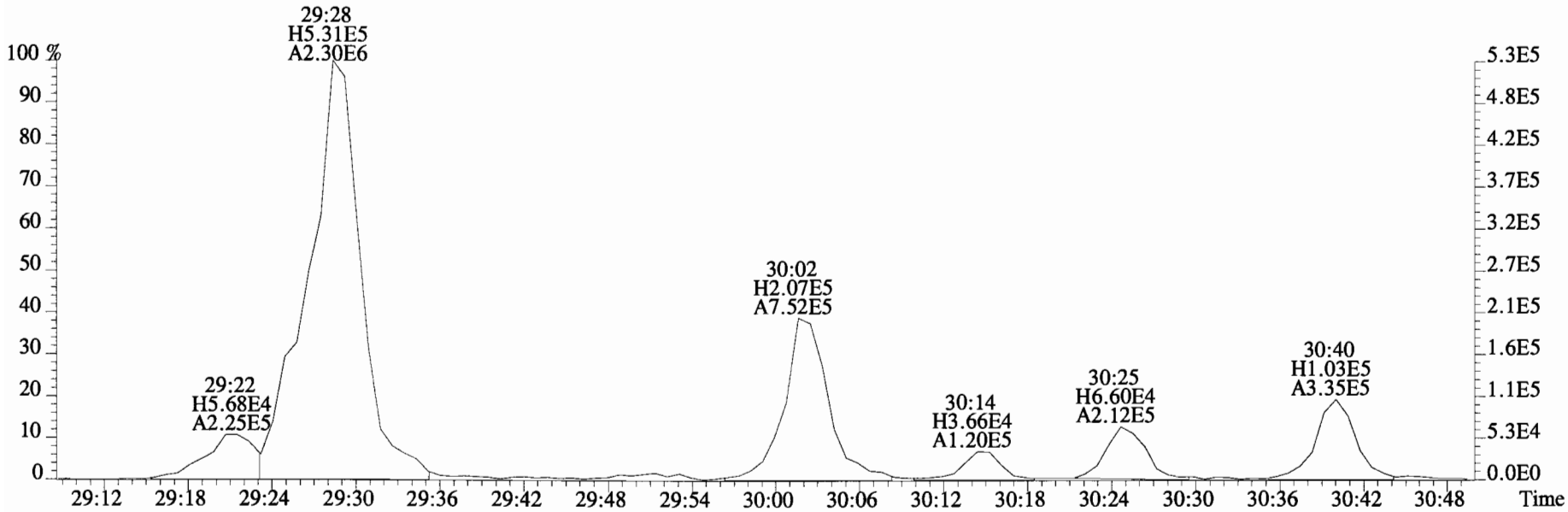


316.9824 S:7

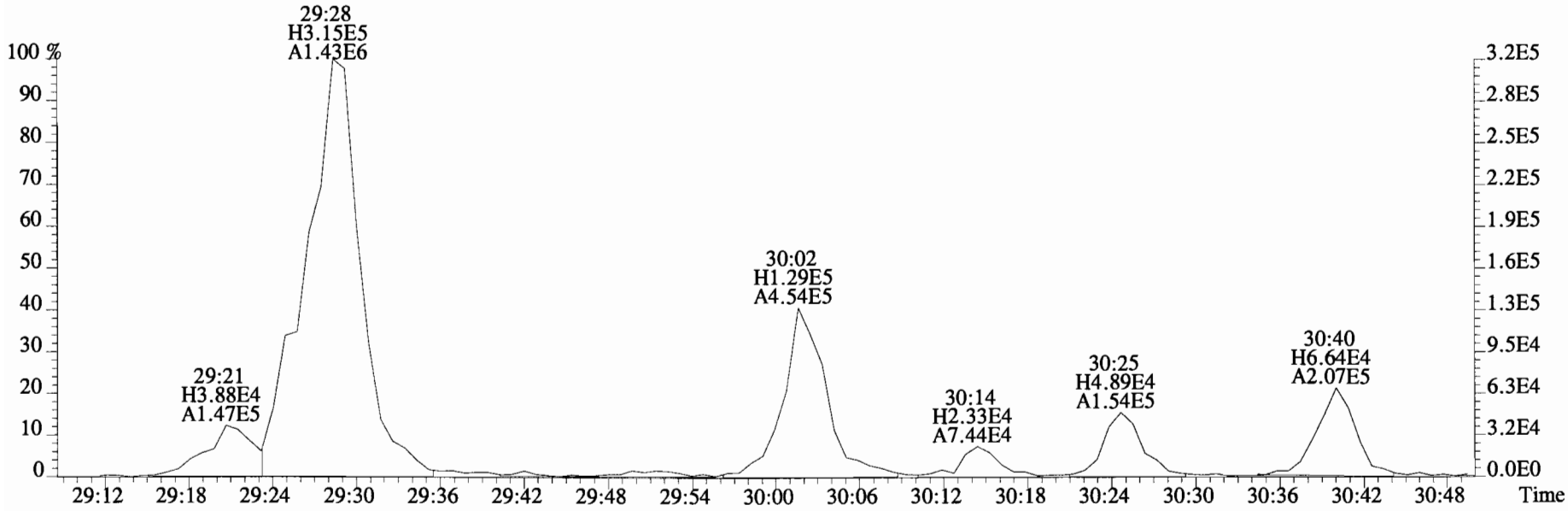



File:141226D2 #1-256 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:28 H5.31E5 A2.31E6
29:22 H5.62E4 A2.24E5
30:02 H2.06E5 A7.48E5
30:25 H6.70E4 A2.28E5
30:40 H1.02E5 A3.40E5
31:21 H1.12E5 A5.99E5
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:28 H3.15E5 A1.45E6
29:21 H3.87E4 A1.47E5
30:02 H1.28E5 A4.53E5
30:25 H4.83E4 A1.54E5
30:40 H6.66E4 A2.15E5
31:21 H7.42E4 A3.89E5
351.9000 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:24 H5.63E6 A1.69E7
31:19 H6.03E6 A1.83E7
353.8970 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:24 H3.56E6 A1.07E7
31:19 H3.91E6 A1.15E7
409.7974 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:40 H7.08E3 A2.39E4
29:16 H810.25 A878.63
29:33 H1.15E3 A2.33E3
29:44 H1.76E3 A2.53E3
30:14 H2.40E3 A5.82E3
30:53 H2.72E3 A1.05E4
31:28 H1.44E3 A3.52E3
32:05 H945.75 A2.58E3
32:14 H2.11E3 A3.92E3
100 %
50
0
29:00
30:00
31:00
32:00
Time
5.3E5
2.7E5
0.0E0
3.2E5
1.6E5
6.0E6
3.0E6
3.9E6
2.0E6
7.1E3
3.5E3

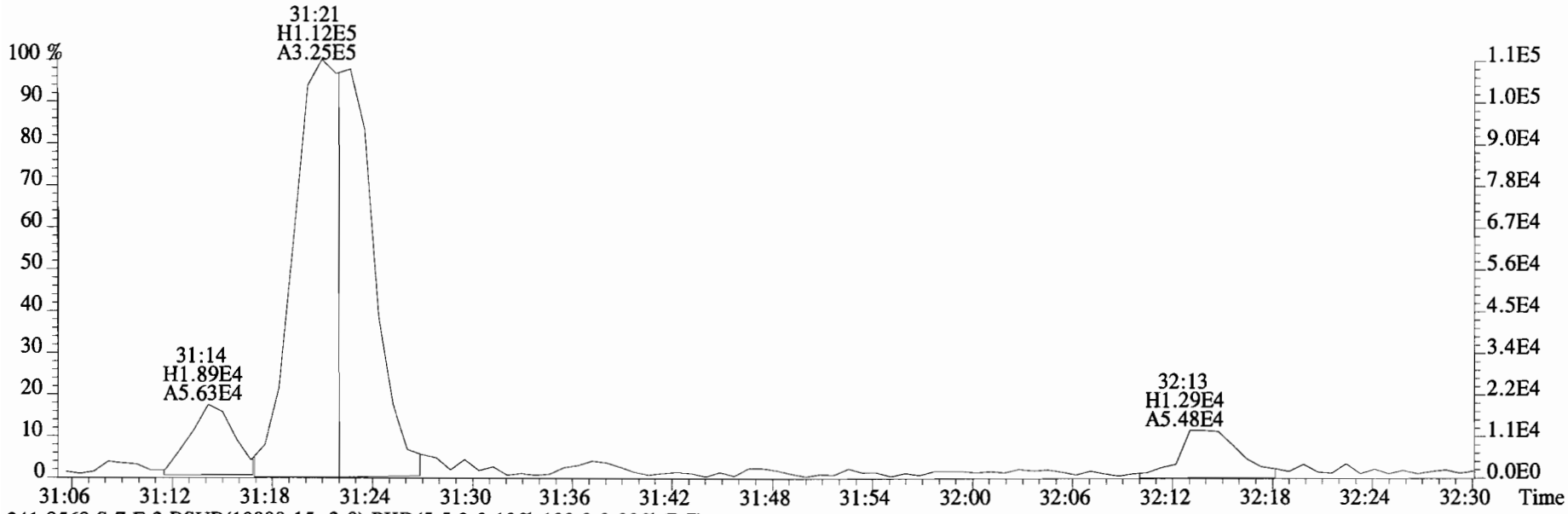
File:141226D2 #1-256 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



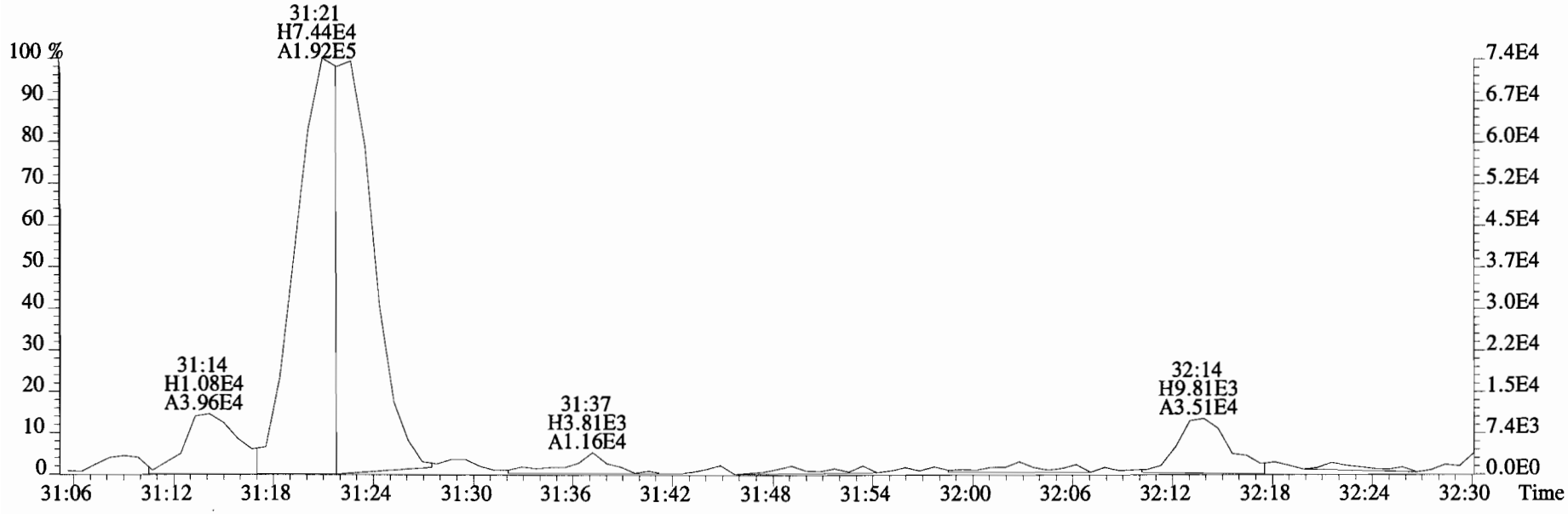
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141226D2 #1-256 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 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)

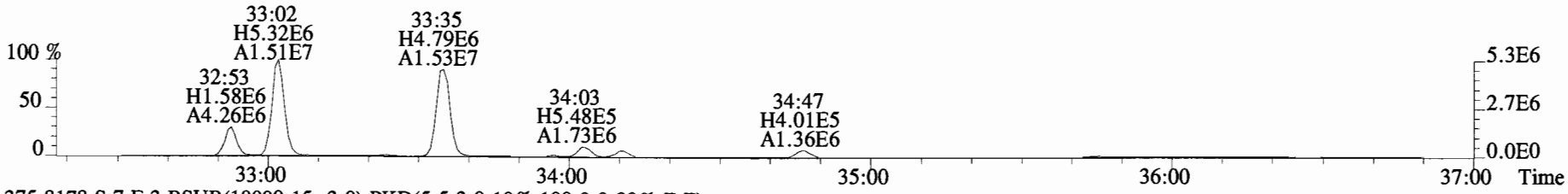


341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

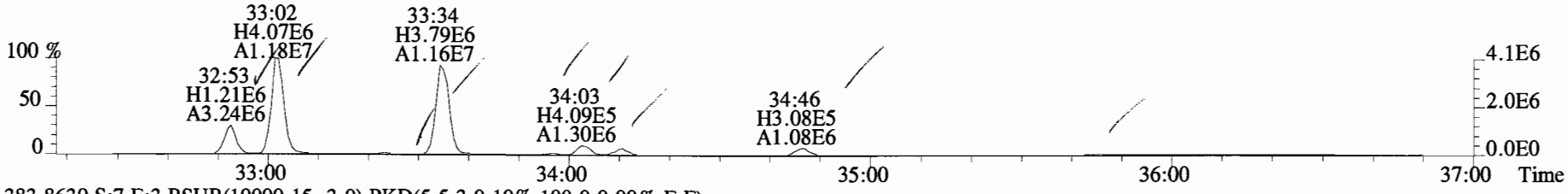


File:141226D2 #1-385 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5

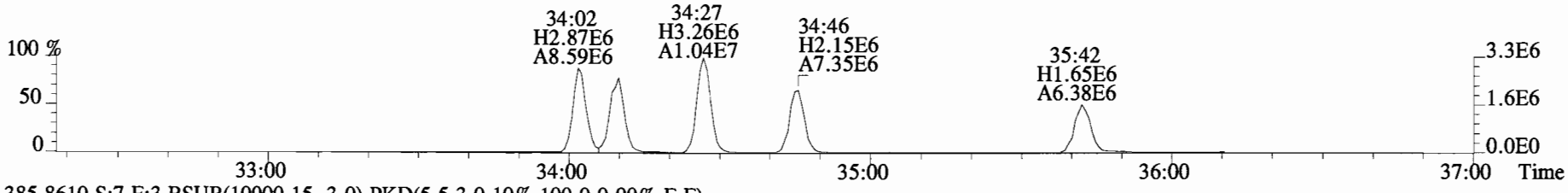
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



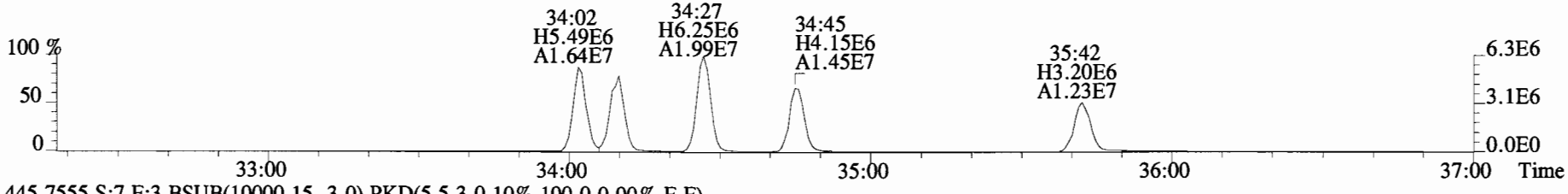
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



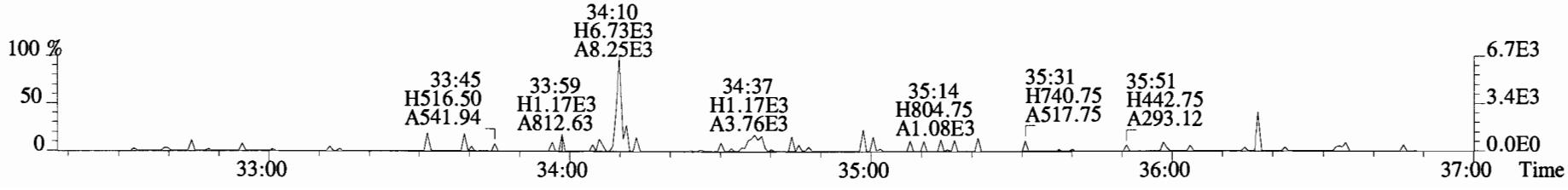
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



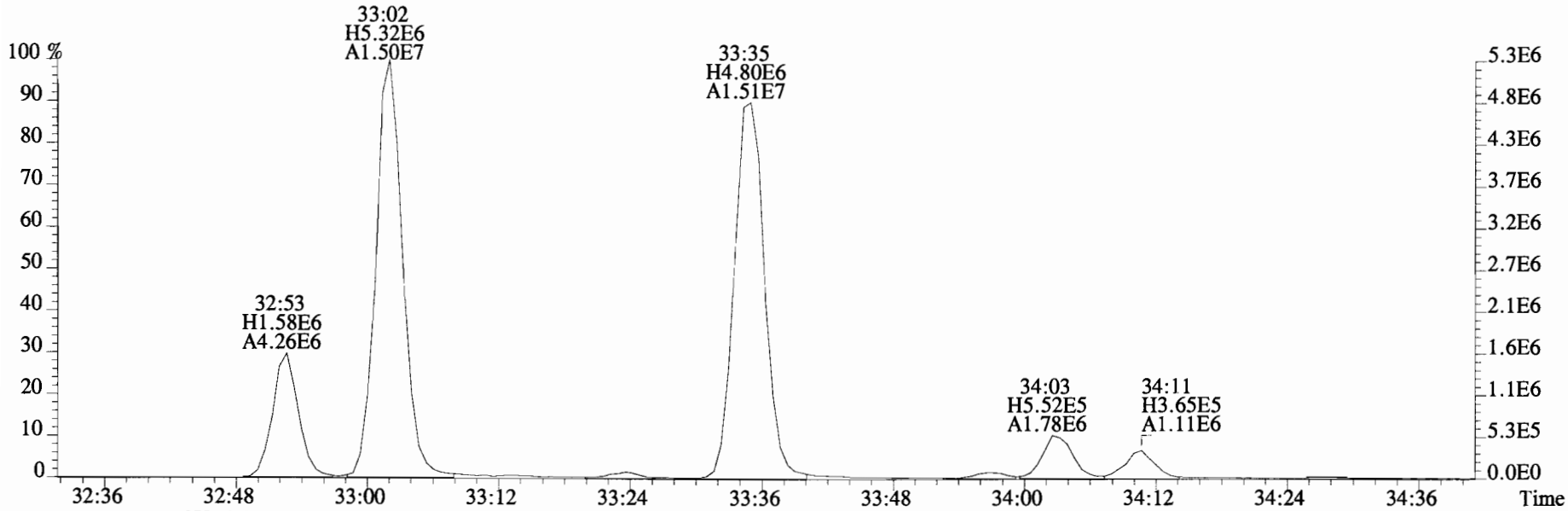
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



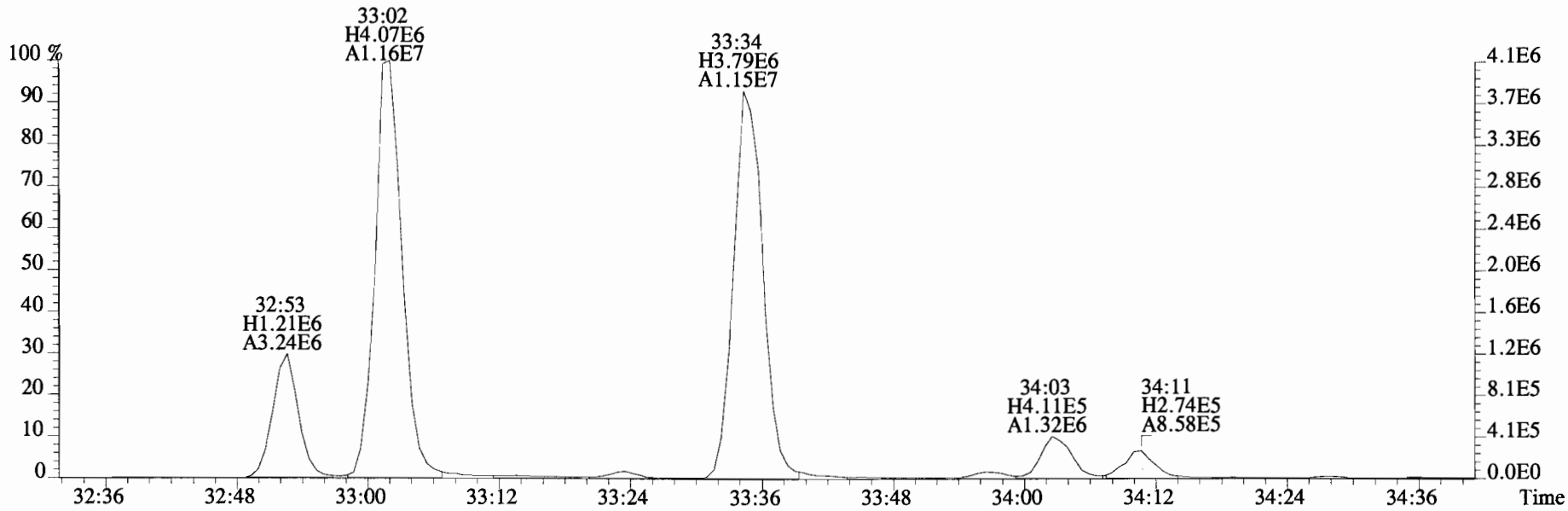
445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

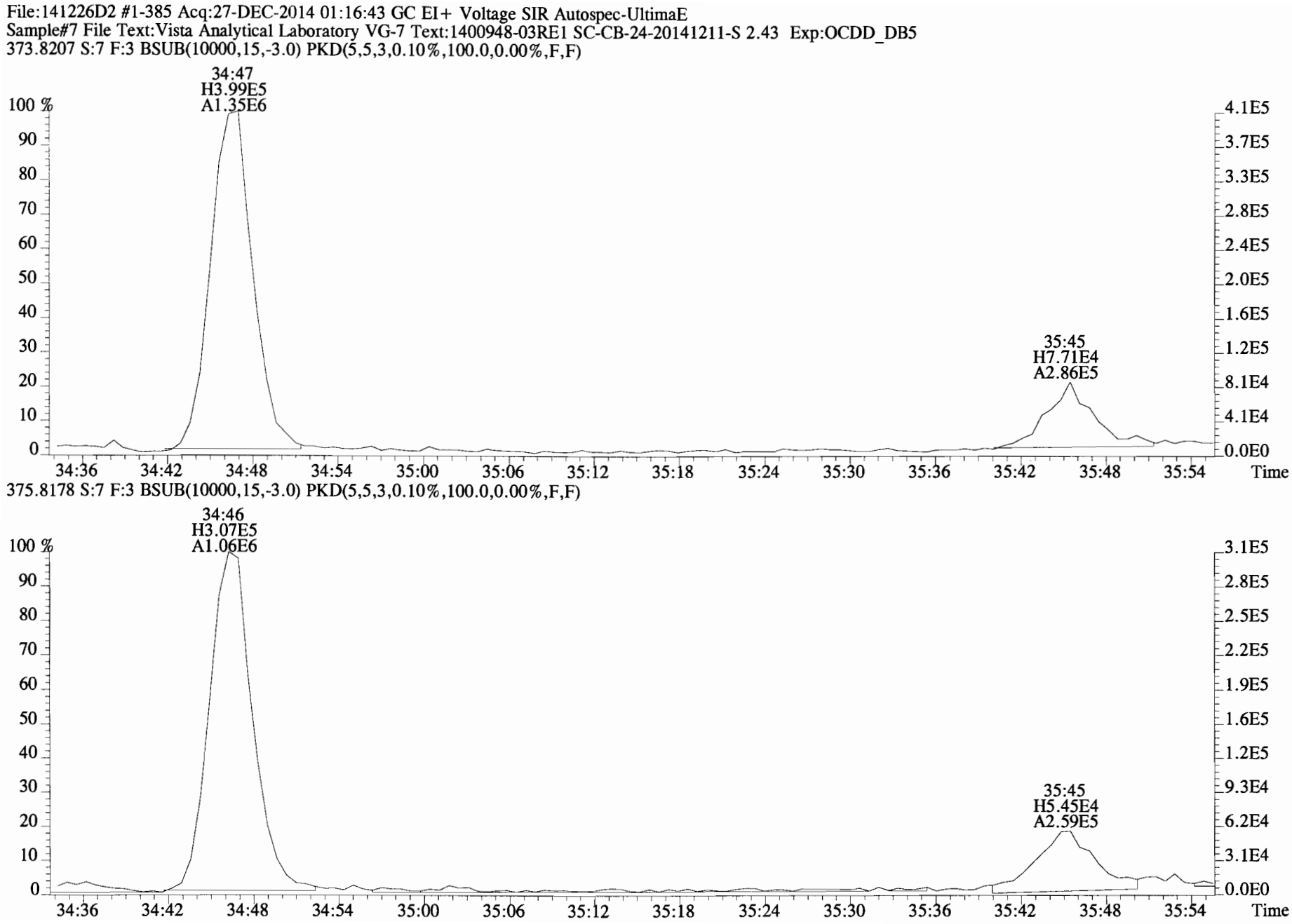


File:141226D2 #1-385 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

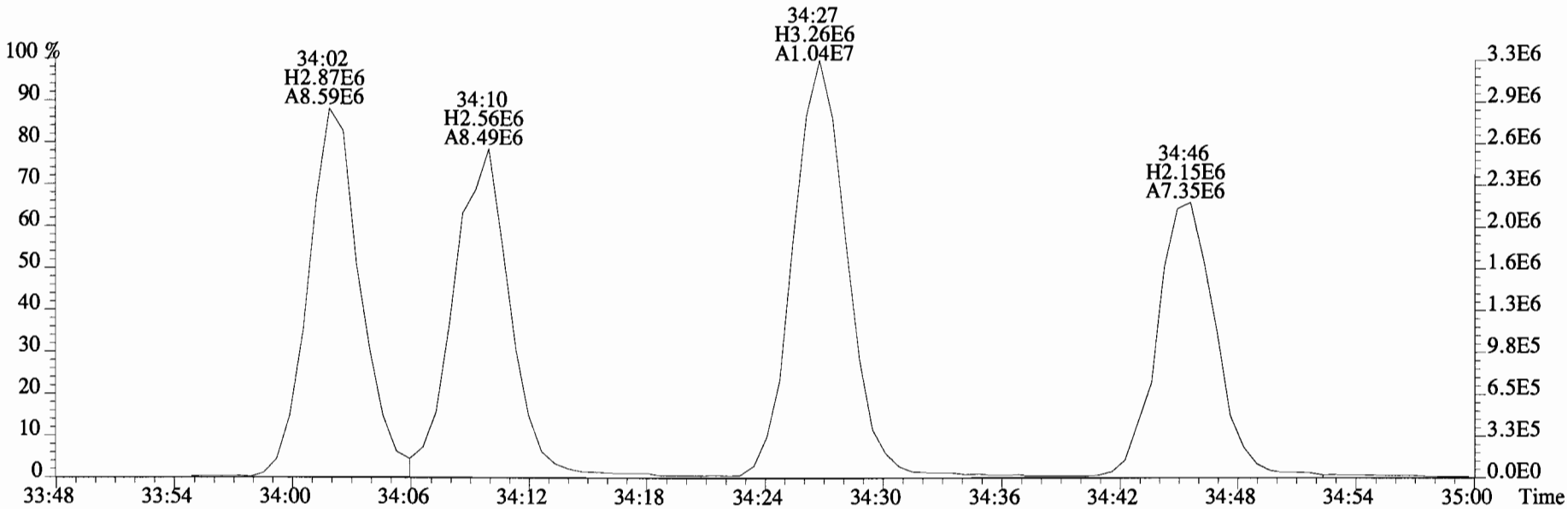


375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

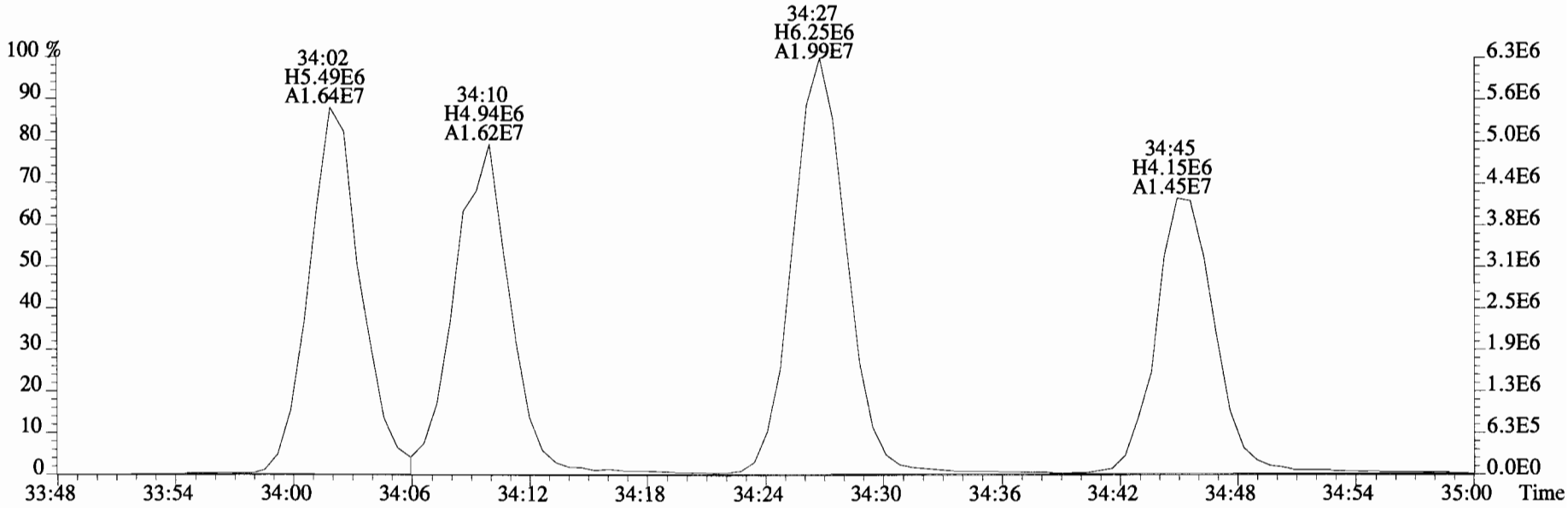



File:141226D2 #1-385 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:47
H3.99E5
A1.35E6
35:45
H7.71E4
A2.86E5
100 %
90
80
70
60
50
40
30
20
10
0
4.1E5
3.7E5
3.3E5
2.8E5
2.4E5
2.0E5
1.6E5
1.2E5
8.1E4
4.1E4
0.0E0
34:36
34:42
34:48
34:54
35:00
35:06
35:12
35:18
35:24
35:30
35:36
35:42
35:48
35:54
Time
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:46
H3.07E5
A1.06E6
35:45
H5.45E4
A2.59E5
100 %
90
80
70
60
50
40
30
20
10
0
3.1E5
2.8E5
2.5E5
2.2E5
1.9E5
1.6E5
1.2E5
9.3E4
6.2E4
3.1E4
0.0E0
34:36
34:42
34:48
34:54
35:00
35:06
35:12
35:18
35:24
35:30
35:36
35:42
35:48
35:54
Time

File:141226D2 #1-385 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 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)

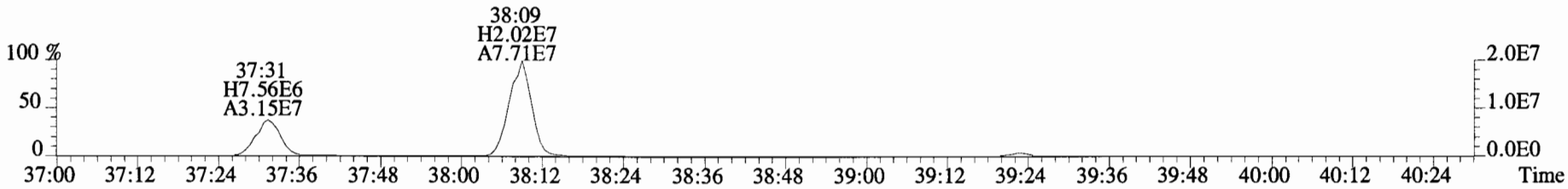


385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

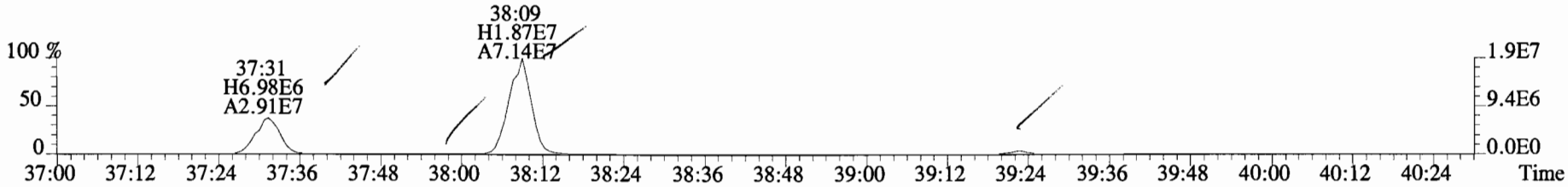


File:141226D2 #1-326 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5

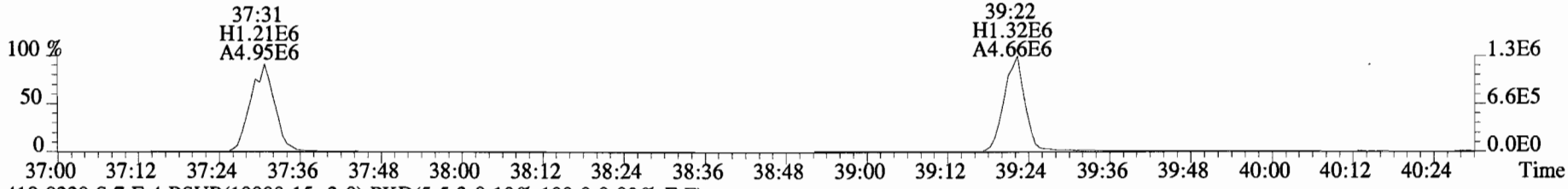
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



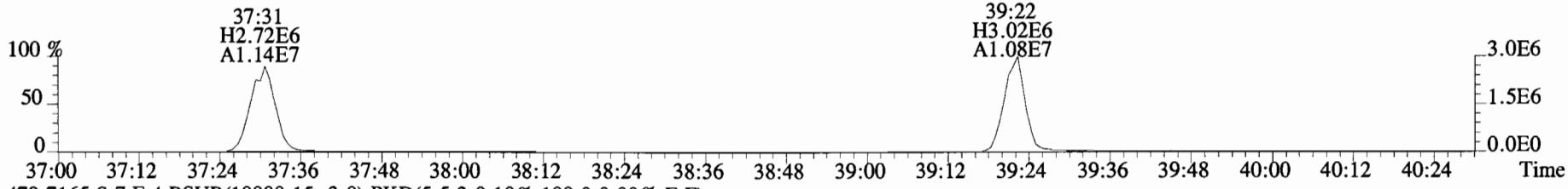
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



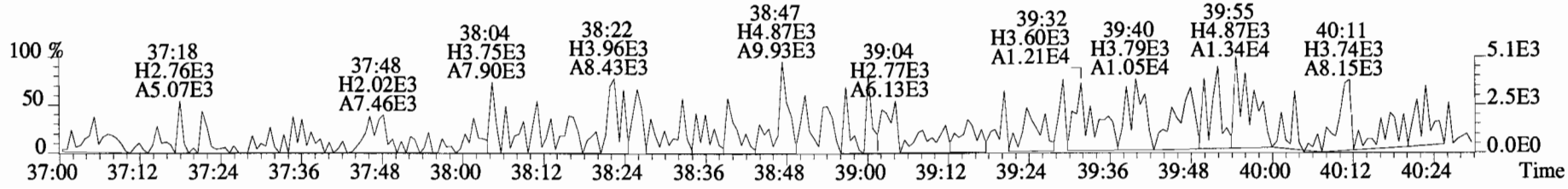
417.8253 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



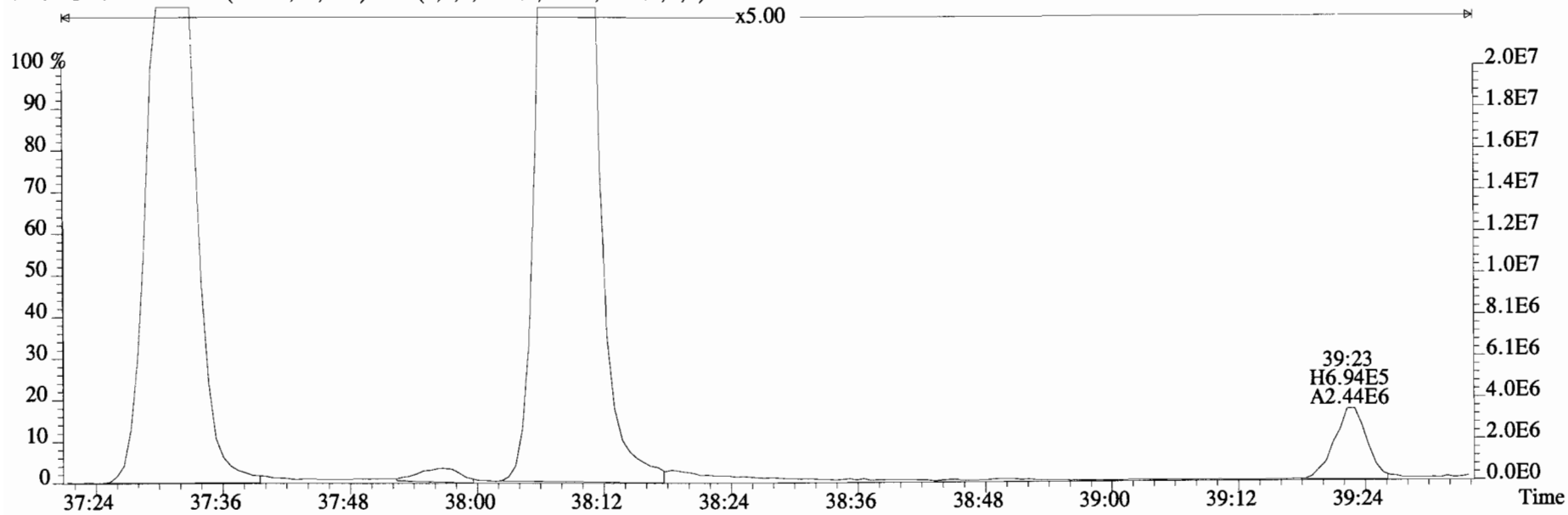
419.8220 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



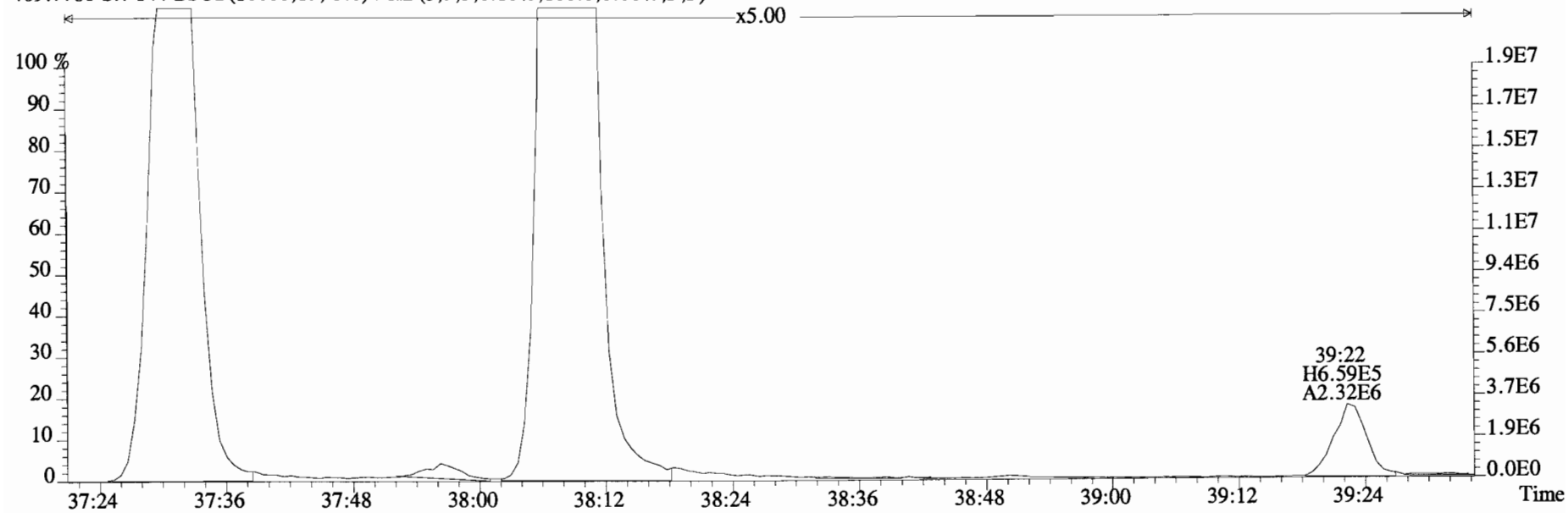
479.7165 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



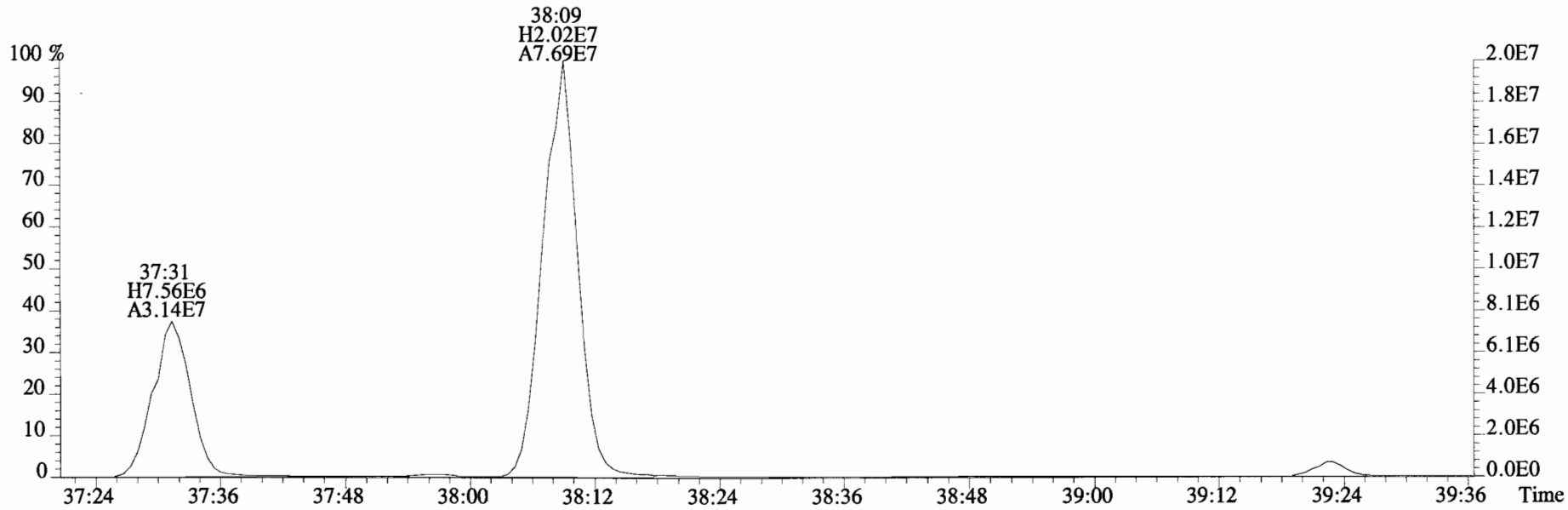
File:141226D2 #1-326 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



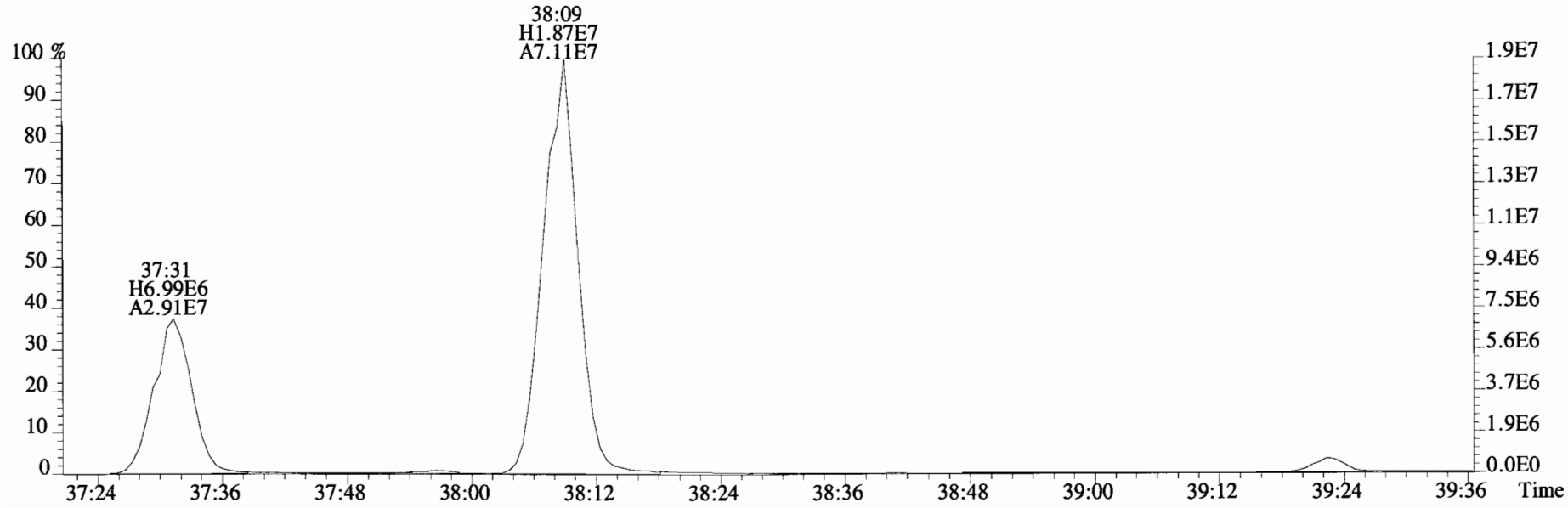
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141226D2 #1-326 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 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)

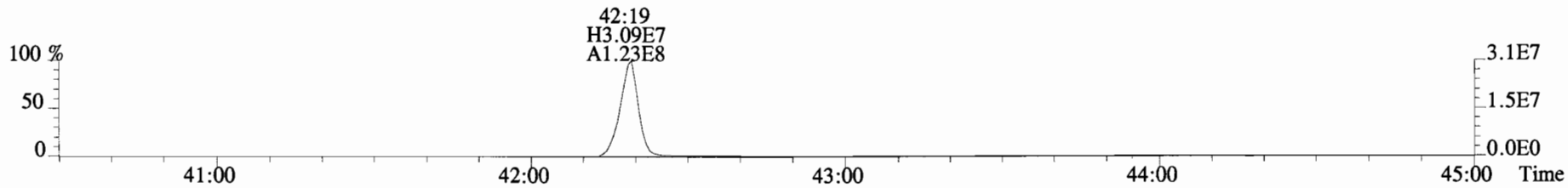


409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

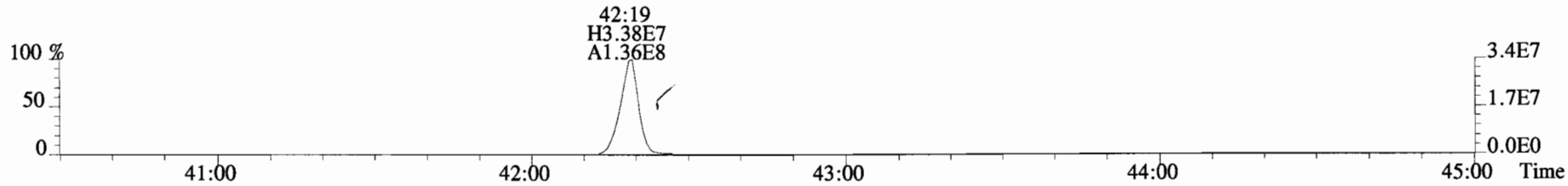


File:141226D2 #1-389 Acq:27-DEC-2014 01:16:43 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:1400948-03RE1 SC-CB-24-20141211-S 2.43 Exp:OCDD_DB5

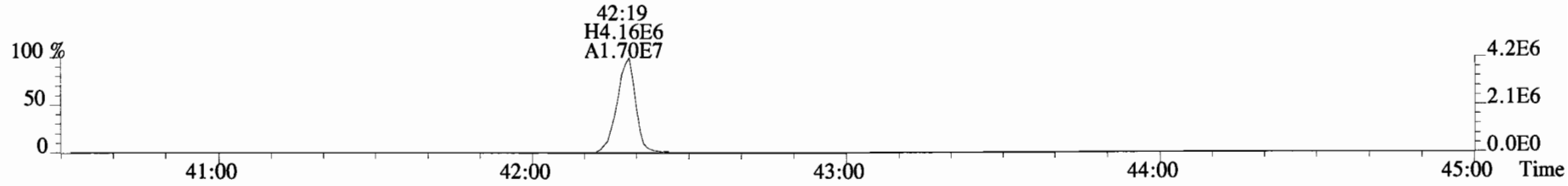
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



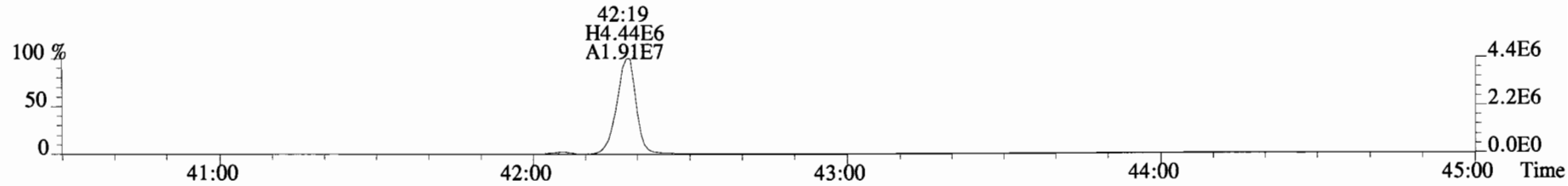
443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



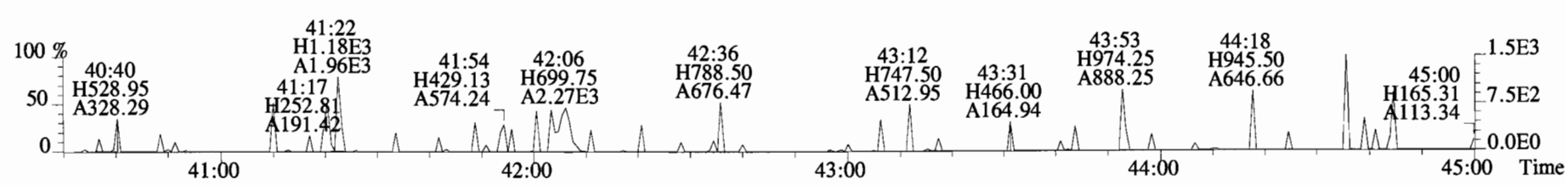
453.7831 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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)



Name	Resp	RA		RRF	RT	RRT	Conc	Q	noise	Fac	DL
2,3,7,8-TCDD	*	*	n	1.18	NotF	*	*		696	2.5	1.13
1,2,3,7,8-PeCDD	*	*	n	0.92	NotF	*	*		361	2.5	0.445
1,2,3,4,7,8-HxCDD	*	*	n	1.09	NotF	*	*		459	2.5	1.25
1,2,3,6,7,8-HxCDD	*	*	n	1.07	NotF	*	*		459	2.5	1.26
1,2,3,7,8,9-HxCDD	*	*	n	0.93	NotF	*	*		459	2.5	1.34
1,2,3,4,6,7,8-HpCDD	*	*	n	1.12	NotF	*	*		536	2.5	1.49
OCDD	*	*	n	0.95	NotF	*	*		1050	2.5	4.89
2,3,7,8-TCDF	*	*	n	1.08	NotF	*	*		736	2.5	0.895
1,2,3,7,8-PeCDF	*	*	n	1.09	NotF	*	*		528	2.5	0.703
2,3,4,7,8-PeCDF	*	*	n	1.04	NotF	*	*		528	2.5	0.740
1,2,3,4,7,8-HxCDF	*	*	n	1.39	NotF	*	*		1040	2.5	0.787
1,2,3,6,7,8-HxCDF	*	*	n	1.26	NotF	*	*		1040	2.5	1.03
2,3,4,6,7,8-HxCDF	*	*	n	1.30	NotF	*	*		599	2.5	0.640
1,2,3,7,8,9-HxCDF	*	*	n	1.19	NotF	*	*		599	2.5	0.992
1,2,3,4,6,7,8-HpCDF	*	*	n	1.62	NotF	*	*		723	2.5	1.13
1,2,3,4,7,8,9-HpCDF	*	*	n	1.53	NotF	*	*		401	2.5	0.627
OCDF	*	*	n	1.10	NotF	*	*		701	2.5	2.28

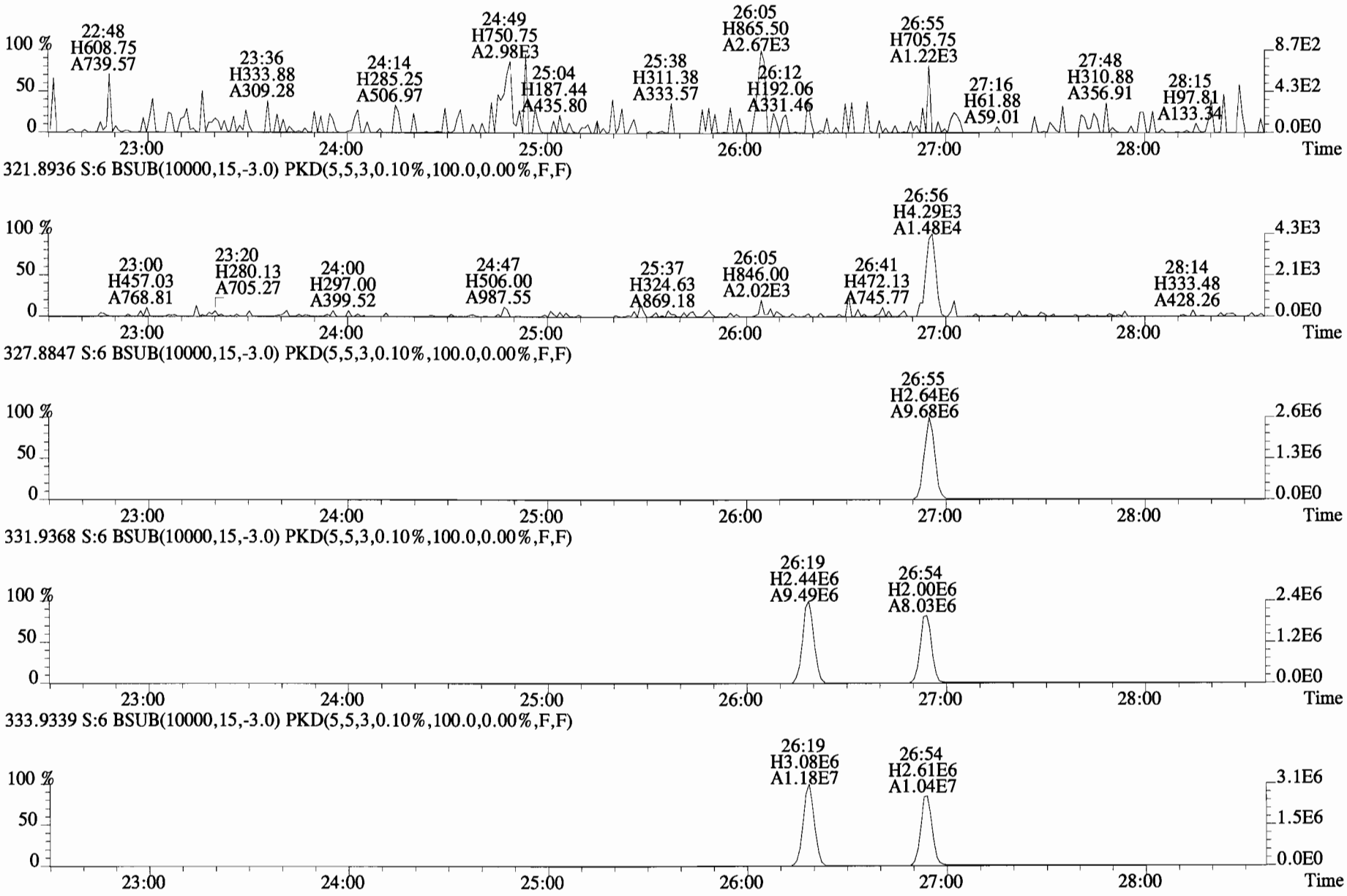
Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		696	1.13
Total Penta-Dioxins	*	*		439	0.542
Total Hexa-Dioxins	*	*		809	2.27
Total Hepta-Dioxins	*	*		536	1.49
Total Tetra-Furans	*	*		736	0.895
Total Penta-Furans	0.0000	0.0000		1080	1.48
Total Hexa-Furans	*	*		1040	1.11
Total Hepta-Furans	*	*		723	1.13

									Rec	Qual
IS	13C-2,3,7,8-TCDD	1.84e+07	0.78	y	1.07	26:54	1.022	1611.6	80.6	
IS	13C-1,2,3,7,8-PeCDD	2.10e+07	0.63	y	1.24	31:32	1.198	1589.9	79.5	
IS	13C-1,2,3,4,7,8-HxCDD	1.40e+07	1.22	y	0.72	34:50	1.014	1463.2	73.2	
IS	13C-1,2,3,6,7,8-HxCDD	1.42e+07	1.24	y	0.74	34:57	1.017	1459.2	73.0	
IS	13C-1,2,3,7,8,9-HxCDD	1.65e+07	1.25	y	0.86	35:14	1.025	1460.5	73.0	
IS	13C-1,2,3,4,6,7,8-HpCDD	1.30e+07	1.06	y	0.64	38:44	1.127	1531.3	76.6	
IS	13C-OCDD	2.05e+07	0.89	y	0.78	41:60	1.222	1980.2	49.5	
IS	13C-2,3,7,8-TCDF	2.71e+07	0.77	y	0.92	26:06	0.992	1616.3	80.8	
IS	13C-1,2,3,7,8-PeCDF	2.72e+07	1.59	y	0.95	30:20	1.153	1579.4	79.0	
IS	13C-2,3,4,7,8-PeCDF	2.84e+07	1.60	y	0.97	31:14	1.187	1615.3	80.8	
IS	13C-1,2,3,4,7,8-HxCDF	2.35e+07	0.51	y	0.99	33:57	0.988	1795.3	89.8	
IS	13C-1,2,3,6,7,8-HxCDF	2.20e+07	0.52	y	1.10	34:05	0.992	1518.0	75.9	
IS	13C-2,3,4,6,7,8-HxCDF	2.00e+07	0.52	y	1.03	34:40	1.009	1466.8	73.3	
IS	13C-1,2,3,7,8,9-HxCDF	1.74e+07	0.51	y	0.86	35:38	1.037	1529.0	76.5	
IS	13C-1,2,3,4,6,7,8-HpCDF	1.42e+07	0.44	y	0.71	37:26	1.090	1501.1	75.1	
IS	13C-1,2,3,4,7,8,9-HpCDF	1.26e+07	0.44	y	0.71	39:17	1.143	1340.6	67.0	
IS	13C-OCDF	2.67e+07	0.88	y	0.87	42:13	1.229	2310.6	57.8	
C/Up	37Cl-2,3,7,8-TCDD	9.68e+06			1.21	26:55	1.023	751.35	93.9	
RS/RT	13C-1,2,3,4-TCDD	2.13e+07	0.81	y	1.00	26:19	*	2000.0		
RS	13C-1,2,3,4-TCDF	3.63e+07	0.77	y	1.00	24:48	*	2000.0		
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.65e+07	0.52	y	1.00	34:22	*	2000.0		

Integrations by Analyst: M Date: 12/18/14

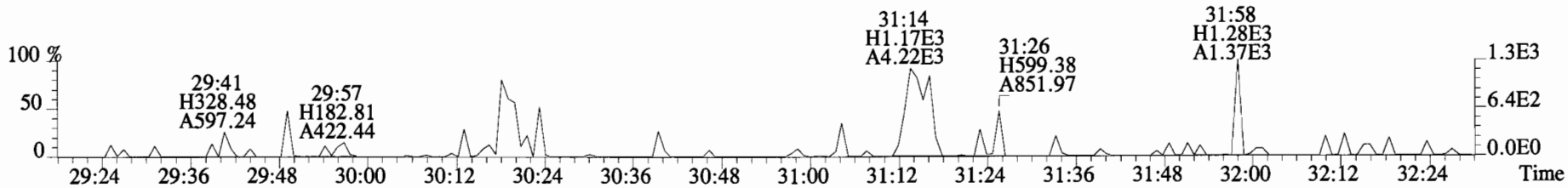
Reviewed by Analyst: Date: 12/19/14

File:141217D1 #1-552 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5

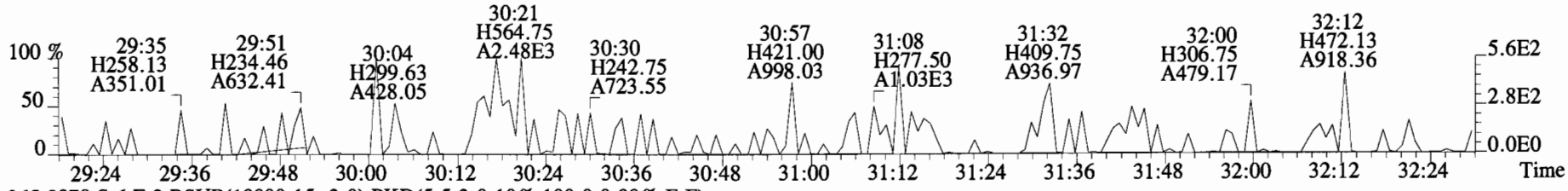


File:141217D1 #1-256 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5

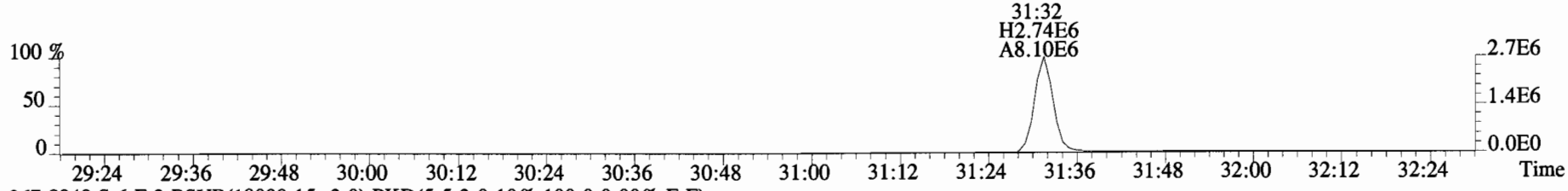
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



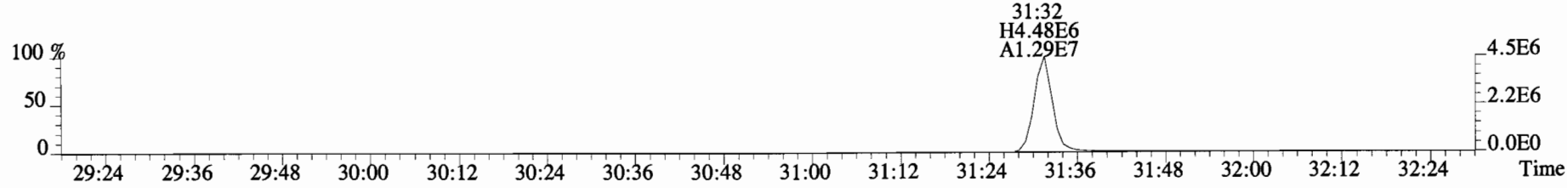
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



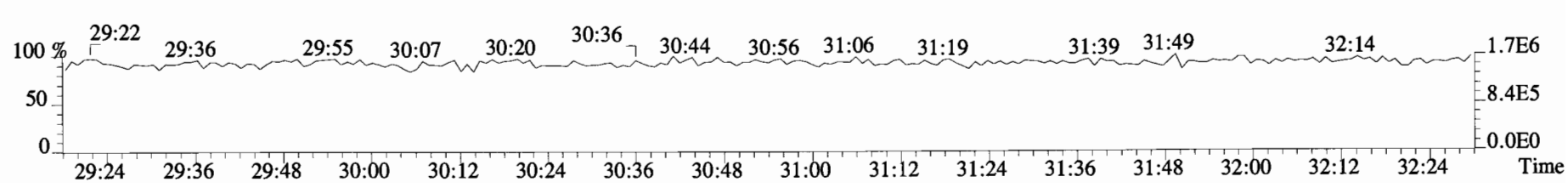
365.8978 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



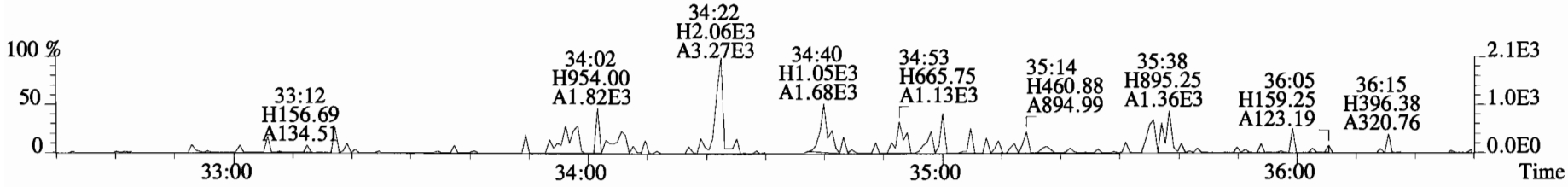
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



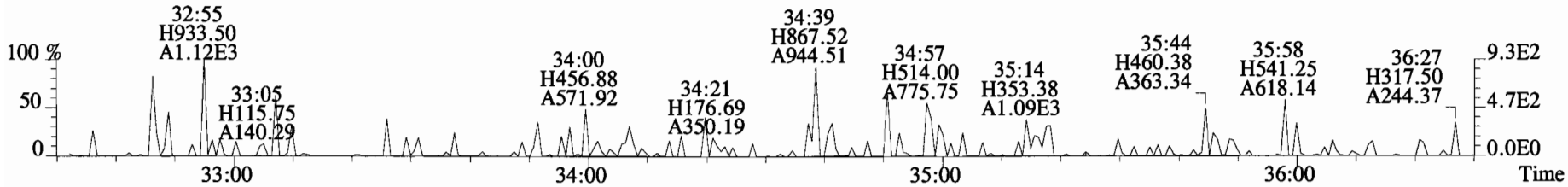
366.9792 S:6 F:2



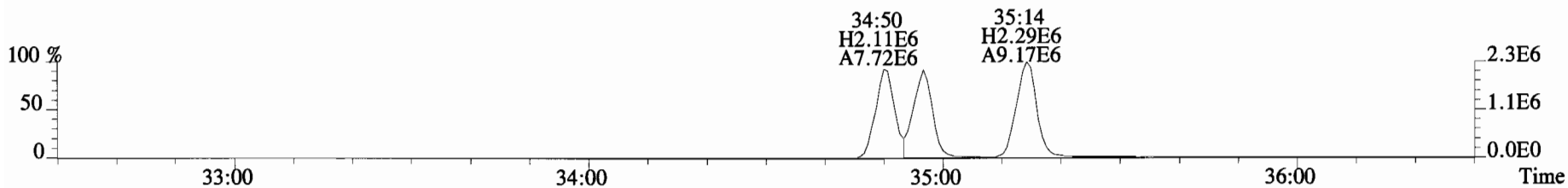
File:141217D1 #1-385 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



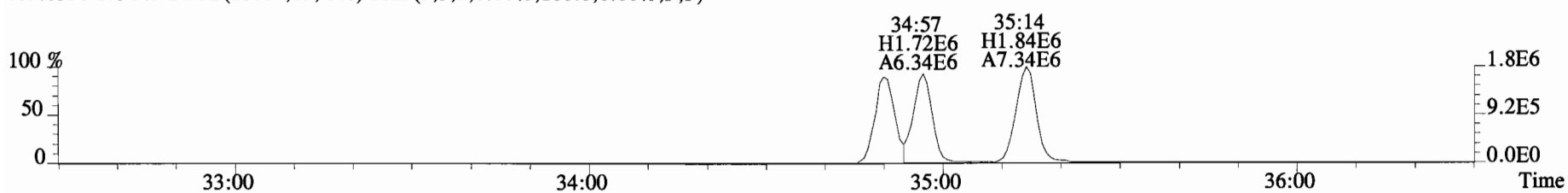
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



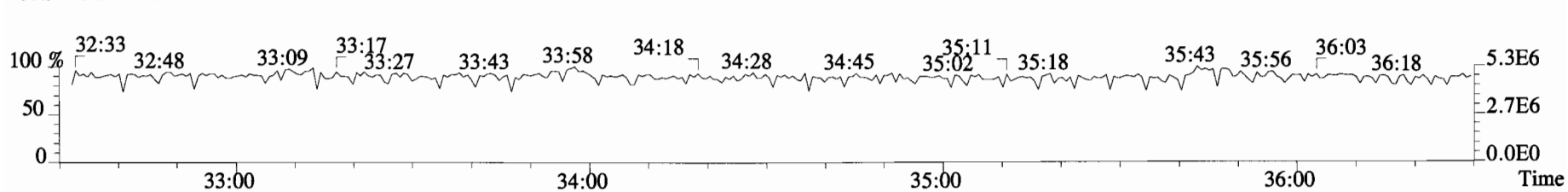
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



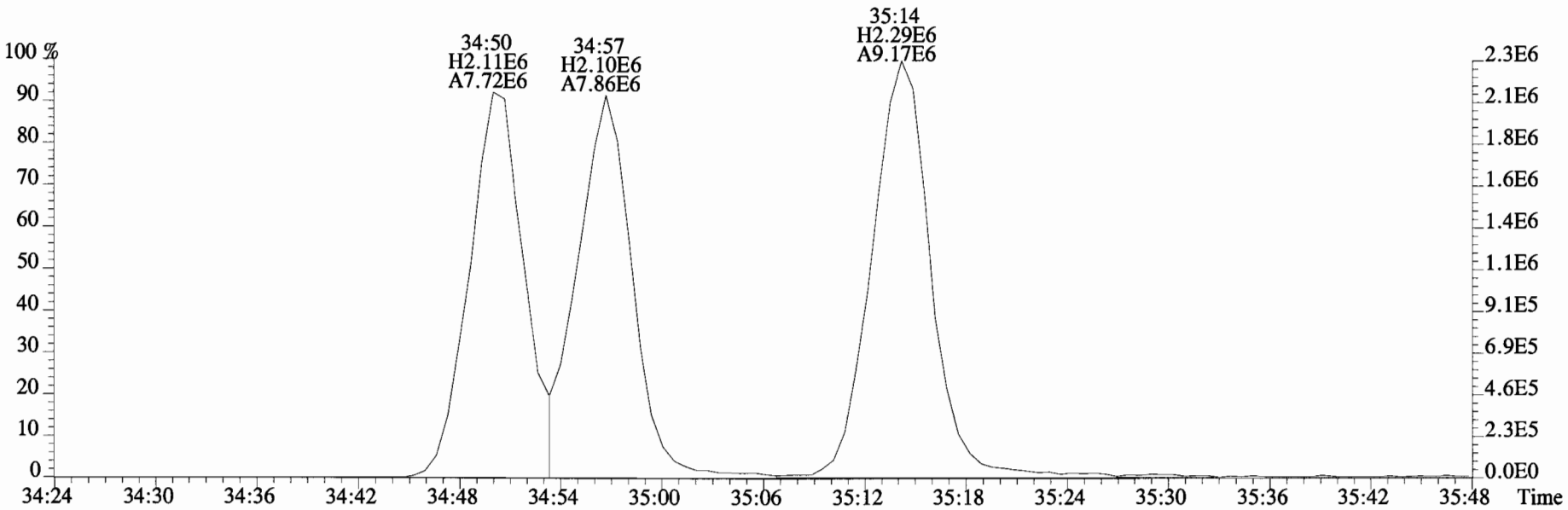
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



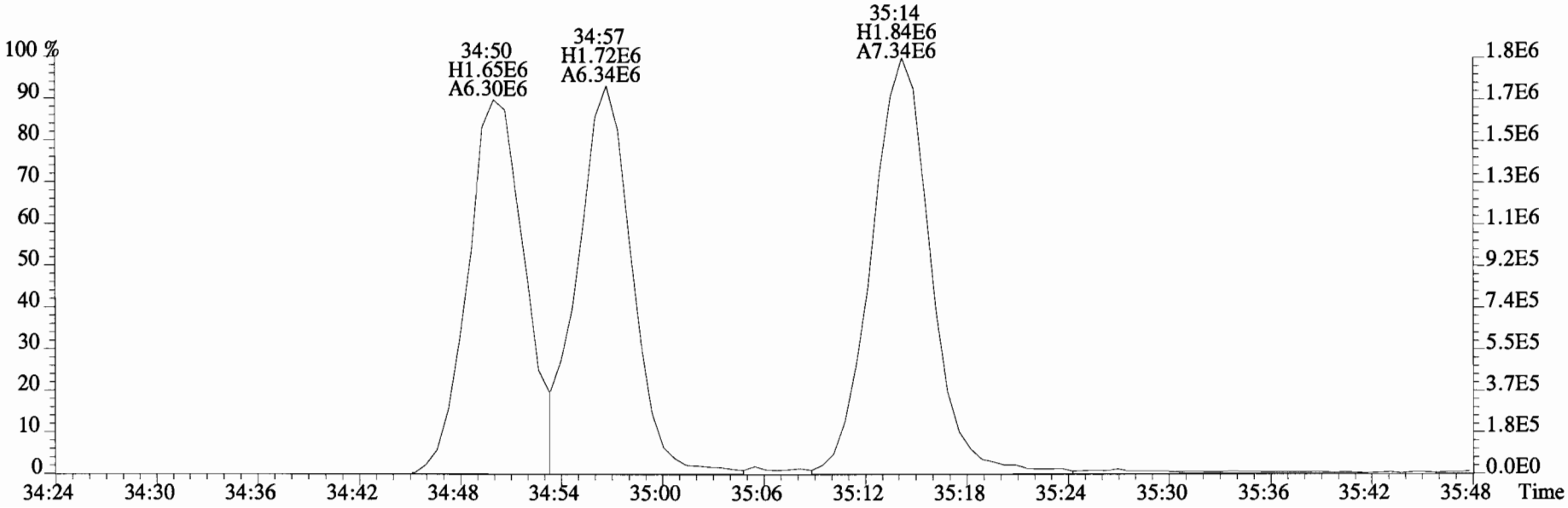
380.9760 S:6 F:3



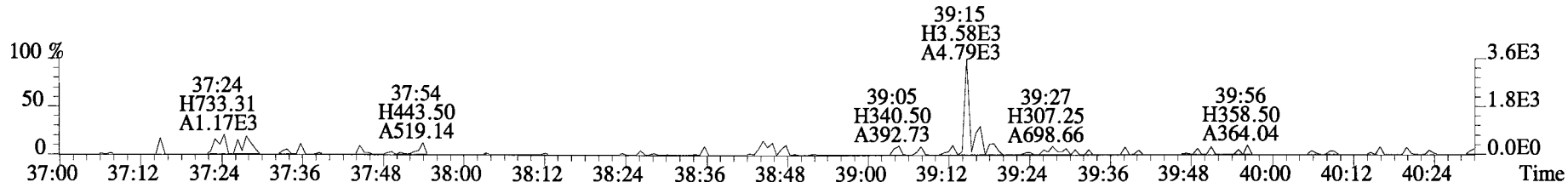
File:141217D1 #1-385 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



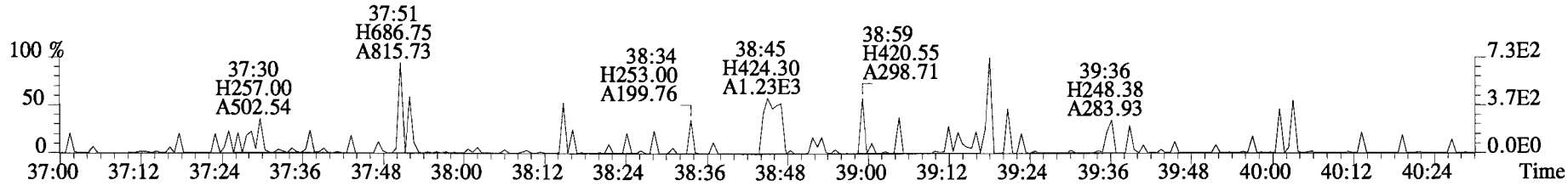
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



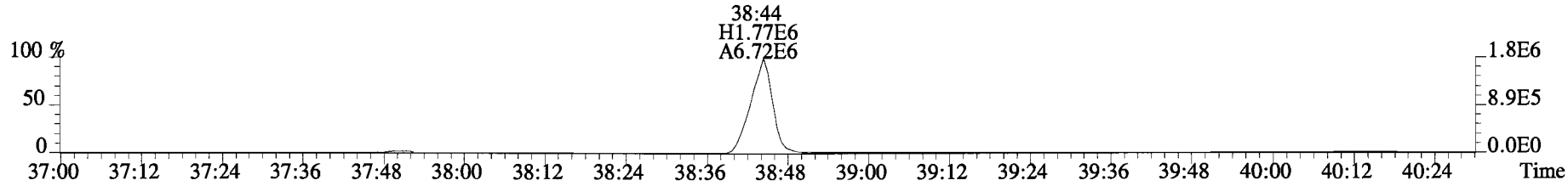
File:141217D1 #1-326 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



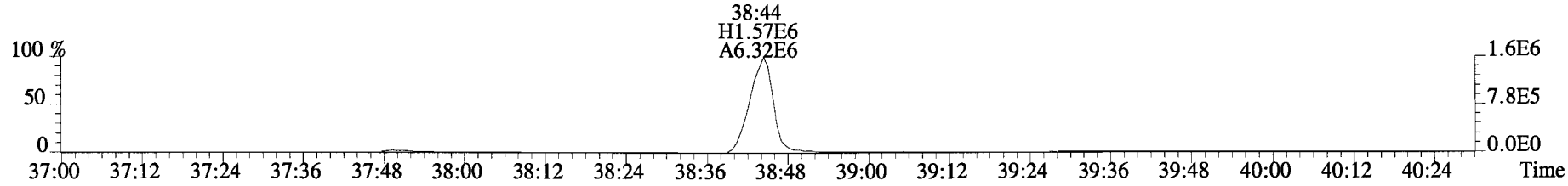
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



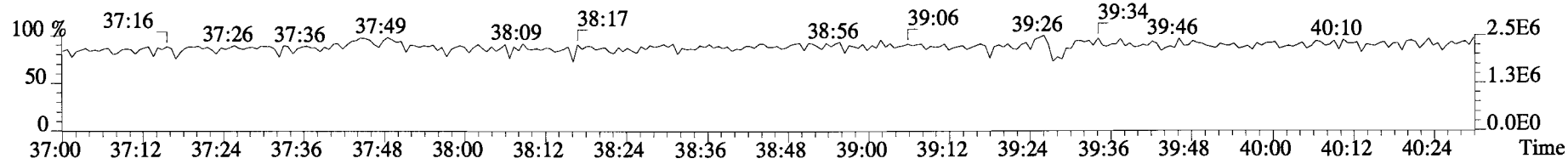
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



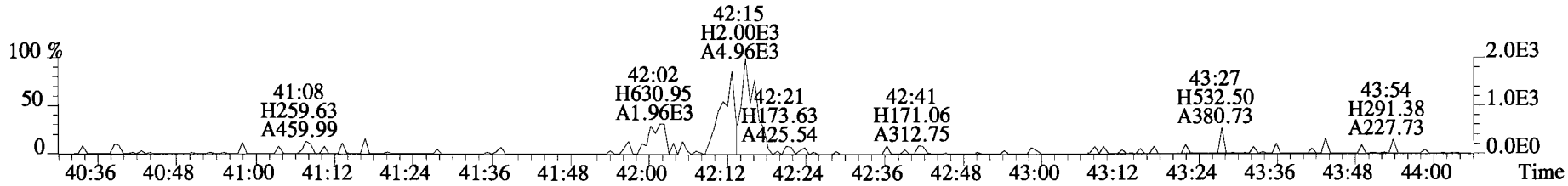
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



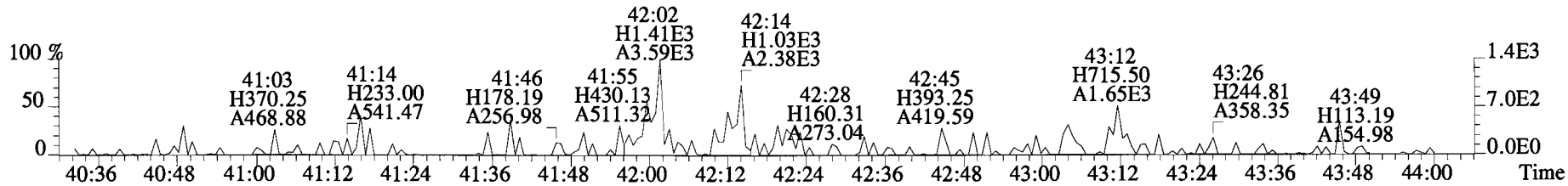
430.9728 S:6 F:4



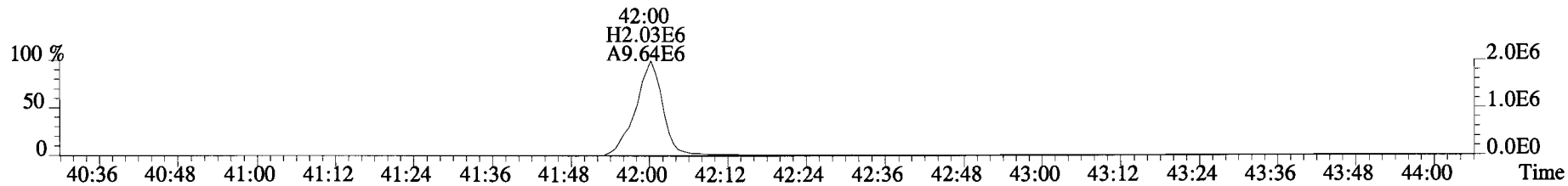
File:141217D1 #1-388 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



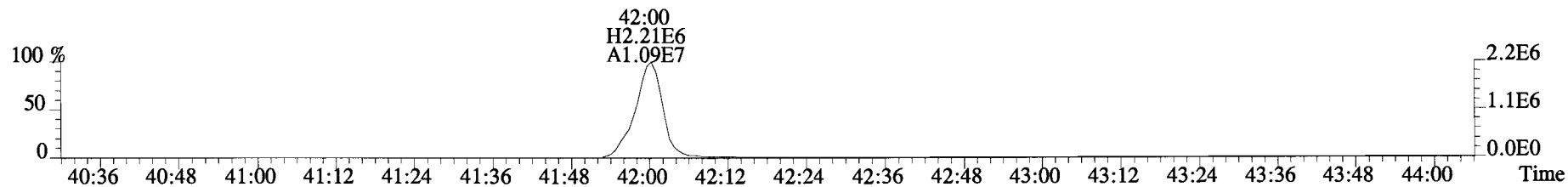
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



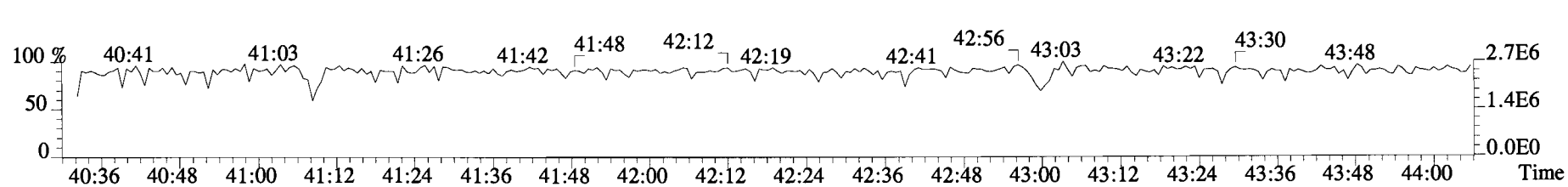
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



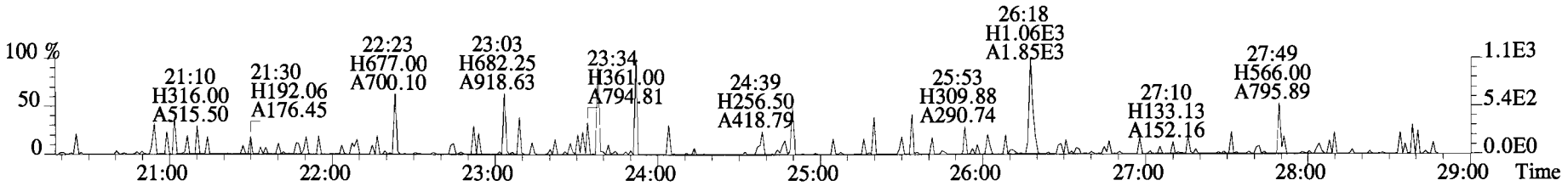
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



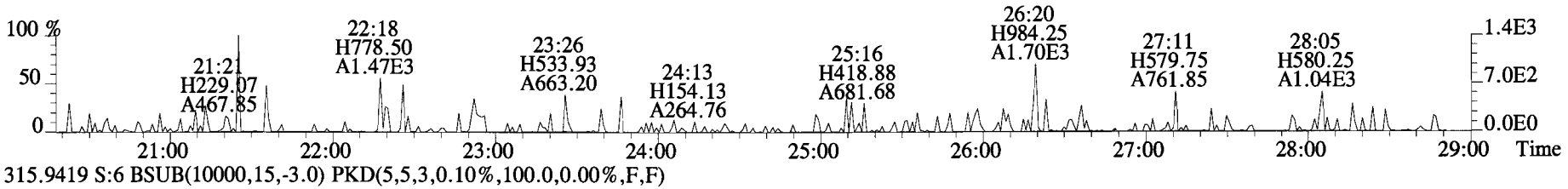
454.9728 S:6 F:5



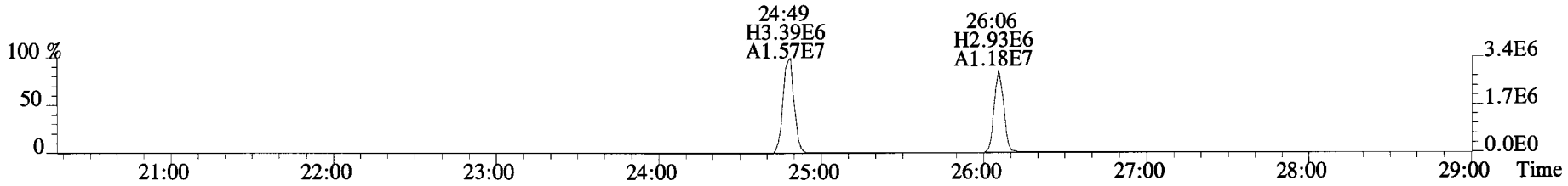
File:141217D1 #1-552 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



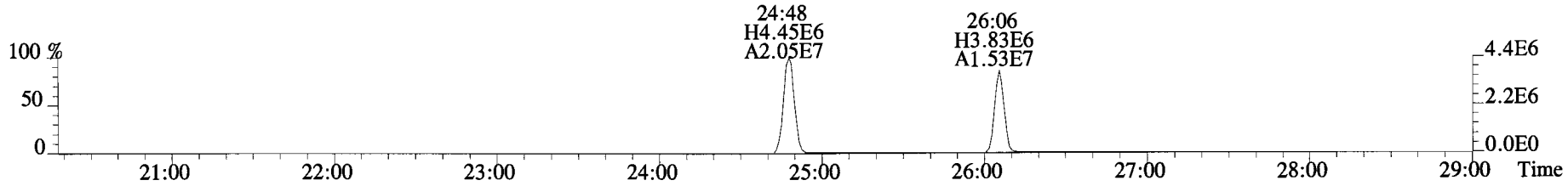
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



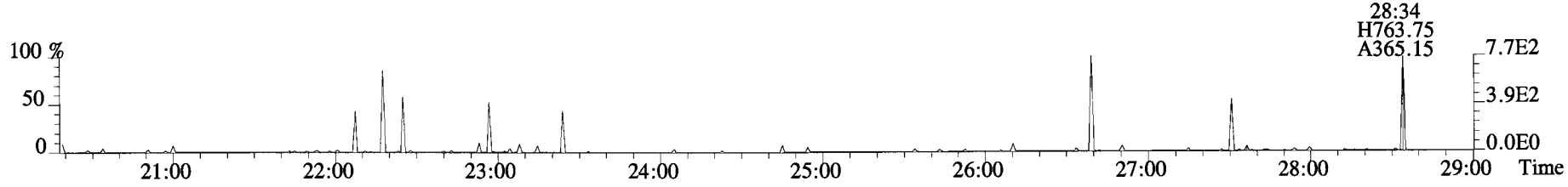
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



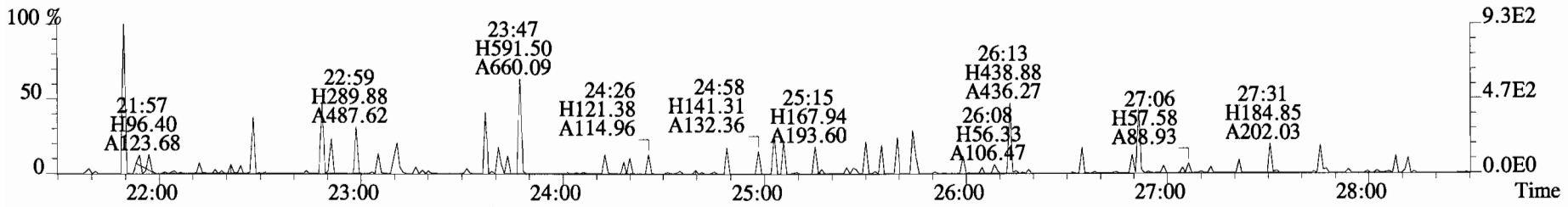
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



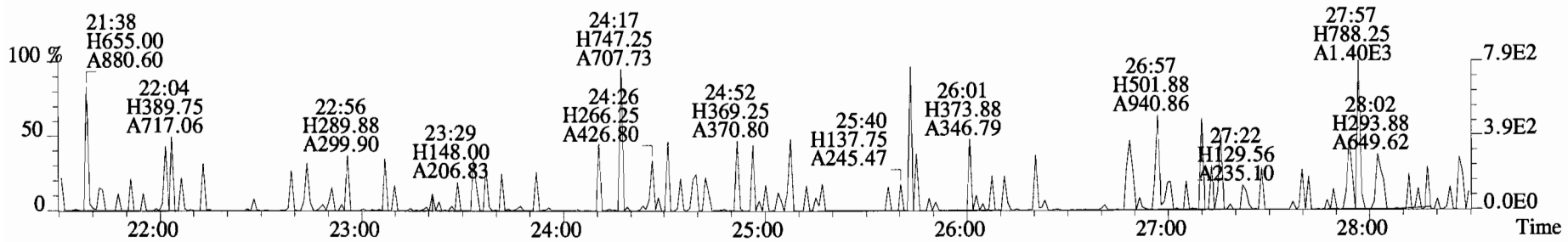
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



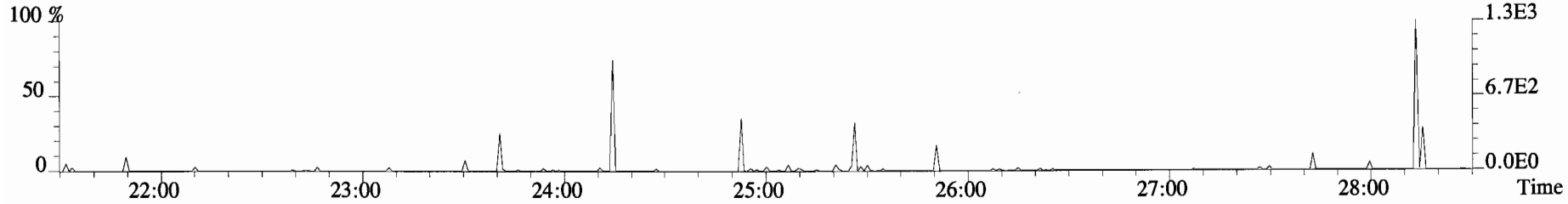
File:141217D1 #1-552 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



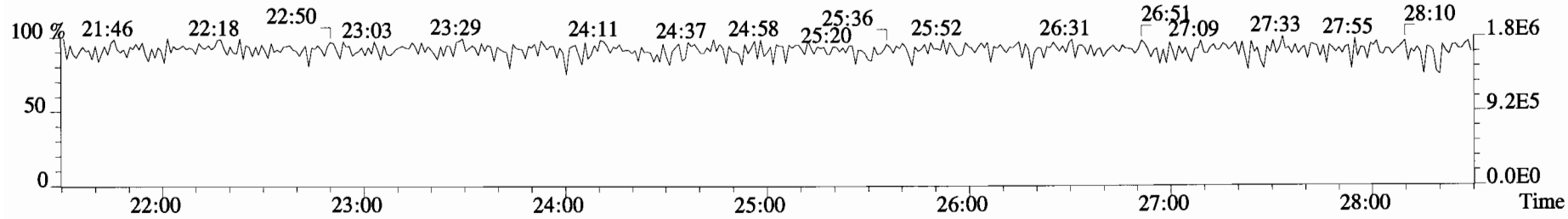
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



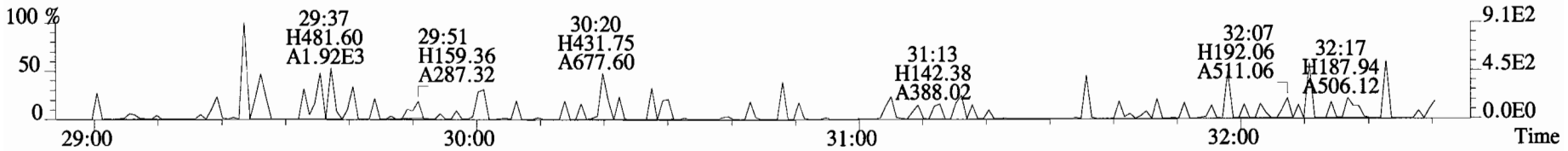
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



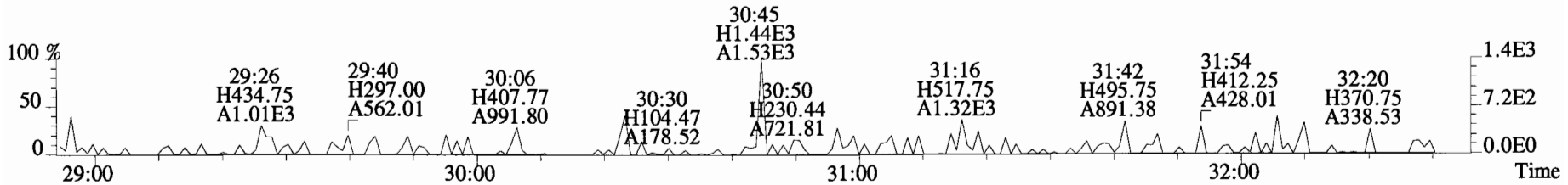
316.9824 S:6



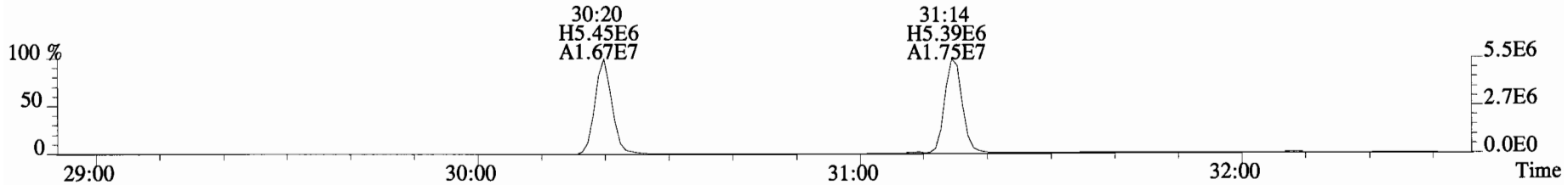
File:141217D1 #1-256 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



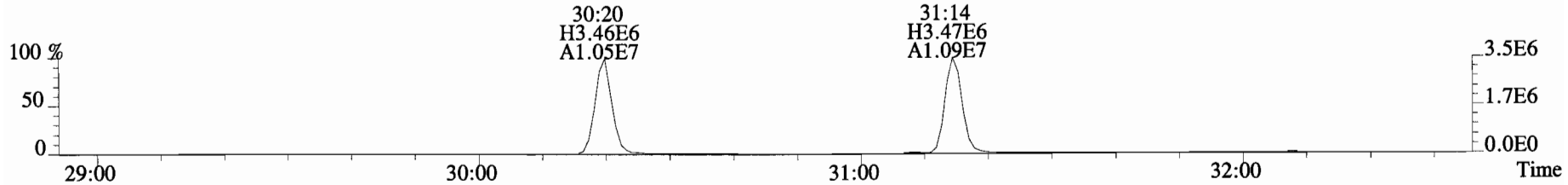
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



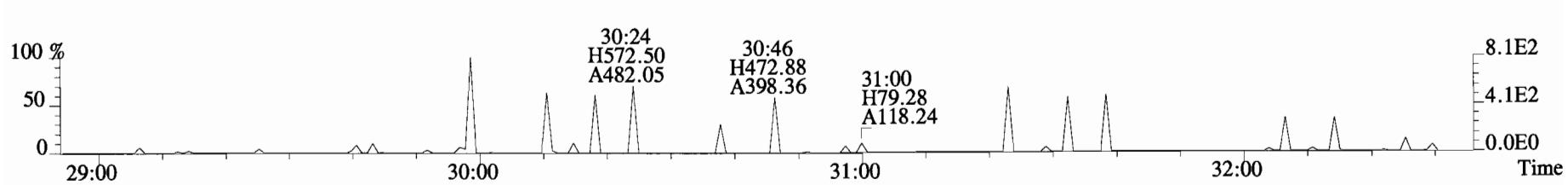
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

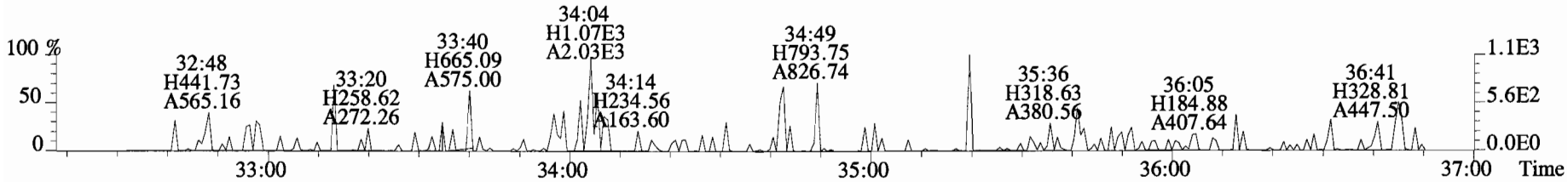


409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

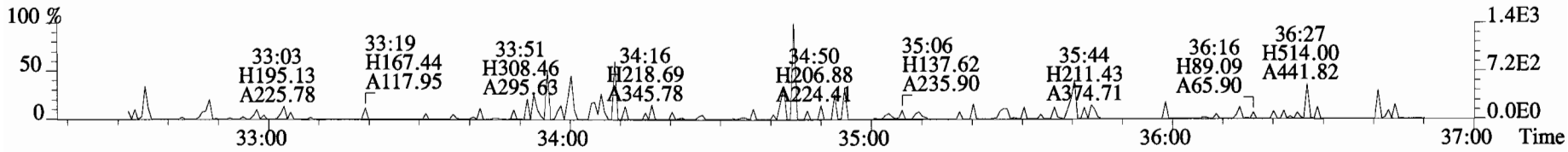


File:141217D1 #1-385 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5

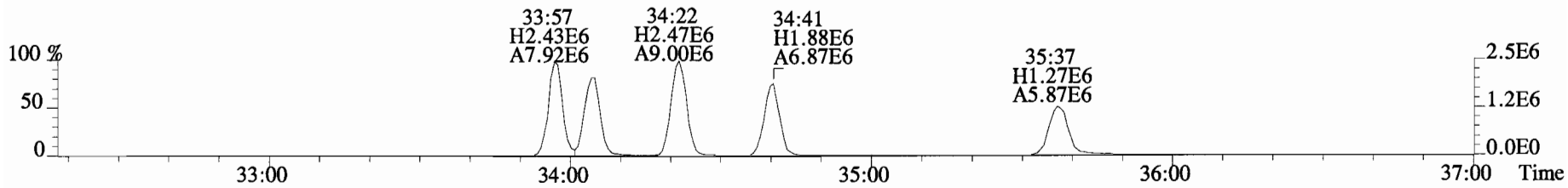
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



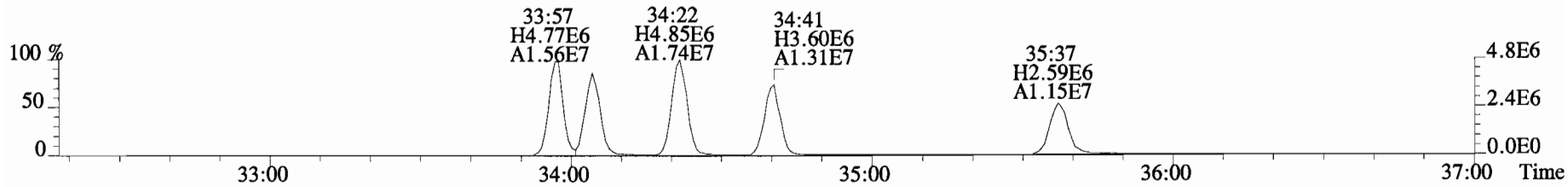
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



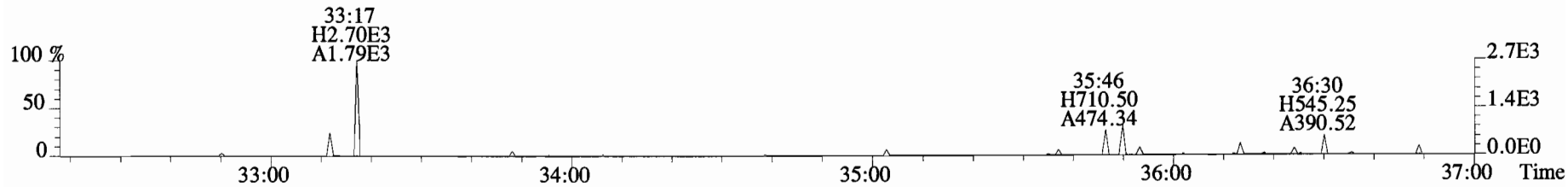
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



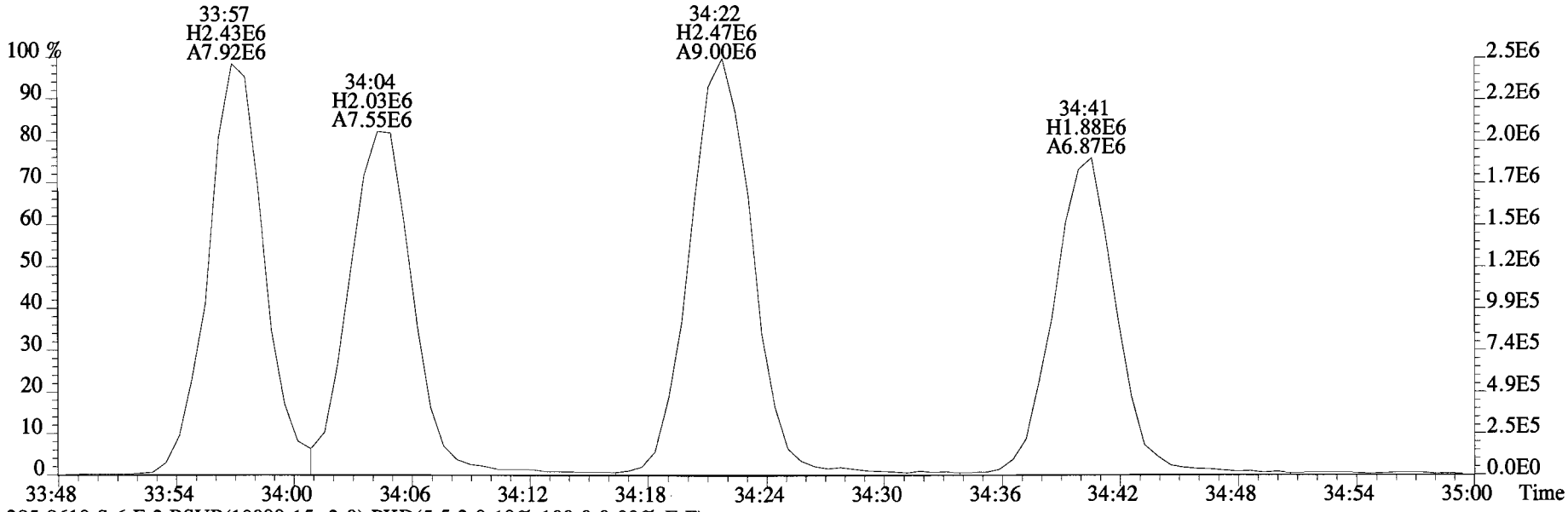
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



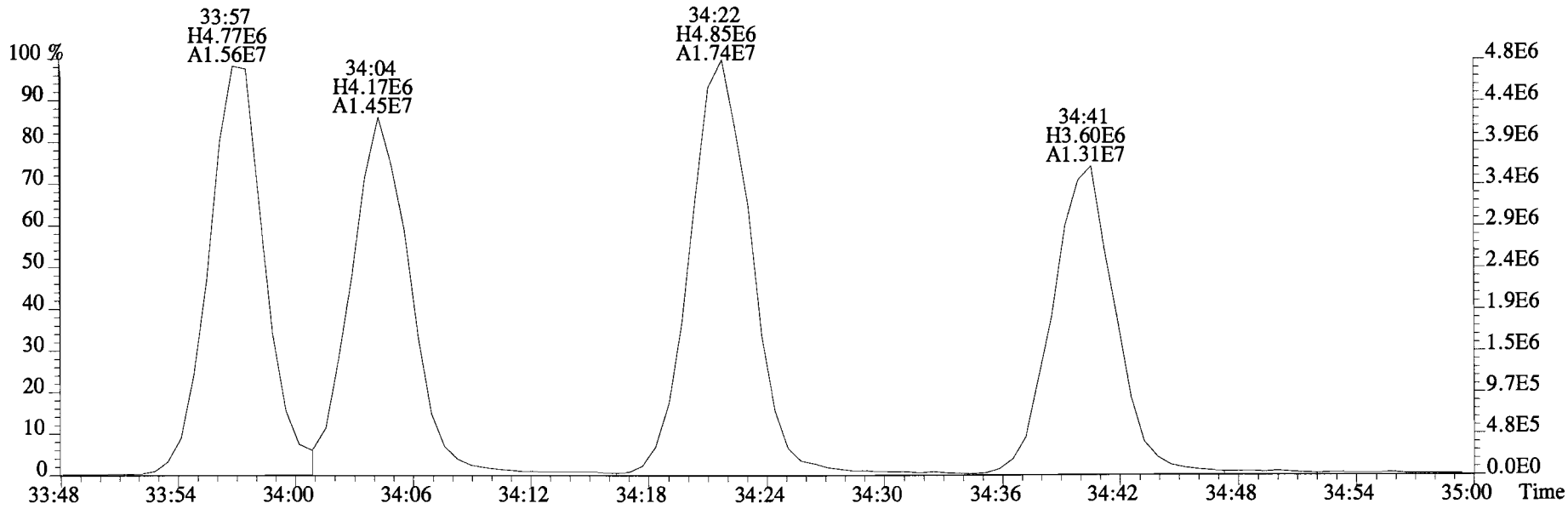
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



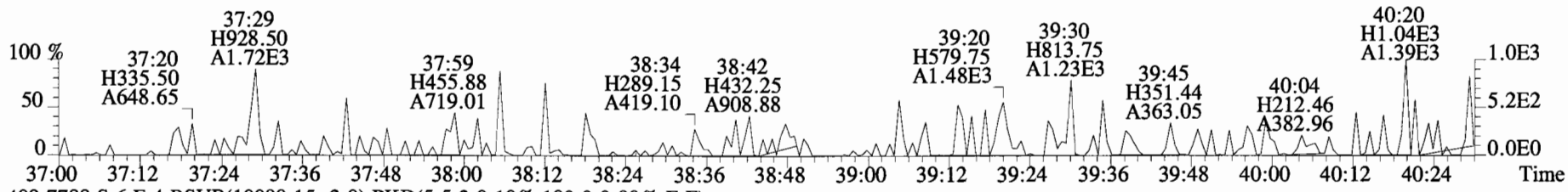
File:141217D1 #1-385 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



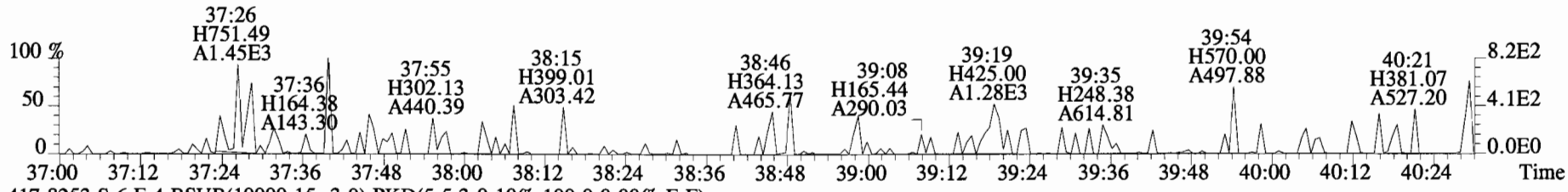
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



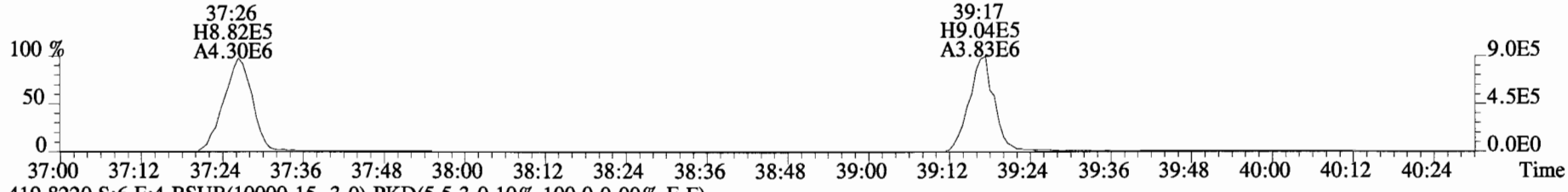
File:141217D1 #1-326 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



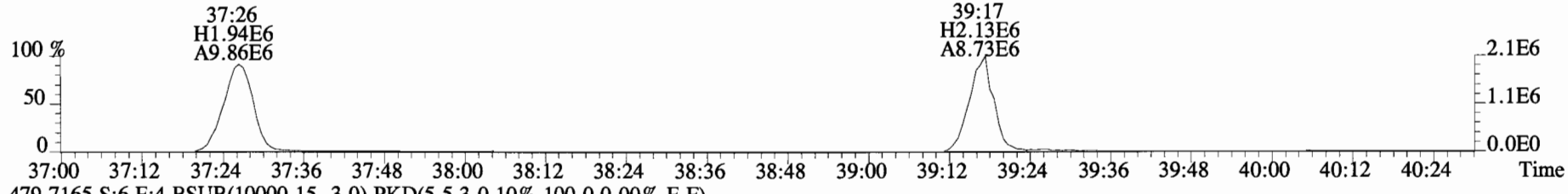
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



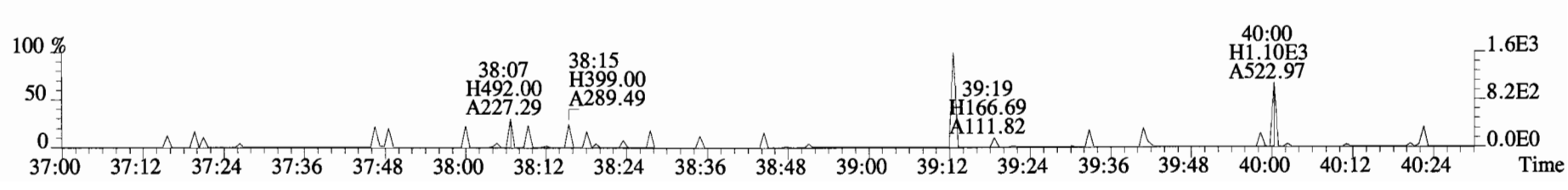
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

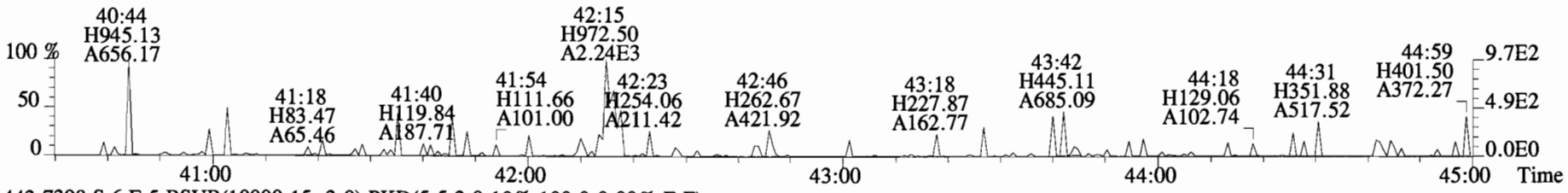


479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

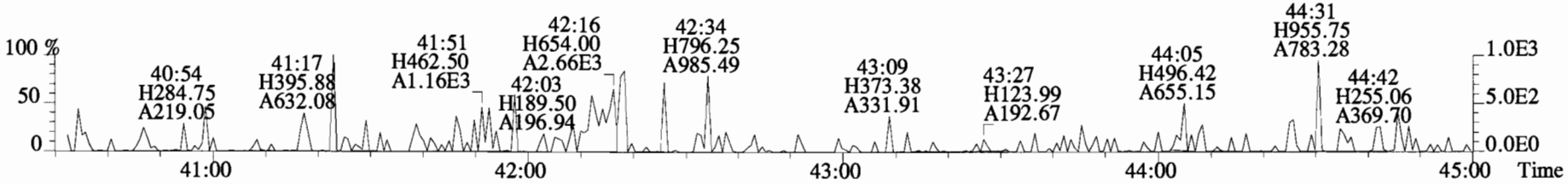


File:141217D1 #1-388 Acq:17-DEC-2014 18:51:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BLK1 Method Blank 1 Exp:OCDD_DB5

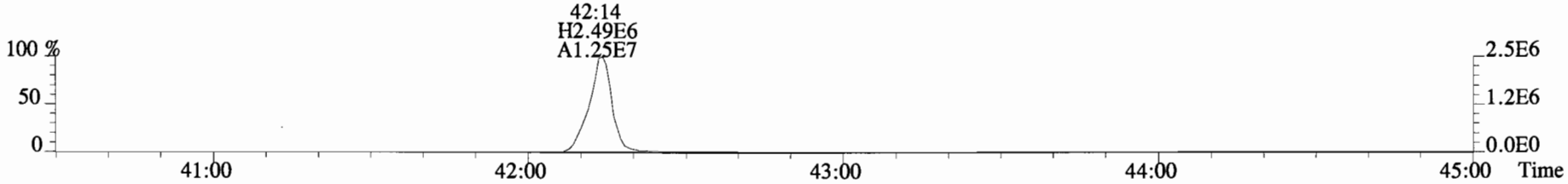
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



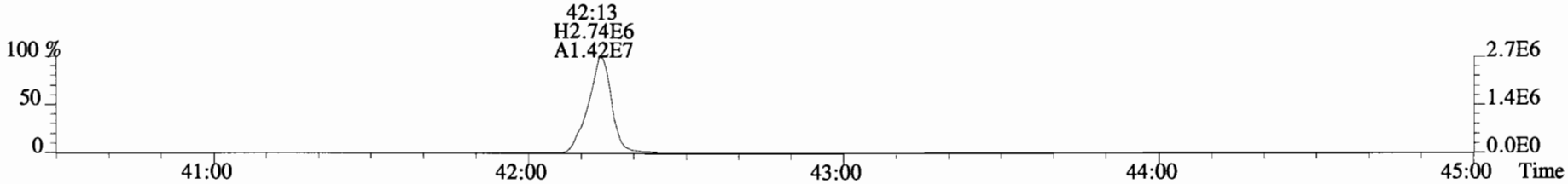
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



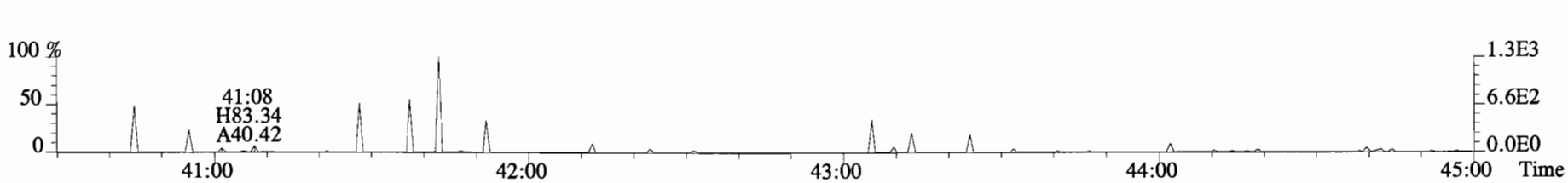
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

Lab Name: Vista Analytical Laboratory Extraction Batch: B4L0090-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): AQUEOUS OPR Data Filename: 141217D1-4

Ext. Date: 12-16-14 Shift: Day Analysis Date: 17-DEC-14 Time: 17:13:51

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	9.09	6.7 - 15.8 7.3 - 14.6 (2)
1,2,3,7,8-PeCDD	50	48.5	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	49.3	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	51.4	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	49.1	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	47.1	35.0 - 70.0
OCDD	100	99.6	78.0 - 144.0
2,3,7,8-TCDF	10	8.90	7.5 - 15.8 8.0 - 14.7 (2)
1,2,3,7,8-PeCDF	50	47.0	40.0 - 67.0
2,3,4,7,8-PeCDF	50	47.5	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	49.5	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	48.2	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	49.8	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	47.7	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	49.2	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	48.9	39.0 - 69.0
OCDF	100	98.3	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: [signature]

Date: 12/18/14

FORM 8B

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory Extraction Batch: B4L0090-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): AQUEOUS OPR Data Filename: 141217D1-4

Ext. Date: 12-16-14 Shift: Day Analysis Date: 17-DEC-14 Time: 17:13:51

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	79.7	20.0 - 175.0
			25.0 - 141.0 (2)
13C-1,2,3,7,8-PeCDD	100	75.8	21.0 - 227.0
13C-1,2,3,4,7,8-HxCDD	100	77.0	21.0 - 193.0
13C-1,2,3,6,7,8-HxCDD	100	76.6	25.0 - 163.0
13C-1,2,3,7,8,9-HxCDD	100	78.2	21.0 - 193.0
13C-1,2,3,4,6,7,8-HpCDD	100	79.1	26.0 - 166.0
13C-OCDD	200	107	26.0 - 397.0
13C-2,3,7,8-TCDF	100	79.0	22.0 - 152.0
			26.0 - 126.0 (2)
13C-1,2,3,7,8-PeCDF	100	75.4	21.0 - 192.0
13C-2,3,4,7,8-PeCDF	100	76.5	13.0 - 328.0
13C-1,2,3,4,7,8-HxCDF	100	86.5	19.0 - 202.0
13C-1,2,3,6,7,8-HxCDF	100	79.2	21.0 - 159.0
13C-2,3,4,6,7,8-HxCDF	100	73.0	22.0 - 176.0
13C-1,2,3,7,8,9-HxCDF	100	79.7	17.0 - 205.0
13C-1,2,3,4,6,7,8-HpCDF	100	73.5	21.0 - 158.0
13C-1,2,3,4,7,8,9-HpCDF	100	71.4	20.0 - 186.0
13C-OCDF	200	120	26.0 - 397.0
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	39.5	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: 12/16/14

Client ID: OPR Filename: 141217D1 S:4 Acq:17-DEC-14 17:13:51 ConCal: ST141217D1-1
Lab ID: B4L0090-BS1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000 EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	2.09e+06	0.76 y	1.18	26:55	1.001	9.0908		*	2.5	*
	1,2,3,7,8-PeCDD	9.50e+06	0.62 y	0.92	31:33	1.001	48.507		*	2.5	*
	1,2,3,4,7,8-HxCDD	8.05e+06	1.24 y	1.09	34:51	1.000	49.290		*	2.5	*
	1,2,3,6,7,8-HxCDD	8.31e+06	1.25 y	1.07	34:58	1.000	51.362		*	2.5	*
	1,2,3,7,8,9-HxCDD	8.22e+06	1.26 y	0.93	35:15	1.000	49.087		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	7.21e+06	1.05 y	1.12	38:45	1.000	47.148		*	2.5	*
	OCDD	1.07e+07	0.88 y	0.95	42:01	1.000	99.560		*	2.5	*
	2,3,7,8-TCDF	2.72e+06	0.79 y	1.08	26:07	1.001	8.8993		*	2.5	*
	1,2,3,7,8-PeCDF	1.43e+07	1.64 y	1.09	30:21	1.000	46.994		*	2.5	*
	2,3,4,7,8-PeCDF	1.43e+07	1.61 y	1.04	31:16	1.000	47.510		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.59e+07	1.29 y	1.39	33:58	1.000	49.473		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.42e+07	1.29 y	1.26	34:06	1.001	48.179		*	2.5	*
	2,3,4,6,7,8-HxCDF	1.31e+07	1.29 y	1.30	34:42	1.001	49.848		*	2.5	*
	1,2,3,7,8,9-HxCDF	1.04e+07	1.23 y	1.19	35:39	1.001	47.650		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	1.12e+07	1.08 y	1.62	37:28	1.001	49.165		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	1.01e+07	1.11 y	1.53	39:18	1.000	48.863		*	2.5	*
	OCDF	1.53e+07	0.93 y	1.10	42:15	1.000	98.315		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.94e+07	0.81 y	1.07	26:54	1.022	79.695				
IS	13C-1,2,3,7,8-PeCDD	2.13e+07	0.63 y	1.24	31:32	1.199	75.830				
IS	13C-1,2,3,4,7,8-HxCDD	1.50e+07	1.24 y	0.72	34:51	1.014	76.973				
IS	13C-1,2,3,6,7,8-HxCDD	1.52e+07	1.23 y	0.74	34:57	1.017	76.578				
IS	13C-1,2,3,7,8,9-HxCDD	1.80e+07	1.25 y	0.86	35:15	1.025	78.152				
IS	13C-1,2,3,4,6,7,8-HpCDD	1.37e+07	1.06 y	0.64	38:44	1.127	79.095				
IS	13C-OCDD	2.25e+07	0.87 y	0.78	41:60	1.222	106.84				
IS	13C-2,3,7,8-TCDF	2.84e+07	0.79 y	0.92	26:06	0.992	79.017				
IS	13C-1,2,3,7,8-PeCDF	2.79e+07	1.59 y	0.95	30:20	1.153	75.366				
IS	13C-2,3,4,7,8-PeCDF	2.89e+07	1.61 y	0.97	31:15	1.188	76.455				
IS	13C-1,2,3,4,7,8-HxCDF	2.31e+07	0.51 y	0.99	33:57	0.988	86.537				
IS	13C-1,2,3,6,7,8-HxCDF	2.34e+07	0.51 y	1.10	34:05	0.992	79.214				
IS	13C-2,3,4,6,7,8-HxCDF	2.03e+07	0.51 y	1.03	34:40	1.009	73.036				
IS	13C-1,2,3,7,8,9-HxCDF	1.84e+07	0.50 y	0.86	35:38	1.037	79.713				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.41e+07	0.43 y	0.71	37:26	1.089	73.454				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.36e+07	0.44 y	0.71	39:17	1.143	71.410				
IS	13C-OCDF	2.83e+07	0.91 y	0.87	42:14	1.229	120.34				
C/Up	37Cl-2,3,7,8-TCDD	1.09e+07		1.21	26:56	1.023	39.486				
RS/RT	13C-1,2,3,4-TCDD	2.27e+07	0.81 y	1.00	26:19	*	100.00				
RS	13C-1,2,3,4-TCDF	3.89e+07	0.78 y	1.00	24:48	*	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.69e+07	0.52 y	1.00	34:22	*	100.00				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	9.40	9.52		*	*
Total Penta-Dioxins	48.5	49.1		*	*
Total Hexa-Dioxins	150	151		*	*
Total Hepta-Dioxins	47.7	48.6		*	*
Total Tetra-Furans	9.05	9.31		*	*
Total Penta-Furans	95.840	96.660		*	*
Total Hexa-Furans	196	196		*	*
Total Hepta-Furans	98.2	100		*	*

	Rec	Qual
IS	79.7	
IS	75.8	
IS	77.0	
IS	76.6	
IS	78.2	
IS	79.1	
IS	53.4	
IS	79.0	
IS	75.4	
IS	76.5	
IS	86.5	
IS	79.2	
IS	73.0	
IS	79.7	
IS	73.5	
IS	71.4	
IS	60.2	
C/Up	98.7	

Integrations by Analyst: MM
Date: 12/16/14

Reviewed by Analyst:
Date: 12/19/14

Client ID: OPR | Filename: 141217D1 S:4 Acq:17-DEC-14 17:13:51 | ConCal: ST141217D1-1
Lab ID: B4L0090-BS1 | GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000 | EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	2.09e+06	0.76 y	1.18	26:55	1.001	181.82		*	2.5	*
	1,2,3,7,8-PeCDD	9.50e+06	0.62 y	0.92	31:33	1.001	970.15		*	2.5	*
	1,2,3,4,7,8-HxCDD	8.05e+06	1.24 y	1.09	34:51	1.000	985.80		*	2.5	*
	1,2,3,6,7,8-HxCDD	8.31e+06	1.25 y	1.07	34:58	1.000	1027.2		*	2.5	*
	1,2,3,7,8,9-HxCDD	8.22e+06	1.26 y	0.93	35:15	1.000	981.74		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	7.21e+06	1.05 y	1.12	38:45	1.000	942.96		*	2.5	*
	OCDD	1.07e+07	0.88 y	0.95	42:01	1.000	1991.2		*	2.5	*
	2,3,7,8-TCDF	2.72e+06	0.79 y	1.08	26:07	1.001	177.99		*	2.5	*
	1,2,3,7,8-PeCDF	1.43e+07	1.64 y	1.09	30:21	1.000	939.88		*	2.5	*
	2,3,4,7,8-PeCDF	1.43e+07	1.61 y	1.04	31:16	1.000	950.20		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.59e+07	1.29 y	1.39	33:58	1.000	989.46		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.42e+07	1.29 y	1.26	34:06	1.001	963.59		*	2.5	*
	2,3,4,6,7,8-HxCDF	1.31e+07	1.29 y	1.30	34:42	1.001	996.95		*	2.5	*
	1,2,3,7,8,9-HxCDF	1.04e+07	1.23 y	1.19	35:39	1.001	953.01		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	1.12e+07	1.08 y	1.62	37:28	1.001	983.31		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	1.01e+07	1.11 y	1.53	39:18	1.000	977.25		*	2.5	*
	OCDF	1.53e+07	0.93 y	1.10	42:15	1.000	1966.3		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.94e+07	0.81 y	1.07	26:54	1.022	1593.9				
IS	13C-1,2,3,7,8-PeCDD	2.13e+07	0.63 y	1.24	31:32	1.199	1516.6				
IS	13C-1,2,3,4,7,8-HxCDD	1.50e+07	1.24 y	0.72	34:51	1.014	1539.5				
IS	13C-1,2,3,6,7,8-HxCDD	1.52e+07	1.23 y	0.74	34:57	1.017	1531.6				
IS	13C-1,2,3,7,8,9-HxCDD	1.80e+07	1.25 y	0.86	35:15	1.025	1563.0				
IS	13C-1,2,3,4,6,7,8-HpCDD	1.37e+07	1.06 y	0.64	38:44	1.127	1581.9				
IS	13C-OCDD	2.25e+07	0.87 y	0.78	41:60	1.222	2136.8				
IS	13C-2,3,7,8-TCDF	2.84e+07	0.79 y	0.92	26:06	0.992	1580.3				
IS	13C-1,2,3,7,8-PeCDF	2.79e+07	1.59 y	0.95	30:20	1.153	1507.3				
IS	13C-2,3,4,7,8-PeCDF	2.89e+07	1.61 y	0.97	31:15	1.188	1529.1				
IS	13C-1,2,3,4,7,8-HxCDF	2.31e+07	0.51 y	0.99	33:57	0.988	1730.7				
IS	13C-1,2,3,6,7,8-HxCDF	2.34e+07	0.51 y	1.10	34:05	0.992	1584.3				
IS	13C-2,3,4,6,7,8-HxCDF	2.03e+07	0.51 y	1.03	34:40	1.009	1460.7				
IS	13C-1,2,3,7,8,9-HxCDF	1.84e+07	0.50 y	0.86	35:38	1.037	1594.3				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.41e+07	0.43 y	0.71	37:26	1.089	1469.1				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.36e+07	0.44 y	0.71	39:17	1.143	1428.2				
IS	13C-OCDF	2.83e+07	0.91 y	0.87	42:14	1.229	2406.8				
C/Up	37Cl-2,3,7,8-TCDD	1.09e+07		1.21	26:56	1.023	789.72				
RS/RT	13C-1,2,3,4-TCDD	2.27e+07	0.81 y	1.00	26:19	*	2000.0				
RS	13C-1,2,3,4-TCDF	3.89e+07	0.78 y	1.00	24:48	*	2000.0				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.69e+07	0.52 y	1.00	34:22	*	2000.0				

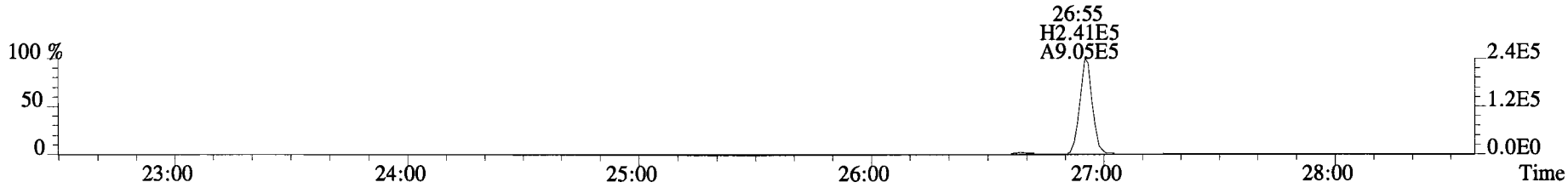
Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	188	190		*	*
Total Penta-Dioxins	970	982		*	*
Total Hexa-Dioxins	3000	3010		*	*
Total Hepta-Dioxins	955	971		*	*
Total Tetra-Furans	181	186		*	*
Total Penta-Furans	1916.8	1933.2		*	*
Total Hexa-Furans	3910	3920		*	*
Total Hepta-Furans	1960	2010		*	*

	Rec	Qual
IS	79.7	
IS	75.8	
IS	77.0	
IS	76.6	
IS	78.2	
IS	79.1	
IS	53.4	
IS	79.0	
IS	75.4	
IS	76.5	
IS	86.5	
IS	79.2	
IS	73.0	
IS	79.7	
IS	73.5	
IS	71.4	
IS	60.2	
C/Up	98.7	

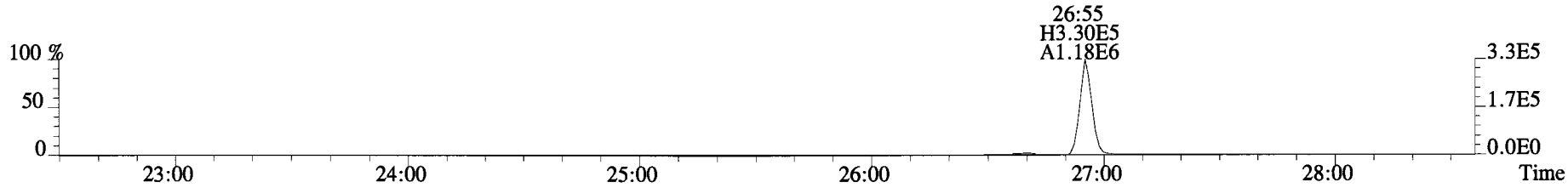
Integrations by Analyst: MM Date: 12/19/14

Reviewed by Analyst:_____ Date:_____

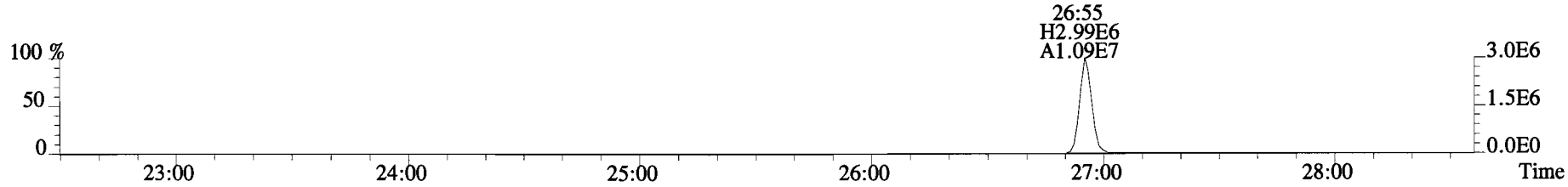
File:141217D1 #1-551 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



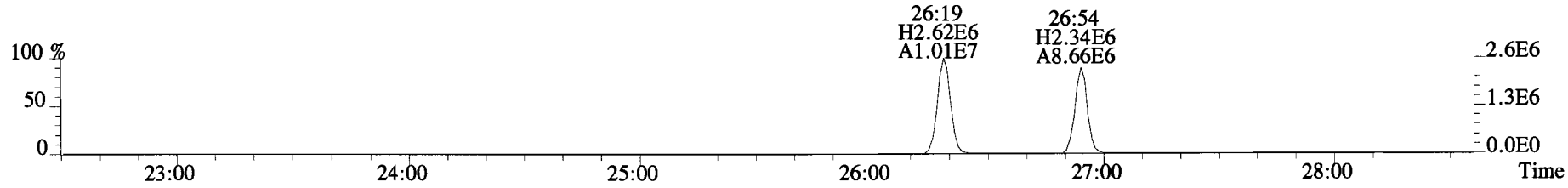
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



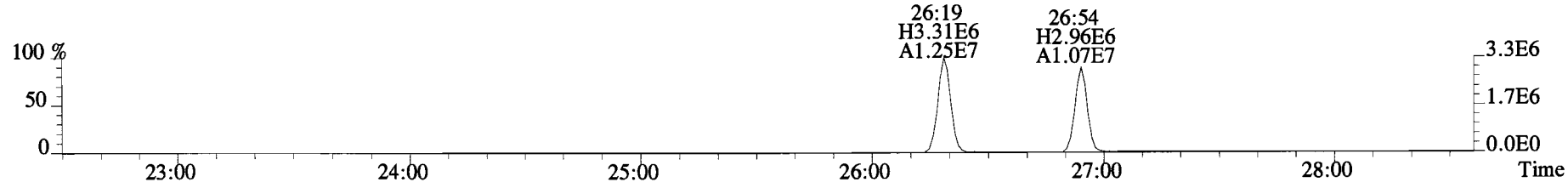
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



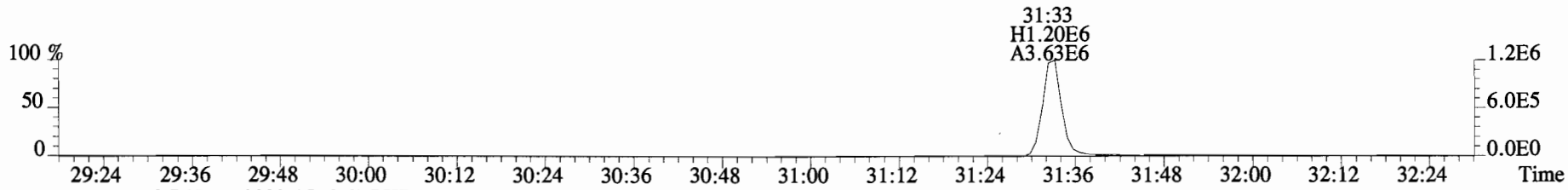
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



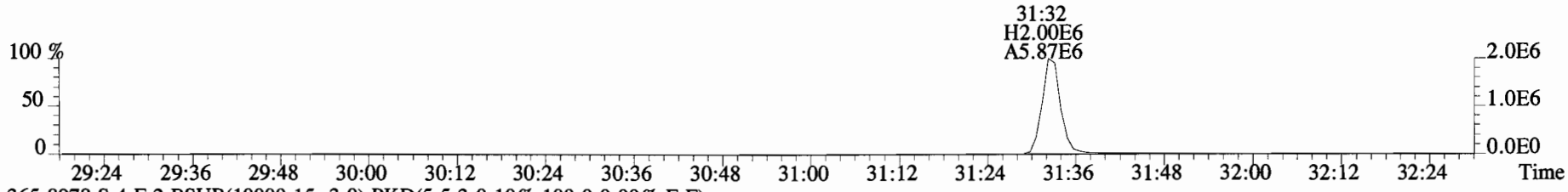
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



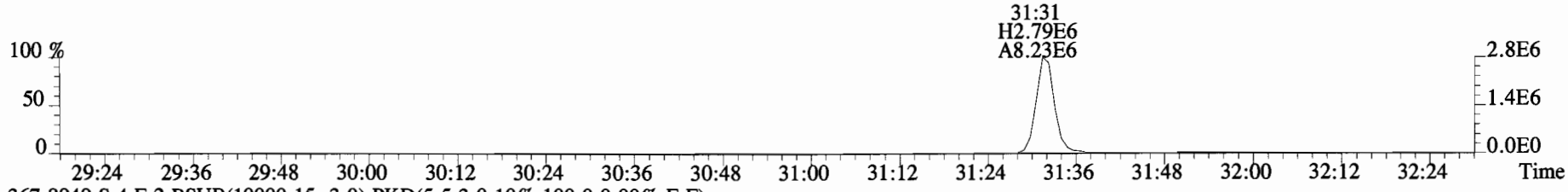
File:141217D1 #1-257 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5
353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



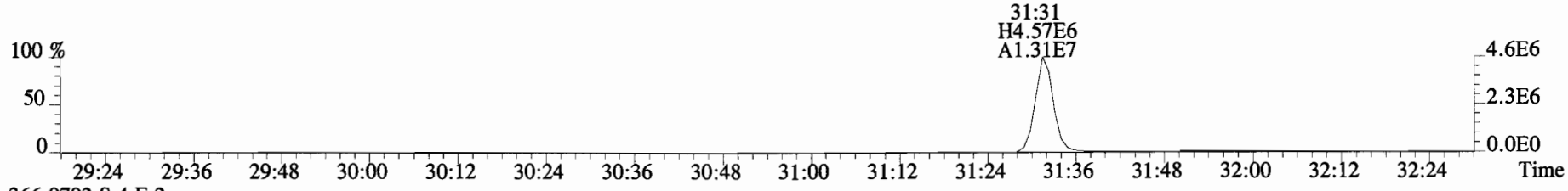
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



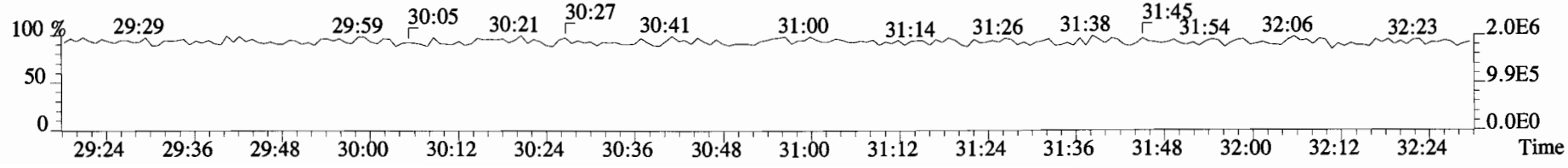
365.8978 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



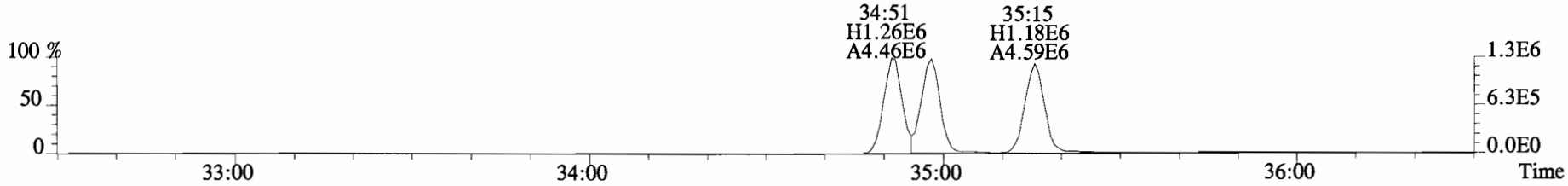
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



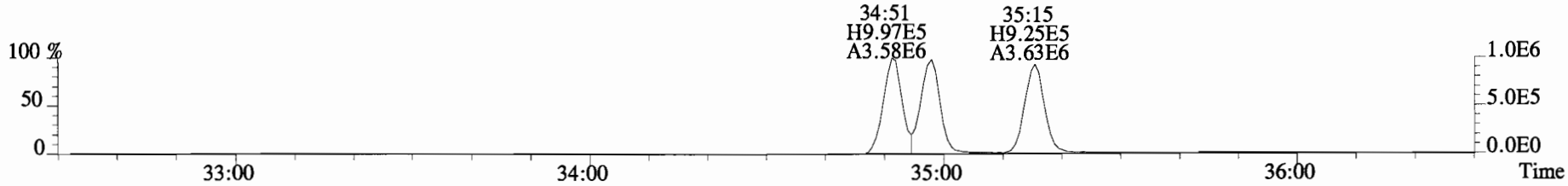
366.9792 S:4 F:2



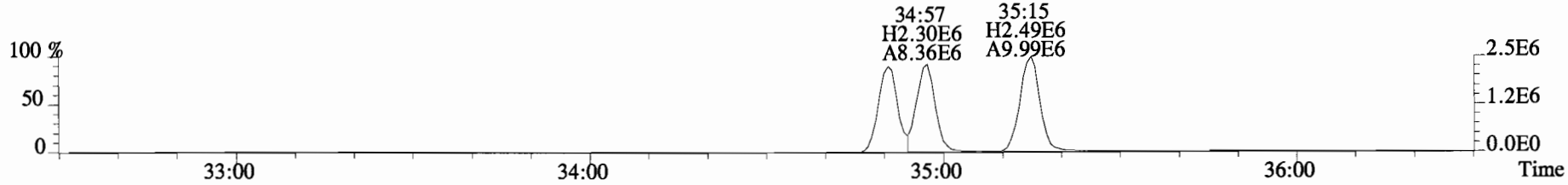
File:141217D1 #1-385 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



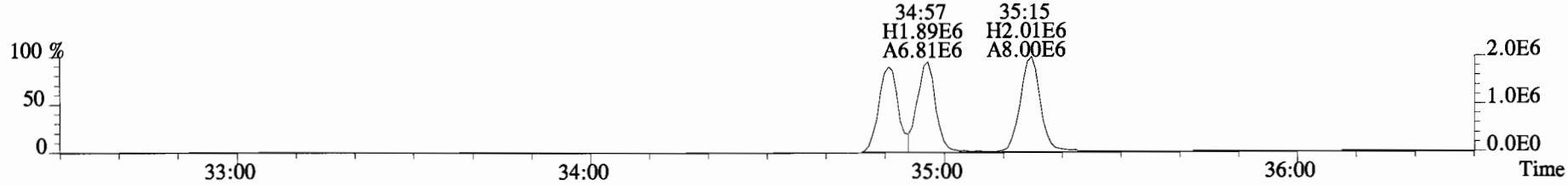
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



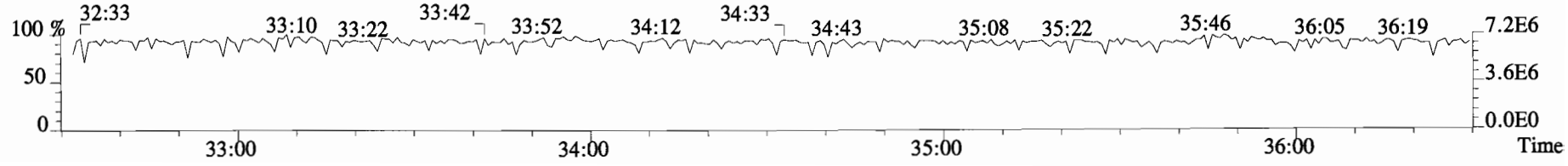
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



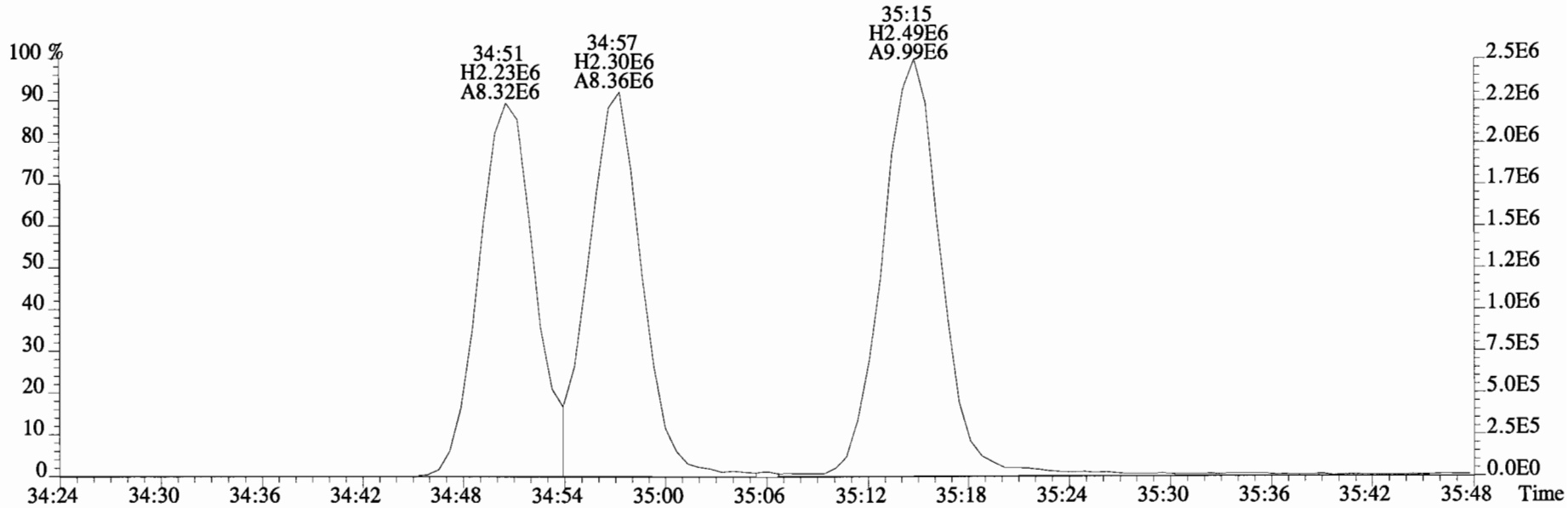
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



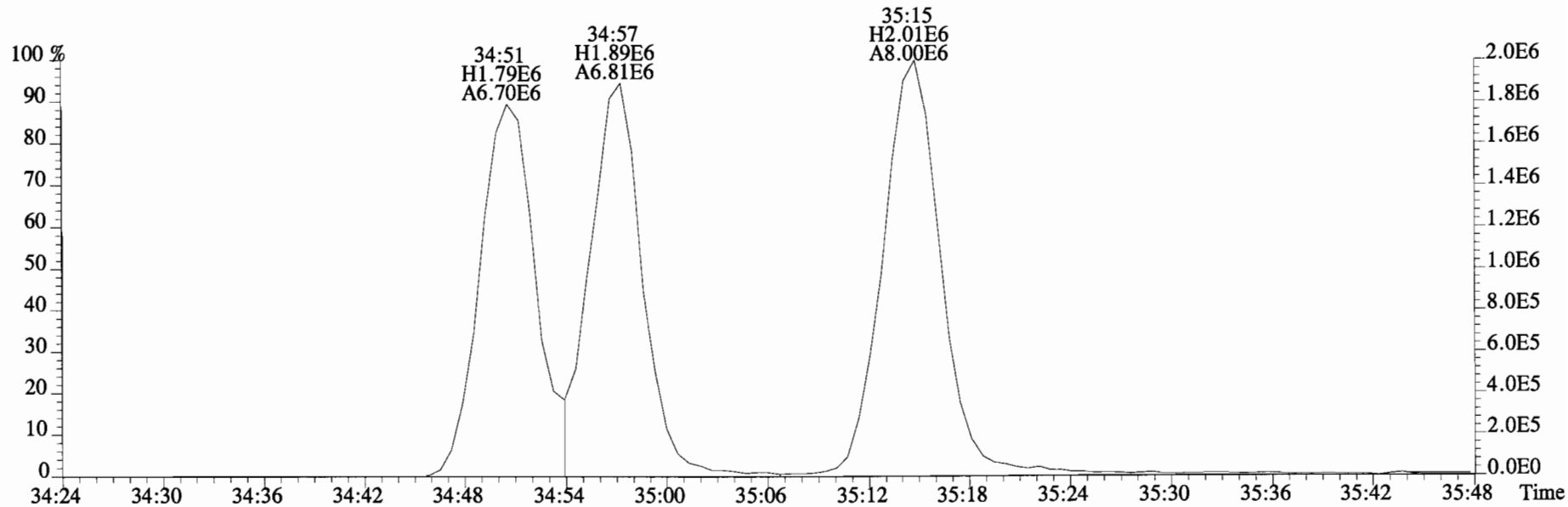
380.9760 S:4 F:3



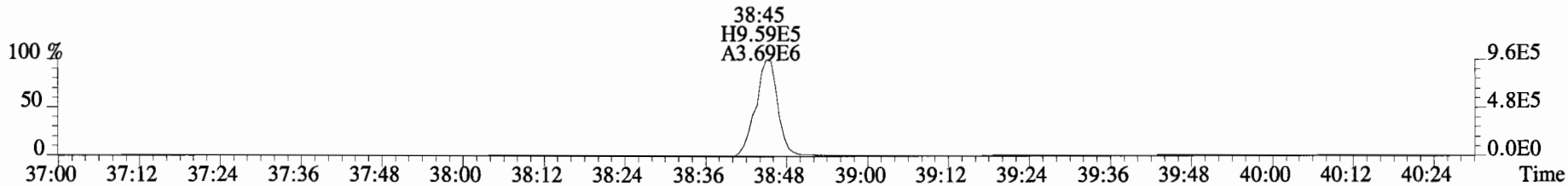
File:141217D1 #1-385 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



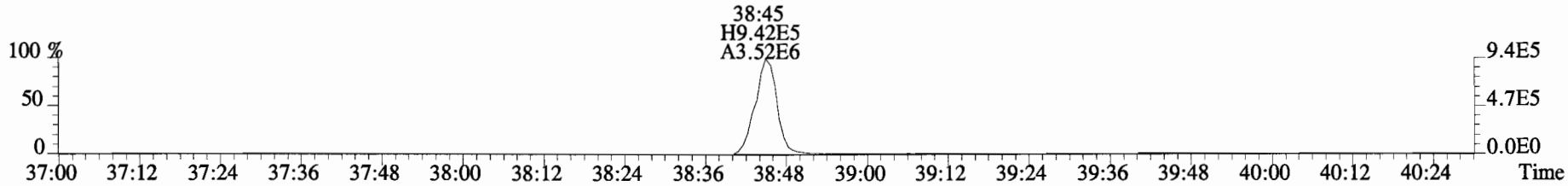
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



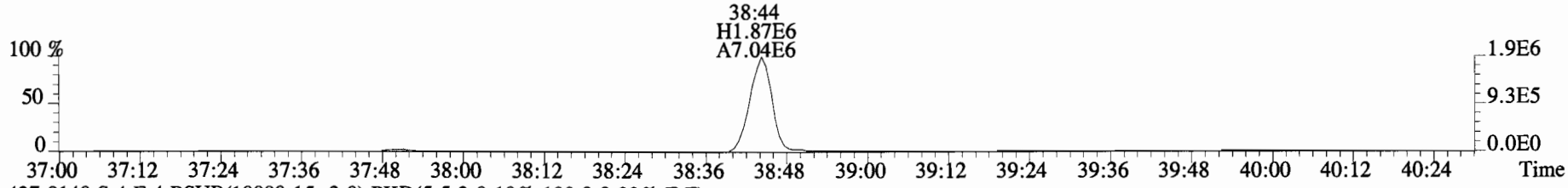
File:141217D1 #1-326 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



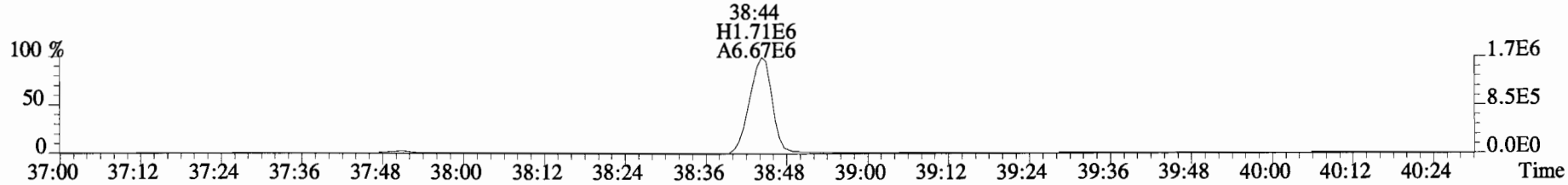
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



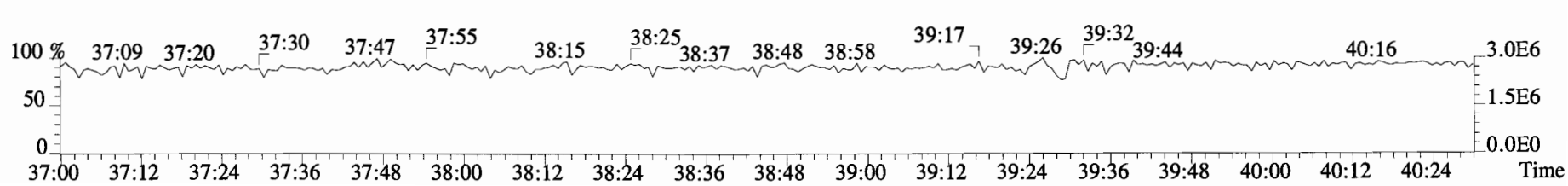
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



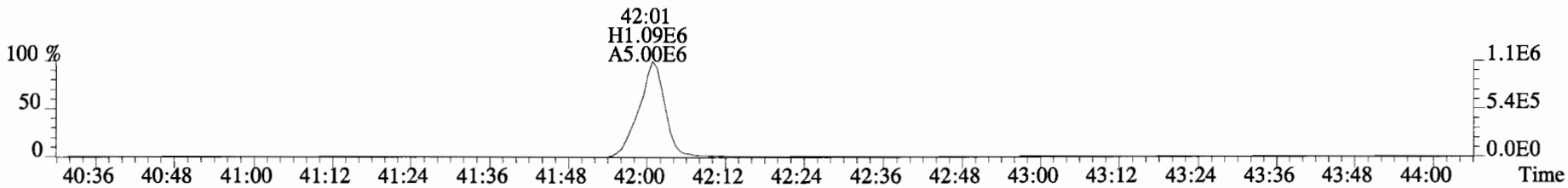
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



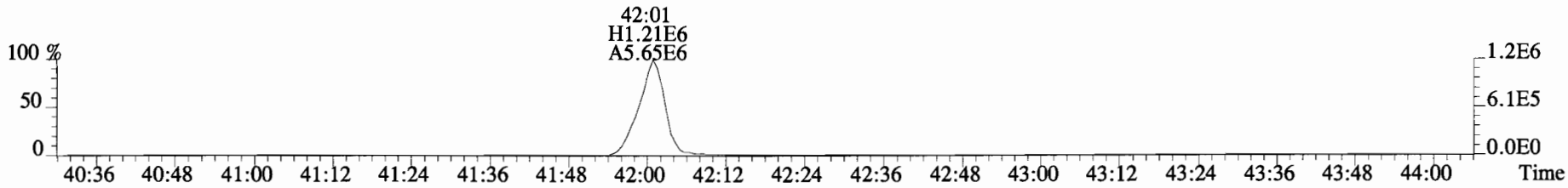
430.9728 S:4 F:4



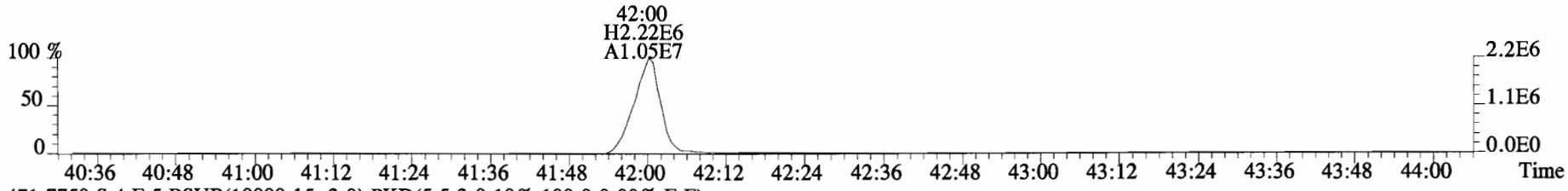
File:141217D1 #1-388 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



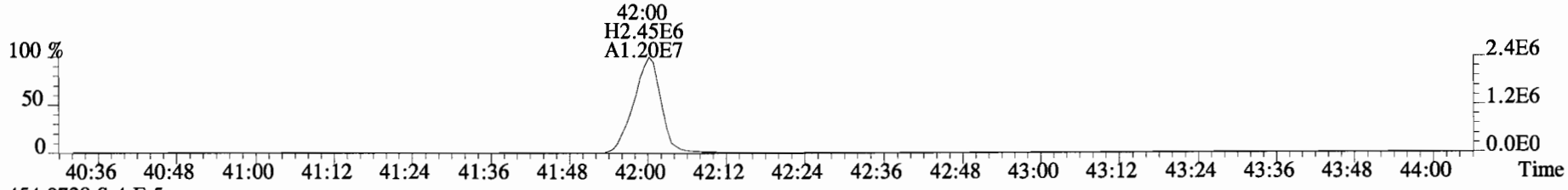
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



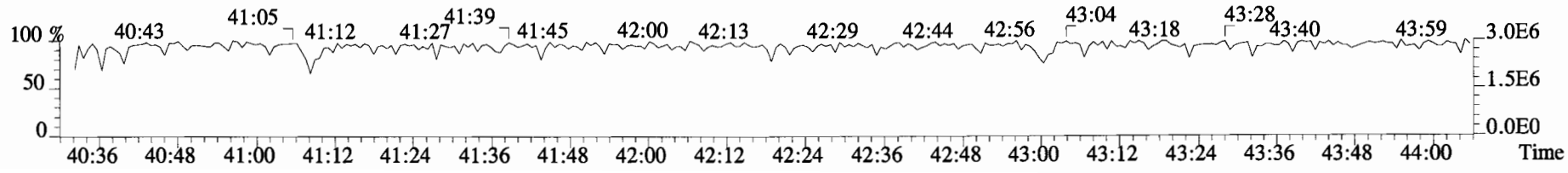
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



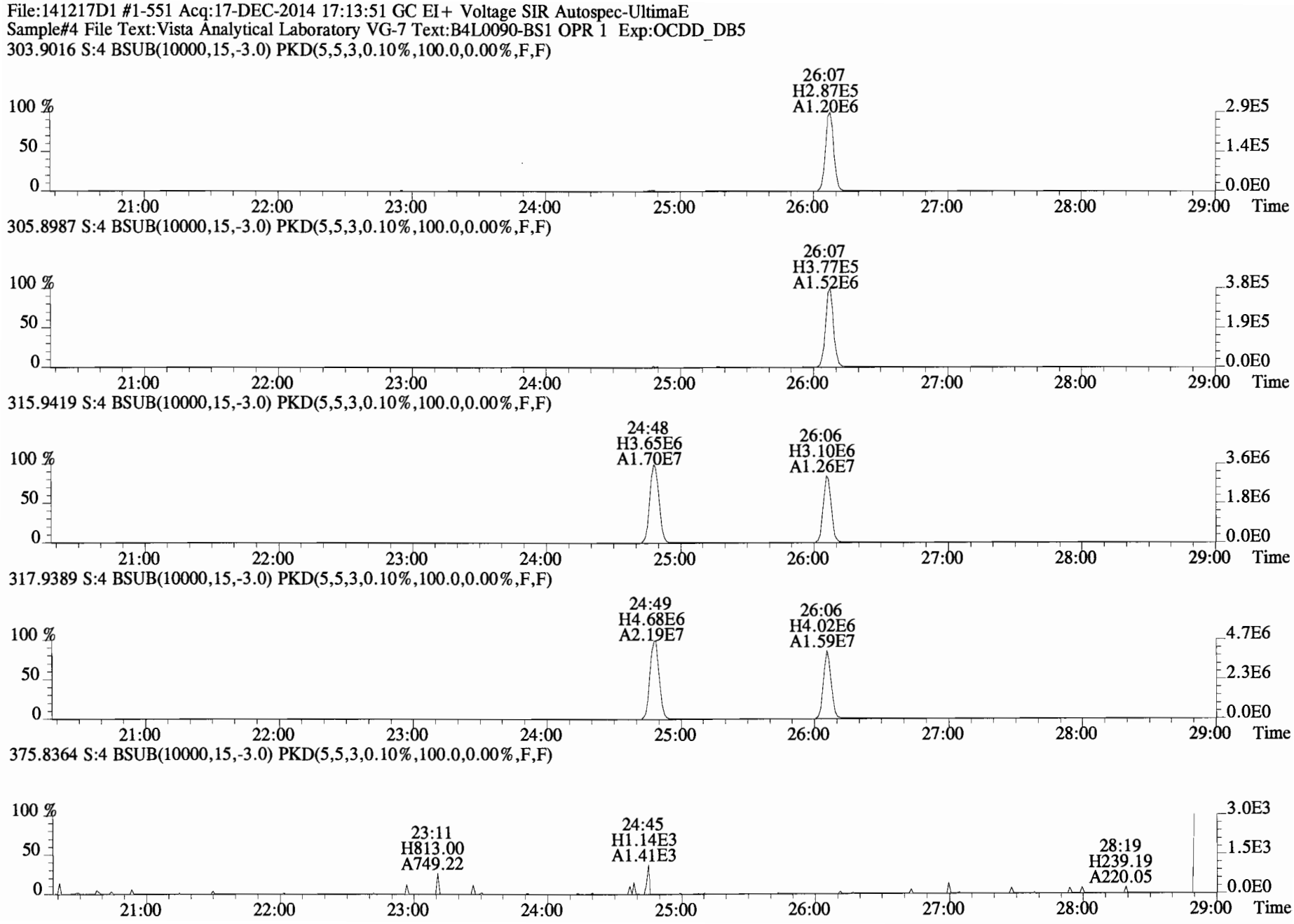
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



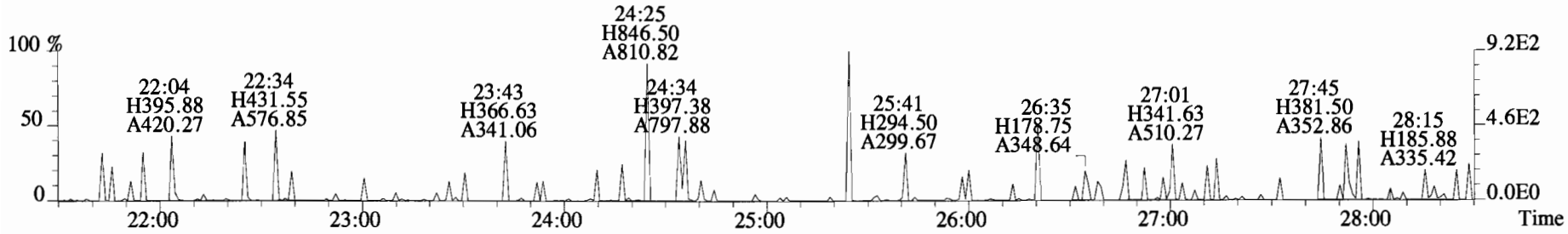
454.9728 S:4 F:5



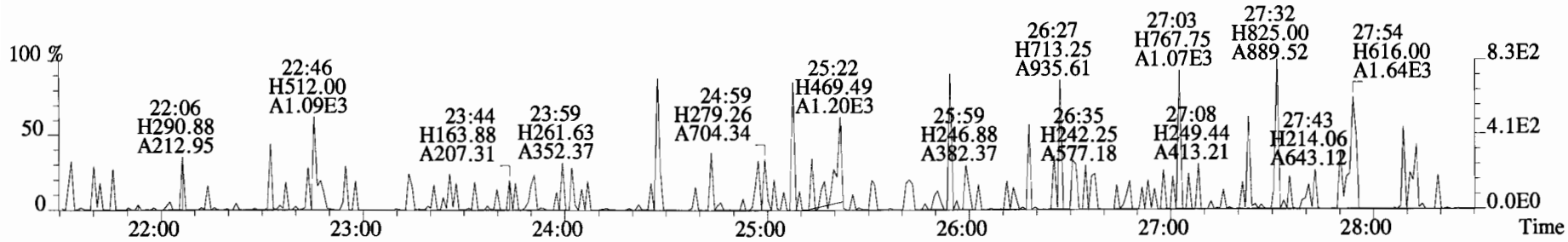
File:141217D1 #1-551 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5



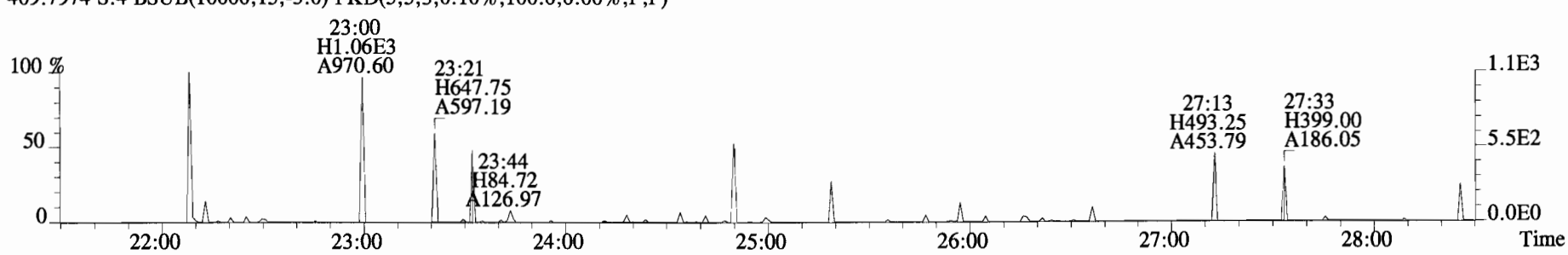
File:141217D1 #1-551 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



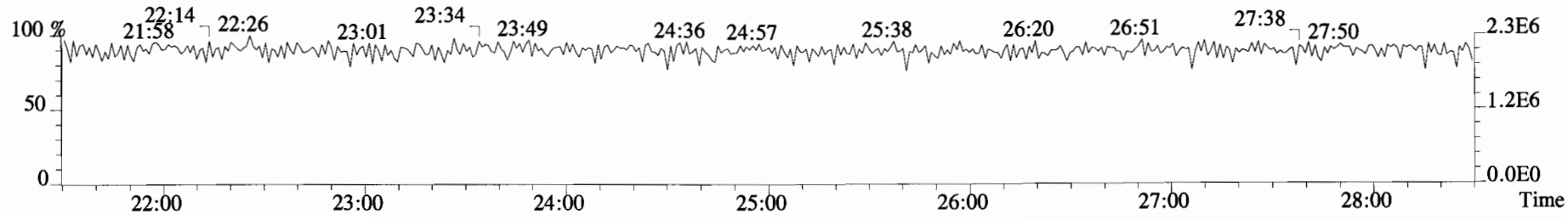
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



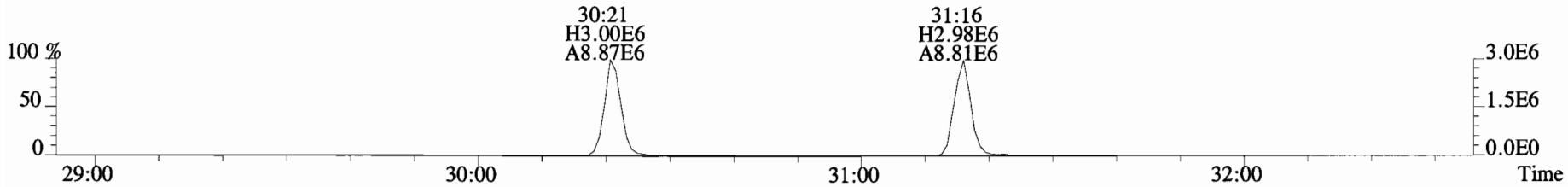
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



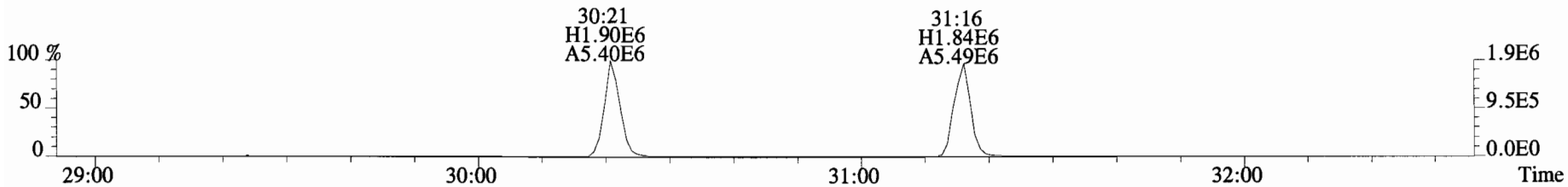
316.9824 S:4



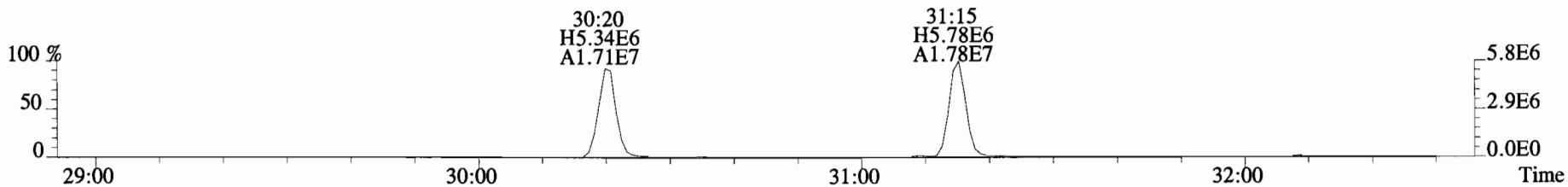
File:141217D1 #1-257 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



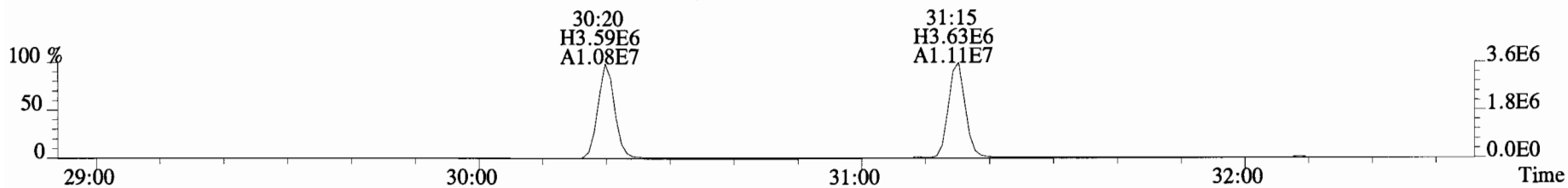
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



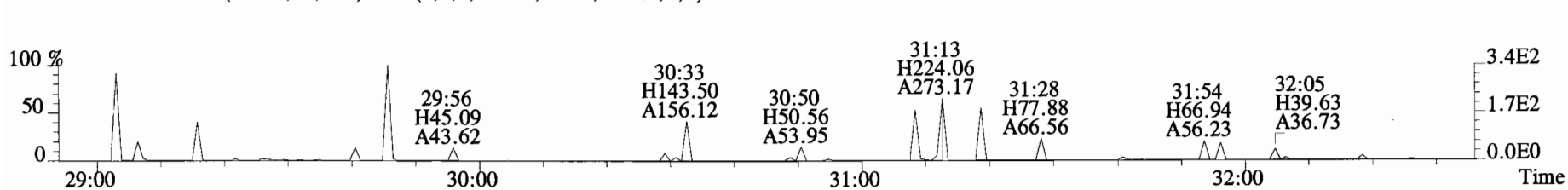
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

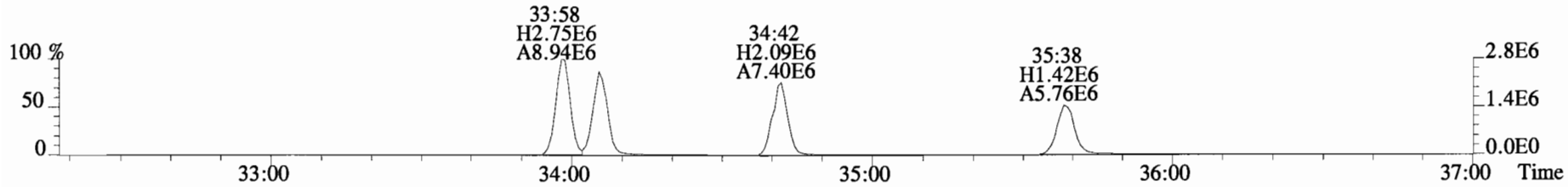


409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

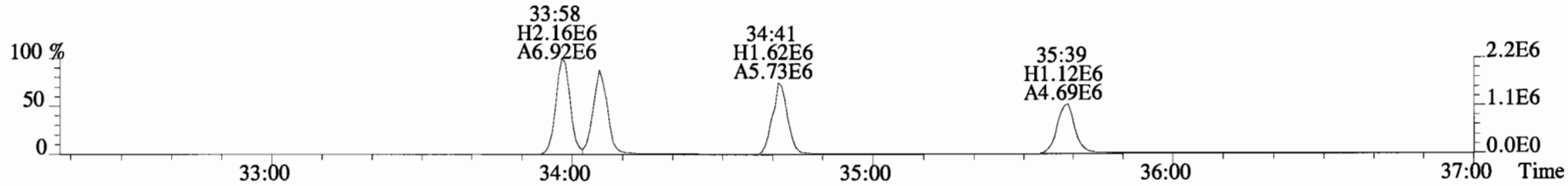


File:141217D1 #1-385 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5

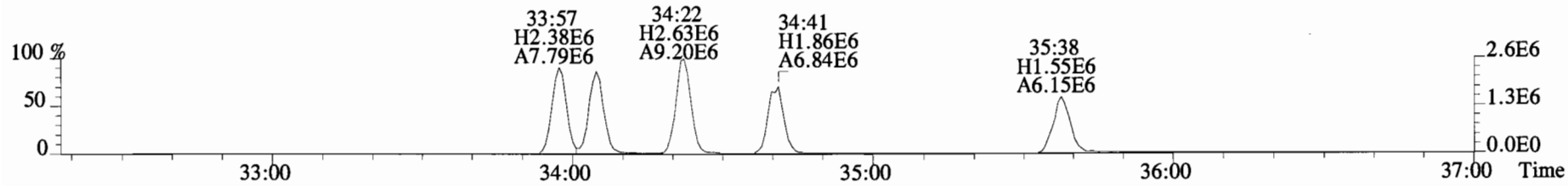
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



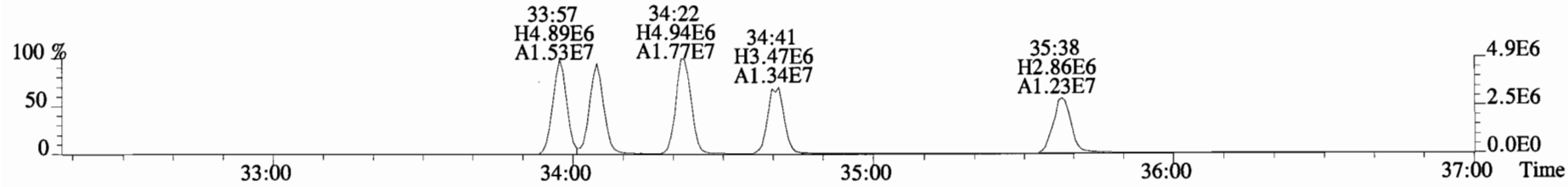
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



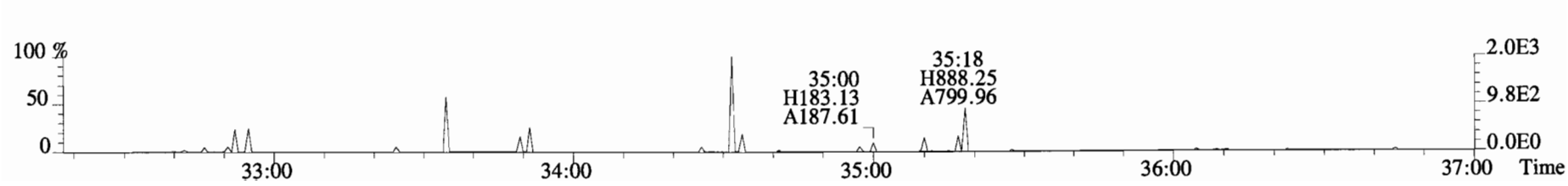
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

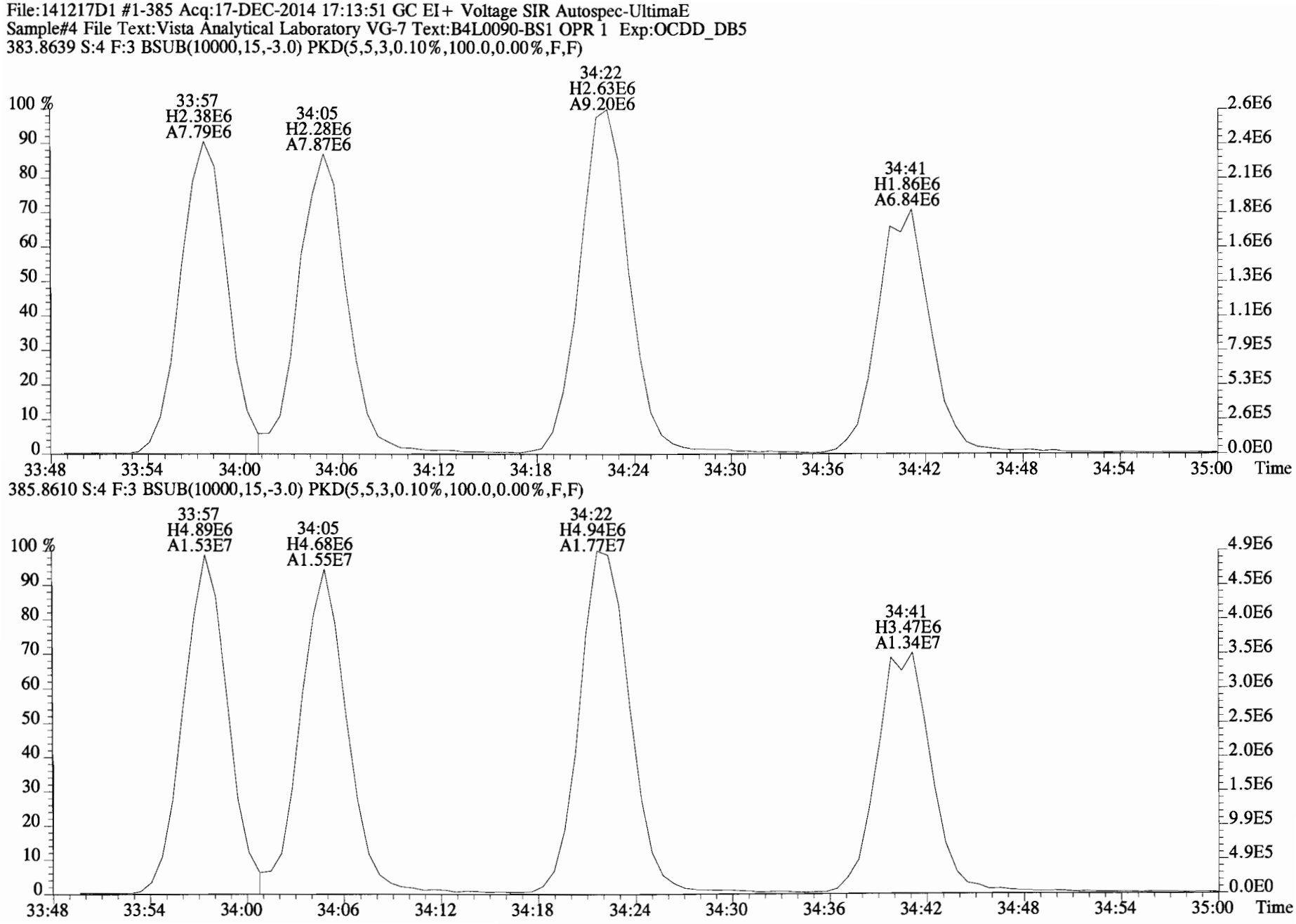


385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

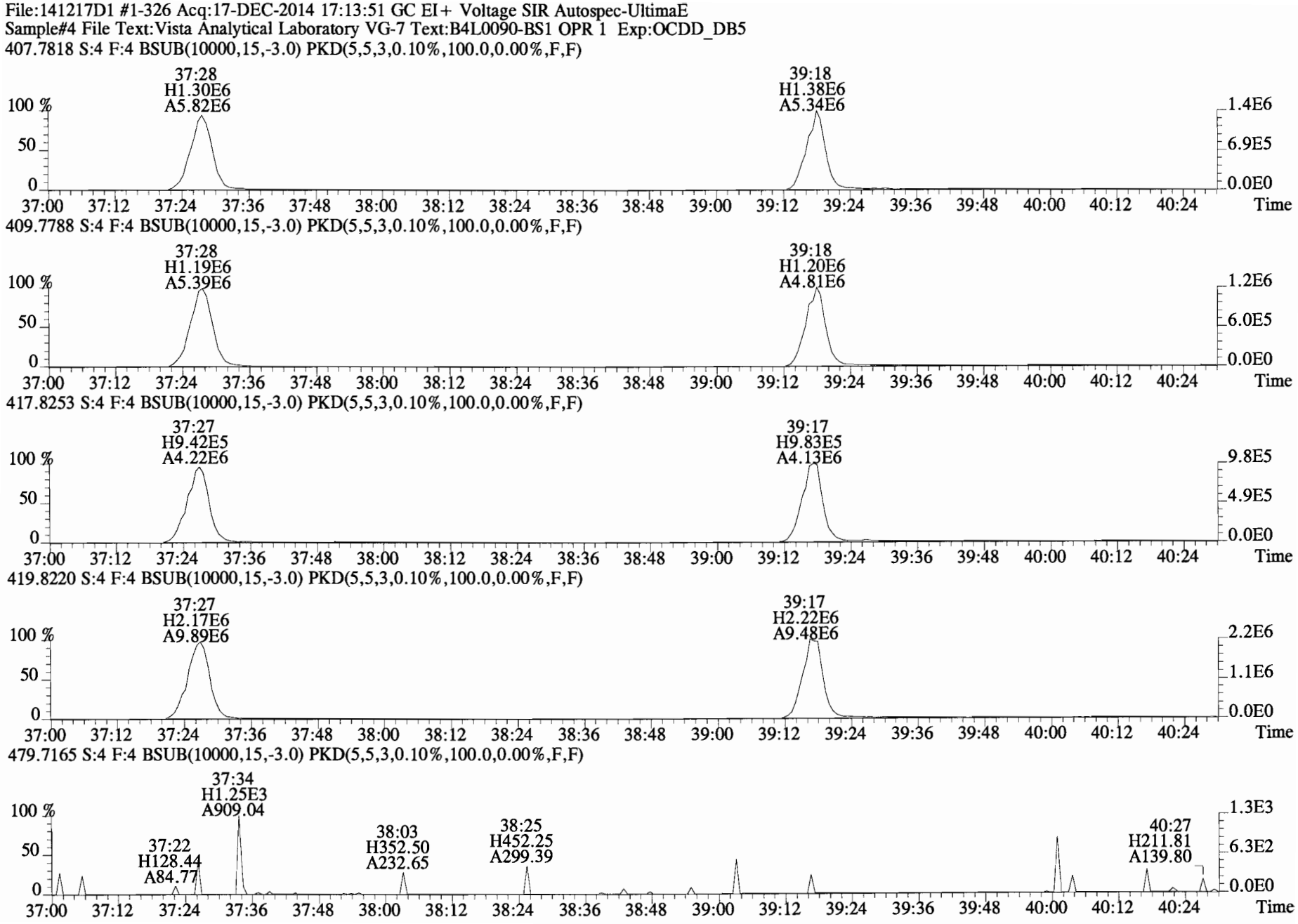


445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

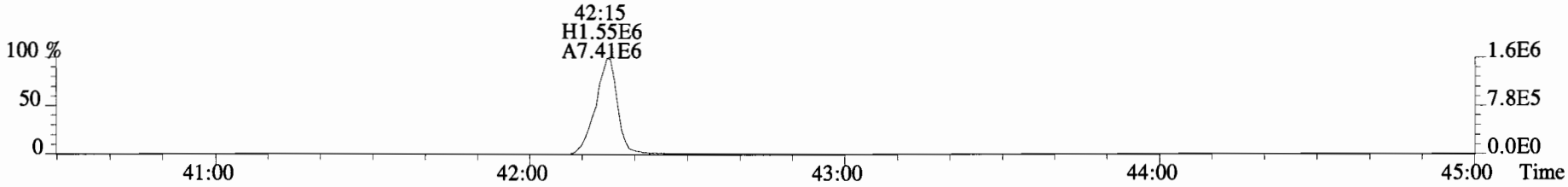



File:141217D1 #1-385 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:57
H2.38E6
A7.79E6
34:05
H2.28E6
A7.87E6
34:22
H2.63E6
A9.20E6
34:41
H1.86E6
A6.84E6
100 %
90
80
70
60
50
40
30
20
10
0
2.6E6
2.4E6
2.1E6
1.8E6
1.6E6
1.3E6
1.1E6
7.9E5
5.3E5
2.6E5
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:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:57
H4.89E6
A1.53E7
34:05
H4.68E6
A1.55E7
34:22
H4.94E6
A1.77E7
34:41
H3.47E6
A1.34E7
100 %
90
80
70
60
50
40
30
20
10
0
4.9E6
4.5E6
4.0E6
3.5E6
3.0E6
2.5E6
2.0E6
1.5E6
9.9E5
4.9E5
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

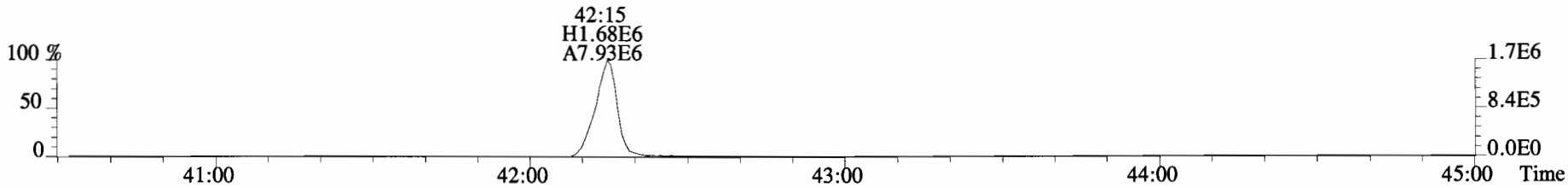
File:141217D1 #1-326 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5



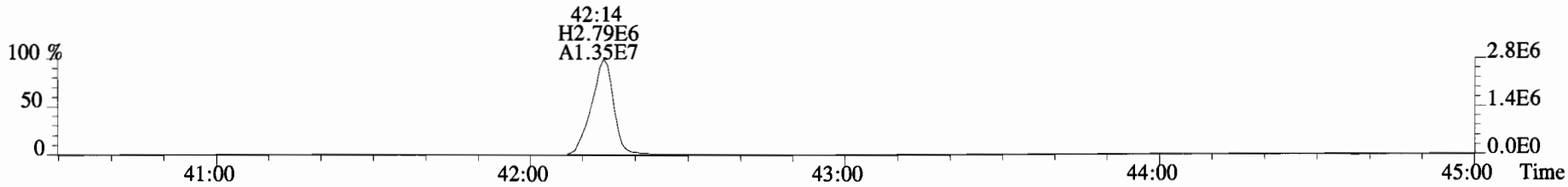
File:141217D1 #1-388 Acq:17-DEC-2014 17:13:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:B4L0090-BS1 OPR 1 Exp:OCDD_DB5
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



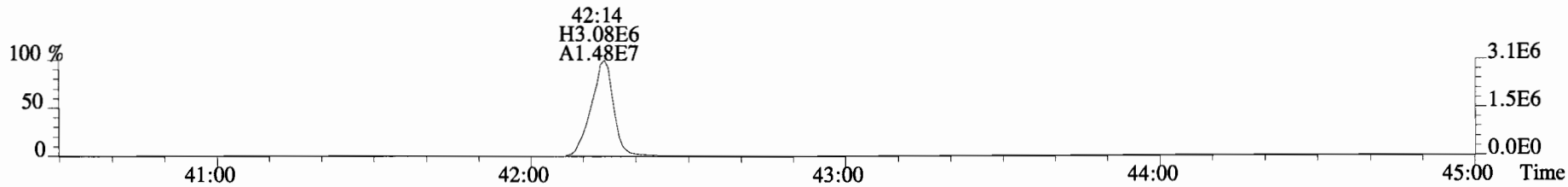
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



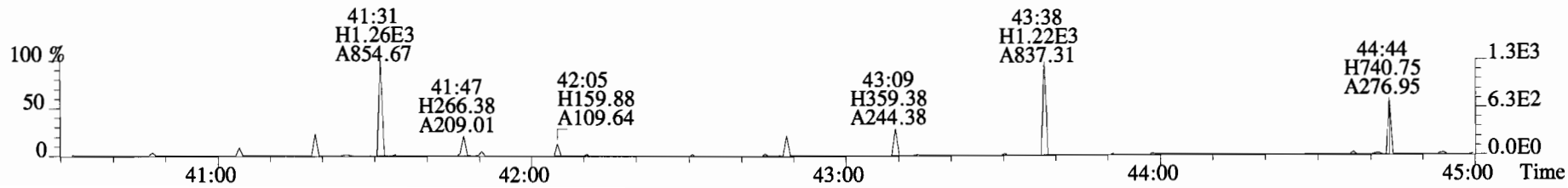
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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



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



Client ID: SC-MH-20-20141211-S Filename: 141217D2 S:6 Acq:18-DEC-14 08:03:28 ConCal: ST141217D2-1
Lab ID: 1400948-04 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 0.965 EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	1.37e+04	0.33 n	1.18	26:55	1.001	1.8229		*	2.5	*
	1,2,3,7,8-PeCDD	7.93e+04	0.51 n	0.92	31:31	1.000	12.273		*	2.5	*
	1,2,3,4,7,8-HxCDD	2.16e+05	1.33 y	1.09	34:50	1.000	42.132		*	2.5	*
	1,2,3,6,7,8-HxCDD	5.23e+05	1.12 y	1.07	34:56	1.000	95.860		*	2.5	*
	1,2,3,7,8,9-HxCDD	4.29e+05	1.16 y	0.93	35:14	1.000	79.151		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	1.35e+07	1.01 y	1.12	38:44	1.000	2685.2		*	2.5	*
	OCDD	8.06e+07	0.89 y	0.95	41:60	1.000	21825		*	2.5	*
	2,3,7,8-TCDF	2.08e+04	0.70 y	1.08	26:06	1.001	1.9781		*	2.5	*
	1,2,3,7,8-PeCDF	4.27e+04	1.61 y	1.09	30:19	1.000	4.1985		*	2.5	*
	2,3,4,7,8-PeCDF	6.02e+04	1.75 y	1.04	31:14	1.000	5.8669		*	2.5	*
	1,2,3,4,7,8-HxCDF	3.65e+05	1.32 y	1.39	33:57	1.000	35.263		*	2.5	*
	1,2,3,6,7,8-HxCDF	3.83e+05	1.23 y	1.26	34:05	1.001	40.385		*	2.5	*
	2,3,4,6,7,8-HxCDF	4.03e+05	1.29 y	1.30	34:40	1.000	43.762		*	2.5	*
	1,2,3,7,8,9-HxCDF	1.88e+04	1.23 y	1.19	35:37	1.000	2.6342		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	9.30e+06	1.10 y	1.62	37:26	1.000	1168.9		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	4.03e+05	1.12 y	1.53	39:17	1.000	59.491		*	2.5	*
	OCDF	1.79e+07	0.91 y	1.10	42:13	1.000	3457.0		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.31e+07	0.81 y	1.07	26:53	1.023	1334.6				
IS	13C-1,2,3,7,8-PeCDD	1.46e+07	0.62 y	1.24	31:31	1.199	1286.3				
IS	13C-1,2,3,4,7,8-HxCDD	9.79e+06	1.23 y	0.72	34:49	1.014	1038.3				
IS	13C-1,2,3,6,7,8-HxCDD	1.06e+07	1.23 y	0.74	34:56	1.017	1107.7				
IS	13C-1,2,3,7,8,9-HxCDD	1.21e+07	1.23 y	0.86	35:14	1.025	1084.3				
IS	13C-1,2,3,4,6,7,8-HpCDD	9.34e+06	1.05 y	0.64	38:43	1.127	1114.3				
IS	13C-OCDD	1.61e+07	0.87 y	0.78	41:59	1.222	1581.4				
IS	13C-2,3,7,8-TCDF	2.03e+07	0.76 y	0.92	26:05	0.992	1353.8				
IS	13C-1,2,3,7,8-PeCDF	1.94e+07	1.62 y	0.95	30:19	1.153	1257.7				
IS	13C-2,3,4,7,8-PeCDF	2.04e+07	1.62 y	0.97	31:14	1.188	1297.8				
IS	13C-1,2,3,4,7,8-HxCDF	1.55e+07	0.51 y	0.99	33:56	0.988	1199.3				
IS	13C-1,2,3,6,7,8-HxCDF	1.56e+07	0.51 y	1.10	34:04	0.992	1090.0				
IS	13C-2,3,4,6,7,8-HxCDF	1.47e+07	0.52 y	1.03	34:39	1.009	1094.4				
IS	13C-1,2,3,7,8,9-HxCDF	1.24e+07	0.50 y	0.86	35:37	1.037	1110.0				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.02e+07	0.44 y	0.71	37:25	1.089	1099.0				
IS	13C-1,2,3,4,7,8,9-HpCDF	9.21e+06	0.43 y	0.71	39:16	1.143	999.95				
IS	13C-OCDF	1.95e+07	0.89 y	0.87	42:13	1.229	1717.7				
C/Up	37Cl-2,3,7,8-TCDD	8.64e+06		1.21	26:54	1.024	778.62				
RS/RT	13C-1,2,3,4-TCDD	1.90e+07	0.79 y	1.00	26:17	*	2073.2				
RS	13C-1,2,3,4-TCDF	3.36e+07	0.78 y	1.00	24:47	*	2073.2				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.70e+07	0.52 y	1.00	34:21	*	2073.2				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	1.82		*	*
Total Penta-Dioxins	45.2	59.9		*	*
Total Hexa-Dioxins	654	654		*	*
Total Hepta-Dioxins	4910	4910		*	*
Total Tetra-Furans	18.1	26.1		*	*
Total Penta-Furans	191.81	193.65		*	*
Total Hexa-Furans	1050	1050		*	*
Total Hepta-Furans	2880	2880		*	*

	Rec	Qual
IS 13C-2,3,7,8-TCDD	64.4	
IS 13C-1,2,3,7,8-PeCDD	62.0	
IS 13C-1,2,3,4,7,8-HxCDD	50.1	
IS 13C-1,2,3,6,7,8-HxCDD	53.4	
IS 13C-1,2,3,7,8,9-HxCDD	52.3	
IS 13C-1,2,3,4,6,7,8-HpCDD	53.7	
IS 13C-OCDD	38.1	
IS 13C-2,3,7,8-TCDF	65.3	
IS 13C-1,2,3,7,8-PeCDF	60.7	
IS 13C-2,3,4,7,8-PeCDF	62.6	
IS 13C-1,2,3,4,7,8-HxCDF	57.8	
IS 13C-1,2,3,6,7,8-HxCDF	52.6	
IS 13C-2,3,4,6,7,8-HxCDF	52.8	
IS 13C-1,2,3,7,8,9-HxCDF	53.5	
IS 13C-1,2,3,4,6,7,8-HpCDF	53.0	
IS 13C-1,2,3,4,7,8,9-HpCDF	48.2	
IS 13C-OCDF	41.4	
C/Up 37Cl-2,3,7,8-TCDD	93.9	

Integrations by Analyst: MJ Date: 12/18/14

Reviewed by Analyst: Date: 12/19/14

Totals class: TCDD EMPC Entry #: 19

Run: 11 File: 141217D2 S: 6 I: 1 F: 1
Acquired: 18-DEC-14 08:03:28 Processed: 18-DEC-14 13:52:17

Total Concentration: 1.8229 Unnamed Concentration: *

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
26:55	5.939e+03	1.798e+04	0.33	n	1.365e+04	1.8229	2,3,7,8-TCDD

Totals class: PeCDD EMPC Entry #: 21

Run: 11 File: 141217D2 S: 6 I: 1 F: 2
Acquired: 18-DEC-14 08:03:28 Processed: 18-DEC-14 13:52:17

Total Concentration: 59.855 Unnamed Concentration: 47.582

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:26	2.792e+04	5.178e+04	0.54	y	7.969e+04	12.329	
29:54	9.295e+03	1.475e+04	0.63	y	2.405e+04	3.7199	
30:21	1.521e+04	2.186e+04	0.70	y	3.707e+04	5.7346	
30:30	2.449e+04	4.136e+04	0.59	y	6.585e+04	10.187	
30:36	1.500e+04	2.326e+04	0.65	y	3.826e+04	5.9195	
30:48	1.811e+04	2.933e+04	0.62	y	4.743e+04	7.3376	
31:31	3.066e+04	5.980e+04	0.51	n	7.934e+04	12.273	1,2,3,7,8-PeCDD
31:53	7.826e+03	9.340e+03	0.84	n	1.522e+04	2.3551	

Totals class: HxCDD EMPC Entry #: 23

Run: 11 File: 141217D2 S: 6 I: 1 F: 3
Acquired: 18-DEC-14 08:03:28 Processed: 18-DEC-14 13:52:17

Total Concentration: 654.22 Unnamed Concentration: 437.079

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
33:18	3.963e+05	3.416e+05	1.16	y	7.380e+05	138.25	
33:52	7.569e+04	6.238e+04	1.21	y	1.381e+05	25.866	
34:08	8.030e+05	6.540e+05	1.23	y	1.457e+06	272.96	
34:50	1.235e+05	9.279e+04	1.33	y	2.163e+05	42.132	1,2,3,4,7,8-HxCDD
34:56	2.769e+05	2.461e+05	1.12	y	5.230e+05	95.860	1,2,3,6,7,8-HxCDD
35:14	2.304e+05	1.983e+05	1.16	y	4.287e+05	79.151	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 11 File: 141217D2 S: 6 I: 1 F: 4
Acquired: 18-DEC-14 08:03:28 Processed: 18-DEC-14 13:52:17

Total Concentration: 4914.5 Unnamed Concentration: 2229.235

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:49	5.657e+06	5.536e+06	1.02	y	1.119e+07	2229.2	
38:44	6.787e+06	6.695e+06	1.01	y	1.348e+07	2685.2	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 11 File: 141217D2 S: 6 I: 1 F: 1
Acquired: 18-DEC-14 08:03:28 Processed: 18-DEC-14 13:52:17

Total Concentration: 26.133 Unnamed Concentration: 24.155

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
22:18	3.567e+04	5.141e+04	0.69	y	8.708e+04	8.2741	
23:17	1.169e+04	1.486e+04	0.79	y	2.654e+04	2.5222	
23:43	1.252e+04	1.937e+04	0.65	n	2.877e+04	2.7338	
24:42	1.875e+04	1.780e+04	1.05	n	3.151e+04	2.9944	
24:48	1.696e+04	2.576e+04	0.66	y	4.272e+04	4.0591	
25:15	5.754e+03	7.547e+03	0.76	y	1.330e+04	1.2639	
26:06	8.564e+03	1.225e+04	0.70	y	2.082e+04	1.9781	2,3,7,8-TCDF
26:26	1.382e+04	1.372e+04	1.01	n	2.428e+04	2.3073	

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

Run: 11 File: 141217D2 S: 6 I: 1 F: 1
Acquired: 18-DEC-14 08:03:28 Processed: 18-DEC-14 13:52:17

Total Concentration: 99.685 Unnamed Concentration: 99.685

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
27:54	6.138e+05	4.046e+05	1.52	y	1.018e+06	99.685	

Totals class: PeCDF EMPC Entry #: 31

Run: 11 File: 141217D2 S: 6 I: 1 F: 2
Acquired: 18-DEC-14 08:03:28 Processed: 18-DEC-14 13:52:17

Total Concentration: 93.967 Unnamed Concentration: 83.902

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:22	3.222e+05	1.970e+05	1.64	y	5.192e+05	50.827	
29:56	1.265e+05	8.182e+04	1.55	y	2.083e+05	20.393	
30:09	1.143e+04	1.015e+04	1.13	n	1.881e+04	1.8414	
30:19	2.634e+04	1.636e+04	1.61	y	4.270e+04	4.1985	1,2,3,7,8-PeCDF
30:35	3.857e+04	2.667e+04	1.45	y	6.524e+04	6.3861	
31:14	3.830e+04	2.187e+04	1.75	y	6.016e+04	5.8669	2,3,4,7,8-PeCDF
31:17	2.904e+04	1.646e+04	1.76	y	4.550e+04	4.4541	

Totals class: HxCDF EMPC Entry #: 33

Run: 11 File: 141217D2 S: 6 I: 1 F: 3
Acquired: 18-DEC-14 08:03:28 Processed: 18-DEC-14 13:52:17

Total Concentration: 1045.9 Unnamed Concentration: 923.830

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
32:46	6.973e+05	5.243e+05	1.33 y	1.222e+06	135.37	
32:56	2.685e+06	2.062e+06	1.30 y	4.748e+06	526.10	
33:29	1.268e+06	9.705e+05	1.31 y	2.239e+06	248.09	
33:51	4.767e+04	3.829e+04	1.25 y	8.595e+04	9.5246	
33:57	2.082e+05	1.572e+05	1.32 y	3.654e+05	35.263	1,2,3,4,7,8-HxCDF
34:05	2.111e+05	1.717e+05	1.23 y	3.828e+05	40.385	1,2,3,6,7,8-HxCDF
34:40	2.271e+05	1.755e+05	1.29 y	4.026e+05	43.762	2,3,4,6,7,8-HxCDF
35:37	1.034e+04	8.419e+03	1.23 y	1.875e+04	2.6342	1,2,3,7,8,9-HxCDF
35:41	2.492e+04	1.783e+04	1.40 y	4.275e+04	4.7370	

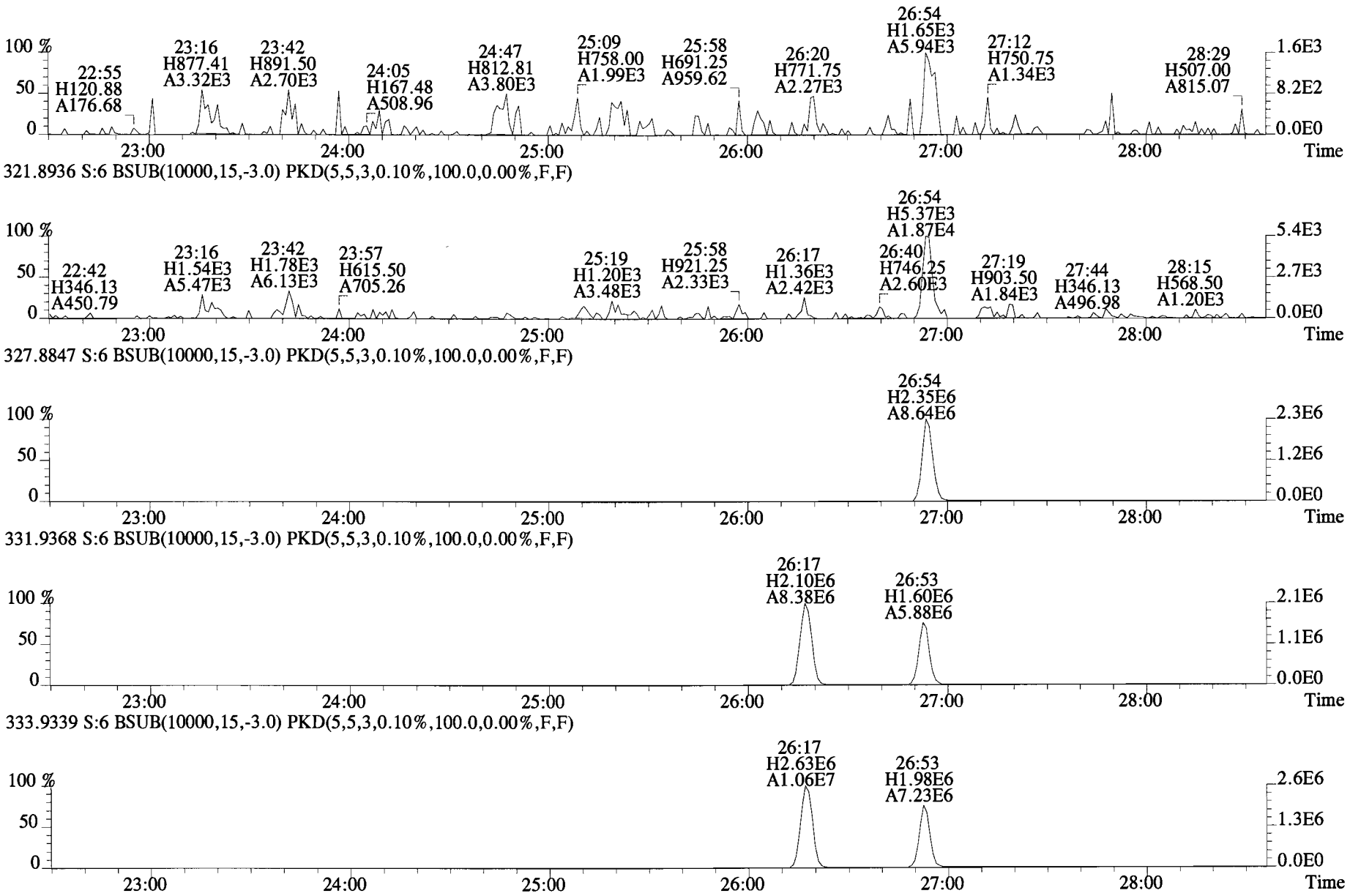
Totals class: HpCDF EMPC Entry #: 35

Run: 11 File: 141217D2 S: 6 I: 1 F: 4
Acquired: 18-DEC-14 08:03:28 Processed: 18-DEC-14 13:52:17

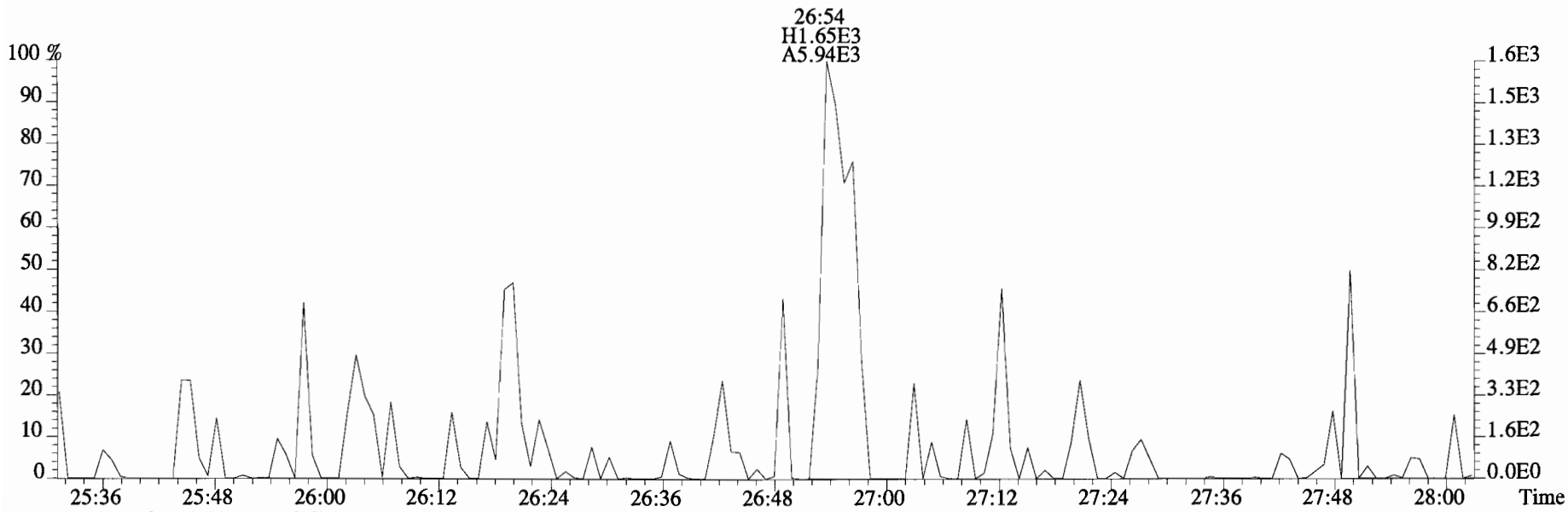
Total Concentration: 2879.6 Unnamed Concentration: 1651.185

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:26	4.877e+06	4.418e+06	1.10 y	9.296e+06	1168.9	1,2,3,4,6,7,8-HpCDF
37:50	9.710e+04	9.014e+04	1.08 y	1.872e+05	25.454	
38:03	6.269e+06	5.689e+06	1.10 y	1.196e+07	1625.7	
39:17	2.128e+05	1.906e+05	1.12 y	4.034e+05	59.491	1,2,3,4,7,8,9-HpCDF

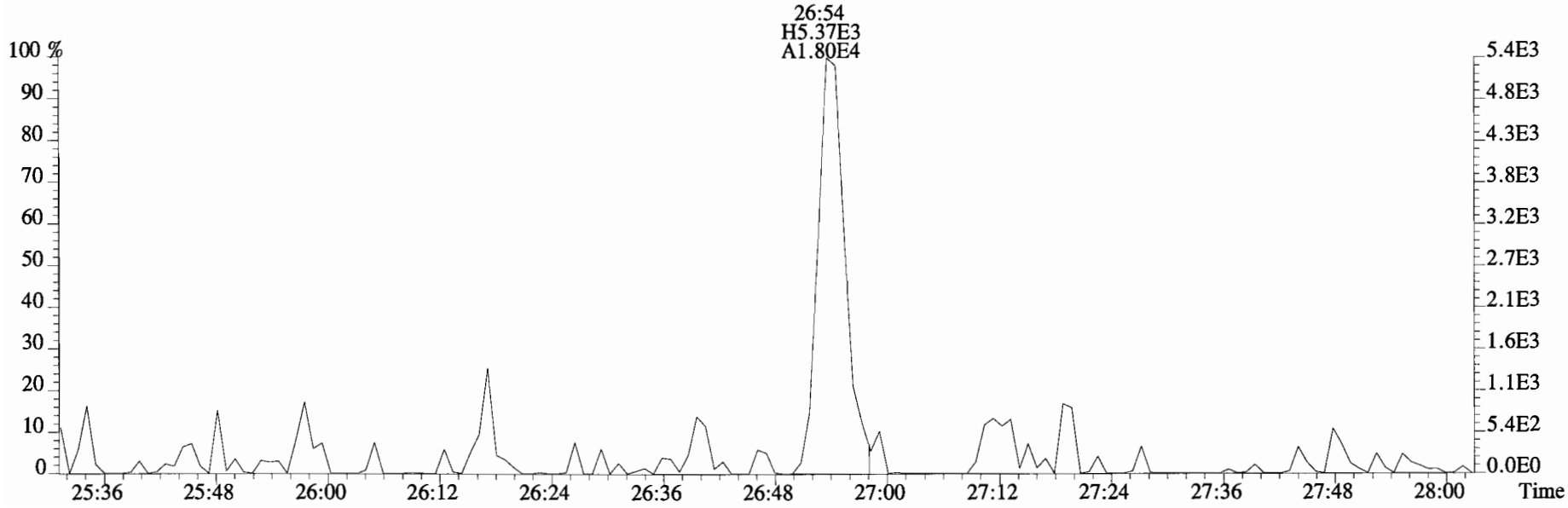
File:141217D2 #1-551 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5



File:141217D2 #1-551 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

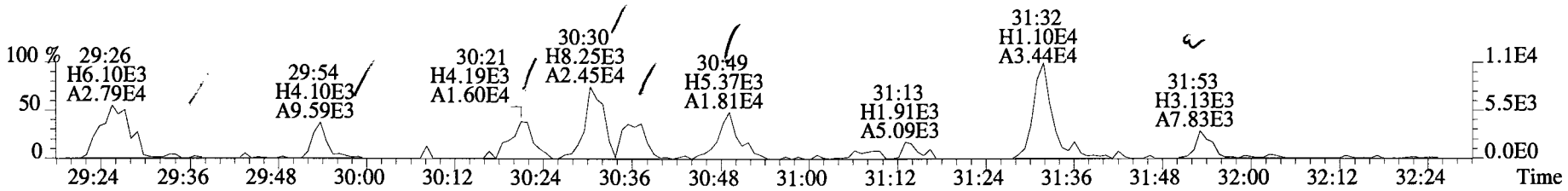


321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

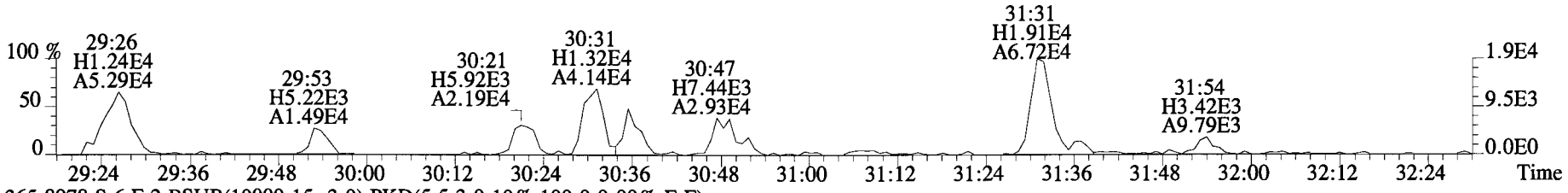


File:141217D2 #1-257 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5

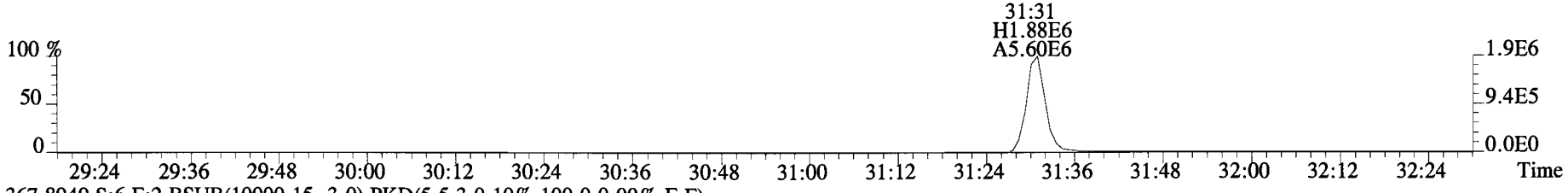
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



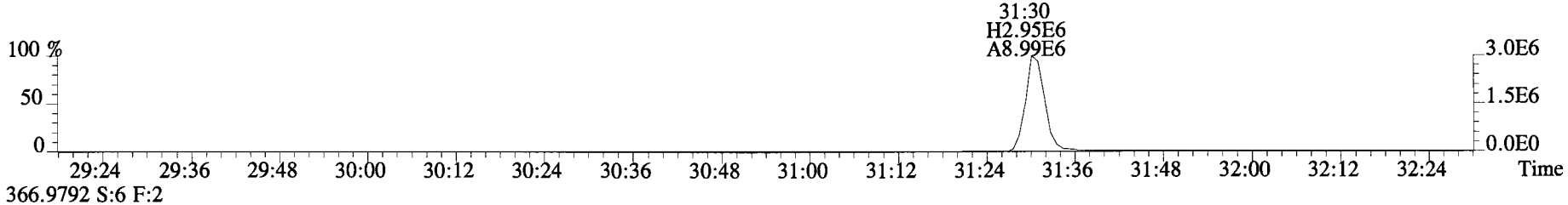
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



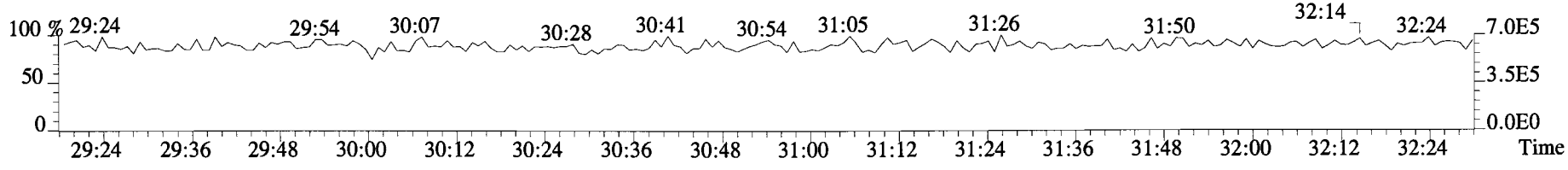
365.8978 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



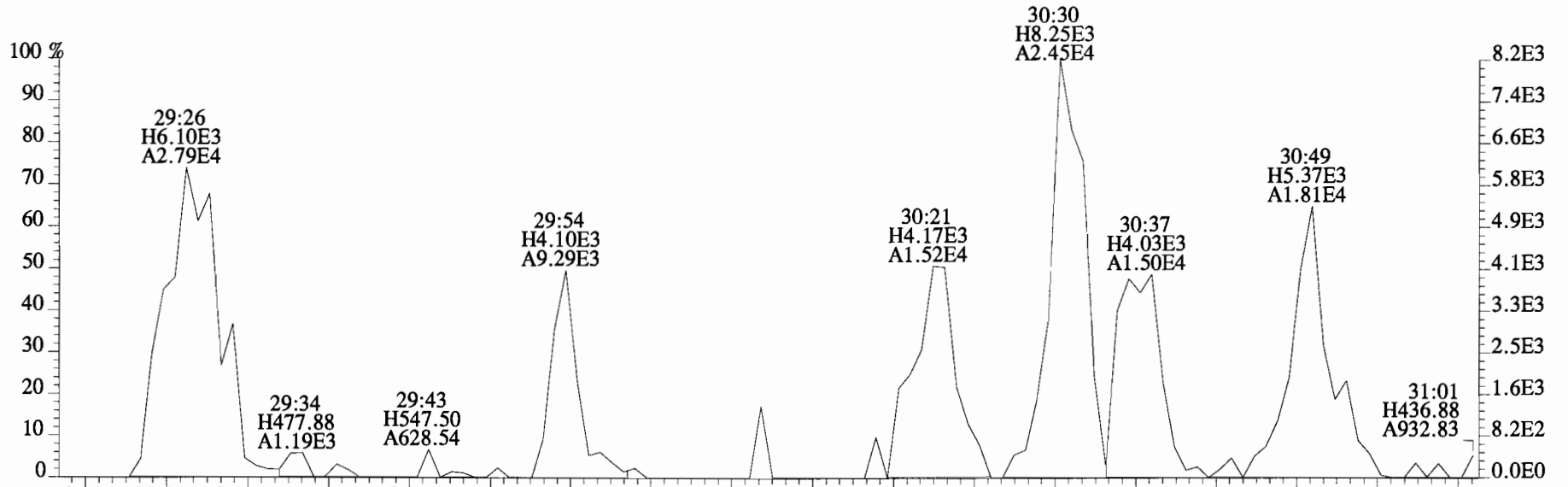
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



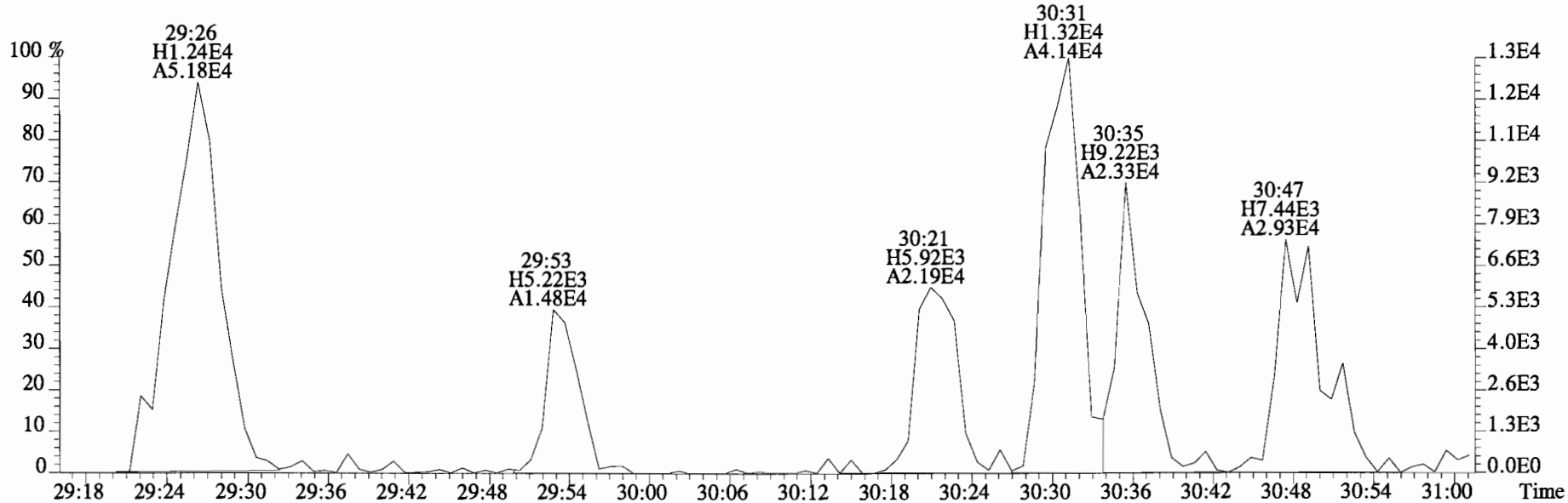
366.9792 S:6 F:2



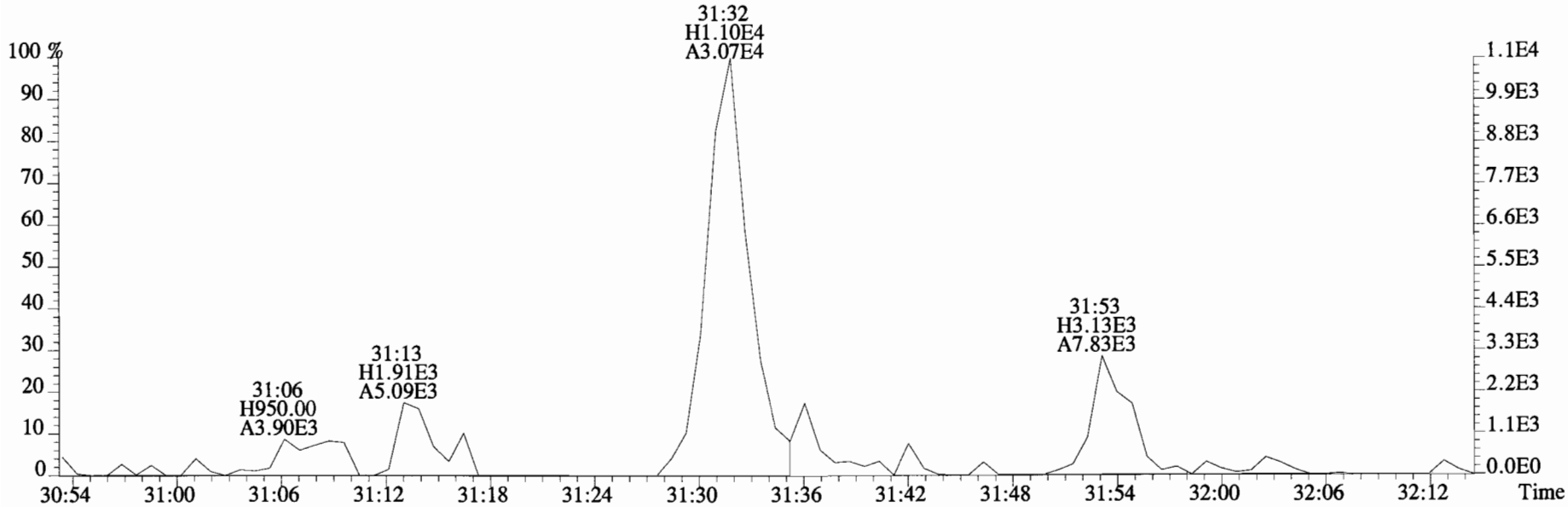
File:141217D2 #1-257 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



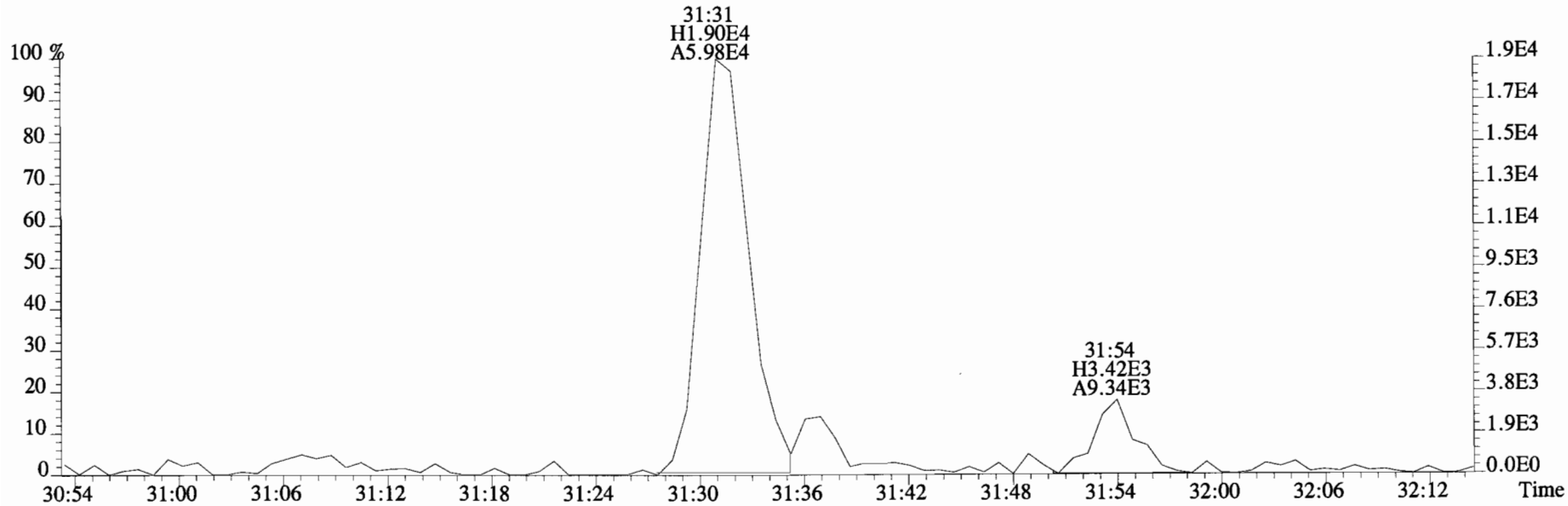
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



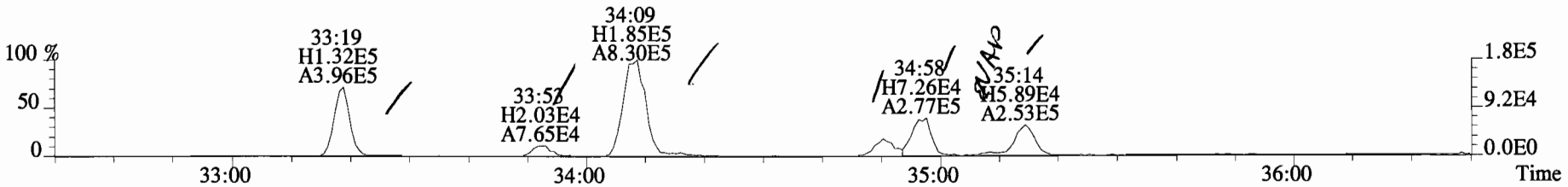
File:141217D2 #1-257 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



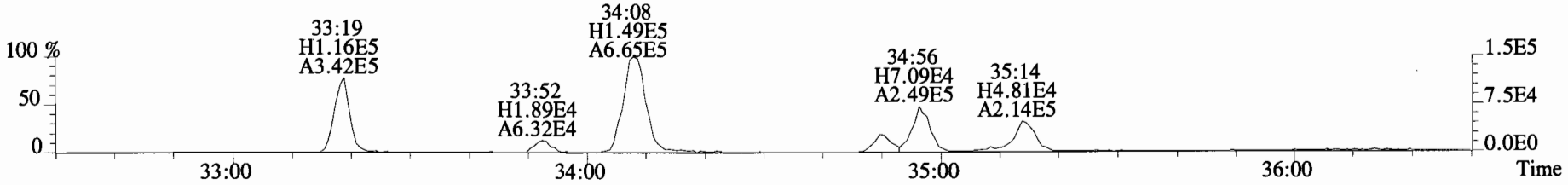
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



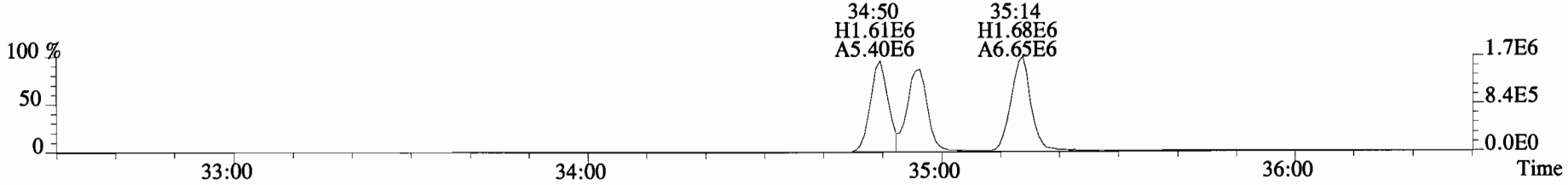
File:141217D2 #1-385 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



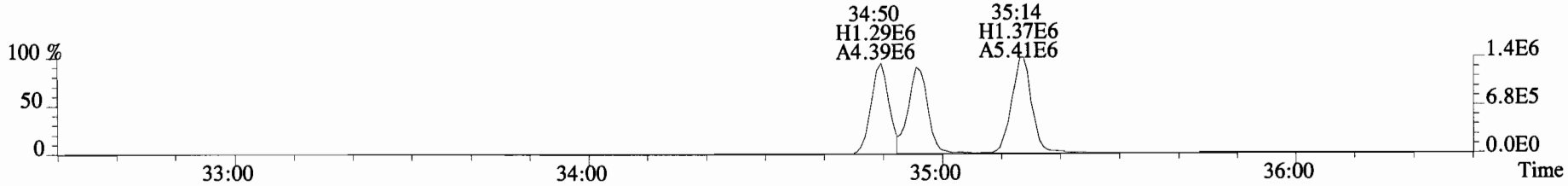
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



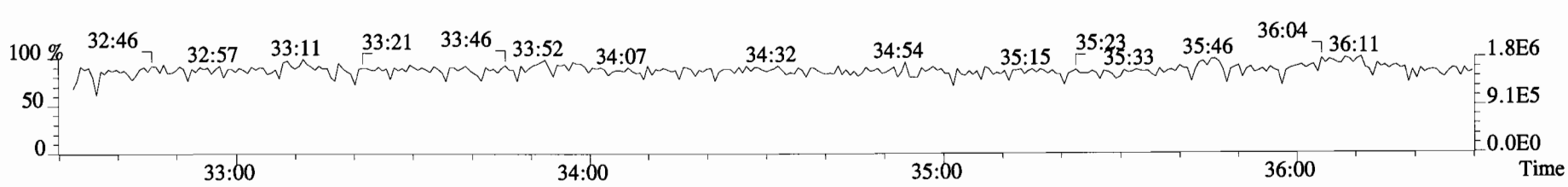
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



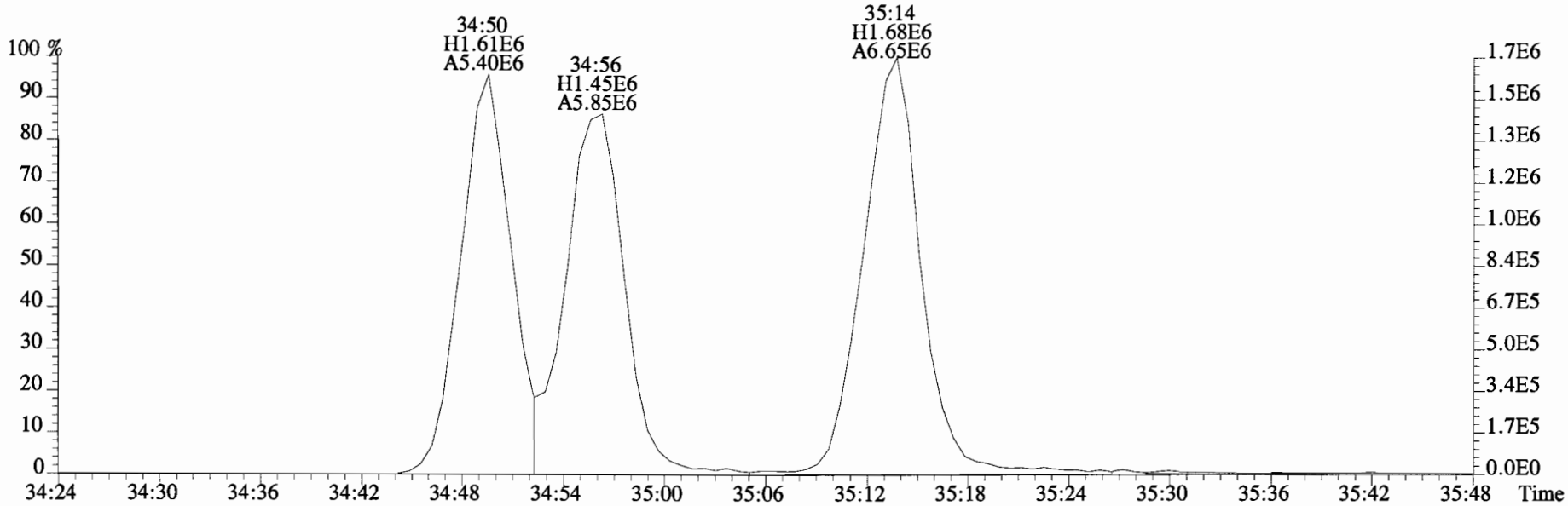
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



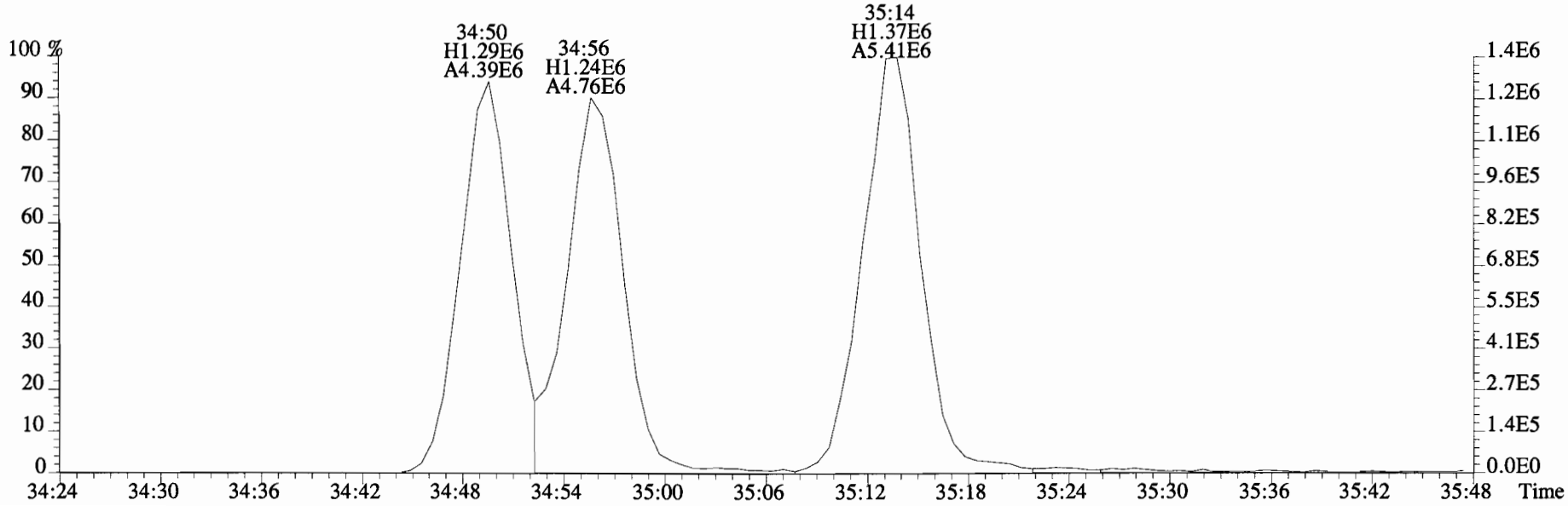
380.9760 S:6 F:3



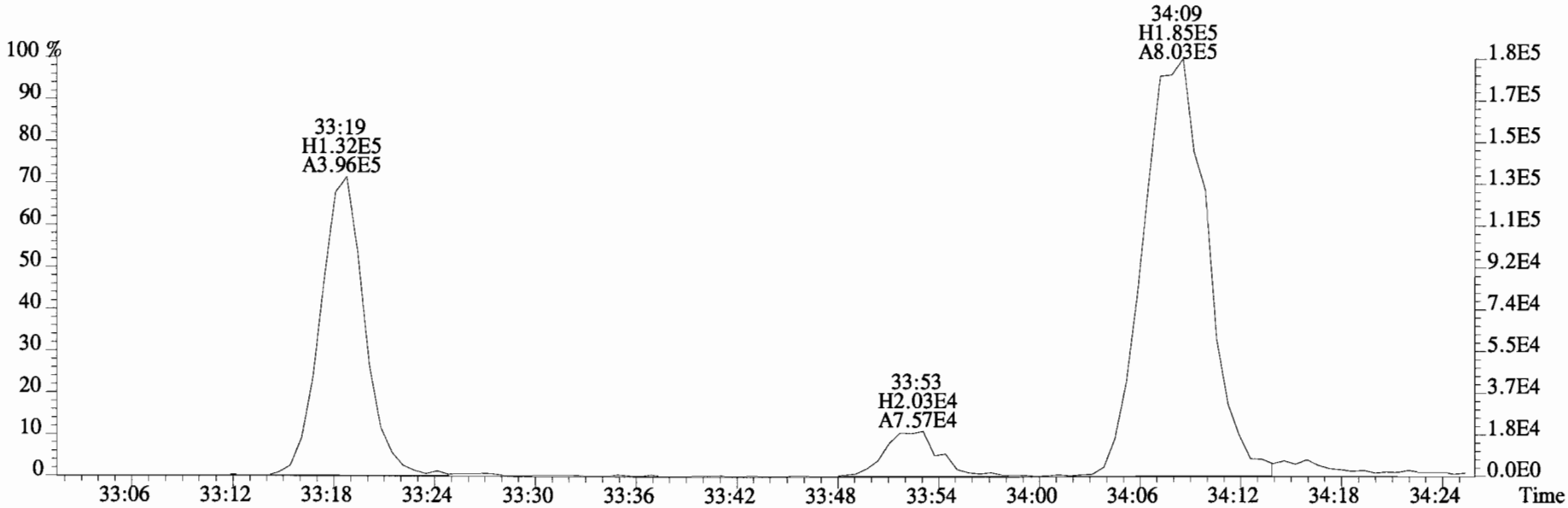
File:141217D2 #1-385 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



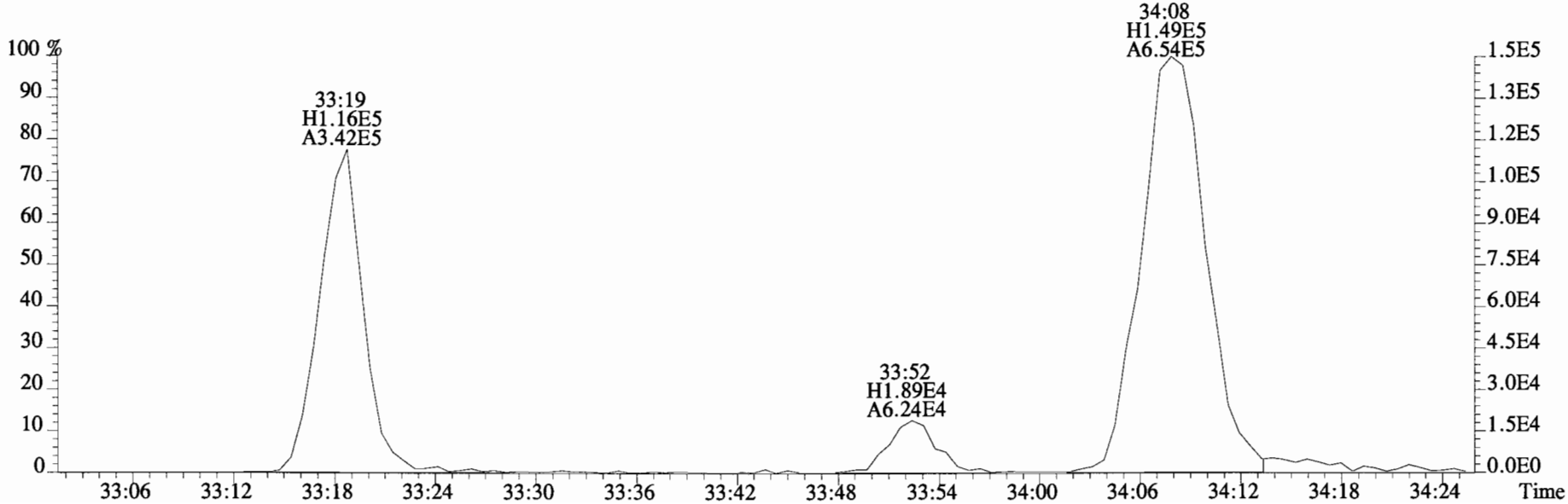
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



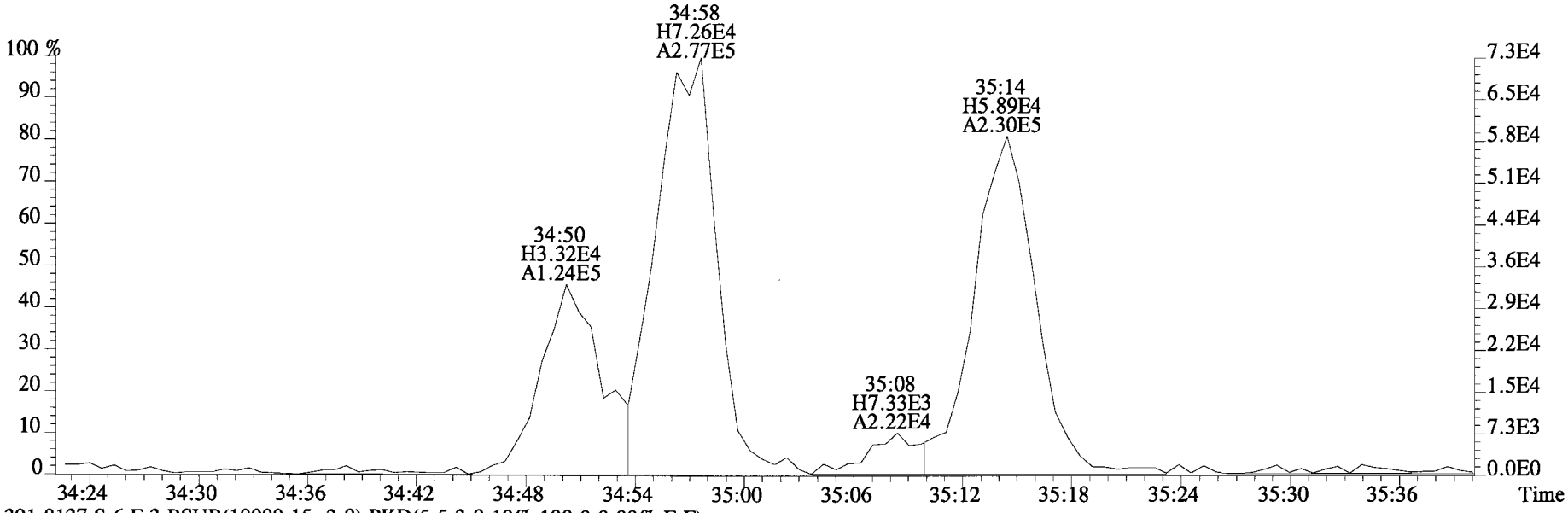
File:141217D2 #1-385 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



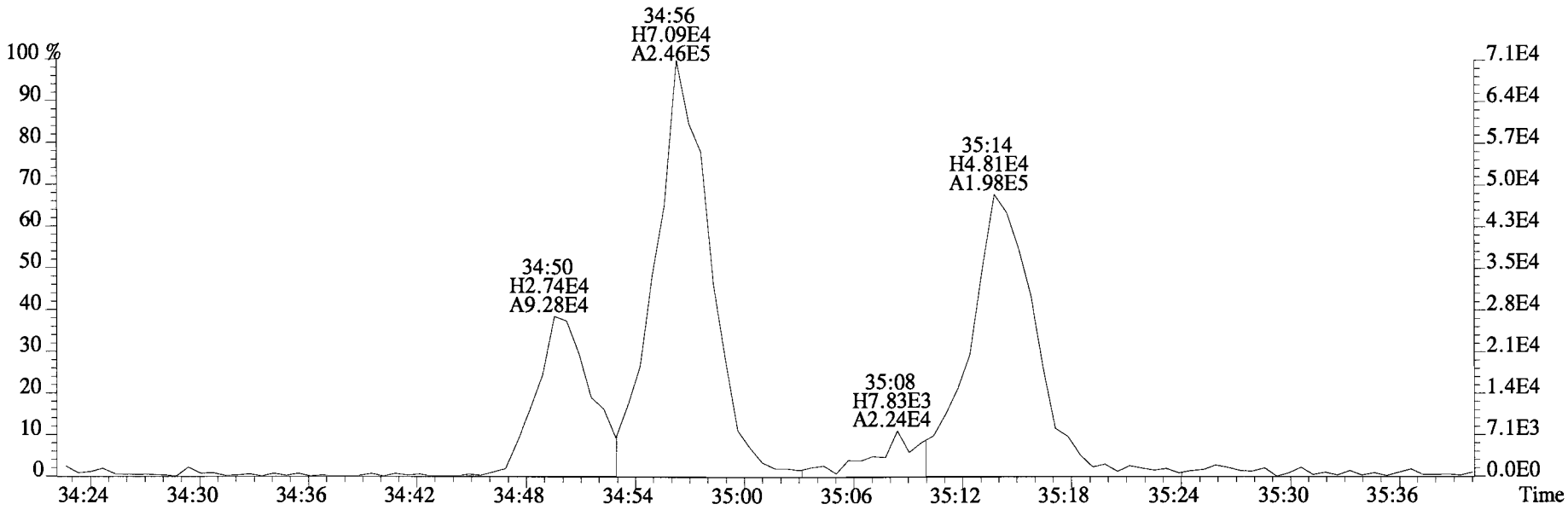
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



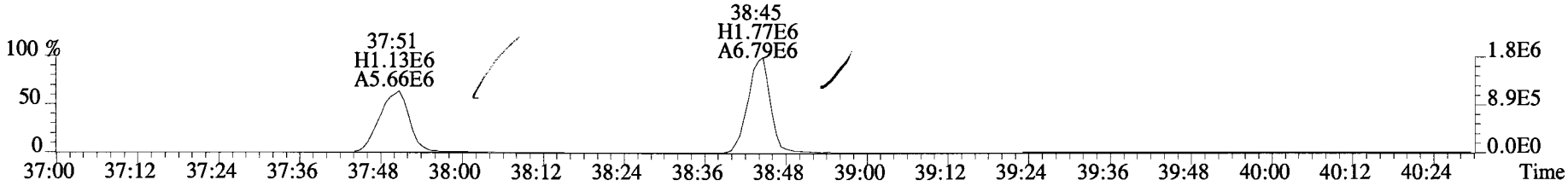
File:141217D2 #1-385 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



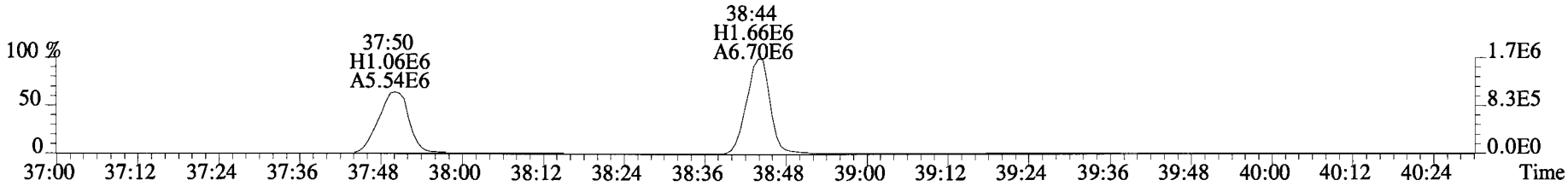
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



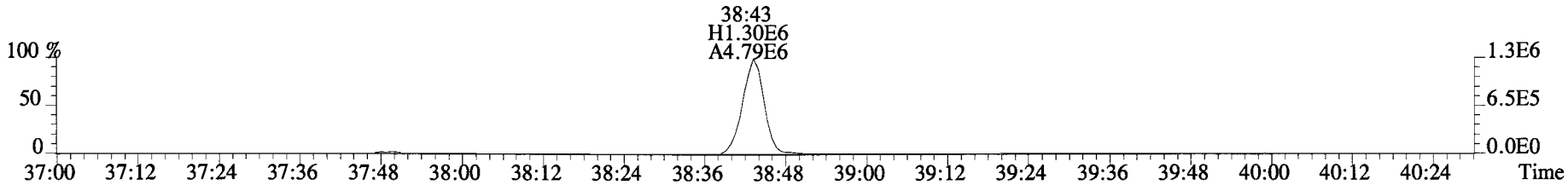
File:141217D2 #1-325 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



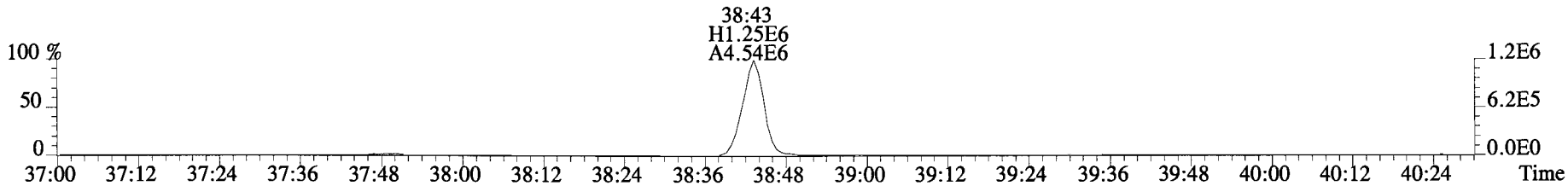
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



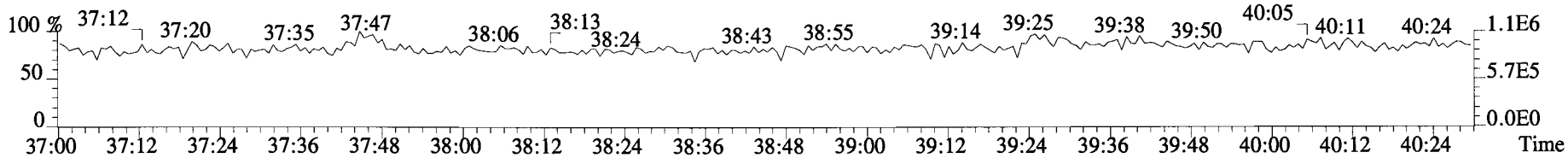
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



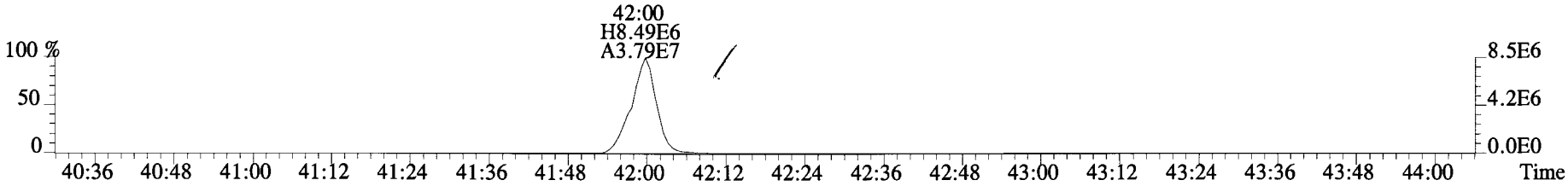
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



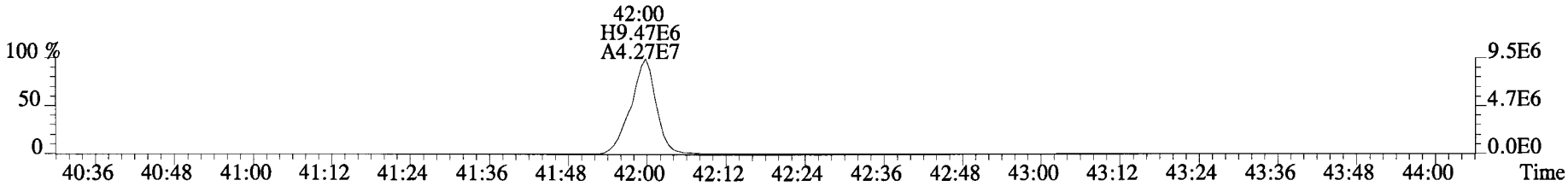
430.9728 S:6 F:4



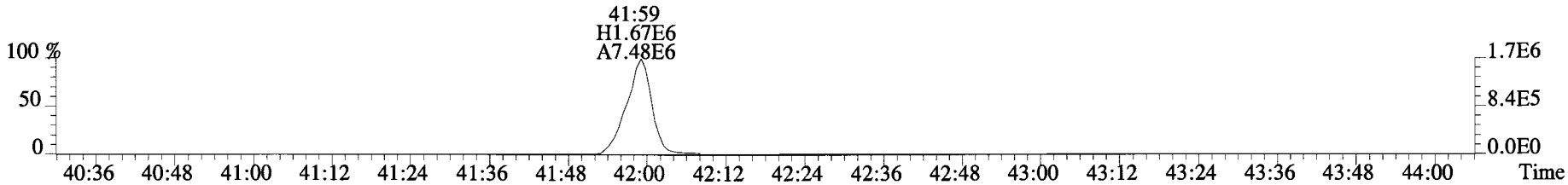
File:141217D2 #1-389 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



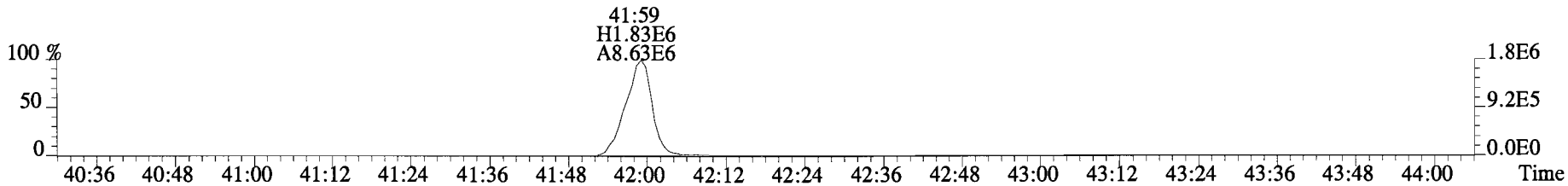
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



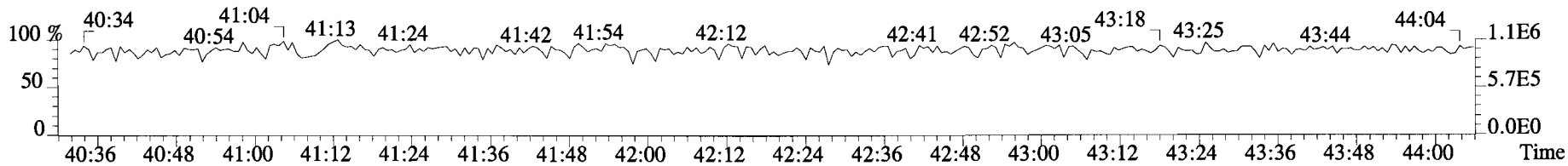
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

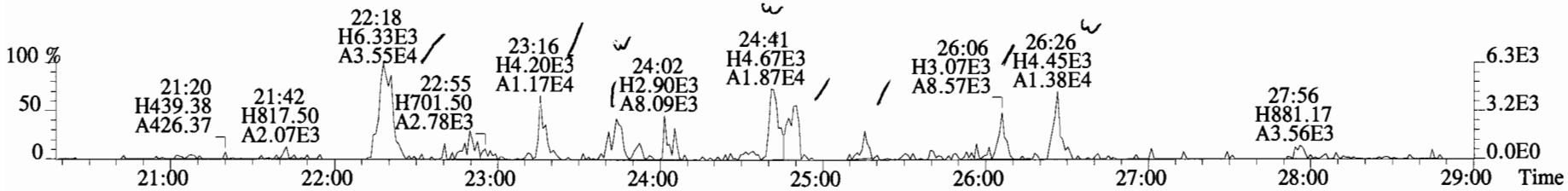


454.9728 S:6 F:5

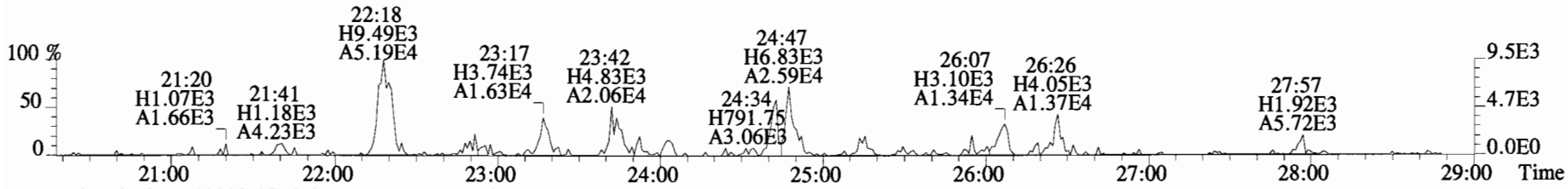


File:141217D2 #1-551 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5

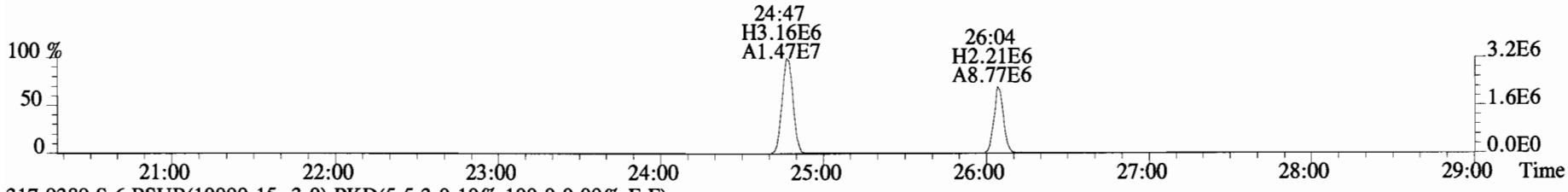
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



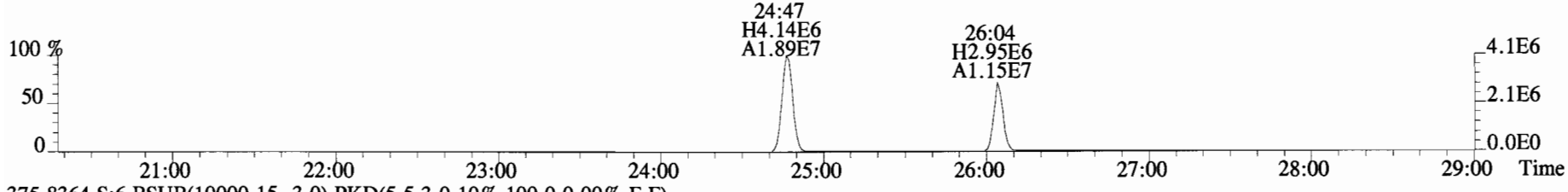
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



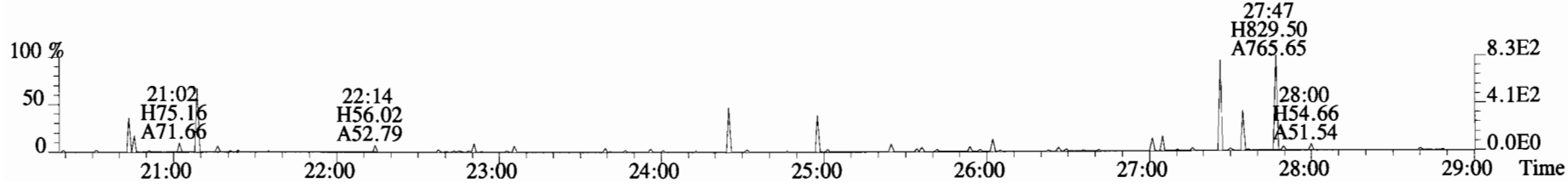
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



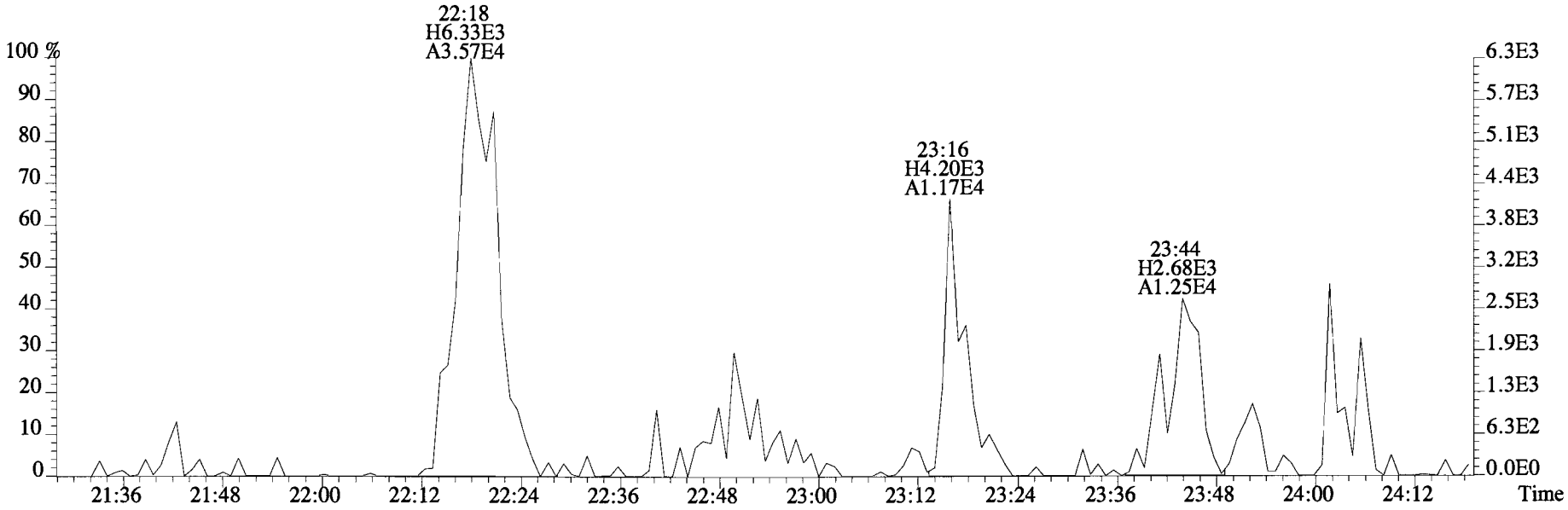
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



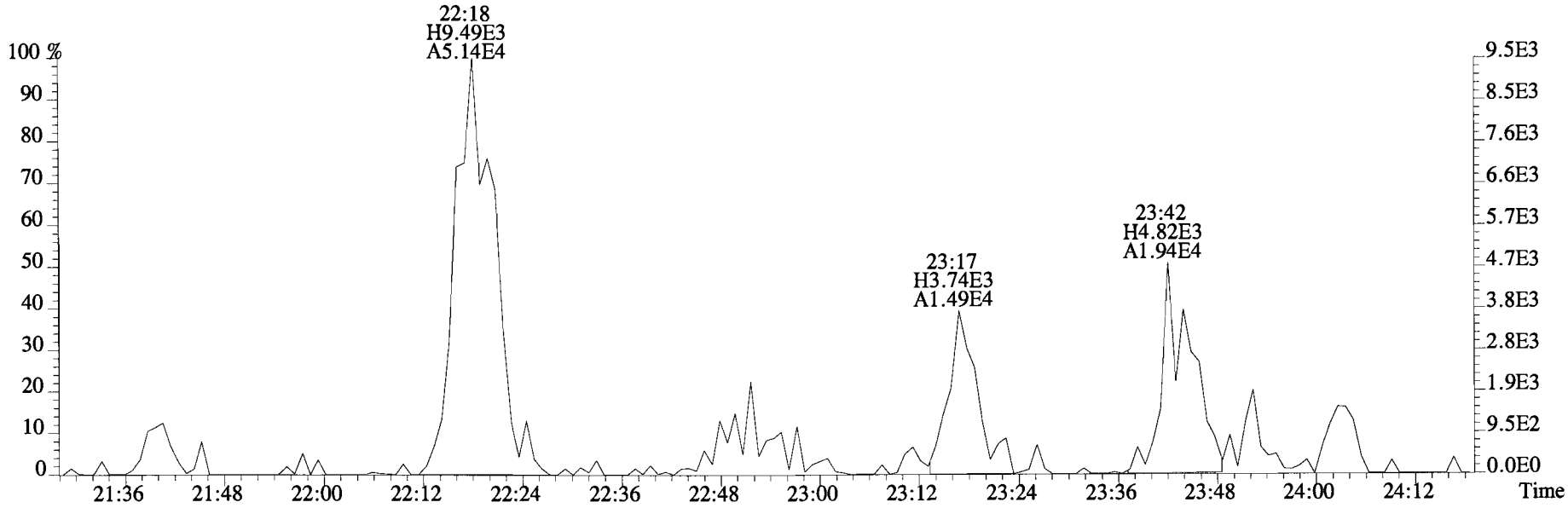
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

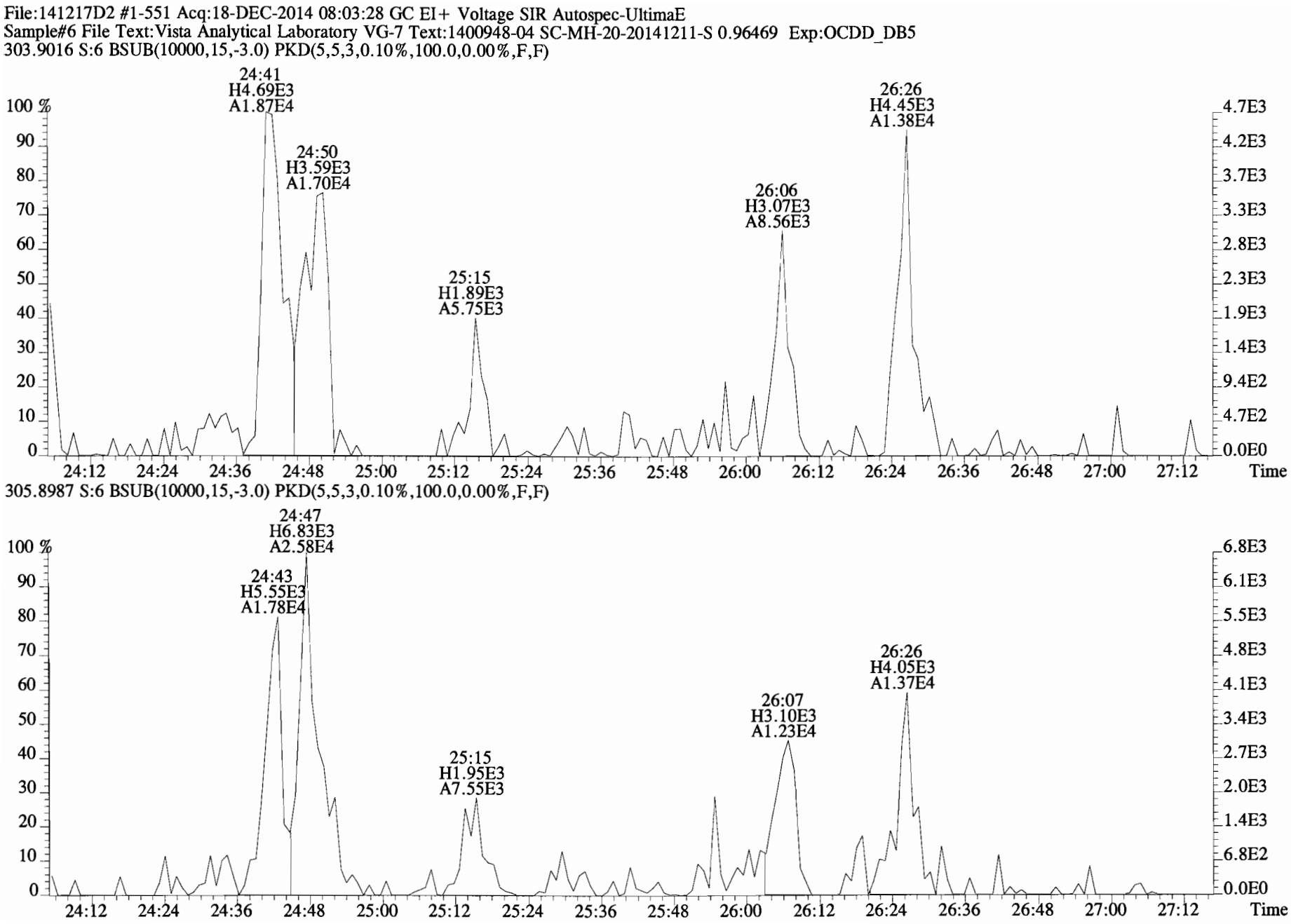


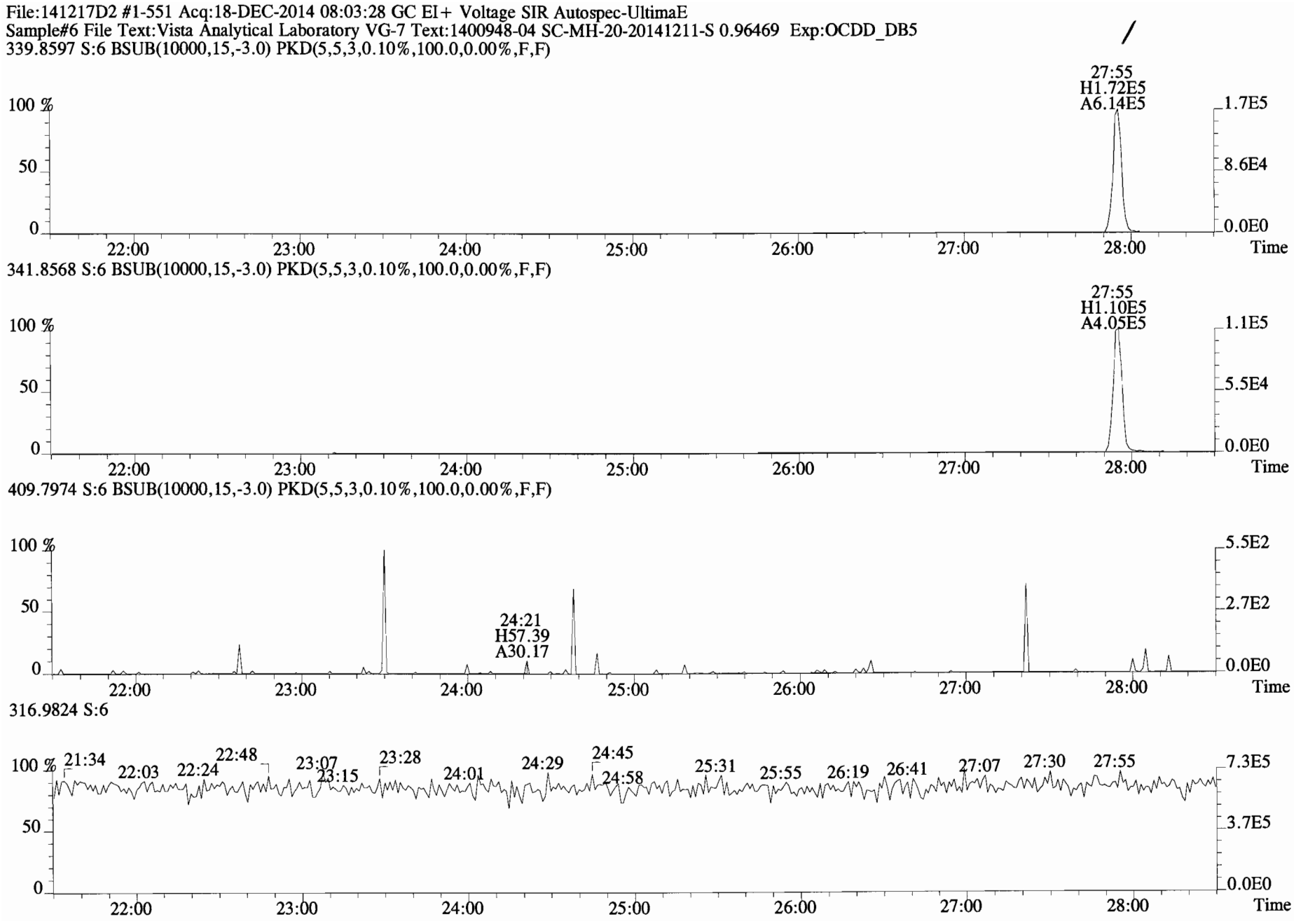
File:141217D2 #1-551 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

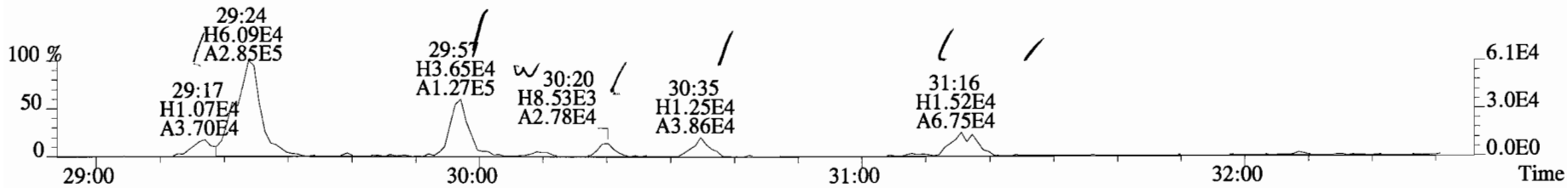



File:141217D2 #1-551 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:41
H4.69E3
A1.87E4
24:50
H3.59E3
A1.70E4
25:15
H1.89E3
A5.75E3
26:06
H3.07E3
A8.56E3
26:26
H4.45E3
A1.38E4
100 %
90
80
70
60
50
40
30
20
10
0
4.7E3
4.2E3
3.7E3
3.3E3
2.8E3
2.3E3
1.9E3
1.4E3
9.4E2
4.7E2
0.0E0
24:12
24:24
24:36
24:48
25:00
25:12
25:24
25:36
25:48
26:00
26:12
26:24
26:36
26:48
27:00
27:12
Time
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:47
H6.83E3
A2.58E4
24:43
H5.55E3
A1.78E4
25:15
H1.95E3
A7.55E3
26:07
H3.10E3
A1.23E4
26:26
H4.05E3
A1.37E4
100 %
90
80
70
60
50
40
30
20
10
0
6.8E3
6.1E3
5.5E3
4.8E3
4.1E3
3.4E3
2.7E3
2.0E3
1.4E3
6.8E2
0.0E0
24:12
24:24
24:36
24:48
25:00
25:12
25:24
25:36
25:48
26:00
26:12
26:24
26:36
26:48
27:00
27:12
Time

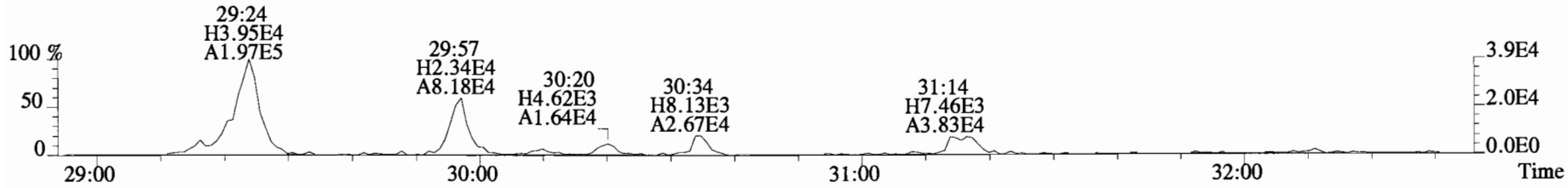

File:141217D2 #1-551 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:55
H1.72E5
A6.14E5
100 %
50
0
1.7E5
8.6E4
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:55
H1.10E5
A4.05E5
100 %
50
0
1.1E5
5.5E4
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:21
H57.39
A30.17
100 %
50
0
5.5E2
2.7E2
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
316.9824 S:6
21:34
22:03
22:24
22:48
23:07
23:15
23:28
24:01
24:29
24:45
24:58
25:31
25:55
26:19
26:41
27:07
27:30
27:55
100 %
50
0
7.3E5
3.7E5
0.0E0
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time

File:141217D2 #1-257 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5

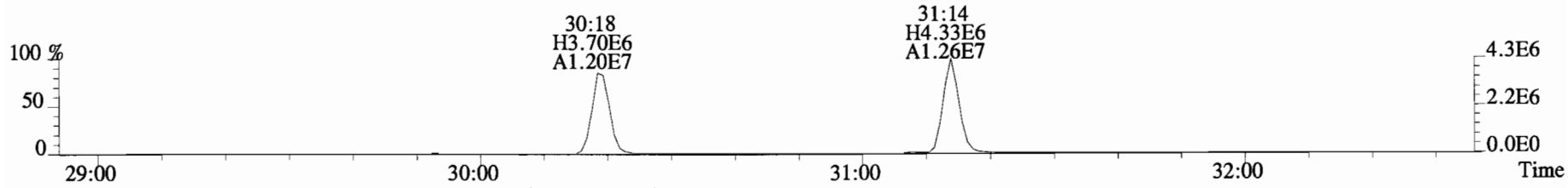
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



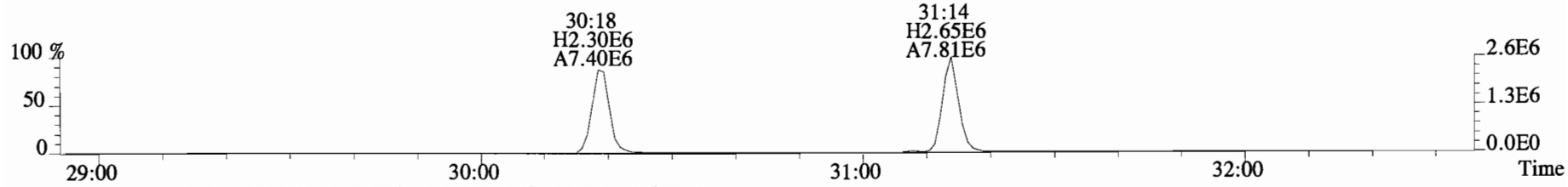
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



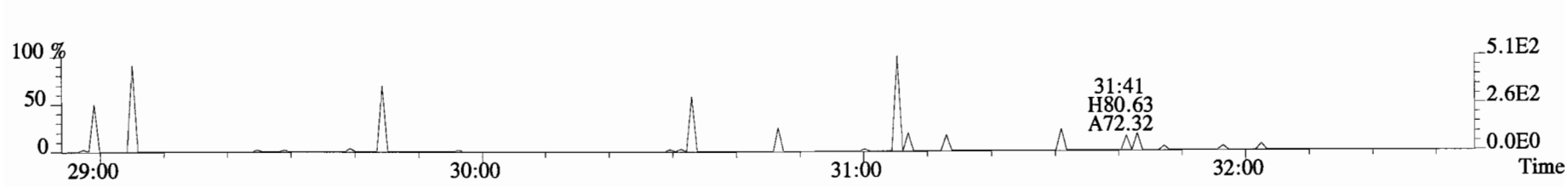
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



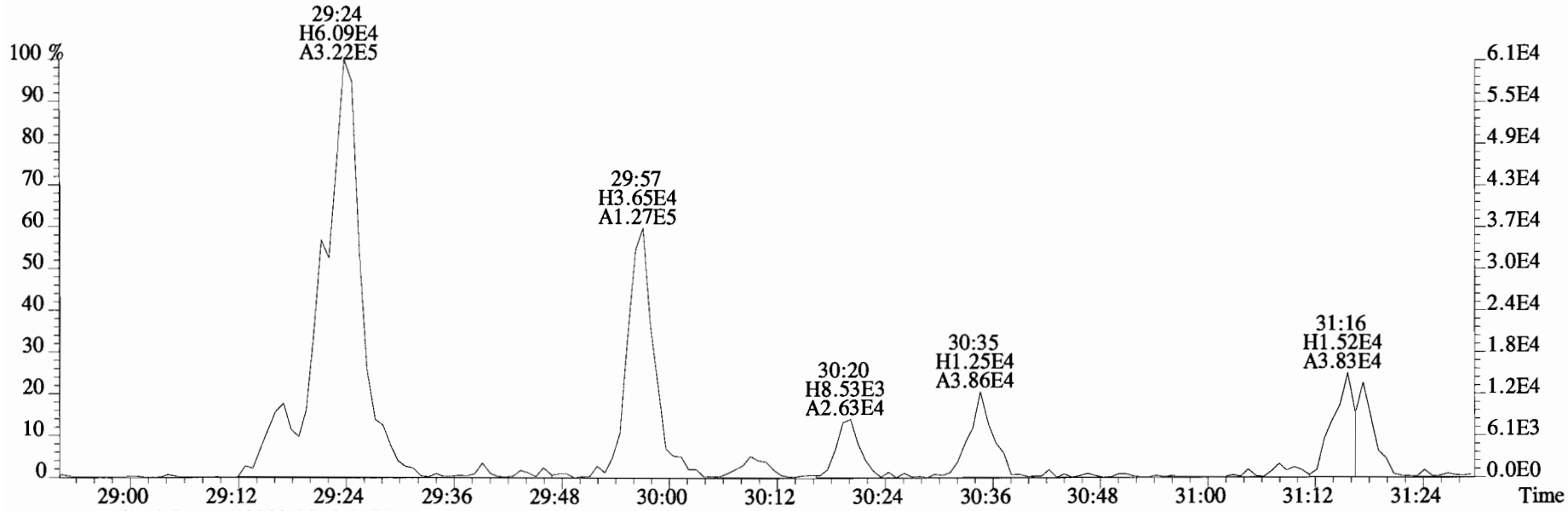
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



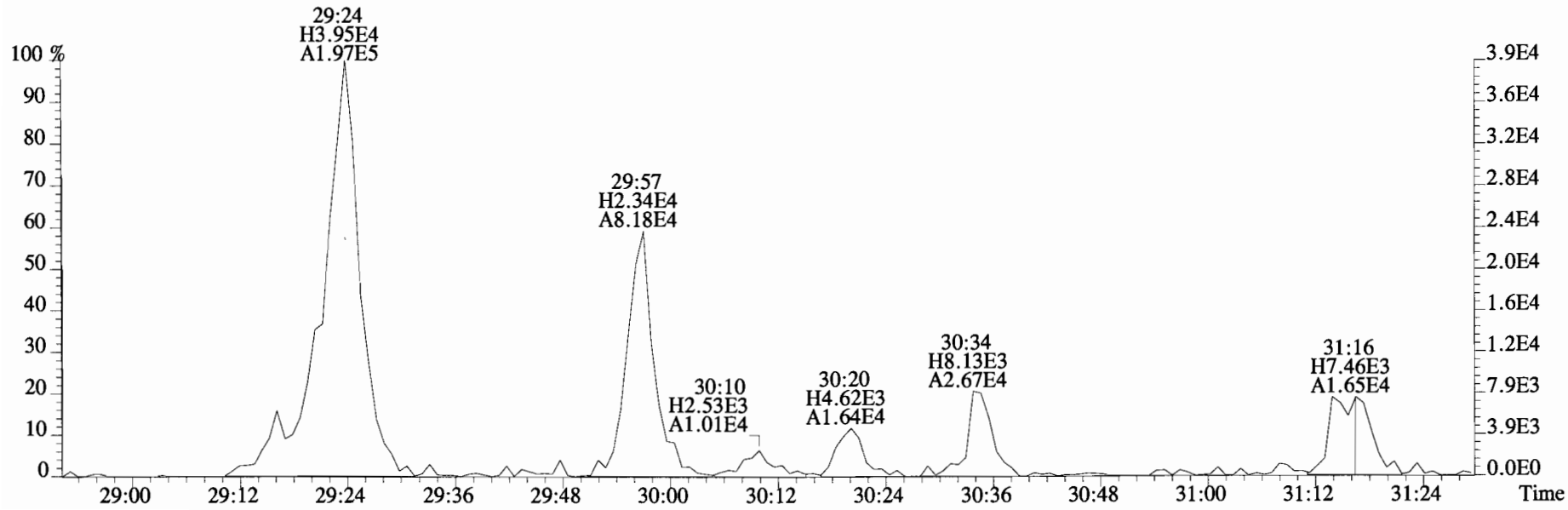
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



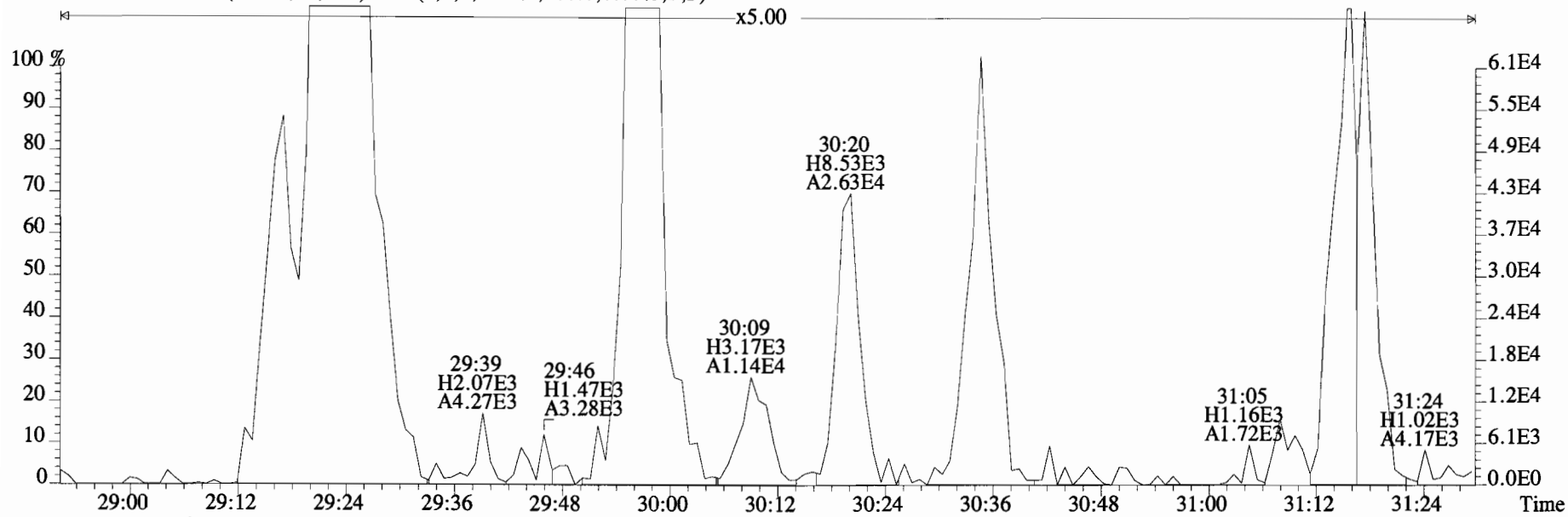
File:141217D2 #1-257 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



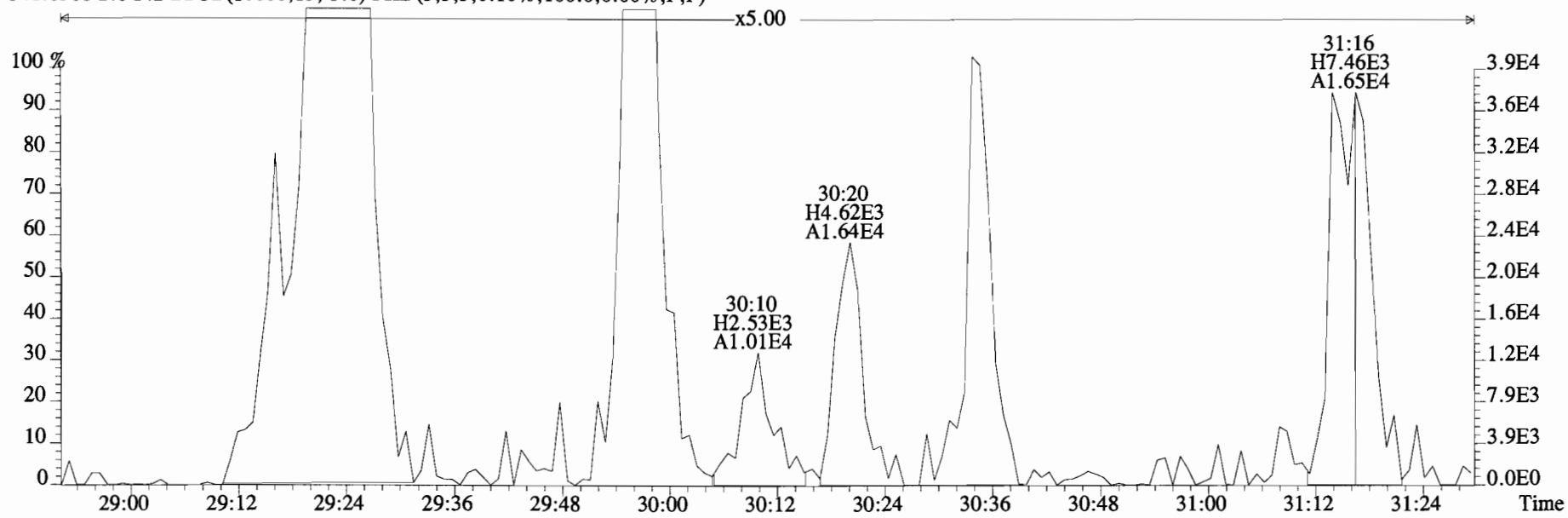
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141217D2 #1-257 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

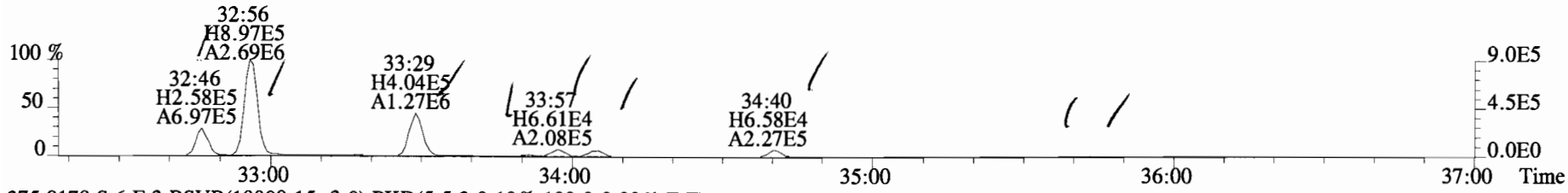


341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

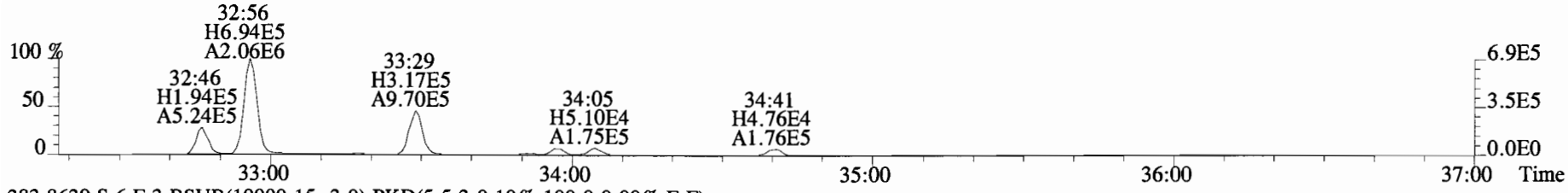


File:141217D2 #1-385 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5

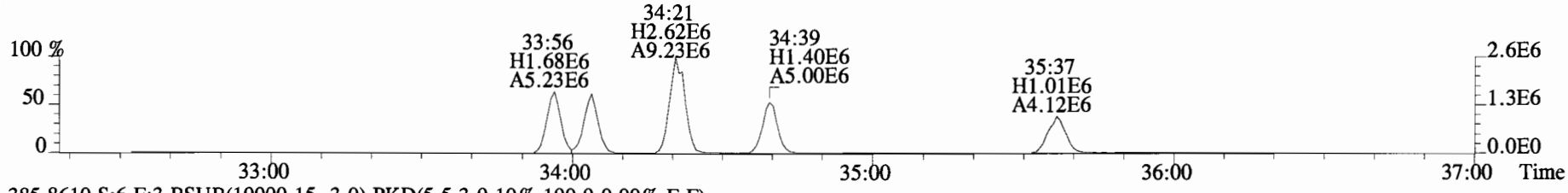
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



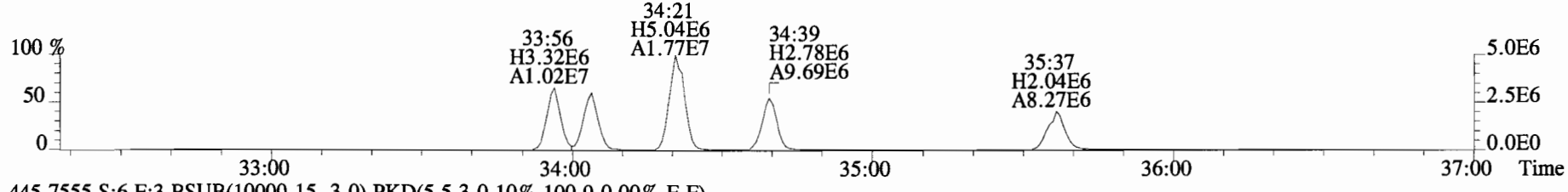
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



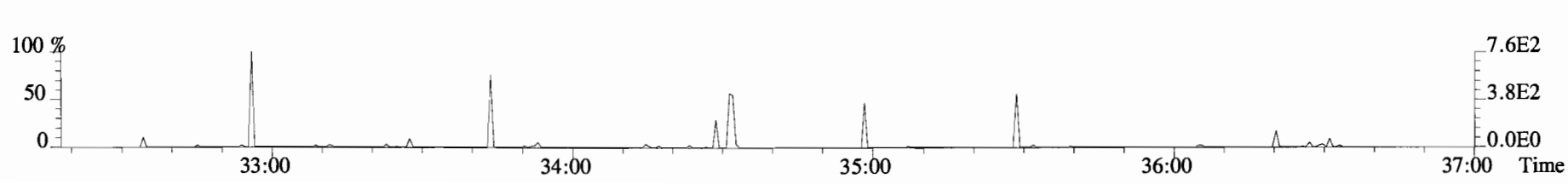
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



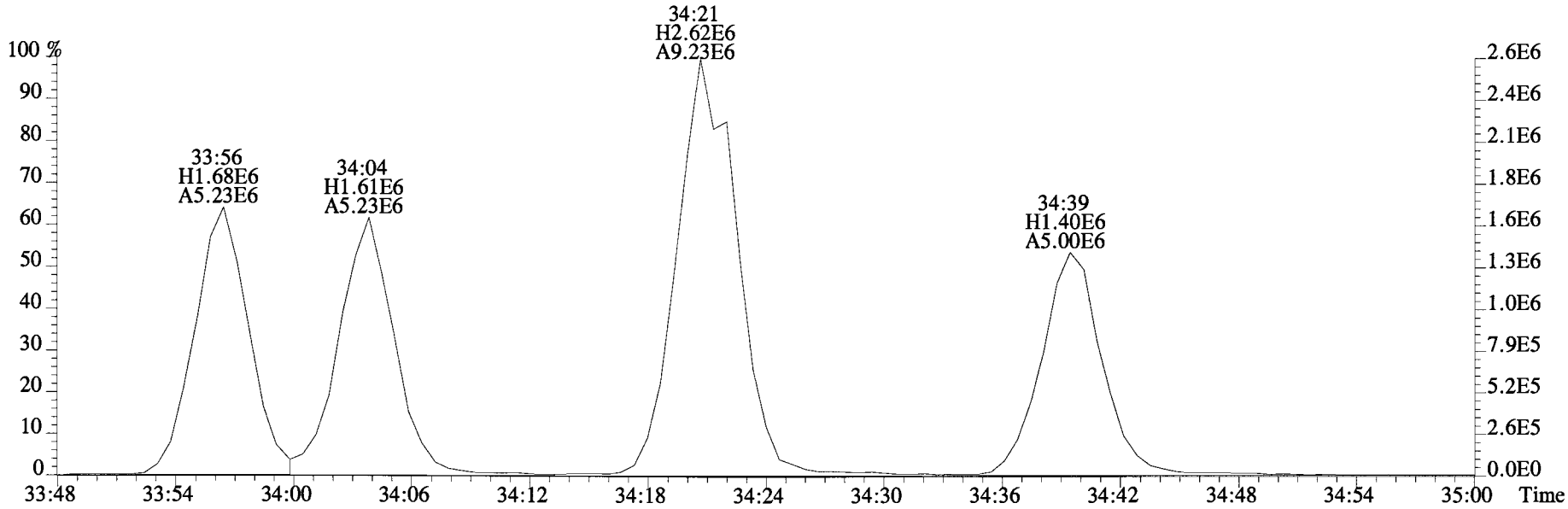
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



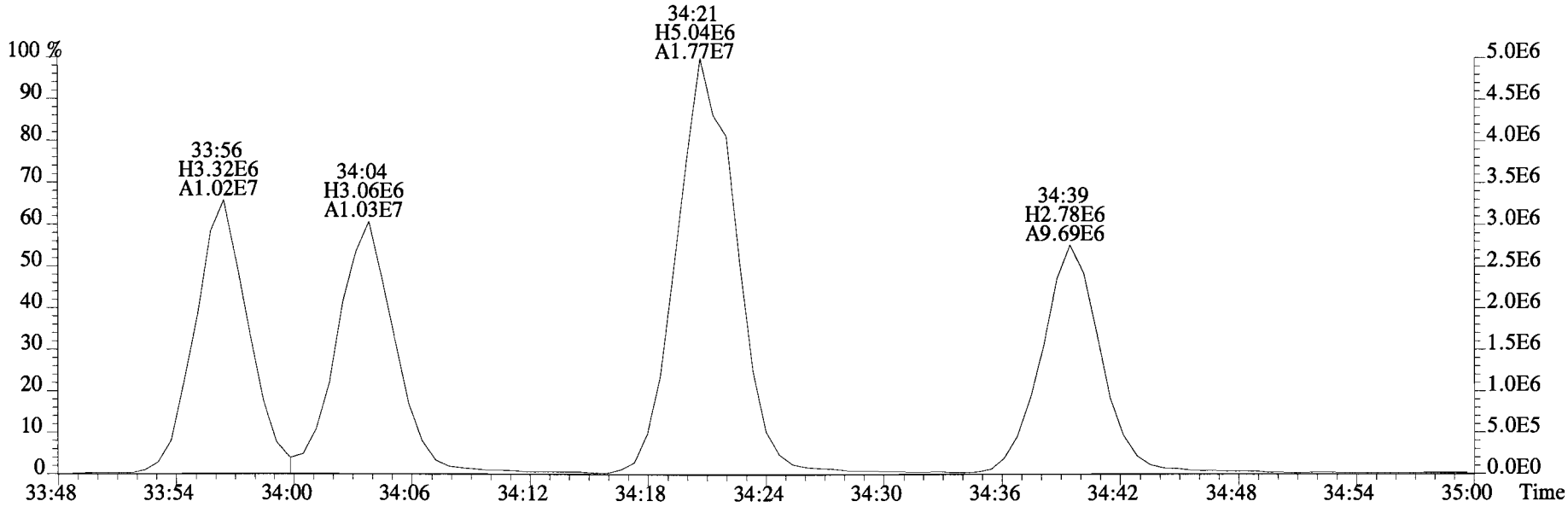
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



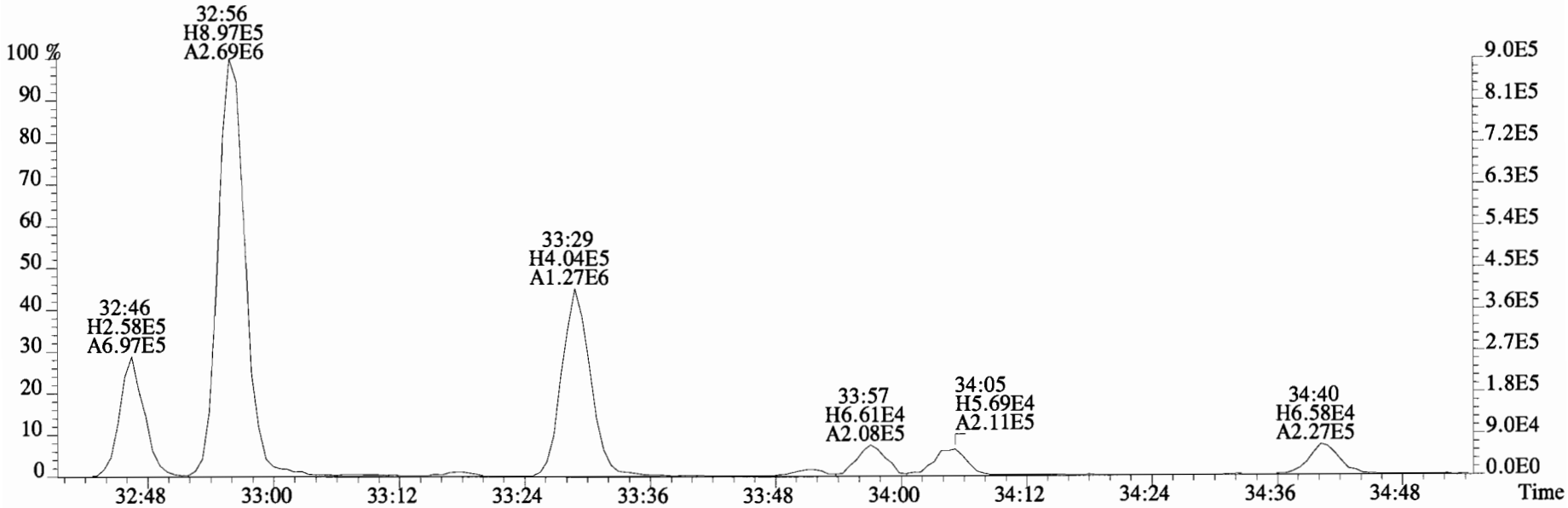
File:141217D2 #1-385 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



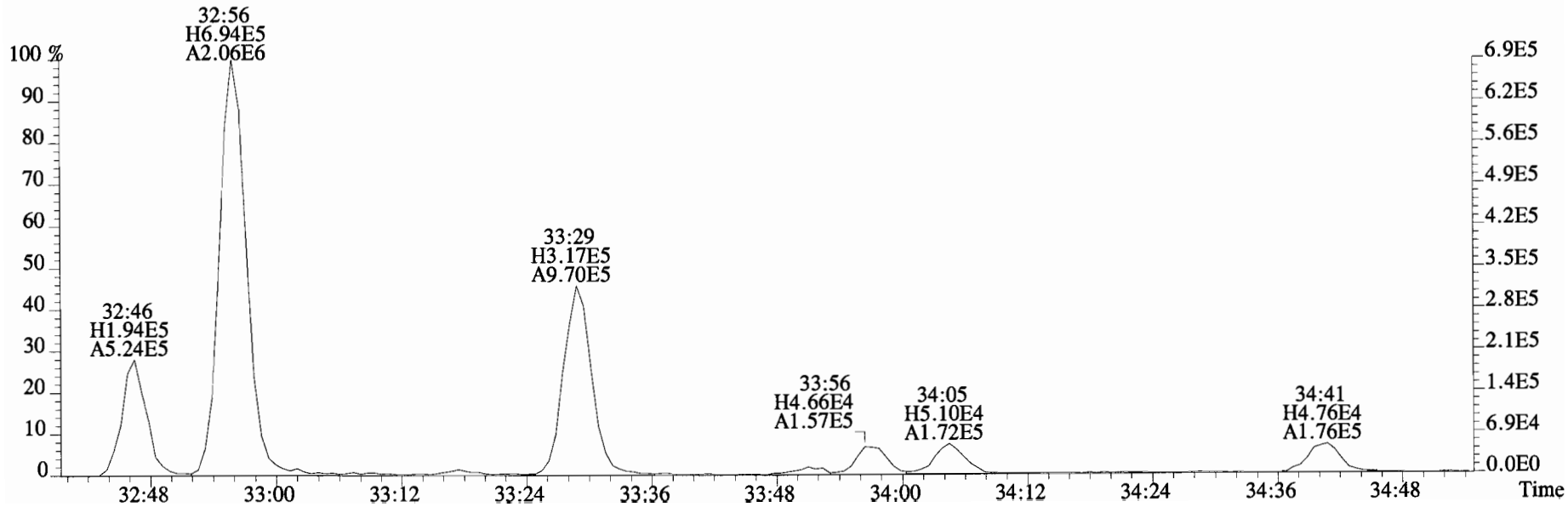
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



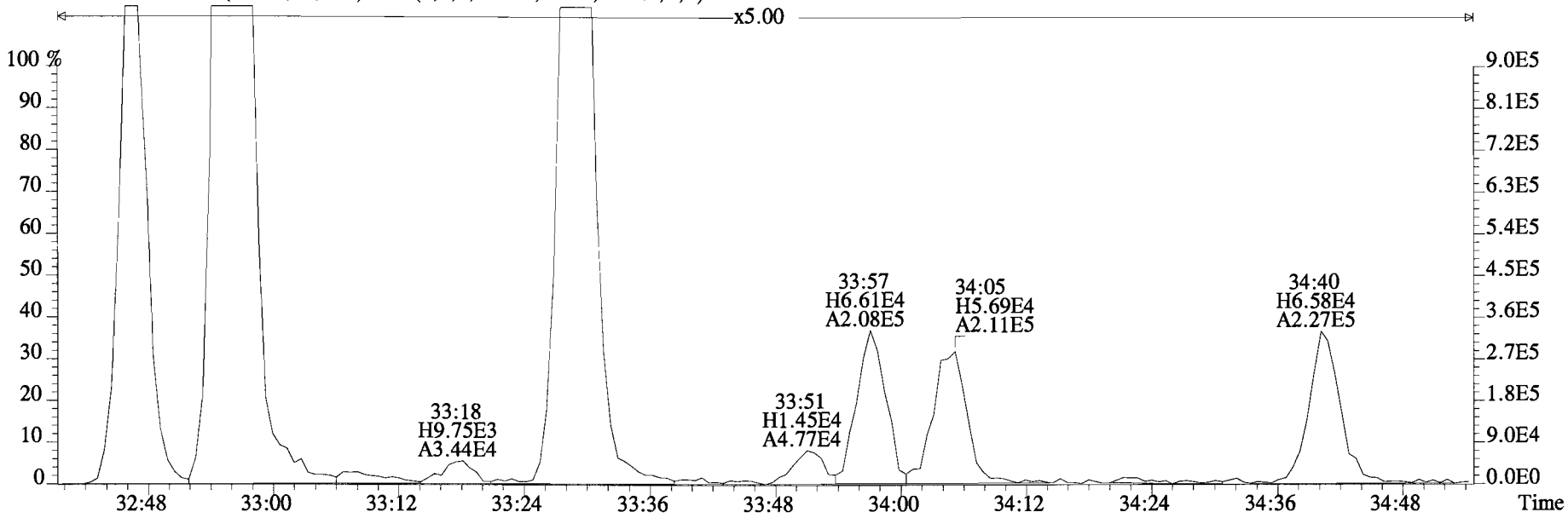
File:141217D2 #1-385 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



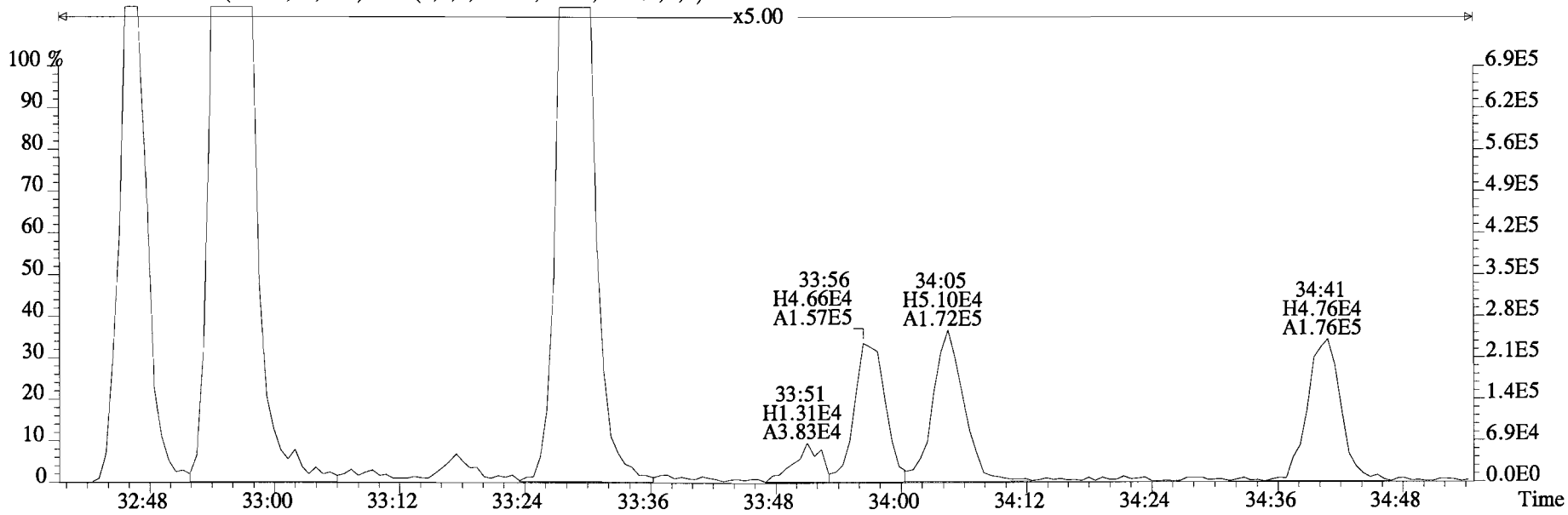
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



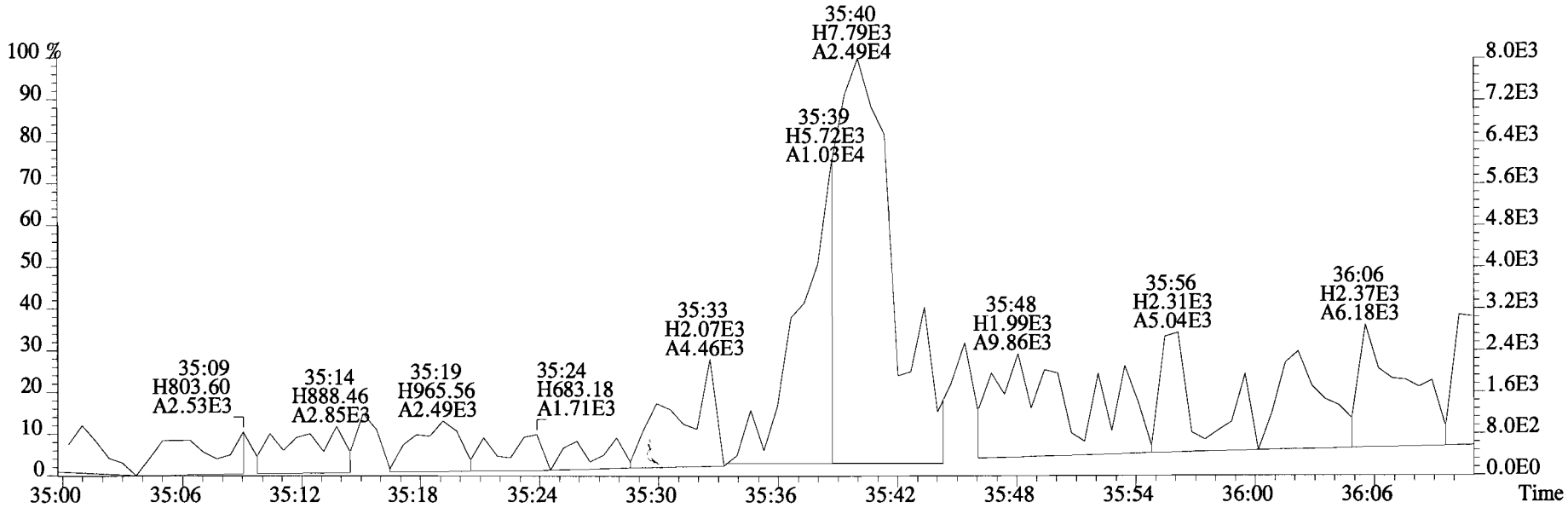
File:141217D2 #1-385 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



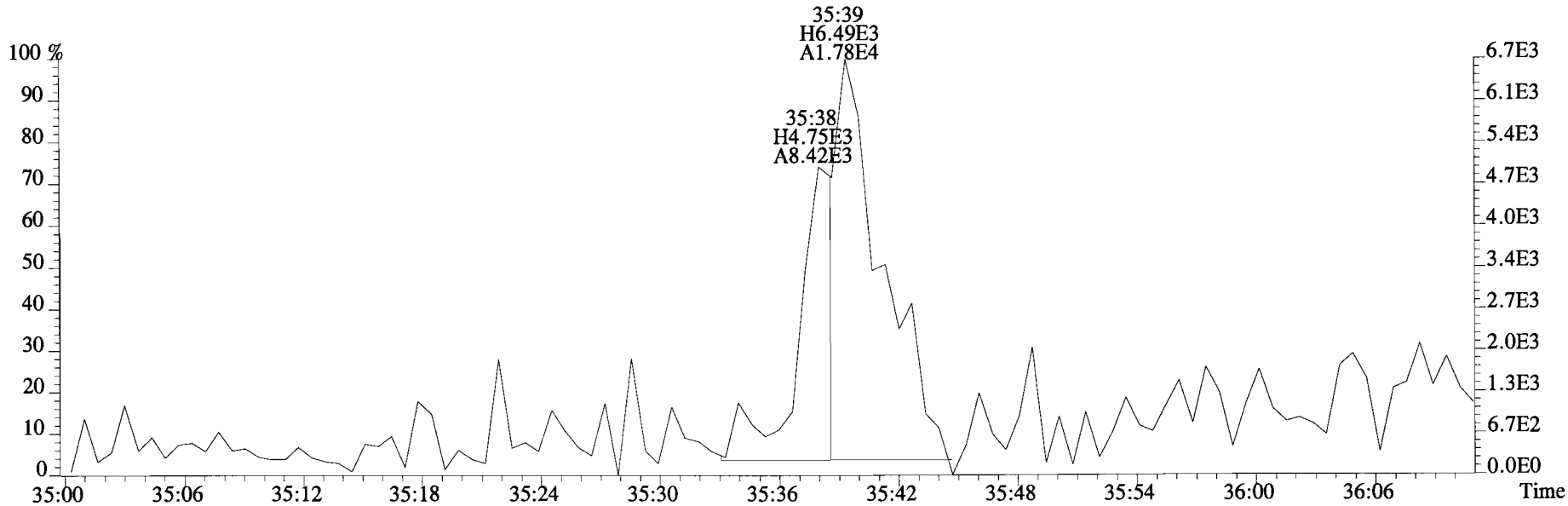
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



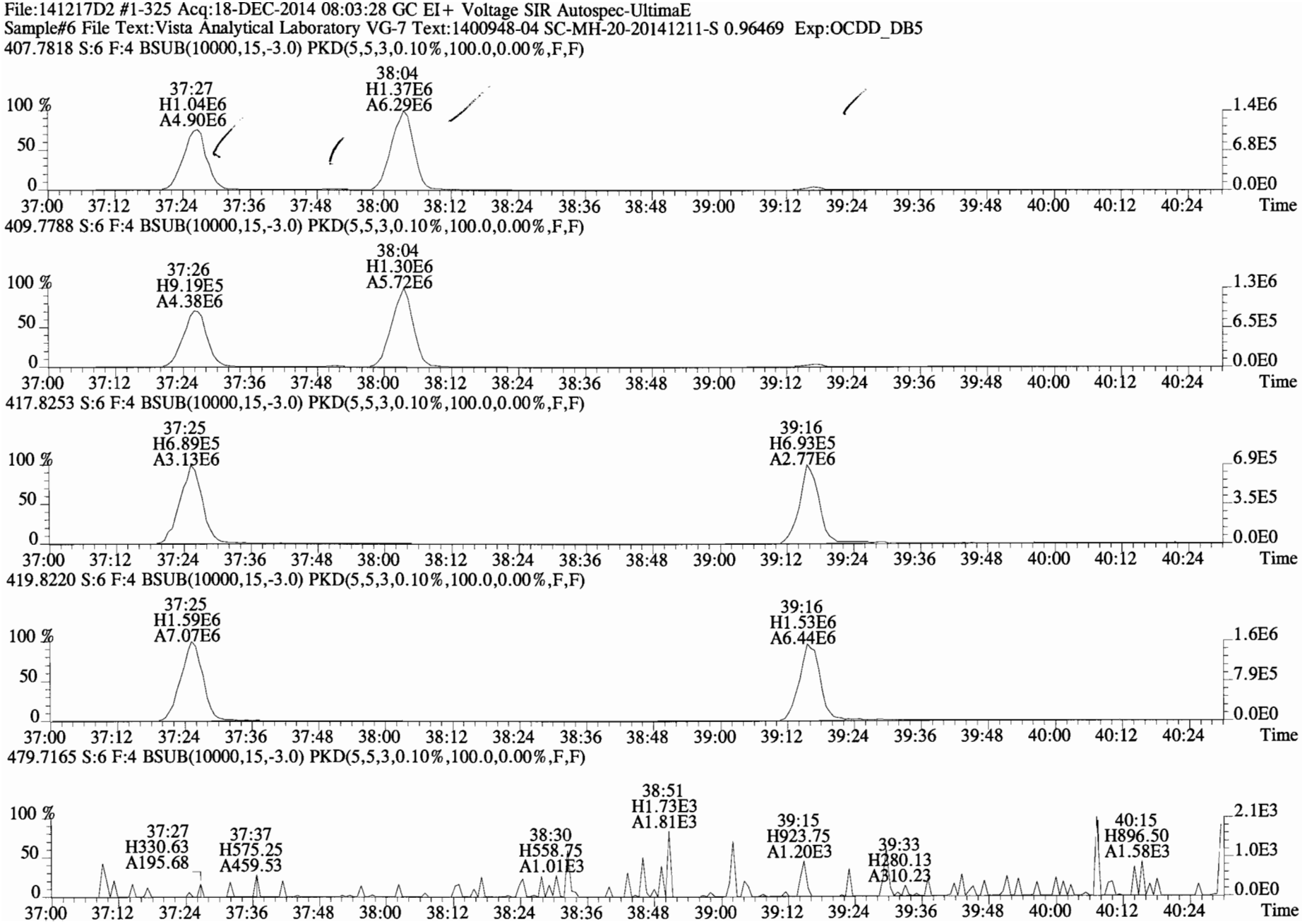
File:141217D2 #1-385 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



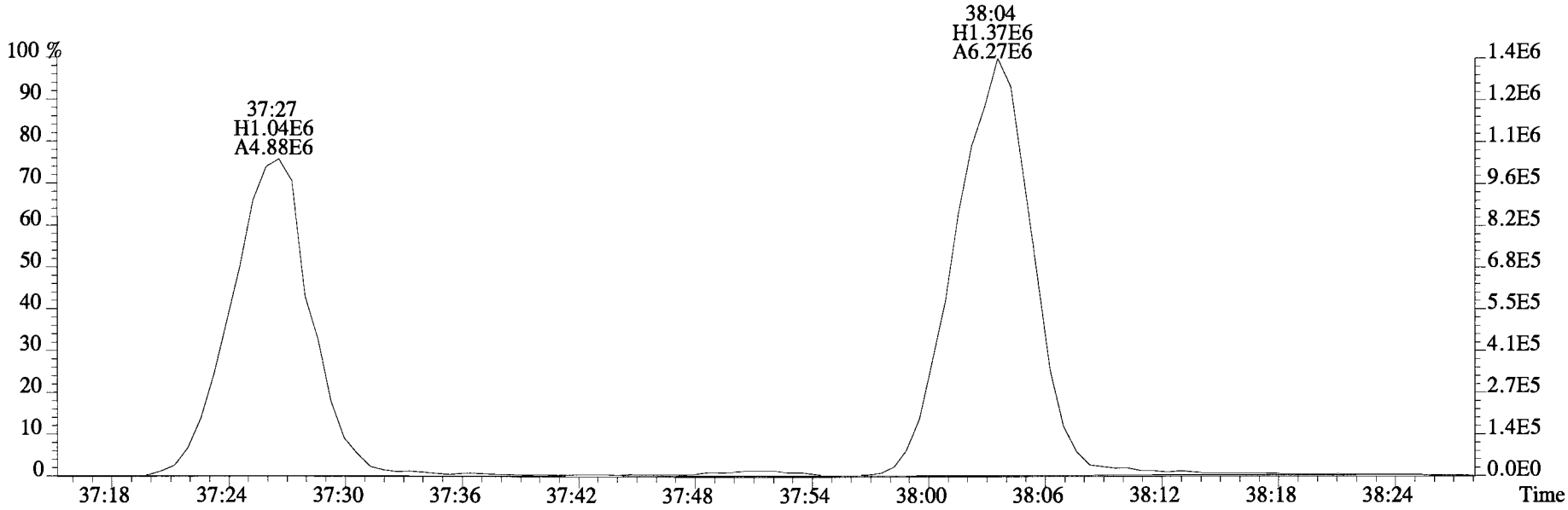
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



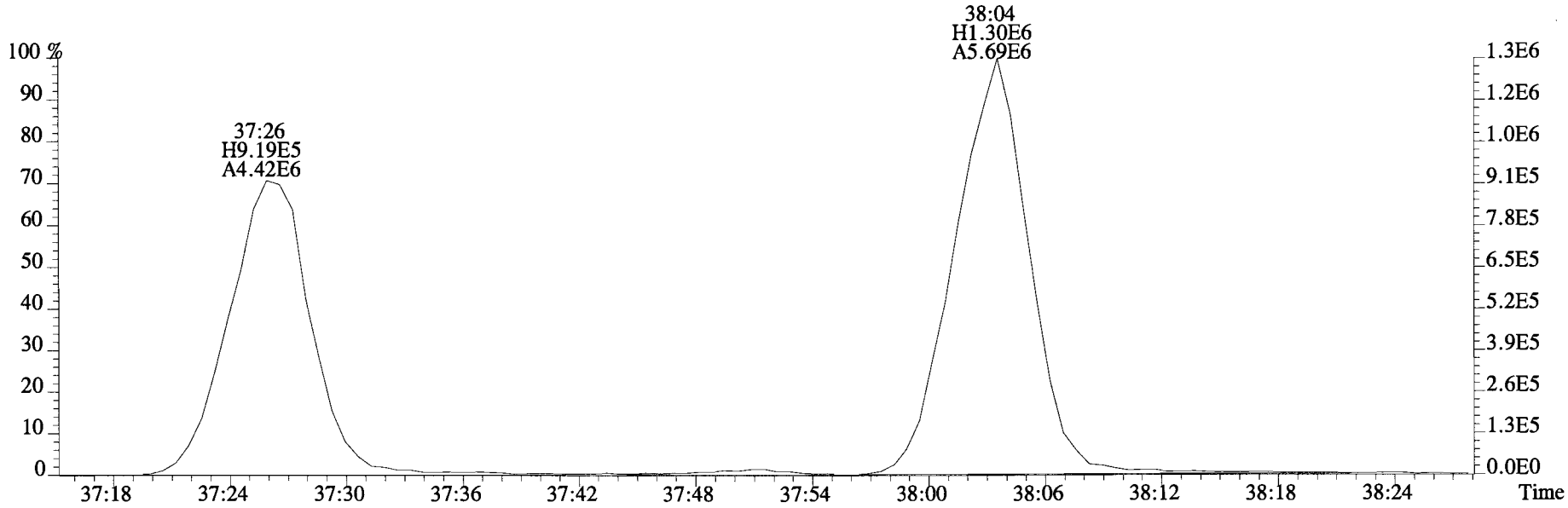
File:141217D2 #1-325 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5



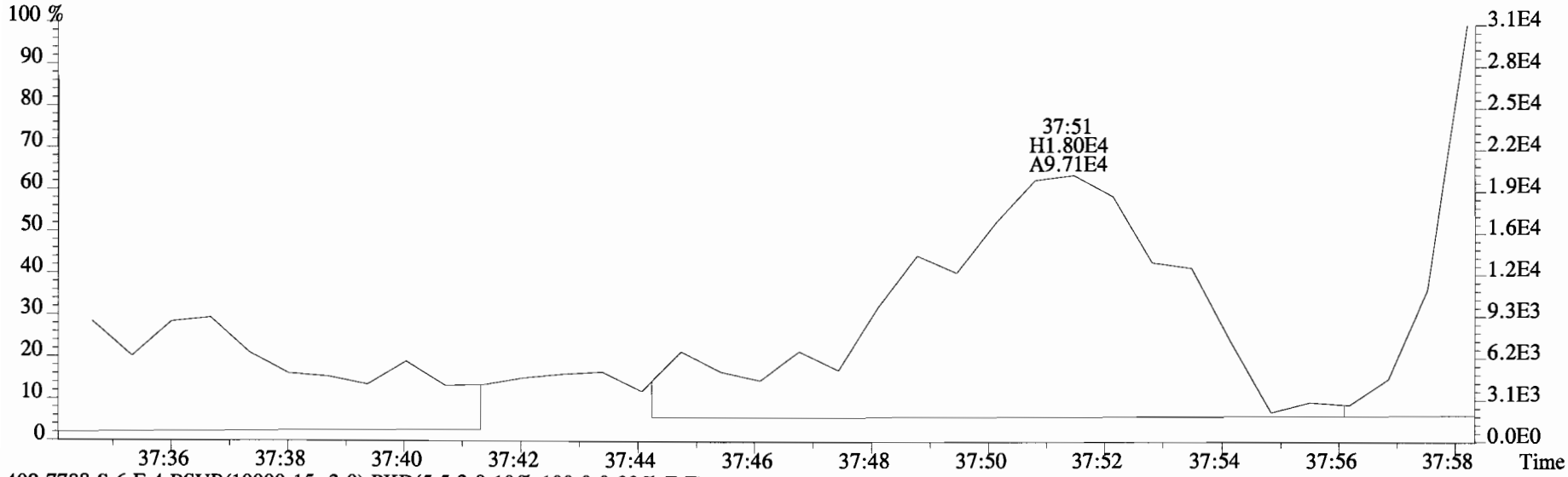
File:141217D2 #1-325 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



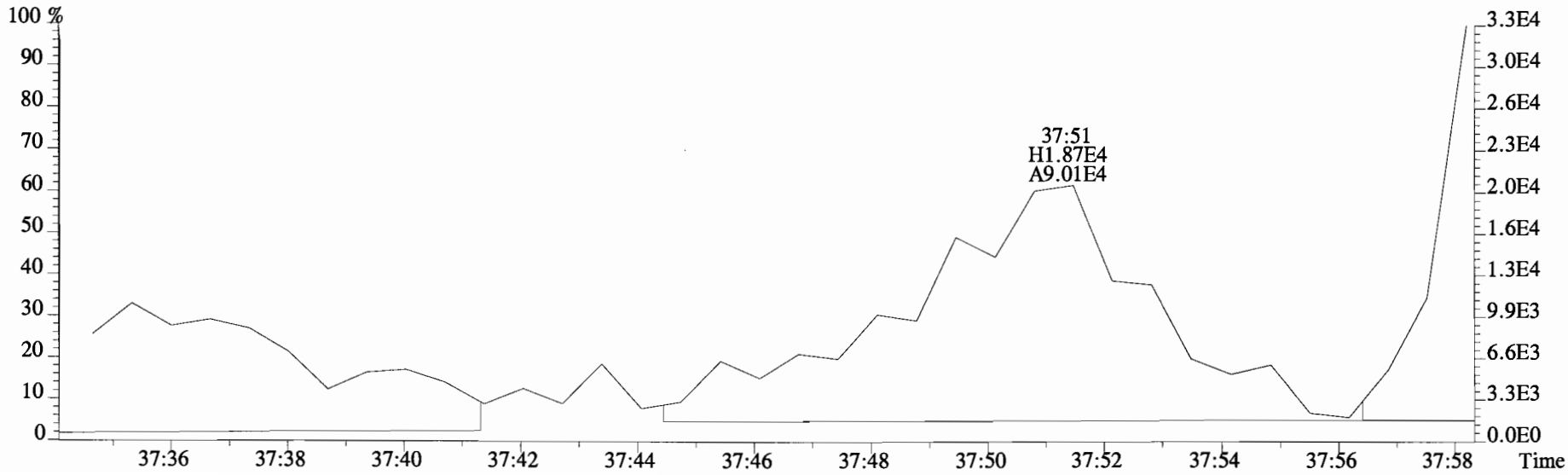
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



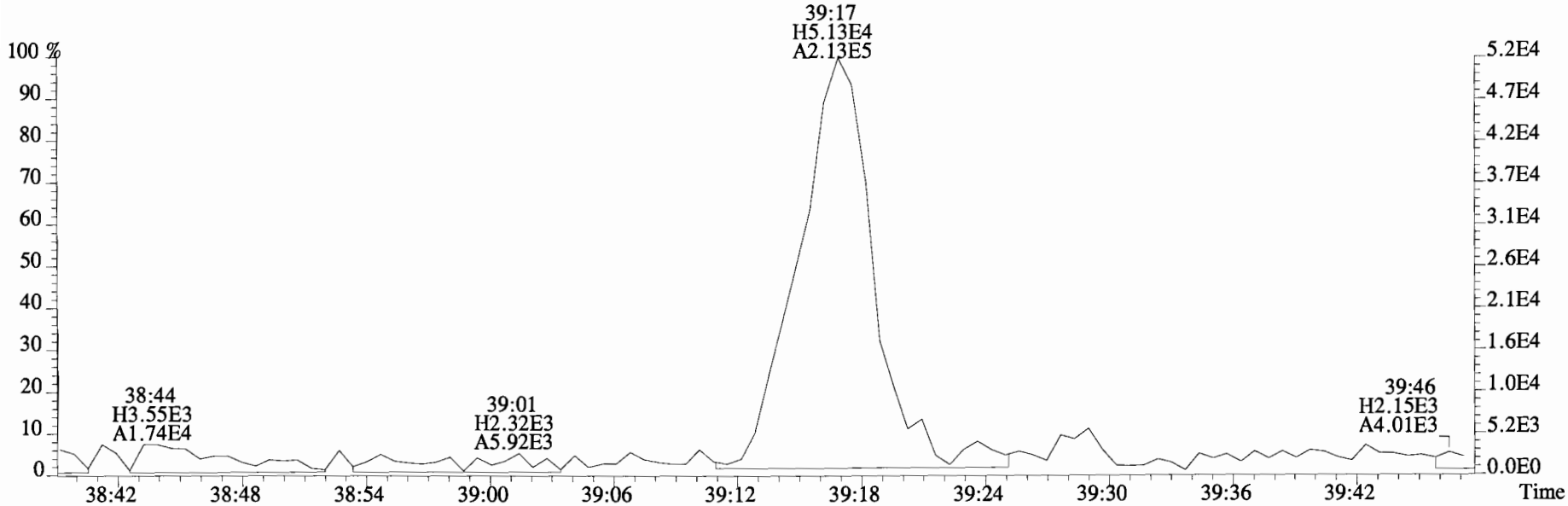
File:141217D2 #1-325 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



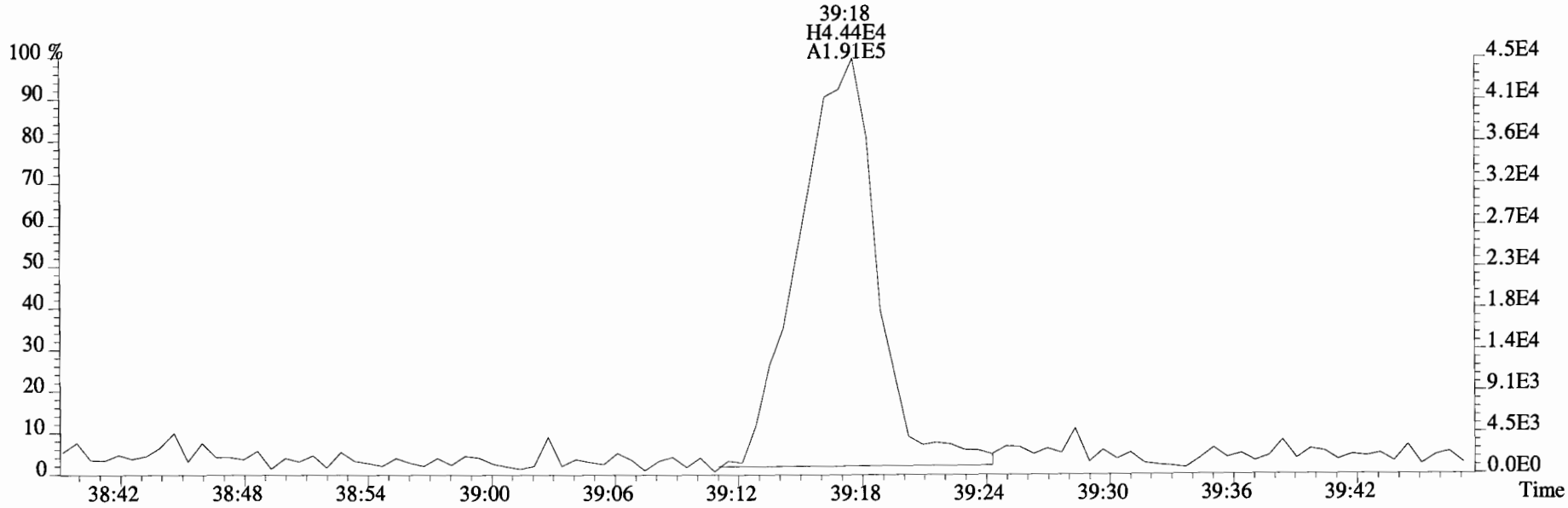
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



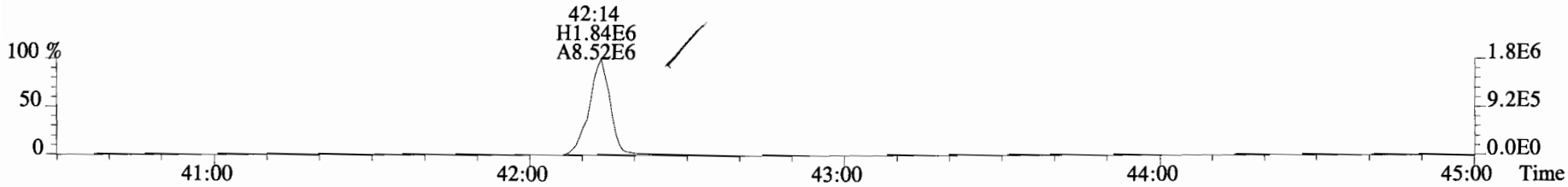
File:141217D2 #1-325 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



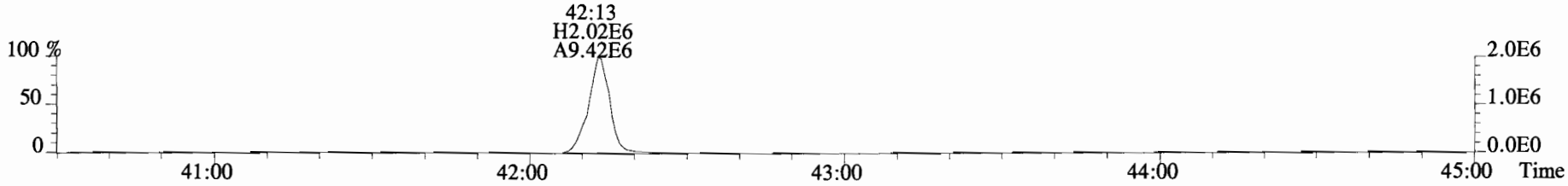
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



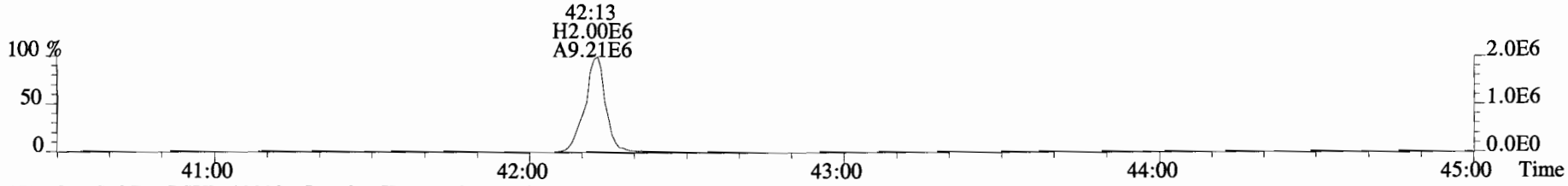
File:141217D2 #1-389 Acq:18-DEC-2014 08:03:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-7 Text:1400948-04 SC-MH-20-20141211-S 0.96469 Exp:OCDD_DB5
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



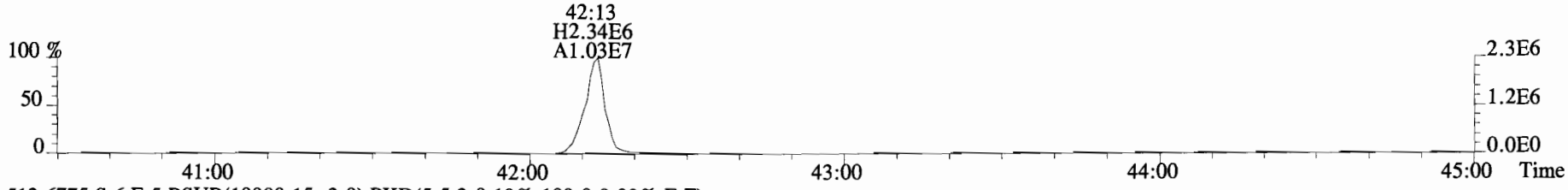
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



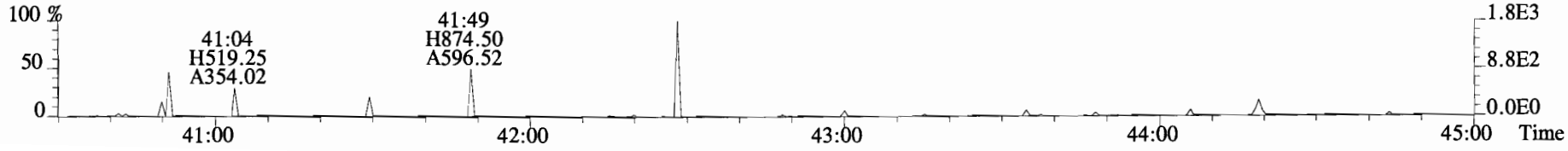
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



SAMPLE DATA

EPA Method 1668C

Client ID: Method Blank Filename: 141226E1 S:4 Acq:26-DEC-14 14:35:58 ConCal: ST141226E1-1

Lab ID: B4L0127-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	*		993	2.5	1.12	*	0.996	1.006
Mono	PCB-2	*	*	n	NotF¶	1.18	*		993	2.5	1.29	*	0.983	0.993
Mono	PCB-3	*	*	n	NotF¶	1.22	*		993	2.5	1.25	*	0.996	1.006
Di	PCB-4/10	*	*	n	NotF¶	1.55	*		721	2.5	0.849	*	0.998	1.008
Di	PCB-7/9	*	*	n	NotF¶	1.27	*		721	2.5	0.687	*	0.865	0.873
Di	PCB-6	*	*	n	NotF¶	1.26	*		721	2.5	0.692	*	0.890	0.899
Di	PCB-5/8	*	*	n	NotF¶	1.23	*		721	2.5	0.707	*	0.906	0.916
Di	PCB-14	*	*	n	NotF¶	1.23	*		721	2.5	0.626	*	0.949	0.959
Di	PCB-11	3.81e+05	1.10	n	25:13	1.16	14.2		*	2.5	*	1.000	0.996	1.006
Di	PCB-12/13	*	*	n	NotF¶	1.10	*		721	2.5	0.702	*	1.010	1.020
Di	PCB-15	*	*	n	NotF¶	1.21	*		721	2.5	0.638	*	1.024	1.034
Tri	PCB-19	*	*	n	NotF¶	1.30	*		797	2.5	1.02	*	0.996	1.006
Tri	PCB-30	*	*	n	NotF¶	1.83	*		797	2.5	0.725	*	1.032	1.042
Tri	PCB-18	*	*	n	NotF¶	0.86	*		797	2.5	1.02	*	0.949	0.959
Tri	PCB-17	*	*	n	NotF¶	0.90	*		797	2.5	0.970	*	0.955	0.965
Tri	PCB-24/27	*	*	n	NotF¶	1.18	*		797	2.5	0.742	*	0.976	0.986
Tri	PCB-16/32	*	*	n	NotF¶	1.03	*		797	2.5	0.848	*	0.995	1.005
Tri	PCB-34	*	*	n	NotF¶	1.26	*		720	2.5	0.659	*	0.956	0.966
Tri	PCB-23	*	*	n	NotF¶	1.31	*		720	2.5	0.634	*	0.959	0.969
Tri	PCB-29	*	*	n	NotF¶	1.33	*		720	2.5	0.625	*	0.967	0.977
Tri	PCB-26	*	*	n	NotF¶	1.29	*		720	2.5	0.643	*	0.974	0.984
Tri	PCB-25	*	*	n	NotF¶	1.34	*		720	2.5	0.619	*	0.980	0.990
Tri	PCB-31	*	*	n	NotF¶	1.42	*		720	2.5	0.585	*	0.992	1.002
Tri	PCB-28	9.37e+04	1.09	y	29:03	1.38	3.18		*	2.5	*	0.999	0.996	1.006
Tri	PCB-20/21/33	*	*	n	NotF¶	1.31	*		720	2.5	0.634	*	1.017	1.027
Tri	PCB-22	*	*	n	NotF¶	1.32	*		720	2.5	0.629	*	1.032	1.042
Tri	PCB-36	*	*	n	NotF¶	1.38	*		720	2.5	0.652	*	0.929	0.939
Tri	PCB-39	*	*	n	NotF¶	1.42	*		720	2.5	0.632	*	0.943	0.953
Tri	PCB-38	*	*	n	NotF¶	1.35	*		720	2.5	0.663	*	0.967	0.976
Tri	PCB-35	*	*	n	NotF¶	1.38	*		720	2.5	0.652	*	0.982	0.992
Tri	PCB-37	*	*	n	NotF¶	1.39	*		720	2.5	0.645	*	0.996	1.006
Tetra	PCB-54	*	*	n	NotF¶	1.20	*		855	2.5	0.975	*	0.996	1.006
Tetra	PCB-50	*	*	n	NotF¶	0.97	*		855	2.5	1.21	*	1.037	1.047
Tetra	PCB-53	*	*	n	NotF¶	1.19	*		855	2.5	1.18	*	0.941	0.951
Tetra	PCB-51	*	*	n	NotF¶	1.15	*		855	2.5	1.22	*	0.952	0.962
Tetra	PCB-45	*	*	n	NotF¶	0.97	*		855	2.5	1.45	*	0.966	0.976
Tetra	PCB-46	*	*	n	NotF¶	0.95	*		855	2.5	1.48	*	0.982	0.992

Integrations By:

Analyst: [signature]

Date: 12/30/14

Reviewed by: [signature]

Date: 12/31/14

Client ID: Method Blank Filename: 141226E1 S:4 Acq:26-DEC-14 14:35:58 ConCal: ST141226E1-1

Lab ID: B4L0127-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	*	*	n NotF¶	1.28	*		855	2.5	1.10	*	0.996	1.006
Tetra	PCB-73	*	*	n NotF¶	1.37	*		855	2.5	1.02	*	1.000	1.010
Tetra	PCB-43/49	*	*	n NotF¶	1.11	*		855	2.5	1.26	*	1.005	1.015
Tetra	PCB-47	*	*	n NotF¶	1.13	*		855	2.5	1.22	*	0.996	1.006
Tetra	PCB-48/75	*	*	n NotF¶	1.30	*		855	2.5	1.06	*	0.999	1.009
Tetra	PCB-65	*	*	n NotF¶	1.33	*		855	2.5	1.04	*	1.007	1.017
Tetra	PCB-62	*	*	n NotF¶	1.29	*		855	2.5	1.07	*	1.011	1.021
Tetra	PCB-44	*	*	n NotF¶	0.94	*		855	2.5	1.47	*	1.020	1.030
Tetra	PCB-42/59	*	*	n NotF¶	1.22	*		855	2.5	1.14	*	1.028	1.038
Tetra	PCB-41/64/71/72	*	*	n NotF¶	1.31	*		855	2.5	1.05	*	1.046	1.056
Tetra	PCB-68	*	*	n NotF¶	1.49	*		855	2.5	0.930	*	1.054	1.064
Tetra	PCB-40	*	*	n NotF¶	0.82	*		855	2.5	1.69	*	1.061	1.071
Tetra	PCB-57	*	*	n NotF¶	1.11	*		855	2.5	0.920	*	0.965	0.975
Tetra	PCB-67	*	*	n NotF¶	1.07	*		855	2.5	0.954	*	0.974	0.984
Tetra	PCB-58	*	*	n NotF¶	1.10	*		855	2.5	0.930	*	0.977	0.987
Tetra	PCB-63	*	*	n NotF¶	1.12	*		855	2.5	0.917	*	0.982	0.992
Tetra	PCB-74	*	*	n NotF¶	1.20	*		855	2.5	0.851	*	0.990	1.000
Tetra	PCB-61/70	*	*	n NotF¶	1.08	*		855	2.5	0.949	*	0.994	1.004
Tetra	PCB-76/66	*	*	n NotF¶	1.14	*		855	2.5	0.902	*	1.001	1.011
Tetra	PCB-80	*	*	n NotF¶	1.28	*		855	2.5	0.774	*	0.996	1.006
Tetra	PCB-55	*	*	n NotF¶	1.11	*		855	2.5	0.891	*	1.005	1.015
Tetra	PCB-56/60	*	*	n NotF¶	1.09	*		855	2.5	0.910	*	1.018	1.028
Tetra	PCB-79	*	*	n NotF¶	1.12	*		855	2.5	0.880	*	1.048	1.058
Tetra	PCB-78	*	*	n NotF¶	1.24	*		855	2.5	0.903	*	0.982	0.992
Tetra	PCB-81	*	*	n NotF¶	1.38	*		855	2.5	0.809	*	0.995	1.005
Tetra	PCB-77	*	*	n NotF¶	1.21	*		855	2.5	0.813	*	0.995	1.005
Penta	PCB-104	*	*	n NotF¶	1.26	*		657	2.5	1.60	*	0.996	1.006
Penta	PCB-96	*	*	n NotF¶	1.09	*		657	2.5	1.85	*	1.034	1.044
Penta	PCB-103	*	*	n NotF¶	0.93	*		657	2.5	2.16	*	1.050	1.060
Penta	PCB-100	*	*	n NotF¶	1.00	*		657	2.5	2.01	*	1.061	1.071
Penta	PCB-94	*	*	n NotF¶	1.11	*		657	2.5	2.38	*	0.981	0.991
Penta	PCB-95/98/102	*	*	n NotF¶	1.21	*		657	2.5	2.17	*	0.994	1.004
Penta	PCB-93	*	*	n NotF¶	1.13	*		657	2.5	2.33	*	0.998	1.008
Penta	PCB-88/91	*	*	n NotF¶	1.02	*		657	2.5	2.59	*	1.006	1.016
Penta	PCB-121	*	*	n NotF¶	1.90	*		657	2.5	1.38	*	1.009	1.019
Penta	PCB-84/92	*	*	n NotF¶	1.05	*		657	2.5	2.36	*	0.986	0.996
Penta	PCB-89	*	*	n NotF¶	1.02	*		657	2.5	2.44	*	0.991	1.001

Analyst: CC

Date: 12/30/14

Client ID: Method Blank Filename: 141226E1 S:4 Acq:26-DEC-14 14:35:58 ConCal: ST141226E1-1
Lab ID: B4L0127-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	5.59e+04	1.10	n 37:29	1.19	5.45		*	2.5	*	1.000	0.996	1.006
Penta	PCB-113	*	*	n NotF¶	1.35	*		657	2.5	1.84	*	1.002	1.012
Penta	PCB-99	*	*	n NotF¶	1.29	*		657	2.5	1.93	*	1.005	1.015
Penta	PCB-119	*	*	n NotF¶	1.72	*		657	2.5	1.50	*	0.982	0.992
Penta	PCB-108/112	*	*	n NotF¶	1.29	*		657	2.5	2.01	*	0.986	0.996
Penta	PCB-83	*	*	n NotF¶	1.52	*		657	2.5	1.70	*	0.991	1.001
Penta	PCB-97	*	*	n NotF¶	1.25	*		657	2.5	2.07	*	0.996	1.006
Penta	PCB-86	*	*	n NotF¶	1.02	*		657	2.5	2.53	*	1.000	1.010
Penta	PCB-87/117/125	*	*	n NotF¶	1.56	*		657	2.5	1.66	*	1.002	1.012
Penta	PCB-111/115	*	*	n NotF¶	1.75	*		657	2.5	1.47	*	1.007	1.017
Penta	PCB-85/116	*	*	n NotF¶	1.30	*		657	2.5	1.98	*	1.010	1.020
Penta	PCB-120	*	*	n NotF¶	1.78	*		657	2.5	1.45	*	1.016	1.026
Penta	PCB-110	*	*	n NotF¶	1.68	*		657	2.5	1.54	*	1.020	1.030
Penta	PCB-82	*	*	n NotF¶	0.74	*		657	2.5	2.65	*	0.972	0.982
Penta	PCB-124	*	*	n NotF¶	1.32	*		657	2.5	1.48	*	0.988	0.998
Penta	PCB-107/109	*	*	n NotF¶	1.22	*		657	2.5	1.60	*	0.991	1.001
Penta	PCB-123	*	*	n NotF¶	1.22	*		657	2.5	1.61	*	0.995	1.005
Penta	PCB-106/118	5.56e+04	1.31	n 41:31	1.22	3.97		*	2.5	*	1.000	0.996	1.006
Penta	PCB-114	*	*	n NotF¶	1.36	*		555	2.5	0.835	*	0.995	1.005
Penta	PCB-122	*	*	n NotF¶	1.24	*		555	2.5	0.915	*	0.999	1.009
Penta	PCB-105	*	*	n NotF¶	1.28	*		555	2.5	0.826	*	0.995	1.005
Penta	PCB-127	*	*	n NotF¶	1.14	*		555	2.5	0.848	*	0.995	1.005
Penta	PCB-126	*	*	n NotF¶	1.28	*		555	2.5	0.844	*	0.995	1.005
Hexa	PCB-155	*	*	n NotF¶	1.14	*		480	2.5	1.56	*	0.966	1.006
Hexa	PCB-150	*	*	n NotF¶	1.06	*		480	2.5	1.66	*	1.030	1.040
Hexa	PCB-152	*	*	n NotF¶	1.10	*		480	2.5	1.61	*	1.043	1.053
Hexa	PCB-145	*	*	n NotF¶	1.09	*		480	2.5	1.62	*	1.055	1.065
Hexa	PCB-136	*	*	n NotF¶	1.08	*		480	2.5	1.63	*	1.064	1.074
Hexa	PCB-148	*	*	n NotF¶	0.74	*		480	2.5	2.39	*	1.066	1.076
Hexa	PCB-154	*	*	n NotF¶	0.88	*		480	2.5	2.00	*	1.079	1.089
Hexa	PCB-151	*	*	n NotF¶	0.81	*		480	2.5	2.18	*	1.097	1.107
Hexa	PCB-135	*	*	n NotF¶	0.78	*		480	2.5	2.27	*	1.101	1.113
Hexa	PCB-144	*	*	n NotF¶	0.82	*		480	2.5	2.16	*	1.105	1.116
Hexa	PCB-147	*	*	n NotF¶	0.83	*		480	2.5	2.13	*	1.011	1.120
Hexa	PCB-139/149	2.76e+04	1.49	n 41:28	0.84	4.33		*	2.5	*	1.121	1.115	1.127
Hexa	PCB-140	*	*	n NotF¶	0.79	*		480	2.5	2.25	*	1.120	1.132
Hexa	PCB-134/143	*	*	n NotF¶	0.93	*		947	2.5	2.16	*	0.970	0.980

Analyst: _____

Date: 12/30/14

Client ID: Method Blank Filename: 141226E1 S:4 Acq:26-DEC-14 14:35:58 ConCal: ST141226E1-1

Lab ID: B4L0127-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	*		947	2.5	2.12	*	0.977-0.987
Hexa	PCB-131	*	*	n NotF	0.91	*		947	2.5	2.19	*	0.981-0.991
Hexa	PCB-146/165	*	*	n NotF	1.16	*		947	2.5	1.73	*	0.986-0.996
Hexa	PCB-132/161	*	*	n NotF	1.11	*		947	2.5	1.80	*	0.992-1.002
Hexa	PCB-153	1.48e+05	1.04	n 43:11	1.18	9.67		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-168	*	*	n NotF	1.37	*		947	2.5	1.46	*	1.000-1.010
Hexa	PCB-141	*	*	n NotF	0.97	*		947	2.5	2.04	*	0.996-1.005
Hexa	PCB-137	*	*	n NotF	1.07	*		947	2.5	1.86	*	1.004-1.014
Hexa	PCB-130	*	*	n NotF	0.85	*		947	2.5	2.35	*	1.007-1.017
Hexa	PCB-138/163/164	1.10e+05	0.80	n 44:47	1.23	6.99		*	2.5	*	1.001	0.996-1.006
Hexa	PCB-158/160	*	*	n NotF	1.29	*		947	2.5	1.57	*	1.001-1.011
Hexa	PCB-129	*	*	n NotF	0.92	*		947	2.5	2.19	*	1.007-1.017
Hexa	PCB-166	*	*	n NotF	1.12	*		947	2.5	1.65	*	0.988-0.998
Hexa	PCB-159	*	*	n NotF	1.16	*		947	2.5	1.58	*	0.995-1.005
Hexa	PCB-128/162	*	*	n NotF	1.02	*		947	2.5	1.81	*	1.002-1.012
Hexa	PCB-167	*	*	n NotF	1.06	*		947	2.5	1.46	*	0.995-1.005
Hexa	PCB-156	*	*	n NotF	1.18	*		947	2.5	1.42	*	0.995-1.005
Hexa	PCB-157	*	*	n NotF	1.08	*		947	2.5	1.54	*	0.995-1.005
Hexa	PCB-169	*	*	n NotF	1.11	*		947	2.5	1.49	*	0.995-1.005
Hepta	PCB-188	*	*	n NotF	1.40	*		822	2.5	1.15	*	0.995-1.005
Hepta	PCB-184	*	*	n NotF	1.24	*		822	2.5	1.30	*	1.006-1.016
Hepta	PCB-179	*	*	n NotF	1.30	*		822	2.5	1.23	*	1.024-1.034
Hepta	PCB-176	*	*	n NotF	1.36	*		822	2.5	1.18	*	1.035-1.045
Hepta	PCB-186	*	*	n NotF	1.28	*		822	2.5	1.26	*	1.049-1.059
Hepta	PCB-178	*	*	n NotF	0.94	*		822	2.5	1.72	*	1.061-1.071
Hepta	PCB-175	*	*	n NotF	0.97	*		822	2.5	1.66	*	1.069-1.079
Hepta	PCB-182/187	4.13e+04	0.72	n 46:07	1.01	4.45		*	2.5	*	1.077	1.073-1.083
Hepta	PCB-183	*	*	n NotF	1.08	*		822	2.5	1.49	*	1.080-1.090
Hepta	PCB-185	*	*	n NotF	1.34	*		822	2.5	1.47	*	0.951-0.961
Hepta	PCB-174	*	*	n NotF	1.34	*		822	2.5	1.48	*	0.958-0.968
Hepta	PCB-181	*	*	n NotF	1.36	*		822	2.5	1.45	*	0.961-0.971
Hepta	PCB-177	*	*	n NotF	1.24	*		822	2.5	1.59	*	0.964-0.974
Hepta	PCB-171	*	*	n NotF	1.31	*		822	2.5	1.51	*	0.970-0.980
Hepta	PCB-173	*	*	n NotF	1.16	*		822	2.5	1.71	*	0.979-0.989
Hepta	PCB-172	*	*	n NotF	1.22	*		822	2.5	1.62	*	0.988-0.998
Hepta	PCB-192	*	*	n NotF	1.53	*		822	2.5	1.30	*	0.991-1.001
Hepta	PCB-180	5.92e+04	1.22	n 49:20	1.43	5.50		*	2.5	*	1.001	0.995-1.005

Analyst: [signature]

Date: 12/30/14

Client ID: Method Blank Filename: 141226E1 S:4 Acq:26-DEC-14 14:35:58 ConCal: ST141226E1-1

Lab ID: B4L0127-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	*		822	2.5	1.20	*	0.999	1.009
Hepta	PCB-191	*	*	n	NotF	1.67	*		822	2.5	1.18	*	1.004	1.014
Hepta	PCB-170	*	*	n	NotF	1.50	*		822	2.5	1.54	*	0.995	1.005
Hepta	PCB-190	*	*	n	NotF	2.02	*		822	2.5	1.15	*	0.998	1.008
Hepta	PCB-189	*	*	n	NotF	1.54	*		822	2.5	1.04	*	0.995	1.005
Octa	PCB-202	*	*	n	NotF	1.04	*		540	2.5	1.55	*	0.995	1.005
Octa	PCB-201	*	*	n	NotF	1.10	*		540	2.5	1.46	*	1.006	1.016
Octa	PCB-204	*	*	n	NotF	0.99	*		540	2.5	1.62	*	1.009	1.019
Octa	PCB-197	*	*	n	NotF	1.07	*		540	2.5	1.50	*	1.015	1.025
Octa	PCB-200	*	*	n	NotF	1.02	*		540	2.5	1.58	*	1.032	1.044
Octa	PCB-198	*	*	n	NotF	0.74	*		540	2.5	2.17	*	1.058	1.068
Octa	PCB-199	*	*	n	NotF	0.73	*		540	2.5	2.21	*	1.060	1.070
Octa	PCB-196/203	*	*	n	NotF	0.77	*		540	2.5	2.09	*	1.066	1.076
Octa	PCB-195	*	*	n	NotF	1.20	*		585	2.5	0.662	*	0.979	0.989
Octa	PCB-194	*	*	n	NotF	1.25	*		585	2.5	0.637	*	0.995	1.005
Octa	PCB-205	*	*	n	NotF	1.41	*		585	2.5	0.562	*	1.001	1.011
Nona	PCB-208	*	*	n	NotF	0.96	*		422	2.5	0.454	*	0.995	1.005
Nona	PCB-207	*	*	n	NotF	0.92	*		422	2.5	0.477	*	1.001	1.011
Nona	PCB-206	*	*	n	NotF	1.03	*		422	2.5	0.806	*	0.995	1.005
Deca	PCB-209	*	*	n	NotF	1.18	*		815	2.5	1.80	*	0.995	1.005

Analyst: CC

Date: 12/30/14

Client ID: Method Blank Filename: 141226E1 S:4 Acq:26-DEC-14 14:35:58 ConCal: ST141226E1-1
Lab ID: B4L0127-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	*	*	n	NotFnd	1.21	*	
Total Tri-PCB	*	*	n	NotFnd	1.16	*	
Total Tri-PCB	9.37e+04	1.09	y	29:03	1.35	3.17546	Sum:3.17546
Total Tetra-PCB	*	*	n	NotFnd	1.17	*	
Total Penta-PCB	*	*	n	NotFnd	1.21	*	
Total Penta-PCB	*	*	n	NotFnd	1.26	*	Sum:0.00000
Total Hexa-PCB	*	*	n	NotFnd	0.92	*	
Total Hexa-PCB	*	*	n	NotFnd	1.08	*	Sum:0.00000
Total Hepta-PCB	*	*	n	NotFnd	1.27	*	
Total Octa-PCB	*	*	n	NotFnd	0.92	*	
Total Octa-PCB	*	*	n	NotFnd	1.29	*	Sum:0.00000
Total Nona-PCB	*	*	n	NotFnd	0.96	*	
Total Deca-PCB	*	*	n	NotFnd	1.18	*	

Total PCB Conc: ~~57.7364~~ 980000

3.18

Integrations by Analyst: CC

Date: 12/30/14

Client ID: Method Blank Filename: 141226E1 S:4 Acq:26-DEC-14 14:35:58 ConCal: ST141226E1-1
Lab ID: B4L0127-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	4.62e+07	3.24 y	0.89	16:07	0.622	0.622	0.628	1760	87.9
13C-PCB-3	4.65e+07	3.31 y	0.93	18:44	0.723	0.721	0.729	1700	84.9
13C-PCB-4	2.57e+07	1.60 y	0.55	20:03	0.774	0.772	0.780	1590	79.6
13C-PCB-9	3.92e+07	1.59 y	0.83	21:50	0.842	0.840	0.848	1610	80.5
13C-PCB-11	4.63e+07	1.58 y	0.94	25:13	0.973	0.968	0.978	1670	83.6
13C-PCB-19	2.38e+07	1.09 y	0.53	24:12	0.934	0.929	0.939	1510	75.6
13C-PCB-28	4.28e+07	1.11 y	0.89	29:04	1.004	0.999	1.009	1880	93.8
13C-PCB-32	3.66e+07	1.09 y	0.81	27:06	1.046	1.041	1.051	1520	76.1
13C-PCB-37	4.04e+07	1.13 y	0.83	32:55	1.137	1.131	1.143	1890	94.3
13C-PCB-47	2.60e+07	0.80 y	0.74	31:58	0.871	0.867	0.875	1620	81.2
13C-PCB-52	2.52e+07	0.81 y	0.71	31:28	0.857	0.853	0.861	1660	82.9
13C-PCB-54	2.99e+07	0.80 y	0.85	27:56	0.761	0.758	0.766	1640	81.8
13C-PCB-70	3.55e+07	0.81 y	0.94	35:29	0.966	0.961	0.971	1750	87.4
13C-PCB-77	3.93e+07	0.80 y	0.89	39:35	1.078	1.073	1.083	2050	102
13C-PCB-80	3.72e+07	0.82 y	0.96	35:54	0.978	0.972	0.982	1800	89.9
13C-PCB-81	3.52e+07	0.82 y	0.84	39:00	1.062	1.057	1.067	1950	97.6
13C-PCB-95	1.54e+07	1.60 y	0.74	35:47	0.913	0.908	0.918	1700	84.9
13C-PCB-97	1.58e+07	1.65 y	0.69	38:45	0.989	0.984	0.994	1880	94.1
13C-PCB-101	1.72e+07	1.66 y	0.79	37:28	0.956	0.951	0.961	1800	89.8
13C-PCB-104	1.97e+07	1.61 y	1.00	32:37	0.832	0.829	0.837	1620	80.9
13C-PCB-105	3.48e+07	1.71 y	1.24	43:01	0.929	0.924	0.934	2180	109
13C-PCB-114	3.22e+07	1.66 y	1.21	42:09	0.910	0.905	0.915	2070	103
13C-PCB-118	2.29e+07	1.59 y	0.98	41:30	1.059	1.054	1.064	1900	95.1
13C-PCB-123	2.21e+07	1.68 y	0.95	41:19	1.054	1.049	1.059	1910	95.3
13C-PCB-126	3.50e+07	1.63 y	1.16	45:15	0.977	0.972	0.982	2340	117
13C-PCB-127	3.82e+07	1.61 y	1.34	43:21	0.936	0.931	0.941	2210	110
13C-PCB-138	2.58e+07	1.27 y	1.04	44:45	0.967	0.961	0.971	1920	95.9
13C-PCB-141	2.66e+07	1.29 y	1.07	43:54	0.948	0.943	0.953	1930	96.4
13C-PCB-153	2.59e+07	1.30 y	1.11	43:10	0.932	0.927	0.937	1800	90.2
13C-PCB-155	1.51e+07	1.28 y	0.83	37:00	0.944	0.939	0.949	1490	74.4
13C-PCB-156	3.24e+07	1.29 y	1.24	48:00	1.037	1.032	1.042	2020	101
13C-PCB-157	3.38e+07	1.32 y	1.31	48:17	1.043	1.037	1.047	2000	99.9
13C-PCB-159	2.99e+07	1.29 y	1.20	46:02	0.994	0.989	0.999	1940	96.8
13C-PCB-167	3.46e+07	1.28 y	1.32	46:43	1.009	1.004	1.014	2030	101
13C-PCB-169	3.40e+07	1.31 y	1.22	50:26	1.089	1.082	1.092	2170	109
13C-PCB-170	1.23e+07	0.48 y	0.54	50:49	1.098	1.089	1.101	1780	89.1
13C-PCB-180	1.51e+07	0.46 y	0.67	49:18	1.065	1.059	1.069	1730	86.7
13C-PCB-188	1.83e+07	0.46 y	0.94	42:48	0.924	0.919	0.929	1520	75.9
13C-PCB-189	1.70e+07	0.49 y	0.72	52:19	1.130	1.120	1.132	1850	92.4
13C-PCB-194	2.75e+07	0.91 y	0.81	53:51	0.995	0.990	1.000	1950	97.4
13C-PCB-202	1.57e+07	0.92 y	0.83	48:13	1.041	1.036	1.046	1460	73.1
13C-PCB-206	2.04e+07	0.80 y	0.66	55:28	1.025	1.021	1.031	1770	88.7
13C-PCB-208	3.09e+07	0.76 y	1.12	53:07	0.981	0.976	0.986	1580	78.8
13C-PCB-209	1.96e+07	1.19 y	0.61	56:50	1.050	1.044	1.054	1830	91.7

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	4.40e+07	0.80 y	1.01	37:46	1.029	1.023	1.033	2040	102
13C-PCB-178	1.48e+07	0.47 y	0.63	45:35	0.985	0.979	0.989	1820	91.2

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	4.40e+07	0.80 y	1.20	37:46	0.968	0.963	0.973	2090	104
13C-PCB-178	1.48e+07	0.47 y	0.94	45:35	0.925	0.920	0.930	2100	105

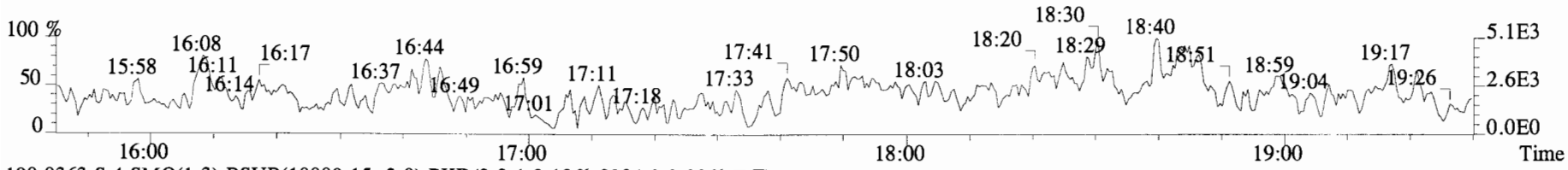
RS

Name	Resp	RA	RRF	RT	Conc
13C-PCB-15	5.91e+07	1.63 y	1.00	25:55	2000
13C-PCB-31	5.15e+07	1.09 y	1.00	28:57	2000
13C-PCB-60	4.30e+07	0.82 y	1.00	36:43	2000
13C-PCB-111	2.44e+07	1.55 y	1.00	39:11	2000
13C-PCB-128	2.58e+07	1.31 y	1.00	46:18	2000
13C-PCB-205	3.49e+07	0.93 y	1.00	54:08	2000

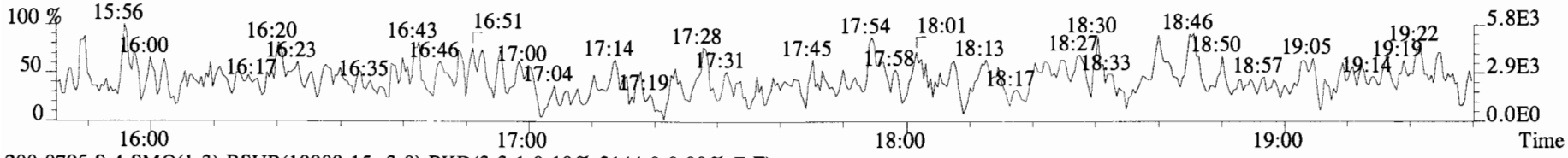
Analyst: GP

Date: 12/30/14

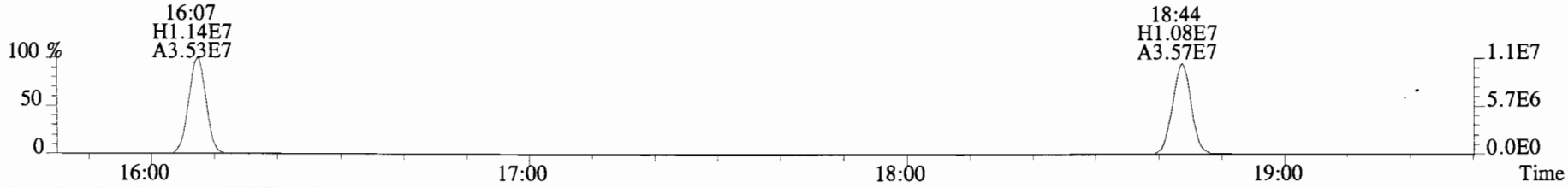
File:141226E1 #1-728 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
188.0393 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2792.0,0.00%,F,F)



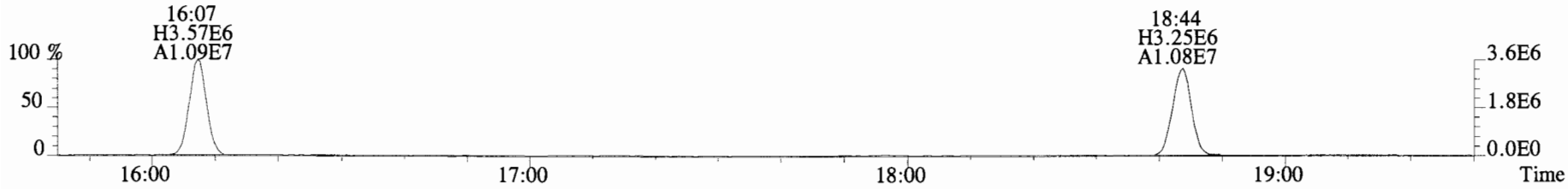
190.0363 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3204.0,0.00%,F,F)



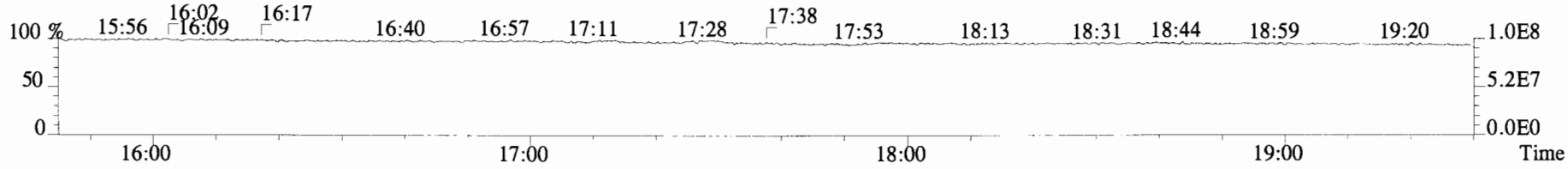
200.0795 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3144.0,0.00%,F,F)



202.0766 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,22996.0,0.00%,F,F)

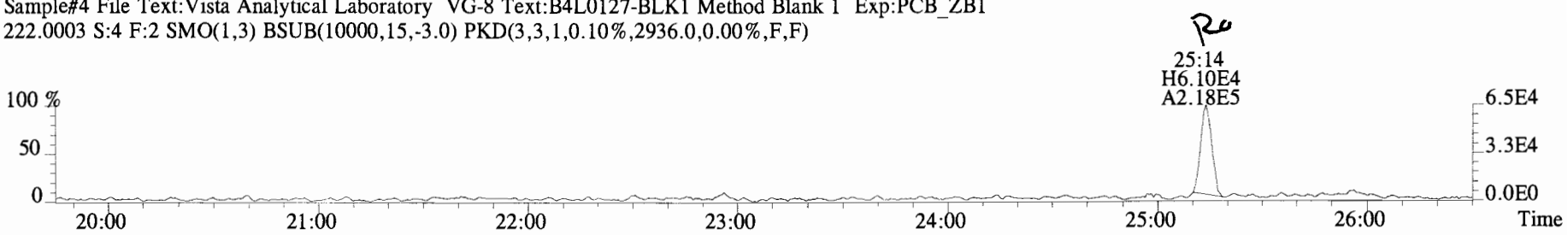


180.9880 S:4

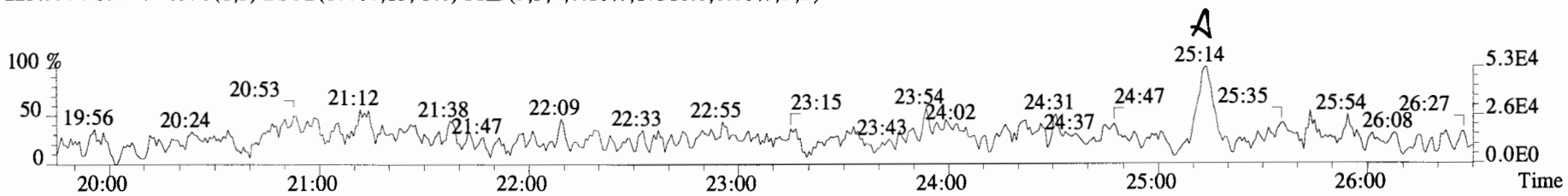


File:141226E1 #1-758 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1

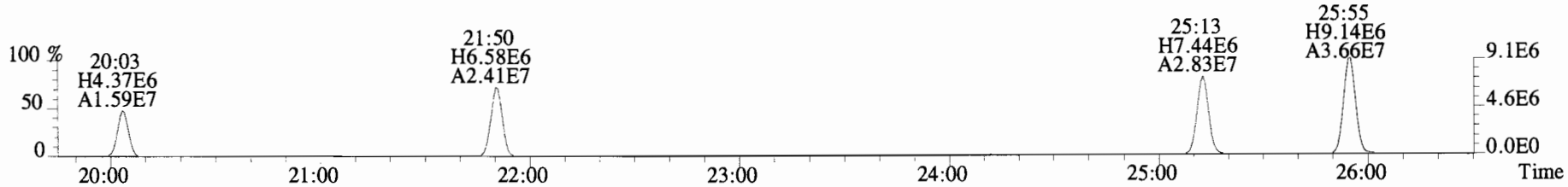
222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2936.0,0.00%,F,F)



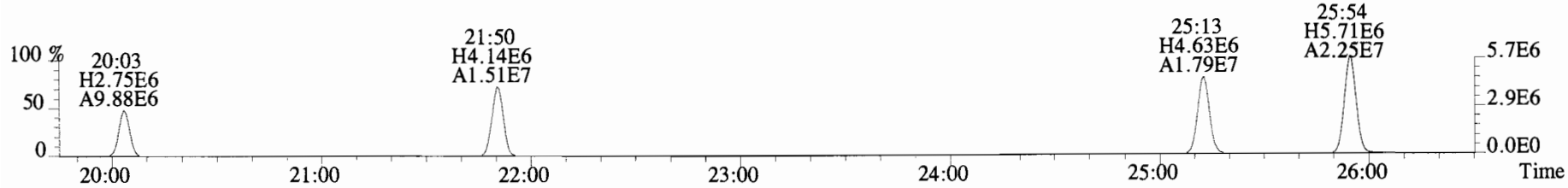
223.9974 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,17516.0,0.00%,F,F)



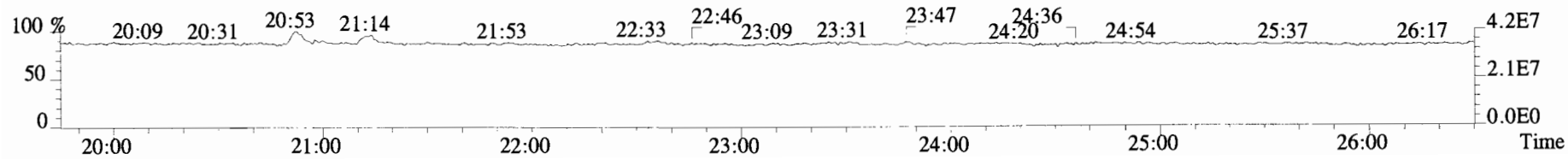
234.0406 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3616.0,0.00%,F,F)



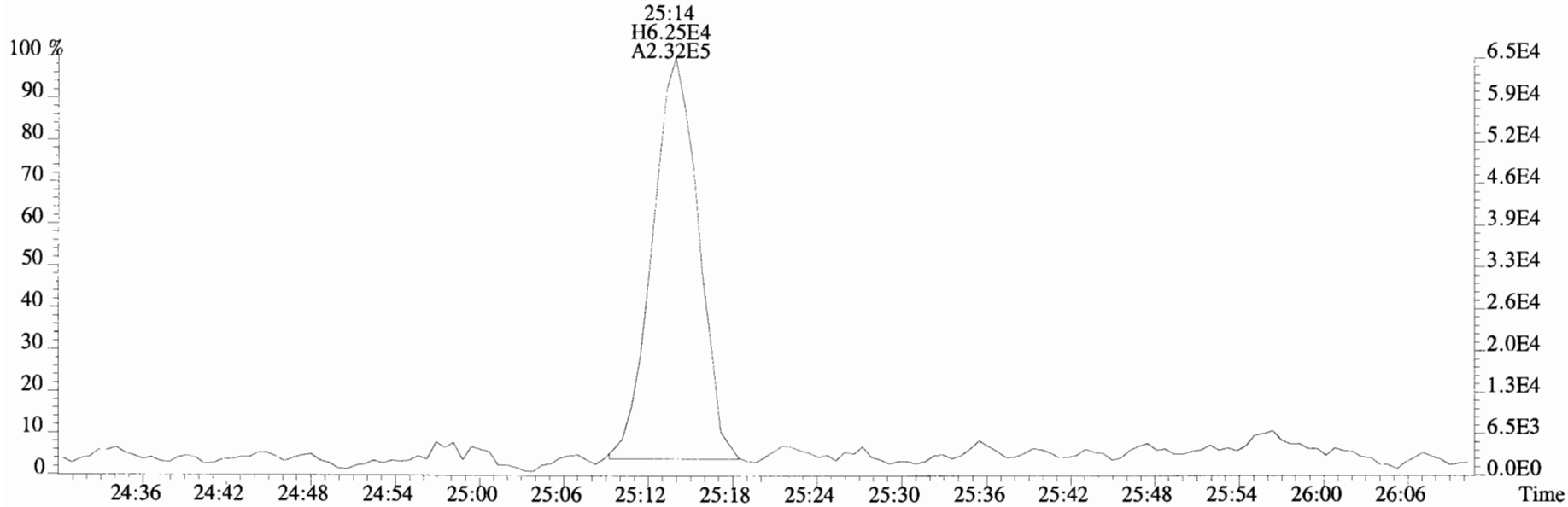
236.0376 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3944.0,0.00%,F,F)



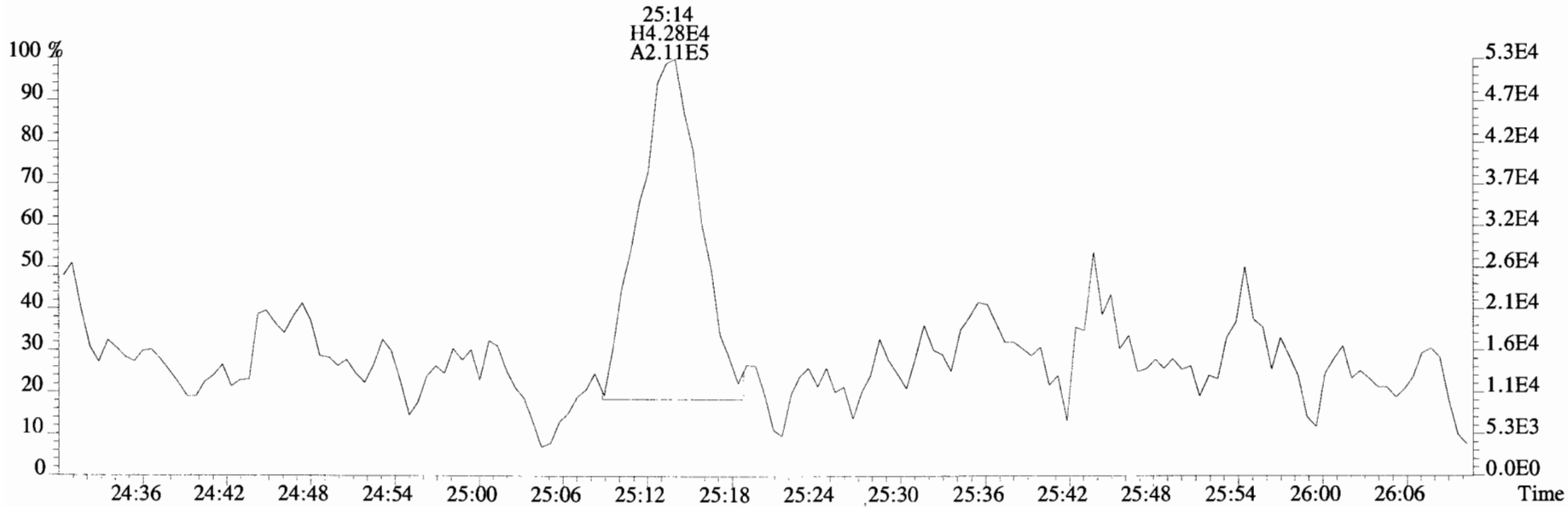
230.9856 S:4 F:2



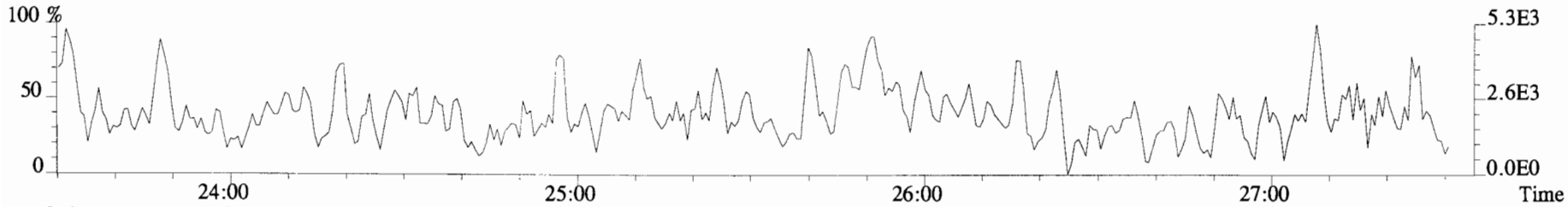
File:141226E1 #1-758 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2936.0,0.00%,F,F)



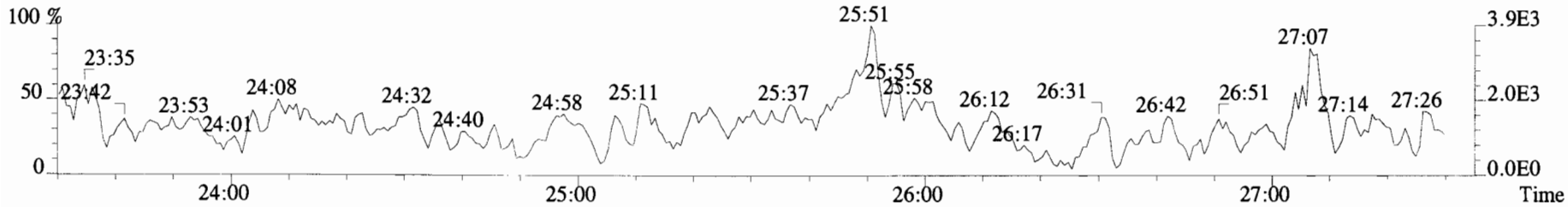
223.9974 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,17516.0,0.00%,F,F)



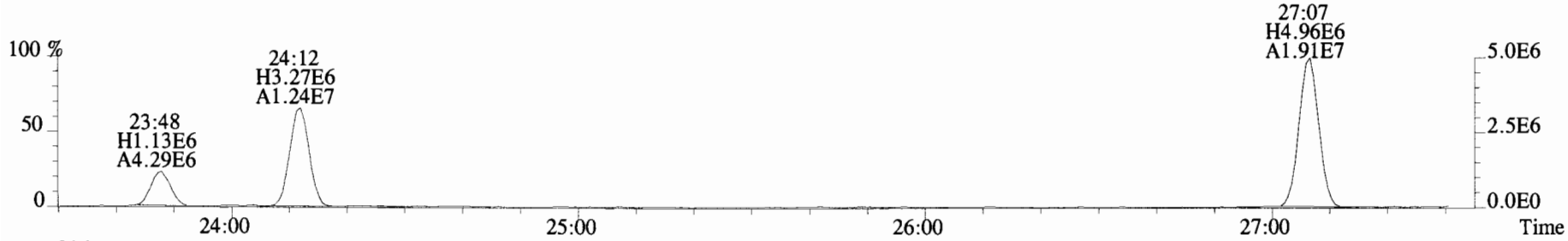
File:141226E1 #1-758 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2512.0,0.00%,F,F)



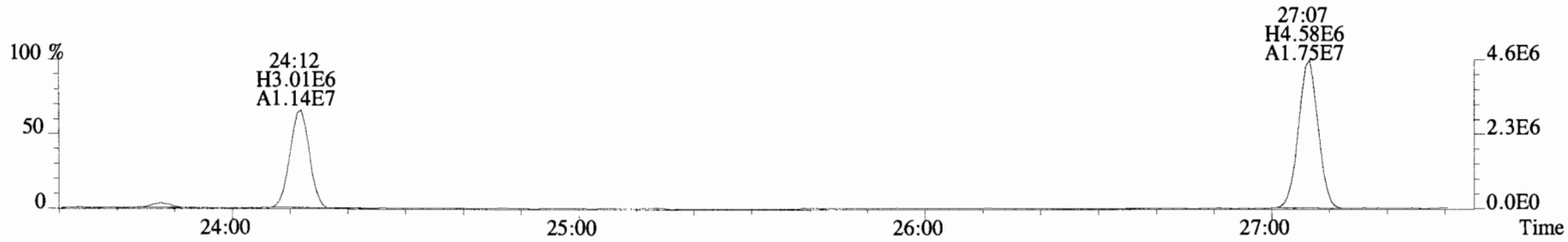
257.9584 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1544.0,0.00%,F,F)



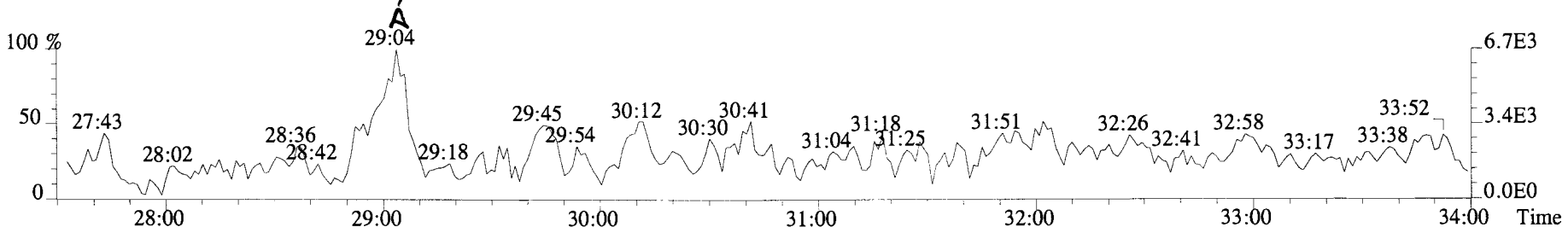
268.0016 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,32736.0,0.00%,F,F)



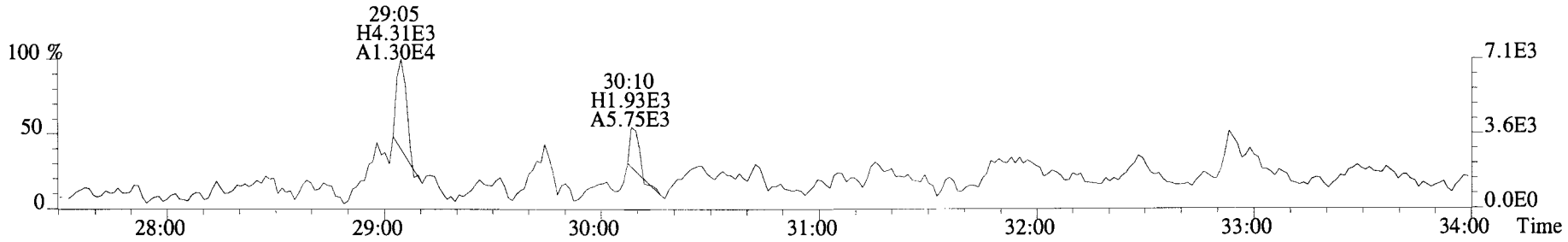
269.9986 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,23940.0,0.00%,F,F)



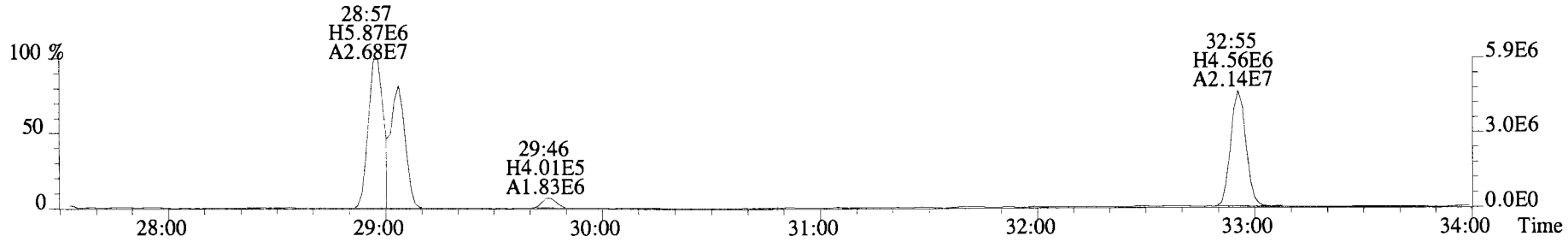
File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2392.0,0.00%,F,F)



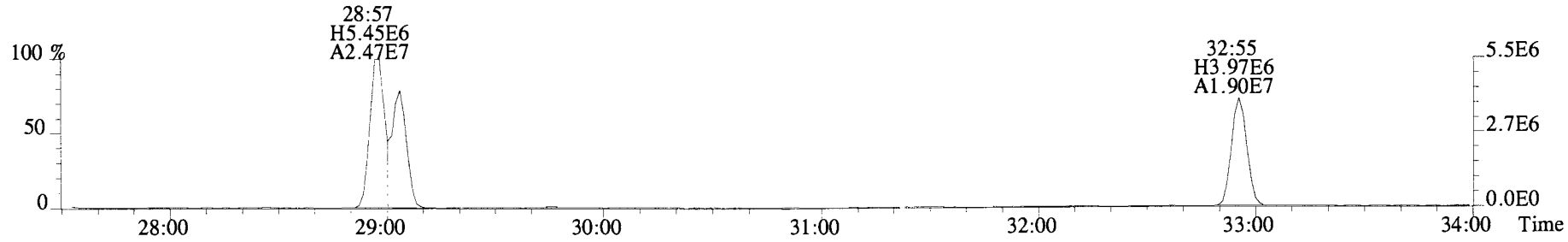
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1640.0,0.00%,F,F)



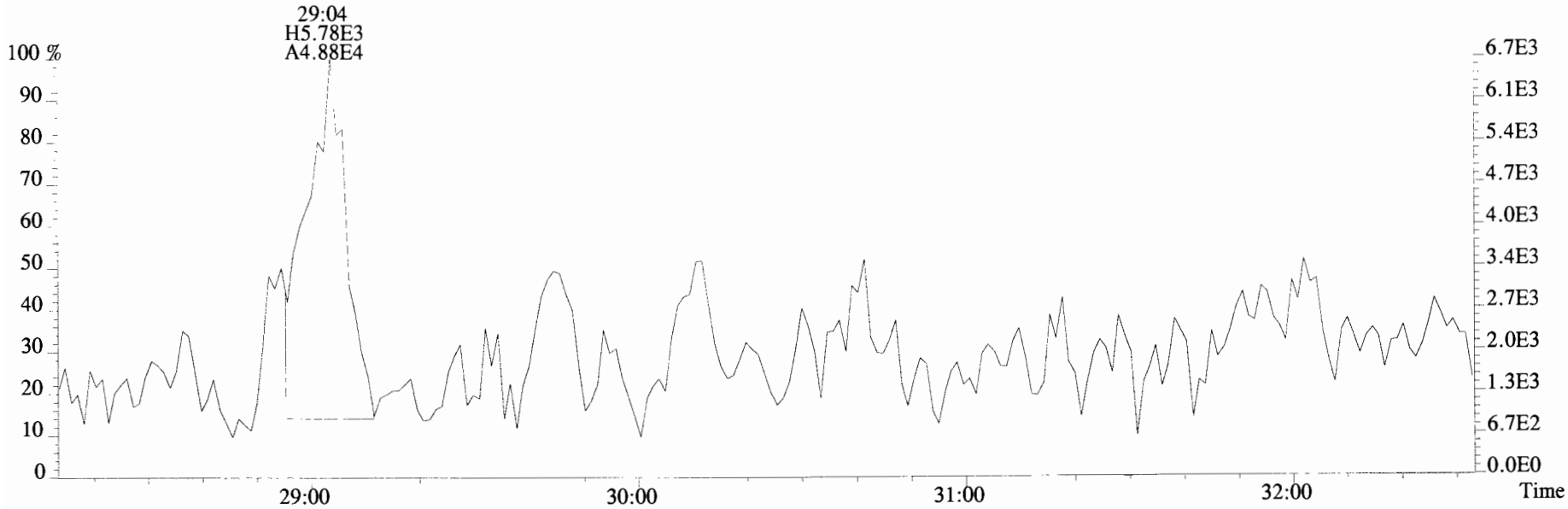
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,32092.0,0.00%,F,F)



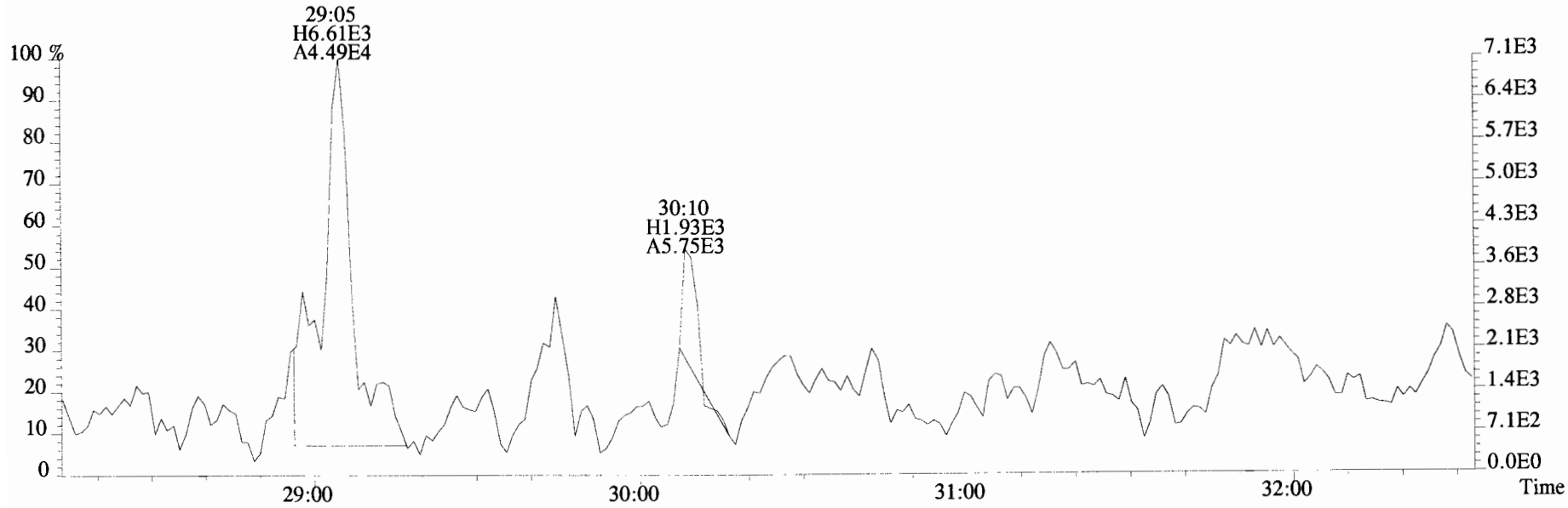
269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15908.0,0.00%,F,F)



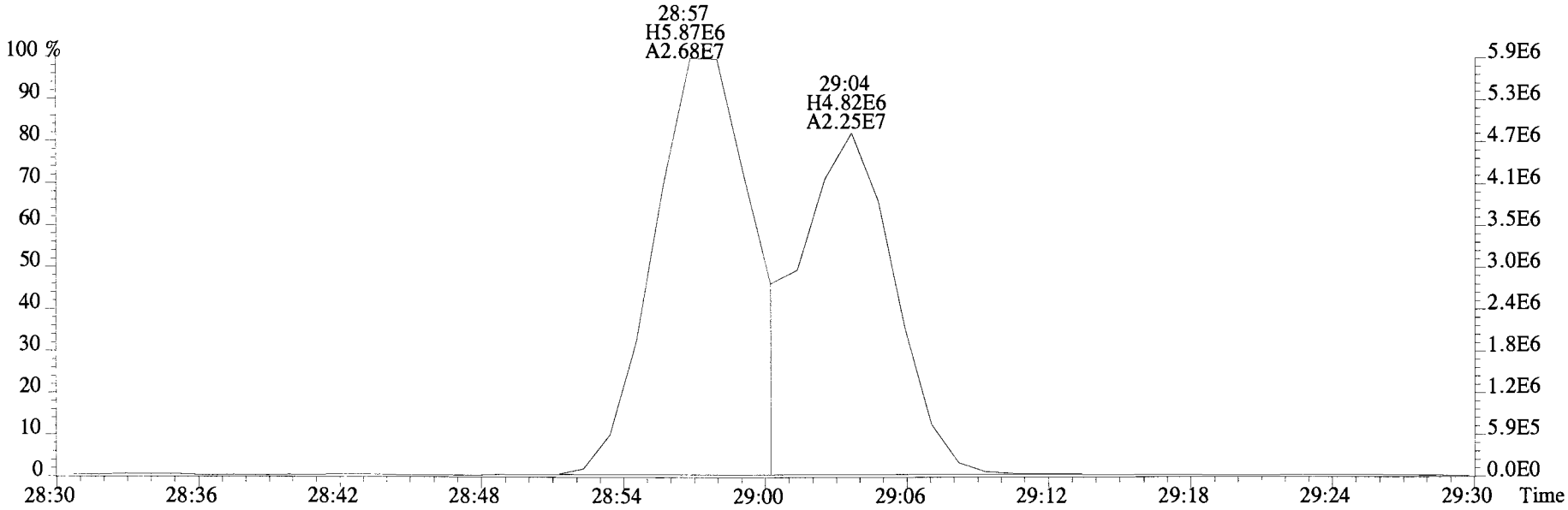
File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2392.0,0.00%,F,F)



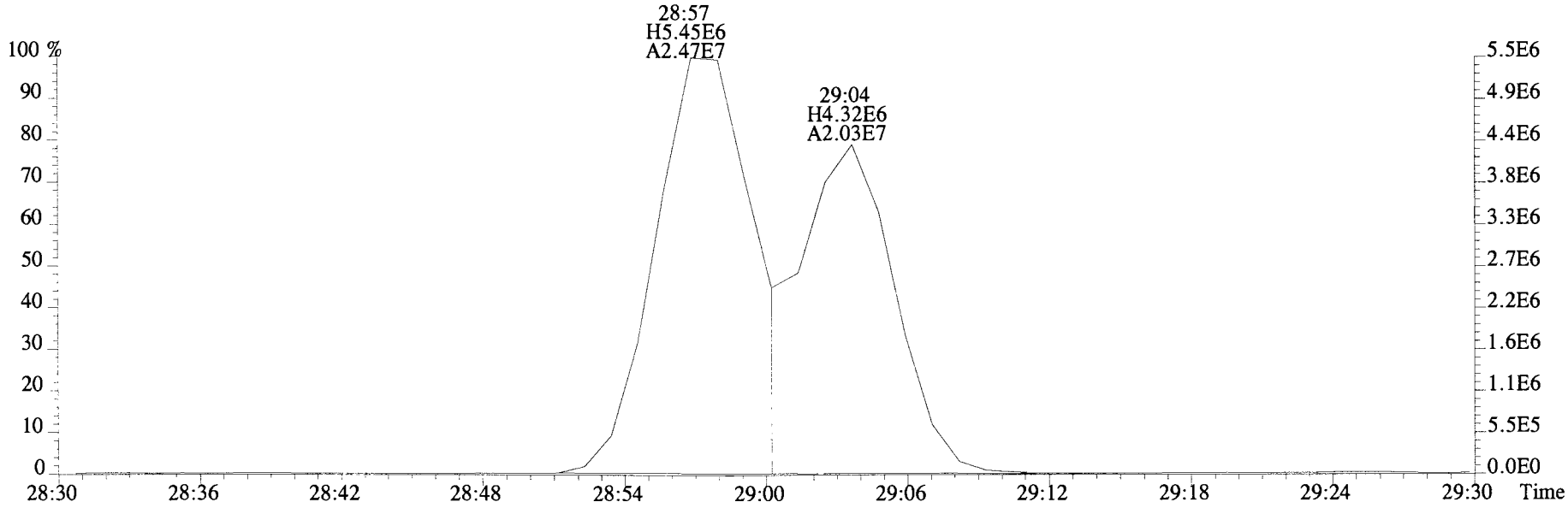
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1640.0,0.00%,F,F)



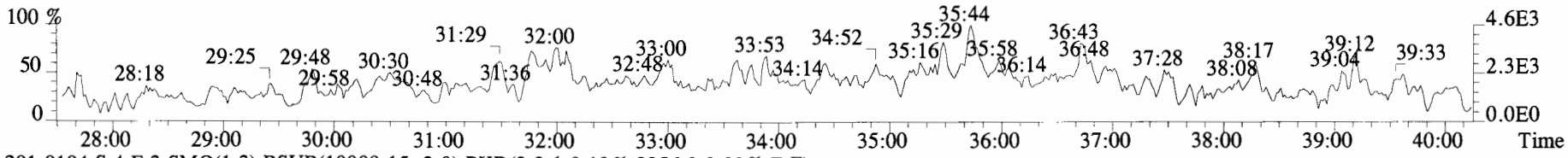
File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,32092.0,0.00%,F,F)



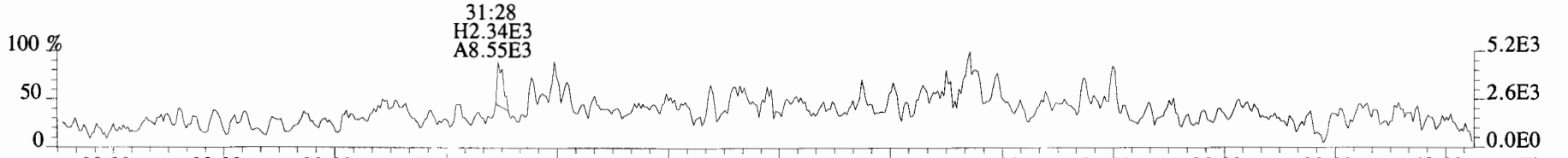
269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15908.0,0.00%,F,F)



File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-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%,2140.0,0.00%,F,F)



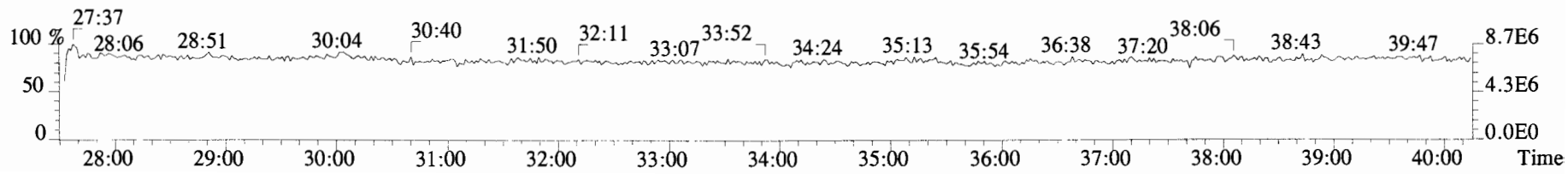
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2256.0,0.00%,F,F)



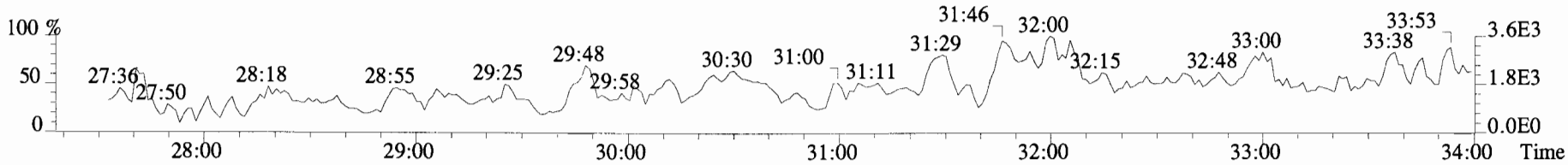
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5544.0,0.00%,F,F)

303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4516.0,0.00%,F,F)

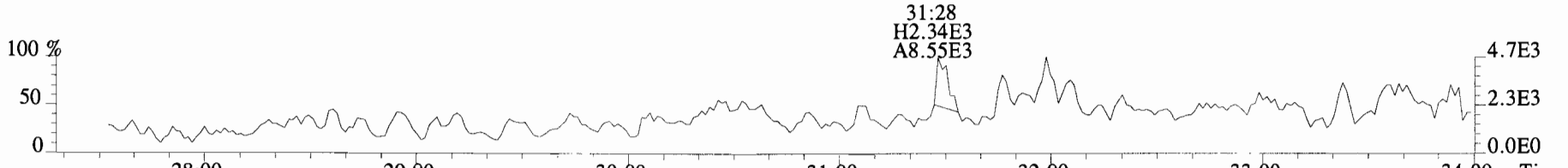
330.9792 S:4 F:3



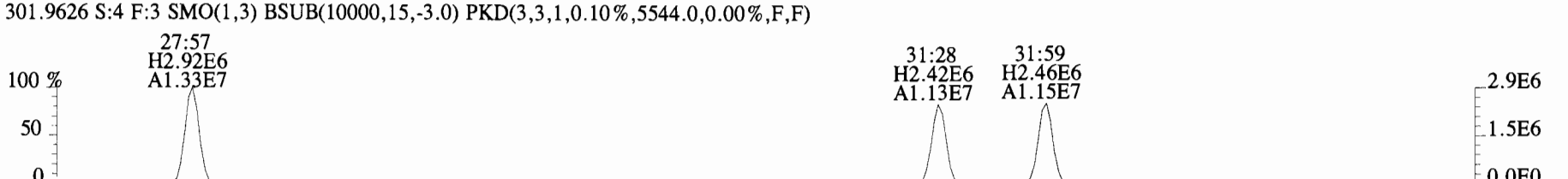
File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2140.0,0.00%,F,F)



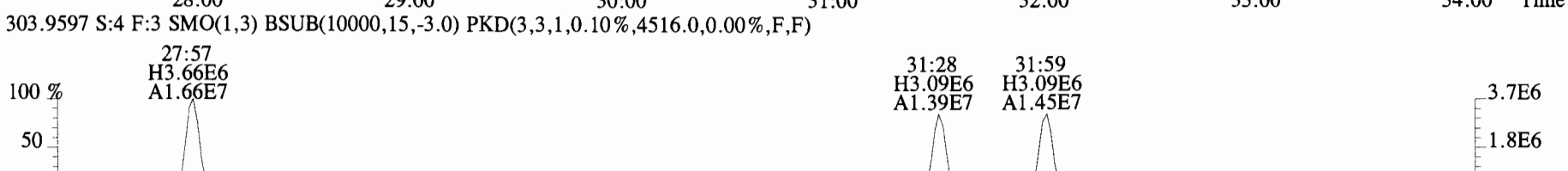
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2256.0,0.00%,F,F)



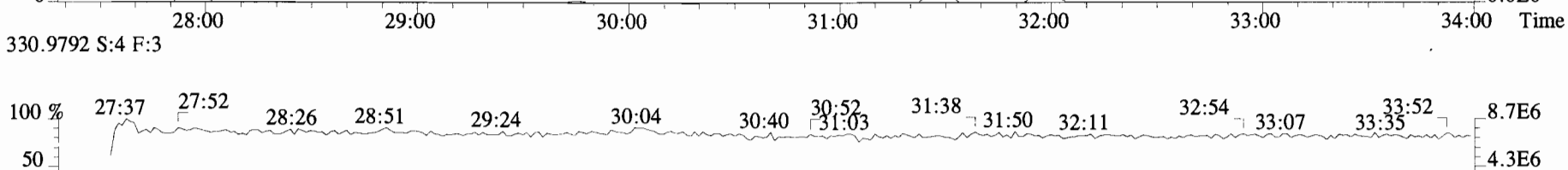
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5544.0,0.00%,F,F)



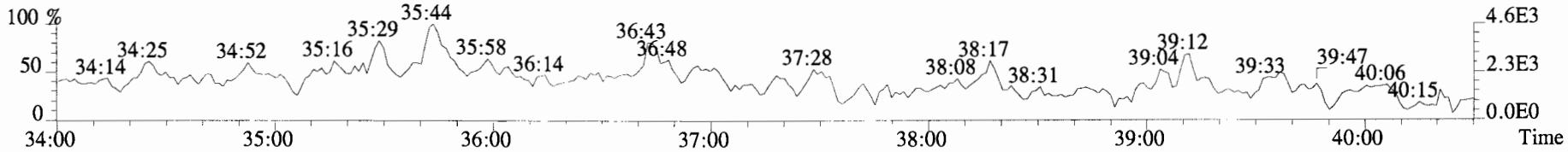
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4516.0,0.00%,F,F)



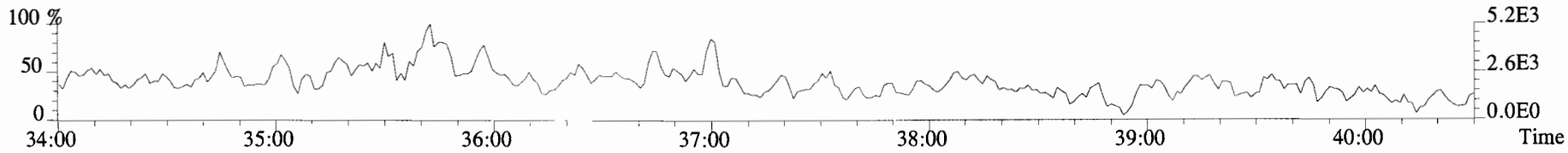
330.9792 S:4 F:3



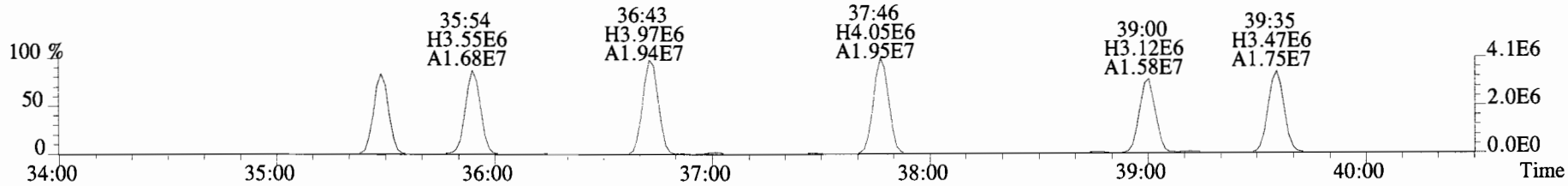
File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2140.0,0.00%,F,F)



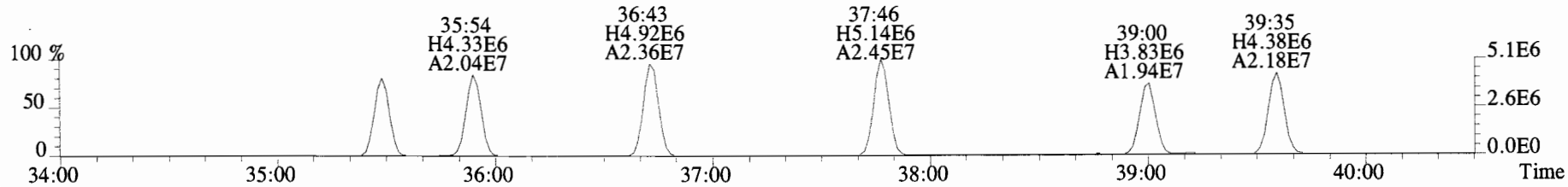
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2256.0,0.00%,F,F)



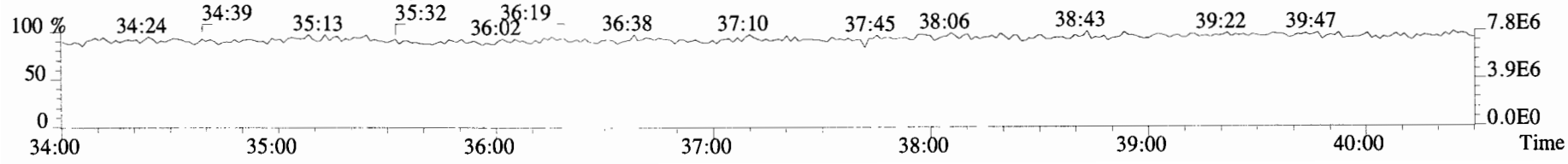
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5544.0,0.00%,F,F)



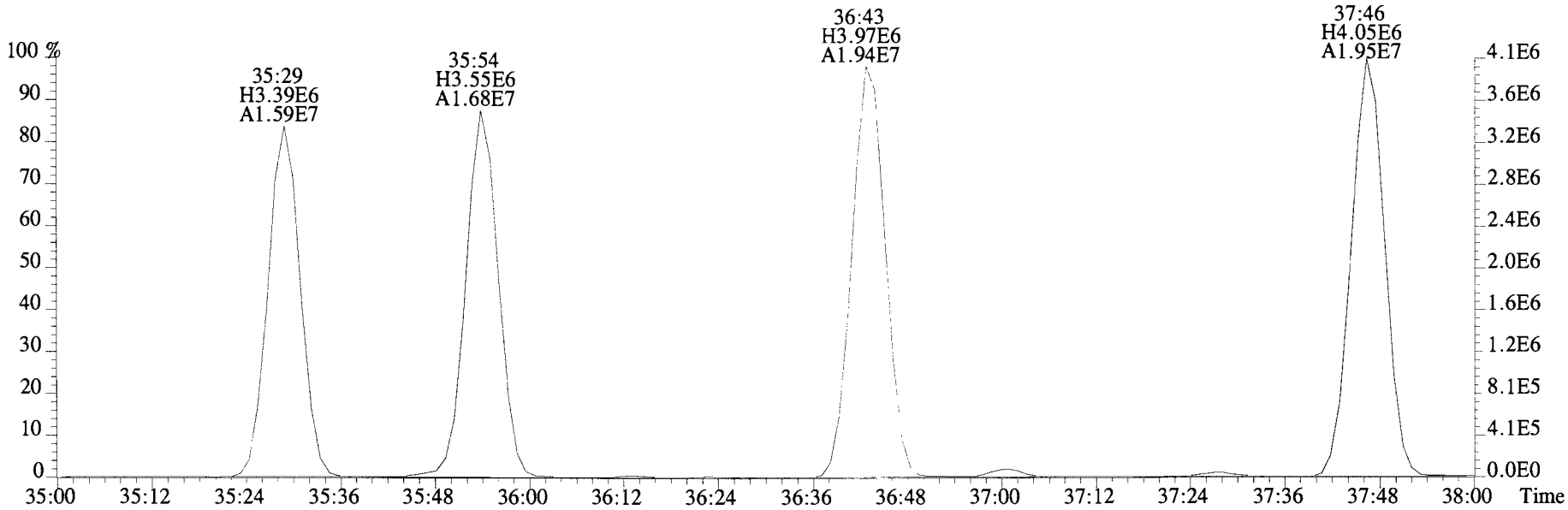
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4516.0,0.00%,F,F)



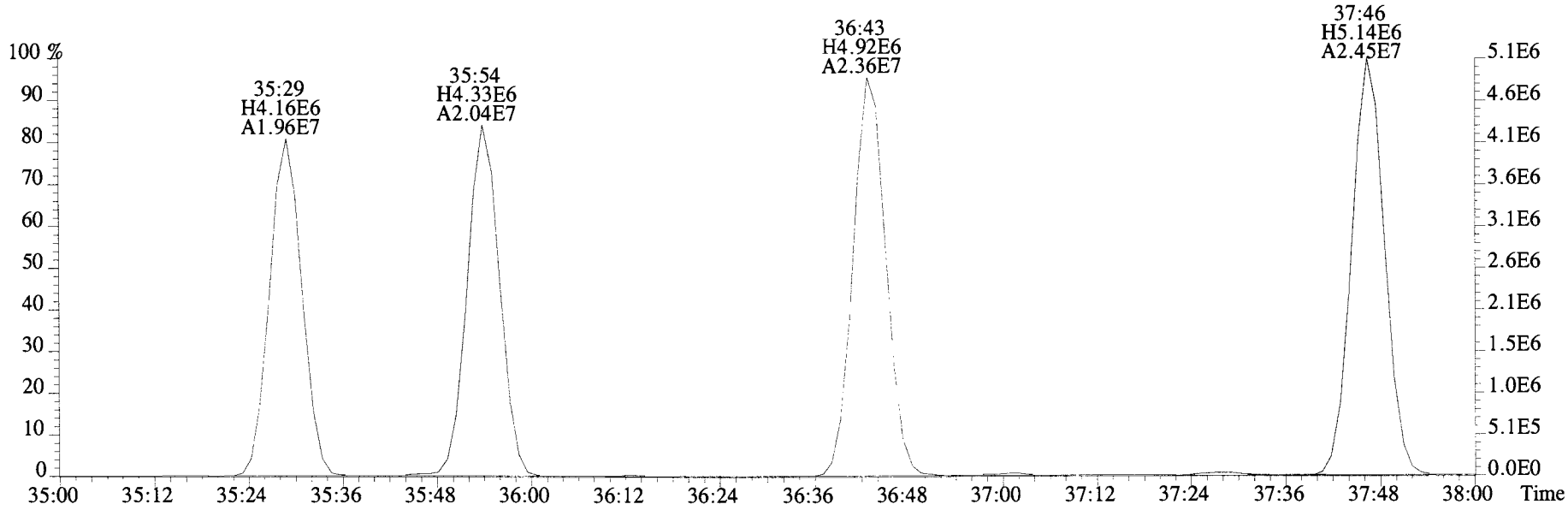
330.9792 S:4 F:3

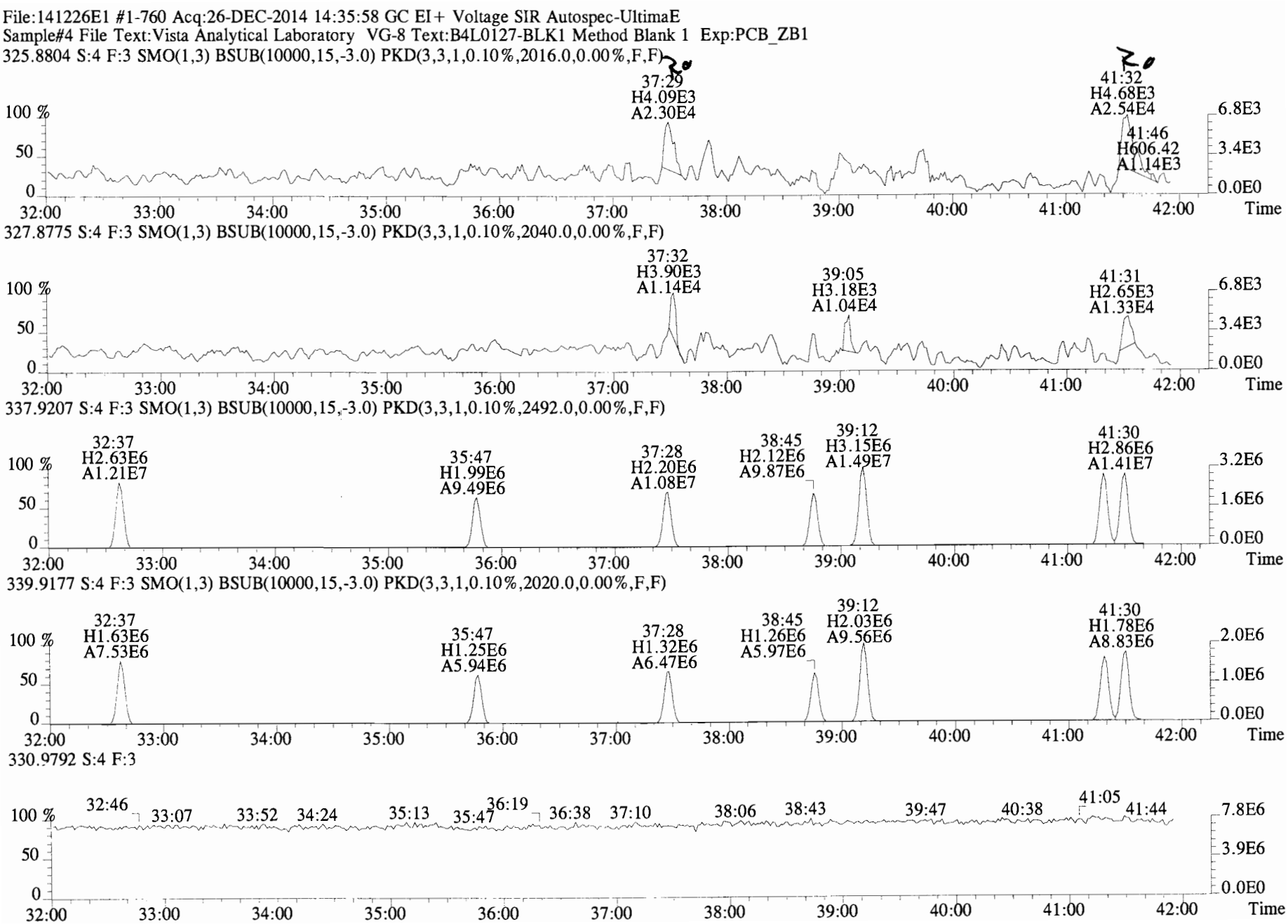


File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5544.0,0.00%,F,F)

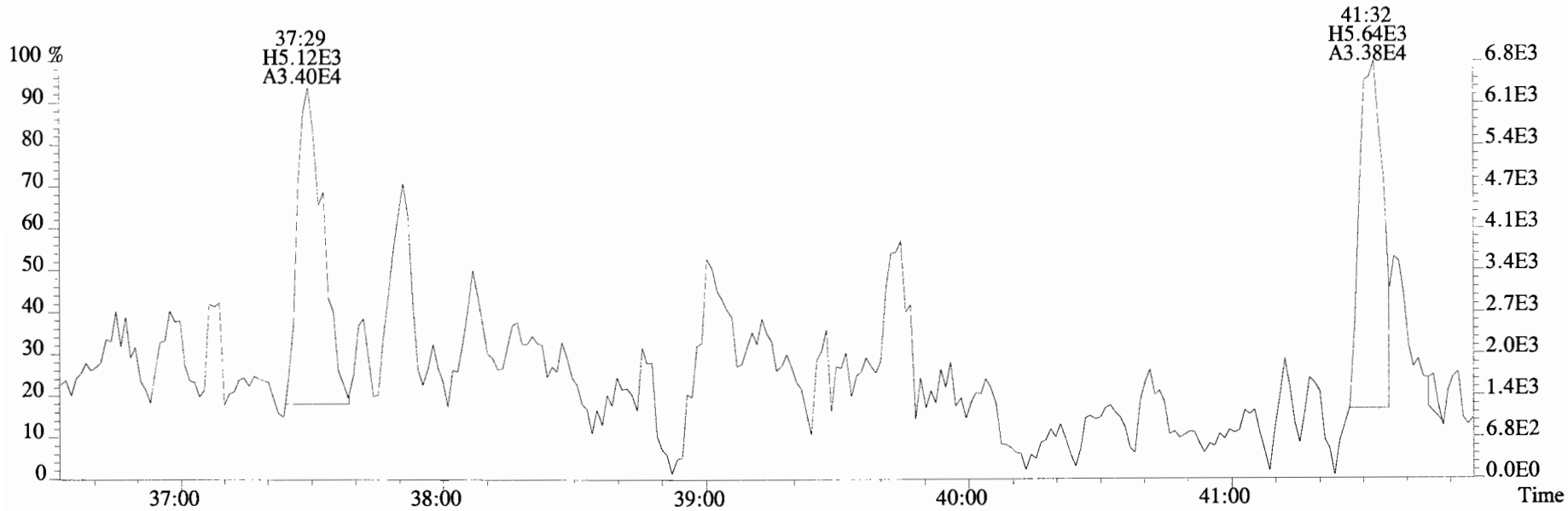


303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4516.0,0.00%,F,F)

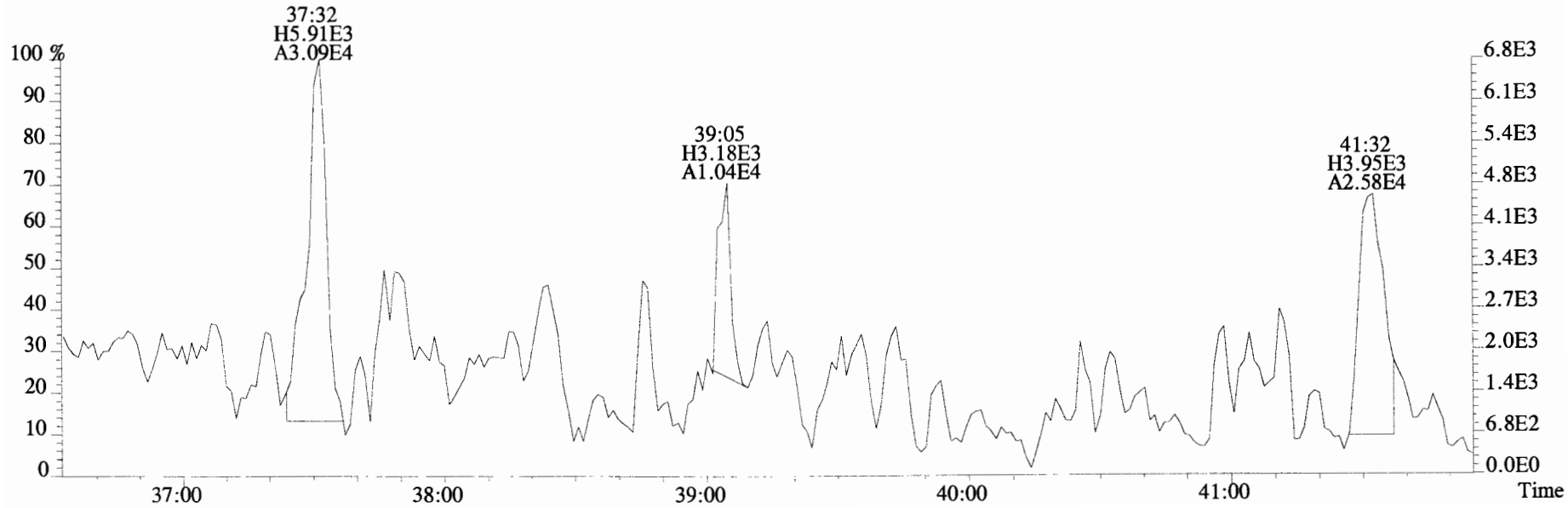



File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2016.0,0.00%,F,F)
37:29 H4.09E3 A2.30E4
41:32 H4.68E3 A2.54E4
41:46 H606.42 A1.14E3
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)
37:32 H3.90E3 A1.14E4
39:05 H3.18E3 A1.04E4
41:31 H2.65E3 A1.33E4
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2492.0,0.00%,F,F)
32:37 H2.63E6 A1.21E7
35:47 H1.99E6 A9.49E6
37:28 H2.20E6 A1.08E7
38:45 H2.12E6 A9.87E6
39:12 H3.15E6 A1.49E7
41:30 H2.86E6 A1.41E7
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2020.0,0.00%,F,F)
32:37 H1.63E6 A7.53E6
35:47 H1.25E6 A5.94E6
37:28 H1.32E6 A6.47E6
38:45 H1.26E6 A5.97E6
39:12 H2.03E6 A9.56E6
41:30 H1.78E6 A8.83E6
330.9792 S:4 F:3
32:46 33:07 33:52 34:24 35:13 35:47 36:19 36:38 37:10 38:06 38:43 39:47 40:38 41:05 41:44
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
6.8E3 3.4E3 0.0E0
3.2E6 1.6E6 0.0E0
2.0E6 1.0E6 0.0E0
7.8E6 3.9E6 0.0E0

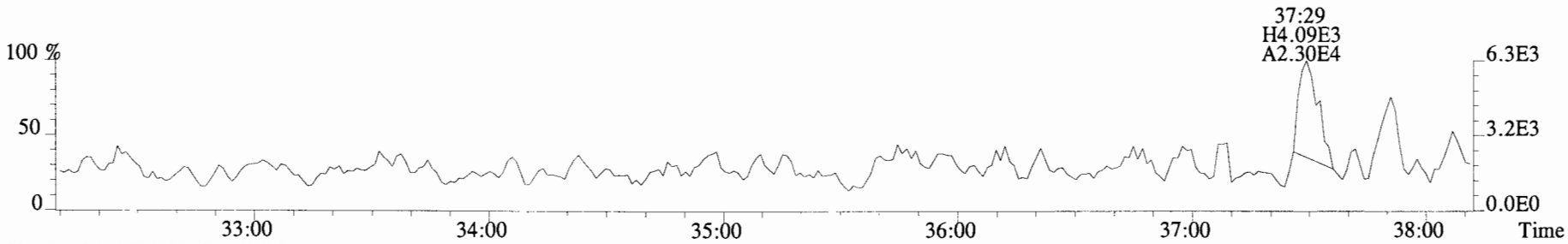
File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2016.0,0.00%,F,F)



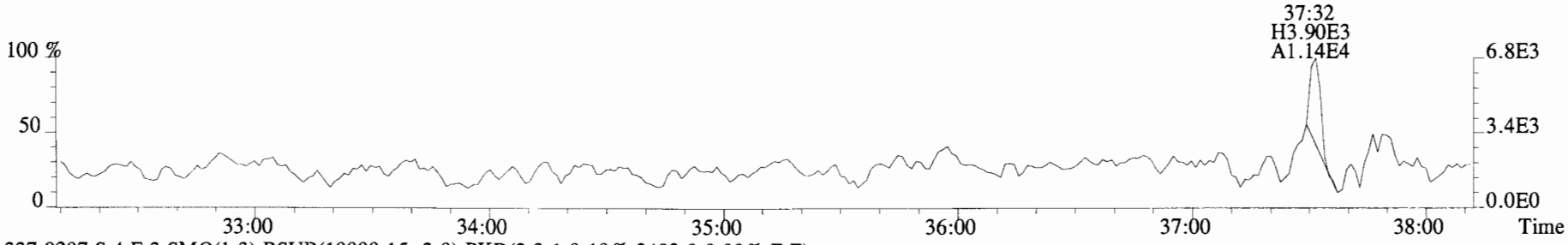
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)



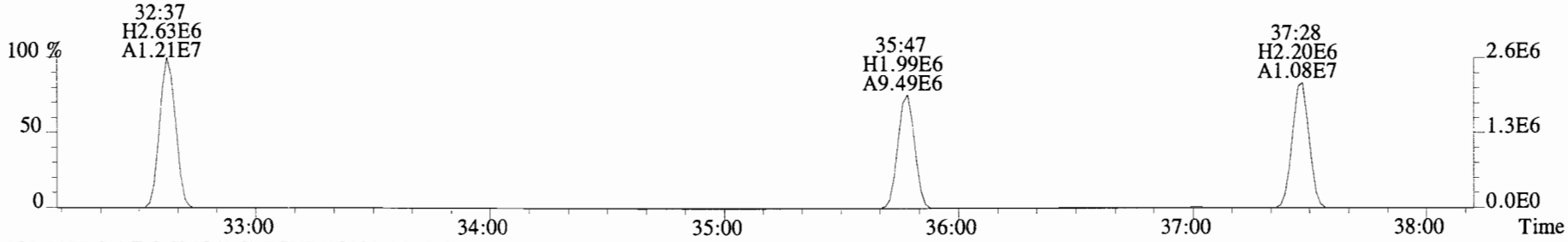
File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2016.0,0.00%,F,F)



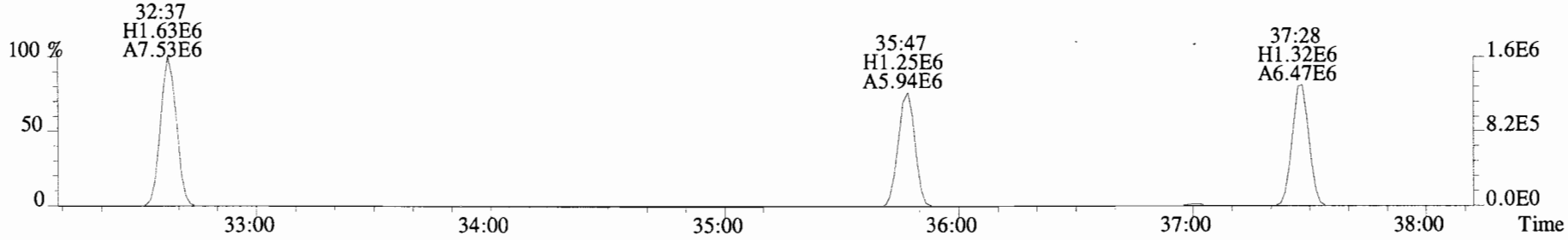
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)



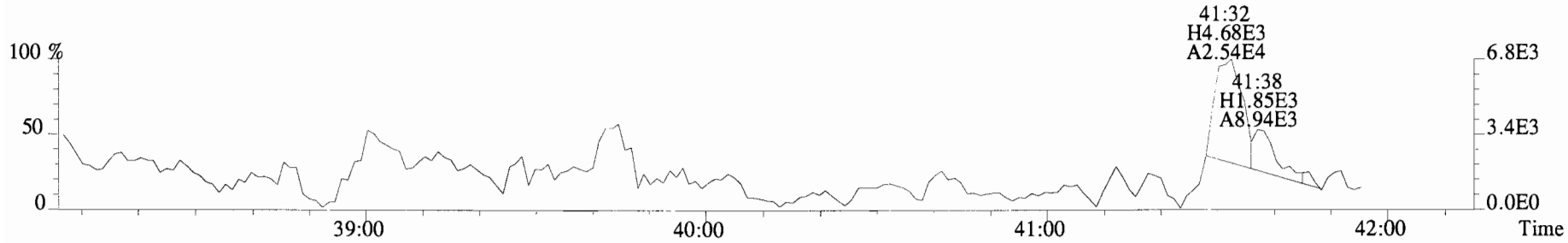
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2492.0,0.00%,F,F)



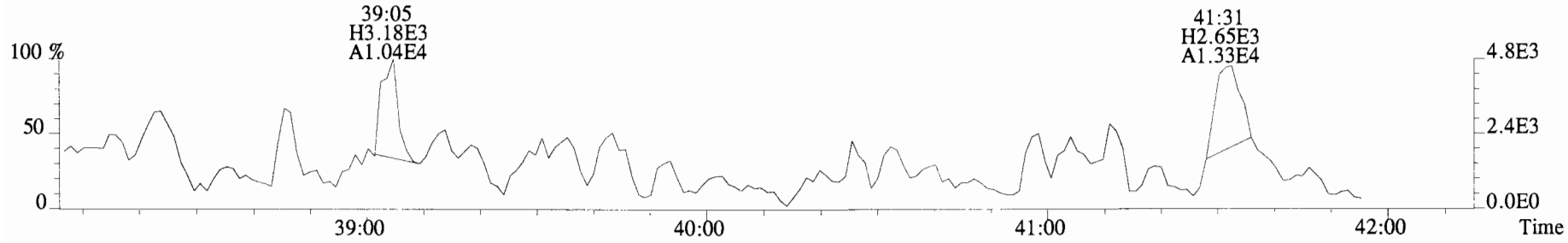
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2020.0,0.00%,F,F)



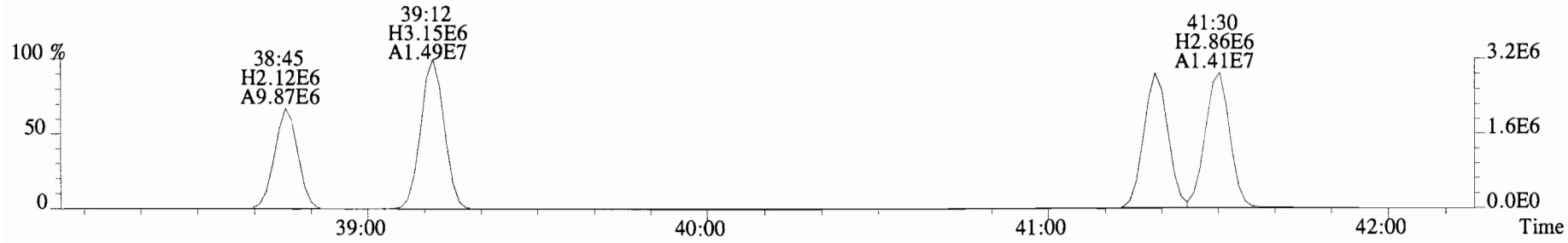
File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2016.0,0.00%,F,F)



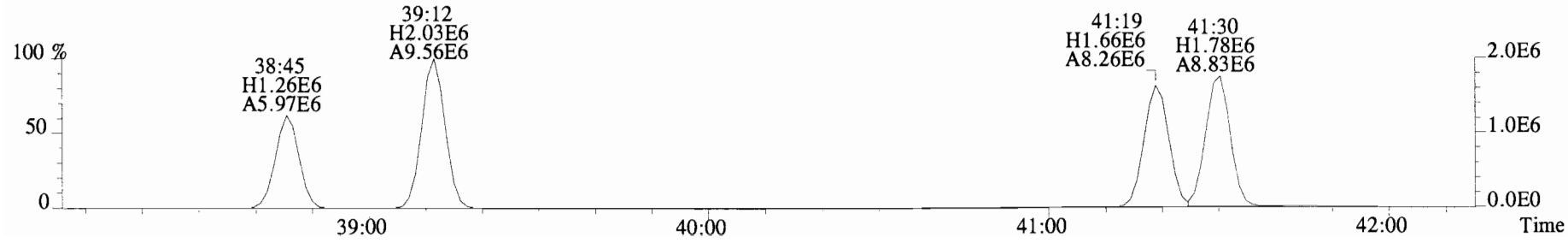
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)



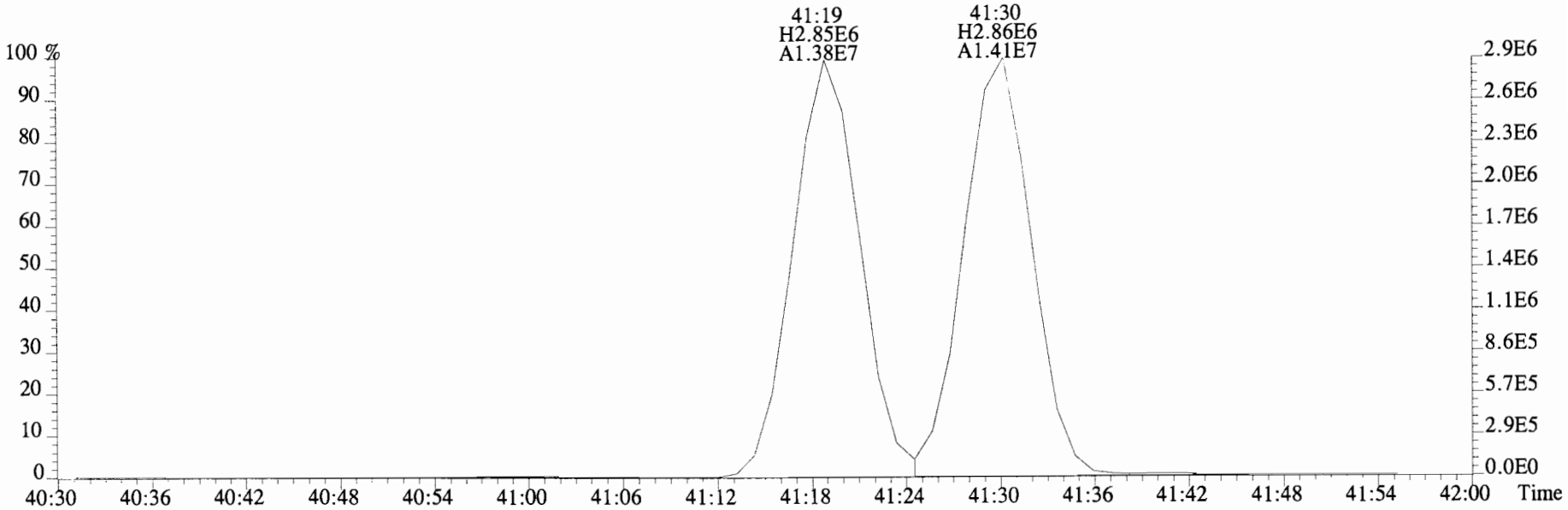
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2492.0,0.00%,F,F)



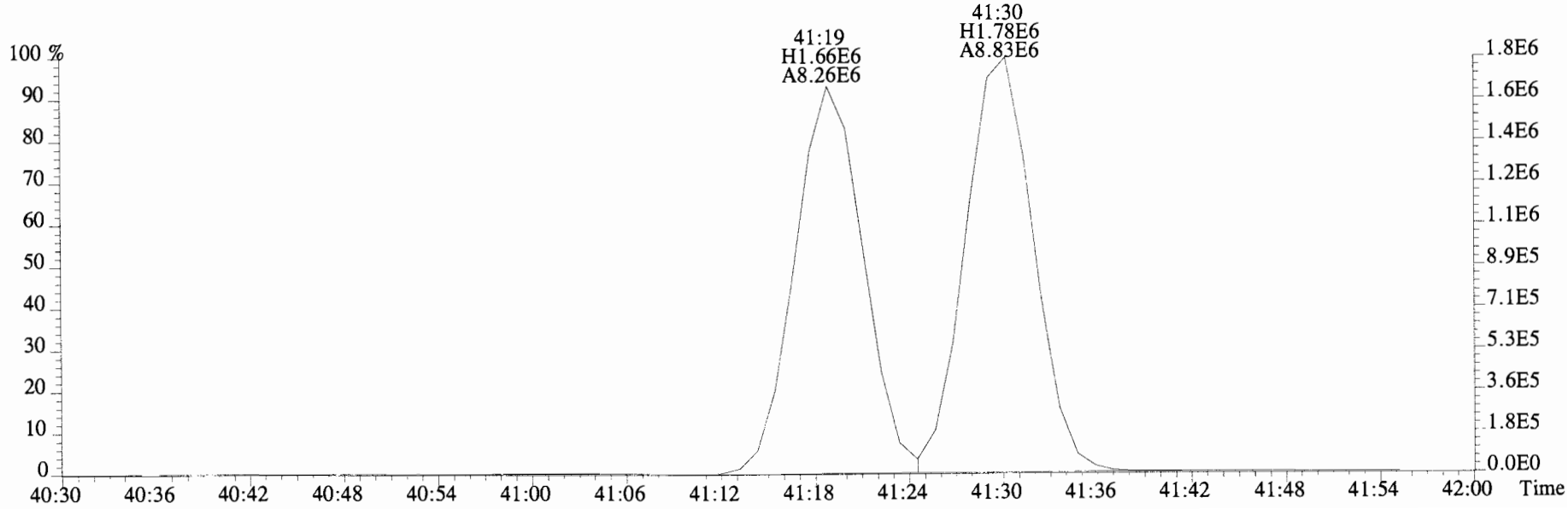
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2020.0,0.00%,F,F)



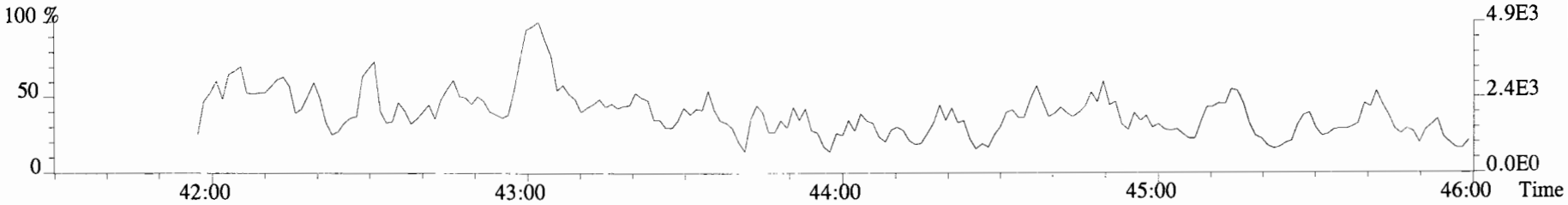
File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2492.0,0.00%,F,F)



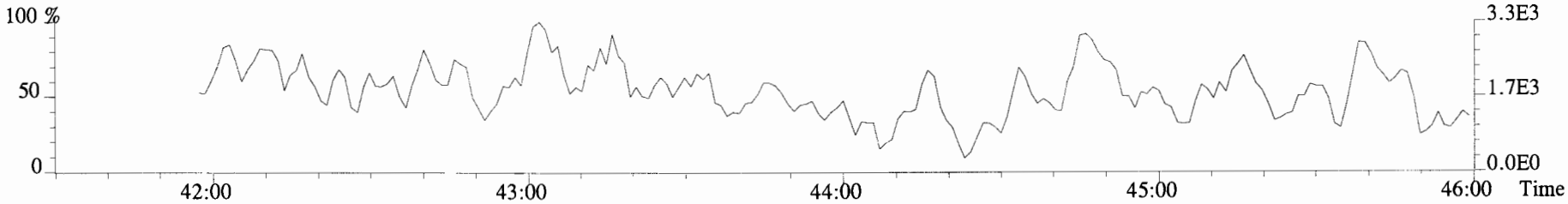
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2020.0,0.00%,F,F)



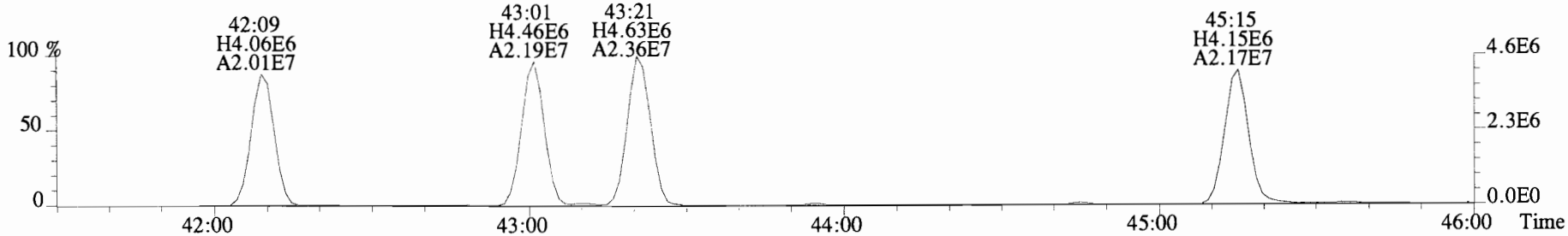
File:141226E1 #1-553 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2244.0,0.00%,F,F)



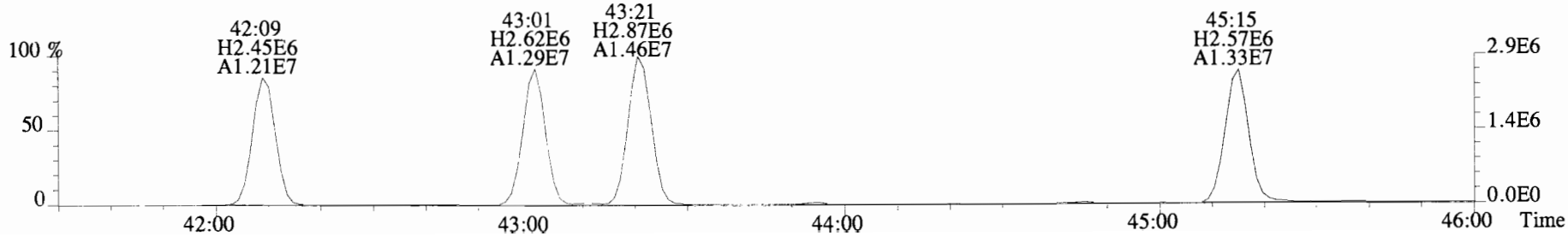
327.8775 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2256.0,0.00%,F,F)

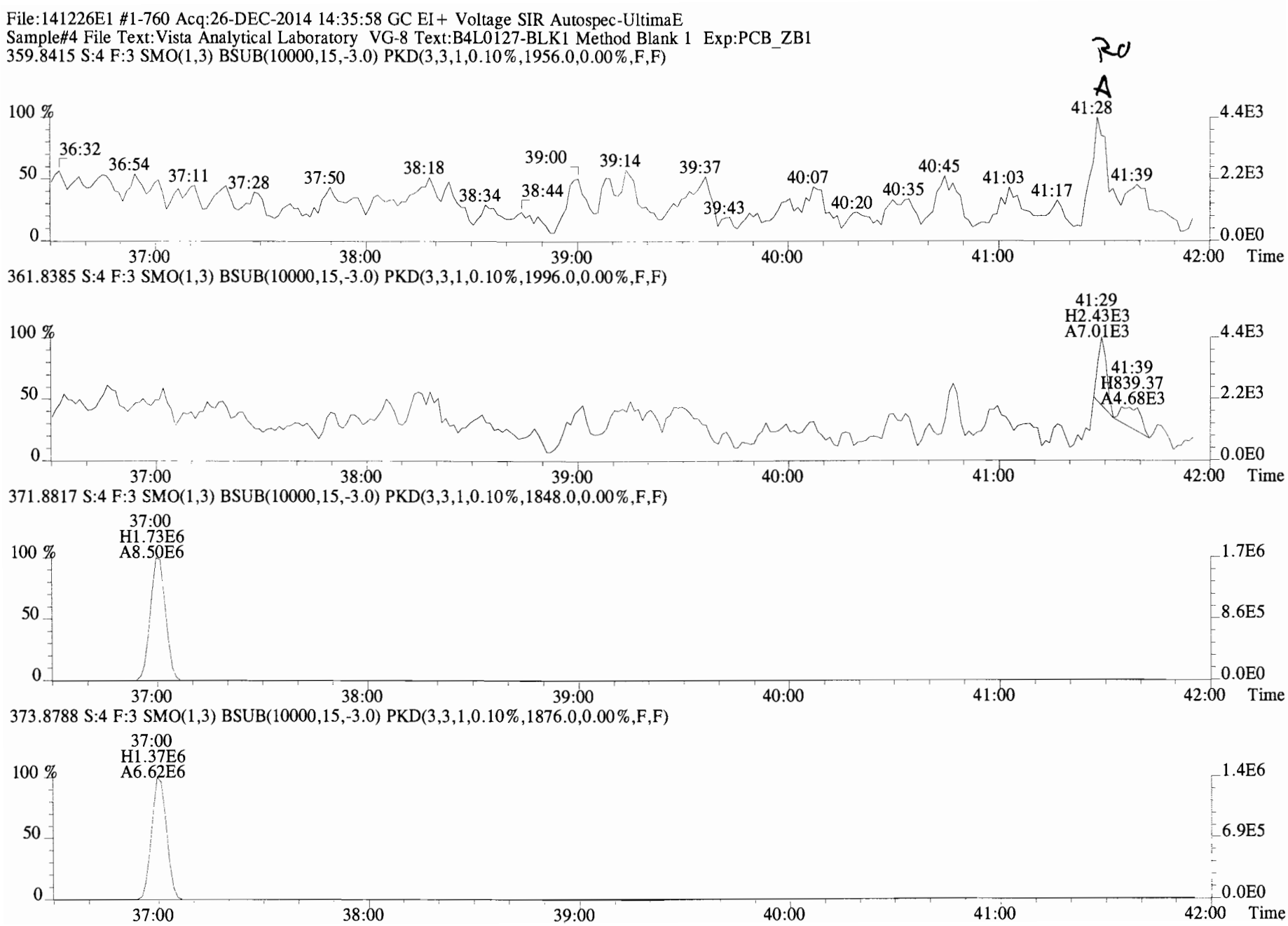


337.9207 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4708.0,0.00%,F,F)

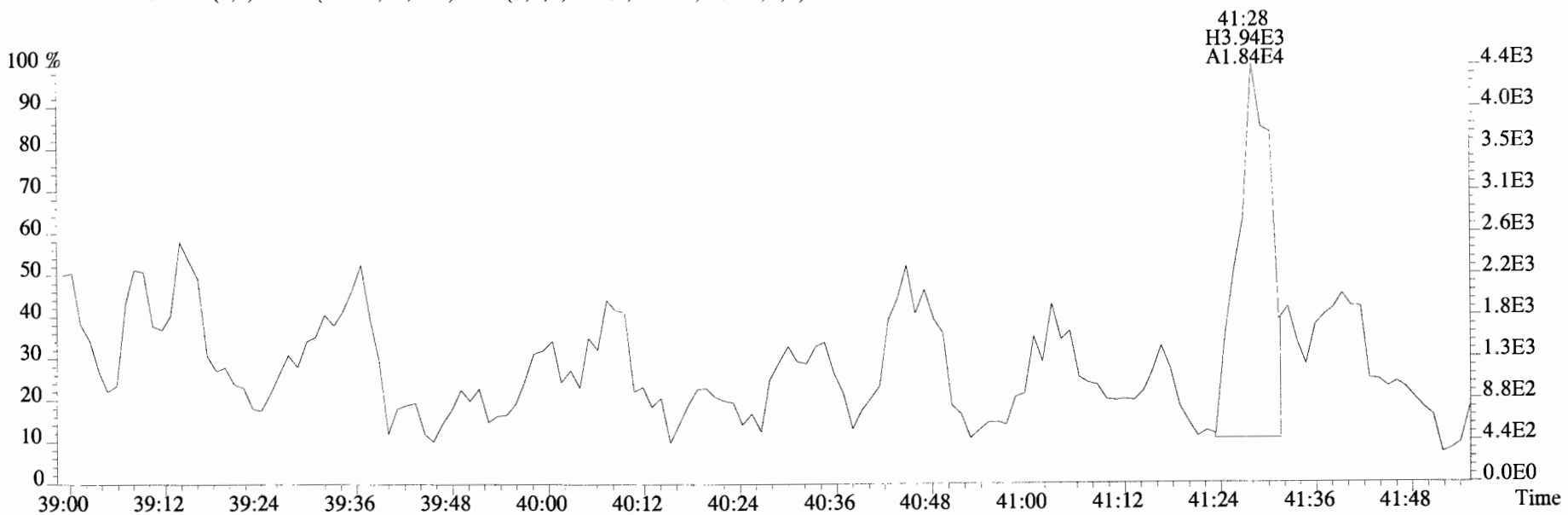


339.9177 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4876.0,0.00%,F,F)

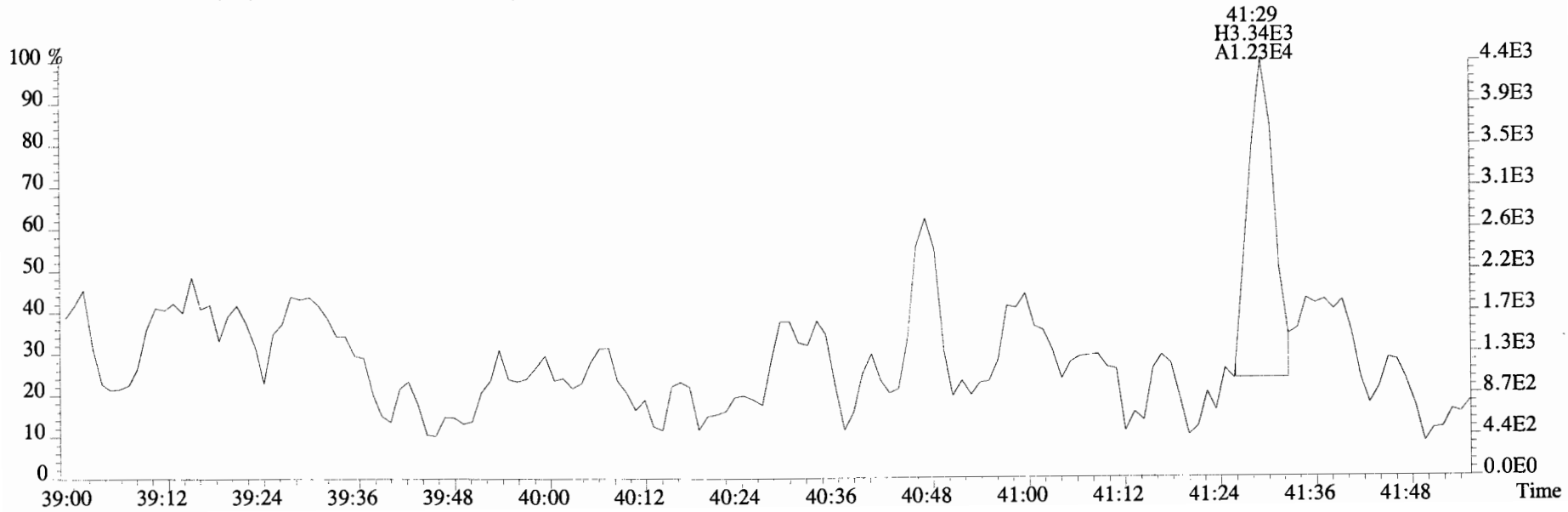



File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1956.0,0.00%,F,F)
R0
A
41:28
36:32
36:54
37:11
37:28
37:50
38:18
38:34
38:44
39:00
39:14
39:37
39:43
40:07
40:20
40:35
40:45
41:03
41:17
41:39
100 %
50
0
4.4E3
2.2E3
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time
361.8385 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1996.0,0.00%,F,F)
41:29
H2.43E3
A7.01E3
41:39
H839.37
A4.68E3
371.8817 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1848.0,0.00%,F,F)
37:00
H1.73E6
A8.50E6
1.7E6
8.6E5
373.8788 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1876.0,0.00%,F,F)
37:00
H1.37E6
A6.62E6
1.4E6
6.9E5

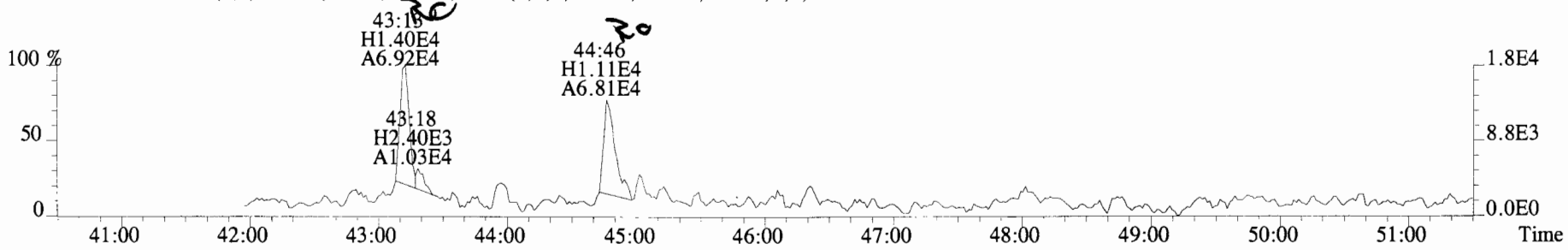
File:141226E1 #1-760 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1956.0,0.00%,F,F)



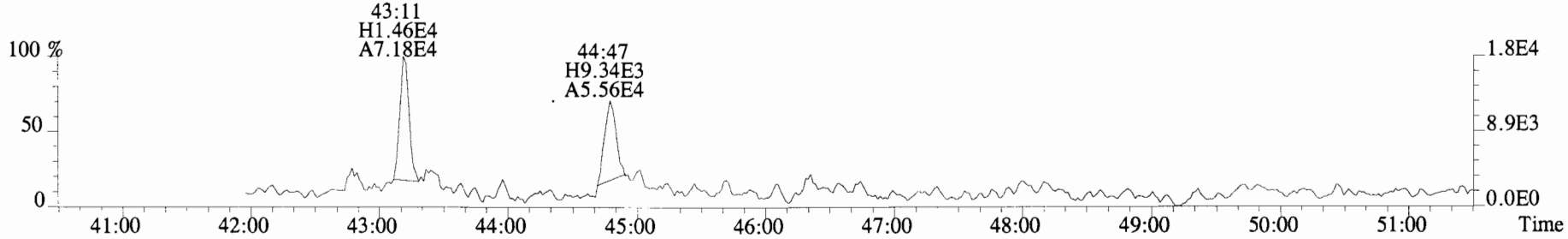
361.8385 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1996.0,0.00%,F,F)



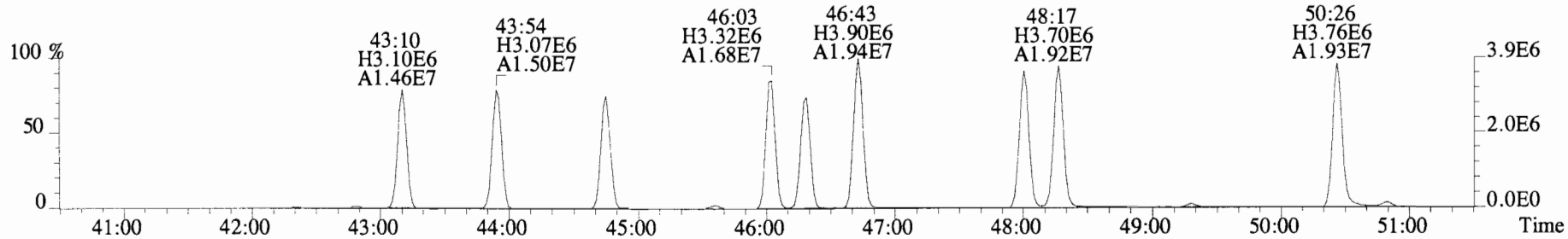
File:141226E1 #1-553 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2208.0,0.00%,F,F)



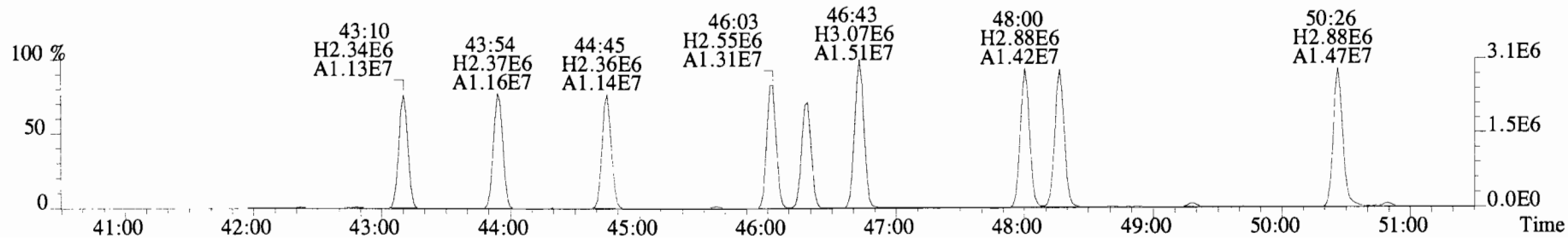
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2236.0,0.00%,F,F)



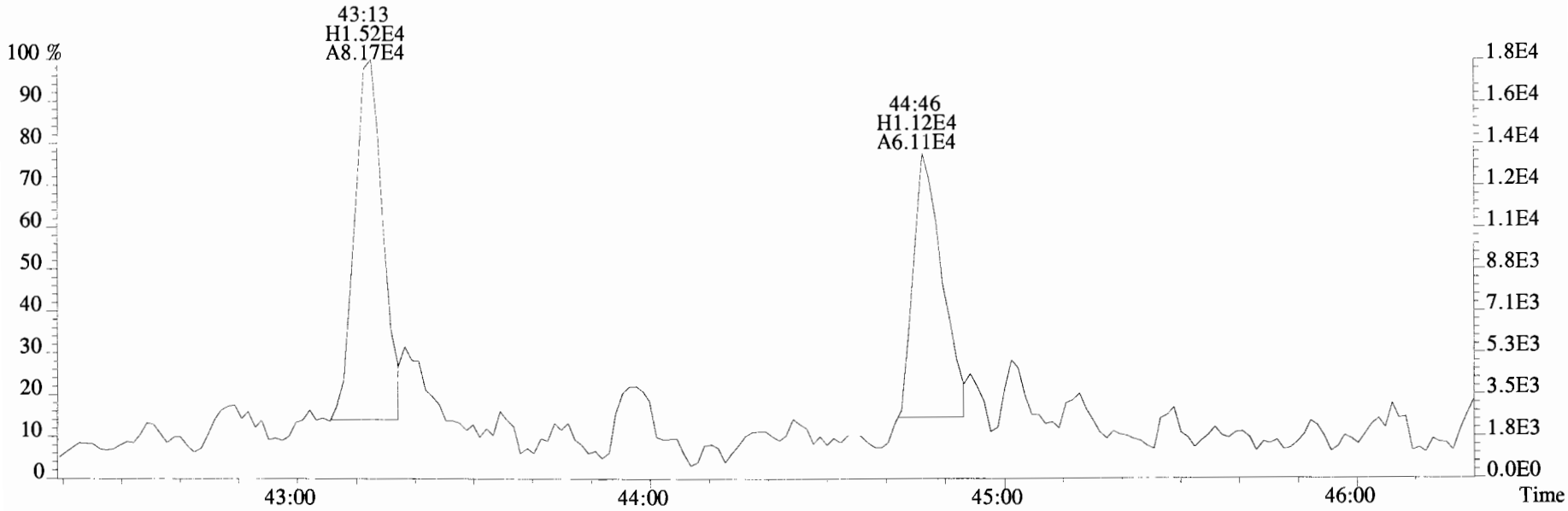
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5160.0,0.00%,F,F)



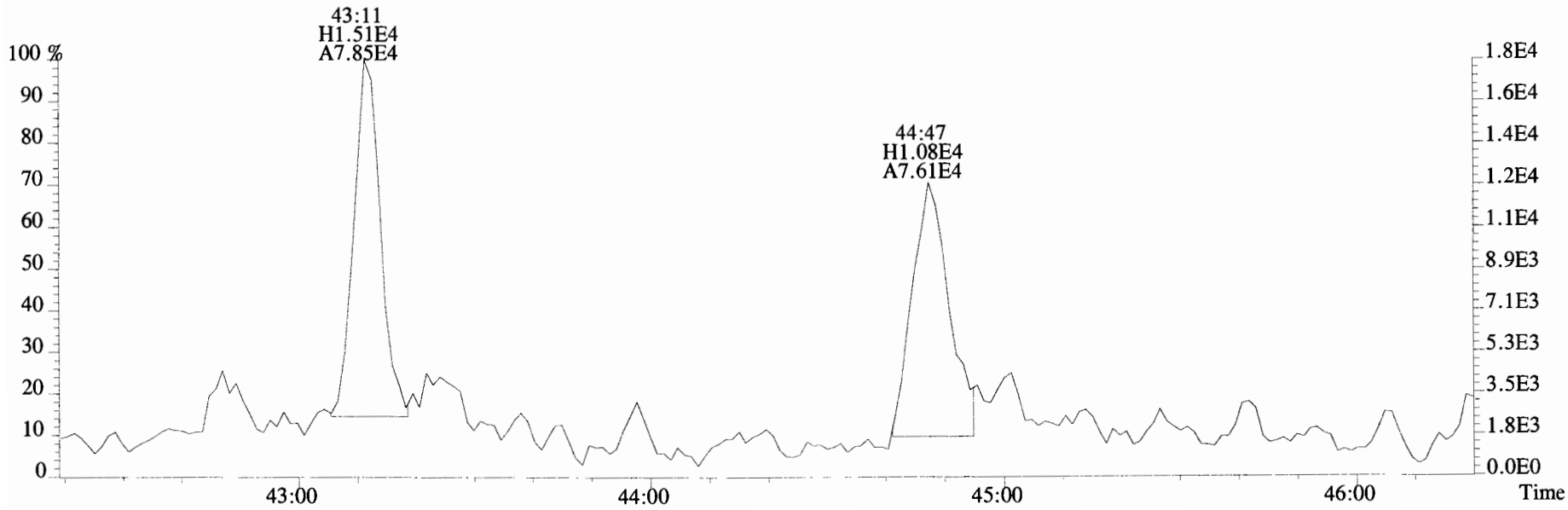
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5004.0,0.00%,F,F)



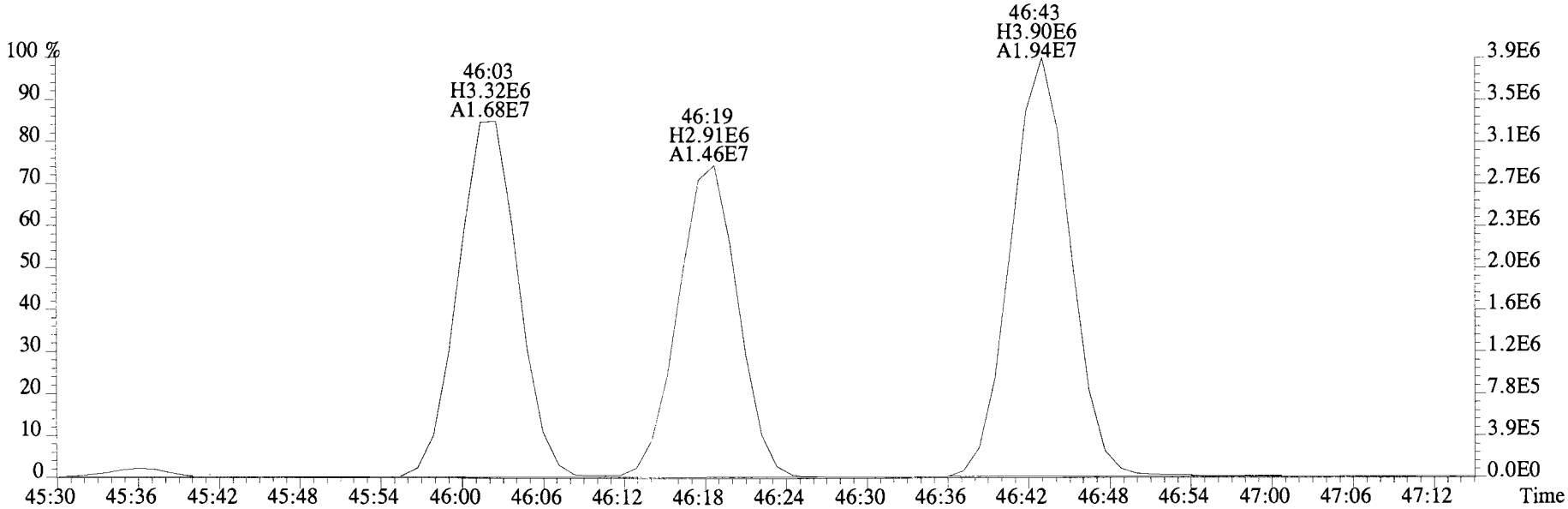
File:141226E1 #1-553 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)



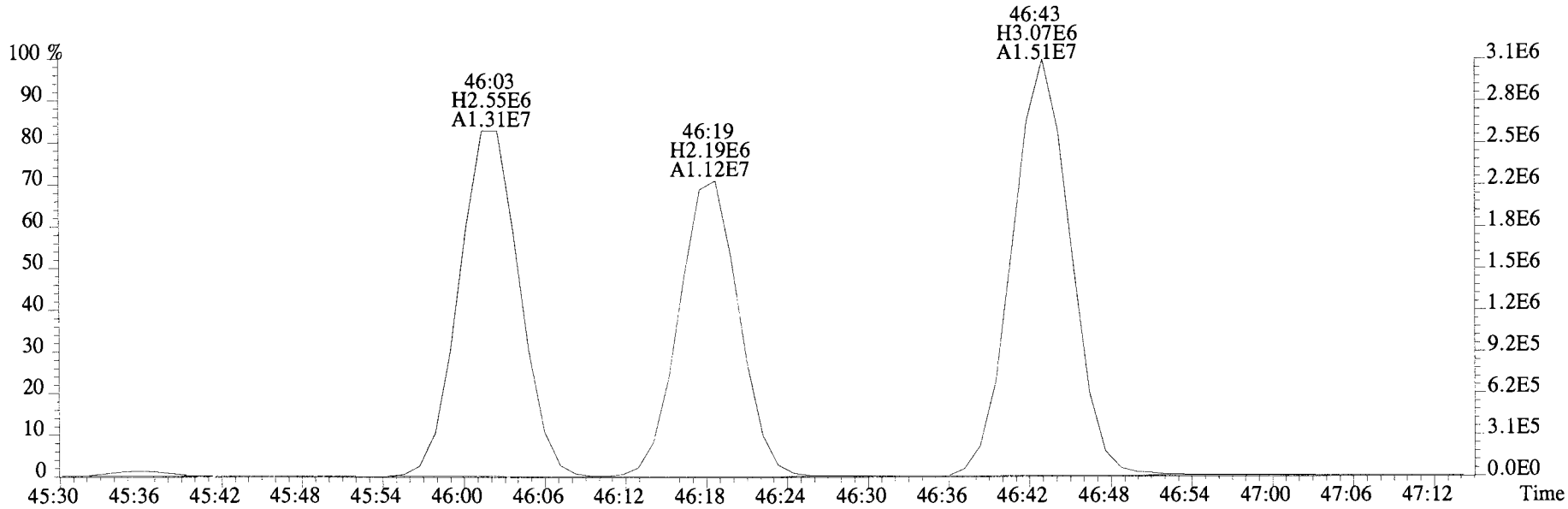
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2236.0,0.00%,F,F)



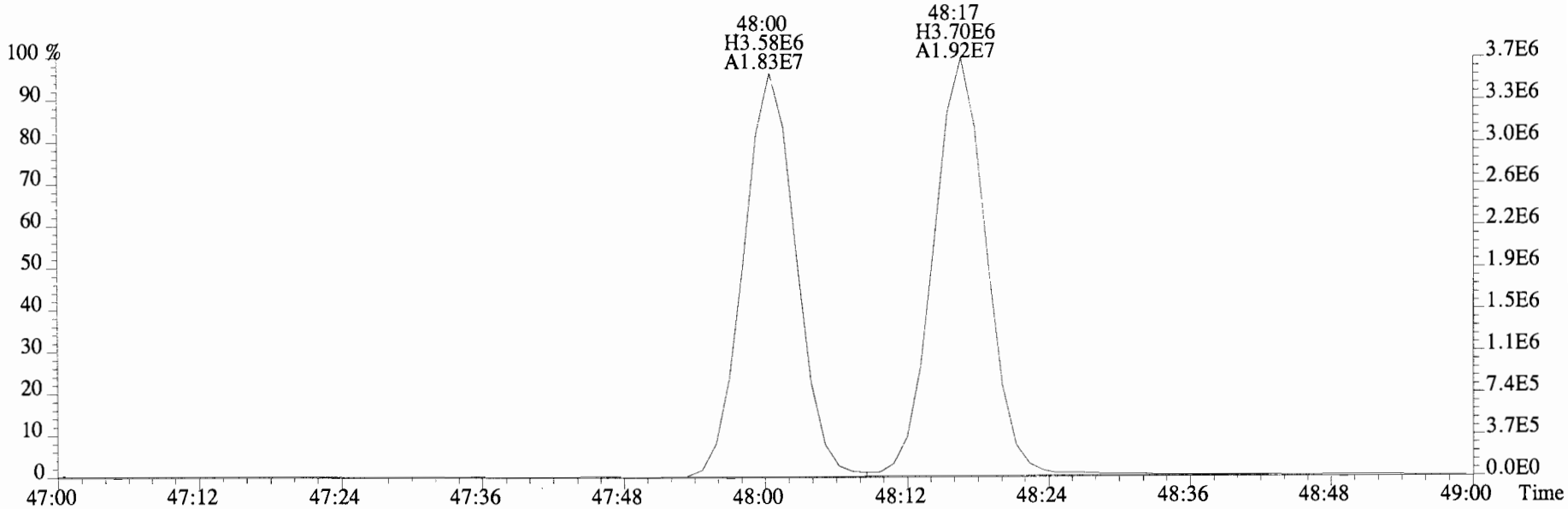
File:141226E1 #1-553 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5160.0,0.00%,F,F)



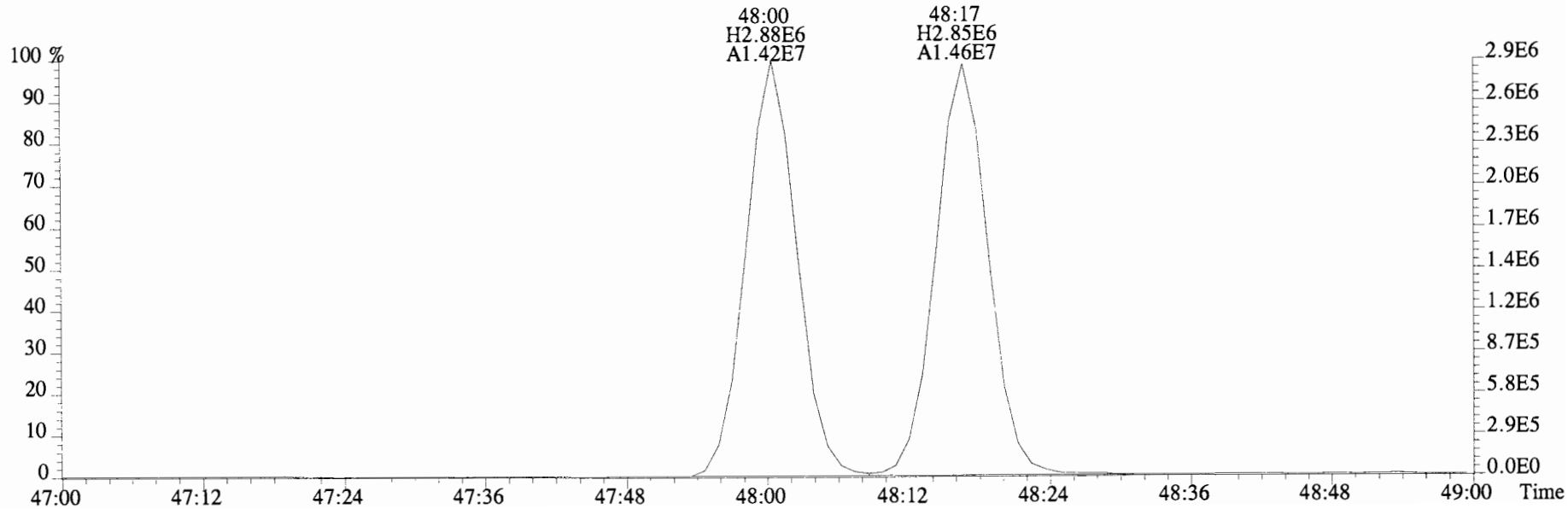
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5004.0,0.00%,F,F)



File:141226E1 #1-553 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-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%,5160.0,0.00%,F,F)

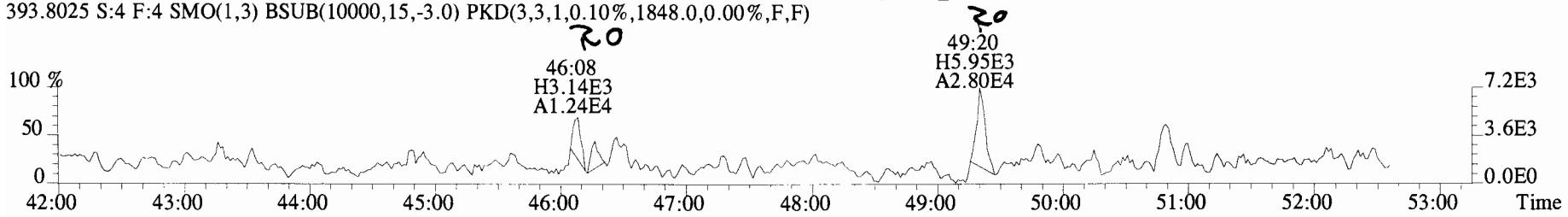


373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5004.0,0.00%,F,F)

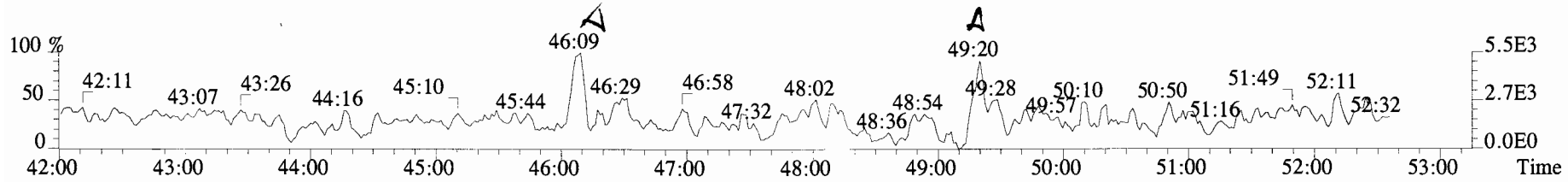


File:141226E1 #1-553 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1

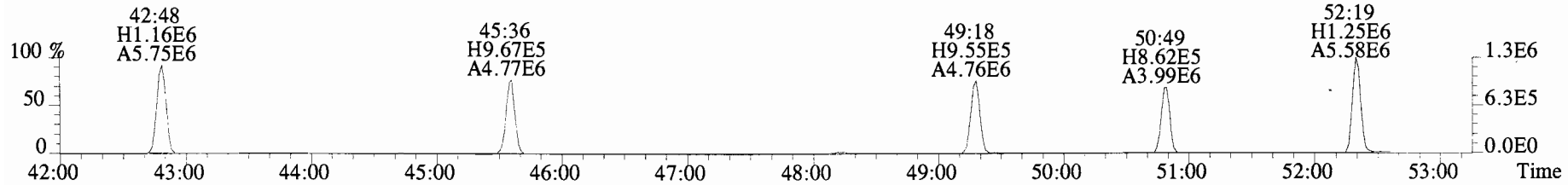
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1848.0,0.00%,F,F)



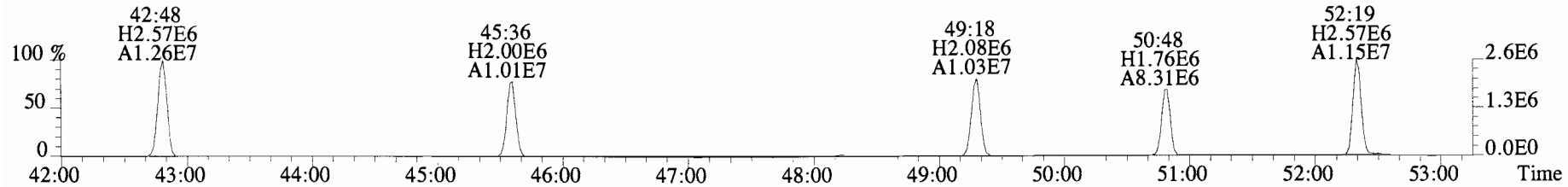
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2128.0,0.00%,F,F)



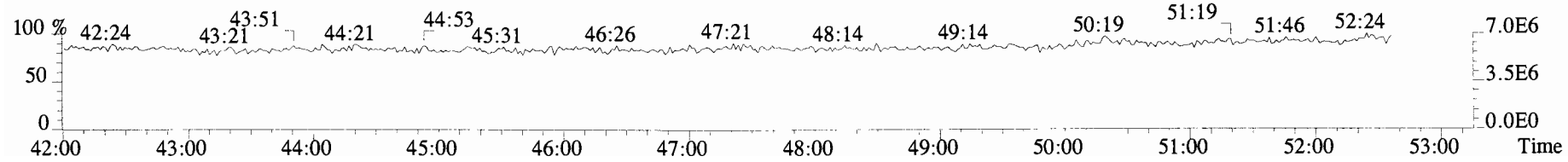
403.8457 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2636.0,0.00%,F,F)



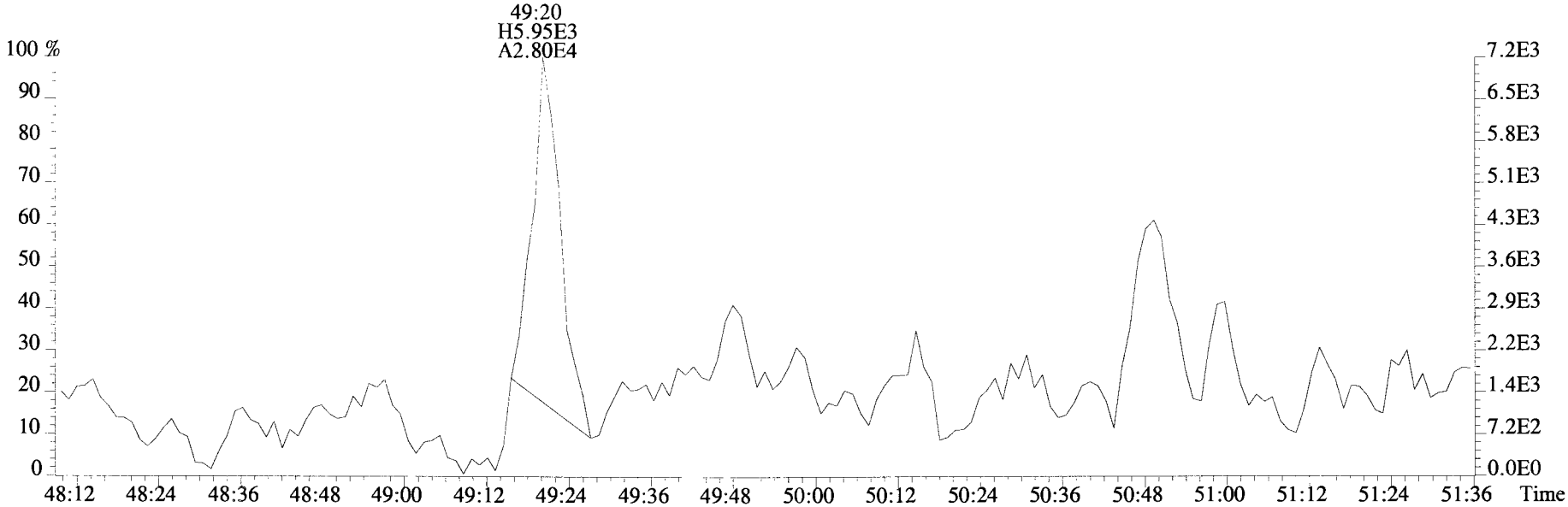
405.8428 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3036.0,0.00%,F,F)



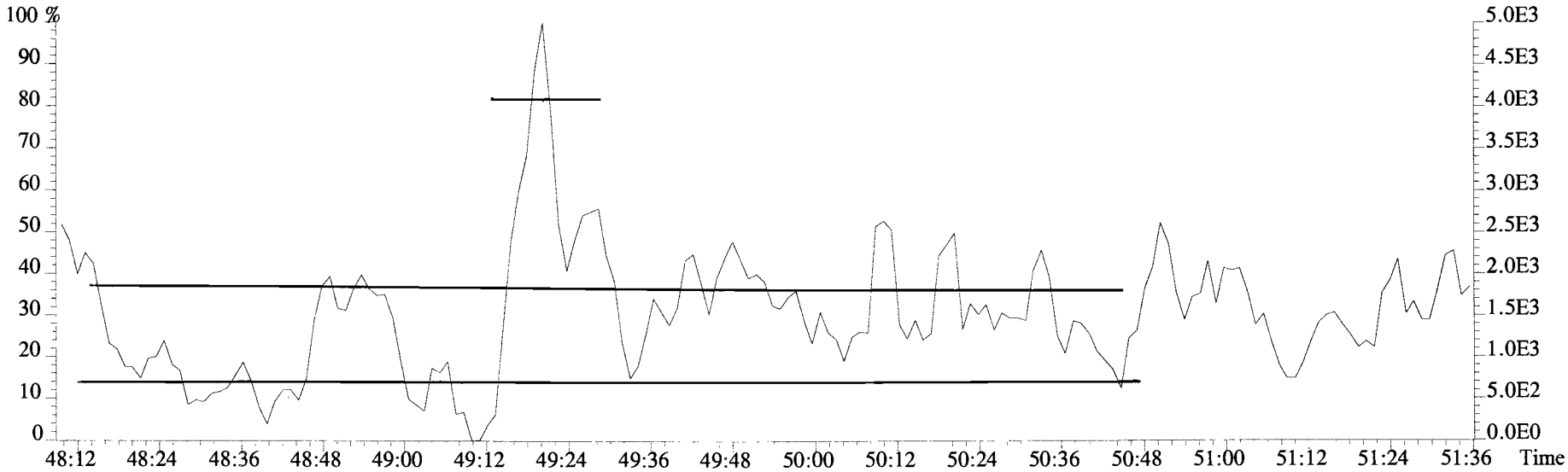
380.9760 S:4 F:4



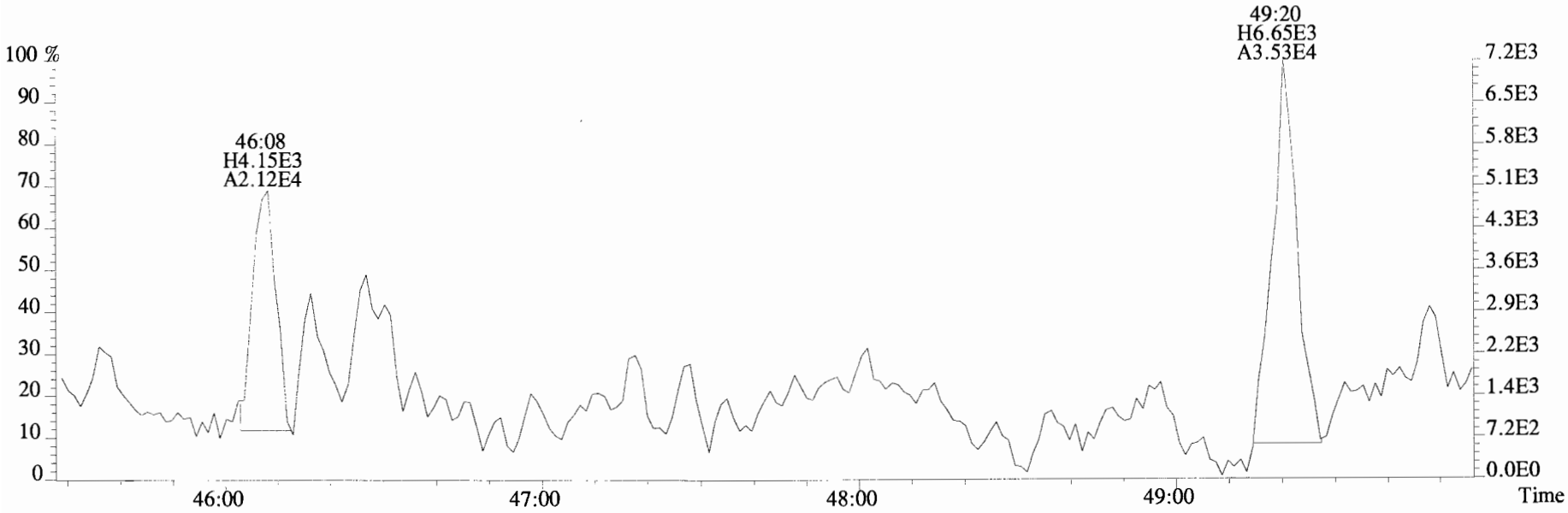
File:141226E1 #1-553 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1848.0,0.00%,F,F)



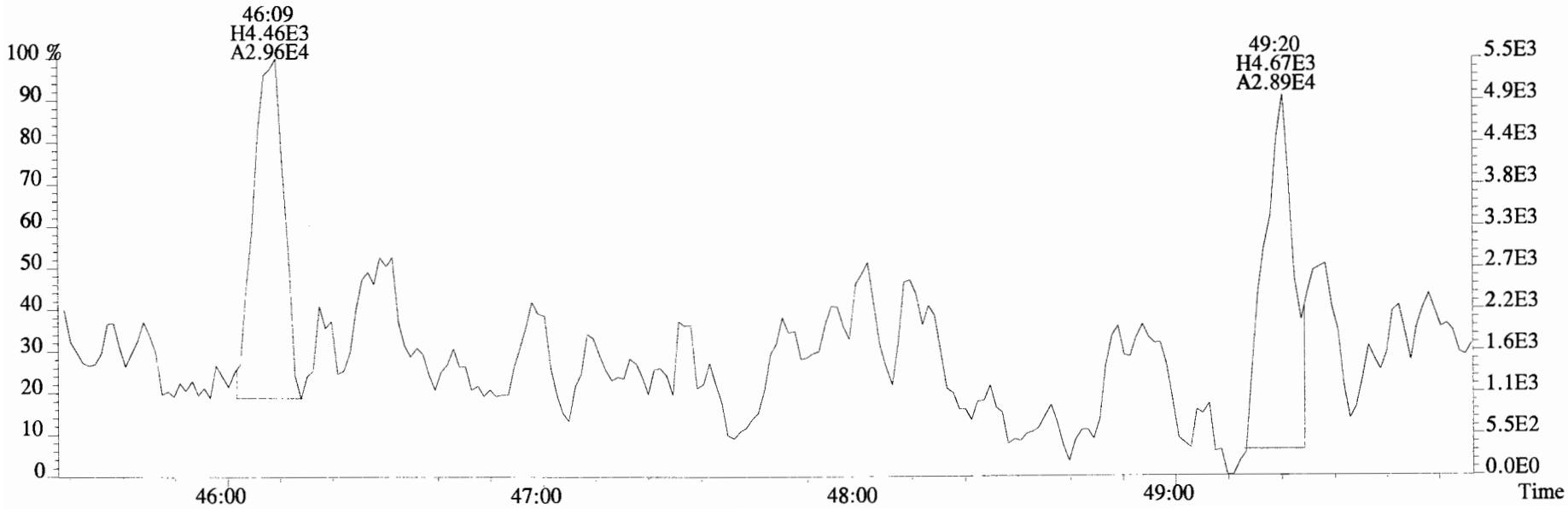
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2128.0,0.00%,F,F)



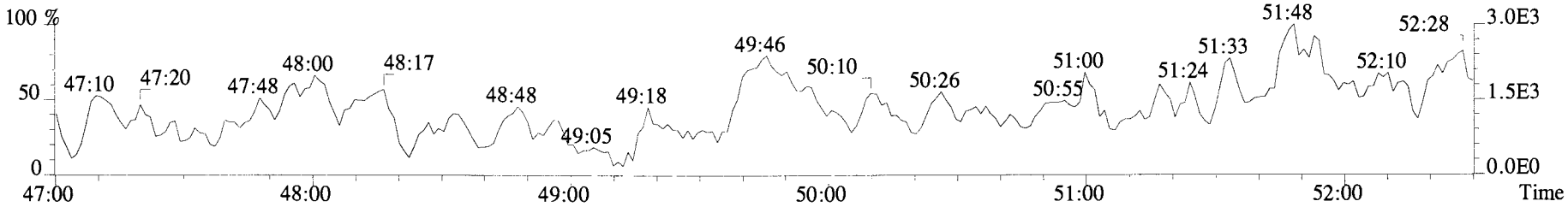
File:141226E1 #1-553 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1848.0,0.00%,F,F)



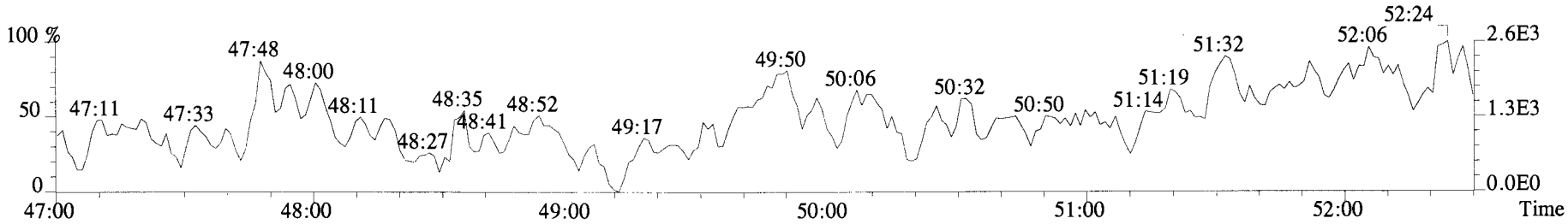
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2128.0,0.00%,F,F)



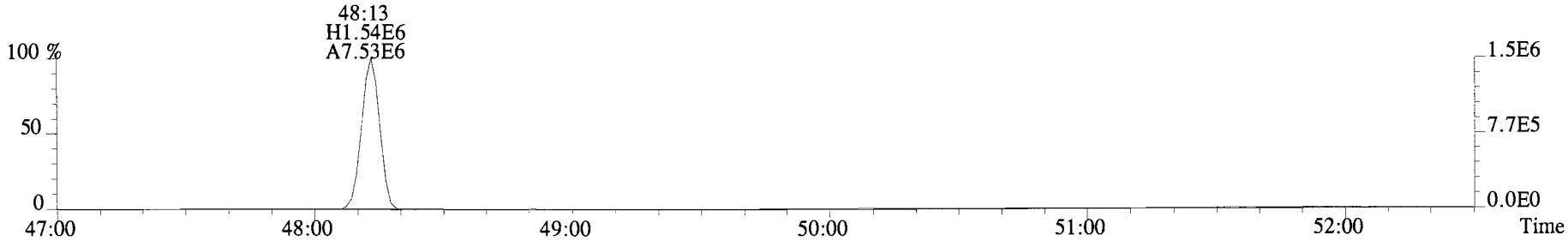
File:141226E1 #1-553 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
427.7635 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1664.0,0.00%,F,F)



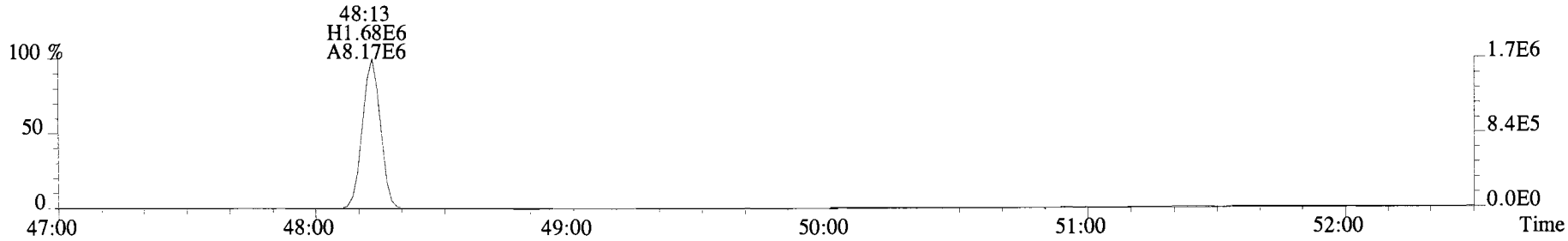
429.7606 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1620.0,0.00%,F,F)



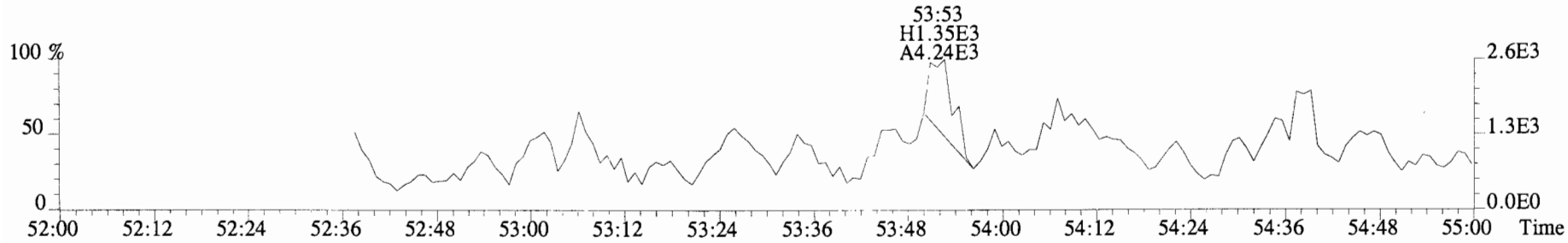
439.8038 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2180.0,0.00%,F,F)



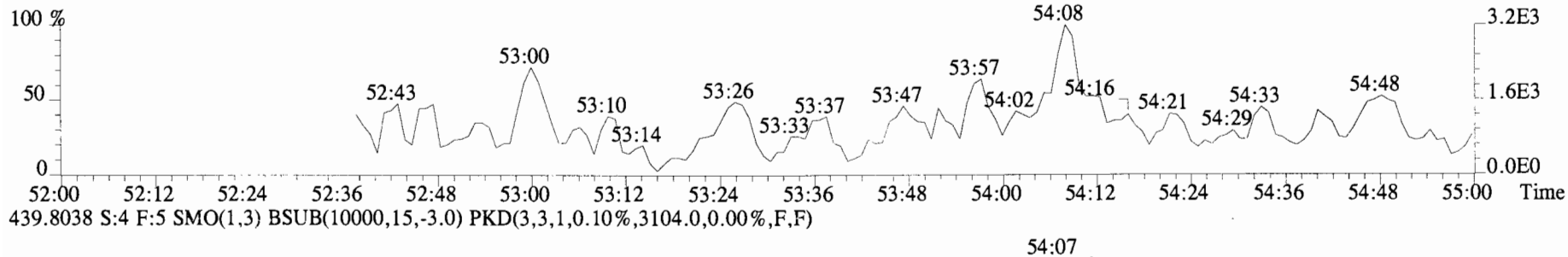
441.8008 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1420.0,0.00%,F,F)



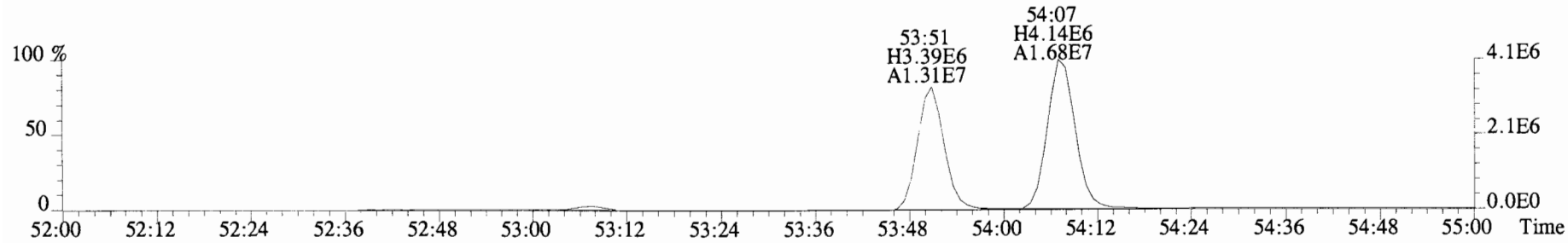
File:141226E1 #1-429 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
427.7635 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1312.0,0.00%,F,F)



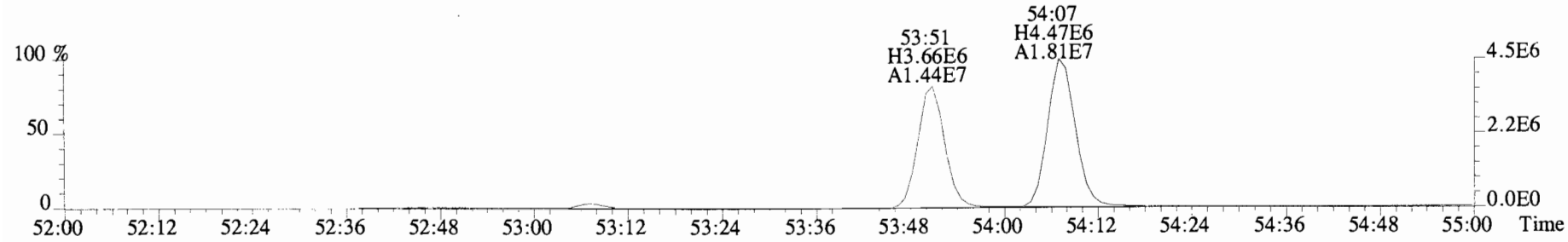
429.7606 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1292.0,0.00%,F,F)



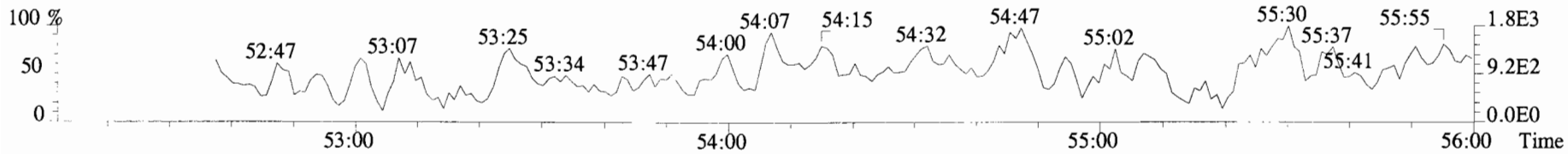
439.8038 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3104.0,0.00%,F,F)



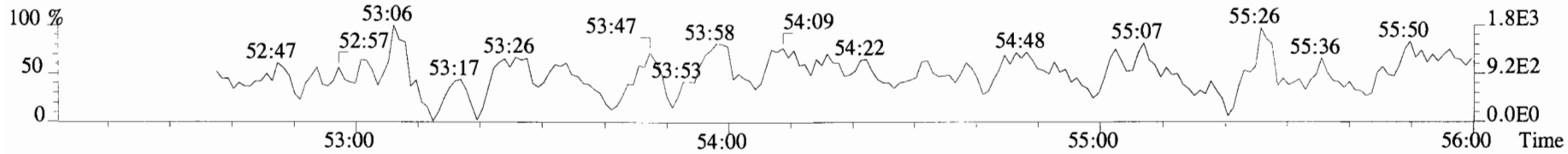
441.8008 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2512.0,0.00%,F,F)



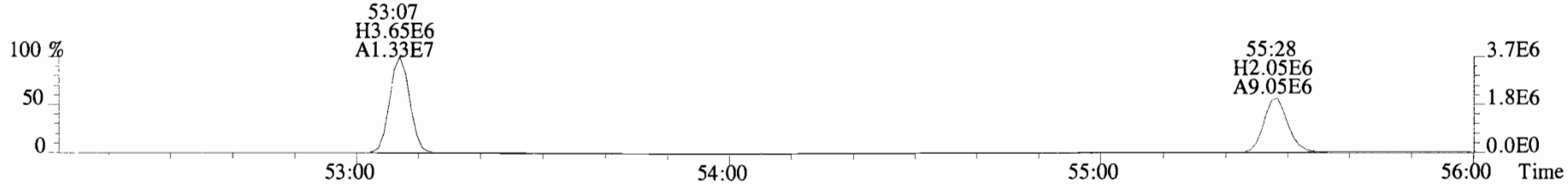
File:141226E1 #1-429 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
463.7216 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1188.0,0.00%,F,F)



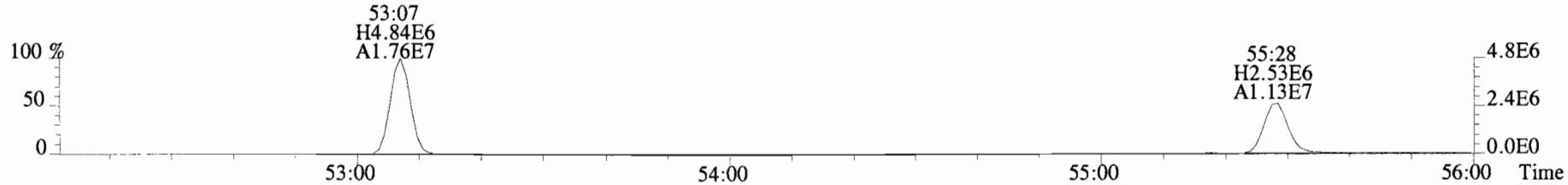
465.7186 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1196.0,0.00%,F,F)



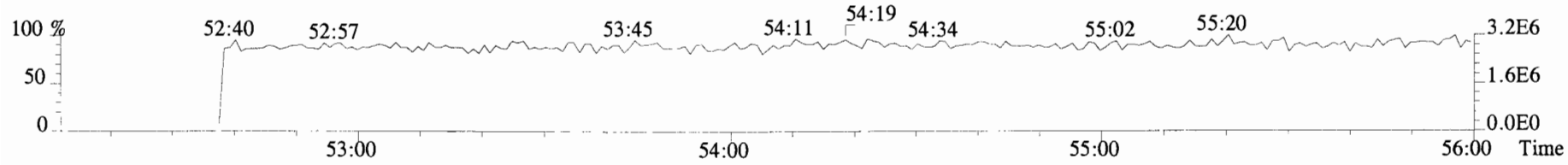
473.7648 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6584.0,0.00%,F,F)



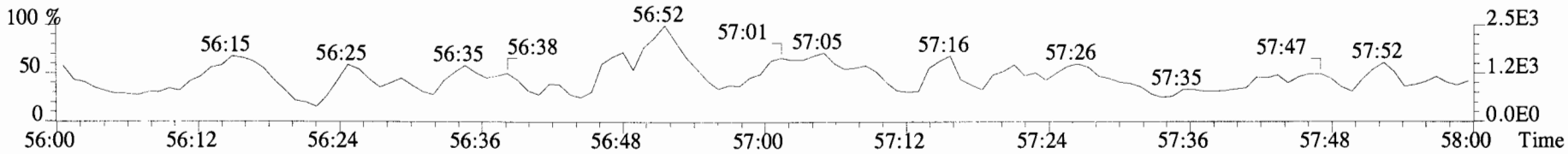
475.7619 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8648.0,0.00%,F,F)



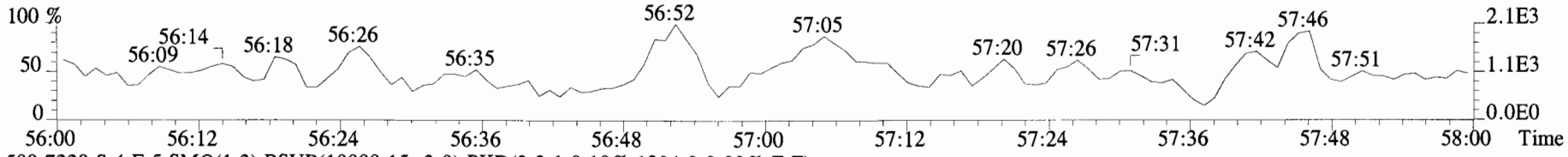
492.9697 S:4 F:5



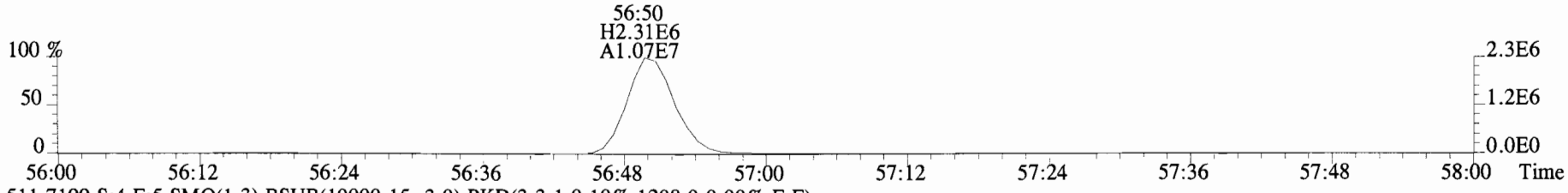
File:141226E1 #1-429 Acq:26-DEC-2014 14:35:58 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BLK1 Method Blank 1 Exp:PCB_ZB1
497.6826 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1284.0,0.00%,F,F)



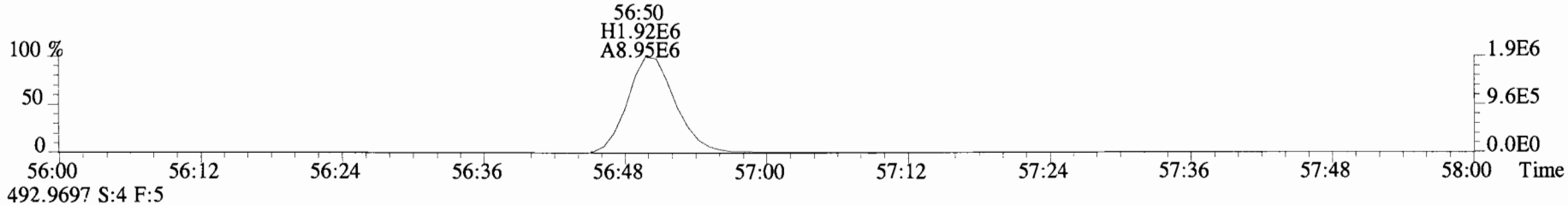
499.6797 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1184.0,0.00%,F,F)



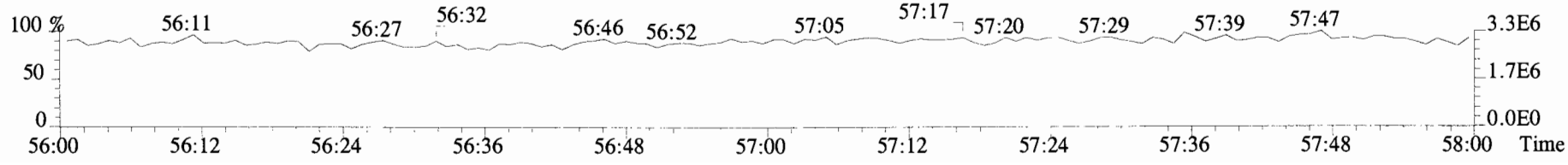
509.7229 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1304.0,0.00%,F,F)



511.7199 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1208.0,0.00%,F,F)



492.9697 S:4 F:5



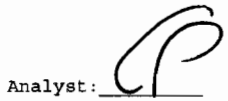
EPA METHOD 1668C PCB ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory OPR Data Filename: B4L0127-BS1

Matrix : AQUEOUS Ext. Date: 23-DEC-14 Analysis Date: 26-DEC-14 Time: 12:27:01

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	50.4	30.0-67.5	13C-PCB-1	100	74.0	15-145	13C-PCB-79	100	99.8	40-145
PCB-3	50	50.7	30.0-67.5	13C-PCB-3	100	71.7	15-145	13C-PCB-178	100	88.8	40-145
PCB-4/10	200	248.2	120-270	13C-PCB-4	100	69.1	15-145				
PCB-15	100	120.4	60.0-135	13C-PCB-11	100	76.0	15-145				
PCB-19	50	53.7	30.0-67.5	13C-PCB-19	100	65.3	15-145				
PCB-37	50	54.2	30.0-67.5	13C-PCB-37	100	87.8	15-145				
PCB-54	50	54.3	30.0-67.5	13C-PCB-54	100	74.9	15-145				
PCB-81	50	53.7	30.0-67.5	13C-PCB-81	100	93.2	40-145				
PCB-77	50	54.2	30.0-67.5	13C-PCB-77	100	94.5	40-145				
PCB-104	50	56.2	30.0-67.5	13C-PCB-104	100	74.5	40-145				
PCB-123	50	59.6	30.0-67.5	13C-PCB-123	100	90.5	40-145				
PCB-106/118	100	112.9	60.0-135	13C-PCB-118	100	93.2	40-145				
PCB-114	50	60.0	30.0-67.5	13C-PCB-114	100	100.9	40-145				
PCB-105	50	60.8	30.0-67.5	13C-PCB-105	100	105.8	40-145				
PCB-126	50	59.1	30.0-67.5	13C-PCB-126	100	110.8	40-145				
PCB-155	50	55.4	30.0-67.5	13C-PCB-155	100	71.3	40-145				
PCB-167	50	57.3	30.0-67.5	13C-PCB-167	100	95.1	40-145				
PCB-156	50	57.7	30.0-67.5	13C-PCB-156	100	96.4	40-145				
PCB-157	50	58.1	30.0-67.5	13C-PCB-157	100	95.5	40-145				
PCB-169	50	60.6	30.0-67.5	13C-PCB-169	100	92.5	40-145				
PCB-188	50	54.7	30.0-67.5	13C-PCB-188	100	74.6	40-145				
PCB-189	50	59.5	30.0-67.5	13C-PCB-189	100	86.2	40-145				
PCB-202	50	54.3	30.0-67.5	13C-PCB-202	100	71.5	40-145				
PCB-205	50	59.0	30.0-67.5	13C-PCB-194	100	92.1	40-145				
PCB-208	50	58.9	30.0-67.5	13C-PCB-208	100	70.1	40-145				
PCB-206	50	60.0	30.0-67.5	13C-PCB-206	100	82.2	40-145				
PCB-209	50	58.6	30.0-67.5	13C-PCB-209	100	86.9	40-145				

Analyst: 

Date: 12/30/14

Client ID: OPR Filename: 141226E1 S:2 Acq:26-DEC-14 12:27:01 ConCal: ST141226E1-1
Lab ID: B4L0127-BS1 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	2.47e+07	3.05	y 16:08	1.25	50.4		*	2.5	*	1.000	0.996	1.006
Mono	PCB-2	2.44e+07	3.01	y 18:31	1.18	52.4		*	2.5	*	0.988	0.983	0.993
Mono	PCB-3	2.43e+07	3.02	y 18:45	1.22	50.7		*	2.5	*	1.001	0.996	1.006
Di	PCB-4/10	8.64e+07	1.64	y 20:07	1.55	248		*	2.5	*	1.003	0.998	1.008
Di	PCB-7/9	1.06e+08	1.63	y 21:53	1.27	241		*	2.5	*	0.868	0.865	0.873
Di	PCB-6	5.36e+07	1.68	y 22:32	1.26	122		*	2.5	*	0.894	0.890	0.899
Di	PCB-5/8	1.08e+08	1.65	y 22:57	1.23	251		*	2.5	*	0.910	0.906	0.916
Di	PCB-14	6.09e+07	1.65	y 24:03	1.23	117		*	2.5	*	0.954	0.949	0.959
Di	PCB-11	5.76e+07	1.65	y 25:14	1.16	118		*	2.5	*	1.001	0.996	1.006
Di	PCB-12/13	1.13e+08	1.65	y 25:37	1.10	245		*	2.5	*	1.016	1.010	1.020
Di	PCB-15	6.13e+07	1.65	y 25:56	1.21	120		*	2.5	*	1.028	1.024	1.034
Tri	PCB-19	1.43e+07	1.07	y 24:13	1.30	53.7		*	2.5	*	1.001	0.996	1.006
Tri	PCB-30	2.09e+07	1.08	y 25:07	1.83	55.5		*	2.5	*	1.038	1.032	1.042
Tri	PCB-18	1.54e+07	1.08	y 25:51	0.86	55.5		*	2.5	*	0.953	0.949	0.959
Tri	PCB-17	1.61e+07	1.08	y 26:02	0.90	55.4		*	2.5	*	0.960	0.955	0.965
Tri	PCB-24/27	4.41e+07	1.08	y 26:36	1.18	116		*	2.5	*	0.981	0.976	0.986
Tri	PCB-16/32	3.77e+07	1.08	y 27:07	1.03	113		*	2.5	*	1.000	0.995	1.005
Tri	PCB-34	2.92e+07	1.06	y 27:55	1.26	60.1		*	2.5	*	0.960	0.956	0.966
Tri	PCB-23	2.57e+07	1.08	y 28:01	1.31	50.8		*	2.5	*	0.964	0.959	0.969
Tri	PCB-29	2.68e+07	1.08	y 28:15	1.33	52.3		*	2.5	*	0.972	0.967	0.977
Tri	PCB-26	2.59e+07	1.08	y 28:28	1.29	52.1		*	2.5	*	0.979	0.974	0.984
Tri	PCB-25	2.67e+07	1.06	y 28:37	1.34	51.6		*	2.5	*	0.985	0.980	0.990
Tri	PCB-31	2.74e+07	1.07	y 28:59	1.42	50.1		*	2.5	*	0.997	0.992	1.002
Tri	PCB-28	2.93e+07	1.08	y 29:04	1.38	55.2		*	2.5	*	1.000	0.996	1.006
Tri	PCB-20/21/33	8.14e+07	1.06	y 29:42	1.31	161		*	2.5	*	1.022	1.017	1.027
Tri	PCB-22	3.05e+07	1.04	y 30:08	1.32	59.8		*	2.5	*	1.037	1.032	1.042
Tri	PCB-36	2.71e+07	1.07	y 30:44	1.38	51.3		*	2.5	*	0.933	0.929	0.939
Tri	PCB-39	2.83e+07	1.07	y 31:13	1.42	52.0		*	2.5	*	0.948	0.943	0.953
Tri	PCB-38	2.73e+07	1.08	y 31:59	1.35	52.6		*	2.5	*	0.971	0.967	0.976
Tri	PCB-35	2.78e+07	1.08	y 32:31	1.38	52.8		*	2.5	*	0.987	0.982	0.992
Tri	PCB-37	2.89e+07	1.06	y 32:56	1.39	54.2		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-54	1.76e+07	0.77	y 27:57	1.20	54.3		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-50	1.34e+07	0.81	y 29:08	0.97	51.1		*	2.5	*	1.042	1.037	1.047
Tetra	PCB-53	1.42e+07	0.78	y 29:46	1.19	52.2		*	2.5	*	0.946	0.941	0.951
Tetra	PCB-51	1.51e+07	0.81	y 30:07	1.15	57.2		*	2.5	*	0.957	0.952	0.962
Tetra	PCB-45	1.16e+07	0.79	y 30:33	0.97	52.3		*	2.5	*	0.971	0.966	0.976
Tetra	PCB-46	1.06e+07	0.75	y 31:01	0.95	48.7		*	2.5	*	0.986	0.982	0.992

Integrations by:
Analyst: CP
Date: 12/30/14

Reviewed by: [signature] Date: 12/31/14

Client ID: OPR | Filename: 141226E1 | S:2 | Acq:26-DEC-14 12:27:01 | ConCal: ST141226E1-1

Lab ID: B4L0127-BS1 | 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	3.02e+07	0.78	y 31:30	1.28	103		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-73	1.86e+07	0.77	y 31:36	1.37	59.0		*	2.5	*	1.004	1.000	1.010
Tetra	PCB-43/49	2.79e+07	0.78	y 31:47	1.11	109		*	2.5	*	1.010	1.005	1.015
Tetra	PCB-47	1.39e+07	0.78	y 31:59	1.13	50.2		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-48/75	3.34e+07	0.80	y 32:06	1.30	105		*	2.5	*	1.004	0.999	1.009
Tetra	PCB-65	1.80e+07	0.80	y 32:22	1.33	55.3		*	2.5	*	1.012	1.007	1.017
Tetra	PCB-62	1.56e+07	0.78	y 32:29	1.29	49.6		*	2.5	*	1.016	1.011	1.021
Tetra	PCB-44	1.29e+07	0.79	y 32:47	0.94	56.0		*	2.5	*	1.025	1.020	1.030
Tetra	PCB-42/59	3.31e+07	0.79	y 33:01	1.22	111		*	2.5	*	1.032	1.028	1.038
Tetra	PCB-41/64/71/72	7.30e+07	0.79	y 33:36	1.31	228		*	2.5	*	1.051	1.046	1.056
Tetra	PCB-68	2.05e+07	0.79	y 33:51	1.49	56.6		*	2.5	*	1.058	1.054	1.064
Tetra	PCB-40	1.11e+07	0.80	y 34:04	0.82	55.3		*	2.5	*	1.065	1.061	1.071
Tetra	PCB-57	2.08e+07	0.80	y 34:26	1.11	53.1		*	2.5	*	0.970	0.965	0.975
Tetra	PCB-67	1.96e+07	0.77	y 34:44	1.07	51.8		*	2.5	*	0.979	0.974	0.984
Tetra	PCB-58	2.19e+07	0.78	y 34:51	1.10	56.6		*	2.5	*	0.982	0.977	0.987
Tetra	PCB-63	2.14e+07	0.81	y 35:00	1.12	54.5		*	2.5	*	0.986	0.982	0.992
Tetra	PCB-74	2.26e+07	0.83	y 35:17	1.20	53.5		*	2.5	*	0.994	0.990	1.000
Tetra	PCB-61/70	4.07e+07	0.76	y 35:28	1.08	107		*	2.5	*	1.000	0.994	1.004
Tetra	PCB-76/66	4.33e+07	0.78	y 35:41	1.14	108		*	2.5	*	1.006	1.001	1.011
Tetra	PCB-80	2.41e+07	0.79	y 35:54	1.28	52.6		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-55	2.13e+07	0.80	y 36:14	1.11	53.5		*	2.5	*	1.009	1.005	1.015
Tetra	PCB-56/60	4.27e+07	0.78	y 36:43	1.09	110		*	2.5	*	1.023	1.018	1.028
Tetra	PCB-79	2.35e+07	0.79	y 37:48	1.12	58.2		*	2.5	*	1.053	1.048	1.058
Tetra	PCB-78	2.28e+07	0.79	y 38:29	1.24	55.3		*	2.5	*	0.987	0.982	0.992
Tetra	PCB-81	2.47e+07	0.79	y 39:01	1.38	53.7		*	2.5	*	1.000	0.995	1.005
Tetra	PCB-77	2.35e+07	0.82	y 39:36	1.21	54.2		*	2.5	*	1.000	0.995	1.005
Penta	PCB-104	1.28e+07	1.59	y 32:39	1.26	56.2		*	2.5	*	1.001	0.996	1.006
Penta	PCB-96	1.21e+07	1.58	y 33:54	1.09	60.8		*	2.5	*	1.039	1.034	1.044
Penta	PCB-103	1.01e+07	1.60	y 34:27	0.93	59.5		*	2.5	*	1.056	1.050	1.060
Penta	PCB-100	1.11e+07	1.66	y 34:47	1.00	60.9		*	2.5	*	1.066	1.061	1.071
Penta	PCB-94	9.59e+06	1.62	y 35:16	1.11	58.1		*	2.5	*	0.986	0.981	0.991
Penta	PCB-95/98/102	3.09e+07	1.63	y 35:45	1.21	171		*	2.5	*	0.999	0.994	1.004
Penta	PCB-93	8.85e+06	1.67	y 35:53	1.13	52.5		*	2.5	*	1.003	0.998	1.008
Penta	PCB-88/91	1.96e+07	1.62	y 36:10	1.02	129		*	2.5	*	1.011	1.006	1.016
Penta	PCB-121	1.34e+07	1.65	y 36:17	1.90	47.3		*	2.5	*	1.014	1.009	1.019
Penta	PCB-84/92	1.95e+07	1.57	y 37:06	1.05	111		*	2.5	*	0.990	0.986	0.996
Penta	PCB-89	9.52e+06	1.59	y 37:17	1.02	56.0		*	2.5	*	0.995	0.991	1.001

Analyst: CP

Date: 12/30/14

Client ID: OPR | Filename: 141226E1 | S:2 | Acq:26-DEC-14 12:27:01 | ConCal: ST141226E1-1

Lab ID: B4L0127-BS1 | 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	2.22e+07	1.63	y 37:29	1.19	112		*	2.5	*	1.000	0.996	1.006
Penta	PCB-113	1.24e+07	1.62	y 37:42	1.35	54.9		*	2.5	*	1.006	1.002	1.012
Penta	PCB-99	1.27e+07	1.60	y 37:48	1.29	58.8		*	2.5	*	1.009	1.005	1.015
Penta	PCB-119	1.46e+07	1.65	y 38:16	1.72	54.7		*	2.5	*	0.987	0.982	0.992
Penta	PCB-108/112	2.25e+07	1.63	y 38:26	1.29	113		*	2.5	*	0.991	0.986	0.996
Penta	PCB-83	1.32e+07	1.57	y 38:35	1.52	56.1		*	2.5	*	0.995	0.991	1.001
Penta	PCB-97	1.09e+07	1.55	y 38:47	1.25	56.0		*	2.5	*	1.000	0.996	1.006
Penta	PCB-86	8.83e+06	1.56	y 38:55	1.02	55.6		*	2.5	*	1.004	1.000	1.010
Penta	PCB-87/117/125	3.96e+07	1.60	y 39:03	1.56	164		*	2.5	*	1.007	1.002	1.012
Penta	PCB-111/115	2.91e+07	1.60	y 39:12	1.75	107		*	2.5	*	1.011	1.007	1.017
Penta	PCB-85/116	2.33e+07	1.64	y 39:20	1.30	115		*	2.5	*	1.015	1.010	1.020
Penta	PCB-120	1.53e+07	1.64	y 39:35	1.78	55.4		*	2.5	*	1.021	1.016	1.026
Penta	PCB-110	1.49e+07	1.64	y 39:43	1.68	57.2		*	2.5	*	1.025	1.020	1.030
Penta	PCB-82	8.89e+06	1.60	y 40:20	0.74	57.2		*	2.5	*	0.976	0.972	0.982
Penta	PCB-124	1.63e+07	1.60	y 41:01	1.32	58.6		*	2.5	*	0.993	0.988	0.998
Penta	PCB-107/109	3.02e+07	1.62	y 41:10	1.22	117		*	2.5	*	0.996	0.991	1.001
Penta	PCB-123	1.53e+07	1.60	y 41:21	1.22	59.6		*	2.5	*	1.001	0.995	1.005
Penta	PCB-106/118	3.11e+07	1.62	y 41:32	1.22	113		*	2.5	*	1.001	0.996	1.006
Penta	PCB-114	2.53e+07	1.64	y 42:11	1.36	60.0		*	2.5	*	1.000	0.995	1.005
Penta	PCB-122	2.25e+07	1.68	y 42:19	1.24	58.3		*	2.5	*	1.004	0.999	1.009
Penta	PCB-105	2.61e+07	1.63	y 43:02	1.28	60.8		*	2.5	*	1.000	0.995	1.005
Penta	PCB-127	2.49e+07	1.63	y 43:22	1.14	59.9		*	2.5	*	1.000	0.995	1.005
Penta	PCB-126	2.50e+07	1.64	y 45:16	1.28	59.1		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-155	9.15e+06	1.31	y 37:02	1.14	55.4		*	2.5	*	1.001	0.966	1.006
Hexa	PCB-150	9.38e+06	1.27	y 38:18	1.06	60.5		*	2.5	*	1.035	1.030	1.040
Hexa	PCB-152	9.75e+06	1.26	y 38:46	1.10	61.0		*	2.5	*	1.048	1.043	1.053
Hexa	PCB-145	9.64e+06	1.27	y 39:13	1.09	60.6		*	2.5	*	1.060	1.055	1.065
Hexa	PCB-136	1.02e+07	1.28	y 39:32	1.08	64.4		*	2.5	*	1.068	1.064	1.074
Hexa	PCB-148	6.60e+06	1.27	y 39:38	0.74	61.2		*	2.5	*	1.071	1.066	1.076
Hexa	PCB-154	7.96e+06	1.26	y 40:08	0.88	61.9		*	2.5	*	1.085	1.079	1.089
Hexa	PCB-151	7.30e+06	1.23	y 40:46	0.81	62.0		*	2.5	*	1.102	1.097	1.107
Hexa	PCB-135	6.94e+06	1.28	y 40:59	0.78	61.2		*	2.5	*	1.108	1.101	1.113
Hexa	PCB-144	7.34e+06	1.25	y 41:06	0.82	61.5		*	2.5	*	1.111	1.105	1.116
Hexa	PCB-147	8.16e+06	1.31	y 41:13	0.83	67.6		*	2.5	*	1.114	1.011	1.120
Hexa	PCB-139/149	1.57e+07	1.28	y 41:29	0.84	128		*	2.5	*	1.121	1.115	1.127
Hexa	PCB-140	7.21e+06	1.30	y 41:40	0.79	63.1		*	2.5	*	1.126	1.120	1.132
Hexa	PCB-134/143	2.57e+07	1.26	y 42:06	0.93	108		*	2.5	*	0.975	0.970	0.980

Analyst: CC

Date: 12/30/14

Client ID: OPR Filename: 141226E1 S:2 Acq:26-DEC-14 12:27:01 ConCal: ST141226E1-1
Lab ID: B4L0127-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000 EndCAL: NA

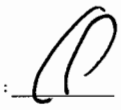
Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	2.58e+07	1.26	y	42:23	0.95	106		*	2.5	*	0.981	0.977	0.987
Hexa	PCB-131	1.25e+07	1.25	y	42:34	0.91	53.1		*	2.5	*	0.986	0.981	0.991
Hexa	PCB-146/165	3.30e+07	1.28	y	42:47	1.16	111		*	2.5	*	0.991	0.986	0.996
Hexa	PCB-132/161	3.24e+07	1.26	y	43:02	1.11	113		*	2.5	*	0.997	0.992	1.002
Hexa	PCB-153	1.70e+07	1.26	y	43:12	1.18	56.0		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-168	1.94e+07	1.25	y	43:25	1.37	55.1		*	2.5	*	1.005	1.000	1.010
Hexa	PCB-141	1.35e+07	1.25	y	43:56	0.97	54.9		*	2.5	*	1.000	0.996	1.005
Hexa	PCB-137	1.54e+07	1.24	y	44:19	1.07	57.0		*	2.5	*	1.009	1.004	1.014
Hexa	PCB-130	1.30e+07	1.27	y	44:25	0.85	60.9		*	2.5	*	1.011	1.007	1.017
Hexa	PCB-138/163/164	5.36e+07	1.27	y	44:48	1.23	174		*	2.5	*	1.001	0.996	1.006
Hexa	PCB-158/160	3.79e+07	1.25	y	45:02	1.29	117		*	2.5	*	1.006	1.001	1.011
Hexa	PCB-129	1.29e+07	1.28	y	45:16	0.92	55.7		*	2.5	*	1.012	1.007	1.017
Hexa	PCB-166	1.84e+07	1.28	y	45:43	1.12	55.5		*	2.5	*	0.993	0.988	0.998
Hexa	PCB-159	1.97e+07	1.25	y	46:03	1.16	57.0		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-128/162	3.36e+07	1.24	y	46:20	1.02	111		*	2.5	*	1.006	1.002	1.012
Hexa	PCB-167	1.96e+07	1.30	y	46:44	1.06	57.3		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-156	2.09e+07	1.27	y	48:02	1.18	57.7		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-157	2.02e+07	1.27	y	48:17	1.08	58.1		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-169	1.93e+07	1.25	y	50:28	1.11	60.6		*	2.5	*	1.000	0.995	1.005
Hepta	PCB-188	1.37e+07	1.03	y	42:50	1.40	54.7		*	2.5	*	1.001	0.995	1.005
Hepta	PCB-184	1.23e+07	1.03	y	43:17	1.24	55.6		*	2.5	*	1.011	1.006	1.016
Hepta	PCB-179	1.33e+07	1.04	y	44:04	1.30	57.1		*	2.5	*	1.030	1.024	1.034
Hepta	PCB-176	1.42e+07	1.06	y	44:31	1.36	58.3		*	2.5	*	1.040	1.035	1.045
Hepta	PCB-186	1.37e+07	1.09	y	45:08	1.28	60.0		*	2.5	*	1.055	1.049	1.059
Hepta	PCB-178	9.99e+06	1.04	y	45:37	0.94	59.7		*	2.5	*	1.066	1.061	1.071
Hepta	PCB-175	1.09e+07	1.08	y	45:58	0.97	63.2		*	2.5	*	1.074	1.069	1.079
Hepta	PCB-182/187	2.27e+07	1.06	y	46:08	1.01	125		*	2.5	*	1.078	1.073	1.083
Hepta	PCB-183	1.17e+07	1.06	y	46:27	1.08	60.4		*	2.5	*	1.085	1.080	1.090
Hepta	PCB-185	1.03e+07	1.06	y	47:07	1.34	51.9		*	2.5	*	0.956	0.951	0.961
Hepta	PCB-174	1.14e+07	1.05	y	47:29	1.34	57.4		*	2.5	*	0.963	0.958	0.968
Hepta	PCB-181	1.05e+07	1.10	y	47:35	1.36	52.0		*	2.5	*	0.966	0.961	0.971
Hepta	PCB-177	1.01e+07	1.05	y	47:45	1.24	55.1		*	2.5	*	0.969	0.964	0.974
Hepta	PCB-171	1.03e+07	1.07	y	48:02	1.31	53.2		*	2.5	*	0.975	0.970	0.980
Hepta	PCB-173	9.04e+06	1.07	y	48:28	1.16	52.7		*	2.5	*	0.983	0.979	0.989
Hepta	PCB-172	1.01e+07	1.07	y	48:55	1.22	55.8		*	2.5	*	0.993	0.988	0.998
Hepta	PCB-192	1.27e+07	1.06	y	49:07	1.53	56.0		*	2.5	*	0.997	0.991	1.001
Hepta	PCB-180	1.18e+07	1.02	y	49:19	1.43	56.0		*	2.5	*	1.001	0.995	1.005

Analyst: LC

Date: 12/30/14

Client ID: OPR Filename: 141226E1 S:2 Acq:26-DEC-14 12:27:01 ConCal: ST141226E1-1
Lab ID: B4L0127-BS1 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	1.36e+07	1.09	y	49:31	1.65	55.5		*	2.5	*	1.005	0.999	1.009
Hepta	PCB-191	1.39e+07	1.09	y	49:47	1.67	56.2		*	2.5	*	1.010	1.004	1.014
Hepta	PCB-170	1.04e+07	1.05	y	50:50	1.50	58.3		*	2.5	*	1.000	0.995	1.005
Hepta	PCB-190	1.38e+07	1.05	y	51:00	2.02	57.5		*	2.5	*	1.004	0.998	1.008
Hepta	PCB-189	1.45e+07	1.06	y	52:21	1.54	59.5		*	2.5	*	1.000	0.995	1.005
Octa	PCB-202	8.60e+06	0.96	y	48:15	1.04	54.3		*	2.5	*	1.000	0.995	1.005
Octa	PCB-201	9.45e+06	0.95	y	48:44	1.10	56.2		*	2.5	*	1.010	1.006	1.016
Octa	PCB-204	8.70e+06	0.91	y	48:53	0.99	57.4		*	2.5	*	1.013	1.009	1.019
Octa	PCB-197	9.52e+06	0.91	y	49:11	1.07	58.2		*	2.5	*	1.020	1.015	1.025
Octa	PCB-200	9.29e+06	0.89	y	50:05	1.02	59.9		*	2.5	*	1.038	1.032	1.044
Octa	PCB-198	6.35e+06	0.90	y	51:26	0.74	56.1		*	2.5	*	1.066	1.058	1.068
Octa	PCB-199	7.30e+06	0.87	y	51:33	0.73	65.7		*	2.5	*	1.069	1.060	1.070
Octa	PCB-196/203	1.45e+07	0.90	y	51:49	0.77	123		*	2.5	*	1.074	1.066	1.076
Octa	PCB-195	1.54e+07	0.89	y	53:00	1.20	53.8		*	2.5	*	0.984	0.979	0.989
Octa	PCB-194	1.72e+07	0.90	y	53:52	1.25	57.9		*	2.5	*	1.000	0.995	1.005
Octa	PCB-205	1.99e+07	0.91	y	54:09	1.41	59.0		*	2.5	*	1.006	1.001	1.011
Nona	PCB-208	1.43e+07	1.34	y	53:08	0.96	58.9		*	2.5	*	1.000	0.995	1.005
Nona	PCB-207	1.46e+07	1.37	y	53:27	0.92	63.6		*	2.5	*	1.006	1.001	1.011
Nona	PCB-206	1.07e+07	1.35	y	55:30	1.03	60.0		*	2.5	*	1.000	0.995	1.005
Deca	PCB-209	1.17e+07	1.19	y	56:52	1.18	58.6		*	2.5	*	1.000	0.995	1.005

Analyst: 

Date: 12/30/14

Client ID: OPR Filename: 141226E1 S:2 Acq:26-DEC-14 12:27:01 ConCal: ST141226E1-1

Lab ID: B4L0127-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	3.90e+07	3.27 y	0.89	16:08	0.623	0.622	0.628	74.0	74.0
13C-PCB-3	3.94e+07	3.43 y	0.93	18:44	0.723	0.721	0.729	71.7	71.7
13C-PCB-4	2.24e+07	1.59 y	0.55	20:03	0.774	0.772	0.780	69.1	69.1
13C-PCB-9	3.49e+07	1.61 y	0.83	21:51	0.843	0.840	0.848	71.3	71.3
13C-PCB-11	4.21e+07	1.60 y	0.94	25:13	0.973	0.968	0.978	76.0	76.0
13C-PCB-19	2.06e+07	1.08 y	0.53	24:12	0.934	0.929	0.939	65.3	65.3
13C-PCB-28	3.85e+07	1.11 y	0.89	29:04	1.004	0.999	1.009	82.7	82.7
13C-PCB-32	3.23e+07	1.11 y	0.81	27:07	1.046	1.041	1.051	67.1	67.1
13C-PCB-37	3.83e+07	1.07 y	0.83	32:56	1.138	1.131	1.143	87.8	87.8
13C-PCB-47	2.44e+07	0.78 y	0.74	31:59	0.871	0.867	0.875	77.0	77.0
13C-PCB-52	2.29e+07	0.83 y	0.71	31:28	0.857	0.853	0.861	76.1	76.1
13C-PCB-54	2.71e+07	0.82 y	0.85	27:57	0.761	0.758	0.766	74.9	74.9
13C-PCB-70	3.52e+07	0.81 y	0.94	35:29	0.966	0.961	0.971	87.4	87.4
13C-PCB-77	3.60e+07	0.81 y	0.89	39:36	1.079	1.073	1.083	94.5	94.5
13C-PCB-80	3.59e+07	0.81 y	0.96	35:54	0.978	0.972	0.982	87.5	87.5
13C-PCB-81	3.33e+07	0.81 y	0.84	39:00	1.062	1.057	1.067	93.2	93.2
13C-PCB-95	1.49e+07	1.62 y	0.74	35:47	0.913	0.908	0.918	81.7	81.7
13C-PCB-97	1.55e+07	1.63 y	0.69	38:46	0.989	0.984	0.994	91.9	91.9
13C-PCB-101	1.67e+07	1.64 y	0.79	37:28	0.956	0.951	0.961	86.8	86.8
13C-PCB-104	1.82e+07	1.65 y	1.00	32:38	0.832	0.829	0.837	74.5	74.5
13C-PCB-105	3.35e+07	1.68 y	1.24	43:01	0.929	0.924	0.934	106	106
13C-PCB-114	3.12e+07	1.65 y	1.21	42:10	0.910	0.905	0.915	101	101
13C-PCB-118	2.25e+07	1.60 y	0.98	41:30	1.059	1.054	1.064	93.2	93.2
13C-PCB-123	2.11e+07	1.57 y	0.95	41:19	1.054	1.049	1.059	90.5	90.5
13C-PCB-126	3.29e+07	1.64 y	1.16	45:16	0.977	0.972	0.982	111	111
13C-PCB-127	3.65e+07	1.65 y	1.34	43:21	0.936	0.931	0.941	106	106
13C-PCB-138	2.51e+07	1.30 y	1.04	44:45	0.966	0.961	0.971	94.1	94.1
13C-PCB-141	2.52e+07	1.31 y	1.07	43:55	0.948	0.943	0.953	91.8	91.8
13C-PCB-153	2.57e+07	1.33 y	1.11	43:11	0.932	0.927	0.937	90.3	90.3
13C-PCB-155	1.46e+07	1.35 y	0.83	37:00	0.944	0.939	0.949	71.3	71.3
13C-PCB-156	3.07e+07	1.27 y	1.24	48:01	1.037	1.032	1.042	96.4	96.4
13C-PCB-157	3.20e+07	1.30 y	1.31	48:17	1.042	1.037	1.047	95.5	95.5
13C-PCB-159	2.96e+07	1.30 y	1.20	46:03	0.994	0.989	0.999	96.5	96.5
13C-PCB-167	3.21e+07	1.30 y	1.32	46:44	1.009	1.004	1.014	95.1	95.1
13C-PCB-169	2.88e+07	1.32 y	1.22	50:27	1.089	1.082	1.092	92.5	92.5
13C-PCB-170	1.19e+07	0.46 y	0.54	50:49	1.097	1.089	1.101	86.9	86.9
13C-PCB-180	1.48e+07	0.48 y	0.67	49:17	1.064	1.059	1.069	85.8	85.8
13C-PCB-188	1.79e+07	0.47 y	0.94	42:48	0.924	0.919	0.929	74.6	74.6
13C-PCB-189	1.58e+07	0.45 y	0.72	52:20	1.130	1.120	1.132	86.2	86.2
13C-PCB-194	2.38e+07	0.96 y	0.81	53:51	0.995	0.990	1.000	92.1	92.1
13C-PCB-202	1.52e+07	0.92 y	0.83	48:14	1.041	1.036	1.046	71.5	71.5
13C-PCB-206	1.73e+07	0.79 y	0.66	55:29	1.025	1.021	1.031	82.2	82.2
13C-PCB-208	2.51e+07	0.76 y	1.12	53:07	0.981	0.976	0.986	70.1	70.1
13C-PCB-209	1.70e+07	1.22 y	0.61	56:51	1.050	1.044	1.054	86.9	86.9

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	4.27e+07	0.80 y	1.01	37:47	1.029	1.023	1.033	99.8	99.8
13C-PCB-178	1.43e+07	0.45 y	0.63	45:35	0.984	0.979	0.989	88.8	88.8

PS vs. IS

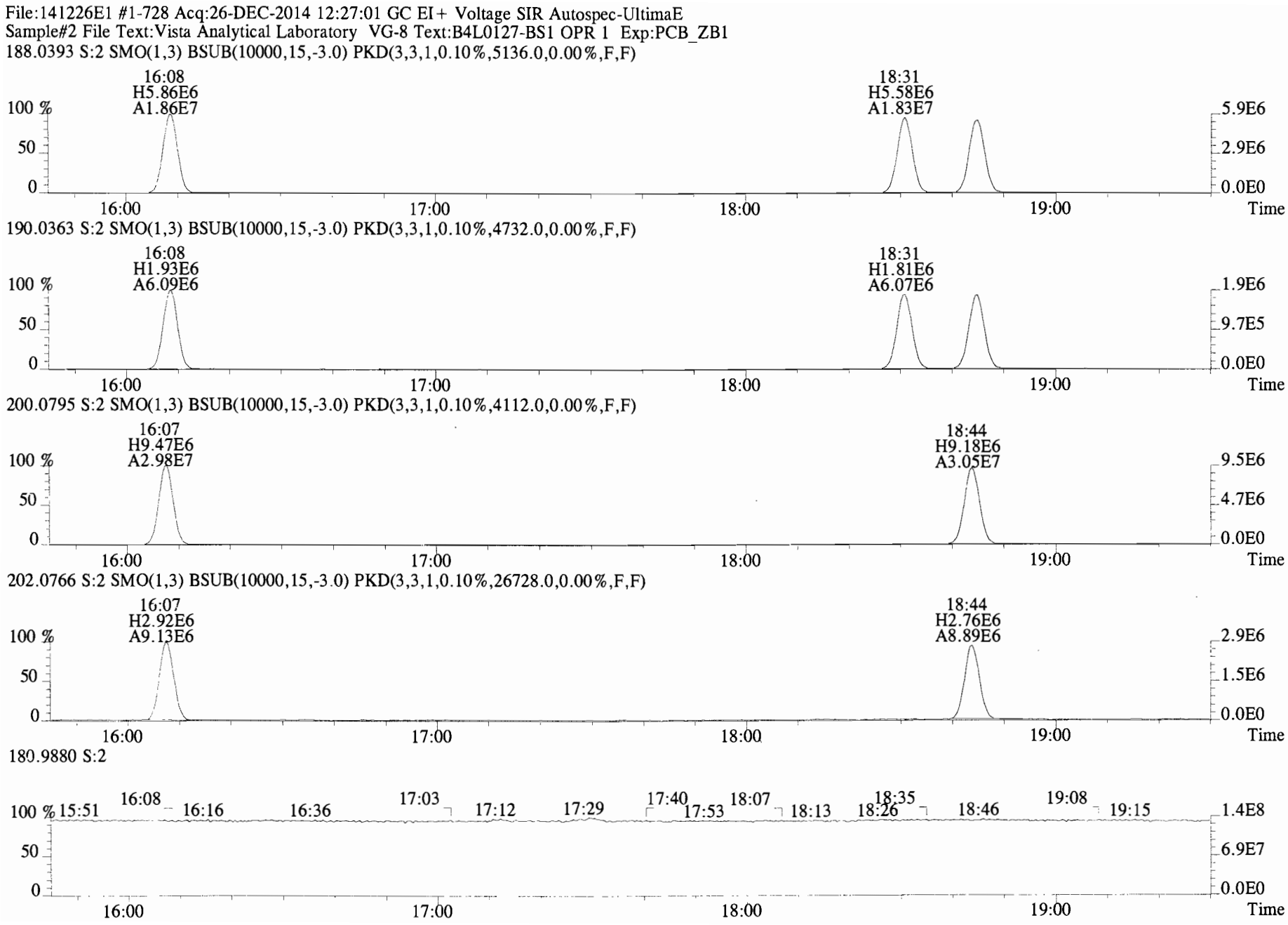
Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	4.27e+07	0.80 y	1.20	37:47	0.969	0.963	0.973	107	107
13C-PCB-178	1.43e+07	0.45 y	0.94	45:35	0.925	0.920	0.930	103	103

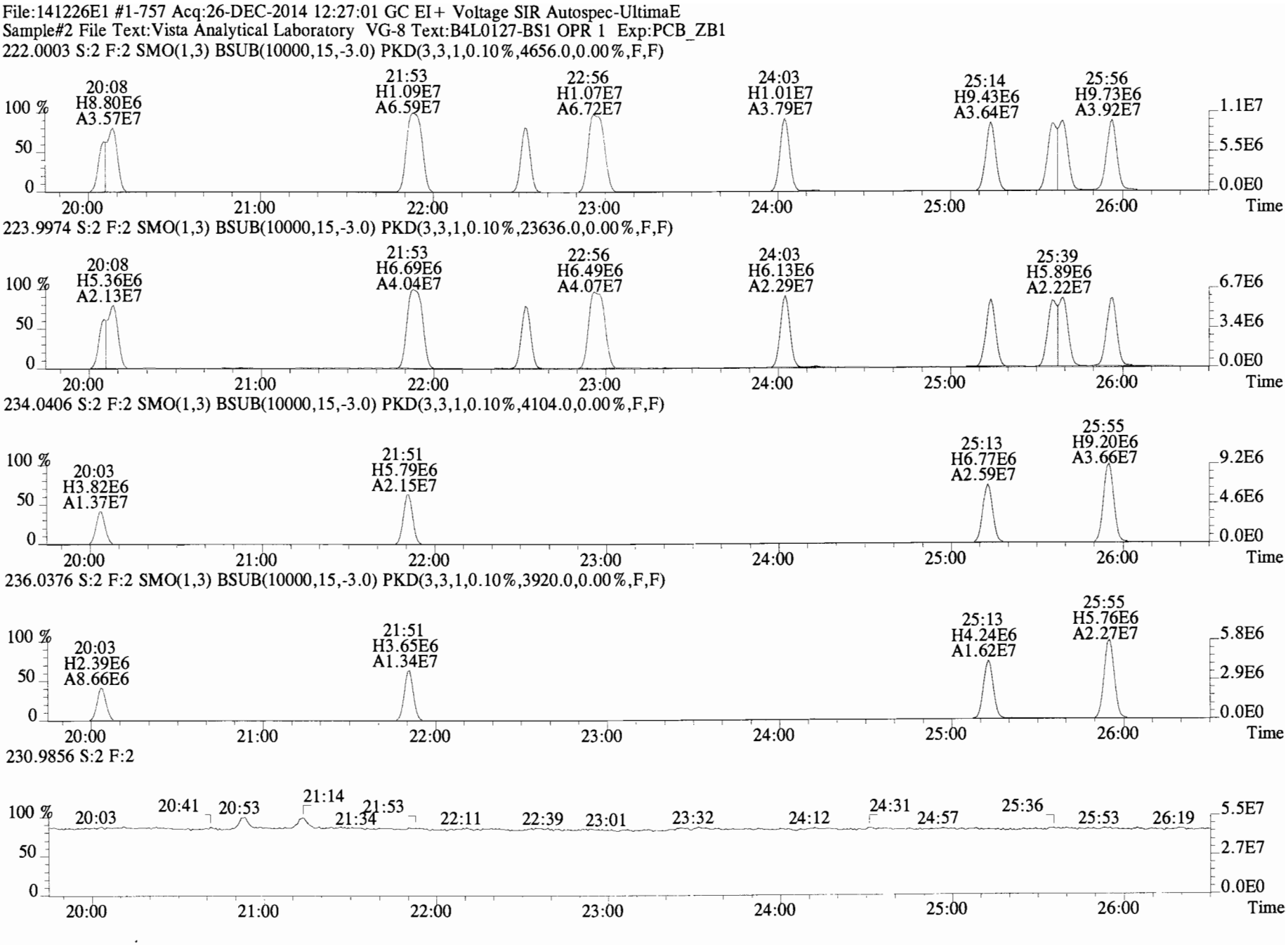
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	5.92e+07	1.61	y	1.00	25:55	100
13C-PCB-31	5.25e+07	1.07	y	1.00	28:57	100
13C-PCB-60	4.26e+07	0.78	y	1.00	36:43	100
13C-PCB-111	2.45e+07	1.62	y	1.00	39:12	100
13C-PCB-128	2.56e+07	1.31	y	1.00	46:19	100
13C-PCB-205	3.19e+07	0.94	y	1.00	54:08	100

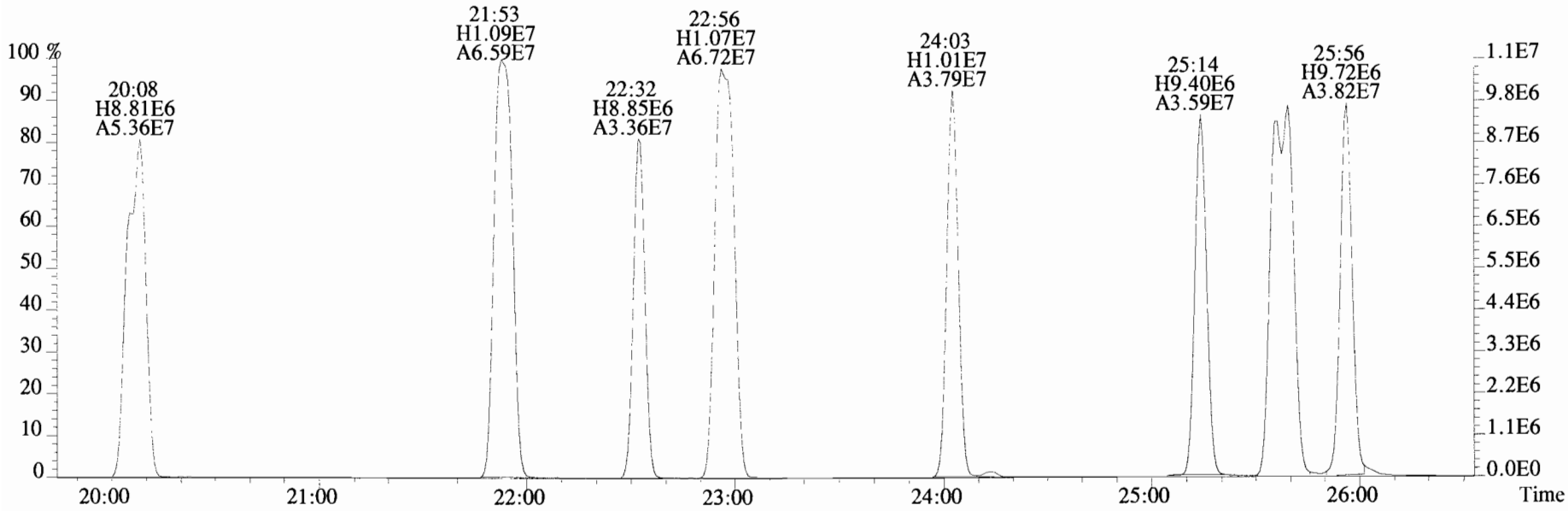
Analyst: _____

Date: 12/30/14

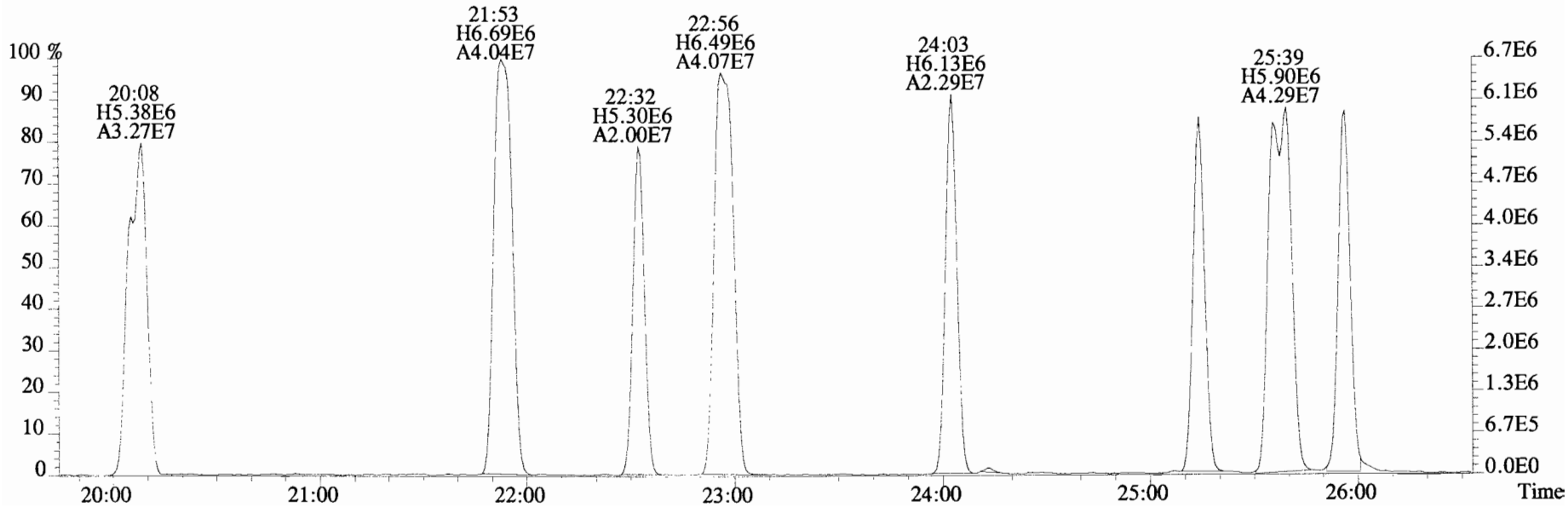

File:141226E1 #1-728 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
188.0393 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5136.0,0.00%,F,F)
16:08
H5.86E6
A1.86E7
18:31
H5.58E6
A1.83E7
100 %
50
0
5.9E6
2.9E6
0.0E0
16:00
17:00
18:00
19:00
Time
190.0363 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4732.0,0.00%,F,F)
16:08
H1.93E6
A6.09E6
18:31
H1.81E6
A6.07E6
1.9E6
9.7E5
0.0E0
200.0795 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4112.0,0.00%,F,F)
16:07
H9.47E6
A2.98E7
18:44
H9.18E6
A3.05E7
9.5E6
4.7E6
0.0E0
202.0766 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26728.0,0.00%,F,F)
16:07
H2.92E6
A9.13E6
18:44
H2.76E6
A8.89E6
2.9E6
1.5E6
0.0E0
180.9880 S:2
15:51
16:08
16:16
16:36
17:03
17:12
17:29
17:40
17:53
18:07
18:13
18:35
18:26
18:46
19:08
19:15
1.4E8
6.9E7
0.0E0


File:141226E1 #1-757 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-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%,4656.0,0.00%,F,F)
20:08 H8.80E6 A3.57E7
21:53 H1.09E7 A6.59E7
22:56 H1.07E7 A6.72E7
24:03 H1.01E7 A3.79E7
25:14 H9.43E6 A3.64E7
25:56 H9.73E6 A3.92E7
223.9974 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,23636.0,0.00%,F,F)
20:08 H5.36E6 A2.13E7
21:53 H6.69E6 A4.04E7
22:56 H6.49E6 A4.07E7
24:03 H6.13E6 A2.29E7
25:39 H5.89E6 A2.22E7
234.0406 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4104.0,0.00%,F,F)
20:03 H3.82E6 A1.37E7
21:51 H5.79E6 A2.15E7
25:13 H6.77E6 A2.59E7
25:55 H9.20E6 A3.66E7
236.0376 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3920.0,0.00%,F,F)
20:03 H2.39E6 A8.66E6
21:51 H3.65E6 A1.34E7
25:13 H4.24E6 A1.62E7
25:55 H5.76E6 A2.27E7
230.9856 S:2 F:2
20:03 20:41 20:53 21:14 21:34 21:53 22:11 22:39 23:01 23:32 24:12 24:31 24:57 25:36 25:53 26:19
100 %
50
0
20:00 21:00 22:00 23:00 24:00 25:00 26:00 Time
1.1E7 5.5E6 0.0E0
6.7E6 3.4E6 0.0E0
9.2E6 4.6E6 0.0E0
5.8E6 2.9E6 0.0E0
5.5E7 2.7E7 0.0E0

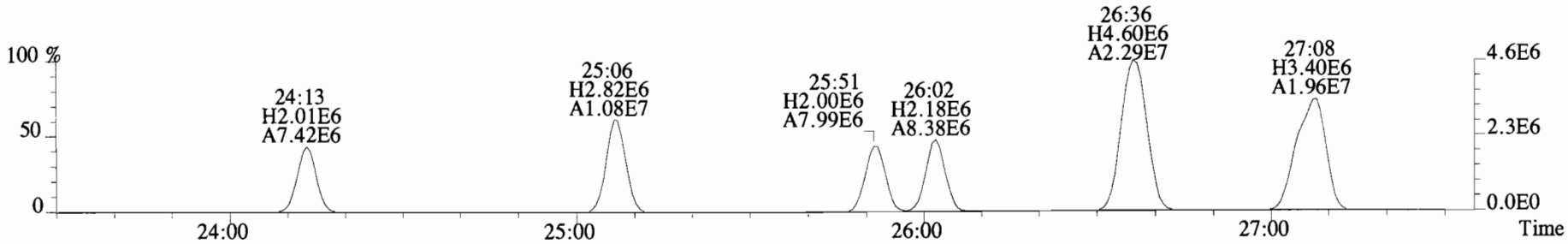
File:141226E1 #1-757 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
222.0003 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4656.0,0.00%,F,F)



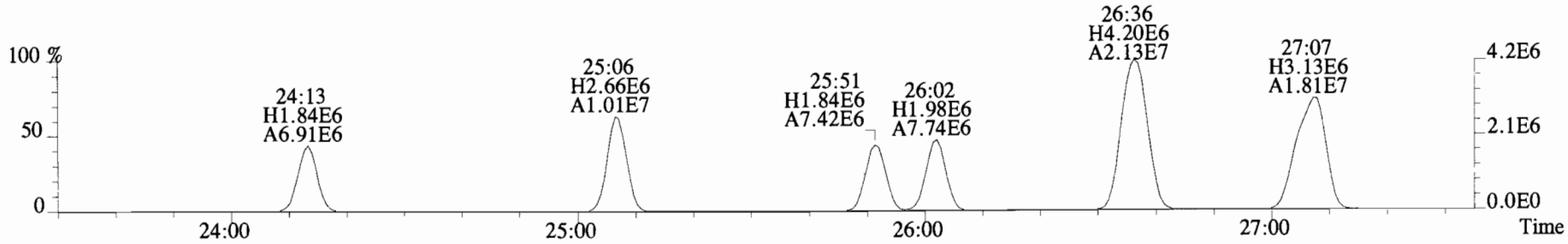
223.9974 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,23636.0,0.00%,F,F)



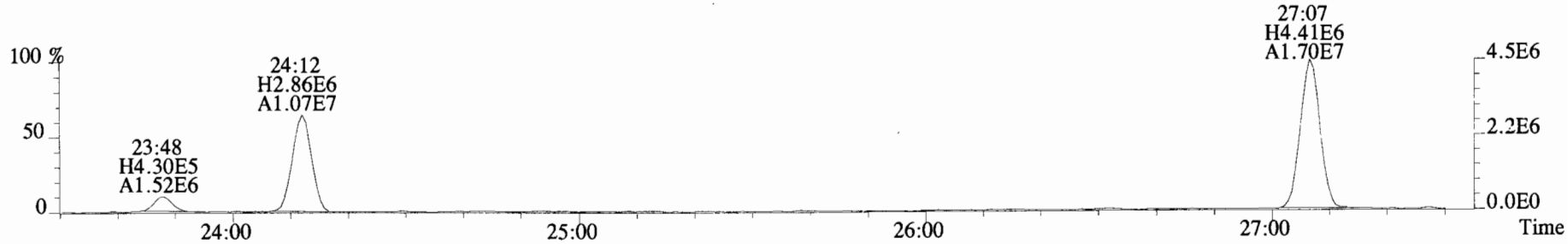
File:141226E1 #1-757 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3884.0,0.00%,F,F)



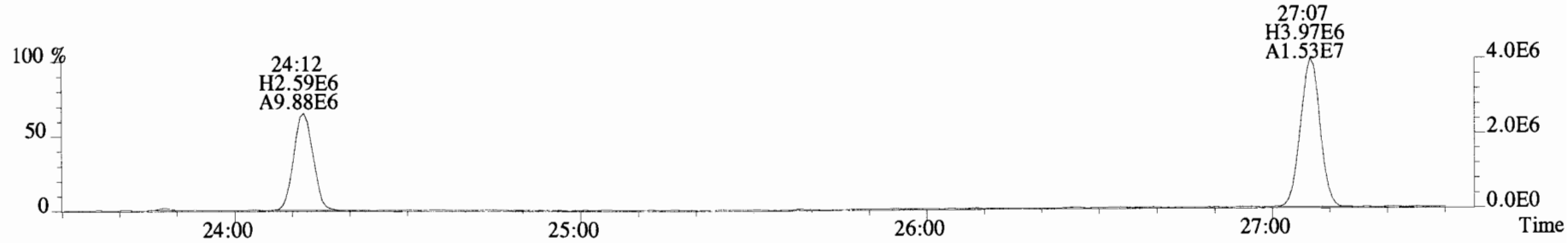
257.9584 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2584.0,0.00%,F,F)



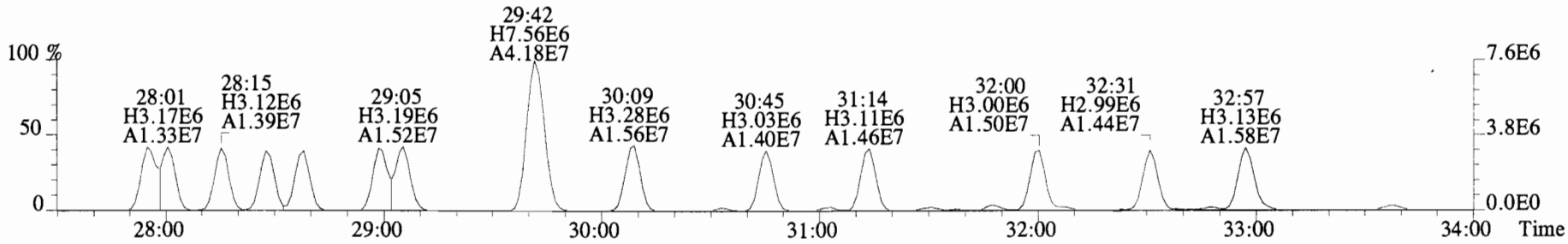
268.0016 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30828.0,0.00%,F,F)



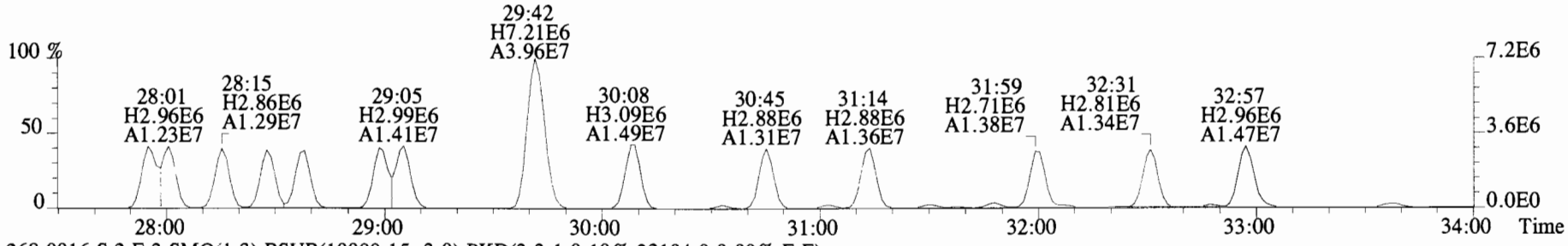
269.9986 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,23204.0,0.00%,F,F)



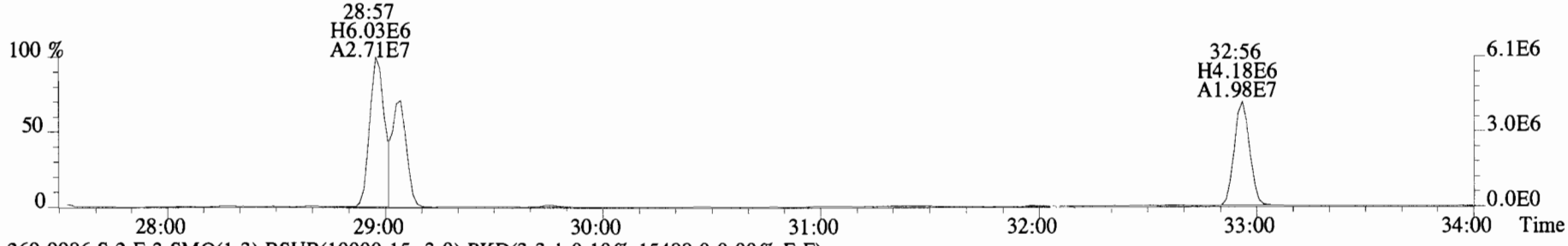
File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7020.0,0.00%,F,F)



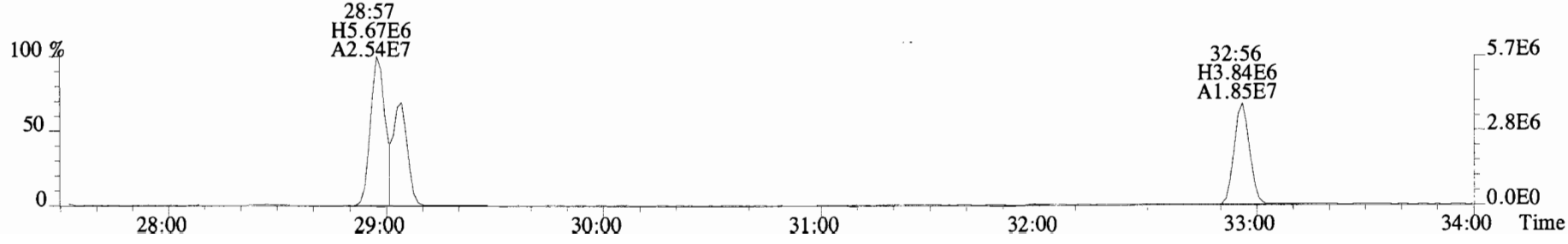
257.9584 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8600.0,0.00%,F,F)



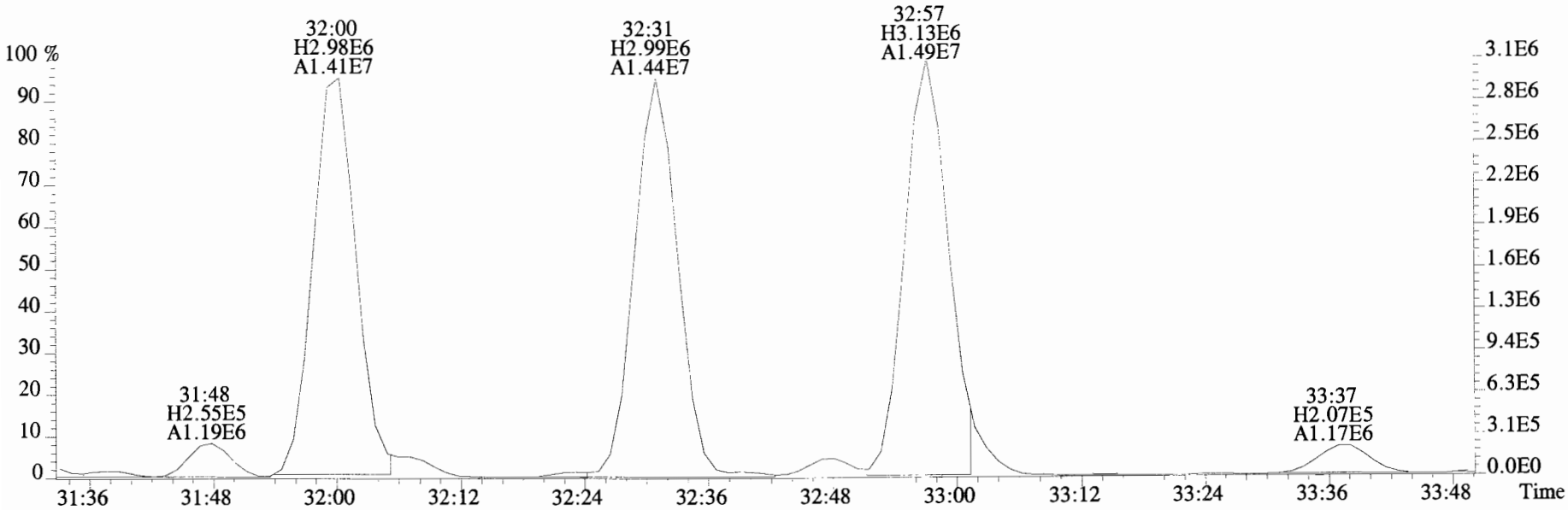
268.0016 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,32104.0,0.00%,F,F)



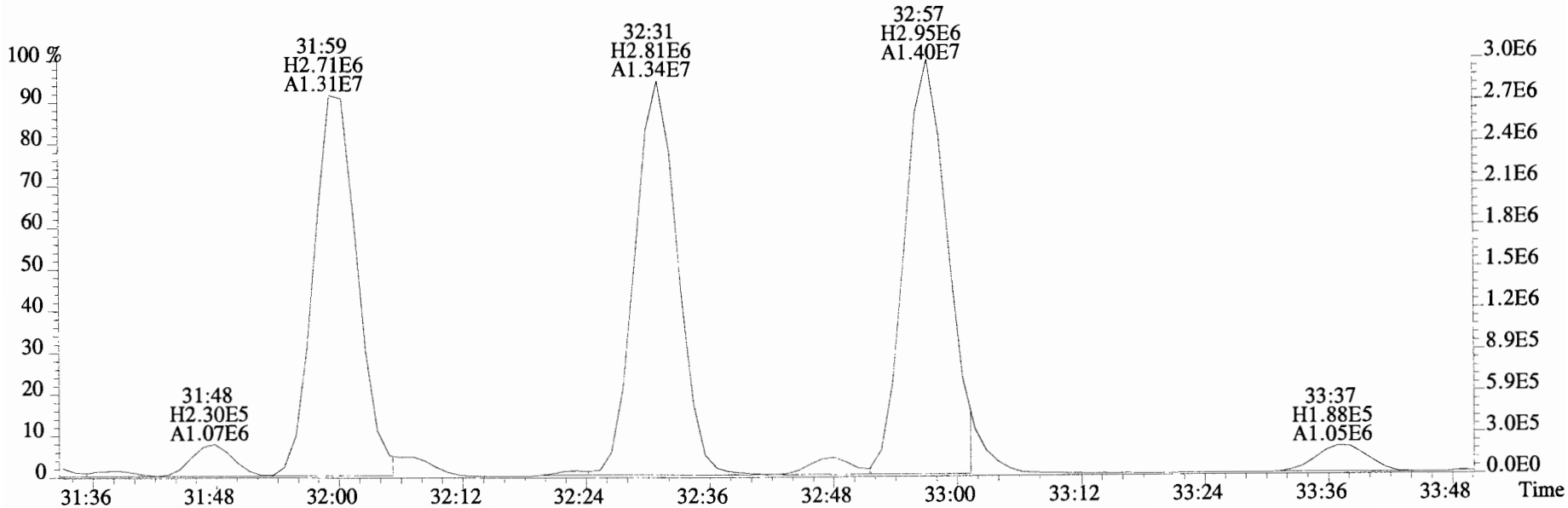
269.9986 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15488.0,0.00%,F,F)



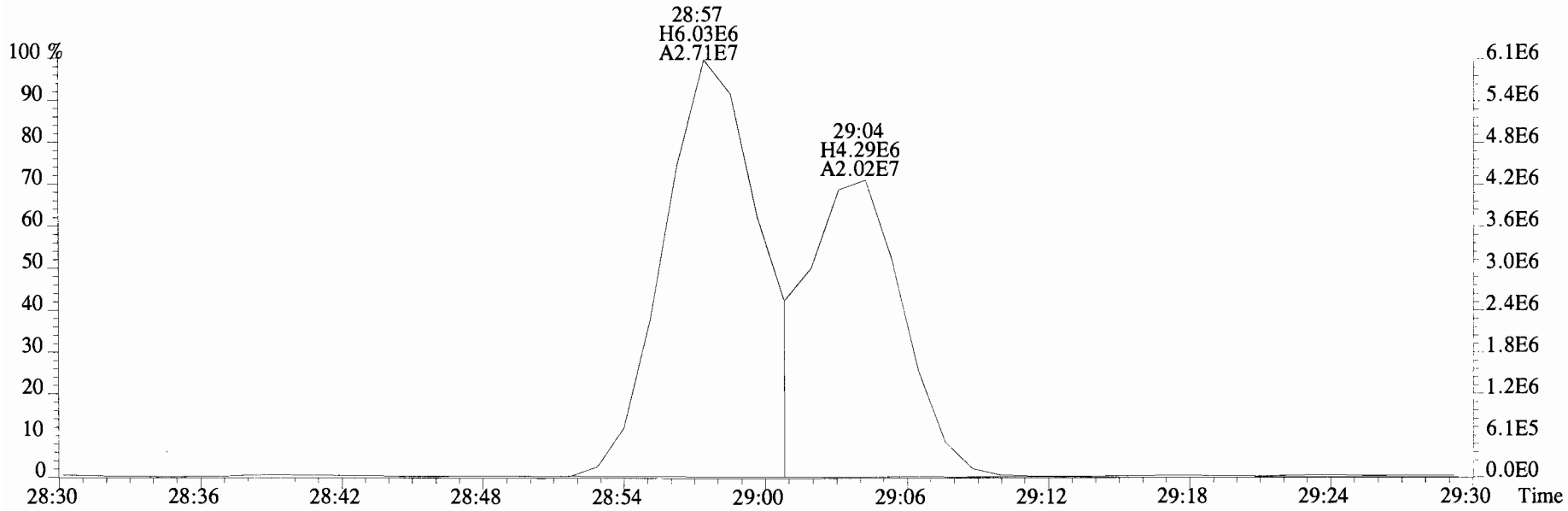
File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7020.0,0.00%,F,F)



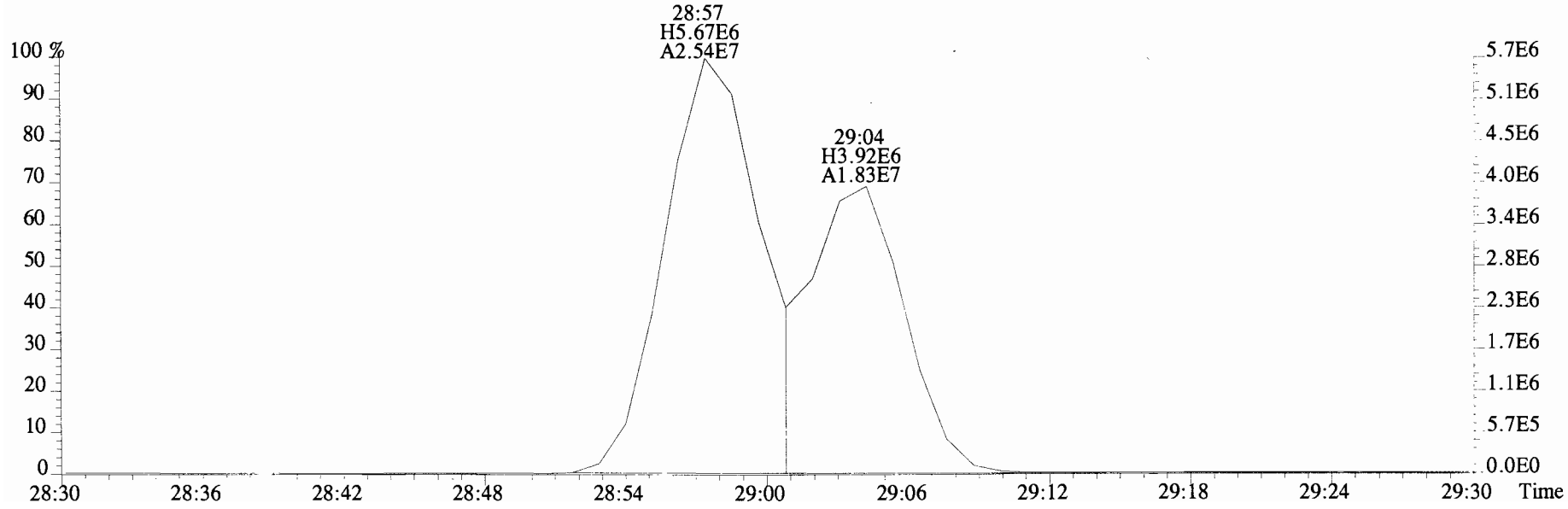
257.9584 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8604.0,0.00%,F,F)

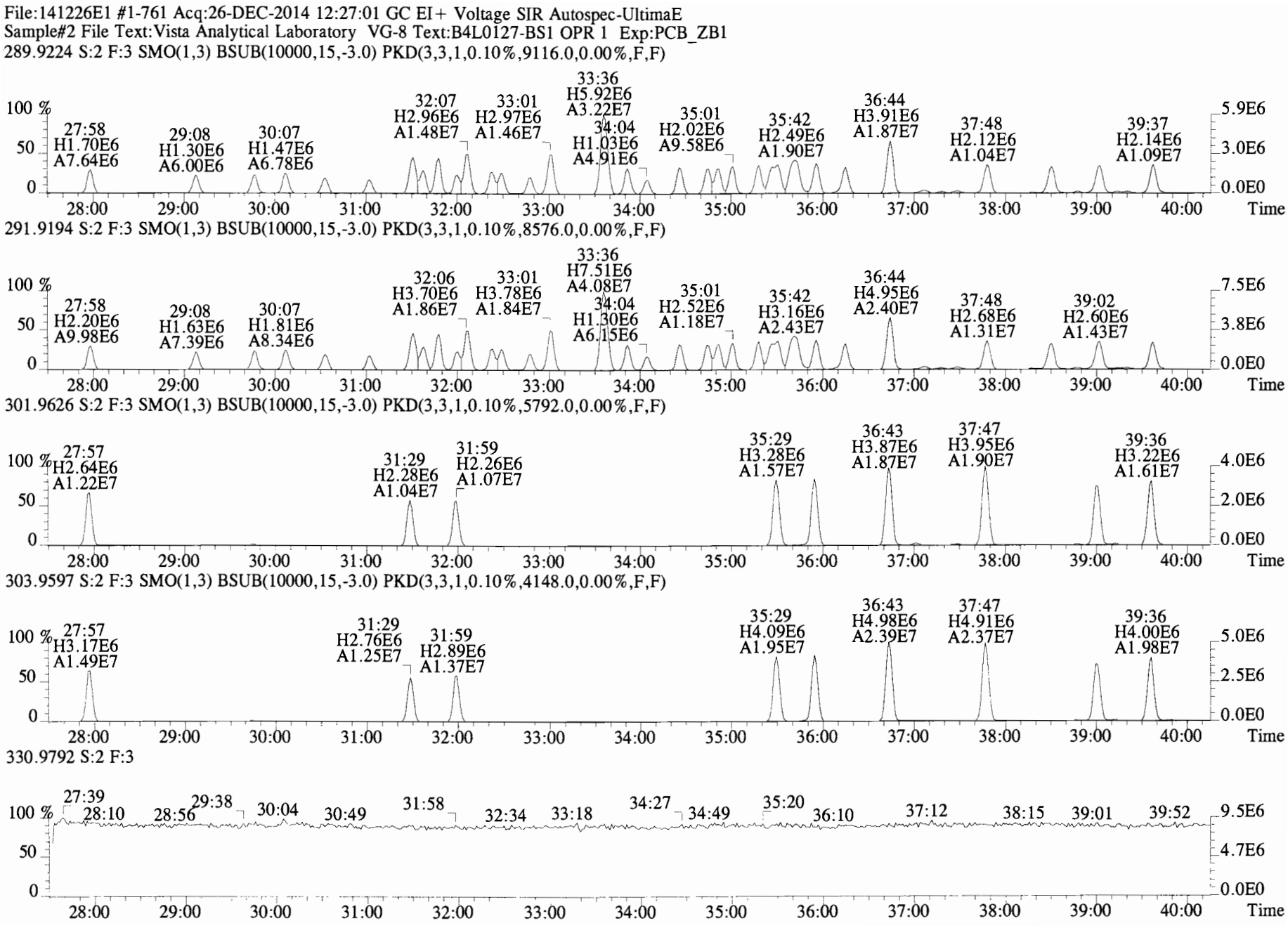


File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
268.0016 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,32104.0,0.00%,F,F)

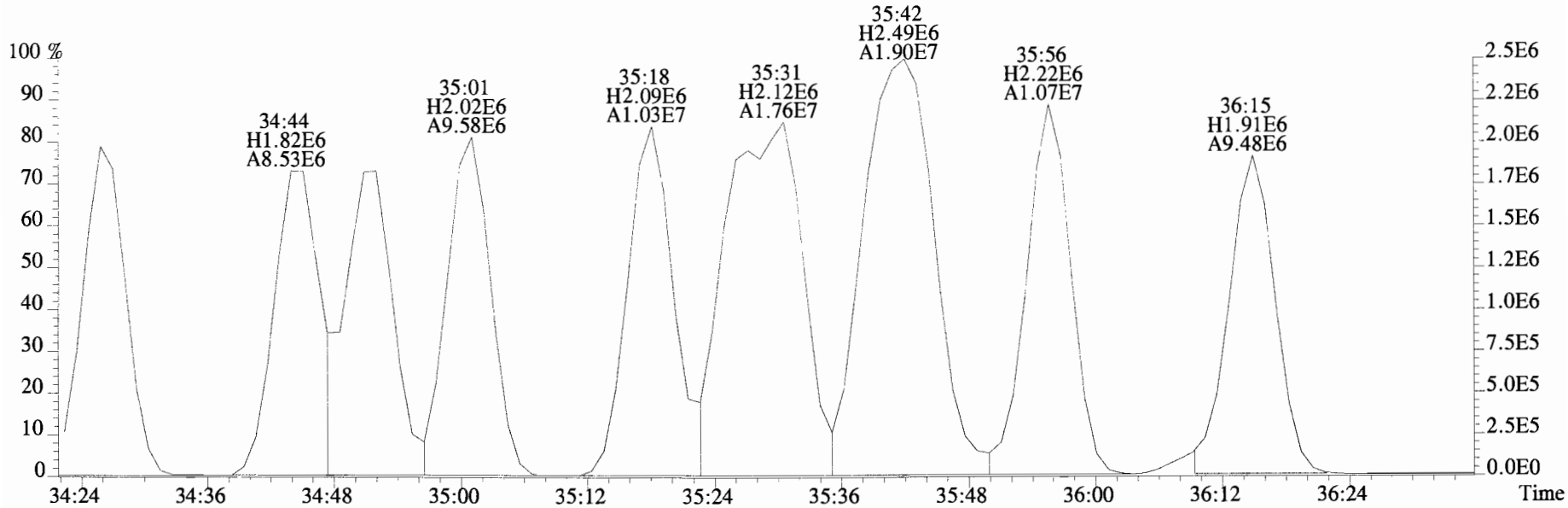


269.9986 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15488.0,0.00%,F,F)

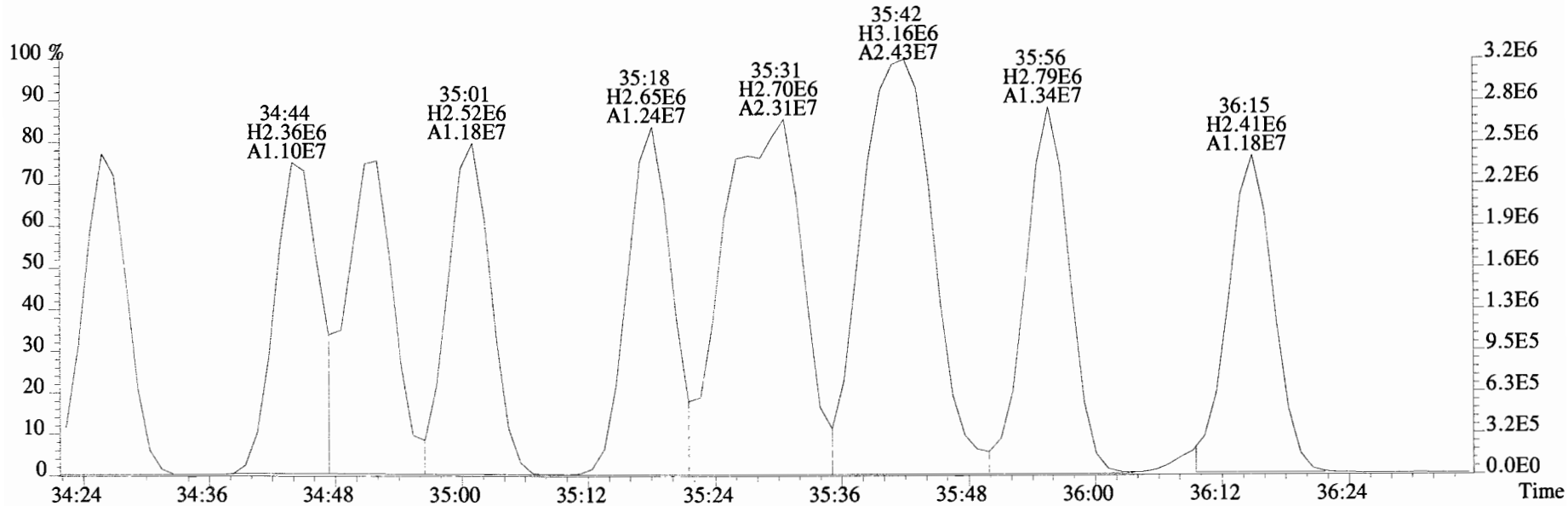


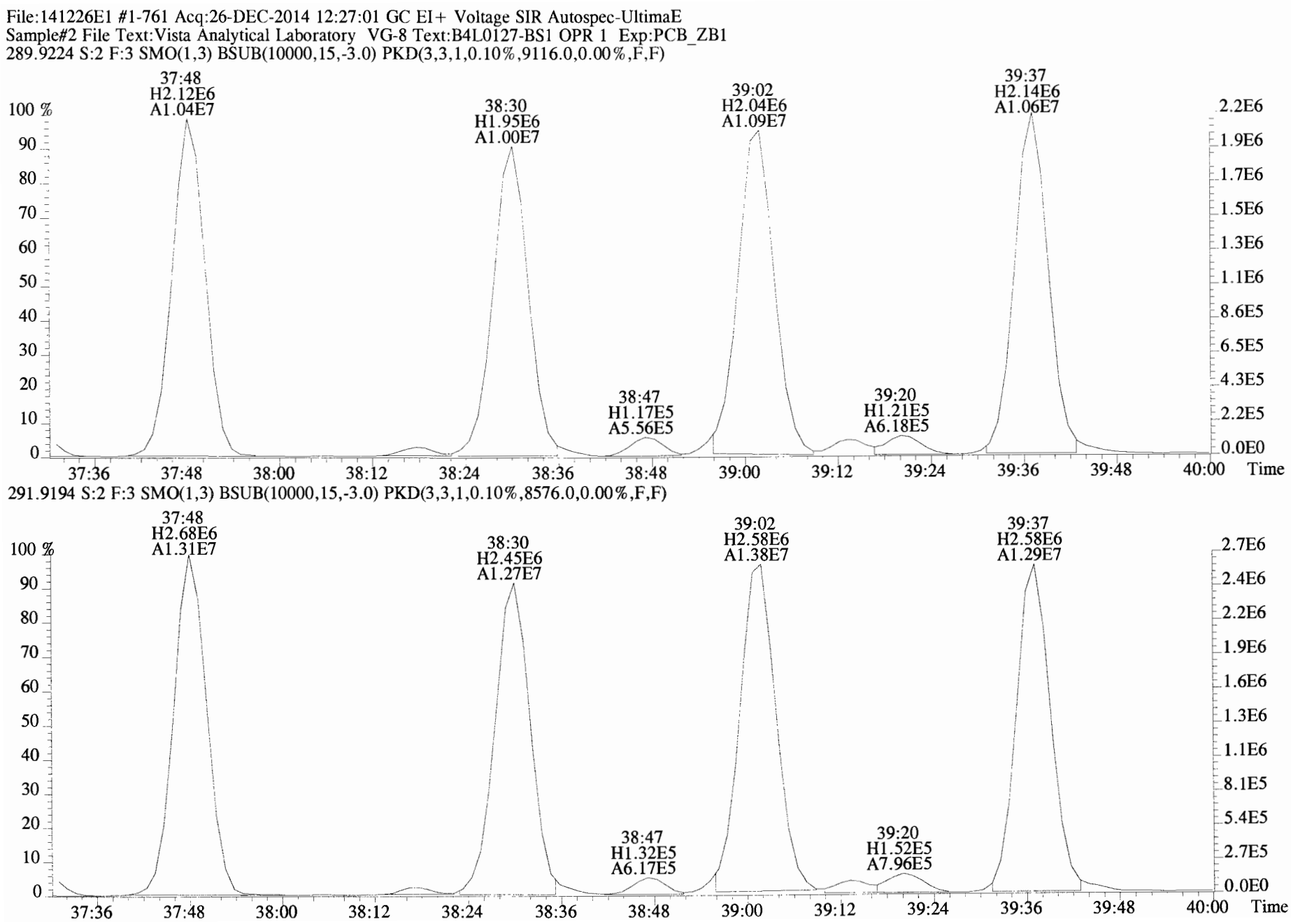

File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9116.0,0.00%,F,F)
27:58 H1.70E6 A7.64E6
29:08 H1.30E6 A6.00E6
30:07 H1.47E6 A6.78E6
32:07 H2.96E6 A1.48E7
33:01 H2.97E6 A1.46E7
33:36 H5.92E6 A3.22E7
34:04 H1.03E6 A4.91E6
35:01 H2.02E6 A9.58E6
35:42 H2.49E6 A1.90E7
36:44 H3.91E6 A1.87E7
37:48 H2.12E6 A1.04E7
39:37 H2.14E6 A1.09E7
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8576.0,0.00%,F,F)
27:58 H2.20E6 A9.98E6
29:08 H1.63E6 A7.39E6
30:07 H1.81E6 A8.34E6
32:06 H3.70E6 A1.86E7
33:01 H3.78E6 A1.84E7
33:36 H7.51E6 A4.08E7
34:04 H1.30E6 A6.15E6
35:01 H2.52E6 A1.18E7
35:42 H3.16E6 A2.43E7
36:44 H4.95E6 A2.40E7
37:48 H2.68E6 A1.31E7
39:02 H2.60E6 A1.43E7
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5792.0,0.00%,F,F)
27:57 H2.64E6 A1.22E7
31:29 H2.28E6 A1.04E7
31:59 H2.26E6 A1.07E7
35:29 H3.28E6 A1.57E7
36:43 H3.87E6 A1.87E7
37:47 H3.95E6 A1.90E7
39:36 H3.22E6 A1.61E7
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4148.0,0.00%,F,F)
27:57 H3.17E6 A1.49E7
31:29 H2.76E6 A1.25E7
31:59 H2.89E6 A1.37E7
35:29 H4.09E6 A1.95E7
36:43 H4.98E6 A2.39E7
37:47 H4.91E6 A2.37E7
39:36 H4.00E6 A1.98E7
330.9792 S:2 F:3
27:39
28:10
28:56
29:38
30:04
30:49
31:58
32:34
33:18
34:27
34:49
35:20
36:10
37:12
38:15
39:01
39:52
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
5.9E6
3.0E6
0.0E0
7.5E6
3.8E6
0.0E0
4.0E6
2.0E6
0.0E0
5.0E6
2.5E6
0.0E0
9.5E6
4.7E6
0.0E0

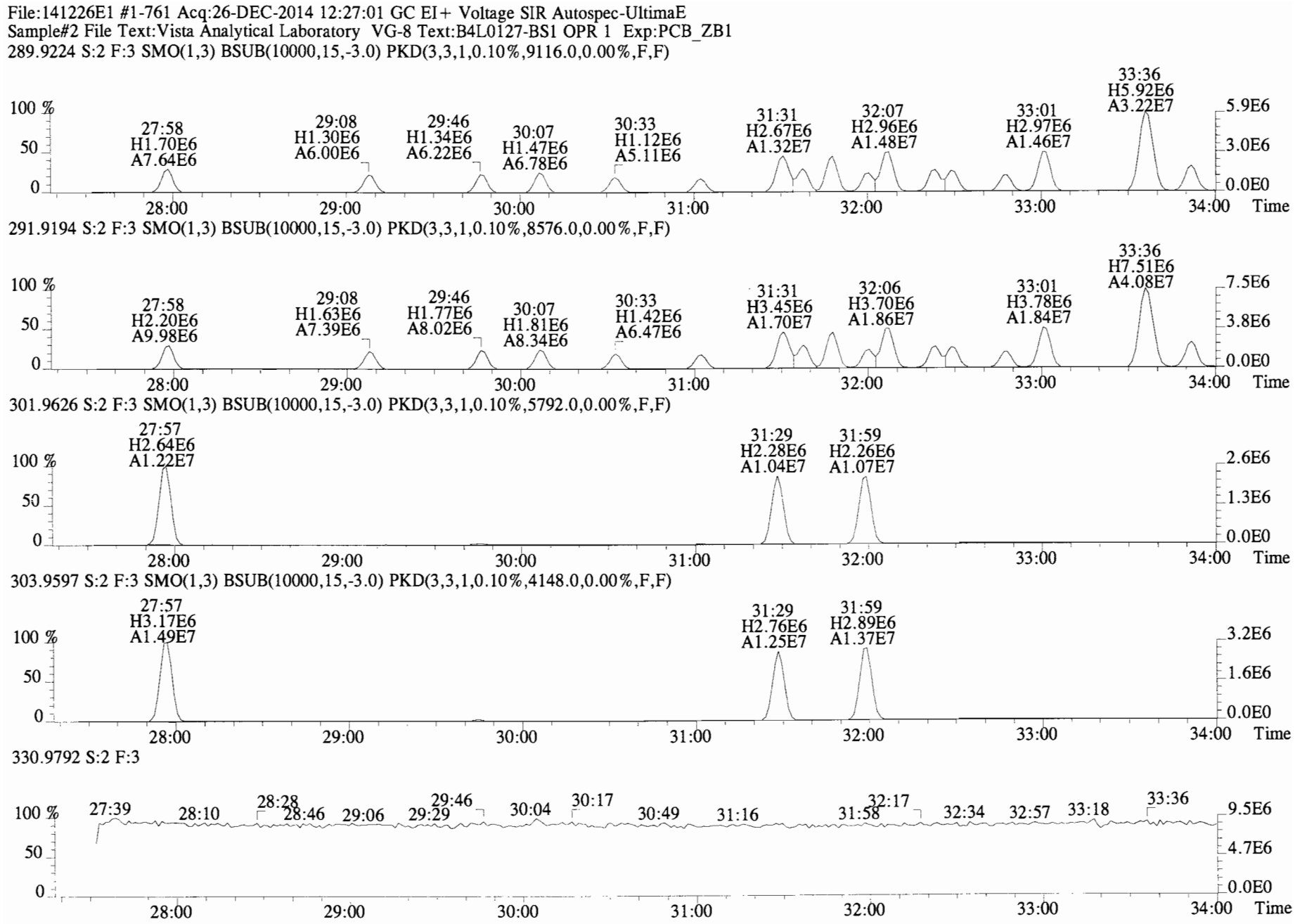
File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9116.0,0.00%,F,F)

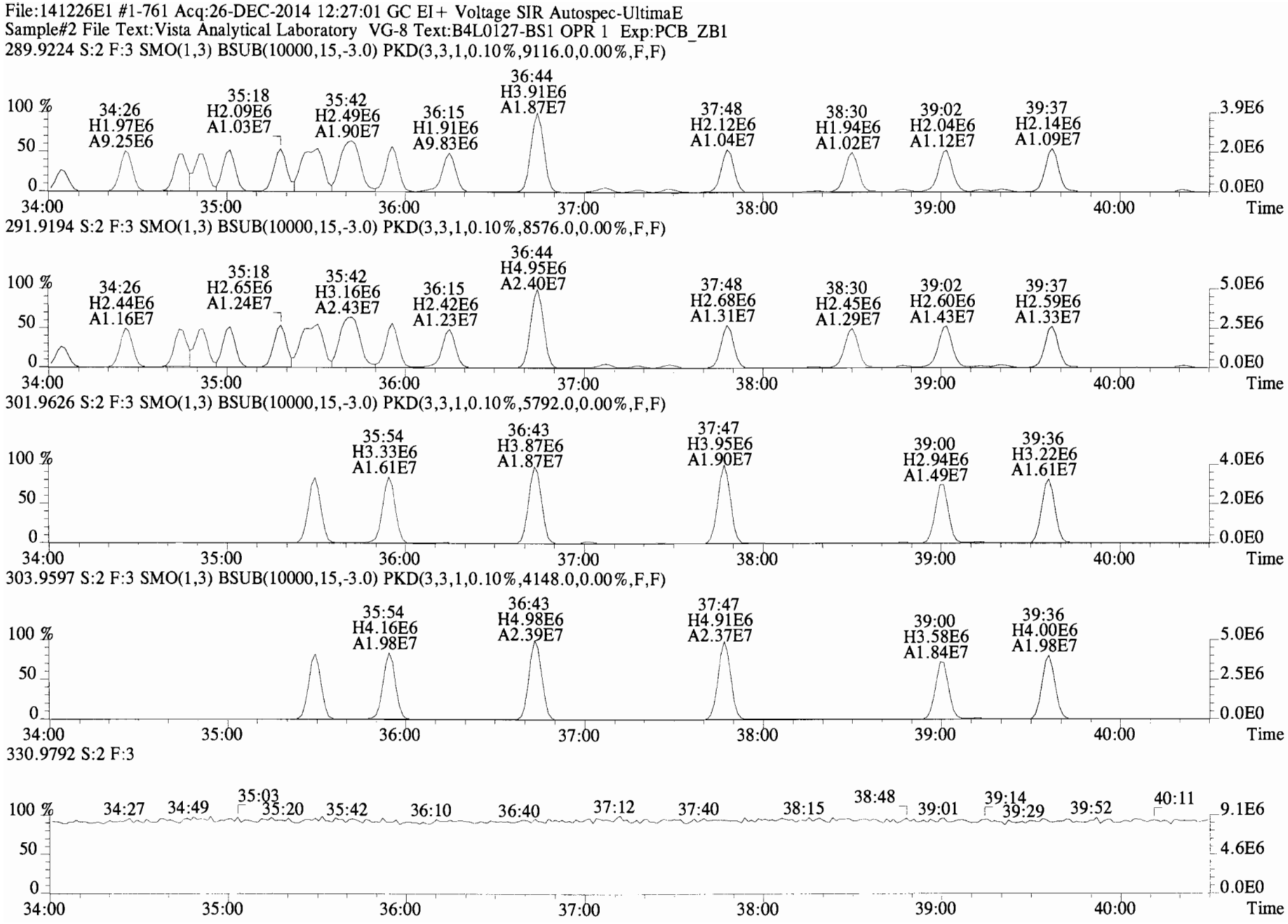


291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8576.0,0.00%,F,F)

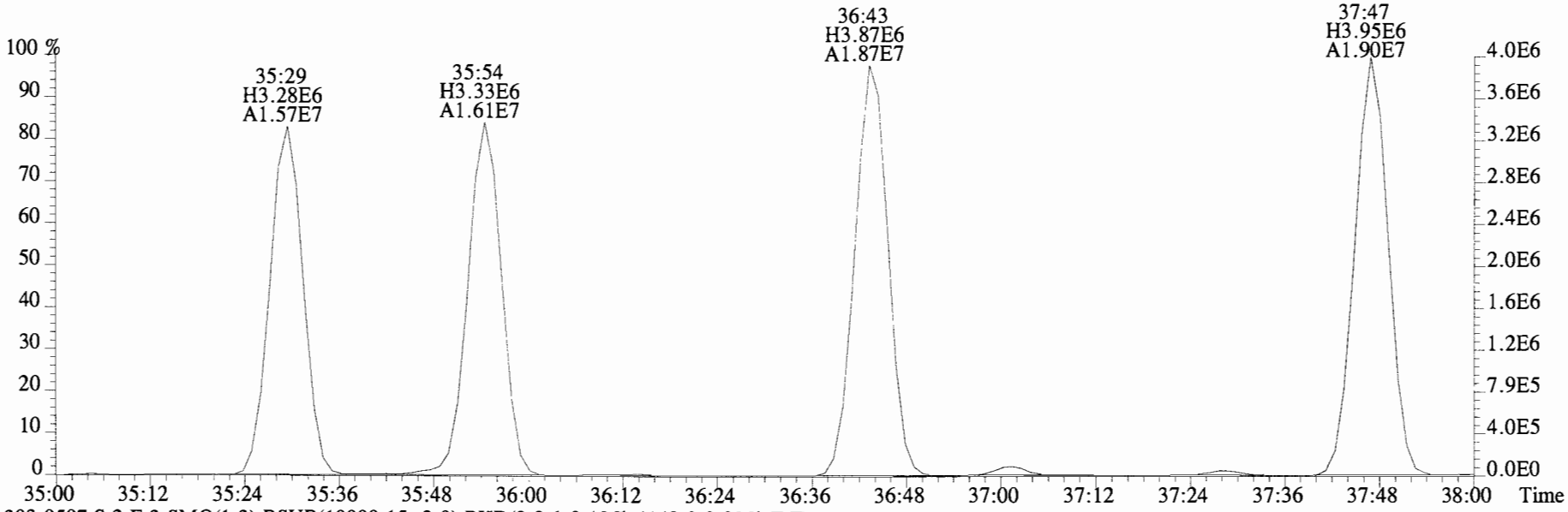



File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9116.0,0.00%,F,F)
37:48
H2.12E6
A1.04E7
38:30
H1.95E6
A1.00E7
38:47
H1.17E5
A5.56E5
39:02
H2.04E6
A1.09E7
39:20
H1.21E5
A6.18E5
39:37
H2.14E6
A1.06E7
100 %
2.2E6
1.9E6
1.7E6
1.5E6
1.3E6
1.1E6
8.6E5
6.5E5
4.3E5
2.2E5
0.0E0
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
Time
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8576.0,0.00%,F,F)
37:48
H2.68E6
A1.31E7
38:30
H2.45E6
A1.27E7
38:47
H1.32E5
A6.17E5
39:02
H2.58E6
A1.38E7
39:20
H1.52E5
A7.96E5
39:37
H2.58E6
A1.29E7
100 %
2.7E6
2.4E6
2.2E6
1.9E6
1.6E6
1.3E6
1.1E6
8.1E5
5.4E5
2.7E5
0.0E0
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
Time

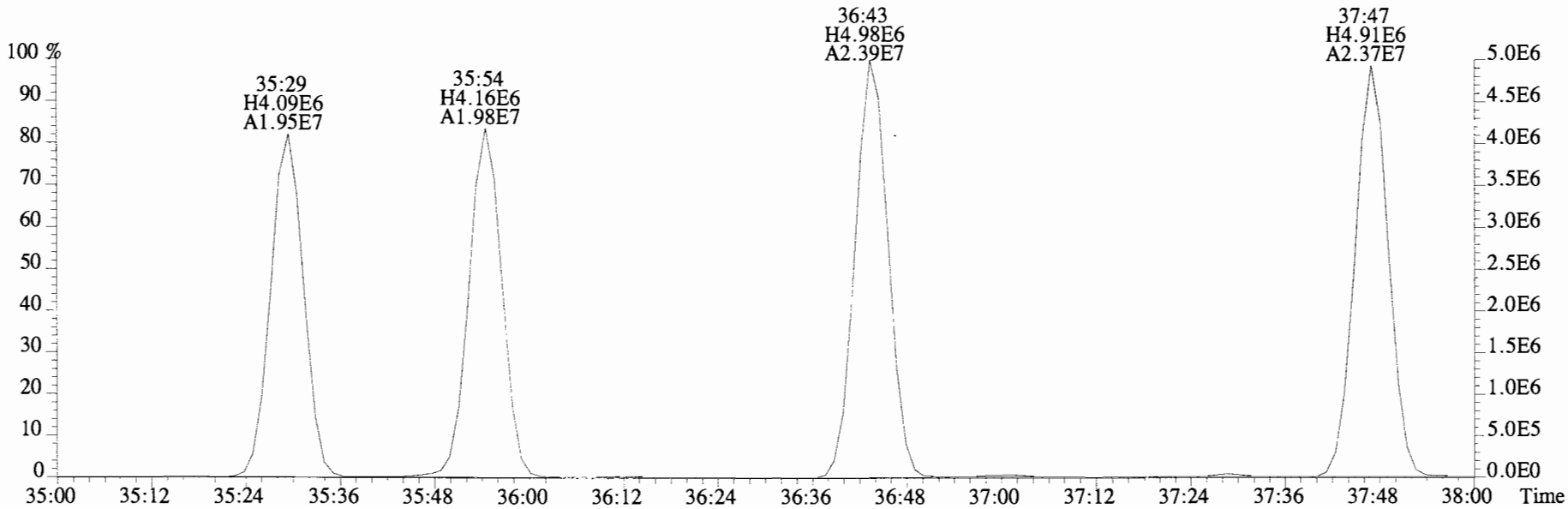

File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9116.0,0.00%,F,F)
27:58 H1.70E6 A7.64E6
29:08 H1.30E6 A6.00E6
29:46 H1.34E6 A6.22E6
30:07 H1.47E6 A6.78E6
30:33 H1.12E6 A5.11E6
31:31 H2.67E6 A1.32E7
32:07 H2.96E6 A1.48E7
33:01 H2.97E6 A1.46E7
33:36 H5.92E6 A3.22E7
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8576.0,0.00%,F,F)
27:58 H2.20E6 A9.98E6
29:08 H1.63E6 A7.39E6
29:46 H1.77E6 A8.02E6
30:07 H1.81E6 A8.34E6
30:33 H1.42E6 A6.47E6
31:31 H3.45E6 A1.70E7
32:06 H3.70E6 A1.86E7
33:01 H3.78E6 A1.84E7
33:36 H7.51E6 A4.08E7
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5792.0,0.00%,F,F)
27:57 H2.64E6 A1.22E7
31:29 H2.28E6 A1.04E7
31:59 H2.26E6 A1.07E7
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4148.0,0.00%,F,F)
27:57 H3.17E6 A1.49E7
31:29 H2.76E6 A1.25E7
31:59 H2.89E6 A1.37E7
330.9792 S:2 F:3
27:39
28:10
28:28
28:46
29:06
29:29
29:46
30:04
30:17
30:49
31:16
31:58
32:17
32:34
32:57
33:18
33:36
100 %
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
5.9E6
3.0E6
0.0E0
7.5E6
3.8E6
2.6E6
1.3E6
3.2E6
1.6E6
9.5E6
4.7E6

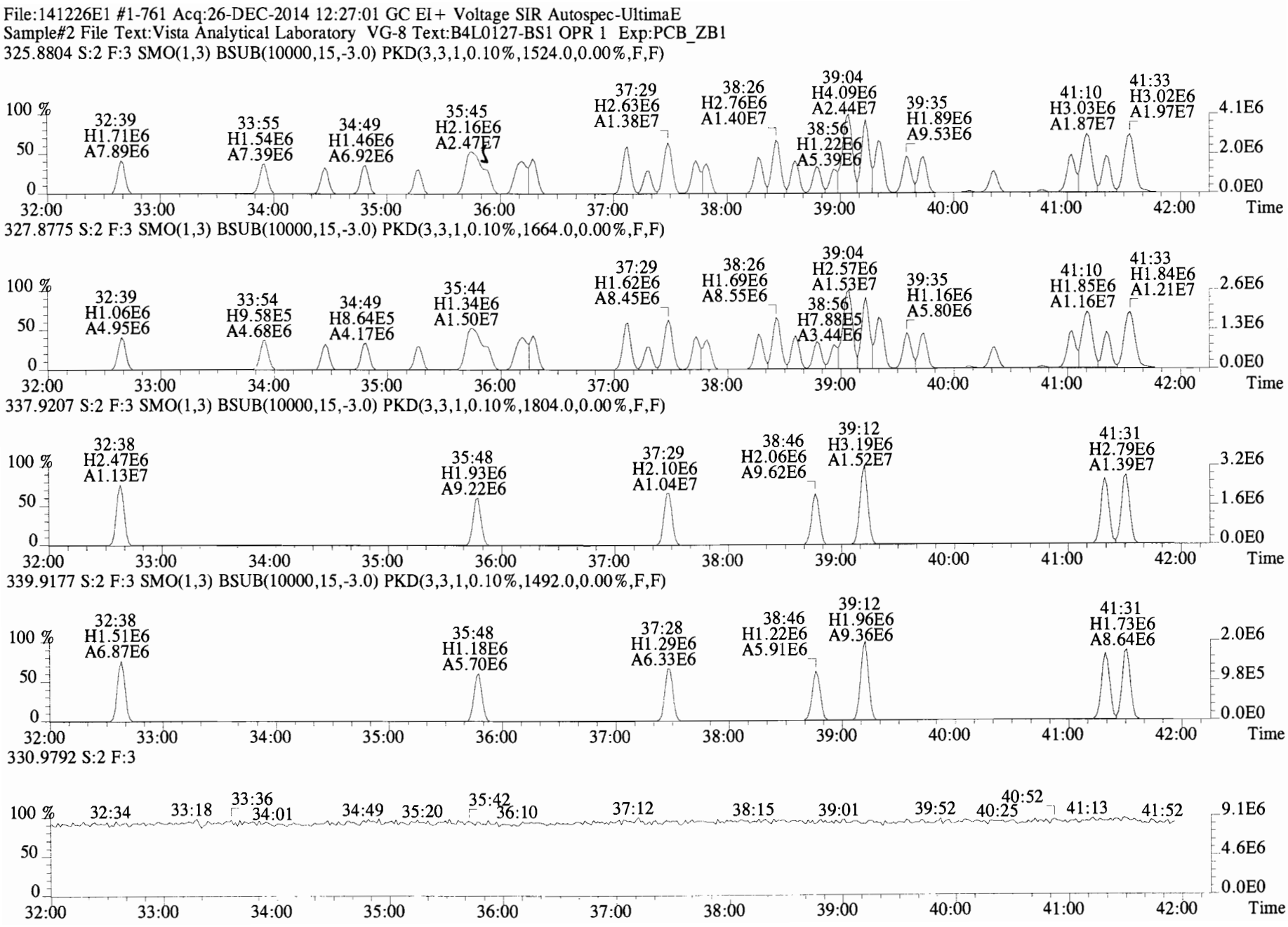

File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9116.0,0.00%,F,F)
34:26 H1.97E6 A9.25E6
35:18 H2.09E6 A1.03E7
35:42 H2.49E6 A1.90E7
36:15 H1.91E6 A9.83E6
36:44 H3.91E6 A1.87E7
37:48 H2.12E6 A1.04E7
38:30 H1.94E6 A1.02E7
39:02 H2.04E6 A1.12E7
39:37 H2.14E6 A1.09E7
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8576.0,0.00%,F,F)
34:26 H2.44E6 A1.16E7
35:18 H2.65E6 A1.24E7
35:42 H3.16E6 A2.43E7
36:15 H2.42E6 A1.23E7
36:44 H4.95E6 A2.40E7
37:48 H2.68E6 A1.31E7
38:30 H2.45E6 A1.29E7
39:02 H2.60E6 A1.43E7
39:37 H2.59E6 A1.33E7
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5792.0,0.00%,F,F)
35:54 H3.33E6 A1.61E7
36:43 H3.87E6 A1.87E7
37:47 H3.95E6 A1.90E7
39:00 H2.94E6 A1.49E7
39:36 H3.22E6 A1.61E7
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4148.0,0.00%,F,F)
35:54 H4.16E6 A1.98E7
36:43 H4.98E6 A2.39E7
37:47 H4.91E6 A2.37E7
39:00 H3.58E6 A1.84E7
39:36 H4.00E6 A1.98E7
330.9792 S:2 F:3
34:27 34:49 35:03 35:20 35:42 36:10 36:40 37:12 37:40 38:15 38:48 39:01 39:14 39:29 39:52 40:11
100 %
50
0
34:00 35:00 36:00 37:00 38:00 39:00 40:00 Time
3.9E6 2.0E6 0.0E0
5.0E6 2.5E6 0.0E0
4.0E6 2.0E6 0.0E0
5.0E6 2.5E6 0.0E0
9.1E6 4.6E6 0.0E0

File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-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%,5792.0,0.00%,F,F)

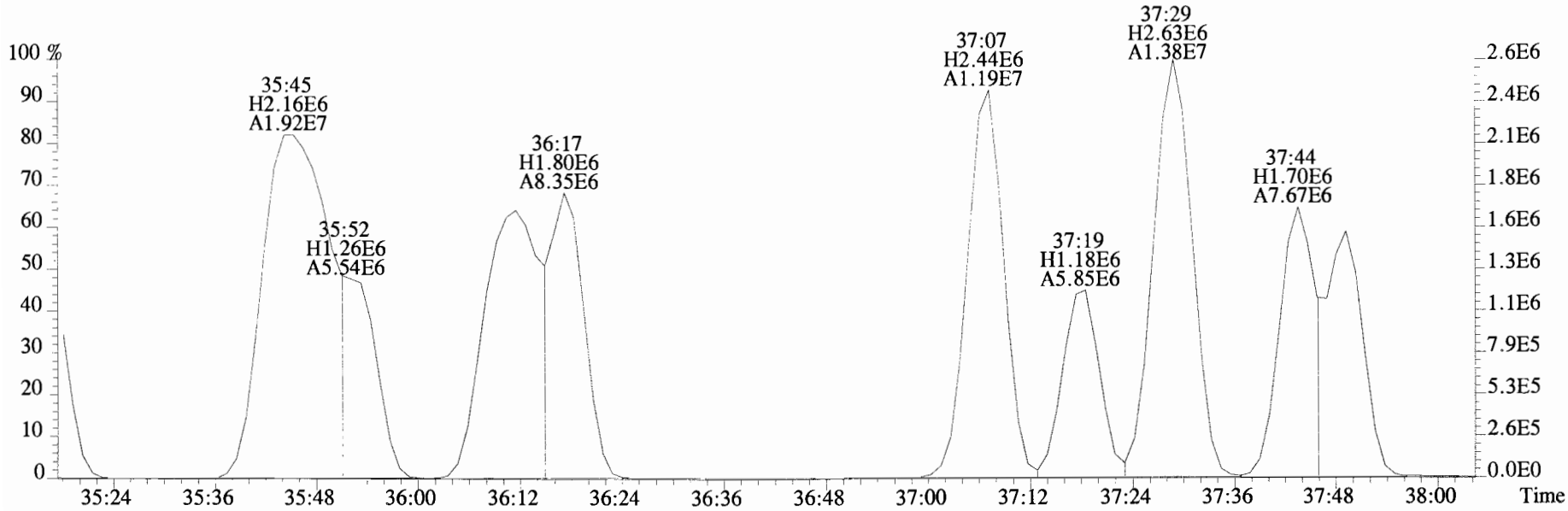


303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4148.0,0.00%,F,F)

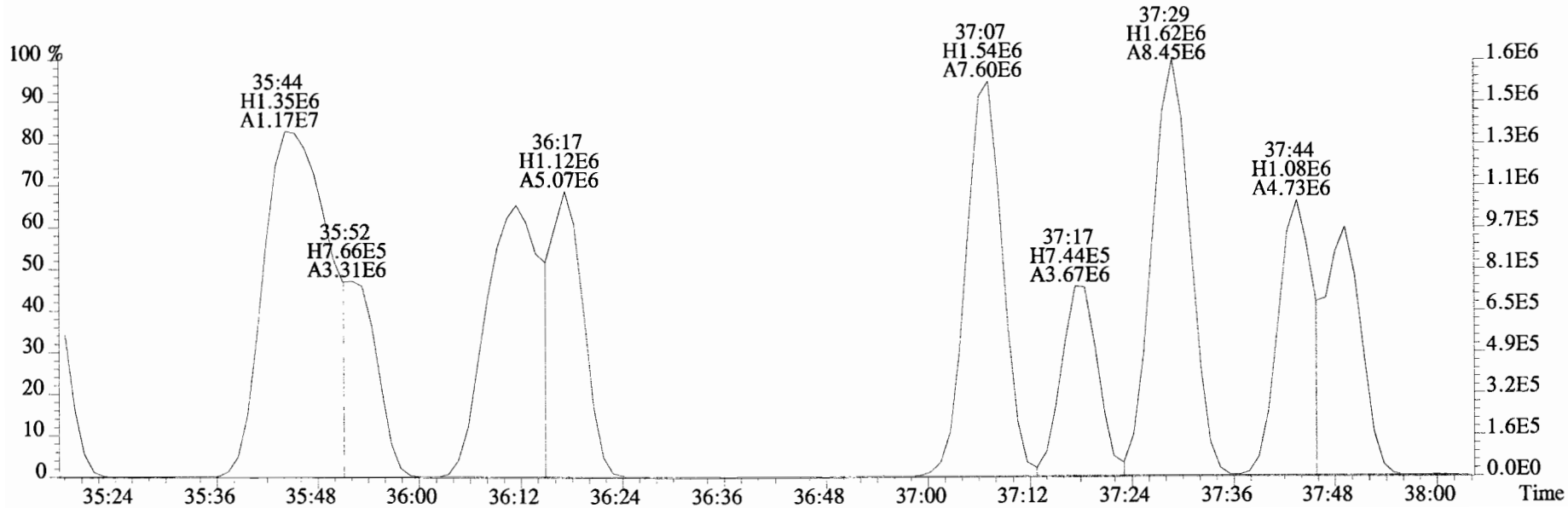



File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1524.0,0.00%,F,F)
32:39 H1.71E6 A7.89E6
33:55 H1.54E6 A7.39E6
34:49 H1.46E6 A6.92E6
35:45 H2.16E6 A2.47E7
37:29 H2.63E6 A1.38E7
38:26 H2.76E6 A1.40E7
39:04 H4.09E6 A2.44E7
38:56 H1.22E6 A5.39E6
39:35 H1.89E6 A9.53E6
41:10 H3.03E6 A1.87E7
41:33 H3.02E6 A1.97E7
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1664.0,0.00%,F,F)
32:39 H1.06E6 A4.95E6
33:54 H9.58E5 A4.68E6
34:49 H8.64E5 A4.17E6
35:44 H1.34E6 A1.50E7
37:29 H1.62E6 A8.45E6
38:26 H1.69E6 A8.55E6
39:04 H2.57E6 A1.53E7
38:56 H7.88E5 A3.44E6
39:35 H1.16E6 A5.80E6
41:10 H1.85E6 A1.16E7
41:33 H1.84E6 A1.21E7
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1804.0,0.00%,F,F)
32:38 H2.47E6 A1.13E7
35:48 H1.93E6 A9.22E6
37:29 H2.10E6 A1.04E7
38:46 H2.06E6 A9.62E6
39:12 H3.19E6 A1.52E7
41:31 H2.79E6 A1.39E7
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1492.0,0.00%,F,F)
32:38 H1.51E6 A6.87E6
35:48 H1.18E6 A5.70E6
37:28 H1.29E6 A6.33E6
38:46 H1.22E6 A5.91E6
39:12 H1.96E6 A9.36E6
41:31 H1.73E6 A8.64E6
330.9792 S:2 F:3
32:34 33:18 33:36 34:01 34:49 35:20 35:42 36:10 37:12 38:15 39:01 39:52 40:25 40:52 41:13 41:52
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
4.1E6 2.0E6 0.0E0
2.6E6 1.3E6 0.0E0
3.2E6 1.6E6 0.0E0
2.0E6 9.8E5 0.0E0
9.1E6 4.6E6 0.0E0

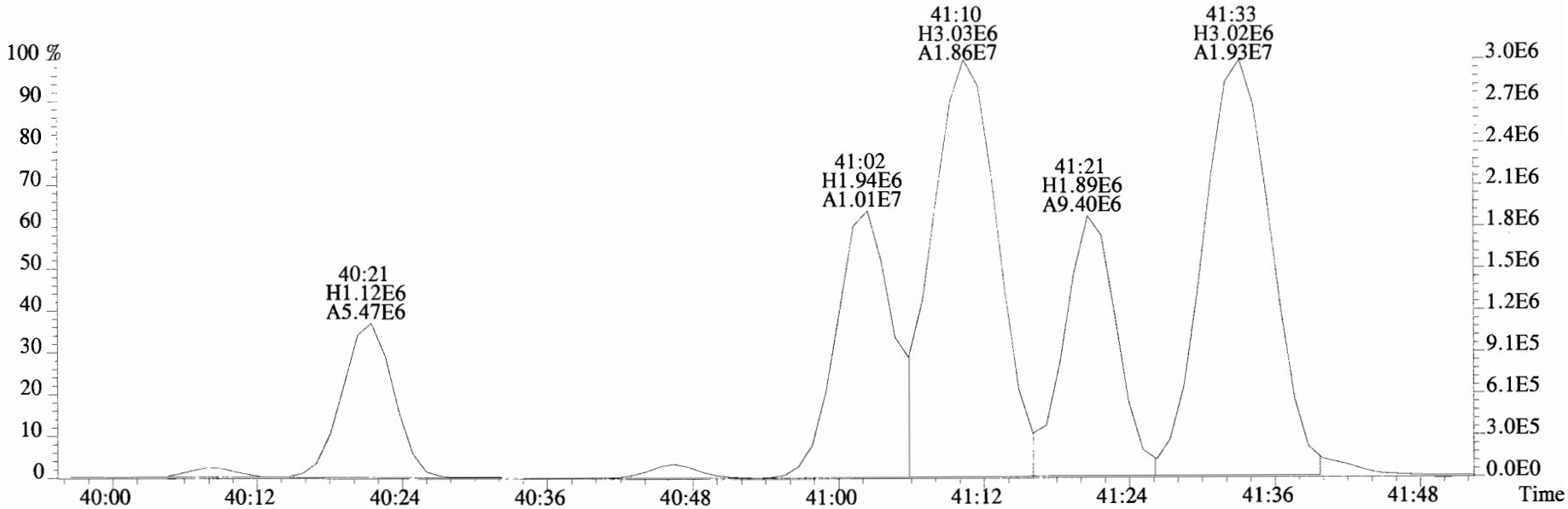
File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1524.0,0.00%,F,F)



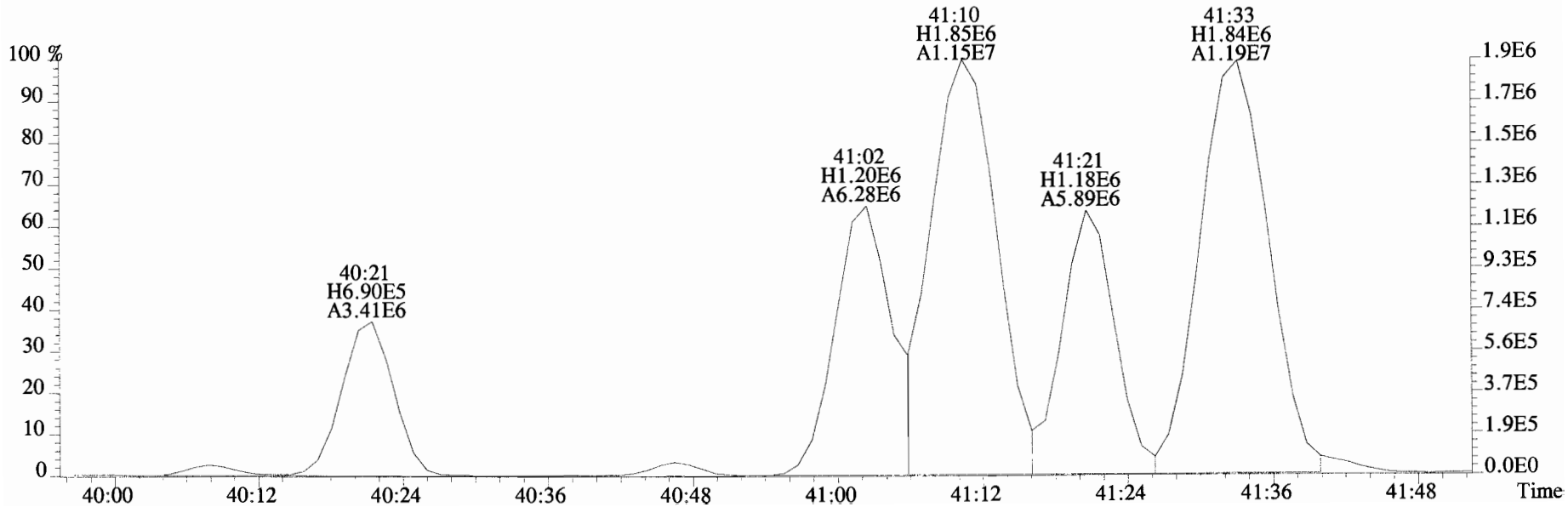
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1664.0,0.00%,F,F)



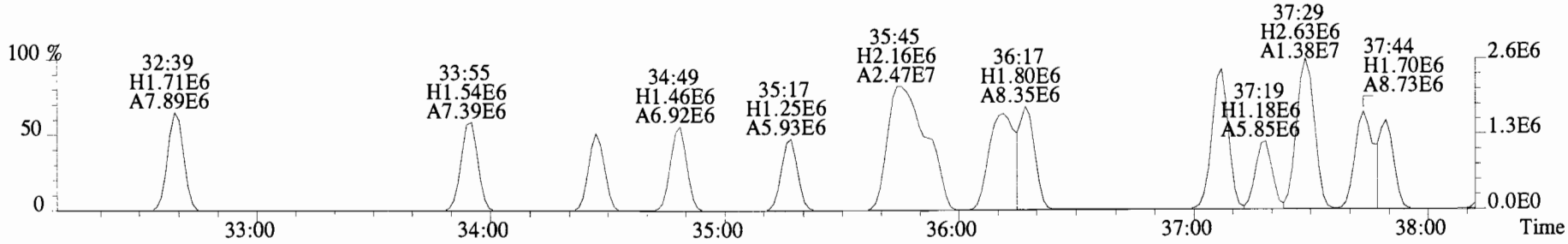
File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1524.0,0.00%,F,F)



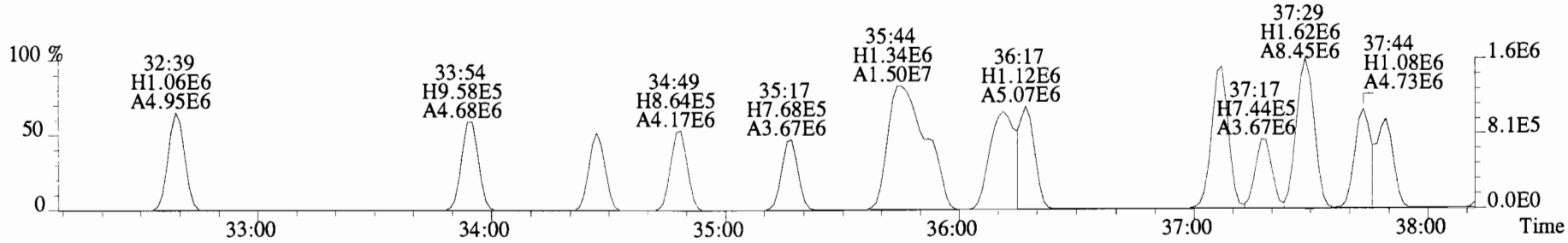
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1664.0,0.00%,F,F)



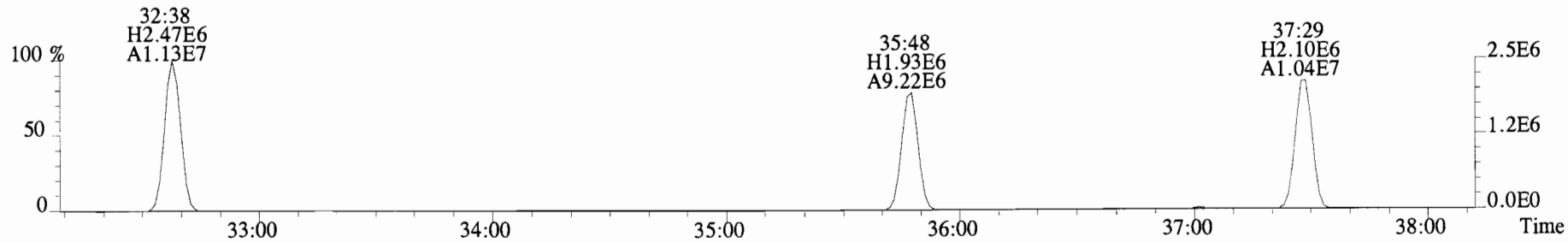
File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1524.0,0.00%,F,F)



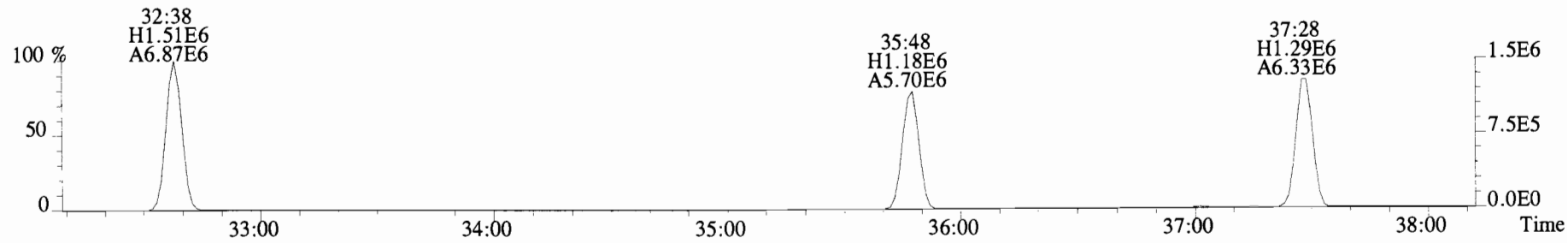
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1664.0,0.00%,F,F)



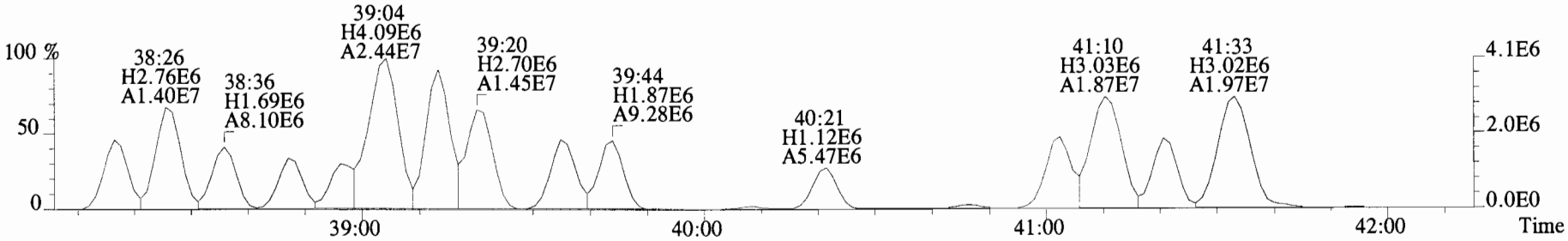
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1804.0,0.00%,F,F)



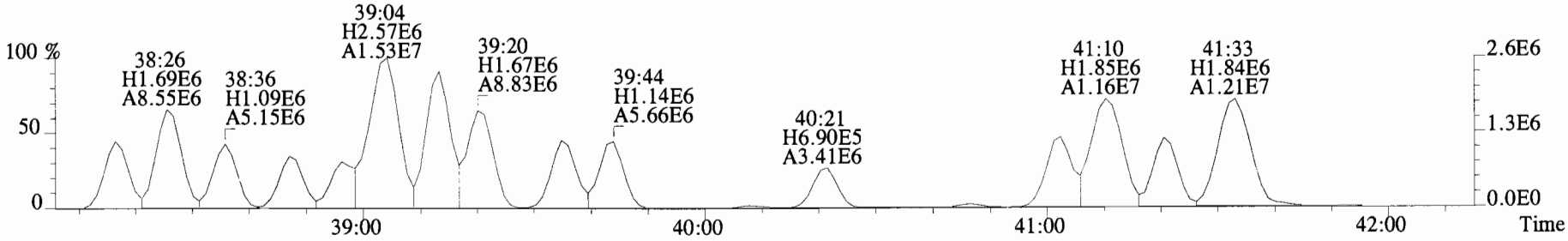
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1492.0,0.00%,F,F)



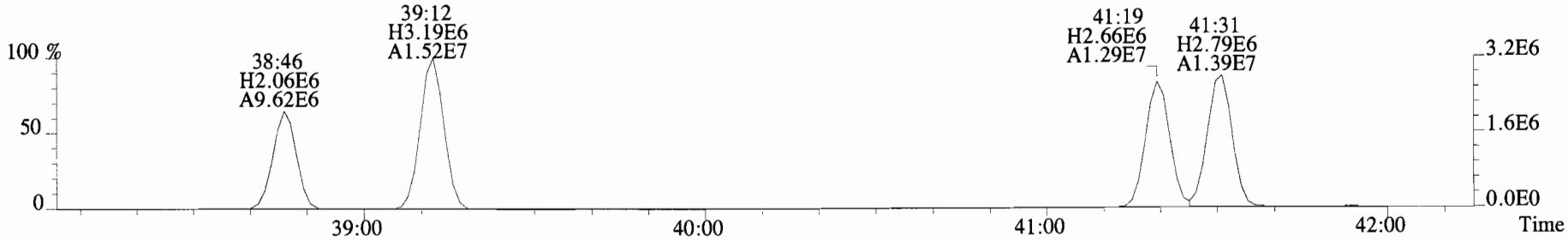
File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1524.0,0.00%,F,F)



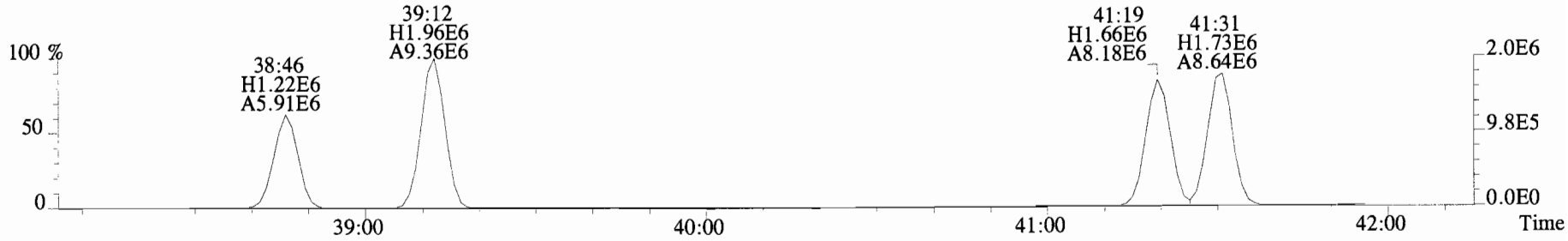
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1664.0,0.00%,F,F)



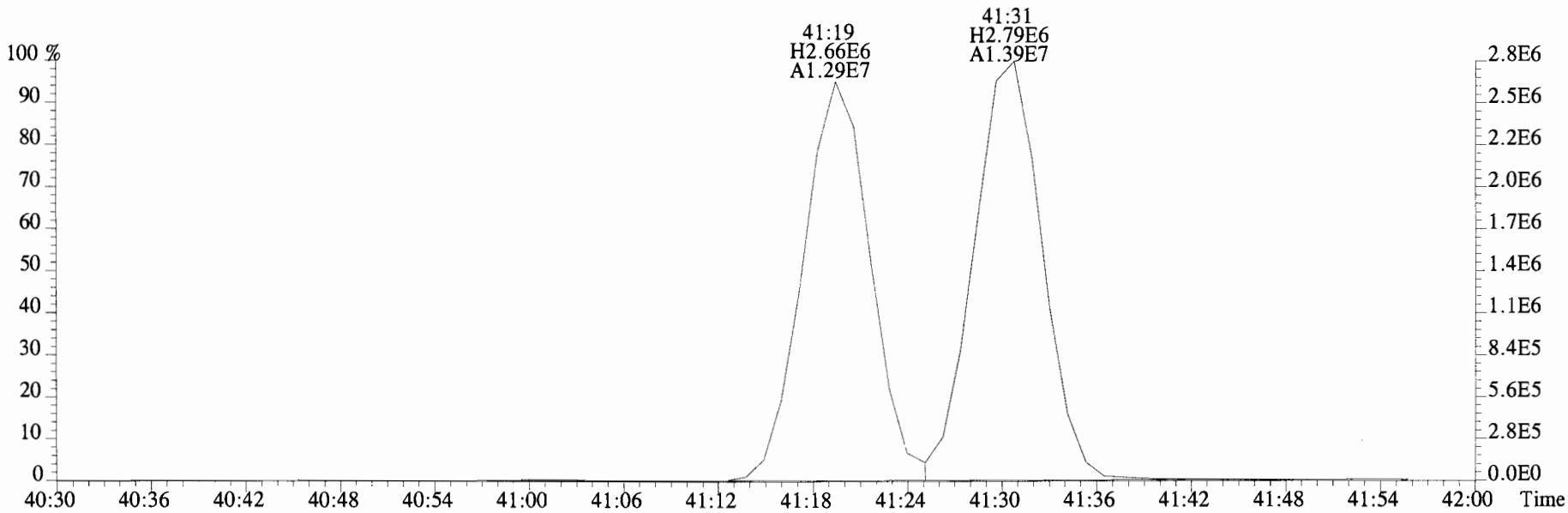
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1804.0,0.00%,F,F)



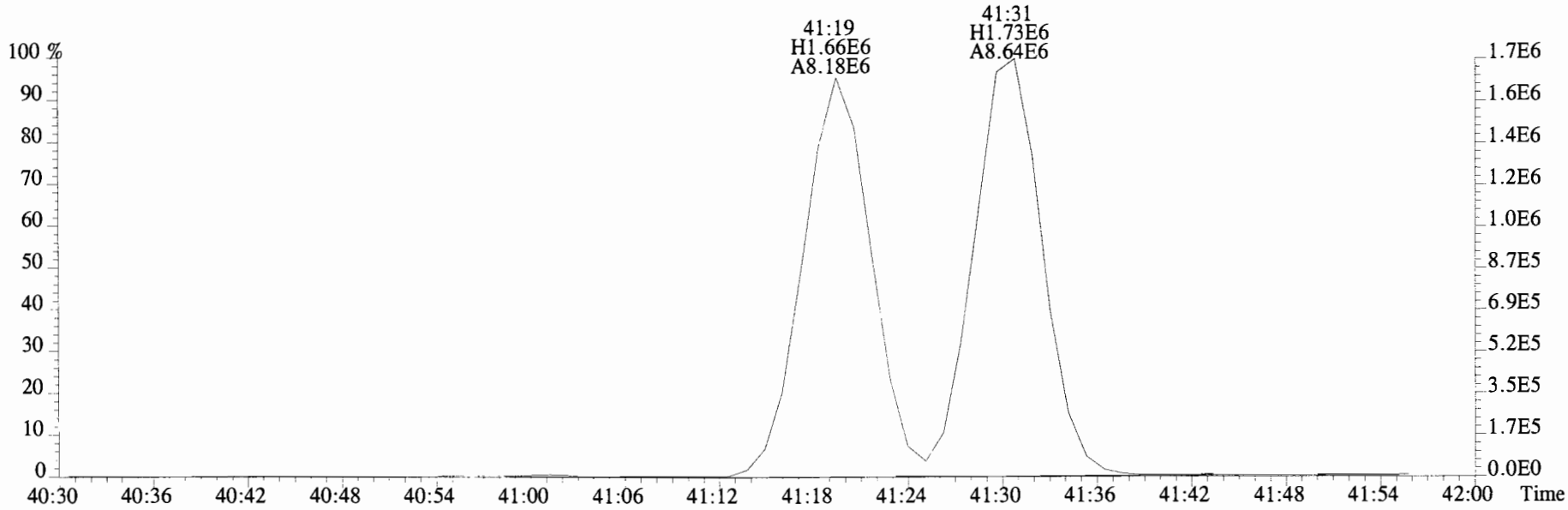
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1492.0,0.00%,F,F)

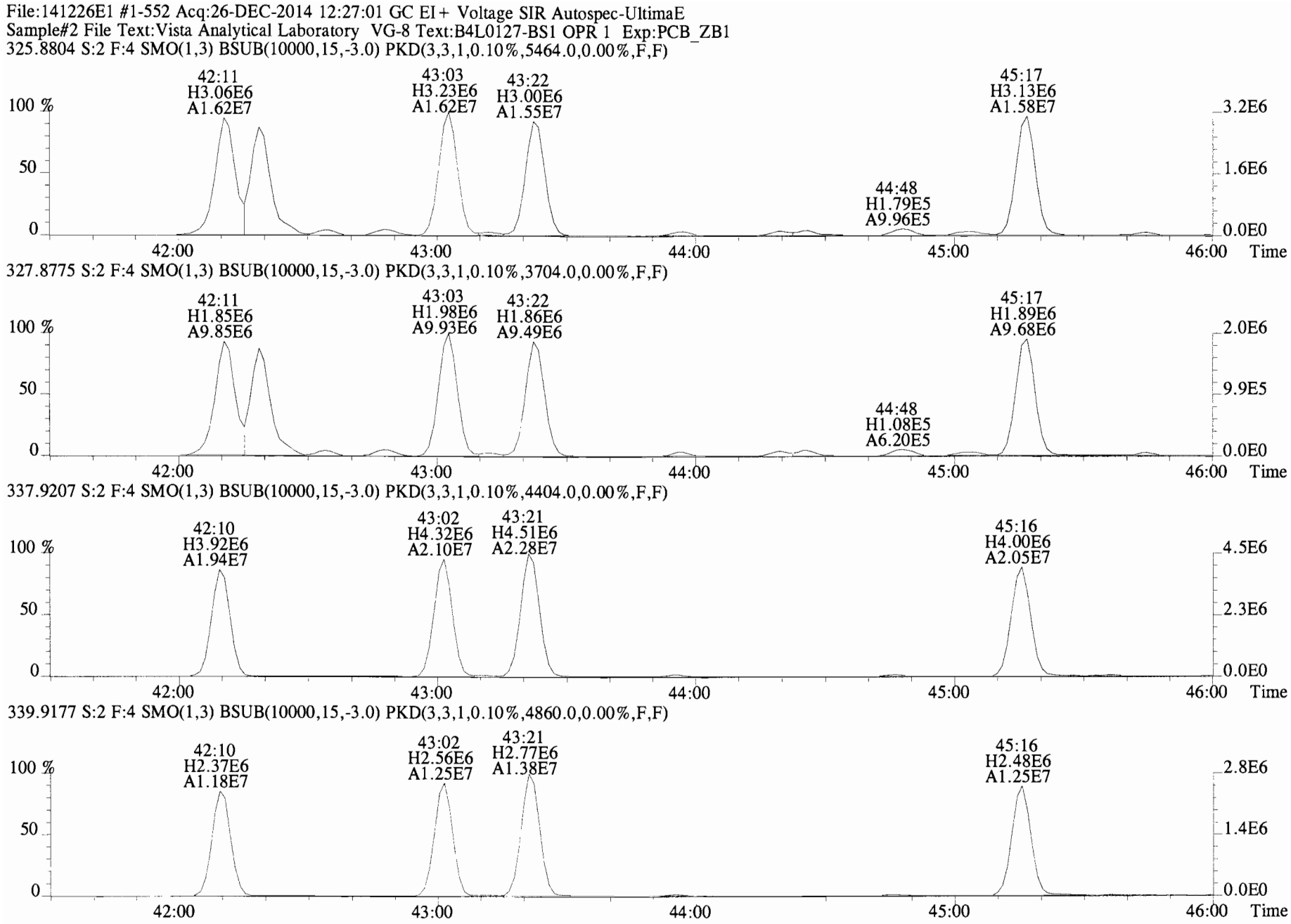


File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1804.0,0.00%,F,F)

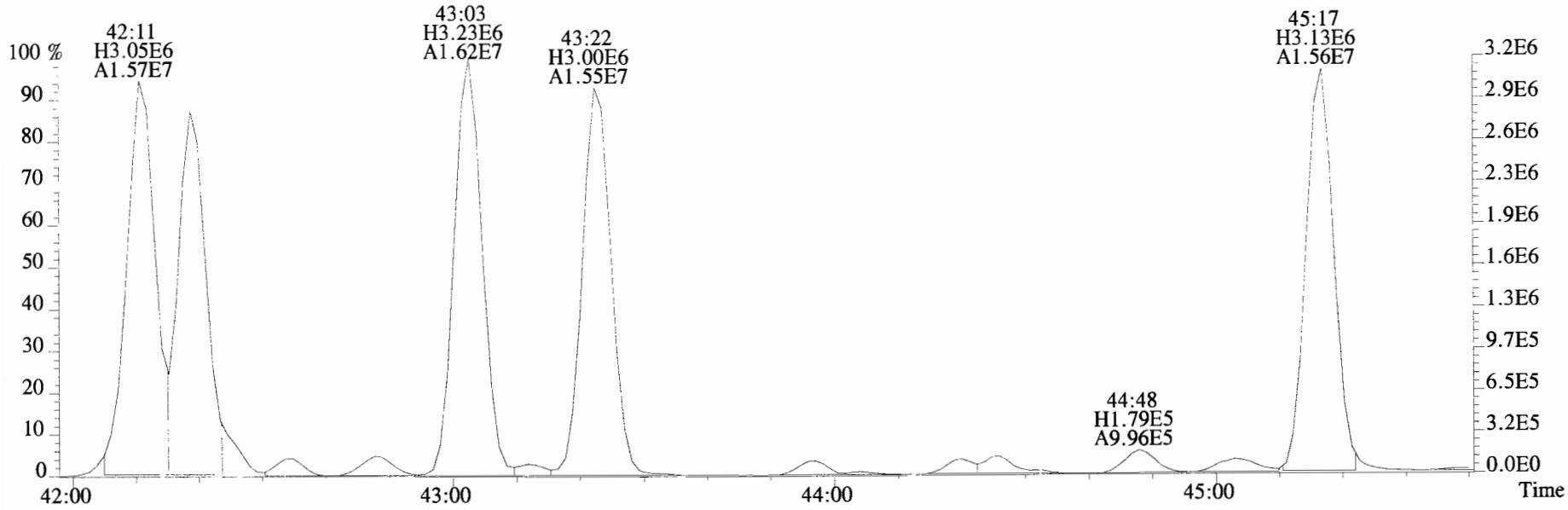


339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1492.0,0.00%,F,F)

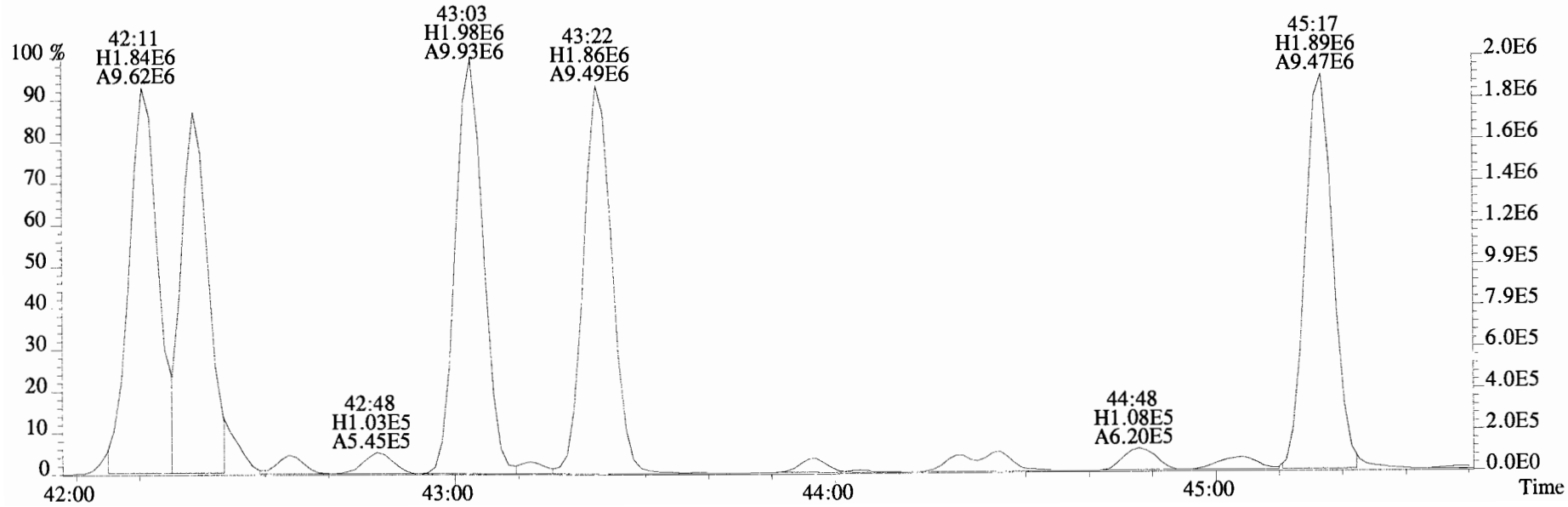



File:141226E1 #1-552 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5464.0,0.00%,F,F)
42:11 H3.06E6 A1.62E7
43:03 H3.23E6 A1.62E7
43:22 H3.00E6 A1.55E7
44:48 H1.79E5 A9.96E5
45:17 H3.13E6 A1.58E7
100 %
50
0
3.2E6
1.6E6
0.0E0
42:00
43:00
44:00
45:00
46:00
Time
327.8775 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3704.0,0.00%,F,F)
42:11 H1.85E6 A9.85E6
43:03 H1.98E6 A9.93E6
43:22 H1.86E6 A9.49E6
44:48 H1.08E5 A6.20E5
45:17 H1.89E6 A9.68E6
100 %
50
0
2.0E6
9.9E5
0.0E0
42:00
43:00
44:00
45:00
46:00
Time
337.9207 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4404.0,0.00%,F,F)
42:10 H3.92E6 A1.94E7
43:02 H4.32E6 A2.10E7
43:21 H4.51E6 A2.28E7
45:16 H4.00E6 A2.05E7
100 %
50
0
4.5E6
2.3E6
0.0E0
42:00
43:00
44:00
45:00
46:00
Time
339.9177 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4860.0,0.00%,F,F)
42:10 H2.37E6 A1.18E7
43:02 H2.56E6 A1.25E7
43:21 H2.77E6 A1.38E7
45:16 H2.48E6 A1.25E7
100 %
50
0
2.8E6
1.4E6
0.0E0
42:00
43:00
44:00
45:00
46:00
Time

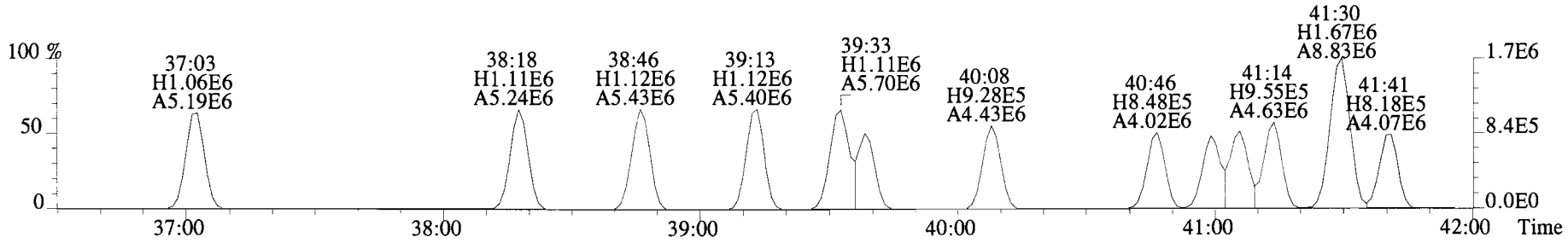
File:141226E1 #1-552 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5464.0,0.00%,F,F)



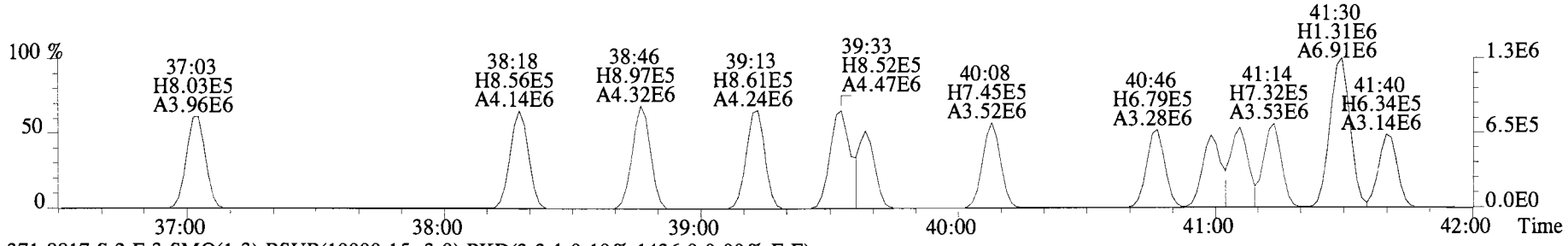
327.8775 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3704.0,0.00%,F,F)



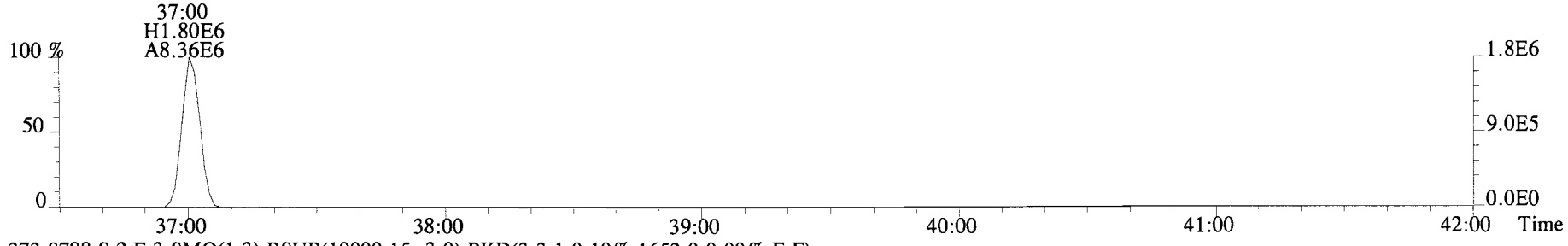
File:141226E1 #1-761 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1460.0,0.00%,F,F)



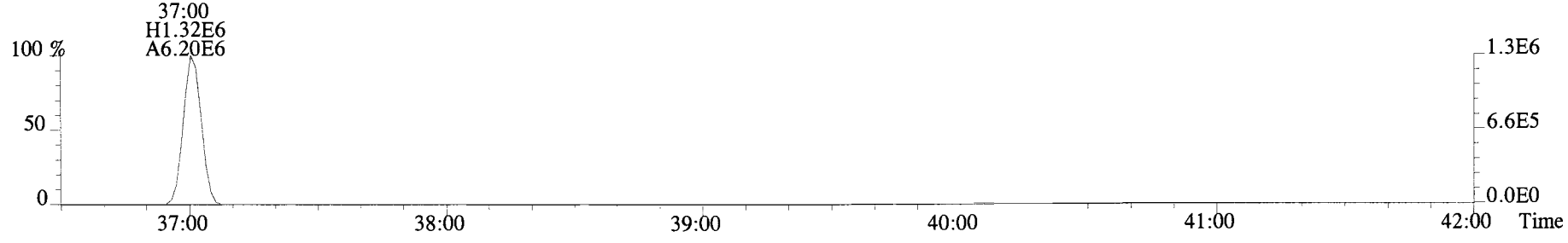
361.8385 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1464.0,0.00%,F,F)



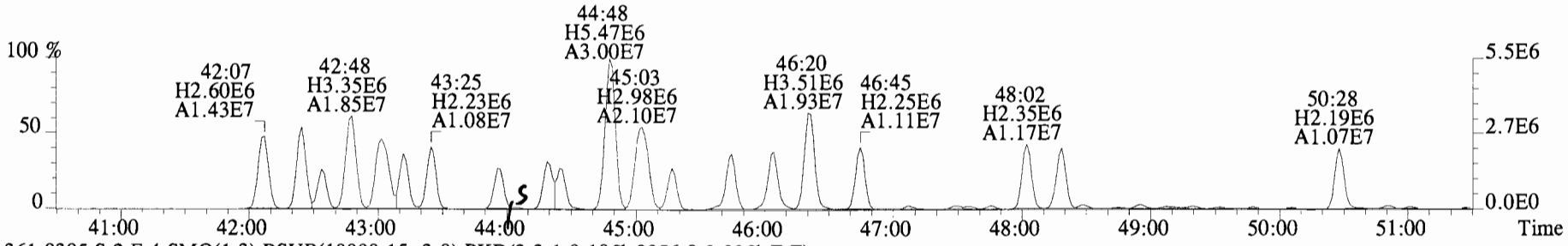
371.8817 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1436.0,0.00%,F,F)



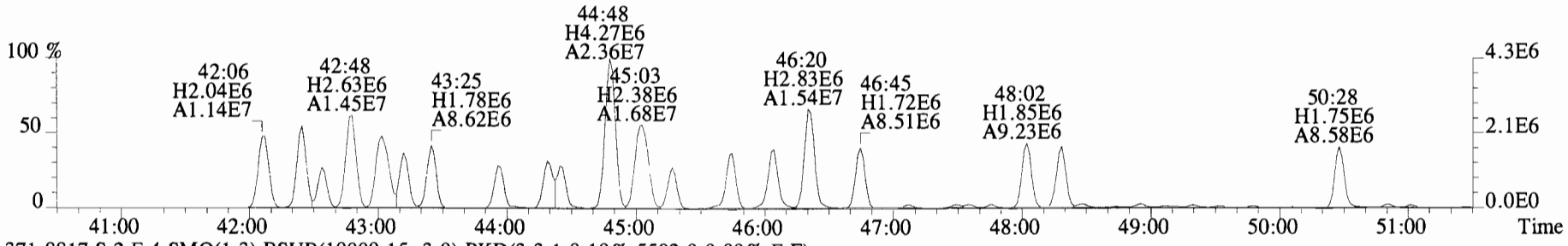
373.8788 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1652.0,0.00%,F,F)



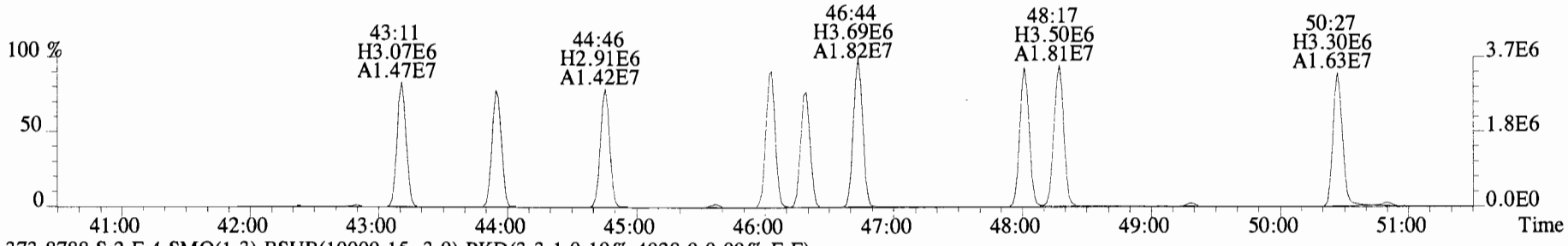
File:141226E1 #1-552 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10656.0,0.00%,F,F)



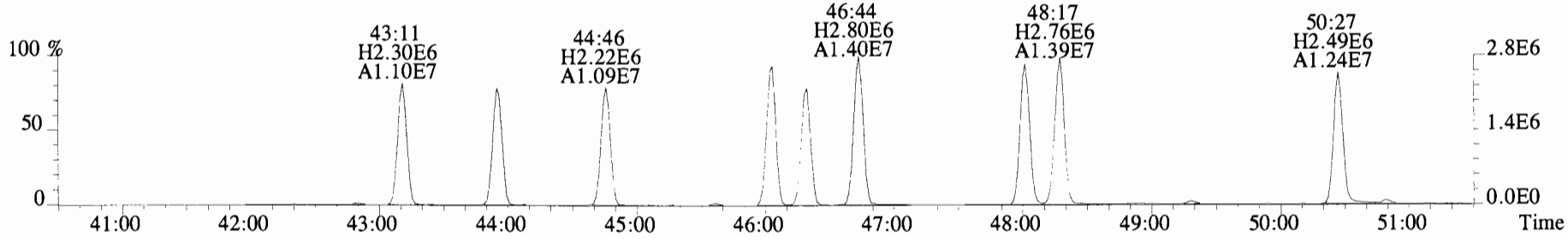
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8056.0,0.00%,F,F)



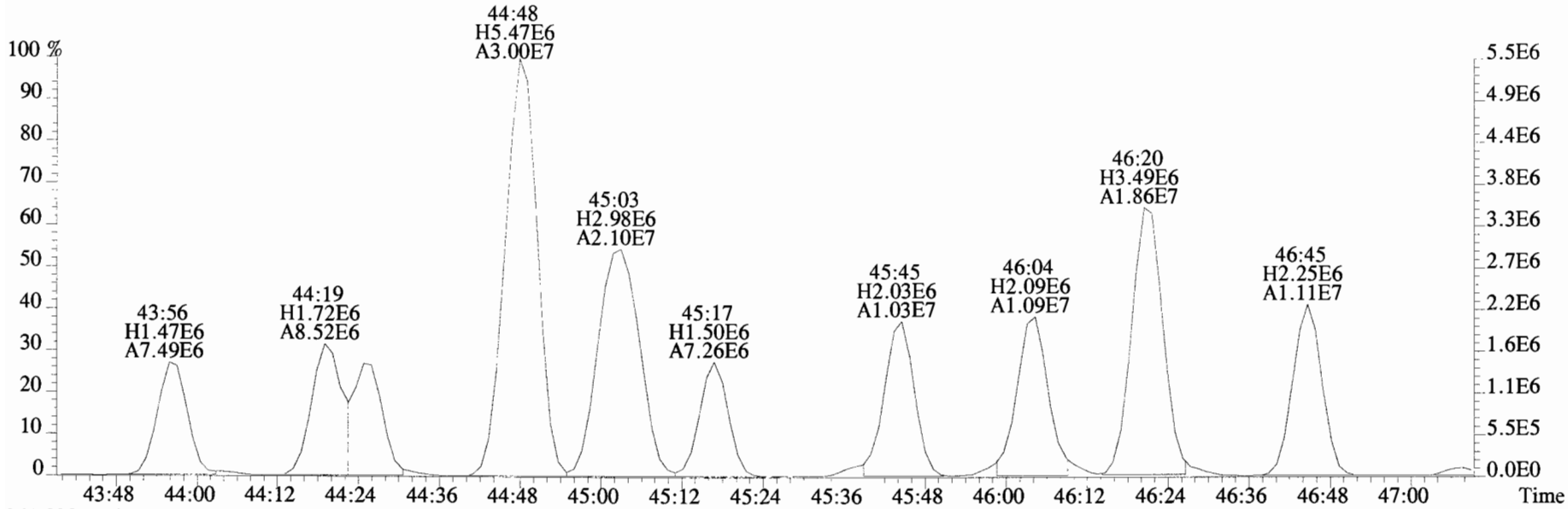
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5592.0,0.00%,F,F)



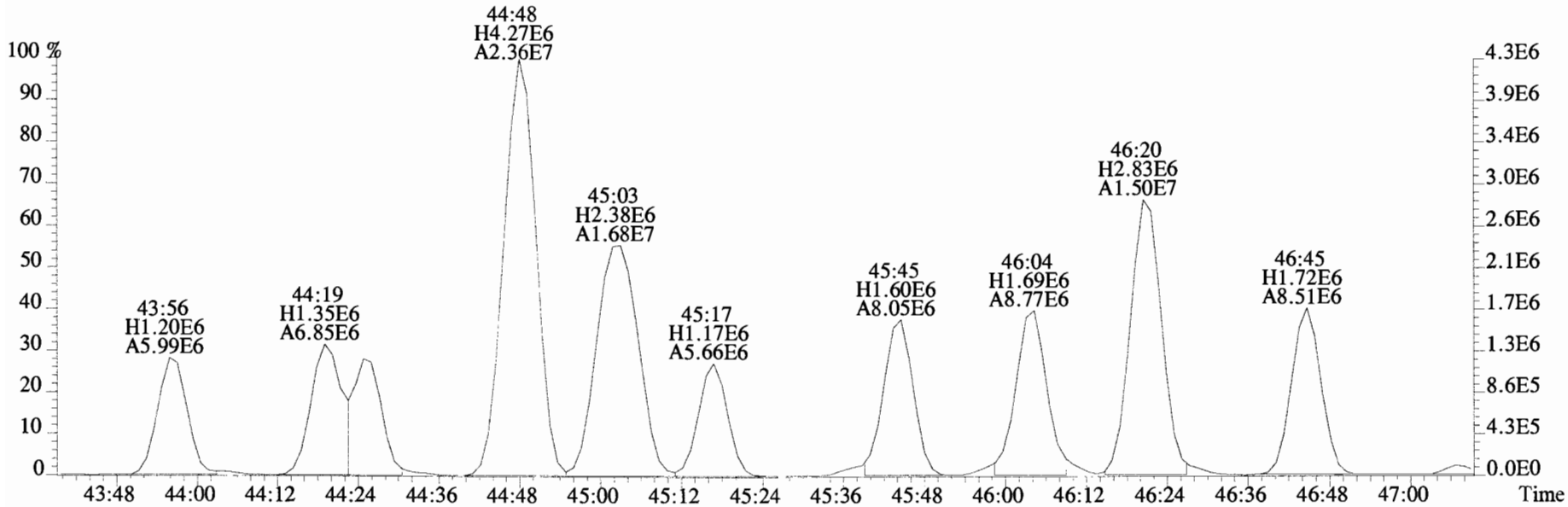
373.8788 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4028.0,0.00%,F,F)



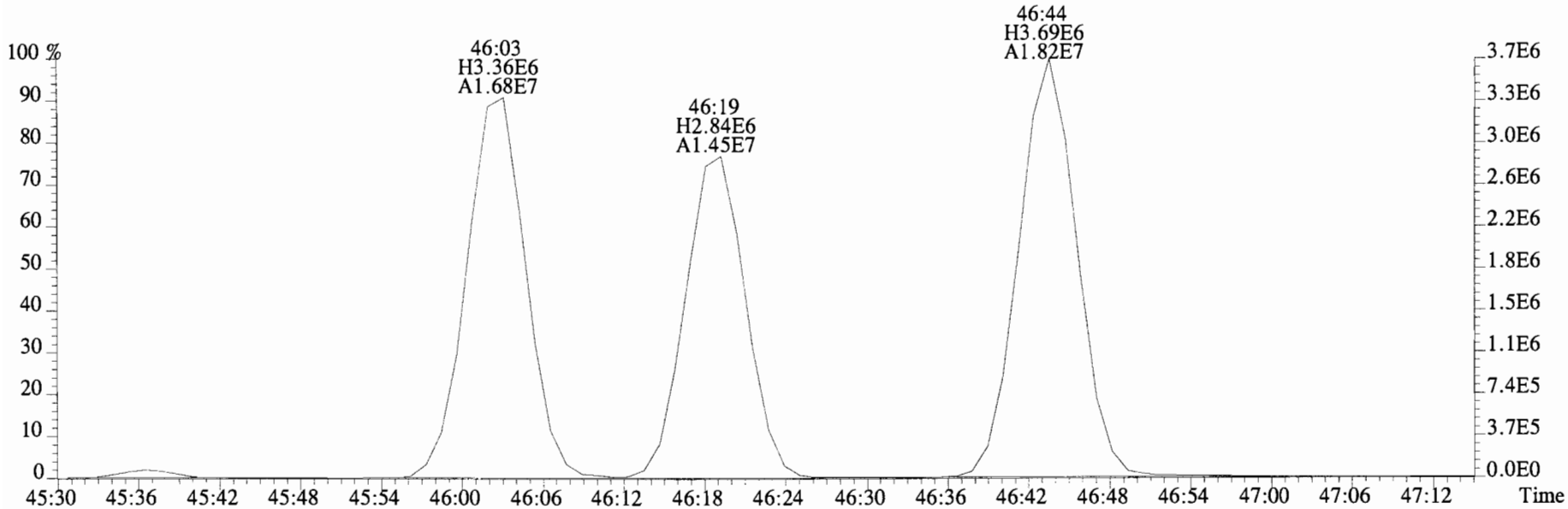
File:141226E1 #1-552 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10656.0,0.00%,F,F)



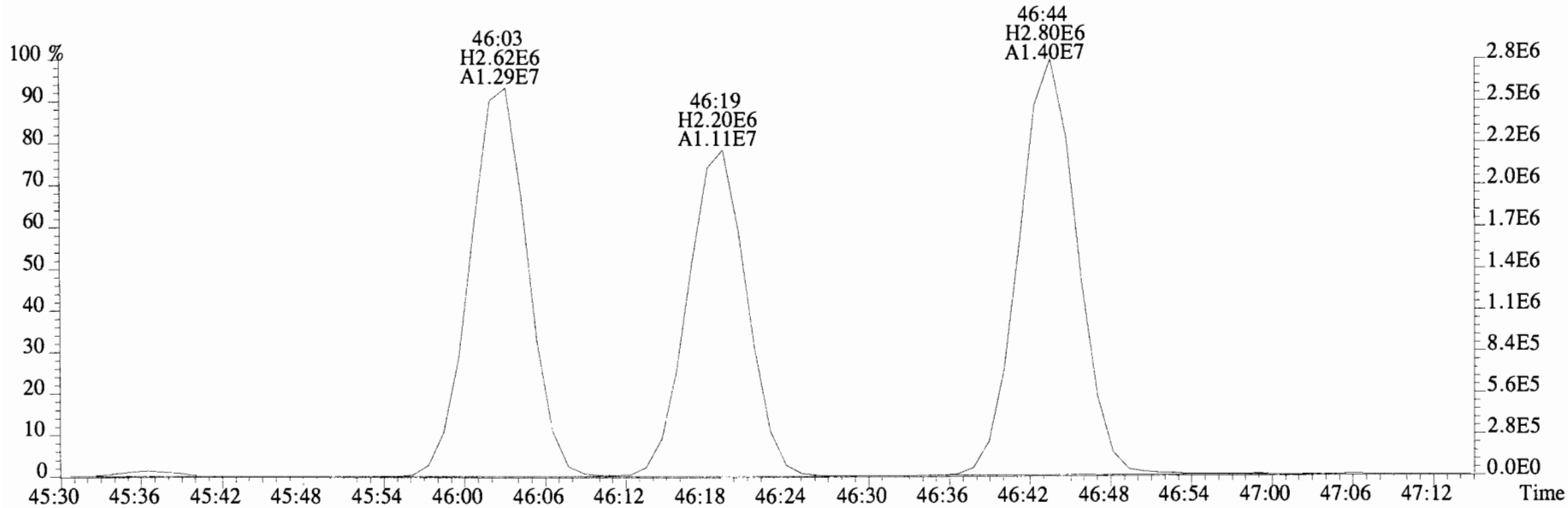
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8056.0,0.00%,F,F)



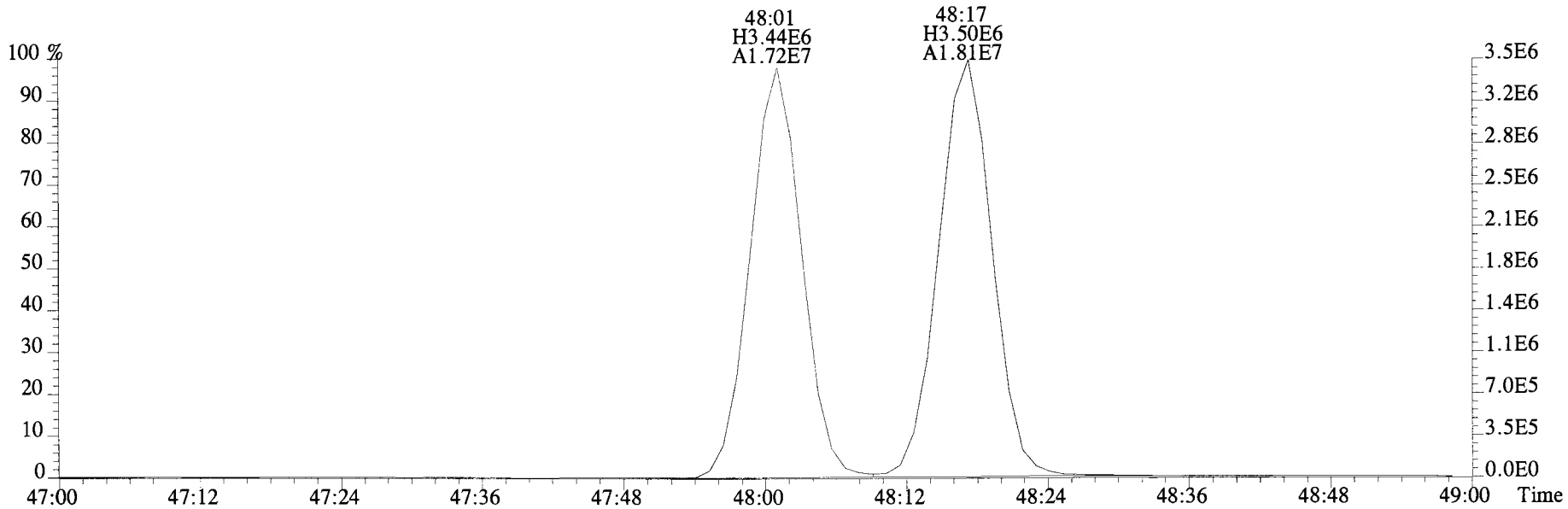
File:141226E1 #1-552 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5592.0,0.00%,F,F)



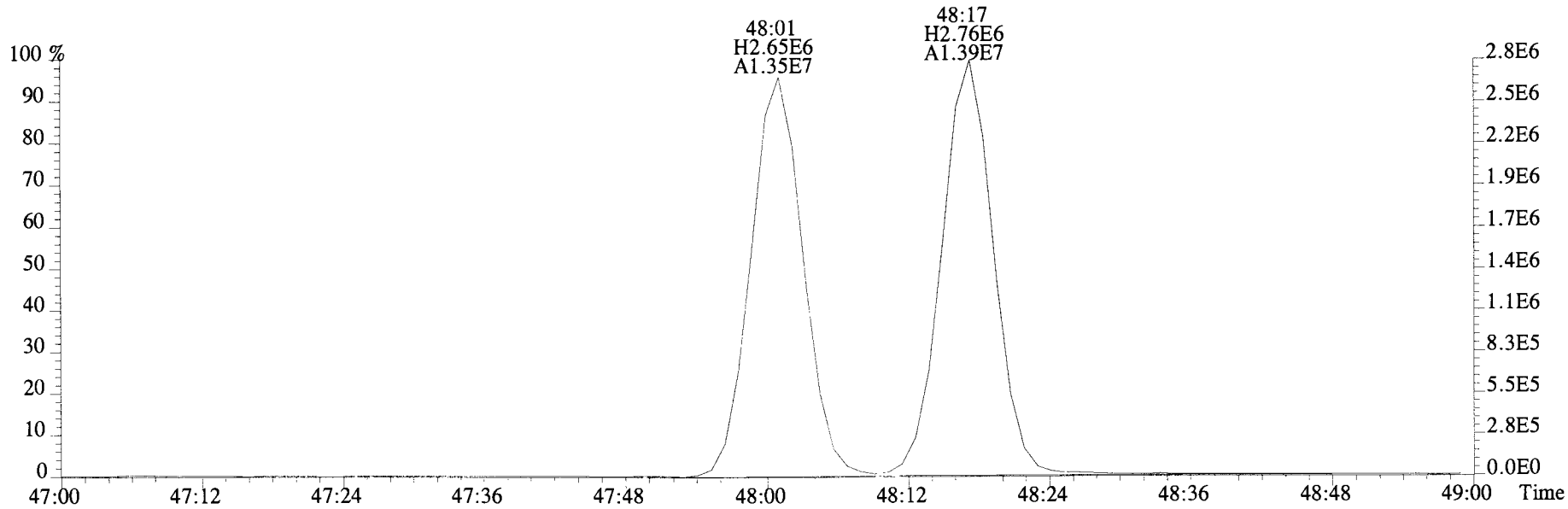
373.8788 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4028.0,0.00%,F,F)



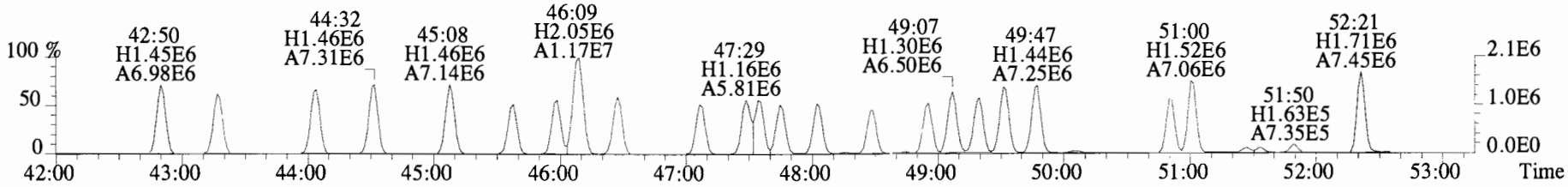
File:141226E1 #1-552 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5592.0,0.00%,F,F)



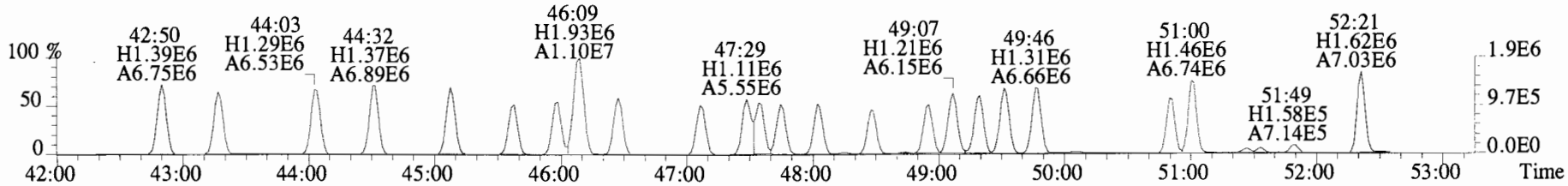
373.8788 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4028.0,0.00%,F,F)



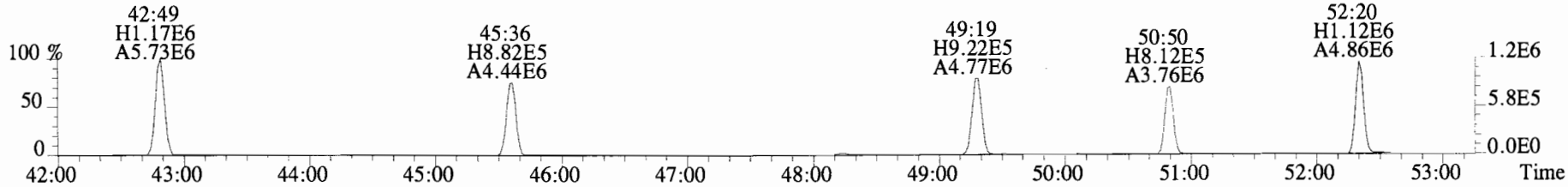
File:141226E1 #1-552 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
393.8025 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3844.0,0.00%,F,F)



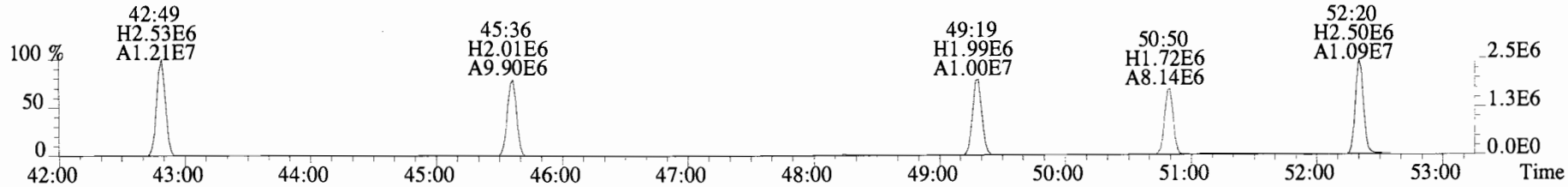
395.7995 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4452.0,0.00%,F,F)



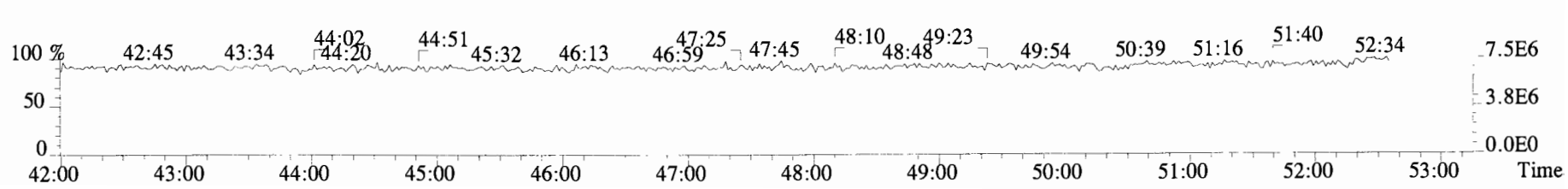
403.8457 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1760.0,0.00%,F,F)



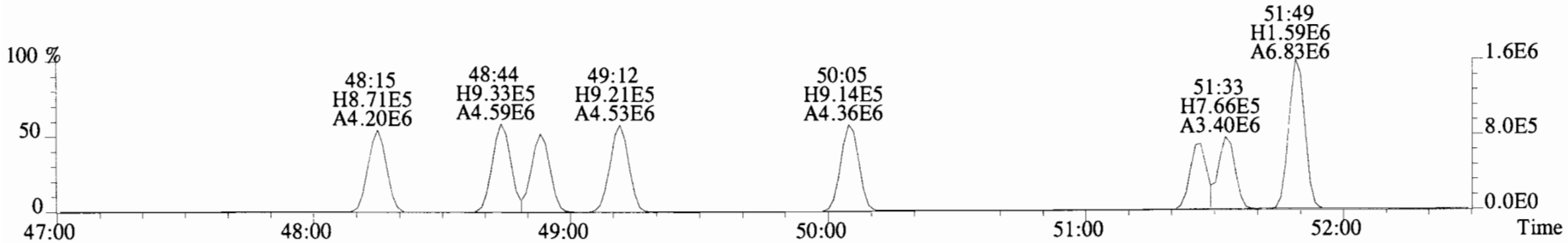
405.8428 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2312.0,0.00%,F,F)



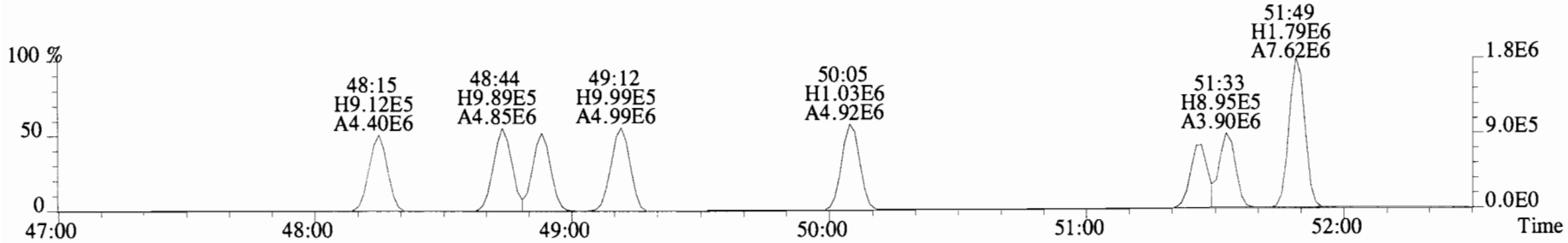
380.9760 S:2 F:4



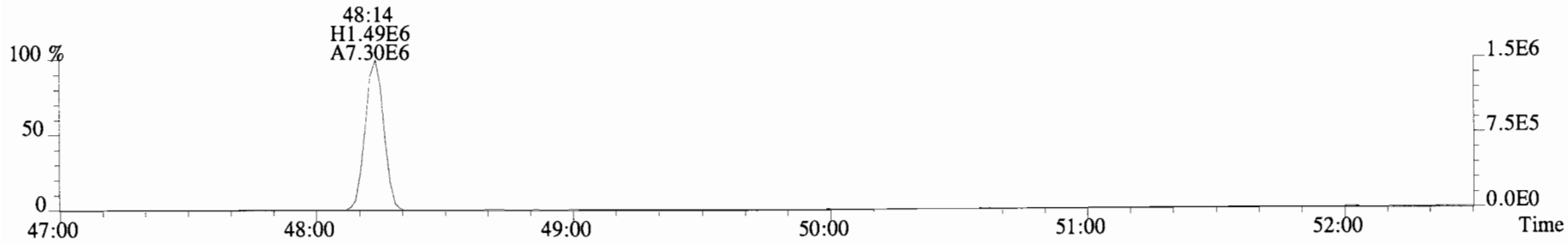
File:141226E1 #1-552 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
427.7635 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1600.0,0.00%,F,F)



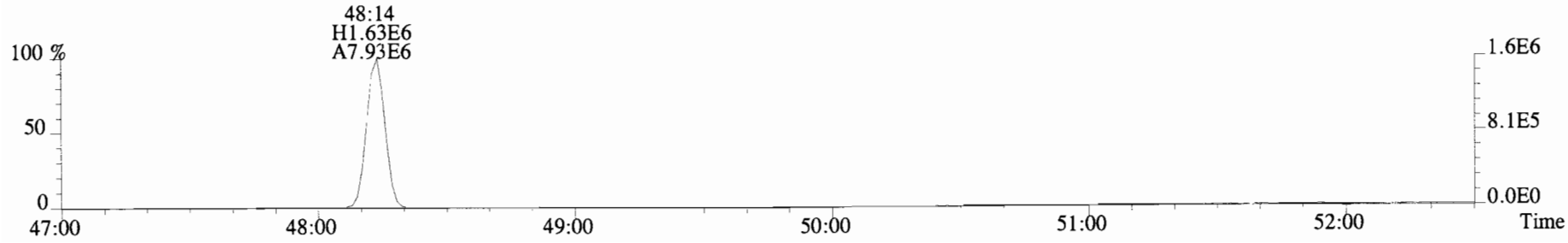
429.7606 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1860.0,0.00%,F,F)



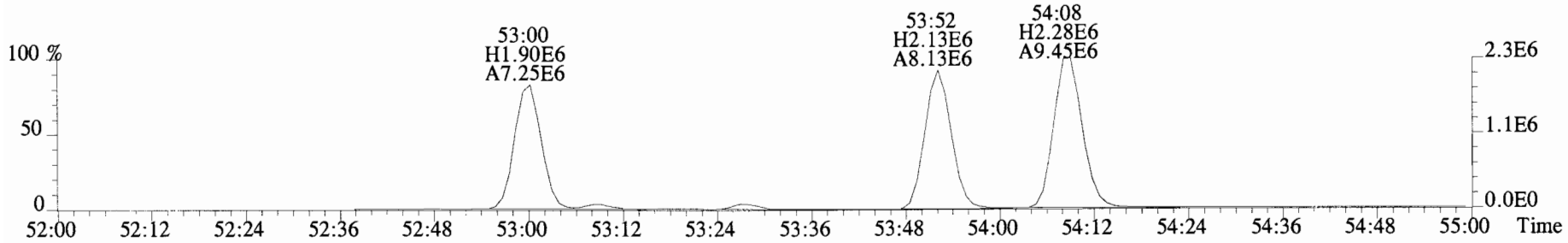
439.8038 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1696.0,0.00%,F,F)



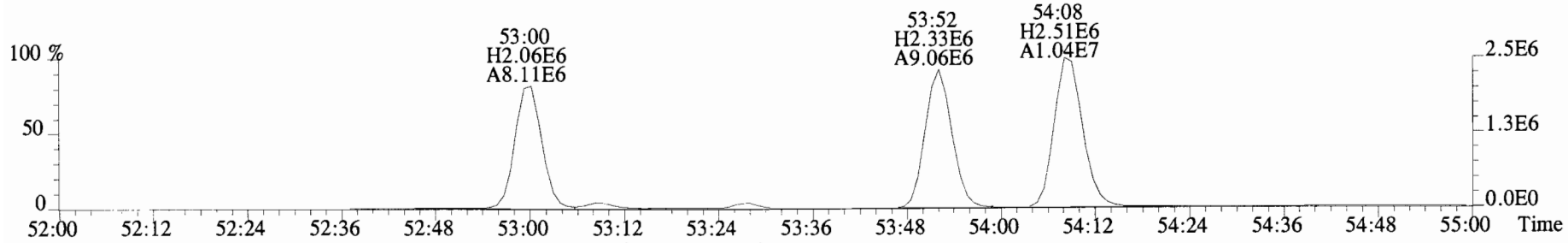
441.8008 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1700.0,0.00%,F,F)



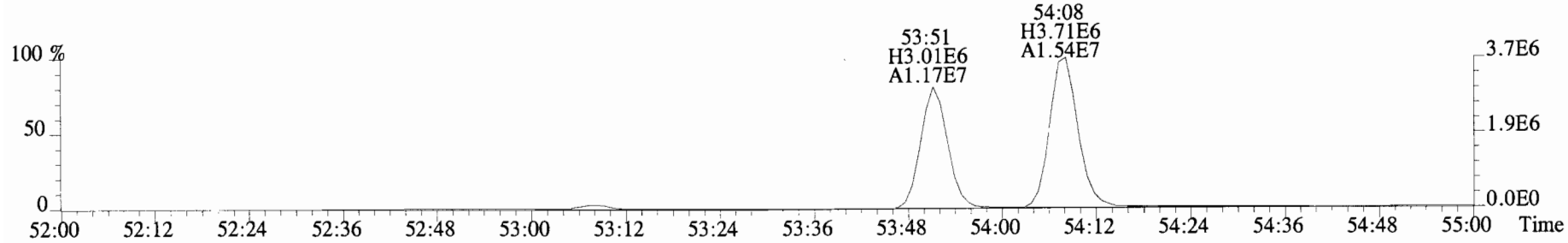
File:141226E1 #1-430 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
427.7635 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9996.0,0.00%,F,F)



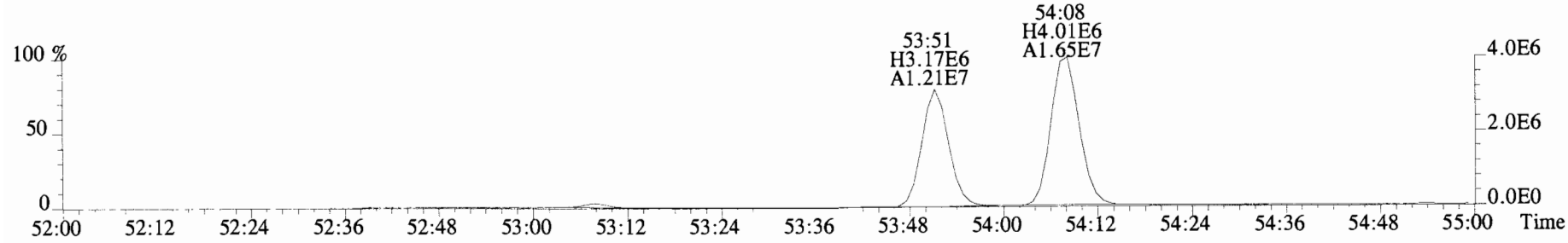
429.7606 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3076.0,0.00%,F,F)



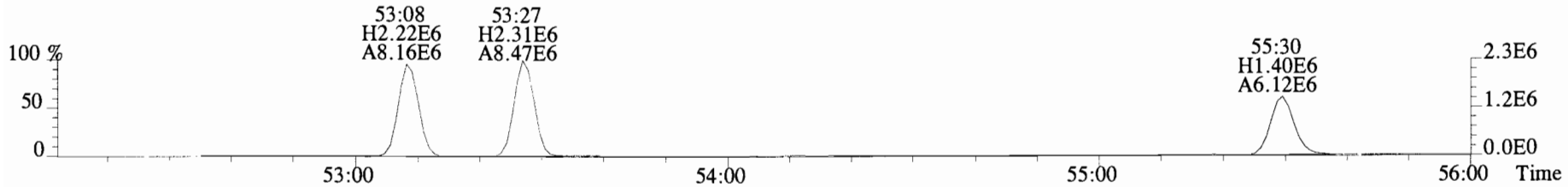
439.8038 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3544.0,0.00%,F,F)



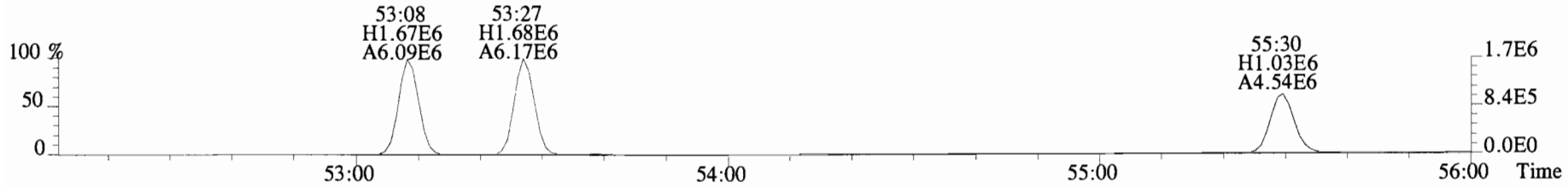
441.8008 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15020.0,0.00%,F,F)



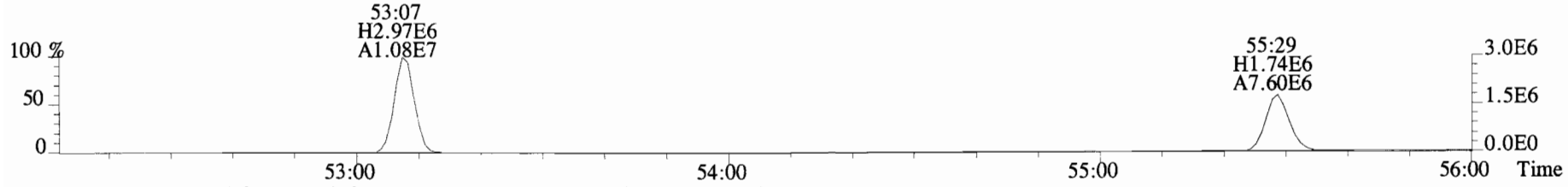
File:141226E1 #1-430 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
463.7216 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5908.0,0.00%,F,F)



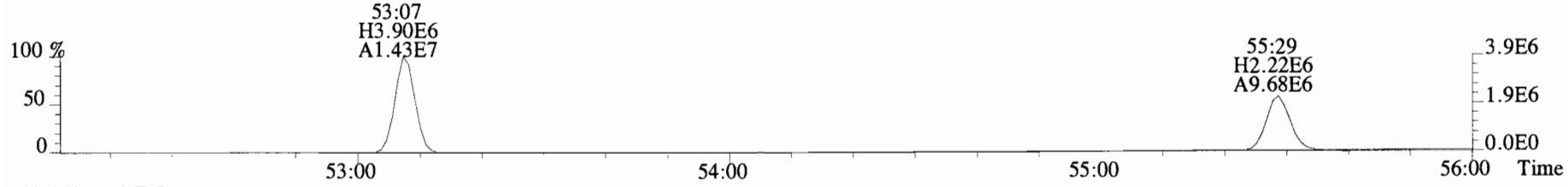
465.7186 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4028.0,0.00%,F,F)



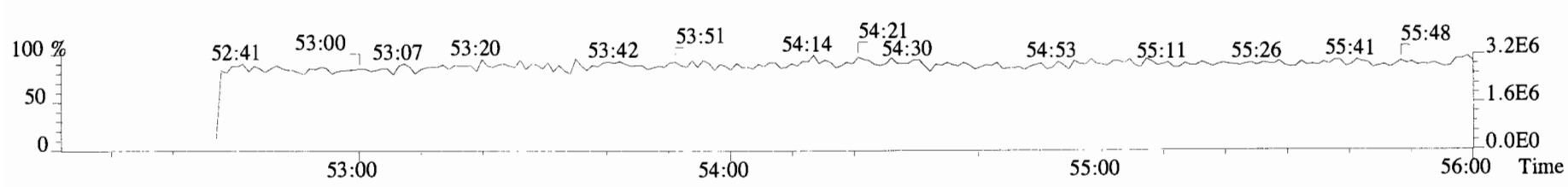
473.7648 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5676.0,0.00%,F,F)



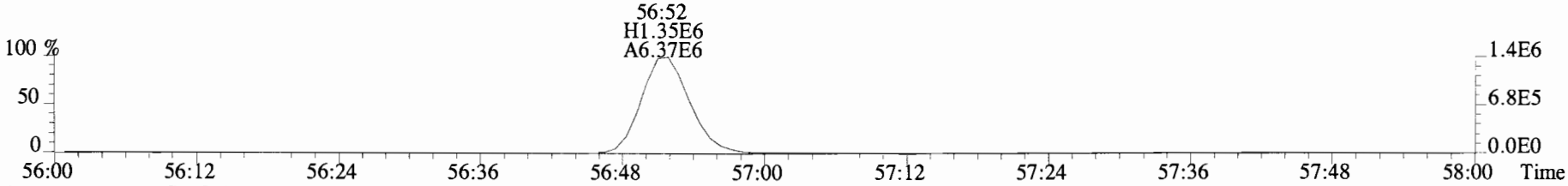
475.7619 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6780.0,0.00%,F,F)



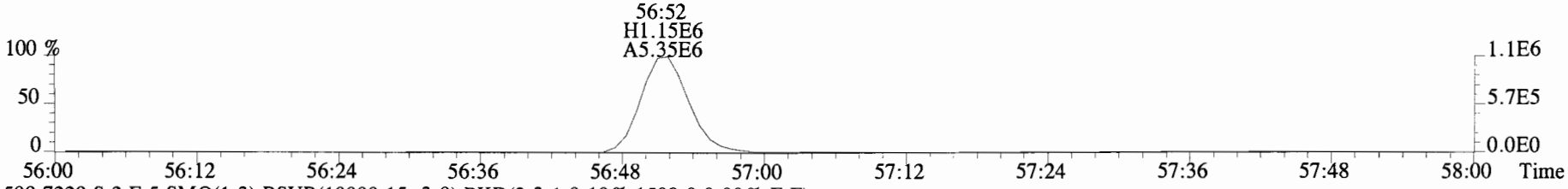
492.9697 S:2 F:5



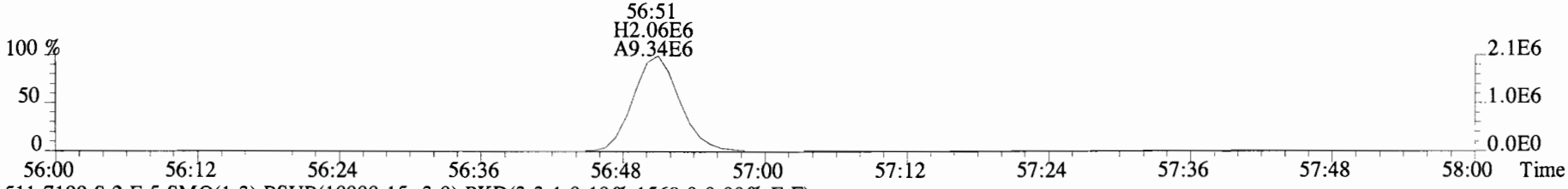
File:141226E1 #1-430 Acq:26-DEC-2014 12:27:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4L0127-BS1 OPR 1 Exp:PCB_ZB1
497.6826 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1444.0,0.00%,F,F)



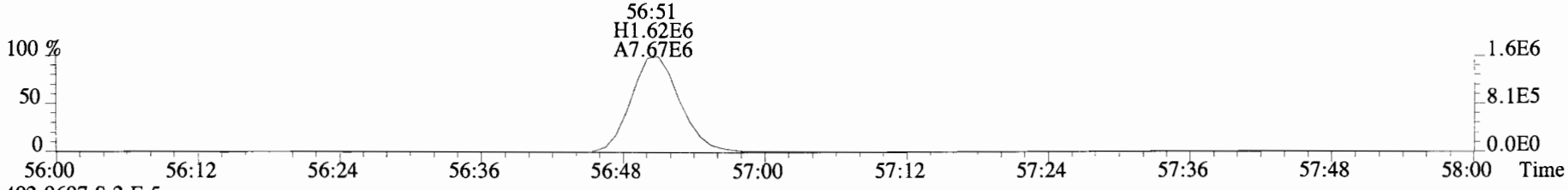
499.6797 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1292.0,0.00%,F,F)



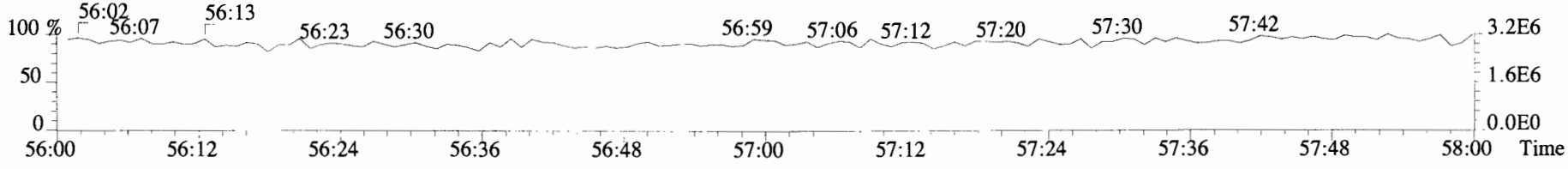
509.7229 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1508.0,0.00%,F,F)



511.7199 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1568.0,0.00%,F,F)



492.9697 S:2 F:5



Client ID: SC-MH-20-20141211-W Filename: 141226E1 S:7 Acq:26-DEC-14 17:49:21 ConCal: ST141226E1-1

Lab ID: 1400948-04 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.993 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	1.15e+05	2.71	y 16:08	1.25	3.44		*	2.5	*	1.001	0.996	1.006
Mono	PCB-2	5.51e+04	2.85	y 18:30	1.18	1.67		*	2.5	*	0.988	0.983	0.993
Mono	PCB-3	1.01e+05	3.29	y 18:45	1.22	2.97		*	2.5	*	1.001	0.996	1.006
Di	PCB-4/10	8.41e+05	1.77	y 20:05	1.55	32.4		*	2.5	*	1.002	0.998	1.008
Di	PCB-7/9	2.40e+05	1.71	y 21:53	1.27	7.24		*	2.5	*	0.868	0.865	0.873
Di	PCB-6	6.40e+05	1.55	y 22:32	1.26	19.4		*	2.5	*	0.894	0.890	0.899
Di	PCB-5/8	2.85e+06	1.65	y 22:55	1.23	88.3		*	2.5	*	0.909	0.906	0.916
Di	PCB-14	*	*	n NotF¶	1.23	*		12000	2.5	7.32	*	0.949	0.959
Di	PCB-11	3.83e+06	1.60	y 25:15	1.16	96.6		*	2.5	*	1.001	0.996	1.006
Di	PCB-12/13	5.19e+05	1.38	y 25:37	1.10	13.8		*	2.5	*	1.016	1.010	1.020
Di	PCB-15	6.19e+06	1.65	y 25:56	1.21	150		*	2.5	*	1.028	1.024	1.034
Tri	PCB-19	7.28e+05	1.19	y 24:13	1.30	37.6		*	2.5	*	1.001	0.996	1.006
Tri	PCB-30	*	*	n NotF¶	1.83	*		1200	2.5	0.915	*	1.032	1.042
Tri	PCB-18	5.35e+06	1.06	y 25:52	0.86	242		*	2.5	*	0.954	0.949	0.959
Tri	PCB-17	2.38e+06	1.10	y 26:02	0.90	102		*	2.5	*	0.960	0.955	0.965
Tri	PCB-24/27	9.95e+05	1.10	y 26:36	1.18	32.8		*	2.5	*	0.981	0.976	0.986
Tri	PCB-16/32	6.70e+06	1.11	y 27:07	1.03	253		*	2.5	*	1.000	0.995	1.005
Tri	PCB-34	5.76e+04	1.11	y 27:55	1.26	1.44		*	2.5	*	0.960	0.956	0.966
Tri	PCB-23	*	*	n NotF¶	1.31	*		3600	1.0	0.852	*	0.959	0.969
Tri	PCB-29	1.41e+05	1.06	y 28:16	1.33	3.33		*	2.5	*	0.972	0.967	0.977
Tri	PCB-26	3.63e+06	1.07	y 28:29	1.29	88.3		*	2.5	*	0.979	0.974	0.984
Tri	PCB-25	1.79e+06	1.02	y 28:38	1.34	41.8		*	2.5	*	0.985	0.980	0.990
Tri	PCB-31	2.05e+07	1.02	y 29:00	1.42	454		*	2.5	*	0.997	0.992	1.002
Tri	PCB-28	2.54e+07	1.04	y 29:05	1.38	579		*	2.5	*	1.000	0.996	1.006
Tri	PCB-20/21/33	1.38e+07	1.01	y 29:44	1.31	331		*	2.5	*	1.022	1.017	1.027
Tri	PCB-22	1.25e+07	1.04	y 30:09	1.32	298		*	2.5	*	1.037	1.032	1.042
Tri	PCB-36	*	*	n NotF¶	1.38	*		2400	2.5	1.48	*	0.929	0.939
Tri	PCB-39	*	*	n NotF¶	1.42	*		2400	2.5	1.44	*	0.943	0.953
Tri	PCB-38	2.48e+05	1.08	y 32:01	1.35	5.95		*	2.5	*	0.972	0.967	0.976
Tri	PCB-35	1.00e+06	1.02	y 32:32	1.38	23.7		*	2.5	*	0.987	0.982	0.992
Tri	PCB-37	2.20e+07	1.02	y 32:58	1.39	514		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-54	3.03e+04	0.80	y 27:58	1.20	1.21		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-50	*	*	n NotF¶	0.97	*		1440	2.5	1.50	*	1.037	1.047
Tetra	PCB-53	1.67e+06	0.85	y 29:47	1.19	69.9		*	2.5	*	0.946	0.941	0.951
Tetra	PCB-51	7.91e+05	0.78	y 30:08	1.15	34.2		*	2.5	*	0.957	0.952	0.962
Tetra	PCB-45	1.87e+06	0.77	y 30:33	0.97	96.4		*	2.5	*	0.970	0.966	0.976
Tetra	PCB-46	8.48e+05	0.75	y 31:02	0.95	44.4		*	2.5	*	0.985	0.982	0.992

Integrations by:

Analyst: JM

Date: 12/30/14

Reviewed by: [signature] Date: 12/31/14

Client ID: SC-MH-20-20141211-W Filename: 141226E1 S:7 Acq:26-DEC-14 17:49:21 ConCal: ST141226E1-1
Lab ID: 1400948-04 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.993 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	2.23e+07	0.79	y 31:31	1.28	869		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-73	*	*	n NotF¶	1.37	*		4140	2.5	3.23	*	1.000	1.010
Tetra	PCB-43/49	1.17e+07	0.77	y 31:49	1.11	525		*	2.5	*	1.010	1.005	1.015
Tetra	PCB-47	4.73e+06	0.81	y 32:00	1.13	199		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-48/75	3.66e+06	0.77	y 32:08	1.30	133		*	2.5	*	1.004	0.999	1.009
Tetra	PCB-65	*	*	n NotF¶	1.33	*		1700	2.5	1.31	*	1.007	1.017
Tetra	PCB-62	*	*	n NotF¶	1.29	*		1700	2.5	1.35	*	1.011	1.021
Tetra	PCB-44	1.73e+07	0.80	y 32:48	0.94	876		*	2.5	*	1.025	1.020	1.030
Tetra	PCB-42/59	7.17e+06	0.78	y 33:02	1.22	280		*	2.5	*	1.032	1.028	1.038
Tetra	PCB-41/64/71/72	2.36e+07	0.82	y 33:37	1.31	856		*	2.5	*	1.051	1.046	1.056
Tetra	PCB-68	3.34e+05	0.87	y 33:53	1.49	10.7		*	2.5	*	1.059	1.054	1.064
Tetra	PCB-40	3.44e+06	0.86	y 34:05	0.82	200		*	2.5	*	1.065	1.061	1.071
Tetra	PCB-57	1.93e+05	0.86	y 34:27	1.11	5.84		*	2.5	*	0.970	0.965	0.975
Tetra	PCB-67	1.16e+06	0.75	y 34:45	1.07	36.5		*	2.5	*	0.978	0.974	0.984
Tetra	PCB-58	7.95e+04	0.71	y 34:52	1.10	2.43		*	2.5	*	0.982	0.977	0.987
Tetra	PCB-63	1.30e+06	0.81	y 35:02	1.12	39.4		*	2.5	*	0.986	0.982	0.992
Tetra	PCB-74	1.82e+07	0.77	y 35:19	1.20	511		*	2.5	*	0.994	0.990	1.000
Tetra	PCB-61/70	4.96e+07	0.80	y 35:32	1.08	1550		*	2.5	*	1.000	0.994	1.004
Tetra	PCB-76/66	3.66e+07	0.80	y 35:44	1.14	1090		*	2.5	*	1.006	1.001	1.011
Tetra	PCB-80	*	*	n NotF¶	1.28	*		1700	2.5	1.05	*	0.996	1.006
Tetra	PCB-55	1.37e+06	0.77	y 36:15	1.11	41.4		*	2.5	*	1.009	1.005	1.015
Tetra	PCB-56/60	3.46e+07	0.79	y 36:46	1.09	1060		*	2.5	*	1.023	1.018	1.028
Tetra	PCB-79	9.50e+05	0.88	y 37:50	1.12	28.2		*	2.5	*	1.053	1.048	1.058
Tetra	PCB-78	*	*	n NotF¶	1.24	*		1700	2.5	1.21	*	0.982	0.992
Tetra	PCB-81	7.64e+05	0.88	y 39:03	1.38	20.1		*	2.5	*	1.000	0.995	1.005
Tetra	PCB-77	1.10e+07	0.79	y 39:38	1.21	315		*	2.5	*	1.000	0.995	1.005
Penta	PCB-104	*	*	n NotF¶	1.26	*		1670	2.5	2.73	*	0.996	1.006
Penta	PCB-96	2.11e+05	1.58	y 33:55	1.09	12.7		*	2.5	*	1.039	1.034	1.044
Penta	PCB-103	1.09e+05	1.51	y 34:28	0.93	7.68		*	2.5	*	1.056	1.050	1.060
Penta	PCB-100	6.49e+04	1.63	y 34:50	1.00	4.27		*	2.5	*	1.067	1.061	1.071
Penta	PCB-94	1.25e+05	1.47	y 35:18	1.11	9.14		*	2.5	*	0.986	0.981	0.991
Penta	PCB-95/98/102	2.17e+07	1.63	y 35:50	1.21	1450		*	2.5	*	1.000	0.994	1.004
Penta	PCB-93	*	*	n NotF¶	1.13	*		1670	2.5	3.86	*	0.998	1.008
Penta	PCB-88/91	3.89e+06	1.71	y 36:14	1.02	310		*	2.5	*	1.012	1.006	1.016
Penta	PCB-121	*	*	n NotF¶	1.90	*		1670	2.5	2.29	*	1.009	1.019
Penta	PCB-84/92	1.30e+07	1.65	y 37:08	1.05	892		*	2.5	*	0.990	0.986	0.996
Penta	PCB-89	3.27e+05	1.63	y 37:18	1.02	23.2		*	2.5	*	0.995	0.991	1.001

Analyst: MJ

Date: 12/30/14

Client ID: SC-MH-20-20141211-W Filename: 141226E1 S:7 Acq:26-DEC-14 17:49:21 ConCal: ST141226E1-1

Lab ID: 1400948-04 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.993 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	3.66e+07	1.65	y 37:31	1.19	2220		*	2.5	*	1.000	0.996	1.006
Penta	PCB-113	*	*	n NotF¶	1.35	*		2200	2.5	3.90	*	1.002	1.012
Penta	PCB-99	1.58e+07	1.66	y 37:50	1.29	886		*	2.5	*	1.009	1.005	1.015
Penta	PCB-119	7.32e+05	1.44	y 38:18	1.72	33.0		*	2.5	*	0.987	0.982	0.992
Penta	PCB-108/112	1.84e+06	1.71	y 38:28	1.29	111		*	2.5	*	0.991	0.986	0.996
Penta	PCB-83	*	*	n NotF¶	1.52	*		2200	2.5	3.72	*	0.991	1.001
Penta	PCB-97	1.24e+07	1.64	y 38:48	1.25	772		*	2.5	*	1.000	0.996	1.006
Penta	PCB-86	1.13e+05	1.50	y 38:57	1.02	8.58		*	2.5	*	1.004	1.000	1.010
Penta	PCB-87/117/125	2.07e+07	1.65	y 39:05	1.56	1030		*	2.5	*	1.007	1.002	1.012
Penta	PCB-111/115	8.69e+05	1.72	y 39:13	1.75	38.6		*	2.5	*	1.011	1.007	1.017
Penta	PCB-85/116	8.31e+06	1.73	y 39:21	1.30	496		*	2.5	*	1.014	1.010	1.020
Penta	PCB-120	1.32e+05	1.70	y 39:34	1.78	5.74		*	2.5	*	1.020	1.016	1.026
Penta	PCB-110	6.74e+07	1.64	y 39:45	1.68	3120		*	2.5	*	1.024	1.020	1.030
Penta	PCB-82	5.57e+06	1.65	y 40:23	0.74	426		*	2.5	*	0.976	0.972	0.982
Penta	PCB-124	2.98e+06	1.69	y 41:03	1.32	127		*	2.5	*	0.992	0.988	0.998
Penta	PCB-107/109	4.47e+06	1.58	y 41:14	1.22	207		*	2.5	*	0.997	0.991	1.001
Penta	PCB-123	1.10e+06	1.77	y 41:23	1.22	51.2		*	2.5	*	1.000	0.995	1.005
Penta	PCB-106/118	6.86e+07	1.65	y 41:33	1.22	2980		*	2.5	*	1.000	0.996	1.006
Penta	PCB-114	2.20e+06	1.66	y 42:13	1.36	71.6		*	2.5	*	1.000	0.995	1.005
Penta	PCB-122	1.07e+06	1.69	y 42:21	1.24	38.3		*	2.5	*	1.004	0.999	1.009
Penta	PCB-105	4.26e+07	1.62	y 43:04	1.28	1440		*	2.5	*	1.000	0.995	1.005
Penta	PCB-127	*	*	n NotF¶	1.14	*		3600	2.5	4.40	*	0.995	1.005
Penta	PCB-126	1.33e+06	1.54	y 45:19	1.28	48.3		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-155	*	*	n NotF¶	1.14	*		917	2.5	1.84	*	0.966	1.006
Hexa	PCB-150	4.58e+04	1.29	y 38:19	1.06	3.38		*	2.5	*	1.035	1.030	1.040
Hexa	PCB-152	3.58e+04	1.19	y 38:47	1.10	2.56		*	2.5	*	1.047	1.043	1.053
Hexa	PCB-145	*	*	n NotF¶	1.09	*		917	2.5	1.91	*	1.055	1.065
Hexa	PCB-136	3.69e+06	1.25	y 39:33	1.08	267		*	2.5	*	1.068	1.064	1.074
Hexa	PCB-148	*	*	n NotF¶	0.74	*		917	2.5	2.82	*	1.066	1.076
Hexa	PCB-154	2.41e+05	1.13	y 40:09	0.88	21.4		*	2.5	*	1.084	1.079	1.089
Hexa	PCB-151	4.70e+06	1.35	y 40:48	0.81	456		*	2.5	*	1.102	1.097	1.107
Hexa	PCB-135	3.28e+06	1.26	y 41:00	0.78	331		*	2.5	*	1.107	1.101	1.113
Hexa	PCB-144	1.06e+06	1.39	y 41:08	0.82	101		*	2.5	*	1.111	1.105	1.116
Hexa	PCB-147	5.31e+05	1.39	y 41:15	0.83	50.3		*	2.5	*	1.114	1.011	1.120
Hexa	PCB-139/149	2.28e+07	1.28	y 41:30	0.84	2120		*	2.5	*	1.121	1.115	1.127
Hexa	PCB-140	1.88e+05	1.09	y 41:42	0.79	18.8		*	2.5	*	1.126	1.120	1.132
Hexa	PCB-134/143	2.66e+06	1.26	y 42:08	0.93	136		*	2.5	*	0.975	0.970	0.980

Analyst: MJ

Date: 12/30/14

Client ID: SC-MH-20-20141211-W Filename: 141226E1 S:7 Acq:26-DEC-14 17:49:21 ConCal: ST141226E1-1
Lab ID: 1400948-04 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.993 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	1.42e+06	1.28	y 42:26	0.95	71.1		*	2.5	*	0.982	0.977	0.987
Hexa	PCB-131	*	*	n NotF╖	0.91	*		2400	2.5	3.77	*	0.981	0.991
Hexa	PCB-146/165	7.88e+06	1.28	y 42:50	1.16	323		*	2.5	*	0.991	0.986	0.996
Hexa	PCB-132/161	2.03e+07	1.27	y 43:05	1.11	863		*	2.5	*	0.997	0.992	1.002
Hexa	PCB-153	5.84e+07	1.28	y 43:14	1.18	2350		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-168	*	*	n NotF╖	1.37	*		2400	2.5	2.52	*	1.000	1.010
Hexa	PCB-141	1.20e+07	1.28	y 43:58	0.97	619		*	2.5	*	1.000	0.996	1.005
Hexa	PCB-137	3.64e+06	1.23	y 44:21	1.07	171		*	2.5	*	1.009	1.004	1.014
Hexa	PCB-130	3.71e+06	1.24	y 44:27	0.85	220		*	2.5	*	1.011	1.007	1.017
Hexa	PCB-138/163/164	8.30e+07	1.27	y 44:49	1.23	3360		*	2.5	*	1.000	0.996	1.006
Hexa	PCB-158/160	1.04e+07	1.24	y 45:03	1.29	399		*	2.5	*	1.006	1.001	1.011
Hexa	PCB-129	3.26e+06	1.18	y 45:18	0.92	175		*	2.5	*	1.011	1.007	1.017
Hexa	PCB-166	3.16e+05	1.60	n 45:46	1.12	12.1	R	*	2.5	*	0.993	0.988	0.998
Hexa	PCB-159	*	*	n NotF╖	1.16	*		2400	2.5	2.70	*	0.995	1.005
Hexa	PCB-128/162	1.48e+07	1.28	y 46:22	1.02	623		*	2.5	*	1.006	1.002	1.012
Hexa	PCB-167	4.24e+06	1.24	y 46:47	1.06	155		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-156	1.11e+07	1.27	y 48:04	1.18	391		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-157	2.56e+06	1.24	y 48:20	1.08	93.6		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-169	*	*	n NotF╖	1.11	*		2400	2.5	2.92	*	0.995	1.005
Hepta	PCB-188	6.91e+04	0.90	y 42:51	1.40	3.08		*	2.5	*	1.000	0.995	1.005
Hepta	PCB-184	3.63e+04	1.00	y 43:18	1.24	1.84		*	2.5	*	1.011	1.006	1.016
Hepta	PCB-179	5.20e+06	1.03	y 44:05	1.30	250		*	2.5	*	1.029	1.024	1.034
Hepta	PCB-176	1.68e+06	1.02	y 44:33	1.36	77.2		*	2.5	*	1.040	1.035	1.045
Hepta	PCB-186	*	*	n NotF╖	1.28	*		1200	2.5	1.11	*	1.049	1.059
Hepta	PCB-178	2.14e+06	1.05	y 45:39	0.94	143		*	2.5	*	1.065	1.061	1.071
Hepta	PCB-175	5.45e+05	0.91	y 46:00	0.97	35.2		*	2.5	*	1.074	1.069	1.079
Hepta	PCB-182/187	1.51e+07	1.09	y 46:09	1.01	934		*	2.5	*	1.077	1.073	1.083
Hepta	PCB-183	7.45e+06	1.07	y 46:28	1.08	431		*	2.5	*	1.084	1.080	1.090
Hepta	PCB-185	1.39e+06	1.10	y 47:09	1.34	81.0		*	2.5	*	0.956	0.951	0.961
Hepta	PCB-174	1.22e+07	1.07	y 47:30	1.34	712		*	2.5	*	0.963	0.958	0.968
Hepta	PCB-181	*	*	n NotF╖	1.36	*		1200	2.5	1.29	*	0.961	0.971
Hepta	PCB-177	6.59e+06	1.09	y 47:46	1.24	414		*	2.5	*	0.968	0.964	0.974
Hepta	PCB-171	3.40e+06	1.12	y 48:04	1.31	202		*	2.5	*	0.974	0.970	0.980
Hepta	PCB-173	2.52e+05	1.14	y 48:30	1.16	16.9		*	2.5	*	0.983	0.979	0.989
Hepta	PCB-172	2.26e+06	1.04	y 48:57	1.22	144		*	2.5	*	0.992	0.988	0.998
Hepta	PCB-192	*	*	n NotF╖	1.53	*		1200	2.5	1.15	*	0.991	1.001
Hepta	PCB-180	3.29e+07	1.05	y 49:21	1.43	1800		*	2.5	*	1.000	0.995	1.005

Analyst: M

Date: 12/30/14

Client ID: SC-MH-20-20141211-W Filename: 141226E1 S:7 Acq:26-DEC-14 17:49:21 ConCal: ST141226E1-1
Lab ID: 1400948-04 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.993 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	1.77e+06	1.05	y	49:34	1.65	83.7		*	2.5	*	1.005	0.999	1.009
Hepta	PCB-191	7.20e+05	0.97	y	49:49	1.67	33.6		*	2.5	*	1.010	1.004	1.014
Hepta	PCB-170	1.30e+07	1.11	y	50:52	1.50	875		*	2.5	*	1.000	0.995	1.005
Hepta	PCB-190	3.29e+06	1.03	y	51:03	2.02	165		*	2.5	*	1.004	0.998	1.008
Hepta	PCB-189	6.43e+05	0.98	y	52:22	1.54	33.6		*	2.5	*	1.000	0.995	1.005
Octa	PCB-202	1.37e+06	0.95	y	48:16	1.04	94.1		*	2.5	*	1.000	0.995	1.005
Octa	PCB-201	9.80e+05	0.99	y	48:45	1.10	63.3		*	2.5	*	1.010	1.006	1.016
Octa	PCB-204	*	*	n	NotF	0.99	*		1140	2.5	2.09	*	1.009	1.019
Octa	PCB-197	2.49e+05	1.02	y	49:13	1.07	16.6		*	2.5	*	1.020	1.015	1.025
Octa	PCB-200	8.52e+05	0.95	y	50:06	1.02	59.6		*	2.5	*	1.038	1.032	1.044
Octa	PCB-198	2.22e+05	0.98	y	51:27	0.74	21.3		*	2.5	*	1.066	1.058	1.068
Octa	PCB-199	6.04e+06	0.94	y	51:34	0.73	591		*	2.5	*	1.069	1.060	1.070
Octa	PCB-196/203	6.91e+06	0.97	y	51:50	0.77	637		*	2.5	*	1.074	1.066	1.076
Octa	PCB-195	2.47e+06	0.89	y	53:01	1.20	163		*	2.5	*	0.984	0.979	0.989
Octa	PCB-194	7.48e+06	0.96	y	53:53	1.25	475		*	2.5	*	1.000	0.995	1.005
Octa	PCB-205	4.35e+05	0.93	y	54:10	1.41	24.4		*	2.5	*	1.005	1.001	1.011
Nona	PCB-208	1.45e+06	1.41	y	53:09	0.96	94.3		*	2.5	*	1.000	0.995	1.005
Nona	PCB-207	6.14e+05	1.45	y	53:28	0.92	41.9		*	2.5	*	1.006	1.001	1.011
Nona	PCB-206	3.74e+06	1.36	y	55:31	1.03	360		*	2.5	*	1.000	0.995	1.005
Deca	PCB-209	7.42e+05	1.14	y	56:54	1.18	53.5		*	2.5	*	1.000	0.995	1.005

Analyst: [illegible]

Date: 12/30/14

Client ID: SC-MH-20-20141211-W Filename: 141226E1 S:7 Acq:26-DEC-14 17:49:21 ConCal: ST141226E1-1
Lab ID: 1400948-04 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.9930 EndCAL: NA

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	2.71e+05	2.71	y	16:08	1.22	8.07217	
Total Di-PCB	1.51e+07	1.77	y	20:05	1.21	407.246	
Total Tri-PCB	1.61e+07	1.19	y	24:13	1.16	666.981	
Total Tri-PCB	1.01e+08	1.11	y	27:55	1.35	2340.48	Sum:3007.46
Total Tetra-PCB	2.55e+08	0.80	y	27:58	1.17	8894.28	
Total Penta-PCB	2.87e+08	1.58	y	33:55	1.21	15232.0	
Total Penta-PCB	4.72e+07	1.66	y	42:13	1.26	1593.74	Sum:16825.8
Total Hexa-PCB	3.66e+07	1.29	y	38:19	0.92	3374.50	
Total Hexa-PCB	2.39e+08	1.26	y	42:08	1.08	9951.37	Sum:13325.9
Total Hepta-PCB	1.11e+08	0.90	y	42:51	1.27	6431.44	
Total Octa-PCB	1.66e+07	0.95	y	48:16	0.92	1483.01	
Total Octa-PCB	1.04e+07	0.89	y	53:01	1.29	662.597	Sum:2145.61
Total Nona-PCB	5.80e+06	1.41	y	53:09	0.96	495.971	
Total Deca-PCB	7.42e+05	1.14	y	56:54	1.18	53.5270	

Total PCB Conc:51607.3617210

Integrations by Analyst: M

Date: 12/30/14

Client ID: SC-MH-20-20141211-W Filename: 141226E1 S:7 Acq:26-DEC-14 17:49:21 ConCal: ST141226E1-1
Lab ID: 1400948-04 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.993 EndCAL: NA

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	5.37e+07	3.34 y	0.89	16:07	0.621	0.622	0.628	1760	87.5
13C-PCB-3	5.63e+07	3.42 y	0.93	18:44	0.722	0.721	0.729	1770	88.1
13C-PCB-4	3.36e+07	1.60 y	0.55	20:03	0.773	0.772	0.780	1790	89.1
13C-PCB-9	5.27e+07	1.61 y	0.83	21:51	0.843	0.840	0.848	1870	92.6
13C-PCB-11	6.89e+07	1.55 y	0.94	25:13	0.972	0.968	0.978	2150	107
13C-PCB-32	5.19e+07	1.13 y	0.81	27:07	1.046	1.041	1.051	1860	92.5
13C-PCB-19	3.01e+07	1.12 y	0.53	24:12	0.933	0.929	0.939	1650	82.0
13C-PCB-28	6.41e+07	1.09 y	0.89	29:05	1.003	0.999	1.009	2220	110
13C-PCB-52	4.04e+07	0.81 y	0.71	31:30	0.857	0.853	0.861	2090	104
13C-PCB-54	4.22e+07	0.83 y	0.85	27:57	0.761	0.758	0.766	1820	90.4
13C-PCB-37	6.19e+07	1.11 y	0.83	32:57	1.137	1.131	1.143	2290	114
13C-PCB-47	4.24e+07	0.82 y	0.74	32:00	0.871	0.867	0.875	2090	104
13C-PCB-81	5.53e+07	0.84 y	0.84	39:02	1.062	1.057	1.067	2420	120
13C-PCB-70	5.96e+07	0.83 y	0.94	35:31	0.966	0.961	0.971	2310	115
13C-PCB-80	6.04e+07	0.83 y	0.96	35:56	0.978	0.972	0.982	2300	114
13C-PCB-104	3.06e+07	1.61 y	1.00	32:39	0.832	0.829	0.837	1910	95.1
13C-PCB-101	2.79e+07	1.65 y	0.79	37:30	0.956	0.951	0.961	2210	110
13C-PCB-95	2.48e+07	1.62 y	0.74	35:49	0.913	0.908	0.918	2080	103
13C-PCB-77	5.81e+07	0.84 y	0.89	39:38	1.078	1.073	1.083	2380	118
13C-PCB-114	4.56e+07	1.67 y	1.21	42:12	0.911	0.905	0.915	2380	118
13C-PCB-118	3.78e+07	1.57 y	0.98	41:33	1.059	1.054	1.064	2390	119
13C-PCB-123	3.57e+07	1.62 y	0.95	41:22	1.054	1.049	1.059	2340	116
13C-PCB-97	2.59e+07	1.59 y	0.69	38:48	0.989	0.984	0.994	2340	116
13C-PCB-127	5.19e+07	1.66 y	1.34	43:24	0.937	0.931	0.941	2430	121
13C-PCB-105	4.66e+07	1.65 y	1.24	43:04	0.929	0.924	0.934	2370	117
13C-PCB-141	4.01e+07	1.33 y	1.07	43:57	0.949	0.943	0.953	2360	117
13C-PCB-153	4.25e+07	1.36 y	1.11	43:13	0.933	0.927	0.937	2400	119
13C-PCB-155	2.56e+07	1.31 y	0.83	37:02	0.944	0.939	0.949	1920	95.3
13C-PCB-126	4.31e+07	1.66 y	1.16	45:18	0.978	0.972	0.982	2330	116
13C-PCB-167	5.17e+07	1.32 y	1.32	46:46	1.009	1.004	1.014	2470	122
13C-PCB-156	4.83e+07	1.31 y	1.24	48:03	1.037	1.032	1.042	2440	121
13C-PCB-138	4.05e+07	1.36 y	1.04	44:48	0.967	0.961	0.971	2440	121
13C-PCB-159	4.69e+07	1.34 y	1.20	46:05	0.995	0.989	0.999	2460	122
13C-PCB-157	5.09e+07	1.31 y	1.31	48:19	1.043	1.037	1.047	2440	121
13C-PCB-180	2.58e+07	0.46 y	0.67	49:20	1.065	1.059	1.069	2410	120
13C-PCB-188	3.22e+07	0.46 y	0.94	42:51	0.925	0.919	0.929	2160	107
13C-PCB-169	4.38e+07	1.32 y	1.22	50:29	1.090	1.082	1.092	2270	113
13C-PCB-170	1.99e+07	0.47 y	0.54	50:51	1.097	1.089	1.101	2340	116
13C-PCB-202	2.82e+07	0.93 y	0.83	48:15	1.041	1.036	1.046	2130	106
13C-PCB-189	2.50e+07	0.46 y	0.72	52:22	1.130	1.120	1.132	2200	109
13C-PCB-208	3.22e+07	0.77 y	1.12	53:09	0.981	0.976	0.986	2150	107
13C-PCB-194	2.54e+07	0.95 y	0.81	53:53	0.995	0.990	1.000	2350	117
13C-PCB-206	2.03e+07	0.79 y	0.66	55:30	1.025	1.021	1.031	2320	115
13C-PCB-209	2.38e+07	1.22 y	0.61	56:53	1.050	1.044	1.054	2900	144

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	5.64e+07	0.84 y	1.01	37:49	1.029	1.023	1.033	2060	102
13C-PCB-178	1.97e+07	0.47 y	0.63	45:38	0.985	0.979	0.989	1970	97.6

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	5.64e+07	0.84 y	1.20	37:49	0.969	0.963	0.973	1710	85.0
13C-PCB-178	1.97e+07	0.47 y	0.94	45:38	0.925	0.920	0.930	1640	81.4

RS

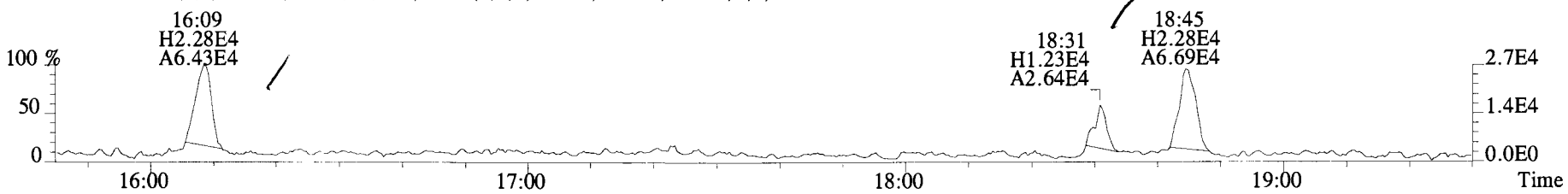
Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	6.90e+07	1.59	y	1.00	25:56	2010
13C-PCB-31	6.55e+07	1.10	y	1.00	28:59	2010
13C-PCB-60	5.50e+07	0.85	y	1.00	36:45	2010
13C-PCB-111	3.23e+07	1.63	y	1.00	39:14	2010
13C-PCB-128	3.20e+07	1.33	y	1.00	46:20	2010
13C-PCB-205	2.69e+07	0.93	y	1.00	54:10	2010

Analyst: MJ

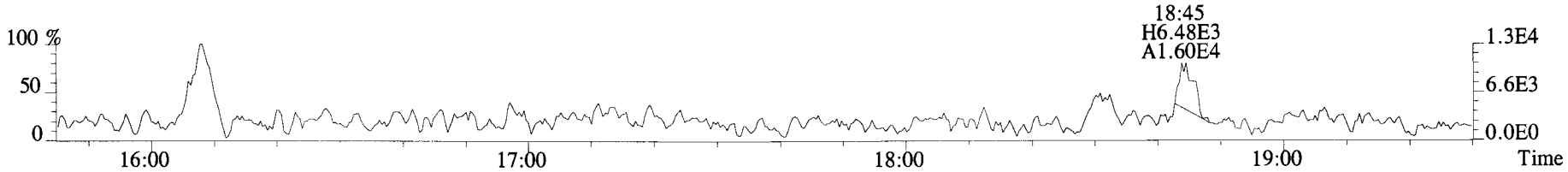
Date: 12/30/14

File:141226E1 #1-728 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1

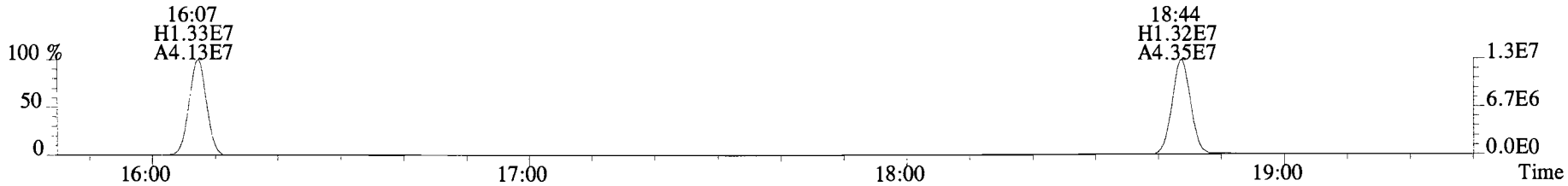
188.0393 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2912.0,0.00%,F,F)



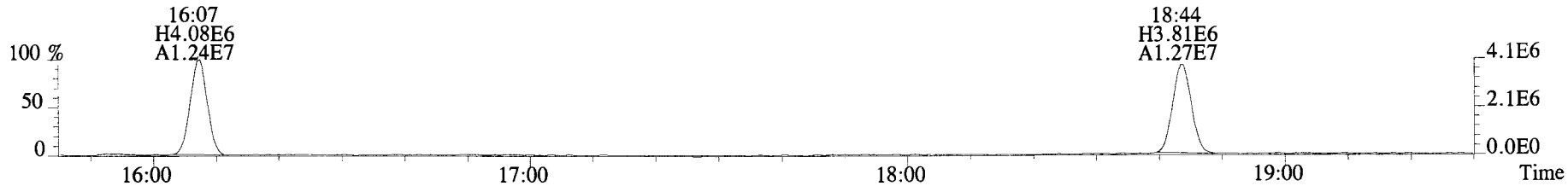
190.0363 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3260.0,0.00%,F,F)



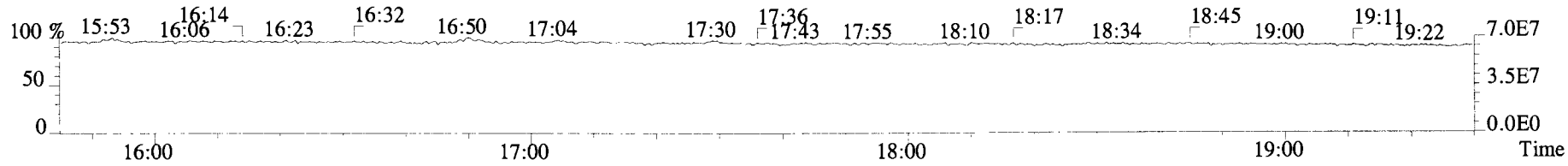
200.0795 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3872.0,0.00%,F,F)



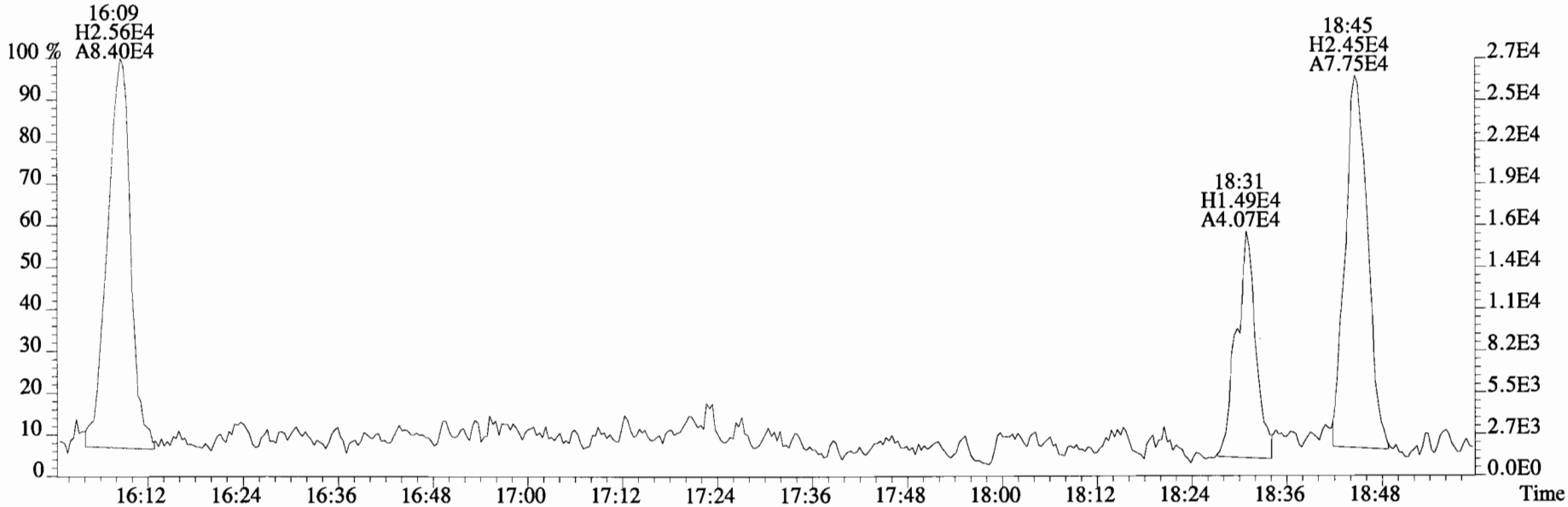
202.0766 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,42356.0,0.00%,F,F)



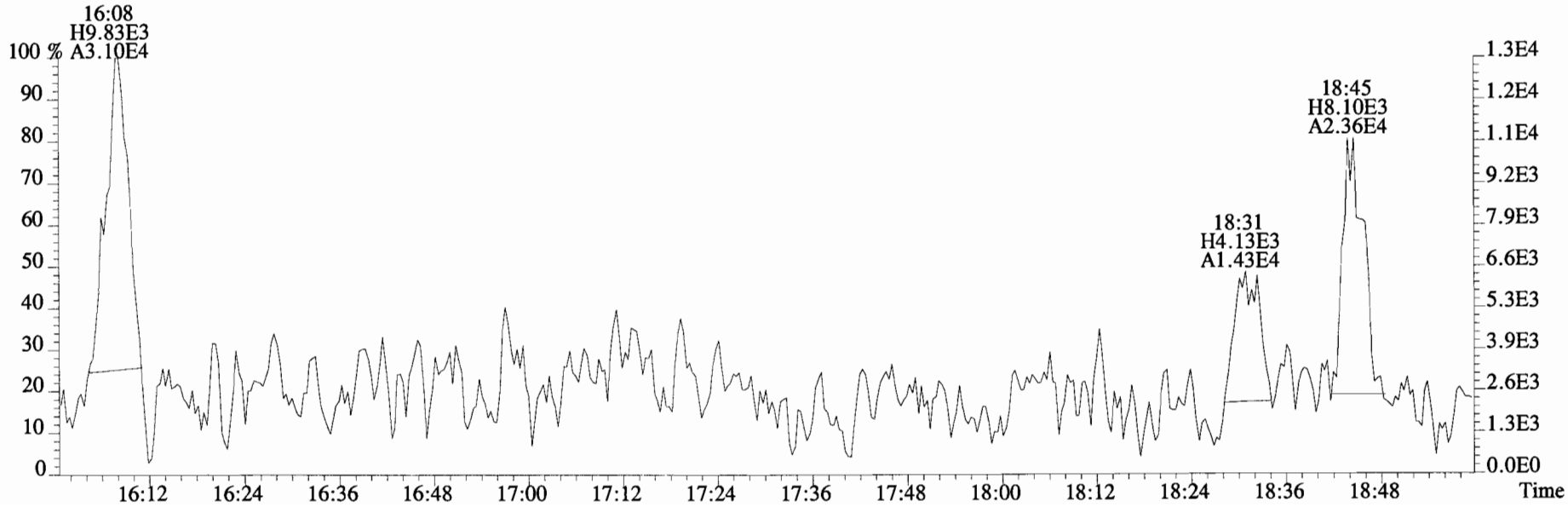
180.9880 S:7

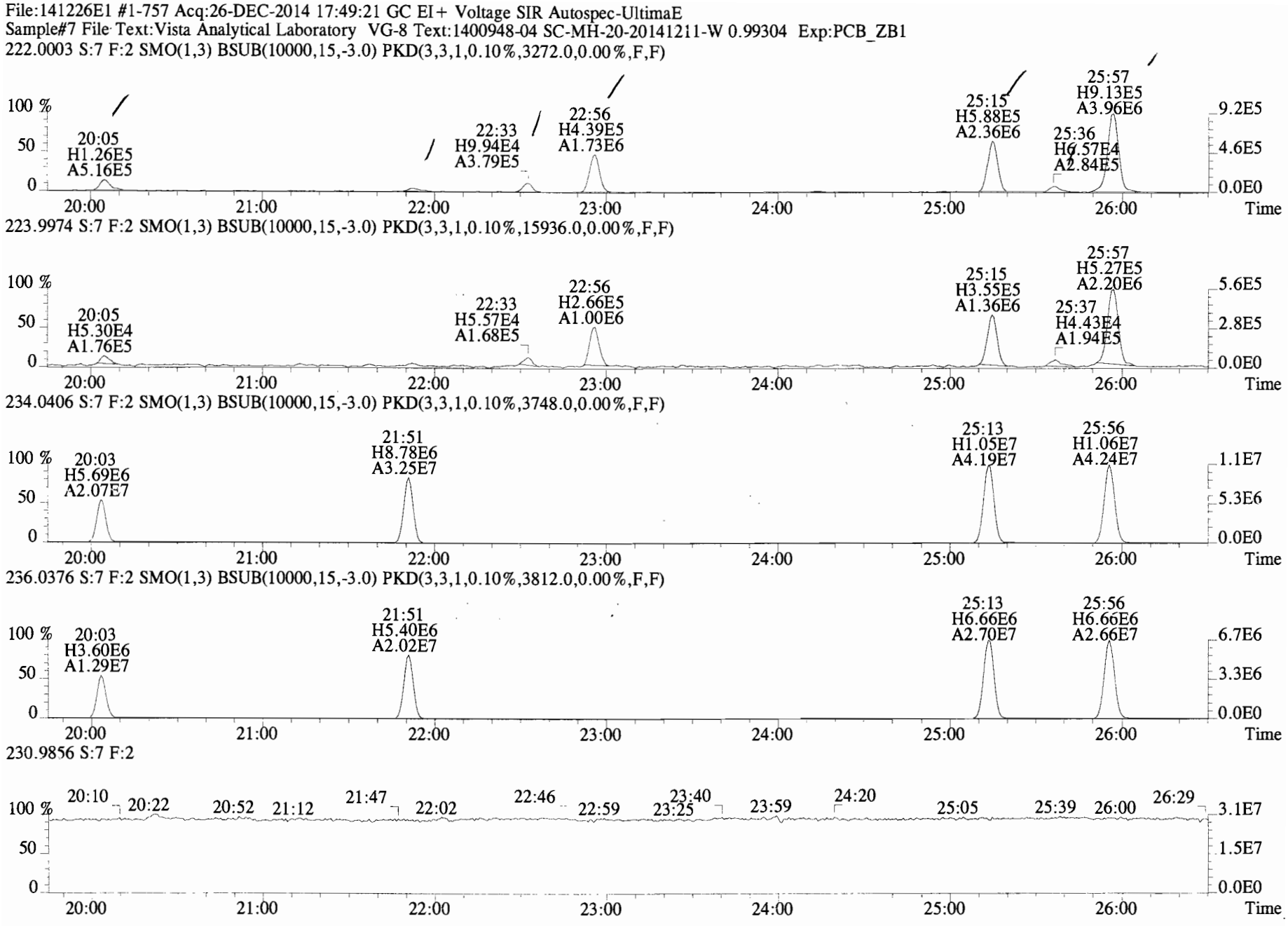


File:141226E1 #1-728 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
188.0393 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2912.0,0.00%,F,F)

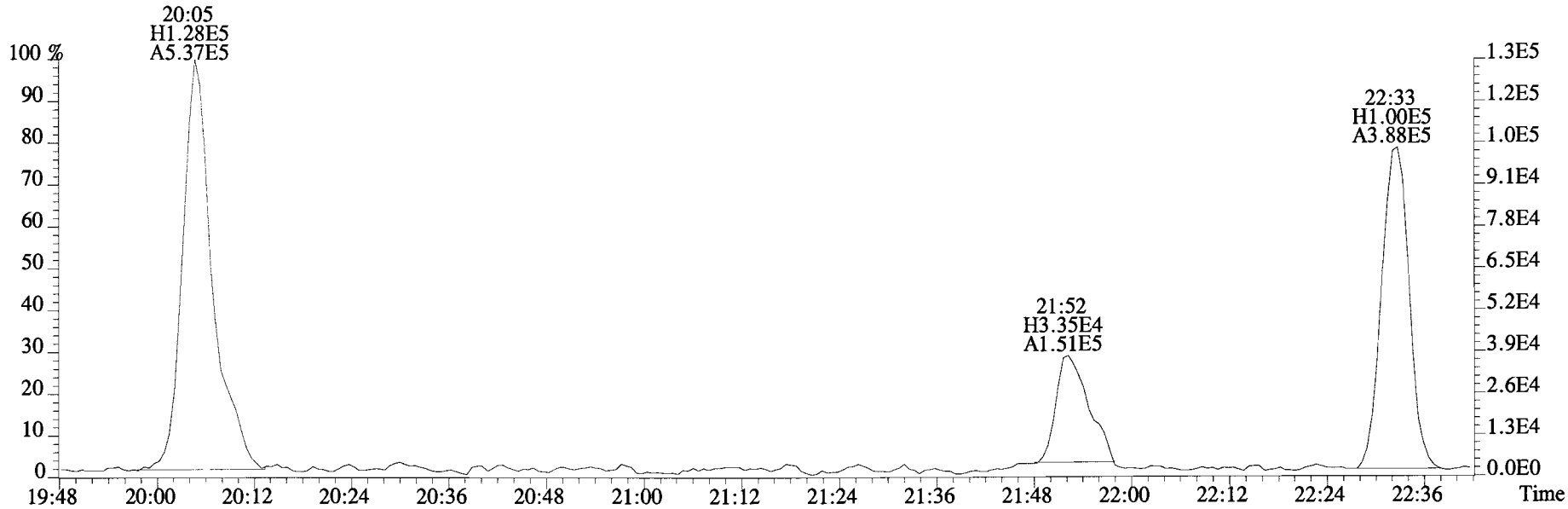


190.0363 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3260.0,0.00%,F,F)

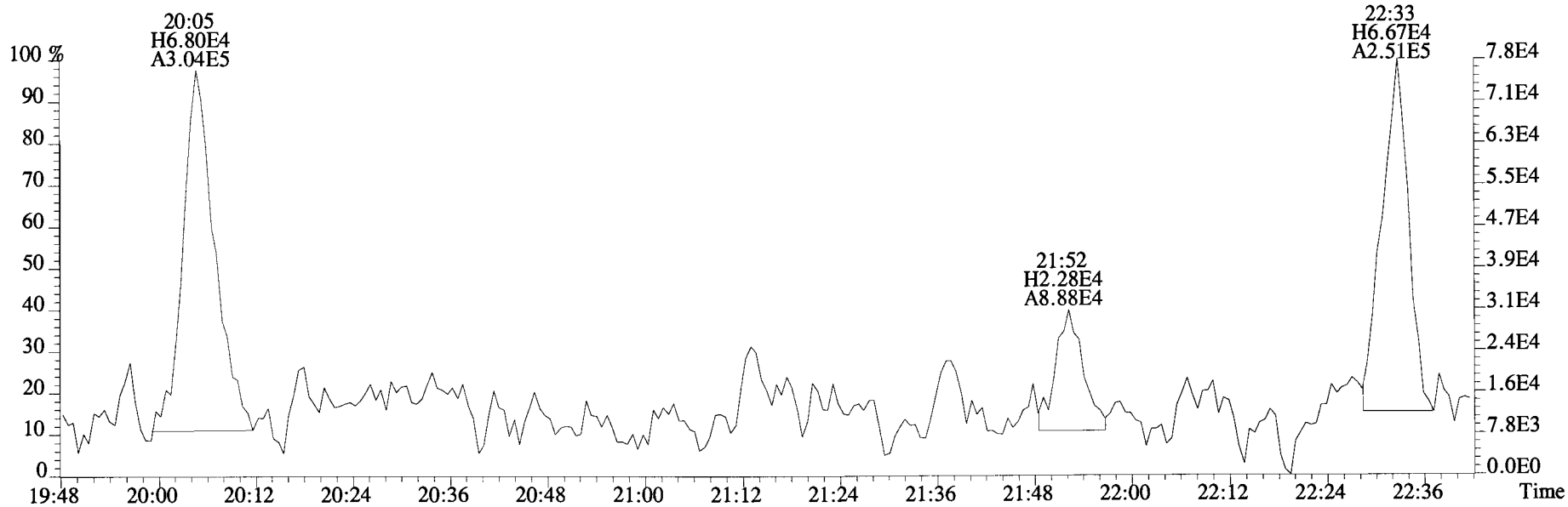



File:141226E1 #1-757 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
222.0003 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3272.0,0.00%,F,F)
20:05 H1.26E5 A5.16E5
22:33 H9.94E4 A3.79E5
22:56 H4.39E5 A1.73E6
25:15 H5.88E5 A2.36E6
25:36 H6.57E4 A2.84E5
25:57 H9.13E5 A3.96E6
223.9974 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15936.0,0.00%,F,F)
20:05 H5.30E4 A1.76E5
22:33 H5.57E4 A1.68E5
22:56 H2.66E5 A1.00E6
25:15 H3.55E5 A1.36E6
25:37 H4.43E4 A1.94E5
25:57 H5.27E5 A2.20E6
234.0406 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3748.0,0.00%,F,F)
20:03 H5.69E6 A2.07E7
21:51 H8.78E6 A3.25E7
25:13 H1.05E7 A4.19E7
25:56 H1.06E7 A4.24E7
236.0376 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3812.0,0.00%,F,F)
20:03 H3.60E6 A1.29E7
21:51 H5.40E6 A2.02E7
25:13 H6.66E6 A2.70E7
25:56 H6.66E6 A2.66E7
230.9856 S:7 F:2
20:10 20:22 20:52 21:12 21:47 22:02 22:46 22:59 23:25 23:40 23:59 24:20 25:05 25:39 26:00 26:29
100 %
50
0
20:00 21:00 22:00 23:00 24:00 25:00 26:00 Time
9.2E5 4.6E5 0.0E0
5.6E5 2.8E5 0.0E0
1.1E7 5.3E6 0.0E0
6.7E6 3.3E6 0.0E0
3.1E7 1.5E7 0.0E0

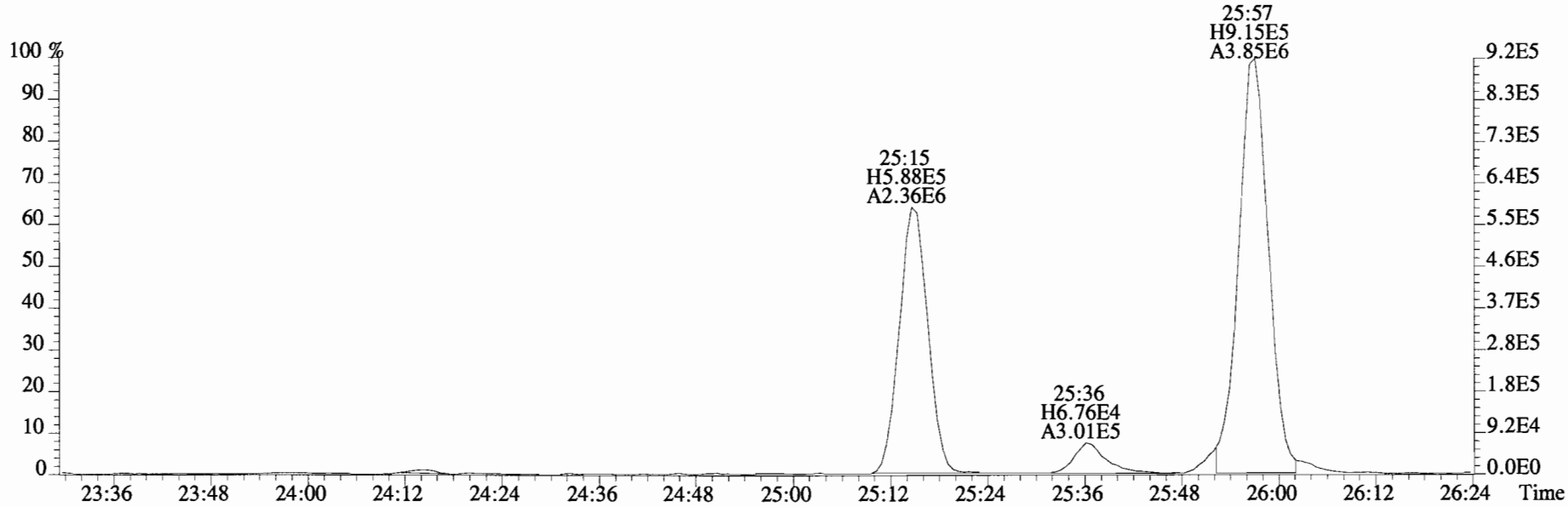
File:141226E1 #1-757 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
222.0003 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3272.0,0.00%,F,F)



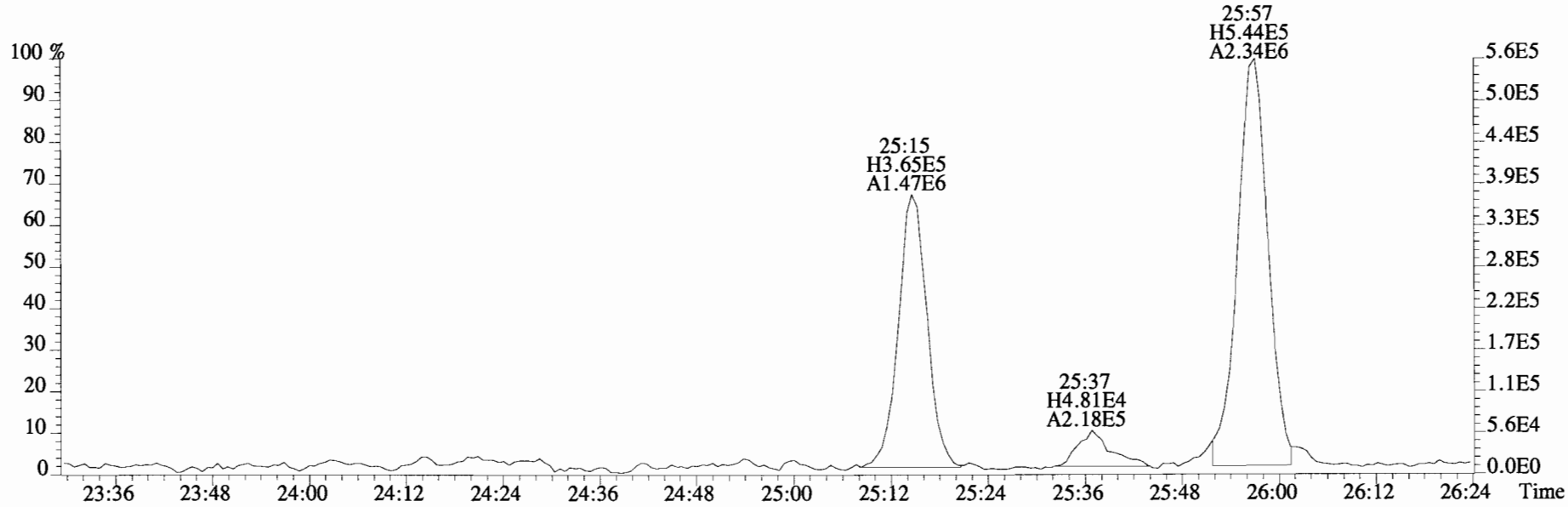
223.9974 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15936.0,0.00%,F,F)



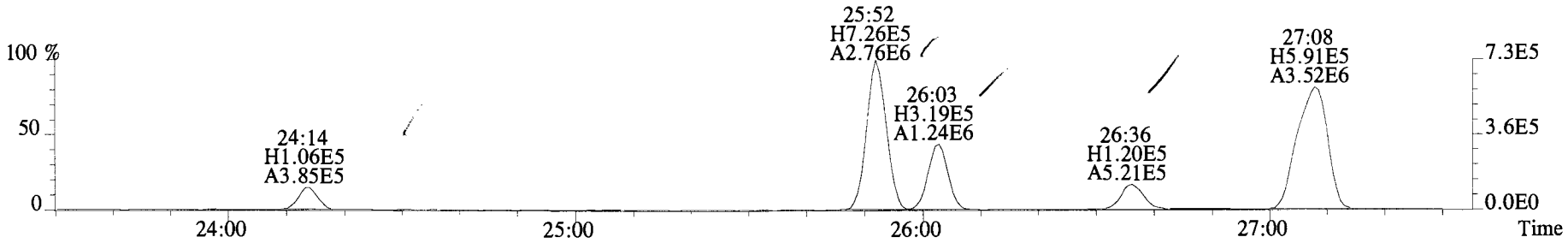
File:141226E1 #1-757 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
222.0003 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3272.0,0.00%,F,F)



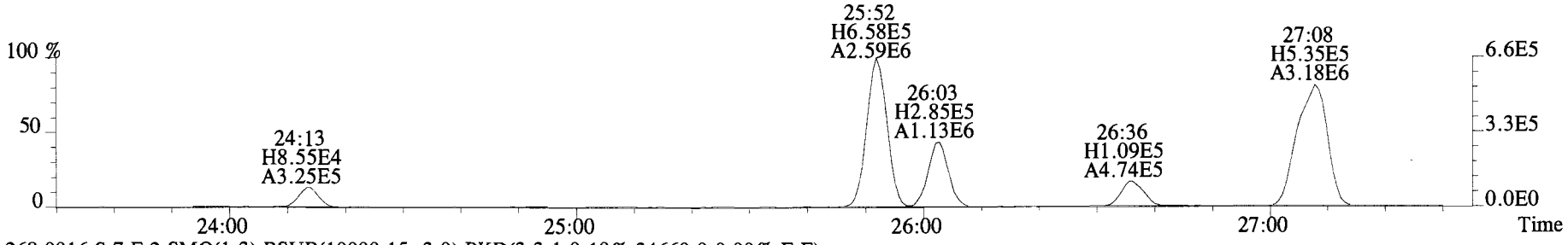
223.9974 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15936.0,0.00%,F,F)



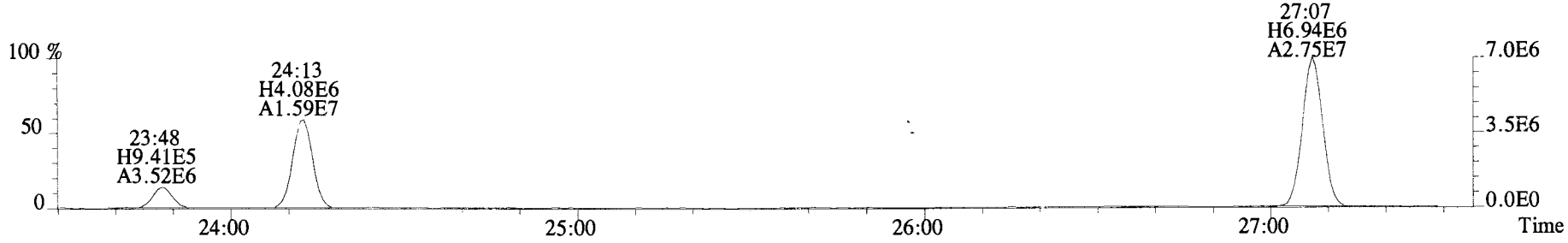
File:141226E1 #1-757 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
255.9613 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2860.0,0.00%,F,F)



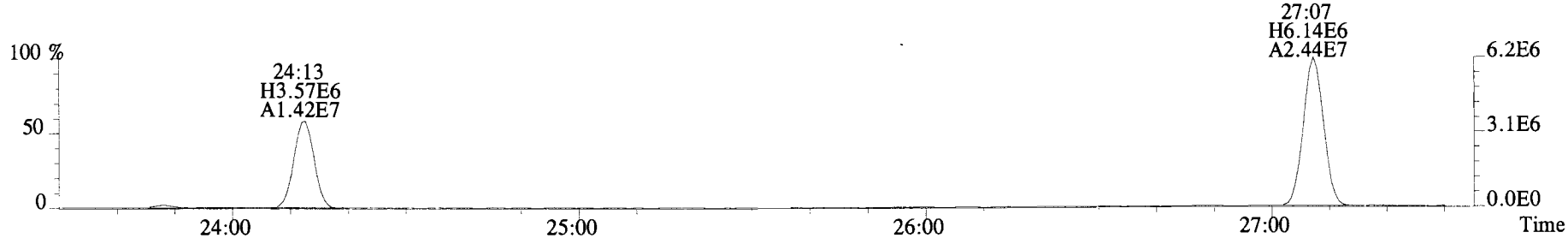
257.9584 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1676.0,0.00%,F,F)



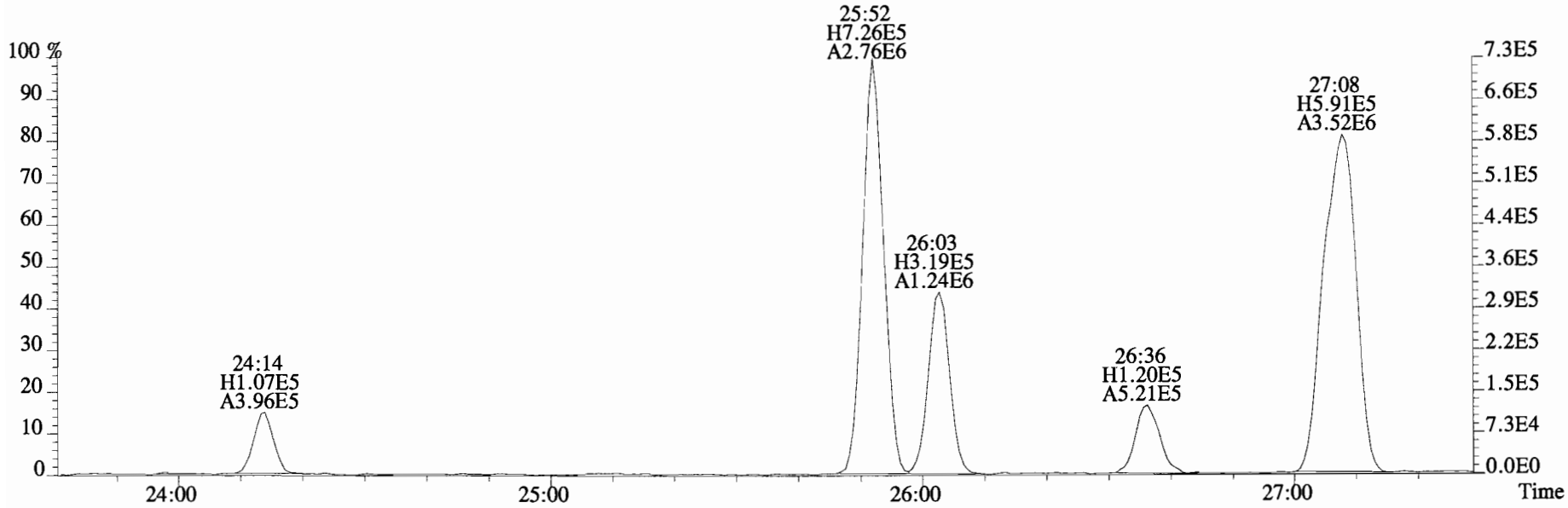
268.0016 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,34660.0,0.00%,F,F)



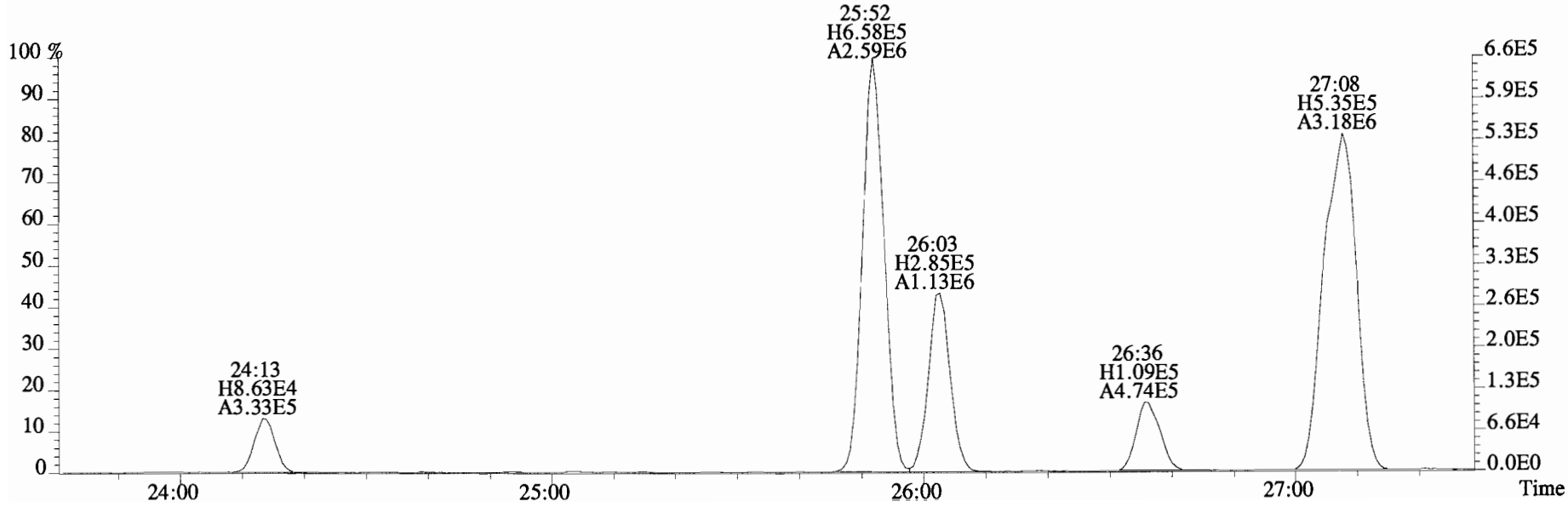
269.9986 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,20308.0,0.00%,F,F)



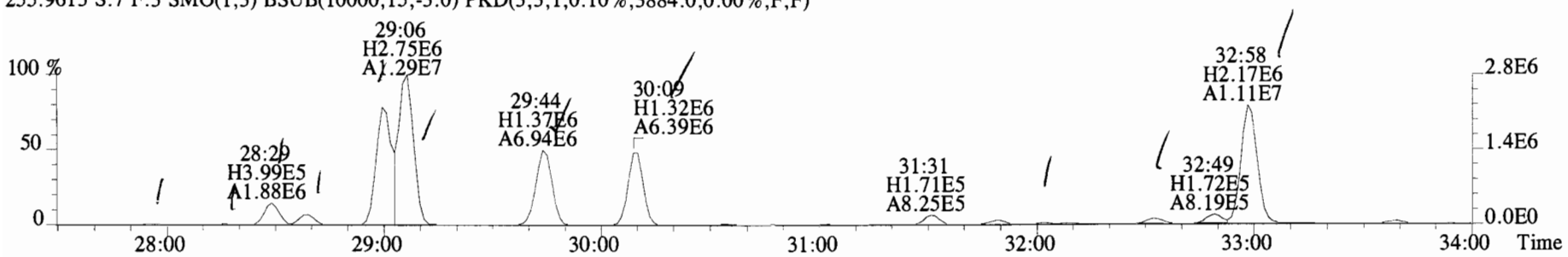
File:141226E1 #1-757 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
255.9613 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2860.0,0.00%,F,F)



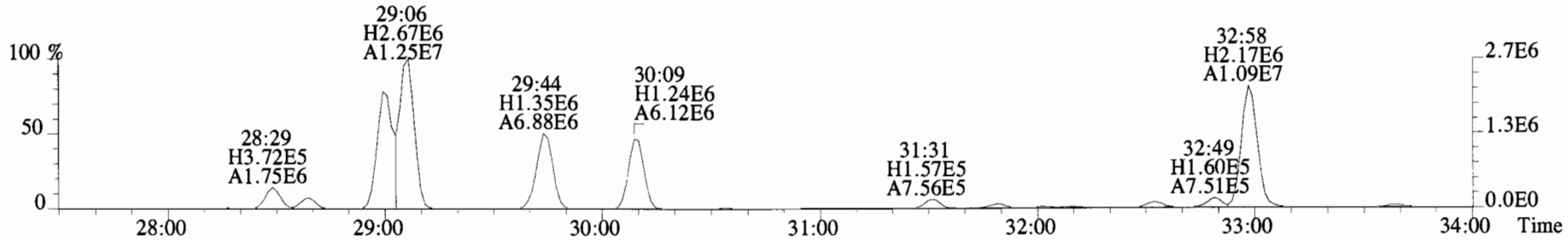
257.9584 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1676.0,0.00%,F,F)



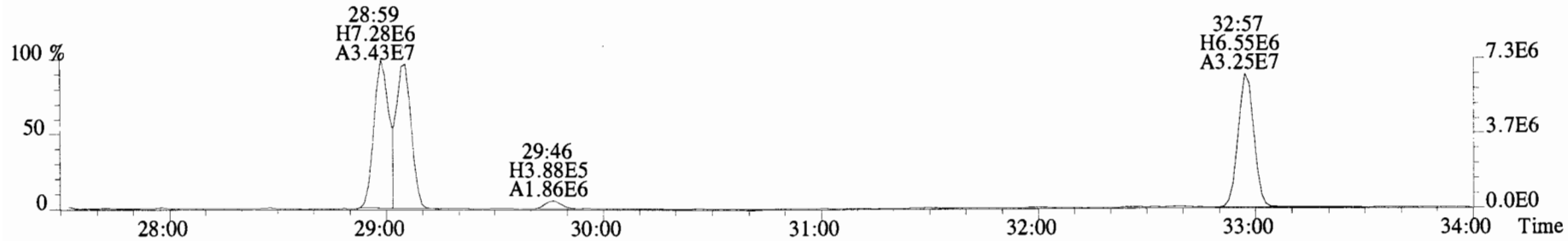
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
255.9613 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3884.0,0.00%,F,F)



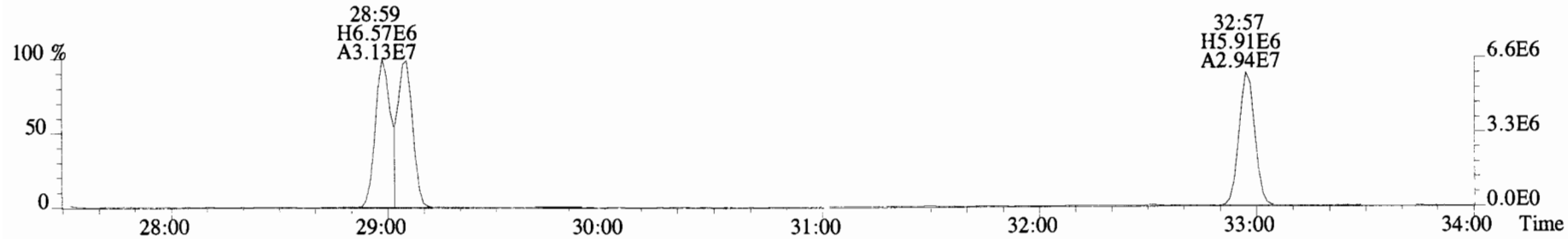
257.9584 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3760.0,0.00%,F,F)



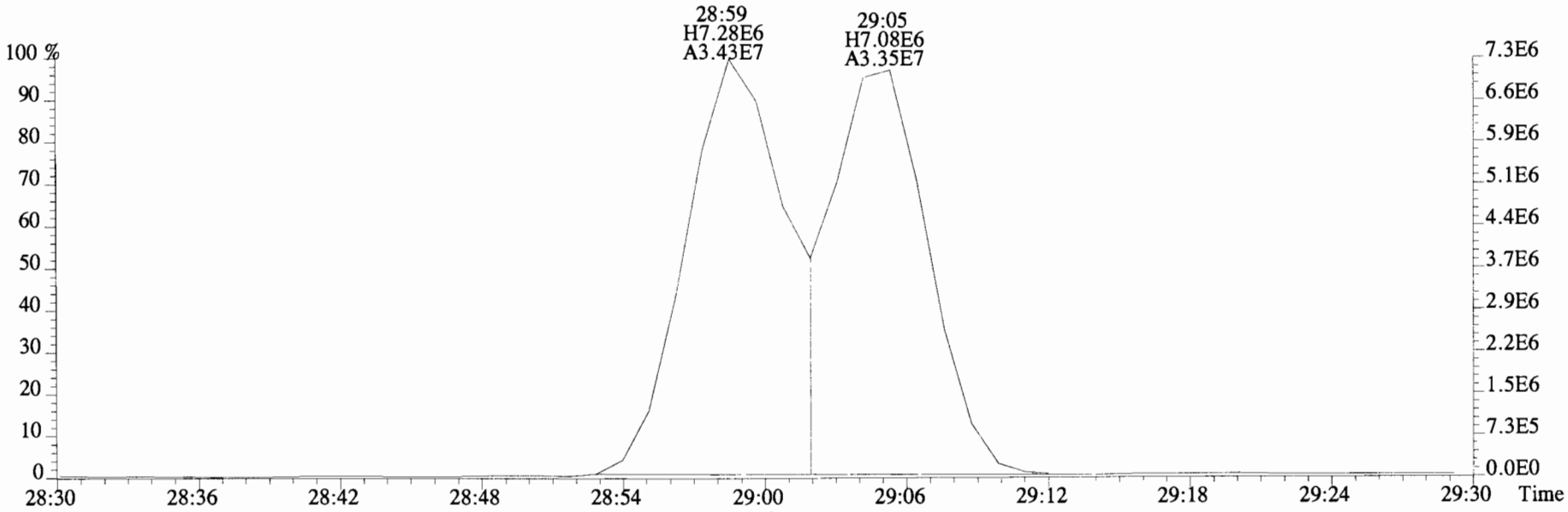
268.0016 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,38940.0,0.00%,F,F)



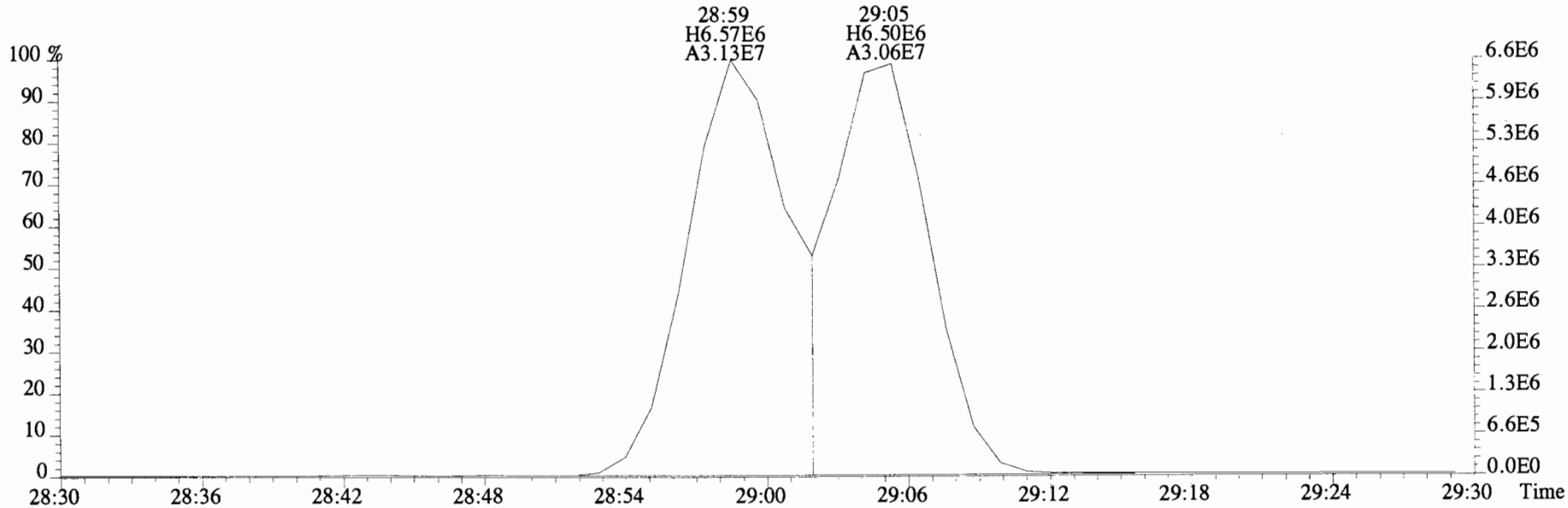
269.9986 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,20948.0,0.00%,F,F)



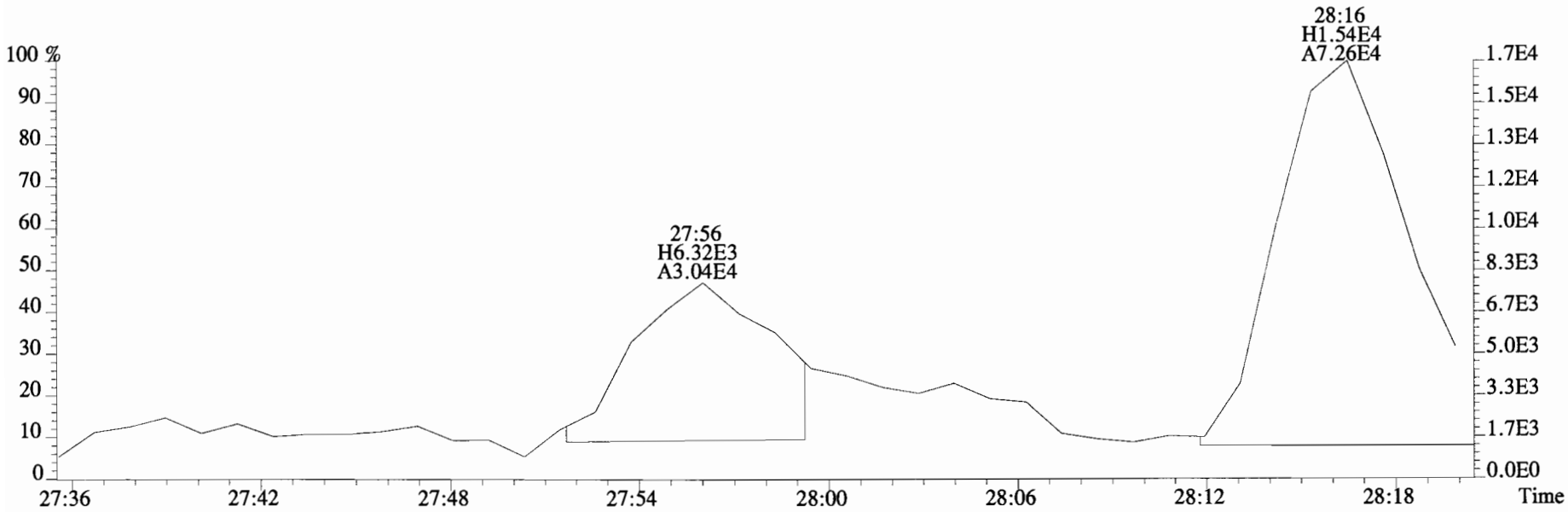
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
268.0016 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,38940.0,0.00%,F,F)



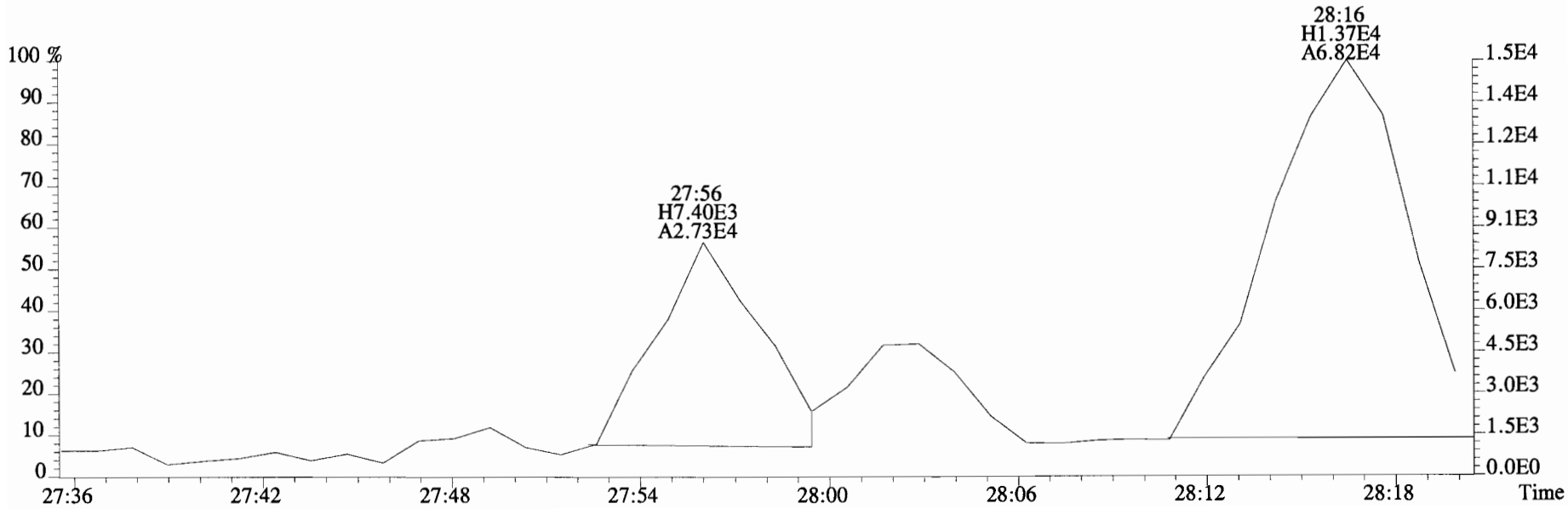
269.9986 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,20948.0,0.00%,F,F)



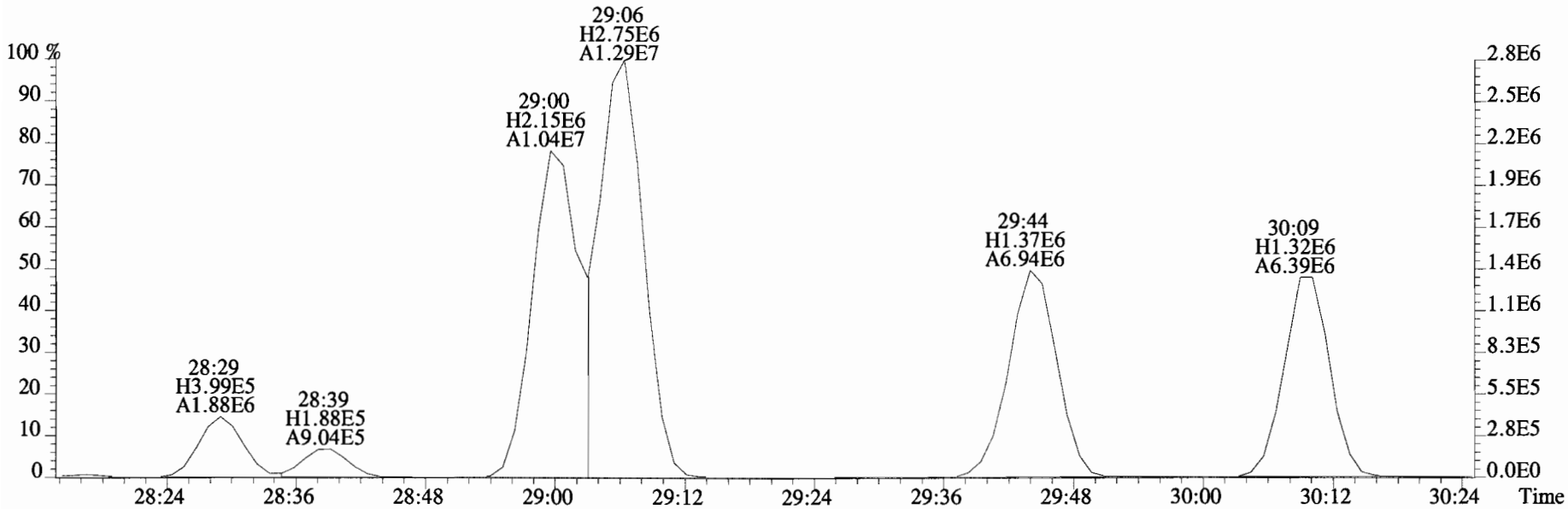
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
255.9613 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3884.0,0.00%,F,F)



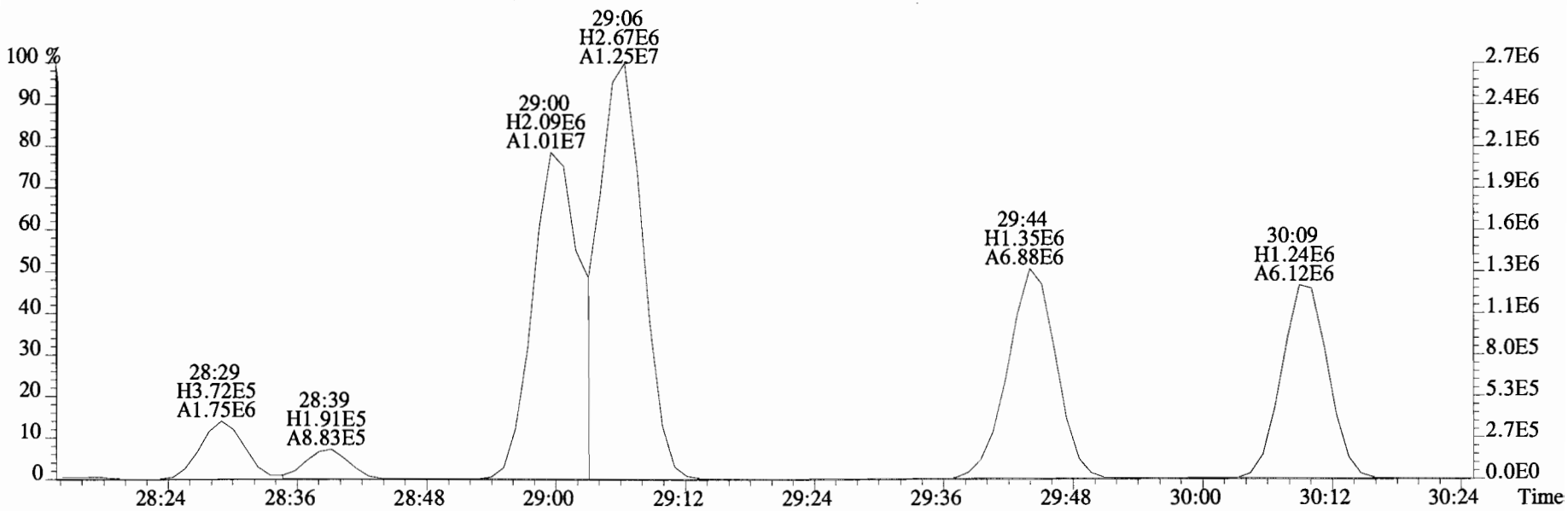
257.9584 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3760.0,0.00%,F,F)



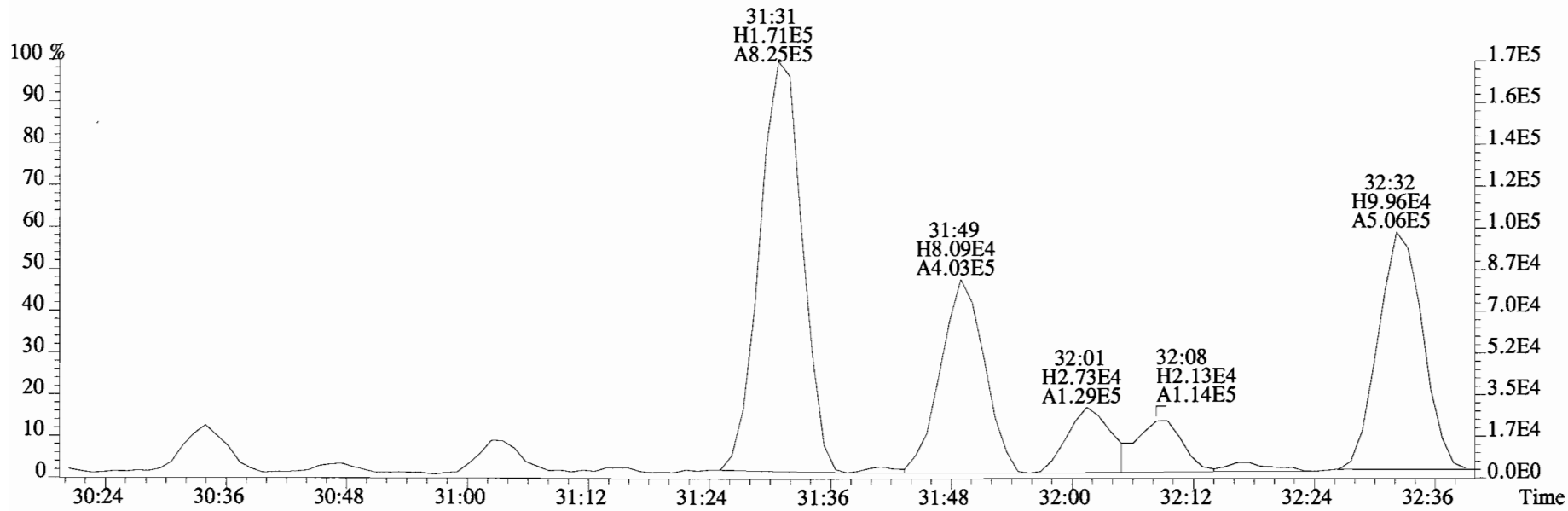
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
255.9613 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3884.0,0.00%,F,F)



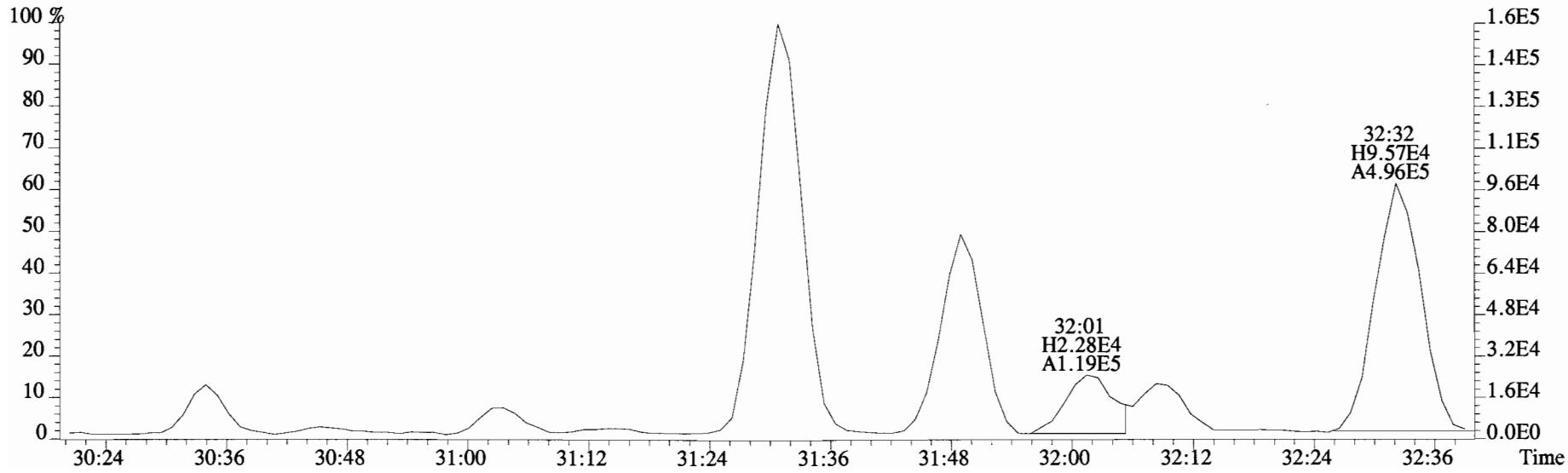
257.9584 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3760.0,0.00%,F,F)



File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
255.9613 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3884.0,0.00%,F,F)

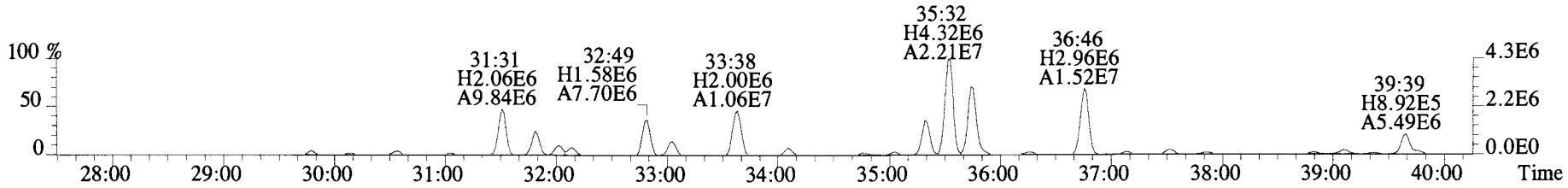


257.9584 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3760.0,0.00%,F,F)

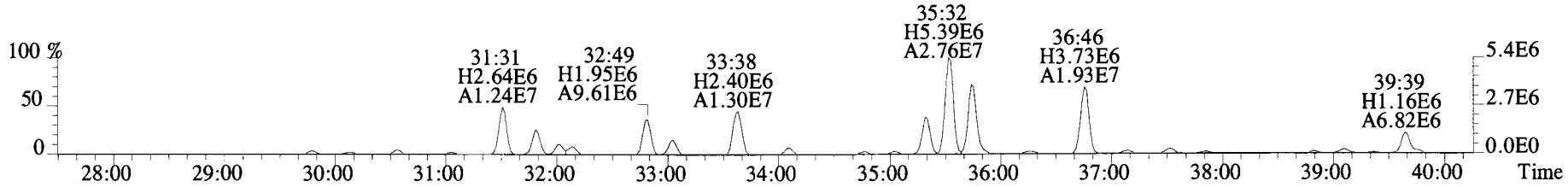


File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1

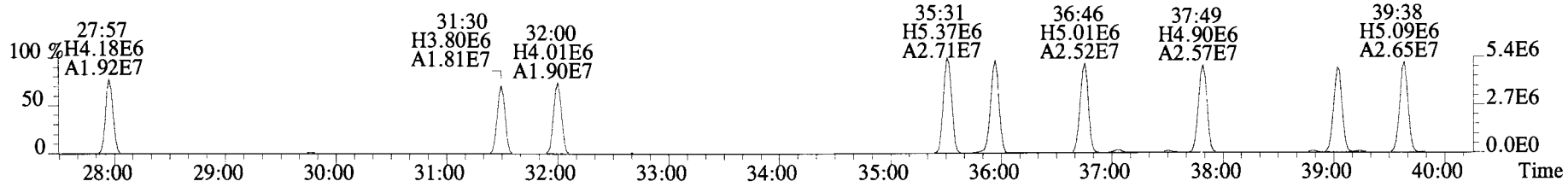
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3480.0,0.00%,F,F)



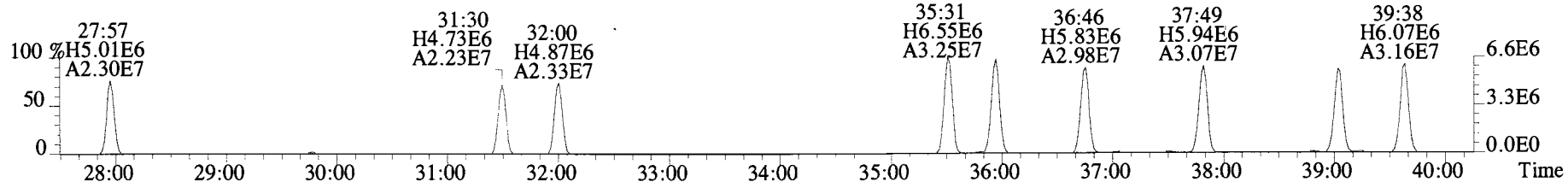
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4140.0,0.00%,F,F)



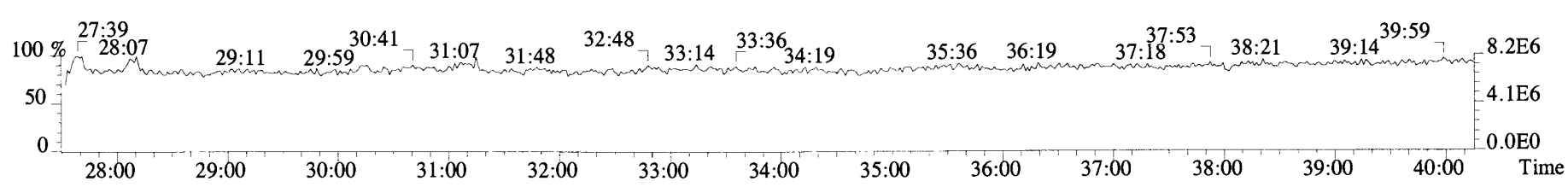
301.9626 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5392.0,0.00%,F,F)

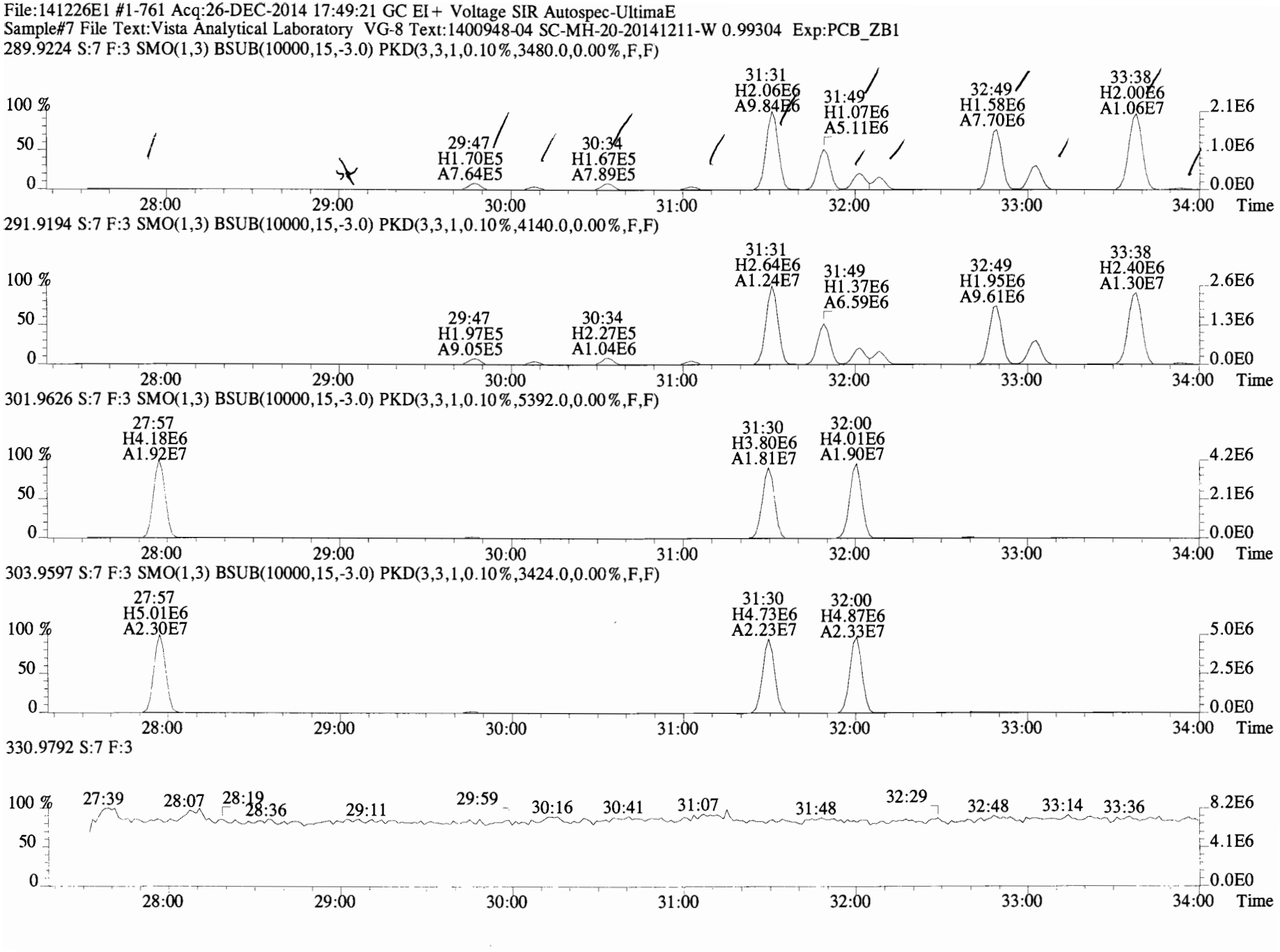


303.9597 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3424.0,0.00%,F,F)



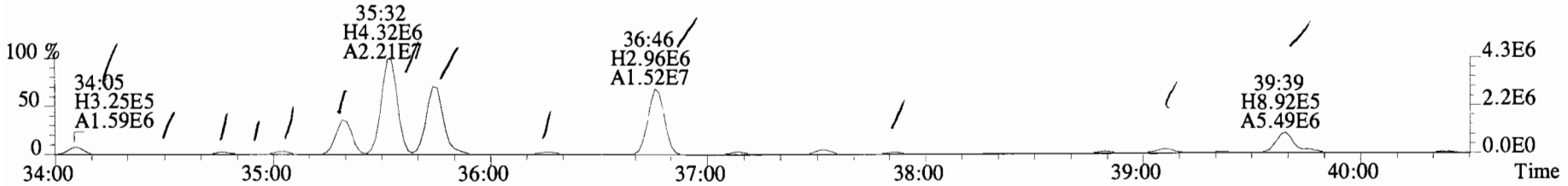
330.9792 S:7 F:3



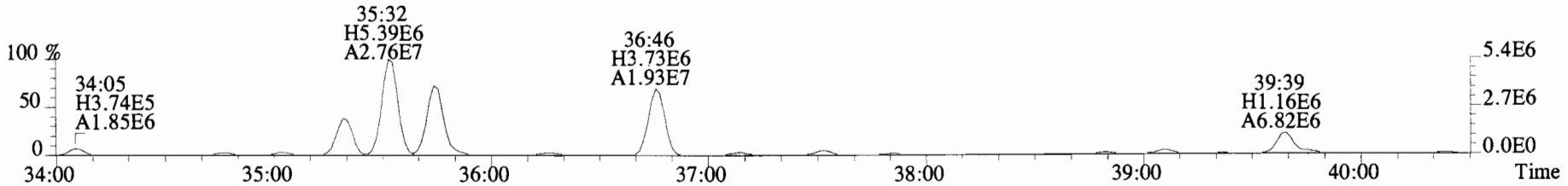

File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3480.0,0.00%,F,F)
29:47 H1.70E5 A7.64E5
30:34 H1.67E5 A7.89E5
31:31 H2.06E6 A9.84E6
31:49 H1.07E6 A5.11E6
32:49 H1.58E6 A7.70E6
33:38 H2.00E6 A1.06E7
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4140.0,0.00%,F,F)
29:47 H1.97E5 A9.05E5
30:34 H2.27E5 A1.04E6
31:31 H2.64E6 A1.24E7
31:49 H1.37E6 A6.59E6
32:49 H1.95E6 A9.61E6
33:38 H2.40E6 A1.30E7
301.9626 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5392.0,0.00%,F,F)
27:57 H4.18E6 A1.92E7
31:30 H3.80E6 A1.81E7
32:00 H4.01E6 A1.90E7
303.9597 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3424.0,0.00%,F,F)
27:57 H5.01E6 A2.30E7
31:30 H4.73E6 A2.23E7
32:00 H4.87E6 A2.33E7
330.9792 S:7 F:3
27:39
28:07
28:19
28:36
29:11
29:59
30:16
30:41
31:07
31:48
32:29
32:48
33:14
33:36
100 %
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
2.1E6
1.0E6
0.0E0
2.6E6
1.3E6
4.2E6
2.1E6
5.0E6
2.5E6
8.2E6
4.1E6

File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1

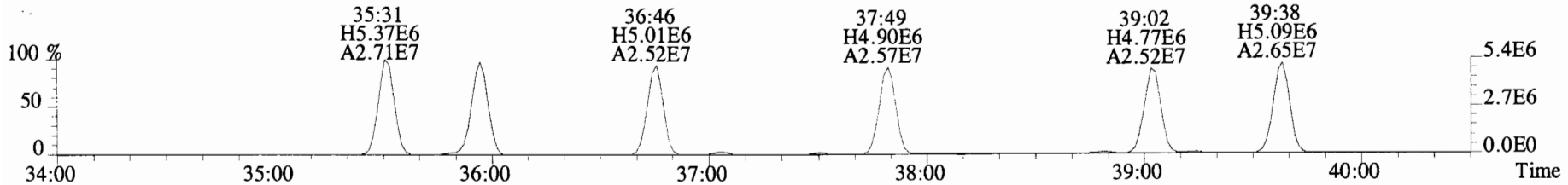
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3480.0,0.00%,F,F)



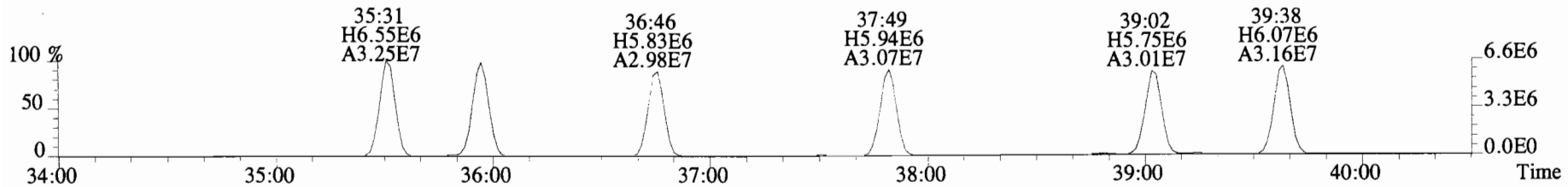
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4140.0,0.00%,F,F)



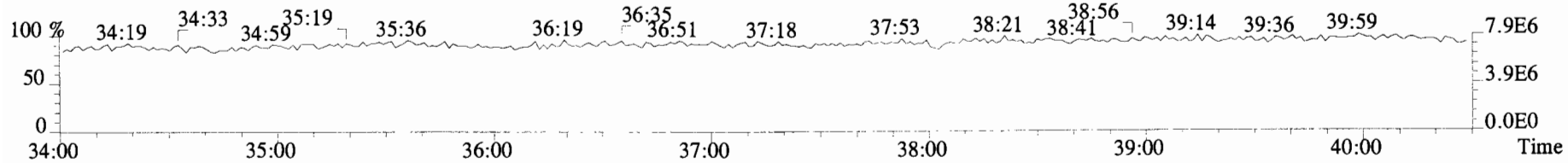
301.9626 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5392.0,0.00%,F,F)



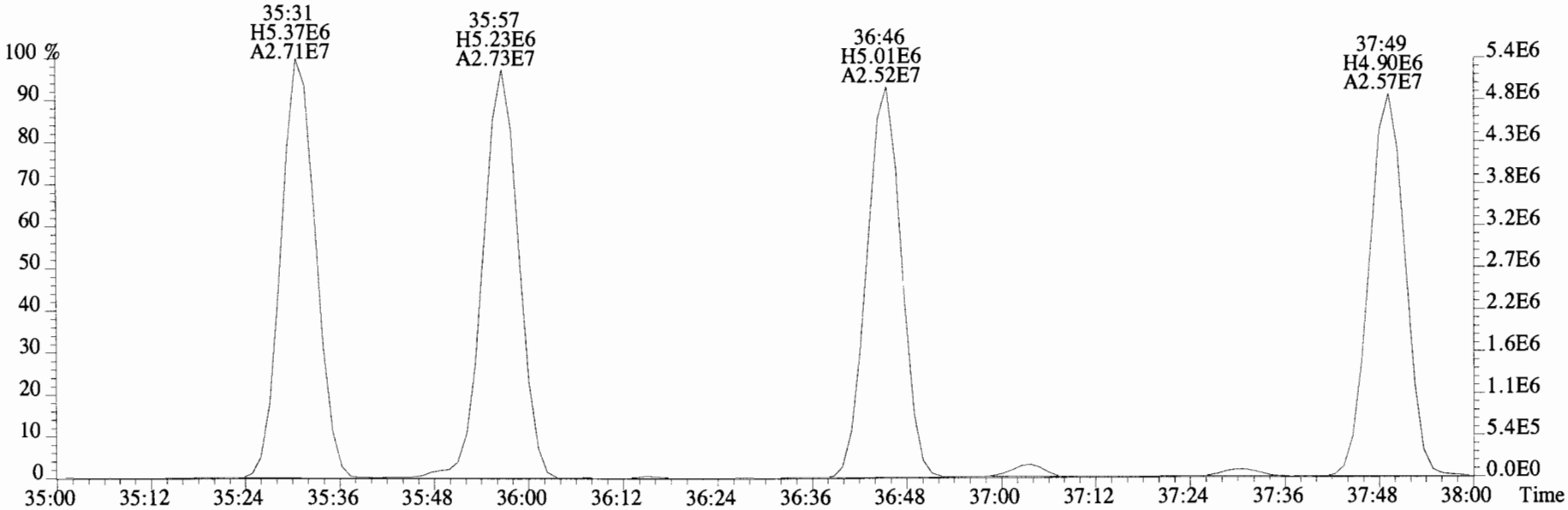
303.9597 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3424.0,0.00%,F,F)



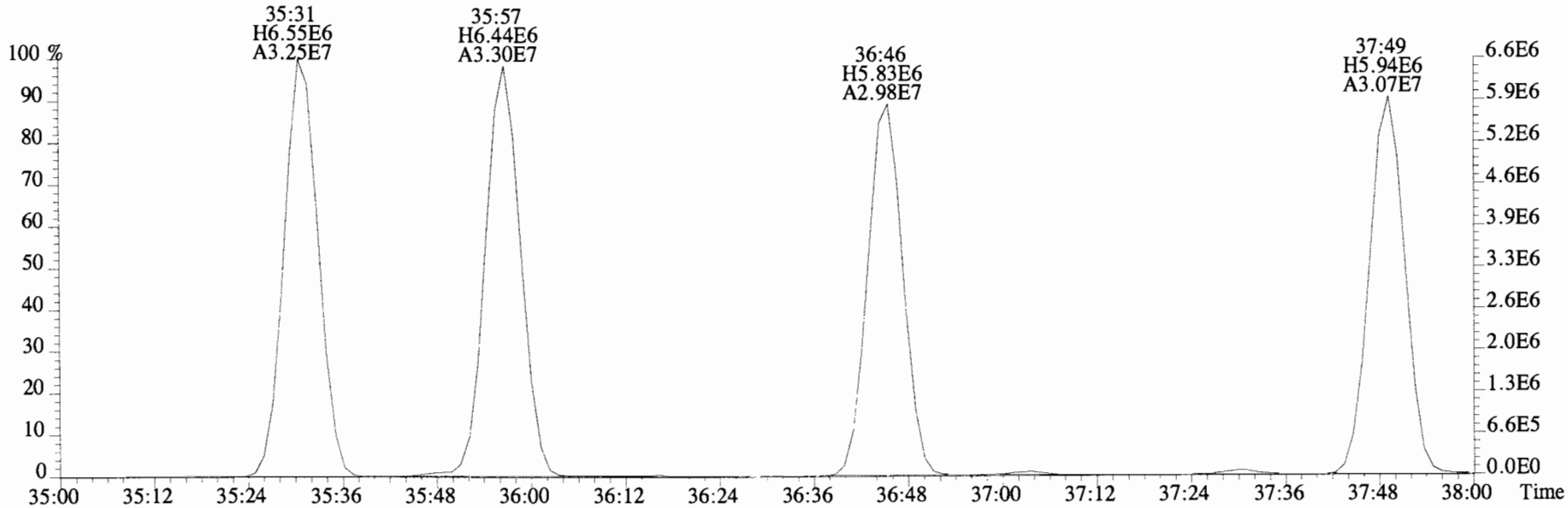
330.9792 S:7 F:3



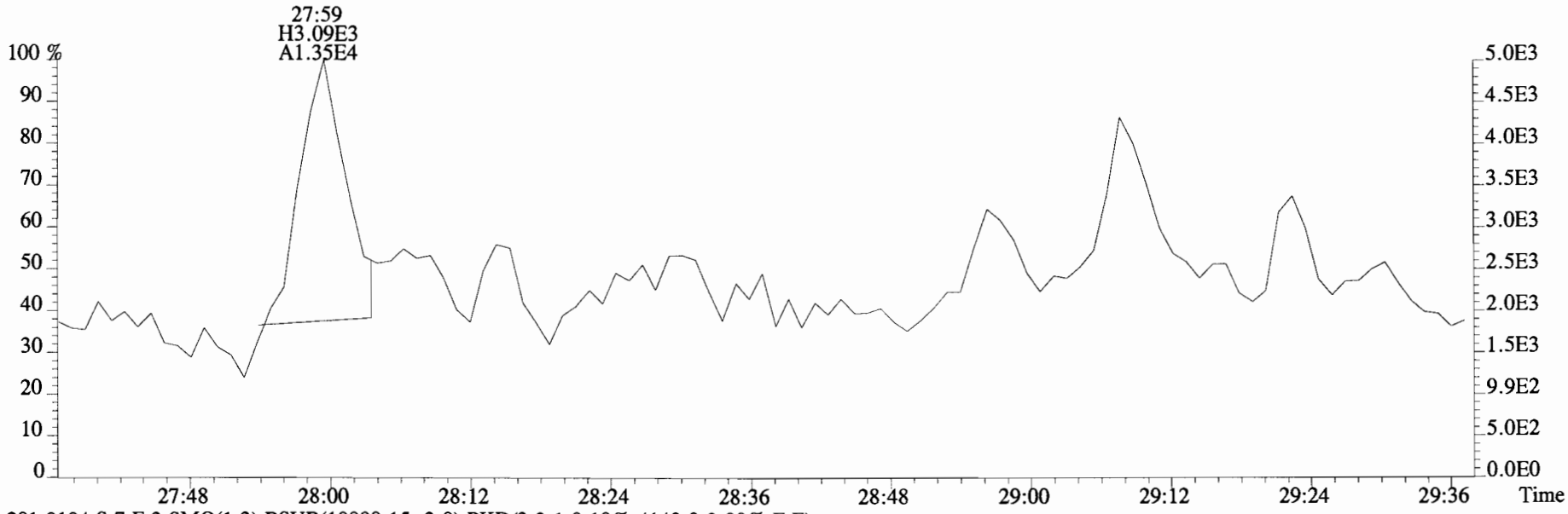
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
301.9626 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5392.0,0.00%,F,F)



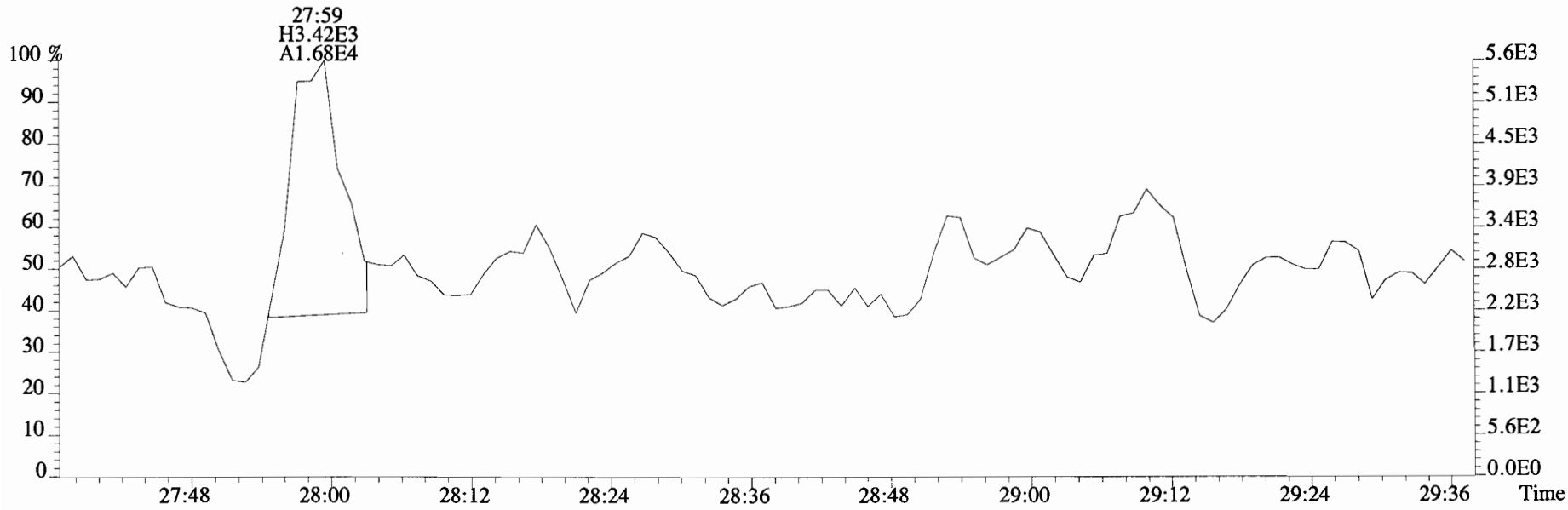
303.9597 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3424.0,0.00%,F,F)



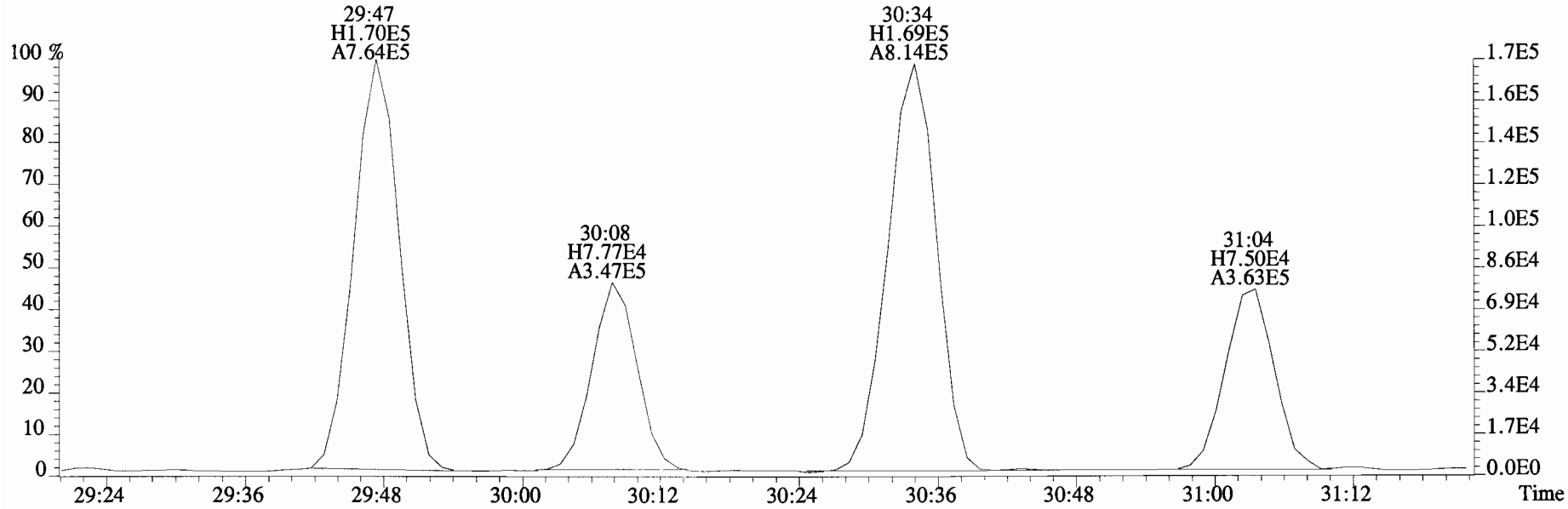
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3480.0,0.00%,F,F)



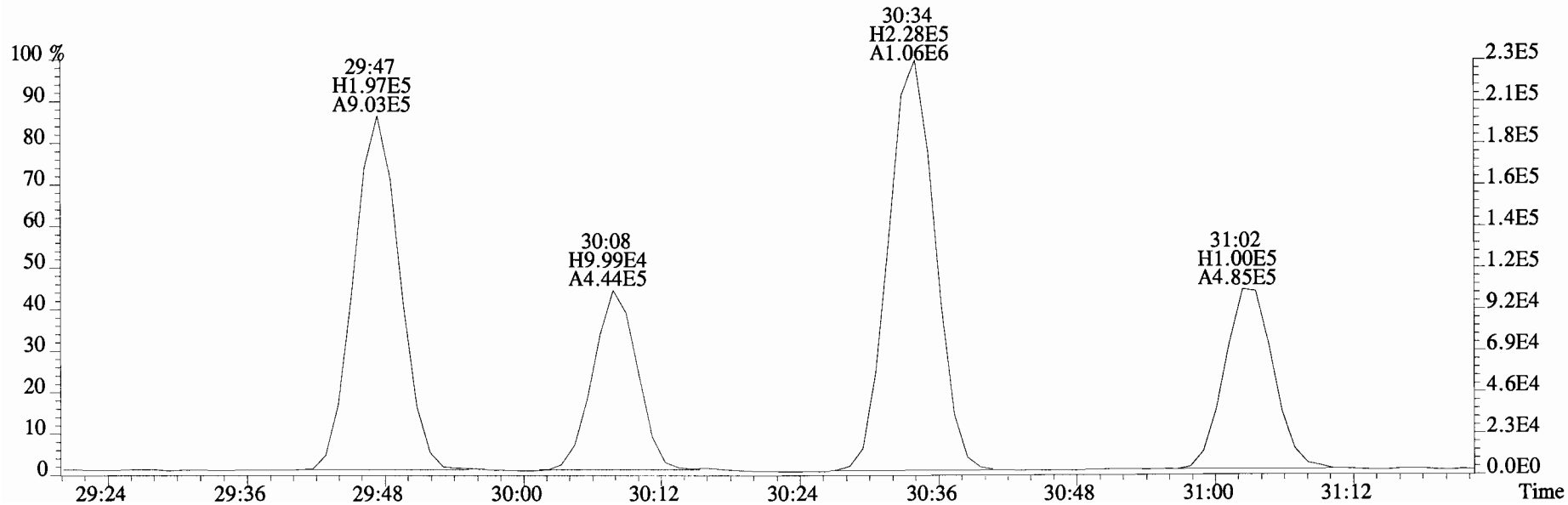
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4140.0,0.00%,F,F)



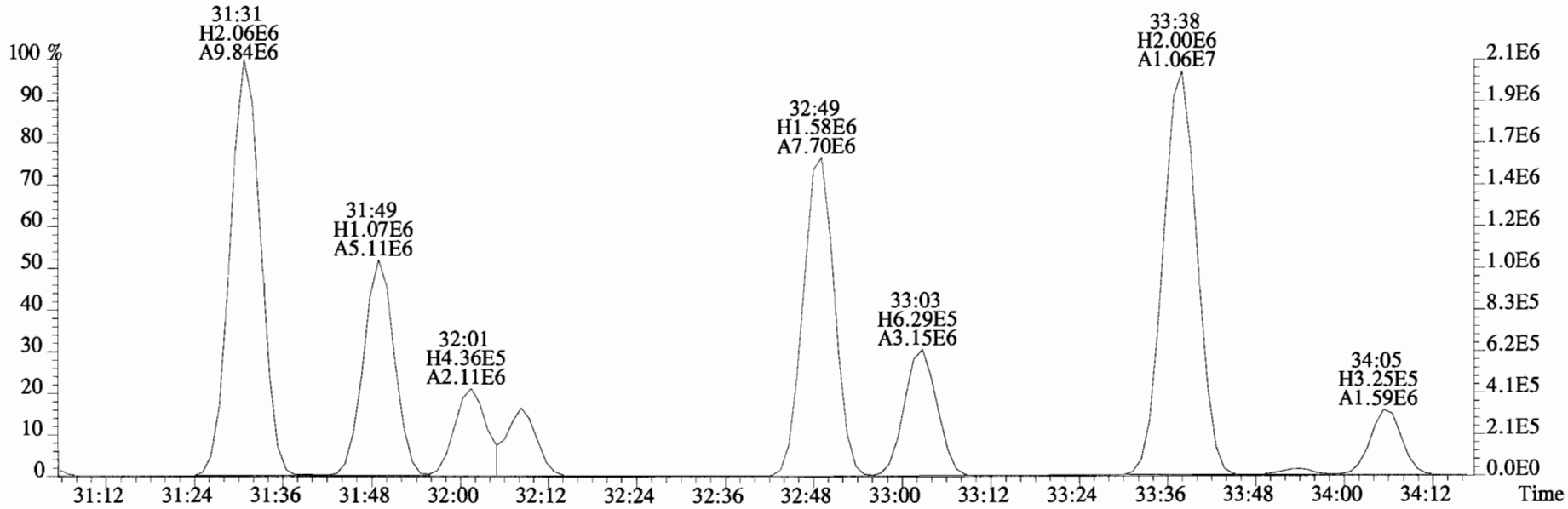
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3480.0,0.00%,F,F)



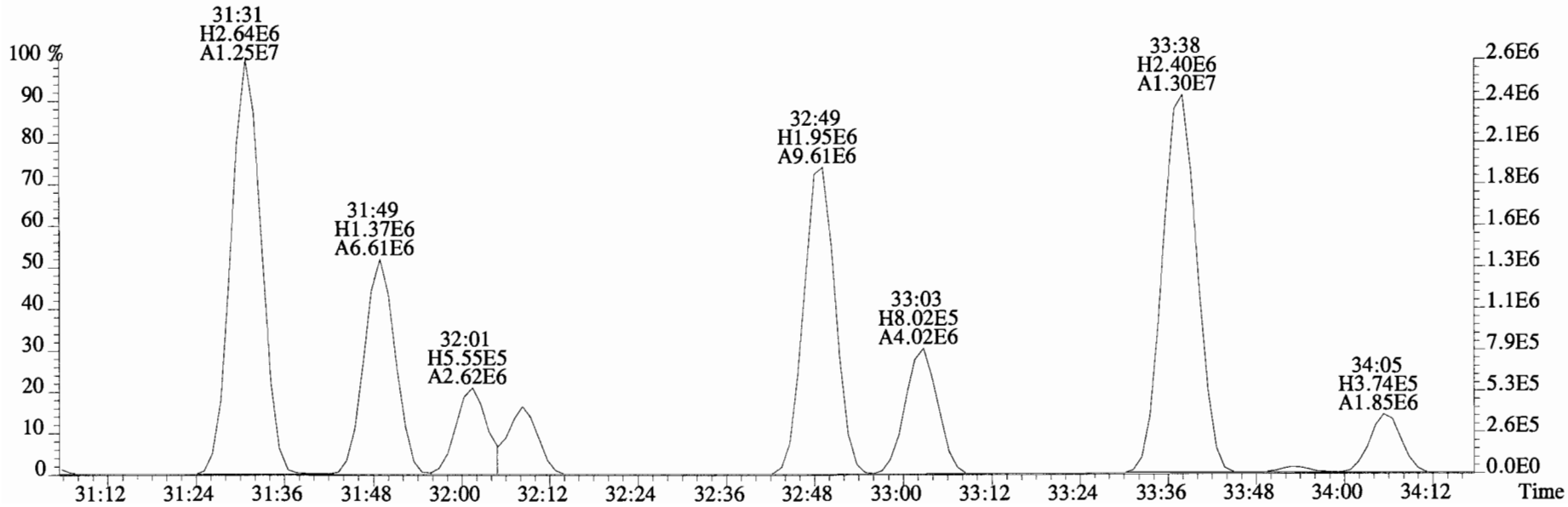
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4140.0,0.00%,F,F)



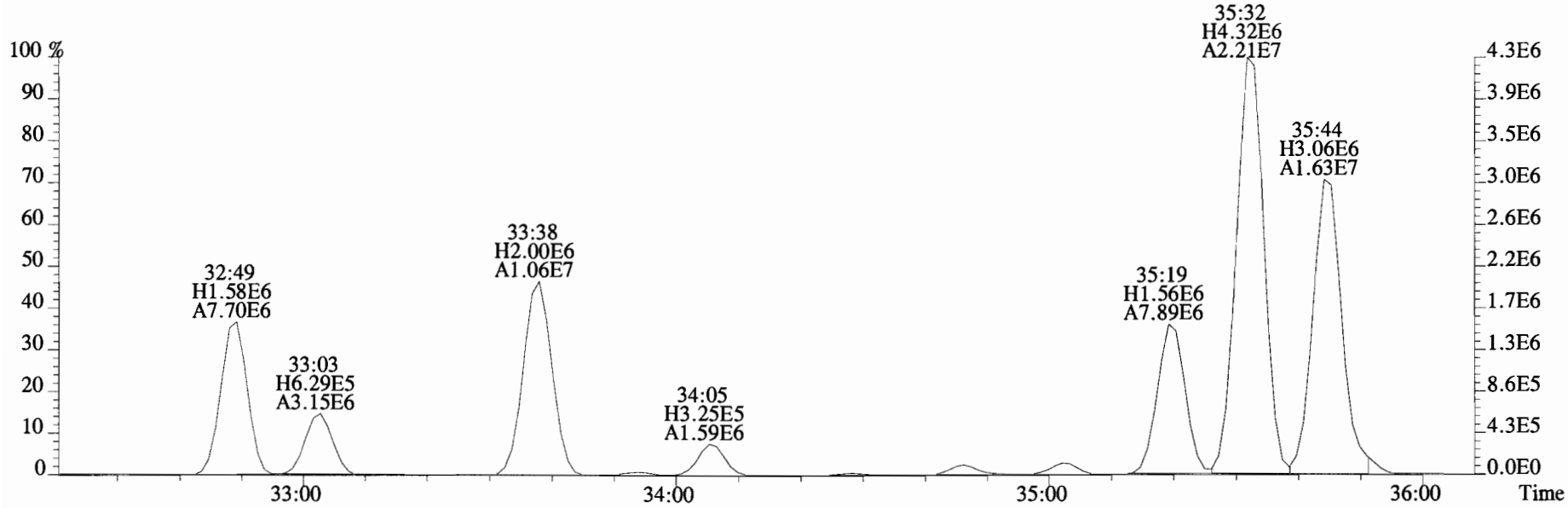
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3480.0,0.00%,F,F)



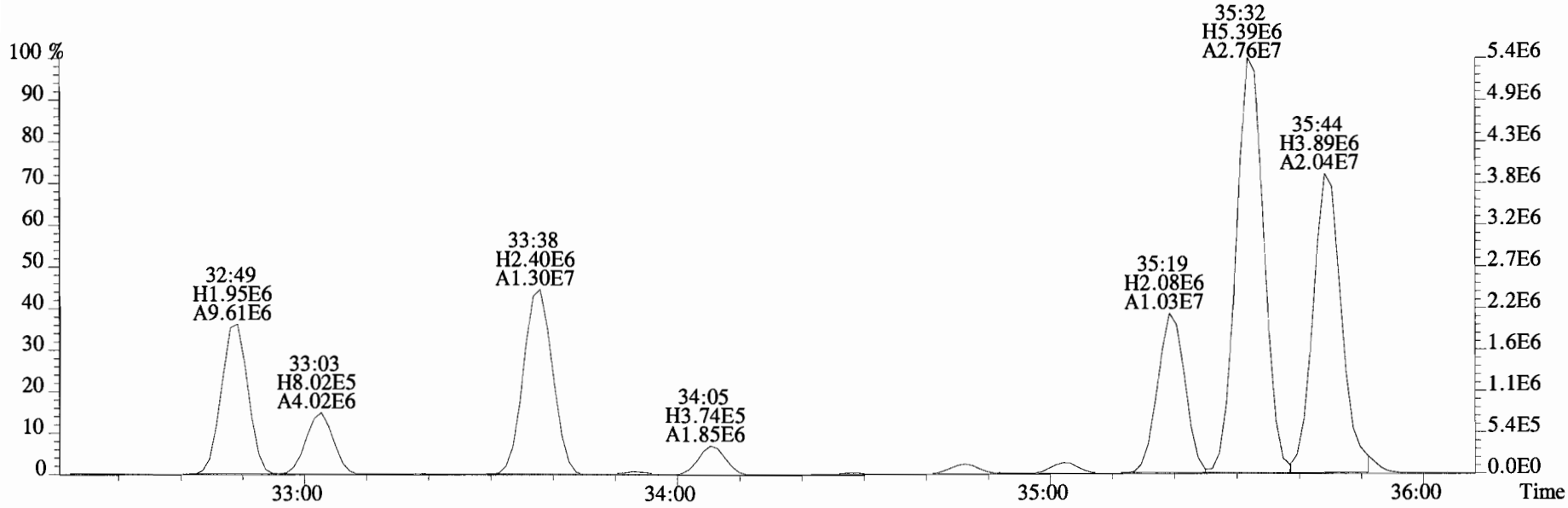
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4140.0,0.00%,F,F)



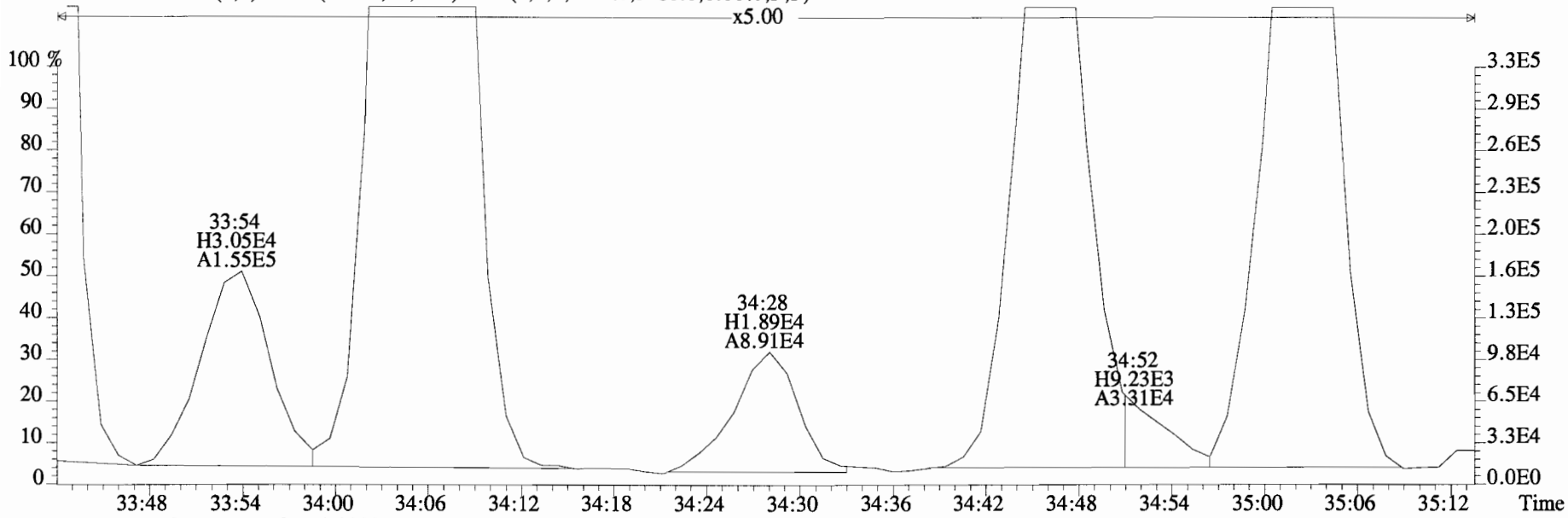
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3480.0,0.00%,F,F)



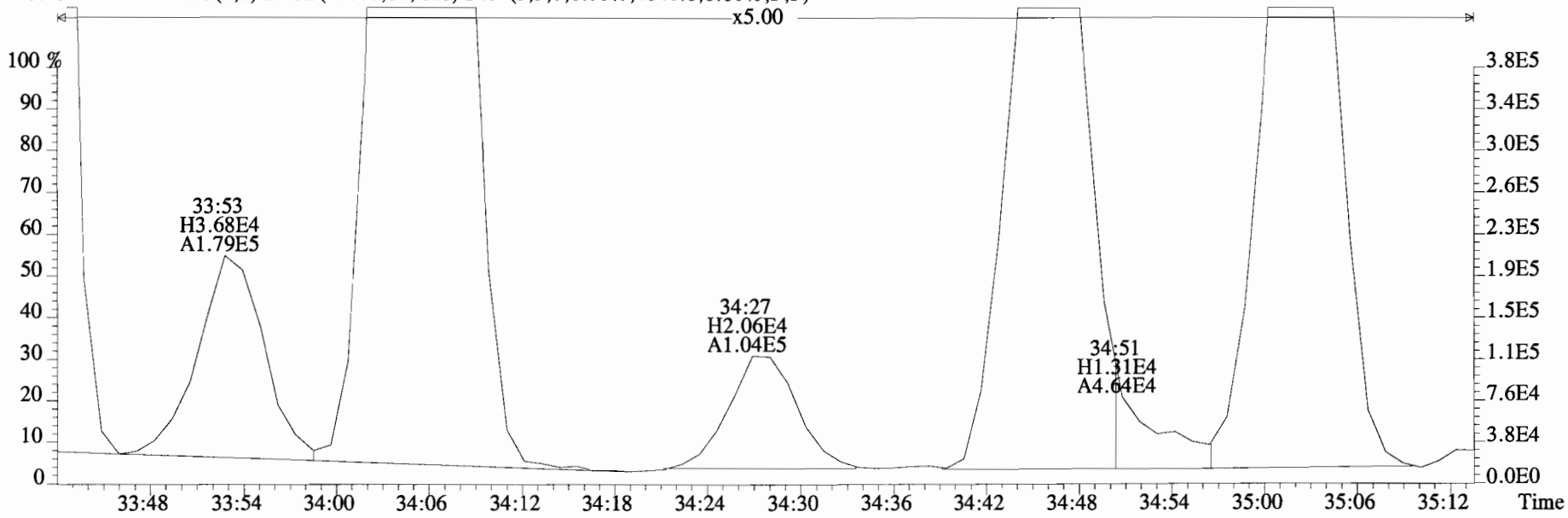
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4140.0,0.00%,F,F)



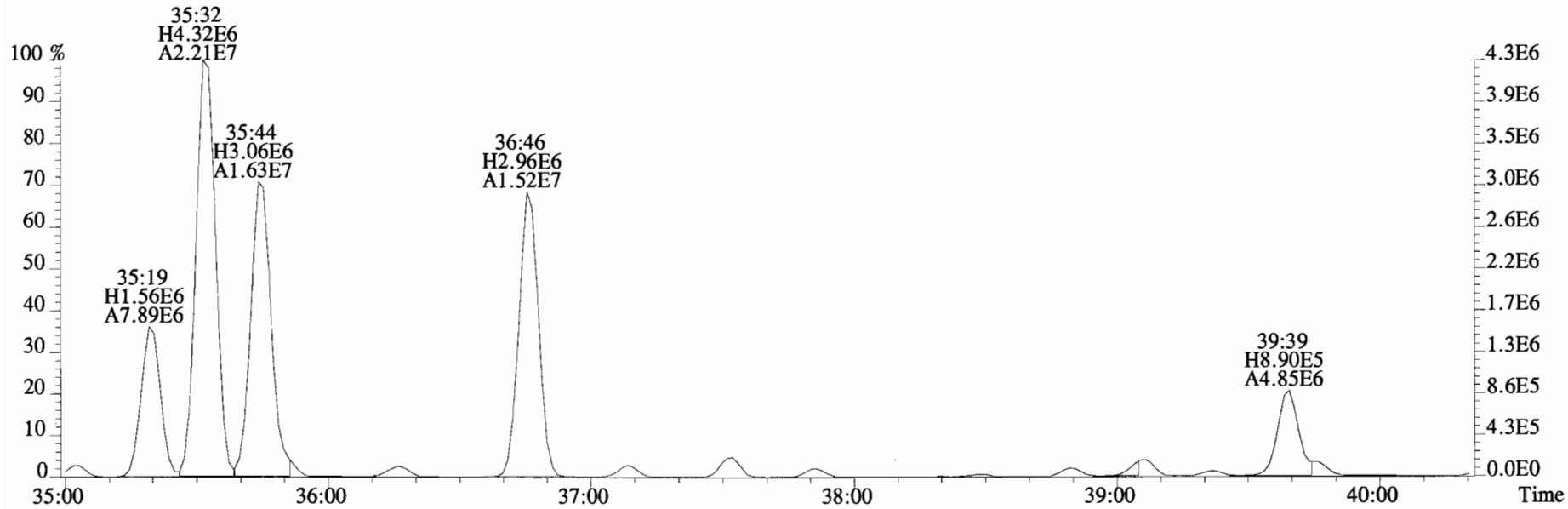
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3480.0,0.00%,F,F)



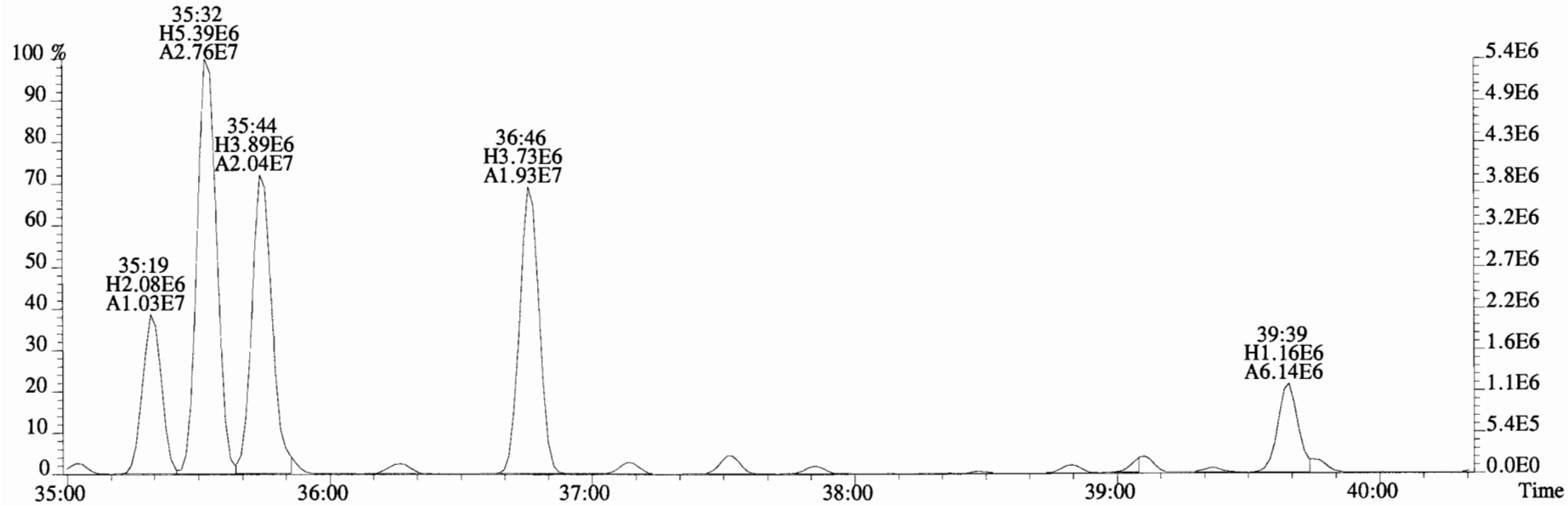
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4140.0,0.00%,F,F)



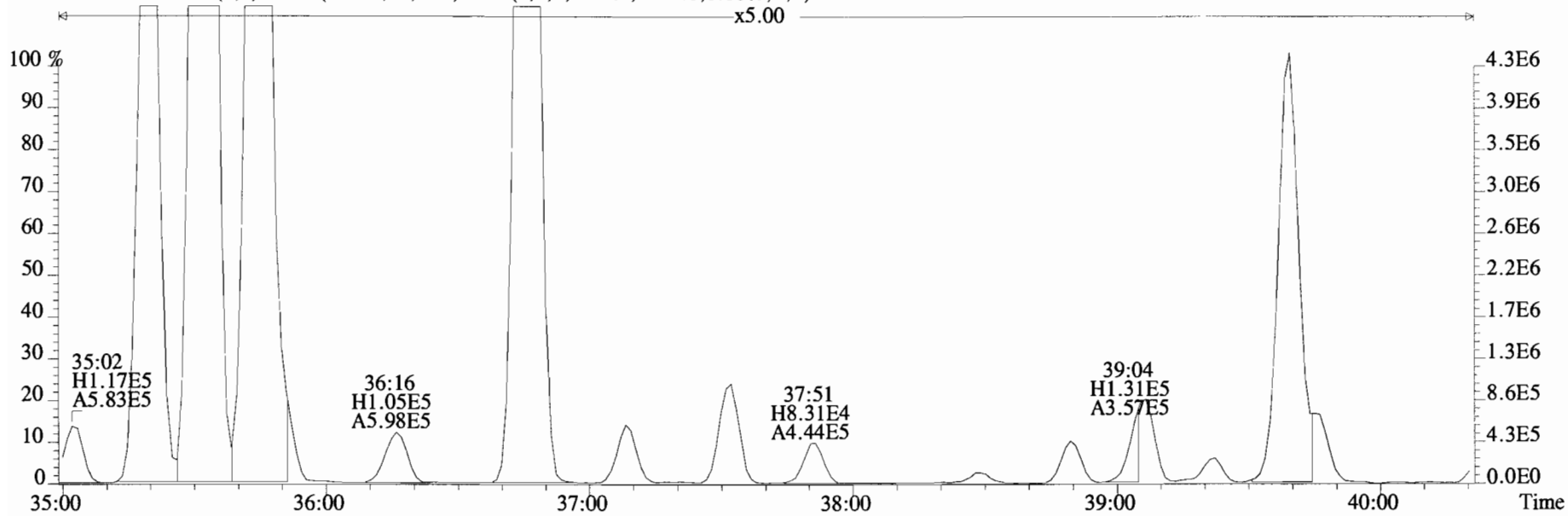
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3480.0,0.00%,F,F)



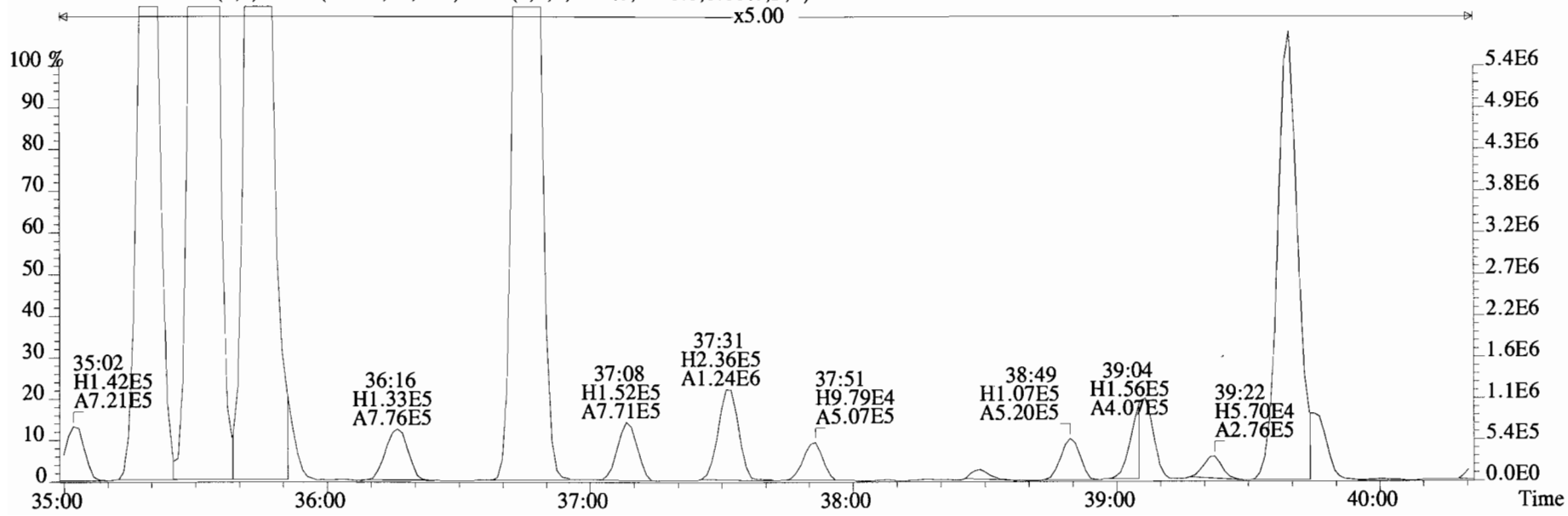
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4140.0,0.00%,F,F)



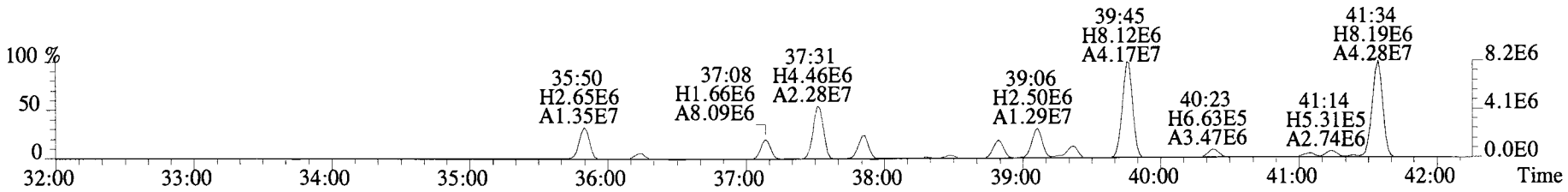
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3480.0,0.00%,F,F)



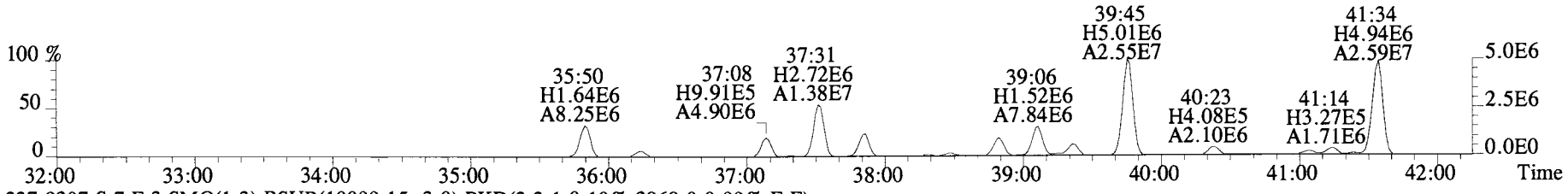
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4140.0,0.00%,F,F)



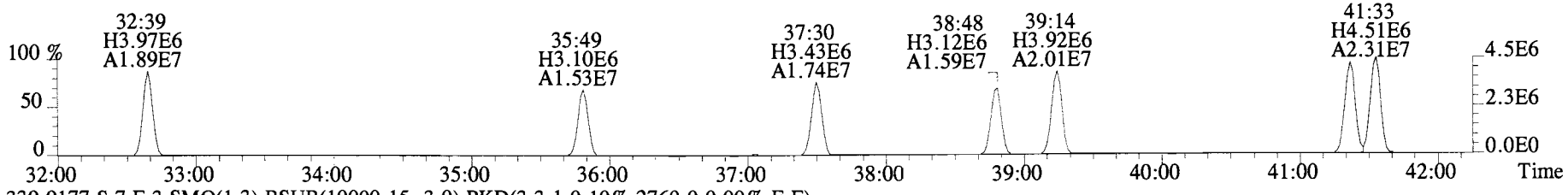
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2088.0,0.00%,F,F)



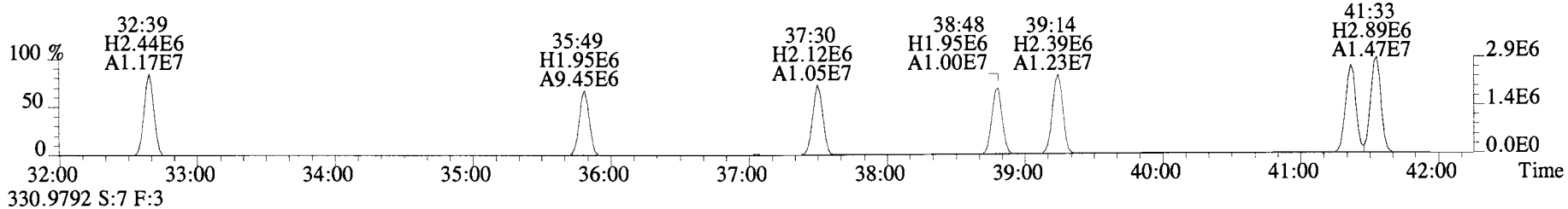
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2500.0,0.00%,F,F)



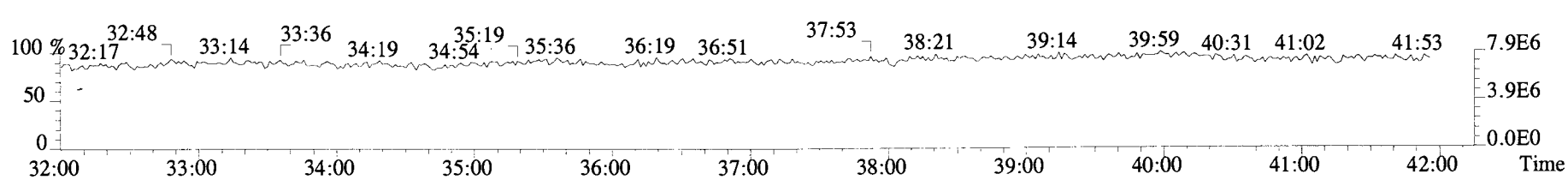
337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2868.0,0.00%,F,F)



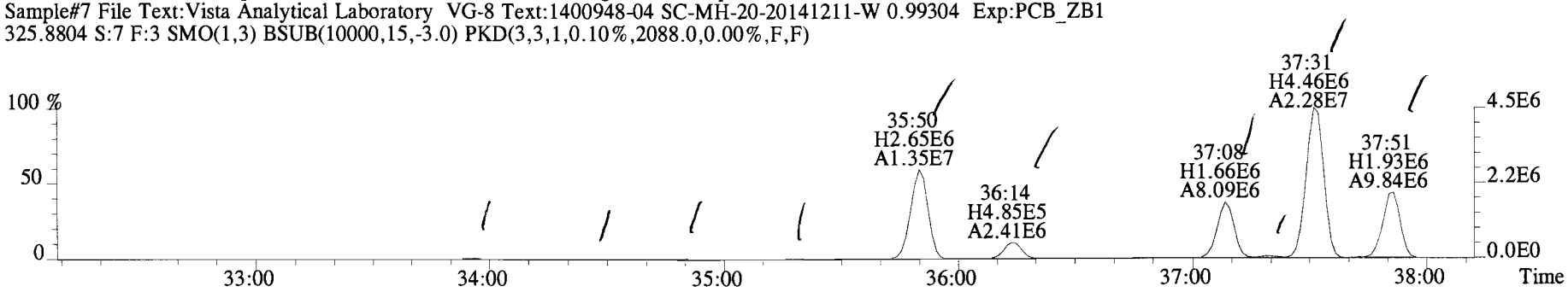
339.9177 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2760.0,0.00%,F,F)



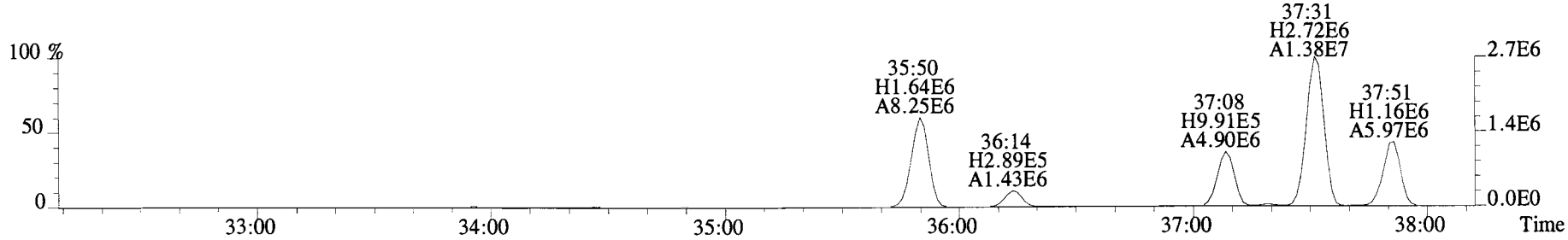
330.9792 S:7 F:3



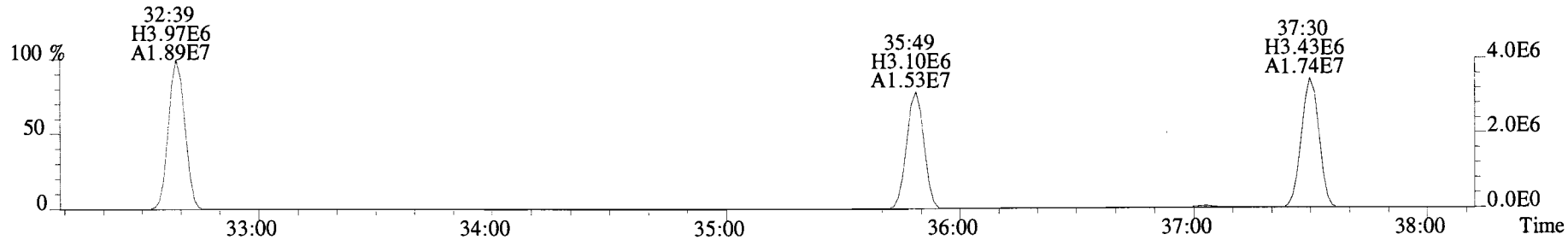
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2088.0,0.00%,F,F)



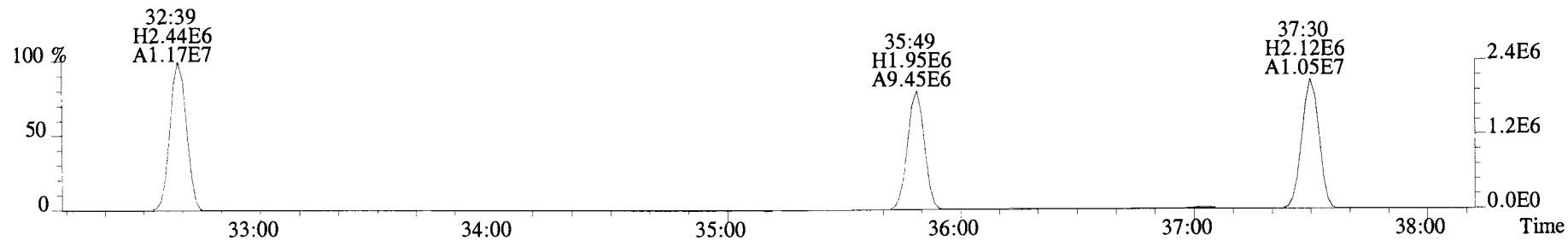
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2500.0,0.00%,F,F)

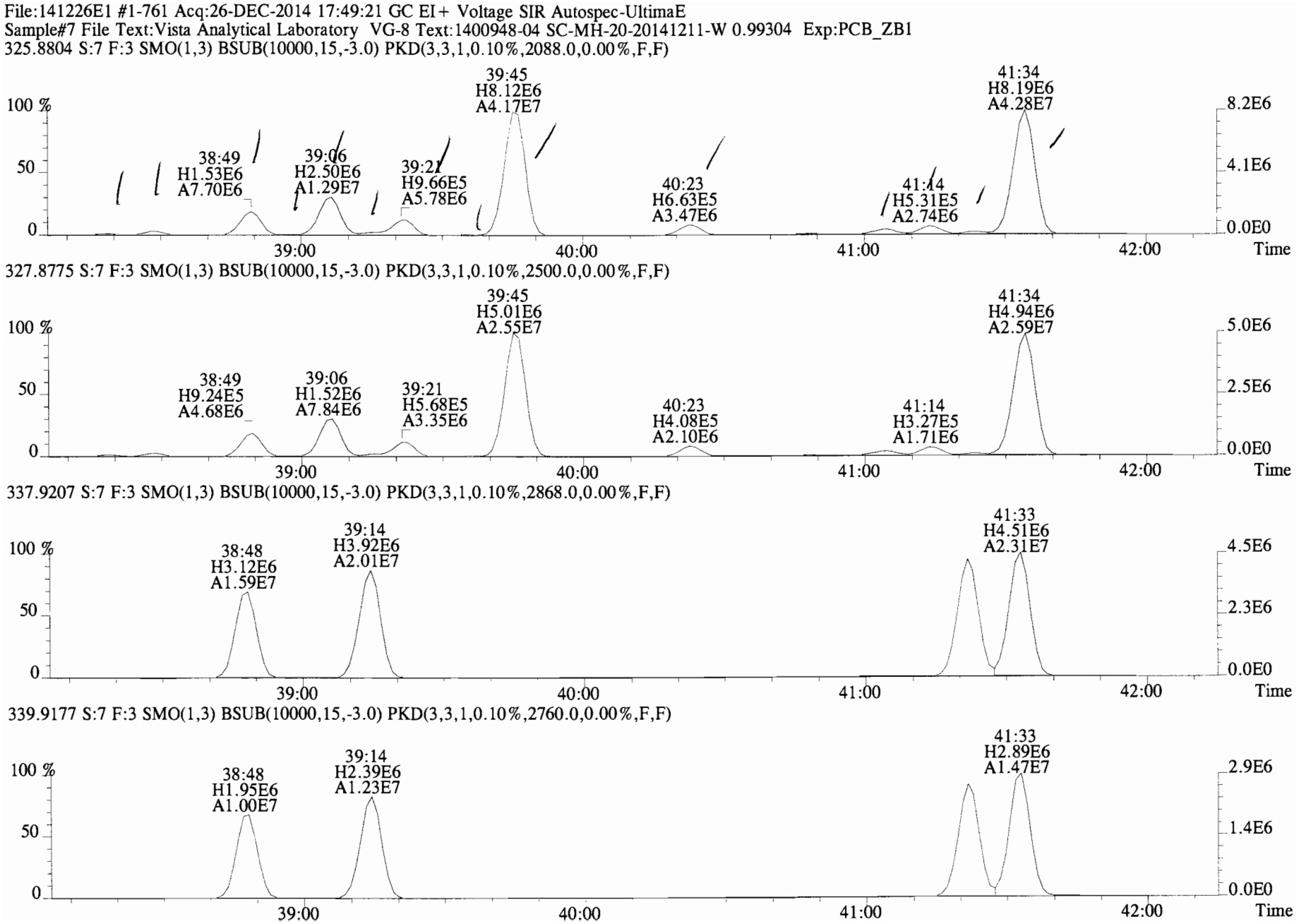


337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2868.0,0.00%,F,F)

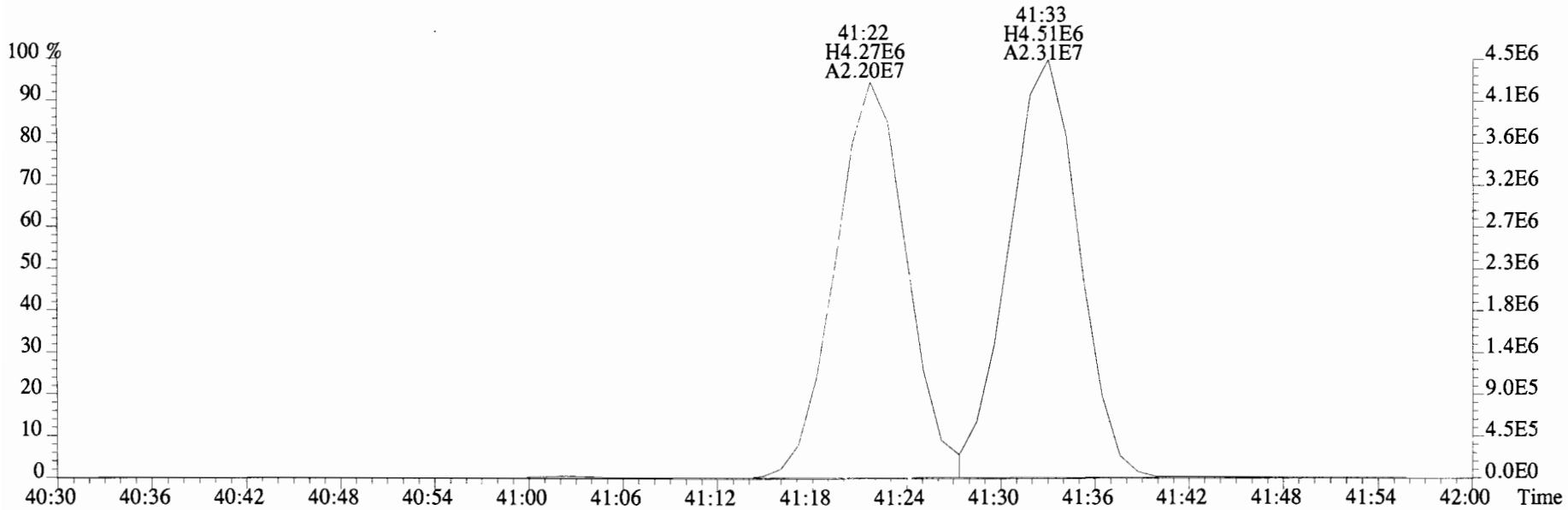


339.9177 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2760.0,0.00%,F,F)

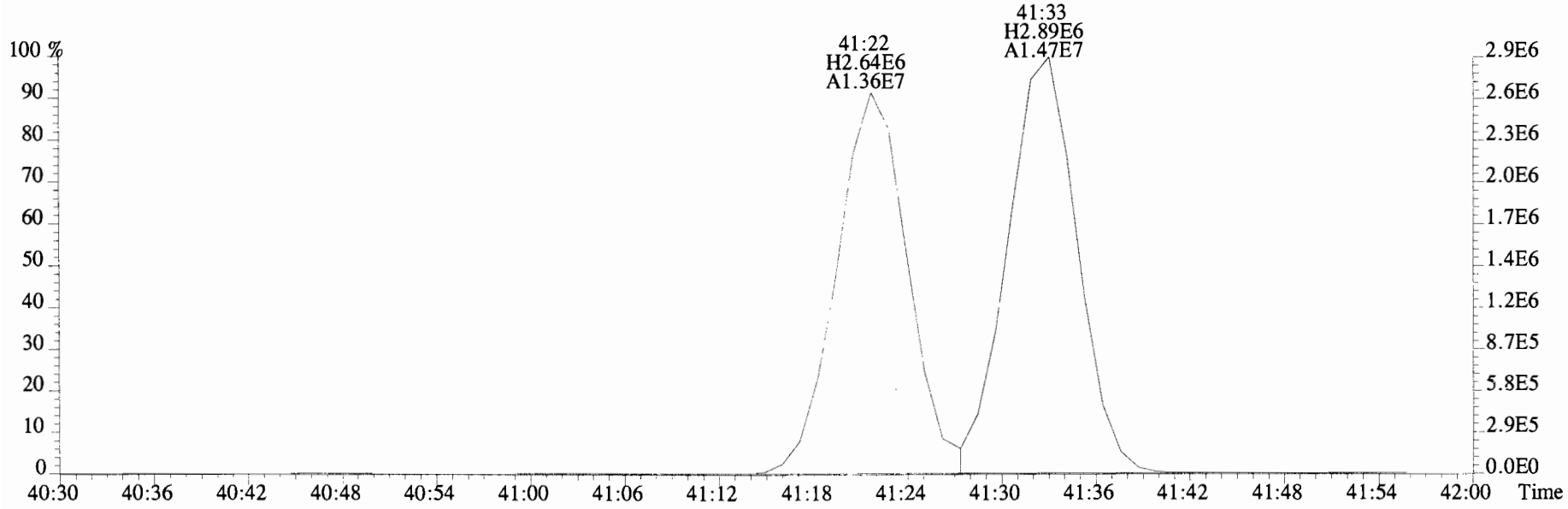



File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2088.0,0.00%,F,F)
38:49 H1.53E6 A7.70E6
39:06 H2.50E6 A1.29E7
39:21 H9.66E5 A5.78E6
39:45 H8.12E6 A4.17E7
40:23 H6.63E5 A3.47E6
41:14 H5.31E5 A2.74E6
41:34 H8.19E6 A4.28E7
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2500.0,0.00%,F,F)
38:49 H9.24E5 A4.68E6
39:06 H1.52E6 A7.84E6
39:21 H5.68E5 A3.35E6
39:45 H5.01E6 A2.55E7
40:23 H4.08E5 A2.10E6
41:14 H3.27E5 A1.71E6
41:34 H4.94E6 A2.59E7
337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2868.0,0.00%,F,F)
38:48 H3.12E6 A1.59E7
39:14 H3.92E6 A2.01E7
41:33 H4.51E6 A2.31E7
339.9177 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2760.0,0.00%,F,F)
38:48 H1.95E6 A1.00E7
39:14 H2.39E6 A1.23E7
41:33 H2.89E6 A1.47E7
100 %
50
0
39:00
40:00
41:00
42:00
Time
8.2E6
4.1E6
0.0E0
5.0E6
2.5E6
4.5E6
2.3E6
2.9E6
1.4E6

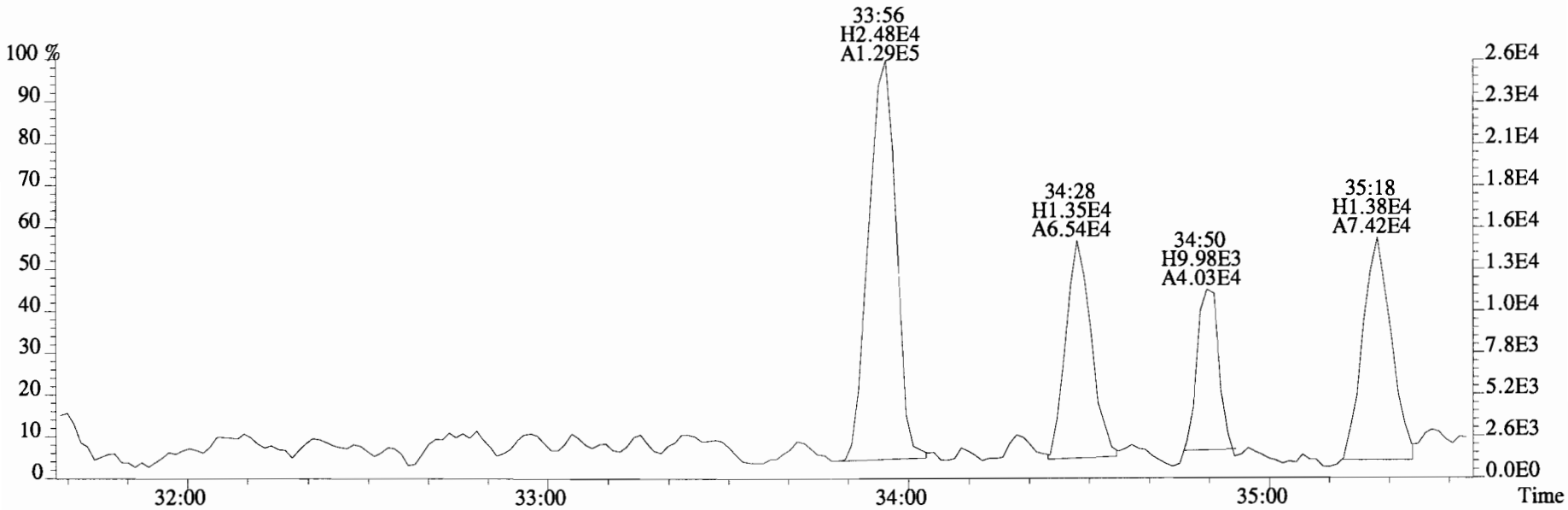
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2868.0,0.00%,F,F)



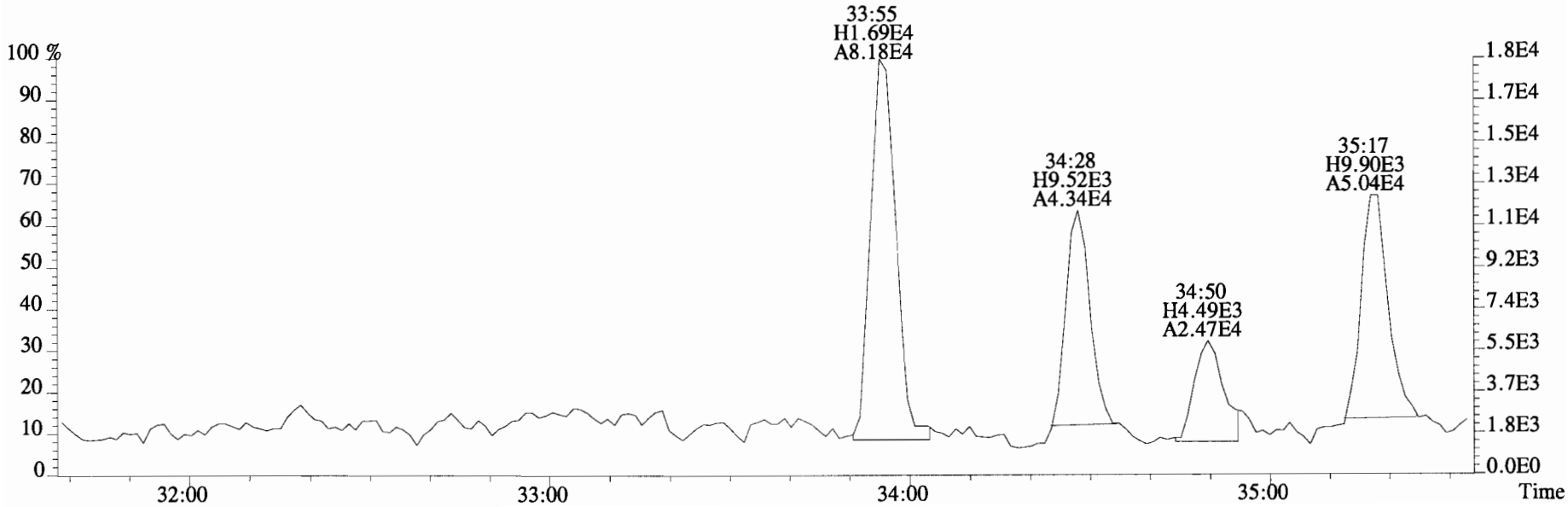
339.9177 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2760.0,0.00%,F,F)



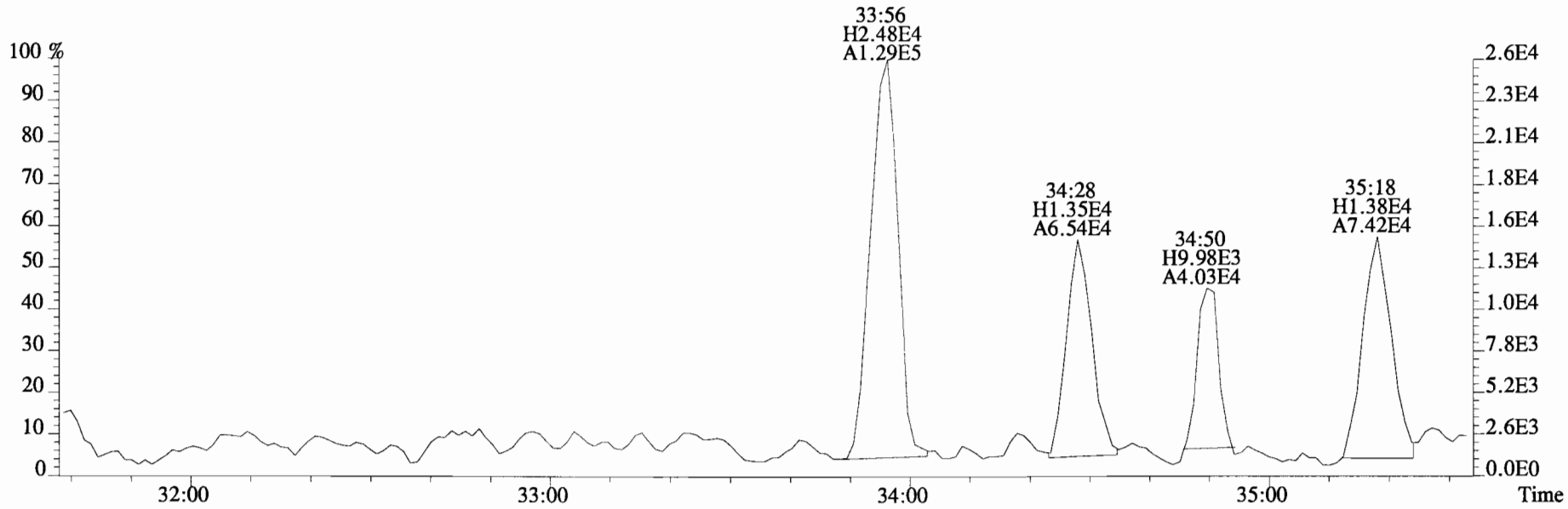
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2088.0,0.00%,F,F)



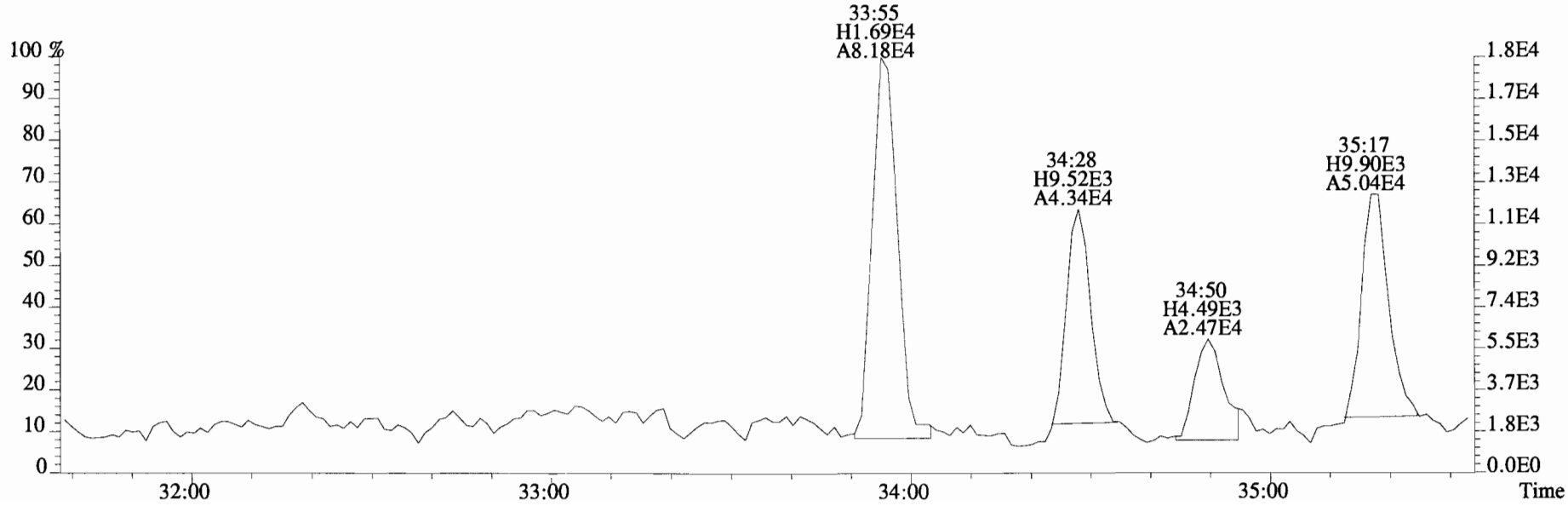
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2500.0,0.00%,F,F)



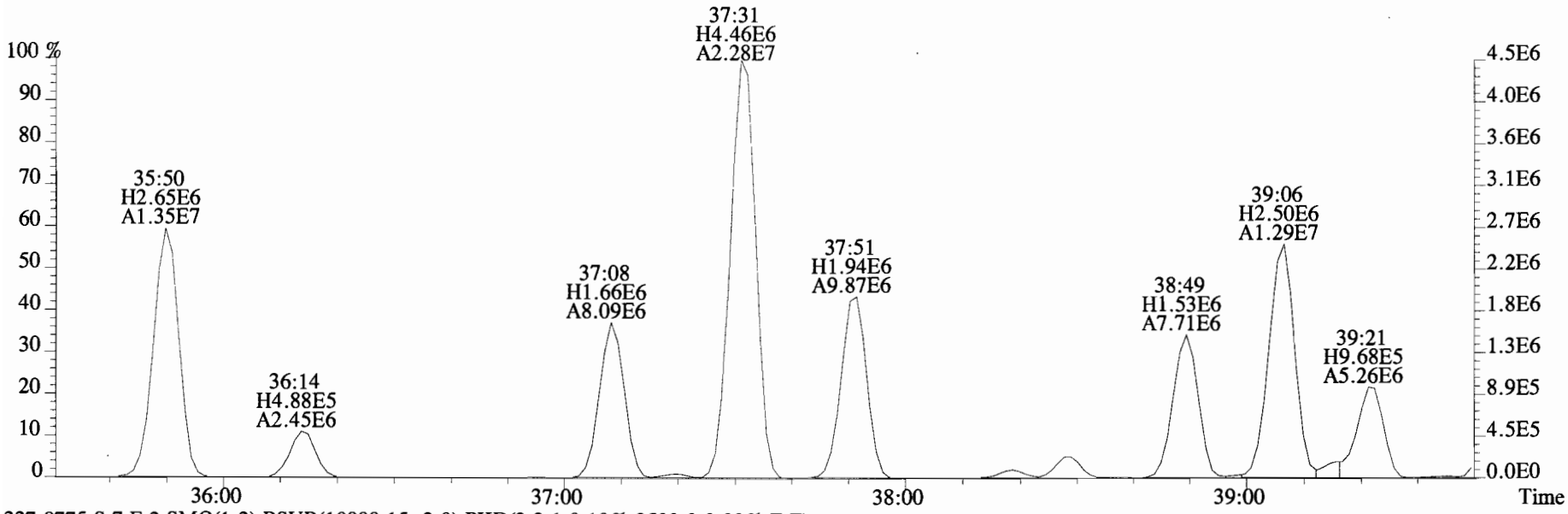
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2088.0,0.00%,F,F)



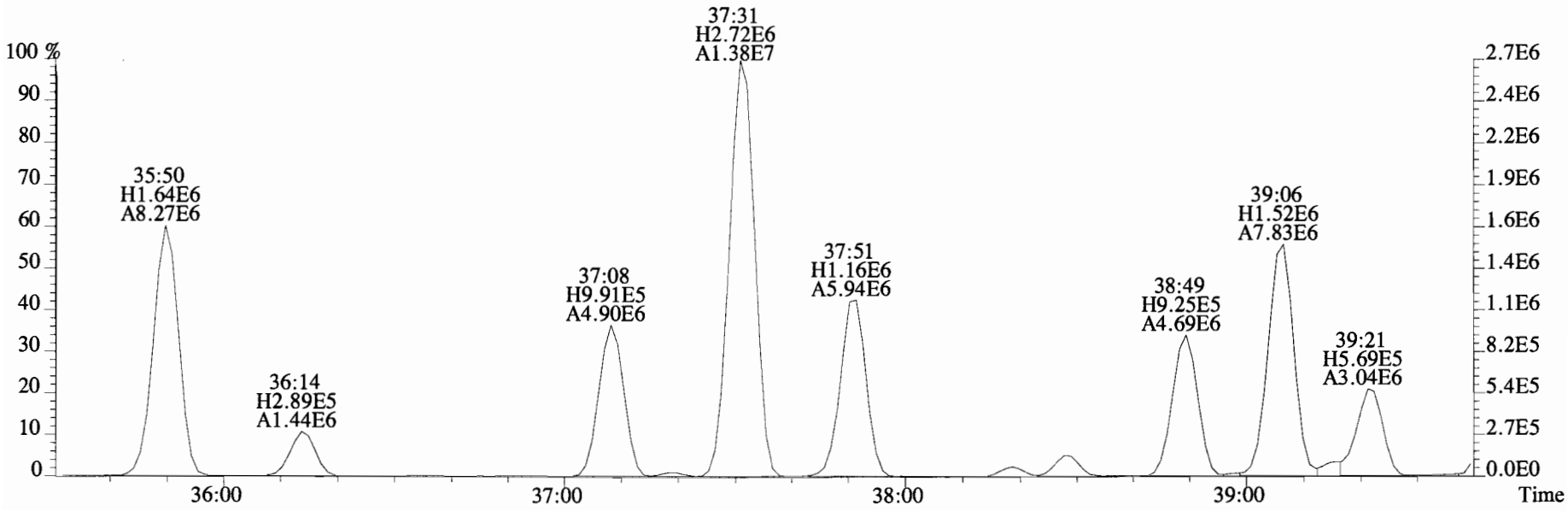
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2500.0,0.00%,F,F)

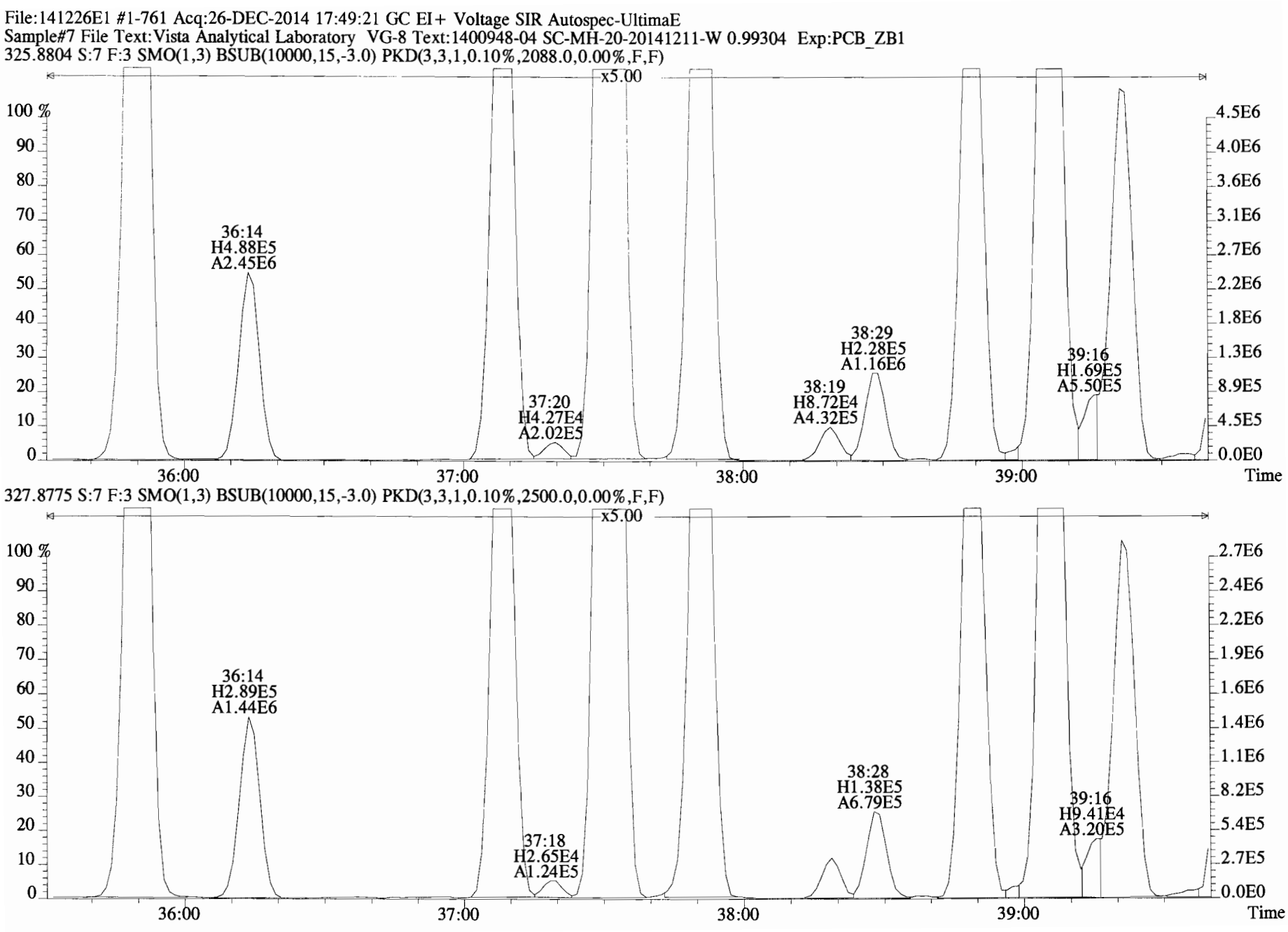


File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2088.0,0.00%,F,F)

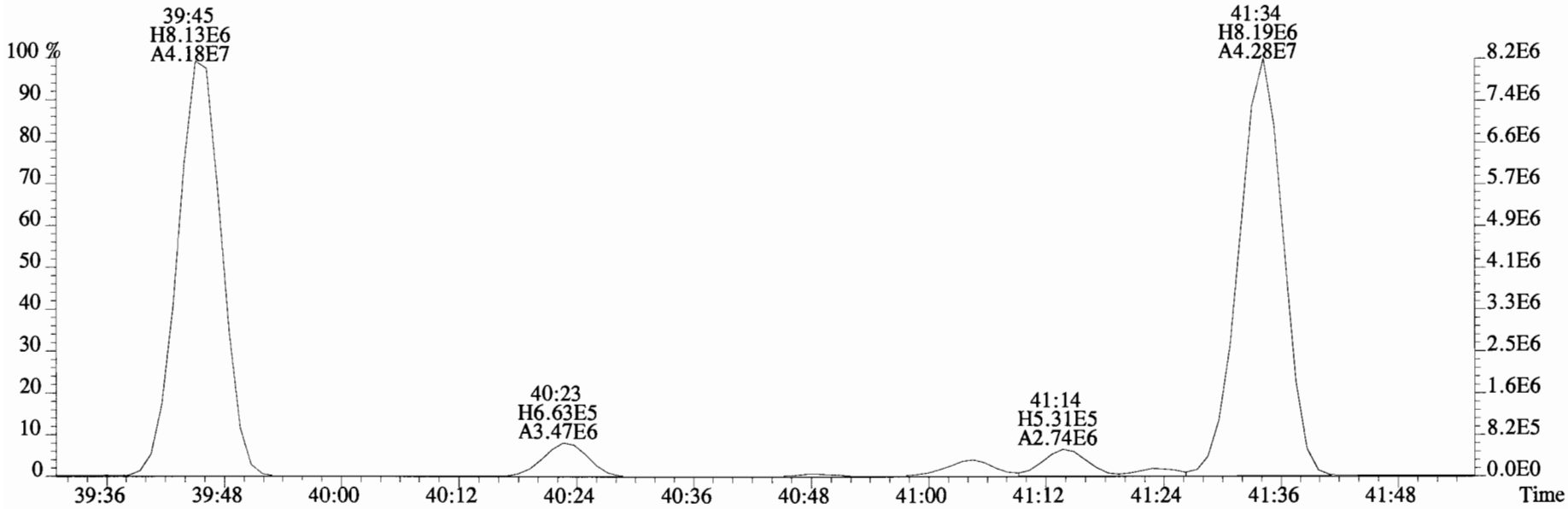


327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2500.0,0.00%,F,F)

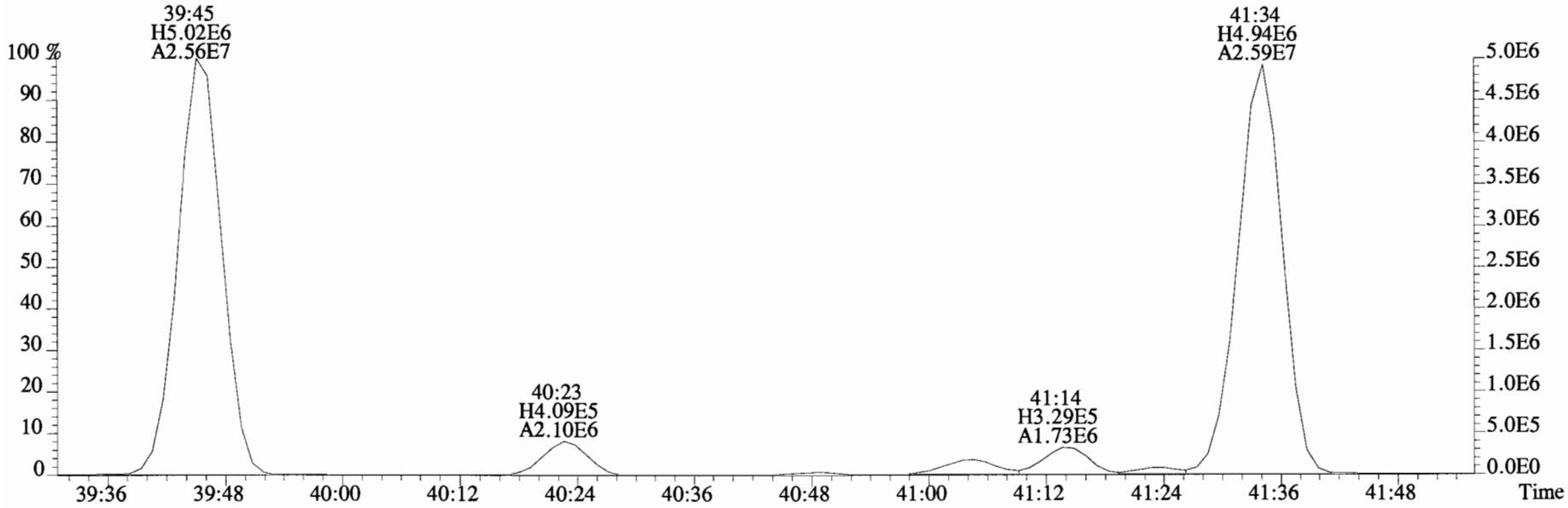



File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2088.0,0.00%,F,F)
x5.00
36:14
H4.88E5
A2.45E6
37:20
H4.27E4
A2.02E5
38:19
H8.72E4
A4.32E5
38:29
H2.28E5
A1.16E6
39:16
H1.69E5
A5.50E5
100 %
90
80
70
60
50
40
30
20
10
0
4.5E6
4.0E6
3.6E6
3.1E6
2.7E6
2.2E6
1.8E6
1.3E6
8.9E5
4.5E5
0.0E0
36:00
37:00
38:00
39:00
Time
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2500.0,0.00%,F,F)
x5.00
36:14
H2.89E5
A1.44E6
37:18
H2.65E4
A1.24E5
38:28
H1.38E5
A6.79E5
39:16
H9.41E4
A3.20E5
100 %
90
80
70
60
50
40
30
20
10
0
2.7E6
2.4E6
2.2E6
1.9E6
1.6E6
1.4E6
1.1E6
8.2E5
5.4E5
2.7E5
0.0E0
36:00
37:00
38:00
39:00
Time

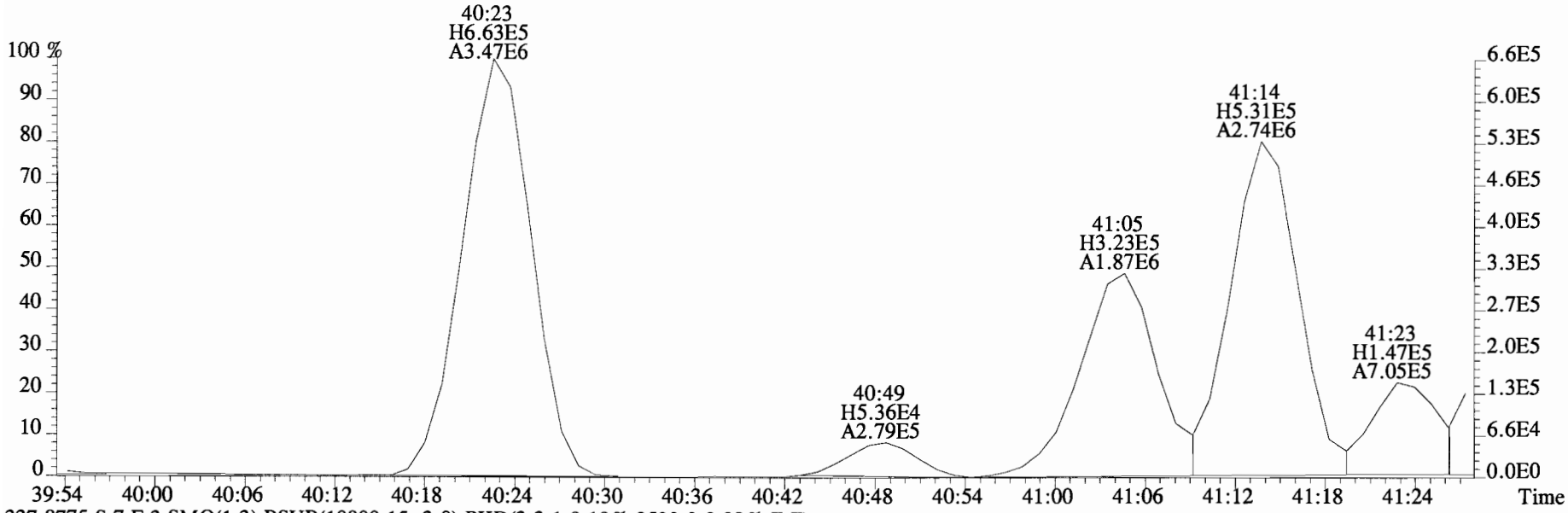
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2088.0,0.00%,F,F)



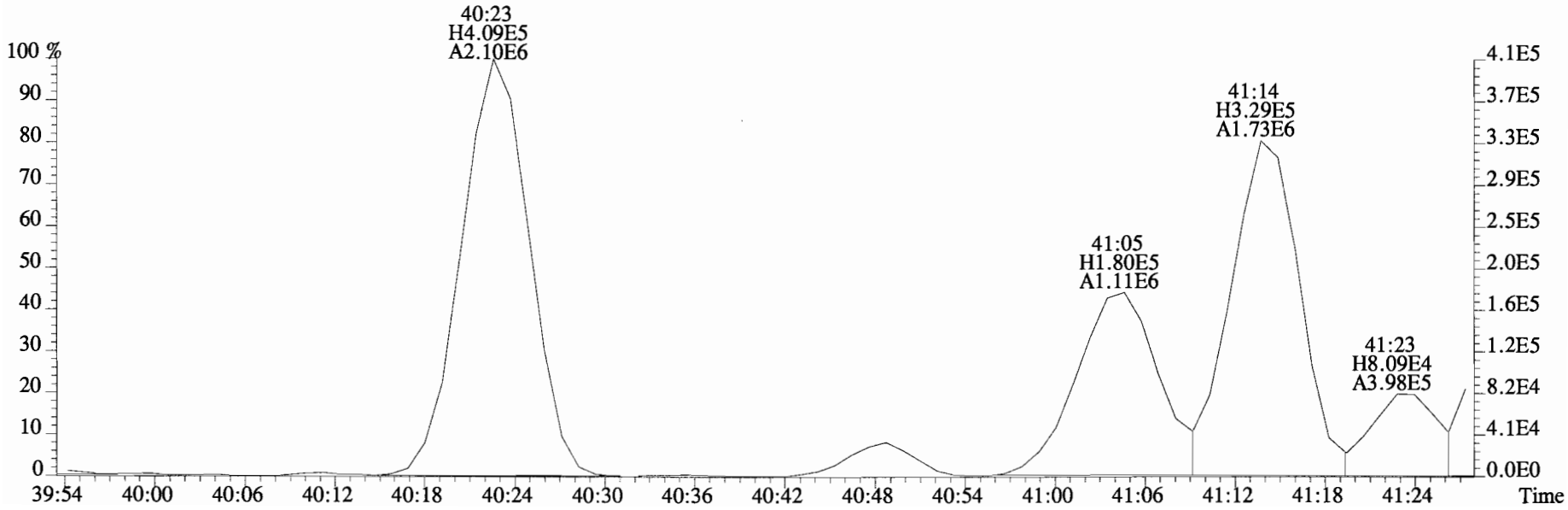
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2500.0,0.00%,F,F)



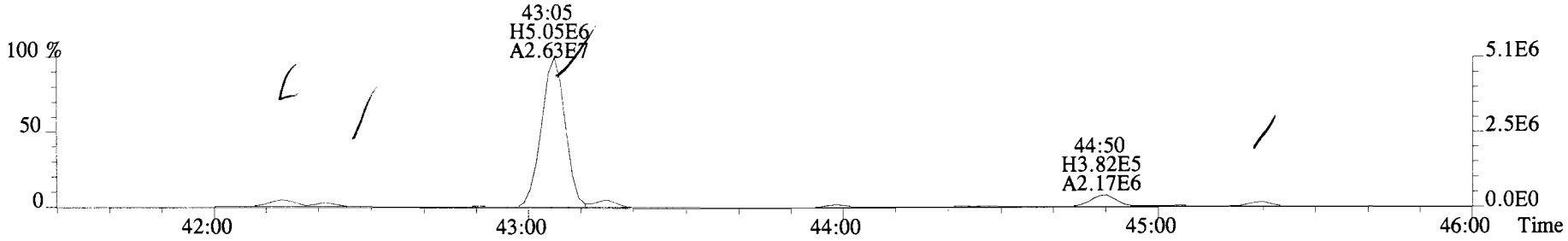
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2088.0,0.00%,F,F)



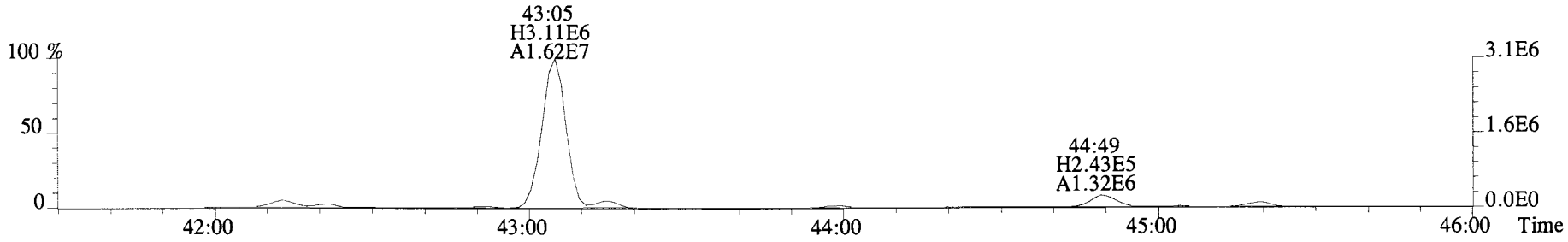
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2500.0,0.00%,F,F)



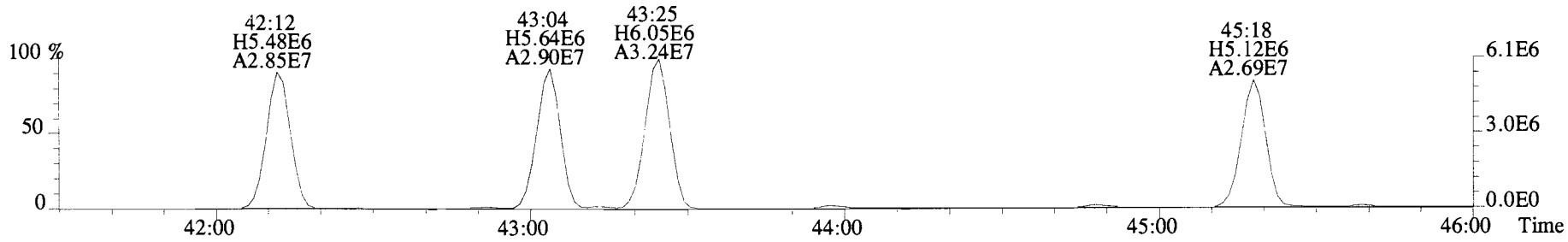
File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9196.0,0.00%,F,F)



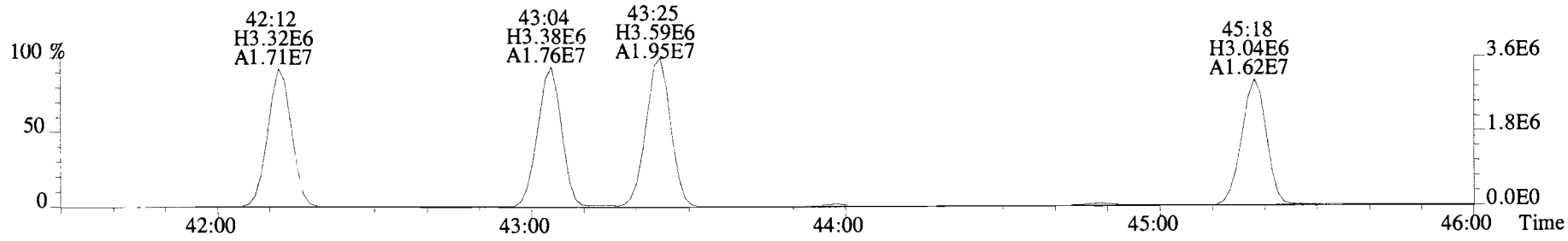
327.8775 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5352.0,0.00%,F,F)



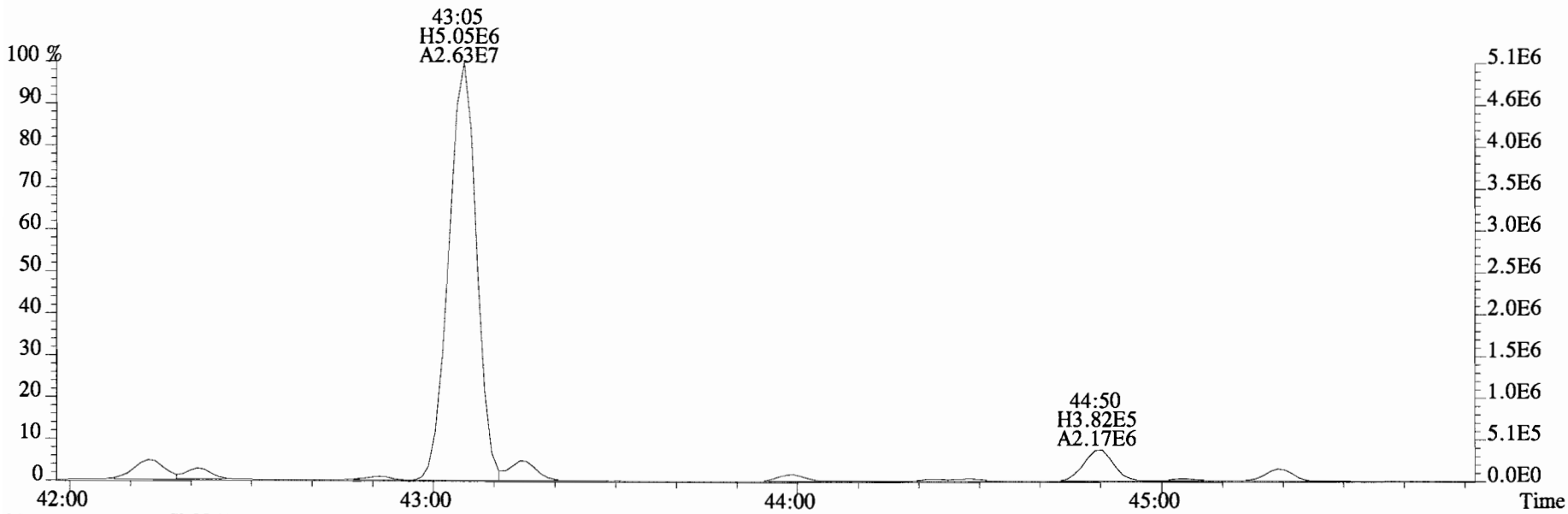
337.9207 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6036.0,0.00%,F,F)



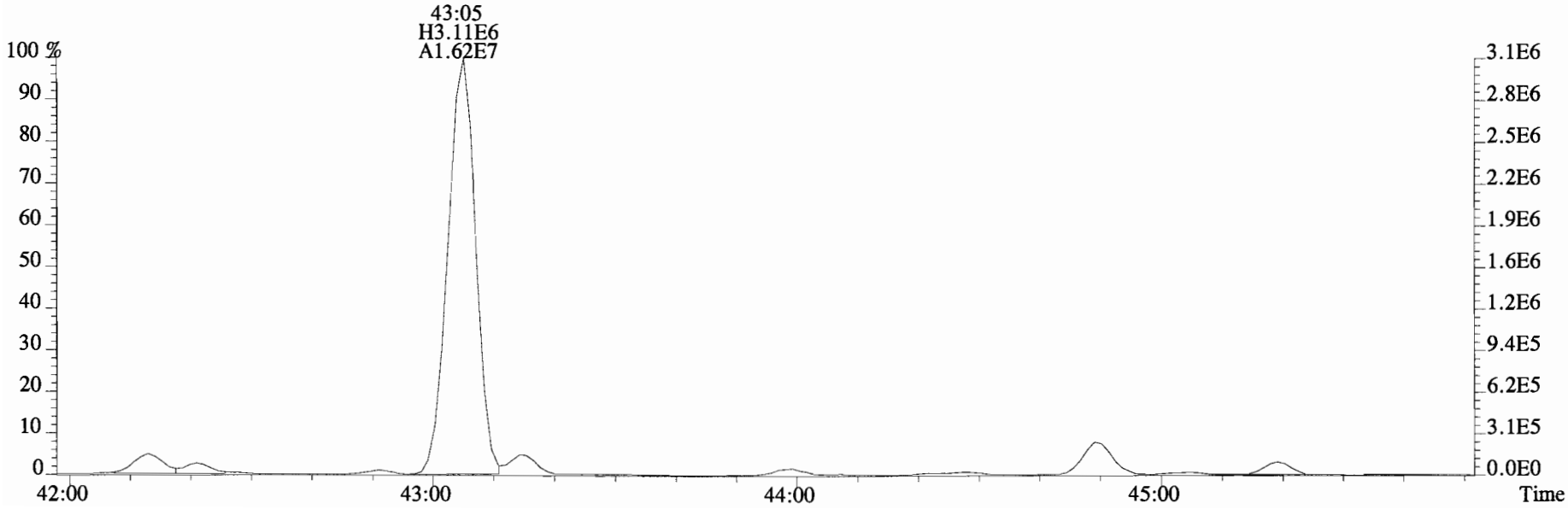
339.9177 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3468.0,0.00%,F,F)

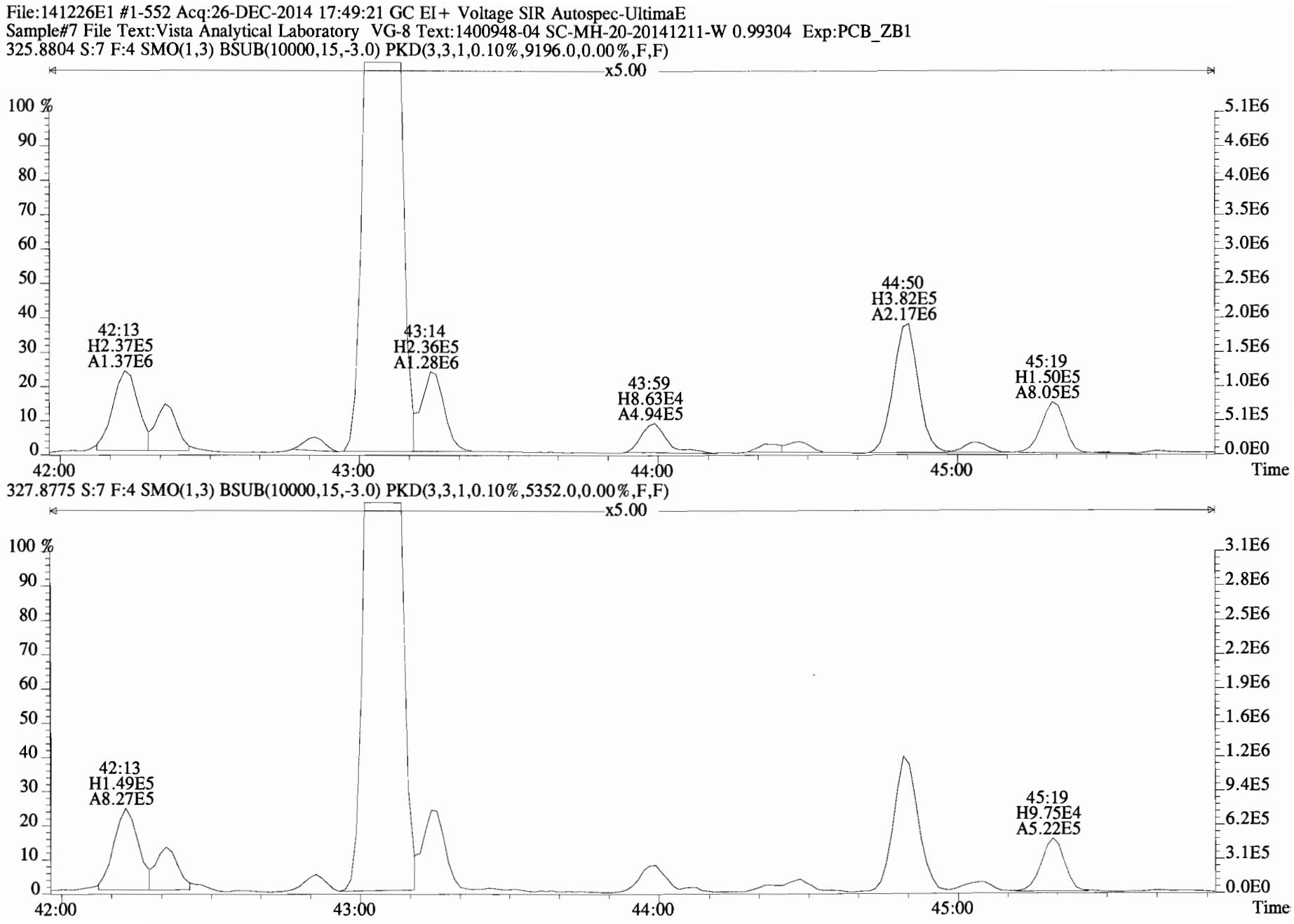


File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9196.0,0.00%,F,F)

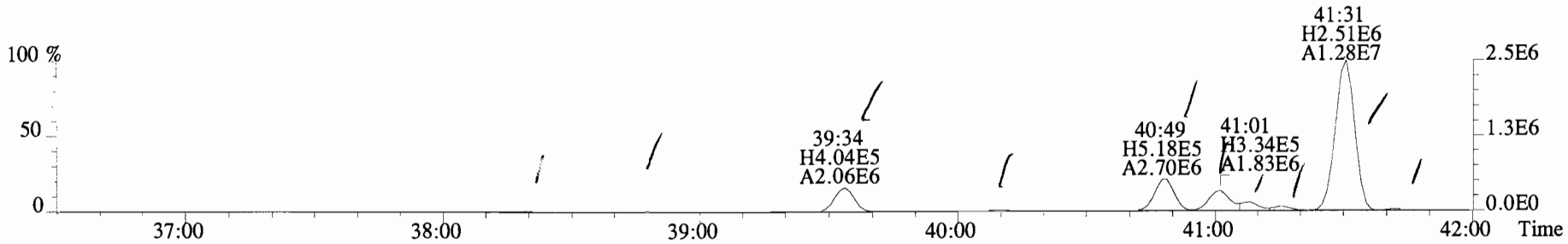


327.8775 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5352.0,0.00%,F,F)

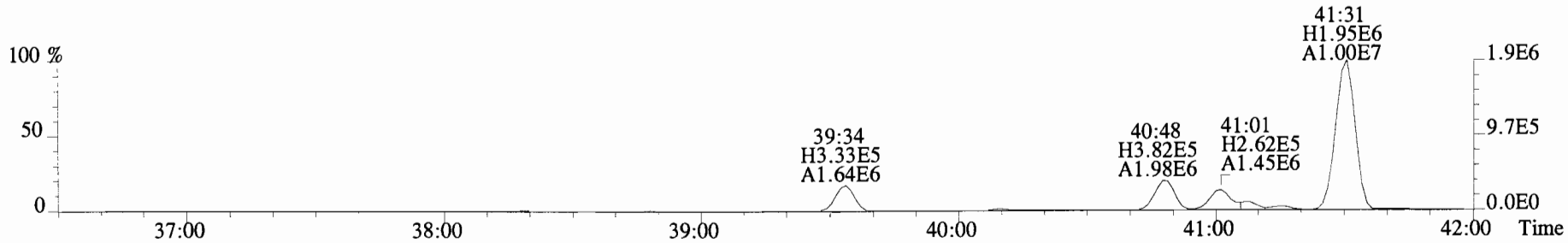



File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
325.8804 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9196.0,0.00%,F,F)
x5.00
42:13
H2.37E5
A1.37E6
43:14
H2.36E5
A1.28E6
43:59
H8.63E4
A4.94E5
44:50
H3.82E5
A2.17E6
45:19
H1.50E5
A8.05E5
Time
327.8775 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5352.0,0.00%,F,F)
x5.00
42:13
H1.49E5
A8.27E5
45:19
H9.75E4
A5.22E5
Time

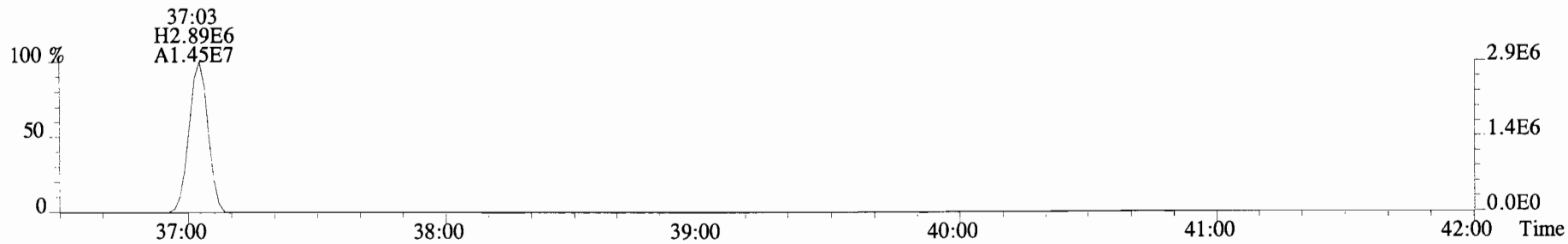
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
359.8415 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2484.0,0.00%,F,F)



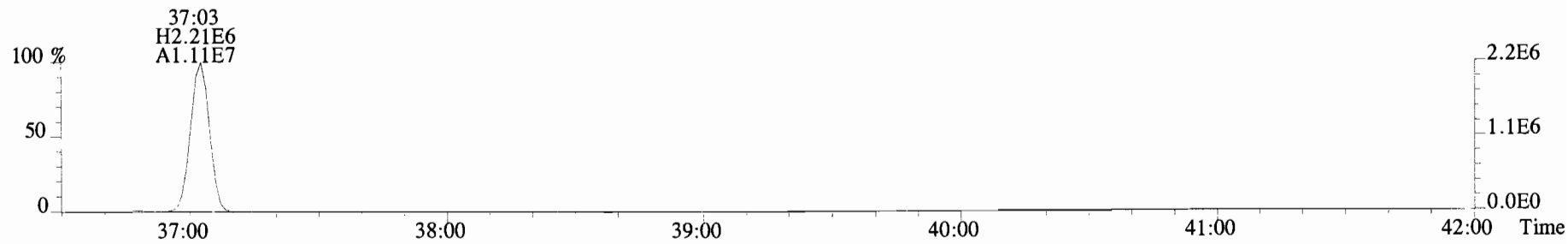
361.8385 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



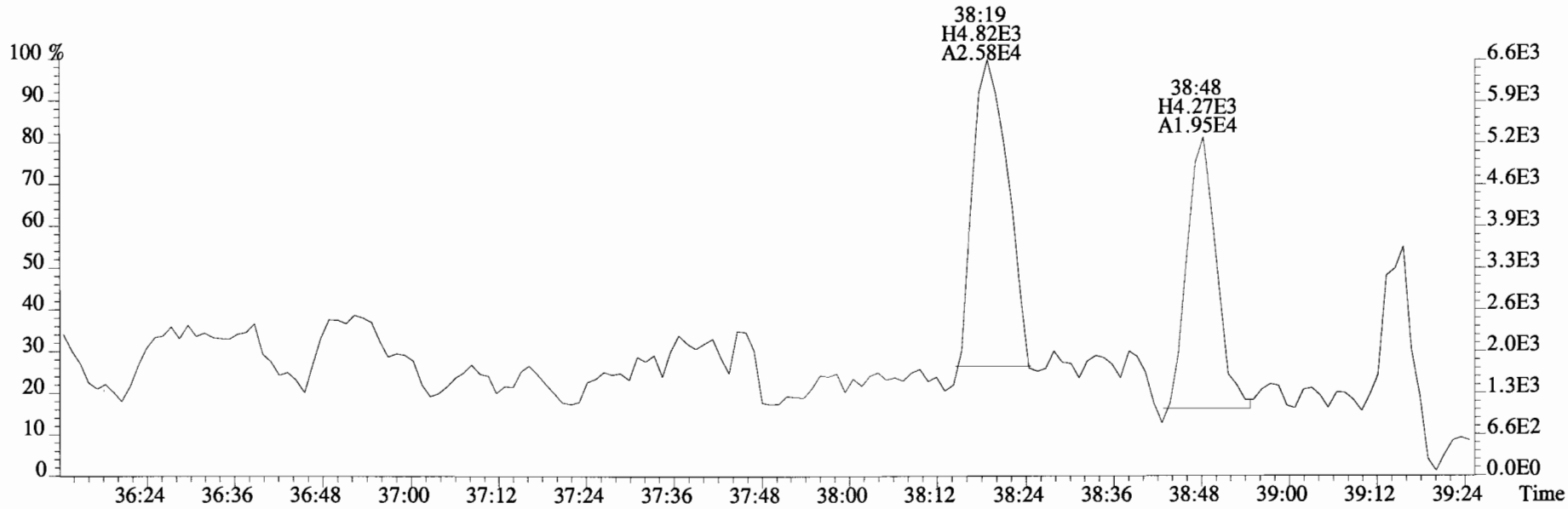
371.8817 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2584.0,0.00%,F,F)



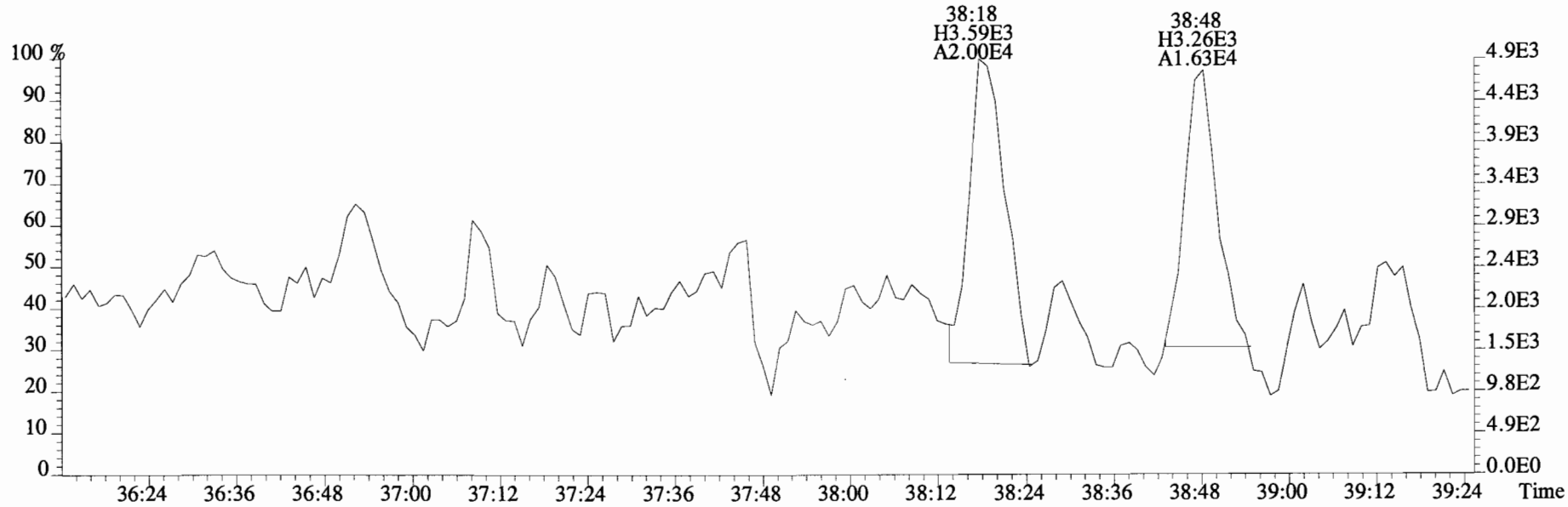
373.8788 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2624.0,0.00%,F,F)



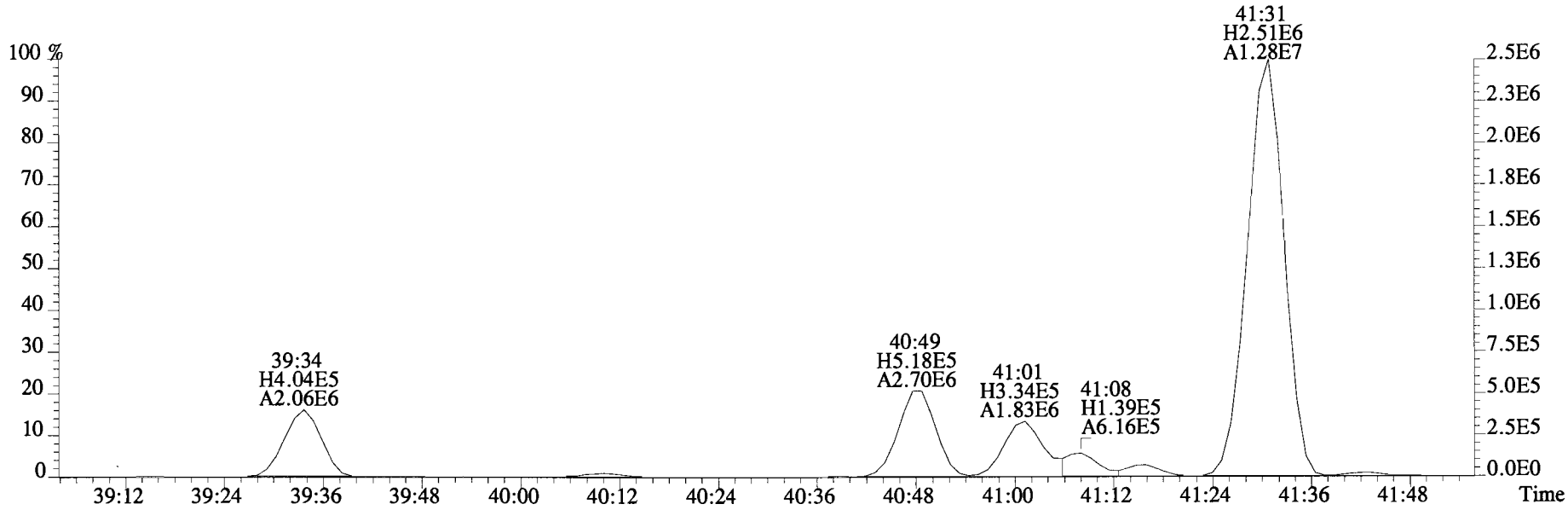
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
359.8415 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2484.0,0.00%,F,F)



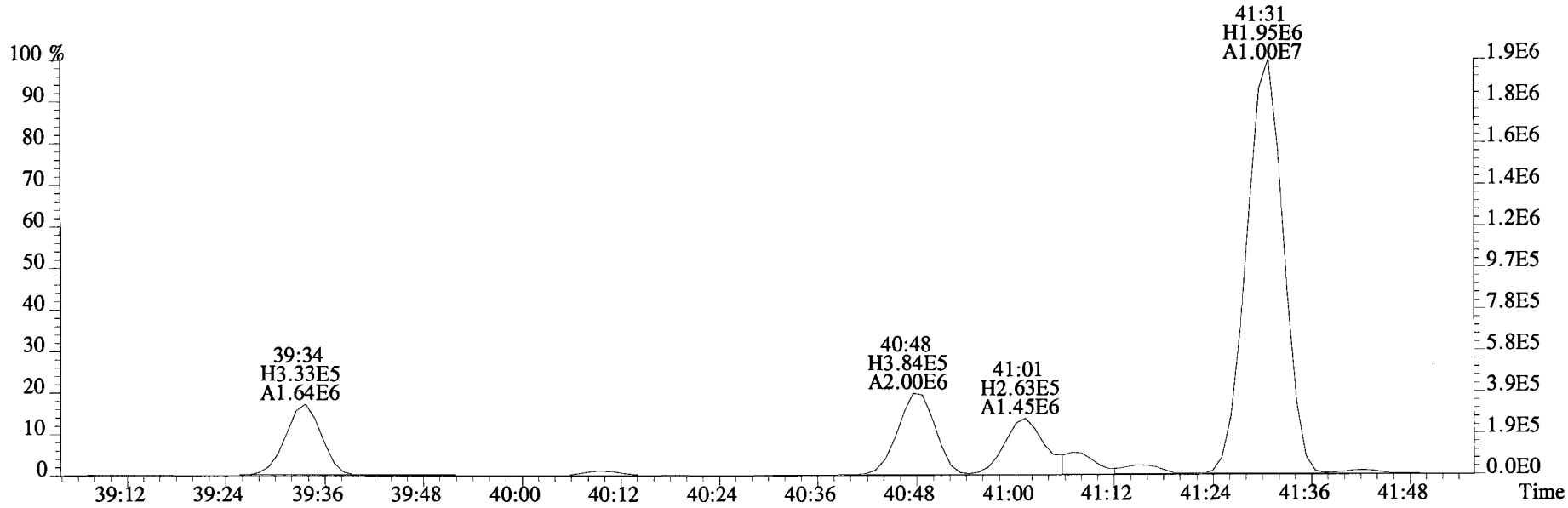
361.8385 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)

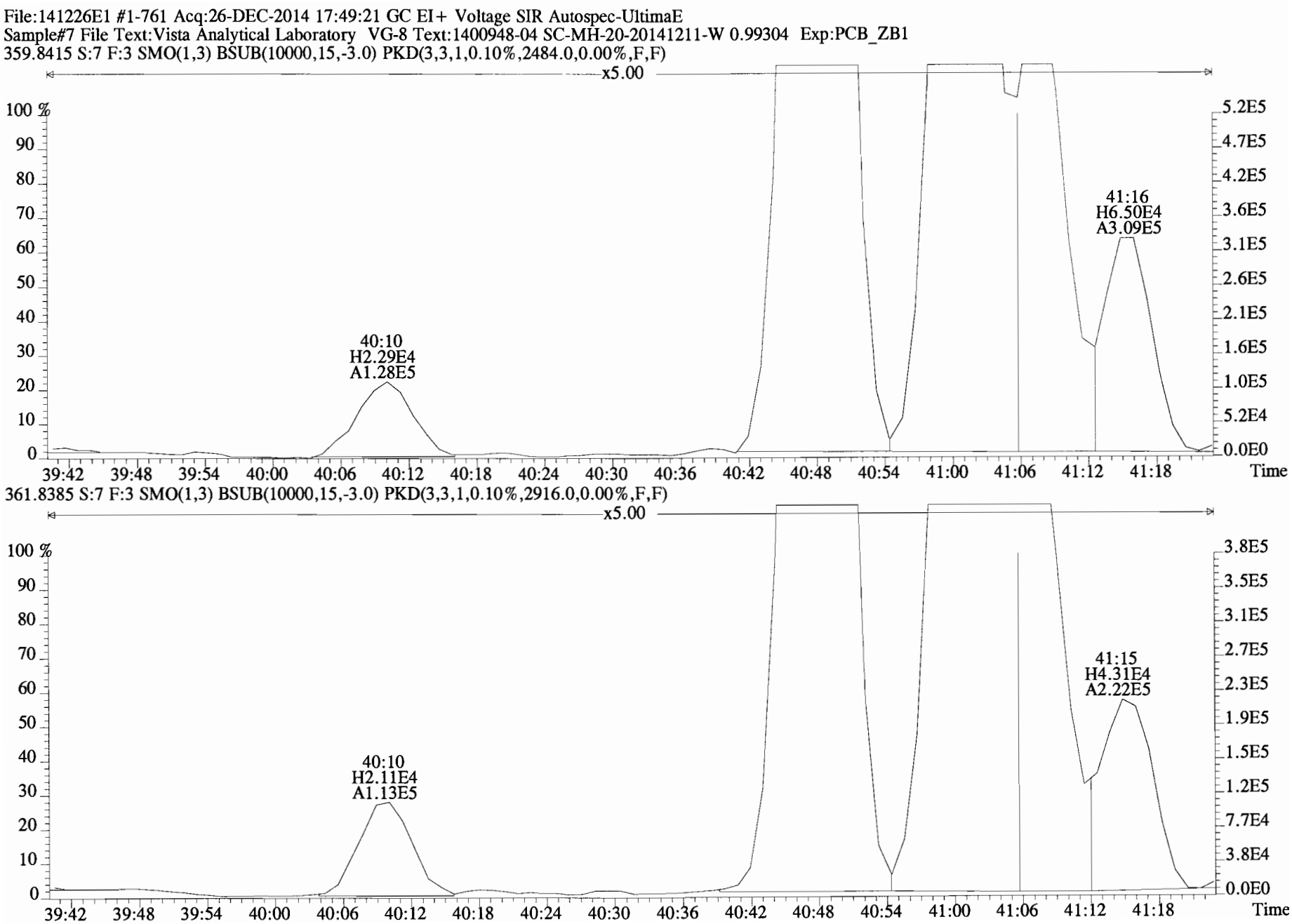


File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
359.8415 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2484.0,0.00%,F,F)

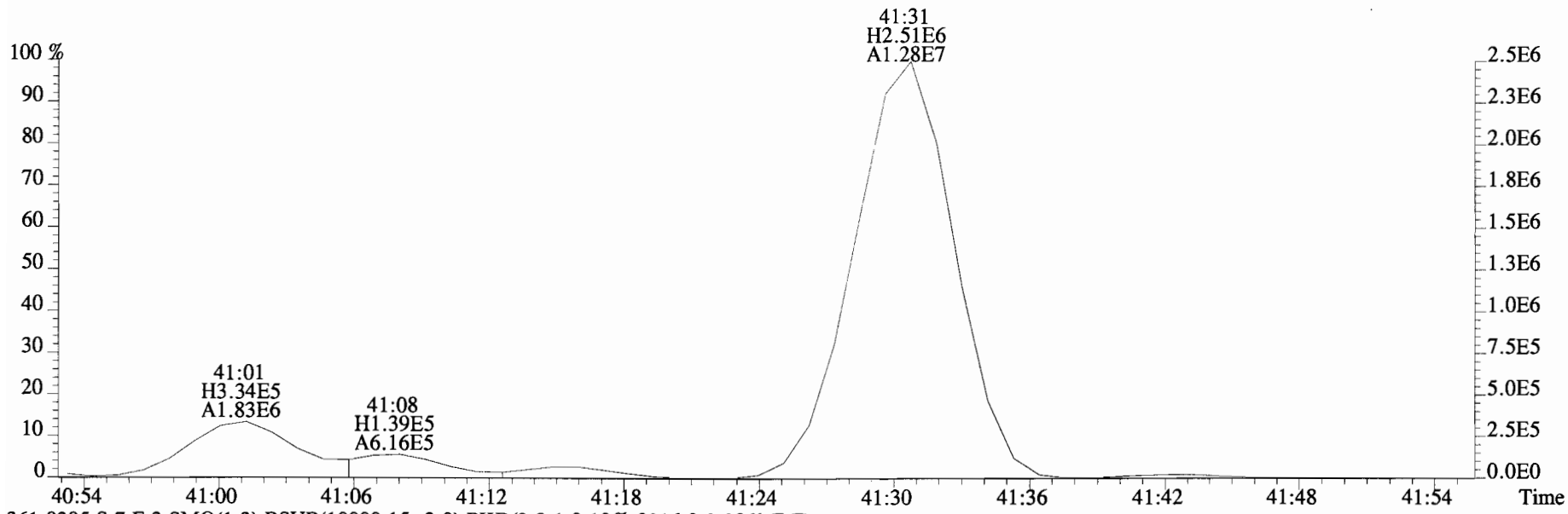


361.8385 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)

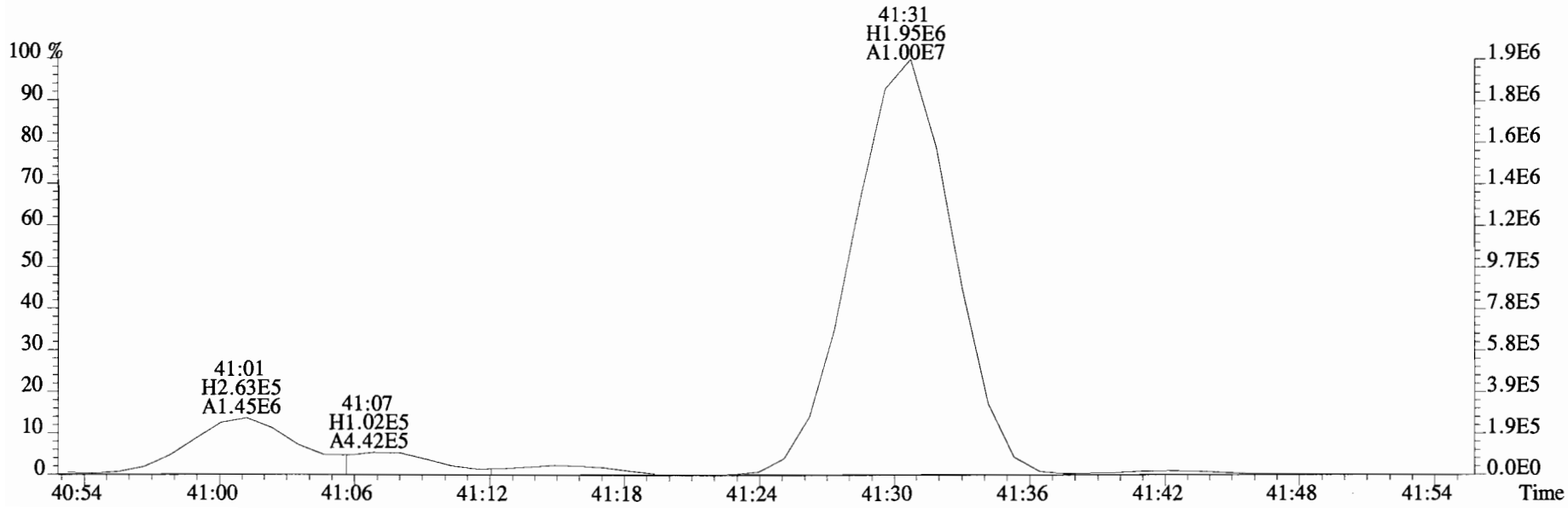



File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
359.8415 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2484.0,0.00%,F,F)
x5.00
40:10
H2.29E4
A1.28E5
41:16
H6.50E4
A3.09E5
361.8385 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)
x5.00
40:10
H2.11E4
A1.13E5
41:15
H4.31E4
A2.22E5
Time

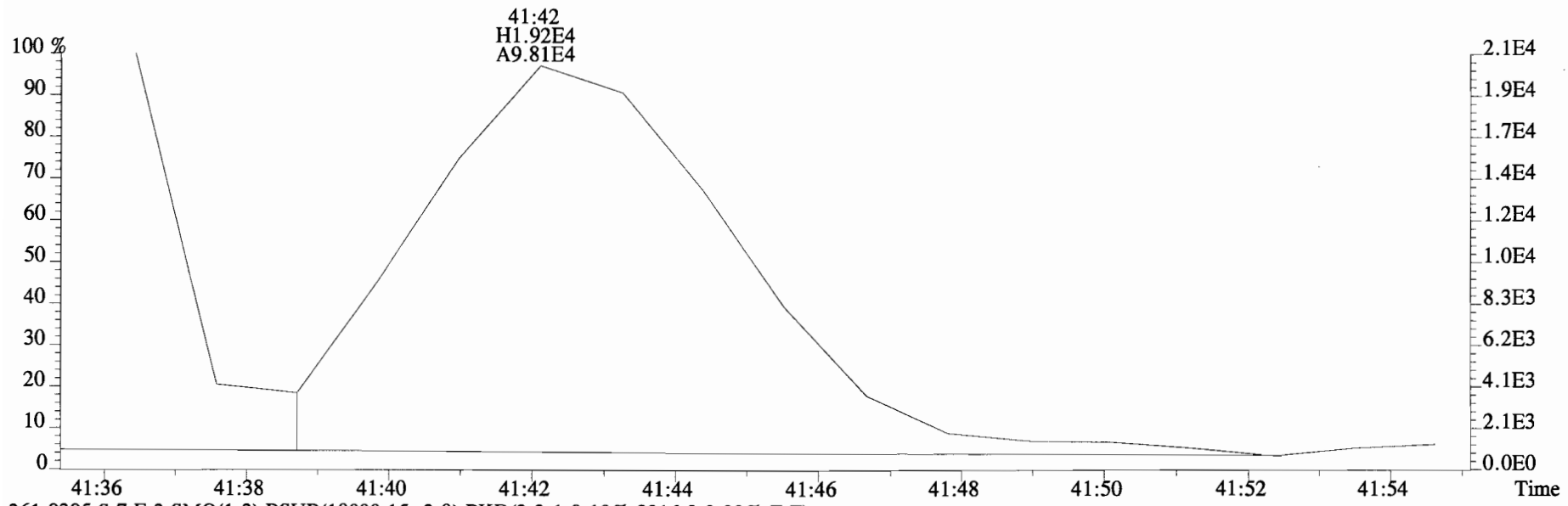
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
359.8415 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2484.0,0.00%,F,F)



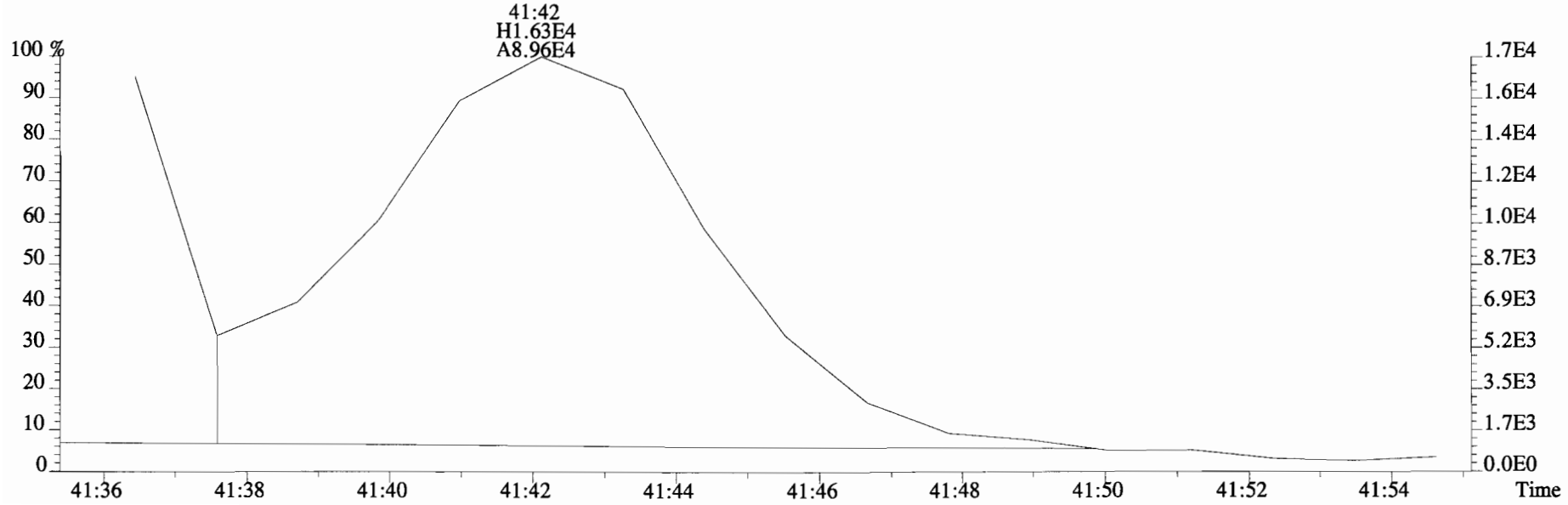
361.8385 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



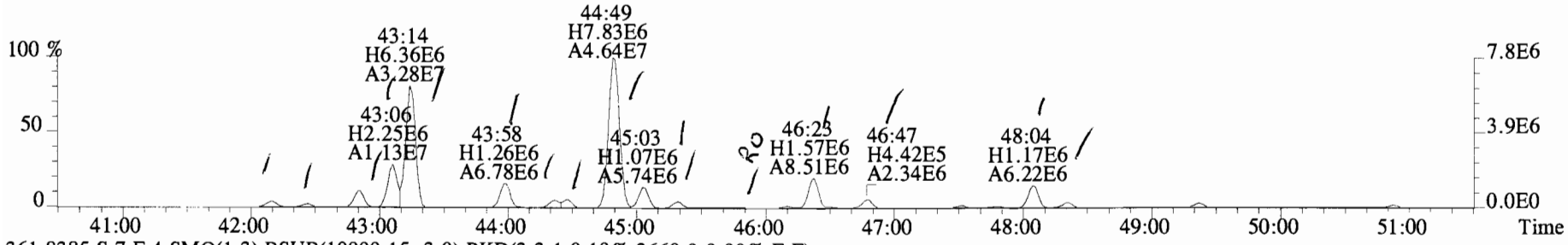
File:141226E1 #1-761 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
359.8415 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2484.0,0.00%,F,F)



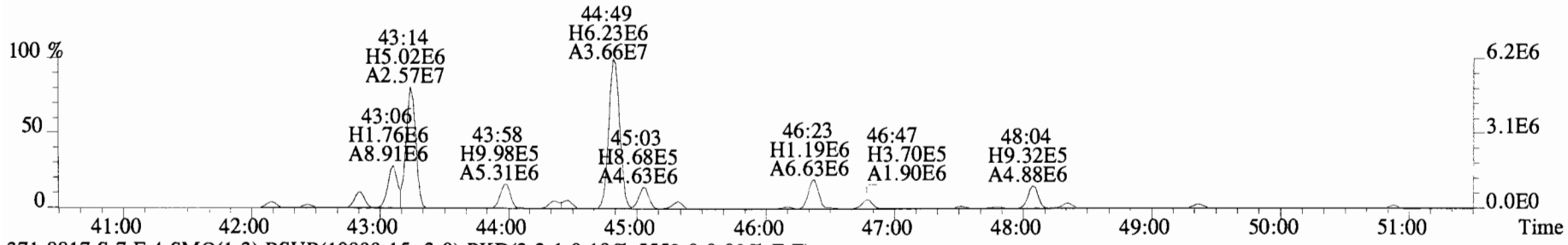
361.8385 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



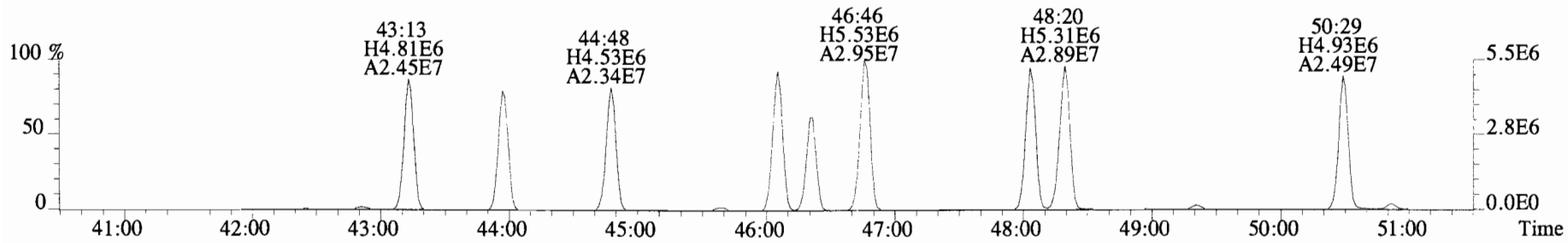
File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
359.8415 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4320.0,0.00%,F,F)



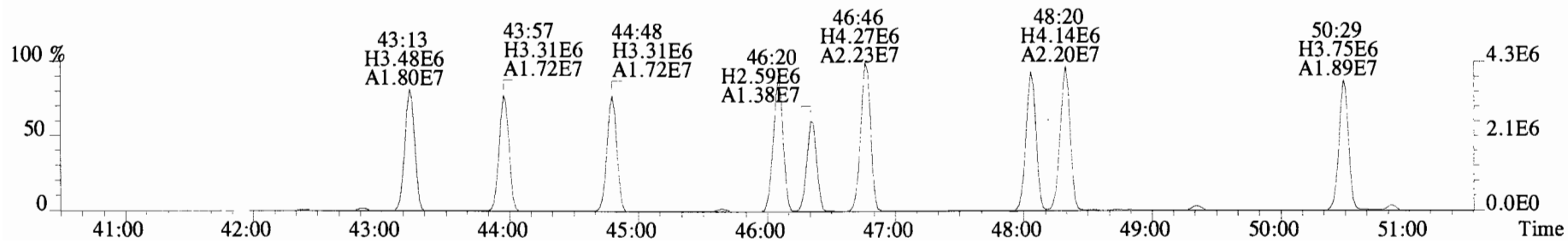
361.8385 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3660.0,0.00%,F,F)



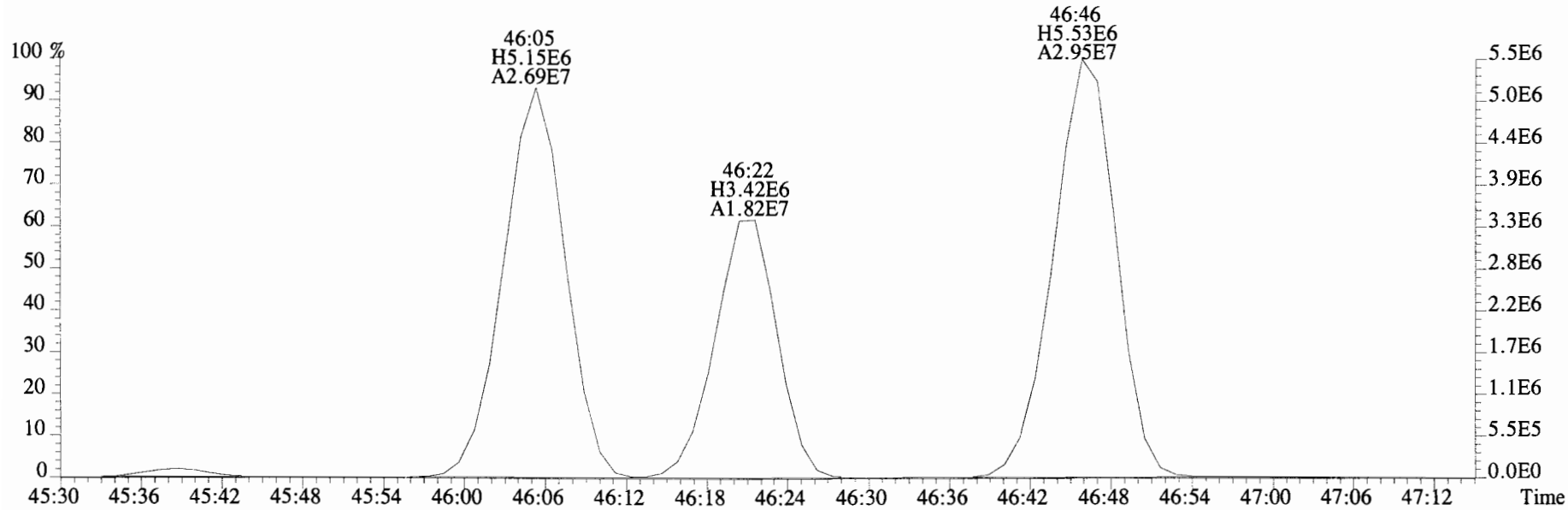
371.8817 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5552.0,0.00%,F,F)



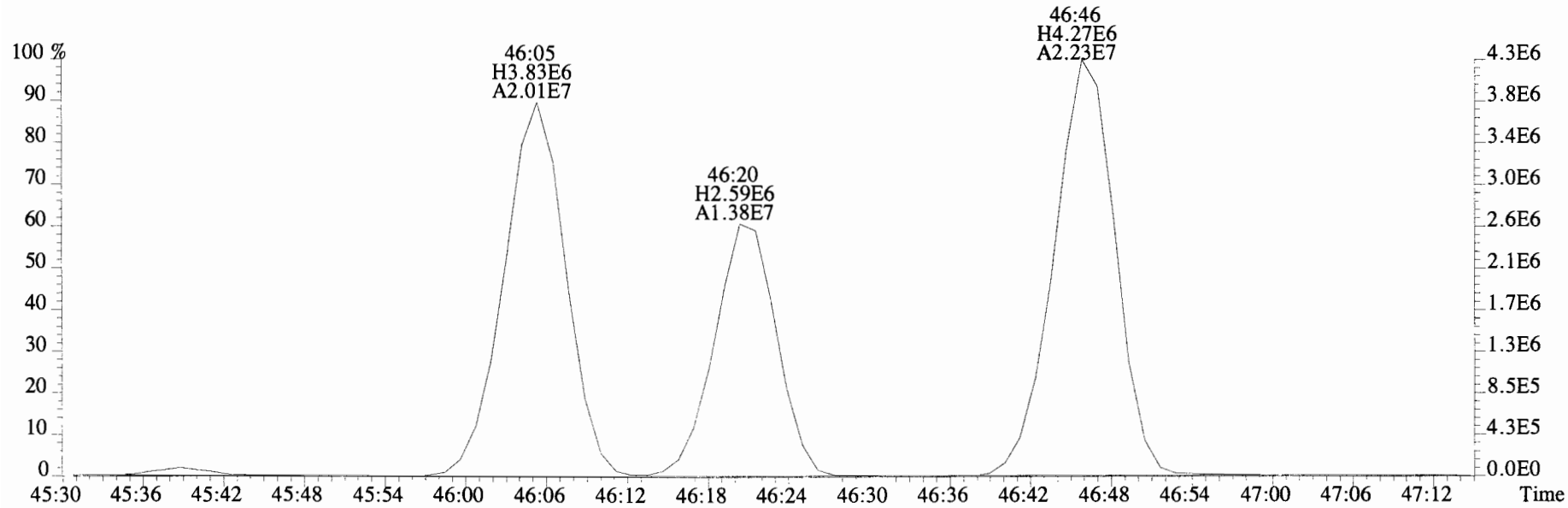
373.8788 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4896.0,0.00%,F,F)



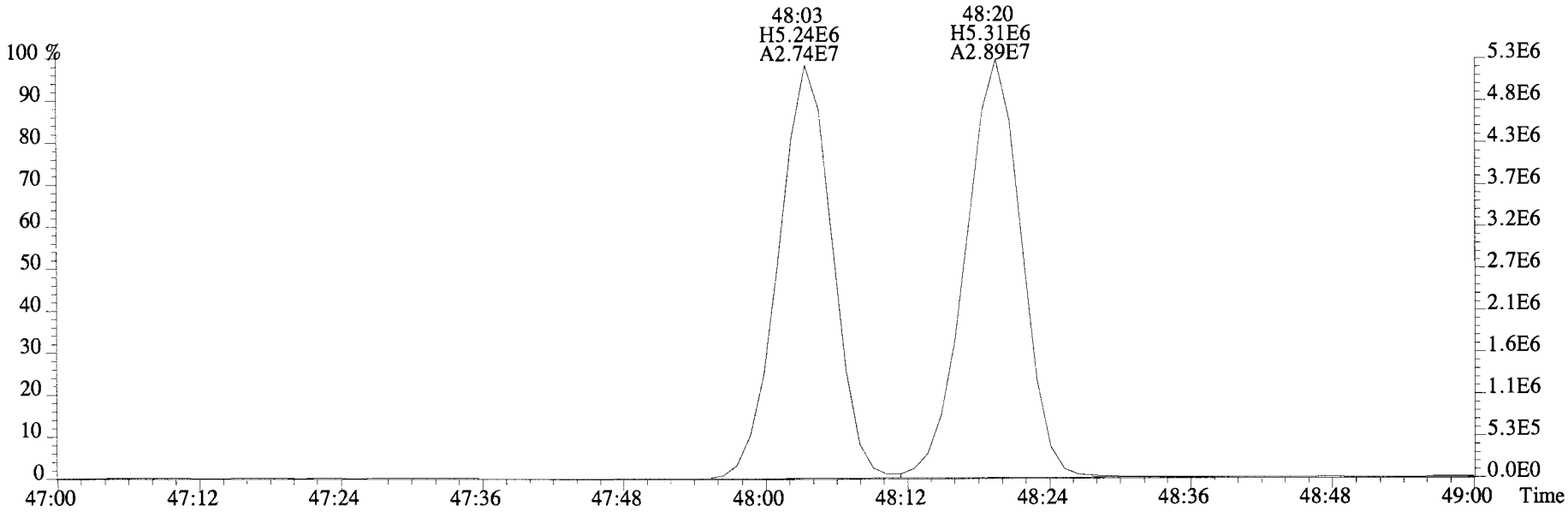
File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
371.8817 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5552.0,0.00%,F,F)



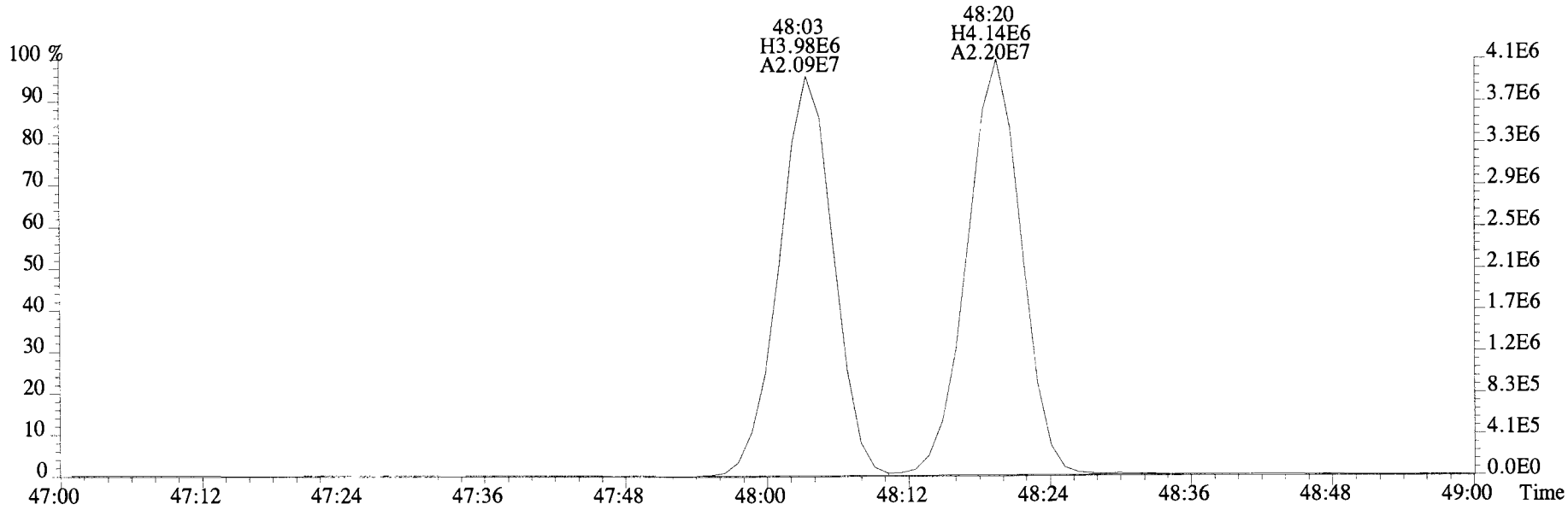
373.8788 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4896.0,0.00%,F,F)



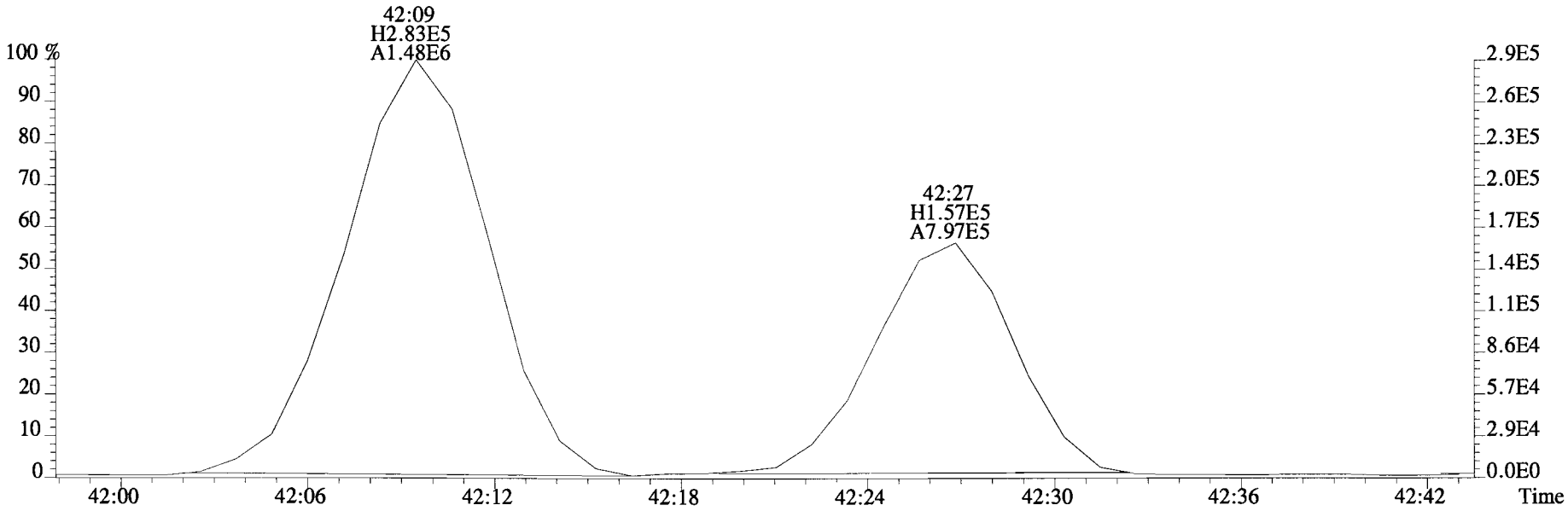
File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
371.8817 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5552.0,0.00%,F,F)



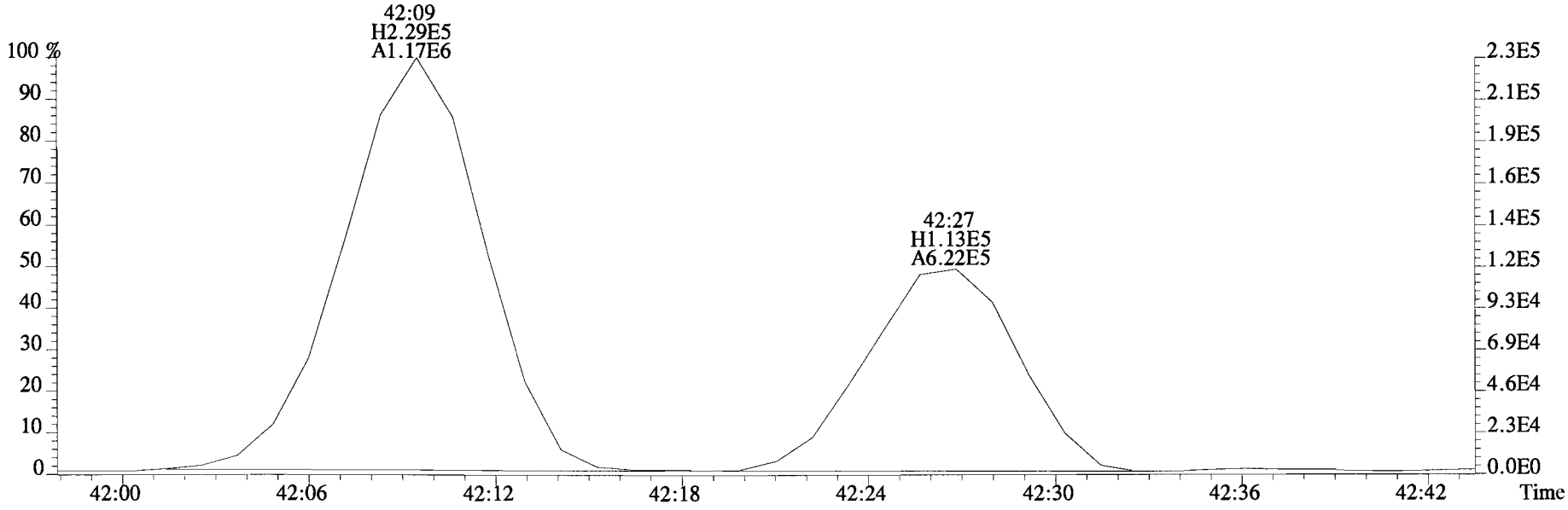
373.8788 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4896.0,0.00%,F,F)



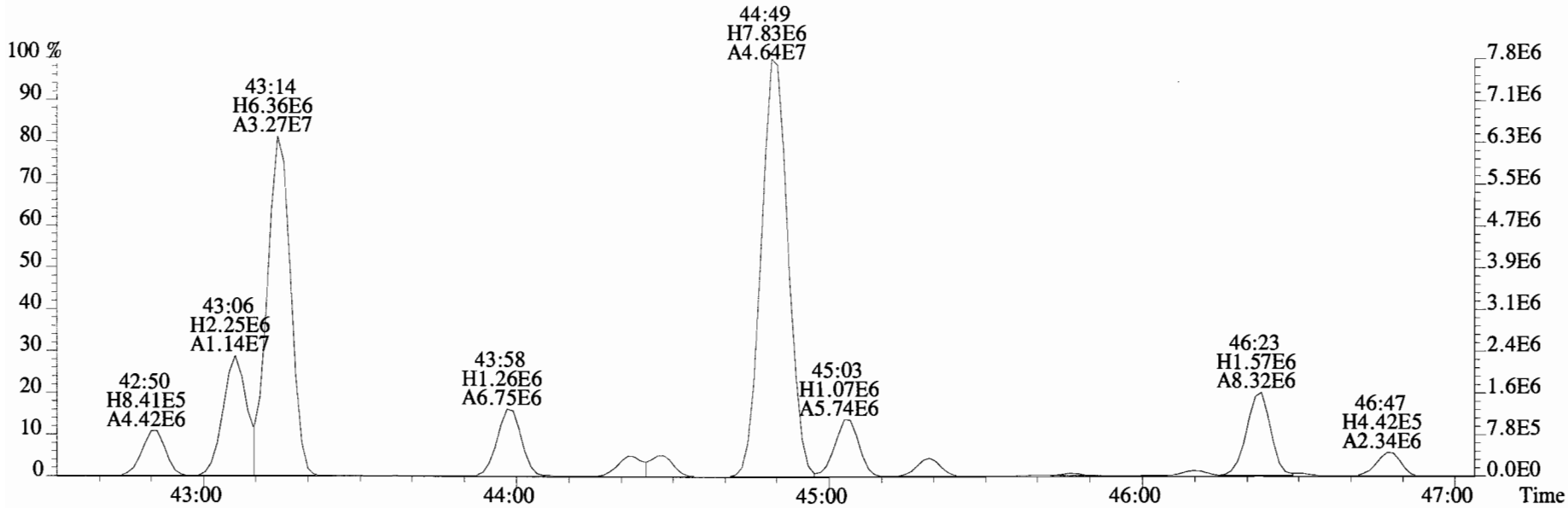
File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
359.8415 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4320.0,0.00%,F,F)



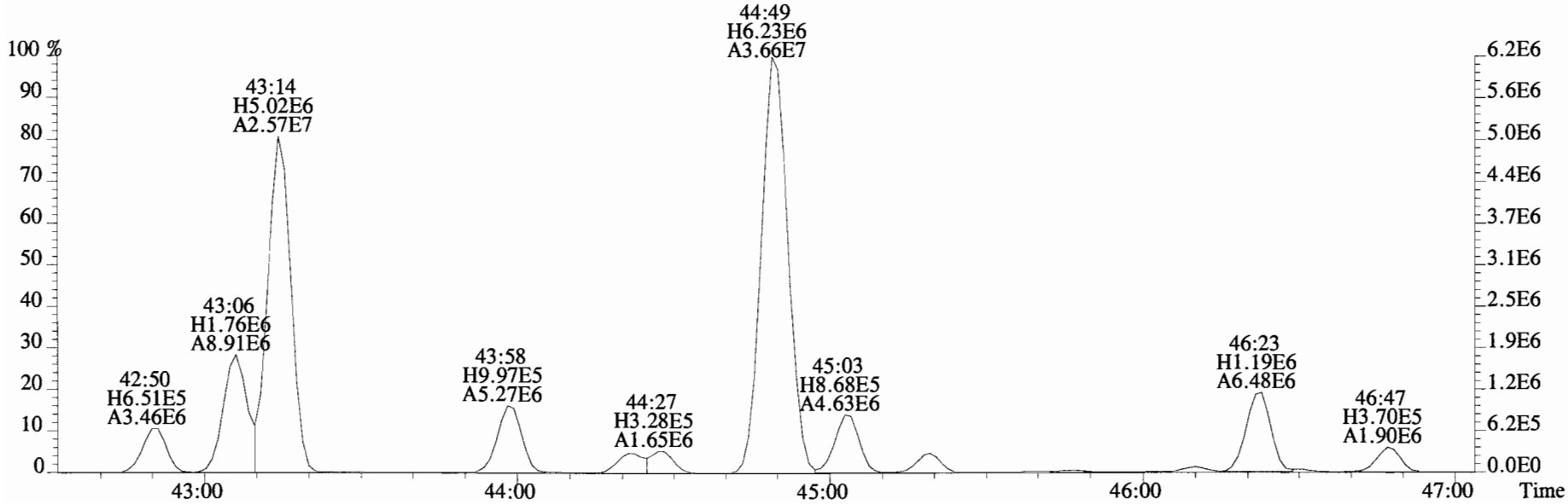
361.8385 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3660.0,0.00%,F,F)



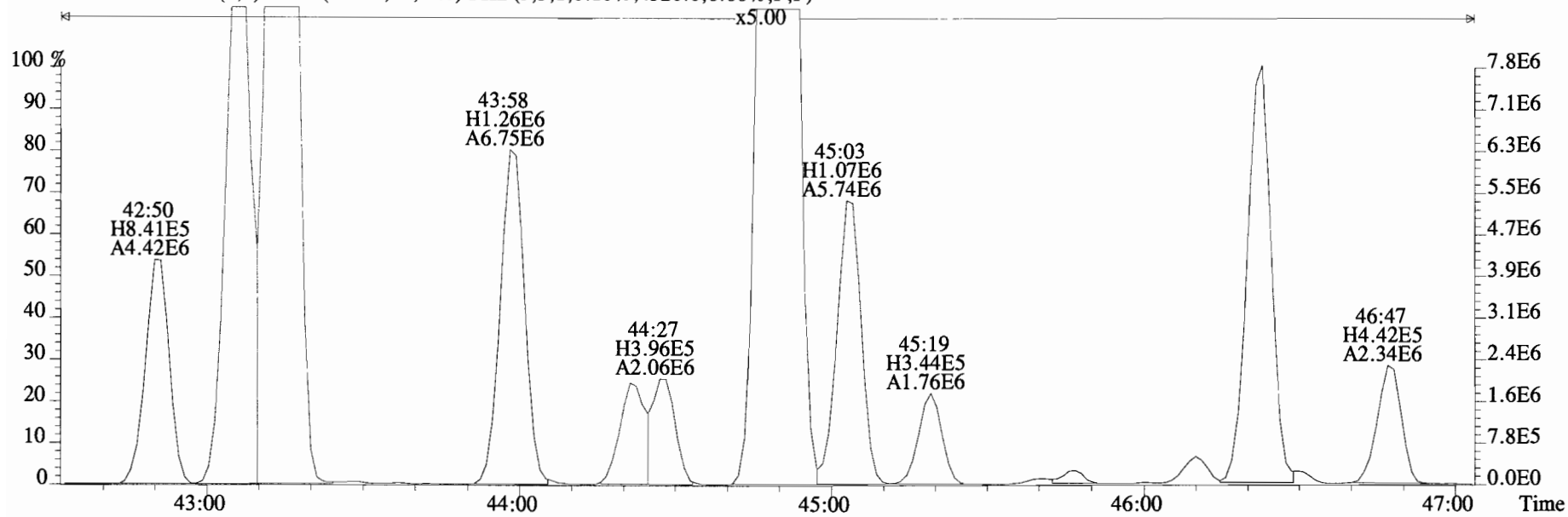
File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
359.8415 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4320.0,0.00%,F,F)



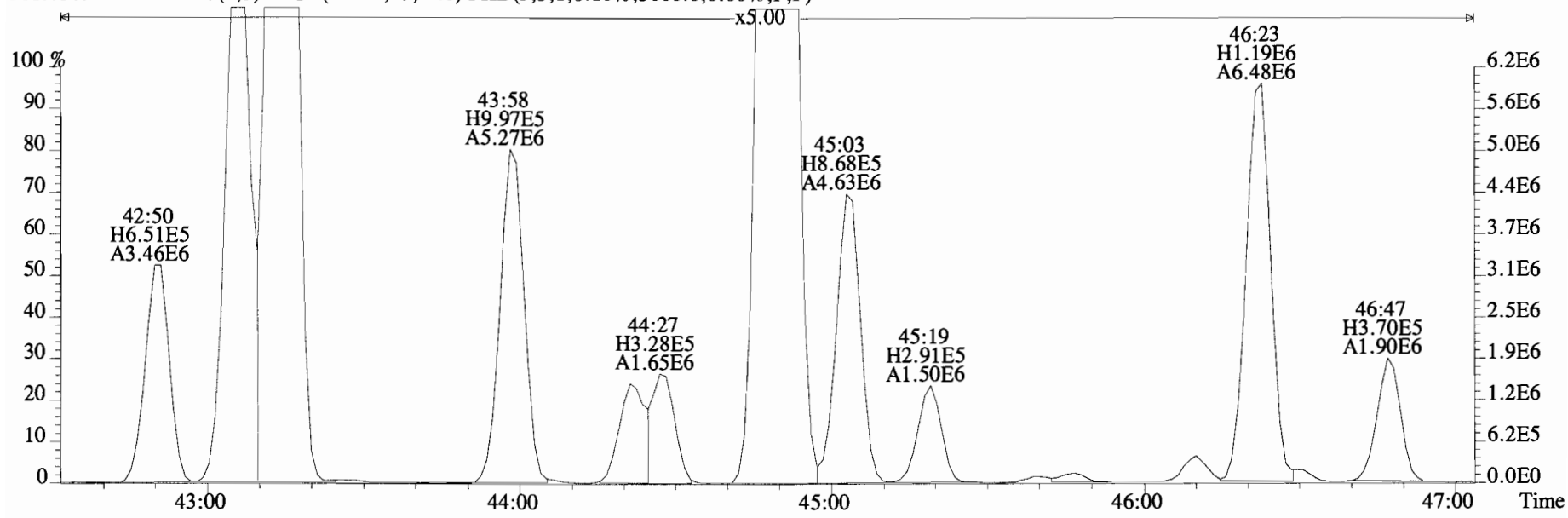
361.8385 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3660.0,0.00%,F,F)



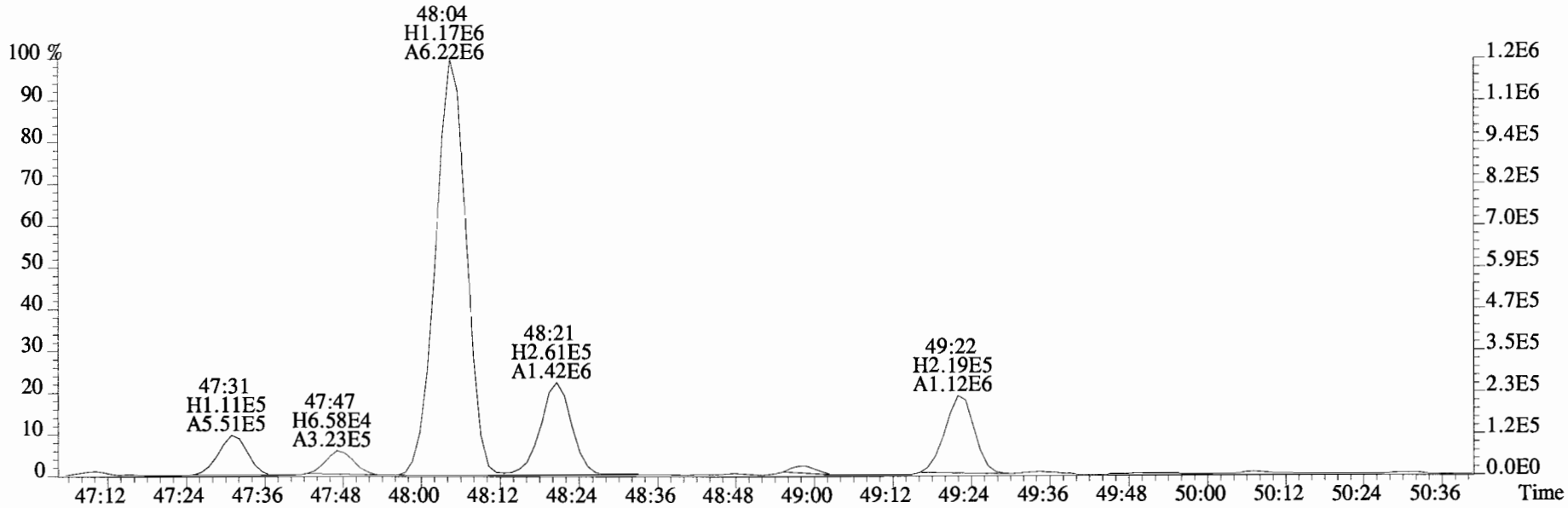
File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
359.8415 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4320.0,0.00%,F,F)



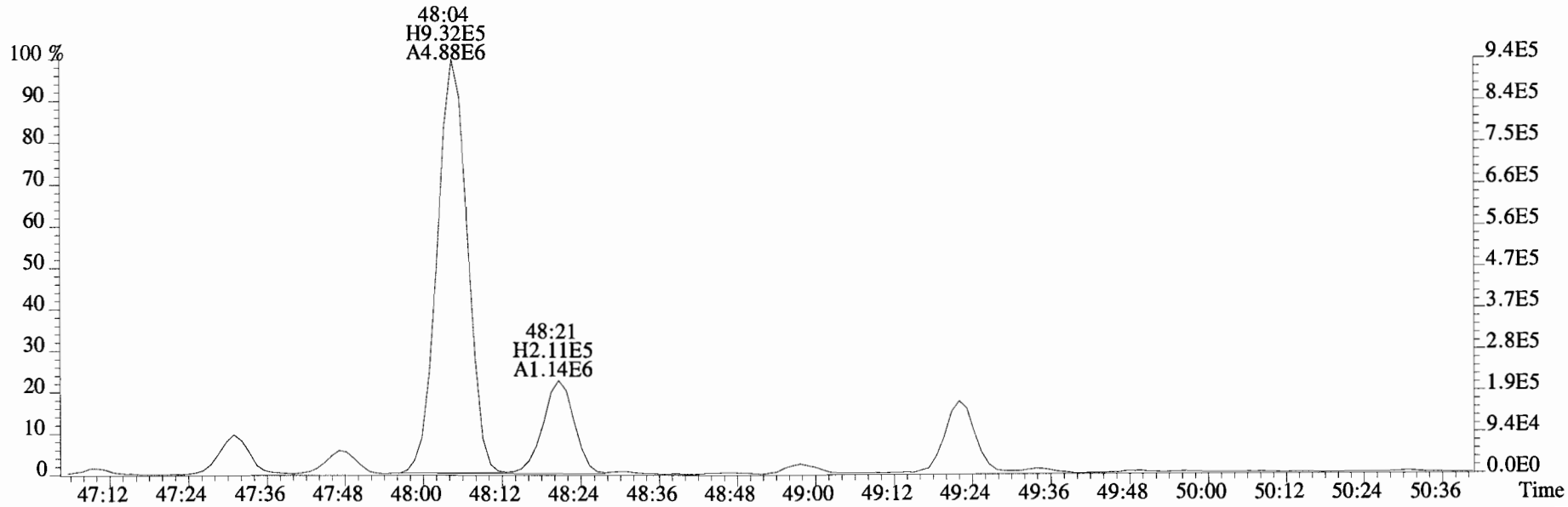
361.8385 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3660.0,0.00%,F,F)



File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
359.8415 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4320.0,0.00%,F,F)

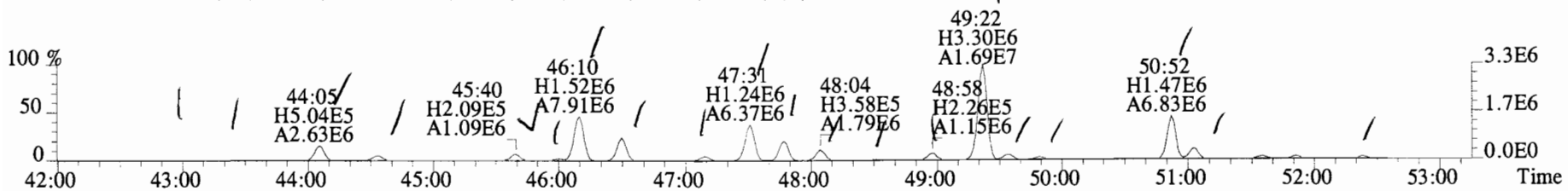


361.8385 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3660.0,0.00%,F,F)

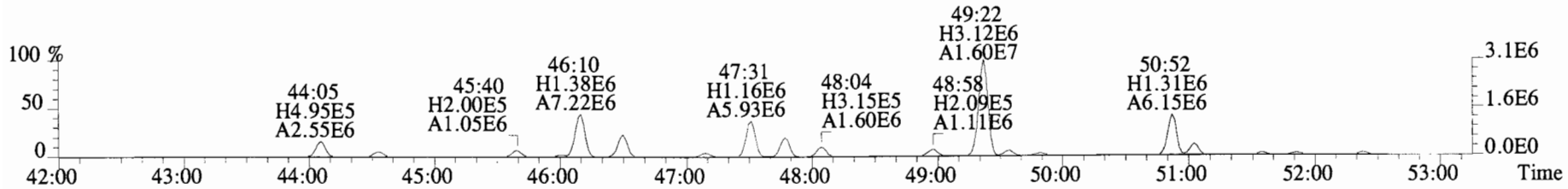


File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1

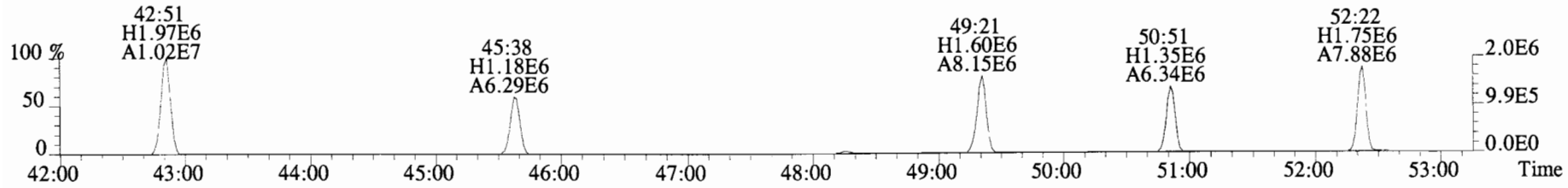
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2928.0,0.00%,F,F)



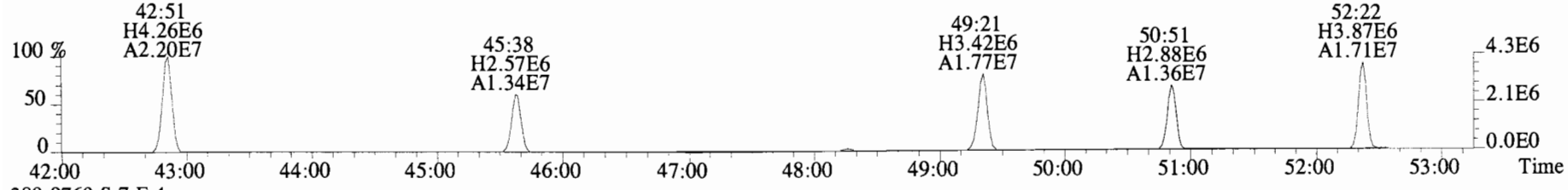
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2620.0,0.00%,F,F)



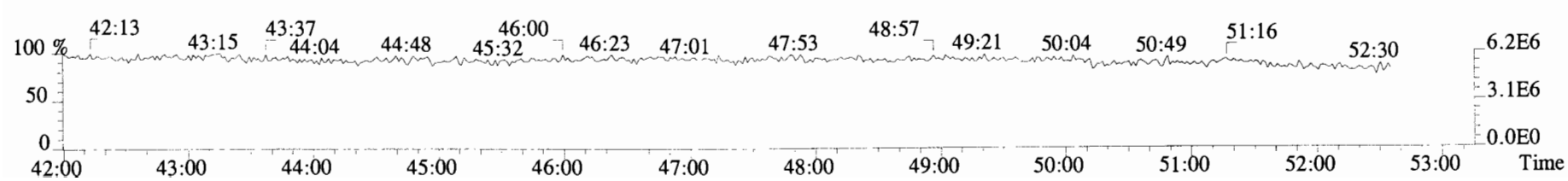
403.8457 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2356.0,0.00%,F,F)



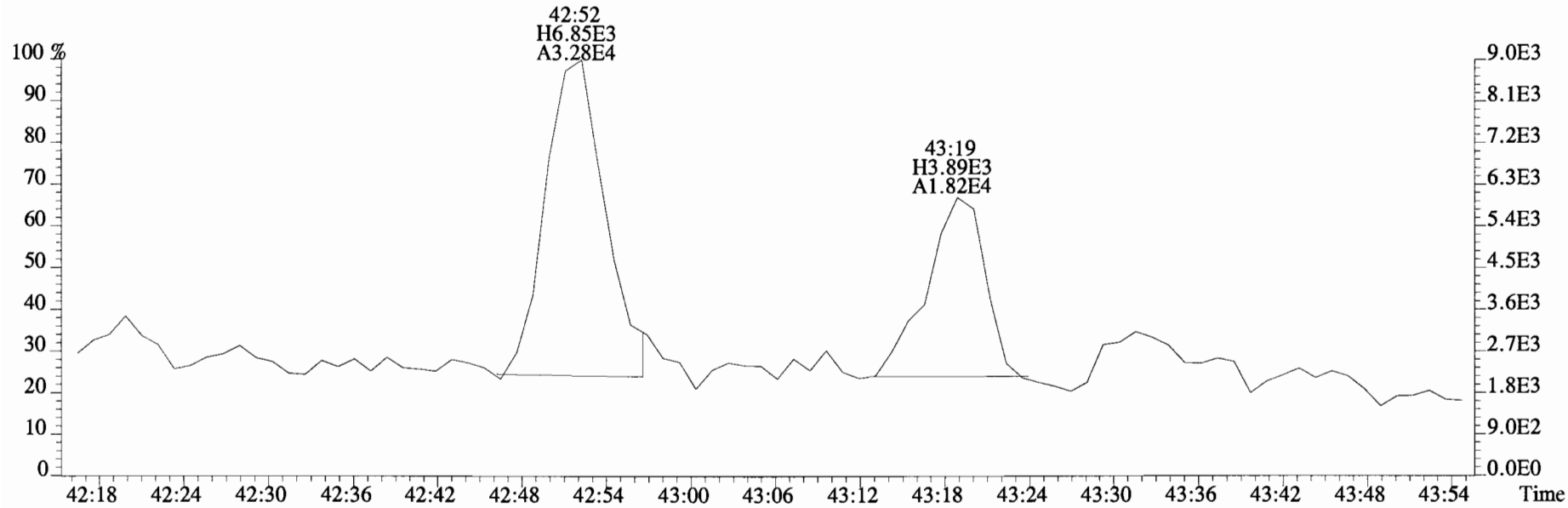
405.8428 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2840.0,0.00%,F,F)



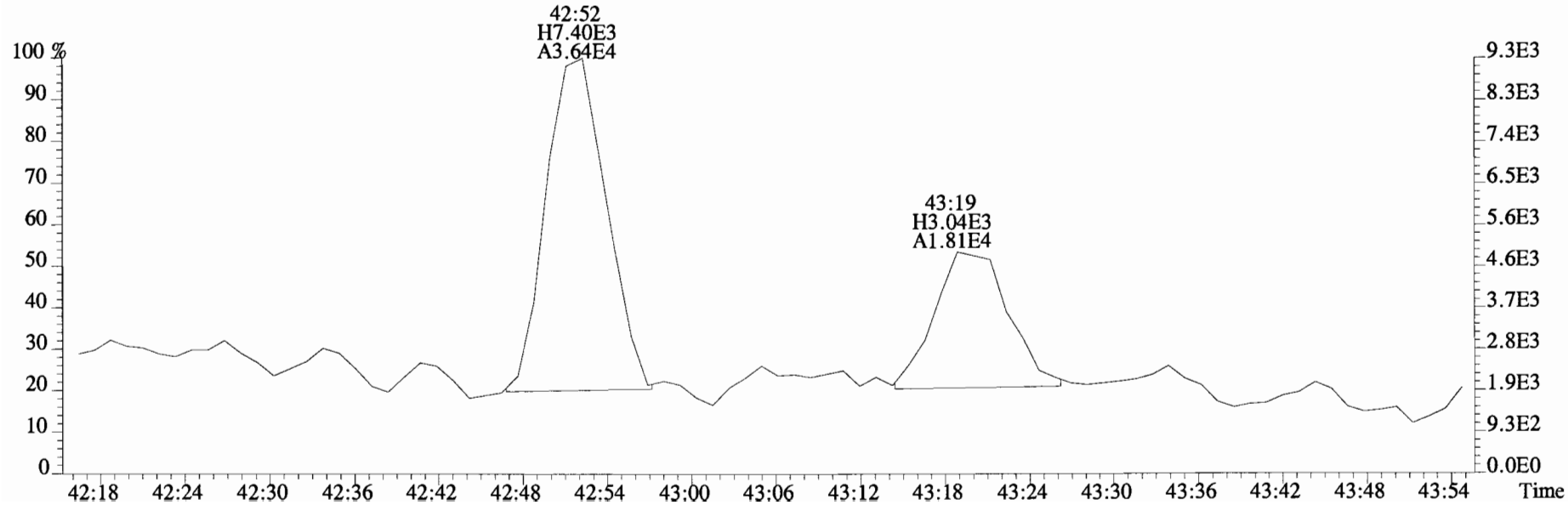
380.9760 S:7 F:4

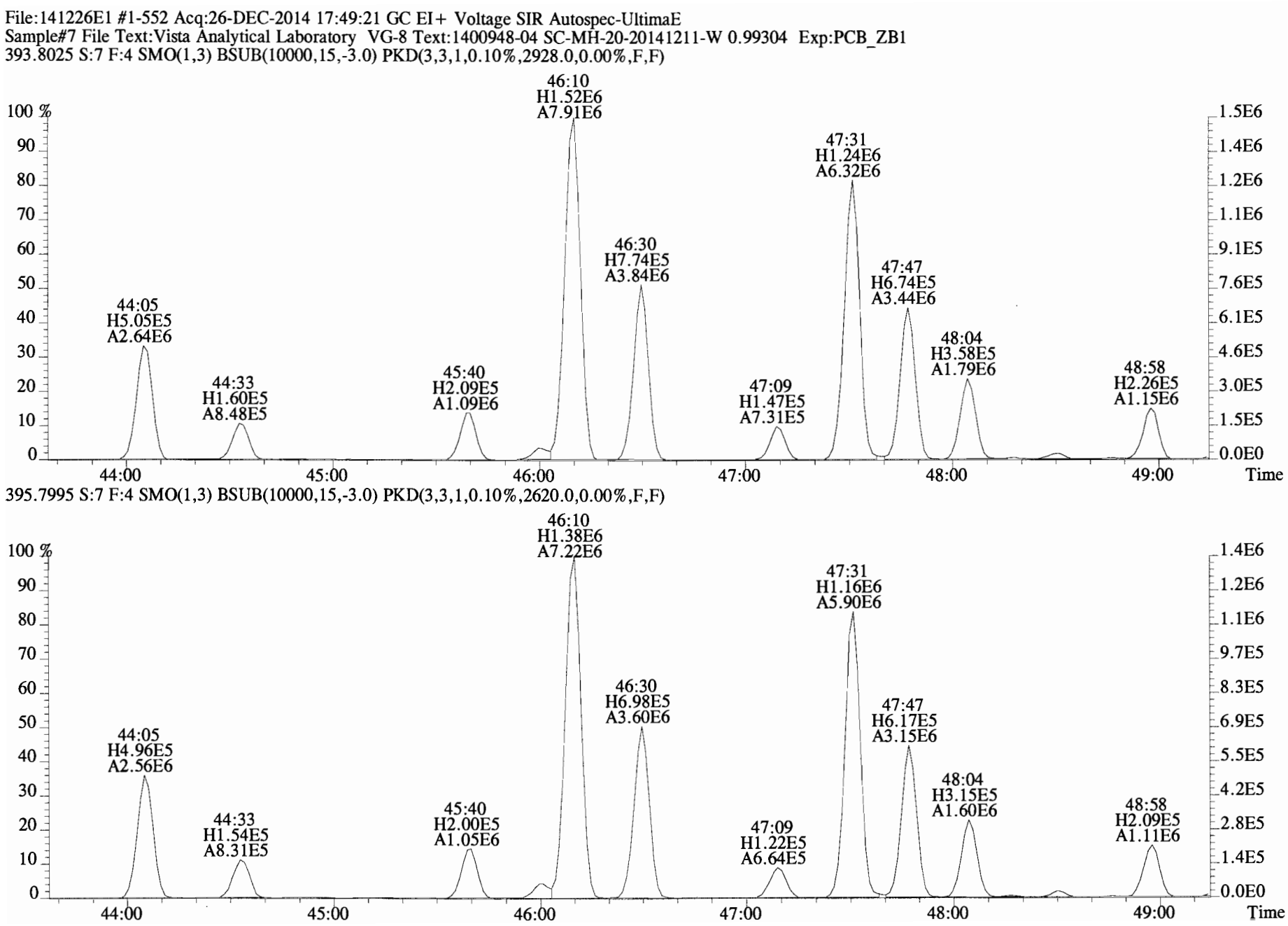


File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2928.0,0.00%,F,F)

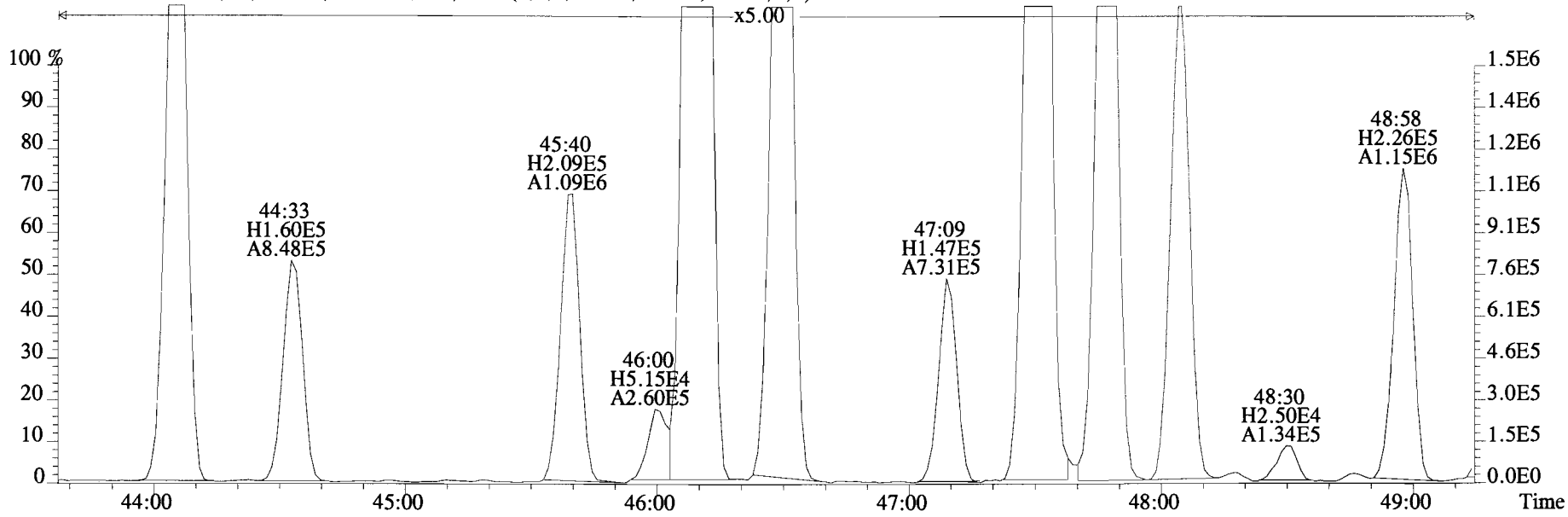


395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2620.0,0.00%,F,F)

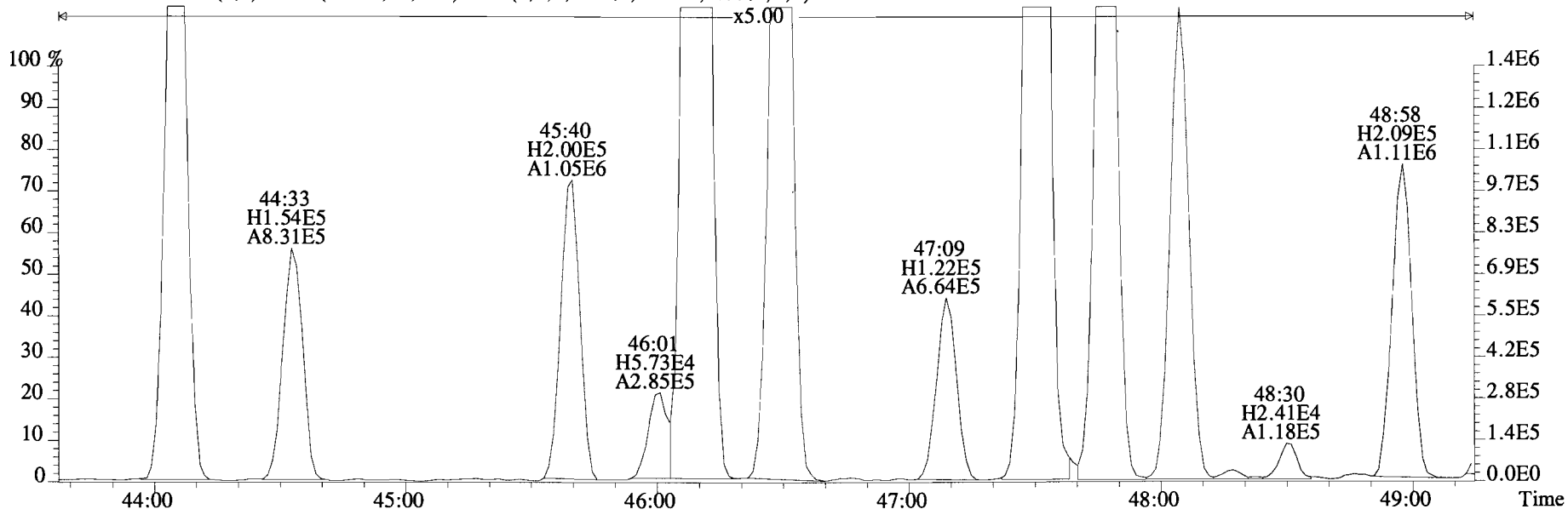


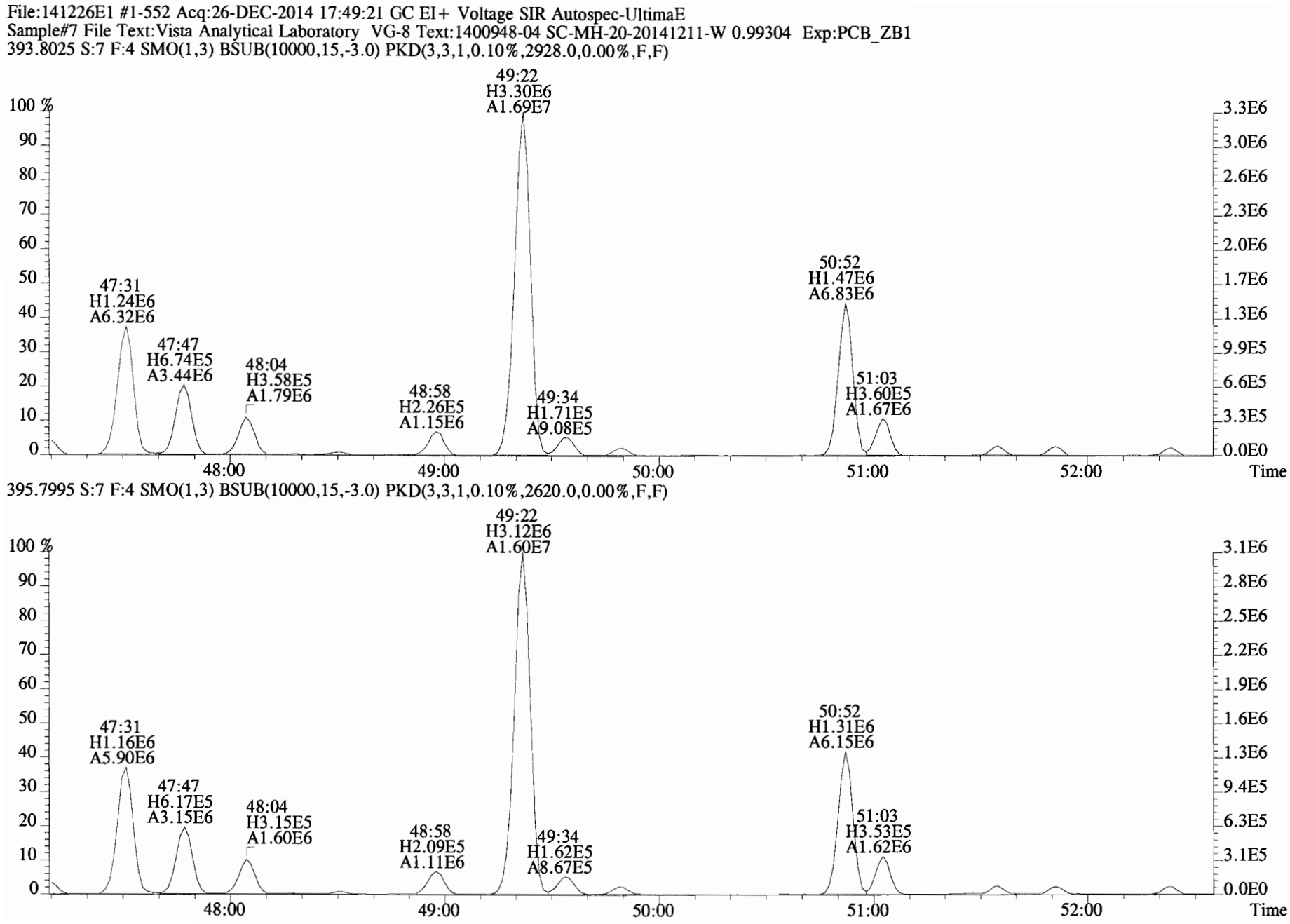

File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2928.0,0.00%,F,F)
46:10 H1.52E6 A7.91E6
47:31 H1.24E6 A6.32E6
46:30 H7.74E5 A3.84E6
47:47 H6.74E5 A3.44E6
48:04 H3.58E5 A1.79E6
44:05 H5.05E5 A2.64E6
48:58 H2.26E5 A1.15E6
44:33 H1.60E5 A8.48E5
45:40 H2.09E5 A1.09E6
47:09 H1.47E5 A7.31E5
100 %
90
80
70
60
50
40
30
20
10
0
1.5E6
1.4E6
1.2E6
1.1E6
9.1E5
7.6E5
6.1E5
4.6E5
3.0E5
1.5E5
0.0E0
44:00
45:00
46:00
47:00
48:00
49:00
Time
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2620.0,0.00%,F,F)
46:10 H1.38E6 A7.22E6
47:31 H1.16E6 A5.90E6
46:30 H6.98E5 A3.60E6
47:47 H6.17E5 A3.15E6
48:04 H3.15E5 A1.60E6
44:05 H4.96E5 A2.56E6
48:58 H2.09E5 A1.11E6
44:33 H1.54E5 A8.31E5
45:40 H2.00E5 A1.05E6
47:09 H1.22E5 A6.64E5
100 %
90
80
70
60
50
40
30
20
10
0
1.4E6
1.2E6
1.1E6
9.7E5
8.3E5
6.9E5
5.5E5
4.2E5
2.8E5
1.4E5
0.0E0
44:00
45:00
46:00
47:00
48:00
49:00
Time

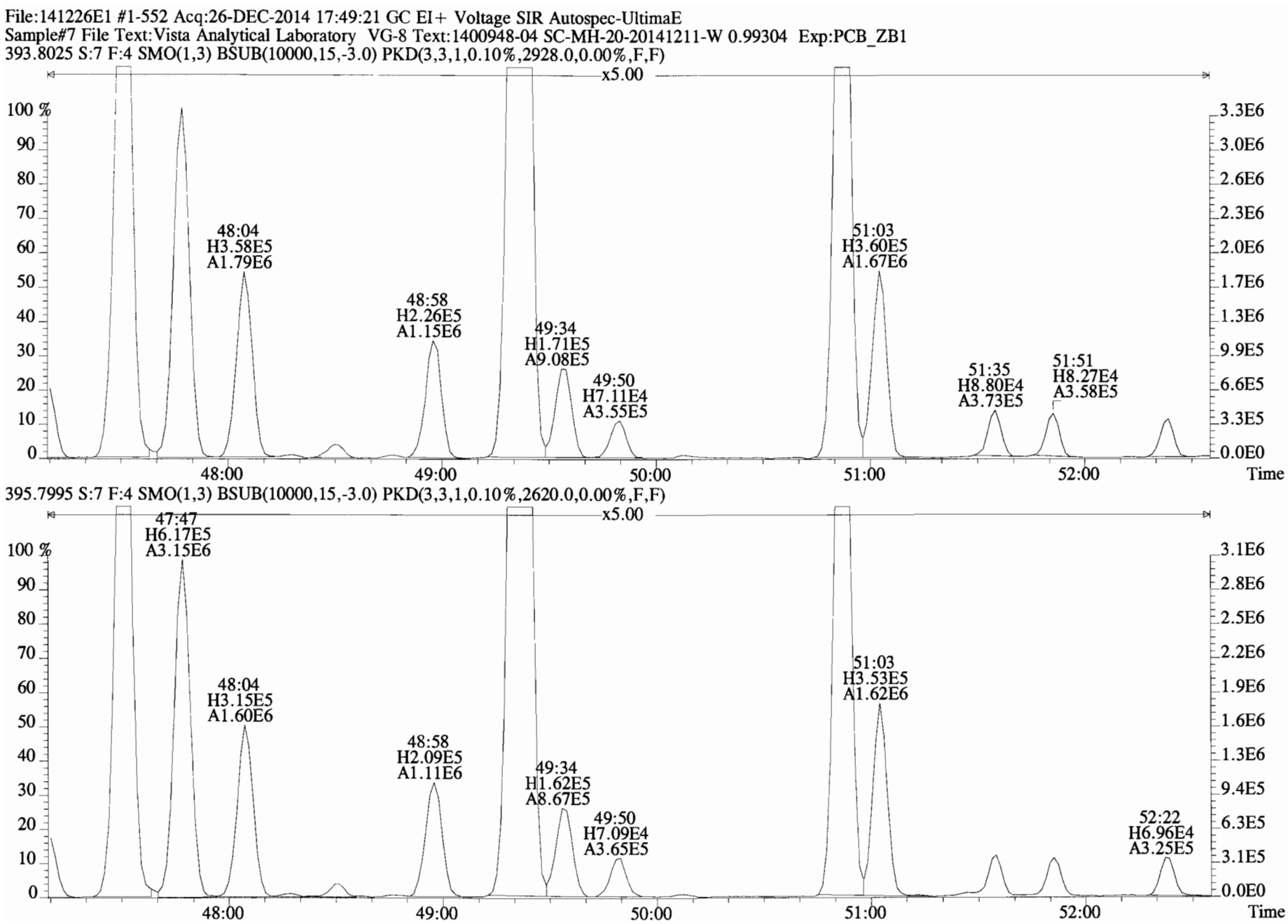
File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2928.0,0.00%,F,F)



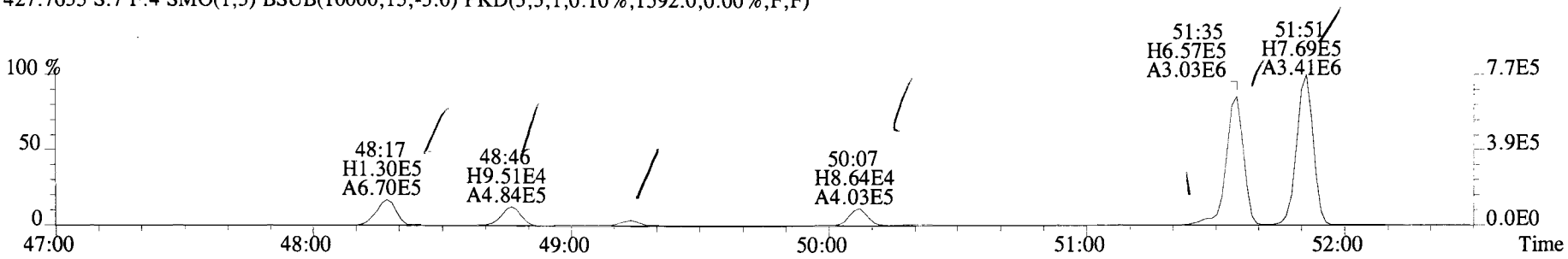
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2620.0,0.00%,F,F)



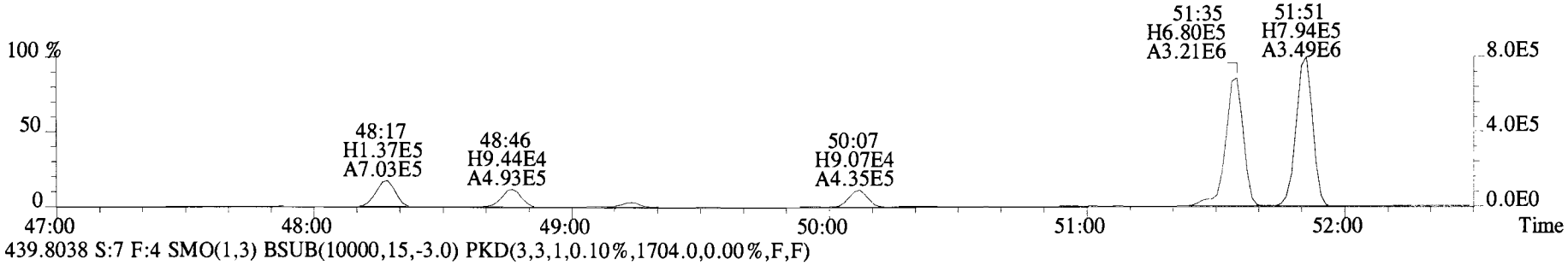

File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2928.0,0.00%,F,F)
49:22
H3.30E6
A1.69E7
47:31
H1.24E6
A6.32E6
47:47
H6.74E5
A3.44E6
48:04
H3.58E5
A1.79E6
48:58
H2.26E5
A1.15E6
49:34
H1.71E5
A9.08E5
50:52
H1.47E6
A6.83E6
51:03
H3.60E5
A1.67E6
100 %
90
80
70
60
50
40
30
20
10
0
3.3E6
3.0E6
2.6E6
2.3E6
2.0E6
1.7E6
1.3E6
9.9E5
6.6E5
3.3E5
0.0E0
48:00
49:00
50:00
51:00
52:00
Time
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2620.0,0.00%,F,F)
49:22
H3.12E6
A1.60E7
47:31
H1.16E6
A5.90E6
47:47
H6.17E5
A3.15E6
48:04
H3.15E5
A1.60E6
48:58
H2.09E5
A1.11E6
49:34
H1.62E5
A8.67E5
50:52
H1.31E6
A6.15E6
51:03
H3.53E5
A1.62E6
100 %
90
80
70
60
50
40
30
20
10
0
3.1E6
2.8E6
2.5E6
2.2E6
1.9E6
1.6E6
1.3E6
9.4E5
6.3E5
3.1E5
0.0E0
48:00
49:00
50:00
51:00
52:00
Time


File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2928.0,0.00%,F,F)
x5.00
48:04 H3.58E5 A1.79E6
48:58 H2.26E5 A1.15E6
49:34 H1.71E5 A9.08E5
49:50 H7.11E4 A3.55E5
51:03 H3.60E5 A1.67E6
51:35 H8.80E4 A3.73E5
51:51 H8.27E4 A3.58E5
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2620.0,0.00%,F,F)
x5.00
47:47 H6.17E5 A3.15E6
48:04 H3.15E5 A1.60E6
48:58 H2.09E5 A1.11E6
49:34 H1.62E5 A8.67E5
49:50 H7.09E4 A3.65E5
51:03 H3.53E5 A1.62E6
52:22 H6.96E4 A3.25E5
100 %
48:00
49:00
50:00
51:00
52:00
Time

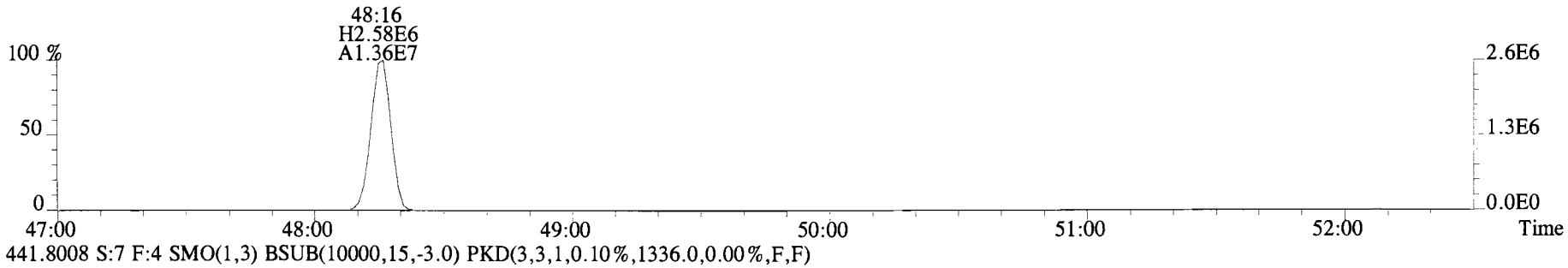
File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
427.7635 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1592.0,0.00%,F,F)



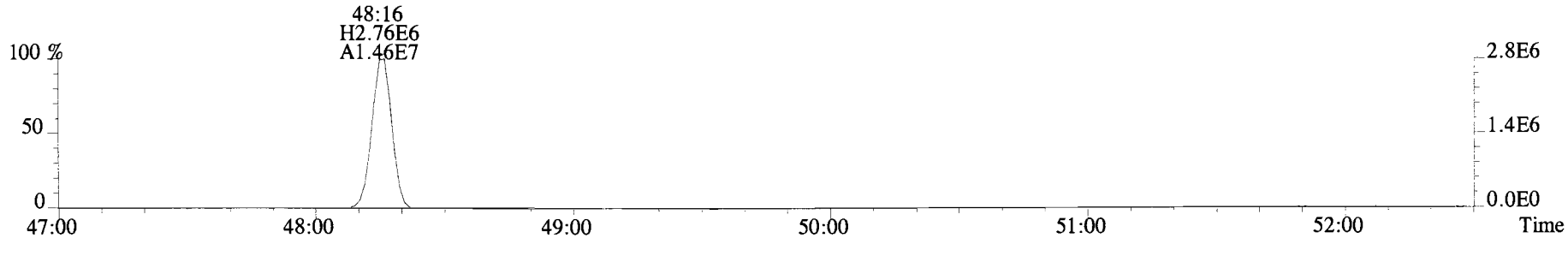
429.7606 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1624.0,0.00%,F,F)



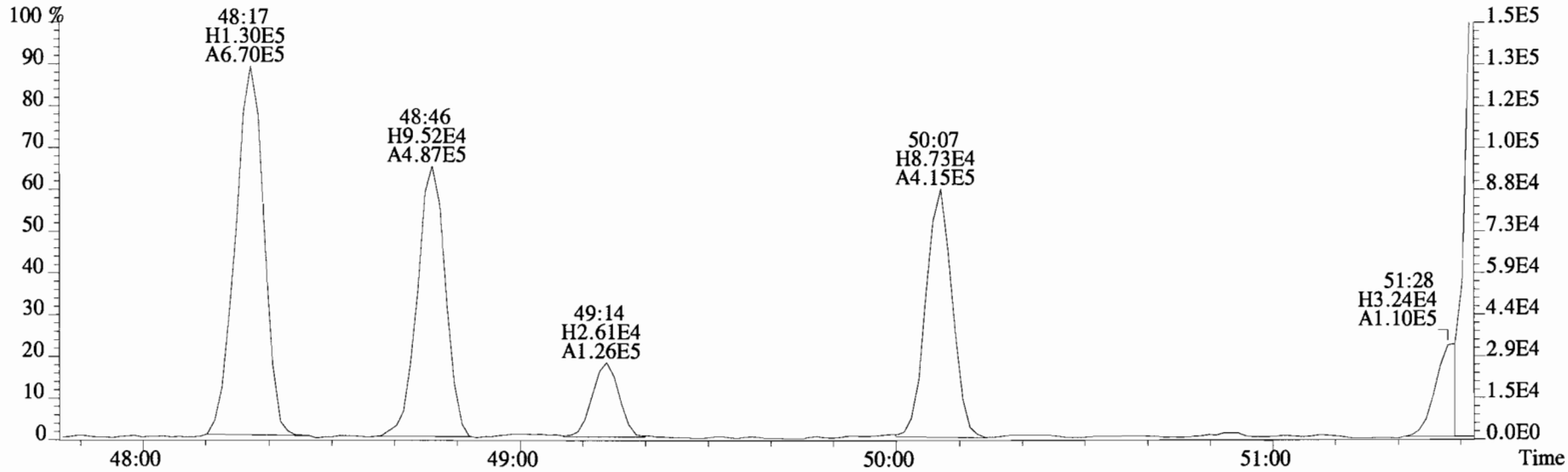
439.8038 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1704.0,0.00%,F,F)



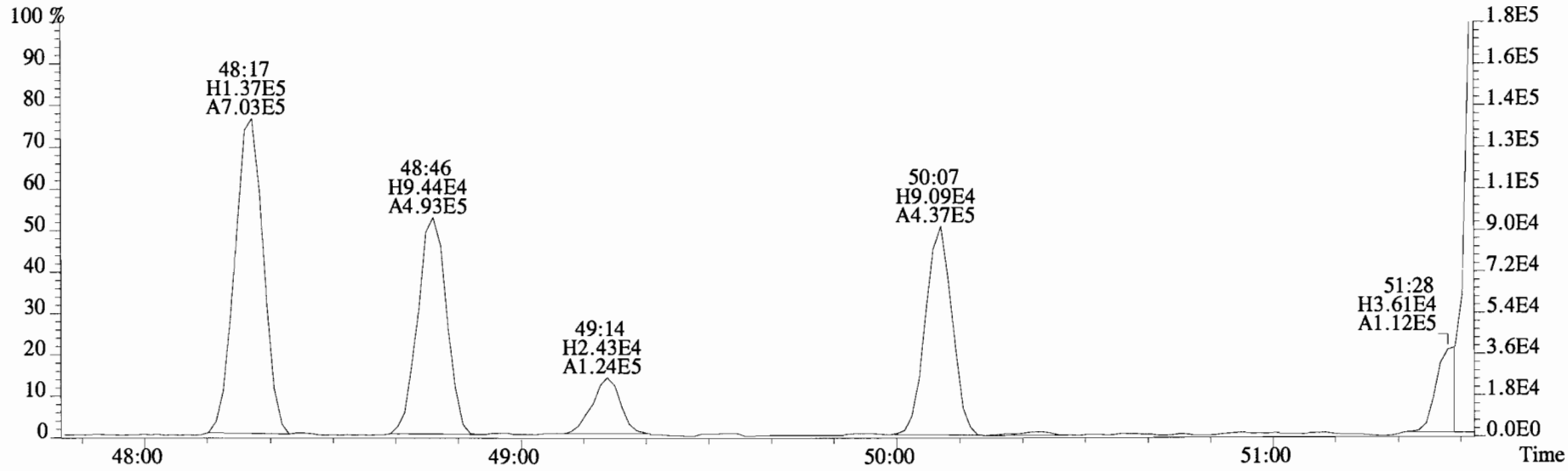
441.8008 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1336.0,0.00%,F,F)



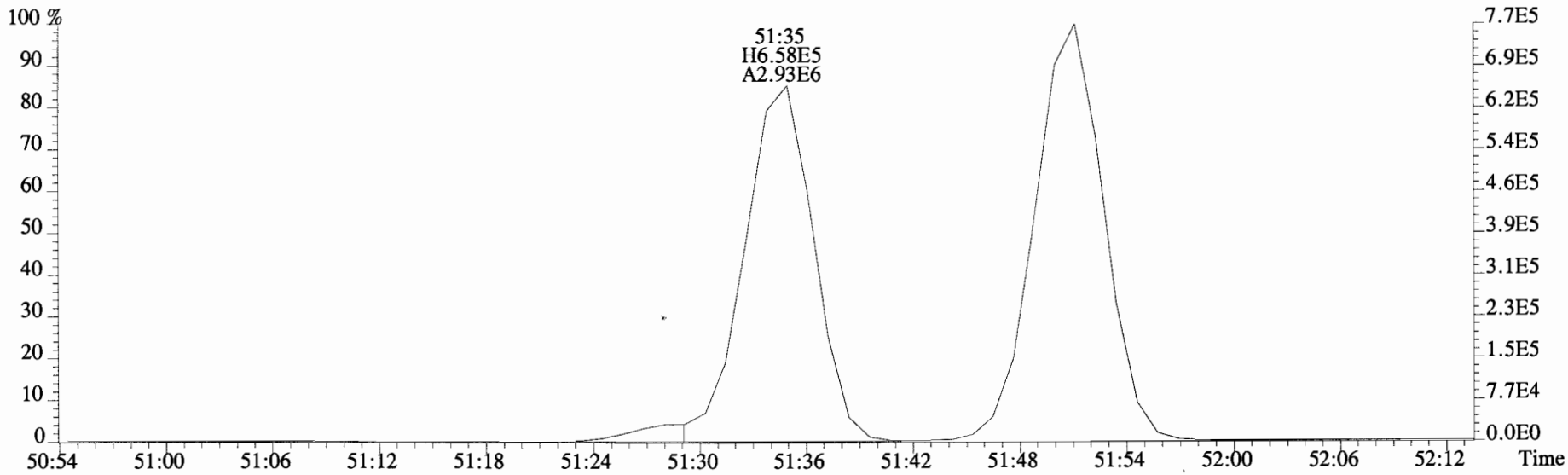
File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
427.7635 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1592.0,0.00%,F,F)



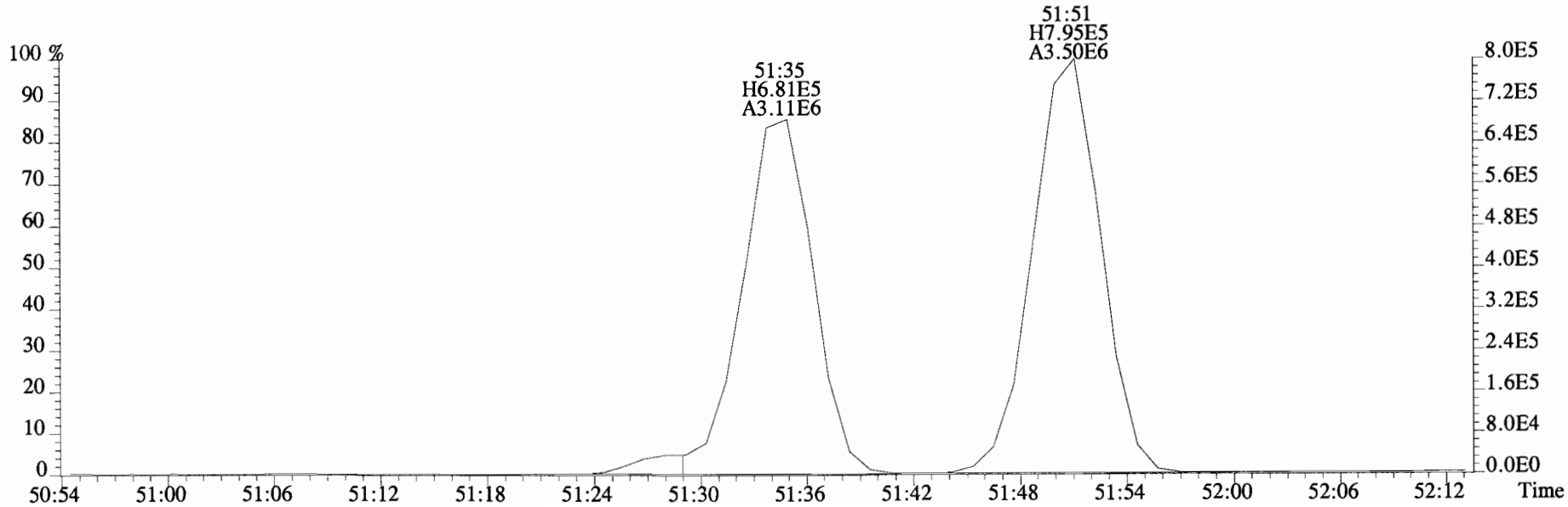
429.7606 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1624.0,0.00%,F,F)



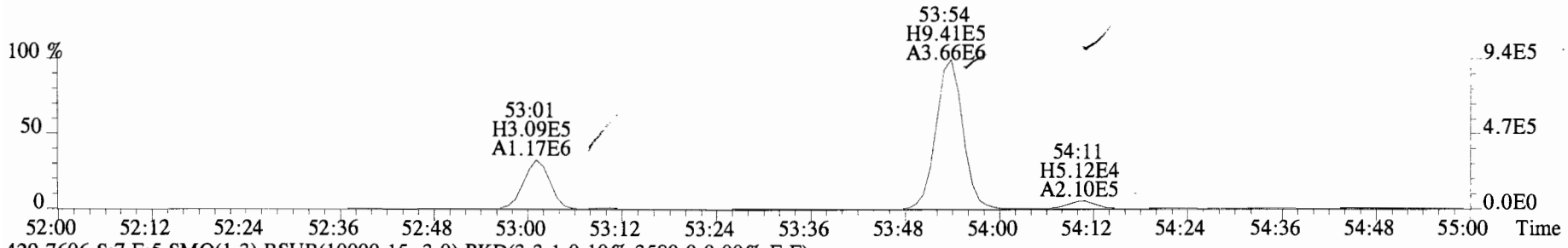
File:141226E1 #1-552 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
427.7635 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1592.0,0.00%,F,F)



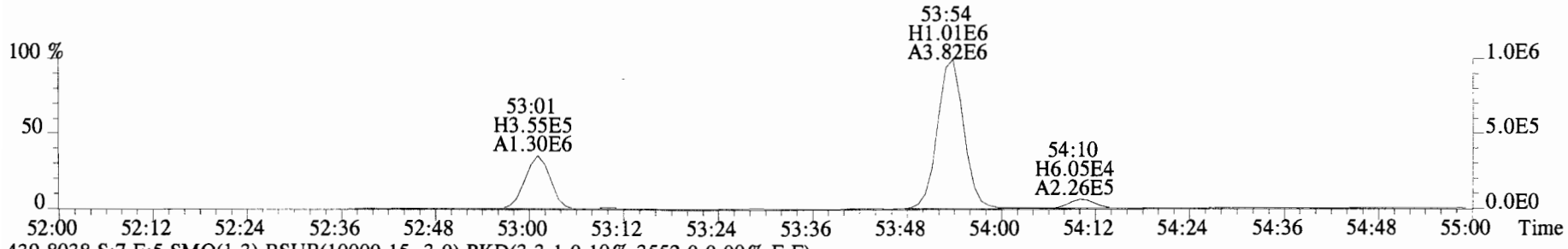
429.7606 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)



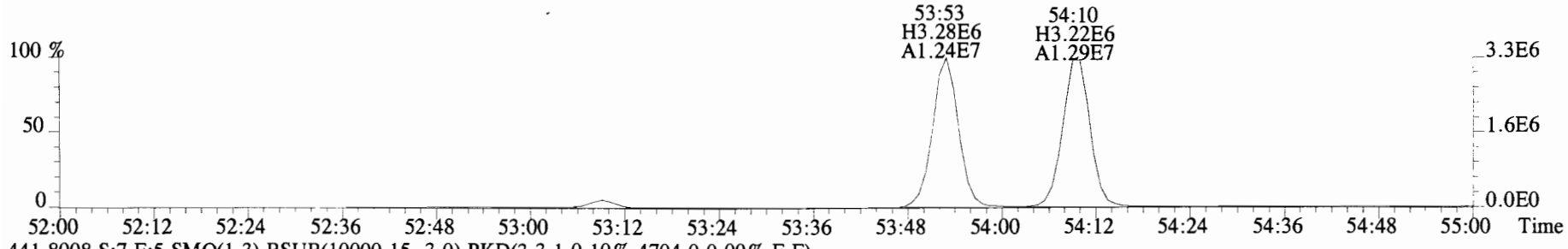
File:141226E1 #1-430 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
427.7635 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2500.0,0.00%,F,F)



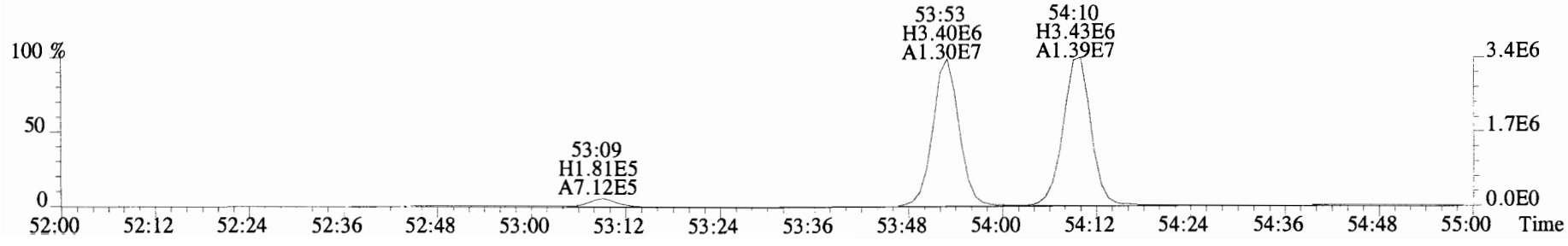
429.7606 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3580.0,0.00%,F,F)



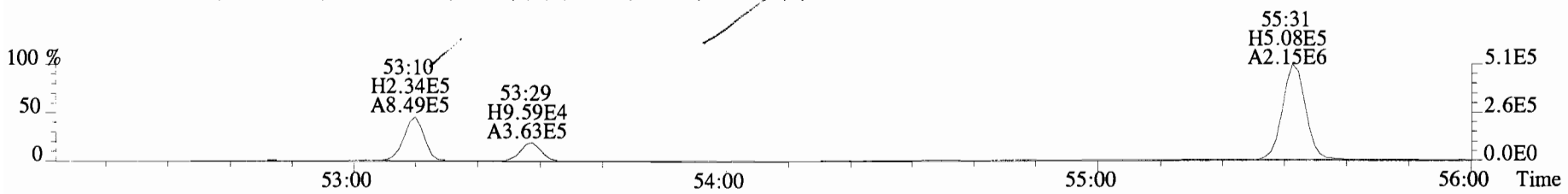
439.8038 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3552.0,0.00%,F,F)



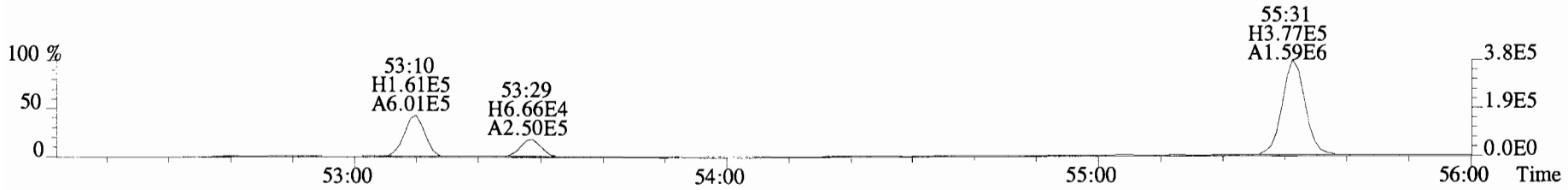
441.8008 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4704.0,0.00%,F,F)



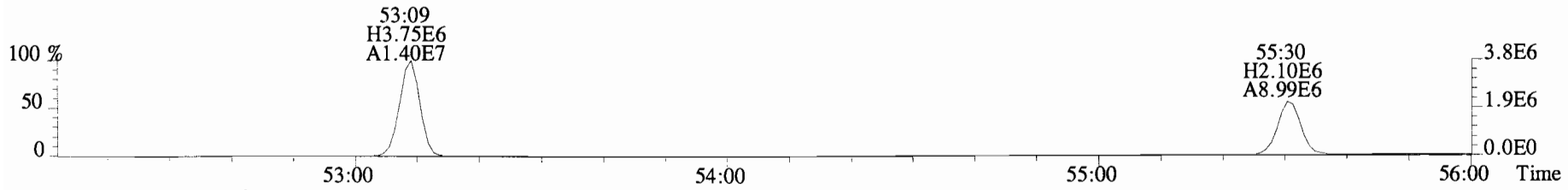
File:141226E1 #1-430 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
463.7216 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2116.0,0.00%,F,F)



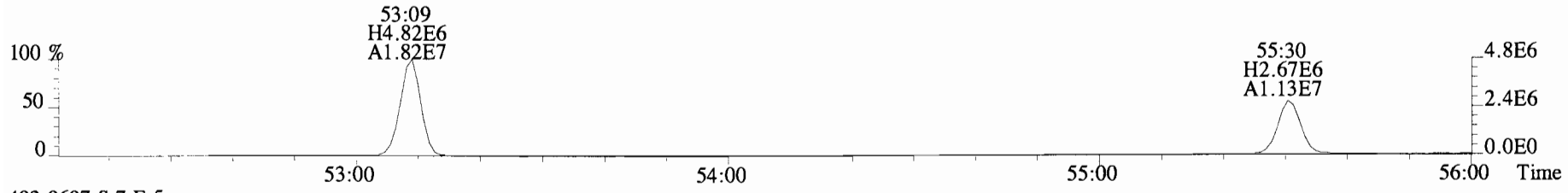
465.7186 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2112.0,0.00%,F,F)



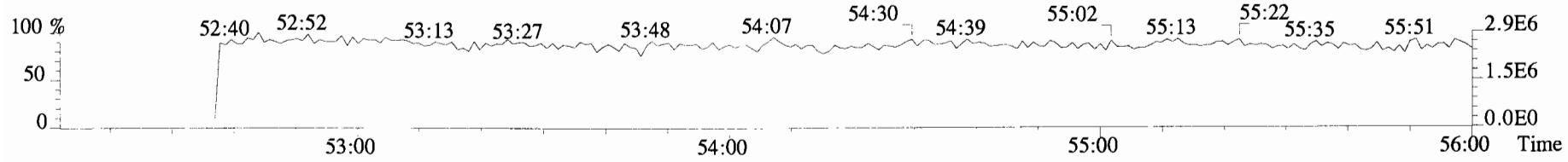
473.7648 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4648.0,0.00%,F,F)



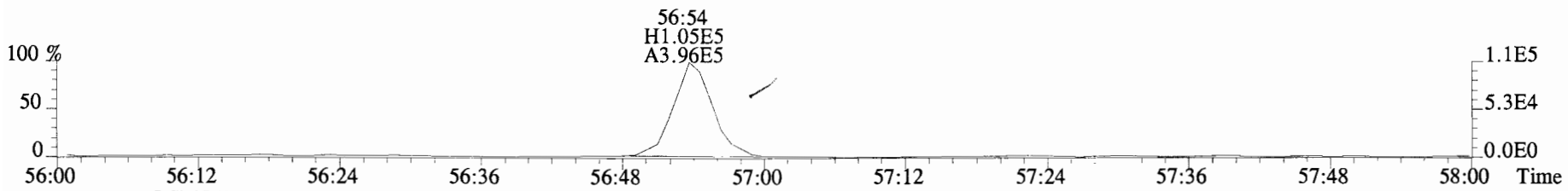
475.7619 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6884.0,0.00%,F,F)



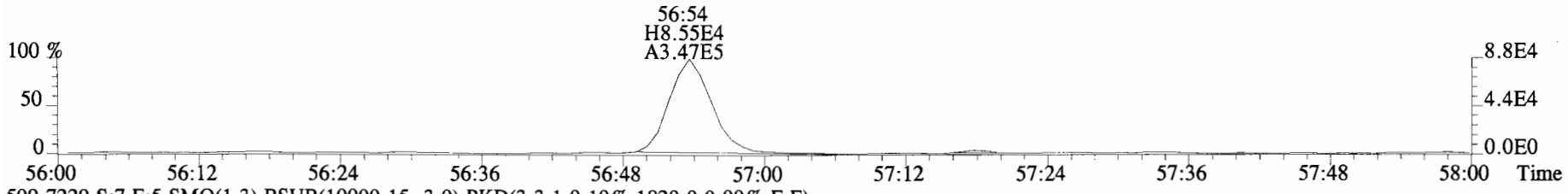
492.9697 S:7 F:5



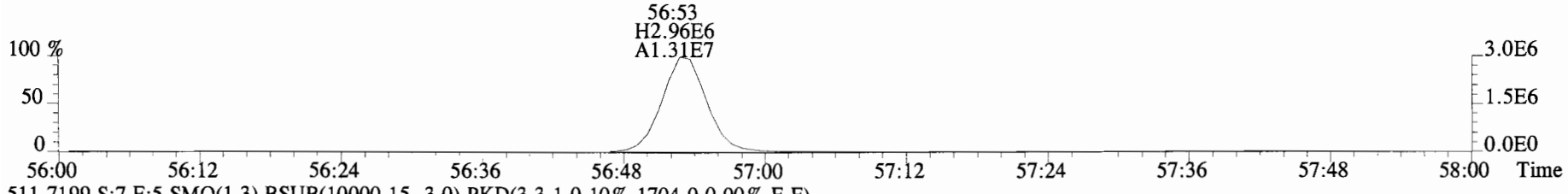
File:141226E1 #1-430 Acq:26-DEC-2014 17:49:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:1400948-04 SC-MH-20-20141211-W 0.99304 Exp:PCB_ZB1
497.6826 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1424.0,0.00%,F,F)



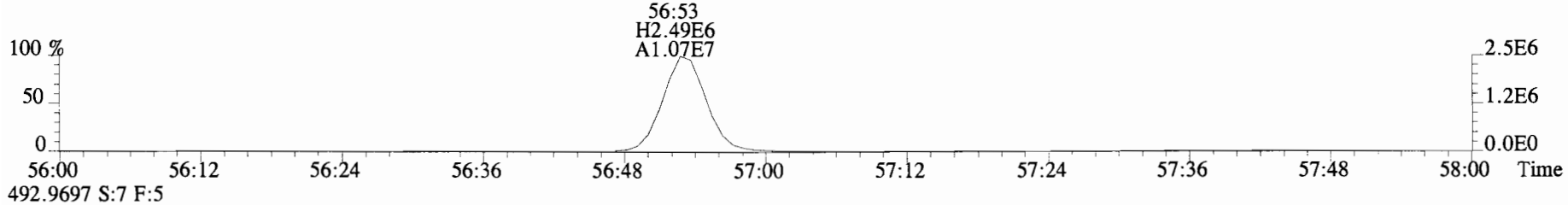
499.6797 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1400.0,0.00%,F,F)



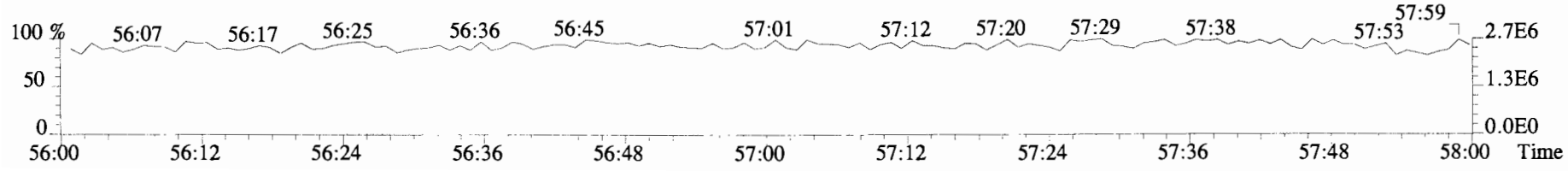
509.7229 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1820.0,0.00%,F,F)



511.7199 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1704.0,0.00%,F,F)



492.9697 S:7 F:5



CONFIRMATION

Dataset: C:\MassLynx\Default.pro\Results\141229F1\141229F1_5.qld

Last Altered: Monday, December 29, 2014 08:59:13 Pacific Standard Time
Printed: Monday, December 29, 2014 08:59:56 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 24 Dec 2014 07:18:45
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 141229F1-5, Date: 29-Dec-2014, Time: 07:58:07, ID: 1400948-01RE2 SC-OWS-05-20141211-S 3.7, Description: SC-OWS-05-20141211-S

	#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1	2,3,7,8-TCDF	6.97e3	0.80	NO	1.10	1.002	17.54	78.648		11.4
2	2	13C-2,3,7,8-TCDF	1.61e5	0.73	NO	0.844	1.002	17.51	1566.5	78.5	16.6
3	3	13C-1,2,3,4-TCDF	2.43e5	0.80	NO	1.00	1.002	15.25	1996.0	100	14.0

12/29/14

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Vista Analytical Laboratory VG-9

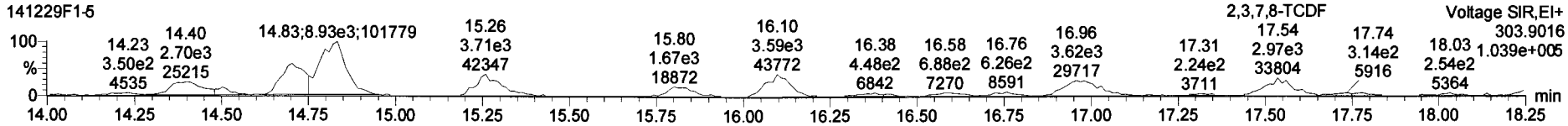
Dataset: Untitled

Last Altered: Monday, December 29, 2014 08:57:51 Pacific Standard Time
Printed: Monday, December 29, 2014 08:58:16 Pacific Standard Time

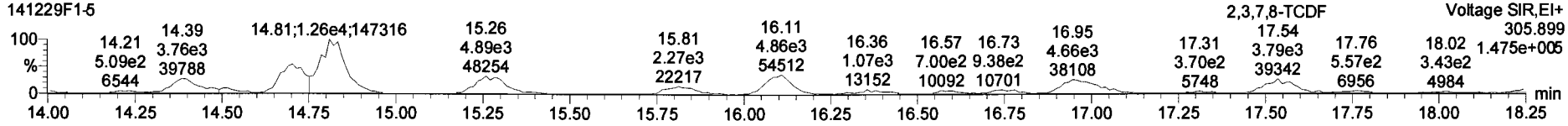
Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 24 Dec 2014 07:18:45
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 141229F1-5, Date: 29-Dec-2014, Time: 07:58:07, ID: 1400948-01RE2 SC-OWS-05-20141211-S 3.7, Description: SC-OWS-05-20141211-S

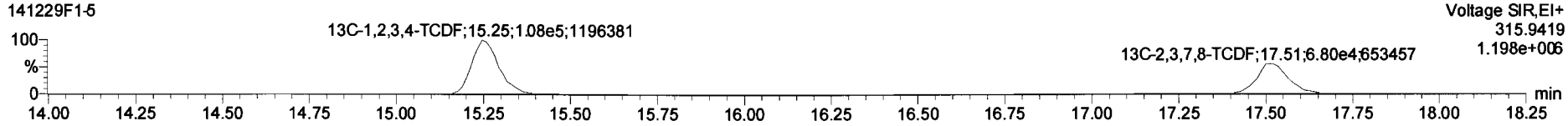
2,3,7,8-TCDF



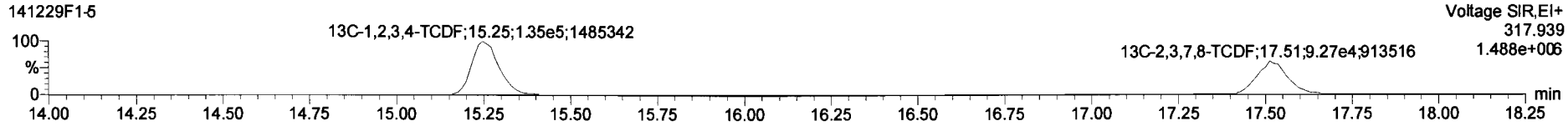
2,3,7,8-TCDF



13C-2,3,7,8-TCDF



13C-2,3,7,8-TCDF

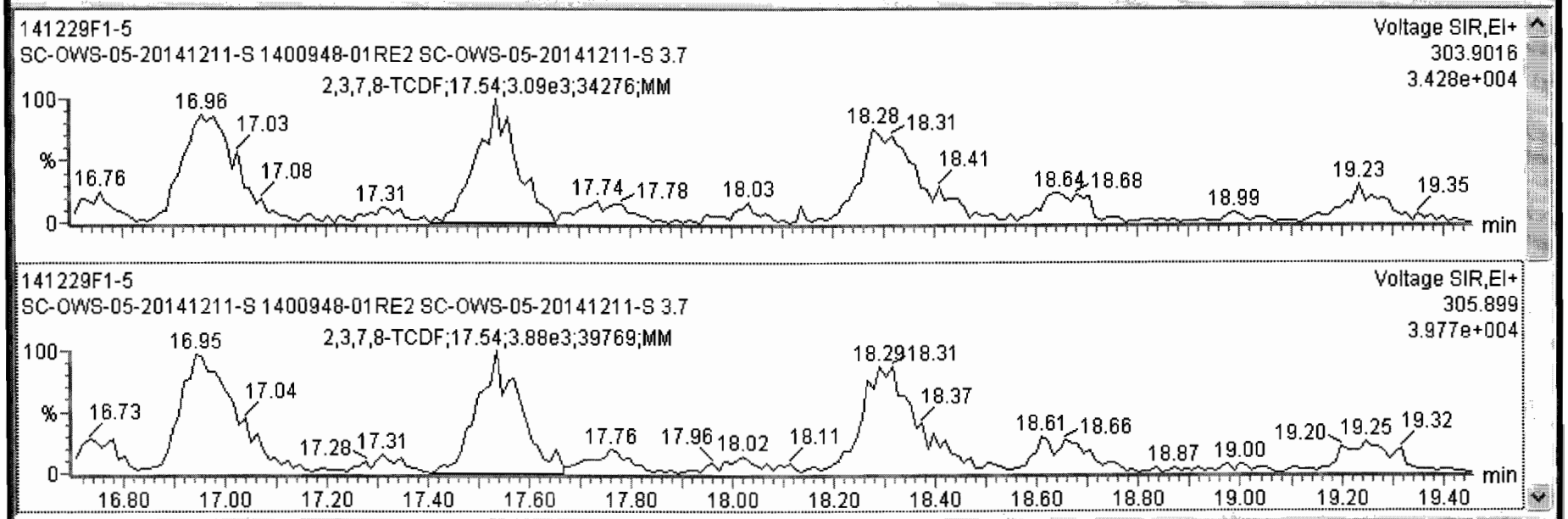


TargetLynx - untitled * - [Chromatogram]

File Edit View Display Processing Window Help

141229F1-5 - 1400948-01RE2 SC-OWS-05-20141211-S 3.7 - SC-OWS-05-20141211-S

	Name	Resp	RA	n/y	RRF	wt/vol	RT	RRT	Conc.	%Rec	DL	EMPC
1	2,3,7,8-TCDF	6.97e3	0.80	NO	1.10	1.002	17.54	1.001	78.6		11.4	
2	13C-2,3,7,8-TCDF	1.61e5	0.73	NO	0.84	1.002	17.51	1.149	1570	78.5	16.6	
3	13C-1,2,3,4-TCDF	2.43e5	0.80	NO	1.00	1.002	15.25	0.000	2000	100	14.0	
4	13C-1,2,3,4-TCDD	1.62e5	0.77	NO		1.002	16.06	0.000				
5	PFK1					1.000						
6	DPE1					1.000						



Ready 141229F1-5 CAP NUM

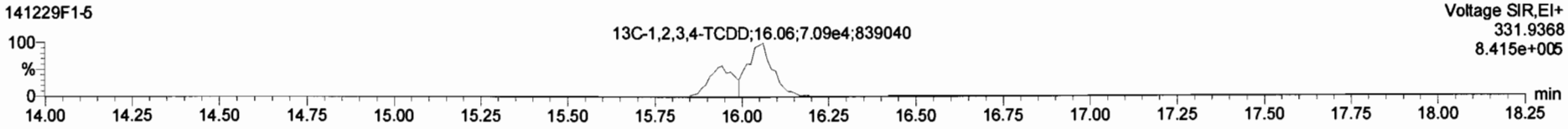
Vista Analytical Laboratory VG-9

Dataset: Untitled

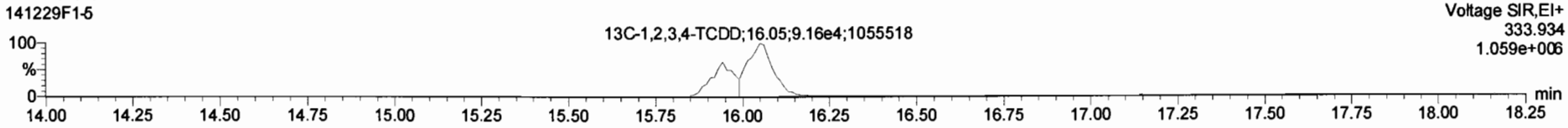
Last Altered: Monday, December 29, 2014 08:57:51 Pacific Standard Time
Printed: Monday, December 29, 2014 08:58:16 Pacific Standard Time

Name: 141229F1-5, Date: 29-Dec-2014, Time: 07:58:07, ID: 1400948-01RE2 SC-OWS-05-20141211-S 3.7, Description: SC-OWS-05-20141211-S

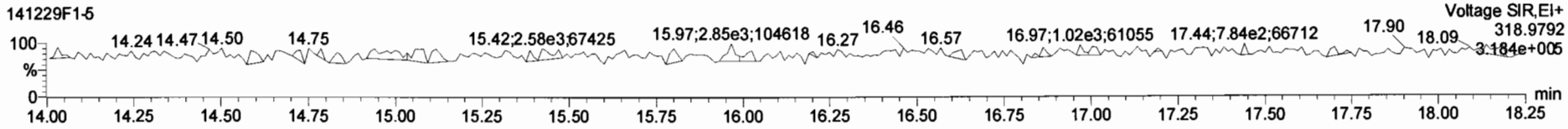
13C-1,2,3,4-TCDD



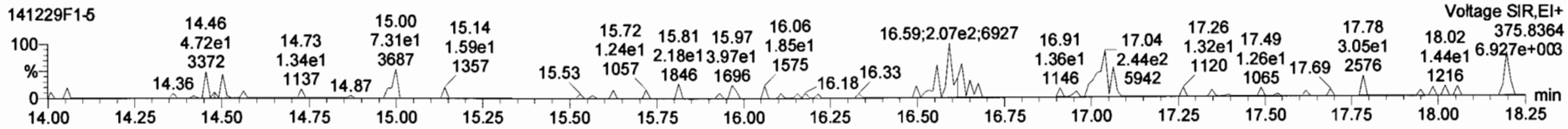
13C-1,2,3,4-TCDD



PFK1



DPE1



Dataset: C:\MassLynx\Default.pro\Results\141229F1\141229F1_6.qld

Last Altered: Monday, December 29, 2014 10:35:27 Pacific Standard Time
Printed: Monday, December 29, 2014 10:35:57 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 24 Dec 2014 07:18:45
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 141229F1-6, Date: 29-Dec-2014, Time: 08:30:30, ID: 1400948-02RE2 SC-CB-35-20141211-S 1.85, Description: SC-CB-35-20141211-S

	#-Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	1.66e3	0.70	NO	1.10	1.002	17.56	15.869		5.98
2	2 13C-2,3,7,8-TCDF	1.90e5	0.77	NO	0.844	1.002	17.51	1680.9	84.2	17.6
3	3 13C-1,2,3,4-TCDF	2.67e5	0.79	NO	1.00	1.002	15.26	1995.3	100	14.8

CJS 12/29/14

12/31/14

Vista Analytical Laboratory VG-9

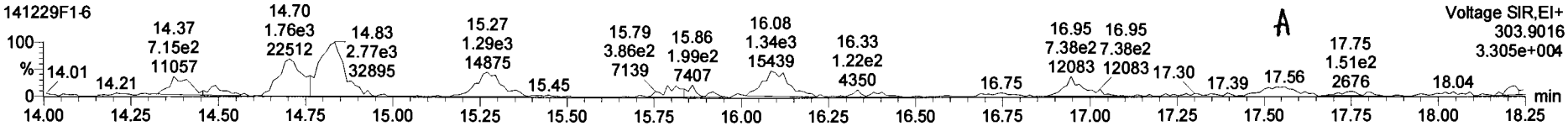
Dataset: Untitled

Last Altered: Monday, December 29, 2014 09:46:28 Pacific Standard Time
Printed: Monday, December 29, 2014 09:47:14 Pacific Standard Time

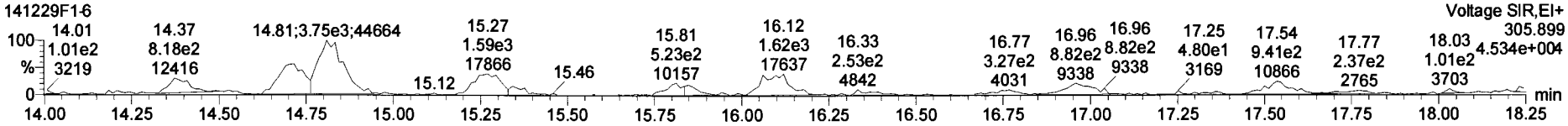
Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 24 Dec 2014 07:18:45
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 141229F1-6, Date: 29-Dec-2014, Time: 08:30:30, ID: 1400948-02RE2 SC-CB-35-20141211-S 1.85, Description: SC-CB-35-20141211-S

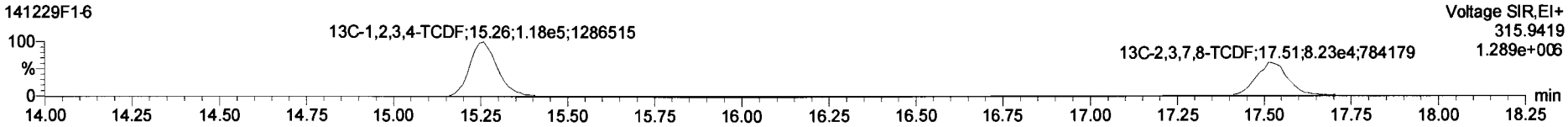
2,3,7,8-TCDF



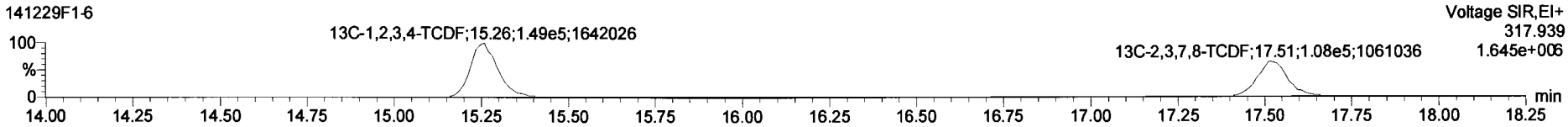
2,3,7,8-TCDF



13C-2,3,7,8-TCDF



13C-2,3,7,8-TCDF

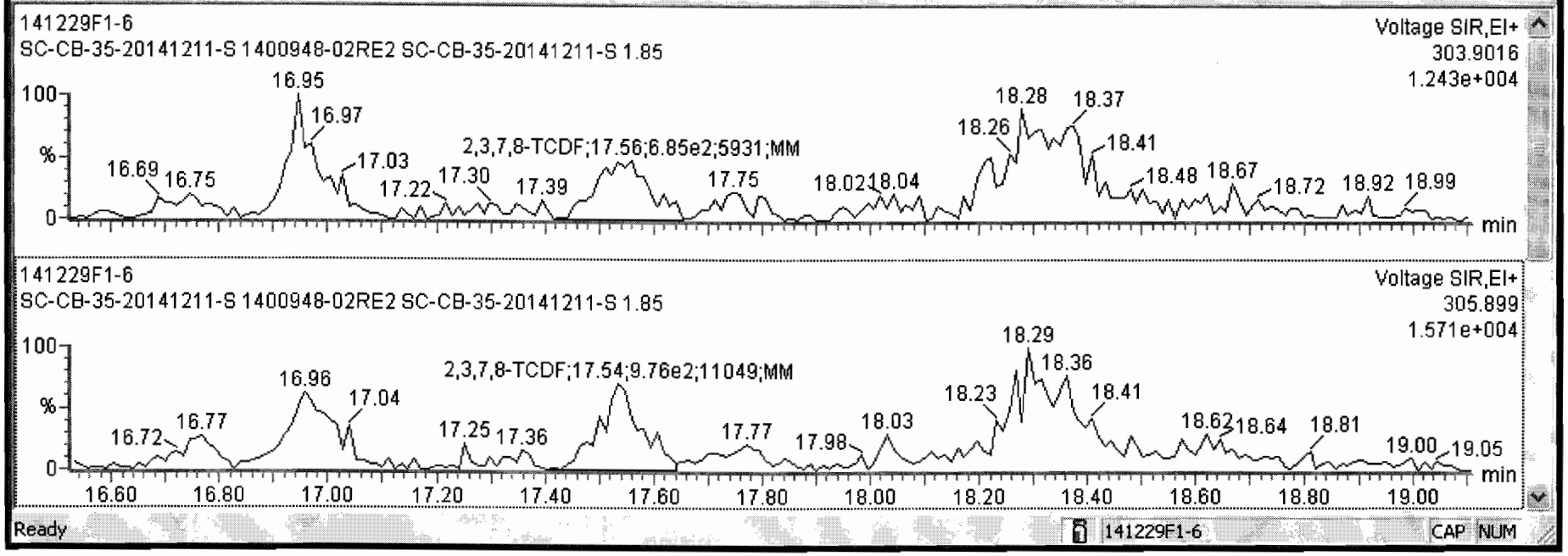


TargetLynx - untitled * - [Chromatogram]

File Edit View Display Processing Window Help

141229F1-6 - 1400948-02RE2 SC-CB-35-20141211-S 1.85 - SC-CB-35-20141211-S

	#	Name	Resp	RA	n/y	RRF	wt/vol	RT	Conc.	%Rec	DL
1	1	2,3,7,8-TCDF	1.66e3	0.70	NO	1.10	1.002	17.56	15.9		5.98
2	2	13C-2,3,7,8-TCDF	1.90e5	0.77	NO	0.84	1.002	17.51	1680	84.2	17.6
3	3	13C-1,2,3,4-TCDF	2.67e5	0.79	NO	1.00	1.002	15.26	2000	100	14.8
4	4	13C-1,2,3,4-TCDD	2.17e5	0.81	NO		1.002	16.05			
5	5	PFK1					1.000				
6	6	DPE1					1.000				



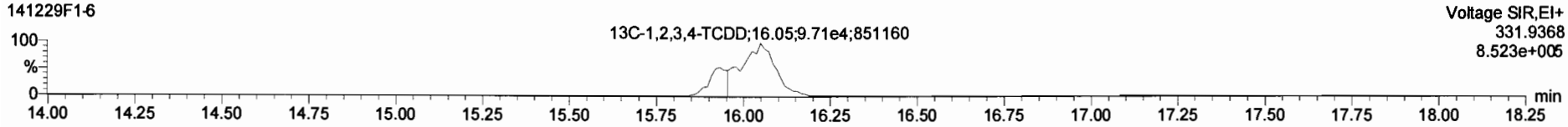
Ready 141229F1-6 CAP NUM

Dataset: Untitled

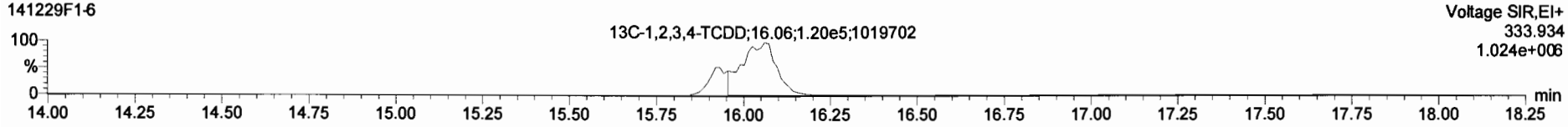
Last Altered: Monday, December 29, 2014 09:46:28 Pacific Standard Time
Printed: Monday, December 29, 2014 09:47:14 Pacific Standard Time

Name: 141229F1-6, Date: 29-Dec-2014, Time: 08:30:30, ID: 1400948-02RE2 SC-CB-35-20141211-S 1.85, Description: SC-CB-35-20141211-S

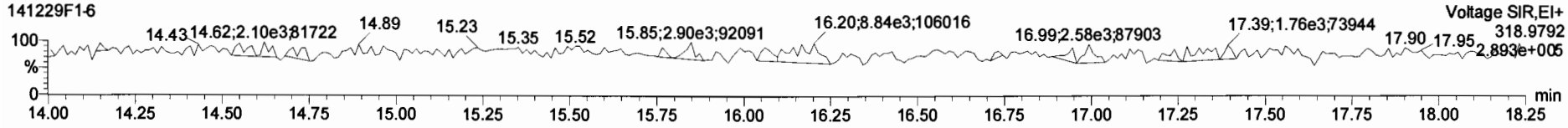
13C-1,2,3,4-TCDD



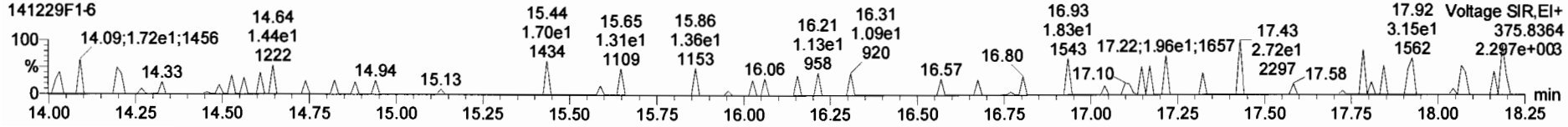
13C-1,2,3,4-TCDD



PFK1



DPE1



Dataset: C:\MassLynx\Default.pro\Results\141229F1\141229F1_7.qld

Last Altered: Monday, December 29, 2014 10:36:53 Pacific Standard Time
Printed: Monday, December 29, 2014 10:37:30 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 24 Dec 2014 07:18:45
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 141229F1-7, Date: 29-Dec-2014, Time: 09:02:52, ID: 1400948-03RE2 SC-CB-24-20141211-S 2.43, Description: SC-CB-24-20141211-S

	#-Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	1.67e3	0.77	NO	1.10	1.012	17.54	17.942		5.49
2	2 13C-2,3,7,8-TCDF	1.67e5	0.79	NO	0.844	1.012	17.52	1704.4	86.2	20.7
3	3 13C-1,2,3,4-TCDF	2.30e5	0.80	NO	1.00	1.012	15.27	1977.2	100	17.5

CJS 12/29/14

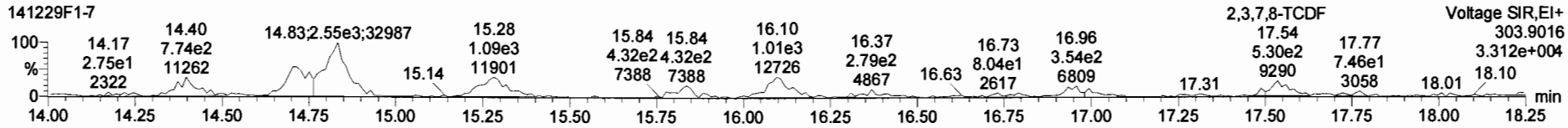
12/31/14

Dataset: Untitled

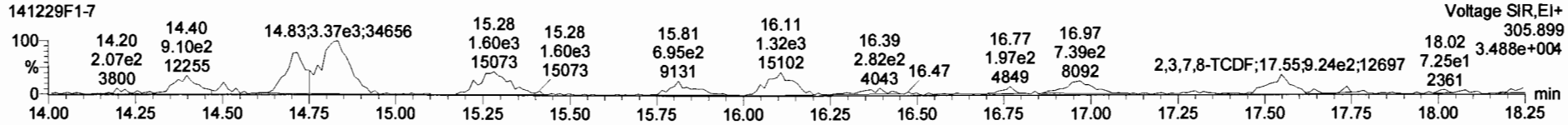
Last Altered: Monday, December 29, 2014 09:46:28 Pacific Standard Time
Printed: Monday, December 29, 2014 09:47:14 Pacific Standard Time

Name: 141229F1-7, Date: 29-Dec-2014, Time: 09:02:52, ID: 1400948-03RE2 SC-CB-24-20141211-S 2.43, Description: SC-CB-24-20141211-S

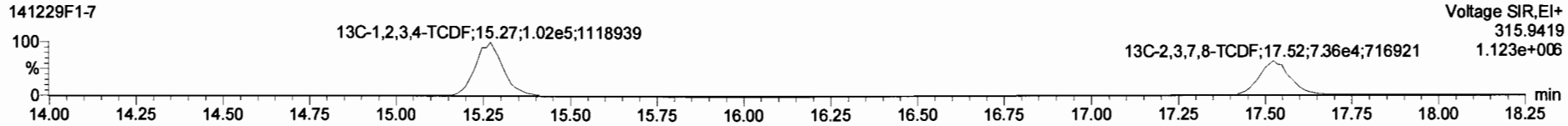
2,3,7,8-TCDF



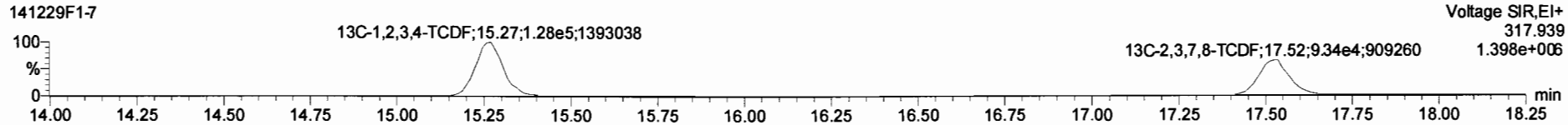
2,3,7,8-TCDF



13C-2,3,7,8-TCDF



13C-2,3,7,8-TCDF

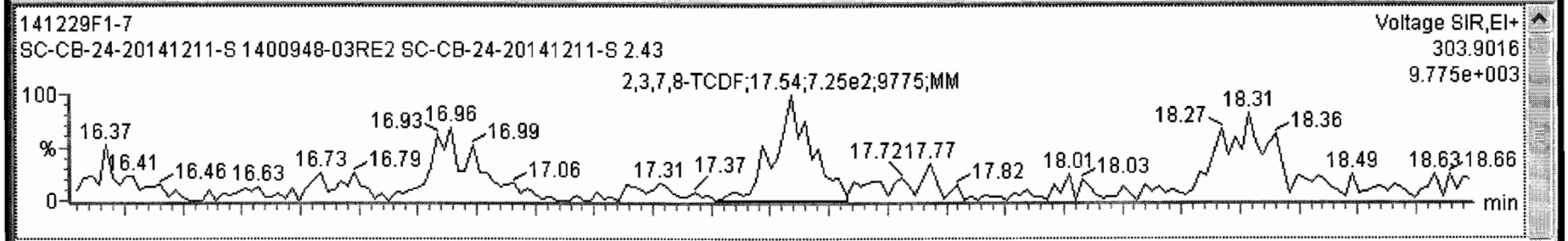


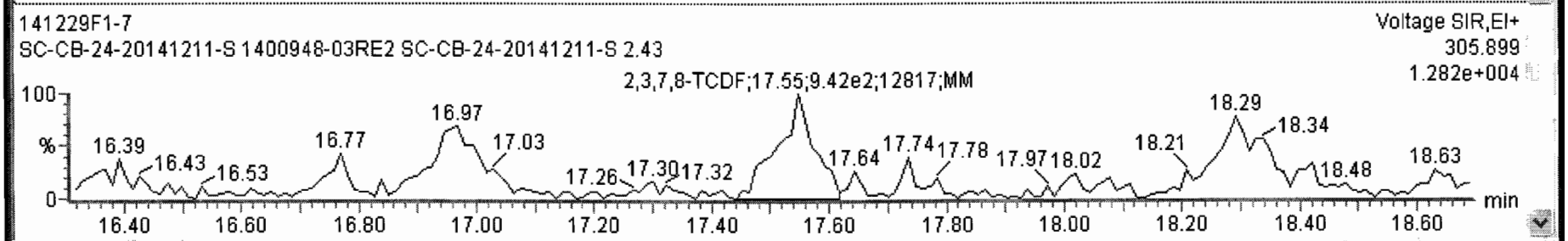
TargetLynx - untitled * - [Chromatogram]

File Edit View Display Processing Window Help

141229F1-7 - 1400948-03RE2 SC-CB-24-20141211-S 2.43 - SC-CB-24-20141211-S

	#	Name	Resp	RA	n/y	RRF	wt/vol	RT	Conc.	%Rec	DL
1	1	2,3,7,8-TCDF	1.67e3	0.77	NO	1.10	1.012	17.54	17.9		5.49
2	2	13C-2,3,7,8-TCDF	1.67e5	0.79	NO	0.84	1.012	17.52	1700	86.2	20.7
3	3	13C-1,2,3,4-TCDF	2.30e5	0.80	NO	1.00	1.012	15.27	1980	100	17.5
4	4	13C-1,2,3,4-TCDD	1.67e5	0.78	NO		1.012	16.06			
5	5	PFK1					1.000				
6	6	DPE1					1.000				





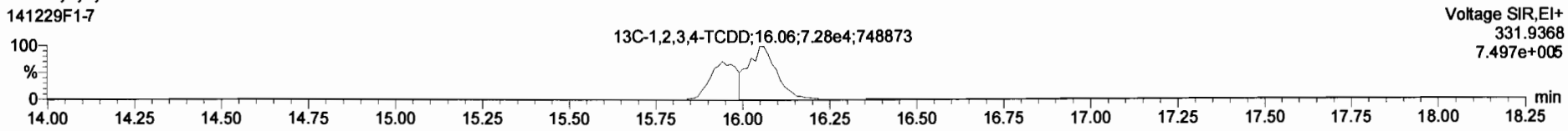
Ready 141229F1-7 CAP NUM

Dataset: Untitled

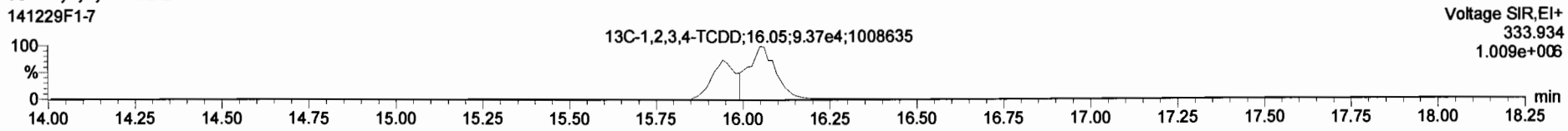
Last Altered: Monday, December 29, 2014 09:46:28 Pacific Standard Time
Printed: Monday, December 29, 2014 09:47:14 Pacific Standard Time

Name: 141229F1-7, Date: 29-Dec-2014, Time: 09:02:52, ID: 1400948-03RE2 SC-CB-24-20141211-S 2.43, Description: SC-CB-24-20141211-S

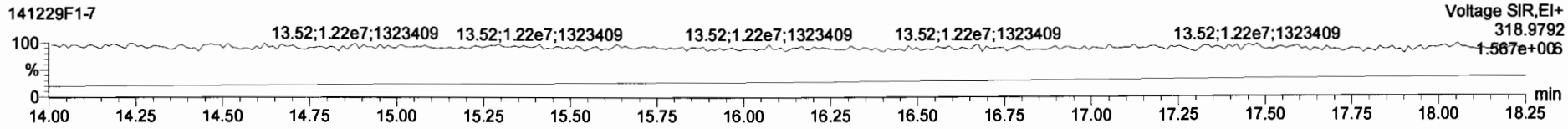
13C-1,2,3,4-TCDD



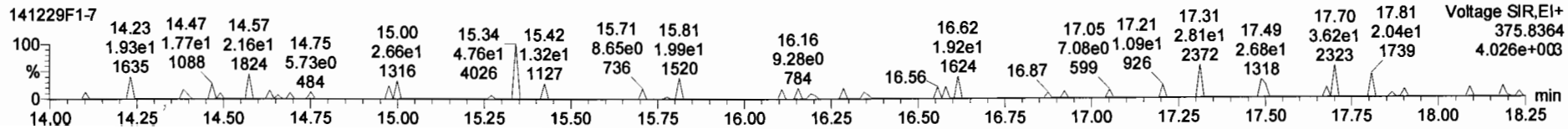
13C-1,2,3,4-TCDD



PFK1



DPE1



CONTINUING CALIBRATION

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST141217D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141217D1 S#1 Analysis Date: 17-DEC-14 Time: 14:47:55

	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	9.56	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	50.2	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	52.3	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.21	1.05-1.43	y	51.0	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	51.5	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	48.5	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	105	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	9.19	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	49.9	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	50.8	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	49.4	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	50.5	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.31	1.05-1.43	y	50.8	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	50.4	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.10	0.88-1.20	y	50.1	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.05	0.88-1.20	y	52.0	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	101	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: 12/17/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141217D1 S#1 Analysis Date: 17-DEC-14 Time: 14:47:55

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	0.78	0.65-0.89	y	93.7	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	81.0	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	97.6	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	104	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	100	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	108	72.0 - 138.0
13C-OCDD	M/M+2	0.89	0.76-1.02	y	164	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.77	0.65-0.89	y	98.6	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	84.9	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.64	1.32-1.78	y	85.3	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	101	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	98.0	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	94.9	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	102	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.43	0.37-0.51	y	104	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.43	0.37-0.51	y	92.1	77.0 - 129.0
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	174	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.87	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: 12/17/14

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-16-14

RT Window Data Filename: 141217D1 S#1 Analysis Date: 17-DEC-14 Time: 14:47:55

ZB-5MS IS Data Filename: 141217D1 S#1 Analysis Date: 17-DEC-14 Time: 14:47:55

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)	23:15	1,3,6,8-TCDF (F)	21:02
1,2,8,9-TCDD (L)	27:46	1,2,8,9-TCDF (L)	27:56
1,2,4,7,9-PeCDD (F)	29:26	1,3,4,6,8-PeCDF (F)	27:53
1,2,3,8,9-PeCDD (L)	31:54	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)	32:47
1,2,3,7,8,9-HxCDD (L)	35:15	1,2,3,7,8,9-HxCDF (L)	35:38
1,2,3,4,6,7,9-HpCDD (F)	37:51	1,2,3,4,6,7,8-HpCDF (F)	37:27
1,2,3,4,6,7,8-HpCDD (L)	38:45	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: MJ

Date: 12/18/14

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141217D1 S#1 Analysis Date: 17-DEC-14 Time: 14:47:55

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	1.023	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.200	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	1.154	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.189	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.989-1.052

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: MJ

Date: 12/17/14

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141217D1 S#1 Analysis Date: 17-DEC-14 Time: 14:47:55

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	1.000	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	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	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	0.992	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.009	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.037	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.025	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.089	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	1.222	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.229	1.091-1.371

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: MV

Date: 12/17/14

Client ID: 1613 CS3 14I1102 Filename: 141217D1 S:1 Acq:17-DEC-14 14:47:55 ConCal: ST141217D1-1

Lab ID: ST141217D1-1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000 EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	2.47e+06	0.77 y	1.18	26:53	1.001	9.5620		*	2.5	*
	1,2,3,7,8-PeCDD	1.00e+07	0.62 y	0.92	31:32	1.000	50.208		*	2.5	*
	1,2,3,4,7,8-HxCDD	9.16e+06	1.29 y	1.09	34:51	1.000	52.315		*	2.5	*
	1,2,3,6,7,8-HxCDD	9.45e+06	1.21 y	1.07	34:57	1.001	51.012		*	2.5	*
	1,2,3,7,8,9-HxCDD	9.38e+06	1.23 y	0.93	35:15	1.000	51.502		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	8.55e+06	1.07 y	1.12	38:45	1.000	48.524		*	2.5	*
	OCDD	1.46e+07	0.89 y	0.95	42:00	1.000	104.51		*	2.5	*
	2,3,7,8-TCDF	3.20e+06	0.78 y	1.08	26:05	1.001	9.1882		*	2.5	*
	1,2,3,7,8-PeCDF	1.56e+07	1.60 y	1.09	30:20	1.000	49.948		*	2.5	*
	2,3,4,7,8-PeCDF	1.55e+07	1.60 y	1.04	31:14	1.000	50.774		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.56e+07	1.29 y	1.39	33:57	1.000	49.403		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.56e+07	1.29 y	1.26	34:05	1.000	50.465		*	2.5	*
	2,3,4,6,7,8-HxCDF	1.47e+07	1.31 y	1.30	34:41	1.000	50.800		*	2.5	*
	1,2,3,7,8,9-HxCDF	1.20e+07	1.27 y	1.19	35:38	1.000	50.436		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	1.38e+07	1.10 y	1.62	37:27	1.001	50.143		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	1.18e+07	1.05 y	1.53	39:17	1.000	51.997		*	2.5	*
	OCDF	1.93e+07	0.91 y	1.10	42:14	1.000	101.14		*	2.5	*

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	55.5	56.0		*	*
Total Penta-Dioxins	156	157		*	*
Total Hexa-Dioxins	201	202		*	*
Total Hepta-Dioxins	126	127		*	*
Total Tetra-Furans	29.1	29.3		*	*
Total Penta-Furans	207.53	208.21		*	*
Total Hexa-Furans	249	250		*	*
Total Hepta-Furans	102	104		*	*

								Rec	Qual
IS	13C-2,3,7,8-TCDD	2.18e+07	0.78 y	1.07	26:52	1.023	93.676	93.7	
IS	13C-1,2,3,7,8-PeCDD	2.18e+07	0.63 y	1.24	31:31	1.200	80.959	81.0	
IS	13C-1,2,3,4,7,8-HxCDD	1.61e+07	1.24 y	0.72	34:50	1.014	97.570	97.6	
IS	13C-1,2,3,6,7,8-HxCDD	1.74e+07	1.23 y	0.74	34:56	1.017	103.61	104	
IS	13C-1,2,3,7,8,9-HxCDD	1.96e+07	1.23 y	0.86	35:14	1.025	100.49	100	
IS	13C-1,2,3,4,6,7,8-HpCDD	1.58e+07	1.07 y	0.64	38:44	1.127	107.72	108	
IS	13C-OCDD	2.93e+07	0.89 y	0.78	41:60	1.222	164.44	82.2	
IS	13C-2,3,7,8-TCDF	3.23e+07	0.77 y	0.92	26:03	0.992	98.622	98.6	
IS	13C-1,2,3,7,8-PeCDF	2.86e+07	1.60 y	0.95	30:19	1.154	84.870	84.9	
IS	13C-2,3,4,7,8-PeCDF	2.94e+07	1.64 y	0.97	31:14	1.189	85.263	85.3	
IS	13C-1,2,3,4,7,8-HxCDF	2.27e+07	0.52 y	0.99	33:57	0.988	100.51	101	
IS	13C-1,2,3,6,7,8-HxCDF	2.45e+07	0.52 y	1.10	34:04	0.992	98.005	98.0	
IS	13C-2,3,4,6,7,8-HxCDF	2.23e+07	0.52 y	1.03	34:40	1.009	94.926	94.9	
IS	13C-1,2,3,7,8,9-HxCDF	1.99e+07	0.51 y	0.86	35:37	1.037	101.81	102	
IS	13C-1,2,3,4,6,7,8-HpCDF	1.70e+07	0.43 y	0.71	37:26	1.089	104.48	104	
IS	13C-1,2,3,4,7,8,9-HpCDF	1.48e+07	0.43 y	0.71	39:17	1.143	92.079	92.1	
IS	13C-OCDF	3.47e+07	0.91 y	0.87	42:13	1.229	174.33	87.2	
C/Up	37Cl-2,3,7,8-TCDD	2.60e+06		1.21	26:53	1.024	9.8714	24.7	
RS/RT	13C-1,2,3,4-TCDD	2.17e+07	0.81 y	1.00	26:16	*	100.00		
RS	13C-1,2,3,4-TCDF	3.55e+07	0.77 y	1.00	24:45	*	100.00		
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.28e+07	0.52 y	1.00	34:21	*	100.00		

Integrations by Analyst: MJ Date: 12/17/14

Reviewed by Analyst: [signature] Date: 12/18/14

Vista Analytical Laboratory - Injection Log Run file: 141217D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141217D1	1	ST141217D1-1	MAS	17-DEC-14	14:47:55	ST141217D1-1	NA
141217D1	2	SOLVENT BLANK	MAS	17-DEC-14	15:36:33	ST141217D1-1	NA
141217D1	3	SOLVENT BLANK	MAS	17-DEC-14	16:25:12	ST141217D1-1	NA
141217D1	4	B4L0090-BS1	MAS	17-DEC-14	17:13:51	ST141217D1-1	NA
141217D1	5	SOLVENT BLANK	MAS	17-DEC-14	18:02:30	ST141217D1-1	NA
141217D1	6	B4L0090-BLK1	MAS	17-DEC-14	18:51:09	ST141217D1-1	NA
141217D1	7	1400930-01	MAS	17-DEC-14	19:39:48	ST141217D1-1	NA
141217D1	8	1400931-01	MAS	17-DEC-14	20:28:27	ST141217D1-1	NA
141217D1	9	1400932-01	MAS	17-DEC-14	21:17:04	ST141217D1-1	NA
141217D1	10	1400925-01	MAS	17-DEC-14	22:05:43	ST141217D1-1	NA
141217D1	11	1400925-02	MAS	17-DEC-14	22:54:21	ST141217D1-1	NA
141217D1	12	1400925-03	MAS	17-DEC-14	23:42:57	ST141217D1-1	NA
141217D1	13	1400925-04	MAS	18-DEC-14	00:31:39	ST141217D1-1	NA
141217D1	14	1400928-01	MAS	18-DEC-14	01:20:15	ST141217D1-1	NA
141217D1	15	1400915-01	MAS	18-DEC-14	02:08:52	ST141217D1-1	NA
141217D1	16	SOLVENT BLANK	MAS	18-DEC-14	02:57:30	ST141217D1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST14121701-1 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: MZ 12/18/14
Initials & Date

** Ending standard criteria applicable to 8290 only.*

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST141217D2-1

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141217D2 S#1 Analysis Date: 18-DEC-14 Time: 04:00:11

	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	9.87	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	51.2	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	52.0	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	50.5	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	52.0	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	49.6	43.0 - 58.0
OCDD	M+2/M+4	0.90	0.76-1.02	y	103	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.75	0.65-0.89	y	9.60	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	49.5	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	51.1	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	51.7	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	1.28	1.05-1.43	y	50.9	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.29	1.05-1.43	y	50.9	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.09	0.88-1.20	y	53.0	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.05	0.88-1.20	y	55.0	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	103	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: 12/19/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141217D2 S#1 Analysis Date: 18-DEC-14 Time: 04:00:11

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	0.81	0.65-0.89	y	96.3	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.63	0.54-0.72	y	103	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	93.9	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	97.3	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	98.7	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	103	72.0 - 138.0
13C-OCDD	M/M+2	0.88	0.76-1.02	y	180	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.77	0.65-0.89	y	95.9	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	100	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	98.5	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	103	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	97.8	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	96.5	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.50	0.43-0.59	y	102	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.42	0.37-0.51	y	103	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.43	0.37-0.51	y	91.8	77.0 - 129.0
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	191	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					10.4	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: (n)

Date: 12/19/14

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-16-14

RT Window Data Filename: 141217D2 S#1 Analysis Date: 18-DEC-14 Time: 04:00:11

ZB-5MS IS Data Filename: 141217D2 S#1 Analysis Date: 18-DEC-14 Time: 04:00:11

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)	23:15	1,3,6,8-TCDF (F)	21:03
1,2,8,9-TCDD (L)	27:46	1,2,8,9-TCDF (L)	27:56
1,2,4,7,9-PeCDD (F)	29:25	1,3,4,6,8-PeCDF (F)	27:52
1,2,3,8,9-PeCDD (L)	31:53	1,2,3,8,9-PeCDF (L)	32:07
1,2,4,6,7,9-HxCDD (F)	33:18	1,2,3,4,6,8-HxCDF (F)	32:46
1,2,3,7,8,9-HxCDD (L)	35:14	1,2,3,7,8,9-HxCDF (L)	35:37
1,2,3,4,6,7,9-HpCDD (F)	37:50	1,2,3,4,6,7,8-HpCDF (F)	37:26
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: MJ

Date: 12/19/14

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141217D2 S#1 Analysis Date: 18-DEC-14 Time: 04:00:11

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	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.199	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	1.154	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.189	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: MN

Date: 12/19/14

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141217D2 S#1 Analysis Date: 18-DEC-14 Time: 04:00:11

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	1.001	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	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	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	0.992	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.009	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.037	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.026	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.090	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.143	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	1.229	1.091-1.371

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: MM

Date: 12/19/14

Client ID: 1613 CS3 14I1102 Filename: 141217D2 S:1 Acq:18-DEC-14 04:00:11 ConCal: ST141217D2-1

Lab ID: ST141217D2-1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000 EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	1.88e+06	0.77 y	1.18	26:53	1.001	9.8679		*	2.5	*
	1,2,3,7,8-PeCDD	9.36e+06	0.61 y	0.92	31:31	1.001	51.192		*	2.5	*
	1,2,3,4,7,8-HxCDD	8.50e+06	1.27 y	1.09	34:50	1.000	51.951		*	2.5	*
	1,2,3,6,7,8-HxCDD	8.53e+06	1.26 y	1.07	34:57	1.001	50.486		*	2.5	*
	1,2,3,7,8,9-HxCDD	9.03e+06	1.24 y	0.93	35:14	1.000	51.990		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	8.15e+06	1.02 y	1.12	38:44	1.000	49.597		*	2.5	*
	OCDD	1.53e+07	0.90 y	0.95	41:59	1.000	103.11		*	2.5	*
	2,3,7,8-TCDF	2.60e+06	0.75 y	1.08	26:04	1.001	9.6016		*	2.5	*
	1,2,3,7,8-PeCDF	1.46e+07	1.59 y	1.09	30:19	1.000	49.481		*	2.5	*
	2,3,4,7,8-PeCDF	1.44e+07	1.61 y	1.04	31:14	1.001	51.073		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.62e+07	1.28 y	1.39	33:57	1.001	51.744		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.54e+07	1.30 y	1.26	34:04	1.000	51.439		*	2.5	*
	2,3,4,6,7,8-HxCDF	1.46e+07	1.28 y	1.30	34:40	1.000	50.943		*	2.5	*
	1,2,3,7,8,9-HxCDF	1.17e+07	1.29 y	1.19	35:37	1.001	50.916		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	1.39e+07	1.09 y	1.62	37:26	1.001	53.006		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	1.21e+07	1.05 y	1.53	39:17	1.000	54.978		*	2.5	*
	OCDF	2.09e+07	0.92 y	1.10	42:13	1.000	102.95		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.61e+07	0.81 y	1.07	26:51	1.023	96.273				
IS	13C-1,2,3,7,8-PeCDD	1.99e+07	0.63 y	1.24	31:30	1.199	103.11				
IS	13C-1,2,3,4,7,8-HxCDD	1.51e+07	1.27 y	0.72	34:49	1.014	93.931				
IS	13C-1,2,3,6,7,8-HxCDD	1.58e+07	1.26 y	0.74	34:55	1.017	97.273				
IS	13C-1,2,3,7,8,9-HxCDD	1.87e+07	1.26 y	0.86	35:13	1.026	98.659				
IS	13C-1,2,3,4,6,7,8-HpCDD	1.47e+07	1.07 y	0.64	38:43	1.127	103.41				
IS	13C-OCDD	3.12e+07	0.88 y	0.78	41:59	1.223	180.17				
IS	13C-2,3,7,8-TCDF	2.51e+07	0.77 y	0.92	26:03	0.992	95.879				
IS	13C-1,2,3,7,8-PeCDF	2.70e+07	1.62 y	0.95	30:18	1.154	100.33				
IS	13C-2,3,4,7,8-PeCDF	2.71e+07	1.59 y	0.97	31:13	1.189	98.548				
IS	13C-1,2,3,4,7,8-HxCDF	2.25e+07	0.50 y	0.99	33:55	0.988	102.78				
IS	13C-1,2,3,6,7,8-HxCDF	2.38e+07	0.51 y	1.10	34:03	0.992	97.834				
IS	13C-2,3,4,6,7,8-HxCDF	2.20e+07	0.52 y	1.03	34:39	1.009	96.472				
IS	13C-1,2,3,7,8,9-HxCDF	1.93e+07	0.50 y	0.86	35:36	1.037	101.74				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.62e+07	0.42 y	0.71	37:25	1.090	102.60				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.44e+07	0.43 y	0.71	39:16	1.143	91.845				
IS	13C-OCDF	3.69e+07	0.89 y	0.87	42:13	1.229	190.71				
C/Up	37Cl-2,3,7,8-TCDD	1.97e+06		1.21	26:52	1.023	10.444				
RS/RT	13C-1,2,3,4-TCDD	1.56e+07	0.85 y	1.00	26:16	*	100.00				
RS	13C-1,2,3,4-TCDF	2.83e+07	0.79 y	1.00	24:44	*	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.21e+07	0.52 y	1.00	34:20	*	100.00				

	Rec	Qual
IS	96.3	
IS	103	
IS	93.9	
IS	97.3	
IS	98.7	
IS	103	
IS	90.1	
IS	95.9	
IS	100	
IS	98.5	
IS	103	
IS	97.8	
IS	96.5	
IS	102	
IS	103	
IS	91.8	
IS	95.4	
C/Up	26.1	

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	56.9	57.0		*	*
Total Penta-Dioxins	156	157		*	*
Total Hexa-Dioxins	201	202		*	*
Total Hepta-Dioxins	130	131		*	*
Total Tetra-Furans	31.3	31.6		*	*
Total Penta-Furans	205.52	206.80		*	*
Total Hexa-Furans	253	254		*	*
Total Hepta-Furans	108	110		*	*

Integrations by Analyst: MJ Date: 12/16/14

Reviewed by Analyst: [signature] Date: 12/18/14

Vista Analytical Laboratory - Injection Log Run file: 141217D2 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141217D2	1	ST141217D2-1	MAS	18-DEC-14	04:00:11	ST141217D2-1	NA
141217D2	2	SOLVENT BLANK	MAS	18-DEC-14	04:48:48	ST141217D2-1	NA
141217D2	3	1400933-01	MAS	18-DEC-14	05:37:30	ST141217D2-1	NA
141217D2	4	1400945-01	MAS	18-DEC-14	06:26:06	ST141217D2-1	NA
141217D2	5	1400946-01	MAS	18-DEC-14	07:14:47	ST141217D2-1	NA
141217D2	6	1400948-04	MAS	18-DEC-14	08:03:28	ST141217D2-1	NA
141217D2	7	1400934-01	MAS	18-DEC-14	08:52:13	ST141217D2-1	NA
141217D2	8	1400934-02	MAS	18-DEC-14	09:40:59	ST141217D2-1	NA
141217D2	9	SOLVENT BLANK	MAS	18-DEC-14	10:29:36	ST141217D2-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST141217D2-1

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: [signature] 12/18/14
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: ST141226D2-1

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141226D2 S#1 Analysis Date: 26-DEC-14 Time: 20:23:51

	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	9.91	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	49.2	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	50.7	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	51.6	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	y	50.5	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	50.0	43.0 - 58.0
OCDD	M+2/M+4	0.88	0.76-1.02	y	102	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.81	0.65-0.89	y	9.73	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	47.8	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	49.1	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.31	1.05-1.43	y	49.9	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	50.7	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	50.4	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.34	1.05-1.43	y	50.2	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.08	0.88-1.20	y	49.4	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.11	0.88-1.20	y	51.0	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	101	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: 12/27/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141226D2 S#1 Analysis Date: 26-DEC-14 Time: 20:23:51

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	96.8	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.62	0.54-0.72	y	118	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y	91.0	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.21	1.05-1.43	y	93.0	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	y	91.6	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.10	0.88-1.20	y	95.4	72.0 - 138.0
13C-OCDD	M/M+2	0.88	0.76-1.02	y	167	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.77	0.65-0.89	y	92.8	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	103	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	104	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	101	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	97.9	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	93.5	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.50	0.43-0.59	y	92.6	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	y	101	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.43	0.37-0.51	y	91.7	77.0 - 129.0
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	172	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: [signature]

Date: 12/27/14

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-16-14

RT Window Data Filename: 141226D2 S#1 Analysis Date: 26-DEC-14 Time: 20:23:51

ZB-5MS IS Data Filename: 141226D2 S#1 Analysis Date: 26-DEC-14 Time: 20:23:51

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)	23:15	1,3,6,8-TCDF (F)	21:03
1,2,8,9-TCDD (L)	27:50	1,2,8,9-TCDF (L)	28:00
1,2,4,7,9-PeCDD (F)	29:30	1,3,4,6,8-PeCDF (F)	27:56
1,2,3,8,9-PeCDD (L)	31:59	1,2,3,8,9-PeCDF (L)	32:14
1,2,4,6,7,9-HxCDD (F)	33:24	1,2,3,4,6,8-HxCDF (F)	32:52
1,2,3,7,8,9-HxCDD (L)	35:19	1,2,3,7,8,9-HxCDF (L)	35:43
1,2,3,4,6,7,9-HpCDD (F)	37:55	1,2,3,4,6,7,8-HpCDF (F)	37:31
1,2,3,4,6,7,8-HpCDD (L)	38:50	1,2,3,4,7,8,9-HpCDF (L)	39:23

(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: 12/27/14

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

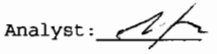
Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141226D2 S#1 Analysis Date: 26-DEC-14 Time: 20:23:51

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	1.023	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.201	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	1.155	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.190	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.989-1.052

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: 

Date: 12/27/14

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141226D2 S#1 Analysis Date: 26-DEC-14 Time: 20:23:51

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.988	0.975-1.001
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.992	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.009	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.036	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.025	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.089	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	1.222	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.228	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: 12/27/14

Client ID: 1613 CS3 14I1102 Filename: 141226D2 S:1 Acq:26-DEC-14 20:23:51 ConCal: ST141226D2-1

Lab ID: ST141226D2-1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000 EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	1.49e+06	0.76 y	1.18	26:56	1.001	9.9102		*	2.5	*
	1,2,3,7,8-PeCDD	8.07e+06	0.62 y	0.92	31:37	1.000	49.178		*	2.5	*
	1,2,3,4,7,8-HxCDD	7.25e+06	1.27 y	1.09	34:55	1.000	50.650		*	2.5	*
	1,2,3,6,7,8-HxCDD	7.52e+06	1.22 y	1.07	35:02	1.000	51.568		*	2.5	*
	1,2,3,7,8,9-HxCDD	7.35e+06	1.22 y	0.93	35:19	1.000	50.487		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	6.84e+06	1.05 y	1.12	38:50	1.000	49.983		*	2.5	*
	OCDD	1.27e+07	0.88 y	0.95	42:05	1.000	101.99		*	2.5	*
	2,3,7,8-TCDF	2.10e+06	0.81 y	1.08	26:07	1.001	9.7274		*	2.5	*
	1,2,3,7,8-PeCDF	1.19e+07	1.57 y	1.09	30:24	1.000	47.795		*	2.5	*
	2,3,4,7,8-PeCDF	1.21e+07	1.55 y	1.04	31:20	1.000	49.095		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.38e+07	1.31 y	1.39	34:02	1.000	49.869		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.37e+07	1.29 y	1.26	34:10	1.001	50.666		*	2.5	*
	2,3,4,6,7,8-HxCDF	1.26e+07	1.29 y	1.30	34:46	1.000	50.365		*	2.5	*
	1,2,3,7,8,9-HxCDF	9.49e+06	1.34 y	1.19	35:43	1.001	50.199		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	1.15e+07	1.08 y	1.62	37:31	1.000	49.353		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	1.01e+07	1.11 y	1.53	39:23	1.001	50.952		*	2.5	*
	OCDF	1.67e+07	0.92 y	1.10	42:19	1.000	101.43		*	2.5	*

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	56.4	56.8		*	*
Total Penta-Dioxins	152	152		*	*
Total Hexa-Dioxins	199	200		*	*
Total Hepta-Dioxins	122	124		*	*
Total Tetra-Furans	32.0	32.3		*	*
Total Penta-Furans	200.35	200.84		*	*
Total Hexa-Furans	250	251		*	*
Total Hepta-Furans	101	103		*	*

								Rec	Qual
IS	13C-2,3,7,8-TCDD	1.27e+07	0.80 y	1.07	26:55	1.023	96.770	96.8	
IS	13C-1,2,3,7,8-PeCDD	1.79e+07	0.62 y	1.24	31:36	1.201	118.25	118	
IS	13C-1,2,3,4,7,8-HxCDD	1.32e+07	1.31 y	0.72	34:55	1.014	90.951	91.0	
IS	13C-1,2,3,6,7,8-HxCDD	1.37e+07	1.21 y	0.74	35:01	1.017	93.010	93.0	
IS	13C-1,2,3,7,8,9-HxCDD	1.56e+07	1.22 y	0.86	35:19	1.025	91.562	91.6	
IS	13C-1,2,3,4,6,7,8-HpCDD	1.23e+07	1.10 y	0.64	38:49	1.127	95.406	95.4	
IS	13C-OCDD	2.62e+07	0.88 y	0.78	42:05	1.222	167.32	83.7	
IS	13C-2,3,7,8-TCDF	2.00e+07	0.77 y	0.92	26:06	0.992	92.808	92.8	
IS	13C-1,2,3,7,8-PeCDF	2.29e+07	1.58 y	0.95	30:23	1.155	103.20	103	
IS	13C-2,3,4,7,8-PeCDF	2.36e+07	1.59 y	0.97	31:19	1.190	104.12	104	
IS	13C-1,2,3,4,7,8-HxCDF	1.99e+07	0.51 y	0.99	34:01	0.988	100.50	101	
IS	13C-1,2,3,6,7,8-HxCDF	2.15e+07	0.51 y	1.10	34:09	0.992	97.851	97.9	
IS	13C-2,3,4,6,7,8-HxCDF	1.93e+07	0.52 y	1.03	34:45	1.009	93.529	93.5	
IS	13C-1,2,3,7,8,9-HxCDF	1.59e+07	0.50 y	0.86	35:42	1.036	92.557	92.6	
IS	13C-1,2,3,4,6,7,8-HpCDF	1.44e+07	0.44 y	0.71	37:30	1.089	101.06	101	
IS	13C-1,2,3,4,7,8,9-HpCDF	1.30e+07	0.43 y	0.71	39:22	1.143	91.706	91.7	
IS	13C-OCDF	2.99e+07	0.90 y	0.87	42:18	1.228	171.55	85.8	
C/Up	37Cl-2,3,7,8-TCDD	1.58e+06		1.21	26:56	1.024	10.723	26.8	
RS/RT	13C-1,2,3,4-TCDD	1.22e+07	0.81 y	1.00	26:19	*	100.00		
RS	13C-1,2,3,4-TCDF	2.33e+07	0.77 y	1.00	24:46	*	100.00		
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.00e+07	0.52 y	1.00	34:26	*	100.00		

Integrations by Analyst: AL Date: 12/27/14

Reviewed by Analyst: CT Date: 12/29/14

Vista Analytical Laboratory - Injection Log Run file: 141226D2 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141226D2	1	ST141226D2-1	DMS	26-DEC-14	20:23:51	ST141226D2-1	NA
141226D2	2	B4L0130-BS1	DMS	26-DEC-14	21:12:35	ST141226D2-1	NA
141226D2	3	SOLVENT BLANK	DMS	26-DEC-14	22:01:27	ST141226D2-1	NA
141226D2	4	B4L0130-BLK1	DMS	26-DEC-14	22:50:17	ST141226D2-1	NA
141226D2	5	1400948-01RE1	DMS	26-DEC-14	23:39:03	ST141226D2-1	NA
141226D2	6	1400948-02RE1	DMS	27-DEC-14	00:27:53	ST141226D2-1	NA
141226D2	7	1400948-03RE1	DMS	27-DEC-14	01:16:43	ST141226D2-1	NA
141226D2	8	SOLVENT BLANK	DMS	27-DEC-14	02:05:36	ST141226D2-1	NA
141226D2	9	SOLVENT BLANK	DMS	27-DEC-14	02:54:34	ST141226D2-1	NA
141226D2	10	SOLVENT BLANK	DMS	27-DEC-14	03:43:31	ST141226D2-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST14 1226D2-1 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: CT 12/29/14
Initials & Date

* *Ending standard criteria applicable to 8290 only.*

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141226E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141226E1 S#1 Analysis Date: 26-DEC-14 Time: 11:22:34

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-1	3.02	2.66-3.60	y	49.1	37.5-62.5
PCB-2	3.05	2.66-3.60	y	48.5	37.5-62.5
PCB-3	3.04	2.66-3.60	y	49.1	37.5-62.5
PCB-4/10	1.64	1.33-1.79	y	227.9	150-250
PCB-7/9	1.64	1.33-1.79	y	224.5	150-250
PCB-6	1.64	1.33-1.79	y	107.1	75.0-125
PCB-5/8	1.64	1.33-1.79	y	224.8	150-250
PCB-14	1.65	1.33-1.79	y	114.9	75.0-125
PCB-11	1.65	1.33-1.79	y	113.5	75.0-125
PCB-12/13	1.65	1.33-1.79	y	226.2	150-250
PCB-15	1.65	1.33-1.79	y	111.9	75.0-125
PCB-19	1.09	0.88-1.20	y	51.9	37.5-62.5
PCB-30	1.09	0.88-1.20	y	52.5	37.5-62.5
PCB-18	1.08	0.88-1.20	y	51.3	37.5-62.5
PCB-17	1.08	0.88-1.20	y	51.4	37.5-62.5
PCB-24/27	1.08	0.88-1.20	y	104.6	75.0-125
PCB-16/32	1.08	0.88-1.20	y	102.2	75.0-125
PCB-34	1.07	0.88-1.20	y	57.9	37.5-62.5
PCB-23	1.09	0.88-1.20	y	48.1	37.5-62.5
PCB-29	1.07	0.88-1.20	y	51.9	37.5-62.5
PCB-26	1.07	0.88-1.20	y	51.1	37.5-62.5
PCB-25	1.07	0.88-1.20	y	51.2	37.5-62.5
PCB-31	1.06	0.88-1.20	y	48.7	37.5-62.5
PCB-28	1.08	0.88-1.20	y	54.5	37.5-62.5
PCB-20/21/33	1.07	0.88-1.20	y	152.4	112.5-225
PCB-22	1.07	0.88-1.20	y	52.5	37.5-62.5
PCB-36	1.07	0.88-1.20	y	54.3	37.5-62.5
PCB-39	1.06	0.88-1.20	y	53.8	37.5-62.5
PCB-38	1.06	0.88-1.20	y	55.8	37.5-62.5
PCB-35	1.05	0.88-1.20	y	52.7	37.5-62.5
PCB-37	1.06	0.88-1.20	y	52.4	37.5-62.5
PCB-54	0.79	0.65-0.89	y	50.5	37.5-62.5
PCB-50	0.77	0.65-0.89	y	48.4	37.5-62.5
PCB-53	0.81	0.65-0.89	y	50.4	37.5-62.5
PCB-51	0.80	0.65-0.89	y	53.8	37.5-62.5
PCB-45	0.79	0.65-0.89	y	51.2	37.5-62.5
PCB-46	0.81	0.65-0.89	y	49.5	37.5-62.5
PCB-52/69	0.79	0.65-0.89	y	97.5	75.0-125
PCB-73	0.78	0.65-0.89	y	54.0	37.5-62.5
PCB-43/49	0.80	0.65-0.89	y	97.0	75.0-125
PCB-47	0.79	0.65-0.89	y	49.1	37.5-62.5
PCB-48/75	0.79	0.65-0.89	y	103.6	75.0-125
PCB-65	0.79	0.65-0.89	y	53.5	37.5-62.5
PCB-62	0.79	0.65-0.89	y	46.9	37.5-62.5
PCB-44	0.79	0.65-0.89	y	49.0	37.5-62.5
PCB-42/59	0.79	0.65-0.89	y	99.2	75.0-125
PCB-41/64/71/72	0.78	0.65-0.89	y	203.1	150-250
PCB-68	0.79	0.65-0.89	y	50.3	37.5-62.5
PCB-40	0.78	0.65-0.89	y	49.8	37.5-62.5
PCB-57	0.80	0.65-0.89	y	50.9	37.5-62.5
PCB-67	0.78	0.65-0.89	y	47.2	37.5-62.5
PCB-58	0.80	0.65-0.89	y	50.4	37.5-62.5
PCB-63	0.76	0.65-0.89	y	49.6	37.5-62.5
PCB-74	0.79	0.65-0.89	y	51.3	37.5-62.5
PCB-61/70	0.79	0.65-0.89	y	101.5	75.0-125
PCB-76/66	0.80	0.65-0.89	y	103.1	75.0-125
PCB-80	0.80	0.65-0.89	y	50.0	37.5-62.5
PCB-55	0.81	0.65-0.89	y	48.7	37.5-62.5
PCB-56/60	0.80	0.65-0.89	y	100.3	75.0-125
PCB-79	0.80	0.65-0.89	y	49.0	37.5-62.5
PCB-78	0.78	0.65-0.89	y	52.8	37.5-62.5
PCB-81	0.77	0.65-0.89	y	52.1	37.5-62.5
PCB-77	0.80	0.65-0.89	y	53.0	37.5-62.5
PCB-104	1.63	1.32-1.78	y	53.5	37.5-62.5
PCB-96	1.60	1.32-1.78	y	55.8	37.5-62.5
PCB-103	1.57	1.32-1.78	y	54.4	37.5-62.5
PCB-100	1.60	1.32-1.78	y	53.6	37.5-62.5
PCB-94	1.61	1.32-1.78	y	53.0	37.5-62.5
PCB-95/98/102	1.60	1.32-1.78	y	161.9	112.5-225
PCB-93	1.65	1.32-1.78	y	50.8	37.5-62.5
PCB-88/91	1.58	1.32-1.78	y	121.4	75.0-125
PCB-121	1.63	1.32-1.78	y	43.7	37.5-62.5

Analyst: DMS

Date: 12/26/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141226E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141226E1 S#1 Analysis Date: 26-DEC-14 Time: 11:22:34

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	1.62	1.32-1.78	y	105.6	75.0-125	PCB-140	1.26	1.05-1.43	y	50.3	37.5-62.5
PCB-89	1.60	1.32-1.78	y	54.9	37.5-62.5	PCB-134/143	1.24	1.05-1.43	y	106.9	75.0-125
PCB-90/101	1.61	1.32-1.78	y	105.4	75.0-125	PCB-133/142	1.26	1.05-1.43	y	102.6	75.0-125
PCB-113	1.57	1.32-1.78	y	49.5	37.5-62.5	PCB-131	1.26	1.05-1.43	y	49.9	37.5-62.5
PCB-99	1.66	1.32-1.78	y	56.0	37.5-62.5	PCB-146/165	1.25	1.05-1.43	y	106.1	75.0-125
PCB-119	1.61	1.32-1.78	y	54.2	37.5-62.5	PCB-132/161	1.30	1.05-1.43	y	106.3	75.0-125
PCB-108/112	1.63	1.32-1.78	y	108.9	75.0-125	PCB-153	1.19	1.05-1.43	y	54.9	37.5-62.5
PCB-83	1.61	1.32-1.78	y	54.5	37.5-62.5	PCB-168	1.25	1.05-1.43	y	53.4	37.5-62.5
PCB-97	1.65	1.32-1.78	y	53.6	37.5-62.5	PCB-141	1.26	1.05-1.43	y	52.6	37.5-62.5
PCB-86	1.59	1.32-1.78	y	53.4	37.5-62.5	PCB-137	1.23	1.05-1.43	y	51.0	37.5-62.5
PCB-87/117/125	1.61	1.32-1.78	y	157.3	112.5-225	PCB-130	1.29	1.05-1.43	y	53.6	37.5-62.5
PCB-111/115	1.58	1.32-1.78	y	102.0	75.0-125	PCB-138/163/164	1.26	1.05-1.43	y	162.9	112.5-225
PCB-85/116	1.63	1.32-1.78	y	109.6	75.0-125	PCB-158/160	1.25	1.05-1.43	y	106.8	75.0-125
PCB-120	1.67	1.32-1.78	y	52.6	37.5-62.5	PCB-129	1.27	1.05-1.43	y	51.6	37.5-62.5
PCB-110	1.58	1.32-1.78	y	55.3	37.5-62.5	PCB-166	1.28	1.05-1.43	y	53.0	37.5-62.5
PCB-82	1.60	1.32-1.78	y	56.6	37.5-62.5	PCB-159	1.27	1.05-1.43	y	53.5	37.5-62.5
PCB-124	1.54	1.32-1.78	y	55.5	37.5-62.5	PCB-128/162	1.26	1.05-1.43	y	107.5	75.0-125
PCB-107/109	1.62	1.32-1.78	y	107.1	75.0-125	PCB-167	1.26	1.05-1.43	y	52.4	37.5-62.5
PCB-123	1.59	1.32-1.78	y	54.5	37.5-62.5	PCB-156	1.28	1.05-1.43	y	53.8	37.5-62.5
PCB-106/118	1.62	1.32-1.78	y	106.8	75.0-125	PCB-157	1.27	1.05-1.43	y	53.7	37.5-62.5
PCB-114	1.63	1.32-1.78	y	56.8	37.5-62.5	PCB-169	1.26	1.05-1.43	y	52.4	37.5-62.5
PCB-122	1.59	1.32-1.78	y	54.1	37.5-62.5	PCB-188	1.07	0.89-1.21	y	53.2	37.5-62.5
PCB-105	1.60	1.32-1.78	y	57.7	37.5-62.5	PCB-184	1.06	0.89-1.21	y	53.6	37.5-62.5
PCB-127	1.65	1.32-1.78	y	56.3	37.5-62.5	PCB-179	1.06	0.89-1.21	y	50.9	37.5-62.5
PCB-126	1.61	1.32-1.78	y	57.5	37.5-62.5	PCB-176	1.05	0.89-1.21	y	50.9	37.5-62.5
PCB-155	1.30	1.05-1.43	y	52.4	37.5-62.5	PCB-186	1.04	0.89-1.21	y	53.1	37.5-62.5
PCB-150	1.30	1.05-1.43	y	51.6	37.5-62.5	PCB-178	1.06	0.89-1.21	y	51.8	37.5-62.5
PCB-152	1.26	1.05-1.43	y	50.2	37.5-62.5	PCB-175	1.02	0.89-1.21	y	51.3	37.5-62.5
PCB-145	1.26	1.05-1.43	y	49.9	37.5-62.5	PCB-182/187	1.04	0.89-1.21	y	103.9	75.0-125
PCB-136	1.38	1.05-1.43	y	50.0	37.5-62.5	PCB-183	1.07	0.89-1.21	y	50.7	37.5-62.5
PCB-148	1.14	1.05-1.43	y	53.2	37.5-62.5	PCB-185	1.02	0.89-1.21	y	47.8	37.5-62.5
PCB-154	1.25	1.05-1.43	y	54.3	37.5-62.5	PCB-174	1.07	0.89-1.21	y	50.5	37.5-62.5
PCB-151	1.32	1.05-1.43	y	50.4	37.5-62.5	PCB-181	1.07	0.89-1.21	y	46.2	37.5-62.5
PCB-135	1.27	1.05-1.43	y	48.8	37.5-62.5	PCB-177	1.06	0.89-1.21	y	49.4	37.5-62.5
PCB-144	1.28	1.05-1.43	y	49.8	37.5-62.5	PCB-171	1.09	0.89-1.21	y	50.2	37.5-62.5
PCB-147	1.27	1.05-1.43	y	51.0	37.5-62.5	PCB-173	1.05	0.89-1.21	y	48.1	37.5-62.5
PCB-139/149	1.30	1.05-1.43	y	103.4	75.0-125	PCB-172	1.05	0.89-1.21	y	50.6	37.5-62.5

Analyst: DMS

Date: 12/26/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141226E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141226E1 S#1 Analysis Date: 26-DEC-14 Time: 11:22:34

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-192	1.06	0.89-1.21	y	51.2	37.5-62.5
PCB-180	1.05	0.89-1.21	y	51.1	37.5-62.5
PCB-193	1.07	0.89-1.21	y	52.7	37.5-62.5
PCB-191	1.06	0.89-1.21	y	52.5	37.5-62.5
PCB-170	1.04	0.89-1.21	y	55.1	37.5-62.5
PCB-190	1.07	0.89-1.21	y	55.3	37.5-62.5
PCB-189	1.09	0.89-1.21	y	53.9	37.5-62.5
PCB-202	0.90	0.76-1.02	y	49.6	37.5-62.5
PCB-201	0.87	0.76-1.02	y	48.7	37.5-62.5
PCB-204	0.93	0.76-1.02	y	50.9	37.5-62.5
PCB-197	0.91	0.76-1.02	y	51.7	37.5-62.5
PCB-200	0.89	0.76-1.02	y	53.3	37.5-62.5
PCB-198	0.92	0.76-1.02	y	45.2	37.5-62.5
PCB-199	0.92	0.76-1.02	y	54.1	37.5-62.5
PCB-196/203	0.93	0.76-1.02	y	101.1	75.0-125
PCB-195	0.90	0.76-1.02	y	50.0	37.5-62.5
PCB-194	0.94	0.76-1.02	y	53.1	37.5-62.5
PCB-205	0.92	0.76-1.02	y	54.9	37.5-62.5
PCB-208	1.35	1.14-1.54	y	52.2	37.5-62.5
PCB-207	1.38	1.14-1.54	y	54.7	37.5-62.5
PCB-206	1.35	1.14-1.54	y	54.3	37.5-62.5
PCB-209	1.17	0.99-1.33	y	53.7	37.5-62.5

Analyst: DMS

Date: 12/26/14

LABELED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141226E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141226E1 S#1 Analysis Date: 26-DEC-14 Time: 11:22:34

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-1	3.25	2.66-3.60	y	116.3	50.0-145
13C-PCB-3	3.31	2.66-3.60	y	114.1	50.0-145
13C-PCB-4	1.61	1.33-1.79	y	108.4	50.0-145
13C-PCB-9	1.62	1.33-1.79	y	107.3	50.0-145
13C-PCB-11	1.61	1.33-1.79	y	101.0	50.0-145
13C-PCB-19	1.09	0.88-1.20	y	89.7	50.0-145
13C-PCB-32	1.08	0.88-1.20	y	90.1	50.0-145
13C-PCB-28	1.09	0.88-1.20	y	100.3	50.0-145
13C-PCB-37	1.08	0.88-1.20	y	92.5	50.0-145
13C-PCB-54	0.80	0.65-0.89	y	106.4	50.0-145
13C-PCB-52	0.81	0.65-0.89	y	99.3	50.0-145
13C-PCB-47	0.79	0.65-0.89	y	99.6	50.0-145
13C-PCB-70	0.79	0.65-0.89	y	98.5	50.0-145
13C-PCB-80	0.80	0.65-0.89	y	100.4	50.0-145
13C-PCB-81	0.80	0.65-0.89	y	96.7	50.0-145
13C-PCB-77	0.80	0.65-0.89	y	97.1	50.0-145
13C-PCB-104	1.61	1.32-1.78	y	99.3	50.0-145
13C-PCB-95	1.59	1.32-1.78	y	100.2	50.0-145
13C-PCB-101	1.56	1.32-1.78	y	100.0	50.0-145
13C-PCB-97	1.65	1.32-1.78	y	101.1	50.0-145
13C-PCB-123	1.56	1.32-1.78	y	100.0	50.0-145
13C-PCB-118	1.60	1.32-1.78	y	102.3	50.0-145
13C-PCB-114	1.64	1.32-1.78	y	114.2	50.0-145
13C-PCB-105	1.64	1.32-1.78	y	115.9	50.0-145
13C-PCB-127	1.64	1.32-1.78	y	115.2	50.0-145
13C-PCB-126	1.68	1.32-1.78	y	112.5	50.0-145
13C-PCB-155	1.26	1.05-1.43	y	99.2	50.0-145
13C-PCB-153	1.32	1.05-1.43	y	102.0	50.0-145
13C-PCB-141	1.29	1.05-1.43	y	101.5	50.0-145
13C-PCB-138	1.26	1.05-1.43	y	102.6	50.0-145
13C-PCB-159	1.30	1.05-1.43	y	99.5	50.0-145
13C-PCB-167	1.26	1.05-1.43	y	101.4	50.0-145
13C-PCB-156	1.33	1.05-1.43	y	97.2	50.0-145
13C-PCB-157	1.37	1.05-1.43	y	99.4	50.0-145

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-169	1.30	1.05-1.43	y	103.6	50 - 145
13C-PCB-188	0.49	0.38-0.52	y	96.7	50 - 145
13C-PCB-180	0.45	0.38-0.52	y	99.1	50 - 145
13C-PCB-170	0.49	0.38-0.52	y	91.7	50 - 145
13C-PCB-189	0.45	0.38-0.52	y	90.3	50 - 145
13C-PCB-202	0.96	0.76-1.02	y	93.7	50 - 145
13C-PCB-194	0.95	0.76-1.02	y	99.7	50 - 145
13C-PCB-208	0.78	0.65-0.89	y	83.7	50 - 145
13C-PCB-206	0.79	0.65-0.89	y	93.1	50 - 145
13C-PCB-209	1.19	0.99-1.33	y	101.0	50 - 145

CRS vs. RS

13C-PCB-79	0.78	0.65-0.89	y	100.3	75 - 125
13C-PCB-178	0.47	0.38-0.52	y	99.9	75 - 125

Analyst: DMS

Date: 12/26/14

Client ID: PCB CS3 14L2401 Filename: 141226E1 S:1 Acq:26-DEC-14 11:22:34 ConCal: ST141226E1-1
Lab ID: ST141226E1-1 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	4.60e+07	3.02	y	1.25	16:07	1.001	0.996	1.006	49.0610
	PCB-2	4.38e+07	3.05	y	1.18	18:30	0.988	0.983	0.993	48.4802
	PCB-3	4.57e+07	3.04	y	1.22	18:44	1.001	0.996	1.006	49.1032
	PCB-4/10	1.52e+08	1.64	y	1.55	20:06	1.003	0.998	1.008	227.901
	PCB-7/9	1.82e+08	1.64	y	1.27	21:52	0.868	0.865	0.873	224.470
	PCB-6	8.64e+07	1.64	y	1.26	22:31	0.893	0.890	0.899	107.139
	PCB-5/8	1.77e+08	1.64	y	1.23	22:56	0.910	0.906	0.916	224.785
	PCB-14	9.68e+07	1.65	y	1.23	24:02	0.954	0.949	0.959	114.906
	PCB-11	8.99e+07	1.65	y	1.16	25:13	1.001	0.996	1.006	113.468
	PCB-12/13	1.70e+08	1.65	y	1.10	25:37	1.017	1.010	1.020	226.181
	PCB-15	9.24e+07	1.65	y	1.21	25:55	1.028	1.024	1.034	111.876
	PCB-19	2.32e+07	1.09	y	1.30	24:13	1.001	0.996	1.006	51.9110
	PCB-30	3.31e+07	1.09	y	1.83	25:06	1.038	1.032	1.042	52.4544
	PCB-18	2.34e+07	1.08	y	0.86	25:51	0.954	0.949	0.959	51.3106
	PCB-17	2.45e+07	1.08	y	0.90	26:01	0.960	0.955	0.965	51.3844
	PCB-24/27	6.52e+07	1.08	y	1.18	26:36	0.981	0.976	0.986	104.575
-	PCB-16/32	5.58e+07	1.08	y	1.03	27:06	1.000	0.995	1.005	102.232
-	PCB-34	4.24e+07	1.07	y	1.26	27:54	0.960	0.956	0.966	57.9144
	PCB-23	3.66e+07	1.09	y	1.31	28:00	0.964	0.959	0.969	48.0997
	PCB-29	4.00e+07	1.07	y	1.33	28:15	0.972	0.967	0.977	51.8619
	PCB-26	3.84e+07	1.07	y	1.29	28:27	0.979	0.974	0.984	51.1481
	PCB-25	4.00e+07	1.07	y	1.34	28:36	0.984	0.980	0.990	51.2350
	PCB-31	4.02e+07	1.06	y	1.42	28:58	0.997	0.992	1.002	48.7304
	PCB-28	4.36e+07	1.08	y	1.38	29:04	1.000	0.996	1.006	54.5299
	PCB-20/21/33	1.16e+08	1.07	y	1.31	29:41	1.022	1.017	1.027	152.380
	PCB-22	4.03e+07	1.07	y	1.32	30:07	1.037	1.032	1.042	52.5278
	PCB-36	3.75e+07	1.07	y	1.38	30:44	0.934	0.929	0.939	54.3345
	PCB-39	3.83e+07	1.06	y	1.42	31:12	0.948	0.943	0.953	53.7951
	PCB-38	3.79e+07	1.06	y	1.35	31:59	0.971	0.967	0.976	55.7631
	PCB-35	3.64e+07	1.05	y	1.38	32:29	0.987	0.982	0.992	52.7481
	PCB-37	3.66e+07	1.06	y	1.39	32:55	1.000	0.996	1.006	52.4316
	PCB-54	2.59e+07	0.79	y	1.20	27:57	1.001	0.996	1.006	50.5271
	PCB-50	2.01e+07	0.77	y	0.97	29:07	1.042	1.037	1.047	48.4145
	PCB-53	2.00e+07	0.81	y	1.19	29:46	0.946	0.941	0.951	50.3694
	PCB-51	2.07e+07	0.80	y	1.15	30:06	0.957	0.952	0.962	53.8174
	PCB-45	1.65e+07	0.79	y	0.97	30:32	0.970	0.966	0.976	51.2166
	PCB-46	1.57e+07	0.81	y	0.95	31:01	0.986	0.982	0.992	49.5073

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	4.16e+07	0.79	y	1.28	31:29	1.001	0.996	1.006	97.5413
PCB-73	2.47e+07	0.78	y	1.37	31:36	1.004	1.000	1.010	54.0317
PCB-43/49	3.60e+07	0.80	y	1.11	31:46	1.010	1.005	1.015	97.0303
PCB-47	1.96e+07	0.79	y	1.13	31:59	1.000	0.996	1.006	49.1359
PCB-48/75	4.75e+07	0.79	y	1.30	32:05	1.004	0.999	1.009	103.567
PCB-65	2.51e+07	0.79	y	1.33	32:21	1.012	1.007	1.017	53.5466
PCB-62	2.13e+07	0.79	y	1.29	32:28	1.016	1.011	1.021	46.9003
PCB-44	1.62e+07	0.79	y	0.94	32:46	1.025	1.020	1.030	48.9585
PCB-42/59	4.24e+07	0.79	y	1.22	33:00	1.032	1.028	1.038	99.2307
PCB-41/64/71/72	9.37e+07	0.78	y	1.31	33:35	1.050	1.046	1.056	203.143
PCB-68	2.62e+07	0.79	y	1.49	33:50	1.058	1.054	1.064	50.2548
PCB-40	1.43e+07	0.78	y	0.82	34:04	1.066	1.061	1.071	49.7899
PCB-57	2.50e+07	0.80	y	1.11	34:25	0.970	0.965	0.975	50.9394
PCB-67	2.23e+07	0.78	y	1.07	34:43	0.979	0.974	0.984	47.1795
PCB-58	2.45e+07	0.80	y	1.10	34:50	0.982	0.977	0.987	50.4214
PCB-63	2.44e+07	0.76	y	1.12	34:59	0.986	0.982	0.992	49.5894
PCB-74	2.72e+07	0.79	y	1.20	35:16	0.994	0.990	1.000	51.3047
PCB-61/70	4.83e+07	0.79	y	1.08	35:28	1.000	0.994	1.004	101.519
PCB-76/66	5.17e+07	0.80	y	1.14	35:40	1.005	1.001	1.011	103.138
PCB-80	2.92e+07	0.80	y	1.28	35:54	1.000	0.996	1.006	49.9682
PCB-55	2.48e+07	0.81	y	1.11	36:13	1.009	1.005	1.015	48.6946
PCB-56/60	4.99e+07	0.80	y	1.09	36:43	1.023	1.018	1.028	100.312
PCB-79	2.52e+07	0.80	y	1.12	37:47	1.053	1.048	1.058	48.9897
PCB-78	2.51e+07	0.78	y	1.24	38:28	0.986	0.982	0.992	52.7855
PCB-81	2.76e+07	0.77	y	1.38	39:00	1.000	0.995	1.005	52.0736
PCB-77	2.63e+07	0.80	y	1.21	39:35	1.000	0.995	1.005	53.0114
PCB-104	1.80e+07	1.63	y	1.26	32:38	1.000	0.996	1.006	53.5354
PCB-96	1.63e+07	1.60	y	1.09	33:53	1.039	1.034	1.044	55.7688
PCB-103	1.35e+07	1.57	y	0.93	34:26	1.056	1.050	1.060	54.3848
PCB-100	1.43e+07	1.60	y	1.00	34:47	1.066	1.061	1.071	53.5569
PCB-94	1.18e+07	1.61	y	1.11	35:15	0.985	0.981	0.991	53.0209
PCB-95/98/102	3.96e+07	1.60	y	1.21	35:45	0.999	0.994	1.004	161.943
PCB-93	1.16e+07	1.65	y	1.13	35:53	1.003	0.998	1.008	50.8371
PCB-88/91	2.49e+07	1.58	y	1.02	36:10	1.011	1.006	1.016	121.372
PCB-121	1.67e+07	1.63	y	1.90	36:17	1.014	1.009	1.019	43.6647
PCB-84/92	2.36e+07	1.62	y	1.05	37:05	0.990	0.986	0.996	105.573
PCB-89	1.18e+07	1.60	y	1.02	37:17	0.996	0.991	1.001	54.8951

RL: MONO, TRI - DECA: ~~—~~

RL: DI : ~~—~~

Integrations by Analyst: DMS Date: 12/26/14

Reviewed by Analyst: CJ Date: 12/29/14

Client ID: PCB CS3 14L2401 Filename: 141226E1 S:1 Acq:26-DEC-14 11:22:34 ConCal: ST141226E1-1
Lab ID: ST141226E1-1 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	2.66e+07	1.61	y	1.19	37:28	1.000	0.996	1.006	105.435
	PCB-113	1.42e+07	1.57	y	1.35	37:42	1.007	1.002	1.012	49.4509
	PCB-99	1.53e+07	1.66	y	1.29	37:47	1.009	1.005	1.015	55.9738
	PCB-119	1.76e+07	1.61	y	1.72	38:16	0.987	0.982	0.992	54.2424
	PCB-108/112	2.64e+07	1.63	y	1.29	38:25	0.991	0.986	0.996	108.901
	PCB-83	1.56e+07	1.61	y	1.52	38:34	0.995	0.991	1.001	54.5003
	PCB-97	1.26e+07	1.65	y	1.25	38:47	1.001	0.996	1.006	53.5763
	PCB-86	1.03e+07	1.59	y	1.02	38:55	1.004	1.000	1.010	53.3577
	B-87/117/125	4.61e+07	1.61	y	1.56	39:02	1.007	1.002	1.012	157.300
	PCB-111/115	3.36e+07	1.58	y	1.75	39:12	1.011	1.007	1.017	102.017
	PCB-85/116	2.69e+07	1.63	y	1.30	39:20	1.015	1.010	1.020	109.584
	PCB-120	1.76e+07	1.67	y	1.78	39:34	1.021	1.016	1.026	52.6249
	PCB-110	1.75e+07	1.58	y	1.68	39:42	1.024	1.020	1.030	55.3219
	PCB-82	1.07e+07	1.60	y	0.74	40:20	0.976	0.972	0.982	56.5594
	PCB-124	1.88e+07	1.54	y	1.32	41:01	0.993	0.988	0.998	55.5492
	PCB-107/109	3.35e+07	1.62	y	1.22	41:10	0.996	0.991	1.001	107.112
	PCB-123	1.70e+07	1.59	y	1.22	41:20	1.000	0.995	1.005	54.4885
-	PCB-106/118	3.56e+07	1.62	y	1.22	41:31	1.000	0.996	1.006	106.792
-	PCB-114	2.78e+07	1.63	y	1.36	42:10	1.000	0.995	1.005	56.7522
	PCB-122	2.42e+07	1.59	y	1.24	42:18	1.004	0.999	1.009	54.1231
	PCB-105	2.79e+07	1.60	y	1.28	43:01	1.000	0.995	1.005	57.6649
	PCB-127	2.60e+07	1.65	y	1.14	43:22	1.001	0.995	1.005	56.3159
	PCB-126	2.53e+07	1.61	y	1.28	45:15	1.000	0.995	1.005	57.4797
	PCB-155	1.33e+07	1.30	y	1.14	37:01	1.001	0.966	1.006	52.3973
	PCB-150	1.22e+07	1.30	y	1.06	38:17	1.035	1.030	1.040	51.5963
	PCB-152	1.23e+07	1.26	y	1.10	38:45	1.048	1.043	1.053	50.1774
	PCB-145	1.22e+07	1.26	y	1.09	39:12	1.060	1.055	1.065	49.8712
	PCB-136	1.21e+07	1.38	y	1.08	39:32	1.068	1.064	1.074	50.0231
	PCB-148	8.79e+06	1.14	y	0.74	39:38	1.071	1.066	1.076	53.1982
	PCB-154	1.07e+07	1.25	y	0.88	40:07	1.084	1.079	1.089	54.2649
	PCB-151	9.10e+06	1.32	y	0.81	40:46	1.102	1.097	1.107	50.4409
	PCB-135	8.48e+06	1.27	y	0.78	40:58	1.108	1.101	1.113	48.8197
	PCB-144	9.10e+06	1.28	y	0.82	41:05	1.110	1.105	1.116	49.7949
	PCB-147	9.42e+06	1.27	y	0.83	41:13	1.114	1.011	1.120	50.9653
	PCB-139/149	1.95e+07	1.30	y	0.84	41:29	1.121	1.115	1.127	103.370
-	PCB-140	8.80e+06	1.26	y	0.79	41:39	1.126	1.120	1.132	50.3010
-	PCB-134/143	2.95e+07	1.24	y	0.93	42:05	0.975	0.970	0.980	106.881

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-133/142	2.89e+07	1.26	y	0.95	42:23	0.982	0.977	0.987	102.635
	PCB-131	1.36e+07	1.26	y	0.91	42:33	0.986	0.981	0.991	49.8732
	PCB-146/165	3.65e+07	1.25	y	1.16	42:46	0.991	0.986	0.996	106.102
	PCB-132/161	3.52e+07	1.30	y	1.11	43:01	0.996	0.992	1.002	106.266
	PCB-153	1.93e+07	1.19	y	1.18	43:11	1.000	0.995	1.005	54.9480
	PCB-168	2.18e+07	1.25	y	1.37	43:24	1.005	1.000	1.010	53.4064
	PCB-141	1.46e+07	1.26	y	0.97	43:55	1.000	0.996	1.005	52.6016
	PCB-137	1.56e+07	1.23	y	1.07	44:18	1.009	1.004	1.014	51.0443
	PCB-130	1.30e+07	1.29	y	0.85	44:24	1.011	1.007	1.017	53.5939
	PCB-138/163/164	5.61e+07	1.26	y	1.23	44:47	1.001	0.996	1.006	162.940
	PCB-158/160	3.87e+07	1.25	y	1.29	45:01	1.006	1.001	1.011	106.779
	PCB-129	1.34e+07	1.27	y	0.92	45:15	1.011	1.007	1.017	51.5618
	PCB-166	1.85e+07	1.28	y	1.12	45:43	0.993	0.988	0.998	53.0093
	PCB-159	1.95e+07	1.27	y	1.16	46:02	1.000	0.995	1.005	53.4771
	PCB-128/162	3.43e+07	1.26	y	1.02	46:20	1.007	1.002	1.012	107.467
	PCB-167	1.96e+07	1.26	y	1.06	46:43	1.000	0.995	1.005	52.4246
	PCB-156	2.02e+07	1.28	y	1.18	48:02	1.001	0.995	1.005	53.7928
	PCB-157	1.99e+07	1.27	y	1.08	48:17	1.000	0.995	1.005	53.6612
	PCB-169	1.92e+07	1.26	y	1.11	50:27	1.000	0.995	1.005	52.3884
	PCB-188	1.77e+07	1.07	y	1.40	42:49	1.001	0.995	1.005	53.2340
	PCB-184	1.57e+07	1.06	y	1.24	43:16	1.011	1.006	1.016	53.6054
	PCB-179	1.58e+07	1.06	y	1.30	44:03	1.029	1.024	1.034	50.8710
	PCB-176	1.65e+07	1.05	y	1.36	44:31	1.040	1.035	1.045	50.9379
	PCB-186	1.61e+07	1.04	y	1.28	45:07	1.054	1.049	1.059	53.0814
	PCB-178	1.15e+07	1.06	y	0.94	45:37	1.066	1.061	1.071	51.7635
	PCB-175	1.18e+07	1.02	y	0.97	45:57	1.074	1.069	1.079	51.2635
	PCB-182/187	2.50e+07	1.04	y	1.01	46:08	1.078	1.073	1.083	103.862
	PCB-183	1.30e+07	1.07	y	1.08	46:27	1.085	1.080	1.090	50.7129
	PCB-185	1.12e+07	1.02	y	1.34	47:06	0.956	0.951	0.961	47.8238
	PCB-174	1.18e+07	1.07	y	1.34	47:28	0.963	0.958	0.968	50.5171
	PCB-181	1.10e+07	1.07	y	1.36	47:35	0.965	0.961	0.971	46.2495
	PCB-177	1.07e+07	1.06	y	1.24	47:44	0.968	0.964	0.974	49.4231
	PCB-171	1.15e+07	1.09	y	1.31	48:02	0.974	0.970	0.980	50.1933
	PCB-173	9.76e+06	1.05	y	1.16	48:28	0.983	0.979	0.989	48.0578
	PCB-172	1.08e+07	1.05	y	1.22	48:54	0.992	0.988	0.998	50.6435
	PCB-192	1.37e+07	1.06	y	1.53	49:06	0.996	0.991	1.001	51.2023
	PCB-180	1.28e+07	1.05	y	1.43	49:19	1.000	0.995	1.005	51.0762

RL: MONO, TRI - DECA: ~~———~~

Integrations by Analyst: DMS

Date: 12/26/14

Client ID: PCB CS3 14L2401 Filename: 141226E1 S:1 Acq:26-DEC-14 11:22:34 ConCal: ST141226E1-1
Lab ID: ST141226E1-1 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	1.53e+07	1.07	y	1.65	49:31	1.004	0.999	1.009	52.6816
	PCB-191	1.54e+07	1.06	y	1.67	49:46	1.010	1.004	1.014	52.5322
	PCB-170	1.06e+07	1.04	y	1.50	50:49	1.000	0.995	1.005	55.0817
	PCB-190	1.44e+07	1.07	y	2.02	50:60	1.004	0.998	1.008	55.2871
	PCB-189	1.41e+07	1.09	y	1.54	52:21	1.000	0.995	1.005	53.9014
	PCB-202	1.06e+07	0.90	y	1.04	48:14	1.000	0.995	1.005	49.6379
	PCB-201	1.10e+07	0.87	y	1.10	48:43	1.010	1.006	1.016	48.7498
	PCB-204	1.04e+07	0.93	y	0.99	48:52	1.013	1.009	1.019	50.9134
	PCB-197	1.13e+07	0.91	y	1.07	49:10	1.020	1.015	1.025	51.6677
	PCB-200	1.11e+07	0.89	y	1.02	50:04	1.038	1.032	1.044	53.3109
	PCB-198	6.88e+06	0.92	y	0.74	51:25	1.066	1.058	1.068	45.2265
	PCB-199	8.07e+06	0.92	y	0.73	51:32	1.069	1.060	1.070	54.1053
-	PCB-196/203	1.60e+07	0.93	y	0.77	51:48	1.074	1.066	1.076	101.083
-	PCB-195	1.51e+07	0.90	y	1.20	52:59	0.984	0.979	0.989	50.0390
	PCB-194	1.66e+07	0.94	y	1.25	53:52	1.000	0.995	1.005	53.1109
	PCB-205	1.95e+07	0.92	y	1.41	54:08	1.005	1.001	1.011	54.8823
	PCB-208	1.47e+07	1.35	y	0.96	53:08	1.000	0.995	1.005	52.1614
	PCB-207	1.47e+07	1.38	y	0.92	53:27	1.006	1.001	1.011	54.6571
	PCB-206	1.07e+07	1.35	y	1.03	55:29	1.000	0.995	1.005	54.3183
	PCB-209	1.22e+07	1.17	y	1.18	56:51	1.000	0.995	1.005	53.6915

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	1.36e+08	3.02	y	16:07	1.22	146.644	
Total Di-PCB	1.05e+09	1.64	y	20:06	1.21	1353.03	
Total Tri-PCB	2.25e+08	1.09	y	24:13	1.16	413.868	
Total Tri-PCB	6.34e+08	1.07	y	27:54	1.35	850.146	Sum:1264.01
Total Tetra-PCB	9.68e+08	0.79	y	27:57	1.17	2138.23	
Total Penta-PCB	5.99e+08	1.63	y	32:38	1.21	2204.88	
Total Penta-PCB	1.40e+08	1.63	y	42:10	1.26	300.730	Sum:2505.61
Total Hexa-PCB	1.46e+08	1.30	y	37:01	0.92	715.220	
Total Hexa-PCB	4.96e+08	1.24	y	42:05	1.08	1512.31	Sum:2227.53
Total Hepta-PCB	3.19e+08	1.07	y	42:49	1.27	1244.14	
Total Octa-PCB	8.53e+07	0.90	y	48:14	0.92	454.695	
Total Octa-PCB	5.20e+07	0.90	y	52:59	1.29	160.459	Sum:615.154
Total Nona-PCB	4.06e+07	1.35	y	53:08	0.96	163.526	
Total Deca-PCB	1.22e+07	1.17	y	56:51	1.18	53.6915	

Total PCB Conc:11610.9534460

RL: MONO, TRI - DECA: ———

Integrations by Analyst: DMS

Date: 12/26/14

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	7.48e+07	3.25	y	0.89	16:06	0.622	0.622	0.628	116	116
13C-PCB-3	7.63e+07	3.31	y	0.93	18:43	0.722	0.721	0.729	114	114
13C-PCB-4	4.29e+07	1.61	y	0.55	20:03	0.774	0.772	0.780	108	108
13C-PCB-9	6.40e+07	1.62	y	0.83	21:50	0.843	0.840	0.848	107	107
13C-PCB-11	6.84e+07	1.61	y	0.94	25:12	0.973	0.968	0.978	101	101
13C-PCB-19	3.45e+07	1.09	y	0.53	24:11	0.934	0.929	0.939	89.7	89.7
13C-PCB-28	5.81e+07	1.09	y	0.89	29:03	1.004	0.999	1.009	100	100
13C-PCB-32	5.30e+07	1.08	y	0.81	27:06	1.046	1.041	1.051	90.1	90.1
13C-PCB-37	5.02e+07	1.08	y	0.83	32:55	1.137	1.131	1.143	92.5	92.5
13C-PCB-47	3.51e+07	0.79	y	0.74	31:58	0.871	0.867	0.875	99.6	99.6
13C-PCB-52	3.33e+07	0.81	y	0.71	31:28	0.857	0.853	0.861	99.3	99.3
13C-PCB-54	4.29e+07	0.80	y	0.85	27:56	0.761	0.758	0.766	106	106
13C-PCB-70	4.41e+07	0.79	y	0.94	35:29	0.966	0.961	0.971	98.5	98.5
13C-PCB-77	4.11e+07	0.80	y	0.89	39:35	1.078	1.073	1.083	97.1	97.1
13C-PCB-80	4.58e+07	0.80	y	0.96	35:54	0.978	0.972	0.982	100	100
13C-PCB-81	3.84e+07	0.80	y	0.84	38:60	1.062	1.057	1.067	96.7	96.7
13C-PCB-95	2.01e+07	1.59	y	0.74	35:47	0.913	0.908	0.918	100	100
13C-PCB-97	1.88e+07	1.65	y	0.69	38:45	0.989	0.984	0.994	101	101
13C-PCB-101	2.12e+07	1.56	y	0.79	37:27	0.956	0.951	0.961	100	100
13C-PCB-104	2.67e+07	1.61	y	1.00	32:37	0.832	0.829	0.837	99.3	99.3
13C-PCB-105	3.76e+07	1.64	y	1.24	43:01	0.929	0.924	0.934	116	116
13C-PCB-114	3.62e+07	1.64	y	1.21	42:09	0.910	0.905	0.915	114	114
13C-PCB-118	2.72e+07	1.60	y	0.98	41:30	1.059	1.054	1.064	102	102
13C-PCB-123	2.56e+07	1.56	y	0.95	41:19	1.054	1.049	1.059	100	100
13C-PCB-126	3.43e+07	1.68	y	1.16	45:15	0.977	0.972	0.982	113	113
13C-PCB-127	4.06e+07	1.64	y	1.34	43:21	0.936	0.931	0.941	115	115
13C-PCB-138	2.81e+07	1.26	y	1.04	44:45	0.966	0.961	0.971	103	103
13C-PCB-141	2.85e+07	1.29	y	1.07	43:54	0.948	0.943	0.953	102	102
13C-PCB-153	2.98e+07	1.32	y	1.11	43:10	0.932	0.927	0.937	102	102
13C-PCB-155	2.23e+07	1.26	y	0.83	36:60	0.944	0.939	0.949	99.2	99.2
13C-PCB-156	3.18e+07	1.33	y	1.24	48:00	1.037	1.032	1.042	97.2	97.2
13C-PCB-157	3.42e+07	1.37	y	1.31	48:16	1.043	1.037	1.047	99.4	99.4
13C-PCB-159	3.13e+07	1.30	y	1.20	46:02	0.994	0.989	0.999	99.5	99.5
13C-PCB-167	3.51e+07	1.26	y	1.32	46:43	1.009	1.004	1.014	101	101
13C-PCB-169	3.30e+07	1.30	y	1.22	50:26	1.089	1.082	1.092	104	104
13C-PCB-170	1.29e+07	0.49	y	0.54	50:49	1.097	1.089	1.101	91.7	91.7
13C-PCB-180	1.75e+07	0.45	y	0.67	49:17	1.065	1.059	1.069	99.1	99.1
13C-PCB-188	2.37e+07	0.49	y	0.94	42:48	0.924	0.919	0.929	96.7	96.7
13C-PCB-189	1.69e+07	0.45	y	0.72	52:19	1.130	1.120	1.132	90.3	90.3
13C-PCB-194	2.52e+07	0.95	y	0.81	53:51	0.995	0.990	1.000	99.7	99.7
13C-PCB-202	2.05e+07	0.96	y	0.83	48:13	1.041	1.036	1.046	93.7	93.7
13C-PCB-206	1.91e+07	0.79	y	0.66	55:28	1.025	1.021	1.031	93.1	93.1
13C-PCB-208	2.93e+07	0.78	y	1.12	53:07	0.981	0.976	0.986	83.7	83.7
13C-PCB-209	1.93e+07	1.19	y	0.61	56:51	1.050	1.044	1.054	101	101

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	4.78e+07	0.78	y	1.01	37:46	1.029	1.023	1.033	100	100
13C-PCB-178	1.65e+07	0.47	y	0.63	45:35	0.985	0.979	0.989	99.9	99.9

PS vs. IS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	4.78e+07	0.78	y	1.20	37:46	0.969	0.963	0.973	104	104
13C-PCB-178	1.65e+07	0.47	y	0.94	45:35	0.925	0.920	0.930	101	101

RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	7.23e+07	1.59	y	1.00	25:54	100
13C-PCB-31	6.52e+07	1.08	y	1.00	28:57	100
13C-PCB-60	4.74e+07	0.80	y	1.00	36:43	100
13C-PCB-111	2.70e+07	1.60	y	1.00	39:11	100
13C-PCB-128	2.62e+07	1.30	y	1.00	46:18	100
13C-PCB-205	3.12e+07	0.90	y	1.00	54:08	100

Analyst: DMS

Date: 12/26/14

Vista Analytical Laboratory - Injection Log Run file: 141226E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141226E1	1	ST141226E1-1	DMS	26-DEC-14	11:22:34	ST141226E1-1	NA
141226E1	2	B4L0127-BS1	DMS	26-DEC-14	12:27:01	ST141226E1-1	NA
141226E1	3	SOLVENT BLANK	DMS	26-DEC-14	13:31:29	ST141226E1-1	NA
141226E1	4	B4L0127-BLK1	DMS	26-DEC-14	14:35:58	ST141226E1-1	NA
141226E1	5	1400934-01	DMS	26-DEC-14	15:40:25	ST141226E1-1	NA
141226E1	6	1400934-02	DMS	26-DEC-14	16:44:54	ST141226E1-1	NA
141226E1	7	1400948-04	DMS	26-DEC-14	17:49:21	ST141226E1-1	NA
141226E1	8	1400949-01	DMS	26-DEC-14	18:53:50	ST141226E1-1	NA
141226E1	9	1400949-02	DMS	26-DEC-14	19:58:16	ST141226E1-1	NA
141226E1	10	1400921-01@20X	DMS	26-DEC-14	21:02:49	ST141226E1-1	NA
141226E1	11	1400921-02@20X	DMS	26-DEC-14	22:07:16	ST141226E1-1	NA
141226E1	12	SOLVENT BLANK	DMS	26-DEC-14	23:11:49	ST141226E1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST141226E1-1 End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	✓	NA
Concentration within range?	✓	
First and last eluters present?	N/A	
Retention Times within criteria?	DMJ 12/29/14	
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%?	N/A	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 12/29/14
Initials & Date

* *Ending standard criteria applicable to 8290 only.*

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Vista Analytical Laboratory
CCAL ID: ST141229F1-1
Initial Calibration Date: 11/13/2014
Instrument ID: VG-9
GC Column ID: DB-225
VER Data file name: 141229F1-3
Analysis Date: 29-Dec-14
Analysis Time: 06:53:24

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	0.79	0.65-0.89	NO	8.87	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: 12/29/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Vista Analytical Laboratory
CCAL ID: ST141229F1-1
Initial Calibration Date: 11/13/2014
Instrument ID: VG-9
GC Column ID: DB-225
VER Data file name: 141229F1-3
Analysis Date: 29-Dec-14
Analysis Time: 06:53:24

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	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: 12/29/14

Dataset: C:\MassLynx\Default.pro\Results\141229F1\141229F1_3.qld

Last Altered: Monday, December 29, 2014 08:50:17 Pacific Standard Time
Printed: Monday, December 29, 2014 08:51:31 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 24 Dec 2014 07:18:45
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 141229F1-3, Date: 29-Dec-2014, Time: 06:53:24, ID: ST141229F1-1 1613 CS3 14I1102, Description: 1613 CS3 14I1102

	# Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	2.57e4	0.79	NO	1.10	1.002	17.52	8.8699	88.9	0.183
2	2 13C-2,3,7,8-TCDF	2.63e5	0.79	NO	0.844	1.002	17.50	102.20	102	0.741
3	3 13C-1,2,3,4-TCDF	3.04e5	0.77	NO	1.00	1.002	15.23	99.801	100	0.625
4	4 13C-1,2,3,4-TCDD	2.27e5	0.79	NO		1.002	16.05			

CJS 12/29/14

Vista Analytical Laboratory VG-9

Dataset: Untitled

Last Altered: Monday, December 29, 2014 10:10:26 Pacific Standard Time
Printed: Monday, December 29, 2014 10:10:42 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 24 Dec 2014 07:18:45
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Compound name: 2,3,7,8-TCDF

	Name	ID	Acq.Date	Acq.Time
1	141229F1-1	CP141229F1-1 DB-225 CPSM	29-Dec-14	05:50:59
2	141229F1-2	SOLVENT BLANK	29-Dec-14	06:21:03
3	141229F1-3	ST141229F1-1 1613 CS3 14I1102	29-Dec-14	06:53:24
4	141229F1-4	SOLVENT BLANK	29-Dec-14	07:25:47
5	141229F1-5	1400948-01RE2 SC-OWS-05-20141211-S 3.7	29-Dec-14	07:58:07
6	141229F1-6	1400948-02RE2 SC-CB-35-20141211-S 1.85	29-Dec-14	08:30:30
7	141229F1-7	1400948-03RE2 SC-CB-24-20141211-S 2.43	29-Dec-14	09:02:52
8	141229F1-8	SOLVENT BLANK	29-Dec-14	09:35:11

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST141229F1-1 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:

Reviewed by: CP 12/09/14
Initials & Date

* *Ending standard criteria applicable to 8290 only.*

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-ท 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\141113F1\141113F1_CRV.qld

Last Altered: Friday, November 14, 2014 07:50:29 Pacific Standard Time
Printed: Friday, November 14, 2014 08:18:43 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 13 Nov 2014 15:04:53
Calibration: C:\MassLynx\Default.pro\Curvedb\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Compound name: 2,3,7,8-TCDF
Response Factor: 1.10023
RRF SD: 0.100726, Relative SD: 9.15499
Response type: Internal Std (Ref 2), Area * (IS Conc. / IS Area)
Curve type: RF

	#-Name	Std. Conc	RA	n/y	RT	Resp	IS Resp	Conc.	RRF
1	1 141113F1_2	0.250	0.76	NO	17.52	2.58e3	9.20e5	0.255	1.12
2	2 141113F1_3	0.500	0.88	NO	17.54	5.25e3	1.05e6	0.455	1.00
3	3 141113F1_4	2.00	0.76	NO	17.52	2.24e4	1.16e6	1.76	0.968
4	4 141113F1_5	40.0	0.78	NO	17.52	5.36e5	1.16e6	41.8	1.15
5	5 141113F1_6	200	0.80	NO	17.52	3.07e6	1.24e6	226	1.24
6	6 141113F1_7	10.0	0.86	NO	17.55	1.30e5	1.16e6	10.2	1.12

CG 11/14/14

11/14/14

Compound name: 13C-2,3,7,8-TCDF
Response Factor: 0.843843
RRF SD: 0.0230178, Relative SD: 2.72774
Response type: Internal Std (Ref 3), Area * (IS Conc. / IS Area)
Curve type: RF

	#-Name	Std. Conc	RA	n/y	RT	Resp	IS Resp	Conc.	RRF
1	1 141113F1_2	100	0.79	NO	17.51	9.20e5	1.11e6	98.2	0.829
2	2 141113F1_3	100	0.79	NO	17.51	1.05e6	1.28e6	97.4	0.822
3	3 141113F1_4	100	0.79	NO	17.51	1.16e6	1.37e6	99.6	0.840
4	4 141113F1_5	100	0.80	NO	17.51	1.16e6	1.31e6	105	0.885
5	5 141113F1_6	100	0.81	NO	17.51	1.24e6	1.45e6	101	0.853
6	6 141113F1_7	100	0.81	NO	17.52	1.16e6	1.39e6	98.8	0.833

Vista Analytical Laboratory VG-9

Dataset: C:\MassLynx\Default.pro\Results\141113F1\141113F1_CRV.qld

Last Altered: Friday, November 14, 2014 07:50:29 Pacific Standard Time
Printed: Friday, November 14, 2014 08:18:43 Pacific Standard Time

Compound name: 13C-1,2,3,4-TCDF
Response Factor: 1
RRF SD: 0, Relative SD: 0
Response type: Internal Std (Ref 3), Area * (IS Conc. / IS Area)
Curve type: RF

	#-Name	Std. Conc	RA	n/y	RT	Resp	IS Resp	Conc.	RRF
1	1 141113F1_2	100	0.81	NO	15.25	1.11e6	1.11e6	100	1.00
2	2 141113F1_3	100	0.81	NO	15.23	1.28e6	1.28e6	100	1.00
3	3 141113F1_4	100	0.80	NO	15.23	1.37e6	1.37e6	100	1.00
4	4 141113F1_5	100	0.80	NO	15.23	1.31e6	1.31e6	100	1.00
5	5 141113F1_6	100	0.82	NO	15.23	1.45e6	1.45e6	100	1.00
6	6 141113F1_7	100	0.81	NO	15.25	1.39e6	1.39e6	100	1.00

Compound name: 13C-1,2,3,4-TCDD
No Calibration
Response type: External Std, Area
Curve type: RF

	#-Name	Std. Conc	RA	n/y	RT	Resp	IS Resp	Conc.	RRF
1	1 141113F1_2	0.000	0.80	NO	16.00	7.79e5			0.000
2	2 141113F1_3	0.000	0.78	NO	16.00	9.07e5			0.000
3	3 141113F1_4	0.000	0.80	NO	16.00	9.36e5			0.000
4	4 141113F1_5	0.000	0.80	NO	16.00	9.46e5			0.000
5	5 141113F1_6	0.000	0.79	NO	16.00	1.03e6			0.000
6	6 141113F1_7	0.000	0.79	NO	16.00	9.83e5			0.000

Dataset: C:\MassLynx\Default.pro\Results\141113F1\141113F1_CRV.qld

Last Altered: Friday, November 14, 2014 07:50:29 Pacific Standard Time
Printed: Friday, November 14, 2014 08:16:25 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 13 Nov 2014 15:04:53
Calibration: C:\MassLynx\Default.pro\Curvedb\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 141113F1_7, Date: 13-Nov-2014, Time: 17:16:30, ID: ST141113F1-6 1613 CS3 14I1102, Description: 1613 CS3 14I1102

	#	Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1	2,3,7,8-TCDF	1.30e5	0.86	NO	1.10	1.000	17.55	10.185	102	0.217
2	2	13C-2,3,7,8-TCDF	1.16e6	0.81	NO	0.844	1.000	17.52	98.766	98.8	0.302
3	3	13C-1,2,3,4-TCDF	1.39e6	0.81	NO	1.00	1.000	15.25	100.00	100	0.255
4	4	13C-1,2,3,4-TCDD	9.83e5	0.79	NO		1.000	16.00			

CG 11/14/14

Vista Analytical Laboratory VG-9

Dataset: Untitled

Last Altered: Friday, November 14, 2014 07:58:55 Pacific Standard Time
Printed: Friday, November 14, 2014 08:07:25 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 13 Nov 2014 15:04:53
Calibration: C:\MassLynx\DEFAULT.PRO\CurveDB\11-13-TEST.cdb 14 Nov 2014 07:50:26

Compound name: 2,3,7,8-TCDF

	Name	ID	Acq.Date	Acq.Time
1	141113F1_1	CP141113F1-1 DB-225 CPSM	13-Nov-14	14:06:21
2	141113F1_2	ST141113F1-1 1613 CS0 14I1819	13-Nov-14	14:37:32
3	141113F1_3	ST141113F1-2 1613 CS1 14I1820	13-Nov-14	15:09:19
4	141113F1_4	ST141113F1-3 1613 CS2 14I1821	13-Nov-14	15:41:06
5	141113F1_5	ST141113F1-4 1613 CS4 14I1822	13-Nov-14	16:12:54
6	141113F1_6	ST141113F1-5 1613 CS5 14I1823	13-Nov-14	16:44:42
7	141113F1_7	ST141113F1-6 1613 CS3 14I1102	13-Nov-14	17:16:30
8	141113F1_8	SOLVENT BLANK	13-Nov-14	17:48:17
9	141113F1_9	SS141113F1-1 1613 SSS 13J3107	13-Nov-14	18:20:05
10	141113F1_10	SOLVENT BLANK	13-Nov-14	18:53:47
11	141113F1_11	1400819-01RE1 DP-1 CF 0.93853	13-Nov-14	19:23:48
12	141113F1_12	1400819-02RE1 RP-4 CF 0.95774	13-Nov-14	19:55:36
13	141113F1_13	1400824-02RE1 Secondary Sludge CF 19.78	13-Nov-14	20:27:24
14	141113F1_14	1400785-01RE1 DU1SU2 CF 29.92	13-Nov-14	20:59:12
15	141113F1_15	1400785-02RE1 DU1SU4 CF 31.78	13-Nov-14	21:31:00
16	141113F1_16	1400789-01RE1 DU1SU5 CF 33.89	13-Nov-14	22:02:48
17	141113F1_17	1400789-02RE1 DU2SU17 CF 30.06	13-Nov-14	22:34:35
18	141113F1_18	1400789-03RE1 DU2SU9 CF 29.99	13-Nov-14	23:06:23
19	141113F1_19	1400789-04RE1 DU2SU10 CF 30.04	13-Nov-14	23:38:10
20	141113F1_20	SOLVENT BLANK	14-Nov-14	00:09:58
21	141113F1_21	1400798-01RE1 DU2SU19 CF 31.55	14-Nov-14	00:43:33
22	141113F1_22	1400798-02RE1 DU2SU28 CF 33.04	14-Nov-14	01:13:41
23	141113F1_23	1400798-03RE1 DU2SU36 CF 30.86	14-Nov-14	01:45:28
24	141113F1_24	1400798-04RE1 DU2SU30-1 CF 32.41	14-Nov-14	02:17:16
25	141113F1_25	1400798-05RE1 DU2SU30-2 CF 33.37	14-Nov-14	02:49:03
26	141113F1_26	1400798-06RE1 DU2SU30-3 CF 30.24	14-Nov-14	03:20:52
27	141113F1_27	SOLVENT BLANK	14-Nov-14	03:52:41
28	141113F1_28	SOLVENT BLANK	14-Nov-14	04:24:29
29	141113F1_29	SOLVENT BLANK	14-Nov-14	04:56:17

Dataset: C:\MassLynx\Default.pro\Results\141113F1\141113F1_9.qld

Last Altered: Friday, November 14, 2014 08:14:45 Pacific Standard Time
Printed: Friday, November 14, 2014 08:22:47 Pacific Standard Time

Method: C:\MassLynx\DEFAULT.PRO\MethDB\tcdf.mdb 13 Nov 2014 15:04:53
Calibration: C:\MassLynx\Default.pro\Curvedb\db-225_1613TCDFvg9-11-13-14.cdb 14 Nov 2014 07:50:26

Name: 141113F1_9, Date: 13-Nov-2014, Time: 18:20:05, ID: SS141113F1-1 1613 SSS 13J3107, Description: 1613 SSS 13J3107

	#-Name	Resp	RA	n/y	RRF M...	wt/vol	RT	Conc.	%Rec	DL
1	1 2,3,7,8-TCDF	1.48e5	0.81	NO	1.10	1.000	17.54	8.9493	89.5	0.0832
2	2 13C-2,3,7,8-TCDF	1.51e6	0.81	NO	0.844	1.000	17.52	109.62	110	0.171
3	3 13C-1,2,3,4-TCDF	1.63e6	0.81	NO	1.00	1.000	15.25	100.00	100	0.145
4	4 13C-1,2,3,4-TCDD	1.29e6	0.78	NO		1.000	16.00			

11/14/14

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

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PCB-48/75	1.30	10.70 %	1.52	1.28	1.33	1.31	1.08	1.30
PCB-65	1.33	13.12 %	1.67	1.30	1.28	1.32	1.15	1.30
PCB-62	1.29	10.74 %	1.39	1.40	1.30	1.38	1.03	1.25
PCB-44	0.94	10.79 %	1.08	0.90	0.98	0.98	0.78	0.92
PCB-42/59	1.22	9.45 %	1.36	1.25	1.21	1.26	1.01	1.21
PCB-41/64/71/72	1.31	8.83 %	1.48	1.32	1.28	1.35	1.12	1.33
PCB-68	1.49	9.40 %	1.63	1.59	1.48	1.51	1.23	1.46
PCB-40	0.82	12.75 %	0.99	0.83	0.82	0.83	0.67	0.78
PCB-57	1.11	10.20 %	1.26	1.18	1.11	1.15	0.92	1.07
PCB-67	1.07	9.89 %	1.05	1.20	1.12	1.15	0.90	1.03
PCB-58	1.10	11.05 %	1.29	1.13	1.12	1.09	0.91	1.07

PCB-63	1.12	7.49 %	1.17	1.17	1.14	1.16	0.95	1.12
PCB-74	1.20	8.89 %	1.31	1.27	1.22	1.25	1.00	1.18
PCB-61/70	1.08	8.22 %	1.18	1.13	1.08	1.10	0.92	1.06
PCB-76/66	1.14	10.54 %	1.31	1.18	1.12	1.17	0.94	1.10
PCB-80	1.28	9.96 %	1.46	1.33	1.28	1.28	1.07	1.24
PCB-55	1.11	7.19 %	1.16	1.17	1.10	1.14	0.96	1.12
PCB-56/60	1.09	10.58 %	1.26	1.12	1.07	1.09	0.91	1.07
PCB-79	1.12	8.90 %	1.26	1.11	1.12	1.15	0.95	1.13
PCB-78	1.24	11.08 %	1.43	1.32	1.20	1.27	1.02	1.18
PCB-81	1.38	9.94 %	1.51	1.50	1.41	1.41	1.14	1.31
PCB-77	1.21	8.98 %	1.33	1.26	1.22	1.25	1.02	1.17
PCB-104	1.26	10.21 %	1.42	1.31	1.28	1.27	1.03	1.22
PCB-96	1.09	9.49 %	1.24	1.12	1.08	1.10	0.92	1.10
PCB-103	0.93	8.17 %	1.00	0.98	0.89	0.95	0.80	0.98
PCB-100	1.00	7.45 %	1.03	1.08	0.97	1.01	0.87	1.05
PCB-94	1.11	11.35 %	1.31	1.11	1.11	1.13	0.91	1.08
PCB-95/98/102	1.21	9.28 %	1.36	1.25	1.18	1.30	1.04	1.17
PCB-93	1.13	18.48 %	1.36	1.34	1.21	0.95	0.84	1.08
PCB-88/91	1.02	8.29 %	1.00	1.06	1.02	1.15	0.89	1.00
PCB-121	1.90	16.11 %	2.27	2.21	1.94	1.69	1.46	1.85
PCB-84/92	1.05	9.56 %	1.15	1.13	1.05	1.09	0.87	1.02
PCB-89	1.02	10.73 %	1.15	1.04	1.02	1.08	0.83	0.98
PCB-90/101	1.19	9.91 %	1.34	1.26	1.19	1.21	0.99	1.15
PCB-113	1.35	10.72 %	1.54	1.26	1.32	1.51	1.16	1.33
PCB-99	1.29	12.88 %	1.43	1.48	1.35	1.20	1.03	1.24
PCB-119	1.72	7.60 %	1.78	1.88	1.72	1.73	1.48	1.73
PCB-108/112	1.29	7.44 %	1.31	1.39	1.29	1.33	1.10	1.30
PCB-83	1.52	7.96 %	1.66	1.53	1.51	1.58	1.30	1.54
PCB-97	1.25	8.07 %	1.35	1.26	1.27	1.32	1.06	1.23
PCB-86	1.02	10.03 %	1.19	0.96	1.05	0.98	0.90	1.06
PCB-87/117/125	1.56	6.32 %	1.67	1.60	1.55	1.59	1.37	1.57
PCB-111/115	1.75	13.48 %	2.16	1.80	1.69	1.76	1.43	1.66
PCB-85/116	1.30	6.67 %	1.30	1.35	1.33	1.34	1.13	1.35
PCB-120	1.78	10.02 %	2.08	1.80	1.76	1.75	1.52	1.77
PCB-110	1.68	10.37 %	1.90	1.78	1.65	1.72	1.38	1.64
PCB-82	0.74	11.58 %	0.83	0.83	0.73	0.73	0.60	0.71
PCB-124	1.32	11.30 %	1.54	1.34	1.33	1.32	1.07	1.33
PCB-107/109	1.22	8.01 %	1.35	1.31	1.18	1.24	1.08	1.17
PCB-123	1.22	9.00 %	1.30	1.30	1.23	1.28	1.01	1.20
PCB-106/118	1.22	9.57 %	1.37	1.27	1.25	1.26	1.01	1.19
PCB-114	1.36	10.69 %	1.57	1.37	1.36	1.37	1.11	1.35
PCB-122	1.24	10.69 %	1.41	1.32	1.20	1.25	1.02	1.22
PCB-105	1.28	7.83 %	1.36	1.29	1.33	1.34	1.09	1.28
PCB-127	1.14	11.20 %	1.33	1.18	1.14	1.16	0.94	1.09
PCB-126	1.28	9.08 %	1.46	1.28	1.28	1.32	1.10	1.27
PCB-155	1.14	7.40 %	1.11	1.20	1.18	1.20	0.98	1.15
PCB-150	1.06	7.11 %	1.15	1.04	1.05	1.11	0.94	1.10
PCB-152	1.10	11.78 %	1.32	1.08	1.06	1.12	0.92	1.09
PCB-145	1.09	12.69 %	1.35	1.06	1.05	1.11	0.92	1.08
PCB-136	1.08	11.65 %	1.25	1.02	1.08	1.14	0.88	1.14

PCB-148	0.74	7.71 %	0.84	0.75	0.68	0.75	0.70	0.72
PCB-154	0.88	8.65 %	0.96	0.88	0.88	0.93	0.74	0.91
PCB-151	0.81	9.63 %	0.91	0.82	0.78	0.86	0.68	0.81
PCB-135	0.78	6.32 %	0.83	0.75	0.76	0.81	0.70	0.82
PCB-144	0.82	10.98 %	0.93	0.81	0.78	0.90	0.68	0.82
PCB 147	0.83	12.38 %	1.00	0.76	0.78	0.88	0.70	0.85
PCB-139/149	0.84	7.77 %	0.91	0.82	0.83	0.91	0.73	0.86
PCB-140	0.79	11.18 %	0.91	0.73	0.76	0.86	0.66	0.80
PCB-134/143	0.93	12.49 %	1.13	0.94	0.90	0.94	0.78	0.87
PCB-133/142	0.95	11.69 %	1.12	0.98	0.91	0.96	0.79	0.90
PCB-131	0.91	13.39 %	1.11	0.96	0.90	0.90	0.74	0.87

PCB-146/165	1.16	9.91 %	1.33	1.19	1.14	1.16	0.97	1.13
PCB-132/161	1.11	10.87 %	1.31	1.14	1.09	1.13	0.93	1.07
PCB-153	1.18	8.19 %	1.21	1.24	1.26	1.18	0.99	1.18
PCB-168	1.37	10.18 %	1.56	1.44	1.37	1.37	1.14	1.35
PCB-141	0.97	8.49 %	1.08	1.00	0.97	0.99	0.83	0.99
PCB-137	1.07	6.76 %	1.12	1.16	1.05	1.03	0.96	1.11
PCB-130	0.85	9.16 %	0.85	0.83	0.87	0.94	0.71	0.89
PCB-138/163/164	1.23	7.23 %	1.30	1.28	1.22	1.26	1.05	1.24
PCB-158/160	1.29	7.06 %	1.37	1.33	1.29	1.34	1.11	1.29
PCB-129	0.92	10.90 %	1.06	0.98	0.93	0.93	0.76	0.88
PCB-166	1.12	8.09 %	1.17	1.21	1.11	1.13	0.94	1.13
PCB-159	1.16	9.05 %	1.24	1.24	1.18	1.17	0.96	1.20
PCB-128/162	1.02	8.78 %	1.10	1.03	1.04	1.07	0.85	1.03
PCB-167	1.06	9.67 %	1.20	1.04	1.10	1.09	0.88	1.05
PCB-156	1.18	12.60 %	1.44	1.20	1.18	1.17	0.98	1.12
PCB-157	1.08	8.46 %	1.17	1.12	1.13	1.11	0.91	1.06
PCB-169	1.11	8.78 %	1.24	1.15	1.12	1.11	0.94	1.09
PCB-188	1.40	9.77 %	1.59	1.44	1.43	1.43	1.17	1.37
PCB-184	1.24	9.34 %	1.35	1.30	1.25	1.28	1.02	1.23
PCB-179	1.30	11.40 %	1.50	1.37	1.32	1.31	1.05	1.28
PCB-176	1.36	12.01 %	1.55	1.47	1.35	1.38	1.07	1.34
PCB-186	1.28	10.58 %	1.46	1.30	1.25	1.31	1.05	1.29
PCB-178	0.94	10.89 %	0.99	1.05	0.96	0.96	0.75	0.92
PCB-175	0.97	9.63 %	1.03	1.01	0.98	1.02	0.78	0.99
PCB-182/187	1.01	8.25 %	1.07	1.03	1.01	1.06	0.85	1.07
PCB-183	1.08	11.32 %	1.18	1.17	1.08	1.10	0.85	1.12
PCB-185	1.34	11.43 %	1.58	1.37	1.30	1.36	1.10	1.35
PCB-174	1.34	6.35 %	1.41	1.36	1.36	1.32	1.18	1.40
PCB-181	1.36	12.64 %	1.56	1.48	1.28	1.43	1.08	1.33
PCB-177	1.24	12.38 %	1.50	1.23	1.20	1.28	1.03	1.21
PCB-171	1.31	10.27 %	1.52	1.33	1.34	1.31	1.10	1.28
PCB-173	1.16	12.99 %	1.43	1.13	1.15	1.17	0.97	1.11
PCB-172	1.22	11.23 %	1.47	1.18	1.22	1.24	1.05	1.18
PCB-192	1.53	7.91 %	1.69	1.58	1.49	1.56	1.33	1.51
PCB-180	1.43	12.38 %	1.72	1.48	1.44	1.42	1.18	1.34
PCB-193	1.65	9.91 %	1.90	1.71	1.65	1.68	1.40	1.59
PCB-191	1.67	12.03 %	2.04	1.63	1.65	1.68	1.43	1.61
PCB-170	1.50	10.78 %	1.66	1.67	1.51	1.50	1.23	1.44
PCB-190	2.02	10.04 %	2.33	2.09	1.97	2.04	1.70	1.98
PCB-189	1.54	8.43 %	1.70	1.58	1.55	1.59	1.30	1.54
PCB-202	1.04	12.36 %	1.24	1.11	1.01	1.04	0.85	0.99
PCB-201	1.10	11.84 %	1.33	1.11	1.06	1.11	0.92	1.09
PCB-204	0.99	8.55 %	1.10	0.99	0.99	1.04	0.84	1.00
PCB-197	1.07	11.41 %	1.28	1.04	1.04	1.12	0.90	1.06
PCB-200	1.02	8.06 %	1.11	1.02	1.02	1.07	0.87	1.02
PCB-198	0.74	13.95 %	0.90	0.81	0.69	0.77	0.60	0.70
PCB-199	0.73	6.67 %	0.75	0.75	0.73	0.77	0.63	0.74
PCB-196/203	0.77	7.49 %	0.82	0.80	0.75	0.81	0.67	0.79
PCB-195	1.20	7.95 %	1.32	1.23	1.17	1.25	1.04	1.19
PCB-194	1.25	15.62 %	1.61	1.21	1.22	1.24	1.02	1.17

PCB-205	1.41	12.03 %	1.70	1.44	1.41	1.41	1.17	1.36
PCB-208	0.96	16.01 %	1.25	0.95	0.93	0.95	0.78	0.91
PCB-207	0.92	8.32 %	0.99	0.97	0.91	0.93	0.78	0.91
PCB-206	1.03	12.39 %	1.24	1.05	1.03	1.02	0.84	0.98
PCB-209	1.18	8.31 %	1.27	1.19	1.21	1.23	0.99	1.16
Total Mono-PCB	1.22	8.44 %	1.32	1.27	1.21	1.27	1.02	1.22
Total Di-PCB	1.21	8.72 %	1.35	1.24	1.21	1.25	1.03	1.19
Total Tri-PCB	1.16	11.17 %	1.36	1.20	1.15	1.18	0.96	1.12

Total Tri-PCB	1.35	11.56 %	1.58	1.38	1.36	1.39	1.11	1.26
Total Tetra-PCB	1.17	9.20 %	1.32	1.21	1.17	1.21	0.99	1.15
Total Penta-PCB	1.21	8.50 %	1.33	1.27	1.21	1.24	1.03	1.21
Total Penta-PCB	1.26	9.64 %	1.42	1.29	1.26	1.29	1.05	1.24
Total Hexa-PCB	0.92	8.86 %	1.03	0.90	0.89	0.96	0.78	0.93
Total Hexa-PCB	1.08	8.82 %	1.20	1.12	1.08	1.10	0.91	1.07
Total Hepta-PCB	1.27	10.02 %	1.44	1.31	1.27	1.30	1.05	1.26
Total Octa-PCB	0.92	9.46 %	1.04	0.94	0.89	0.95	0.77	0.91
Total Octa-PCB	1.29	11.68 %	1.54	1.29	1.26	1.30	1.08	1.24
Total Nona-PCB	0.96	11.85 %	1.15	0.98	0.94	0.96	0.79	0.93
Total Deca-PCB	1.18	8.31 %	1.27	1.19	1.21	1.23	0.99	1.16
13C-PCB-1	0.89	8.16 %	0.97	0.94	0.91	0.88	0.88	0.76
13C-PCB-3	0.93	4.27 %	0.98	0.94	0.94	0.93	0.91	0.86
13C-PCB-4	0.55	3.55 %	0.56	0.57	0.56	0.55	0.53	0.52
13C-PCB-9	0.83	2.91 %	0.84	0.85	0.84	0.82	0.80	0.79
13C-PCB-11	0.94	1.99 %	0.94	0.96	0.96	0.92	0.93	0.91
13C-PCB-19	0.53	4.01 %	0.55	0.55	0.55	0.53	0.52	0.50
13C-PCB-32	0.81	1.81 %	0.83	0.82	0.83	0.81	0.81	0.79
13C-PCB-28	0.89	8.44 %	0.79	0.91	0.83	0.85	0.96	0.98
13C-PCB-37	0.83	4.85 %	0.80	0.83	0.80	0.80	0.87	0.89
13C-PCB-54	0.85	5.64 %	0.86	0.89	0.91	0.84	0.83	0.77
13C-PCB-52	0.71	4.89 %	0.72	0.74	0.75	0.70	0.68	0.66
13C-PCB-47	0.74	4.31 %	0.74	0.78	0.78	0.73	0.73	0.70
13C-PCB-70	0.94	2.25 %	0.96	0.97	0.96	0.93	0.94	0.91
13C-PCB-80	0.96	2.89 %	0.96	1.00	0.99	0.95	0.95	0.92
13C-PCB-81	0.84	2.20 %	0.83	0.82	0.84	0.82	0.86	0.86
13C-PCB-77	0.89	1.89 %	0.88	0.87	0.90	0.88	0.91	0.91
13C-PCB-104	1.00	6.42 %	0.99	1.06	1.07	0.98	0.96	0.90
13C-PCB-95	0.74	2.70 %	0.74	0.78	0.75	0.73	0.74	0.72
13C-PCB-101	0.79	2.14 %	0.79	0.81	0.79	0.77	0.78	0.77
13C-PCB-97	0.69	1.41 %	0.70	0.69	0.70	0.69	0.69	0.67
13C-PCB-123	0.95	4.62 %	0.88	0.92	0.98	1.00	0.95	0.97
13C-PCB-118	0.98	3.93 %	0.92	0.95	0.99	1.03	1.01	0.99
13C-PCB-114	1.21	3.28 %	1.26	1.20	1.21	1.18	1.25	1.15
13C-PCB-105	1.24	3.05 %	1.26	1.24	1.25	1.20	1.29	1.19
13C-PCB-127	1.34	2.73 %	1.37	1.34	1.38	1.29	1.36	1.30
13C-PCB-126	1.16	2.72 %	1.16	1.17	1.20	1.12	1.19	1.14
13C-PCB-155	0.83	3.93 %	0.86	0.87	0.84	0.83	0.81	0.78
13C-PCB-153	1.11	2.81 %	1.14	1.11	1.13	1.10	1.15	1.06
13C-PCB-141	1.07	3.72 %	1.13	1.09	1.09	1.06	1.06	1.01
13C-PCB-138	1.04	2.24 %	1.06	1.05	1.06	1.02	1.06	1.01
13C-PCB-159	1.20	1.72 %	1.21	1.19	1.22	1.17	1.22	1.19
13C-PCB-167	1.32	1.88 %	1.32	1.33	1.36	1.29	1.32	1.31
13C-PCB-156	1.24	1.98 %	1.23	1.25	1.28	1.21	1.26	1.24
13C-PCB-157	1.31	1.61 %	1.31	1.31	1.34	1.28	1.33	1.29
13C-PCB-169	1.22	1.81 %	1.22	1.21	1.25	1.19	1.22	1.20
13C-PCB-188	0.94	3.81 %	0.97	0.93	0.93	0.93	0.98	0.88
13C-PCB-180	0.67	2.62 %	0.71	0.67	0.67	0.67	0.67	0.65
13C-PCB-170	0.54	1.49 %	0.55	0.54	0.54	0.53	0.54	0.52
13C-PCB-189	0.72	1.73 %	0.72	0.70	0.73	0.73	0.71	0.70
13C-PCB-202	0.83	2.31 %	0.86	0.83	0.83	0.84	0.84	0.80

13C-PCB-194	0.81	1.33 %	0.82	0.82	0.82	0.80	0.81	0.79
13C-PCB-208	1.12	2.11 %	1.10	1.14	1.13	1.14	1.14	1.09
13C-PCB-206	0.66	3.31 %	0.63	0.65	0.66	0.70	0.65	0.65
13C-PCB-209	0.61	2.62 %	0.59	0.60	0.62	0.64	0.61	0.62
13C-PCB-15	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-31	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-60	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-111	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-128	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-205	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00

13C-PCB-79	1.01	4.78 %	0.97	0.97	0.99	1.09	0.99	1.02
13C-PCB-178	0.63	4.30 %	0.62	0.61	0.62	0.69	0.62	0.62
13C-PCB-79	1.20	5.38 %	1.18	1.18	1.17	1.33	1.15	1.19
13C-PCB-178	0.94	5.01 %	0.88	0.91	0.92	1.02	0.93	0.96

Filename: 140620E1 S: 1 Acquired: 20-JUN-14 09:31:44
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-1 PCB CS0 13H1202

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	0.25	4.35e+05	2.82 y	16:14	-	1.37
2	Mono	PCB-2	0.25	4.10e+05	3.17 y	18:35	-	1.27
3	Mono	PCB-3	0.25	4.22e+05	2.92 y	18:49	-	1.31
4	Di	PCB-4/10	1.00	1.23e+06	1.61 y	20:10	-	1.67
5	Di	PCB-7/9	1.00	1.58e+06	1.70 y	21:56	-	1.43
6	Di	PCB-6	0.50	8.23e+05	1.36 y	22:35	-	1.49
7	Di	PCB-5/8	1.00	1.42e+06	1.76 y	23:00	-	1.29
8	Di	PCB-14	0.50	8.96e+05	1.59 y	24:05	-	1.45
9	Di	PCB-11	0.50	8.18e+05	1.39 y	25:16	-	1.33
10	Di	PCB-12/13	1.00	1.48e+06	1.71 y	25:40	-	1.20
11	Di	PCB-15	0.50	8.65e+05	1.43 y	25:58	-	1.40
12	Tri	PCB-19	0.25	2.94e+05	1.11 y	24:16	-	1.63
13	Tri	PCB-30	0.25	3.70e+05	0.89 y	25:09	-	2.06
14	Tri	PCB-18	0.25	2.78e+05	1.19 y	25:54	-	1.03
15	Tri	PCB-17	0.25	2.82e+05	0.94 y	26:04	-	1.04
16	Tri	PCB-24/27	0.50	7.21e+05	1.01 y	26:38	-	1.33
17	Tri	PCB-16/32	0.50	6.64e+05	1.06 y	27:09	-	1.23
18	Tri	PCB-34	0.25	3.70e+05	1.06 y	27:56	-	1.47
19	Tri	PCB-23	0.25	3.85e+05	1.19 y	28:02	-	1.54
20	Tri	PCB-29	0.25	4.36e+05	1.18 y	28:17	-	1.74
21	Tri	PCB-26	0.25	4.07e+05	0.97 y	28:29	-	1.62
22	Tri	PCB-25	0.25	4.10e+05	1.07 y	28:39	-	1.63
23	Tri	PCB-31	0.25	4.70e+05	1.15 y	29:00	-	1.87
24	Tri	PCB-28	0.25	4.03e+05	1.12 y	29:07	-	1.60
25	Tri	PCB-20/21/33	0.75	1.20e+06	1.11 y	29:43	-	1.59
26	Tri	PCB-22	0.25	3.76e+05	1.05 y	30:10	-	1.50
27	Tri	PCB-36	0.25	3.74e+05	1.12 y	30:47	-	1.47
28	Tri	PCB-39	0.25	3.99e+05	1.02 y	31:14	-	1.58
29	Tri	PCB-38	0.25	3.51e+05	1.20 y	32:00	-	1.39
30	Tri	PCB-35	0.25	3.85e+05	1.07 y	32:32	-	1.52
31	Tri	PCB-37	0.25	4.00e+05	0.99 y	32:58	-	1.58
32	Tetra	PCB-54	0.25	3.02e+05	0.84 y	27:59	-	1.29
33	Tetra	PCB-50	0.25	2.51e+05	0.85 y	29:09	-	1.08
34	Tetra	PCB-53	0.25	2.75e+05	0.70 y	29:47	-	1.42
35	Tetra	PCB-51	0.25	2.35e+05	0.68 y	30:08	-	1.21
36	Tetra	PCB-45	0.25	2.02e+05	0.82 y	30:34	-	1.04
37	Tetra	PCB-46	0.25	2.36e+05	0.75 y	31:04	-	1.21
38	Tetra	PCB-52/69	0.50	5.24e+05	0.82 y	31:32	-	1.35
39	Tetra	PCB-73	0.25	2.76e+05	0.88 y	31:39	-	1.42
40	Tetra	PCB-43/49	0.50	5.07e+05	0.72 y	31:49	-	1.30

41	Tetra	PCB-47	0.25	2.69e+05	0.78 y	32:00	-	1.34
42	Tetra	PCB-48/75	0.50	6.11e+05	0.75 y	32:07	-	1.52
43	Tetra	PCB-65	0.25	3.35e+05	0.81 y	32:23	-	1.67
44	Tetra	PCB-62	0.25	2.78e+05	0.66 y	32:30	-	1.39
45	Tetra	PCB-44	0.25	2.18e+05	0.67 y	32:48	-	1.08
46	Tetra	PCB-42/59	0.50	5.48e+05	0.72 y	33:02	-	1.36
47	Tetra	PCB-41/64/71/72	1.00	1.19e+06	0.71 y	33:37	-	1.48
48	Tetra	PCB-68	0.25	3.28e+05	0.80 y	33:52	-	1.63
49	Tetra	PCB-40	0.25	1.99e+05	0.82 y	34:05	-	0.99
50	Tetra	PCB-57	0.25	3.26e+05	0.66 y	34:27	-	1.26
51	Tetra	PCB-67	0.25	2.73e+05	0.74 y	34:45	-	1.05

52	Tetra	PCB-58	0.25	3.35e+05	0.79	y	34:52	-	1.29
53	Tetra	PCB-63	0.25	3.04e+05	0.78	y	35:01	-	1.17
54	Tetra	PCB-74	0.25	3.39e+05	0.76	y	35:18	-	1.31
55	Tetra	PCB-61/70	0.50	6.13e+05	0.75	y	35:29	-	1.18
56	Tetra	PCB-76/66	0.50	6.79e+05	0.81	y	35:42	-	1.31
57	Tetra	PCB-80	0.25	3.81e+05	0.73	y	35:56	-	1.46
58	Tetra	PCB-55	0.25	3.04e+05	0.81	y	36:16	-	1.16
59	Tetra	PCB-56/60	0.50	6.61e+05	0.75	y	36:46	-	1.26
60	Tetra	PCB-79	0.25	3.31e+05	0.86	y	37:48	-	1.26
61	Tetra	PCB-78	0.25	3.20e+05	0.80	y	38:30	-	1.43
62	Tetra	PCB-81	0.25	3.39e+05	0.75	y	39:02	-	1.51
63	Tetra	PCB-77	0.25	3.19e+05	0.68	y	39:38	-	1.33
64	Penta	PCB-104	0.25	2.39e+05	1.52	y	32:40	-	1.42
65	Penta	PCB-96	0.25	2.08e+05	1.62	y	33:56	-	1.24
66	Penta	PCB-103	0.25	1.68e+05	1.38	y	34:27	-	1.00
67	Penta	PCB-100	0.25	1.73e+05	1.61	y	34:49	-	1.03
68	Penta	PCB-94	0.25	1.64e+05	1.42	y	35:17	-	1.31
69	Penta	PCB-95/98/102	0.75	5.11e+05	1.73	y	35:45	-	1.36
70	Penta	PCB-93	0.25	1.71e+05	1.64	y	35:54	-	1.36
71	Penta	PCB-88/91	0.50	2.51e+05	1.76	y	36:10	-	1.00
72	Penta	PCB-121	0.25	2.86e+05	1.39	y	36:17	-	2.27
73	Penta	PCB-84/92	0.50	3.08e+05	1.45	y	37:07	-	1.15
74	Penta	PCB-89	0.25	1.54e+05	1.32	y	37:19	-	1.15
75	Penta	PCB-90/101	0.50	3.59e+05	1.43	y	37:29	-	1.34
76	Penta	PCB-113	0.25	2.06e+05	1.63	y	37:44	-	1.54
77	Penta	PCB-99	0.25	1.92e+05	1.34	y	37:49	-	1.43
78	Penta	PCB-119	0.25	2.11e+05	1.49	y	38:18	-	1.78
79	Penta	PCB-108/112	0.50	3.11e+05	1.68	y	38:27	-	1.31
80	Penta	PCB-83	0.25	1.96e+05	1.33	y	38:37	-	1.66
81	Penta	PCB-97	0.25	1.60e+05	1.69	y	38:48	-	1.35
82	Penta	PCB-86	0.25	1.41e+05	1.52	y	38:56	-	1.19
83	Penta	PCB-87/117/125	0.75	5.92e+05	1.55	y	39:04	-	1.67
84	Penta	PCB-111/115	0.50	5.11e+05	1.55	y	39:14	-	2.16
85	Penta	PCB-85/116	0.50	3.09e+05	1.69	y	39:22	-	1.30
86	Penta	PCB-120	0.25	2.47e+05	1.58	y	39:35	-	2.08
87	Penta	PCB-110	0.25	2.26e+05	1.34	y	39:44	-	1.90
88	Penta	PCB-82	0.25	1.23e+05	1.66	y	40:23	-	0.83
89	Penta	PCB-124	0.25	2.30e+05	1.74	y	41:02	-	1.54
90	Penta	PCB-107/109	0.50	4.02e+05	1.57	y	41:12	-	1.35
91	Penta	PCB-123	0.25	1.93e+05	1.66	y	41:22	-	1.30
92	Penta	PCB-106/118	0.50	4.29e+05	1.45	y	41:33	-	1.37
93	Penta	PCB-114	0.25	2.76e+05	1.56	y	42:12	-	1.57
94	Penta	PCB-122	0.25	2.48e+05	1.55	y	42:20	-	1.41
95	Penta	PCB-105	0.25	2.42e+05	1.73	y	43:04	-	1.36
96	Penta	PCB-127	0.25	2.56e+05	1.65	y	43:24	-	1.33
97	Penta	PCB-126	0.25	2.38e+05	1.59	y	45:17	-	1.46
98	Hexa	PCB-155	0.25	1.62e+05	1.06	y	37:03	-	1.11
99	Hexa	PCB-150	0.25	1.67e+05	1.15	y	38:19	-	1.15
100	Hexa	PCB-152	0.25	1.92e+05	1.35	y	38:47	-	1.32
101	Hexa	PCB-145	0.25	1.95e+05	1.19	y	39:13	-	1.35

102	Hexa	PCB-136	0.25	1.82e+05	1.10	y	39:34	-	1.25
103	Hexa	PCB-148	0.25	1.22e+05	1.18	y	39:39	-	0.84
104	Hexa	PCB-154	0.25	1.40e+05	1.29	y	40:09	-	0.96
105	Hexa	PCB-151	0.25	1.32e+05	1.38	y	40:47	-	0.91
106	Hexa	PCB-135	0.25	1.21e+05	1.08	y	40:59	-	0.83
107	Hexa	PCB-144	0.25	1.35e+05	1.36	y	41:07	-	0.93
108	Hexa	PCB-147	0.25	1.45e+05	1.24	y	41:14	-	1.00
109	Hexa	PCB-139/149	0.50	2.63e+05	1.42	y	41:30	-	0.91
110	Hexa	PCB-140	0.25	1.32e+05	1.26	y	41:41	-	0.91
111	Hexa	PCB-134/143	0.50	3.60e+05	1.29	y	42:07	-	1.13
112	Hexa	PCB-133/142	0.50	3.59e+05	1.27	y	42:25	-	1.12

113	Hexa	PCB-131	0.25	1.78e-05	1.22 y	42:35	-	1.11
114	Hexa	PCB-146/165	0.50	4.25e+05	1.38 y	42:48	-	1.33
115	Hexa	PCB-132/161	0.50	4.18e+05	1.33 y	43:03	-	1.31
116	Hexa	PCB-153	0.25	1.94e+05	1.33 y	43:13	-	1.21
117	Hexa	PCB-168	0.25	2.50e+05	1.10 y	43:25	-	1.56
118	Hexa	PCB-141	0.25	1.70e+05	1.16 y	43:57	-	1.08
119	Hexa	PCB-137	0.25	1.76e+05	1.34 y	44:20	-	1.12
120	Hexa	PCB-130	0.25	1.34e+05	1.41 y	44:26	-	0.85
121	Hexa	PCB-138/163/164	0.75	5.80e+05	1.22 y	44:49	-	1.30
122	Hexa	PCB-158/160	0.50	4.07e+05	1.26 y	45:04	-	1.37
123	Hexa	PCB-129	0.25	1.58e+05	1.11 y	45:18	-	1.06
124	Hexa	PCB-166	0.25	1.98e+05	1.26 y	45:46	-	1.17
125	Hexa	PCB-159	0.25	2.11e+05	1.18 y	46:04	-	1.24
126	Hexa	PCB-128/162	0.50	3.74e+05	1.26 y	46:22	-	1.10
127	Hexa	PCB-167	0.25	2.22e+05	1.41 y	46:46	-	1.20
128	Hexa	PCB-156	0.25	2.47e+05	1.24 y	48:03	-	1.44
129	Hexa	PCB-157	0.25	2.16e+05	1.36 y	48:20	-	1.17
130	Hexa	PCB-169	0.25	2.12e+05	1.07 y	50:23	-	1.24
131	Hepta	PCB-188	0.25	2.17e+05	1.02 y	42:51	-	1.59
132	Hepta	PCB-184	0.25	1.84e+05	0.94 y	43:18	-	1.35
133	Hepta	PCB-179	0.25	2.05e+05	1.05 y	44:04	-	1.50
134	Hepta	PCB-176	0.25	2.12e+05	1.04 y	44:32	-	1.55
135	Hepta	PCB-186	0.25	2.00e+05	0.97 y	45:09	-	1.46
136	Hepta	PCB-178	0.25	1.35e+05	0.98 y	45:38	-	0.99
137	Hepta	PCB-175	0.25	1.41e+05	1.08 y	45:58	-	1.03
138	Hepta	PCB-182/187	0.50	2.91e+05	0.90 y	46:09	-	1.07
139	Hepta	PCB-183	0.25	1.61e+05	0.95 y	46:29	-	1.18
140	Hepta	PCB-185	0.25	1.56e+05	0.97 y	47:08	-	1.58
141	Hepta	PCB-174	0.25	1.40e+05	1.03 y	47:30	-	1.41
142	Hepta	PCB-181	0.25	1.55e+05	1.17 y	47:37	-	1.56
143	Hepta	PCB-177	0.25	1.49e+05	1.09 y	47:46	-	1.50
144	Hepta	PCB-171	0.25	1.51e+05	0.93 y	48:05	-	1.52
145	Hepta	PCB-173	0.25	1.42e+05	0.96 y	48:30	-	1.43
146	Hepta	PCB-172	0.25	1.45e+05	1.13 y	48:55	-	1.47
147	Hepta	PCB-192	0.25	1.68e+05	0.90 y	49:08	-	1.69
148	Hepta	PCB-180	0.25	1.70e+05	0.97 y	49:20	-	1.72
149	Hepta	PCB-193	0.25	1.88e+05	1.13 y	49:31	-	1.90
150	Hepta	PCB-191	0.25	2.02e+05	1.05 y	49:45	-	2.04
151	Hepta	PCB-170	0.25	1.27e+05	1.19 y	50:44	-	1.66
152	Hepta	PCB-190	0.25	1.78e+05	0.91 y	50:55	-	2.33
153	Hepta	PCB-189	0.25	1.70e+05	1.20 y	52:11	-	1.70
154	Octa	PCB-202	0.25	1.49e+05	0.98 y	48:16	-	1.24
155	Octa	PCB-201	0.25	1.60e+05	1.02 y	48:45	-	1.33
156	Octa	PCB-204	0.25	1.33e+05	0.77 y	48:54	-	1.10
157	Octa	PCB-197	0.25	1.54e+05	0.92 y	49:13	-	1.28
158	Octa	PCB-200	0.25	1.34e+05	1.01 y	50:02	-	1.11
159	Octa	PCB-198	0.25	1.08e+05	0.88 y	51:19	-	0.90
160	Octa	PCB-199	0.25	9.08e+04	0.94 y	51:25	-	0.75
161	Octa	PCB-196/203	0.50	1.98e+05	0.81 y	51:40	-	0.82
162	Octa	PCB-195	0.25	1.39e+05	0.81 y	52:48	-	1.32

163	Octa		PCB-194	0.25	1.70e+05	0.85	y	53:40	- 1.61
164	Octa		PCB-205	0.25	1.79e+05	0.98	y	53:57	- 1.70
165	Nona		PCB-208	0.25	1.78e+05	1.17	y	52:57	- 1.25
166	Nona		PCB-207	0.25	1.41e+05	1.37	y	53:14	- 0.99
167	Nona		PCB-206	0.25	1.02e+05	1.41	y	55:20	- 1.24
168	Deca		PCB-209	0.25	9.69e+04	1.15	y	56:37	- 1.27
169	Tot ╗	Total Mono-PCB		0.00	-	-	n	-	- 1.32
170	Tot ╗	Total Di-PCB		0.00	-	-	n	-	- 1.35

171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.36
172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.58
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.32
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.33
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.42
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.03
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.20
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.44
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.04
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.54
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	1.15
182	Tot ╗	Total Deca-PCB	0.25	9.69e+04	1.15	y	56:37	-	1.27
183	Mono╗	13C-PCB-1	100.00	1.27e+08	3.28	y	16:13	-	0.97
184	Mono╗	13C-PCB-3	100.00	1.29e+08	3.32	y	18:48	-	0.98
185	Di-IS	13C-PCB-4	100.00	7.37e+07	1.59	y	20:07	-	0.56
186	Di-IS	13C-PCB-9	100.00	1.10e+08	1.57	y	21:53	-	0.84
187	Di-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

March 30, 2015

Vista Project I.D.: 1400948

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

Dear Ms. Nancarrow,

Enclosed are the additional results for the sample set received at Vista Analytical Laboratory on December 12, 2014. This sample set was analyzed on a standard turn-around time.

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

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

Sincerely,

Martha Maier
Laboratory Director

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

Vista Work Order No. 1400948
Case Narrative

Sample Condition on Receipt:

One effluent sample and three sediment samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology. The sediment samples were originally archived; they were authorized for analysis on March 9, 2015.

Analytical Notes:

EPA Method 1668C

The sediment 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 the preparation batch. No analytes were detected above the sample quantitation limit in the Method Blank. The OPR recoveries were within the method acceptance criteria.

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

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1400948-01	SC-OWS-05-20141211-S	11-Dec-14 10:10	12-Dec-14 08:53	Amber Glass, 250mL
1400948-02	SC-CB-35-20141211-S	11-Dec-14 13:00	12-Dec-14 08:53	Amber Glass, 250mL
1400948-03	SC-CB-24-20141211-S	11-Dec-14 14:00	12-Dec-14 08:53	Amber Glass, 250mL
1400948-04	SC-MH-20-20141211-S	11-Dec-14 15:00	12-Dec-14 08:53	Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L

Vista Project: 1400948

ANALYTICAL RESULTS

Sample ID: Method Blank

EPA Method 1668C

Matrix: Solid
Sample Size: 2.00 g

QC Batch: B5C0059
Date Extracted: 12-Mar-2015 12:37

Lab Sample: B5C0059-BLK1
Date Analyzed: 18-Mar-15 13:13 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	2.50	10.8		0.320	
PCB-2	ND	2.50	8.86		0.240	
PCB-3	ND	2.50	7.36		0.323	
PCB-4/10	ND	5.00	34.6		1.14	
PCB-5/8	ND	5.00	27.8		1.76	
PCB-6	ND	2.50	24.5		1.00	
PCB-7/9	ND	5.00	26.4		1.34	
PCB-11	ND	2.50	26.3		3.48	
PCB-12/13	ND	5.00	24.0		1.37	
PCB-14	ND	2.50	25.8		0.337	
PCB-15	ND	2.50	22.3		0.634	
PCB-16/32	ND	5.00	3.98		0.430	
PCB-17	ND	2.50	4.06		0.658	
PCB-18	ND	2.50	4.79		0.696	
PCB-19	ND	2.50	5.52		0.612	
PCB-20/21/33	ND	7.50	3.54		2.47	
PCB-22	ND	2.50	3.17		0.964	
PCB-23	ND	2.50	2.99		0.543	
PCB-24/27	ND	5.00	3.15		0.742	
PCB-25	ND	2.50	3.04		0.768	
PCB-26	ND	2.50	3.17		0.766	
PCB-28	ND	2.50	2.24		1.12	
PCB-29	ND	2.50	3.55		0.949	
PCB-30	ND	2.50	3.36		0.355	
PCB-31	ND	2.50	2.98		0.809	
PCB-34	ND	2.50	3.37		1.57	
PCB-35	ND	2.50	3.14		0.565	
PCB-36	ND	2.50	3.39		0.406	
PCB-37	ND	2.50	3.15		0.389	
PCB-38	ND	2.50	3.23		0.528	
PCB-39	ND	2.50	3.47		0.461	
PCB-40	ND	2.50	6.11		0.927	
PCB-41/64/71/72	ND	10.0	3.55		1.70	
PCB-42/59	ND	5.00	3.77		0.899	
PCB-43/49	ND	5.00	4.49		0.879	
PCB-44	ND	2.50	4.98		0.745	
PCB-45	ND	2.50	5.17		0.402	
PCB-46	ND	2.50	5.29		0.537	
PCB-47	ND	2.50	4.05		2.19	
PCB-48/75	ND	5.00	3.49		0.983	
PCB-50	ND	2.50	4.67		0.603	
PCB-51	ND	2.50	4.51		0.789	
PCB-52/69	ND	5.00	3.49		0.722	
PCB-53	ND	2.50	4.20		0.331	
PCB-54	ND	2.50	3.73		0.275	
PCB-55	ND	2.50	3.07		0.416	
PCB-56/60	ND	5.00	3.17		0.825	
PCB-57	ND	2.50	3.45		0.354	
PCB-58	ND	2.50	3.64		0.589	
PCB-61/70	ND	5.00	3.54		1.20	
PCB-62	ND	2.50	3.51		0.597	
PCB-63	ND	2.50	3.54		0.524	
PCB-65	ND	2.50	3.50		0.842	
PCB-66/76	ND	5.00	3.23		1.31	
PCB-67	ND	2.50	3.05		0.486	
PCB-68	ND	2.50	3.18		0.658	
PCB-73	ND	2.50	3.30		0.454	
PCB-74	ND	2.50	2.71		0.781	
PCB-77	ND	2.50	3.10		0.748	
PCB-78	ND	2.50	2.64		0.385	
PCB-79	ND	2.50	2.96		0.633	
PCB-80	ND	2.50	2.68		0.336	
PCB-81	ND	2.50	2.52		0.674	
PCB-82	ND	2.50	13.1		0.981	
PCB-83	ND	2.50	8.49		0.440	
PCB-84/92	ND	5.00	11.2		1.01	
PCB-85/116	ND	5.00	9.90		1.64	
PCB-86	ND	2.50	15.3		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: 2.00 g

QC Batch: B5C0059
Date Extracted: 12-Mar-2015 12:37

Lab Sample: B5C0059-BLK1
Date Analyzed: 18-Mar-15 13:13 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-87/117/125	ND	7.50	8.32		0.880	
PCB-88/91	ND	5.00	11.5		1.25	
PCB-89	ND	2.50	10.4		1.22	
PCB-90/101	ND	5.00	10.6		1.19	
PCB-93	ND	2.50	15.2		2.53	
PCB-94	ND	2.50	12.2		0.874	
PCB-95/98/102	ND	7.50	10.5		1.38	
PCB-96	ND	2.50	8.81		0.588	
PCB-97	ND	2.50	10.9		0.675	
PCB-99	ND	2.50	8.77		0.474	
PCB-100	ND	2.50	10.7		0.511	
PCB-103	ND	2.50	10.5		0.428	
PCB-104	ND	2.50	8.47		0.876	
PCB-105	ND	2.50	4.50		0.462	
PCB-106/118	ND	5.00	7.90		0.728	
PCB-107/109	ND	5.00	7.54		0.631	
PCB-108/112	ND	5.00	10.1		0.844	
PCB-110	ND	2.50	8.29		0.555	
PCB-111/115	ND	5.00	7.90		1.24	
PCB-113	ND	2.50	8.31		0.495	
PCB-114	ND	2.50	4.59		0.418	
PCB-119	ND	2.50	8.42		0.383	
PCB-120	ND	2.50	7.69		0.622	
PCB-121	ND	2.50	7.95		0.978	
PCB-122	ND	2.50	5.31		0.619	
PCB-123	ND	2.50	8.53		0.494	
PCB-124	ND	2.50	6.78		0.813	
PCB-126	ND	2.50	5.23		0.543	
PCB-127	ND	2.50	4.09		0.326	
PCB-128/162	ND	5.00	4.01		1.08	
PCB-129	ND	2.50	6.07		0.567	
PCB-130	ND	2.50	5.23		0.798	
PCB-131	ND	2.50	5.28		0.731	
PCB-132/161	ND	5.00	4.34		1.05	
PCB-133/142	ND	5.00	5.85		1.04	
PCB-134/143	ND	5.00	5.23		1.05	
PCB-135	ND	2.50	12.1		1.47	
PCB-136	ND	2.50	8.12		0.776	
PCB-137	ND	2.50	4.75		0.541	
PCB-138/163/164	5.41	7.50			0.809	J
PCB-139/149	ND	5.00	12.6		1.49	
PCB-140	ND	2.50	13.2		1.20	
PCB-141	ND	2.50	4.65		0.678	
PCB-144	ND	2.50	12.6		1.38	
PCB-145	ND	2.50	7.96		1.05	
PCB-146/165	ND	5.00	3.85		0.792	
PCB-147	ND	2.50	11.7		5.26	
PCB-148	ND	2.50	12.9		1.45	
PCB-150	ND	2.50	9.58		0.801	
PCB-151	ND	2.50	12.8		1.16	
PCB-152	ND	2.50	8.57		0.744	
PCB-153	ND	2.50	3.84		0.484	
PCB-154	ND	2.50	11.1		0.837	
PCB-155	ND	2.50	8.59		0.767	
PCB-156	ND	2.50	3.55		0.534	
PCB-157	ND	2.50	3.44		0.485	
PCB-158/160	ND	5.00	3.86		0.915	
PCB-159	ND	2.50	3.77		0.578	
PCB-166	ND	2.50	3.54		0.425	
PCB-167	ND	2.50	3.32		0.653	
PCB-168	ND	2.50	3.31		0.502	
PCB-169	ND	2.50	3.44		0.767	
PCB-170	ND	2.50	3.79		0.758	
PCB-171	ND	2.50	3.45		0.372	
PCB-172	ND	2.50	3.34		0.857	
PCB-173	ND	2.50	4.92		0.507	
PCB-174	ND	2.50	3.96		0.797	
PCB-175	ND	2.50	4.04		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: 2.00 g

QC Batch: B5C0059
Date Extracted: 12-Mar-2015 12:37

Lab Sample: B5C0059-BLK1
Date Analyzed: 18-Mar-15 13:13 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-176	ND	2.50	2.77		0.729	
PCB-177	ND	2.50	4.34		0.404	
PCB-178	ND	2.50	3.95		0.610	
PCB-179	ND	2.50	3.14		0.418	
PCB-180	ND	2.50	4.06		0.420	
PCB-181	ND	2.50	3.95		1.26	
PCB-182/187	ND	5.00	3.27		1.33	
PCB-183	ND	2.50	3.38		0.638	
PCB-184	ND	2.50	2.51		0.597	
PCB-185	ND	2.50	3.03		0.557	
PCB-186	ND	2.50	2.81		0.421	
PCB-188	ND	2.50	2.59		0.759	
PCB-189	ND	2.50	2.57		0.483	
PCB-190	ND	2.50	2.74		0.686	
PCB-191	ND	2.50	3.22		0.447	
PCB-192	ND	2.50	3.13		0.528	
PCB-193	ND	2.50	3.18		0.836	
PCB-194	ND	2.50	2.68		0.645	
PCB-195	ND	2.50	2.65		0.722	
PCB-196/203	ND	5.00	8.81		0.983	
PCB-197	ND	2.50	6.57		0.794	
PCB-198	ND	2.50	9.35		0.792	
PCB-199	ND	2.50	8.85		0.615	
PCB-200	ND	2.50	6.64		0.795	
PCB-201	ND	2.50	6.14		0.317	
PCB-202	ND	2.50	6.52		0.759	
PCB-204	ND	2.50	6.20		0.543	
PCB-205	ND	2.50	2.11		0.471	
PCB-206	ND	2.50	3.36		0.852	
PCB-207	ND	2.50	1.93		0.402	
PCB-208	ND	2.50	2.24		0.441	
PCB-209	ND	2.50		4.10	1.10	
Total monoCB	ND	2.50				
Total diCB	ND	2.50				

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
Total triCB	ND	2.50				
Total tetraCB	ND	2.50				
Total pentaCB	ND	2.50				
Total hexaCB	5.41	2.50				
Total heptaCB	ND	2.50				
Total octaCB	ND	2.50				
Total nonaCB	ND	2.50				
DecaCB	ND	2.50		4.10		
Total PCB	5.41	2.50				

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: 2.00 g

QC Batch: B5C0059
Date Extracted: 12-Mar-2015 12:37

Lab Sample: B5C0059-BLK1
Date Analyzed: 18-Mar-15 13:13 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	50.0	5 - 145	
	13C-PCB-3	62.8	5 - 145	
	13C-PCB-4	60.8	5 - 145	
	13C-PCB-11	77.1	5 - 145	
	13C-PCB-9	68.3	5 - 145	
	13C-PCB-19	71.4	5 - 145	
	13C-PCB-28	88.3	5 - 145	
	13C-PCB-32	77.3	5 - 145	
	13C-PCB-37	99.9	5 - 145	
	13C-PCB-47	80.4	5 - 145	
	13C-PCB-52	81.7	5 - 145	
	13C-PCB-54	71.3	5 - 145	
	13C-PCB-70	87.5	5 - 145	
	13C-PCB-77	92.2	10 - 145	
	13C-PCB-80	88.2	10 - 145	
	13C-PCB-81	93.4	10 - 145	
	13C-PCB-95	87.7	10 - 145	
	13C-PCB-97	92.8	10 - 145	
	13C-PCB-101	90.5	10 - 145	
	13C-PCB-104	82.6	10 - 145	
	13C-PCB-105	99.3	10 - 145	
	13C-PCB-114	98.1	10 - 145	
	13C-PCB-118	95.3	10 - 145	
	13C-PCB-123	97.7	10 - 145	
	13C-PCB-126	102	10 - 145	
	13C-PCB-127	99.7	10 - 145	
	13C-PCB-138	91.0	10 - 145	
	13C-PCB-141	92.1	10 - 145	
	13C-PCB-153	92.1	10 - 145	
	13C-PCB-155	72.3	10 - 145	
	13C-PCB-156	96.6	10 - 145	
	13C-PCB-157	94.4	10 - 145	
	13C-PCB-159	96.8	10 - 145	
	13C-PCB-167	95.8	10 - 145	
	13C-PCB-169	93.0	10 - 145	
	13C-PCB-170	80.9	10 - 145	
	13C-PCB-180	79.1	10 - 145	
	13C-PCB-188	78.7	10 - 145	
	13C-PCB-189	85.5	10 - 145	
	13C-PCB-194	90.4	10 - 145	
	13C-PCB-202	69.4	10 - 145	
	13C-PCB-206	93.7	10 - 145	
	13C-PCB-208	84.1	10 - 145	
	13C-PCB-209	99.0	10 - 145	
CRS	13C-PCB-79	92.5	10 - 145	
	13C-PCB-178	78.3	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: 2.00 g

QC Batch: B5C0059
Date Extracted: 12-Mar-2015 12:37

Lab Sample: B5C0059-BS1
Date Analyzed: 18-Mar-15 11:04 Column: ZB-1 Analyst: DMS

Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits
PCB-1	4430	5000	88.7	60 - 135
PCB-3	4390	5000	87.7	60 - 135
PCB-4/10	21400	20000	107	60 - 135
PCB-15	10500	10000	105	60 - 135
PCB-19	5330	5000	107	60 - 135
PCB-37	5770	5000	115	60 - 135
PCB-54	5260	5000	105	60 - 135
PCB-77	5420	5000	108	60 - 135
PCB-81	5330	5000	107	60 - 135
PCB-104	5860	5000	117	60 - 135
PCB-105	5350	5000	107	60 - 135
PCB-106/118	11200	10000	112	60 - 135
PCB-114	5230	5000	105	60 - 135
PCB-123	5550	5000	111	60 - 135
PCB-126	5760	5000	115	60 - 135
PCB-155	5570	5000	111	60 - 135
PCB-156	5260	5000	105	60 - 135
PCB-157	5130	5000	103	60 - 135
PCB-167	5550	5000	111	60 - 135
PCB-169	5220	5000	104	60 - 135
PCB-188	5600	5000	112	60 - 135
PCB-189	5450	5000	109	60 - 135
PCB-202	5440	5000	109	60 - 135
PCB-205	5470	5000	109	60 - 135
PCB-206	5450	5000	109	60 - 135
PCB-208	5550	5000	111	60 - 135
PCB-209	5580	5000	112	60 - 135

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-1	71.4	15 - 145
IS	13C-PCB-3	77.6	15 - 145
IS	13C-PCB-4	68.7	15 - 145
IS	13C-PCB-11	79.4	15 - 145
IS	13C-PCB-9	73.6	15 - 145
IS	13C-PCB-19	76.1	15 - 145
IS	13C-PCB-28	94.1	15 - 145
IS	13C-PCB-32	79.5	15 - 145
IS	13C-PCB-37	108	15 - 145
IS	13C-PCB-47	80.7	15 - 145
IS	13C-PCB-52	80.1	15 - 145
IS	13C-PCB-54	70.9	15 - 145
IS	13C-PCB-70	90.3	15 - 145
IS	13C-PCB-77	96.2	40 - 145
IS	13C-PCB-80	89.5	40 - 145
IS	13C-PCB-81	94.8	40 - 145
IS	13C-PCB-95	87.3	40 - 145
IS	13C-PCB-97	92.8	40 - 145
IS	13C-PCB-101	90.5	40 - 145
IS	13C-PCB-104	81.3	40 - 145
IS	13C-PCB-105	104	40 - 145
IS	13C-PCB-114	102	40 - 145
IS	13C-PCB-118	97.8	40 - 145
IS	13C-PCB-123	98.1	40 - 145
IS	13C-PCB-126	107	40 - 145
IS	13C-PCB-127	103	40 - 145
IS	13C-PCB-138	94.3	40 - 145
IS	13C-PCB-141	93.8	40 - 145
IS	13C-PCB-153	96.8	40 - 145
IS	13C-PCB-155	73.4	40 - 145
IS	13C-PCB-156	104	40 - 145
IS	13C-PCB-157	103	40 - 145
IS	13C-PCB-159	99.5	40 - 145
IS	13C-PCB-167	95.5	40 - 145
IS	13C-PCB-169	108	40 - 145
IS	13C-PCB-170	88.5	40 - 145
IS	13C-PCB-180	84.6	40 - 145
IS	13C-PCB-188	82.0	40 - 145
IS	13C-PCB-189	93.0	40 - 145
IS	13C-PCB-194	91.0	40 - 145

Sample ID: OPR

EPA Method 1668C

Matrix: Solid
Sample Size: 2.00 g

QC Batch: B5C0059
Date Extracted: 12-Mar-2015 12:37

Lab Sample: B5C0059-BS1
Date Analyzed: 18-Mar-15 11:04 Column: ZB-1 Analyst: DMS

Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-202	76.2	40 - 145
IS	13C-PCB-206	93.1	40 - 145
IS	13C-PCB-208	81.3	40 - 145
IS	13C-PCB-209	99.4	40 - 145
CRS	13C-PCB-79	92.9	40 - 145
CRS	13C-PCB-178	85.4	40 - 145

LCL-UCL - Lower control limit - upper control limit

Sample ID: SC-OWS-05-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 10:10

Sample Data
Matrix: Sediment
Sample Size: 7.85 g
% Solids: 27.1

Laboratory Data
Lab Sample: 1400948-01 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 19-Mar-15 16:00 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	447	47.0			0.320	D
PCB-2	148	47.0			0.240	D
PCB-3	427	47.0			0.323	D
PCB-4/10	6520	94.1			1.14	D
PCB-5/8	23400	94.1			1.76	D
PCB-6	8660	47.0			1.00	D
PCB-7/9	2730	94.1			1.34	D
PCB-11	5450	47.0			3.48	D
PCB-12/13	3280	94.1			1.37	D
PCB-14	ND	47.0	695		0.337	D
PCB-15	29000	47.0			0.634	D
PCB-16/32	76800	94.1			0.430	D
PCB-17	35300	47.0			0.658	D
PCB-18	95600	47.0			0.696	D
PCB-19	12000	47.0			0.612	D
PCB-20/21/33	70900	141			2.47	D
PCB-22	56500	47.0			0.964	D
PCB-23	ND	47.0		67.1	0.543	D
PCB-24/27	9250	94.1			0.742	D
PCB-25	16500	47.0			0.768	D
PCB-26	30900	47.0			0.766	D
PCB-28	117000	47.0			1.12	D
PCB-29	722	47.0			0.949	D
PCB-30	ND	47.0	69.3		0.355	D
PCB-31	111000	47.0			0.809	D
PCB-34	1250	47.0			1.57	D
PCB-35	3880	47.0			0.565	D
PCB-36	ND	47.0	219		0.406	D
PCB-37	93900	47.0			0.389	D
PCB-38	1570	47.0			0.528	D
PCB-39	484	47.0			0.461	D
PCB-40	37000	47.0			0.927	D
PCB-41/64/71/72	150000	188			1.70	D
PCB-42/59	56200	94.1			0.899	D
PCB-43/49	170000	94.1			0.879	D

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-44	146000	47.0			0.745	D
PCB-45	26100	47.0			0.402	D
PCB-46	14900	47.0			0.537	D
PCB-47	84600	47.0			2.19	D
PCB-48/75	23800	94.1			0.983	D
PCB-50	498	47.0			0.603	D
PCB-51	50400	47.0			0.789	D
PCB-52/69	175000	94.1			0.722	D
PCB-53	72600	47.0			0.331	D
PCB-54	6040	47.0			0.275	D
PCB-55	5370	47.0			0.416	D
PCB-56/60	163000	94.1			0.825	D
PCB-57	1640	47.0			0.354	D
PCB-58	740	47.0			0.589	D
PCB-61/70	243000	94.1			1.20	D
PCB-62	ND	47.0	263		0.597	D
PCB-63	9050	47.0			0.524	D
PCB-65	ND	47.0	262		0.842	D
PCB-66/76	207000	94.1			1.31	D
PCB-67	7660	47.0			0.486	D
PCB-68	2060	47.0			0.658	D
PCB-73	1870	47.0			0.454	D
PCB-74	75600	47.0			0.781	D
PCB-77	50800	47.0			0.748	D
PCB-78	ND	47.0	245		0.385	D
PCB-79	3180	47.0			0.633	D
PCB-80	ND	47.0	247		0.336	D
PCB-81	1380	47.0			0.674	D
PCB-82	40000	47.0			0.981	D
PCB-83	ND	47.0		207	0.440	D
PCB-84/92	107000	94.1			1.01	D
PCB-85/116	47900	94.1			1.64	D
PCB-86	1440	47.0			1.79	D
PCB-87/117/125	100000	141			0.880	D
PCB-88/91	48200	94.1			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: SC-OWS-05-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 10:10

Sample Data
Matrix: Sediment
Sample Size: 7.85 g
% Solids: 27.1

Laboratory Data
Lab Sample: 1400948-01 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 19-Mar-15 16:00 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-89	3350	47.0			1.22	D
PCB-90/101	287000	94.1			1.19	D
PCB-93	ND	47.0	489		2.53	D
PCB-94	4170	47.0			0.874	D
PCB-95/98/102	161000	141			1.38	D
PCB-96	4780	47.0			0.588	D
PCB-97	84800	47.0			0.675	D
PCB-99	107000	47.0			0.474	D
PCB-100	6010	47.0			0.511	D
PCB-103	4780	47.0			0.428	D
PCB-104	582	47.0			0.876	D
PCB-105	138000	47.0			0.462	D
PCB-106/118	306000	94.1			0.728	D
PCB-107/109	20000	94.1			0.631	D
PCB-108/112	13300	94.1			0.844	D
PCB-110	346000	47.0			0.555	E, D
PCB-111/115	3390	94.1			1.24	D
PCB-113	ND	47.0	287		0.495	D
PCB-114	6880	47.0			0.418	D
PCB-119	11900	47.0			0.383	D
PCB-120	ND	47.0		1060	0.622	D
PCB-121	ND	47.0	255		0.978	D
PCB-122	4020	47.0			0.619	D
PCB-123	4560	47.0			0.494	D
PCB-124	10700	47.0			0.813	D
PCB-126	5780	47.0			0.543	D
PCB-127	ND	47.0	279		0.326	D
PCB-128/162	66600	94.1			1.08	D
PCB-129	21100	47.0			0.567	D
PCB-130	25900	47.0			0.798	D
PCB-131	ND	47.0		78.9	0.731	D
PCB-132/161	117000	94.1			1.05	D
PCB-133/142	13300	94.1			1.04	D
PCB-134/143	19400	94.1			1.05	D
PCB-135	46000	47.0			1.47	D

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-136	37400	47.0			0.776	D
PCB-137	20400	47.0			0.541	D
PCB-138/163/164	412000	141			0.809	B, D
PCB-139/149	322000	94.1			1.49	D
PCB-140	3170	47.0			1.20	D
PCB-141	74600	47.0			0.678	D
PCB-144	15600	47.0			1.38	D
PCB-145	ND	47.0	267		1.05	D
PCB-146/165	53600	94.1			0.792	D
PCB-147	11600	47.0			5.26	D
PCB-148	792	47.0			1.45	D
PCB-150	1770	47.0			0.801	D
PCB-151	78800	47.0			1.16	D
PCB-152	ND	47.0		663	0.744	D
PCB-153	331000	47.0			0.484	E, D
PCB-154	8500	47.0			0.837	D
PCB-155	ND	47.0	288		0.767	D
PCB-156	45200	47.0			0.534	D
PCB-157	9880	47.0			0.485	D
PCB-158/160	46000	94.1			0.915	D
PCB-159	ND	47.0	304		0.578	D
PCB-166	1360	47.0			0.425	D
PCB-167	17400	47.0			0.653	D
PCB-168	674	47.0			0.502	D
PCB-169	279	47.0			0.767	D
PCB-170	123000	47.0			0.758	D
PCB-171	28100	47.0			0.372	D
PCB-172	16300	47.0			0.857	D
PCB-173	3020	47.0			0.507	D
PCB-174	113000	47.0			0.797	D
PCB-175	5380	47.0			0.679	D
PCB-176	12600	47.0			0.729	D
PCB-177	70900	47.0			0.404	D
PCB-178	21800	47.0			0.610	D
PCB-179	44200	47.0			0.418	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: SC-OWS-05-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 10:10

Sample Data
Matrix: Sediment
Sample Size: 7.85 g
% Solids: 27.1

Laboratory Data
Lab Sample: 1400948-01 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 19-Mar-15 16:00 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-180	275000	47.0			0.420	E, D
PCB-181	468	47.0			1.26	D
PCB-182/187	122000	94.1			1.33	D
PCB-183	58200	47.0			0.638	D
PCB-184	ND	47.0		143	0.597	D
PCB-185	9050	47.0			0.557	D
PCB-186	ND	47.0	159		0.421	D
PCB-188	441	47.0			0.759	D
PCB-189	4770	47.0			0.483	D
PCB-190	23400	47.0			0.686	D
PCB-191	4980	47.0			0.447	D
PCB-192	ND	47.0	165		0.528	D
PCB-193	13500	47.0			0.836	D
PCB-194	53900	47.0			0.645	D
PCB-195	20400	47.0			0.722	D
PCB-196/203	66400	94.1			0.983	D
PCB-197	2310	47.0			0.794	D
PCB-198	2530	47.0			0.792	D
PCB-199	56700	47.0			0.615	D
PCB-200	6440	47.0			0.795	D
PCB-201	6690	47.0			0.317	D
PCB-202	10100	47.0			0.759	D
PCB-204	ND	47.0	172		0.543	D
PCB-205	2780	47.0			0.471	D
PCB-206	28300	47.0			0.852	D
PCB-207	2920	47.0			0.402	D
PCB-208	8170	47.0			0.441	D
PCB-209	6090	47.0			1.10	D
Total monoCB	1020	47.0				
Total diCB	79000	47.0				
Total triCB	733000	47.0		734000		
Total tetraCB	1790000	47.0				
Total pentaCB	1880000	47.0				
Total hexaCB	1800000	47.0				
Total heptaCB	950000	47.0				

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
Total octaCB	228000	47.0				
Total nonaCB	39300	47.0				
DecaCB	6090	47.0				
Total PCB	7500000	47.0				

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: SC-OWS-05-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 10:10

Sample Data
Matrix: Sediment
Sample Size: 7.85 g
% Solids: 27.1

Laboratory Data
Lab Sample: 1400948-01 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 19-Mar-15 16:00 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	112	5 -145	D
	13C-PCB-3	114	5 -145	D
	13C-PCB-4	111	5 -145	D
	13C-PCB-11	107	5 -145	D
	13C-PCB-9	104	5 -145	D
	13C-PCB-19	115	5 -145	D
	13C-PCB-28	103	5 -145	D
	13C-PCB-32	97.2	5 -145	D
	13C-PCB-37	112	5 -145	D
	13C-PCB-47	108	5 -145	D
	13C-PCB-52	107	5 -145	D
	13C-PCB-54	95.5	5 -145	D
	13C-PCB-70	102	5 -145	D
	13C-PCB-77	101	10 -145	D
	13C-PCB-80	97.5	10 -145	D
	13C-PCB-81	106	10 -145	D
	13C-PCB-95	100	10 -145	D
	13C-PCB-97	97.8	10 -145	D
	13C-PCB-101	96.9	10 -145	D
	13C-PCB-104	100	10 -145	D
	13C-PCB-105	112	10 -145	D
	13C-PCB-114	118	10 -145	D
	13C-PCB-118	103	10 -145	D
	13C-PCB-123	111	10 -145	D
	13C-PCB-126	108	10 -145	D
	13C-PCB-127	105	10 -145	D
	13C-PCB-138	110	10 -145	D
	13C-PCB-141	109	10 -145	D
	13C-PCB-153	109	10 -145	D
	13C-PCB-155	78.3	10 -145	D
	13C-PCB-156	109	10 -145	D
	13C-PCB-157	108	10 -145	D
	13C-PCB-159	105	10 -145	D
	13C-PCB-167	105	10 -145	D
	13C-PCB-169	112	10 -145	D
	13C-PCB-170	96.8	10 -145	D
	13C-PCB-180	99.4	10 -145	D
	13C-PCB-188	93.2	10 -145	D
	13C-PCB-189	95.9	10 -145	D
	13C-PCB-194	97.9	10 -145	D
	13C-PCB-202	82.2	10 -145	D
	13C-PCB-206	101	10 -145	D
	13C-PCB-208	90.1	10 -145	D
	13C-PCB-209	108	10 -145	D
CRS	13C-PCB-79	103	10 -145	D
	13C-PCB-178	92.8	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: SC-CB-35-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 13:00

Sample Data
Matrix: Sediment
Sample Size: 3.49 g
% Solids: 54.2

Laboratory Data
Lab Sample: 1400948-02 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 18-Mar-15 19:39 Column: ZB-1 Analyst: MAS
19-Mar-15 17:05 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	52.9	174		0.320	D
PCB-2	ND	52.9	194		0.240	D
PCB-3	ND	52.9	161		0.323	D
PCB-4/10	ND	106	620		1.14	D
PCB-5/8	1480	106			1.76	D
PCB-6	ND	52.9	503		1.00	D
PCB-7/9	ND	106	543		1.34	D
PCB-11	2860	52.9			3.48	D
PCB-12/13	ND	106	607		1.37	D
PCB-14	ND	52.9	653		0.337	D
PCB-15	1850	52.9			0.634	D
PCB-16/32	2900	106			0.430	D
PCB-17	1320	52.9			0.658	D
PCB-18	3510	52.9			0.696	D
PCB-19	ND	52.9		377	0.612	D
PCB-20/21/33	5490	159			2.47	D
PCB-22	3580	52.9			0.964	D
PCB-23	ND	52.9	96.5		0.543	D
PCB-24/27	313	106			0.742	D
PCB-25	571	52.9			0.768	D
PCB-26	1120	52.9			0.766	D
PCB-28	5570	52.9			1.12	D
PCB-29	ND	52.9	114		0.949	D
PCB-30	ND	52.9	106		0.355	D
PCB-31	6020	52.9			0.809	D
PCB-34	ND	52.9	109		1.57	D
PCB-35	570	52.9			0.565	D
PCB-36	ND	52.9	115		0.406	D
PCB-37	9200	52.9			0.389	D
PCB-38	ND	52.9	110		0.528	D
PCB-39	ND	52.9	118		0.461	D
PCB-40	2900	52.9			0.927	D
PCB-41/64/71/72	11300	212			1.70	D
PCB-42/59	4050	106			0.899	D
PCB-43/49	7480	106			0.879	D

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-44	10500	52.9			0.745	D
PCB-45	1340	52.9			0.402	D
PCB-46	727	52.9			0.537	D
PCB-47	2420	52.9			2.19	D
PCB-48/75	1880	106			0.983	D
PCB-50	ND	52.9	202		0.603	D
PCB-51	554	52.9			0.789	D
PCB-52/69	9070	106			0.722	D
PCB-53	1110	52.9			0.331	D
PCB-54	ND	52.9	161		0.275	D
PCB-55	522	52.9			0.416	D
PCB-56/60	16900	106			0.825	D
PCB-57	ND	52.9	177		0.354	D
PCB-58	ND	52.9	187		0.589	D
PCB-61/70	25400	106			1.20	D
PCB-62	ND	52.9	178		0.597	D
PCB-63	784	52.9			0.524	D
PCB-65	ND	52.9	178		0.842	D
PCB-66/76	20100	106			1.31	D
PCB-67	658	52.9			0.486	D
PCB-68	ND	52.9		108	0.658	D
PCB-73	ND	52.9	172		0.454	D
PCB-74	7420	52.9			0.781	D
PCB-77	7160	52.9			0.748	D
PCB-78	ND	52.9	151		0.385	D
PCB-79	355	52.9			0.633	D
PCB-80	ND	52.9	147		0.336	D
PCB-81	183	52.9			0.674	D
PCB-82	5610	52.9			0.981	D
PCB-83	ND	52.9	397		0.440	D
PCB-84/92	9260	106			1.01	D
PCB-85/116	5260	106			1.64	D
PCB-86	ND	52.9	716		1.79	D
PCB-87/117/125	10500	159			0.880	D
PCB-88/91	3060	106			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: SC-CB-35-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 13:00

Sample Data
Matrix: Sediment
Sample Size: 3.49 g
% Solids: 54.2

Laboratory Data
Lab Sample: 1400948-02 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 18-Mar-15 19:39 Column: ZB-1 Analyst: MAS
19-Mar-15 17:05 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-89	ND	52.9		319	1.22	D
PCB-90/101	27300	106			1.19	D
PCB-93	ND	52.9	820		2.53	D
PCB-94	ND	52.9	654		0.874	D
PCB-95/98/102	13700	159			1.38	D
PCB-96	ND	52.9	389		0.588	D
PCB-97	8260	52.9			0.675	D
PCB-99	9620	52.9			0.474	D
PCB-100	ND	52.9	473		0.511	D
PCB-103	ND	52.9	463		0.428	D
PCB-104	ND	52.9	374		0.876	D
PCB-105	18500	52.9			0.462	D
PCB-106/118	39100	106			0.728	D
PCB-107/109	2490	106			0.631	D
PCB-108/112	ND	106		1170	0.844	D
PCB-110	35000	52.9			0.555	D
PCB-111/115	474	106			1.24	D
PCB-113	ND	52.9	479		0.495	D
PCB-114	836	52.9			0.418	D
PCB-119	695	52.9			0.383	D
PCB-120	ND	52.9	360		0.622	D
PCB-121	ND	52.9	428		0.978	D
PCB-122	517	52.9			0.619	D
PCB-123	860	52.9			0.494	D
PCB-124	1620	52.9			0.813	D
PCB-126	865	52.9			0.543	D
PCB-127	ND	52.9	291		0.326	D
PCB-128/162	7930	106			1.08	D
PCB-129	2720	52.9			0.567	D
PCB-130	3730	52.9			0.798	D
PCB-131	ND	52.9	452		0.731	D
PCB-132/161	13500	106			1.05	D
PCB-133/142	1430	106			1.04	D
PCB-134/143	2400	106			1.05	D
PCB-135	5130	52.9			1.47	D
PCB-136	3810	52.9			0.776	D
PCB-137	2100	52.9			0.541	D
PCB-138/163/164	52000	159			0.809	B, D
PCB-139/149	35800	106			1.49	D
PCB-140	ND	52.9		293	1.20	D
PCB-141	10500	52.9			0.678	D
PCB-144	ND	52.9		2080	1.38	D
PCB-145	ND	52.9	219		1.05	D
PCB-146/165	5920	106			0.792	D
PCB-147	539	52.9			5.26	D
PCB-148	ND	52.9	354		1.45	D
PCB-150	ND	52.9	264		0.801	D
PCB-151	9040	52.9			1.16	D
PCB-152	ND	52.9	236		0.744	D
PCB-153	40600	52.9			0.484	D
PCB-154	628	52.9			0.837	D
PCB-155	ND	52.9	237		0.767	D
PCB-156	5850	52.9			0.534	D
PCB-157	1340	52.9			0.485	D
PCB-158/160	5990	106			0.915	D
PCB-159	ND	52.9	349		0.578	D
PCB-166	219	52.9			0.425	D
PCB-167	2190	52.9			0.653	D
PCB-168	ND	52.9	283		0.502	D
PCB-169	ND	52.9	271		0.767	D
PCB-170	16800	2.64			0.758	E
PCB-171	3430	52.9			0.372	D
PCB-172	2450	52.9			0.857	D
PCB-173	293	52.9			0.507	D
PCB-174	15500	52.9			0.797	D
PCB-175	817	52.9			0.679	D
PCB-176	1760	52.9			0.729	D
PCB-177	9260	52.9			0.404	D
PCB-178	ND	52.9		2980	0.610	D
PCB-179	5720	52.9			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: SC-CB-35-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 13:00

Sample Data
Matrix: Sediment
Sample Size: 3.49 g
% Solids: 54.2

Laboratory Data
Lab Sample: 1400948-02 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 18-Mar-15 19:39 Column: ZB-1 Analyst: MAS
19-Mar-15 17:05 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-180	41200	52.9			0.420	D
PCB-181	ND	52.9	226		1.26	D
PCB-182/187	17200	106			1.33	D
PCB-183	8680	52.9			0.638	D
PCB-184	ND	52.9	168		0.597	D
PCB-185	1260	52.9			0.557	D
PCB-186	ND	52.9	189		0.421	D
PCB-188	ND	52.9	174		0.759	D
PCB-189	927	52.9			0.483	D
PCB-190	3140	2.64			0.686	
PCB-191	758	52.9			0.447	D
PCB-192	ND	52.9	179		0.528	D
PCB-193	1910	52.9			0.836	D
PCB-194	9210	52.9			0.645	D
PCB-195	3080	52.9			0.722	D
PCB-196/203	11400	106			0.983	D
PCB-197	352	52.9			0.794	D
PCB-198	ND	52.9		422	0.792	D
PCB-199	9510	52.9			0.615	D
PCB-200	998	52.9			0.795	D
PCB-201	1100	52.9			0.317	D
PCB-202	1530	52.9			0.759	D
PCB-204	ND	52.9	297		0.543	D
PCB-205	504	52.9			0.471	D
PCB-206	4250	52.9			0.852	D
PCB-207	458	52.9			0.402	D
PCB-208	1250	52.9			0.441	D
PCB-209	1020	52.9			1.10	D
Total monoCB	ND	52.9				
Total diCB	6190	52.9				
Total triCB	40100	52.9		40500		
Total tetraCB	133000	52.9				
Total pentaCB	193000	52.9		195000		
Total hexaCB	213000	52.9		216000		
Total heptaCB	131000	52.9		134000		

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
Total octaCB	37700	52.9		38100		
Total nonaCB	5960	52.9				
DecaCB	1020	52.9				
Total PCB	762000	52.9				

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: SC-CB-35-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 13:00

Sample Data
Matrix: Sediment
Sample Size: 3.49 g
% Solids: 54.2

Laboratory Data
Lab Sample: 1400948-02 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 18-Mar-15 19:39 Column: ZB-1 Analyst: MAS
19-Mar-15 17:05 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	103	5 -145	D
	13C-PCB-3	101	5 -145	D
	13C-PCB-4	100	5 -145	D
	13C-PCB-11	98.9	5 -145	D
	13C-PCB-9	100	5 -145	D
	13C-PCB-19	97.4	5 -145	D
	13C-PCB-28	99.1	5 -145	D
	13C-PCB-32	91.8	5 -145	D
	13C-PCB-37	104	5 -145	D
	13C-PCB-47	97.2	5 -145	D
	13C-PCB-52	94.0	5 -145	D
	13C-PCB-54	91.3	5 -145	D
	13C-PCB-70	97.0	5 -145	D
	13C-PCB-77	102	10 -145	D
	13C-PCB-80	102	10 -145	D
	13C-PCB-81	102	10 -145	D
	13C-PCB-95	102	10 -145	D
	13C-PCB-97	108	10 -145	D
	13C-PCB-101	101	10 -145	D
	13C-PCB-104	104	10 -145	D
	13C-PCB-105	107	10 -145	D
	13C-PCB-114	119	10 -145	D
	13C-PCB-118	101	10 -145	D
	13C-PCB-123	100	10 -145	D
	13C-PCB-126	112	10 -145	D
	13C-PCB-127	102	10 -145	D
	13C-PCB-138	104	10 -145	D
	13C-PCB-141	98.9	10 -145	D
	13C-PCB-153	102	10 -145	D
	13C-PCB-155	79.9	10 -145	D
	13C-PCB-156	111	10 -145	D
	13C-PCB-157	103	10 -145	D
	13C-PCB-159	101	10 -145	D
	13C-PCB-167	111	10 -145	D
	13C-PCB-169	109	10 -145	D
	13C-PCB-170	114	10 -145	
	13C-PCB-180	103	10 -145	D
	13C-PCB-188	88.8	10 -145	D
	13C-PCB-189	98.8	10 -145	D
	13C-PCB-194	100	10 -145	D
	13C-PCB-202	88.5	10 -145	D
	13C-PCB-206	102	10 -145	D
	13C-PCB-208	84.7	10 -145	D
	13C-PCB-209	103	10 -145	D
CRS	13C-PCB-79	99.1	10 -145	D
	13C-PCB-178	99.2	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: SC-CB-24-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 14:00

Sample Data
Matrix: Sediment
Sample Size: 4.57 g
% Solids: 41.6

Laboratory Data
Lab Sample: 1400948-03 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 18-Mar-15 20:44 Column: ZB-1 Analyst: MAS
19-Mar-15 18:09 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	132	52.6			0.320	D
PCB-2	ND	52.6	161		0.240	D
PCB-3	107	52.6			0.323	D
PCB-4/10	ND	105	711		1.14	D
PCB-5/8	1170	105			1.76	D
PCB-6	ND	52.6		238	1.00	D
PCB-7/9	ND	105	581		1.34	D
PCB-11	4330	52.6			3.48	D
PCB-12/13	ND	105	576		1.37	D
PCB-14	ND	52.6	620		0.337	D
PCB-15	1770	52.6			0.634	D
PCB-16/32	2550	105			0.430	D
PCB-17	1160	52.6			0.658	D
PCB-18	3190	52.6			0.696	D
PCB-19	323	52.6			0.612	D
PCB-20/21/33	5400	158			2.47	D
PCB-22	3440	52.6			0.964	D
PCB-23	ND	52.6	105		0.543	D
PCB-24/27	321	105			0.742	D
PCB-25	475	52.6			0.768	D
PCB-26	1040	52.6			0.766	D
PCB-28	5010	52.6			1.12	D
PCB-29	ND	52.6	125		0.949	D
PCB-30	ND	52.6	75.5		0.355	D
PCB-31	5530	52.6			0.809	D
PCB-34	ND	52.6	118		1.57	D
PCB-35	565	52.6			0.565	D
PCB-36	ND	52.6	133		0.406	D
PCB-37	8390	52.6			0.389	D
PCB-38	ND	52.6	126		0.528	D
PCB-39	ND	52.6	136		0.461	D
PCB-40	3620	52.6			0.927	D
PCB-41/64/71/72	15900	210			1.70	D
PCB-42/59	4430	105			0.899	D
PCB-43/49	11600	105			0.879	D

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-44	21100	52.6			0.745	D
PCB-45	1400	52.6			0.402	D
PCB-46	585	52.6			0.537	D
PCB-47	2850	52.6			2.19	D
PCB-48/75	2150	105			0.983	D
PCB-50	ND	52.6	201		0.603	D
PCB-51	437	52.6			0.789	D
PCB-52/69	25400	105			0.722	D
PCB-53	1270	52.6			0.331	D
PCB-54	ND	52.6	160		0.275	D
PCB-55	720	52.6			0.416	D
PCB-56/60	18600	105			0.825	D
PCB-57	ND	52.6		125	0.354	D
PCB-58	ND	52.6	173		0.589	D
PCB-61/70	41600	105			1.20	D
PCB-62	ND	52.6	181		0.597	D
PCB-63	879	52.6			0.524	D
PCB-65	ND	52.6	180		0.842	D
PCB-66/76	21300	105			1.31	D
PCB-67	687	52.6			0.486	D
PCB-68	ND	52.6		115	0.658	D
PCB-73	ND	52.6	162		0.454	D
PCB-74	9920	52.6			0.781	D
PCB-77	7140	2.63			0.748	
PCB-78	ND	52.6	149		0.385	D
PCB-79	743	52.6			0.633	D
PCB-80	ND	52.6	136		0.336	D
PCB-81	411	52.6			0.674	D
PCB-82	10300	52.6			0.981	D
PCB-83	ND	52.6	239		0.440	D
PCB-84/92	27200	105			1.01	D
PCB-85/116	11300	105			1.64	D
PCB-86	238	52.6			1.79	D
PCB-87/117/125	27400	158			0.880	D
PCB-88/91	8670	105			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: SC-CB-24-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 14:00

Sample Data
Matrix: Sediment
Sample Size: 4.57 g
% Solids: 41.6

Laboratory Data
Lab Sample: 1400948-03 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 18-Mar-15 20:44 Column: ZB-1 Analyst: MAS
19-Mar-15 18:09 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-89	610	52.6			1.22	D
PCB-90/101	73600	105			1.19	D
PCB-93	ND	52.6	457		2.53	D
PCB-94	322	52.6			0.874	D
PCB-95/98/102	48200	158			1.38	D
PCB-96	430	52.6			0.588	D
PCB-97	20200	52.6			0.675	D
PCB-99	25000	52.6			0.474	D
PCB-100	130	52.6			0.511	D
PCB-103	319	52.6			0.428	D
PCB-104	ND	52.6	221		0.876	D
PCB-105	35700	52.6			0.462	D
PCB-106/118	79900	105			0.728	D
PCB-107/109	4900	105			0.631	D
PCB-108/112	2670	105			0.844	D
PCB-110	81300	52.6			0.555	D
PCB-111/115	918	105			1.24	D
PCB-113	ND	52.6	243		0.495	D
PCB-114	1840	52.6			0.418	D
PCB-119	975	52.6			0.383	D
PCB-120	137	52.6			0.622	D
PCB-121	ND	52.6	239		0.978	D
PCB-122	872	52.6			0.619	D
PCB-123	1350	52.6			0.494	D
PCB-124	3100	52.6			0.813	D
PCB-126	1440	52.6			0.543	D
PCB-127	ND	52.6	277		0.326	D
PCB-128/162	15300	105			1.08	D
PCB-129	5850	52.6			0.567	D
PCB-130	6110	52.6			0.798	D
PCB-131	ND	52.6	285		0.731	D
PCB-132/161	26900	105			1.05	D
PCB-133/142	2900	105			1.04	D
PCB-134/143	4980	105			1.05	D
PCB-135	8020	52.6			1.47	D
PCB-136	7230	52.6			0.776	D
PCB-137	5280	52.6			0.541	D
PCB-138/163/164	91200	158			0.809	B, D
PCB-139/149	59900	105			1.49	D
PCB-140	ND	52.6		422	1.20	D
PCB-141	16500	52.6			0.678	D
PCB-144	3960	52.6			1.38	D
PCB-145	ND	52.6	248		1.05	D
PCB-146/165	9870	105			0.792	D
PCB-147	1330	52.6			5.26	D
PCB-148	ND	52.6	400		1.45	D
PCB-150	ND	52.6	298		0.801	D
PCB-151	13000	52.6			1.16	D
PCB-152	ND	52.6	267		0.744	D
PCB-153	67300	52.6			0.484	D
PCB-154	747	52.6			0.837	D
PCB-155	ND	52.6	267		0.767	D
PCB-156	11400	52.6			0.534	D
PCB-157	2560	52.6			0.485	D
PCB-158/160	11400	105			0.915	D
PCB-159	ND	52.6	179		0.578	D
PCB-166	387	52.6			0.425	D
PCB-167	4180	52.6			0.653	D
PCB-168	ND	52.6	178		0.502	D
PCB-169	ND	52.6	181		0.767	D
PCB-170	20500	52.6			0.758	D
PCB-171	4440	52.6			0.372	D
PCB-172	3110	52.6			0.857	D
PCB-173	390	52.6			0.507	D
PCB-174	19400	52.6			0.797	D
PCB-175	954	52.6			0.679	D
PCB-176	2210	52.6			0.729	D
PCB-177	11500	52.6			0.404	D
PCB-178	3870	52.6			0.610	D
PCB-179	7370	52.6			0.418	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: SC-CB-24-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 14:00

Sample Data
Matrix: Sediment
Sample Size: 4.57 g
% Solids: 41.6

Laboratory Data
Lab Sample: 1400948-03 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 18-Mar-15 20:44 Column: ZB-1 Analyst: MAS
19-Mar-15 18:09 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/g)	RL	DL	EMPC	MDL	Qualifiers
PCB-180	52500	52.6			0.420	D
PCB-181	ND	52.6	175		1.26	D
PCB-182/187	22800	105			1.33	D
PCB-183	11600	52.6			0.638	D
PCB-184	ND	52.6		61.7	0.597	D
PCB-185	1700	52.6			0.557	D
PCB-186	ND	52.6	129		0.421	D
PCB-188	112	52.6			0.759	D
PCB-189	824	52.6			0.483	D
PCB-190	4060	52.6			0.686	D
PCB-191	1010	52.6			0.447	D
PCB-192	ND	52.6	138		0.528	D
PCB-193	2190	52.6			0.836	D
PCB-194	12000	52.6			0.645	D
PCB-195	3820	52.6			0.722	D
PCB-196/203	18600	105			0.983	D
PCB-197	ND	52.6		452	0.794	D
PCB-198	761	52.6			0.792	D
PCB-199	14900	52.6			0.615	D
PCB-200	1670	52.6			0.795	D
PCB-201	1860	52.6			0.317	D
PCB-202	2940	52.6			0.759	D
PCB-204	ND	52.6	239		0.543	D
PCB-205	537	52.6			0.471	D
PCB-206	8950	52.6			0.852	D
PCB-207	1030	52.6			0.402	D
PCB-208	2470	52.6			0.441	D
PCB-209	1560	52.6			1.10	D
Total monoCB	239	52.6				
Total diCB	7260	52.6		7500		
Total triCB	37400	52.6				
Total tetraCB	193000	52.6				
Total pentaCB	469000	52.6				
Total hexaCB	376000	52.6		377000		
Total heptaCB	171000	52.6				
Total octaCB	57100	52.6		57500		
Total nonaCB	12500	52.6				
DecaCB	1560	52.6				
Total PCB	1320000	52.6				

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: SC-CB-24-20141211-S

EPA Method 1668C

Client Data
Name: Leidos
Project:
Date Collected: 11-Dec-2014 14:00

Sample Data
Matrix: Sediment
Sample Size: 4.57 g
% Solids: 41.6

Laboratory Data
Lab Sample: 1400948-03 Date Received: 12-Dec-2014 8:53
QC Batch: B5C0059 Date Extracted: 12-Mar-2015 12:37
Date Analyzed : 18-Mar-15 20:44 Column: ZB-1 Analyst: MAS
19-Mar-15 18:09 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	85.6	5 -145	D
	13C-PCB-3	91.2	5 -145	D
	13C-PCB-4	93.1	5 -145	D
	13C-PCB-11	101	5 -145	D
	13C-PCB-9	96.4	5 -145	D
	13C-PCB-19	89.9	5 -145	D
	13C-PCB-28	100	5 -145	D
	13C-PCB-32	91.9	5 -145	D
	13C-PCB-37	106	5 -145	D
	13C-PCB-47	84.9	5 -145	D
	13C-PCB-52	86.2	5 -145	D
	13C-PCB-54	87.2	5 -145	D
	13C-PCB-70	90.5	5 -145	D
	13C-PCB-77	80.8	10 -145	
	13C-PCB-80	90.8	10 -145	D
	13C-PCB-81	91.9	10 -145	D
	13C-PCB-95	96.2	10 -145	D
	13C-PCB-97	112	10 -145	D
	13C-PCB-101	101	10 -145	D
	13C-PCB-104	101	10 -145	D
	13C-PCB-105	107	10 -145	D
	13C-PCB-114	118	10 -145	D
	13C-PCB-118	104	10 -145	D
	13C-PCB-123	107	10 -145	D
	13C-PCB-126	106	10 -145	D
	13C-PCB-127	104	10 -145	D
	13C-PCB-138	99.0	10 -145	D
	13C-PCB-141	103	10 -145	D
	13C-PCB-153	98.7	10 -145	D
	13C-PCB-155	78.6	10 -145	D
	13C-PCB-156	105	10 -145	D
	13C-PCB-157	101	10 -145	D
	13C-PCB-159	112	10 -145	D
	13C-PCB-167	104	10 -145	D
	13C-PCB-169	99.6	10 -145	D

	Labeled Standard	%R	LCL-UCL	Qualifiers
	13C-PCB-170	92.8	10 -145	D
	13C-PCB-180	92.6	10 -145	D
	13C-PCB-188	88.8	10 -145	D
	13C-PCB-189	89.3	10 -145	D
	13C-PCB-194	102	10 -145	D
	13C-PCB-202	78.9	10 -145	D
	13C-PCB-206	100	10 -145	D
	13C-PCB-208	90.3	10 -145	D
	13C-PCB-209	101	10 -145	D
CRS	13C-PCB-79	91.1	10 -145	D
	13C-PCB-178	94.3	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
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2014022
Michigan Department of Natural Resources	9932
Nevada Division of Environmental Protection	CA004132015-1
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
North Carolina Department of Health & Human Services	06700
Oregon Laboratory Accreditation Program	4042-003
Pennsylvania Department of Environmental Protection	011
South Carolina Department of Health	87002001
Tennessee Department of Environment & Conservation	TN02996
Texas Commission on Environmental Quality	T104704189-15-6
Virginia Department of General Services	3138
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

CHAIN OF CUSTODY

Vista

FOR LABORATORY USE ONLY

Laboratory Project ID: 1400948

Storage ID: WR-2

Storage Secured: Yes ☑ No ☐

Temp: 19 °C

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

Project I.D.:_____ P.O.#_____ Sampler: M. Ivancevich, C. Wilson (Name)

Invoice to: Name: Christine Nancarrow Company: Leidos Address: 18912 N. Creek Pkwy Ste 101 City: Bothell State: WA Zip: 98011 Ph#: 206-300-2144 Fax#:

Relinquished by: (Signature and Printed Name) Melissa Ivancevich Date: 12/11/14 Time: 1713 Received by: (Signature and Printed Name) Betty J. Benedict B. Benedict Date: 12/12/14 Time: 0859

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:_____

Method of Shipment: _____

Tracking No.: _____

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	EPA1614 PBDE	EPA1614 PAH	CARB429 WHO-29
SC-OWS-05-20141211-S	12/11/14	1010	S. Service Center	1	A	SD		✓									✓		✓				
SC-CB-35-20141211-S	12/11/14	1300	S. Service Center	1	A	SD		✓									✓		✓				
SC-CB-24-20141211-S	12/11/14	1400	S. Service Center	1	A	SD		✓									✓		✓				
SC-MH-20-20141211-S	12/11/14	1500	S. Service Center	4	A	EF		✓									✓		✓				

Special Instructions/Comments:_____

SEND DOCUMENTATION AND RESULTS TO:

Name: same as above
Company:_____
Address:_____
City:_____ State:_____ Zip:_____
Phone:_____ Fax:_____
Email: nancarrowc@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 #: 1400948 **TAT** Std

Samples Arrival:	**Date/Time** 12/12/14 0853	**Initials:** VBB	**Location:** WR-2 **Shelf/Rack:** NA
Logged In:	**Date/Time** 12/12/14 1519	**Initials:** VBB	**Location:** WR-2 **Shelf/Rack:** C4 / E6

Delivered By:	(FedEx)	UPS	On Trac	DHL	Hand Delivered	Other
Preservation:	(Ice)	Blue Ice	Dry Ice	None		

Temp °C: 1.9 (uncorrected)	**Time:** 0859	**Thermometer ID:** IR-1	
Temp °C: 1.9 (corrected)			

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill Trk # 8064 5979 2390	✓		
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:

AQ Sample SC-MH-20-20141211-W A,B,C,D Containers

Sample Login 11/2013 ckt

Chain of Custody Anomaly/Sample Acceptance Form

Vista Analytical Laboratory

Client: Leidos
Contact: Christine Nancarrow
Email: christine.f.nancarrow@leidos.com
Phone:

Workorder Number: 1400948
Date Received: 12-Dec-14 08:53
Documented by/date: B.Benedict 12/12/2014

Please review the following information and complete the Client Authorization section. To comply with NELAC regulations, we must receive authorization before proceeding with sample analysis.

Thank you,

Martha Maier
mmaier@vista-analytical.com
916-673-1520

The following information or item is needed to proceed with analysis:

- [ ] Complete Chain-of-Custody
- [ ] Test Method Requested
- [ ] Analyte List Requested
- [ ] Other:
- [ ] Preservative
- [ ] Sample Identification
- [ ] Sample Collection Date and/or Time
- [ ] Collector's Name
- [ ] Sample Type
- [ ] Sample Location

The following anomalies were noted. Authorization is needed to proceed with analysis.

- [ ] Temperature outside < 6°C Range — Samples Affected: _____
  Temperature _____°C Ice Present? Yes No Melted
- [X] Sample ID Discrepancy
- [ ] Sample Holding Time Missed
- [ ] Custody Seals Broken
- [ ] Insufficient Sample Size
- [ ] Sample Container(s) Broken
- [ ] Incorrect Container Type

Comments: COC ID: SC-MH-20-20141211-S
Label ID: SC-MH-20-20141211-W

Client Authorization

Proceed with Analysis: (YES) NO Signature and Date MM 12/31/14

Client Comments/Instructions Label ID is correct, per email.

EXTRACTION INFORMATION

Process Sheet

Workorder: 1400948

Prep Expiration: 12/11/2015
Client: Leidos

March 30
Workorder Due: ~~02-Jan-15 00:00~~
TAT: 21

Method: **1668C Full List**
Matrix: **Solid**
Client Matrix: Sediment
Also run: **Percent Solids**

Prep Batch: BSC0059

Prep Data Entered: 3/17/15 cej
Date and Initials

Initial Sequence: S5C0043E

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400948-01 A	☑	SC-OWS-05-20141211-S	12-Dec-14 08:53	WR-2 E-6	
1400948-02 A	☑	SC-CB-35-20141211-S	12-Dec-14 08:53	WR-2 E-6	
1400948-03 A	☑	SC-CB-24-20141211-S	12-Dec-14 08:53	WR-2 E-6	

2g, 2x spike, 200mL FV

Vista PM:Martha Maier

Vial Box ID: Soup

Sample Reconciled By: KBridgeman 3/12/15

Solids estimate

Batch: B4L0100

Lab ID	Analysis	% Solids	Entered	Target weight	Weigh this much
1400948-01	Percent Solids	27.08		2.00	7.39
1400948-02	Percent Solids	54.18		2.00	3.69
1400948-03	Percent Solids	41.63		2.00	4.80

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4L0100

Analyst: S.Roughton **Test Code:** %Moist/%Solids

Analyte: Dried at 110°C+/-5°C **Units:** %

HRMS-2

Date/Time IN:	Date/Time OUT
12/18/14 15:00	12/22/14 11:10

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	BR 12/18/2014	MJT 12/22/2014			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-
	1400948-01		Sample	1.3200	10.3300	3.7600	2.4400	27.08	NA	NA	NA	NA
	1400948-02		Sample	1.3100	10.2800	6.1700	4.8600	54.18	NA	NA	NA	NA
	1400948-03		Sample	1.3200	9.8000	4.8500	3.5300	41.63	NA	NA	NA	NA

Matrix: Solid

Method: 1668C Full List

PREPARATION BENCH SHEET

B5C0059

Prepared using: HRMS - Soxhlet

Chemist: A. Clarke

Prep Date/Time: 12-Mar-15 12:37

						C5C0069	C5C0070	N/A	N/A	
C	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
☐	B5C0059-BLK1	2.00	(2.00)	DC/KB 3/12/15	ES BMS 3/17/15	ES 3/17/15	ES 3/17/15	N/A	N/A	ES KB 3/17/15
☐	B5C0059-BS1	2.00	↓	↓	↓	↓	↓	↓	↓	↓
☐	1400915-02RE1 (C)	2.87	2.91							
☐	1400915-03RE1 (A)(C)	11.08	11.13							
☐	1400915-04RE1 (C)	6.08	5.76							
☐	1400915-05RE1 (C)	5.47	5.35							
☐	1400948-01RE1 (B)(C)	7.39	7.85							
☐	1400948-02RE1 (B)(C)	3.69	3.49							
☐	1400948-03RE1 (B)(C)	4.80	4.57	↓	↓	↓	↓	↓	↓	↓

(A) Crystals present at final volume ES 3/17/15
(B) Precipitate present at FV. ES 3/17/15
(C) 1:20 Dilutions made per request. ES 3/17/15

2X 2X 2X 2X

IS Name	NS Name	CRS Name	RS Name	Cycle Time	APP: SEFUN SOX (SDS)	Check Out: Chemist/Date: KB 3/12/15
PCDD/F (V1)	PCDD/F (V2)	PCDD/F (V1)	PCDD/F (V1)	Start Date/Time 3/12/15 16:00	SOLV: TOL	Check In: Chemist/Date: ↓
PCB 14D2901, 20µL	PCB 14F1301, 20µL	PCB 14D2903, 20µL	PCB 14D2904, 20µL		Other N/A	
PAH	PAH	PAH	PAH	Stop Date/Time 3/13/15 8:00	Final Volume(s) 200µL Cg	Balance ID: HRMS-2

Comments:

SAMPLE DATA

EPA Method 1668C

Client ID: Method Blank Filename: 150318E1 S:4 Acq:18-MAR-15 13:13:08 ConCal: ST150318E1-1
Lab ID: B5C0059-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.000 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n NotF	1.19	*		3730	2.5	10.8	*	0.996	1.006
Mono	PCB-2	*	*	n NotF	1.18	*		3730	2.5	8.86	*	0.984	0.994
Mono	PCB-3	*	*	n NotF	1.43	*		3730	2.5	7.36	*	0.996	1.006
Di	PCB-4/10	*	*	n NotF	1.57	*		18000	2.5	34.6	*	0.997	1.007
Di	PCB-7/9	*	*	n NotF	1.21	*		18000	2.5	38.4	*	0.866	0.874
Di	PCB-6	*	*	n NotF	1.30	*		18000	2.5	35.6	*	0.890	0.899
Di	PCB-5/8	*	*	n NotF	1.15	*		18000	2.5	40.4	*	0.907	0.917
Di	PCB-14	*	*	n NotF	1.11	*		18000	2.5	37.5	*	0.949	0.959
Di	PCB-11	*	*	n NotF	1.09	*		18000	2.5	38.3	*	0.995	1.005
Di	PCB-12/13	*	*	n NotF	1.19	*		18000	2.5	34.9	*	1.011	1.021
Di	PCB-15	*	*	n NotF	1.28	*		18000	2.5	32.5	*	1.023	1.033
Tri	PCB-19	*	*	n NotF	1.04	*		2400	2.5	5.52	*	0.996	1.006
Tri	PCB-30	*	*	n NotF	1.71	*		2400	2.5	3.36	*	1.032	1.042
Tri	PCB-18	*	*	n NotF	0.78	*		2400	2.5	4.79	*	0.949	0.959
Tri	PCB-17	*	*	n NotF	0.92	*		2400	2.5	4.06	*	0.956	0.966
Tri	PCB-24/27	*	*	n NotF	1.19	*		2400	2.5	3.15	*	0.977	0.987
Tri	PCB-16/32	*	*	n NotF	0.94	*		2400	2.5	3.98	*	0.995	1.005
Tri	PCB-34	*	*	n NotF	1.14	*		2380	2.5	3.37	*	0.955	0.965
Tri	PCB-23	*	*	n NotF	1.28	*		2380	2.5	2.99	*	0.959	0.969
Tri	PCB-29	*	*	n NotF	1.08	*		2380	2.5	3.55	*	0.967	0.977
Tri	PCB-26	*	*	n NotF	1.21	*		2380	2.5	3.17	*	0.974	0.984
Tri	PCB-25	*	*	n NotF	1.26	*		2380	2.5	3.04	*	0.979	0.989
Tri	PCB-31	*	*	n NotF	1.28	*		2380	2.5	2.98	*	0.992	1.002
Tri	PCB-28	*	*	n NotF	1.71	*		2380	2.5	2.24	*	0.995	1.005
Tri	PCB-20/21/33	*	*	n NotF	1.08	*		2380	2.5	3.54	*	1.017	1.027
Tri	PCB-22	*	*	n NotF	1.21	*		2380	2.5	3.17	*	1.032	1.042
Tri	PCB-36	*	*	n NotF	1.14	*		2380	2.5	3.39	*	0.928	0.938
Tri	PCB-39	*	*	n NotF	1.12	*		2380	2.5	3.47	*	0.943	0.953
Tri	PCB-38	*	*	n NotF	1.20	*		2380	2.5	3.23	*	0.966	0.976
Tri	PCB-35	*	*	n NotF	1.23	*		2380	2.5	3.14	*	0.982	0.992
Tri	PCB-37	*	*	n NotF	1.23	*		2380	2.5	3.15	*	0.995	1.005
Tetra	PCB-54	*	*	n NotF	1.10	*		2160	2.5	3.73	*	0.996	1.006
Tetra	PCB-50	*	*	n NotF	0.88	*		2160	2.5	4.67	*	1.037	1.047
Tetra	PCB-53	*	*	n NotF	1.06	*		2160	2.5	4.20	*	0.942	0.952
Tetra	PCB-51	*	*	n NotF	0.99	*		2160	2.5	4.51	*	0.952	0.962
Tetra	PCB-45	*	*	n NotF	0.86	*		2160	2.5	5.17	*	0.966	0.976
Tetra	PCB-46	*	*	n NotF	0.85	*		2160	2.5	5.29	*	0.981	0.991

Integrations by:

Analyst: DMS

Date: 3/26/15

Reviewed by: [signature] Date: 3/27/15

Client ID: Method Blank Filename: 150318E1 S:4 Acq:18-MAR-15 13:13:08 ConCal: ST150318E1-1
Lab ID: B5C0059-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.000 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	*	*	n	NotF	1.28	*		2160	2.5	3.49	*	0.996	1.006
Tetra	PCB-73	*	*	n	NotF	1.35	*		2160	2.5	3.30	*	1.000	1.010
Tetra	PCB-43/49	*	*	n	NotF	0.99	*		2160	2.5	4.49	*	1.005	1.015
Tetra	PCB-47	*	*	n	NotF	1.06	*		2160	2.5	4.05	*	0.996	1.006
Tetra	PCB-48/75	*	*	n	NotF	1.23	*		2160	2.5	3.49	*	0.999	1.009
Tetra	PCB-65	*	*	n	NotF	1.22	*		2160	2.5	3.50	*	1.008	1.018
Tetra	PCB-62	*	*	n	NotF	1.22	*		2160	2.5	3.51	*	1.011	1.021
Tetra	PCB-44	*	*	n	NotF	0.86	*		2160	2.5	4.98	*	1.021	1.031
Tetra	PCB-42/59	*	*	n	NotF	1.14	*		2160	2.5	3.77	*	1.028	1.038
Tetra	PCB-41/64/71/72	*	*	n	NotF	1.21	*		2160	2.5	3.55	*	1.046	1.056
Tetra	PCB-68	*	*	n	NotF	1.35	*		2160	2.5	3.18	*	1.054	1.064
Tetra	PCB-40	*	*	n	NotF	0.70	*		2160	2.5	6.11	*	1.061	1.071
Tetra	PCB-57	*	*	n	NotF	0.98	*		2160	2.5	3.45	*	0.965	0.975
Tetra	PCB-67	*	*	n	NotF	1.11	*		2160	2.5	3.05	*	0.974	0.984
Tetra	PCB-58	*	*	n	NotF	0.93	*		2160	2.5	3.64	*	0.977	0.987
Tetra	PCB-63	*	*	n	NotF	0.95	*		2160	2.5	3.54	*	0.982	0.992
Tetra	PCB-74	*	*	n	NotF	1.24	*		2160	2.5	2.71	*	0.990	1.000
Tetra	PCB-61/70	*	*	n	NotF	0.95	*		2160	2.5	3.54	*	0.995	1.005
Tetra	PCB-76/66	*	*	n	NotF	1.04	*		2160	2.5	3.23	*	1.001	1.011
Tetra	PCB-80	*	*	n	NotF	1.19	*		2160	2.5	2.68	*	0.996	1.006
Tetra	PCB-55	*	*	n	NotF	1.04	*		2160	2.5	3.07	*	1.005	1.015
Tetra	PCB-56/60	*	*	n	NotF	1.01	*		2160	2.5	3.17	*	1.019	1.029
Tetra	PCB-79	*	*	n	NotF	1.08	*		2160	2.5	2.96	*	1.048	1.058
Tetra	PCB-78	*	*	n	NotF	1.27	*		2160	2.5	2.64	*	0.982	0.992
Tetra	PCB-81	*	*	n	NotF	1.33	*		2160	2.5	2.52	*	0.995	1.005
Tetra	PCB-77	*	*	n	NotF	1.10	*		2160	2.5	3.10	*	0.995	1.005
Penta	PCB-104	*	*	n	NotF	1.18	*		2240	2.5	8.47	*	0.996	1.006
Penta	PCB-96	*	*	n	NotF	1.14	*		2240	2.5	8.81	*	1.034	1.044
Penta	PCB-103	*	*	n	NotF	0.96	*		2240	2.5	10.5	*	1.050	1.060
Penta	PCB-100	*	*	n	NotF	0.94	*		2240	2.5	10.7	*	1.061	1.071
Penta	PCB-94	*	*	n	NotF	1.06	*		2240	2.5	12.2	*	0.980	0.990
Penta	PCB-95/98/102	*	*	n	NotF	1.22	*		2240	2.5	10.5	*	0.995	1.005
Penta	PCB-93	*	*	n	NotF	0.84	*		2240	2.5	15.2	*	0.997	1.007
Penta	PCB-88/91	*	*	n	NotF	1.12	*		2240	2.5	11.5	*	1.005	1.015
Penta	PCB-121	*	*	n	NotF	1.62	*		2240	2.5	7.95	*	1.009	1.019
Penta	PCB-84/92	*	*	n	NotF	1.05	*		2240	2.5	11.2	*	0.985	0.995
Penta	PCB-89	*	*	n	NotF	1.13	*		2240	2.5	10.4	*	0.991	1.001

Analyst: DMS

Date: 3/26/15

Client ID: Method Blank Filename: 150318E1 S:4 Acq:18-MAR-15 13:13:08 ConCal: ST150318E1-1
Lab ID: B5C0059-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.000 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	*	*	n NotF	1.10	*		2240	2.5	10.6	*	0.995	1.005
Penta	PCB-113	*	*	n NotF	1.41	*		2240	2.5	8.31	*	1.002	1.012
Penta	PCB-99	*	*	n NotF	1.34	*		2240	2.5	8.77	*	1.004	1.014
Penta	PCB-119	*	*	n NotF	1.53	*		2240	2.5	8.42	*	0.982	0.992
Penta	PCB-108/112	*	*	n NotF	1.28	*		2240	2.5	10.1	*	0.986	0.996
Penta	PCB-83	*	*	n NotF	1.52	*		2240	2.5	8.49	*	0.990	1.000
Penta	PCB-97	*	*	n NotF	1.18	*		2240	2.5	10.9	*	0.995	1.005
Penta	PCB-86	*	*	n NotF	0.84	*		2240	2.5	15.3	*	0.999	1.009
Penta	PCB-87/117/125	*	*	n NotF	1.55	*		2240	2.5	8.32	*	1.002	1.012
Penta	PCB-111/115	*	*	n NotF	1.63	*		2240	2.5	7.90	*	1.006	1.016
Penta	PCB-85/116	*	*	n NotF	1.30	*		2240	2.5	9.90	*	1.010	1.020
Penta	PCB-120	*	*	n NotF	1.68	*		2240	2.5	7.69	*	1.016	1.026
Penta	PCB-110	*	*	n NotF	1.56	*		2240	2.5	8.29	*	1.020	1.030
Penta	PCB-82	*	*	n NotF	0.76	*		2240	2.5	13.1	*	0.971	0.981
Penta	PCB-124	*	*	n NotF	1.47	*		2240	2.5	6.78	*	0.988	0.998
Penta	PCB-107/109	*	*	n NotF	1.32	*		2240	2.5	7.54	*	0.991	1.001
Penta	PCB-123	*	*	n NotF	1.17	*		2240	2.5	8.53	*	0.996	1.006
Penta	PCB-106/118	*	*	n NotF	1.17	*		2240	2.5	7.90	*	0.996	1.006
Penta	PCB-114	*	*	n NotF	1.30	*		2090	2.5	4.59	*	0.995	1.005
Penta	PCB-122	*	*	n NotF	1.12	*		2090	2.5	5.31	*	0.999	1.009
Penta	PCB-105	*	*	n NotF	1.30	*		2090	2.5	4.50	*	0.995	1.005
Penta	PCB-127	*	*	n NotF	1.33	*		2090	2.5	4.09	*	0.996	1.006
Penta	PCB-126	*	*	n NotF	1.18	*		2090	2.5	5.23	*	0.995	1.005
Hexa	PCB-155	*	*	n NotF	1.11	*		1780	2.5	8.59	*	0.966	1.006
Hexa	PCB-150	*	*	n NotF	1.00	*		1780	2.5	9.58	*	1.030	1.040
Hexa	PCB-152	*	*	n NotF	1.12	*		1780	2.5	8.57	*	1.043	1.053
Hexa	PCB-145	*	*	n NotF	1.20	*		1780	2.5	7.96	*	1.055	1.065
Hexa	PCB-136	*	*	n NotF	1.18	*		1780	2.5	8.12	*	1.064	1.074
Hexa	PCB-148	*	*	n NotF	0.74	*		1780	2.5	12.9	*	1.066	1.076
Hexa	PCB-154	*	*	n NotF	0.86	*		1780	2.5	11.1	*	1.080	1.090
Hexa	PCB-151	*	*	n NotF	0.75	*		1780	2.5	12.8	*	1.097	1.107
Hexa	PCB-135	*	*	n NotF	0.79	*		1780	2.5	12.1	*	1.103	1.113
Hexa	PCB-144	*	*	n NotF	0.76	*		1780	2.5	12.6	*	1.105	1.117
Hexa	PCB-147	*	*	n NotF	0.82	*		1780	2.5	11.7	*	1.109	1.121
Hexa	PCB-139/149	*	*	n NotF	0.76	*		1780	2.5	12.6	*	1.116	1.128
Hexa	PCB-140	*	*	n NotF	0.72	*		1780	2.5	13.2	*	1.121	1.133
Hexa	PCB-134/143	*	*	n NotF	0.92	*		1540	2.5	5.23	*	0.970	0.980

Analyst: DMS

Date: 3/26/15

Client ID: Method Blank Filename: 150318E1 S:4 Acq:18-MAR-15 13:13:08 ConCal: ST150318E1-1

Lab ID: B5C0059-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.000 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	*	*	n	NotF¶	0.82	*		1540	2.5	5.85	*	0.977	0.987
Hexa	PCB-131	*	*	n	NotF¶	0.91	*		1540	2.5	5.28	*	0.981	0.991
Hexa	PCB-146/165	*	*	n	NotF¶	1.25	*		1540	2.5	3.85	*	0.986	0.996
Hexa	PCB-132/161	*	*	n	NotF¶	1.10	*		1540	2.5	4.34	*	0.992	1.002
Hexa	PCB-153	*	*	n	NotF¶	1.25	*		1540	2.5	3.84	*	0.995	1.005
Hexa	PCB-168	*	*	n	NotF¶	1.45	*		1540	2.5	3.31	*	1.001	1.011
Hexa	PCB-141	*	*	n	NotF¶	1.09	*		1540	2.5	4.65	*	0.995	1.005
Hexa	PCB-137	*	*	n	NotF¶	1.06	*		1540	2.5	4.75	*	1.004	1.014
Hexa	PCB-130	*	*	n	NotF¶	0.96	*		1540	2.5	5.23	*	1.006	1.016
Hexa	PCB-138/163/164	5.97e+04	1.25	y	44:47	1.29	5.41		*	2.5	*	1.001	0.996	1.006
Hexa	PCB-158/160	*	*	n	NotF¶	1.34	*		1540	2.5	3.86	*	1.001	1.011
Hexa	PCB-129	*	*	n	NotF¶	0.85	*		1540	2.5	6.07	*	1.007	1.017
Hexa	PCB-166	*	*	n	NotF¶	1.19	*		1540	2.5	3.54	*	0.988	0.998
Hexa	PCB-159	*	*	n	NotF¶	1.11	*		1540	2.5	3.77	*	0.996	1.006
Hexa	PCB-128/162	*	*	n	NotF¶	1.05	*		1540	2.5	4.01	*	1.002	1.012
Hexa	PCB-167	*	*	n	NotF¶	1.20	*		1540	2.5	3.32	*	0.995	1.005
Hexa	PCB-156	*	*	n	NotF¶	1.14	*		1540	2.5	3.55	*	0.996	1.006
Hexa	PCB-157	*	*	n	NotF¶	1.16	*		1540	2.5	3.44	*	0.995	1.005
Hexa	PCB-169	*	*	n	NotF¶	1.12	*		1540	2.5	3.44	*	0.995	1.005
Hepta	PCB-188	*	*	n	NotF¶	1.58	*		1400	2.5	2.59	*	0.996	1.006
Hepta	PCB-184	*	*	n	NotF¶	1.63	*		1400	2.5	2.51	*	1.006	1.016
Hepta	PCB-179	*	*	n	NotF¶	1.30	*		1400	2.5	3.14	*	1.024	1.034
Hepta	PCB-176	*	*	n	NotF¶	1.48	*		1400	2.5	2.77	*	1.035	1.045
Hepta	PCB-186	*	*	n	NotF¶	1.45	*		1400	2.5	2.81	*	1.050	1.060
Hepta	PCB-178	*	*	n	NotF¶	1.03	*		1400	2.5	3.95	*	1.061	1.071
Hepta	PCB-175	*	*	n	NotF¶	1.01	*		1400	2.5	4.04	*	1.069	1.079
Hepta	PCB-182/187	*	*	n	NotF¶	1.25	*		1400	2.5	3.27	*	1.073	1.083
Hepta	PCB-183	*	*	n	NotF¶	1.21	*		1400	2.5	3.38	*	1.081	1.091
Hepta	PCB-185	*	*	n	NotF¶	1.80	*		1400	2.5	3.03	*	0.951	0.961
Hepta	PCB-174	*	*	n	NotF¶	1.38	*		1400	2.5	3.96	*	0.958	0.968
Hepta	PCB-181	*	*	n	NotF¶	1.38	*		1400	2.5	3.95	*	0.960	0.970
Hepta	PCB-177	*	*	n	NotF¶	1.26	*		1400	2.5	4.34	*	0.963	0.973
Hepta	PCB-171	*	*	n	NotF¶	1.58	*		1400	2.5	3.45	*	0.970	0.980
Hepta	PCB-173	*	*	n	NotF¶	1.11	*		1400	2.5	4.92	*	0.978	0.988
Hepta	PCB-172	*	*	n	NotF¶	1.63	*		1400	2.5	3.34	*	0.987	0.997
Hepta	PCB-192	*	*	n	NotF¶	1.74	*		1400	2.5	3.13	*	0.991	1.001
Hepta	PCB-180	*	*	n	NotF¶	1.34	*		1400	2.5	4.06	*	0.995	1.005

Analyst: DMS

Date: 3/26/15

Client ID: Method Blank Filename: 150318E1 S:4 Acq:18-MAR-15 13:13:08 ConCal: ST150318E1-1
Lab ID: B5C0059-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.000 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	*	*	n	NotF╗	1.72	*		1400	2.5	3.18	*	0.999	1.009
Hepta	PCB-191	*	*	n	NotF╗	1.69	*		1400	2.5	3.22	*	1.004	1.014
Hepta	PCB-170	*	*	n	NotF╗	1.60	*		1400	2.5	3.79	*	0.995	1.005
Hepta	PCB-190	*	*	n	NotF╗	2.21	*		1400	2.5	2.74	*	0.998	1.008
Hepta	PCB-189	*	*	n	NotF╗	1.55	*		1400	2.5	2.57	*	0.995	1.005
Octa	PCB-202	*	*	n	NotF╗	1.08	*		1500	2.5	6.52	*	0.995	1.005
Octa	PCB-201	*	*	n	NotF╗	1.15	*		1500	2.5	6.14	*	1.005	1.015
Octa	PCB-204	*	*	n	NotF╗	1.14	*		1500	2.5	6.20	*	1.008	1.018
Octa	PCB-197	*	*	n	NotF╗	1.07	*		1500	2.5	6.57	*	1.015	1.025
Octa	PCB-200	*	*	n	NotF╗	1.06	*		1500	2.5	6.64	*	1.032	1.044
Octa	PCB-198	*	*	n	NotF╗	0.76	*		1500	2.5	9.35	*	1.059	1.069
Octa	PCB-199	*	*	n	NotF╗	0.80	*		1500	2.5	8.85	*	1.061	1.071
Octa	PCB-196/203	*	*	n	NotF╗	0.80	*		1500	2.5	8.81	*	1.066	1.076
Octa	PCB-195	*	*	n	NotF╗	1.23	*		1360	2.5	2.65	*	0.979	0.989
Octa	PCB-194	*	*	n	NotF╗	1.21	*		1360	2.5	2.68	*	0.995	1.005
Octa	PCB-205	*	*	n	NotF╗	1.54	*		1360	2.5	2.11	*	1.001	1.011
Nona	PCB-208	*	*	n	NotF╗	0.93	*		1200	2.5	2.24	*	0.995	1.005
Nona	PCB-207	*	*	n	NotF╗	1.08	*		1200	2.5	1.93	*	1.001	1.011
Nona	PCB-206	*	*	n	NotF╗	1.02	*		1200	2.5	3.36	*	0.995	1.005
Deca	PCB-209	2.80e+04	0.96	n	56:49	1.17	4.10	R	*	2.5	*	1.000	0.995	1.005

Analyst: DMS

Date: 3/26/15

Client ID: Method Blank Filename: 150318E1 S:4 Acq:18-MAR-15 13:13:08 ConCal: ST150318E1-1
Lab ID: B5C0059-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.0000 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	*	*	n	NotFnd	1.10	*	
Total Tri-PCB	*	*	n	NotFnd	1.21	*	Sum:0.00000
Total Tetra-PCB	*	*	n	NotFnd	1.09	*	
Total Penta-PCB	*	*	n	NotFnd	1.18	*	
Total Penta-PCB	*	*	n	NotFnd	1.25	*	Sum:0.00000
Total Hexa-PCB	*	*	n	NotFnd	0.90	*	
Total Hexa-PCB	5.97e+04	1.25	y	44:47	1.11	5.40708	Sum:5.40708
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	2.80e+04	0.96	n	56:49	1.17	4.10166	

Total PCB Conc:9.50874300000

Integrations
by
Analyst: DMS

Date: 3/26/15

Client ID: Method Blank Filename: 150318E1 S:4 Acq:18-MAR-15 13:13:08 ConCal: ST150318E1-1

Lab ID: B5C0059-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:2.0000 EndCAL: NA

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	9.41e+07	3.22 y	0.87	16:09	0.623	0.629-0.635		5000	50.0
13C-PCB-3	1.23e+08	3.24 y	0.91	18:46	0.724	0.725-0.733		6280	62.8
13C-PCB-4	7.69e+07	1.60 y	0.59	20:05	0.774	0.775-0.783		6080	60.8
13C-PCB-9	1.32e+08	1.60 y	0.90	21:52	0.843	0.842-0.850		6830	68.3
13C-PCB-11	1.56e+08	1.58 y	0.94	25:14	0.973	0.968-0.978		7710	77.1
13C-PCB-19	8.19e+07	1.07 y	0.53	24:13	0.934	0.930-0.940		7140	71.4
13C-PCB-28	1.51e+08	1.08 y	0.93	29:05	1.003	0.999-1.009		8830	88.3
13C-PCB-32	1.33e+08	1.10 y	0.80	27:08	1.046	1.040-1.050		7730	77.3
13C-PCB-37	1.54e+08	1.08 y	0.84	32:57	1.137	1.131-1.143		9990	99.9
13C-PCB-47	1.06e+08	0.79 y	0.81	31:59	0.871	0.866-0.874		8040	80.4
13C-PCB-52	1.02e+08	0.80 y	0.77	31:29	0.857	0.853-0.861		8170	81.7
13C-PCB-54	1.12e+08	0.84 y	0.97	27:58	0.761	0.758-0.766		7130	71.3
13C-PCB-70	1.42e+08	0.80 y	1.00	35:30	0.966	0.961-0.971		8750	87.5
13C-PCB-77	1.41e+08	0.79 y	0.94	39:36	1.078	1.073-1.083		9220	92.2
13C-PCB-80	1.48e+08	0.80 y	1.03	35:55	0.978	0.972-0.982		8820	88.2
13C-PCB-81	1.40e+08	0.80 y	0.92	39:01	1.062	1.057-1.067		9340	93.4
13C-PCB-95	5.48e+07	1.62 y	0.74	35:48	0.913	0.908-0.918		8770	87.7
13C-PCB-97	5.52e+07	1.60 y	0.70	38:46	0.989	0.984-0.994		9280	92.8
13C-PCB-101	5.99e+07	1.62 y	0.78	37:29	0.956	0.951-0.961		9050	90.5
13C-PCB-104	6.98e+07	1.62 y	1.00	32:39	0.833	0.828-0.836		8260	82.6
13C-PCB-105	1.16e+08	1.58 y	1.37	43:02	0.929	0.924-0.934		9930	99.3
13C-PCB-114	1.14e+08	1.62 y	1.36	42:10	0.911	0.905-0.915		9810	98.1
13C-PCB-118	7.71e+07	1.59 y	0.96	41:31	1.059	1.054-1.064		9530	95.3
13C-PCB-123	7.38e+07	1.65 y	0.89	41:20	1.054	1.050-1.060		9770	97.7
13C-PCB-126	1.14e+08	1.63 y	1.31	45:15	0.977	0.972-0.982		10200	102
13C-PCB-127	1.25e+08	1.64 y	1.47	43:21	0.936	0.931-0.941		9970	99.7
13C-PCB-138	8.54e+07	1.32 y	1.10	44:45	0.967	0.961-0.971		9100	91.0
13C-PCB-141	8.45e+07	1.28 y	1.07	43:55	0.949	0.943-0.953		9210	92.1
13C-PCB-153	9.01e+07	1.31 y	1.15	43:11	0.933	0.927-0.937		9210	92.1
13C-PCB-155	5.13e+07	1.28 y	0.84	37:01	0.944	0.939-0.949		7230	72.3
13C-PCB-156	1.07e+08	1.29 y	1.30	48:00	1.037	1.032-1.042		9660	96.6
13C-PCB-157	1.09e+08	1.28 y	1.36	48:16	1.042	1.038-1.048		9440	94.4
13C-PCB-159	1.03e+08	1.28 y	1.25	46:02	0.994	0.989-0.999		9680	96.8
13C-PCB-167	1.11e+08	1.29 y	1.35	46:43	1.009	1.004-1.014		9580	95.8
13C-PCB-169	1.02e+08	1.26 y	1.29	50:26	1.089	1.083-1.093		9300	93.0
13C-PCB-170	3.74e+07	0.48 y	0.54	50:48	1.097	1.089-1.101		8090	80.9
13C-PCB-180	4.62e+07	0.48 y	0.68	49:17	1.064	1.060-1.070		7910	79.1
13C-PCB-188	6.16e+07	0.46 y	0.92	42:49	0.925	0.919-0.929		7870	78.7
13C-PCB-189	5.22e+07	0.47 y	0.72	52:18	1.130	1.120-1.132		8550	85.5
13C-PCB-194	6.95e+07	0.92 y	0.80	53:49	0.995	0.990-1.000		9040	90.4
13C-PCB-202	4.96e+07	0.94 y	0.84	48:13	1.041	1.036-1.046		6940	69.4
13C-PCB-206	5.87e+07	0.79 y	0.65	55:26	1.025	1.021-1.031		9370	93.7
13C-PCB-208	8.76e+07	0.78 y	1.08	53:05	0.982	0.976-0.986		8410	84.1
13C-PCB-209	5.83e+07	1.21 y	0.61	56:48	1.050	1.045-1.055		9900	99.0

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.53e+08	0.79 y	1.02	37:48	1.029	1.023-1.034		9250	92.5
13C-PCB-178	4.10e+07	0.48 y	0.61	45:36	0.985	0.979-0.990		7830	78.3

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.53e+08	0.79 y	1.10	37:48	0.969	0.964-0.974		9900	99.0
13C-PCB-178	4.10e+07	0.48 y	0.90	45:36	0.925	0.920-0.930		9880	98.8

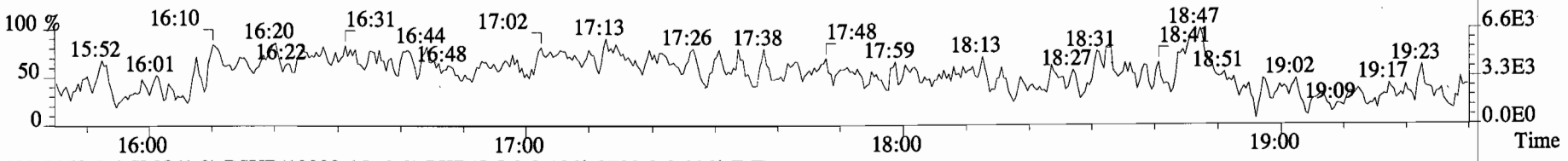
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	2.16e+08	1.57	y	1.00	25:56	10000
13C-PCB-31	1.83e+08	1.06	y	1.00	28:59	10000
13C-PCB-60	1.62e+08	0.81	y	1.00	36:44	10000
13C-PCB-111	8.44e+07	1.60	y	1.00	39:12	10000
13C-PCB-128	8.53e+07	1.30	y	1.00	46:18	10000
13C-PCB-205	9.64e+07	0.91	y	1.00	54:05	10000

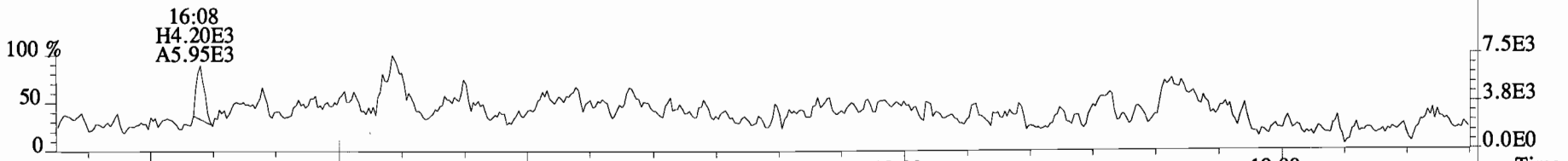
Analyst: DMS

Date: 3/26/15

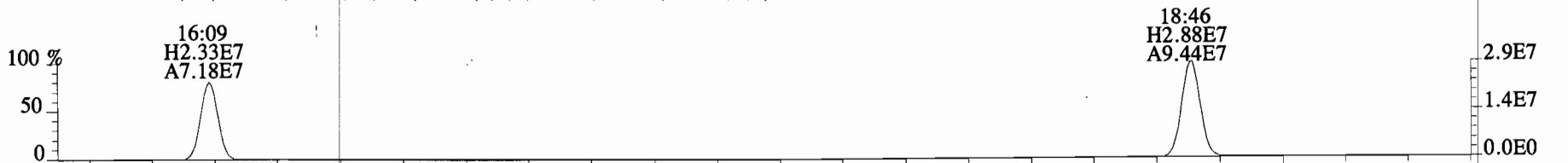
File:150318E1 #1-867 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
188.0393 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4496.0,0.00%,F,F)



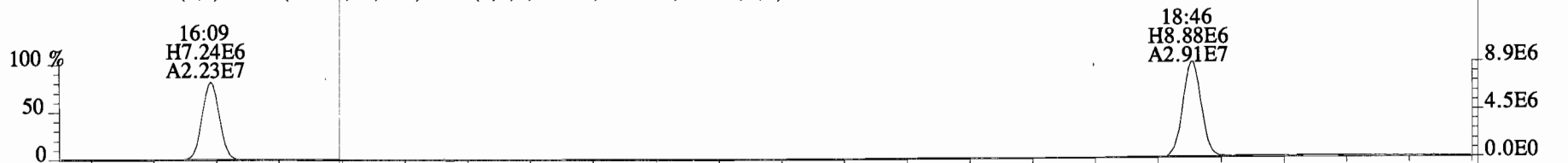
190.0363 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3728.0,0.00%,F,F)



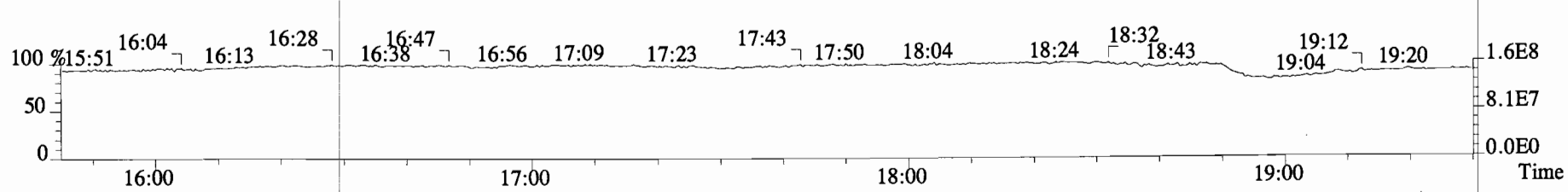
200.0795 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7836.0,0.00%,F,F)



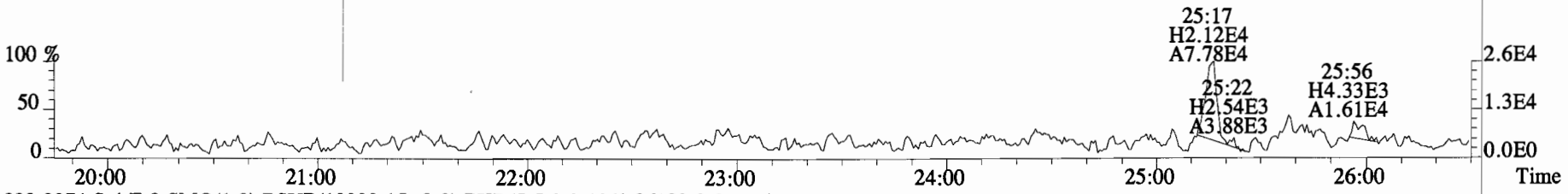
202.0766 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,81316.0,0.00%,F,F)



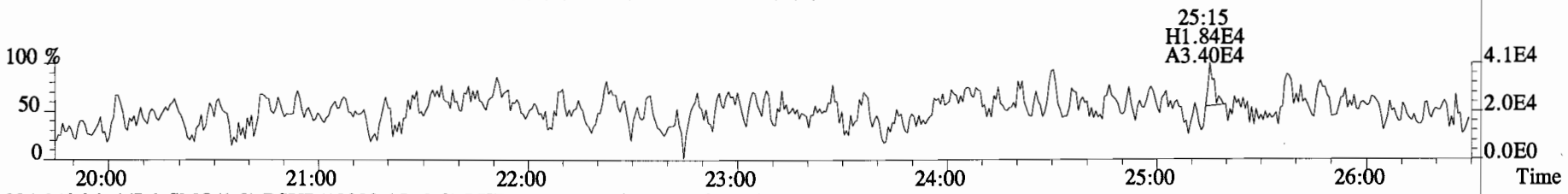
180.9880 S:4



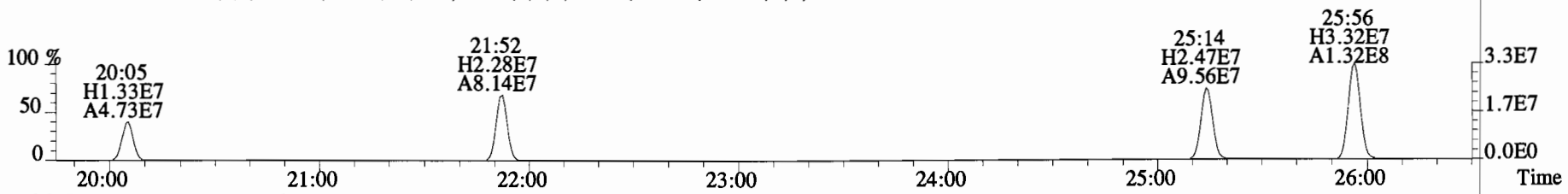
File:150318E1 #1-757 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4960.0,0.00%,F,F)



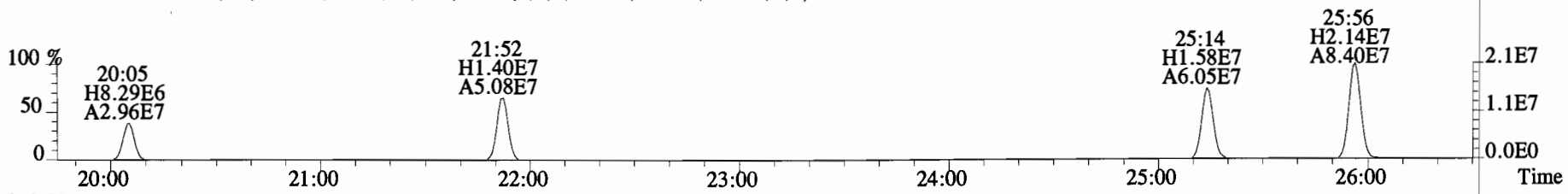
223.9974 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,26180.0,0.00%,F,F)



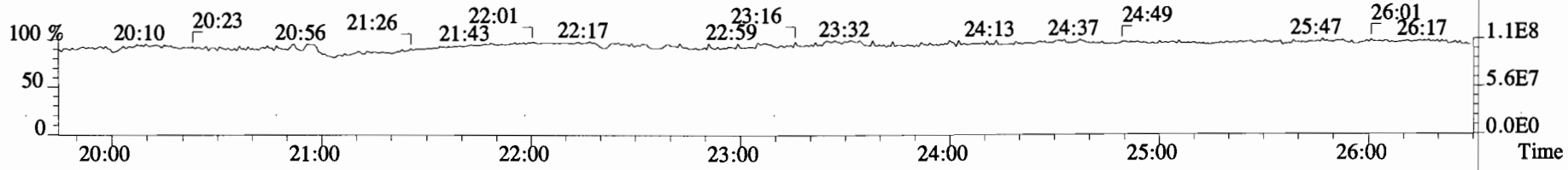
234.0406 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5508.0,0.00%,F,F)



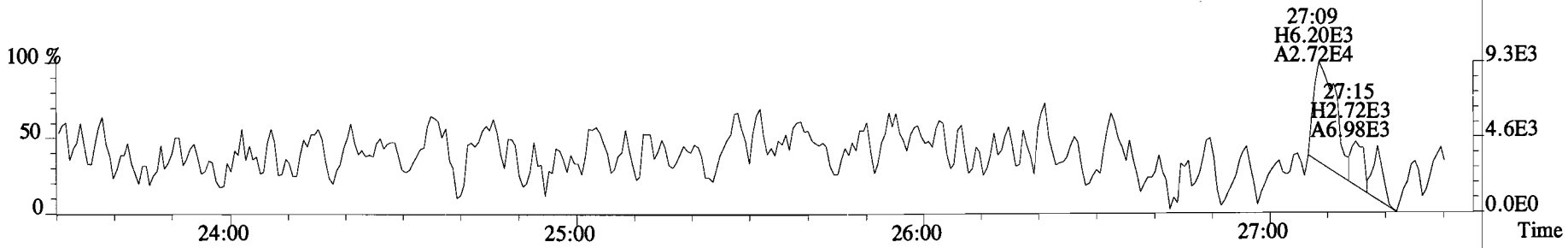
236.0376 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4596.0,0.00%,F,F)



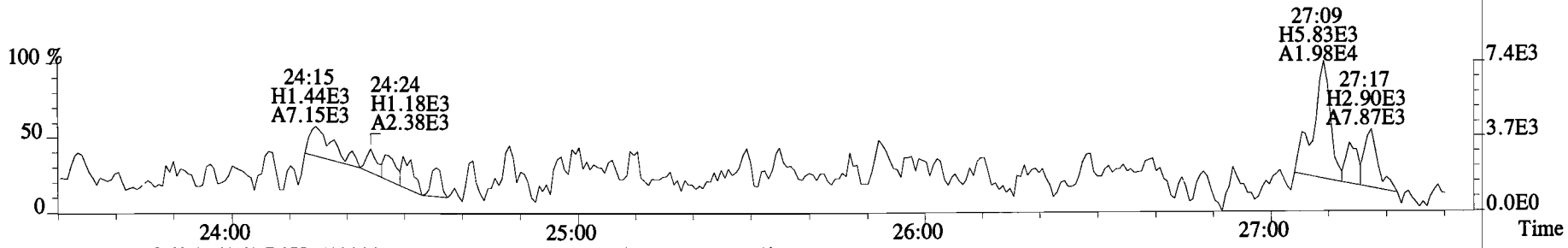
230.9856 S:4 F:2



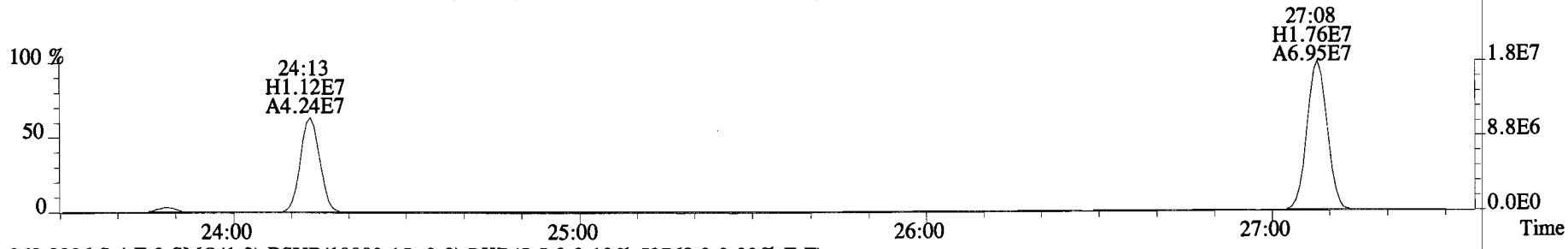
File:150318E1 #1-757 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
255.9613 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4688.0,0.00%,F,F)



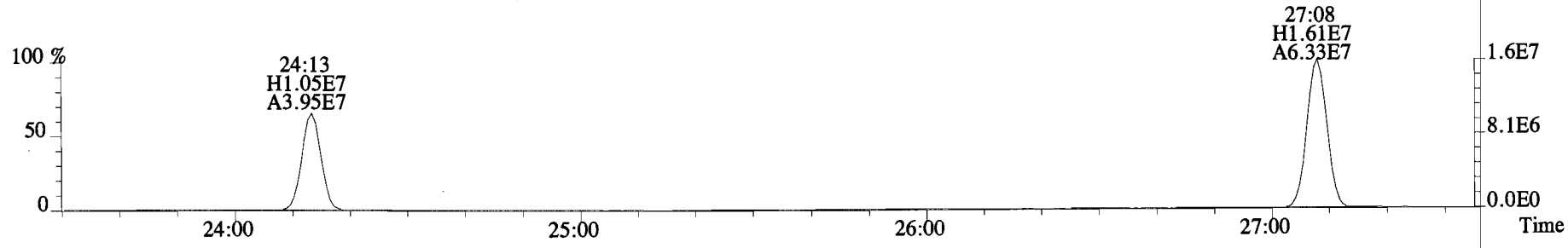
257.9584 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2404.0,0.00%,F,F)

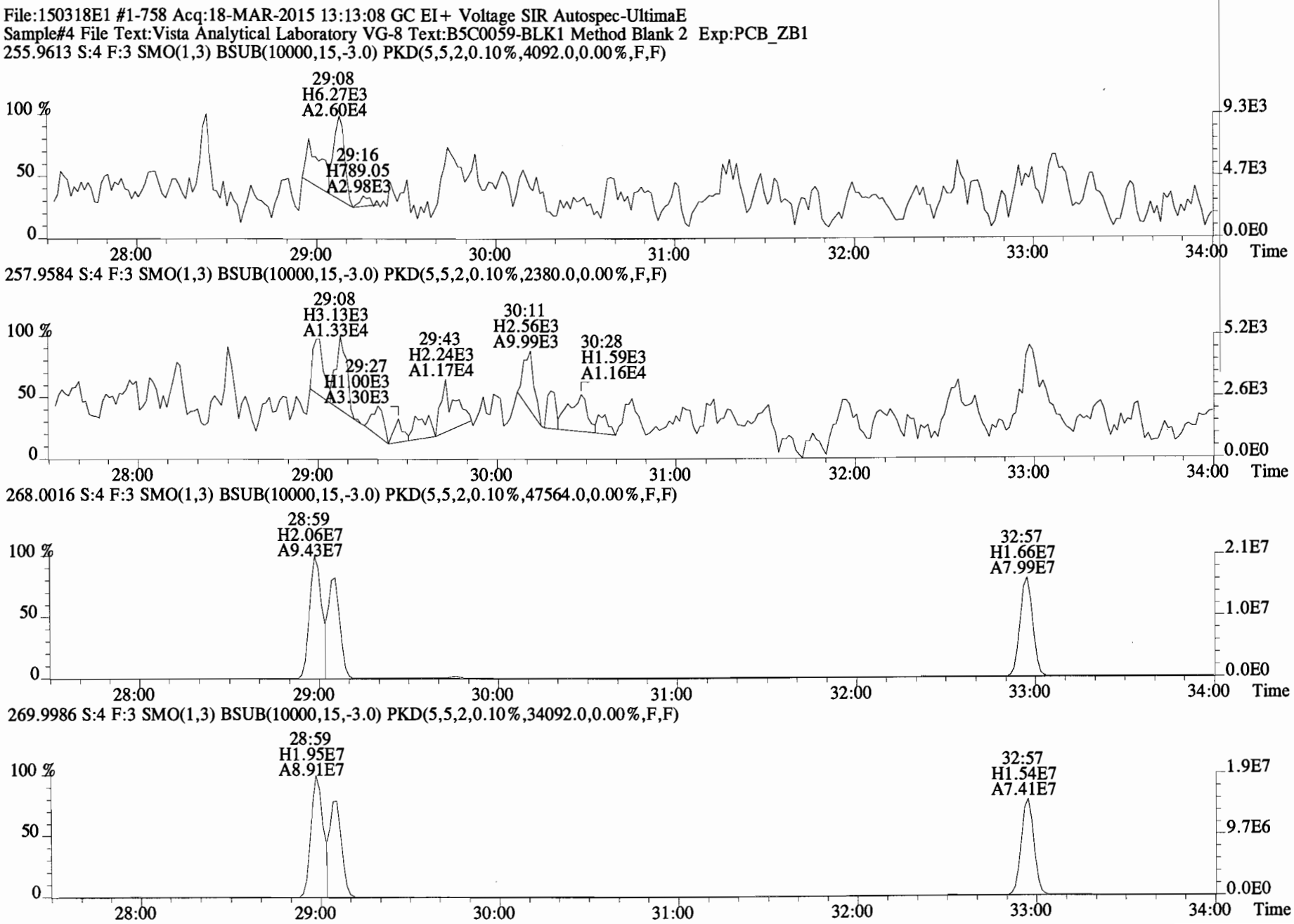


268.0016 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,80356.0,0.00%,F,F)

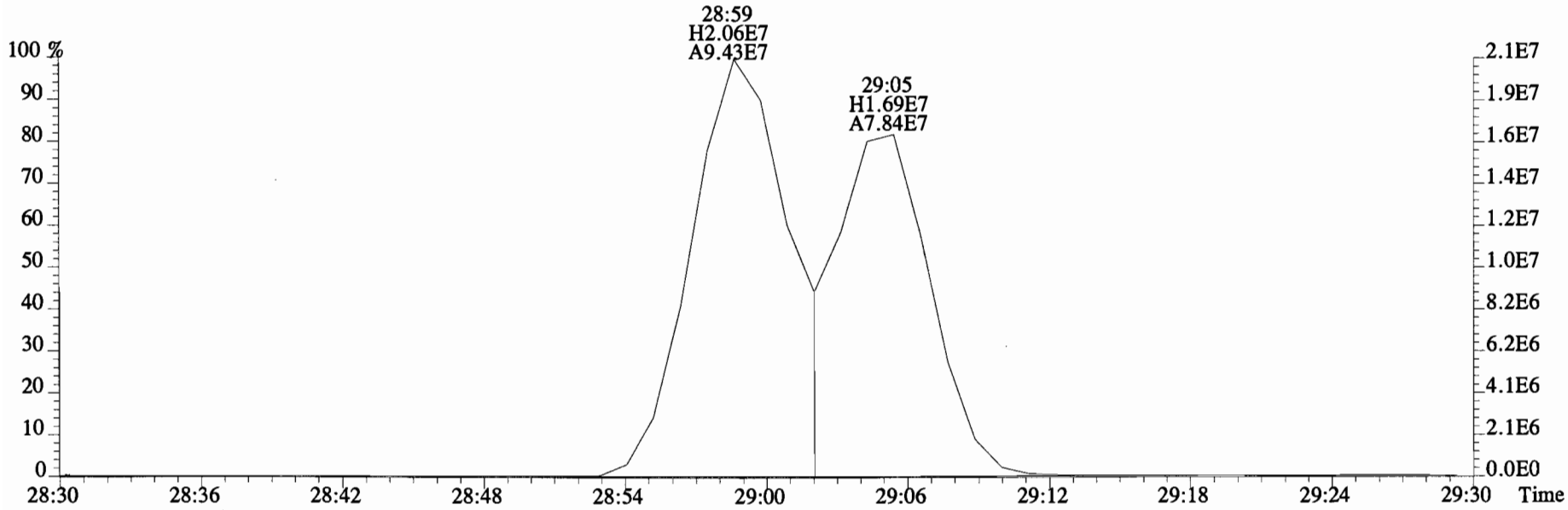


269.9986 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,52768.0,0.00%,F,F)

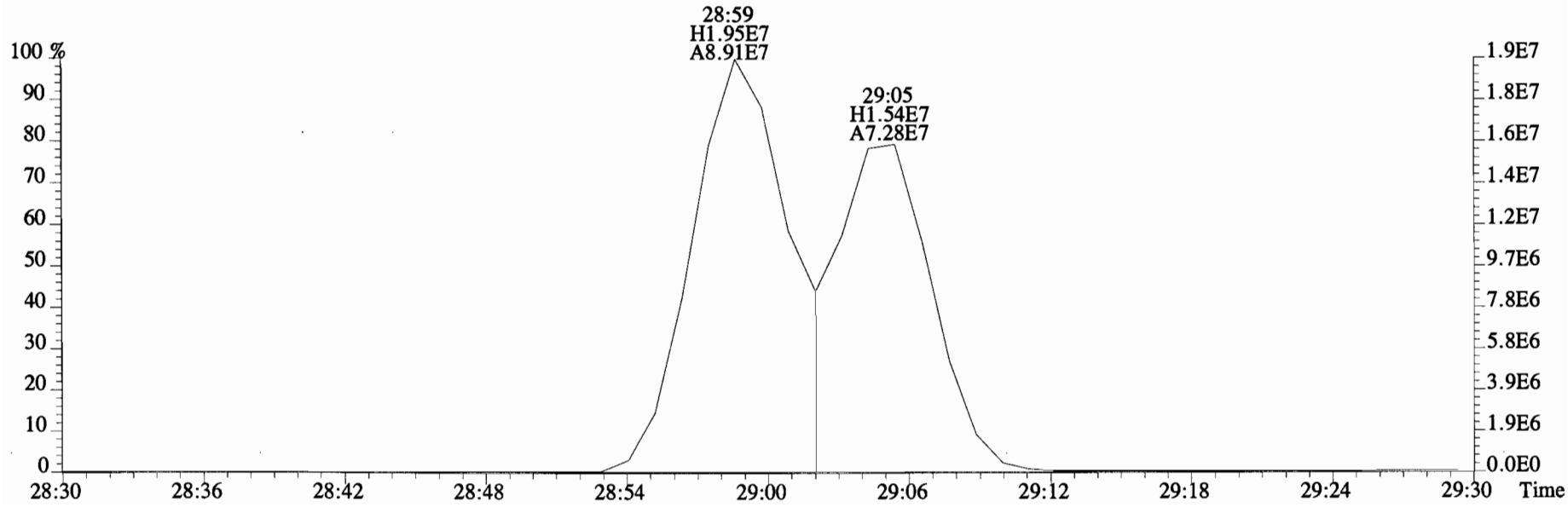



File:150318E1 #1-758 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4092.0,0.00%,F,F)
29:08
H6.27E3
A2.60E4
29:16
H789.05
A2.98E3
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2380.0,0.00%,F,F)
29:08
H3.13E3
A1.33E4
29:27
H1.00E3
A3.30E3
29:43
H2.24E3
A1.17E4
30:11
H2.56E3
A9.99E3
30:28
H1.59E3
A1.16E4
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,47564.0,0.00%,F,F)
28:59
H2.06E7
A9.43E7
32:57
H1.66E7
A7.99E7
269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,34092.0,0.00%,F,F)
28:59
H1.95E7
A8.91E7
32:57
H1.54E7
A7.41E7
100 %
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
9.3E3
4.7E3
0.0E0
5.2E3
2.6E3
2.1E7
1.0E7
1.9E7
9.7E6

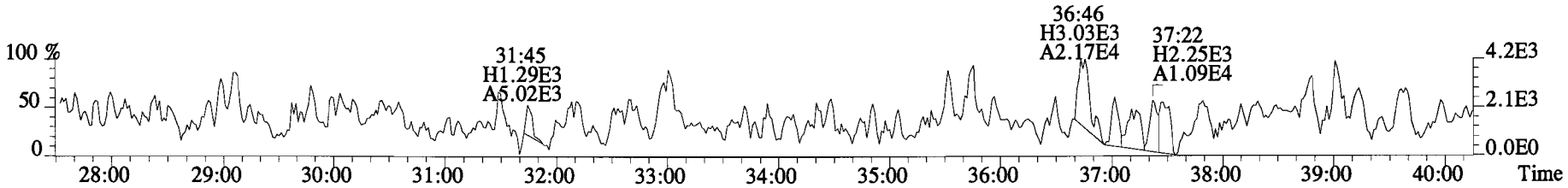
File:150318E1 #1-758 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,47564.0,0.00%,F,F)



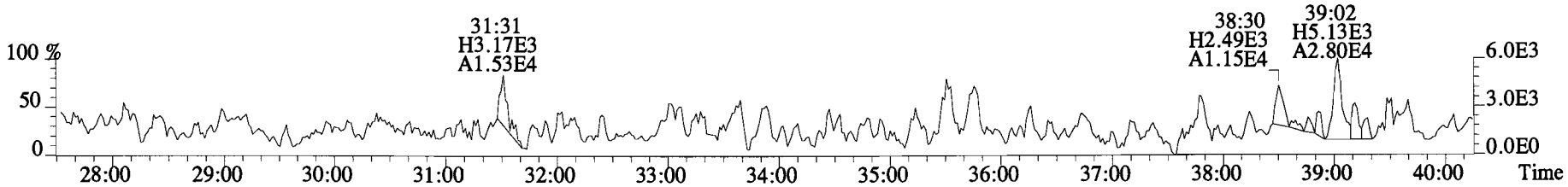
269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,34092.0,0.00%,F,F)



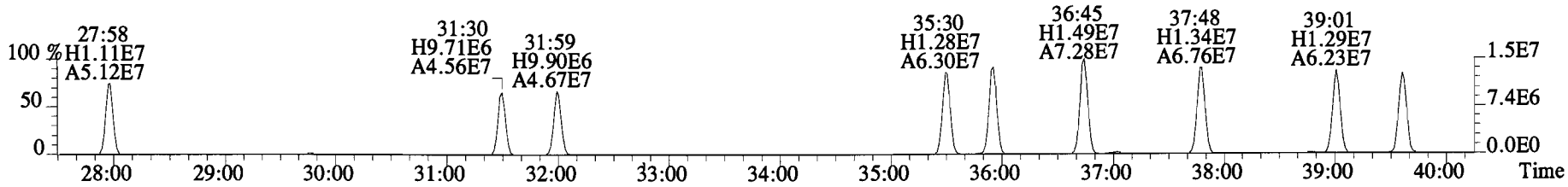
File:150318E1 #1-758 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2104.0,0.00%,F,F)



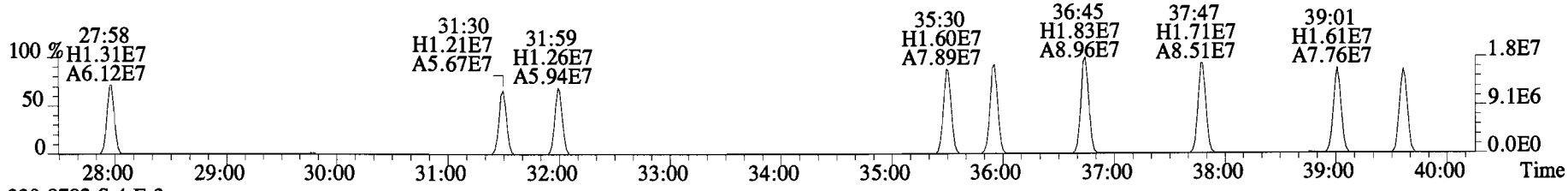
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2164.0,0.00%,F,F)



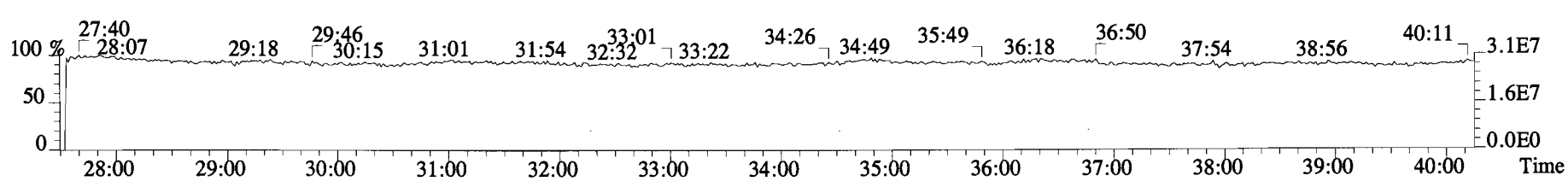
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,25996.0,0.00%,F,F)



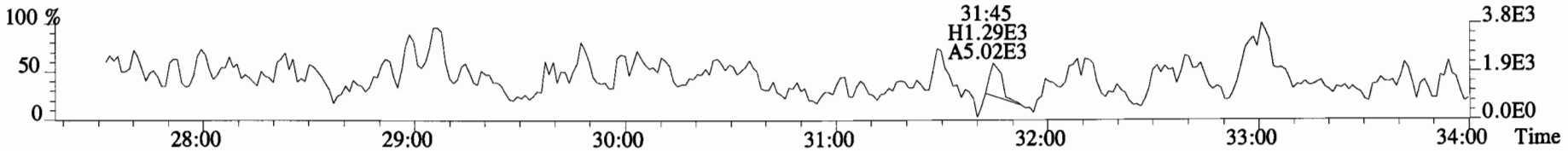
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,14968.0,0.00%,F,F)



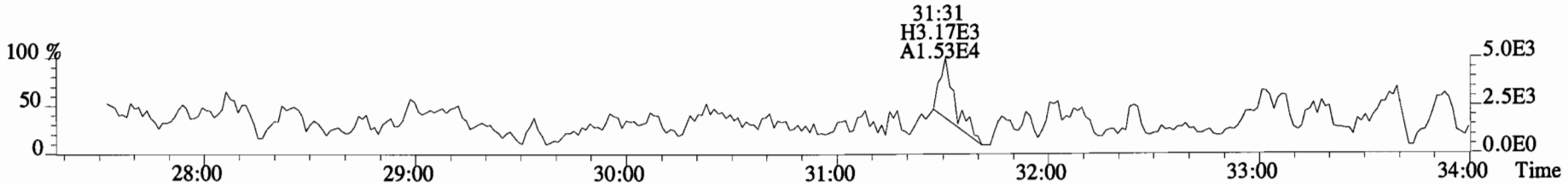
330.9792 S:4 F:3



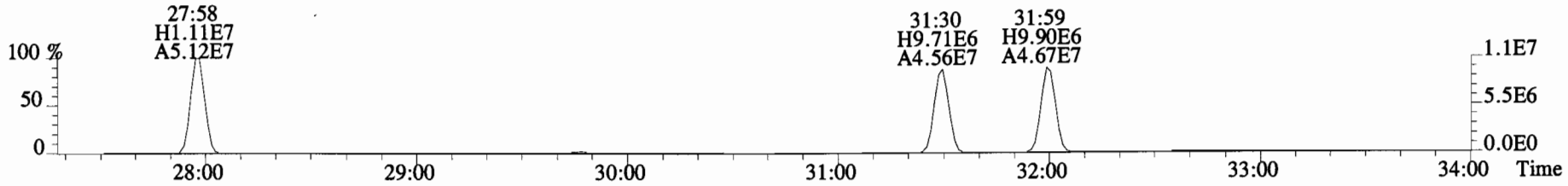
File:150318E1 #1-758 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2104.0,0.00%,F,F)



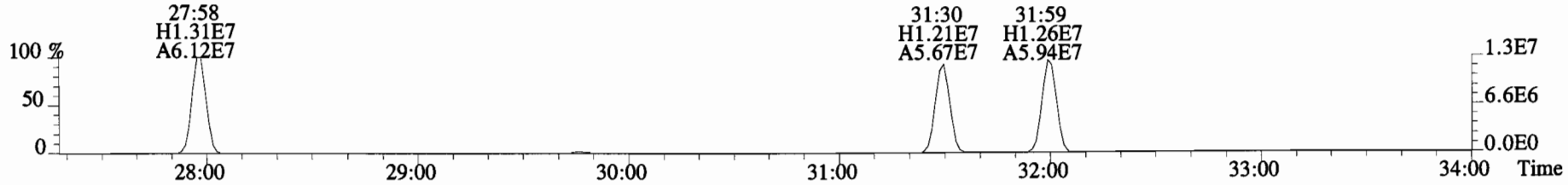
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2164.0,0.00%,F,F)



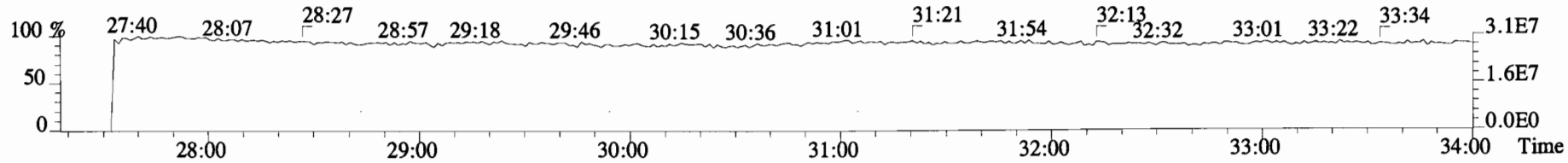
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,25996.0,0.00%,F,F)



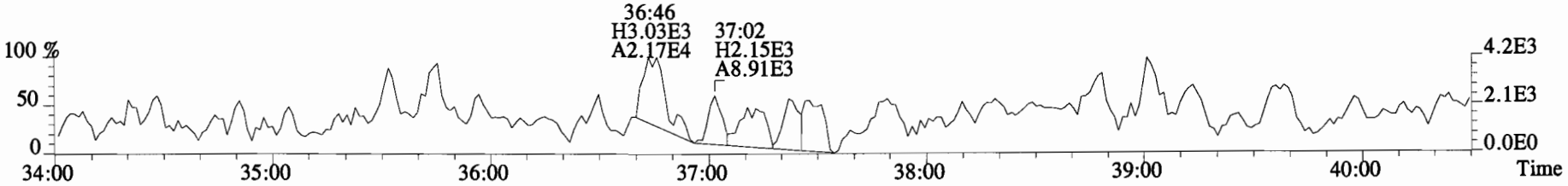
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,14968.0,0.00%,F,F)



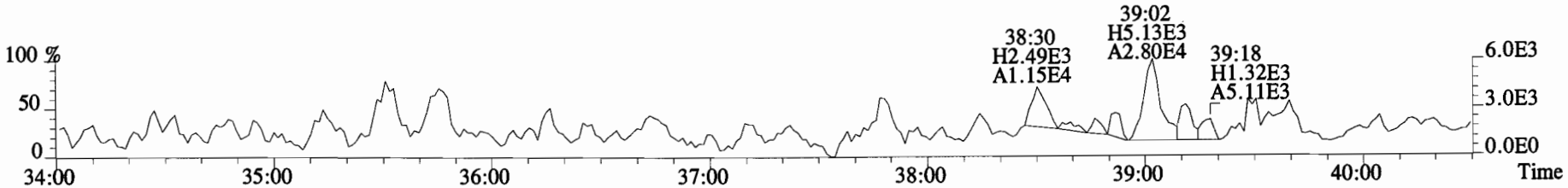
330.9792 S:4 F:3



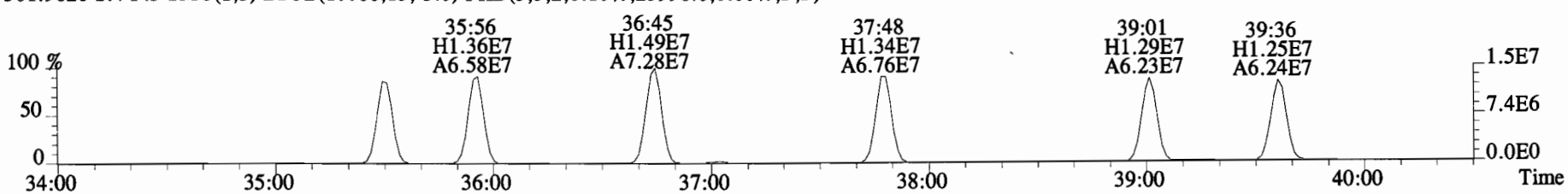
File:150318E1 #1-758 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2104.0,0.00%,F,F)



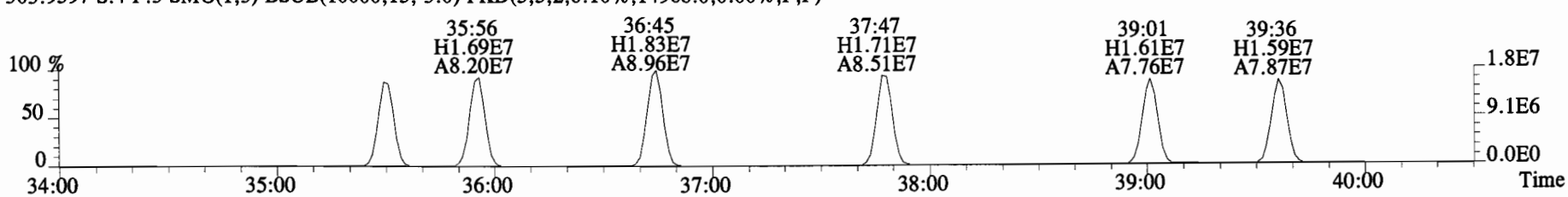
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2164.0,0.00%,F,F)



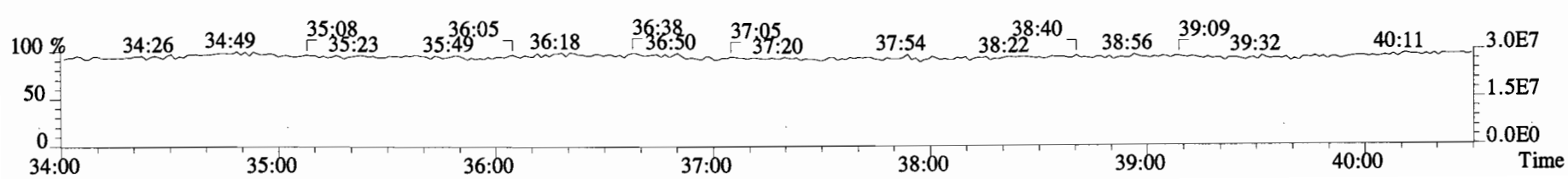
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,25996.0,0.00%,F,F)



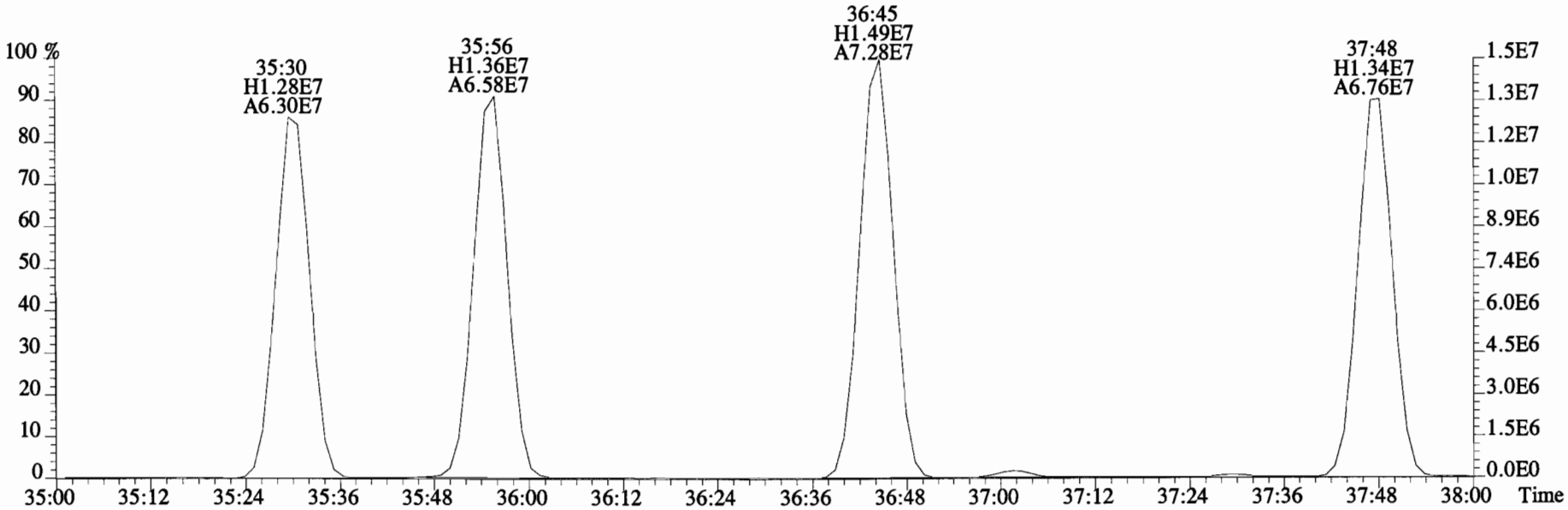
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,14968.0,0.00%,F,F)



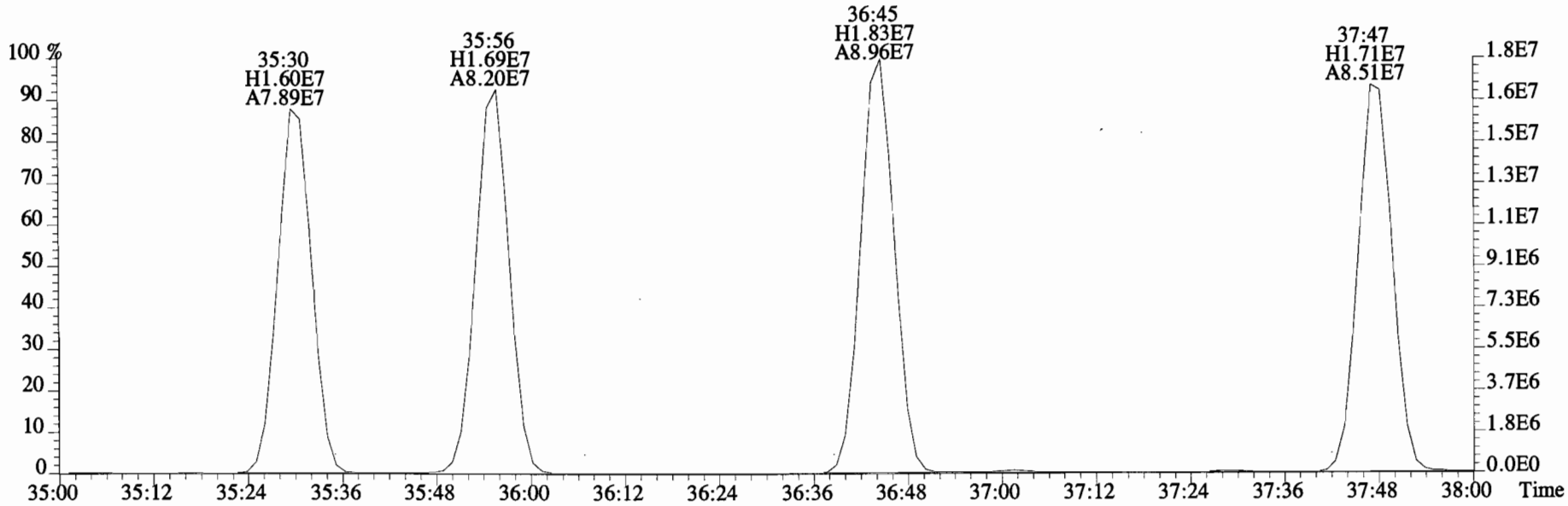
330.9792 S:4 F:3



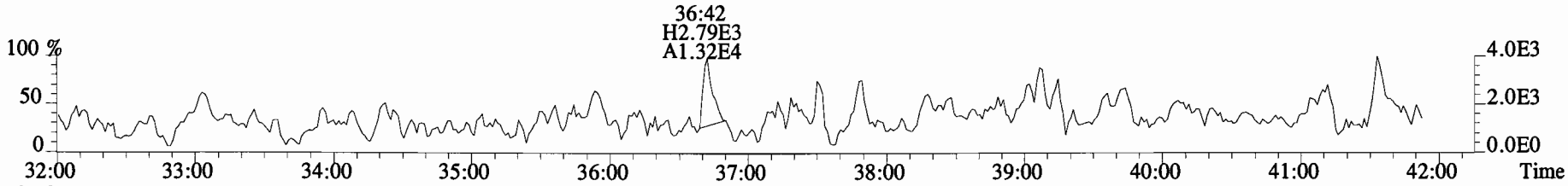
File:150318E1 #1-758 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,25996.0,0.00%,F,F)



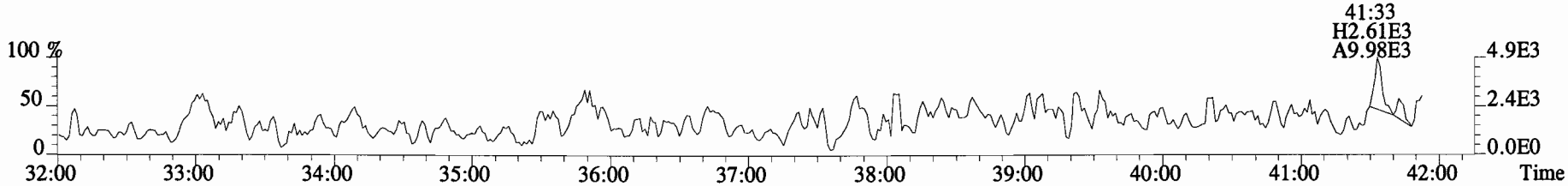
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,14968.0,0.00%,F,F)



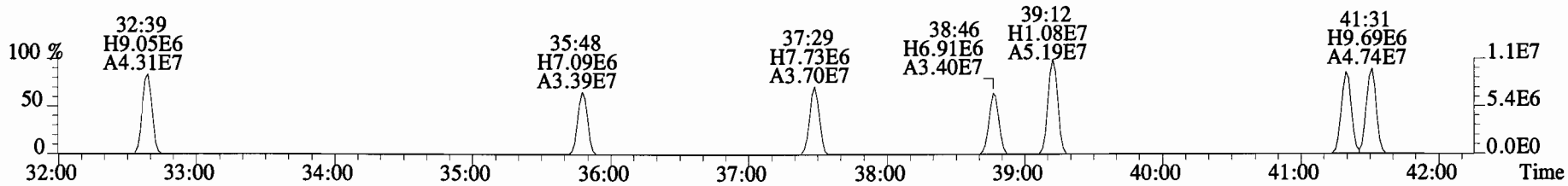
File:150318E1 #1-758 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1848.0,0.00%,F,F)



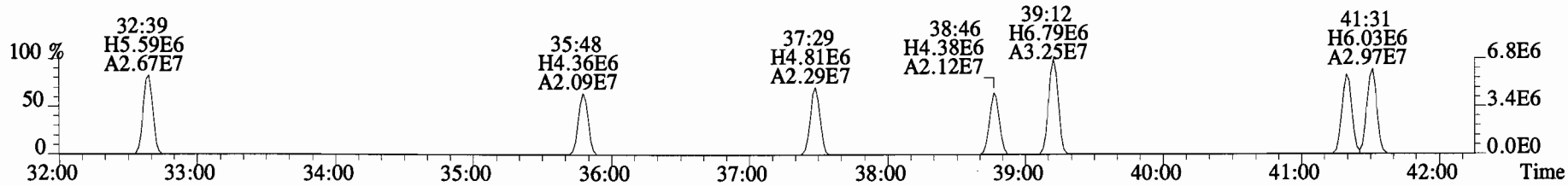
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2244.0,0.00%,F,F)



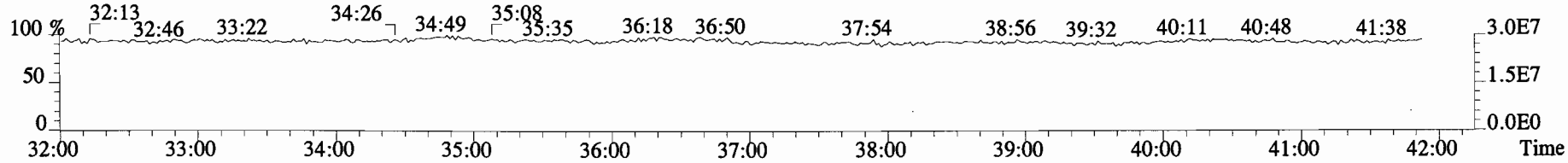
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3144.0,0.00%,F,F)



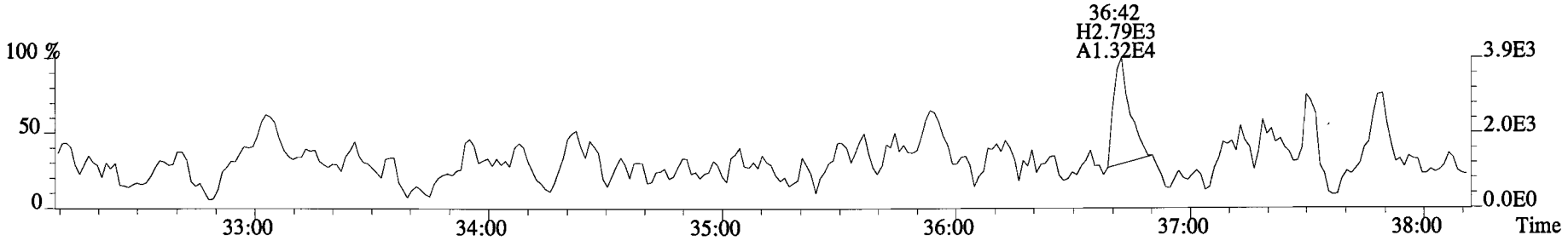
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2736.0,0.00%,F,F)



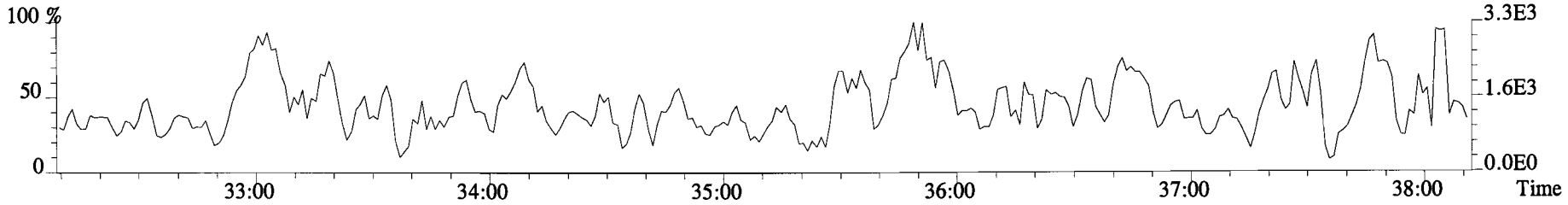
330.9792 S:4 F:3



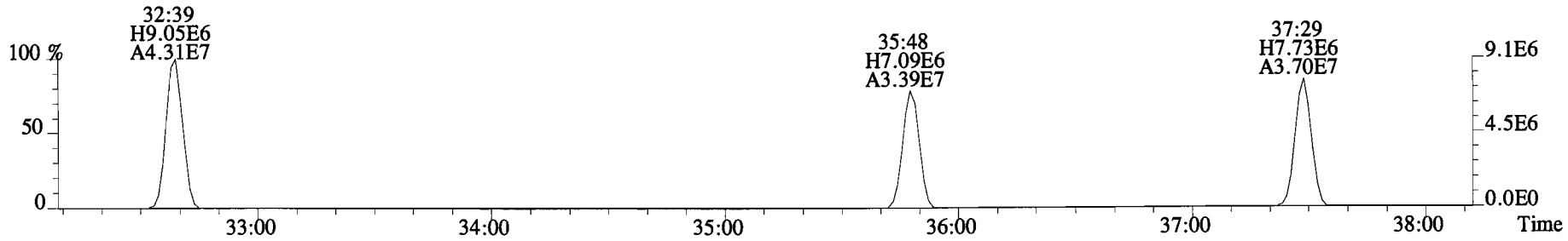
File:150318E1 #1-758 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1848.0,0.00%,F,F)



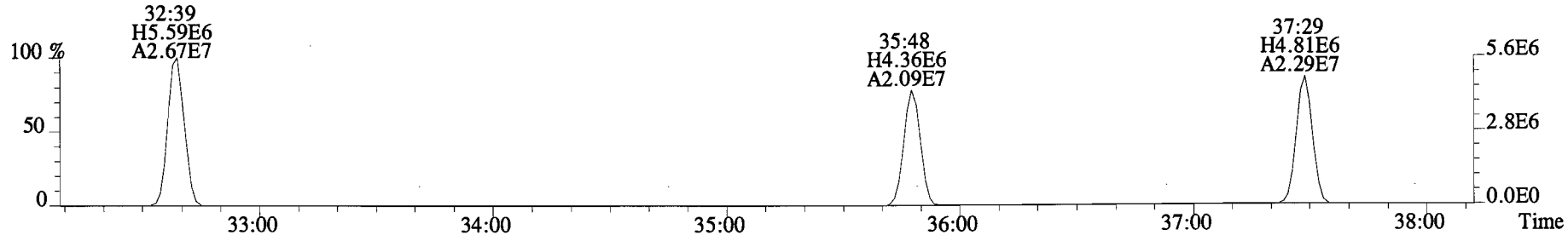
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2244.0,0.00%,F,F)



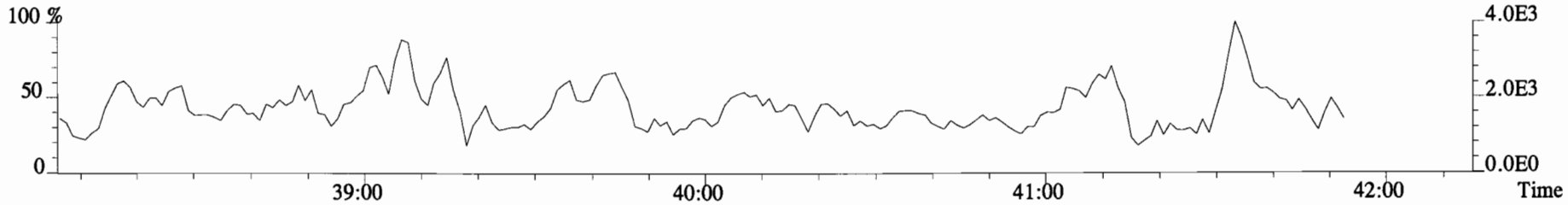
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3144.0,0.00%,F,F)



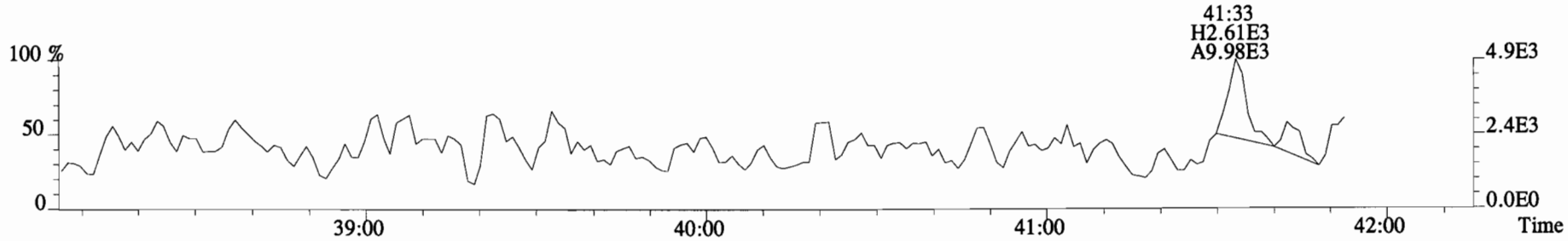
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2736.0,0.00%,F,F)



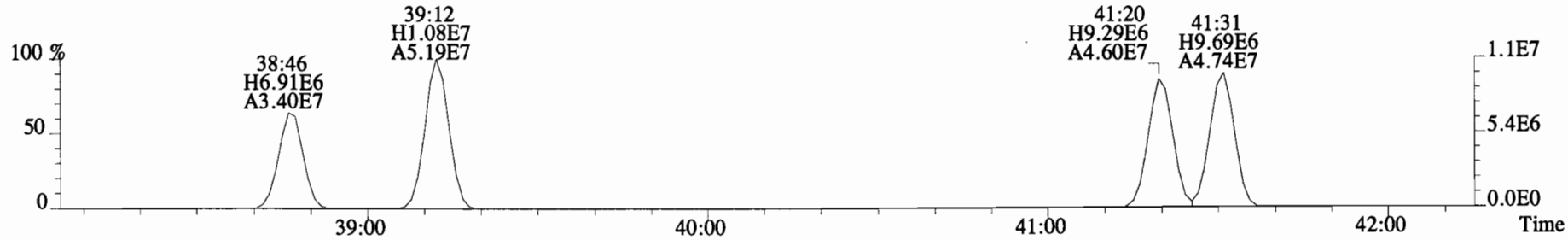
File:150318E1 #1-758 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1848.0,0.00%,F,F)



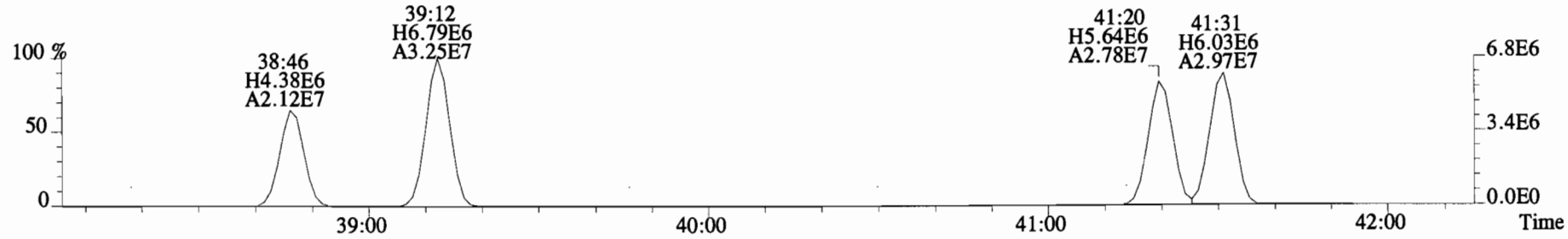
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2244.0,0.00%,F,F)



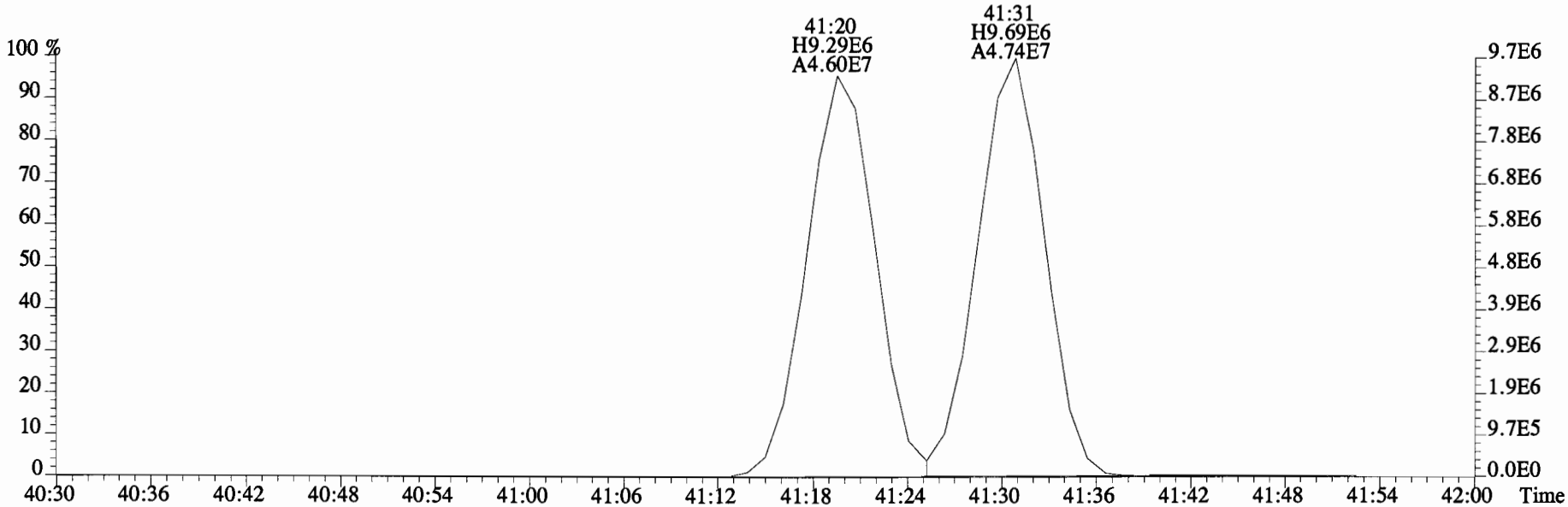
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3144.0,0.00%,F,F)



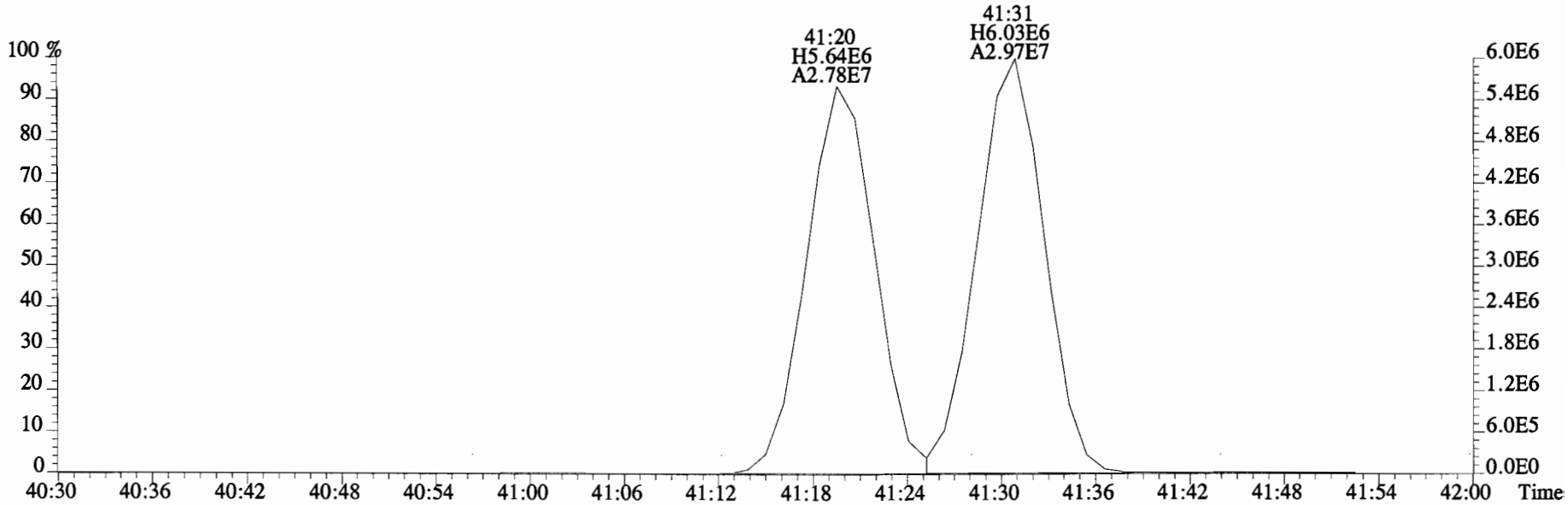
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2736.0,0.00%,F,F)



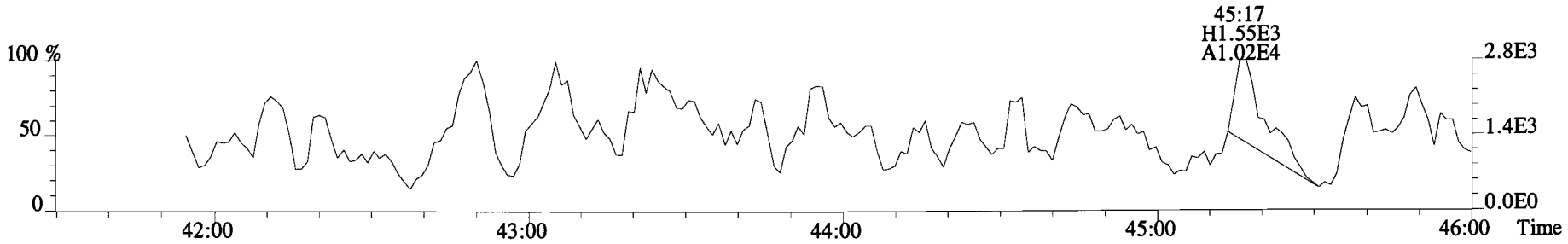
File:150318E1 #1-758 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3144.0,0.00%,F,F)



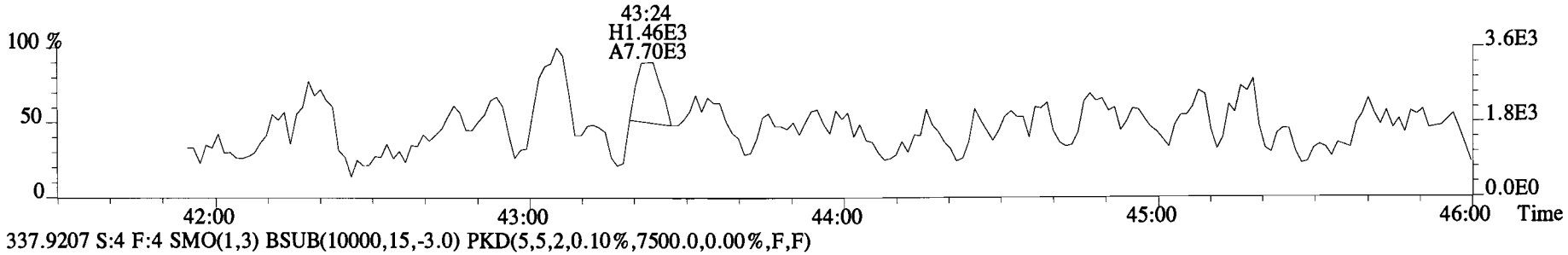
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2736.0,0.00%,F,F)



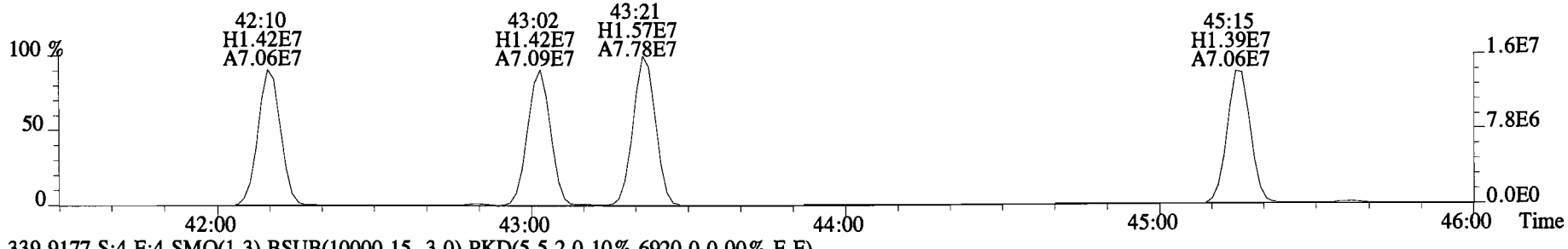
File:150318E1 #1-555 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
325.8804 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1724.0,0.00%,F,F)



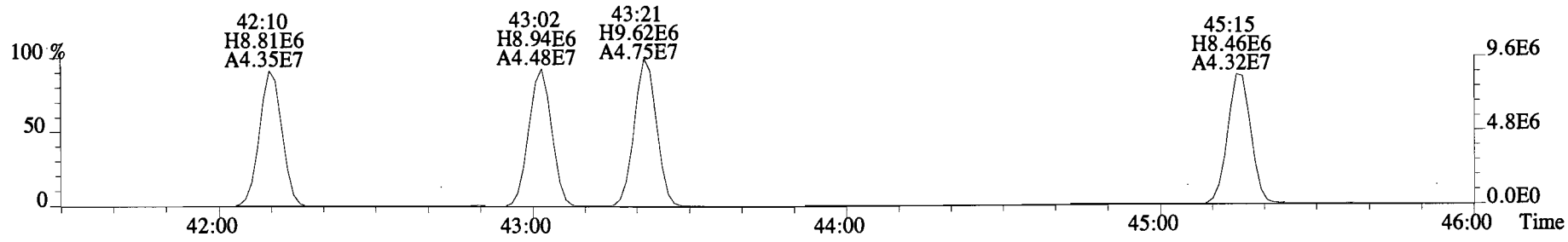
327.8775 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2092.0,0.00%,F,F)



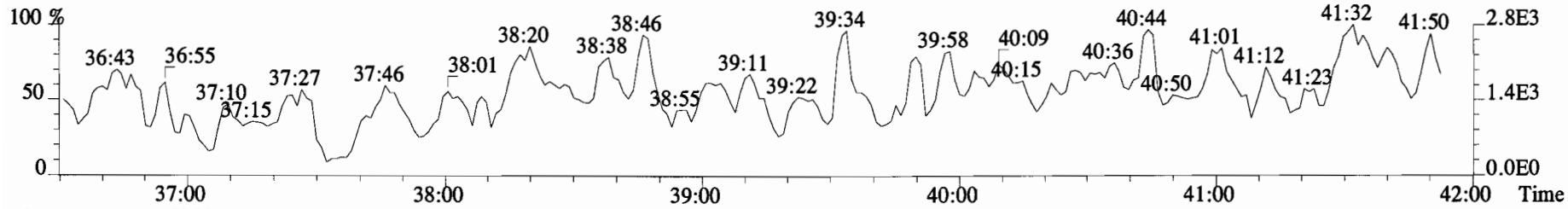
337.9207 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7500.0,0.00%,F,F)



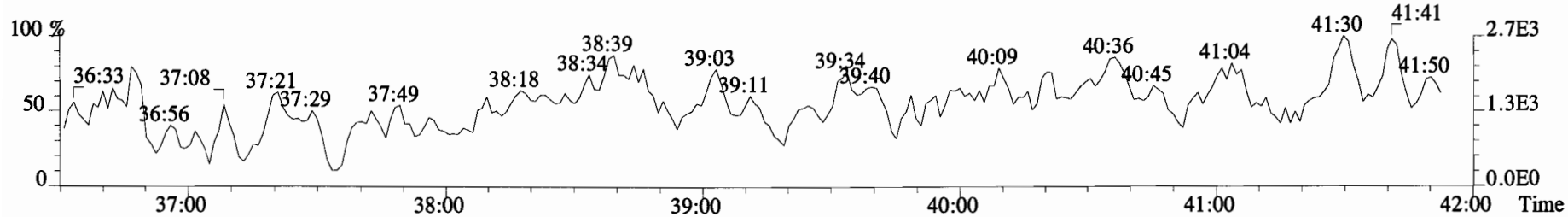
339.9177 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6920.0,0.00%,F,F)



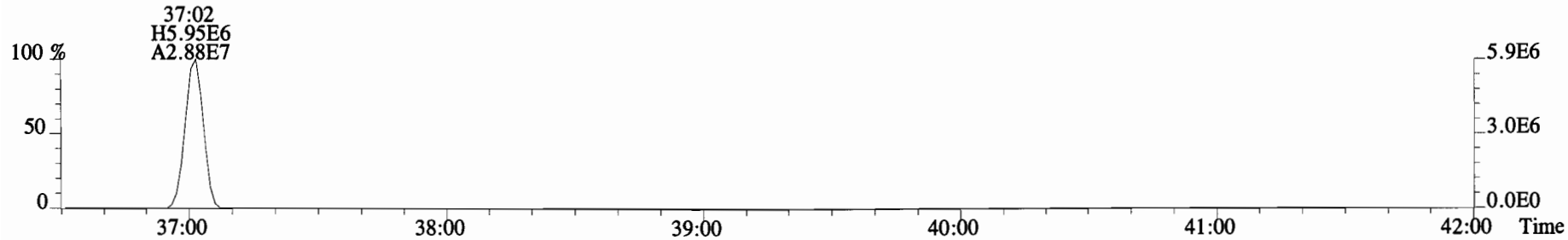
File:150318E1 #1-758 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1768.0,0.00%,F,F)



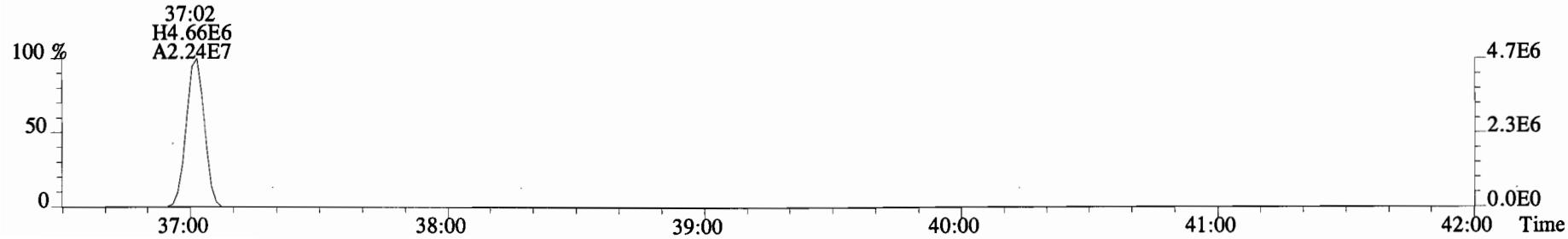
361.8385 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1776.0,0.00%,F,F)



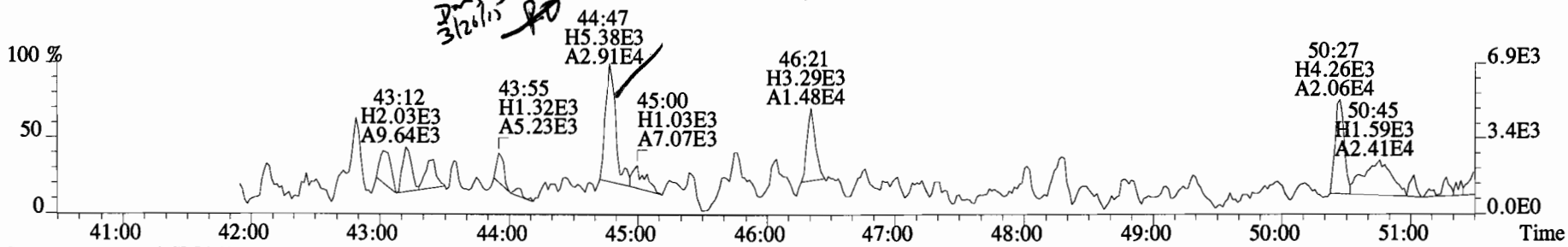
371.8817 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1852.0,0.00%,F,F)



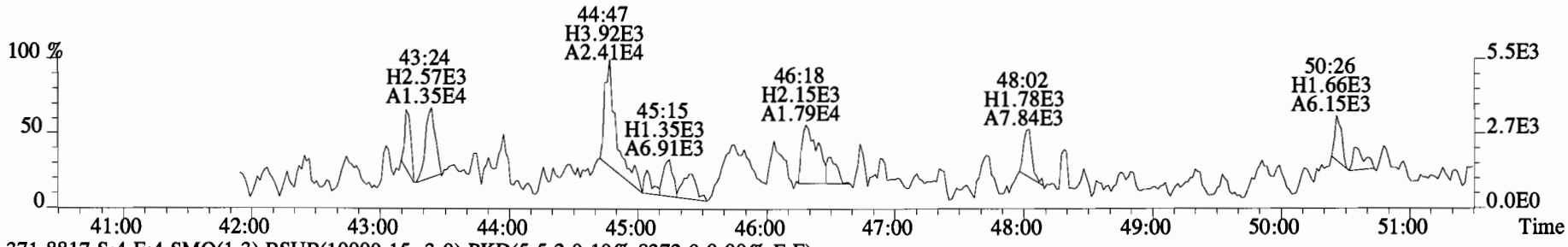
373.8788 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2076.0,0.00%,F,F)



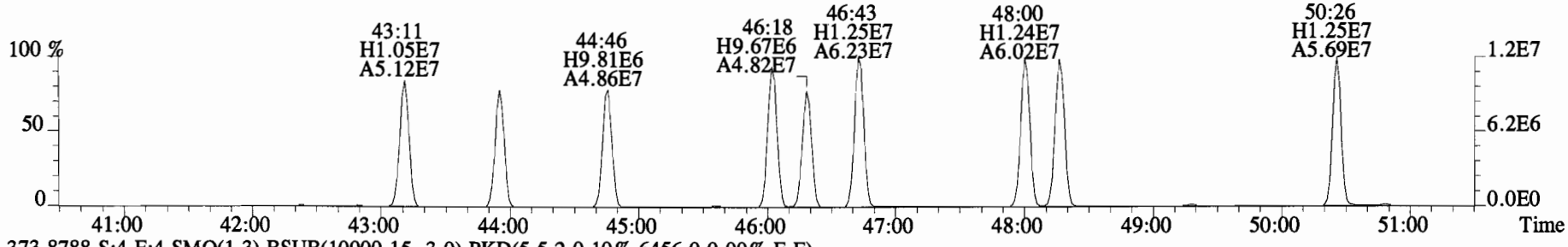
File:150318E1 #1-555 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1592.0,0.00%,F,F)



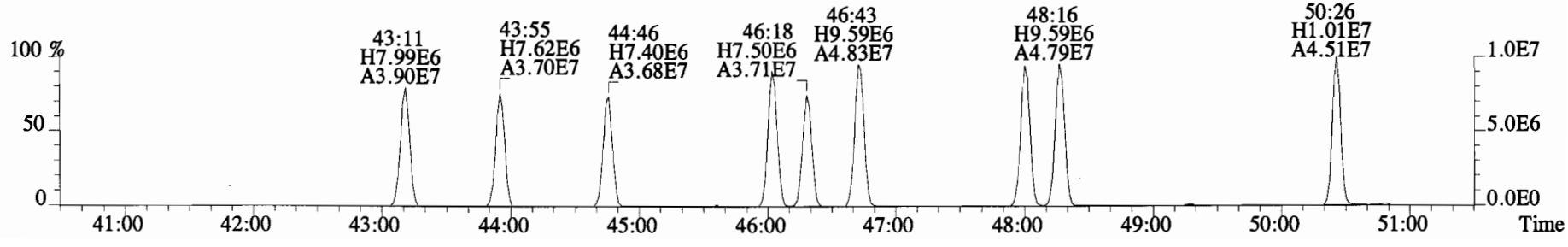
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1536.0,0.00%,F,F)



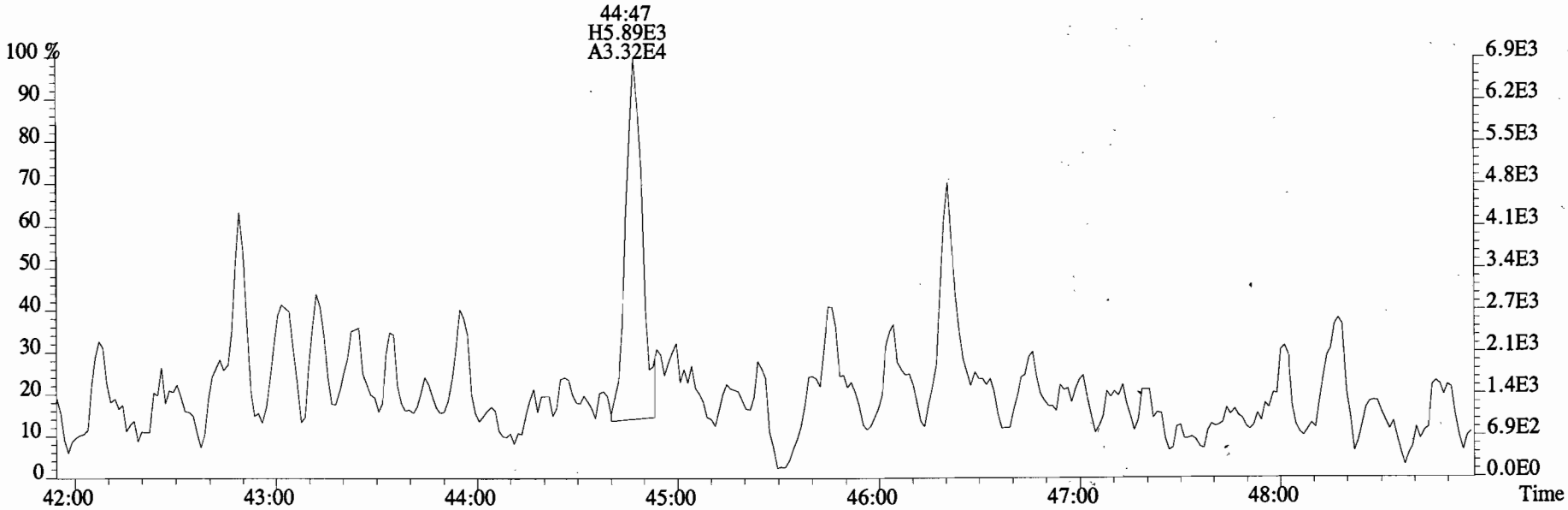
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8372.0,0.00%,F,F)



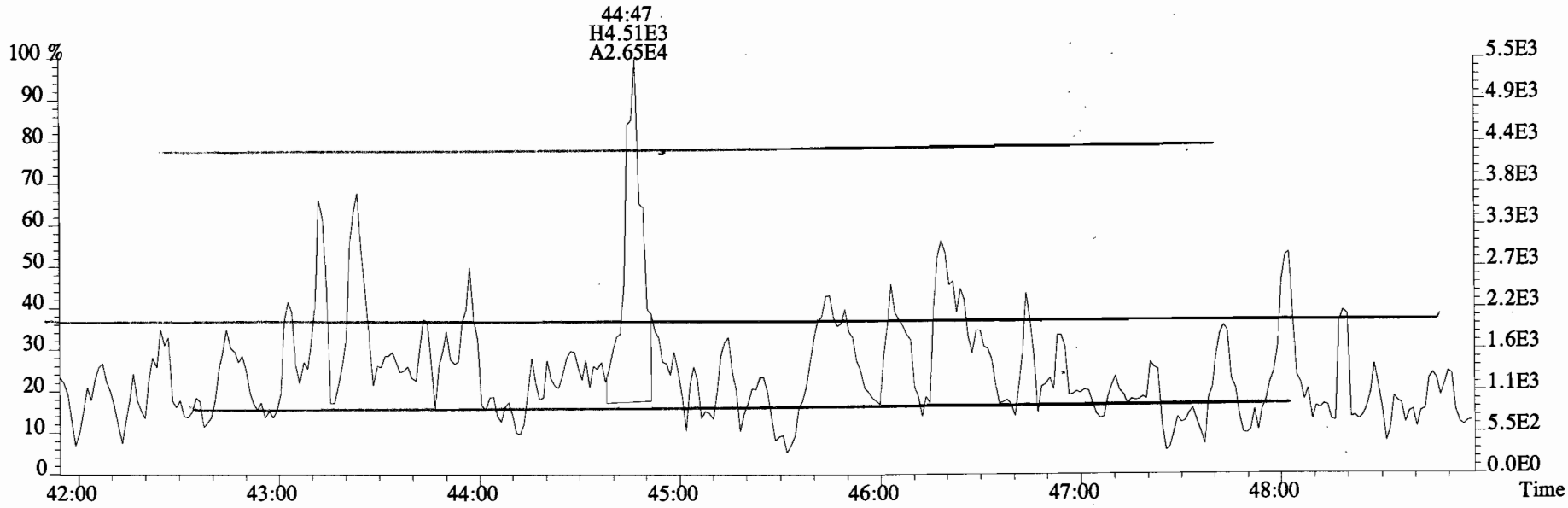
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6456.0,0.00%,F,F)



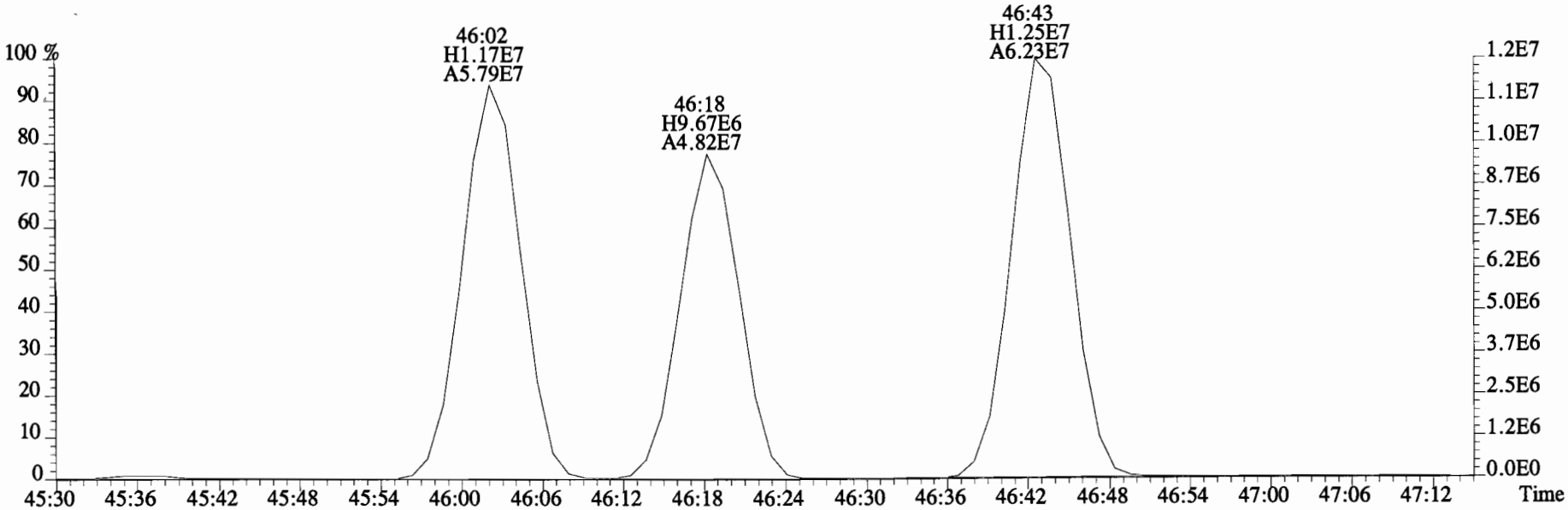
File:150318E1 #1-555 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1592.0,0.00%,F,F)



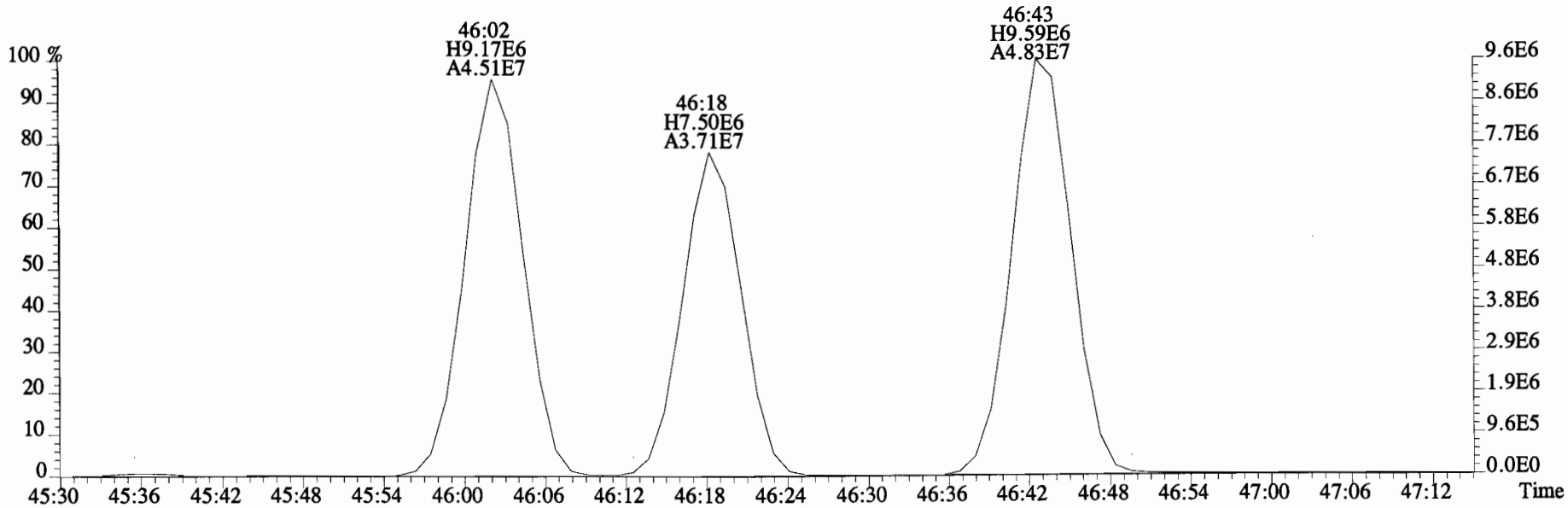
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1536.0,0.00%,F,F)

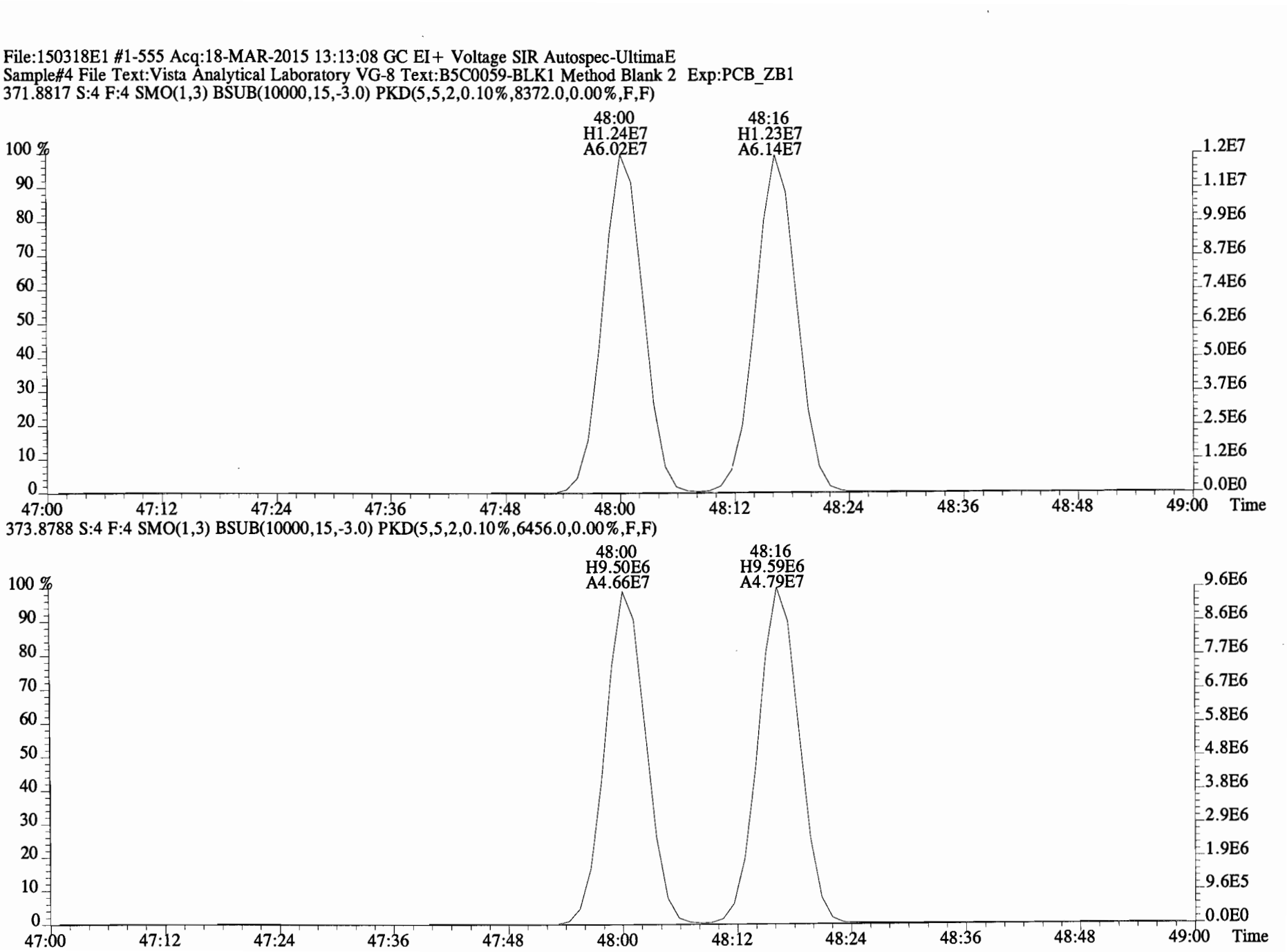


File:150318E1 #1-555 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8372.0,0.00%,F,F)

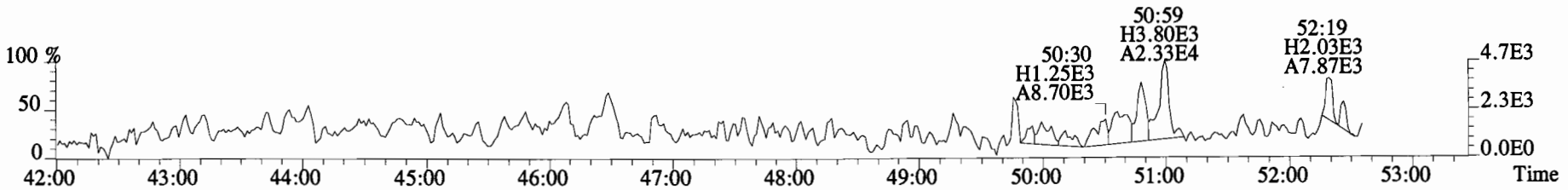


373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6456.0,0.00%,F,F)

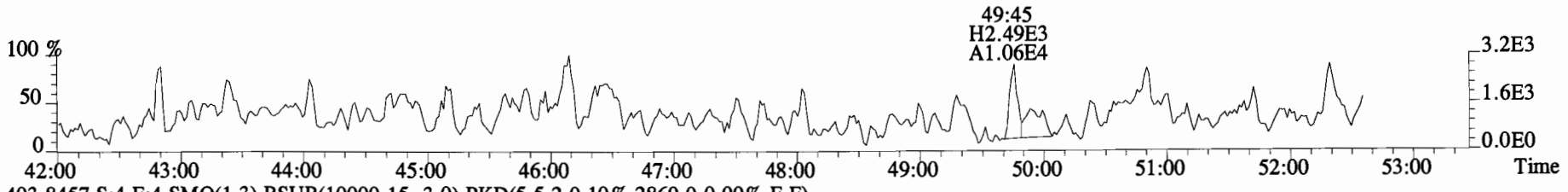



File:150318E1 #1-555 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8372.0,0.00%,F,F)
48:00
H1.24E7
A6.02E7
48:16
H1.23E7
A6.14E7
100 %
90
80
70
60
50
40
30
20
10
0
1.2E7
1.1E7
9.9E6
8.7E6
7.4E6
6.2E6
5.0E6
3.7E6
2.5E6
1.2E6
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:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6456.0,0.00%,F,F)
48:00
H9.50E6
A4.66E7
48:16
H9.59E6
A4.79E7
100 %
90
80
70
60
50
40
30
20
10
0
9.6E6
8.6E6
7.7E6
6.7E6
5.8E6
4.8E6
3.8E6
2.9E6
1.9E6
9.6E5
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

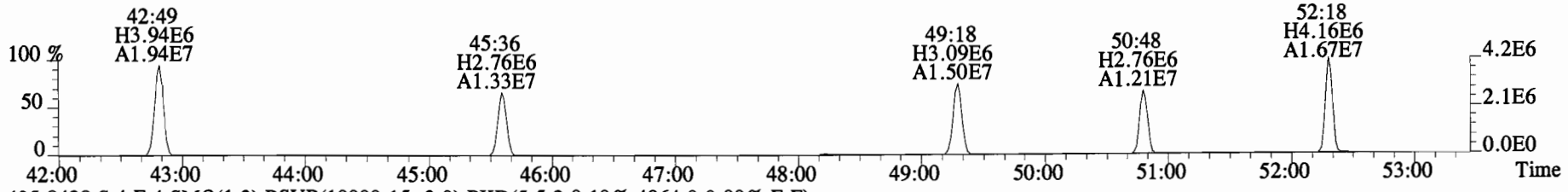
File:150318E1 #1-555 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1696.0,0.00%,F,F)



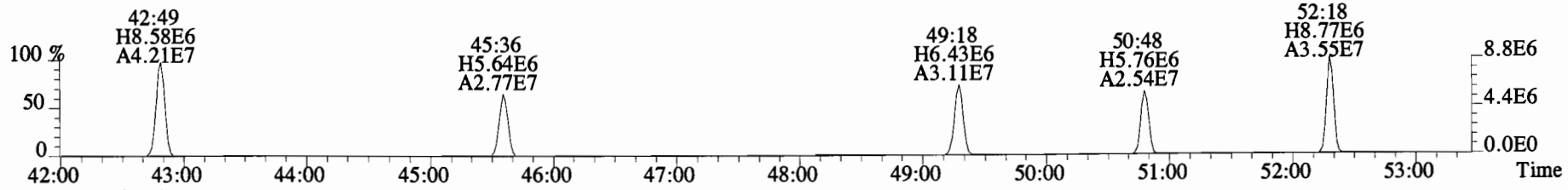
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1400.0,0.00%,F,F)



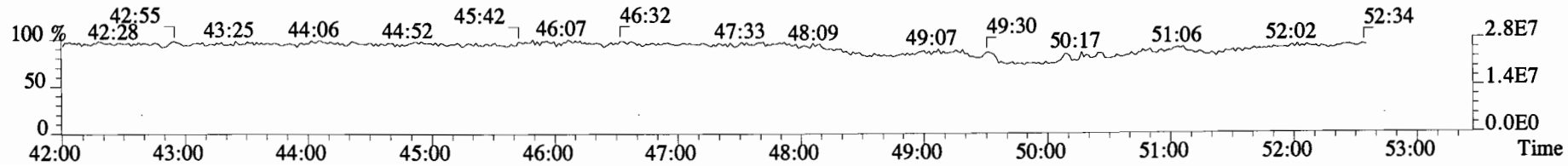
403.8457 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2860.0,0.00%,F,F)



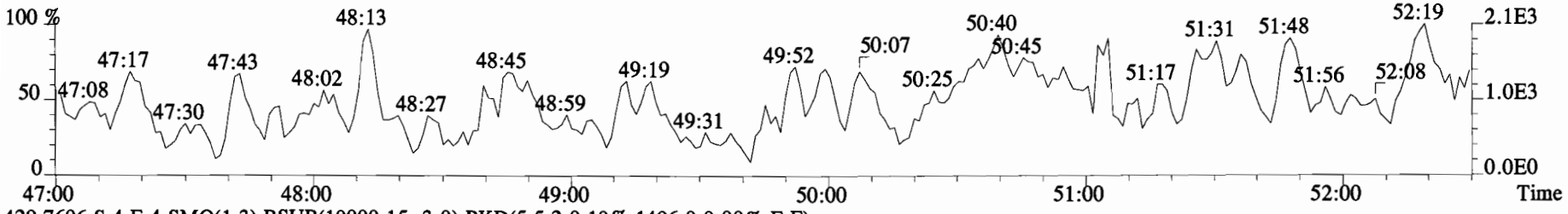
405.8428 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4964.0,0.00%,F,F)



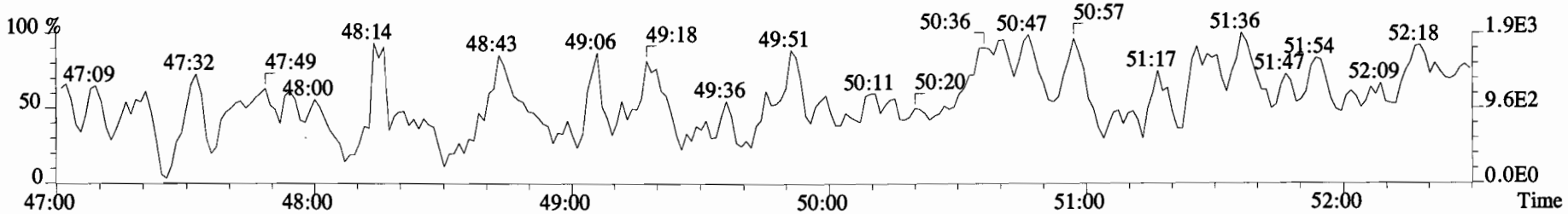
380.9760 S:4 F:4



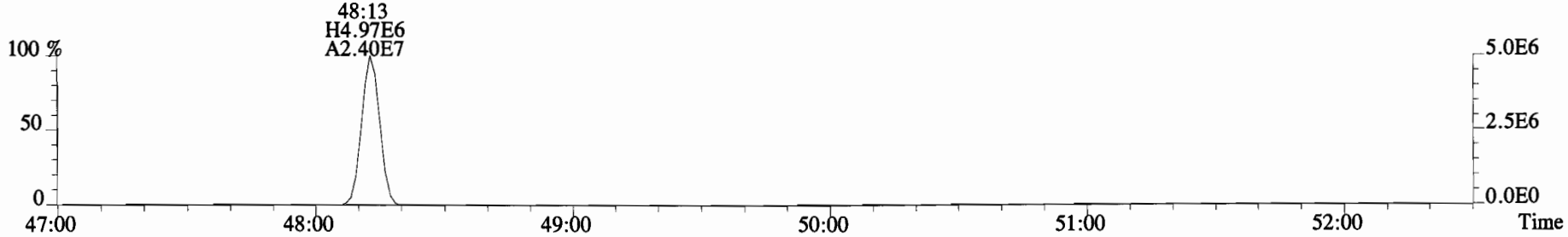
File:150318E1 #1-555 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
427.7635 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1400.0,0.00%,F,F)



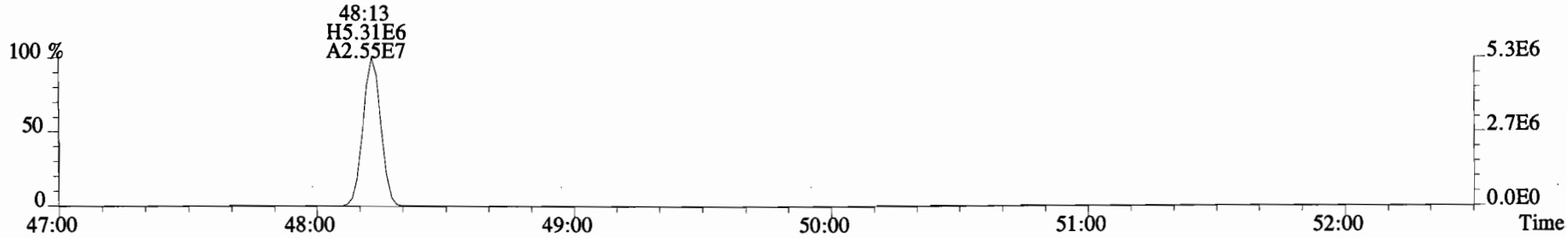
429.7606 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1496.0,0.00%,F,F)



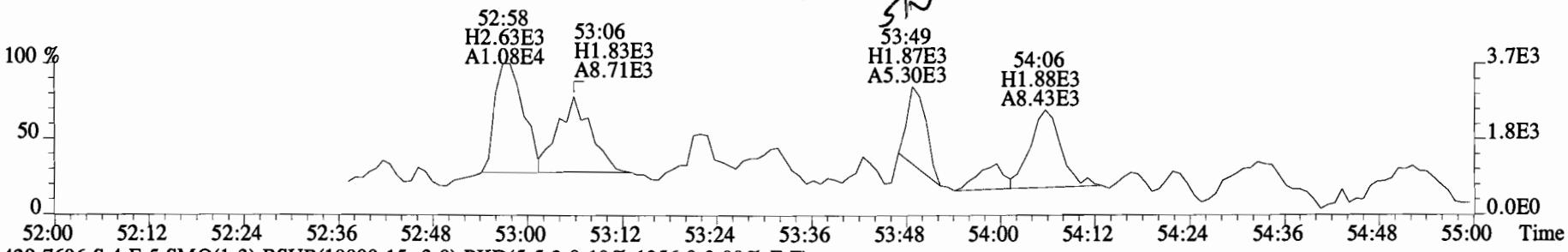
439.8038 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1576.0,0.00%,F,F)



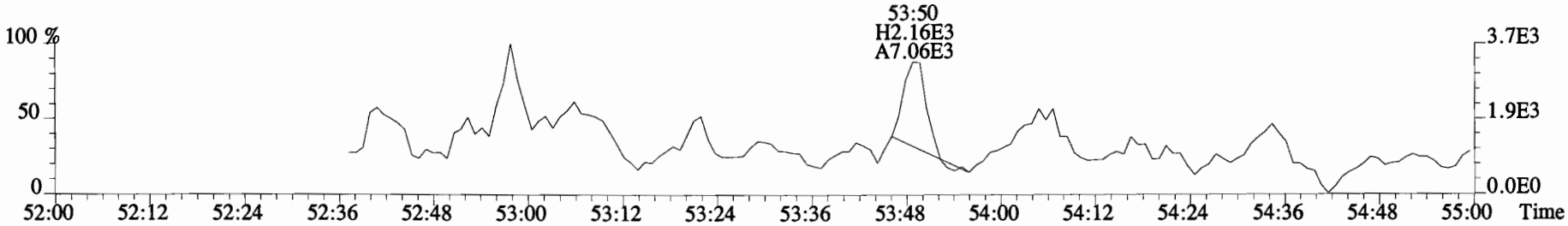
441.8008 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2268.0,0.00%,F,F)



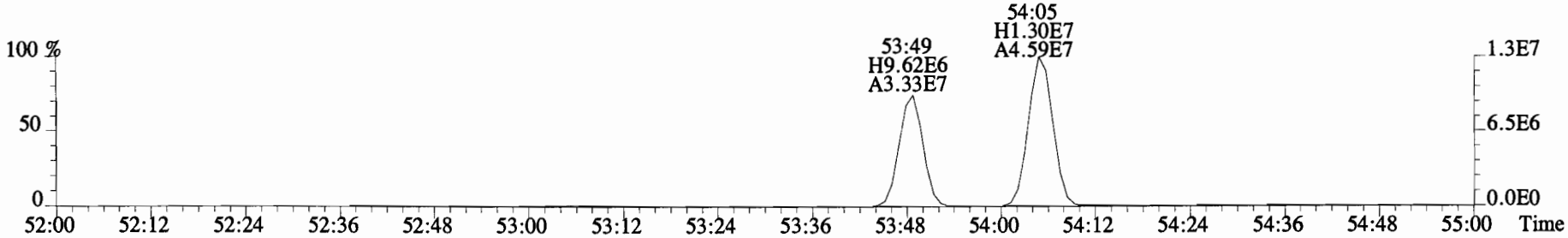
File:150318E1 #1-429 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
427.7635 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1228.0,0.00%,F,F)



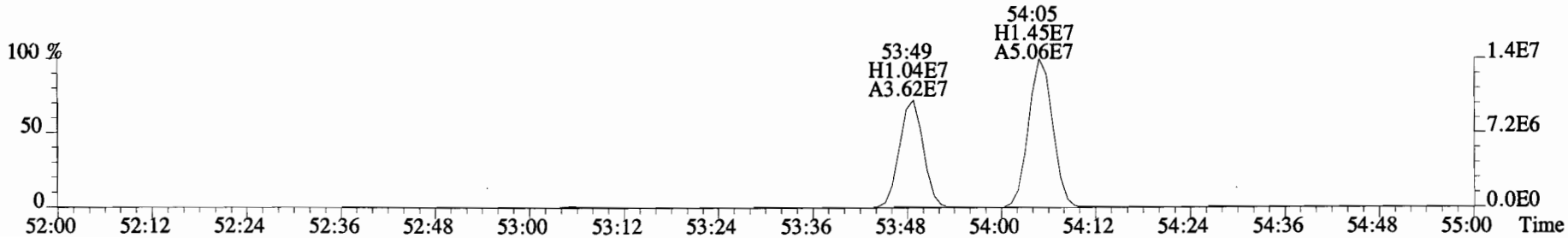
429.7606 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1356.0,0.00%,F,F)



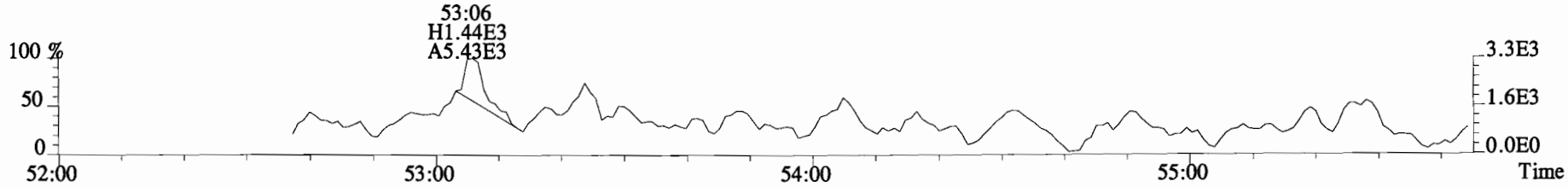
439.8038 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3008.0,0.00%,F,F)



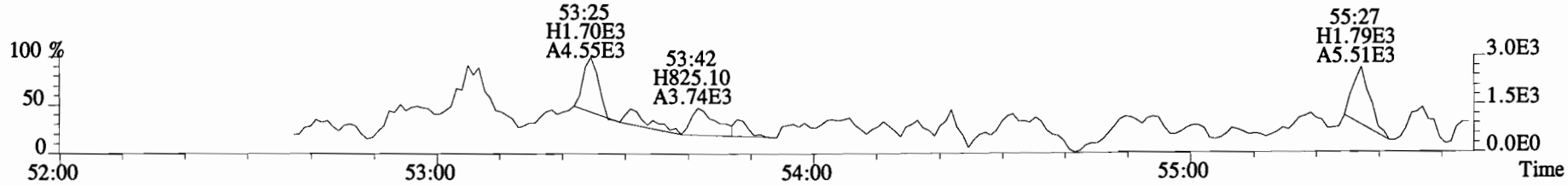
441.8008 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3288.0,0.00%,F,F)



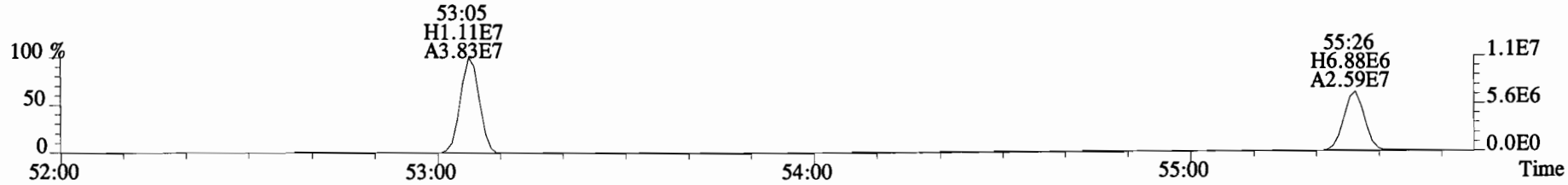
File:150318E1 #1-429 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
463.7216 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1432.0,0.00%,F,F)



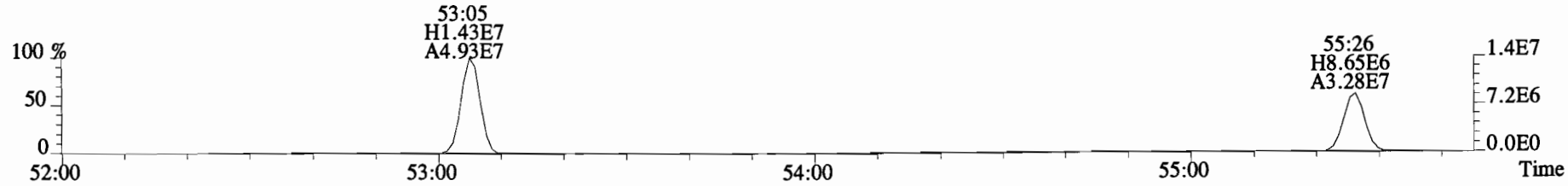
465.7186 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1196.0,0.00%,F,F)



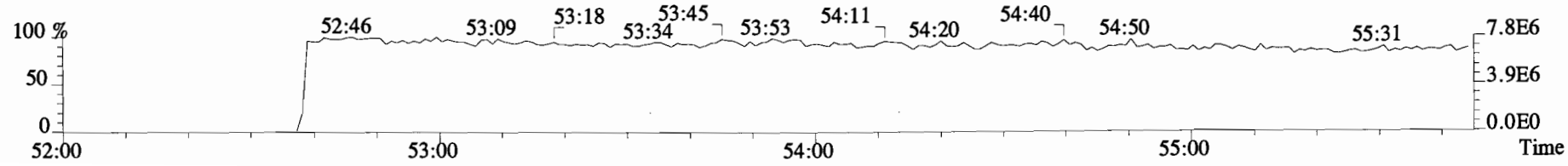
473.7648 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,9644.0,0.00%,F,F)



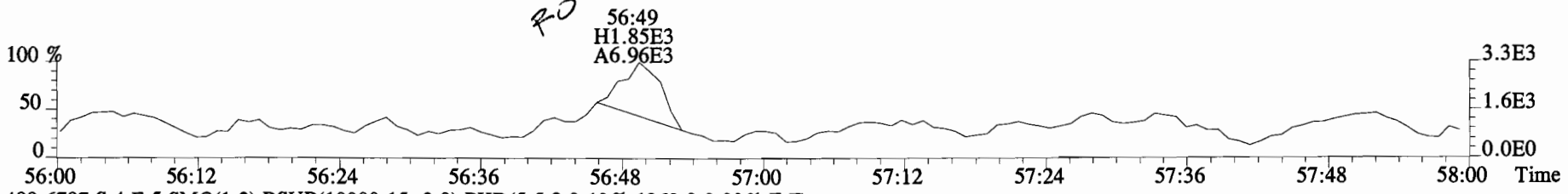
475.7619 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,12168.0,0.00%,F,F)



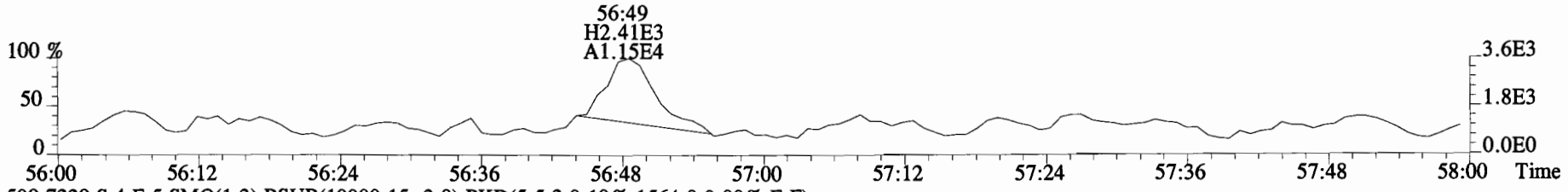
492.9697 S:4 F:5



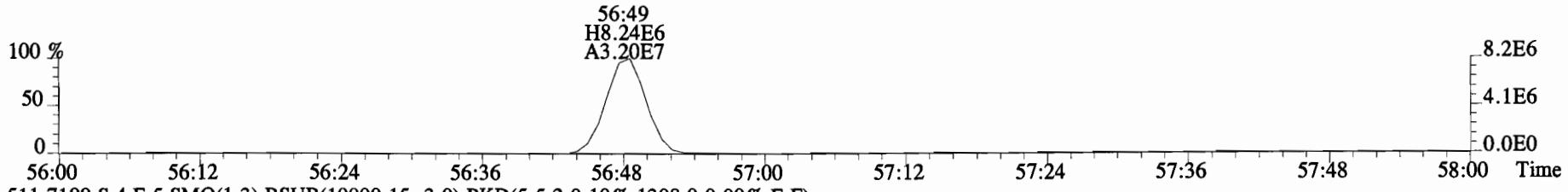
File:150318E1 #1-429 Acq:18-MAR-2015 13:13:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BLK1 Method Blank 2 Exp:PCB_ZB1
497.6826 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1228.0,0.00%,F,F)



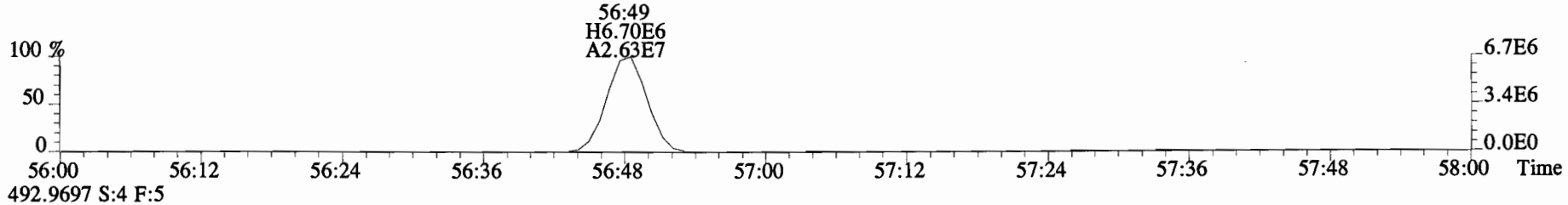
499.6797 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1260.0,0.00%,F,F)



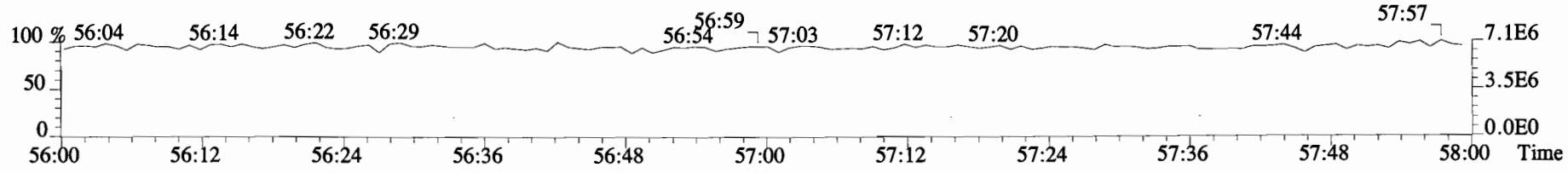
509.7229 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1564.0,0.00%,F,F)



511.7199 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1308.0,0.00%,F,F)



492.9697 S:4 F:5



EPA METHOD 1668A PCB ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory OPR Data Filename: B5C0059-BS1

Matrix : SOLID Ext. Date: 3-12-15 Analysis Date: 18-MAR-15 Time: 11:04:10

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	44.3	25.0-75.0	13C-PCB-1	100	71.4	15-140	13C-PCB-79	100	92.9	40-125
PCB-3	50	43.9	25.0-75.0	13C-PCB-3	100	77.6	15-140	13C-PCB-178	100	85.4	40-125
PCB-4/10	200	214.2	100-300	13C-PCB-4	100	68.7	30-140				
PCB-15	100	105.1	50.0-150	13C-PCB-11	100	79.4	30-140				
PCB-19	50	53.3	25.0-75.0	13C-PCB-19	100	76.1	30-140				
PCB-37	50	57.7	25.0-75.0	13C-PCB-37	100	108.3	30-140				
PCB-54	50	52.6	25.0-75.0	13C-PCB-54	100	70.9	30-140				
PCB-81	50	53.3	25.0-75.0	13C-PCB-81	100	94.8	30-140				
PCB-77	50	54.2	25.0-75.0	13C-PCB-77	100	96.2	30-140				
PCB-104	50	58.6	25.0-75.0	13C-PCB-104	100	81.3	30-140				
PCB-123	50	55.5	25.0-75.0	13C-PCB-123	100	98.1	30-140				
PCB-106/118	100	111.6	50.0-150	13C-PCB-118	100	97.8	30-140				
PCB-114	50	52.3	25.0-75.0	13C-PCB-114	100	101.9	30-140				
PCB-105	50	53.5	25.0-75.0	13C-PCB-105	100	104.4	30-140				
PCB-126	50	57.6	25.0-75.0	13C-PCB-126	100	106.9	30-140				
PCB-155	50	55.7	25.0-75.0	13C-PCB-155	100	73.4	30-140				
PCB-167	50	55.5	25.0-75.0	13C-PCB-167	100	95.5	30-140				
PCB-156	50	52.6	25.0-75.0	13C-PCB-156	100	103.7	30-140				
PCB-157	50	51.3	25.0-75.0	13C-PCB-157	100	102.6	30-140				
PCB-169	50	52.2	25.0-75.0	13C-PCB-169	100	108.0	30-140				
PCB-188	50	56.0	25.0-75.0	13C-PCB-188	100	82.0	30-140				
PCB-189	50	54.5	25.0-75.0	13C-PCB-189	100	93.0	30-140				
PCB-202	50	54.4	25.0-75.0	13C-PCB-202	100	76.2	30-140				
PCB-205	50	54.7	25.0-75.0	13C-PCB-194	100	91.0	30-140				
PCB-208	50	55.5	25.0-75.0	13C-PCB-208	100	81.3	30-140				
PCB-206	50	54.5	25.0-75.0	13C-PCB-206	100	93.1	30-140				
PCB-209	50	55.8	25.0-75.0	13C-PCB-209	100	99.4	30-140				

Analyst: DMS

Date: 3/26/15

Client ID: OPR Filename: 150318E1 S:2 Acq:18-MAR-15 11:04:10 ConCal: ST150318E1-1

Lab ID: B5C0059-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	6.56e+07	2.95	y	1.19	16:10	1.001	0.996	1.006	44.3329
	PCB-2	7.64e+07	2.93	y	1.18	18:33	0.988	0.984	0.994	45.7983
	PCB-3	8.81e+07	2.94	y	1.43	18:47	1.001	0.996	1.006	43.8619
	PCB-4/10	2.69e+08	1.64	y	1.57	20:09	1.003	0.997	1.007	214.214
	PCB-7/9	3.44e+08	1.62	y	1.21	21:55	0.868	0.866	0.874	216.633
	PCB-6	1.79e+08	1.66	y	1.30	22:33	0.893	0.890	0.899	104.297
	PCB-5/8	3.26e+08	1.60	y	1.15	22:59	0.910	0.907	0.917	215.934
	PCB-14	1.73e+08	1.65	y	1.11	24:04	0.953	0.949	0.959	105.160
	PCB-11	1.73e+08	1.64	y	1.09	25:15	1.000	0.995	1.005	107.340
	PCB-12/13	3.75e+08	1.62	y	1.19	25:39	1.016	1.011	1.021	211.965
	PCB-15	2.00e+08	1.62	y	1.28	25:58	1.028	1.023	1.033	105.125
	PCB-19	4.48e+07	1.07	y	1.04	24:15	1.001	0.996	1.006	53.2984
	PCB-30	7.67e+07	1.07	y	1.71	25:08	1.038	1.032	1.042	55.6966
	PCB-18	5.51e+07	1.07	y	0.78	25:53	0.954	0.949	0.959	56.0155
	PCB-17	6.42e+07	1.07	y	0.92	26:03	0.960	0.956	0.966	55.2996
	PCB-24/27	1.70e+08	1.06	y	1.19	26:38	0.982	0.977	0.987	113.820
-	PCB-16/32	1.33e+08	1.07	y	0.94	27:08	1.000	0.995	1.005	112.284
-	PCB-34	8.56e+07	1.10	y	1.14	27:56	0.960	0.955	0.965	54.0460
	PCB-23	8.98e+07	1.12	y	1.28	28:02	0.964	0.959	0.969	50.3368
	PCB-29	7.92e+07	1.11	y	1.08	28:17	0.972	0.967	0.977	52.6153
	PCB-26	9.23e+07	1.11	y	1.21	28:29	0.979	0.974	0.984	54.8559
	PCB-25	1.03e+08	1.10	y	1.26	28:39	0.985	0.979	0.989	58.5281
	PCB-31	9.31e+07	1.12	y	1.28	29:00	0.997	0.992	1.002	51.9803
	PCB-28	1.35e+08	1.12	y	1.71	29:07	1.001	0.995	1.005	56.3554
	PCB-20/21/33	2.72e+08	1.10	y	1.08	29:43	1.022	1.017	1.027	180.070
	PCB-22	1.03e+08	1.10	y	1.21	30:09	1.037	1.032	1.042	60.8617
	PCB-36	9.17e+07	1.10	y	1.14	30:47	0.934	0.928	0.938	55.5429
	PCB-39	8.94e+07	1.08	y	1.12	31:14	0.948	0.943	0.953	55.4319
	PCB-38	9.26e+07	1.11	y	1.20	32:00	0.971	0.966	0.976	53.3517
	PCB-35	1.07e+08	1.09	y	1.23	32:32	0.987	0.982	0.992	59.8731
	PCB-37	1.03e+08	1.09	y	1.23	32:58	1.001	0.995	1.005	57.6925
	PCB-54	6.15e+07	0.77	y	1.10	28:00	1.001	0.996	1.006	52.5863
	PCB-50	5.03e+07	0.80	y	0.88	29:09	1.042	1.037	1.047	53.8631
	PCB-53	5.13e+07	0.80	y	1.06	29:48	0.946	0.942	0.952	50.6060
	PCB-51	4.93e+07	0.79	y	0.99	30:08	0.957	0.952	0.962	52.2804
	PCB-45	4.44e+07	0.78	y	0.86	30:34	0.970	0.966	0.976	54.0149
	PCB-46	4.27e+07	0.80	y	0.85	31:04	0.986	0.981	0.991	53.0577

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	1.32e+08	0.85	y	1.28	31:32	1.001	0.996	1.006	108.411
PCB-73	7.21e+07	0.69	y	1.35	31:39	1.005	1.000	1.010	55.9302
PCB-43/49	1.02e+08	0.79	y	0.99	31:49	1.010	1.005	1.015	107.914
PCB-47	5.46e+07	0.78	y	1.06	32:01	1.001	0.996	1.006	51.0263
PCB-48/75	1.37e+08	0.79	y	1.23	32:08	1.004	0.999	1.009	110.250
PCB-65	7.21e+07	0.79	y	1.22	32:24	1.012	1.008	1.018	58.1930
PCB-62	6.38e+07	0.81	y	1.22	32:31	1.016	1.011	1.021	51.6651
PCB-44	4.85e+07	0.79	y	0.86	32:48	1.025	1.021	1.031	55.7079
PCB-42/59	1.35e+08	0.78	y	1.14	33:02	1.032	1.028	1.038	117.332
PCB-41/64/71/72	2.92e+08	0.78	y	1.21	33:37	1.051	1.046	1.056	239.315
PCB-68	8.31e+07	0.78	y	1.35	33:53	1.059	1.054	1.064	60.9901
PCB-40	4.36e+07	0.77	y	0.70	34:05	1.065	1.061	1.071	61.5200
PCB-57	7.52e+07	0.77	y	0.98	34:27	0.970	0.965	0.975	55.2683
PCB-67	7.65e+07	0.78	y	1.11	34:45	0.979	0.974	0.984	49.7854
PCB-58	7.28e+07	0.77	y	0.93	34:52	0.982	0.977	0.987	56.5267
PCB-63	6.93e+07	0.80	y	0.95	35:01	0.986	0.982	0.992	52.3874
PCB-74	9.01e+07	0.77	y	1.24	35:19	0.995	0.990	1.000	52.1387
PCB-61/70	1.46e+08	0.78	y	0.95	35:29	1.000	0.995	1.005	110.176
PCB-76/66	1.51e+08	0.77	y	1.04	35:42	1.006	1.001	1.011	104.004
PCB-80	9.64e+07	0.78	y	1.19	35:57	1.001	0.996	1.006	56.8025
PCB-55	8.32e+07	0.77	y	1.04	36:16	1.010	1.005	1.015	56.1112
PCB-56/60	1.67e+08	0.78	y	1.01	36:45	1.023	1.019	1.029	116.242
PCB-79	8.84e+07	0.79	y	1.08	37:49	1.053	1.048	1.058	57.4862
PCB-78	8.79e+07	0.78	y	1.27	38:30	0.987	0.982	0.992	51.3574
PCB-81	9.56e+07	0.77	y	1.33	39:02	1.000	0.995	1.005	53.3138
PCB-77	8.34e+07	0.79	y	1.10	39:37	1.000	0.995	1.005	54.1783
PCB-104	4.59e+07	1.62	y	1.18	32:40	1.001	0.996	1.006	58.6110
PCB-96	4.52e+07	1.63	y	1.14	33:55	1.039	1.034	1.044	60.0477
PCB-103	3.71e+07	1.62	y	0.96	34:27	1.055	1.050	1.060	58.5531
PCB-100	3.74e+07	1.62	y	0.94	34:49	1.066	1.061	1.071	60.2027
PCB-94	3.09e+07	1.63	y	1.06	35:17	0.986	0.980	0.990	55.5773
PCB-95/98/102	1.08e+08	1.63	y	1.22	35:47	1.000	0.995	1.005	168.539
PCB-93	2.78e+07	1.64	y	0.84	35:55	1.003	0.997	1.007	62.7395
PCB-88/91	7.52e+07	1.63	y	1.12	36:12	1.011	1.005	1.015	128.171
PCB-121	4.47e+07	1.59	y	1.62	36:18	1.014	1.009	1.019	52.6017
PCB-84/92	6.86e+07	1.63	y	1.05	37:07	0.990	0.985	0.995	113.755
PCB-89	3.71e+07	1.61	y	1.13	37:18	0.995	0.991	1.001	57.0358

Integrations by Analyst: DMS Date: 3/26/15

Reviewed by Analyst: Date: 3/27/15

Client ID: OPR Filename: 150318E1 S:2 Acq:18-MAR-15 11:04:10 ConCal: ST150318E1-1
Lab ID: B5C0059-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	7.35e+07	1.64 y	1.10	37:29	1.000	0.995	1.005	115.757
PCB-113	4.78e+07	1.61 y	1.41	37:44	1.007	1.002	1.012	58.8248
PCB-99	4.48e+07	1.63 y	1.34	37:49	1.009	1.004	1.014	58.1941
PCB-119	4.57e+07	1.60 y	1.53	38:17	0.988	0.982	0.992	56.1561
PCB-108/112	7.73e+07	1.60 y	1.28	38:26	0.991	0.986	0.996	113.565
PCB-83	4.61e+07	1.64 y	1.52	38:36	0.996	0.990	1.000	57.1144
PCB-97	3.56e+07	1.62 y	1.18	38:47	1.000	0.995	1.005	56.6878
PCB-86	2.46e+07	1.54 y	0.84	38:56	1.004	0.999	1.009	55.0304
B-87/117/125	1.44e+08	1.62 y	1.55	39:03	1.007	1.002	1.012	175.092
PCB-111/115	9.94e+07	1.61 y	1.63	39:13	1.012	1.006	1.016	114.491
PCB-85/116	7.88e+07	1.63 y	1.30	39:21	1.015	1.010	1.020	113.902
PCB-120	5.33e+07	1.61 y	1.68	39:35	1.021	1.016	1.026	59.7850
PCB-110	4.60e+07	1.61 y	1.56	39:44	1.025	1.020	1.030	55.6483
PCB-82	3.02e+07	1.62 y	0.76	40:22	0.977	0.971	0.981	55.8661
PCB-124	5.86e+07	1.61 y	1.47	41:01	0.992	0.988	0.998	55.8658
PCB-107/109	1.07e+08	1.63 y	1.32	41:10	0.996	0.991	1.001	113.505
PCB-123	4.62e+07	1.64 y	1.17	41:21	1.000	0.996	1.006	55.4815
- PCB-106/118	9.97e+07	1.63 y	1.17	41:33	1.001	0.996	1.006	111.566
PCB-114	7.33e+07	1.57 y	1.30	42:11	1.000	0.995	1.005	52.3367
56 PCB-122	6.78e+07	1.62 y	1.12	42:19	1.004	0.999	1.009	56.0637
PCB-105	7.69e+07	1.55 y	1.30	43:03	1.000	0.995	1.005	53.4848
PCB-127	8.72e+07	1.66 y	1.33	43:23	1.000	0.996	1.006	55.4493
PCB-126	7.39e+07	1.66 y	1.18	45:16	1.000	0.995	1.005	57.6102
PCB-155	3.10e+07	1.32 y	1.11	37:03	1.000	0.966	1.006	55.6635
PCB-150	2.85e+07	1.29 y	1.00	38:18	1.034	1.030	1.040	57.0168
PCB-152	3.17e+07	1.30 y	1.12	38:47	1.047	1.043	1.053	56.7571
PCB-145	3.55e+07	1.27 y	1.20	39:13	1.059	1.055	1.065	59.0929
PCB-136	3.42e+07	1.27 y	1.18	39:33	1.068	1.064	1.074	57.8959
PCB-148	2.12e+07	1.32 y	0.74	39:39	1.071	1.066	1.076	56.8225
PCB-154	2.58e+07	1.28 y	0.86	40:08	1.084	1.080	1.090	60.0448
PCB-151	2.22e+07	1.27 y	0.75	40:47	1.101	1.097	1.107	59.3995
PCB-135	2.29e+07	1.26 y	0.79	40:59	1.107	1.103	1.113	57.7140
PCB-144	2.48e+07	1.31 y	0.76	41:06	1.110	1.105	1.117	65.0829
PCB-147	2.47e+07	1.30 y	0.82	41:14	1.113	1.109	1.121	60.1736
PCB-139/149	4.67e+07	1.27 y	0.76	41:30	1.121	1.116	1.128	122.419
- PCB-140	2.24e+07	1.30 y	0.72	41:41	1.126	1.121	1.133	61.8581
- PCB-134/143	8.06e+07	1.24 y	0.92	42:06	0.975	0.970	0.980	101.902

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	7.24e+07	1.25 y	0.82	42:25	0.982	0.977	0.987	102.475
PCB-131	4.00e+07	1.26 y	0.91	42:34	0.986	0.981	0.991	51.0487
PCB-146/165	1.11e+08	1.23 y	1.25	42:47	0.991	0.986	0.996	103.533
PCB-132/161	9.95e+07	1.24 y	1.10	43:02	0.997	0.992	1.002	104.386
PCB-153	5.25e+07	1.26 y	1.25	43:12	1.000	0.995	1.005	48.8010
PCB-168	6.34e+07	1.26 y	1.45	43:25	1.005	1.001	1.011	50.7623
PCB-141	4.41e+07	1.23 y	1.09	43:56	1.000	0.995	1.005	51.8815
PCB-137	4.47e+07	1.21 y	1.06	44:19	1.009	1.004	1.014	53.8073
PCB-130	4.18e+07	1.28 y	0.96	44:25	1.011	1.006	1.016	55.3642
PCB-138/163/164	1.62e+08	1.24 y	1.29	44:48	1.001	0.996	1.006	155.397
PCB-158/160	1.19e+08	1.26 y	1.34	45:02	1.006	1.001	1.011	109.828
PCB-129	3.68e+07	1.24 y	0.85	45:17	1.012	1.007	1.017	53.5715
PCB-166	5.98e+07	1.27 y	1.19	45:44	0.993	0.988	0.998	52.3002
PCB-159	5.51e+07	1.30 y	1.11	46:03	1.000	0.996	1.006	51.3802
PCB-128/162	9.94e+07	1.26 y	1.05	46:21	1.007	1.002	1.012	98.4926
PCB-167	6.68e+07	1.27 y	1.20	46:44	1.000	0.995	1.005	55.4819
PCB-156	6.24e+07	1.23 y	1.14	48:01	1.000	0.996	1.006	52.5926
PCB-157	6.46e+07	1.24 y	1.16	48:17	1.000	0.995	1.005	51.2576
PCB-169	6.30e+07	1.24 y	1.12	50:27	1.000	0.995	1.005	52.1999
PCB-188	5.18e+07	1.06 y	1.58	42:50	1.000	0.996	1.006	56.0132
PCB-184	5.44e+07	1.07 y	1.63	43:17	1.011	1.006	1.016	56.9834
PCB-179	4.34e+07	1.08 y	1.30	44:04	1.029	1.024	1.034	56.8839
PCB-176	4.98e+07	1.07 y	1.48	44:32	1.040	1.035	1.045	57.6163
PCB-186	4.81e+07	1.06 y	1.45	45:08	1.054	1.050	1.060	56.5805
PCB-178	3.47e+07	1.07 y	1.03	45:38	1.066	1.061	1.071	57.3100
PCB-175	3.54e+07	1.12 y	1.01	45:58	1.074	1.069	1.079	59.7182
PCB-182/187	8.36e+07	1.07 y	1.25	46:09	1.078	1.073	1.083	114.153
PCB-183	3.98e+07	1.07 y	1.21	46:28	1.085	1.081	1.091	56.3171
PCB-185	4.71e+07	1.09 y	1.80	47:07	0.956	0.951	0.961	58.1742
PCB-174	3.88e+07	1.07 y	1.38	47:29	0.963	0.958	0.968	62.6333
PCB-181	3.53e+07	1.06 y	1.38	47:35	0.965	0.960	0.970	56.8317
PCB-177	3.33e+07	1.08 y	1.26	47:45	0.969	0.963	0.973	59.0280
PCB-171	4.08e+07	1.07 y	1.58	48:02	0.974	0.970	0.980	57.2909
PCB-173	2.99e+07	1.08 y	1.11	48:28	0.983	0.978	0.988	59.9705
PCB-172	4.25e+07	1.07 y	1.63	48:54	0.992	0.987	0.997	57.7963
PCB-192	4.72e+07	1.08 y	1.74	49:07	0.996	0.991	1.001	60.3577
PCB-180	3.48e+07	1.07 y	1.34	49:19	1.000	0.995	1.005	57.5674

Integrations by Analyst: DMS

Date: 3/26/15

Client ID: OPR Filename: 150318E1 S:2 Acq:18-MAR-15 11:04:10 ConCal: ST150318E1-1
Lab ID: B5C0059-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	4.39e+07	1.07	y	1.72	49:31	1.004	0.999	1.009	56.9376
	PCB-191	4.37e+07	1.08	y	1.69	49:46	1.009	1.004	1.014	57.4190
	PCB-170	3.33e+07	1.06	y	1.60	50:49	1.000	0.995	1.005	55.8341
	PCB-190	4.68e+07	1.08	y	2.21	50:59	1.004	0.998	1.008	56.7720
	PCB-189	4.38e+07	1.06	y	1.55	52:19	1.000	0.995	1.005	54.5394
	PCB-202	2.92e+07	0.93	y	1.08	48:15	1.000	0.995	1.005	54.3576
	PCB-201	3.12e+07	0.93	y	1.15	48:44	1.010	1.005	1.015	54.7255
	PCB-204	3.03e+07	0.91	y	1.14	48:53	1.013	1.008	1.018	53.7005
	PCB-197	2.85e+07	0.92	y	1.07	49:11	1.020	1.015	1.025	53.4912
	PCB-200	2.90e+07	0.90	y	1.06	50:04	1.038	1.032	1.044	54.9869
	PCB-198	2.20e+07	0.90	y	0.76	51:25	1.066	1.059	1.069	58.7756
	PCB-199	2.20e+07	0.93	y	0.80	51:31	1.068	1.061	1.071	55.6406
-	PCB-196/203	4.63e+07	0.92	y	0.80	51:47	1.074	1.066	1.076	116.450
-	PCB-195	4.21e+07	0.93	y	1.23	52:57	0.984	0.979	0.989	49.7405
	PCB-194	4.22e+07	0.92	y	1.21	53:49	1.000	0.995	1.005	50.4719
	PCB-205	5.82e+07	0.93	y	1.54	54:06	1.006	1.001	1.011	54.6963
	PCB-208	4.32e+07	1.35	y	0.93	53:06	1.000	0.995	1.005	55.4948
	PCB-207	5.30e+07	1.36	y	1.08	53:25	1.006	1.001	1.011	58.4694
	PCB-206	3.21e+07	1.36	y	1.02	55:26	1.000	0.995	1.005	54.5313
	PCB-209	3.77e+07	1.19	y	1.17	56:48	1.000	0.995	1.005	55.7969

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	2.30e+08	2.95	y	16:10	1.27	133.993	
Total Di-PCB	2.04e+09	1.64	y	20:09	1.21	1283.61	
Total Tri-PCB	5.44e+08	1.07	y	24:15	1.10	446.413	
Total Tri-PCB	1.55e+09	1.10	y	27:56	1.21	909.631	Sum:1356.04
Total Tetra-PCB	2.93e+09	0.77	y	28:00	1.09	2331.39	
Total Penta-PCB	1.72e+09	1.62	y	32:40	1.18	2361.37	
Total Penta-PCB	4.00e+08	1.57	y	42:11	1.25	289.900	Sum:2651.27
Total Hexa-PCB	3.72e+08	1.32	y	37:03	0.90	829.941	
Total Hexa-PCB	1.46e+09	1.24	y	42:06	1.11	1479.42	Sum:2309.36
Total Hepta-PCB	1.01e+09	1.06	y	42:50	1.42	1395.34	
Total Octa-PCB	2.39e+08	0.93	y	48:15	0.96	502.128	
Total Octa-PCB	1.46e+08	0.93	y	52:57	1.33	159.103	Sum:661.230
Total Nona-PCB	1.29e+08	1.35	y	53:06	1.01	169.290	
Total Deca-PCB	3.77e+07	1.19	y	56:48	1.17	55.7969	

Total PCB Conc:12266.8260710

Integrations by Analyst: DMS

Date: 3/26/15

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.24e+08	3.16 y	0.87	16:09	0.622	0.629	0.635	71.4	71.4
13C-PCB-3	1.41e+08	3.27 y	0.91	18:46	0.723	0.725	0.733	77.6	77.6
13C-PCB-4	8.02e+07	1.59 y	0.59	20:05	0.774	0.775	0.783	68.7	68.7
13C-PCB-9	1.31e+08	1.60 y	0.90	21:52	0.843	0.842	0.850	73.6	73.6
13C-PCB-11	1.48e+08	1.55 y	0.94	25:15	0.973	0.968	0.978	79.4	79.4
13C-PCB-19	8.05e+07	1.08 y	0.53	24:13	0.933	0.930	0.940	76.1	76.1
13C-PCB-28	1.40e+08	1.08 y	0.93	29:05	1.003	0.999	1.009	94.1	94.1
13C-PCB-32	1.26e+08	1.10 y	0.80	27:08	1.046	1.040	1.050	79.5	79.5
13C-PCB-37	1.45e+08	1.06 y	0.84	32:57	1.137	1.131	1.143	108	108
13C-PCB-47	1.01e+08	0.78 y	0.81	32:00	0.871	0.866	0.874	80.7	80.7
13C-PCB-52	9.52e+07	0.80 y	0.77	31:30	0.858	0.853	0.861	80.1	80.1
13C-PCB-54	1.06e+08	0.82 y	0.97	27:58	0.761	0.758	0.766	70.9	70.9
13C-PCB-70	1.39e+08	0.82 y	1.00	35:30	0.966	0.961	0.971	90.2	90.3
13C-PCB-77	1.40e+08	0.83 y	0.94	39:36	1.078	1.073	1.083	96.2	96.2
13C-PCB-80	1.42e+08	0.82 y	1.03	35:55	0.978	0.972	0.982	89.5	89.5
13C-PCB-81	1.35e+08	0.82 y	0.92	39:01	1.062	1.057	1.067	94.8	94.8
13C-PCB-95	5.26e+07	1.61 y	0.74	35:48	0.913	0.908	0.918	87.3	87.3
13C-PCB-97	5.32e+07	1.61 y	0.70	38:46	0.989	0.984	0.994	92.8	92.8
13C-PCB-101	5.77e+07	1.63 y	0.78	37:29	0.956	0.951	0.961	90.5	90.5
13C-PCB-104	6.62e+07	1.58 y	1.00	32:39	0.833	0.828	0.836	81.3	81.3
13C-PCB-105	1.11e+08	1.59 y	1.37	43:02	0.929	0.924	0.934	104	104
13C-PCB-114	1.08e+08	1.62 y	1.36	42:10	0.910	0.905	0.915	102	102
13C-PCB-118	7.62e+07	1.58 y	0.96	41:31	1.059	1.054	1.064	97.8	97.8
13C-PCB-123	7.13e+07	1.59 y	0.89	41:20	1.054	1.050	1.060	98.1	98.1
13C-PCB-126	1.09e+08	1.60 y	1.31	45:16	0.977	0.972	0.982	107	107
13C-PCB-127	1.18e+08	1.59 y	1.47	43:22	0.936	0.931	0.941	103	103
13C-PCB-138	8.06e+07	1.30 y	1.10	44:46	0.967	0.961	0.971	94.3	94.3
13C-PCB-141	7.83e+07	1.29 y	1.07	43:55	0.948	0.943	0.953	93.8	93.8
13C-PCB-153	8.62e+07	1.26 y	1.15	43:11	0.932	0.927	0.937	96.8	96.8
13C-PCB-155	5.01e+07	1.27 y	0.84	37:02	0.945	0.939	0.949	73.4	73.4
13C-PCB-156	1.04e+08	1.27 y	1.30	48:01	1.037	1.032	1.042	104	104
13C-PCB-157	1.08e+08	1.29 y	1.36	48:17	1.042	1.038	1.048	103	103
13C-PCB-159	9.64e+07	1.27 y	1.25	46:03	0.994	0.989	0.999	99.5	99.5
13C-PCB-167	1.00e+08	1.28 y	1.35	46:44	1.009	1.004	1.014	95.5	95.5
13C-PCB-169	1.08e+08	1.31 y	1.29	50:26	1.089	1.083	1.093	108	108
13C-PCB-170	3.73e+07	0.46 y	0.54	50:48	1.097	1.089	1.101	88.5	88.5
13C-PCB-180	4.50e+07	0.47 y	0.68	49:18	1.064	1.060	1.070	84.6	84.6
13C-PCB-188	5.85e+07	0.48 y	0.92	42:49	0.924	0.919	0.929	82.0	82.0
13C-PCB-189	5.18e+07	0.46 y	0.72	52:18	1.129	1.120	1.132	93.0	93.0
13C-PCB-194	6.91e+07	0.91 y	0.80	53:48	0.995	0.990	1.000	91.0	91.0
13C-PCB-202	4.96e+07	0.93 y	0.84	48:14	1.041	1.036	1.046	76.2	76.2
13C-PCB-206	5.75e+07	0.79 y	0.65	55:25	1.025	1.021	1.031	93.1	93.1
13C-PCB-208	8.36e+07	0.78 y	1.08	53:05	0.982	0.976	0.986	81.3	81.3
13C-PCB-209	5.77e+07	1.21 y	0.61	56:48	1.050	1.045	1.055	99.4	99.4

OK

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.46e+08	0.81 y	1.02	37:48	1.029	1.023	1.034	92.9	92.9
13C-PCB-178	4.07e+07	0.47 y	0.61	45:36	0.985	0.979	0.990	85.4	85.4

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.46e+08	0.81 y	1.10	37:48	0.969	0.964	0.974	98.0	98.0
13C-PCB-178	4.07e+07	0.47 y	0.90	45:36	0.925	0.920	0.930	101	101

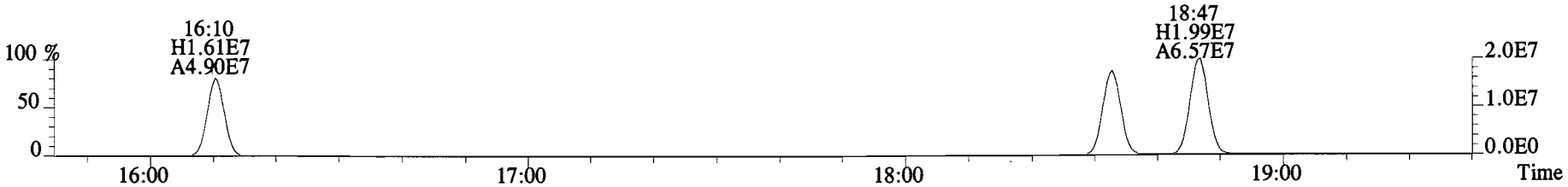
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.99e+08	1.59	y	1.00	25:57	100
13C-PCB-31	1.59e+08	1.07	y	1.00	28:59	100
13C-PCB-60	1.54e+08	0.82	y	1.00	36:44	100
13C-PCB-111	8.13e+07	1.61	y	1.00	39:12	100
13C-PCB-128	7.77e+07	1.28	y	1.00	46:19	100
13C-PCB-205	9.51e+07	0.90	y	1.00	54:05	100

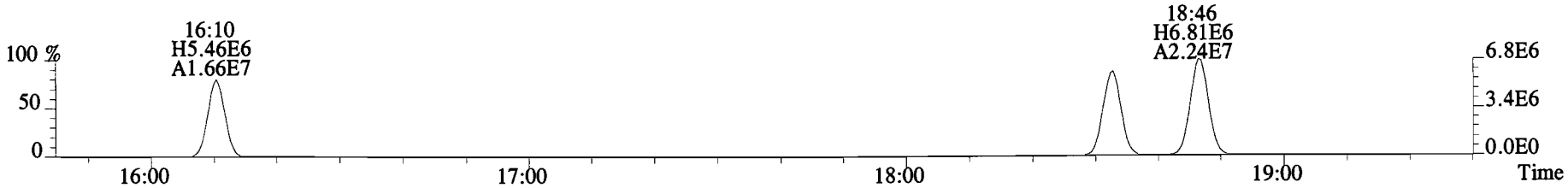
Analyst: JMS

Date: 3/26/15

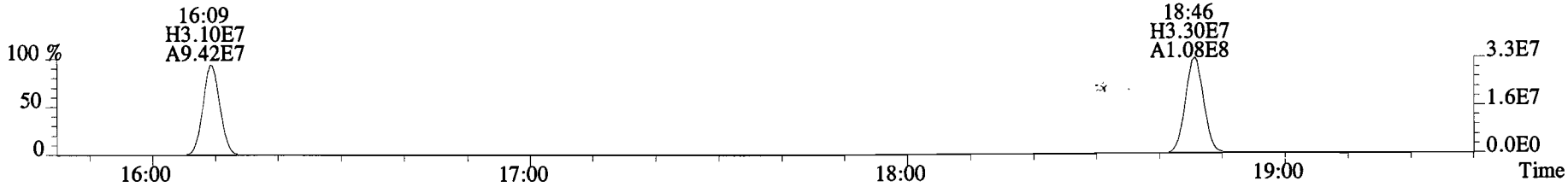
File:150318E1 #1-867 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
188.0393 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4484.0,0.00%,F,F)



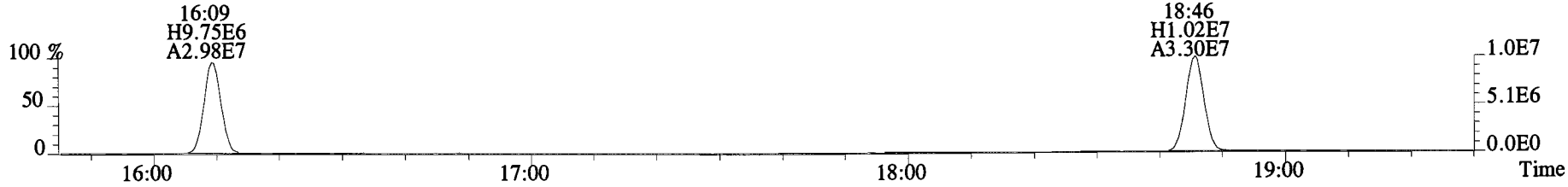
190.0363 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3228.0,0.00%,F,F)



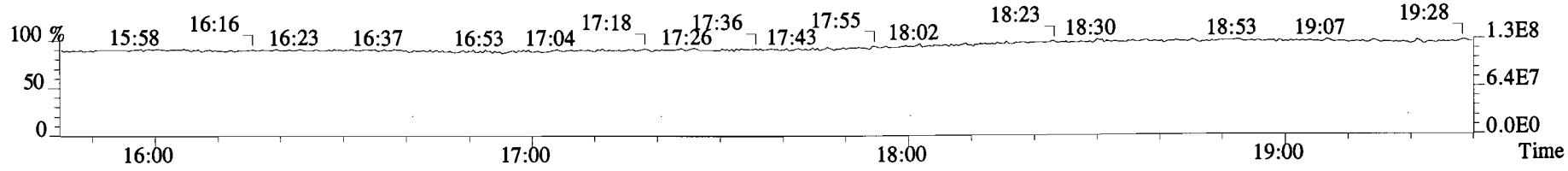
200.0795 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6204.0,0.00%,F,F)



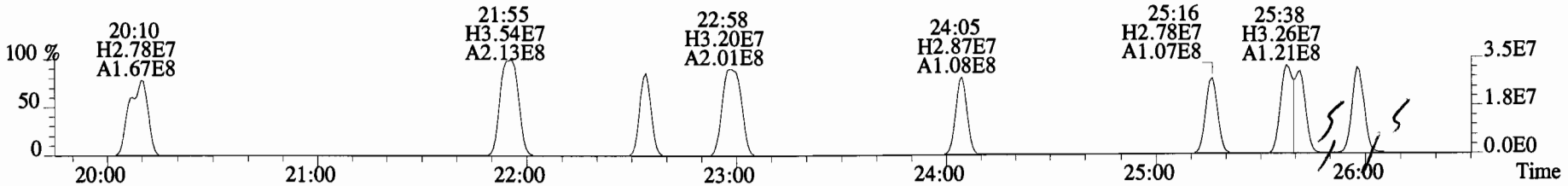
202.0766 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,90652.0,0.00%,F,F)



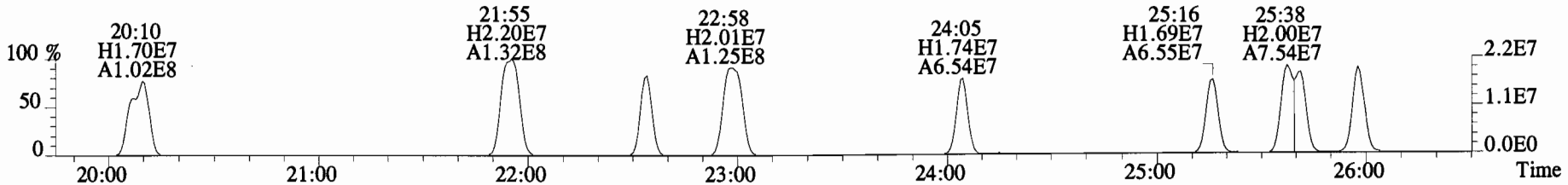
180.9880 S:2



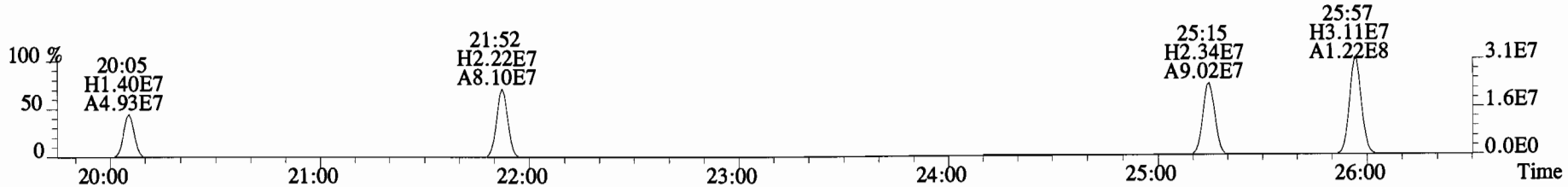
File:150318E1 #1-757 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
222.0003 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,12588.0,0.00%,F,F)



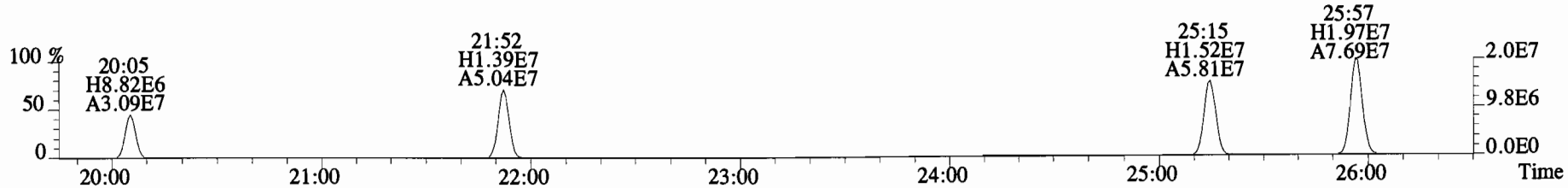
223.9974 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,32060.0,0.00%,F,F)



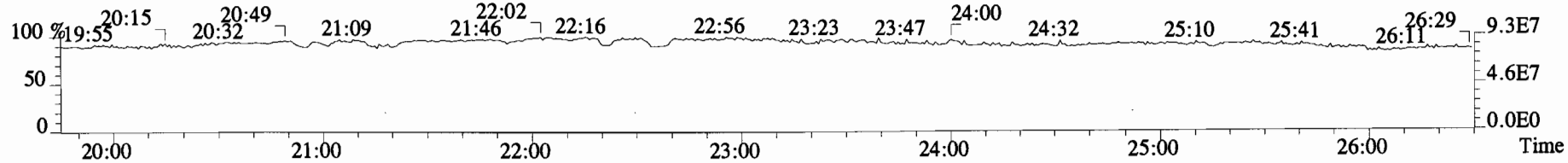
234.0406 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5956.0,0.00%,F,F)



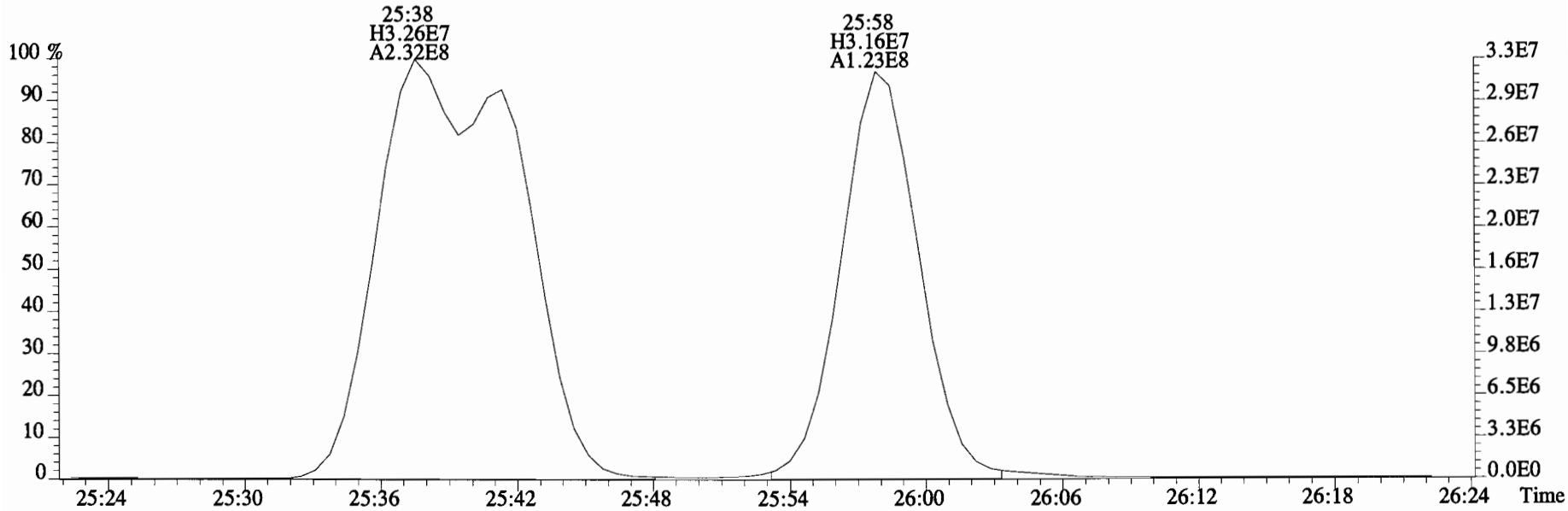
236.0376 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4208.0,0.00%,F,F)



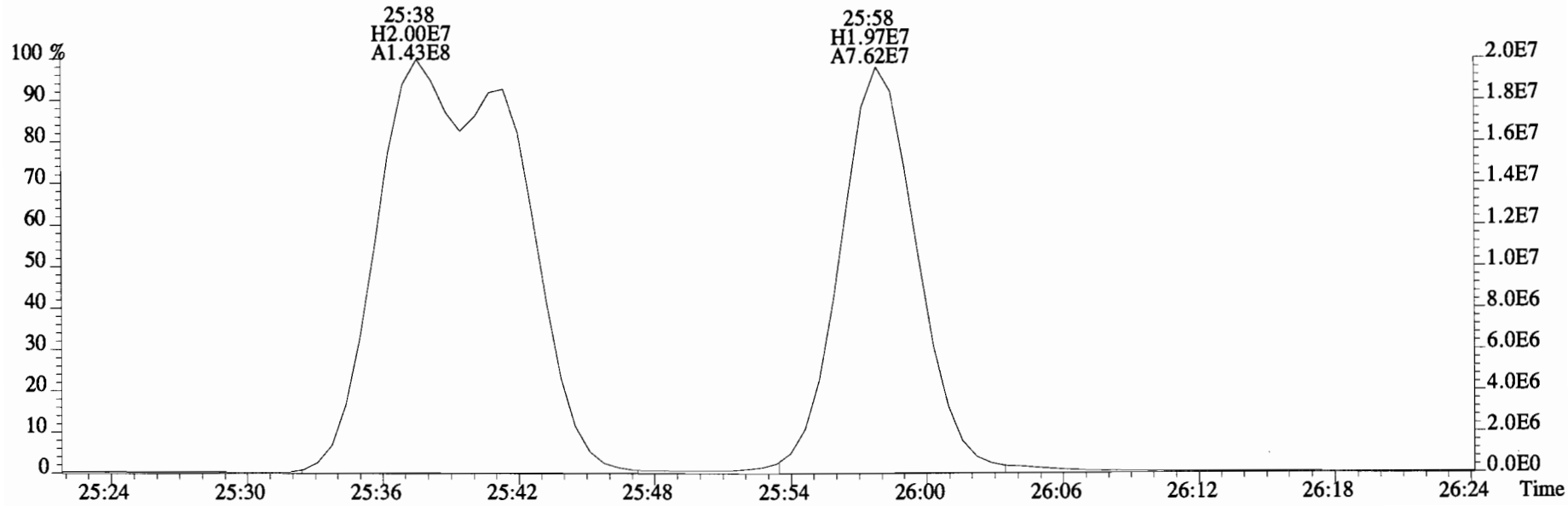
230.9856 S:2 F:2



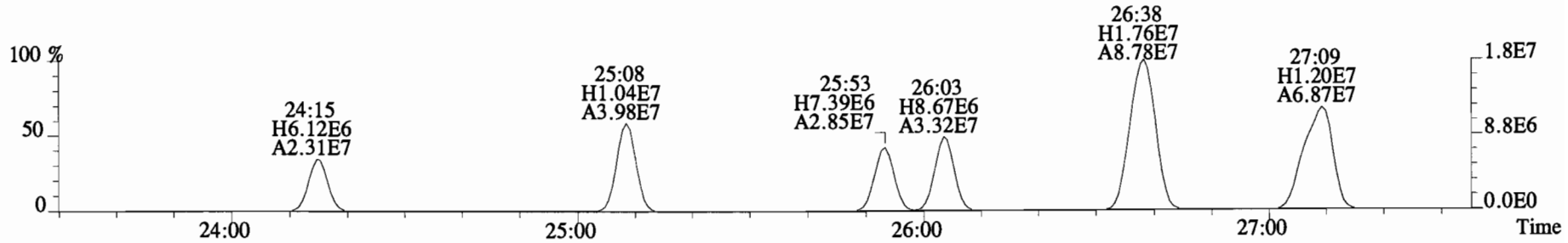
File:150318E1 #1-757 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
222.0003 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,12588.0,0.00%,F,F)



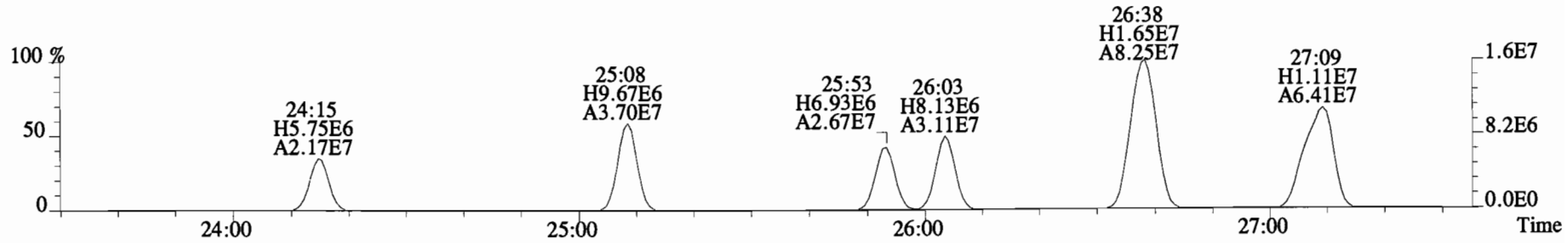
223.9974 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,32060.0,0.00%,F,F)



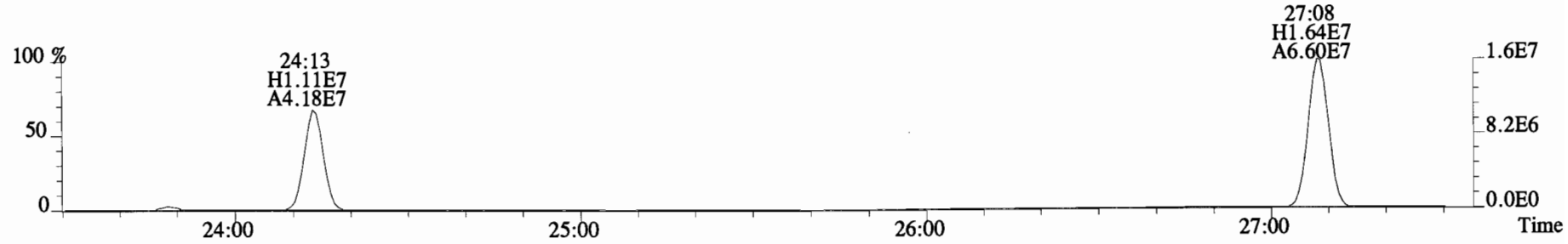
File:150318E1 #1-757 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
255.9613 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4524.0,0.00%,F,F)



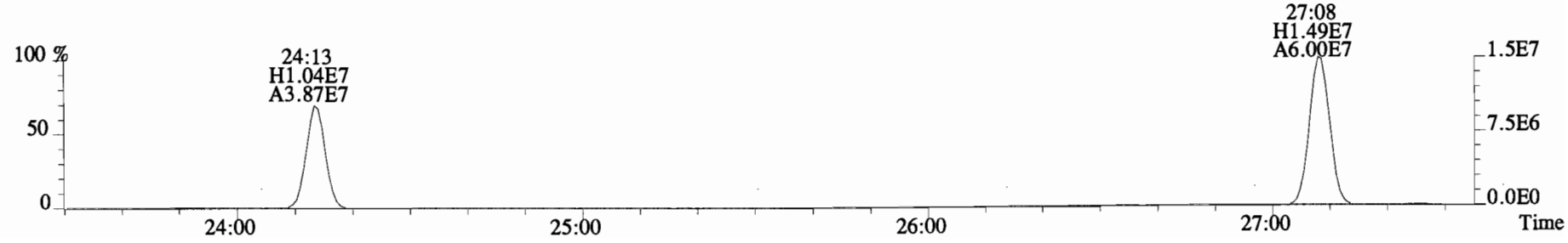
257.9584 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2364.0,0.00%,F,F)



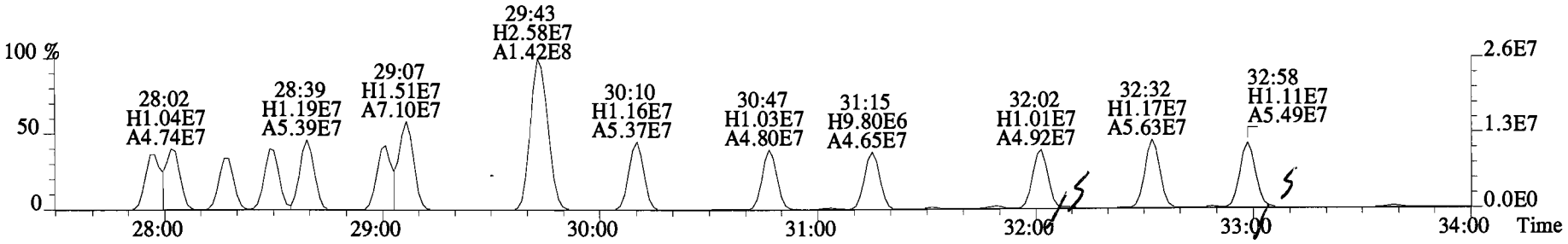
268.0016 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,81964.0,0.00%,F,F)



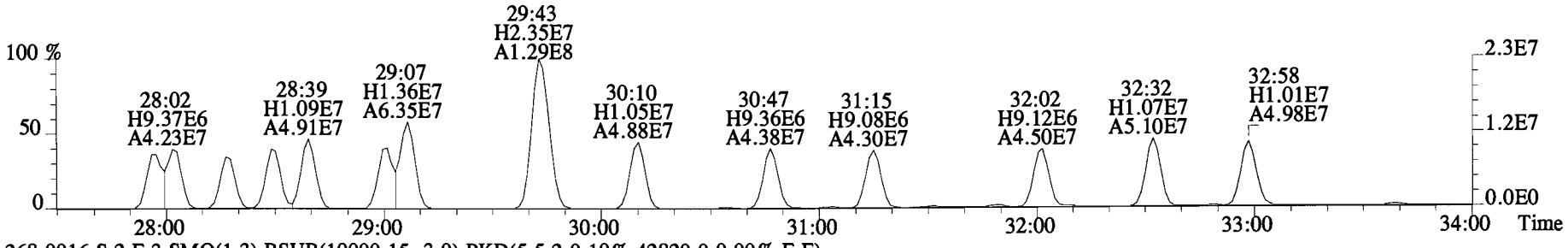
269.9986 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,53844.0,0.00%,F,F)



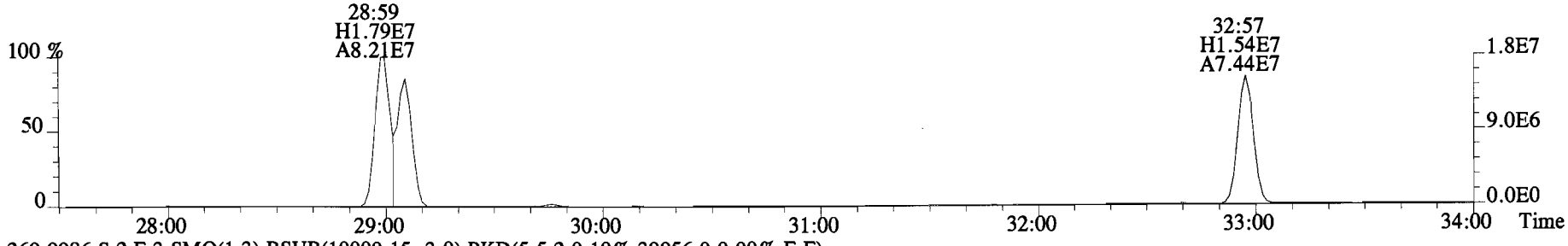
File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
255.9613 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,36464.0,0.00%,F,F)



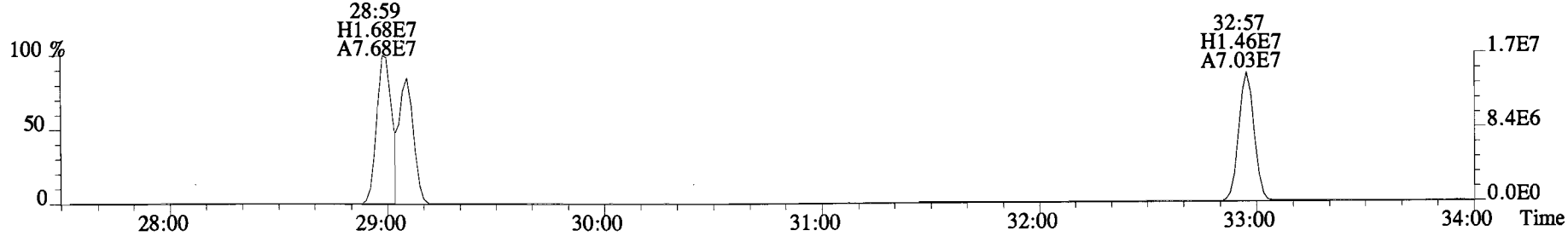
257.9584 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,36488.0,0.00%,F,F)



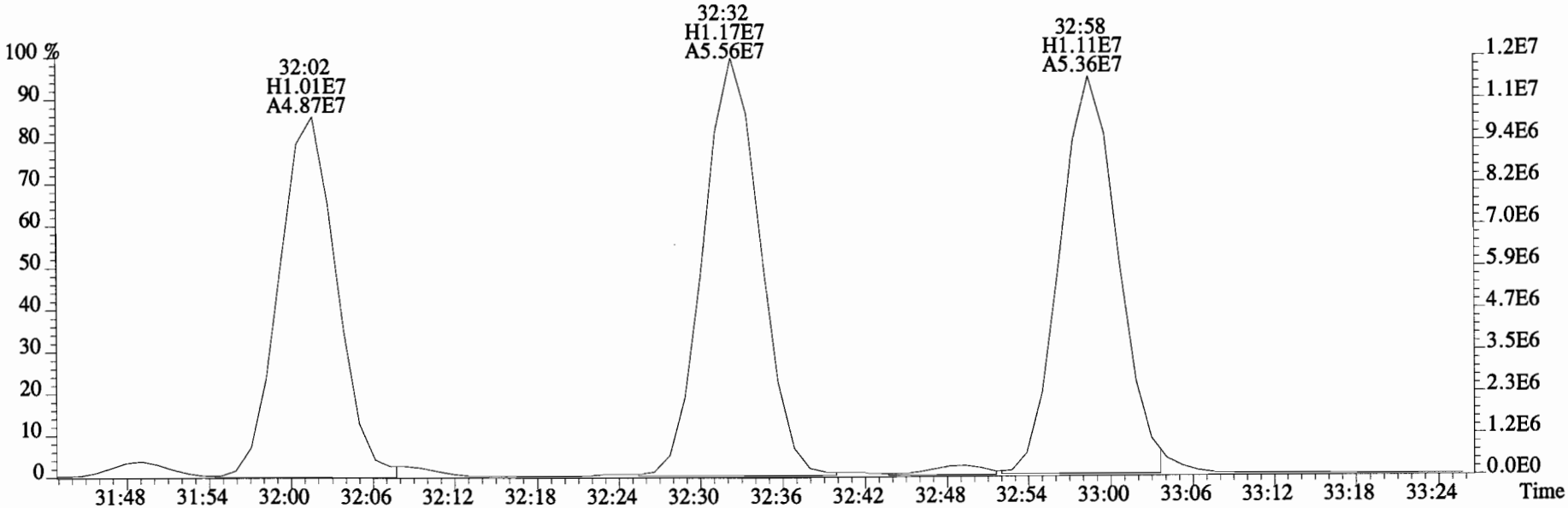
268.0016 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,42820.0,0.00%,F,F)



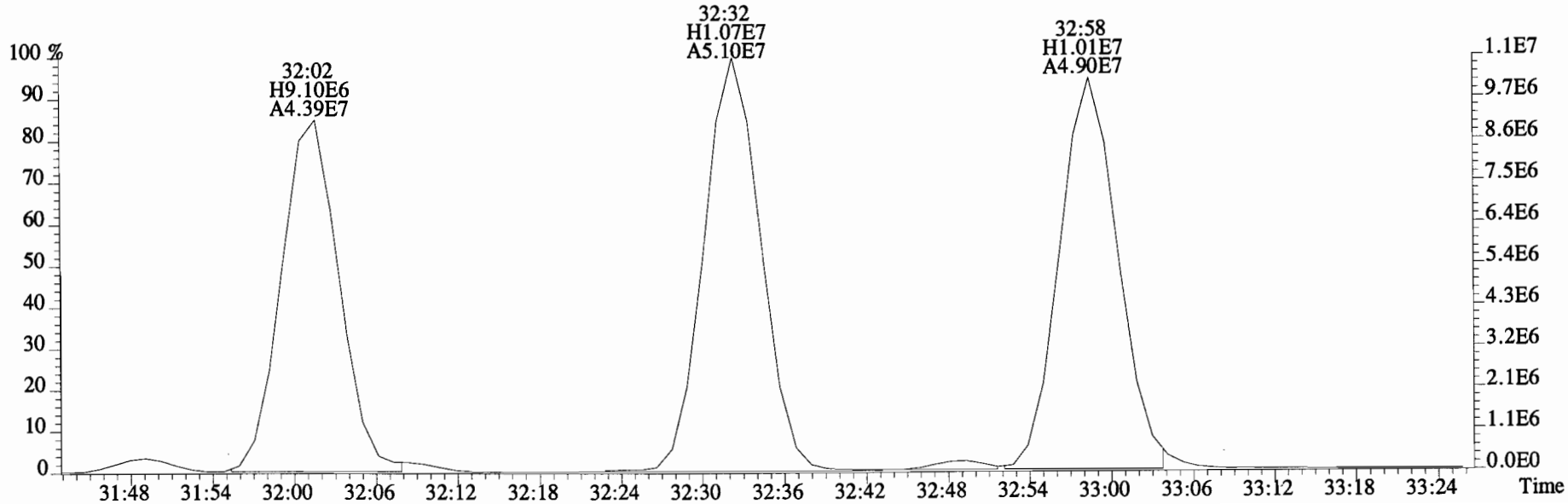
269.9986 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,39956.0,0.00%,F,F)



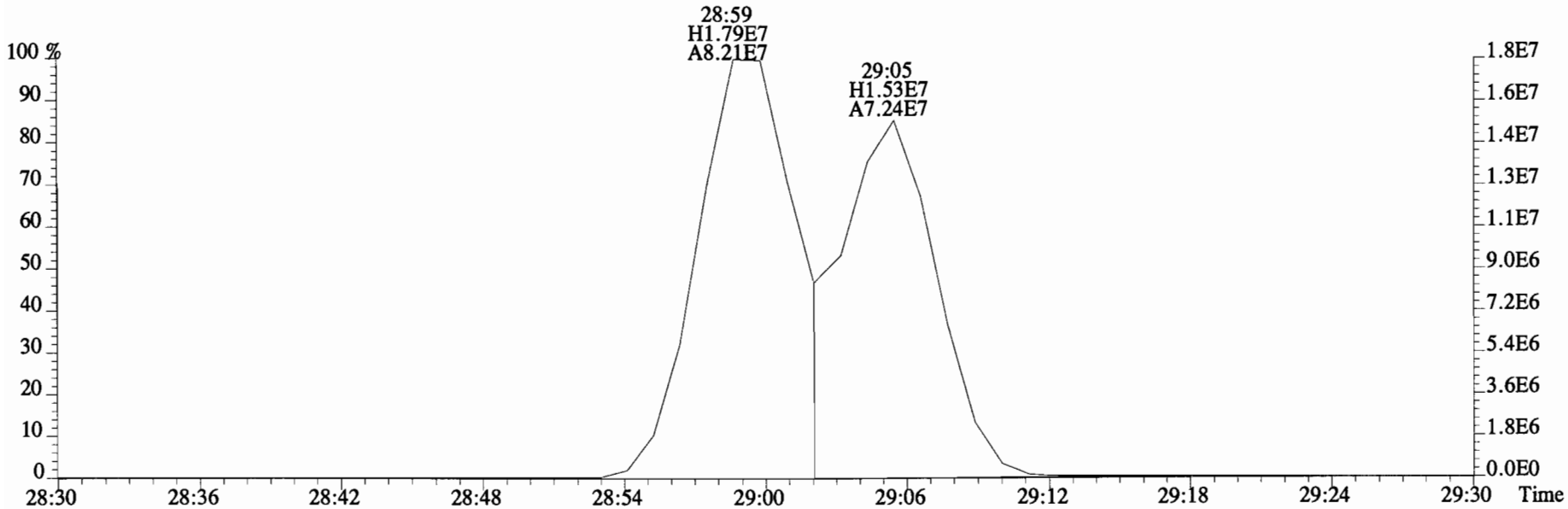
File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
255.9613 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,36464.0,0.00%,F,F)



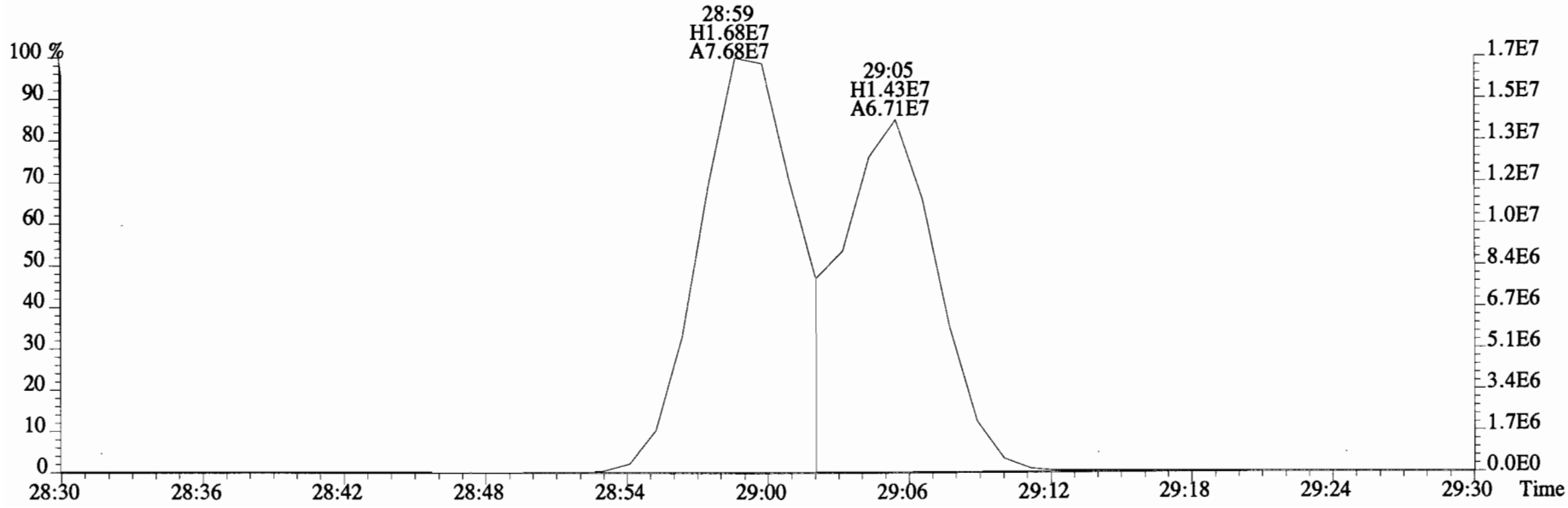
257.9584 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,36488.0,0.00%,F,F)

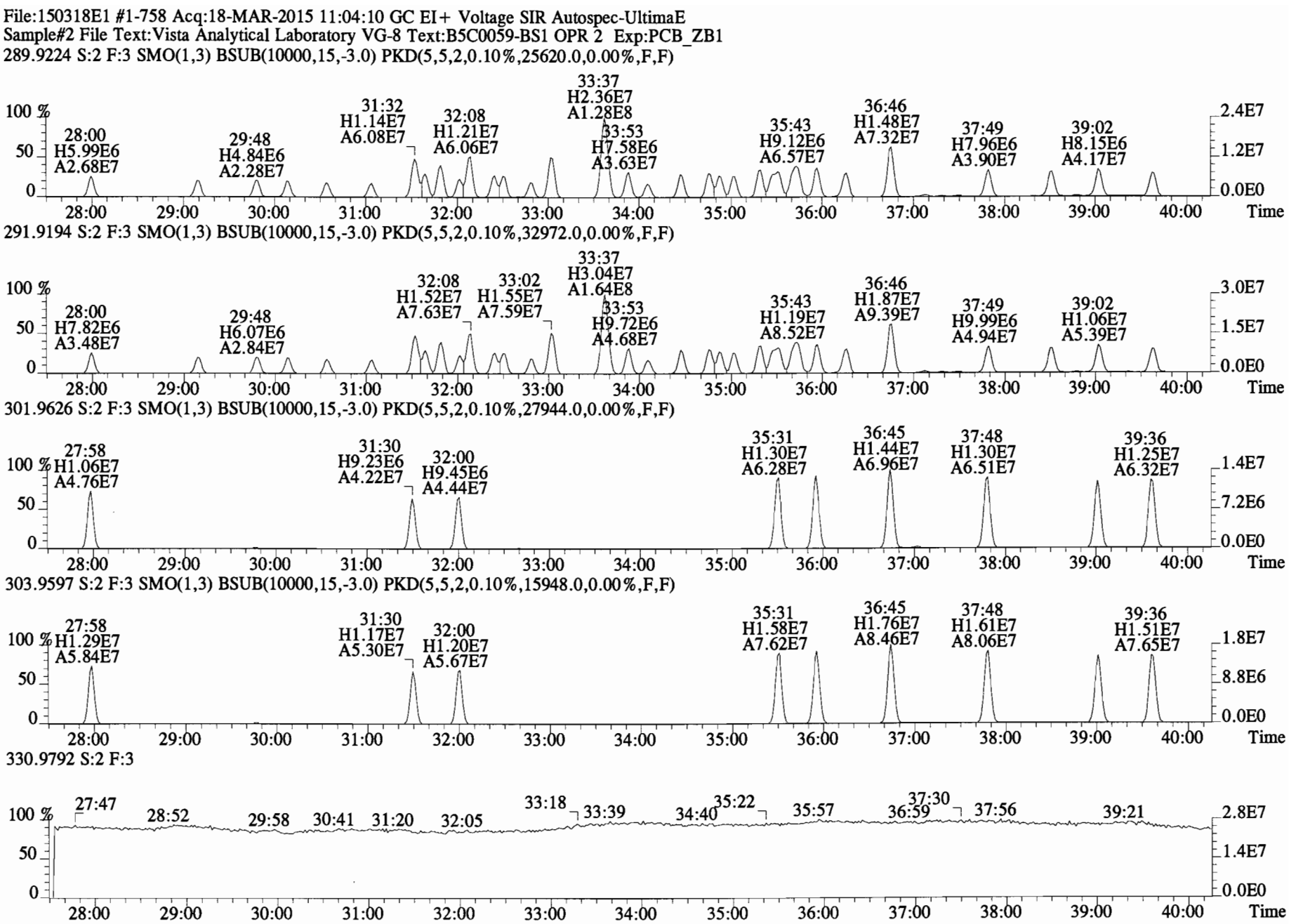


File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
268.0016 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,42820.0,0.00%,F,F)

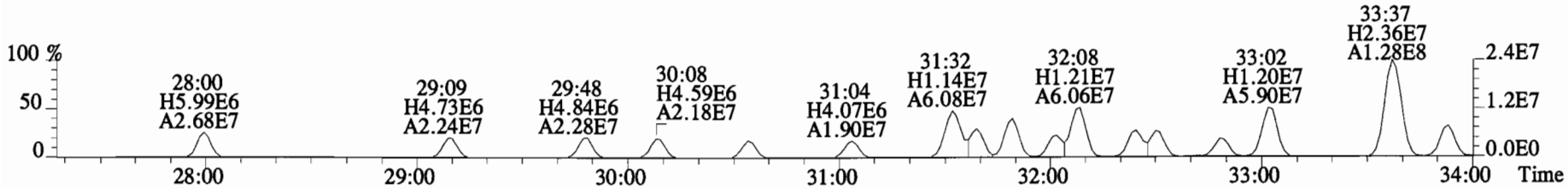


269.9986 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,39956.0,0.00%,F,F)

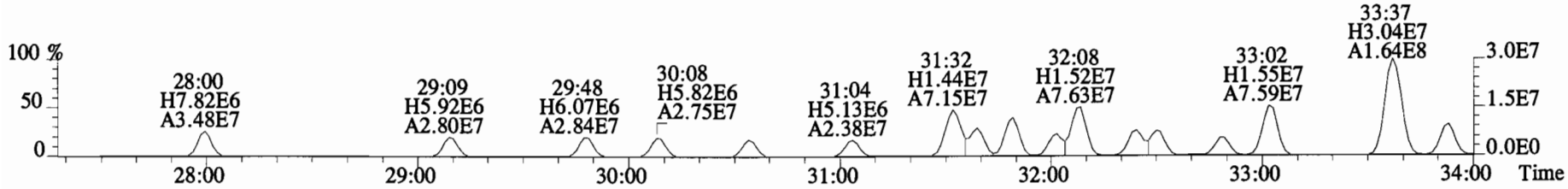



File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,25620.0,0.00%,F,F)
28:00 H5.99E6 A2.68E7
29:48 H4.84E6 A2.28E7
31:32 H1.14E7 A6.08E7
32:08 H1.21E7 A6.06E7
33:37 H2.36E7 A1.28E8
33:53 H7.58E6 A3.63E7
35:43 H9.12E6 A6.57E7
36:46 H1.48E7 A7.32E7
37:49 H7.96E6 A3.90E7
39:02 H8.15E6 A4.17E7
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,32972.0,0.00%,F,F)
28:00 H7.82E6 A3.48E7
29:48 H6.07E6 A2.84E7
32:08 H1.52E7 A7.63E7
33:02 H1.55E7 A7.59E7
33:37 H3.04E7 A1.64E8
33:53 H9.72E6 A4.68E7
35:43 H1.19E7 A8.52E7
36:46 H1.87E7 A9.39E7
37:49 H9.99E6 A4.94E7
39:02 H1.06E7 A5.39E7
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,27944.0,0.00%,F,F)
27:58 H1.06E7 A4.76E7
31:30 H9.23E6 A4.22E7
32:00 H9.45E6 A4.44E7
35:31 H1.30E7 A6.28E7
36:45 H1.44E7 A6.96E7
37:48 H1.30E7 A6.51E7
39:36 H1.25E7 A6.32E7
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,15948.0,0.00%,F,F)
27:58 H1.29E7 A5.84E7
31:30 H1.17E7 A5.30E7
32:00 H1.20E7 A5.67E7
35:31 H1.58E7 A7.62E7
36:45 H1.76E7 A8.46E7
37:48 H1.61E7 A8.06E7
39:36 H1.51E7 A7.65E7
330.9792 S:2 F:3
27:47
28:52
29:58
30:41
31:20
32:05
33:18
33:39
34:40
35:22
35:57
36:59
37:30
37:56
39:21
100 %
50
0
2.4E7
1.2E7
0.0E0
3.0E7
1.5E7
1.4E7
7.2E6
1.8E7
8.8E6
2.8E7
1.4E7
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

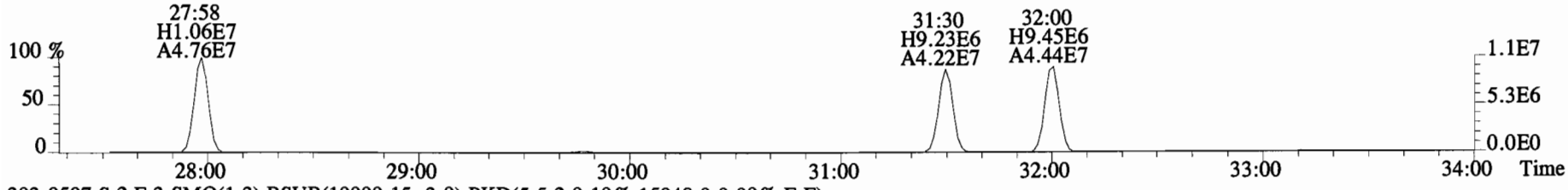
File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,25620.0,0.00%,F,F)



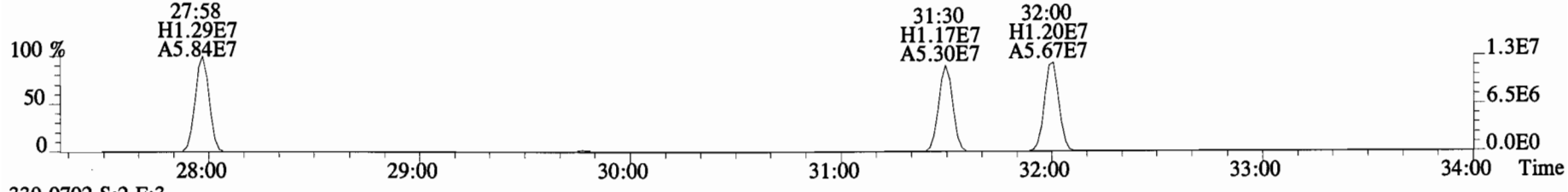
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,32972.0,0.00%,F,F)



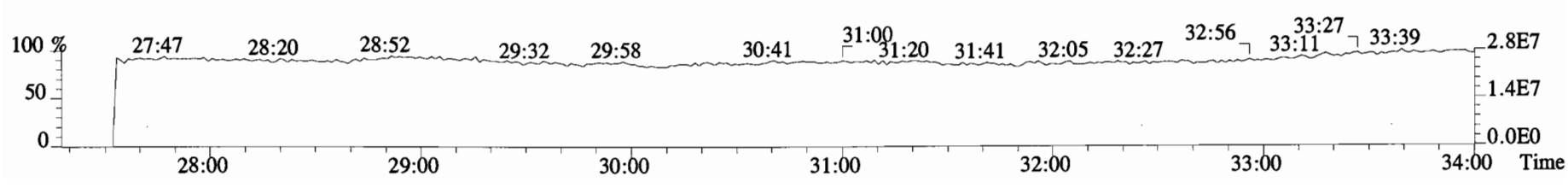
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,27944.0,0.00%,F,F)



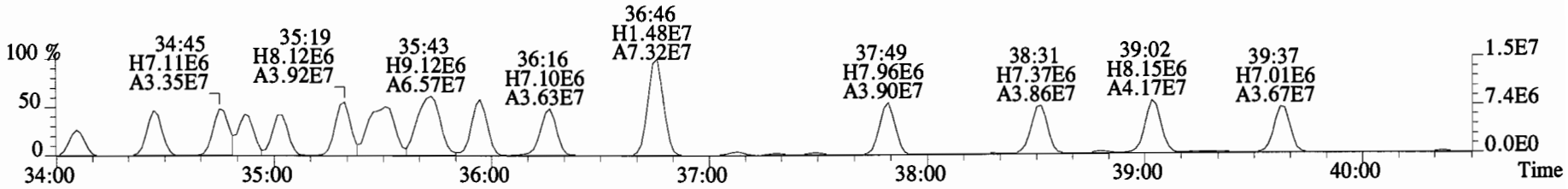
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,15948.0,0.00%,F,F)



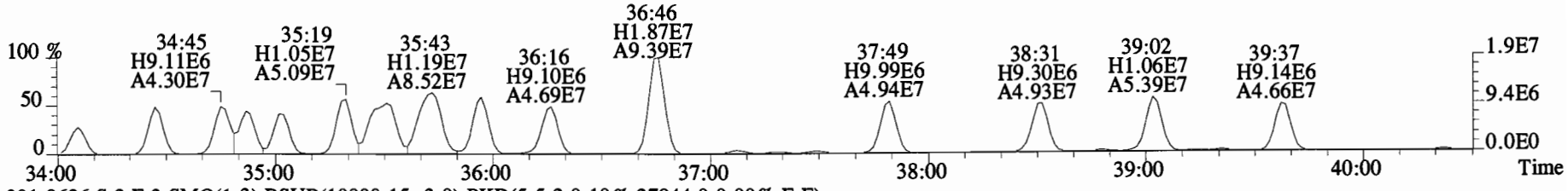
330.9792 S:2 F:3



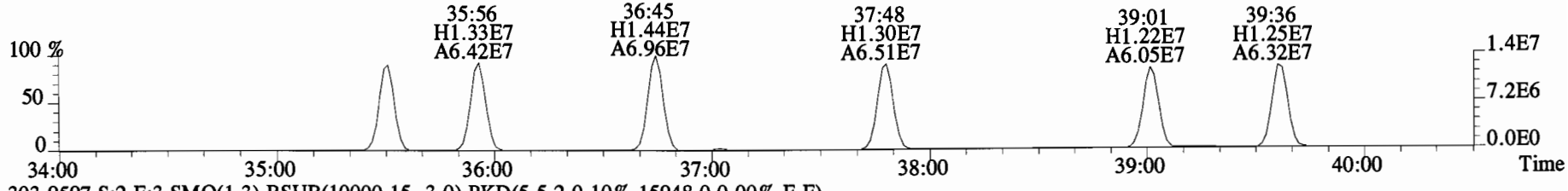
File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,25620.0,0.00%,F,F)



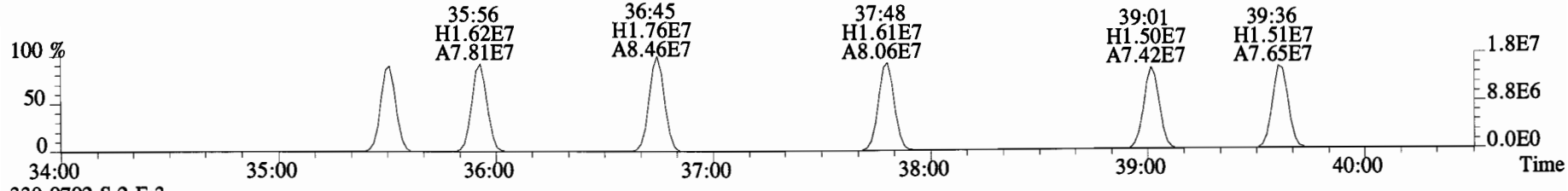
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,32972.0,0.00%,F,F)



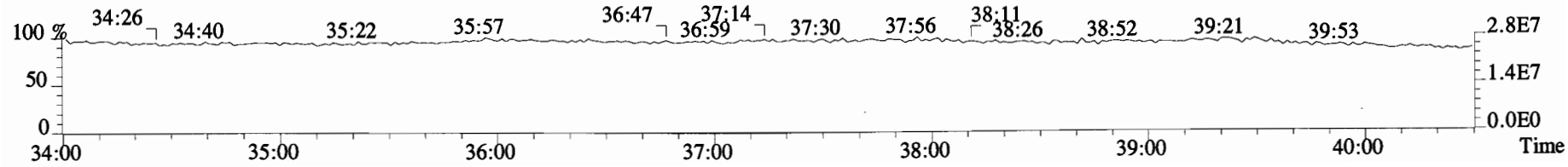
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,27944.0,0.00%,F,F)



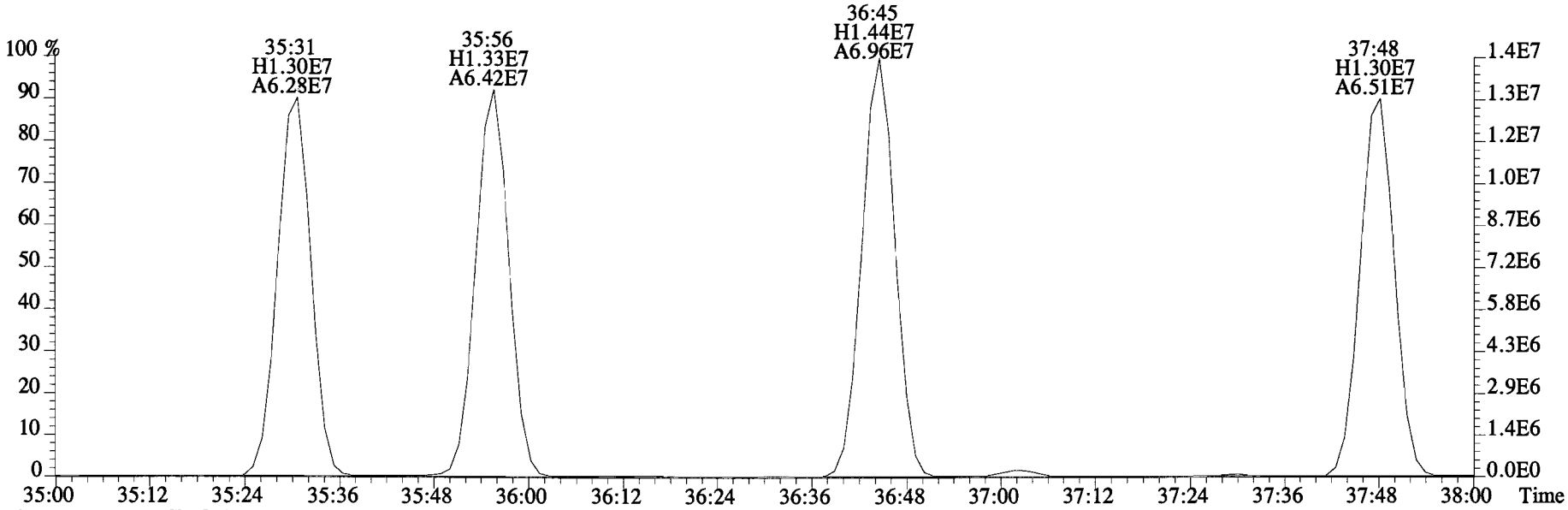
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,15948.0,0.00%,F,F)



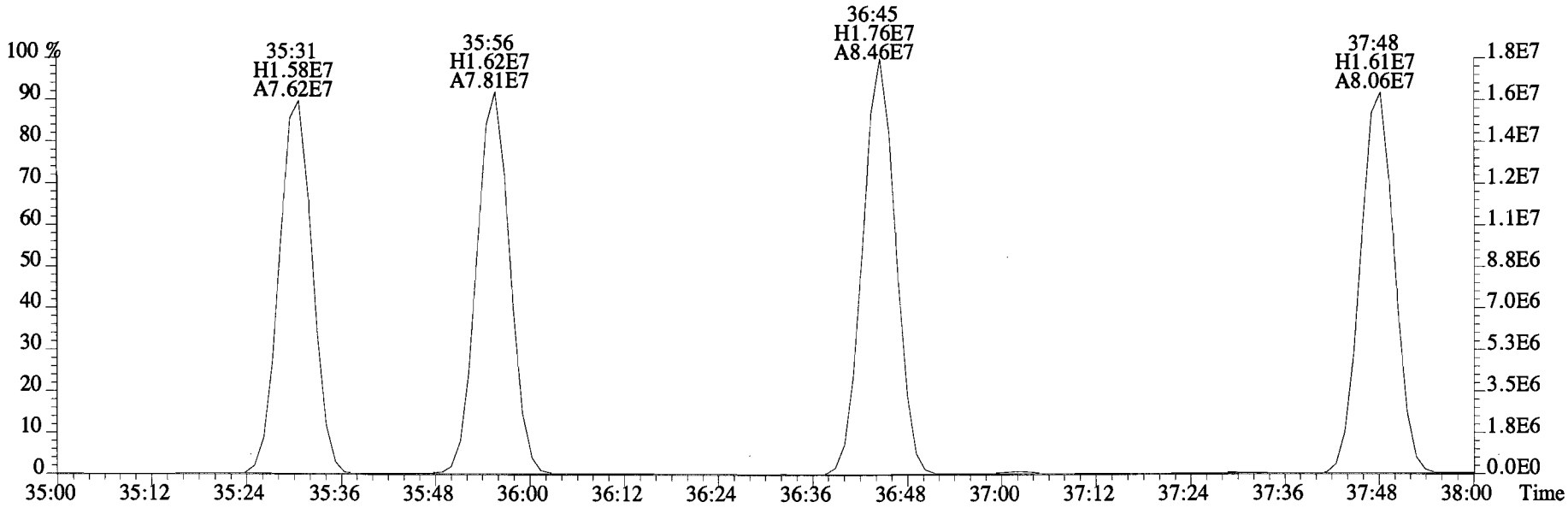
330.9792 S:2 F:3



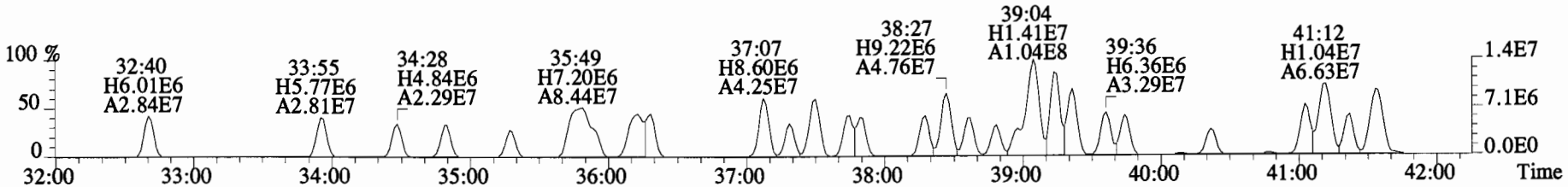
File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,27944.0,0.00%,F,F)



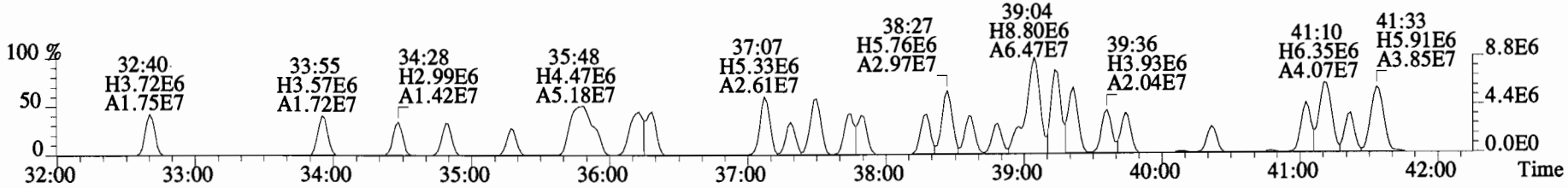
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,15948.0,0.00%,F,F)



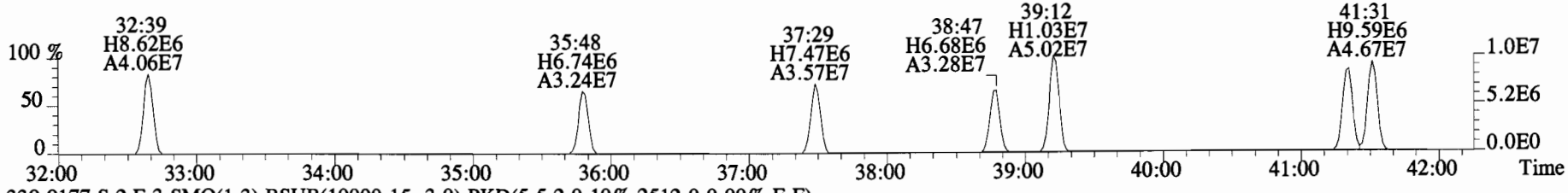
File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2032.0,0.00%,F,F)



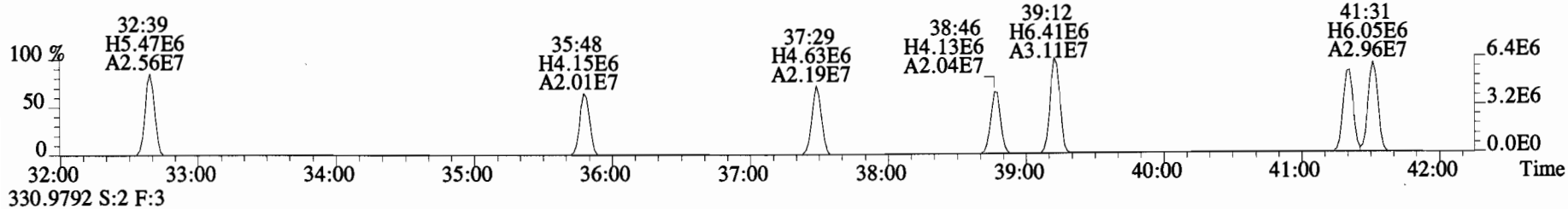
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1984.0,0.00%,F,F)



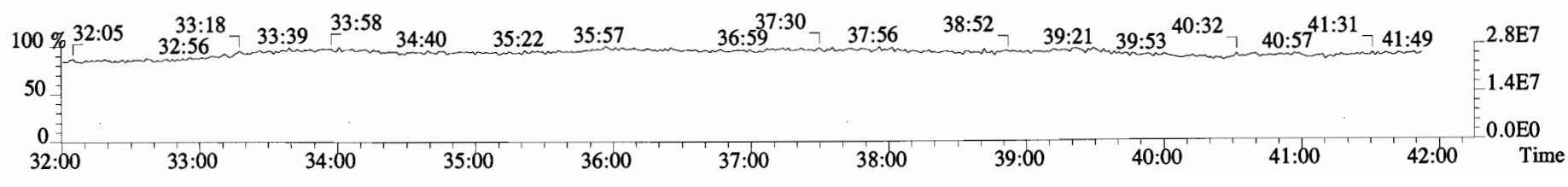
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3048.0,0.00%,F,F)

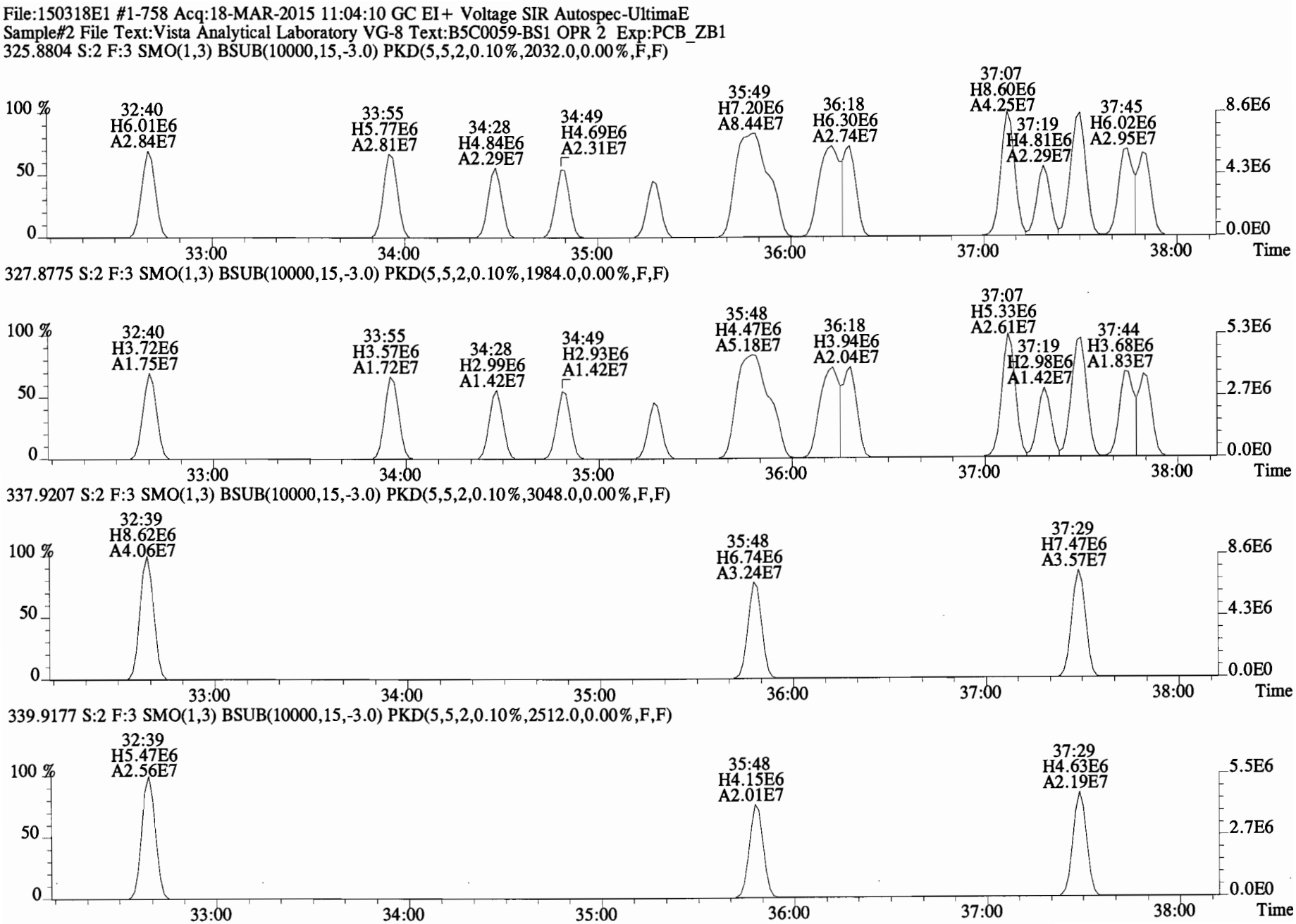


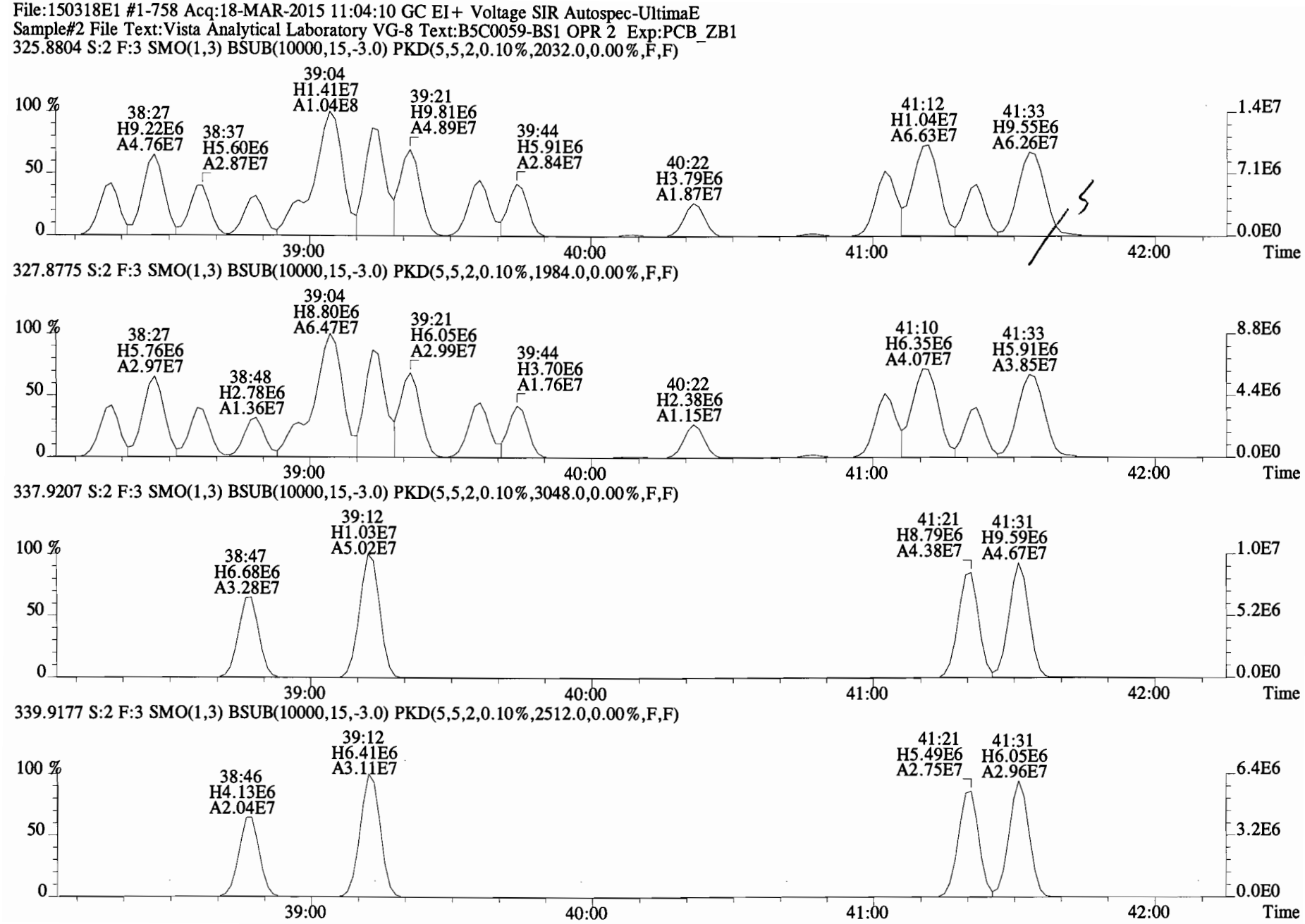
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2512.0,0.00%,F,F)



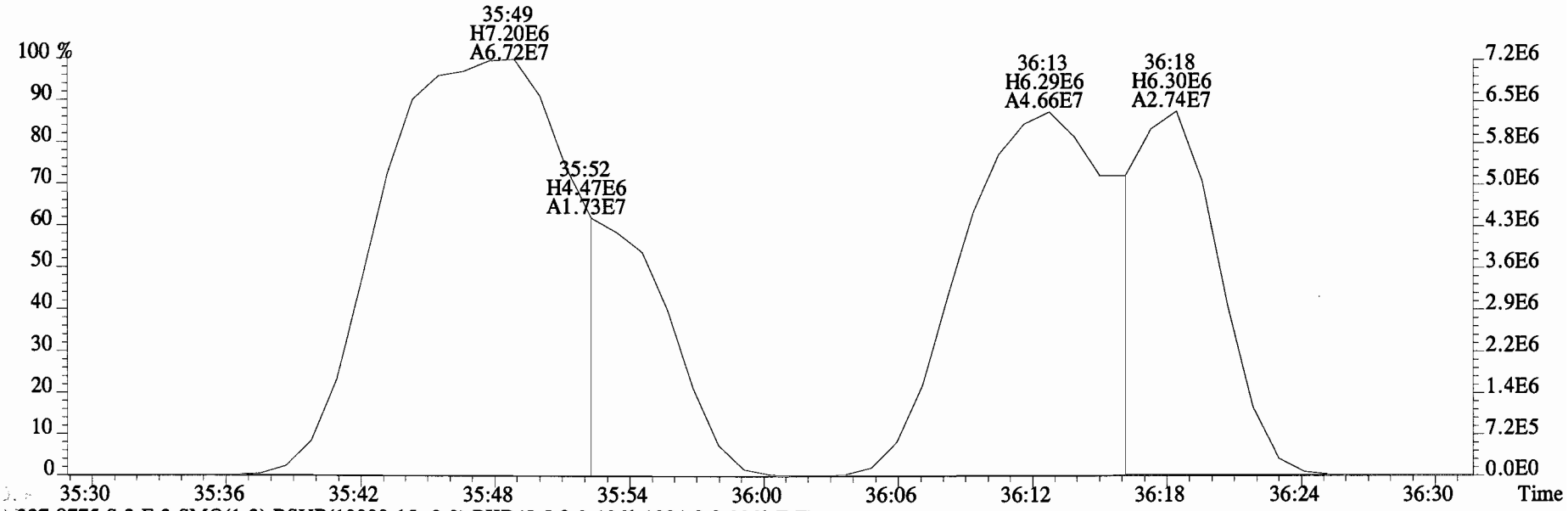
330.9792 S:2 F:3



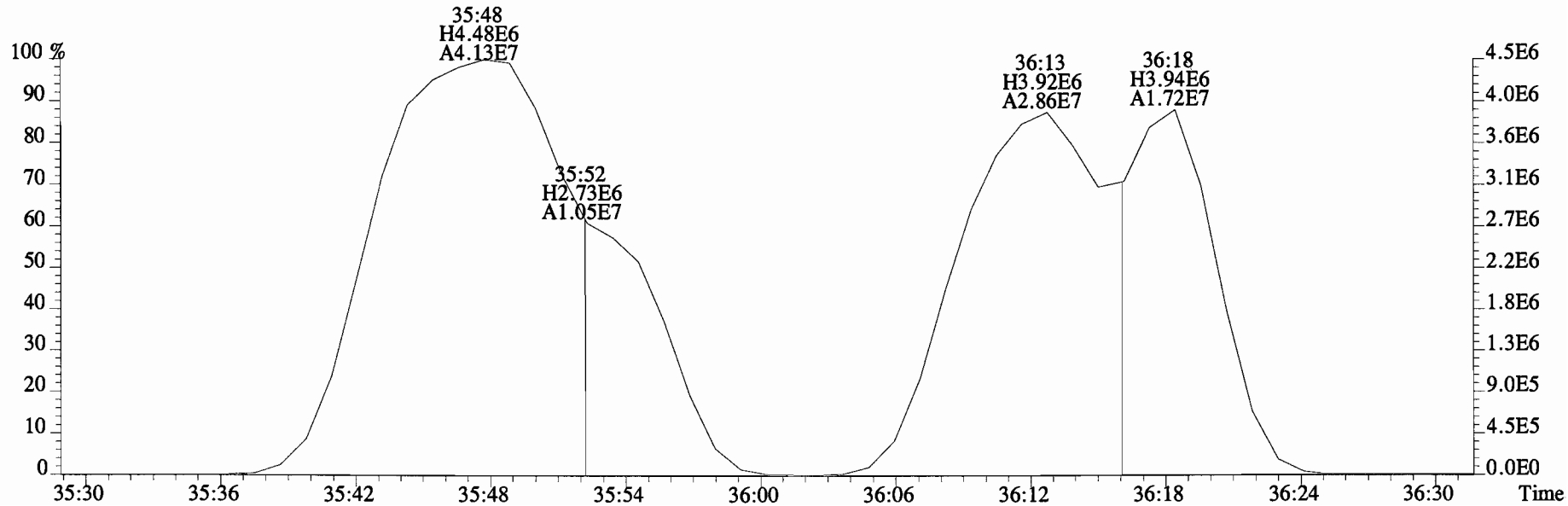

File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2032.0,0.00%,F,F)
32:40 H6.01E6 A2.84E7
33:55 H5.77E6 A2.81E7
34:28 H4.84E6 A2.29E7
34:49 H4.69E6 A2.31E7
35:49 H7.20E6 A8.44E7
36:18 H6.30E6 A2.74E7
37:07 H8.60E6 A4.25E7
37:19 H4.81E6 A2.29E7
37:45 H6.02E6 A2.95E7
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1984.0,0.00%,F,F)
32:40 H3.72E6 A1.75E7
33:55 H3.57E6 A1.72E7
34:28 H2.99E6 A1.42E7
34:49 H2.93E6 A1.42E7
35:48 H4.47E6 A5.18E7
36:18 H3.94E6 A2.04E7
37:07 H5.33E6 A2.61E7
37:19 H2.98E6 A1.42E7
37:44 H3.68E6 A1.83E7
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3048.0,0.00%,F,F)
32:39 H8.62E6 A4.06E7
35:48 H6.74E6 A3.24E7
37:29 H7.47E6 A3.57E7
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2512.0,0.00%,F,F)
32:39 H5.47E6 A2.56E7
35:48 H4.15E6 A2.01E7
37:29 H4.63E6 A2.19E7
100 %
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
8.6E6
4.3E6
0.0E0
5.3E6
2.7E6
5.5E6


File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2032.0,0.00%,F,F)
38:27 H9.22E6 A4.76E7
38:37 H5.60E6 A2.87E7
39:04 H1.41E7 A1.04E8
39:21 H9.81E6 A4.89E7
39:44 H5.91E6 A2.84E7
40:22 H3.79E6 A1.87E7
41:12 H1.04E7 A6.63E7
41:33 H9.55E6 A6.26E7
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1984.0,0.00%,F,F)
38:27 H5.76E6 A2.97E7
38:48 H2.78E6 A1.36E7
39:04 H8.80E6 A6.47E7
39:21 H6.05E6 A2.99E7
39:44 H3.70E6 A1.76E7
40:22 H2.38E6 A1.15E7
41:10 H6.35E6 A4.07E7
41:33 H5.91E6 A3.85E7
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3048.0,0.00%,F,F)
38:47 H6.68E6 A3.28E7
39:12 H1.03E7 A5.02E7
41:21 H8.79E6 A4.38E7
41:31 H9.59E6 A4.67E7
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2512.0,0.00%,F,F)
38:46 H4.13E6 A2.04E7
39:12 H6.41E6 A3.11E7
41:21 H5.49E6 A2.75E7
41:31 H6.05E6 A2.96E7
100 %
50
0
39:00
40:00
41:00
42:00
Time
1.4E7
7.1E6
0.0E0
8.8E6
4.4E6
1.0E7
5.2E6
6.4E6
3.2E6

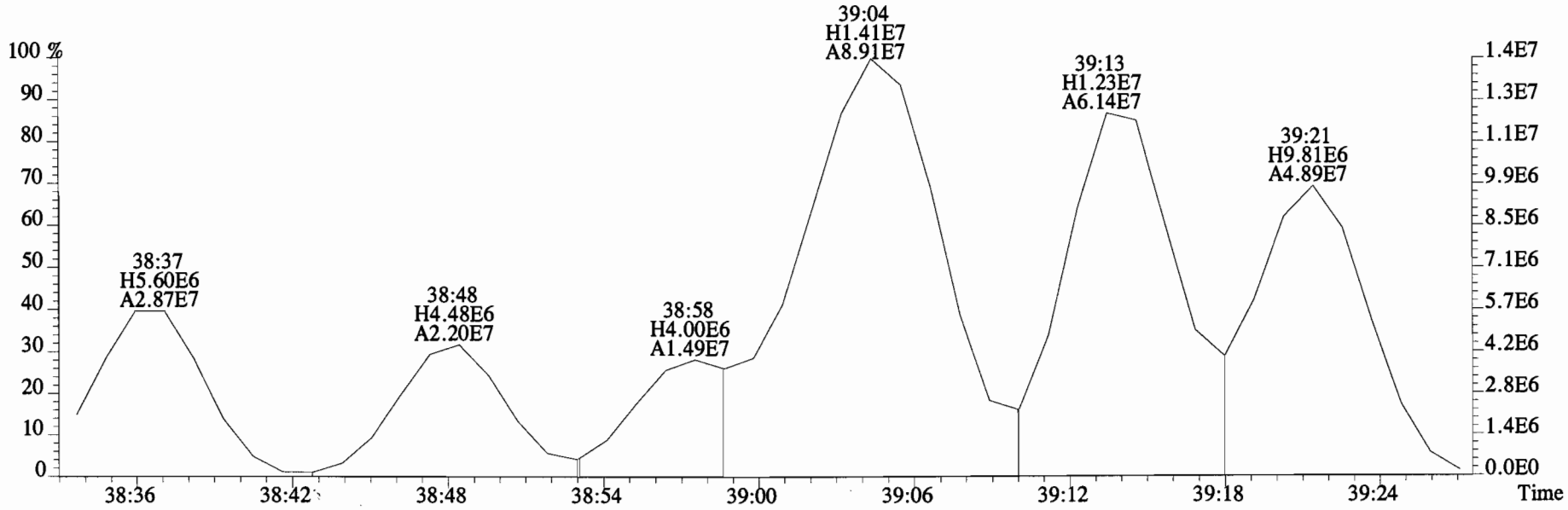
File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2032.0,0.00%,F,F)



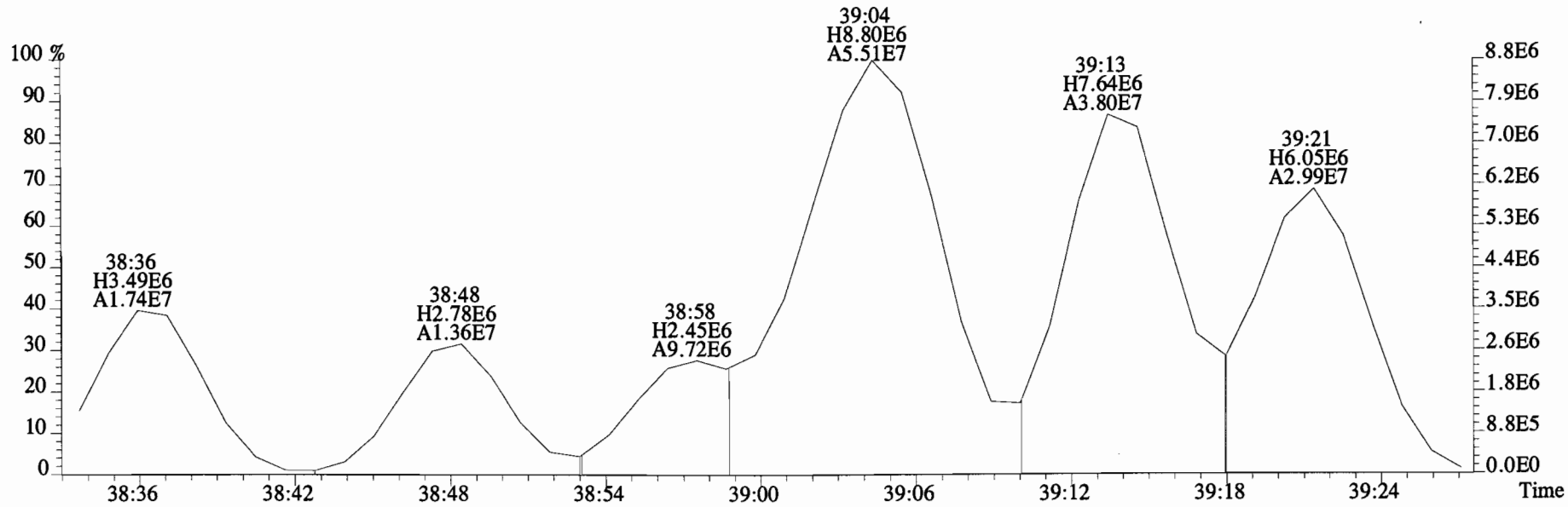
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1984.0,0.00%,F,F)



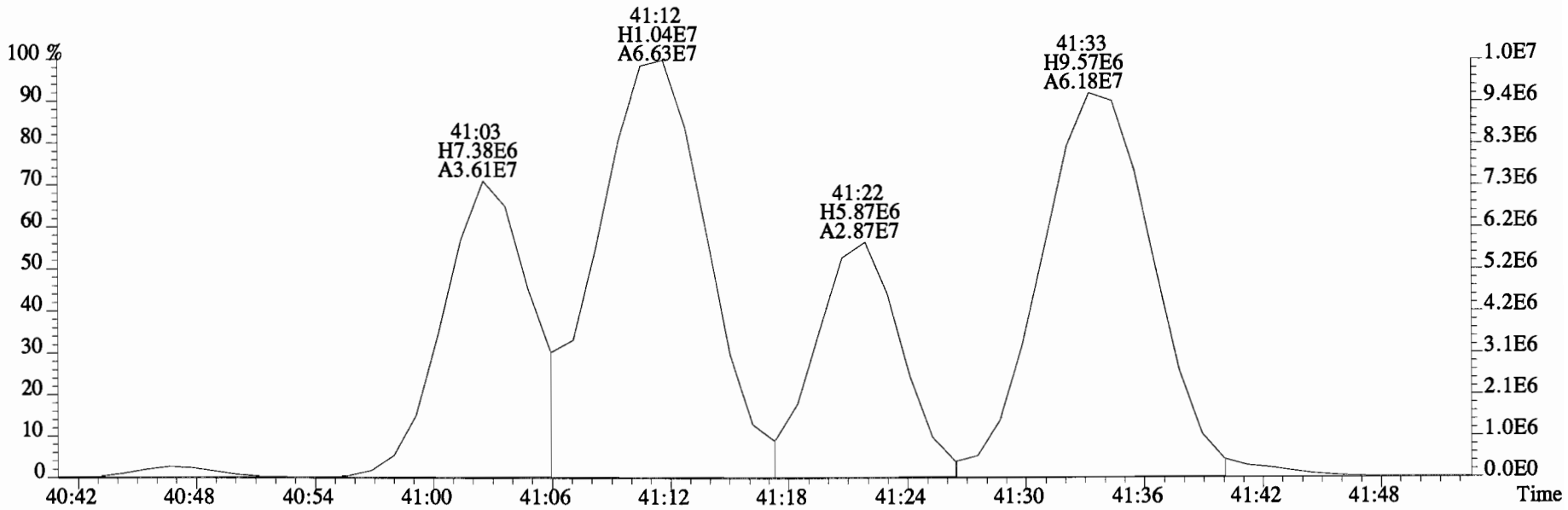
File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2032.0,0.00%,F,F)



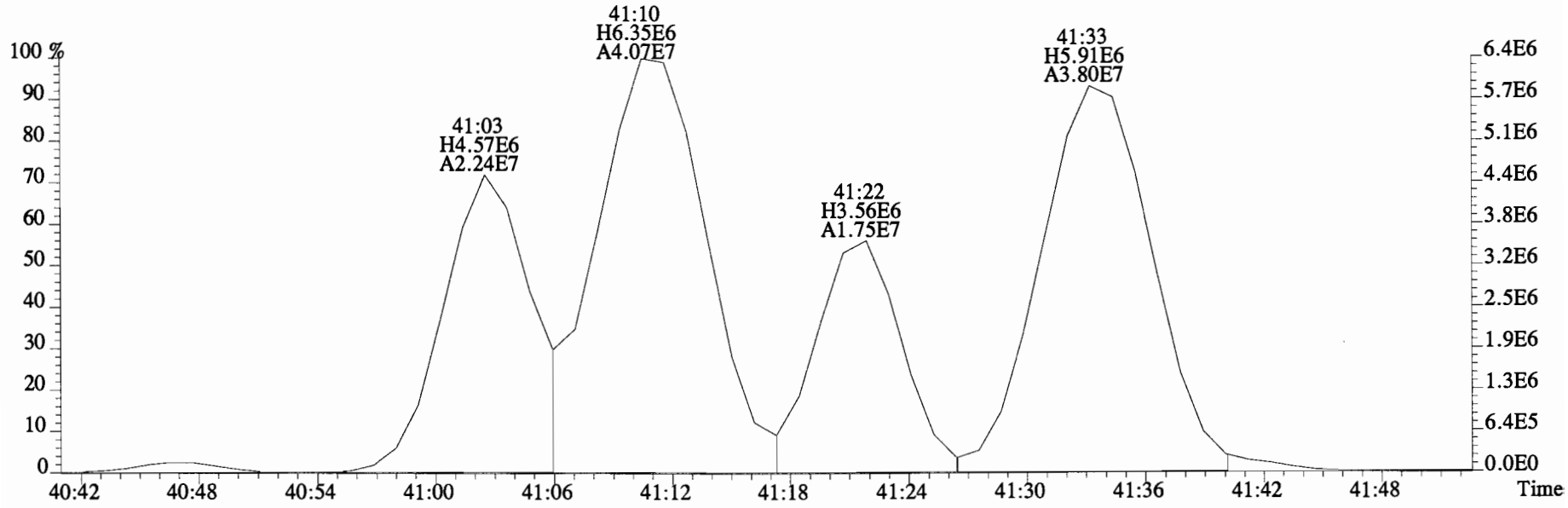
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1984.0,0.00%,F,F)



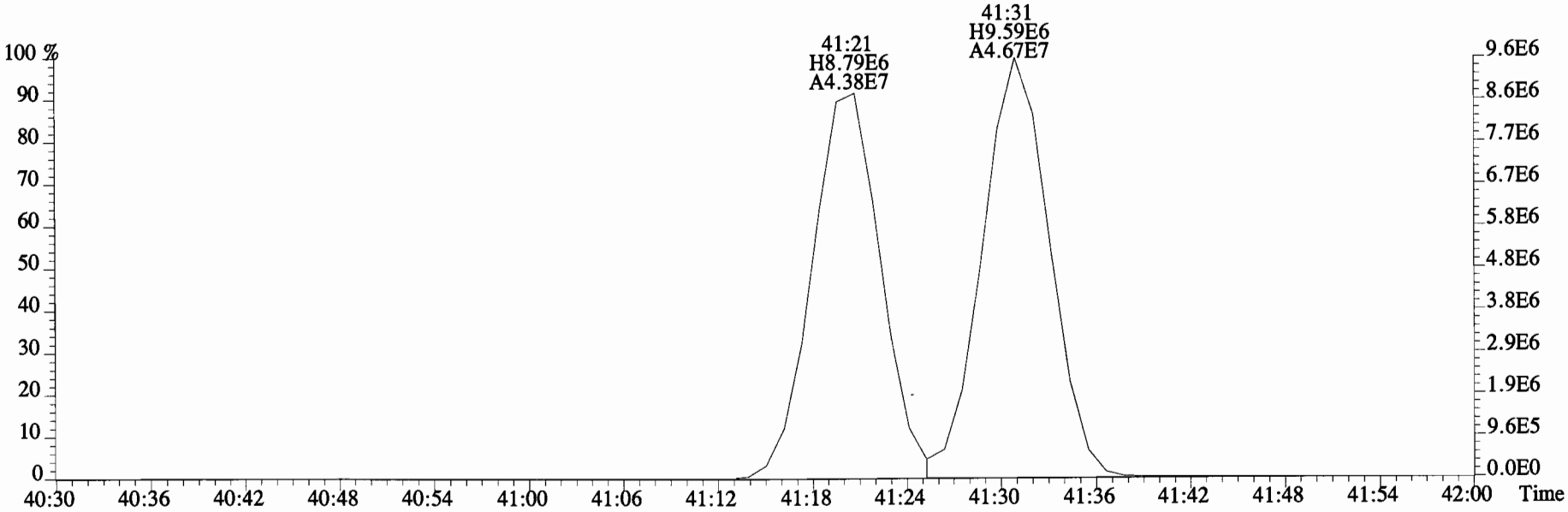
File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2032.0,0.00%,F,F)



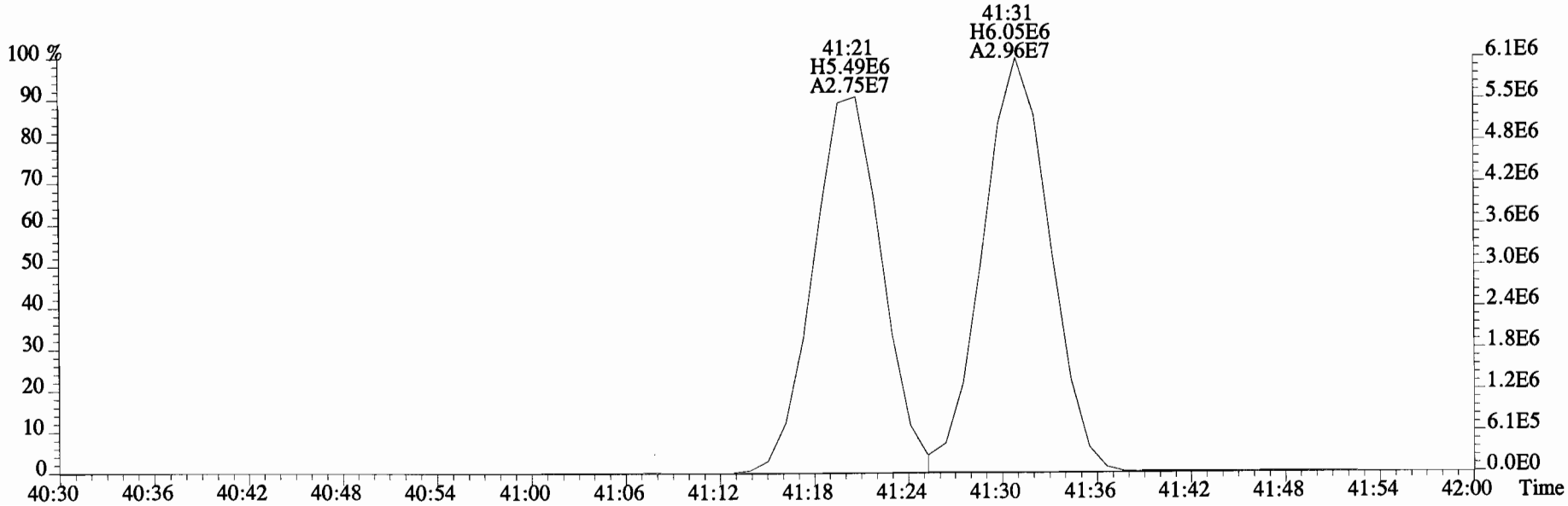
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1984.0,0.00%,F,F)



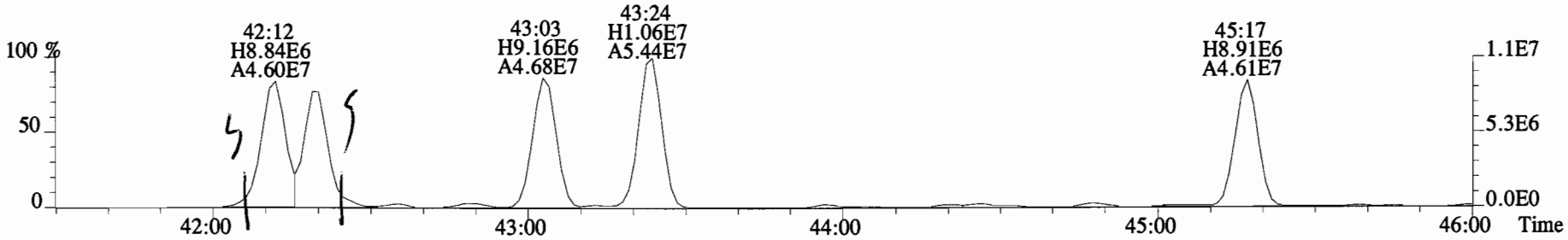
File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3048.0,0.00%,F,F)



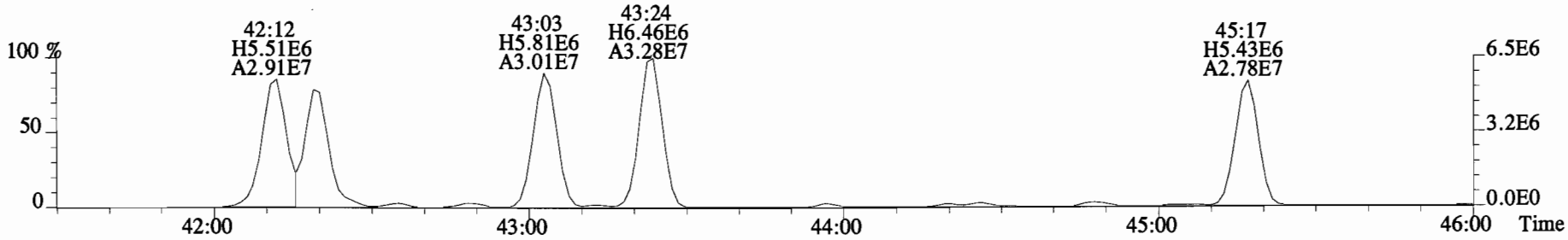
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2512.0,0.00%,F,F)



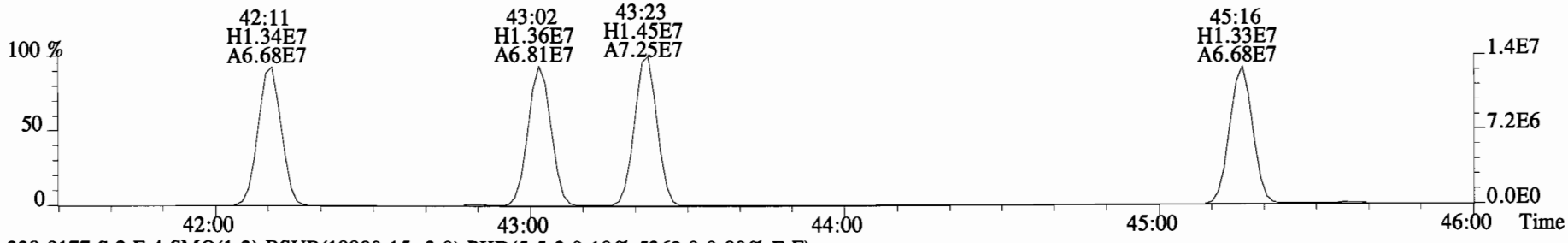
File:150318E1 #1-555 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
325.8804 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7644.0,0.00%,F,F)



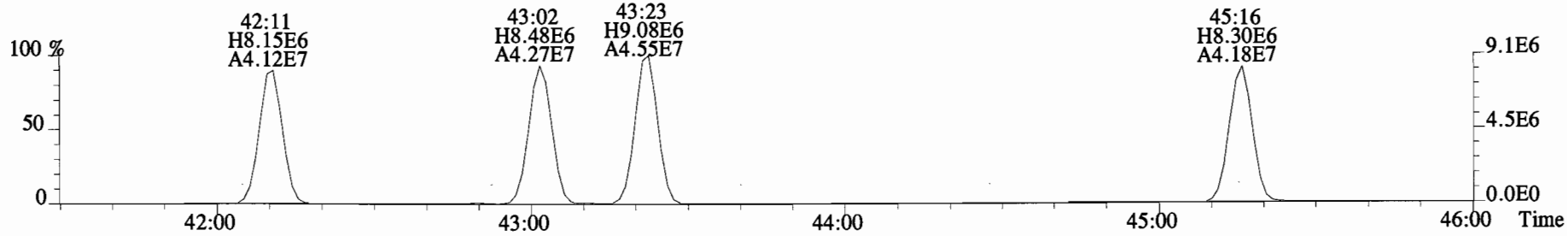
327.8775 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7000.0,0.00%,F,F)



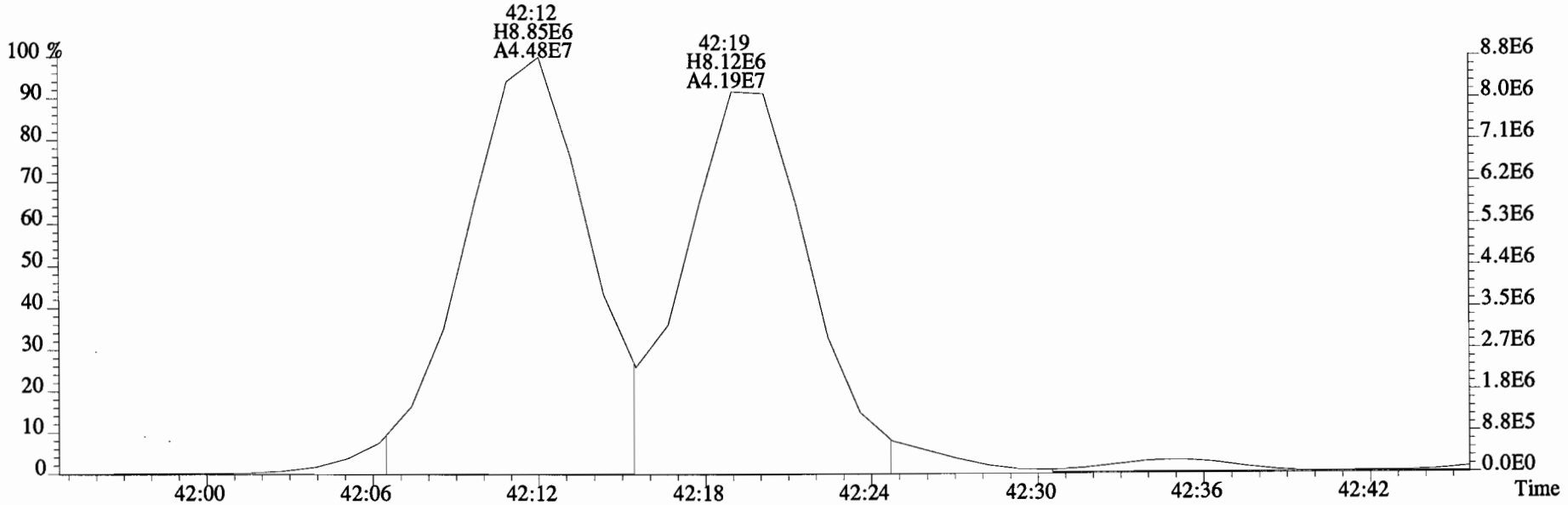
337.9207 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7324.0,0.00%,F,F)



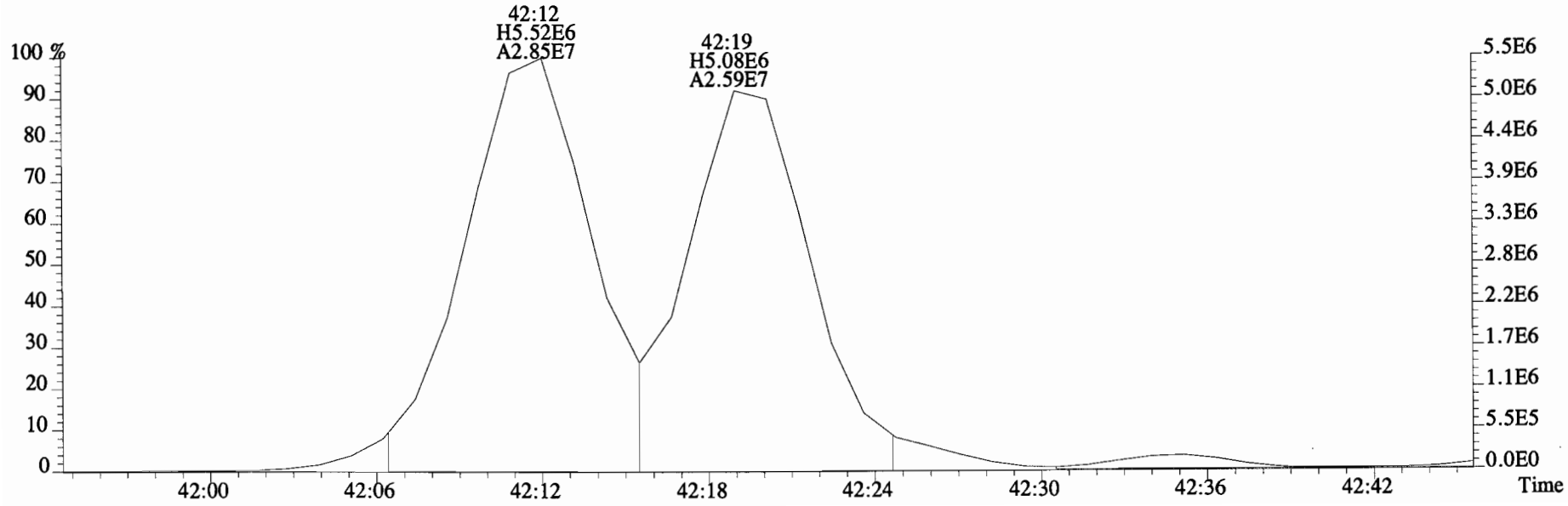
339.9177 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5368.0,0.00%,F,F)



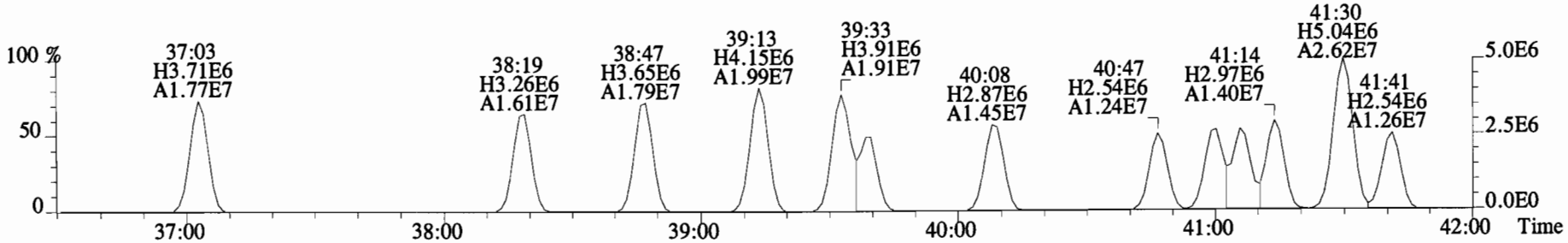
File:150318E1 #1-555 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
325.8804 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7644.0,0.00%,F,F)



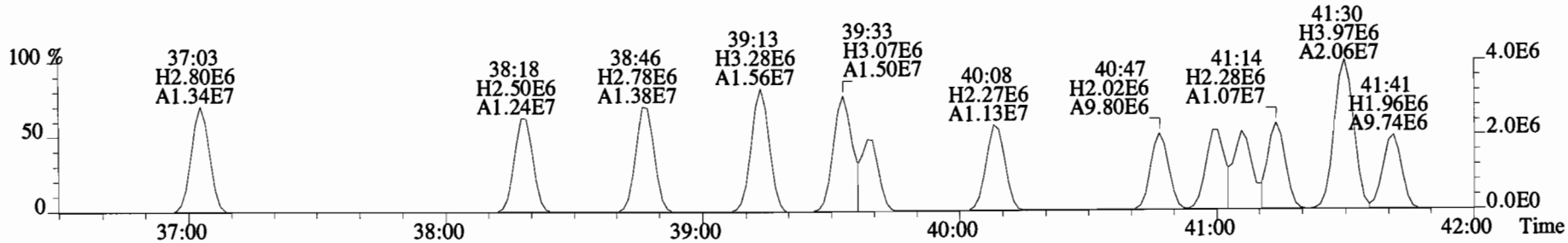
327.8775 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7000.0,0.00%,F,F)



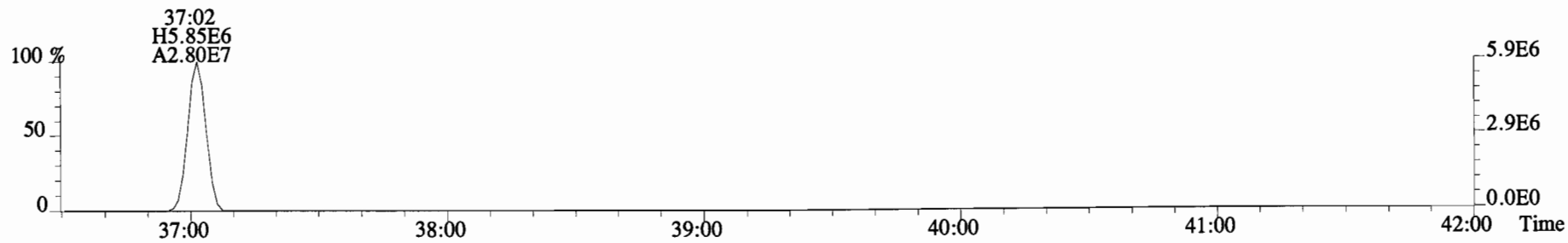
File:150318E1 #1-758 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
359.8415 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1688.0,0.00%,F,F)



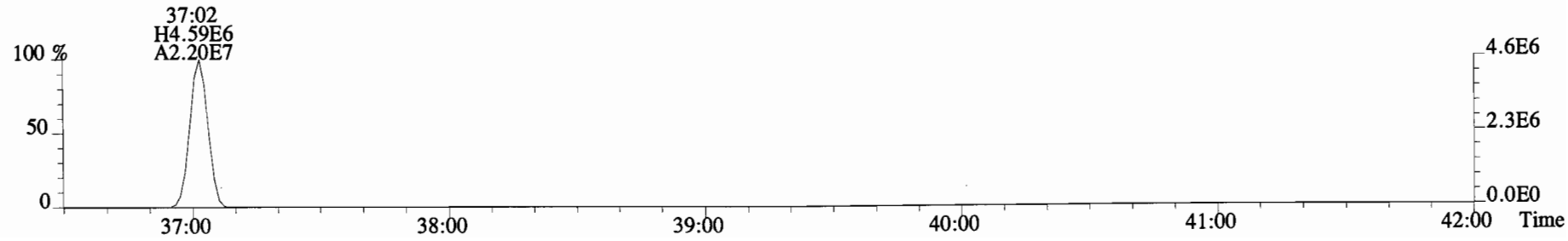
361.8385 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1892.0,0.00%,F,F)



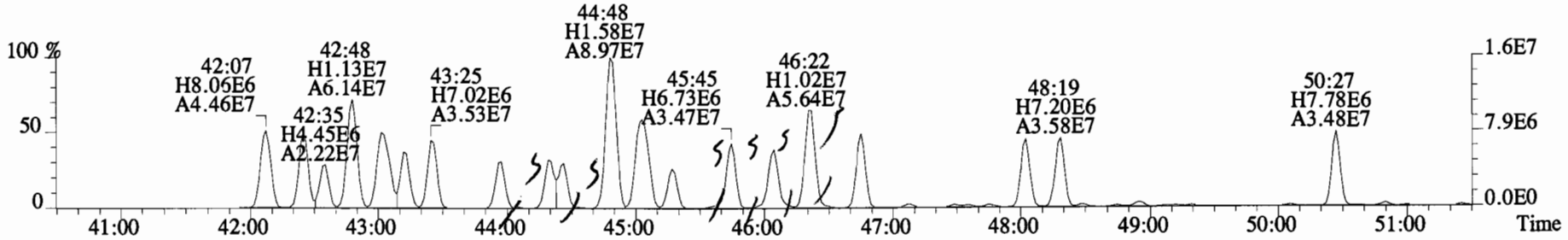
371.8817 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2252.0,0.00%,F,F)



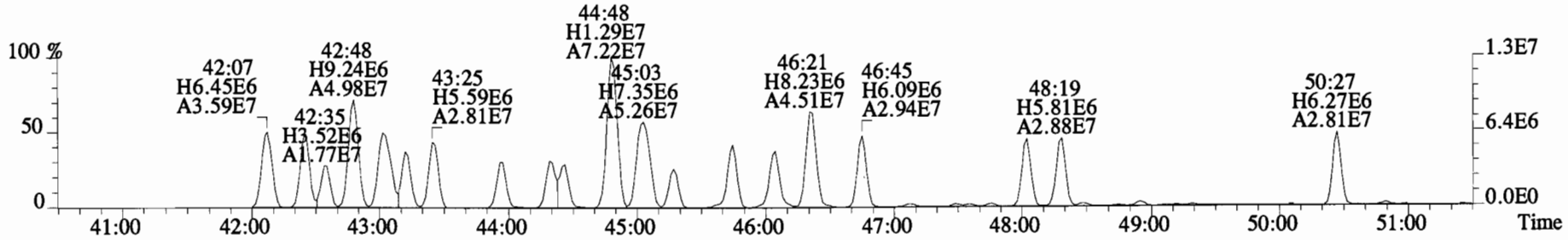
373.8788 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2328.0,0.00%,F,F)



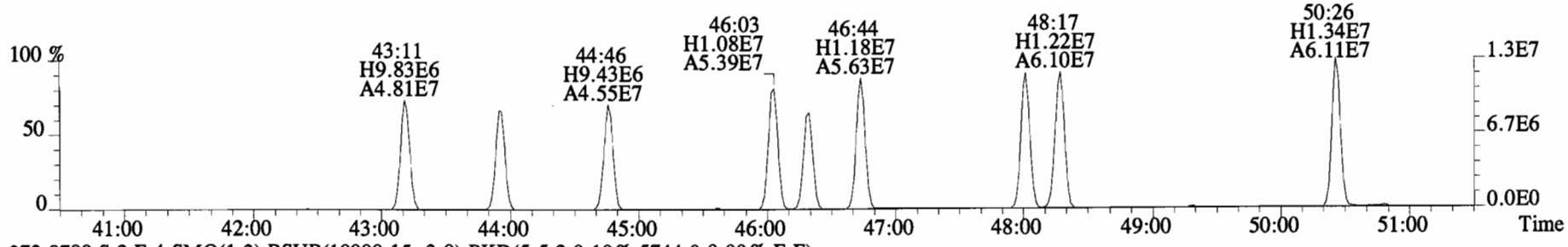
File:150318E1 #1-555 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,22708.0,0.00%,F,F)



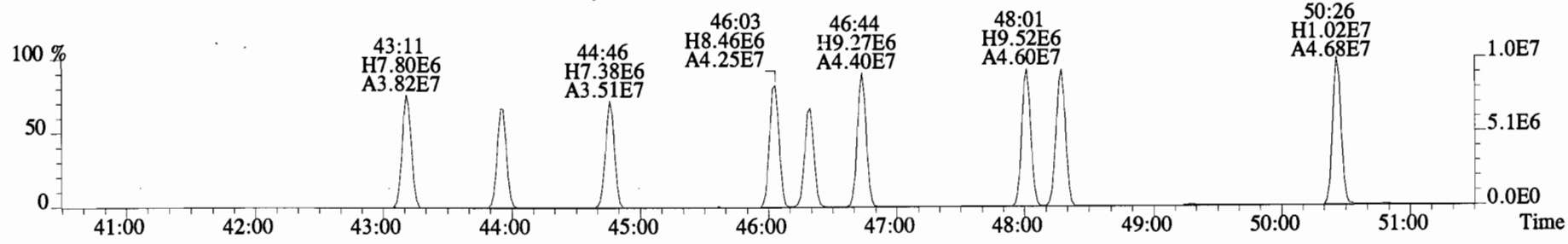
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11828.0,0.00%,F,F)



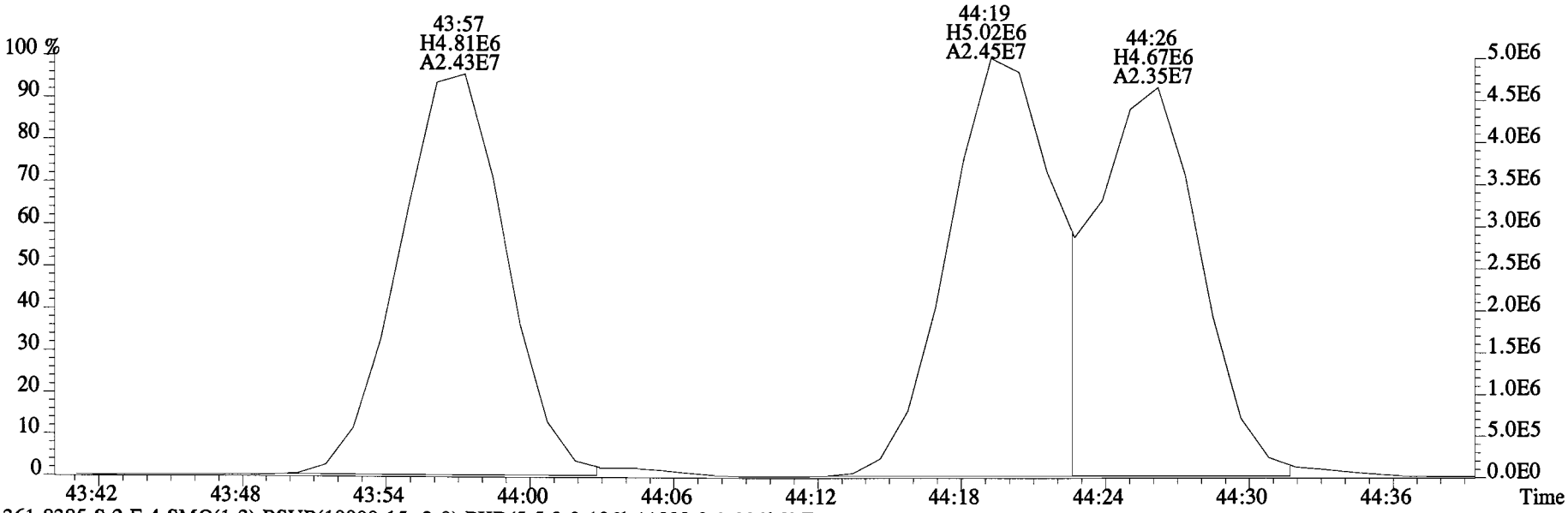
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6672.0,0.00%,F,F)



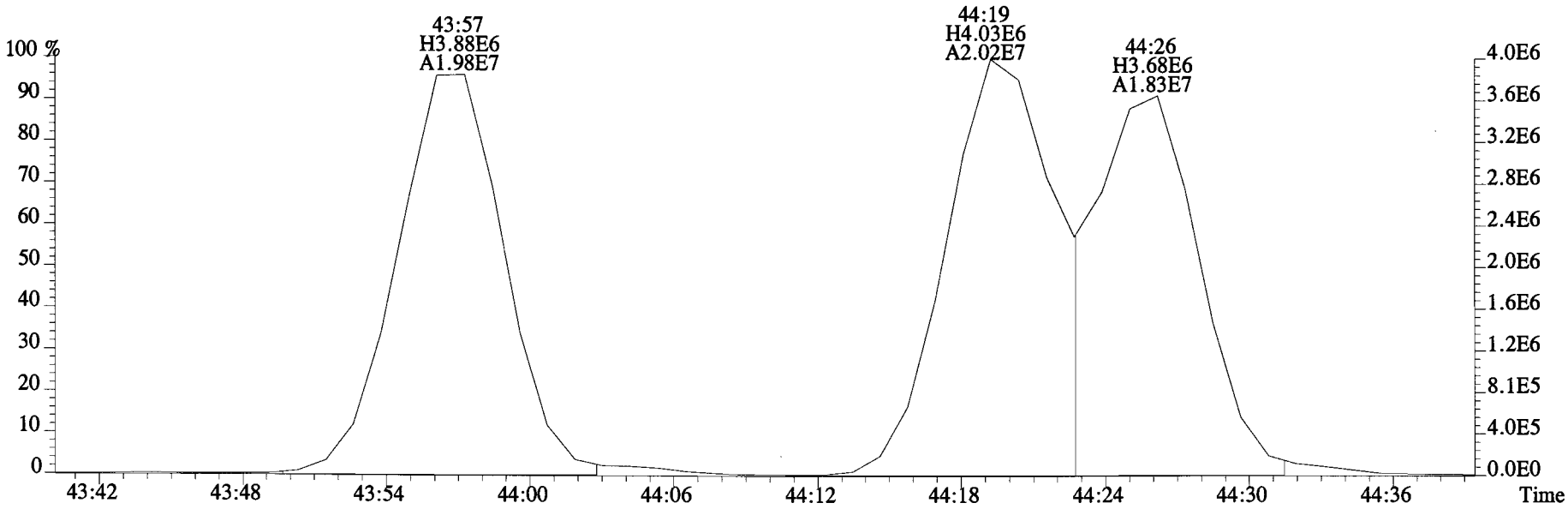
373.8788 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5744.0,0.00%,F,F)

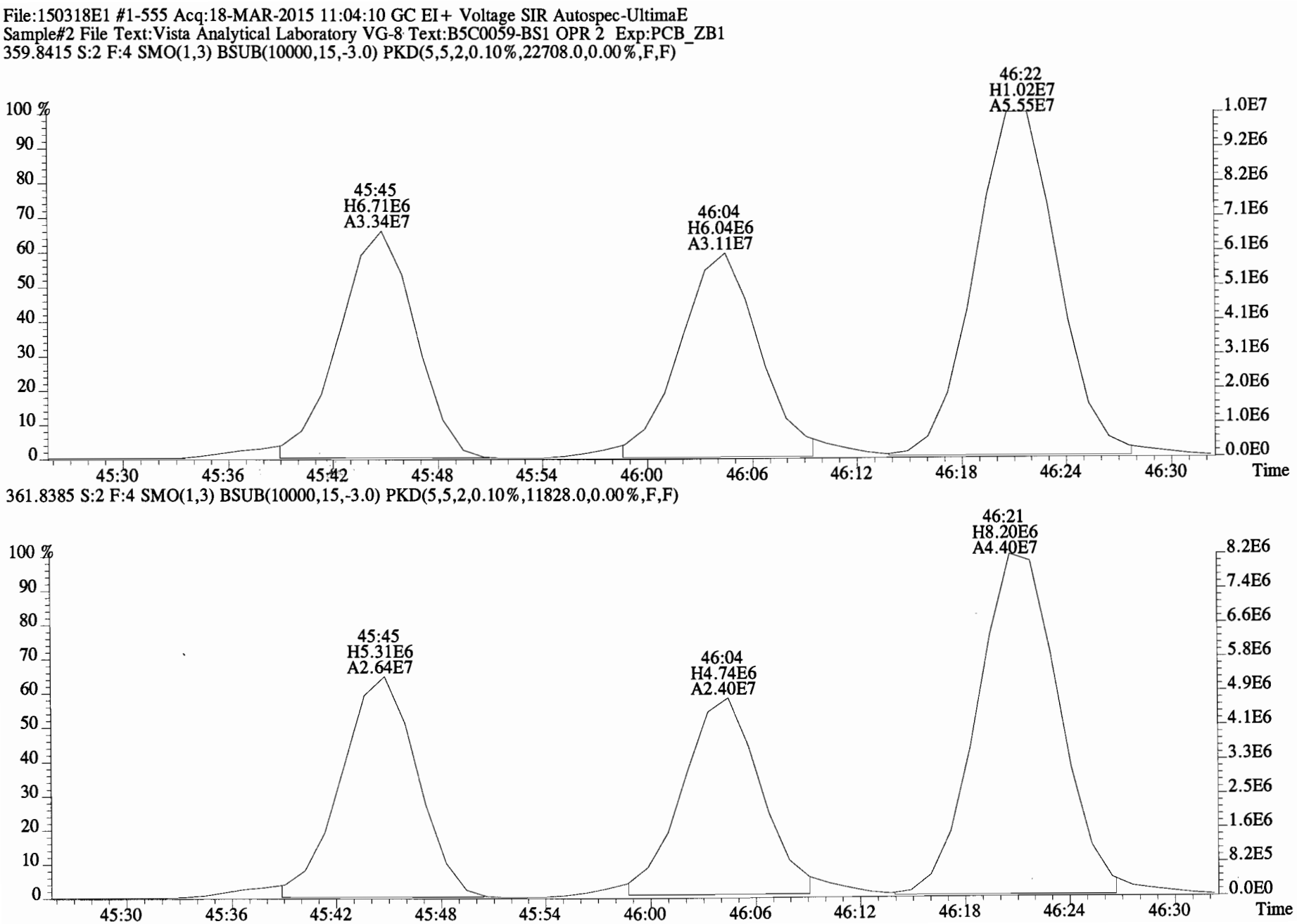


File:150318E1 #1-555 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,22708.0,0.00%,F,F)

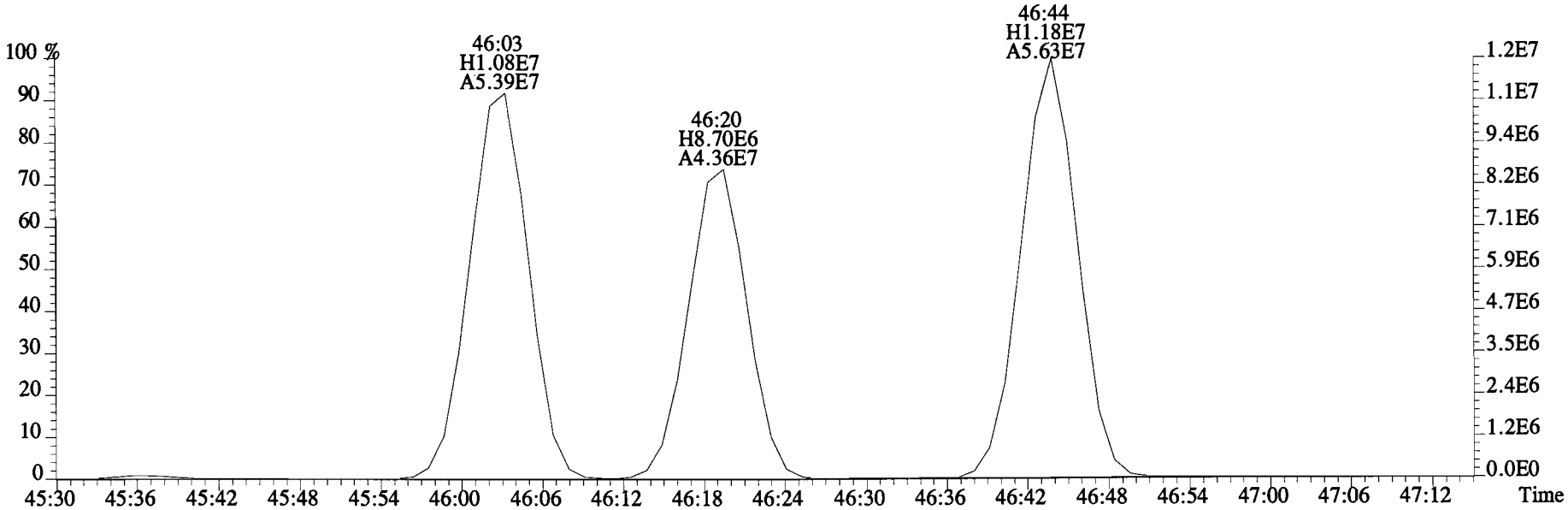


361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11828.0,0.00%,F,F)

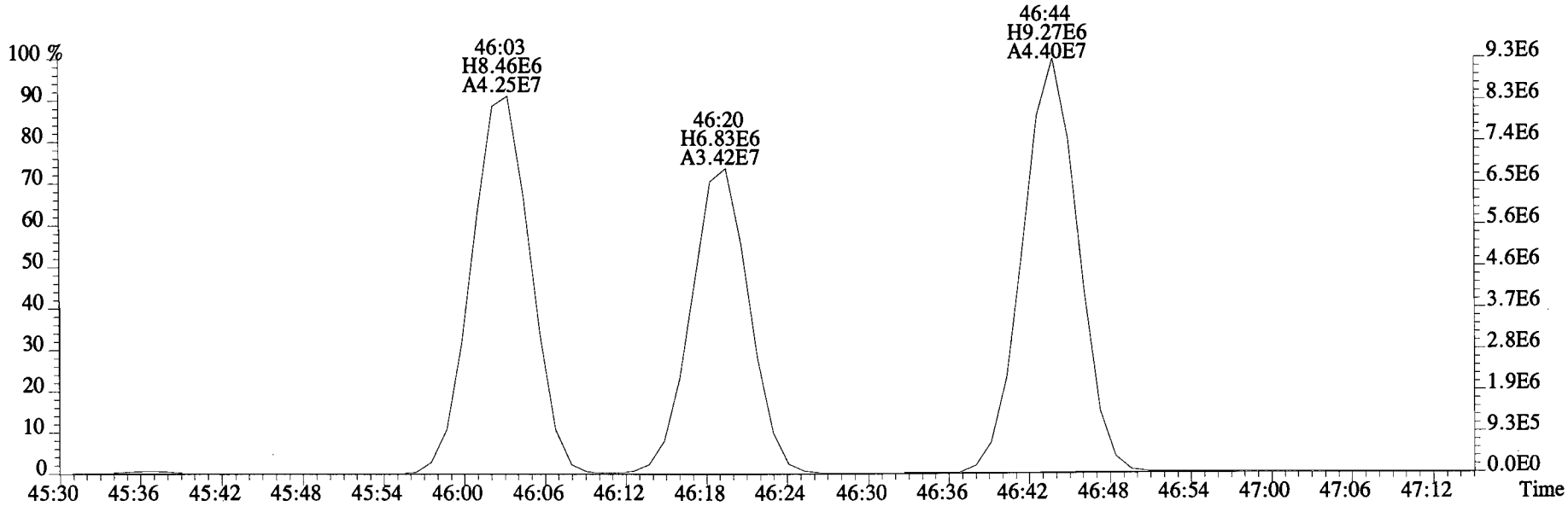


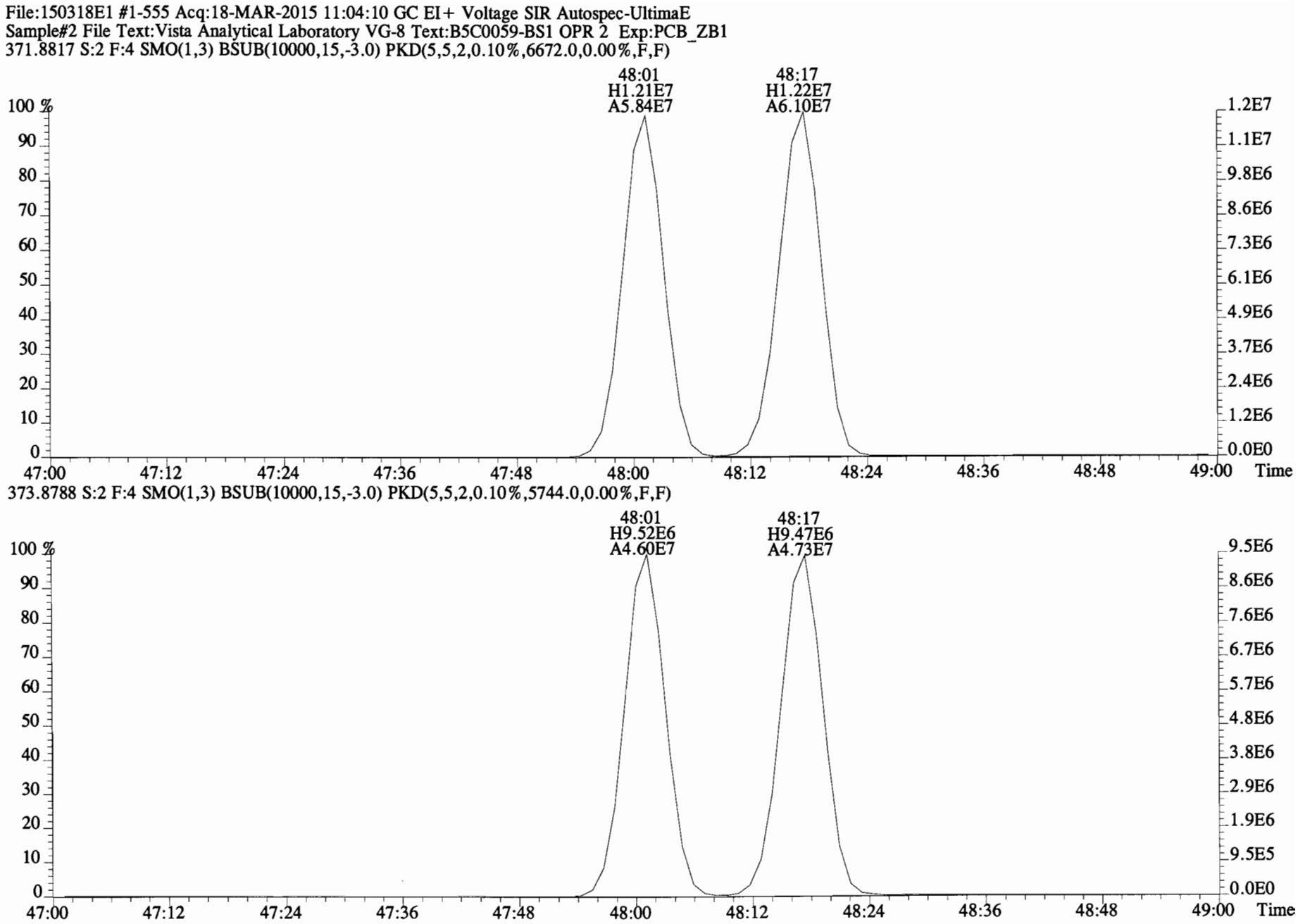

File:150318E1 #1-555 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,22708.0,0.00%,F,F)
45:45
H6.71E6
A3.34E7
46:04
H6.04E6
A3.11E7
46:22
H1.02E7
A5.55E7
100 %
90
80
70
60
50
40
30
20
10
0
1.0E7
9.2E6
8.2E6
7.1E6
6.1E6
5.1E6
4.1E6
3.1E6
2.0E6
1.0E6
0.0E0
45:30
45:36
45:42
45:48
45:54
46:00
46:06
46:12
46:18
46:24
46:30
Time
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11828.0,0.00%,F,F)
45:45
H5.31E6
A2.64E7
46:04
H4.74E6
A2.40E7
46:21
H8.20E6
A4.40E7
100 %
90
80
70
60
50
40
30
20
10
0
8.2E6
7.4E6
6.6E6
5.8E6
4.9E6
4.1E6
3.3E6
2.5E6
1.6E6
8.2E5
0.0E0
45:30
45:36
45:42
45:48
45:54
46:00
46:06
46:12
46:18
46:24
46:30
Time

File:150318E1 #1-555 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6672.0,0.00%,F,F)

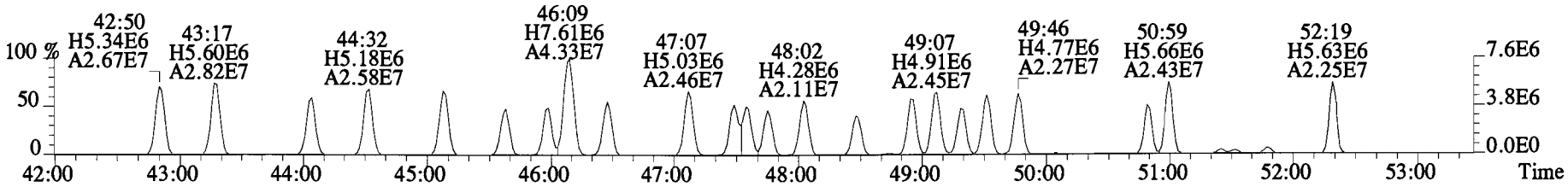


373.8788 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5744.0,0.00%,F,F)

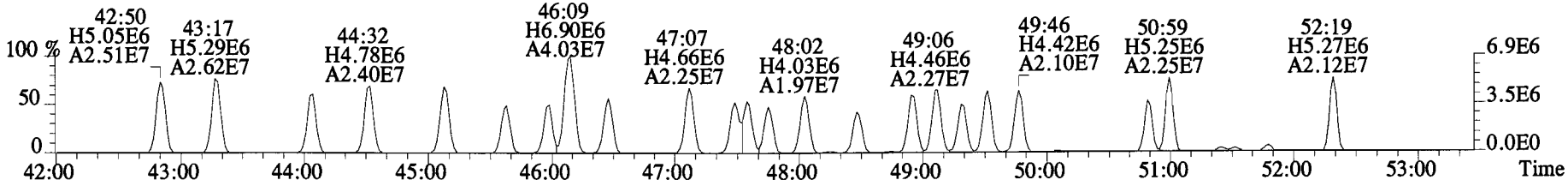



File:150318E1 #1-555 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6672.0,0.00%,F,F)
48:01
H1.21E7
A5.84E7
48:17
H1.22E7
A6.10E7
100 %
90
80
70
60
50
40
30
20
10
0
1.2E7
1.1E7
9.8E6
8.6E6
7.3E6
6.1E6
4.9E6
3.7E6
2.4E6
1.2E6
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(5,5,2,0.10%,5744.0,0.00%,F,F)
48:01
H9.52E6
A4.60E7
48:17
H9.47E6
A4.73E7
100 %
90
80
70
60
50
40
30
20
10
0
9.5E6
8.6E6
7.6E6
6.7E6
5.7E6
4.8E6
3.8E6
2.9E6
1.9E6
9.5E5
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

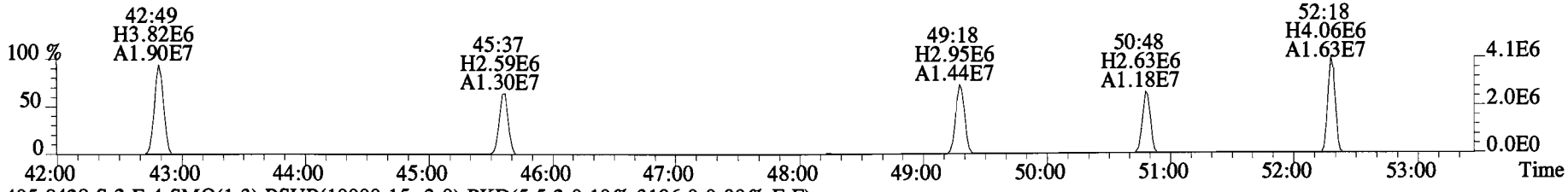
File:150318E1 #1-555 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
393.8025 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11768.0,0.00%,F,F)



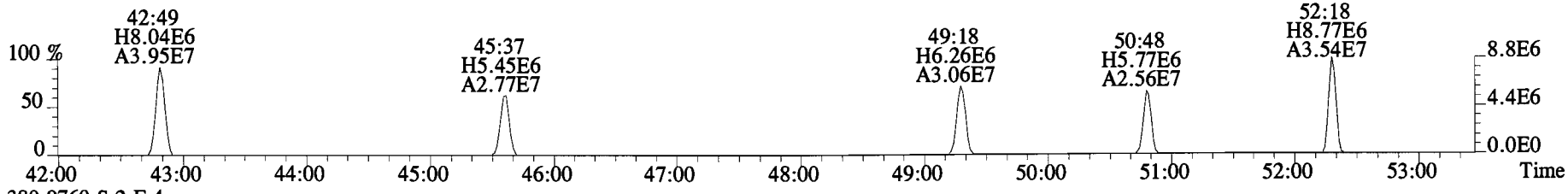
395.7995 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8560.0,0.00%,F,F)



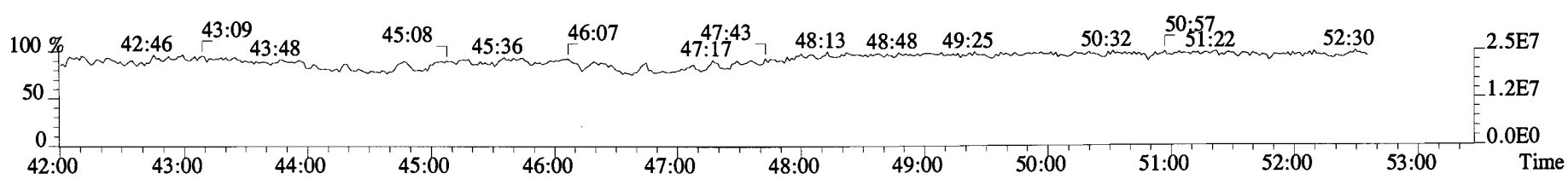
403.8457 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2732.0,0.00%,F,F)

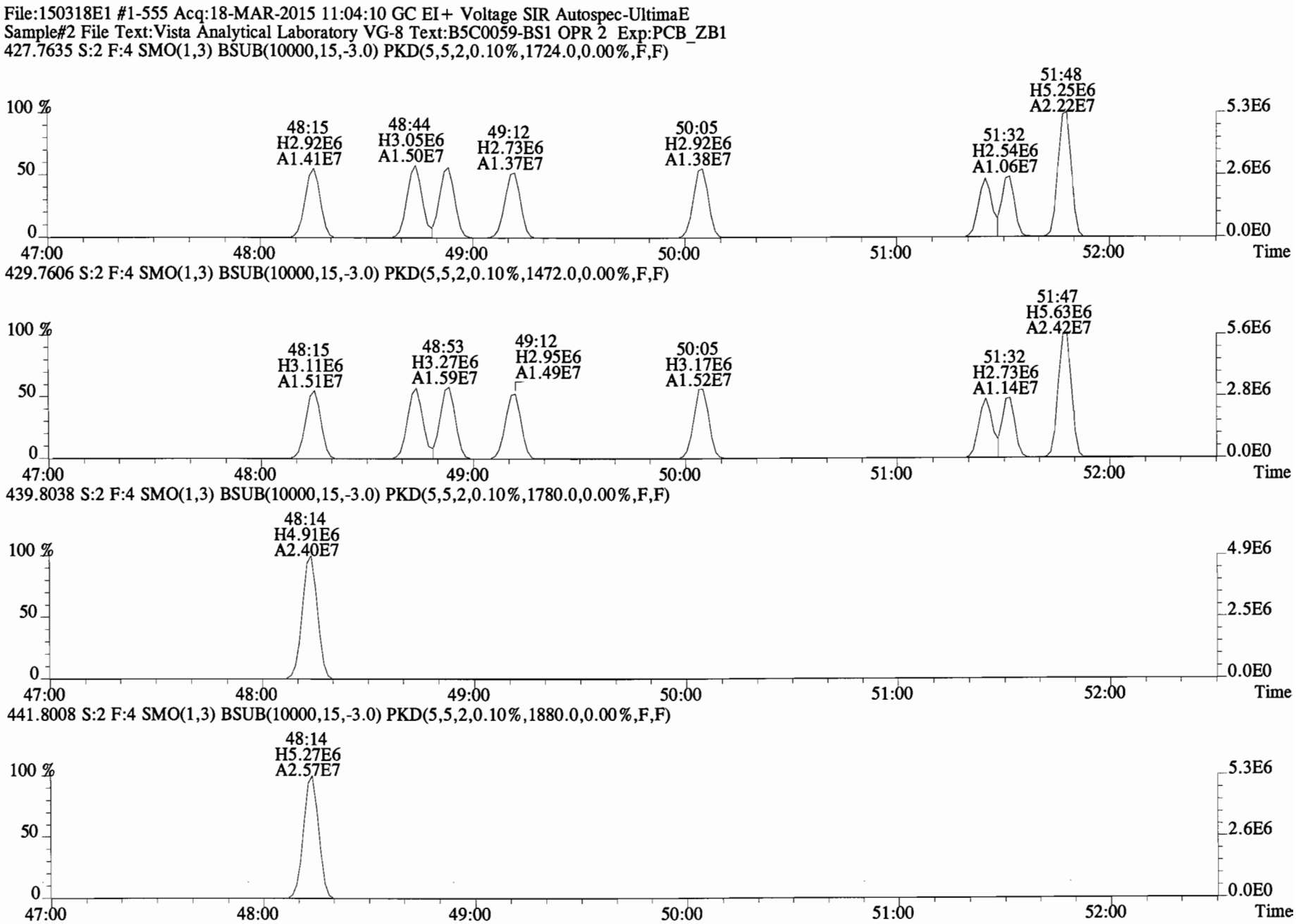


405.8428 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3196.0,0.00%,F,F)

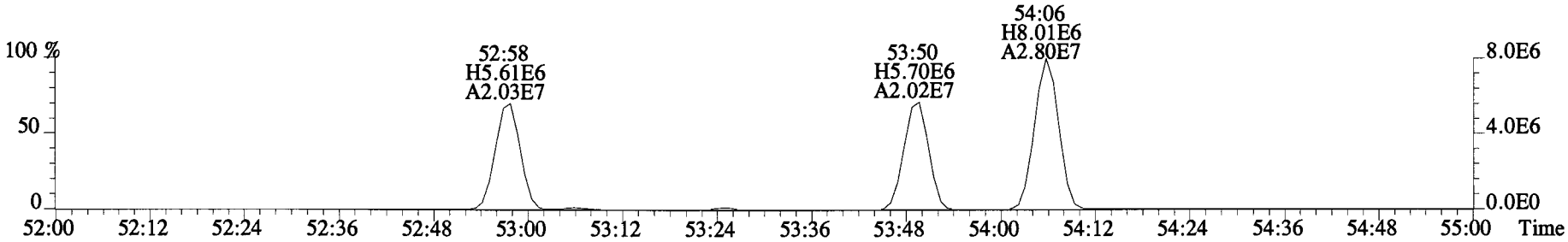


380.9760 S:2 F:4

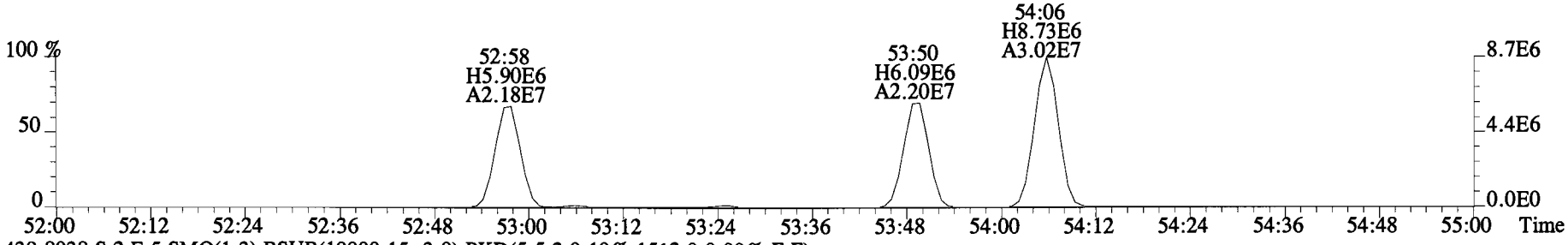



File:150318E1 #1-555 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
427.7635 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1724.0,0.00%,F,F)
48:15 H2.92E6 A1.41E7
48:44 H3.05E6 A1.50E7
49:12 H2.73E6 A1.37E7
50:05 H2.92E6 A1.38E7
51:32 H2.54E6 A1.06E7
51:48 H5.25E6 A2.22E7
429.7606 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1472.0,0.00%,F,F)
48:15 H3.11E6 A1.51E7
48:53 H3.27E6 A1.59E7
49:12 H2.95E6 A1.49E7
50:05 H3.17E6 A1.52E7
51:32 H2.73E6 A1.14E7
51:47 H5.63E6 A2.42E7
439.8038 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1780.0,0.00%,F,F)
48:14 H4.91E6 A2.40E7
441.8008 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1880.0,0.00%,F,F)
48:14 H5.27E6 A2.57E7
100 %
50
0
47:00
48:00
49:00
50:00
51:00
52:00
Time
5.3E6
2.6E6
0.0E0
5.6E6
2.8E6
4.9E6
2.5E6

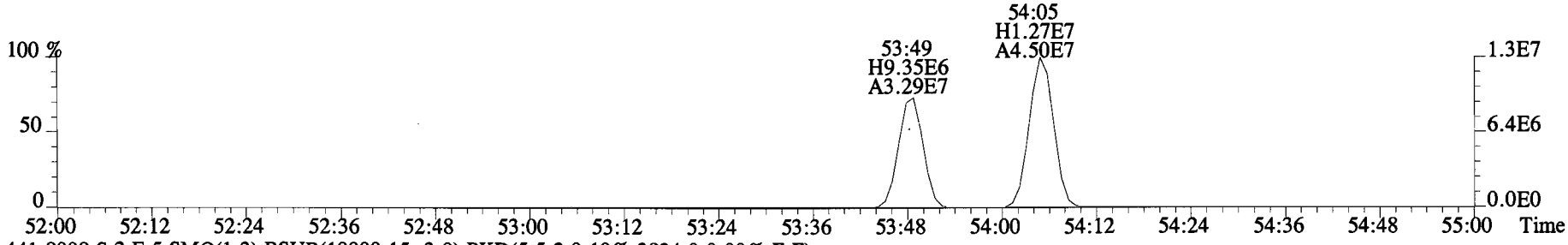
File:150318E1 #1-429 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
427.7635 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1536.0,0.00%,F,F)



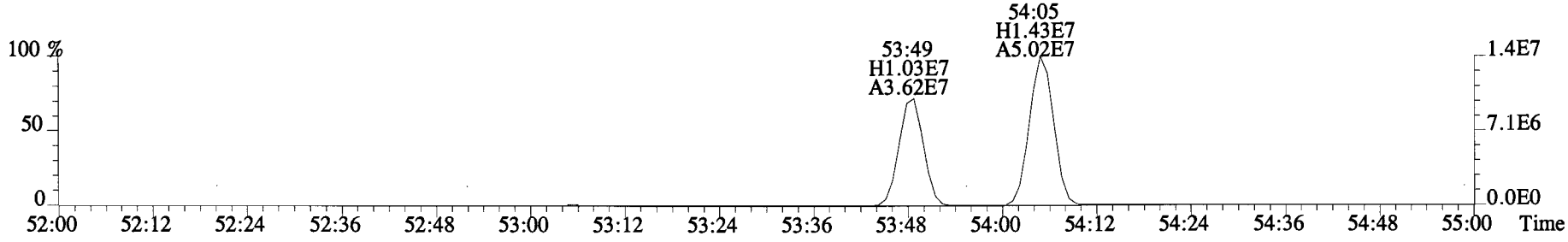
429.7606 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1696.0,0.00%,F,F)



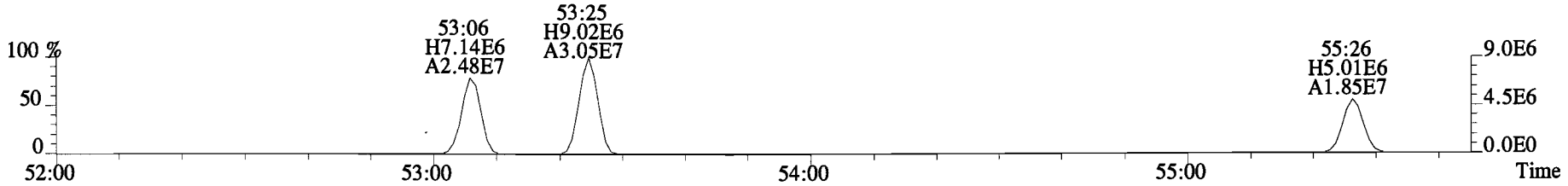
439.8038 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1512.0,0.00%,F,F)



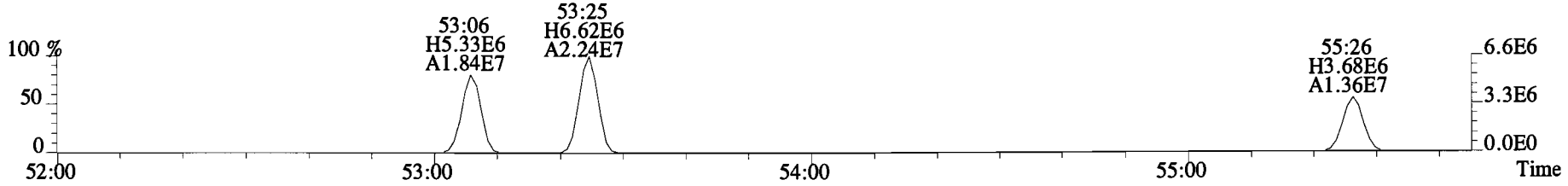
441.8008 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3924.0,0.00%,F,F)



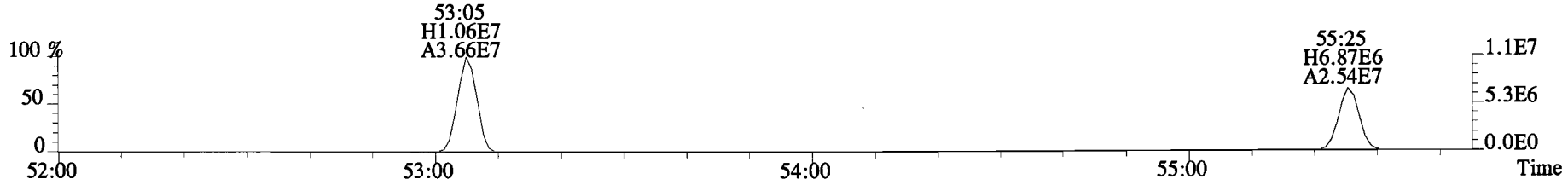
File:150318E1 #1-429 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
463.7216 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6728.0,0.00%,F,F)



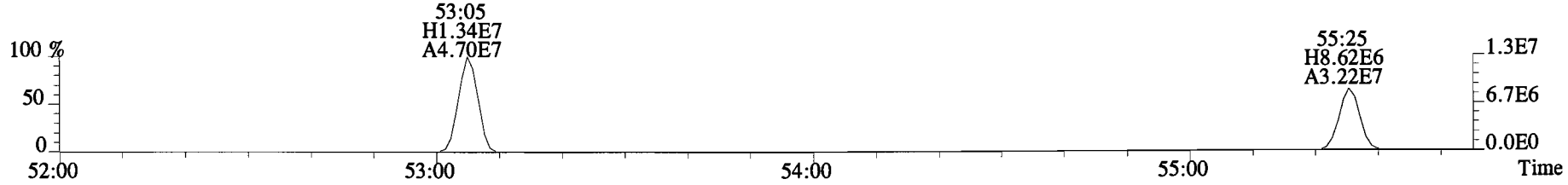
465.7186 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6080.0,0.00%,F,F)



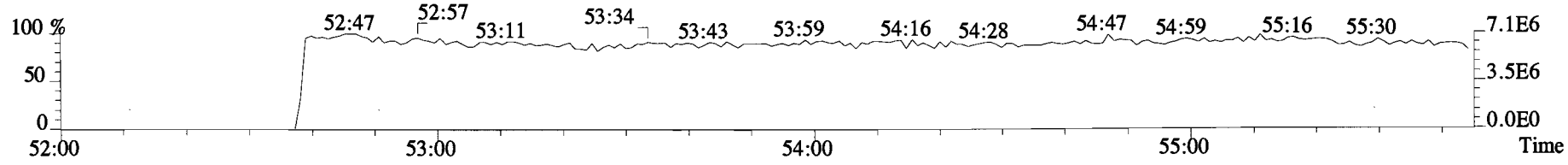
473.7648 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11052.0,0.00%,F,F)



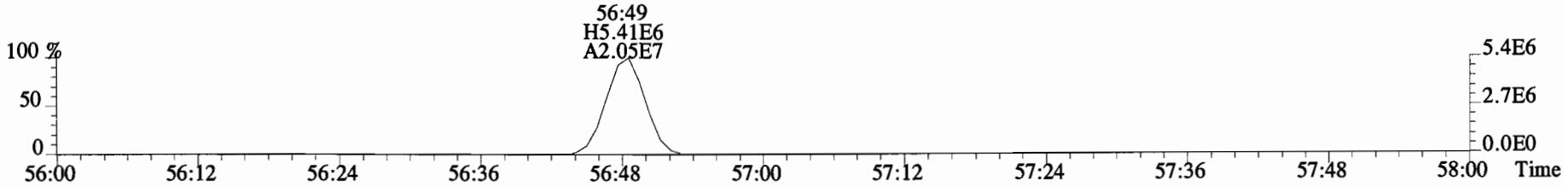
475.7619 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,12752.0,0.00%,F,F)



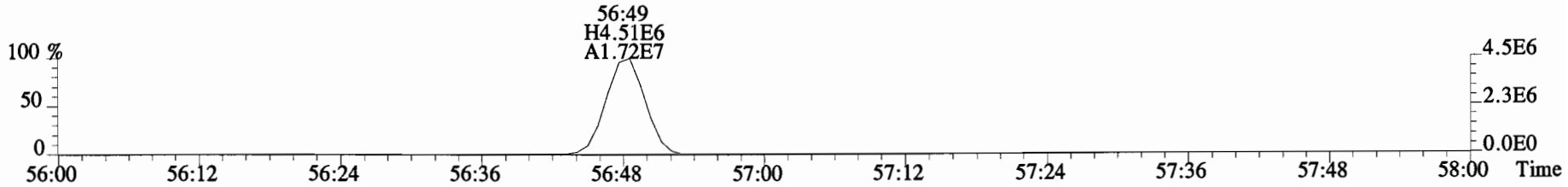
492.9697 S:2 F:5



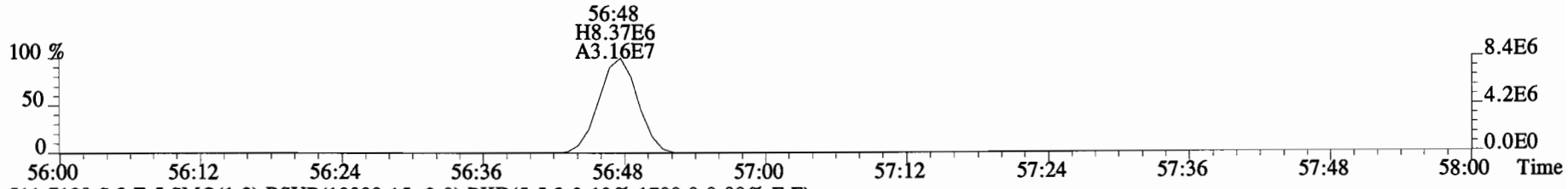
File:150318E1 #1-429 Acq:18-MAR-2015 11:04:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B5C0059-BS1 OPR 2 Exp:PCB_ZB1
497.6826 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1612.0,0.00%,F,F)



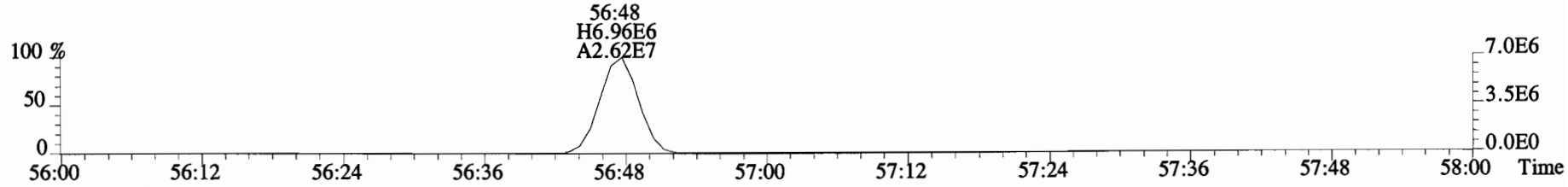
499.6797 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1688.0,0.00%,F,F)



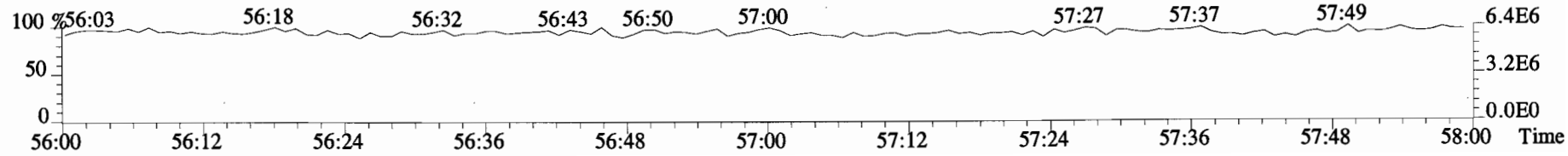
509.7229 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1460.0,0.00%,F,F)



511.7199 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1700.0,0.00%,F,F)



492.9697 S:2 F:5



Client ID: SC-OWS-05-20141211-S Filename: 150319E1 S:4 Acq:19-MAR-15 16:00:57 ConCal: ST150319E1-1
Lab ID: 1400948-01RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.126 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	3.36e+05	2.77	y 16:11	1.19	447		*	2.5	*	1.001	0.996	1.006
Mono	PCB-2	1.18e+05	3.31	y 18:34	1.18	148		*	2.5	*	0.988	0.984	0.994
Mono	PCB-3	4.09e+05	3.18	y 18:48	1.43	427		*	2.5	*	1.001	0.996	1.006
Di	PCB-4/10	4.29e+06	1.63	y 20:08	1.57	6520		*	2.5	*	1.002	0.997	1.007
Di	PCB-7/9	1.98e+06	1.36	y 21:56	1.21	2730		*	2.5	*	0.868	0.866	0.874
Di	PCB-6	6.78e+06	1.65	y 22:35	1.30	8660		*	2.5	*	0.893	0.890	0.899
Di	PCB-5/8	1.61e+07	1.67	y 22:59	1.15	23400		*	2.5	*	0.909	0.907	0.917
Di	PCB-14	*	*	n NotF╗	1.11	*		18800	2.5	695	*	0.949	0.959
Di	PCB-11	3.84e+06	1.65	y 25:17	1.09	5450		*	2.5	*	1.000	0.995	1.005
Di	PCB-12/13	2.53e+06	1.68	y 25:40	1.19	3280		*	2.5	*	1.015	1.011	1.021
Di	PCB-15	2.40e+07	1.61	y 26:00	1.28	29000		*	2.5	*	1.028	1.023	1.033
Tri	PCB-19	4.95e+06	1.07	y 24:16	1.04	12000		*	2.5	*	1.001	0.996	1.006
Tri	PCB-30	*	*	n NotF╗	1.71	*		2200	2.5	69.3	*	1.032	1.042
Tri	PCB-18	3.73e+07	1.06	y 25:55	0.78	95600		*	2.5	*	0.954	0.949	0.959
Tri	PCB-17	1.63e+07	1.08	y 26:05	0.92	35300		*	2.5	*	0.960	0.956	0.966
Tri	PCB-24/27	5.49e+06	1.03	y 26:39	1.19	9250		*	2.5	*	0.981	0.977	0.987
Tri	PCB-16/32	3.60e+07	1.05	y 27:10	0.94	76800		*	2.5	*	1.000	0.995	1.005
Tri	PCB-34	7.95e+05	1.06	y 27:59	1.14	1250		*	2.5	*	0.961	0.955	0.965
Tri	PCB-23	4.81e+04	1.36	n 28:05	1.28	67.1	R	*	2.5	*	0.964	0.959	0.969
Tri	PCB-29	4.37e+05	1.17	y 28:19	1.08	722		*	2.5	*	0.972	0.967	0.977
Tri	PCB-26	2.09e+07	1.10	y 28:31	1.21	30900		*	2.5	*	0.979	0.974	0.984
Tri	PCB-25	1.16e+07	1.07	y 28:41	1.26	16500		*	2.5	*	0.985	0.979	0.989
Tri	PCB-31	7.98e+07	1.08	y 29:02	1.28	111000		*	2.5	*	0.997	0.992	1.002
Tri	PCB-28	1.12e+08	1.10	y 29:09	1.71	117000		*	2.5	*	1.001	0.995	1.005
Tri	PCB-20/21/33	4.29e+07	1.10	y 29:46	1.08	70900		*	2.5	*	1.022	1.017	1.027
Tri	PCB-22	3.82e+07	1.08	y 30:11	1.21	56500		*	2.5	*	1.036	1.032	1.042
Tri	PCB-36	*	*	n NotF╗	1.14	*		5220	2.5	219	*	0.928	0.938
Tri	PCB-39	2.98e+05	1.11	y 31:17	1.12	484		*	2.5	*	0.948	0.943	0.953
Tri	PCB-38	1.04e+06	1.17	y 32:04	1.20	1570		*	2.5	*	0.972	0.966	0.976
Tri	PCB-35	2.64e+06	1.15	y 32:35	1.23	3880		*	2.5	*	0.987	0.982	0.992
Tri	PCB-37	6.37e+07	1.10	y 33:01	1.23	93900		*	2.5	*	1.001	0.995	1.005
Tetra	PCB-54	2.71e+06	0.83	y 28:01	1.10	6040		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-50	1.78e+05	0.84	y 29:11	0.88	498		*	2.5	*	1.042	1.037	1.047
Tetra	PCB-53	2.79e+07	0.77	y 29:50	1.06	72600		*	2.5	*	0.946	0.942	0.952
Tetra	PCB-51	1.80e+07	0.79	y 30:10	0.99	50400		*	2.5	*	0.957	0.952	0.962
Tetra	PCB-45	8.14e+06	0.77	y 30:35	0.86	26100		*	2.5	*	0.970	0.966	0.976
Tetra	PCB-46	4.55e+06	0.79	y 31:05	0.85	14900		*	2.5	*	0.986	0.981	0.991

Integrations by:

Analyst: DMS

Date: 3/26/15

Reviewed by: [signature] Date: 3/27/15

Client ID: SC-OWS-05-20141211-S Filename: 150319E1 S:4 Acq:19-MAR-15 16:00:57 ConCal: ST150319E1-1

Lab ID: 1400948-01RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.126 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	8.09e+07	0.80	y 31:33	1.28	175000		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-73	9.16e+05	0.84	y 31:41	1.35	1870		*	2.5	*	1.005	1.000	1.010
Tetra	PCB-43/49	6.13e+07	0.80	y 31:50	0.99	170000		*	2.5	*	1.010	1.005	1.015
Tetra	PCB-47	3.45e+07	0.79	y 32:03	1.06	84600		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-48/75	1.13e+07	0.80	y 32:11	1.23	23800		*	2.5	*	1.004	0.999	1.009
Tetra	PCB-65	*	*	n NotF	1.22	*		5570	2.5	262	*	1.008	1.018
Tetra	PCB-62	*	*	n NotF	1.22	*		5570	2.5	263	*	1.011	1.021
Tetra	PCB-44	4.83e+07	0.79	y 32:51	0.86	146000		*	2.5	*	1.025	1.021	1.031
Tetra	PCB-42/59	2.46e+07	0.79	y 33:04	1.14	56200		*	2.5	*	1.032	1.028	1.038
Tetra	PCB-41/64/71/72	6.99e+07	0.79	y 33:39	1.21	150000		*	2.5	*	1.050	1.046	1.056
Tetra	PCB-68	1.07e+06	0.83	y 33:55	1.35	2060		*	2.5	*	1.058	1.054	1.064
Tetra	PCB-40	9.98e+06	0.78	y 34:08	0.70	37000		*	2.5	*	1.065	1.061	1.071
Tetra	PCB-57	7.20e+05	0.80	y 34:29	0.98	1640		*	2.5	*	0.970	0.965	0.975
Tetra	PCB-67	3.79e+06	0.77	y 34:48	1.11	7660		*	2.5	*	0.979	0.974	0.984
Tetra	PCB-58	3.07e+05	0.71	y 34:56	0.93	740		*	2.5	*	0.983	0.977	0.987
Tetra	PCB-63	3.86e+06	0.78	y 35:04	0.95	9050		*	2.5	*	0.986	0.982	0.992
Tetra	PCB-74	4.21e+07	0.78	y 35:22	1.24	75600		*	2.5	*	0.995	0.990	1.000
Tetra	PCB-61/70	1.04e+08	0.78	y 35:34	0.95	243000		*	2.5	*	1.000	0.995	1.005
Tetra	PCB-76/66	9.68e+07	0.79	y 35:47	1.04	207000		*	2.5	*	1.007	1.001	1.011
Tetra	PCB-80	*	*	n NotF	1.19	*		5570	2.5	247	*	0.996	1.006
Tetra	PCB-55	2.47e+06	0.84	y 36:17	1.04	5370		*	2.5	*	1.008	1.005	1.015
Tetra	PCB-56/60	7.28e+07	0.79	y 36:47	1.01	163000		*	2.5	*	1.022	1.019	1.029
Tetra	PCB-79	1.51e+06	0.79	y 37:53	1.08	3180		*	2.5	*	1.053	1.048	1.058
Tetra	PCB-78	*	*	n NotF	1.27	*		5570	2.5	245	*	0.982	0.992
Tetra	PCB-81	7.86e+05	0.82	y 39:04	1.33	1380		*	2.5	*	1.000	0.995	1.005
Tetra	PCB-77	2.34e+07	0.79	y 39:41	1.10	50800		*	2.5	*	1.000	0.995	1.005
Penta	PCB-104	1.63e+05	1.49	y 32:43	1.18	582		*	2.5	*	1.002	0.996	1.006
Penta	PCB-96	1.28e+06	1.76	y 33:58	1.14	4780		*	2.5	*	1.040	1.034	1.044
Penta	PCB-103	1.08e+06	1.71	y 34:31	0.96	4780		*	2.5	*	1.057	1.050	1.060
Penta	PCB-100	1.33e+06	1.69	y 34:51	0.94	6010		*	2.5	*	1.067	1.061	1.071
Penta	PCB-94	7.67e+05	1.55	y 35:19	1.06	4170		*	2.5	*	0.986	0.980	0.990
Penta	PCB-95/98/102	3.42e+07	1.60	y 35:51	1.22	161000		*	2.5	*	1.000	0.995	1.005
Penta	PCB-93	*	*	n NotF	0.84	*		2200	2.5	489	*	0.997	1.007
Penta	PCB-88/91	9.36e+06	1.62	y 36:15	1.12	48200		*	2.5	*	1.012	1.005	1.015
Penta	PCB-121	*	*	n NotF	1.62	*		2200	2.5	255	*	1.009	1.019
Penta	PCB-84/92	1.99e+07	1.61	y 37:10	1.05	107000		*	2.5	*	0.991	0.985	0.995
Penta	PCB-89	6.74e+05	1.50	y 37:21	1.13	3350		*	2.5	*	0.996	0.991	1.001

Analyst: DMS

Date: 3/26/15

Client ID: SC-OWS-05-20141211-S Filename: 150319E1 S:4 Acq:19-MAR-15 16:00:57 ConCal: ST150319E1-1

Lab ID: 1400948-01RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.126 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	5.61e+07	1.60	y	37:32	1.10	287000		*	2.5	*	1.000	0.995	1.005
Penta	PCB-113	*	*	n	NotF┐	1.41	*		2200	2.5	287	*	1.002	1.012
Penta	PCB-99	2.53e+07	1.65	y	37:53	1.34	107000		*	2.5	*	1.010	1.004	1.014
Penta	PCB-119	2.95e+06	1.78	y	38:20	1.53	11900		*	2.5	*	0.987	0.982	0.992
Penta	PCB-108/112	2.74e+06	1.55	y	38:30	1.28	13300		*	2.5	*	0.991	0.986	0.996
Penta	PCB-83	5.06e+04	1.88	n	38:39	1.52	207	R	*	2.5	*	0.995	0.990	1.000
Penta	PCB-97	1.62e+07	1.64	y	38:51	1.18	84800		*	2.5	*	1.000	0.995	1.005
Penta	PCB-86	1.96e+05	1.54	y	38:59	0.84	1440		*	2.5	*	1.004	0.999	1.009
Penta	PCB-87/117/125	2.50e+07	1.67	y	39:08	1.55	100000		*	2.5	*	1.008	1.002	1.012
Penta	PCB-111/115	8.93e+05	1.75	y	39:16	1.63	3390		*	2.5	*	1.011	1.006	1.016
Penta	PCB-85/116	1.01e+07	1.64	y	39:23	1.30	47900		*	2.5	*	1.014	1.010	1.020
Penta	PCB-120	2.86e+05	2.03	n	39:36	1.68	1060	R	*	2.5	*	1.020	1.016	1.026
Penta	PCB-110	8.68e+07	1.60	y	39:46	1.56	346000		*	2.5	*	1.024	1.020	1.030
Penta	PCB-82	7.07e+06	1.63	y	40:24	0.76	40000		*	2.5	*	0.976	0.971	0.981
Penta	PCB-124	3.66e+06	1.66	y	41:05	1.47	10700		*	2.5	*	0.993	0.988	0.998
Penta	PCB-107/109	6.17e+06	1.60	y	41:15	1.32	20000		*	2.5	*	0.997	0.991	1.001
Penta	PCB-123	1.24e+06	1.66	y	41:24	1.17	4560		*	2.5	*	1.000	0.996	1.006
Penta	PCB-106/118	8.31e+07	1.61	y	41:36	1.17	306000		*	2.5	*	1.001	0.996	1.006
Penta	PCB-114	3.03e+06	1.67	y	42:14	1.30	6880		*	2.5	*	1.000	0.995	1.005
Penta	PCB-122	1.53e+06	1.58	y	42:23	1.12	4020		*	2.5	*	1.004	0.999	1.009
Penta	PCB-105	5.77e+07	1.65	y	43:06	1.30	138000		*	2.5	*	1.000	0.995	1.005
Penta	PCB-127	*	*	n	NotF┐	1.33	*		3500	2.5	279	*	0.996	1.006
Penta	PCB-126	2.02e+06	1.68	y	45:21	1.18	5780		*	2.5	*	1.001	0.995	1.005
Hexa	PCB-155	*	*	n	NotF┐	1.11	*		1850	2.5	288	*	0.966	1.006
Hexa	PCB-150	2.72e+05	1.14	y	38:20	1.00	1770		*	2.5	*	1.034	1.030	1.040
Hexa	PCB-152	1.14e+05	0.99	n	38:49	1.12	663	R	*	2.5	*	1.047	1.043	1.053
Hexa	PCB-145	*	*	n	NotF┐	1.20	*		1850	2.5	267	*	1.055	1.065
Hexa	PCB-136	6.78e+06	1.32	y	39:35	1.18	37400		*	2.5	*	1.068	1.064	1.074
Hexa	PCB-148	9.08e+04	1.28	y	39:43	0.74	792		*	2.5	*	1.071	1.066	1.076
Hexa	PCB-154	1.12e+06	1.30	y	40:11	0.86	8500		*	2.5	*	1.084	1.080	1.090
Hexa	PCB-151	9.06e+06	1.37	y	40:49	0.75	78800		*	2.5	*	1.101	1.097	1.107
Hexa	PCB-135	5.61e+06	1.24	y	41:03	0.79	46000		*	2.5	*	1.107	1.103	1.113
Hexa	PCB-144	1.83e+06	1.31	y	41:09	0.76	15600		*	2.5	*	1.110	1.105	1.117
Hexa	PCB-147	1.46e+06	1.40	y	41:16	0.82	11600		*	2.5	*	1.113	1.109	1.121
Hexa	PCB-139/149	3.78e+07	1.31	y	41:31	0.76	322000		*	2.5	*	1.120	1.116	1.128
Hexa	PCB-140	3.52e+05	1.37	y	41:44	0.72	3170		*	2.5	*	1.126	1.121	1.133
Hexa	PCB-134/143	4.65e+06	1.25	y	42:11	0.92	19400		*	2.5	*	0.975	0.970	0.980

Analyst: DMS

Date: 3/26/15

Client ID: SC-OWS-05-20141211-S Filename: 150319E1 S:4 Acq:19-MAR-15 16:00:57 ConCal: ST150319E1-1
Lab ID: 1400948-01RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.126 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	2.85e+06	1.19	y	42:27	0.82	13300		*	2.5	*	0.982	0.977	0.987
Hexa	PCB-131	1.88e+04	1.73	n	42:38	0.91	78.9	R	*	2.5	*	0.986	0.981	0.991
Hexa	PCB-146/165	1.75e+07	1.23	y	42:51	1.25	53600		*	2.5	*	0.991	0.986	0.996
Hexa	PCB-132/161	3.39e+07	1.25	y	43:06	1.10	117000		*	2.5	*	0.997	0.992	1.002
Hexa	PCB-153	1.08e+08	1.24	y	43:16	1.25	331000		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-168	2.56e+05	1.37	y	43:28	1.45	674		*	2.5	*	1.005	1.001	1.011
Hexa	PCB-141	2.00e+07	1.25	y	44:00	1.09	74600		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-137	5.35e+06	1.25	y	44:23	1.06	20400		*	2.5	*	1.009	1.004	1.014
Hexa	PCB-130	6.16e+06	1.27	y	44:29	0.96	25900		*	2.5	*	1.011	1.006	1.016
Hexa	PCB-138/163/164	1.35e+08	1.24	y	44:51	1.29	412000		*	2.5	*	1.001	0.996	1.006
Hexa	PCB-158/160	1.57e+07	1.27	y	45:04	1.34	46000		*	2.5	*	1.006	1.001	1.011
Hexa	PCB-129	4.57e+06	1.27	y	45:19	0.85	21100		*	2.5	*	1.012	1.007	1.017
Hexa	PCB-166	4.45e+05	1.16	y	45:48	1.19	1360		*	2.5	*	0.993	0.988	0.998
Hexa	PCB-159	*	*	n	NotF¶	1.11	*		3240	2.5	304	*	0.996	1.006
Hexa	PCB-128/162	1.93e+07	1.21	y	46:23	1.05	66600		*	2.5	*	1.006	1.002	1.012
Hexa	PCB-167	6.24e+06	1.21	y	46:48	1.20	17400		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-156	1.53e+07	1.25	y	48:06	1.14	45200		*	2.5	*	1.001	0.996	1.006
Hexa	PCB-157	3.55e+06	1.18	y	48:21	1.16	9880		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-169	9.67E4*	1.1+2	n	NotF¶	1.12	279		~~3240~~	2.5	~~355~~ 400		0.995	1.005

Hepta

Hepta	PCB-188	1.26e+05	0.93	y	42:54	1.58	441		*	2.5	*	1.001	0.996	1.006
Hepta	PCB-184	4.20e+04	1.83	n	43:20	1.63	143	R	*	2.5	*	1.011	1.006	1.016
Hepta	PCB-179	1.04e+07	1.09	y	44:07	1.30	44200		*	2.5	*	1.030	1.024	1.034
Hepta	PCB-176	3.36e+06	1.08	y	44:34	1.48	12600		*	2.5	*	1.040	1.035	1.045
Hepta	PCB-186	*	*	n	NotF¶	1.45	*		2210	2.5	159	*	1.050	1.060
Hepta	PCB-178	4.06e+06	1.03	y	45:40	1.03	21800		*	2.5	*	1.066	1.061	1.071
Hepta	PCB-175	9.80e+05	1.10	y	46:01	1.01	5380		*	2.5	*	1.074	1.069	1.079
Hepta	PCB-182/187	2.74e+07	1.08	y	46:10	1.25	122000		*	2.5	*	1.077	1.073	1.083
Hepta	PCB-183	1.27e+07	1.08	y	46:30	1.21	58200		*	2.5	*	1.085	1.081	1.091
Hepta	PCB-185	2.33e+06	1.09	y	47:09	1.80	9050		*	2.5	*	0.955	0.951	0.961
Hepta	PCB-174	2.23e+07	1.08	y	47:31	1.38	113000		*	2.5	*	0.963	0.958	0.968
Hepta	PCB-181	9.25e+04	0.99	y	47:38	1.38	468		*	2.5	*	0.965	0.960	0.970
Hepta	PCB-177	1.27e+07	1.08	y	47:47	1.26	70900		*	2.5	*	0.968	0.963	0.973
Hepta	PCB-171	6.37e+06	1.04	y	48:05	1.58	28100		*	2.5	*	0.974	0.970	0.980
Hepta	PCB-173	4.80e+05	0.93	y	48:31	1.11	3020		*	2.5	*	0.983	0.978	0.988
Hepta	PCB-172	3.81e+06	1.07	y	48:58	1.63	16300		*	2.5	*	0.992	0.987	0.997
Hepta	PCB-192	*	*	n	NotF¶	1.74	*		2210	2.5	165	*	0.991	1.001
Hepta	PCB-180	5.29e+07	1.07	y	49:22	1.34	275000		*	2.5	*	1.000	0.995	1.005

Analyst: DMS

Date: 3/26/15

Client ID: SC-OWS-05-20141211-S Filename: 150319E1 S:4 Acq:19-MAR-15 16:00:57 ConCal: ST150319E1-1
Lab ID: 1400948-01RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.126 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	3.32e+06	1.08	y	49:35	1.72	13500		*	2.5	*	1.005	0.999	1.009
Hepta	PCB-191	1.21e+06	1.02	y	49:50	1.69	4980		*	2.5	*	1.010	1.004	1.014
Hepta	PCB-170	2.16e+07	1.08	y	50:52	1.60	123000		*	2.5	*	1.000	0.995	1.005
Hepta	PCB-190	5.72e+06	1.06	y	51:03	2.21	23400		*	2.5	*	1.004	0.998	1.008
Hepta	PCB-189	1.07e+06	0.95	y	52:23	1.55	4770		*	2.5	*	1.000	0.995	1.005
Octa	PCB-202	1.58e+06	0.91	y	48:18	1.08	10100		*	2.5	*	1.001	0.995	1.005
Octa	PCB-201	1.12e+06	0.88	y	48:46	1.15	6690		*	2.5	*	1.010	1.005	1.015
Octa	PCB-204	*	*	n	NotFnd	1.14	*		1260	2.5	172	*	1.008	1.018
Octa	PCB-197	3.59e+05	1.01	y	49:14	1.07	2310		*	2.5	*	1.020	1.015	1.025
Octa	PCB-200	9.93e+05	0.88	y	50:06	1.06	6440		*	2.5	*	1.038	1.032	1.044
Octa	PCB-198	2.78e+05	0.88	y	51:27	0.76	2530		*	2.5	*	1.066	1.059	1.069
Octa	PCB-199	6.56e+06	0.90	y	51:34	0.80	56700		*	2.5	*	1.068	1.061	1.071
Octa	PCB-196/203	7.72e+06	0.91	y	51:50	0.80	66400		*	2.5	*	1.074	1.066	1.076
Octa	PCB-195	4.63e+06	0.95	y	53:01	1.23	20400		*	2.5	*	0.984	0.979	0.989
Octa	PCB-194	1.21e+07	0.94	y	53:52	1.21	53900		*	2.5	*	1.000	0.995	1.005
Octa	PCB-205	7.94e+05	0.89	y	54:09	1.54	2780		*	2.5	*	1.005	1.001	1.011
Nona	PCB-208	1.76e+06	1.41	y	53:09	0.93	8170		*	2.5	*	1.000	0.995	1.005
Nona	PCB-207	7.30e+05	1.15	y	53:27	1.08	2920		*	2.5	*	1.006	1.001	1.011
Nona	PCB-206	4.52e+06	1.37	y	55:31	1.02	28300		*	2.5	*	1.000	0.995	1.005
Deca	PCB-209	1.12e+06	1.21	y	56:54	1.17	6090		*	2.5	*	1.000	0.995	1.005

Analyst: DMS

Date: 3/26/15

Client ID: SC-OWS-05-20141211-S Filename: 150319E1 S:4 Acq:19-MAR-15 16:00:57 ConCal: ST150319E1-1
Lab ID: 1400948-01RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 2.1259 EndCAL: NA

Name	Resp	RA	RT	RRF	Conc	
Total Mono-PCB	8.63e+05	2.77 y	16:11	1.27	1022.47	
Total Di-PCB	5.96e+07	1.63 y	20:08	1.21	78996.1	
Total Tri-PCB	1.00e+08	1.07 y	24:16	1.10	229013	
Total Tri-PCB	3.75e+08	1.06 y	27:59	1.21	504476	Sum:733489
Total Tetra-PCB	7.57e+08	0.83 y	28:01	1.09	1786440	
Total Penta-PCB	3.96e+08	1.49 y	32:43	1.18	1722370	
Total Penta-PCB	6.43e+07	1.67 y	42:14	1.25	154445	Sum:1876810
Total Hexa-PCB	6.43e+07	1.14 y	38:20	0.90	525158	
Total Hexa-PCB	4.00e+08	1.25 y	42:11	1.11	1275650	Sum:1800810
Total Hepta-PCB	1.93e+08	0.93 y	42:54	1.42	949539	
Total Octa-PCB	1.86e+07	0.91 y	48:18	0.96	151223	
Total Octa-PCB	1.75e+07	0.95 y	53:01	1.33	77024.5	Sum:228248
Total Nona-PCB	7.00e+06	1.41 y	53:09	1.01	39348.4	
Total Deca-PCB	1.12e+06	1.21 y	56:54	1.17	6093.51	

Total PCB Conc:7503017.39162

Integrations
by
Analyst: DMS
Date: 3/26/15

Client ID: SC-OWS-05-20141211-S Filename: 150319E1 S:4 Acq:19-MAR-15 16:00:57 ConCal: ST150319E1-1
Lab ID: 1400948-01RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:2.1259 EndCAL: NA

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	5.91e+06	3.16 y	0.87	16:10	0.622	0.629-	0.635	10500	112
13C-PCB-3	6.33e+06	3.24 y	0.91	18:47	0.723	0.725-	0.733	10700	114
13C-PCB-4	3.94e+06	1.52 y	0.59	20:06	0.774	0.775-	0.783	10400	111
13C-PCB-9	5.65e+06	1.56 y	0.90	21:54	0.843	0.842-	0.850	9750	104
13C-PCB-11	6.10e+06	1.57 y	0.94	25:17	0.973	0.968-	0.978	10100	107
13C-PCB-19	3.72e+06	1.14 y	0.53	24:15	0.933	0.930-	0.940	10800	115
13C-PCB-28	5.27e+06	1.04 y	0.93	29:08	1.004	0.999-	1.009	9670	103
13C-PCB-32	4.70e+06	1.07 y	0.80	27:10	1.046	1.040-	1.050	9140	97.2
13C-PCB-37	5.19e+06	1.06 y	0.84	33:00	1.137	1.131-	1.143	10600	112
13C-PCB-47	3.62e+06	0.73 y	0.81	32:03	0.871	0.866-	0.874	10200	108
13C-PCB-52	3.40e+06	0.86 y	0.77	31:32	0.857	0.853-	0.861	10000	107
13C-PCB-54	3.82e+06	0.85 y	0.97	28:00	0.761	0.758-	0.766	8980	95.5
13C-PCB-70	4.21e+06	0.84 y	1.00	35:33	0.966	0.961-	0.971	9610	102
13C-PCB-77	3.94e+06	0.86 y	0.94	39:41	1.078	1.073-	1.083	9530	101
13C-PCB-80	4.15e+06	0.82 y	1.03	35:59	0.978	0.972-	0.982	9170	97.5
13C-PCB-81	4.03e+06	0.84 y	0.92	39:04	1.062	1.057-	1.067	9980	106
13C-PCB-95	1.64e+06	1.61 y	0.74	35:50	0.913	0.908-	0.918	9430	100
13C-PCB-97	1.52e+06	1.66 y	0.70	38:50	0.989	0.984-	0.994	9200	97.8
13C-PCB-101	1.67e+06	1.50 y	0.78	37:31	0.955	0.951-	0.961	9120	96.9
13C-PCB-104	2.22e+06	1.78 y	1.00	32:40	0.832	0.828-	0.836	9450	100
13C-PCB-105	3.04e+06	1.53 y	1.37	43:05	0.929	0.924-	0.934	10600	112
13C-PCB-114	3.20e+06	1.75 y	1.36	42:14	0.911	0.905-	0.915	11100	118
13C-PCB-118	2.18e+06	1.61 y	0.96	41:34	1.059	1.054-	1.064	9690	103
13C-PCB-123	2.19e+06	1.51 y	0.89	41:23	1.054	1.050-	1.060	10500	111
13C-PCB-126	2.79e+06	1.71 y	1.31	45:19	0.977	0.972-	0.982	10100	108
13C-PCB-127	3.07e+06	1.66 y	1.47	43:26	0.937	0.931-	0.941	9890	105
13C-PCB-138	2.39e+06	1.26 y	1.10	44:49	0.967	0.961-	0.971	10300	110
13C-PCB-141	2.32e+06	1.26 y	1.07	43:59	0.949	0.943-	0.953	10300	109
13C-PCB-153	2.47e+06	1.32 y	1.15	43:15	0.933	0.927-	0.937	10200	109
13C-PCB-155	1.45e+06	1.15 y	0.84	37:04	0.944	0.939-	0.949	7360	78.3
13C-PCB-156	2.81e+06	1.36 y	1.30	48:05	1.037	1.032-	1.042	10300	109
13C-PCB-157	2.91e+06	1.36 y	1.36	48:21	1.043	1.038-	1.048	10200	108
13C-PCB-159	2.61e+06	1.32 y	1.25	46:07	0.995	0.989-	0.999	9930	105
13C-PCB-167	2.82e+06	1.25 y	1.35	46:47	1.009	1.004-	1.014	9900	105
13C-PCB-169	2.91e+06	1.36 y	1.29	50:30	1.089	1.083-	1.093	10700	114
13C-PCB-170	1.04e+06	0.43 y	0.54	50:51	1.097	1.089-	1.101	9100	96.8
13C-PCB-180	1.35e+06	0.51 y	0.68	49:21	1.064	1.060-	1.070	9350	99.4
13C-PCB-188	1.69e+06	0.48 y	0.92	42:51	0.924	0.919-	0.929	8760	93.2
13C-PCB-189	1.36e+06	0.43 y	0.72	52:22	1.129	1.120-	1.132	9020	95.9
13C-PCB-194	1.74e+06	0.87 y	0.80	53:52	0.995	0.990-	1.000	9210	97.9
13C-PCB-202	1.36e+06	0.83 y	0.84	48:16	1.041	1.036-	1.046	7730	82.2
13C-PCB-206	1.47e+06	0.78 y	0.65	55:31	1.025	1.021-	1.031	9540	101
13C-PCB-208	2.17e+06	0.75 y	1.08	53:08	0.981	0.976-	0.986	8480	90.1
13C-PCB-209	1.48e+06	1.22 y	0.61	56:53	1.050	1.045-	1.055	10200	108

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	4.33e+06	0.85 y	1.02	37:52	1.029	1.023-	1.034	9700	103
13C-PCB-178	1.13e+06	0.45 y	0.61	45:39	0.985	0.979-	0.990	8730	92.8

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	4.33e+06	0.85 y	1.10	37:52	0.969	0.964-	0.974	9150	97.2
13C-PCB-178	1.13e+06	0.45 y	0.90	45:39	0.925	0.920-	0.930	8770	93.3

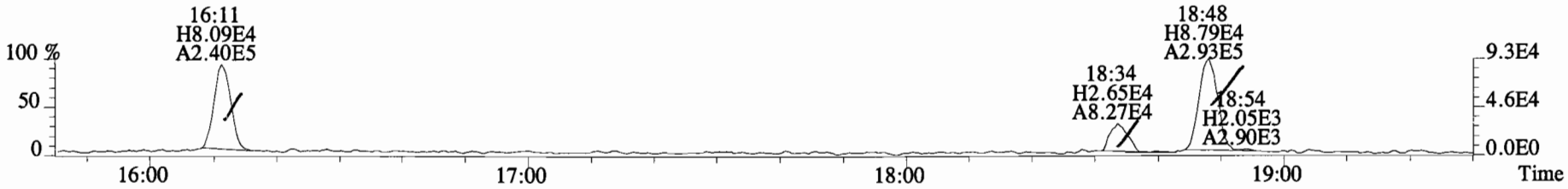
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	6.07e+06	1.56	y	1.00	25:59	9410
13C-PCB-31	5.50e+06	1.00	y	1.00	29:01	9410
13C-PCB-60	4.13e+06	0.88	y	1.00	36:48	9410
13C-PCB-111	2.20e+06	1.47	y	1.00	39:16	9410
13C-PCB-128	1.98e+06	1.34	y	1.00	46:22	9410
13C-PCB-205	2.23e+06	0.95	y	1.00	54:09	9410

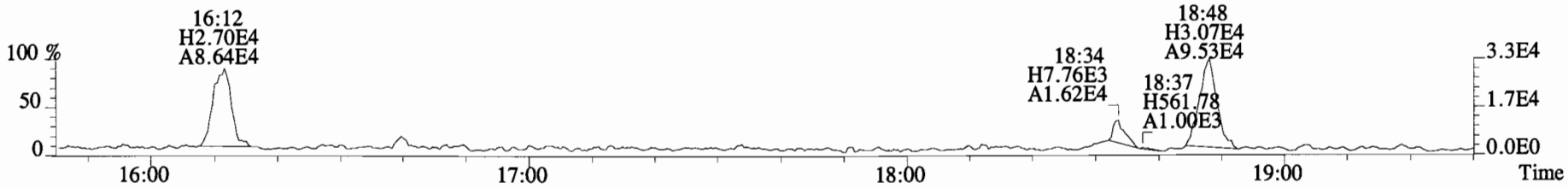
Analyst: DMS

Date: 3/26/15

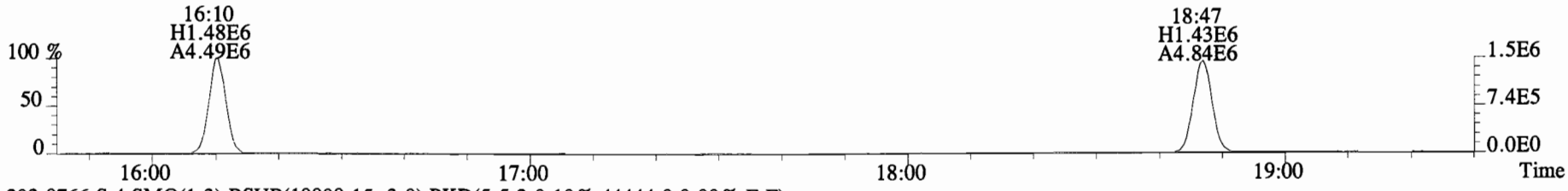
File:150319E1 #1-867 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
188.0393 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4888.0,0.00%,F,F)



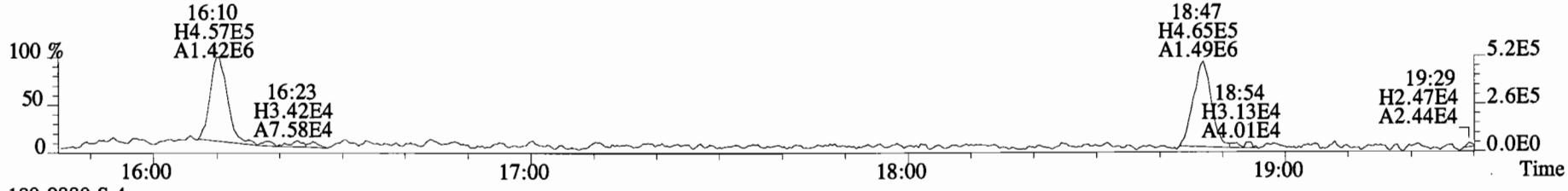
190.0363 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3288.0,0.00%,F,F)



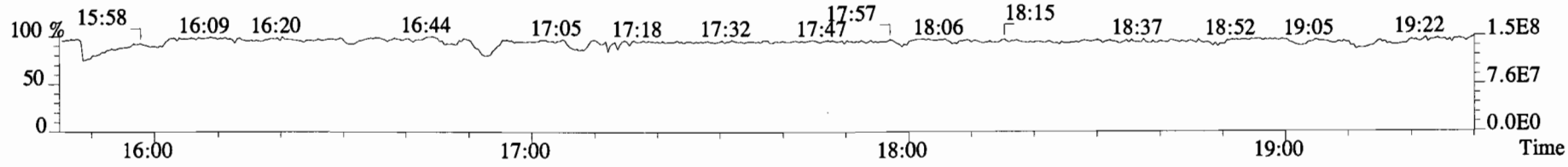
200.0795 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5056.0,0.00%,F,F)



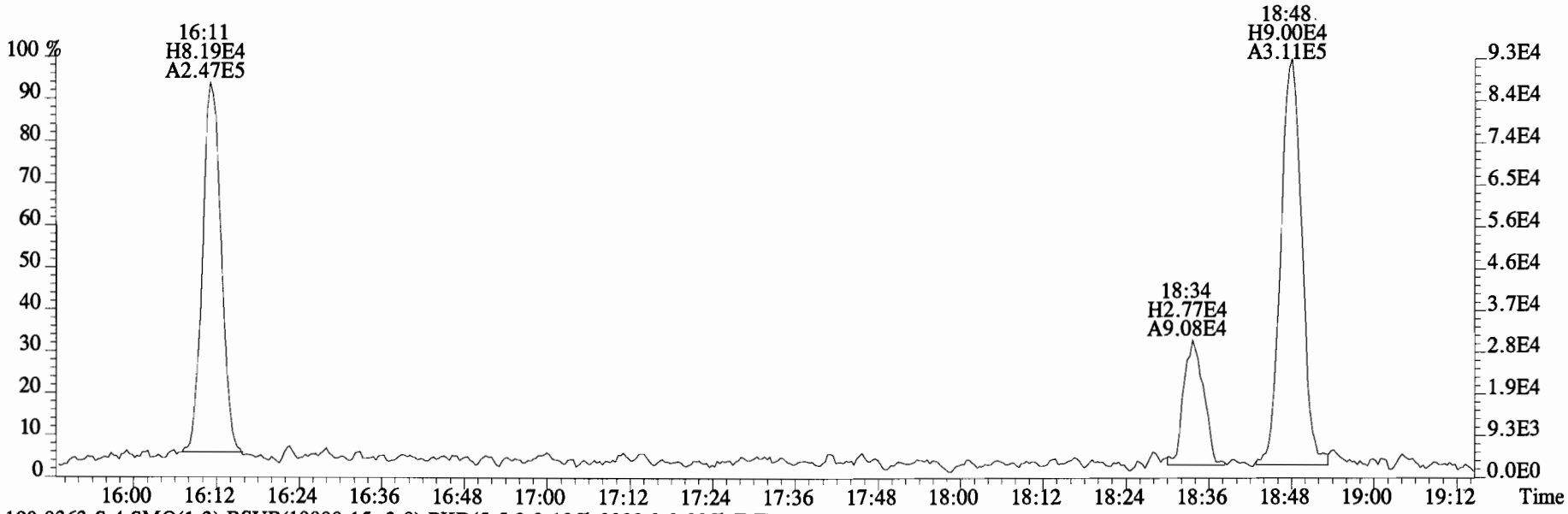
202.0766 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,44444.0,0.00%,F,F)



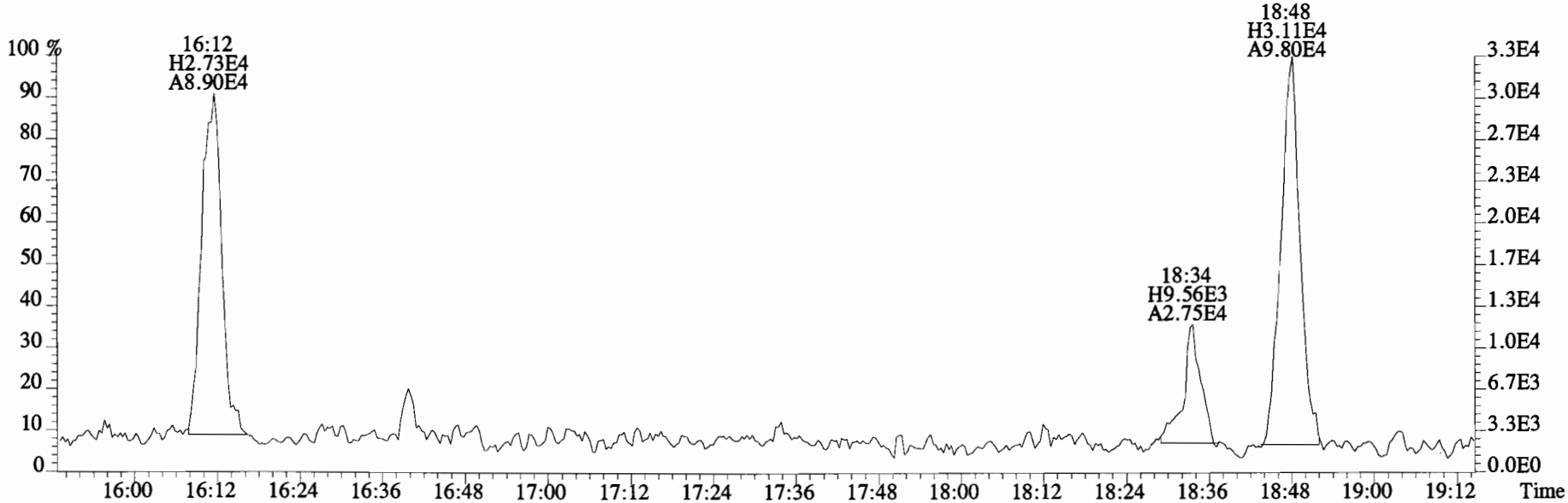
180.9880 S:4



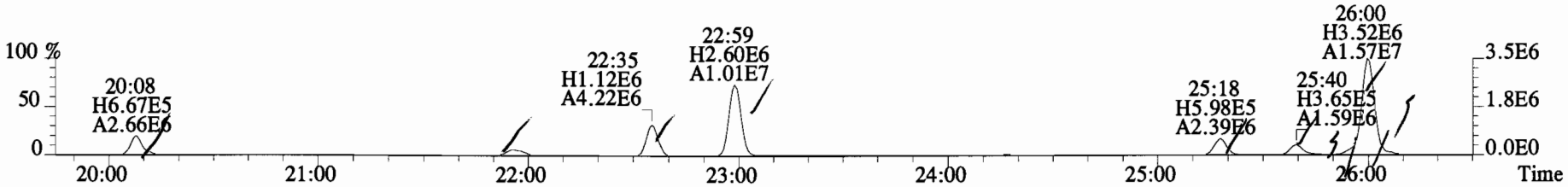
File:150319E1 #1-867 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
188.0393 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4888.0,0.00%,F,F)



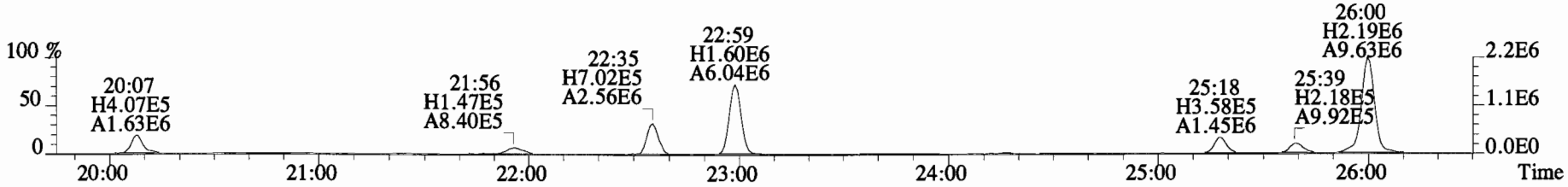
190.0363 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3288.0,0.00%,F,F)



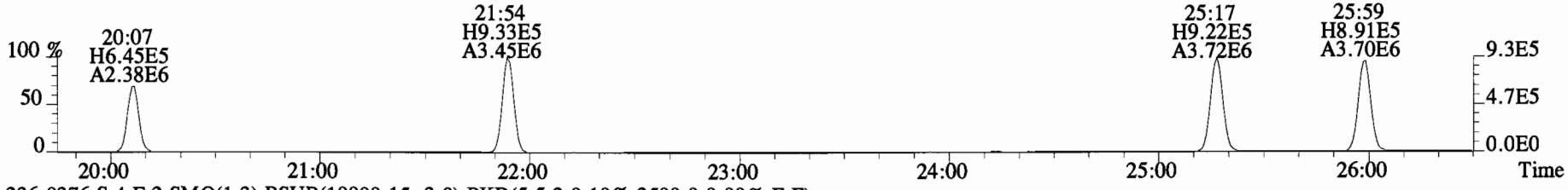
File:150319E1 #1-757 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3824.0,0.00%,F,F)



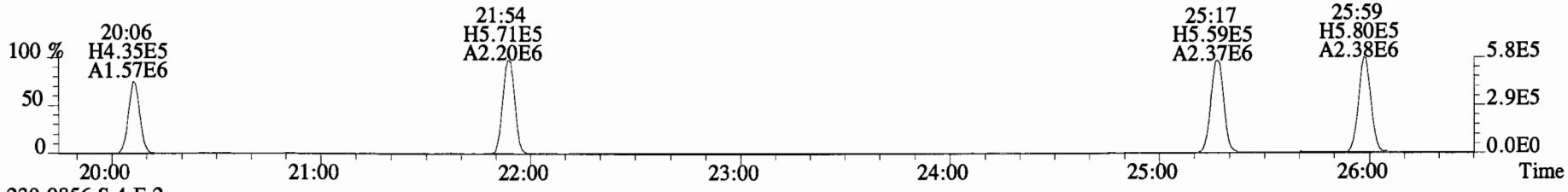
223.9974 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,18784.0,0.00%,F,F)



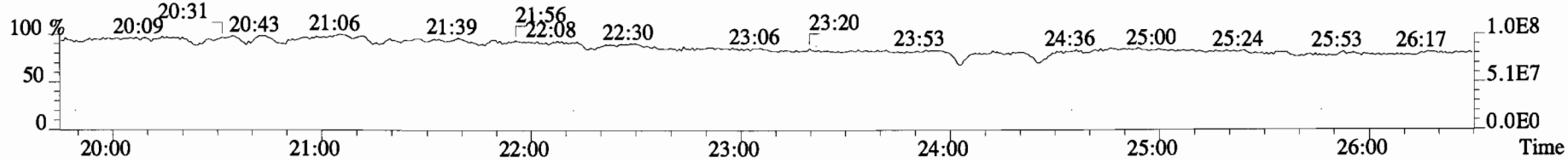
234.0406 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2620.0,0.00%,F,F)



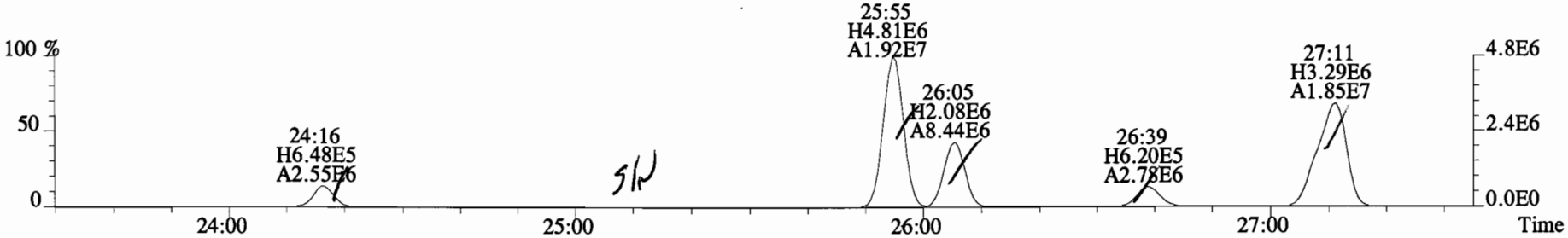
236.0376 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2500.0,0.00%,F,F)



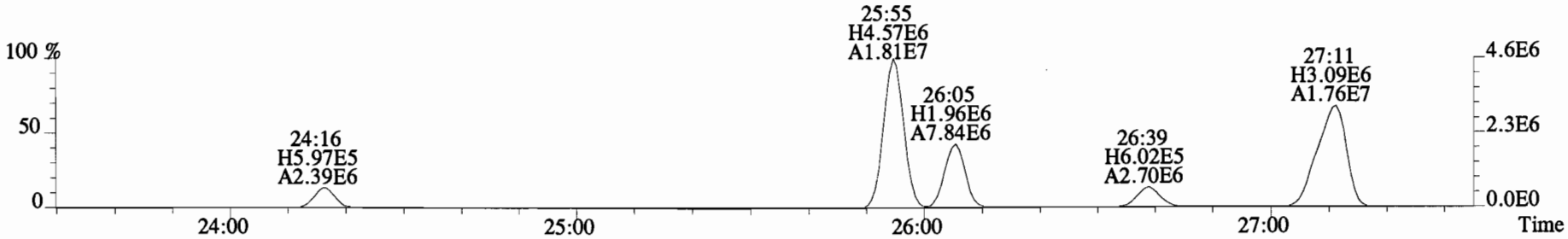
230.9856 S:4 F:2



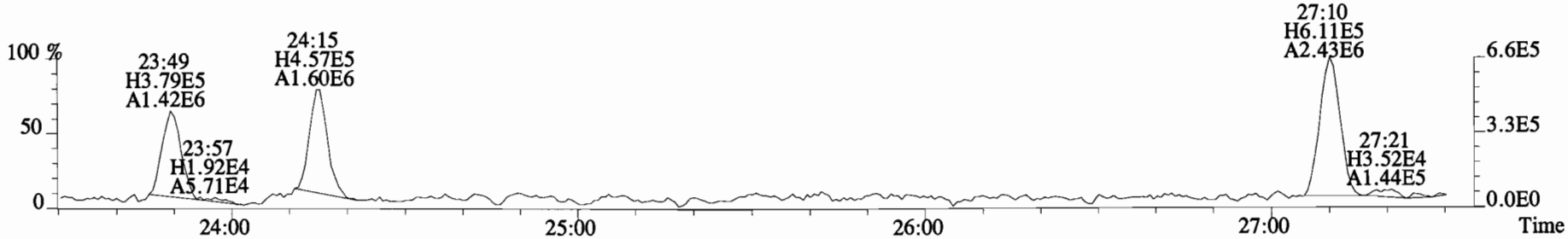
File:150319E1 #1-757 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
255.9613 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6552.0,0.00%,F,F)



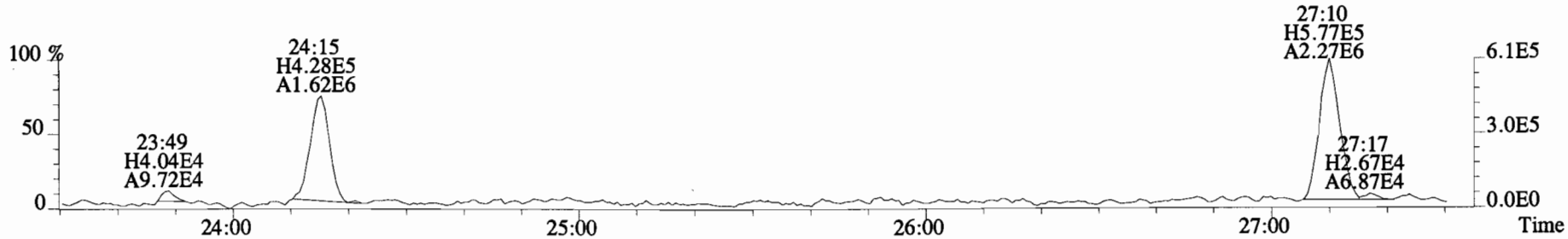
257.9584 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2196.0,0.00%,F,F)



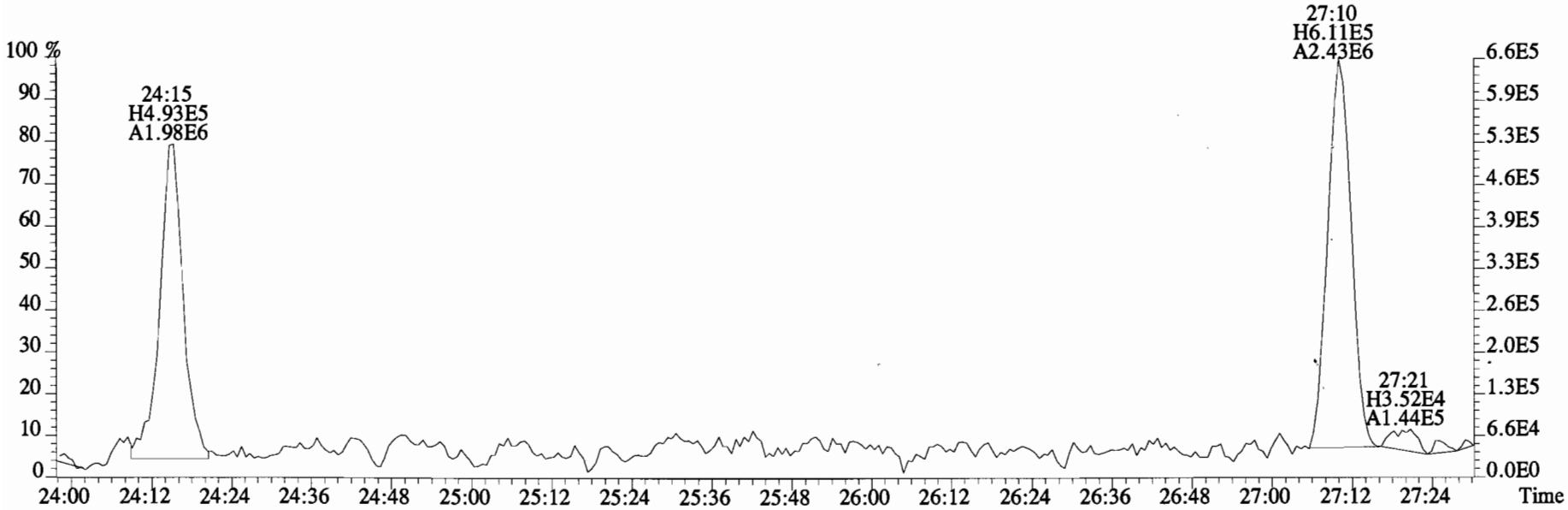
268.0016 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,62016.0,0.00%,F,F)



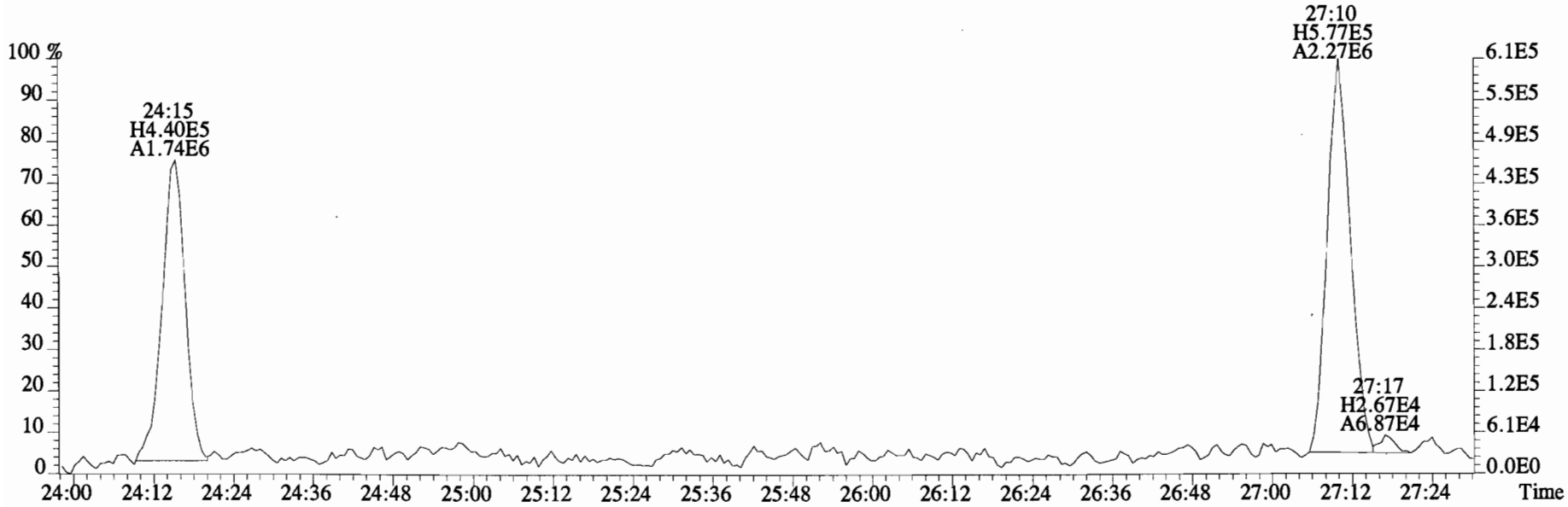
269.9986 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,37252.0,0.00%,F,F)



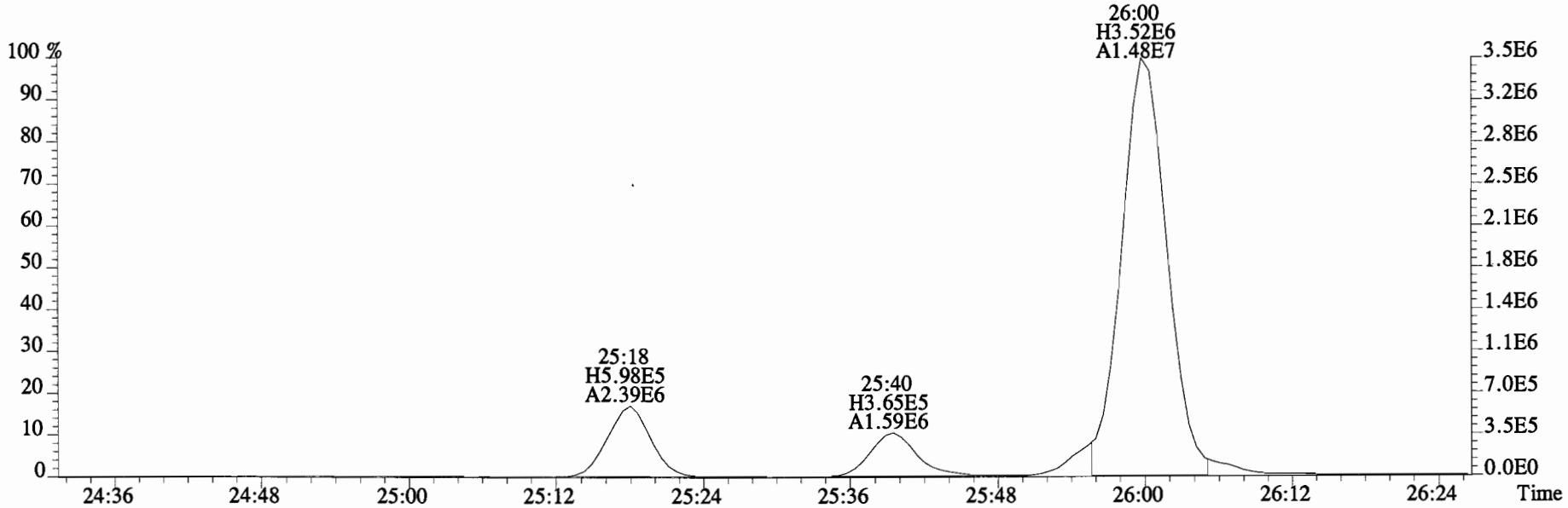
File:150319E1 #1-757 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
268.0016 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,62016.0,0.00%,F,F)



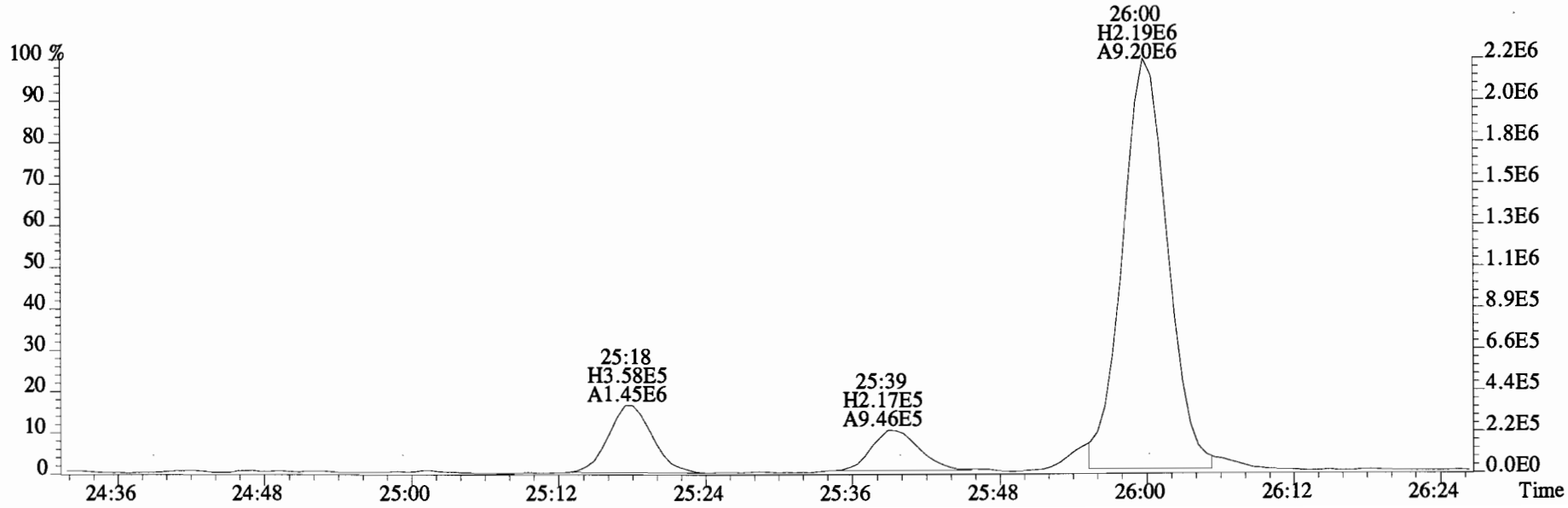
269.9986 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,37252.0,0.00%,F,F)



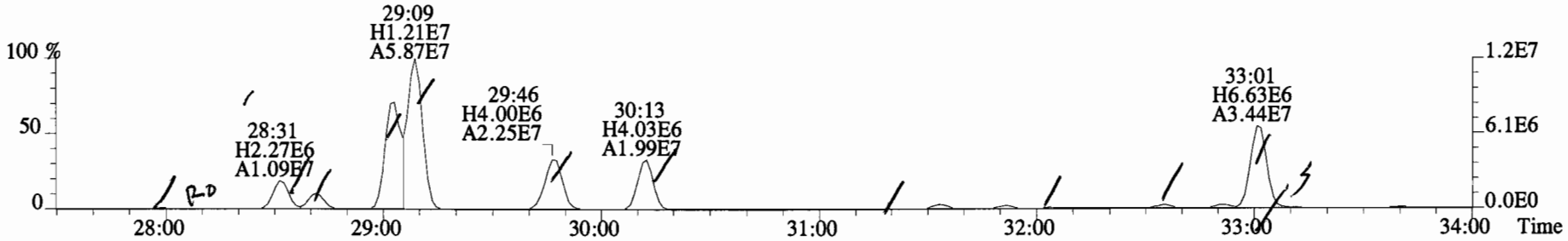
File:150319E1 #1-757 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3824.0,0.00%,F,F)



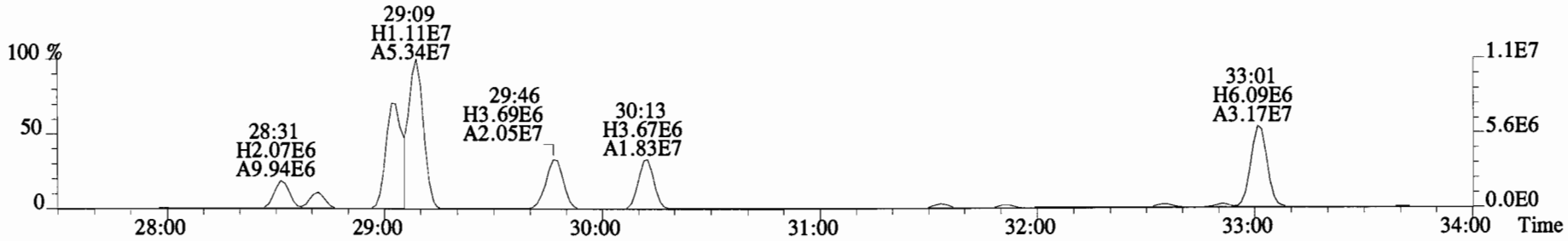
223.9974 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,18784.0,0.00%,F,F)



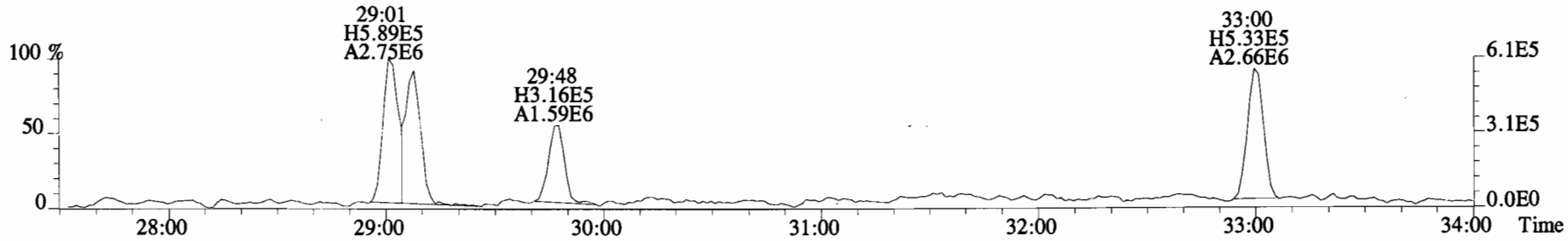
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,9544.0,0.00%,F,F)



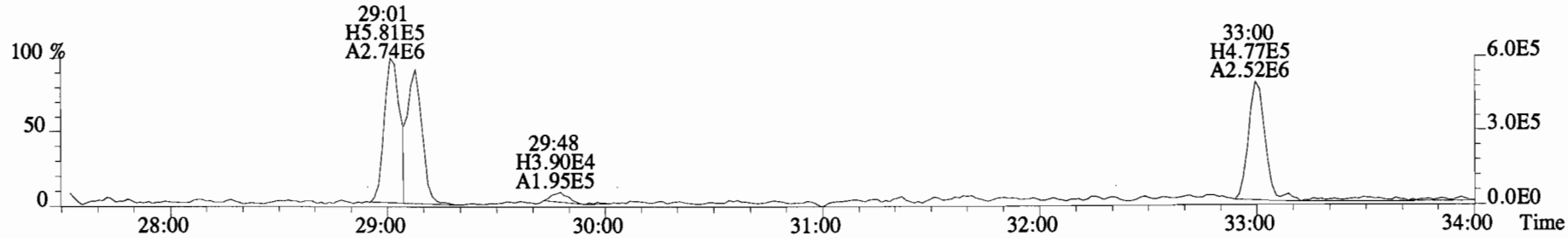
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5220.0,0.00%,F,F)



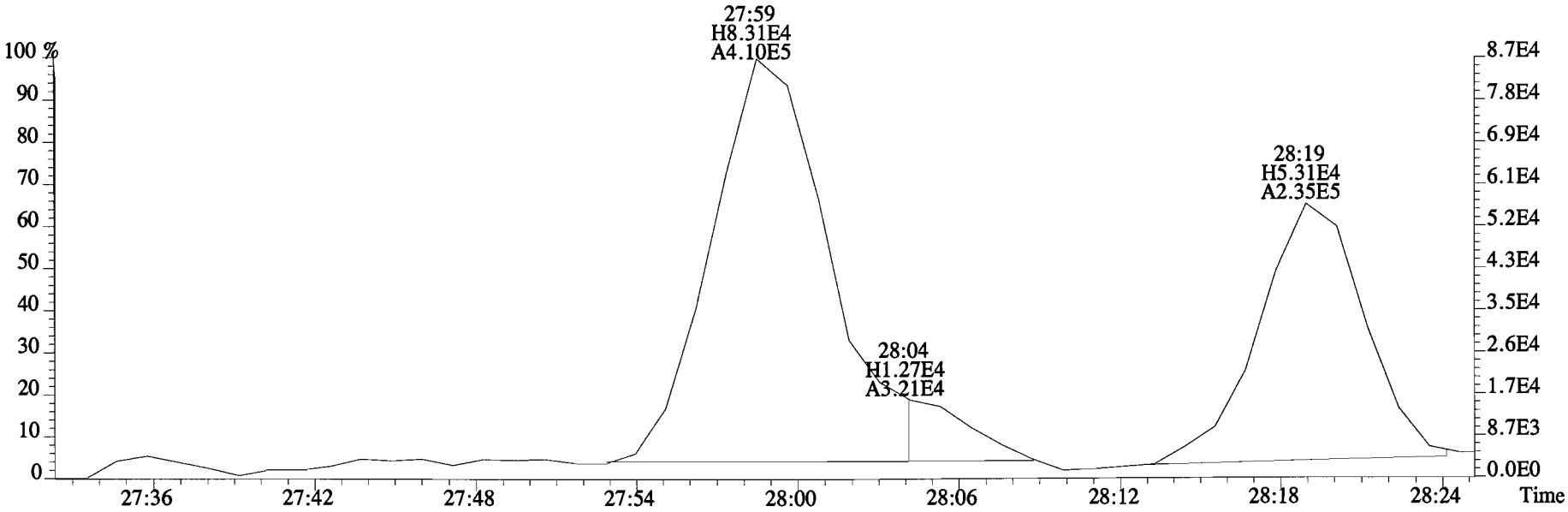
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,41028.0,0.00%,F,F)



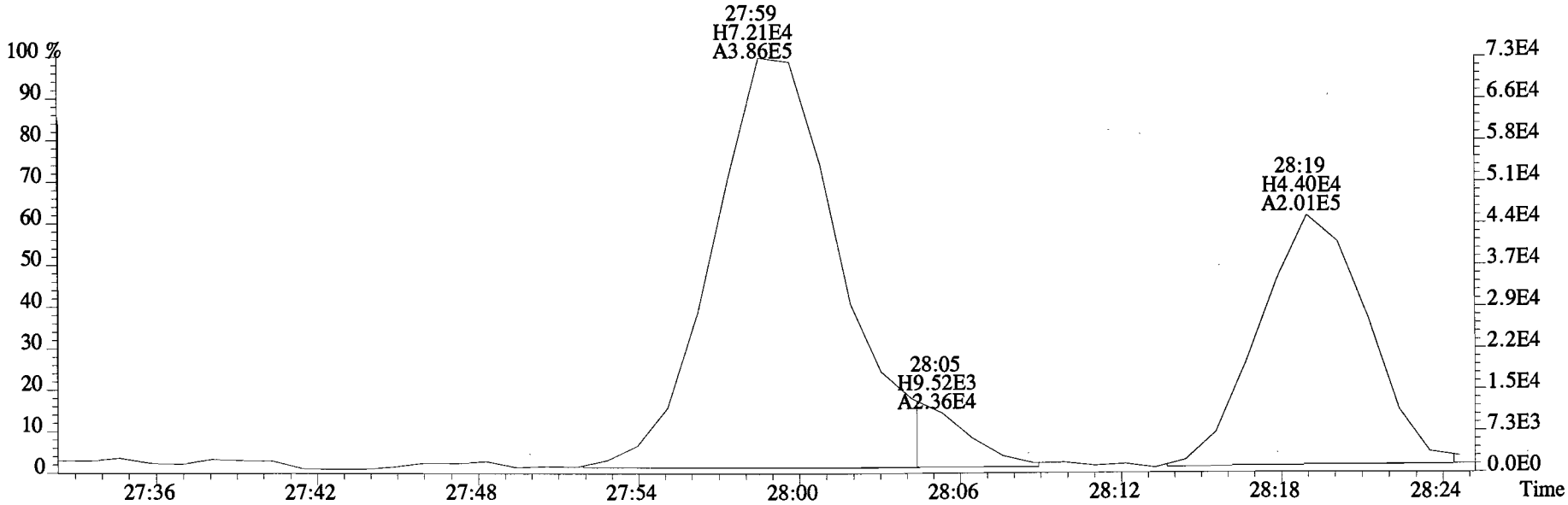
269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,26256.0,0.00%,F,F)



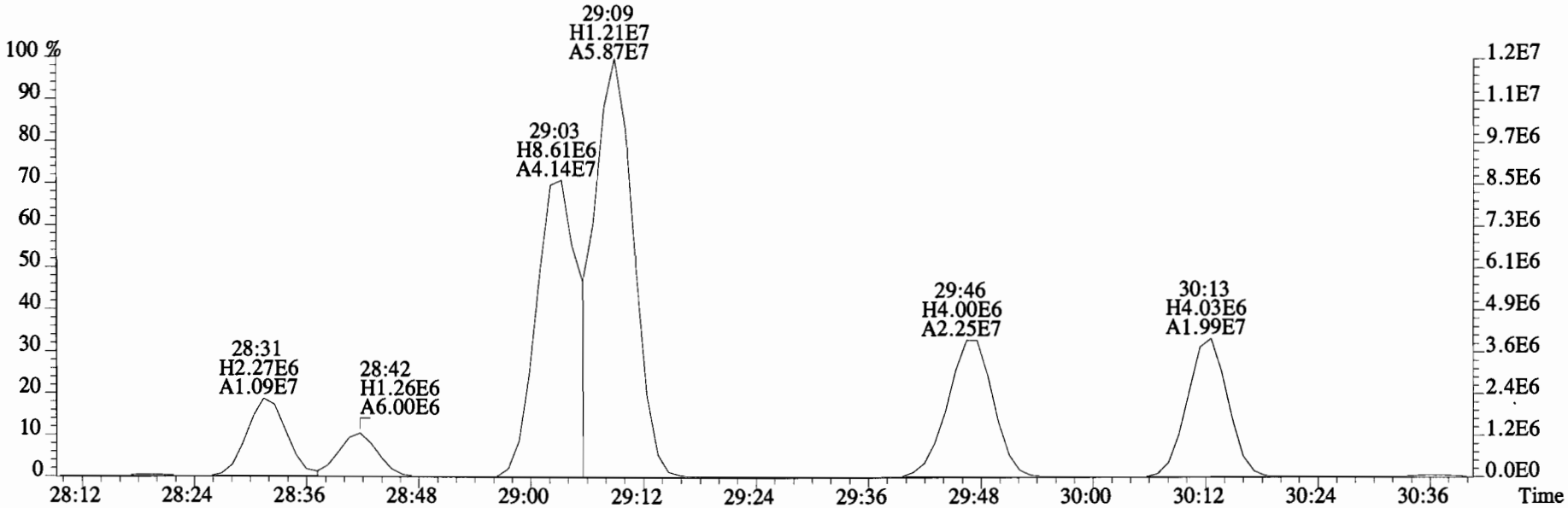
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0)



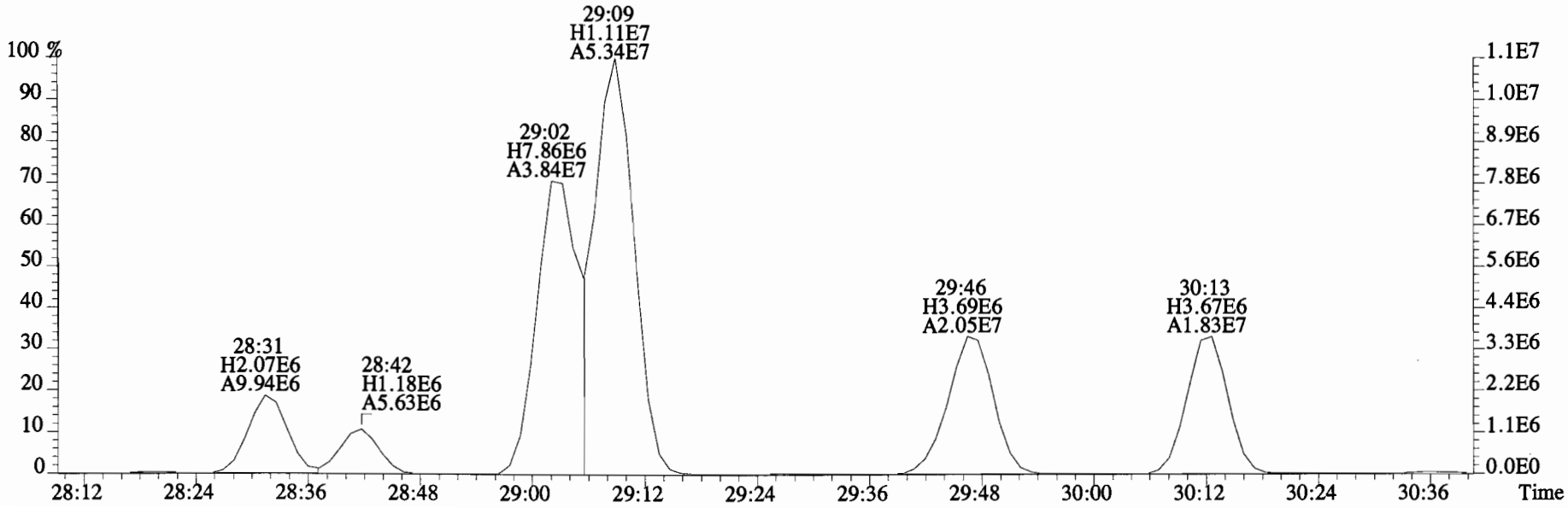
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0)



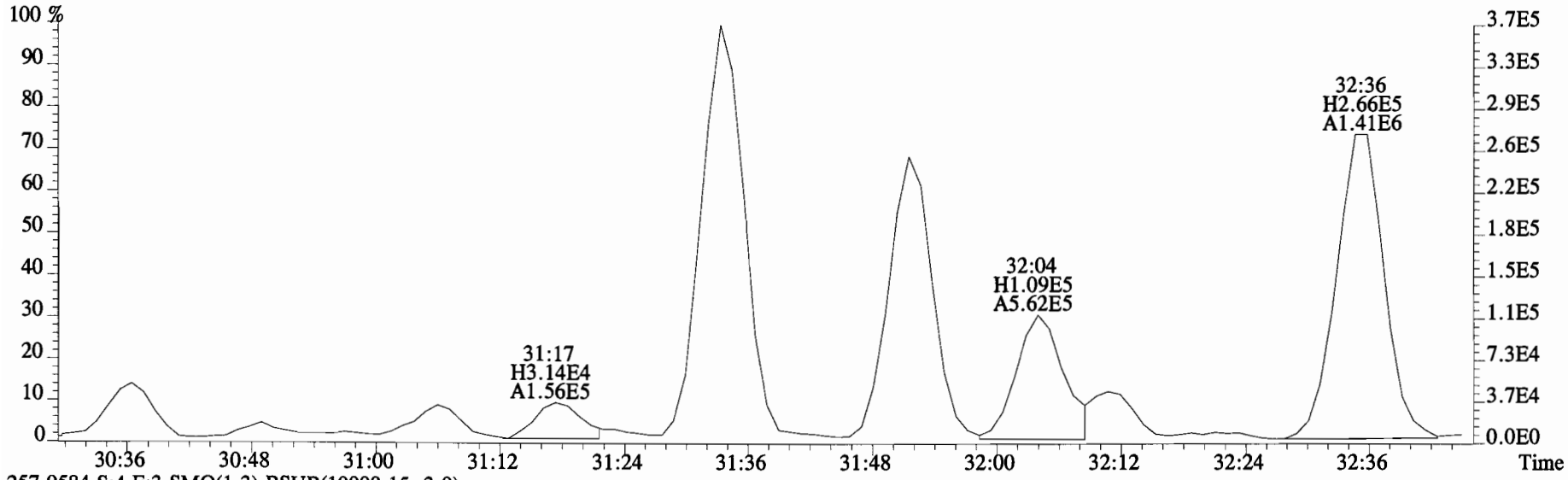
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0)



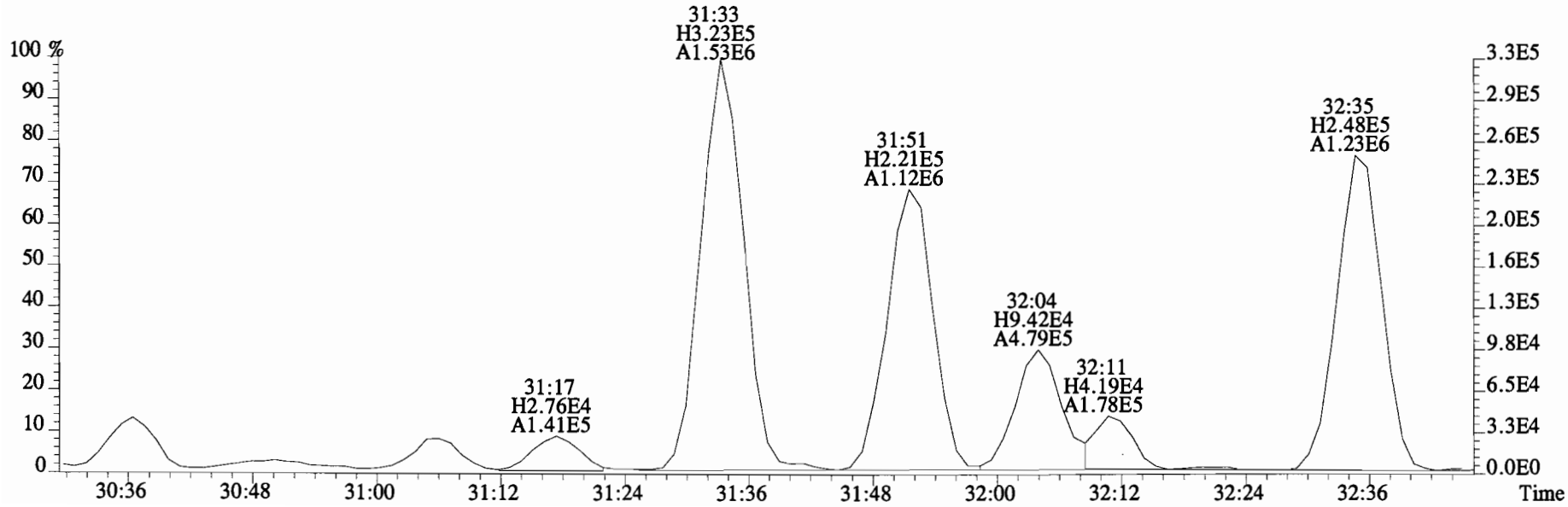
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0)



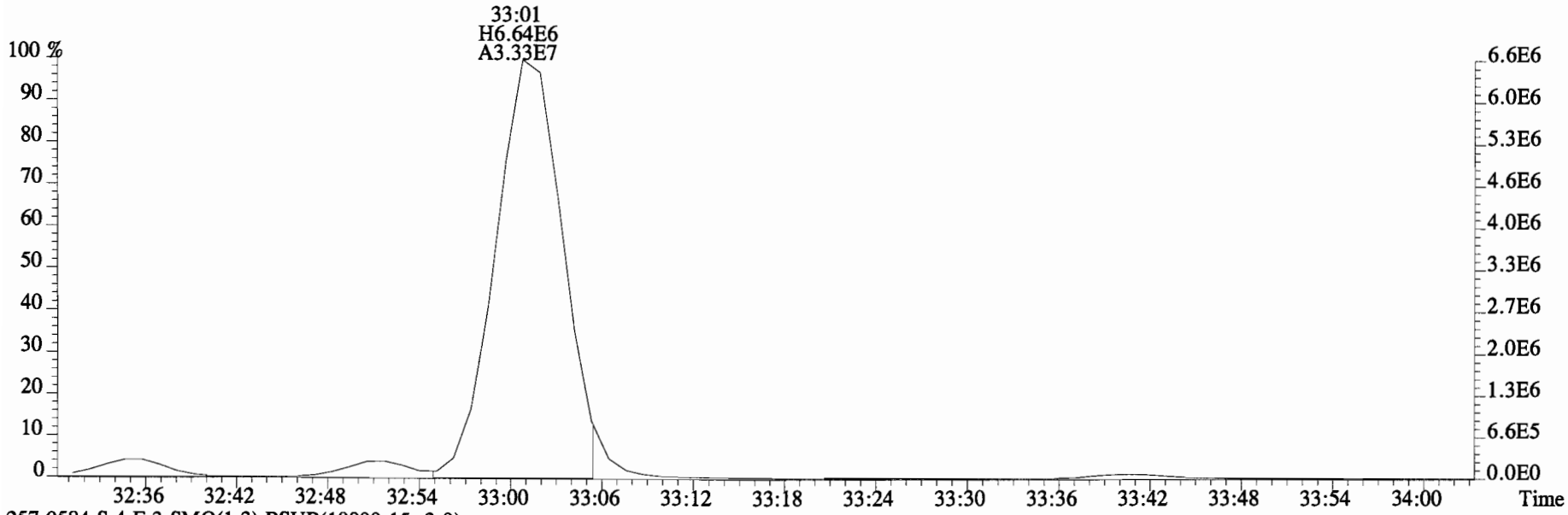
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0)



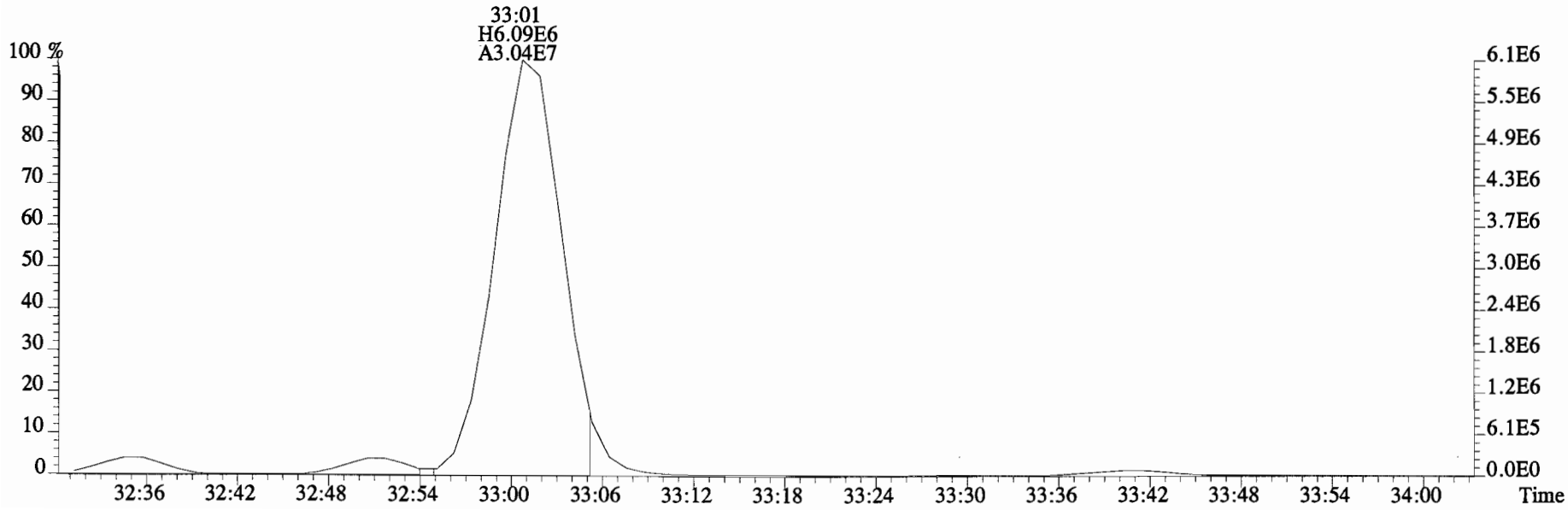
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0)



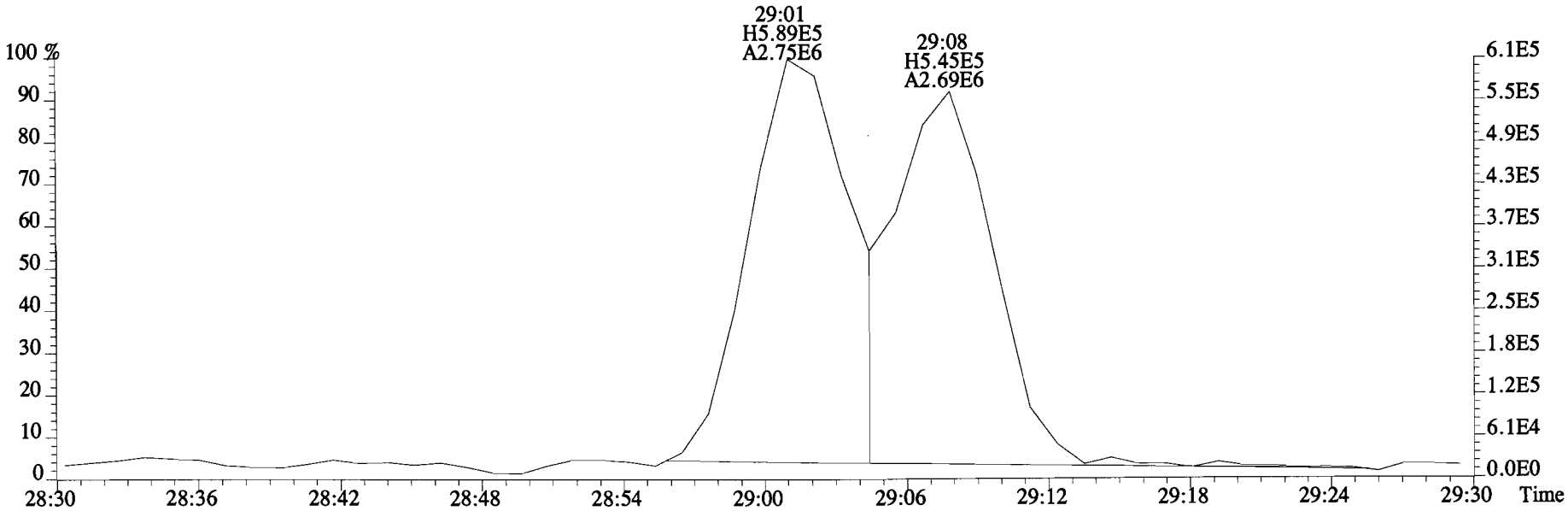
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0)



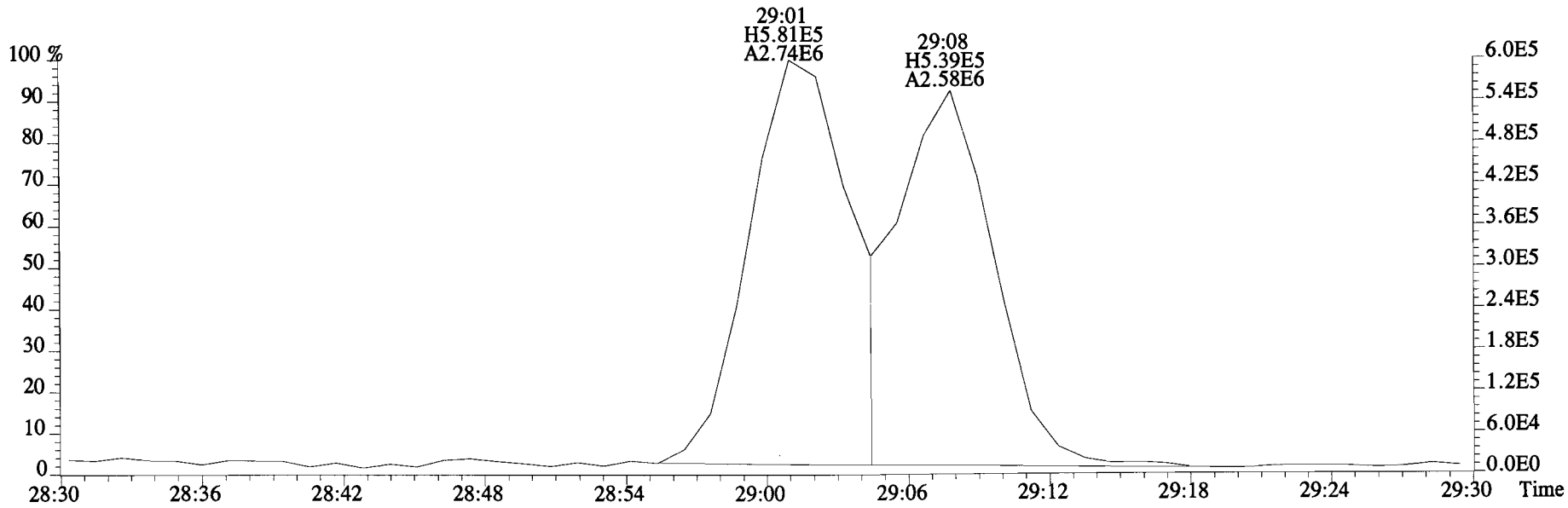
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0)



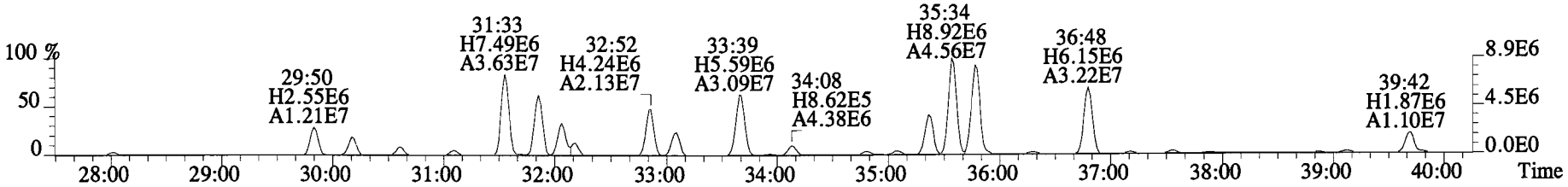
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,41028.0,0.00%,F,F)



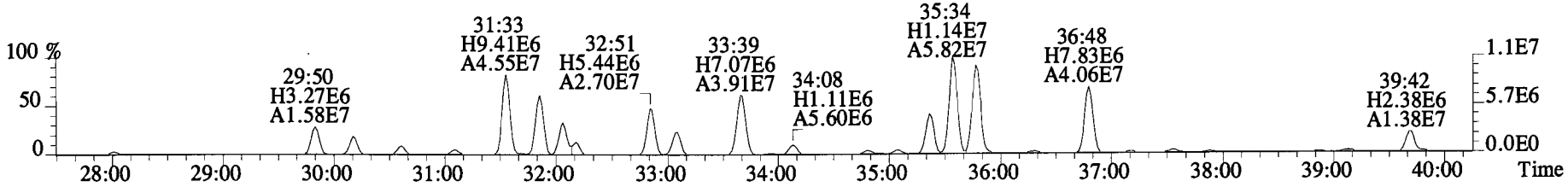
269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,26256.0,0.00%,F,F)



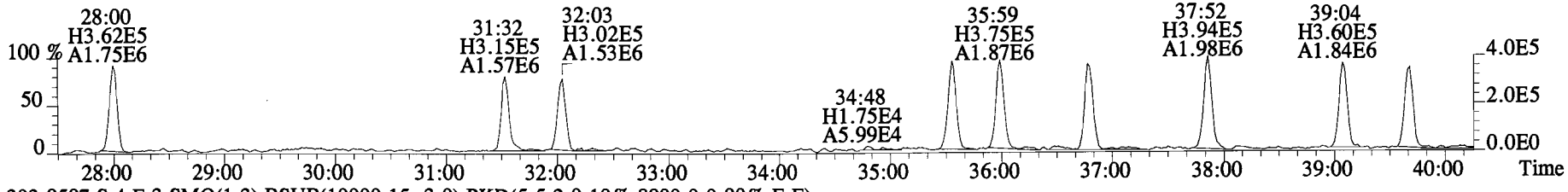
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3912.0,0.00%,F,F)



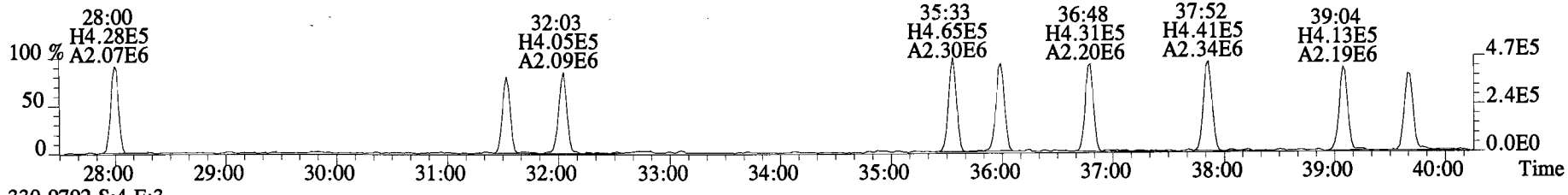
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5572.0,0.00%,F,F)



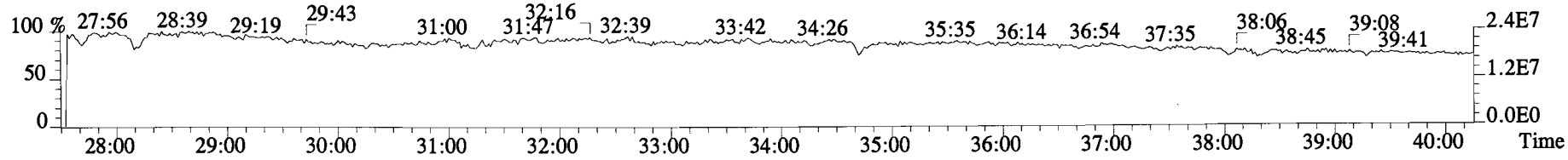
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,16592.0,0.00%,F,F)



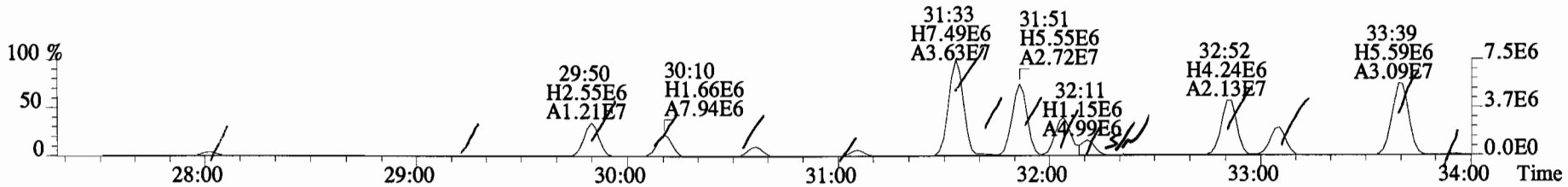
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8900.0,0.00%,F,F)



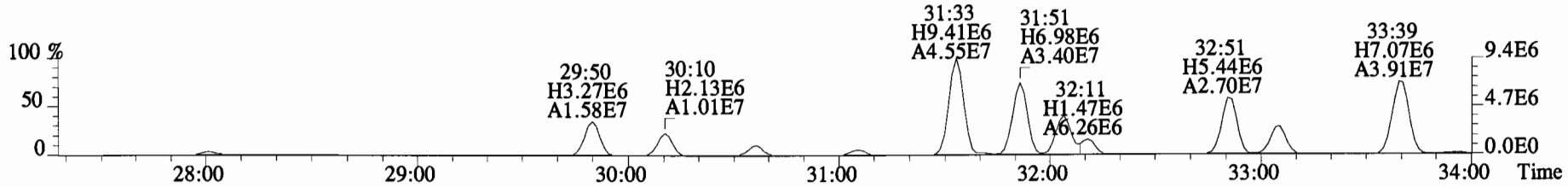
330.9792 S:4 F:3



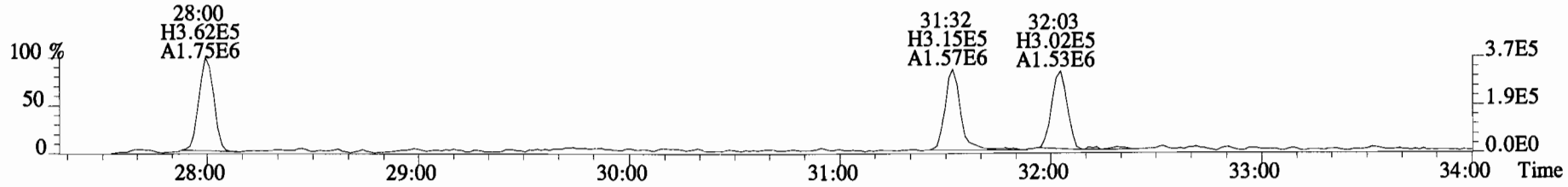
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3912.0,0.00%,F,F)



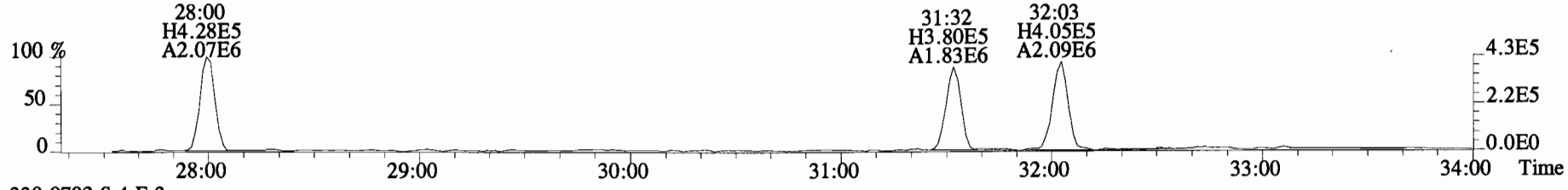
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5572.0,0.00%,F,F)



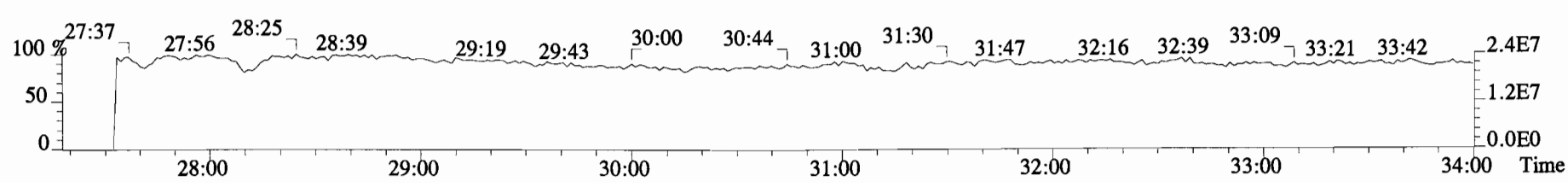
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,16592.0,0.00%,F,F)



303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8900.0,0.00%,F,F)

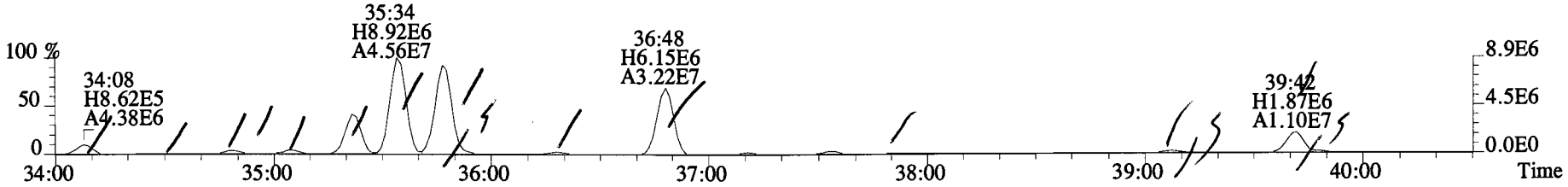


330.9792 S:4 F:3

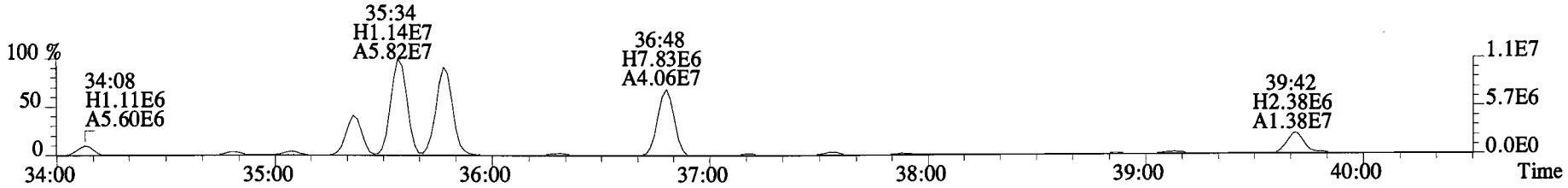


File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1

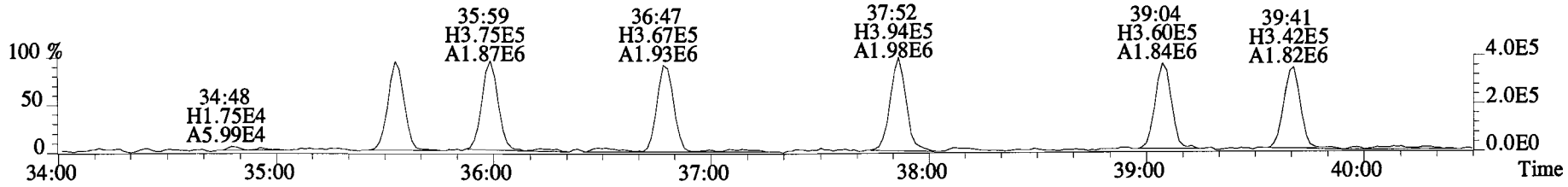
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3912.0,0.00%,F,F)



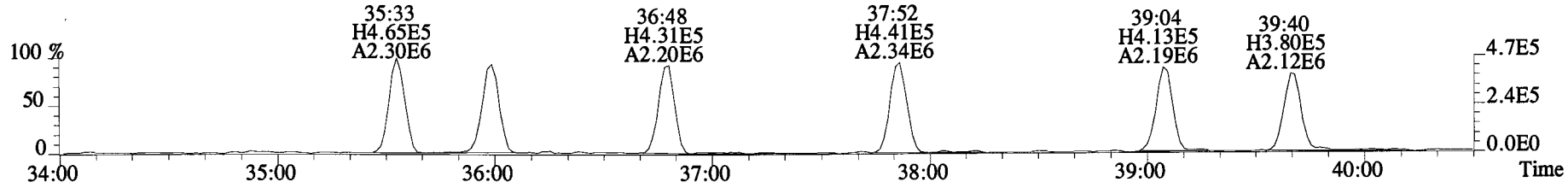
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5572.0,0.00%,F,F)



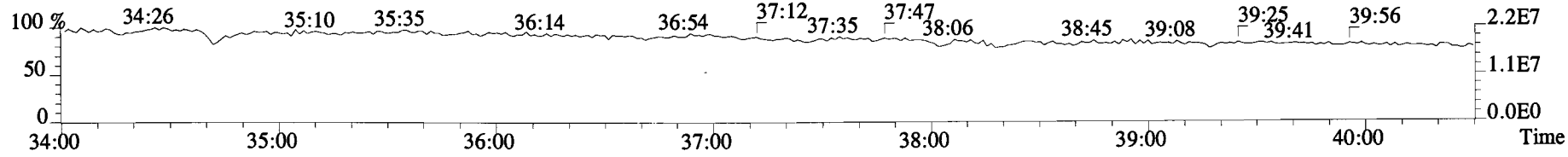
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,16592.0,0.00%,F,F)



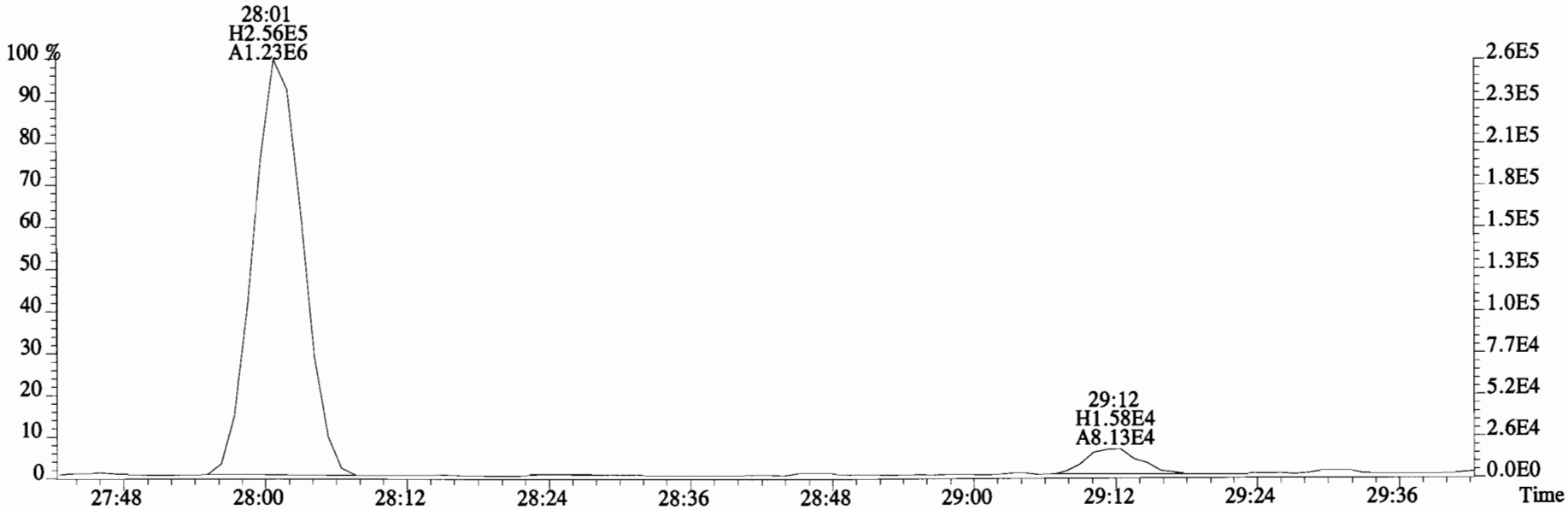
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8900.0,0.00%,F,F)



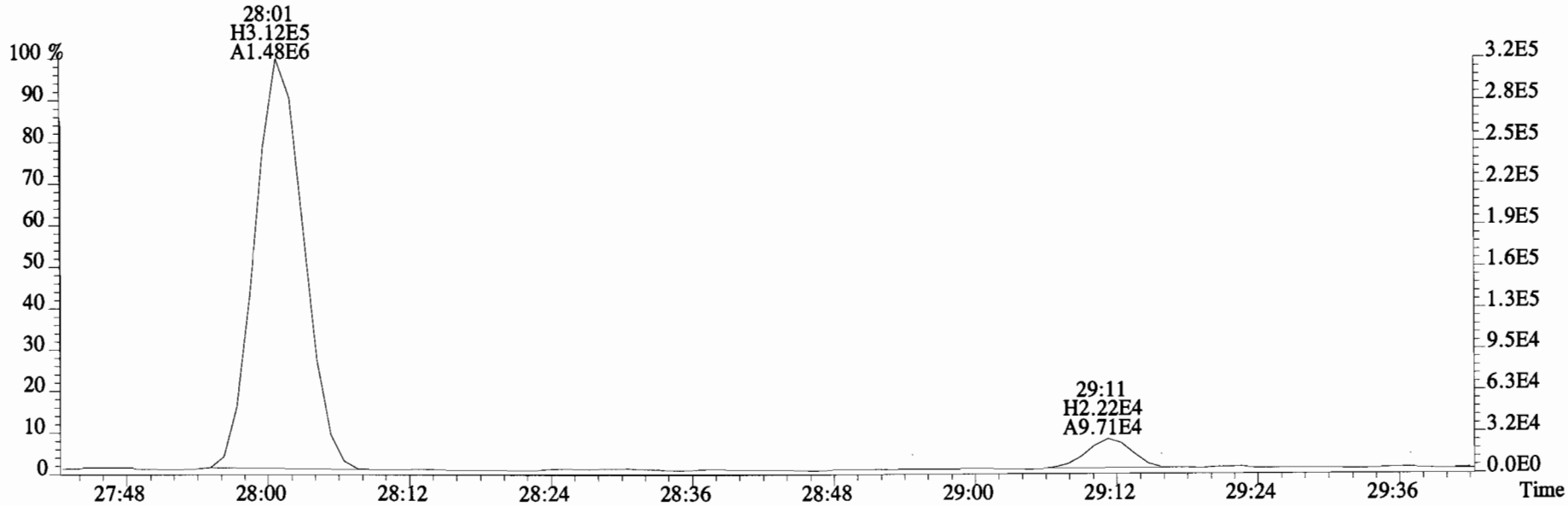
330.9792 S:4 F:3



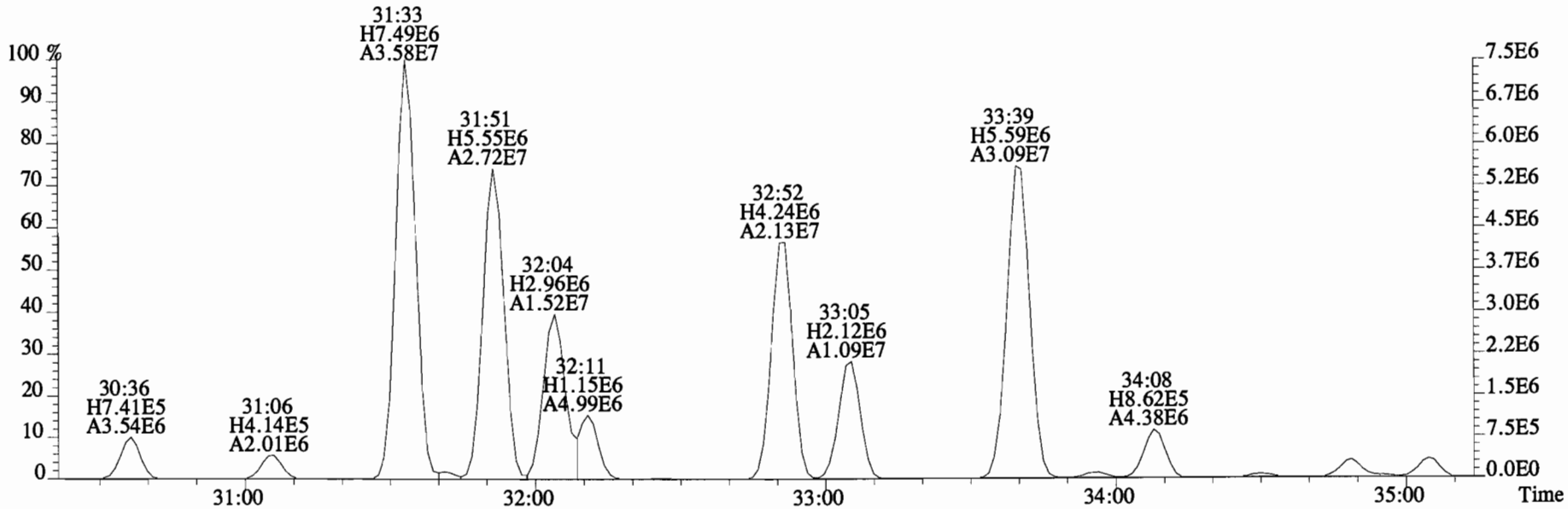
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3912.0,0.00%,F,F)



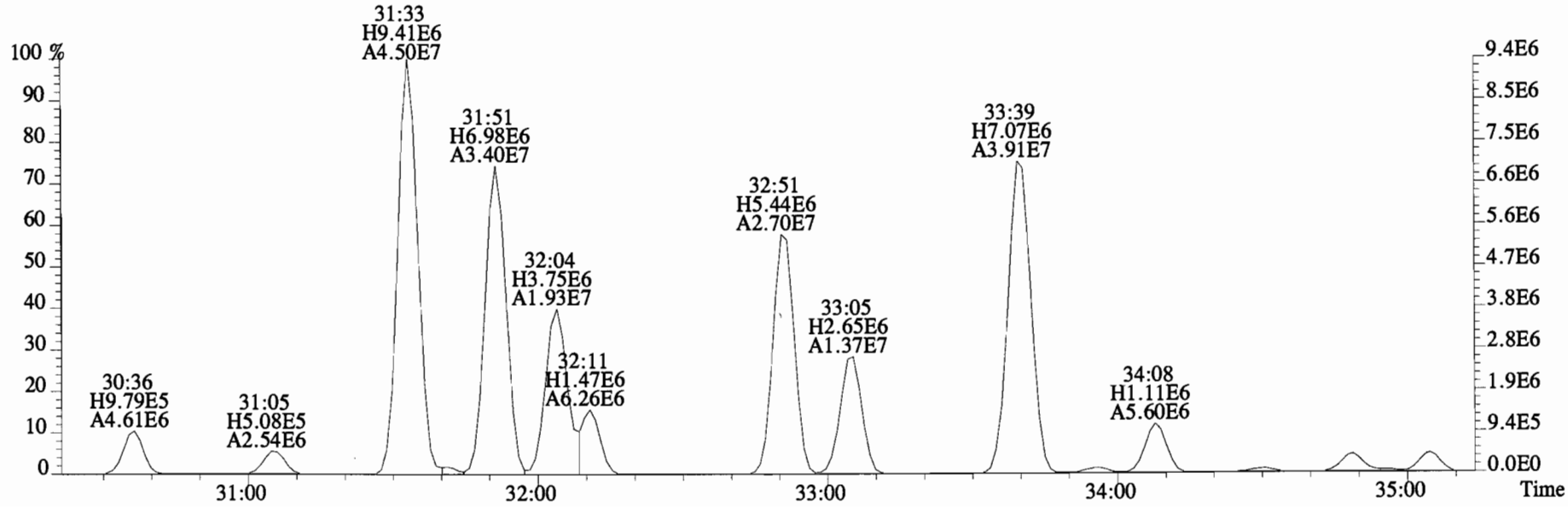
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5572.0,0.00%,F,F)



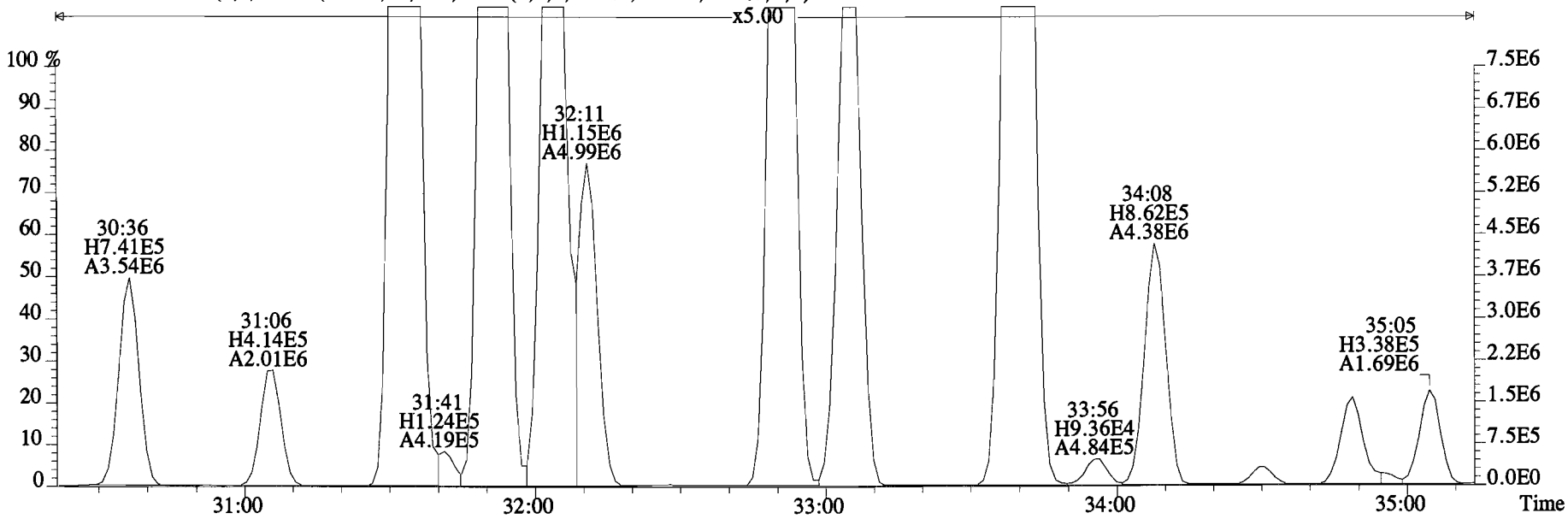
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3912.0,0.00%,F,F)



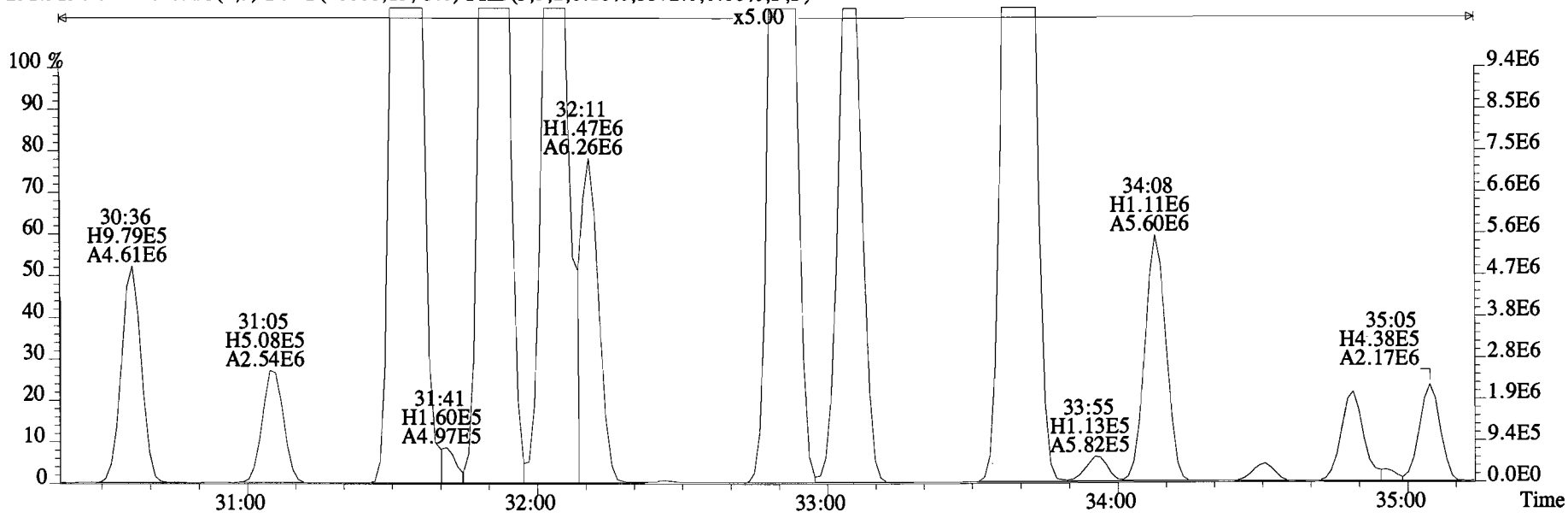
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5572.0,0.00%,F,F)



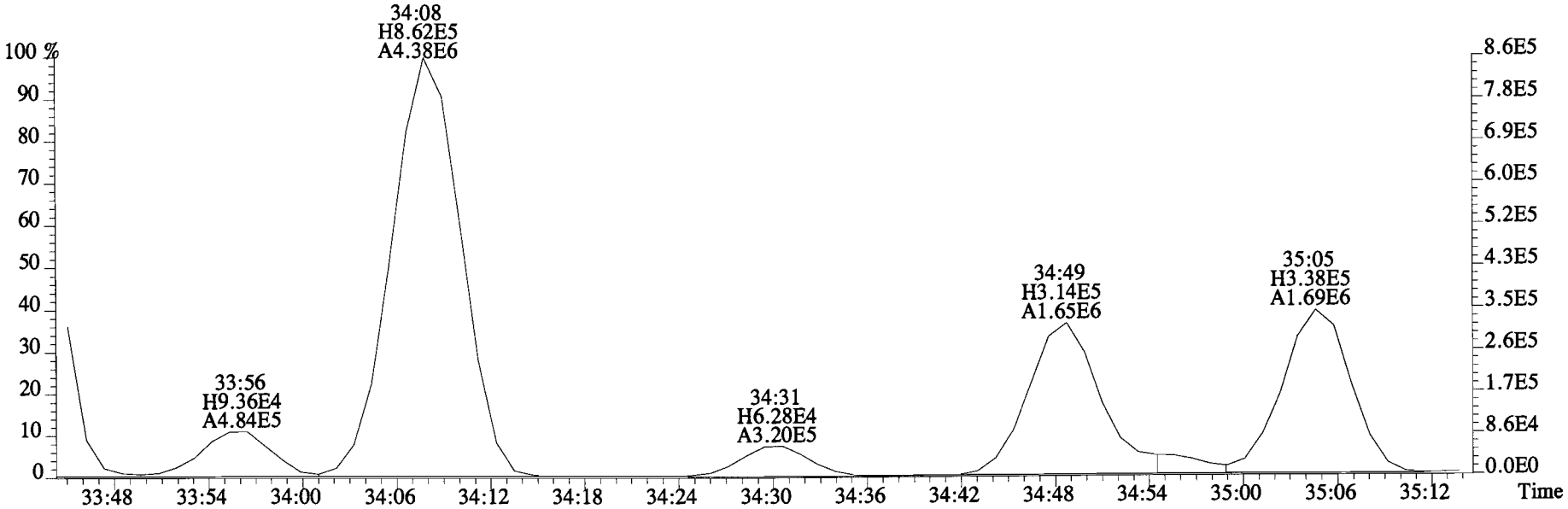
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3912.0,0.00%,F,F)



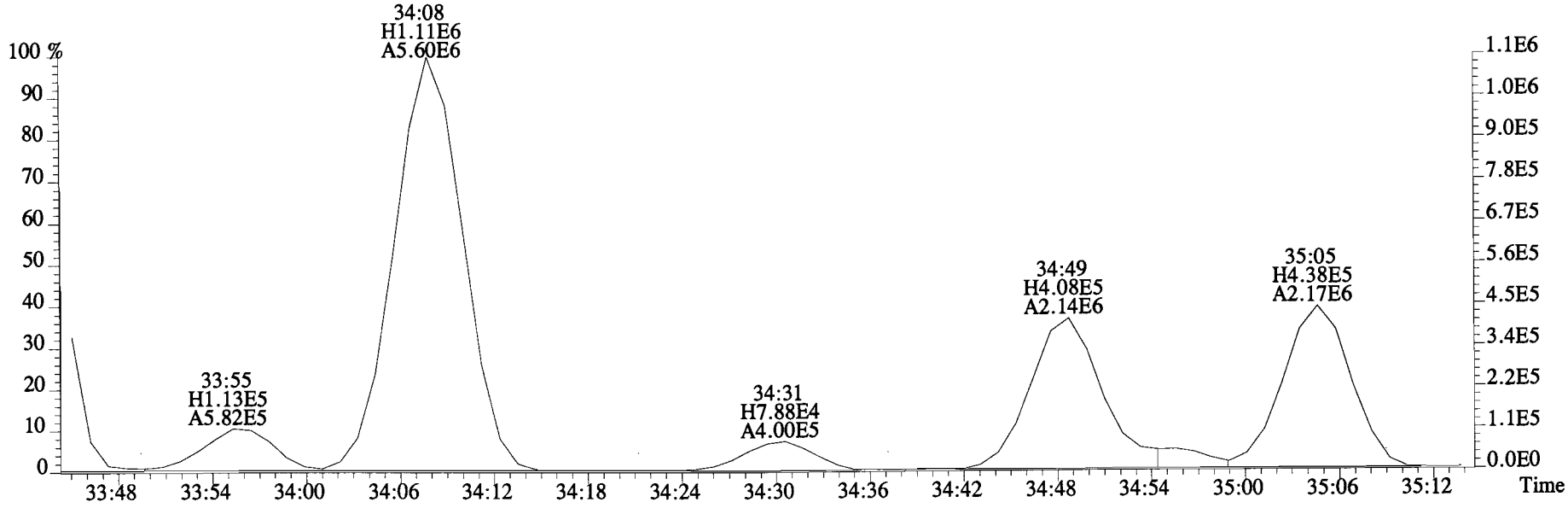
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5572.0,0.00%,F,F)

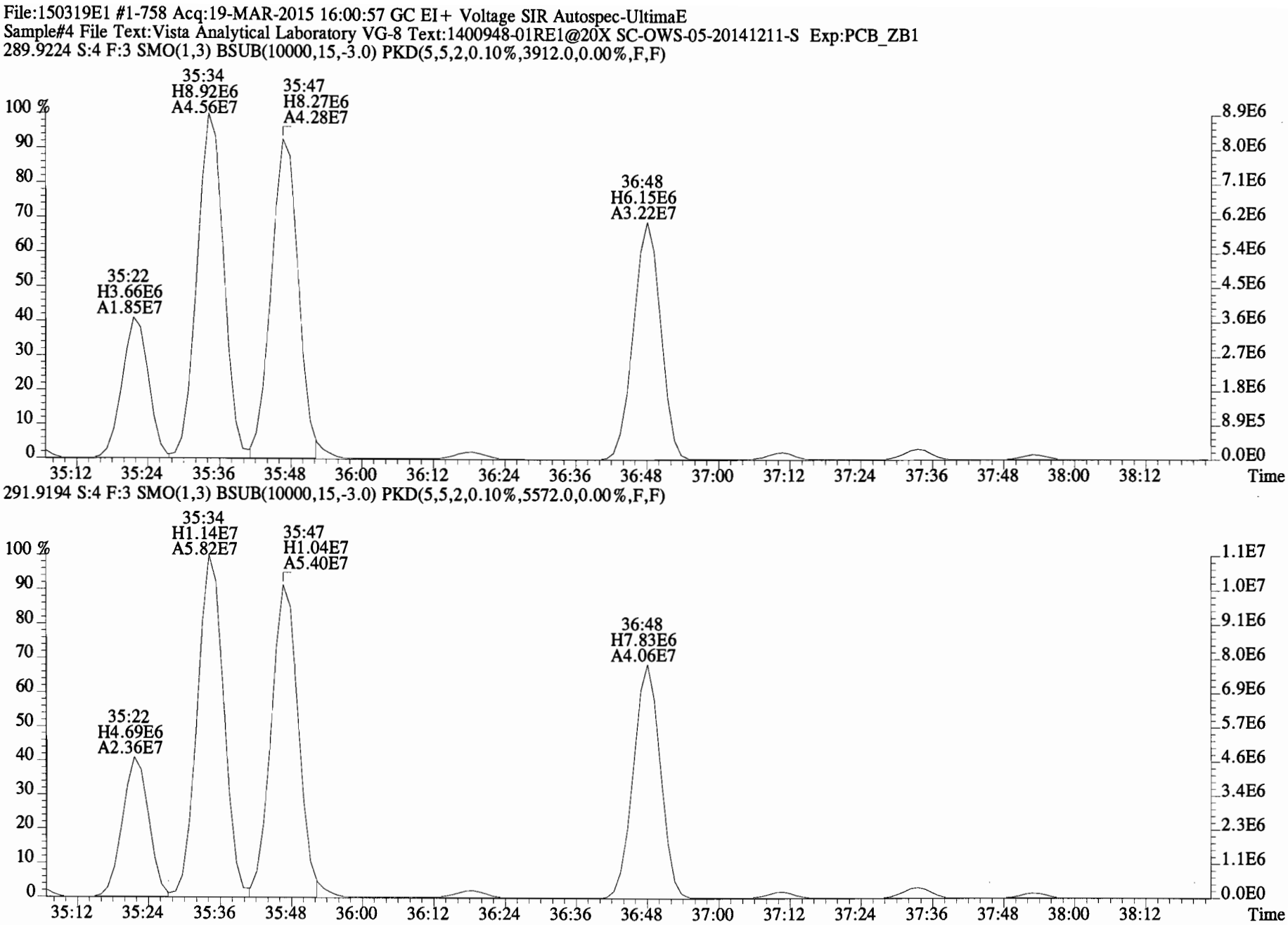


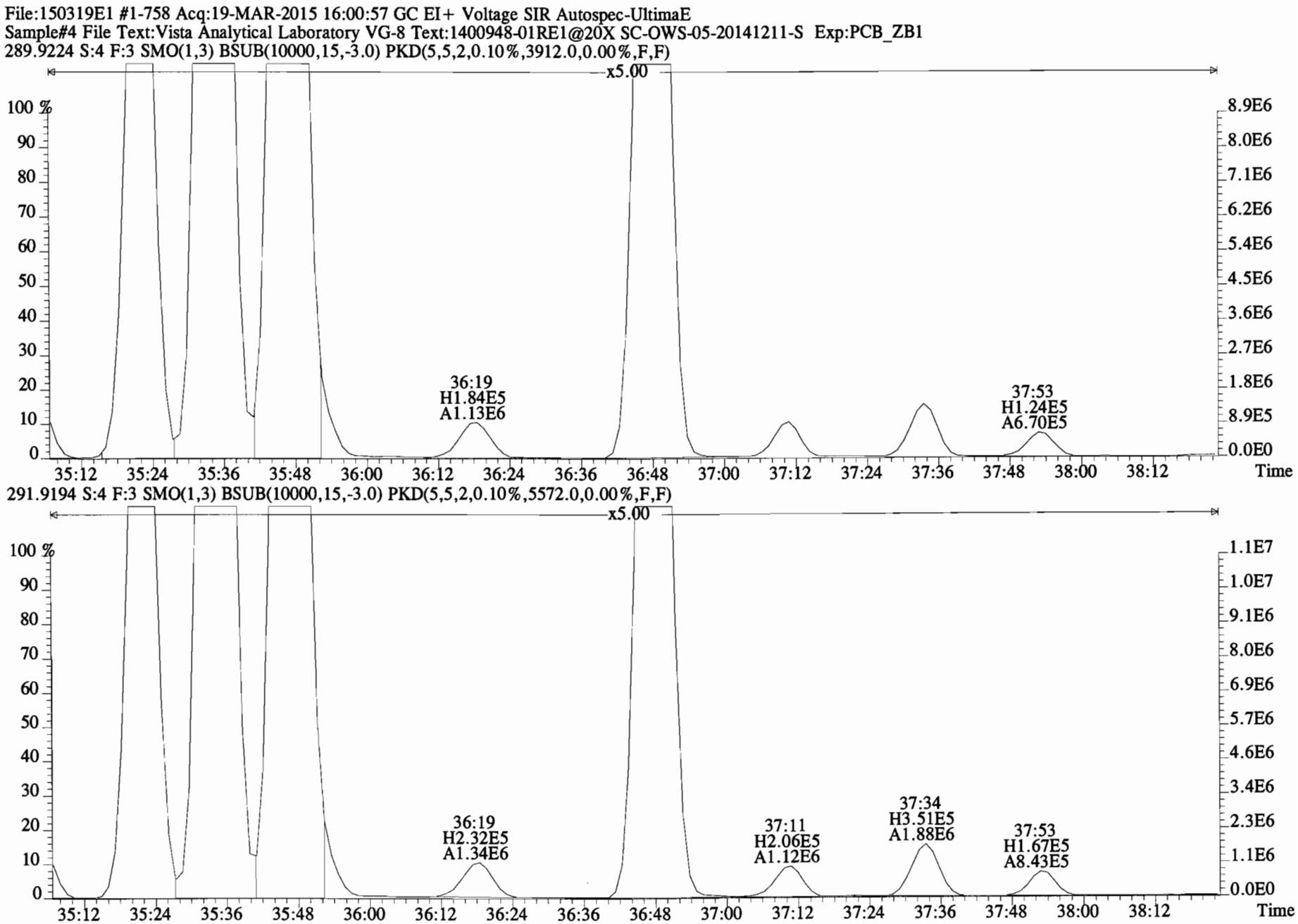
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3912.0,0.00%,F,F)



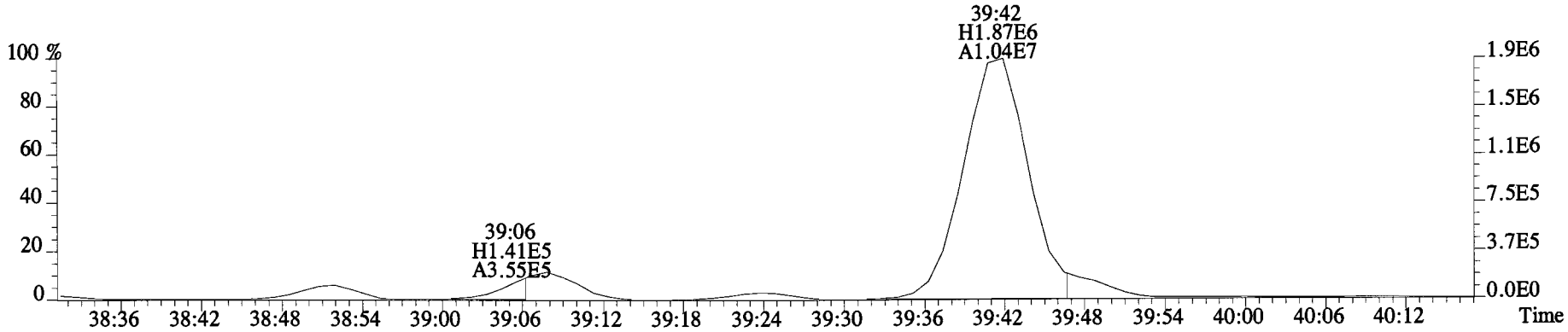
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5572.0,0.00%,F,F)



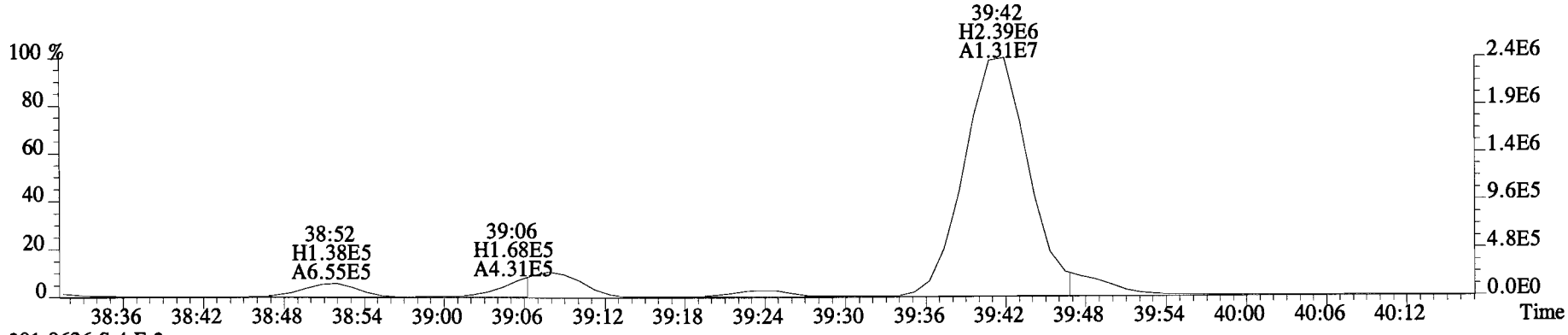

File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3912.0,0.00%,F,F)
35:34
H8.92E6
A4.56E7
35:47
H8.27E6
A4.28E7
36:48
H6.15E6
A3.22E7
35:22
H3.66E6
A1.85E7
100 %
90
80
70
60
50
40
30
20
10
0
8.9E6
8.0E6
7.1E6
6.2E6
5.4E6
4.5E6
3.6E6
2.7E6
1.8E6
8.9E5
0.0E0
35:12
35:24
35:36
35:48
36:00
36:12
36:24
36:36
36:48
37:00
37:12
37:24
37:36
37:48
38:00
38:12
Time
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5572.0,0.00%,F,F)
35:34
H1.14E7
A5.82E7
35:47
H1.04E7
A5.40E7
36:48
H7.83E6
A4.06E7
35:22
H4.69E6
A2.36E7
100 %
90
80
70
60
50
40
30
20
10
0
1.1E7
1.0E7
9.1E6
8.0E6
6.9E6
5.7E6
4.6E6
3.4E6
2.3E6
1.1E6
0.0E0
35:12
35:24
35:36
35:48
36:00
36:12
36:24
36:36
36:48
37:00
37:12
37:24
37:36
37:48
38:00
38:12
Time


File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3912.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
8.9E6
8.0E6
7.1E6
6.2E6
5.4E6
4.5E6
3.6E6
2.7E6
1.8E6
8.9E5
0.0E0
36:19
H1.84E5
A1.13E6
37:53
H1.24E5
A6.70E5
35:12
35:24
35:36
35:48
36:00
36:12
36:24
36:36
36:48
37:00
37:12
37:24
37:36
37:48
38:00
38:12
Time
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5572.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
1.1E7
1.0E7
9.1E6
8.0E6
6.9E6
5.7E6
4.6E6
3.4E6
2.3E6
1.1E6
0.0E0
36:19
H2.32E5
A1.34E6
37:11
H2.06E5
A1.12E6
37:34
H3.51E5
A1.88E6
37:53
H1.67E5
A8.43E5
35:12
35:24
35:36
35:48
36:00
36:12
36:24
36:36
36:48
37:00
37:12
37:24
37:36
37:48
38:00
38:12
Time

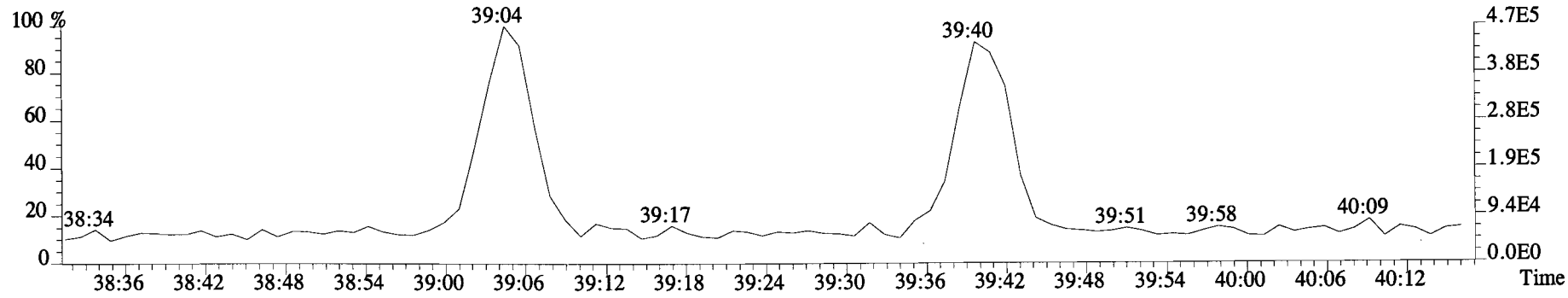
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3912.0,0.00%,F,F)



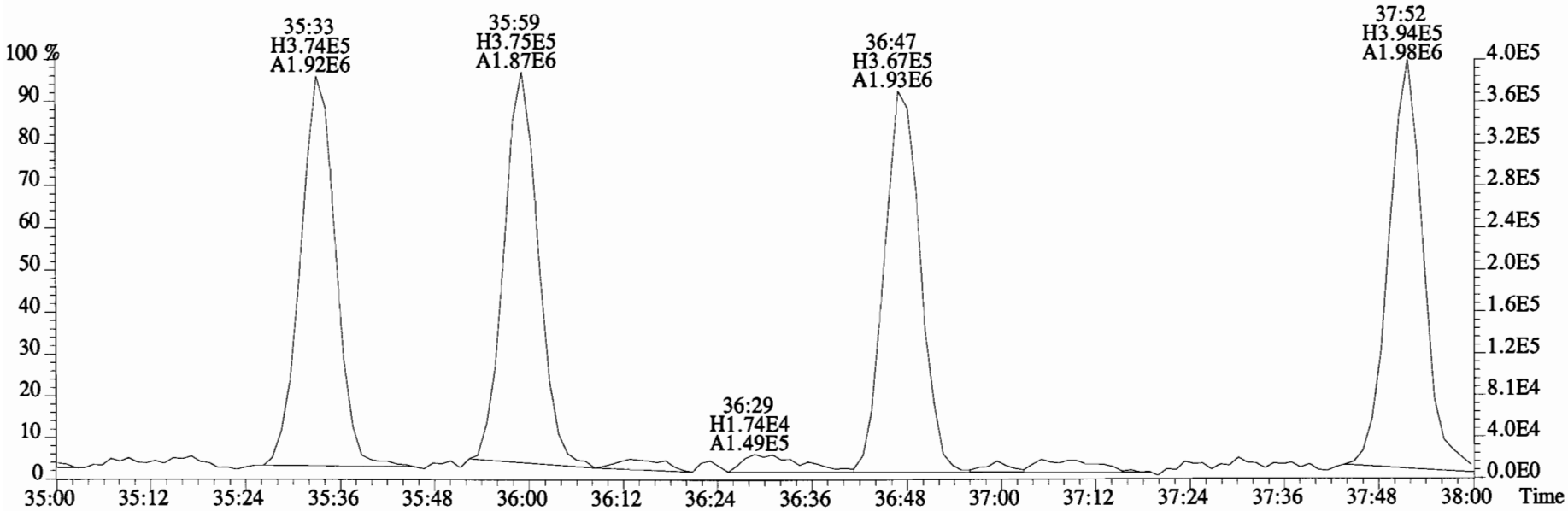
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5572.0,0.00%,F,F)



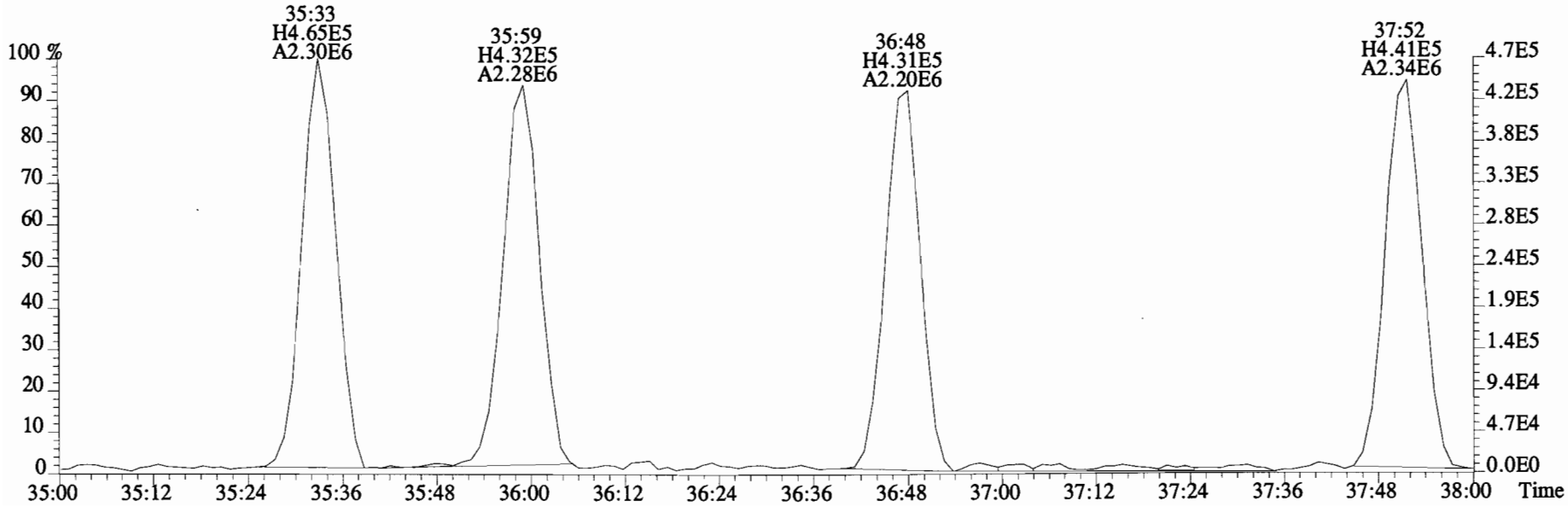
301.9626 S:4 F:3



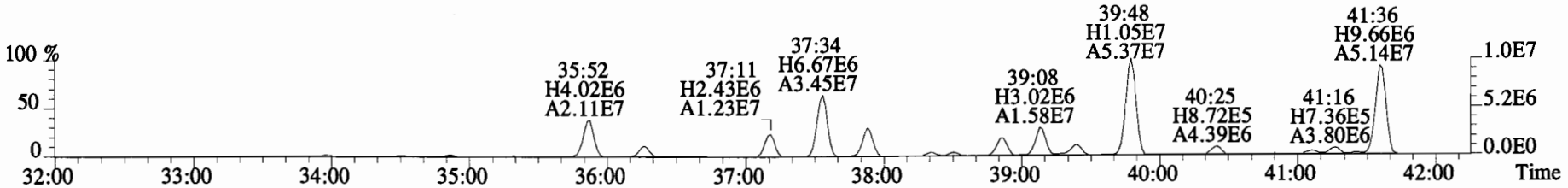
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,16592.0,0.00%,F,F)



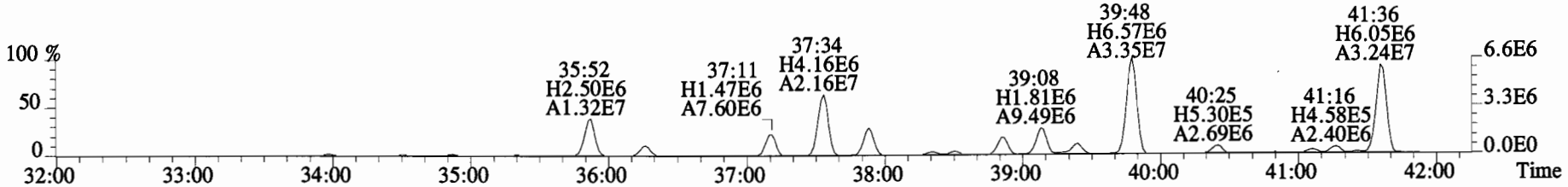
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8900.0,0.00%,F,F)



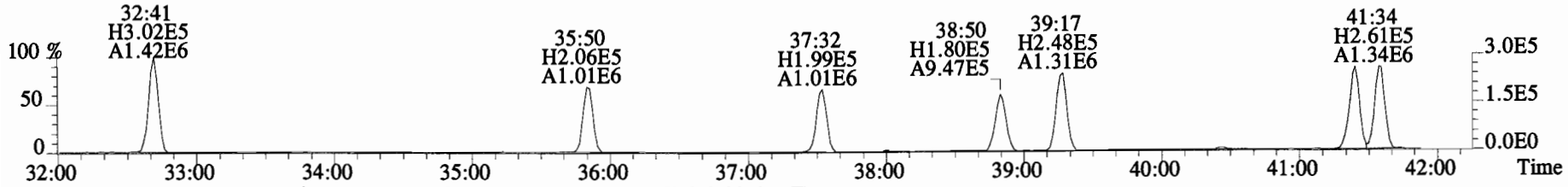
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2184.0,0.00%,F,F)



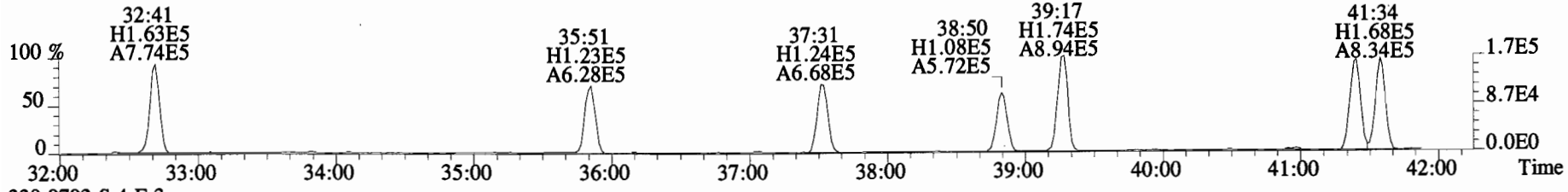
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2200.0,0.00%,F,F)



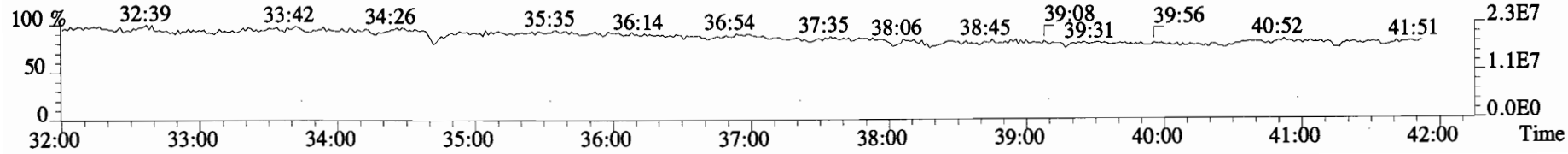
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2348.0,0.00%,F,F)



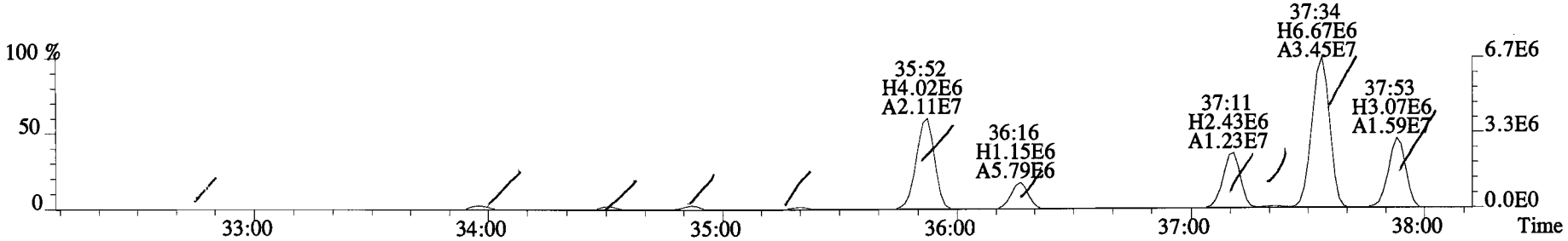
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1960.0,0.00%,F,F)



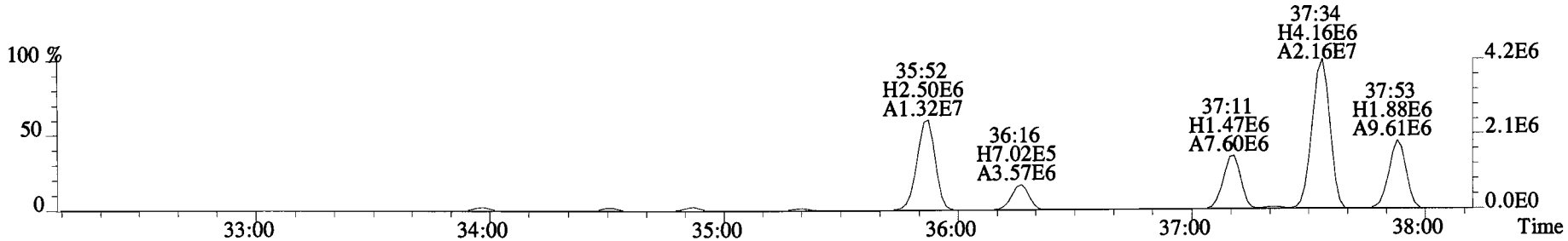
330.9792 S:4 F:3



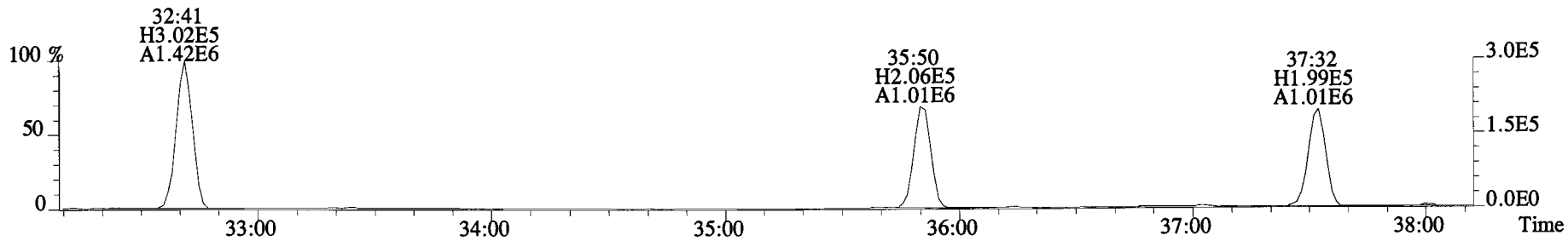
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2184.0,0.00%,F,F)



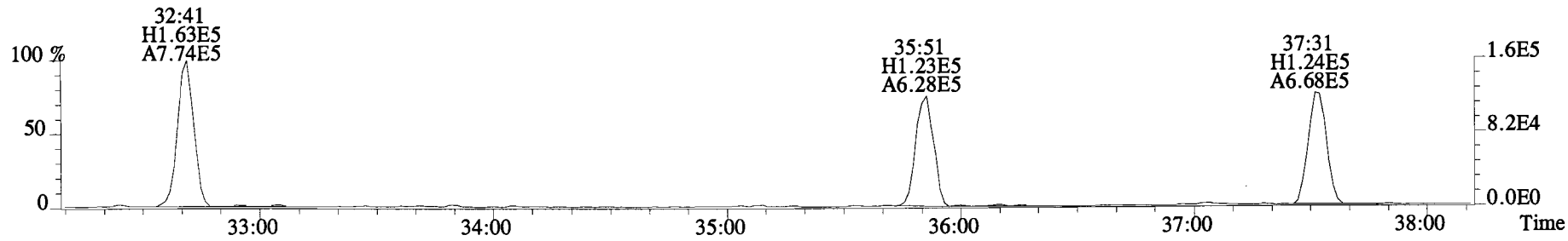
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2200.0,0.00%,F,F)



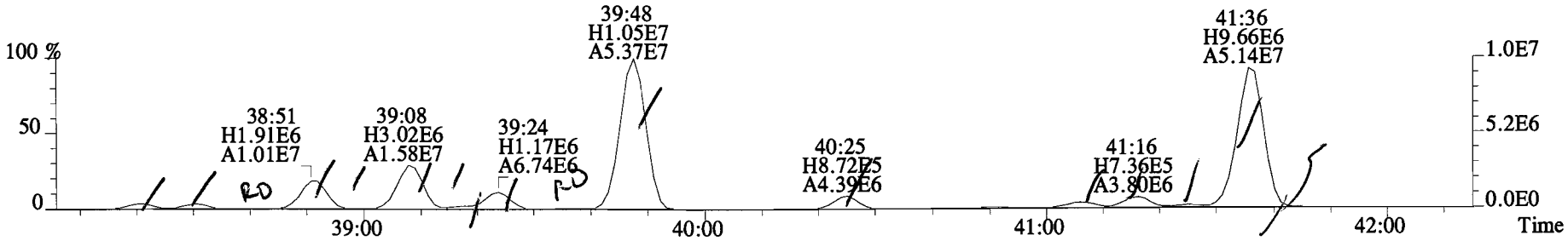
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2348.0,0.00%,F,F)



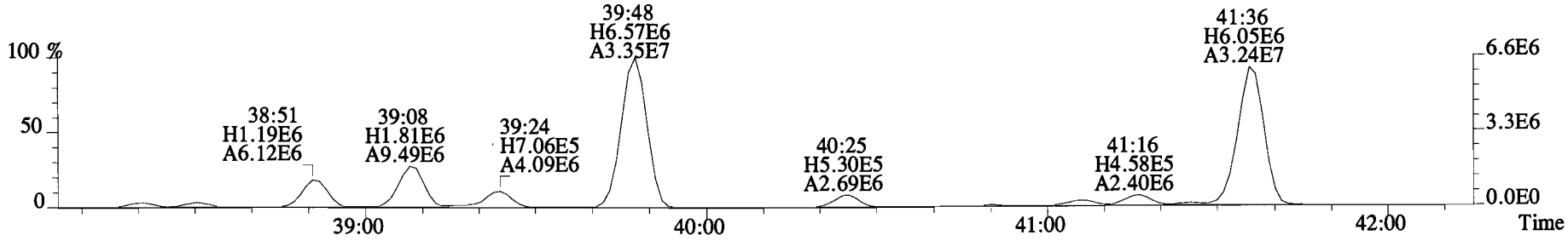
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1960.0,0.00%,F,F)



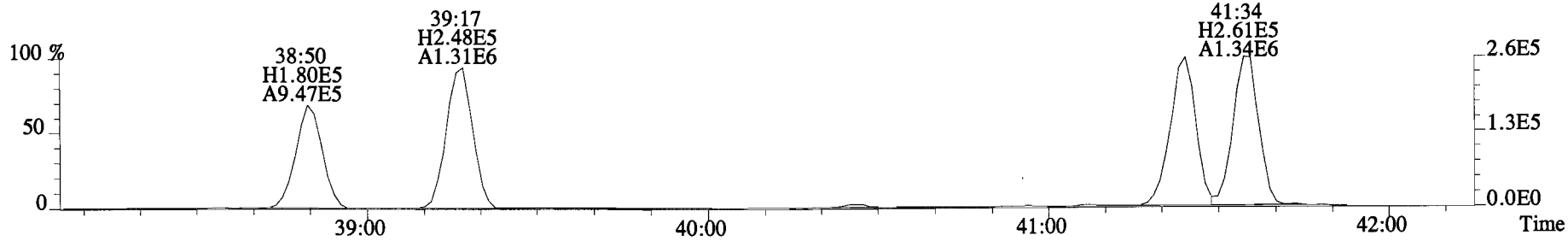
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2184.0,0.00%,F,F)



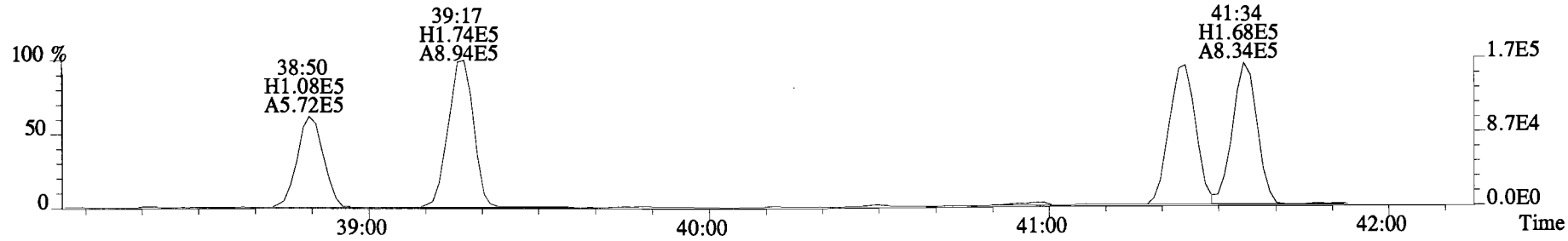
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2200.0,0.00%,F,F)



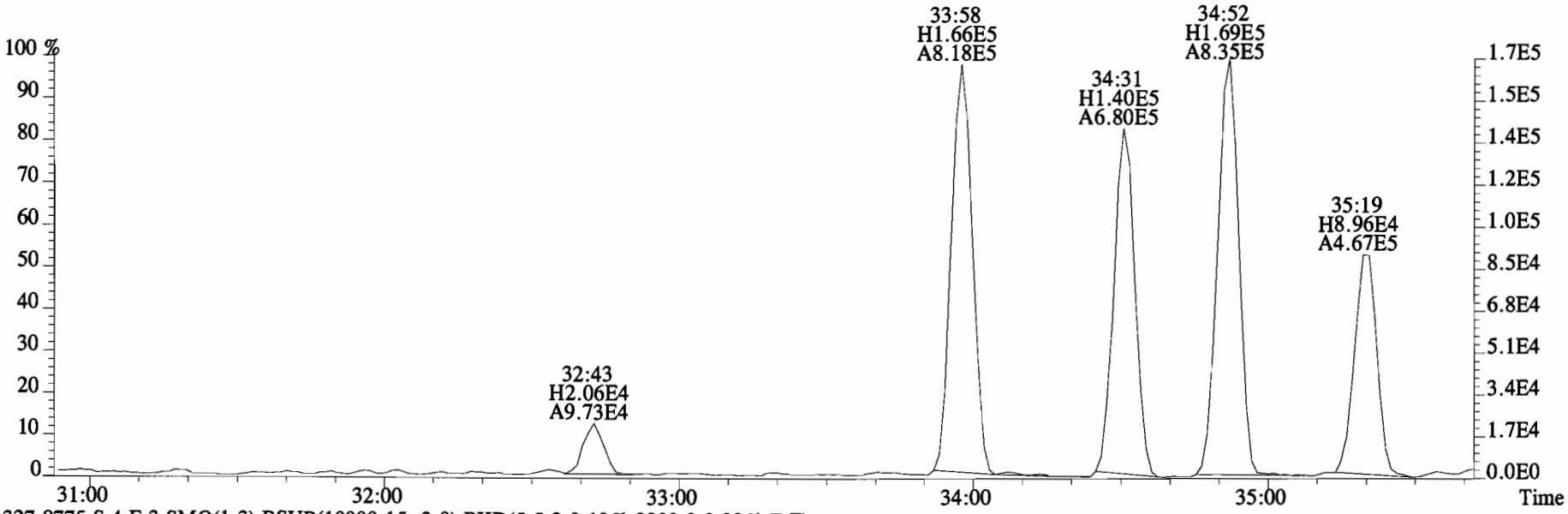
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2348.0,0.00%,F,F)



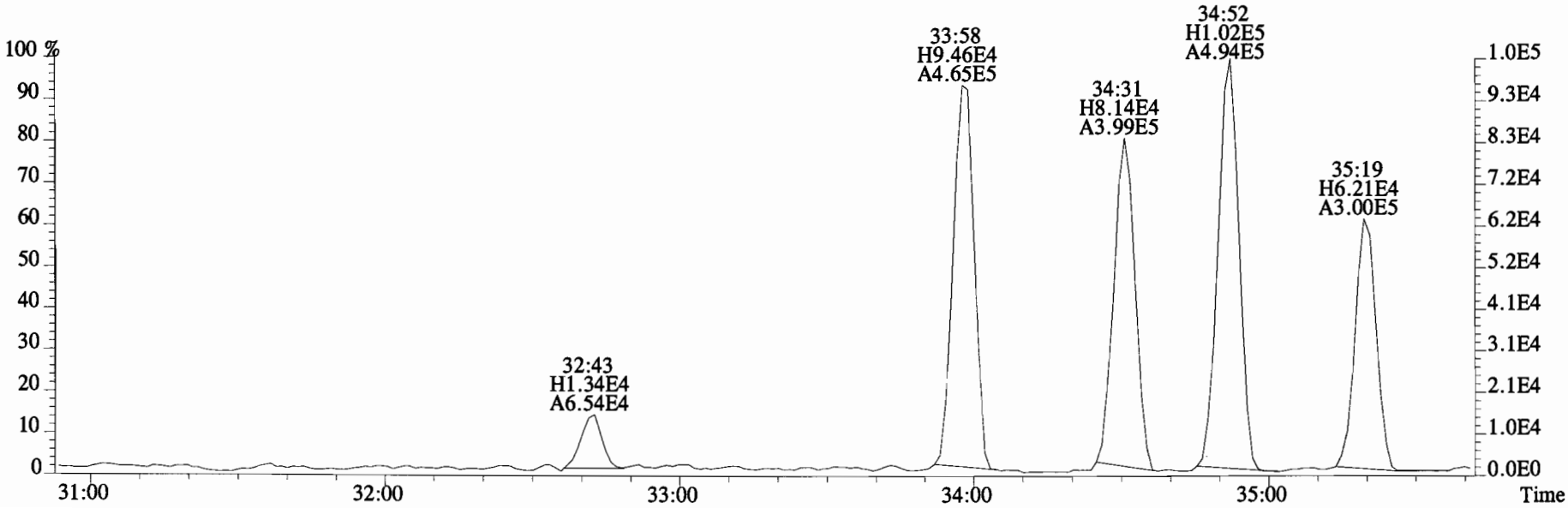
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1960.0,0.00%,F,F)



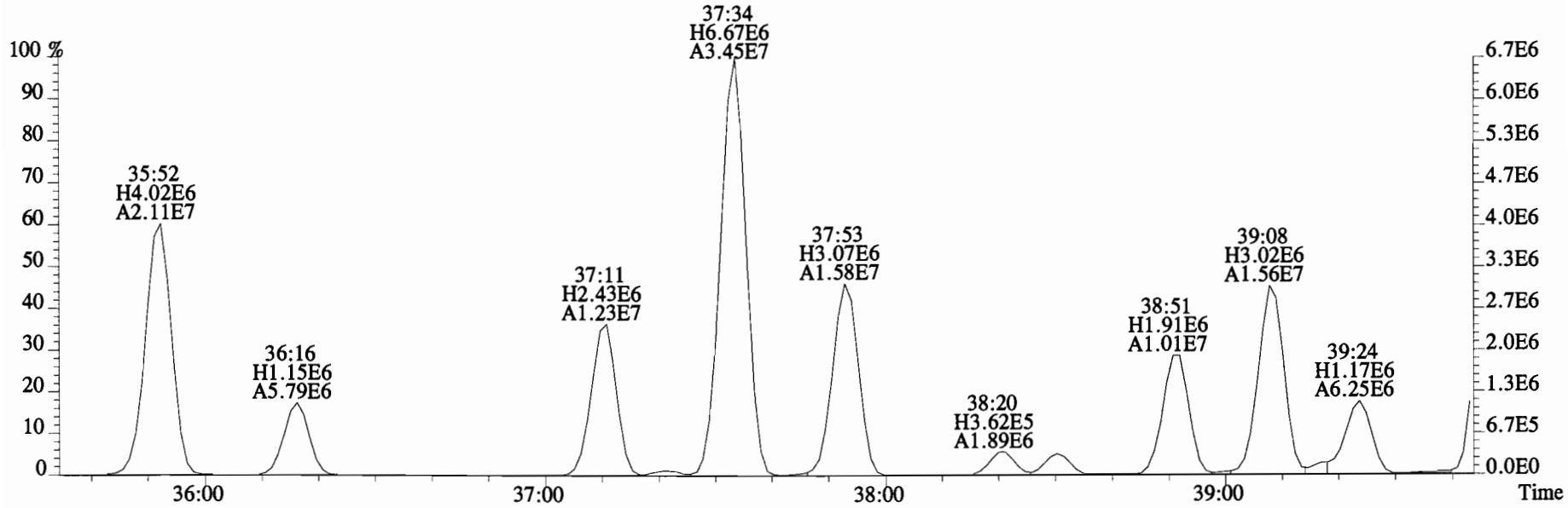
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2184.0,0.00%,F,F)



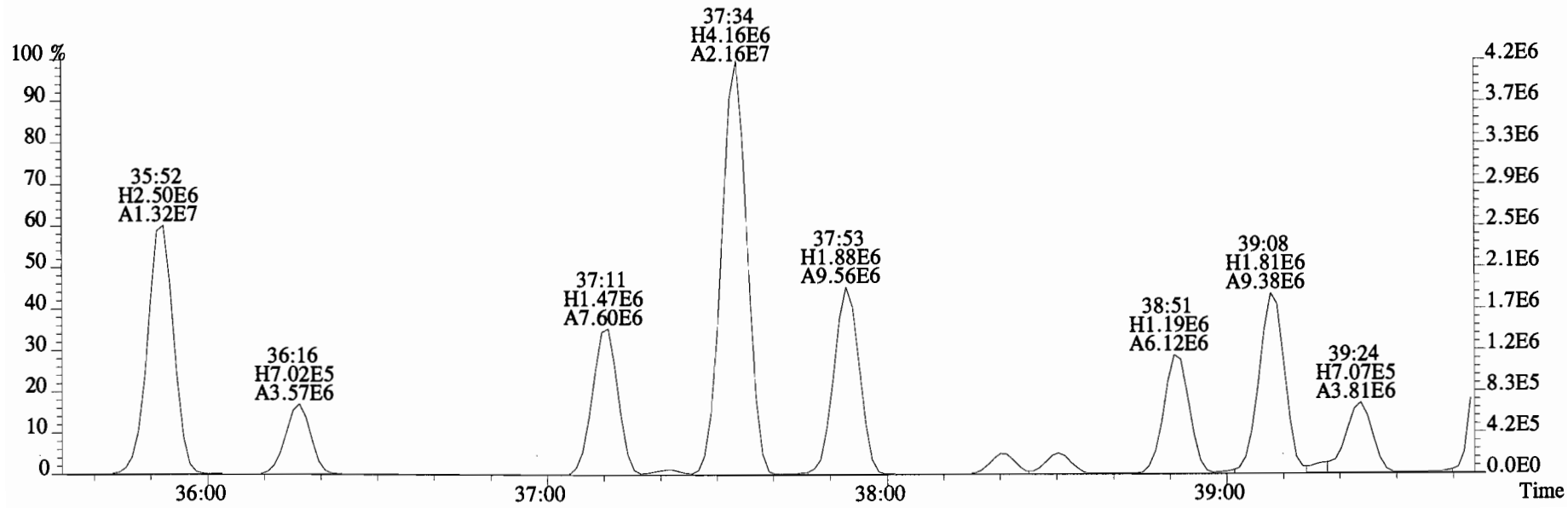
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2200.0,0.00%,F,F)



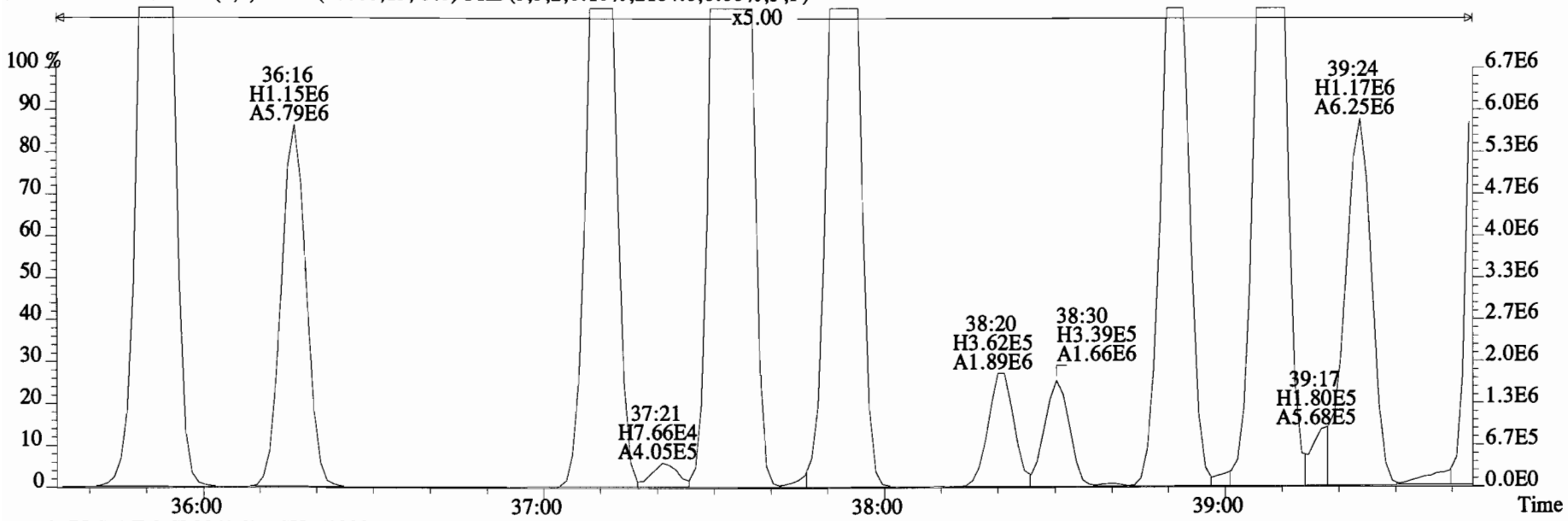
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2184.0,0.00%,F,F)



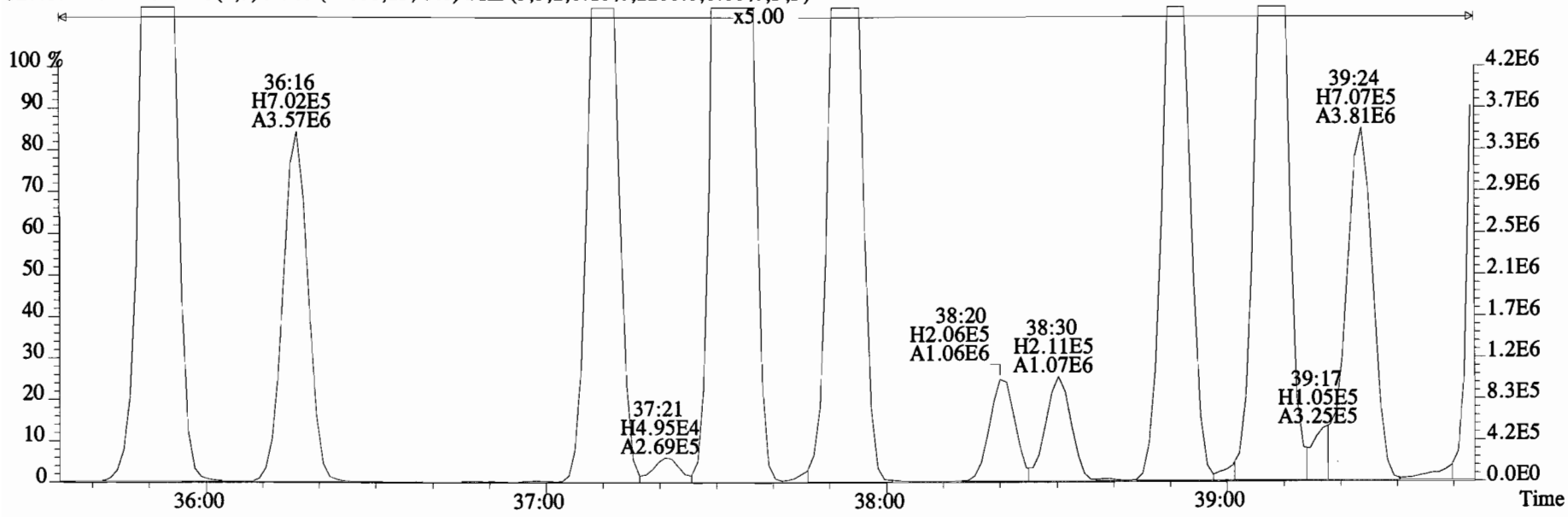
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2200.0,0.00%,F,F)



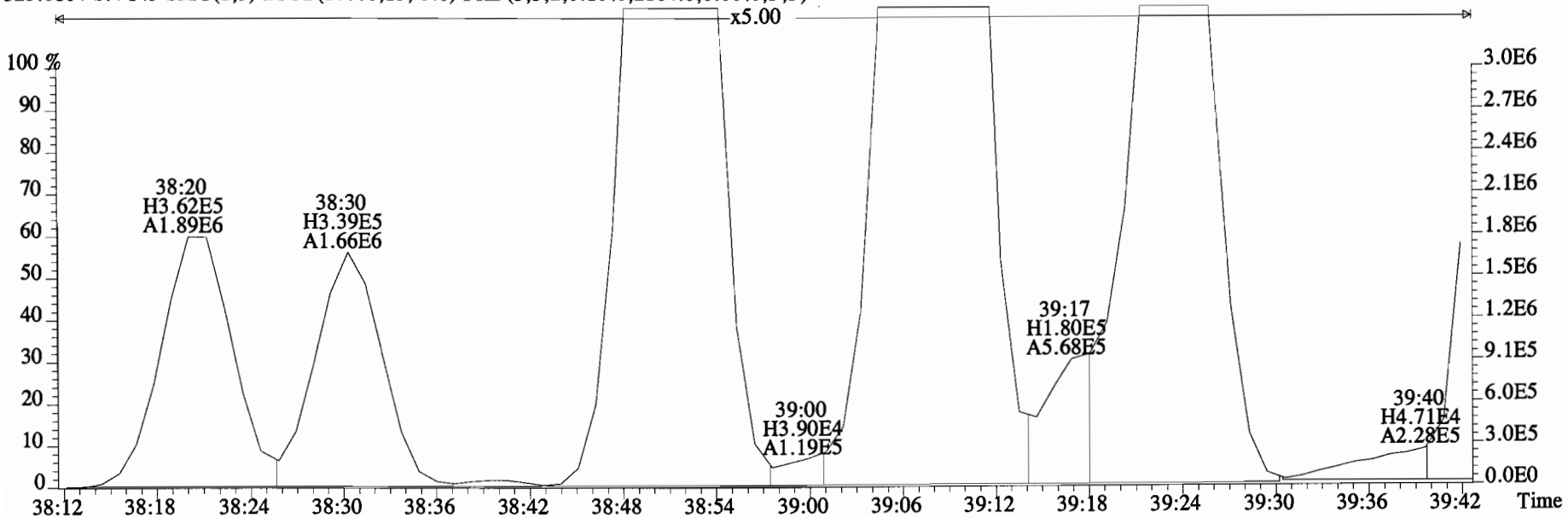
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2184.0,0.00%,F,F)



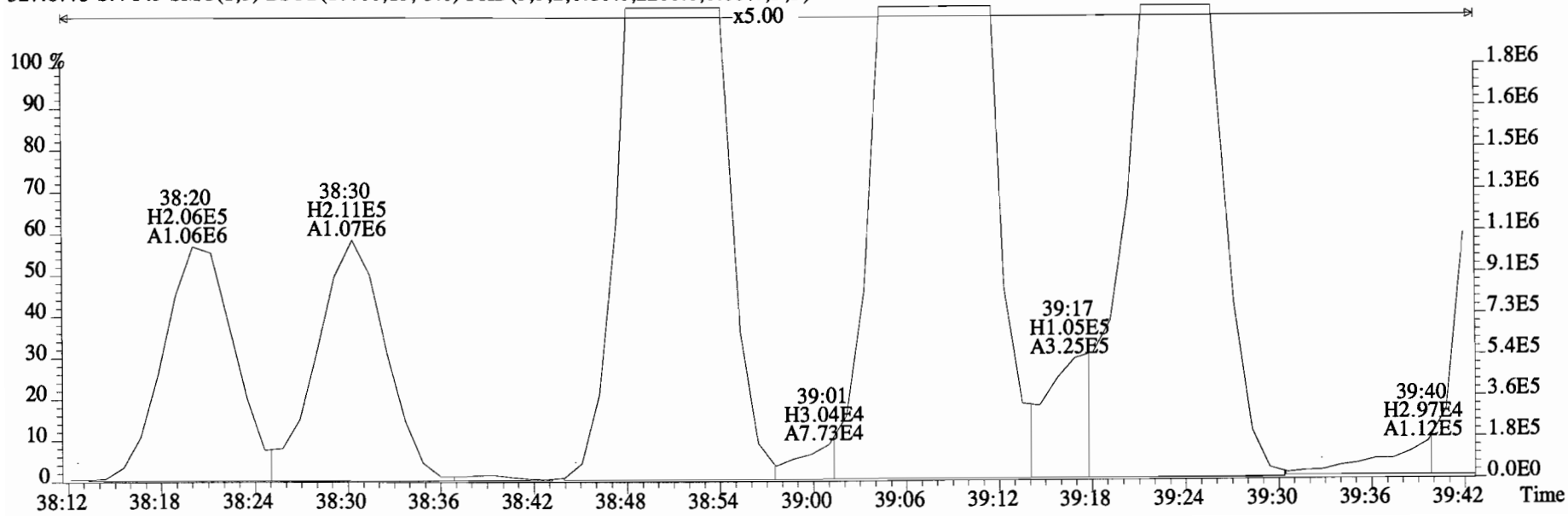
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2200.0,0.00%,F,F)



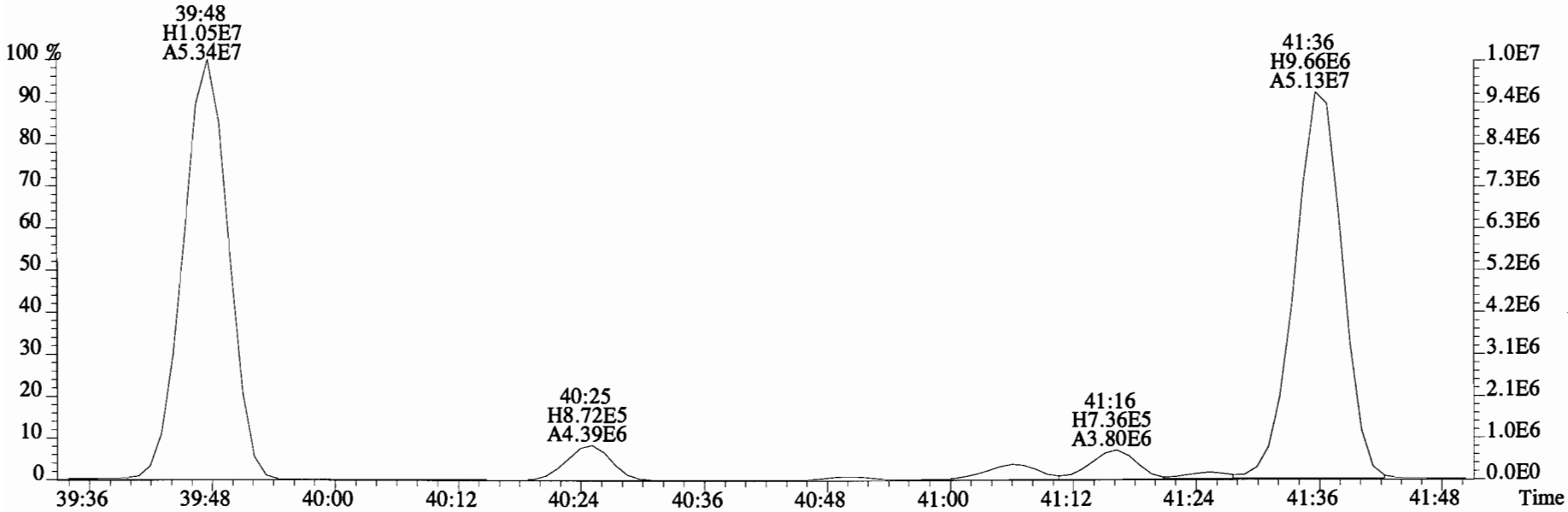
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2184.0,0.00%,F,F)



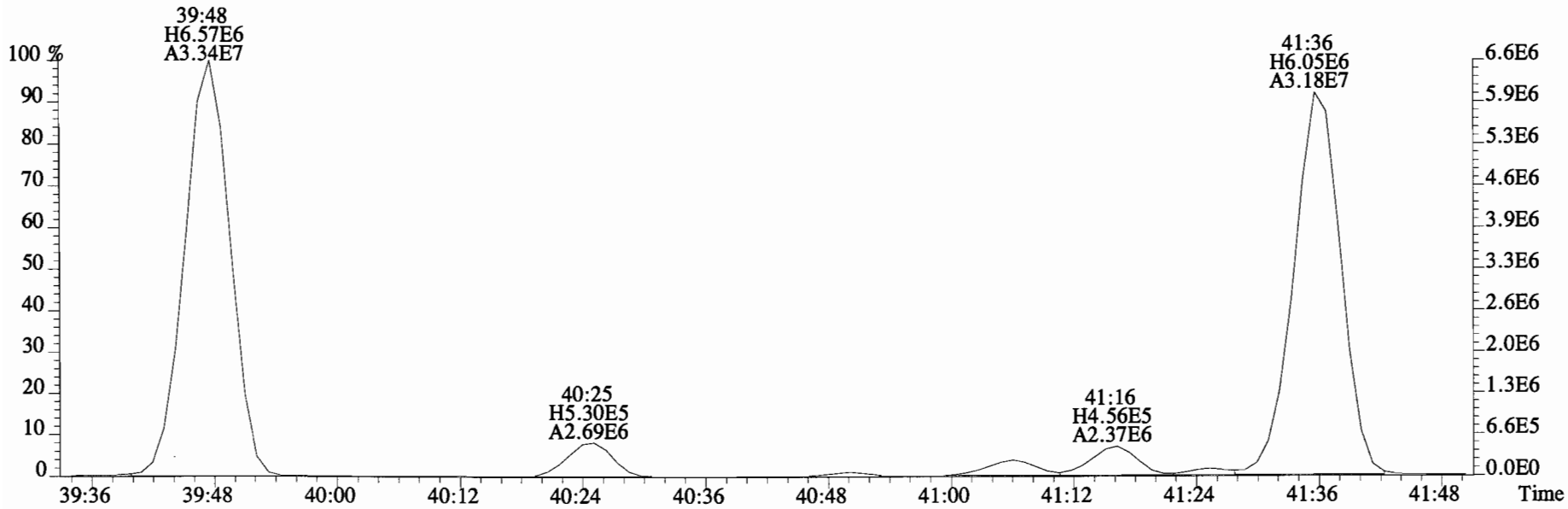
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2200.0,0.00%,F,F)

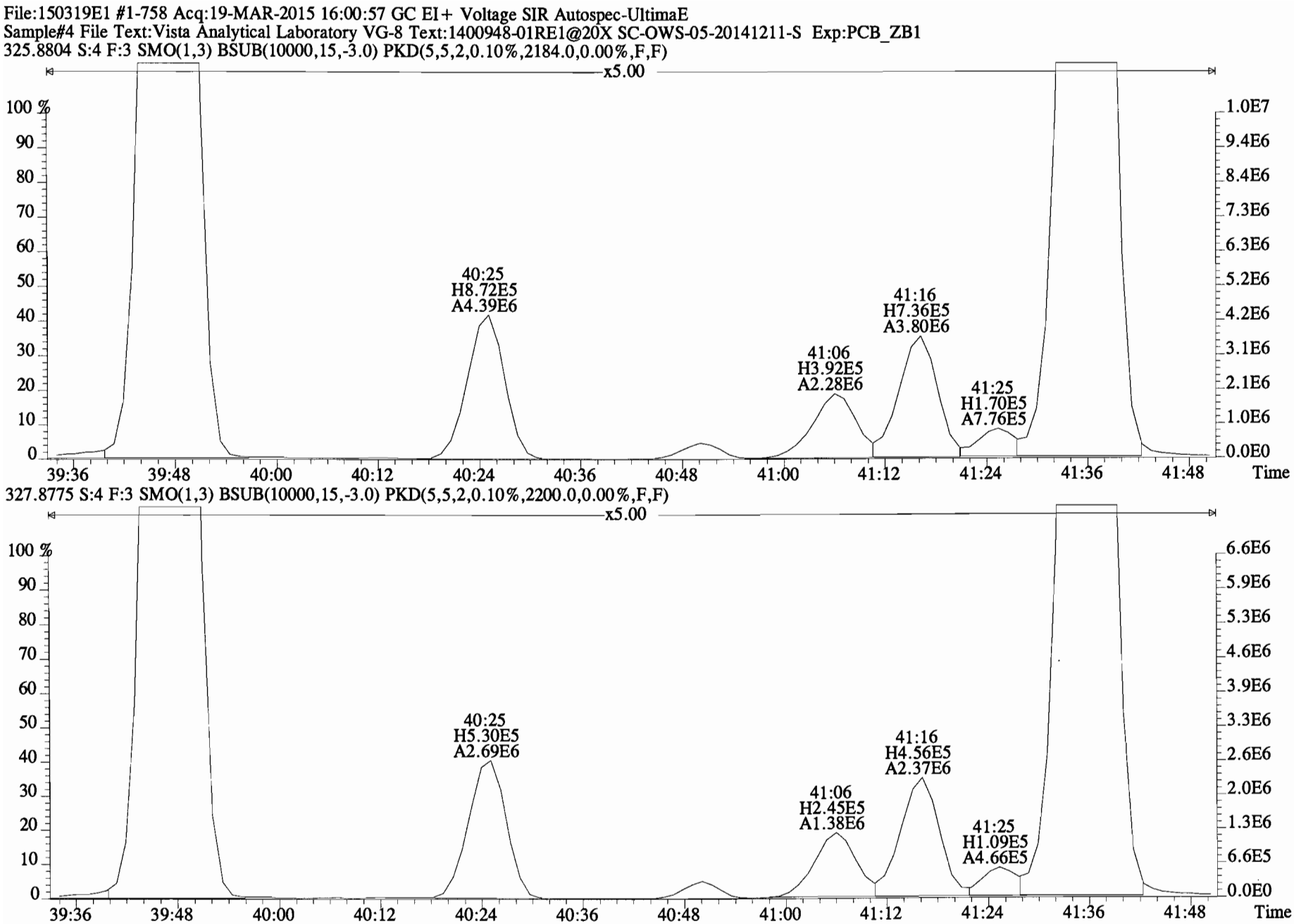


File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2184.0,0.00%,F,F)

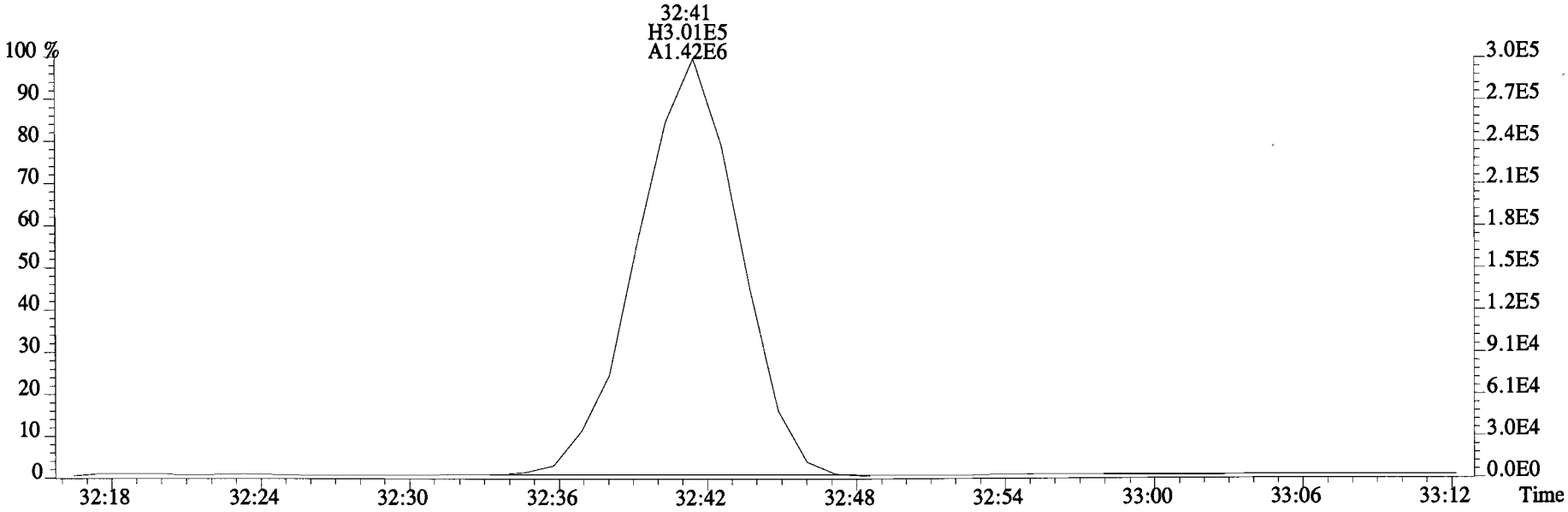


327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2200.0,0.00%,F,F)

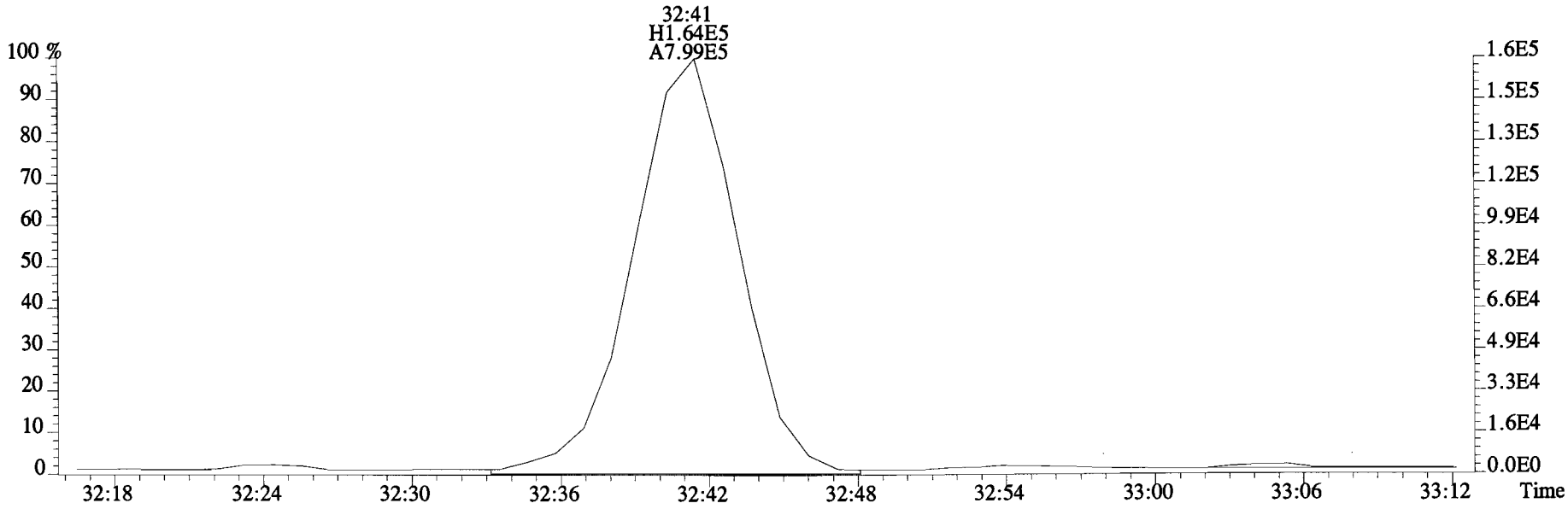



File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2184.0,0.00%,F,F)
x5.00
40:25
H8.72E5
A4.39E6
41:06
H3.92E5
A2.28E6
41:16
H7.36E5
A3.80E6
41:25
H1.70E5
A7.76E5
Time
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2200.0,0.00%,F,F)
x5.00
40:25
H5.30E5
A2.69E6
41:06
H2.45E5
A1.38E6
41:16
H4.56E5
A2.37E6
41:25
H1.09E5
A4.66E5
Time

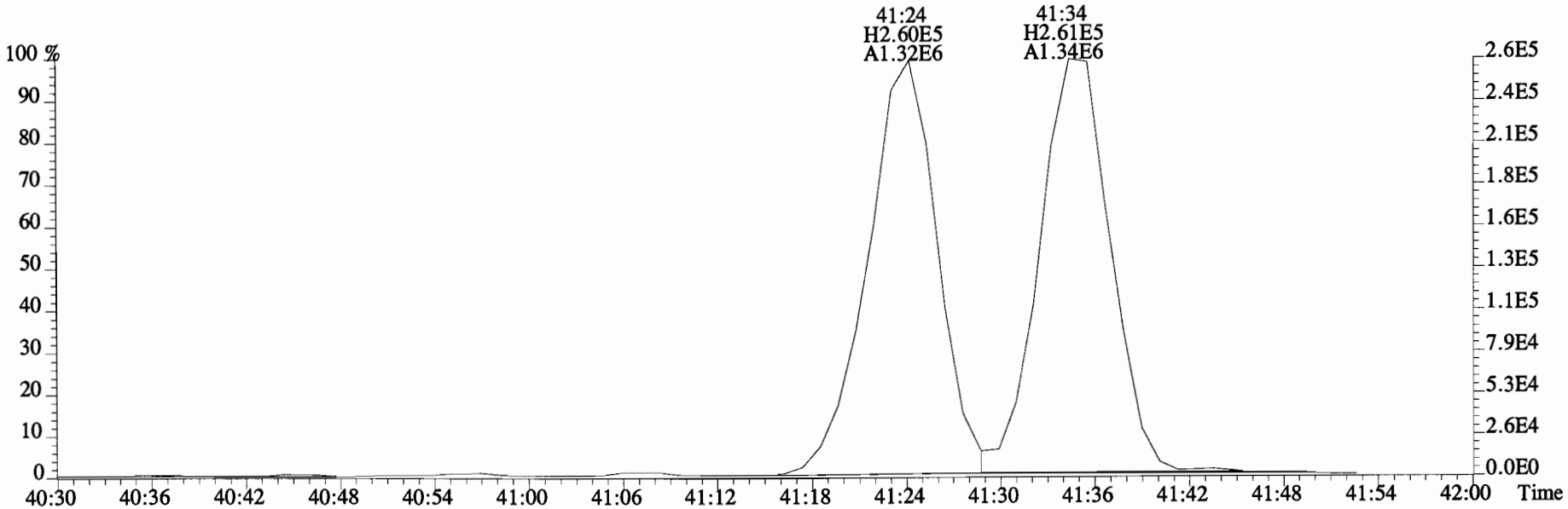
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2348.0,0.00%,F,F)



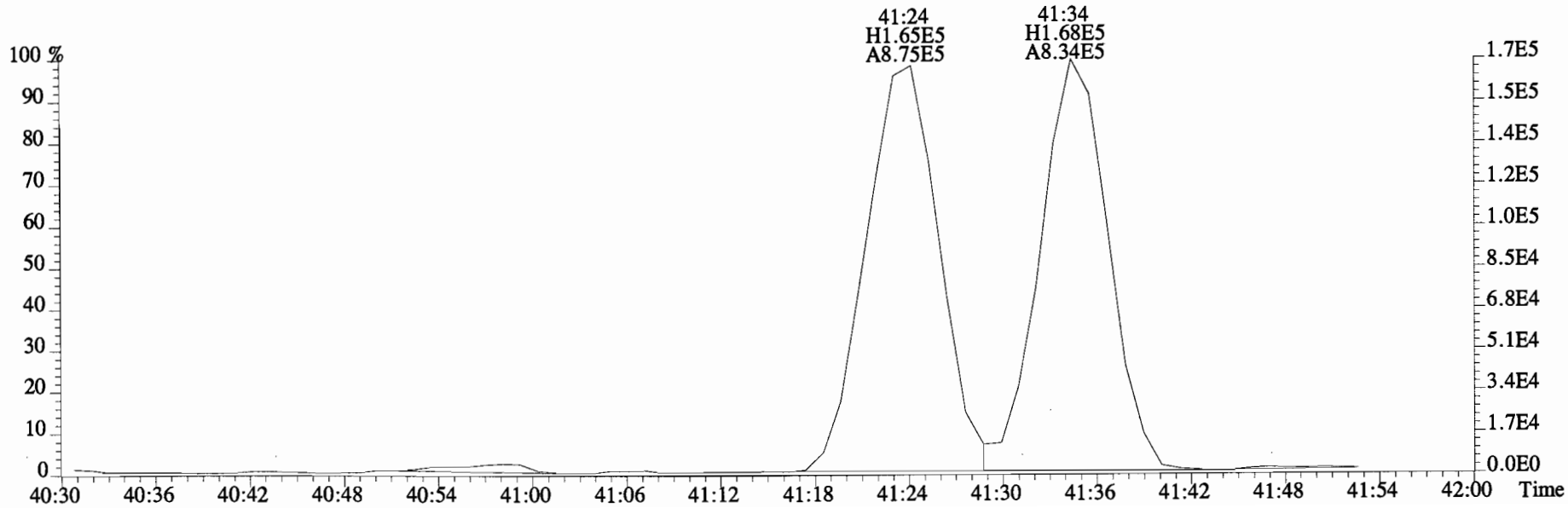
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1960.0,0.00%,F,F)



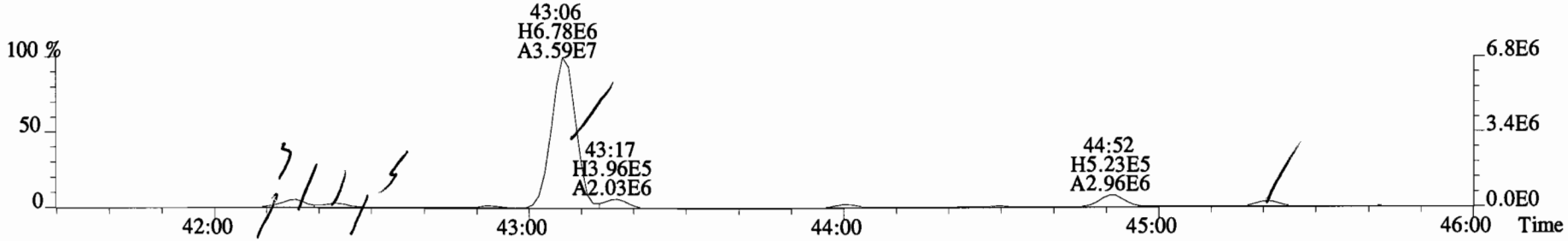
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2348.0,0.00%,F,F)



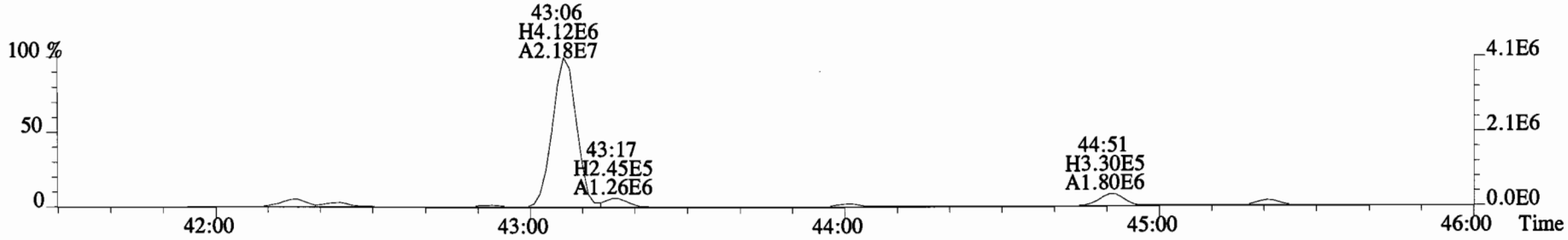
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1960.0,0.00%,F,F)



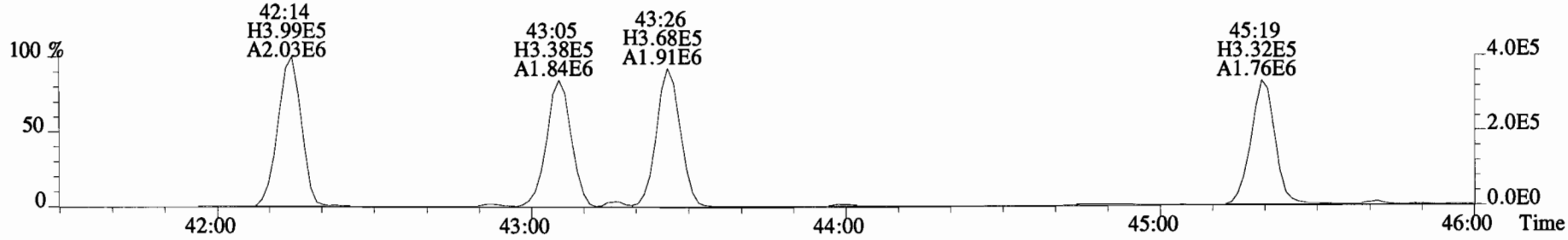
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
325.8804 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5668.0,0.00%,F,F)



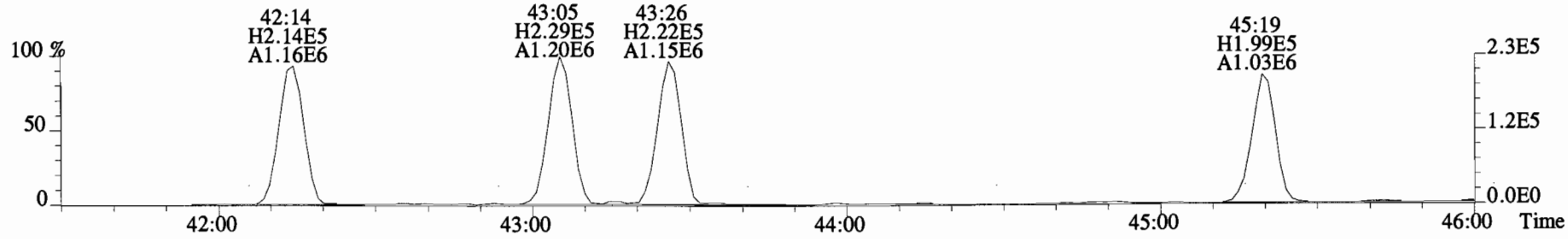
327.8775 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3500.0,0.00%,F,F)



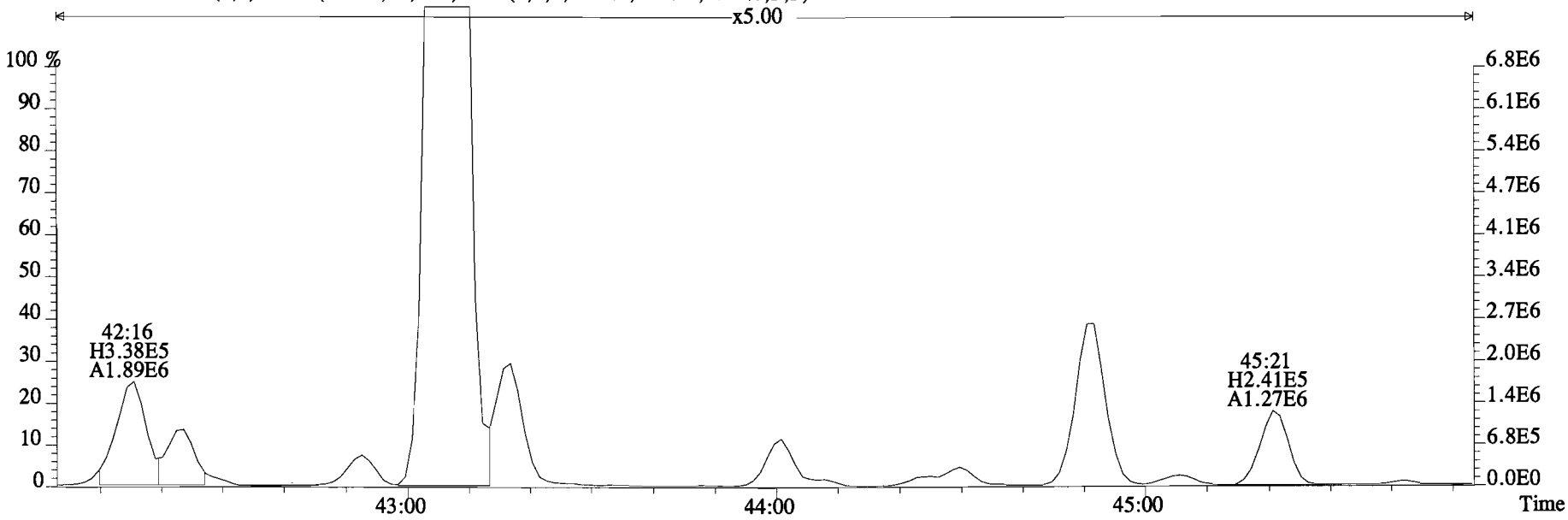
337.9207 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1640.0,0.00%,F,F)



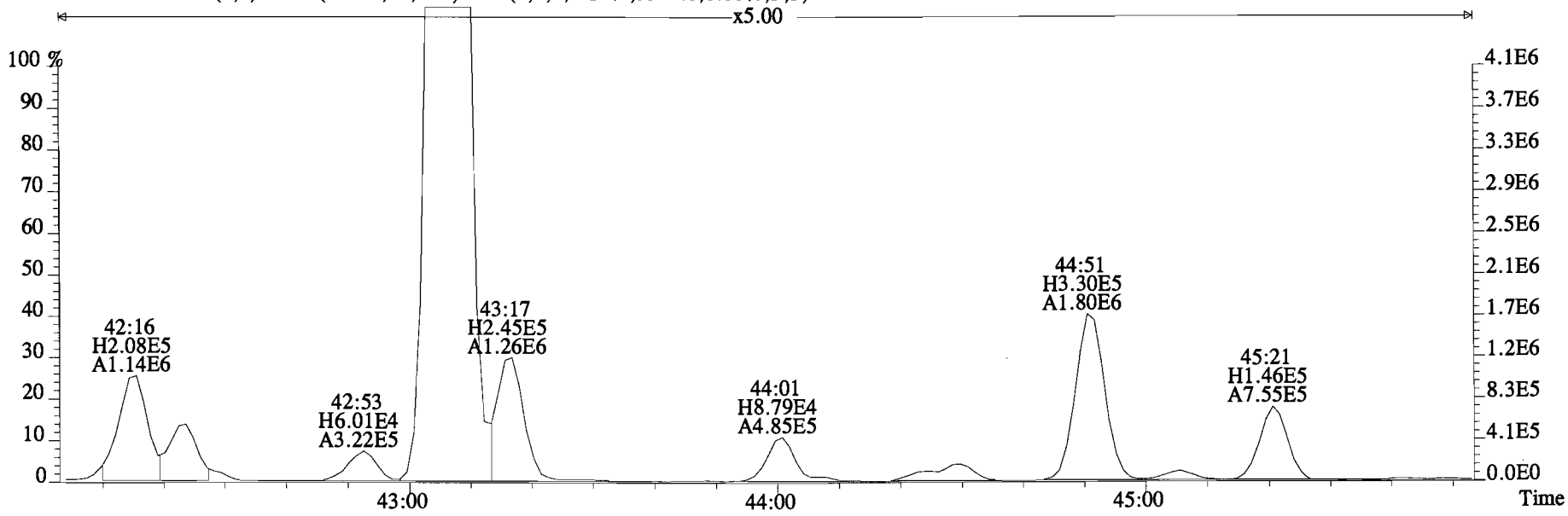
339.9177 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2148.0,0.00%,F,F)



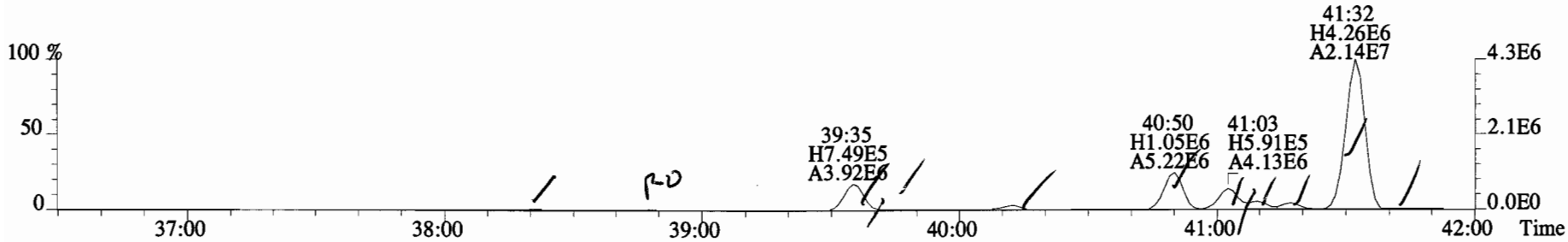
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
325.8804 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5668.0,0.00%,F,F)



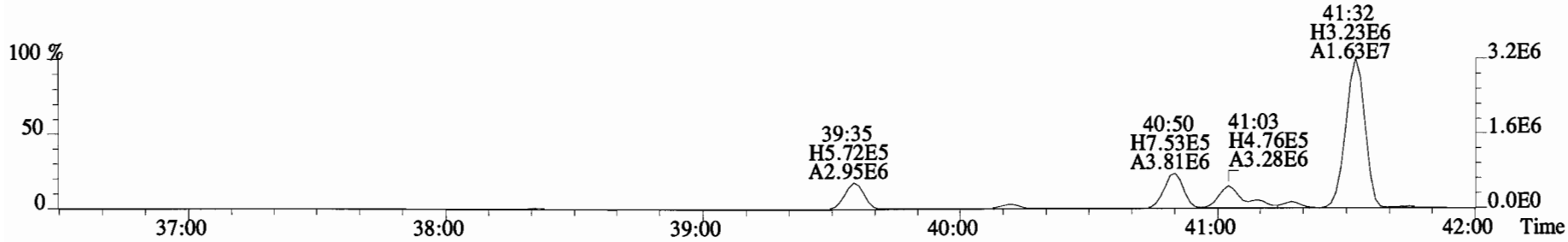
327.8775 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3500.0,0.00%,F,F)



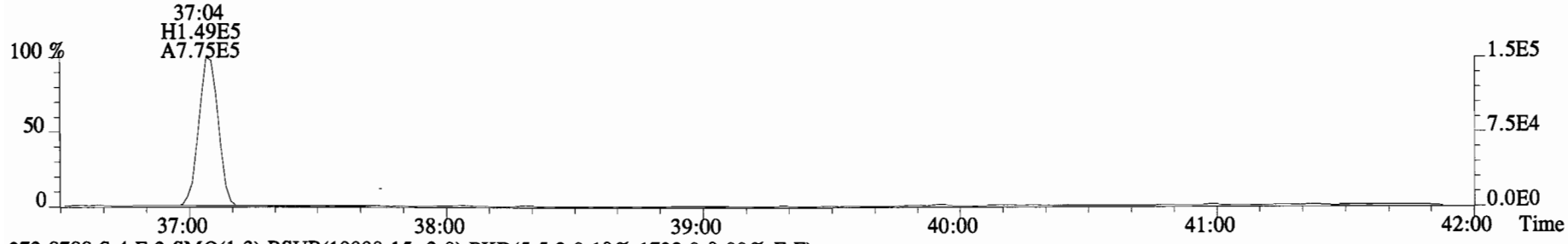
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1968.0,0.00%,F,F)



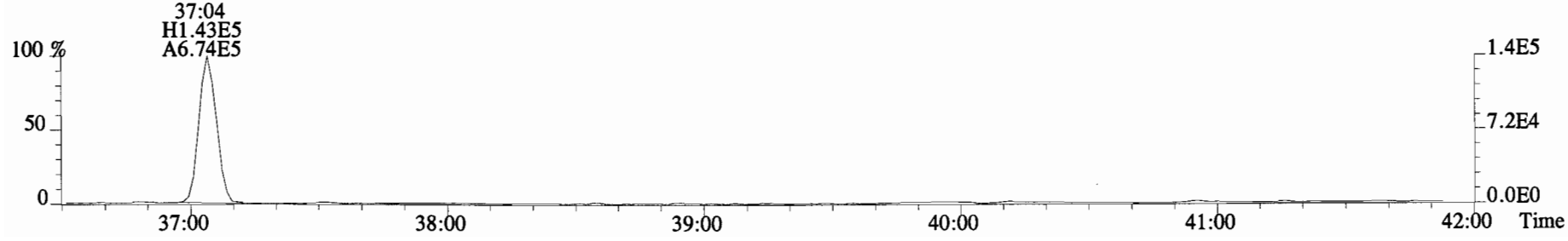
361.8385 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1852.0,0.00%,F,F)



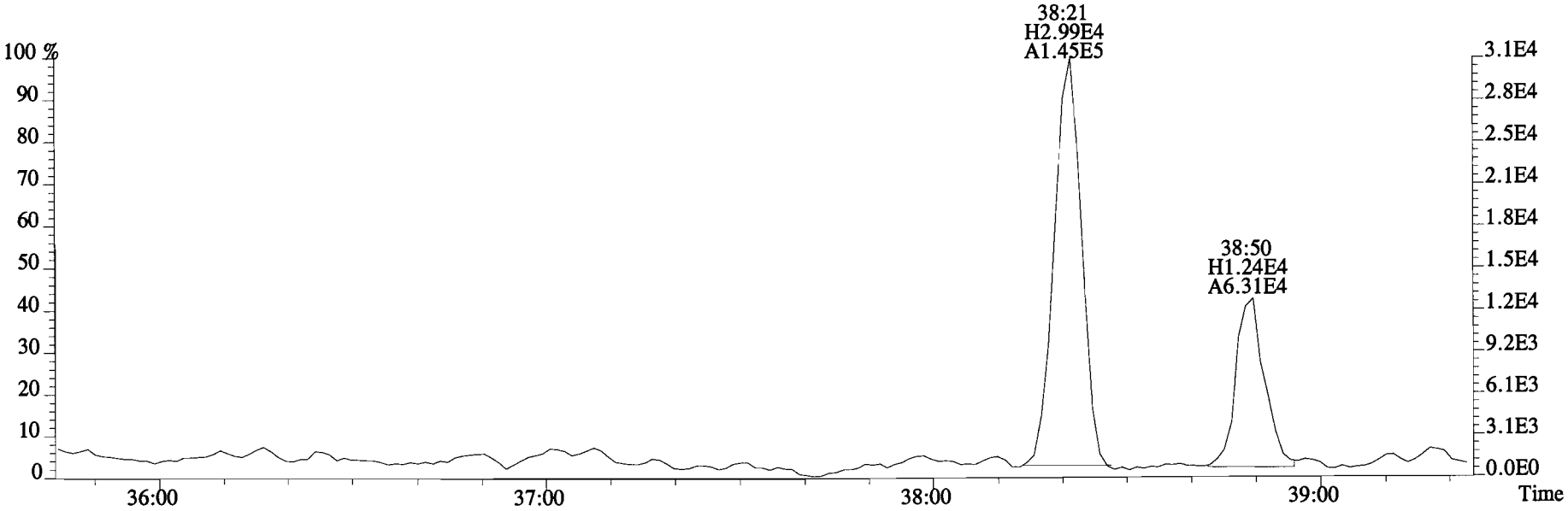
371.8817 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1752.0,0.00%,F,F)



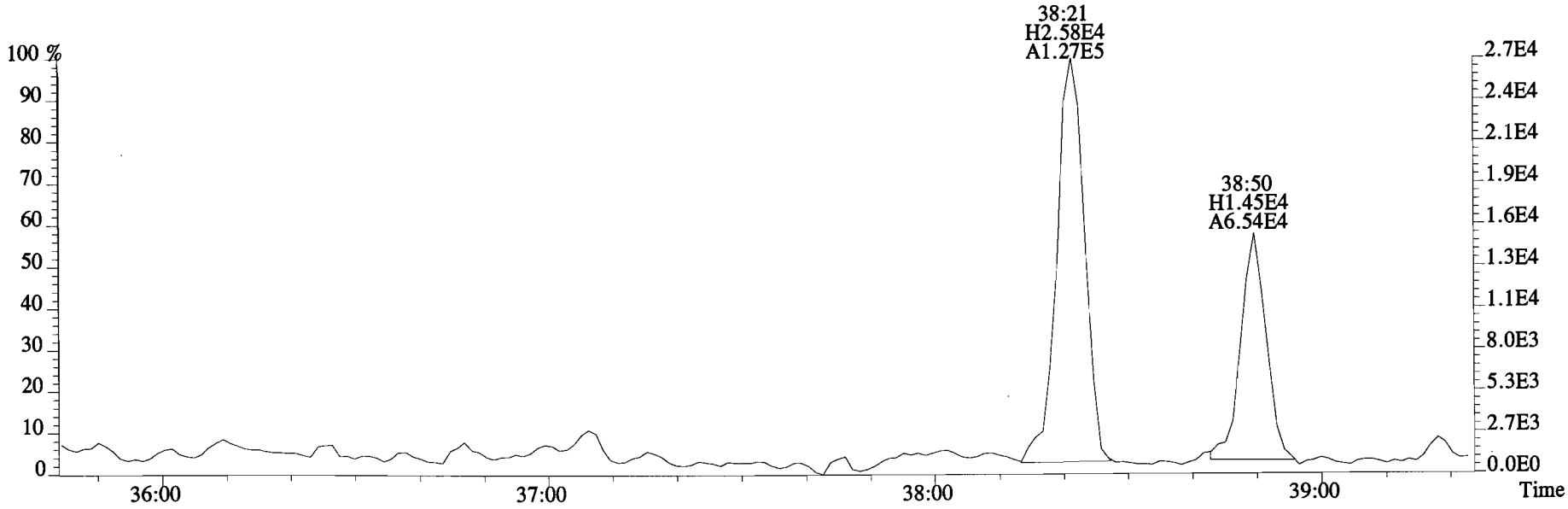
373.8788 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1732.0,0.00%,F,F)



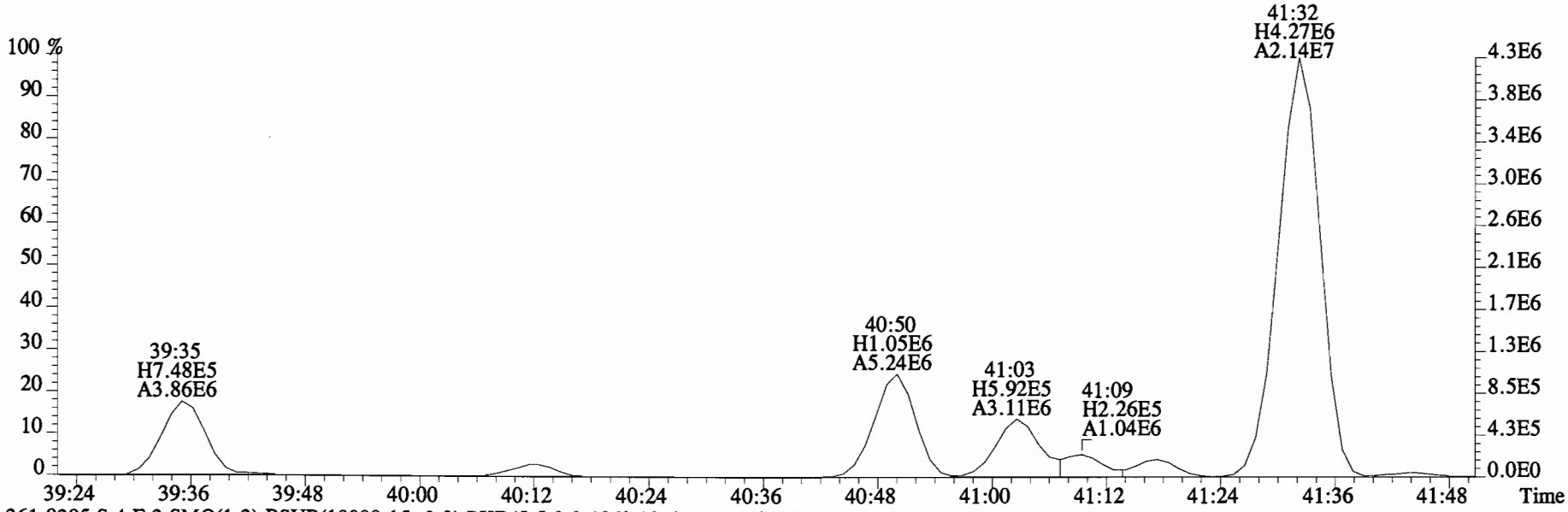
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1968.0,0.00%,F,F)



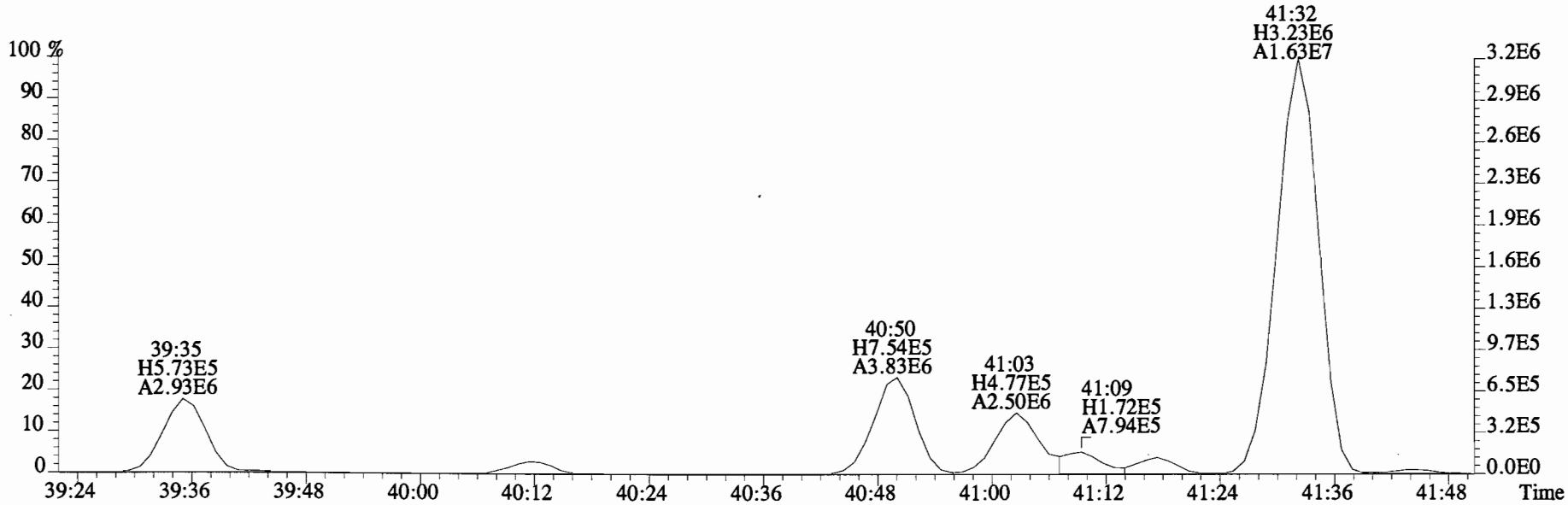
361.8385 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1852.0,0.00%,F,F)

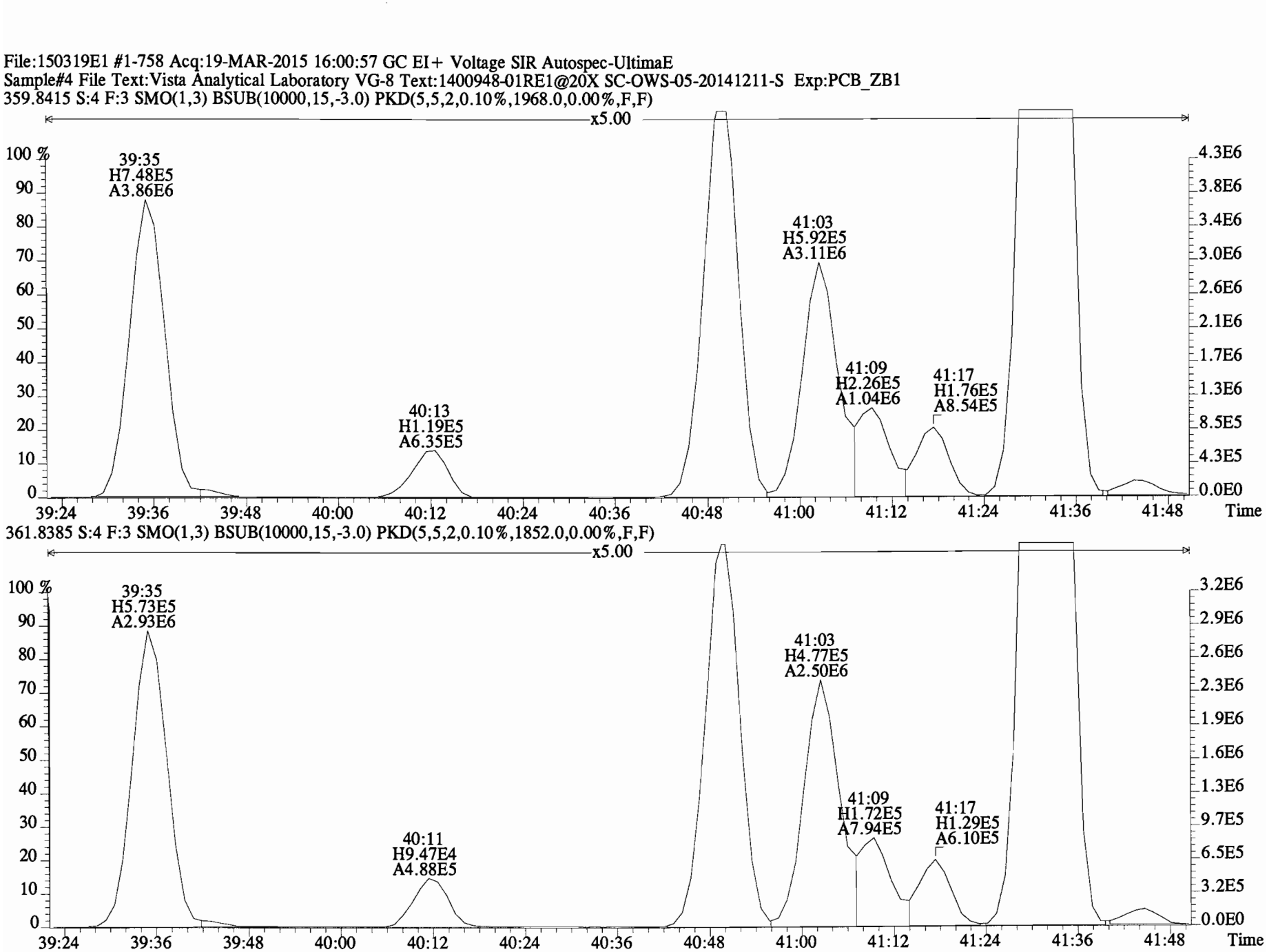


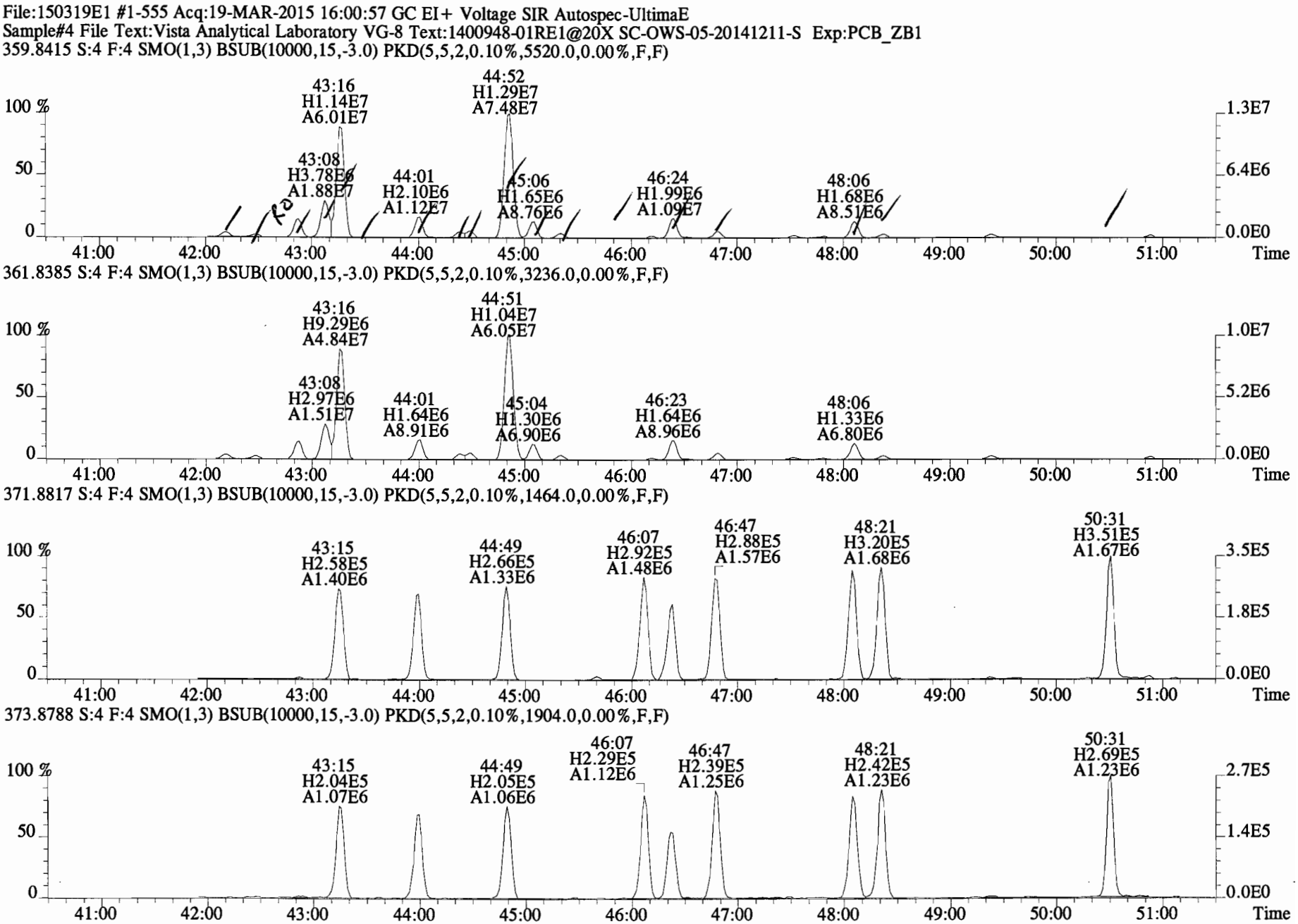
File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1968.0,0.00%,F,F)



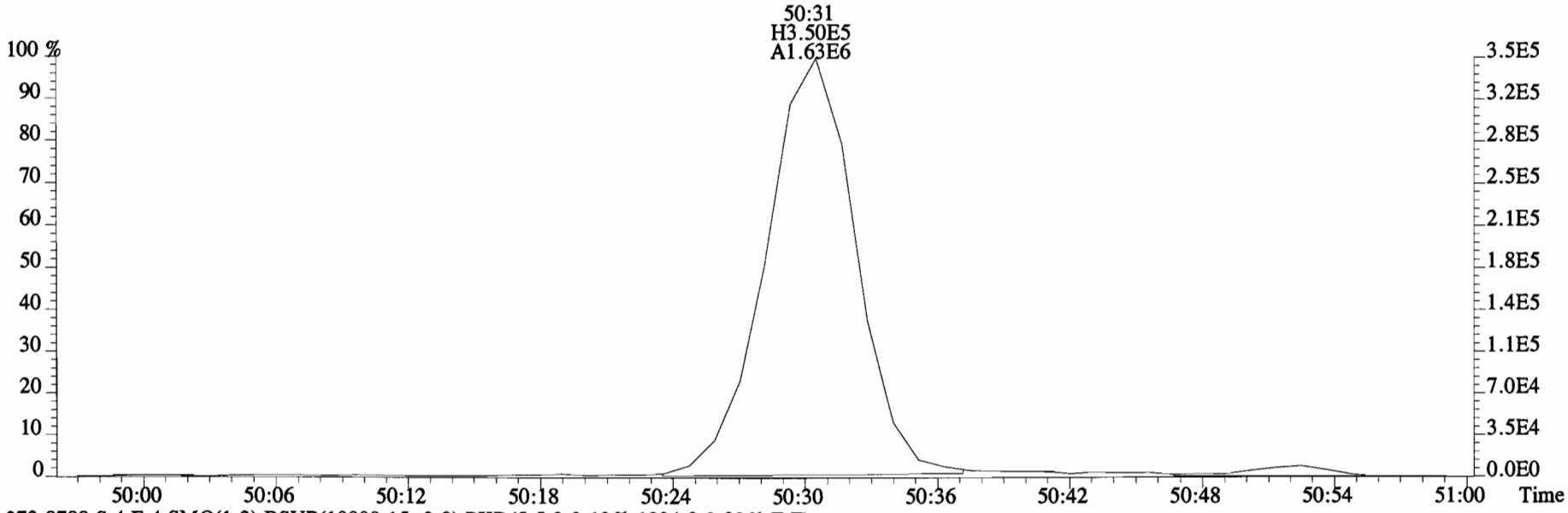
361.8385 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1852.0,0.00%,F,F)



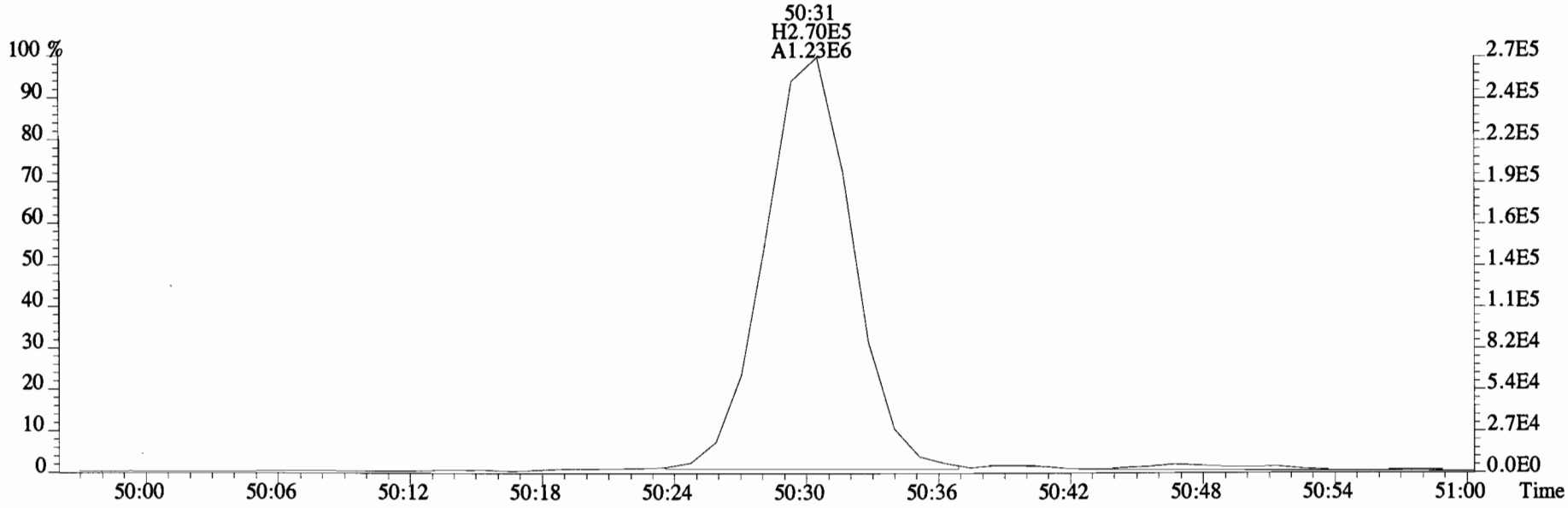

File:150319E1 #1-758 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1968.0,0.00%,F,F)
x5.00
39:35
H7.48E5
A3.86E6
40:13
H1.19E5
A6.35E5
41:03
H5.92E5
A3.11E6
41:09
H2.26E5
A1.04E6
41:17
H1.76E5
A8.54E5
Time
361.8385 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1852.0,0.00%,F,F)
x5.00
39:35
H5.73E5
A2.93E6
40:11
H9.47E4
A4.88E5
41:03
H4.77E5
A2.50E6
41:09
H1.72E5
A7.94E5
41:17
H1.29E5
A6.10E5
Time


File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5520.0,0.00%,F,F)
43:16 H1.14E7 A6.01E7
44:52 H1.29E7 A7.48E7
43:08 H3.78E6 A1.88E7
44:01 H2.10E6 A1.12E7
45:06 H1.65E6 A8.76E6
46:24 H1.99E6 A1.09E7
48:06 H1.68E6 A8.51E6
Ra
100 %
50
0
1.3E7
6.4E6
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:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3236.0,0.00%,F,F)
43:16 H9.29E6 A4.84E7
44:51 H1.04E7 A6.05E7
43:08 H2.97E6 A1.51E7
44:01 H1.64E6 A8.91E6
45:04 H1.30E6 A6.90E6
46:23 H1.64E6 A8.96E6
48:06 H1.33E6 A6.80E6
100 %
50
0
1.0E7
5.2E6
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:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1464.0,0.00%,F,F)
43:15 H2.58E5 A1.40E6
44:49 H2.66E5 A1.33E6
46:07 H2.92E5 A1.48E6
46:47 H2.88E5 A1.57E6
48:21 H3.20E5 A1.68E6
50:31 H3.51E5 A1.67E6
100 %
50
0
3.5E5
1.8E5
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:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1904.0,0.00%,F,F)
43:15 H2.04E5 A1.07E6
44:49 H2.05E5 A1.06E6
46:07 H2.29E5 A1.12E6
46:47 H2.39E5 A1.25E6
48:21 H2.42E5 A1.23E6
50:31 H2.69E5 A1.23E6
100 %
50
0
2.7E5
1.4E5
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

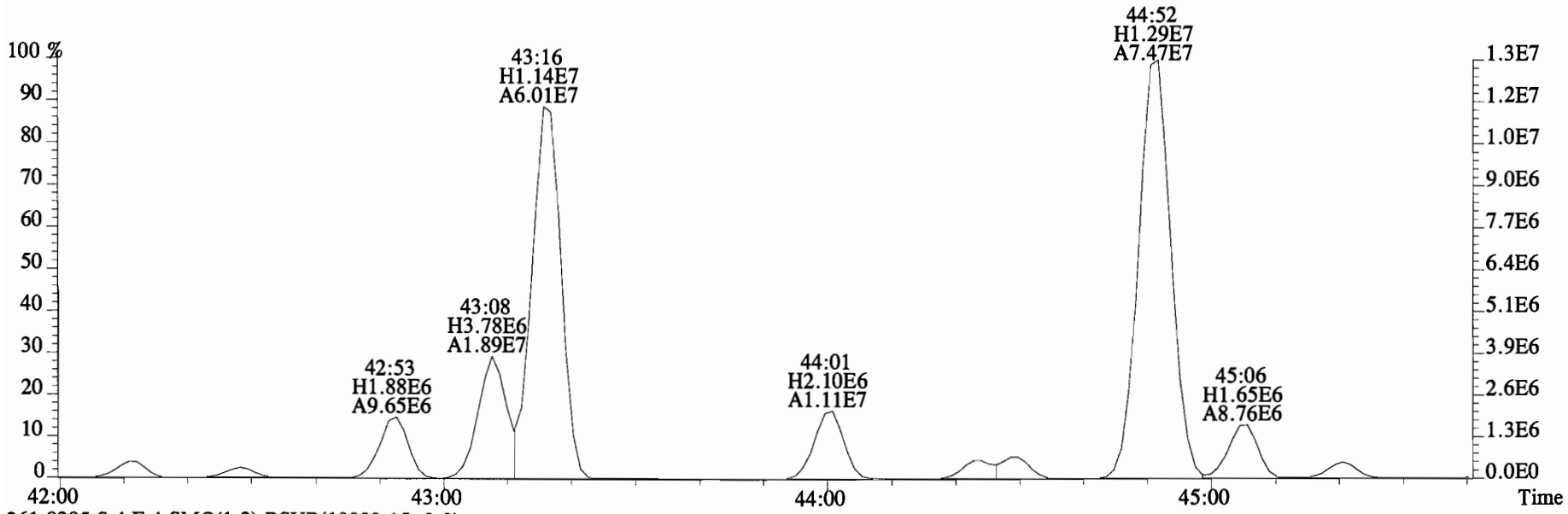
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1464.0,0.00%,F,F)



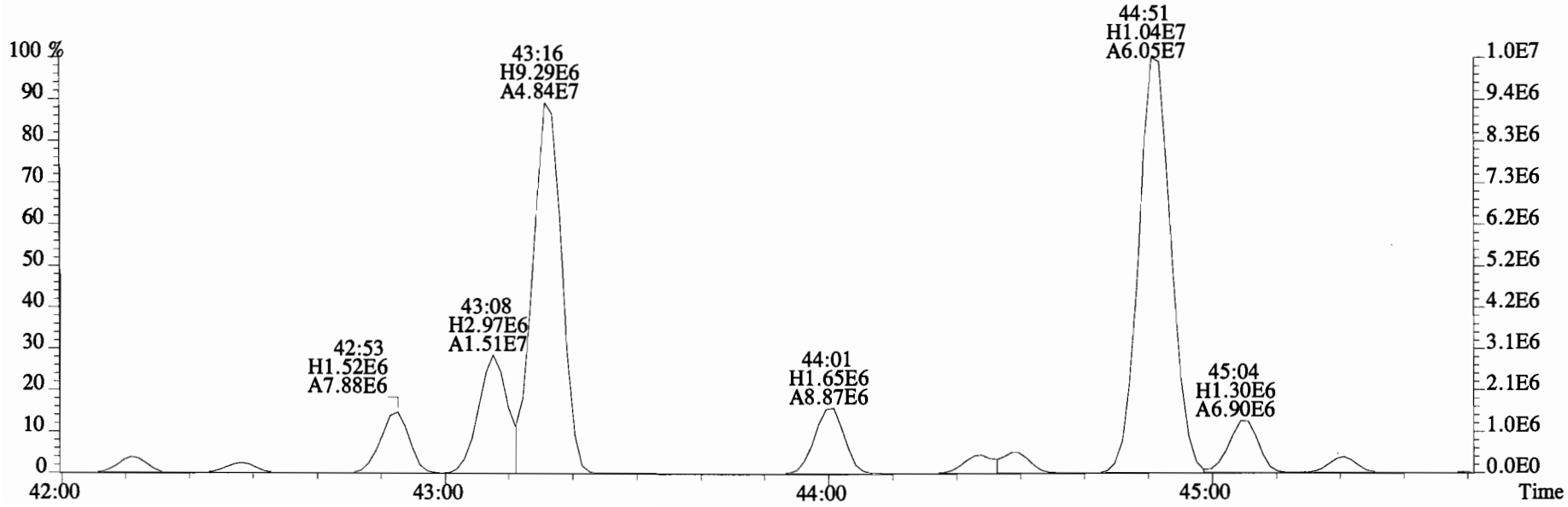
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1904.0,0.00%,F,F)

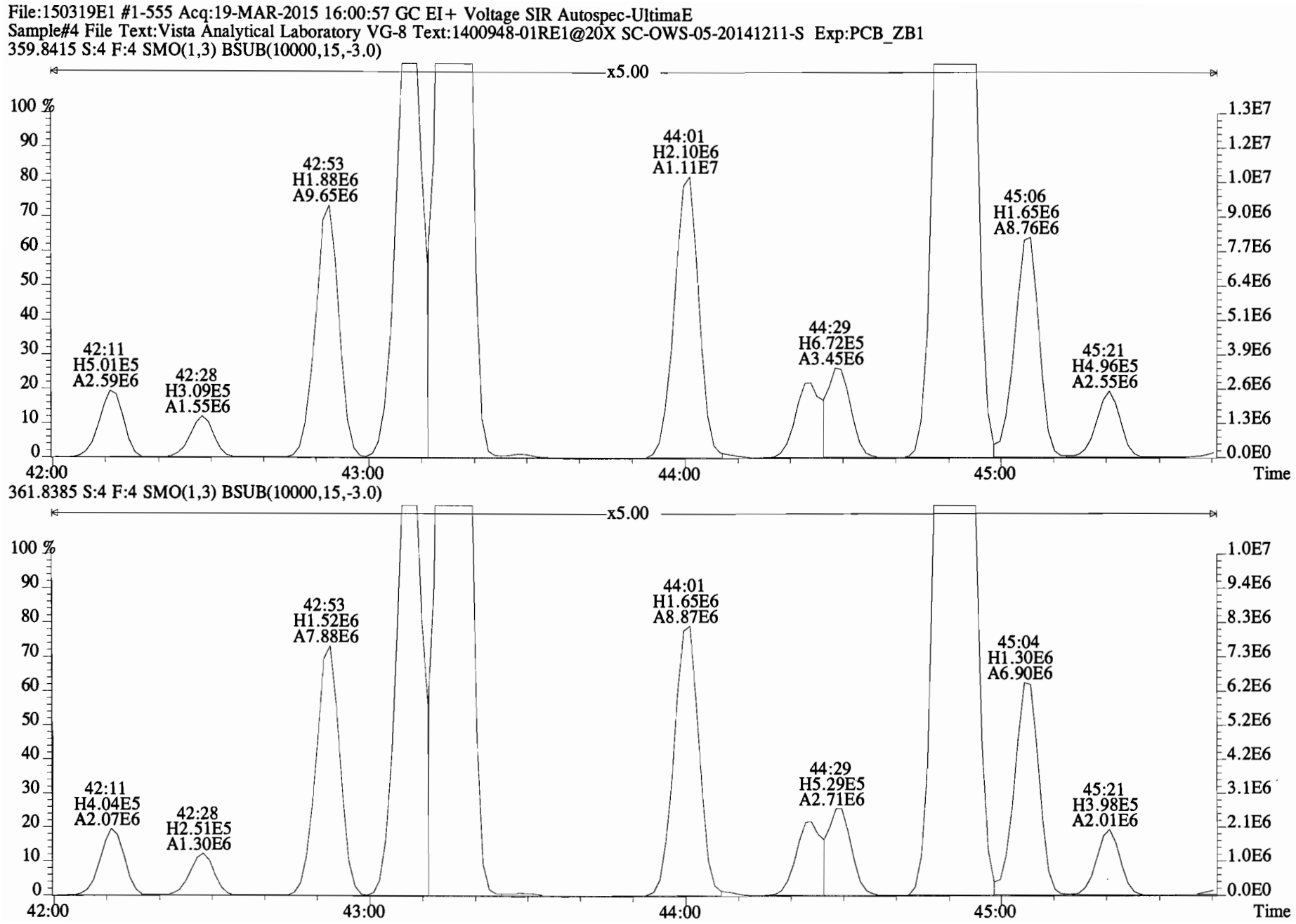


File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)

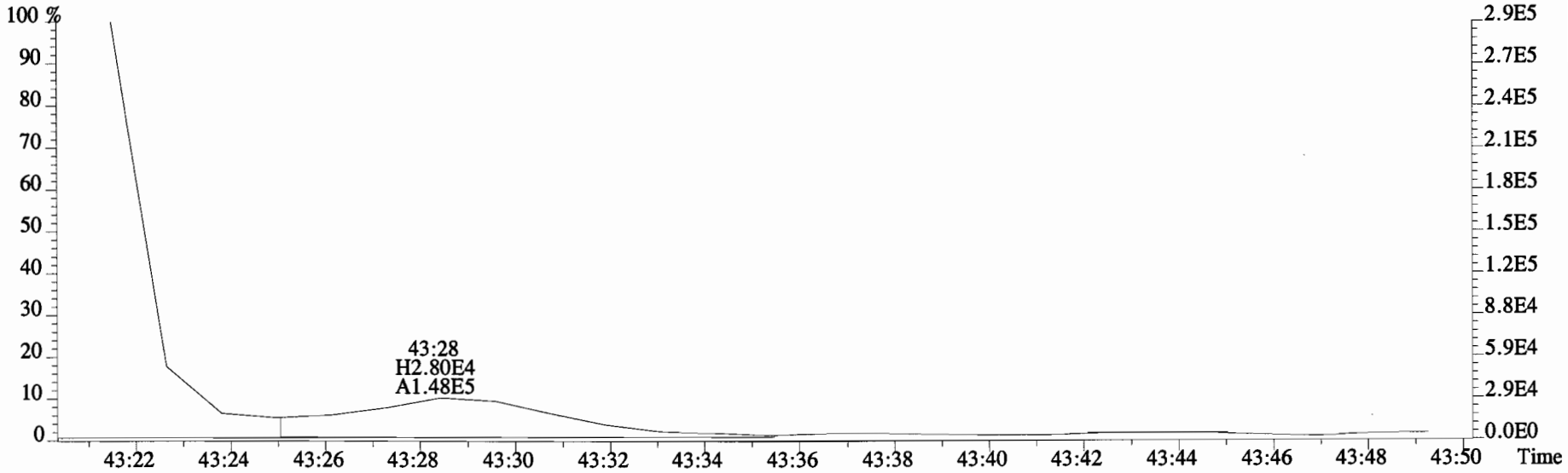


361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)

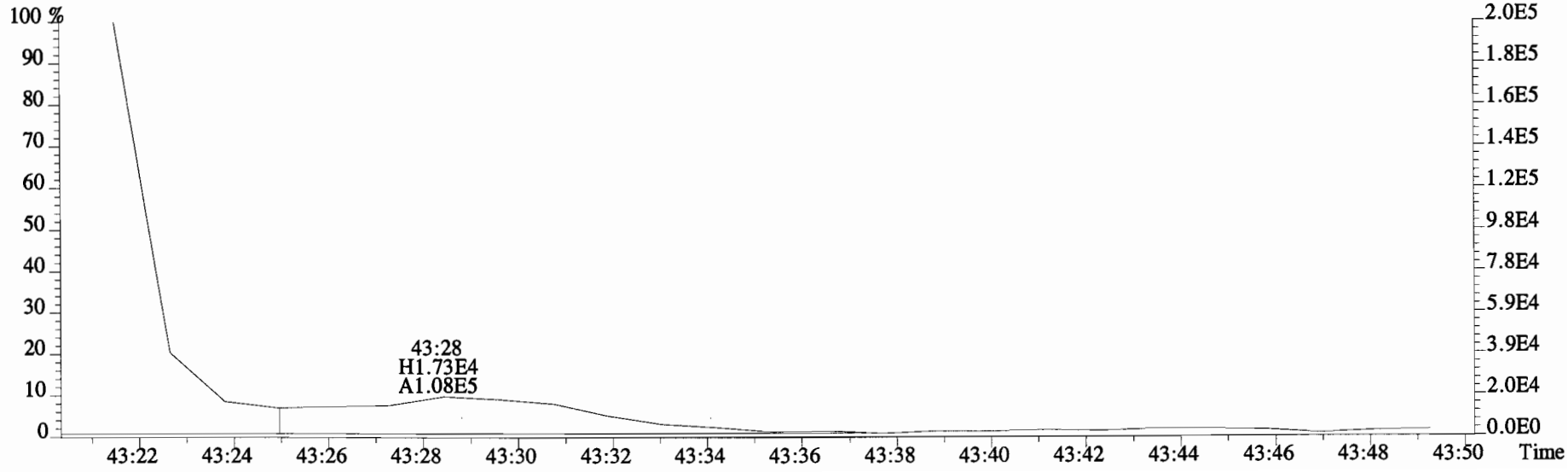



File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
42:11 H5.01E5 A2.59E6
42:28 H3.09E5 A1.55E6
42:53 H1.88E6 A9.65E6
44:01 H2.10E6 A1.11E7
44:29 H6.72E5 A3.45E6
45:06 H1.65E6 A8.76E6
45:21 H4.96E5 A2.55E6
Time
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
42:11 H4.04E5 A2.07E6
42:28 H2.51E5 A1.30E6
42:53 H1.52E6 A7.88E6
44:01 H1.65E6 A8.87E6
44:29 H5.29E5 A2.71E6
45:04 H1.30E6 A6.90E6
45:21 H3.98E5 A2.01E6
Time

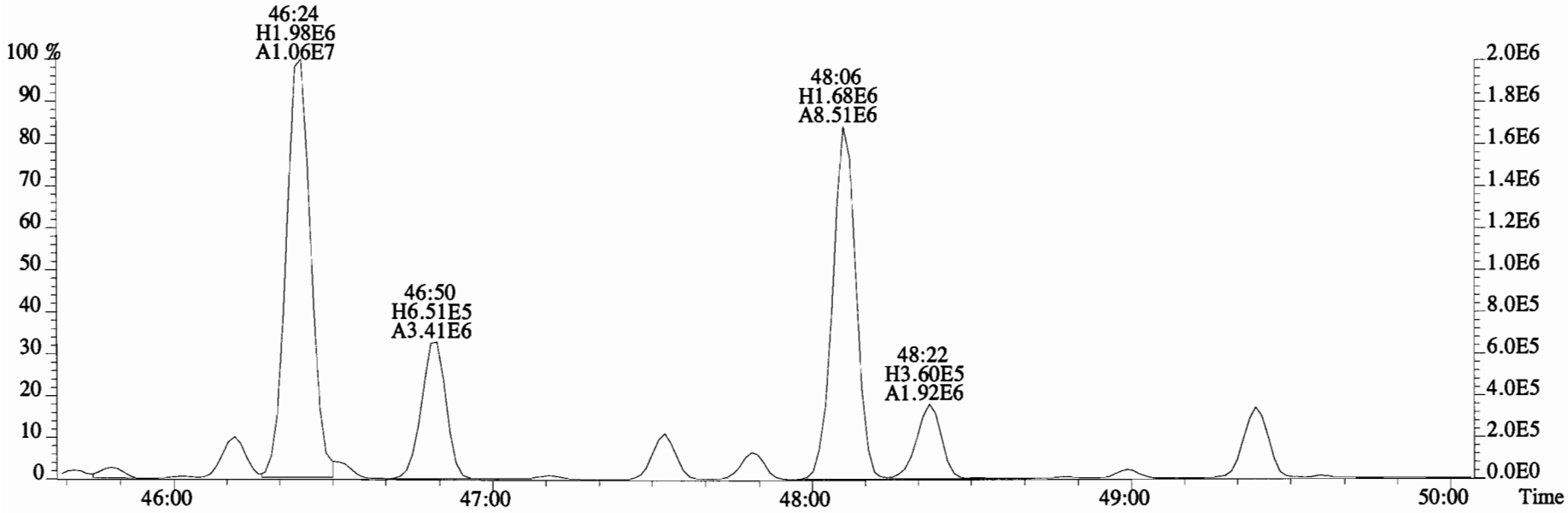
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)



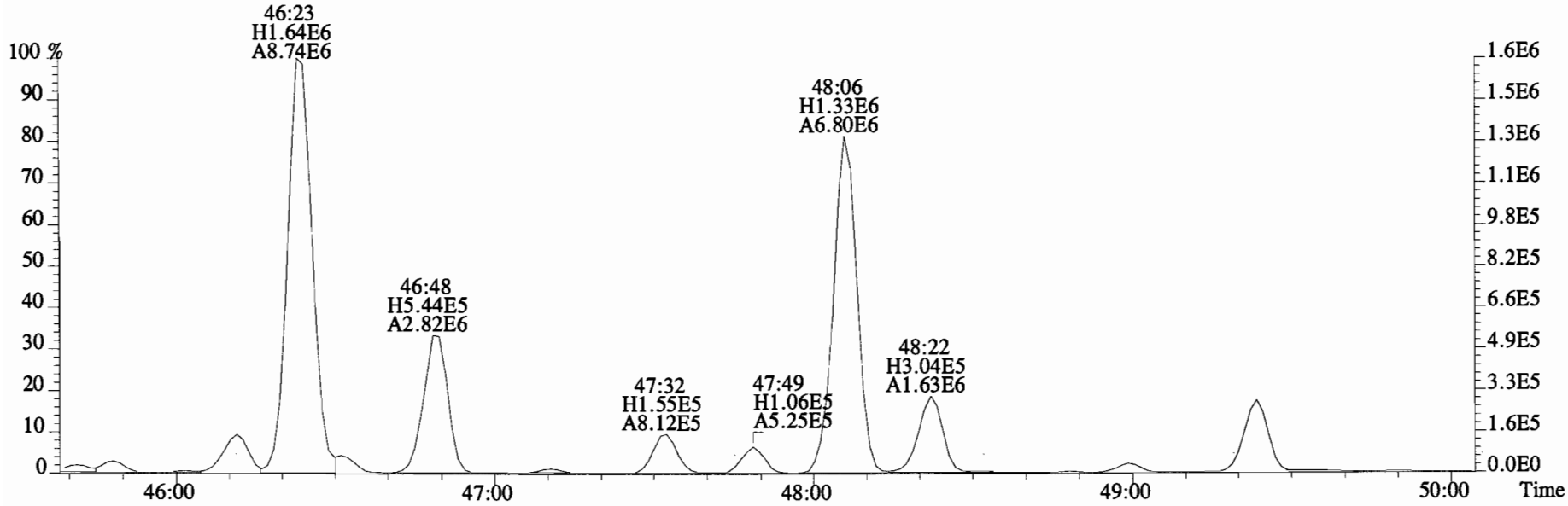
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)



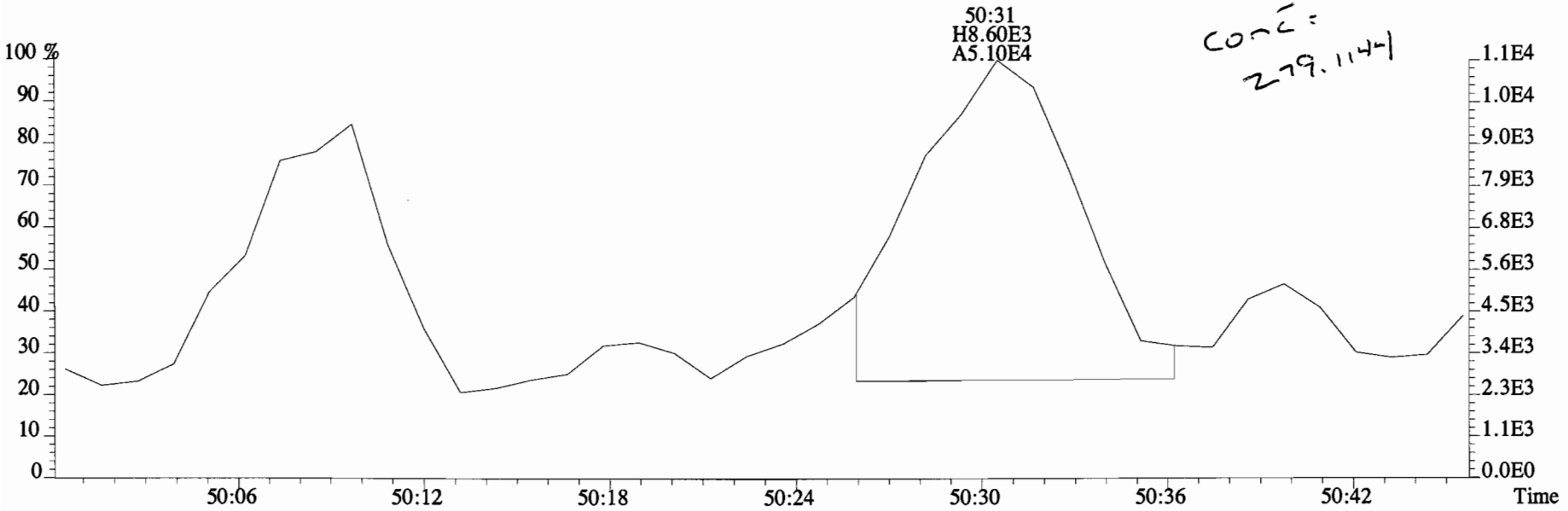
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)



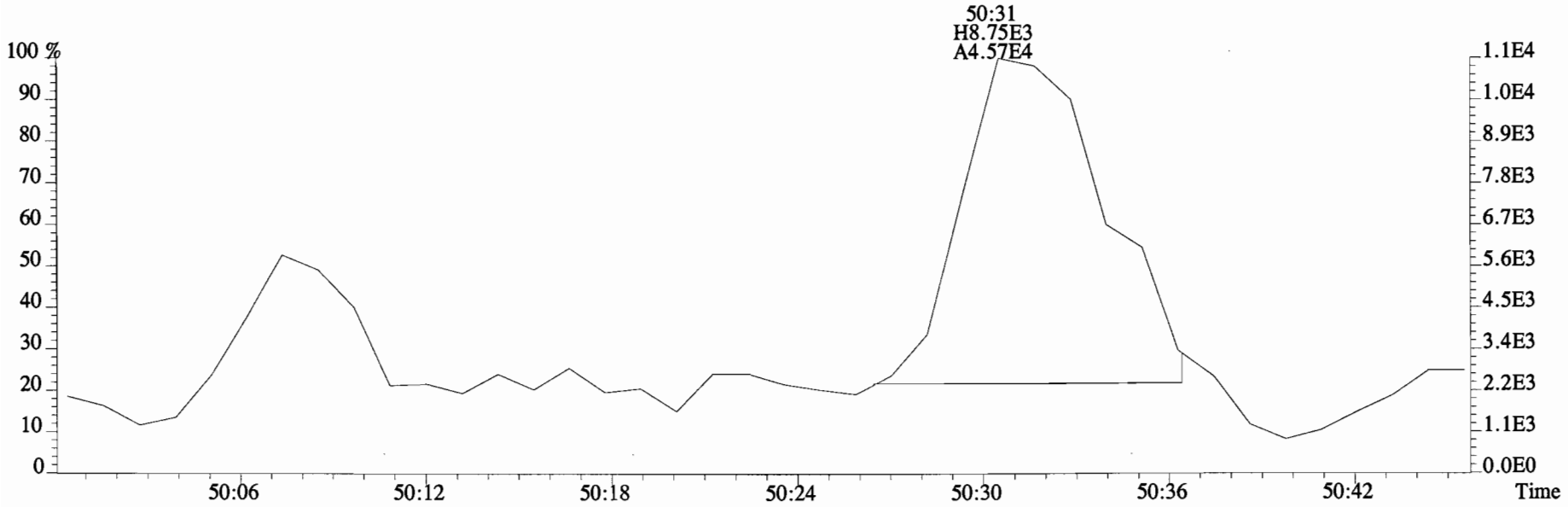
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)



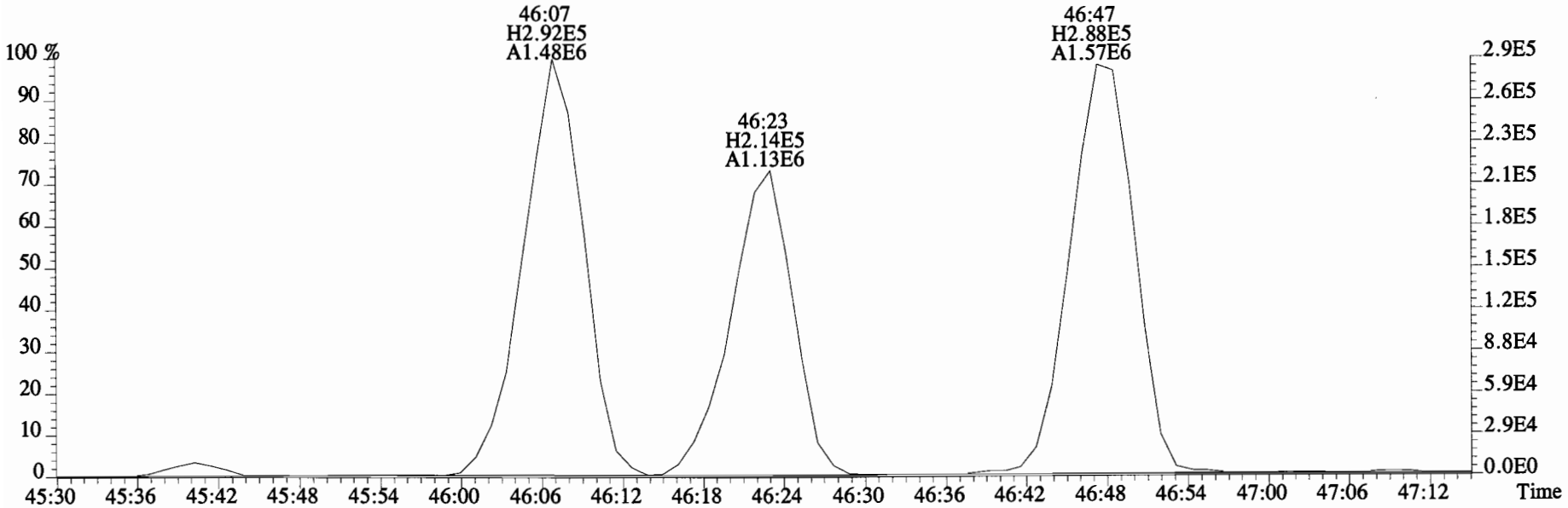
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)



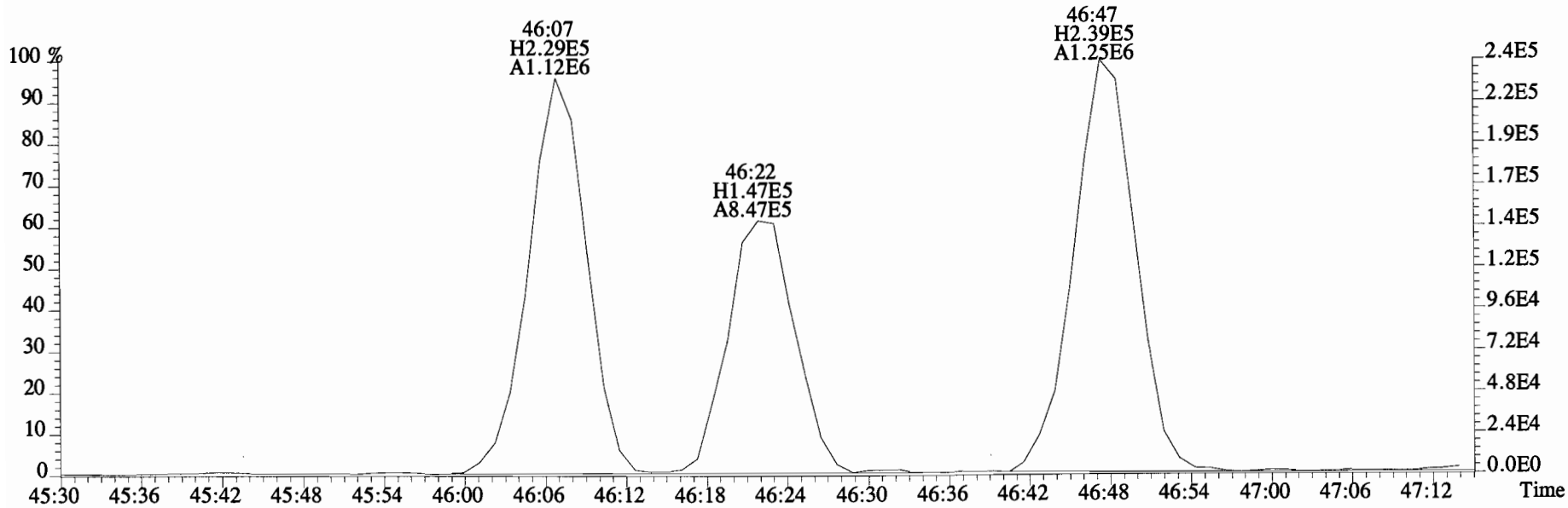
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0)



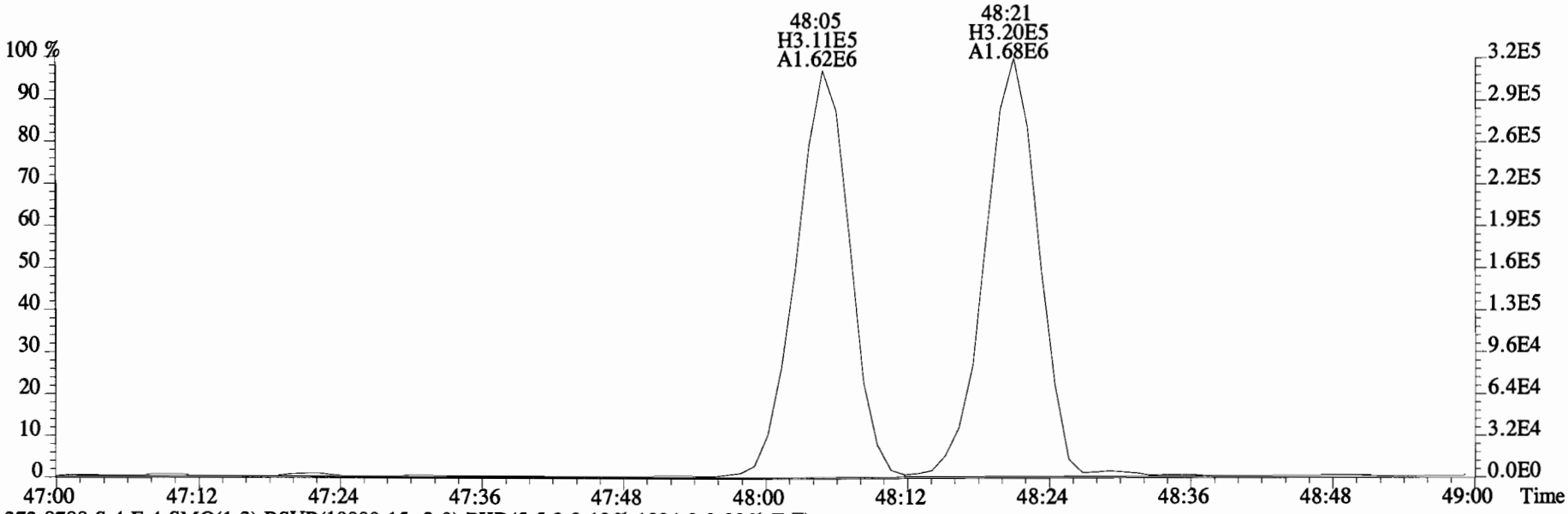
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1464.0,0.00%,F,F)



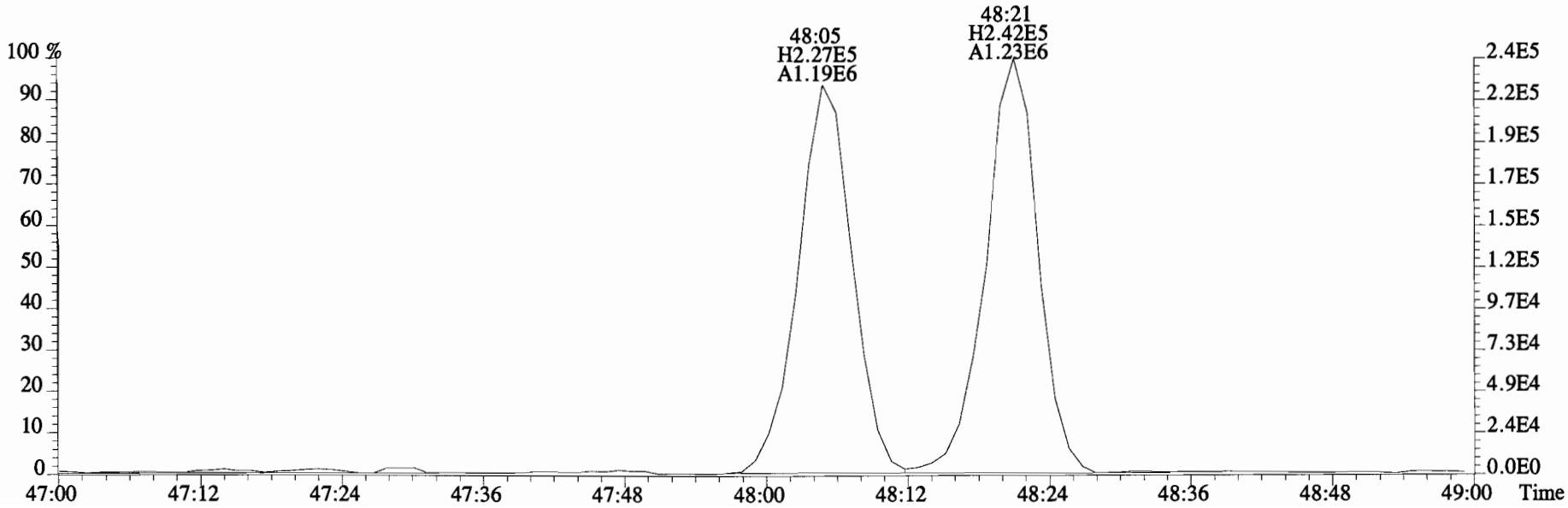
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1904.0,0.00%,F,F)



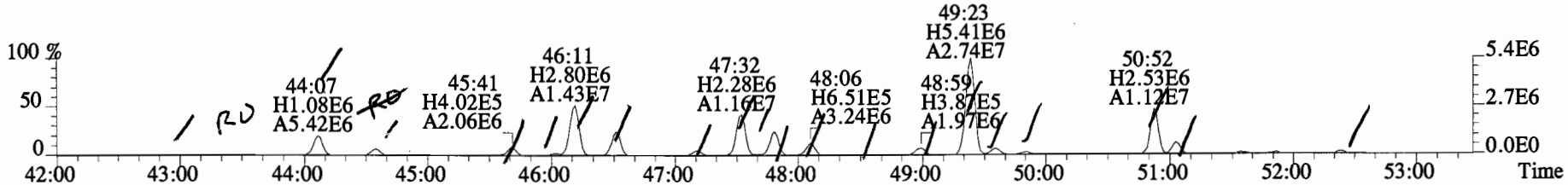
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1464.0,0.00%,F,F)



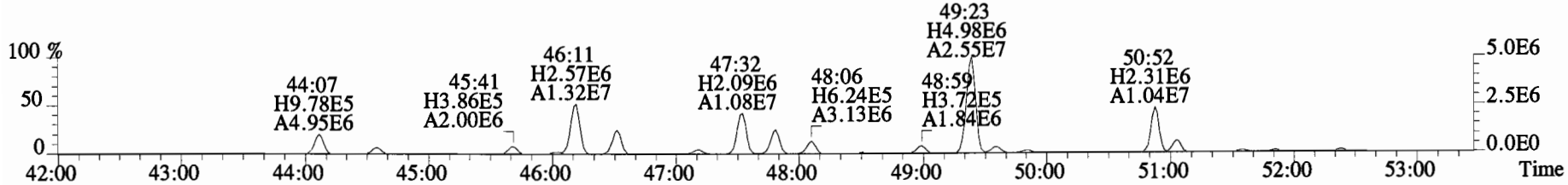
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1904.0,0.00%,F,F)



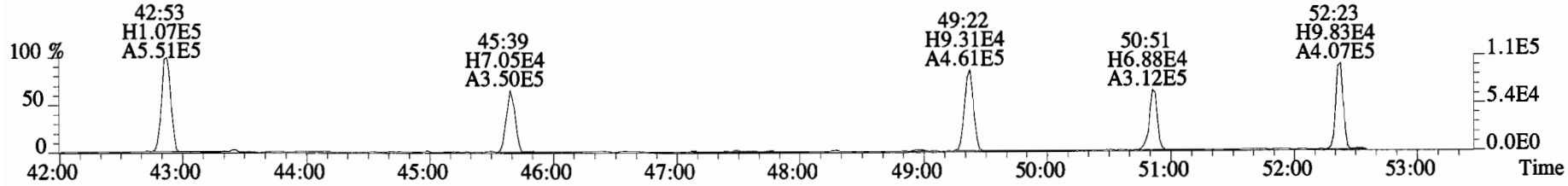
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2764.0,0.00%,F,F)



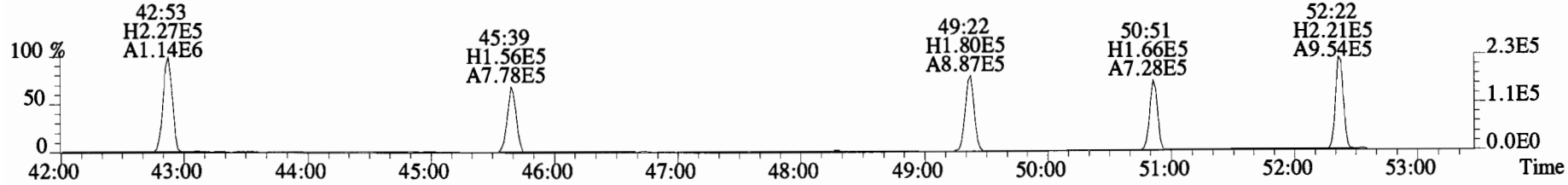
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2212.0,0.00%,F,F)



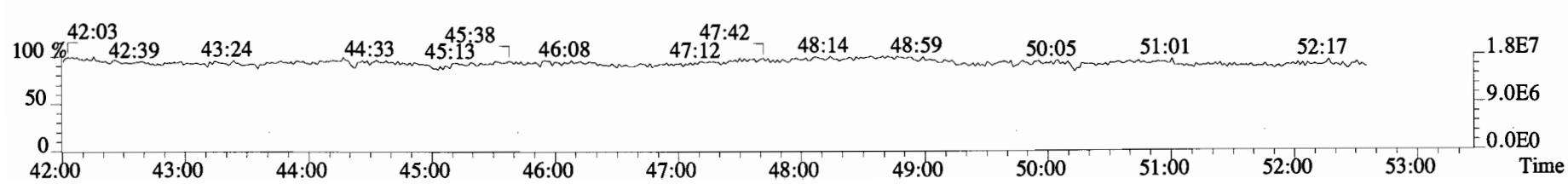
403.8457 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1332.0,0.00%,F,F)



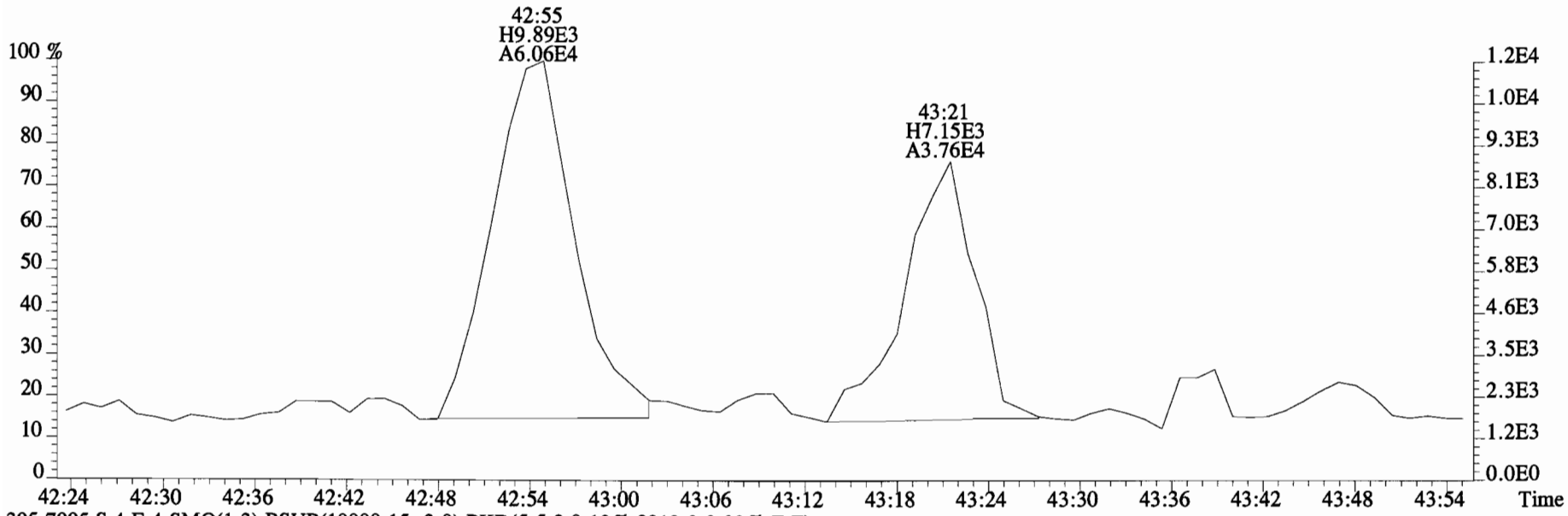
405.8428 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1384.0,0.00%,F,F)



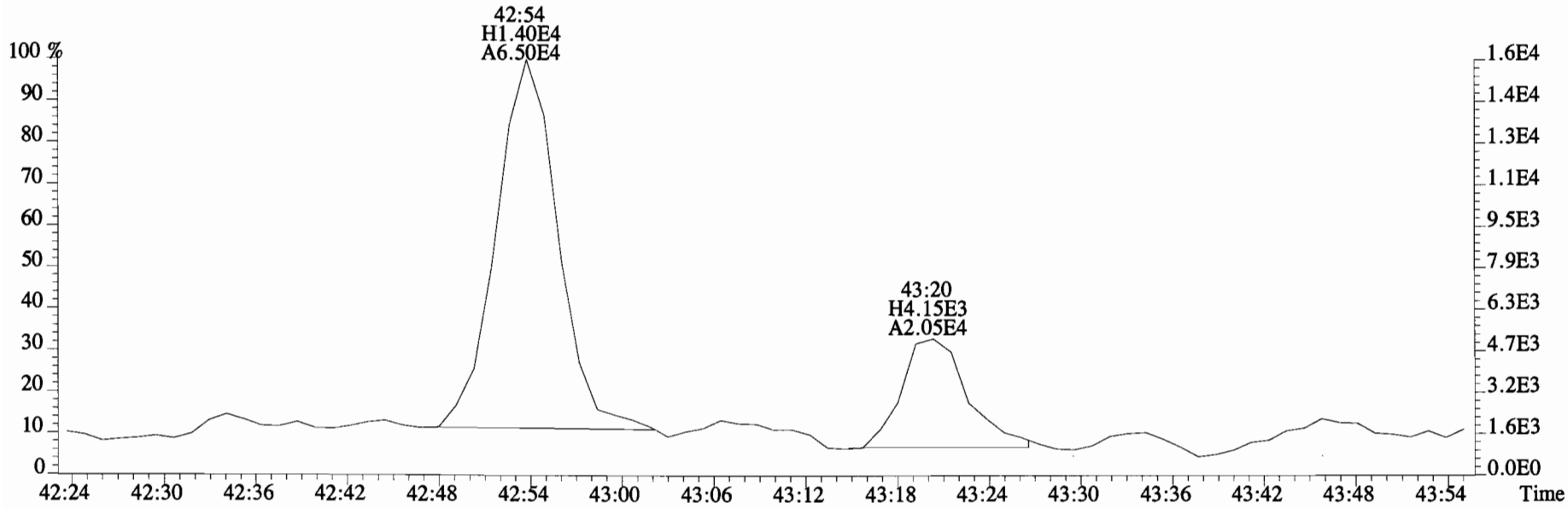
380.9760 S:4 F:4

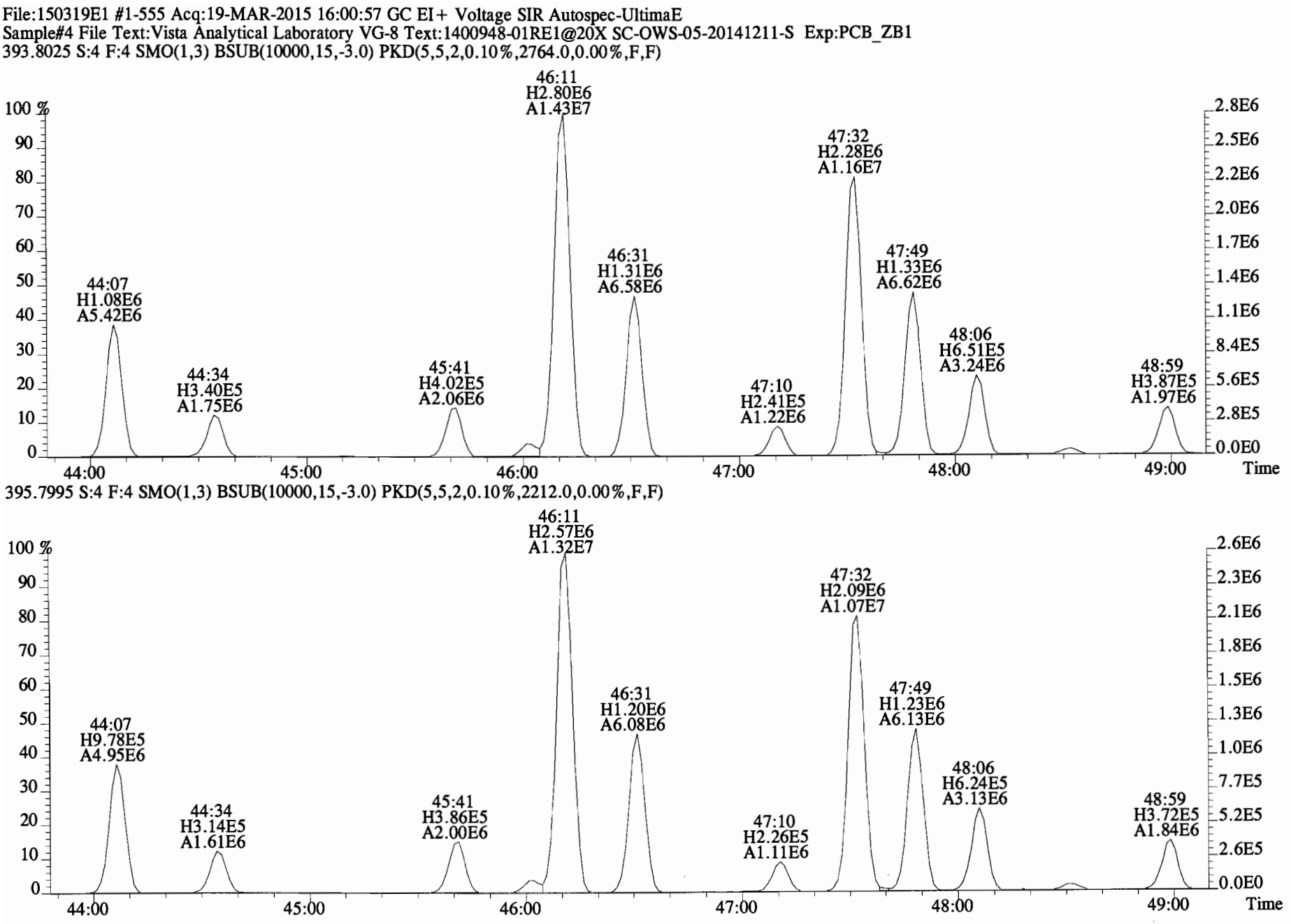


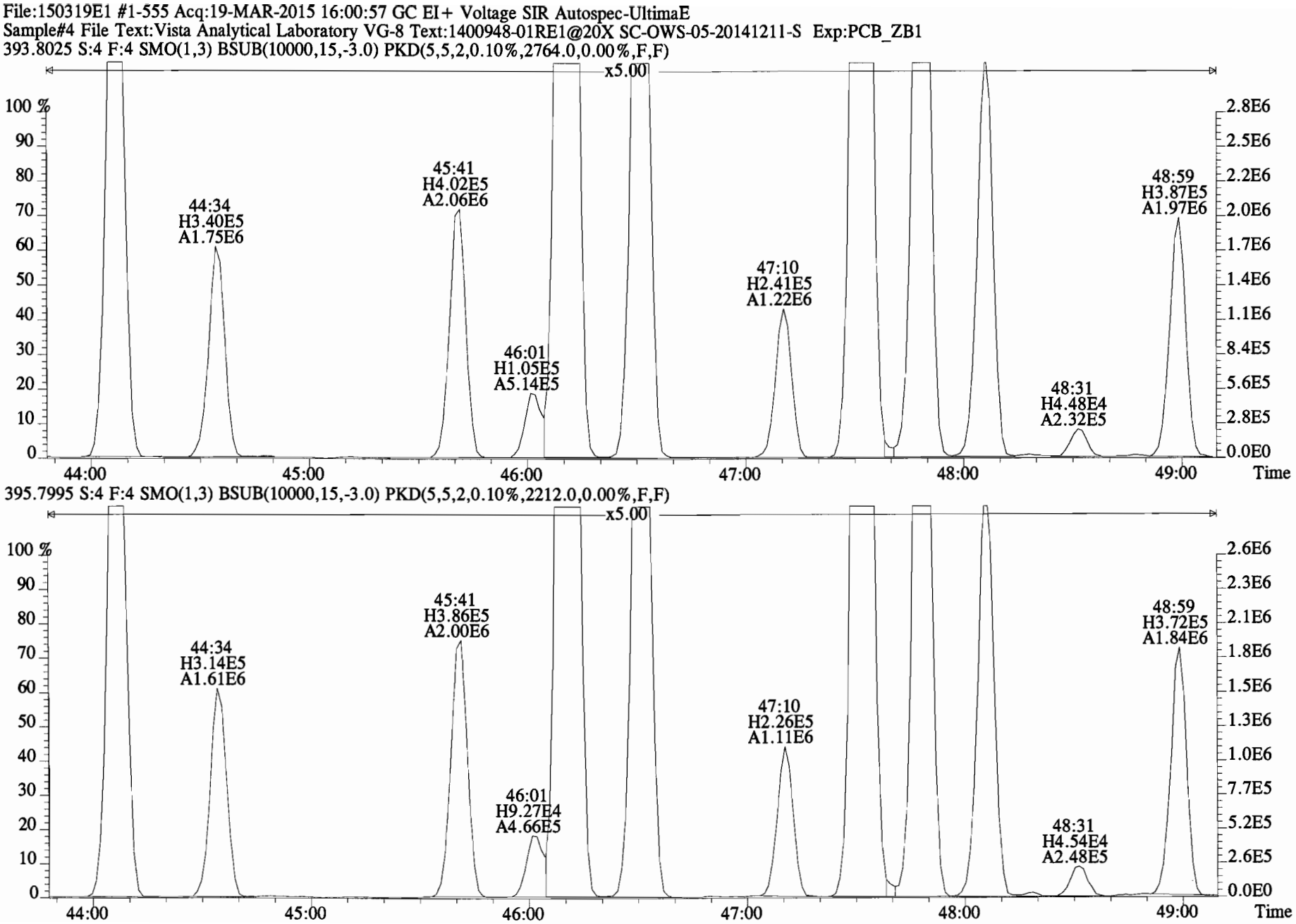
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2764.0,0.00%,F,F)



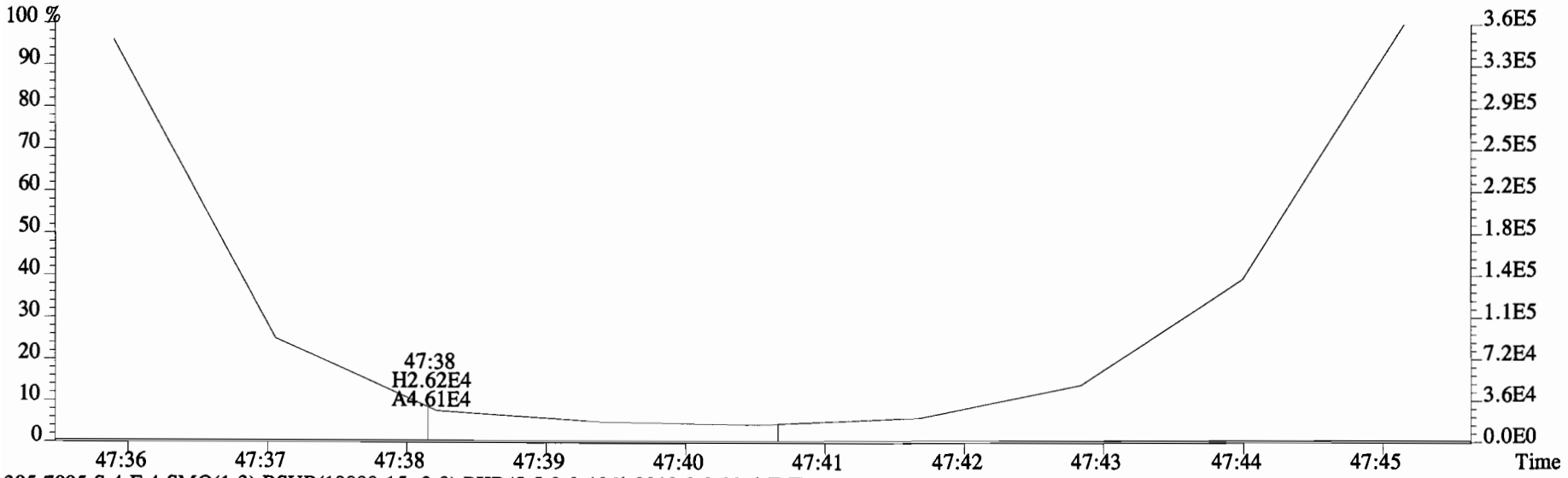
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2212.0,0.00%,F,F)



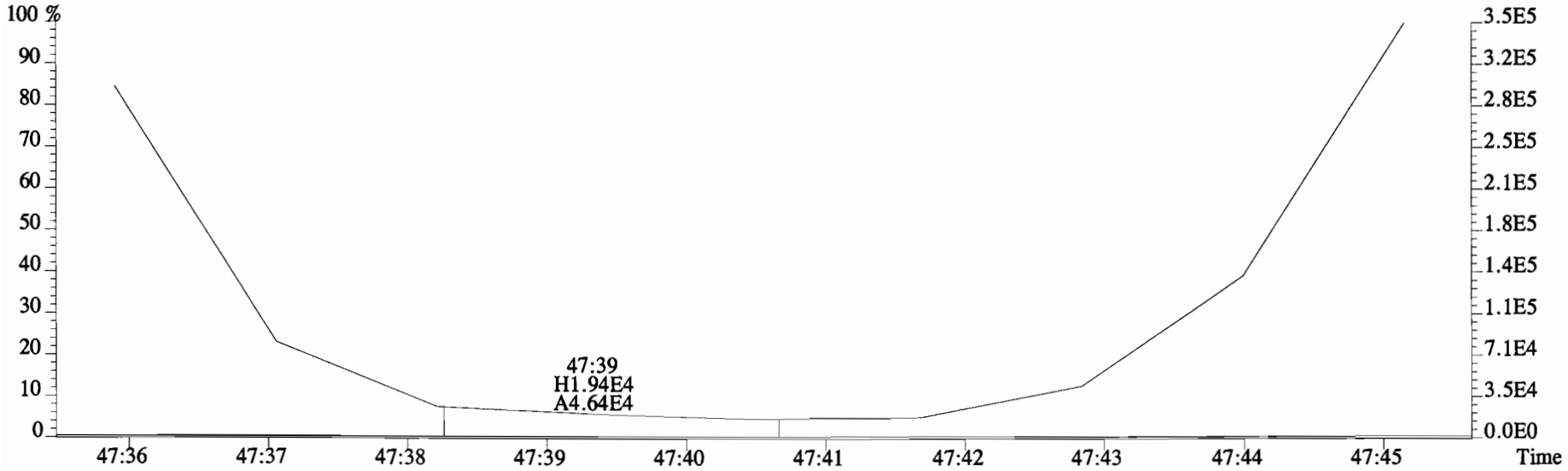

File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2764.0,0.00%,F,F)
44:07 H1.08E6 A5.42E6
44:34 H3.40E5 A1.75E6
45:41 H4.02E5 A2.06E6
46:11 H2.80E6 A1.43E7
46:31 H1.31E6 A6.58E6
47:10 H2.41E5 A1.22E6
47:32 H2.28E6 A1.16E7
47:49 H1.33E6 A6.62E6
48:06 H6.51E5 A3.24E6
48:59 H3.87E5 A1.97E6
100 %
Time
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2212.0,0.00%,F,F)
44:07 H9.78E5 A4.95E6
44:34 H3.14E5 A1.61E6
45:41 H3.86E5 A2.00E6
46:11 H2.57E6 A1.32E7
46:31 H1.20E6 A6.08E6
47:10 H2.26E5 A1.11E6
47:32 H2.09E6 A1.07E7
47:49 H1.23E6 A6.13E6
48:06 H6.24E5 A3.13E6
48:59 H3.72E5 A1.84E6
100 %
Time

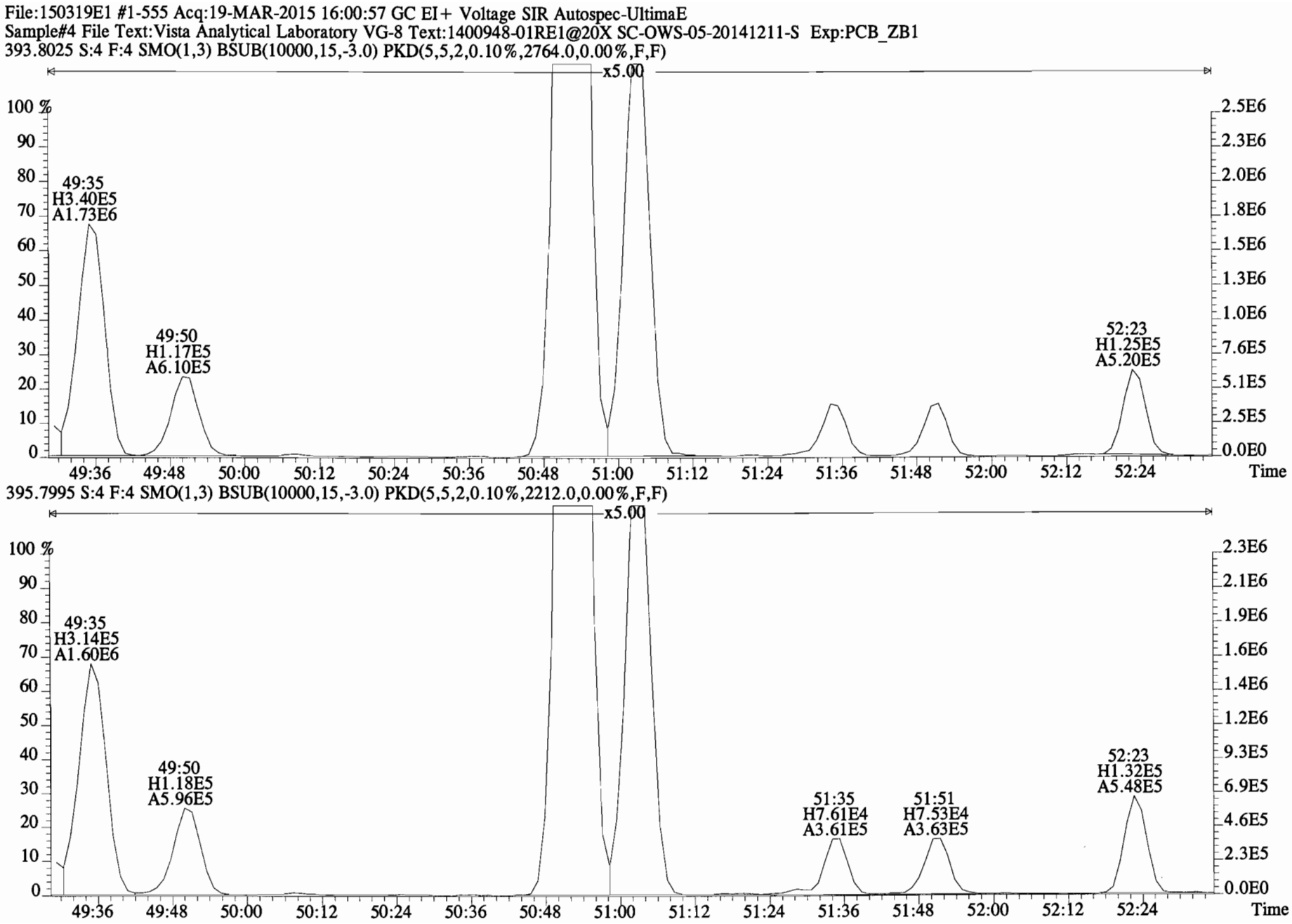

File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2764.0,0.00%,F,F)
x5.00
44:34
H3.40E5
A1.75E6
45:41
H4.02E5
A2.06E6
46:01
H1.05E5
A5.14E5
47:10
H2.41E5
A1.22E6
48:31
H4.48E4
A2.32E5
48:59
H3.87E5
A1.97E6
Time
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2212.0,0.00%,F,F)
x5.00
44:34
H3.14E5
A1.61E6
45:41
H3.86E5
A2.00E6
46:01
H9.27E4
A4.66E5
47:10
H2.26E5
A1.11E6
48:31
H4.54E4
A2.48E5
48:59
H3.72E5
A1.84E6
Time

File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2764.0,0.00%,F,F)

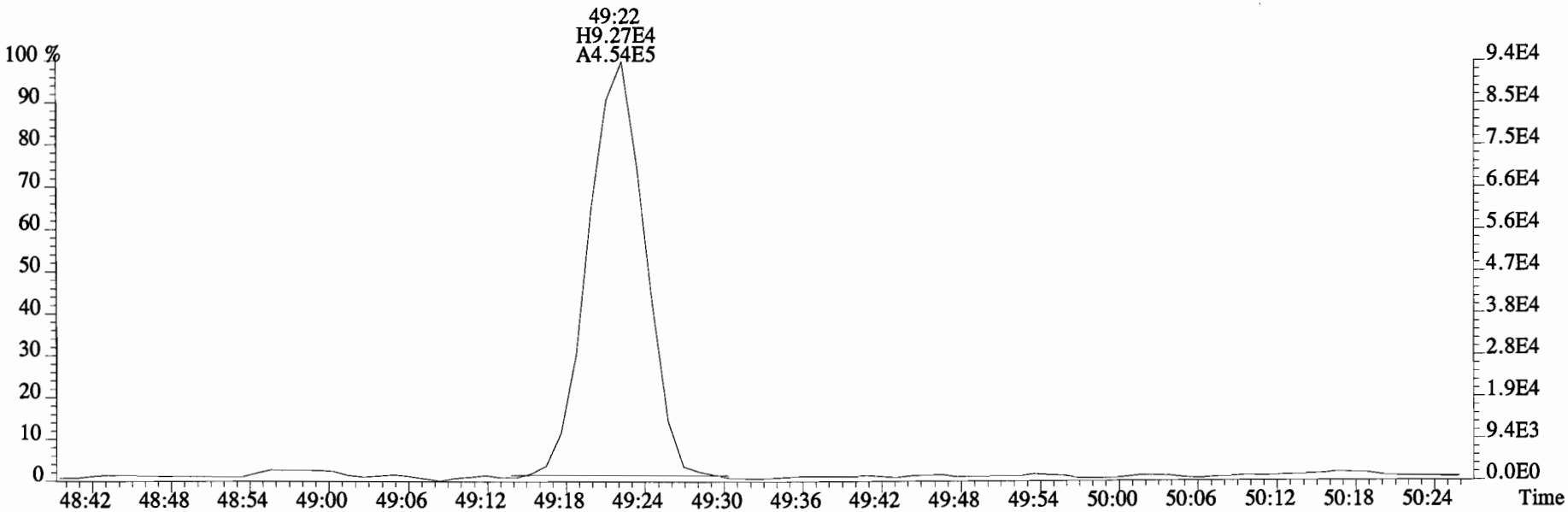


395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2212.0,0.00%,F,F)

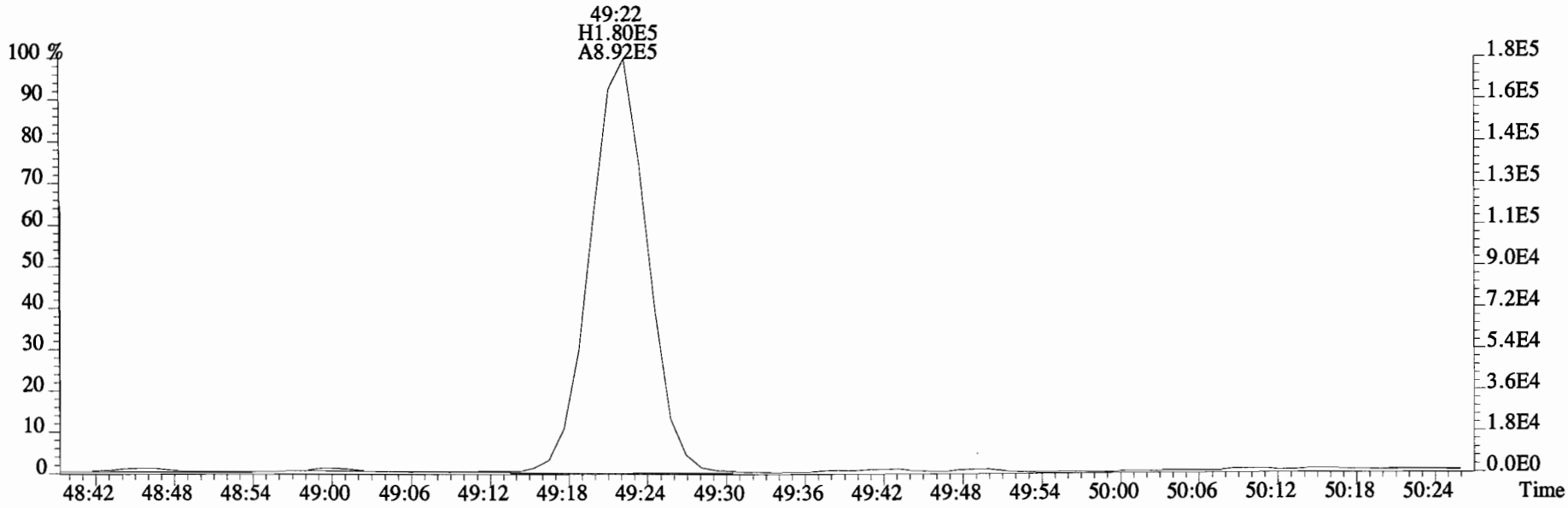



File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2764.0,0.00%,F,F)
x5.00
49:35
H3.40E5
A1.73E6
49:50
H1.17E5
A6.10E5
52:23
H1.25E5
A5.20E5
Time
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2212.0,0.00%,F,F)
x5.00
49:35
H3.14E5
A1.60E6
49:50
H1.18E5
A5.96E5
51:35
H7.61E4
A3.61E5
51:51
H7.53E4
A3.63E5
52:23
H1.32E5
A5.48E5
Time

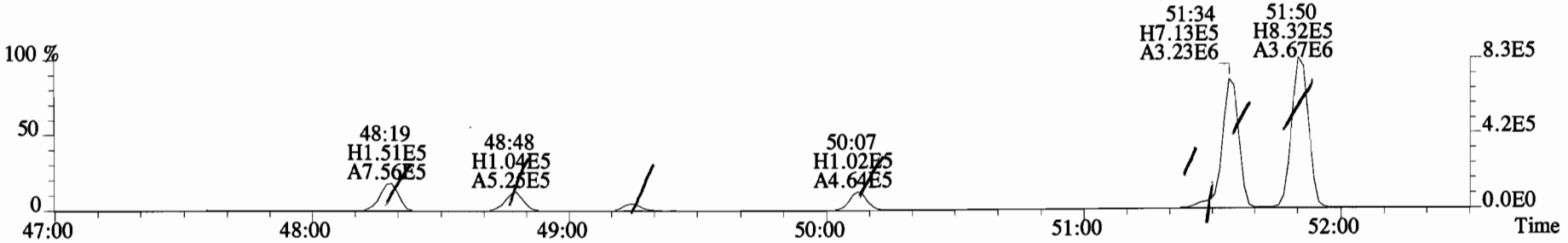
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
403.8457 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1332.0,0.00%,F,F)



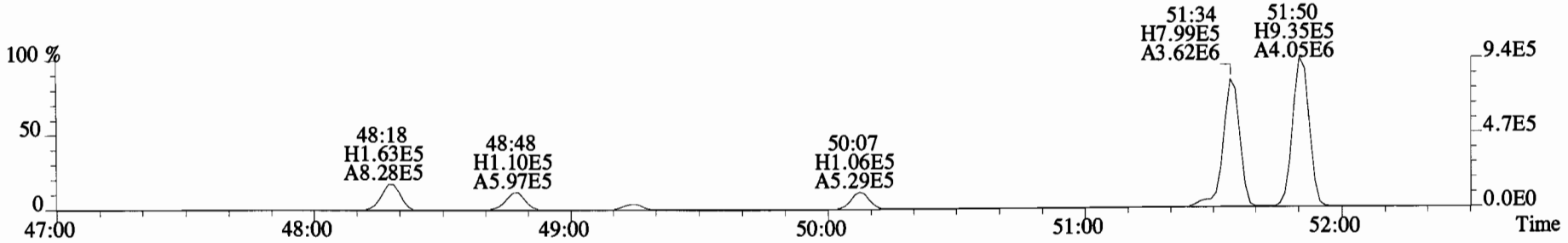
405.8428 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1384.0,0.00%,F,F)



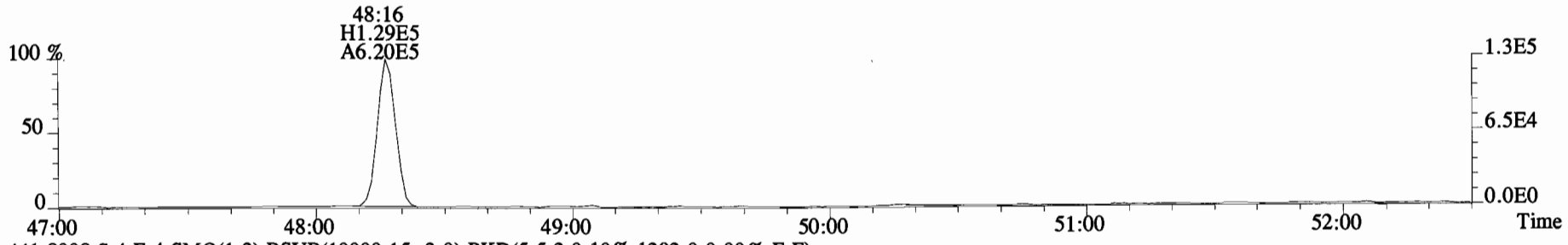
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
427.7635 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1296.0,0.00%,F,F)



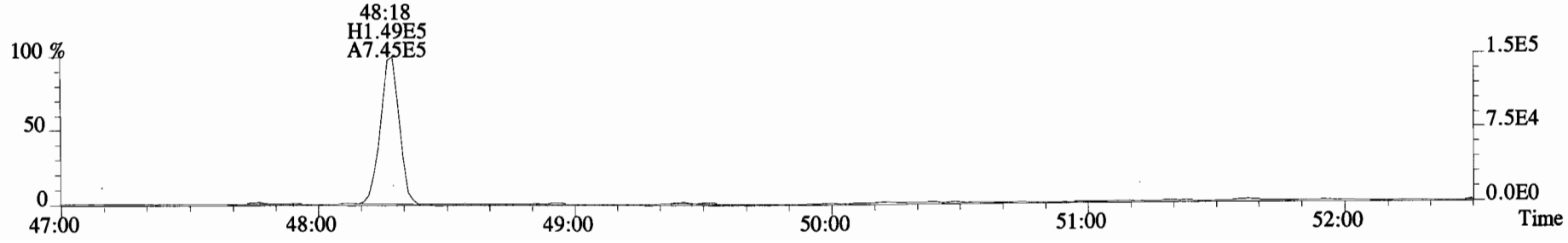
429.7606 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1260.0,0.00%,F,F)



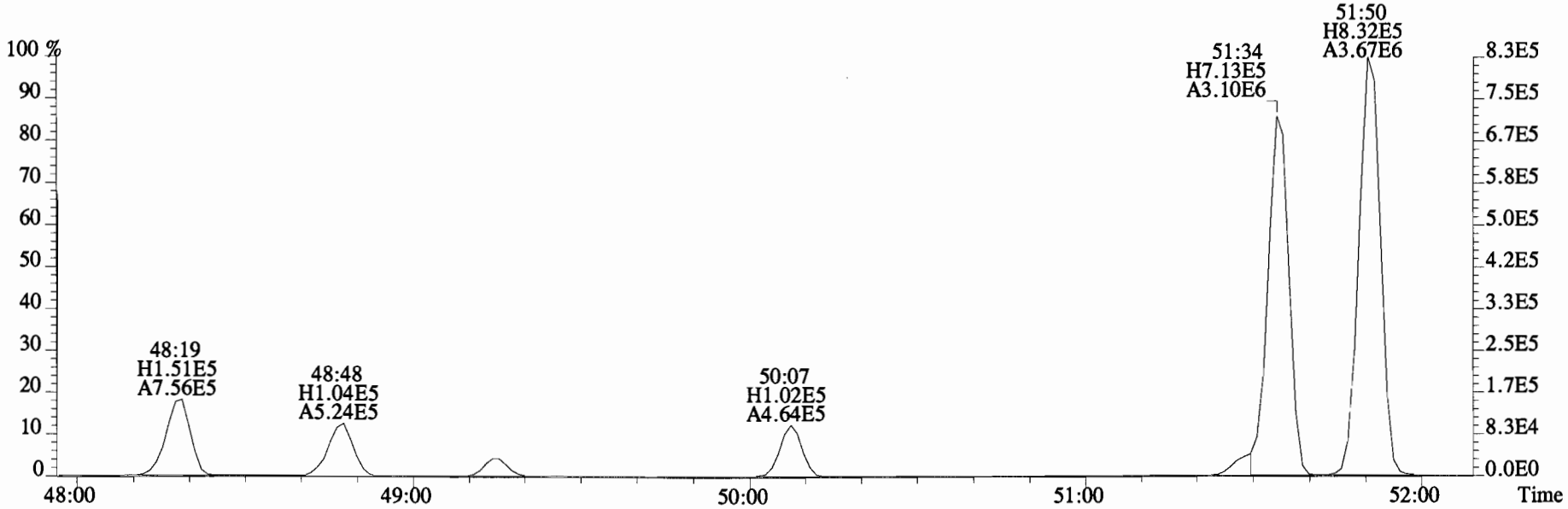
439.8038 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1308.0,0.00%,F,F)



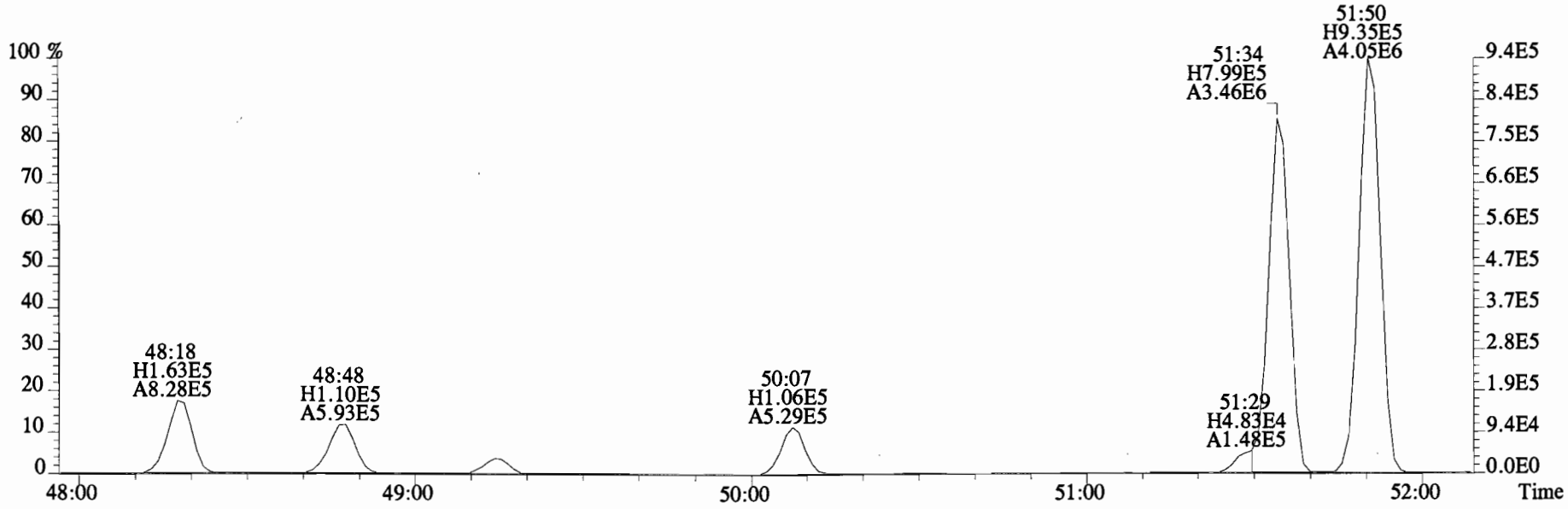
441.8008 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1292.0,0.00%,F,F)



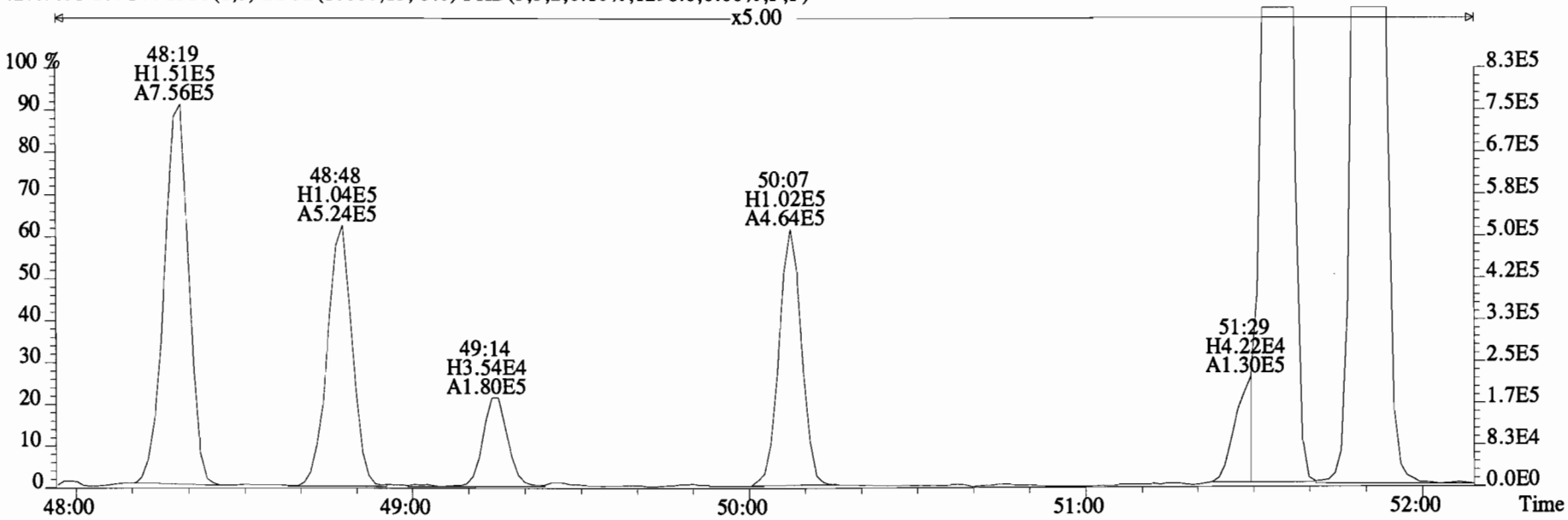
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
427.7635 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1296.0,0.00%,F,F)



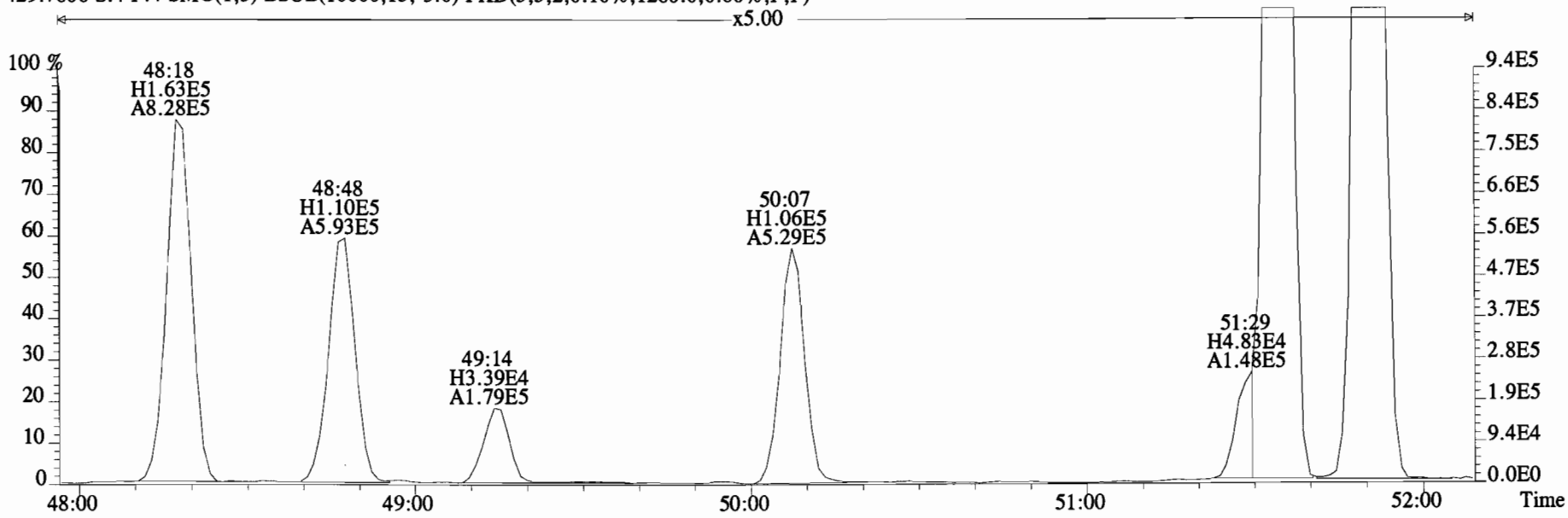
429.7606 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1260.0,0.00%,F,F)



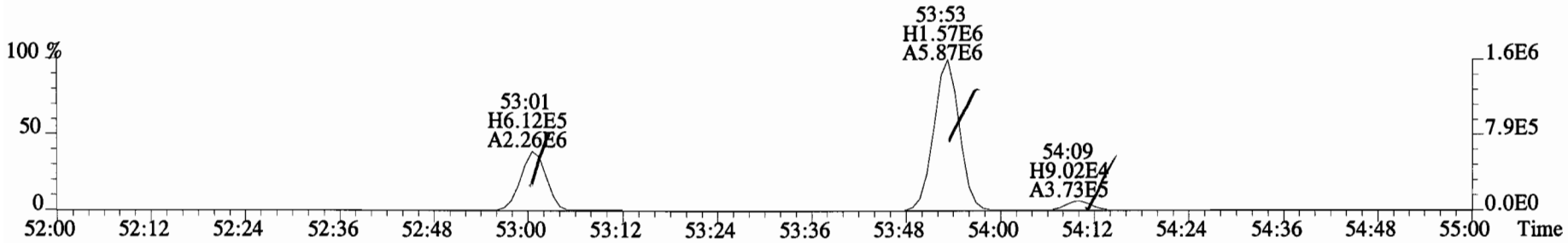
File:150319E1 #1-555 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
427.7635 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1296.0,0.00%,F,F)



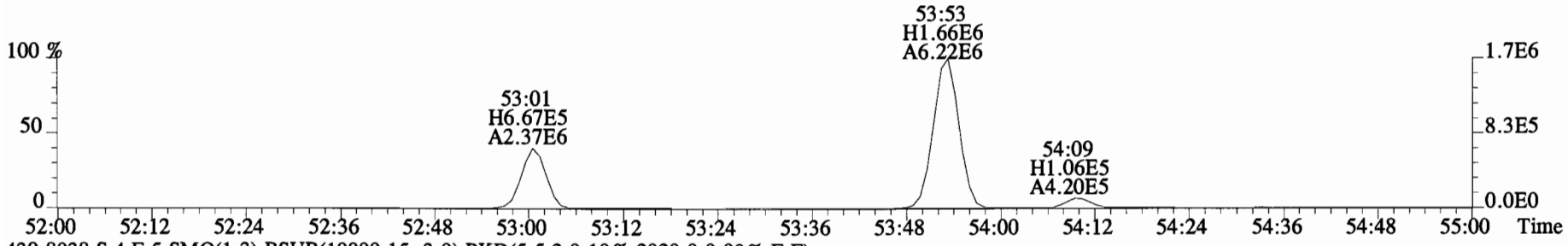
429.7606 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1260.0,0.00%,F,F)



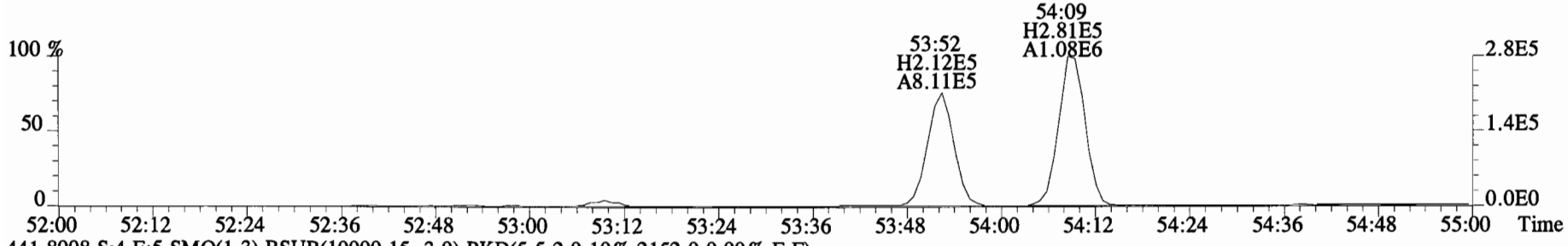
File:150319E1 #1-429 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
427.7635 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2068.0,0.00%,F,F)



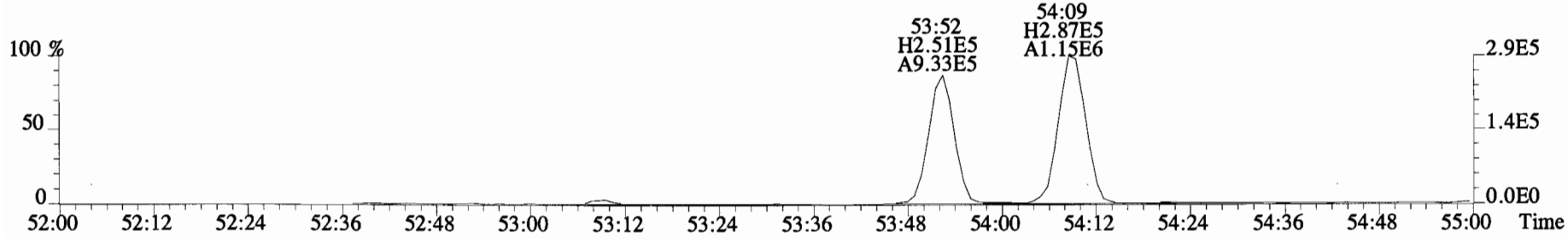
429.7606 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3720.0,0.00%,F,F)



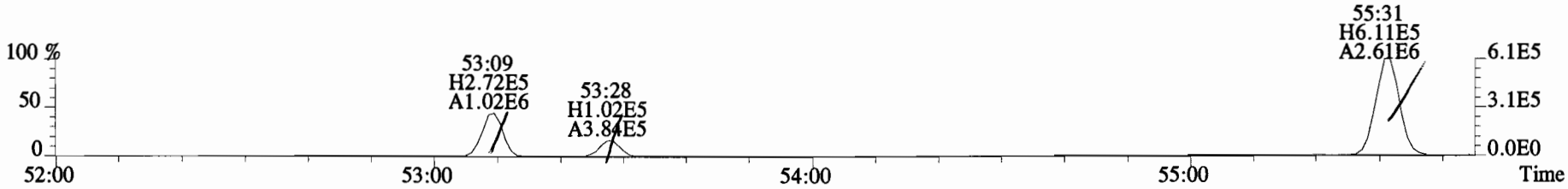
439.8038 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2020.0,0.00%,F,F)



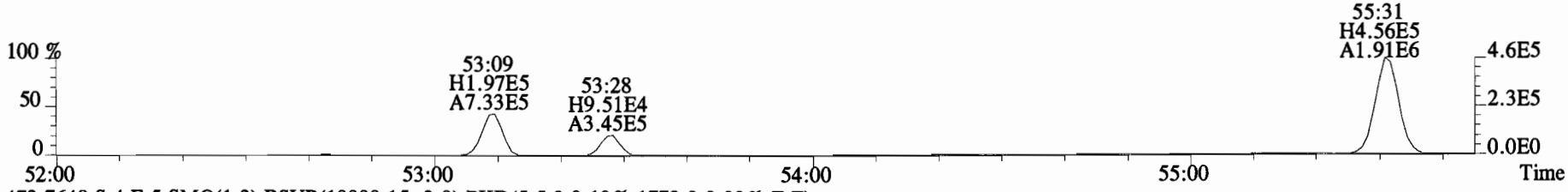
441.8008 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2152.0,0.00%,F,F)



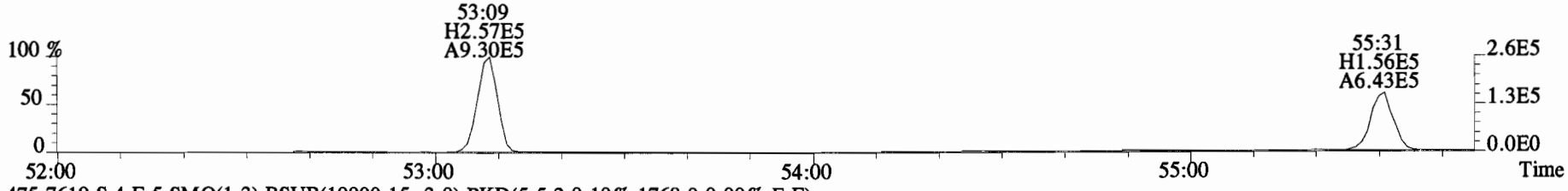
File:150319E1 #1-429 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
463.7216 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1652.0,0.00%,F,F)



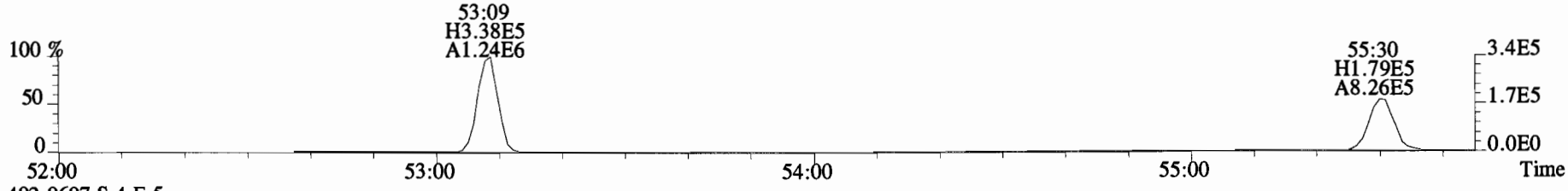
465.7186 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1744.0,0.00%,F,F)



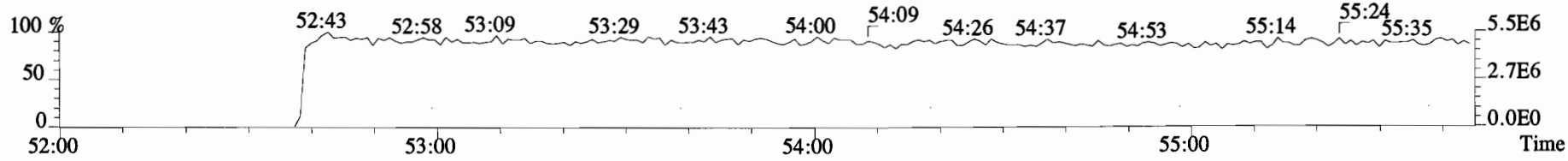
473.7648 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1772.0,0.00%,F,F)



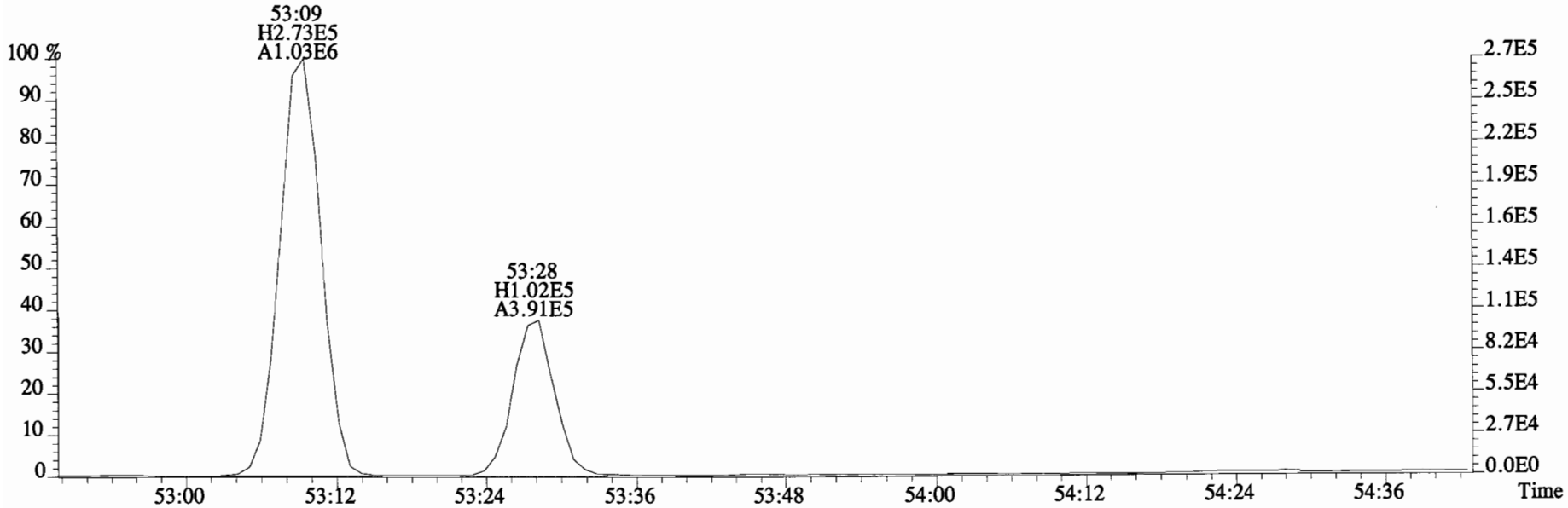
475.7619 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1768.0,0.00%,F,F)



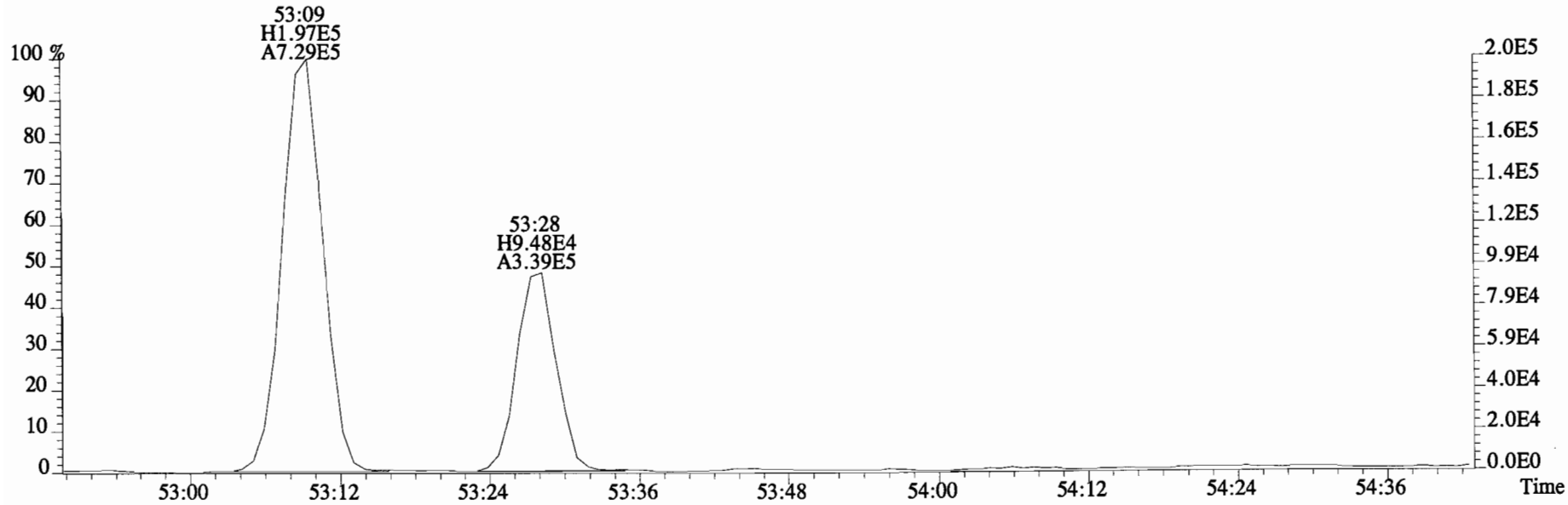
492.9697 S:4 F:5



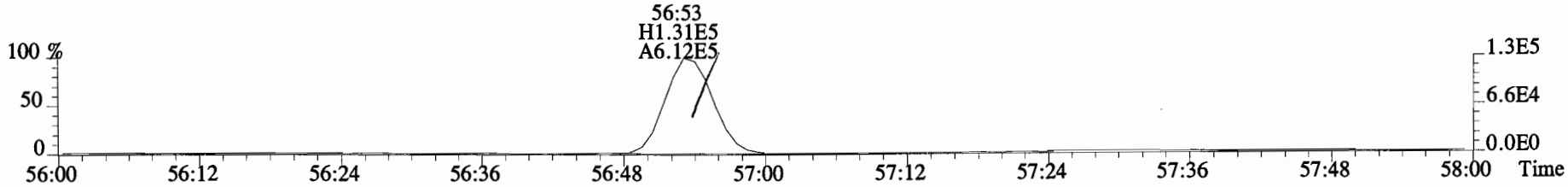
File:150319E1 #1-429 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
463.7216 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0)



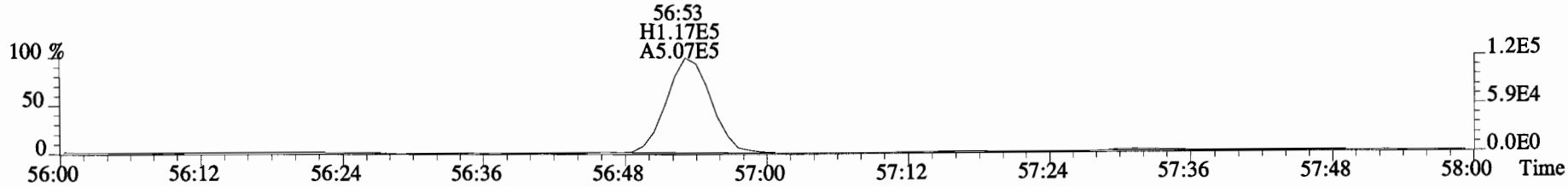
465.7186 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1744.0,0.00%,F,F)



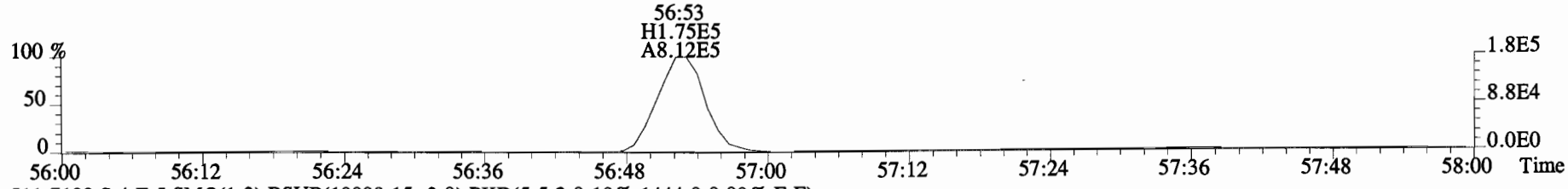
File:150319E1 #1-429 Acq:19-MAR-2015 16:00:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:1400948-01RE1@20X SC-OWS-05-20141211-S Exp:PCB_ZB1
497.6826 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1548.0,0.00%,F,F)



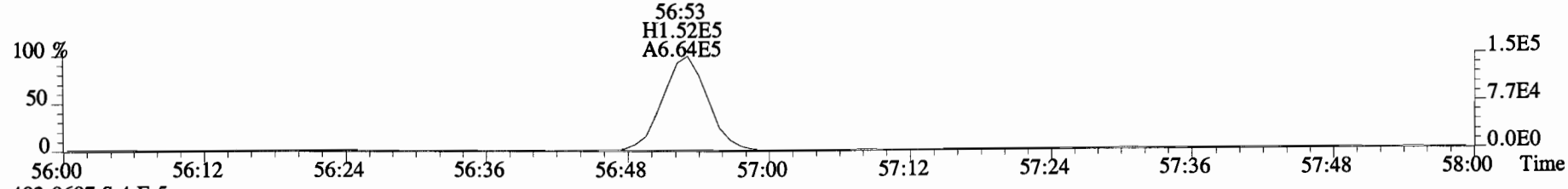
499.6797 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1300.0,0.00%,F,F)



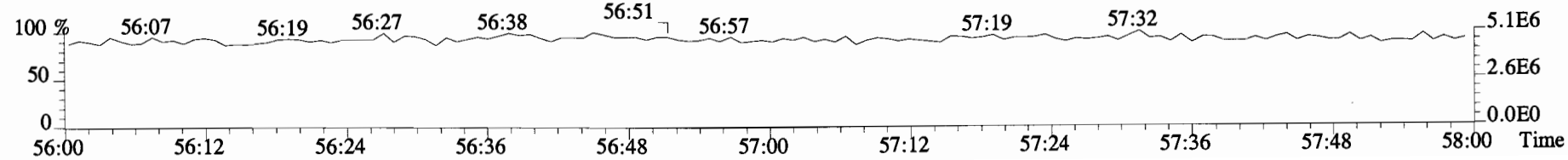
509.7229 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1352.0,0.00%,F,F)



511.7199 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1444.0,0.00%,F,F)



492.9697 S:4 F:5



Client ID: SC-CB-35-20141211-S Filename: 150319E1 S:5 Acq:19-MAR-15 17:05:20 ConCal: ST150319E1-1
Lab ID: 1400948-02RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.891 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n	NotF	1.19	*		3380	2.5	174	*	0.996	1.006
Mono	PCB-2	*	*	n	NotF	1.18	*		3380	2.5	194	*	0.984	0.994
Mono	PCB-3	*	*	n	NotF	1.43	*		3380	2.5	161	*	0.996	1.006
Di	PCB-4/10	*	*	n	NotF	1.57	*		14800	2.5	620	*	0.997	1.007
Di	PCB-7/9	*	*	n	NotF	1.21	*		14800	2.5	543	*	0.866	0.874
Di	PCB-6	*	*	n	NotF	1.30	*		14800	2.5	503	*	0.890	0.899
Di	PCB-5/8	8.95e+05	1.52	y	22:58	1.15	1480		*	2.5	*	0.909	0.907	0.917
Di	PCB-14	*	*	n	NotF	1.11	*		14800	2.5	653	*	0.949	0.959
Di	PCB-11	1.69e+06	1.66	y	25:17	1.09	2860		*	2.5	*	1.001	0.995	1.005
Di	PCB-12/13	*	*	n	NotF	1.19	*		14800	2.5	607	*	1.011	1.021
Di	PCB-15	1.29e+06	1.49	y	26:00	1.28	1850		*	2.5	*	1.029	1.023	1.033
Tri	PCB-19	1.19e+05	1.26	n	24:15	1.04	377	R	*	2.5	*	1.000	0.996	1.006
Tri	PCB-30	*	*	n	NotF	1.71	*		2600	2.5	106	*	1.032	1.042
Tri	PCB-18	1.17e+06	1.10	y	25:54	0.78	3510		*	2.5	*	0.953	0.949	0.959
Tri	PCB-17	5.21e+05	1.11	y	26:05	0.92	1320		*	2.5	*	0.960	0.956	0.966
Tri	PCB-24/27	1.59e+05	0.91	y	26:38	1.19	313		*	2.5	*	0.980	0.977	0.987
Tri	PCB-16/32	1.17e+06	1.07	y	27:09	0.94	2900		*	2.5	*	0.999	0.995	1.005
Tri	PCB-34	*	*	n	NotF	1.14	*		2440	2.5	109	*	0.955	0.965
Tri	PCB-23	*	*	n	NotF	1.28	*		2440	2.5	96.5	*	0.959	0.969
Tri	PCB-29	*	*	n	NotF	1.08	*		2440	2.5	114	*	0.967	0.977
Tri	PCB-26	6.38e+05	1.14	y	28:31	1.21	1120		*	2.5	*	0.979	0.974	0.984
Tri	PCB-25	3.41e+05	1.02	y	28:40	1.26	571		*	2.5	*	0.985	0.979	0.989
Tri	PCB-31	3.66e+06	1.11	y	29:02	1.28	6020		*	2.5	*	0.997	0.992	1.002
Tri	PCB-28	4.52e+06	1.08	y	29:08	1.71	5570		*	2.5	*	1.001	0.995	1.005
Tri	PCB-20/21/33	2.81e+06	1.09	y	29:46	1.08	5490		*	2.5	*	1.022	1.017	1.027
Tri	PCB-22	2.05e+06	1.12	y	30:11	1.21	3580		*	2.5	*	1.037	1.032	1.042
Tri	PCB-36	*	*	n	NotF	1.14	*		2440	2.5	115	*	0.928	0.938
Tri	PCB-39	*	*	n	NotF	1.12	*		2440	2.5	118	*	0.943	0.953
Tri	PCB-38	*	*	n	NotF	1.20	*		2440	2.5	110	*	0.966	0.976
Tri	PCB-35	3.13e+05	1.19	y	32:34	1.23	570		*	2.5	*	0.987	0.982	0.992
Tri	PCB-37	5.05e+06	1.10	y	33:01	1.23	9200		*	2.5	*	1.001	0.995	1.005
Tetra	PCB-54	*	*	n	NotF	1.10	*		2990	2.5	161	*	0.996	1.006
Tetra	PCB-50	*	*	n	NotF	0.88	*		2990	2.5	202	*	1.037	1.047
Tetra	PCB-53	3.35e+05	0.82	y	29:49	1.06	1110		*	2.5	*	0.946	0.942	0.952
Tetra	PCB-51	1.56e+05	0.85	y	30:10	0.99	554		*	2.5	*	0.957	0.952	0.962
Tetra	PCB-45	3.30e+05	0.75	y	30:35	0.86	1340		*	2.5	*	0.970	0.966	0.976
Tetra	PCB-46	1.75e+05	0.66	y	31:05	0.85	727		*	2.5	*	0.986	0.981	0.991

Integrations by:

Analyst: DMS

Date: 3/26/15

Reviewed by: [signature] Date: 3/27/15

Client ID: SC-CB-35-20141211-S Filename: 150319E1 S:5 Acq:19-MAR-15 17:05:20 ConCal: ST150319E1-1
Lab ID: 1400948-02RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.891 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	3.31e+06	0.72	y	31:33	1.28	9070		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-73	*	*	n	NotF	1.35	*		2990	2.5	172	*	1.000	1.010
Tetra	PCB-43/49	2.12e+06	0.76	y	31:50	0.99	7480		*	2.5	*	1.010	1.005	1.015
Tetra	PCB-47	7.95e+05	0.83	y	32:03	1.06	2420		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-48/75	7.14e+05	0.83	y	32:11	1.23	1880		*	2.5	*	1.005	0.999	1.009
Tetra	PCB-65	*	*	n	NotF	1.22	*		2990	2.5	178	*	1.008	1.018
Tetra	PCB-62	*	*	n	NotF	1.22	*		2990	2.5	178	*	1.011	1.021
Tetra	PCB-44	2.80e+06	0.83	y	32:50	0.86	10500		*	2.5	*	1.025	1.021	1.031
Tetra	PCB-42/59	1.43e+06	0.74	y	33:04	1.14	4050		*	2.5	*	1.032	1.028	1.038
Tetra	PCB-41/64/71/72	4.21e+06	0.80	y	33:39	1.21	11300		*	2.5	*	1.050	1.046	1.056
Tetra	PCB-68	4.50e+04	0.62	n	33:55	1.35	108	R	*	2.5	*	1.059	1.054	1.064
Tetra	PCB-40	6.30e+05	0.82	y	34:08	0.70	2900		*	2.5	*	1.066	1.061	1.071
Tetra	PCB-57	*	*	n	NotF	0.98	*		2990	2.5	177	*	0.965	0.975
Tetra	PCB-67	2.77e+05	0.77	y	34:47	1.11	658		*	2.5	*	0.979	0.974	0.984
Tetra	PCB-58	*	*	n	NotF	0.93	*		2990	2.5	187	*	0.977	0.987
Tetra	PCB-63	2.84e+05	0.85	y	35:03	0.95	784		*	2.5	*	0.986	0.982	0.992
Tetra	PCB-74	3.51e+06	0.82	y	35:22	1.24	7420		*	2.5	*	0.995	0.990	1.000
Tetra	PCB-61/70	9.20e+06	0.81	y	35:34	0.95	25400		*	2.5	*	1.001	0.995	1.005
Tetra	PCB-76/66	7.97e+06	0.78	y	35:47	1.04	20100		*	2.5	*	1.007	1.001	1.011
Tetra	PCB-80	*	*	n	NotF	1.19	*		2990	2.5	147	*	0.996	1.006
Tetra	PCB-55	2.24e+05	0.66	y	36:17	1.04	522		*	2.5	*	1.009	1.005	1.015
Tetra	PCB-56/60	7.04e+06	0.80	y	36:47	1.01	16900		*	2.5	*	1.023	1.019	1.029
Tetra	PCB-79	1.58e+05	0.82	y	37:53	1.08	355		*	2.5	*	1.053	1.048	1.058
Tetra	PCB-78	*	*	n	NotF	1.27	*		2990	2.5	151	*	0.982	0.992
Tetra	PCB-81	8.96e+04	0.74	y	39:03	1.33	183		*	2.5	*	1.000	0.995	1.005
Tetra	PCB-77	2.96e+06	0.79	y	39:41	1.10	7160		*	2.5	*	1.001	0.995	1.005
Penta	PCB-104	*	*	n	NotF	1.18	*		3030	2.5	374	*	0.996	1.006
Penta	PCB-96	*	*	n	NotF	1.14	*		3030	2.5	389	*	1.034	1.044
Penta	PCB-103	*	*	n	NotF	0.96	*		3030	2.5	463	*	1.050	1.060
Penta	PCB-100	*	*	n	NotF	0.94	*		3030	2.5	473	*	1.061	1.071
Penta	PCB-94	*	*	n	NotF	1.06	*		3030	2.5	654	*	0.980	0.990
Penta	PCB-95/98/102	2.59e+06	1.64	y	35:51	1.22	13700		*	2.5	*	1.000	0.995	1.005
Penta	PCB-93	*	*	n	NotF	0.84	*		3030	2.5	820	*	0.997	1.007
Penta	PCB-88/91	5.25e+05	1.73	y	36:15	1.12	3060		*	2.5	*	1.012	1.005	1.015
Penta	PCB-121	*	*	n	NotF	1.62	*		3030	2.5	428	*	1.009	1.019
Penta	PCB-84/92	1.55e+06	1.69	y	37:09	1.05	9260		*	2.5	*	0.990	0.985	0.995
Penta	PCB-89	5.79e+04	1.19	n	37:21	1.13	319	R	*	2.5	*	0.996	0.991	1.001

Analyst: DMS

Date: 3/26/15

Client ID: SC-CB-35-20141211-S Filename: 150319E1 S:5 Acq:19-MAR-15 17:05:20 ConCal: ST150319E1-1
Lab ID: 1400948-02RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.891 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	4.82e+06	1.65	y 37:32	1.10	27300		*	2.5	*	1.000	0.995	1.005
Penta	PCB-113	*	*	n NotFnd	1.41	*		3030	2.5	479	*	1.002	1.012
Penta	PCB-99	2.06e+06	1.65	y 37:52	1.34	9620		*	2.5	*	1.009	1.004	1.014
Penta	PCB-119	1.64e+05	1.43	y 38:19	1.53	695		*	2.5	*	0.987	0.982	0.992
Penta	PCB-108/112	2.32e+05	1.22	n 38:29	1.28	1170	R	*	2.5	*	0.991	0.986	0.996
Penta	PCB-83	*	*	n NotFnd	1.52	*		3030	2.5	397	*	0.990	1.000
Penta	PCB-97	1.51e+06	1.62	y 38:51	1.18	8260		*	2.5	*	1.001	0.995	1.005
Penta	PCB-86	*	*	n NotFnd	0.84	*		3030	2.5	716	*	0.999	1.009
Penta	PCB-87/117/125	2.50e+06	1.73	y 39:08	1.55	10500		*	2.5	*	1.008	1.002	1.012
Penta	PCB-111/115	1.20e+05	1.37	y 39:16	1.63	474		*	2.5	*	1.012	1.006	1.016
Penta	PCB-85/116	1.06e+06	1.61	y 39:22	1.30	5260		*	2.5	*	1.014	1.010	1.020
Penta	PCB-120	*	*	n NotFnd	1.68	*		3030	2.5	360	*	1.016	1.026
Penta	PCB-110	8.42e+06	1.60	y 39:46	1.56	35000		*	2.5	*	1.024	1.020	1.030
Penta	PCB-82	7.77e+05	1.69	y 40:24	0.76	5610		*	2.5	*	0.976	0.971	0.981
Penta	PCB-124	4.35e+05	1.64	y 41:05	1.47	1620		*	2.5	*	0.993	0.988	0.998
Penta	PCB-107/109	6.01e+05	1.69	y 41:15	1.32	2490		*	2.5	*	0.997	0.991	1.001
Penta	PCB-123	1.83e+05	1.58	y 41:24	1.17	860		*	2.5	*	1.000	0.996	1.006
Penta	PCB-106/118	9.05e+06	1.62	y 41:34	1.17	39100		*	2.5	*	1.000	0.996	1.006
Penta	PCB-114	3.38e+05	1.66	y 42:14	1.30	836		*	2.5	*	1.000	0.995	1.005
Penta	PCB-122	1.81e+05	1.33	y 42:21	1.12	517		*	2.5	*	1.003	0.999	1.009
Penta	PCB-105	6.75e+06	1.65	y 43:05	1.30	18500		*	2.5	*	1.000	0.995	1.005
Penta	PCB-127	*	*	n NotFnd	1.33	*		3260	2.5	291	*	0.996	1.006
Penta	PCB-126	2.88e+05	1.53	y 45:19	1.18	865		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-155	*	*	n NotFnd	1.11	*		1170	2.5	237	*	0.966	1.006
Hexa	PCB-150	*	*	n NotFnd	1.00	*		1170	2.5	264	*	1.030	1.040
Hexa	PCB-152	*	*	n NotFnd	1.12	*		1170	2.5	236	*	1.043	1.053
Hexa	PCB-145	*	*	n NotFnd	1.20	*		1170	2.5	219	*	1.055	1.065
Hexa	PCB-136	6.13e+05	1.28	y 39:35	1.18	3810		*	2.5	*	1.068	1.064	1.074
Hexa	PCB-148	*	*	n NotFnd	0.74	*		1170	2.5	354	*	1.066	1.076
Hexa	PCB-154	7.36e+04	1.06	y 40:11	0.86	628		*	2.5	*	1.084	1.080	1.090
Hexa	PCB-151	9.22e+05	1.38	y 40:49	0.75	9040		*	2.5	*	1.101	1.097	1.107
Hexa	PCB-135	5.56e+05	1.33	y 41:01	0.79	5130		*	2.5	*	1.107	1.103	1.113
Hexa	PCB-144	2.16e+05	1.47	n 41:08	0.76	2080	R	*	2.5	*	1.110	1.105	1.117
Hexa	PCB-147	6.04e+04	1.31	y 41:16	0.82	539		*	2.5	*	1.113	1.109	1.121
Hexa	PCB-139/149	3.73e+06	1.24	y 41:31	0.76	35800		*	2.5	*	1.120	1.116	1.128
Hexa	PCB-140	2.89e+04	1.02	n 41:43	0.72	293	R	*	2.5	*	1.125	1.121	1.133
Hexa	PCB-134/143	4.95e+05	1.19	y 42:10	0.92	2400		*	2.5	*	0.975	0.970	0.980

Analyst: DMS

Date: 3/26/15

Client ID: SC-CB-35-20141211-S Filename: 150319E1 S:5 Acq:19-MAR-15 17:05:20 ConCal: ST150319E1-1
Lab ID: 1400948-02RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.891 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	2.63e+05	1.27	y	42:27	0.82	1430		*	2.5	*	0.982	0.977	0.987
Hexa	PCB-131	*	*	n	NotF¶	0.91	*		3230	2.5	452	*	0.981	0.991
Hexa	PCB-146/165	1.66e+06	1.34	y	42:51	1.25	5920		*	2.5	*	0.991	0.986	0.996
Hexa	PCB-132/161	3.35e+06	1.27	y	43:06	1.10	13500		*	2.5	*	0.997	0.992	1.002
Hexa	PCB-153	1.14e+07	1.24	y	43:16	1.25	40600	R	*	2.5	*	1.001	0.995	1.005
Hexa	PCB-168	*	*	n	NotF¶	1.45	*		3230	2.5	283	*	1.001	1.011
Hexa	PCB-141	2.34e+06	1.23	y	43:59	1.09	10500		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-137	4.56e+05	1.29	y	44:21	1.06	2100		*	2.5	*	1.009	1.004	1.014
Hexa	PCB-130	7.38e+05	1.21	y	44:27	0.96	3730		*	2.5	*	1.011	1.006	1.016
Hexa	PCB-138/163/164	1.48e+07	1.24	y	44:50	1.29	52000		*	2.5	*	1.001	0.996	1.006
Hexa	PCB-158/160	1.77e+06	1.29	y	45:03	1.34	5990		*	2.5	*	1.006	1.001	1.011
Hexa	PCB-129	5.13e+05	1.19	y	45:19	0.85	2720		*	2.5	*	1.012	1.007	1.017
Hexa	PCB-166	6.32e+04	1.27	y	45:47	1.19	219		*	2.5	*	0.993	0.988	0.998
Hexa	PCB-159	*	*	n	NotF¶	1.11	*		3230	2.5	349	*	0.996	1.006
Hexa	PCB-128/162	2.02e+06	1.22	y	46:22	1.05	7930		*	2.5	*	1.006	1.002	1.012
Hexa	PCB-167	7.61e+05	1.09	y	46:47	1.20	2190		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-156	1.85e+06	1.26	y	48:05	1.14	5850		*	2.5	*	1.001	0.996	1.006
Hexa	PCB-157	4.19e+05	1.40	y	48:21	1.16	1340		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-169	*	*	n	NotF¶	1.12	*		3230	2.5	271	*	0.995	1.005
Hepta	PCB-188	*	*	n	NotF¶	1.58	*		2390	2.5	174	*	0.996	1.006
Hepta	PCB-184	*	*	n	NotF¶	1.63	*		2390	2.5	168	*	1.006	1.016
Hepta	PCB-179	1.17e+06	1.06	y	44:05	1.30	5720		*	2.5	*	1.029	1.024	1.034
Hepta	PCB-176	4.09e+05	1.13	y	44:33	1.48	1760		*	2.5	*	1.040	1.035	1.045
Hepta	PCB-186	*	*	n	NotF¶	1.45	*		2390	2.5	189	*	1.050	1.060
Hepta	PCB-178	4.84e+05	1.27	n	45:39	1.03	2980	R	*	2.5	*	1.065	1.061	1.071
Hepta	PCB-175	1.30e+05	1.04	y	46:00	1.01	817		*	2.5	*	1.074	1.069	1.079
Hepta	PCB-182/187	3.39e+06	1.06	y	46:10	1.25	17200		*	2.5	*	1.077	1.073	1.083
Hepta	PCB-183	1.65e+06	1.14	y	46:30	1.21	8680		*	2.5	*	1.085	1.081	1.091
Hepta	PCB-185	3.09e+05	1.01	y	47:09	1.80	1260		*	2.5	*	0.956	0.951	0.961
Hepta	PCB-174	2.90e+06	1.00	y	47:31	1.38	15500		*	2.5	*	0.963	0.958	0.968
Hepta	PCB-181	*	*	n	NotF¶	1.38	*		2390	2.5	226	*	0.960	0.970
Hepta	PCB-177	1.58e+06	1.12	y	47:47	1.26	9260		*	2.5	*	0.969	0.963	0.973
Hepta	PCB-171	7.38e+05	1.03	y	48:05	1.58	3430		*	2.5	*	0.975	0.970	0.980
Hepta	PCB-173	4.41e+04	1.05	y	48:30	1.11	293		*	2.5	*	0.983	0.978	0.988
Hepta	PCB-172	5.44e+05	1.15	y	48:57	1.63	2450		*	2.5	*	0.992	0.987	0.997
Hepta	PCB-192	*	*	n	NotF¶	1.74	*		2390	2.5	179	*	0.991	1.001
Hepta	PCB-180	7.52e+06	1.05	y	49:21	1.34	41200		*	2.5	*	1.000	0.995	1.005

Analyst: DMS

Date: 3/26/15

Client ID: SC-CB-35-20141211-S Filename: 150319E1 S:5 Acq:19-MAR-15 17:05:20 ConCal: ST150319E1-1
Lab ID: 1400948-02RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.891 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	4.45e+05	1.06	y 49:34	1.72	1910		*	2.5	*	1.005	0.999	1.009
Hepta	PCB-191	1.74e+05	0.93	y 49:49	1.69	758		*	2.5	*	1.010	1.004	1.014
Hepta	PCB-170	*	*	n NotF¶	1.60	16900 *		*	2.5	*	*	0.995	1.005
Hepta	PCB-190	*	*	n NotF¶	2.21	3140 *		*	2.5	*	*	0.998	1.008
Hepta	PCB-189	1.96e+05	0.90	y 52:21	1.55	927		*	2.5	*	1.000	0.995	1.005
Octa	PCB-202	2.36e+05	0.97	y 48:16	1.08	1530		*	2.5	*	1.000	0.995	1.005
Octa	PCB-201	1.81e+05	0.89	y 48:46	1.15	1100		*	2.5	*	1.010	1.005	1.015
Octa	PCB-204	*	*	n NotF¶	1.14	*		2080	2.5	297	*	1.008	1.018
Octa	PCB-197	5.40e+04	0.92	y 49:13	1.07	352		*	2.5	*	1.020	1.015	1.025
Octa	PCB-200	1.52e+05	0.87	y 50:06	1.06	998		*	2.5	*	1.038	1.032	1.044
Octa	PCB-198	4.56e+04	1.06	n 51:26	0.76	422	R	*	2.5	*	1.066	1.059	1.069
Octa	PCB-199	1.08e+06	0.90	y 51:33	0.80	9510		*	2.5	*	1.068	1.061	1.071
Octa	PCB-196/203	1.31e+06	0.89	y 51:49	0.80	11400		*	2.5	*	1.074	1.066	1.076
Octa	PCB-195	7.39e+05	1.02	y 52:59	1.23	3080		*	2.5	*	0.984	0.979	0.989
Octa	PCB-194	2.18e+06	0.91	y 53:50	1.21	9210		*	2.5	*	1.000	0.995	1.005
Octa	PCB-205	1.52e+05	0.92	y 54:07	1.54	504		*	2.5	*	1.005	1.001	1.011
Nona	PCB-208	2.62e+05	1.47	y 53:08	0.93	1250		*	2.5	*	1.000	0.995	1.005
Nona	PCB-207	1.11e+05	1.54	y 53:26	1.08	458		*	2.5	*	1.006	1.001	1.011
Nona	PCB-206	7.03e+05	1.49	y 55:29	1.02	4250		*	2.5	*	1.000	0.995	1.005
Deca	PCB-209	1.84e+05	1.14	y 56:51	1.17	1020		*	2.5	*	1.000	0.995	1.005

* See ORIGINAL INJECTION

Analyst: DMS

Date: 3/26/15

Client ID: SC-CB-35-20141211-S Filename: 150319E1 S:5 Acq:19-MAR-15 17:05:20 ConCal: ST150319E1-1
Lab ID: 1400948-02RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.8909 EndCAL: NA

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	*	*	n	NotFnd	1.27	*	
Total Di-PCB	3.88e+06	1.52	y	22:58	1.21	6194.83	
Total Tri-PCB	3.02e+06	1.10	y	25:54	1.10	8036.23	
Total Tri-PCB	1.94e+07	1.14	y	28:31	1.21	32108.6	Sum:40144.8
Total Tetra-PCB	4.87e+07	0.82	y	29:49	1.09	132735	
Total Penta-PCB	3.64e+07	1.64	y	35:51	1.18	172794	
Total Penta-PCB	7.55e+06	1.66	y	42:14	1.25	20703.3	Sum:193498
Total Hexa-PCB	5.95e+06	1.28	y	39:35	0.90	54948.8	
Total Hexa-PCB	4.29e+07	1.19	y	42:10	1.11	158427	Sum:213376
Total Hepta-PCB	2.12e+07	1.06	y	44:05	1.42	111183	
Total Octa-PCB	3.02e+06	0.97	y	48:16	0.96	24914.2	
Total Octa-PCB	3.07e+06	1.02	y	52:59	1.33	12803.8	Sum:37718.0
Total Nona-PCB	1.08e+06	1.47	y	53:08	1.01	5963.19	
Total Deca-PCB	1.84e+05	1.14	y	56:51	1.17	1021.11	

* see original injection
+ 19981.6 = 131164.6

Total PCB Conc:~~749581.343157~~ + 19981.6 = ~~769562.94~~
762000

Integrations by Analyst: DMS

Date: 3/26/15

Client ID: SC-CB-35-20141211-S Filename: 150319E1 S:5 Acq:19-MAR-15 17:05:20 ConCal: ST150319E1-1
Lab ID: 1400948-02RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:1.8909 EndCAL: NA

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	5.55e+06	3.06	y	0.87	16:10	0.623	0.629	0.635	10800	103
13C-PCB-3	5.71e+06	3.22	y	0.91	18:47	0.723	0.725	0.733	10700	101
13C-PCB-4	3.65e+06	1.47	y	0.59	20:06	0.774	0.775	0.783	10600	100
13C-PCB-9	5.56e+06	1.53	y	0.90	21:53	0.843	0.842	0.850	10600	100.0
13C-PCB-11	5.76e+06	1.67	y	0.94	25:16	0.973	0.968	0.978	10500	98.9
13C-PCB-19	3.21e+06	1.17	y	0.53	24:15	0.934	0.930	0.940	10300	97.4
13C-PCB-28	5.01e+06	1.02	y	0.93	29:07	1.003	0.999	1.009	10500	99.1
13C-PCB-32	4.53e+06	0.93	y	0.80	27:10	1.046	1.040	1.050	9710	91.8
13C-PCB-37	4.72e+06	0.94	y	0.84	32:59	1.137	1.131	1.143	11000	104
13C-PCB-47	3.28e+06	0.77	y	0.81	32:02	0.871	0.866	0.874	10300	97.2
13C-PCB-52	3.01e+06	0.76	y	0.77	31:32	0.857	0.853	0.861	9940	94.0
13C-PCB-54	3.68e+06	0.78	y	0.97	27:59	0.761	0.758	0.766	9660	91.3
13C-PCB-70	4.02e+06	0.76	y	1.00	35:32	0.966	0.961	0.971	10300	97.0
13C-PCB-77	3.97e+06	0.73	y	0.94	39:39	1.078	1.073	1.083	10700	102
13C-PCB-80	4.36e+06	0.86	y	1.03	35:58	0.978	0.972	0.982	10800	102
13C-PCB-81	3.89e+06	0.85	y	0.92	39:03	1.062	1.057	1.067	10800	102
13C-PCB-95	1.63e+06	1.74	y	0.74	35:50	0.913	0.908	0.918	10800	102
13C-PCB-97	1.63e+06	1.50	y	0.70	38:49	0.989	0.984	0.994	11400	108
13C-PCB-101	1.70e+06	1.78	y	0.78	37:31	0.955	0.951	0.961	10600	101
13C-PCB-104	2.25e+06	1.58	y	1.00	32:41	0.832	0.828	0.836	11000	104
13C-PCB-105	2.97e+06	1.59	y	1.37	43:05	0.930	0.924	0.934	11300	107
13C-PCB-114	3.30e+06	1.58	y	1.36	42:13	0.911	0.905	0.915	12600	119
13C-PCB-118	2.09e+06	1.69	y	0.96	41:34	1.059	1.054	1.064	10700	101
13C-PCB-123	1.93e+06	1.54	y	0.89	41:23	1.054	1.050	1.060	10600	100
13C-PCB-126	2.98e+06	1.73	y	1.31	45:19	0.978	0.972	0.982	11800	112
13C-PCB-127	3.08e+06	1.61	y	1.47	43:26	0.937	0.931	0.941	10800	102
13C-PCB-138	2.34e+06	1.28	y	1.10	44:48	0.967	0.961	0.971	11000	104
13C-PCB-141	2.17e+06	1.20	y	1.07	43:58	0.949	0.943	0.953	10500	98.9
13C-PCB-153	2.38e+06	1.23	y	1.15	43:14	0.933	0.927	0.937	10800	102
13C-PCB-155	1.45e+06	1.39	y	0.84	37:04	0.944	0.939	0.949	8450	79.9
13C-PCB-156	2.94e+06	1.31	y	1.30	48:03	1.037	1.032	1.042	11800	111
13C-PCB-157	2.84e+06	1.35	y	1.36	48:20	1.043	1.038	1.048	10900	103
13C-PCB-159	2.58e+06	1.29	y	1.25	46:06	0.995	0.989	0.999	10700	101
13C-PCB-167	3.06e+06	1.33	y	1.35	46:47	1.009	1.004	1.014	11800	111
13C-PCB-169	2.85e+06	1.24	y	1.29	50:29	1.089	1.083	1.093	11500	109
13C-PCB-170	9.68e+05	0.54	n	0.54	50:50	1.097	1.089	1.101	9260	(87.5)
13C-PCB-180	1.44e+06	0.49	y	0.68	49:20	1.064	1.060	1.070	10900	103
13C-PCB-188	1.66e+06	0.50	y	0.92	42:51	0.924	0.919	0.929	9400	88.8
13C-PCB-189	1.44e+06	0.47	y	0.72	52:20	1.129	1.120	1.132	10400	98.8
13C-PCB-194	2.07e+06	1.01	y	0.80	53:50	0.995	0.990	1.000	10600	100
13C-PCB-202	1.51e+06	0.86	y	0.84	48:16	1.041	1.036	1.046	9360	88.5
13C-PCB-206	1.71e+06	0.74	y	0.65	55:28	1.025	1.021	1.031	10700	102
13C-PCB-208	2.37e+06	0.77	y	1.08	53:07	0.982	0.976	0.986	8960	84.7
13C-PCB-209	1.63e+06	1.33	y	0.61	56:50	1.050	1.045	1.055	10900	103

114 see original injection

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	4.18e+06	0.84	y	1.02	37:50	1.029	1.023	1.034	10500	99.1
13C-PCB-178	1.24e+06	0.45	y	0.61	45:38	0.985	0.979	0.990	10500	99.2

PS vs. IS

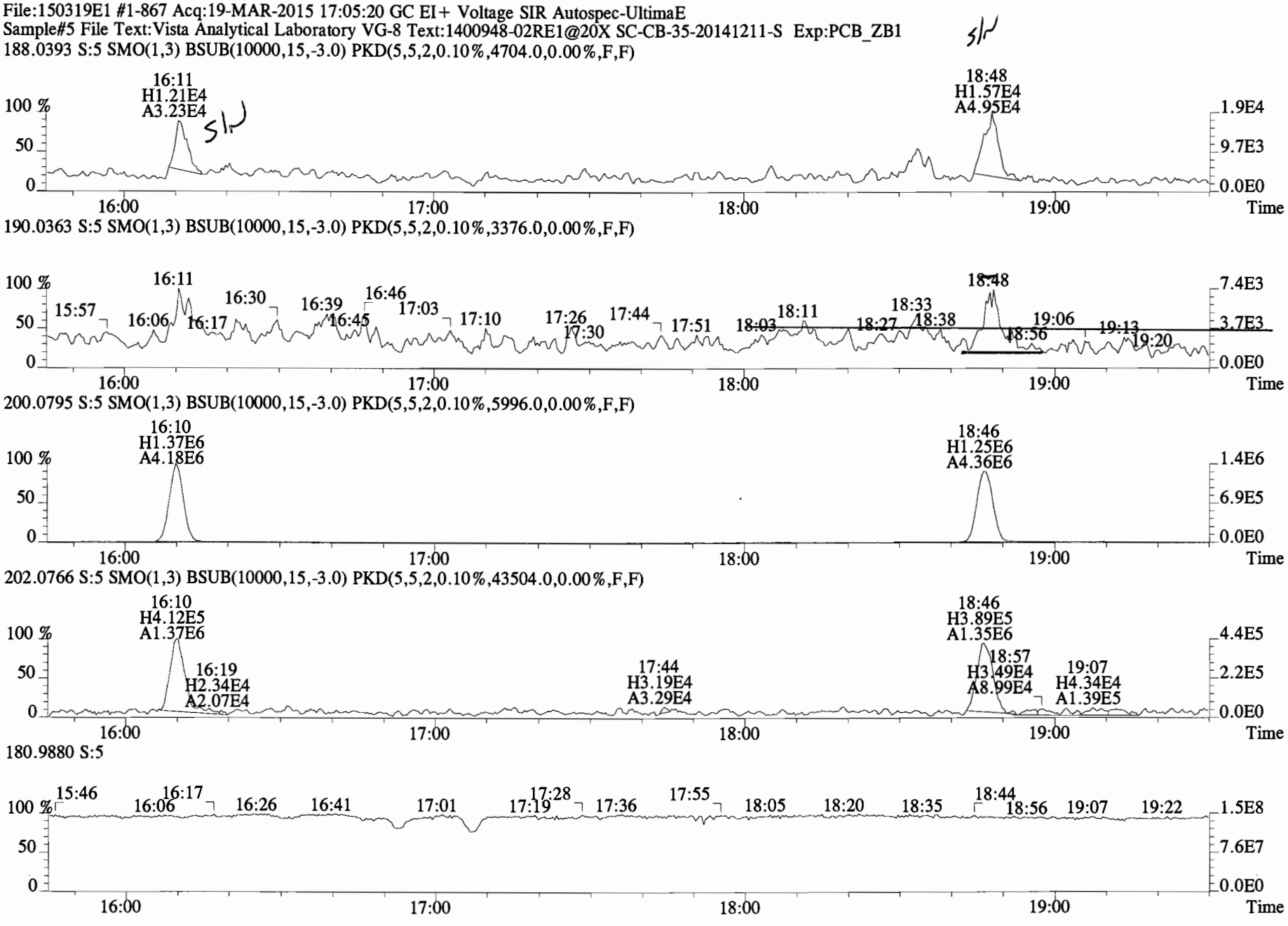
Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	4.18e+06	0.84	y	1.10	37:50	0.969	0.964	0.974	10300	97.4
13C-PCB-178	1.24e+06	0.45	y	0.90	45:38	0.925	0.920	0.930	10200	96.2

RS

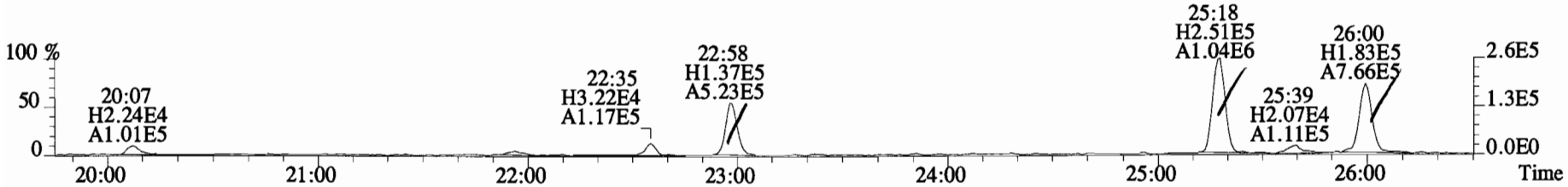
Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	6.20e+06	1.65	y	1.00	25:58	10600
13C-PCB-31	5.42e+06	0.99	y	1.00	29:01	10600
13C-PCB-60	4.15e+06	0.81	y	1.00	36:47	10600
13C-PCB-111	2.15e+06	1.66	y	1.00	39:16	10600
13C-PCB-128	2.04e+06	1.31	y	1.00	46:21	10600
13C-PCB-205	2.59e+06	0.88	y	1.00	54:07	10600

Analyst: DMS

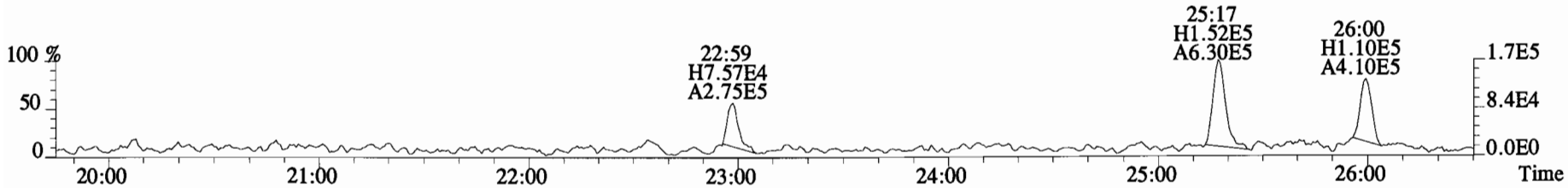
Date: 3/26/15


File:150319E1 #1-867 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
188.0393 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4704.0,0.00%,F,F)
16:11
H1.21E4
A3.23E4
18:48
H1.57E4
A4.95E4
190.0363 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3376.0,0.00%,F,F)
200.0795 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5996.0,0.00%,F,F)
16:10
H1.37E6
A4.18E6
18:46
H1.25E6
A4.36E6
202.0766 S:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,43504.0,0.00%,F,F)
16:10
H4.12E5
A1.37E6
16:19
H2.34E4
A2.07E4
17:44
H3.19E4
A3.29E4
18:46
H3.89E5
A1.35E6
18:57
H3.49E4
A8.99E4
19:07
H4.34E4
A1.39E5
180.9880 S:5
100 %
50
0
16:00
17:00
18:00
19:00
Time
1.9E4
9.7E3
0.0E0
7.4E3
3.7E3
1.4E6
6.9E5
4.4E5
2.2E5
1.5E8
7.6E7

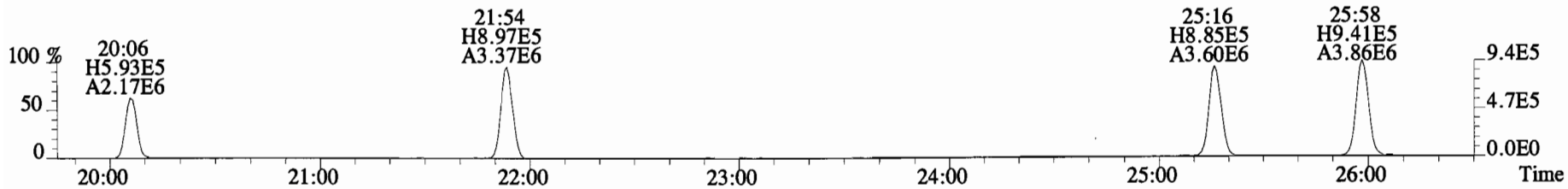
File:150319E1 #1-757 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
222.0003 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3880.0,0.00%,F,F)



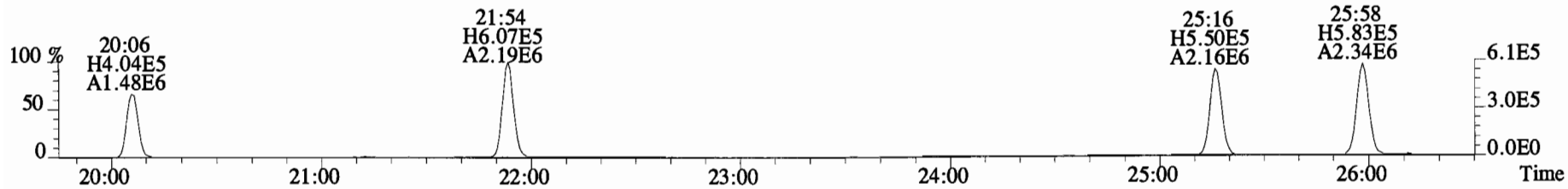
223.9974 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,18760.0,0.00%,F,F)



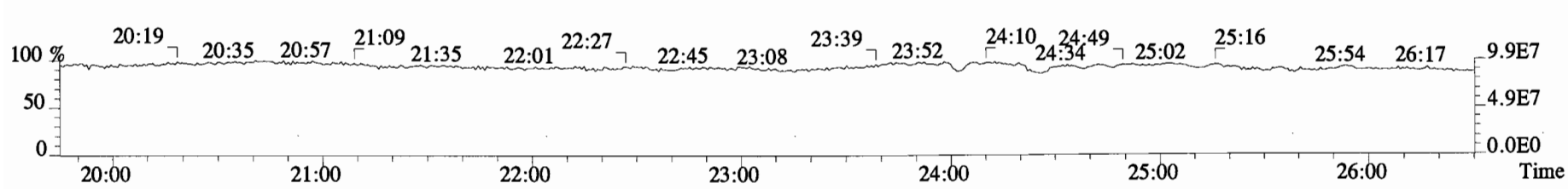
234.0406 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3092.0,0.00%,F,F)



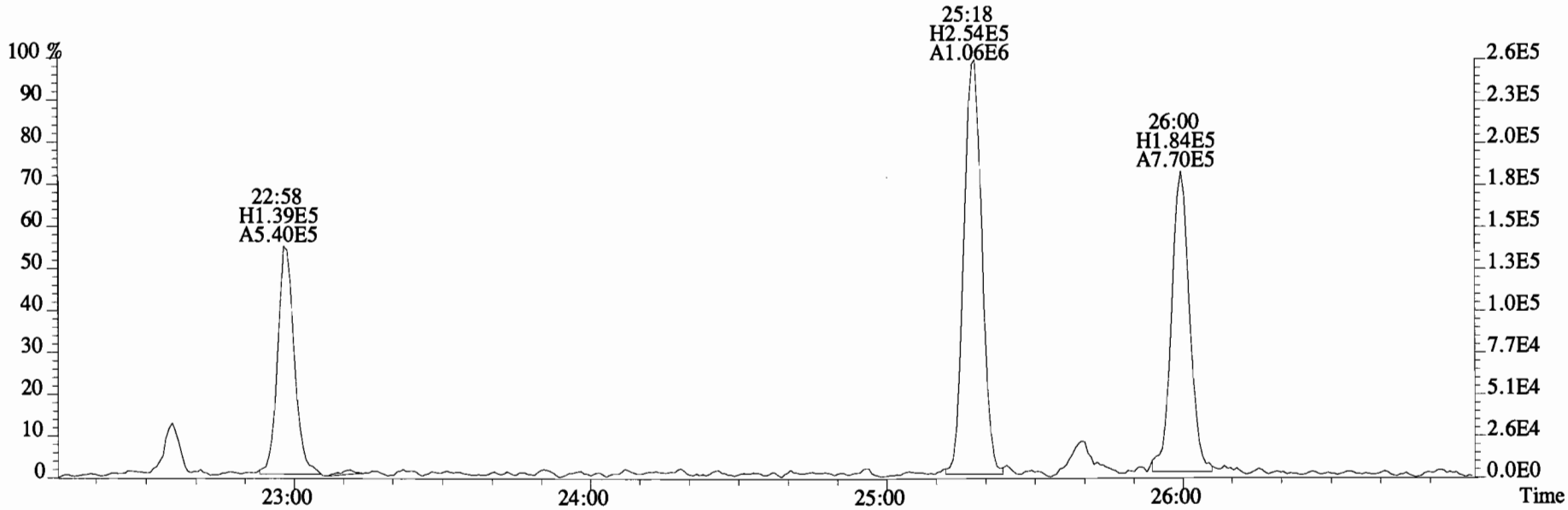
236.0376 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2616.0,0.00%,F,F)



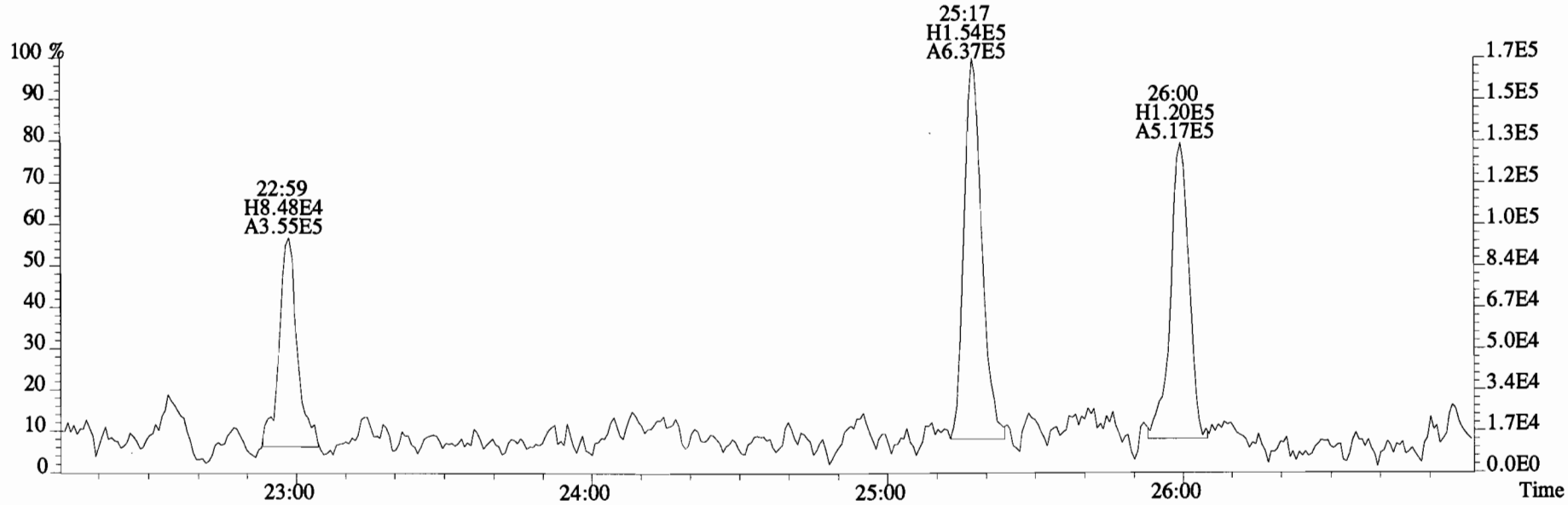
230.9856 S:5 F:2



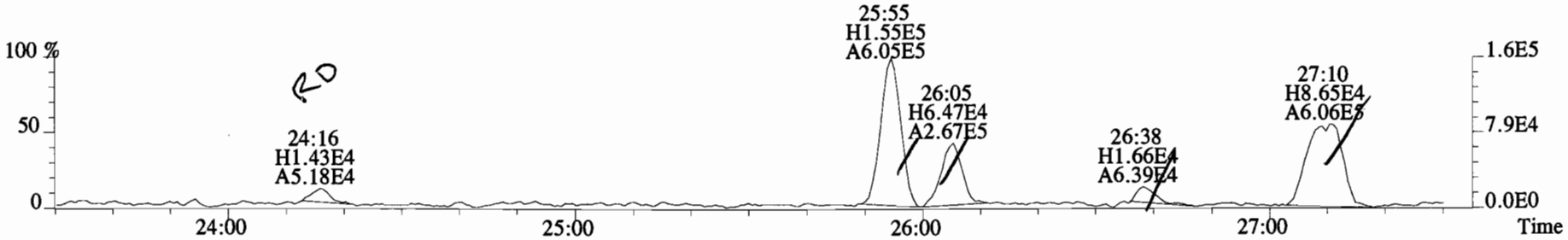
File:150319E1 #1-757 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
222.0003 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3880.0,0.00%,F,F)



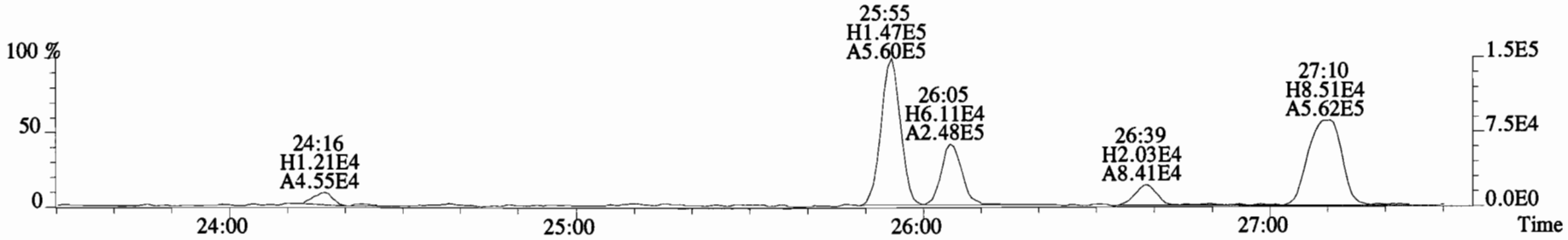
223.9974 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,18760.0,0.00%,F,F)



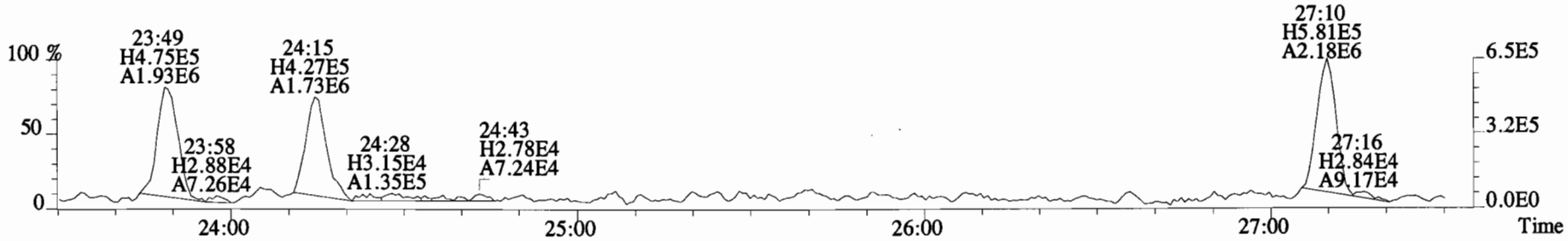
File:150319E1 #1-757 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
255.9613 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5748.0,0.00%,F,F)



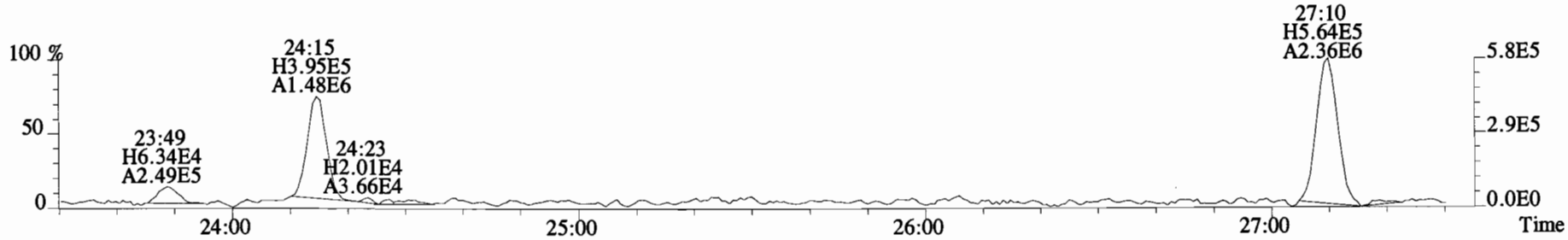
257.9584 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2604.0,0.00%,F,F)



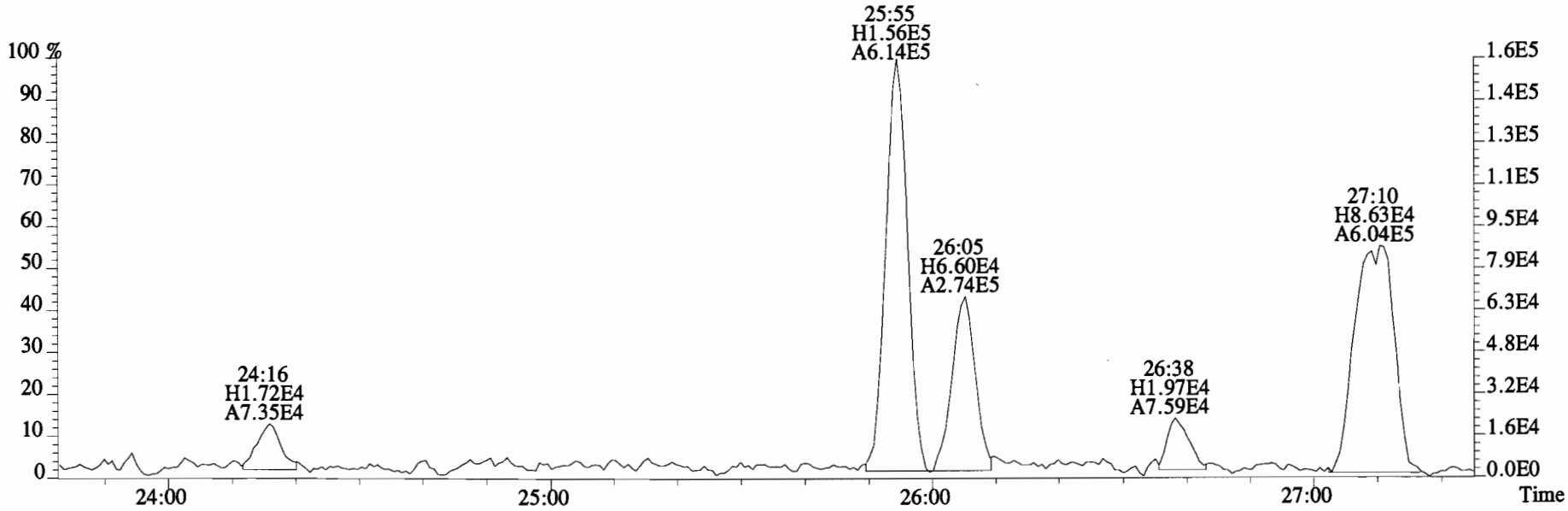
268.0016 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,65624.0,0.00%,F,F)



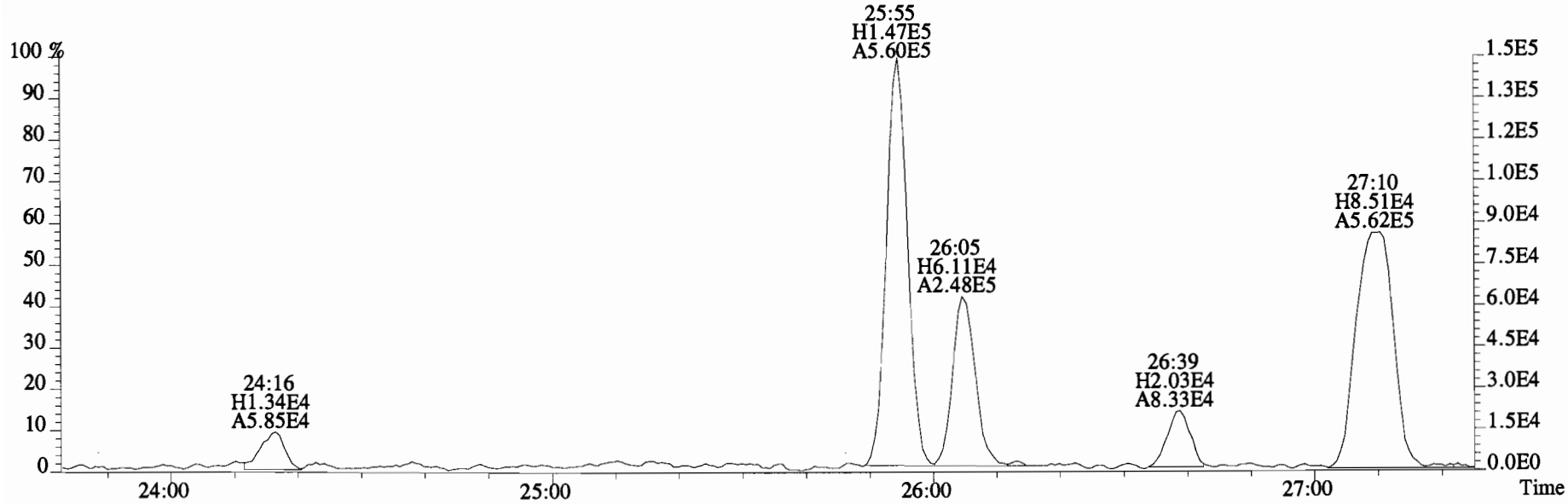
269.9986 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,30296.0,0.00%,F,F)

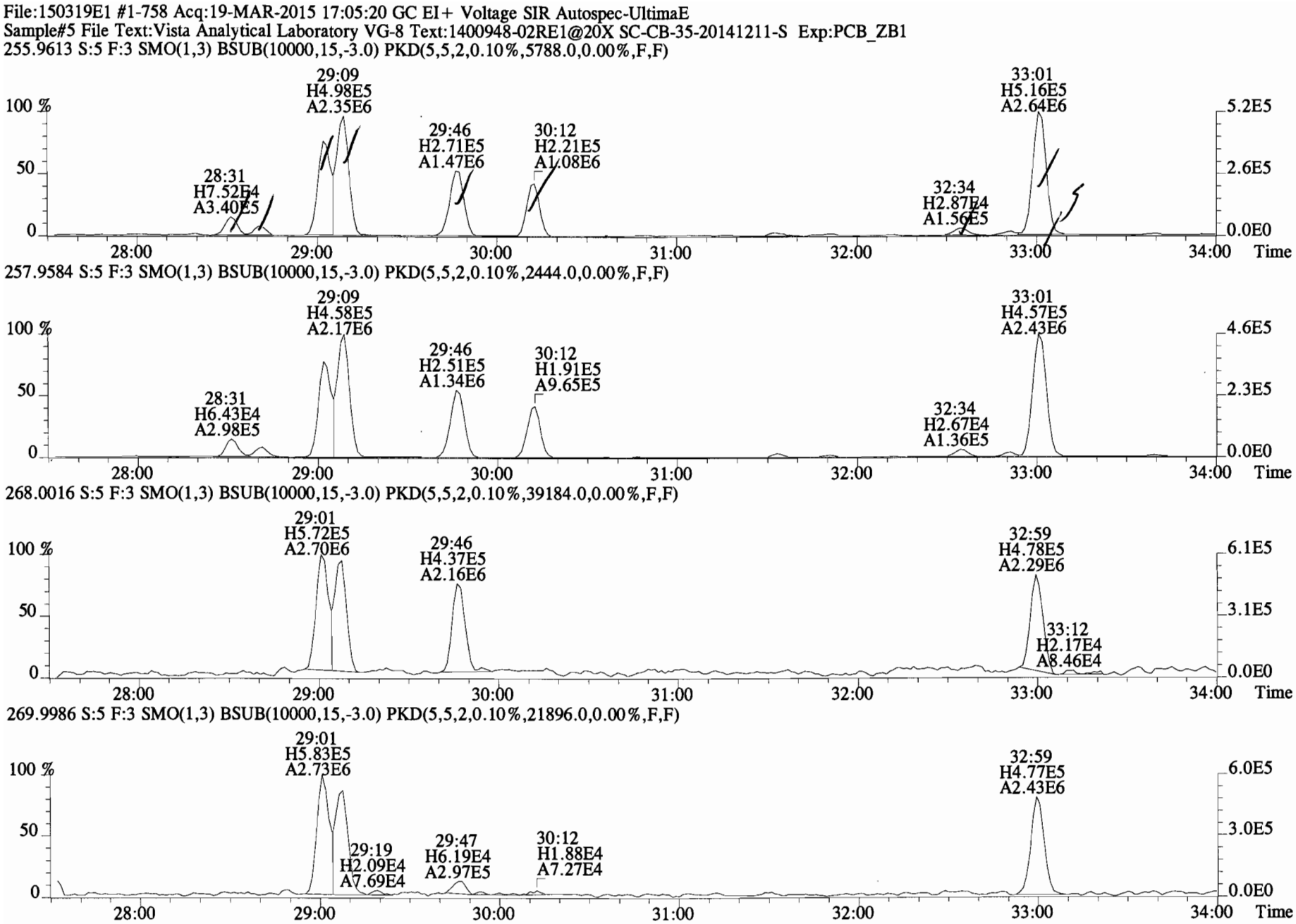


File:150319E1 #1-757 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
255.9613 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5748.0,0.00%,F,F)

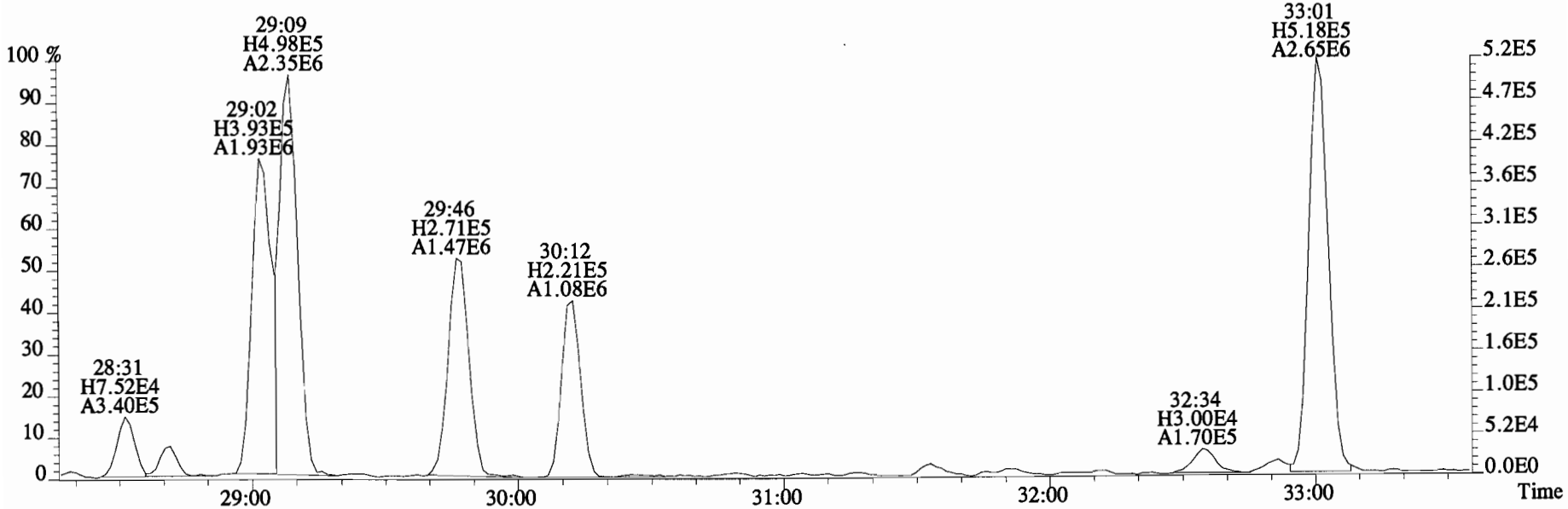


257.9584 S:5 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2604.0,0.00%,F,F)

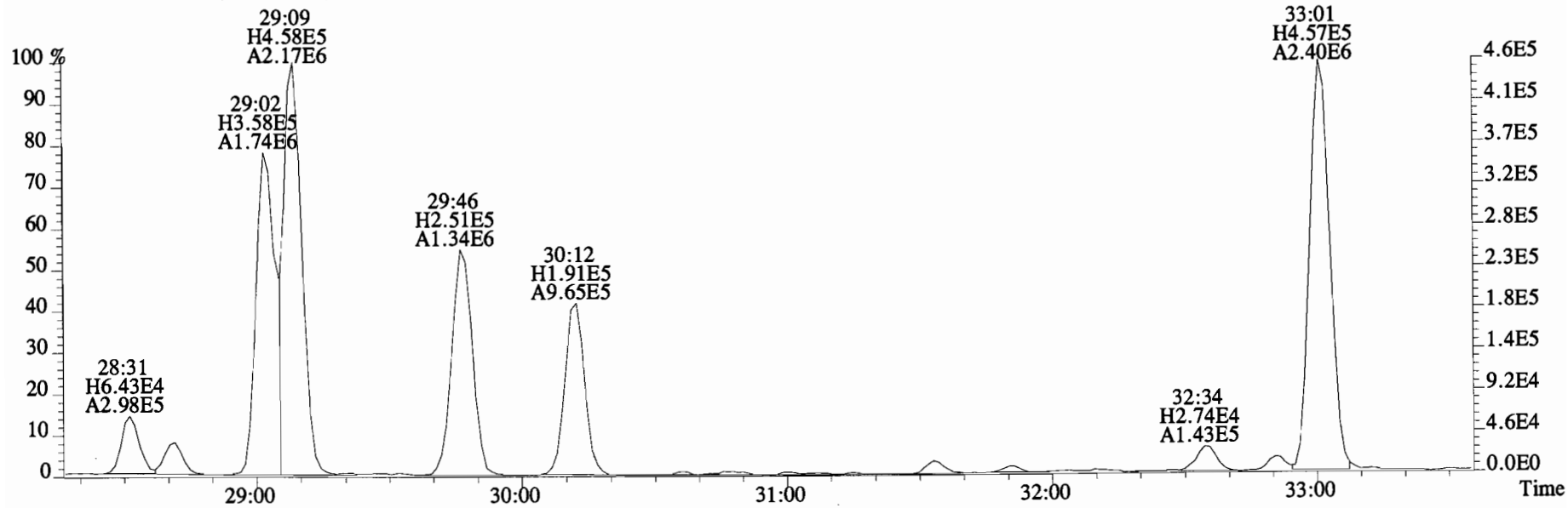



File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
255.9613 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5788.0,0.00%,F,F)
29:09 H4.98E5 A2.35E6
33:01 H5.16E5 A2.64E6
29:46 H2.71E5 A1.47E6
30:12 H2.21E5 A1.08E6
28:31 H7.52E4 A3.40E5
32:34 H2.87E4 A1.56E5
257.9584 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2444.0,0.00%,F,F)
29:09 H4.58E5 A2.17E6
33:01 H4.57E5 A2.43E6
29:46 H2.51E5 A1.34E6
30:12 H1.91E5 A9.65E5
28:31 H6.43E4 A2.98E5
32:34 H2.67E4 A1.36E5
268.0016 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,39184.0,0.00%,F,F)
29:01 H5.72E5 A2.70E6
29:46 H4.37E5 A2.16E6
32:59 H4.78E5 A2.29E6
33:12 H2.17E4 A8.46E4
269.9986 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,21896.0,0.00%,F,F)
29:01 H5.83E5 A2.73E6
32:59 H4.77E5 A2.43E6
29:19 H2.09E4 A7.69E4
29:47 H6.19E4 A2.97E5
30:12 H1.88E4 A7.27E4
100 %
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
5.2E5
2.6E5
0.0E0
4.6E5
2.3E5
6.1E5
3.1E5
6.0E5
3.0E5

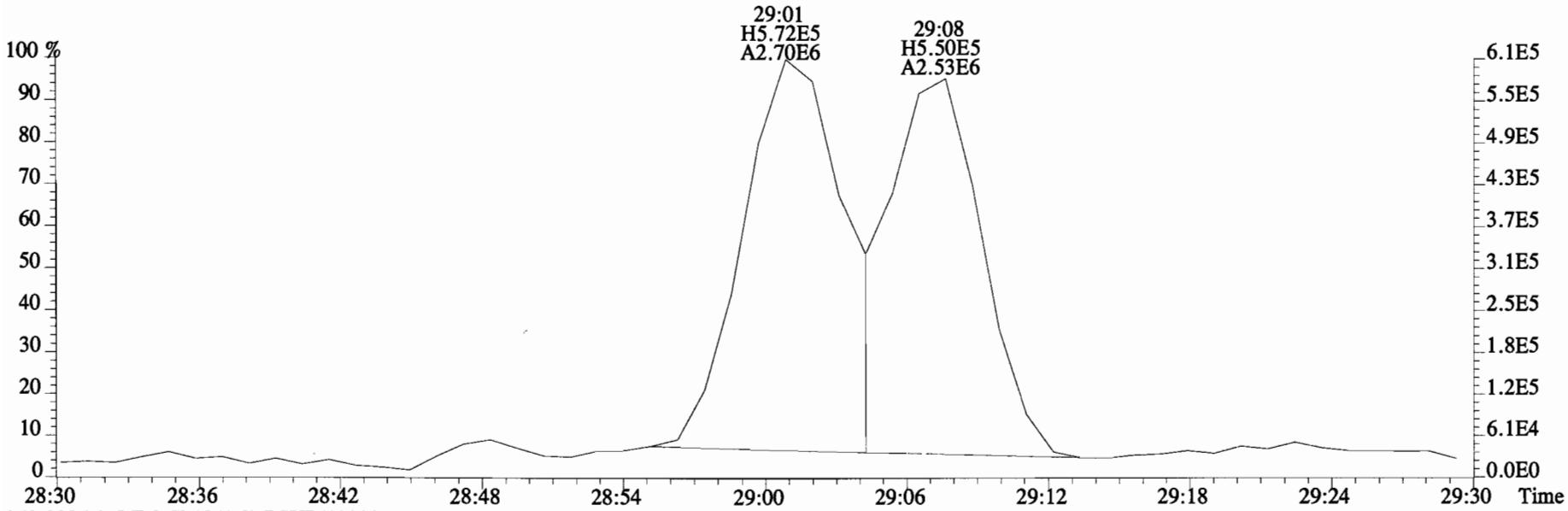
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
255.9613 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5788.0,0.00%,F,F)



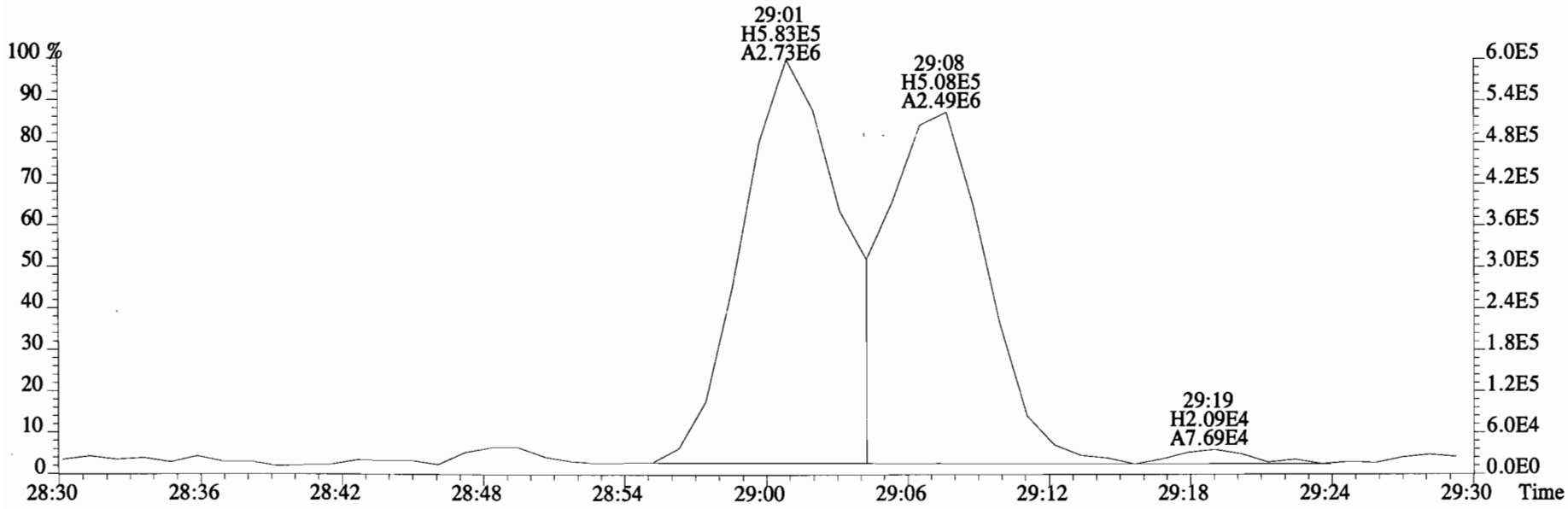
257.9584 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2444.0,0.00%,F,F)



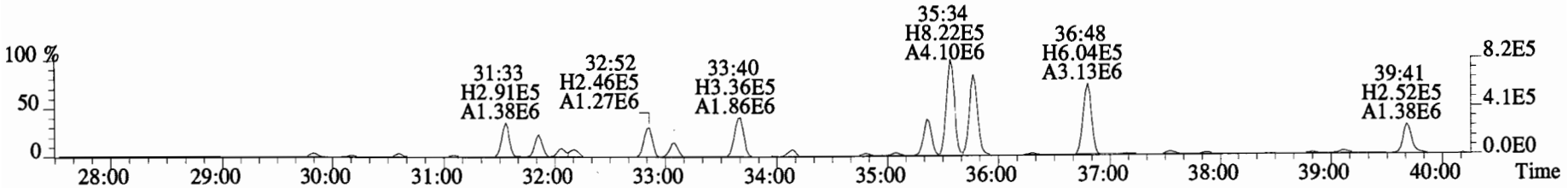
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
268.0016 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,39184.0,0.00%,F,F)



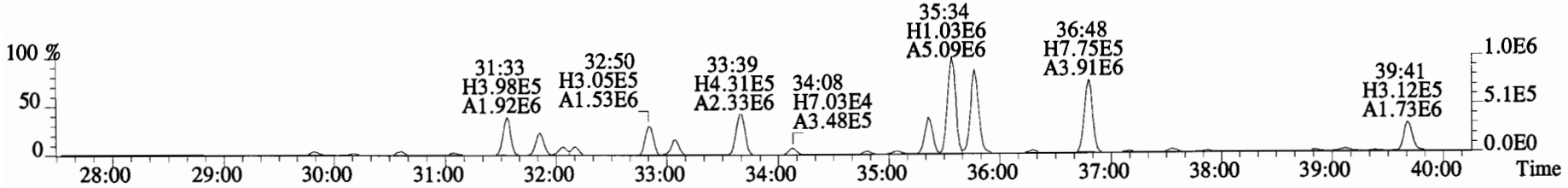
269.9986 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,21896.0,0.00%,F,F)



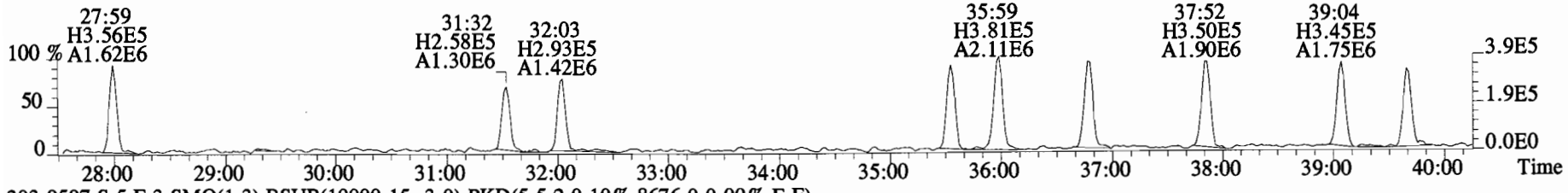
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3004.0,0.00%,F,F)



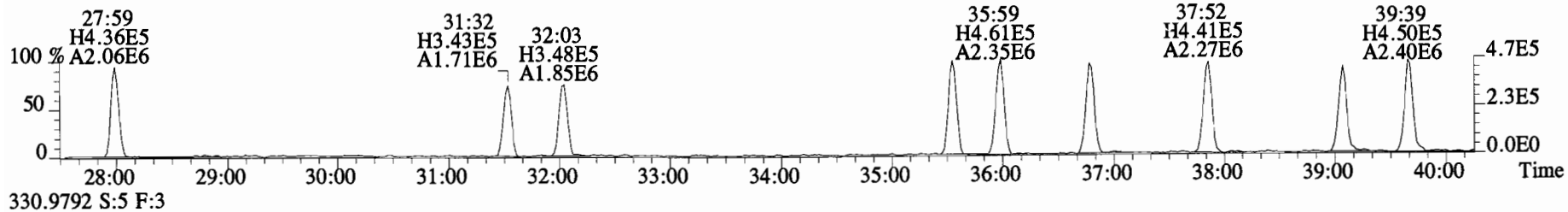
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2992.0,0.00%,F,F)



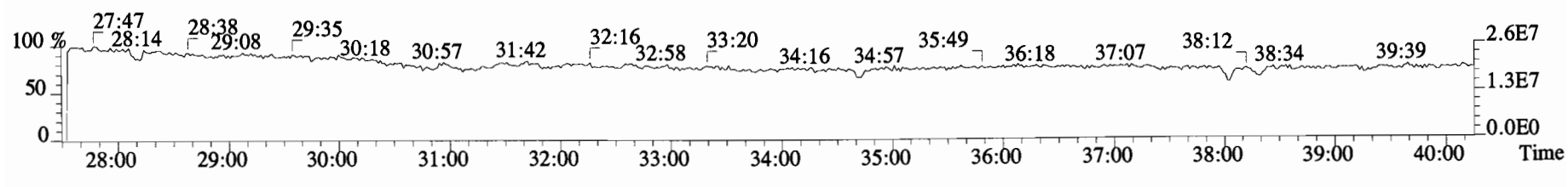
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,18544.0,0.00%,F,F)



303.9597 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8676.0,0.00%,F,F)

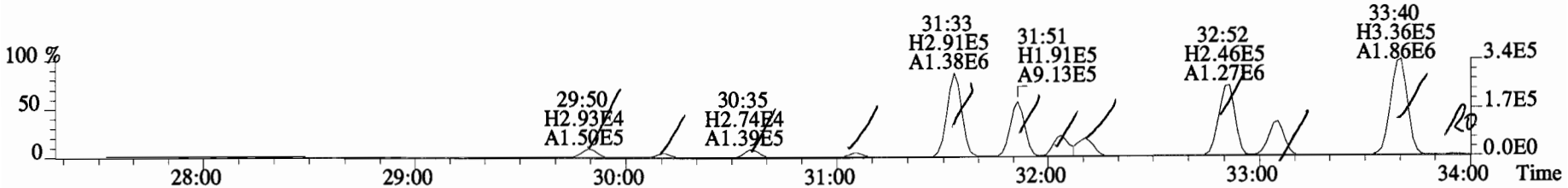


330.9792 S:5 F:3

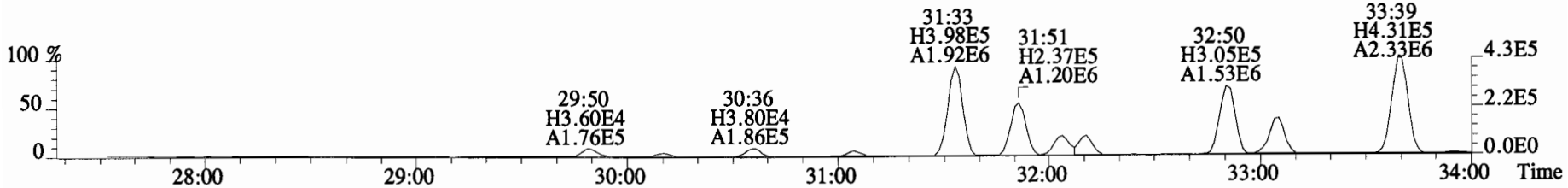


File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1

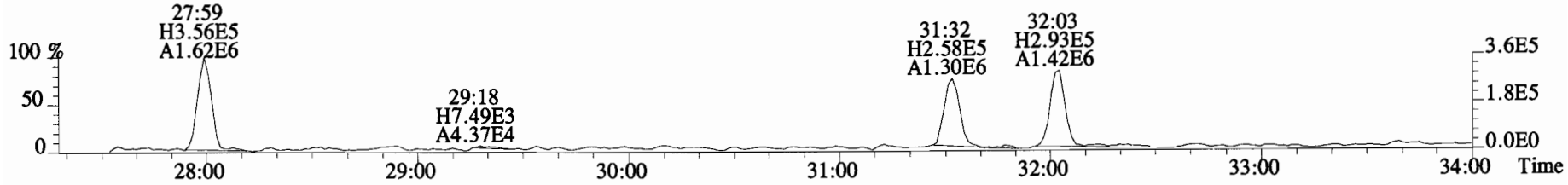
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3004.0,0.00%,F,F)



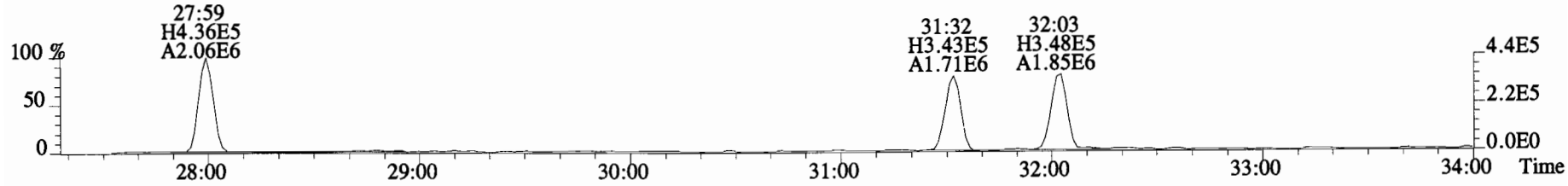
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2992.0,0.00%,F,F)



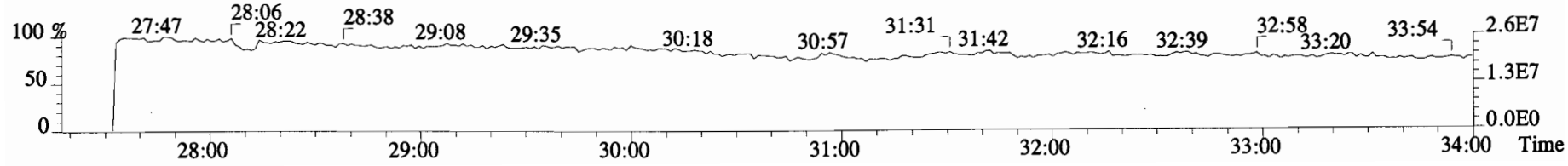
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,18544.0,0.00%,F,F)

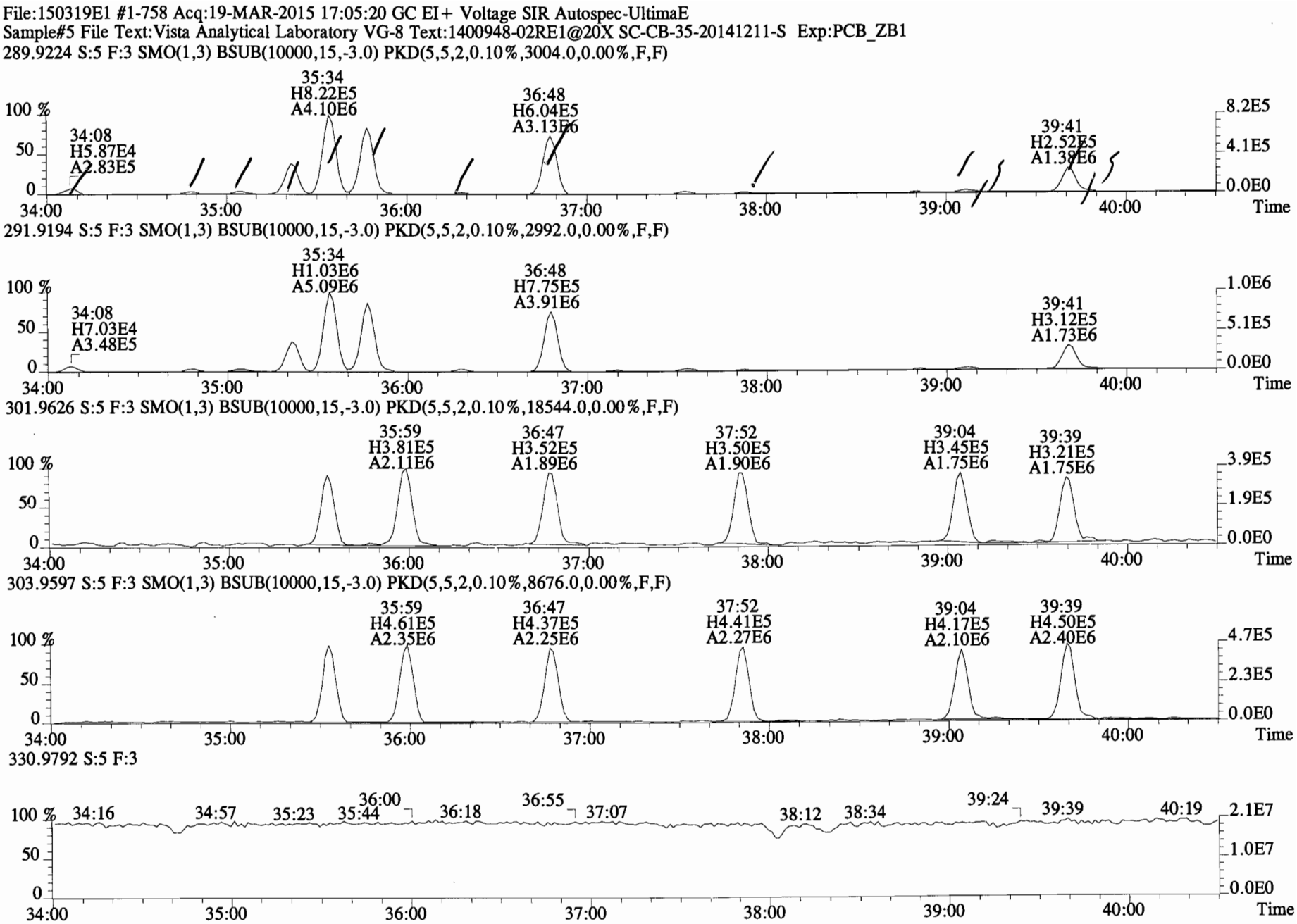


303.9597 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8676.0,0.00%,F,F)

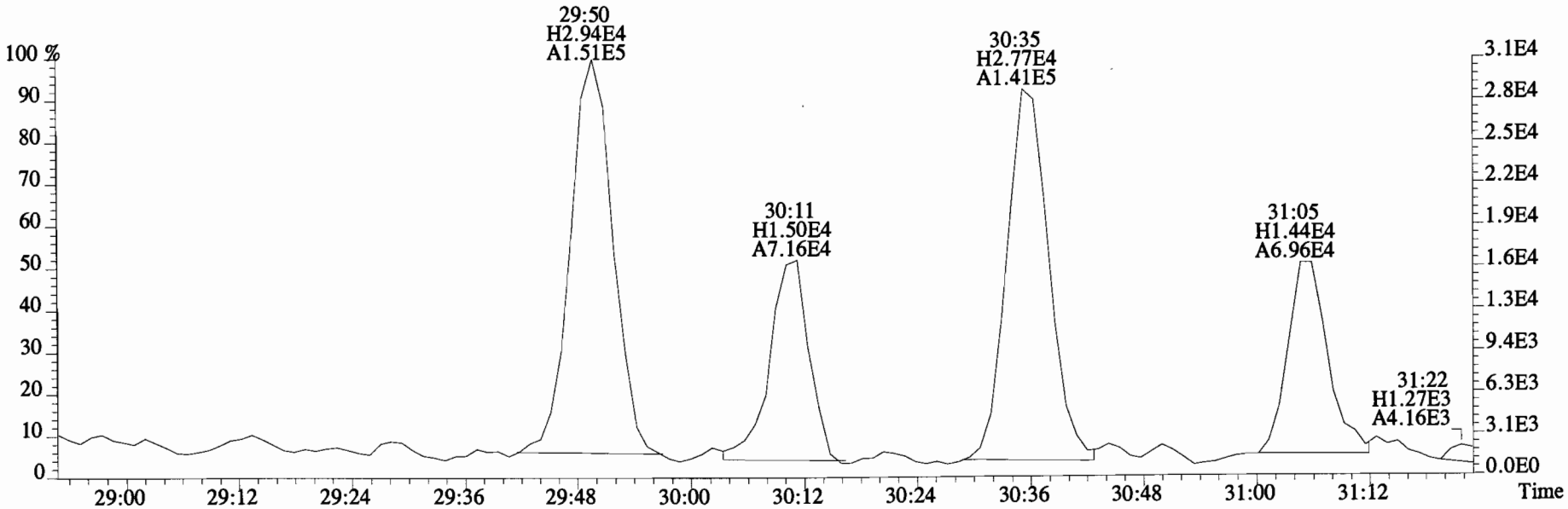


330.9792 S:5 F:3

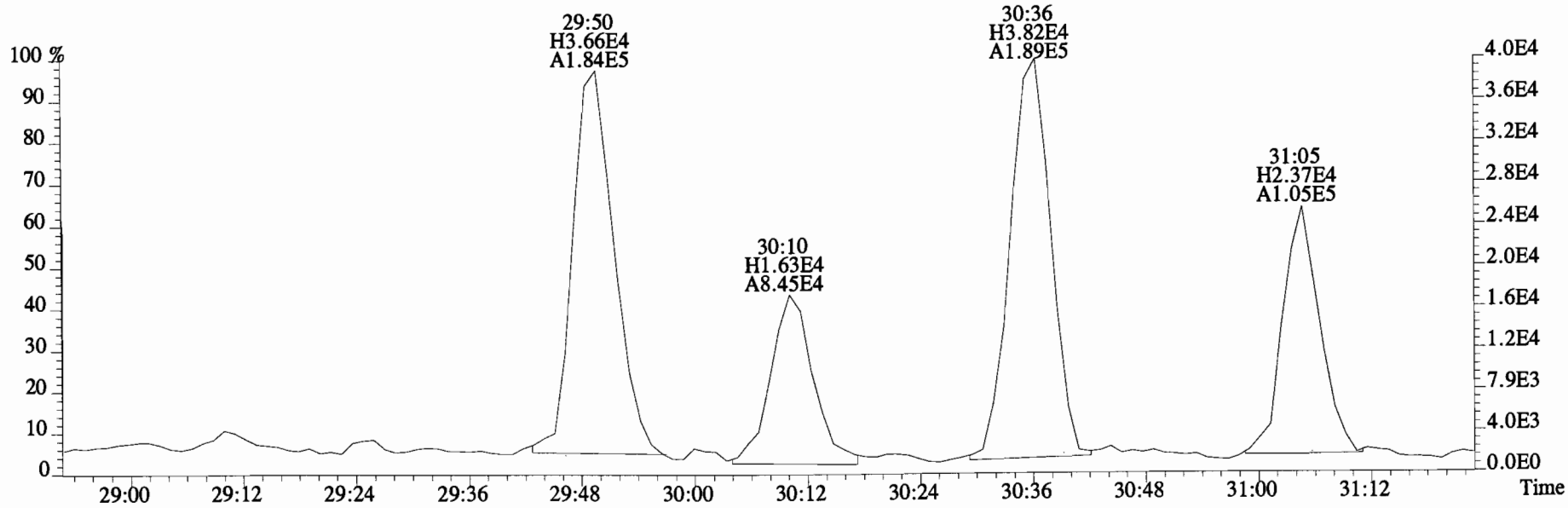



File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3004.0,0.00%,F,F)
35:34 H8.22E5 A4.10E6
36:48 H6.04E5 A3.13E6
34:08 H5.87E4 A2.83E5
39:41 H2.52E5 A1.39E6
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2992.0,0.00%,F,F)
35:34 H1.03E6 A5.09E6
36:48 H7.75E5 A3.91E6
34:08 H7.03E4 A3.48E5
39:41 H3.12E5 A1.73E6
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,18544.0,0.00%,F,F)
35:59 H3.81E5 A2.11E6
36:47 H3.52E5 A1.89E6
37:52 H3.50E5 A1.90E6
39:04 H3.45E5 A1.75E6
39:39 H3.21E5 A1.75E6
303.9597 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8676.0,0.00%,F,F)
35:59 H4.61E5 A2.35E6
36:47 H4.37E5 A2.25E6
37:52 H4.41E5 A2.27E6
39:04 H4.17E5 A2.10E6
39:39 H4.50E5 A2.40E6
330.9792 S:5 F:3
34:16 34:57 35:23 35:44 36:00 36:18 36:55 37:07 38:12 38:34 39:24 39:39 40:19
100 %
50
0
34:00 35:00 36:00 37:00 38:00 39:00 40:00 Time
8.2E5 4.1E5 0.0E0
1.0E6 5.1E5 0.0E0
3.9E5 1.9E5 0.0E0
4.7E5 2.3E5 0.0E0
2.1E7 1.0E7 0.0E0

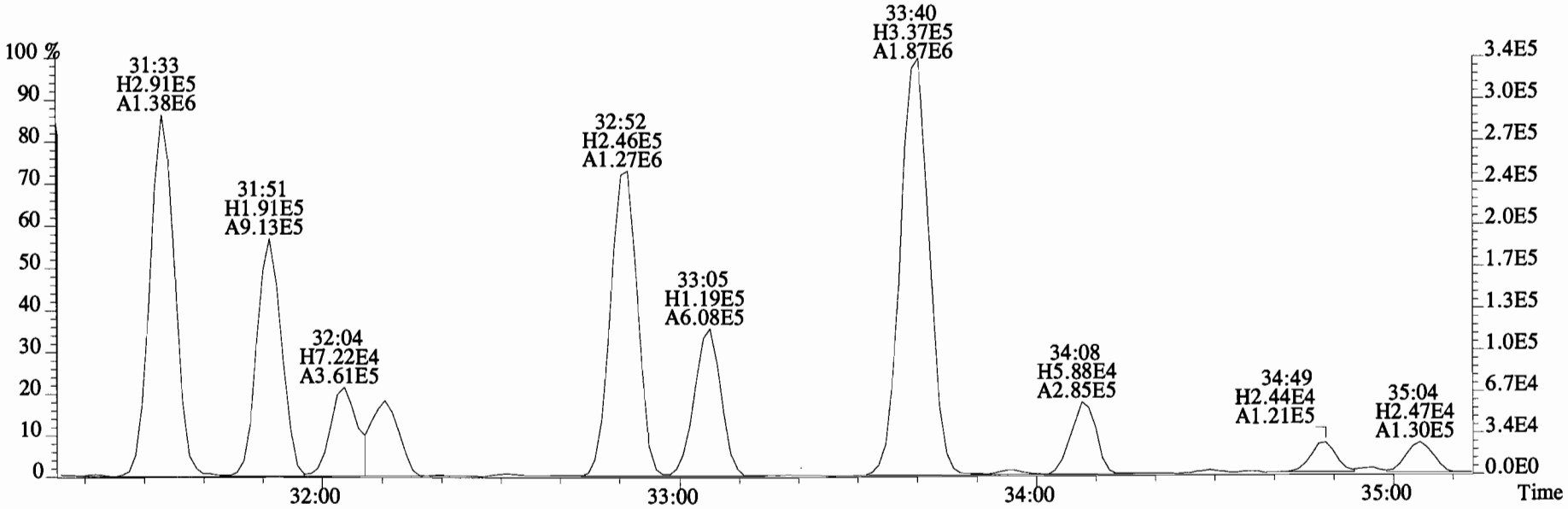
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3004.0,0.00%,F,F)



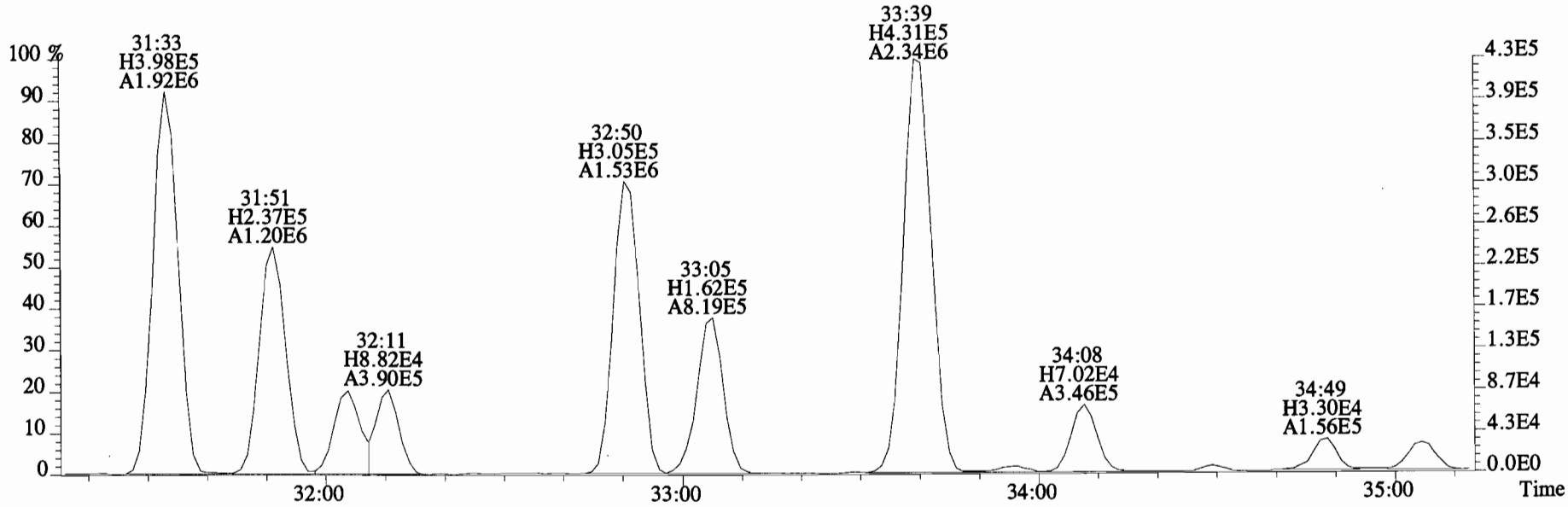
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2992.0,0.00%,F,F)



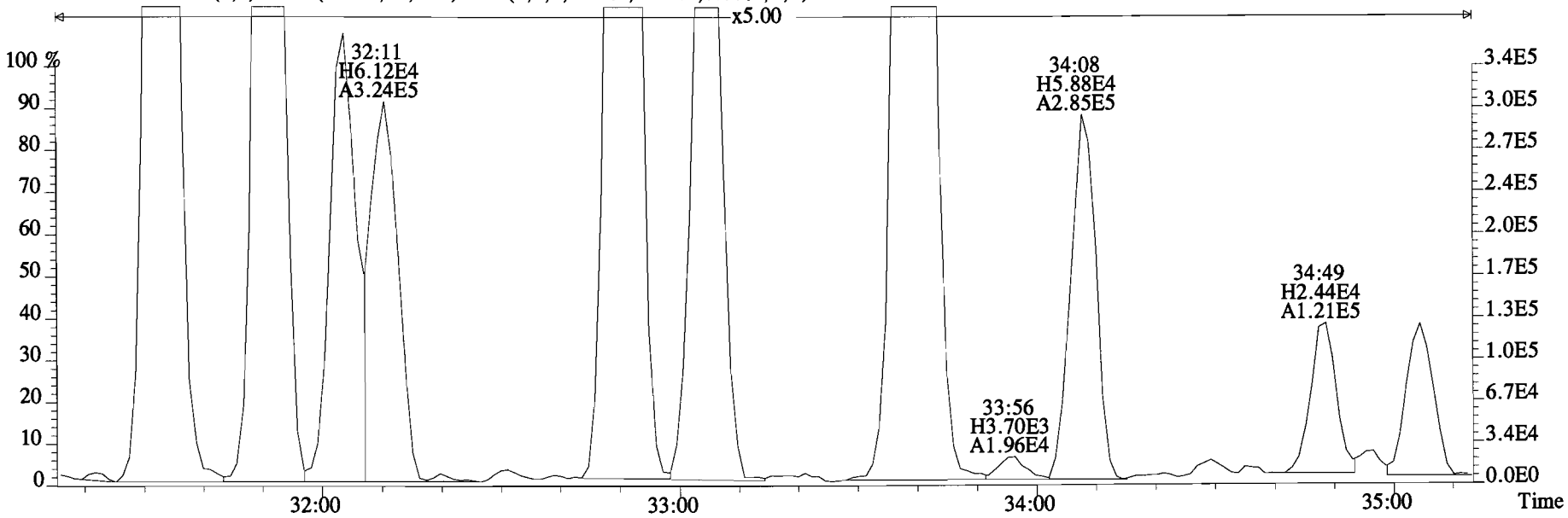
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3004.0,0.00%,F,F)



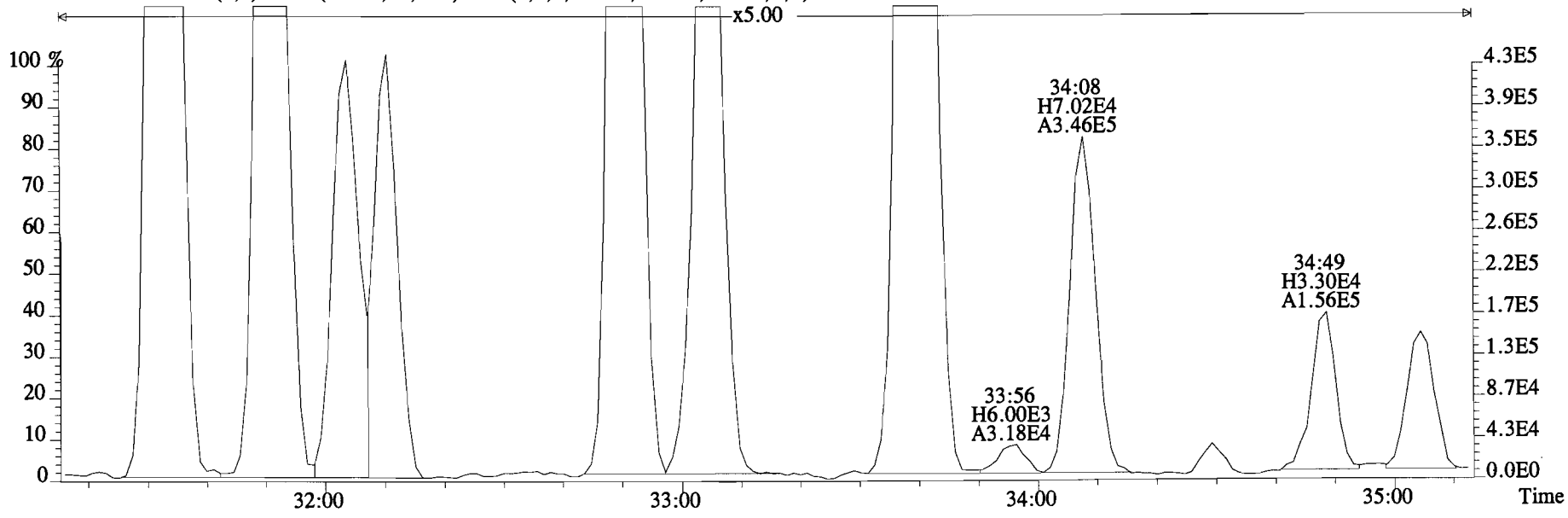
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2992.0,0.00%,F,F)



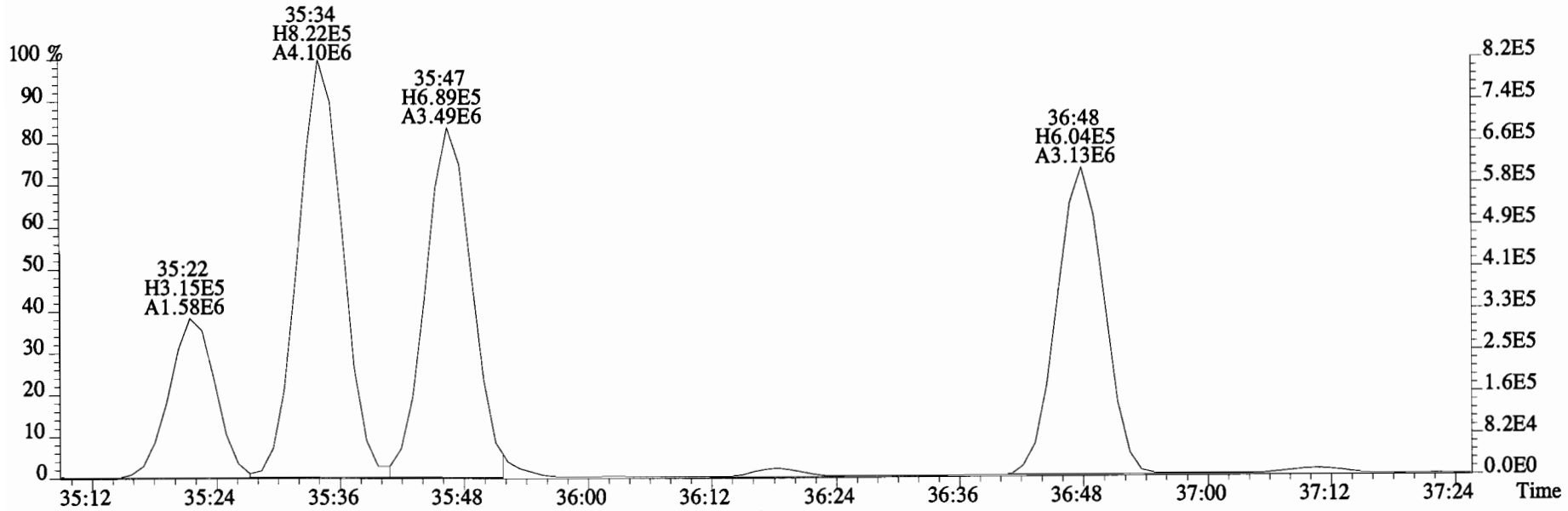
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3004.0,0.00%,F,F)



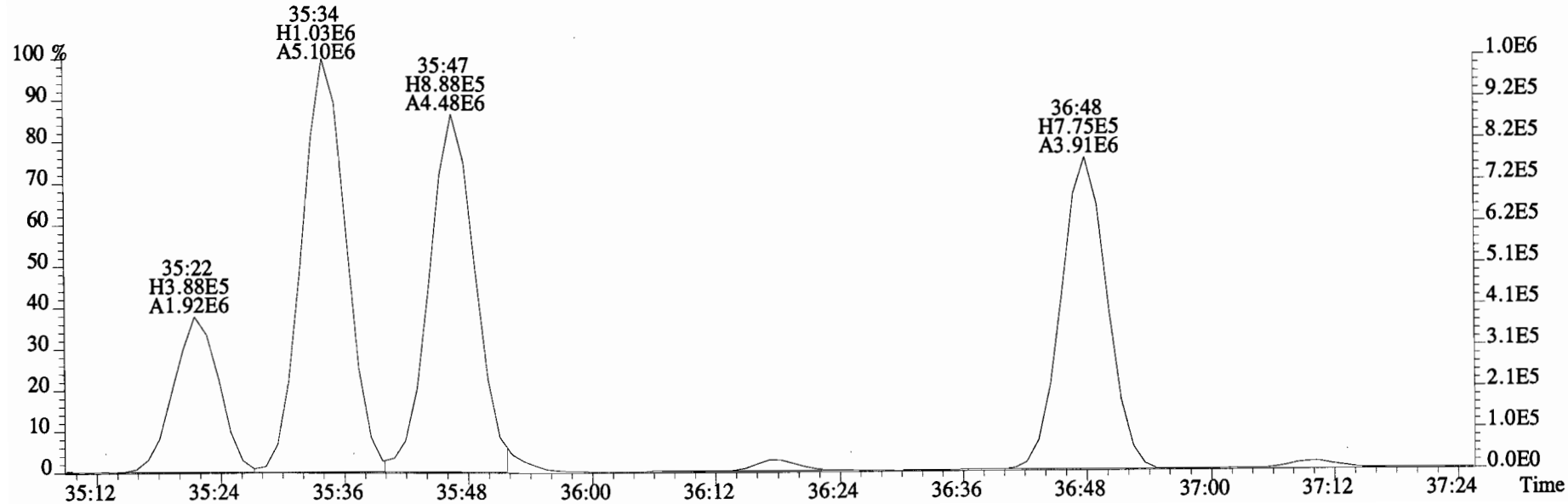
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2992.0,0.00%,F,F)

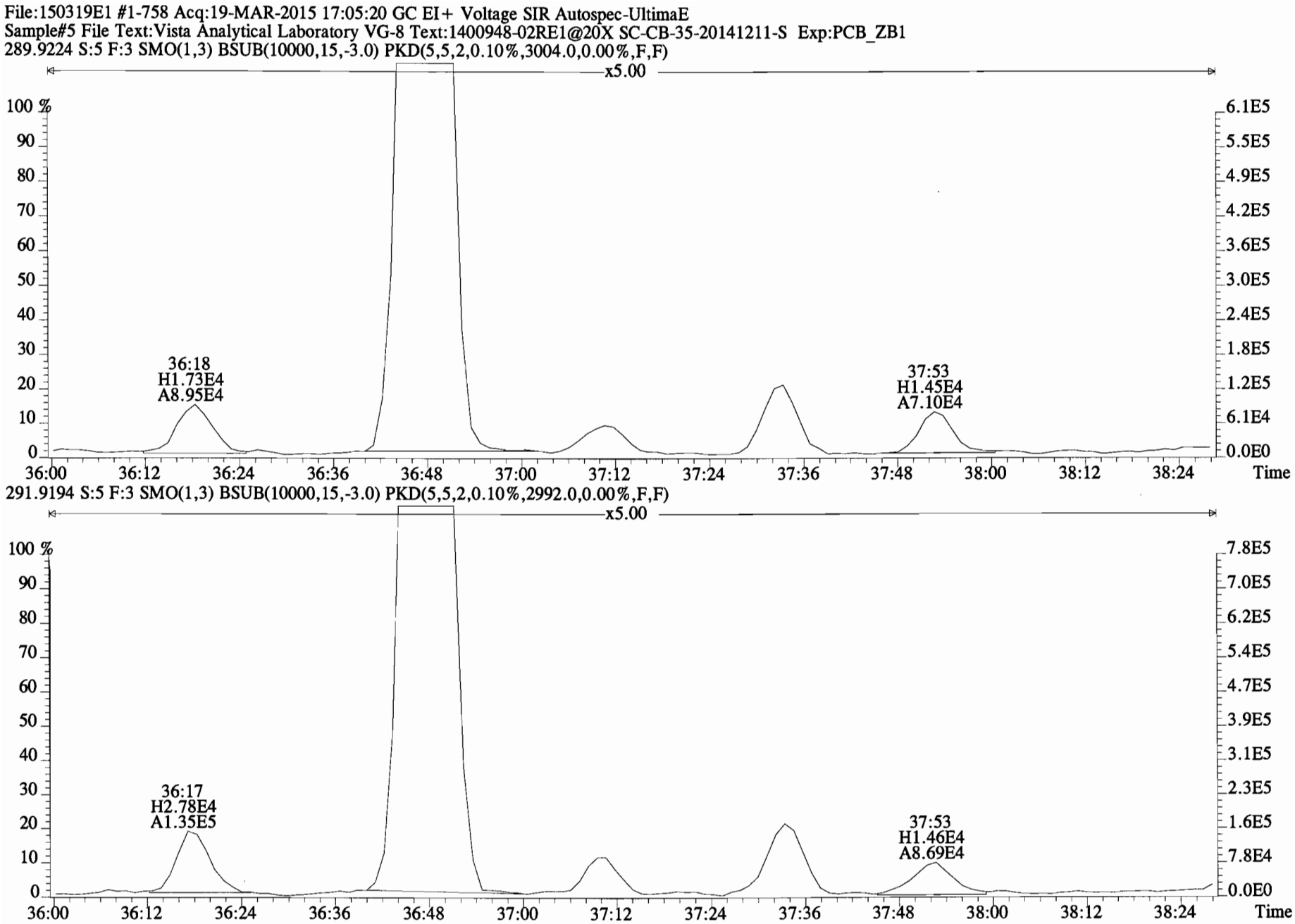


File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3004.0,0.00%,F,F)

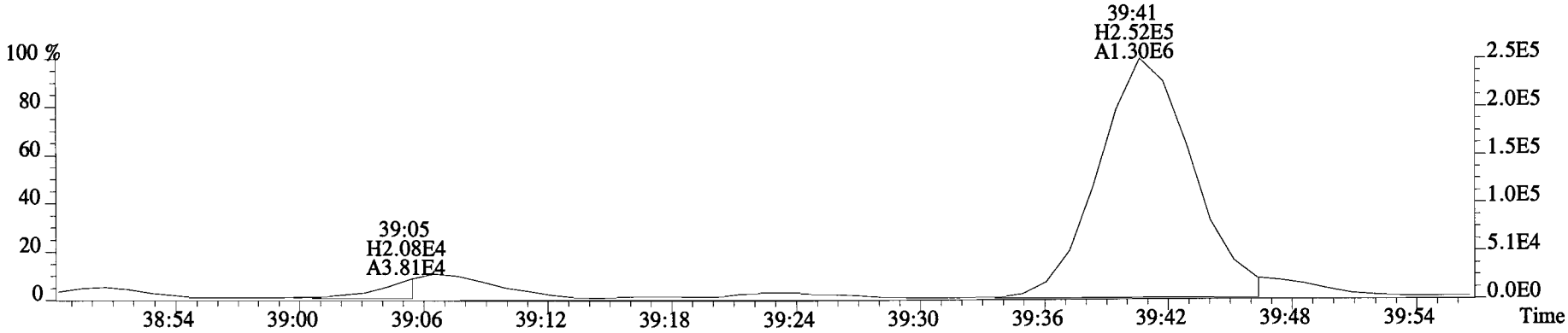


291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2992.0,0.00%,F,F)

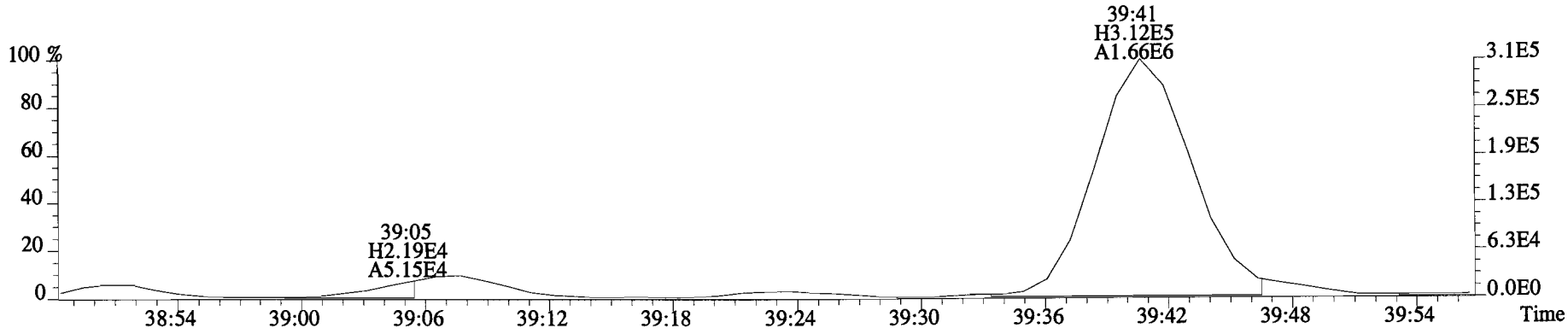



File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3004.0,0.00%,F,F)
x5.00
36:18
H1.73E4
A8.95E4
37:53
H1.45E4
A7.10E4
Time
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2992.0,0.00%,F,F)
x5.00
36:17
H2.78E4
A1.35E5
37:53
H1.46E4
A8.69E4
Time

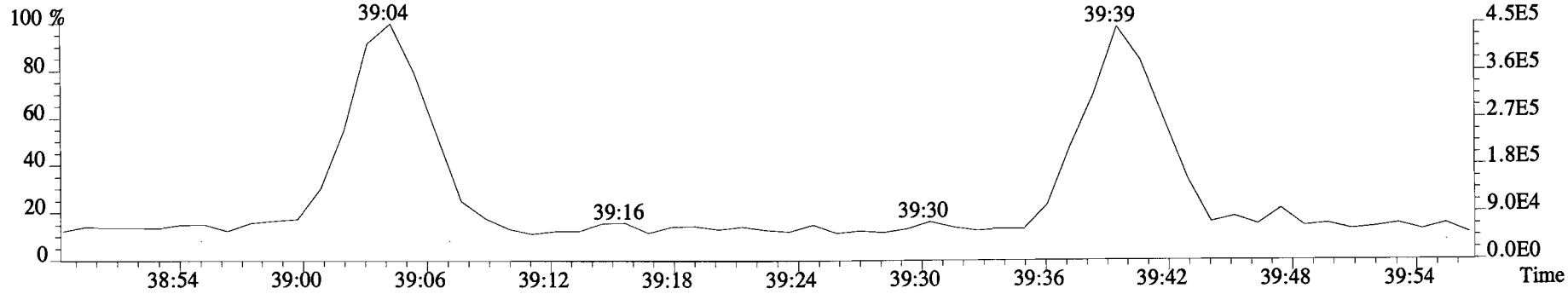
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
289.9224 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3004.0,0.00%,F,F)



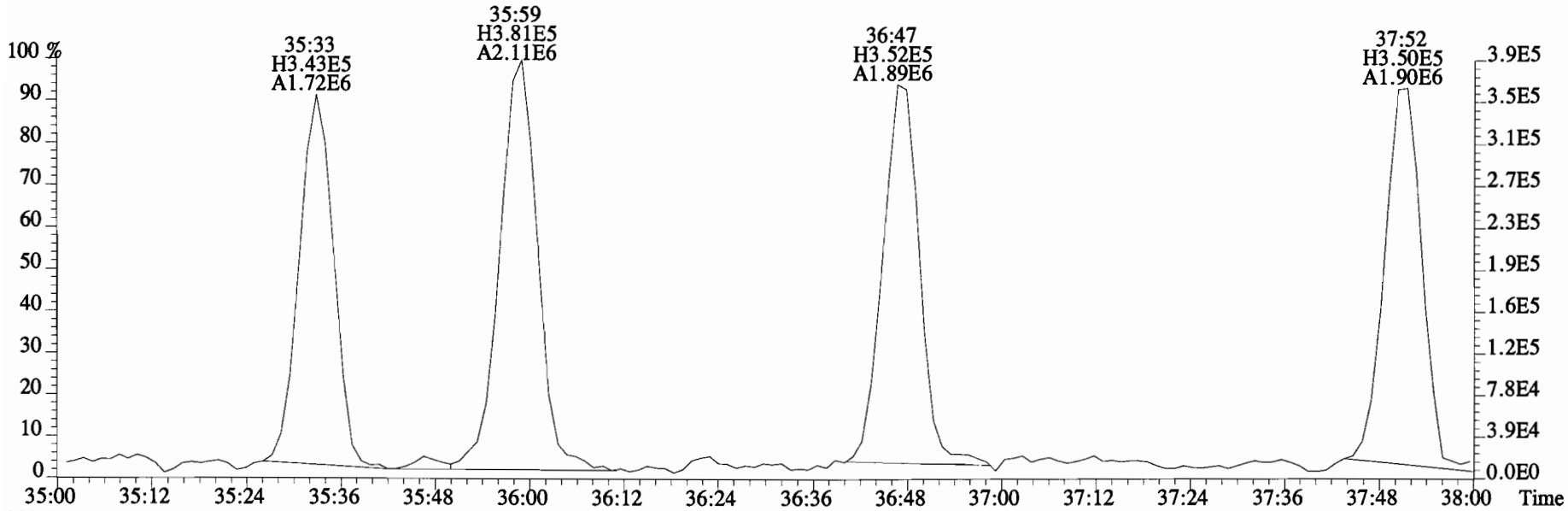
291.9194 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2992.0,0.00%,F,F)



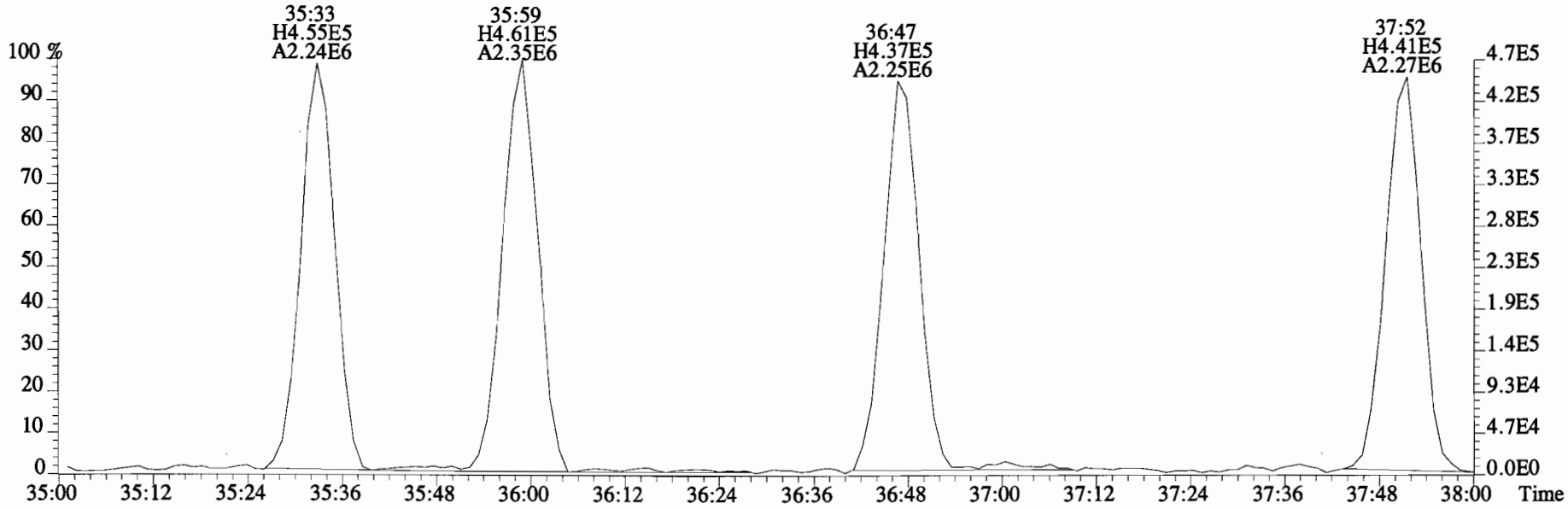
301.9626 S:5 F:3



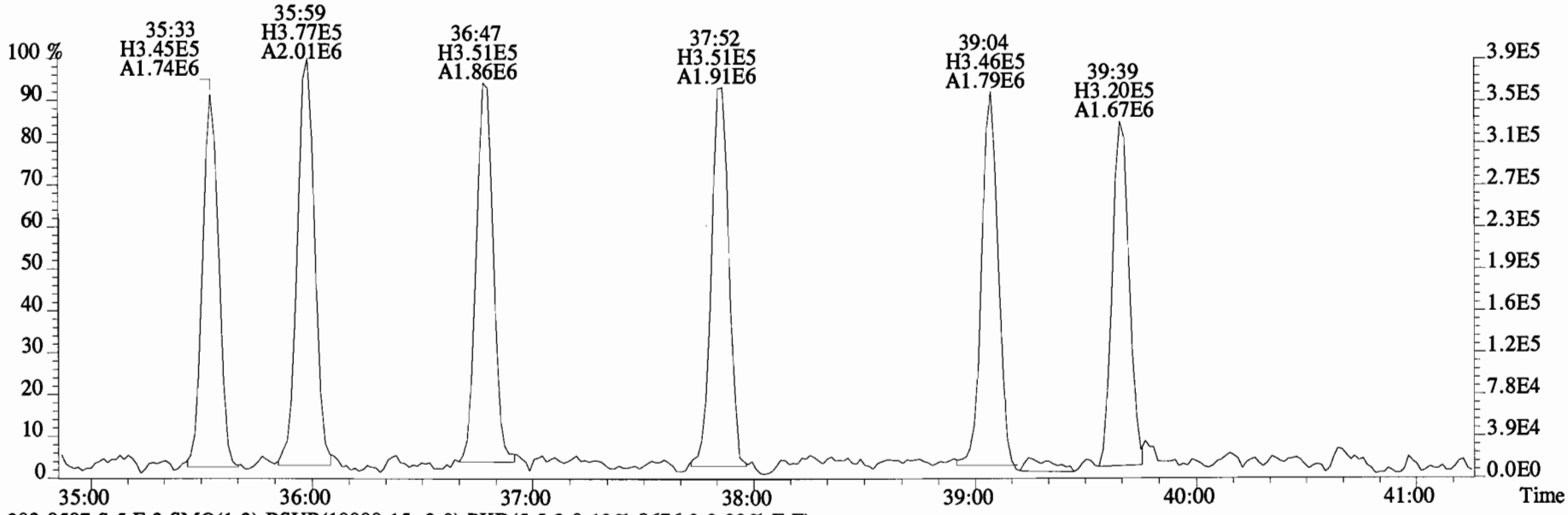
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,18544.0,0.00%,F,F)



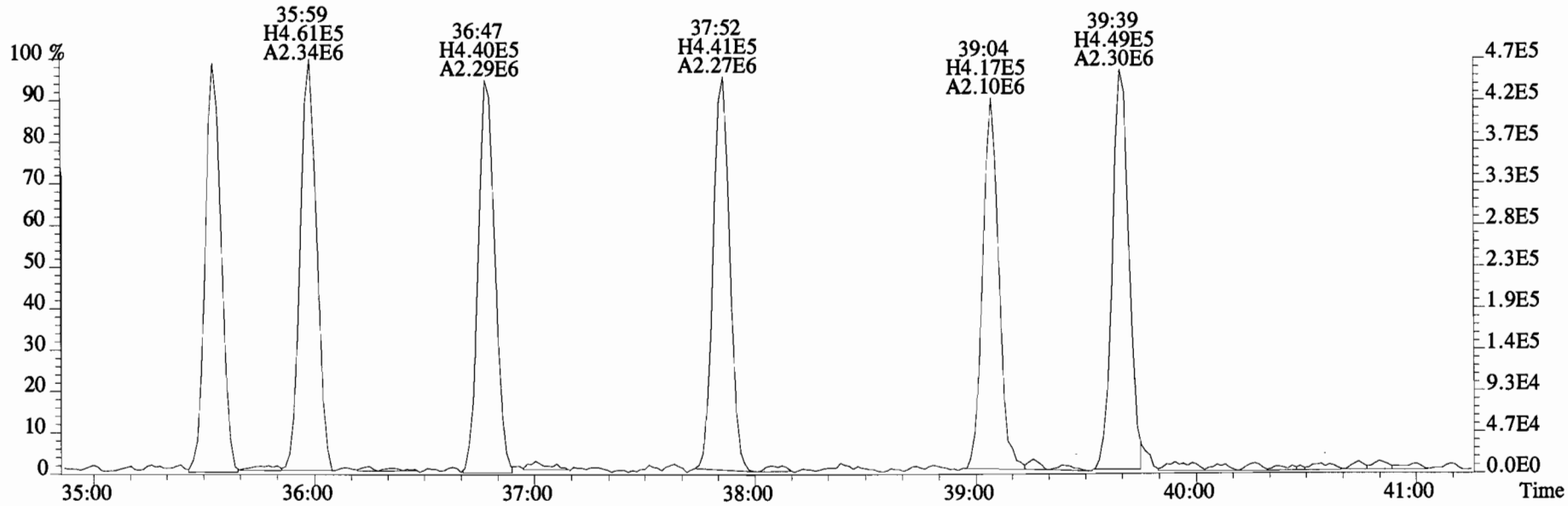
303.9597 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8676.0,0.00%,F,F)



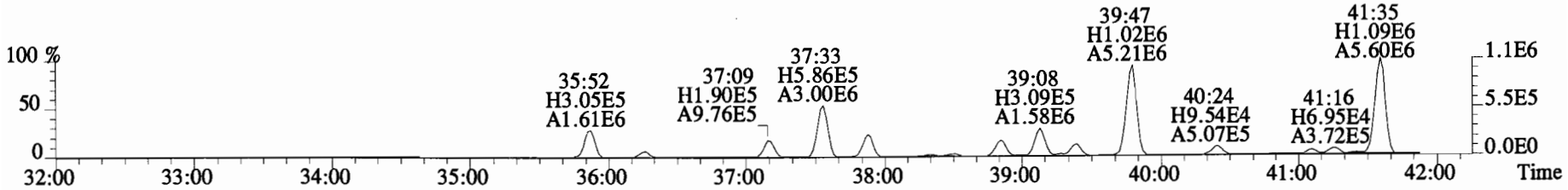
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
301.9626 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,18544.0,0.00%,F,F)



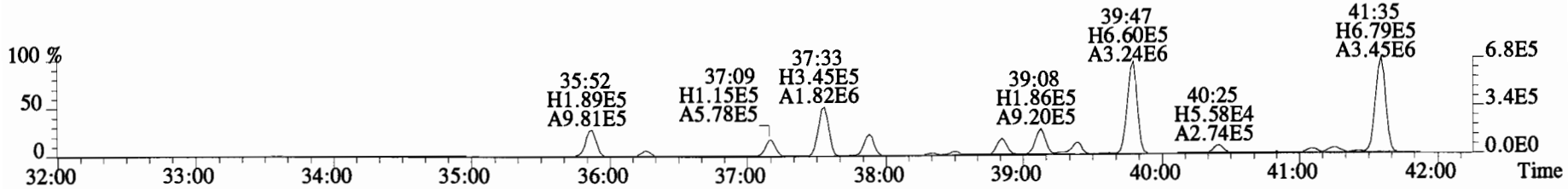
303.9597 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,8676.0,0.00%,F,F)



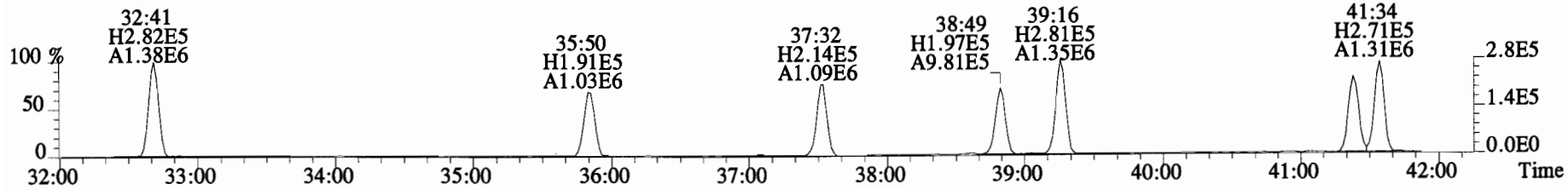
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3784.0,0.00%,F,F)



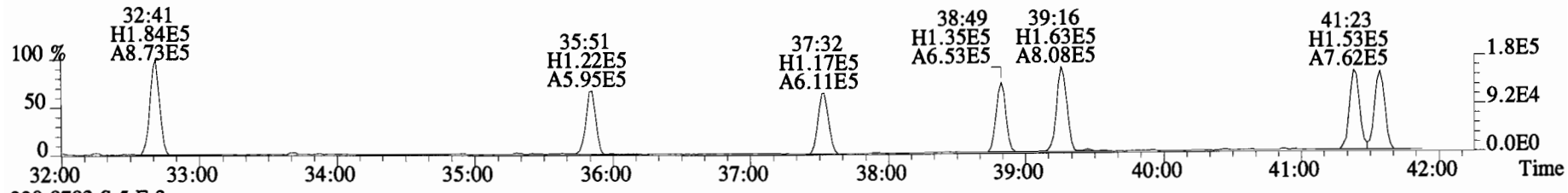
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3032.0,0.00%,F,F)



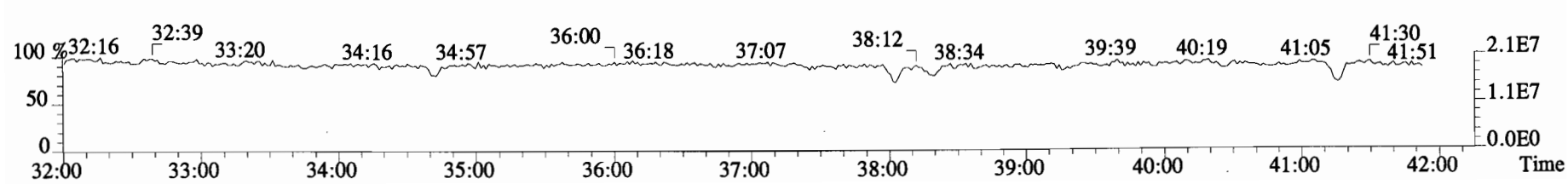
337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2524.0,0.00%,F,F)



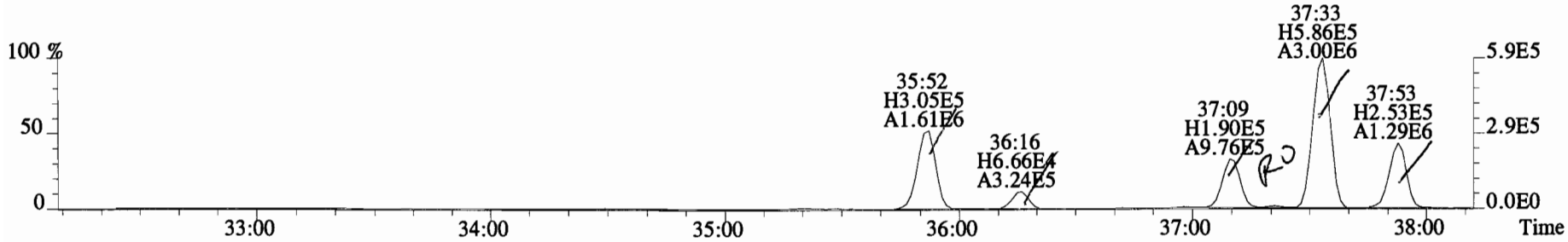
339.9177 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2856.0,0.00%,F,F)



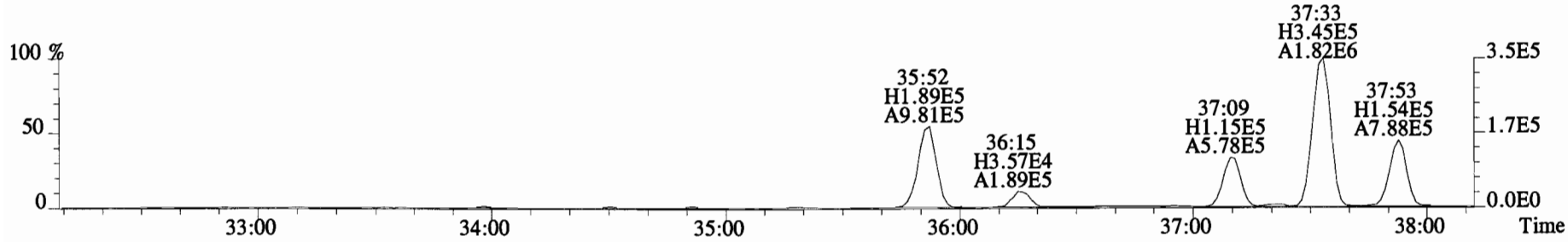
330.9792 S:5 F:3



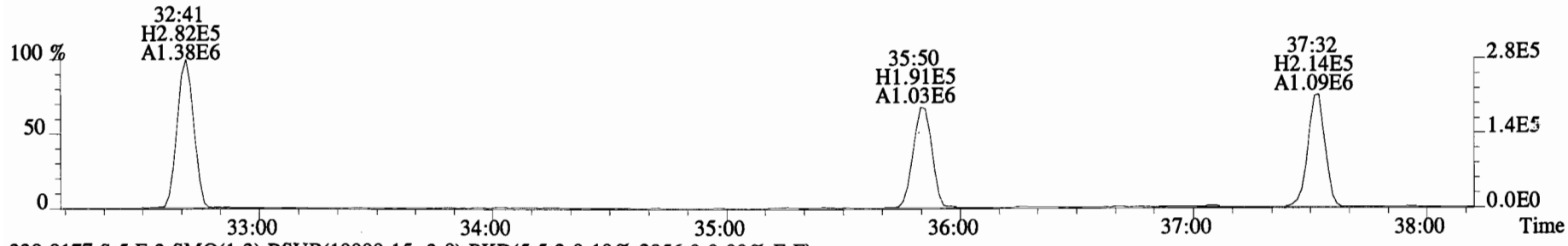
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3784.0,0.00%,F,F)



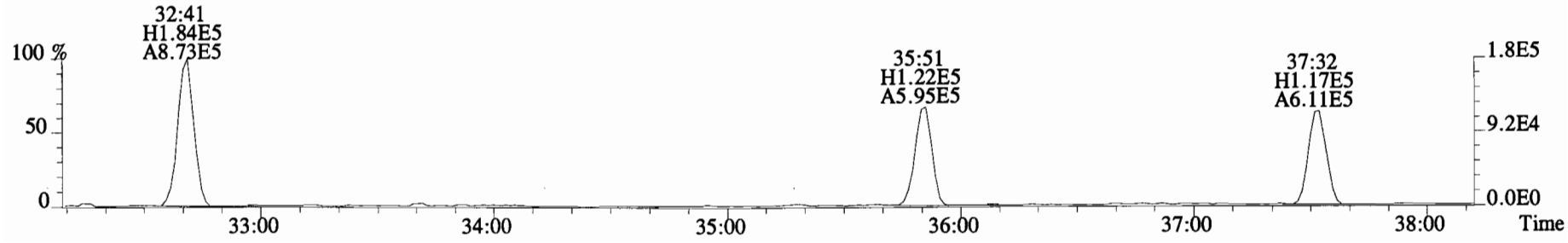
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3032.0,0.00%,F,F)



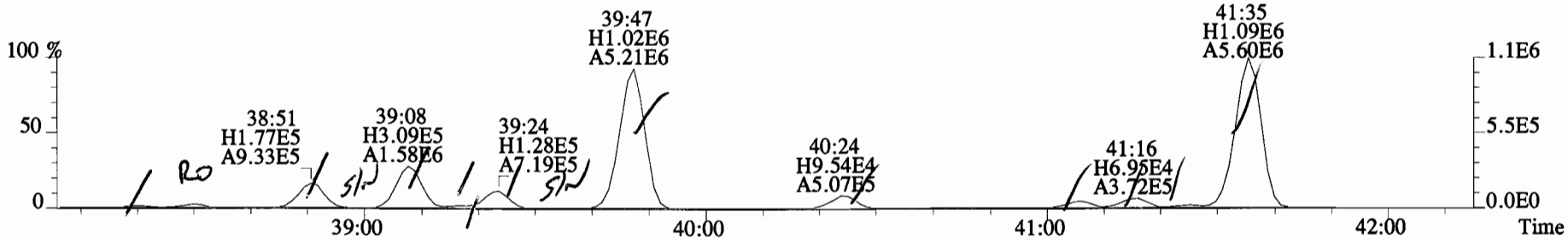
337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2524.0,0.00%,F,F)



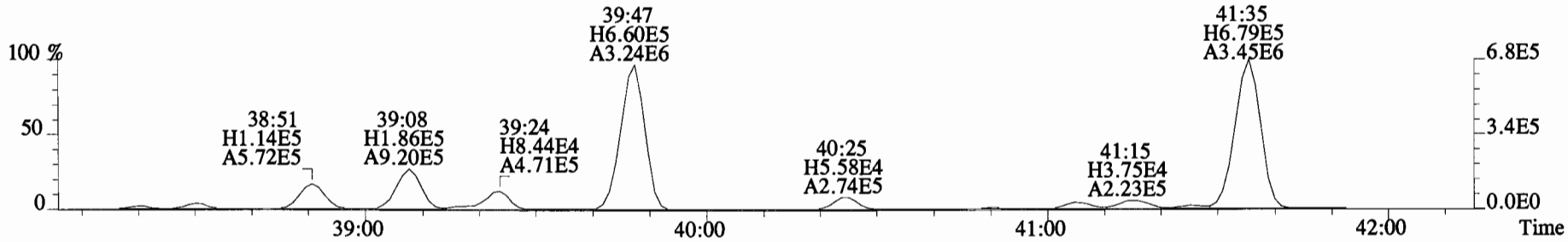
339.9177 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2856.0,0.00%,F,F)



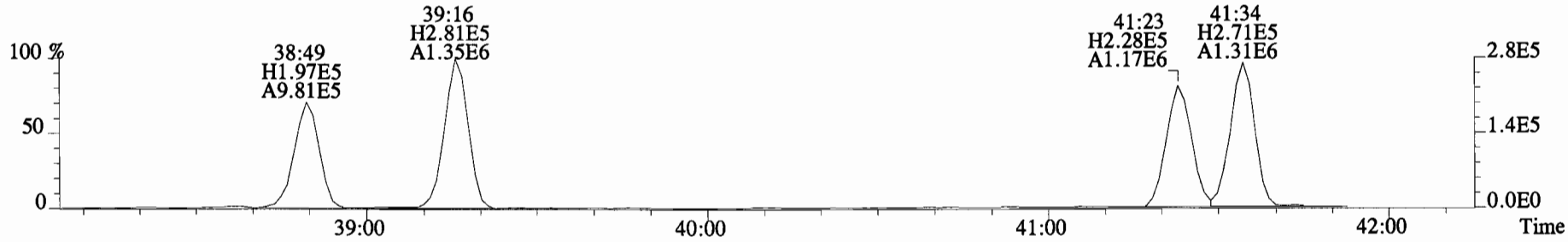
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3784.0,0.00%,F,F)



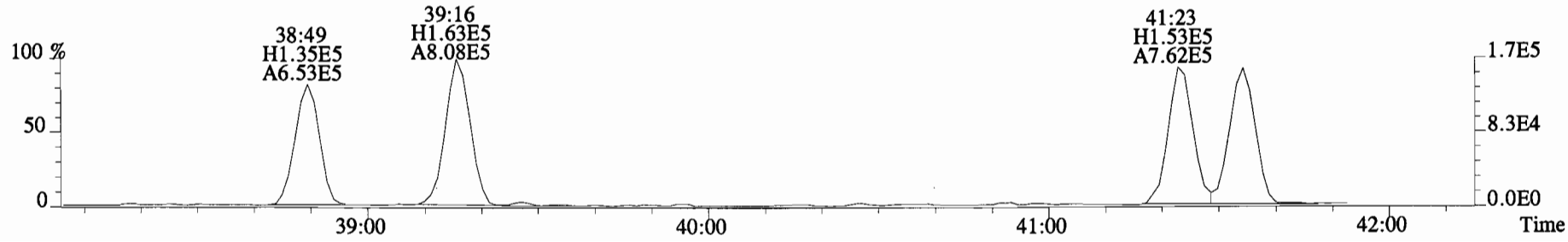
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3032.0,0.00%,F,F)



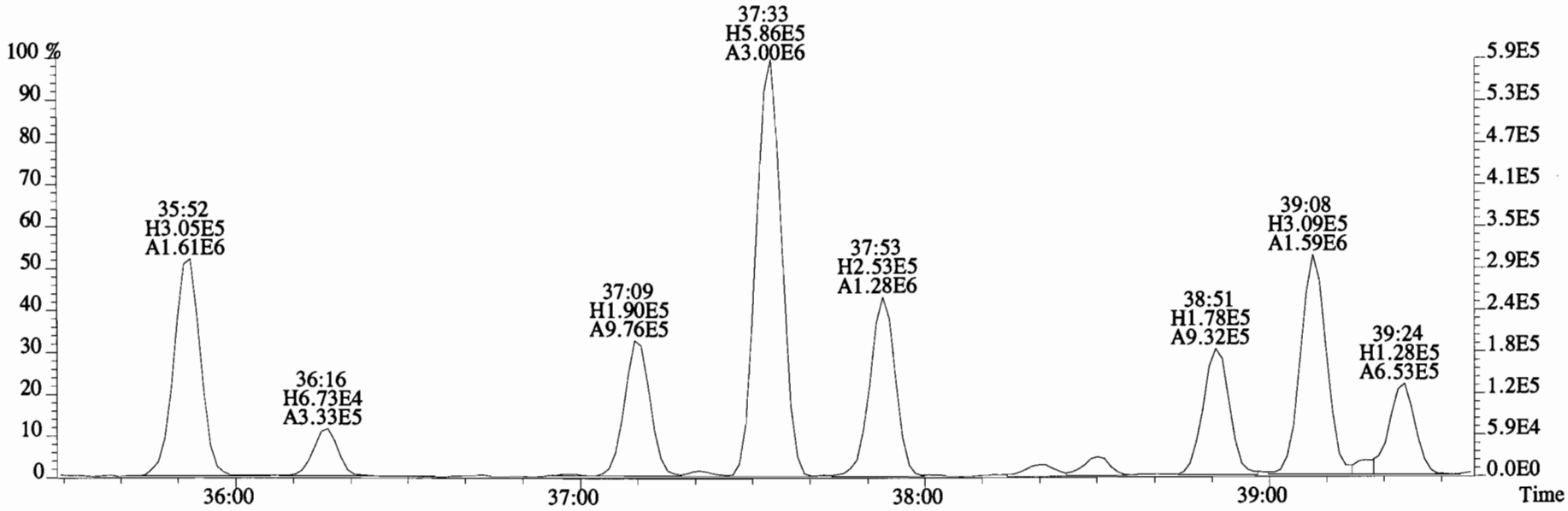
337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2524.0,0.00%,F,F)



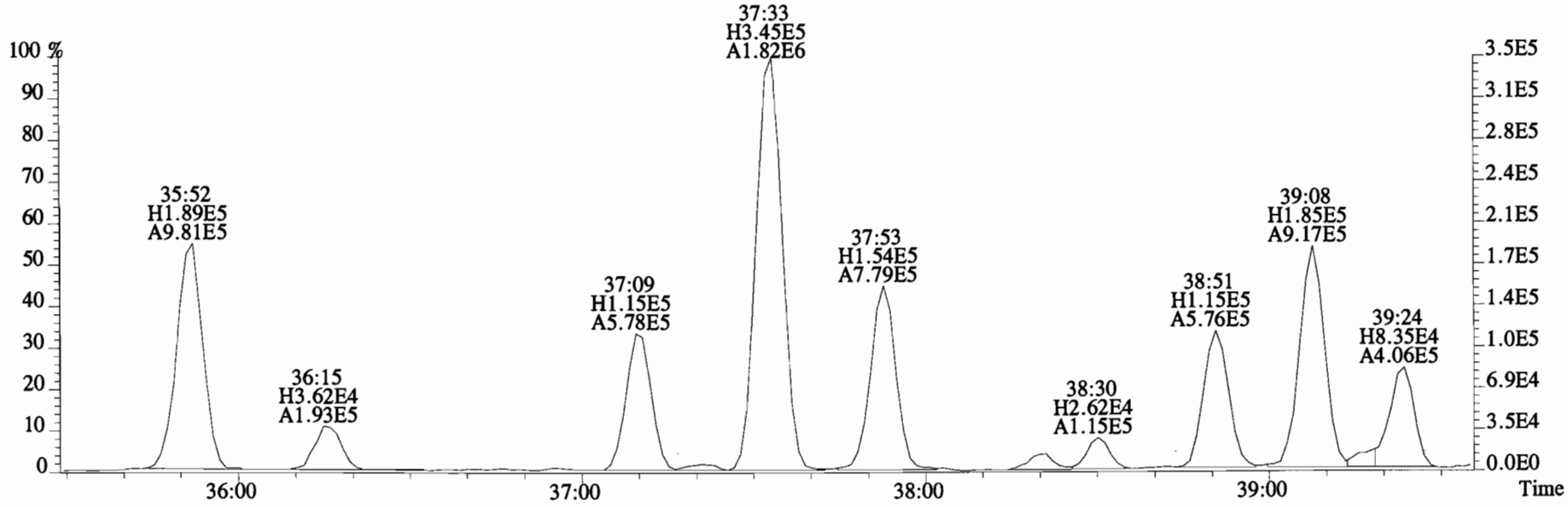
339.9177 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2856.0,0.00%,F,F)

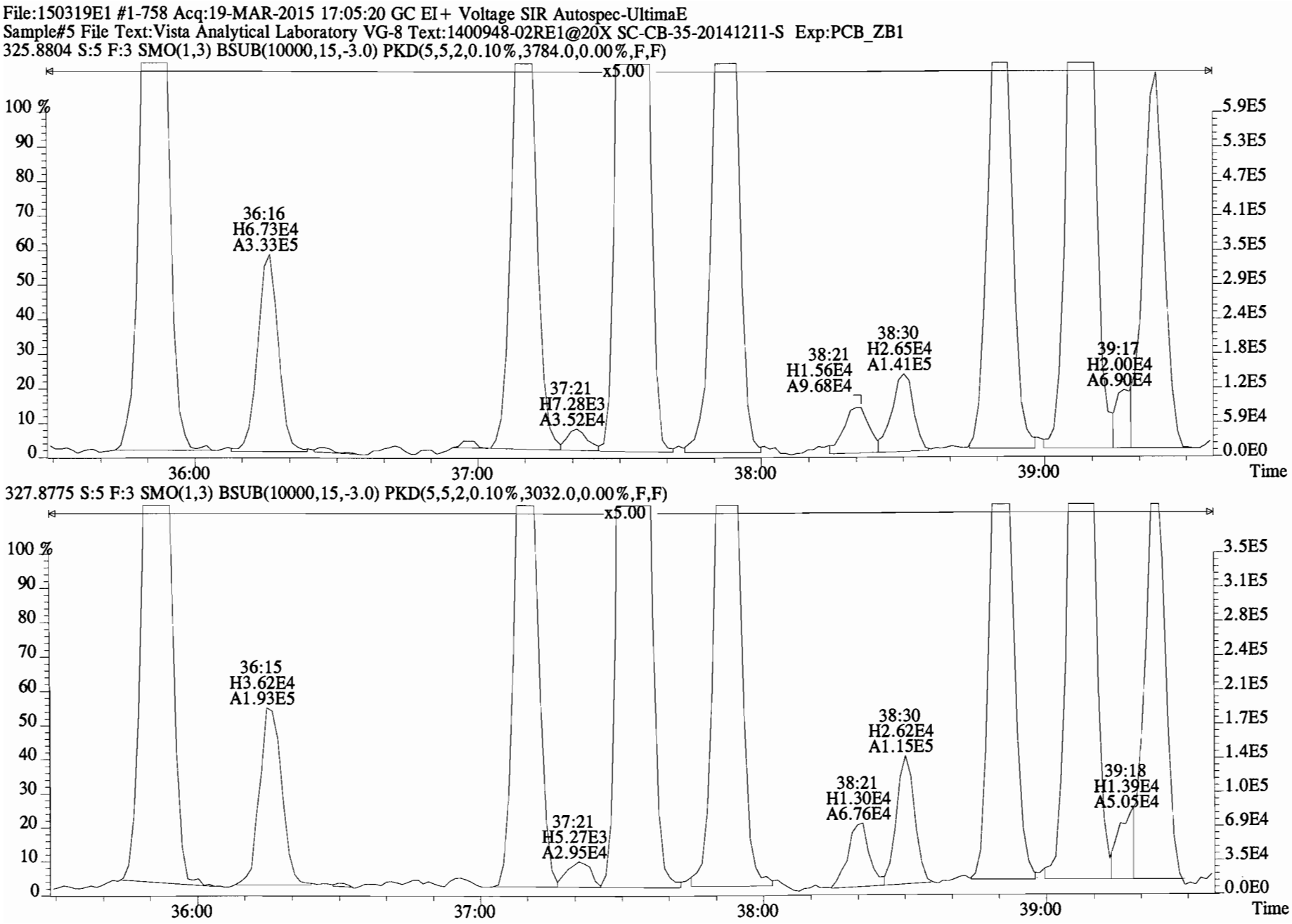


File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3784.0,0.00%,F,F)

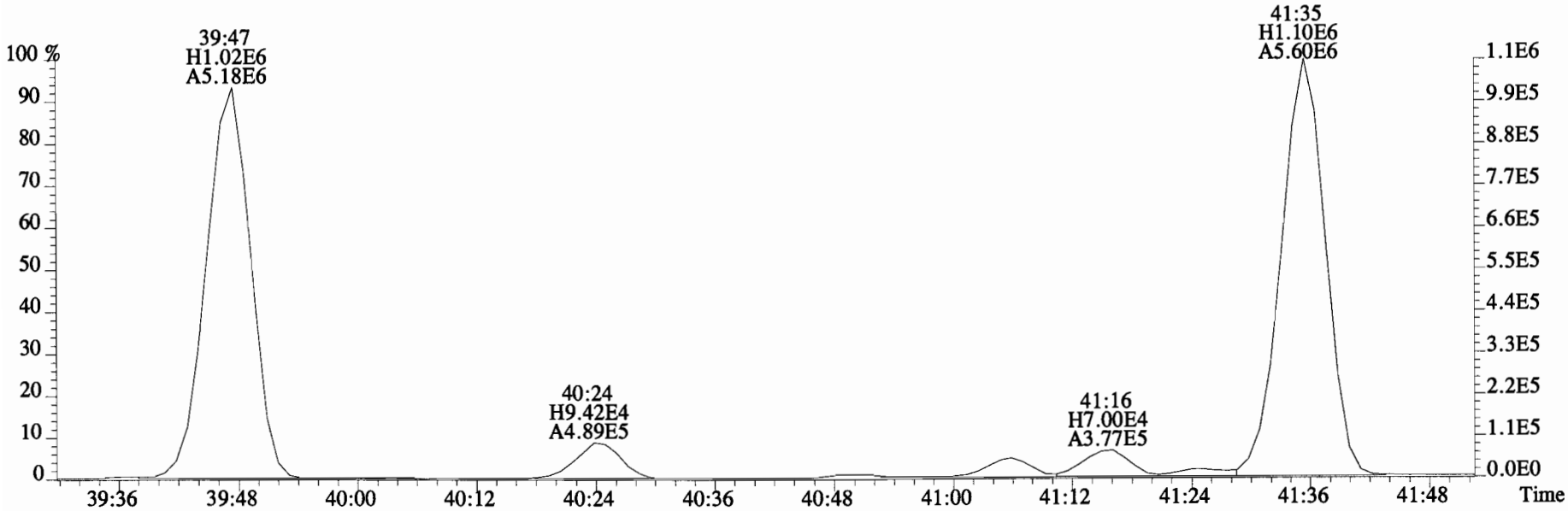


327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3032.0,0.00%,F,F)

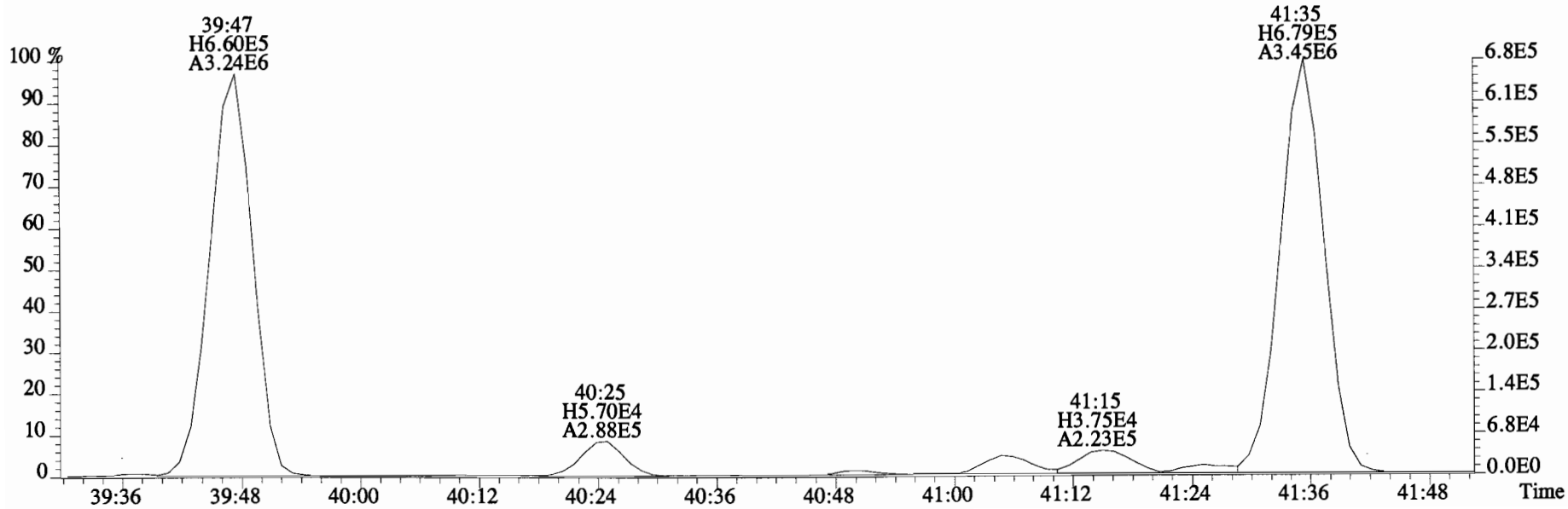



File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3784.0,0.00%,F,F)
x5.00
36:16
H6.73E4
A3.33E5
37:21
H7.28E3
A3.52E4
38:21
H1.56E4
A9.68E4
38:30
H2.65E4
A1.41E5
39:17
H2.00E4
A6.90E4
Time
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3032.0,0.00%,F,F)
x5.00
36:15
H3.62E4
A1.93E5
37:21
H5.27E3
A2.95E4
38:21
H1.30E4
A6.76E4
38:30
H2.62E4
A1.15E5
39:18
H1.39E4
A5.05E4
Time

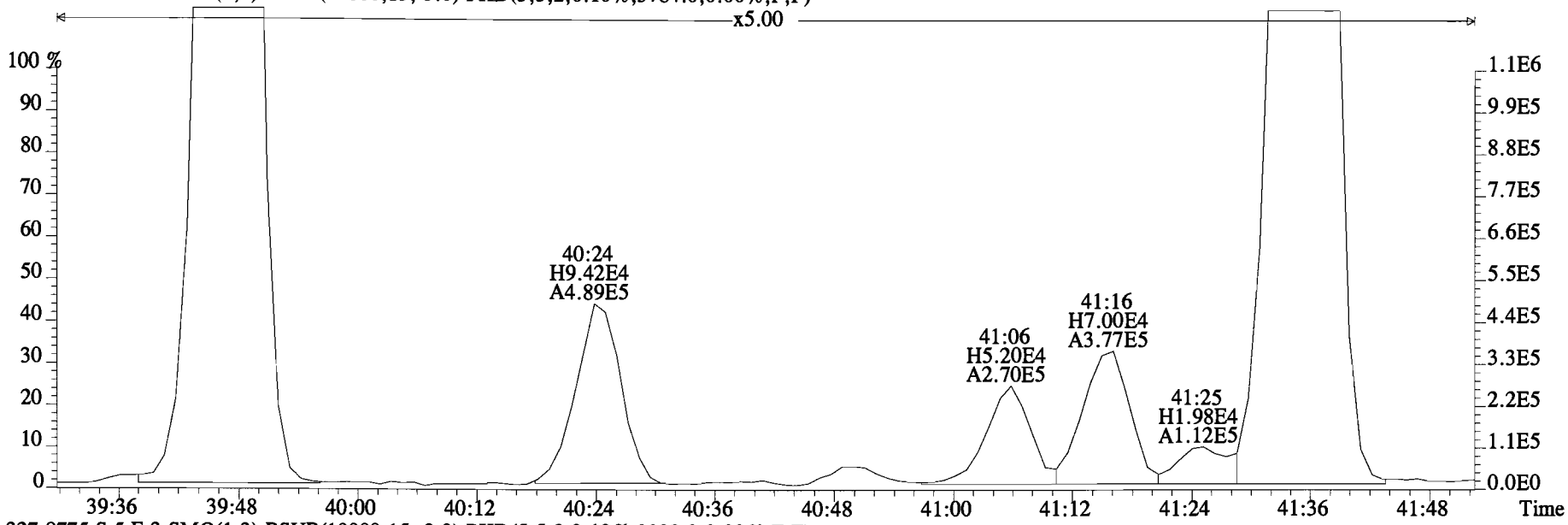
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3784.0,0.00%,F,F)



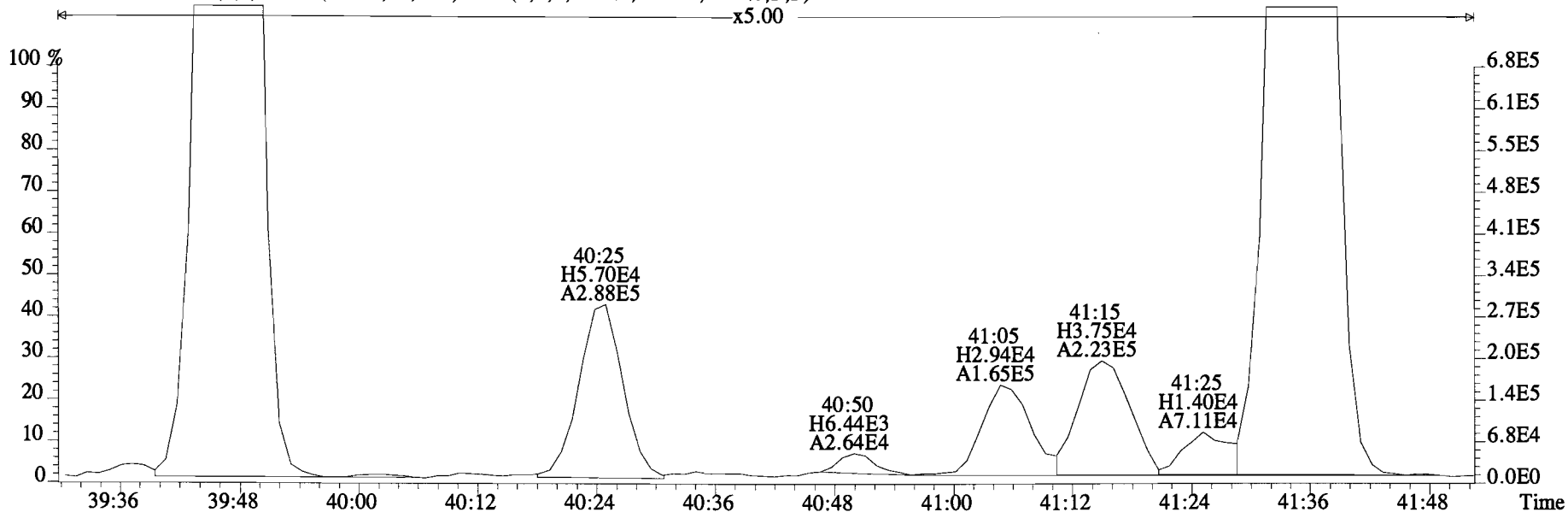
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3032.0,0.00%,F,F)



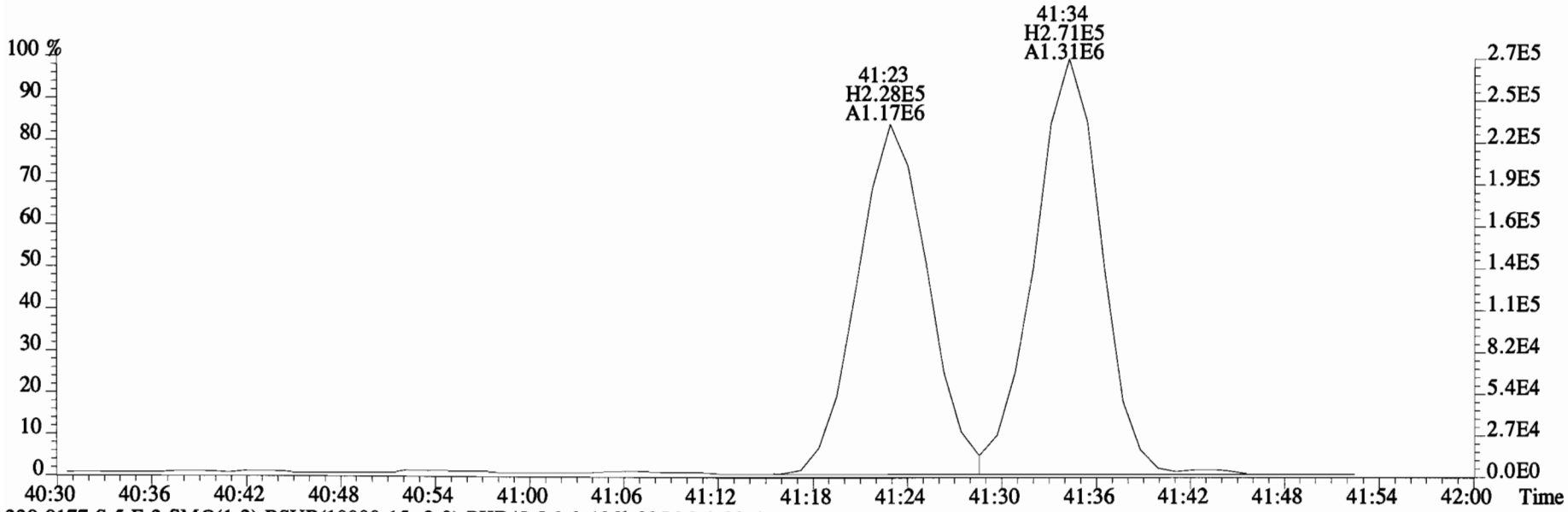
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3784.0,0.00%,F,F)



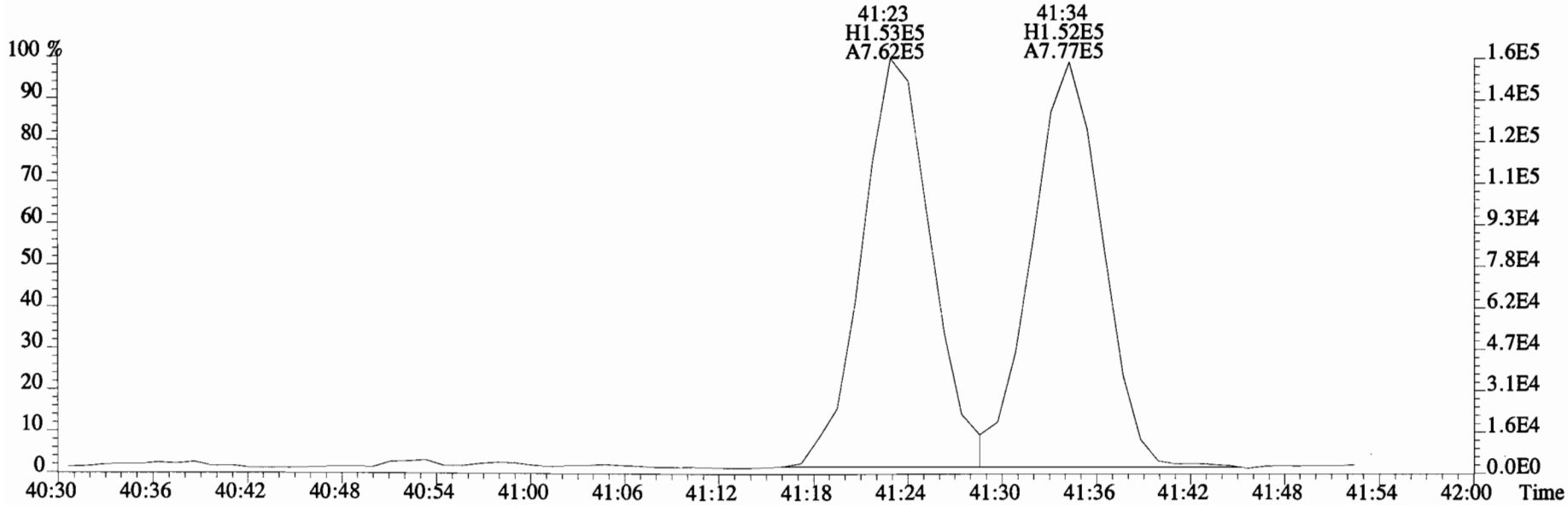
327.8775 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3032.0,0.00%,F,F)



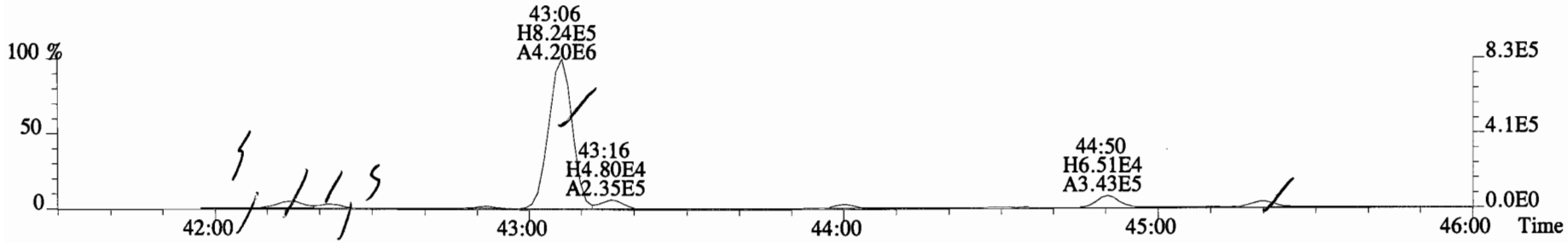
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
337.9207 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2524.0,0.00%,F,F)



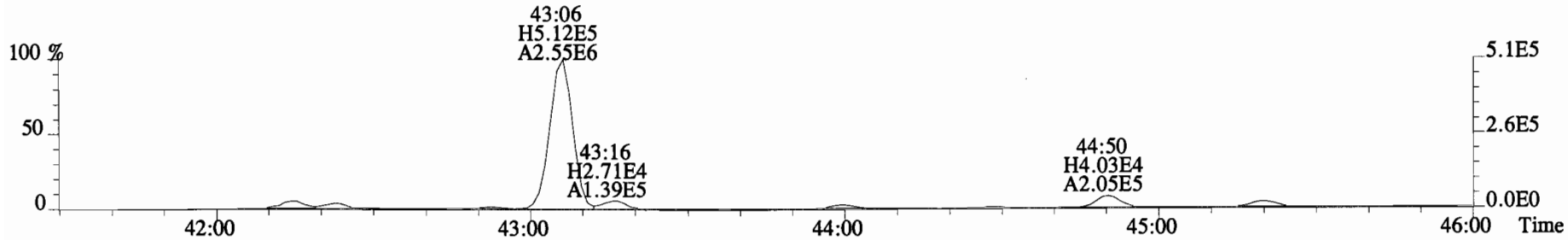
339.9177 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2856.0,0.00%,F,F)



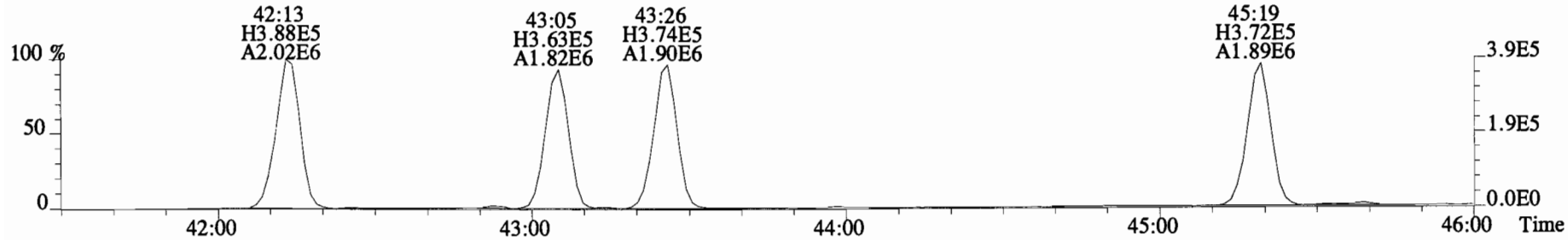
File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4872.0,0.00%,F,F)



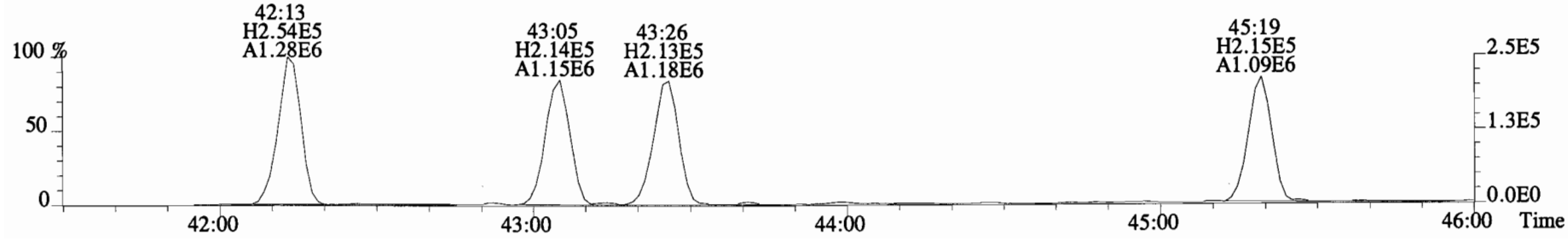
327.8775 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3256.0,0.00%,F,F)



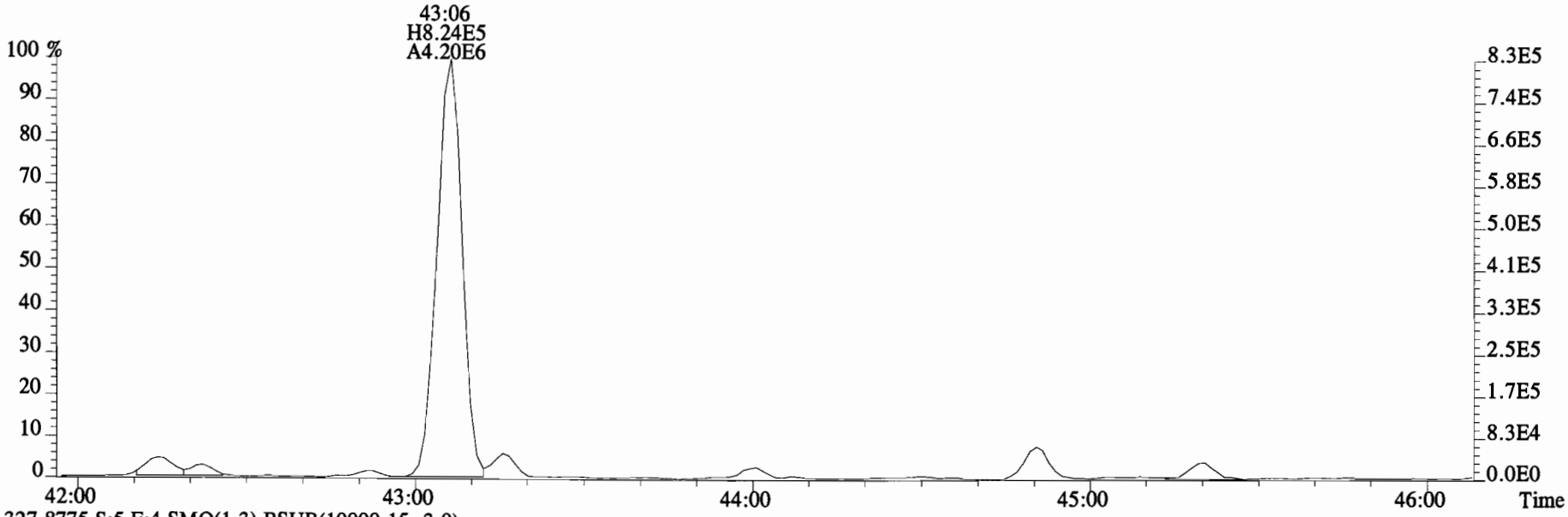
337.9207 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3356.0,0.00%,F,F)



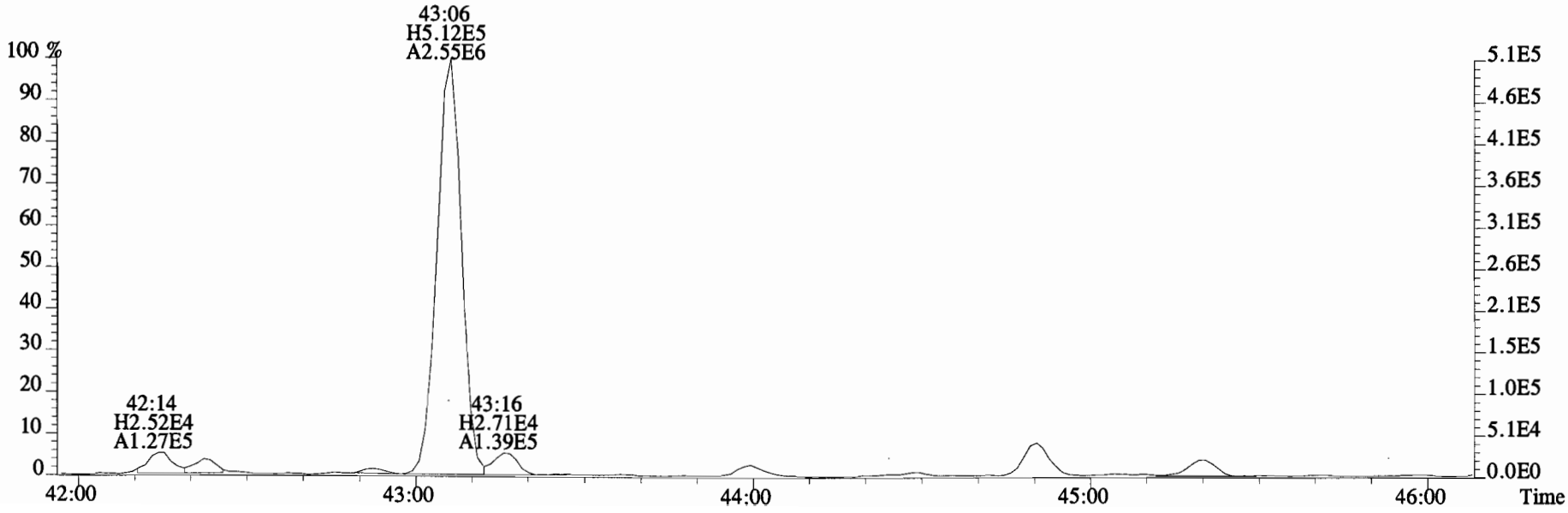
339.9177 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2960.0,0.00%,F,F)



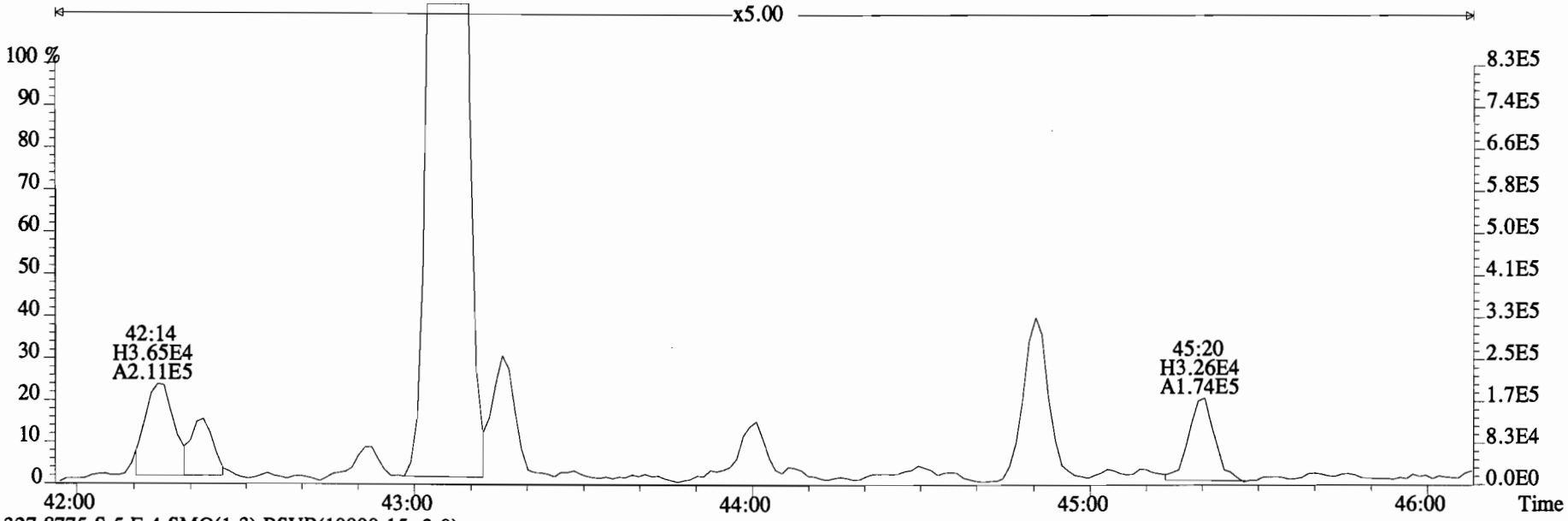
File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0)



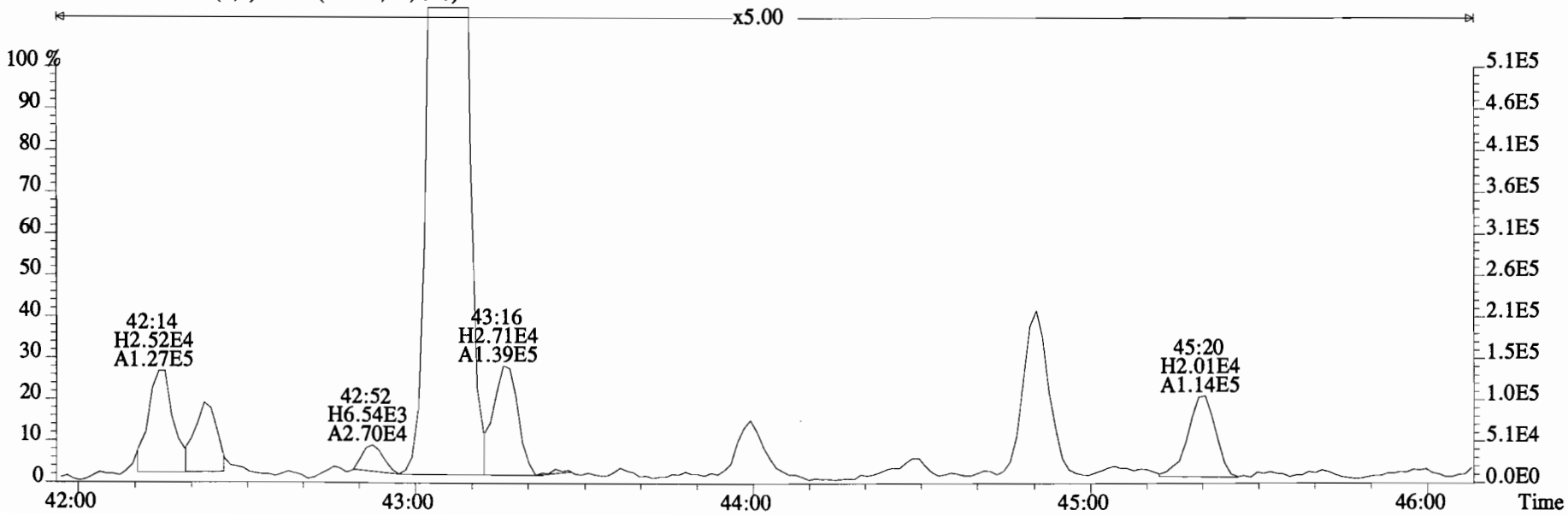
327.8775 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0)



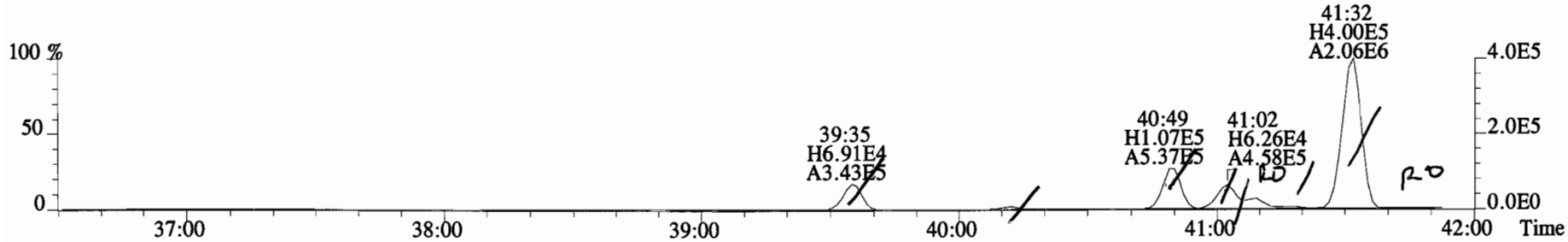
File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0)



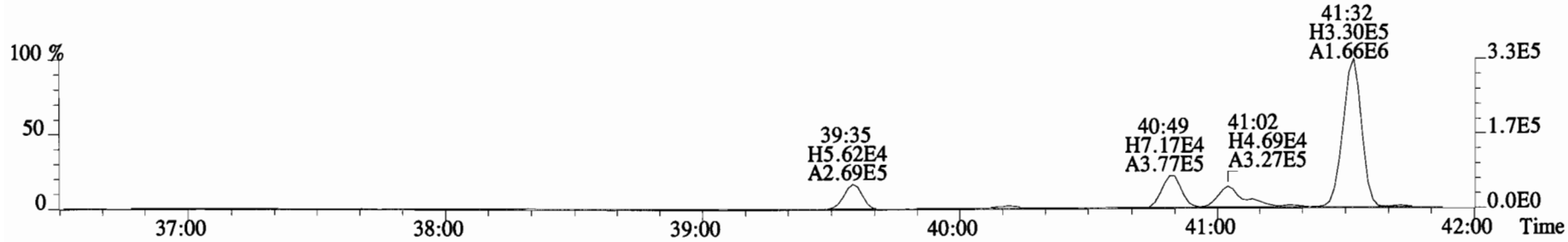
327.8775 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0)



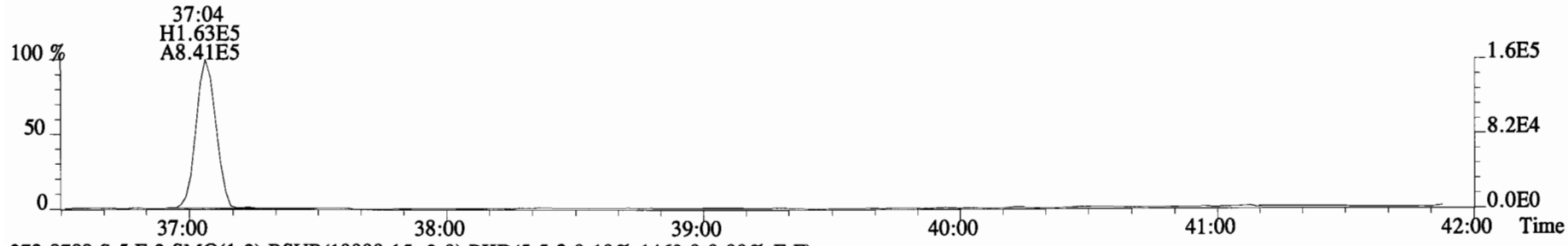
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
359.8415 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1580.0,0.00%,F,F)



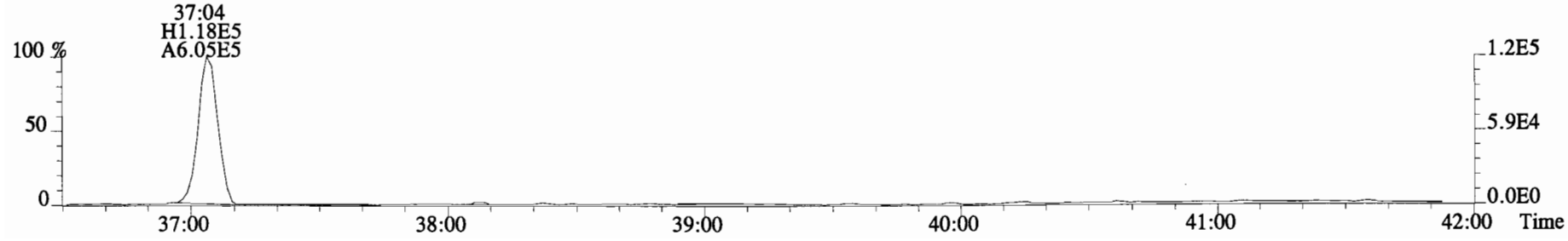
361.8385 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1168.0,0.00%,F,F)



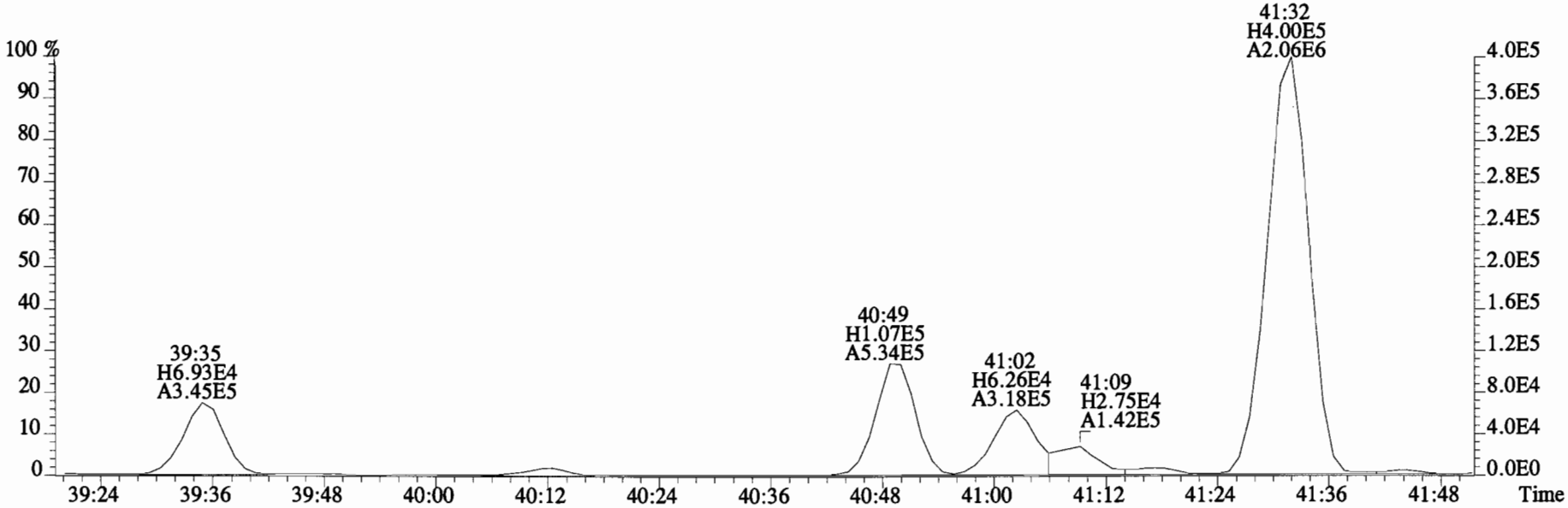
371.8817 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1524.0,0.00%,F,F)



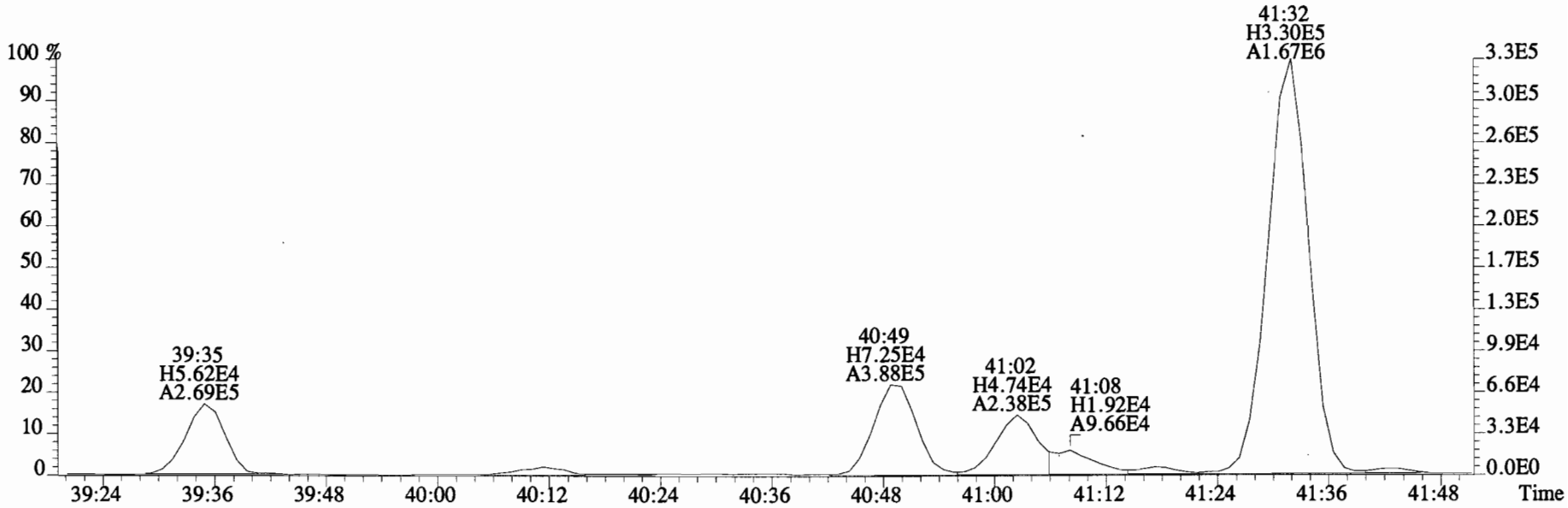
373.8788 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1460.0,0.00%,F,F)

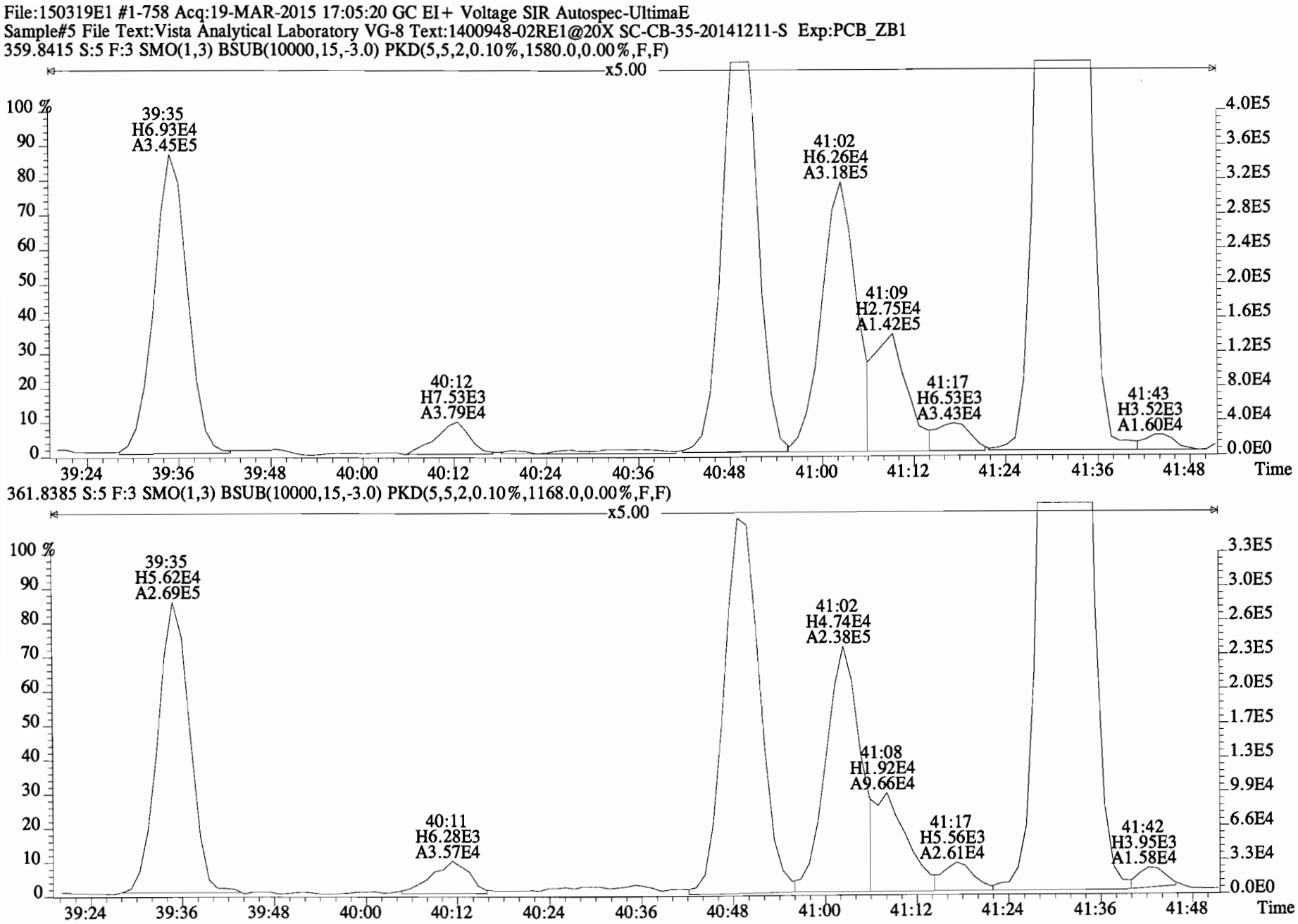


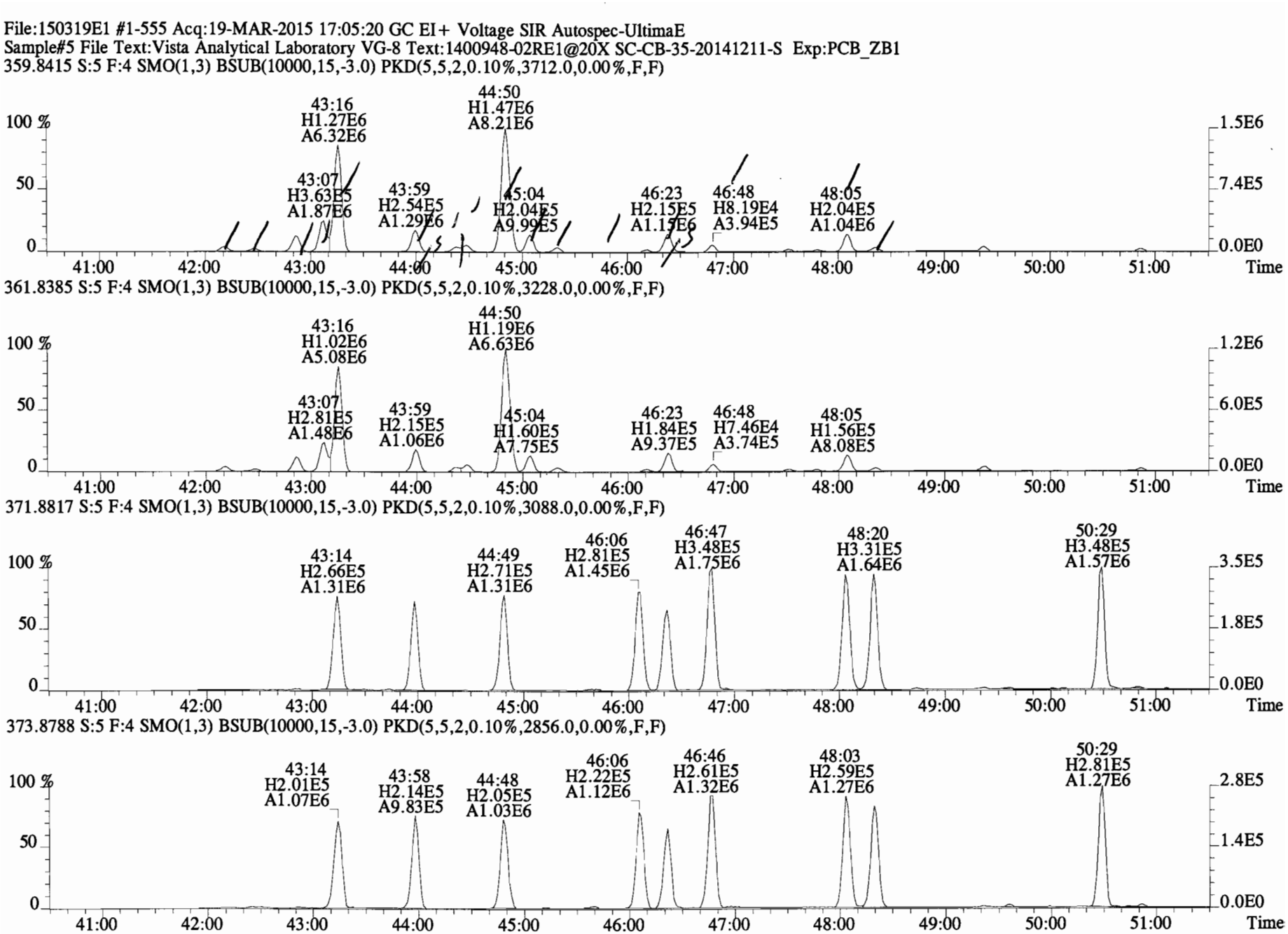
File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
359.8415 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1580.0,0.00%,F,F)



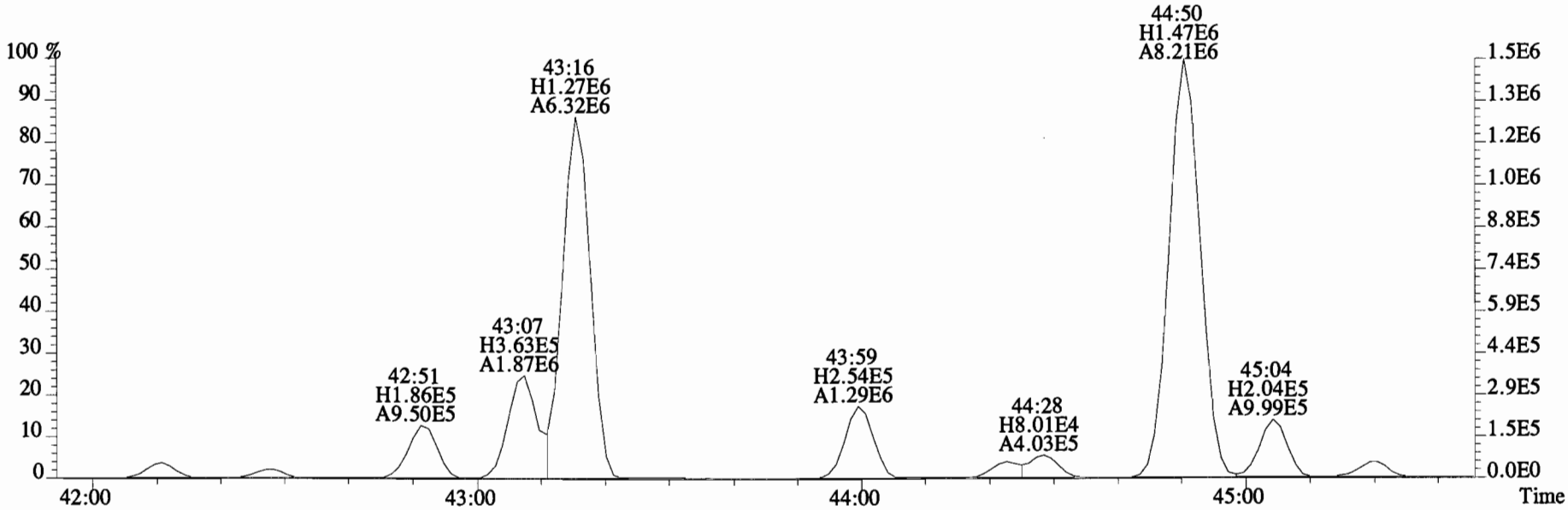
361.8385 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1168.0,0.00%,F,F)



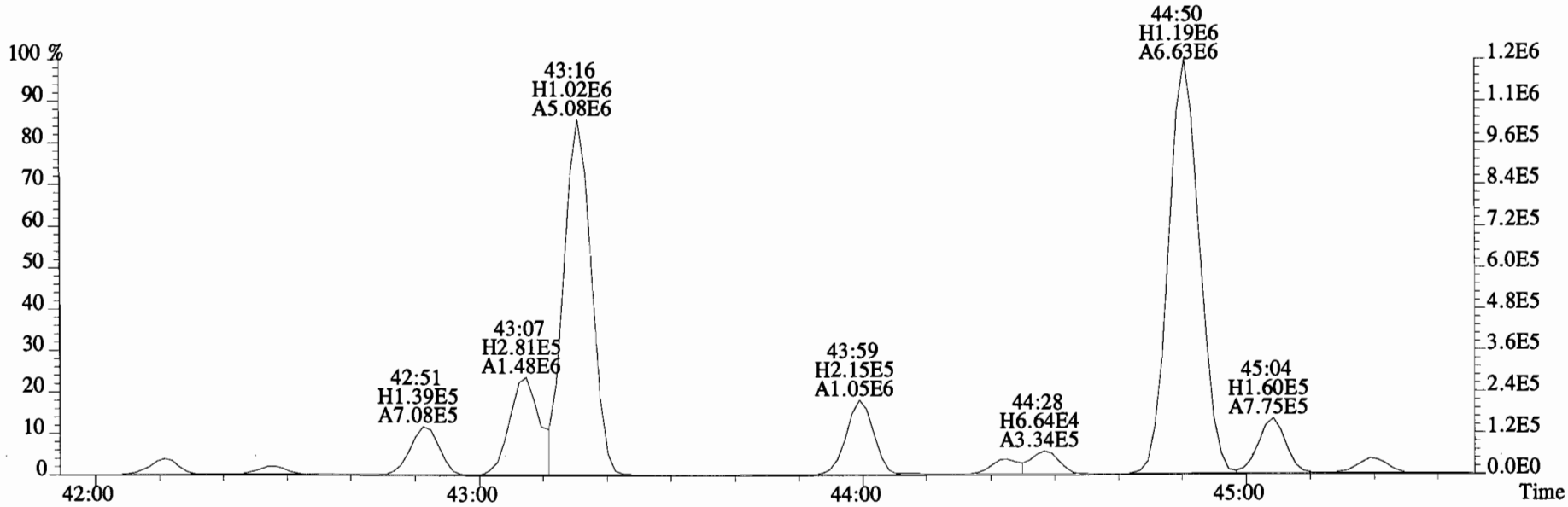

File:150319E1 #1-758 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
359.8415 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1580.0,0.00%,F,F)
x5.00
39:35 H6.93E4 A3.45E5
40:12 H7.53E3 A3.79E4
41:02 H6.26E4 A3.18E5
41:09 H2.75E4 A1.42E5
41:17 H6.53E3 A3.43E4
41:43 H3.52E3 A1.60E4
361.8385 S:5 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1168.0,0.00%,F,F)
x5.00
39:35 H5.62E4 A2.69E5
40:11 H6.28E3 A3.57E4
41:02 H4.74E4 A2.38E5
41:08 H1.92E4 A9.66E4
41:17 H5.56E3 A2.61E4
41:42 H3.95E3 A1.58E4
Time


File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
359.8415 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3712.0,0.00%,F,F)
43:16 H1.27E6 A6.32E6
44:50 H1.47E6 A8.21E6
43:07 H3.63E5 A1.87E6
43:59 H2.54E5 A1.29E6
45:04 H2.04E5 A9.99E5
46:23 H2.15E5 A1.15E6
46:48 H8.19E4 A3.94E5
48:05 H2.04E5 A1.04E6
361.8385 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3228.0,0.00%,F,F)
43:16 H1.02E6 A5.08E6
44:50 H1.19E6 A6.63E6
43:07 H2.81E5 A1.48E6
43:59 H2.15E5 A1.06E6
45:04 H1.60E5 A7.75E5
46:23 H1.84E5 A9.37E5
46:48 H7.46E4 A3.74E5
48:05 H1.56E5 A8.08E5
371.8817 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3088.0,0.00%,F,F)
43:14 H2.66E5 A1.31E6
44:49 H2.71E5 A1.31E6
46:06 H2.81E5 A1.45E6
46:47 H3.48E5 A1.75E6
48:20 H3.31E5 A1.64E6
50:29 H3.48E5 A1.57E6
373.8788 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2856.0,0.00%,F,F)
43:14 H2.01E5 A1.07E6
43:58 H2.14E5 A9.83E5
44:48 H2.05E5 A1.03E6
46:06 H2.22E5 A1.12E6
46:46 H2.61E5 A1.32E6
48:03 H2.59E5 A1.27E6
50:29 H2.81E5 A1.27E6
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
1.5E6
7.4E5
0.0E0
1.2E6
6.0E5
3.5E5
1.8E5
2.8E5
1.4E5

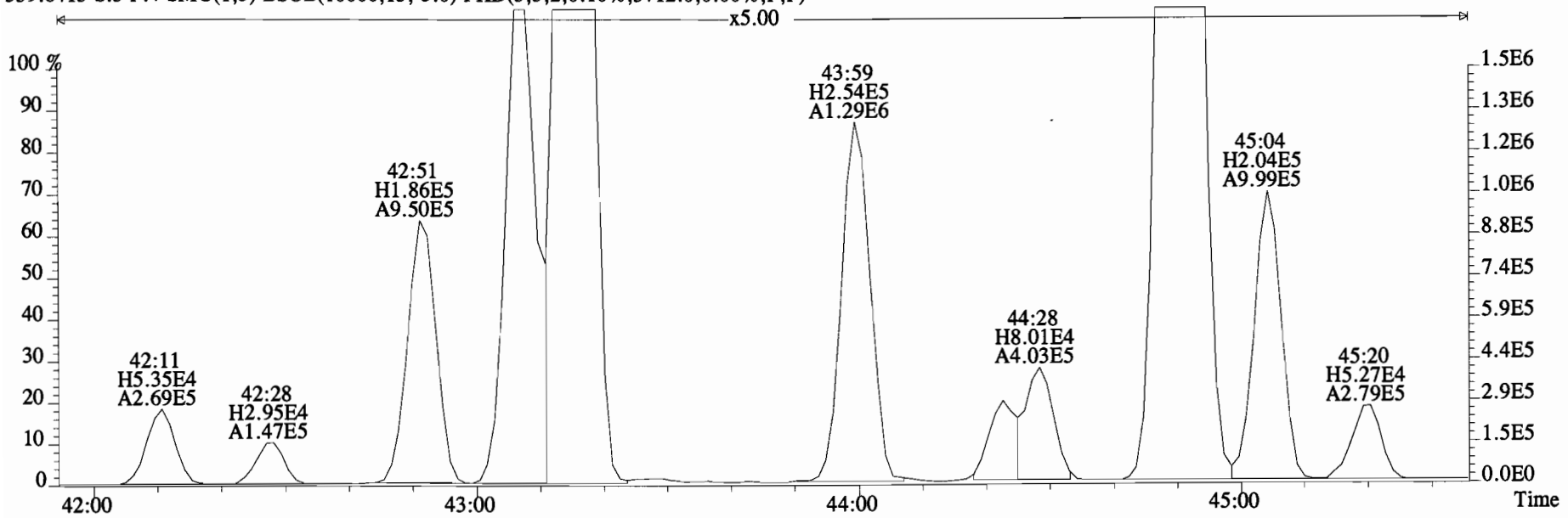
File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
359.8415 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3712.0,0.00%,F,F)



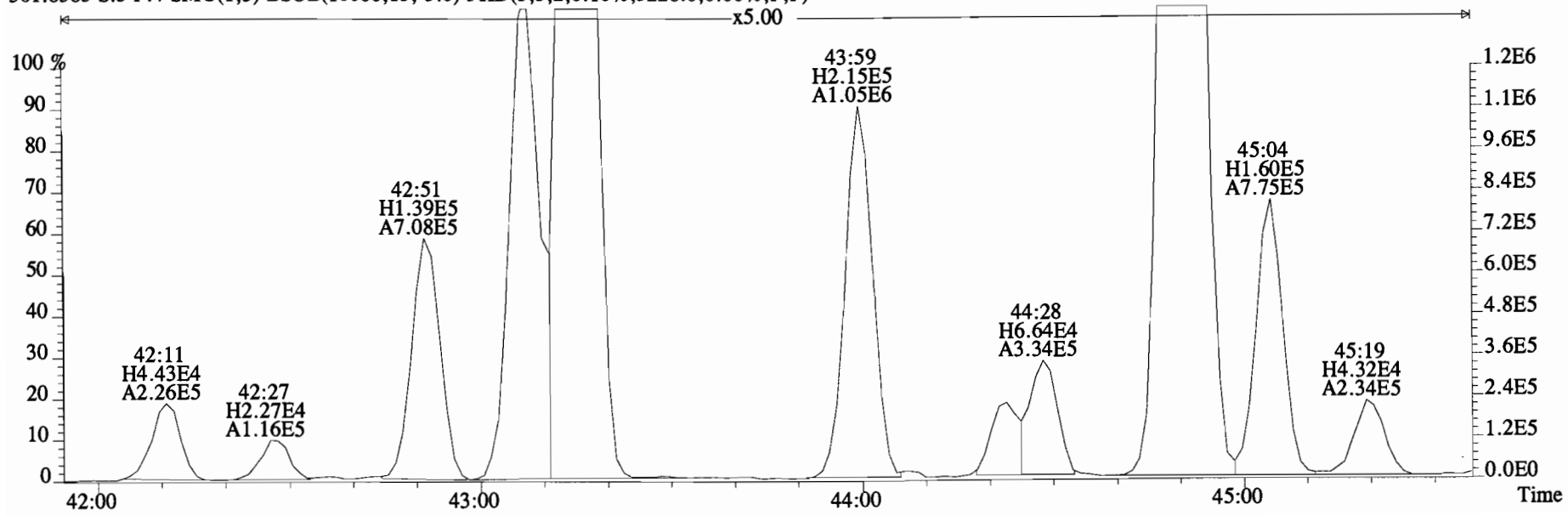
361.8385 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3228.0,0.00%,F,F)



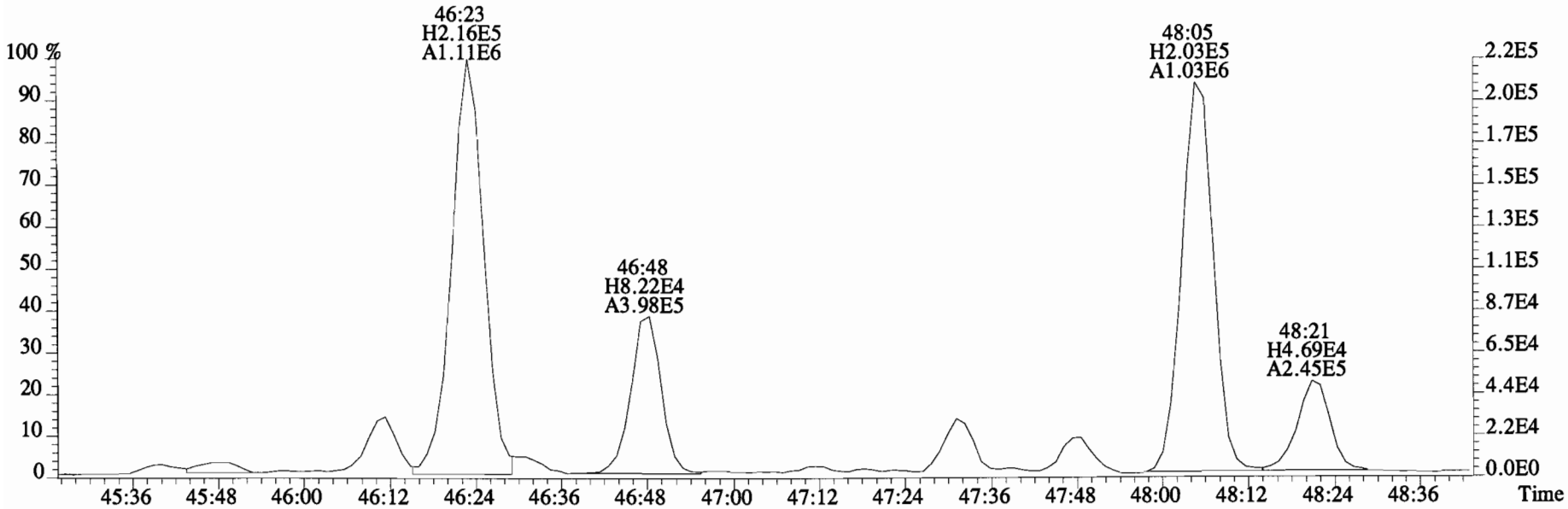
File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
359.8415 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3712.0,0.00%,F,F)



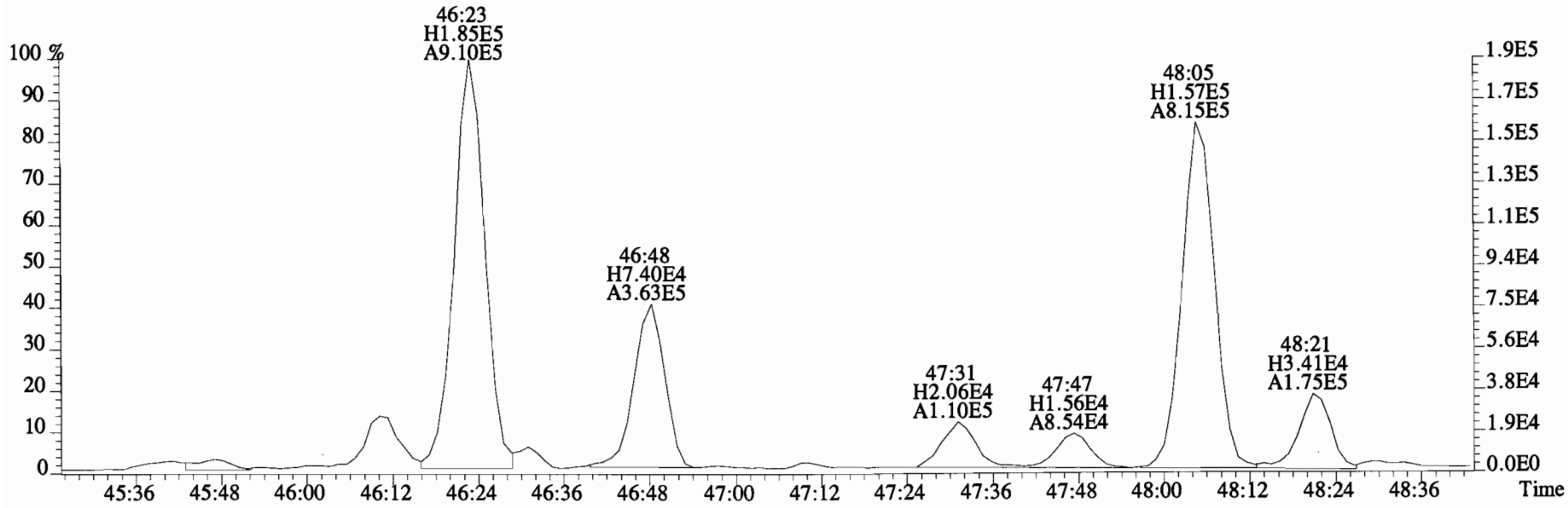
361.8385 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3228.0,0.00%,F,F)



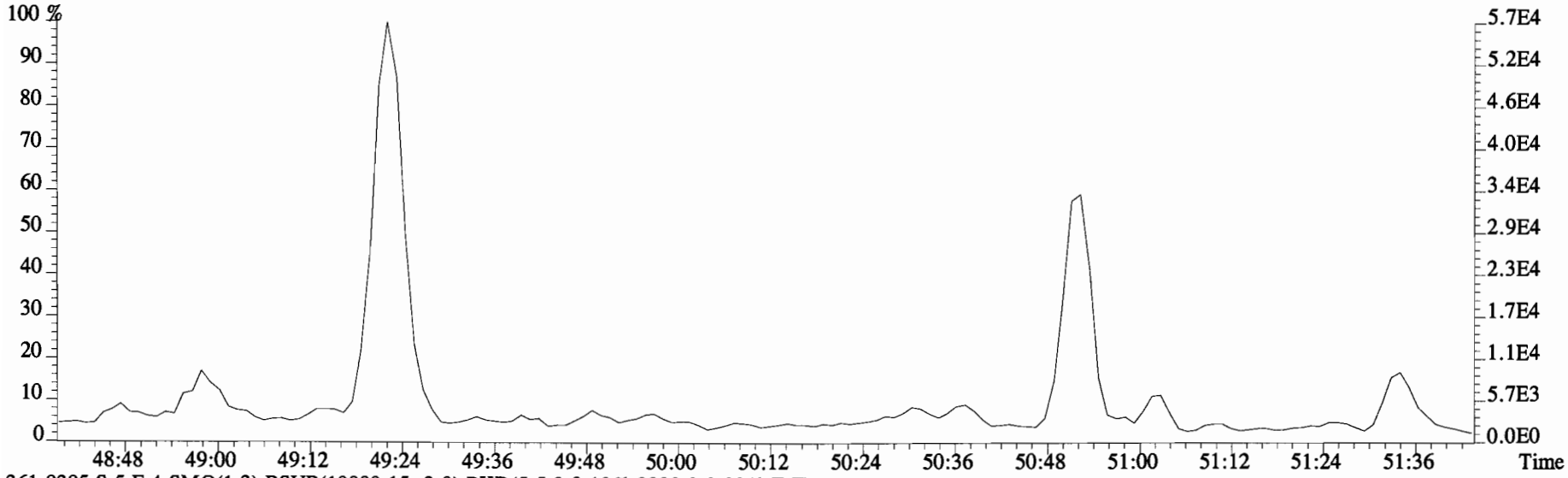
File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
359.8415 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3712.0,0.00%,F,F)



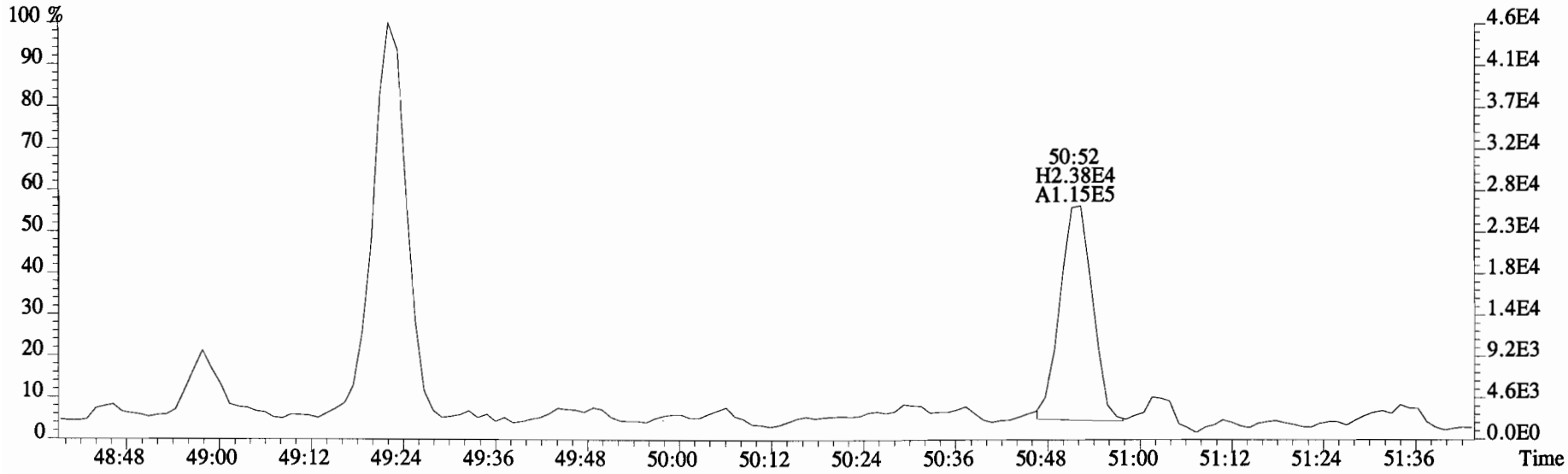
361.8385 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3228.0,0.00%,F,F)



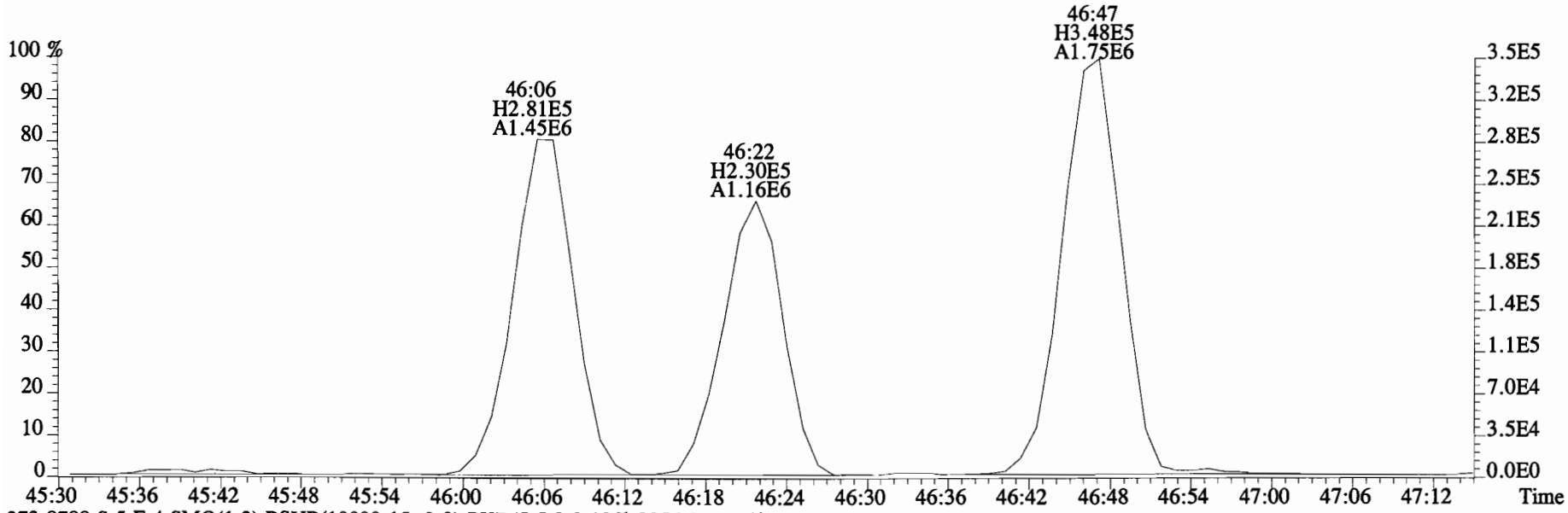
File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
359.8415 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3712.0,0.00%,F,F)



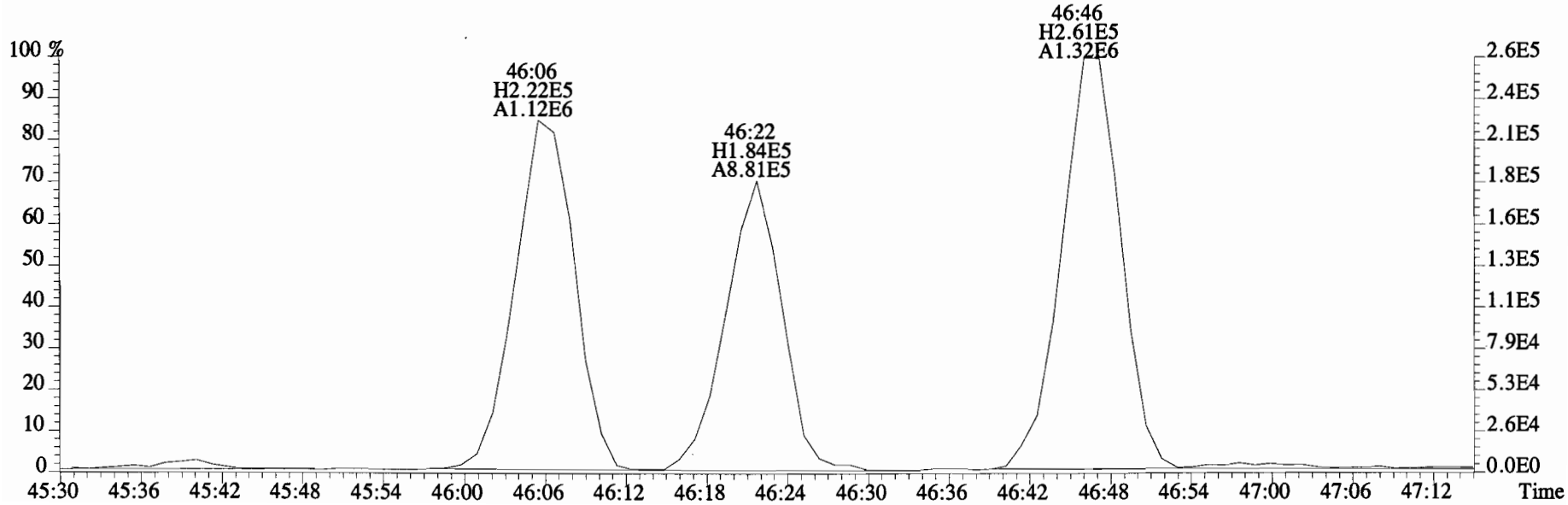
361.8385 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3228.0,0.00%,F,F)



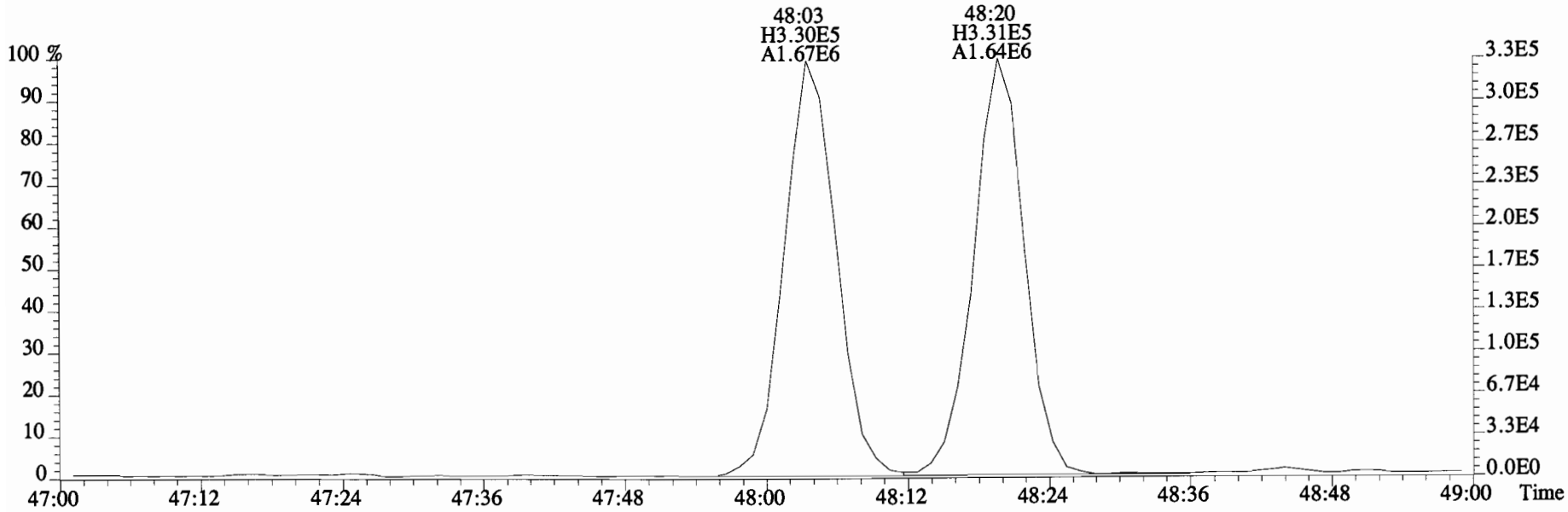
File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
371.8817 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3088.0,0.00%,F,F)



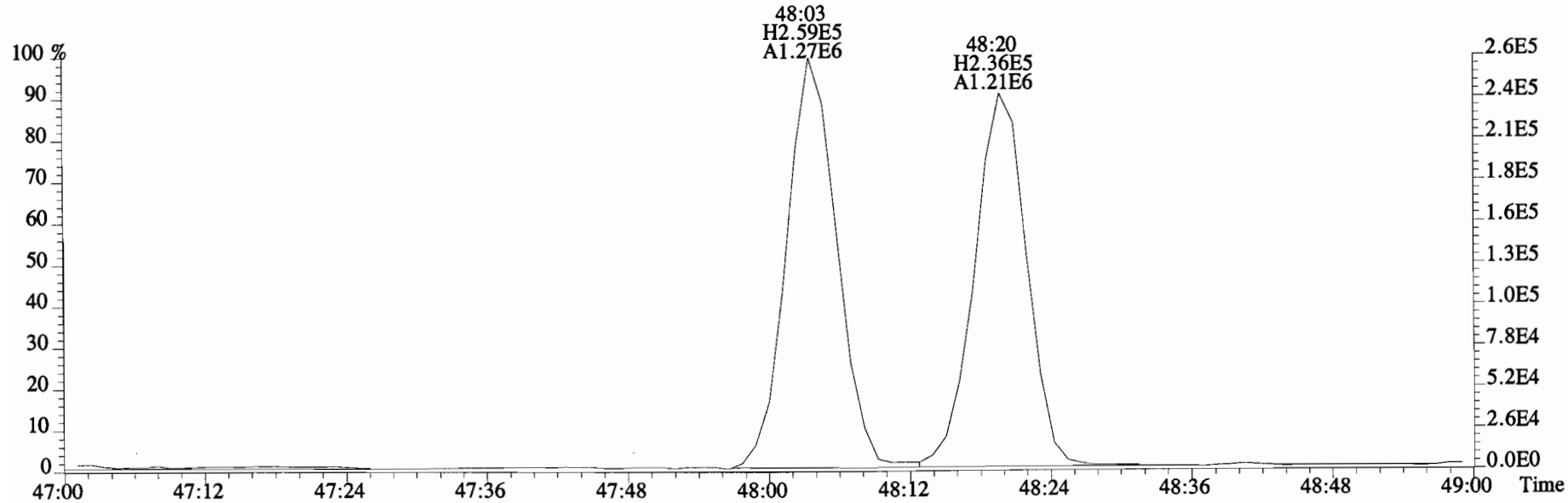
373.8788 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2856.0,0.00%,F,F)



File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
371.8817 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3088.0,0.00%,F,F)

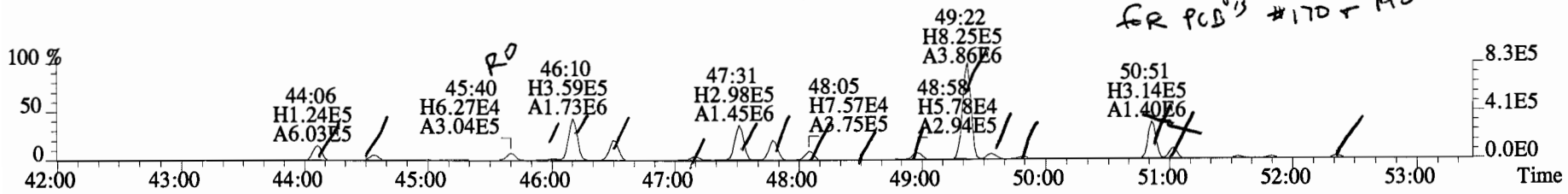


373.8788 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2856.0,0.00%,F,F)

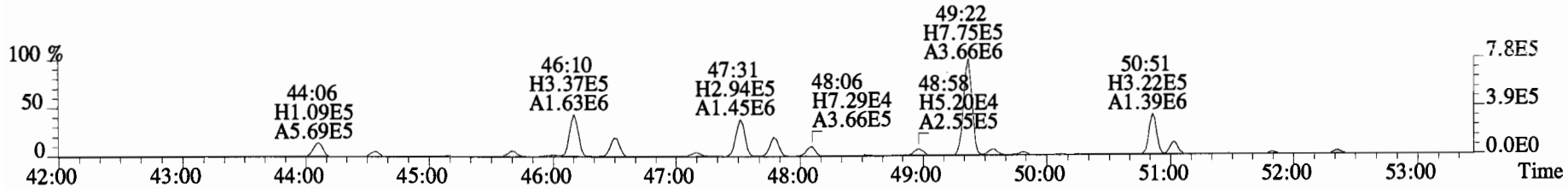


File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
393.8025 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2676.0,0.00%,F,F)

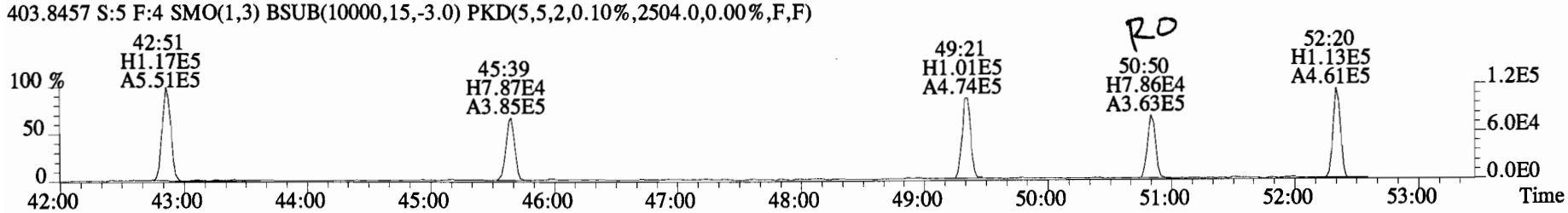
See original injection for PCB's #170 & 190



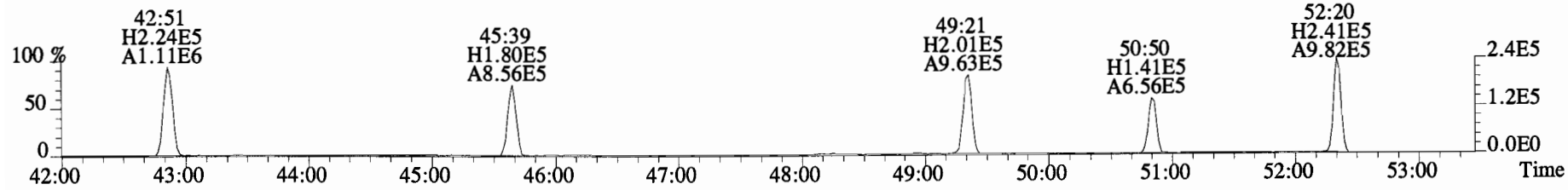
395.7995 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2392.0,0.00%,F,F)



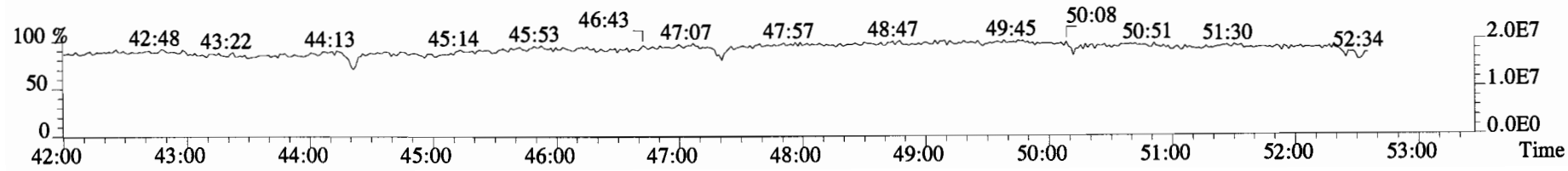
403.8457 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2504.0,0.00%,F,F)



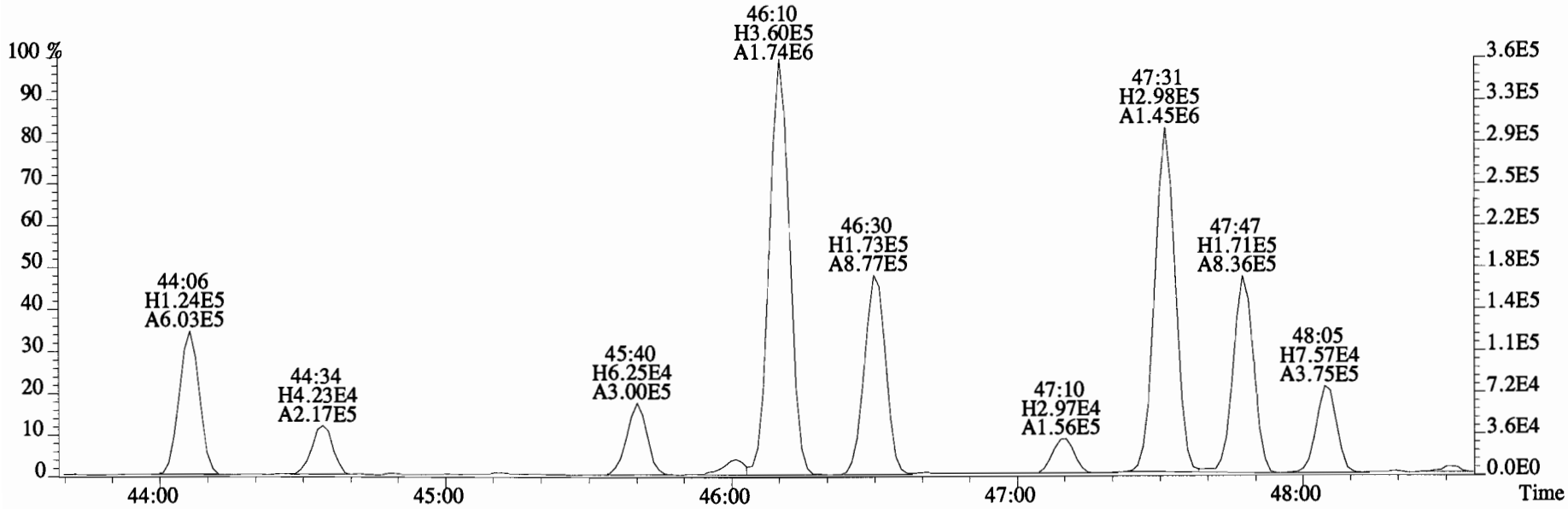
405.8428 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2592.0,0.00%,F,F)



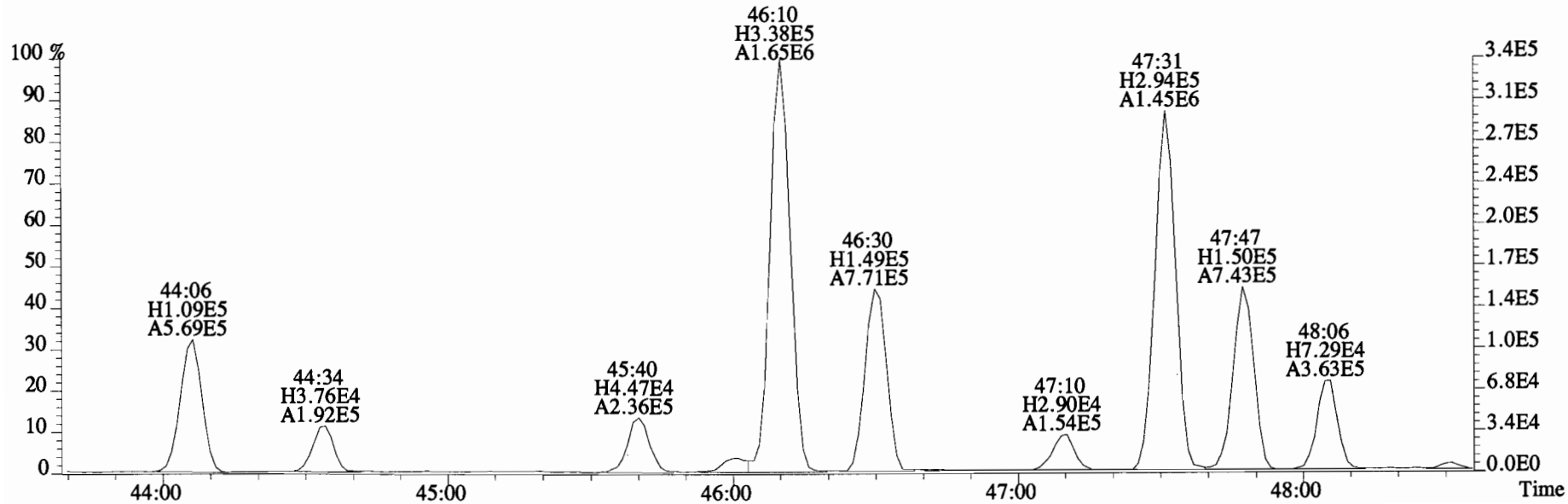
380.9760 S:5 F:4



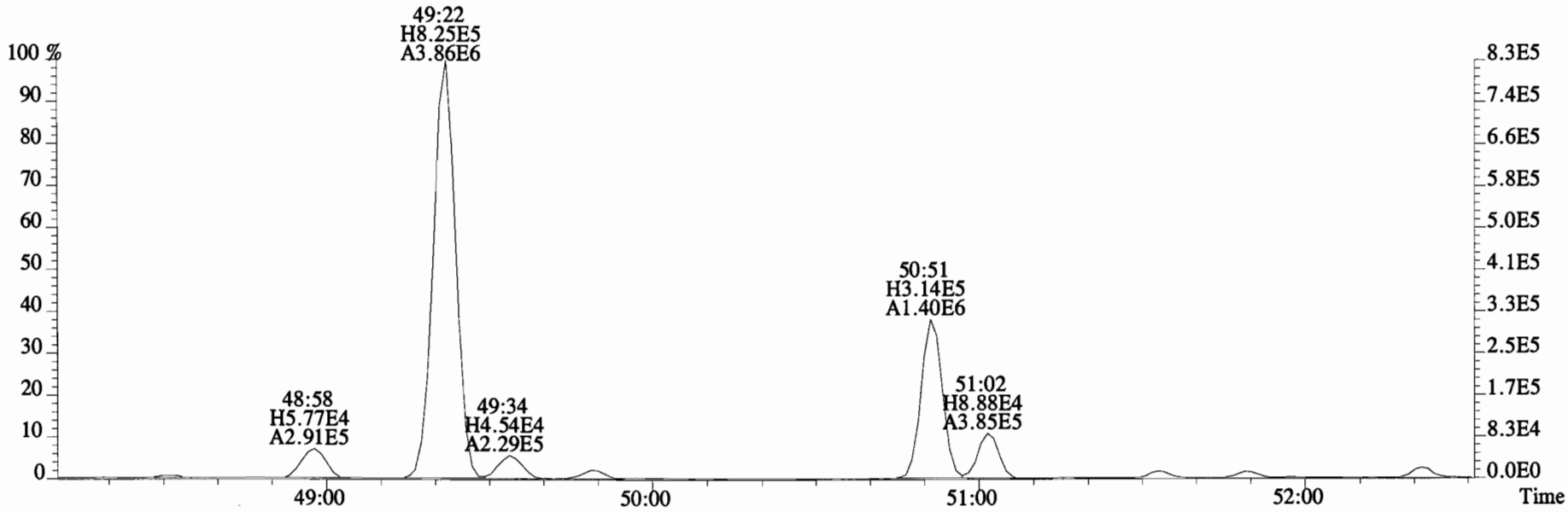
File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
393.8025 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2676.0,0.00%,F,F)



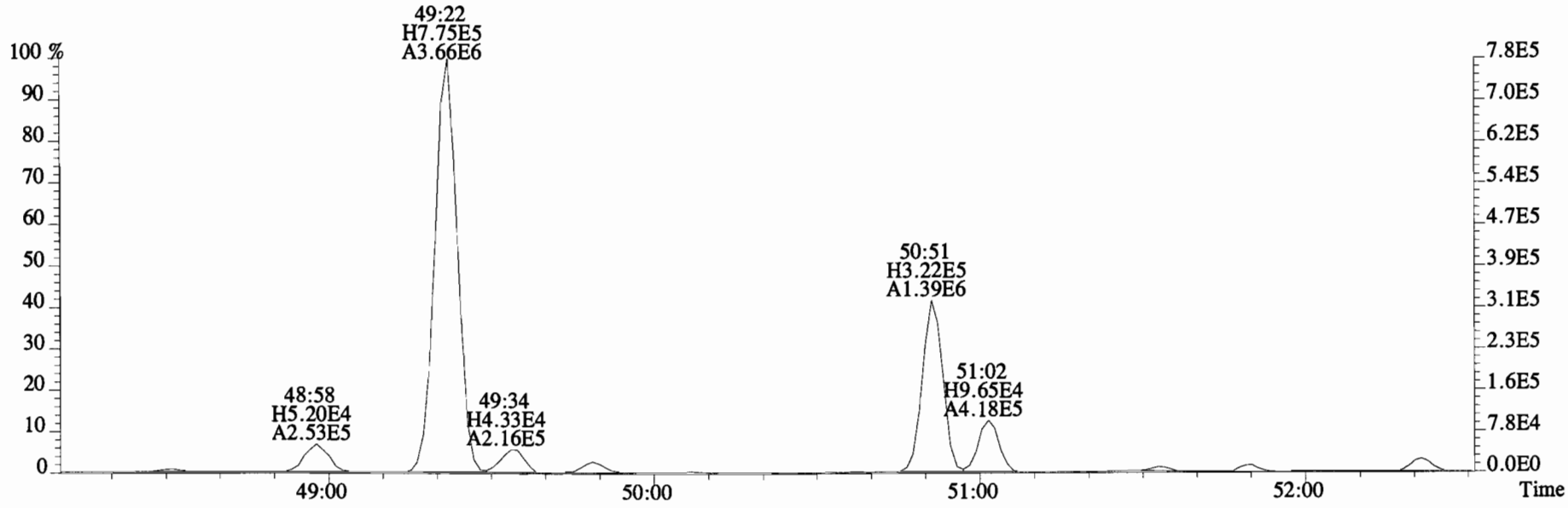
395.7995 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2392.0,0.00%,F,F)

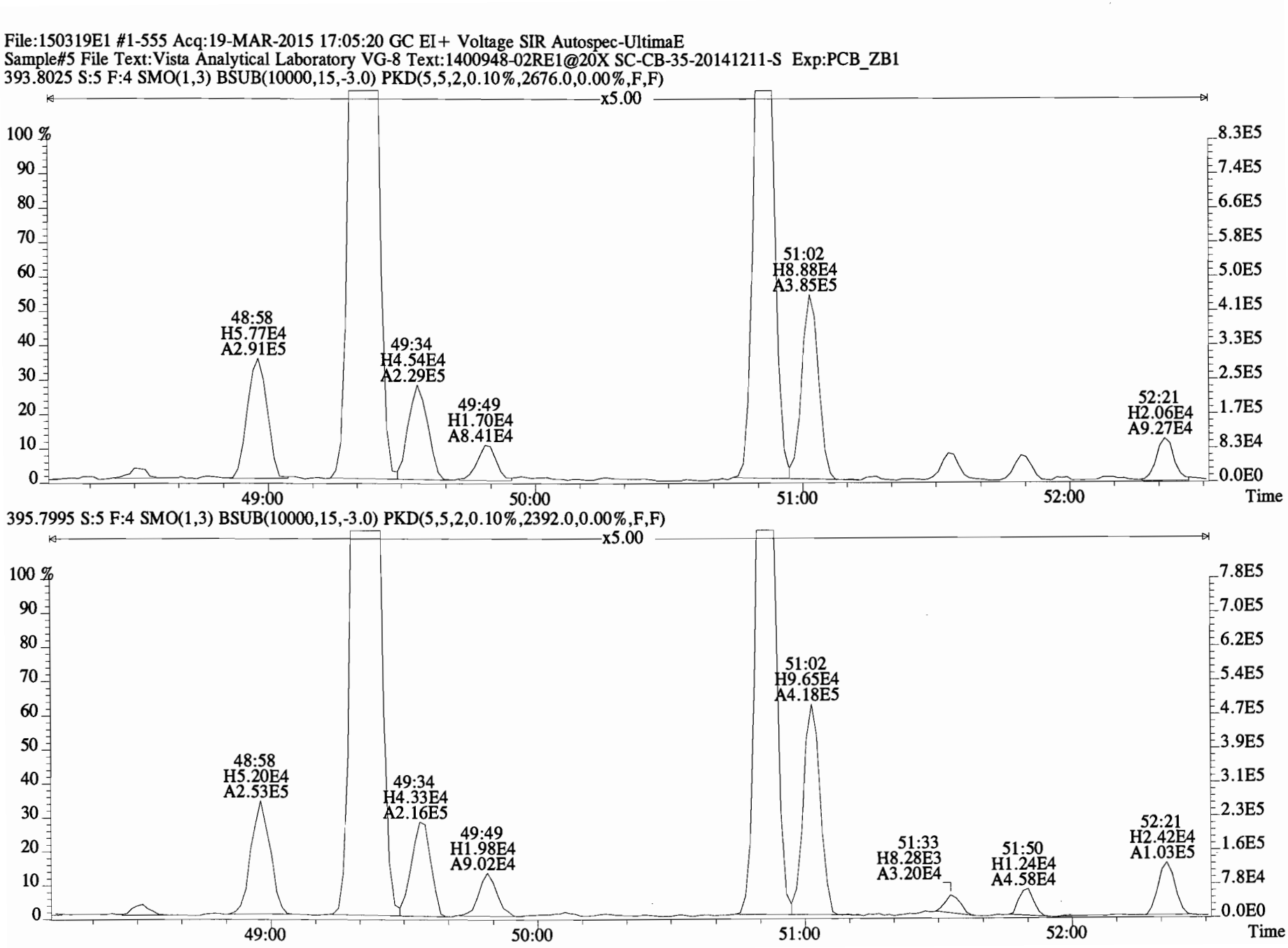


File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
393.8025 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2676.0,0.00%,F,F)

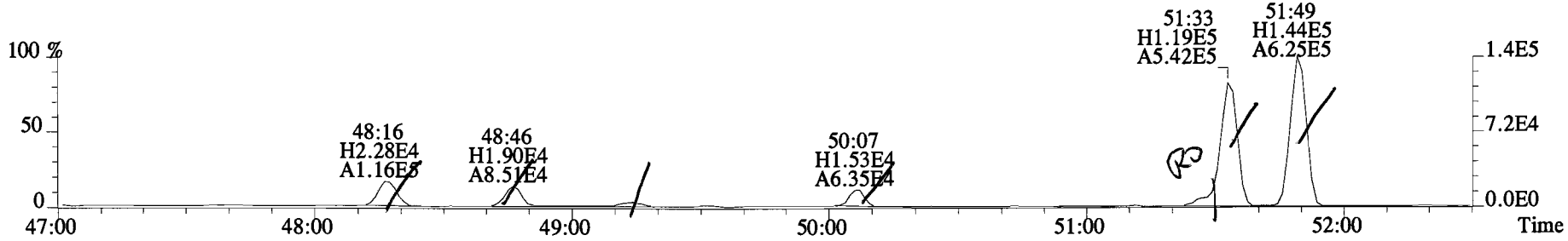


395.7995 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2392.0,0.00%,F,F)

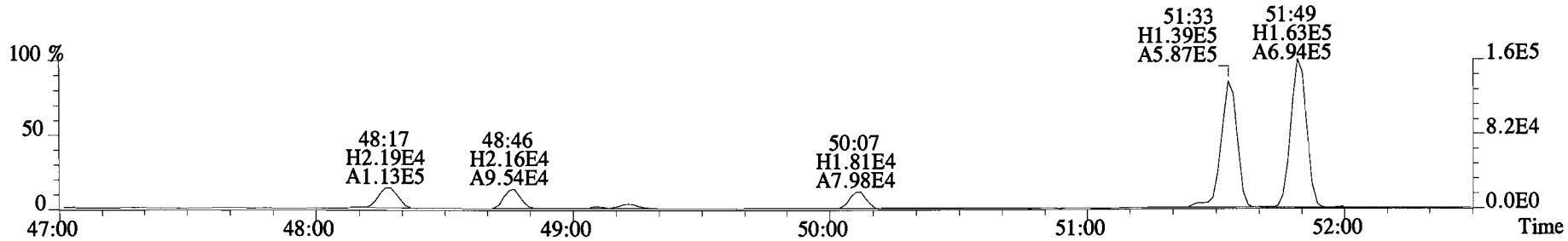



File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
393.8025 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2676.0,0.00%,F,F)
x5.00
48:58
H5.77E4
A2.91E5
49:34
H4.54E4
A2.29E5
49:49
H1.70E4
A8.41E4
51:02
H8.88E4
A3.85E5
52:21
H2.06E4
A9.27E4
Time
395.7995 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2392.0,0.00%,F,F)
x5.00
48:58
H5.20E4
A2.53E5
49:34
H4.33E4
A2.16E5
49:49
H1.98E4
A9.02E4
51:02
H9.65E4
A4.18E5
51:33
H8.28E3
A3.20E4
51:50
H1.24E4
A4.58E4
52:21
H2.42E4
A1.03E5
Time

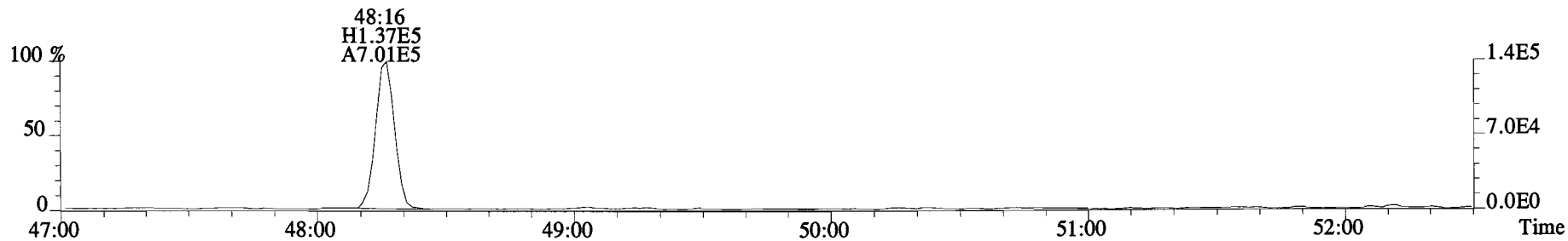
File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
427.7635 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2188.0,0.00%,F,F)



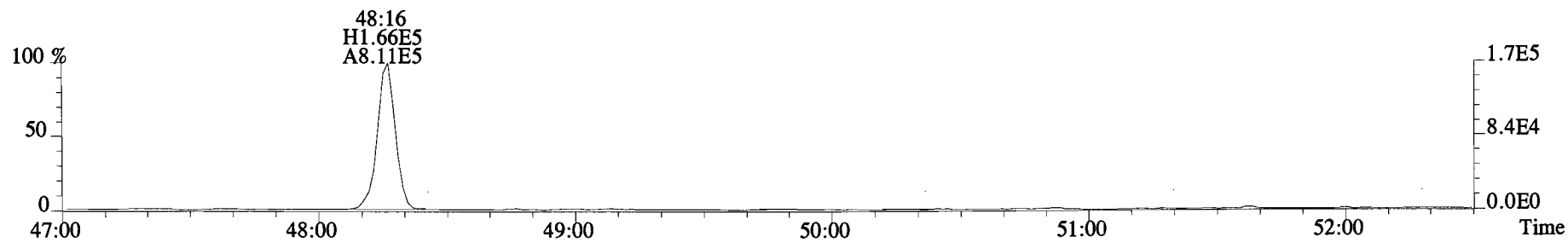
429.7606 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2076.0,0.00%,F,F)



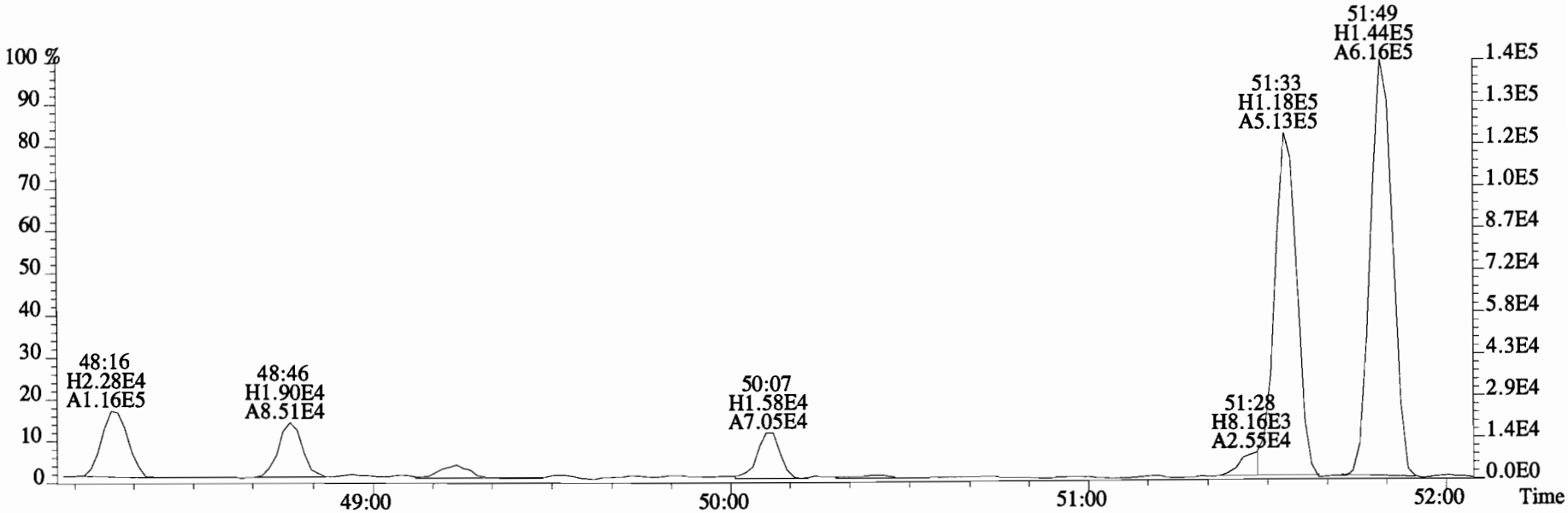
439.8038 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2328.0,0.00%,F,F)



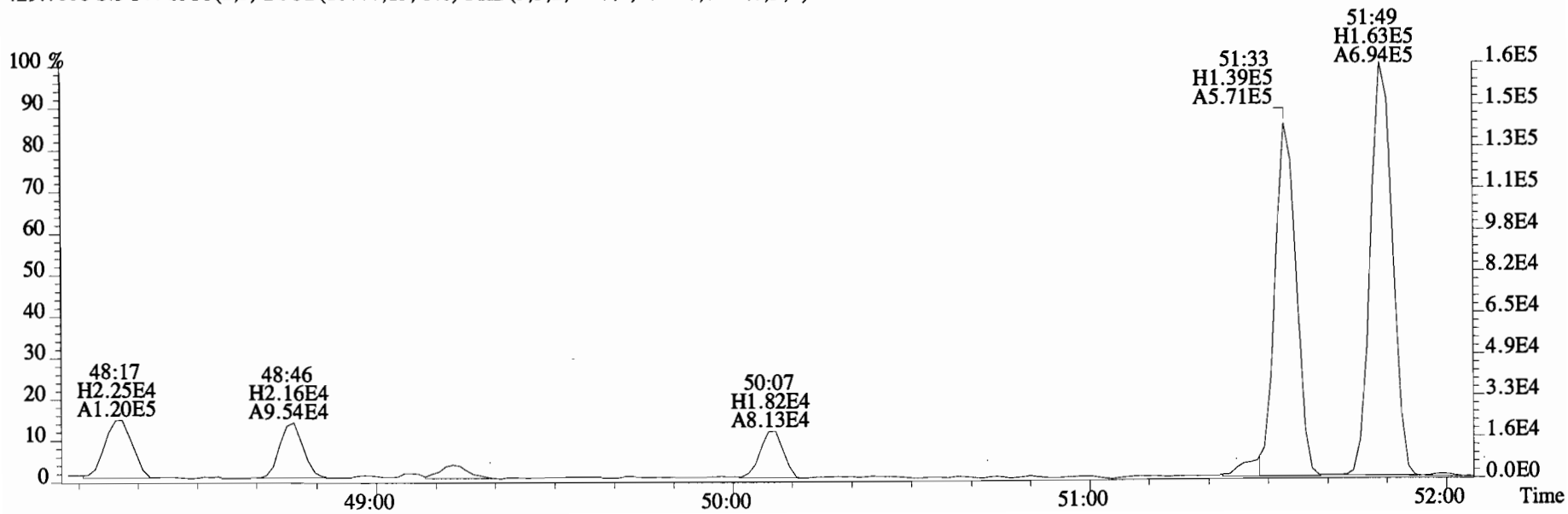
441.8008 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2172.0,0.00%,F,F)

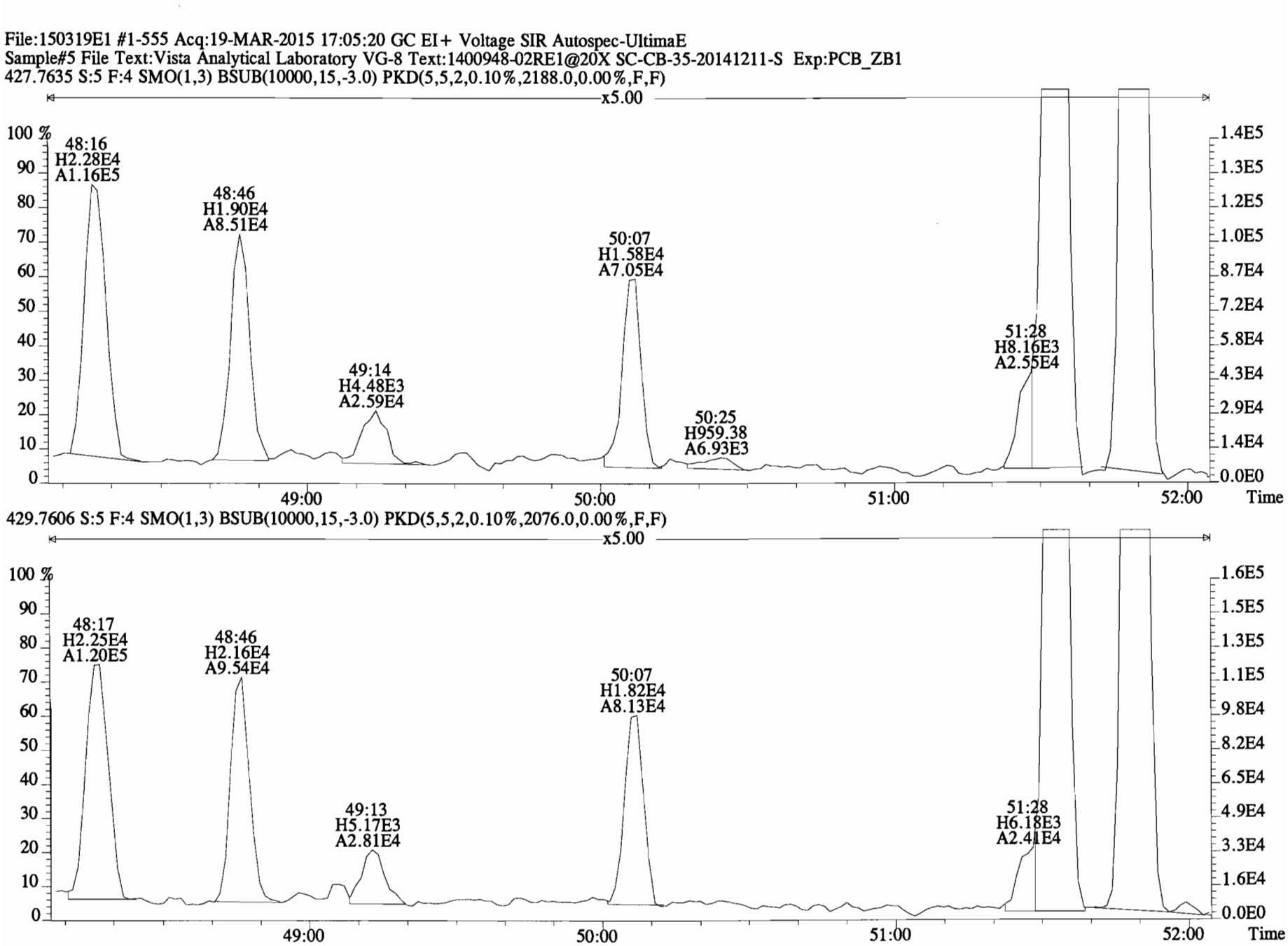


File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
427.7635 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2188.0,0.00%,F,F)

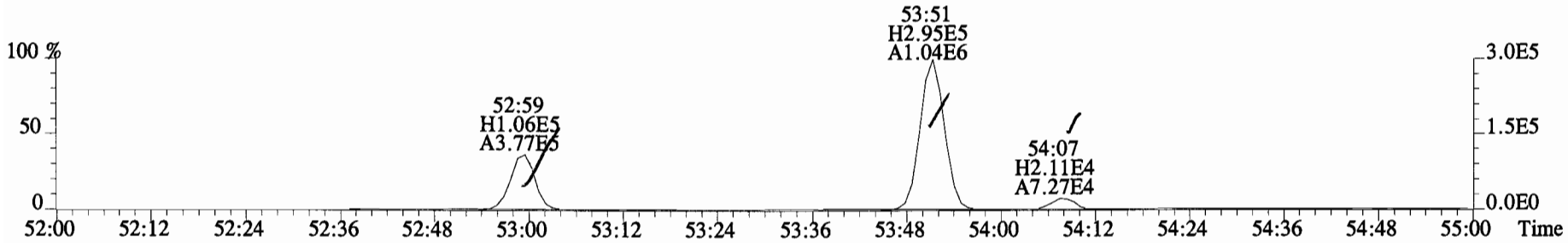


429.7606 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2076.0,0.00%,F,F)

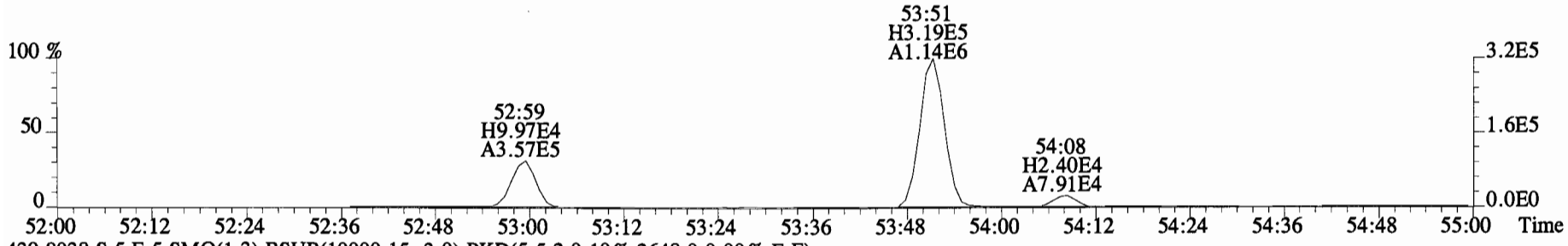



File:150319E1 #1-555 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
427.7635 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2188.0,0.00%,F,F)
x5.00
48:16
H2.28E4
A1.16E5
48:46
H1.90E4
A8.51E4
49:14
H4.48E3
A2.59E4
50:07
H1.58E4
A7.05E4
50:25
H959.38
A6.93E3
51:28
H8.16E3
A2.55E4
Time
429.7606 S:5 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2076.0,0.00%,F,F)
x5.00
48:17
H2.25E4
A1.20E5
48:46
H2.16E4
A9.54E4
49:13
H5.17E3
A2.81E4
50:07
H1.82E4
A8.13E4
51:28
H6.18E3
A2.41E4
Time

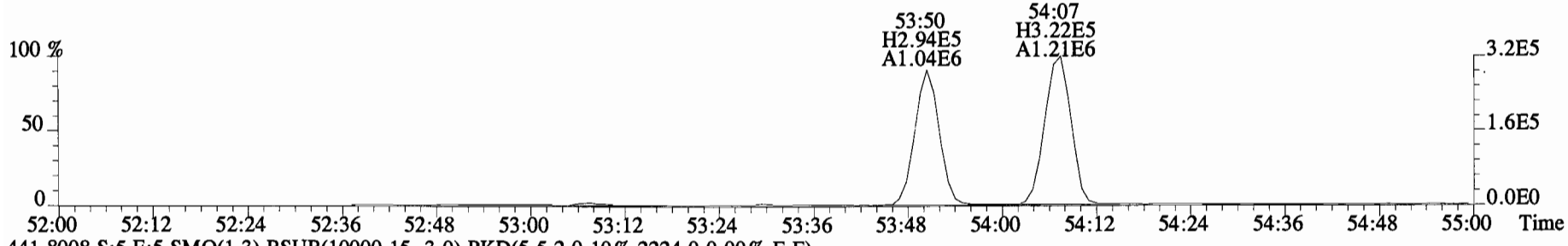
File:150319E1 #1-430 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
427.7635 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1816.0,0.00%,F,F)



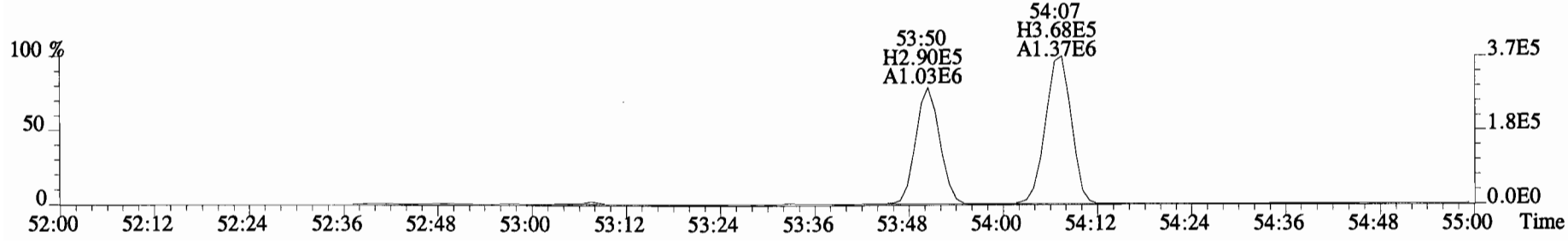
429.7606 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1492.0,0.00%,F,F)



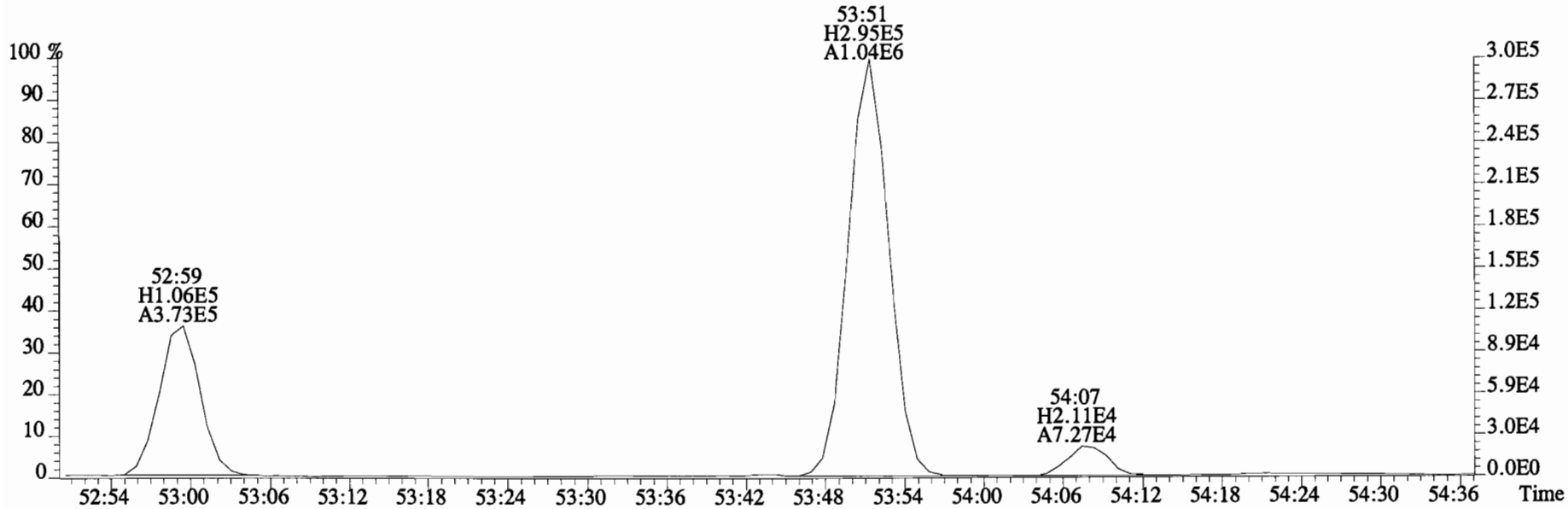
439.8038 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2648.0,0.00%,F,F)



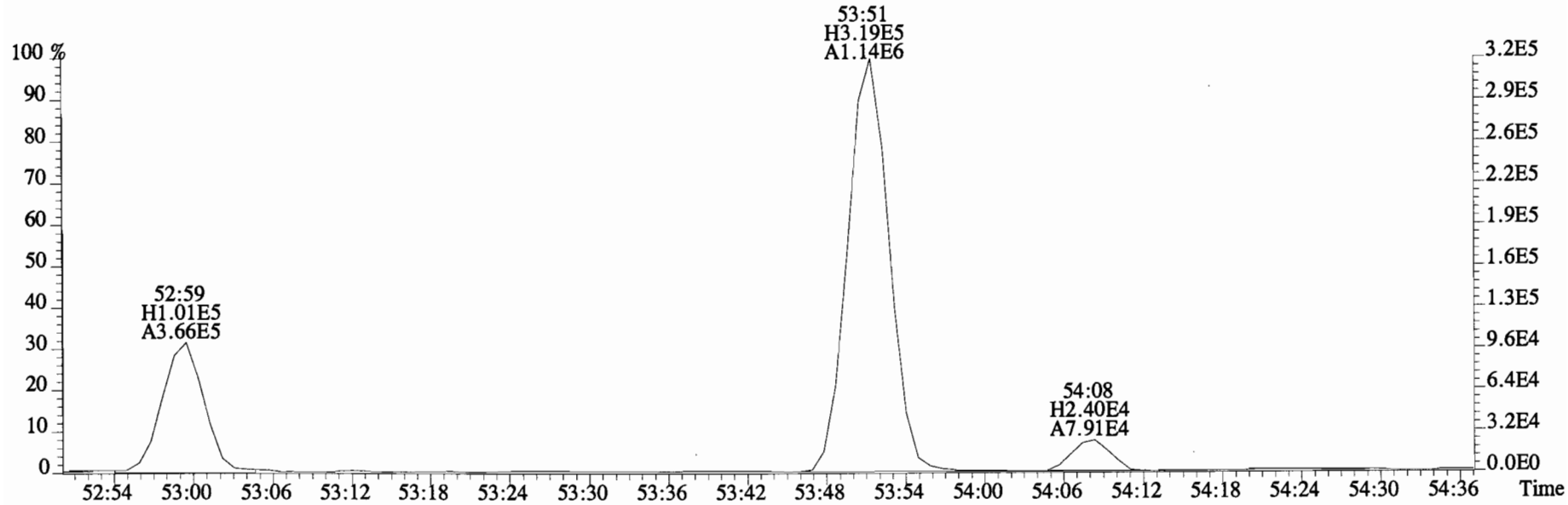
441.8008 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2224.0,0.00%,F,F)



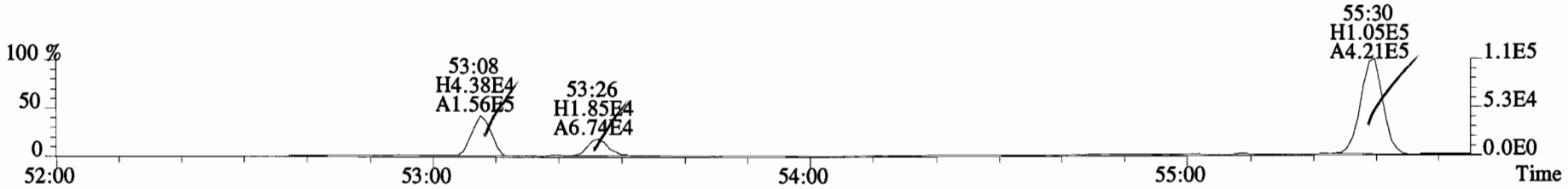
File:150319E1 #1-430 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
427.7635 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1816.0,0.00%,F,F)



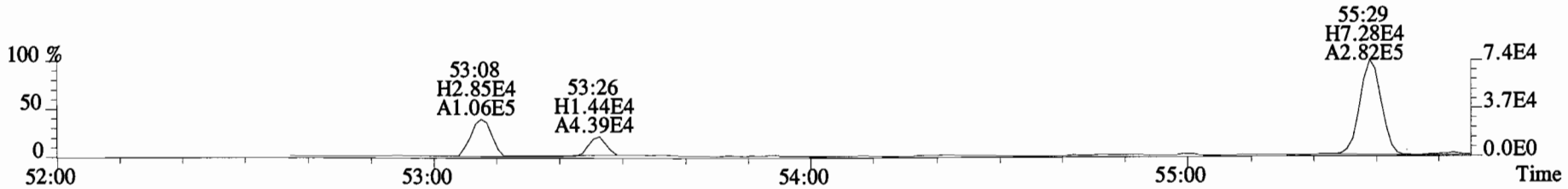
429.7606 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1492.0,0.00%,F,F)



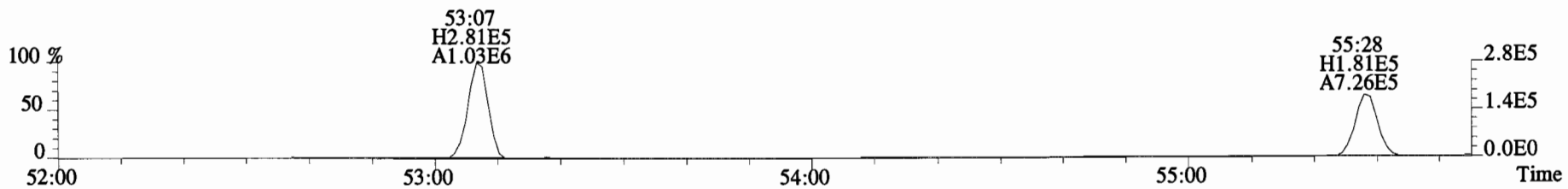
File:150319E1 #1-430 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
463.7216 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1456.0,0.00%,F,F)



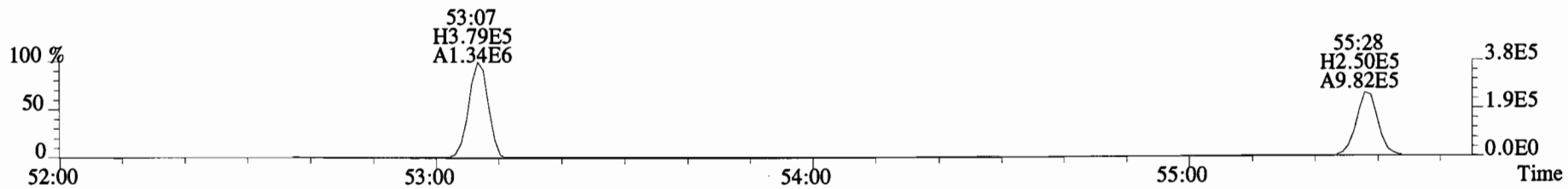
465.7186 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1492.0,0.00%,F,F)



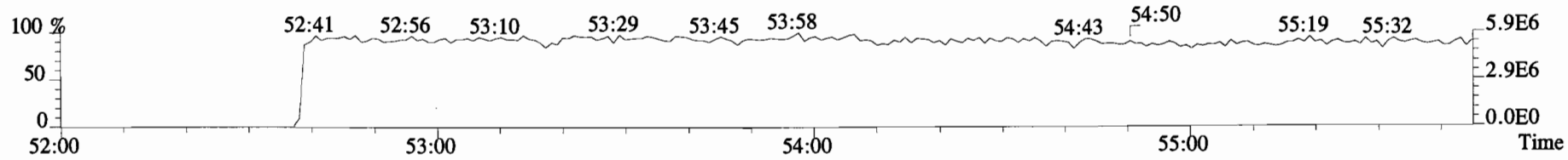
473.7648 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1700.0,0.00%,F,F)



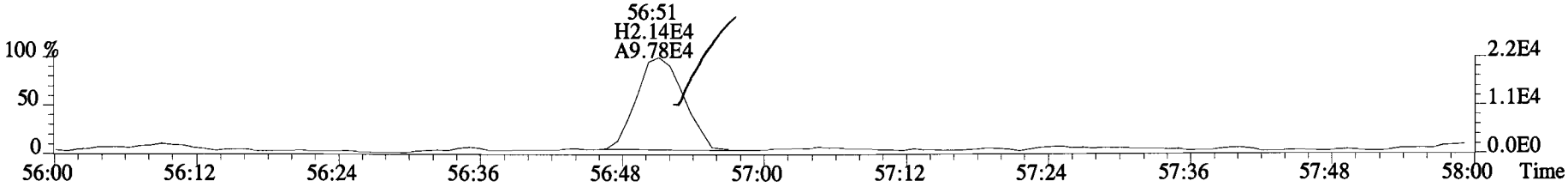
475.7619 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1732.0,0.00%,F,F)



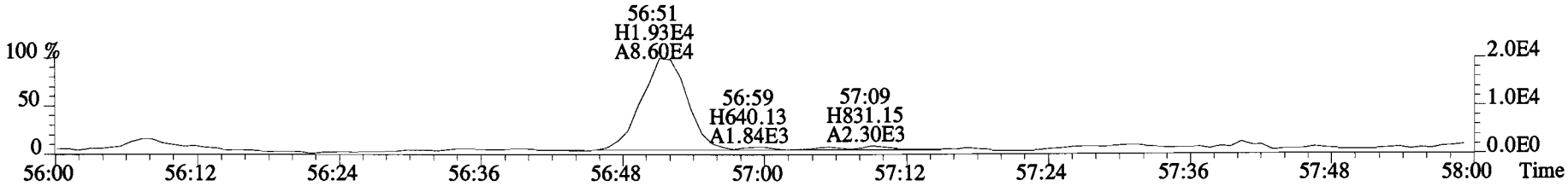
492.9697 S:5 F:5



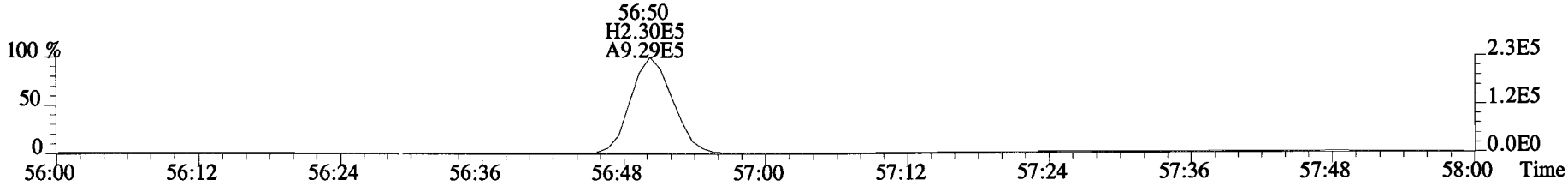
File:150319E1 #1-430 Acq:19-MAR-2015 17:05:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1@20X SC-CB-35-20141211-S Exp:PCB_ZB1
497.6826 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1476.0,0.00%,F,F)



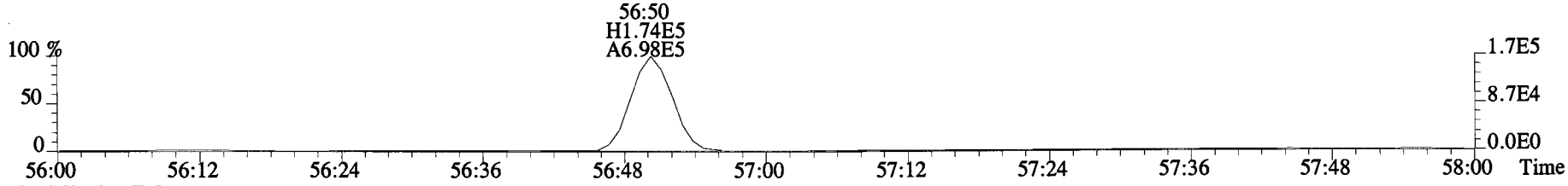
499.6797 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1520.0,0.00%,F,F)



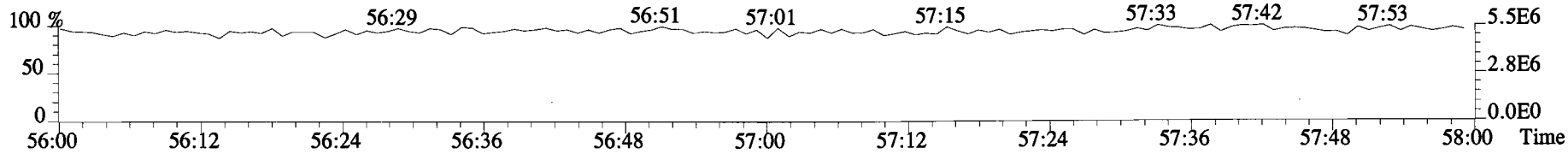
509.7229 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1836.0,0.00%,F,F)



511.7199 S:5 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1532.0,0.00%,F,F)



492.9697 S:5 F:5



Client ID: SC-CB-35-20141211-S Filename: 150318E1 S:10 Acq:18-MAR-15 19:39:45 ConCal: ST150318E1-1
Lab ID: 1400948-02RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.891 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	*	*	n	NotF	1.72	*		*	2.5	*	*	0.999	1.009
Hepta	PCB-191	*	*	n	NotF	1.69	*		*	2.5	*	*	1.004	1.014
Hepta	PCB-170	2.20e+07	1.06	y	51:09	1.60	16800	X	*	2.5	*	1.000	0.995	1.005
Hepta	PCB-190	5.67e+06	1.04	y	51:19	2.21	3140		*	2.5	*	1.003	0.998	1.008
Hepta	PCB-189	*	*	n	NotF	1.55	*		*	2.5	*	*	0.995	1.005
Octa	PCB-202	*	*	n	NotF	1.08	*		*	2.5	*	*	0.995	1.005
Octa	PCB-201	*	*	n	NotF	1.15	*		*	2.5	*	*	1.005	1.015
Octa	PCB-204	*	*	n	NotF	1.14	*		*	2.5	*	*	1.008	1.018
Octa	PCB-197	*	*	n	NotF	1.07	*		*	2.5	*	*	1.015	1.025
Octa	PCB-200	*	*	n	NotF	1.06	*		*	2.5	*	*	1.032	1.044
Octa	PCB-198	*	*	n	NotF	0.76	*		*	2.5	*	*	1.059	1.069
Octa	PCB-199	*	*	n	NotF	0.80	*		*	2.5	*	*	1.061	1.071
Octa	PCB-196/203	*	*	n	NotF	0.80	*		*	2.5	*	*	1.066	1.076
Octa	PCB-195	*	*	n	NotF	1.23	*		*	2.5	*	*	0.979	0.989
Octa	PCB-194	*	*	n	NotF	1.21	*		*	2.5	*	*	0.995	1.005
Octa	PCB-205	*	*	n	NotF	1.54	*		*	2.5	*	*	1.001	1.011
Nona	PCB-208	*	*	n	NotF	0.93	*		*	2.5	*	*	0.995	1.005
Nona	PCB-207	*	*	n	NotF	1.08	*		*	2.5	*	*	1.001	1.011
Nona	PCB-206	*	*	n	NotF	1.02	*		*	2.5	*	*	0.995	1.005
Deca	PCB-209	*	*	n	NotF	1.17	*		*	2.5	*	*	0.995	1.005

X used only

Analyst: DMS 3/27/15

Date: 3/26/15

Client ID: SC-CB-35-20141211-S Filename: 150318E1 S:10 Acq:18-MAR-15 19:39:45 ConCal: ST150318E1-1
Lab ID: 1400948-02RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.8909 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	*	*	n	NotFnd	1.10	*	
Total Tri-PCB	*	*	n	NotFnd	1.21	*	Sum:0.00000
Total Tetra-PCB	*	*	n	NotFnd	1.09	*	
Total Penta-PCB	*	*	n	NotFnd	1.18	*	
Total Penta-PCB	*	*	n	NotFnd	1.25	*	Sum:0.00000
Total Hexa-PCB	*	*	n	NotFnd	0.90	*	
Total Hexa-PCB	*	*	n	NotFnd	1.11	*	Sum:0.00000
Total Hepta-PCB	2.77e+07	1.06	y	51:09	1.42	19981.6	
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:19981.5960600

Integrations by Analyst: DMS

Date: 3/26/15

Client ID: SC-CB-35-20141211-S Filename: 150318E1 S:10 Acq:18-MAR-15 19:39:45 ConCal: ST150318E1-1
Lab ID: 1400948-02RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:1.8909 EndCAL: NA

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	*	*	n	0.87	NotFnd	*	0.629	0.635	*	*
13C-PCB-3	*	*	n	0.91	NotFnd	*	0.725	0.733	*	*
13C-PCB-4	*	*	n	0.59	NotFnd	*	0.775	0.783	*	*
13C-PCB-9	*	*	n	0.90	NotFnd	*	0.842	0.850	*	*
13C-PCB-11	*	*	n	0.94	NotFnd	*	0.968	0.978	*	*
13C-PCB-19	*	*	n	0.53	NotFnd	*	0.930	0.940	*	*
13C-PCB-28	*	*	n	0.93	NotFnd	*	0.999	1.009	*	*
13C-PCB-32	*	*	n	0.80	NotFnd	*	1.040	1.050	*	*
13C-PCB-37	*	*	n	0.84	NotFnd	*	1.131	1.143	*	*
13C-PCB-47	*	*	n	0.81	NotFnd	*	0.866	0.874	*	*
13C-PCB-52	*	*	n	0.77	NotFnd	*	0.853	0.861	*	*
13C-PCB-54	*	*	n	0.97	NotFnd	*	0.758	0.766	*	*
13C-PCB-70	*	*	n	1.00	NotFnd	*	0.961	0.971	*	*
13C-PCB-77	*	*	n	0.94	NotFnd	*	1.073	1.083	*	*
13C-PCB-80	*	*	n	1.03	NotFnd	*	0.972	0.982	*	*
13C-PCB-81	*	*	n	0.92	NotFnd	*	1.057	1.067	*	*
13C-PCB-95	*	*	n	0.74	NotFnd	*	0.908	0.918	*	*
13C-PCB-97	*	*	n	0.70	NotFnd	*	0.984	0.994	*	*
13C-PCB-101	*	*	n	0.78	NotFnd	*	0.951	0.961	*	*
13C-PCB-104	*	*	n	1.00	NotFnd	*	0.828	0.836	*	*
13C-PCB-105	*	*	n	1.37	NotFnd	*	0.924	0.934	*	*
13C-PCB-114	*	*	n	1.36	NotFnd	*	0.905	0.915	*	*
13C-PCB-118	*	*	n	0.96	NotFnd	*	1.054	1.064	*	*
13C-PCB-123	*	*	n	0.89	NotFnd	*	1.050	1.060	*	*
13C-PCB-126	*	*	n	1.31	NotFnd	*	0.972	0.982	*	*
13C-PCB-127	*	*	n	1.47	NotFnd	*	0.931	0.941	*	*
13C-PCB-138	*	*	n	1.10	NotFnd	*	0.961	0.971	*	*
13C-PCB-141	*	*	n	1.07	NotFnd	*	0.943	0.953	*	*
13C-PCB-153	*	*	n	1.15	NotFnd	*	0.927	0.937	*	*
13C-PCB-155	*	*	n	0.84	NotFnd	*	0.939	0.949	*	*
13C-PCB-156	*	*	n	1.30	NotFnd	*	1.032	1.042	*	*
13C-PCB-157	*	*	n	1.36	NotFnd	*	1.038	1.048	*	*
13C-PCB-159	*	*	n	1.25	NotFnd	*	0.989	0.999	*	*
13C-PCB-167	*	*	n	1.35	NotFnd	*	1.004	1.014	*	*
13C-PCB-169	*	*	n	1.29	NotFnd	*	1.083	1.093	*	*
13C-PCB-170	8.64e+06	0.48	y	0.54	51:09	1.095	1.089	1.101	12000	114
13C-PCB-180	*	*	n	0.68	NotFnd	*	1.060	1.070	*	*
13C-PCB-188	*	*	n	0.92	NotFnd	*	0.919	0.929	*	*
13C-PCB-189	*	*	n	0.72	NotFnd	*	1.120	1.132	*	*
13C-PCB-194	*	*	n	0.80	NotFnd	*	0.990	1.000	*	*
13C-PCB-202	*	*	n	0.84	NotFnd	*	1.036	1.046	*	*
13C-PCB-206	*	*	n	0.65	NotFnd	*	1.021	1.031	*	*
13C-PCB-208	*	*	n	1.08	NotFnd	*	0.976	0.986	*	*
13C-PCB-209	*	*	n	0.61	NotFnd	*	1.045	1.055	*	*

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	*	*	n	1.02	NotFnd	*	1.023	1.034	*	*
13C-PCB-178	*	*	n	0.61	NotFnd	*	0.979	0.990	*	*

PS vs. IS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	*	*	n	1.10	NotFnd	*	0.964	0.974	*	*
13C-PCB-178	*	*	n	0.90	NotFnd	*	0.920	0.930	*	*

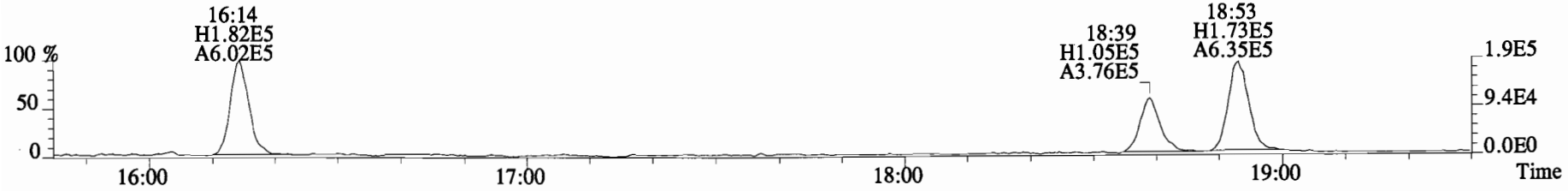
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	*	*	n	1.00	NotFnd	*
13C-PCB-31	*	*	n	1.00	NotFnd	*
13C-PCB-60	*	*	n	1.00	NotFnd	*
13C-PCB-111	*	*	n	1.00	NotFnd	*
13C-PCB-128	1.40e+07	1.32	y	1.00	46:43	10600
13C-PCB-205	1.55e+07	0.79	y	1.00	54:27	10600

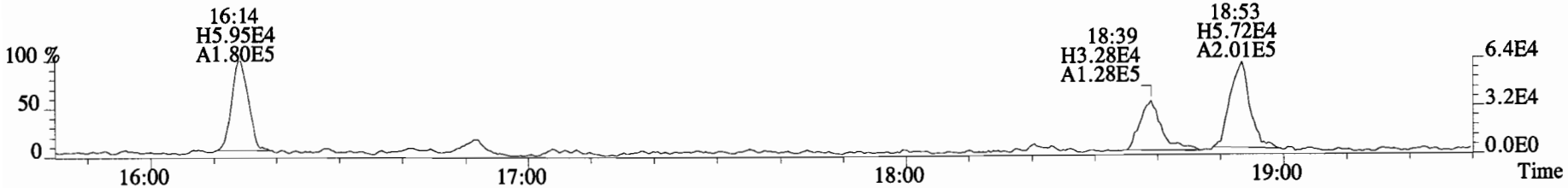
Analyst: DMS

Date: 3/26/15

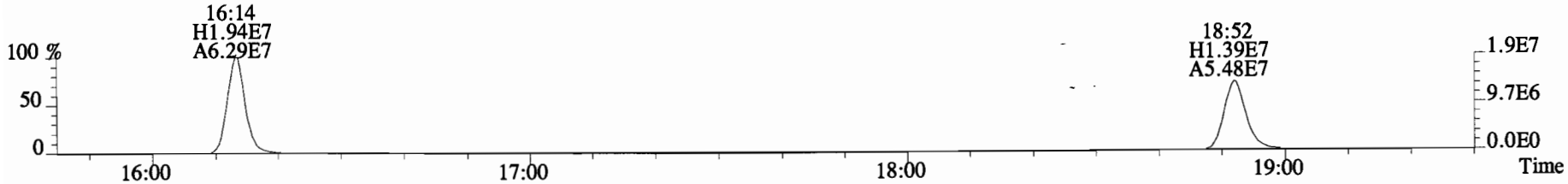
File:150318E1 #1-866 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
188.0393 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5940.0,0.00%,F,F)



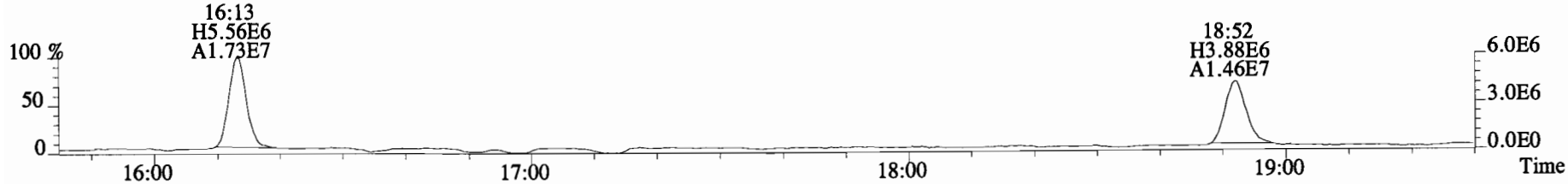
190.0363 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3972.0,0.00%,F,F)



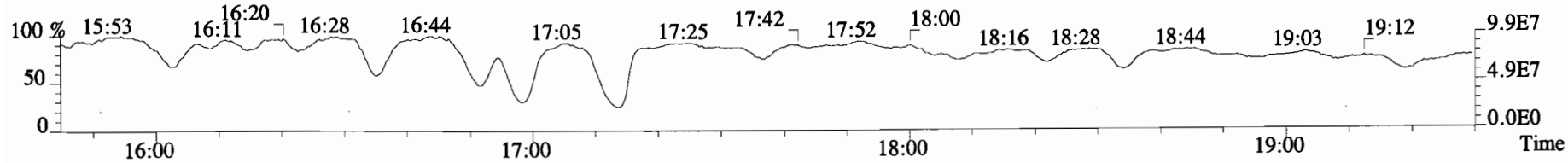
200.0795 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7588.0,0.00%,F,F)



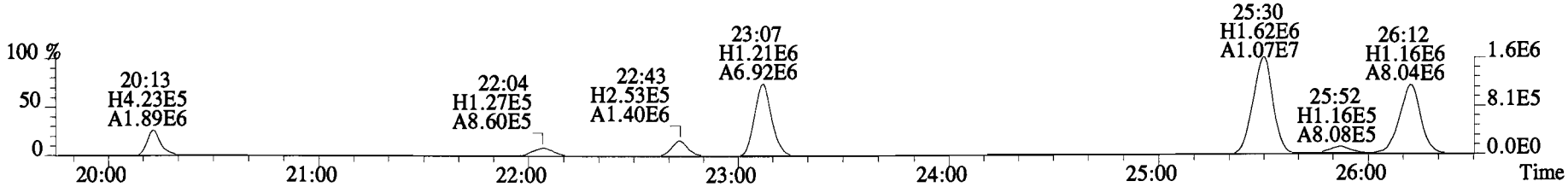
202.0766 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,349312.0,0.00%,F,F)



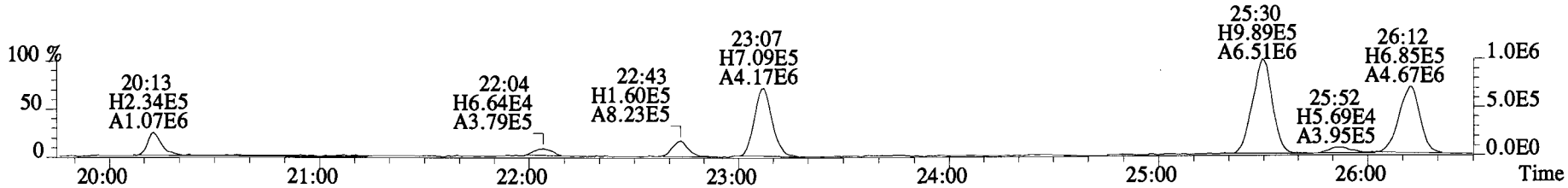
180.9880 S:10



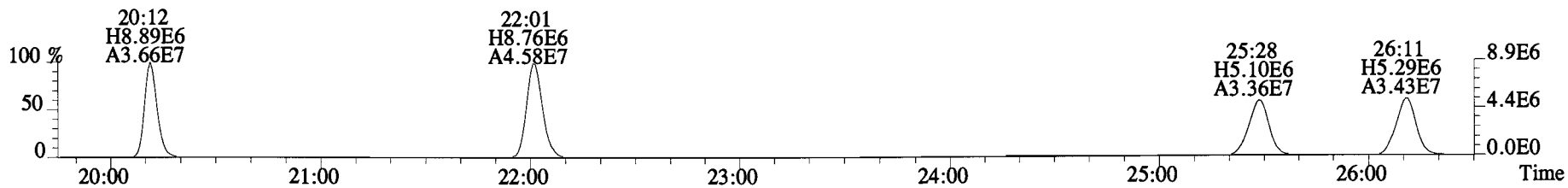
File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
222.0003 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4020.0,0.00%,F,F)



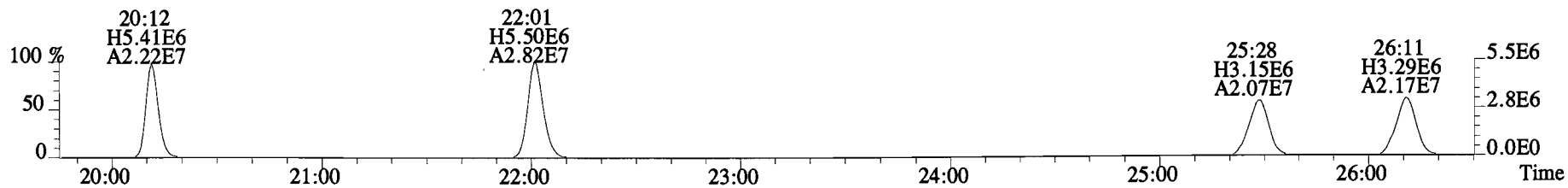
223.9974 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,19256.0,0.00%,F,F)



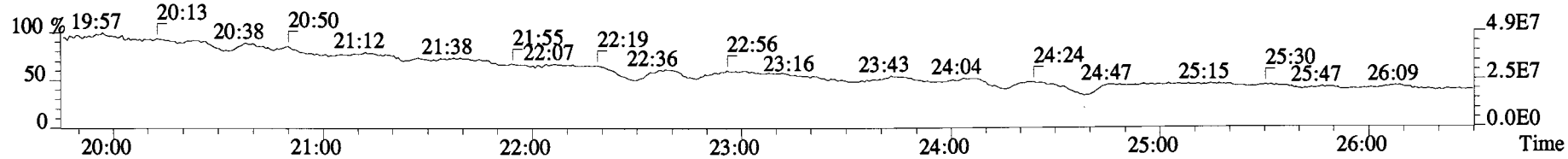
234.0406 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4764.0,0.00%,F,F)



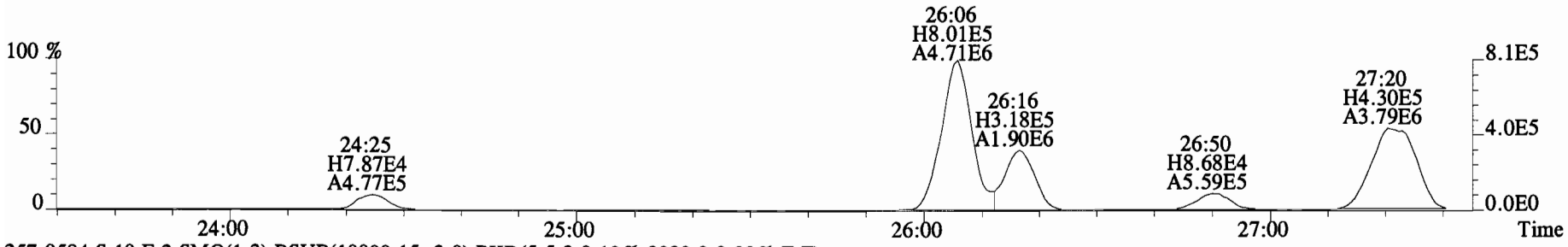
236.0376 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4488.0,0.00%,F,F)



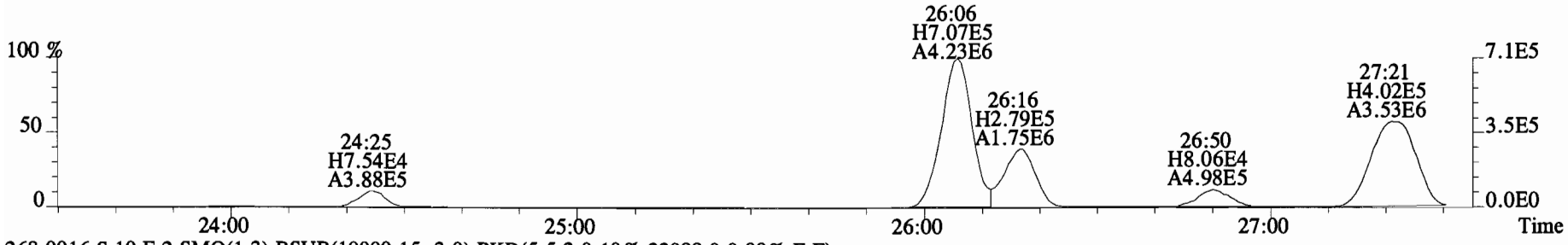
230.9856 S:10 F:2



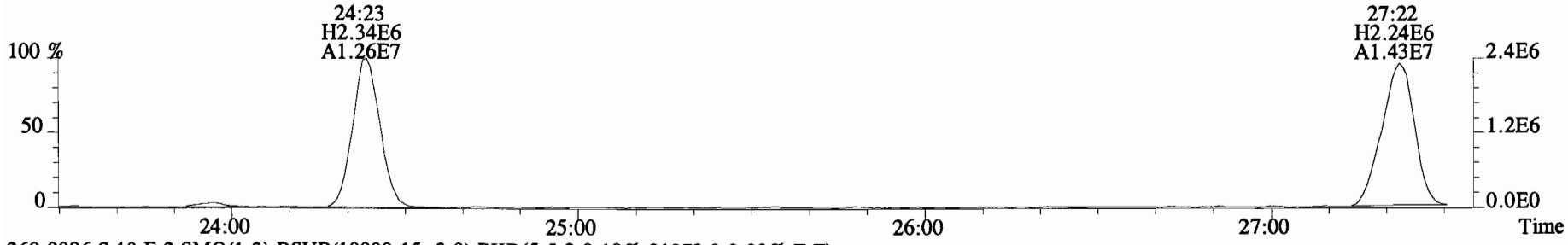
File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
255.9613 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4124.0,0.00%,F,F)



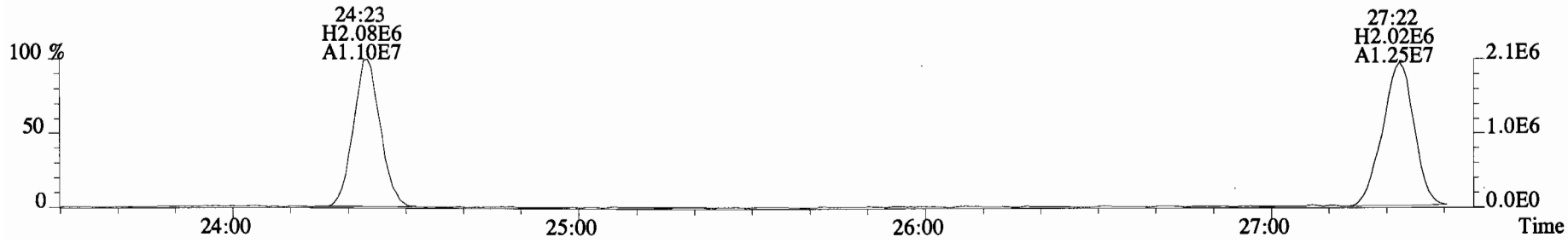
257.9584 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2020.0,0.00%,F,F)



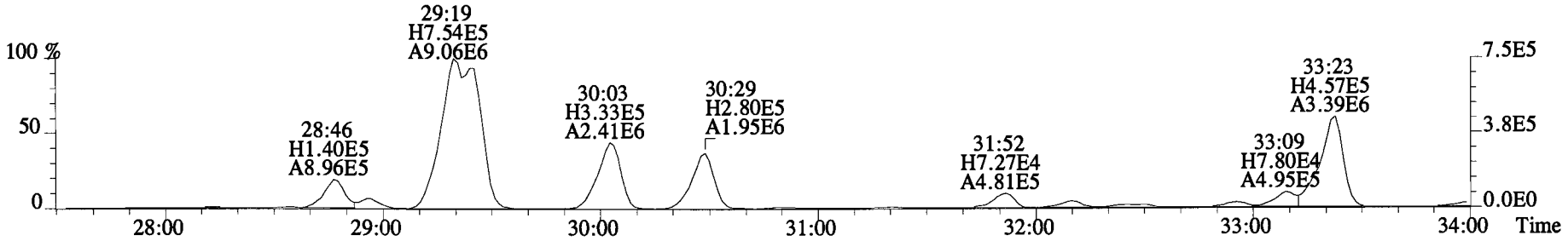
268.0016 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,22988.0,0.00%,F,F)



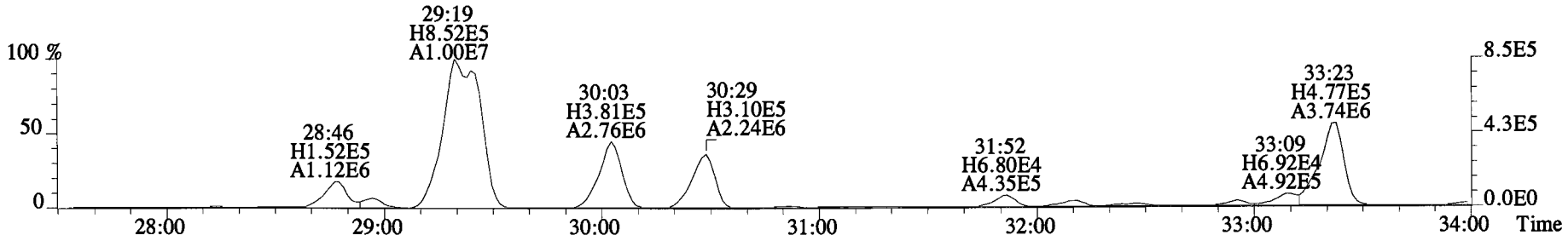
269.9986 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,21072.0,0.00%,F,F)



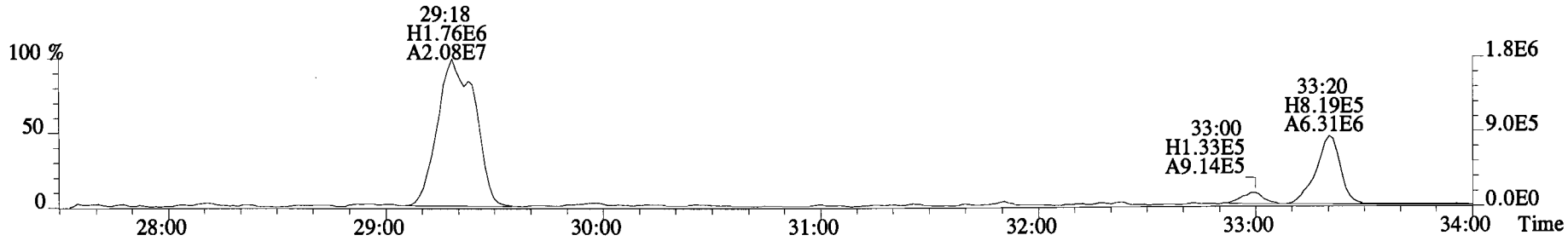
File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
255.9613 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3160.0,0.00%,F,F)



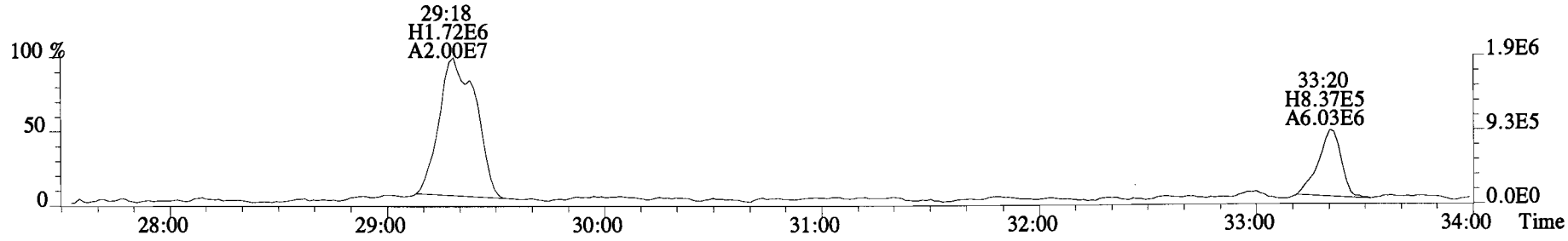
257.9584 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2924.0,0.00%,F,F)



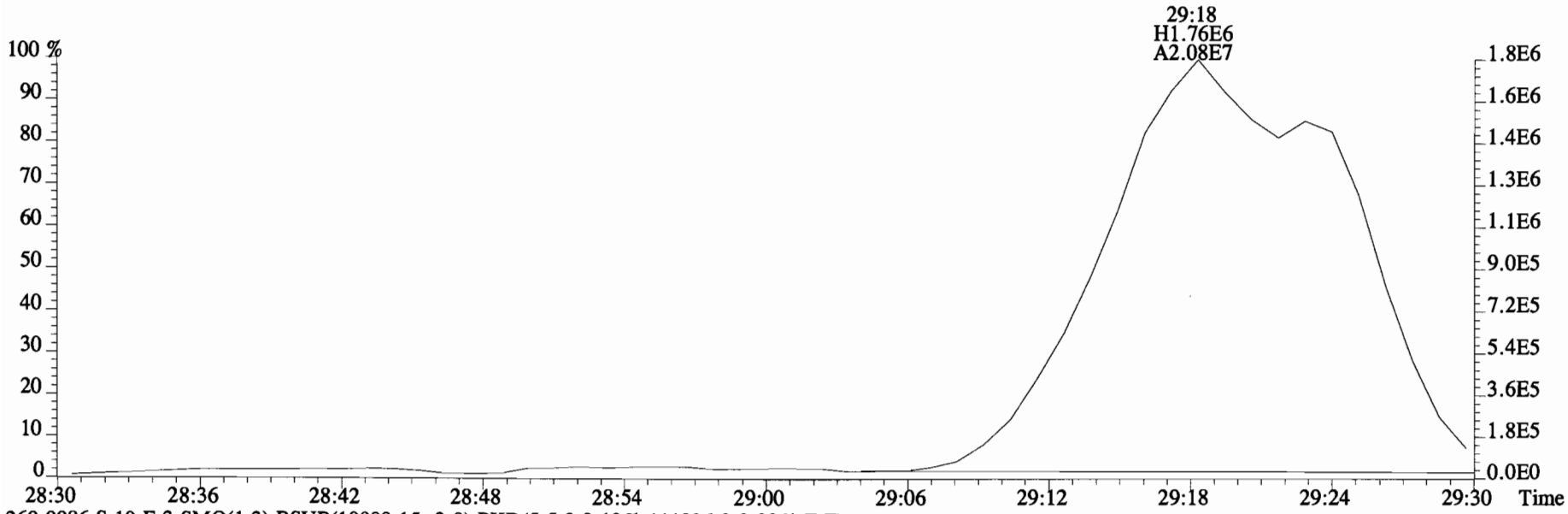
268.0016 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,40708.0,0.00%,F,F)



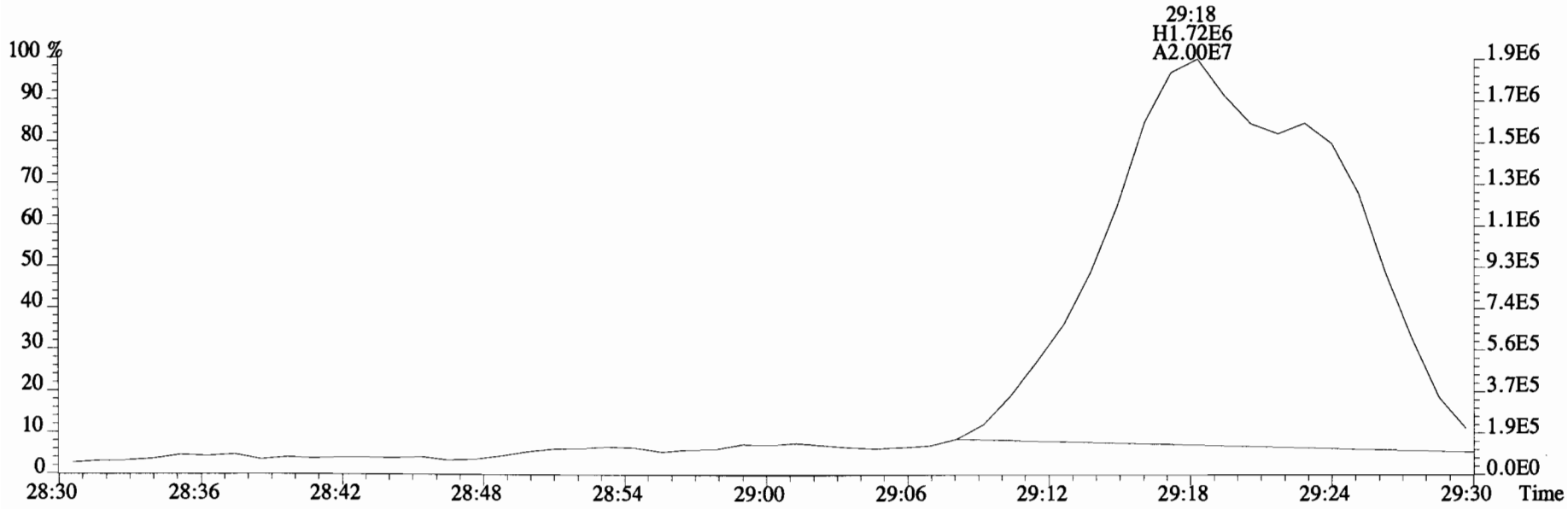
269.9986 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,111036.0,0.00%,F,F)



File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
268.0016 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,40708.0,0.00%,F,F)

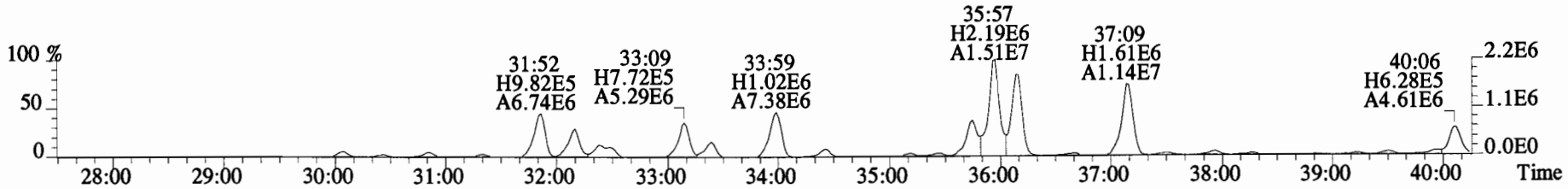


269.9986 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,111036.0,0.00%,F,F)

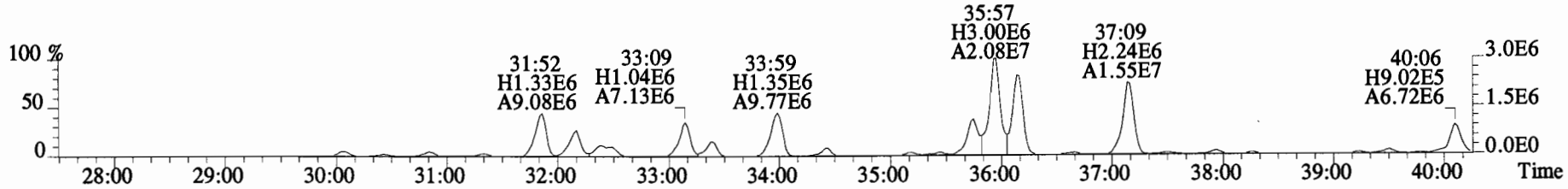


File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1

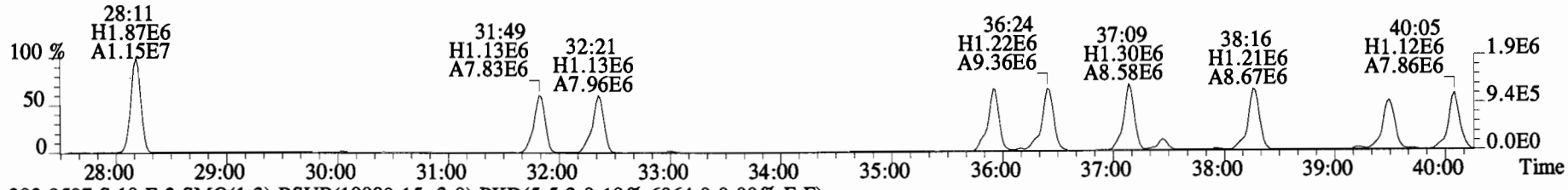
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3276.0,0.00%,F,F)



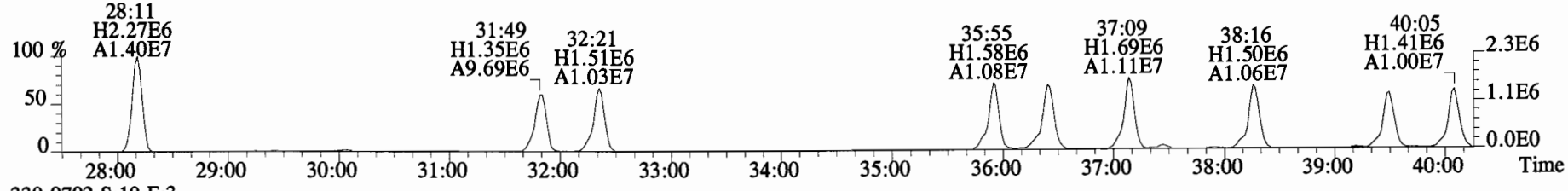
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6288.0,0.00%,F,F)



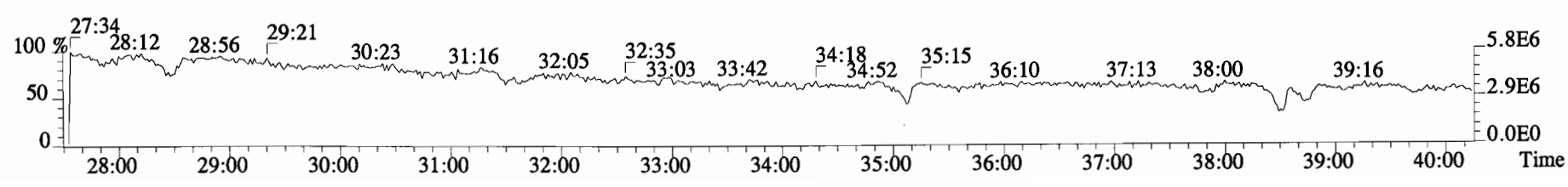
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10488.0,0.00%,F,F)



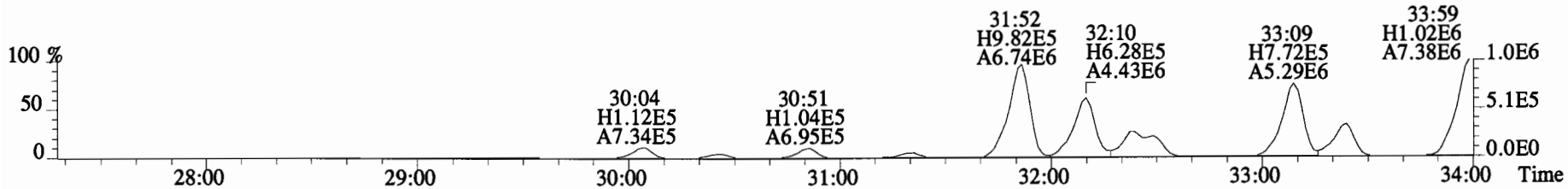
303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6064.0,0.00%,F,F)



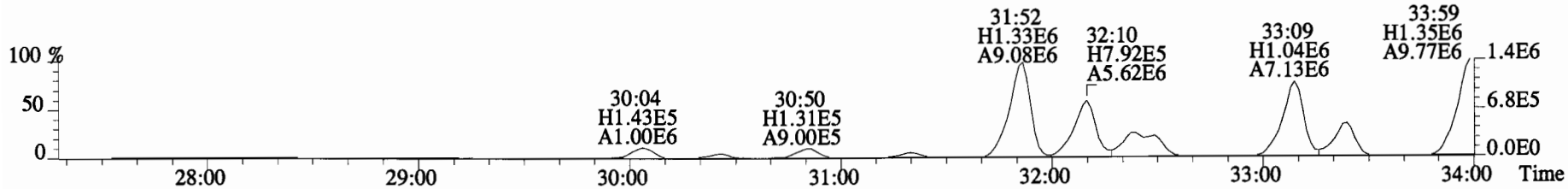
330.9792 S:10 F:3



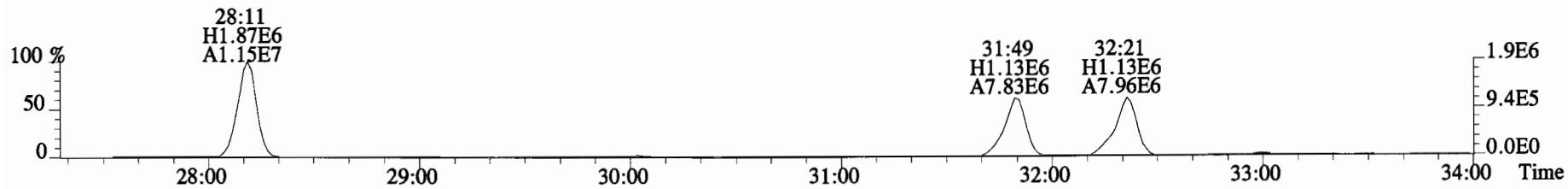
File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3276.0,0.00%,F,F)



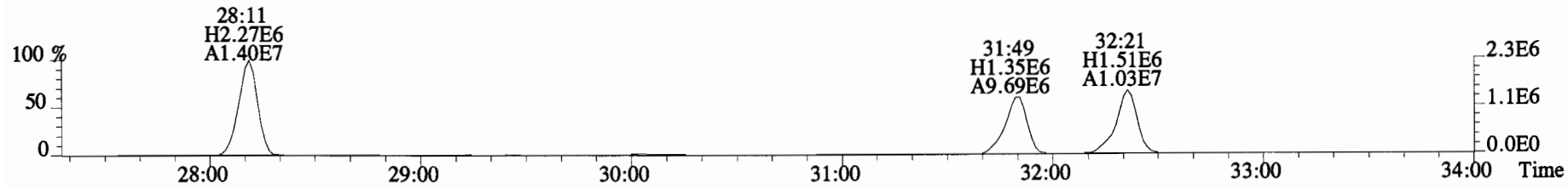
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6288.0,0.00%,F,F)



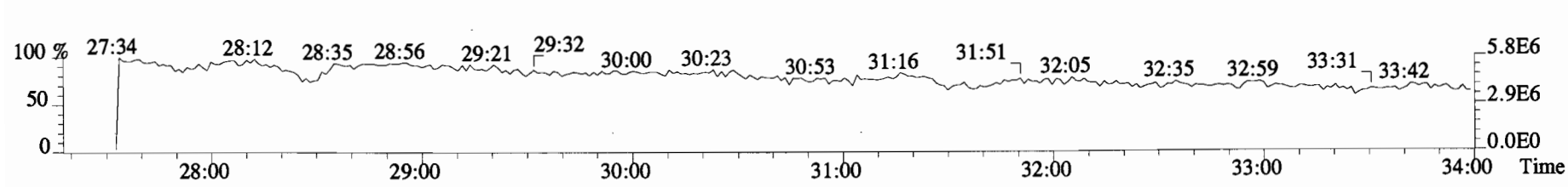
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10488.0,0.00%,F,F)

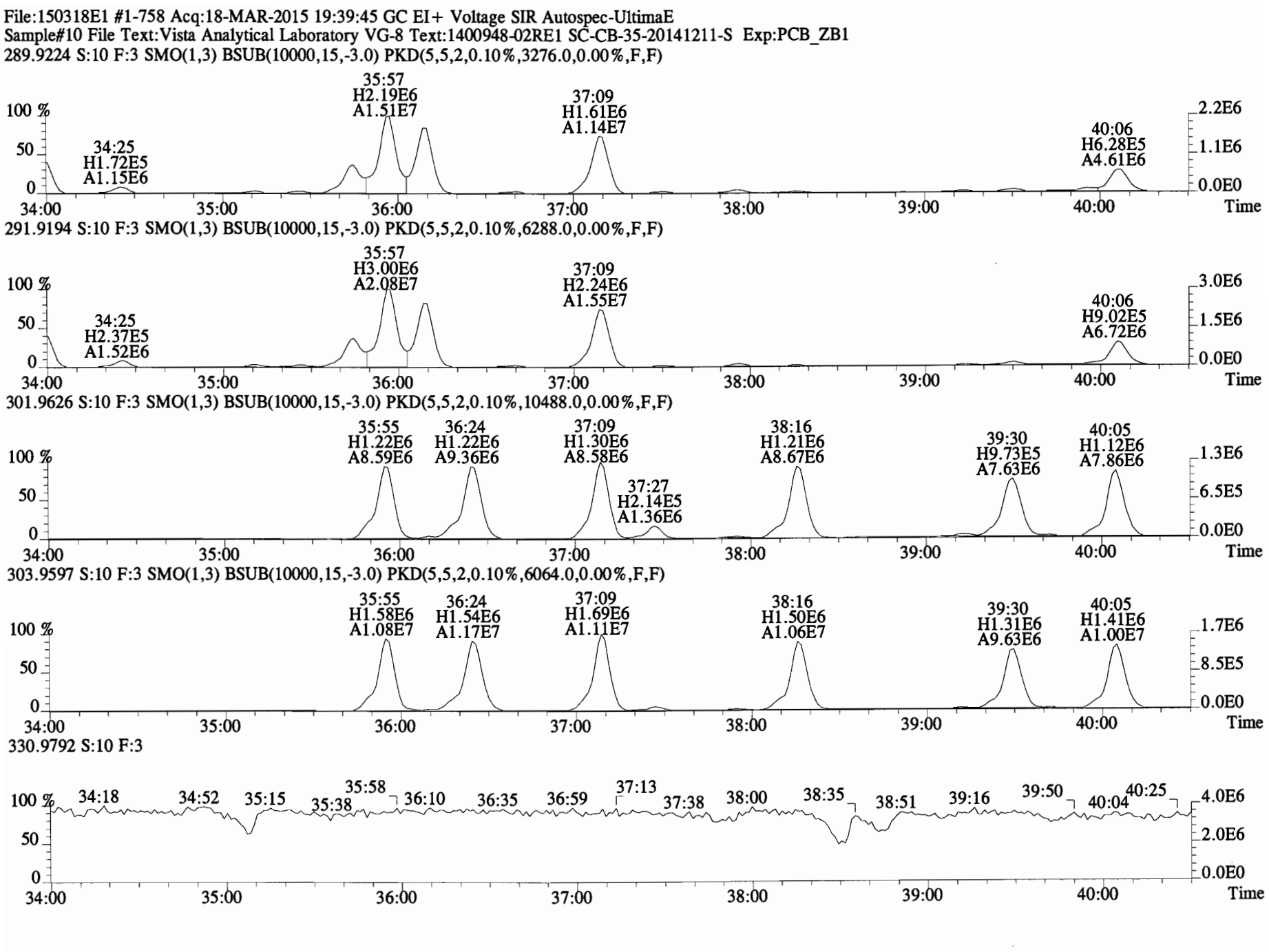


303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6064.0,0.00%,F,F)

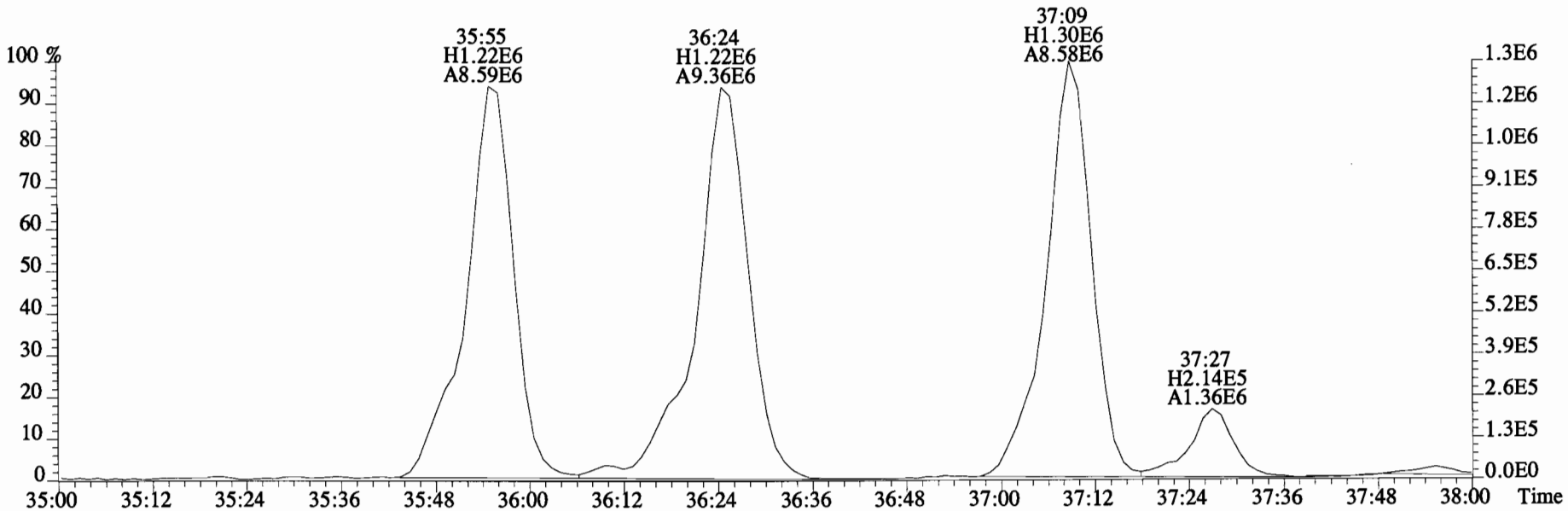


330.9792 S:10 F:3

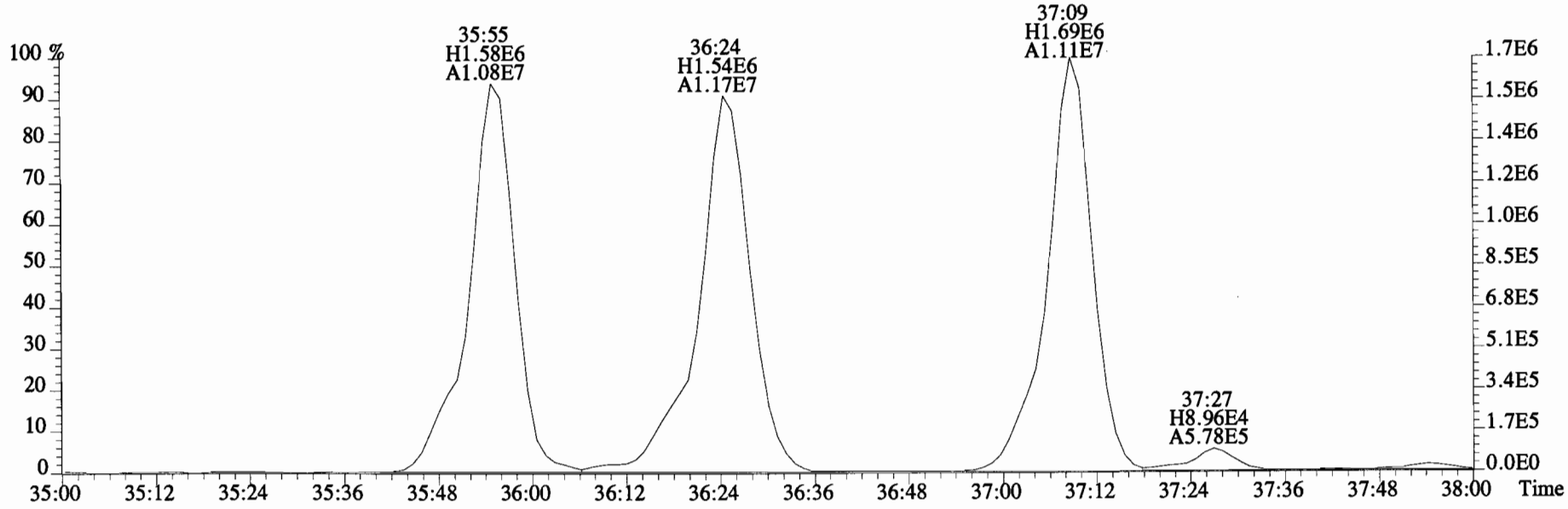



File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3276.0,0.00%,F,F)
35:57 H2.19E6 A1.51E7
37:09 H1.61E6 A1.14E7
34:25 H1.72E5 A1.15E6
40:06 H6.28E5 A4.61E6
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6288.0,0.00%,F,F)
35:57 H3.00E6 A2.08E7
37:09 H2.24E6 A1.55E7
34:25 H2.37E5 A1.52E6
40:06 H9.02E5 A6.72E6
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10488.0,0.00%,F,F)
35:55 H1.22E6 A8.59E6
36:24 H1.22E6 A9.36E6
37:09 H1.30E6 A8.58E6
37:27 H2.14E5 A1.36E6
38:16 H1.21E6 A8.67E6
39:30 H9.73E5 A7.63E6
40:05 H1.12E6 A7.86E6
303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6064.0,0.00%,F,F)
35:55 H1.58E6 A1.08E7
36:24 H1.54E6 A1.17E7
37:09 H1.69E6 A1.11E7
38:16 H1.50E6 A1.06E7
39:30 H1.31E6 A9.63E6
40:05 H1.41E6 A1.00E7
330.9792 S:10 F:3
34:18
34:52
35:15
35:38
35:58
36:10
36:35
36:59
37:13
37:38
38:00
38:35
38:51
39:16
39:50
40:04
40:25
100 %
50
0
34:00
35:00
36:00
37:00
38:00
39:00
40:00
Time
2.2E6
1.1E6
0.0E0
3.0E6
1.5E6
1.3E6
6.5E5
1.7E6
8.5E5
4.0E6
2.0E6

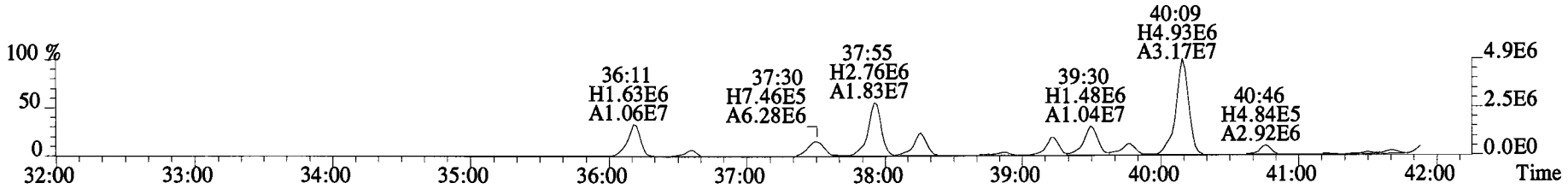
File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10488.0,0.00%,F,F)



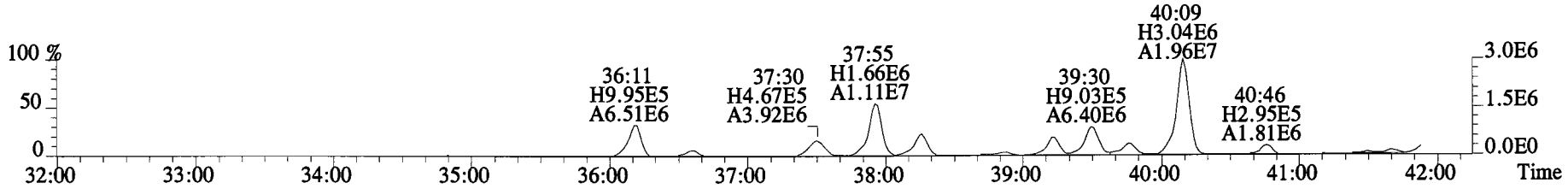
303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6064.0,0.00%,F,F)



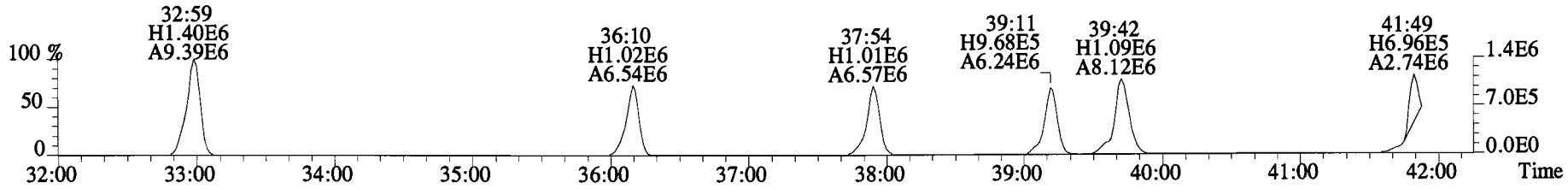
File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3088.0,0.00%,F,F)



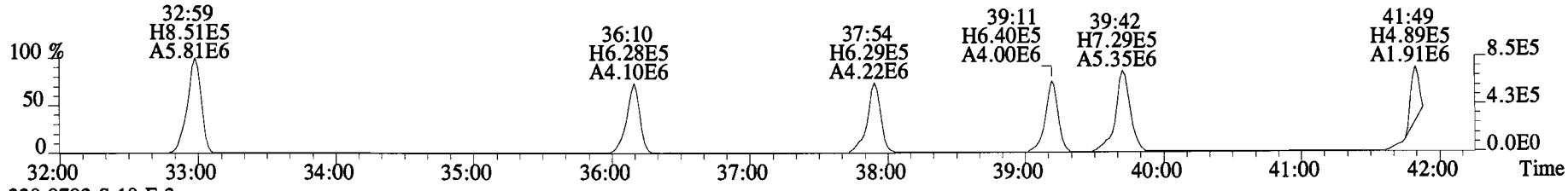
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2360.0,0.00%,F,F)



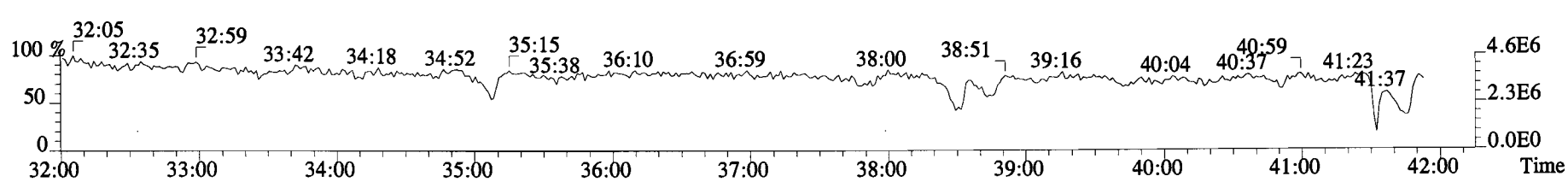
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1980.0,0.00%,F,F)



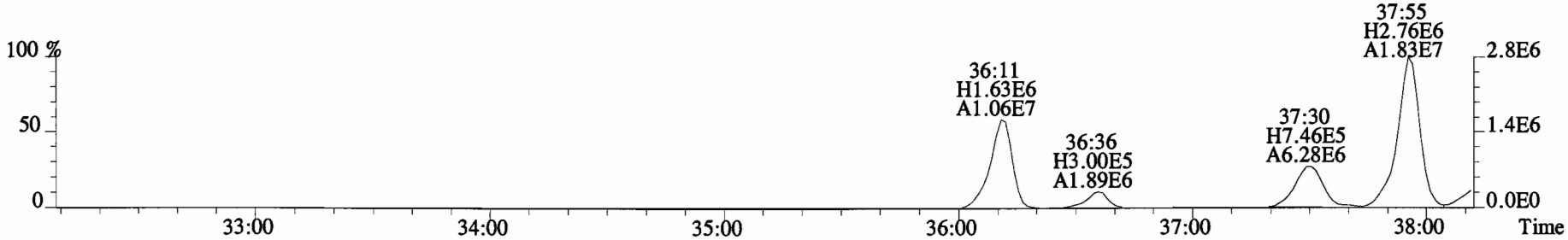
339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2016.0,0.00%,F,F)



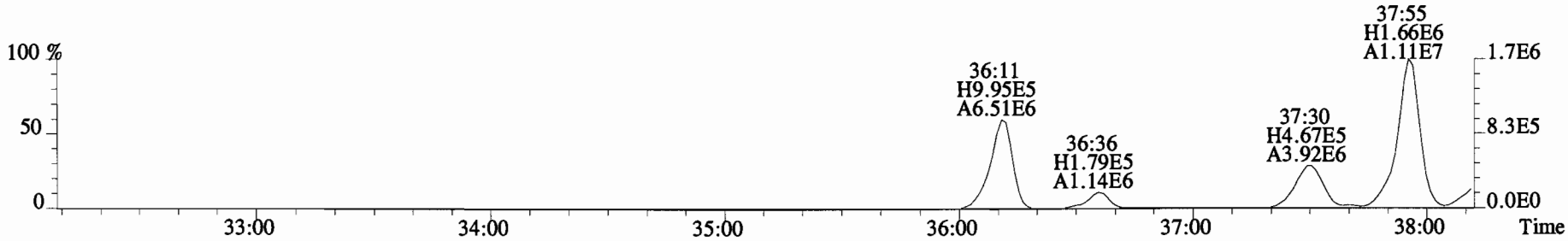
330.9792 S:10 F:3



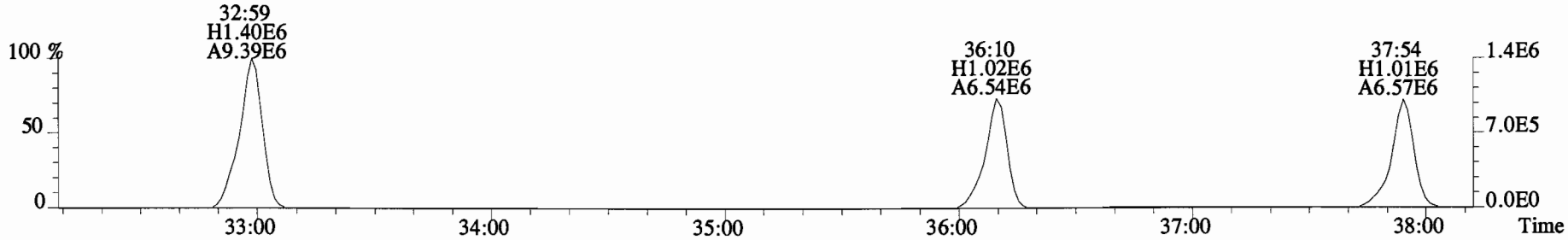
File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3088.0,0.00%,F,F)



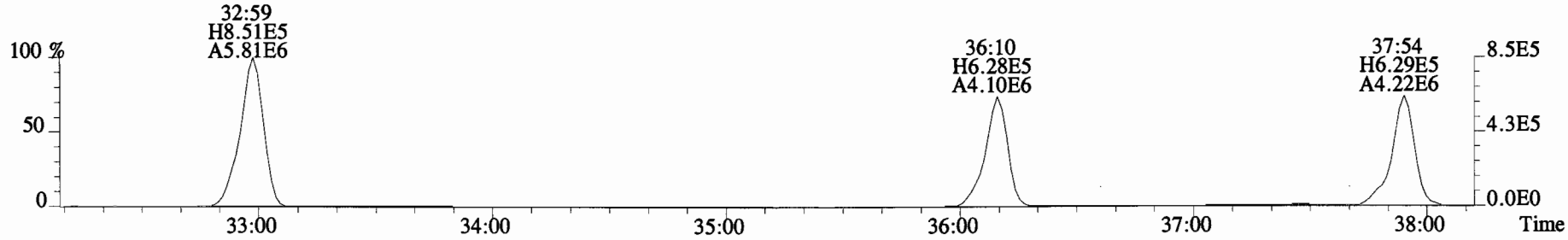
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2360.0,0.00%,F,F)



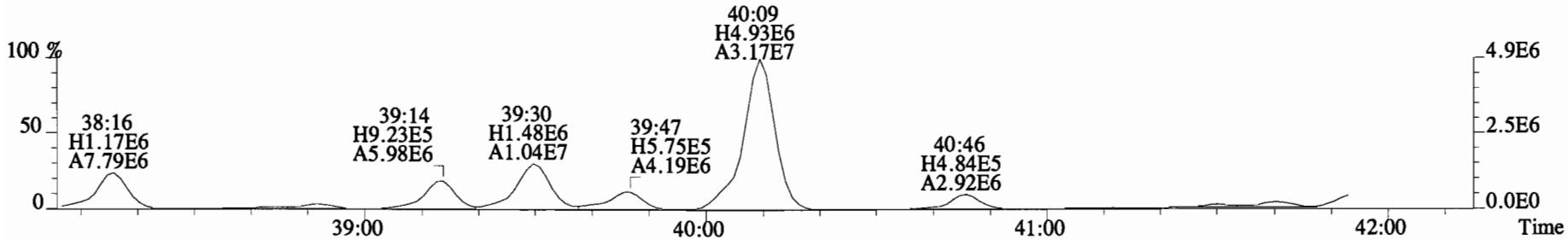
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1980.0,0.00%,F,F)



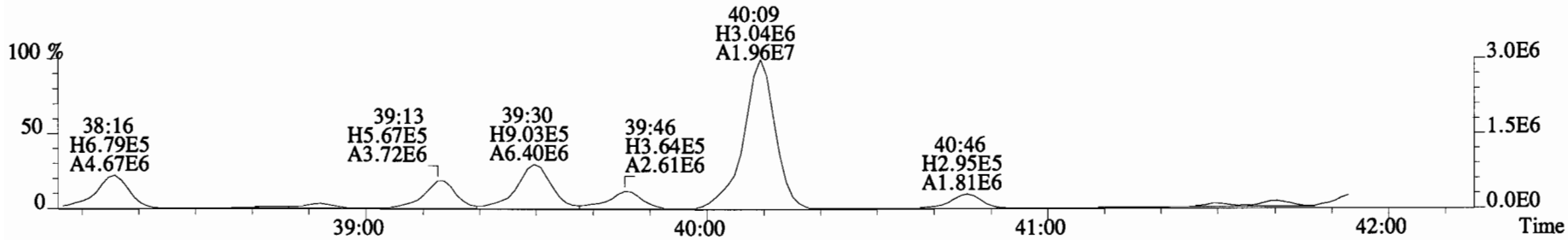
339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2016.0,0.00%,F,F)



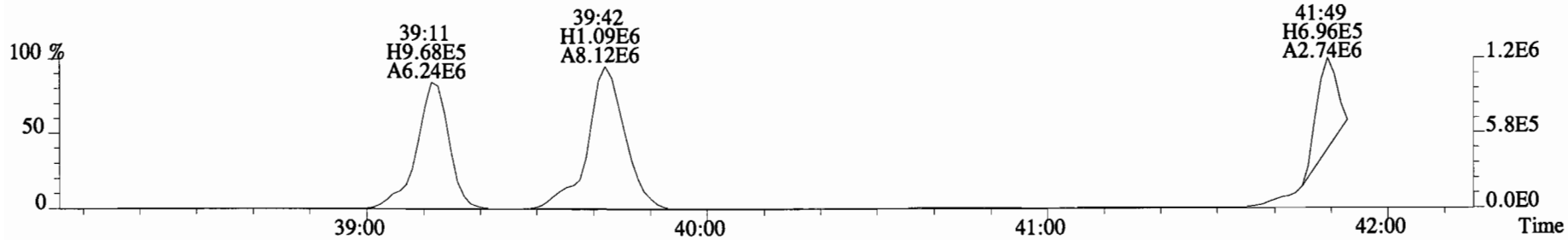
File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3088.0,0.00%,F,F)



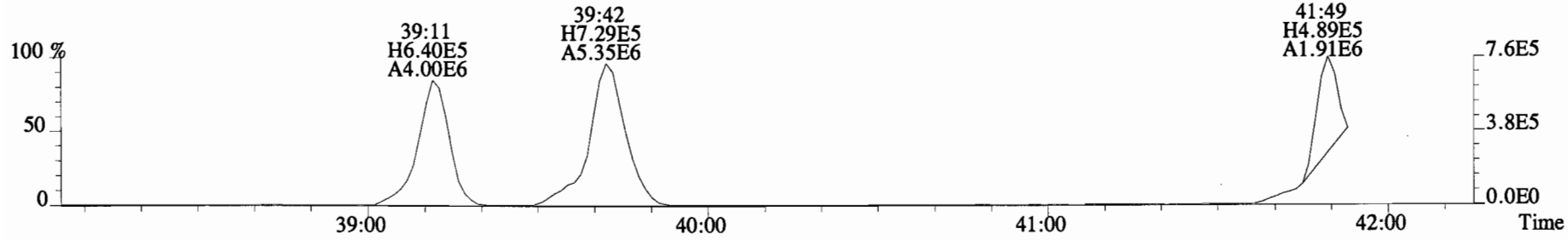
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2360.0,0.00%,F,F)



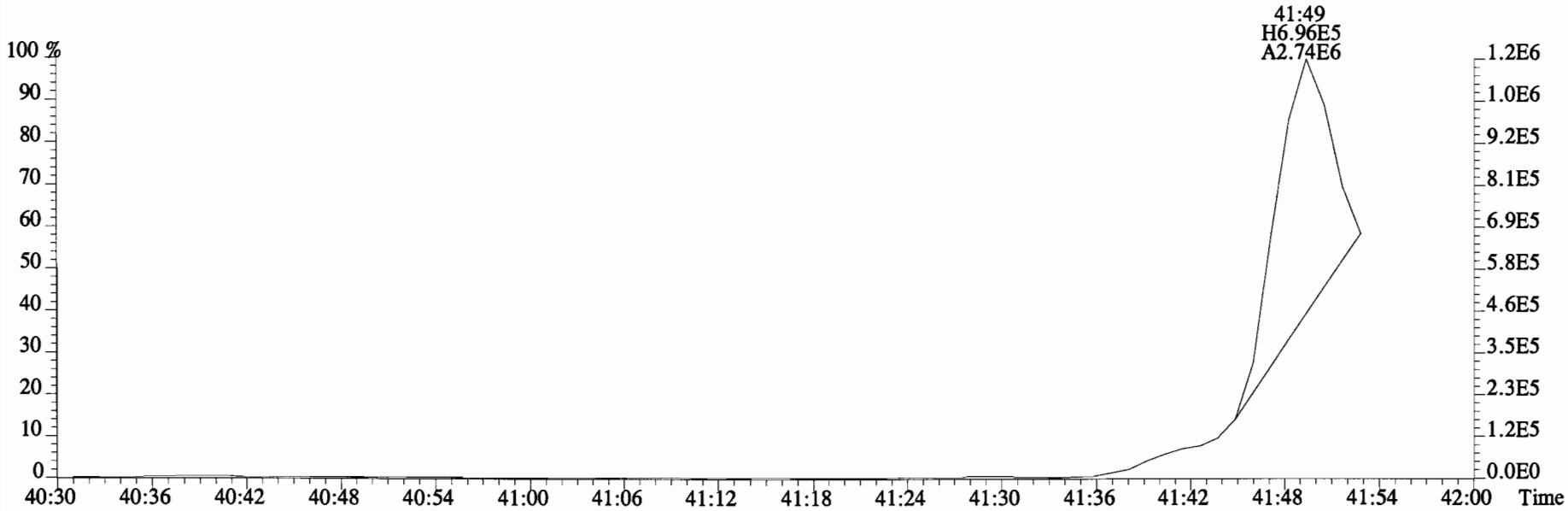
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1980.0,0.00%,F,F)



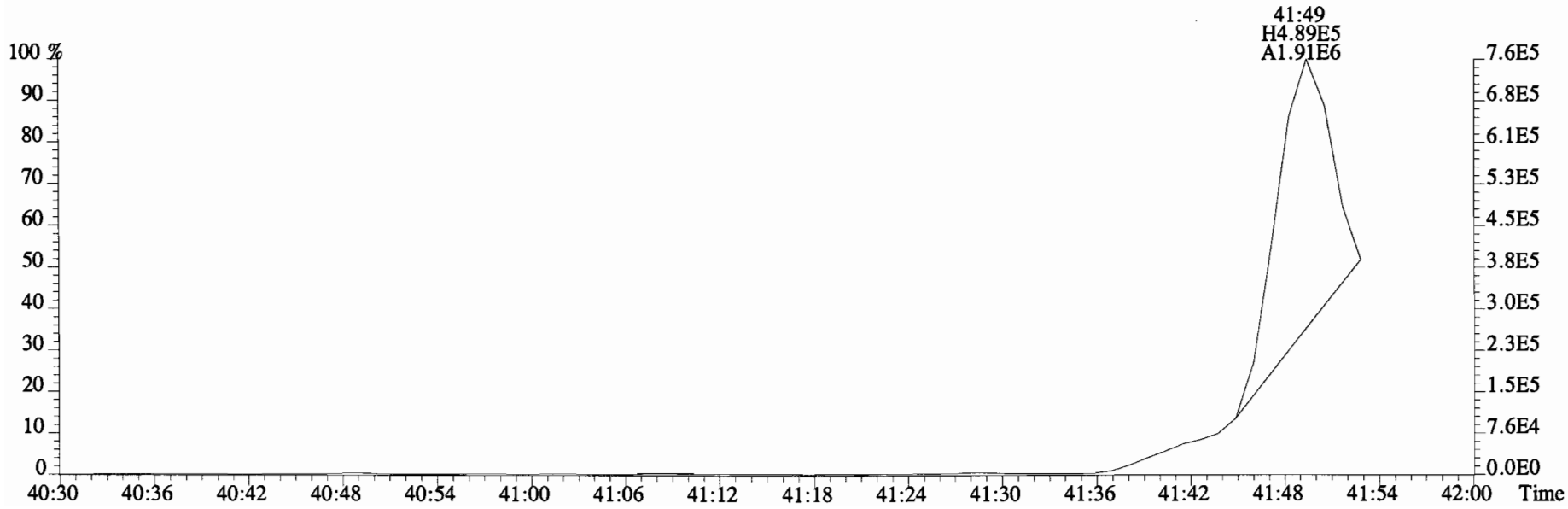
339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2016.0,0.00%,F,F)



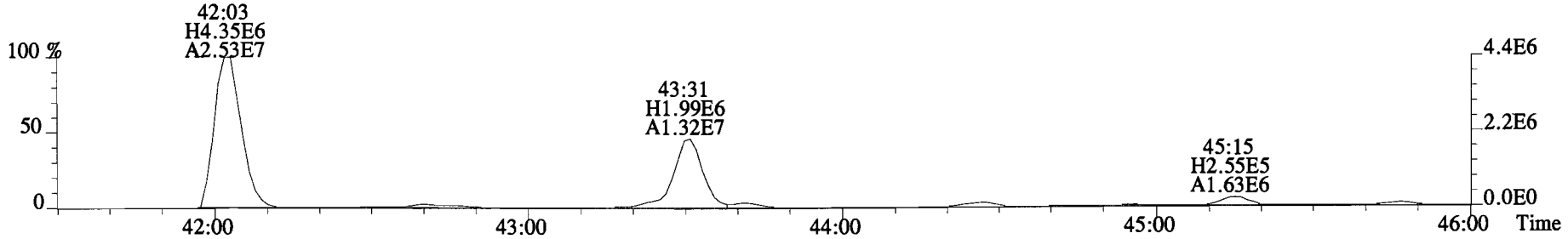
File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1980.0,0.00%,F,F)



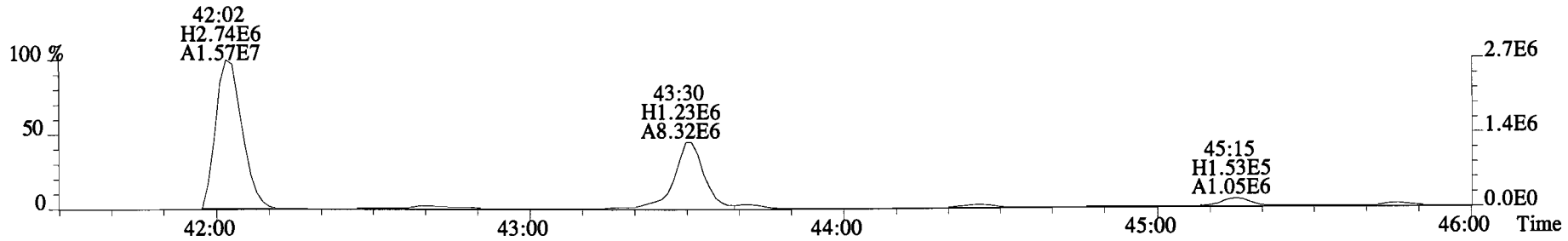
339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2016.0,0.00%,F,F)



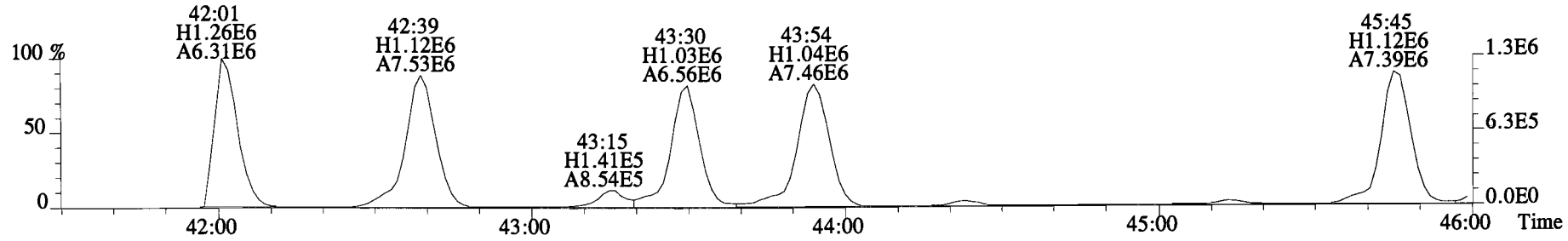
File:150318E1 #1-555 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
325.8804 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10284.0,0.00%,F,F)



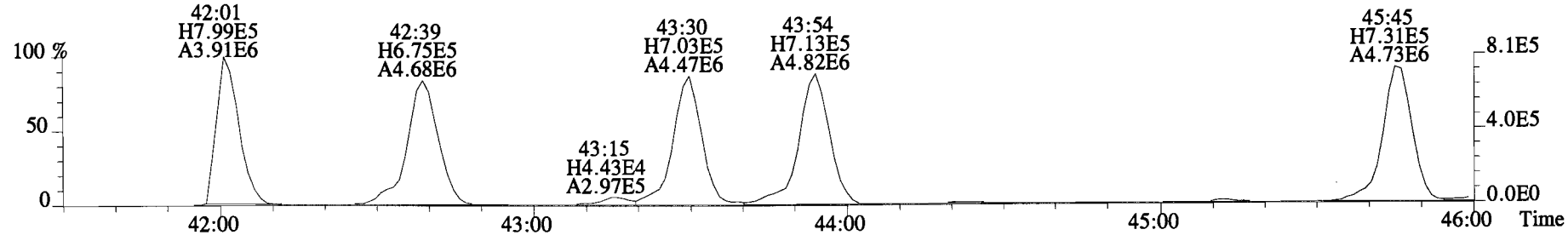
327.8775 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6264.0,0.00%,F,F)



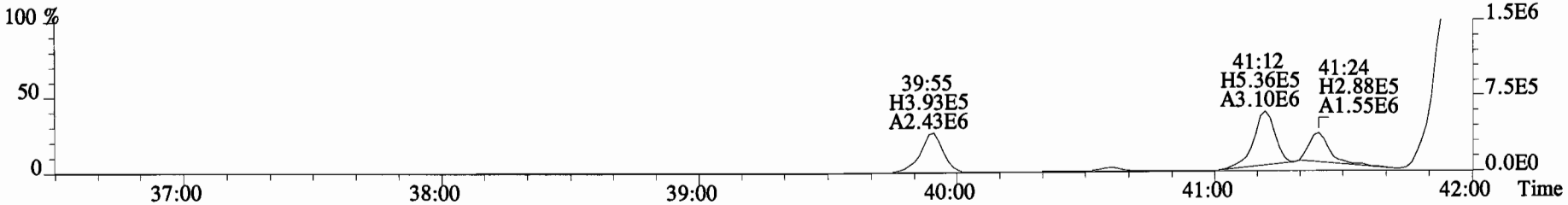
337.9207 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5600.0,0.00%,F,F)



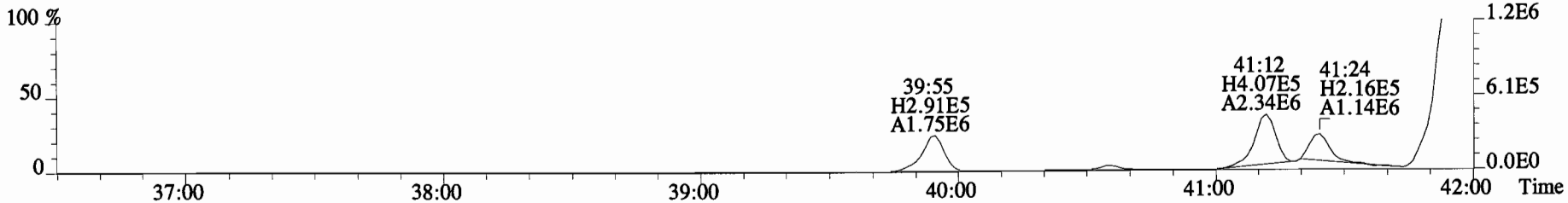
339.9177 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3476.0,0.00%,F,F)



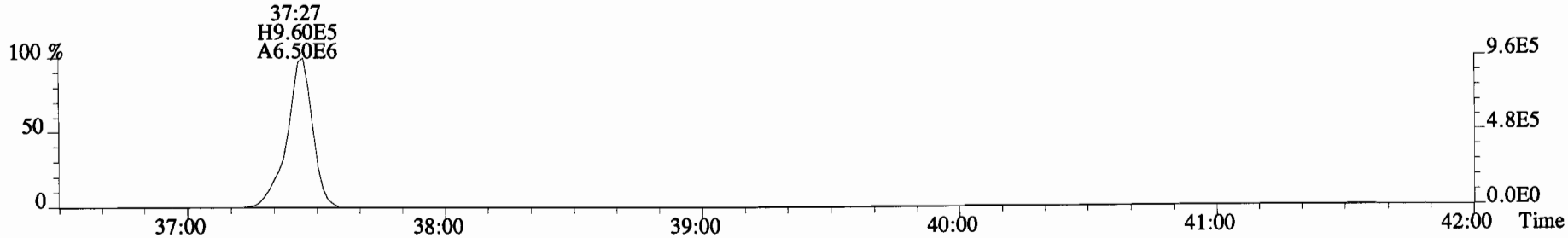
File:150318E1 #1-758 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
359.8415 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1724.0,0.00%,F,F)



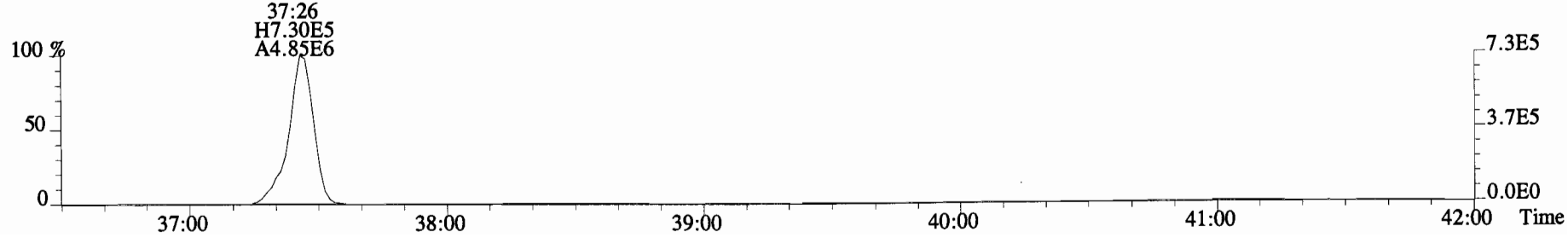
361.8385 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1660.0,0.00%,F,F)

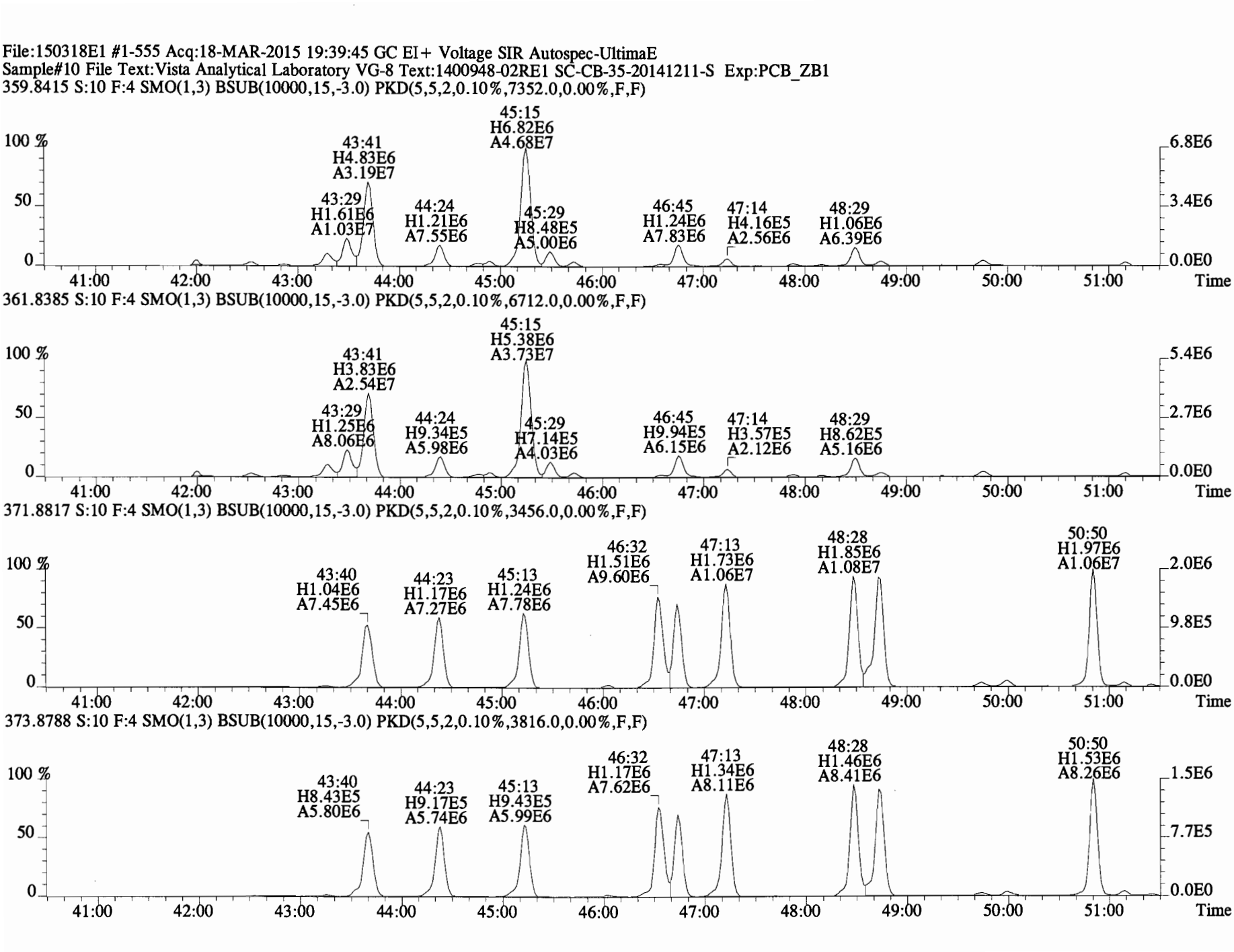


371.8817 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1952.0,0.00%,F,F)

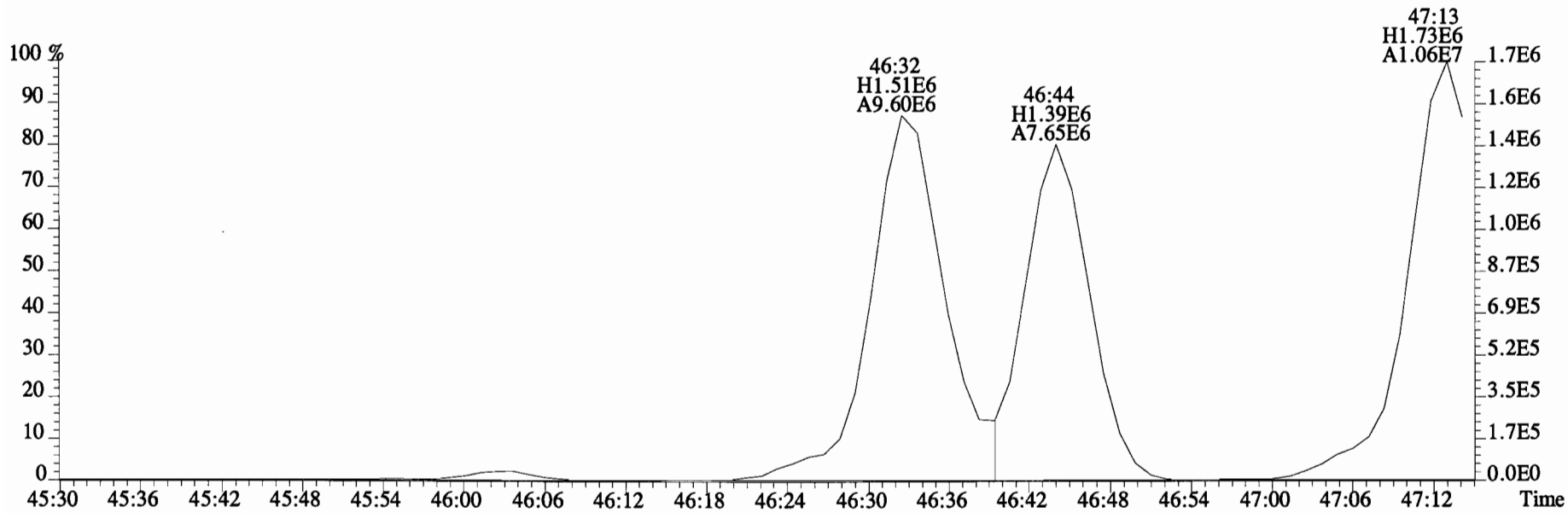


373.8788 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1796.0,0.00%,F,F)

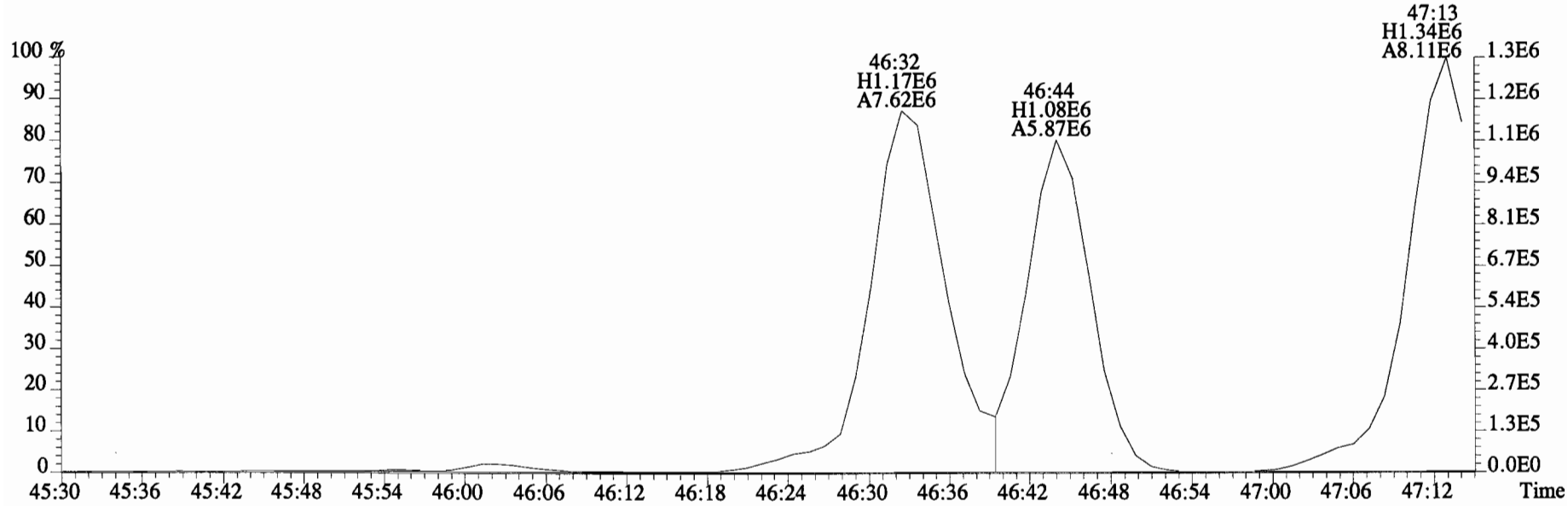



File:150318E1 #1-555 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
359.8415 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7352.0,0.00%,F,F)
45:15 H6.82E6 A4.68E7
43:41 H4.83E6 A3.19E7
43:29 H1.61E6 A1.03E7
44:24 H1.21E6 A7.55E6
45:29 H8.48E5 A5.00E6
46:45 H1.24E6 A7.83E6
47:14 H4.16E5 A2.56E6
48:29 H1.06E6 A6.39E6
100 %
50
0
6.8E6
3.4E6
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:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6712.0,0.00%,F,F)
45:15 H5.38E6 A3.73E7
43:41 H3.83E6 A2.54E7
43:29 H1.25E6 A8.06E6
44:24 H9.34E5 A5.98E6
45:29 H7.14E5 A4.03E6
46:45 H9.94E5 A6.15E6
47:14 H3.57E5 A2.12E6
48:29 H8.62E5 A5.16E6
100 %
50
0
5.4E6
2.7E6
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:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3456.0,0.00%,F,F)
43:40 H1.04E6 A7.45E6
44:23 H1.17E6 A7.27E6
45:13 H1.24E6 A7.78E6
46:32 H1.51E6 A9.60E6
47:13 H1.73E6 A1.06E7
48:28 H1.85E6 A1.08E7
50:50 H1.97E6 A1.06E7
100 %
50
0
2.0E6
9.8E5
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:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3816.0,0.00%,F,F)
43:40 H8.43E5 A5.80E6
44:23 H9.17E5 A5.74E6
45:13 H9.43E5 A5.99E6
46:32 H1.17E6 A7.62E6
47:13 H1.34E6 A8.11E6
48:28 H1.46E6 A8.41E6
50:50 H1.53E6 A8.26E6
100 %
50
0
1.5E6
7.7E5
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

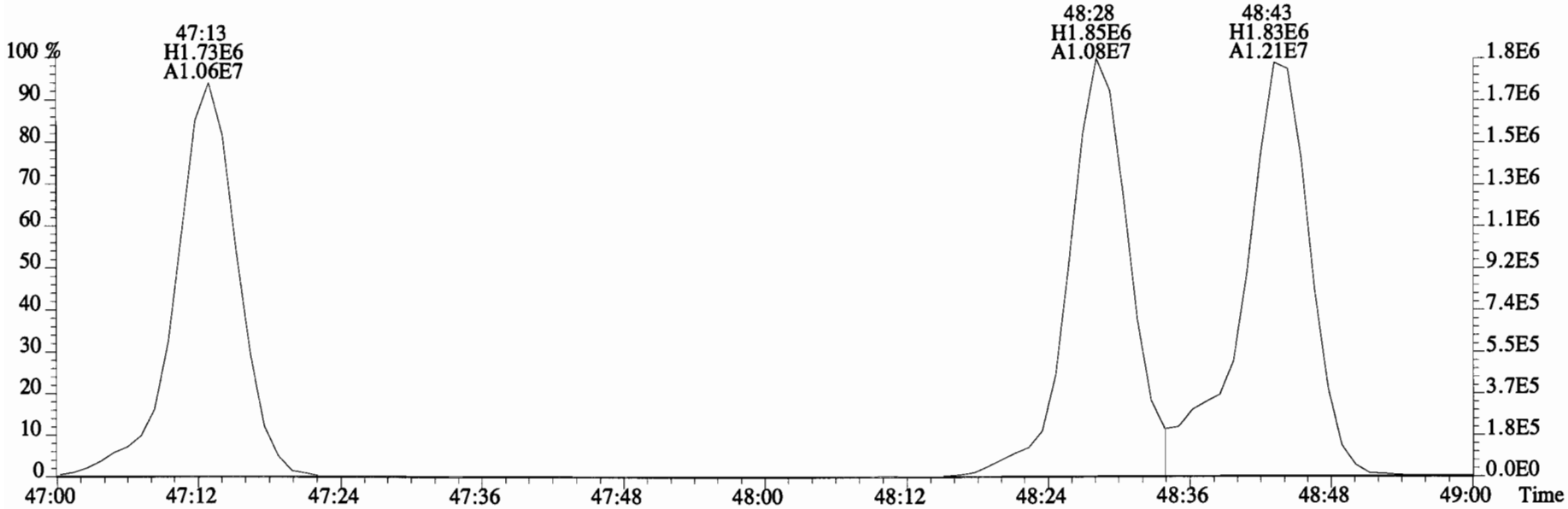
File:150318E1 #1-555 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
371.8817 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3456.0,0.00%,F,F)



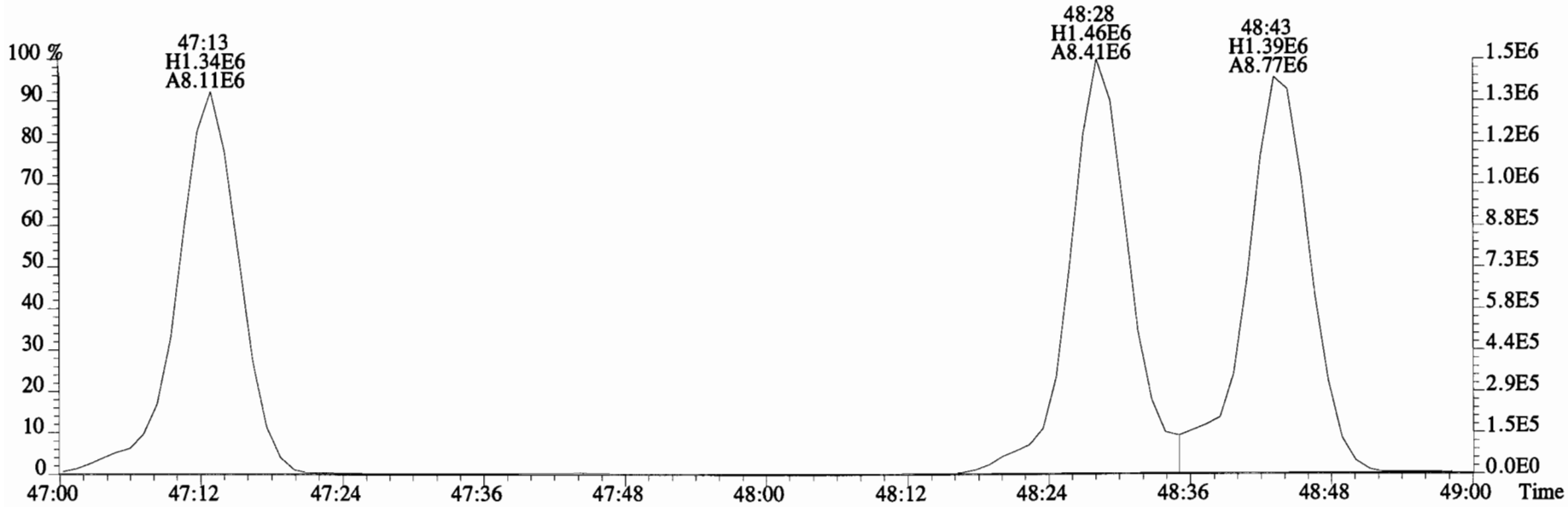
373.8788 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3816.0,0.00%,F,F)



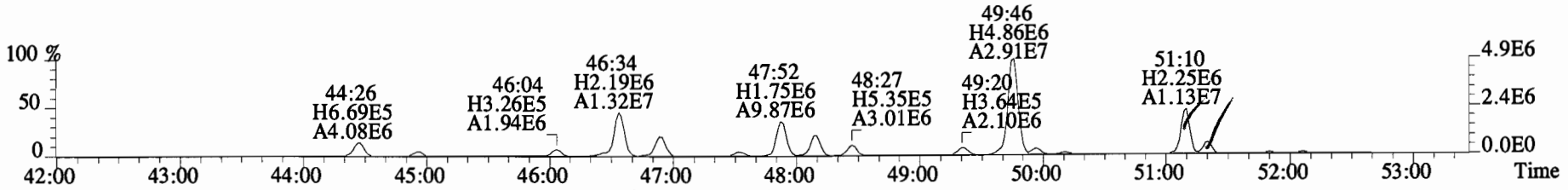
File:150318E1 #1-555 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
371.8817 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3456.0,0.00%,F,F)



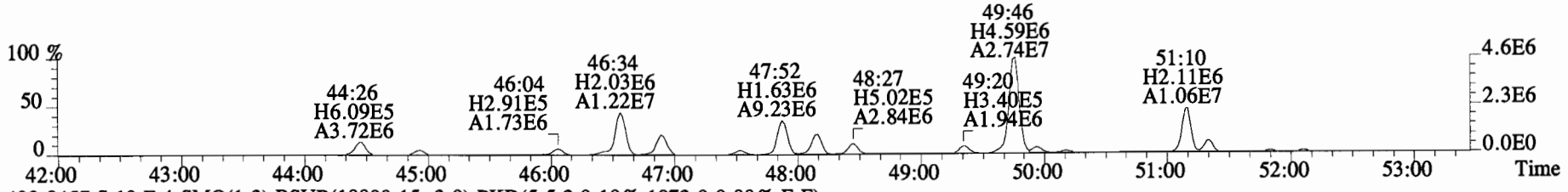
373.8788 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3816.0,0.00%,F,F)



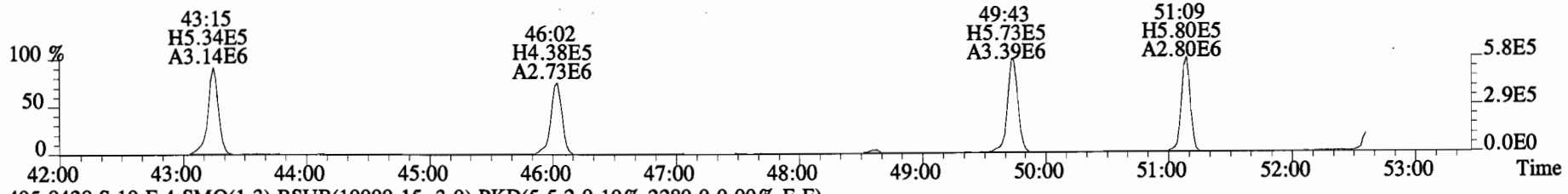
File:150318E1 #1-555 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
393.8025 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2504.0,0.00%,F,F)



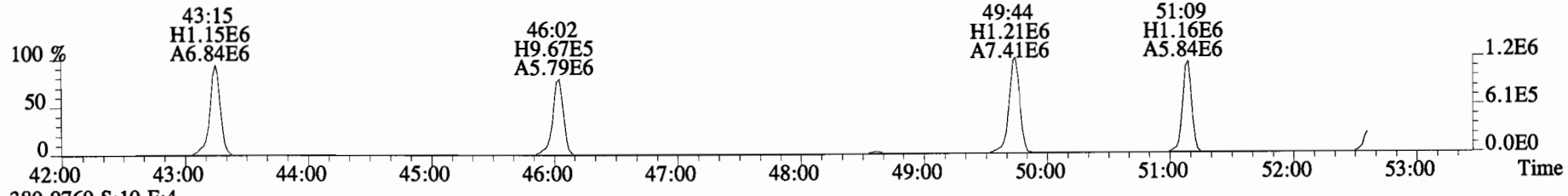
395.7995 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1588.0,0.00%,F,F)



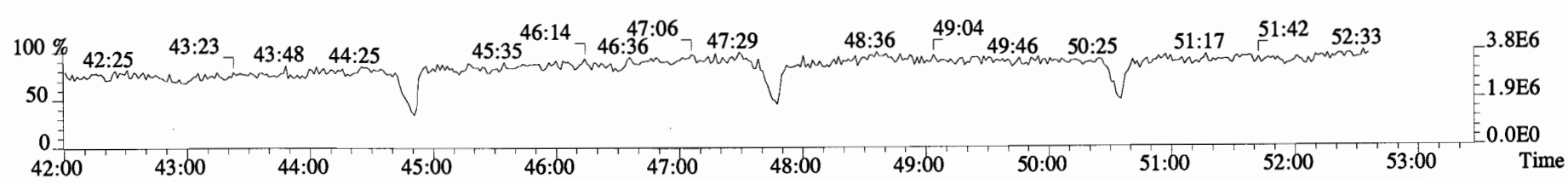
403.8457 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1972.0,0.00%,F,F)



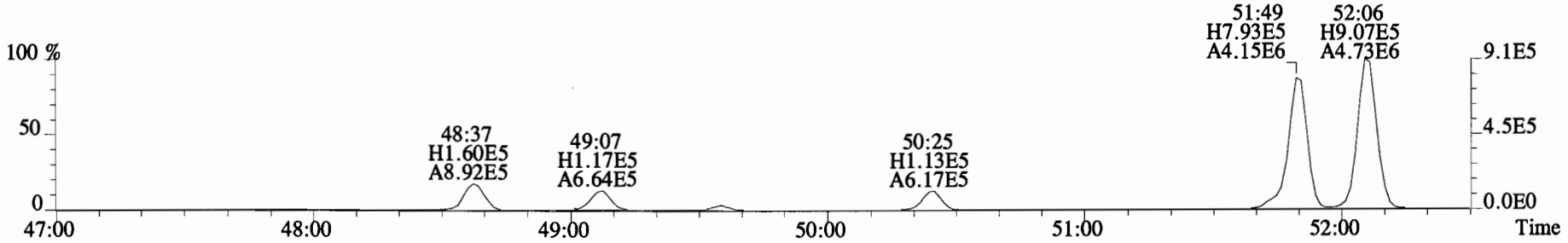
405.8428 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2280.0,0.00%,F,F)



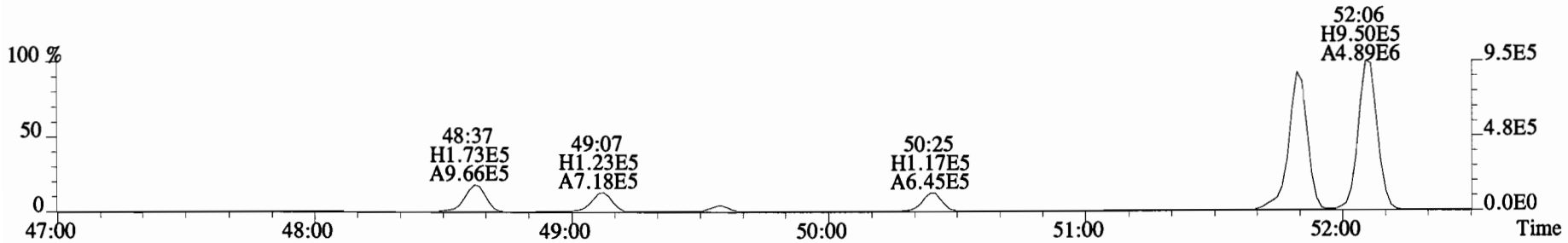
380.9760 S:10 F:4



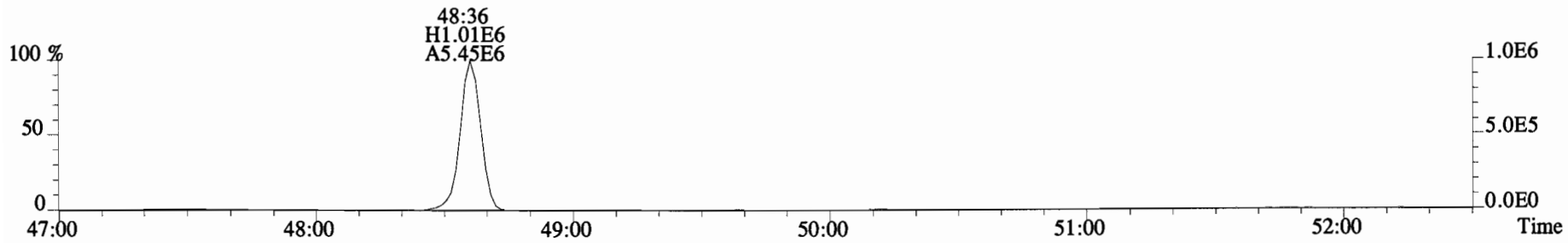
File:150318E1 #1-555 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
427.7635 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1916.0,0.00%,F,F)



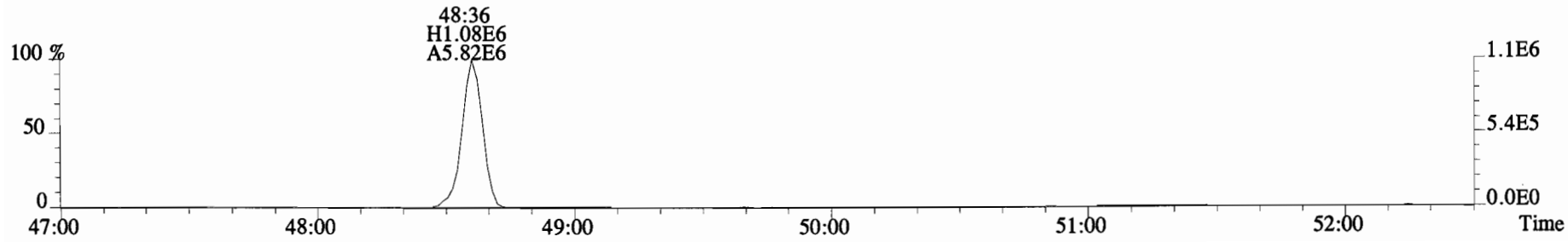
429.7606 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2160.0,0.00%,F,F)



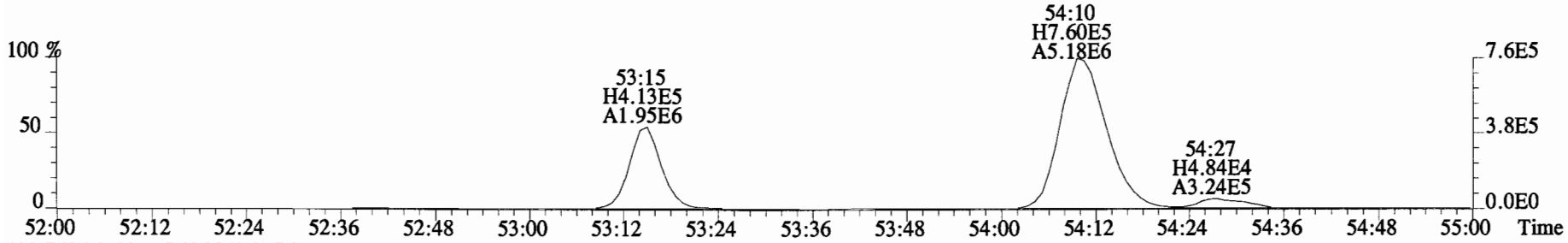
439.8038 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2092.0,0.00%,F,F)



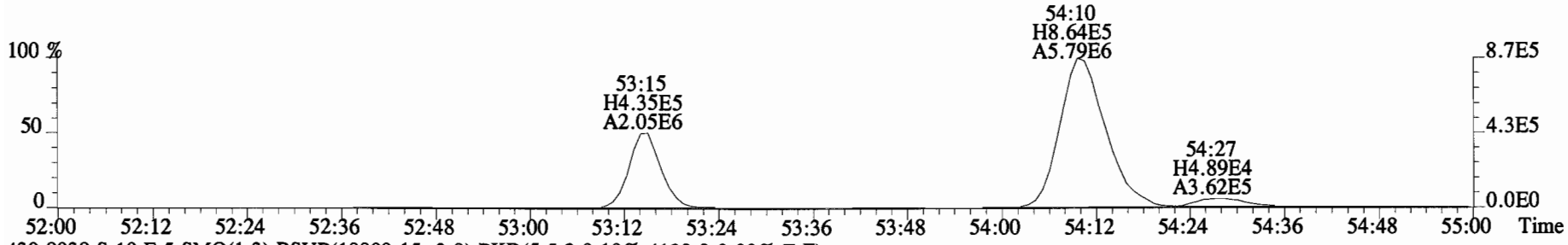
441.8008 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2392.0,0.00%,F,F)



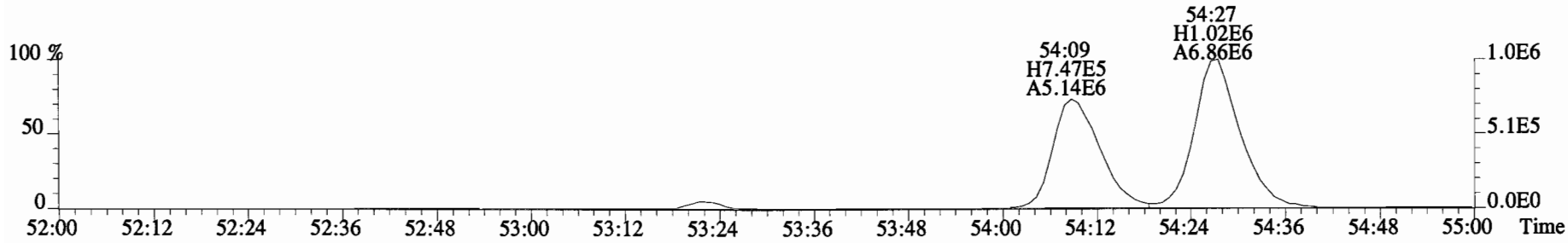
File:150318E1 #1-429 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
427.7635 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3900.0,0.00%,F,F)



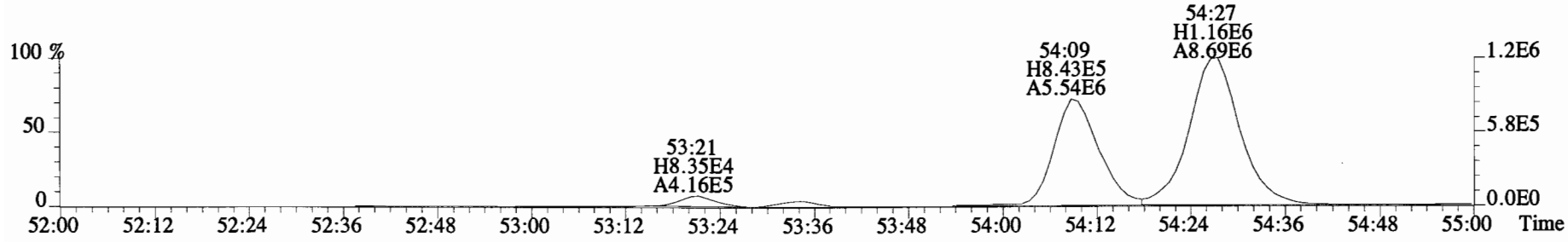
429.7606 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3372.0,0.00%,F,F)



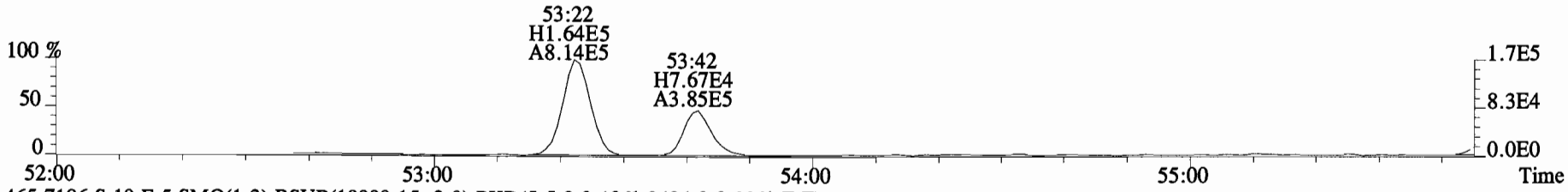
439.8038 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4120.0,0.00%,F,F)



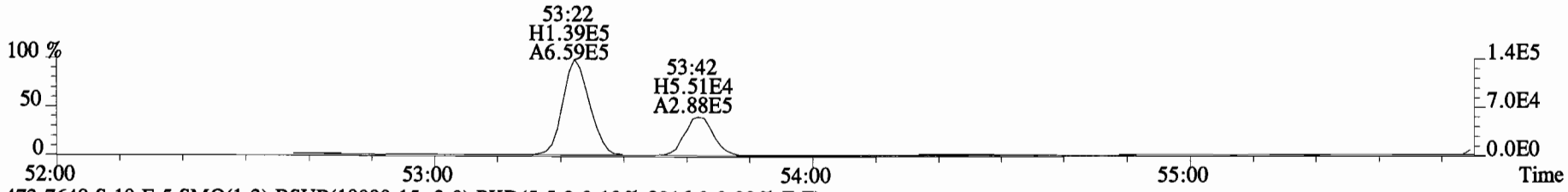
441.8008 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6980.0,0.00%,F,F)



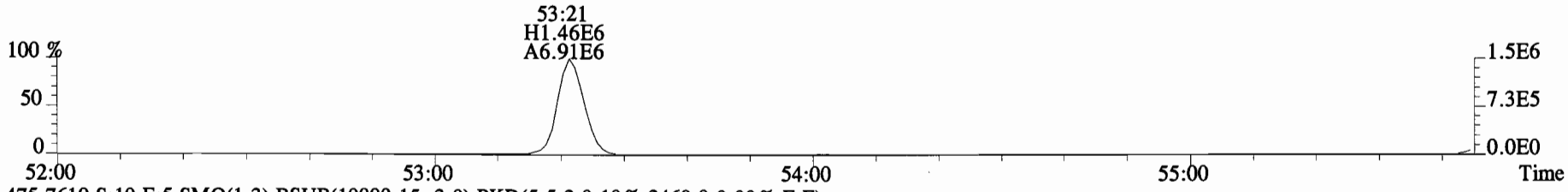
File:150318E1 #1-429 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
463.7216 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2772.0,0.00%,F,F)



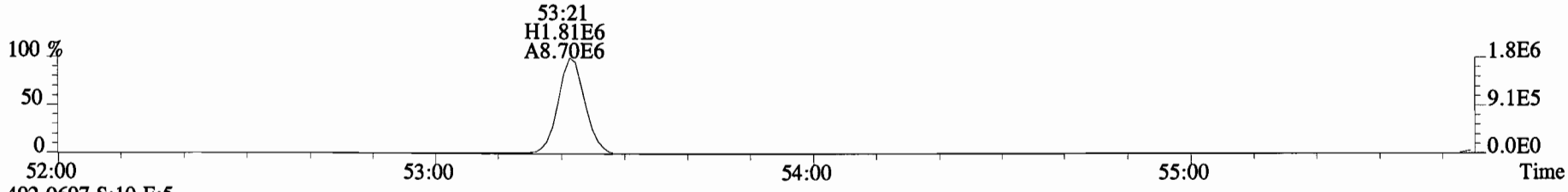
465.7186 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2424.0,0.00%,F,F)



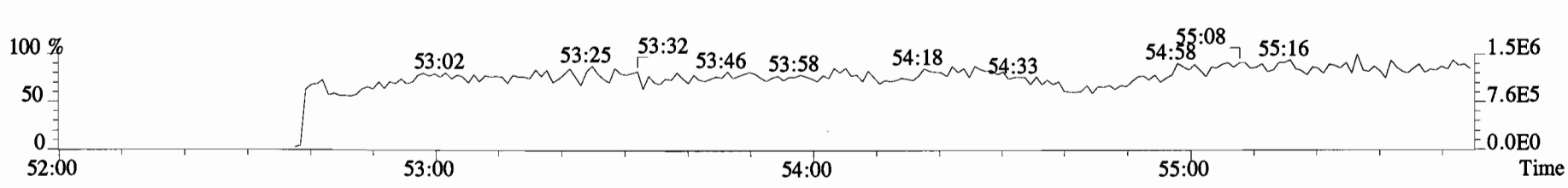
473.7648 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2916.0,0.00%,F,F)



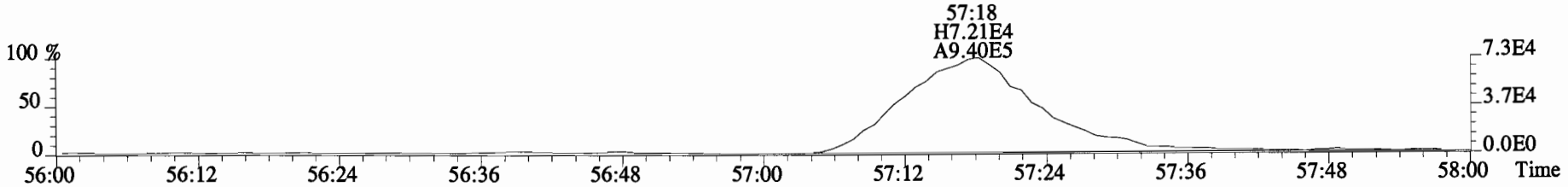
475.7619 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2460.0,0.00%,F,F)



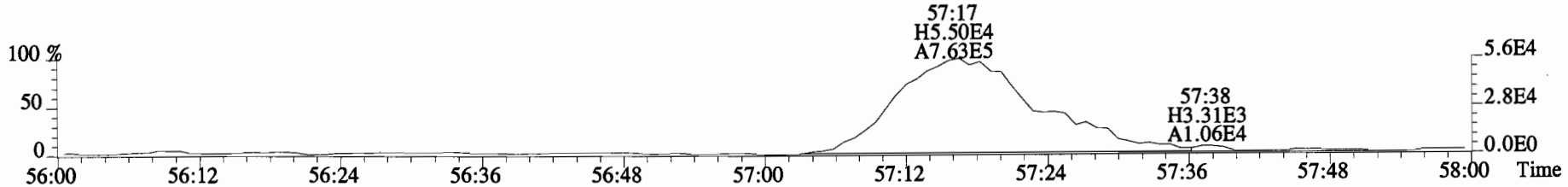
492.9697 S:10 F:5



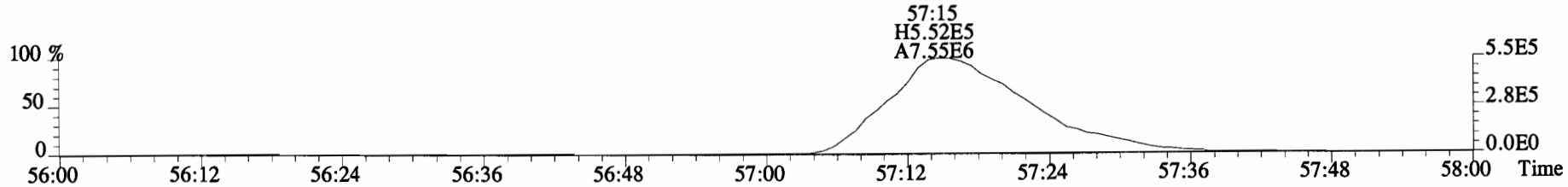
File:150318E1 #1-429 Acq:18-MAR-2015 19:39:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400948-02RE1 SC-CB-35-20141211-S Exp:PCB_ZB1
497.6826 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2040.0,0.00%,F,F)



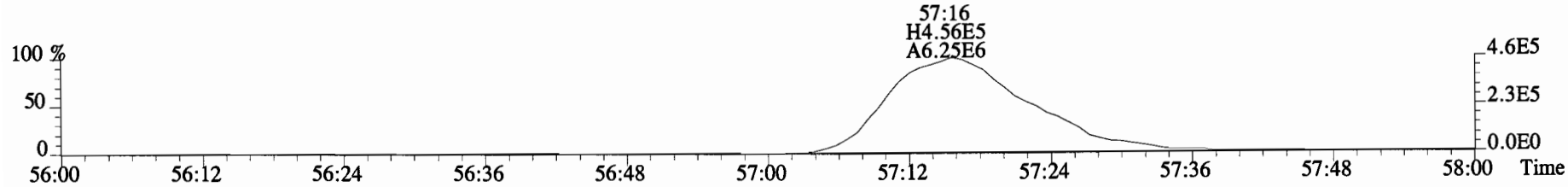
499.6797 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2108.0,0.00%,F,F)



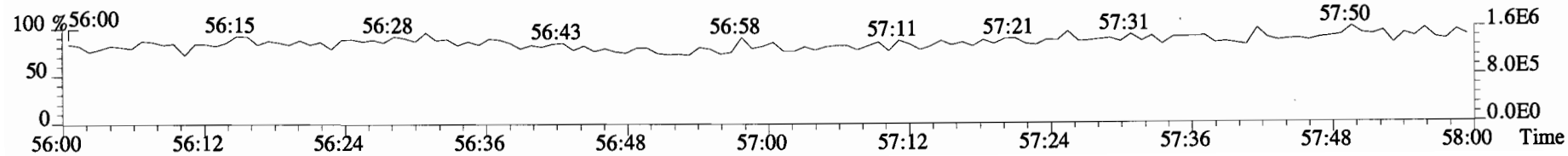
509.7229 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1832.0,0.00%,F,F)



511.7199 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1316.0,0.00%,F,F)



492.9697 S:10 F:5



Client ID: SC-CB-24-20141211-S Filename: 150319E1 S:6 Acq:19-MAR-15 18:09:45 ConCal: ST150319E1-1

Lab ID: 1400948-03RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.902 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Mono	PCB-1	7.76e+04	3.16	y 16:11	1.19	132		*	2.5	*	1.001	0.996-1.006
Mono	PCB-2	*	*	n NotF	1.18	*		2920	2.5	161	*	0.984-0.994
Mono	PCB-3	8.40e+04	3.03	y 18:47	1.43	107		*	2.5	*	1.000	0.996-1.006
Di	PCB-4/10	*	*	n NotF	1.57	*		17500	2.5	711	*	0.997-1.007
Di	PCB-7/9	*	*	n NotF	1.21	*		17500	2.5	581	*	0.866-0.874
Di	PCB-6	1.78e+05	1.25	n 22:35	1.30	238	R	*	2.5	*	0.894	0.890-0.899
Di	PCB-5/8	7.69e+05	1.57	y 22:58	1.15	1170		*	2.5	*	0.909	0.907-0.917
Di	PCB-14	*	*	n NotF	1.11	*		17500	2.5	620	*	0.949-0.959
Di	PCB-11	2.94e+06	1.59	y 25:17	1.09	4330		*	2.5	*	1.001	0.995-1.005
Di	PCB-12/13	*	*	n NotF	1.19	*		17500	2.5	576	*	1.011-1.021
Di	PCB-15	1.42e+06	1.59	y 25:59	1.28	1770		*	2.5	*	1.028	1.023-1.033
Tri	PCB-19	1.06e+05	1.01	y 24:15	1.04	323		*	2.5	*	1.001	0.996-1.006
Tri	PCB-30	*	*	n NotF	1.71	*		2220	2.5	75.5	*	1.032-1.042
Tri	PCB-18	1.21e+06	1.09	y 25:53	0.78	3190		*	2.5	*	0.953	0.949-0.959
Tri	PCB-17	5.20e+05	0.98	y 26:04	0.92	1160		*	2.5	*	0.960	0.956-0.966
Tri	PCB-24/27	1.84e+05	1.18	y 26:38	1.19	321		*	2.5	*	0.981	0.977-0.987
Tri	PCB-16/32	1.16e+06	1.12	y 27:09	0.94	2550		*	2.5	*	1.000	0.995-1.005
Tri	PCB-34	*	*	n NotF	1.14	*		3200	2.5	118	*	0.955-0.965
Tri	PCB-23	*	*	n NotF	1.28	*		3200	2.5	105	*	0.959-0.969
Tri	PCB-29	*	*	n NotF	1.08	*		3200	2.5	125	*	0.967-0.977
Tri	PCB-26	7.12e+05	0.97	y 28:30	1.21	1040		*	2.5	*	0.979	0.974-0.984
Tri	PCB-25	3.41e+05	1.09	y 28:39	1.26	475		*	2.5	*	0.985	0.979-0.989
Tri	PCB-31	4.04e+06	1.08	y 29:01	1.28	5530		*	2.5	*	0.997	0.992-1.002
Tri	PCB-28	4.88e+06	1.08	y 29:08	1.71	5010		*	2.5	*	1.001	0.995-1.005
Tri	PCB-20/21/33	3.32e+06	1.07	y 29:45	1.08	5400		*	2.5	*	1.022	1.017-1.027
Tri	PCB-22	2.37e+06	1.08	y 30:10	1.21	3440		*	2.5	*	1.037	1.032-1.042
Tri	PCB-36	*	*	n NotF	1.14	*		3200	2.5	133	*	0.928-0.938
Tri	PCB-39	*	*	n NotF	1.12	*		3200	2.5	136	*	0.943-0.953
Tri	PCB-38	*	*	n NotF	1.20	*		3200	2.5	126	*	0.966-0.976
Tri	PCB-35	3.78e+05	1.10	y 32:33	1.23	565		*	2.5	*	0.987	0.982-0.992
Tri	PCB-37	5.60e+06	1.07	y 33:00	1.23	8390		*	2.5	*	1.001	0.995-1.005
Tetra	PCB-54	*	*	n NotF	1.10	*		3610	2.5	160	*	0.996-1.006
Tetra	PCB-50	*	*	n NotF	0.88	*		3610	2.5	201	*	1.037-1.047
Tetra	PCB-53	4.74e+05	0.82	y 29:47	1.06	1270		*	2.5	*	0.946	0.942-0.952
Tetra	PCB-51	1.52e+05	0.85	y 30:09	0.99	437		*	2.5	*	0.957	0.952-0.962
Tetra	PCB-45	4.25e+05	0.84	y 30:34	0.86	1400		*	2.5	*	0.970	0.966-0.976
Tetra	PCB-46	1.74e+05	0.70	y 31:04	0.85	585		*	2.5	*	0.986	0.981-0.991

Integrations by:

Analyst: DMS

Date: 3/27/15

Reviewed by: [illegible] Date: 3/27/15

Client ID: SC-CB-24-20141211-S Filename: 150319E1 S:6 Acq:19-MAR-15 18:09:45 ConCal: ST150319E1-1
Lab ID: 1400948-03RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.902 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	1.14e+07	0.79	y	31:32	1.28	25400		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-73	*	*	n	NotF	1.35	*		3610	2.5	162	*	1.000	1.010
Tetra	PCB-43/49	4.06e+06	0.78	y	31:49	0.99	11600		*	2.5	*	1.010	1.005	1.015
Tetra	PCB-47	1.10e+06	0.78	y	32:02	1.06	2850		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-48/75	9.58e+05	0.82	y	32:10	1.23	2150		*	2.5	*	1.005	0.999	1.009
Tetra	PCB-65	*	*	n	NotF	1.22	*		3610	2.5	180	*	1.008	1.018
Tetra	PCB-62	*	*	n	NotF	1.22	*		3610	2.5	181	*	1.011	1.021
Tetra	PCB-44	6.61e+06	0.80	y	32:49	0.86	21100		*	2.5	*	1.026	1.021	1.031
Tetra	PCB-42/59	1.83e+06	0.71	y	33:03	1.14	4430		*	2.5	*	1.033	1.028	1.038
Tetra	PCB-41/64/71/72	6.98e+06	0.79	y	33:38	1.21	15900		*	2.5	*	1.051	1.046	1.056
Tetra	PCB-68	5.61e+04	0.96	n	33:54	1.35	115	R	*	2.5	*	1.059	1.054	1.064
Tetra	PCB-40	9.24e+05	0.77	y	34:07	0.70	3620		*	2.5	*	1.066	1.061	1.071
Tetra	PCB-57	5.84e+04	1.01	n	34:28	0.98	125	R	*	2.5	*	0.970	0.965	0.975
Tetra	PCB-67	3.63e+05	0.82	y	34:46	1.11	687		*	2.5	*	0.978	0.974	0.984
Tetra	PCB-58	*	*	n	NotF	0.93	*		3610	2.5	173	*	0.977	0.987
Tetra	PCB-63	3.99e+05	0.70	y	35:02	0.95	879		*	2.5	*	0.986	0.982	0.992
Tetra	PCB-74	5.88e+06	0.79	y	35:20	1.24	9920		*	2.5	*	0.994	0.990	1.000
Tetra	PCB-61/70	1.89e+07	0.79	y	35:33	0.95	41600		*	2.5	*	1.000	0.995	1.005
Tetra	PCB-76/66	1.06e+07	0.81	y	35:45	1.04	21300		*	2.5	*	1.006	1.001	1.011
Tetra	PCB-80	*	*	n	NotF	1.19	*		3610	2.5	136	*	0.996	1.006
Tetra	PCB-55	3.71e+05	0.87	y	36:16	1.04	720		*	2.5	*	1.009	1.005	1.015
Tetra	PCB-56/60	9.28e+06	0.76	y	36:46	1.01	18600		*	2.5	*	1.023	1.019	1.029
Tetra	PCB-79	3.97e+05	0.69	y	37:52	1.08	743		*	2.5	*	1.053	1.048	1.058
Tetra	PCB-78	*	*	n	NotF	1.27	*		3610	2.5	149	*	0.982	0.992
Tetra	PCB-81	2.45e+05	0.73	y	39:03	1.33	411		*	2.5	*	1.000	0.995	1.005
Tetra	PCB-77	*	*	n	NotF	1.10	7140 *		~~2610~~	2.5	~~171~~	*	0.995	1.005
Penta	PCB-104	*	*	n	NotF	1.18	*		2090	2.5	221	*	0.996	1.006
Penta	PCB-96	1.23e+05	1.53	y	33:56	1.14	430		*	2.5	*	1.039	1.034	1.044
Penta	PCB-103	7.65e+04	1.36	y	34:28	0.96	319		*	2.5	*	1.055	1.050	1.060
Penta	PCB-100	3.05e+04	1.55	y	34:50	0.94	130		*	2.5	*	1.066	1.061	1.071
Penta	PCB-94	6.01e+04	1.39	y	35:18	1.06	322		*	2.5	*	0.986	0.980	0.990
Penta	PCB-95/98/102	1.04e+07	1.58	y	35:50	1.22	48200		*	2.5	*	1.000	0.995	1.005
Penta	PCB-93	*	*	n	NotF	0.84	*		2090	2.5	457	*	0.997	1.007
Penta	PCB-88/91	1.71e+06	1.57	y	36:14	1.12	8670		*	2.5	*	1.012	1.005	1.015
Penta	PCB-121	*	*	n	NotF	1.62	*		2090	2.5	239	*	1.009	1.019
Penta	PCB-84/92	5.60e+06	1.63	y	37:08	1.05	27200		*	2.5	*	0.990	0.985	0.995
Penta	PCB-89	1.36e+05	1.42	y	37:20	1.13	610		*	2.5	*	0.996	0.991	1.001

* See original injection

Analyst: DMS

Date: 3/27/15

Client ID: SC-CB-24-20141211-S Filename: 150319E1 S:6 Acq:19-MAR-15 18:09:45 ConCal: ST150319E1-1

Lab ID: 1400948-03RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.902 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	1.60e+07	1.64	y 37:31	1.10	73600		*	2.5	*	1.000	0.995	1.005
Penta	PCB-113	*	*	n NotF╗	1.41	*		2090	2.5	243	*	1.002	1.012
Penta	PCB-99	6.57e+06	1.61	y 37:50	1.34	25000		*	2.5	*	1.009	1.004	1.014
Penta	PCB-119	2.92e+05	1.56	y 38:19	1.53	975		*	2.5	*	0.988	0.982	0.992
Penta	PCB-108/112	6.69e+05	1.54	y 38:28	1.28	2670		*	2.5	*	0.991	0.986	0.996
Penta	PCB-83	*	*	n NotF╗	1.52	*		2090	2.5	239	*	0.990	1.000
Penta	PCB-97	4.68e+06	1.58	y 38:50	1.18	20200		*	2.5	*	1.001	0.995	1.005
Penta	PCB-86	3.93e+04	1.40	y 38:57	0.84	238		*	2.5	*	1.004	0.999	1.009
Penta	PCB-87/117/125	8.32e+06	1.65	y 39:07	1.55	27400		*	2.5	*	1.008	1.002	1.012
Penta	PCB-111/115	2.93e+05	1.78	y 39:15	1.63	918		*	2.5	*	1.012	1.006	1.016
Penta	PCB-85/116	2.88e+06	1.48	y 39:21	1.30	11300		*	2.5	*	1.014	1.010	1.020
Penta	PCB-120	4.51e+04	1.38	y 39:34	1.68	137		*	2.5	*	1.020	1.016	1.026
Penta	PCB-110	2.47e+07	1.61	y 39:45	1.56	81300		*	2.5	*	1.024	1.020	1.030
Penta	PCB-82	1.86e+06	1.59	y 40:23	0.76	10300		*	2.5	*	0.976	0.971	0.981
Penta	PCB-124	1.08e+06	1.66	y 41:04	1.47	3100		*	2.5	*	0.993	0.988	0.998
Penta	PCB-107/109	1.54e+06	1.62	y 41:14	1.32	4900		*	2.5	*	0.997	0.991	1.001
Penta	PCB-123	3.74e+05	1.38	y 41:23	1.17	1350		*	2.5	*	1.000	0.996	1.006
Penta	PCB-106/118	2.31e+07	1.62	y 41:33	1.17	79900		*	2.5	*	1.000	0.996	1.006
Penta	PCB-114	8.56e+05	1.65	y 42:13	1.30	1840		*	2.5	*	1.000	0.995	1.005
Penta	PCB-122	3.51e+05	1.63	y 42:21	1.12	872		*	2.5	*	1.004	0.999	1.009
Penta	PCB-105	1.52e+07	1.63	y 43:04	1.30	35700		*	2.5	*	1.000	0.995	1.005
Penta	PCB-127	*	*	n NotF╗	1.33	*		3920	2.5	277	*	0.996	1.006
Penta	PCB-126	5.27e+05	1.66	y 45:18	1.18	1440		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-155	*	*	n NotF╗	1.11	*		1720	2.5	267	*	0.966	1.006
Hexa	PCB-150	*	*	n NotF╗	1.00	*		1720	2.5	298	*	1.030	1.040
Hexa	PCB-152	*	*	n NotF╗	1.12	*		1720	2.5	267	*	1.043	1.053
Hexa	PCB-145	*	*	n NotF╗	1.20	*		1720	2.5	248	*	1.055	1.065
Hexa	PCB-136	1.39e+06	1.28	y 39:34	1.18	7230		*	2.5	*	1.068	1.064	1.074
Hexa	PCB-148	*	*	n NotF╗	0.74	*		1720	2.5	400	*	1.066	1.076
Hexa	PCB-154	1.05e+05	1.25	y 40:10	0.86	747		*	2.5	*	1.084	1.080	1.090
Hexa	PCB-151	1.59e+06	1.34	y 40:48	0.75	13000		*	2.5	*	1.101	1.097	1.107
Hexa	PCB-135	1.04e+06	1.22	y 41:00	0.79	8020		*	2.5	*	1.107	1.103	1.113
Hexa	PCB-144	4.93e+05	1.26	y 41:07	0.76	3960		*	2.5	*	1.110	1.105	1.117
Hexa	PCB-147	1.78e+05	1.41	y 41:15	0.82	1330		*	2.5	*	1.113	1.109	1.121
Hexa	PCB-139/149	7.47e+06	1.30	y 41:30	0.76	59900		*	2.5	*	1.120	1.116	1.128
Hexa	PCB-140	4.99e+04	1.53	n 41:42	0.72	422	R	*	2.5	*	1.126	1.121	1.133
Hexa	PCB-134/143	1.16e+06	1.18	y 42:10	0.92	4980		*	2.5	*	0.976	0.970	0.980

Analyst: DMS

Date: 3/27/15

Client ID: SC-CB-24-20141211-S Filename: 150319E1 S:6 Acq:19-MAR-15 18:09:45 ConCal: ST150319E1-1
Lab ID: 1400948-03RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.902 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	6.01e+05	1.21	y	42:26	0.82	2900		*	2.5	*	0.982	0.977	0.987
Hexa	PCB-131	*	*	n	NotF	0.91	*		2260	2.5	285	*	0.981	0.991
Hexa	PCB-146/165	3.11e+06	1.23	y	42:50	1.25	9870		*	2.5	*	0.991	0.986	0.996
Hexa	PCB-132/161	7.54e+06	1.16	y	43:05	1.10	26900		*	2.5	*	0.997	0.992	1.002
Hexa	PCB-153	2.13e+07	1.25	y	43:14	1.25	67300		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-168	*	*	n	NotF	1.45	*		2260	2.5	178	*	1.001	1.011
Hexa	PCB-141	4.43e+06	1.23	y	43:58	1.09	16500		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-137	1.38e+06	1.25	y	44:20	1.06	5280		*	2.5	*	1.009	1.004	1.014
Hexa	PCB-130	1.46e+06	1.27	y	44:27	0.96	6110		*	2.5	*	1.011	1.006	1.016
Hexa	PCB-138/163/164	2.87e+07	1.21	y	44:49	1.29	91200		*	2.5	*	1.000	0.996	1.006
Hexa	PCB-158/160	3.74e+06	1.25	y	45:03	1.34	11400		*	2.5	*	1.006	1.001	1.011
Hexa	PCB-129	1.22e+06	1.27	y	45:18	0.85	5850		*	2.5	*	1.011	1.007	1.017
Hexa	PCB-166	1.43e+05	1.39	y	45:46	1.19	387		*	2.5	*	0.993	0.988	0.998
Hexa	PCB-159	*	*	n	NotF	1.11	*		2260	2.5	179	*	0.996	1.006
Hexa	PCB-128/162	5.00e+06	1.19	y	46:22	1.05	15300		*	2.5	*	1.007	1.002	1.012
Hexa	PCB-167	1.57e+06	1.15	y	46:46	1.20	4180		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-156	3.92e+06	1.18	y	48:04	1.14	11400		*	2.5	*	1.000	0.996	1.006
Hexa	PCB-157	9.18e+05	1.19	y	48:20	1.16	2560		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-169	*	*	n	NotF	1.12	*		2260	2.5	181	*	0.995	1.005
Hepta	PCB-188	3.22e+04	1.03	y	42:51	1.58	112		*	2.5	*	1.000	0.996	1.006
Hepta	PCB-184	1.84e+04	0.76	n	43:18	1.63	61.7	R	*	2.5	*	1.011	1.006	1.016
Hepta	PCB-179	1.75e+06	1.06	y	44:04	1.30	7370		*	2.5	*	1.029	1.024	1.034
Hepta	PCB-176	5.96e+05	1.17	y	44:32	1.48	2210		*	2.5	*	1.040	1.035	1.045
Hepta	PCB-186	*	*	n	NotF	1.45	*		1880	2.5	129	*	1.050	1.060
Hepta	PCB-178	7.30e+05	1.03	y	45:39	1.03	3870		*	2.5	*	1.066	1.061	1.071
Hepta	PCB-175	1.76e+05	1.15	y	45:59	1.01	954		*	2.5	*	1.074	1.069	1.079
Hepta	PCB-182/187	5.19e+06	1.06	y	46:09	1.25	22800		*	2.5	*	1.077	1.073	1.083
Hepta	PCB-183	2.55e+06	1.13	y	46:29	1.21	11600		*	2.5	*	1.085	1.081	1.091
Hepta	PCB-185	4.33e+05	0.99	y	47:08	1.80	1700		*	2.5	*	0.955	0.951	0.961
Hepta	PCB-174	3.80e+06	1.06	y	47:30	1.38	19400		*	2.5	*	0.963	0.958	0.968
Hepta	PCB-181	*	*	n	NotF	1.38	*		1880	2.5	175	*	0.960	0.970
Hepta	PCB-177	2.05e+06	1.08	y	47:46	1.26	11500		*	2.5	*	0.968	0.963	0.973
Hepta	PCB-171	9.97e+05	1.00	y	48:04	1.58	4440		*	2.5	*	0.974	0.970	0.980
Hepta	PCB-173	6.14e+04	0.93	y	48:30	1.11	390		*	2.5	*	0.983	0.978	0.988
Hepta	PCB-172	7.22e+05	1.14	y	48:57	1.63	3110		*	2.5	*	0.992	0.987	0.997
Hepta	PCB-192	*	*	n	NotF	1.74	*		1880	2.5	138	*	0.991	1.001
Hepta	PCB-180	1.00e+07	1.05	y	49:21	1.34	52500		*	2.5	*	1.000	0.995	1.005

Analyst: DMS

Date: 3/27/15

Client ID: SC-CB-24-20141211-S Filename: 150319E1 S:6 Acq:19-MAR-15 18:09:45 ConCal: ST150319E1-1
Lab ID: 1400948-03RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.902 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	5.33e+05	1.07	y	49:34	1.72	2190		*	2.5	*	1.005	0.999	1.009
Hepta	PCB-191	2.41e+05	1.20	y	49:49	1.69	1010		*	2.5	*	1.010	1.004	1.014
Hepta	PCB-170	3.69e+06	1.06	y	50:51	1.60	20500		*	2.5	*	1.000	0.995	1.005
Hepta	PCB-190	1.01e+06	1.05	y	51:02	2.21	4060		*	2.5	*	1.004	0.998	1.008
Hepta	PCB-189	1.83e+05	0.92	y	52:21	1.55	824		*	2.5	*	1.000	0.995	1.005
Octa	PCB-202	4.71e+05	0.98	y	48:16	1.08	2940		*	2.5	*	1.000	0.995	1.005
Octa	PCB-201	3.16e+05	1.00	y	48:45	1.15	1860		*	2.5	*	1.010	1.005	1.015
Octa	PCB-204	*	*	n	NotFnd	1.14	*		1720	2.5	239	*	1.008	1.018
Octa	PCB-197	7.18e+04	1.17	n	49:13	1.07	452	R	*	2.5	*	1.020	1.015	1.025
Octa	PCB-200	2.63e+05	0.92	y	50:06	1.06	1670		*	2.5	*	1.038	1.032	1.044
Octa	PCB-198	8.51e+04	1.01	y	51:27	0.76	761		*	2.5	*	1.066	1.059	1.069
Octa	PCB-199	1.76e+06	0.88	y	51:33	0.80	14900		*	2.5	*	1.068	1.061	1.071
Octa	PCB-196/203	2.21e+06	0.96	y	51:49	0.80	18600		*	2.5	*	1.074	1.066	1.076
Octa	PCB-195	9.44e+05	0.95	y	53:00	1.23	3820		*	2.5	*	0.984	0.979	0.989
Octa	PCB-194	2.92e+06	0.96	y	53:51	1.21	12000		*	2.5	*	1.000	0.995	1.005
Octa	PCB-205	1.67e+05	0.80	y	54:08	1.54	537		*	2.5	*	1.005	1.001	1.011
Nona	PCB-208	5.56e+05	1.25	y	53:08	0.93	2470		*	2.5	*	1.000	0.995	1.005
Nona	PCB-207	2.71e+05	1.54	y	53:26	1.08	1030		*	2.5	*	1.006	1.001	1.011
Nona	PCB-206	1.48e+06	1.41	y	55:29	1.02	8950		*	2.5	*	1.000	0.995	1.005
Deca	PCB-209	2.80e+05	1.27	y	56:52	1.17	1560		*	2.5	*	1.000	0.995	1.005

Analyst: DMS

Date: 3/27/15

Name	Resp	RA	RT	RRF	Conc	
Total Mono-PCB	1.62e+05	3.16 y	16:11	1.27	238.725	
Total Di-PCB	5.13e+06	1.57 y	22:58	1.21	7261.46	
Total Tri-PCB	3.18e+06	1.01 y	24:15	1.10	7545.20	
Total Tri-PCB	2.16e+07	0.97 y	28:30	1.21	29849.5	Sum:37394.7
Total Tetra-PCB	8.16e+07	0.82 y	29:47	1.09	185629	
Total Penta-PCB	1.11e+08	1.53 y	33:56	1.18	429155	
Total Penta-PCB	1.69e+07	1.65 y	42:13	1.25	39860.6	Sum:469016
Total Hexa-PCB	1.23e+07	1.28 y	39:34	0.90	94240.5	
Total Hexa-PCB	8.62e+07	1.18 y	42:10	1.11	282138	Sum:376378
Total Hepta-PCB	3.48e+07	1.03 y	42:51	1.42	170587	
Total Octa-PCB	5.10e+06	0.98 y	48:16	0.96	40730.2	
Total Octa-PCB	4.03e+06	0.95 y	53:00	1.33	16330.8	Sum:57061.0
Total Nona-PCB	2.30e+06	1.25 y	53:08	1.01	12458.5	
Total Deca-PCB	2.80e+05	1.27 y	56:52	1.17	1564.95	

+ 7140.93 = 192769.93

Total PCB Conc:~~1319002.60009~~ 1320000 + ~~7140.93 = 1,326,143.53~~

Integrations
by
Analyst: DMS

Date: 3/22/15

Client ID: SC-CB-24-20141211-S Filename: 150319E1 S:6 Acq:19-MAR-15 18:09:45 ConCal: ST150319E1-1
Lab ID: 1400948-03RE1@20X GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:1.9024 EndCAL: NA

Name	Resp	RA	RRF	RT	RRT	LCL	UCL		Conc	Rec
13C-PCB-1	5.19e+06	3.25 y	0.87	16:10	0.623	0.629	0.635	OK	9000	85.6
13C-PCB-3	5.78e+06	3.35 y	0.91	18:47	0.723	0.725	0.733		9580	91.2
13C-PCB-4	3.80e+06	1.59 y	0.59	20:06	0.774	0.775	0.783		9790	93.1
13C-PCB-9	6.01e+06	1.50 y	0.90	21:53	0.843	0.842	0.850		10100	96.4
13C-PCB-11	6.58e+06	1.51 y	0.94	25:16	0.973	0.968	0.978		10600	101
13C-PCB-19	3.32e+06	0.98 y	0.53	24:14	0.933	0.930	0.940		9450	89.9
13C-PCB-28	5.98e+06	1.00 y	0.93	29:06	1.003	0.999	1.009		10500	100
13C-PCB-32	5.09e+06	1.03 y	0.80	27:09	1.046	1.040	1.050		9670	91.9
13C-PCB-37	5.71e+06	1.10 y	0.84	32:58	1.137	1.131	1.143		11200	106
13C-PCB-47	3.82e+06	0.82 y	0.81	32:00	0.870	0.866	0.874		8920	84.9
13C-PCB-52	3.69e+06	0.84 y	0.77	31:30	0.857	0.853	0.861		9060	86.2
13C-PCB-54	4.70e+06	0.87 y	0.97	27:58	0.761	0.758	0.766		9170	87.2
13C-PCB-70	5.02e+06	0.78 y	1.00	35:32	0.966	0.961	0.971		9520	90.5
13C-PCB-77	4.53e+06	0.93 n	0.94	39:38	1.078	1.073	1.083		9110	(86.6)
13C-PCB-80	5.20e+06	0.78 y	1.03	35:57	0.978	0.972	0.982		9550	90.8
13C-PCB-81	4.70e+06	0.85 y	0.92	39:02	1.062	1.057	1.067		9670	91.9
13C-PCB-95	1.86e+06	1.71 y	0.74	35:49	0.913	0.908	0.918		10100	96.2
13C-PCB-97	2.06e+06	1.74 y	0.70	38:48	0.989	0.984	0.994		11800	112
13C-PCB-101	2.07e+06	1.69 y	0.78	37:30	0.955	0.951	0.961		10700	101
13C-PCB-104	2.64e+06	1.66 y	1.00	32:40	0.832	0.828	0.836		10600	101
13C-PCB-105	3.44e+06	1.71 y	1.37	43:04	0.929	0.924	0.934		11200	107
13C-PCB-114	3.78e+06	1.51 y	1.36	42:12	0.910	0.905	0.915		12400	118
13C-PCB-118	2.59e+06	1.58 y	0.96	41:33	1.059	1.054	1.064		10900	104
13C-PCB-123	2.50e+06	1.63 y	0.89	41:22	1.054	1.050	1.060		11300	107
13C-PCB-126	3.25e+06	1.62 y	1.31	45:18	0.977	0.972	0.982		11100	106
13C-PCB-127	3.61e+06	1.50 y	1.47	43:24	0.936	0.931	0.941		11000	104
13C-PCB-138	2.56e+06	1.26 y	1.10	44:48	0.967	0.961	0.971		10400	99.0
13C-PCB-141	2.60e+06	1.36 y	1.07	43:57	0.948	0.943	0.953		10800	103
13C-PCB-153	2.66e+06	1.37 y	1.15	43:13	0.932	0.927	0.937		10400	98.7
13C-PCB-155	1.72e+06	1.25 y	0.84	37:03	0.944	0.939	0.949		8270	78.6
13C-PCB-156	3.20e+06	1.31 y	1.30	48:03	1.037	1.032	1.042		11000	105
13C-PCB-157	3.24e+06	1.23 y	1.36	48:19	1.042	1.038	1.048		10700	101
13C-PCB-159	3.29e+06	1.15 y	1.25	46:04	0.994	0.989	0.999		11800	112
13C-PCB-167	3.30e+06	1.21 y	1.35	46:46	1.009	1.004	1.014		10900	104
13C-PCB-169	3.01e+06	1.11 y	1.29	50:29	1.089	1.083	1.093		10500	99.6
13C-PCB-170	1.18e+06	0.46 y	0.54	50:50	1.097	1.089	1.101		9760	92.8
13C-PCB-180	1.49e+06	0.48 y	0.68	49:20	1.064	1.060	1.070		9740	92.6
13C-PCB-188	1.92e+06	0.46 y	0.92	42:50	0.924	0.919	0.929		9330	88.8
13C-PCB-189	1.51e+06	0.49 y	0.72	52:20	1.129	1.120	1.132		9390	89.3
13C-PCB-194	2.12e+06	1.02 y	0.80	53:51	0.995	0.990	1.000		10700	102
13C-PCB-202	1.56e+06	0.86 y	0.84	48:15	1.041	1.036	1.046		8300	78.9
13C-PCB-206	1.69e+06	0.86 y	0.65	55:28	1.025	1.021	1.031		10500	100
13C-PCB-208	2.54e+06	0.70 y	1.08	53:07	0.981	0.976	0.986		9490	90.3
13C-PCB-209	1.61e+06	1.32 y	0.61	56:51	1.050	1.045	1.055		10600	101

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	5.14e+06	0.80 y	1.02	37:49	1.029	1.023	1.034	9580	91.1
13C-PCB-178	1.36e+06	0.47 y	0.61	45:38	0.985	0.979	0.990	9910	94.3

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	5.14e+06	0.80 y	1.10	37:49	0.969	0.964	0.974	10400	99.1
13C-PCB-178	1.36e+06	0.47 y	0.90	45:38	0.925	0.920	0.930	10700	102

(86.6) 80.8 * see ORIGINAL injection

RS

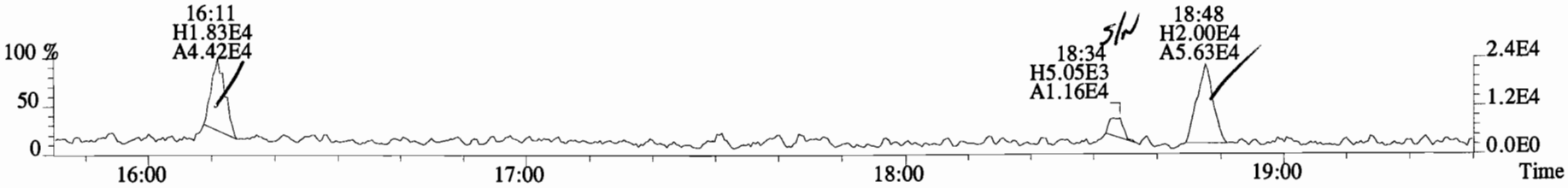
Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	6.95e+06	1.54	y	1.00	25:58	10500
13C-PCB-31	6.39e+06	1.00	y	1.00	29:00	10500
13C-PCB-60	5.55e+06	0.78	y	1.00	36:46	10500
13C-PCB-111	2.61e+06	1.53	y	1.00	39:15	10500
13C-PCB-128	2.35e+06	1.30	y	1.00	46:21	10500
13C-PCB-205	2.61e+06	0.91	y	1.00	54:08	10500

Analyst: DMS

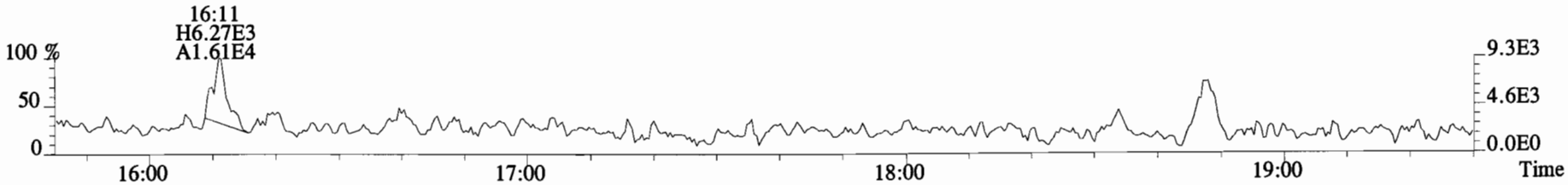
Date: 3/26/15

File:150319E1 #1-867 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1

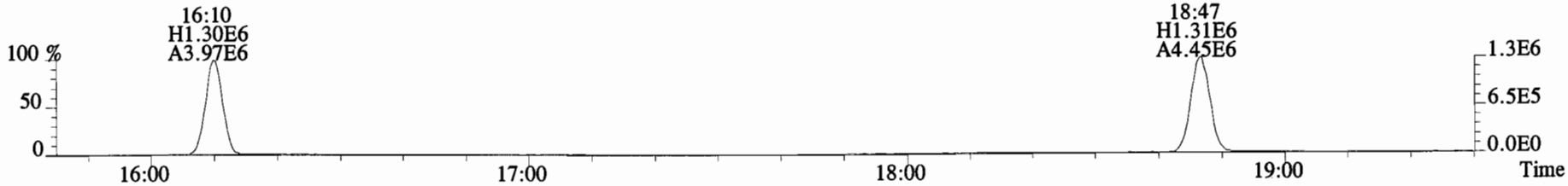
188.0393 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4316.0,0.00%,F,F)



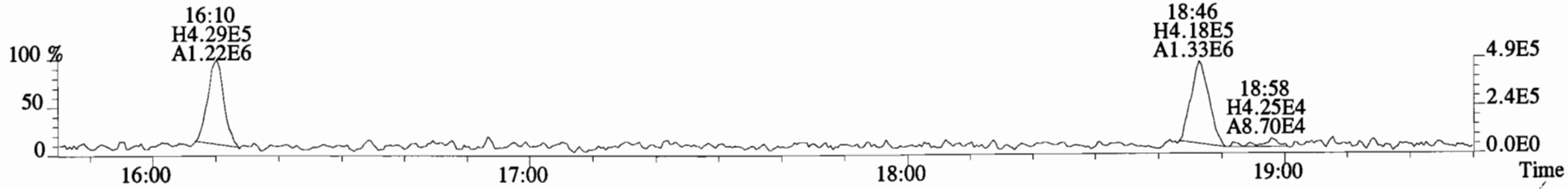
190.0363 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2924.0,0.00%,F,F)



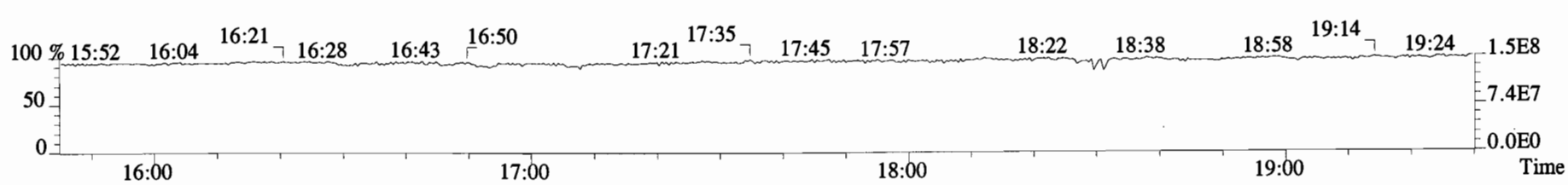
200.0795 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5632.0,0.00%,F,F)



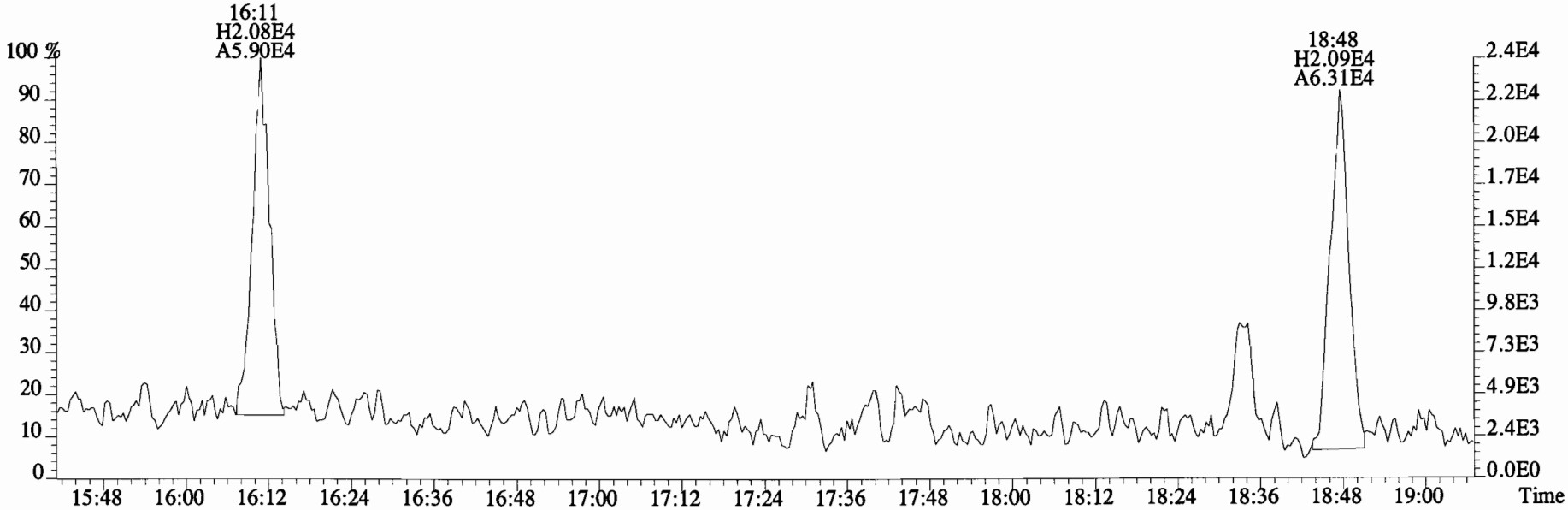
202.0766 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,60884.0,0.00%,F,F)



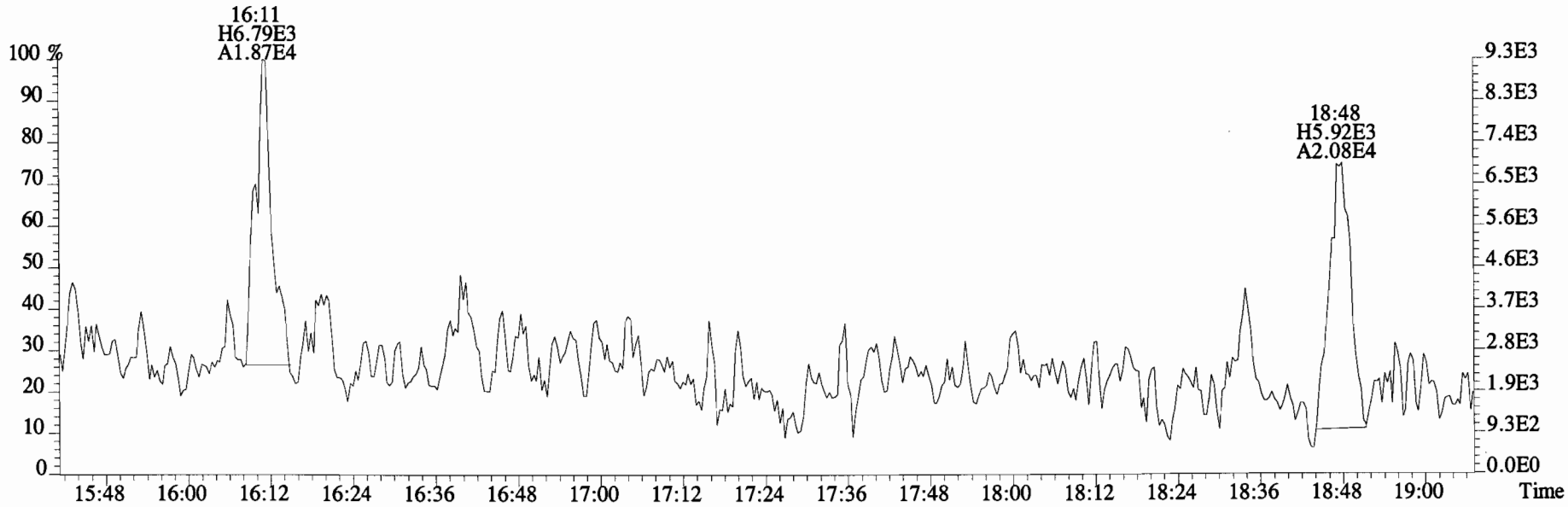
180.9880 S:6



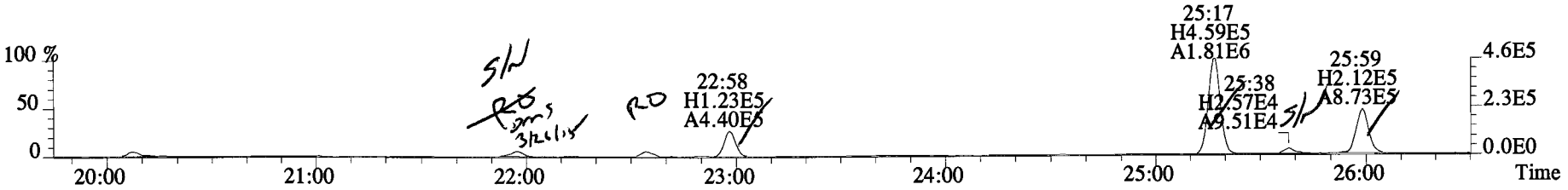
File:150319E1 #1-867 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
188.0393 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4316.0,0.00%,F,F)



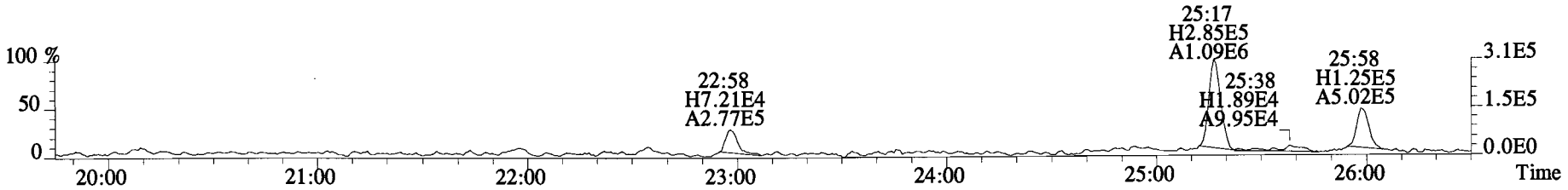
190.0363 S:6 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2924.0,0.00%,F,F)



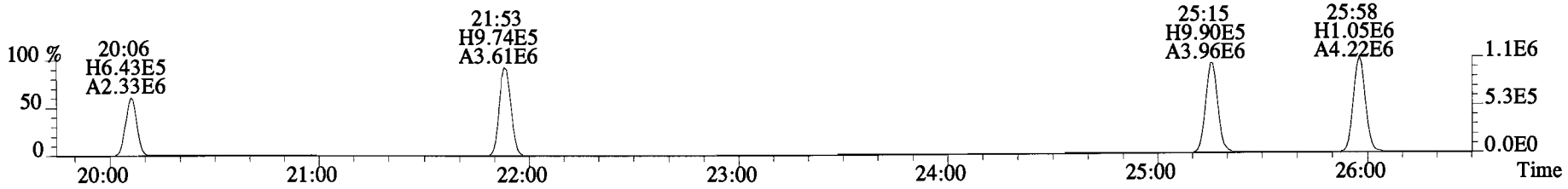
File:150319E1 #1-757 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
222.0003 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3676.0,0.00%,F,F)



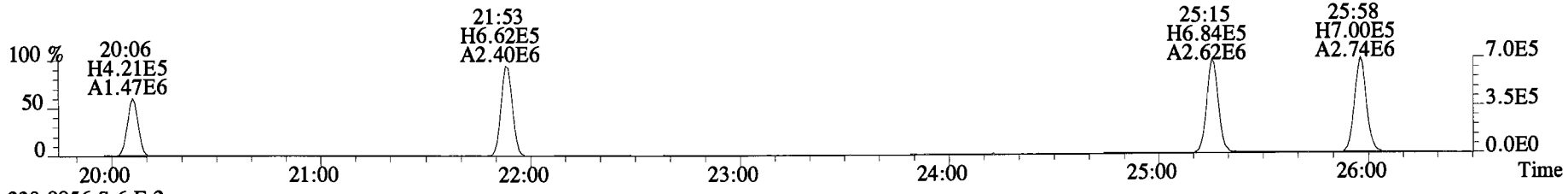
223.9974 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,17520.0,0.00%,F,F)



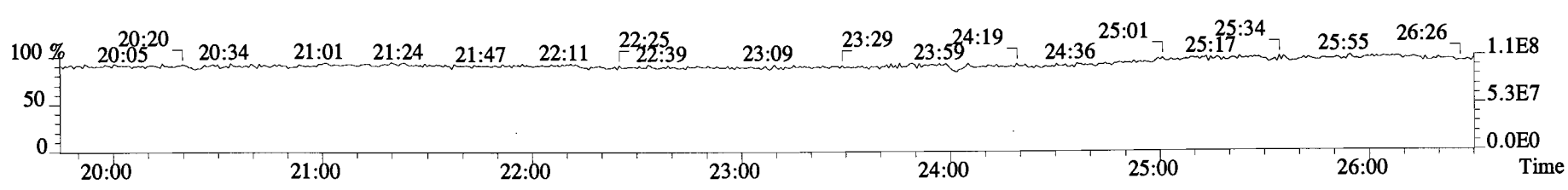
234.0406 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2952.0,0.00%,F,F)



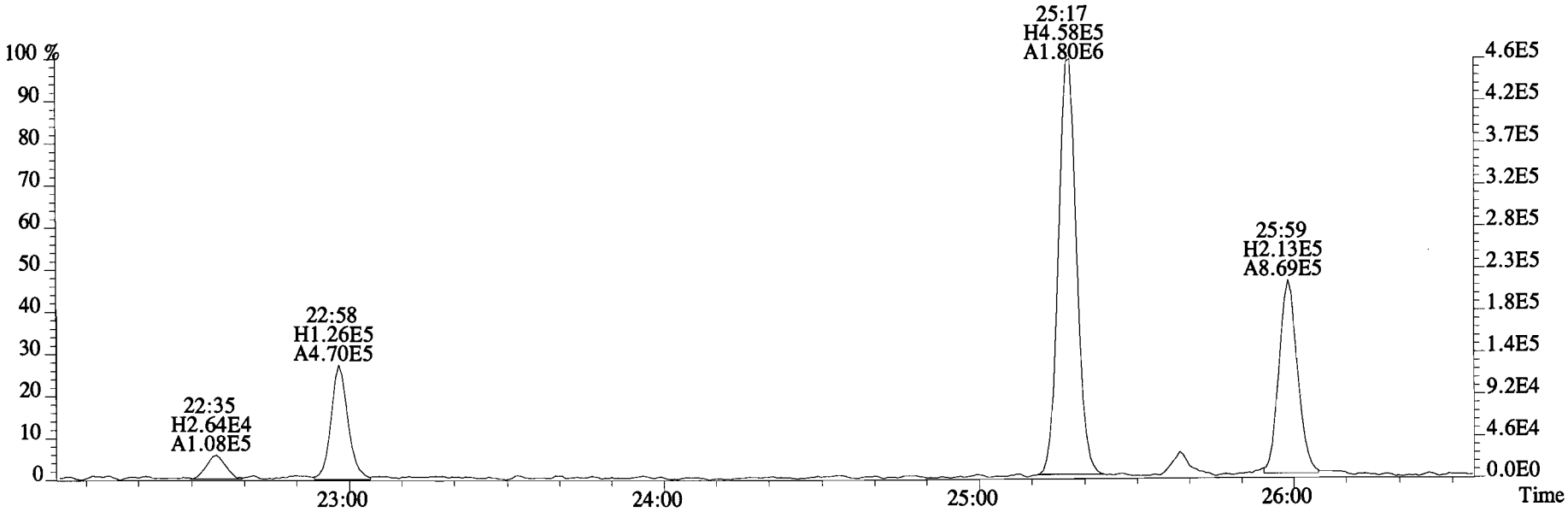
236.0376 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2384.0,0.00%,F,F)



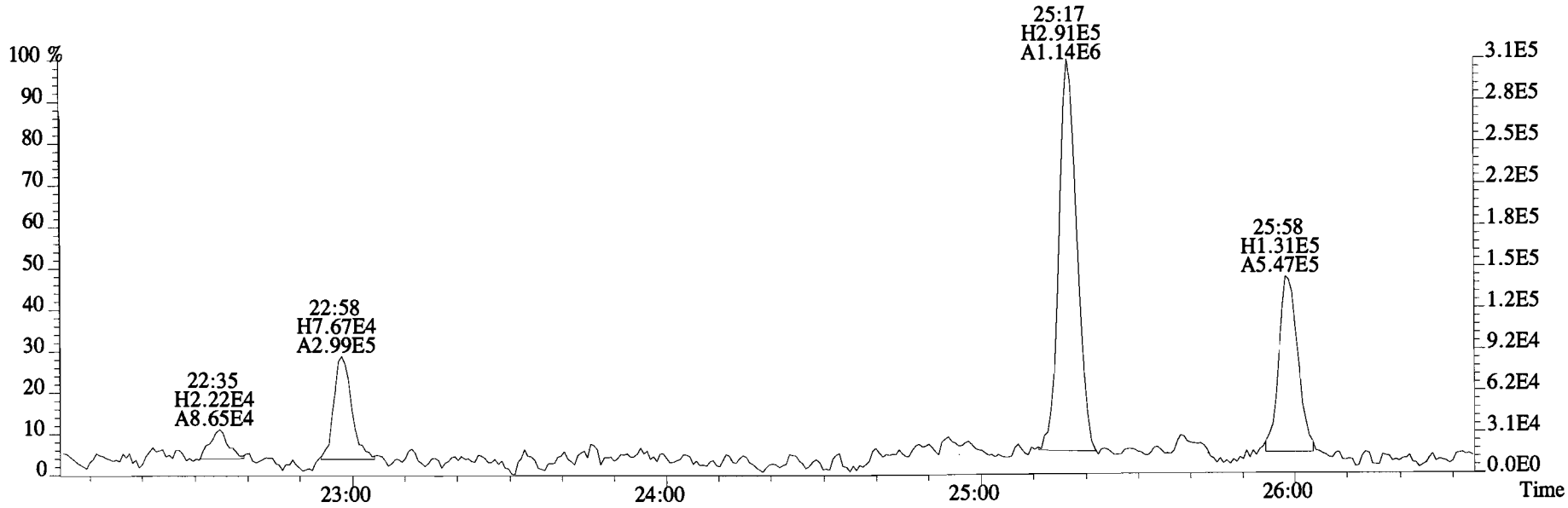
230.9856 S:6 F:2



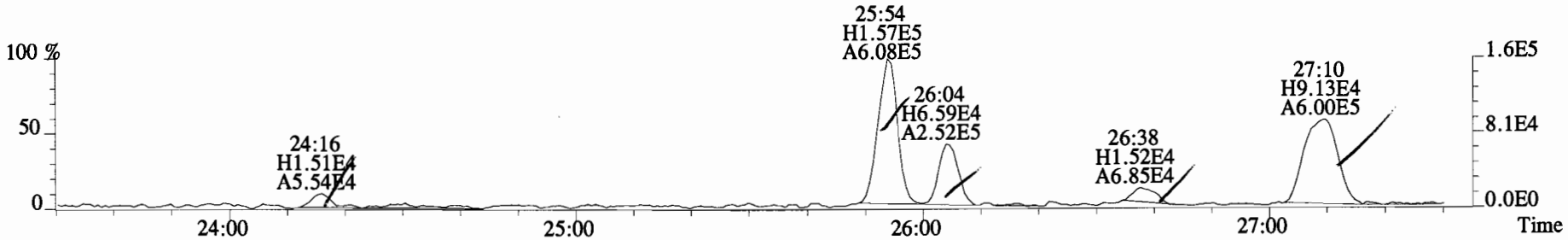
File:150319E1 #1-757 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
222.0003 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3676.0,0.00%,F,F)



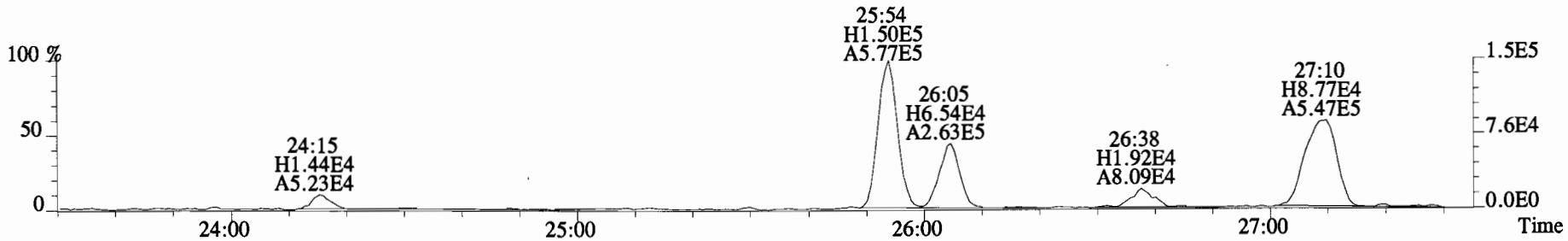
223.9974 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,17520.0,0.00%,F,F)



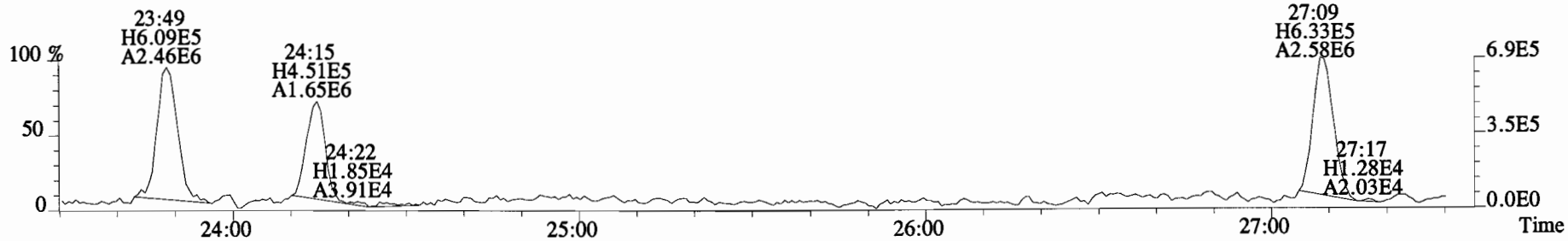
File:150319E1 #1-757 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
255.9613 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4812.0,0.00%,F,F)



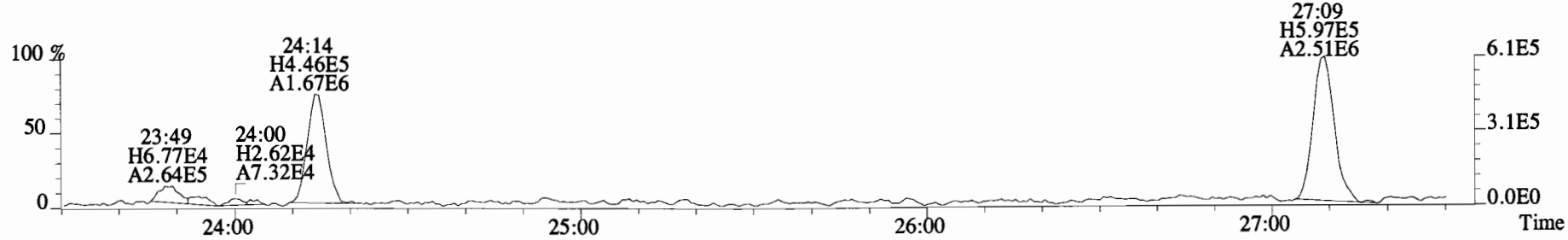
257.9584 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2224.0,0.00%,F,F)



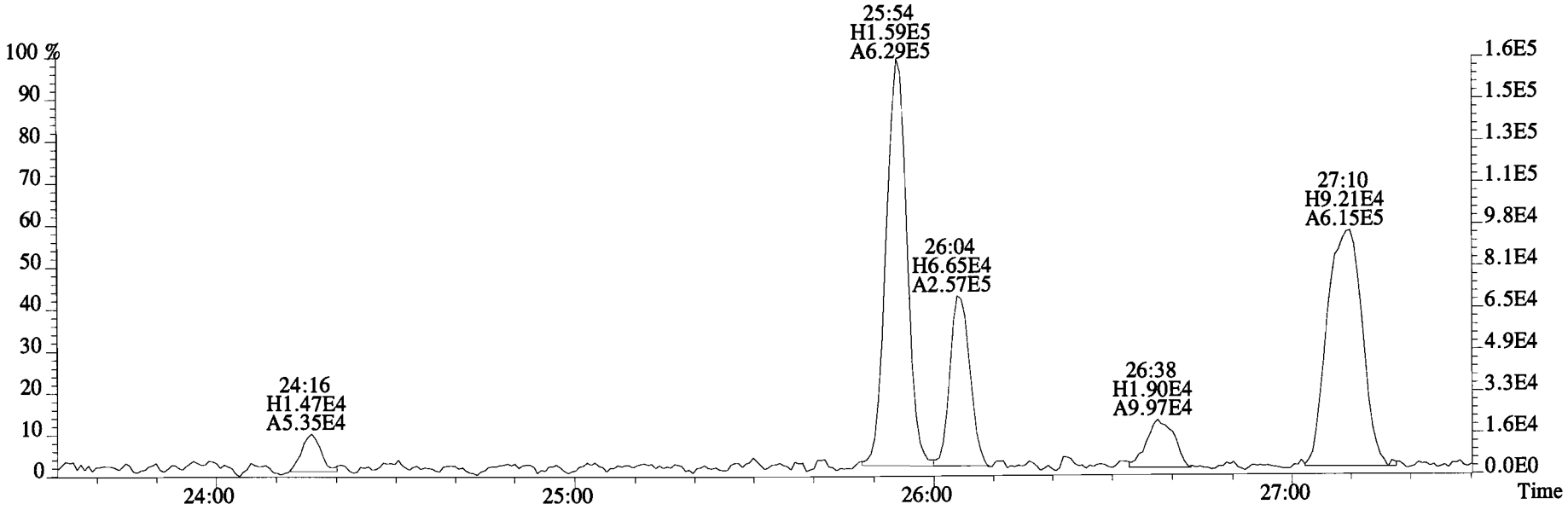
268.0016 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,56960.0,0.00%,F,F)



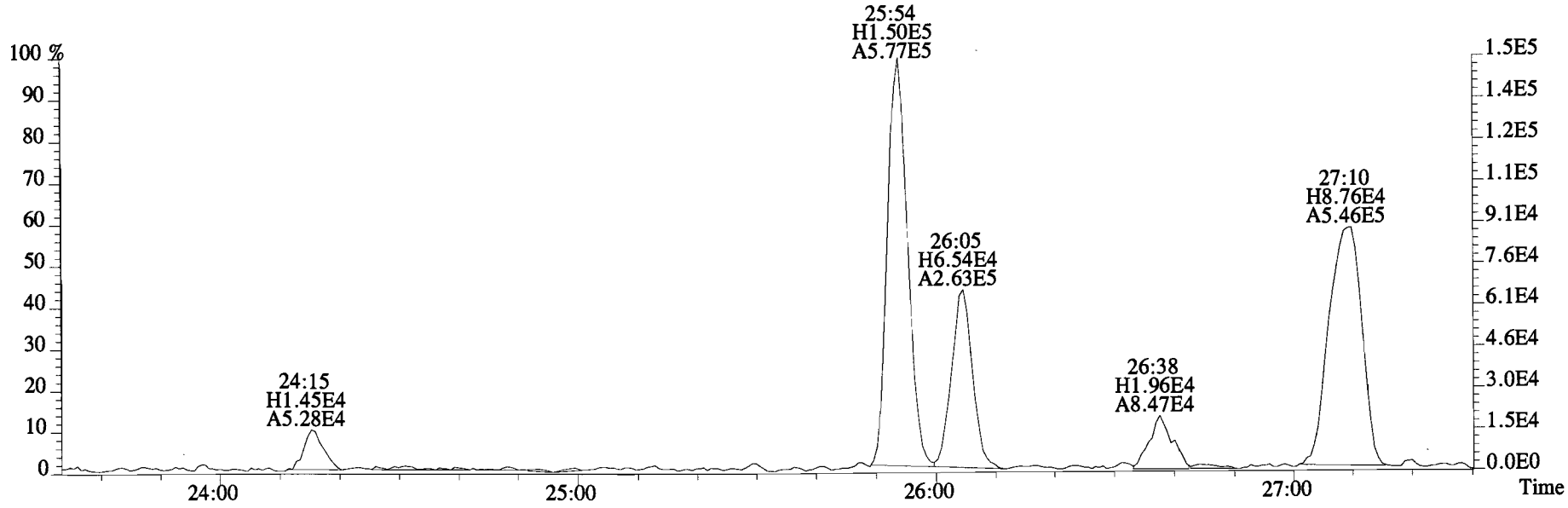
269.9986 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,30836.0,0.00%,F,F)

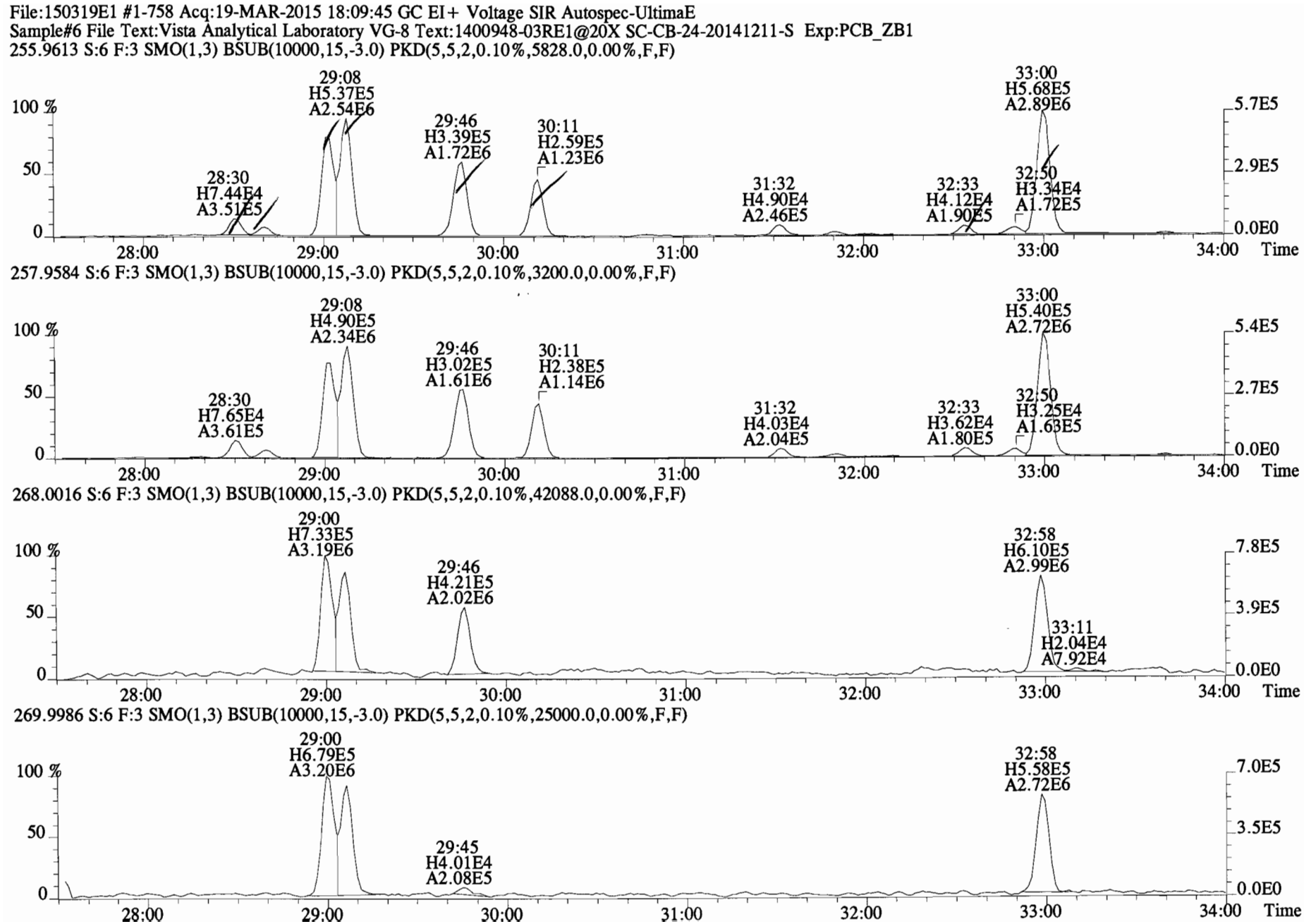


File:150319E1 #1-757 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
255.9613 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4812.0,0.00%,F,F)

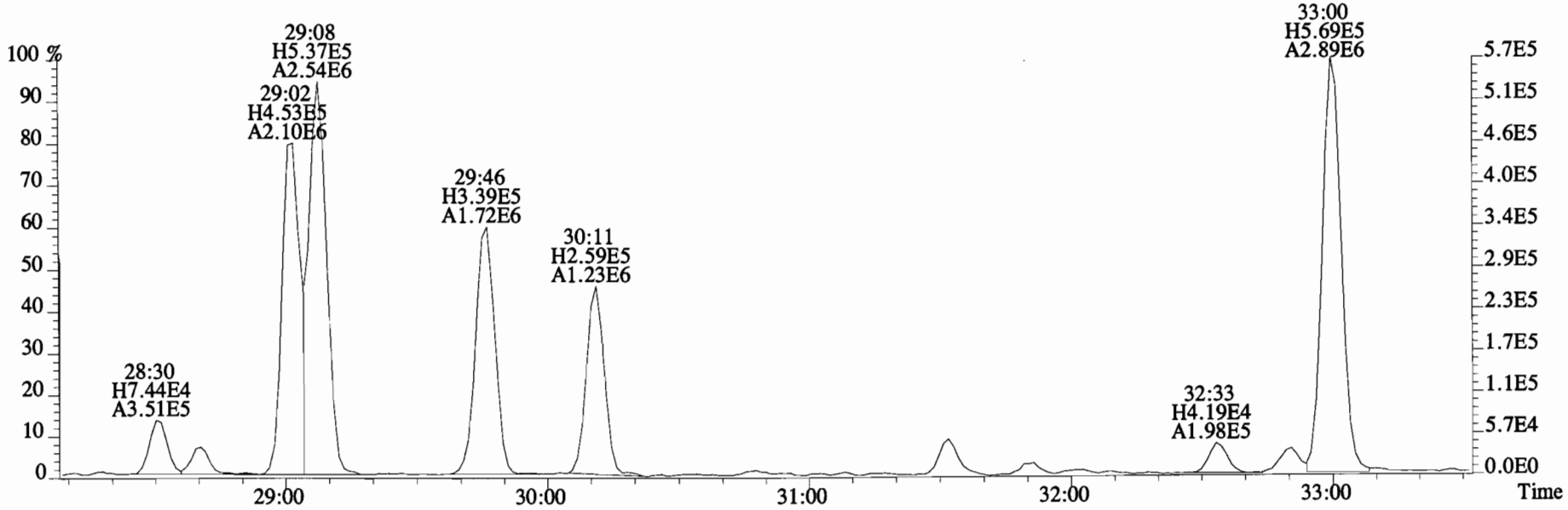


257.9584 S:6 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2224.0,0.00%,F,F)

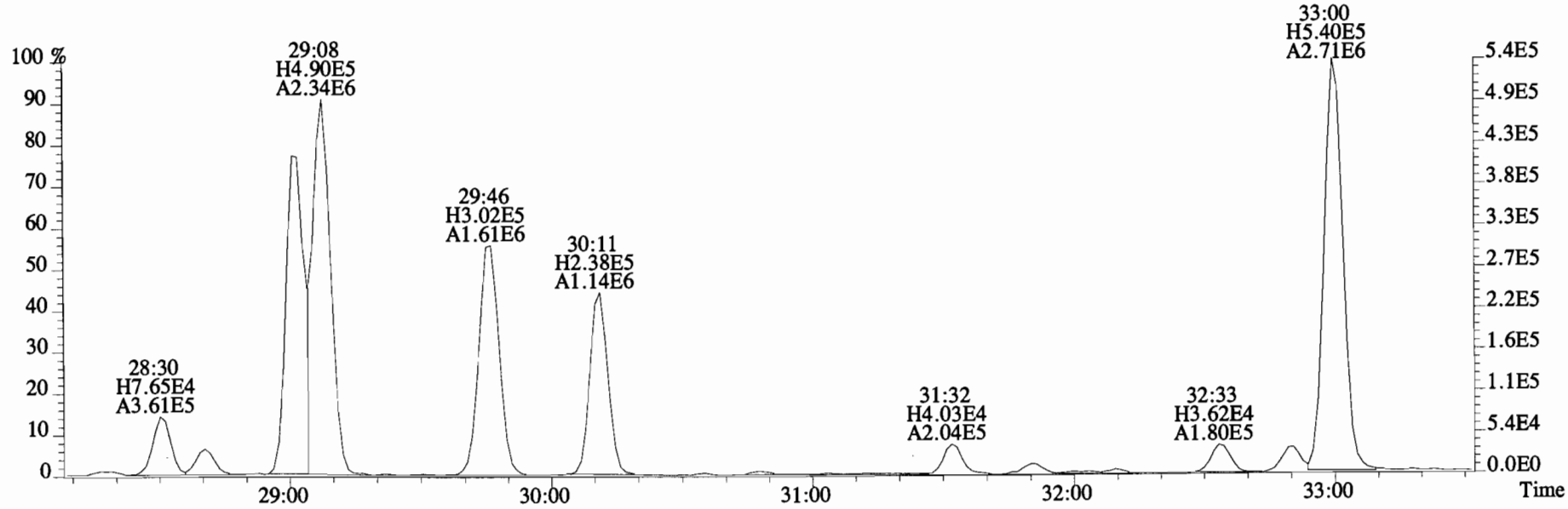



File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
255.9613 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5828.0,0.00%,F,F)
29:08 H5.37E5 A2.54E6
29:46 H3.39E5 A1.72E6
30:11 H2.59E5 A1.23E6
28:30 H7.44E4 A3.51E5
31:32 H4.90E4 A2.46E5
32:33 H4.12E4 A1.90E5
33:00 H5.68E5 A2.89E6
32:50 H3.34E4 A1.72E5
257.9584 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3200.0,0.00%,F,F)
29:08 H4.90E5 A2.34E6
29:46 H3.02E5 A1.61E6
30:11 H2.38E5 A1.14E6
28:30 H7.65E4 A3.61E5
31:32 H4.03E4 A2.04E5
32:33 H3.62E4 A1.80E5
33:00 H5.40E5 A2.72E6
32:50 H3.25E4 A1.63E5
268.0016 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,42088.0,0.00%,F,F)
29:00 H7.33E5 A3.19E6
29:46 H4.21E5 A2.02E6
32:58 H6.10E5 A2.99E6
33:11 H2.04E4 A7.92E4
269.9986 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,25000.0,0.00%,F,F)
29:00 H6.79E5 A3.20E6
29:45 H4.01E4 A2.08E5
32:58 H5.58E5 A2.72E6
100 %
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
5.7E5
2.9E5
0.0E0
5.4E5
2.7E5
7.8E5
3.9E5
7.0E5
3.5E5

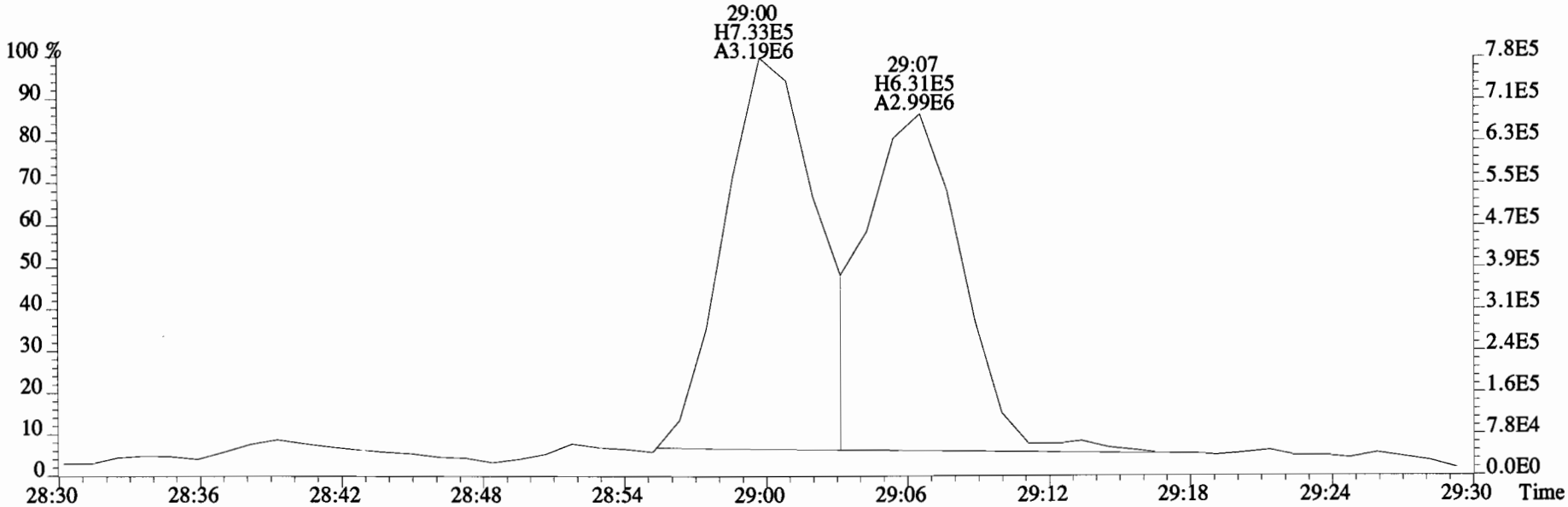
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
255.9613 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5828.0,0.00%,F,F)



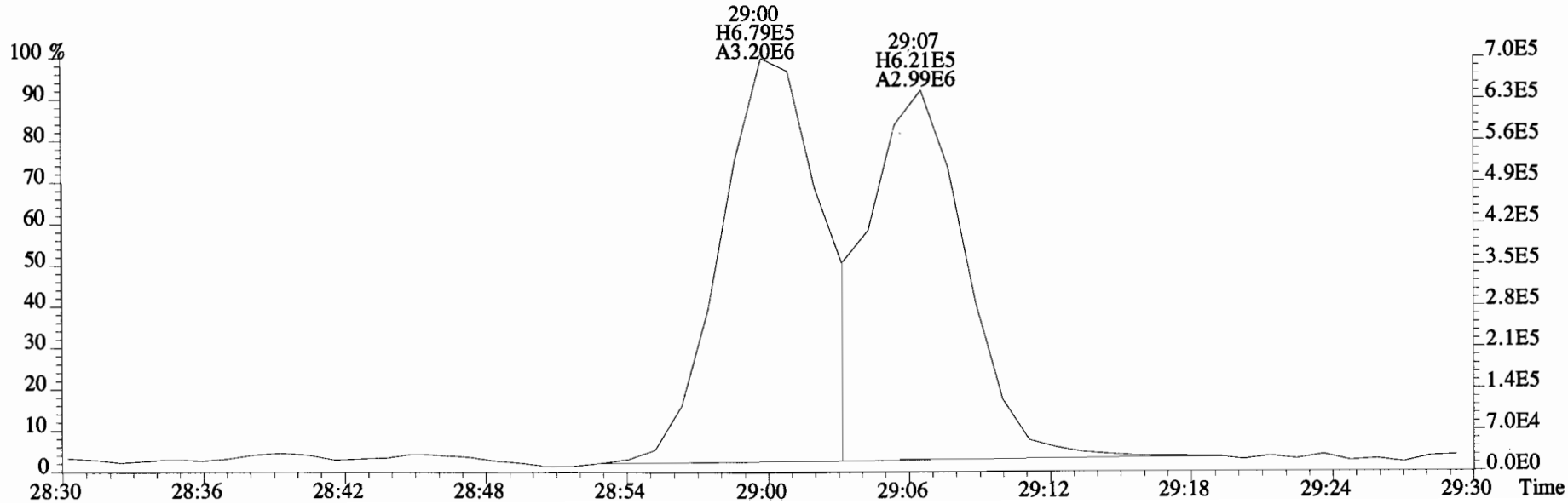
257.9584 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3200.0,0.00%,F,F)



File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
268.0016 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,42088.0,0.00%,F,F)

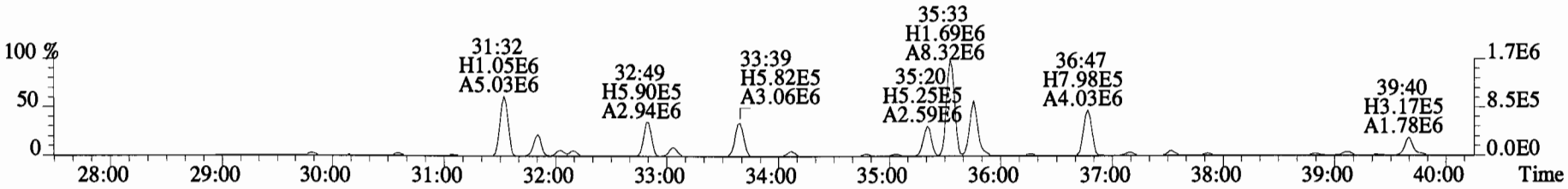


269.9986 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,25000.0,0.00%,F,F)

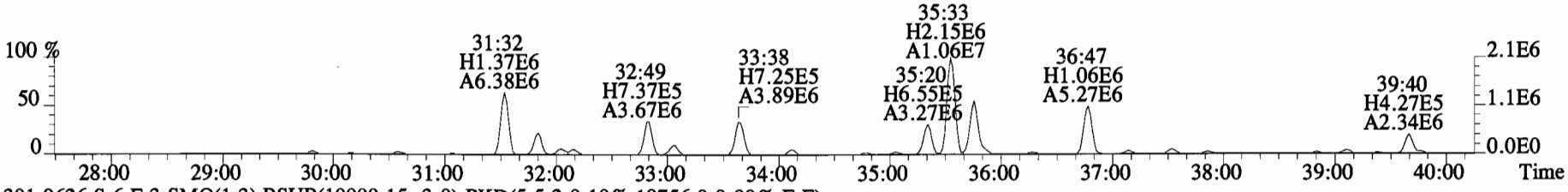


File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1

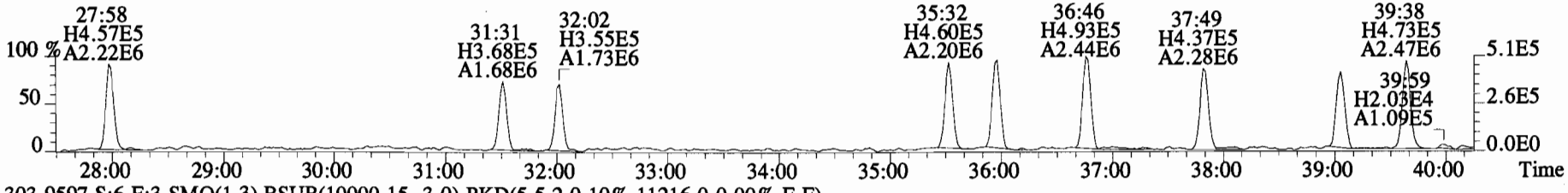
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2900.0,0.00%,F,F)



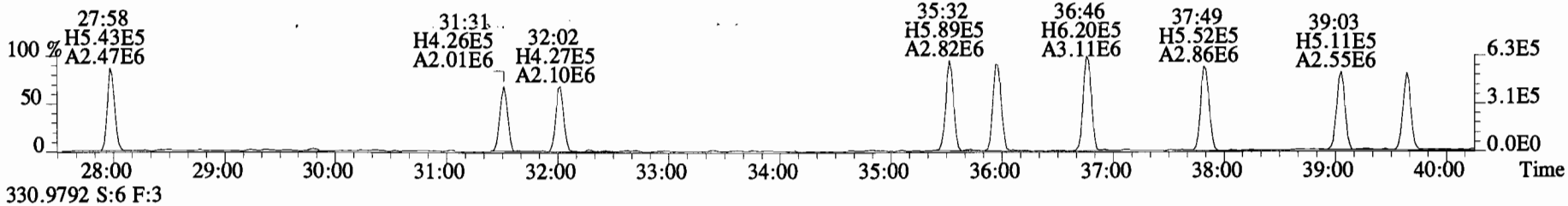
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3608.0,0.00%,F,F)



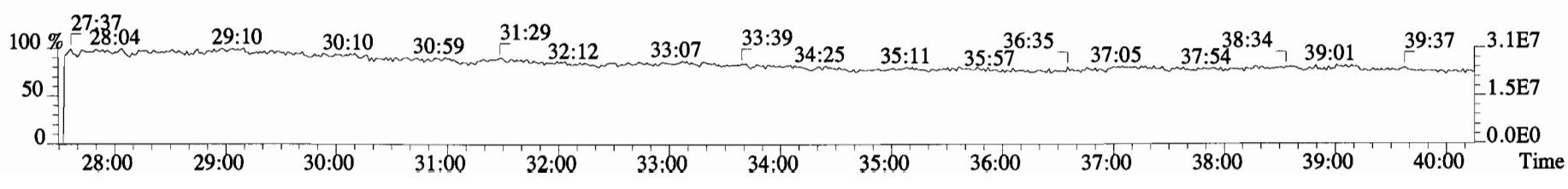
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,19756.0,0.00%,F,F)



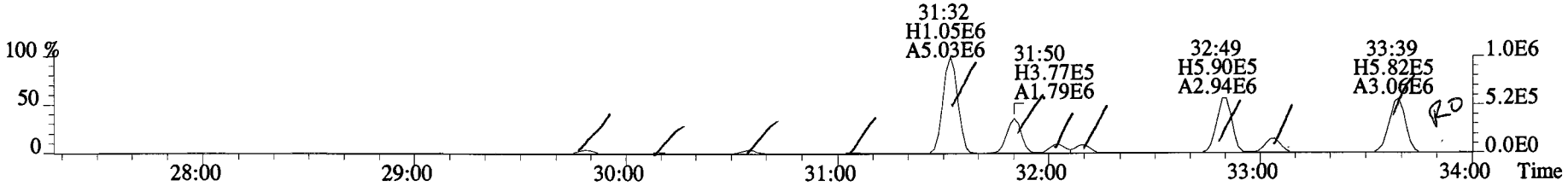
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11216.0,0.00%,F,F)



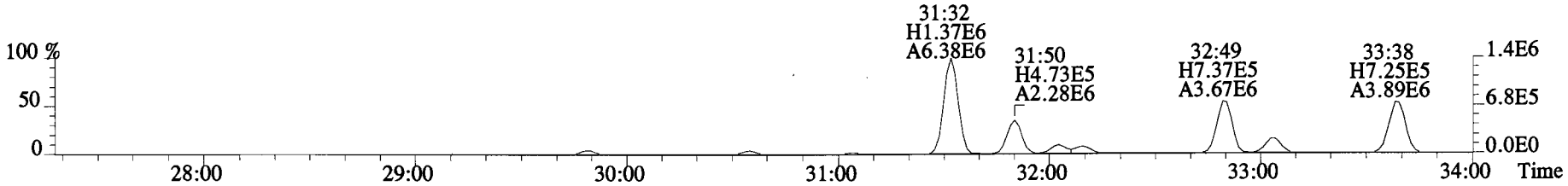
330.9792 S:6 F:3



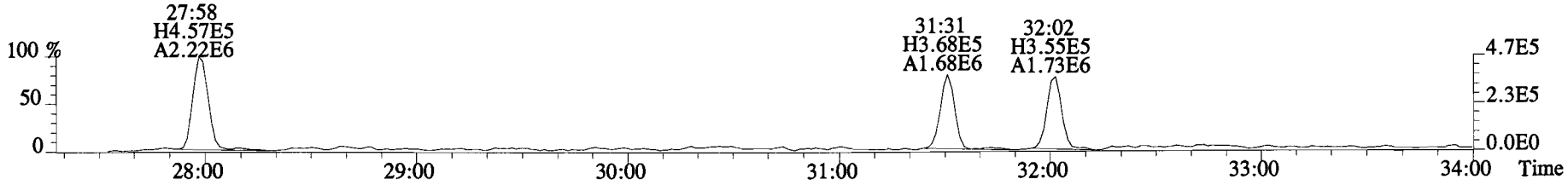
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2900.0,0.00%,F,F)



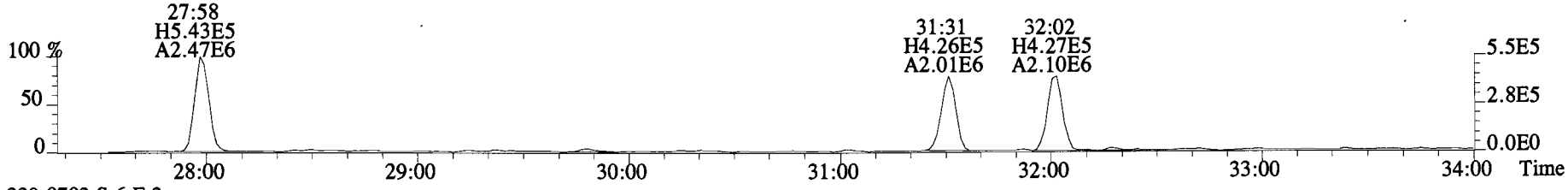
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3608.0,0.00%,F,F)



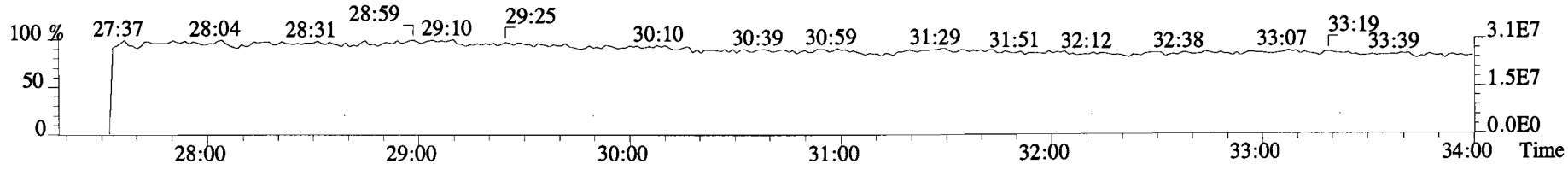
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,19756.0,0.00%,F,F)



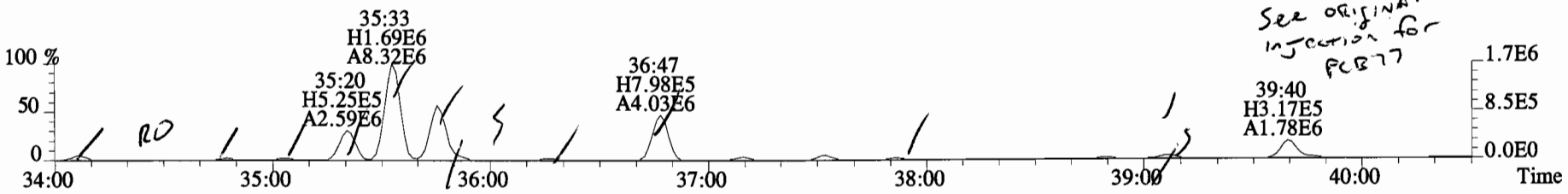
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11216.0,0.00%,F,F)



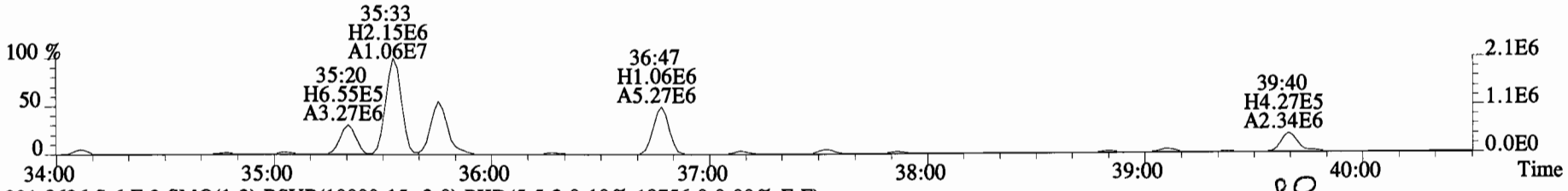
330.9792 S:6 F:3



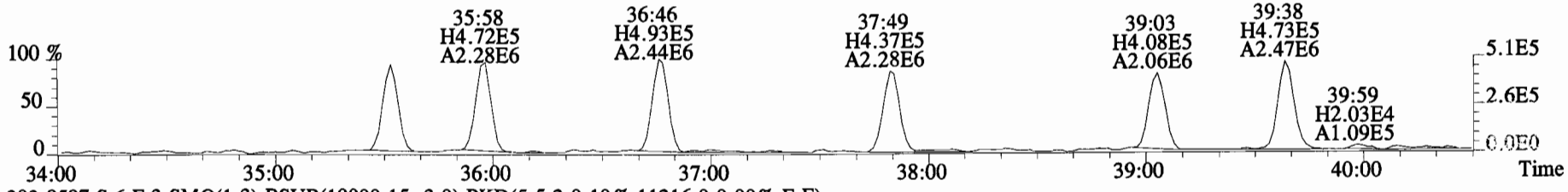
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2900.0,0.00%,F,F)



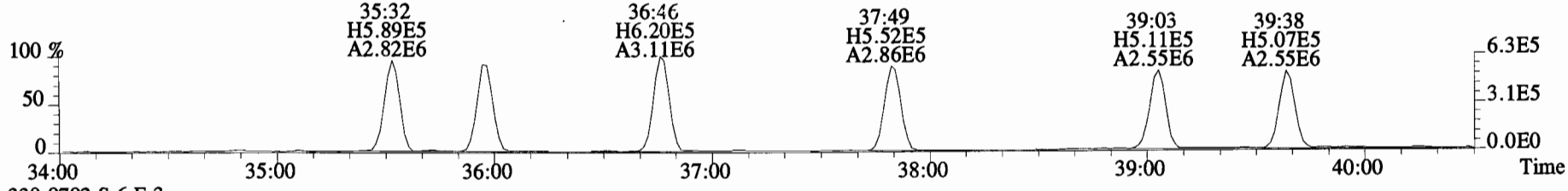
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3608.0,0.00%,F,F)



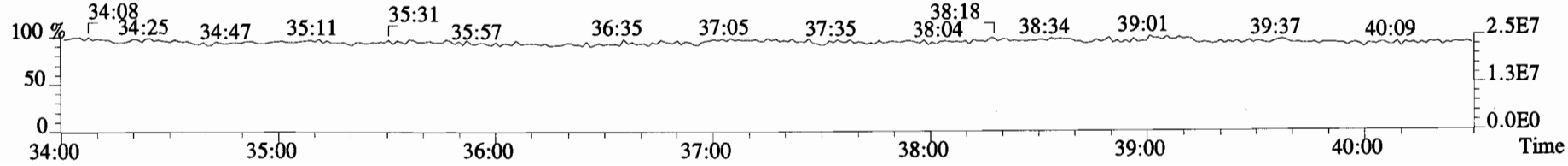
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,19756.0,0.00%,F,F)



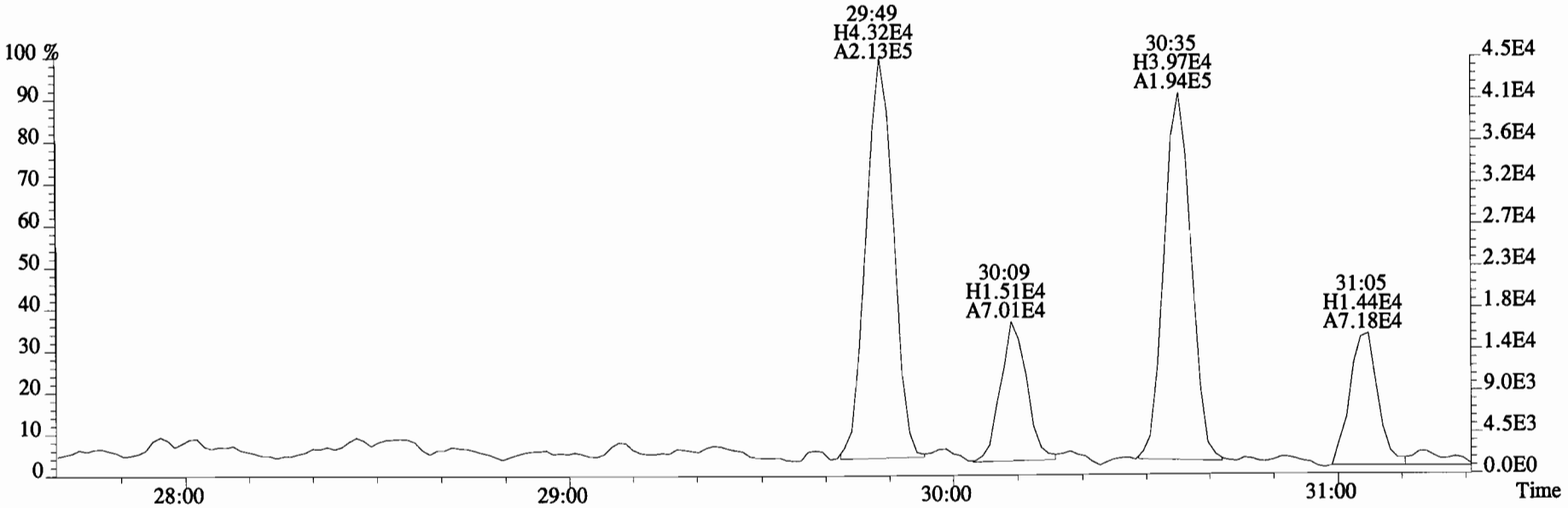
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11216.0,0.00%,F,F)



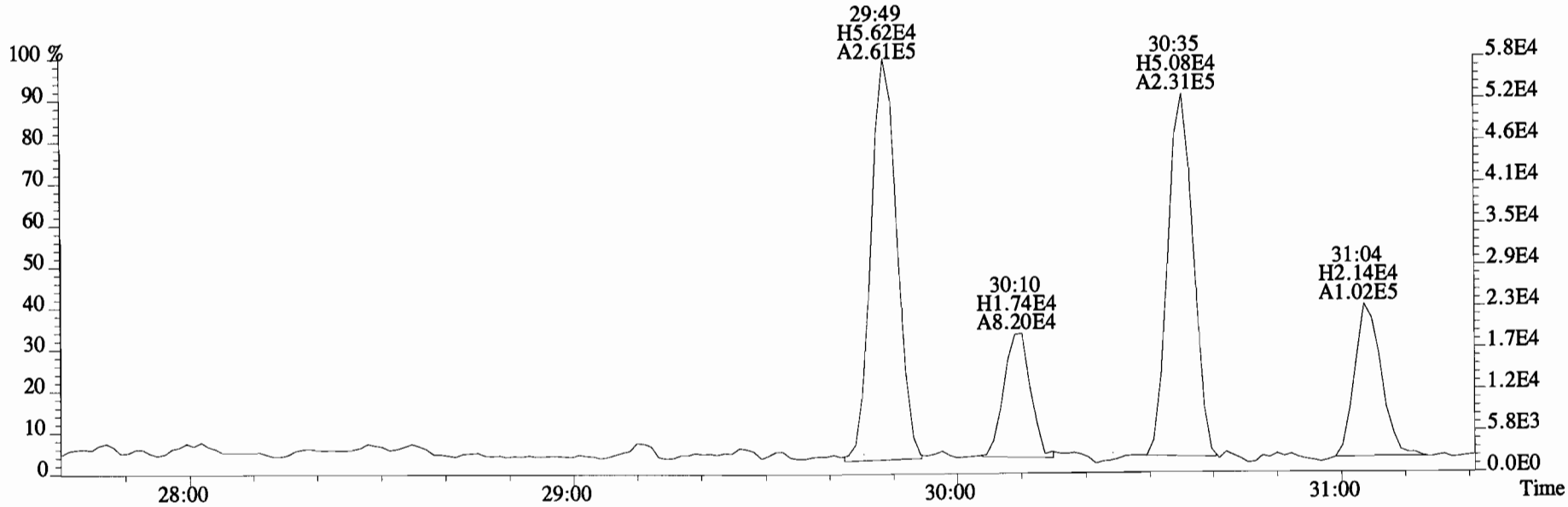
330.9792 S:6 F:3



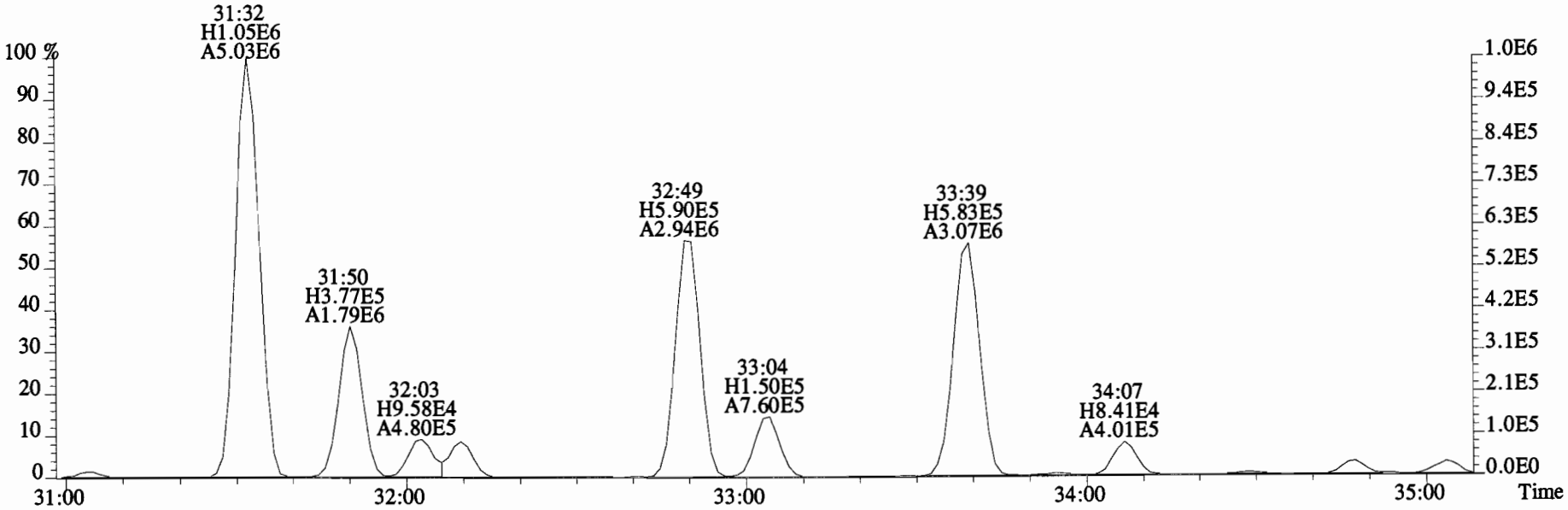
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2900.0,0.00%,F,F)



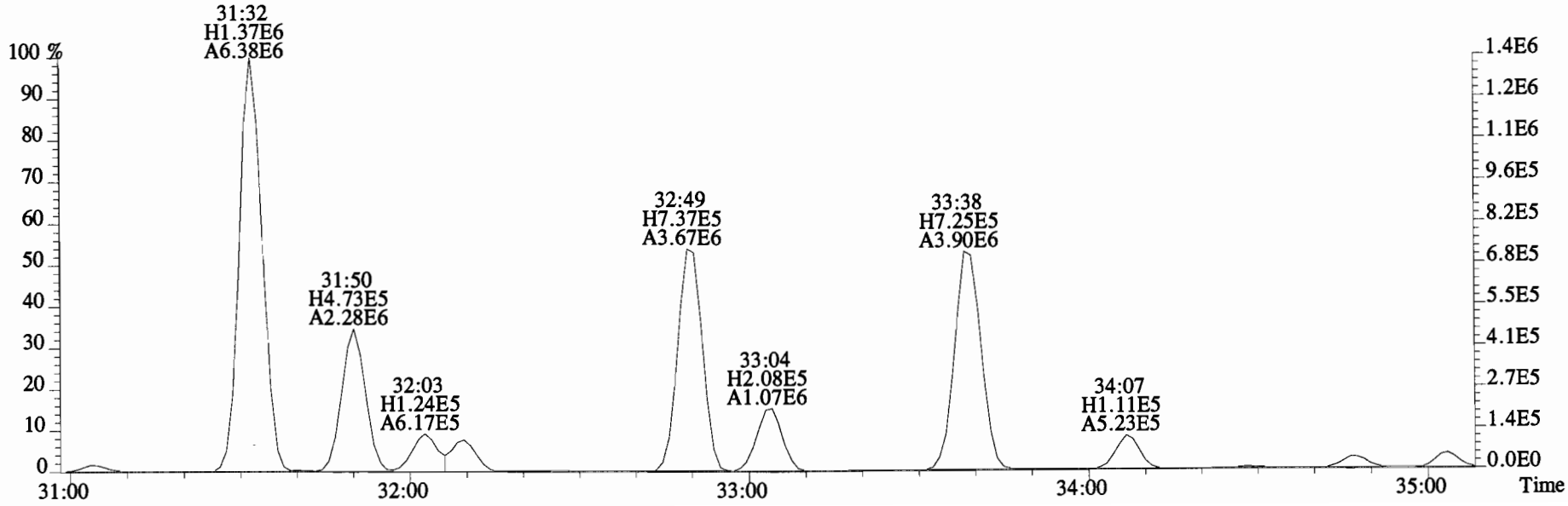
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3608.0,0.00%,F,F)



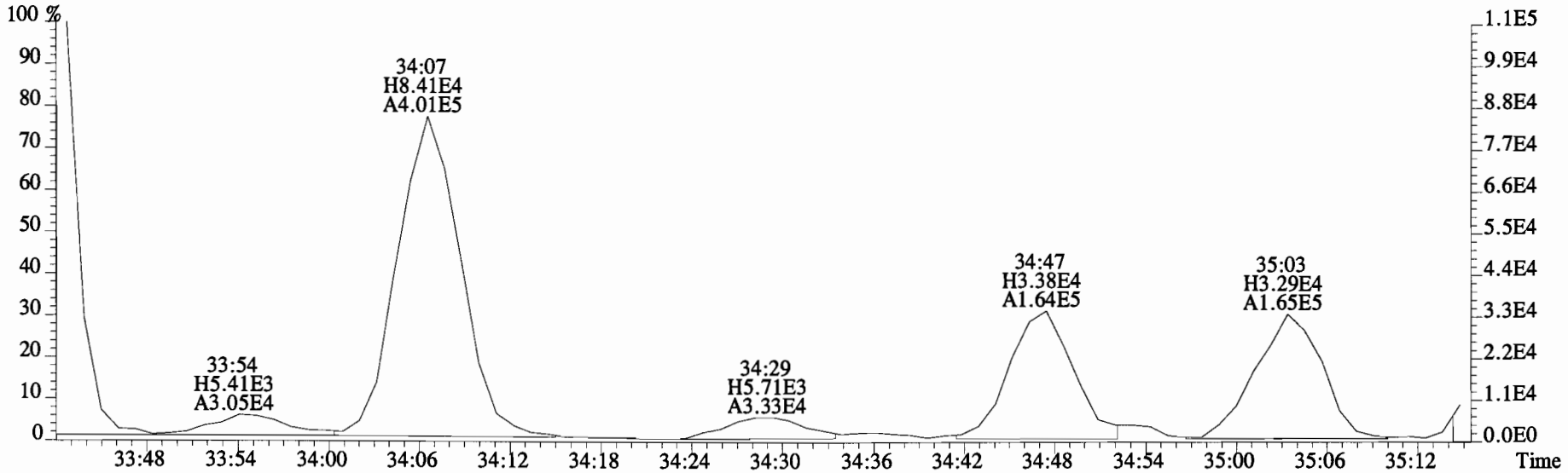
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2900.0,0.00%,F,F)



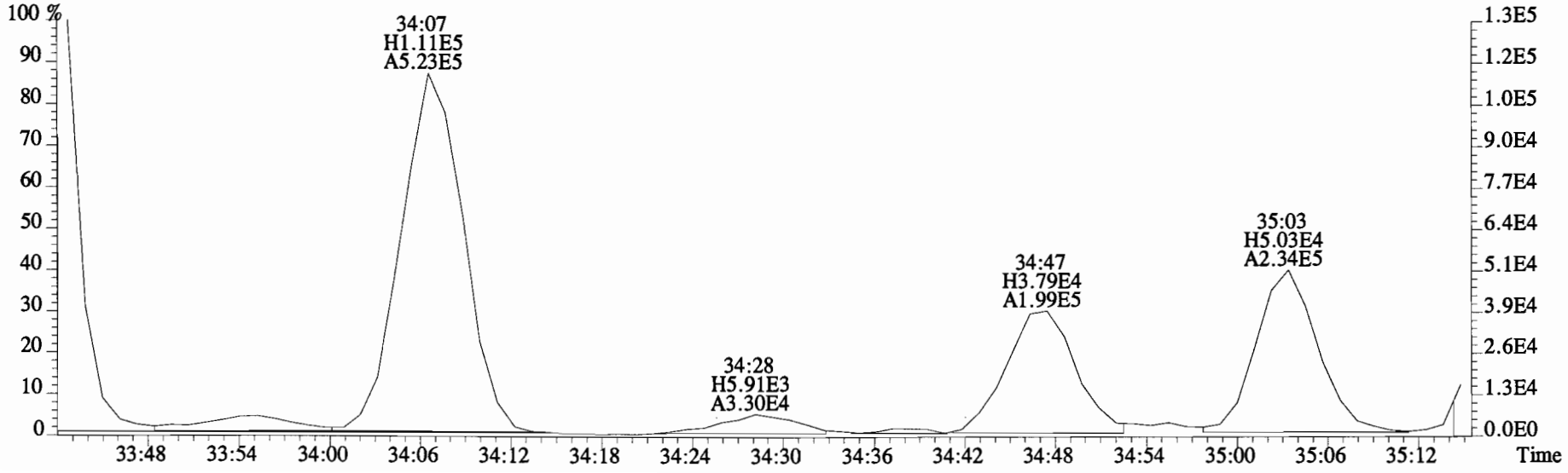
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3608.0,0.00%,F,F)



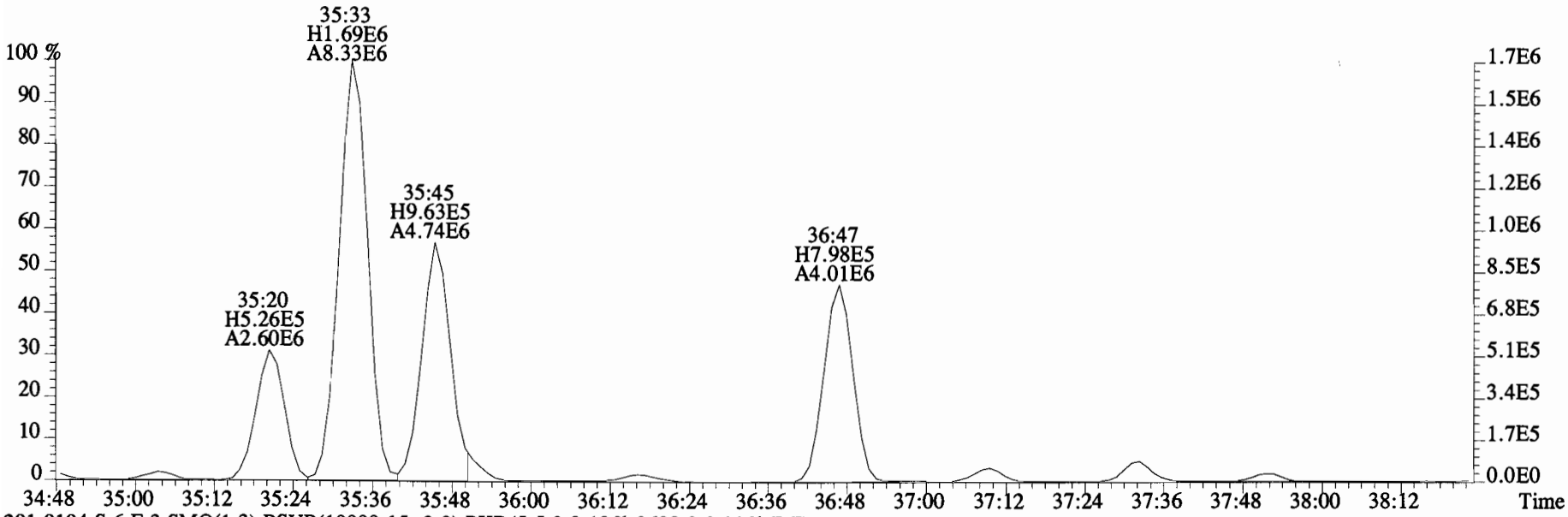
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2900.0,0.00%,F,F)



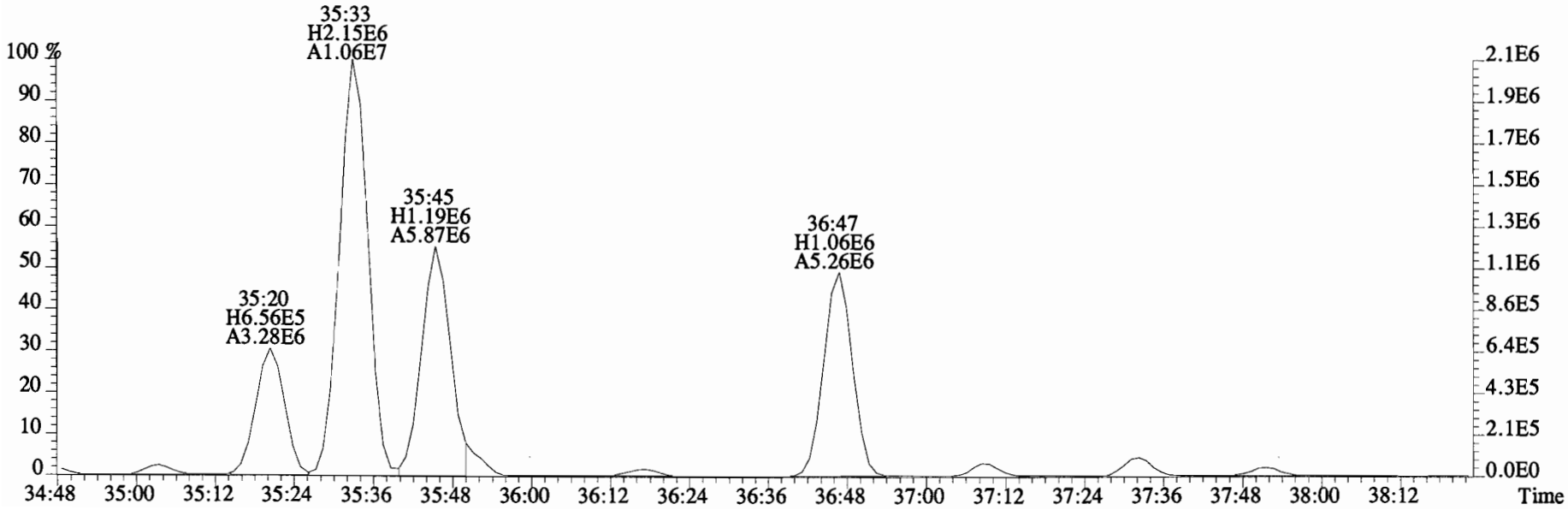
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3608.0,0.00%,F,F)

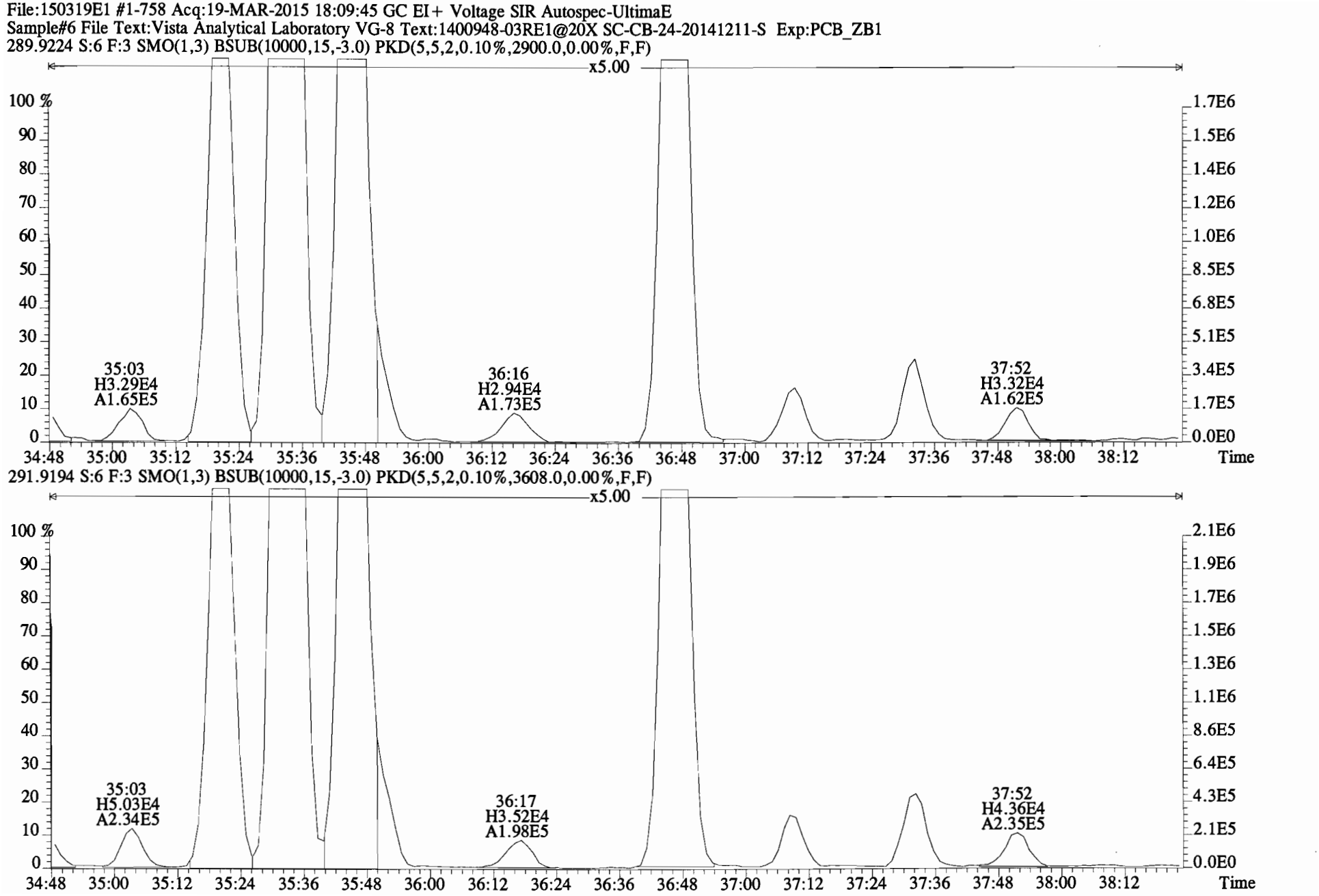


File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2900.0,0.00%,F,F)

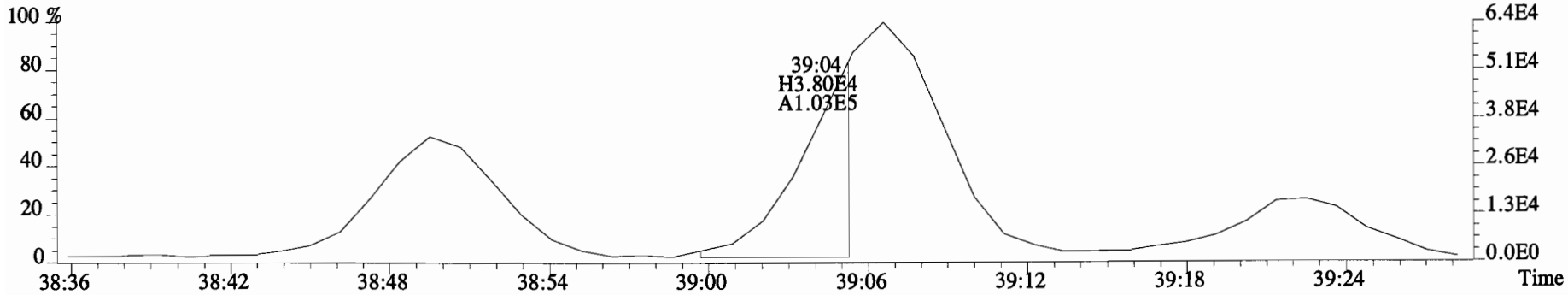


291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3608.0,0.00%,F,F)

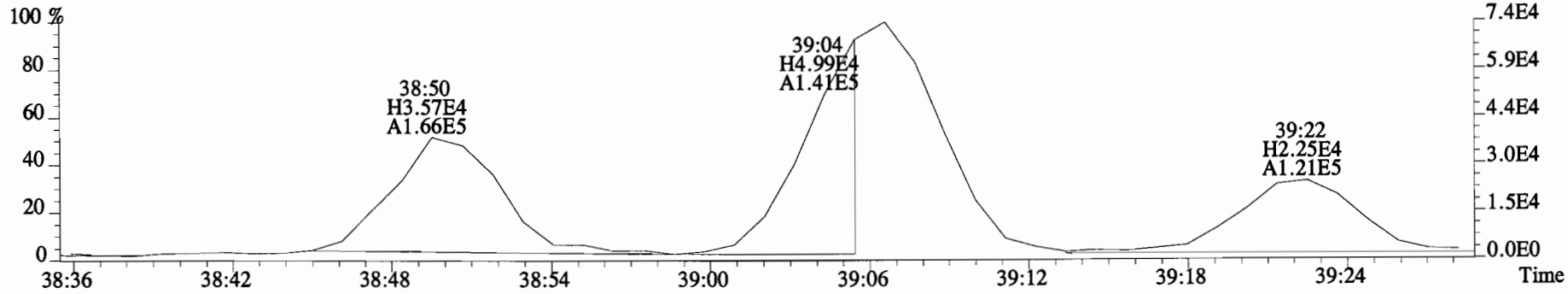



File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2900.0,0.00%,F,F)
x5.00
35:03
H3.29E4
A1.65E5
36:16
H2.94E4
A1.73E5
37:52
H3.32E4
A1.62E5
Time
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3608.0,0.00%,F,F)
x5.00
35:03
H5.03E4
A2.34E5
36:17
H3.52E4
A1.98E5
37:52
H4.36E4
A2.35E5
Time

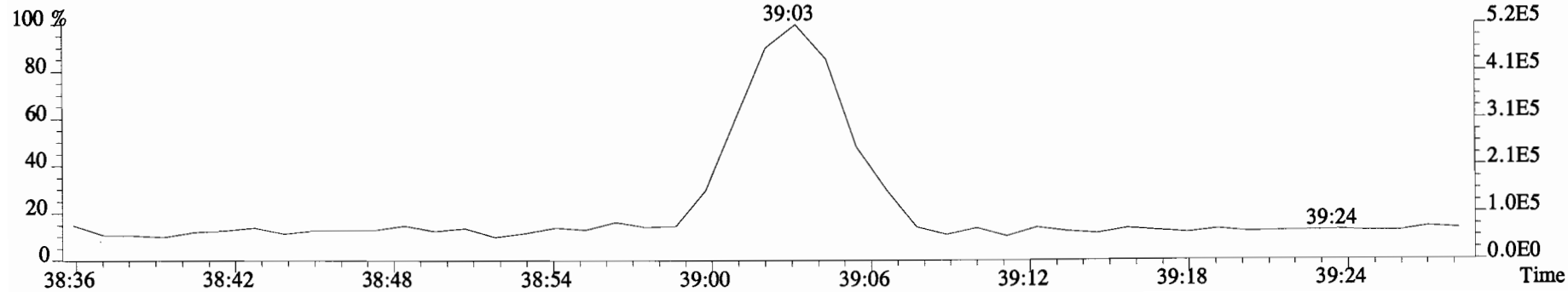
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2900.0,0.00%,F,F)



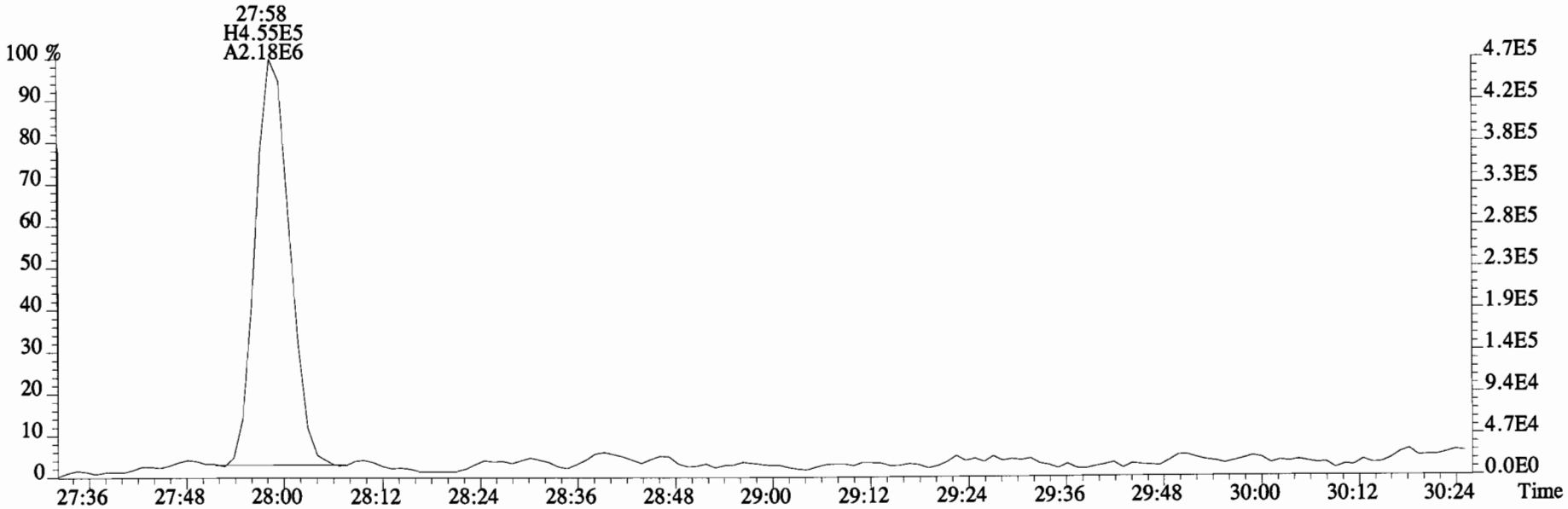
291.9194 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3608.0,0.00%,F,F)



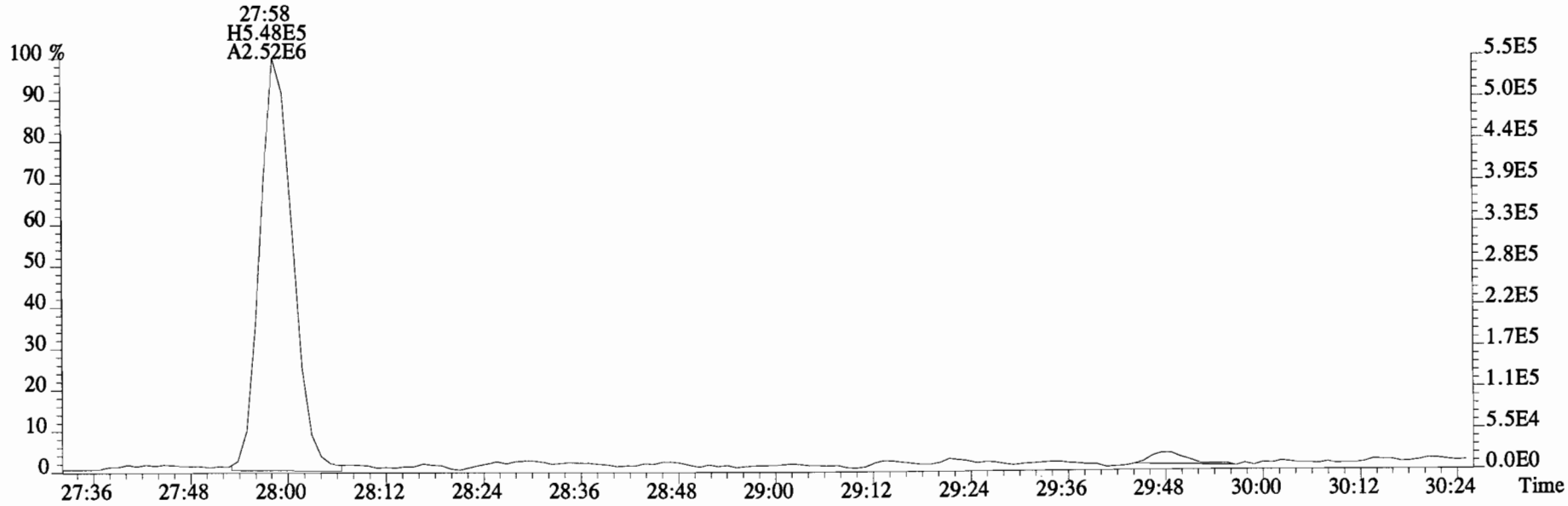
301.9626 S:6 F:3



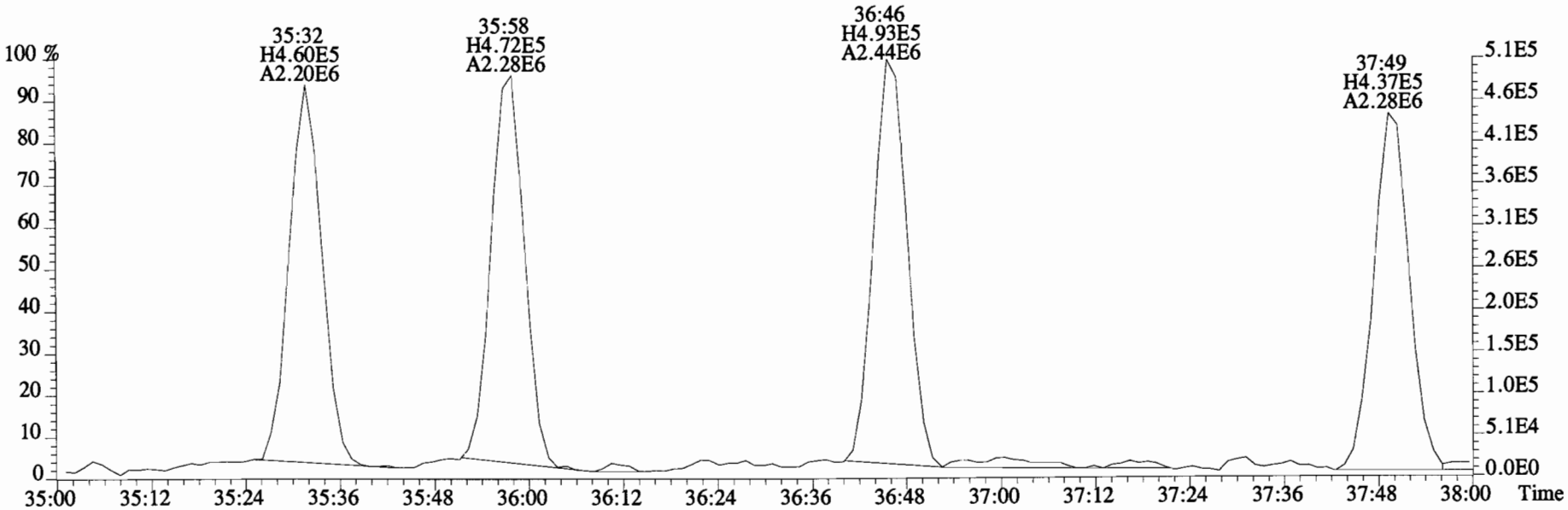
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,19756.0,0.00%,F,F)



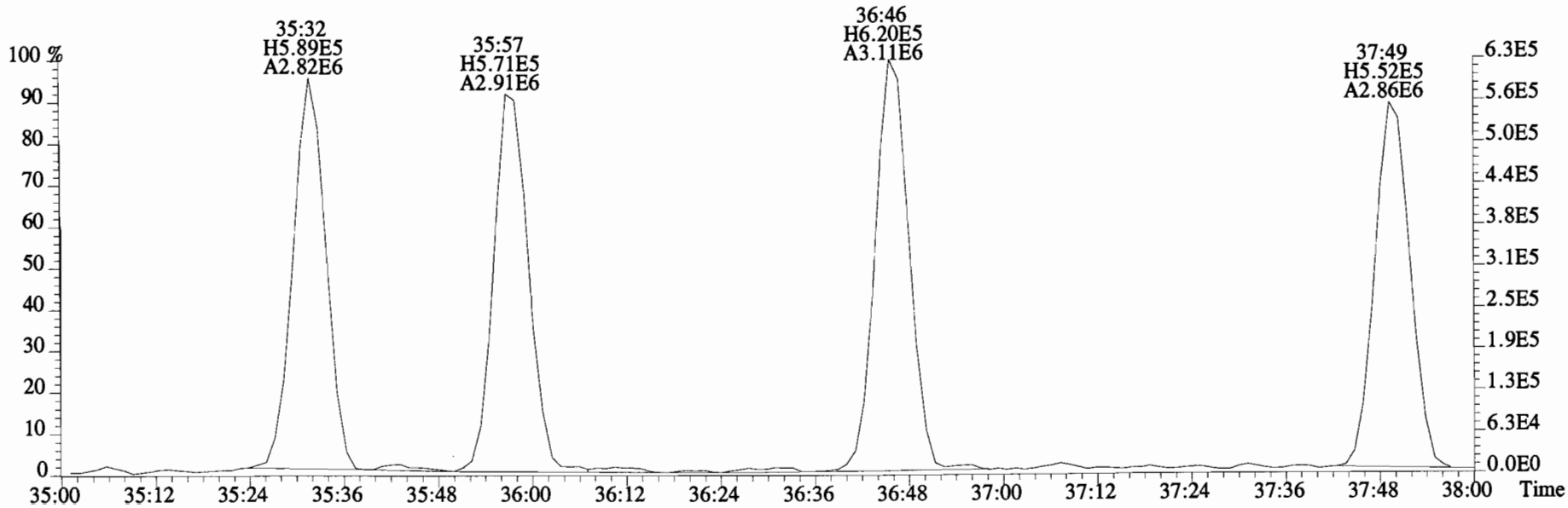
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11216.0,0.00%,F,F)



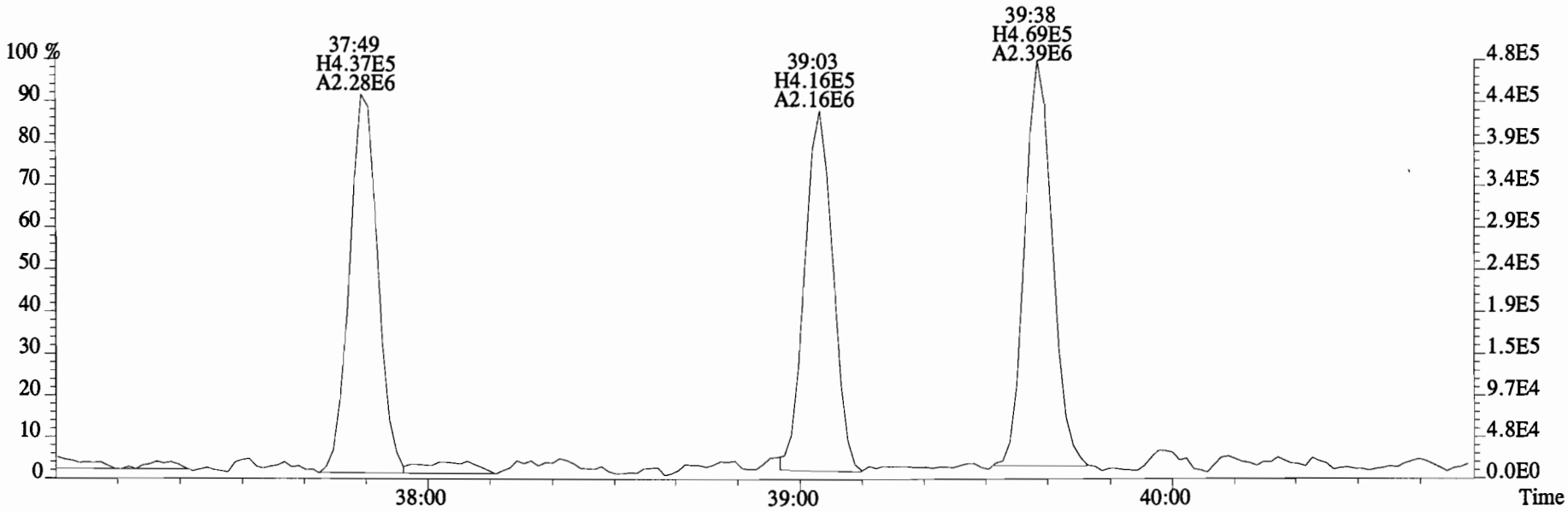
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,19756.0,0.00%,F,F)



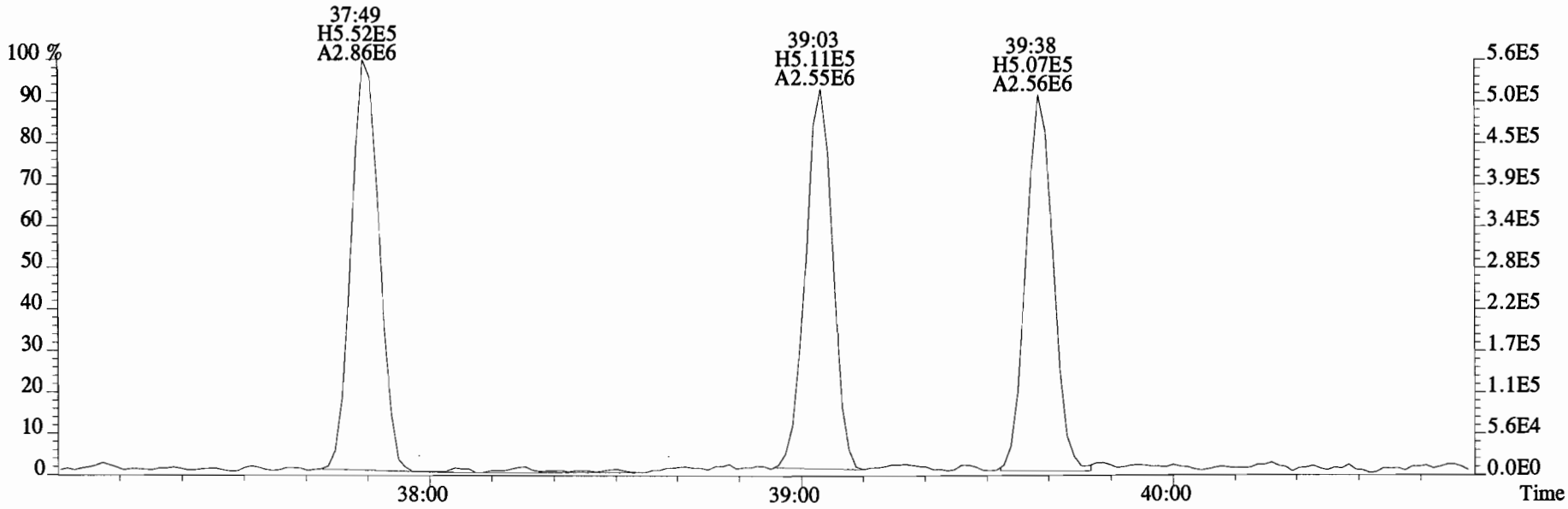
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11216.0,0.00%,F,F)



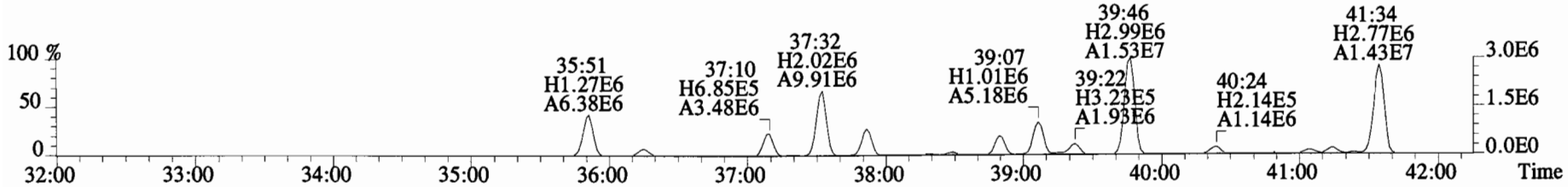
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
301.9626 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,19756.0,0.00%,F,F)



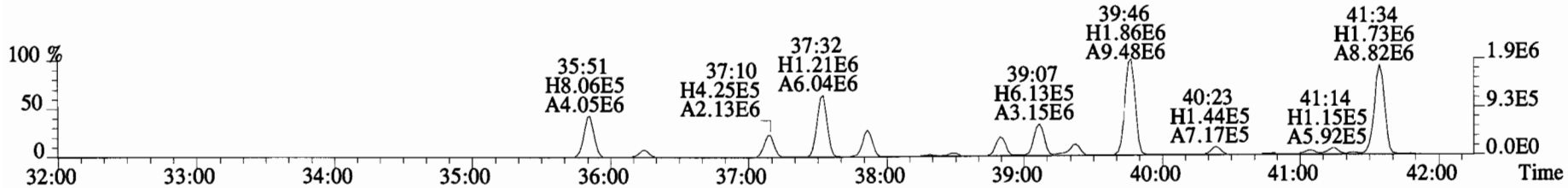
303.9597 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,11216.0,0.00%,F,F)



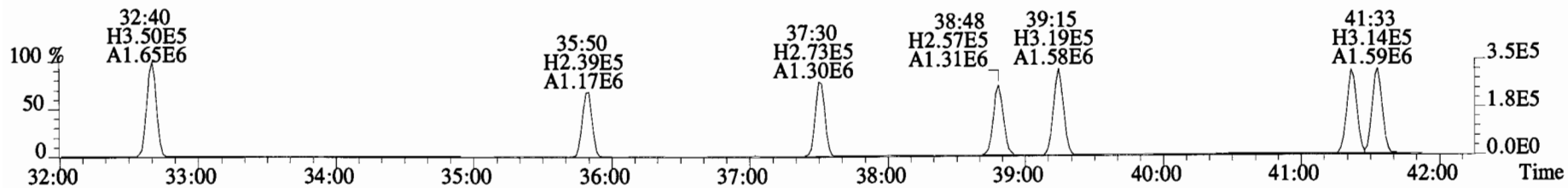
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1836.0,0.00%,F,F)



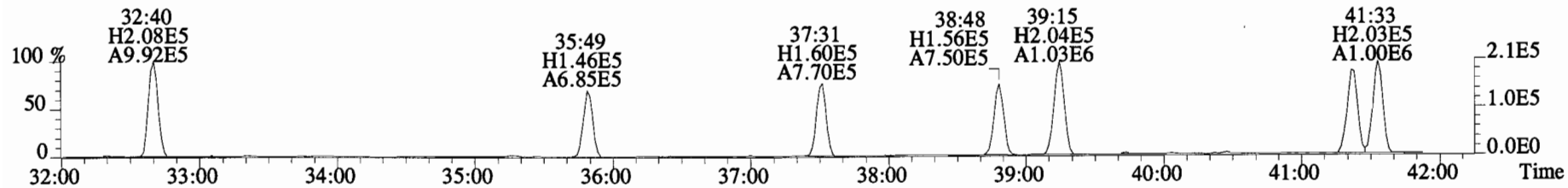
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2092.0,0.00%,F,F)



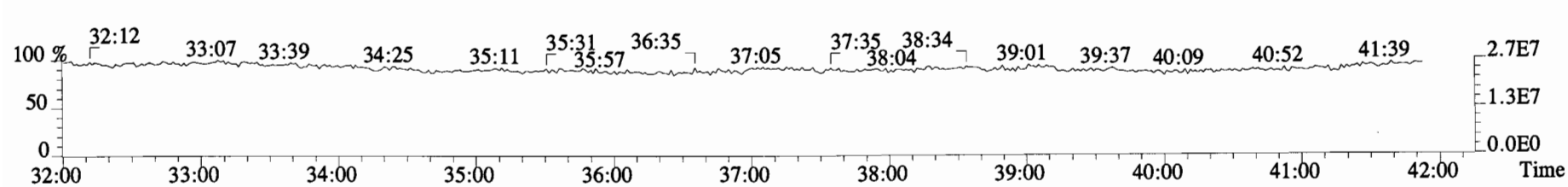
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2484.0,0.00%,F,F)



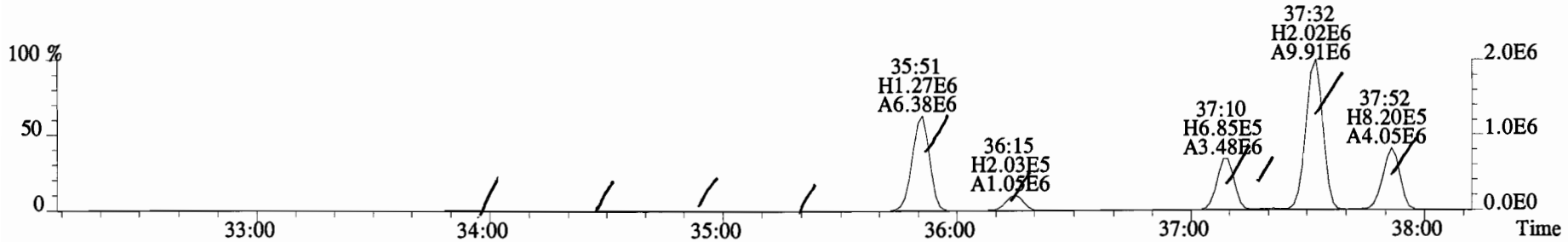
339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2604.0,0.00%,F,F)



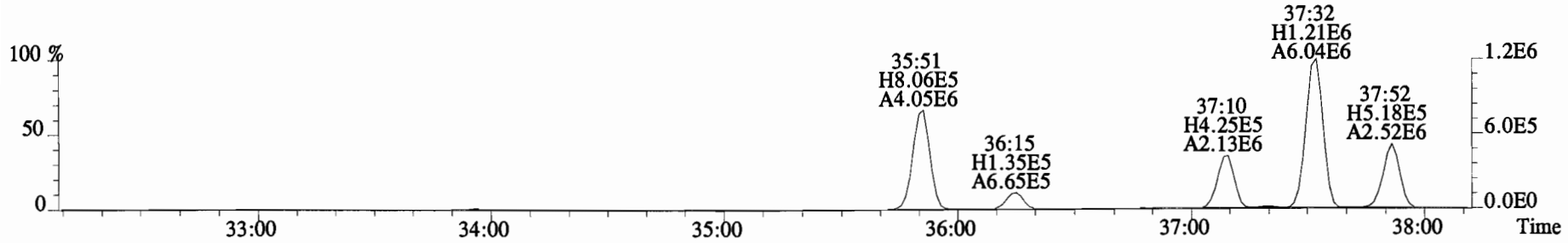
330.9792 S:6 F:3



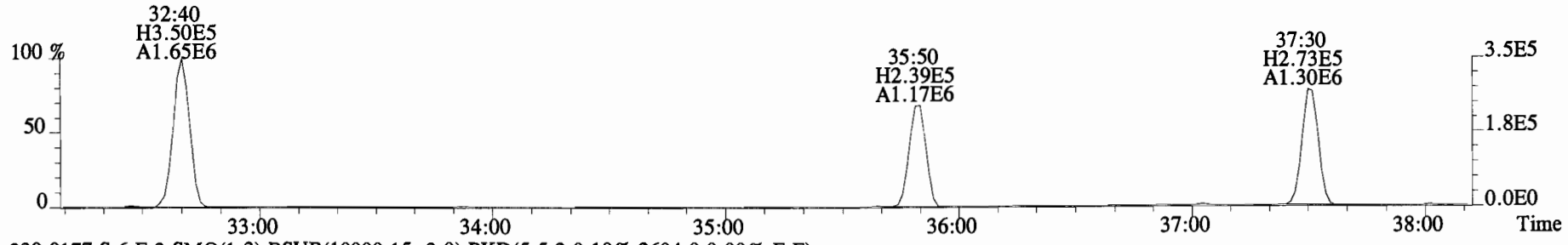
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1836.0,0.00%,F,F)



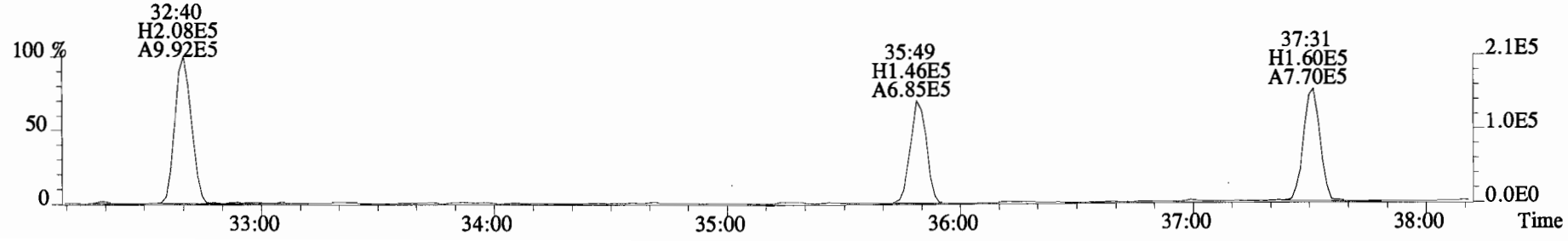
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2092.0,0.00%,F,F)



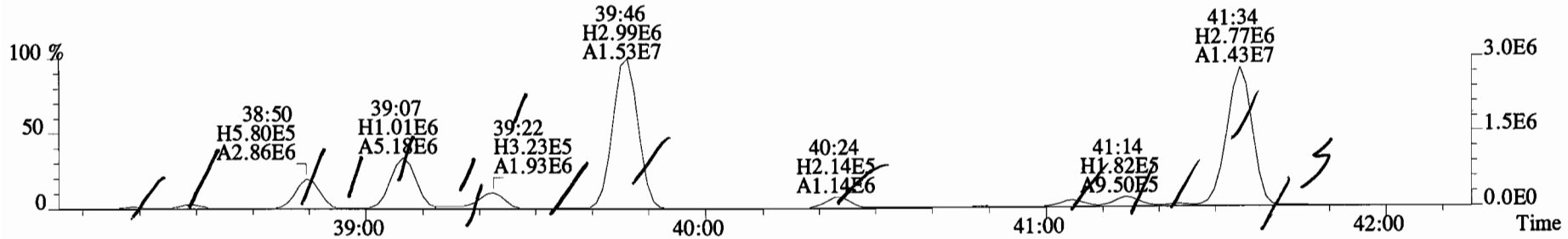
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2484.0,0.00%,F,F)



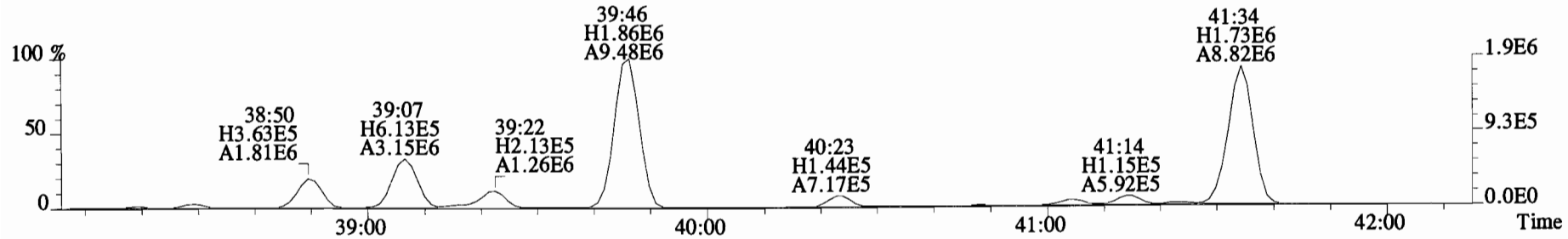
339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2604.0,0.00%,F,F)



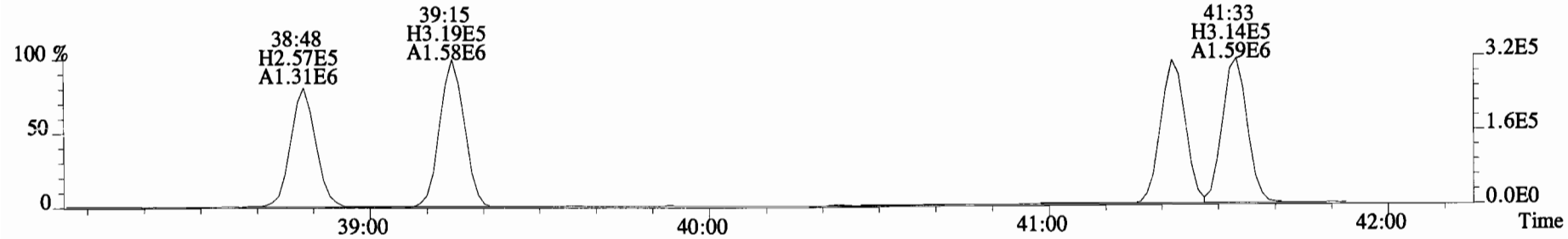
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1836.0,0.00%,F,F)



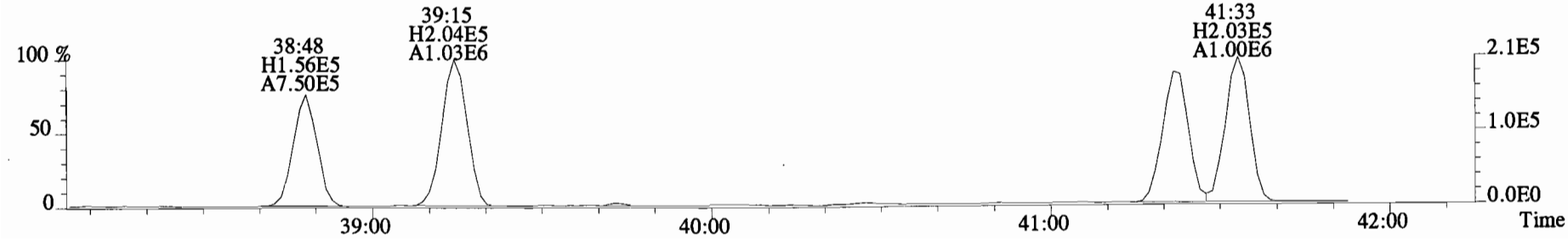
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2092.0,0.00%,F,F)



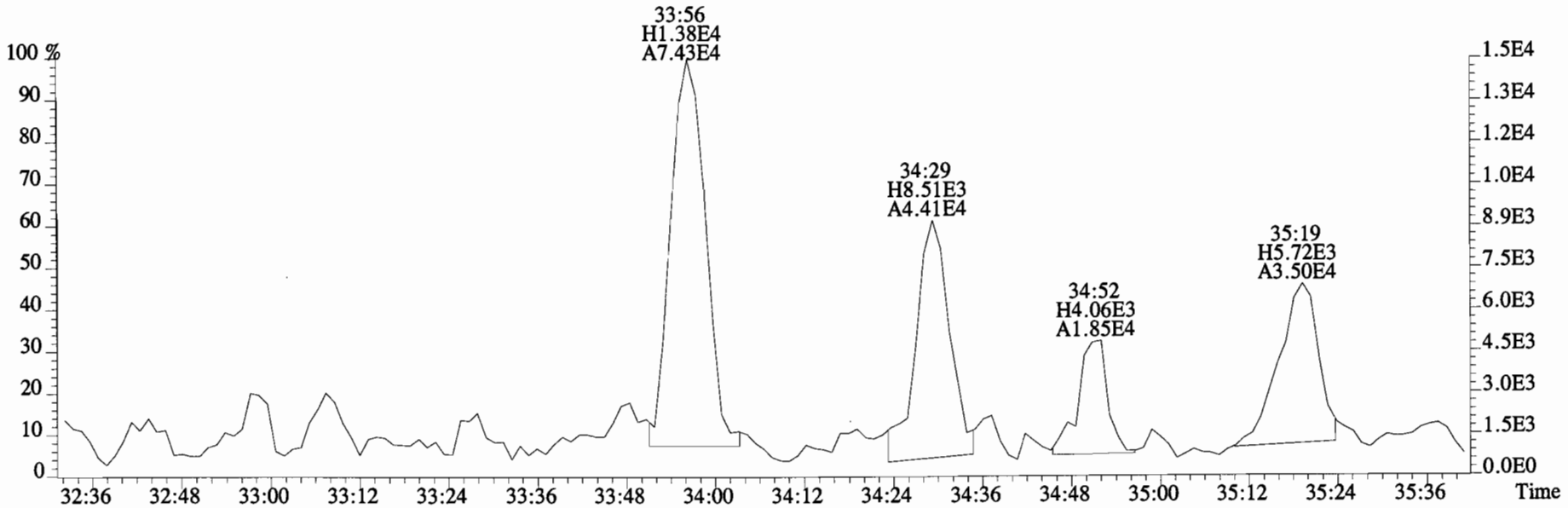
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2484.0,0.00%,F,F)



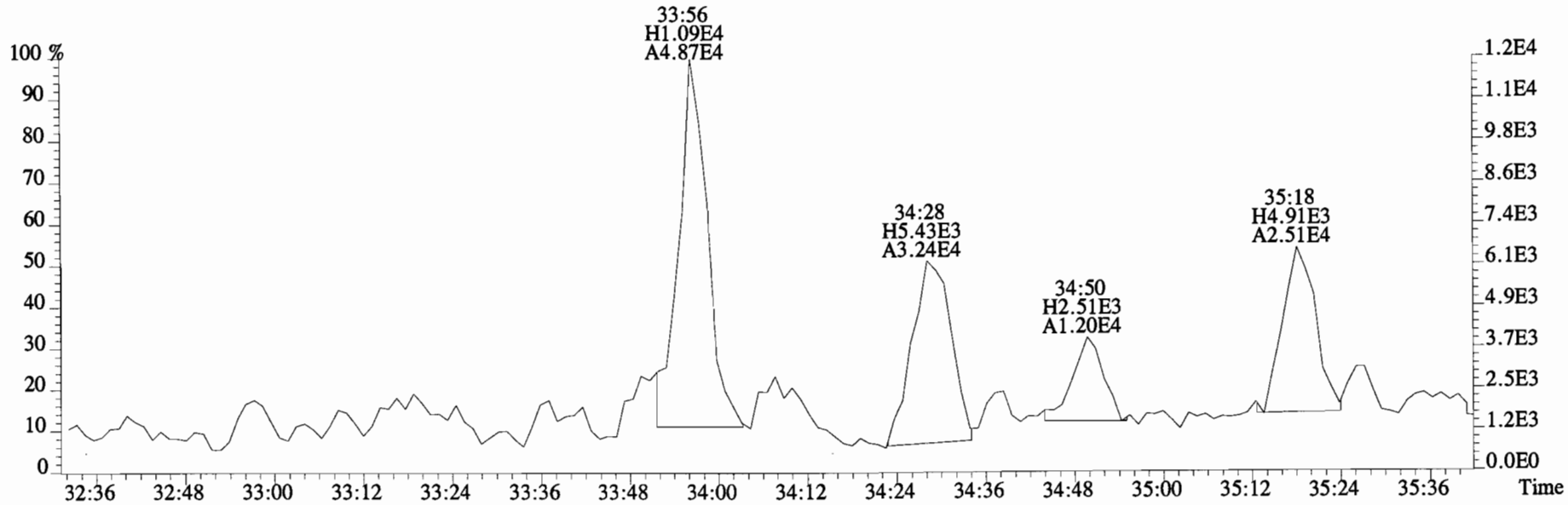
339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2604.0,0.00%,F,F)



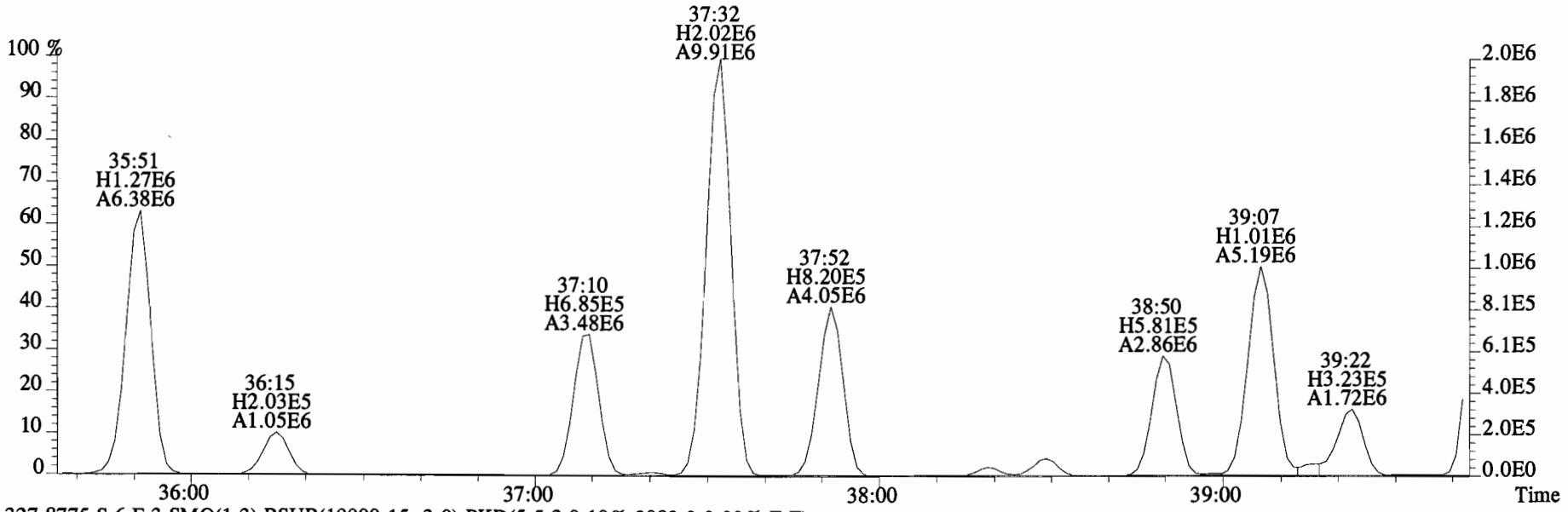
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1836.0,0.00%,F,F)



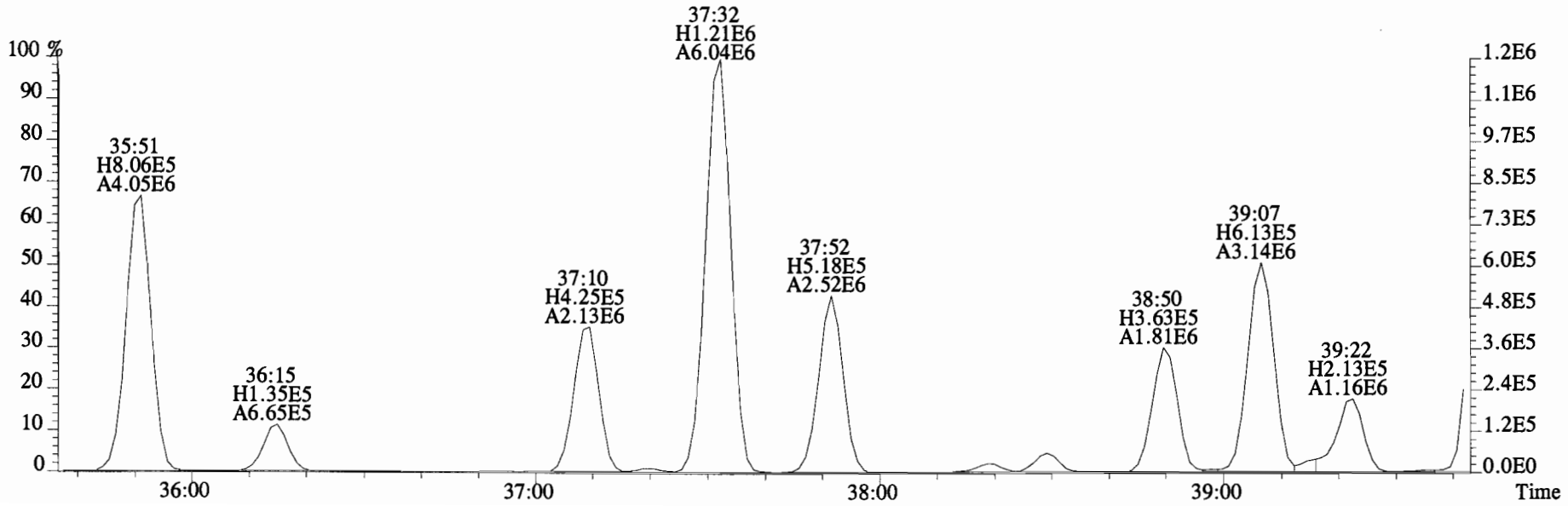
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2092.0,0.00%,F,F)



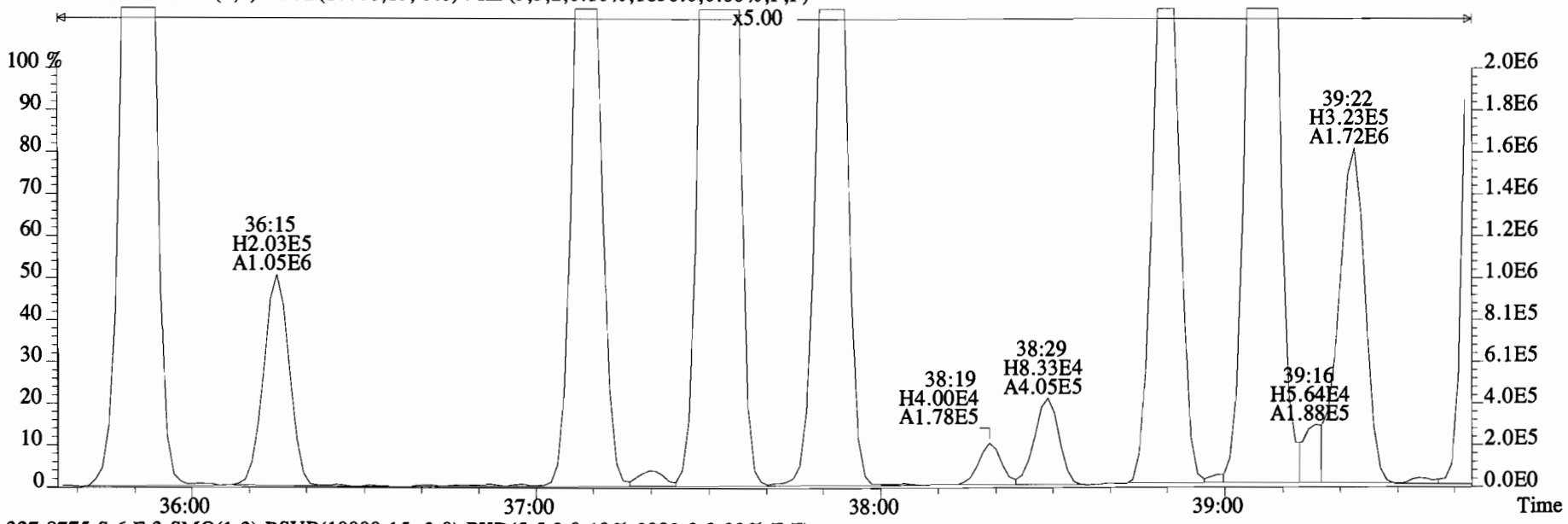
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1836.0,0.00%,F,F)



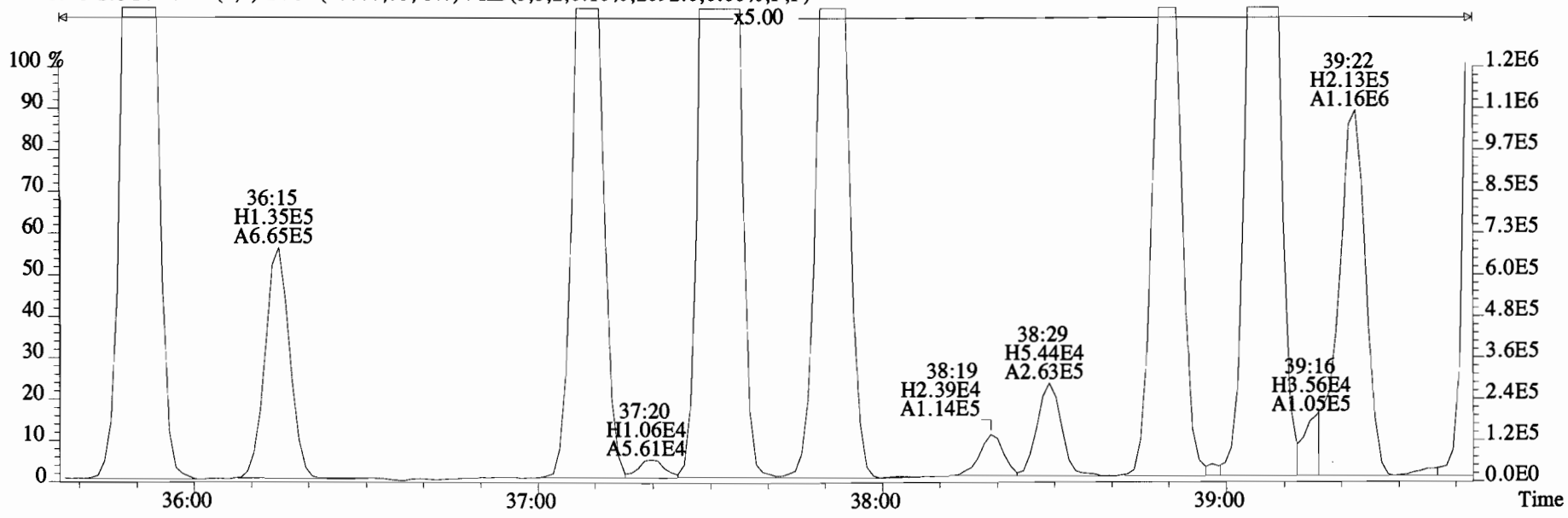
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2092.0,0.00%,F,F)



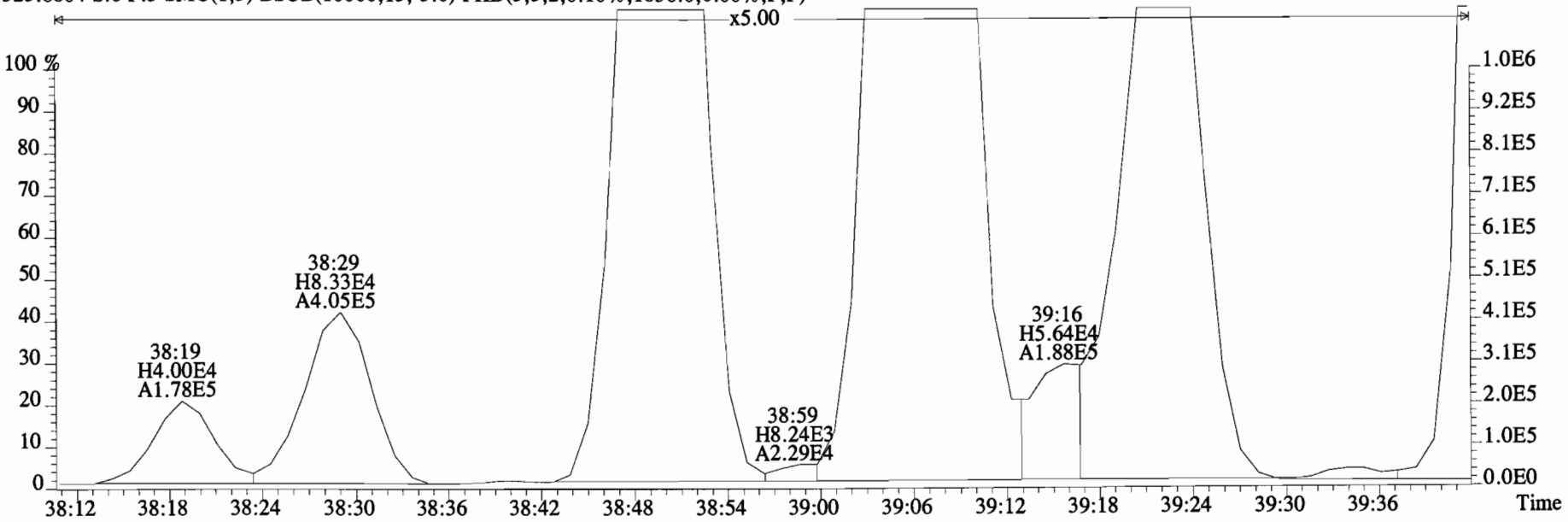
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1836.0,0.00%,F,F)



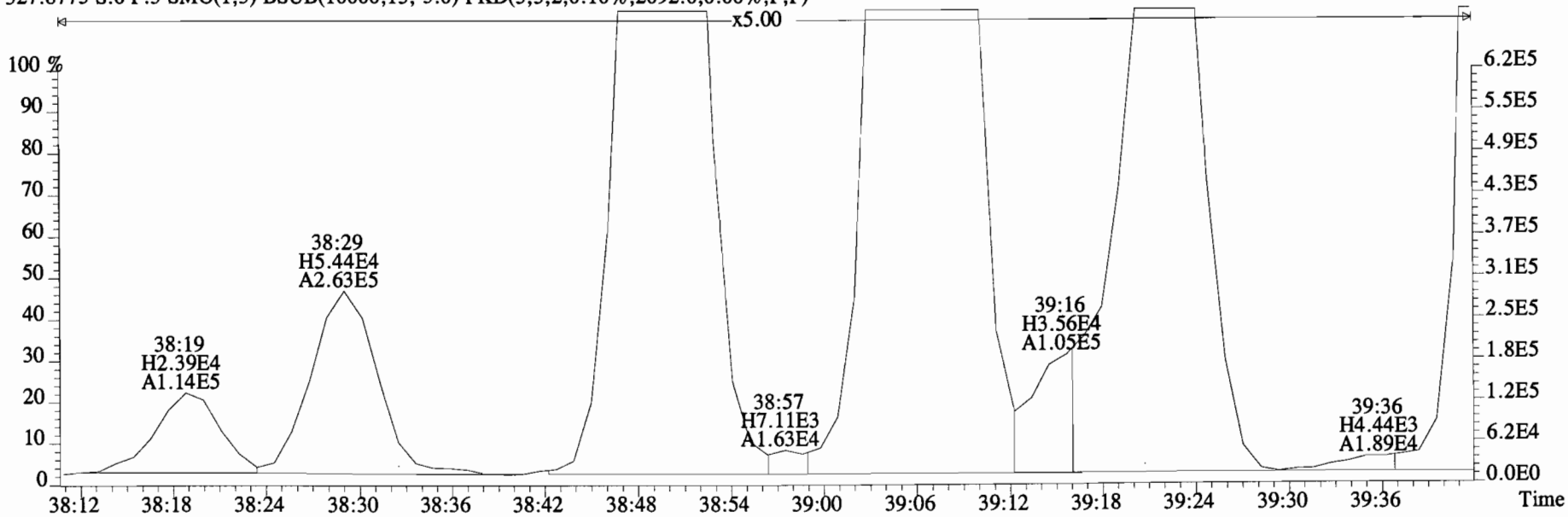
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2092.0,0.00%,F,F)



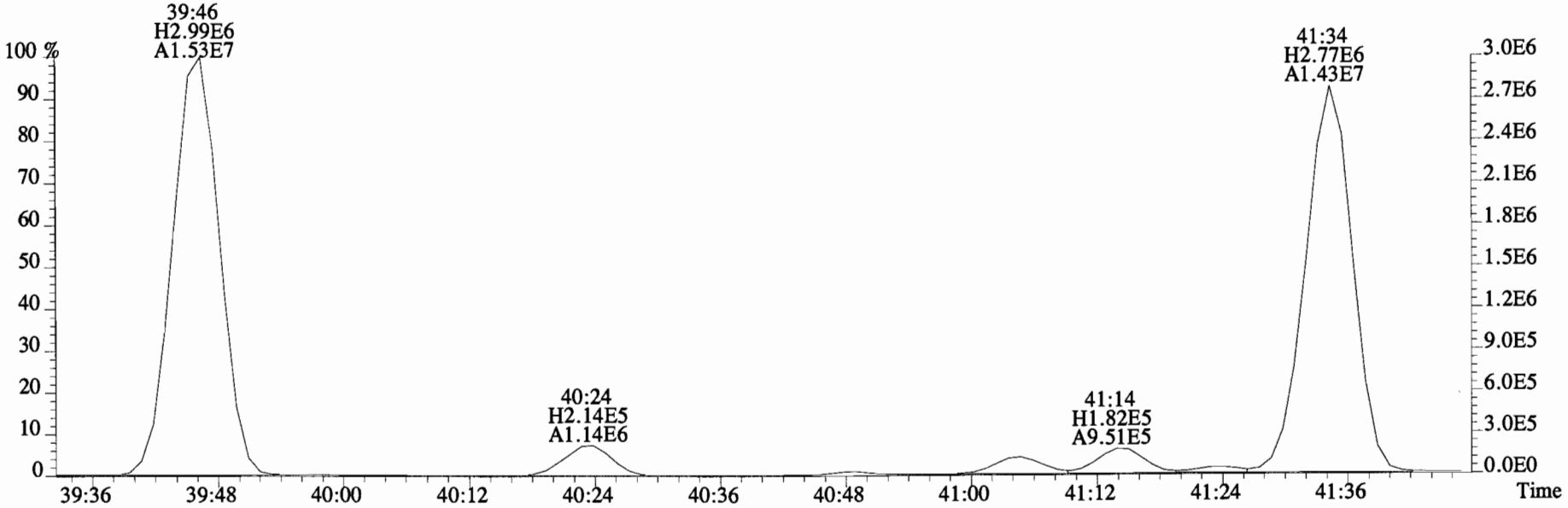
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1836.0,0.00%,F,F)



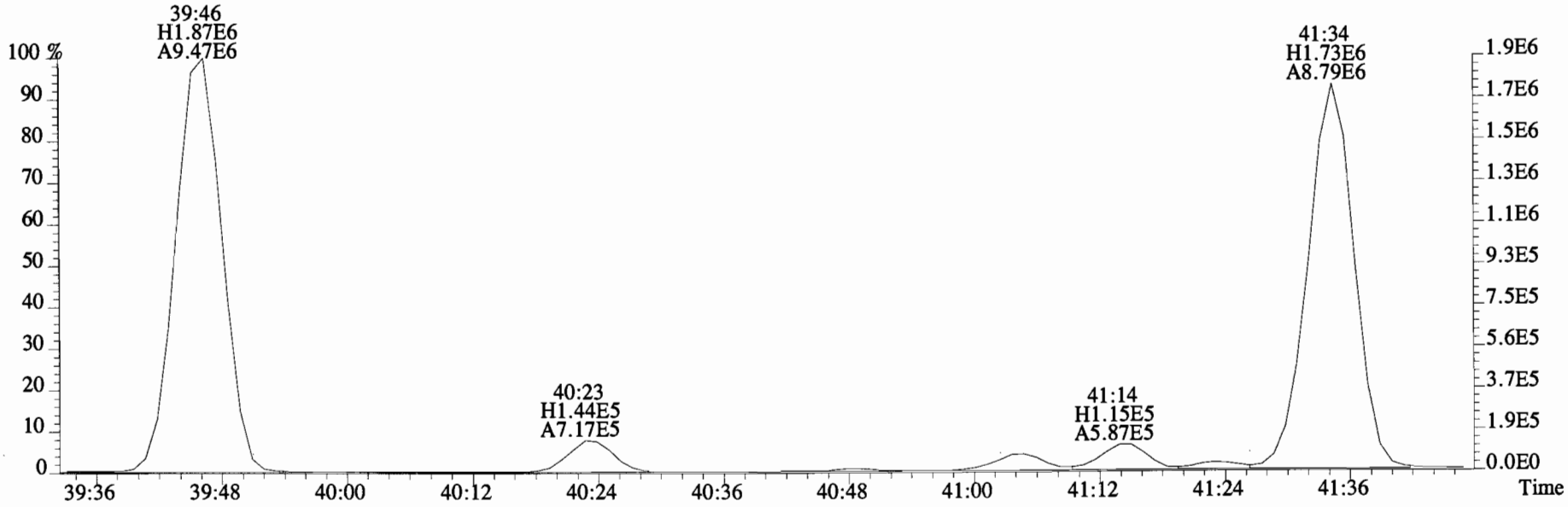
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2092.0,0.00%,F,F)

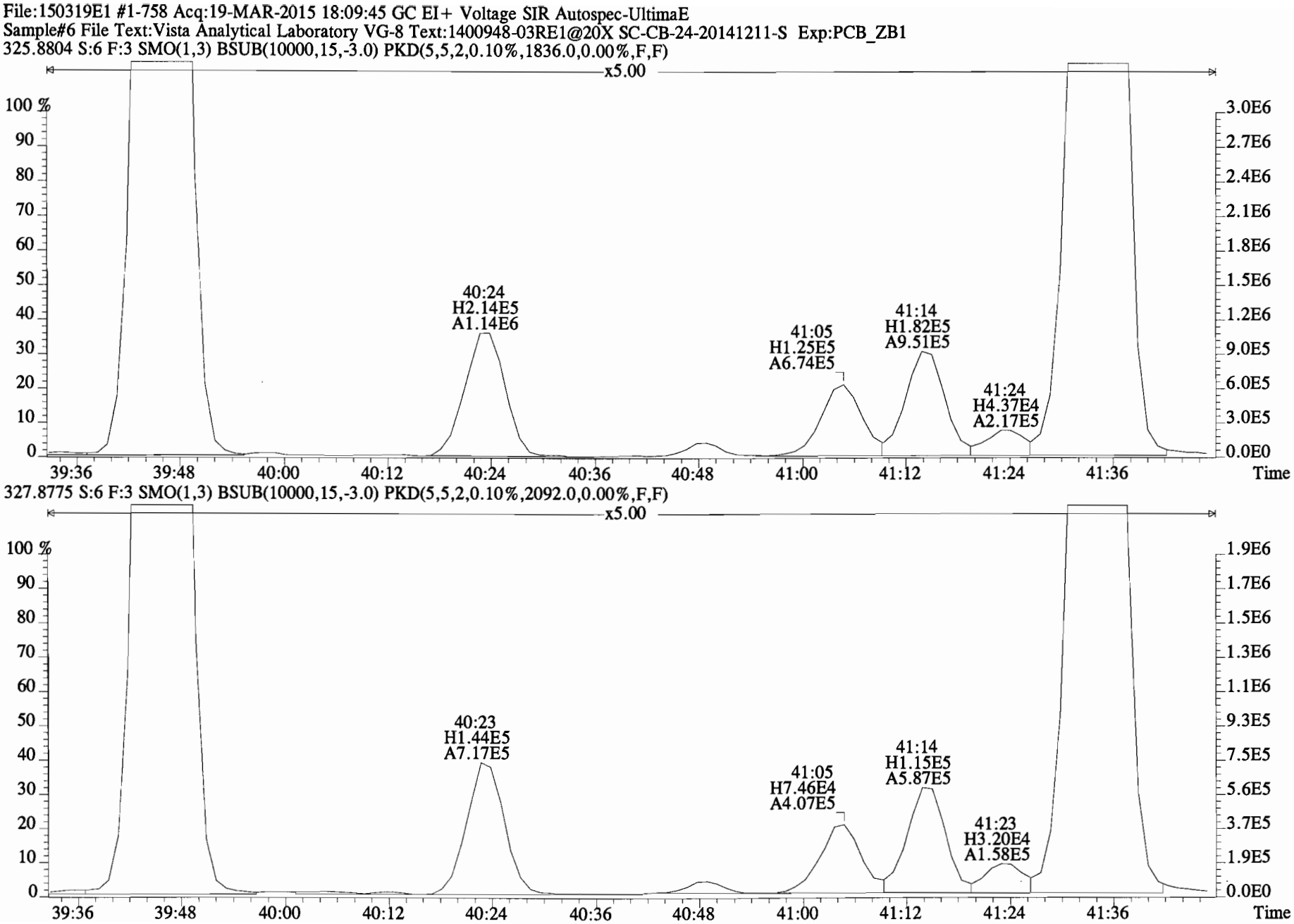


File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1836.0,0.00%,F,F)

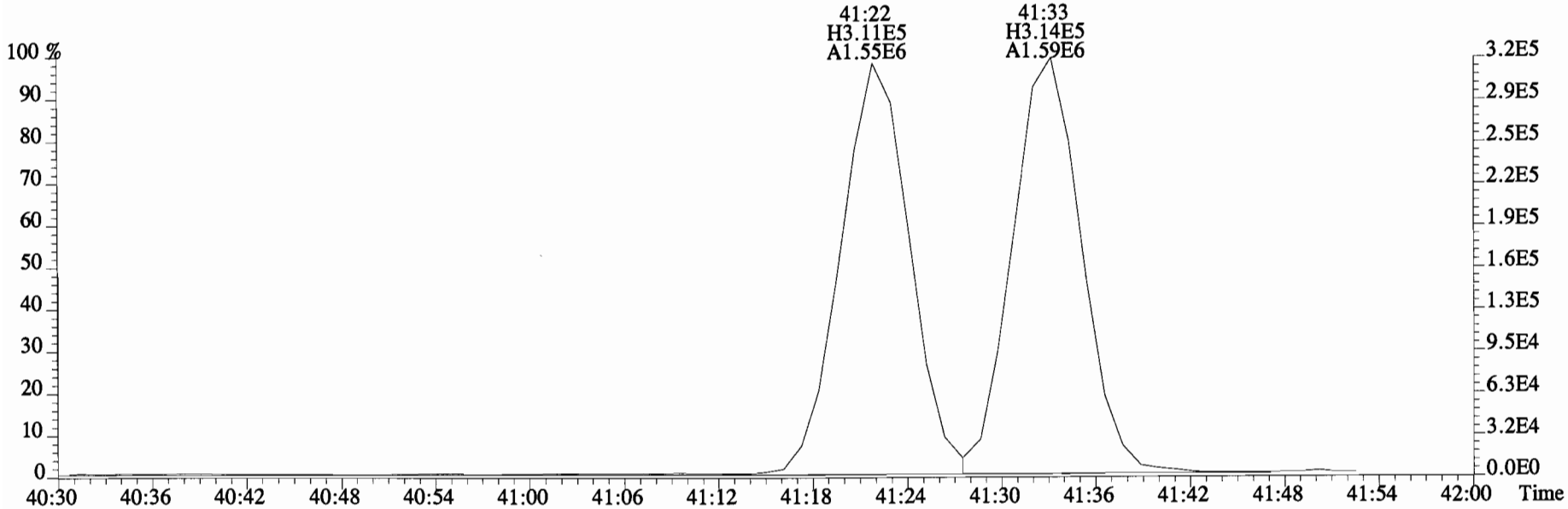


327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2092.0,0.00%,F,F)

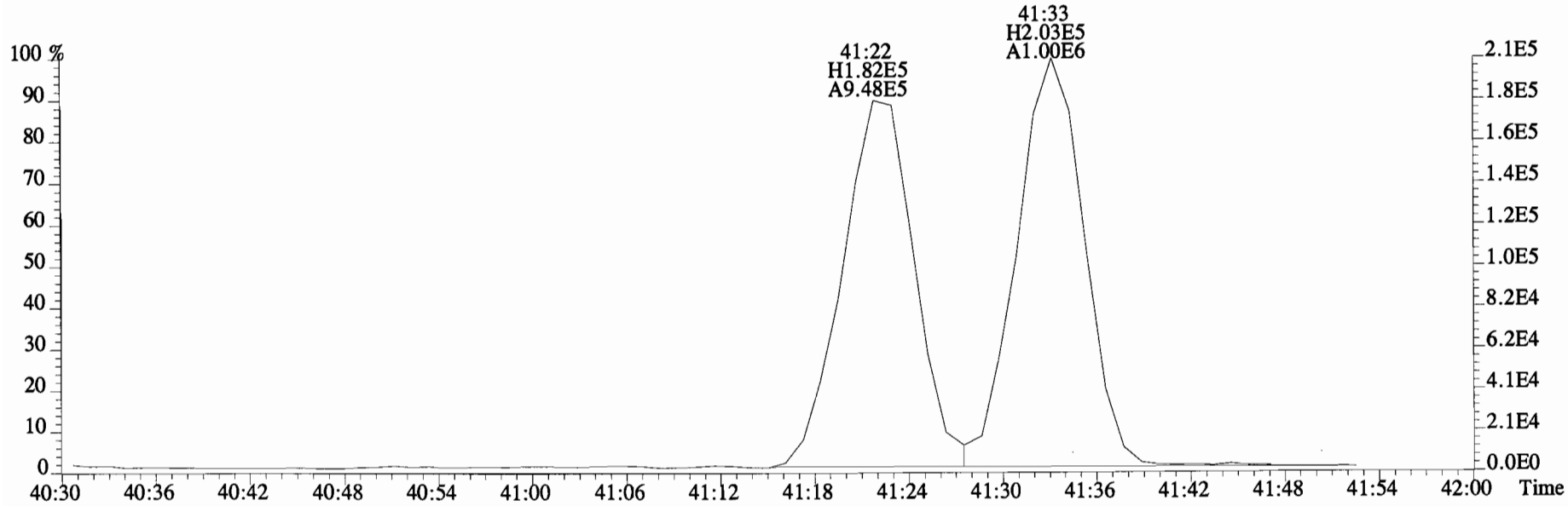



File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1836.0,0.00%,F,F)
x5.00
40:24
H2.14E5
A1.14E6
41:05
H1.25E5
A6.74E5
41:14
H1.82E5
A9.51E5
41:24
H4.37E4
A2.17E5
Time
327.8775 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2092.0,0.00%,F,F)
x5.00
40:23
H1.44E5
A7.17E5
41:05
H7.46E4
A4.07E5
41:14
H1.15E5
A5.87E5
41:23
H3.20E4
A1.58E5
Time

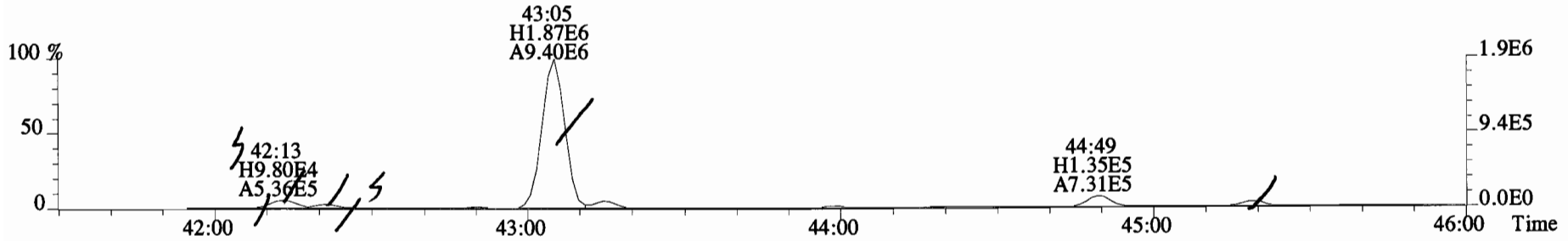
File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
337.9207 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2484.0,0.00%,F,F)



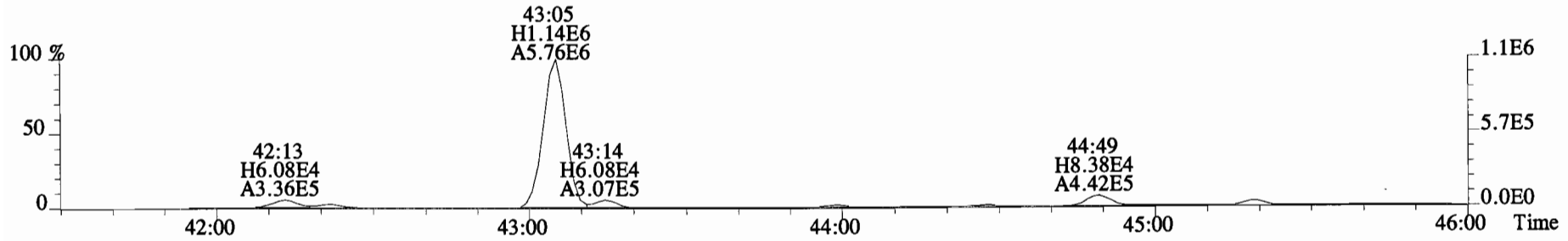
339.9177 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2604.0,0.00%,F,F)



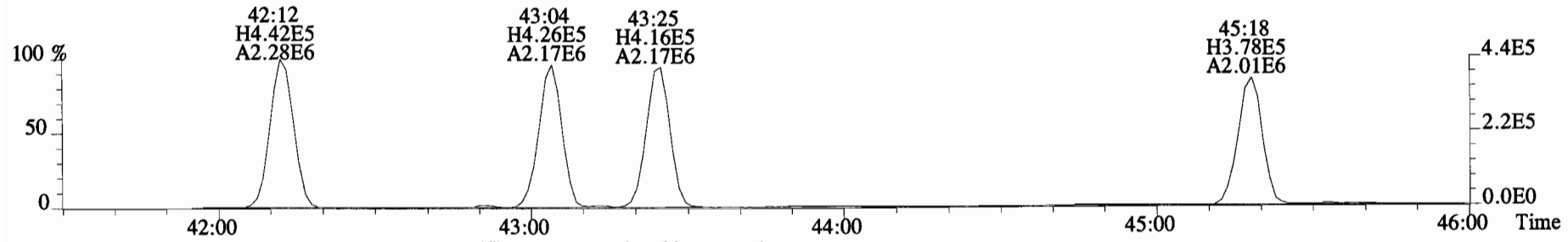
File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7180.0,0.00%,F,F)



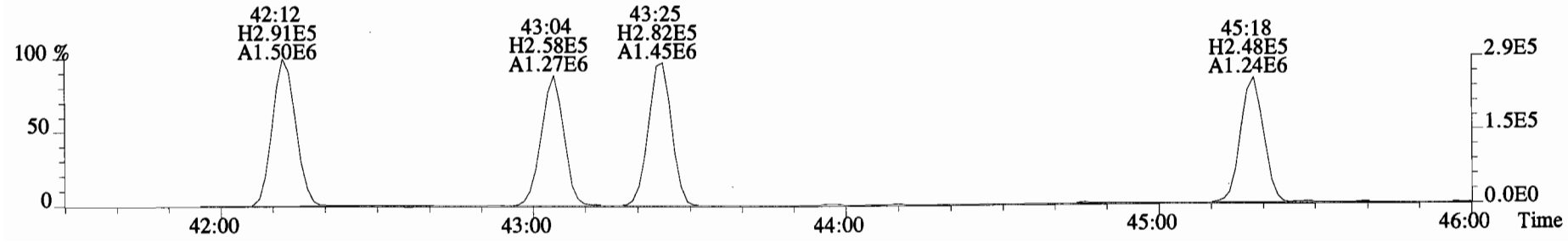
327.8775 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3924.0,0.00%,F,F)



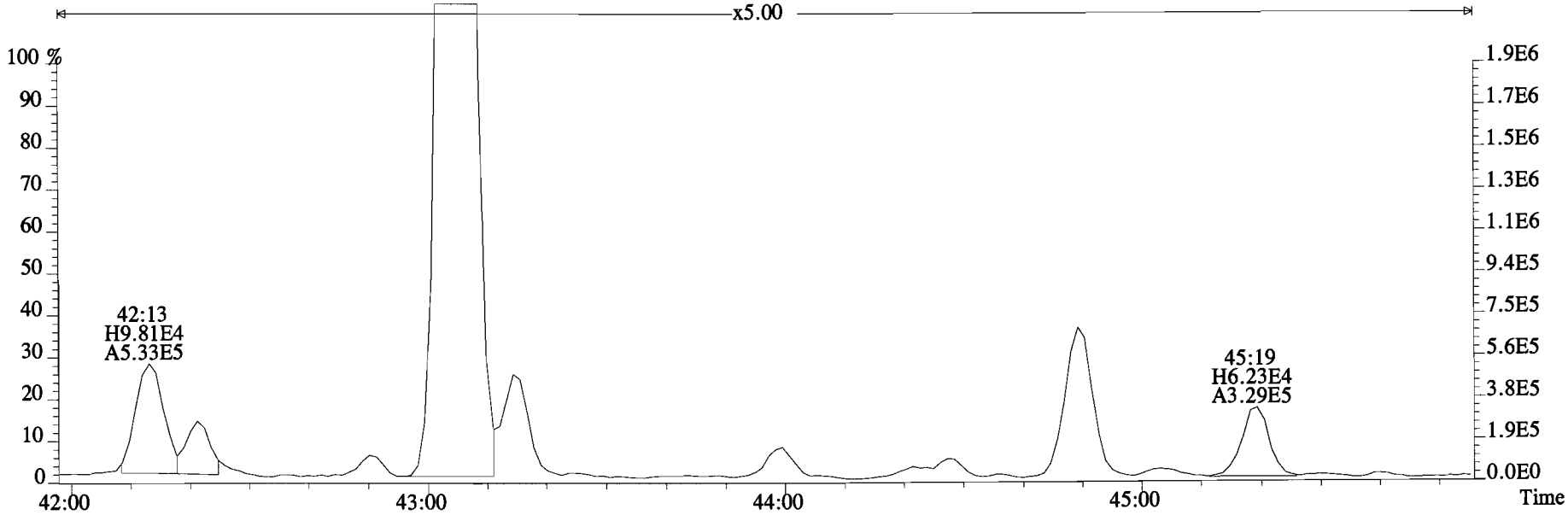
337.9207 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2524.0,0.00%,F,F)



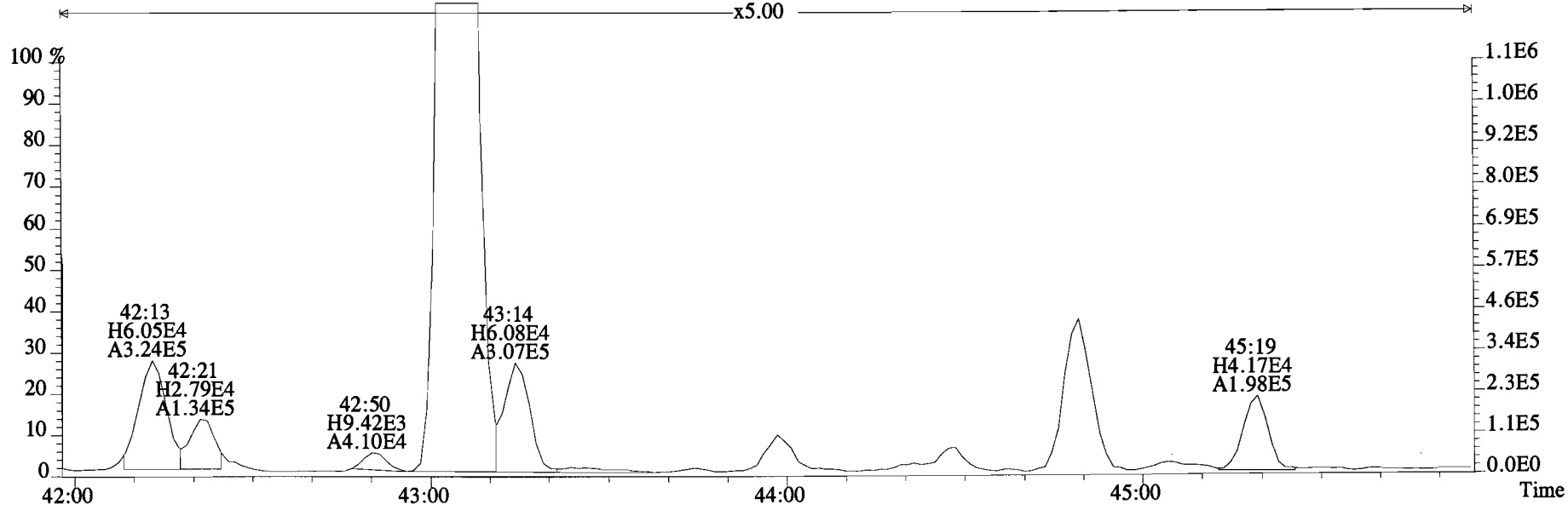
339.9177 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1788.0,0.00%,F,F)

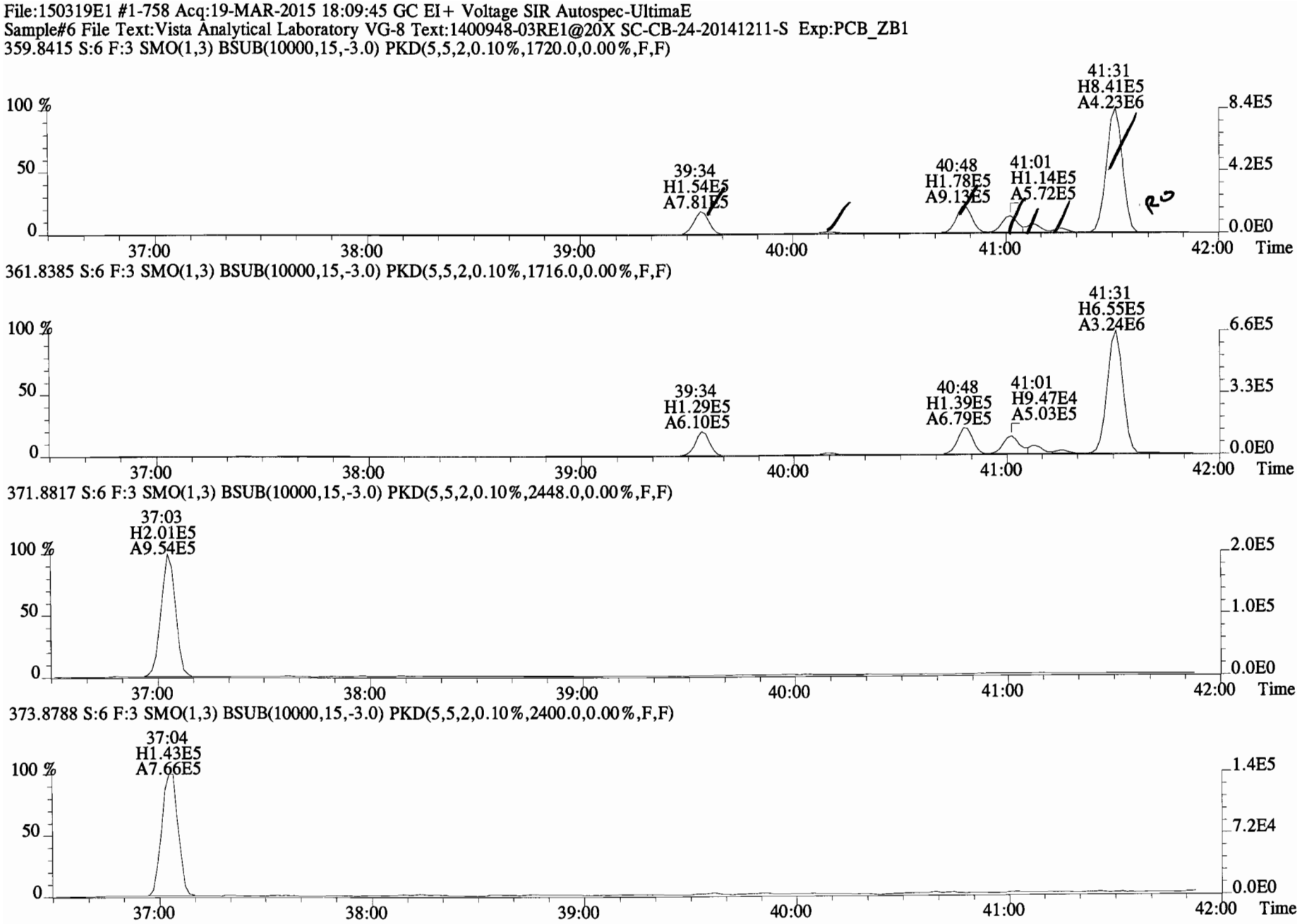


File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7180.0,0.00%,F,F)

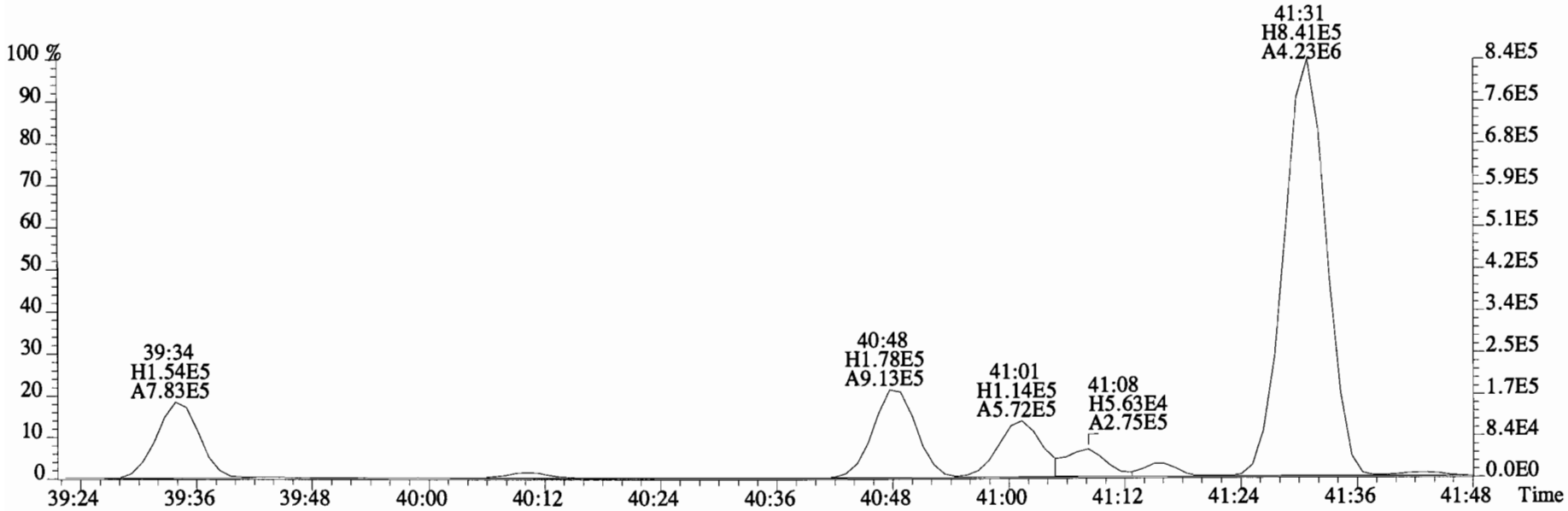


327.8775 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3924.0,0.00%,F,F)

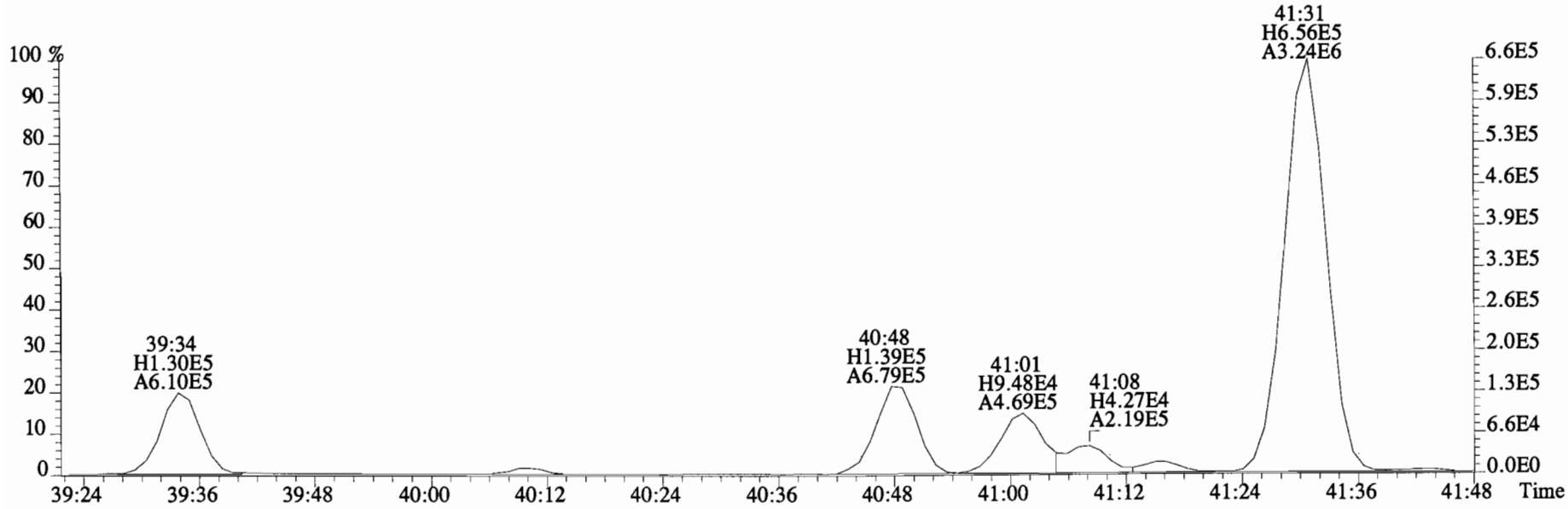


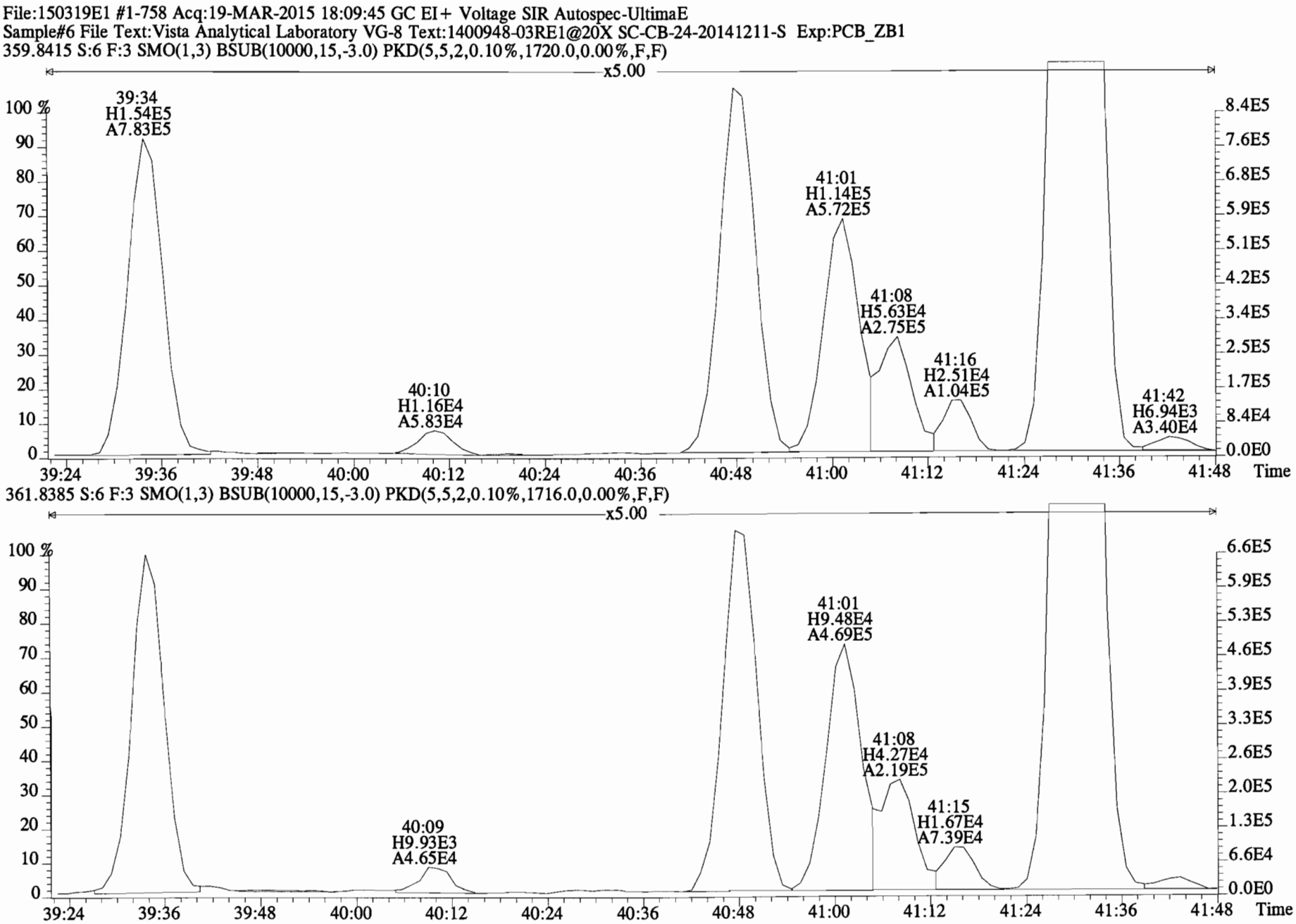

File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1720.0,0.00%,F,F)
41:31
H8.41E5
A4.23E6
39:34
H1.54E5
A7.81E5
40:48
H1.78E5
A9.13E5
41:01
H1.14E5
A5.72E5
RD
100 %
50
0
8.4E5
4.2E5
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(5,5,2,0.10%,1716.0,0.00%,F,F)
41:31
H6.55E5
A3.24E6
39:34
H1.29E5
A6.10E5
40:48
H1.39E5
A6.79E5
41:01
H9.47E4
A5.03E5
100 %
50
0
6.6E5
3.3E5
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(5,5,2,0.10%,2448.0,0.00%,F,F)
37:03
H2.01E5
A9.54E5
100 %
50
0
2.0E5
1.0E5
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(5,5,2,0.10%,2400.0,0.00%,F,F)
37:04
H1.43E5
A7.66E5
100 %
50
0
1.4E5
7.2E4
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time

File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1720.0,0.00%,F,F)

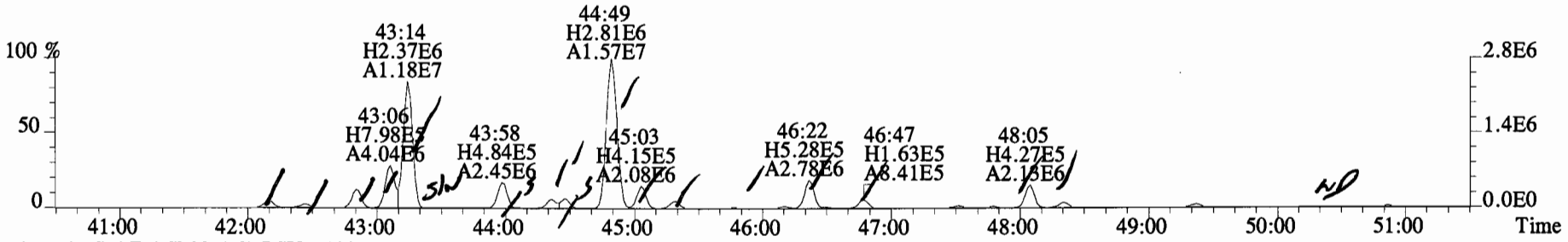


361.8385 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1716.0,0.00%,F,F)

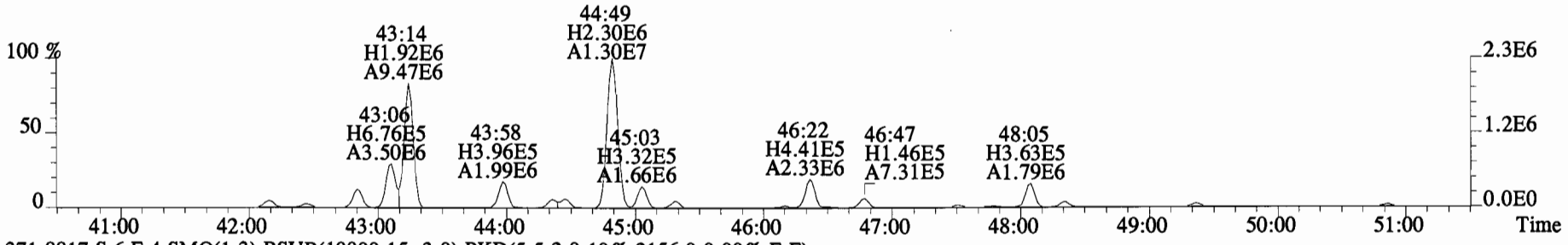



File:150319E1 #1-758 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
359.8415 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1720.0,0.00%,F,F)
x5.00
39:34
H1.54E5
A7.83E5
40:10
H1.16E4
A5.83E4
41:01
H1.14E5
A5.72E5
41:08
H5.63E4
A2.75E5
41:16
H2.51E4
A1.04E5
41:42
H6.94E3
A3.40E4
Time
361.8385 S:6 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1716.0,0.00%,F,F)
x5.00
40:09
H9.93E3
A4.65E4
41:01
H9.48E4
A4.69E5
41:08
H4.27E4
A2.19E5
41:15
H1.67E4
A7.39E4
Time

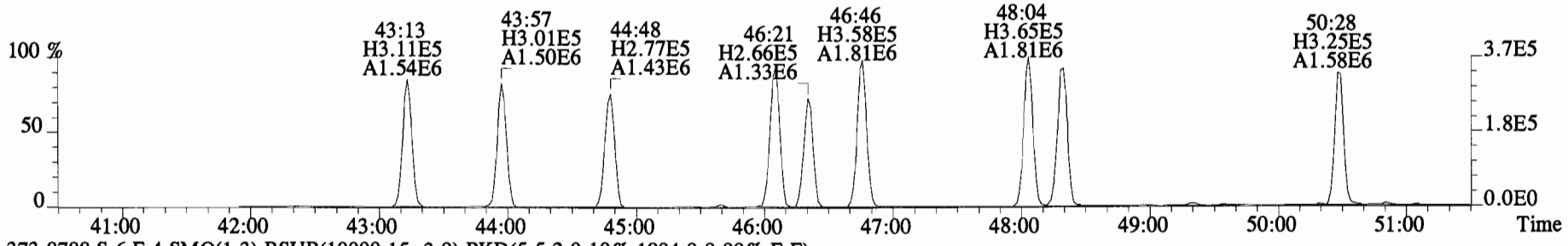
File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2256.0,0.00%,F,F)



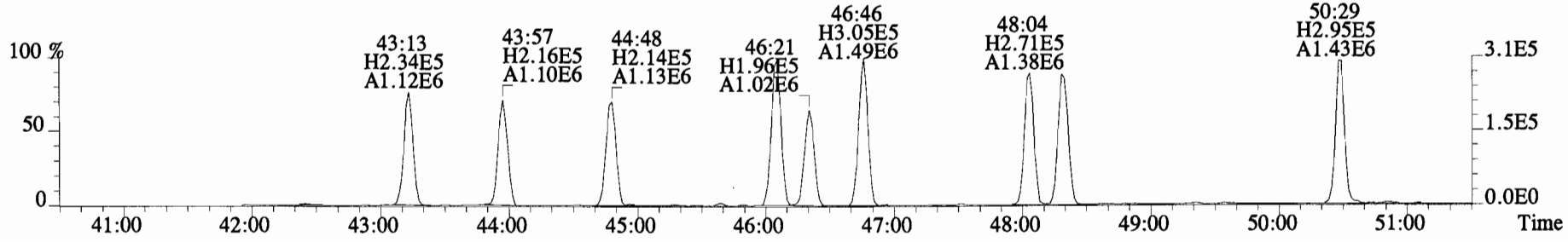
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2264.0,0.00%,F,F)



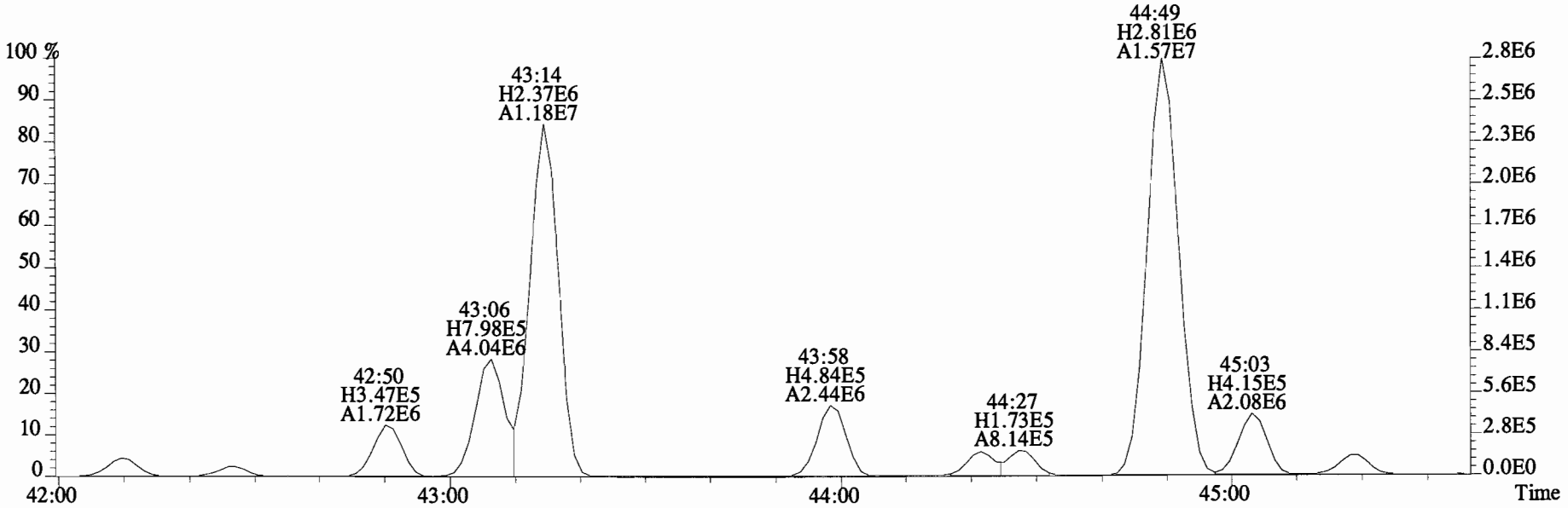
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2156.0,0.00%,F,F)



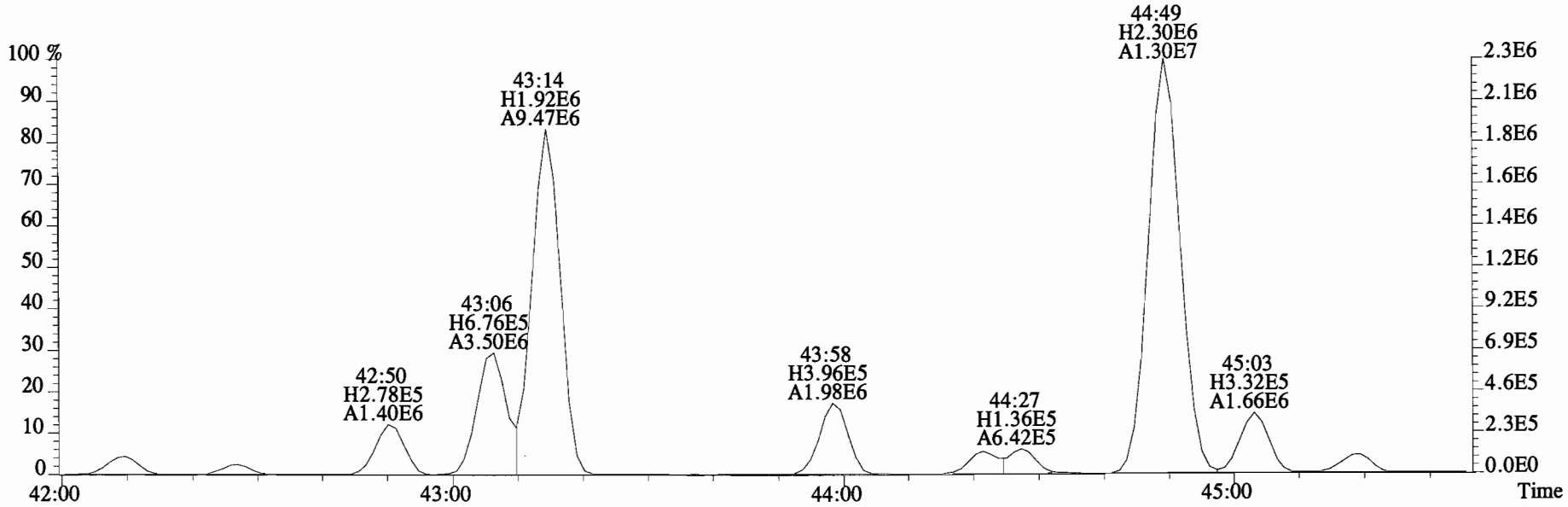
373.8788 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1904.0,0.00%,F,F)

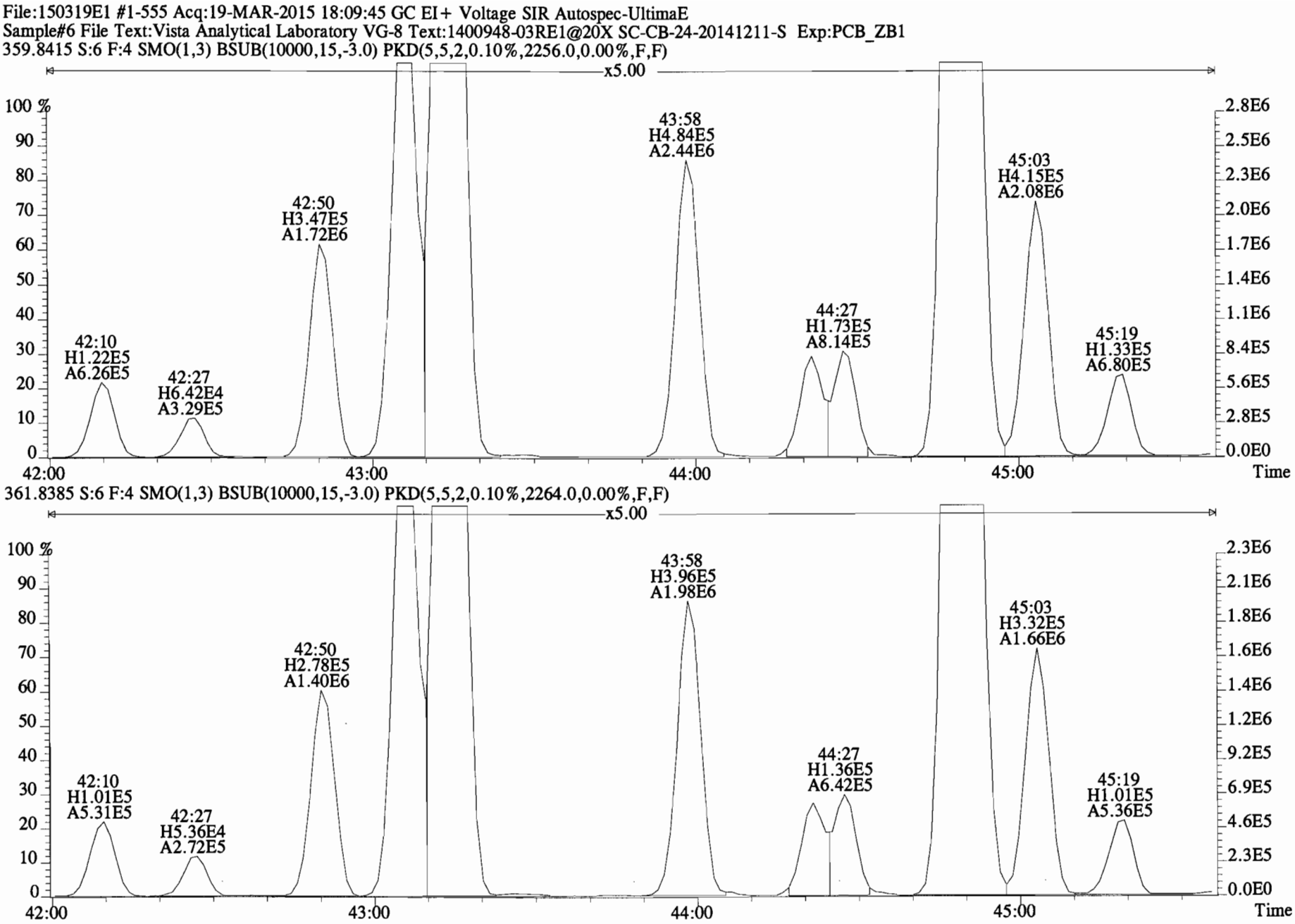


File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2256.0,0.00%,F,F)

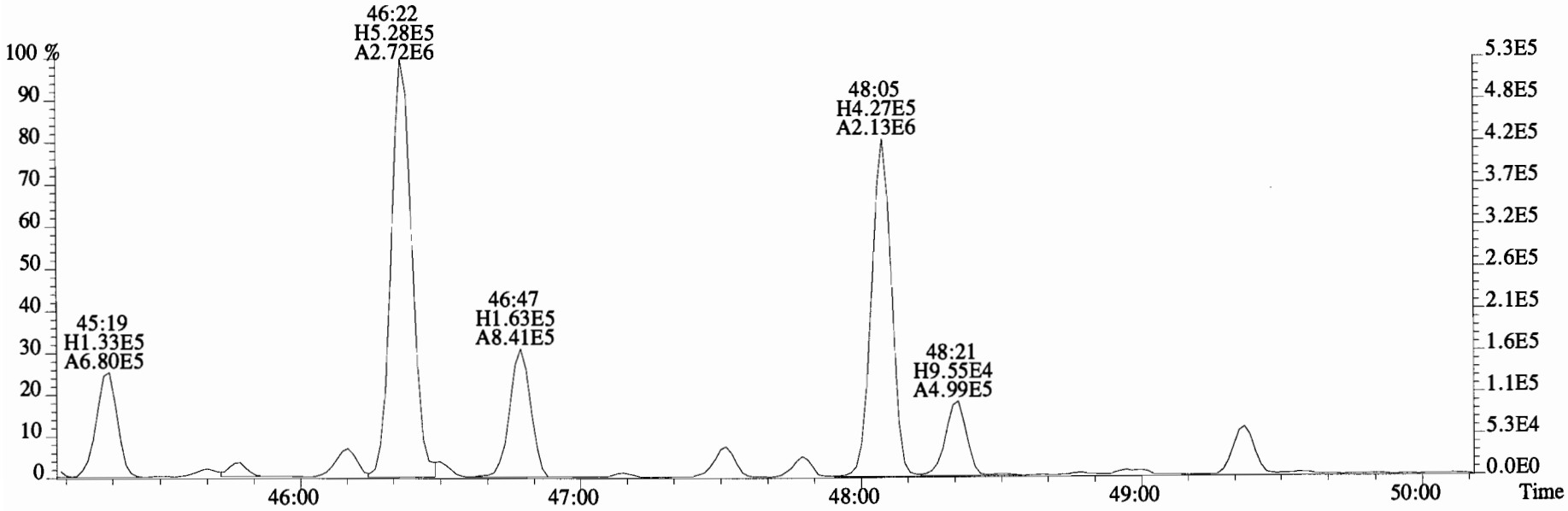


361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2264.0,0.00%,F,F)

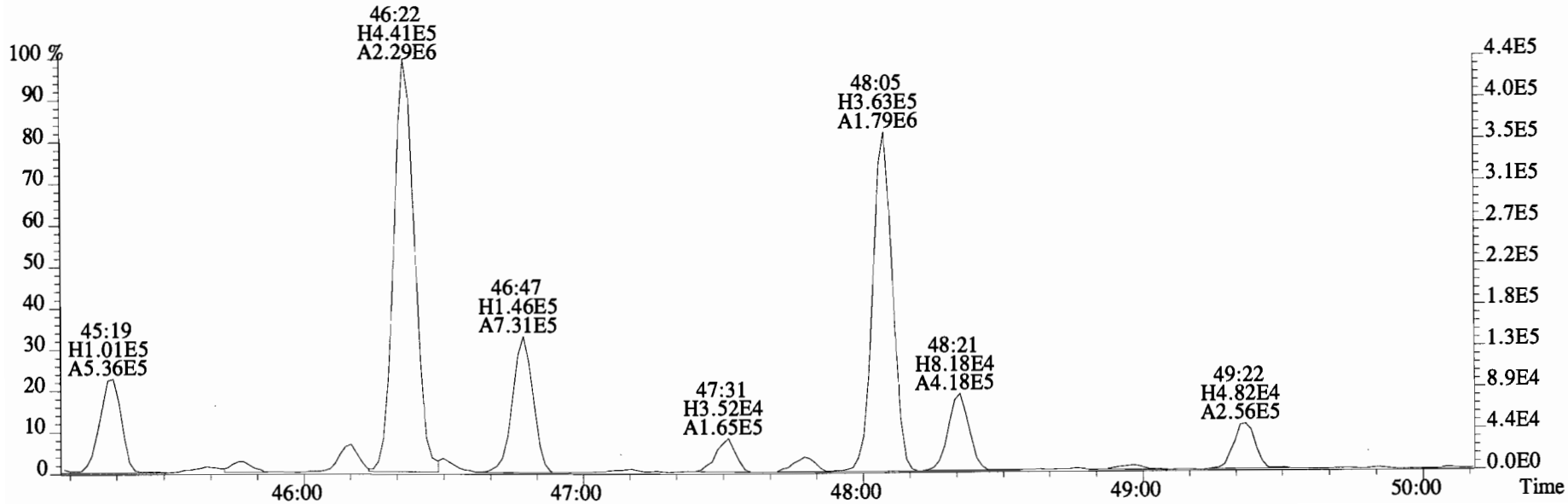



File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2256.0,0.00%,F,F)
x5.00
42:10 H1.22E5 A6.26E5
42:27 H6.42E4 A3.29E5
42:50 H3.47E5 A1.72E6
43:58 H4.84E5 A2.44E6
44:27 H1.73E5 A8.14E5
45:03 H4.15E5 A2.08E6
45:19 H1.33E5 A6.80E5
Time
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2264.0,0.00%,F,F)
x5.00
42:10 H1.01E5 A5.31E5
42:27 H5.36E4 A2.72E5
42:50 H2.78E5 A1.40E6
43:58 H3.96E5 A1.98E6
44:27 H1.36E5 A6.42E5
45:03 H3.32E5 A1.66E6
45:19 H1.01E5 A5.36E5
Time

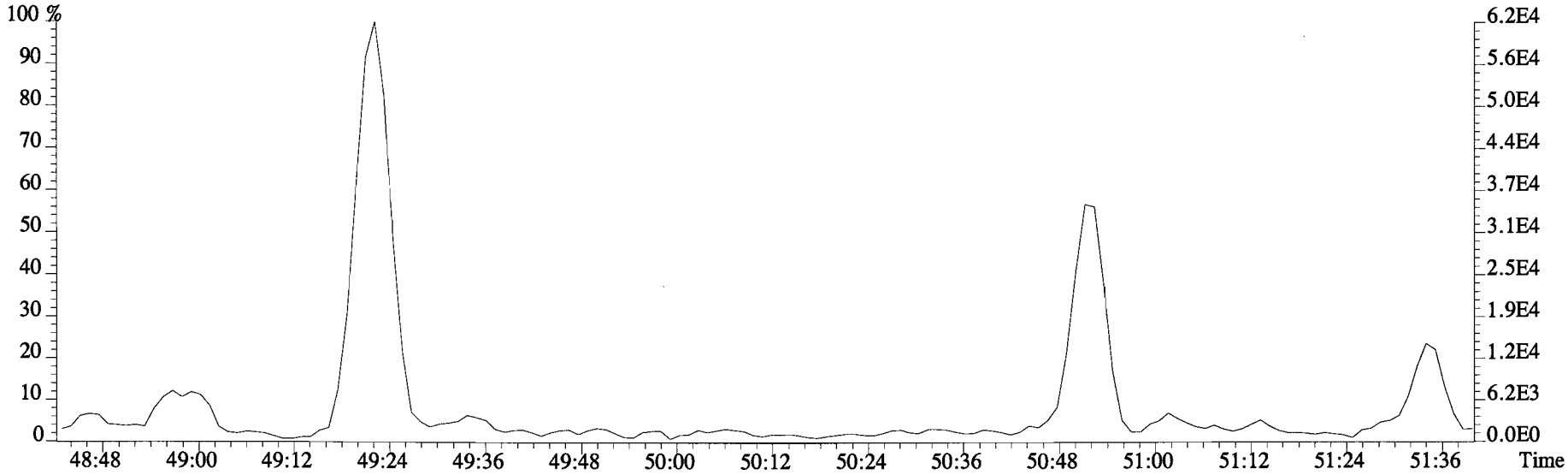
File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2256.0,0.00%,F,F)



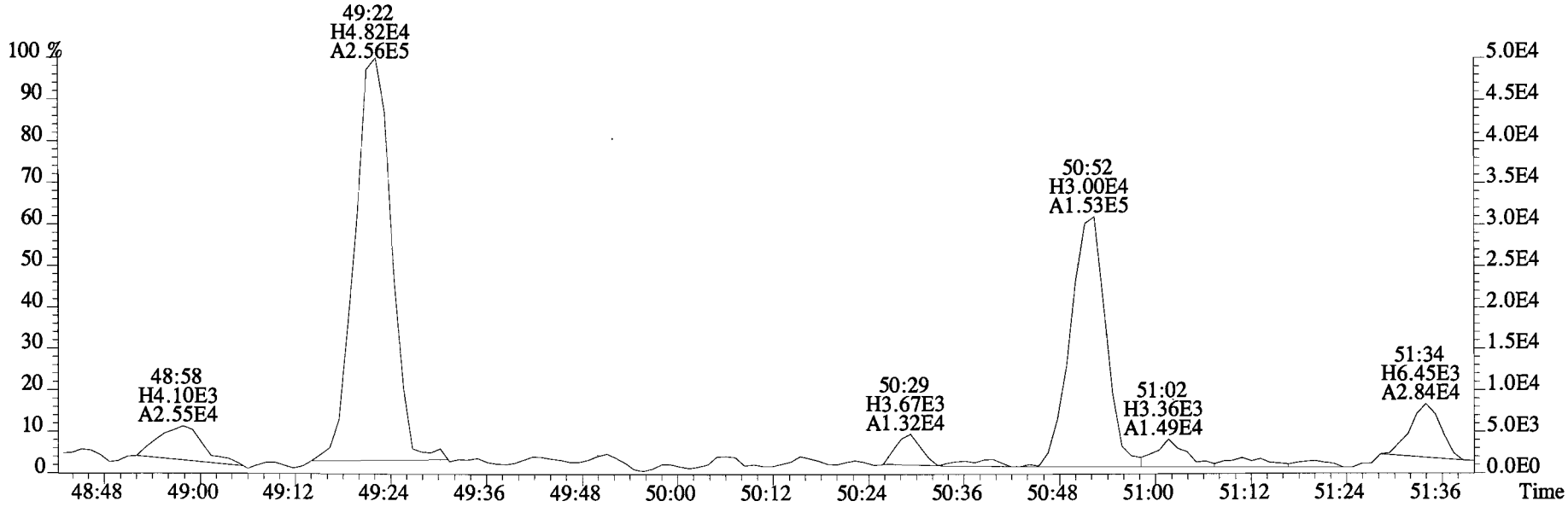
361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2264.0,0.00%,F,F)

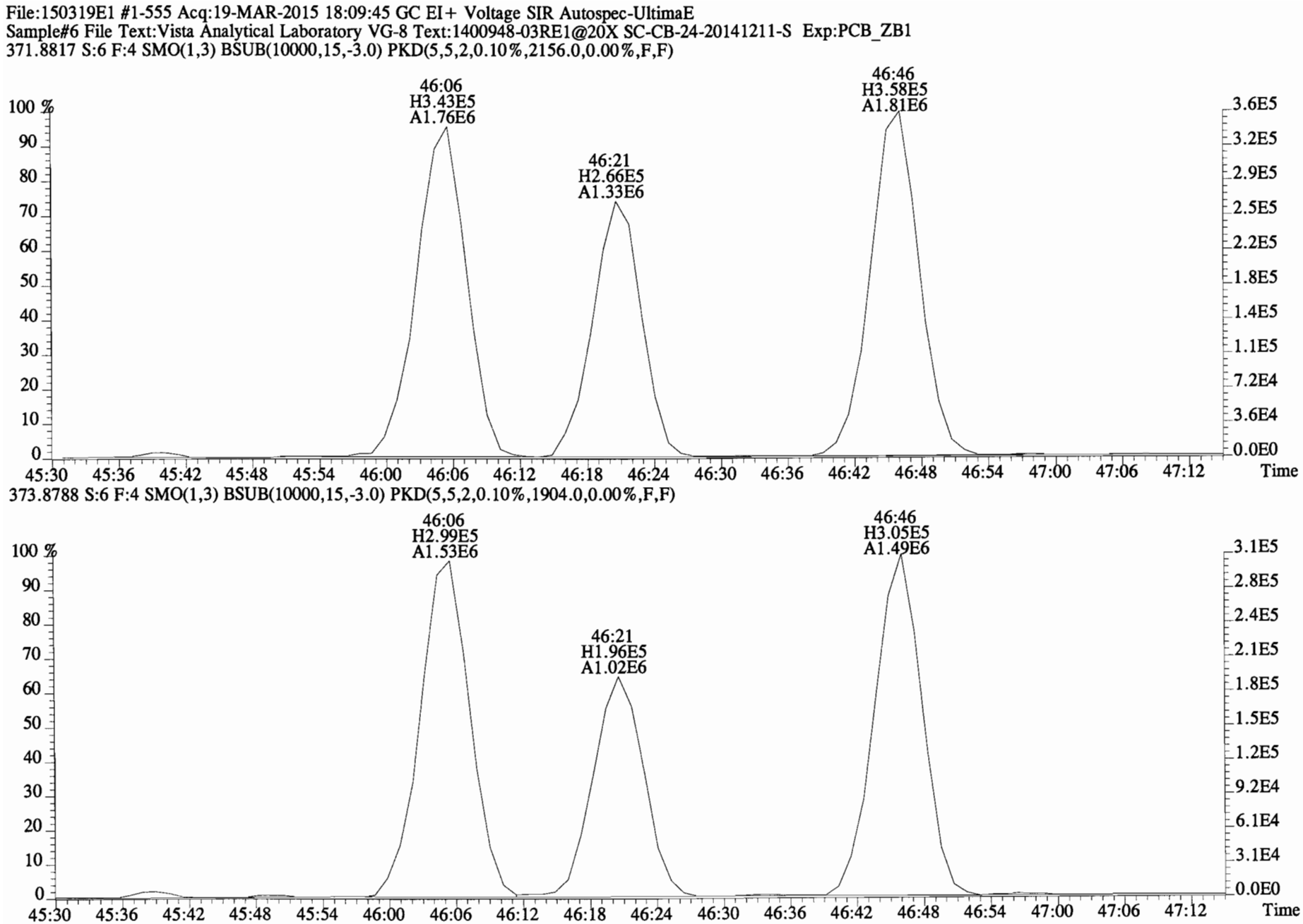


File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
359.8415 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2256.0,0.00%,F,F)

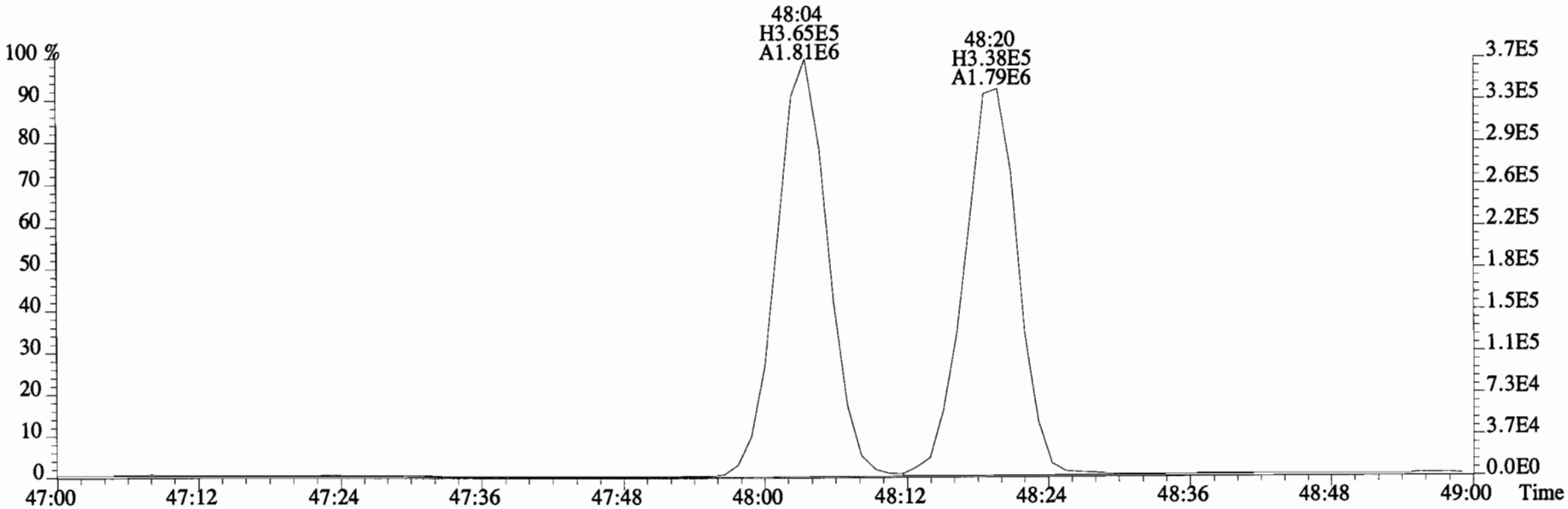


361.8385 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2264.0,0.00%,F,F)

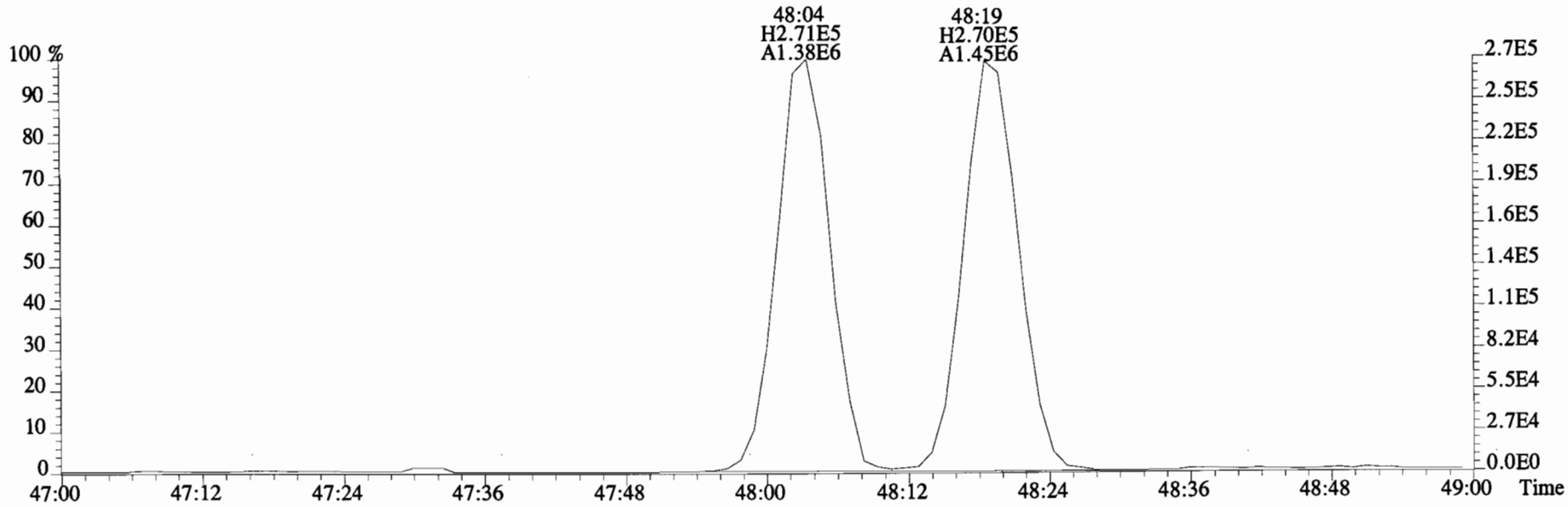



File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2156.0,0.00%,F,F)
46:06
H3.43E5
A1.76E6
46:21
H2.66E5
A1.33E6
46:46
H3.58E5
A1.81E6
100 %
90
80
70
60
50
40
30
20
10
0
3.6E5
3.2E5
2.9E5
2.5E5
2.2E5
1.8E5
1.4E5
1.1E5
7.2E4
3.6E4
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(5,5,2,0.10%,1904.0,0.00%,F,F)
46:06
H2.99E5
A1.53E6
46:21
H1.96E5
A1.02E6
46:46
H3.05E5
A1.49E6
100 %
90
80
70
60
50
40
30
20
10
0
3.1E5
2.8E5
2.4E5
2.1E5
1.8E5
1.5E5
1.2E5
9.2E4
6.1E4
3.1E4
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

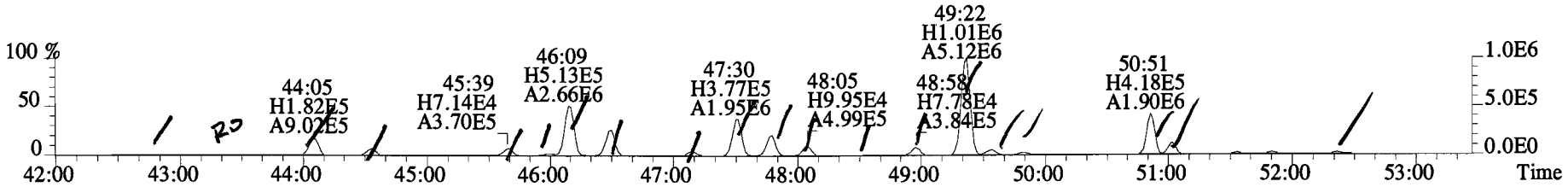
File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
371.8817 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2156.0,0.00%,F,F)



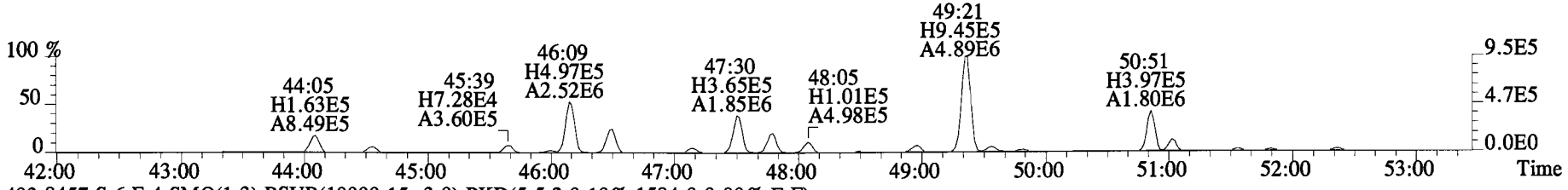
373.8788 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1904.0,0.00%,F,F)



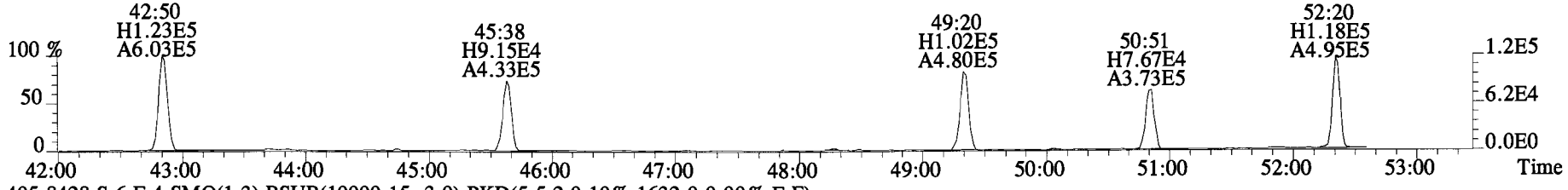
File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1888.0,0.00%,F,F)



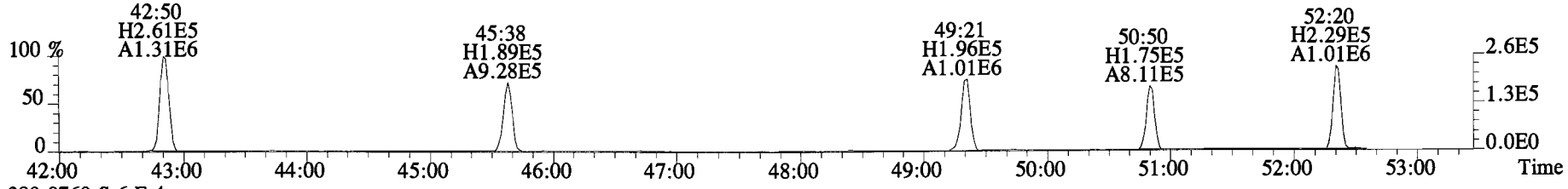
395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1880.0,0.00%,F,F)



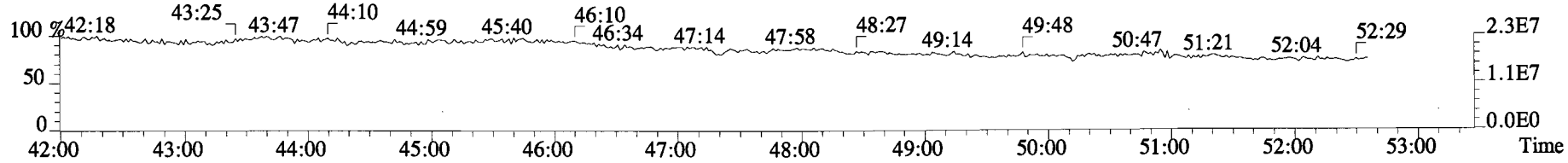
403.8457 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1584.0,0.00%,F,F)



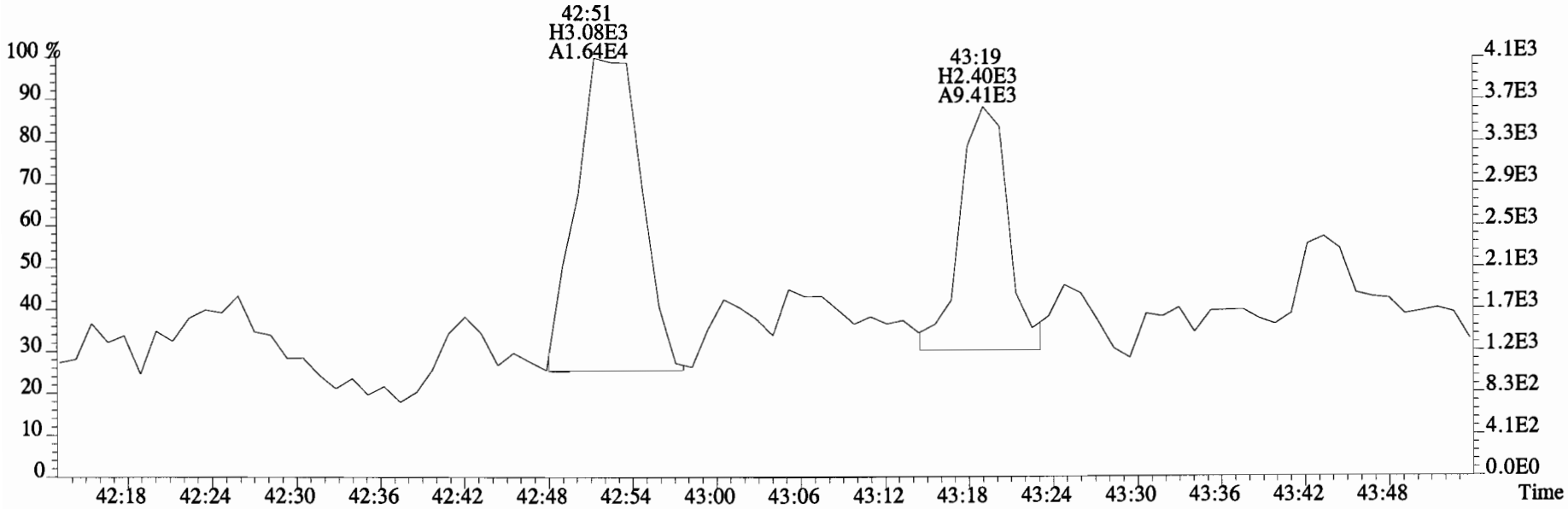
405.8428 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1632.0,0.00%,F,F)



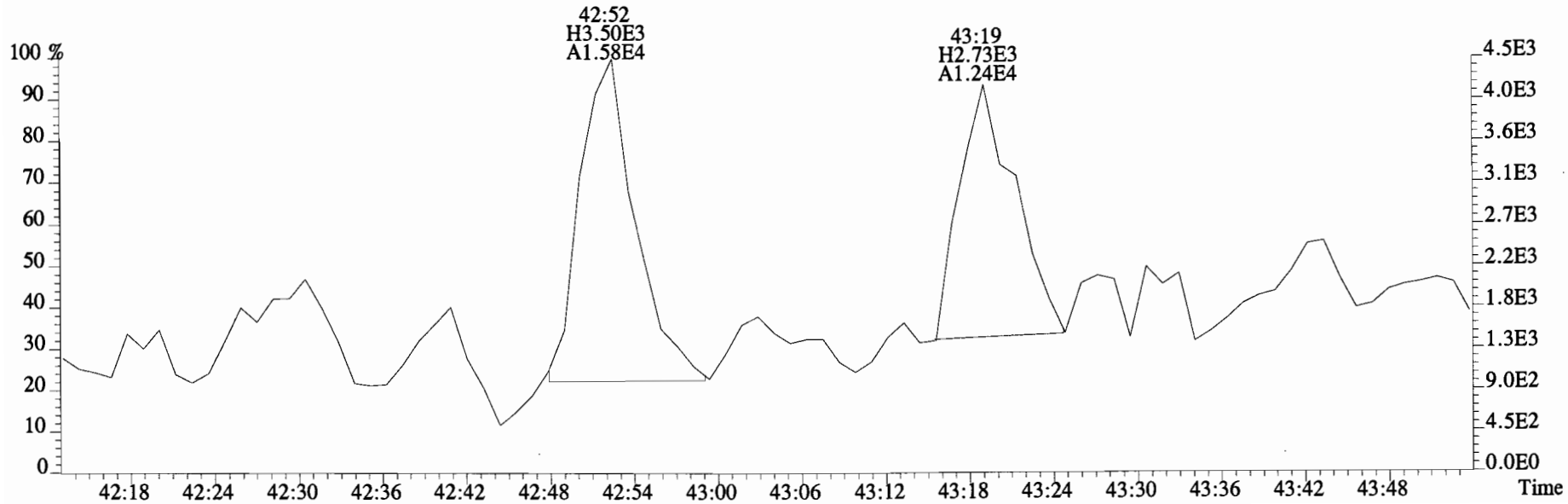
380.9760 S:6 F:4



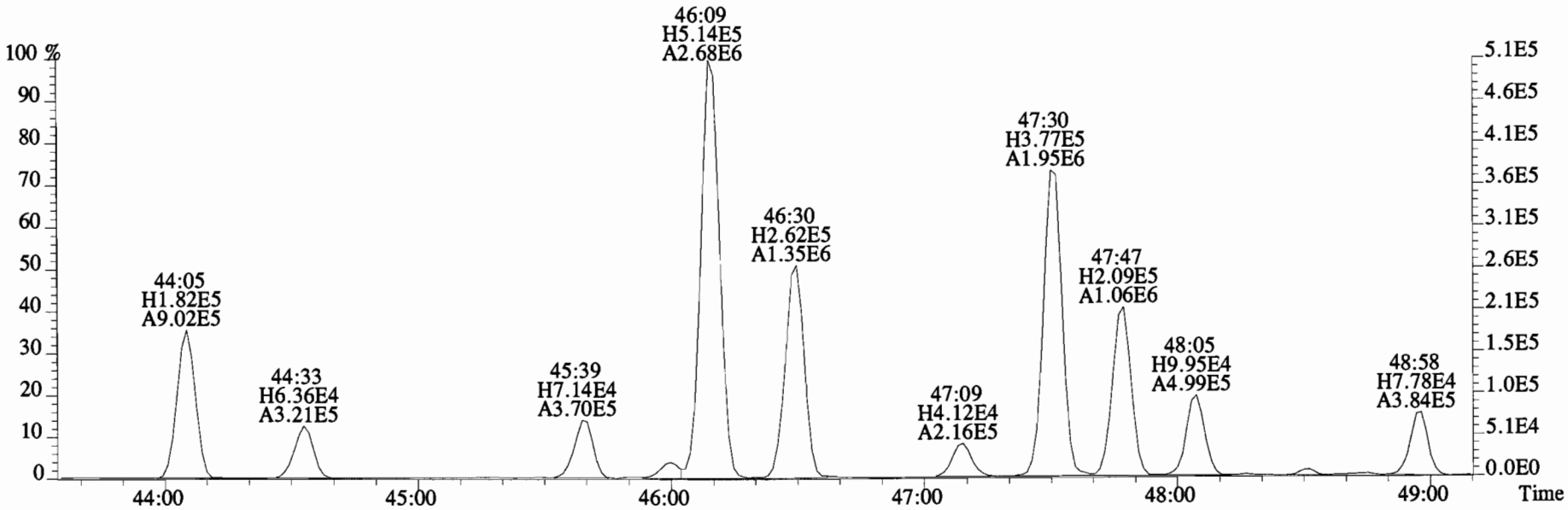
File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1888.0,0.00%,F,F)



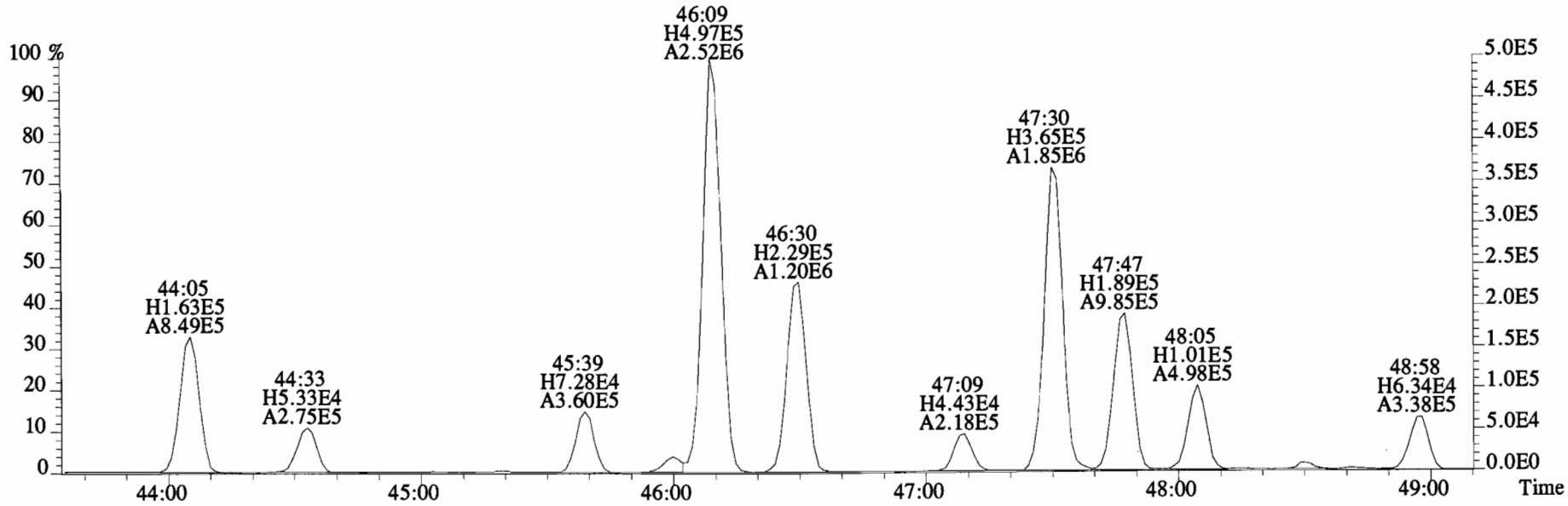
395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1880.0,0.00%,F,F)

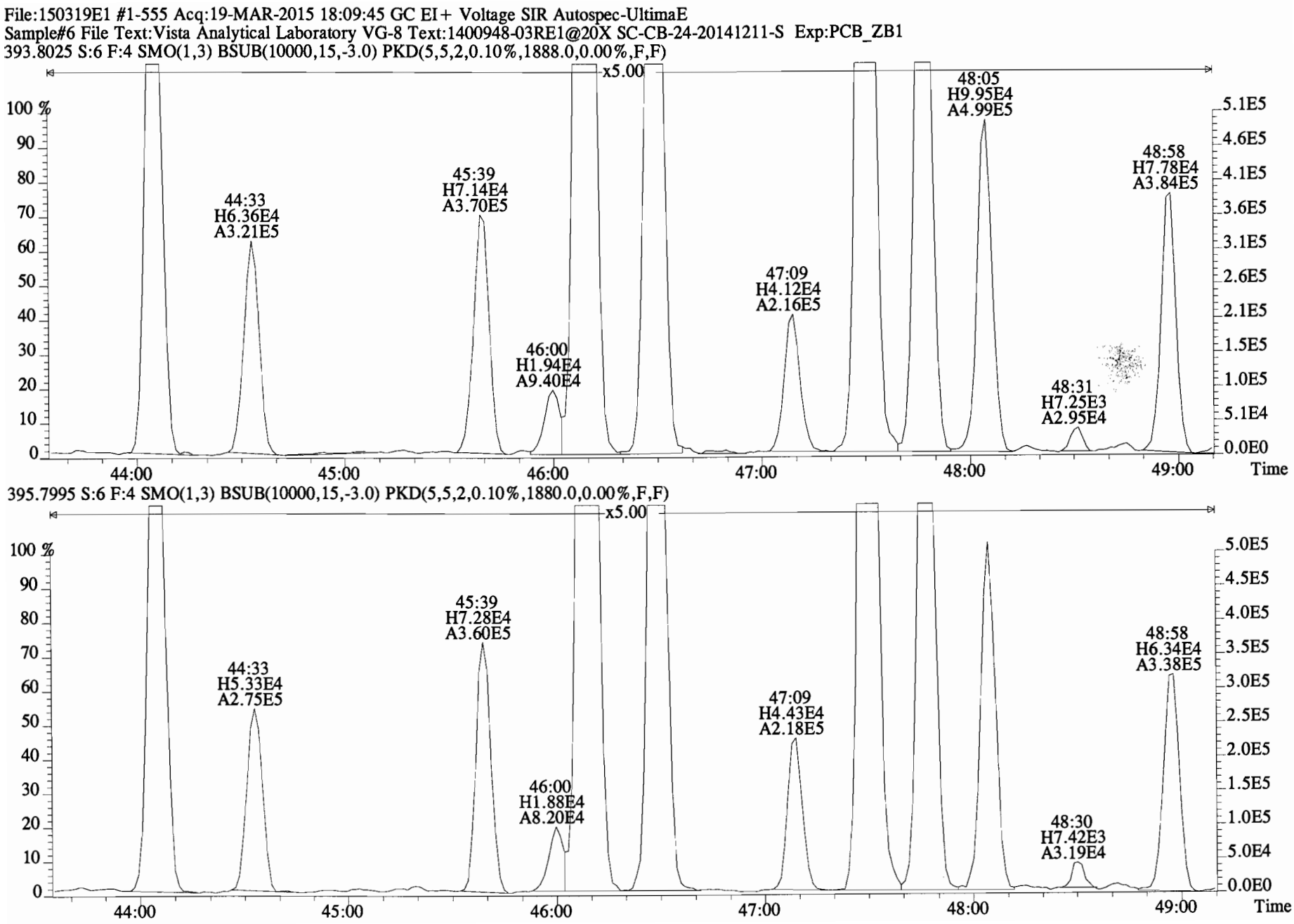


File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1888.0,0.00%,F,F)

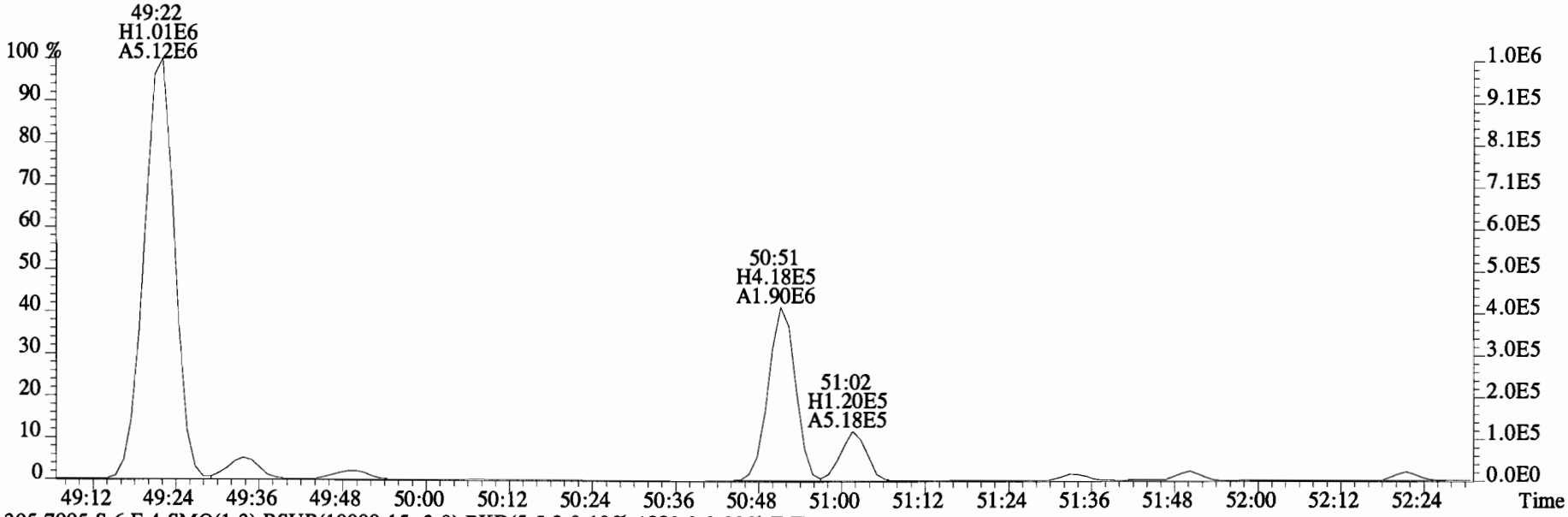


395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1880.0,0.00%,F,F)

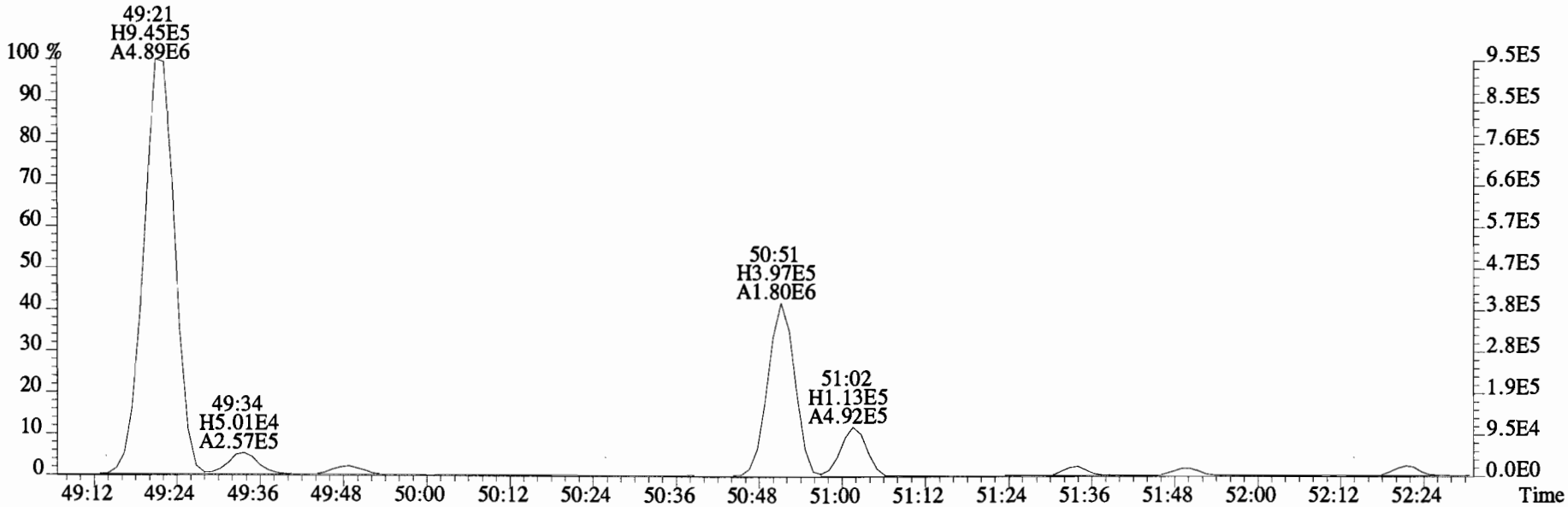


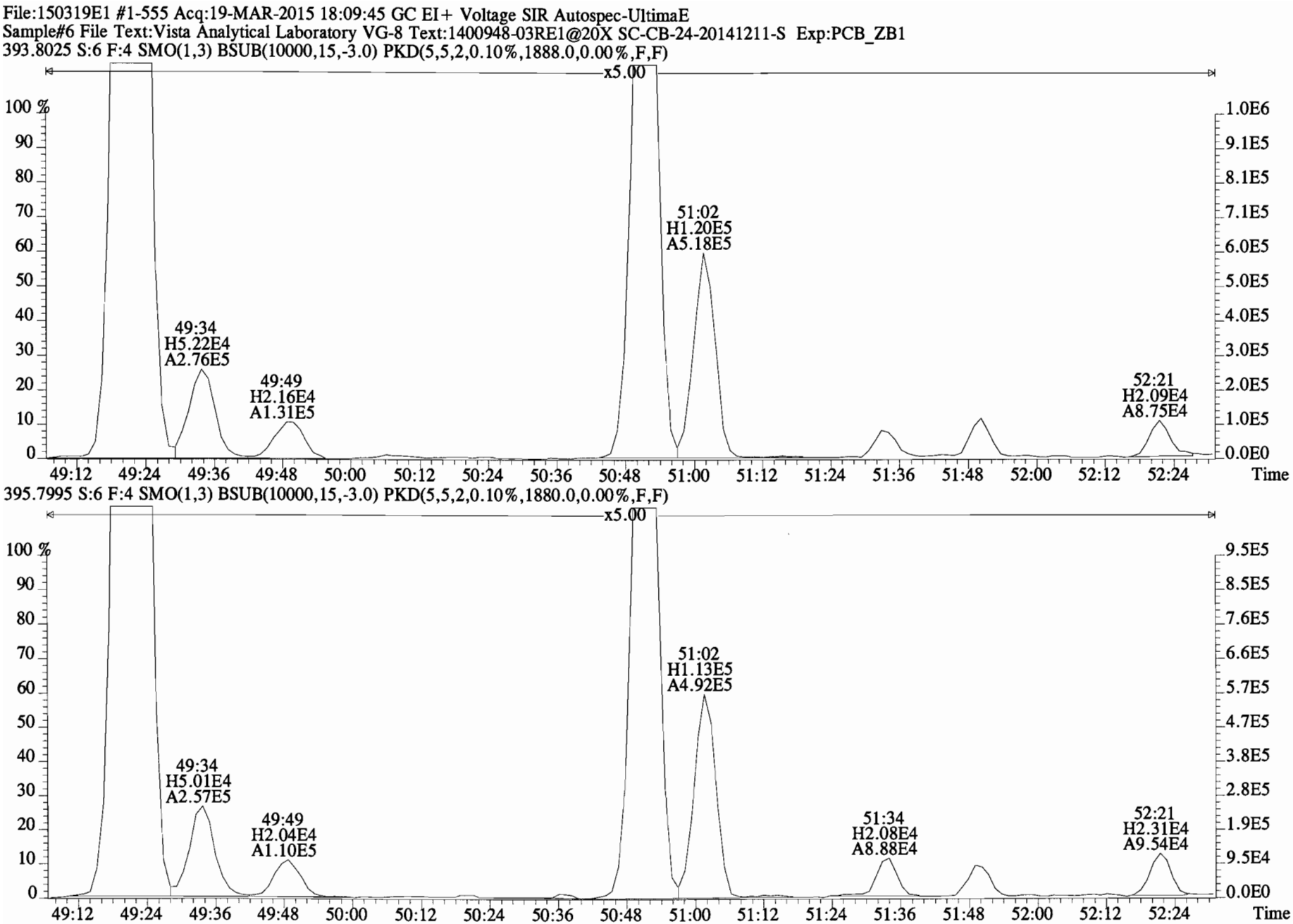

File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1888.0,0.00%,F,F)
x5.00
44:33
H6.36E4
A3.21E5
45:39
H7.14E4
A3.70E5
46:00
H1.94E4
A9.40E4
47:09
H4.12E4
A2.16E5
48:05
H9.95E4
A4.99E5
48:31
H7.25E3
A2.95E4
48:58
H7.78E4
A3.84E5
Time
395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1880.0,0.00%,F,F)
x5.00
44:33
H5.33E4
A2.75E5
45:39
H7.28E4
A3.60E5
46:00
H1.88E4
A8.20E4
47:09
H4.43E4
A2.18E5
48:30
H7.42E3
A3.19E4
48:58
H6.34E4
A3.38E5
Time

File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1888.0,0.00%,F,F)

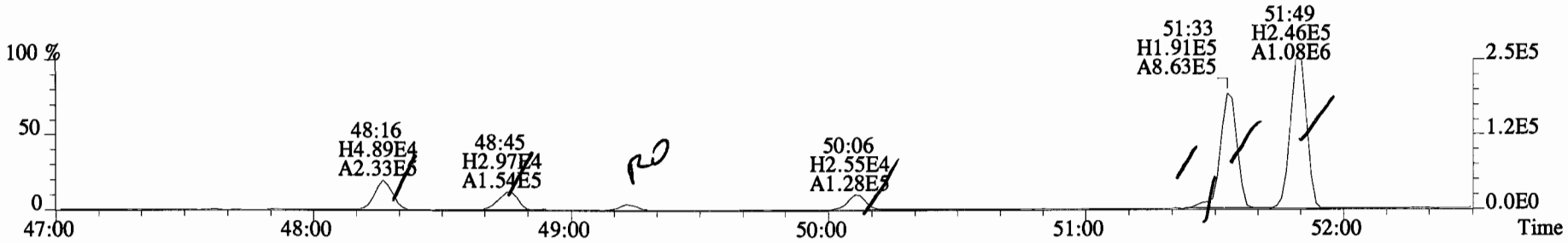


395.7995 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1880.0,0.00%,F,F)

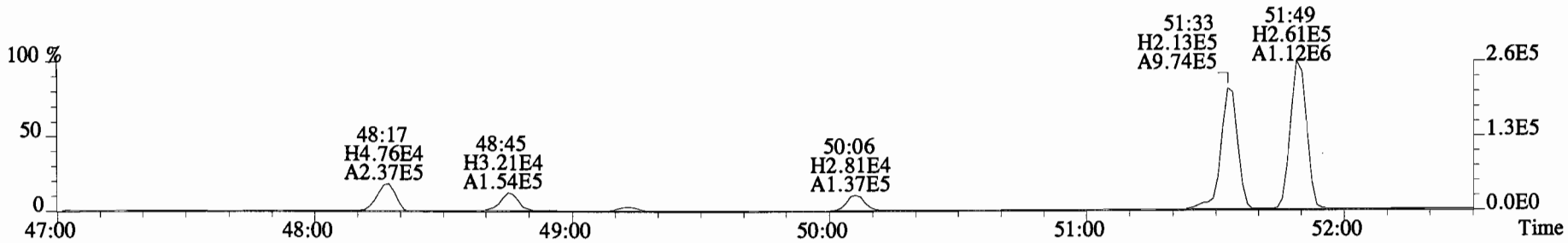



File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
393.8025 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1888.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
1.0E6
9.1E5
8.1E5
7.1E5
6.0E5
5.0E5
4.0E5
3.0E5
2.0E5
1.0E5
0.0E0
49:34
H5.22E4
A2.76E5
49:49
H2.16E4
A1.31E5
51:02
H1.20E5
A5.18E5
52:21
H2.09E4
A8.75E4
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(5,5,2,0.10%,1880.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
9.5E5
8.5E5
7.6E5
6.6E5
5.7E5
4.7E5
3.8E5
2.8E5
1.9E5
9.5E4
0.0E0
49:34
H5.01E4
A2.57E5
49:49
H2.04E4
A1.10E5
51:02
H1.13E5
A4.92E5
51:34
H2.08E4
A8.88E4
52:21
H2.31E4
A9.54E4
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

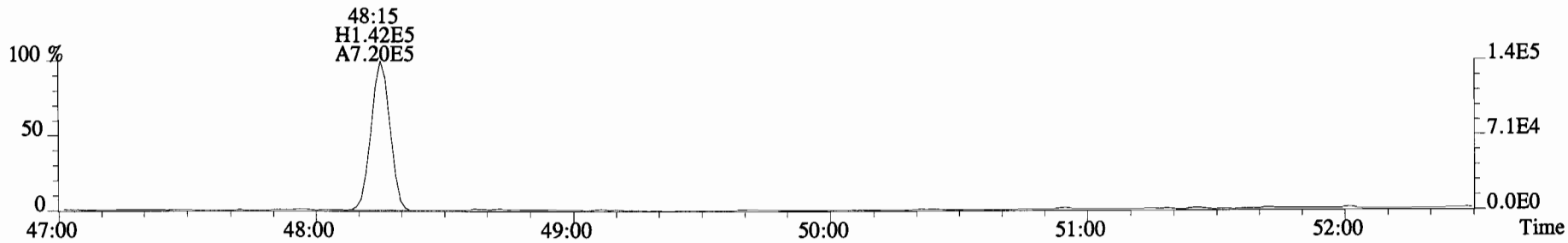
File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
427.7635 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1496.0,0.00%,F,F)



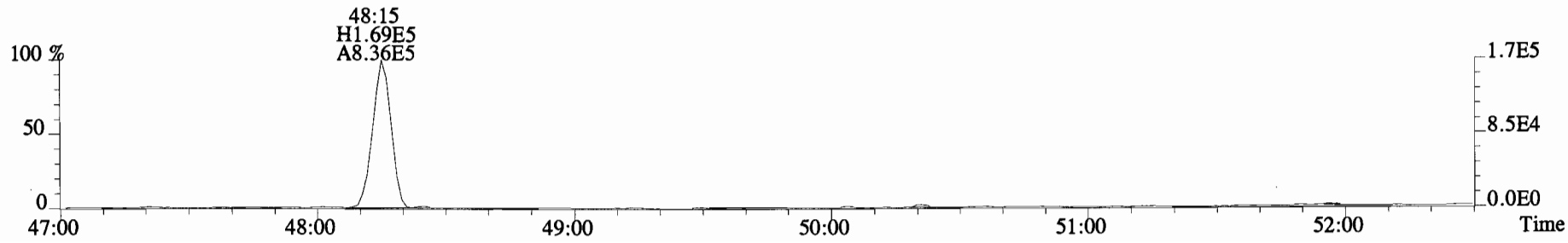
429.7606 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1724.0,0.00%,F,F)



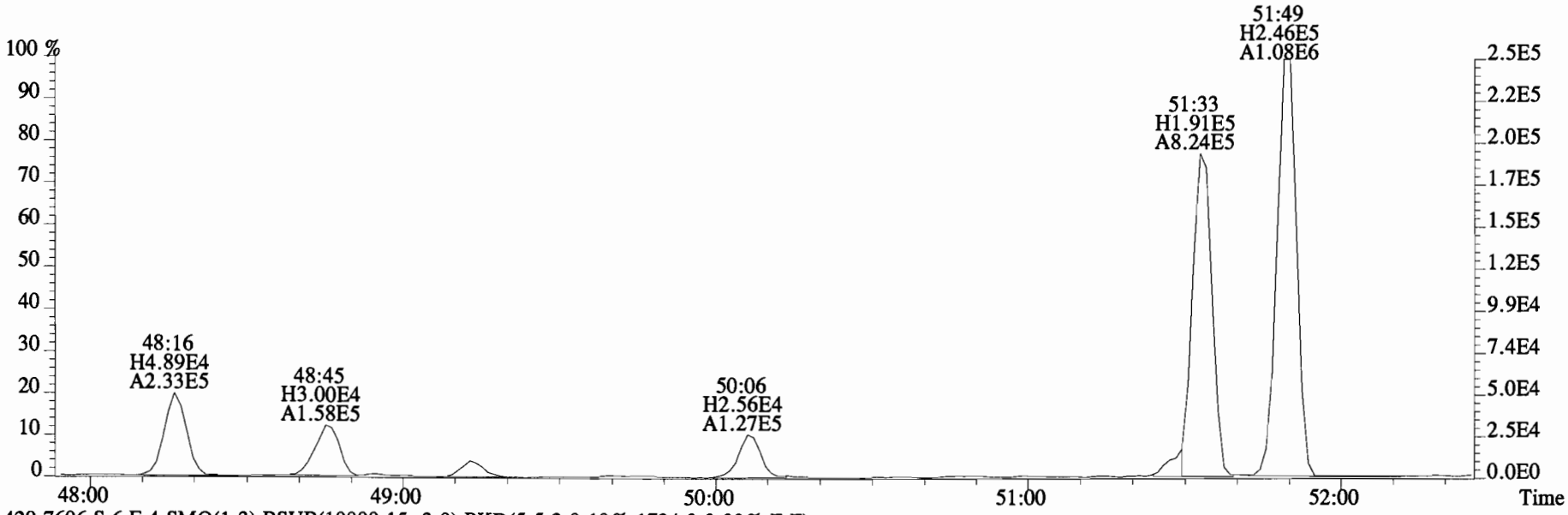
439.8038 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1456.0,0.00%,F,F)



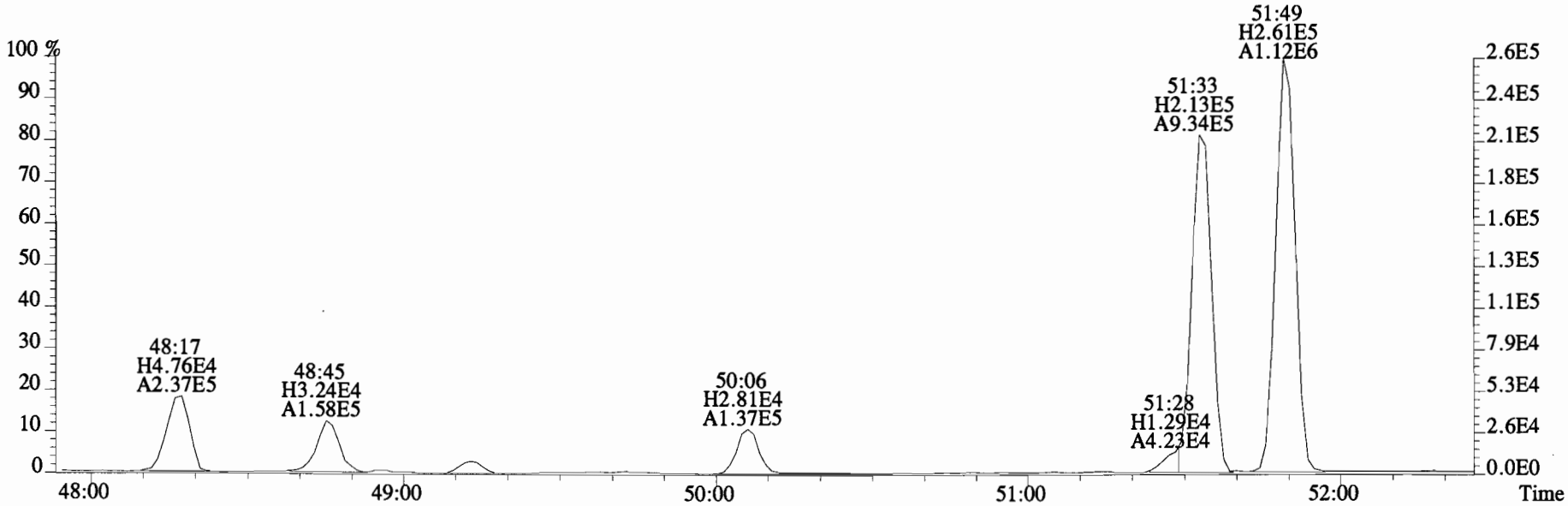
441.8008 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1472.0,0.00%,F,F)

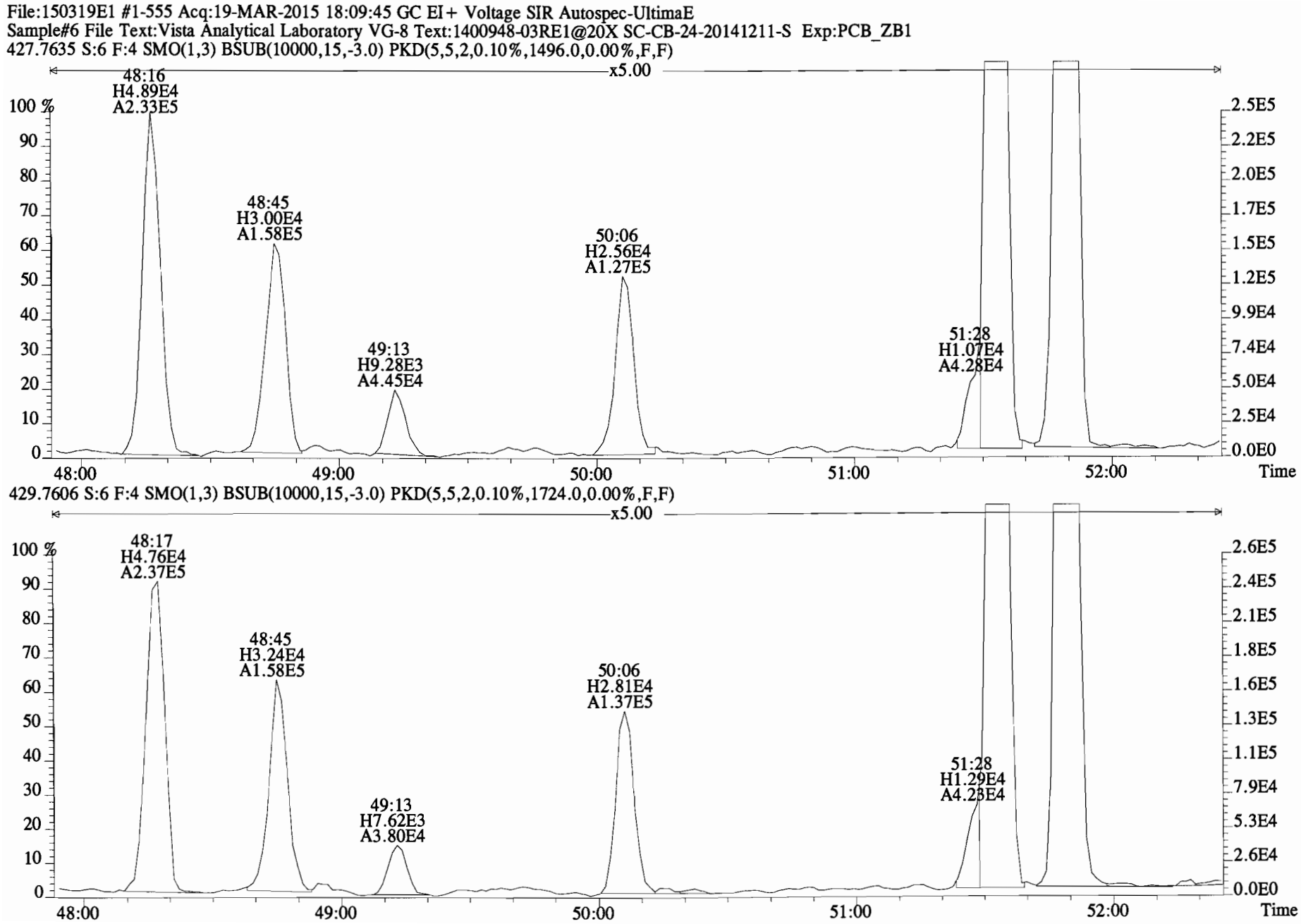


File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
427.7635 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1496.0,0.00%,F,F)

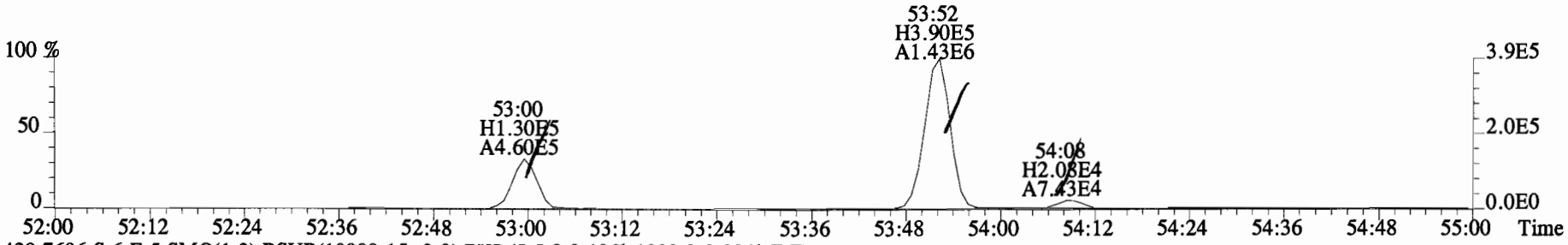


429.7606 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1724.0,0.00%,F,F)

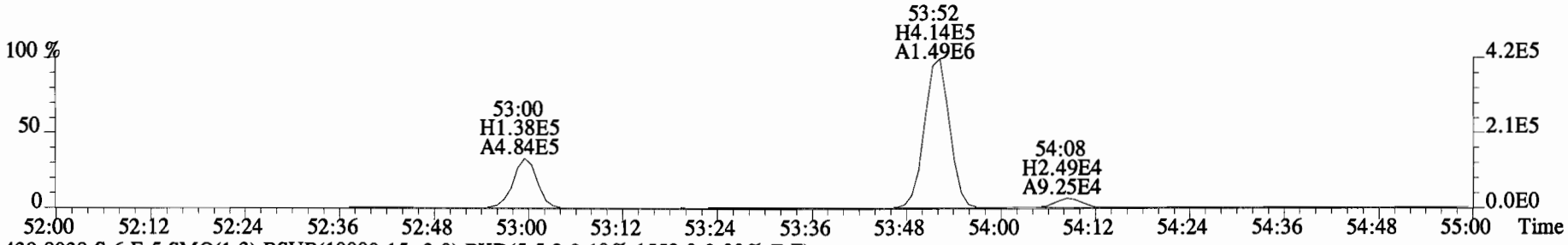



File:150319E1 #1-555 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
427.7635 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1496.0,0.00%,F,F)
x5.00
48:16
H4.89E4
A2.33E5
48:45
H3.00E4
A1.58E5
49:13
H9.28E3
A4.45E4
50:06
H2.56E4
A1.27E5
51:28
H1.07E4
A4.28E4
100 %
90
80
70
60
50
40
30
20
10
0
2.5E5
2.2E5
2.0E5
1.7E5
1.5E5
1.2E5
9.9E4
7.4E4
5.0E4
2.5E4
0.0E0
48:00
49:00
50:00
51:00
52:00
Time
429.7606 S:6 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1724.0,0.00%,F,F)
x5.00
48:17
H4.76E4
A2.37E5
48:45
H3.24E4
A1.58E5
49:13
H7.62E3
A3.80E4
50:06
H2.81E4
A1.37E5
51:28
H1.29E4
A4.23E4
100 %
90
80
70
60
50
40
30
20
10
0
2.6E5
2.4E5
2.1E5
1.8E5
1.6E5
1.3E5
1.1E5
7.9E4
5.3E4
2.6E4
0.0E0
48:00
49:00
50:00
51:00
52:00
Time

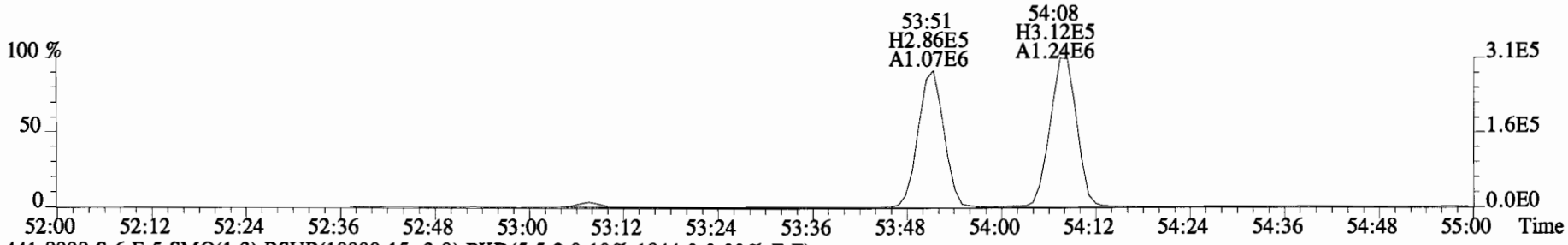
File:150319E1 #1-430 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
427.7635 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2448.0,0.00%,F,F)



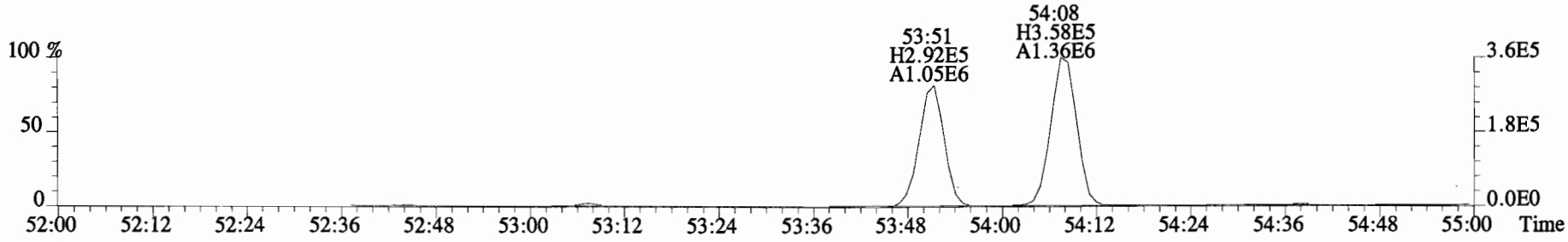
429.7606 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1992.0,0.00%,F,F)



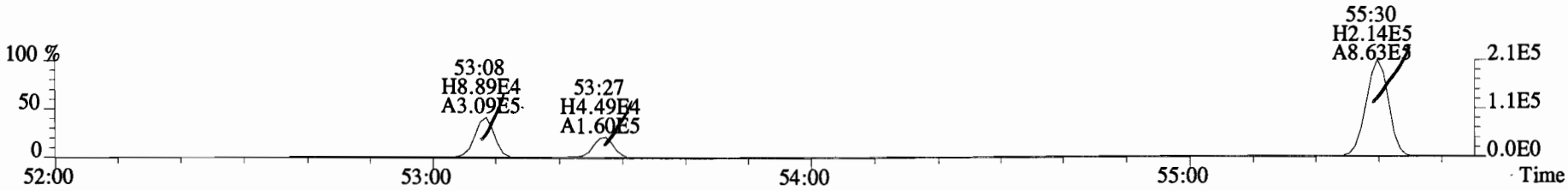
439.8038 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1552.0,0.00%,F,F)



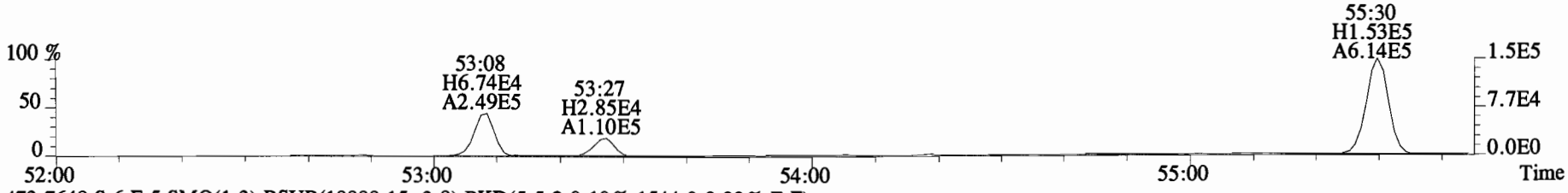
441.8008 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1944.0,0.00%,F,F)



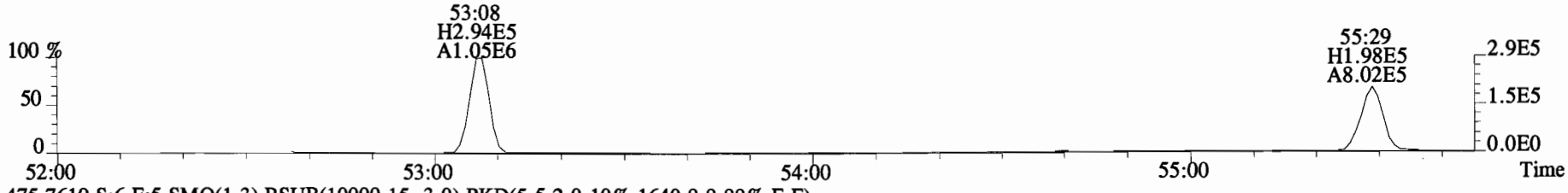
File:150319E1 #1-430 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
463.7216 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1460.0,0.00%,F,F)



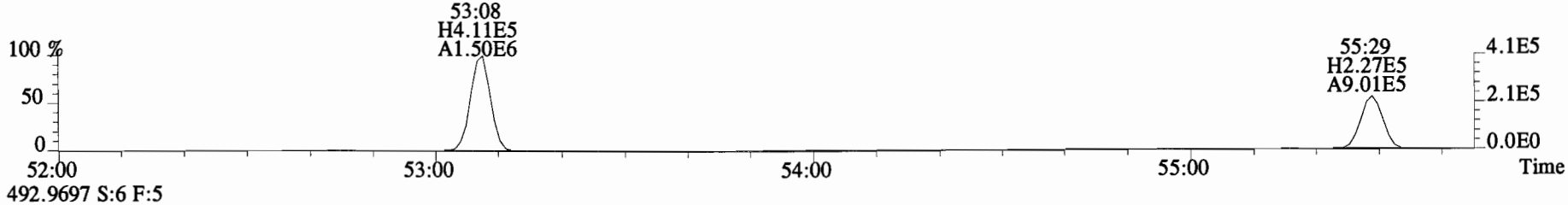
465.7186 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1588.0,0.00%,F,F)



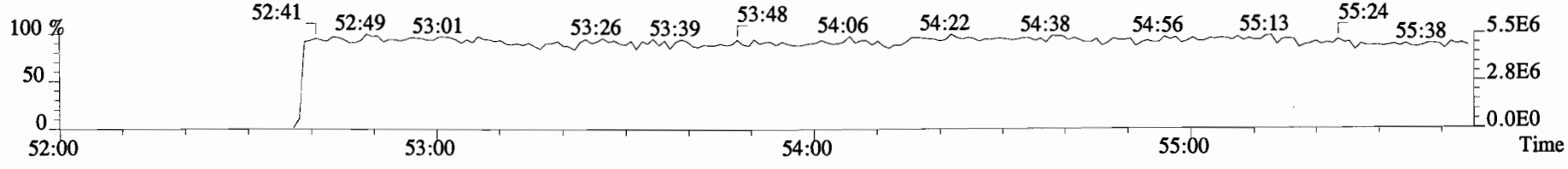
473.7648 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1544.0,0.00%,F,F)



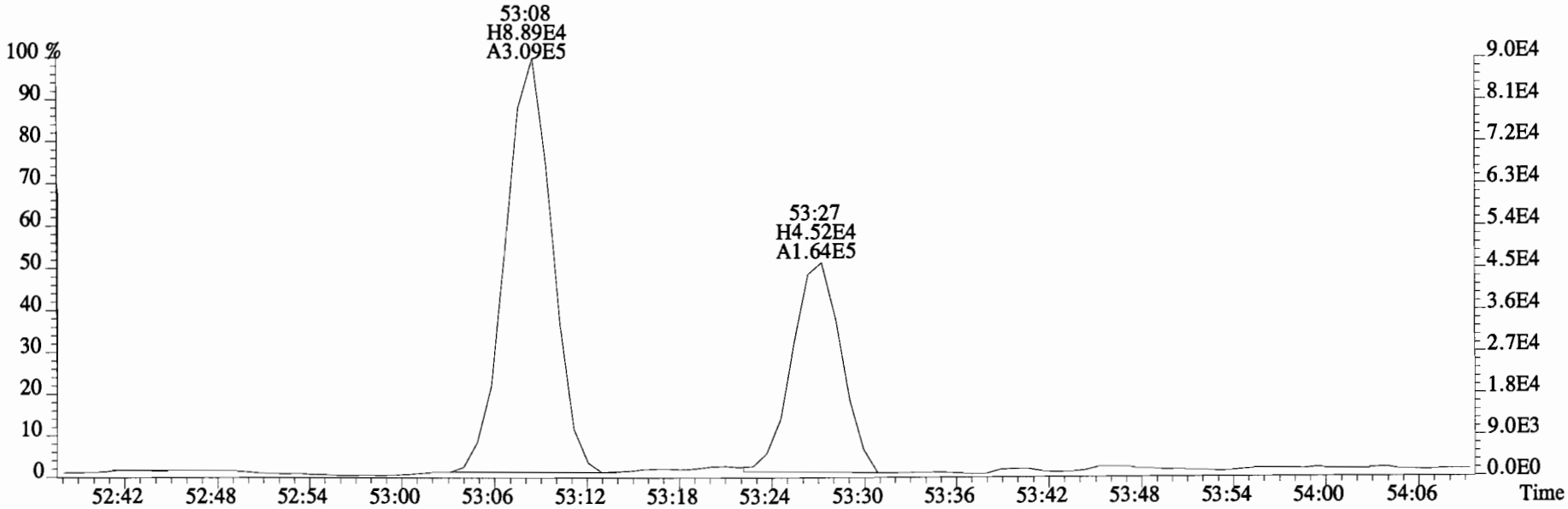
475.7619 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1640.0,0.00%,F,F)



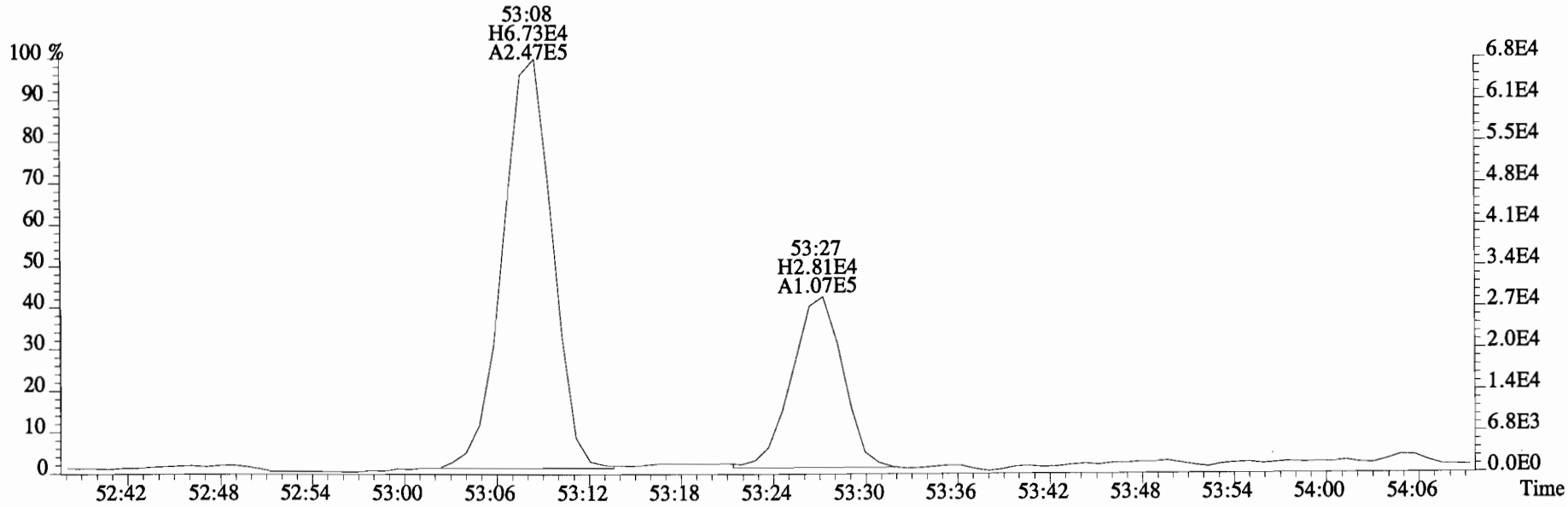
492.9697 S:6 F:5



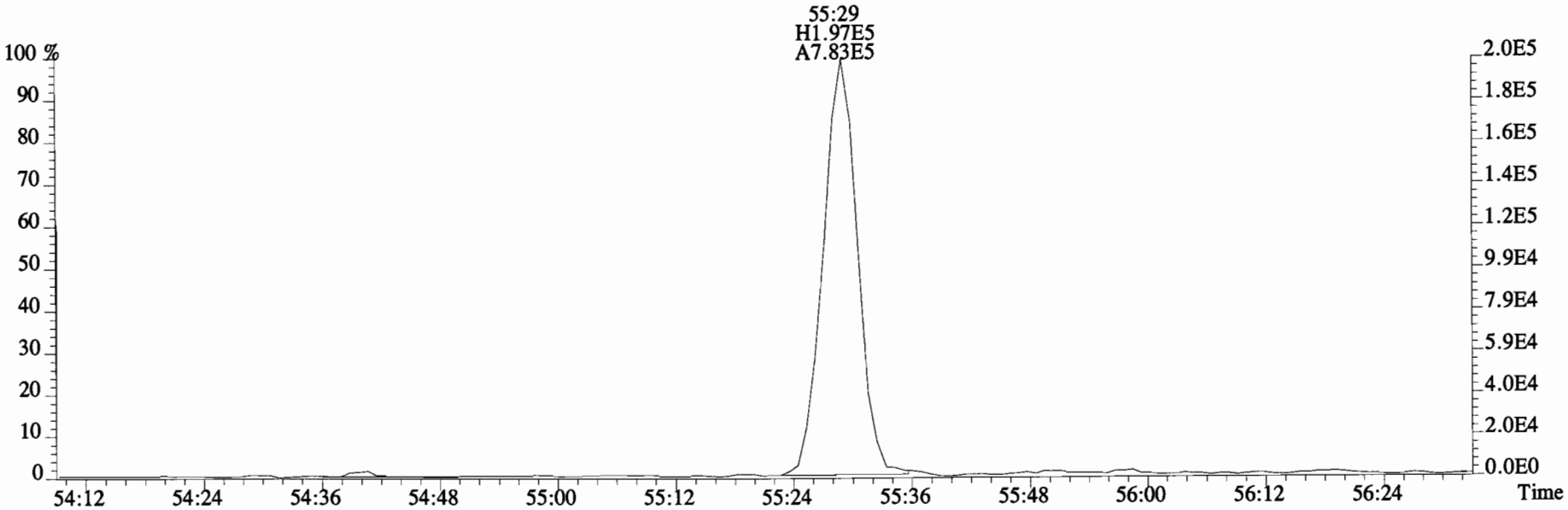
File:150319E1 #1-430 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
463.7216 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1460.0,0.00%,F,F)



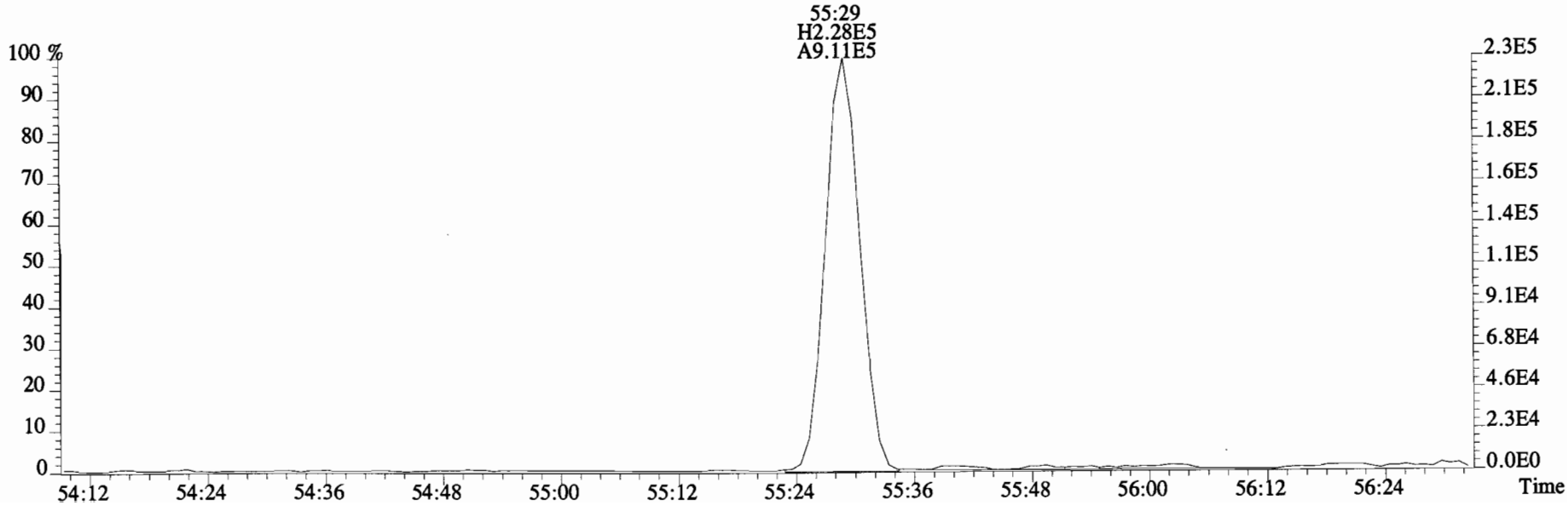
465.7186 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1588.0,0.00%,F,F)



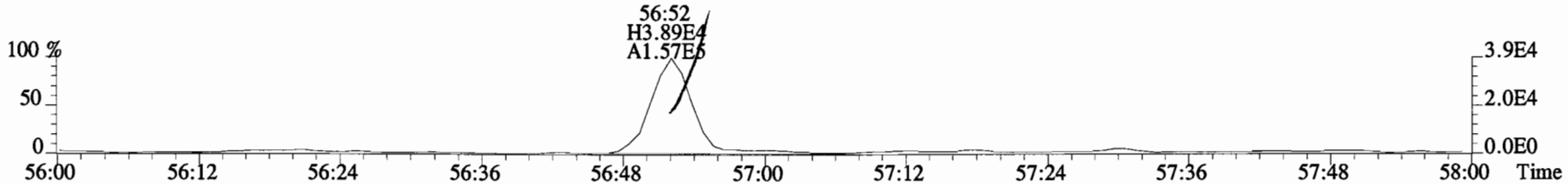
File:150319E1 #1-430 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
473.7648 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1544.0,0.00%,F,F)



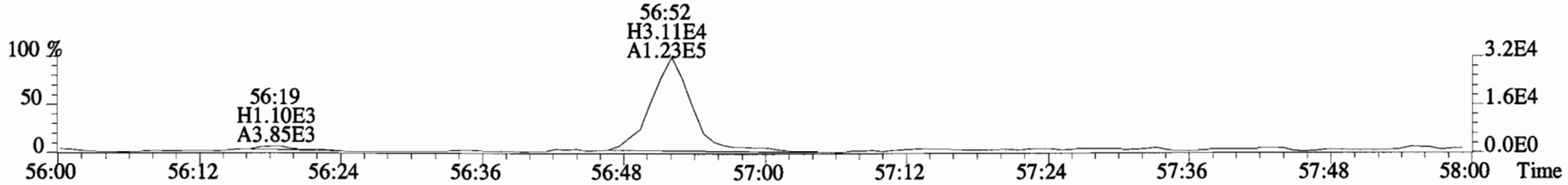
475.7619 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1640.0,0.00%,F,F)



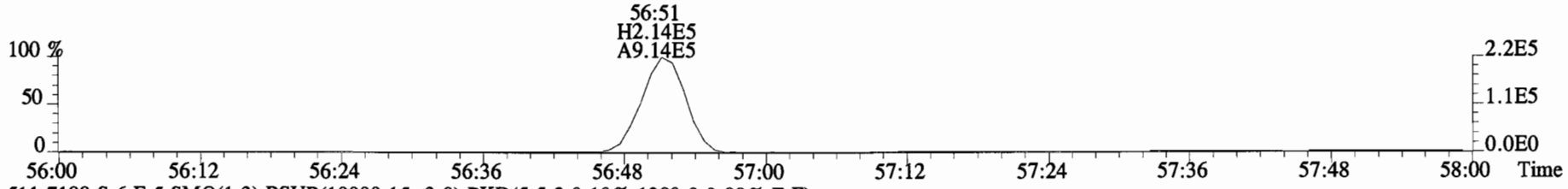
File:150319E1 #1-430 Acq:19-MAR-2015 18:09:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1@20X SC-CB-24-20141211-S Exp:PCB_ZB1
497.6826 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1120.0,0.00%,F,F)



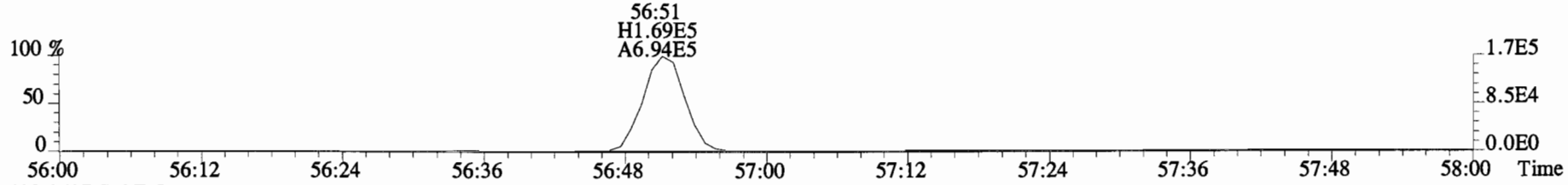
499.6797 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1288.0,0.00%,F,F)



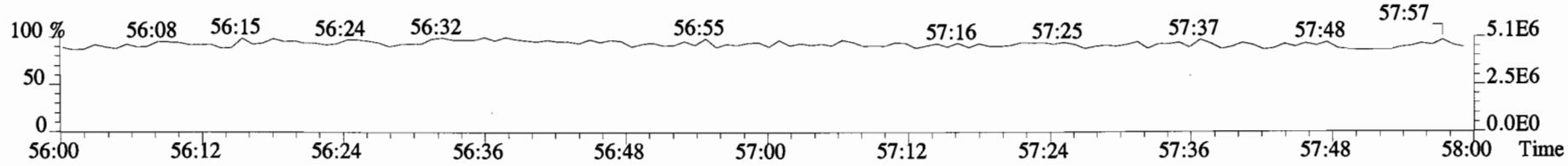
509.7229 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1108.0,0.00%,F,F)



511.7199 S:6 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1380.0,0.00%,F,F)



492.9697 S:6 F:5



Client ID: SC-CB-24-20141211-S Filename: 150318E1 S:11 Acq:18-MAR-15 20:44:12 ConCal: ST150318E1-1
Lab ID: 1400948-03RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.902 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	*	*	n	NotF¶	1.28	*		3360	2.5	*	*	0.996	1.006
Tetra	PCB-73	*	*	n	NotF¶	1.35	*		3360	2.5	*	*	1.000	1.010
Tetra	PCB-43/49	*	*	n	NotF¶	0.99	*		3360	2.5	*	*	1.005	1.015
Tetra	PCB-47	*	*	n	NotF¶	1.06	*		3360	2.5	*	*	0.996	1.006
Tetra	PCB-48/75	*	*	n	NotF¶	1.23	*		3360	2.5	*	*	0.999	1.009
Tetra	PCB-65	*	*	n	NotF¶	1.22	*		3360	2.5	*	*	1.008	1.018
Tetra	PCB-62	*	*	n	NotF¶	1.22	*		3360	2.5	*	*	1.011	1.021
Tetra	PCB-44	*	*	n	NotF¶	0.86	*		3360	2.5	*	*	1.021	1.031
Tetra	PCB-42/59	*	*	n	NotF¶	1.14	*		3360	2.5	*	*	1.028	1.038
Tetra	PCB-41/64/71/72	*	*	n	NotF¶	1.21	*		3360	2.5	*	*	1.046	1.056
Tetra	PCB-68	*	*	n	NotF¶	1.35	*		3360	2.5	*	*	1.054	1.064
Tetra	PCB-40	*	*	n	NotF¶	0.70	*		3360	2.5	*	*	1.061	1.071
Tetra	PCB-57	*	*	n	NotF¶	0.98	*		3360	2.5	*	*	0.965	0.975
Tetra	PCB-67	*	*	n	NotF¶	1.11	*		3360	2.5	*	*	0.974	0.984
Tetra	PCB-58	*	*	n	NotF¶	0.93	*		3360	2.5	*	*	0.977	0.987
Tetra	PCB-63	*	*	n	NotF¶	0.95	*		3360	2.5	*	*	0.982	0.992
Tetra	PCB-74	*	*	n	NotF¶	1.24	*		3360	2.5	*	*	0.990	1.000
Tetra	PCB-61/70	*	*	n	NotF¶	0.95	*		3360	2.5	*	*	0.995	1.005
Tetra	PCB-76/66	*	*	n	NotF¶	1.04	*		3360	2.5	*	*	1.001	1.011
Tetra	PCB-80	*	*	n	NotF¶	1.19	*		3360	2.5	*	*	0.996	1.006
Tetra	PCB-55	*	*	n	NotF¶	1.04	*		3360	2.5	*	*	1.005	1.015
Tetra	PCB-56/60	*	*	n	NotF¶	1.01	*		3360	2.5	*	*	1.019	1.029
Tetra	PCB-79	*	*	n	NotF¶	1.08	*		3360	2.5	*	*	1.048	1.058
Tetra	PCB-78	*	*	n	NotF¶	1.27	*		3360	2.5	*	*	0.982	0.992
Tetra	PCB-81	*	*	n	NotF¶	1.33	*		3360	2.5	*	*	0.995	1.005
Tetra	PCB-77	3.19e+07	0.77	y	39:51	1.10	7140		3360	2.5	19.5	1.000	0.995	1.005
Penta	PCB-104	*	*	n	NotF¶	1.18	*		2960	2.5	*	*	0.996	1.006
Penta	PCB-96	*	*	n	NotF¶	1.14	*		2960	2.5	*	*	1.034	1.044
Penta	PCB-103	*	*	n	NotF¶	0.96	*		2960	2.5	*	*	1.050	1.060
Penta	PCB-100	*	*	n	NotF¶	0.94	*		2960	2.5	*	*	1.061	1.071
Penta	PCB-94	*	*	n	NotF¶	1.06	*		2960	2.5	*	*	0.980	0.990
Penta	PCB-95/98/102	*	*	n	NotF¶	1.22	*		2960	2.5	*	*	0.995	1.005
Penta	PCB-93	*	*	n	NotF¶	0.84	*		2960	2.5	*	*	0.997	1.007
Penta	PCB-88/91	*	*	n	NotF¶	1.12	*		2960	2.5	*	*	1.005	1.015
Penta	PCB-121	*	*	n	NotF¶	1.62	*		2960	2.5	*	*	1.009	1.019
Penta	PCB-84/92	*	*	n	NotF¶	1.05	*		2960	2.5	*	*	0.985	0.995
Penta	PCB-89	*	*	n	NotF¶	1.13	*		2960	2.5	*	*	0.991	1.001

Analyst: DMS

Date: 3/27/15

3/27/15

Client ID: SC-CB-24-20141211-S Filename: 150318E1 S:11 Acq:18-MAR-15 20:44:12 ConCal: ST150318E1-1
Lab ID: 1400948-03RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol: 1.9024 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	*	*	n	NotFnd	1.10	*	
Total Tri-PCB	*	*	n	NotFnd	1.21	*	Sum:0.00000
Total Tetra-PCB	3.19e+07	0.77	y	39:51	1.09	7140.93	
Total Penta-PCB	*	*	n	NotFnd	1.18	*	
Total Penta-PCB	*	*	n	NotFnd	1.25	*	Sum:0.00000
Total Hexa-PCB	*	*	n	NotFnd	0.90	*	
Total Hexa-PCB	*	*	n	NotFnd	1.11	*	Sum:0.00000
Total Hepta-PCB	*	*	n	NotFnd	1.42	*	
Total Octa-PCB	*	*	n	NotFnd	0.96	*	
Total Octa-PCB	*	*	n	NotFnd	1.33	*	Sum:0.00000
Total Nona-PCB	*	*	n	NotFnd	1.01	*	
Total Deca-PCB	1.45e+06	1.21	y	57:24	1.17	*	

Total PCB Conc:7140.92613000

Integrations
by
Analyst: DMS

Date: 3/27/15

Client ID: SC-CB-24-20141211-S Filename: 150318E1 S:11 Acq:18-MAR-15 20:44:12 ConCal: ST150318E1-1
Lab ID: 1400948-03RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-23-14 wt/vol:1.9024 EndCAL: NA

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	*	*	n	0.87	NotFnd	*	0.629	0.635	*	*
13C-PCB-3	*	*	n	0.91	NotFnd	*	0.725	0.733	*	*
13C-PCB-4	*	*	n	0.59	NotFnd	*	0.775	0.783	*	*
13C-PCB-9	*	*	n	0.90	NotFnd	*	0.842	0.850	*	*
13C-PCB-11	*	*	n	0.94	NotFnd	*	0.968	0.978	*	*
13C-PCB-19	*	*	n	0.53	NotFnd	*	0.930	0.940	*	*
13C-PCB-28	*	*	n	0.93	NotFnd	*	0.999	1.009	*	*
13C-PCB-32	*	*	n	0.80	NotFnd	*	1.040	1.050	*	*
13C-PCB-37	*	*	n	0.84	NotFnd	*	1.131	1.143	*	*
13C-PCB-47	*	*	n	0.81	NotFnd	*	0.866	0.874	*	*
13C-PCB-52	*	*	n	0.77	NotFnd	*	0.853	0.861	*	*
13C-PCB-54	*	*	n	0.97	NotFnd	*	0.758	0.766	*	*
13C-PCB-70	*	*	n	1.00	NotFnd	*	0.961	0.971	*	*
13C-PCB-77	4.26e+07	0.83	y	0.94	39:50	1.079	1.073	1.083	8500	80.8
13C-PCB-80	*	*	n	1.03	NotFnd	*	0.972	0.982	*	*
13C-PCB-81	*	*	n	0.92	NotFnd	*	1.057	1.067	*	*
13C-PCB-95	*	*	n	0.74	NotFnd	*	0.908	0.918	*	*
13C-PCB-97	*	*	n	0.70	NotFnd	*	0.984	0.994	*	*
13C-PCB-101	*	*	n	0.78	NotFnd	*	0.951	0.961	*	*
13C-PCB-104	*	*	n	1.00	NotFnd	*	0.828	0.836	*	*
13C-PCB-105	*	*	n	1.37	NotFnd	*	0.924	0.934	*	*
13C-PCB-114	*	*	n	1.36	NotFnd	*	0.905	0.915	*	*
13C-PCB-118	*	*	n	0.96	NotFnd	*	1.054	1.064	*	*
13C-PCB-123	*	*	n	0.89	NotFnd	*	1.050	1.060	*	*
13C-PCB-126	*	*	n	1.31	NotFnd	*	0.972	0.982	*	*
13C-PCB-127	*	*	n	1.47	NotFnd	*	0.931	0.941	*	*
13C-PCB-138	*	*	n	1.10	NotFnd	*	0.961	0.971	*	*
13C-PCB-141	*	*	n	1.07	NotFnd	*	0.943	0.953	*	*
13C-PCB-153	*	*	n	1.15	NotFnd	*	0.927	0.937	*	*
13C-PCB-155	*	*	n	0.84	NotFnd	*	0.939	0.949	*	*
13C-PCB-156	*	*	n	1.30	NotFnd	*	1.032	1.042	*	*
13C-PCB-157	*	*	n	1.36	NotFnd	*	1.038	1.048	*	*
13C-PCB-159	*	*	n	1.25	NotFnd	*	0.989	0.999	*	*
13C-PCB-167	*	*	n	1.35	NotFnd	*	1.004	1.014	*	*
13C-PCB-169	*	*	n	1.29	NotFnd	*	1.083	1.093	*	*
13C-PCB-170	*	*	n	0.54	NotFnd	*	1.089	1.101	*	*
13C-PCB-180	*	*	n	0.68	NotFnd	*	1.060	1.070	*	*
13C-PCB-188	*	*	n	0.92	NotFnd	*	0.919	0.929	*	*
13C-PCB-189	*	*	n	0.72	NotFnd	*	1.120	1.132	*	*
13C-PCB-194	*	*	n	0.80	NotFnd	*	0.990	1.000	*	*
13C-PCB-202	*	*	n	0.84	NotFnd	*	1.036	1.046	*	*
13C-PCB-206	*	*	n	0.65	NotFnd	*	1.021	1.031	*	*
13C-PCB-208	*	*	n	1.08	NotFnd	*	0.976	0.986	*	*
13C-PCB-209	*	*	n	0.61	NotFnd	*	1.045	1.055	*	*

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	5.31e+07	0.79	y	1.02	38:01	1.030	1.023	1.034	9800	~~93.2~~
13C-PCB-178	*	*	n	0.61	NotFnd	*	0.979	0.990	*	*

PS vs. IS

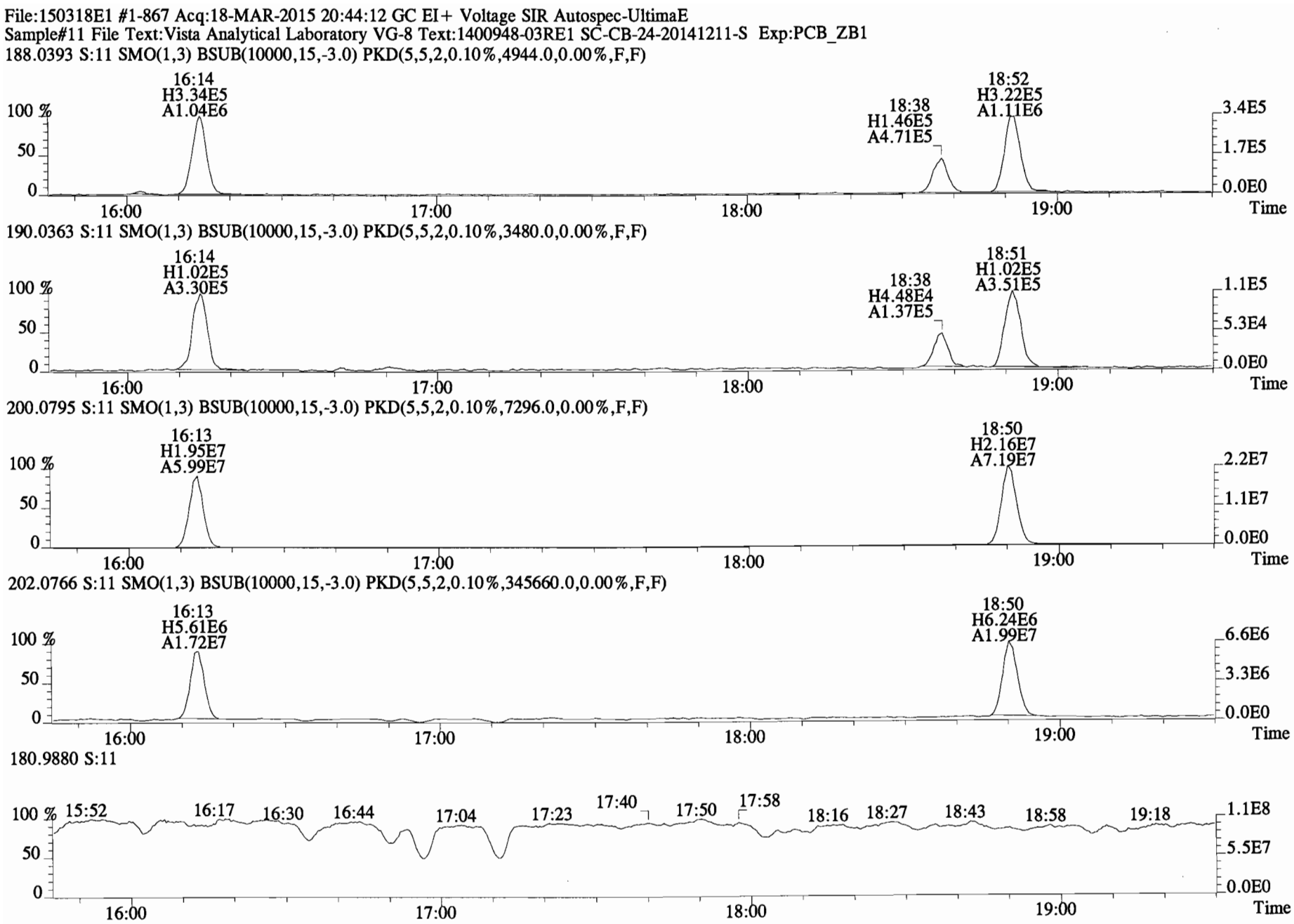
Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	*	*	n	1.10	NotFnd	*	0.964	0.974	*	*
13C-PCB-178	*	*	n	0.90	NotFnd	*	0.920	0.930	*	*

RS

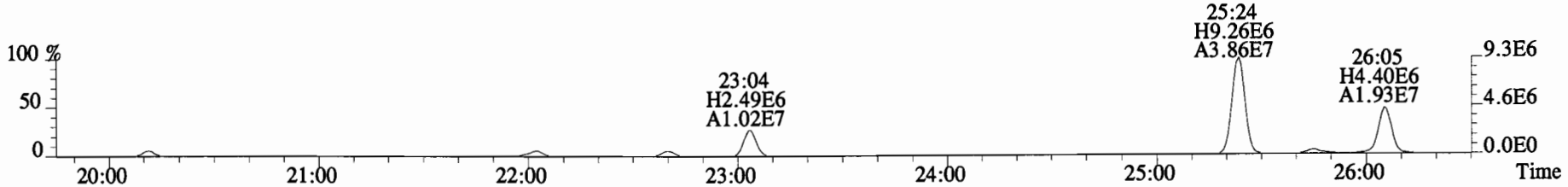
Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.24e+08	1.61	y	1.00	26:04	10500
13C-PCB-31	6.24e+07	1.00	y	1.00	29:07	10500
13C-PCB-60	5.60e+07	0.80	y	1.00	36:55	10500
13C-PCB-111	*	*	n	1.00	NotFnd	*
13C-PCB-128	2.44e+07	1.30	y	1.00	46:23	10500
13C-PCB-205	6.47e+06	0.86	y	1.00	54:11	10500

Analyst: DMS

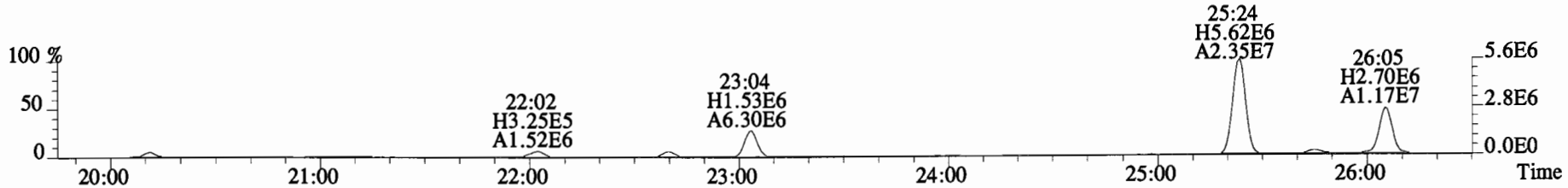
Date: 3/27/15


File:150318E1 #1-867 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
188.0393 S:11 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4944.0,0.00%,F,F)
16:14 H3.34E5 A1.04E6
18:38 H1.46E5 A4.71E5
18:52 H3.22E5 A1.11E6
3.4E5
1.7E5
0.0E0
190.0363 S:11 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3480.0,0.00%,F,F)
16:14 H1.02E5 A3.30E5
18:38 H4.48E4 A1.37E5
18:51 H1.02E5 A3.51E5
1.1E5
5.3E4
0.0E0
200.0795 S:11 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7296.0,0.00%,F,F)
16:13 H1.95E7 A5.99E7
18:50 H2.16E7 A7.19E7
2.2E7
1.1E7
0.0E0
202.0766 S:11 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,345660.0,0.00%,F,F)
16:13 H5.61E6 A1.72E7
18:50 H6.24E6 A1.99E7
6.6E6
3.3E6
0.0E0
180.9880 S:11
15:52 16:17 16:30 16:44 17:04 17:23 17:40 17:50 17:58 18:16 18:27 18:43 18:58 19:18
1.1E8
5.5E7
0.0E0
100 %
50
0
16:00
17:00
18:00
19:00
Time

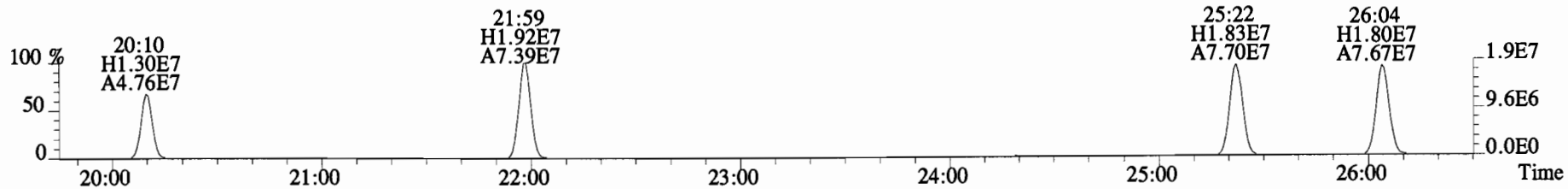
File:150318E1 #1-757 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
222.0003 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5316.0,0.00%,F,F)



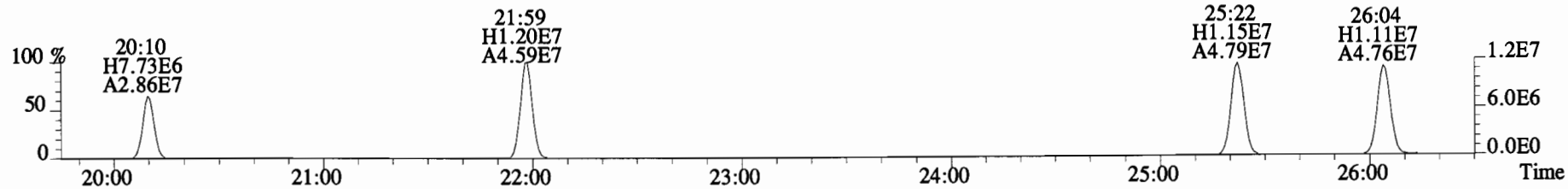
223.9974 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,22776.0,0.00%,F,F)



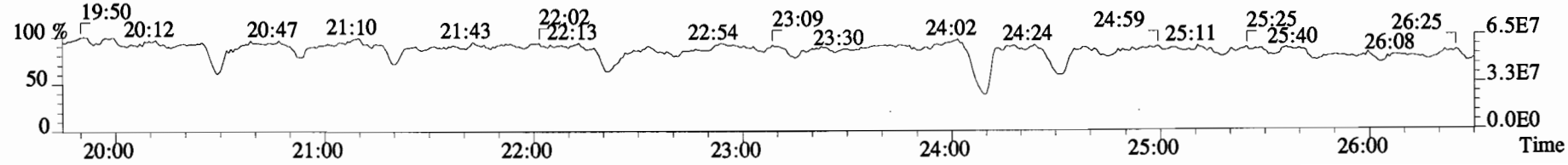
234.0406 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,6064.0,0.00%,F,F)



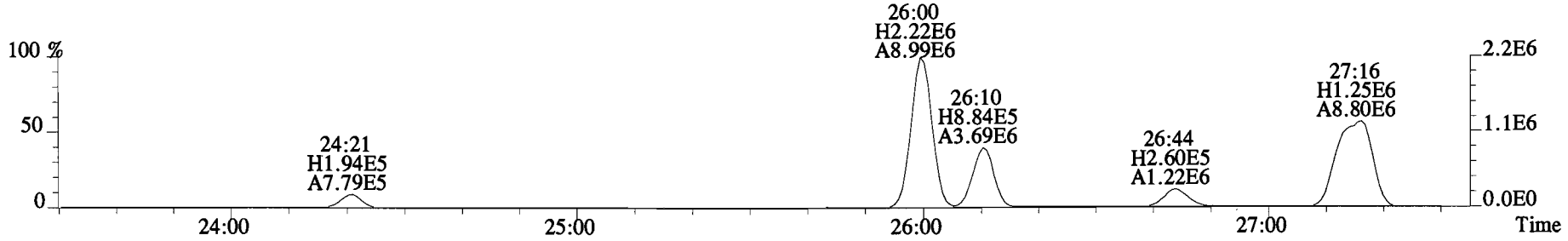
236.0376 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3840.0,0.00%,F,F)



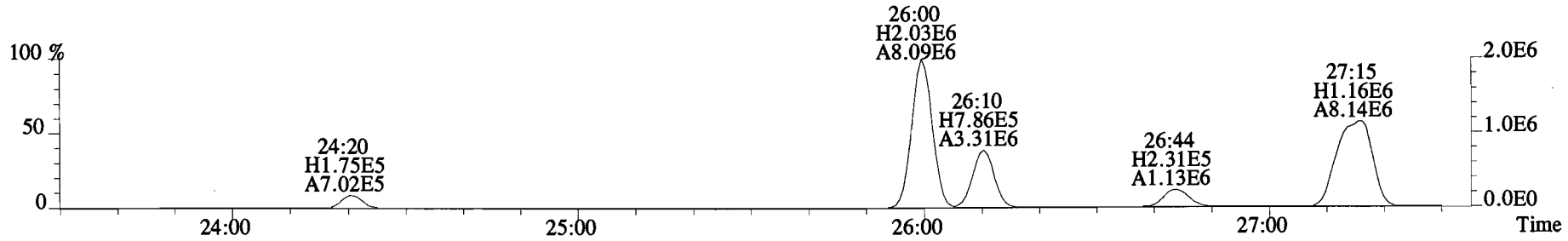
230.9856 S:11 F:2



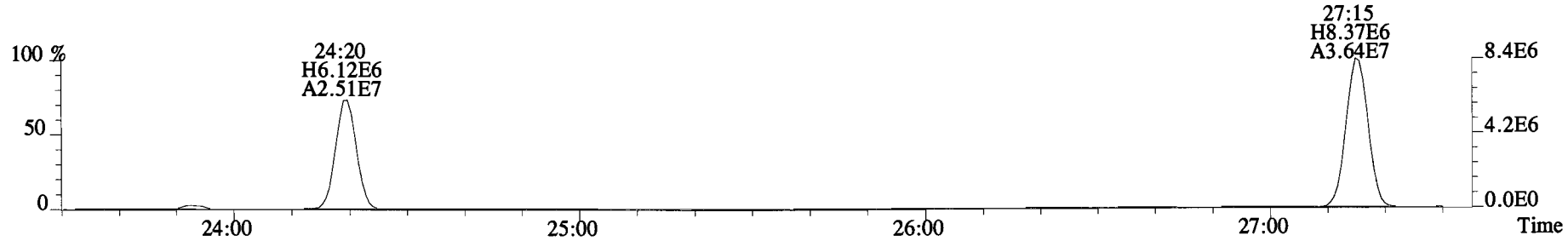
File:150318E1 #1-757 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
255.9613 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4580.0,0.00%,F,F)



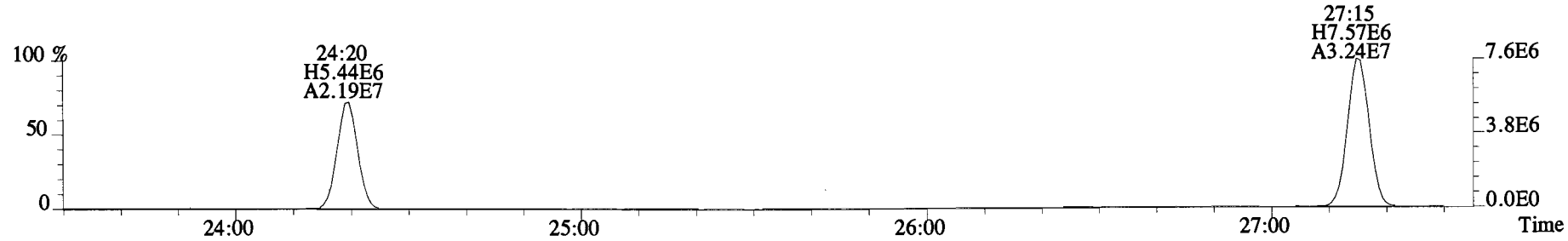
257.9584 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2328.0,0.00%,F,F)

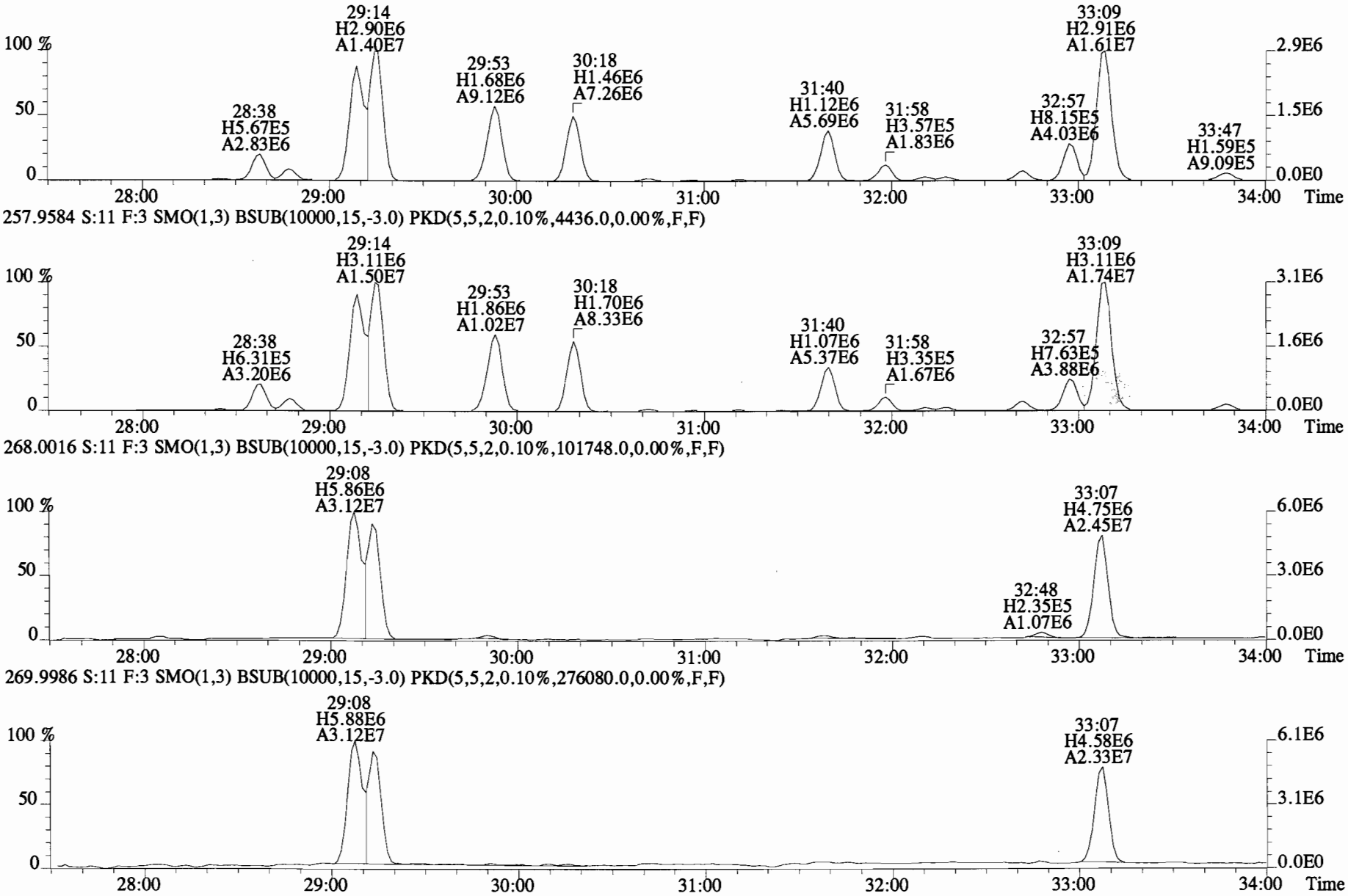


268.0016 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,28084.0,0.00%,F,F)

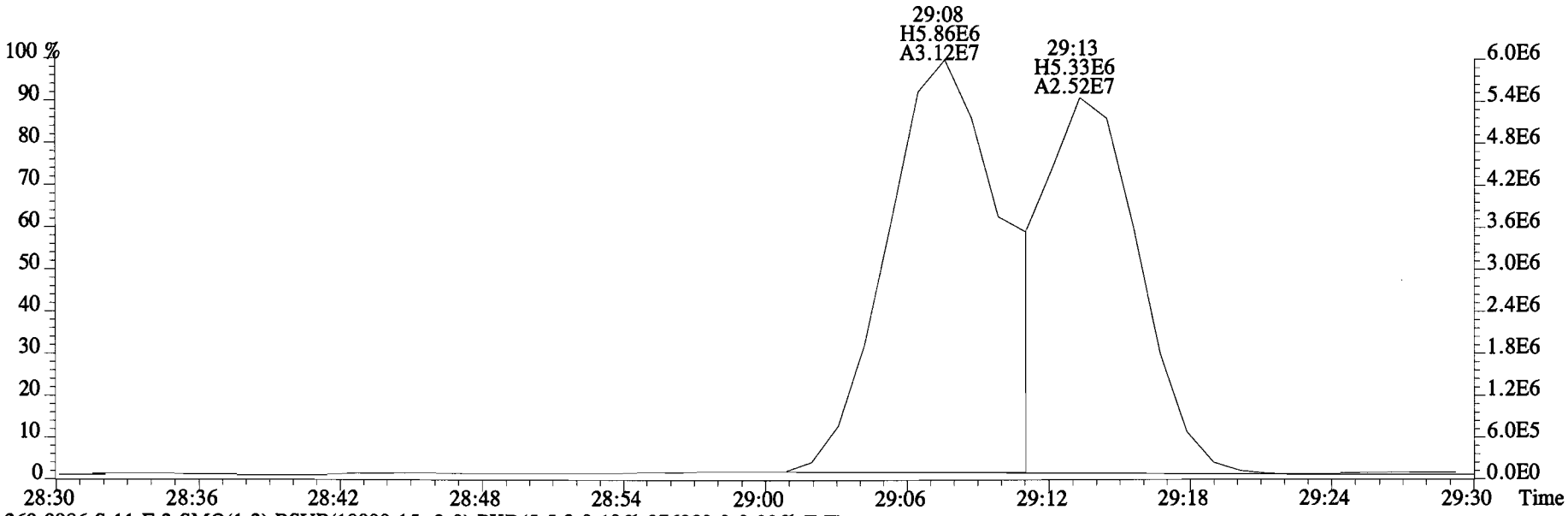


269.9986 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,23228.0,0.00%,F,F)

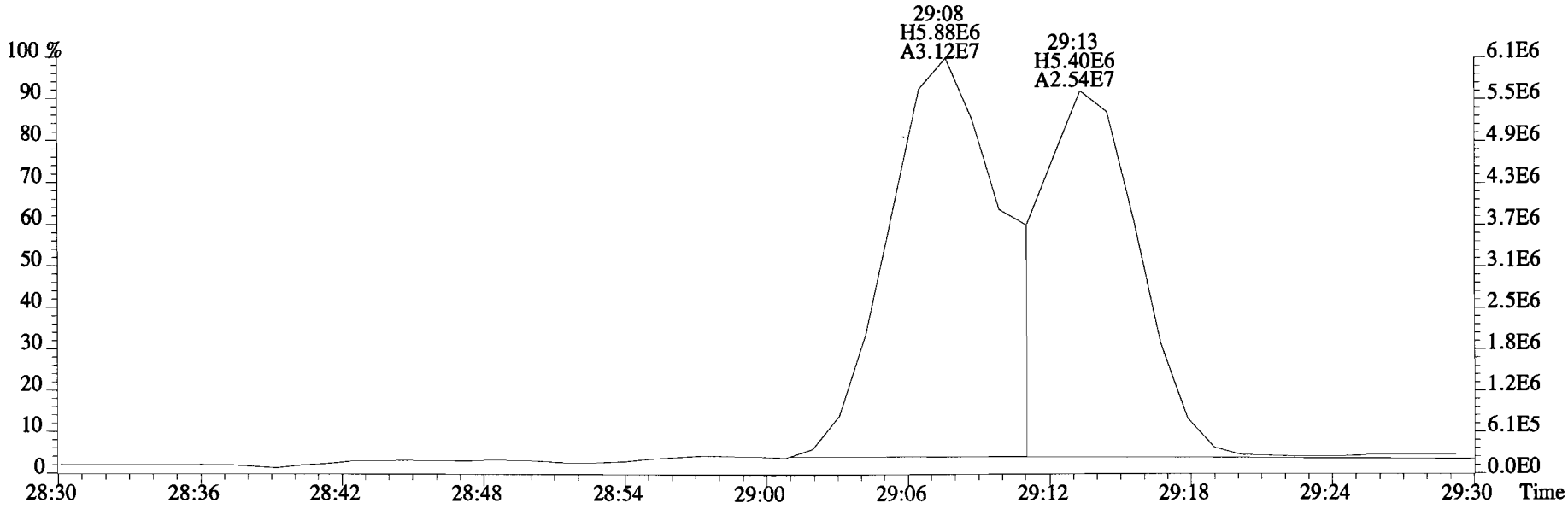



File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
255.9613 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,5136.0,0.00%,F,F)
29:14 H2.90E6 A1.40E7
28:38 H5.67E5 A2.83E6
29:53 H1.68E6 A9.12E6
30:18 H1.46E6 A7.26E6
31:40 H1.12E6 A5.69E6
31:58 H3.57E5 A1.83E6
32:57 H8.15E5 A4.03E6
33:09 H2.91E6 A1.61E7
33:47 H1.59E5 A9.09E5
257.9584 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4436.0,0.00%,F,F)
29:14 H3.11E6 A1.50E7
28:38 H6.31E5 A3.20E6
29:53 H1.86E6 A1.02E7
30:18 H1.70E6 A8.33E6
31:40 H1.07E6 A5.37E6
31:58 H3.35E5 A1.67E6
32:57 H7.63E5 A3.88E6
33:09 H3.11E6 A1.74E7
268.0016 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,101748.0,0.00%,F,F)
29:08 H5.86E6 A3.12E7
32:48 H2.35E5 A1.07E6
33:07 H4.75E6 A2.45E7
269.9986 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,276080.0,0.00%,F,F)
29:08 H5.88E6 A3.12E7
33:07 H4.58E6 A2.33E7
100 %
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
2.9E6
1.5E6
0.0E0
3.1E6
1.6E6
6.0E6
3.0E6
6.1E6
3.1E6

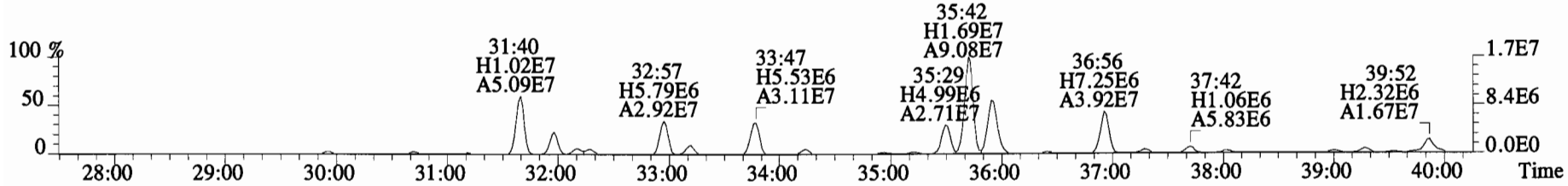
File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
268.0016 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,101748.0,0.00%,F,F)



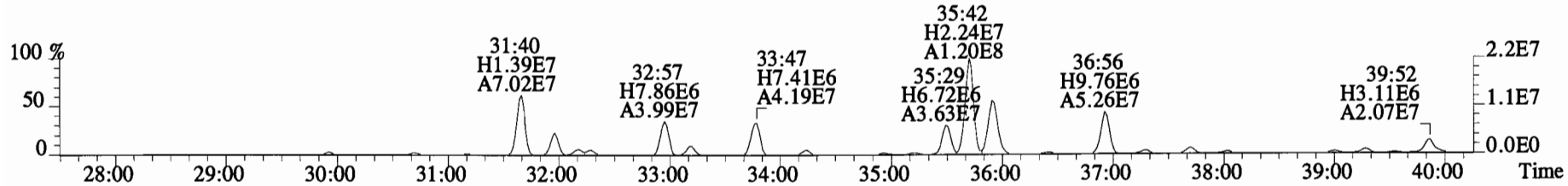
269.9986 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,276080.0,0.00%,F,F)



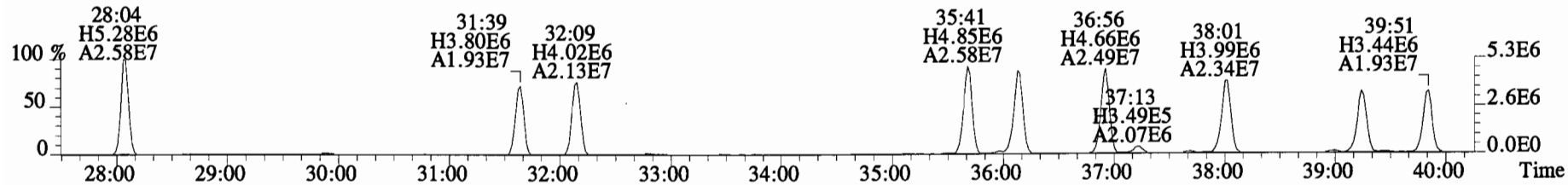
File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2344.0,0.00%,F,F)



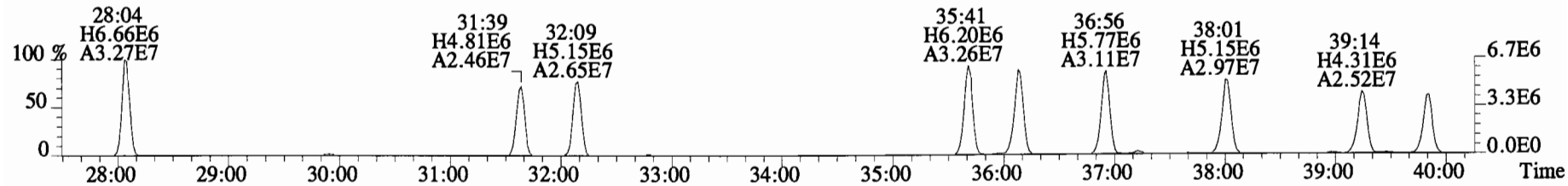
291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3356.0,0.00%,F,F)



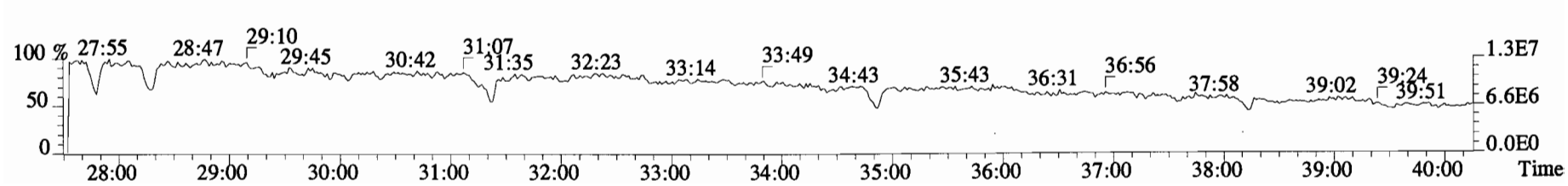
301.9626 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,19072.0,0.00%,F,F)



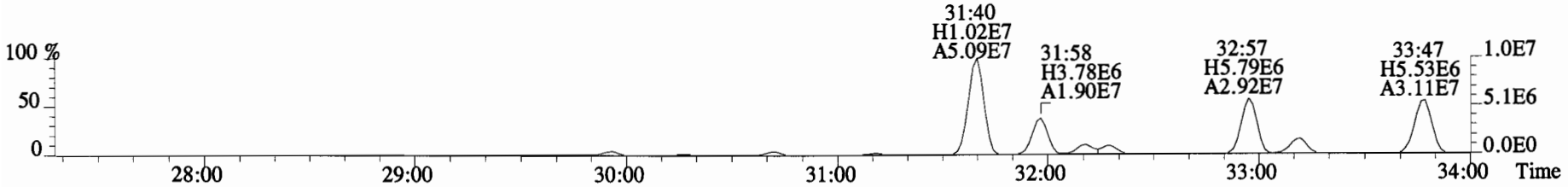
303.9597 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10048.0,0.00%,F,F)



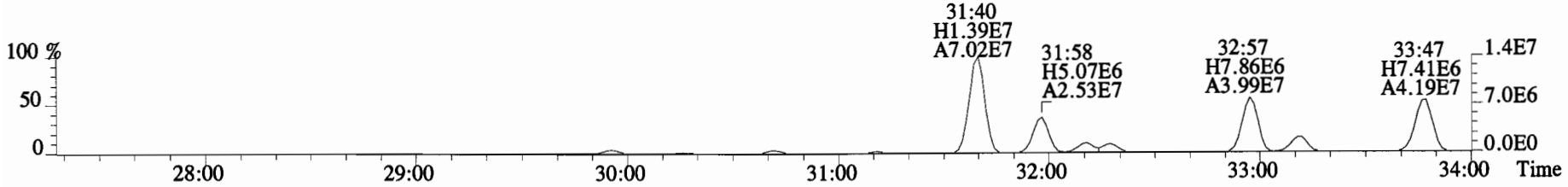
330.9792 S:11 F:3



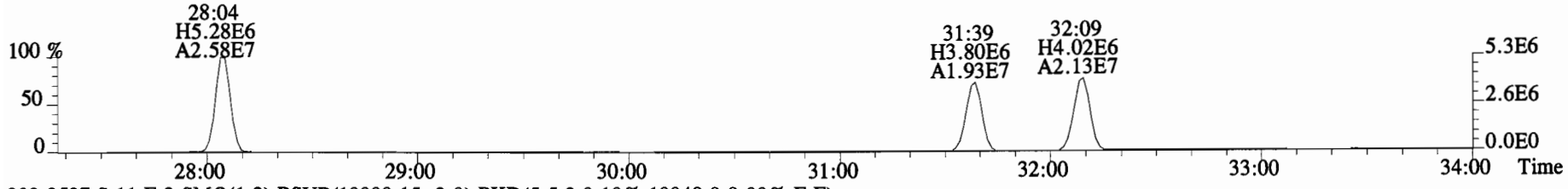
File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2344.0,0.00%,F,F)



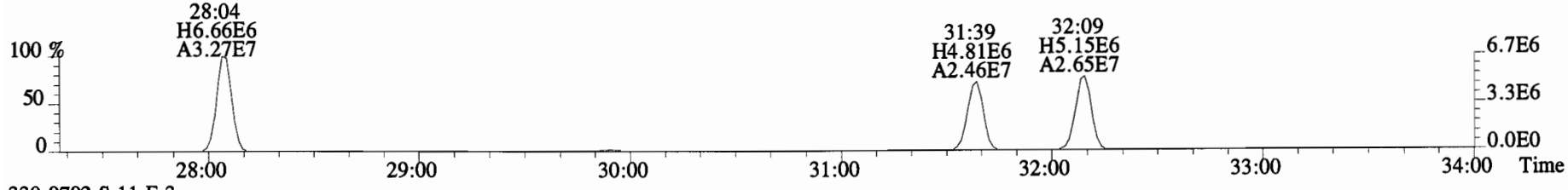
291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3356.0,0.00%,F,F)



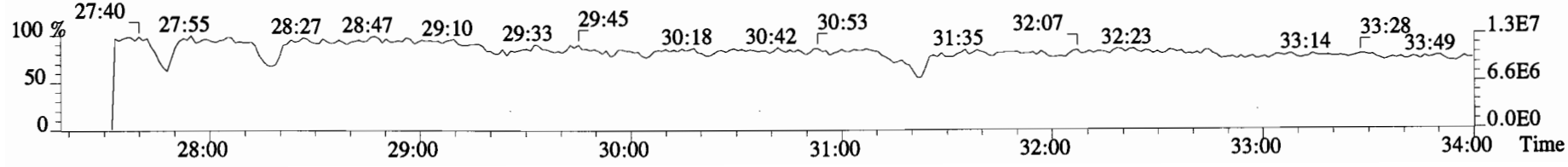
301.9626 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,19072.0,0.00%,F,F)



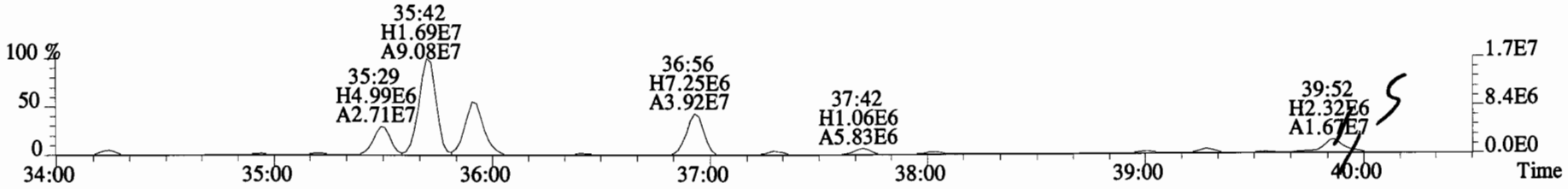
303.9597 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10048.0,0.00%,F,F)



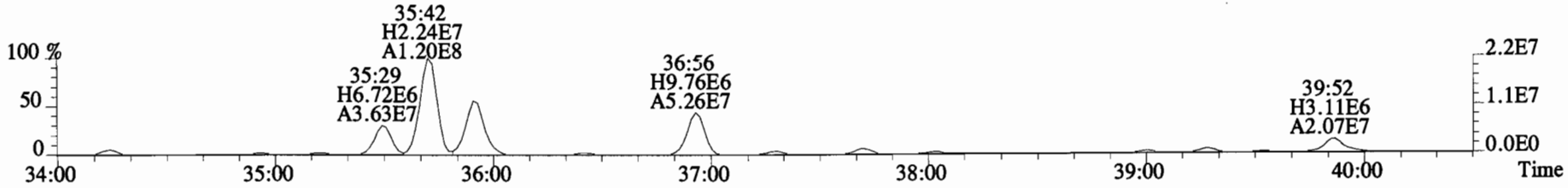
330.9792 S:11 F:3



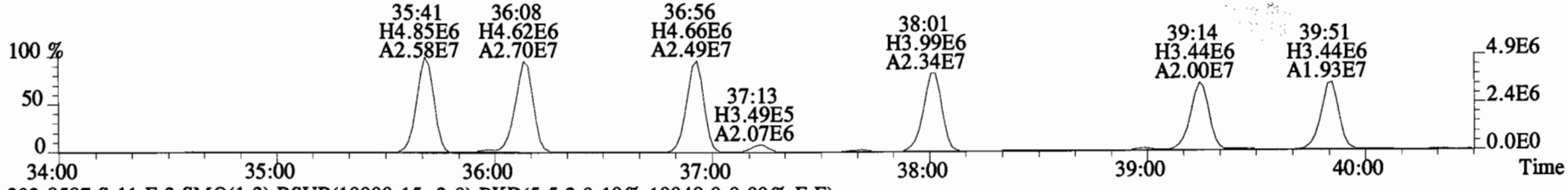
File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2344.0,0.00%,F,F)



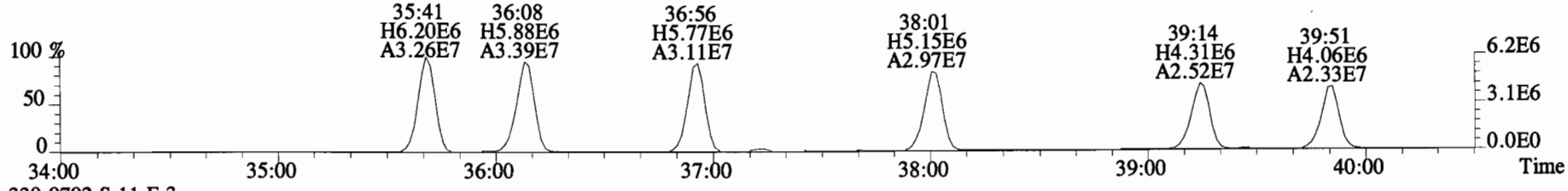
291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3356.0,0.00%,F,F)



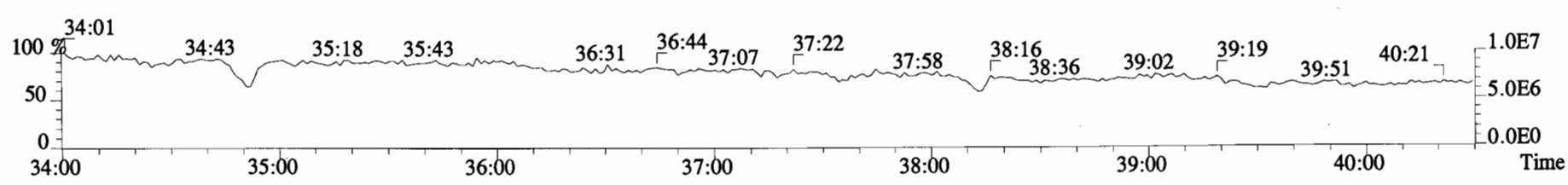
301.9626 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,19072.0,0.00%,F,F)



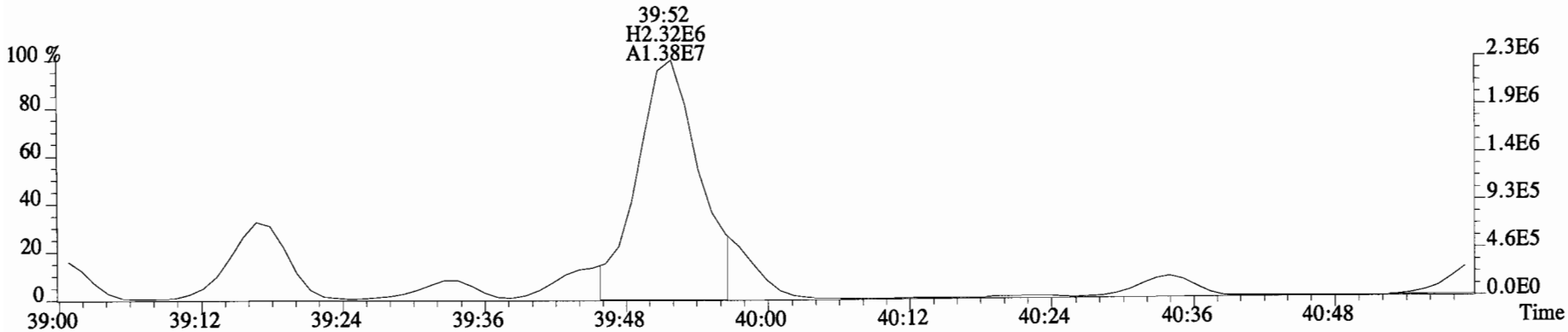
303.9597 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10048.0,0.00%,F,F)



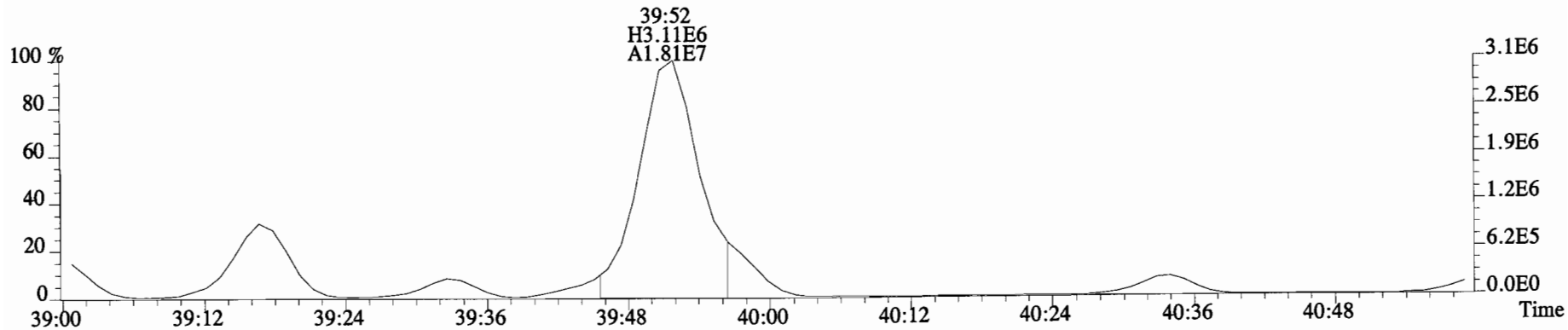
330.9792 S:11 F:3



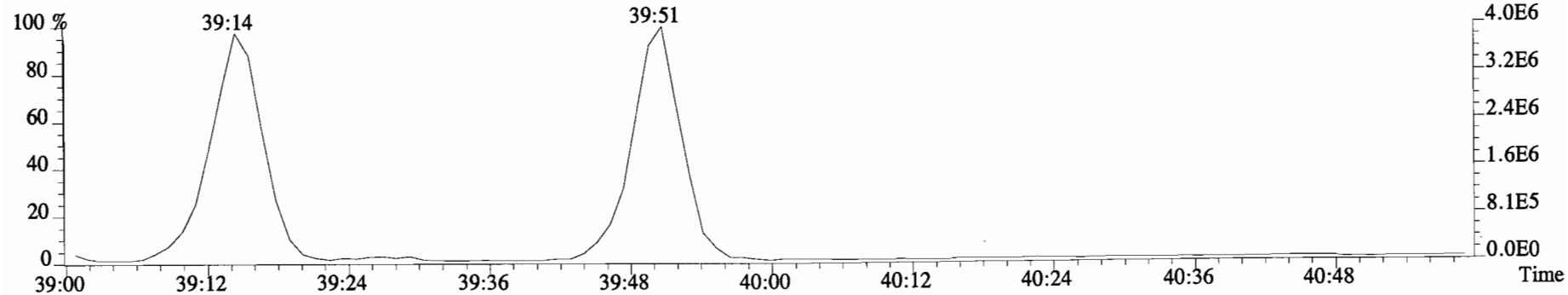
File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2344.0,0.00%,F,F)



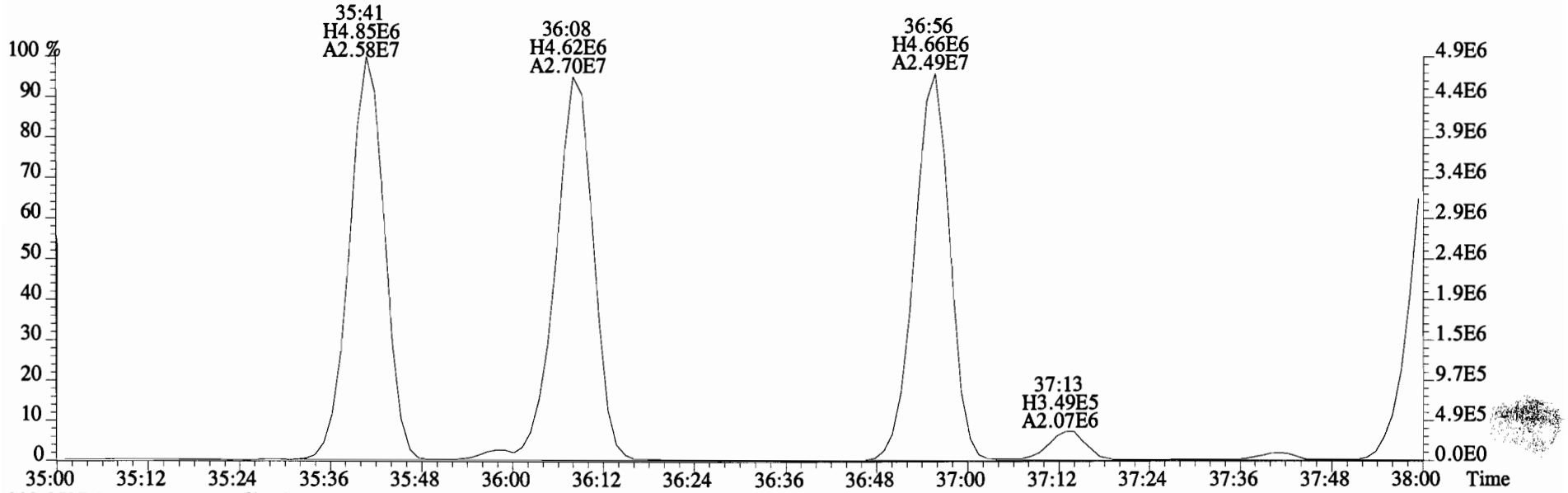
291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3356.0,0.00%,F,F)



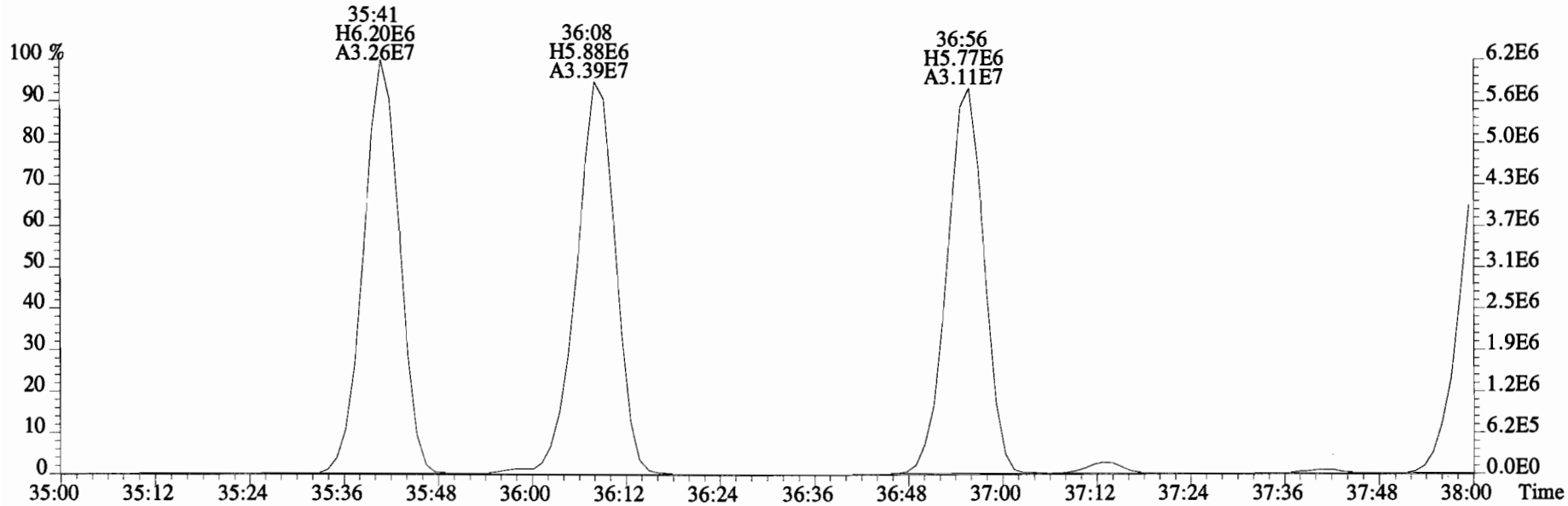
301.9626 S:11 F:3



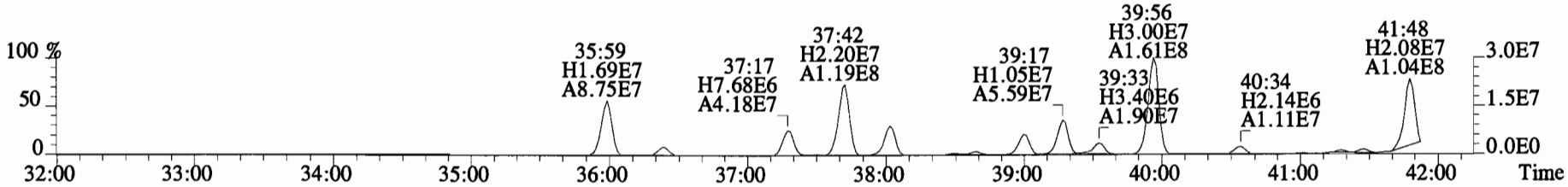
File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
301.9626 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,19072.0,0.00%,F,F)



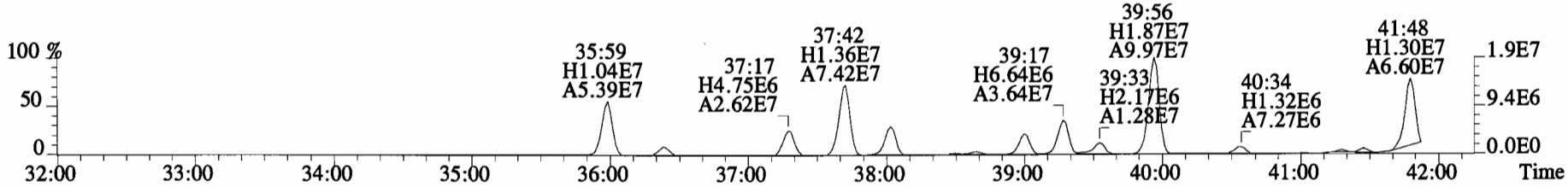
303.9597 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10048.0,0.00%,F,F)



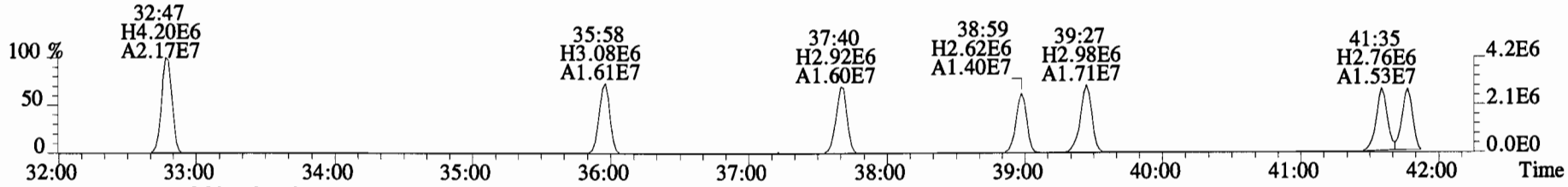
File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4732.0,0.00%,F,F)



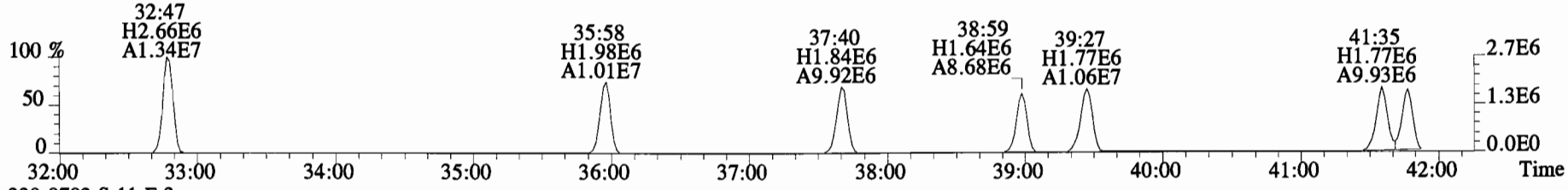
327.8775 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2964.0,0.00%,F,F)



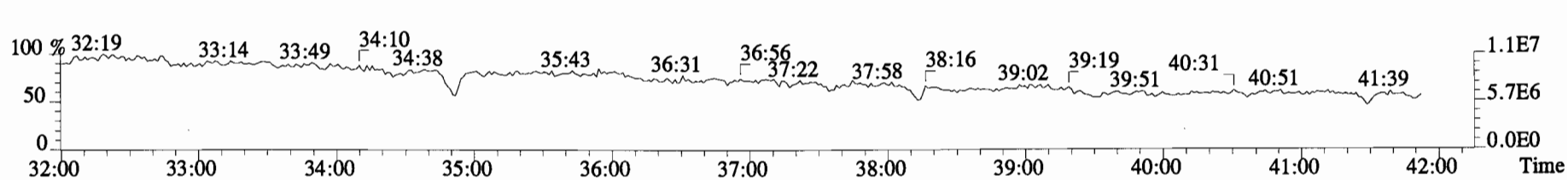
337.9207 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3392.0,0.00%,F,F)



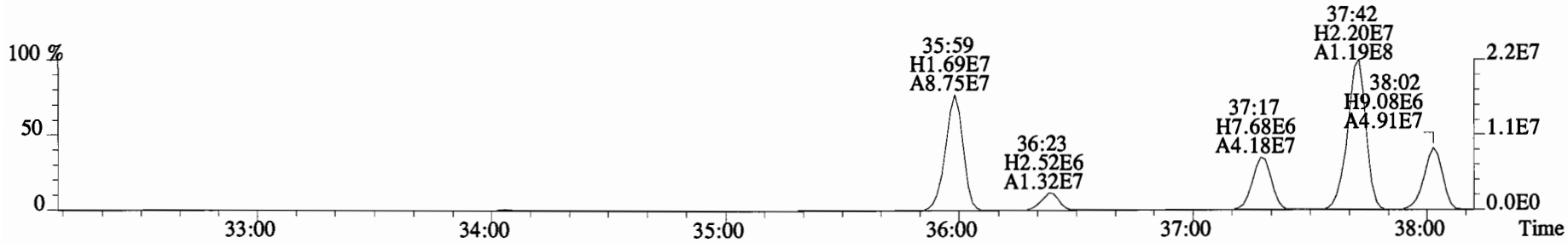
339.9177 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2644.0,0.00%,F,F)



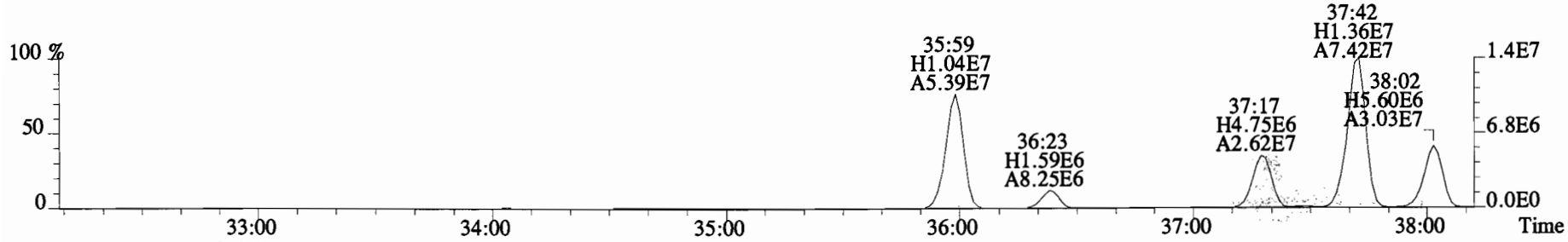
330.9792 S:11 F:3



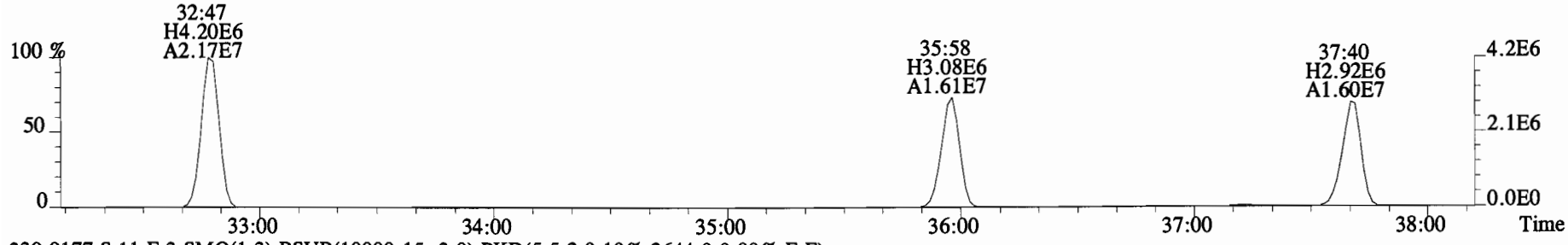
File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4732.0,0.00%,F,F)



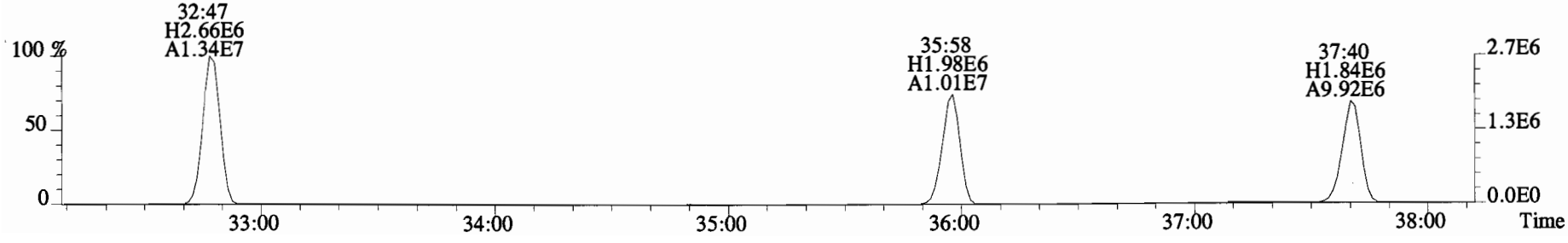
327.8775 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2964.0,0.00%,F,F)



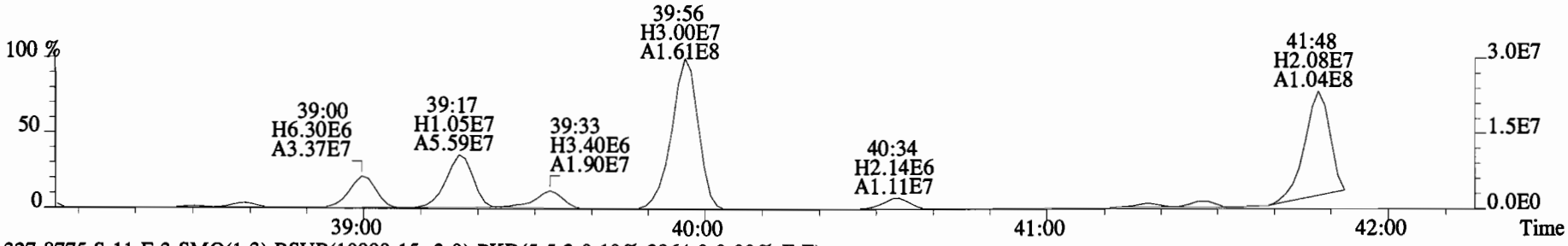
337.9207 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3392.0,0.00%,F,F)



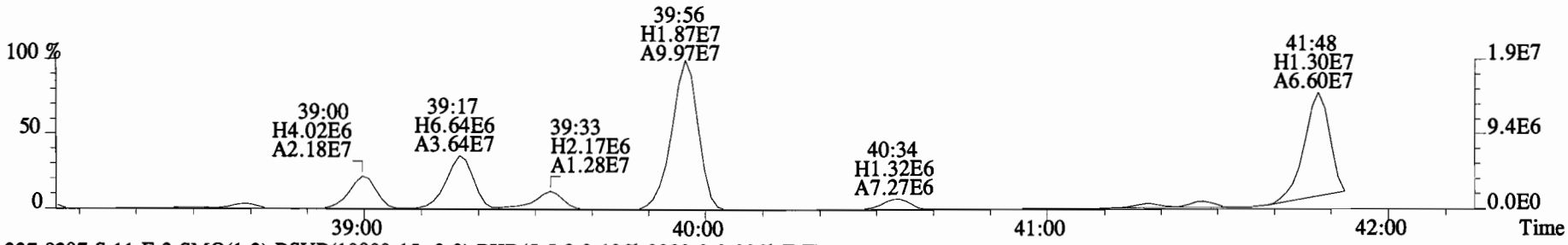
339.9177 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2644.0,0.00%,F,F)



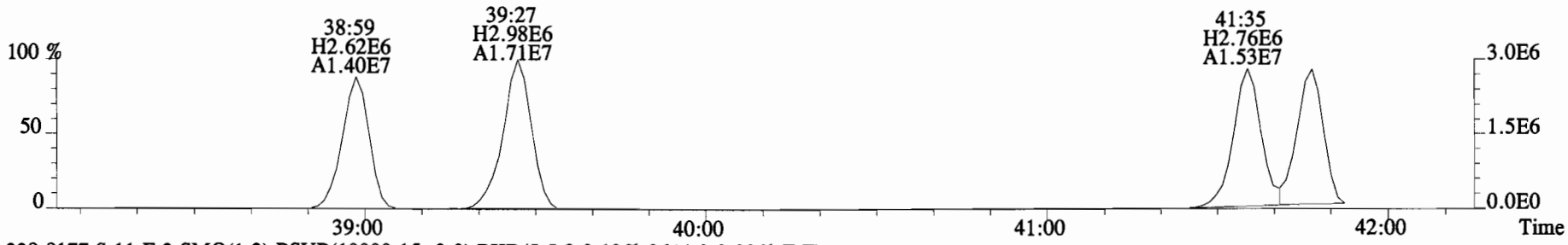
File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4732.0,0.00%,F,F)



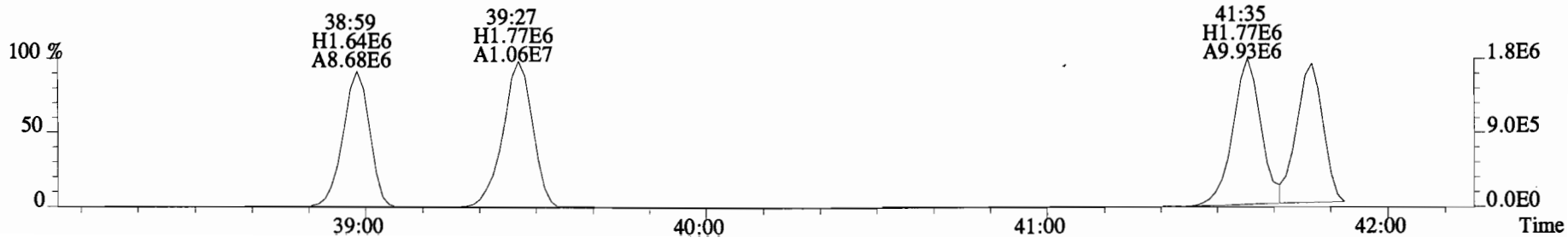
327.8775 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2964.0,0.00%,F,F)



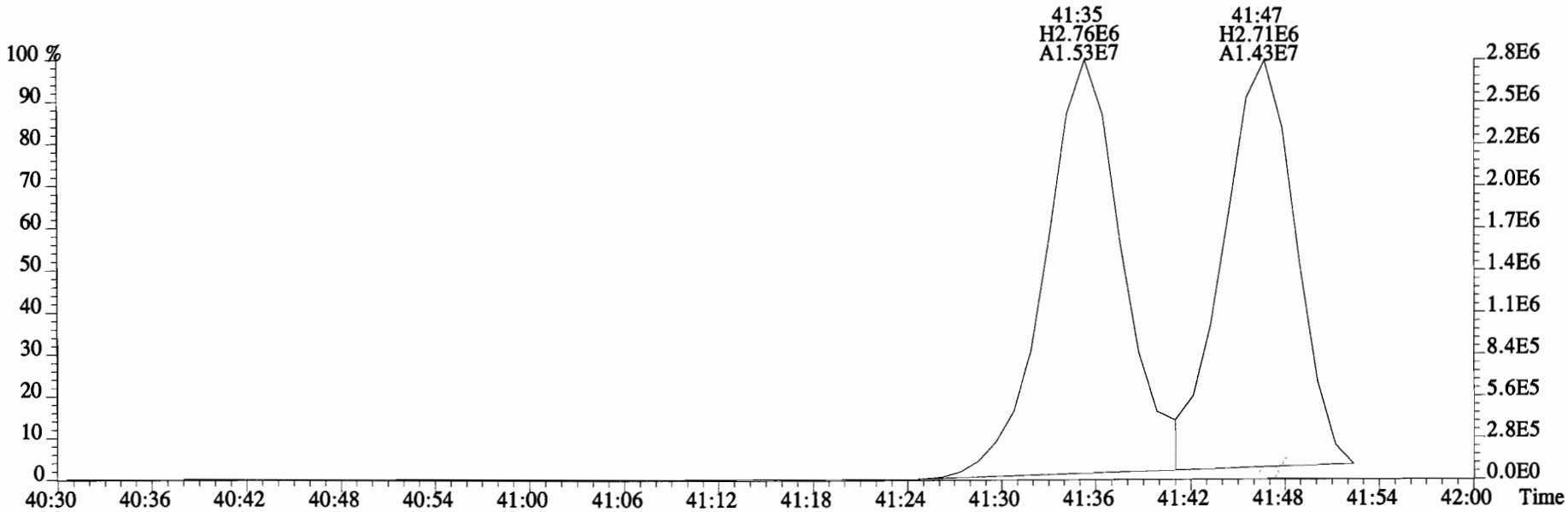
337.9207 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3392.0,0.00%,F,F)



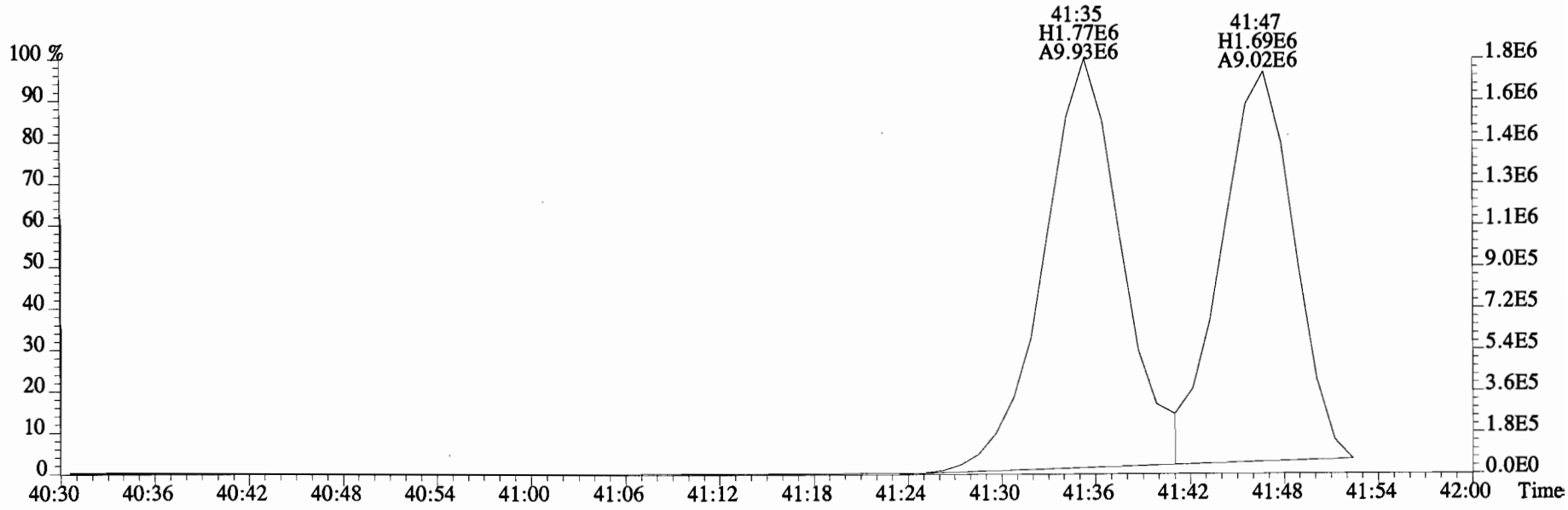
339.9177 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2644.0,0.00%,F,F)



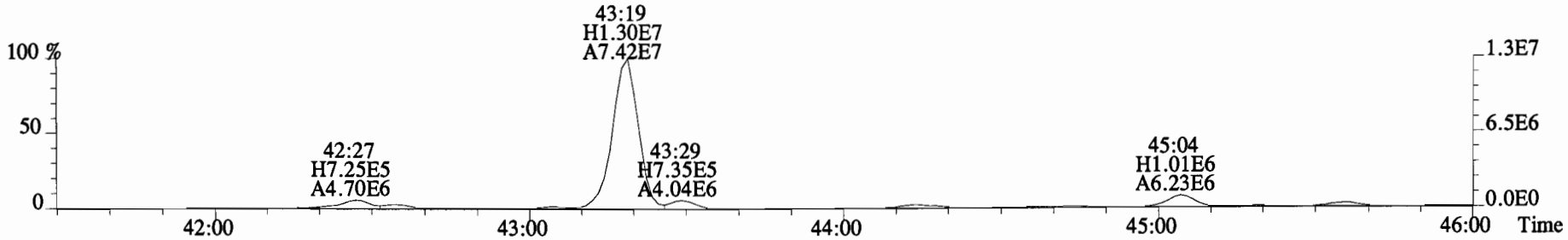
File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
337.9207 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3392.0,0.00%,F,F)



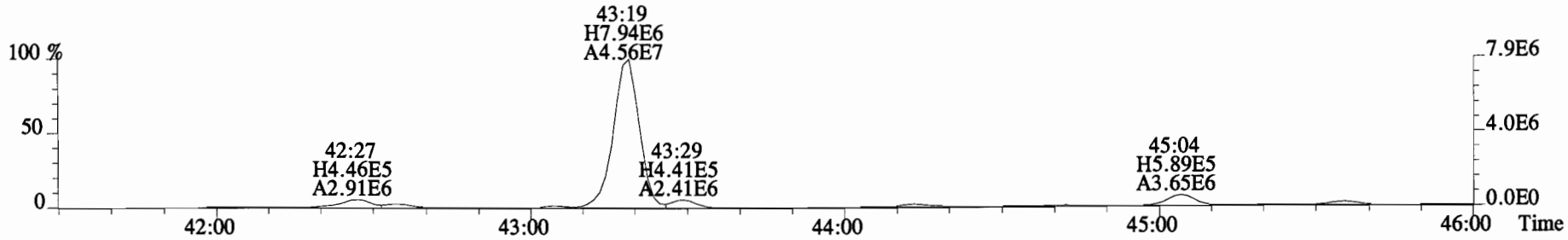
339.9177 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2644.0,0.00%,F,F)



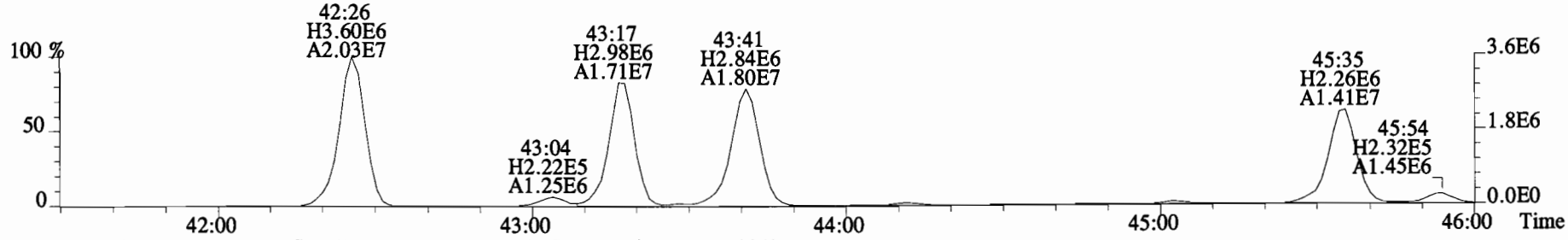
File:150318E1 #1-555 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
325.8804 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,23528.0,0.00%,F,F)



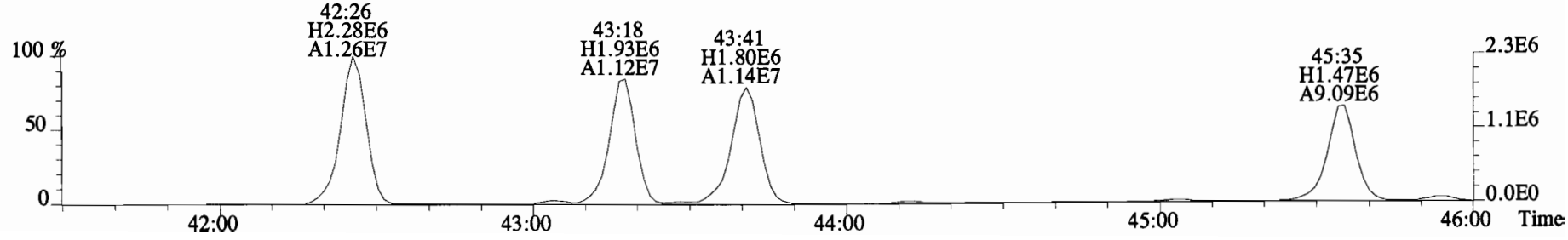
327.8775 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,12844.0,0.00%,F,F)



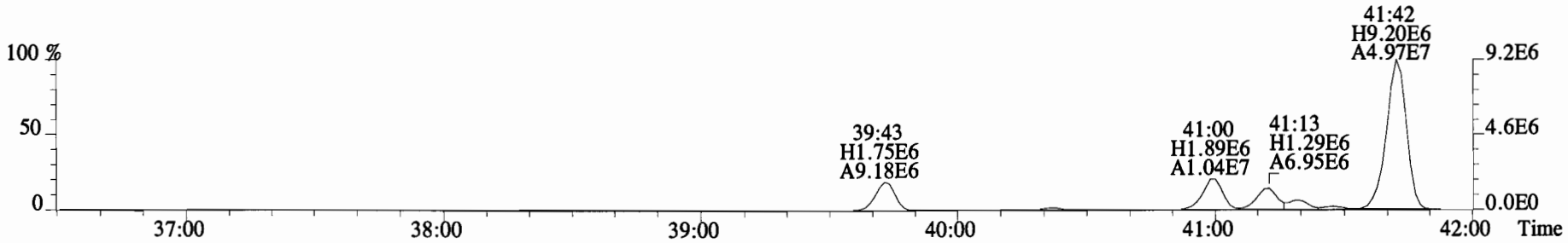
337.9207 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7300.0,0.00%,F,F)



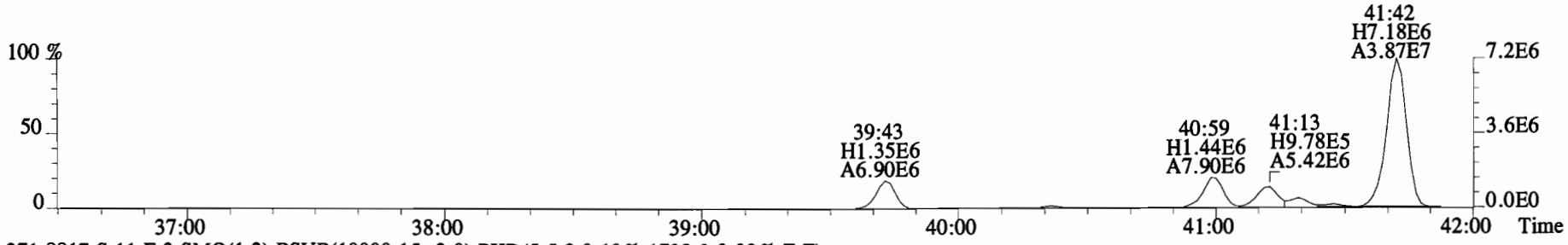
339.9177 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4572.0,0.00%,F,F)



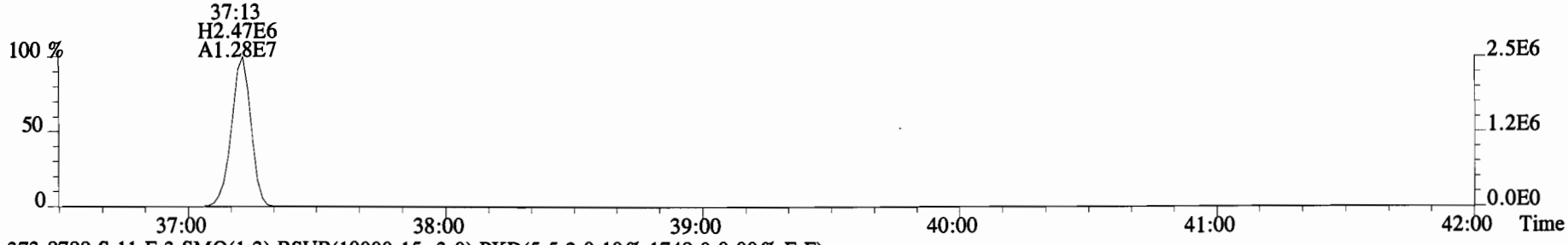
File:150318E1 #1-758 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
359.8415 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1712.0,0.00%,F,F)



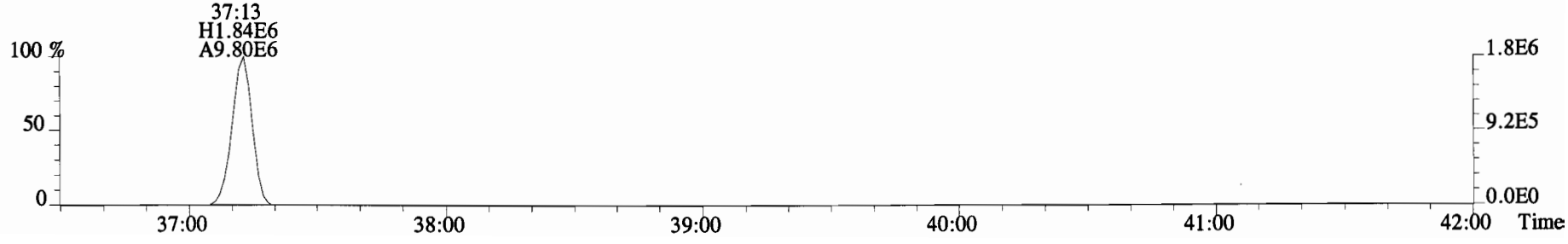
361.8385 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1672.0,0.00%,F,F)



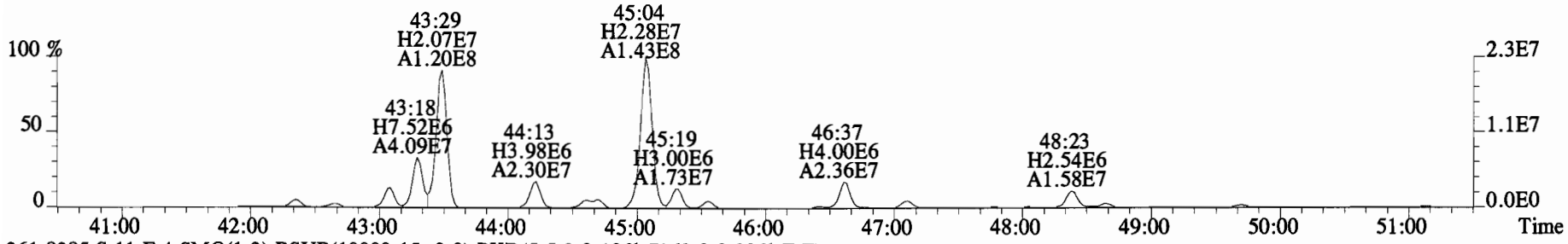
371.8817 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1708.0,0.00%,F,F)



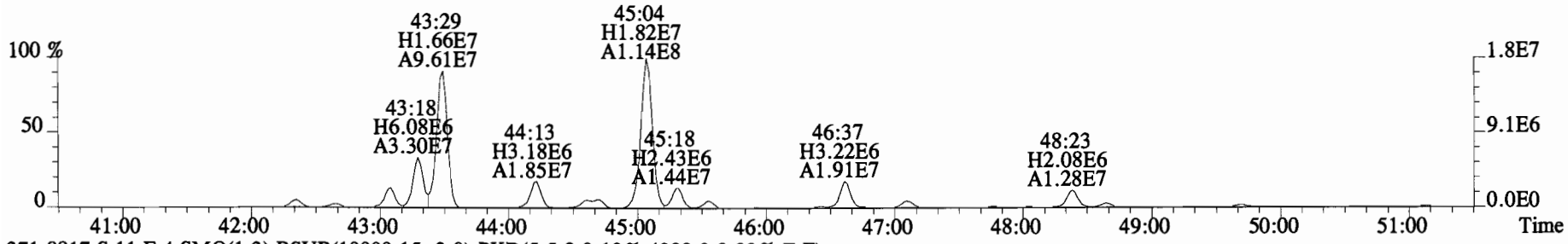
373.8788 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1748.0,0.00%,F,F)



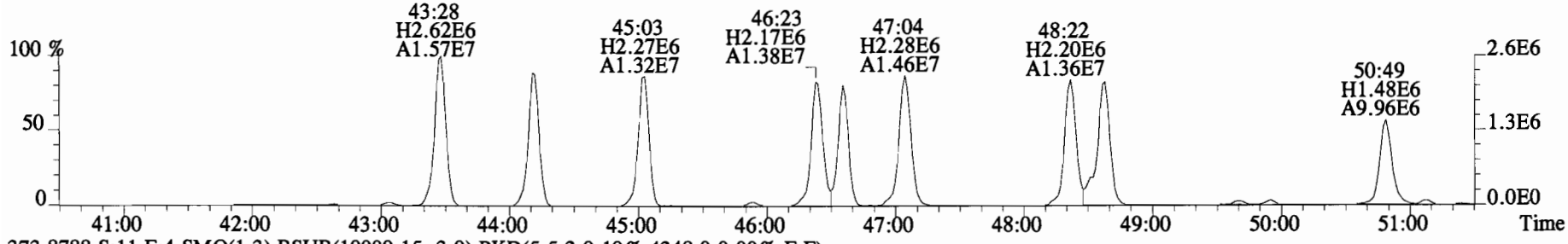
File:150318E1 #1-555 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
359.8415 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,10032.0,0.00%,F,F)



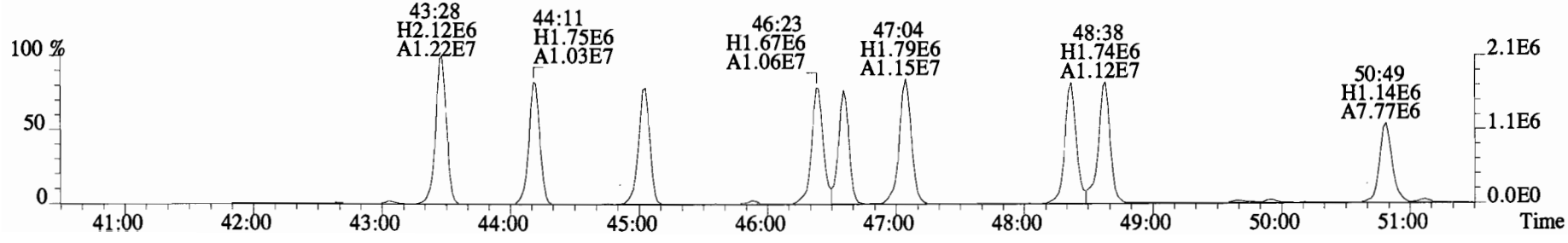
361.8385 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,7360.0,0.00%,F,F)



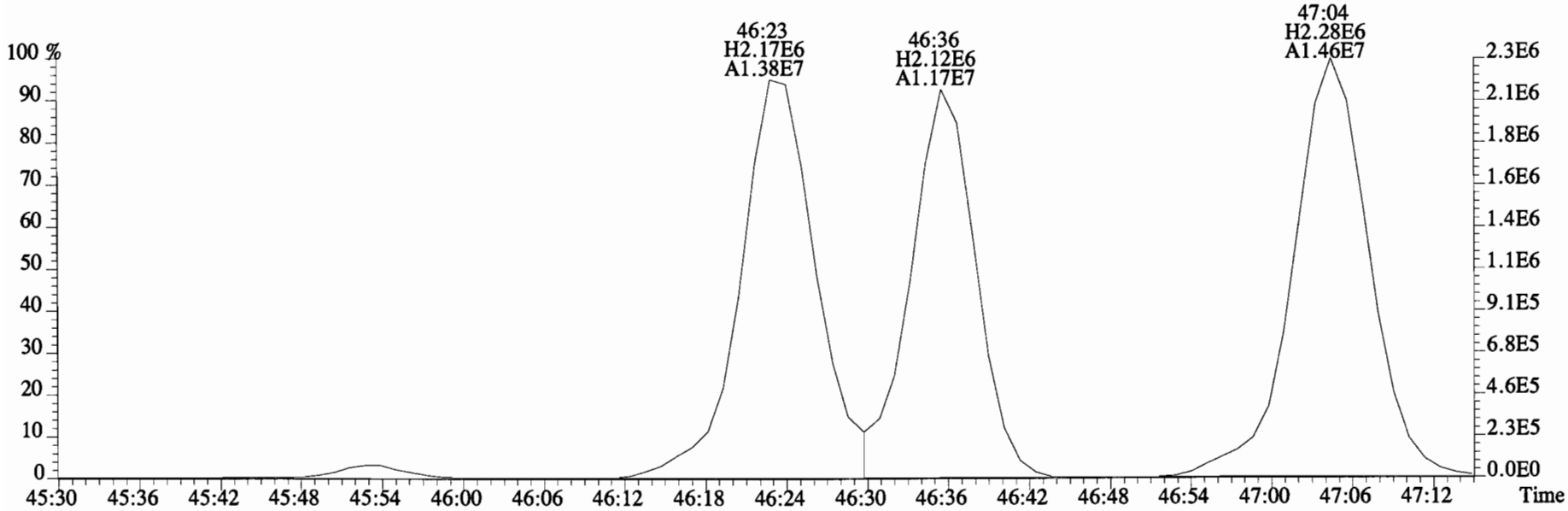
371.8817 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4392.0,0.00%,F,F)



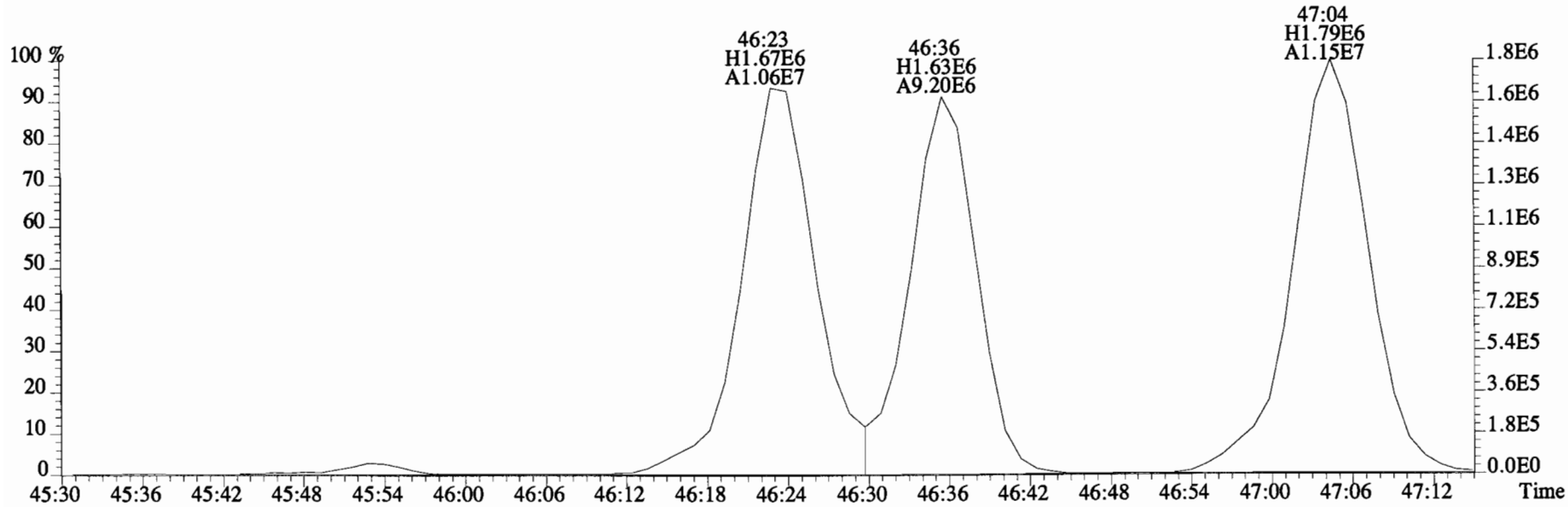
373.8788 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4248.0,0.00%,F,F)



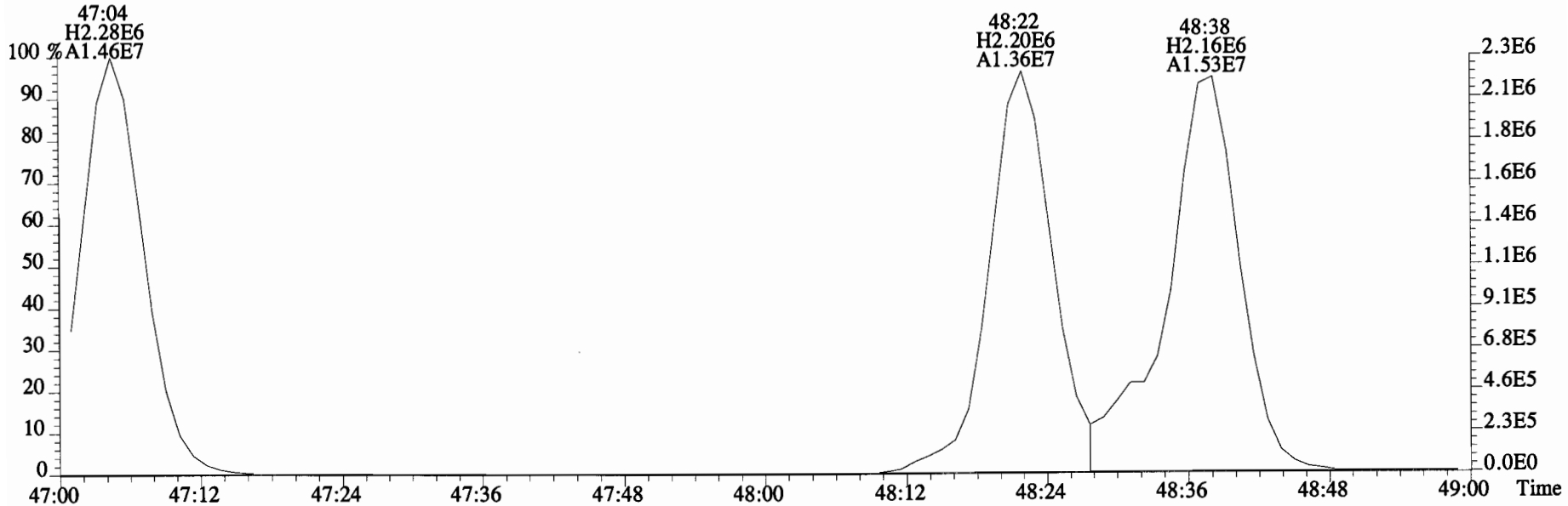
File:150318E1 #1-555 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
371.8817 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4392.0,0.00%,F,F)



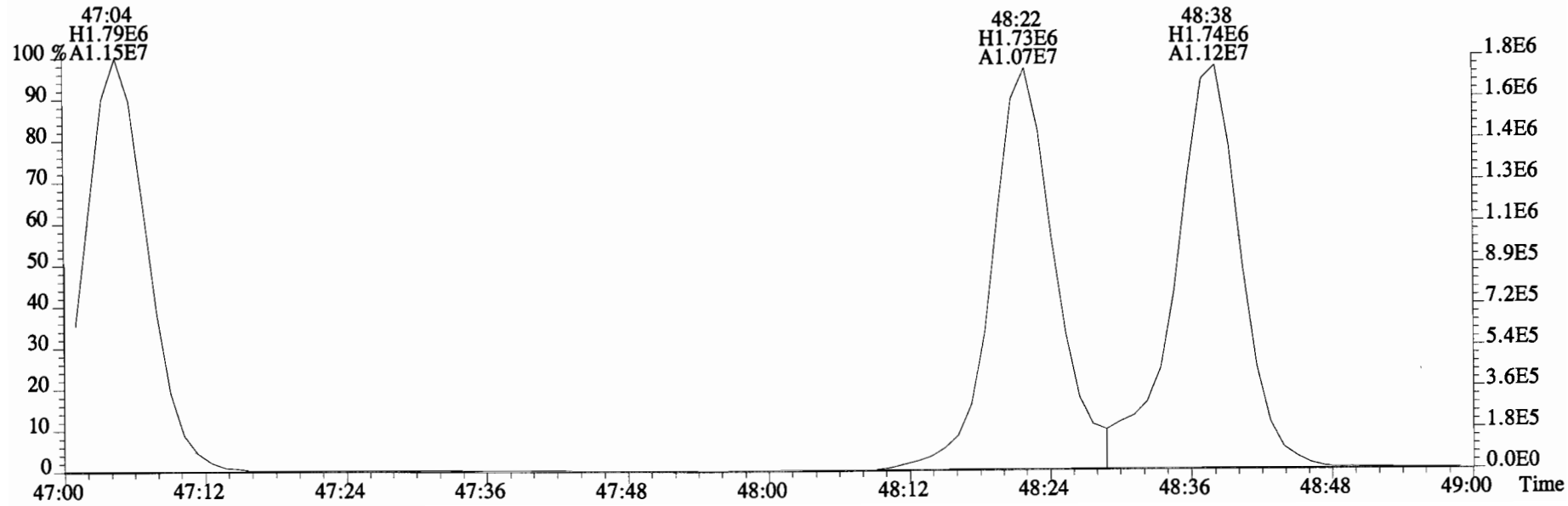
373.8788 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4248.0,0.00%,F,F)



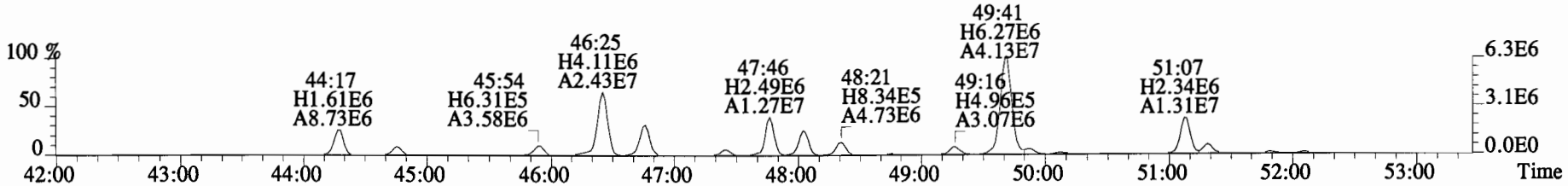
File:150318E1 #1-555 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
371.8817 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4392.0,0.00%,F,F)



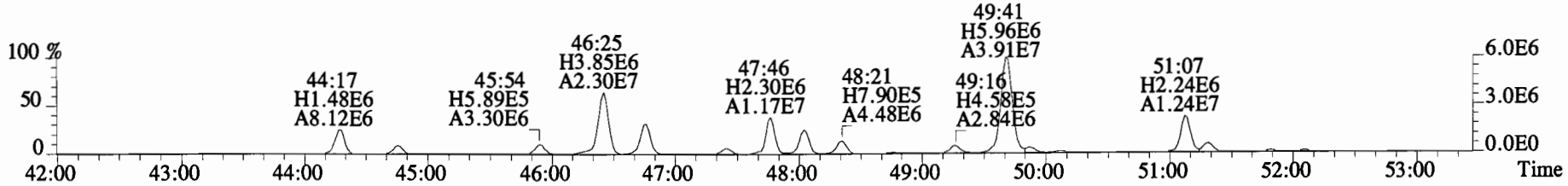
373.8788 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,4248.0,0.00%,F,F)



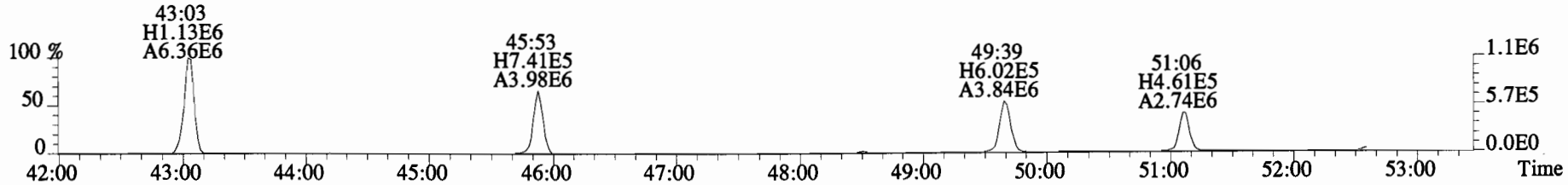
File:150318E1 #1-555 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
393.8025 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2448.0,0.00%,F,F)



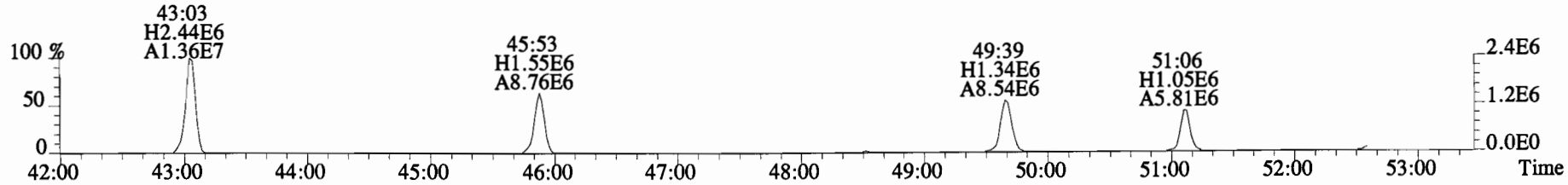
395.7995 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2184.0,0.00%,F,F)



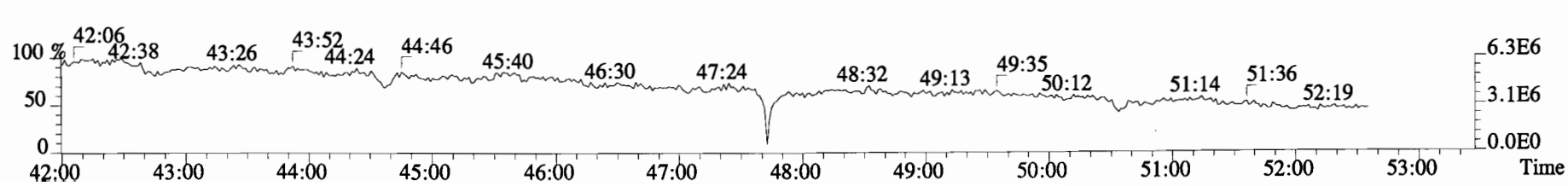
403.8457 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2388.0,0.00%,F,F)



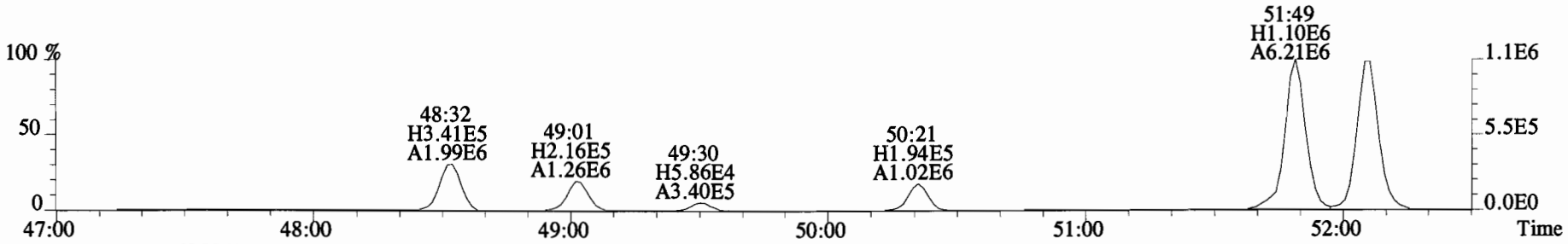
405.8428 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2112.0,0.00%,F,F)



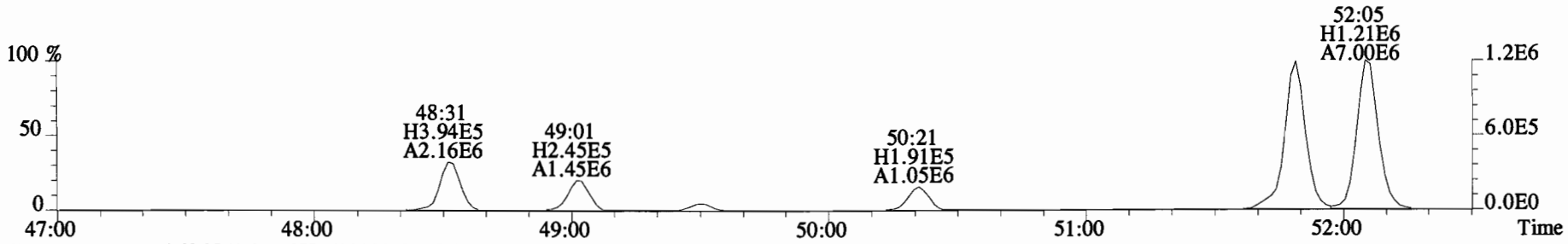
380.9760 S:11 F:4



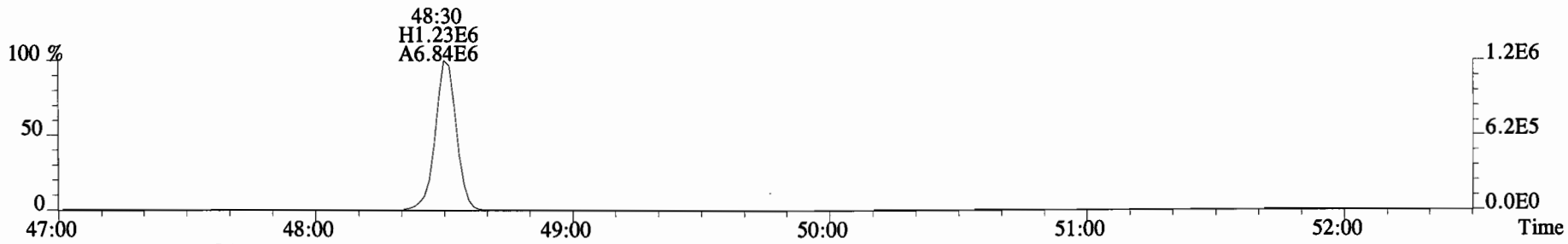
File:150318E1 #1-555 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
427.7635 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2428.0,0.00%,F,F)



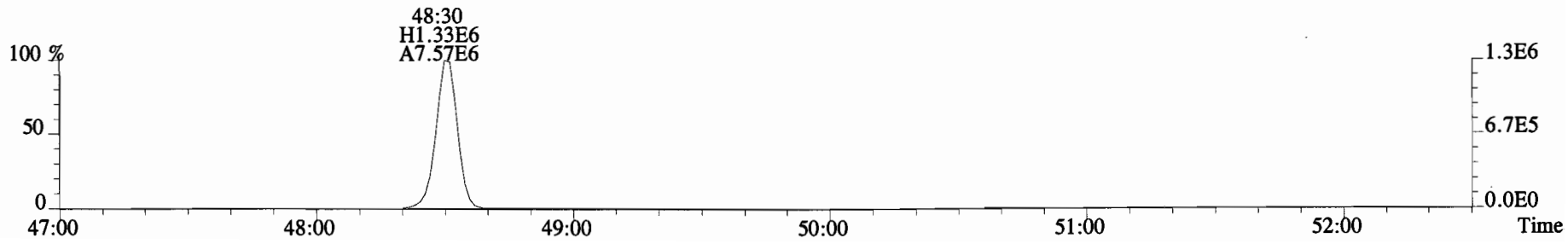
429.7606 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1756.0,0.00%,F,F)



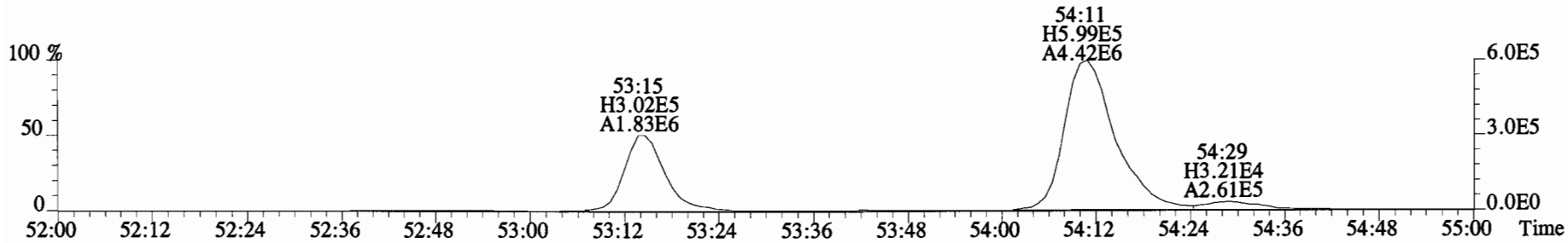
439.8038 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1800.0,0.00%,F,F)



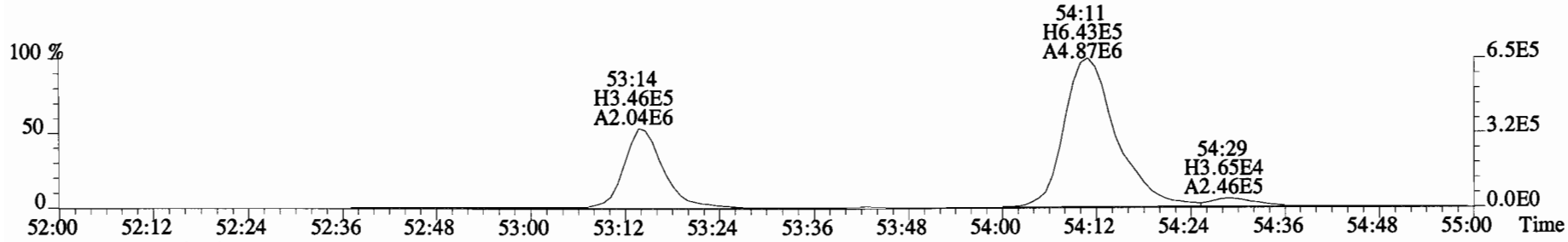
441.8008 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1996.0,0.00%,F,F)



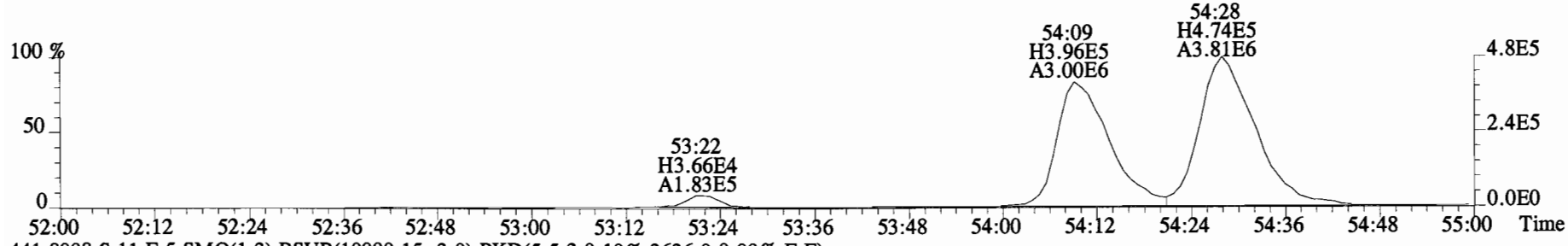
File:150318E1 #1-430 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
427.7635 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2104.0,0.00%,F,F)



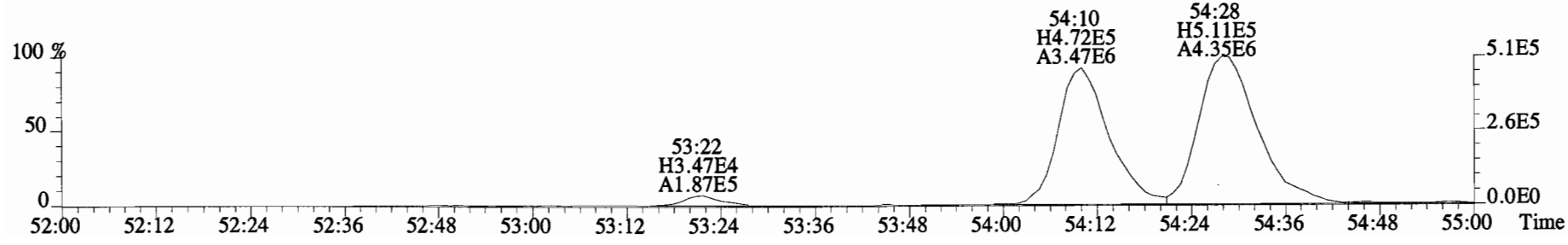
429.7606 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2900.0,0.00%,F,F)



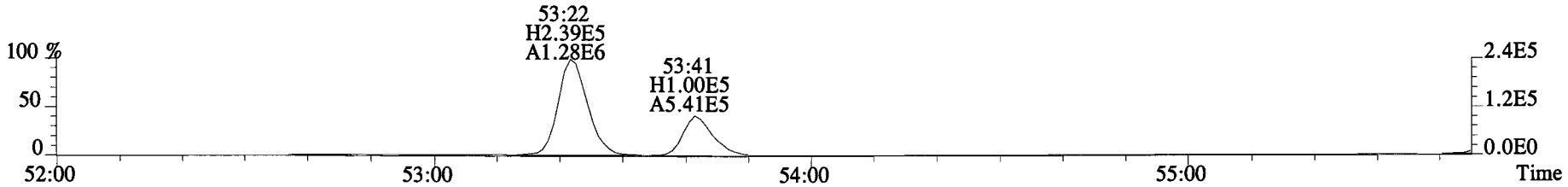
439.8038 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3200.0,0.00%,F,F)



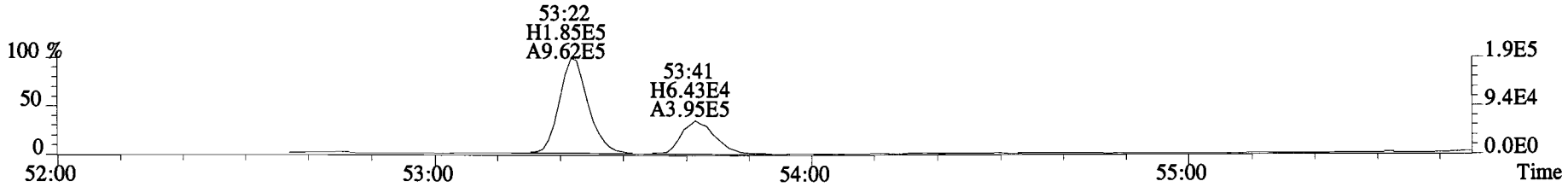
441.8008 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3636.0,0.00%,F,F)



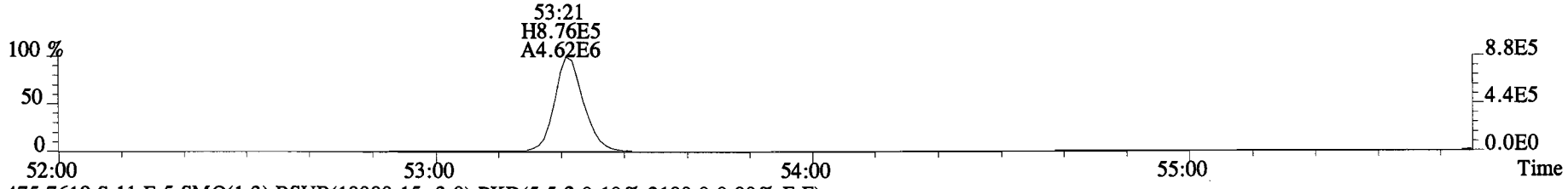
File:150318E1 #1-430 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
463.7216 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1548.0,0.00%,F,F)



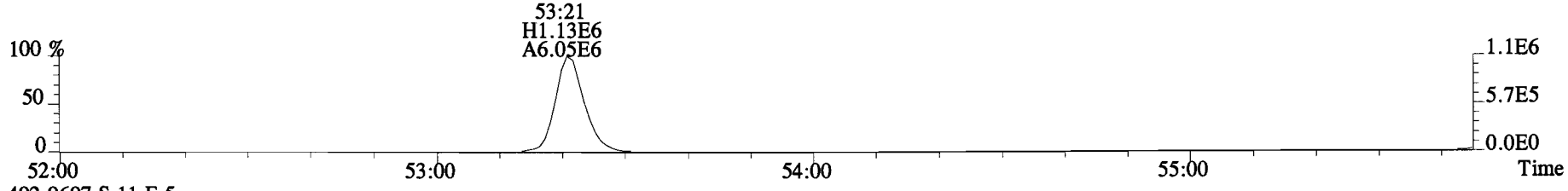
465.7186 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,3368.0,0.00%,F,F)



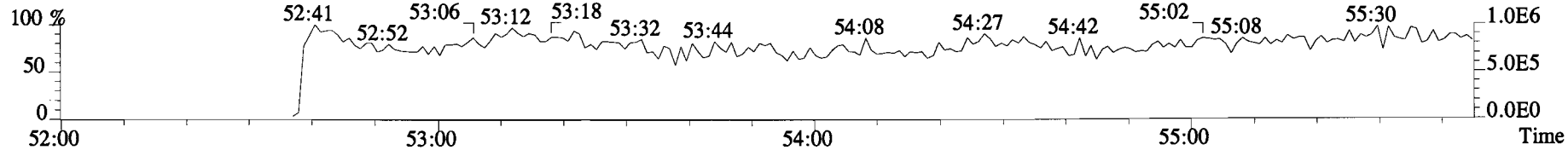
473.7648 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2848.0,0.00%,F,F)



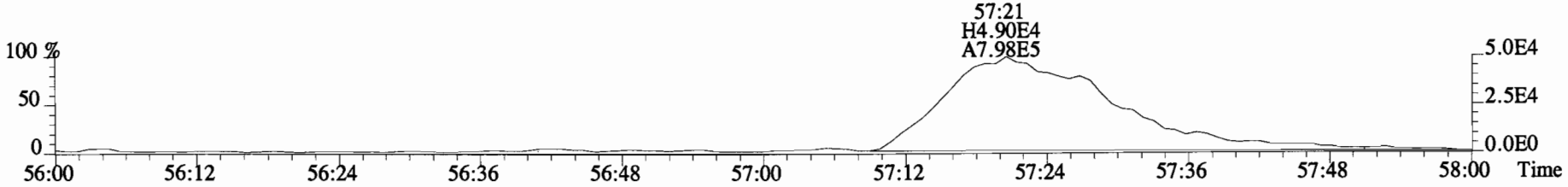
475.7619 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,2100.0,0.00%,F,F)



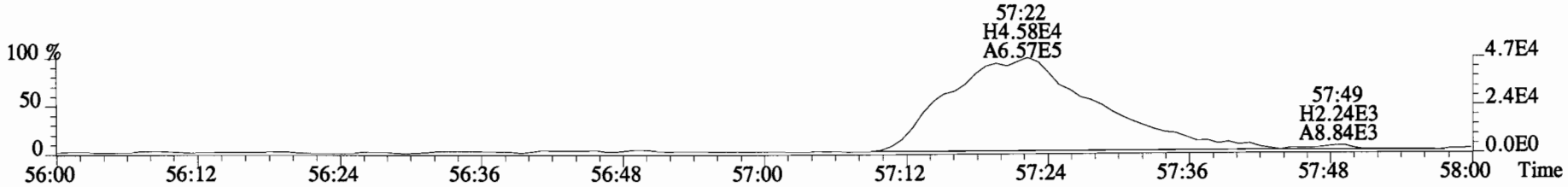
492.9697 S:11 F:5



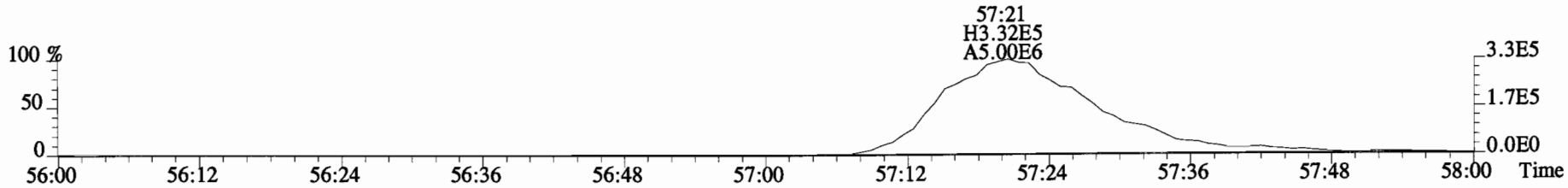
File:150318E1 #1-430 Acq:18-MAR-2015 20:44:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400948-03RE1 SC-CB-24-20141211-S Exp:PCB_ZB1
497.6826 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1952.0,0.00%,F,F)



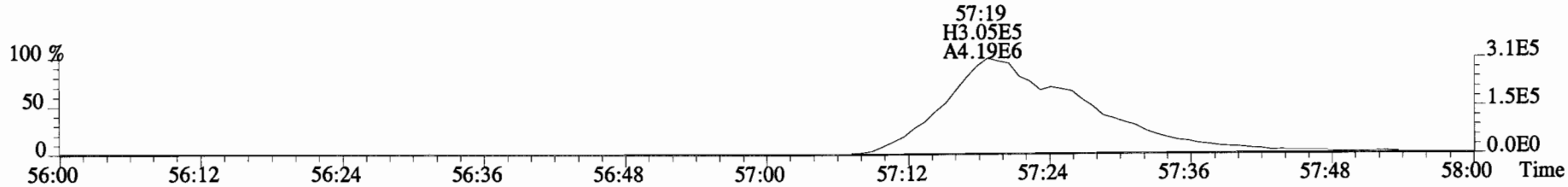
499.6797 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1720.0,0.00%,F,F)



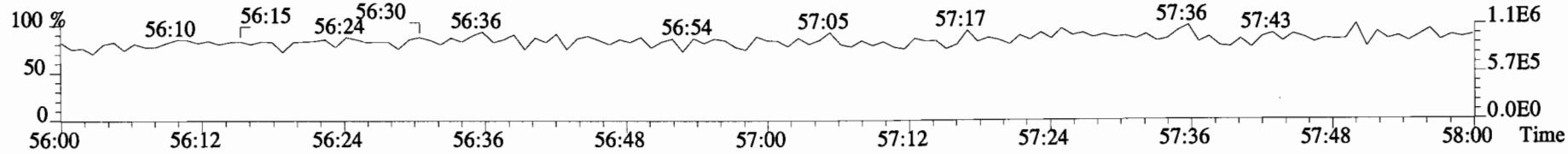
509.7229 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1496.0,0.00%,F,F)



511.7199 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(5,5,2,0.10%,1640.0,0.00%,F,F)



492.9697 S:11 F:5



CONTINUING CALIBRATION

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST150318E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 150318E1 S#1 Analysis Date: 18-MAR-15 Time: 09:59:47

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-1	2.98	2.66-3.60	y	44.7	37.5-62.5
PCB-2	3.01	2.66-3.60	y	42.3	37.5-62.5
PCB-3	2.96	2.66-3.60	y	43.9	37.5-62.5
PCB-4/10	1.64	1.33-1.79	y	203.3	150-250
PCB-7/9	1.66	1.33-1.79	y	208.6	150-250
PCB-6	1.64	1.33-1.79	y	102.0	75.0-125
PCB-5/8	1.66	1.33-1.79	y	211.1	150-250
PCB-14	1.66	1.33-1.79	y	104.8	75.0-125
PCB-11	1.66	1.33-1.79	y	105.0	75.0-125
PCB-12/13	1.64	1.33-1.79	y	207.9	150-250
PCB-15	1.63	1.33-1.79	y	104.4	75.0-125
PCB-19	1.09	0.88-1.20	y	53.0	37.5-62.5
PCB-30	1.07	0.88-1.20	y	50.9	37.5-62.5
PCB-18	1.07	0.88-1.20	y	52.9	37.5-62.5
PCB-17	1.07	0.88-1.20	y	51.8	37.5-62.5
PCB-24/27	1.07	0.88-1.20	y	105.1	75.0-125
PCB-16/32	1.07	0.88-1.20	y	105.5	75.0-125
PCB-34	1.10	0.88-1.20	y	54.7	37.5-62.5
PCB-23	1.12	0.88-1.20	y	49.9	37.5-62.5
PCB-29	1.09	0.88-1.20	y	53.7	37.5-62.5
PCB-26	1.08	0.88-1.20	y	54.6	37.5-62.5
PCB-25	1.10	0.88-1.20	y	56.9	37.5-62.5
PCB-31	1.12	0.88-1.20	y	53.3	37.5-62.5
PCB-28	1.12	0.88-1.20	y	55.9	37.5-62.5
PCB-20/21/33	1.10	0.88-1.20	y	178.4	112.5-225
PCB-22	1.11	0.88-1.20	y	57.1	37.5-62.5
PCB-36	1.11	0.88-1.20	y	53.9	37.5-62.5
PCB-39	1.12	0.88-1.20	y	54.3	37.5-62.5
PCB-38	1.10	0.88-1.20	y	51.3	37.5-62.5
PCB-35	1.11	0.88-1.20	y	58.7	37.5-62.5
PCB-37	1.12	0.88-1.20	y	56.8	37.5-62.5
PCB-54	0.79	0.65-0.89	y	52.6	37.5-62.5
PCB-50	0.80	0.65-0.89	y	53.1	37.5-62.5
PCB-53	0.79	0.65-0.89	y	54.9	37.5-62.5
PCB-51	0.80	0.65-0.89	y	53.2	37.5-62.5
PCB-45	0.80	0.65-0.89	y	54.5	37.5-62.5
PCB-46	0.79	0.65-0.89	y	54.3	37.5-62.5
PCB-52/69	0.78	0.65-0.89	y	114.8	75.0-125
PCB-73	0.79	0.65-0.89	y	52.0	37.5-62.5
PCB-43/49	0.79	0.65-0.89	y	108.5	75.0-125
PCB-47	0.78	0.65-0.89	y	51.0	37.5-62.5
PCB-48/75	0.79	0.65-0.89	y	116.2	75.0-125
PCB-65	0.78	0.65-0.89	y	58.0	37.5-62.5
PCB-62	0.80	0.65-0.89	y	54.6	37.5-62.5
PCB-44	0.79	0.65-0.89	y	56.7	37.5-62.5
PCB-42/59	0.80	0.65-0.89	y	114.9	75.0-125
PCB-41/64/71/72	0.80	0.65-0.89	y	227.4	150-250
PCB-68	0.80	0.65-0.89	y	58.5	37.5-62.5
PCB-40	0.78	0.65-0.89	y	59.3	37.5-62.5
PCB-57	0.79	0.65-0.89	y	56.3	37.5-62.5
PCB-67	0.78	0.65-0.89	y	54.7	37.5-62.5
PCB-58	0.79	0.65-0.89	y	55.2	37.5-62.5
PCB-63	0.78	0.65-0.89	y	54.6	37.5-62.5
PCB-74	0.80	0.65-0.89	y	54.3	37.5-62.5
PCB-61/70	0.79	0.65-0.89	y	112.7	75.0-125
PCB-76/66	0.80	0.65-0.89	y	108.8	75.0-125
PCB-80	0.79	0.65-0.89	y	55.0	37.5-62.5
PCB-55	0.78	0.65-0.89	y	54.8	37.5-62.5
PCB-56/60	0.80	0.65-0.89	y	111.0	75.0-125
PCB-79	0.80	0.65-0.89	y	55.3	37.5-62.5
PCB-78	0.79	0.65-0.89	y	51.0	37.5-62.5
PCB-81	0.79	0.65-0.89	y	50.7	37.5-62.5
PCB-77	0.81	0.65-0.89	y	51.5	37.5-62.5
PCB-104	1.60	1.32-1.78	y	56.4	37.5-62.5
PCB-96	1.62	1.32-1.78	y	54.6	37.5-62.5
PCB-103	1.61	1.32-1.78	y	54.8	37.5-62.5
PCB-100	1.58	1.32-1.78	y	55.6	37.5-62.5
PCB-94	1.60	1.32-1.78	y	52.0	37.5-62.5
PCB-95/98/102	1.62	1.32-1.78	y	163.3	112.5-225
PCB-93	1.65	1.32-1.78	y	50.9	37.5-62.5
PCB-88/91	1.61	1.32-1.78	y	111.2	75.0-125
PCB-121	1.62	1.32-1.78	y	53.8	37.5-62.5

Analyst: DMS

Date: 3/19/15

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST150318E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 150318E1 S#1 Analysis Date: 18-MAR-15 Time: 09:59:47

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	1.61	1.32-1.78	y	108.8	75.0-125	PCB-140	1.30	1.05-1.43	y	59.8	37.5-62.5
PCB-89	1.58	1.32-1.78	y	52.5	37.5-62.5	PCB-134/143	1.23	1.05-1.43	y	94.7	75.0-125
PCB-90/101	1.61	1.32-1.78	y	110.5	75.0-125	PCB-133/142	1.26	1.05-1.43	y	93.5	75.0-125
PCB-113	1.60	1.32-1.78	y	56.4	37.5-62.5	PCB-131	1.25	1.05-1.43	y	47.6	37.5-62.5
PCB-99	1.60	1.32-1.78	y	52.5	37.5-62.5	PCB-146/165	1.23	1.05-1.43	y	96.5	75.0-125
PCB-119	1.56	1.32-1.78	y	54.5	37.5-62.5	PCB-132/161	1.24	1.05-1.43	y	95.3	75.0-125
PCB-108/112	1.61	1.32-1.78	y	108.5	75.0-125	PCB-153	1.24	1.05-1.43	y	48.5	37.5-62.5
PCB-83	1.61	1.32-1.78	y	54.2	37.5-62.5	PCB-168	1.24	1.05-1.43	y	48.4	37.5-62.5
PCB-97	1.64	1.32-1.78	y	52.8	37.5-62.5	PCB-141	1.23	1.05-1.43	y	49.6	37.5-62.5
PCB-86	1.48	1.32-1.78	y	58.5	37.5-62.5	PCB-137	1.25	1.05-1.43	y	49.4	37.5-62.5
PCB-87/117/125	1.64	1.32-1.78	y	165.4	112.5-225	PCB-130	1.25	1.05-1.43	y	45.2	37.5-62.5
PCB-111/115	1.61	1.32-1.78	y	106.7	75.0-125	PCB-138/163/164	1.24	1.05-1.43	y	156.1	112.5-225
PCB-85/116	1.61	1.32-1.78	y	118.7	75.0-125	PCB-158/160	1.23	1.05-1.43	y	102.6	75.0-125
PCB-120	1.60	1.32-1.78	y	55.1	37.5-62.5	PCB-129	1.27	1.05-1.43	y	52.5	37.5-62.5
PCB-110	1.61	1.32-1.78	y	58.0	37.5-62.5	PCB-166	1.23	1.05-1.43	y	47.4	37.5-62.5
PCB-82	1.63	1.32-1.78	y	52.8	37.5-62.5	PCB-159	1.24	1.05-1.43	y	52.4	37.5-62.5
PCB-124	1.60	1.32-1.78	y	53.3	37.5-62.5	PCB-128/162	1.26	1.05-1.43	y	100.4	75.0-125
PCB-107/109	1.62	1.32-1.78	y	102.0	75.0-125	PCB-167	1.25	1.05-1.43	y	51.3	37.5-62.5
PCB-123	1.60	1.32-1.78	y	53.1	37.5-62.5	PCB-156	1.24	1.05-1.43	y	52.4	37.5-62.5
PCB-106/118	1.63	1.32-1.78	y	106.0	75.0-125	PCB-157	1.25	1.05-1.43	y	50.2	37.5-62.5
PCB-114	1.58	1.32-1.78	y	51.3	37.5-62.5	PCB-169	1.24	1.05-1.43	y	50.3	37.5-62.5
PCB-122	1.65	1.32-1.78	y	51.6	37.5-62.5	PCB-188	1.08	0.89-1.21	y	51.8	37.5-62.5
PCB-105	1.60	1.32-1.78	y	53.4	37.5-62.5	PCB-184	1.07	0.89-1.21	y	51.9	37.5-62.5
PCB-127	1.63	1.32-1.78	y	52.3	37.5-62.5	PCB-179	1.08	0.89-1.21	y	51.5	37.5-62.5
PCB-126	1.61	1.32-1.78	y	54.9	37.5-62.5	PCB-176	1.09	0.89-1.21	y	51.1	37.5-62.5
PCB-155	1.30	1.05-1.43	y	53.3	37.5-62.5	PCB-186	1.08	0.89-1.21	y	52.8	37.5-62.5
PCB-150	1.27	1.05-1.43	y	55.8	37.5-62.5	PCB-178	1.06	0.89-1.21	y	52.9	37.5-62.5
PCB-152	1.31	1.05-1.43	y	55.2	37.5-62.5	PCB-175	1.06	0.89-1.21	y	53.4	37.5-62.5
PCB-145	1.27	1.05-1.43	y	56.8	37.5-62.5	PCB-182/187	1.08	0.89-1.21	y	106.5	75.0-125
PCB-136	1.31	1.05-1.43	y	57.7	37.5-62.5	PCB-183	1.06	0.89-1.21	y	53.3	37.5-62.5
PCB-148	1.29	1.05-1.43	y	53.9	37.5-62.5	PCB-185	1.06	0.89-1.21	y	50.8	37.5-62.5
PCB-154	1.26	1.05-1.43	y	57.8	37.5-62.5	PCB-174	1.06	0.89-1.21	y	49.5	37.5-62.5
PCB-151	1.28	1.05-1.43	y	58.6	37.5-62.5	PCB-181	1.08	0.89-1.21	y	54.4	37.5-62.5
PCB-135	1.27	1.05-1.43	y	59.0	37.5-62.5	PCB-177	1.08	0.89-1.21	y	51.7	37.5-62.5
PCB-144	1.28	1.05-1.43	y	61.5	37.5-62.5	PCB-171	1.08	0.89-1.21	y	51.7	37.5-62.5
PCB-147	1.30	1.05-1.43	y	61.0	37.5-62.5	PCB-173	1.06	0.89-1.21	y	53.1	37.5-62.5
PCB-139/149	1.27	1.05-1.43	y	120.5	75.0-125	PCB-172	1.07	0.89-1.21	y	53.0	37.5-62.5

Analyst: DMS

Date: 3/19/15

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST150318E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 150318E1 S#1 Analysis Date: 18-MAR-15 Time: 09:59:47

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-192	1.07	0.89-1.21	y	54.7	37.5-62.5
PCB-180	1.07	0.89-1.21	y	52.5	37.5-62.5
PCB-193	1.07	0.89-1.21	y	53.2	37.5-62.5
PCB-191	1.07	0.89-1.21	y	52.9	37.5-62.5
PCB-170	1.08	0.89-1.21	y	52.5	37.5-62.5
PCB-190	1.06	0.89-1.21	y	53.0	37.5-62.5
PCB-189	1.07	0.89-1.21	y	51.4	37.5-62.5
PCB-202	0.92	0.76-1.02	y	51.0	37.5-62.5
PCB-201	0.93	0.76-1.02	y	52.8	37.5-62.5
PCB-204	0.92	0.76-1.02	y	50.7	37.5-62.5
PCB-197	0.92	0.76-1.02	y	51.4	37.5-62.5
PCB-200	0.92	0.76-1.02	y	52.5	37.5-62.5
PCB-198	0.90	0.76-1.02	y	57.2	37.5-62.5
PCB-199	0.91	0.76-1.02	y	55.8	37.5-62.5
PCB-196/203	0.92	0.76-1.02	y	116.7	75.0-125
PCB-195	0.93	0.76-1.02	y	43.2	37.5-62.5
PCB-194	0.92	0.76-1.02	y	47.7	37.5-62.5
PCB-205	0.92	0.76-1.02	y	51.2	37.5-62.5
PCB-208	1.33	1.14-1.54	y	51.6	37.5-62.5
PCB-207	1.34	1.14-1.54	y	53.2	37.5-62.5
PCB-206	1.35	1.14-1.54	y	50.5	37.5-62.5
PCB-209	1.18	0.99-1.33	y	52.4	37.5-62.5

Analyst: DMS

Date: 3/19/15

LABELED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST150318E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 150318E1 S#1 Analysis Date: 18-MAR-15 Time: 09:59:47

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-1	3.20	2.66-3.60	y	100.9	50.0-145
13C-PCB-3	3.22	2.66-3.60	y	104.8	50.0-145
13C-PCB-4	1.61	1.33-1.79	y	98.6	50.0-145
13C-PCB-9	1.60	1.33-1.79	y	95.2	50.0-145
13C-PCB-11	1.59	1.33-1.79	y	97.4	50.0-145
13C-PCB-19	1.09	0.88-1.20	y	86.8	50.0-145
13C-PCB-32	1.10	0.88-1.20	y	86.0	50.0-145
13C-PCB-28	1.09	0.88-1.20	y	105.6	50.0-145
13C-PCB-37	1.09	0.88-1.20	y	117.7	50.0-145
13C-PCB-54	0.82	0.65-0.89	y	87.6	50.0-145
13C-PCB-52	0.82	0.65-0.89	y	91.8	50.0-145
13C-PCB-47	0.80	0.65-0.89	y	91.5	50.0-145
13C-PCB-70	0.83	0.65-0.89	y	96.5	50.0-145
13C-PCB-80	0.81	0.65-0.89	y	98.8	50.0-145
13C-PCB-81	0.81	0.65-0.89	y	104.1	50.0-145
13C-PCB-77	0.81	0.65-0.89	y	105.5	50.0-145
13C-PCB-104	1.62	1.32-1.78	y	91.5	50.0-145
13C-PCB-95	1.62	1.32-1.78	y	96.4	50.0-145
13C-PCB-101	1.61	1.32-1.78	y	95.4	50.0-145
13C-PCB-97	1.67	1.32-1.78	y	97.8	50.0-145
13C-PCB-123	1.62	1.32-1.78	y	107.1	50.0-145
13C-PCB-118	1.63	1.32-1.78	y	104.6	50.0-145
13C-PCB-114	1.63	1.32-1.78	y	105.9	50.0-145
13C-PCB-105	1.64	1.32-1.78	y	104.8	50.0-145
13C-PCB-127	1.63	1.32-1.78	y	106.0	50.0-145
13C-PCB-126	1.64	1.32-1.78	y	110.8	50.0-145
13C-PCB-155	1.32	1.05-1.43	y	73.4	50.0-145
13C-PCB-153	1.29	1.05-1.43	y	94.7	50.0-145
13C-PCB-141	1.29	1.05-1.43	y	95.0	50.0-145
13C-PCB-138	1.31	1.05-1.43	y	94.4	50.0-145
13C-PCB-159	1.30	1.05-1.43	y	101.8	50.0-145
13C-PCB-167	1.30	1.05-1.43	y	103.3	50.0-145
13C-PCB-156	1.29	1.05-1.43	y	105.3	50.0-145
13C-PCB-157	1.29	1.05-1.43	y	104.3	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	112.5	50 - 145
13C-PCB-188	0.47	0.38-0.52	y	81.4	50 - 145
13C-PCB-180	0.48	0.38-0.52	y	89.0	50 - 145
13C-PCB-170	0.47	0.38-0.52	y	94.5	50 - 145
13C-PCB-189	0.45	0.38-0.52	y	98.6	50 - 145
13C-PCB-202	0.93	0.76-1.02	y	76.2	50 - 145
13C-PCB-194	0.93	0.76-1.02	y	96.1	50 - 145
13C-PCB-208	0.78	0.65-0.89	y	78.9	50 - 145
13C-PCB-206	0.79	0.65-0.89	y	91.9	50 - 145
13C-PCB-209	1.20	0.99-1.33	y	99.7	50 - 145

CRS vs. RS

13C-PCB-79	0.82	0.65-0.89	y	98.4	75 - 125
13C-PCB-178	0.47	0.38-0.52	y	83.9	75 - 125

Analyst: DMS

Date: 3/19/15

Client ID: PCB CS3 14K1102 Filename: 150318E1 S:1 Acq:18-MAR-15 09:59:47 ConCal: ST150318E1-1

Lab ID: ST150318E1-1 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	1.21e+08	2.98	y	1.19	16:07	1.001	0.996	1.006	44.6964
	PCB-2	1.23e+08	3.01	y	1.18	18:30	0.988	0.984	0.994	42.2561
	PCB-3	1.54e+08	2.96	y	1.43	18:44	1.001	0.996	1.006	43.8704
	PCB-4/10	4.75e+08	1.64	y	1.57	20:05	1.002	0.997	1.007	203.261
	PCB-7/9	5.55e+08	1.66	y	1.21	21:52	0.868	0.866	0.874	208.570
	PCB-6	2.93e+08	1.64	y	1.30	22:31	0.893	0.890	0.899	101.975
	PCB-5/8	5.33e+08	1.66	y	1.15	22:56	0.910	0.907	0.917	211.116
	PCB-14	2.73e+08	1.66	y	1.11	24:01	0.953	0.949	0.959	104.825
	PCB-11	2.68e+08	1.66	y	1.09	25:13	1.001	0.995	1.005	104.998
	PCB-12/13	5.83e+08	1.64	y	1.19	25:37	1.016	1.011	1.021	207.948
	PCB-15	3.15e+08	1.63	y	1.28	25:55	1.028	1.023	1.033	104.436
	PCB-19	6.58e+07	1.09	y	1.04	24:12	1.001	0.996	1.006	53.0357
	PCB-30	1.03e+08	1.07	y	1.71	25:06	1.038	1.032	1.042	50.8591
	PCB-18	7.28e+07	1.07	y	0.78	25:51	0.954	0.949	0.959	52.8603
	PCB-17	8.43e+07	1.07	y	0.92	26:01	0.960	0.956	0.966	51.8482
	PCB-24/27	2.20e+08	1.07	y	1.19	26:36	0.981	0.977	0.987	105.096
-	PCB-16/32	1.75e+08	1.07	y	0.94	27:06	1.000	0.995	1.005	105.508
-	PCB-34	1.31e+08	1.10	y	1.14	27:54	0.960	0.955	0.965	54.7364
	PCB-23	1.35e+08	1.12	y	1.28	28:00	0.964	0.959	0.969	49.9337
	PCB-29	1.22e+08	1.09	y	1.08	28:14	0.972	0.967	0.977	53.7071
	PCB-26	1.39e+08	1.08	y	1.21	28:27	0.979	0.974	0.984	54.5863
	PCB-25	1.51e+08	1.10	y	1.26	28:37	0.985	0.979	0.989	56.9431
	PCB-31	1.44e+08	1.12	y	1.28	28:57	0.997	0.992	1.002	53.2659
	PCB-28	2.02e+08	1.12	y	1.71	29:04	1.001	0.995	1.005	55.8828
	PCB-20/21/33	4.07e+08	1.10	y	1.08	29:41	1.022	1.017	1.027	178.437
	PCB-22	1.45e+08	1.11	y	1.21	30:07	1.037	1.032	1.042	57.0758
	PCB-36	1.30e+08	1.11	y	1.14	30:44	0.934	0.928	0.938	53.9271
	PCB-39	1.28e+08	1.12	y	1.12	31:13	0.948	0.943	0.953	54.3169
	PCB-38	1.30e+08	1.10	y	1.20	31:58	0.971	0.966	0.976	51.2600
	PCB-35	1.53e+08	1.11	y	1.23	32:30	0.987	0.982	0.992	58.6611
	PCB-37	1.48e+08	1.12	y	1.23	32:56	1.001	0.995	1.005	56.7809
	PCB-54	8.75e+07	0.79	y	1.10	27:57	1.001	0.996	1.006	52.6081
	PCB-50	7.06e+07	0.80	y	0.88	29:07	1.042	1.037	1.047	53.1481
	PCB-53	7.34e+07	0.79	y	1.06	29:45	0.946	0.942	0.952	54.9121
	PCB-51	6.63e+07	0.80	y	0.99	30:06	0.957	0.952	0.962	53.2479
	PCB-45	5.92e+07	0.80	y	0.86	30:32	0.970	0.966	0.976	54.5327
	PCB-46	5.76e+07	0.79	y	0.85	31:01	0.986	0.981	0.991	54.2908

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	1.85e+08	0.78	y	1.28	31:30	1.001	0.996	1.006	114.800
PCB-73	8.83e+07	0.79	y	1.35	31:37	1.005	1.000	1.010	51.9749
PCB-43/49	1.36e+08	0.79	y	0.99	31:47	1.010	1.005	1.015	108.475
PCB-47	7.12e+07	0.78	y	1.06	31:59	1.000	0.996	1.006	51.0419
PCB-48/75	1.88e+08	0.79	y	1.23	32:06	1.004	0.999	1.009	116.178
PCB-65	9.35e+07	0.78	y	1.22	32:22	1.013	1.008	1.018	57.9719
PCB-62	8.79e+07	0.80	y	1.22	32:29	1.016	1.011	1.021	54.6217
PCB-44	6.42e+07	0.79	y	0.86	32:47	1.025	1.021	1.031	56.6678
PCB-42/59	1.72e+08	0.80	y	1.14	33:00	1.032	1.028	1.038	114.935
PCB-41/64/71/72	3.62e+08	0.80	y	1.21	33:35	1.051	1.046	1.056	227.374
PCB-68	1.04e+08	0.80	y	1.35	33:51	1.059	1.054	1.064	58.4761
PCB-40	5.48e+07	0.78	y	0.70	34:04	1.066	1.061	1.071	59.2951
PCB-57	9.42e+07	0.79	y	0.98	34:25	0.970	0.965	0.975	56.2961
PCB-67	1.04e+08	0.78	y	1.11	34:44	0.979	0.974	0.984	54.7482
PCB-58	8.74e+07	0.79	y	0.93	34:51	0.982	0.977	0.987	55.1846
PCB-63	8.88e+07	0.78	y	0.95	34:60	0.987	0.982	0.992	54.6057
PCB-74	1.15e+08	0.80	y	1.24	35:17	0.995	0.990	1.000	54.2857
PCB-61/70	1.84e+08	0.79	y	0.95	35:27	0.999	0.995	1.005	112.737
PCB-76/66	1.94e+08	0.80	y	1.04	35:41	1.006	1.001	1.011	108.829
PCB-80	1.19e+08	0.79	y	1.19	35:55	1.001	0.996	1.006	55.0299
PCB-55	1.03e+08	0.78	y	1.04	36:14	1.009	1.005	1.015	54.8373
PCB-56/60	2.03e+08	0.80	y	1.01	36:43	1.023	1.019	1.029	110.967
PCB-79	1.08e+08	0.80	y	1.08	37:47	1.053	1.048	1.058	55.2529
PCB-78	1.10e+08	0.79	y	1.27	38:29	0.987	0.982	0.992	50.9739
PCB-81	1.15e+08	0.79	y	1.33	39:01	1.000	0.995	1.005	50.7450
PCB-77	1.00e+08	0.81	y	1.10	39:36	1.000	0.995	1.005	51.5069
PCB-104	6.08e+07	1.60	y	1.18	32:38	1.001	0.996	1.006	56.3701
PCB-96	5.66e+07	1.62	y	1.14	33:53	1.039	1.034	1.044	54.5595
PCB-103	4.78e+07	1.61	y	0.96	34:26	1.056	1.050	1.060	54.7679
PCB-100	4.75e+07	1.58	y	0.94	34:46	1.066	1.061	1.071	55.5593
PCB-94	3.90e+07	1.60	y	1.06	35:15	0.985	0.980	0.990	52.0090
PCB-95/98/102	1.42e+08	1.62	y	1.22	35:44	0.999	0.995	1.005	163.280
PCB-93	3.05e+07	1.65	y	0.84	35:52	1.003	0.997	1.007	50.9496
PCB-88/91	8.81e+07	1.61	y	1.12	36:09	1.011	1.005	1.015	111.153
PCB-121	6.16e+07	1.62	y	1.62	36:16	1.014	1.009	1.019	53.7770
PCB-84/92	8.45e+07	1.61	y	1.05	37:05	0.990	0.985	0.995	108.819
PCB-89	4.41e+07	1.58	y	1.13	37:16	0.995	0.991	1.001	52.5087

Integrations by Analyst: DMS Date: 3/19/15

Reviewed by Analyst:_____ Date:_____

Client ID: PCB CS3 14K1102 Filename: 150318E1 S:1 Acq:18-MAR-15 09:59:47 ConCal: ST150318E1-1

Lab ID: ST150318E1-1 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	9.03e+07	1.61 y	1.10	37:28	1.000	0.995	1.005	110.461
	PCB-113	5.91e+07	1.60 y	1.41	37:42	1.007	1.002	1.012	56.4456
	PCB-99	5.21e+07	1.60 y	1.34	37:48	1.009	1.004	1.014	52.5033
	PCB-119	5.72e+07	1.56 y	1.53	38:15	0.987	0.982	0.992	54.5424
	PCB-108/112	9.51e+07	1.61 y	1.28	38:25	0.991	0.986	0.996	108.493
	PCB-83	5.63e+07	1.61 y	1.52	38:35	0.996	0.990	1.000	54.1735
	PCB-97	4.27e+07	1.64 y	1.18	38:46	1.000	0.995	1.005	52.7997
	PCB-86	3.37e+07	1.48 y	0.84	38:54	1.004	0.999	1.009	58.4511
	B-87/117/125	1.75e+08	1.64 y	1.55	39:02	1.007	1.002	1.012	165.378
	PCB-111/115	1.19e+08	1.61 y	1.63	39:11	1.011	1.006	1.016	106.673
	PCB-85/116	1.06e+08	1.61 y	1.30	39:19	1.015	1.010	1.020	118.735
	PCB-120	6.33e+07	1.60 y	1.68	39:34	1.021	1.016	1.026	55.1286
	PCB-110	6.18e+07	1.61 y	1.56	39:42	1.025	1.020	1.030	57.9803
	PCB-82	3.82e+07	1.63 y	0.76	40:19	0.976	0.971	0.981	52.8483
	PCB-124	7.46e+07	1.60 y	1.47	41:00	0.993	0.988	0.998	53.2750
	PCB-107/109	1.28e+08	1.62 y	1.32	41:09	0.996	0.991	1.001	101.957
	PCB-123	5.91e+07	1.60 y	1.17	41:20	1.001	0.996	1.006	53.1336
-	PCB-106/118	1.24e+08	1.63 y	1.17	41:32	1.001	0.996	1.006	105.997
-	PCB-114	1.06e+08	1.58 y	1.30	42:10	1.001	0.995	1.005	51.2802
	PCB-122	9.20e+07	1.65 y	1.12	42:18	1.004	0.999	1.009	51.5704
	PCB-105	1.09e+08	1.60 y	1.30	43:02	1.001	0.995	1.005	53.3975
	PCB-127	1.20e+08	1.63 y	1.33	43:21	1.000	0.996	1.006	52.2841
	PCB-126	1.04e+08	1.61 y	1.18	45:15	1.000	0.995	1.005	54.8932
	PCB-155	3.64e+07	1.30 y	1.11	37:00	1.000	0.966	1.006	53.3097
	PCB-150	3.41e+07	1.27 y	1.00	38:17	1.035	1.030	1.040	55.7683
	PCB-152	3.78e+07	1.31 y	1.12	38:45	1.048	1.043	1.053	55.2167
	PCB-145	4.18e+07	1.27 y	1.20	39:11	1.059	1.055	1.065	56.8049
	PCB-136	4.17e+07	1.31 y	1.18	39:30	1.068	1.064	1.074	57.7128
	PCB-148	2.46e+07	1.29 y	0.74	39:37	1.071	1.066	1.076	53.8529
	PCB-154	3.04e+07	1.26 y	0.86	40:07	1.085	1.080	1.090	57.8483
	PCB-151	2.68e+07	1.28 y	0.75	40:44	1.101	1.097	1.107	58.6369
	PCB-135	2.87e+07	1.27 y	0.79	40:58	1.108	1.103	1.113	59.0086
	PCB-144	2.87e+07	1.28 y	0.76	41:05	1.111	1.105	1.117	61.5348
	PCB-147	3.06e+07	1.30 y	0.82	41:12	1.114	1.109	1.121	60.9603
	PCB-139/149	5.63e+07	1.27 y	0.76	41:27	1.121	1.116	1.128	120.483
-	PCB-140	2.65e+07	1.30 y	0.72	41:39	1.126	1.121	1.133	59.8412
-	PCB-134/143	1.04e+08	1.23 y	0.92	42:05	0.975	0.970	0.980	94.7123

	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
	PCB-133/142	9.17e+07	1.26 y	0.82	42:22	0.982	0.977	0.987	93.5166
	PCB-131	5.18e+07	1.25 y	0.91	42:33	0.986	0.981	0.991	47.6086
	PCB-146/165	1.44e+08	1.23 y	1.25	42:46	0.991	0.986	0.996	96.5208
	PCB-132/161	1.26e+08	1.24 y	1.10	43:01	0.997	0.992	1.002	95.3490
	PCB-153	7.25e+07	1.24 y	1.25	43:11	1.000	0.995	1.005	48.5013
	PCB-168	8.40e+07	1.24 y	1.45	43:24	1.006	1.001	1.011	48.3955
	PCB-141	6.06e+07	1.23 y	1.09	43:55	1.000	0.995	1.005	49.5823
	PCB-137	5.91e+07	1.25 y	1.06	44:18	1.009	1.004	1.014	49.3772
	PCB-130	4.91e+07	1.25 y	0.96	44:24	1.011	1.006	1.016	45.1724
	PCB-138/163/164	2.31e+08	1.24 y	1.29	44:46	1.001	0.996	1.006	156.125
	PCB-158/160	1.58e+08	1.23 y	1.34	45:01	1.006	1.001	1.011	102.610
	PCB-129	5.13e+07	1.27 y	0.85	45:15	1.011	1.007	1.017	52.4735
	PCB-166	7.88e+07	1.23 y	1.19	45:42	0.993	0.988	0.998	47.4479
	PCB-159	8.16e+07	1.24 y	1.11	46:02	1.000	0.996	1.006	52.3615
	PCB-128/162	1.47e+08	1.26 y	1.05	46:19	1.007	1.002	1.012	100.427
	PCB-167	9.48e+07	1.25 y	1.20	46:43	1.000	0.995	1.005	51.2751
	PCB-156	8.97e+07	1.24 y	1.14	48:00	1.000	0.996	1.006	52.4309
	PCB-157	9.12e+07	1.25 y	1.16	48:16	1.000	0.995	1.005	50.1619
	PCB-169	8.98e+07	1.24 y	1.12	50:26	1.000	0.995	1.005	50.3260
	PCB-188	6.74e+07	1.08 y	1.58	42:49	1.001	0.996	1.006	51.7581
	PCB-184	6.98e+07	1.07 y	1.63	43:16	1.011	1.006	1.016	51.8768
	PCB-179	5.54e+07	1.08 y	1.30	44:02	1.029	1.024	1.034	51.5052
	PCB-176	6.22e+07	1.09 y	1.48	44:30	1.040	1.035	1.045	51.0944
	PCB-186	6.33e+07	1.08 y	1.45	45:07	1.054	1.050	1.060	52.8146
	PCB-178	4.51e+07	1.06 y	1.03	45:36	1.065	1.061	1.071	52.8629
	PCB-175	4.46e+07	1.06 y	1.01	45:56	1.074	1.069	1.079	53.3735
	PCB-182/187	1.10e+08	1.08 y	1.25	46:07	1.078	1.073	1.083	106.539
	PCB-183	5.31e+07	1.06 y	1.21	46:26	1.085	1.081	1.091	53.2514
	PCB-185	6.14e+07	1.06 y	1.80	47:06	0.956	0.951	0.961	50.7841
	PCB-174	4.58e+07	1.06 y	1.38	47:27	0.963	0.958	0.968	49.4784
	PCB-181	5.04e+07	1.08 y	1.38	47:33	0.965	0.960	0.970	54.3947
	PCB-177	4.36e+07	1.08 y	1.26	47:44	0.969	0.963	0.973	51.7315
	PCB-171	5.50e+07	1.08 y	1.58	48:01	0.975	0.970	0.980	51.7045
	PCB-173	3.96e+07	1.06 y	1.11	48:27	0.983	0.978	0.988	53.1133
	PCB-172	5.82e+07	1.07 y	1.63	48:53	0.992	0.987	0.997	53.0008
	PCB-192	6.40e+07	1.07 y	1.74	49:05	0.996	0.991	1.001	54.7450
	PCB-180	4.74e+07	1.07 y	1.34	49:18	1.000	0.995	1.005	52.5186

Integrations by Analyst: DMS

Date: 3/19/15

Client ID: PCB CS3 14K1102 Filename: 150318E1 S:1 Acq:18-MAR-15 09:59:47 ConCal: ST150318E1-1

Lab ID: ST150318E1-1 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	6.13e+07	1.07	y	1.72	49:30	1.005	0.999	1.009	53.2013
	PCB-191	6.02e+07	1.07	y	1.69	49:45	1.010	1.004	1.014	52.9142
	PCB-170	4.74e+07	1.08	y	1.60	50:48	1.000	0.995	1.005	52.4653
	PCB-190	6.62e+07	1.06	y	2.21	50:58	1.004	0.998	1.008	52.9871
	PCB-189	6.21e+07	1.07	y	1.55	52:19	1.000	0.995	1.005	51.3793
	PCB-202	3.89e+07	0.92	y	1.08	48:13	1.001	0.995	1.005	50.9695
	PCB-201	4.27e+07	0.93	y	1.15	48:42	1.011	1.005	1.015	52.7684
	PCB-204	4.06e+07	0.92	y	1.14	48:52	1.014	1.008	1.018	50.6622
	PCB-197	3.89e+07	0.92	y	1.07	49:09	1.020	1.015	1.025	51.3701
	PCB-200	3.93e+07	0.92	y	1.06	50:03	1.039	1.032	1.044	52.5204
	PCB-198	3.04e+07	0.90	y	0.76	51:24	1.066	1.059	1.069	57.1544
	PCB-199	3.13e+07	0.91	y	0.80	51:30	1.069	1.061	1.071	55.7696
-	PCB-196/203	6.59e+07	0.92	y	0.80	51:47	1.074	1.066	1.076	116.679
-	PCB-195	6.19e+07	0.93	y	1.23	52:57	0.984	0.979	0.989	43.1686
	PCB-194	6.76e+07	0.92	y	1.21	53:49	1.000	0.995	1.005	47.6950
	PCB-205	9.23e+07	0.92	y	1.54	54:06	1.006	1.001	1.011	51.2187
	PCB-208	6.24e+07	1.33	y	0.93	53:06	1.000	0.995	1.005	51.5636
	PCB-207	7.49e+07	1.34	y	1.08	53:24	1.006	1.001	1.011	53.1980
	PCB-206	4.71e+07	1.35	y	1.02	55:26	1.000	0.995	1.005	50.5127
	PCB-209	5.69e+07	1.18	y	1.17	56:48	1.000	0.995	1.005	52.4032

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	3.98e+08	2.98	y	16:07	1.27	130.823	
Total Di-PCB	3.30e+09	1.64	y	20:05	1.21	1250.38	
Total Tri-PCB	7.21e+08	1.09	y	24:12	1.10	419.207	
Total Tri-PCB	2.28e+09	1.10	y	27:54	1.21	894.818	Sum:1314.02
Total Tetra-PCB	3.76e+09	0.79	y	27:57	1.09	2331.76	
Total Penta-PCB	2.14e+09	1.60	y	32:38	1.18	2235.54	
Total Penta-PCB	5.57e+08	1.58	y	42:10	1.25	276.538	Sum:2512.07
Total Hexa-PCB	4.44e+08	1.30	y	37:00	0.90	810.979	
Total Hexa-PCB	1.99e+09	1.23	y	42:05	1.11	1407.04	Sum:2218.02
Total Hepta-PCB	1.35e+09	1.08	y	42:49	1.42	1272.47	
Total Octa-PCB	3.28e+08	0.92	y	48:13	0.96	487.893	
Total Octa-PCB	2.28e+08	0.93	y	52:57	1.33	145.845	Sum:633.739
Total Nona-PCB	1.85e+08	1.33	y	53:06	1.01	155.945	
Total Deca-PCB	5.69e+07	1.18	y	56:48	1.17	52.4032	

Total PCB Conc:11795.8760210

Integrations
by
Analyst: DMS

Date: 3/19/15

Client ID: PCB CS3 14K1102 Filename: 150318E1 S:1 Acq:18-MAR-15 09:59:47 ConCal: ST150318E1-1
Lab ID: ST150318E1-1 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	Rec
13C-PCB-1	2.27e+08	3.20 y	0.87	16:06	0.622	0.629	0.635	101	101
13C-PCB-3	2.46e+08	3.22 y	0.91	18:43	0.722	0.725	0.733	105	105
13C-PCB-4	1.49e+08	1.61 y	0.59	20:03	0.774	0.775	0.783	98.6	98.6
13C-PCB-9	2.20e+08	1.60 y	0.90	21:50	0.843	0.842	0.850	95.2	95.2
13C-PCB-11	2.35e+08	1.59 y	0.94	25:12	0.973	0.968	0.978	97.4	97.4
13C-PCB-19	1.19e+08	1.09 y	0.53	24:11	0.933	0.930	0.940	86.8	86.8
13C-PCB-28	2.11e+08	1.09 y	0.93	29:03	1.004	0.999	1.009	106	106
13C-PCB-32	1.76e+08	1.10 y	0.80	27:06	1.046	1.040	1.050	86.0	86.0
13C-PCB-37	2.12e+08	1.09 y	0.84	32:55	1.137	1.131	1.143	118	118
13C-PCB-47	1.32e+08	0.80 y	0.81	31:58	0.871	0.866	0.874	91.5	91.5
13C-PCB-52	1.26e+08	0.82 y	0.77	31:27	0.857	0.853	0.861	91.8	91.8
13C-PCB-54	1.51e+08	0.82 y	0.97	27:56	0.761	0.758	0.766	87.6	87.6
13C-PCB-70	1.71e+08	0.83 y	1.00	35:28	0.966	0.961	0.971	96.5	96.5
13C-PCB-77	1.76e+08	0.81 y	0.94	39:35	1.078	1.073	1.083	106	106
13C-PCB-80	1.81e+08	0.81 y	1.03	35:53	0.978	0.972	0.982	98.8	98.8
13C-PCB-81	1.70e+08	0.81 y	0.92	38:60	1.062	1.057	1.067	104	104
13C-PCB-95	7.10e+07	1.62 y	0.74	35:46	0.913	0.908	0.918	96.4	96.4
13C-PCB-97	6.85e+07	1.67 y	0.70	38:45	0.989	0.984	0.994	97.8	97.8
13C-PCB-101	7.43e+07	1.61 y	0.78	37:27	0.956	0.951	0.961	95.4	95.4
13C-PCB-104	9.11e+07	1.62 y	1.00	32:37	0.832	0.828	0.836	91.5	91.5
13C-PCB-105	1.58e+08	1.64 y	1.37	43:00	0.929	0.924	0.934	105	105
13C-PCB-114	1.59e+08	1.63 y	1.36	42:09	0.910	0.905	0.915	106	106
13C-PCB-118	9.97e+07	1.63 y	0.96	41:30	1.059	1.054	1.064	105	105
13C-PCB-123	9.52e+07	1.62 y	0.89	41:18	1.054	1.050	1.060	107	107
13C-PCB-126	1.60e+08	1.64 y	1.31	45:14	0.977	0.972	0.982	111	111
13C-PCB-127	1.72e+08	1.63 y	1.47	43:20	0.936	0.931	0.941	106	106
13C-PCB-138	1.15e+08	1.31 y	1.10	44:44	0.967	0.961	0.971	94.4	94.4
13C-PCB-141	1.13e+08	1.29 y	1.07	43:54	0.948	0.943	0.953	95.0	95.0
13C-PCB-153	1.20e+08	1.29 y	1.15	43:10	0.933	0.927	0.937	94.7	94.7
13C-PCB-155	6.13e+07	1.32 y	0.84	36:59	0.944	0.939	0.949	73.4	73.4
13C-PCB-156	1.51e+08	1.29 y	1.30	47:60	1.037	1.032	1.042	105	105
13C-PCB-157	1.56e+08	1.29 y	1.36	48:16	1.043	1.038	1.048	104	104
13C-PCB-159	1.40e+08	1.30 y	1.25	46:01	0.994	0.989	0.999	102	102
13C-PCB-167	1.54e+08	1.30 y	1.35	46:42	1.009	1.004	1.014	103	103
13C-PCB-169	1.60e+08	1.29 y	1.29	50:25	1.089	1.083	1.093	113	113
13C-PCB-170	5.66e+07	0.47 y	0.54	50:47	1.097	1.089	1.101	94.5	94.5
13C-PCB-180	6.72e+07	0.48 y	0.68	49:16	1.065	1.060	1.070	89.0	89.0
13C-PCB-188	8.24e+07	0.47 y	0.92	42:48	0.925	0.919	0.929	81.4	81.4
13C-PCB-189	7.80e+07	0.45 y	0.72	52:18	1.130	1.120	1.132	98.6	98.6
13C-PCB-194	1.17e+08	0.93 y	0.80	53:48	0.995	0.990	1.000	96.1	96.1
13C-PCB-202	7.04e+07	0.93 y	0.84	48:12	1.041	1.036	1.046	76.2	76.2
13C-PCB-206	9.11e+07	0.79 y	0.65	55:25	1.025	1.021	1.031	91.9	91.9
13C-PCB-208	1.30e+08	0.78 y	1.08	53:05	0.982	0.976	0.986	78.9	78.9
13C-PCB-209	9.28e+07	1.20 y	0.61	56:47	1.050	1.045	1.055	99.7	99.7

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.77e+08	0.82 y	1.02	37:46	1.029	1.023	1.034	98.4	98.4
13C-PCB-178	5.68e+07	0.47 y	0.61	45:34	0.985	0.979	0.990	83.9	83.9

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.77e+08	0.82 y	1.10	37:46	0.968	0.964	0.974	94.5	94.5
13C-PCB-178	5.68e+07	0.47 y	0.90	45:34	0.925	0.920	0.930	94.2	94.2

RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	2.57e+08	1.60	y	1.00	25:54	100
13C-PCB-31	2.14e+08	1.08	y	1.00	28:56	100
13C-PCB-60	1.77e+08	0.82	y	1.00	36:42	100
13C-PCB-111	9.94e+07	1.63	y	1.00	39:11	100
13C-PCB-128	1.10e+08	1.32	y	1.00	46:17	100
13C-PCB-205	1.53e+08	0.91	y	1.00	54:05	100

Analyst: DMS

Date: 3/19/15

Vista Analytical Laboratory - Injection Log Run file: 150318E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
150318E1	1	ST150318E1-1	DMS	18-MAR-15	09:59:47	ST150318E1-1	NA
150318E1	2	B5C0059-BS1	DMS	18-MAR-15	11:04:10	ST150318E1-1	NA
150318E1	3	SOLVENT BLANK	DMS	18-MAR-15	12:08:39	ST150318E1-1	NA
150318E1	4	B5C0059-BLK1	DMS	18-MAR-15	13:13:08	ST150318E1-1	NA
150318E1	5	1400915-02RE1	DMS	18-MAR-15	14:17:36	ST150318E1-1	NA
150318E1	6	1400915-03RE1	DMS	18-MAR-15	15:22:05	ST150318E1-1	NA
150318E1	7	1400915-04RE1	DMS	18-MAR-15	16:26:29	ST150318E1-1	NA
150318E1	8	1400915-05RE1	DMS	18-MAR-15	17:30:54	ST150318E1-1	NA
150318E1	9	1400948-01RE1	DMS	18-MAR-15	18:35:16	ST150318E1-1	NA
150318E1	10	1400948-02RE1	DMS	18-MAR-15	19:39:45	ST150318E1-1	NA
150318E1	11	1400948-03RE1	DMS	18-MAR-15	20:44:12	ST150318E1-1	NA
150318E1	12	SOLVENT BLANK	DMS	18-MAR-15	21:48:42	ST150318E1-1	NA
150318E1	13	QC150318E1-1	DMS	18-MAR-15	22:53:09	ST150318E1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST150318E1-1 End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	✓	NA
Concentration within range?	✓	
First and last eluters present?	✓	
Retention Times within criteria?	PM 3/19 ✓	
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: MN 3/19/15
Initials & Date

* *Ending standard criteria applicable to 8290 only.*

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST150319E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 150319E1 S#1 Analysis Date: 19-MAR-15 Time: 12:47:35

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-1	2.98	2.66-3.60	y	43.4	37.5-62.5
PCB-2	3.01	2.66-3.60	y	40.0	37.5-62.5
PCB-3	3.00	2.66-3.60	y	40.4	37.5-62.5
PCB-4/10	1.61	1.33-1.79	y	185.1	150-250
PCB-7/9	1.62	1.33-1.79	y	187.3	150-250
PCB-6	1.61	1.33-1.79	y	90.3	75.0-125
PCB-5/8	1.61	1.33-1.79	y	185.8	150-250
PCB-14	1.61	1.33-1.79	y	94.9	75.0-125
PCB-11	1.63	1.33-1.79	y	95.3	75.0-125
PCB-12/13	1.62	1.33-1.79	y	189.1	150-250
PCB-15	1.61	1.33-1.79	y	95.4	75.0-125
PCB-19	1.07	0.88-1.20	y	51.4	37.5-62.5
PCB-30	1.06	0.88-1.20	y	50.1	37.5-62.5
PCB-18	1.07	0.88-1.20	y	51.3	37.5-62.5
PCB-17	1.07	0.88-1.20	y	50.7	37.5-62.5
PCB-24/27	1.07	0.88-1.20	y	100.9	75.0-125
PCB-16/32	1.07	0.88-1.20	y	101.9	75.0-125
PCB-34	1.08	0.88-1.20	y	51.0	37.5-62.5
PCB-23	1.12	0.88-1.20	y	48.7	37.5-62.5
PCB-29	1.09	0.88-1.20	y	50.9	37.5-62.5
PCB-26	1.10	0.88-1.20	y	51.4	37.5-62.5
PCB-25	1.09	0.88-1.20	y	54.0	37.5-62.5
PCB-31	1.09	0.88-1.20	y	51.5	37.5-62.5
PCB-28	1.11	0.88-1.20	y	50.2	37.5-62.5
PCB-20/21/33	1.07	0.88-1.20	y	172.8	112.5-225
PCB-22	1.09	0.88-1.20	y	54.6	37.5-62.5
PCB-36	1.10	0.88-1.20	y	54.5	37.5-62.5
PCB-39	1.09	0.88-1.20	y	52.5	37.5-62.5
PCB-38	1.09	0.88-1.20	y	49.5	37.5-62.5
PCB-35	1.10	0.88-1.20	y	57.4	37.5-62.5
PCB-37	1.11	0.88-1.20	y	52.3	37.5-62.5
PCB-54	0.79	0.65-0.89	y	52.7	37.5-62.5
PCB-50	0.79	0.65-0.89	y	54.3	37.5-62.5
PCB-53	0.78	0.65-0.89	y	55.2	37.5-62.5
PCB-51	0.79	0.65-0.89	y	52.9	37.5-62.5
PCB-45	0.78	0.65-0.89	y	53.5	37.5-62.5
PCB-46	0.79	0.65-0.89	y	53.6	37.5-62.5

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-52/69	0.78	0.65-0.89	y	104.9	75.0-125
PCB-73	0.81	0.65-0.89	y	56.7	37.5-62.5
PCB-43/49	0.79	0.65-0.89	y	106.0	75.0-125
PCB-47	0.78	0.65-0.89	y	51.9	37.5-62.5
PCB-48/75	0.78	0.65-0.89	y	108.4	75.0-125
PCB-65	0.88	0.65-0.89	y	55.9	37.5-62.5
PCB-62	0.69	0.65-0.89	y	55.7	37.5-62.5
PCB-44	0.79	0.65-0.89	y	55.2	37.5-62.5
PCB-42/59	0.80	0.65-0.89	y	106.9	75.0-125
PCB-41/64/71/72	0.78	0.65-0.89	y	216.0	150-250
PCB-68	0.78	0.65-0.89	y	55.0	37.5-62.5
PCB-40	0.79	0.65-0.89	y	56.5	37.5-62.5
PCB-57	0.79	0.65-0.89	y	54.7	37.5-62.5
PCB-67	0.86	0.65-0.89	y	51.6	37.5-62.5
PCB-58	0.73	0.65-0.89	y	54.0	37.5-62.5
PCB-63	0.77	0.65-0.89	y	52.6	37.5-62.5
PCB-74	0.78	0.65-0.89	y	51.7	37.5-62.5
PCB-61/70	0.78	0.65-0.89	y	110.8	75.0-125
PCB-76/66	0.78	0.65-0.89	y	104.4	75.0-125
PCB-80	0.79	0.65-0.89	y	53.5	37.5-62.5
PCB-55	0.78	0.65-0.89	y	53.7	37.5-62.5
PCB-56/60	0.78	0.65-0.89	y	109.1	75.0-125
PCB-79	0.79	0.65-0.89	y	53.8	37.5-62.5
PCB-78	0.77	0.65-0.89	y	51.5	37.5-62.5
PCB-81	0.79	0.65-0.89	y	51.7	37.5-62.5
PCB-77	0.80	0.65-0.89	y	52.0	37.5-62.5
PCB-104	1.61	1.32-1.78	y	53.1	37.5-62.5
PCB-96	1.64	1.32-1.78	y	52.7	37.5-62.5
PCB-103	1.62	1.32-1.78	y	51.4	37.5-62.5
PCB-100	1.60	1.32-1.78	y	51.5	37.5-62.5
PCB-94	1.60	1.32-1.78	y	49.4	37.5-62.5
PCB-95/98/102	1.59	1.32-1.78	y	148.3	112.5-225
PCB-93	1.62	1.32-1.78	y	52.1	37.5-62.5
PCB-88/91	1.61	1.32-1.78	y	108.4	75.0-125
PCB-121	1.62	1.32-1.78	y	45.6	37.5-62.5

Analyst: DMS

Date: 3/20/15

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST150319E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 150319E1 S#1 Analysis Date: 19-MAR-15 Time: 12:47:35

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	1.60	1.32-1.78	y	102.5	75.0-125	PCB-140	1.32	1.05-1.43	y	58.3	37.5-62.5
PCB-89	1.61	1.32-1.78	y	50.2	37.5-62.5	PCB-134/143	1.25	1.05-1.43	y	105.7	75.0-125
PCB-90/101	1.61	1.32-1.78	y	105.3	75.0-125	PCB-133/142	1.25	1.05-1.43	y	106.4	75.0-125
PCB-113	1.61	1.32-1.78	y	49.6	37.5-62.5	PCB-131	1.26	1.05-1.43	y	50.9	37.5-62.5
PCB-99	1.64	1.32-1.78	y	53.3	37.5-62.5	PCB-146/165	1.25	1.05-1.43	y	102.8	75.0-125
PCB-119	1.60	1.32-1.78	y	51.2	37.5-62.5	PCB-132/161	1.24	1.05-1.43	y	103.2	75.0-125
PCB-108/112	1.61	1.32-1.78	y	99.9	75.0-125	PCB-153	1.23	1.05-1.43	y	48.8	37.5-62.5
PCB-83	1.62	1.32-1.78	y	47.9	37.5-62.5	PCB-168	1.25	1.05-1.43	y	48.8	37.5-62.5
PCB-97	1.56	1.32-1.78	y	50.6	37.5-62.5	PCB-141	1.25	1.05-1.43	y	48.2	37.5-62.5
PCB-86	1.57	1.32-1.78	y	47.9	37.5-62.5	PCB-137	1.23	1.05-1.43	y	51.6	37.5-62.5
PCB-87/117/125	1.61	1.32-1.78	y	155.1	112.5-225	PCB-130	1.28	1.05-1.43	y	44.9	37.5-62.5
PCB-111/115	1.59	1.32-1.78	y	99.5	75.0-125	PCB-138/163/164	1.23	1.05-1.43	y	144.5	112.5-225
PCB-85/116	1.64	1.32-1.78	y	102.1	75.0-125	PCB-158/160	1.25	1.05-1.43	y	102.0	75.0-125
PCB-120	1.59	1.32-1.78	y	52.3	37.5-62.5	PCB-129	1.22	1.05-1.43	y	51.1	37.5-62.5
PCB-110	1.62	1.32-1.78	y	50.1	37.5-62.5	PCB-166	1.23	1.05-1.43	y	52.4	37.5-62.5
PCB-82	1.59	1.32-1.78	y	50.6	37.5-62.5	PCB-159	1.27	1.05-1.43	y	51.6	37.5-62.5
PCB-124	1.78	1.32-1.78	y	50.8	37.5-62.5	PCB-128/162	1.24	1.05-1.43	y	97.9	75.0-125
PCB-107/109	1.51	1.32-1.78	y	102.6	75.0-125	PCB-167	1.24	1.05-1.43	y	50.5	37.5-62.5
PCB-123	1.64	1.32-1.78	y	50.3	37.5-62.5	PCB-156	1.22	1.05-1.43	y	50.4	37.5-62.5
PCB-106/118	1.60	1.32-1.78	y	99.5	75.0-125	PCB-157	1.24	1.05-1.43	y	49.1	37.5-62.5
PCB-114	1.64	1.32-1.78	y	51.5	37.5-62.5	PCB-169	1.24	1.05-1.43	y	48.4	37.5-62.5
PCB-122	1.61	1.32-1.78	y	56.4	37.5-62.5	PCB-188	1.07	0.89-1.21	y	51.1	37.5-62.5
PCB-105	1.57	1.32-1.78	y	52.1	37.5-62.5	PCB-184	1.08	0.89-1.21	y	51.7	37.5-62.5
PCB-127	1.68	1.32-1.78	y	54.4	37.5-62.5	PCB-179	1.08	0.89-1.21	y	49.6	37.5-62.5
PCB-126	1.64	1.32-1.78	y	55.5	37.5-62.5	PCB-176	1.08	0.89-1.21	y	49.6	37.5-62.5
PCB-155	1.31	1.05-1.43	y	54.4	37.5-62.5	PCB-186	1.08	0.89-1.21	y	50.6	37.5-62.5
PCB-150	1.29	1.05-1.43	y	54.8	37.5-62.5	PCB-178	1.06	0.89-1.21	y	51.2	37.5-62.5
PCB-152	1.30	1.05-1.43	y	53.4	37.5-62.5	PCB-175	1.07	0.89-1.21	y	50.5	37.5-62.5
PCB-145	1.30	1.05-1.43	y	53.5	37.5-62.5	PCB-182/187	1.07	0.89-1.21	y	99.8	75.0-125
PCB-136	1.31	1.05-1.43	y	55.8	37.5-62.5	PCB-183	1.07	0.89-1.21	y	51.1	37.5-62.5
PCB-148	1.27	1.05-1.43	y	57.2	37.5-62.5	PCB-185	1.05	0.89-1.21	y	52.9	37.5-62.5
PCB-154	1.32	1.05-1.43	y	57.3	37.5-62.5	PCB-174	1.07	0.89-1.21	y	53.2	37.5-62.5
PCB-151	1.28	1.05-1.43	y	56.7	37.5-62.5	PCB-181	1.08	0.89-1.21	y	52.5	37.5-62.5
PCB-135	1.29	1.05-1.43	y	53.8	37.5-62.5	PCB-177	1.08	0.89-1.21	y	49.6	37.5-62.5
PCB-144	1.27	1.05-1.43	y	62.1	37.5-62.5	PCB-171	1.08	0.89-1.21	y	50.5	37.5-62.5
PCB-147	1.28	1.05-1.43	y	58.0	37.5-62.5	PCB-173	1.07	0.89-1.21	y	51.4	37.5-62.5
PCB-139/149	1.30	1.05-1.43	y	114.9	75.0-125	PCB-172	1.08	0.89-1.21	y	50.0	37.5-62.5

Analyst: DMS

Date: 3/20/15

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST150319E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 150319E1 S#1 Analysis Date: 19-MAR-15 Time: 12:47:35

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-192	1.07	0.89-1.21	y	52.4	37.5-62.5
PCB-180	1.05	0.89-1.21	y	50.5	37.5-62.5
PCB-193	1.08	0.89-1.21	y	54.9	37.5-62.5
PCB-191	1.07	0.89-1.21	y	51.3	37.5-62.5
PCB-170	1.07	0.89-1.21	y	50.1	37.5-62.5
PCB-190	1.08	0.89-1.21	y	51.9	37.5-62.5
PCB-189	1.06	0.89-1.21	y	52.0	37.5-62.5
PCB-202	0.91	0.76-1.02	y	51.6	37.5-62.5
PCB-201	0.92	0.76-1.02	y	50.6	37.5-62.5
PCB-204	0.92	0.76-1.02	y	51.7	37.5-62.5
PCB-197	0.91	0.76-1.02	y	52.5	37.5-62.5
PCB-200	0.92	0.76-1.02	y	53.0	37.5-62.5
PCB-198	0.90	0.76-1.02	y	57.7	37.5-62.5
PCB-199	0.93	0.76-1.02	y	52.1	37.5-62.5
PCB-196/203	0.92	0.76-1.02	y	106.1	75.0-125
PCB-195	0.91	0.76-1.02	y	43.9	37.5-62.5
PCB-194	0.92	0.76-1.02	y	47.6	37.5-62.5
PCB-205	0.93	0.76-1.02	y	51.7	37.5-62.5
PCB-208	1.35	1.14-1.54	y	51.9	37.5-62.5
PCB-207	1.35	1.14-1.54	y	52.8	37.5-62.5
PCB-206	1.30	1.14-1.54	y	50.3	37.5-62.5
PCB-209	1.19	0.99-1.33	y	51.3	37.5-62.5

Analyst: DMS

Date: 3/20/15

LABELED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST150319E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-23-14 ICal ID: PCBVG8-6-23-14 GC Column ID: ZB-1

VER Data Filename: 150319E1 S#1 Analysis Date: 19-MAR-15 Time: 12:47:35

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-1	3.21	2.66-3.60	y	107.4	50.0-145
13C-PCB-3	3.24	2.66-3.60	y	115.5	50.0-145
13C-PCB-4	1.59	1.33-1.79	y	99.6	50.0-145
13C-PCB-9	1.58	1.33-1.79	y	97.1	50.0-145
13C-PCB-11	1.56	1.33-1.79	y	97.4	50.0-145
13C-PCB-19	1.07	0.88-1.20	y	93.6	50.0-145
13C-PCB-32	1.09	0.88-1.20	y	93.7	50.0-145
13C-PCB-28	1.07	0.88-1.20	y	98.3	50.0-145
13C-PCB-37	1.09	0.88-1.20	y	105.4	50.0-145
13C-PCB-54	0.81	0.65-0.89	y	89.5	50.0-145
13C-PCB-52	0.80	0.65-0.89	y	95.0	50.0-145
13C-PCB-47	0.81	0.65-0.89	y	94.1	50.0-145
13C-PCB-70	0.82	0.65-0.89	y	96.6	50.0-145
13C-PCB-80	0.82	0.65-0.89	y	97.2	50.0-145
13C-PCB-81	0.82	0.65-0.89	y	97.4	50.0-145
13C-PCB-77	0.81	0.65-0.89	y	99.4	50.0-145
13C-PCB-104	1.58	1.32-1.78	y	95.2	50.0-145
13C-PCB-95	1.60	1.32-1.78	y	100.8	50.0-145
13C-PCB-101	1.66	1.32-1.78	y	100.6	50.0-145
13C-PCB-97	1.63	1.32-1.78	y	100.4	50.0-145
13C-PCB-123	1.61	1.32-1.78	y	104.1	50.0-145
13C-PCB-118	1.60	1.32-1.78	y	101.8	50.0-145
13C-PCB-114	1.61	1.32-1.78	y	104.8	50.0-145
13C-PCB-105	1.60	1.32-1.78	y	107.9	50.0-145
13C-PCB-127	1.59	1.32-1.78	y	99.1	50.0-145
13C-PCB-126	1.59	1.32-1.78	y	105.1	50.0-145
13C-PCB-155	1.28	1.05-1.43	y	74.5	50.0-145
13C-PCB-153	1.29	1.05-1.43	y	98.6	50.0-145
13C-PCB-141	1.28	1.05-1.43	y	98.5	50.0-145
13C-PCB-138	1.27	1.05-1.43	y	97.0	50.0-145
13C-PCB-159	1.29	1.05-1.43	y	97.5	50.0-145
13C-PCB-167	1.27	1.05-1.43	y	99.1	50.0-145
13C-PCB-156	1.29	1.05-1.43	y	103.0	50.0-145
13C-PCB-157	1.27	1.05-1.43	y	100.5	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	107.5	50 - 145
13C-PCB-188	0.46	0.38-0.52	y	87.4	50 - 145
13C-PCB-180	0.47	0.38-0.52	y	89.6	50 - 145
13C-PCB-170	0.47	0.38-0.52	y	87.9	50 - 145
13C-PCB-189	0.47	0.38-0.52	y	92.1	50 - 145
13C-PCB-202	0.96	0.76-1.02	y	79.5	50 - 145
13C-PCB-194	0.92	0.76-1.02	y	92.7	50 - 145
13C-PCB-208	0.80	0.65-0.89	y	83.5	50 - 145
13C-PCB-206	0.80	0.65-0.89	y	100.0	50 - 145
13C-PCB-209	1.20	0.99-1.33	y	104.4	50 - 145

CRS vs. RS

13C-PCB-79	0.81	0.65-0.89	y	99.2	75 - 125
13C-PCB-178	0.47	0.38-0.52	y	85.3	75 - 125

Analyst: DMS

Date: 3/20/15

Client ID: PCB CS3 14K1102 Filename: 150319E1 S:1 Acq:19-MAR-15 12:47:35 ConCal: ST150319E1-1

Lab ID: ST150319E1-1 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	2.98	y	1.19	16:09	1.001	0.996	1.006	43.3920
	PCB-2	1.04e+08	3.01	y	1.18	18:32	0.988	0.984	0.994	39.9761
	PCB-3	1.26e+08	3.00	y	1.43	18:46	1.001	0.996	1.006	40.3912
	PCB-4/10	3.52e+08	1.61	y	1.57	20:07	1.002	0.997	1.007	185.096
	PCB-7/9	4.10e+08	1.62	y	1.21	21:54	0.868	0.866	0.874	187.316
	PCB-6	2.13e+08	1.61	y	1.30	22:33	0.894	0.890	0.899	90.2932
	PCB-5/8	3.86e+08	1.61	y	1.15	22:58	0.910	0.907	0.917	185.770
	PCB-14	2.00e+08	1.61	y	1.11	24:04	0.954	0.949	0.959	94.9032
	PCB-11	1.96e+08	1.63	y	1.09	25:15	1.001	0.995	1.005	95.3146
	PCB-12/13	4.28e+08	1.62	y	1.19	25:39	1.016	1.011	1.021	189.104
	PCB-15	2.32e+08	1.61	y	1.28	25:57	1.028	1.023	1.033	95.3854
	PCB-19	5.54e+07	1.07	y	1.04	24:14	1.001	0.996	1.006	51.4241
	PCB-30	8.86e+07	1.06	y	1.71	25:08	1.038	1.032	1.042	50.1128
	PCB-18	6.21e+07	1.07	y	0.78	25:53	0.954	0.949	0.959	51.3359
	PCB-17	7.24e+07	1.07	y	0.92	26:03	0.960	0.956	0.966	50.6904
	PCB-24/27	1.86e+08	1.07	y	1.19	26:38	0.981	0.977	0.987	100.921
-	PCB-16/32	1.48e+08	1.07	y	0.94	27:08	1.000	0.995	1.005	101.870
-	PCB-34	9.86e+07	1.08	y	1.14	27:56	0.960	0.955	0.965	51.0079
	PCB-23	1.06e+08	1.12	y	1.28	28:02	0.964	0.959	0.969	48.6560
	PCB-29	9.35e+07	1.09	y	1.08	28:17	0.972	0.967	0.977	50.9165
	PCB-26	1.06e+08	1.10	y	1.21	28:29	0.979	0.974	0.984	51.4193
	PCB-25	1.16e+08	1.09	y	1.26	28:38	0.984	0.979	0.989	53.9740
	PCB-31	1.13e+08	1.09	y	1.28	29:00	0.997	0.992	1.002	51.5059
	PCB-28	1.46e+08	1.11	y	1.71	29:05	1.000	0.995	1.005	50.2122
	PCB-20/21/33	3.18e+08	1.07	y	1.08	29:43	1.022	1.017	1.027	172.818
	PCB-22	1.12e+08	1.09	y	1.21	30:09	1.037	1.032	1.042	54.6025
	PCB-36	1.02e+08	1.10	y	1.14	30:47	0.934	0.928	0.938	54.4555
	PCB-39	9.62e+07	1.09	y	1.12	31:14	0.948	0.943	0.953	52.4989
	PCB-38	9.75e+07	1.09	y	1.20	32:00	0.971	0.966	0.976	49.4745
	PCB-35	1.16e+08	1.10	y	1.23	32:32	0.987	0.982	0.992	57.4476
	PCB-37	1.06e+08	1.11	y	1.23	32:58	1.000	0.995	1.005	52.2617
	PCB-54	7.56e+07	0.79	y	1.10	27:59	1.001	0.996	1.006	52.7290
	PCB-50	6.23e+07	0.79	y	0.88	29:09	1.043	1.037	1.047	54.3478
	PCB-53	6.44e+07	0.78	y	1.06	29:47	0.946	0.942	0.952	55.1602
	PCB-51	5.75e+07	0.79	y	0.99	30:08	0.957	0.952	0.962	52.8833
	PCB-45	5.07e+07	0.78	y	0.86	30:34	0.971	0.966	0.976	53.5266
	PCB-46	4.97e+07	0.79	y	0.85	31:03	0.986	0.981	0.991	53.6143

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	1.48e+08	0.78	y	1.28	31:32	1.001	0.996	1.006	104.930
PCB-73	8.42e+07	0.81	y	1.35	31:39	1.005	1.000	1.010	56.7008
PCB-43/49	1.16e+08	0.79	y	0.99	31:49	1.010	1.005	1.015	106.019
PCB-47	6.29e+07	0.78	y	1.06	32:00	1.000	0.996	1.006	51.8615
PCB-48/75	1.52e+08	0.78	y	1.23	32:08	1.004	0.999	1.009	108.423
PCB-65	7.84e+07	0.88	y	1.22	32:24	1.013	1.008	1.018	55.9368
PCB-62	7.78e+07	0.69	y	1.22	32:31	1.016	1.011	1.021	55.6795
PCB-44	5.43e+07	0.79	y	0.86	32:48	1.025	1.021	1.031	55.1720
PCB-42/59	1.39e+08	0.80	y	1.14	33:02	1.032	1.028	1.038	106.867
PCB-41/64/71/72	2.99e+08	0.78	y	1.21	33:37	1.051	1.046	1.056	215.999
PCB-68	8.48e+07	0.78	y	1.35	33:53	1.059	1.054	1.064	54.9810
PCB-40	4.53e+07	0.79	y	0.70	34:05	1.065	1.061	1.071	56.4794
PCB-57	7.73e+07	0.79	y	0.98	34:27	0.970	0.965	0.975	54.6910
PCB-67	8.24e+07	0.86	y	1.11	34:45	0.979	0.974	0.984	51.5735
PCB-58	7.23e+07	0.73	y	0.93	34:53	0.982	0.977	0.987	53.9906
PCB-63	7.23e+07	0.77	y	0.95	35:02	0.987	0.982	0.992	52.5623
PCB-74	9.29e+07	0.78	y	1.24	35:19	0.995	0.990	1.000	51.7420
PCB-61/70	1.53e+08	0.78	y	0.95	35:29	1.000	0.995	1.005	110.835
PCB-76/66	1.57e+08	0.78	y	1.04	35:43	1.006	1.001	1.011	104.388
PCB-80	9.58e+07	0.79	y	1.19	35:57	1.001	0.996	1.006	53.4631
PCB-55	8.41e+07	0.78	y	1.04	36:16	1.009	1.005	1.015	53.7396
PCB-56/60	1.66e+08	0.78	y	1.01	36:45	1.023	1.019	1.029	109.109
PCB-79	8.73e+07	0.79	y	1.08	37:49	1.053	1.048	1.058	53.8202
PCB-78	8.81e+07	0.77	y	1.27	38:31	0.987	0.982	0.992	51.5380
PCB-81	9.26e+07	0.79	y	1.33	39:02	1.000	0.995	1.005	51.7350
PCB-77	8.03e+07	0.80	y	1.10	39:38	1.000	0.995	1.005	51.9938
PCB-104	4.80e+07	1.61	y	1.18	32:40	1.001	0.996	1.006	53.0956
PCB-96	4.57e+07	1.64	y	1.14	33:55	1.039	1.034	1.044	52.6666
PCB-103	3.76e+07	1.62	y	0.96	34:27	1.055	1.050	1.060	51.4305
PCB-100	3.68e+07	1.60	y	0.94	34:49	1.066	1.061	1.071	51.5146
PCB-94	3.12e+07	1.60	y	1.06	35:17	0.986	0.980	0.990	49.4337
PCB-95/98/102	1.08e+08	1.59	y	1.22	35:47	1.000	0.995	1.005	148.250
PCB-93	2.62e+07	1.62	y	0.84	35:55	1.003	0.997	1.007	52.0802
PCB-88/91	7.23e+07	1.61	y	1.12	36:12	1.011	1.005	1.015	108.446
PCB-121	4.40e+07	1.62	y	1.62	36:18	1.014	1.009	1.019	45.5781
PCB-84/92	6.76e+07	1.60	y	1.05	37:07	0.990	0.985	0.995	102.454
PCB-89	3.57e+07	1.61	y	1.13	37:17	0.995	0.991	1.001	50.1810

Integrations by Analyst: DMS Date: 3/20/15

Reviewed by Analyst: _____ Date: _____

Client ID: PCB CS3 14K1102 Filename: 150319E1 S:1 Acq:19-MAR-15 12:47:35 ConCal: ST150319E1-1

Lab ID: ST150319E1-1 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	7.31e+07	1.61	y	1.10	37:29	1.000	0.995	1.005	105.262
	PCB-113	4.41e+07	1.61	y	1.41	37:44	1.007	1.002	1.012	49.6044
	PCB-99	4.49e+07	1.64	y	1.34	37:49	1.009	1.004	1.014	53.2895
	PCB-119	4.44e+07	1.60	y	1.53	38:17	0.987	0.982	0.992	51.2365
	PCB-108/112	7.24e+07	1.61	y	1.28	38:27	0.991	0.986	0.996	99.9031
	PCB-83	4.12e+07	1.62	y	1.52	38:36	0.995	0.990	1.000	47.9338
	PCB-97	3.39e+07	1.56	y	1.18	38:47	1.000	0.995	1.005	50.6037
	PCB-86	2.29e+07	1.57	y	0.84	38:56	1.004	0.999	1.009	47.9347
	B-87/117/125	1.36e+08	1.61	y	1.55	39:04	1.007	1.002	1.012	155.100
	PCB-111/115	9.20e+07	1.59	y	1.63	39:13	1.011	1.006	1.016	99.5078
	PCB-85/116	7.53e+07	1.64	y	1.30	39:21	1.015	1.010	1.020	102.103
	PCB-120	4.97e+07	1.59	y	1.68	39:36	1.021	1.016	1.026	52.3469
	PCB-110	4.41e+07	1.62	y	1.56	39:44	1.025	1.020	1.030	50.0899
	PCB-82	2.86e+07	1.59	y	0.76	40:22	0.976	0.971	0.981	50.6080
	PCB-124	5.56e+07	1.78	y	1.47	41:03	0.993	0.988	0.998	50.7834
	PCB-107/109	1.01e+08	1.51	y	1.32	41:10	0.996	0.991	1.001	102.565
	PCB-123	4.37e+07	1.64	y	1.17	41:21	1.000	0.996	1.006	50.2746
-	PCB-106/118	9.12e+07	1.60	y	1.17	41:33	1.001	0.996	1.006	99.5185
-	PCB-114	6.93e+07	1.64	y	1.30	42:11	1.000	0.995	1.005	51.5419
	PCB-122	6.55e+07	1.61	y	1.12	42:19	1.003	0.999	1.009	56.3544
	PCB-105	7.24e+07	1.57	y	1.30	43:03	1.000	0.995	1.005	52.0688
	PCB-127	7.69e+07	1.68	y	1.33	43:23	1.000	0.996	1.006	54.4276
	PCB-126	6.55e+07	1.64	y	1.18	45:17	1.000	0.995	1.005	55.5098
	PCB-155	3.03e+07	1.31	y	1.11	37:03	1.001	0.966	1.006	54.4355
	PCB-150	2.74e+07	1.29	y	1.00	38:18	1.035	1.030	1.040	54.8059
	PCB-152	2.98e+07	1.30	y	1.12	38:47	1.047	1.043	1.053	53.3997
	PCB-145	3.22e+07	1.30	y	1.20	39:13	1.059	1.055	1.065	53.5444
	PCB-136	3.29e+07	1.31	y	1.18	39:33	1.068	1.064	1.074	55.7567
	PCB-148	2.13e+07	1.27	y	0.74	39:39	1.071	1.066	1.076	57.2457
	PCB-154	2.46e+07	1.32	y	0.86	40:09	1.084	1.080	1.090	57.2789
	PCB-151	2.12e+07	1.28	y	0.75	40:47	1.101	1.097	1.107	56.7430
	PCB-135	2.13e+07	1.29	y	0.79	40:59	1.107	1.103	1.113	53.8195
	PCB-144	2.37e+07	1.27	y	0.76	41:06	1.110	1.105	1.117	62.1146
	PCB-147	2.38e+07	1.28	y	0.82	41:14	1.114	1.109	1.121	57.9784
	PCB-139/149	4.38e+07	1.30	y	0.76	41:30	1.121	1.116	1.128	114.911
-	PCB-140	2.11e+07	1.32	y	0.72	41:41	1.126	1.121	1.133	58.3439
-	PCB-134/143	7.95e+07	1.25	y	0.92	42:06	0.975	0.970	0.980	105.690

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	7.15e+07	1.25	y	0.82	42:25	0.982	0.977	0.987	106.409
PCB-131	3.79e+07	1.26	y	0.91	42:34	0.985	0.981	0.991	50.9396
PCB-146/165	1.05e+08	1.25	y	1.25	42:48	0.991	0.986	0.996	102.771
PCB-132/161	9.36e+07	1.24	y	1.10	43:02	0.996	0.992	1.002	103.202
PCB-153	5.00e+07	1.23	y	1.25	43:12	1.000	0.995	1.005	48.7911
PCB-168	5.80e+07	1.25	y	1.45	43:25	1.005	1.001	1.011	48.7827
PCB-141	4.02e+07	1.25	y	1.09	43:56	1.000	0.995	1.005	48.1666
PCB-137	4.21e+07	1.23	y	1.06	44:19	1.009	1.004	1.014	51.5529
PCB-130	3.33e+07	1.28	y	0.96	44:26	1.011	1.006	1.016	44.9484
PCB-138/163/164	1.45e+08	1.23	y	1.29	44:48	1.001	0.996	1.006	144.512
PCB-158/160	1.06e+08	1.25	y	1.34	45:03	1.006	1.001	1.011	102.007
PCB-129	3.38e+07	1.22	y	0.85	45:17	1.012	1.007	1.017	51.0837
PCB-166	5.48e+07	1.23	y	1.19	45:45	0.993	0.988	0.998	52.3541
PCB-159	5.07e+07	1.27	y	1.11	46:04	1.000	0.996	1.006	51.6136
PCB-128/162	9.05e+07	1.24	y	1.05	46:21	1.006	1.002	1.012	97.9105
PCB-167	5.89e+07	1.24	y	1.20	46:45	1.000	0.995	1.005	50.4839
PCB-156	5.56e+07	1.22	y	1.14	48:02	1.000	0.996	1.006	50.4430
PCB-157	5.66e+07	1.24	y	1.16	48:19	1.001	0.995	1.005	49.0684
PCB-169	5.43e+07	1.24	y	1.12	50:27	1.000	0.995	1.005	48.3503
PCB-188	4.70e+07	1.07	y	1.58	42:50	1.000	0.996	1.006	51.0689
PCB-184	4.92e+07	1.08	y	1.63	43:17	1.011	1.006	1.016	51.7290
PCB-179	3.77e+07	1.08	y	1.30	44:04	1.029	1.024	1.034	49.6012
PCB-176	4.27e+07	1.08	y	1.48	44:32	1.040	1.035	1.045	49.6386
PCB-186	4.28e+07	1.08	y	1.45	45:08	1.054	1.050	1.060	50.5790
PCB-178	3.08e+07	1.06	y	1.03	45:38	1.066	1.061	1.071	51.1683
PCB-175	2.98e+07	1.07	y	1.01	45:59	1.074	1.069	1.079	50.4714
PCB-182/187	7.27e+07	1.07	y	1.25	46:09	1.078	1.073	1.083	99.8125
PCB-183	3.60e+07	1.07	y	1.21	46:28	1.085	1.081	1.091	51.1315
PCB-185	4.24e+07	1.05	y	1.80	47:08	0.956	0.951	0.961	52.9339
PCB-174	3.26e+07	1.07	y	1.38	47:29	0.963	0.958	0.968	53.2241
PCB-181	3.22e+07	1.08	y	1.38	47:36	0.965	0.960	0.970	52.4688
PCB-177	2.77e+07	1.08	y	1.26	47:45	0.968	0.963	0.973	49.6221
PCB-171	3.56e+07	1.08	y	1.58	48:03	0.974	0.970	0.980	50.5052
PCB-173	2.54e+07	1.07	y	1.11	48:29	0.983	0.978	0.988	51.4223
PCB-172	3.63e+07	1.08	y	1.63	48:56	0.992	0.987	0.997	49.9671
PCB-192	4.06e+07	1.07	y	1.74	49:07	0.996	0.991	1.001	52.4359
PCB-180	3.02e+07	1.05	y	1.34	49:20	1.000	0.995	1.005	50.5287

Integrations by Analyst: DMS

Date: 3/20/15

Client ID: PCB CS3 14K1102 Filename: 150319E1 S:1 Acq:19-MAR-15 12:47:35 ConCal: ST150319E1-1

Lab ID: ST150319E1-1 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	4.19e+07	1.08	y	1.72	49:32	1.005	0.999	1.009	54.9486
	PCB-191	3.87e+07	1.07	y	1.69	49:47	1.010	1.004	1.014	51.3340
	PCB-170	2.77e+07	1.07	y	1.60	50:50	1.000	0.995	1.005	50.0974
	PCB-190	3.97e+07	1.08	y	2.21	51:00	1.004	0.998	1.008	51.9351
	PCB-189	3.86e+07	1.06	y	1.55	52:20	1.000	0.995	1.005	52.0292
	PCB-202	2.70e+07	0.91	y	1.08	48:15	1.000	0.995	1.005	51.6207
	PCB-201	2.81e+07	0.92	y	1.15	48:44	1.010	1.005	1.015	50.6057
	PCB-204	2.85e+07	0.92	y	1.14	48:53	1.014	1.008	1.018	51.7211
	PCB-197	2.73e+07	0.91	y	1.07	49:12	1.020	1.015	1.025	52.4953
	PCB-200	2.72e+07	0.92	y	1.06	50:05	1.038	1.032	1.044	52.9706
	PCB-198	2.11e+07	0.90	y	0.76	51:26	1.066	1.059	1.069	57.7480
	PCB-199	2.01e+07	0.93	y	0.80	51:32	1.069	1.061	1.071	52.0847
-	PCB-196/203	4.11e+07	0.92	y	0.80	51:48	1.074	1.066	1.076	106.090
-	PCB-195	3.57e+07	0.91	y	1.23	52:59	0.984	0.979	0.989	43.8846
	PCB-194	3.83e+07	0.92	y	1.21	53:51	1.000	0.995	1.005	47.6409
	PCB-205	5.29e+07	0.93	y	1.54	54:07	1.005	1.001	1.011	51.7120
	PCB-208	3.92e+07	1.35	y	0.93	53:07	1.000	0.995	1.005	51.9422
	PCB-207	4.63e+07	1.35	y	1.08	53:26	1.006	1.001	1.011	52.8099
	PCB-206	3.00e+07	1.30	y	1.02	55:28	1.000	0.995	1.005	50.3270
	PCB-209	3.43e+07	1.19	y	1.17	56:49	1.000	0.995	1.005	51.2505

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	3.30e+08	2.98	y	16:09	1.27	123.759	
Total Di-PCB	2.42e+09	1.61	y	20:07	1.21	1125.73	
Total Tri-PCB	6.13e+08	1.07	y	24:14	1.10	406.355	
Total Tri-PCB	1.74e+09	1.08	y	27:56	1.21	859.180	Sum:1265.53
Total Tetra-PCB	3.12e+09	0.79	y	27:59	1.09	2271.28	
Total Penta-PCB	1.65e+09	1.61	y	32:40	1.18	2088.02	
Total Penta-PCB	3.70e+08	1.64	y	42:11	1.25	285.945	Sum:2373.96
Total Hexa-PCB	3.53e+08	1.31	y	37:03	0.90	790.377	
Total Hexa-PCB	1.34e+09	1.25	y	42:06	1.11	1436.00	Sum:2226.38
Total Hepta-PCB	8.88e+08	1.07	y	42:50	1.42	1242.17	
Total Octa-PCB	2.21e+08	0.91	y	48:15	0.96	475.396	
Total Octa-PCB	1.30e+08	0.91	y	52:59	1.33	146.896	Sum:622.292
Total Nona-PCB	1.16e+08	1.35	y	53:07	1.01	155.946	
Total Deca-PCB	3.43e+07	1.19	y	56:49	1.17	51.2505	

Total PCB Conc:11367.7510010

Integrations
by
Analyst: DMS

Date: 3/20/15

Client ID: PCB CS3 14K1102 Filename: 150319E1 S:1 Acq:19-MAR-15 12:47:35 ConCal: ST150319E1-1
Lab ID: ST150319E1-1 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	Rec
13C-PCB-1	1.95e+08	3.21 y	0.87	16:08	0.622	0.629	0.635	107	107
13C-PCB-3	2.19e+08	3.24 y	0.91	18:45	0.723	0.725	0.733	115	115
13C-PCB-4	1.21e+08	1.59 y	0.59	20:05	0.774	0.775	0.783	99.6	99.6
13C-PCB-9	1.81e+08	1.58 y	0.90	21:52	0.843	0.842	0.850	97.1	97.1
13C-PCB-11	1.90e+08	1.56 y	0.94	25:14	0.973	0.968	0.978	97.4	97.4
13C-PCB-19	1.03e+08	1.07 y	0.53	24:13	0.933	0.930	0.940	93.6	93.6
13C-PCB-28	1.70e+08	1.07 y	0.93	29:05	1.004	0.999	1.009	98.3	98.3
13C-PCB-32	1.55e+08	1.09 y	0.80	27:08	1.046	1.040	1.050	93.7	93.7
13C-PCB-37	1.64e+08	1.09 y	0.84	32:57	1.137	1.131	1.143	105	105
13C-PCB-47	1.14e+08	0.81 y	0.81	31:60	0.871	0.866	0.874	94.1	94.1
13C-PCB-52	1.10e+08	0.80 y	0.77	31:30	0.857	0.853	0.861	95.0	95.0
13C-PCB-54	1.30e+08	0.81 y	0.97	27:57	0.761	0.758	0.766	89.5	89.5
13C-PCB-70	1.44e+08	0.82 y	1.00	35:30	0.966	0.961	0.971	96.6	96.6
13C-PCB-77	1.40e+08	0.81 y	0.94	39:37	1.078	1.073	1.083	99.4	99.4
13C-PCB-80	1.50e+08	0.82 y	1.03	35:56	0.978	0.972	0.982	97.2	97.2
13C-PCB-81	1.35e+08	0.82 y	0.92	39:01	1.062	1.057	1.067	97.4	97.4
13C-PCB-95	5.97e+07	1.60 y	0.74	35:48	0.913	0.908	0.918	101	101
13C-PCB-97	5.66e+07	1.63 y	0.70	38:47	0.989	0.984	0.994	100	100
13C-PCB-101	6.31e+07	1.66 y	0.78	37:29	0.956	0.951	0.961	101	101
13C-PCB-104	7.63e+07	1.58 y	1.00	32:39	0.832	0.828	0.836	95.2	95.2
13C-PCB-105	1.07e+08	1.60 y	1.37	43:02	0.929	0.924	0.934	108	108
13C-PCB-114	1.04e+08	1.61 y	1.36	42:11	0.911	0.905	0.915	105	105
13C-PCB-118	7.81e+07	1.60 y	0.96	41:31	1.059	1.054	1.064	102	102
13C-PCB-123	7.44e+07	1.61 y	0.89	41:20	1.054	1.050	1.060	104	104
13C-PCB-126	9.98e+07	1.59 y	1.31	45:16	0.977	0.972	0.982	105	105
13C-PCB-127	1.06e+08	1.59 y	1.47	43:23	0.936	0.931	0.941	99.1	99.1
13C-PCB-138	7.75e+07	1.27 y	1.10	44:46	0.966	0.961	0.971	97.0	97.0
13C-PCB-141	7.69e+07	1.28 y	1.07	43:56	0.948	0.943	0.953	98.5	98.5
13C-PCB-153	8.21e+07	1.29 y	1.15	43:12	0.932	0.927	0.937	98.6	98.6
13C-PCB-155	5.01e+07	1.28 y	0.84	37:02	0.944	0.939	0.949	74.5	74.5
13C-PCB-156	9.71e+07	1.29 y	1.30	48:01	1.037	1.032	1.042	103	103
13C-PCB-157	9.91e+07	1.27 y	1.36	48:17	1.042	1.038	1.048	101	101
13C-PCB-159	8.83e+07	1.29 y	1.25	46:03	0.994	0.989	0.999	97.5	97.5
13C-PCB-167	9.73e+07	1.27 y	1.35	46:44	1.009	1.004	1.014	99.1	99.1
13C-PCB-169	1.00e+08	1.29 y	1.29	50:27	1.089	1.083	1.093	107	107
13C-PCB-170	3.46e+07	0.47 y	0.54	50:49	1.097	1.089	1.101	87.9	87.9
13C-PCB-180	4.45e+07	0.47 y	0.68	49:19	1.065	1.060	1.070	89.6	89.6
13C-PCB-188	5.82e+07	0.46 y	0.92	42:49	0.924	0.919	0.929	87.4	87.4
13C-PCB-189	4.79e+07	0.47 y	0.72	52:19	1.129	1.120	1.132	92.1	92.1
13C-PCB-194	6.64e+07	0.92 y	0.80	53:50	0.995	0.990	1.000	92.7	92.7
13C-PCB-202	4.84e+07	0.96 y	0.84	48:14	1.041	1.036	1.046	79.5	79.5
13C-PCB-206	5.83e+07	0.80 y	0.65	55:27	1.025	1.021	1.031	100.0	100.0
13C-PCB-208	8.10e+07	0.80 y	1.08	53:06	0.981	0.976	0.986	83.5	83.5
13C-PCB-209	5.72e+07	1.20 y	0.61	56:48	1.050	1.045	1.055	104	104

OK

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.51e+08	0.81 y	1.02	37:48	1.029	1.023	1.034	99.2	99.2
13C-PCB-178	3.80e+07	0.47 y	0.61	45:36	0.985	0.979	0.990	85.3	85.3

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.51e+08	0.81 y	1.10	37:48	0.969	0.964	0.974	102	102
13C-PCB-178	3.80e+07	0.47 y	0.90	45:36	0.925	0.920	0.930	95.1	95.1

RS

Name	Resp	RA	RRF	RT	Conc
13C-PCB-15	2.08e+08	1.57 y	1.00	25:56	100
13C-PCB-31	1.85e+08	1.06 y	1.00	28:59	100
13C-PCB-60	1.50e+08	0.81 y	1.00	36:45	100
13C-PCB-111	8.00e+07	1.63 y	1.00	39:13	100
13C-PCB-128	7.26e+07	1.30 y	1.00	46:19	100
13C-PCB-205	8.97e+07	0.92 y	1.00	54:07	100

Analyst: DMS

Date: 3/20/15

Vista Analytical Laboratory - Injection Log Run file: 150319E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
150319E1	1	ST150319E1-1	DMS	19-MAR-15	12:47:35	ST150319E1-1	NA
150319E1	2	SOLVENT BLANK	DMS	19-MAR-15	13:51:58	ST150319E1-1	NA
150319E1	3	1400915-05RE1@5X	DMS	19-MAR-15	14:56:27	ST150319E1-1	NA
150319E1	4	1400948-01RE1@20X	DMS	19-MAR-15	16:00:57	ST150319E1-1	NA
150319E1	5	1400948-02RE1@20X	DMS	19-MAR-15	17:05:20	ST150319E1-1	NA
150319E1	6	1400948-03RE1@20X	DMS	19-MAR-15	18:09:45	ST150319E1-1	NA
150319E1	7	1500211-01RE1@20X	DMS	19-MAR-15	19:14:08	ST150319E1-1	NA
150319E1	8	SOLVENT BLANK	DMS	19-MAR-15	20:18:33	ST150319E1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST1S0319E1-1

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 3Feb15	
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 3/20/15
Initials & Date

* *Ending standard criteria applicable to 8290 only.*

INITIAL CALIBRATION

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

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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

Attachment S-5
Ecology Inspection Report

MUNICIPAL STORMWATER INSPECTION REPORT

State of Washington Department of Ecology
3190 – 160th Avenue SE, Bellevue, WA 98008-5452

Municipal Stormwater Inspection Form

Phone: (425) 649-7000
FAX: (425) 649-7098

Section A: General Data

Inspection Date	NPDES Permit #	County	Receiving Waters	Inspector(s)	Facility Type
12/11/14	**WAR044503**	King	Duwamish River	Rachel McCrea	Municipal

Discharges to: Surface Water ☒ Ground Water ☐ | Announced (<24 hours) Inspection

Section B: Facility Data

Name and Location of Site Inspected

Seattle City Light South Service Center*
400 S Spokane Street
Seattle, WA 98134

*Excluding on-site substation

Entry Time	Permit Effective Date
8:30 a.m.	8/1/2013
Exit Time	**Permit Expiration Date**
4:00 p.m.	7/31/2018

Permittee Contact(s)

Gary Lockwood, Seattle City Light, NPDES Coordinator
Echo Tremoglio, Seattle City Light, Sr. Environmental Analyst
Kate Rhoads, Seattle Public Utilities, Municipal Stormwater Specialist
Beth Schmoyer, Seattle Public Utilities, Duwamish Source Control
Joe Silvernale, Seattle City Light, South Service Center, Crew Chief (on-site contact)
Jose and Joe, Seattle City Light, South Service Center, on-site employees

Additional Participants:

Bob Wright – Ecology
Mahbub Alam – Ecology
Alex White – Ecology
Christine Nancarrow – Leidos
Melissa Ivancevich – Leidos
Corey Wilson – Leidos

Responsible Official(s):

Nancy Ahern, Director
Utility System Management Branch
Seattle Public Utilities
PO Box 34018
Seattle, WA 98124-4018

	Yes	No
Samples Taken?	☒	☐
Photos Taken?	☒	☐

Section C: Summary of Findings/Comments

BACKGROUND

This inspection with sampling occurred as part of Ecology's efforts to control sources of pollutants to the Lower Duwamish Waterway Superfund cleanup site. Refer to Ecology Publication Number 14-09-263 for additional background. The purpose of the sampling is to evaluate pollutants present in the stormwater system on the site. Stormwater from the site flows to the Duwamish/Diagonal municipal stormwater conveyance system which discharges to the Duwamish Waterway. Results from the sampling will be available several months following the date of inspection and sampling. A report documenting the specific locations and site conditions related to sample collection will be available at that time. Ecology will provide the sampling results to the City of Seattle when they become available. City of Seattle (City) representatives observed sample collection procedures and obtained split samples for their use.

The purposes of the inspection were to document on-site conditions and activities and evaluate compliance with the Phase I Municipal Stormwater Permit issued to the City of Seattle, as applicable to the Seattle City Light (SCL) South Service Center. Note that the on-site substation was not accessed nor inspected.

The South Service Center is required to implement a Stormwater Pollution Prevention Plan (SWPPP) per Special Condition S5.C.9.g of Phase I Municipal Stormwater Permit No. WAR044503; the City has identified it as meeting the definition of a "heavy equipment maintenance or storage yard" and/or "material storage facility" (permit definitions excerpted below).

- "Heavy equipment maintenance or storage yard" means an uncovered area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are washed or maintained, or where at least five pieces of heavy equipment are stored on a long term basis.
- "Material Storage Facilities" means an uncovered area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.

INSPECTION/OBSERVATIONS

The following observations are organized by on-site activity area as referenced on the "Existing Yard Building & Surface Drainage Plan" and as verbally referenced during the inspection.

Decant Facility – The brand new decant facility looked great, but as with all new facilities, it will take some time to work out the details. Decant materials are segregated into hydro (material excavated using the hydro equipment) and vault (material removed from utility vaults) solids. Liquid waste receives advanced treatment (carbon filtration) and discharges to the sanitary sewer under King County Major Wastewater Discharge Authorization No. 4194-01. The concrete facility pad is covered and drains to sanitary. Solids (dried) are loaded from inside the facility to metal bins located outside the facility (on asphalt that drains to storm). Rain will wash any materials spilled during this transfer activity into the storm drain system. Ensure BMPs are in place to address spillage, operations during rainfall, and include in SWPPP.

Bone Yard (SW area of site) – This is a storage area for large transformers on pallets that are intact and will be used for parts/as needed. Transformers are labeled as being < 1 ppm or < 50 ppm PCBs. Area receives an undocumented daily walkthrough check.

PCB Building and Related Activities – The PCB Building is used to dismantle old/broken transformers. Roof downspouts are tightlined to the stormwater system. Unknown whether roof venting occurs; exterior vent visible at top of southern and northern walls. Inside the building, PCB-containing oils are drained and segregated into 2 tanks (< 1 ppm or < 50 ppm PCBs). Both before and after service in the PCB Building, old/broken transformers are stored on pallets along the north side of building. Two catch basins serve this storage area. Old/broken large transformers are stored for months until they can be processed (e.g., parts/materials salvage, including fluid draining) inside the PCB building and then, following processing, until there is sufficient quantity to make recycling pick up cost effective. Visible oil sheen and oil stains were present, exposed to rain. The on-site contact indicated these conditions were typical and that no particular action would normally be taken given observed conditions (e.g., the spill kit is deployed when the spill itself is flowing). The on-site contact further explained that the large transformer present at the bay door of the PCB Building had been located outside in this storage area on the north side of the building until the day before the inspection, when it had been observed to be leaking and moved into the PCB Building for draining. He explained that the visible oil stains on the pavement (refer to photo 14 attached) were likely from that transformer (refer to photo 11 for PCB content information). The SWPPP provides no specificity regarding stormwater pollution prevention BMPs identified for this area, although page 19 of the SWPPP states "Leaks and spills of solid and liquid pollutants…must be promptly contained and cleaned up." Additionally, the SWPPP states that "general practices should be employed to reduce the potential for spills" including "Place drip pans underneath all containers fittings, valves, where materials are likely to spill or leak."

Scrap Yard – Bulk storage of scrap metal, electronic parts and other materials exposed to stormwater. Some bins had lids, others did not. Some materials were covered with tarps, others were not. Pollution generating materials need BMPs to prevent exposure to stormwater. Page 19 of the site's SWPPP states that "Solid wastes must be stored in suitable containers with leak-proof lids (where appropriate) that are closed at all times…"

Material/Product Storage – New products are stored in open shelving in this fenced area. No observable stormwater BMPs in place. Pollution generating products (i.e., galvanized metals, treated wood) need BMPs to prevent exposure to stormwater.

Vegetation Crew Storage Area (south of facility outside of fence in city street end) – Product storage (construction materials), vehicle/equipment parking and equipment servicing occur in this area. Area not included in facility SWPPP.

Bulk Products Storage (unpaved lot located across 4th Avenue) – Bulk storage of materials occurs in this area. According to SCL representatives, this unpaved lot has no formal on-site drainage system but drains to right-of-way. Area not included in facility SWPPP.

Sampling of Stormwater System Solids and Water – Ecology's contractor (Leidos), at the direction of Ecology, collected three storm drain solids samples (two from catch basins and one from an oil water separator) and one water sample (manhole before the same oil water separator). Ecology will perform laboratory analysis for a suite of parameters, including the chemicals of concern for the Duwamish Waterway Superfund cleanup site.

Section D: Compliance/Recommendations

1. Ensure site-specific BMPs are implemented and documented in the SWPPP to prevent and/or minimize stormwater pollution. While the Phase I Municipal Stormwater Permit allows "generic SWPPPs that can be applied at multiple sites" (Special Condition S5.C.9.g), activities on this site necessitate site-specific and area-specific BMPs to prevent and/or minimize stormwater pollution. Also consider including tools (such as checklists and forms) to assist with documentation of BMP-related activities and/or inspections.

2. This site handles PCB-containing products and materials. Ensure site-specific and area-specific BMPs are implemented and documented in the SWPPP to address chemicals of concern in the Lower Duwamish Waterway in-waterway cleanup, particularly PCBs. Petroleum staining and visible sheen in the area where PCB containing transformers were stored while waiting for decommissioning indicates a need for improved source control measures. Oil staining and petroleum sheens in this area are expected to contain PCBs. Consider structural BMPs (such as catch basin filtration inserts) in addition operational BMPs (such as drip trays) to prevent PCB-containing materials from getting into the stormwater system.

3. Ensure the SWPPP is complete and accurate (page 2 of the SWPPP indicates that BMPs to be implemented are described in Section 8, but Section 8 discusses water quality treatment BMPs for new and redevelopment projects).

4. Ensure the SWPPP addresses all areas associated with this facility which discharge or have the potential to discharge to the municipal separated stormwater system, including the street-end area outside the fence at the south end of the facility used by the vegetation crew for storage and the unpaved lot across 4th Avenue where bulk materials are stored outside.

5. The Phase I Municipal Stormwater Permit requires "periodic visual observation of discharges from the facility to evaluate the effectiveness of BMPs" (Special Condition S5.C.9.g). Ensure procedures for such observations at each discharge location from the facility, including all associated areas, are described in the SWPPP, conducted and documented.

6. The Phase I Municipal Stormwater Permit requires notification of any stormwater monitoring or stormwater-related studies that occurred over the previous calendar year (Appendix 12 Annual Report question 72, Special Condition S8.A). In upcoming annual report(s), describe any analysis of the City's split samples from the 12/11/14 inspection.

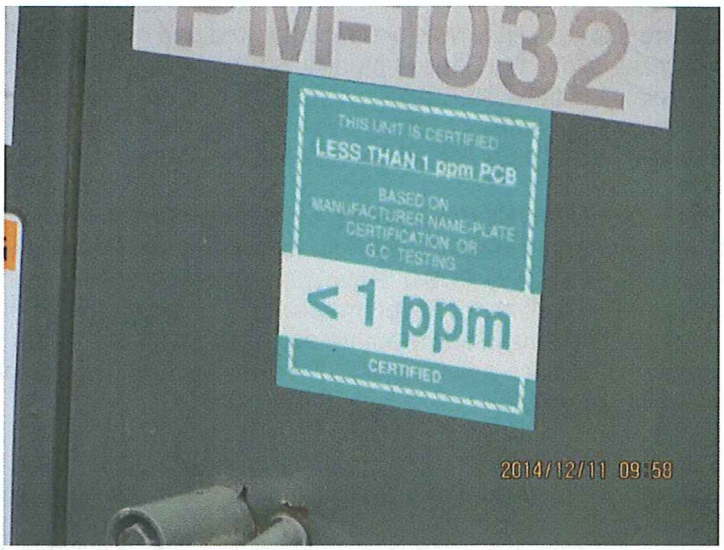
For questions related to this report or any technical assistance please contact Rachel McCrea at: (425) 649-7223 or rmcc461@ecy.wa.gov.

The Department of Ecology has the authority to issue formal enforcement actions including issuance of orders and civil penalties of up to $10,000 per day per violation for violations of an NPDES permit and/or state laws and regulations.

Rachel McCrea 1/27/15	Reviewed and approved by: 1/28/15
Rachel McCrea Date Lead Water Quality Planner for the Lower Duwamish & Municipal Stormwater Specialist Water Quality Program	Raman Iyer Date Compliance & Technical Assistance Unit Supervisor Water Quality Program

PHOTO LOG - SEATTLE CITY LIGHT SOUTH SERVICE CENTER

01 **DESCRIPTION:** "BONE YARD" AREA



02 **DESCRIPTION:** TRANSFORMER PCB CONTENT LABEL

03 **DESCRIPTION:** DECANT FACILITY BAYS

04 **DESCRIPTION:** DECANT SOLIDS LOADED FROM CONCRETE DRYING AREA (SANITARY) TO BLUE STORAGE BIN ON ASPHALT (STORM).

05 **DESCRIPTION:** SCRAP YARD AREA (NORTH SIDE)

06 **DESCRIPTION:** COATED & UNCOATED METAL IN UNCOVERED BINS EXPOSED TO STORMWATER.

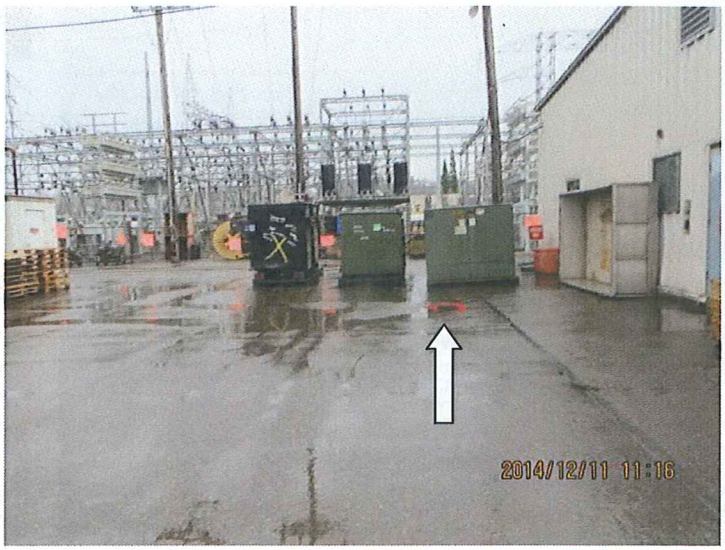
07 **DESCRIPTION:** SCRAP YARD AREA (SOUTH SIDE)

08 **DESCRIPTION:** CATCH BASIN IN SCRAP YARD. SHEEN.

09 **DESCRIPTION:** PCB BUILDING (SW CORNER). BAY DOOR VISIBLE IN BLUE.

10 **DESCRIPTION:** OLD TRANSFORMER IN PCB BUILDING BAY DOOR

11 **DESCRIPTION**: CLOSE UP OF OLD TRANSFORMER FROM PHOTO 10 SHOWING PCB CONTENT OF COMPONENTS (6.1 PPM, 24.4 PPM)



12 **DESCRIPTION**: NORTH SIDE OF PCB BUILDING (ON RIGHT). TRANSFORMER STORAGE. RED PAINT/ARROW SHOWS CATCH BASIN LOCATION.

13 **DESCRIPTION**: NORTH SIDE OF PCB BUILDING, LOOKING SOUTH BETWEEN STORED TRANSFORMERS (SAME AS IN PHOTO 12). SHEEN AND OIL STAINS.

14 **DESCRIPTION**: CLOSE UP OF OIL STAINS AND SHEEN IN TRANSFORMER STORAGE AREA (SAME AS IN PHOTO 13).

15 **DESCRIPTION**: CLOSE UP OF SHEEN FROM TRANSFORMERS IN PHOTO 13. FLOWING WESTWARD TOWARD CATCH BASIN VISIBLE IN PHOTO 12.

16 **DESCRIPTION**: PREPARING FOR SAMPLING AT NORTH SIDE OF PCB BUILDING. BACKGROUND CATCH BASIN (ARROW; ALSO IN PHOTO 12) FLOWS TO CATCH BASIN IN FOREGROUND.

17 **DESCRIPTION**: PCB SPILL KIT (TYPICAL)

18 **DESCRIPTION**: MATERIAL/PRODUCT STORAGE AREA

Attachment S-6
Split Sample Results

OnSite Environmental Inc.

14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

December 24, 2014

Gary Lockwood
Seattle City Light
3613 4th Avenue S.
Seattle, WA 98134

Re: Analytical Data for Project SW Inspection
Laboratory Reference No. 1412-140

Dear Gary:

Enclosed are the analytical results and associated quality control data for samples submitted on December 12, 2014.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

Case Narrative

Samples were collected on December 11, 2014 and received by the laboratory on December 12, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx Analysis

Per EPA Method 5035A, some of the samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis. The remaining samples were received by the laboratory in pre-weighed 40 mL VOA vials and were preserved with either Methanol or Sodium Bisulfate.

Volatiles EPA 8260C Analysis

Per EPA Method 5035A, some of the samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis. The remaining samples were received by the laboratory in pre-weighed 40 mL VOA vials and were preserved with either Methanol or Sodium Bisulfate.

Some MTCA Method A cleanup levels are non-achievable for samples SC-CB-35-20141211-S and SC-CB-24-20141211-S due to sample matrix effects.

Surrogate Standard 4-Bromofluorobenzene is outside control limits for sample SC-CB-35-20141211-S due to sample matrix effects.

The value reported for Acetone in sample SC-CB-24-20141211-S exceeds the quantitation range and is therefore an estimate. The sample was re-analyzed at the lowest possible dilution allowed by Method 5035A with non-detect results for Acetone.

Semivolatiles EPA 8270D/SIM Analysis

Sample SC-OWS-05-20141211-S had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

PCBs
EPA 8082A

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-OWS-05-20141211-S**					
Laboratory ID:	12-140-01					
Aroclor 1016	**ND**	0.16	EPA 8082A	12-22-14	12-22-14	
Aroclor 1221	**ND**	0.16	EPA 8082A	12-22-14	12-22-14	
Aroclor 1232	**ND**	0.16	EPA 8082A	12-22-14	12-22-14	
Aroclor 1242	**1.2**	0.16	EPA 8082A	12-22-14	12-22-14	
Aroclor 1248	**ND**	0.16	EPA 8082A	12-22-14	12-22-14	
Aroclor 1254	**3.7**	0.16	EPA 8082A	12-22-14	12-22-14	
Aroclor 1260	**1.7**	0.16	EPA 8082A	12-22-14	12-22-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*72*	*55-140*				

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

PCBs EPA 8082A
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1222S1					
Aroclor 1016	**ND**	0.050	EPA 8082A	12-22-14	12-22-14	
Aroclor 1221	**ND**	0.050	EPA 8082A	12-22-14	12-22-14	
Aroclor 1232	**ND**	0.050	EPA 8082A	12-22-14	12-22-14	
Aroclor 1242	**ND**	0.050	EPA 8082A	12-22-14	12-22-14	
Aroclor 1248	**ND**	0.050	EPA 8082A	12-22-14	12-22-14	
Aroclor 1254	**ND**	0.050	EPA 8082A	12-22-14	12-22-14	
Aroclor 1260	**ND**	0.050	EPA 8082A	12-22-14	12-22-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*78*	*55-140*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	12-225-02										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	**0.497**	**0.498**	0.500	0.500	ND	**99**	**100**	46-136	0	17	
Surrogate:											
DCB						*80*	*82*	*55-140*			

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

PCBs
EPA 8082A

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-CB-35-20141211-S**					
Laboratory ID:	12-140-02					
Aroclor 1016	**ND**	0.088	EPA 8082A	12-17-14	12-18-14	
Aroclor 1221	**ND**	0.088	EPA 8082A	12-17-14	12-18-14	
Aroclor 1232	**ND**	0.088	EPA 8082A	12-17-14	12-18-14	
Aroclor 1242	**ND**	0.088	EPA 8082A	12-17-14	12-18-14	
Aroclor 1248	**ND**	0.088	EPA 8082A	12-17-14	12-18-14	
Aroclor 1254	**0.41**	0.088	EPA 8082A	12-17-14	12-18-14	
Aroclor 1260	**0.23**	0.088	EPA 8082A	12-17-14	12-18-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*94*	*55-140*				
Client ID:	**SC-CB-24-20141211-S**					
Laboratory ID:	12-140-03					
Aroclor 1016	**ND**	0.10	EPA 8082A	12-17-14	12-18-14	
Aroclor 1221	**ND**	0.10	EPA 8082A	12-17-14	12-18-14	
Aroclor 1232	**ND**	0.10	EPA 8082A	12-17-14	12-18-14	
Aroclor 1242	**ND**	0.10	EPA 8082A	12-17-14	12-18-14	
Aroclor 1248	**ND**	0.10	EPA 8082A	12-17-14	12-18-14	
Aroclor 1254	**0.99**	0.10	EPA 8082A	12-17-14	12-18-14	
Aroclor 1260	**0.27**	0.10	EPA 8082A	12-17-14	12-18-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*99*	*55-140*				

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

PCBs EPA 8082A
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1217S1					
Aroclor 1016	**ND**	0.050	EPA 8082A	12-17-14	12-17-14	
Aroclor 1221	**ND**	0.050	EPA 8082A	12-17-14	12-17-14	
Aroclor 1232	**ND**	0.050	EPA 8082A	12-17-14	12-17-14	
Aroclor 1242	**ND**	0.050	EPA 8082A	12-17-14	12-17-14	
Aroclor 1248	**ND**	0.050	EPA 8082A	12-17-14	12-17-14	
Aroclor 1254	**ND**	0.050	EPA 8082A	12-17-14	12-17-14	
Aroclor 1260	**ND**	0.050	EPA 8082A	12-17-14	12-17-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*103*	*55-140*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	12-114-02										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	**0.412**	**0.438**	0.500	0.500	ND	**82**	**88**	46-136	6	17	
Surrogate:											
DCB						*86*	*89*	*55-140*			

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
page 1 of 2

Matrix: Sediment
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-OWS-05-20141211-S**					
Laboratory ID:	12-140-01					
n-Nitrosodimethylamine	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Pyridine	**ND**	11	EPA 8270D	12-22-14	12-22-14	
Phenol	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Aniline	**ND**	5.3	EPA 8270D	12-22-14	12-22-14	
bis(2-Chloroethyl)ether	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2-Chlorophenol	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
1,3-Dichlorobenzene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
1,4-Dichlorobenzene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Benzyl alcohol	**ND**	5.3	EPA 8270D	12-22-14	12-22-14	
1,2-Dichlorobenzene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2-Methylphenol (o-Cresol)	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
bis(2-Chloroisopropyl)ether	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
n-Nitroso-di-n-propylamine	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Hexachloroethane	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Nitrobenzene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Isophorone	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2-Nitrophenol	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2,4-Dimethylphenol	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
bis(2-Chloroethoxy)methane	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2,4-Dichlorophenol	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
1,2,4-Trichlorobenzene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Naphthalene	**ND**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
4-Chloroaniline	**ND**	5.3	EPA 8270D	12-22-14	12-22-14	
Hexachlorobutadiene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
4-Chloro-3-methylphenol	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2-Methylnaphthalene	**ND**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
1-Methylnaphthalene	**ND**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
Hexachlorocyclopentadiene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2,4,6-Trichlorophenol	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2,3-Dichloroaniline	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2,4,5-Trichlorophenol	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2-Chloronaphthalene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2-Nitroaniline	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
1,4-Dinitrobenzene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Dimethylphthalate	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
1,3-Dinitrobenzene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2,6-Dinitrotoluene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
1,2-Dinitrobenzene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Acenaphthylene	**ND**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
3-Nitroaniline	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-OWS-05-20141211-S**					
Laboratory ID:	12-140-01					
2,4-Dinitrophenol	**ND**	5.3	EPA 8270D	12-22-14	12-22-14	
Acenaphthene	**ND**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
4-Nitrophenol	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2,4-Dinitrotoluene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Dibenzofuran	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2,3,5,6-Tetrachlorophenol	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
2,3,4,6-Tetrachlorophenol	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Diethylphthalate	**ND**	5.3	EPA 8270D	12-22-14	12-22-14	
4-Chlorophenyl-phenylether	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
4-Nitroaniline	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Fluorene	**0.27**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
4,6-Dinitro-2-methylphenol	**ND**	5.3	EPA 8270D	12-22-14	12-22-14	
n-Nitrosodiphenylamine	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
1,2-Diphenylhydrazine	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
4-Bromophenyl-phenylether	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Hexachlorobenzene	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Pentachlorophenol	**ND**	5.3	EPA 8270D	12-22-14	12-22-14	
Phenanthrene	**1.5**	1.1	EPA 8270D	12-22-14	12-22-14	
Anthracene	**0.47**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
Carbazole	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Di-n-butylphthalate	**1.1**	1.1	EPA 8270D	12-22-14	12-22-14	
Fluoranthene	**2.2**	1.1	EPA 8270D	12-22-14	12-22-14	
Benzidine	**ND**	11	EPA 8270D	12-22-14	12-22-14	
Pyrene	**2.4**	1.1	EPA 8270D	12-22-14	12-22-14	
Butylbenzylphthalate	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
bis-2-Ethylhexyladipate	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
3,3'-Dichlorobenzidine	**ND**	5.3	EPA 8270D	12-22-14	12-22-14	
Benzo[a]anthracene	**1.0**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
Chrysene	**2.0**	1.1	EPA 8270D	12-22-14	12-22-14	
bis(2-Ethylhexyl)phthalate	**46**	1.1	EPA 8270D	12-22-14	12-22-14	
Di-n-octylphthalate	**ND**	1.1	EPA 8270D	12-22-14	12-22-14	
Benzo[b]fluoranthene	**1.3**	1.1	EPA 8270D	12-22-14	12-22-14	
Benzo(j,k)fluoranthene	**0.70**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
Benzo[a]pyrene	**0.87**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
Indeno[1,2,3-cd]pyrene	**0.63**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
Dibenz[a,h]anthracene	**0.31**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
Benzo[g,h,i]perylene	**1.0**	0.21	EPA 8270D/SIM	12-22-14	12-22-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*41*	*31 - 110*				
Phenol-d6	*37*	*34 - 109*				
Nitrobenzene-d5	*38*	*30 - 109*				
2-Fluorobiphenyl	*39*	*39 - 103*				
2,4,6-Tribromophenol	*33*	*25 - 120*				
Terphenyl-d14	*38*	*40 - 117*				Q

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 1 of 2

Matrix: Sediment
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1222S1					
n-Nitrosodimethylamine	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Pyridine	**ND**	0.33	EPA 8270D	12-22-14	12-22-14	
Phenol	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Aniline	**ND**	0.17	EPA 8270D	12-22-14	12-22-14	
bis(2-Chloroethyl)ether	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2-Chlorophenol	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
1,3-Dichlorobenzene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
1,4-Dichlorobenzene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Benzyl alcohol	**ND**	0.17	EPA 8270D	12-22-14	12-22-14	
1,2-Dichlorobenzene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2-Methylphenol (o-Cresol)	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
bis(2-Chloroisopropyl)ether	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
n-Nitroso-di-n-propylamine	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Hexachloroethane	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Nitrobenzene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Isophorone	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2-Nitrophenol	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2,4-Dimethylphenol	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
bis(2-Chloroethoxy)methane	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2,4-Dichlorophenol	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
1,2,4-Trichlorobenzene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Naphthalene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
4-Chloroaniline	**ND**	0.17	EPA 8270D	12-22-14	12-22-14	
Hexachlorobutadiene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
4-Chloro-3-methylphenol	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Hexachlorocyclopentadiene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2,4,6-Trichlorophenol	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2,3-Dichloroaniline	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2,4,5-Trichlorophenol	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2-Chloronaphthalene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2-Nitroaniline	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
1,4-Dinitrobenzene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Dimethylphthalate	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
1,3-Dinitrobenzene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2,6-Dinitrotoluene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
1,2-Dinitrobenzene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Acenaphthylene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
3-Nitroaniline	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1222S1					
2,4-Dinitrophenol	**ND**	0.17	EPA 8270D	12-22-14	12-22-14	
Acenaphthene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
4-Nitrophenol	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2,4-Dinitrotoluene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Dibenzofuran	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2,3,5,6-Tetrachlorophenol	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
2,3,4,6-Tetrachlorophenol	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Diethylphthalate	**ND**	0.17	EPA 8270D	12-22-14	12-22-14	
4-Chlorophenyl-phenylether	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
4-Nitroaniline	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Fluorene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
4,6-Dinitro-2-methylphenol	**ND**	0.17	EPA 8270D	12-22-14	12-22-14	
n-Nitrosodiphenylamine	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
1,2-Diphenylhydrazine	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
4-Bromophenyl-phenylether	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Hexachlorobenzene	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Pentachlorophenol	**ND**	0.17	EPA 8270D	12-22-14	12-22-14	
Phenanthrene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Anthracene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Carbazole	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Di-n-butylphthalate	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Fluoranthene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Benzidine	**ND**	0.33	EPA 8270D	12-22-14	12-22-14	
Pyrene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Butylbenzylphthalate	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
bis-2-Ethylhexyladipate	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
3,3'-Dichlorobenzidine	**ND**	0.17	EPA 8270D	12-22-14	12-22-14	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Chrysene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
bis(2-Ethylhexyl)phthalate	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Di-n-octylphthalate	**ND**	0.033	EPA 8270D	12-22-14	12-22-14	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Indeno[1,2,3-cd]pyrene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Benzo[g,h,i]perylene	**ND**	0.0067	EPA 8270D/SIM	12-22-14	12-22-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*89*	*31 - 110*				
Phenol-d6	*92*	*34 - 109*				
Nitrobenzene-d5	*95*	*30 - 109*				
2-Fluorobiphenyl	*79*	*39 - 103*				
2,4,6-Tribromophenol	*83*	*25 - 120*				
Terphenyl-d14	*88*	*40 - 117*				

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Sediment
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1222S1									
	SB	SBD	SB	SBD	SB	SBD				
Phenol	**0.942**	**0.973**	1.33	1.33	71	73	55 - 105	3	25	
2-Chlorophenol	**0.874**	**0.911**	1.33	1.33	66	68	56 - 102	4	30	
1,4-Dichlorobenzene	**0.372**	**0.408**	0.667	0.667	56	61	49 - 99	9	35	
n-Nitroso-di-n-propylamine	**0.484**	**0.510**	0.667	0.667	73	76	52 - 102	5	26	
1,2,4-Trichlorobenzene	**0.390**	**0.394**	0.667	0.667	58	59	49 - 110	1	30	
4-Chloro-3-methylphenol	**0.960**	**1.02**	1.33	1.33	72	77	59 - 113	6	22	
Acenaphthene	**0.440**	**0.465**	0.667	0.667	66	70	52 - 103	6	22	
4-Nitrophenol	**0.940**	**0.997**	1.33	1.33	71	75	51 - 125	6	23	
2,4-Dinitrotoluene	**0.484**	**0.526**	0.667	0.667	73	79	53 - 118	8	23	
Pentachlorophenol	**0.744**	**0.784**	1.33	1.33	56	59	25 - 141	5	39	
Pyrene	**0.533**	**0.545**	0.667	0.667	80	82	57 - 120	2	20	
Surrogate:										
2-Fluorophenol					*67*	*68*	*31 - 110*			
Phenol-d6					*72*	*73*	*34 - 109*			
Nitrobenzene-d5					*71*	*72*	*30 - 109*			
2-Fluorobiphenyl					*67*	*69*	*39 - 103*			
2,4,6-Tribromophenol					*69*	*74*	*25 - 120*			
Terphenyl-d14					*75*	*76*	*40 - 117*			

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-CB-35-20141211-S**					
Laboratory ID:	12-140-02					
n-Nitrosodimethylamine	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Pyridine	**ND**	5.9	EPA 8270D	12-16-14	12-17-14	
Phenol	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Aniline	**ND**	2.9	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroethyl)ether	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2-Chlorophenol	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
1,3-Dichlorobenzene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
1,4-Dichlorobenzene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Benzyl alcohol	**23**	2.9	EPA 8270D	12-16-14	12-17-14	
1,2-Dichlorobenzene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2-Methylphenol (o-Cresol)	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroisopropyl)ether	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
n-Nitroso-di-n-propylamine	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Hexachloroethane	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Nitrobenzene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Isophorone	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2-Nitrophenol	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2,4-Dimethylphenol	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroethoxy)methane	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2,4-Dichlorophenol	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
1,2,4-Trichlorobenzene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Naphthalene	**0.27**	0.12	EPA 8270D/SIM	12-16-14	12-17-14	
4-Chloroaniline	**ND**	2.9	EPA 8270D	12-16-14	12-17-14	
Hexachlorobutadiene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
4-Chloro-3-methylphenol	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2-Methylnaphthalene	**0.28**	0.12	EPA 8270D/SIM	12-16-14	12-17-14	
1-Methylnaphthalene	**0.17**	0.12	EPA 8270D/SIM	12-16-14	12-17-14	
Hexachlorocyclopentadiene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2,4,6-Trichlorophenol	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2,3-Dichloroaniline	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2,4,5-Trichlorophenol	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2-Chloronaphthalene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2-Nitroaniline	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
1,4-Dinitrobenzene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Dimethylphthalate	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
1,3-Dinitrobenzene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2,6-Dinitrotoluene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
1,2-Dinitrobenzene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Acenaphthylene	**ND**	0.12	EPA 8270D/SIM	12-16-14	12-17-14	
3-Nitroaniline	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-CB-35-20141211-S**					
Laboratory ID:	12-140-02					
2,4-Dinitrophenol	**ND**	2.9	EPA 8270D	12-16-14	12-17-14	
Acenaphthene	**0.13**	0.12	EPA 8270D/SIM	12-16-14	12-17-14	
4-Nitrophenol	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2,4-Dinitrotoluene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Dibenzofuran	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2,3,5,6-Tetrachlorophenol	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
2,3,4,6-Tetrachlorophenol	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Diethylphthalate	**ND**	2.9	EPA 8270D	12-16-14	12-17-14	
4-Chlorophenyl-phenylether	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
4-Nitroaniline	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Fluorene	**0.23**	0.12	EPA 8270D/SIM	12-16-14	12-17-14	
4,6-Dinitro-2-methylphenol	**ND**	2.9	EPA 8270D	12-16-14	12-17-14	
n-Nitrosodiphenylamine	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
1,2-Diphenylhydrazine	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
4-Bromophenyl-phenylether	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Hexachlorobenzene	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Pentachlorophenol	**10**	2.9	EPA 8270D	12-16-14	12-17-14	
Phenanthrene	**2.0**	0.59	EPA 8270D	12-16-14	12-17-14	
Anthracene	**0.28**	0.12	EPA 8270D/SIM	12-16-14	12-17-14	
Carbazole	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Di-n-butylphthalate	**0.77**	0.59	EPA 8270D	12-16-14	12-17-14	
Fluoranthene	**2.1**	0.59	EPA 8270D	12-16-14	12-17-14	
Benzidine	**ND**	5.9	EPA 8270D	12-16-14	12-17-14	
Pyrene	**2.1**	0.59	EPA 8270D	12-16-14	12-17-14	
Butylbenzylphthalate	**5.8**	0.59	EPA 8270D	12-16-14	12-17-14	
bis-2-Ethylhexyladipate	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
3,3'-Dichlorobenzidine	**ND**	2.9	EPA 8270D	12-16-14	12-17-14	
Benzo[a]anthracene	**0.85**	0.59	EPA 8270D	12-16-14	12-17-14	
Chrysene	**1.8**	0.59	EPA 8270D	12-16-14	12-17-14	
bis(2-Ethylhexyl)phthalate	**42**	2.9	EPA 8270D	12-16-14	12-18-14	
Di-n-octylphthalate	**ND**	0.59	EPA 8270D	12-16-14	12-17-14	
Benzo[b]fluoranthene	**1.7**	0.59	EPA 8270D	12-16-14	12-17-14	
Benzo(j,k)fluoranthene	**1.1**	0.59	EPA 8270D	12-16-14	12-17-14	
Benzo[a]pyrene	**1.1**	0.59	EPA 8270D	12-16-14	12-17-14	
Indeno[1,2,3-cd]pyrene	**0.96**	0.59	EPA 8270D	12-16-14	12-17-14	
Dibenz[a,h]anthracene	**0.30**	0.12	EPA 8270D/SIM	12-16-14	12-17-14	
Benzo[g,h,i]perylene	**1.3**	0.59	EPA 8270D	12-16-14	12-17-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*59*	*31 - 110*				
Phenol-d6	*64*	*34 - 109*				
Nitrobenzene-d5	*62*	*30 - 109*				
2-Fluorobiphenyl	*65*	*39 - 103*				
2,4,6-Tribromophenol	*67*	*25 - 120*				
Terphenyl-d14	*69*	*40 - 117*				

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-CB-24-20141211-S**					
Laboratory ID:	12-140-03					
n-Nitrosodimethylamine	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Pyridine	**ND**	6.6	EPA 8270D	12-16-14	12-17-14	
Phenol	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Aniline	**ND**	3.3	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroethyl)ether	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2-Chlorophenol	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
1,3-Dichlorobenzene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
1,4-Dichlorobenzene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Benzyl alcohol	**ND**	3.3	EPA 8270D	12-16-14	12-17-14	
1,2-Dichlorobenzene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2-Methylphenol (o-Cresol)	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroisopropyl)ether	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
n-Nitroso-di-n-propylamine	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Hexachloroethane	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Nitrobenzene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Isophorone	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2-Nitrophenol	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2,4-Dimethylphenol	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroethoxy)methane	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2,4-Dichlorophenol	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
1,2,4-Trichlorobenzene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Naphthalene	**0.14**	0.13	EPA 8270D/SIM	12-16-14	12-17-14	
4-Chloroaniline	**ND**	3.3	EPA 8270D	12-16-14	12-17-14	
Hexachlorobutadiene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
4-Chloro-3-methylphenol	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2-Methylnaphthalene	**ND**	0.13	EPA 8270D/SIM	12-16-14	12-17-14	
1-Methylnaphthalene	**ND**	0.13	EPA 8270D/SIM	12-16-14	12-17-14	
Hexachlorocyclopentadiene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2,4,6-Trichlorophenol	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2,3-Dichloroaniline	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2,4,5-Trichlorophenol	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2-Chloronaphthalene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2-Nitroaniline	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
1,4-Dinitrobenzene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Dimethylphthalate	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
1,3-Dinitrobenzene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2,6-Dinitrotoluene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
1,2-Dinitrobenzene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Acenaphthylene	**ND**	0.13	EPA 8270D/SIM	12-16-14	12-17-14	
3-Nitroaniline	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-CB-24-20141211-S**					
Laboratory ID:	12-140-03					
2,4-Dinitrophenol	**ND**	3.3	EPA 8270D	12-16-14	12-17-14	
Acenaphthene	**ND**	0.13	EPA 8270D/SIM	12-16-14	12-17-14	
4-Nitrophenol	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2,4-Dinitrotoluene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Dibenzofuran	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2,3,5,6-Tetrachlorophenol	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
2,3,4,6-Tetrachlorophenol	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Diethylphthalate	**ND**	3.3	EPA 8270D	12-16-14	12-17-14	
4-Chlorophenyl-phenylether	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
4-Nitroaniline	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Fluorene	**0.22**	0.13	EPA 8270D/SIM	12-16-14	12-17-14	
4,6-Dinitro-2-methylphenol	**ND**	3.3	EPA 8270D	12-16-14	12-17-14	
n-Nitrosodiphenylamine	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
1,2-Diphenylhydrazine	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
4-Bromophenyl-phenylether	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Hexachlorobenzene	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Pentachlorophenol	**ND**	3.3	EPA 8270D	12-16-14	12-17-14	
Phenanthrene	**1.5**	0.66	EPA 8270D	12-16-14	12-17-14	
Anthracene	**0.45**	0.13	EPA 8270D/SIM	12-16-14	12-17-14	
Carbazole	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Di-n-butylphthalate	**19**	0.66	EPA 8270D	12-16-14	12-17-14	
Fluoranthene	**2.4**	0.66	EPA 8270D	12-16-14	12-17-14	
Benzidine	**ND**	6.6	EPA 8270D	12-16-14	12-17-14	
Pyrene	**2.7**	0.66	EPA 8270D	12-16-14	12-17-14	
Butylbenzylphthalate	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
bis-2-Ethylhexyladipate	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
3,3'-Dichlorobenzidine	**ND**	3.3	EPA 8270D	12-16-14	12-17-14	
Benzo[a]anthracene	**1.1**	0.66	EPA 8270D	12-16-14	12-17-14	
Chrysene	**2.1**	0.66	EPA 8270D	12-16-14	12-17-14	
bis(2-Ethylhexyl)phthalate	**39**	0.66	EPA 8270D	12-16-14	12-17-14	
Di-n-octylphthalate	**ND**	0.66	EPA 8270D	12-16-14	12-17-14	
Benzo[b]fluoranthene	**1.2**	0.66	EPA 8270D	12-16-14	12-17-14	
Benzo(j,k)fluoranthene	**1.1**	0.66	EPA 8270D	12-16-14	12-17-14	
Benzo[a]pyrene	**0.98**	0.66	EPA 8270D	12-16-14	12-17-14	
Indeno[1,2,3-cd]pyrene	**0.63**	0.13	EPA 8270D/SIM	12-16-14	12-17-14	
Dibenz[a,h]anthracene	**0.35**	0.13	EPA 8270D/SIM	12-16-14	12-17-14	
Benzo[g,h,i]perylene	**1.1**	0.66	EPA 8270D	12-16-14	12-17-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*53*	*31 - 110*				
Phenol-d6	*53*	*34 - 109*				
Nitrobenzene-d5	*56*	*30 - 109*				
2-Fluorobiphenyl	*55*	*39 - 103*				
2,4,6-Tribromophenol	*55*	*25 - 120*				
Terphenyl-d14	*59*	*40 - 117*				

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1216S1					
n-Nitrosodimethylamine	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Pyridine	**ND**	0.33	EPA 8270D	12-16-14	12-17-14	
Phenol	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Aniline	**ND**	0.17	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroethyl)ether	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2-Chlorophenol	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
1,3-Dichlorobenzene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
1,4-Dichlorobenzene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Benzyl alcohol	**ND**	0.17	EPA 8270D	12-16-14	12-17-14	
1,2-Dichlorobenzene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2-Methylphenol (o-Cresol)	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroisopropyl)ether	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
n-Nitroso-di-n-propylamine	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Hexachloroethane	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Nitrobenzene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Isophorone	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2-Nitrophenol	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2,4-Dimethylphenol	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroethoxy)methane	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2,4-Dichlorophenol	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
1,2,4-Trichlorobenzene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Naphthalene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
4-Chloroaniline	**ND**	0.17	EPA 8270D	12-16-14	12-17-14	
Hexachlorobutadiene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
4-Chloro-3-methylphenol	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Hexachlorocyclopentadiene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2,4,6-Trichlorophenol	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2,3-Dichloroaniline	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2,4,5-Trichlorophenol	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2-Chloronaphthalene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2-Nitroaniline	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
1,4-Dinitrobenzene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Dimethylphthalate	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
1,3-Dinitrobenzene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2,6-Dinitrotoluene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
1,2-Dinitrobenzene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Acenaphthylene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
3-Nitroaniline	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1216S1					
2,4-Dinitrophenol	**ND**	0.17	EPA 8270D	12-16-14	12-17-14	
Acenaphthene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
4-Nitrophenol	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2,4-Dinitrotoluene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Dibenzofuran	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2,3,5,6-Tetrachlorophenol	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
2,3,4,6-Tetrachlorophenol	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Diethylphthalate	**ND**	0.17	EPA 8270D	12-16-14	12-17-14	
4-Chlorophenyl-phenylether	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
4-Nitroaniline	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Fluorene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
4,6-Dinitro-2-methylphenol	**ND**	0.17	EPA 8270D	12-16-14	12-17-14	
n-Nitrosodiphenylamine	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
1,2-Diphenylhydrazine	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
4-Bromophenyl-phenylether	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Hexachlorobenzene	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Pentachlorophenol	**ND**	0.17	EPA 8270D	12-16-14	12-17-14	
Phenanthrene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Anthracene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Carbazole	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Di-n-butylphthalate	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Fluoranthene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Benzidine	**ND**	0.33	EPA 8270D	12-16-14	12-17-14	
Pyrene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Butylbenzylphthalate	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
bis-2-Ethylhexyladipate	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
3,3'-Dichlorobenzidine	**ND**	0.17	EPA 8270D	12-16-14	12-17-14	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Chrysene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
bis(2-Ethylhexyl)phthalate	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Di-n-octylphthalate	**ND**	0.033	EPA 8270D	12-16-14	12-17-14	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Indeno[1,2,3-cd]pyrene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Benzo[g,h,i]perylene	**ND**	0.0067	EPA 8270D/SIM	12-16-14	12-17-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*90*	*31 - 110*				
Phenol-d6	*90*	*34 - 109*				
Nitrobenzene-d5	*96*	*30 - 109*				
2-Fluorobiphenyl	*84*	*39 - 103*				
2,4,6-Tribromophenol	*86*	*25 - 120*				
Terphenyl-d14	*85*	*40 - 117*				

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1216S1									
	SB	SBD	SB	SBD	SB	SBD				
Phenol	**1.06**	**1.04**	1.33	1.33	80	78	55 - 105	2	25	
2-Chlorophenol	**1.07**	**1.08**	1.33	1.33	80	81	56 - 102	1	30	
1,4-Dichlorobenzene	**0.514**	**0.518**	0.667	0.667	77	78	49 - 99	1	35	
n-Nitroso-di-n-propylamine	**0.510**	**0.509**	0.667	0.667	76	76	52 - 102	0	26	
1,2,4-Trichlorobenzene	**0.507**	**0.511**	0.667	0.667	76	77	49 - 110	1	30	
4-Chloro-3-methylphenol	**1.04**	**1.05**	1.33	1.33	78	79	59 - 113	1	22	
Acenaphthene	**0.486**	**0.505**	0.667	0.667	73	76	52 - 103	4	22	
4-Nitrophenol	**0.997**	**0.976**	1.33	1.33	75	73	51 - 125	2	23	
2,4-Dinitrotoluene	**0.526**	**0.532**	0.667	0.667	79	80	53 - 118	1	23	
Pentachlorophenol	**1.02**	**1.02**	1.33	1.33	77	77	25 - 141	0	39	
Pyrene	**0.549**	**0.557**	0.667	0.667	82	84	57 - 120	1	20	
Surrogate:										
2-Fluorophenol					*78*	*78*	*31 - 110*			
Phenol-d6					*79*	*81*	*34 - 109*			
Nitrobenzene-d5					*83*	*87*	*30 - 109*			
2-Fluorobiphenyl					*75*	*77*	*39 - 103*			
2,4,6-Tribromophenol					*78*	*76*	*25 - 120*			
Terphenyl-d14					*78*	*80*	*40 - 117*			

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-OWS-05-20141211-S**					
Laboratory ID:	12-140-01					
Diesel Range Organics	**7300**	800	NWTPH-Dx	12-16-14	12-16-14	
Lube Oil	**16000**	1600	NWTPH-Dx	12-16-14	12-16-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	---	*50-150*				S
Client ID:	**SC-CB-35-20141211-S**					
Laboratory ID:	12-140-02					
Diesel Range Organics	**4100**	440	NWTPH-Dx	12-16-14	12-16-14	
Lube Oil	**4600**	880	NWTPH-Dx	12-16-14	12-16-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	---	*50-150*				S
Client ID:	**SC-CB-24-20141211-S**					
Laboratory ID:	12-140-03					
Diesel Range Organics	**ND**	1200	NWTPH-Dx	12-16-14	12-16-14	U1
Lube Oil	**6300**	500	NWTPH-Dx	12-16-14	12-16-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*71*	*50-150*				

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1216S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	12-16-14	12-16-14	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	12-16-14	12-16-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*85*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-135-01										
	ORIG	DUP									
Diesel Range Organics	**1490**	**1350**	NA	NA		NA		NA	10	NA	N
Lube Oil	**10500**	**9430**	NA	NA		NA		NA	11	NA	
Surrogate:											
o-Terphenyl						---	---	*50-150*			S,S

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 6010C/7471B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	12-140-01					
Client ID:	**SC-OWS-05-20141211-S**					
Arsenic	**19**	16	6010C	12-22-14	12-23-14	
Barium	**230**	8.0	6010C	12-22-14	12-23-14	
Cadmium	**8.7**	1.6	6010C	12-22-14	12-23-14	
Chromium	**100**	1.6	6010C	12-22-14	12-23-14	
Copper	**1100**	3.2	6010C	12-22-14	12-23-14	
Lead	**570**	16	6010C	12-22-14	12-23-14	
Mercury	**1.8**	0.80	7471B	12-23-14	12-23-14	
Selenium	**ND**	32	6010C	12-22-14	12-23-14	
Silver	**ND**	3.2	6010C	12-22-14	12-23-14	
Zinc	**3000**	40	6010C	12-22-14	12-22-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted: 12-22&23-14
Date Analyzed: 12-22&23-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1222SM1

Analyte	Method	Result	PQL
Arsenic	6010C	**ND**	5
Barium	6010C	**ND**	2.5
Cadmium	6010C	**ND**	0.50
Chromium	6010C	**ND**	0.50
Copper	6010C	**ND**	1.0
Lead	6010C	**ND**	5.0
Selenium	6010C	**ND**	10
Silver	6010C	**ND**	1.0
Zinc	6010C	**ND**	2.5

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL MERCURY
EPA 7471B
METHOD BLANK QUALITY CONTROL

Date Extracted:	12-23-14
Date Analyzed:	12-23-14
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB1223S1

Analyte	Method	Result	PQL
Mercury	7471B	**ND**	0.25

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 12-22&23-14
Date Analyzed: 12-22&23-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 12-255-02

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	**ND**	**ND**	NA	5	
Barium	**16.1**	**17.8**	10	2.5	
Cadmium	**ND**	**ND**	NA	0.50	
Chromium	**14.2**	**15.0**	6	0.50	
Copper	**6.90**	**7.35**	6	1.0	
Lead	**ND**	**ND**	NA	5.0	
Selenium	**ND**	**ND**	NA	10	
Silver	**ND**	**ND**	NA	1.0	
Zinc	**18.0**	**18.6**	3	2.5	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL MERCURY
EPA 7471B
DUPLICATE QUALITY CONTROL

Date Extracted: 12-23-14
Date Analyzed: 12-23-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 12-209-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	**ND**	**ND**	NA	0.25	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 12-22&23-14
Date Analyzed: 12-22&23-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 12-255-02

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	**102**	102	**107**	107	5	
Barium	100	**112**	96	**118**	102	5	
Cadmium	50.0	**49.4**	99	**51.6**	103	4	
Chromium	100	**110**	96	**117**	103	7	
Copper	50.0	**57.8**	102	**60.7**	108	5	
Lead	250	**240**	96	**253**	101	5	
Selenium	100	**96.8**	97	**102**	102	5	
Silver	25.0	**22.6**	90	**23.7**	95	5	
Zinc	100	**120**	102	**125**	107	4	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL MERCURY
EPA 7471B
MS/MSD QUALITY CONTROL

Date Extracted: 12-23-14
Date Analyzed: 12-23-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 12-209-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	**ND**	**ND**	NA	0.25	

This report pertains to the samples analyzed in accordance with the chain of custody,
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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 6010C/7471B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	12-140-02					
Client ID:	**SC-CB-35-20141211-S**					
Arsenic	**ND**	18	6010C	12-18-14	12-18-14	
Barium	**180**	4.4	6010C	12-18-14	12-18-14	
Cadmium	**6.6**	0.88	6010C	12-18-14	12-18-14	
Chromium	**150**	0.88	6010C	12-18-14	12-18-14	
Copper	**510**	1.8	6010C	12-18-14	12-18-14	
Lead	**260**	8.8	6010C	12-18-14	12-18-14	
Mercury	**ND**	0.44	7471B	12-19-14	12-19-14	
Selenium	**ND**	18	6010C	12-18-14	12-18-14	
Silver	**1.9**	1.8	6010C	12-18-14	12-18-14	
Zinc	**1700**	22	6010C	12-18-14	12-19-14	
Lab ID:	12-140-03					
Client ID:	**SC-CB-24-20141211-S**					
Arsenic	**ND**	20	6010C	12-18-14	12-18-14	
Barium	**340**	5.0	6010C	12-18-14	12-18-14	
Cadmium	**3.1**	1.0	6010C	12-18-14	12-18-14	
Chromium	**68**	1.0	6010C	12-18-14	12-18-14	
Copper	**2600**	10	6010C	12-18-14	12-19-14	
Lead	**430**	10	6010C	12-18-14	12-18-14	
Mercury	**ND**	0.50	7471B	12-19-14	12-19-14	
Selenium	**ND**	20	6010C	12-18-14	12-18-14	
Silver	**ND**	2.0	6010C	12-18-14	12-18-14	
Zinc	**1700**	25	6010C	12-18-14	12-19-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 6010C/7471B
METHOD BLANK QUALITY CONTROL

Date Extracted: 12-18&19-14
Date Analyzed: 12-18&19-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1218SM1&MB1219S1

Analyte	Method	Result	PQL
Arsenic	6010C	**ND**	10
Barium	6010C	**ND**	2.5
Cadmium	6010C	**ND**	0.50
Chromium	6010C	**ND**	0.50
Copper	6010C	**ND**	1.0
Lead	6010C	**ND**	5.0
Mercury	7471B	**ND**	0.25
Selenium	6010C	**ND**	10
Silver	6010C	**ND**	1.0
Zinc	6010C	**ND**	2.5

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 6010C/7471B
DUPLICATE QUALITY CONTROL

Date Extracted: 12-18&19-14
Date Analyzed: 12-18&19-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 12-150-06

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	**ND**	**ND**	NA	10	
Barium	**27.1**	**25.9**	5	2.5	
Cadmium	**ND**	**ND**	NA	0.50	
Chromium	**23.1**	**24.1**	5	0.50	
Copper	**4.51**	**4.61**	2	1.0	
Lead	**7.90**	**7.30**	8	5.0	
Mercury	**ND**	**ND**	NA	0.25	
Selenium	**ND**	**ND**	NA	10	
Silver	**ND**	**ND**	NA	1.0	
Zinc	**16.0**	**16.4**	3	2.5	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 6010C/7471B
MS/MSD QUALITY CONTROL

Date Extracted: 12-18&19-14
Date Analyzed: 12-18&19-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 12-150-06

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	**96.5**	96	**97.4**	97	1	
Barium	100	**120**	93	**124**	97	3	
Cadmium	50.0	**48.2**	96	**49.1**	98	2	
Chromium	100	**113**	90	**117**	94	3	
Copper	50.0	**51.1**	93	**52.0**	95	2	
Lead	250	**240**	93	**243**	94	1	
Mercury	0.500	**0.489**	98	**0.491**	98	0	
Selenium	100	**93.0**	93	**92.4**	92	1	
Silver	25.0	**20.6**	82	**20.6**	82	0	
Zinc	100	**114**	98	**117**	101	2	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

NWTPH-Gx

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-CB-35-20141211-S**					
Laboratory ID:	12-140-02					
Gasoline	**ND**	11	NWTPH-Gx	12-15-14	12-15-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*68-123*				
Client ID:	**SC-CB-24-20141211-S**					
Laboratory ID:	12-140-03					
Gasoline	**ND**	21	NWTPH-Gx	12-15-14	12-15-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*89*	*68-123*				

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

NWTPH-Gx
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1215S1					
Gasoline	**ND**	5.0	NWTPH-Gx	12-15-14	12-15-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*100*	*68-123*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-130-01										
	ORIG	DUP									
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*98*	*93*	*68-123*			

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

VOLATILES EPA 8260C
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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-CB-35-20141211-S**					
Laboratory ID:	12-140-02					
Dichlorodifluoromethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Chloromethane	ND	0.54	EPA 8260C	12-15-14	12-15-14	
Vinyl Chloride	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Bromomethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Chloroethane	ND	0.54	EPA 8260C	12-15-14	12-15-14	
Trichlorofluoromethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,1-Dichloroethene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Acetone	ND	1.0	EPA 8260C	12-15-14	12-15-14	
Iodomethane	ND	0.54	EPA 8260C	12-15-14	12-15-14	
Carbon Disulfide	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Methylene Chloride	ND	0.54	EPA 8260C	12-15-14	12-15-14	
(trans) 1,2-Dichloroethene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Methyl t-Butyl Ether	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,1-Dichloroethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Vinyl Acetate	ND	0.54	EPA 8260C	12-15-14	12-15-14	
2,2-Dichloropropane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
(cis) 1,2-Dichloroethene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
2-Butanone	ND	0.54	EPA 8260C	12-15-14	12-15-14	
Bromochloromethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Chloroform	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,1,1-Trichloroethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Carbon Tetrachloride	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,1-Dichloropropene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Benzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,2-Dichloroethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Trichloroethene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,2-Dichloropropane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Dibromomethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Bromodichloromethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
2-Chloroethyl Vinyl Ether	ND	0.54	EPA 8260C	12-15-14	12-15-14	
(cis) 1,3-Dichloropropene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Methyl Isobutyl Ketone	ND	0.54	EPA 8260C	12-15-14	12-15-14	
Toluene	ND	0.54	EPA 8260C	12-15-14	12-15-14	
(trans) 1,3-Dichloropropene	ND	0.11	EPA 8260C	12-15-14	12-15-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

VOLATILES EPA 8260C
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-CB-35-20141211-S**					
Laboratory ID:	12-140-02					
1,1,2-Trichloroethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Tetrachloroethene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,3-Dichloropropane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
2-Hexanone	ND	0.54	EPA 8260C	12-15-14	12-15-14	
Dibromochloromethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,2-Dibromoethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Chlorobenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,1,1,2-Tetrachloroethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Ethylbenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
m,p-Xylene	0.25	0.22	EPA 8260C	12-15-14	12-15-14	
o-Xylene	0.12	0.11	EPA 8260C	12-15-14	12-15-14	
Styrene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Bromoform	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Isopropylbenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Bromobenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,1,2,2-Tetrachloroethane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,2,3-Trichloropropane	ND	0.11	EPA 8260C	12-15-14	12-15-14	
n-Propylbenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
2-Chlorotoluene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
4-Chlorotoluene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,3,5-Trimethylbenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
tert-Butylbenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,2,4-Trimethylbenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
sec-Butylbenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,3-Dichlorobenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
p-Isopropyltoluene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,4-Dichlorobenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,2-Dichlorobenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
n-Butylbenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,2-Dibromo-3-chloropropane	ND	0.54	EPA 8260C	12-15-14	12-15-14	
1,2,4-Trichlorobenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Hexachlorobutadiene	ND	0.54	EPA 8260C	12-15-14	12-15-14	
Naphthalene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
1,2,3-Trichlorobenzene	ND	0.11	EPA 8260C	12-15-14	12-15-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*90*	*76-131*				
Toluene-d8	*87*	*82-129*				
4-Bromofluorobenzene	*70*	*79-126*				Q

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

VOLATILES EPA 8260C
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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-CB-24-20141211-S**					
Laboratory ID:	12-140-03					
Dichlorodifluoromethane	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Chloromethane	ND	0.0099	EPA 8260C	12-15-14	12-15-14	
Vinyl Chloride	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Bromomethane	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Chloroethane	ND	0.0099	EPA 8260C	12-15-14	12-15-14	
Trichlorofluoromethane	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
1,1-Dichloroethene	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Acetone	0.69	0.019	EPA 8260C	12-15-14	12-15-14	Y,E
Iodomethane	ND	0.0099	EPA 8260C	12-15-14	12-15-14	
Carbon Disulfide	0.0035	0.0020	EPA 8260C	12-15-14	12-15-14	
Methylene Chloride	ND	0.0099	EPA 8260C	12-15-14	12-15-14	
(trans) 1,2-Dichloroethene	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Methyl t-Butyl Ether	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
1,1-Dichloroethane	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Vinyl Acetate	ND	0.0099	EPA 8260C	12-15-14	12-15-14	
2,2-Dichloropropane	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
(cis) 1,2-Dichloroethene	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
2-Butanone	0.23	0.0099	EPA 8260C	12-15-14	12-15-14	
Bromochloromethane	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Chloroform	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
1,1,1-Trichloroethane	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Carbon Tetrachloride	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
1,1-Dichloropropene	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Benzene	0.0077	0.0020	EPA 8260C	12-15-14	12-15-14	
1,2-Dichloroethane	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Trichloroethene	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
1,2-Dichloropropane	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Dibromomethane	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Bromodichloromethane	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
2-Chloroethyl Vinyl Ether	ND	0.0099	EPA 8260C	12-15-14	12-15-14	
(cis) 1,3-Dichloropropene	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
Methyl Isobutyl Ketone	0.014	0.0099	EPA 8260C	12-15-14	12-15-14	
Toluene	0.046	0.0099	EPA 8260C	12-15-14	12-15-14	
(trans) 1,3-Dichloropropene	ND	0.21	EPA 8260C	12-15-14	12-15-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

VOLATILES EPA 8260C
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-CB-24-20141211-S**					
Laboratory ID:	12-140-03					
1,1,2-Trichloroethane	ND	0.21	EPA 8260C	12-15-14	12-15-14	
Tetrachloroethene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,3-Dichloropropane	ND	0.21	EPA 8260C	12-15-14	12-15-14	
2-Hexanone	ND	1.0	EPA 8260C	12-15-14	12-15-14	
Dibromochloromethane	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,2-Dibromoethane	ND	0.21	EPA 8260C	12-15-14	12-15-14	
Chlorobenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,1,1,2-Tetrachloroethane	ND	0.21	EPA 8260C	12-15-14	12-15-14	
Ethylbenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
m,p-Xylene	ND	0.41	EPA 8260C	12-15-14	12-15-14	
o-Xylene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
Styrene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
Bromoform	ND	0.21	EPA 8260C	12-15-14	12-15-14	
Isopropylbenzene	0.30	0.21	EPA 8260C	12-15-14	12-15-14	
Bromobenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,1,2,2-Tetrachloroethane	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,2,3-Trichloropropane	ND	0.21	EPA 8260C	12-15-14	12-15-14	
n-Propylbenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
2-Chlorotoluene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
4-Chlorotoluene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,3,5-Trimethylbenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
tert-Butylbenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,2,4-Trimethylbenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
sec-Butylbenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,3-Dichlorobenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
p-Isopropyltoluene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,4-Dichlorobenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,2-Dichlorobenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
n-Butylbenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-15-14	12-15-14	
1,2,4-Trichlorobenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
Hexachlorobutadiene	ND	1.0	EPA 8260C	12-15-14	12-15-14	
Naphthalene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
1,2,3-Trichlorobenzene	ND	0.21	EPA 8260C	12-15-14	12-15-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*118*	*76-131*				
Toluene-d8	*94*	*82-129*				
4-Bromofluorobenzene	*86*	*79-126*				

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1215S2					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Chloromethane	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
Vinyl Chloride	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Bromomethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Chloroethane	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Acetone	ND	0.0096	EPA 8260C	12-15-14	12-15-14	
Iodomethane	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
Carbon Disulfide	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Methylene Chloride	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Vinyl Acetate	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
2-Butanone	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
Bromochloromethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Chloroform	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Benzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Trichloroethene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Dibromomethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Bromodichloromethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
Toluene	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1215S2					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Tetrachloroethene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
2-Hexanone	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
Dibromochloromethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Chlorobenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Ethylbenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
m,p-Xylene	ND	0.0020	EPA 8260C	12-15-14	12-15-14	
o-Xylene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Styrene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Bromoform	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Isopropylbenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Bromobenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
n-Propylbenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
2-Chlorotoluene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
4-Chlorotoluene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
tert-Butylbenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
sec-Butylbenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
n-Butylbenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	12-15-14	12-15-14	
Naphthalene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	12-15-14	12-15-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*95*	*76-131*				
Toluene-d8	*99*	*82-129*				
4-Bromofluorobenzene	*117*	*79-126*				

This report pertains to the samples analyzed in accordance with the chain of custody,
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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1215S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0577**	**0.0589**	0.0500	0.0500	115	118	66-129	2	15	
Benzene	**0.0557**	**0.0562**	0.0500	0.0500	111	112	71-123	1	15	
Trichloroethene	**0.0515**	**0.0521**	0.0500	0.0500	103	104	75-115	1	15	
Toluene	**0.0499**	**0.0505**	0.0500	0.0500	100	101	75-120	1	15	
Chlorobenzene	**0.0460**	**0.0465**	0.0500	0.0500	92	93	75-121	1	15	
Surrogate:										
Dibromofluoromethane					*89*	*89*	*76-131*			
Toluene-d8					*94*	*93*	*82-129*			
4-Bromofluorobenzene					*111*	*111*	*79-126*			

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL ORGANIC CARBON
SM 5310B

Matrix: Soil
Units: % Carbon

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-OWS-05-20141211-S**					
Laboratory ID:	12-140-01					
Total Organic Carbon	**19**	0.57	EPA 9060	12-23-14	12-23-14	
Client ID:	**SC-CB-35-20141211-S**					
Laboratory ID:	12-140-02					
Total Organic Carbon	**7.8**	0.66	EPA 9060	12-23-14	12-23-14	
Client ID:	**SC-CB-24-20141211-S**					
Laboratory ID:	12-140-03					
Total Organic Carbon	**10**	0.68	EPA 9060	12-23-14	12-23-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL ORGANIC CARBON
SM 5310B
QUALITY CONTROL

Matrix: Soil
Units: % Carbon

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1223S1					
Total Organic Carbon	**ND**	0.042	EPA 9060	12-23-14	12-23-14	

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	12-197-02								
	ORIG	DUP							
Total Organic Carbon	**6.37**	**7.215**	NA	NA	NA	NA	12	20	
SPIKE BLANK									
Laboratory ID:	SB1223S1								
	SB		SB		SB				
Total Organic Carbon	**45.3**		42.1	NA	108	87-132	NA	NA	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-MH-20-20141211-W**					
Laboratory ID:	12-140-04					
n-Nitrosodimethylamine	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Pyridine	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Phenol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Aniline	**ND**	4.7	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroethyl)ether	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2-Chlorophenol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
1,3-Dichlorobenzene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
1,4-Dichlorobenzene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Benzyl alcohol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
1,2-Dichlorobenzene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2-Methylphenol (o-Cresol)	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroisopropyl)ether	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
n-Nitroso-di-n-propylamine	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Hexachloroethane	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Nitrobenzene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Isophorone	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2-Nitrophenol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2,4-Dimethylphenol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroethoxy)methane	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2,4-Dichlorophenol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
1,2,4-Trichlorobenzene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Naphthalene	**ND**	0.095	EPA 8270D/SIM	12-16-14	12-17-14	
4-Chloroaniline	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Hexachlorobutadiene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
4-Chloro-3-methylphenol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2-Methylnaphthalene	**ND**	0.095	EPA 8270D/SIM	12-16-14	12-17-14	
1-Methylnaphthalene	**ND**	0.095	EPA 8270D/SIM	12-16-14	12-17-14	
Hexachlorocyclopentadiene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2,4,6-Trichlorophenol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2,3-Dichloroaniline	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2,4,5-Trichlorophenol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2-Chloronaphthalene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2-Nitroaniline	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
1,4-Dinitrobenzene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Dimethylphthalate	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
1,3-Dinitrobenzene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2,6-Dinitrotoluene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
1,2-Dinitrobenzene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Acenaphthylene	**ND**	0.095	EPA 8270D/SIM	12-16-14	12-17-14	
3-Nitroaniline	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-MH-20-20141211-W**					
Laboratory ID:	12-140-04					
2,4-Dinitrophenol	**ND**	4.7	EPA 8270D	12-16-14	12-17-14	
Acenaphthene	**ND**	0.095	EPA 8270D/SIM	12-16-14	12-17-14	
4-Nitrophenol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2,4-Dinitrotoluene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Dibenzofuran	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2,3,5,6-Tetrachlorophenol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
2,3,4,6-Tetrachlorophenol	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Diethylphthalate	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
4-Chlorophenyl-phenylether	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
4-Nitroaniline	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Fluorene	**ND**	0.095	EPA 8270D/SIM	12-16-14	12-17-14	
4,6-Dinitro-2-methylphenol	**ND**	4.7	EPA 8270D	12-16-14	12-17-14	
n-Nitrosodiphenylamine	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
1,2-Diphenylhydrazine	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
4-Bromophenyl-phenylether	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Hexachlorobenzene	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Pentachlorophenol	**ND**	4.7	EPA 8270D	12-16-14	12-17-14	
Phenanthrene	**0.13**	0.095	EPA 8270D/SIM	12-16-14	12-17-14	
Anthracene	**ND**	0.095	EPA 8270D/SIM	12-16-14	12-17-14	
Carbazole	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Di-n-butylphthalate	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Fluoranthene	**0.20**	0.095	EPA 8270D/SIM	12-16-14	12-17-14	
Benzidine	**ND**	4.7	EPA 8270D	12-16-14	12-17-14	
Pyrene	**0.19**	0.095	EPA 8270D/SIM	12-16-14	12-17-14	
Butylbenzylphthalate	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
bis-2-Ethylhexyladipate	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
3,3'-Dichlorobenzidine	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Benzo[a]anthracene	**0.081**	0.0095	EPA 8270D/SIM	12-16-14	12-17-14	
Chrysene	**0.12**	0.0095	EPA 8270D/SIM	12-16-14	12-17-14	
bis(2-Ethylhexyl)phthalate	**ND**	4.7	EPA 8270D	12-16-14	12-17-14	
Di-n-octylphthalate	**ND**	0.95	EPA 8270D	12-16-14	12-17-14	
Benzo[b]fluoranthene	**0.061**	0.0095	EPA 8270D/SIM	12-16-14	12-17-14	
Benzo(j,k)fluoranthene	**0.053**	0.0095	EPA 8270D/SIM	12-16-14	12-17-14	
Benzo[a]pyrene	**0.051**	0.0095	EPA 8270D/SIM	12-16-14	12-17-14	
Indeno[1,2,3-cd]pyrene	**0.038**	0.0095	EPA 8270D/SIM	12-16-14	12-17-14	
Dibenz[a,h]anthracene	**0.016**	0.0095	EPA 8270D/SIM	12-16-14	12-17-14	
Benzo[g,h,i]perylene	**0.051**	0.0095	EPA 8270D/SIM	12-16-14	12-17-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*48*	*19 - 86*				
Phenol-d6	*41*	*10 - 94*				
Nitrobenzene-d5	*83*	*37 - 108*				
2-Fluorobiphenyl	*82*	*46 - 107*				
2,4,6-Tribromophenol	*90*	*49 - 116*				
Terphenyl-d14	*90*	*69 - 112*				

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1216W2					
n-Nitrosodimethylamine	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Pyridine	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Phenol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Aniline	**ND**	5.0	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroethyl)ether	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2-Chlorophenol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
1,3-Dichlorobenzene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
1,4-Dichlorobenzene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Benzyl alcohol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
1,2-Dichlorobenzene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2-Methylphenol (o-Cresol)	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroisopropyl)ether	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
n-Nitroso-di-n-propylamine	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Hexachloroethane	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Nitrobenzene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Isophorone	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2-Nitrophenol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2,4-Dimethylphenol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
bis(2-Chloroethoxy)methane	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2,4-Dichlorophenol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
1,2,4-Trichlorobenzene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Naphthalene	**ND**	0.10	EPA 8270D/SIM	12-16-14	12-17-14	
4-Chloroaniline	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Hexachlorobutadiene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
4-Chloro-3-methylphenol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2-Methylnaphthalene	**ND**	0.10	EPA 8270D/SIM	12-16-14	12-17-14	
1-Methylnaphthalene	**ND**	0.10	EPA 8270D/SIM	12-16-14	12-17-14	
Hexachlorocyclopentadiene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2,4,6-Trichlorophenol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2,3-Dichloroaniline	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2,4,5-Trichlorophenol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2-Chloronaphthalene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2-Nitroaniline	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
1,4-Dinitrobenzene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Dimethylphthalate	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
1,3-Dinitrobenzene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2,6-Dinitrotoluene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
1,2-Dinitrobenzene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Acenaphthylene	**ND**	0.10	EPA 8270D/SIM	12-16-14	12-17-14	
3-Nitroaniline	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1216W2					
2,4-Dinitrophenol	**ND**	5.0	EPA 8270D	12-16-14	12-17-14	
Acenaphthene	**ND**	0.10	EPA 8270D/SIM	12-16-14	12-17-14	
4-Nitrophenol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2,4-Dinitrotoluene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Dibenzofuran	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2,3,5,6-Tetrachlorophenol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
2,3,4,6-Tetrachlorophenol	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Diethylphthalate	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
4-Chlorophenyl-phenylether	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
4-Nitroaniline	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Fluorene	**ND**	0.10	EPA 8270D/SIM	12-16-14	12-17-14	
4,6-Dinitro-2-methylphenol	**ND**	5.0	EPA 8270D	12-16-14	12-17-14	
n-Nitrosodiphenylamine	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
1,2-Diphenylhydrazine	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
4-Bromophenyl-phenylether	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Hexachlorobenzene	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Pentachlorophenol	**ND**	5.0	EPA 8270D	12-16-14	12-17-14	
Phenanthrene	**ND**	0.10	EPA 8270D/SIM	12-16-14	12-17-14	
Anthracene	**ND**	0.10	EPA 8270D/SIM	12-16-14	12-17-14	
Carbazole	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Di-n-butylphthalate	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Fluoranthene	**ND**	0.10	EPA 8270D/SIM	12-16-14	12-17-14	
Benzidine	**ND**	5.0	EPA 8270D	12-16-14	12-17-14	
Pyrene	**ND**	0.10	EPA 8270D/SIM	12-16-14	12-17-14	
Butylbenzylphthalate	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
bis-2-Ethylhexyladipate	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
3,3'-Dichlorobenzidine	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Benzo[a]anthracene	**ND**	0.010	EPA 8270D/SIM	12-16-14	12-17-14	
Chrysene	**ND**	0.010	EPA 8270D/SIM	12-16-14	12-17-14	
bis(2-Ethylhexyl)phthalate	**ND**	5.0	EPA 8270D	12-16-14	12-17-14	
Di-n-octylphthalate	**ND**	1.0	EPA 8270D	12-16-14	12-17-14	
Benzo[b]fluoranthene	**ND**	0.010	EPA 8270D/SIM	12-16-14	12-17-14	
Benzo(j,k)fluoranthene	**ND**	0.010	EPA 8270D/SIM	12-16-14	12-17-14	
Benzo[a]pyrene	**ND**	0.010	EPA 8270D/SIM	12-16-14	12-17-14	
Indeno[1,2,3-cd]pyrene	**ND**	0.010	EPA 8270D/SIM	12-16-14	12-17-14	
Dibenz[a,h]anthracene	**ND**	0.010	EPA 8270D/SIM	12-16-14	12-17-14	
Benzo[g,h,i]perylene	**ND**	0.010	EPA 8270D/SIM	12-16-14	12-17-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*60*	*19 - 86*				
Phenol-d6	*46*	*10 - 94*				
Nitrobenzene-d5	*94*	*37 - 108*				
2-Fluorobiphenyl	*85*	*46 - 107*				
2,4,6-Tribromophenol	*95*	*49 - 116*				
Terphenyl-d14	*93*	*69 - 112*				

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SEMIVOLATILES EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1216W2									
	SB	SBD	SB	SBD	SB	SBD				
Phenol	**18.4**	**18.5**	40.0	40.0	46	46	31 - 70	1	32	
2-Chlorophenol	**32.0**	**31.8**	40.0	40.0	80	80	51 - 103	1	37	
1,4-Dichlorobenzene	**14.0**	**14.0**	20.0	20.0	70	70	45 - 94	0	42	
n-Nitroso-di-n-propylamine	**15.8**	**16.7**	20.0	20.0	79	84	45 - 102	6	36	
1,2,4-Trichlorobenzene	**14.0**	**14.4**	20.0	20.0	70	72	51 - 98	3	37	
4-Chloro-3-methylphenol	**31.8**	**32.8**	40.0	40.0	80	82	67 - 116	3	32	
Acenaphthene	**15.0**	**15.6**	20.0	20.0	75	78	63 - 103	4	27	
4-Nitrophenol	**17.8**	**17.9**	40.0	40.0	45	45	36 - 75	1	37	
2,4-Dinitrotoluene	**16.3**	**16.3**	20.0	20.0	82	82	68 - 123	0	30	
Pentachlorophenol	**31.7**	**32.4**	40.0	40.0	79	81	40 - 120	2	38	
Pyrene	**17.0**	**17.2**	20.0	20.0	85	86	60 - 120	1	29	
Surrogate:										
2-Fluorophenol					*58*	*58*	*19 - 86*			
Phenol-d6					*46*	*45*	*10 - 94*			
Nitrobenzene-d5					*85*	*87*	*37 - 108*			
2-Fluorobiphenyl					*75*	*77*	*46 - 107*			
2,4,6-Tribromophenol					*82*	*82*	*49 - 116*			
Terphenyl-d14					*82*	*81*	*69 - 112*			

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 200.8/245.1

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	12-140-04					
Client ID:	**SC-MH-20-20141211-W**					
Arsenic	**0.58**	0.50	200.8	12-18-14	12-18-14	
Arsenic	**15**	2.5	200.8	12-18-14	12-18-14	
Cadmium	**0.39**	0.20	200.8	12-18-14	12-18-14	
Chromium	**ND**	5.0	200.8	12-18-14	12-18-14	
Copper	**61**	2.0	200.8	12-18-14	12-18-14	
Lead	**11**	0.50	200.8	12-18-14	12-18-14	
Mercury	**ND**	0.025	245.1	12-18-14	12-18-14	
Nickel	**ND**	4.0	200.8	12-18-14	12-18-14	
Nickel	**ND**	2.5	200.8	12-18-14	12-18-14	
Silver	**ND**	0.20	200.8	12-18-14	12-18-14	
Zinc	**210**	2.5	200.8	12-18-14	12-18-14	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 200.8
METHOD BLANK QUALITY CONTROL

Date Extracted:	12-18-14
Date Analyzed:	12-18-14
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB1218WH1

Analyte	Method	Result	PQL
Arsenic	200.8	**ND**	0.50
Barium	200.8	**ND**	2.5
Cadmium	200.8	**ND**	0.20
Chromium	200.8	**ND**	5.0
Copper	200.8	**ND**	2.0
Lead	200.8	**ND**	0.50
Nickel	200.8	**ND**	4.0
Selenium	200.8	**ND**	2.5
Silver	200.8	**ND**	0.20
Zinc	200.8	**ND**	2.5

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL MERCURY
EPA 245.1
METHOD BLANK QUALITY CONTROL

Date Extracted:	12-18-14
Date Analyzed:	12-18-14
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB1218W1

Analyte	Method	Result	PQL
Mercury	245.1	**ND**	0.025

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 200.8
DUPLICATE QUALITY CONTROL

Date Extracted: 12-18-14
Date Analyzed: 12-18-14

Matrix: Water
Units: ug/L (ppb)

Lab ID: 12-041-08

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	**8.14**	**8.08**	1	0.50	
Barium	**37.7**	**38.8**	3	2.5	
Cadmium	**ND**	**ND**	NA	0.20	
Chromium	**ND**	**ND**	NA	5.0	
Copper	**ND**	**ND**	NA	2.0	
Lead	**ND**	**ND**	NA	0.50	
Nickel	**ND**	**ND**	NA	4.0	
Selenium	**ND**	**ND**	NA	2.5	
Silver	**ND**	**ND**	NA	0.20	
Zinc	**8.17**	**7.39**	10	2.5	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL MERCURY
EPA 245.1
DUPLICATE QUALITY CONTROL

Date Extracted: 12-18-14
Date Analyzed: 12-18-14

Matrix: Water
Units: ug/L (ppb)

Lab ID: 12-041-06

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	**ND**	**ND**	NA	0.025	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL METALS
EPA 200.8
MS/MSD QUALITY CONTROL

Date Extracted: 12-18-14
Date Analyzed: 12-18-14

Matrix: Water
Units: ug/L (ppb)

Lab ID: 12-041-08

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	**114**	106	**114**	106	0	
Barium	100	**141**	103	**141**	103	0	
Cadmium	100	**104**	104	**103**	103	0	
Chromium	100	**112**	112	**112**	112	0	
Copper	100	**102**	102	**104**	104	2	
Lead	100	**100**	100	**101**	101	1	
Nickel	100	**107**	107	**108**	108	1	
Selenium	100	**97.7**	98	**100**	100	3	
Silver	100	**104**	104	**106**	106	2	
Zinc	100	**109**	101	**110**	102	1	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL MERCURY
EPA 245.1
MS/MSD QUALITY CONTROL

Date Extracted: 12-18-14
Date Analyzed: 12-18-14

Matrix: Water
Units: ug/L (ppb)

Lab ID: 12-041-06

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	6.25	**5.51**	88	**5.72**	91	4	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

ALKALINITY
SM 2320B

Matrix: Water
Units: mg CaCO3/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-MH-20-20141211-W**					
Laboratory ID:	12-140-04					
Carbonate Alkalinity	**ND**	2.0	SM 2320B	12-16-14	12-16-14	
Bicarbonate Concentration	**5.0**	2.0	SM 2320B	12-16-14	12-16-14	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

ALKALINITY
SM 2320B
QUALITY CONTROL

Matrix: Water
Units: mg CaCO3/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1216W1					
Carbonate Alkalinity	**ND**	2.0	SM 2320B	12-16-14	12-16-14	
Bicarbonate Concentration	**ND**	2.0	SM 2320B	12-16-14	12-16-14	

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	12-140-04								
	ORIG	DUP							
Total Alkalinity	**5.00**	**5.00**	NA	NA	NA	NA	0	10	
SPIKE BLANK									
Laboratory ID:	SB1216W1								
	SB		SB		SB				
Total Alkalinity	**106**		100	NA	106	88-114	NA	NA	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SULFATE
ASTM D516-07

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-MH-20-20141211-W**					
Laboratory ID:	12-140-04					
Sulfate	**ND**	5.0	ASTM D516-07	12-17-14	12-17-14	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

SULFATE
ASTM D516-07
QUALITY CONTROL

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1217W1					
Sulfate	**ND**	5.0	ASTM D516-07	12-17-14	12-17-14	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-140-04							
	ORIG DUP							
Sulfate	**ND** **ND**	NA	NA	NA	NA	NA	10	
MATRIX SPIKE								
Laboratory ID:	12-140-04							
	MS	MS		MS				
Sulfate	**10.9**	10.0	ND	109	82-121	NA	NA	
SPIKE BLANK								
Laboratory ID:	SB1217W1							
	SB	SB		SB				
Sulfate	**9.55**	10.0	NA	96	90-114	NA	NA	

This report pertains to the samples analyzed in accordance with the chain of custody,
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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL ORGANIC CARBON
EPA 9060

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-MH-20-20141211-W**					
Laboratory ID:	12-140-04					
Total Organic Carbon	**2.5**	1.0	SM 5310B	12-17-14	12-17-14	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL ORGANIC CARBON
EPA 9060
QUALITY CONTROL

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1217W1					
Total Organic Carbon	**ND**	1.0	SM 5310B	12-17-14	12-17-14	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-140-04							
	ORIG DUP							
Total Organic Carbon	**2.55** **2.566**	NA	NA	NA	NA	1	15	
MATRIX SPIKE								
Laboratory ID:	12-140-04							
	MS	MS		MS				
Total Organic Carbon	**12.1**	10.0	2.55	96	80-122	NA	NA	
SPIKE BLANK								
Laboratory ID:	SB1217W1							
	SB	SB		SB				
Total Organic Carbon	**9.65**	10.0	NA	97	84-115	NA	NA	

This report pertains to the samples analyzed in accordance with the chain of custody,
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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

DISSOLVED ORGANIC CARBON
SM 5310B

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-MH-20-20141211-W**					
Laboratory ID:	12-140-04					
Dissolved Organic Carbon	**2.1**	1.0	SM 5310B	12-15-14	12-17-14	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

DISSOLVED ORGANIC CARBON
SM 5310B
QUALITY CONTROL

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1215D1					
Dissolved Organic Carbon	**ND**	1.0	SM 5310B	12-15-14	12-17-14	

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	12-140-04								
	ORIG	DUP							
Dissolved Organic Carbon	**2.05**	**1.881**	NA	NA	NA	NA	9	20	
MATRIX SPIKE									
Laboratory ID:	12-140-04								
	MS		MS		MS				
Dissolved Organic Carbon	**11.3**		10.0	2.05	93	75-125	NA	NA	
SPIKE BLANK									
Laboratory ID:	SB1215D1								
	SB		SB		SB				
Dissolved Organic Carbon	**9.55**		10.0	NA	96	75-125	NA	NA	

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Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL SUSPENDED SOLIDS
SM 2540D

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SC-MH-20-20141211-W**					
Laboratory ID:	12-140-04					
Total Suspended Solids	**13**	4.0	SM 2540D	12-16-14	12-17-14	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

TOTAL SUSPENDED SOLIDS
SM 2540D
QUALITY CONTROL

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1216W1					
Total Suspended Solids	**ND**	4.0	SM 2540D	12-16-14	12-17-14	

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	12-140-04								
	ORIG	DUP							
Total Suspended Solids	**13.0**	**12.0**	NA	NA	NA	NA	8	20	
SPIKE BLANK									
Laboratory ID:	SB1216W1								
	SB		SB		SB				
Total Suspended Solids	**99.0**		100	NA	99	76-111	NA	NA	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 24, 2014
Samples Submitted: December 12, 2014
Laboratory Reference: 1412-140
Project: SW Inspection

% MOISTURE

Date Analyzed: 12-15&17-14

Client ID	Lab ID	% Moisture
SC-OWS-05-20141211-S	12-140-01	69
SC-CB-35-20141211-S	12-140-02	43
SC-CB-24-20141211-S	12-140-03	50

This report pertains to the samples analyzed in accordance with the chain of custody,
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OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

12-140

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

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

Client Contact	Project Manager:	Site Contact:	Date: 12/11/14	COC No:
Gary Lockwood - SCL	Tel/Fax:	Lab Contact:	Carrier: Courier	1 of 2 COCs

Phone 206 684-3393
FAX
Project Name: SW Inspection
Site: SSC
P O #

Analysis Turnaround Time
☑ CALENDAR DAYS ☐ WORKING DAYS
TAT if different from Below 3 Weeks
☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day

Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

	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)	PCB congeners 1668	Dioxins/Furans	% moisture	Sample Specific Notes:
1	SC-OWS-05-20141211-S	12/11/14	1018	C	Sed	4					1					1				X	
2	SC-CB-35-20141211-S	12/11/14	1300	C	Sed	7			√	√	√	√		1	2	1				↓	
3	SC-CB-24-20141211-S	12/11/14	1400	C	Sed	7			√	√	√	√		1	2	1				↓	
															6						

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other MeOH & as marked on container

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 1+ Months

Special Instructions/QC Requirements & Comments:

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

	Company	Date/Time		Company	Date/Time
Relinquished by: Melissa Ivancevich	Leidos	12/11/14 1550	Received by: Gary Lockwood	SCL	12/11/14
Relinquished by: Gary Lockwood	SCL	12/12/14 [illegible]	Received by: [illegible]	[illegible]	12/12/14 1345
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

12-140

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

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

Client Contact	Project Manager:	Site Contact:	Date: 12/11/14	COC No:
Gary Lockwood	Tel/Fax:	Lab Contact:	Carrier: Courier	2 of 2 COCs

Client Contact: Gary Lockwood
Phone 206 684-3293
FAX
Project Name: SW Inspection
Site: SSC
P O #

Analysis Turnaround Time
☒ CALENDAR DAYS ☑ WORKING DAYS
TAT if different from Below 3 Weeks
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

	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) - Total RCRA + Zn, Cu	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)	PCB Congeners	Dioxins/Furans	Sample Specific Notes:
4	SC-MH-20-20141211-W	12/11/14	1500	G	W	~~13~~ 13	N		2	1			2		1	2	1	[redacted]	[redacted]	
										4					3					

*~~Nitrates~~, Sulfates only

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other MeOH & asked marked on container

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 2+ Months

Special Instructions/QC Requirements & Comments:

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

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Melissa Ivancevich	Leidos	12/11/14 1500	[signature]	SCL	12/11/14
[signature] Gary Lockwood	SCL	12/12/14 1345	[signature]	[illegible]	12/12/14 1345
			Received in Laboratory by:	Company:	Date/Time: