Lower Duwamish Waterway

NPDES Inspection Sampling Support 2014/2015

Prepared for

Toxics Cleanup Program
Northwest Regional Office
Washington State Department of Ecology
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Appendix Q
Insurance Auto Auctions

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.

Table of Contents

Figures

Tables

Attachments

Q-1 Introduction and Background

Facility Name	Insurance Auto Auctions
Facility/Site ID	2072
Address	8801 East Marginal Way S Tukwila, WA 98108
NPDES Permit Type	Industrial Stormwater General Permit
NPDES Permit No.	WAR008681
Permit Monitoring Requirements	Turbidity, pH, total zinc, total copper, petroleum–oil, grease
SIC Code	7389: Business Services, NEC 5012: Automobiles and Other Motor Vehicles
Inspection Date	October 20, 2014
Grab Samples	3 water samples
Sample ID(s)	IA-CBN-60-20141020-W IA-CV-01-20141020-W IA-MHS-05-20141020-W
Water Sample Analytes	Total metals, mercury, PCB congeners, dioxins/furans, SVOCs, alkalinity/carbonate/bicarbonate, anions, specific conductance, pH, TOC, DOC, TSS
Solids Sample Analytes	No solids samples were collected.
Split Samples with Facility	Yes

Insurance Auto Auctions facility is located along the eastern shoreline of the Lower Duwamish Waterway (LDW) on East Marginal Way S. Insurance Auto Auctions is a wholesaler and auctioner of salvaged automobiles. The primary activities at the facility include temporary storage of vehicles prior to resale. No vehicle washing, crushing, or "parting-out" is conducted at the facility. The only vehicle servicing or refueling activities conducted at the site consist of refueling diesel-powered forklifts from a 55-gallon aboveground storage tank (AST) located on the south side of the warehouse building, and fueling of company vehicles from one of the three 30-gallon gasoline carts also stored on the south side of the warehouse (Windward 2012). An overview of the facility is presented in Figures Q-1a and Q-1b.

Q-1.1 Stormwater Conveyance

There are three active stormwater outfalls at the site, all which discharge to the LDW. There is also one abandoned outfall along the property shoreline. The facility outfalls are referred to as Outfall No. 1 (northern outfall), Outfall No. 2 (abandoned outfall), Outfall No. 3 (central outfall), and Outfall No. 4 (southern outfall) (Figure Q-1). The drainage area for Outfall No. 1 is approximately 15 acres in size. This area includes a large portion of the vehicle storage yard and the facility structures. Stormwater runoff from the northern outfall is collected by 71 stormwater conveyance structures: 60 catch basins and 11 manholes. The roof drains from the building are

also connected to this stormwater system. The drainage basin for Outfall No. 3 is approximately 9 acres in size. This area is used as a vehicle storage yard and also includes the drop lot where vehicles are received and inventoried. The storm drainage area for the middle outfall is comprised of 32 storm drain conveyance structures. The drainage basin for Outfall No. 4 is also 9 acres in size and used for vehicle storage. The drainage system for the southern outfall consists of 16 storm drain conveyance structures (Windward 2012). A facility drainage map is presented in Figure Q-1.

Q-1.2 Recent Compliance History

Based on available discharge monitoring reports, Insurance Auto Auctions exceeded benchmarks for copper during the 2nd and 3rd quarter of 2014. The facility exceeded benchmarks for zinc during the 2nd quarter of 2014 (Ecology 2015).

Q-2 Inspection and Sampling

Q-2.1 October 2014 Stormwater Compliance Inspection

On October 20, 2014, Ecology conducted a stormwater compliance inspection at Insurance Auto Auctions. Leidos assisted Ecology with the 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 Q-2 using geographic information system software. An inspection photographic log and field documentation are presented in Attachments Q-1 and Q-2, respectively.

The field team inspected the following stormwater conveyance structures at Insurance Auto Auctions, as shown in Figure Q-2 (locations where samples were collected are shown in bold font):

- **Manhole C5 (IA-MHC-05)**
- Manhole S4 (IA-MHS-04)
- Manhole S5 (IA-MHS-05)
- **Catch basin 60 (IA-CBN-60)**
- **Vault 01 (IA-CV-01).**

Locations MH-S5, CBN-60, and CV-01 contained sufficient water to collect a water grab sample. Sampleable solids material was insufficient at these locations. Insurance Auto Auctions collected split samples at these locations.

Q-2.2 Stormwater Conveyance System Sampling

Ecology collected three water samples from the stormwater conveyance system at Insurance Auto Auctions. Sample locations, analytes, and analytical methods are listed on Table Q-1. Results are presented in Tables Q-2 through Q-6. Chain of custody forms and the laboratory

reports are provided as Attachments Q-3 and Q-4, respectively. Split samples results are provided in Attachment Q-5.

Q-2.2.1 Water Samples

Water sample IA-MHS-05-20141020-W was collected from manhole MH-S5 (Figure Q-2 and Attachment Q-1). Manhole MH-S5 is located at the southeast portion of the facility. The manhole receives stormwater from the southern portion of the facility where damaged vehicles waiting for auction are stored. Manhole MH-S5 is located upstream of the stormwater treatment system. During heavy flows, a portion of the stormwater bypasses the treatment system via the weir in MH-S5. After treatment (or during bypass), stormwater is conveyed to the King County drainage system prior to discharge to Slip 6 of the LDW.

Water sample IA-CBN-60-20141020-W was collected from CBN-60 (Figure Q-2 and Attachment Q-1). Catch basin CBN-60 is located at the northwest portion of the facility and receives stormwater from roof drains on the vehicle storage warehouse, employee parking area, and the vehicle storage yard. Stormwater is conveyed from CBN-60 to a lift station that pumps stormwater to a Vortechs vault. Stormwater is conveyed from the Vortechs vault to a stormwater filter vault and discharged to the LDW via Outfall 1.

Water sample IA-CV-01-20141020-W was collected from vault CV-01. The vault CV-01 is located along the western and central portion of the facility. The location CV-01 is on the upstream side of the Vortechs vault that receives stormwater from the southern portion of the north parcel at the facility. The area is used to store cars awaiting auction. Stormwater is conveyed from the Vortechs vault to a lift station and stormfilter vault. Stormwater is discharged from the stormfilter vault to the LDW via Outfall 3.

Q-2.2.2 Solids Samples

No solids samples were collected during the October 20, 2014 inspection.

Q-3 Results

Q-3.1 Chemical Analysis

Ecology collected three water samples during the October 20, 2014 stormwater compliance inspection at Insurance Auto Auctions. Analytical methods, chemical results and regulatory criteria are presented in Tables Q-1 through Q-6.

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

Copper and total PCB congener concentrations exceeded a screening level in all three water samples (Table Q-4). PAHs and bis(2-ethylhexyl)phthalate exceeded a screening level in two samples.

Q-3.2 Inspection Results and Permit Compliance Requirements

The Ecology inspection report was not available for review.

Q-4 References

Ecology. 2015. Water Quality Permitting and Reporting Information System, Summary Information, Insurance Auto Auctions. Online database; accessed May 4, 2015.

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.

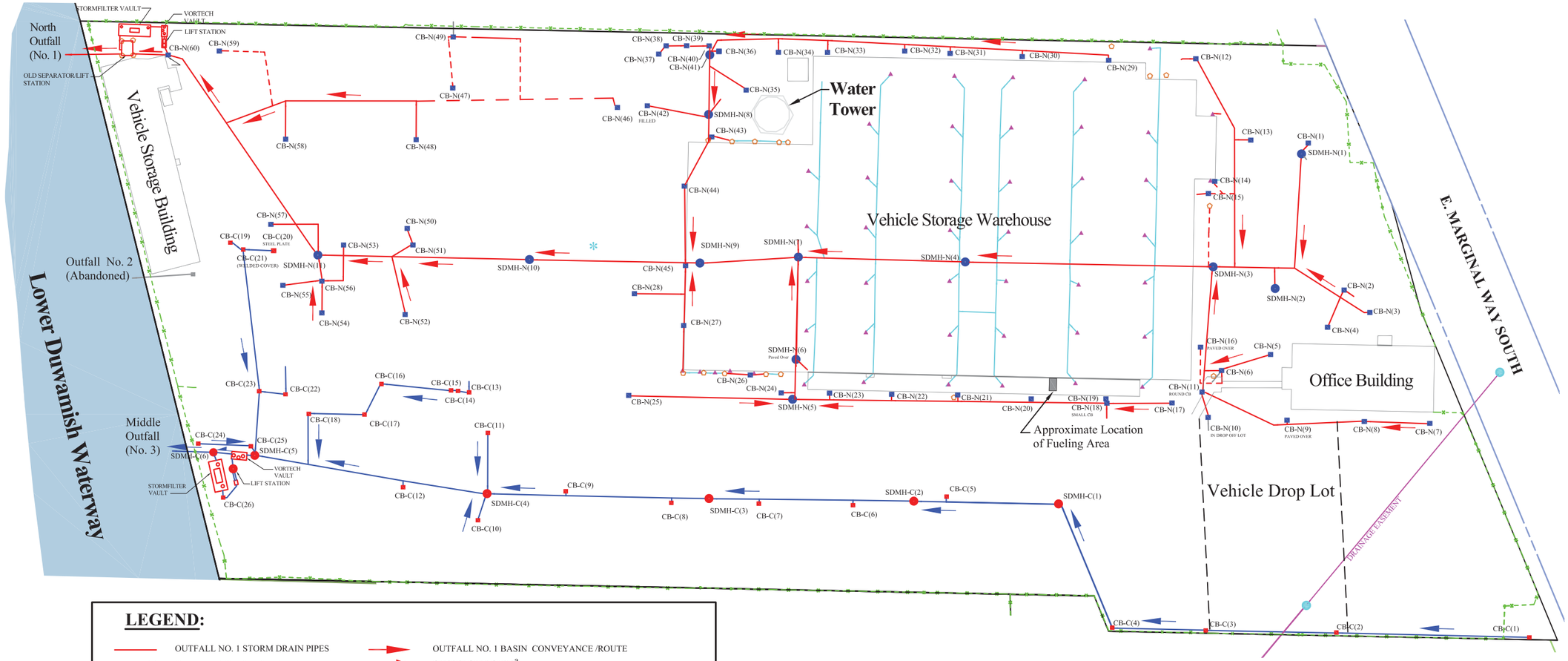
EPA. 2009. *Guidance for labeling externally validated laboratory analytical data for Superfund use.* EPA-540-R-08-005. Office of Emergency and Remedial Response. January 2009.

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.

Windward Environmental (Windward). 2012. Stormwater Pollution Prevention Plan, Insurance Auto Auctions, 8801 East Marginal Way South, Tukwila, Washington. May 2012.

Figures



LEGEND:

- OUTFALL NO. 1 STORM DRAIN PIPES
- OUTFALL NO. 1 CATCH BASINS
- OUTFALL NO. 1 STORM DRAIN MANHOLES
- OUTFALL NO. 3 STORM DRAIN PIPES
- OUTFALL NO. 3 CATCH BASINS
- OUTFALL NO. 3 STORM DRAIN MANHOLES
- EASEMENT STORM DRAIN PIPES
- EASEMENT STORM DRAIN MANHOLES
- ABANDONED STORM DRAIN PIPES
- PRESUMED ALIGNMENT OF STORM DRAIN PIPES [b]
- OUTFALL NO. 1 BASIN CONVEYANCE /ROUTE
- OVERFLOW ROUTE[a]
- OUTFALL NO. 3 BASIN CONVEYANCE ROUTE
- DOWNSPOUTS
- ROOF DRAIN INLET
- ROOF DRAIN PIPES
- EAST MARGINAL WAY RIGHT OF WAY
- FENCE LINE
- PROPERTY LINE
- APPROXIMATE LOCATION OF A WELL - NON STORM WATER RELATED STRUCTURE

[a] DURING SEVERE STORM EVENTS, THIS ROUTE MAY BE USED IN CONJUNCTION WITH THE NORMAL FLOW ROUTE

[b] BASED ON HISTORICAL INFORMATION OR FIELD OBSERVATIONS OF PIPES WITHIN DRAINAGE STRUCTURES, DYE/SMOKE TESTING, AND VIDEO SURVEILLANCE. WORK IS ONGOING TO CONFIRM THESE CONNECTIONS.

Windward environmental LLC

Note:

Base map, utilities, and all survey related information has been obtained from Barghausen Consulting Engineers, Incorporated As-built storm drainage and water quality improvements plans, dated 7/19/08. The base map has been updated based on field observations by Insurance Auto Auctions and Windward Environmental staff. The storm drain system on north parcel is owned by Merrill Creek Holdings LLC. The storm drain system on the south parcel is owned by Container Properties LLC.

N

0 100 200

Scale in feet

Figure 4. North parcel storm drainage detail

Storm Water Pollution Prevention Plan (SWPPP)
Insurance Auto Auctions, Inc.
8801 East Marginal Way South
Seattle, Washington

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Figure Q-1a. Insurance Auto Auctions SWPPP Map – North Parcel

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Updated 5/1/12 by: CW

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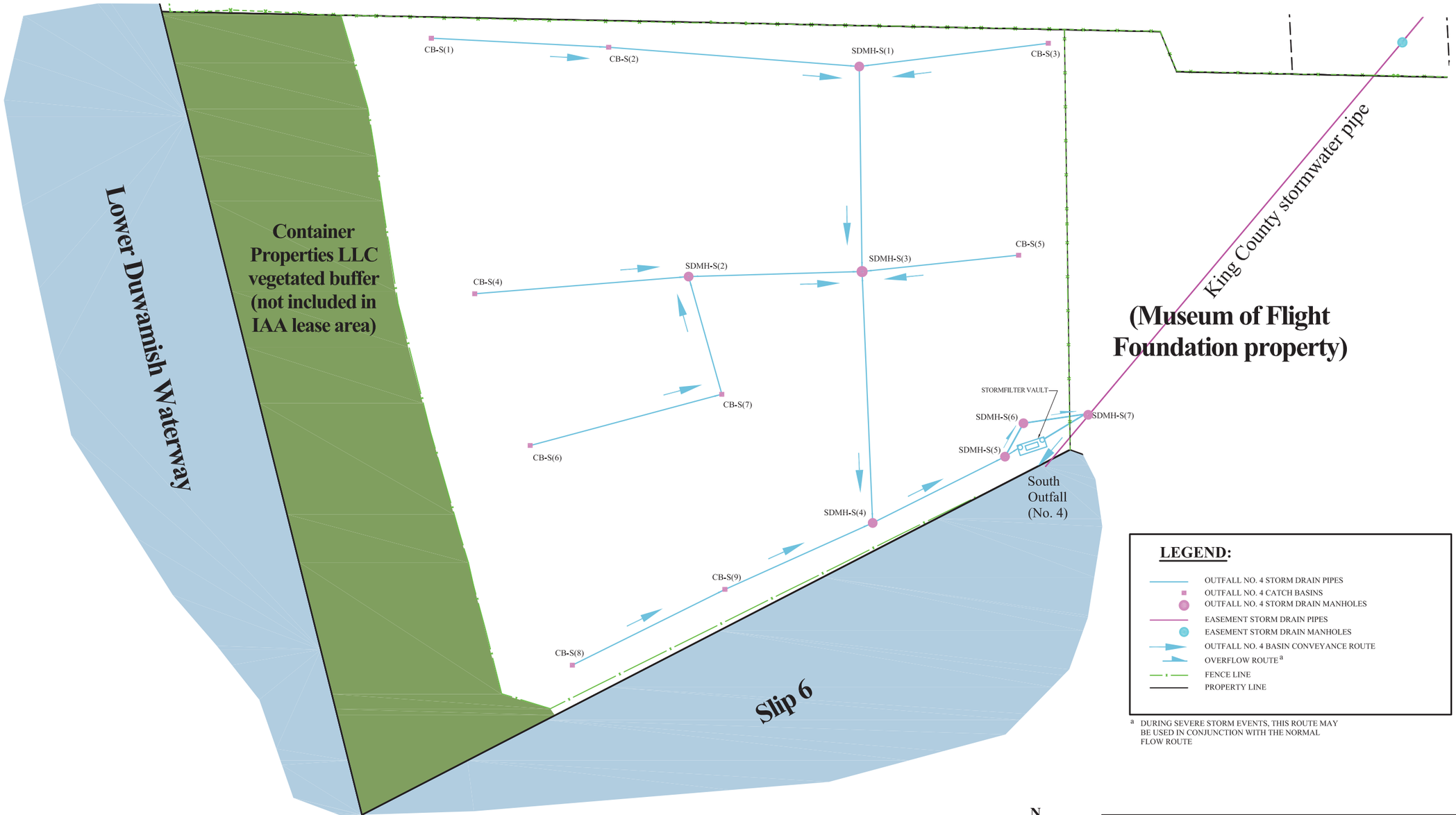


LEGEND:

- OUTFALL NO. 4 STORM DRAIN PIPES
- OUTFALL NO. 4 CATCH BASINS
- OUTFALL NO. 4 STORM DRAIN MANHOLES
- EASEMENT STORM DRAIN PIPES
- EASEMENT STORM DRAIN MANHOLES
- OUTFALL NO. 4 BASIN CONVEYANCE ROUTE
- OVERFLOW ROUTE [a]
- FENCE LINE
- PROPERTY LINE

[a] DURING SEVERE STORM EVENTS, THIS ROUTE MAY BE USED IN CONJUNCTION WITH THE NORMAL FLOW ROUTE

Note:

Base map, utilities, and all survey related information has been obtained from Barghausen Consulting Engineers, Incorporated As-built storm drainage and water quality improvements plans, dated 7/19/08. The base map has been updated based on field observations by Insurance Auto Auctions and Windward Environmental staff. The storm drain system on north parcel is owned by Merrill Creek Holdings LLC. The storm drain system on the south parcel is owned by Container Properties LLC.

N

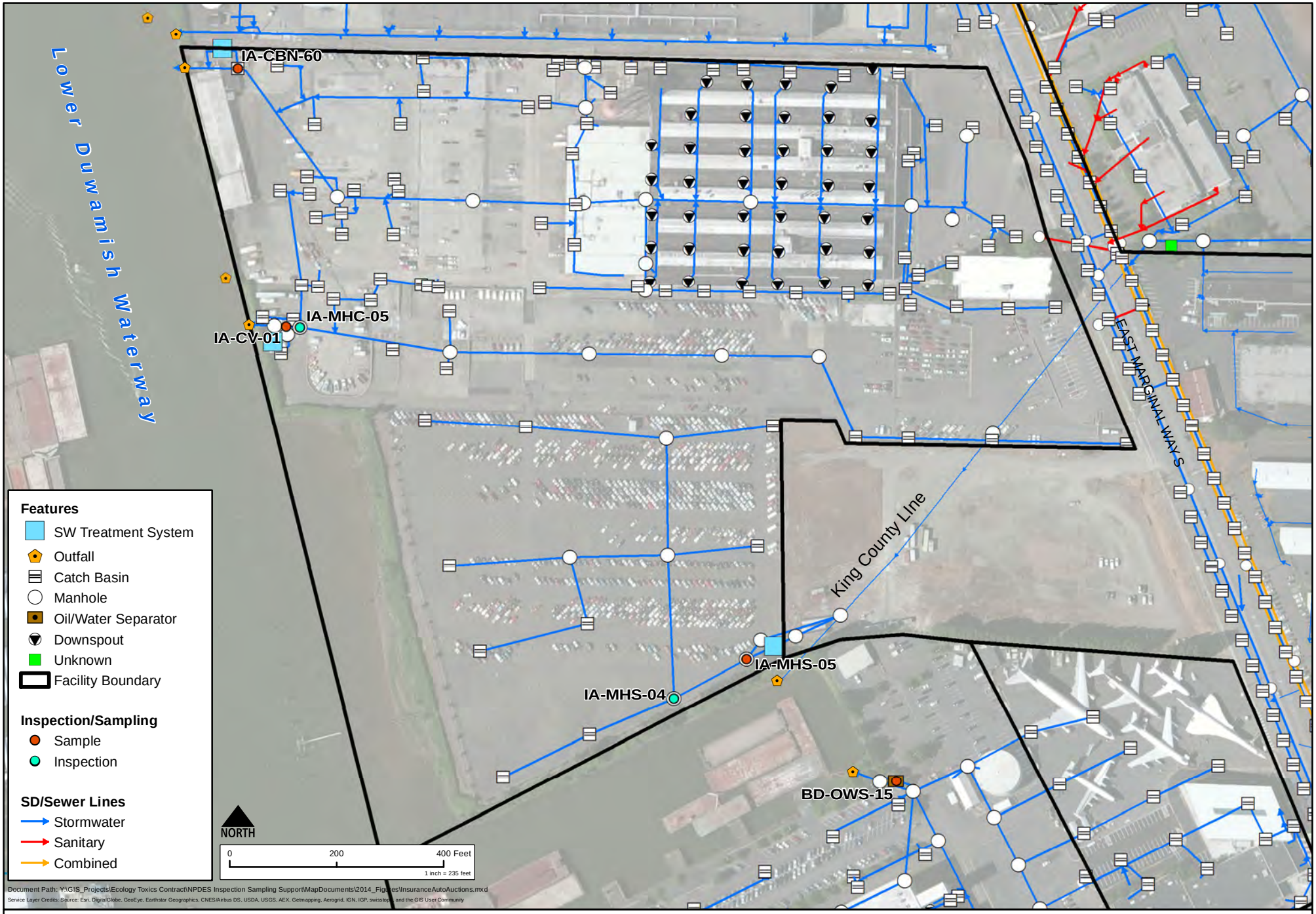
0 100 200

Scale in feet

Figure 7. South parcel storm drainage detail

Storm Water Pollution Prevention Plan (SWPPP)
Insurance Auto Auctions, Inc.
8801 East Marginal Way South
Seattle, Washington

Figure Q-1b. Insurance Auto Auctions SWPPP Map – South Parcel



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State of Washington

Figure Q-2. Insurance Auto Auctions Inspection and Sample Locations

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Tables

Acronyms and Abbreviations Used in Tables

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

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

Table Q-1
Sampling Locations and Analytical Methods
Insurance Auto Auctions

Analyte	Method	Sample Location / Collection Date		
		IA-CBN-60 10/20/2014	IA-CV-01 10/20/2014	IA-MHS-05 10/20/2014
Water Samples				
Metals (total)	EPA 200.8	●	●	●
Mercury (total, dissolved)	SW 7470A	●	●	●
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	●	●	●

Note: No solids samples were collected at Insurance Auto Auctions.

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

Table Q-2. Water Quality Data - Field Measurements
Insurance Auto Auctions

		Location ID	IA-MHS-05	IA-CBN-60	IA-CV-01
		Collection Date	10/20/2014	10/20/2014	10/20/2014
Analyte	**ISGP Benchmark**	**Units**	**Result**	**Result**	**Result**
Field Parameters					
Flow	--	Yes/No	No	No	No
pH	5.0 to 9.0	std units	7.5	6.7	6.3
Conductivity	--	mS/cm	-- a	-- a	-- a
Temperature	--	degrees C	16.5	16.2	16.6
Total Dissolved Solids	--	mg/L	50	30	30
Turbidity	25	NTU	0.0	0.0	**34**
Oil & Grease	No visible sheen	Yes/No	No	No	**Yes**
Dissolved Oxygen	--	mg/L	13	12	12
ORP	--	mV	46	106	133

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

a - Conductivity values on field form appear to be incorrect and are not reported here.

Table Q-3. Water Sample Results
Insurance Auto Auctions

Analyte	ISGP Benchmark	WA WQC Marine Chronic	WA WQC Marine Acute	NTR WQC HHO	NR WQC HHO	Location ID	IA-MHS-05	IA-CBN-60	IA-CV-01
						Collection Date	10/20/2014	10/20/2014	10/20/2014
							Result	Result	Result
Total Metals (µg/L)									
Antimony	--	--	--	--	--		**0.55**	**0.60**	**1.0**
Arsenic	150	36	69	--	--		< 1.0 U	< 1.0 U	< 1.0 U
Beryllium	--	--	--	--	--		< 0.40 U	< 0.40 U	< 0.40 U
Cadmium	2.1	9.4	42	--	--		**0.054 J**	**0.15 J**	**0.14 J**
Chromium	--	--	--	--	--		**1.1**	**1.3**	**1.7**
Chromium, hexavalent	--	--	--	--	--		na	na	na
Copper	14	3.7	5.8	--	--		**7.4**	**21**	**9.8**
Lead	81.6	8.5	221	--	--		**3.8**	**11**	**18**
Mercury	1.4	0.025	2.1	--	--		< 0.20 U	< 0.20 U	< 0.20 U
Nickel	--	8.3	75	--	--		**1.7 J**	**1.3 J**	**1.5 J**
Selenium	5	71	291	--	--		< 1.0 U	< 1.0 U	< 1.0 U
Silver	3.8	--	2.2	--	--		< 0.40 U	0.059 J	0.051 J
Thallium	--	--	--	--	--		< 1.0 U	< 1.0 U	< 1.0 U
Zinc	117	86	95	--	--		**47**	**100**	**67**
PCB Congeners (µg/L) [a]									
Total PCB Congeners	--	0.03	10	1.70E-04	6.40E-05		**7.59E-04**	**0.028 J**	**0.00628 J**
PCB TEQ, nd SDL*0	--	0.03	10	--	--		**1.62E-09 J**	**3.80E-06**	**9.20E-07 J**
PCB TEQ, nd SDL*0.5	--	0.03	10	--	--		**3.21E-07 J**	**3.84E-06**	**1.03E-06 J**
PCB TEQ, nd SDL*1	--	0.03	10	--	--		**6.40E-07 J**	**3.87E-06**	**1.15E-06 J**
Dioxins and Furans (pg/L) [a]									
2,3,7,8-TCDD	--	--	--	0.014	0.0051		< 2.28 U	< 2.38 U	< 1.48 U
1,2,3,7,8-PeCDD	--	--	--	--	--		< 2.92 U	< 1.83 U	< 1.98 U
1,2,3,4,7,8-HxCDD	--	--	--	--	--		< 3.06 UJ	< 3.68 U	< 3.87 U
1,2,3,6,7,8-HxCDD	--	--	--	--	--		< 4.22 U	< 4.58 U	< 4.85 U
1,2,3,7,8,9-HxCDD	--	--	--	--	--		< 4.99 U	< 3.63 U	< 5.31 U
1,2,3,4,6,7,8-HpCDD	--	--	--	--	--		**38.6**	**69.1**	**47.5**
OCDD	--	--	--	--	--		**194**	**706**	**296**
2,3,7,8-TCDF	--	--	--	--	--		< 1.39 U	< 2.28 U	< 1.78 U
1,2,3,7,8-PeCDF	--	--	--	--	--		< 2.80 U	< 2.10 U	< 1.62 U
2,3,4,7,8-PeCDF	--	--	--	--	--		< 2.43 U	< 2.00 U	< 1.84 U
1,2,3,4,7,8-HxCDF	--	--	--	--	--		< 1.72 U	< 1.87 U	< 2.11 U
1,2,3,6,7,8-HxCDF	--	--	--	--	--		< 1.76 U	< 1.98 U	< 2.10 U
1,2,3,7,8,9-HxCDF	--	--	--	--	--		< 3.19 U	< 3.21 U	< 3.64 U

Table Q-3. Water Sample Results
Insurance Auto Auctions

Analyte	ISGP Benchmark	WA WQC Marine Chronic	WA WQC Marine Acute	NTR WQC HHO	NR WQC HHO	Location ID	IA-MHS-05	IA-CBN-60	IA-CV-01
						Collection Date	10/20/2014	10/20/2014	10/20/2014
							Result	Result	Result
2,3,4,6,7,8-HxCDF	--	--	--	--	--		< 1.91 U	< 2.05 U	< 2.14 U
1,2,3,4,6,7,8-HpCDF	--	--	--	--	--		< 3.15 U	**27.1**	**19.4 J**
1,2,3,4,7,8,9-HpCDF	--	--	--	--	--		< 1.72 U	< 3.13 U	< 1.25 U
OCDF	--	--	--	--	--		< 4.92 U*	**135**	**36.9 J**
Total TCDD	--	--	--	--	--		< 2.28 U	< 2.38 U	< 1.48 U
Total PeCDD	--	--	--	--	--		< 6.80 U	< 1.83 U	< 5.48 U
Total HxCDD	--	--	--	--	--		< 5.16 U	8.36	**10.2**
Total HpCDD	--	--	--	--	--		**38.6 J**	**114**	**83.0**
Total TCDF	--	--	--	--	--		< 1.39 U	< 2.78 U	< 3.46 U
Total PeCDF	--	--	--	--	--		< 6.75 U	< 3.81 U	< 2.05 U
Total HxCDF	--	--	--	--	--		< 6.95 U	**6.72 J**	**10.3 J**
Total HpCDF	--	--	--	--	--		< 2.69 U	**80.8**	**39.3**
Dioxin/Furan TEQ, nd SDL*0	--	--	--	--	--		**0.444**	**1.12**	**0.769 J**
Dioxin/Furan TEQ, nd SDL*0.5	--	--	--	--	--		**4.59**	**4.79**	**4.10 J**
Dioxin/Furan TEQ, nd SDL*1	--	--	--	--	--		**8.73**	**8.41**	**7.42 J**
PAHs (µg/L)									
1-Methylnaphthalene	--	--	--	--	--		< 0.058 U	< 0.058 U	< 0.29 U
2-Chloronaphthalene	--	--	--	--	1,600		< 0.058 U	< 0.058 U	< 0.29 U
2-Methylnaphthalene	--	--	--	--	--		< 0.19 U	< 0.19 U	< 0.97 U
Acenaphthene	--	--	--	--	990		< 0.097 U	< 0.096 U	< 0.48 U
Acenaphthylene	--	--	--	--	--		< 0.078 U	< 0.077 U	< 0.39 U
Anthracene	--	--	--	110,000	40,000		< 0.039 U	< 0.039 U	< 0.19 U
Benzo(a)anthracene	--	--	--	0.031	0.018		< 0.058 U	**0.036 J**	< 0.29 U
Benzo(a)pyrene	--	--	--	0.031	0.018		< 0.039 U	< 0.039 U	< 0.19 U
Benzo(b)fluoranthene	--	--	--	0.031	0.018		< 0.078 U	**0.13**	**0.15 J**
Benzo(g,h,i)perylene	--	--	--	--	--		< 0.058 U	**0.049 J**	< 0.29 U
Benzo(k)fluoranthene	--	--	--	0.031	0.018		< 0.058 U	**0.067**	< 0.29 U
Chrysene	--	--	--	0.031	0.018		< 0.039 U	**0.14**	**0.18 J**
Dibenz(a,h)anthracene	--	--	--	0.031	0.018		< 0.058 U	< 0.058 U	< 0.29 U
Dibenzofuran	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
Fluoranthene	--	--	--	370	140		< 0.049 U	**0.18**	**0.21 J**
Fluorene	--	--	--	14,000	5,300		< 0.058 U	< 0.058 U	< 0.29 U
Indeno(1,2,3-cd)pyrene	--	--	--	0.031	0.018		< 0.058 U	**0.05 J**	< 0.29 U
Naphthalene	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
Phenanthrene	--	--	--	--	--		**0.020 J**	< 0.077 U	< 0.39 U

Table Q-3. Water Sample Results
Insurance Auto Auctions

Analyte	ISGP Benchmark	WA WQC Marine Chronic	WA WQC Marine Acute	NTR WQC HHO	NR WQC HHO	Location ID	IA-MHS-05	IA-CBN-60	IA-CV-01
						Collection Date	10/20/2014	10/20/2014	10/20/2014
							Result	Result	Result
Pyrene	--	--	--	11,000	4,000		< 0.058 U	**0.13**	**0.16 J**
Total Benzofluoranthenes	--	--	--	--	--		< 0.078 U	**0.20**	**0.15 J**
Total HPAHs	--	--	--	--	--		< 0.078 U	**0.64**	**0.70**
Total LPAHs	--	--	--	--	--		**0.020**	< 0.39 U	< 1.9 U
Total PAHs	--	--	--	--	--		**0.020**	**0.78**	**0.70**
cPAHs, nd RL*0	--	--	--	--	--		< 0 U	**0.0297 J**	**0.017 J**
cPAHs, nd RL*0.5	--	--	--	--	--		< 0.035 U	**0.0521 J**	**0.17 J**
cPAHs, nd RL*1	--	--	--	--	--		< 0.070 U	**0.0745 J**	**0.32 J**
Phthalates (µg/L)									
bis(2-Ethylhexyl)phthalate	--	--	--	5.9	2.2		**2.8 J**	**1.2 J**	**11 J**
Butylbenzylphthalate	--	--	--	--	1,900		**0.24 J**	**0.20 J**	< 2.9 U
Di-n-Butylphthalate	--	--	--	12,000	4,500		**0.15 J**	**0.16 J**	< 1.9 U
Diethylphthalate	--	--	--	120,000	44,000		< 0.39 U	< 0.39 U	< 1.9 U
Dimethylphthalate	--	--	--	2,900,000	1,100,000		< 0.39 U	< 0.39 U	< 1.9 U
Di-n-Octyl phthalate	--	--	--	--	--		**0.44**	**0.69**	**0.94 J**
Phenols (µg/L)									
2,3,4,6-Tetrachlorophenol	--	--	--	--	--		< 0.68 U	< 0.68 U	< 3.4 U
2,4,5-Trichlorophenol	--	--	--	--	3,600		< 0.39 U	< 0.39 U	< 1.9 U
2,4,6-Trichlorophenol	--	--	--	6.5	2.4		< 0.58 U	< 0.58 U	< 2.9 U
2,4-Dichlorophenol	--	--	--	790	290		< 0.39 U	< 0.39 U	< 1.9 U
2,4-Dimethylphenol	--	--	--	--	850		< 1.9 U	< 1.9 U	< 9.7 U
2,4-Dinitrophenol	--	--	--	14,000	5,300		< 4.9 U	< 4.8 U	< 24 U
2-Chlorophenol	--	--	--	--	150		< 0.39 U	< 0.39 U	< 1.9 U
2-Methylphenol	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
2-Nitrophenol	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
4,6-Dinitro-2-Methylphenol	--	--	--	765	280		< 3.9 U	< 3.9 U	< 19 U
4-Chloro-3-methylphenol	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
4-Methylphenol	--	--	--	--	--		**1.0**	< 0.77 U	< 3.9 U
4-Nitrophenol	--	--	--	--	--		< 2.9 U	< 2.9 U	< 15 U
Pentachlorophenol	--	7.9	13	8.2	3.0		**0.21 J**	**0.28 J**	**0.88 J**
Phenol	--	--	--	4,600,000	860,000		**0.25 J**	< 0.58 U	< 2.9 U
Other SVOCs (µg/L)									
1,2,4-Trichlorobenzene	--	--	--	--	70		< 0.39 U	< 0.39 U	< 1.9 U
1,2-Dichlorobenzene	--	--	--	17,000	1,300		< 0.39 U	< 0.39 U	< 1.9 U
1,3-Dichlorobenzene	--	--	--	2,600	960		< 0.39 U	< 0.39 U	< 1.9 U

Table Q-3. Water Sample Results
Insurance Auto Auctions

Analyte	ISGP Benchmark	WA WQC Marine Chronic	WA WQC Marine Acute	NTR WQC HHO	NR WQC HHO	Location ID	IA-MHS-05	IA-CBN-60	IA-CV-01
						Collection Date	10/20/2014	10/20/2014	10/20/2014
							Result	Result	Result
1,4-Dichlorobenzene	--	--	--	2,600	190		< 0.39 U	< 0.39 U	< 1.9 U
2,4-Dinitrotoluene	--	--	--	9.1	3.4		< 0.39 U	< 0.39 U	< 1.9 U
2,6-Dinitrotoluene	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
2-Nitroaniline	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
3,3'-Dichlorobenzidine	--	--	--	0.077	0.028		< 1.9 U	< 1.9 U	< 9.7 U
3-Nitroaniline	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
4-Bromophenyl-phenylether	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
4-Chloroaniline	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
4-Chlorophenyl-phenylether	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
4-Nitroaniline	--	--	--	--	--		< 0.58 U	< 0.58 U	< 2.9 U
Benzoic Acid	--	--	--	--	--		**0.89 J**	**3.3 J**	**3.0 J**
Benzyl Alcohol	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
2,2'-Oxybis(1-Chloropropane)	--	--	--	170,000	65,000		< 0.39 U	< 0.39 U	< 1.9 U
bis(2-Chloroethoxy) Methane	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
Bis-(2-Chloroethyl) Ether	--	--	--	1.4	0.53		< 0.39 U	< 0.39 U	< 1.9 U
Carbazole	--	--	--	--	--		< 0.39 U	< 0.39 U	< 1.9 U
Hexachlorobenzene	--	--	--	0.00077	0.00029		< 0.39 U	< 0.39 U	< 1.9 U
Hexachlorobutadiene	--	--	--	50	18		< 0.58 U	< 0.58 U	< 2.9 U
Hexachlorocyclopentadiene	--	--	--	17,000	1,100		< 1.9 U	< 1.9 U	< 9.7 U
Hexachloroethane	--	--	--	8.9	3.3		< 0.58 U	< 0.58 U	< 2.9 U
Isophorone	--	--	--	600	960		< 0.39 U	< 0.39 U	< 1.9 U
Nitrobenzene	--	--	--	1,900	690		< 0.39 U	< 0.39 U	< 1.9 U
N-Nitrosodimethylamine	--	--	--	8.1	3.0		< 1.9 U	< 1.9 U	< 9.7 U
N-Nitroso-Di-N-Propylamine	--	--	--	--	0.51		< 0.39 U	< 0.39 U	< 1.9 U
N-Nitrosodiphenylamine	--	--	--	16	6.0		< 0.39 U	< 0.39 U	< 1.9 U

Results in **bold** are detections.

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

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

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

Table Q-4. Water Sample Results Compared to Criteria
Insurance Auto Auctions

Location ID	IA-MHS-05					IA-CBN-60				
Collection Date	10/20/2014					10/20/2014				
	Exceedance Factor					Exceedance Factor				
Analyte	ISGP Benchmark	WA Marine Chronic	WA Marine Acute	NTR Human Health - Organisms	NR Human Health - Organisms	ISGP Benchmark	WA Marine Chronic	WA Marine Acute	NTR Human Health - Organisms	NR Human Health - Organisms
Total Metals										
Copper		2.0	1.3			1.5	5.6	3.6		
Lead							1.3			
Zinc							1.2	1.1		
PCB Congeners										
Total PCB Congeners				4.5	12				166	441
PAHs										
Benzo(a)anthracene									1.2	2.0
Benzo(b)fluoranthene									4.2	7.2
Benzo(k)fluoranthene									2.2	3.7
Chrysene									4.5	7.8
Indeno(1,2,3-cd)pyrene									1.6	2.8
Phthalates										
bis(2-Ethylhexyl)phthalate					1.3					

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 Q-4. Water Sample Results Compared to Criteria
Insurance Auto Auctions

Location ID	IA-CV-01				
Collection Date	10/20/2014				
	Exceedance Factor				
Analyte	ISGP Benchmark	WA Marine Chronic	WA Marine Acute	NTR Human Health - Organisms	NR Human Health - Organisms
Total Metals					
Copper		2.6	1.7		
Lead		2.1			
Zinc					
PCB Congeners					
Total PCB Congeners				37	98
PAHs					
Benzo(a)anthracene					
Benzo(b)fluoranthene				4.8	8.3
Benzo(k)fluoranthene					
Chrysene				5.8	10
Indeno(1,2,3-cd)pyrene					
Phthalates					
bis(2-Ethylhexyl)phthalate				1.9	5.0

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 Q-5. Water Sample Results - PCB Congeners
Industrial Auto Auctions

Location ID	IA-CBN-60		IA-CV-01		IA-MHS-05	
Collection Date	**10/20/2014**		**10/20/2014**		**10/20/1024**	
Analyte	**Result**		**Result**		**Result**	
Total PCB Congeners (µg/L)	0.0282	J	0.00628	J	0.000759	J
Total PCB Congeners (pg/L)	28,200	J	6,280	J	759	J
Total Mono-CB (pg/L)	9.32	J	28.9	J	< 7.03	U
PCB-1	5.43		15.5		< 6.59	U
PCB-2	< 3.94	U	4.70	J	< 7.03	U
PCB-3	3.89	J	8.67	J	< 6.81	U
Total Di-CB (pg/L)	24.2	J	50.6	J	< 28.0	U
PCB-4/10	< 10.5	U	< 22.3	U	< 24.1	U
PCB-5/8	14.5	J	28.8	J	< 20.2	U
PCB-6	< 8.76	U	< 17.7	U	< 19.7	U
PCB-7/9	< 8.70	U	< 17.6	U	< 19.6	U
PCB-11	< 46.9	U	< 31.2	U*	< 28.0	U*
PCB-12/13	< 8.98	U	< 18.2	U	< 19.7	U
PCB-14	< 8.01	U	< 16.3	U	< 17.6	U
PCB-15	9.74	J	21.8		< 17.9	U
Total Tri-CB (pg/L)	106	J	111	J	48.5	
PCB-16/32	12.0		< 13.5	U	< 8.92	U
PCB-17	5.88		7.37	J	4.02	J
PCB-18	16.1		16.2		12.1	
PCB-19	< 1.37	U	3.66	J	< 5.54	U
PCB-20/21/33	12.0	J	17.1	J	9.07	J
PCB-22	6.25		10.7		4.76	J
PCB-23	< 1.82	U	< 2.73	U	< 2.15	U
PCB-24/27	< 0.960	U	< 2.47	U	< 3.78	U
PCB-25	2.30	J	< 2.67	U	< 2.10	U
PCB-26	3.77	J	< 2.77	U	< 2.18	U
PCB-28	15.5		20.5		9.06	J
PCB-29	< 1.79	U	< 2.70	U	< 2.12	U
PCB-30	< 0.969	U	< 2.51	U	< 3.93	U
PCB-31	14.8		22.5		9.46	J
PCB-34	< 1.89	U	< 2.84	U	< 2.24	U
PCB-35	4.78	J	< 2.94	U	< 2.39	U
PCB-36	< 2.03	U	< 2.94	U	< 2.39	U
PCB-37	12.2		13.0		< 2.37	U
PCB-38	< 2.07	U	< 2.99	U	< 2.43	U
PCB-39	< 1.97	U	< 2.85	U	< 2.32	U
Total Tetra-CB (pg/L)	1,010	J	595	J	140	J
PCB-40	11.5		< 8.02	U*	< 4.50	U
PCB-41/64/71/72	52.4		45.9		12.6	J
PCB-42/59	15.2		13.1	J	< 3.03	U
PCB-43/49	55.2		33.7		10.2	J
PCB-44	97.3		70.9		12.3	
PCB-45	< 4.14	U*	4.80	J	< 4.00	U
PCB-46	< 2.44	U*	3.94	J	< 4.06	U
PCB-47	12.3		23.4		59.7	
PCB-48/75	7.20	J	4.20	J	< 2.82	U
PCB-50	< 2.66	U	< 3.73	U	< 3.74	U
PCB-51	1.50	J	< 2.28	U*	< 6.06	U*
PCB-52/69	170		102		< 16.2	U*
PCB-53	6.25		< 5.40	U*	< 3.25	U
PCB-54	< 2.15	U	< 3.01	U	< 3.02	U
PCB-55	< 5.58	U*	< 2.83	U	< 2.68	U

Table Q-5. Water Sample Results - PCB Congeners
Industrial Auto Auctions

Location ID	IA-CBN-60		IA-CV-01		IA-MHS-05	
Collection Date	10/20/2014		10/20/2014		10/20/1024	
Analyte	Result		Result		Result	
PCB-56/60	70.0		38.9		< 6.91	U*
PCB-57	< 2.01	U	< 2.77	U	< 2.63	U
PCB-58	< 2.03	U	< 2.80	U	< 2.66	U
PCB-61/70	290		139		20.9	
PCB-62	< 2.20	U	< 2.89	U	< 2.85	U
PCB-63	< 2.00	U	< 2.76	U	< 2.62	U
PCB-65	< 2.13	U	< 2.80	U	< 2.76	U
PCB-67	4.80	J	< 2.88	U	< 2.73	U
PCB-68	< 1.92	U	4.57	J	8.96	J
PCB-73	< 2.14	U	< 2.93	U	< 2.82	U
PCB-74	49.6		30.5		4.96	J
PCB-76/66	90.6		54.5		10.3	J
PCB-77	52.7		23.4		< 2.84	U
PCB-78	< 2.35	U	< 2.99	U	< 2.92	U
PCB-79	14.1		< 2.79	U	< 2.65	U
PCB-80	< 1.90	U	< 2.46	U	< 2.33	U
PCB-81	5.46		1.77	J	< 2.61	U
Total Penta-CB (pg/L)	10,400	J	2,620	J	241	J
PCB-82	248		64.2		< 6.91	U*
PCB-83	< 2.82	U	< 4.73	U	< 4.11	U
PCB-84/92	448		161		14.3	J
PCB-85/116	244		70.5		< 6.28	U*
PCB-86	< 4.19	U	< 7.03	U	< 6.11	U
PCB-87/117/125	641		169		18.3	J
PCB-88/91	103		< 6.72	U	< 6.13	U
PCB-89	7.50		< 2.07	U*	< 5.50	U
PCB-90/101	1,210		364		45.0	
PCB-93	< 3.77	U	< 6.06	U	< 5.53	U
PCB-94	< 3.85	U	< 6.18	U	< 5.64	U
PCB-95/98/102	592		270		32.2	
PCB-96	4.12	J	< 4.99	U	< 4.29	U
PCB-97	446		125		13.7	
PCB-99	418		126		15.2	
PCB-100	< 3.04	U	< 5.44	U	< 4.68	U
PCB-103	< 3.26	U	< 5.84	U	< 5.03	U
PCB-104	< 2.42	U	< 4.33	U	< 3.73	U
PCB-105	1,140		200		< 17.3	U*
PCB-106/118	2,400		431		44.7	
PCB-107/109	148		< 26.0	U*	< 4.09	U
PCB-108/112	59.8		23.0		< 4.85	U
PCB-110	2,000		528		53.6	
PCB-111/115	14.5		6.09	J	< 3.56	U
PCB-113	< 2.84	U	< 2.01	U*	< 4.14	U
PCB-114	51.7		7.90	J	< 4.18	U
PCB-119	15.8		4.89	J	< 3.63	U
PCB-120	< 2.19	U*	< 4.03	U	< 3.51	U
PCB-121	< 2.24	U	28.6		3.51	J
PCB-122	< 21.6	U*	6.55	J	< 4.58	U
PCB-123	31.0		6.24	J	< 4.10	U
PCB-124	99.5		18.9		< 3.77	U
PCB-126	36.6		8.94	J	< 4.91	U
PCB-127	< 12.7	U	< 6.76	U	< 4.55	U

Table Q-5. Water Sample Results - PCB Congeners
Industrial Auto Auctions

Location ID	IA-CBN-60		IA-CV-01		IA-MHS-05	
Collection Date	10/20/2014		10/20/2014		10/20/1024	
Analyte	Result		Result		Result	
Total Hexa-CB (pg/L)	13,100	J	2,260	J	248	J
PCB-128/162	831		128		14.1	J
PCB-129	245		38.1		< 6.37	U
PCB-130	266		48.6		5.19	J
PCB-131	< 2.13	U	< 8.40	U	< 6.07	U
PCB-132/161	883		162		19.2	J
PCB-133/142	76.6		15.1	J	< 5.87	U
PCB-134/143	150		30.5		5.08	J
PCB-135	229		49.3		< 4.84	U
PCB-136	153		43.3		< 8.25	U*
PCB-137	220		35.5		4.04	J
PCB-138/163/164	3,760		577		68.8	
PCB-139/149	1,420		307		41.4	
PCB-140	12.1		3.72	J	< 4.81	U
PCB-141	563		104		11.8	
PCB-144	85.0		20.5		< 4.61	U
PCB-145	< 2.09	U	< 4.18	U	< 3.45	U
PCB-146/165	325		54.2		8.00	J
PCB-147	51.5		< 8.72	U*	< 4.56	U
PCB-148	< 3.09	U	< 6.17	U	< 5.09	U
PCB-150	< 2.15	U	< 4.30	U	< 3.55	U
PCB-151	251		66.1		< 7.95	U*
PCB-152	< 2.08	U	< 4.16	U	< 3.44	U
PCB-153	2,150		366		51.3	
PCB-154	14.9		5.66	J	< 4.27	U
PCB-155	< 2.02	U	< 4.03	U	< 3.33	U
PCB-156	559		75.9		9.22	J
PCB-157	129		20.2		< 4.63	U
PCB-158/160	474		76.9		10.3	J
PCB-159	< 1.77	U	< 6.36	U	< 4.29	U
PCB-166	16.1		< 6.64	U	< 4.48	U
PCB-167	214		32.6		< 4.50	U
PCB-168	4.22	J	< 5.60	U	< 4.05	U
PCB-169	< 2.14	U	< 7.52	U	< 4.84	U
Total Hepta-CB (pg/L)	3,210		532	J	76.7	J
PCB-170	658		96.3		12.7	
PCB-171	146		24.0		< 3.10	U
PCB-172	92.7		13.7		< 3.33	U
PCB-173	17.4		< 3.91	U	< 3.51	U
PCB-174	354		61.8		12.3	
PCB-175	13.1		< 3.15	U	< 3.24	U
PCB-176	30.0		7.98	J	< 2.30	U
PCB-177	237		38.0		< 3.29	U
PCB-178	47.0		10.8		< 3.35	U
PCB-179	75.8		21.1		5.63	J
PCB-180	873		139		23.8	
PCB-181	5.11		< 3.33	U	< 2.99	U
PCB-182/187	280		62.6		14.6	J
PCB-183	170		32.2		7.70	J
PCB-184	< 1.91	U	< 2.47	U	< 2.53	U
PCB-185	29.5		< 5.91	U*	< 3.04	U
PCB-186	< 1.85	U	< 2.39	U	< 2.46	U

Table Q-5. Water Sample Results - PCB Congeners
Industrial Auto Auctions

Location ID	IA-CBN-60		IA-CV-01		IA-MHS-05	
Collection Date	10/20/2014		10/20/2014		10/20/1024	
Analyte	Result		Result		Result	
PCB-188	< 1.68	U	< 2.17	U	< 2.23	U
PCB-189	33.5		< 2.96	U	< 2.38	U
PCB-190	92.4		17.2		< 2.32	U
PCB-191	20.6		< 2.71	U	< 2.44	U
PCB-192	< 2.52	U	< 2.97	U	< 2.67	U
PCB-193	39.2		7.64	J	< 2.46	U
Total Octa-CB (pg/L)	370	J	69.5	J	5.27	J
PCB-194	157		19.2		5.27	J
PCB-195	53.4		9.00	J	< 4.29	U
PCB-196/203	73.7		22.5		< 5.65	U*
PCB-197	< 3.99	U	< 4.35	U	< 3.10	U
PCB-198	< 5.76	U	< 6.28	U	< 4.48	U
PCB-199	66.4		18.8		< 5.47	U*
PCB-200	8.42		< 4.59	U	< 3.27	U
PCB-201	< 6.76	U*	< 4.24	U	< 3.02	U
PCB-202	< 9.24	U*	< 4.49	U	< 3.20	U
PCB-204	< 4.32	U	< 4.70	U	< 3.35	U
PCB-205	11.1		< 6.81	U	< 3.64	U
Total Nona-CB (pg/L)	< 44.6	U	12.8	J	< 4.54	U
PCB-206	< 44.6	U*	12.8		< 4.54	U
PCB-207	< 4.51	U	< 3.52	U	< 2.62	U
PCB-208	< 4.29	U	< 6.05	U*	< 2.50	U
Deca-CB (pg/L)	< 27.2	U	< 7.05	U	< 4.31	U
PCB-209	< 27.2	U	< 7.05	U	< 4.31	U
PCB TEQ, nd SDL*0	3.80		0.920	J	0.00162	J
PCB TEQ, nd SDL*0.5	3.84		1.03	J	0.321	J
PCB TEQ, nd SDL*1	3.87		1.15	J	0.640	J

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

Table Q-6. Water Sample Results - Conventionals
Insurance Auto Auctions

		Location ID	IA-CBN-60		IA-CV-01		IA-MHS-05	
		Collection	10/20/2014		10/20/2014		10/20/2014	
Analyte	ISGP Benchmark	Units	Result		Result		Result	
Conventionals								
Alkalinity	--	mg/L	16		13		5.6	
Bicarbonate	--	mg/L $CaCO_3$	16		13		5.6	
Carbonate	--	mg/L $CaCO_3$	5	U	5	U	< 5	U
Chloride	--	mg/L	0.67	J	2.1		0.34	J
Specific Conductance	--	µmhos/cm	39		35		11	
Hydroxide	--	mg/L $CaCO_3$	na		na		na	
Nitrate	--	mg/L	0.23	J	< 0.9	U	< 0.9	U
pH	5-9	std units	7.86		8.21		8.44	
Salinity	--	mg/L	na		na		na	
Sulfate	--	mg/L	1.3		1.3		0.69	J
Dissolved Organic Carbon	--	mg/L	4.1		4.2		4.2	
Total Organic Carbon	--	mg/L	5	J	6.2		4.3	
Total Suspended Solids[a]	30	mg/L	5	U	6.5		5	
Turbidity	25	NTU	na		na		na	
Oil & Grease	--	mg/L	na		na		na	
Oil & Grease - Polar	--	mg/L	na		na		na	
Oil & Grease - Silica Gel Treated	--	mg/L	na		na		na	

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

Shaded results exceed the ISGP benchmark for that parameter.

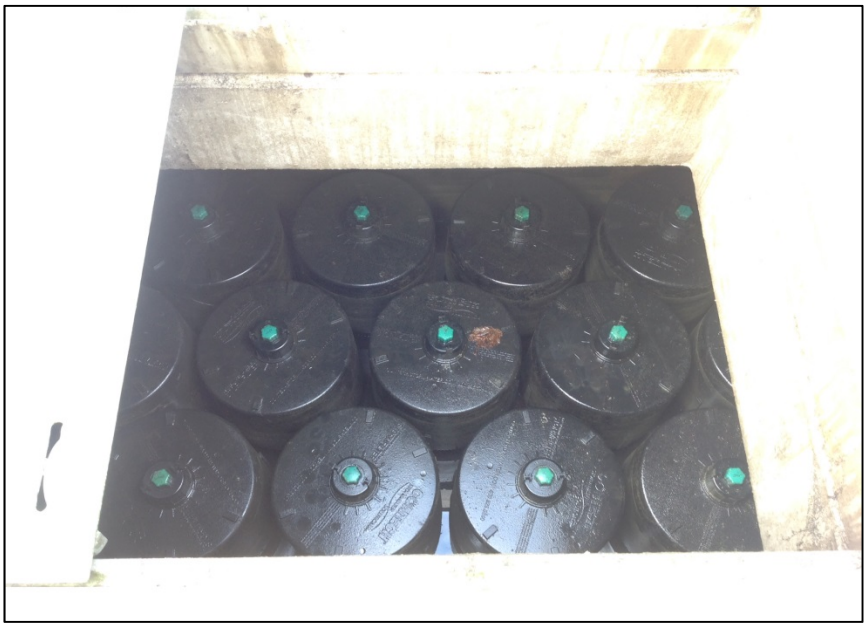
Attachment Q-1
Inspection Photographic Log

Conveyance Structure Information	
Structure Identification Number: IA-MHS-05	**N←**
Structure Type: Manhole	
General Location: Southeast corner of facility	
Characteristics: ~8’ to bottom of structure, 6’ depth to water, <1” depth of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Manhole cover	
Volume Gauge: --	
Sample ID: IA-MHS-05-20141020-W	
Drainage Information:	
The location MHS-05 is located at the southeast corner of the Insurance Auto Auctions facility. MHS-05 receives stormwater from the southwestern portion of the facility and conveys stormwater east to a stormwater vault that contains filter units. After passing through the treatment vault, stormwater discharges to the LDW in Slip 6. An overflow weir is located on the north side of the manhole structure and stormwater discharge may bypass the stormwater vault if discharge exceeds the vaults capacity.	**N↑**

Conveyance Structure Information	
Structure Identification Number: IA-CBN-60	**N➔** 
Structure Type: Manhole	
General Location: Northwest corner of facility	
Characteristics: ~6’ to bottom of structure, ~4’ to depth of water, <1” of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Manhole cover	
Volume Gauge: --	
Sample ID: IA-CBN-60-20141020-W	
Drainage Information:	
The location CBN-60 is located at the northwest corner of the Insurance Auto Auctions facility. CBN-60 receives stormwater from the northern portion of the facility which drains the vehicle storage warehouse and uncovered vehicle storage lots. Stormwater is conveyed from CBN-60 to a stormwater vault that contains filter units. After passing through the treatment vault, stormwater discharges to the LDW. An overflow weir is located on the west side of the manhole structure and stormwater discharge may bypass the stormwater vault if discharge exceeds the vaults capacity.	**N➔** 

Conveyance Structure Information	
Structure Identification Number: IA-CV-01	**N➔**
Structure Type: Manhole	
General Location: East and central area of facility	
Characteristics: ~7’ to bottom of structure, 3’ depth to water, 6” depth of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Manhole cover	
Volume Gauge: --	
Sample ID: IA-CV-01-20141020-W	

Drainage Information:	
The location CV-01 is located at the western edge of the Insurance Auto Auctions facility. CV-01 receives stormwater from the central portion of the facility which drains uncovered vehicle storage lots. CV-01 is the upstream manhole of an oil water separator. After passing through the oil water separator, stormwater discharge is conveyed to a stormwater filter vault. An overflow weir is located on the west side of the oil water separator and stormwater discharge may bypass the stormwater vault if discharge exceeds the vaults capacity.	**N➔**

Conveyance Structure Information	
Structure Identification Number: Central Treatment Vault	**N➔** 
Structure Type: Stormwater filter treatment vault	
General Location: East and central area of facility	
Characteristics: 11.5’ to bottom of structure, 8’ to depth of water, 4.5” of sediment	
Pump Capacity (gpm): --	
Design Storm: --	
Access: Treatment System Grate	
Volume Gauge: --	
Sample ID: --	
Drainage Information:	
The central treatment vault receives stormwater from the central drainage basin at the facility. An oil water separator is located upstream of the vault. The fault contains 40 media filters. After passing through the treatment vault, stormwater is discharged to the LDW.	**N➔** 

Attachment Q-2
Field Documentation

Location Insurance Auto Auctions Date 10/20/14

Project / Client NPDES/Ecology

0630 M. Ivancevich stops to purchase ice while en route to storage unit / field office.

0650 M. Ivancevich arrives at storage unit; preps & loads sampling equipment.

0753 M. Ivancevich departs field office, meets C. Nancarrow at Tully's.

0835 Leidos onsite at Insurance Auto Auctions.

0845 Mahbub Alam/ECY onsite.

0855 Leidos & Ecology meet with Bobby/IAA & Windward (IAA's consultant). Windward requested split samples. Mahbub explained why we are here.

0915 Began site walk at N treatment system. N-60 is last CB entering treatment system. N treatment system cleaned in August & again in September after the fire. N-60 ~ 9 ft deep. 1 inlet ~24 in from East. Sample for solids, maybe water.

0940 @ MH C-5: 3 inlets, all with flow, one outlet. Not enough sampleable material for water or solids.

0955 Probbed top of vault to treatment system in central drainage basin - not enough

Location Insurance Auto Auctions Date 10/20/14

Project / Client NPDES/Ecology

sampleable solids.

1013 @ Southern treatment system. MH-S5: overflow weir would go to KC line, by way of S6. Inlet from SW ~24". Outlet E to treatment system. Not enough sampleable solids. Possible water sampling location.

1030 @ MH-S4; 12 in inlet pipe from SW. Outlet E to MH-S5. Not enough sampleable solids. Will collect a water sample at MH-S5.
Sample ID: IA-MHS-05-20141020-W

1150 Began water sampling at MH-S5.

1205 Completed sampling at MH-S5. Lunch break.

1228 @ CBN-60 to collect water & solids sample. Sample IDs:
IA-CBN-60-20141020-W
IA-CBN-60-20141020-S

1250 Began collecting water sample.

1320 What was thought to be solids @ CBN-60 is actually an absorbent

Location Insurance Auto Auctions Date 10/20/14

Project / Client NPDES/Ecology

pad filled with peat. No sampleable solids @ CBN-60

1405 @ MHC-5: very little water and no flow. Will collect a water sample from the Central vortex.
Sample ID: IA-CV-01-20141020-S

1500 Sampling complete.

1510 M. Alam/ECY offsite.

1515 C. Wilson offsite, en route to field office

1520 M. Ivancevich coordinates TA pickup for tomorrow (Tuesday).

1530 M. Ivancevich offsite; stops for additional ice while en route to field office.

1550 Leidos at field office, unloads sampling supplies. C. Wilson prepares Vista samples for shipment & decons equipment.

1600 M. Ivancevich departs field office to return water quality meter & sampling van.

1635 Water quality meter returned.

1720 M. Ivancevich arrives at Bothell office.

MM 10/20/14

Location Field office Date 10/21/14

Project / Client NPDES/Ecology

0830 M. Ivancevich arrives at field office and prepares Test America cooler for pickup.

0848 TA cooler ready for pickup; M. Ivancevich organizes field office & preps sampling kits.

0939 M. Ivancevich relinquishes TA cooler to Paco, courier for Test America. M. Ivancevich secures field office, en route to Bothell office.

MM 10/21/14

leidos

Sediment Collection Form

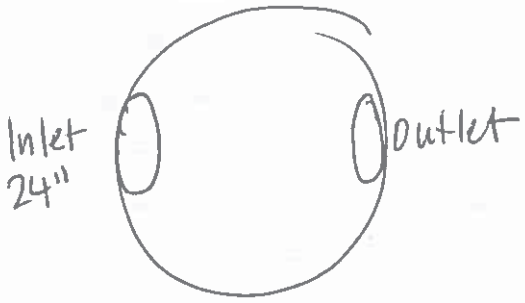
Project: NPDES Sampling Support **Location ID:** MH-S(5)

Facility Name: Insurance Auto Auctions **Sample ID:** IA-MHS-05-20141020-W

Sampled By: M | & CW **Date:** 10 / 20 / 2014 **Time:** 1150

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

Conveyance System Sketch ↑N



Depth to Bottom: _____ ft	Depth to Water: _____ ft	Depth of Sediment: _____ in	Sampled: Y / N 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: Approximately 2'1/2 feet of water.

Recorded By/Date: _____ **Reviewed By/Date:** _____

Version2 -030311

leidos

Sediment Collection Form

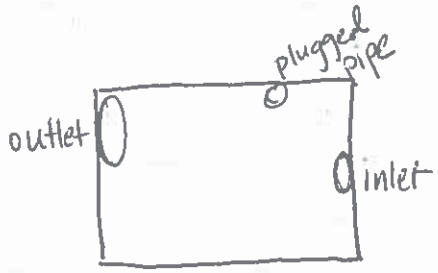
Project: NPDES Sampling Support **Location ID:** CBN-60

Facility Name: Insurance Auto Auctions **Sample ID:** IA-CBN-60-20141020-S

Sampled By: ML & CW **Date:** 10 / 20 / 2014 **Time:** 1250

Structure Type:	Dimensions:	Standing Water:	Flow:
CB	W 18" L 18"	(Y) / N	Y (N)

Conveyance System Sketch ↑N



Depth to Bottom:	Depth to Water:	Depth of Sediment:	Sampled: Y / N
_____ ft	_____ ft	_____ in	Discrete / Composite *(circle one)*

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

NOTES: Approximetely 14" of water.

Recorded By/Date: _____ **Reviewed By/Date:** _____

Version2 -030311

leidos

Sediment Collection Form

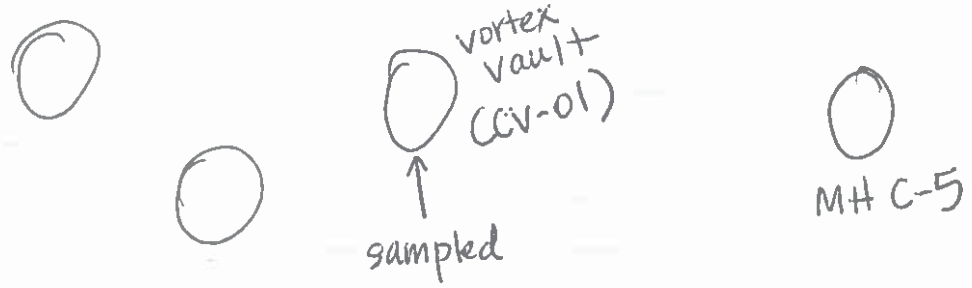
Project: NPDES Sampling Support **Location ID:** central vault (CV-01)

Facility Name: Insurance Auto Auctions **Sample ID:** IA-CV-01-20141020-W

Sampled By: MJ & CW **Date:** 10 / 20 / 2014 **Time:** 1430

Structure Type: vault	**Dimensions:** W_____ L standard	**Standing Water:** (Y) N	**Flow:** Y (N)

Conveyance System Sketch ↑N



Depth to Bottom: _____ ft	**Depth to Water:** _____ ft	**Depth of Sediment:** _____ in	**Sampled: Y / N** **Discrete / Composite** *(circle one)*
Sediment type:	***Sediment color:***	***Sediment Odor:***	***Comments:***
Cobble Gravel Sand C M F Silt/clay Organic matter Debris	Drab olive Brown Brown surface Gray Black Tan	None Slight Moderate Strong Overwhelming H_2S Petroleum	Photo ID(s): _____ GPS ID: _____

NOTES:

Recorded By/Date: _____ **Reviewed By/Date:** _____

Version2 -030311

leidos

SURFACE WATER SAMPLING FORM

Client: Department of Ecology **Site:** Insurance Auto Auctions **Job #:** 309382

Sample ID	TIME	DATE	Flow	pH	Electrical Conductivity	Temp (°C)	Total Dissolved Solids	Dissolved Oxygen	Turbidity (NTU)	Oil & Grease (visible?)	COMMENTS
IA-MHS-05-20141020-W	1158	10/20/14	NO	7.5	6 ☑ S/cm	16.5	0.05 g/L	12.7 g/L	Ø	No	salinity = Ø, ORP = 46 mV
IA-CBN-60-20141020-W	1321	10/20/14	NO	6.7	6 ☑ S/cm	16.2	0.03 g/L	11.9 g/L	Ø	No	salinity = Ø, ORP = 106 mV
IA-CV-01-20141020-W	1453	10/20/14	NO	6.3	45 [illegible] 10/21/14 ☑ S/cm	16.6	0.03 g/L	12 g/L	34	Yes	salinity = Ø, ORP = 133 mV
					☐ S/cm						
					☐ S/cm						
					☐ S/cm						
					☐ S/cm						
					☐ S/cm						
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					☐ S/cm						
					☐ S/cm						

Sample Date:____/____/2014

Attachment Q-3
Chain of Custody Forms

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

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

Client Contact	Project Manager:	Site Contact:	Date:	COC No:
	Tel/Fax:	Lab Contact:	Carrier: Courier	1 of 1 COCs
	Analysis Turnaround Time			Sampler:
Phone	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
FAX	TAT if different from Below 3 Weeks			Walk-in Client:
Project Name:	☐ 2 weeks			Lab Sampling:
Site:	☐ 1 week			Job / SDG No.:
P O #	☐ 2 days			
	☐ 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:
IA-MHS-05-20141020-W	10/20/14	1150	C	W	8	N		2	1		2			1	1	1	
IA-CBN-LO-20141020-W	10/20/14	1250	C	W	8	N		2	1		2			1	1	1	2 - containers for pH, SC, Alk, Anions
IA-CV-01-20141020-W	10/20/14	1430	C	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

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 10/20/14	Leidos	10/20/14 1505	Chad Griggs	Windward Env.	10/20/14 1505
Relinquished by: Chad	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Vista CHAIN OF CUSTODY

FOR LABORATORY USE ONLY 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 Company Address City State Zip Ph# Fax#

Relinquished by: (Signature and Printed Name) Melissa Ivancevich Melissa Ivancevich Date: 10/20/14 Time: 1505 Received by: (Signature and Printed Name) Chad Wiggins Chad Wiggins Date: 10/20/14 Time: 1505

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
IA-MHS-05-20141020-W	10/20/14	1150	IAA	4	A	EF		✓								✓		✓			
IA-CBN-60-20141020-W	10/20/14	1250	IAA	4	A	EF		✓								✓		✓			
IA-CV-01-20141020-W	10/20/14	1430	IAA	4	A	EF		✓								✓		✓			

Special Instructions/Comments:_____

SEND DOCUMENTATION AND RESULTS TO:

Name:_____
Company:_____
Address:_____
City:_____ State:_____ Zip:_____
Phone:_____ Fax:_____
Email:_____

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

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

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

Client Contact	Project Manager: Christine Nancarrow	Site Contact: Melissa Ivancevich	Date: 10/22/14	COC No:
Leidos	Tel/Fax: 206.300.2144	Lab Contact: Kris Allen	Carrier: Courier	1 of 1 COCs
18912 N Creek Pkwy, Ste. 101	Analysis Turnaround Time			Sampler:
Bothell, WA 98011	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
425.398.2101 Phone	TAT if different from Below 3 Weeks			Walk-in Client:
425.485.5566 FAX	☐ 2 weeks			Lab Sampling:
Project Name: NPDES Sampling Support	☐ 1 week			Job / SDG No.:
Site: Lower Duwamish Waterway	☐ 2 days			
P O # P010163427	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	SVOCs (Method 8270D)	Metals (Method 200.8/7470A)	pH (Method SM4500H)	Spec Cond (Method 120.1)	Alk/Bicarb/Carb (Method SM2320)	Anions (Method 300.0/353.2)	TOC (Method SM5310B)	DOC (Method SM5310B)	TSS (Method 2540D)	Sample Specific Notes:
IA-MHS-05-20141020-W	10/20/14	1150	C	W	8	N		2	1		2			1	1	1	
IA-CBN-60-20141020-W	10/20/14	1250	C	W	8	N		2	1		2			1	1	1	
IA-CV-01-20141020-W	10/20/14	1430	C	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			

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.: 242404 | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by: Melissa Ivancevich	Leidos	10/21/14 0845		TASEA	10/21/14 0945
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

CHAIN OF CUSTODY

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:_____ (Name)

Invoice to: Name Company Address City State Zip Ph# Fax#

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

Special Instructions/Comments:_____

SEND DOCUMENTATION AND RESULTS TO:

Name:_____
Company:_____
Address:_____
City:_____ State:_____ Zip:_____
Phone:_____ Fax:_____
Email:_____

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

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

Matrix Types: DW = Drinking Water, EF = Effluent, PP = Pulp/Paper,
SD = Sediment, SL = Sludge, SO = Soil, WW = Wastewater, B = Blood/Serum
AQ = Aqueous, O = Other_____

WHITE - ORIGINAL YELLOW - ARCHIVE PINK - COPY

Attachment Q-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: 580-46021-1
Client Project/Site: NPDES Sampling Support
Revision: 1

For:
Leidos, Inc.
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Bothell, Washington 98011

Attn: Christine Nancarrow

Kristine D. Allen

Authorized for release by:
12/12/2014 3:02:28 PM

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Table of Contents

Job ID: 580-46021-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-46021-1

Comments
Report was revised 12-12-14 to include Dissolved Organic Carbon (DOC) QC samples from batch 580-173628 that were not reported in the original report.

No additional comments.

Receipt
The samples were received on 10/21/2014 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 7.3º C.

Except:

The chain of custody lists the analysis 353.2 along with 300.0 for anions analysis. The project is not built to include 353.2. The samples IA-CBN-60-20141020-W (580-46021-2), IA-CV-01-20141020-W (580-46021-3), IA-MHS-05-20141020-W (580-46021-1) are logged in for method 300.0.

The project is built for DOC by method SM5310B such that the samples(IA-CBN-60-20141020-W (580-46021-2), IA-CV-01-20141020-W (580-46021-3), IA-MHS-05-20141020-W (580-46021-1)) should be field filtered. None of the unpreserved containers indicate that they have been filtered in the field. Only one sulfuric preserved container was received for each sample (for TOC). The filtered a portion of the unpreserved samples received for these samples.

The following samples were received at the laboratory outside the required temperature criteria: IA-CBN-60-20141020-W (580-46021-2), IA-CV-01-20141020-W (580-46021-3), IA-MHS-05-20141020-W (580-46021-1). The samples were received at a temperature of 7.3°C.

GC/MS Semi VOA
Method(s) 8270D: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 173335 recovered outside control limits for the following analytes: Benzoic acid and 4-Chloroaniline. The individual LCS/LCSD recoveries were within the control limits.

Method(s) 8270D: The following samples (LCS 580-173335/2-A), (LCSD 580-173335/3-A), (MB 580-173335/1-A), IA-CBN-60-20141020-W (580-46021-2), IA-CV-01-20141020-W (580-46021-3), IA-MHS-05-20141020-W (580-46021-1) were re-extracted/re-analyzed due to Bis(2-ethylhexyl)phthalate contamination in the MB and LCS/LCSD associated with prep batch 173335. Re-extraction/re-analysis was performed within holding time with acceptable results for Bis(2-ethylhexyl) phthalate. The affected analyte was reported from the re-extraction/re-analysis.

Method(s) 8270D: The laboratory control sample (LCS) for prep batch 173952 recovered outside control limits for the following analyte: Bis(2-ethylhexyl)phthalate. The RPD of the LCSD was also outside of control limits. This analyte was biased high in the LCS and was not detected above the RL in the associated samples (LCS 580-173952/2-A), (LCSD 580-173952/3-A), IA-CBN-60-20141020-W (580-46021-2), IA-CV-01-20141020-W (580-46021-3), IA-MHS-05-20141020-W (580-46021-1); therefore, the data have been reported.

Method(s) 8270D: The following sample(s) was diluted due to the nature of the sample matrix: IA-CV-01-20141020-W (580-46021-3). 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.

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

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

Job ID: 580-46021-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

Organic Prep

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

Qualifiers

GC/MS Semi VOA

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

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.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

General Chemistry

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.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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: 580-46021-1

Client Sample ID: IA-MHS-05-20141020-W
Date Collected: 10/20/14 11:50
Date Received: 10/21/14 10:15

Lab Sample ID: 580-46021-1
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		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
1,2-Dichlorobenzene	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
1,3-Dichlorobenzene	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
1,4-Dichlorobenzene	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
1-Methylnaphthalene	ND		0.058	0.029	ug/L		10/21/14 16:09	10/23/14 22:09	1
2,2'-oxybis[1-chloropropane]	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
2,4,5-Trichlorophenol	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
2,4,6-Trichlorophenol	ND		0.58	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
2,4-Dichlorophenol	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
2,4-Dimethylphenol	ND		1.9	0.29	ug/L		10/21/14 16:09	10/23/14 22:09	1
2,4-Dinitrophenol	ND		4.9	0.97	ug/L		10/21/14 16:09	10/23/14 22:09	1
2,4-Dinitrotoluene	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
2,6-Dinitrotoluene	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
2-Chloronaphthalene	ND		0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
2-Chlorophenol	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
2-Methylphenol	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
2-Nitroaniline	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
2-Nitrophenol	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
3 & 4 Methylphenol	**1.0**		0.78	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
3,3'-Dichlorobenzidine	ND		1.9	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
3-Nitroaniline	ND		0.39	0.12	ug/L		10/21/14 16:09	10/23/14 22:09	1
4,6-Dinitro-2-methylphenol	ND		3.9	0.97	ug/L		10/21/14 16:09	10/23/14 22:09	1
4-Bromophenyl phenyl ether	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
4-Chloro-3-methylphenol	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
4-Chloroaniline	ND	*	0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
4-Chlorophenyl phenyl ether	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
4-Nitroaniline	ND		0.58	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
4-Nitrophenol	ND		2.9	0.97	ug/L		10/21/14 16:09	10/23/14 22:09	1
Acenaphthene	ND		0.097	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
Acenaphthylene	ND		0.078	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
Anthracene	ND		0.039	0.0097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Benzo[a]anthracene	ND		0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
Benzo[a]pyrene	ND		0.039	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
Benzo[b]fluoranthene	ND		0.078	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
Benzo[g,h,i]perylene	ND		0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
Benzo[k]fluoranthene	ND		0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
Benzoic acid	**0.89**	**J ***	2.9	0.58	ug/L		10/21/14 16:09	10/23/14 22:09	1
Benzyl alcohol	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Bis(2-chloroethoxy)methane	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Bis(2-chloroethyl)ether	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Butyl benzyl phthalate	**0.24**	**J**	0.58	0.19	ug/L		10/21/14 16:09	10/23/14 22:09	1
Carbazole	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Chrysene	ND		0.039	0.013	ug/L		10/21/14 16:09	10/23/14 22:09	1
Dibenz(a,h)anthracene	ND		0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
Dibenzofuran	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Diethyl phthalate	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Dimethyl phthalate	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Di-n-butyl phthalate	**0.15**	**J**	0.39	0.13	ug/L		10/21/14 16:09	10/23/14 22:09	1

Client Sample ID: IA-MHS-05-20141020-W
Date Collected: 10/20/14 11:50
Date Received: 10/21/14 10:15

Lab Sample ID: 580-46021-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	0.44		0.39	0.17	ug/L		10/21/14 16:09	10/23/14 22:09	1
Fluoranthene	ND		0.049	0.013	ug/L		10/21/14 16:09	10/23/14 22:09	1
Fluorene	ND		0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
Hexachlorobenzene	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Hexachlorobutadiene	ND		0.58	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Hexachlorocyclopentadiene	ND		1.9	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Hexachloroethane	ND		0.58	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Indeno[1,2,3-cd]pyrene	ND		0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
Isophorone	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Naphthalene	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Nitrobenzene	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
N-Nitrosodimethylamine	ND		1.9	0.19	ug/L		10/21/14 16:09	10/23/14 22:09	1
N-Nitrosodi-n-propylamine	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
N-Nitrosodiphenylamine	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Pentachlorophenol	0.21	J	0.68	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Phenanthrene	0.020	J	0.078	0.019	ug/L		10/21/14 16:09	10/23/14 22:09	1
Phenol	0.25	J	0.58	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1
Pyrene	ND		0.058	0.013	ug/L		10/21/14 16:09	10/23/14 22:09	1
2,3,4,6-Tetrachlorophenol	ND		0.68	0.097	ug/L		10/21/14 16:09	10/23/14 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*105*		*44 - 125*	*10/21/14 16:09*	*10/23/14 22:09*	*1*
2-Fluorobiphenyl	*69*		*50 - 120*	*10/21/14 16:09*	*10/23/14 22:09*	*1*
2-Fluorophenol	*71*		*30 - 134*	*10/21/14 16:09*	*10/23/14 22:09*	*1*
Nitrobenzene-d5	*86*		*59 - 120*	*10/21/14 16:09*	*10/23/14 22:09*	*1*
Phenol-d5	*80*		*52 - 120*	*10/21/14 16:09*	*10/23/14 22:09*	*1*
Terphenyl-d14	*109*		*64 - 150*	*10/21/14 16:09*	*10/23/14 22:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	2.8	J *	2.9	1.1	ug/L		10/27/14 10:47	10/29/14 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*120*		*44 - 125*	*10/27/14 10:47*	*10/29/14 19:38*	*1*
2-Fluorobiphenyl	*86*		*50 - 120*	*10/27/14 10:47*	*10/29/14 19:38*	*1*
2-Fluorophenol	*87*		*30 - 134*	*10/27/14 10:47*	*10/29/14 19:38*	*1*
Nitrobenzene-d5	*89*		*59 - 120*	*10/27/14 10:47*	*10/29/14 19:38*	*1*
Phenol-d5	*96*		*52 - 120*	*10/27/14 10:47*	*10/29/14 19:38*	*1*
Terphenyl-d14	*113*		*64 - 150*	*10/27/14 10:47*	*10/29/14 19:38*	*1*

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		10/31/14 10:16	11/03/14 10:40	1
Antimony	0.00055		0.00040	0.000080	mg/L		10/31/14 10:16	11/03/14 10:40	1
Beryllium	ND		0.00040	0.00010	mg/L		10/31/14 10:16	11/03/14 10:40	1
Cadmium	0.000054	J	0.00040	0.000028	mg/L		10/31/14 10:16	11/03/14 10:40	1
Chromium	0.0011		0.00040	0.00027	mg/L		10/31/14 10:16	11/03/14 10:40	1
Copper	0.0074		0.0010	0.00011	mg/L		10/31/14 10:16	11/03/14 10:40	1
Lead	0.0038		0.00040	0.000034	mg/L		10/31/14 10:16	11/03/14 10:40	1
Nickel	0.0017	J	0.0030	0.00040	mg/L		10/31/14 10:16	11/03/14 10:40	1

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

TestAmerica Job ID: 580-46021-1

Client Sample ID: IA-MHS-05-20141020-W
Date Collected: 10/20/14 11:50
Date Received: 10/21/14 10:15

Lab Sample ID: 580-46021-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.0010	0.00071	mg/L		10/31/14 10:16	11/03/14 10:40	1
Silver	ND		0.00040	0.000030	mg/L		10/31/14 10:16	11/03/14 10:40	1
Thallium	ND		0.0010	0.00028	mg/L		10/31/14 10:16	11/03/14 10:40	1
Zinc	**0.047**		0.0040	0.0019	mg/L		10/31/14 10:16	11/03/14 10:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000041	mg/L		10/22/14 17:26	10/23/14 07:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**11**		10	10	umhos/cm			10/24/14 10:38	1
Alkalinity	**5.6**		5.0	5.0	mg/L			10/27/14 13:37	1
Bicarbonate Alkalinity as CaCO3	**5.6**		5.0	5.0	mg/L			10/27/14 13:37	1
Carbonate Alkalinity as CaCO3	ND		5.0	5.0	mg/L			10/27/14 13:37	1
Chloride	**0.34**	**J**	0.90	0.30	mg/L			10/21/14 14:46	1
Nitrate as N	ND		0.90	0.20	mg/L			10/21/14 14:46	1
Sulfate	**0.69**	**J**	1.2	0.40	mg/L			10/21/14 14:46	1
Total Suspended Solids	ND		5.0	5.0	mg/L			10/24/14 17:17	1
pH	**8.44**	**HF**	0.0100	0.0100	SU			10/21/14 12:44	1
Total Organic Carbon	**4.3**		1.0	0.33	mg/L			10/22/14 17:32	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**4.2**		1.0	0.33	mg/L			10/23/14 15:52	1

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

TestAmerica Job ID: 580-46021-1

Client Sample ID: IA-CBN-60-20141020-W
Date Collected: 10/20/14 12:50
Date Received: 10/21/14 10:15

Lab Sample ID: 580-46021-2
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		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
1,2-Dichlorobenzene	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
1,3-Dichlorobenzene	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
1,4-Dichlorobenzene	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
1-Methylnaphthalene	ND		0.058	0.029	ug/L		10/21/14 16:09	10/23/14 22:35	1
2,2'-oxybis[1-chloropropane]	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
2,4,5-Trichlorophenol	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
2,4,6-Trichlorophenol	ND		0.58	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
2,4-Dichlorophenol	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
2,4-Dimethylphenol	ND		1.9	0.29	ug/L		10/21/14 16:09	10/23/14 22:35	1
2,4-Dinitrophenol	ND		4.8	0.96	ug/L		10/21/14 16:09	10/23/14 22:35	1
2,4-Dinitrotoluene	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
2,6-Dinitrotoluene	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
2-Chloronaphthalene	ND		0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
2-Chlorophenol	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
2-Methylphenol	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
2-Nitroaniline	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
2-Nitrophenol	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
3 & 4 Methylphenol	ND		0.77	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
3,3'-Dichlorobenzidine	ND		1.9	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
3-Nitroaniline	ND		0.39	0.12	ug/L		10/21/14 16:09	10/23/14 22:35	1
4,6-Dinitro-2-methylphenol	ND		3.9	0.96	ug/L		10/21/14 16:09	10/23/14 22:35	1
4-Bromophenyl phenyl ether	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
4-Chloro-3-methylphenol	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
4-Chloroaniline	ND	*	0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
4-Chlorophenyl phenyl ether	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
4-Nitroaniline	ND		0.58	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
4-Nitrophenol	ND		2.9	0.96	ug/L		10/21/14 16:09	10/23/14 22:35	1
Acenaphthene	ND		0.096	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
Acenaphthylene	ND		0.077	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
Anthracene	ND		0.039	0.0096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Benzo[a]anthracene	**0.036**	**J**	0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
Benzo[a]pyrene	ND		0.039	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
Benzo[b]fluoranthene	**0.13**		0.077	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
Benzo[g,h,i]perylene	**0.049**	**J**	0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
Benzo[k]fluoranthene	**0.067**		0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
Benzoic acid	**3.3**	*****	2.9	0.58	ug/L		10/21/14 16:09	10/23/14 22:35	1
Benzyl alcohol	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Bis(2-chloroethoxy)methane	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Bis(2-chloroethyl)ether	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Butyl benzyl phthalate	**0.20**	**J**	0.58	0.19	ug/L		10/21/14 16:09	10/23/14 22:35	1
Carbazole	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Chrysene	**0.14**		0.039	0.013	ug/L		10/21/14 16:09	10/23/14 22:35	1
Dibenz(a,h)anthracene	ND		0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
Dibenzofuran	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Diethyl phthalate	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Dimethyl phthalate	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Di-n-butyl phthalate	**0.16**	**J**	0.39	0.13	ug/L		10/21/14 16:09	10/23/14 22:35	1

Client Sample ID: IA-CBN-60-20141020-W
Date Collected: 10/20/14 12:50
Date Received: 10/21/14 10:15

Lab Sample ID: 580-46021-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	0.69		0.39	0.17	ug/L		10/21/14 16:09	10/23/14 22:35	1
Fluoranthene	0.18		0.048	0.013	ug/L		10/21/14 16:09	10/23/14 22:35	1
Fluorene	ND		0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
Hexachlorobenzene	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Hexachlorobutadiene	ND		0.58	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Hexachlorocyclopentadiene	ND		1.9	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Hexachloroethane	ND		0.58	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Indeno[1,2,3-cd]pyrene	0.050	J	0.058	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
Isophorone	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Naphthalene	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Nitrobenzene	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
N-Nitrosodimethylamine	ND		1.9	0.19	ug/L		10/21/14 16:09	10/23/14 22:35	1
N-Nitrosodi-n-propylamine	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
N-Nitrosodiphenylamine	ND		0.39	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Pentachlorophenol	0.28	J	0.68	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Phenanthrene	ND		0.077	0.019	ug/L		10/21/14 16:09	10/23/14 22:35	1
Phenol	ND		0.58	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1
Pyrene	0.13		0.058	0.013	ug/L		10/21/14 16:09	10/23/14 22:35	1
2,3,4,6-Tetrachlorophenol	ND		0.68	0.096	ug/L		10/21/14 16:09	10/23/14 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*117*		*44 - 125*	*10/21/14 16:09*	*10/23/14 22:35*	*1*
2-Fluorobiphenyl	*83*		*50 - 120*	*10/21/14 16:09*	*10/23/14 22:35*	*1*
2-Fluorophenol	*75*		*30 - 134*	*10/21/14 16:09*	*10/23/14 22:35*	*1*
Nitrobenzene-d5	*91*		*59 - 120*	*10/21/14 16:09*	*10/23/14 22:35*	*1*
Phenol-d5	*81*		*52 - 120*	*10/21/14 16:09*	*10/23/14 22:35*	*1*
Terphenyl-d14	*119*		*64 - 150*	*10/21/14 16:09*	*10/23/14 22:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	1.2	J *	2.9	1.1	ug/L		10/27/14 10:47	10/29/14 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*120*		*44 - 125*	*10/27/14 10:47*	*10/29/14 20:01*	*1*
2-Fluorobiphenyl	*89*		*50 - 120*	*10/27/14 10:47*	*10/29/14 20:01*	*1*
2-Fluorophenol	*81*		*30 - 134*	*10/27/14 10:47*	*10/29/14 20:01*	*1*
Nitrobenzene-d5	*94*		*59 - 120*	*10/27/14 10:47*	*10/29/14 20:01*	*1*
Phenol-d5	*97*		*52 - 120*	*10/27/14 10:47*	*10/29/14 20:01*	*1*
Terphenyl-d14	*113*		*64 - 150*	*10/27/14 10:47*	*10/29/14 20:01*	*1*

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		10/31/14 10:16	11/03/14 11:10	1
Antimony	0.00060		0.00040	0.000080	mg/L		10/31/14 10:16	11/03/14 11:10	1
Beryllium	ND		0.00040	0.00010	mg/L		10/31/14 10:16	11/03/14 11:10	1
Cadmium	0.00015	J	0.00040	0.000028	mg/L		10/31/14 10:16	11/03/14 11:10	1
Chromium	0.0013		0.00040	0.00027	mg/L		10/31/14 10:16	11/03/14 11:10	1
Copper	0.021		0.0010	0.00011	mg/L		10/31/14 10:16	11/03/14 11:10	1
Lead	0.011		0.00040	0.000034	mg/L		10/31/14 10:16	11/03/14 11:10	1
Nickel	0.0013	J	0.0030	0.00040	mg/L		10/31/14 10:16	11/03/14 11:10	1

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

TestAmerica Job ID: 580-46021-1

Client Sample ID: IA-CBN-60-20141020-W
Date Collected: 10/20/14 12:50
Date Received: 10/21/14 10:15

Lab Sample ID: 580-46021-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.0010	0.00071	mg/L		10/31/14 10:16	11/03/14 11:10	1
Silver	**0.000059**	**J**	0.00040	0.000030	mg/L		10/31/14 10:16	11/03/14 11:10	1
Thallium	ND		0.0010	0.00028	mg/L		10/31/14 10:16	11/03/14 11:10	1
Zinc	**0.10**		0.0040	0.0019	mg/L		10/31/14 10:16	11/03/14 11:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000041	mg/L		10/22/14 17:26	10/23/14 07:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**39**		10	10	umhos/cm			10/24/14 10:38	1
Alkalinity	**16**		5.0	5.0	mg/L			10/27/14 13:37	1
Bicarbonate Alkalinity as CaCO3	**16**		5.0	5.0	mg/L			10/27/14 13:37	1
Carbonate Alkalinity as CaCO3	ND		5.0	5.0	mg/L			10/27/14 13:37	1
Chloride	**0.67**	**J**	0.90	0.30	mg/L			10/21/14 15:01	1
Nitrate as N	**0.23**	**J**	0.90	0.20	mg/L			10/21/14 15:01	1
Sulfate	**1.3**		1.2	0.40	mg/L			10/21/14 15:01	1
Total Suspended Solids	ND		5.0	5.0	mg/L			10/24/14 17:17	1
pH	**7.86**	**HF**	0.0100	0.0100	SU			10/21/14 12:45	1
Total Organic Carbon	**5.0**		1.0	0.33	mg/L			10/22/14 17:52	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**4.1**		1.0	0.33	mg/L			10/23/14 16:12	1

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

TestAmerica Job ID: 580-46021-1

Client Sample ID: IA-CV-01-20141020-W
Date Collected: 10/20/14 14:30
Date Received: 10/21/14 10:15

Lab Sample ID: 580-46021-3
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		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
1,2-Dichlorobenzene	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
1,3-Dichlorobenzene	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
1,4-Dichlorobenzene	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
1-Methylnaphthalene	ND		0.29	0.15	ug/L		10/21/14 16:09	10/23/14 23:00	5
2,2'-oxybis[1-chloropropane]	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
2,4,5-Trichlorophenol	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
2,4,6-Trichlorophenol	ND		2.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
2,4-Dichlorophenol	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
2,4-Dimethylphenol	ND		9.7	1.5	ug/L		10/21/14 16:09	10/23/14 23:00	5
2,4-Dinitrophenol	ND		24	4.8	ug/L		10/21/14 16:09	10/23/14 23:00	5
2,4-Dinitrotoluene	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
2,6-Dinitrotoluene	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
2-Chloronaphthalene	ND		0.29	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
2-Chlorophenol	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
2-Methylnaphthalene	ND		0.97	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
2-Methylphenol	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
2-Nitroaniline	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
2-Nitrophenol	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
3 & 4 Methylphenol	ND		3.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
3,3'-Dichlorobenzidine	ND		9.7	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
3-Nitroaniline	ND		1.9	0.58	ug/L		10/21/14 16:09	10/23/14 23:00	5
4,6-Dinitro-2-methylphenol	ND		19	4.8	ug/L		10/21/14 16:09	10/23/14 23:00	5
4-Bromophenyl phenyl ether	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
4-Chloro-3-methylphenol	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
4-Chloroaniline	ND	*	1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
4-Chlorophenyl phenyl ether	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
4-Nitroaniline	ND		2.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
4-Nitrophenol	ND		15	4.8	ug/L		10/21/14 16:09	10/23/14 23:00	5
Acenaphthene	ND		0.48	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
Acenaphthylene	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
Anthracene	ND		0.19	0.048	ug/L		10/21/14 16:09	10/23/14 23:00	5
Benzo[a]anthracene	ND		0.29	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
Benzo[a]pyrene	ND		0.19	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
Benzo[b]fluoranthene	**0.15**	**J**	0.39	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
Benzo[g,h,i]perylene	ND		0.29	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
Benzo[k]fluoranthene	ND		0.29	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
Benzoic acid	**3.0**	**J ***	15	2.9	ug/L		10/21/14 16:09	10/23/14 23:00	5
Benzyl alcohol	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Bis(2-chloroethoxy)methane	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Bis(2-chloroethyl)ether	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Butyl benzyl phthalate	ND		2.9	0.97	ug/L		10/21/14 16:09	10/23/14 23:00	5
Carbazole	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Chrysene	**0.18**	**J**	0.19	0.063	ug/L		10/21/14 16:09	10/23/14 23:00	5
Dibenz(a,h)anthracene	ND		0.29	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
Dibenzofuran	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Diethyl phthalate	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Dimethyl phthalate	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Di-n-butyl phthalate	ND		1.9	0.63	ug/L		10/21/14 16:09	10/23/14 23:00	5

Client Sample ID: IA-CV-01-20141020-W
Date Collected: 10/20/14 14:30
Date Received: 10/21/14 10:15

Lab Sample ID: 580-46021-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	0.94	J	1.9	0.87	ug/L		10/21/14 16:09	10/23/14 23:00	5
Fluoranthene	0.21	J	0.24	0.063	ug/L		10/21/14 16:09	10/23/14 23:00	5
Fluorene	ND		0.29	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
Hexachlorobenzene	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Hexachlorobutadiene	ND		2.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Hexachlorocyclopentadiene	ND		9.7	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Hexachloroethane	ND		2.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Indeno[1,2,3-cd]pyrene	ND		0.29	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
Isophorone	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Naphthalene	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Nitrobenzene	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
N-Nitrosodimethylamine	ND		9.7	0.97	ug/L		10/21/14 16:09	10/23/14 23:00	5
N-Nitrosodi-n-propylamine	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
N-Nitrosodiphenylamine	ND		1.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Pentachlorophenol	0.88	J	3.4	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Phenanthrene	ND		0.39	0.097	ug/L		10/21/14 16:09	10/23/14 23:00	5
Phenol	ND		2.9	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5
Pyrene	0.16	J	0.29	0.063	ug/L		10/21/14 16:09	10/23/14 23:00	5
2,3,4,6-Tetrachlorophenol	ND		3.4	0.48	ug/L		10/21/14 16:09	10/23/14 23:00	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*124*		*44 - 125*	*10/21/14 16:09*	*10/23/14 23:00*	*5*
2-Fluorobiphenyl	*86*		*50 - 120*	*10/21/14 16:09*	*10/23/14 23:00*	*5*
2-Fluorophenol	*72*		*30 - 134*	*10/21/14 16:09*	*10/23/14 23:00*	*5*
Nitrobenzene-d5	*93*		*59 - 120*	*10/21/14 16:09*	*10/23/14 23:00*	*5*
Phenol-d5	*87*		*52 - 120*	*10/21/14 16:09*	*10/23/14 23:00*	*5*
Terphenyl-d14	*111*		*64 - 150*	*10/21/14 16:09*	*10/23/14 23:00*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	11	J *	15	5.7	ug/L		10/27/14 10:47	10/29/14 20:25	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*112*		*44 - 125*	*10/27/14 10:47*	*10/29/14 20:25*	*5*
2-Fluorobiphenyl	*83*		*50 - 120*	*10/27/14 10:47*	*10/29/14 20:25*	*5*
2-Fluorophenol	*71*		*30 - 134*	*10/27/14 10:47*	*10/29/14 20:25*	*5*
Nitrobenzene-d5	*86*		*59 - 120*	*10/27/14 10:47*	*10/29/14 20:25*	*5*
Phenol-d5	*74*		*52 - 120*	*10/27/14 10:47*	*10/29/14 20:25*	*5*
Terphenyl-d14	*96*		*64 - 150*	*10/27/14 10:47*	*10/29/14 20:25*	*5*

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		10/31/14 10:16	11/03/14 11:13	1
Antimony	0.0010		0.00040	0.000080	mg/L		10/31/14 10:16	11/03/14 11:13	1
Beryllium	ND		0.00040	0.00010	mg/L		10/31/14 10:16	11/03/14 11:13	1
Cadmium	0.00014	J	0.00040	0.000028	mg/L		10/31/14 10:16	11/03/14 11:13	1
Chromium	0.0017		0.00040	0.00027	mg/L		10/31/14 10:16	11/03/14 11:13	1
Copper	0.0098		0.0010	0.00011	mg/L		10/31/14 10:16	11/03/14 11:13	1
Lead	0.018		0.00040	0.000034	mg/L		10/31/14 10:16	11/03/14 11:13	1
Nickel	0.0015	J	0.0030	0.00040	mg/L		10/31/14 10:16	11/03/14 11:13	1

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

TestAmerica Job ID: 580-46021-1

Client Sample ID: IA-CV-01-20141020-W
Date Collected: 10/20/14 14:30
Date Received: 10/21/14 10:15

Lab Sample ID: 580-46021-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.0010	0.00071	mg/L		10/31/14 10:16	11/03/14 11:13	1
Silver	**0.000051**	**J**	0.00040	0.000030	mg/L		10/31/14 10:16	11/03/14 11:13	1
Thallium	ND		0.0010	0.00028	mg/L		10/31/14 10:16	11/03/14 11:13	1
Zinc	**0.067**		0.0040	0.0019	mg/L		10/31/14 10:16	11/03/14 11:13	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000041	mg/L		10/22/14 17:26	10/23/14 07:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**35**		10	10	umhos/cm			10/24/14 10:38	1
Alkalinity	**13**		5.0	5.0	mg/L			10/27/14 13:38	1
Bicarbonate Alkalinity as CaCO3	**13**		5.0	5.0	mg/L			10/27/14 13:38	1
Carbonate Alkalinity as CaCO3	ND		5.0	5.0	mg/L			10/27/14 13:38	1
Chloride	**2.1**		0.90	0.30	mg/L			10/21/14 15:44	1
Nitrate as N	ND		0.90	0.20	mg/L			10/21/14 15:44	1
Sulfate	**1.3**		1.2	0.40	mg/L			10/21/14 15:44	1
Total Suspended Solids	**6.5**		5.0	5.0	mg/L			10/24/14 17:17	1
pH	**8.21**	**HF**	0.0100	0.0100	SU			10/21/14 12:47	1
Total Organic Carbon	**6.2**		1.0	0.33	mg/L			10/22/14 18:12	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**4.2**		1.0	0.33	mg/L			10/23/14 16:31	1

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

Lab Sample ID: MB 580-173335/1-A
Matrix: Water
Analysis Batch: 173639

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
1,2-Dichlorobenzene	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
1,3-Dichlorobenzene	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
1,4-Dichlorobenzene	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
1-Methylnaphthalene	ND		0.060	0.030	ug/L		10/21/14 11:07	10/23/14 17:57	1
2,2'-oxybis[1-chloropropane]	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
2,4,5-Trichlorophenol	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
2,4,6-Trichlorophenol	ND		0.60	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
2,4-Dichlorophenol	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
2,4-Dimethylphenol	ND		2.0	0.30	ug/L		10/21/14 11:07	10/23/14 17:57	1
2,4-Dinitrophenol	ND		5.0	1.0	ug/L		10/21/14 11:07	10/23/14 17:57	1
2,4-Dinitrotoluene	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
2,6-Dinitrotoluene	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
2-Chloronaphthalene	ND		0.060	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
2-Chlorophenol	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
2-Methylphenol	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
2-Nitroaniline	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
2-Nitrophenol	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
3 & 4 Methylphenol	ND		0.80	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
3,3'-Dichlorobenzidine	ND		2.0	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
3-Nitroaniline	ND		0.40	0.12	ug/L		10/21/14 11:07	10/23/14 17:57	1
4,6-Dinitro-2-methylphenol	ND		4.0	1.0	ug/L		10/21/14 11:07	10/23/14 17:57	1
4-Bromophenyl phenyl ether	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
4-Chloro-3-methylphenol	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
4-Chloroaniline	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
4-Chlorophenyl phenyl ether	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
4-Nitroaniline	ND		0.60	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
4-Nitrophenol	ND		3.0	1.0	ug/L		10/21/14 11:07	10/23/14 17:57	1
Acenaphthene	ND		0.10	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
Acenaphthylene	ND		0.080	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
Anthracene	ND		0.040	0.010	ug/L		10/21/14 11:07	10/23/14 17:57	1
Benzo[a]anthracene	ND		0.060	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
Benzo[a]pyrene	ND		0.040	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
Benzo[b]fluoranthene	ND		0.080	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
Benzo[g,h,i]perylene	ND		0.060	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
Benzo[k]fluoranthene	ND		0.060	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
Benzoic acid	ND		3.0	0.60	ug/L		10/21/14 11:07	10/23/14 17:57	1
Benzyl alcohol	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Bis(2-chloroethoxy)methane	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Bis(2-chloroethyl)ether	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Butyl benzyl phthalate	ND		0.60	0.20	ug/L		10/21/14 11:07	10/23/14 17:57	1
Carbazole	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Chrysene	ND		0.040	0.013	ug/L		10/21/14 11:07	10/23/14 17:57	1
Dibenz(a,h)anthracene	ND		0.060	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
Dibenzofuran	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Diethyl phthalate	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Dimethyl phthalate	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1

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

Lab Sample ID: MB 580-173335/1-A
Matrix: Water
Analysis Batch: 173639

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		0.40	0.13	ug/L		10/21/14 11:07	10/23/14 17:57	1
Di-n-octyl phthalate	ND		0.40	0.18	ug/L		10/21/14 11:07	10/23/14 17:57	1
Fluoranthene	ND		0.050	0.013	ug/L		10/21/14 11:07	10/23/14 17:57	1
Fluorene	ND		0.060	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
Hexachlorobenzene	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Hexachlorobutadiene	ND		0.60	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Hexachlorocyclopentadiene	ND		2.0	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Hexachloroethane	ND		0.60	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Indeno[1,2,3-cd]pyrene	ND		0.060	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
Isophorone	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Naphthalene	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Nitrobenzene	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
N-Nitrosodimethylamine	ND		2.0	0.20	ug/L		10/21/14 11:07	10/23/14 17:57	1
N-Nitrosodi-n-propylamine	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
N-Nitrosodiphenylamine	ND		0.40	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Pentachlorophenol	ND		0.70	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Phenanthrene	ND		0.080	0.020	ug/L		10/21/14 11:07	10/23/14 17:57	1
Phenol	ND		0.60	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1
Pyrene	ND		0.060	0.013	ug/L		10/21/14 11:07	10/23/14 17:57	1
2,3,4,6-Tetrachlorophenol	ND		0.70	0.10	ug/L		10/21/14 11:07	10/23/14 17:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*89*		*44 - 125*	*10/21/14 11:07*	*10/23/14 17:57*	*1*
2-Fluorobiphenyl	*72*		*50 - 120*	*10/21/14 11:07*	*10/23/14 17:57*	*1*
2-Fluorophenol	*61*		*30 - 134*	*10/21/14 11:07*	*10/23/14 17:57*	*1*
Nitrobenzene-d5	*75*		*59 - 120*	*10/21/14 11:07*	*10/23/14 17:57*	*1*
Phenol-d5	*71*		*52 - 120*	*10/21/14 11:07*	*10/23/14 17:57*	*1*
Terphenyl-d14	*104*		*64 - 150*	*10/21/14 11:07*	*10/23/14 17:57*	*1*

Lab Sample ID: LCS 580-173335/2-A
Matrix: Water
Analysis Batch: 173639

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	2.00	1.30		ug/L		65	40 - 125
1,2-Dichlorobenzene	2.00	1.10		ug/L		55	44 - 125
1,3-Dichlorobenzene	2.00	1.08		ug/L		54	40 - 125
1,4-Dichlorobenzene	2.00	1.12		ug/L		56	40 - 125
1-Methylnaphthalene	2.00	1.46		ug/L		73	54 - 125
2,2'-oxybis[1-chloropropane]	2.00	1.33		ug/L		66	44 - 130
2,4,5-Trichlorophenol	2.00	1.74		ug/L		87	66 - 130
2,4,6-Trichlorophenol	2.00	1.63		ug/L		81	55 - 140
2,4-Dichlorophenol	2.00	1.78		ug/L		89	50 - 140
2,4-Dimethylphenol	2.00	1.39	J	ug/L		69	30 - 135
2,4-Dinitrophenol	4.00	2.88	J	ug/L		72	24 - 146
2,4-Dinitrotoluene	2.00	1.76		ug/L		88	73 - 126
2,6-Dinitrotoluene	2.00	1.77		ug/L		89	67 - 134
2-Chloronaphthalene	2.00	1.39		ug/L		69	55 - 125

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

Lab Sample ID: LCS 580-173335/2-A
Matrix: Water
Analysis Batch: 173639

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorophenol	2.00	1.50		ug/L		75	57 - 125
2-Methylnaphthalene	2.00	1.36		ug/L		68	56 - 125
2-Methylphenol	2.00	1.52		ug/L		76	60 - 130
2-Nitroaniline	2.00	1.71		ug/L		86	52 - 140
2-Nitrophenol	2.00	1.82		ug/L		91	55 - 140
3 & 4 Methylphenol	2.00	1.74		ug/L		87	60 - 130
3,3'-Dichlorobenzidine	4.00	2.76		ug/L		69	20 - 175
3-Nitroaniline	2.00	1.28		ug/L		64	22 - 124
4,6-Dinitro-2-methylphenol	4.00	3.61	J	ug/L		90	50 - 136
4-Bromophenyl phenyl ether	2.00	1.92		ug/L		96	62 - 132
4-Chloro-3-methylphenol	2.00	1.81		ug/L		91	65 - 145
4-Chloroaniline	2.00	0.586		ug/L		29	20 - 150
4-Chlorophenyl phenyl ether	2.00	1.73		ug/L		87	59 - 125
4-Nitroaniline	2.00	1.48		ug/L		74	49 - 125
4-Nitrophenol	4.00	4.25		ug/L		106	35 - 153
Acenaphthene	2.00	1.55		ug/L		78	63 - 125
Acenaphthylene	2.00	1.67		ug/L		84	62 - 125
Anthracene	2.00	1.62		ug/L		81	50 - 125
Benzo[a]anthracene	2.00	1.72		ug/L		86	65 - 125
Benzo[a]pyrene	2.00	1.58		ug/L		79	45 - 125
Benzo[b]fluoranthene	2.00	1.71		ug/L		85	70 - 129
Benzo[g,h,i]perylene	2.00	1.60		ug/L		80	65 - 153
Benzo[k]fluoranthene	2.00	1.55		ug/L		78	70 - 123
Benzoic acid	4.00	3.47		ug/L		87	20 - 144
Benzyl alcohol	2.00	1.66		ug/L		83	41 - 144
Bis(2-chloroethoxy)methane	2.00	1.67		ug/L		83	59 - 125
Bis(2-chloroethyl)ether	2.00	1.47		ug/L		73	55 - 125
Butyl benzyl phthalate	2.00	1.98		ug/L		99	60 - 167
Carbazole	2.00	1.77		ug/L		89	75 - 142
Chrysene	2.00	1.72		ug/L		86	70 - 125
Dibenz(a,h)anthracene	2.00	1.72		ug/L		86	69 - 154
Dibenzofuran	2.00	1.60		ug/L		80	60 - 125
Diethyl phthalate	2.00	1.89		ug/L		95	60 - 150
Dimethyl phthalate	2.00	1.82		ug/L		91	65 - 155
Di-n-butyl phthalate	2.00	2.02		ug/L		101	55 - 167
Di-n-octyl phthalate	2.00	1.62		ug/L		81	55 - 150
Fluoranthene	2.00	1.93		ug/L		97	70 - 145
Fluorene	2.00	1.79		ug/L		90	69 - 125
Hexachlorobenzene	2.00	1.73		ug/L		86	61 - 125
Hexachlorobutadiene	2.00	1.26		ug/L		63	25 - 125
Hexachlorocyclopentadiene	2.00	1.15	J	ug/L		57	20 - 125
Hexachloroethane	2.00	1.08		ug/L		54	30 - 125
Indeno[1,2,3-cd]pyrene	2.00	1.71		ug/L		86	70 - 136
Isophorone	2.00	1.83		ug/L		92	64 - 125
Naphthalene	2.00	1.41		ug/L		70	56 - 125
Nitrobenzene	2.00	1.64		ug/L		82	62 - 125
N-Nitrosodimethylamine	2.00	1.65	J	ug/L		83	33 - 143
N-Nitrosodi-n-propylamine	2.00	1.66		ug/L		83	60 - 120

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

Lab Sample ID: LCS 580-173335/2-A
Matrix: Water
Analysis Batch: 173639

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodiphenylamine	1.99	1.67		ug/L		84	40 - 135
Pentachlorophenol	4.00	2.65		ug/L		66	20 - 145
Phenanthrene	2.00	1.69		ug/L		84	70 - 125
Phenol	2.00	1.55		ug/L		78	53 - 130
Pyrene	2.00	1.77		ug/L		88	70 - 133
2,3,4,6-Tetrachlorophenol	2.00	1.81		ug/L		91	60 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*102*		*44 - 125*
2-Fluorobiphenyl	*77*		*50 - 120*
2-Fluorophenol	*69*		*30 - 134*
Nitrobenzene-d5	*88*		*59 - 120*
Phenol-d5	*78*		*52 - 120*
Terphenyl-d14	*105*		*64 - 150*

Lab Sample ID: LCSD 580-173335/3-A
Matrix: Water
Analysis Batch: 173639

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173335

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	2.00	1.25		ug/L		62	40 - 125	4	20
1,2-Dichlorobenzene	2.00	1.18		ug/L		59	44 - 125	7	20
1,3-Dichlorobenzene	2.00	1.15		ug/L		58	40 - 125	7	20
1,4-Dichlorobenzene	2.00	1.17		ug/L		59	40 - 125	5	20
1-Methylnaphthalene	2.00	1.45		ug/L		73	54 - 125	1	20
2,2'-oxybis[1-chloropropane]	2.00	1.39		ug/L		70	44 - 130	4	20
2,4,5-Trichlorophenol	2.00	1.65		ug/L		82	66 - 130	5	20
2,4,6-Trichlorophenol	2.00	1.77		ug/L		88	55 - 140	8	20
2,4-Dichlorophenol	2.00	1.68		ug/L		84	50 - 140	6	20
2,4-Dimethylphenol	2.00	1.29	J	ug/L		65	30 - 135	7	20
2,4-Dinitrophenol	4.00	2.78	J	ug/L		69	24 - 146	4	20
2,4-Dinitrotoluene	2.00	1.75		ug/L		88	73 - 126	1	20
2,6-Dinitrotoluene	2.00	1.71		ug/L		85	67 - 134	4	20
2-Chloronaphthalene	2.00	1.44		ug/L		72	55 - 125	4	20
2-Chlorophenol	2.00	1.57		ug/L		79	57 - 125	5	20
2-Methylnaphthalene	2.00	1.37		ug/L		69	56 - 125	1	20
2-Methylphenol	2.00	1.65		ug/L		82	60 - 130	8	20
2-Nitroaniline	2.00	1.69		ug/L		85	52 - 140	1	20
2-Nitrophenol	2.00	1.70		ug/L		85	55 - 140	7	20
3 & 4 Methylphenol	2.00	1.73		ug/L		87	60 - 130	0	20
3,3'-Dichlorobenzidine	4.00	3.23		ug/L		81	20 - 175	16	20
3-Nitroaniline	2.00	1.41		ug/L		70	22 - 124	10	20
4,6-Dinitro-2-methylphenol	4.00	3.14	J	ug/L		79	50 - 136	14	20
4-Bromophenyl phenyl ether	2.00	1.89		ug/L		95	62 - 132	2	20
4-Chloro-3-methylphenol	2.00	1.74		ug/L		87	65 - 145	4	20
4-Chloroaniline	2.00	1.00	*	ug/L		50	20 - 150	52	20
4-Chlorophenyl phenyl ether	2.00	1.79		ug/L		89	59 - 125	3	20
4-Nitroaniline	2.00	1.52		ug/L		76	49 - 125	3	20

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

Lab Sample ID: LCSD 580-173335/3-A
Matrix: Water
Analysis Batch: 173639

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173335

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol	4.00	3.99		ug/L		100	35 - 153	6	20
Acenaphthene	2.00	1.50		ug/L		75	63 - 125	3	20
Acenaphthylene	2.00	1.70		ug/L		85	62 - 125	2	20
Anthracene	2.00	1.58		ug/L		79	50 - 125	3	20
Benzo[a]anthracene	2.00	1.71		ug/L		85	65 - 125	1	20
Benzo[a]pyrene	2.00	1.65		ug/L		83	45 - 125	5	20
Benzo[b]fluoranthene	2.00	1.85		ug/L		92	70 - 129	8	20
Benzo[g,h,i]perylene	2.00	1.66		ug/L		83	65 - 153	3	20
Benzo[k]fluoranthene	2.00	1.47		ug/L		73	70 - 123	6	20
Benzoic acid	4.00	2.03	J *	ug/L		51	20 - 144	52	20
Benzyl alcohol	2.00	1.86		ug/L		93	41 - 144	11	20
Bis(2-chloroethoxy)methane	2.00	1.60		ug/L		80	59 - 125	4	20
Bis(2-chloroethyl)ether	2.00	1.47		ug/L		74	55 - 125	0	20
Butyl benzyl phthalate	2.00	1.97		ug/L		98	60 - 167	1	20
Carbazole	2.00	1.77		ug/L		88	75 - 142	0	20
Chrysene	2.00	1.78		ug/L		89	70 - 125	4	20
Dibenz(a,h)anthracene	2.00	1.73		ug/L		86	69 - 154	1	20
Dibenzofuran	2.00	1.59		ug/L		79	60 - 125	1	20
Diethyl phthalate	2.00	1.87		ug/L		94	60 - 150	1	20
Dimethyl phthalate	2.00	1.83		ug/L		91	65 - 155	0	20
Di-n-butyl phthalate	2.00	1.91		ug/L		95	55 - 167	6	20
Di-n-octyl phthalate	2.00	1.66		ug/L		83	55 - 150	3	20
Fluoranthene	2.00	1.87		ug/L		94	70 - 145	3	20
Fluorene	2.00	1.73		ug/L		86	69 - 125	4	20
Hexachlorobenzene	2.00	1.79		ug/L		90	61 - 125	4	20
Hexachlorobutadiene	2.00	1.25		ug/L		63	25 - 125	0	20
Hexachlorocyclopentadiene	2.00	1.23	J	ug/L		62	20 - 125	7	20
Hexachloroethane	2.00	1.12		ug/L		56	30 - 125	4	20
Indeno[1,2,3-cd]pyrene	2.00	1.66		ug/L		83	70 - 136	3	20
Isophorone	2.00	1.74		ug/L		87	64 - 125	5	20
Naphthalene	2.00	1.42		ug/L		71	56 - 125	1	20
Nitrobenzene	2.00	1.57		ug/L		79	62 - 125	4	20
N-Nitrosodimethylamine	2.00	1.50	J	ug/L		75	33 - 143	10	20
N-Nitrosodi-n-propylamine	2.00	1.61		ug/L		81	60 - 120	3	20
N-Nitrosodiphenylamine	1.99	1.65		ug/L		83	40 - 135	1	20
Pentachlorophenol	4.00	2.64		ug/L		66	20 - 145	1	20
Phenanthrene	2.00	1.64		ug/L		82	70 - 125	3	20
Phenol	2.00	1.60		ug/L		80	53 - 130	3	20
Pyrene	2.00	1.75		ug/L		88	70 - 133	1	20
2,3,4,6-Tetrachlorophenol	2.00	1.82		ug/L		91	60 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*105*		*44 - 125*
2-Fluorobiphenyl	*79*		*50 - 120*
2-Fluorophenol	*74*		*30 - 134*
Nitrobenzene-d5	*86*		*59 - 120*
Phenol-d5	*82*		*52 - 120*
Terphenyl-d14	*103*		*64 - 150*

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

Lab Sample ID: MB 580-173952/1-A
Matrix: Water
Analysis Batch: 174218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		3.0	1.2	ug/L		10/27/14 10:47	10/29/14 18:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*44 - 125*	*10/27/14 10:47*	*10/29/14 18:03*	*1*
2-Fluorobiphenyl	*78*		*50 - 120*	*10/27/14 10:47*	*10/29/14 18:03*	*1*
2-Fluorophenol	*65*		*30 - 134*	*10/27/14 10:47*	*10/29/14 18:03*	*1*
Nitrobenzene-d5	*73*		*59 - 120*	*10/27/14 10:47*	*10/29/14 18:03*	*1*
Phenol-d5	*75*		*52 - 120*	*10/27/14 10:47*	*10/29/14 18:03*	*1*
Terphenyl-d14	*92*		*64 - 150*	*10/27/14 10:47*	*10/29/14 18:03*	*1*

Lab Sample ID: LCS 580-173952/2-A
Matrix: Water
Analysis Batch: 174218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173952

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Bis(2-ethylhexyl) phthalate			2.00	4.09	*	ug/L		205	70 - 185		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*108*		*44 - 125*
2-Fluorobiphenyl	*82*		*50 - 120*
2-Fluorophenol	*83*		*30 - 134*
Nitrobenzene-d5	*93*		*59 - 120*
Phenol-d5	*92*		*52 - 120*
Terphenyl-d14	*101*		*64 - 150*

Lab Sample ID: LCSD 580-173952/3-A
Matrix: Water
Analysis Batch: 174218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 173952

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate			2.00	1.81	J *	ug/L		91	70 - 185	77	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*105*		*44 - 125*
2-Fluorobiphenyl	*78*		*50 - 120*
2-Fluorophenol	*79*		*30 - 134*
Nitrobenzene-d5	*84*		*59 - 120*
Phenol-d5	*84*		*52 - 120*
Terphenyl-d14	*96*		*64 - 150*

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-174459/13-A
Matrix: Water
Analysis Batch: 174675

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 174459

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010	0.00075	mg/L		10/31/14 10:16	11/03/14 10:33	1
Antimony	ND		0.00040	0.000080	mg/L		10/31/14 10:16	11/03/14 10:33	1
Beryllium	ND		0.00040	0.00010	mg/L		10/31/14 10:16	11/03/14 10:33	1
Cadmium	ND		0.00040	0.000028	mg/L		10/31/14 10:16	11/03/14 10:33	1
Chromium	ND		0.00040	0.00027	mg/L		10/31/14 10:16	11/03/14 10:33	1
Copper	ND		0.0010	0.00011	mg/L		10/31/14 10:16	11/03/14 10:33	1
Lead	ND		0.00040	0.000034	mg/L		10/31/14 10:16	11/03/14 10:33	1
Nickel	ND		0.0030	0.00040	mg/L		10/31/14 10:16	11/03/14 10:33	1
Selenium	ND		0.0010	0.00071	mg/L		10/31/14 10:16	11/03/14 10:33	1
Silver	ND		0.00040	0.000030	mg/L		10/31/14 10:16	11/03/14 10:33	1
Thallium	ND		0.0010	0.00028	mg/L		10/31/14 10:16	11/03/14 10:33	1
Zinc	ND		0.0040	0.0019	mg/L		10/31/14 10:16	11/03/14 10:33	1

Lab Sample ID: LCS 580-174459/14-A
Matrix: Water
Analysis Batch: 174675

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 174459

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.100		mg/L		100	80 - 120
Antimony	0.100	0.105		mg/L		105	80 - 120
Beryllium	0.100	0.0987		mg/L		99	80 - 120
Cadmium	0.100	0.103		mg/L		103	80 - 120
Chromium	0.100	0.0966		mg/L		97	80 - 120
Copper	0.100	0.0970		mg/L		97	80 - 120
Lead	0.100	0.100		mg/L		100	80 - 120
Nickel	0.100	0.0995		mg/L		99	80 - 120
Selenium	0.100	0.0998		mg/L		100	80 - 120
Silver	0.100	0.0985		mg/L		99	80 - 120
Thallium	0.100	0.0993		mg/L		99	80 - 120
Zinc	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: LCSD 580-174459/15-A
Matrix: Water
Analysis Batch: 174675

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 174459

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.100	0.0990		mg/L		99	80 - 120	1	20
Antimony	0.100	0.103		mg/L		103	80 - 120	1	20
Beryllium	0.100	0.0976		mg/L		98	80 - 120	1	20
Cadmium	0.100	0.103		mg/L		103	80 - 120	1	20
Chromium	0.100	0.0959		mg/L		96	80 - 120	1	20
Copper	0.100	0.0966		mg/L		97	80 - 120	0	20
Lead	0.100	0.0988		mg/L		99	80 - 120	1	20
Nickel	0.100	0.0982		mg/L		98	80 - 120	1	20
Selenium	0.100	0.0995		mg/L		100	80 - 120	0	20
Silver	0.100	0.0985		mg/L		99	80 - 120	0	20
Thallium	0.100	0.0985		mg/L		98	80 - 120	1	20
Zinc	0.100	0.105		mg/L		105	80 - 120	1	20

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

Lab Sample ID: 580-46021-1 MS
Matrix: Water
Analysis Batch: 174675

Client Sample ID: IA-MHS-05-20141020-W
Prep Type: Total/NA
Prep Batch: 174459

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.100	0.102		mg/L		102	80 - 120
Antimony	0.00055		0.100	0.106		mg/L		106	80 - 120
Beryllium	ND		0.100	0.102		mg/L		102	80 - 120
Cadmium	0.000054	J	0.100	0.105		mg/L		105	80 - 120
Chromium	0.0011		0.100	0.103		mg/L		102	80 - 120
Copper	0.0074		0.100	0.106		mg/L		99	80 - 120
Lead	0.0038		0.100	0.107		mg/L		103	80 - 120
Nickel	0.0017	J	0.100	0.103		mg/L		101	80 - 120
Selenium	ND		0.100	0.101		mg/L		101	80 - 120
Silver	ND		0.100	0.102		mg/L		102	80 - 120
Thallium	ND		0.100	0.103		mg/L		103	80 - 120
Zinc	0.047		0.100	0.147		mg/L		99	80 - 120

Lab Sample ID: 580-46021-1 MSD
Matrix: Water
Analysis Batch: 174675

Client Sample ID: IA-MHS-05-20141020-W
Prep Type: Total/NA
Prep Batch: 174459

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.100	0.0991		mg/L		99	80 - 120	3	20
Antimony	0.00055		0.100	0.104		mg/L		103	80 - 120	2	20
Beryllium	ND		0.100	0.0991		mg/L		99	80 - 120	3	20
Cadmium	0.000054	J	0.100	0.102		mg/L		101	80 - 120	3	20
Chromium	0.0011		0.100	0.101		mg/L		100	80 - 120	1	20
Copper	0.0074		0.100	0.105		mg/L		97	80 - 120	1	20
Lead	0.0038		0.100	0.104		mg/L		100	80 - 120	3	20
Nickel	0.0017	J	0.100	0.0996		mg/L		98	80 - 120	3	20
Selenium	ND		0.100	0.0992		mg/L		99	80 - 120	2	20
Silver	ND		0.100	0.0979		mg/L		98	80 - 120	4	20
Thallium	ND		0.100	0.102		mg/L		102	80 - 120	1	20
Zinc	0.047		0.100	0.149		mg/L		101	80 - 120	1	20

Lab Sample ID: 580-46021-1 DU
Matrix: Water
Analysis Batch: 174675

Client Sample ID: IA-MHS-05-20141020-W
Prep Type: Total/NA
Prep Batch: 174459

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	ND		ND		mg/L		NC	20
Antimony	0.00055		0.000614		mg/L		10	20
Beryllium	ND		ND		mg/L		NC	20
Cadmium	0.000054	J	0.0000421	J F5	mg/L		24	20
Chromium	0.0011		0.00115		mg/L		8	20
Copper	0.0074		0.00781		mg/L		6	20
Lead	0.0038		0.00382		mg/L		1	20
Nickel	0.0017	J	0.00171	J	mg/L		0.6	20
Selenium	ND		ND		mg/L		NC	20
Silver	ND		ND		mg/L		NC	20
Thallium	ND		ND		mg/L		NC	20
Zinc	0.047		0.0493		mg/L		4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-173545/20-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173588 — **Prep Batch: 173545**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000041	mg/L		10/22/14 17:26	10/23/14 07:26	1

Lab Sample ID: LCS 580-173545/21-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173588 — **Prep Batch: 173545**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00198		mg/L		99	80 - 120

Lab Sample ID: LCSD 580-173545/22-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173588 — **Prep Batch: 173545**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00200	0.00196		mg/L		98	80 - 120	1	20

Lab Sample ID: LCSSRM 580-173545/23-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173588 — **Prep Batch: 173545**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00202		mg/L		101	75 - 125

Lab Sample ID: 580-46021-3 MS — **Client Sample ID: IA-CV-01-20141020-W**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173588 — **Prep Batch: 173545**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00200	0.00187		mg/L		94	80 - 120

Lab Sample ID: 580-46021-3 MSD — **Client Sample ID: IA-CV-01-20141020-W**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173588 — **Prep Batch: 173545**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00200	0.00189		mg/L		95	80 - 120	1	20

Lab Sample ID: 580-46021-3 DU — **Client Sample ID: IA-CV-01-20141020-W**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 173588 — **Prep Batch: 173545**

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

Method: 120.1 - Conductivity, Specific Conductance

Lab Sample ID: MB 580-173764/1
Matrix: Water
Analysis Batch: 173764

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		10	10	umhos/cm			10/24/14 10:38	1

Lab Sample ID: LCS 580-173764/2
Matrix: Water
Analysis Batch: 173764

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	100	106		umhos/cm		106	90 - 110

Method: 2320B - Alkalinity - Titrimetric

Lab Sample ID: LCS 580-173976/2
Matrix: Water
Analysis Batch: 173976

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

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-173430/1
Matrix: Water
Analysis Batch: 173430

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			10/21/14 09:04	1

Lab Sample ID: LCS 580-173430/2
Matrix: Water
Analysis Batch: 173430

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	1.91		mg/L		106	90 - 110

Lab Sample ID: LCSD 580-173430/3
Matrix: Water
Analysis Batch: 173430

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	1.91		mg/L		106	90 - 110	0	15

Lab Sample ID: 580-46021-2 MS
Matrix: Water
Analysis Batch: 173430

Client Sample ID: IA-CBN-60-20141020-W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.23	J	1.80	2.13		mg/L		106	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-46021-2 DU
Matrix: Water
Analysis Batch: 173430

Client Sample ID: IA-CBN-60-20141020-W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	0.23	J	0.230	J	mg/L		0	10

Lab Sample ID: MB 580-173431/7
Matrix: Water
Analysis Batch: 173431

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.90	0.30	mg/L			10/21/14 09:04	1
Sulfate	ND		1.2	0.40	mg/L			10/21/14 09:04	1

Lab Sample ID: LCS 580-173431/8
Matrix: Water
Analysis Batch: 173431

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	9.71		mg/L		108	90 - 110
Sulfate	12.0	12.0		mg/L		100	90 - 110

Lab Sample ID: LCSD 580-173431/9
Matrix: Water
Analysis Batch: 173431

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	9.72		mg/L		108	90 - 110	0	15
Sulfate	12.0	11.8		mg/L		99	90 - 110	2	15

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

Lab Sample ID: MB 580-173840/1
Matrix: Water
Analysis Batch: 173840

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		2.0	2.0	mg/L			10/24/14 17:17	1

Lab Sample ID: LCS 580-173840/2
Matrix: Water
Analysis Batch: 173840

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	22.8		mg/L		76	70.6 - 120

Lab Sample ID: 580-46021-2 DU
Matrix: Water
Analysis Batch: 173840

Client Sample ID: IA-CBN-60-20141020-W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	ND		ND		mg/L		NC	20

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

TestAmerica Job ID: 580-46021-1

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

Lab Sample ID: MB 580-173497/1
Matrix: Water
Analysis Batch: 173497

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.33	mg/L			10/22/14 13:00	1

Lab Sample ID: LCS 580-173497/2
Matrix: Water
Analysis Batch: 173497

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	14.8		mg/L		99	85 - 115

Lab Sample ID: MB 580-173628/1
Matrix: Water
Analysis Batch: 173628

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.33	mg/L			10/23/14 13:30	1

Lab Sample ID: LCS 580-173628/2
Matrix: Water
Analysis Batch: 173628

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	15.0		mg/L		100	85 - 115

Lab Chronicle

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

TestAmerica Job ID: 580-46021-1

Client Sample ID: IA-MHS-05-20141020-W

Lab Sample ID: 580-46021-1

Date Collected: 10/20/14 11:50

Matrix: Water

Date Received: 10/21/14 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C	RE		173952	10/27/14 10:47	LHJ	TAL SEA
Total/NA	Analysis	8270D	RE	1	174218	10/29/14 19:38	AHP	TAL SEA
Total/NA	Prep	3520C			173335	10/21/14 16:09	LHJ	TAL SEA
Total/NA	Analysis	8270D		1	173639	10/23/14 22:09	AHP	TAL SEA
Total/NA	Prep	200.8			174459	10/31/14 10:16	PAB	TAL SEA
Total/NA	Analysis	200.8		1	174675	11/03/14 10:40	FCW	TAL SEA
Total/NA	Prep	7470A			173545	10/22/14 17:26	PAB	TAL SEA
Total/NA	Analysis	7470A		1	173588	10/23/14 07:45	FCW	TAL SEA
Total/NA	Analysis	120.1		1	173764	10/24/14 10:38	CRH	TAL SEA
Total/NA	Analysis	2320B		1	173976	10/27/14 13:37	SPP	TAL SEA
Total/NA	Analysis	300.0		1	173430	10/21/14 14:46	JLS	TAL SEA
Total/NA	Analysis	300.0		1	173431	10/21/14 14:46	JLS	TAL SEA
Total/NA	Analysis	SM 2540D		1	173840	10/24/14 17:17	LKC	TAL SEA
Total/NA	Analysis	SM 4500 H+ B		1	173459	10/21/14 12:44	JLS	TAL SEA
Dissolved	Filtration	FILTRATION			173629	10/23/14 11:40	JLS	TAL SEA
Dissolved	Analysis	SM 5310B		1	173628	10/23/14 15:52	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	173497	10/22/14 17:32	JLS	TAL SEA

Client Sample ID: IA-CBN-60-20141020-W

Lab Sample ID: 580-46021-2

Date Collected: 10/20/14 12:50

Matrix: Water

Date Received: 10/21/14 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C	RE		173952	10/27/14 10:47	LHJ	TAL SEA
Total/NA	Analysis	8270D	RE	1	174218	10/29/14 20:01	AHP	TAL SEA
Total/NA	Prep	3520C			173335	10/21/14 16:09	LHJ	TAL SEA
Total/NA	Analysis	8270D		1	173639	10/23/14 22:35	AHP	TAL SEA
Total/NA	Prep	200.8			174459	10/31/14 10:16	PAB	TAL SEA
Total/NA	Analysis	200.8		1	174675	11/03/14 11:10	FCW	TAL SEA
Total/NA	Prep	7470A			173545	10/22/14 17:26	PAB	TAL SEA
Total/NA	Analysis	7470A		1	173588	10/23/14 07:48	FCW	TAL SEA
Total/NA	Analysis	120.1		1	173764	10/24/14 10:38	CRH	TAL SEA
Total/NA	Analysis	2320B		1	173976	10/27/14 13:37	SPP	TAL SEA
Total/NA	Analysis	300.0		1	173430	10/21/14 15:01	JLS	TAL SEA
Total/NA	Analysis	300.0		1	173431	10/21/14 15:01	JLS	TAL SEA
Total/NA	Analysis	SM 2540D		1	173840	10/24/14 17:17	LKC	TAL SEA
Total/NA	Analysis	SM 4500 H+ B		1	173459	10/21/14 12:45	JLS	TAL SEA
Dissolved	Filtration	FILTRATION			173629	10/23/14 11:40	JLS	TAL SEA
Dissolved	Analysis	SM 5310B		1	173628	10/23/14 16:12	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	173497	10/22/14 17:52	JLS	TAL SEA

Lab Chronicle

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

TestAmerica Job ID: 580-46021-1

Client Sample ID: IA-CV-01-20141020-W
Date Collected: 10/20/14 14:30
Date Received: 10/21/14 10:15

Lab Sample ID: 580-46021-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C	RE		173952	10/27/14 10:47	LHJ	TAL SEA
Total/NA	Analysis	8270D	RE	5	174218	10/29/14 20:25	AHP	TAL SEA
Total/NA	Prep	3520C			173335	10/21/14 16:09	LHJ	TAL SEA
Total/NA	Analysis	8270D		5	173639	10/23/14 23:00	AHP	TAL SEA
Total/NA	Prep	200.8			174459	10/31/14 10:16	PAB	TAL SEA
Total/NA	Analysis	200.8		1	174675	11/03/14 11:13	FCW	TAL SEA
Total/NA	Prep	7470A			173545	10/22/14 17:26	PAB	TAL SEA
Total/NA	Analysis	7470A		1	173588	10/23/14 07:36	FCW	TAL SEA
Total/NA	Analysis	120.1		1	173764	10/24/14 10:38	CRH	TAL SEA
Total/NA	Analysis	2320B		1	173976	10/27/14 13:38	SPP	TAL SEA
Total/NA	Analysis	300.0		1	173430	10/21/14 15:44	JLS	TAL SEA
Total/NA	Analysis	300.0		1	173431	10/21/14 15:44	JLS	TAL SEA
Total/NA	Analysis	SM 2540D		1	173840	10/24/14 17:17	LKC	TAL SEA
Total/NA	Analysis	SM 4500 H+ B		1	173459	10/21/14 12:47	JLS	TAL SEA
Dissolved	Filtration	FILTRATION			173629	10/23/14 11:40	JLS	TAL SEA
Dissolved	Analysis	SM 5310B		1	173628	10/23/14 16:31	JLS	TAL SEA
Total/NA	Analysis	SM 5310B		1	173497	10/22/14 18:12	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: 580-46021-1

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
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: 580-46021-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-46021-1	IA-MHS-05-20141020-W	Water	10/20/14 11:50	10/21/14 10:15
580-46021-2	IA-CBN-60-20141020-W	Water	10/20/14 12:50	10/21/14 10:15
580-46021-3	IA-CV-01-20141020-W	Water	10/20/14 14:30	10/21/14 10:15

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.

46021

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

Client Contact	Project Manager: Christine Nancarrow	Site Contact: Melissa Ivancevich	Date: 10/20/14	COC No:
Leidos	Tel/Fax: 206.300.2144	Lab Contact: Kris Allen	Carrier: Courier	1 of 1 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:
IA-MHS-05-20141020-W	10/20/14	1150	C	W	8	N		2	1		2			1	1	1	
IA-CBN-CO-20141020-W	10/20/14	1250	C	W	8	N		2	1		2			1	1	1	
IA-CV-01-20141020-W	10/20/14	1430	C	W	8	N		2	1		2			1	1	1	

580-46021 Chain of Custody

~~Cooler/TB-Dig/IR~~ 2 cor 4.9 unc 6.1 °C [illegible] 7.3
Cooler Dsc La Bl[illegible] @Lab 1015
Wet/Packs Packing Bubble
w/cs

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other MeOH — Metals: 4; TOC: 3

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal by Lab ☐ Archive for ______ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 212404 | Cooler Temp. (°C): Obs'd: ______ Corr'd: ______ | Therm ID No.: ______

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Melissa Ivancevich [signature]	Leidos	10/21/14 0[illegible]	[signature]	TASEA	10/21/14 0945
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 580-46021-1

Login Number: 46021

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

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	no
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	

November 11, 2014

Vista Project I.D.: 1400781

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

Dear Ms. Nancarrow,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on October 21, 2014. This sample set was analyzed on a standard turn-around time, under your Project Name '1400647'. The work was authorized under your Purchase Order No. PO 10163569.

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

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

Sincerely,

Martha Maier
Laboratory Director

Vista Work Order No. 1400781
Case Narrative

Sample Condition on Receipt:

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

Analytical Notes:

EPA Method 1613

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

Holding Times

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

Quality Control

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

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

The recovery of 13C-1,2,3,4,7,8-HxCDD in sample "IA-MHS-05-20141020-W" was below the limit at 31.4%. The labeled standard recoveries for all QC and the other field samples were within method acceptance criteria.

EPA Method 1668C

These samples were extracted and analyzed for 209 PCB congeners by EPA Method 1668C using a ZB-1 GC column. Samples "IA-MHS-05-20141020-W" and "IA-CV-20141020-W" required re-extraction using less volume to reduce the effects of the interferences.

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. PCB-11 was detected at 37.9 pg/L in the Method Blank for preparation batch B4J0155. No

other analytes were detected above the sample quantitation limit in the Method Blanks. The OPR recoveries were within the method acceptance criteria.

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

TABLE OF CONTENTS

Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1400781-01	IA-MHS-05-20141020-W	20-Oct-14 11:50	21-Oct-14 09:04	Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
1400781-02	IA-CBW-60-20141020-W	20-Oct-14 12:50	21-Oct-14 09:04	Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
1400781-03	IA-CV-01-20141020-W	20-Oct-14 14:30	21-Oct-14 09:04	Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L
				Amber Glass NM Bottle, 1L

Vista Project: 1400781

Client Project: 1400647

ANALYTICAL RESULTS

Sample ID: Method Blank

EPA Method 1613B

Matrix: Aqueous
Sample Size: 1.00 L

QC Batch: B4J0127
Date Extracted: 23-Oct-2014 8:36

Lab Sample: B4J0127-BLK1
Date Analyzed : 27-Oct-14 19:22 Column: ZB-5MS Analyst: MAS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	ND	5.00	1.76		0.943	
1,2,3,7,8-PeCDD	ND	25.0	0.997		4.51	
1,2,3,4,7,8-HxCDD	ND	25.0	2.20		2.21	
1,2,3,6,7,8-HxCDD	ND	25.0	2.36		1.93	
1,2,3,7,8,9-HxCDD	ND	25.0	2.54		2.02	
1,2,3,4,6,7,8-HpCDD	ND	25.0	2.16		2.98	
OCDD	ND	50.0	6.51		3.57	
2,3,7,8-TCDF	ND	5.00	1.21		0.984	
1,2,3,7,8-PeCDF	ND	25.0	1.56		2.50	
2,3,4,7,8-PeCDF	ND	25.0	1.45		1.73	
1,2,3,4,7,8-HxCDF	ND	25.0	0.772		1.36	
1,2,3,6,7,8-HxCDF	ND	25.0	0.829		1.56	
2,3,4,6,7,8-HxCDF	ND	25.0	0.594		2.05	
1,2,3,7,8,9-HxCDF	ND	25.0	0.901		1.34	
1,2,3,4,6,7,8-HpCDF	ND	25.0	1.34		1.46	
1,2,3,4,7,8,9-HpCDF	ND	25.0	0.914		1.75	
OCDF	ND	50.0	2.92		2.98	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	66.7	25 - 164	
	13C-1,2,3,7,8-PeCDD	68.6	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	71.5	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	78.6	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	76.3	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	70.6	23 - 140	
	13C-OCDD	57.3	17 - 157	
	13C-2,3,7,8-TCDF	64.8	24 - 169	
	13C-1,2,3,7,8-PeCDF	67.1	24 - 185	
	13C-2,3,4,7,8-PeCDF	69.5	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	70.0	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	72.5	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	73.8	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	73.1	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	69.5	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	64.5	26 - 138	
	13C-OCDF	57.6	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	80.7	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	0.00

TOTALS

Total TCDD	ND	1.76
Total PeCDD	ND	1.42
Total HxCDD	ND	3.74
Total HpCDD	ND	2.16
Total TCDF	ND	1.21
Total PeCDF	ND	3.07
Total HxCDF	ND	1.03
Total HpCDF	ND	1.35

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
Sample Size: 1.00 L

QC Batch: B4J0127
Date Extracted: 23-Oct-2014 8:36

Lab Sample: B4J0127-BS1
Date Analyzed: 27-Oct-14 16:08 Column: ZB-5MS Analyst: MAS

Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits
2,3,7,8-TCDD	172	200	86.1	67 - 158
1,2,3,7,8-PeCDD	913	1000	91.3	70 - 142
1,2,3,4,7,8-HxCDD	972	1000	97.2	70 - 164
1,2,3,6,7,8-HxCDD	916	1000	91.6	76 - 134
1,2,3,7,8,9-HxCDD	937	1000	93.7	64 - 162
1,2,3,4,6,7,8-HpCDD	947	1000	94.7	70 - 140
OCDD	1880	2000	93.8	78 - 144
2,3,7,8-TCDF	170	200	84.9	75 - 158
1,2,3,7,8-PeCDF	905	1000	90.5	80 - 134
2,3,4,7,8-PeCDF	916	1000	91.6	68 - 160
1,2,3,4,7,8-HxCDF	906	1000	90.6	72 - 134
1,2,3,6,7,8-HxCDF	916	1000	91.6	84 - 130
2,3,4,6,7,8-HxCDF	913	1000	91.3	70 - 156
1,2,3,7,8,9-HxCDF	901	1000	90.1	78 - 130
1,2,3,4,6,7,8-HpCDF	901	1000	90.1	82 - 122
1,2,3,4,7,8,9-HpCDF	934	1000	93.4	78 - 138
OCDF	1870	2000	93.5	63 - 170

	Labeled Standard	%R	LCL-UCL
IS	13C-2,3,7,8-TCDD	69.2	20 - 175
	13C-1,2,3,7,8-PeCDD	58.5	21 - 227
	13C-1,2,3,4,7,8-HxCDD	72.2	21 - 193
	13C-1,2,3,6,7,8-HxCDD	80.6	25 - 163
	13C-1,2,3,7,8,9-HxCDD	76.2	21 - 193
	13C-1,2,3,4,6,7,8-HpCDD	75.1	26 - 166
	13C-OCDD	54.9	13 - 199
	13C-2,3,7,8-TCDF	72.0	22 - 152
	13C-1,2,3,7,8-PeCDF	62.8	21 - 192
	13C-2,3,4,7,8-PeCDF	63.7	13 - 328
	13C-1,2,3,4,7,8-HxCDF	67.2	19 - 202
	13C-1,2,3,6,7,8-HxCDF	71.7	21 - 159
	13C-2,3,4,6,7,8-HxCDF	72.9	22 - 176
	13C-1,2,3,7,8,9-HxCDF	73.1	17 - 205
	13C-1,2,3,4,6,7,8-HpCDF	71.4	21 - 158
	13C-1,2,3,4,7,8,9-HpCDF	66.8	20 - 186
	13C-OCDF	55.8	13 - 199
CRS	37Cl-2,3,7,8-TCDD	81.7	31 - 191

LCL-UCL - Lower control limit - upper control limit

Sample ID: IA-MHS-05-20141020-W

EPA Method 1613B

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 11:50

Sample Data
Matrix: Effluent
Sample Size: 1.01 L

Laboratory Data
Lab Sample: 1400781-01 Date Received: 21-Oct-2014 9:04
QC Batch: B4J0127 Date Extracted: 23-Oct-2014 8:36
Date Analyzed : 28-Oct-14 06:56 Column: ZB-5MS Analyst: MAS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	ND	4.93	2.28		0.943	
1,2,3,7,8-PeCDD	ND	24.7	2.92		4.51	
1,2,3,4,7,8-HxCDD	ND	24.7	3.06		2.21	
1,2,3,6,7,8-HxCDD	ND	24.7	4.22		1.93	
1,2,3,7,8,9-HxCDD	ND	24.7	4.99		2.02	
1,2,3,4,6,7,8-HpCDD	38.6	24.7			2.98	
OCDD	194	49.3			3.57	
2,3,7,8-TCDF	ND	4.93	1.39		0.984	
1,2,3,7,8-PeCDF	ND	24.7	2.80		2.50	
2,3,4,7,8-PeCDF	ND	24.7	2.43		1.73	
1,2,3,4,7,8-HxCDF	ND	24.7	1.72		1.36	
1,2,3,6,7,8-HxCDF	ND	24.7	1.76		1.56	
2,3,4,6,7,8-HxCDF	ND	24.7	1.91		2.05	
1,2,3,7,8,9-HxCDF	ND	24.7	3.19		1.34	
1,2,3,4,6,7,8-HpCDF	ND	24.7	3.15		1.46	
1,2,3,4,7,8,9-HpCDF	ND	24.7	1.72		1.75	
OCDF	ND	49.3		4.92	2.98	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	58.1	25 - 164	
	13C-1,2,3,7,8-PeCDD	55.1	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	31.4	32 - 141	H
	13C-1,2,3,6,7,8-HxCDD	34.0	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	33.5	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	30.3	23 - 140	
	13C-OCDD	22.8	17 - 157	
	13C-2,3,7,8-TCDF	59.6	24 - 169	
	13C-1,2,3,7,8-PeCDF	49.2	24 - 185	
	13C-2,3,4,7,8-PeCDF	54.9	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	31.6	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	33.9	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	33.8	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	32.3	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	28.7	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	27.8	26 - 138	
	13C-OCDF	24.7	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	87.5	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	0.444

TOTALS

Total TCDD	ND	2.28		
Total PeCDD	ND	6.80		
Total HxCDD	ND	5.16		
Total HpCDD	38.6		62.5	
Total TCDF	ND	1.39		
Total PeCDF	ND	6.75		
Total HxCDF	ND	6.95		
Total HpCDF	ND		2.69	

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: IA-CBN-60-20141020-W

EPA Method 1613B

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 12:50

Sample Data
Matrix: Effluent
Sample Size: 1.03 L

Laboratory Data
Lab Sample: 1400781-02 Date Received: 21-Oct-2014 9:04
QC Batch: B4J0127 Date Extracted: 23-Oct-2014 8:36
Date Analyzed : 28-Oct-14 07:45 Column: ZB-5MS Analyst: MAS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	ND	4.87	2.38		0.943	
1,2,3,7,8-PeCDD	ND	24.4	1.83		4.51	
1,2,3,4,7,8-HxCDD	ND	24.4	3.68		2.21	
1,2,3,6,7,8-HxCDD	ND	24.4	4.58		1.93	
1,2,3,7,8,9-HxCDD	ND	24.4	3.63		2.02	
1,2,3,4,6,7,8-HpCDD	69.1	24.4			2.98	
OCDD	706	48.7			3.57	
2,3,7,8-TCDF	ND	4.87	2.28		0.984	
1,2,3,7,8-PeCDF	ND	24.4	2.10		2.50	
2,3,4,7,8-PeCDF	ND	24.4	2.00		1.73	
1,2,3,4,7,8-HxCDF	ND	24.4	1.87		1.36	
1,2,3,6,7,8-HxCDF	ND	24.4	1.98		1.56	
2,3,4,6,7,8-HxCDF	ND	24.4	2.05		2.05	
1,2,3,7,8,9-HxCDF	ND	24.4	3.21		1.34	
1,2,3,4,6,7,8-HpCDF	27.1	24.4			1.46	
1,2,3,4,7,8,9-HpCDF	ND	24.4	3.13		1.75	
OCDF	135	48.7			2.98	

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	62.2	25 - 164	
	13C-1,2,3,7,8-PeCDD	61.2	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	51.5	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	58.9	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	57.6	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	51.9	23 - 140	
	13C-OCDD	43.5	17 - 157	
	13C-2,3,7,8-TCDF	64.5	24 - 169	
	13C-1,2,3,7,8-PeCDF	59.1	24 - 185	
	13C-2,3,4,7,8-PeCDF	61.3	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	52.0	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	54.8	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	54.6	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	56.4	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	51.9	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	47.7	26 - 138	
	13C-OCDF	45.5	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	84.2	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	1.21

TOTALS				
Total TCDD	ND	2.38		
Total PeCDD	ND	1.83		
Total HxCDD	8.36			
Total HpCDD	114			
Total TCDF	ND		2.78	
Total PeCDF	ND	3.81		
Total HxCDF	6.72		13.3	
Total HpCDF	80.8			

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: IA-CV-01-20141020-W

EPA Method 1613B

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 14:30

Sample Data
Matrix: Effluent
Sample Size: 1.01 L

Laboratory Data
Lab Sample: 1400781-03 Date Received: 21-Oct-2014 9:04
QC Batch: B4J0127 Date Extracted: 23-Oct-2014 8:36
Date Analyzed : 28-Oct-14 08:33 Column: ZB-5MS Analyst: MAS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
2,3,7,8-TCDD	ND	4.93	1.48		0.943	
1,2,3,7,8-PeCDD	ND	24.7	1.98		4.51	
1,2,3,4,7,8-HxCDD	ND	24.7	3.87		2.21	
1,2,3,6,7,8-HxCDD	ND	24.7	4.85		1.93	
1,2,3,7,8,9-HxCDD	ND	24.7	5.31		2.02	
1,2,3,4,6,7,8-HpCDD	47.5	24.7			2.98	
OCDD	296	49.3			3.57	
2,3,7,8-TCDF	ND	4.93	1.78		0.984	
1,2,3,7,8-PeCDF	ND	24.7	1.62		2.50	
2,3,4,7,8-PeCDF	ND	24.7	1.84		1.73	
1,2,3,4,7,8-HxCDF	ND	24.7	2.11		1.36	
1,2,3,6,7,8-HxCDF	ND	24.7	2.10		1.56	
2,3,4,6,7,8-HxCDF	ND	24.7	2.14		2.05	
1,2,3,7,8,9-HxCDF	ND	24.7	3.64		1.34	
1,2,3,4,6,7,8-HpCDF	19.4	24.7			1.46	J
1,2,3,4,7,8,9-HpCDF	ND	24.7	1.25		1.75	
OCDF	36.9	49.3			2.98	J

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-2,3,7,8-TCDD	56.9	25 - 164	
	13C-1,2,3,7,8-PeCDD	49.1	25 - 181	
	13C-1,2,3,4,7,8-HxCDD	49.9	32 - 141	
	13C-1,2,3,6,7,8-HxCDD	57.4	28 - 130	
	13C-1,2,3,7,8,9-HxCDD	52.2	32 - 141	
	13C-1,2,3,4,6,7,8-HpCDD	51.4	23 - 140	
	13C-OCDD	39.3	17 - 157	
	13C-2,3,7,8-TCDF	58.8	24 - 169	
	13C-1,2,3,7,8-PeCDF	52.2	24 - 185	
	13C-2,3,4,7,8-PeCDF	50.3	21 - 178	
	13C-1,2,3,4,7,8-HxCDF	49.7	26 - 152	
	13C-1,2,3,6,7,8-HxCDF	52.0	26 - 123	
	13C-2,3,4,6,7,8-HxCDF	52.5	28 - 136	
	13C-1,2,3,7,8,9-HxCDF	52.0	29 - 147	
	13C-1,2,3,4,6,7,8-HpCDF	49.2	28 - 143	
	13C-1,2,3,4,7,8,9-HpCDF	47.3	26 - 138	
	13C-OCDF	40.7	17 - 157	
CRS	37Cl-2,3,7,8-TCDD	88.3	35 - 197	

Toxic Equivalent Quotient (TEQ) Data

TEQMinWHO2005Dioxin	0.769

TOTALS

Total TCDD	ND	1.48		
Total PeCDD	ND	5.48		
Total HxCDD	10.2			
Total HpCDD	83.0			
Total TCDF	ND	3.46		
Total PeCDF	ND		2.05	
Total HxCDF	10.3		13.1	
Total HpCDF	39.3			

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: B4J0155
Date Extracted: 29-Oct-2014 8:24
Lab Sample: B4J0155-BLK1
Date Analyzed: 31-Oct-14 12:01 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	5.00	3.38		1.21	
PCB-2	ND	5.00	3.45		1.75	
PCB-3	ND	5.00	3.34		1.49	
PCB-4/10	ND	20.0	8.31		5.64	
PCB-5/8	ND	20.0	6.98		3.59	
PCB-6	ND	10.0	6.84		3.10	
PCB-7/9	ND	20.0	6.79		6.22	
PCB-11	37.9	10.0			3.86	
PCB-12/13	ND	20.0	6.71		5.01	
PCB-14	ND	10.0	5.99		3.98	
PCB-15	ND	10.0	6.11		2.53	
PCB-16/32	ND	10.0	1.32		2.87	
PCB-17	ND	5.00	1.51		1.37	
PCB-18	ND	5.00	1.59		2.57	
PCB-19	ND	5.00	1.65		2.38	
PCB-20/21/33	ND	15.0	1.43		10.3	
PCB-22	ND	5.00	1.42		3.17	
PCB-23	ND	5.00	1.43		1.35	
PCB-24/27	ND	10.0	1.16		3.16	
PCB-25	ND	5.00	1.40		3.34	
PCB-26	ND	5.00	1.46		2.19	
PCB-28	ND	5.00	1.36		2.90	
PCB-29	ND	5.00	1.41		1.60	
PCB-30	ND	5.00	1.17		2.09	
PCB-31	ND	5.00		1.66	4.29	
PCB-34	ND	5.00	1.49		2.34	
PCB-35	ND	5.00	1.35		1.65	
PCB-36	ND	5.00	1.35		2.69	
PCB-37	ND	5.00	1.34		1.92	
PCB-38	ND	5.00	1.38		1.56	
PCB-39	ND	5.00	1.31		2.60	
PCB-40	ND	5.00	2.48		3.08	
PCB-41/64/71/72	ND	20.0	1.55		5.57	
PCB-42/59	ND	10.0	1.67		2.84	
PCB-43/49	ND	10.0	1.95		3.38	
PCB-44	ND	5.00	2.16		2.48	
PCB-45	ND	5.00	2.25		1.96	
PCB-46	ND	5.00	2.29		2.49	
PCB-47	ND	5.00	1.79		4.42	
PCB-48/75	ND	10.0	1.55		2.09	
PCB-50	ND	5.00	1.91		1.40	
PCB-51	ND	5.00	1.89		1.42	
PCB-52/69	ND	10.0	1.70		3.64	
PCB-53	ND	5.00	1.83		1.12	
PCB-54	ND	5.00	1.54		1.51	
PCB-55	ND	5.00	1.37		1.19	
PCB-56/60	ND	10.0		1.36	2.19	
PCB-57	ND	5.00	1.34		0.857	
PCB-58	ND	5.00	1.36		1.81	
PCB-61/70	ND	10.0	1.38		2.40	
PCB-62	ND	5.00	1.57		1.46	
PCB-63	ND	5.00	1.34		0.696	
PCB-65	ND	5.00	1.52		0.953	
PCB-66/76	ND	10.0	1.31		2.82	
PCB-67	ND	5.00	1.39		1.22	
PCB-68	ND	5.00	1.37		1.24	
PCB-73	ND	5.00	1.59		1.56	
PCB-74	ND	5.00	1.24		1.53	
PCB-77	ND	5.00	1.33		1.34	
PCB-78	ND	5.00	1.32		0.990	
PCB-79	ND	5.00	1.36		1.60	
PCB-80	ND	5.00	1.19		1.98	
PCB-81	ND	5.00	1.18		2.34	
PCB-82	ND	5.00	3.25		1.69	
PCB-83	ND	5.00	2.16		1.32	
PCB-84/92	ND	10.0	2.82		3.38	
PCB-85/116	ND	10.0	2.52		2.83	
PCB-86	ND	5.00	3.21		2.34	

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: B4J0155
Date Extracted: 29-Oct-2014 8:24
Lab Sample: B4J0155-BLK1
Date Analyzed: 31-Oct-14 12:01 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-87/117/125	ND	15.0	2.10		3.79	
PCB-88/91	ND	5.00	3.29		3.25	
PCB-89	ND	5.00	2.91		1.84	
PCB-90/101	ND	10.0	2.49		1.92	
PCB-93	ND	5.00	4.86		1.47	
PCB-94	ND	5.00	4.96		1.91	
PCB-95/98/102	ND	15.0	4.52		6.58	
PCB-96	ND	5.00	3.93		2.16	
PCB-97	ND	5.00	2.63		1.24	
PCB-99	ND	5.00	2.30		1.94	
PCB-100	ND	5.00	4.29		2.03	
PCB-103	ND	5.00	4.61		2.28	
PCB-104	ND	5.00	3.42		0.931	
PCB-105	ND	5.00	1.45		2.21	
PCB-106/118	ND	10.0	1.90		2.44	
PCB-107/109	ND	10.0	1.96		1.98	
PCB-108/112	ND	10.0	2.54		1.86	
PCB-110	ND	5.00	1.95		1.94	
PCB-111/115	ND	10.0	1.87		0.768	
PCB-113	ND	5.00	2.19		1.31	
PCB-114	ND	5.00	1.53		1.81	
PCB-119	ND	5.00	1.90		0.949	
PCB-120	ND	5.00	1.84		1.01	
PCB-121	ND	5.00	1.76		1.94	
PCB-122	ND	5.00	1.68		1.84	
PCB-123	ND	5.00	1.97		1.35	
PCB-124	ND	5.00	1.81		1.79	
PCB-126	ND	5.00	1.58		2.05	
PCB-127	ND	5.00	1.51		0.808	
PCB-128/162	ND	10.0	1.55		1.68	
PCB-129	ND	5.00	1.97		1.11	
PCB-130	ND	5.00	2.18		2.21	
PCB-131	ND	5.00	2.03		1.46	
PCB-132/161	ND	10.0	1.66		2.34	
PCB-133/142	ND	10.0	1.96		2.19	
PCB-134/143	ND	10.0	2.00		2.40	
PCB-135	ND	5.00	3.31		2.90	
PCB-136	ND	5.00	3.80		2.89	
PCB-137	ND	5.00	1.72		2.08	
PCB-138/163/164	ND	15.0	1.49		2.68	
PCB-139/149	ND	10.0	3.05		7.87	
PCB-140	ND	5.00	3.28		3.52	
PCB-141	ND	5.00	1.89		1.15	
PCB-144	ND	5.00	3.14		3.22	
PCB-145	ND	5.00	3.77		1.73	
PCB-146/165	ND	10.0	1.60		1.91	
PCB-147	ND	5.00	3.11		3.62	
PCB-148	ND	5.00	3.48		1.68	
PCB-150	ND	5.00	3.88		1.14	
PCB-151	ND	5.00	3.19		3.59	
PCB-152	ND	5.00	3.75		1.82	
PCB-153	ND	5.00	1.57		1.83	
PCB-154	ND	5.00	2.91		2.78	
PCB-155	ND	5.00	3.63		1.45	
PCB-156	ND	5.00	1.31		1.74	
PCB-157	ND	5.00	1.37		1.17	
PCB-158/160	ND	10.0	1.41		1.99	
PCB-159	ND	5.00	1.36		1.20	
PCB-166	ND	5.00	1.42		0.920	
PCB-167	ND	5.00	1.37		1.65	
PCB-168	ND	5.00	1.35		0.933	
PCB-169	ND	5.00	1.36		1.12	
PCB-170	ND	5.00	1.33		1.38	
PCB-171	ND	5.00	1.35		1.61	
PCB-172	ND	5.00	1.45		1.46	
PCB-173	ND	5.00	1.52		1.49	
PCB-174	ND	5.00	1.32		1.42	
PCB-175	ND	5.00	1.64		3.15	

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

Sample ID: Method Blank — EPA Method 1668C

Matrix:	Aqueous	QC Batch:	B4J0155	Lab Sample:	B4J0155-BLK1
Sample Size:	1.00 L	Date Extracted:	29-Oct-2014 8:24	Date Analyzed:	31-Oct-14 12:01 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-176	ND	5.00	1.17		2.17	
PCB-177	ND	5.00	1.42		1.34	
PCB-178	ND	5.00	1.70		2.25	
PCB-179	ND	5.00	1.22		1.57	
PCB-180	ND	5.00	1.24		0.610	
PCB-181	ND	5.00	1.30		1.01	
PCB-182/187	ND	10.0	1.57		6.20	
PCB-183	ND	5.00	1.47		3.29	
PCB-184	ND	5.00	1.29		1.25	
PCB-185	ND	5.00	1.32		1.47	
PCB-186	ND	5.00	1.25		2.43	
PCB-188	ND	5.00	1.13		1.08	
PCB-189	ND	5.00	1.03		1.49	
PCB-190	ND	5.00	0.989		1.70	
PCB-191	ND	5.00	1.06		1.96	
PCB-192	ND	5.00	1.16		1.69	
PCB-193	ND	5.00	1.07		1.46	
PCB-194	ND	5.00	1.37		1.71	
PCB-195	ND	5.00	1.43		1.47	
PCB-196/203	ND	10.0	2.68		6.35	
PCB-197	ND	5.00	1.93		1.80	
PCB-198	ND	5.00	2.78		3.78	
PCB-199	ND	5.00	2.84		4.05	
PCB-200	ND	5.00	2.03		1.75	
PCB-201	ND	5.00	1.88		1.02	
PCB-202	ND	5.00	1.99		1.55	
PCB-204	ND	5.00	2.08		1.48	
PCB-205	ND	5.00	1.21		1.53	
PCB-206	ND	5.00	2.27		1.32	
PCB-207	ND	5.00	1.14		1.51	
PCB-208	ND	5.00	1.09		1.34	
PCB-209	ND	5.00	2.48		1.86	
Total monoCB	ND	5.00	3.45			
Total diCB	37.9	10.0				
Total triCB	ND	5.00		1.66		J
Total tetraCB	ND	5.00		1.36		J
Total pentaCB	ND	5.00	4.96			
Total hexaCB	ND	5.00	3.88			
Total heptaCB	ND	5.00	1.70			
Total octaCB	ND	5.00	2.84			
Total nonaCB	ND	5.00	2.27			
DecaCB	ND	5.00	2.48			
Total PCB	37.9	10.0				

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

Sample ID: Method Blank

EPA Method 1668C

Matrix: Aqueous
Sample Size: 1.00 L

QC Batch: B4J0155
Date Extracted: 29-Oct-2014 8:24

Lab Sample: B4J0155-BLK1
Date Analyzed: 31-Oct-14 12:01 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	64.6	5 - 145	
	13C-PCB-3	66.7	5 - 145	
	13C-PCB-4	70.8	5 - 145	
	13C-PCB-11	75.3	5 - 145	
	13C-PCB-9	70.4	5 - 145	
	13C-PCB-19	68.3	5 - 145	
	13C-PCB-28	72.1	5 - 145	
	13C-PCB-32	72.1	5 - 145	
	13C-PCB-37	77.2	5 - 145	
	13C-PCB-47	74.3	5 - 145	
	13C-PCB-52	74.6	5 - 145	
	13C-PCB-54	70.0	5 - 145	
	13C-PCB-70	80.8	5 - 145	
	13C-PCB-77	85.4	10 - 145	
	13C-PCB-80	80.0	10 - 145	
	13C-PCB-81	84.5	10 - 145	
	13C-PCB-95	74.3	10 - 145	
	13C-PCB-97	83.1	10 - 145	
	13C-PCB-101	78.7	10 - 145	
	13C-PCB-104	68.9	10 - 145	
	13C-PCB-105	80.5	10 - 145	
	13C-PCB-114	76.6	10 - 145	
	13C-PCB-118	82.7	10 - 145	
	13C-PCB-123	81.2	10 - 145	
	13C-PCB-126	84.8	10 - 145	
	13C-PCB-127	80.7	10 - 145	
	13C-PCB-138	83.4	10 - 145	
	13C-PCB-141	81.6	10 - 145	
	13C-PCB-153	78.5	10 - 145	
	13C-PCB-155	63.0	10 - 145	
	13C-PCB-156	86.0	10 - 145	
	13C-PCB-157	87.5	10 - 145	
	13C-PCB-159	83.4	10 - 145	
	13C-PCB-167	84.1	10 - 145	
	13C-PCB-169	85.2	10 - 145	
	13C-PCB-170	85.6	10 - 145	
	13C-PCB-180	82.8	10 - 145	
	13C-PCB-188	66.4	10 - 145	
	13C-PCB-189	83.8	10 - 145	
	13C-PCB-194	91.7	10 - 145	
	13C-PCB-202	72.5	10 - 145	
	13C-PCB-206	86.8	10 - 145	
	13C-PCB-208	84.1	10 - 145	
	13C-PCB-209	72.1	10 - 145	
CRS	13C-PCB-79	85.7	10 - 145	
	13C-PCB-178	83.2	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: Method Blank — EPA Method 1668C

Matrix: Aqueous
Sample Size: 0.500 L
QC Batch: B4K0011
Date Extracted: 05-Nov-2014 8:17
Lab Sample: B4K0011-BLK1
Date Analyzed: 06-Nov-14 22:32 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	10.0	5.29		1.21	
PCB-2	ND	10.0	5.58		1.75	
PCB-3	ND	10.0	5.41		1.49	
PCB-4/10	ND	40.0	25.1		5.64	
PCB-5/8	ND	40.0	21.1		3.59	
PCB-6	ND	20.0	20.6		3.10	
PCB-7/9	ND	40.0	20.5		6.22	
PCB-11	ND	20.0	19.0		3.86	
PCB-12/13	ND	40.0	20.0		5.01	
PCB-14	ND	20.0	17.9		3.98	
PCB-15	ND	20.0	18.2		2.53	
PCB-16/32	4.28	20.0			2.87	J
PCB-17	ND	10.0	2.33		1.37	
PCB-18	ND	10.0	2.45		2.57	
PCB-19	ND	10.0	2.55		2.38	
PCB-20/21/33	ND	30.0	1.85		10.3	
PCB-22	ND	10.0	1.84		3.17	
PCB-23	ND	10.0	1.85		1.35	
PCB-24/27	ND	20.0	1.79		3.16	
PCB-25	ND	10.0	1.81		3.34	
PCB-26	ND	10.0	1.88		2.19	
PCB-28	ND	10.0	1.76		2.90	
PCB-29	ND	10.0	1.83		1.60	
PCB-30	ND	10.0	1.81		2.09	
PCB-31	ND	10.0	1.71		4.29	
PCB-34	ND	10.0	1.93		2.34	
PCB-35	ND	10.0	1.89		1.65	
PCB-36	ND	10.0	1.89		2.69	
PCB-37	ND	10.0	1.87		1.92	
PCB-38	ND	10.0	1.92		1.56	
PCB-39	ND	10.0	1.83		2.60	
PCB-40	ND	10.0	3.37		3.08	
PCB-41/64/71/72	ND	40.0	2.10		5.57	
PCB-42/59	ND	20.0	2.27		2.84	
PCB-43/49	ND	20.0	2.62		3.38	
PCB-44	ND	10.0	2.94		2.48	
PCB-45	ND	10.0	3.02		1.96	
PCB-46	ND	10.0	3.06		2.49	
PCB-47	ND	10.0	2.44		4.42	
PCB-48/75	ND	20.0	2.12		2.09	
PCB-50	ND	10.0	2.86		1.40	
PCB-51	ND	10.0	2.53		1.42	
PCB-52/69	ND	20.0	2.28		3.64	
PCB-53	ND	10.0	2.45		1.12	
PCB-54	ND	10.0	2.31		1.51	
PCB-55	ND	10.0	1.84		1.19	
PCB-56/60	ND	20.0	1.88		2.19	
PCB-57	ND	10.0	1.91		0.857	
PCB-58	ND	10.0	1.94		1.81	
PCB-61/70	ND	20.0	1.98		2.40	
PCB-62	ND	10.0	2.14		1.46	
PCB-63	ND	10.0	1.91		0.696	
PCB-65	ND	10.0	2.07		0.953	
PCB-66/76	ND	20.0	1.88		2.82	
PCB-67	ND	10.0	1.99		1.22	
PCB-68	ND	10.0	1.86		1.24	
PCB-73	ND	10.0	2.13		1.56	
PCB-74	ND	10.0	1.77		1.53	
PCB-77	ND	10.0	1.79		1.34	
PCB-78	ND	10.0	1.95		0.990	
PCB-79	ND	10.0	1.82		1.60	
PCB-80	ND	10.0	1.60		1.98	
PCB-81	ND	10.0	1.75		2.34	
PCB-82	ND	10.0	5.04		1.69	
PCB-83	ND	10.0	3.28		1.32	
PCB-84/92	ND	20.0	4.36		3.38	
PCB-85/116	ND	20.0	3.83		2.83	
PCB-86	ND	10.0	4.88		2.34	

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: 0.500 L
QC Batch: B4K0011
Date Extracted: 05-Nov-2014 8:17
Lab Sample: B4K0011-BLK1
Date Analyzed: 06-Nov-14 22:32 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-87/117/125	ND	30.0	3.20		3.79	
PCB-88/91	ND	10.0	5.05		3.25	
PCB-89	ND	10.0	4.50		1.84	
PCB-90/101	ND	20.0	3.85		1.92	
PCB-93	ND	10.0	4.56		1.47	
PCB-94	ND	10.0	4.65		1.91	
PCB-95/98/102	ND	30.0	4.24		6.58	
PCB-96	ND	10.0	3.73		2.16	
PCB-97	ND	10.0	4.00		1.24	
PCB-99	ND	10.0	3.56		1.94	
PCB-100	ND	10.0	4.06		2.03	
PCB-103	ND	10.0	4.36		2.28	
PCB-104	ND	10.0	3.24		0.931	
PCB-105	ND	10.0	3.37		2.21	
PCB-106/118	ND	20.0	3.00		2.44	
PCB-107/109	ND	20.0	3.05		1.98	
PCB-108/112	ND	20.0	3.87		1.86	
PCB-110	ND	10.0	2.97		1.94	
PCB-111/115	ND	20.0	2.85		0.768	
PCB-113	ND	10.0	3.39		1.31	
PCB-114	ND	10.0	3.43		1.81	
PCB-119	ND	10.0	2.90		0.949	
PCB-120	ND	10.0	2.80		1.01	
PCB-121	ND	10.0	2.71		1.94	
PCB-122	ND	10.0	3.76		1.84	
PCB-123	ND	10.0	3.05		1.35	
PCB-124	ND	10.0	2.81		1.79	
PCB-126	ND	10.0	3.63		2.05	
PCB-127	ND	10.0	3.52		0.808	
PCB-128/162	ND	20.0	3.70		1.68	
PCB-129	ND	10.0	4.48		1.11	
PCB-130	ND	10.0	4.86		2.21	
PCB-131	ND	10.0	4.39		1.46	
PCB-132/161	ND	20.0	3.60		2.34	
PCB-133/142	ND	20.0	4.24		2.19	
PCB-134/143	ND	20.0	4.33		2.40	
PCB-135	ND	10.0	4.37		2.90	
PCB-136	ND	10.0	3.14		2.89	
PCB-137	ND	10.0	3.85		2.08	
PCB-138/163/164	ND	30.0	3.38		2.68	
PCB-139/149	6.56	20.0			7.87	J
PCB-140	ND	10.0	4.34		3.52	
PCB-141	ND	10.0	4.23		1.15	
PCB-144	ND	10.0	4.15		3.22	
PCB-145	ND	10.0	3.11		1.73	
PCB-146/165	ND	20.0	3.47		1.91	
PCB-147	ND	10.0	4.11		3.62	
PCB-148	ND	10.0	4.59		1.68	
PCB-150	ND	10.0	3.20		1.14	
PCB-151	ND	10.0	4.21		3.59	
PCB-152	ND	10.0	3.10		1.82	
PCB-153	ND	10.0	3.40		1.83	
PCB-154	ND	10.0	3.85		2.78	
PCB-155	ND	10.0	3.00		1.45	
PCB-156	ND	10.0	3.03		1.74	
PCB-157	ND	10.0	3.28		1.17	
PCB-158/160	ND	20.0	3.21		1.99	
PCB-159	ND	10.0	3.23		1.20	
PCB-166	ND	10.0	3.38		0.920	
PCB-167	ND	10.0	3.15		1.65	
PCB-168	ND	10.0	2.93		0.933	
PCB-169	ND	10.0		3.50	1.12	
PCB-170	ND	10.0	2.53		1.38	
PCB-171	ND	10.0	2.57		1.61	
PCB-172	ND	10.0	2.76		1.46	
PCB-173	ND	10.0	2.91		1.49	
PCB-174	ND	10.0	2.52		1.42	
PCB-175	ND	10.0	2.69		3.15	

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

Sample ID: Method Blank — EPA Method 1668C

Matrix:	Aqueous	QC Batch:	B4K0011	Lab Sample:	B4K0011-BLK1
Sample Size:	0.500 L	Date Extracted:	05-Nov-2014 8:17	Date Analyzed:	06-Nov-14 22:32 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-176	ND	10.0	1.91		2.17	
PCB-177	ND	10.0	2.72		1.34	
PCB-178	ND	10.0	2.78		2.25	
PCB-179	ND	10.0	2.00		1.57	
PCB-180	ND	10.0	2.36		0.610	
PCB-181	ND	10.0	2.48		1.01	
PCB-182/187	ND	20.0	2.57		6.20	
PCB-183	ND	10.0	2.41		3.29	
PCB-184	ND	10.0	2.11		1.25	
PCB-185	ND	10.0	2.51		1.47	
PCB-186	ND	10.0	2.04		2.43	
PCB-188	ND	10.0	1.86		1.08	
PCB-189	2.79	10.0			1.49	J
PCB-190	ND	10.0	1.88		1.70	
PCB-191	ND	10.0	2.02		1.96	
PCB-192	ND	10.0	2.21		1.69	
PCB-193	ND	10.0	2.04		1.46	
PCB-194	ND	10.0	2.75		1.71	
PCB-195	ND	10.0	2.86		1.47	
PCB-196/203	ND	20.0	4.25		6.35	
PCB-197	ND	10.0	3.06		1.80	
PCB-198	ND	10.0	4.42		3.78	
PCB-199	ND	10.0	4.51		4.05	
PCB-200	ND	10.0	3.23		1.75	
PCB-201	ND	10.0	2.98		1.02	
PCB-202	ND	10.0	3.16		1.55	
PCB-204	ND	10.0	3.31		1.48	
PCB-205	ND	10.0	2.43		1.53	
PCB-206	ND	10.0	3.04		1.32	
PCB-207	ND	10.0	1.82		1.51	
PCB-208	ND	10.0	1.73		1.34	
PCB-209	ND	10.0	3.46		1.86	
Total monoCB	ND	10.0	5.58			
Total diCB	ND	20.0	25.1			
Total triCB	4.28	10.0				J
Total tetraCB	ND	10.0	3.37			
Total pentaCB	ND	10.0	5.05			
Total hexaCB	6.56	10.0		10.1		
Total heptaCB	2.79	10.0				J
Total octaCB	ND	10.0	4.51			
Total nonaCB	ND	10.0	3.04			
DecaCB	ND	10.0	3.46			
Total PCB	13.6	20.0				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	QC Batch:	B4K0011	Lab Sample:	B4K0011-BLK1
Sample Size:	0.500 L	Date Extracted:	05-Nov-2014 8:17	Date Analyzed:	06-Nov-14 22:32 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	83.2	5 - 145	
	13C-PCB-3	84.9	5 - 145	
	13C-PCB-4	73.3	5 - 145	
	13C-PCB-11	79.6	5 - 145	
	13C-PCB-9	73.9	5 - 145	
	13C-PCB-19	90.7	5 - 145	
	13C-PCB-28	72.2	5 - 145	
	13C-PCB-32	94.8	5 - 145	
	13C-PCB-37	82.2	5 - 145	
	13C-PCB-47	79.9	5 - 145	
	13C-PCB-52	78.9	5 - 145	
	13C-PCB-54	72.0	5 - 145	
	13C-PCB-70	85.5	5 - 145	
	13C-PCB-77	90.3	10 - 145	
	13C-PCB-80	85.9	10 - 145	
	13C-PCB-81	89.6	10 - 145	
	13C-PCB-95	81.4	10 - 145	
	13C-PCB-97	90.2	10 - 145	
	13C-PCB-101	87.4	10 - 145	
	13C-PCB-104	76.3	10 - 145	
	13C-PCB-105	80.1	10 - 145	
	13C-PCB-114	76.8	10 - 145	
	13C-PCB-118	88.6	10 - 145	
	13C-PCB-123	89.5	10 - 145	
	13C-PCB-126	81.4	10 - 145	
	13C-PCB-127	81.4	10 - 145	
	13C-PCB-138	92.0	10 - 145	
	13C-PCB-141	90.0	10 - 145	
	13C-PCB-153	88.1	10 - 145	
	13C-PCB-155	85.7	10 - 145	
	13C-PCB-156	92.0	10 - 145	
	13C-PCB-157	91.1	10 - 145	
	13C-PCB-159	92.3	10 - 145	
	13C-PCB-167	91.2	10 - 145	
	13C-PCB-169	91.0	10 - 145	
	13C-PCB-170	98.7	10 - 145	
	13C-PCB-180	95.0	10 - 145	
	13C-PCB-188	85.7	10 - 145	
	13C-PCB-189	99.0	10 - 145	
	13C-PCB-194	91.3	10 - 145	
	13C-PCB-202	101	10 - 145	
	13C-PCB-206	103	10 - 145	
	13C-PCB-208	89.7	10 - 145	
	13C-PCB-209	121	10 - 145	
CRS	13C-PCB-79	94.7	10 - 145	
	13C-PCB-178	96.8	10 - 145	

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

Sample ID: OPR

EPA Method 1668C

Matrix: Aqueous
Sample Size: 1.00 L

QC Batch: B4J0155
Date Extracted: 29-Oct-2014 8:24

Lab Sample: B4J0155-BS1
Date Analyzed: 31-Oct-14 09:53 Column: ZB-1 Analyst: DMS

Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits
PCB-1	1150	1000	115	60 - 135
PCB-3	1130	1000	113	60 - 135
PCB-4/10	4390	4000	110	60 - 135
PCB-15	2210	2000	111	60 - 135
PCB-19	1120	1000	112	60 - 135
PCB-37	967	1000	96.7	60 - 135
PCB-54	1100	1000	110	60 - 135
PCB-77	1130	1000	113	60 - 135
PCB-81	1080	1000	108	60 - 135
PCB-104	1110	1000	111	60 - 135
PCB-105	1110	1000	111	60 - 135
PCB-106/118	2190	2000	109	60 - 135
PCB-114	1070	1000	107	60 - 135
PCB-123	1120	1000	112	60 - 135
PCB-126	1090	1000	109	60 - 135
PCB-155	1160	1000	116	60 - 135
PCB-156	1100	1000	110	60 - 135
PCB-157	1130	1000	113	60 - 135
PCB-167	1150	1000	115	60 - 135
PCB-169	1100	1000	110	60 - 135
PCB-188	1130	1000	113	60 - 135
PCB-189	1180	1000	118	60 - 135
PCB-202	1090	1000	109	60 - 135
PCB-205	1040	1000	104	60 - 135
PCB-206	1080	1000	108	60 - 135
PCB-208	1090	1000	109	60 - 135
PCB-209	1130	1000	113	60 - 135

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-1	44.6	15 - 145
IS	13C-PCB-3	49.2	15 - 145
IS	13C-PCB-4	54.5	15 - 145
IS	13C-PCB-11	68.6	15 - 145
IS	13C-PCB-9	57.4	15 - 145
IS	13C-PCB-19	57.6	15 - 145
IS	13C-PCB-28	66.9	15 - 145
IS	13C-PCB-32	63.9	15 - 145
IS	13C-PCB-37	82.9	15 - 145
IS	13C-PCB-47	76.1	15 - 145
IS	13C-PCB-52	75.6	15 - 145
IS	13C-PCB-54	62.5	15 - 145
IS	13C-PCB-70	81.7	15 - 145
IS	13C-PCB-77	89.9	40 - 145
IS	13C-PCB-80	82.1	40 - 145
IS	13C-PCB-81	90.7	40 - 145
IS	13C-PCB-95	78.5	40 - 145
IS	13C-PCB-97	89.1	40 - 145
IS	13C-PCB-101	81.6	40 - 145
IS	13C-PCB-104	67.9	40 - 145
IS	13C-PCB-105	84.6	40 - 145
IS	13C-PCB-114	83.1	40 - 145
IS	13C-PCB-118	87.6	40 - 145
IS	13C-PCB-123	87.6	40 - 145
IS	13C-PCB-126	89.2	40 - 145
IS	13C-PCB-127	84.5	40 - 145
IS	13C-PCB-138	88.5	40 - 145
IS	13C-PCB-141	87.7	40 - 145
IS	13C-PCB-153	84.9	40 - 145
IS	13C-PCB-155	66.4	40 - 145
IS	13C-PCB-156	91.5	40 - 145
IS	13C-PCB-157	91.3	40 - 145
IS	13C-PCB-159	90.2	40 - 145
IS	13C-PCB-167	90.4	40 - 145
IS	13C-PCB-169	91.7	40 - 145
IS	13C-PCB-170	93.5	40 - 145
IS	13C-PCB-180	88.7	40 - 145
IS	13C-PCB-188	73.8	40 - 145
IS	13C-PCB-189	89.5	40 - 145
IS	13C-PCB-194	97.3	40 - 145

Sample ID: OPR

EPA Method 1668C

Matrix: Aqueous
Sample Size: 1.00 L

QC Batch: B4J0155
Date Extracted: 29-Oct-2014 8:24

Lab Sample: B4J0155-BS1
Date Analyzed: 31-Oct-14 09:53 Column: ZB-1 Analyst: DMS

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

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-202	79.4	40 - 145
IS	13C-PCB-206	92.8	40 - 145
IS	13C-PCB-208	89.9	40 - 145
IS	13C-PCB-209	75.8	40 - 145
CRS	13C-PCB-79	87.0	40 - 145
CRS	13C-PCB-178	85.7	40 - 145

LCL-UCL - Lower control limit - upper control limit

Sample ID: OPR

EPA Method 1668C

Matrix: Aqueous
Sample Size: 0.500 L

QC Batch: B4K0011
Date Extracted: 05-Nov-2014 8:17

Lab Sample: B4K0011-BS1
Date Analyzed: 06-Nov-14 19:21 Column: ZB-1 Analyst: DMS

Analyte	Amt Found (pg/L)	Spike Amt	%R	Limits
PCB-1	3820	4000	95.6	60 - 135
PCB-3	3870	4000	96.8	60 - 135
PCB-4/10	17300	16000	108	60 - 135
PCB-15	8340	8000	104	60 - 135
PCB-19	4180	4000	104	60 - 135
PCB-37	4120	4000	103	60 - 135
PCB-54	4240	4000	106	60 - 135
PCB-77	4150	4000	104	60 - 135
PCB-81	4050	4000	101	60 - 135
PCB-104	4240	4000	106	60 - 135
PCB-105	4450	4000	111	60 - 135
PCB-106/118	8470	8000	106	60 - 135
PCB-114	4250	4000	106	60 - 135
PCB-123	4430	4000	111	60 - 135
PCB-126	4360	4000	109	60 - 135
PCB-155	4420	4000	110	60 - 135
PCB-156	4270	4000	107	60 - 135
PCB-157	4410	4000	110	60 - 135
PCB-167	4410	4000	110	60 - 135
PCB-169	4340	4000	109	60 - 135
PCB-188	4430	4000	111	60 - 135
PCB-189	4630	4000	116	60 - 135
PCB-202	4130	4000	103	60 - 135
PCB-205	4520	4000	113	60 - 135
PCB-206	4270	4000	107	60 - 135
PCB-208	4320	4000	108	60 - 135
PCB-209	4480	4000	112	60 - 135

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-1	85.3	15 - 145
IS	13C-PCB-3	85.8	15 - 145
IS	13C-PCB-4	73.6	15 - 145
IS	13C-PCB-11	82.6	15 - 145
IS	13C-PCB-9	74.9	15 - 145
IS	13C-PCB-19	91.5	15 - 145
IS	13C-PCB-28	78.1	15 - 145
IS	13C-PCB-32	98.9	15 - 145
IS	13C-PCB-37	88.0	15 - 145
IS	13C-PCB-47	83.3	15 - 145
IS	13C-PCB-52	82.2	15 - 145
IS	13C-PCB-54	72.8	15 - 145
IS	13C-PCB-70	87.6	15 - 145
IS	13C-PCB-77	92.8	40 - 145
IS	13C-PCB-80	88.6	40 - 145
IS	13C-PCB-81	93.4	40 - 145
IS	13C-PCB-95	82.9	40 - 145
IS	13C-PCB-97	94.0	40 - 145
IS	13C-PCB-101	90.8	40 - 145
IS	13C-PCB-104	76.5	40 - 145
IS	13C-PCB-105	83.5	40 - 145
IS	13C-PCB-114	80.1	40 - 145
IS	13C-PCB-118	91.7	40 - 145
IS	13C-PCB-123	90.9	40 - 145
IS	13C-PCB-126	83.7	40 - 145
IS	13C-PCB-127	83.4	40 - 145
IS	13C-PCB-138	95.0	40 - 145
IS	13C-PCB-141	93.2	40 - 145
IS	13C-PCB-153	93.1	40 - 145
IS	13C-PCB-155	88.1	40 - 145
IS	13C-PCB-156	95.7	40 - 145
IS	13C-PCB-157	94.6	40 - 145
IS	13C-PCB-159	95.2	40 - 145
IS	13C-PCB-167	94.4	40 - 145
IS	13C-PCB-169	93.7	40 - 145
IS	13C-PCB-170	104	40 - 145
IS	13C-PCB-180	101	40 - 145
IS	13C-PCB-188	91.1	40 - 145
IS	13C-PCB-189	102	40 - 145
IS	13C-PCB-194	93.8	40 - 145

Sample ID: OPR

EPA Method 1668C

Matrix: Aqueous
Sample Size: 0.500 L

QC Batch: B4K0011
Date Extracted: 05-Nov-2014 8:17

Lab Sample: B4K0011-BS1
Date Analyzed: 06-Nov-14 19:21 Column: ZB-1 Analyst: DMS

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

	Labeled Standard	%R	LCL-UCL
IS	13C-PCB-202	104	40 - 145
IS	13C-PCB-206	109	40 - 145
IS	13C-PCB-208	95.1	40 - 145
IS	13C-PCB-209	125	40 - 145
CRS	13C-PCB-79	93.5	40 - 145
CRS	13C-PCB-178	99.6	40 - 145

LCL-UCL - Lower control limit - upper control limit

Sample ID: IA-MHS-05-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 11:50

Sample Data
Matrix: Effluent
Sample Size: 0.500 L

Laboratory Data
Lab Sample: 1400781-01 Date Received: 21-Oct-2014 9:04
QC Batch: B4K0011 Date Extracted: 05-Nov-2014 8:17
Date Analyzed : 07-Nov-14 01:44 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	ND	10.0	6.59		1.21	
PCB-2	ND	10.0	7.03		1.75	
PCB-3	ND	10.0	6.81		1.49	
PCB-4/10	ND	40.0	24.1		5.64	
PCB-5/8	ND	40.0	20.2		3.59	
PCB-6	ND	20.0	19.7		3.10	
PCB-7/9	ND	40.0	19.6		6.22	
PCB-11	ND	20.0		28.0	3.86	
PCB-12/13	ND	40.0	19.7		5.01	
PCB-14	ND	20.0	17.6		3.98	
PCB-15	ND	20.0	17.9		2.53	
PCB-16/32	8.92	20.0			2.87	J, B
PCB-17	4.02	10.0			1.37	J
PCB-18	12.1	10.0			2.57	
PCB-19	ND	10.0	5.54		2.38	
PCB-20/21/33	9.07	30.0			10.3	J
PCB-22	4.76	10.0			3.17	J
PCB-23	ND	10.0	2.15		1.35	
PCB-24/27	ND	20.0	3.78		3.16	
PCB-25	ND	10.0	2.10		3.34	
PCB-26	ND	10.0	2.18		2.19	
PCB-28	9.06	10.0			2.90	J
PCB-29	ND	10.0	2.12		1.60	
PCB-30	ND	10.0	3.93		2.09	
PCB-31	9.46	10.0			4.29	J
PCB-34	ND	10.0	2.24		2.34	
PCB-35	ND	10.0	2.39		1.65	
PCB-36	ND	10.0	2.39		2.69	
PCB-37	ND	10.0	2.37		1.92	
PCB-38	ND	10.0	2.43		1.56	
PCB-39	ND	10.0	2.32		2.60	
PCB-40	ND	10.0	4.50		3.08	
PCB-41/64/71/72	12.6	40.0			5.57	J
PCB-42/59	ND	20.0	3.03		2.84	
PCB-43/49	10.2	20.0			3.38	J
PCB-44	12.3	10.0			2.48	
PCB-45	ND	10.0	4.00		1.96	
PCB-46	ND	10.0	4.06		2.49	
PCB-47	59.7	10.0			4.42	
PCB-48/75	ND	20.0	2.82		2.09	
PCB-50	ND	10.0	3.74		1.40	
PCB-51	ND	10.0		6.06	1.42	
PCB-52/69	ND	20.0		16.2	3.64	
PCB-53	ND	10.0	3.25		1.12	
PCB-54	ND	10.0	3.02		1.51	
PCB-55	ND	10.0	2.68		1.19	
PCB-56/60	ND	20.0		6.91	2.19	
PCB-57	ND	10.0	2.63		0.857	
PCB-58	ND	10.0	2.66		1.81	
PCB-61/70	20.9	20.0			2.40	
PCB-62	ND	10.0	2.85		1.46	
PCB-63	ND	10.0	2.62		0.696	
PCB-65	ND	10.0	2.76		0.953	
PCB-66/76	10.3	20.0			2.82	J
PCB-67	ND	10.0	2.73		1.22	
PCB-68	8.96	10.0			1.24	J
PCB-73	ND	10.0	2.82		1.56	
PCB-74	4.96	10.0			1.53	J
PCB-77	ND	10.0	2.84		1.34	
PCB-78	ND	10.0	2.92		0.990	
PCB-79	ND	10.0	2.65		1.60	
PCB-80	ND	10.0	2.33		1.98	
PCB-81	ND	10.0	2.61		2.34	
PCB-82	ND	10.0		6.91	1.69	
PCB-83	ND	10.0	4.11		1.32	
PCB-84/92	14.3	20.0			3.38	J
PCB-85/116	ND	20.0		6.28	2.83	
PCB-86	ND	10.0	6.11		2.34	
PCB-87/117/125	18.3	30.0			3.79	J
PCB-88/91	ND	10.0	6.13		3.25	

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

Sample ID: IA-MHS-05-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 11:50

Sample Data
Matrix: Effluent
Sample Size: 0.500 L

Laboratory Data
Lab Sample: 1400781-01 Date Received: 21-Oct-2014 9:04
QC Batch: B4K0011 Date Extracted: 05-Nov-2014 8:17
Date Analyzed : 07-Nov-14 01:44 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-89	ND	10.0	5.50		1.84	
PCB-90/101	45.0	20.0			1.92	
PCB-93	ND	10.0	5.53		1.47	
PCB-94	ND	10.0	5.64		1.91	
PCB-95/98/102	32.2	30.0			6.58	
PCB-96	ND	10.0	4.29		2.16	
PCB-97	13.7	10.0			1.24	
PCB-99	15.2	10.0			1.94	
PCB-100	ND	10.0	4.68		2.03	
PCB-103	ND	10.0	5.03		2.28	
PCB-104	ND	10.0	3.73		0.931	
PCB-105	ND	10.0		17.3	2.21	
PCB-106/118	44.7	20.0			2.44	
PCB-107/109	ND	20.0	4.09		1.98	
PCB-108/112	ND	20.0	4.85		1.86	
PCB-110	53.6	10.0			1.94	
PCB-111/115	ND	20.0	3.56		0.768	
PCB-113	ND	10.0	4.14		1.31	
PCB-114	ND	10.0	4.18		1.81	
PCB-119	ND	10.0	3.63		0.949	
PCB-120	ND	10.0	3.51		1.01	
PCB-121	3.51	10.0			1.94	J
PCB-122	ND	10.0	4.58		1.84	
PCB-123	ND	10.0	4.10		1.35	
PCB-124	ND	10.0	3.77		1.79	
PCB-126	ND	10.0	4.91		2.05	
PCB-127	ND	10.0	4.55		0.808	
PCB-128/162	14.1	20.0			1.68	J
PCB-129	ND	10.0	6.37		1.11	
PCB-130	5.19	10.0			2.21	J
PCB-131	ND	10.0	6.07		1.46	
PCB-132/161	19.2	20.0			2.34	J
PCB-133/142	ND	20.0	5.87		2.19	
PCB-134/143	5.08	20.0			2.40	J
PCB-135	ND	10.0	4.84		2.90	
PCB-136	ND	10.0		8.25	2.89	
PCB-137	4.04	10.0			2.08	J
PCB-138/163/164	68.8	30.0			2.68	
PCB-139/149	41.4	20.0			7.87	B
PCB-140	ND	10.0	4.81		3.52	
PCB-141	11.8	10.0			1.15	
PCB-144	ND	10.0	4.61		3.22	
PCB-145	ND	10.0	3.45		1.73	
PCB-146/165	8.00	20.0			1.91	J
PCB-147	ND	10.0	4.56		3.62	
PCB-148	ND	10.0	5.09		1.68	
PCB-150	ND	10.0	3.55		1.14	
PCB-151	ND	10.0		7.95	3.59	
PCB-152	ND	10.0	3.44		1.82	
PCB-153	51.3	10.0			1.83	
PCB-154	ND	10.0	4.27		2.78	
PCB-155	ND	10.0	3.33		1.45	
PCB-156	9.22	10.0			1.74	J
PCB-157	ND	10.0	4.63		1.17	
PCB-158/160	10.3	20.0			1.99	J
PCB-159	ND	10.0	4.29		1.20	
PCB-166	ND	10.0	4.48		0.920	
PCB-167	ND	10.0	4.50		1.65	
PCB-168	ND	10.0	4.05		0.933	
PCB-169	ND	10.0	4.84		1.12	
PCB-170	12.7	10.0			1.38	
PCB-171	ND	10.0	3.10		1.61	
PCB-172	ND	10.0	3.33		1.46	
PCB-173	ND	10.0	3.51		1.49	
PCB-174	12.3	10.0			1.42	
PCB-175	ND	10.0	3.24		3.15	
PCB-176	ND	10.0	2.30		2.17	
PCB-177	ND	10.0	3.29		1.34	
PCB-178	ND	10.0	3.35		2.25	
PCB-179	5.63	10.0			1.57	J

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: IA-MHS-05-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 11:50

Sample Data
Matrix: Effluent
Sample Size: 0.500 L

Laboratory Data
Lab Sample: 1400781-01 Date Received: 21-Oct-2014 9:04
QC Batch: B4K0011 Date Extracted: 05-Nov-2014 8:17
Date Analyzed : 07-Nov-14 01:44 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-180	23.8	10.0			0.610	
PCB-181	ND	10.0	2.99		1.01	
PCB-182/187	14.6	20.0			6.20	J
PCB-183	7.70	10.0			3.29	J
PCB-184	ND	10.0	2.53		1.25	
PCB-185	ND	10.0	3.04		1.47	
PCB-186	ND	10.0	2.46		2.43	
PCB-188	ND	10.0	2.23		1.08	
PCB-189	ND	10.0	2.38		1.49	
PCB-190	ND	10.0	2.32		1.70	
PCB-191	ND	10.0	2.44		1.96	
PCB-192	ND	10.0	2.67		1.69	
PCB-193	ND	10.0	2.46		1.46	
PCB-194	5.27	10.0			1.71	J
PCB-195	ND	10.0	4.29		1.47	
PCB-196/203	ND	20.0		5.65	6.35	
PCB-197	ND	10.0	3.10		1.80	
PCB-198	ND	10.0	4.48		3.78	
PCB-199	ND	10.0		5.47	4.05	
PCB-200	ND	10.0	3.27		1.75	
PCB-201	ND	10.0	3.02		1.02	
PCB-202	ND	10.0	3.20		1.55	
PCB-204	ND	10.0	3.35		1.48	
PCB-205	ND	10.0	3.64		1.53	
PCB-206	ND	10.0	4.54		1.32	
PCB-207	ND	10.0	2.62		1.51	
PCB-208	ND	10.0	2.50		1.34	
PCB-209	ND	10.0	4.31		1.86	
Total monoCB	ND	10.0	7.03			
Total diCB	ND	20.0		28.0		
Total triCB	57.4	10.0				B
Total tetraCB	140	10.0		169		
Total pentaCB	241	10.0		271		
Total hexaCB	249	10.0		265		B
Total heptaCB	76.8	10.0				B
Total octaCB	5.27	10.0		16.4		
Total nonaCB	ND	10.0	4.54			
DecaCB	ND	10.0	4.31			
Total PCB	768	20.0				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: IA-MHS-05-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 11:50

Sample Data
Matrix: Effluent
Sample Size: 0.500 L

Laboratory Data
Lab Sample: 1400781-01 Date Received: 21-Oct-2014 9:04
QC Batch: B4K0011 Date Extracted: 05-Nov-2014 8:17
Date Analyzed : 07-Nov-14 01:44 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	83.1	5 -145	
	13C-PCB-3	82.7	5 -145	
	13C-PCB-4	75.2	5 -145	
	13C-PCB-11	82.8	5 -145	
	13C-PCB-9	77.3	5 -145	
	13C-PCB-19	83.3	5 -145	
	13C-PCB-28	85.3	5 -145	
	13C-PCB-32	89.7	5 -145	
	13C-PCB-37	83.5	5 -145	
	13C-PCB-47	81.6	5 -145	
	13C-PCB-52	81.4	5 -145	
	13C-PCB-54	71.5	5 -145	
	13C-PCB-70	84.4	5 -145	
	13C-PCB-77	81.4	10 -145	
	13C-PCB-80	87.4	10 -145	
	13C-PCB-81	83.2	10 -145	
	13C-PCB-95	81.0	10 -145	
	13C-PCB-97	88.5	10 -145	
	13C-PCB-101	84.8	10 -145	
	13C-PCB-104	77.6	10 -145	
	13C-PCB-105	82.2	10 -145	
	13C-PCB-114	81.9	10 -145	
	13C-PCB-118	84.4	10 -145	
	13C-PCB-123	85.0	10 -145	
	13C-PCB-126	81.0	10 -145	
	13C-PCB-127	83.4	10 -145	
	13C-PCB-138	88.2	10 -145	
	13C-PCB-141	88.4	10 -145	
	13C-PCB-153	87.4	10 -145	
	13C-PCB-155	91.7	10 -145	
	13C-PCB-156	88.2	10 -145	
	13C-PCB-157	86.9	10 -145	
	13C-PCB-159	89.7	10 -145	
	13C-PCB-167	86.7	10 -145	
	13C-PCB-169	81.9	10 -145	
	13C-PCB-170	93.1	10 -145	
	13C-PCB-180	94.0	10 -145	
	13C-PCB-188	85.1	10 -145	
	13C-PCB-189	87.3	10 -145	
	13C-PCB-194	89.1	10 -145	
	13C-PCB-202	101	10 -145	
	13C-PCB-206	99.7	10 -145	
	13C-PCB-208	84.7	10 -145	
	13C-PCB-209	114	10 -145	
CRS	13C-PCB-79	90.5	10 -145	
	13C-PCB-178	94.4	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: IA-CBN-60-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 12:50

Sample Data
Matrix: Effluent
Sample Size: 1.02 L

Laboratory Data
Lab Sample: 1400781-02 Date Received: 21-Oct-2014 9:04
QC Batch: B4J0155 Date Extracted: 29-Oct-2014 8:24
Date Analyzed : 31-Oct-14 18:23 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	5.43	4.88			1.21	
PCB-2	ND	4.88	3.94		1.75	
PCB-3	3.89	4.88			1.49	J
PCB-4/10	ND	19.5	10.5		5.64	
PCB-5/8	14.5	19.5			3.59	J
PCB-6	ND	9.77	8.76		3.10	
PCB-7/9	ND	19.5	8.70		6.22	
PCB-11	46.9	9.77			3.86	B
PCB-12/13	ND	19.5	8.98		5.01	
PCB-14	ND	9.77	8.01		3.98	
PCB-15	9.74	9.77			2.53	J
PCB-16/32	12.0	9.77			2.87	
PCB-17	5.88	4.88			1.37	
PCB-18	16.1	4.88			2.57	
PCB-19	ND	4.88	1.37		2.38	
PCB-20/21/33	12.0	14.7			10.3	J
PCB-22	6.25	4.88			3.17	
PCB-23	ND	4.88	1.82		1.35	
PCB-24/27	ND	9.77	0.960		3.16	
PCB-25	2.30	4.88			3.34	J
PCB-26	3.77	4.88			2.19	J
PCB-28	15.5	4.88			2.90	
PCB-29	ND	4.88	1.79		1.60	
PCB-30	ND	4.88	0.969		2.09	
PCB-31	14.8	4.88			4.29	
PCB-34	ND	4.88	1.89		2.34	
PCB-35	4.78	4.88			1.65	J
PCB-36	ND	4.88	2.03		2.69	
PCB-37	12.2	4.88			1.92	
PCB-38	ND	4.88	2.07		1.56	
PCB-39	ND	4.88	1.97		2.60	
PCB-40	11.5	4.88			3.08	
PCB-41/64/71/72	52.4	19.5			5.57	
PCB-42/59	15.2	9.77			2.84	
PCB-43/49	55.2	9.77			3.38	

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-44	97.3	4.88			2.48	
PCB-45	ND	4.88		4.14	1.96	
PCB-46	ND	4.88		2.44	2.49	
PCB-47	12.3	4.88			4.42	
PCB-48/75	7.20	9.77			2.09	J
PCB-50	ND	4.88	2.66		1.40	
PCB-51	1.50	4.88			1.42	J
PCB-52/69	170	9.77			3.64	
PCB-53	6.25	4.88			1.12	
PCB-54	ND	4.88	2.15		1.51	
PCB-55	ND	4.88		5.58	1.19	
PCB-56/60	70.0	9.77			2.19	
PCB-57	ND	4.88	2.01		0.857	
PCB-58	ND	4.88	2.03		1.81	
PCB-61/70	290	9.77			2.40	
PCB-62	ND	4.88	2.20		1.46	
PCB-63	ND	4.88	2.00		0.696	
PCB-65	ND	4.88	2.13		0.953	
PCB-66/76	90.6	9.77			2.82	
PCB-67	4.80	4.88			1.22	J
PCB-68	ND	4.88	1.92		1.24	
PCB-73	ND	4.88	2.14		1.56	
PCB-74	49.6	4.88			1.53	
PCB-77	52.7	4.88			1.34	
PCB-78	ND	4.88	2.35		0.990	
PCB-79	14.1	4.88			1.60	
PCB-80	ND	4.88	1.90		1.98	
PCB-81	5.46	4.88			2.34	
PCB-82	248	4.88			1.69	
PCB-83	ND	4.88	2.82		1.32	
PCB-84/92	448	9.77			3.38	
PCB-85/116	244	9.77			2.83	
PCB-86	ND	4.88	4.19		2.34	
PCB-87/117/125	641	14.7			3.79	
PCB-88/91	103	4.88			3.25	

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

Sample ID: IA-CBN-60-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 12:50

Sample Data
Matrix: Effluent
Sample Size: 1.02 L

Laboratory Data
Lab Sample: 1400781-02 Date Received: 21-Oct-2014 9:04
QC Batch: B4J0155 Date Extracted: 29-Oct-2014 8:24
Date Analyzed : 31-Oct-14 18:23 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-89	7.50	4.88			1.84	
PCB-90/101	1210	9.77			1.92	
PCB-93	ND	4.88	3.77		1.47	
PCB-94	ND	4.88	3.85		1.91	
PCB-95/98/102	592	14.7			6.58	
PCB-96	4.12	4.88			2.16	J
PCB-97	446	4.88			1.24	
PCB-99	418	4.88			1.94	
PCB-100	ND	4.88	3.04		2.03	
PCB-103	ND	4.88	3.26		2.28	
PCB-104	ND	4.88	2.42		0.931	
PCB-105	1140	4.88			2.21	
PCB-106/118	2400	9.77			2.44	
PCB-107/109	148	9.77			1.98	
PCB-108/112	59.8	9.77			1.86	
PCB-110	2000	4.88			1.94	
PCB-111/115	14.5	9.77			0.768	
PCB-113	ND	4.88	2.84		1.31	
PCB-114	51.7	4.88			1.81	
PCB-119	15.8	4.88			0.949	
PCB-120	ND	4.88		2.19	1.01	
PCB-121	ND	4.88	2.24		1.94	
PCB-122	ND	4.88		21.6	1.84	
PCB-123	31.0	4.88			1.35	
PCB-124	99.5	4.88			1.79	
PCB-126	36.6	4.88			2.05	
PCB-127	ND	4.88	12.7		0.808	
PCB-128/162	831	9.77			1.68	
PCB-129	245	4.88			1.11	
PCB-130	266	4.88			2.21	
PCB-131	ND	4.88	2.13		1.46	
PCB-132/161	883	9.77			2.34	
PCB-133/142	76.6	9.77			2.19	
PCB-134/143	150	9.77			2.40	
PCB-135	229	4.88			2.90	

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-136	153	4.88			2.89	
PCB-137	220	4.88			2.08	
PCB-138/163/164	3760	14.7			2.68	
PCB-139/149	1420	9.77			7.87	
PCB-140	12.1	4.88			3.52	
PCB-141	563	4.88			1.15	
PCB-144	85.0	4.88			3.22	
PCB-145	ND	4.88	2.09		1.73	
PCB-146/165	325	9.77			1.91	
PCB-147	51.5	4.88			3.62	
PCB-148	ND	4.88	3.09		1.68	
PCB-150	ND	4.88	2.15		1.14	
PCB-151	251	4.88			3.59	
PCB-152	ND	4.88	2.08		1.82	
PCB-153	2150	4.88			1.83	
PCB-154	14.9	4.88			2.78	
PCB-155	ND	4.88	2.02		1.45	
PCB-156	559	4.88			1.74	
PCB-157	129	4.88			1.17	
PCB-158/160	474	9.77			1.99	
PCB-159	ND	4.88	1.77		1.20	
PCB-166	16.1	4.88			0.920	
PCB-167	214	4.88			1.65	
PCB-168	4.22	4.88			0.933	J
PCB-169	ND	4.88	2.14		1.12	
PCB-170	658	4.88			1.38	
PCB-171	146	4.88			1.61	
PCB-172	92.7	4.88			1.46	
PCB-173	17.4	4.88			1.49	
PCB-174	354	4.88			1.42	
PCB-175	13.1	4.88			3.15	
PCB-176	30.0	4.88			2.17	
PCB-177	237	4.88			1.34	
PCB-178	47.0	4.88			2.25	
PCB-179	75.8	4.88			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: IA-CBN-60-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 12:50

Sample Data
Matrix: Effluent
Sample Size: 1.02 L

Laboratory Data
Lab Sample: 1400781-02 Date Received: 21-Oct-2014 9:04
QC Batch: B4J0155 Date Extracted: 29-Oct-2014 8:24
Date Analyzed : 31-Oct-14 18:23 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-180	873	4.88			0.610	
PCB-181	5.11	4.88			1.01	
PCB-182/187	280	9.77			6.20	
PCB-183	170	4.88			3.29	
PCB-184	ND	4.88	1.91		1.25	
PCB-185	29.5	4.88			1.47	
PCB-186	ND	4.88	1.85		2.43	
PCB-188	ND	4.88	1.68		1.08	
PCB-189	33.5	4.88			1.49	
PCB-190	92.4	4.88			1.70	
PCB-191	20.6	4.88			1.96	
PCB-192	ND	4.88	2.52		1.69	
PCB-193	39.2	4.88			1.46	
PCB-194	157	4.88			1.71	
PCB-195	53.4	4.88			1.47	
PCB-196/203	73.7	9.77			6.35	
PCB-197	ND	4.88	3.99		1.80	
PCB-198	ND	4.88	5.76		3.78	
PCB-199	66.4	4.88			4.05	
PCB-200	8.42	4.88			1.75	
PCB-201	ND	4.88		6.76	1.02	
PCB-202	ND	4.88		9.24	1.55	
PCB-204	ND	4.88	4.32		1.48	
PCB-205	11.1	4.88			1.53	
PCB-206	ND	4.88		44.6	1.32	
PCB-207	ND	4.88	4.51		1.51	
PCB-208	ND	4.88	4.29		1.34	
PCB-209	ND	4.88	27.2		1.86	
Total monoCB	9.32	4.88				
Total diCB	71.2	9.77				B
Total triCB	106	4.88				B
Total tetraCB	1010	4.88		1020		B
Total pentaCB	10400	4.88				
Total hexaCB	13100	4.88				
Total heptaCB	3210	4.88				
Total octaCB	370	4.88		386		
Total nonaCB	ND	4.88		44.6		
DecaCB	ND	4.88	27.2			
Total PCB	28200	9.77				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: IA-CBN-60-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 12:50

Sample Data
Matrix: Effluent
Sample Size: 1.02 L

Laboratory Data
Lab Sample: 1400781-02 Date Received: 21-Oct-2014 9:04
QC Batch: B4J0155 Date Extracted: 29-Oct-2014 8:24
Date Analyzed : 31-Oct-14 18:23 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	73.9	5 -145	
	13C-PCB-3	73.6	5 -145	
	13C-PCB-4	84.5	5 -145	
	13C-PCB-11	88.9	5 -145	
	13C-PCB-9	84.6	5 -145	
	13C-PCB-19	76.4	5 -145	
	13C-PCB-28	89.3	5 -145	
	13C-PCB-32	79.1	5 -145	
	13C-PCB-37	85.9	5 -145	
	13C-PCB-47	96.5	5 -145	
	13C-PCB-52	97.2	5 -145	
	13C-PCB-54	88.2	5 -145	
	13C-PCB-70	97.9	5 -145	
	13C-PCB-77	90.9	10 -145	
	13C-PCB-80	97.2	10 -145	
	13C-PCB-81	92.3	10 -145	
	13C-PCB-95	92.5	10 -145	
	13C-PCB-97	99.5	10 -145	
	13C-PCB-101	95.4	10 -145	
	13C-PCB-104	91.3	10 -145	
	13C-PCB-105	103	10 -145	
	13C-PCB-114	104	10 -145	
	13C-PCB-118	88.8	10 -145	
	13C-PCB-123	92.2	10 -145	
	13C-PCB-126	99.3	10 -145	
	13C-PCB-127	102	10 -145	
	13C-PCB-138	96.2	10 -145	
	13C-PCB-141	99.5	10 -145	
	13C-PCB-153	101	10 -145	
	13C-PCB-155	86.1	10 -145	
	13C-PCB-156	87.0	10 -145	
	13C-PCB-157	90.9	10 -145	
	13C-PCB-159	92.9	10 -145	
	13C-PCB-167	88.4	10 -145	
	13C-PCB-169	70.5	10 -145	
	13C-PCB-170	71.3	10 -145	
	13C-PCB-180	79.9	10 -145	
	13C-PCB-188	88.9	10 -145	
	13C-PCB-189	56.4	10 -145	
	13C-PCB-194	106	10 -145	
	13C-PCB-202	81.5	10 -145	
	13C-PCB-206	71.4	10 -145	
	13C-PCB-208	91.4	10 -145	
	13C-PCB-209	43.9	10 -145	
CRS	13C-PCB-79	93.3	10 -145	
	13C-PCB-178	88.6	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

Sample ID: IA-CV-01-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 14:30

Sample Data
Matrix: Effluent
Sample Size: 0.500 L

Laboratory Data
Lab Sample: 1400781-03 Date Received: 21-Oct-2014 9:04
QC Batch: B4K0011 Date Extracted: 05-Nov-2014 8:17
Date Analyzed : 07-Nov-14 02:47 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-1	15.5	10.0			1.21	
PCB-2	4.70	10.0			1.75	J
PCB-3	8.67	10.0			1.49	J
PCB-4/10	ND	40.0	22.3		5.64	
PCB-5/8	28.8	40.0			3.59	J
PCB-6	ND	20.0	17.7		3.10	
PCB-7/9	ND	40.0	17.6		6.22	
PCB-11	ND	20.0		31.2	3.86	
PCB-12/13	ND	40.0	18.2		5.01	
PCB-14	ND	20.0	16.3		3.98	
PCB-15	21.8	20.0			2.53	
PCB-16/32	13.5	20.0			2.87	J, B
PCB-17	7.37	10.0			1.37	J
PCB-18	16.2	10.0			2.57	
PCB-19	3.66	10.0			2.38	J
PCB-20/21/33	17.1	30.0			10.3	J
PCB-22	10.7	10.0			3.17	
PCB-23	ND	10.0	2.73		1.35	
PCB-24/27	ND	20.0	2.47		3.16	
PCB-25	ND	10.0	2.67		3.34	
PCB-26	ND	10.0	2.77		2.19	
PCB-28	20.5	10.0			2.90	
PCB-29	ND	10.0	2.70		1.60	
PCB-30	ND	10.0	2.51		2.09	
PCB-31	22.5	10.0			4.29	
PCB-34	ND	10.0	2.84		2.34	
PCB-35	ND	10.0	2.94		1.65	
PCB-36	ND	10.0	2.94		2.69	
PCB-37	13.0	10.0			1.92	
PCB-38	ND	10.0	2.99		1.56	
PCB-39	ND	10.0	2.85		2.60	
PCB-40	ND	10.0		8.02	3.08	
PCB-41/64/71/72	45.9	40.0			5.57	
PCB-42/59	13.1	20.0			2.84	J
PCB-43/49	33.7	20.0			3.38	
PCB-44	70.9	10.0			2.48	
PCB-45	4.80	10.0			1.96	J
PCB-46	3.94	10.0			2.49	J
PCB-47	23.4	10.0			4.42	
PCB-48/75	4.20	20.0			2.09	J
PCB-50	ND	10.0	3.73		1.40	
PCB-51	ND	10.0		2.28	1.42	
PCB-52/69	102	20.0			3.64	
PCB-53	ND	10.0		5.40	1.12	
PCB-54	ND	10.0	3.01		1.51	
PCB-55	ND	10.0	2.83		1.19	
PCB-56/60	38.9	20.0			2.19	
PCB-57	ND	10.0	2.77		0.857	
PCB-58	ND	10.0	2.80		1.81	
PCB-61/70	139	20.0			2.40	
PCB-62	ND	10.0	2.89		1.46	
PCB-63	ND	10.0	2.76		0.696	
PCB-65	ND	10.0	2.80		0.953	
PCB-66/76	54.5	20.0			2.82	
PCB-67	ND	10.0	2.88		1.22	
PCB-68	4.57	10.0			1.24	J
PCB-73	ND	10.0	2.93		1.56	
PCB-74	30.5	10.0			1.53	
PCB-77	23.4	10.0			1.34	
PCB-78	ND	10.0	2.99		0.990	
PCB-79	ND	10.0	2.79		1.60	
PCB-80	ND	10.0	2.46		1.98	
PCB-81	1.77	10.0			2.34	J
PCB-82	64.2	10.0			1.69	
PCB-83	ND	10.0	4.73		1.32	
PCB-84/92	161	20.0			3.38	
PCB-85/116	70.5	20.0			2.83	
PCB-86	ND	10.0	7.03		2.34	
PCB-87/117/125	169	30.0			3.79	
PCB-88/91	ND	10.0	6.72		3.25	

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

Sample ID: IA-CV-01-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 14:30

Sample Data
Matrix: Effluent
Sample Size: 0.500 L

Laboratory Data
Lab Sample: 1400781-03 Date Received: 21-Oct-2014 9:04
QC Batch: B4K0011 Date Extracted: 05-Nov-2014 8:17
Date Analyzed : 07-Nov-14 02:47 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-89	ND	10.0		2.07	1.84	
PCB-90/101	364	20.0			1.92	
PCB-93	ND	10.0	6.06		1.47	
PCB-94	ND	10.0	6.18		1.91	
PCB-95/98/102	270	30.0			6.58	
PCB-96	ND	10.0	4.99		2.16	
PCB-97	125	10.0			1.24	
PCB-99	126	10.0			1.94	
PCB-100	ND	10.0	5.44		2.03	
PCB-103	ND	10.0	5.84		2.28	
PCB-104	ND	10.0	4.33		0.931	
PCB-105	200	10.0			2.21	
PCB-106/118	431	20.0			2.44	
PCB-107/109	ND	20.0		26.0	1.98	
PCB-108/112	23.0	20.0			1.86	
PCB-110	528	10.0			1.94	
PCB-111/115	6.09	20.0			0.768	J
PCB-113	ND	10.0		2.01	1.31	
PCB-114	7.90	10.0			1.81	J
PCB-119	4.89	10.0			0.949	J
PCB-120	ND	10.0	4.03		1.01	
PCB-121	28.6	10.0			1.94	
PCB-122	6.55	10.0			1.84	J
PCB-123	6.24	10.0			1.35	J
PCB-124	18.9	10.0			1.79	
PCB-126	8.94	10.0			2.05	J
PCB-127	ND	10.0	6.76		0.808	
PCB-128/162	128	20.0			1.68	
PCB-129	38.1	10.0			1.11	
PCB-130	48.6	10.0			2.21	
PCB-131	ND	10.0	8.40		1.46	
PCB-132/161	162	20.0			2.34	
PCB-133/142	15.1	20.0			2.19	J
PCB-134/143	30.5	20.0			2.40	
PCB-135	49.3	10.0			2.90	
PCB-136	43.3	10.0			2.89	
PCB-137	35.5	10.0			2.08	
PCB-138/163/164	577	30.0			2.68	
PCB-139/149	307	20.0			7.87	B
PCB-140	3.72	10.0			3.52	J
PCB-141	104	10.0			1.15	
PCB-144	20.5	10.0			3.22	
PCB-145	ND	10.0	4.18		1.73	
PCB-146/165	54.2	20.0			1.91	
PCB-147	ND	10.0		8.72	3.62	
PCB-148	ND	10.0	6.17		1.68	
PCB-150	ND	10.0	4.30		1.14	
PCB-151	66.1	10.0			3.59	
PCB-152	ND	10.0	4.16		1.82	
PCB-153	366	10.0			1.83	
PCB-154	5.66	10.0			2.78	J
PCB-155	ND	10.0	4.03		1.45	
PCB-156	75.9	10.0			1.74	
PCB-157	20.2	10.0			1.17	
PCB-158/160	76.9	20.0			1.99	
PCB-159	ND	10.0	6.36		1.20	
PCB-166	ND	10.0	6.64		0.920	
PCB-167	32.6	10.0			1.65	
PCB-168	ND	10.0	5.60		0.933	
PCB-169	ND	10.0	7.52		1.12	
PCB-170	96.3	10.0			1.38	
PCB-171	24.0	10.0			1.61	
PCB-172	13.7	10.0			1.46	
PCB-173	ND	10.0	3.91		1.49	
PCB-174	61.8	10.0			1.42	
PCB-175	ND	10.0	3.15		3.15	
PCB-176	7.98	10.0			2.17	J
PCB-177	38.0	10.0			1.34	
PCB-178	10.8	10.0			2.25	
PCB-179	21.1	10.0			1.57	

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

Sample ID: IA-CV-01-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 14:30

Sample Data
Matrix: Effluent
Sample Size: 0.500 L

Laboratory Data
Lab Sample: 1400781-03 Date Received: 21-Oct-2014 9:04
QC Batch: B4K0011 Date Extracted: 05-Nov-2014 8:17
Date Analyzed : 07-Nov-14 02:47 Column: ZB-1 Analyst: DMS

Analyte	Conc. (pg/L)	RL	DL	EMPC	MDL	Qualifiers
PCB-180	139	10.0			0.610	
PCB-181	ND	10.0	3.33		1.01	
PCB-182/187	62.6	20.0			6.20	
PCB-183	32.2	10.0			3.29	
PCB-184	ND	10.0	2.47		1.25	
PCB-185	ND	10.0		5.91	1.47	
PCB-186	ND	10.0	2.39		2.43	
PCB-188	ND	10.0	2.17		1.08	
PCB-189	ND	10.0	2.96		1.49	
PCB-190	17.2	10.0			1.70	
PCB-191	ND	10.0	2.71		1.96	
PCB-192	ND	10.0	2.97		1.69	
PCB-193	7.64	10.0			1.46	J
PCB-194	19.2	10.0			1.71	
PCB-195	9.00	10.0			1.47	J
PCB-196/203	22.5	20.0			6.35	
PCB-197	ND	10.0	4.35		1.80	
PCB-198	ND	10.0	6.28		3.78	
PCB-199	18.8	10.0			4.05	
PCB-200	ND	10.0	4.59		1.75	
PCB-201	ND	10.0	4.24		1.02	
PCB-202	ND	10.0	4.49		1.55	
PCB-204	ND	10.0	4.70		1.48	
PCB-205	ND	10.0	6.81		1.53	
PCB-206	12.8	10.0			1.32	
PCB-207	ND	10.0	3.52		1.51	
PCB-208	ND	10.0		6.05	1.34	
PCB-209	ND	10.0	7.05		1.86	
Total monoCB	28.9	10.0				
Total diCB	50.6	20.0		81.8		
Total triCB	125	10.0				B
Total tetraCB	594	10.0		610		
Total pentaCB	2620	10.0		2650		
Total hexaCB	2260	10.0		2270		B
Total heptaCB	532	10.0		538		B
Total octaCB	69.5	10.0				
Total nonaCB	12.8	10.0		18.9		
DecaCB	ND	10.0	7.05			
Total PCB	6290	20.0				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: IA-CV-01-20141020-W

EPA Method 1668C

Client Data
Name: Leidos
Project: 1400647
Date Collected: 20-Oct-2014 14:30

Sample Data
Matrix: Effluent
Sample Size: 0.500 L

Laboratory Data
Lab Sample: 1400781-03 Date Received: 21-Oct-2014 9:04
QC Batch: B4K0011 Date Extracted: 05-Nov-2014 8:17
Date Analyzed : 07-Nov-14 02:47 Column: ZB-1 Analyst: DMS

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C-PCB-1	93.1	5 -145	
	13C-PCB-3	91.7	5 -145	
	13C-PCB-4	79.0	5 -145	
	13C-PCB-11	85.4	5 -145	
	13C-PCB-9	81.6	5 -145	
	13C-PCB-19	96.8	5 -145	
	13C-PCB-28	80.5	5 -145	
	13C-PCB-32	101	5 -145	
	13C-PCB-37	86.9	5 -145	
	13C-PCB-47	84.0	5 -145	
	13C-PCB-52	82.3	5 -145	
	13C-PCB-54	73.4	5 -145	
	13C-PCB-70	86.5	5 -145	
	13C-PCB-77	84.8	10 -145	
	13C-PCB-80	88.6	10 -145	
	13C-PCB-81	88.4	10 -145	
	13C-PCB-95	84.1	10 -145	
	13C-PCB-97	90.8	10 -145	
	13C-PCB-101	88.4	10 -145	
	13C-PCB-104	78.8	10 -145	
	13C-PCB-105	84.8	10 -145	
	13C-PCB-114	84.3	10 -145	
	13C-PCB-118	88.0	10 -145	
	13C-PCB-123	89.4	10 -145	
	13C-PCB-126	83.8	10 -145	
	13C-PCB-127	86.2	10 -145	
	13C-PCB-138	94.5	10 -145	
	13C-PCB-141	90.1	10 -145	
	13C-PCB-153	90.3	10 -145	
	13C-PCB-155	90.9	10 -145	
	13C-PCB-156	86.7	10 -145	
	13C-PCB-157	86.0	10 -145	
	13C-PCB-159	91.5	10 -145	
	13C-PCB-167	88.2	10 -145	
	13C-PCB-169	78.0	10 -145	
	13C-PCB-170	87.0	10 -145	
	13C-PCB-180	89.2	10 -145	
	13C-PCB-188	93.5	10 -145	
	13C-PCB-189	75.5	10 -145	
	13C-PCB-194	89.8	10 -145	
	13C-PCB-202	101	10 -145	
	13C-PCB-206	97.3	10 -145	
	13C-PCB-208	84.8	10 -145	
	13C-PCB-209	109	10 -145	
CRS	13C-PCB-79	93.5	10 -145	
	13C-PCB-178	102	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: 1400781

Storage ID: WR-8

Storage Secured: Yes ☑ No ☐

Temp: 1.8 °C 1.6C

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

Project I.D.: 1400647 P.O.# P0101163569 Sampler: Melissa Ivancevich (Name)

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

Relinquished by: (Signature and Printed Name) Corey H. Wilson Date: 10/20/14 Time: 1645 Received by: (Signature and Printed Name) Bethany Benedict Date: 10/21/14 Time: 0907

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

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

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

ATTN: Sample Receiving

Method of Shipment: FedEx Overnight

Tracking No.: 8746 1313 0429

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
IA-MHS-05-20141020-W	10/20/14	1150	IAA/Manhole S	4	A	EF	✓									✓	✓				
IA-CBN-S0-20141020-W	10/20/14	1250	IAA/Manhole N	4	A	EF	✓									✓	✓				
IA-CV-01-20141020-W	10/20/14	1430	IAA/Manhole C	4	A	EF	✓									✓	✓				

10/20/14

Special Instructions/Comments:

2 Coolers

SEND DOCUMENTATION AND RESULTS TO:

Name: Christine Nanscarrow
Company: Same As Above
Address:
City: State: Zip:
Phone: Fax:
Email:

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 #: 1400781 **TAT** Std

Samples Arrival:	**Date/Time** 10/21/14 0904	**Initials:** VBB	**Location:** WR-2 **Shelf/Rack:** NA
Logged In:	**Date/Time** 10/21/14 1159	**Initials:** VBB	**Location:** WR-2 **Shelf/Rack:** A3

Delivered By:	FedEx	UPS	On Trac	DHL	Hand Delivered	Other
Preservation:	(Ice)	Blue Ice	Dry Ice	None		
Temp °C: 1.8 (uncorrected) **Temp °C:** 1.8 (corrected)	**Time:** 0906		**Thermometer ID:** IR-1			

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill 1 of 2 Trk # 8746 1313 0429	✓		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

$Na_2S_2O_3$ Preservation Documented? NA	COC	Sample Container	None		
Shipping Container	(Vista)	Client	Retain	Return	Dispose

Comments:

Sample ID's:	date	time	
1A-CV-01-20141020-W	10/20/14	1430	A, B, C, D containers
1A-CBN-60-20141020-W	10/20/14	1250	D container.
1A-MHS-05-20141020-W	↓	1150	↓

Sample Login 11/2013 ckt

SAMPLE LOG-IN CHECKLIST

Vista Analytical Laboratory

Vista Project #: 1400781 **TAT** Std

Samples Arrival:	**Date/Time** 10/21/14 0904	**Initials:** CBSB	**Location:** WR-2 **Shelf/Rack:** NA
Logged In:	**Date/Time** 10/21/14 1159	**Initials:** VBSB	**Location:** WR-2 **Shelf/Rack:** A3

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

Temp °C: 1.6 (uncorrected)	**Time:** 0909	**Thermometer ID:** IR-1
Temp °C: 1.6 (corrected)		

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill 2 of 2 Trk # 7801 4878 8814	✓		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

$Na_2S_2O_3$ Preservation Documented? NA	COC	Sample Container	None		
Shipping Container (Vista)	Client	Retain	Return	Dispose	

Comments:

Sample IDs:

	date	time
1A-MHS-05-20141020-W	10/20/14	1150
1A-CBN-60-20141020-W	10/20/14	1250

A, B, C Containers ↓

Sample Login 11/2013 ckt

EXTRACTION INFORMATION

Process Sheet

Workorder: 1400781

Prep Expiration: 10/20/2015
Client: Leidos

Workorder Due: 11-Nov-14 00:00

TAT: 21

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

Prep Batch: B4J0127

Prep Data Entered: 10/24/14 BMS
Date and Initials

Initial Sequence: S450048

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400781-01 "A"	☒	IA-MHS-05-20141020-W	21-Oct-14 09:04	WR-2 A-3	
1400781-02	☐	IA-CBW-60-20141020-W "IA-CBW-60-20141020-W	21-Oct-14 09:04	WR-2 A-3	
1400781-03	☒	IA-CV-01-20141020-W	21-Oct-14 09:04	WR-2 A-3	

Vista PM:Martha Maier

Vial Box ID: SLT

Sample Reconciled By: B. Smith 10/23/14

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4J0126

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

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

HRMS-4

Date/Time IN: 10/23/14 0959 Date/Time OUT 10/24/14 1130

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	BMS 10/23/14	BMS 10/24/14			BMS 10/23/14			
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-
	1400777-24		Sample	1.31	17.88	1.31			5	NA	NA	0
	1400781-01		Sample	1.31	16.51	1.31			↓	↓	↓	↓
	1400781-02		Sample	1.32	14.23	1.32						
	1400781-03		Sample	1.32	17.37	1.32						

BCH_QAAN_TS_B4J0126 10/23/2014 8:36 AM

1 of 1

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4J0126

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

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

HRMS-4

Date/Time IN:	Date/Time OUT
10/23/14 0959	10/24/14 1130

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	BMS 10/23/14	BMS 10/24/14			BMS 10/23/14			
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-
	1400777-24		Sample	1.3100	17.8800	1.3100	0.0000	0.00	5	N/A	N/A	0
	1400781-01		Sample	1.3100	16.5100	1.3100	0.0000	0.00	5	N/A	N/A	0
	1400781-02		Sample	1.3200	14.2300	1.3200	0.0000	0.00	5	N/A	N/A	0
	1400781-03		Sample	1.3200	17.3700	1.3200	0.0000	0.00	5	N/A	N/A	0

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 1613 Full List

Method: 1613 Full Congener

B4J0127

Chemist: B. Smith

Prep Date/Time: 23-Oct-14 08:36

Prepared using: HRMS - SPE Extraction

							NA	C4J0133	C4J0133	C4J0134	
C	VISTA Sample ID	Bottle + Sample mL (L) BMS 11/10/14	Bottle Only mL (L) BMS 11/10/14	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
☐	B4J0127-BLK1	NA / L	NA / L	(1.000) L	BMS DC 10/23/14	BMS SR 10/24/14	NA	BMS 10/24/14	BMS 10/24/14	BMS 10/24/14	BMS SR 10/24/14
☐	B4J0127-BS1										
☐	1400777-24	379.32	400.78	0.91854							
☐	1400781-01	1512.63	499.25	1.0338							
☐	1400781-02	1528.62	502.58	1.02604							
☐	1400781-03	1515.48	502.00	1.01348							

IS Name (V10)	NS Name (V14)	CRS Name (V10)	RS Name (V10)	Cycle Time	APP: SEFUN SOX (SDS)	Check Out:
PCDD/F 1413704, 10µL	PCDD/F 13L1101, 10µL	PCDD/F 1413705, 10µL	PCDD/F 1413706, 10µL	Start Date/Time 10/23/14 1537	SOLV: TOL	Chemist/Date: BMS 10/27/14
PCB	PCB	PCB	PCB		Other SPE	Check In:
PAH	PAH	PAH	PAH	Stop Date/Time 10/24/14 0742	Final Volume(s) 20µL CM	Chemist/Date: cmg 10/27/14
						Balance ID: MRMS-4

Comments:

RX

Process Sheet

Workorder: 1400781

Prep Expiration: 10/20/2015
Client: Leidos

Workorder Due: 11-Nov-14 00:00

TAT: 21

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

Prep Batch: B4K0011

Prep Data Entered: M.T 11/5/14
Date and Initials

Initial Sequence: S4K0008E

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400781-01 "D"	☑	IA-MHS-05-20141020-W	21-Oct-14 09:04	WR-2 A-3	
~~1400781-02~~	☐	~~IA-CBW-60-20141020-W~~	~~21-Oct-14 09:04~~	~~WR-2 A-3~~	DMS 11/4/14
1400781-03 "D"	☑	IA-CV-01-20141020-W	21-Oct-14 09:04	WR-2 A-3	

500 mL ~~5X~~ 2X Spike Full Cleanup 1:5, 1:10
DMS 11/5/14

Vista PM:Martha Maier

Vial Box ID: NO WDY

Sample Reconciled By: M.T 11/5/14

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4K0010

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

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

INST HRMS_4 Date/Time IN: 11/5/14 8:40 Date/Time OUT 11/6/14 8:30

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	MJT 11/5/14	MJT 11/6/14			MJT 11/5/14			
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 (A) Added	Cl-
	1400781-01RE2		Sample	1.32	10.38	1.32			5	2	10	0
	1400781-03RE2		Sample	1.32	11.99	1.32			5	2	10	0
	B4K0011-MB		QC	NA	NA	NA	NA	NA	5	2	10	0
	J -OPR		QC	NA	NA	NA	NA	NA	5	2	10	0

(A) Acid was added in drops. MJT 11/5/14

Percent Moisture/ Percent Solids

D2216-90 BATCH ID B4K0010

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

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

INST HRMS-4

Date/Time IN:	Date/Time OUT
11/5/14 8:40	11/6/14 8:30

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	MJT 11/5/2014	MJT 11/6/2014			MJT 11/5/2014			
Pan #	SampID	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid Added	Cl-
	1400781-01RE2		Sample	1.3200	10.3800	1.3200	0.0000	0.00	5	2	10	0
	1400781-03RE2		Sample	1.3200	11.9900	1.3200	0.0000	0.00	5	2	10	0
	B4K0011-MB		QC	NA	NA	NA	NA	NA	5	2	10	0
	B4K0011-OPR		QC	NA	NA	NA	NA	NA	5	2	10	0

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 1668C Full List

B4K0011

Chemist: M.T

Prep Date/Time: 05-Nov-14 08:17

Prepared using: HRMS - Separatory Funnel

C	VISTA Sample ID	Bottle + Sample (mL)	Bottle Only (mL)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	CRS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
						PS	C4K0009	CK40010	NA	NA	
☐	B4K0011-BLK1	NA	NA	(0.500)	M.T 11/5/14	M.T 11/5/14	M.T 11/5/14	M.T 11/5/14	NA	NA	M.T 11/5/14
☐	B4K0011-BS1	NA	NA	J	"	"	"	"	"	"	"
☐	1400781-01RE1	NA	NA	0.500	"	"	"	"	"	"	"
☐	1400781-03RE1	NA	NA	0.500	"	"	"	"	"	"	"

IS Name 2X	NS Name 2X	~~CRS~~ PS Name 2X	RS Name 2X	Cycle Time	APP: (SEFUN) SOX SDS	Check Out: Chemist/Date: M.T 11/5/14
PCDD/F (V2)	PCDD/F (V5)	PCDD/F (V2)	PCDD/F (V2)	Start Date/Time	SOLV: DCM	Check In: M.T 11/5/14 Chemist/Date: M.T 11/5/14
PCB 14A3001, 20ul	PCB 13I2503, 20ul	PCB 14A3002, 20ul	PCB 14A3003, 20ul	NA	Other NA	
PAH	PAH	PAH	PAH	Stop Date/Time NA	Final Volume(s) 20ul C9	Balance ID: HRMS-4

Comments:

Process Sheet

Workorder: 1400781

Prep Expiration: 10/20/2015
Client: Leidos

Workorder Due: 11-Nov-14 00:00

TAT: 21

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

Prep Batch: B4J0155

Prep Data Entered: M.T 10/30/14
Date and Initials

Initial Sequence: S-150606E

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1400781-01 "B"	☑	IA-MHS-05-20141020-W	21-Oct-14 09:04	WR-2 A-3	
1400781-02 "B"	☑	IA-CBW-60-20141020-W	21-Oct-14 09:04	WR-2 A-3	
1400781-03 "B"	☑	IA-CV-01-20141020-W	21-Oct-14 09:04	WR-2 A-3	

Vista PM: Martha Maier

Vial Box ID: Link

Sample Reconciled By: M.T 10/29/14

D2216-90 BATCH ID B4J0153

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

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

INST HRMS-4

Date/Time IN:	Date/Time OUT
10/29/14 9:30	10/30/14 13:10

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	MJT 10/29/2014	MJT 10/30/2014			MJT 10/29/2014			
Pan #	SampID	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid Added	Cl-
	1400739-05		Sample	1.3000	12.6000	1.3100	0.0100	0.09	5	NA	NA	0
	1400779-01		Sample	1.3300	10.7200	1.3300	0.0000	0.00	5	2	10	0
	1400781-01RE1		Sample	1.3100	12.3800	1.3100	0.0000	0.00	5	2	10	0
	1400781-02RE1		Sample	1.3100	12.9800	1.3100	0.0000	0.00	5	2	10	0
	1400781-03RE1		Sample	1.3100	11.1700	1.3100	0.0000	0.00	5	2	10	0
	1400797-01		Sample	1.3100	10.5500	1.3400	0.0300	0.32	7	NA	NA	0
	B4J 155-MB		QC	NA	NA	NA	NA	NA	5	2	10	0
	B4J 155-OPR		QC	NA	NA	NA	NA	NA	5	2	10	0

D2216-90 BATCH ID B4J0153

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

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

INST HRMS-4

Date/Time IN: 10/29/14 ~~8:00~~ 09:30 Date/Time OUT 10/30/14 13:10 M.T 10/30/14

M.T 10/30/14

	B	C	D	E	F	G	H	K	M	N	O	P
				Intial and Date:	MJT 10/24/2014	MJT 10/30/14			MJT 10/24/2014			
Pan #	SampID	Source ID	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	pH Before	pH After	Acid (A) Added	Cl-
	1400739-05		Sample	1.30	12.60	1.31			5	NA	NA	0
	1400779-01		Sample	1.33	10.72	1.33			5	2	10	0
	1400781-01RE1		Sample	1.31	12.38	1.31			5	2	↓	0
	1400781-02RE1		Sample	1.31	12.98	1.31			5	2	↓	0
	1400781-03RE1		Sample	1.31	11.17	1.31			5	2	↓	0
	1400797-01		Sample	1.31	10.55	1.34			7	NA	NA	0
	B4J 155-MB		QC	NA	NA				5	2	10	0
	B4J 155-OPR		QC	NA	NA				5	2	↓	0

(A) acid was added in drops. M.T 10/29/14

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 1668C Full List

B4J0155

Chemist: M.T

Prep Date/Time: 29-Oct-14 08:24

Prepared using: HRMS - Separatory Funnel

							NA	C4J0154	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
☐	B4J0155-BLK1	NA	NA	(1.00)	M.T AC 10/29/14	M.T GF 10/30/14	NA	M.T 10/30/14	NA	NA	M.T AC 10/30/14
☐	B4J0155-BS1	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
☐	1400779-01	715.89	332.99	0.3829							
☐	1400781-01	1508.89	499.85	1.00904							
☐	1400781-02	1524.84	501.10	1.02374							
☐	1400781-03	1523.35	501.63	1.02172	↓	↓	↓	↓	↓	↓	↓

IS Name	NS Name	CRS Name	RS Name	Cycle Time	APP: (SEFUN) SOX SDS	Check Out:
PCDD/F ____ (V2)	PCDD/F ____ (V5)	PCDD/F ____ (V2)	PCDD/F ____ (V2)	Start Date/Time	SOLV: DCM	Chemist/Date: M.T 10/29/14
PCB 14A3001, 10ul	PCB 18I2503, 10ul	PCB 14A3002, 10ul	PCB 14A3003, 10ul	NA	Other NA	Check In:
PAH ____	PAH ____	PAH ____	PAH ____	Stop Date/Time	Final Volume(s) 20ul	Chemist/Date: Empty ↓
____	____	____	____	NA	C9	Balance ID: HRMS-4

Comments:

SAMPLE DATA

EPA Method 1613

Client ID: Method Blank Filename: 141027D1 S:7 Acq:27-OCT-14 19:22:20 ConCal: ST141027D1-1
Lab ID: B4J0127-BLK1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000 EndCAL: NA

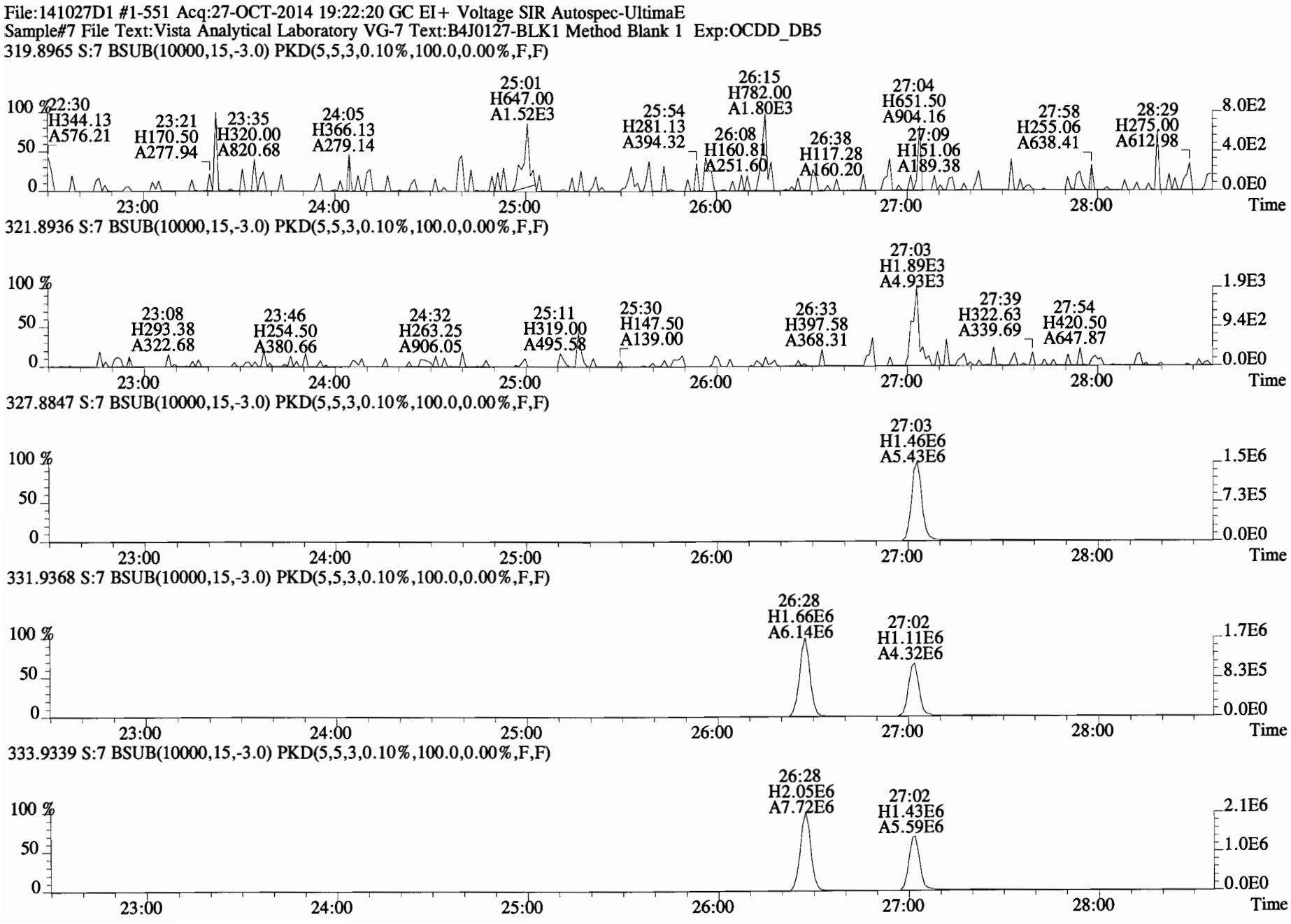
	Name	Resp	RA		RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	*	*	n	1.18	NotF	*	*		598	2.5	1.76
	1,2,3,7,8-PeCDD	*	*	n	0.92	NotF	*	*		451	2.5	0.997
	1,2,3,4,7,8-HxCDD	*	*	n	1.09	NotF	*	*		477	2.5	2.20
	1,2,3,6,7,8-HxCDD	*	*	n	1.07	NotF	*	*		477	2.5	2.36
	1,2,3,7,8,9-HxCDD	*	*	n	0.93	NotF	*	*		477	2.5	2.54
	1,2,3,4,6,7,8-HpCDD	*	*	n	1.12	NotF	*	*		422	2.5	2.16
	OCDD	*	*	n	0.95	NotF	*	*		879	2.5	6.51
	2,3,7,8-TCDF	*	*	n	1.08	NotF	*	*		468	2.5	1.21
	1,2,3,7,8-PeCDF	*	*	n	1.09	NotF	*	*		550	2.5	1.56
	2,3,4,7,8-PeCDF	*	*	n	1.04	NotF	*	*		550	2.5	1.45
	1,2,3,4,7,8-HxCDF	*	*	n	1.39	NotF	*	*		475	2.5	0.772
	1,2,3,6,7,8-HxCDF	*	*	n	1.26	NotF	*	*		475	2.5	0.829
	2,3,4,6,7,8-HxCDF	*	*	n	1.30	NotF	*	*		303	2.5	0.594
	1,2,3,7,8,9-HxCDF	*	*	n	1.19	NotF	*	*		303	2.5	0.901
	1,2,3,4,6,7,8-HpCDF	*	*	n	1.62	NotF	*	*		482	2.5	1.34
	1,2,3,4,7,8,9-HpCDF	*	*	n	1.53	NotF	*	*		321	2.5	0.914
	OCDF	*	*	n	1.10	NotF	*	*		525	2.5	2.92

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		598	1.76
Total Penta-Dioxins	*	*		643	1.42
Total Hexa-Dioxins	*	*		754	3.74
Total Hepta-Dioxins	*	*		422	2.16
Total Tetra-Furans	*	*		468	1.21
Total Penta-Furans	0.0000	0.0000		1120	3.07
Total Hexa-Furans	*	*		509	1.03
Total Hepta-Furans	*	*		482	1.35

									Rec	Qual
IS	13C-2,3,7,8-TCDD	9.92e+06	0.77	y	1.07	27:02	1.022	1333.4	66.7	
IS	13C-1,2,3,7,8-PeCDD	1.18e+07	0.62	y	1.24	31:33	1.193	1371.9	68.6	
IS	13C-1,2,3,4,7,8-HxCDD	8.08e+06	1.27	y	0.72	34:53	1.014	1429.8	71.5	
IS	13C-1,2,3,6,7,8-HxCDD	9.03e+06	1.26	y	0.74	34:60	1.017	1572.4	78.6	
IS	13C-1,2,3,7,8,9-HxCDD	1.02e+07	1.28	y	0.86	35:18	1.026	1526.7	76.3	
IS	13C-1,2,3,4,6,7,8-HpCDD	7.09e+06	1.11	y	0.64	38:46	1.127	1411.3	70.6	
IS	13C-OCDD	1.40e+07	0.88	y	0.78	42:05	1.223	2292.2	57.3	
IS	13C-2,3,7,8-TCDF	1.33e+07	0.76	y	0.92	26:15	0.992	1296.2	64.8	
IS	13C-1,2,3,7,8-PeCDF	1.42e+07	1.61	y	0.95	30:23	1.148	1342.7	67.1	
IS	13C-2,3,4,7,8-PeCDF	1.50e+07	1.59	y	0.97	31:17	1.182	1391.0	69.5	
IS	13C-1,2,3,4,7,8-HxCDF	1.08e+07	0.51	y	0.99	33:59	0.988	1400.8	70.0	
IS	13C-1,2,3,6,7,8-HxCDF	1.24e+07	0.53	y	1.10	34:07	0.992	1449.4	72.5	
IS	13C-2,3,4,6,7,8-HxCDF	1.19e+07	0.52	y	1.03	34:44	1.009	1475.3	73.8	
IS	13C-1,2,3,7,8,9-HxCDF	9.78e+06	0.52	y	0.86	35:42	1.038	1461.1	73.1	
IS	13C-1,2,3,4,6,7,8-HpCDF	7.73e+06	0.45	y	0.71	37:33	1.091	1389.3	69.5	
IS	13C-1,2,3,4,7,8,9-HpCDF	7.12e+06	0.44	y	0.71	39:19	1.143	1290.0	64.5	
IS	13C-OCDF	1.57e+07	0.91	y	0.87	42:19	1.230	2303.4	57.6	
C/Up	37Cl-2,3,7,8-TCDD	5.43e+06			1.21	27:03	1.022	645.83	80.7	
RS/RT	13C-1,2,3,4-TCDD	1.39e+07	0.79	y	1.00	26:27	*	2000.0		
RS	13C-1,2,3,4-TCDF	2.22e+07	0.77	y	1.00	25:01	*	2000.0		
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.56e+07	0.52	y	1.00	34:25	*	2000.0		

Integrations by Analyst: (M) Date: 10/28/14

Reviewed by Analyst: Date: 10/29/14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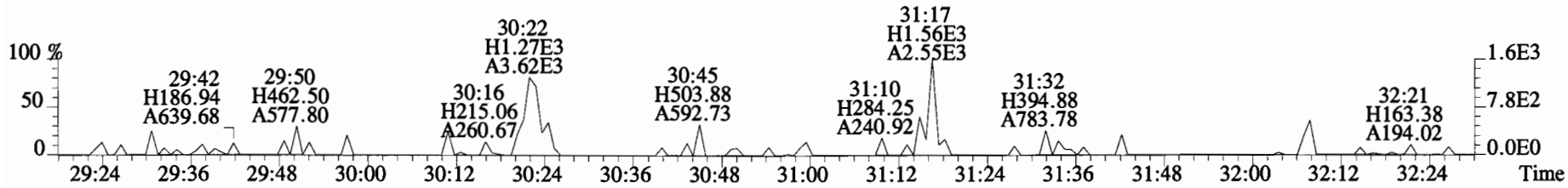
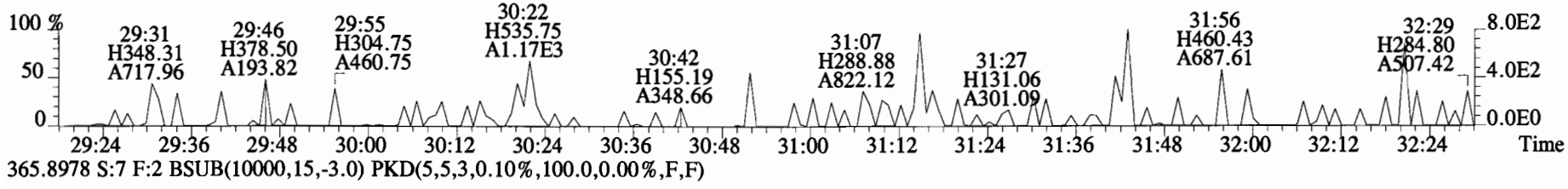
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
22:30 H344.13 A576.21
23:21 H170.50 A277.94
23:35 H320.00 A820.68
24:05 H366.13 A279.14
25:01 H647.00 A1.52E3
25:54 H281.13 A394.32
26:08 H160.81 A251.60
26:15 H782.00 A1.80E3
26:38 H117.28 A160.20
27:04 H651.50 A904.16
27:09 H151.06 A189.38
27:58 H255.06 A638.41
28:29 H275.00 A612.98
8.0E2
4.0E2
0.0E0
Time
321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:08 H293.38 A322.68
23:46 H254.50 A380.66
24:32 H263.25 A906.05
25:11 H319.00 A495.58
25:30 H147.50 A139.00
26:33 H397.58 A368.31
27:03 H1.89E3 A4.93E3
27:39 H322.63 A339.69
27:54 H420.50 A647.87
1.9E3
9.4E2
0.0E0
Time
327.8847 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:03 H1.46E6 A5.43E6
1.5E6
7.3E5
0.0E0
Time
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:28 H1.66E6 A6.14E6
27:02 H1.11E6 A4.32E6
1.7E6
8.3E5
0.0E0
Time
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:28 H2.05E6 A7.72E6
27:02 H1.43E6 A5.59E6
2.1E6
1.0E6
0.0E0
Time

File:141027D1 #1-257 Acq:27-OCT-2014 19:22:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BLK1 Method Blank 1 Exp:OCDD_DB5

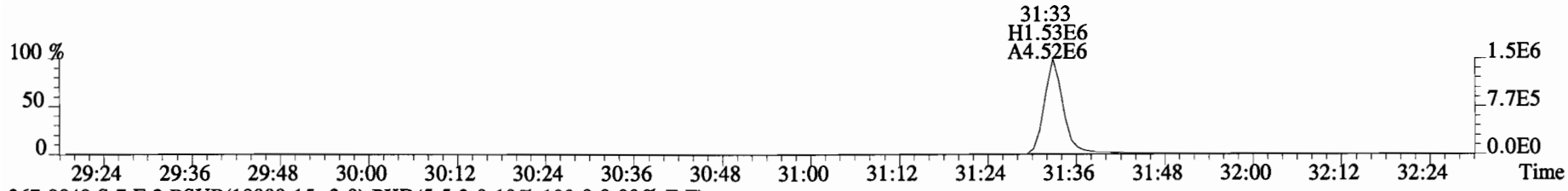
353.8576 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



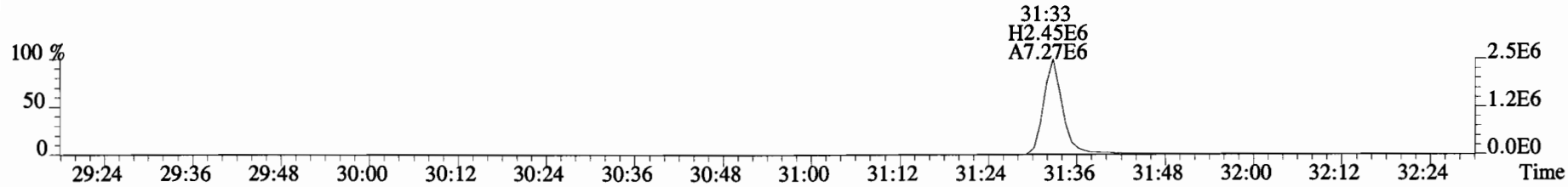
355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



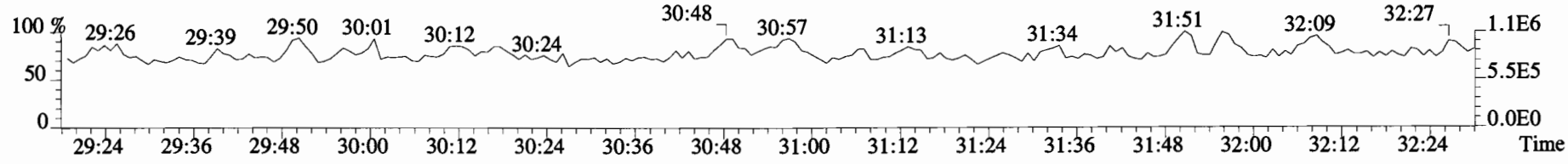
365.8978 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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



366.9792 S:7 F:2



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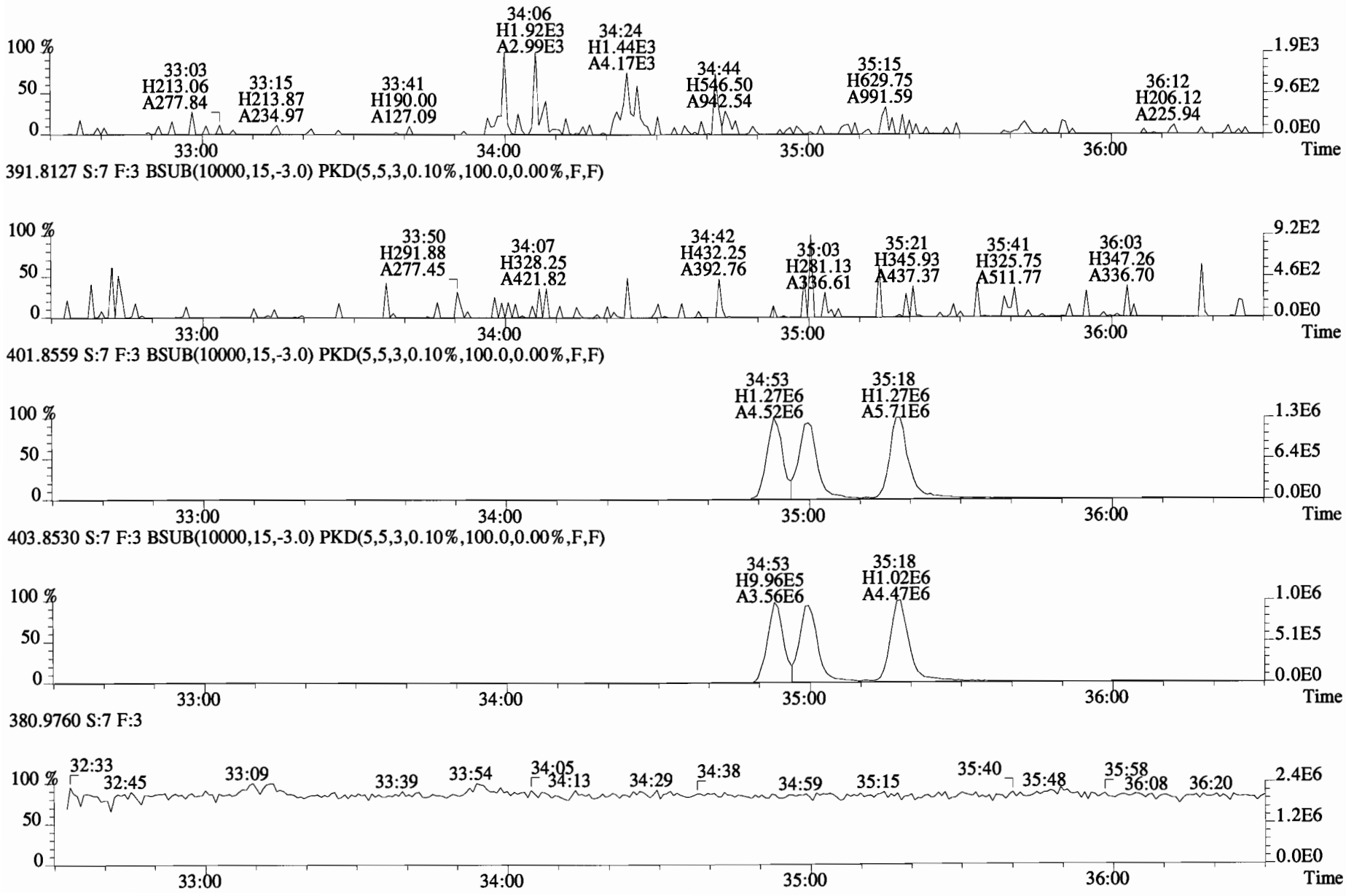

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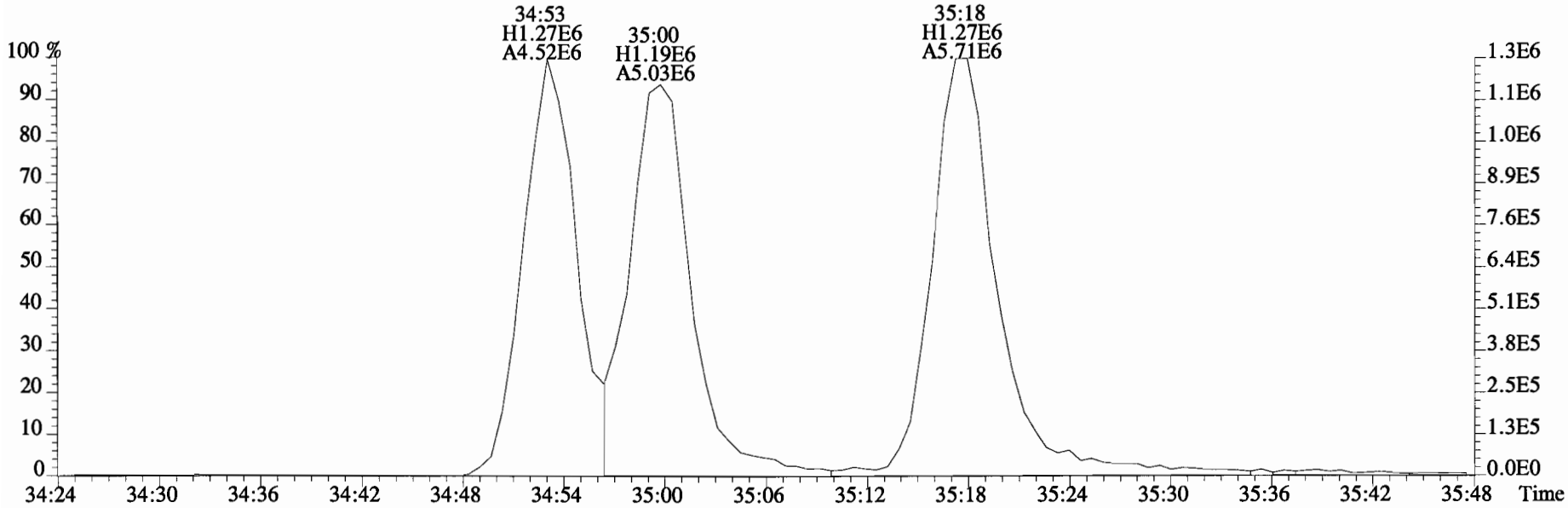
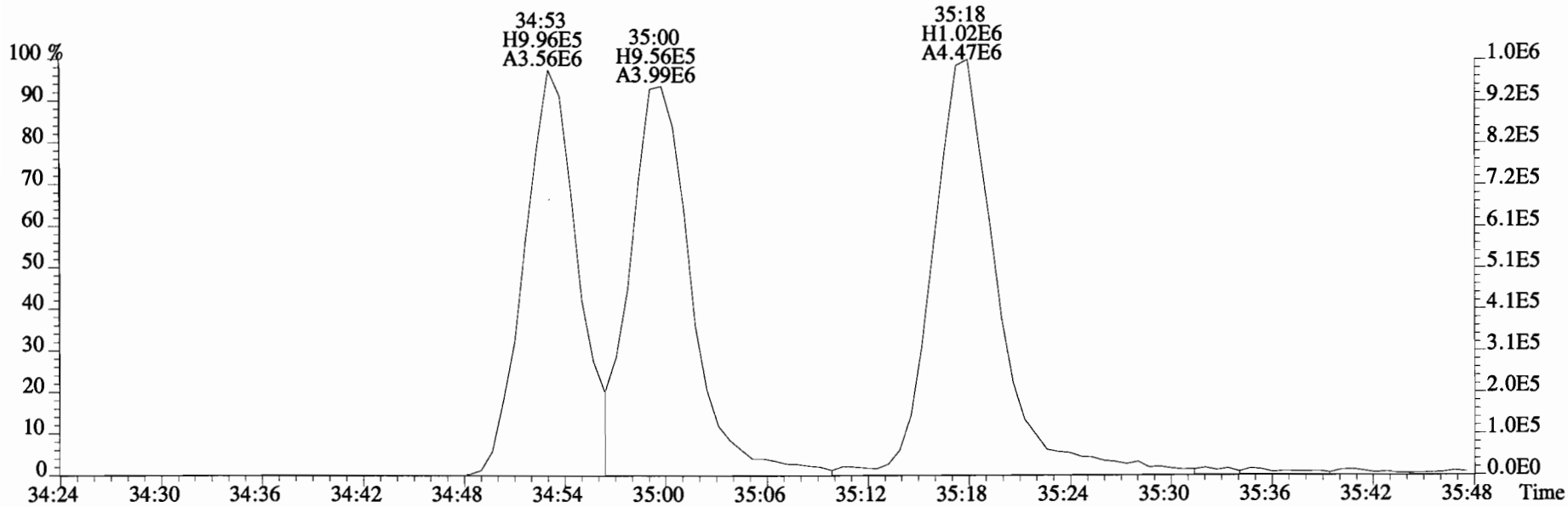
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BLK1 Method Blank 1 Exp:OCDD_DB5
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

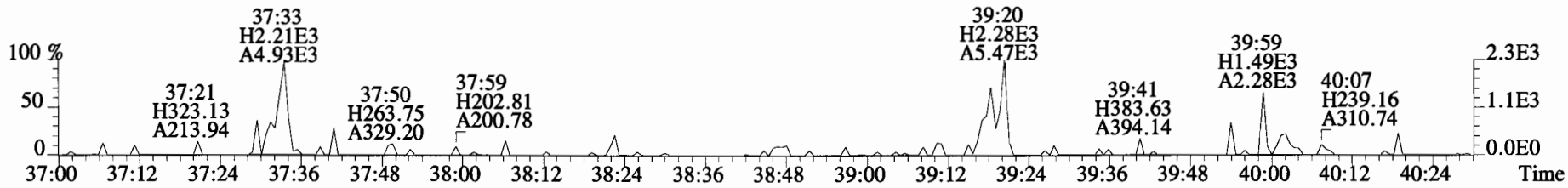


403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



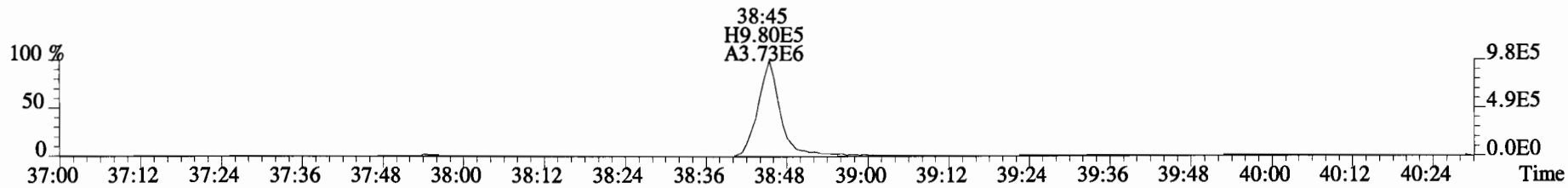
File:141027D1 #1-326 Acq:27-OCT-2014 19:22:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BLK1 Method Blank 1 Exp:OCDD_DB5

423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

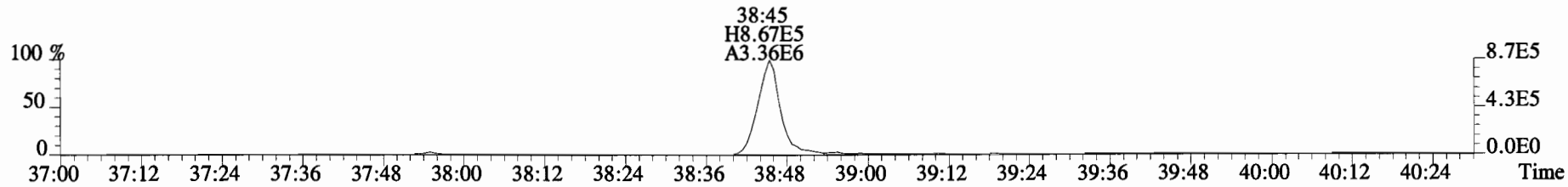


425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

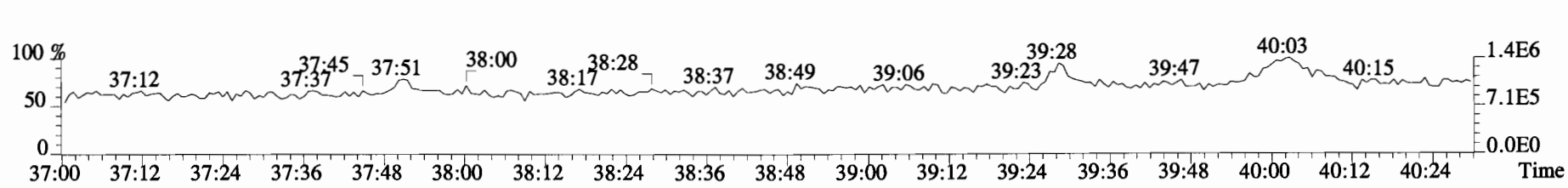
435.8169 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



437.8140 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

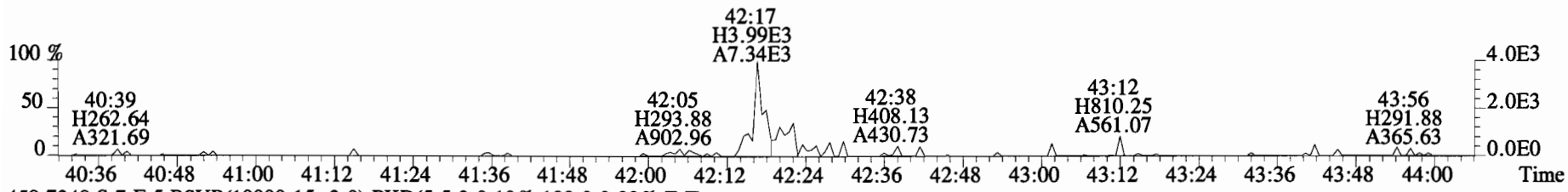


430.9728 S:7 F:4

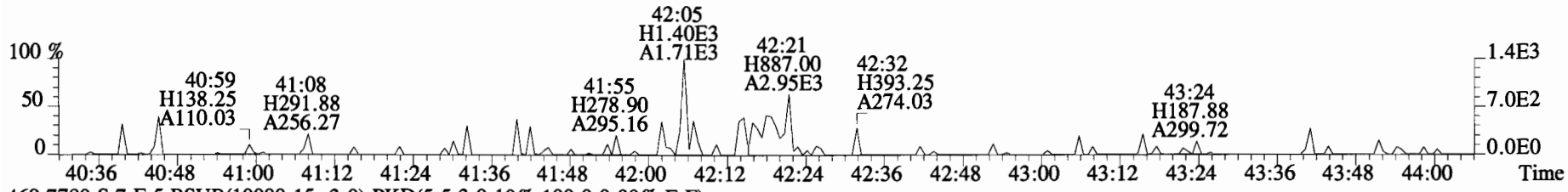


File:141027D1 #1-389 Acq:27-OCT-2014 19:22:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BLK1 Method Blank 1 Exp:OCDD_DB5

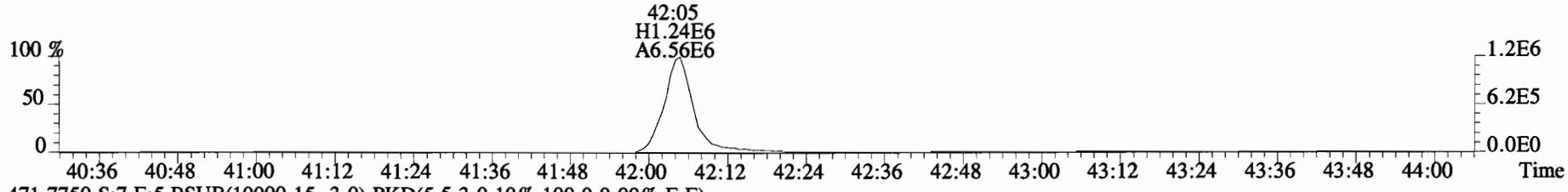
457.7377 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



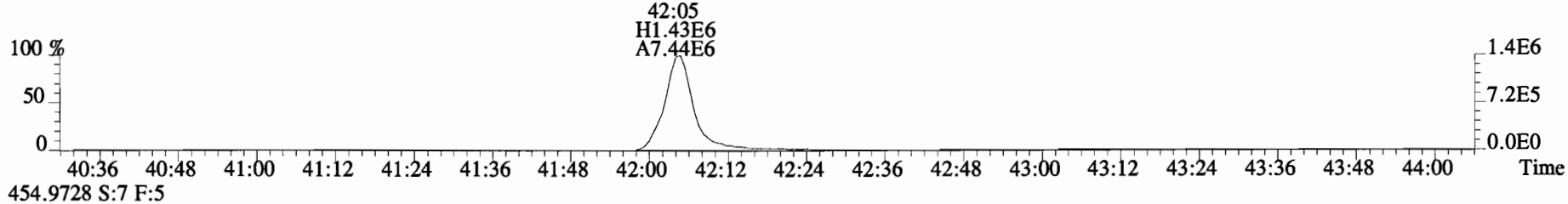
459.7348 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



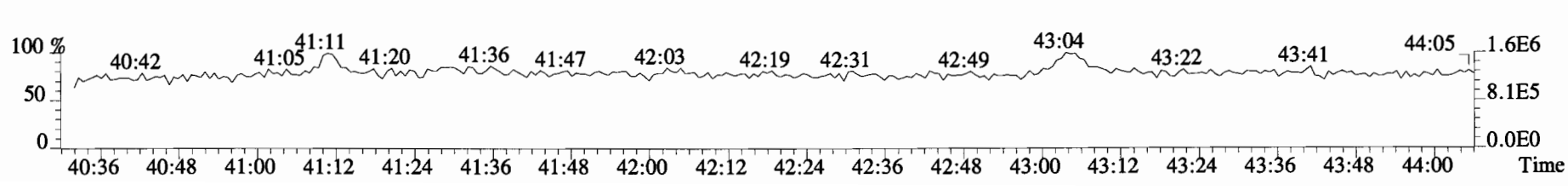
469.7780 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



471.7750 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

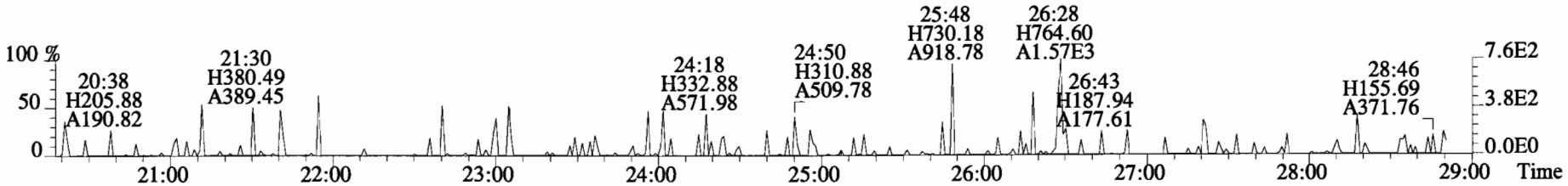


454.9728 S:7 F:5

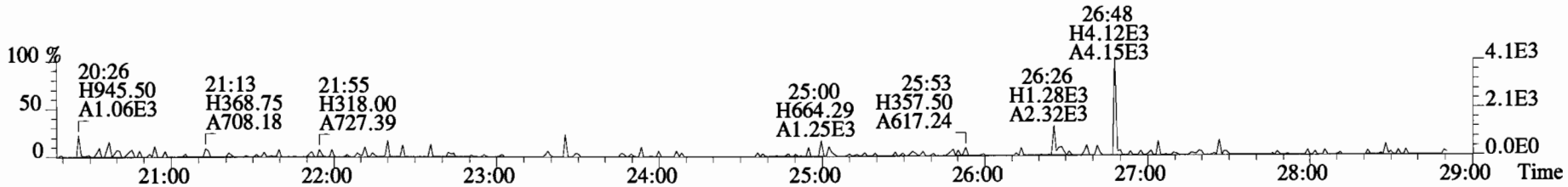


File:141027D1 #1-551 Acq:27-OCT-2014 19:22:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BLK1 Method Blank 1 Exp:OCDD_DB5

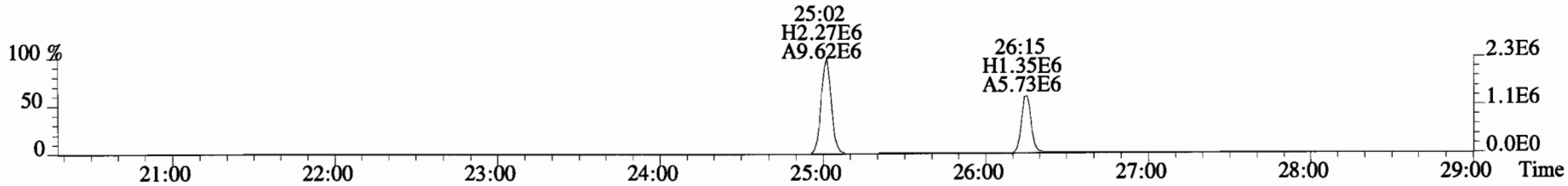
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



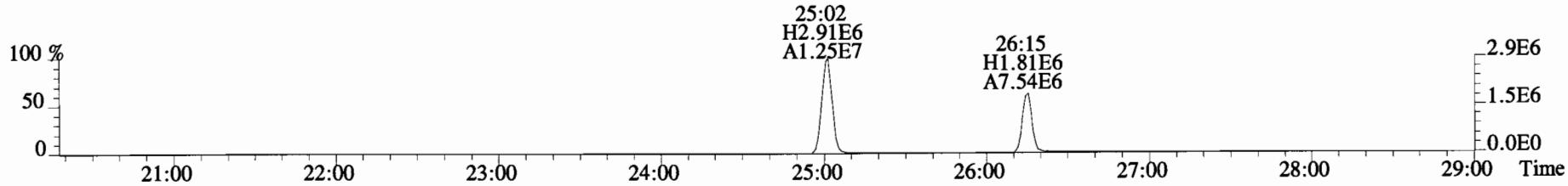
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



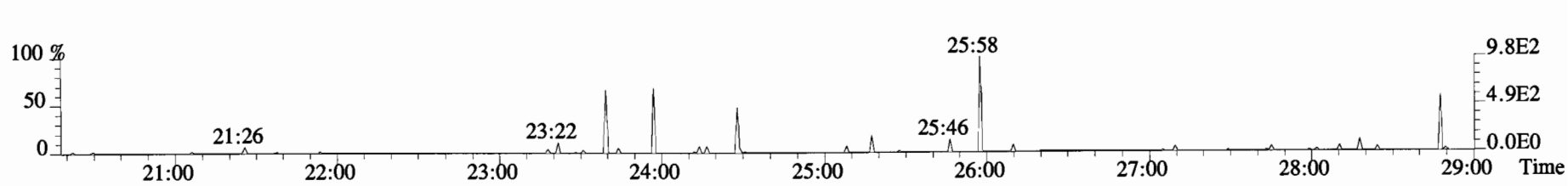
315.9419 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



317.9389 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

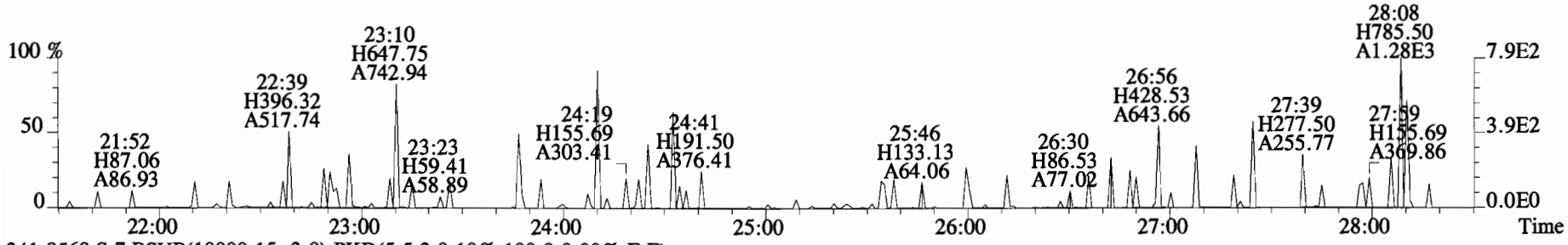


375.8364 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

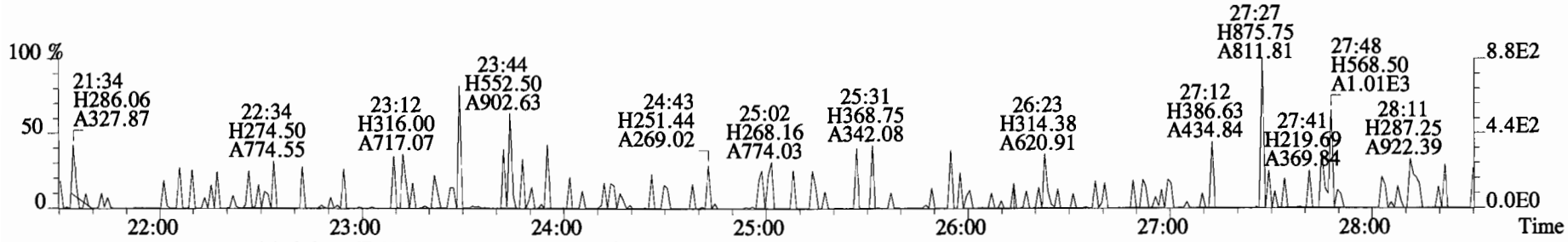


File:141027D1 #1-551 Acq:27-OCT-2014 19:22:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BLK1 Method Blank 1 Exp:OCDD_DB5

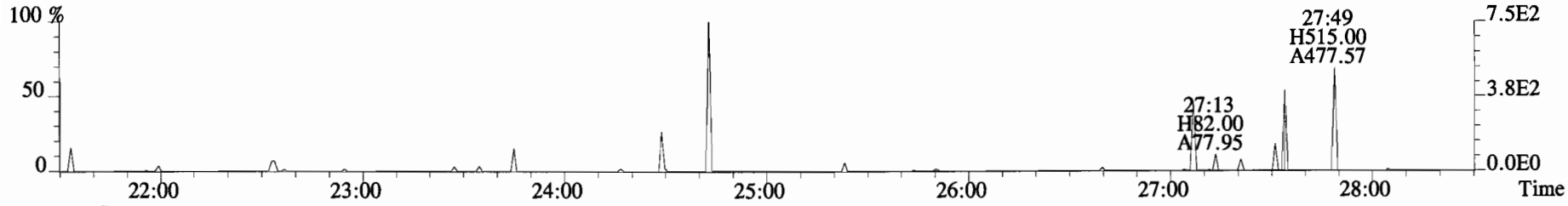
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



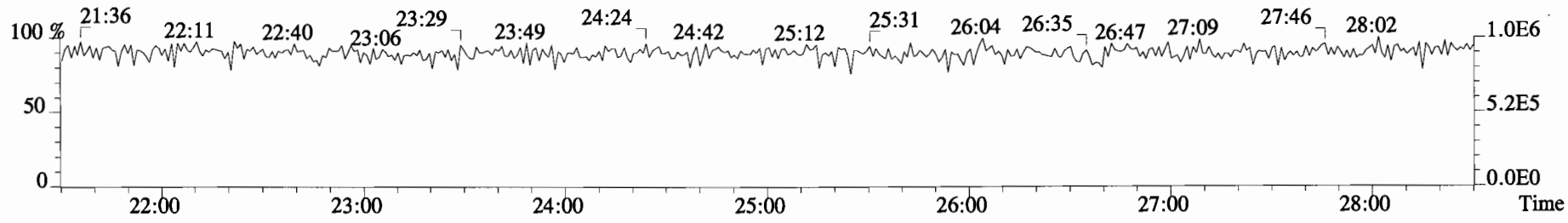
341.8568 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



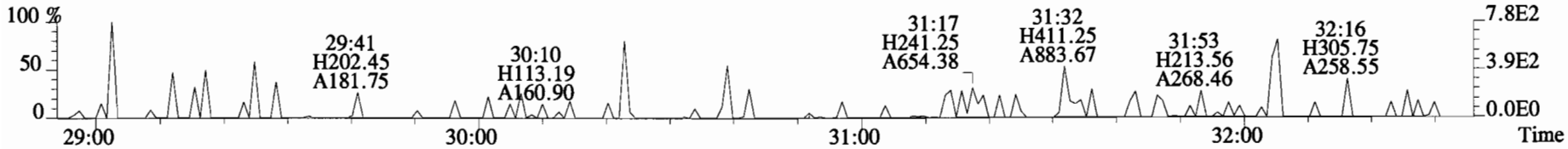
409.7974 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



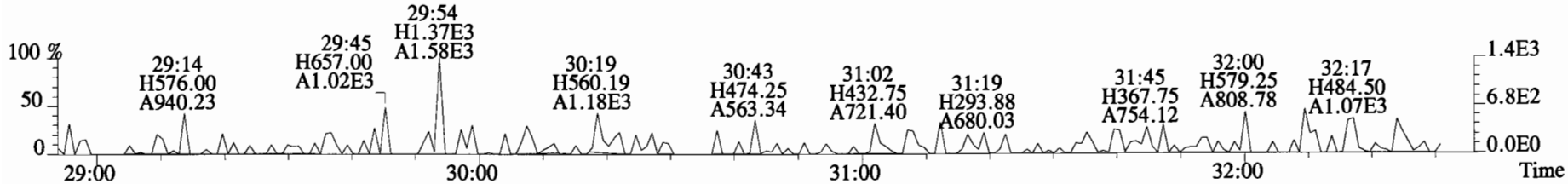
316.9824 S:7



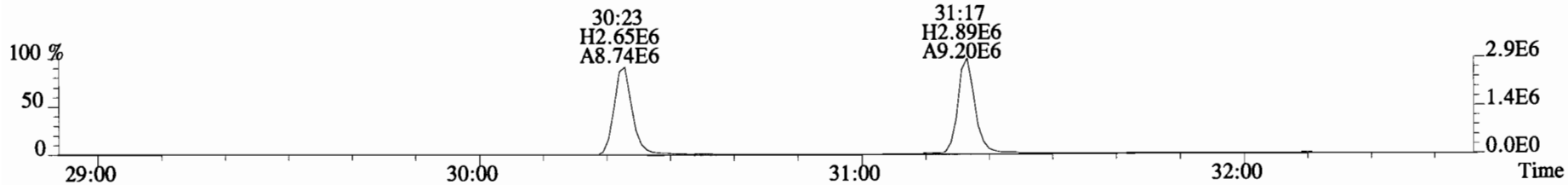
File:141027D1 #1-257 Acq:27-OCT-2014 19:22:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BLK1 Method Blank 1 Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



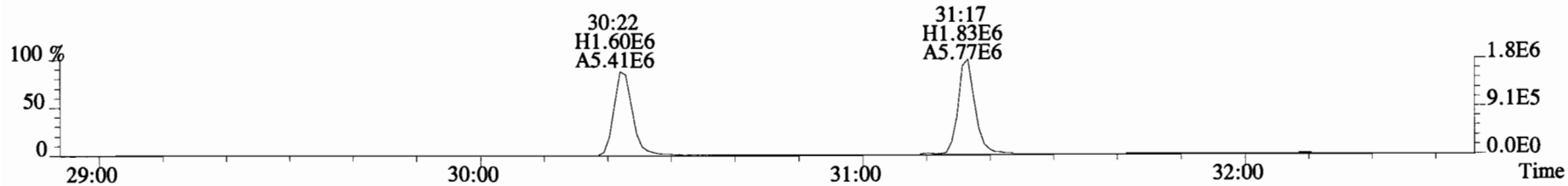
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



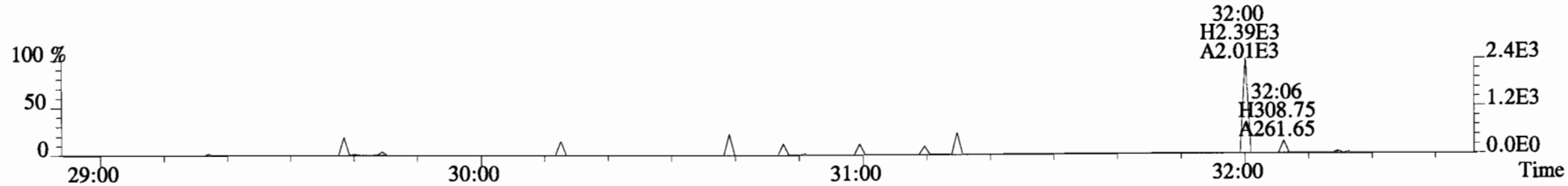
351.9000 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

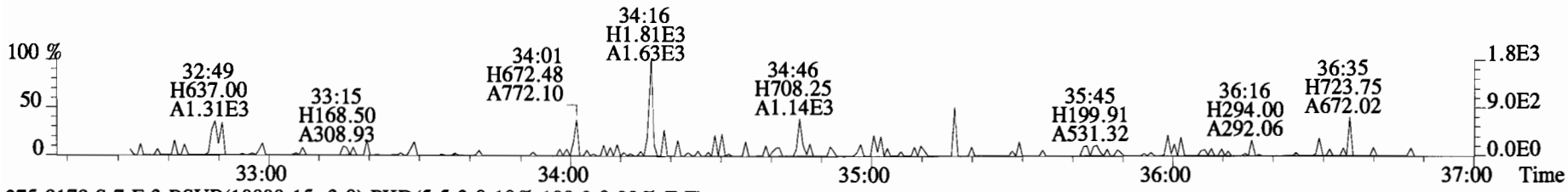


409.7974 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

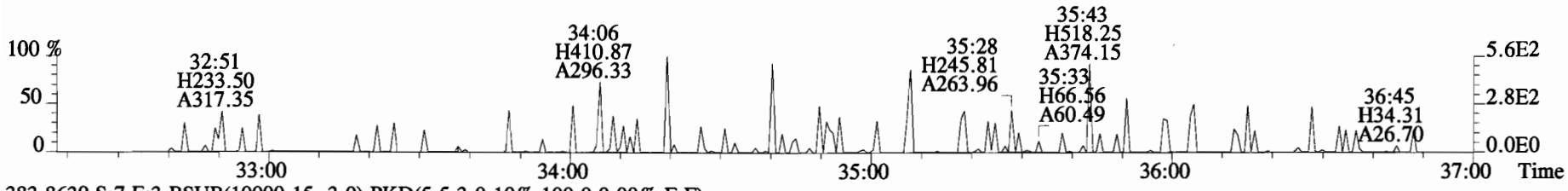


File:141027D1 #1-384 Acq:27-OCT-2014 19:22:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BLK1 Method Blank 1 Exp:OCDD_DB5

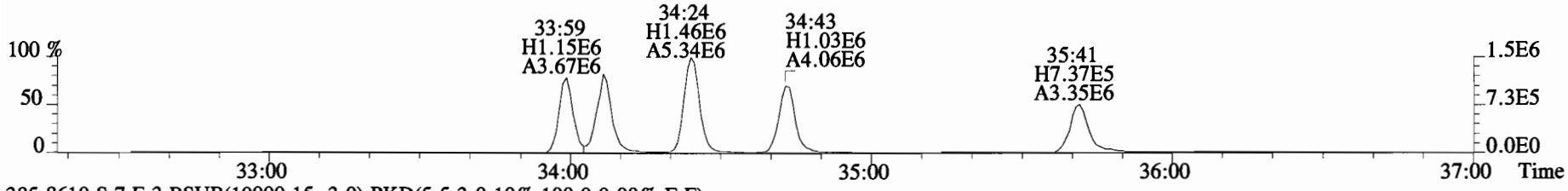
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



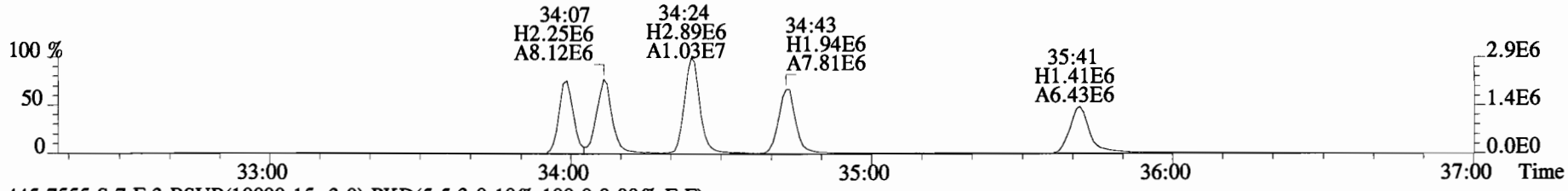
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



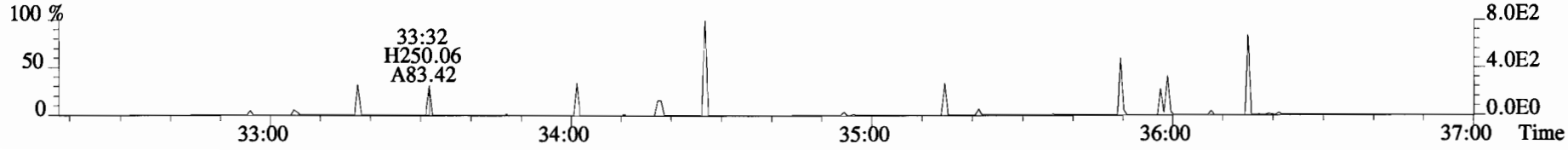
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



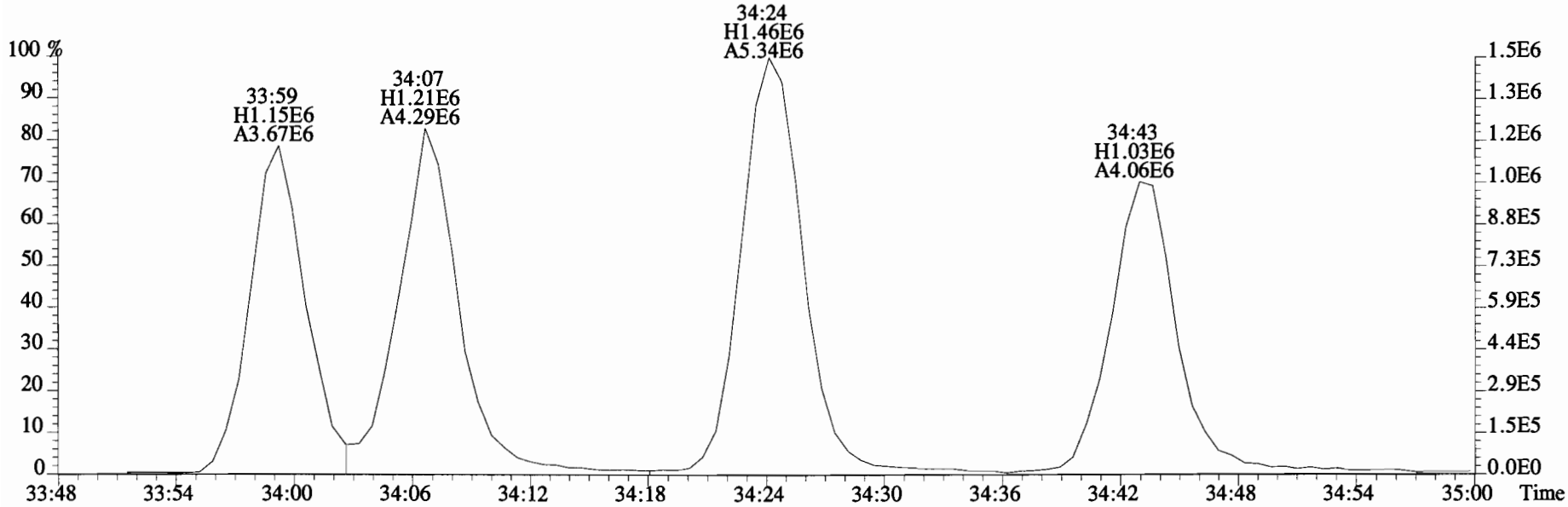
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



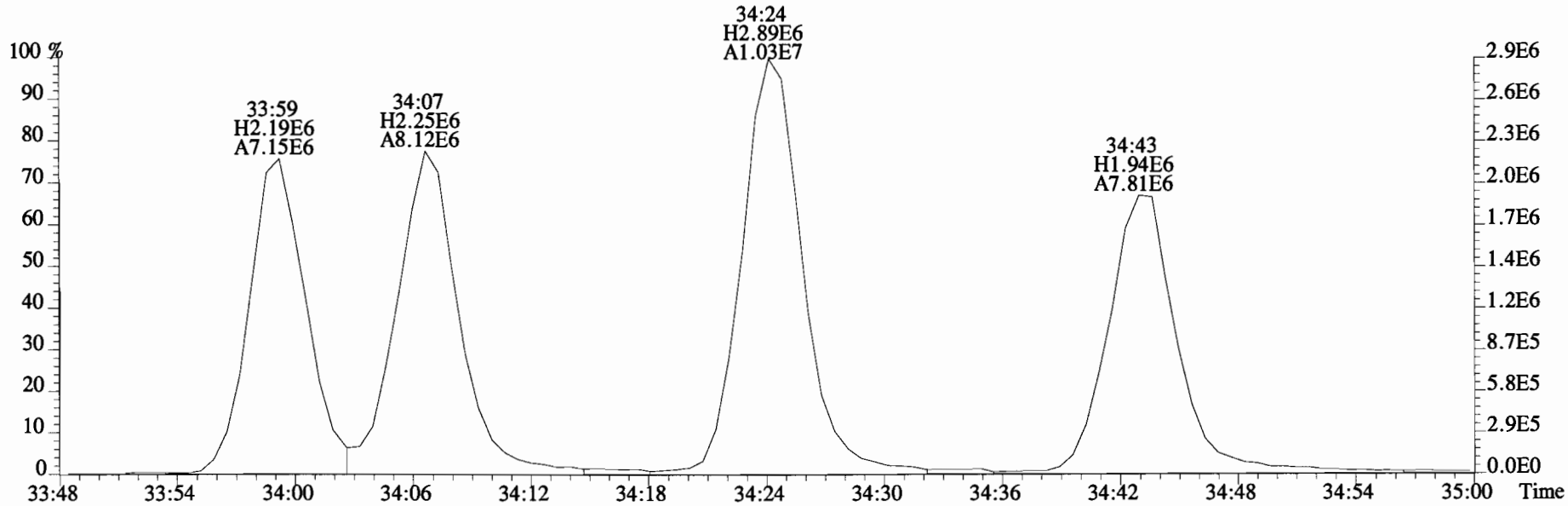
445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



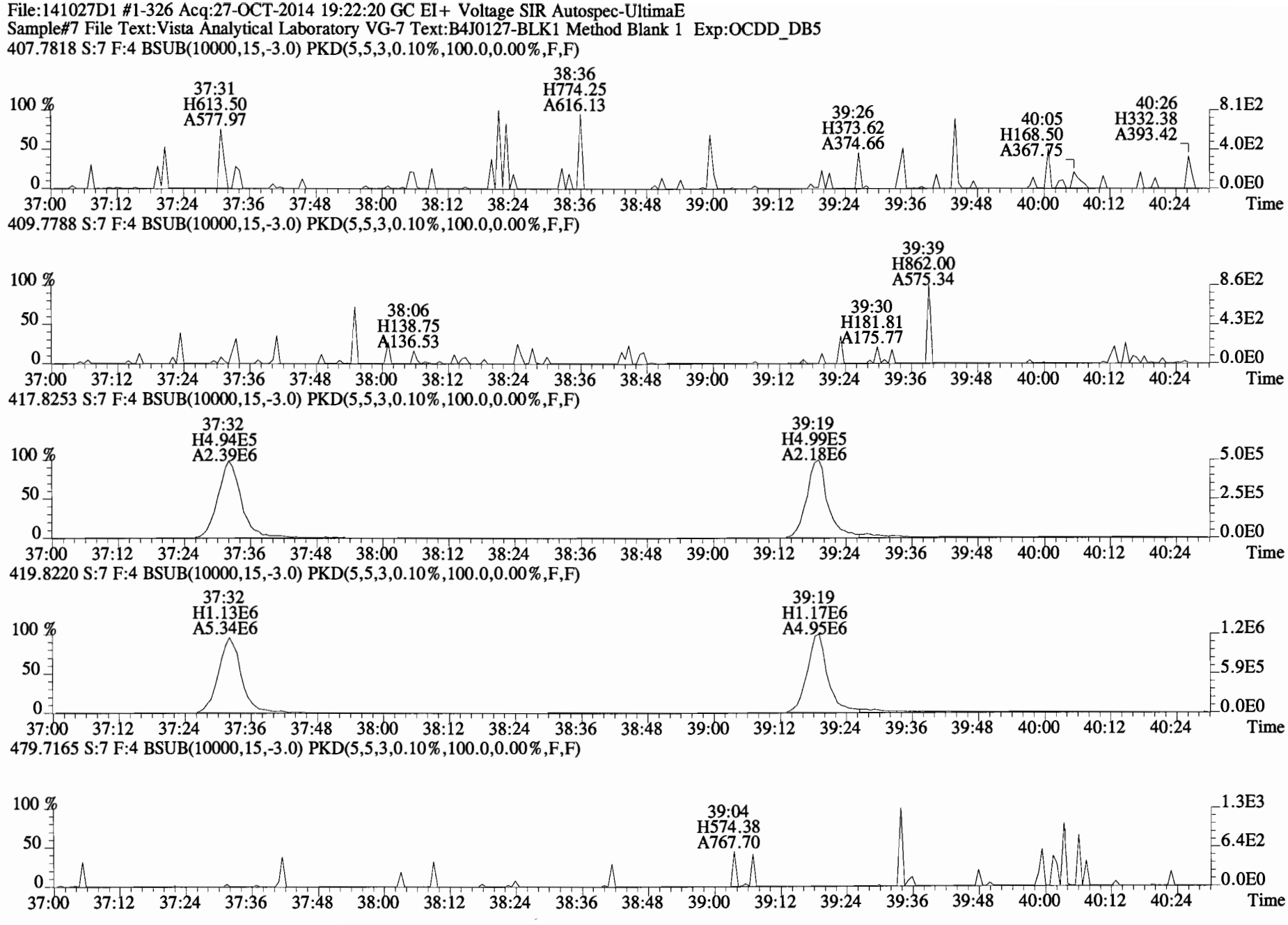
File:141027D1 #1-384 Acq:27-OCT-2014 19:22:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BLK1 Method Blank 1 Exp:OCDD_DB5
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



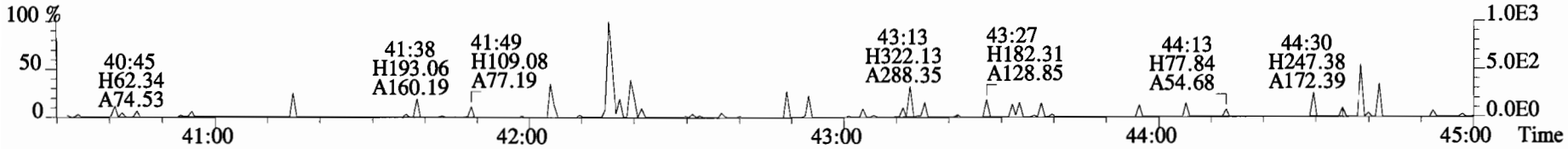
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



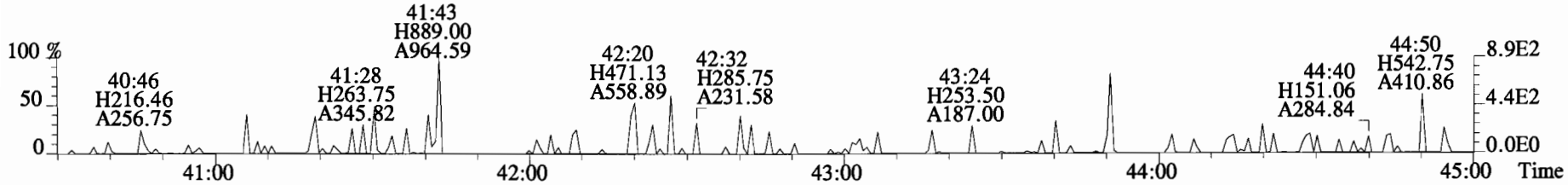
File:141027D1 #1-326 Acq:27-OCT-2014 19:22:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BLK1 Method Blank 1 Exp:OCDD_DB5



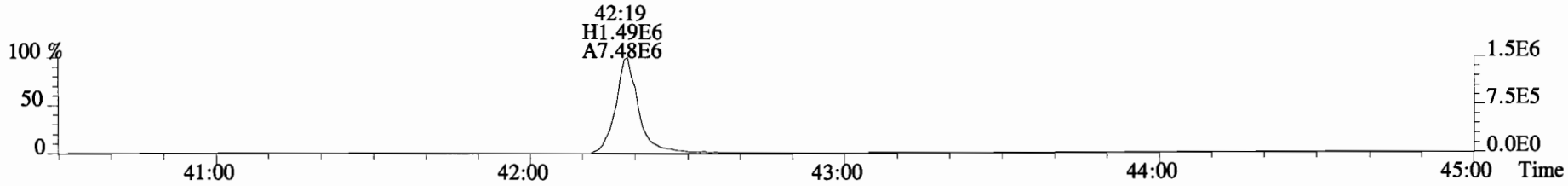
File:141027D1 #1-389 Acq:27-OCT-2014 19:22:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BLK1 Method Blank 1 Exp:OCDD_DB5
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



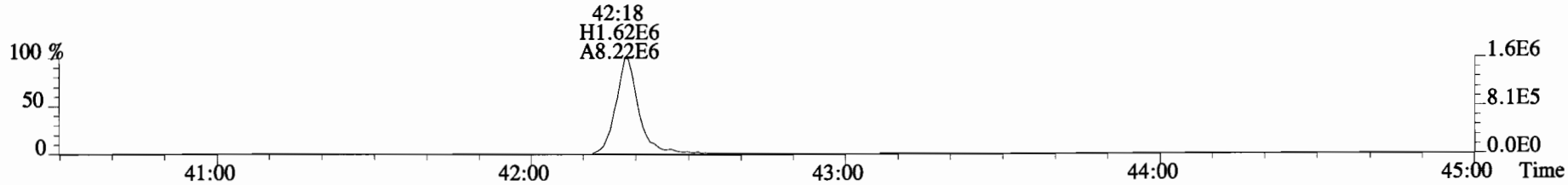
443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



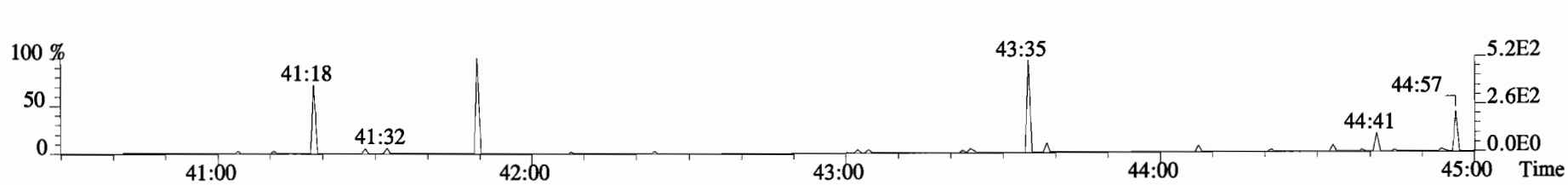
453.7831 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

Lab Name: Vista Analytical Laboratory Extraction Batch: B4J0127-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): AQUEOUS OPR Data Filename: 141027D1-3

Ext. Date: 10-23-14 Shift: Day Analysis Date: 27-OCT-14 Time: 16:08:20

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

NATIVE ANALYTES	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
2,3,7,8-TCDD	10	8.61	6.7 - 15.8 7.3 - 14.6 (2)
1,2,3,7,8-PeCDD	50	45.7	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	48.6	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	45.8	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	46.8	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	47.3	35.0 - 70.0
OCDD	100	93.8	78.0 - 144.0
2,3,7,8-TCDF	10	8.49	7.5 - 15.8 8.0 - 14.7 (2)
1,2,3,7,8-PeCDF	50	45.2	40.0 - 67.0
2,3,4,7,8-PeCDF	50	45.8	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	45.3	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	45.8	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	45.7	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	45.0	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	45.0	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	46.7	39.0 - 69.0
OCDF	100	93.5	63.0 - 170.0

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: MJ

Date: 10/24/14

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

Lab Name: Vista Analytical Laboratory Extraction Batch: B4J0127-BS1

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): AQUEOUS OPR Data Filename: 141027D1-3

Ext. Date: 10-23-14 Shift: Day Analysis Date: 27-OCT-14 Time: 16:08:20

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	69.2	20.0 - 175.0
			25.0 - 141.0 (2)
13C-1,2,3,7,8-PeCDD	100	58.5	21.0 - 227.0
13C-1,2,3,4,7,8-HxCDD	100	72.2	21.0 - 193.0
13C-1,2,3,6,7,8-HxCDD	100	80.6	25.0 - 163.0
13C-1,2,3,7,8,9-HxCDD	100	76.2	21.0 - 193.0
13C-1,2,3,4,6,7,8-HpCDD	100	75.1	26.0 - 166.0
13C-OCDD	200	110	26.0 - 397.0
13C-2,3,7,8-TCDF	100	72.0	22.0 - 152.0
			26.0 - 126.0 (2)
13C-1,2,3,7,8-PeCDF	100	62.8	21.0 - 192.0
13C-2,3,4,7,8-PeCDF	100	63.7	13.0 - 328.0
13C-1,2,3,4,7,8-HxCDF	100	67.2	19.0 - 202.0
13C-1,2,3,6,7,8-HxCDF	100	71.7	21.0 - 159.0
13C-2,3,4,6,7,8-HxCDF	100	72.9	22.0 - 176.0
13C-1,2,3,7,8,9-HxCDF	100	73.1	17.0 - 205.0
13C-1,2,3,4,6,7,8-HpCDF	100	71.4	21.0 - 158.0
13C-1,2,3,4,7,8,9-HpCDF	100	66.8	20.0 - 186.0
13C-OCDF	200	112	26.0 - 397.0
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	32.7	12.4 - 76.4

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: MJ

Date: 10/28/14

Client ID: OPR Filename: 141027D1 S:3 Acq:27-OCT-14 16:08:20 ConCal: ST141027D1-1
Lab ID: B4J0127-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	1.51e+06	0.76 y	1.18	27:03	1.001	8.6084		*	2.5	*
	1,2,3,7,8-PeCDD	6.05e+06	0.60 y	0.92	31:34	1.000	45.674		*	2.5	*
	1,2,3,4,7,8-HxCDD	5.51e+06	1.24 y	1.09	34:54	1.000	48.588		*	2.5	*
	1,2,3,6,7,8-HxCDD	5.78e+06	1.23 y	1.07	35:01	1.000	45.814		*	2.5	*
	1,2,3,7,8,9-HxCDD	5.67e+06	1.22 y	0.93	35:19	1.001	46.847		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	5.10e+06	1.04 y	1.12	38:47	1.000	47.338		*	2.5	*
	OCDD	7.64e+06	0.88 y	0.95	42:06	1.000	93.792		*	2.5	*
	2,3,7,8-TCDF	1.87e+06	0.78 y	1.08	26:16	1.001	8.4861		*	2.5	*
	1,2,3,7,8-PeCDF	9.02e+06	1.57 y	1.09	30:24	1.000	45.241		*	2.5	*
	2,3,4,7,8-PeCDF	9.05e+06	1.61 y	1.04	31:18	1.001	45.794		*	2.5	*
	1,2,3,4,7,8-HxCDF	8.35e+06	1.27 y	1.39	34:00	1.001	45.280		*	2.5	*
	1,2,3,6,7,8-HxCDF	9.07e+06	1.27 y	1.26	34:08	1.001	45.810		*	2.5	*
	2,3,4,6,7,8-HxCDF	8.89e+06	1.28 y	1.30	34:45	1.001	45.660		*	2.5	*
	1,2,3,7,8,9-HxCDF	6.71e+06	1.28 y	1.19	35:43	1.000	45.026		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	7.40e+06	1.08 y	1.62	37:33	1.000	45.046		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	6.72e+06	1.08 y	1.53	39:20	1.001	46.701		*	2.5	*
	OCDF	1.00e+07	0.92 y	1.10	42:20	1.000	93.464		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.48e+07	0.80 y	1.07	27:02	1.022	69.198				
IS	13C-1,2,3,7,8-PeCDD	1.44e+07	0.62 y	1.24	31:34	1.193	58.517				
IS	13C-1,2,3,4,7,8-HxCDD	1.04e+07	1.25 y	0.72	34:53	1.014	72.178				
IS	13C-1,2,3,6,7,8-HxCDD	1.18e+07	1.29 y	0.74	35:00	1.017	80.623				
IS	13C-1,2,3,7,8,9-HxCDD	1.30e+07	1.23 y	0.86	35:18	1.026	76.174				
IS	13C-1,2,3,4,6,7,8-HpCDD	9.65e+06	1.07 y	0.64	38:46	1.127	75.141				
IS	13C-OCDD	1.71e+07	0.89 y	0.78	42:05	1.223	109.74				
IS	13C-2,3,7,8-TCDF	2.04e+07	0.76 y	0.92	26:15	0.992	72.047				
IS	13C-1,2,3,7,8-PeCDF	1.83e+07	1.61 y	0.95	30:23	1.148	62.817				
IS	13C-2,3,4,7,8-PeCDF	1.90e+07	1.57 y	0.97	31:17	1.182	63.704				
IS	13C-1,2,3,4,7,8-HxCDF	1.33e+07	0.51 y	0.99	33:59	0.988	67.178				
IS	13C-1,2,3,6,7,8-HxCDF	1.57e+07	0.51 y	1.10	34:07	0.992	71.652				
IS	13C-2,3,4,6,7,8-HxCDF	1.50e+07	0.51 y	1.03	34:44	1.009	72.874				
IS	13C-1,2,3,7,8,9-HxCDF	1.25e+07	0.52 y	0.86	35:42	1.037	73.118				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.02e+07	0.44 y	0.71	37:32	1.091	71.374				
IS	13C-1,2,3,4,7,8,9-HpCDF	9.43e+06	0.41 y	0.71	39:19	1.143	66.769				
IS	13C-OCDF	1.94e+07	0.90 y	0.87	42:19	1.230	111.57				
C/Up	37Cl-2,3,7,8-TCDD	7.88e+06		1.21	27:03	1.022	32.686				
RS/RT	13C-1,2,3,4-TCDD	1.99e+07	0.80 y	1.00	26:27	*	100.00				
RS	13C-1,2,3,4-TCDF	3.07e+07	0.77 y	1.00	25:01	*	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.00e+07	0.51 y	1.00	34:25	*	100.00				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	8.86	9.18		*	*
Total Penta-Dioxins	45.7	46.4		*	*
Total Hexa-Dioxins	142	143		*	*
Total Hepta-Dioxins	47.9	49.3		*	*
Total Tetra-Furans	8.53	8.92		*	*
Total Penta-Furans	92.040	93.566		*	*
Total Hexa-Furans	183	184		*	*
Total Hepta-Furans	92.7	94.4		*	*

	Rec	Qual
IS 13C-2,3,7,8-TCDD	69.2	
IS 13C-1,2,3,7,8-PeCDD	58.5	
IS 13C-1,2,3,4,7,8-HxCDD	72.2	
IS 13C-1,2,3,6,7,8-HxCDD	80.6	
IS 13C-1,2,3,7,8,9-HxCDD	76.2	
IS 13C-1,2,3,4,6,7,8-HpCDD	75.1	
IS 13C-OCDD	54.9	
IS 13C-2,3,7,8-TCDF	72.0	
IS 13C-1,2,3,7,8-PeCDF	62.8	
IS 13C-2,3,4,7,8-PeCDF	63.7	
IS 13C-1,2,3,4,7,8-HxCDF	67.2	
IS 13C-1,2,3,6,7,8-HxCDF	71.7	
IS 13C-2,3,4,6,7,8-HxCDF	72.9	
IS 13C-1,2,3,7,8,9-HxCDF	73.1	
IS 13C-1,2,3,4,6,7,8-HpCDF	71.4	
IS 13C-1,2,3,4,7,8,9-HpCDF	66.8	
IS 13C-OCDF	55.8	
C/Up 37Cl-2,3,7,8-TCDD	81.7	

Integrations by Analyst: M Date: 10/24/14

Reviewed by Analyst: [illegible] Date: 10/29/14

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	1.51e+06	0.76 y	1.18	27:03	1.001	172.17		*	2.5	*
	1,2,3,7,8-PeCDD	6.05e+06	0.60 y	0.92	31:34	1.000	913.47		*	2.5	*
	1,2,3,4,7,8-HxCDD	5.51e+06	1.24 y	1.09	34:54	1.000	971.75		*	2.5	*
	1,2,3,6,7,8-HxCDD	5.78e+06	1.23 y	1.07	35:01	1.000	916.28		*	2.5	*
	1,2,3,7,8,9-HxCDD	5.67e+06	1.22 y	0.93	35:19	1.001	936.94		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	5.10e+06	1.04 y	1.12	38:47	1.000	946.77		*	2.5	*
	OCDD	7.64e+06	0.88 y	0.95	42:06	1.000	1875.8		*	2.5	*
	2,3,7,8-TCDF	1.87e+06	0.78 y	1.08	26:16	1.001	169.72		*	2.5	*
	1,2,3,7,8-PeCDF	9.02e+06	1.57 y	1.09	30:24	1.000	904.82		*	2.5	*
	2,3,4,7,8-PeCDF	9.05e+06	1.61 y	1.04	31:18	1.001	915.87		*	2.5	*
	1,2,3,4,7,8-HxCDF	8.35e+06	1.27 y	1.39	34:00	1.001	905.61		*	2.5	*
	1,2,3,6,7,8-HxCDF	9.07e+06	1.27 y	1.26	34:08	1.001	916.20		*	2.5	*
	2,3,4,6,7,8-HxCDF	8.89e+06	1.28 y	1.30	34:45	1.001	913.19		*	2.5	*
	1,2,3,7,8,9-HxCDF	6.71e+06	1.28 y	1.19	35:43	1.000	900.53		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	7.40e+06	1.08 y	1.62	37:33	1.000	900.91		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	6.72e+06	1.08 y	1.53	39:20	1.001	934.03		*	2.5	*
	OCDF	1.00e+07	0.92 y	1.10	42:20	1.000	1869.3		*	2.5	*

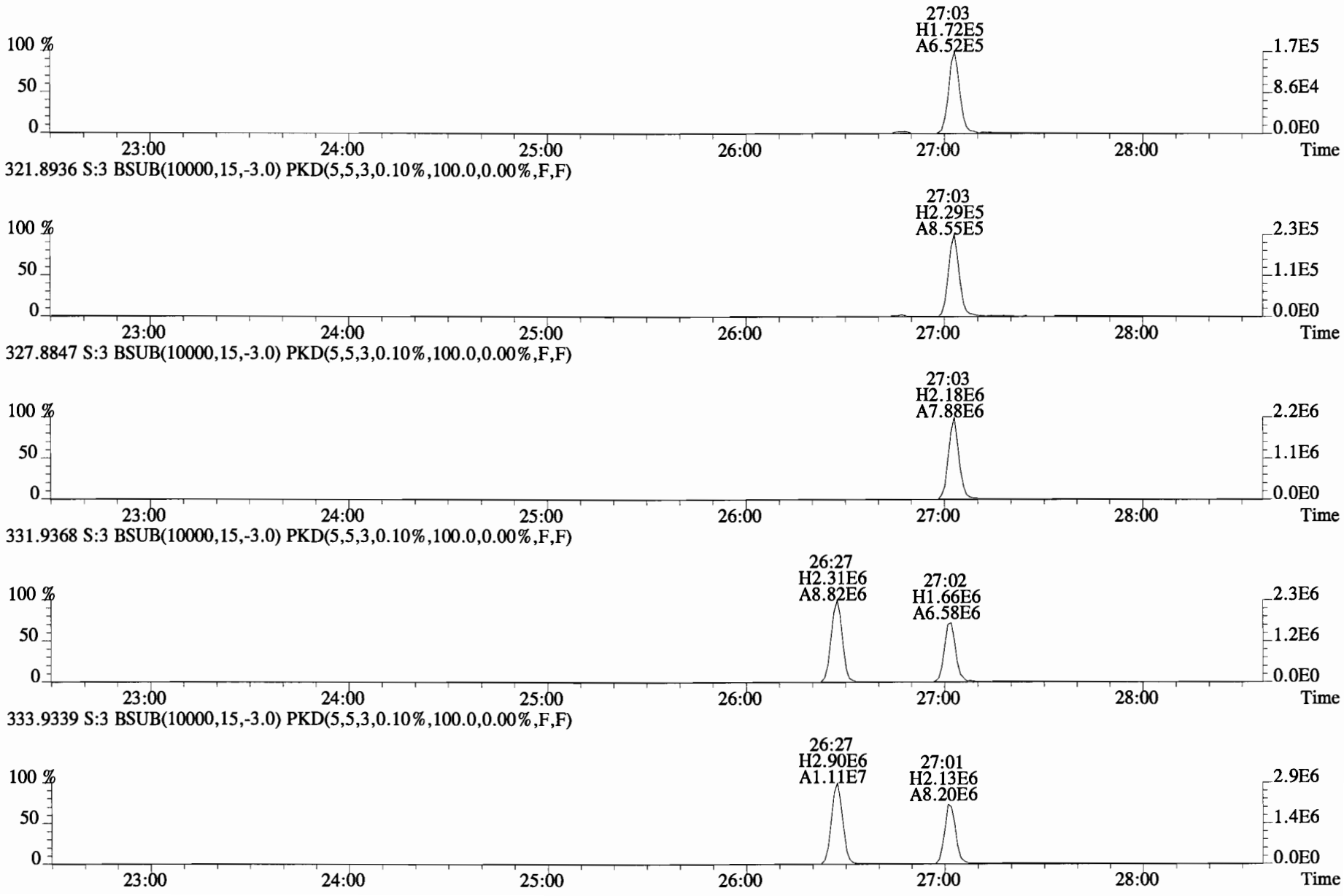
	Name	Resp	RA	RRF	RT	RRT	Conc	Rec	Qual
IS	13C-2,3,7,8-TCDD	1.48e+07	0.80 y	1.07	27:02	1.022	1384.0	69.2	
IS	13C-1,2,3,7,8-PeCDD	1.44e+07	0.62 y	1.24	31:34	1.193	1170.3	58.5	
IS	13C-1,2,3,4,7,8-HxCDD	1.04e+07	1.25 y	0.72	34:53	1.014	1443.6	72.2	
IS	13C-1,2,3,6,7,8-HxCDD	1.18e+07	1.29 y	0.74	35:00	1.017	1612.5	80.6	
IS	13C-1,2,3,7,8,9-HxCDD	1.30e+07	1.23 y	0.86	35:18	1.026	1523.5	76.2	
IS	13C-1,2,3,4,6,7,8-HpCDD	9.65e+06	1.07 y	0.64	38:46	1.127	1502.8	75.1	
IS	13C-OCDD	1.71e+07	0.89 y	0.78	42:05	1.223	2194.7	54.9	
IS	13C-2,3,7,8-TCDF	2.04e+07	0.76 y	0.92	26:15	0.992	1440.9	72.0	
IS	13C-1,2,3,7,8-PeCDF	1.83e+07	1.61 y	0.95	30:23	1.148	1256.3	62.8	
IS	13C-2,3,4,7,8-PeCDF	1.90e+07	1.57 y	0.97	31:17	1.182	1274.1	63.7	
IS	13C-1,2,3,4,7,8-HxCDF	1.33e+07	0.51 y	0.99	33:59	0.988	1343.6	67.2	
IS	13C-1,2,3,6,7,8-HxCDF	1.57e+07	0.51 y	1.10	34:07	0.992	1433.0	71.7	
IS	13C-2,3,4,6,7,8-HxCDF	1.50e+07	0.51 y	1.03	34:44	1.009	1457.5	72.9	
IS	13C-1,2,3,7,8,9-HxCDF	1.25e+07	0.52 y	0.86	35:42	1.037	1462.4	73.1	
IS	13C-1,2,3,4,6,7,8-HpCDF	1.02e+07	0.44 y	0.71	37:32	1.091	1427.5	71.4	
IS	13C-1,2,3,4,7,8,9-HpCDF	9.43e+06	0.41 y	0.71	39:19	1.143	1335.4	66.8	
IS	13C-OCDF	1.94e+07	0.90 y	0.87	42:19	1.230	2231.4	55.8	
C/Up	37Cl-2,3,7,8-TCDD	7.88e+06		1.21	27:03	1.022	653.71	81.7	
RS/RT	13C-1,2,3,4-TCDD	1.99e+07	0.80 y	1.00	26:27	*	2000.0		
RS	13C-1,2,3,4-TCDF	3.07e+07	0.77 y	1.00	25:01	*	2000.0		
RS/RT	13C-1,2,3,4,6,9-HxCDF	2.00e+07	0.51 y	1.00	34:25	*	2000.0		

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	177	184		*	*
Total Penta-Dioxins	913	927		*	*
Total Hexa-Dioxins	2840	2860		*	*
Total Hepta-Dioxins	958	987		*	*
Total Tetra-Furans	171	178		*	*
Total Penta-Furans	1840.8	1871.3		*	*
Total Hexa-Furans	3650	3680		*	*
Total Hepta-Furans	1850	1890		*	*

Integrations by Analyst: M Date: 10/29/14

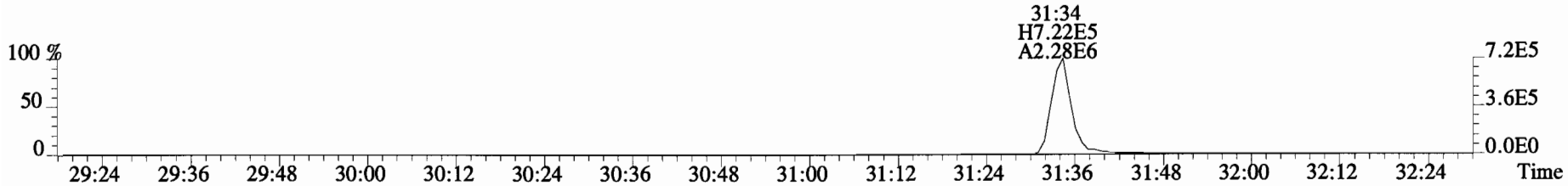
Reviewed by Analyst: _____ Date: _____

File:141027D1 #1-551 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5

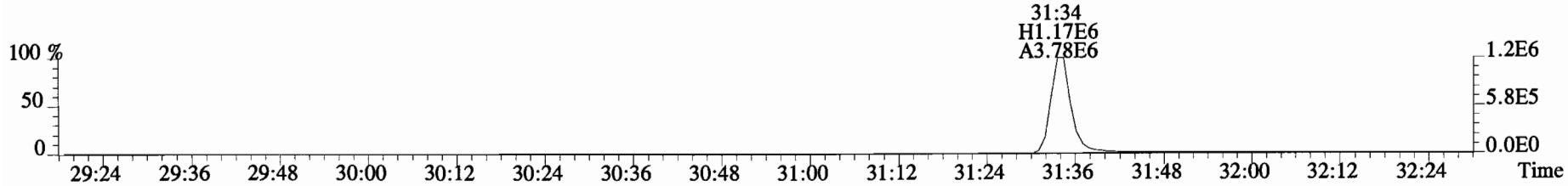


File:141027D1 #1-257 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5

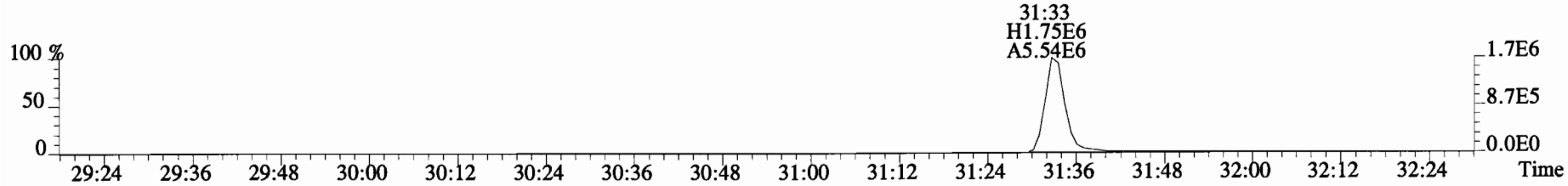
353.8576 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



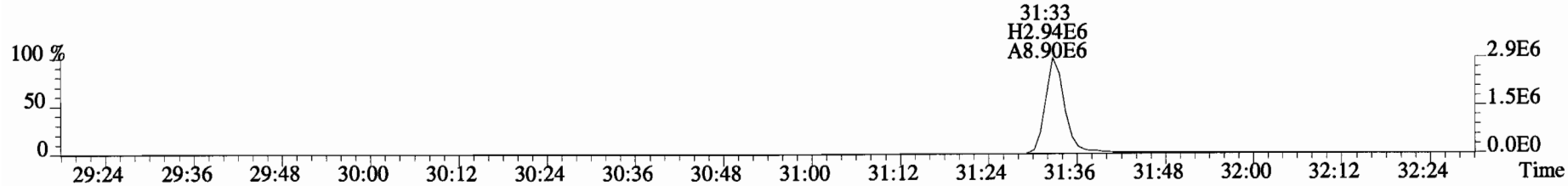
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



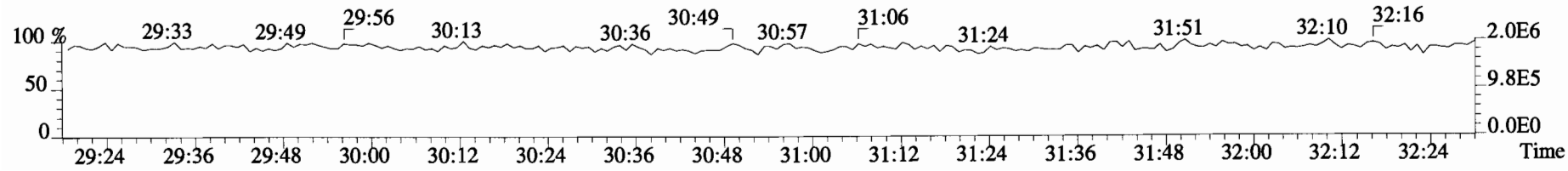
365.8978 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

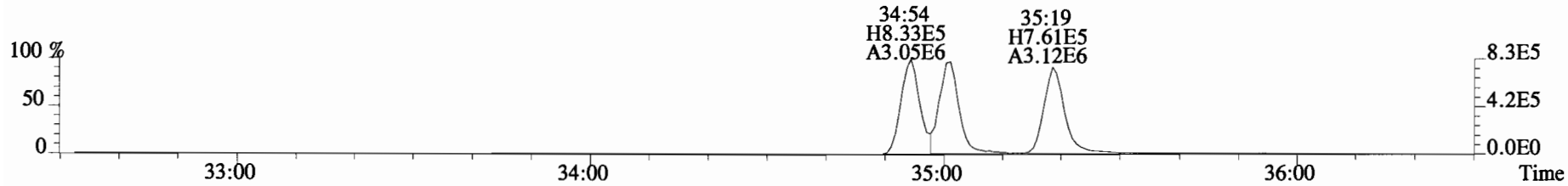


366.9792 S:3 F:2

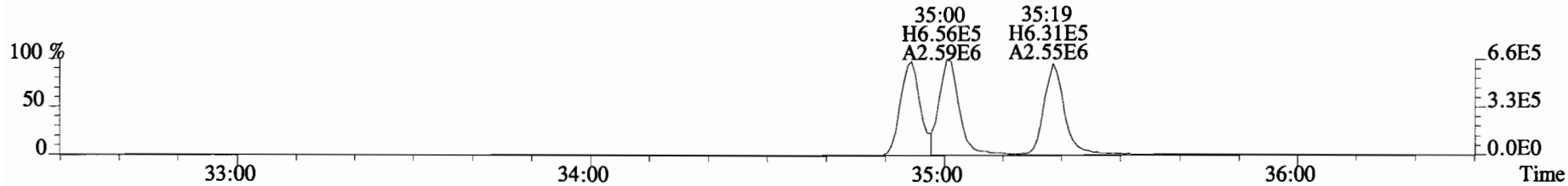


File:141027D1 #1-384 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5

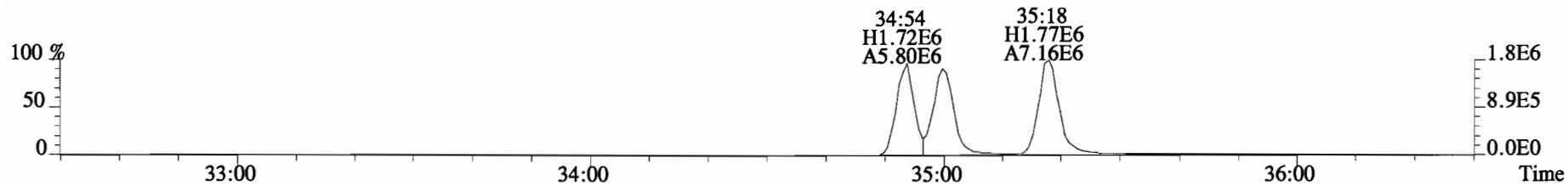
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



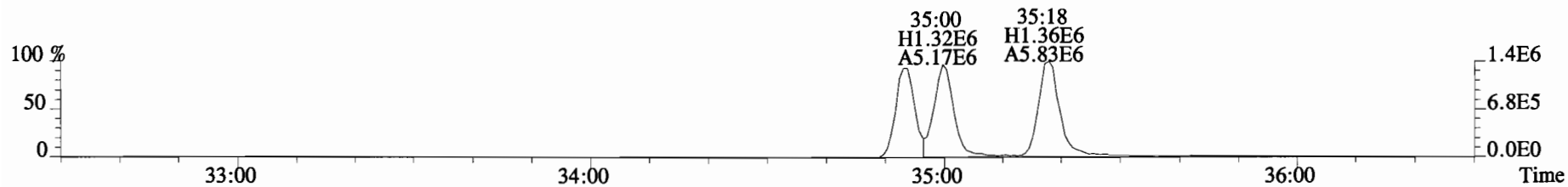
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



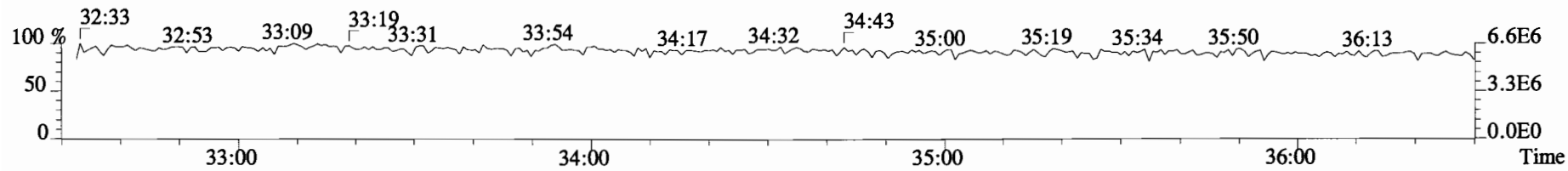
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



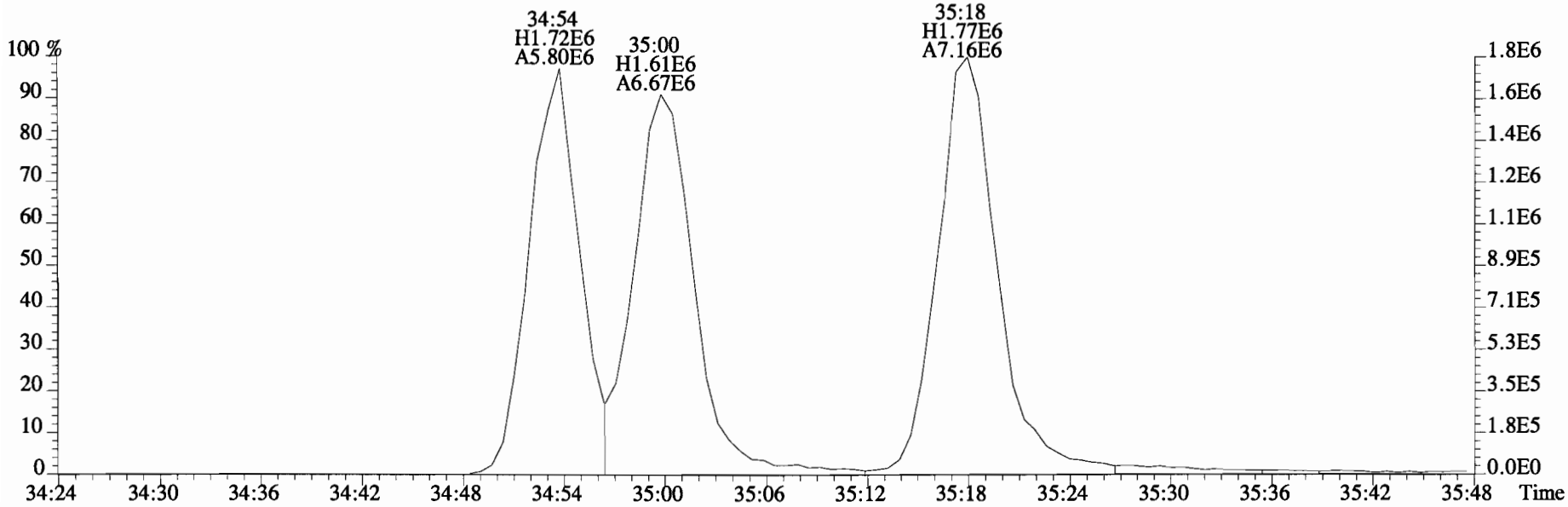
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



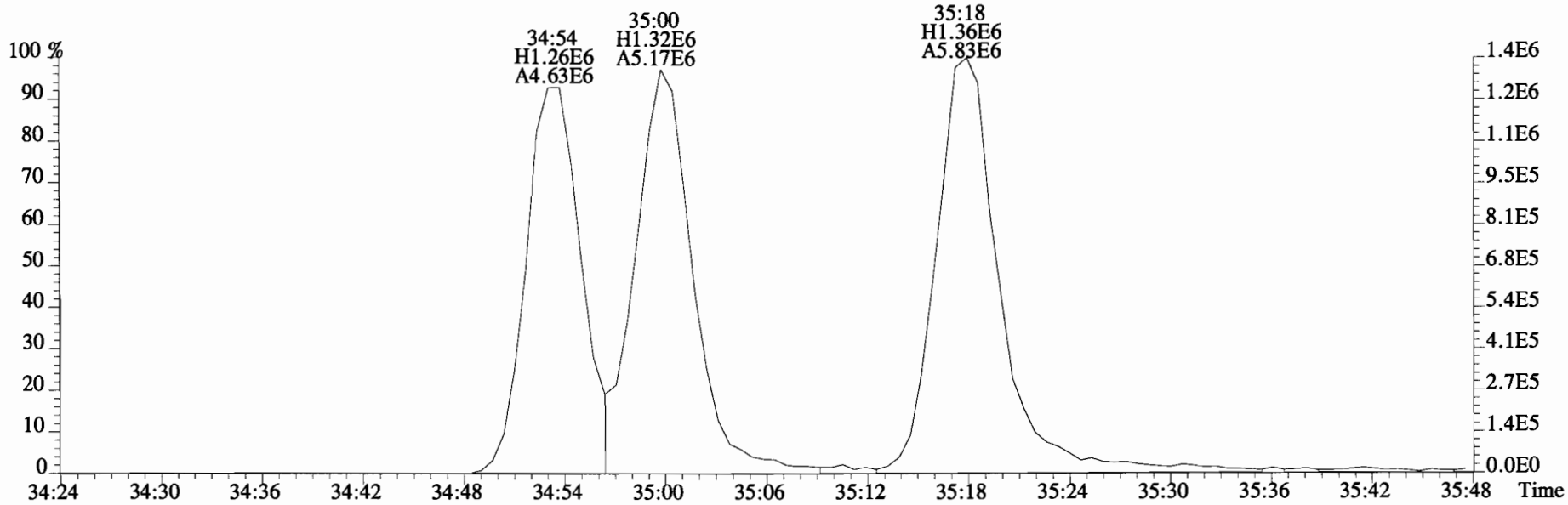
380.9760 S:3 F:3



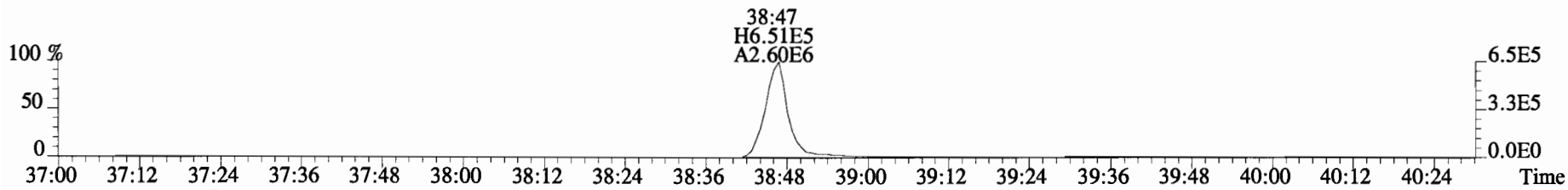
File:141027D1 #1-384 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



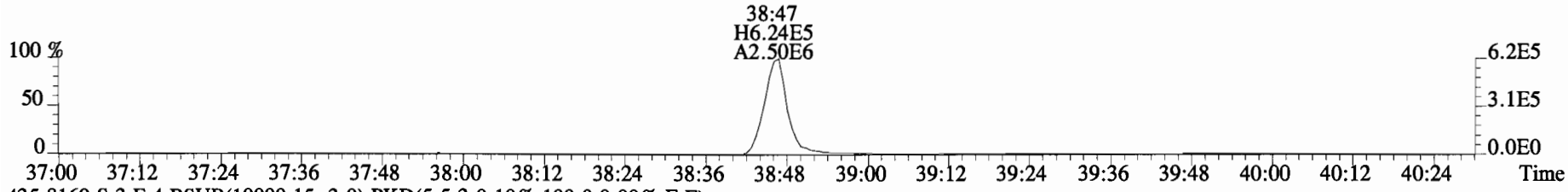
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



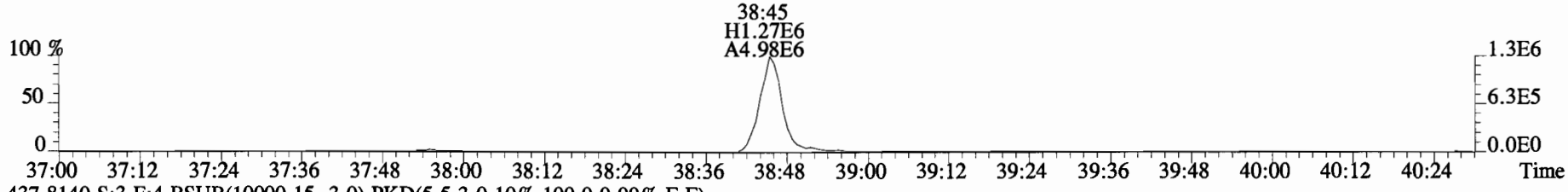
File:141027D1 #1-326 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



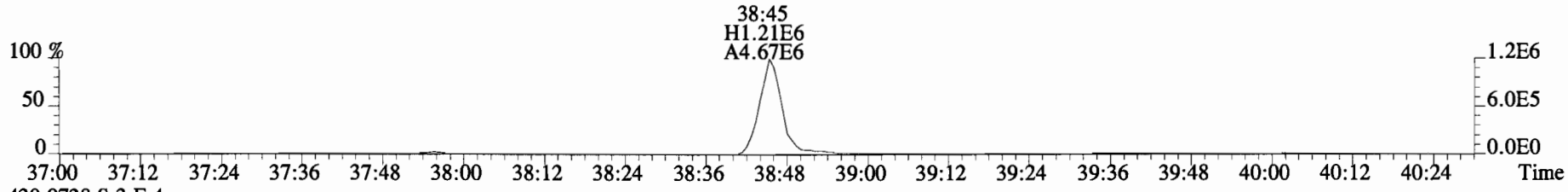
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



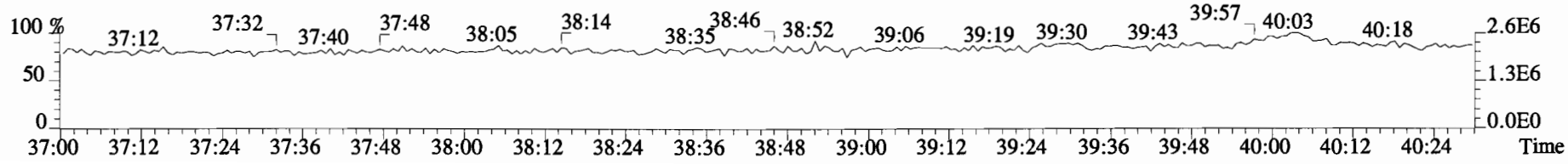
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

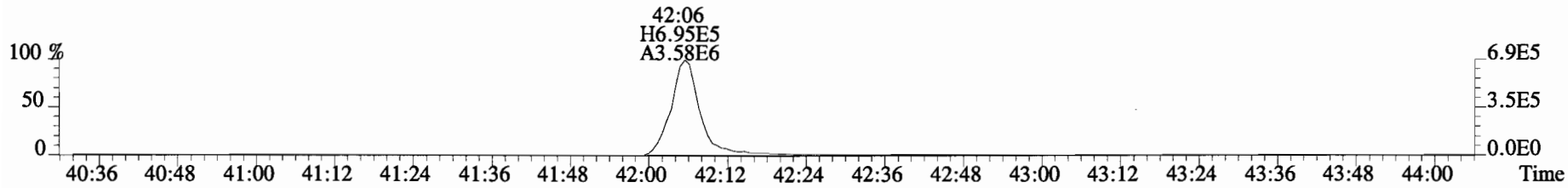


430.9728 S:3 F:4

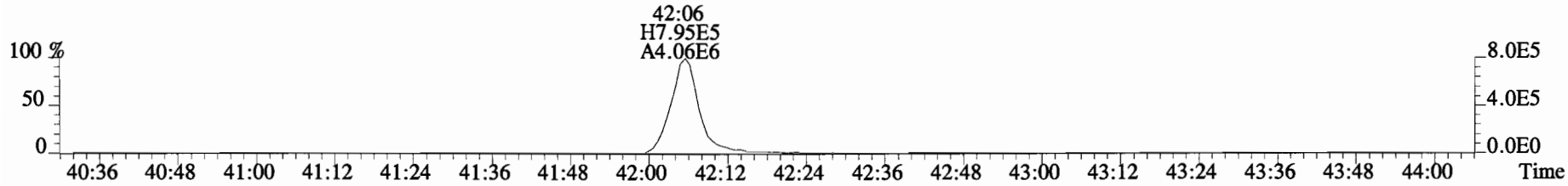


File:141027D1 #1-388 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5

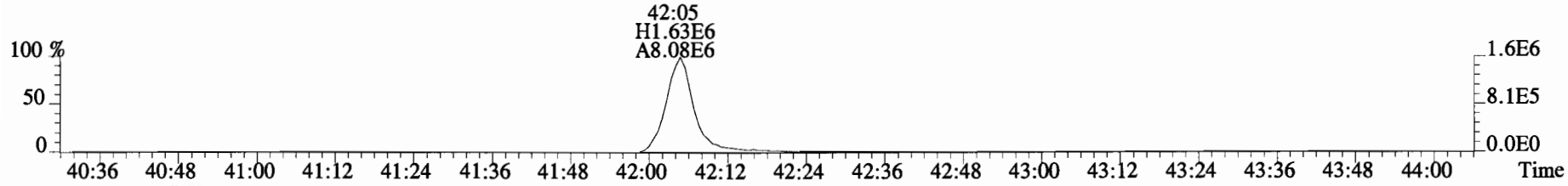
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



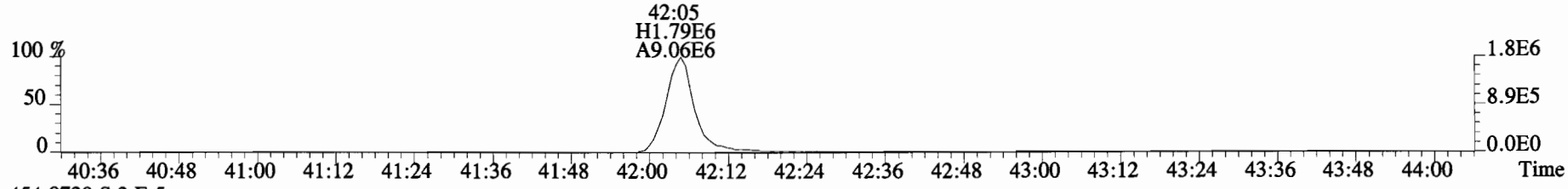
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



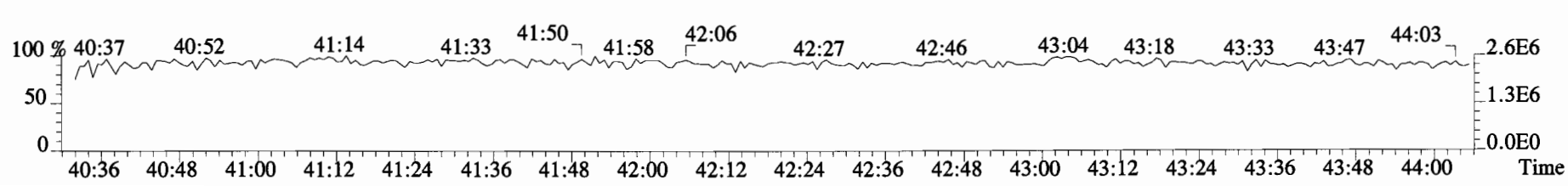
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

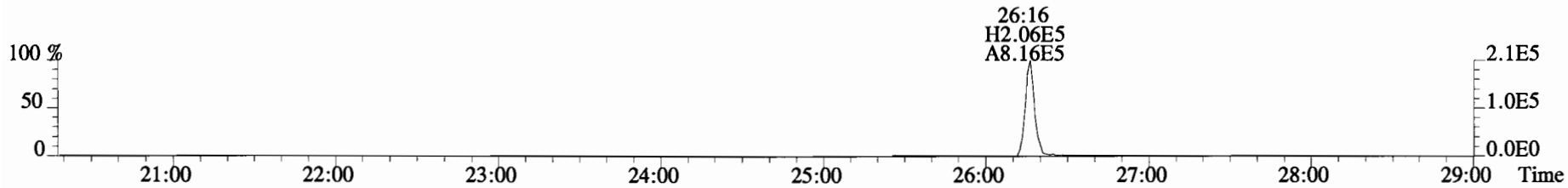


454.9728 S:3 F:5

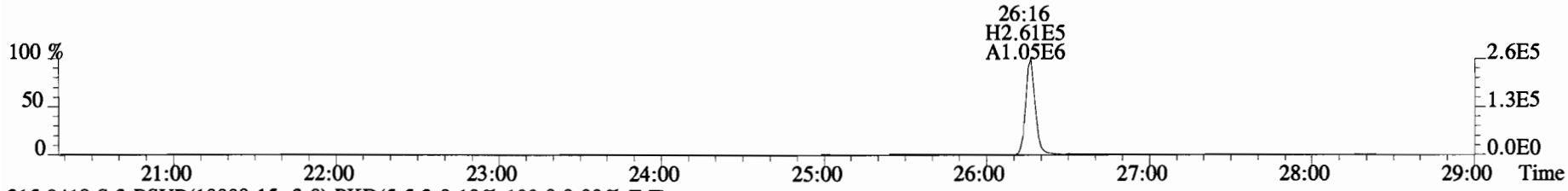


File:141027D1 #1-551 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5

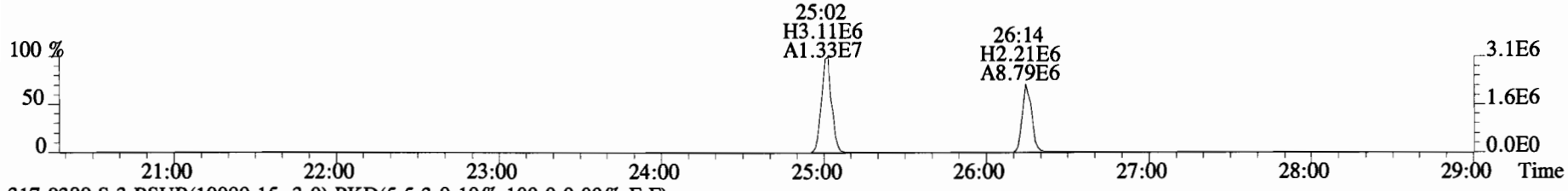
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



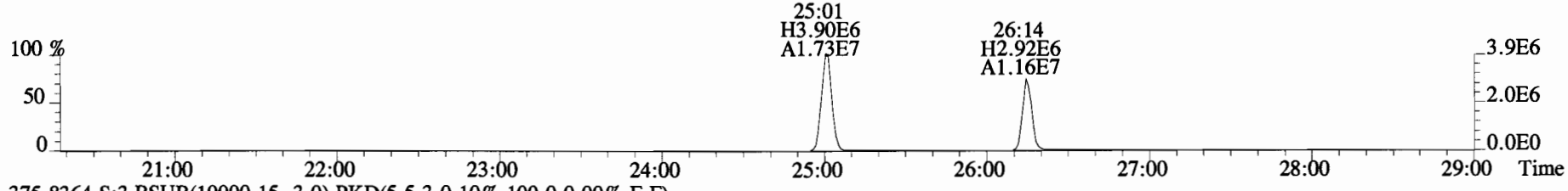
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



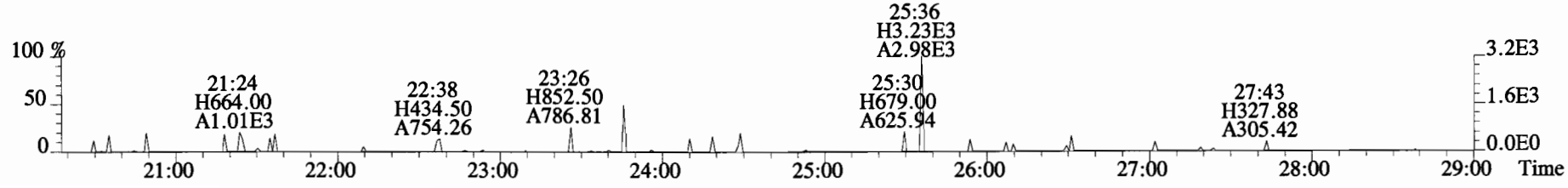
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



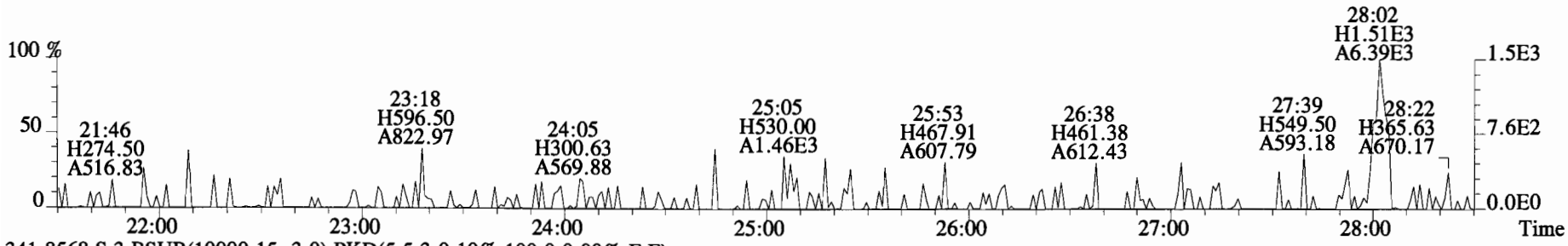
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



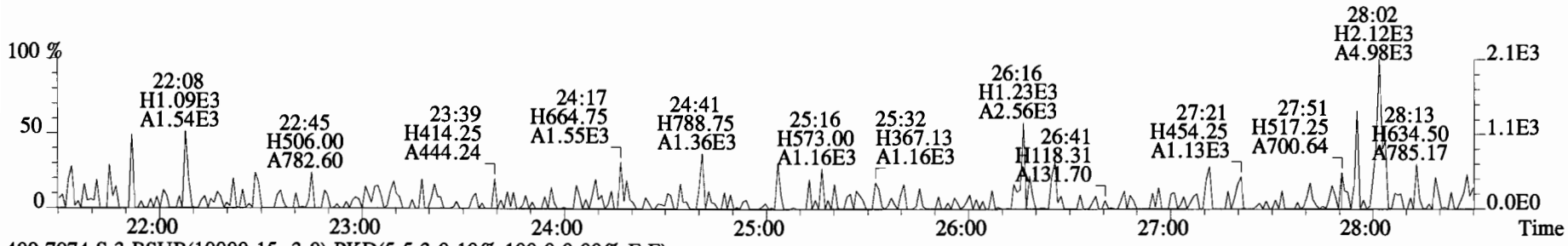
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



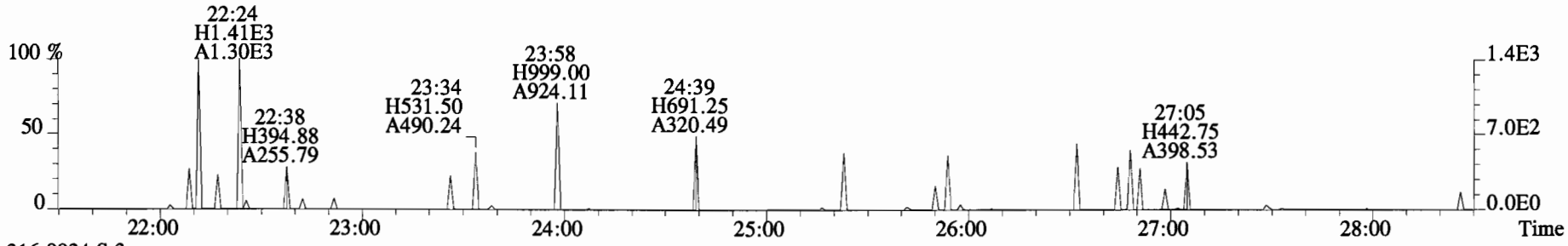
File:141027D1 #1-551 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



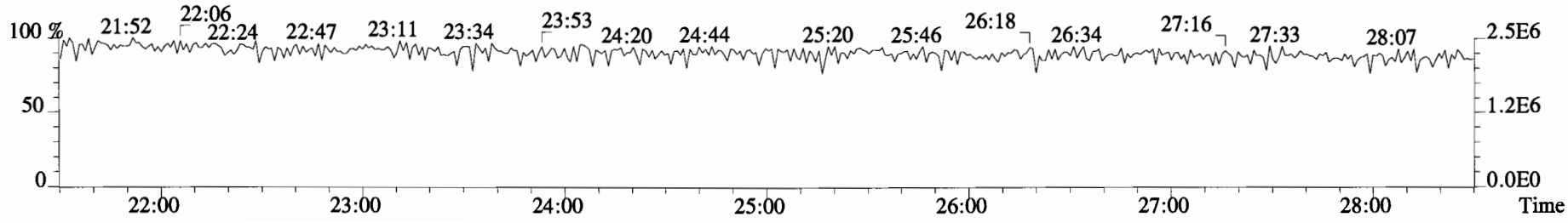
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



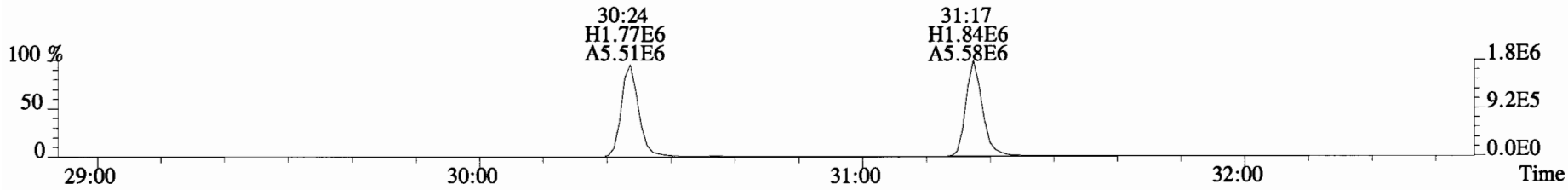
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



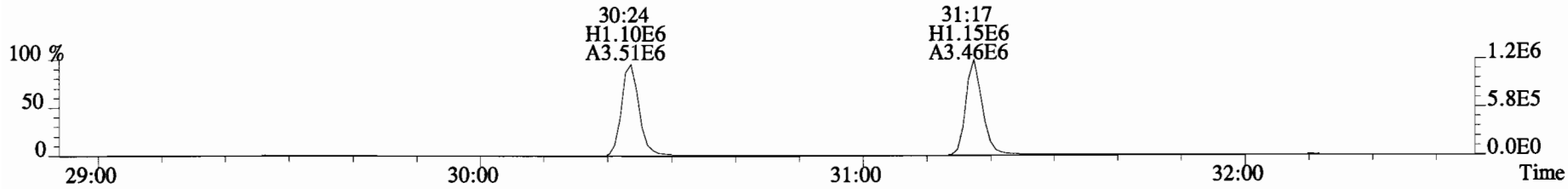
316.9824 S:3



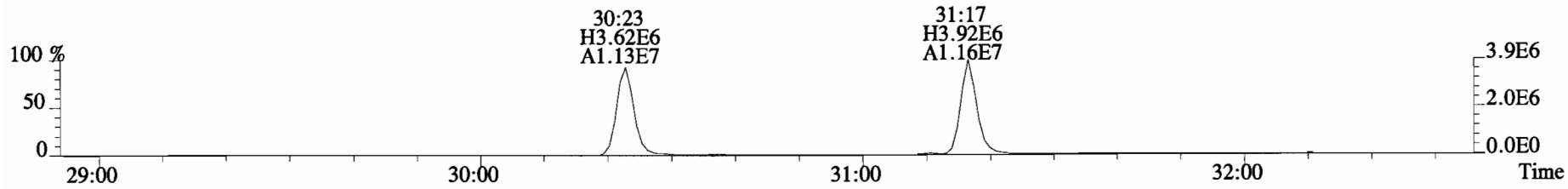
File:141027D1 #1-257 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



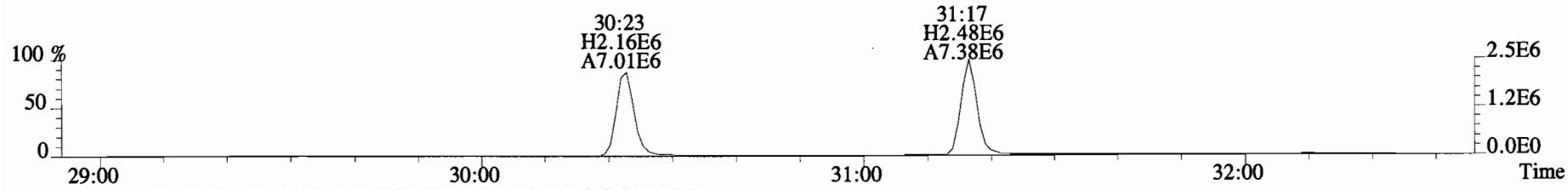
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



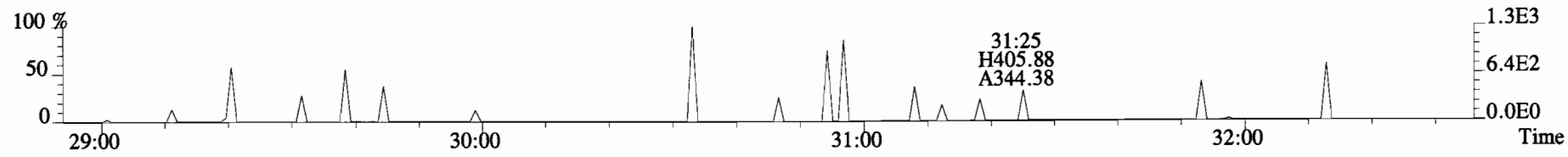
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

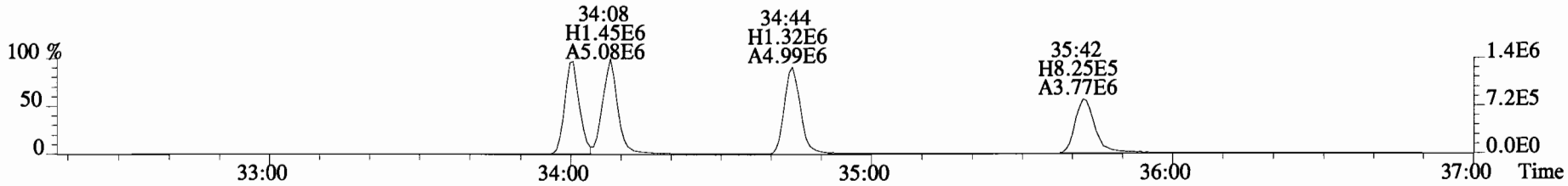


409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

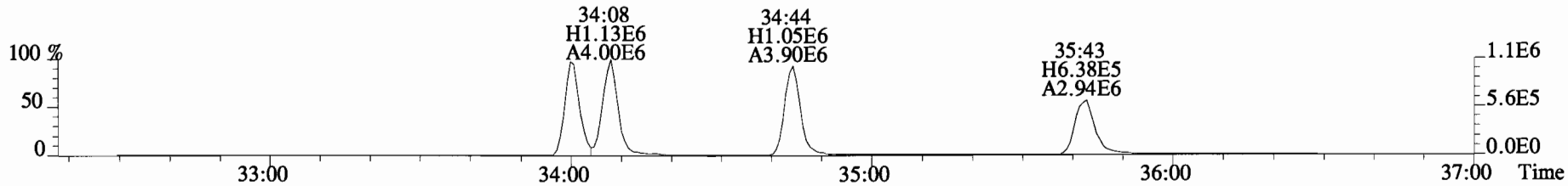


File:141027D1 #1-384 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5

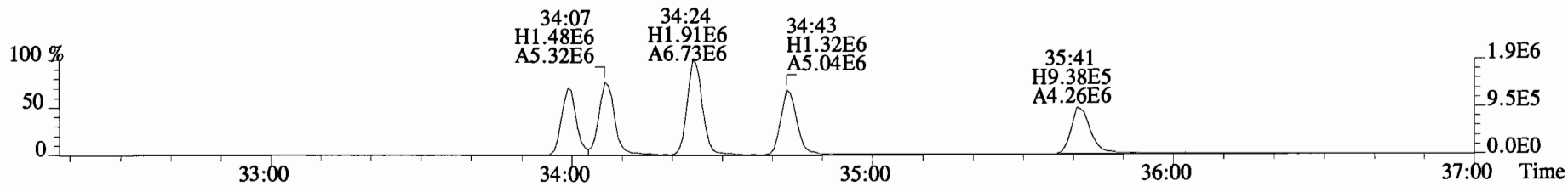
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



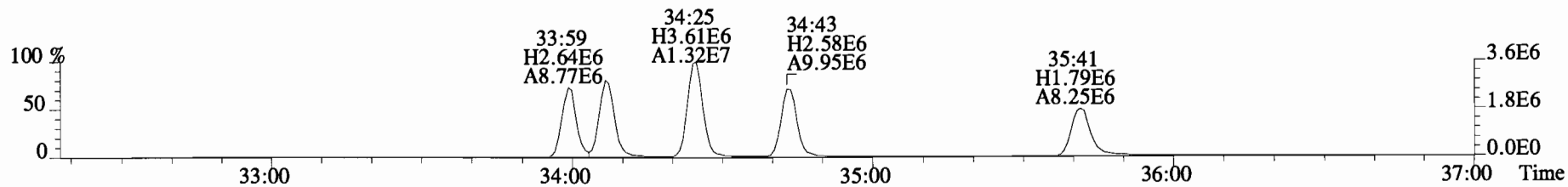
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



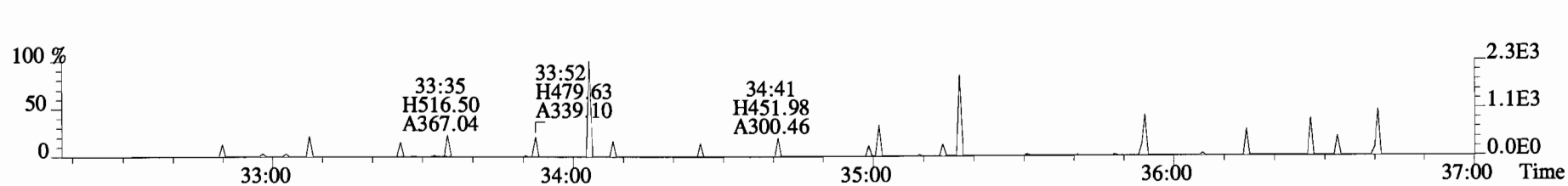
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



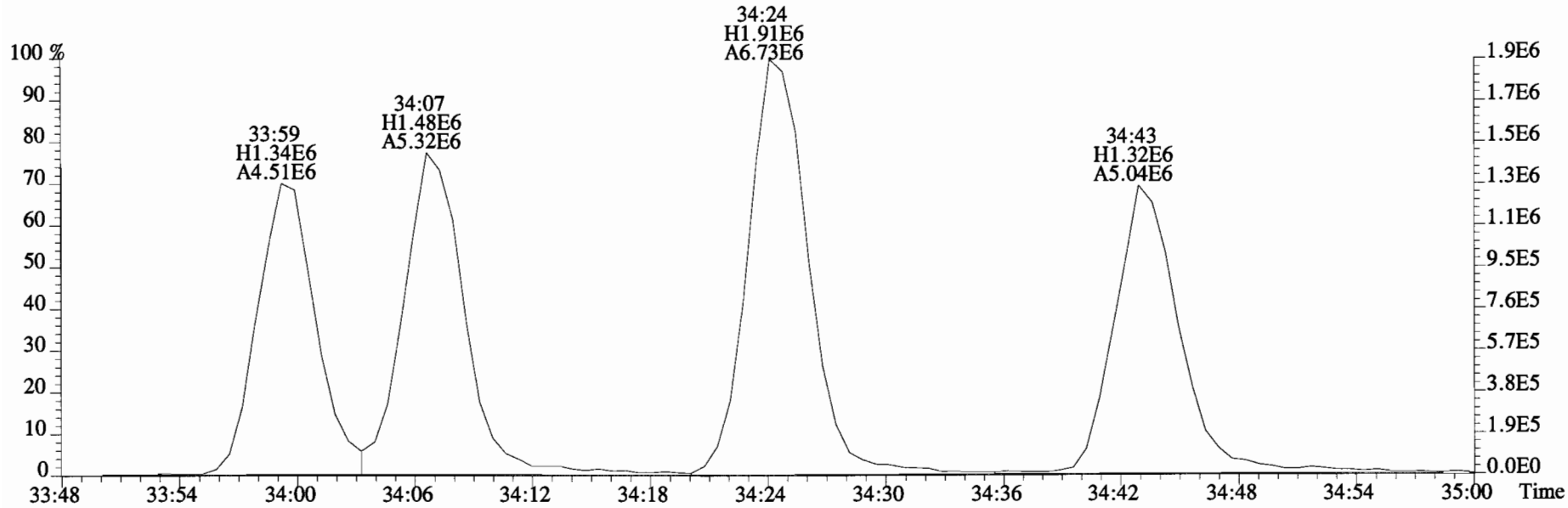
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



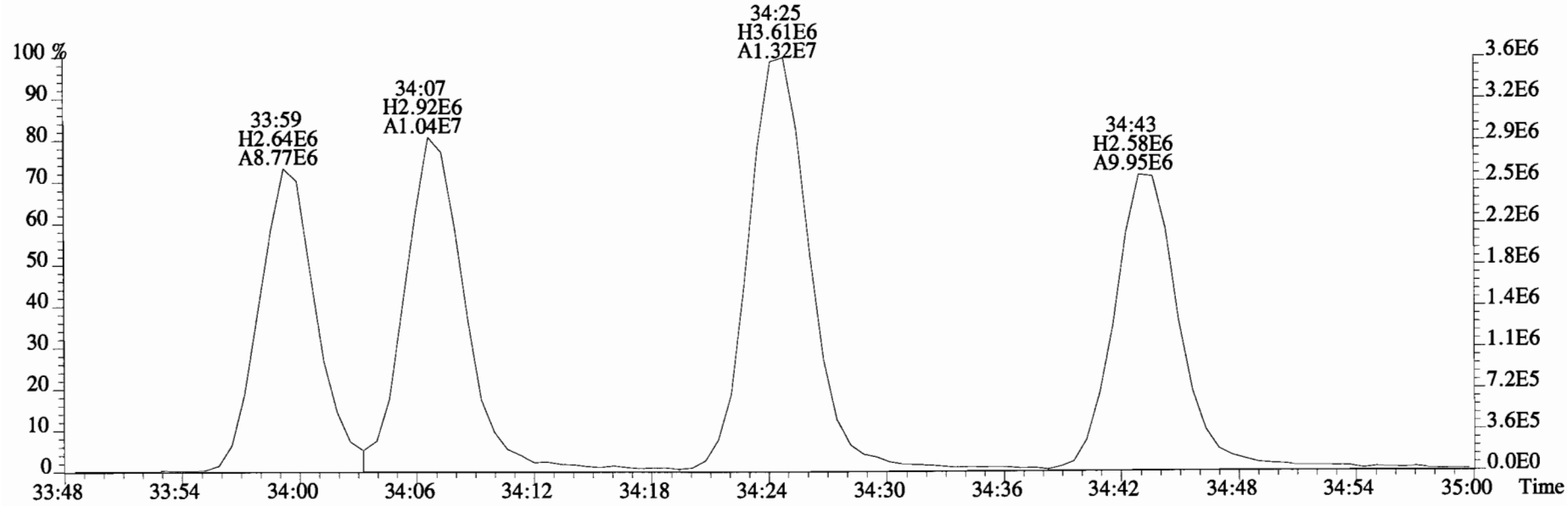
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



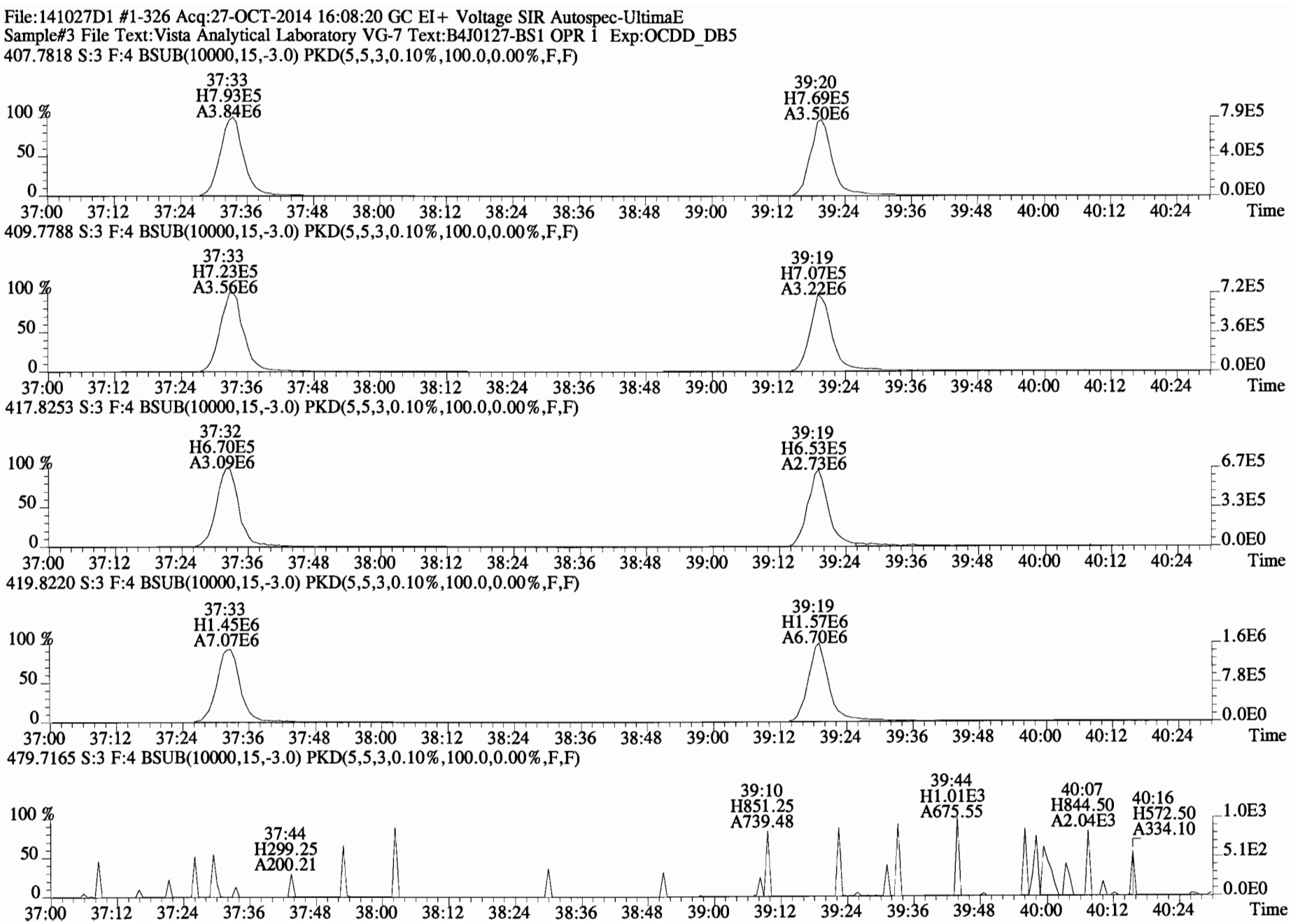
File:141027D1 #1-384 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



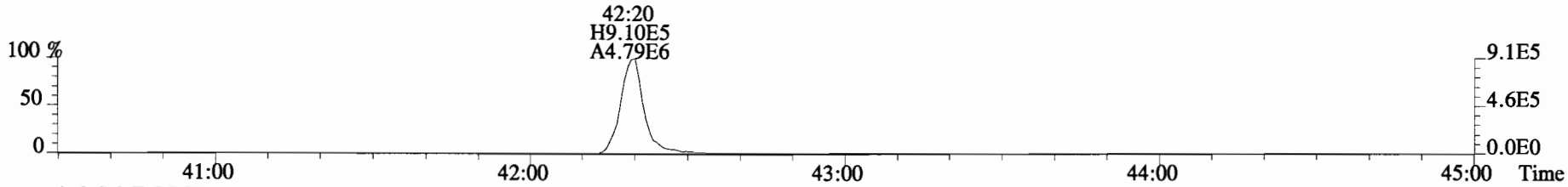
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



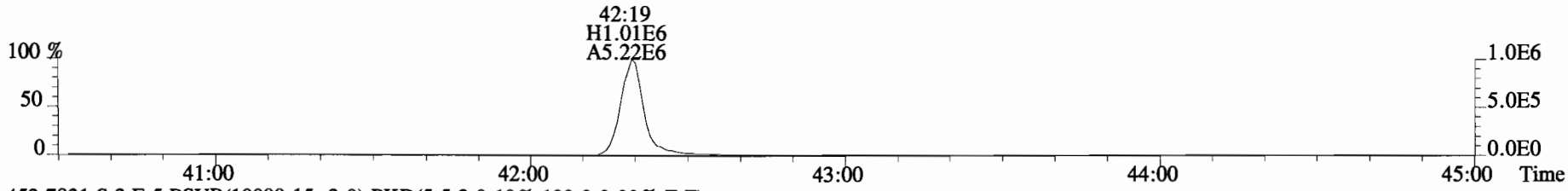
File:141027D1 #1-326 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5



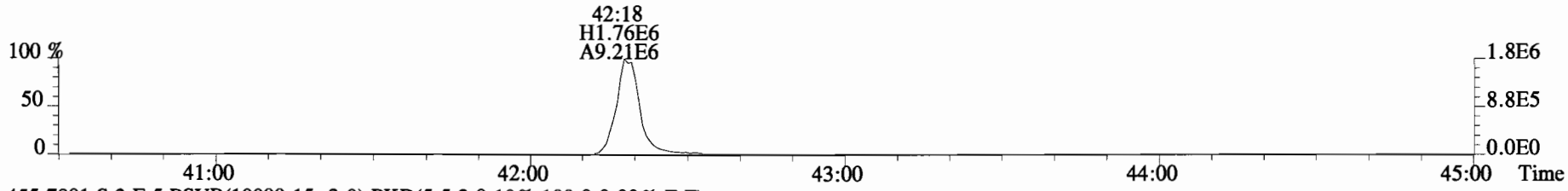
File:141027D1 #1-388 Acq:27-OCT-2014 16:08:20 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:B4J0127-BS1 OPR 1 Exp:OCDD_DB5
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



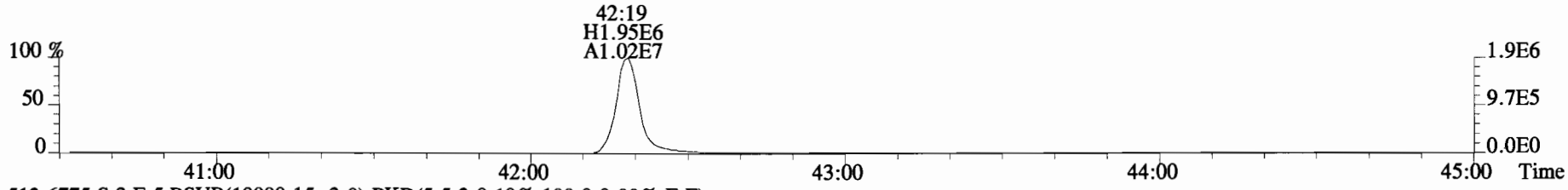
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



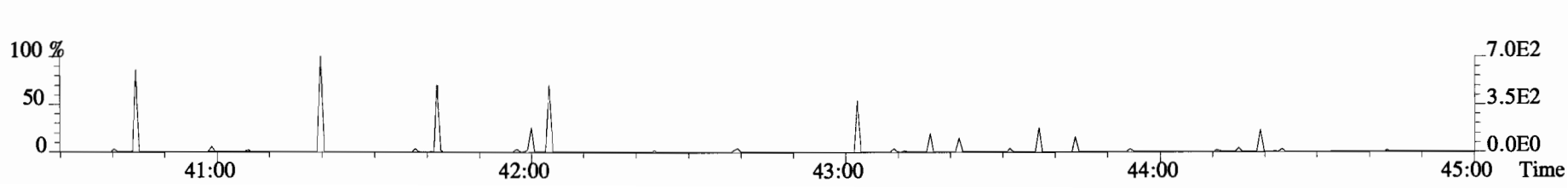
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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



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



Client ID: IA-MHS-05-20141020-W Filename: 141027D2 S:3 Acq:28-OCT-14 06:56:44 ConCal: ST141027D2-1

Lab ID: 1400781-01 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.013 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	*	*	n	1.18	NotF	*	*		427	2.5	2.28
	1,2,3,7,8-PeCDD	*	*	n	0.92	NotF	*	*		602	2.5	2.92
	1,2,3,4,7,8-HxCDD	*	*	n	1.09	NotF	*	*		341	2.5	3.06
	1,2,3,6,7,8-HxCDD	*	*	n	1.07	NotF	*	*		485	2.5	4.22
	1,2,3,7,8,9-HxCDD	*	*	n	0.93	NotF	*	*		485	2.5	4.99
	1,2,3,4,6,7,8-HpCDD	7.36e+04	1.02	y	1.12	38:46	1.000	38.578		*	2.5	*
	OCDD	2.88e+05	0.93	y	0.95	42:06	1.000	193.50		*	2.5	*
	2,3,7,8-TCDF	*	*	n	1.08	NotF	*	*		353	2.5	1.39
	1,2,3,7,8-PeCDF	*	*	n	1.09	NotF	*	*		500	2.5	2.80
	2,3,4,7,8-PeCDF	*	*	n	1.04	NotF	*	*		500	2.5	2.43
	1,2,3,4,7,8-HxCDF	*	*	n	1.39	NotF	*	*		537	2.5	1.72
	1,2,3,6,7,8-HxCDF	*	*	n	1.26	NotF	*	*		537	2.5	1.76
	2,3,4,6,7,8-HxCDF	*	*	n	1.30	NotF	*	*		537	2.5	1.91
	1,2,3,7,8,9-HxCDF	*	*	n	1.19	NotF	*	*		537	2.5	3.19
	1,2,3,4,6,7,8-HpCDF	*	*	n	1.62	NotF	*	*		1340	1.0	3.15
	1,2,3,4,7,8,9-HpCDF	*	*	n	1.53	NotF	*	*		312	2.5	1.72
	OCDF	1.03e+04	0.61	n	1.10	42:19	1.000	4.9243		*	2.5	*
IS	13C-2,3,7,8-TCDD	5.32e+06	0.79	y	1.07	27:01	1.022	1147.4				
IS	13C-1,2,3,7,8-PeCDD	5.82e+06	0.66	y	1.24	31:33	1.193	1088.2				
IS	13C-1,2,3,4,7,8-HxCDD	3.95e+06	1.31	y	0.72	34:53	1.014	620.58				
IS	13C-1,2,3,6,7,8-HxCDD	4.33e+06	1.20	y	0.74	34:60	1.017	670.28				
IS	13C-1,2,3,7,8,9-HxCDD	4.96e+06	1.27	y	0.86	35:18	1.026	661.65				
IS	13C-1,2,3,4,6,7,8-HpCDD	3.37e+06	1.07	y	0.64	38:46	1.127	597.24				
IS	13C-OCDD	6.17e+06	0.86	y	0.78	42:05	1.223	898.19				
IS	13C-2,3,7,8-TCDF	8.24e+06	0.76	y	0.92	26:15	0.992	1176.2				
IS	13C-1,2,3,7,8-PeCDF	7.00e+06	1.59	y	0.95	30:22	1.148	970.23				
IS	13C-2,3,4,7,8-PeCDF	7.98e+06	1.55	y	0.97	31:16	1.182	1083.6				
IS	13C-1,2,3,4,7,8-HxCDF	5.42e+06	0.51	y	0.99	33:59	0.988	623.83				
IS	13C-1,2,3,6,7,8-HxCDF	6.45e+06	0.51	y	1.10	34:07	0.992	669.73				
IS	13C-2,3,4,6,7,8-HxCDF	6.03e+06	0.50	y	1.03	34:43	1.009	666.12				
IS	13C-1,2,3,7,8,9-HxCDF	4.80e+06	0.50	y	0.86	35:41	1.037	637.00				
IS	13C-1,2,3,4,6,7,8-HpCDF	3.55e+06	0.44	y	0.71	37:32	1.091	566.36				
IS	13C-1,2,3,4,7,8,9-HpCDF	3.41e+06	0.46	y	0.71	39:19	1.143	548.37				
IS	13C-OCDF	7.47e+06	0.90	y	0.87	42:19	1.230	974.81				
C/Up	37Cl-2,3,7,8-TCDD	3.62e+06			1.21	27:02	1.022	691.10				
RS/RT	13C-1,2,3,4-TCDD	8.52e+06	0.79	y	1.00	26:27	*	1973.6				
RS	13C-1,2,3,4-TCDF	1.50e+07	0.75	y	1.00	24:60	*	1973.6				
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.73e+07	0.51	y	1.00	34:24	*	1973.6				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		427	2.28
Total Penta-Dioxins	*	*		1400	6.80
Total Hexa-Dioxins	*	*		555	5.16
Total Hepta-Dioxins	38.6	62.5		*	*
Total Tetra-Furans	*	*		353	1.39
Total Penta-Furans	0.0000	0.0000		1300	6.75
Total Hexa-Furans	*	*		1800	6.95
Total Hepta-Furans	*	2.69		*	*

	Rec	Qual
IS	58.1	
IS	55.1	
IS	31.4	
IS	34.0	
IS	33.5	
IS	30.3	
IS	22.8	
IS	59.6	
IS	49.2	
IS	54.9	
IS	31.6	
IS	33.9	
IS	33.8	
IS	32.3	
IS	28.7	
IS	27.8	
IS	24.7	
C/Up	87.5	

Integrations by Analyst: M) Date: 10/29/14

Reviewed by Analyst: Date: 10/29/14

Totals class: HpCDD EMPC Entry #: 25

Run: 8 File: 141027D2 S: 3 I: 1 F: 4
Acquired: 28-OCT-14 06:56:44 Processed: 28-OCT-14 09:17:30

Total Concentration: 62.548 Unnamed Concentration: 23.970

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:56	2.730e+04	2.240e+04	1.22	n	4.570e+04	23.970	
38:46	3.708e+04	3.647e+04	1.02	y	7.355e+04	38.578	1,2,3,4,6,7,8-HpCDD

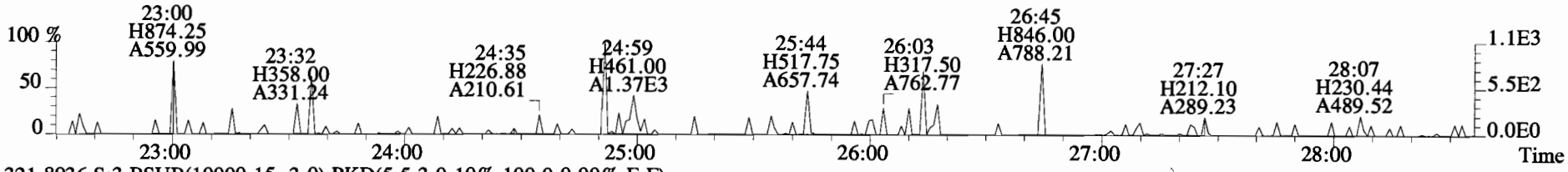
Totals class: HpCDF EMPC Entry #: 35

Run: 8 File: 141027D2 S: 3 I: 1 F: 4
Acquired: 28-OCT-14 06:56:44 Processed: 28-OCT-14 09:17:30

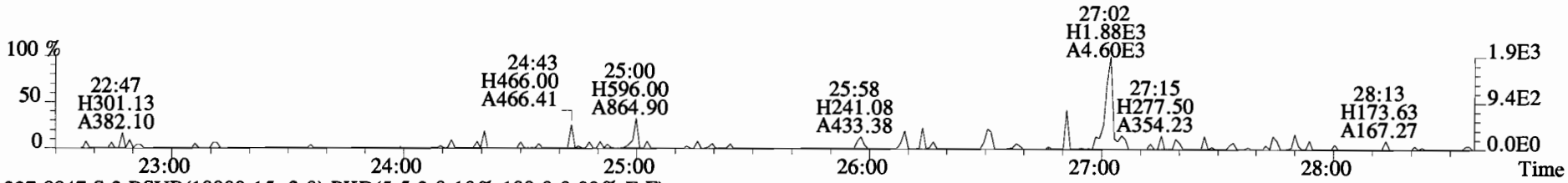
Total Concentration: 2.6875 Unnamed Concentration: *

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
38:08	3.791e+03	5.116e+03	0.74	n	7.437e+03	2.6875	1,2,3,4,6,7,8-HpCDF

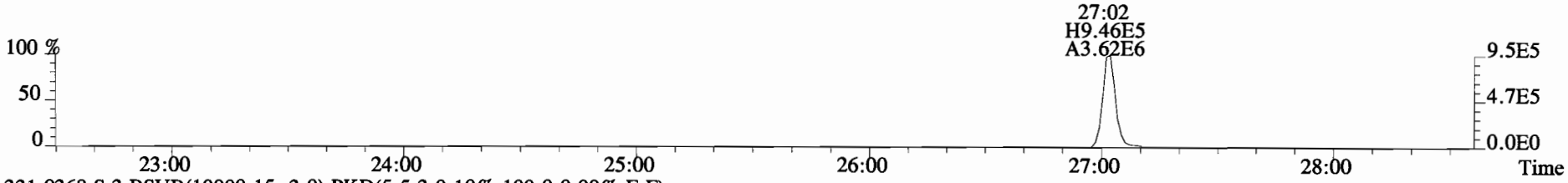
File:141027D2 #1-552 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



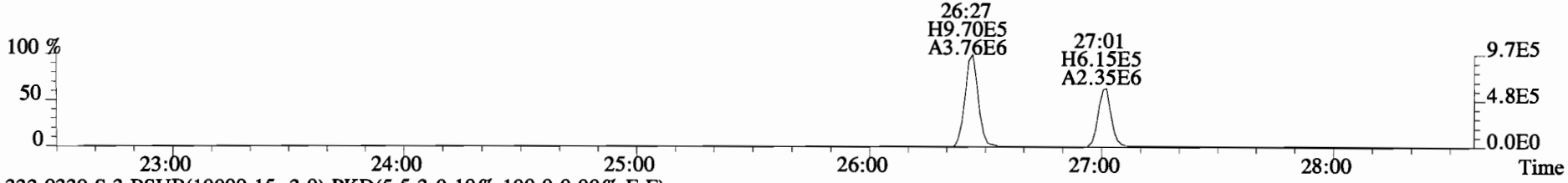
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



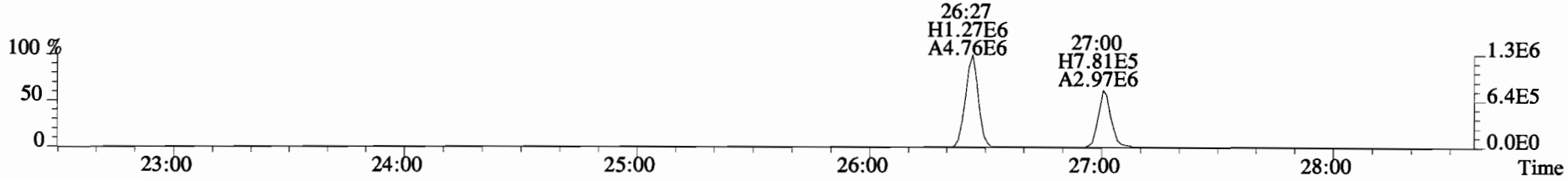
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



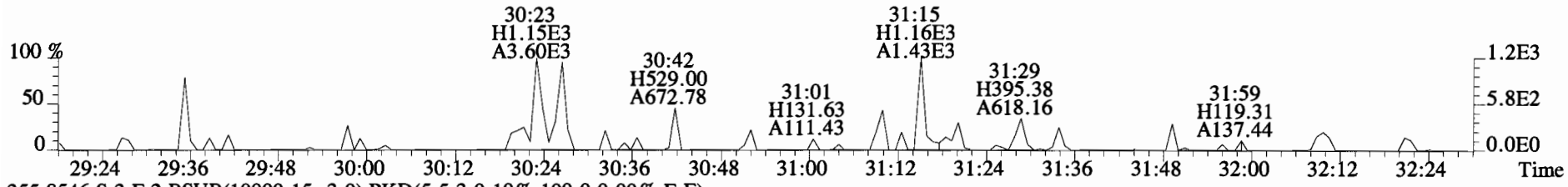
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



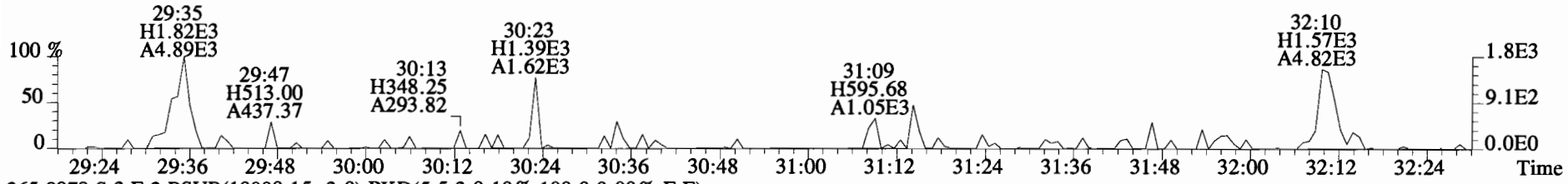
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



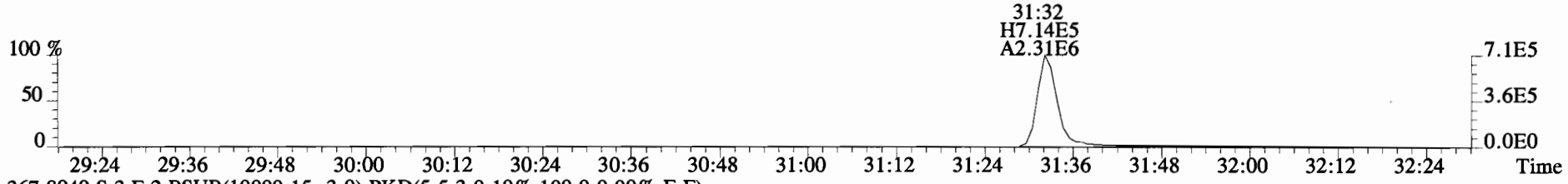
File:141027D2 #1-256 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
353.8576 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



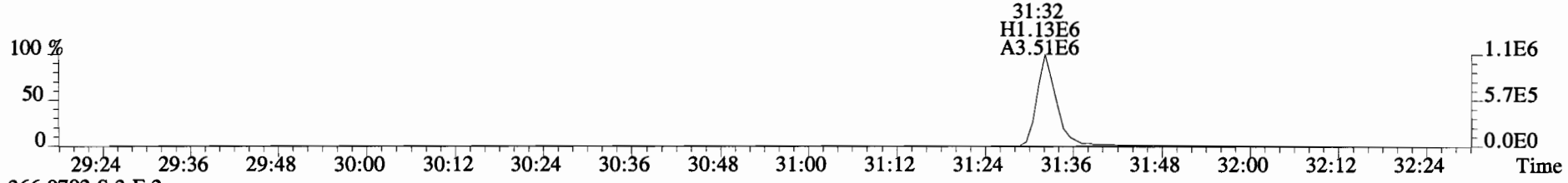
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



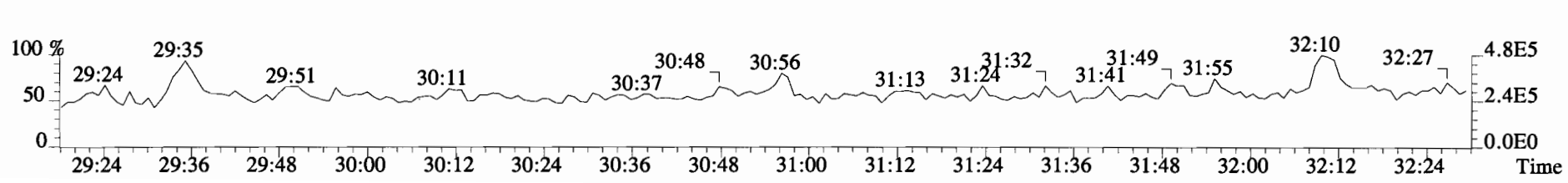
365.8978 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



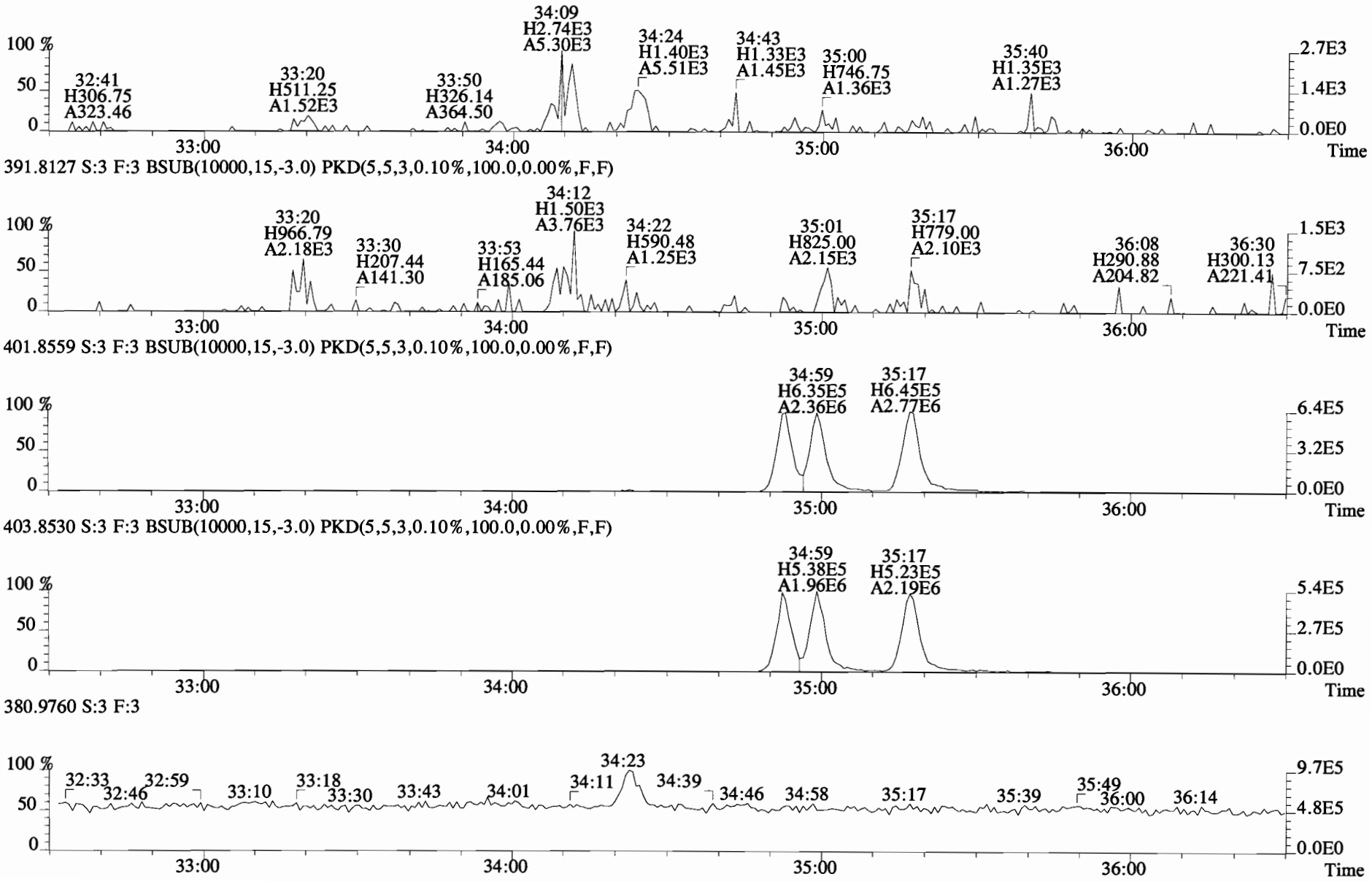
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



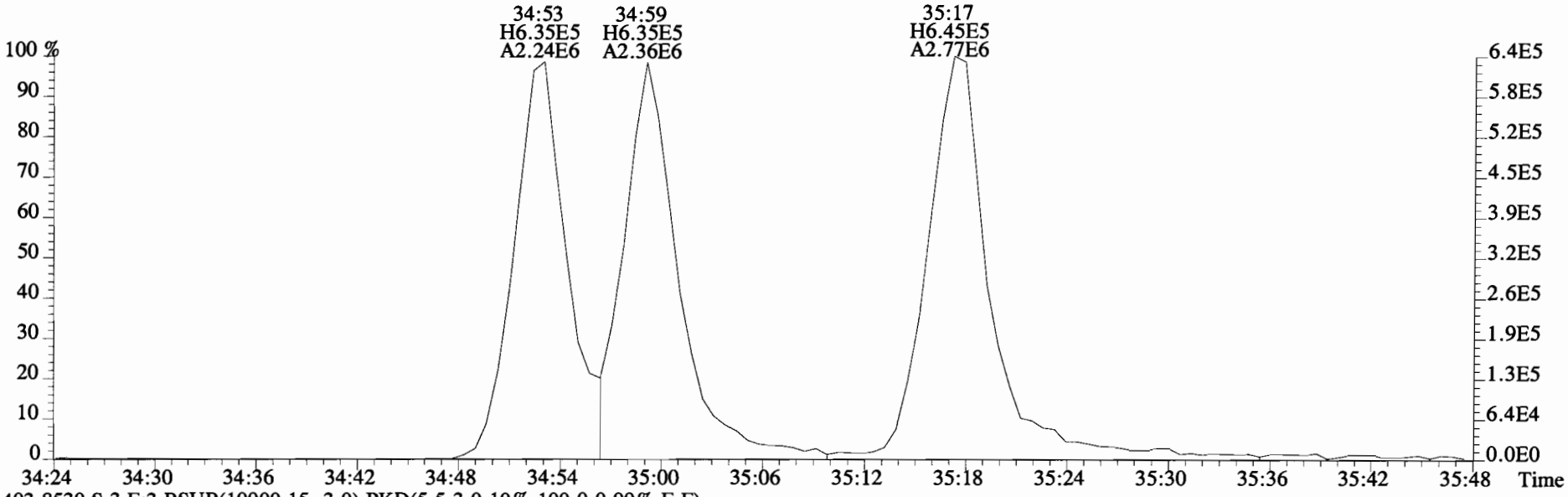
366.9792 S:3 F:2



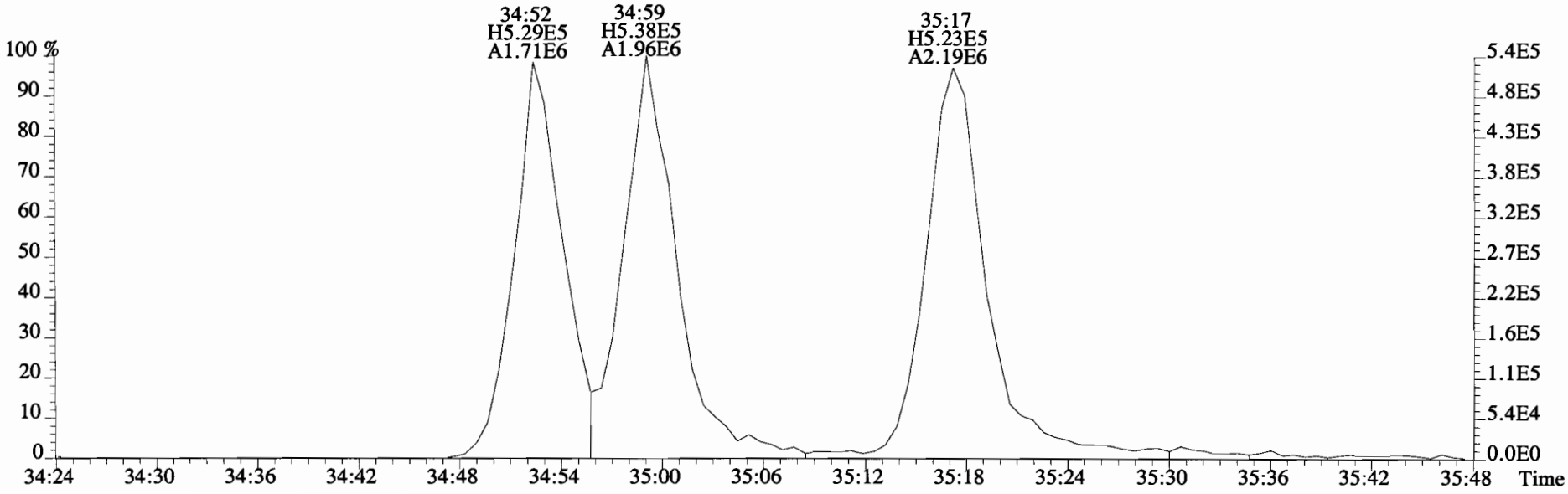
File:141027D2 #1-385 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5



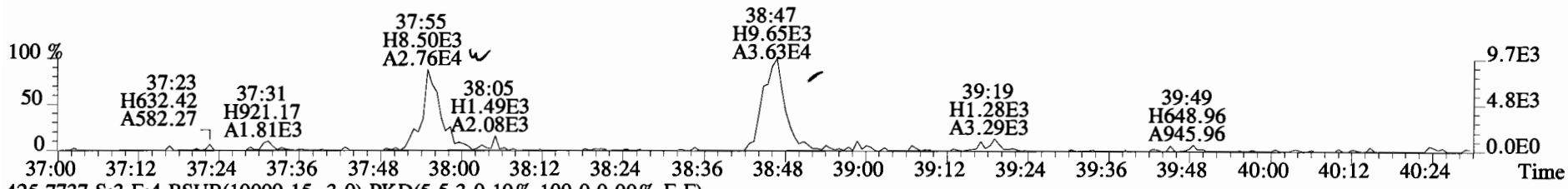
File:141027D2 #1-385 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



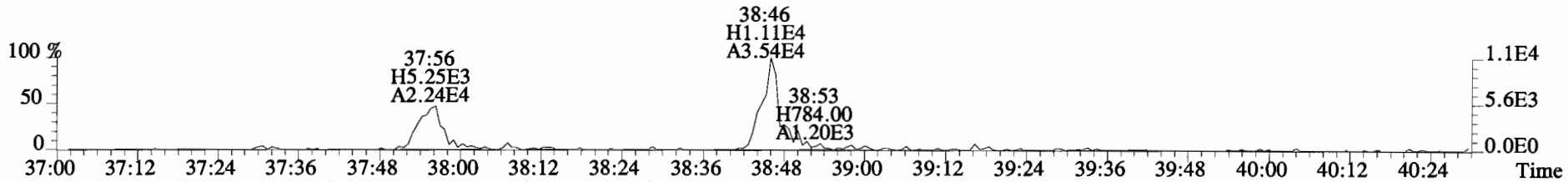
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



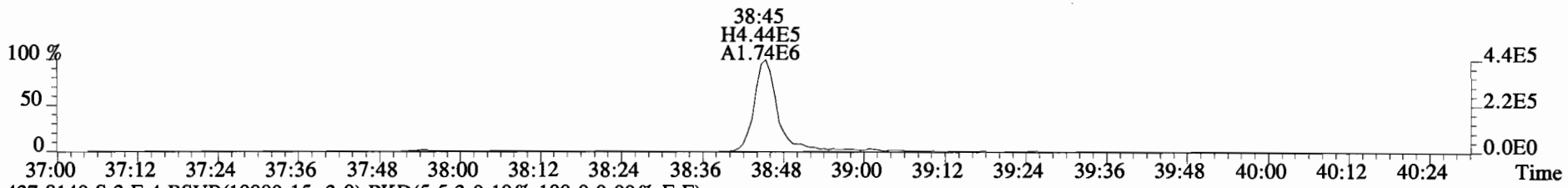
File:141027D2 #1-326 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



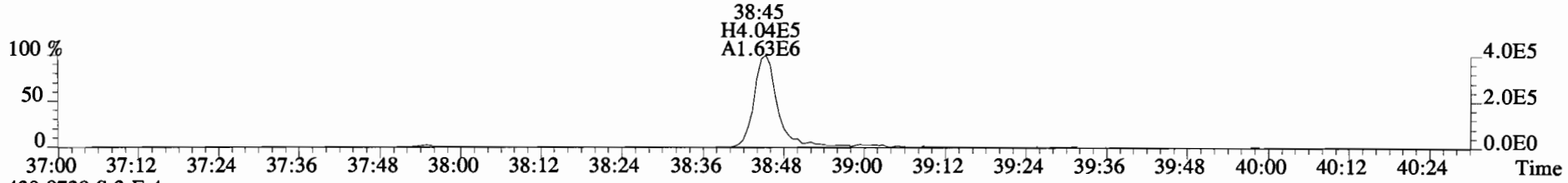
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



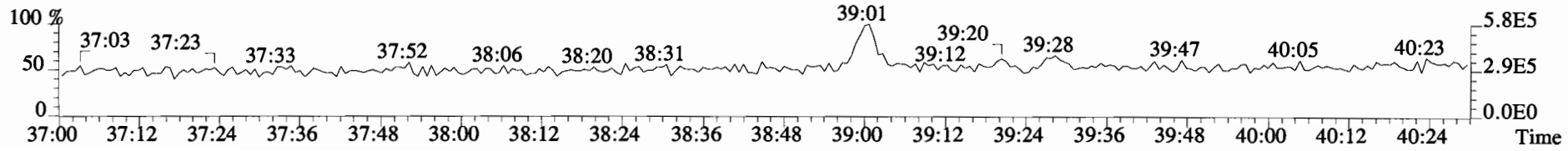
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



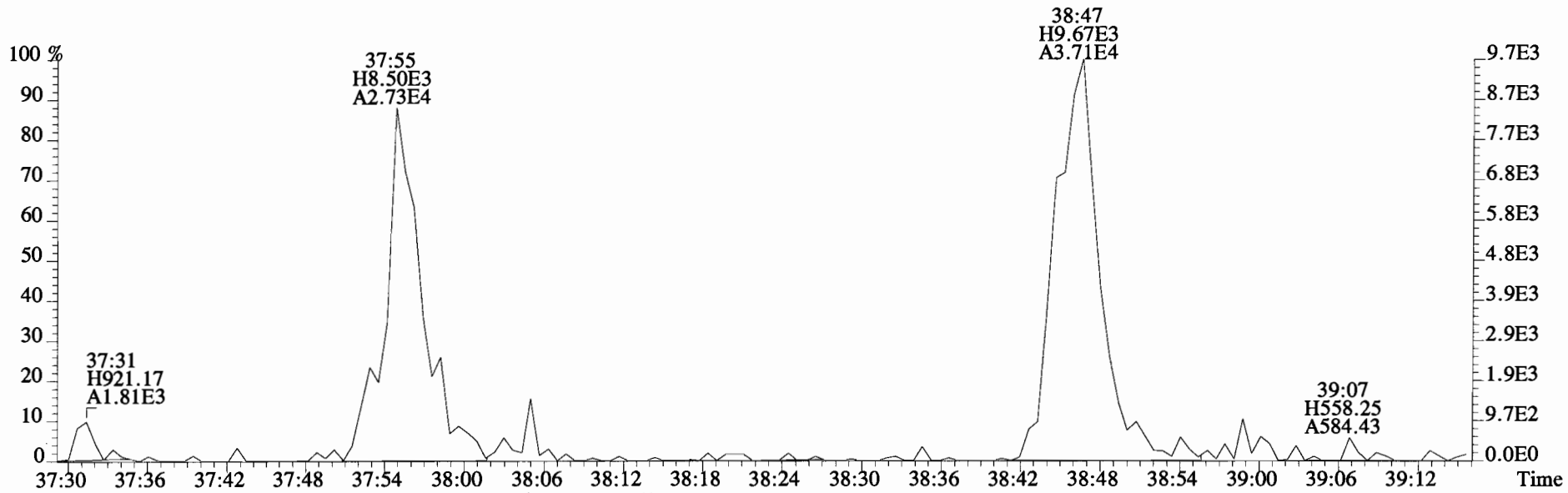
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



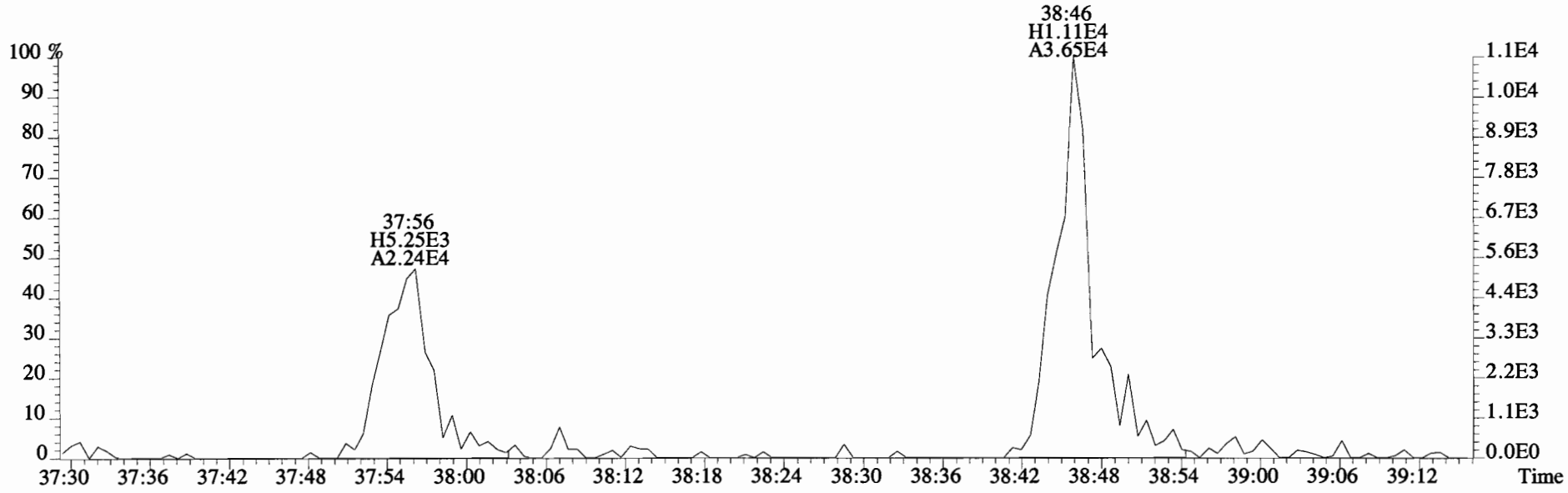
430.9728 S:3 F:4



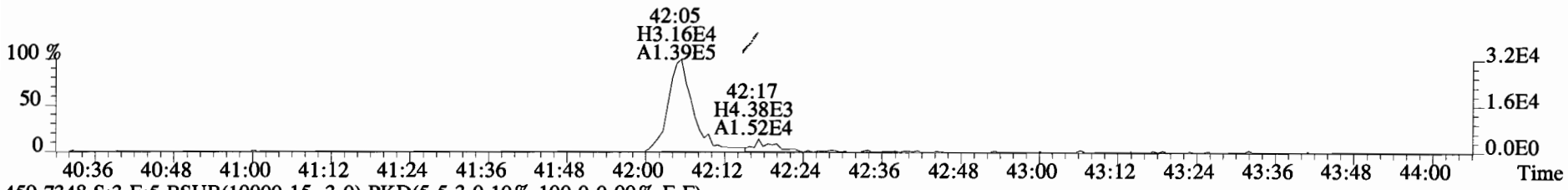
File:141027D2 #1-326 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



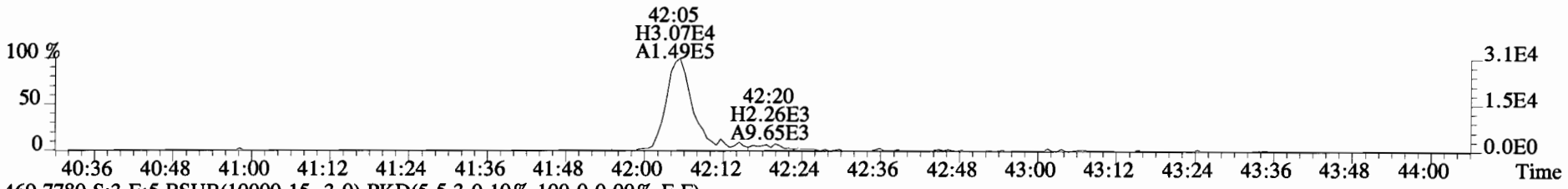
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



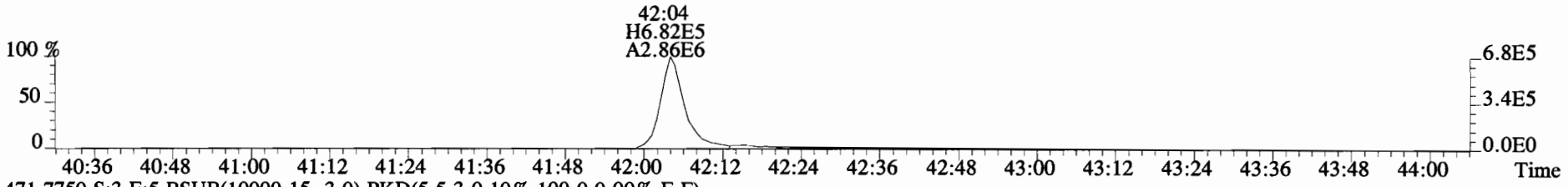
File:141027D2 #1-389 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



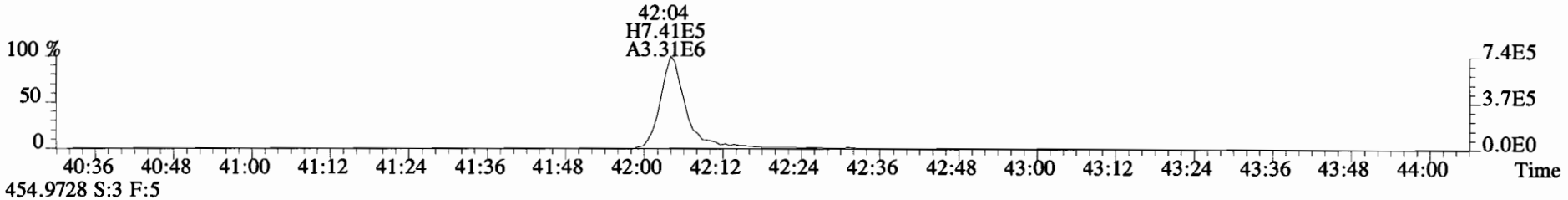
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



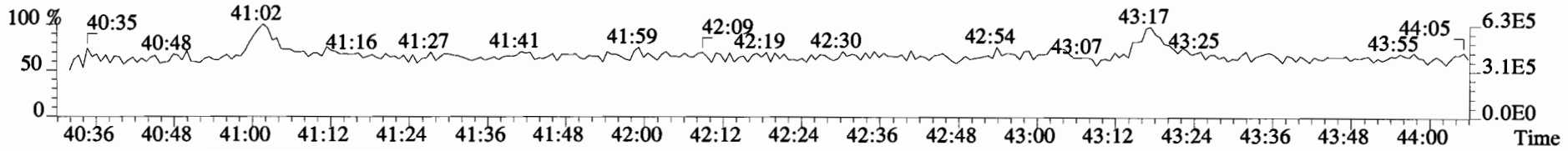
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

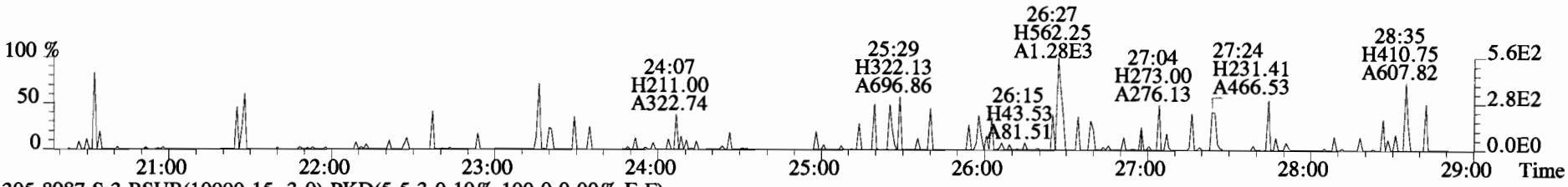


454.9728 S:3 F:5

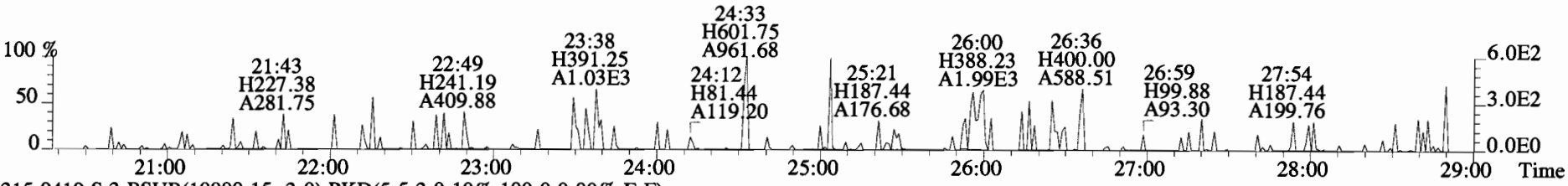


File:141027D2 #1-552 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5

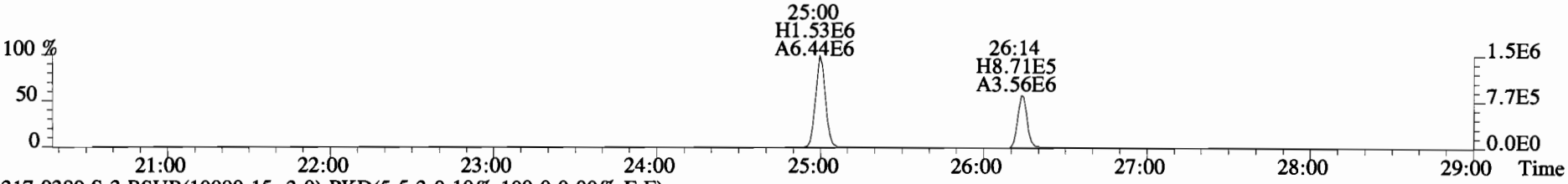
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



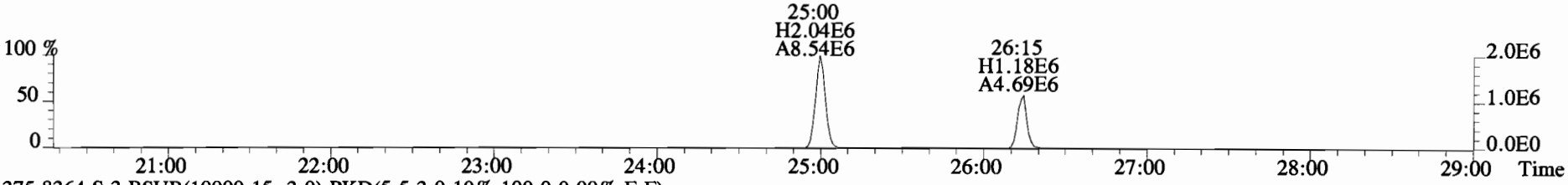
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



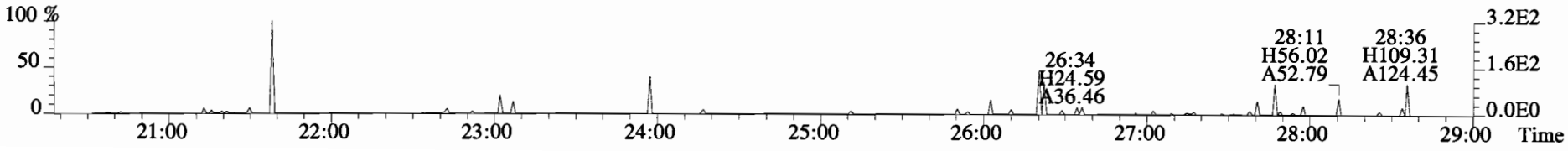
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



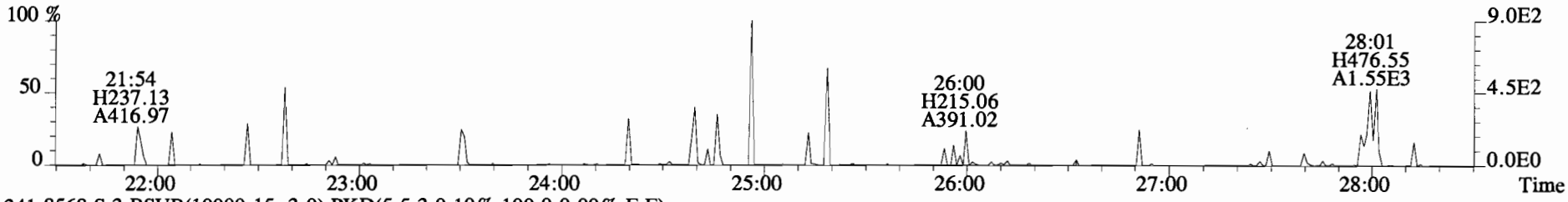
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



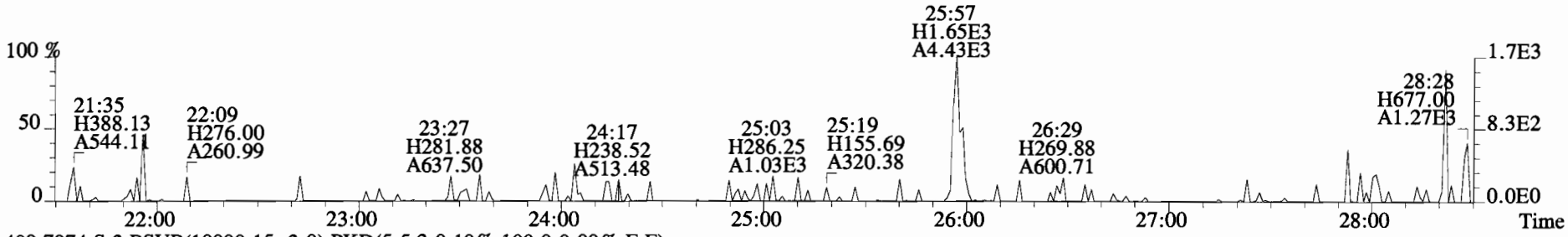
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



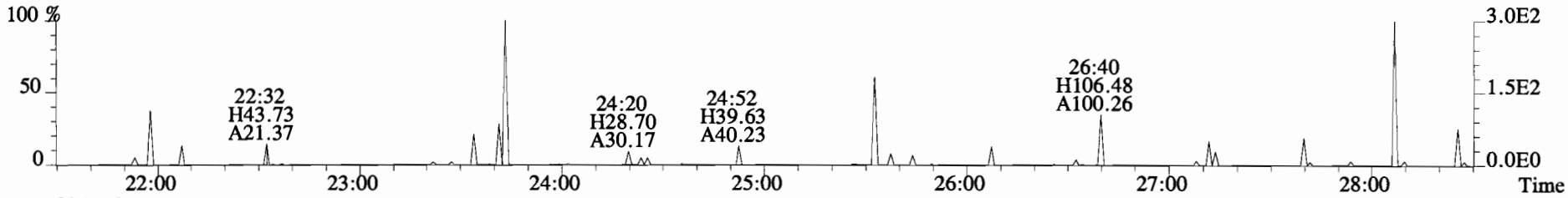
File:141027D2 #1-552 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



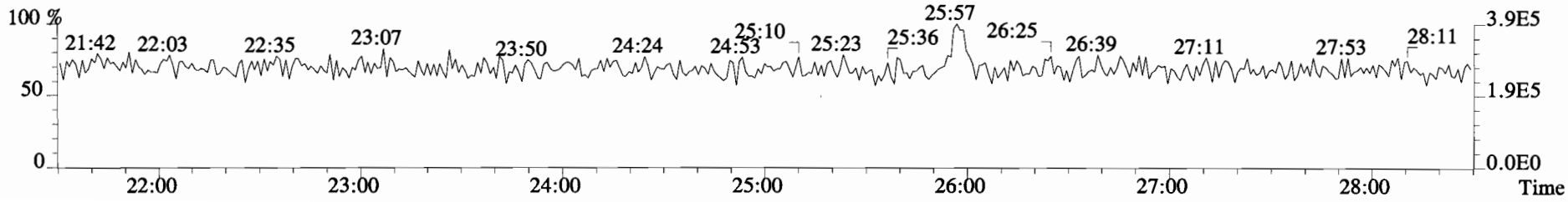
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



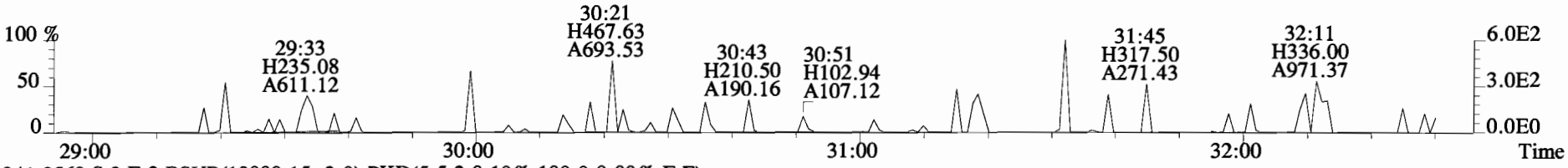
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



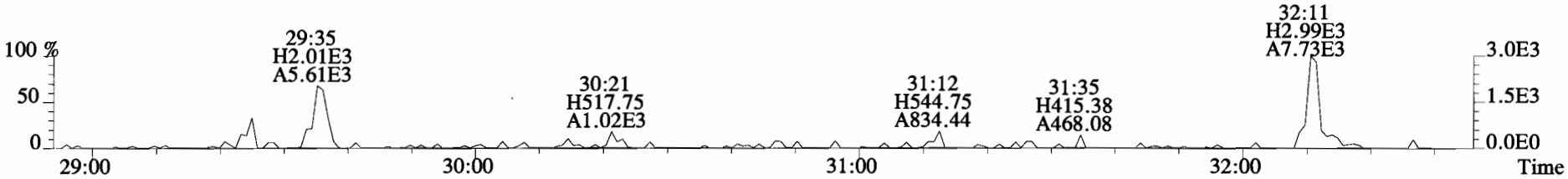
316.9824 S:3



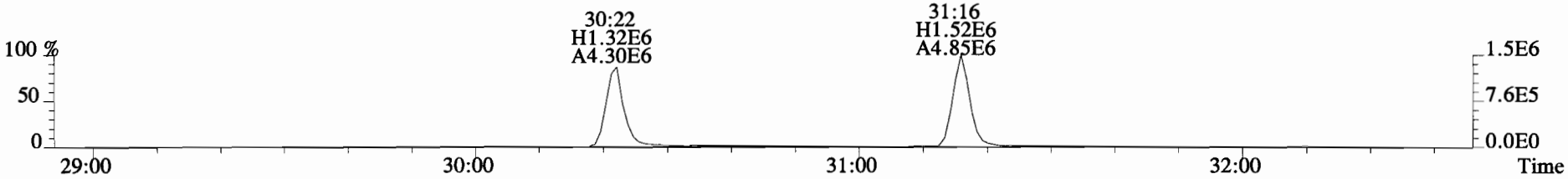
File:141027D2 #1-256 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



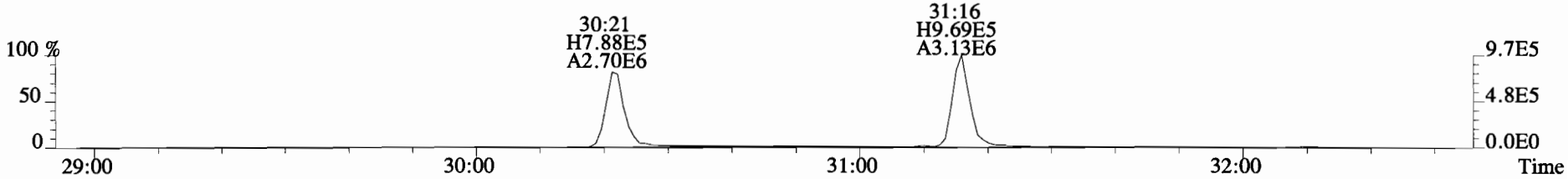
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



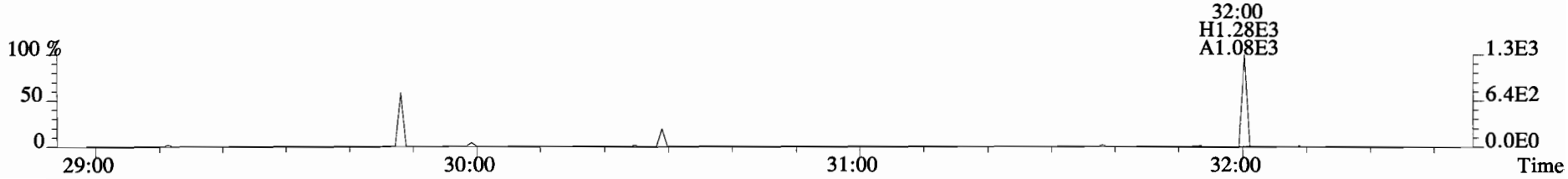
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

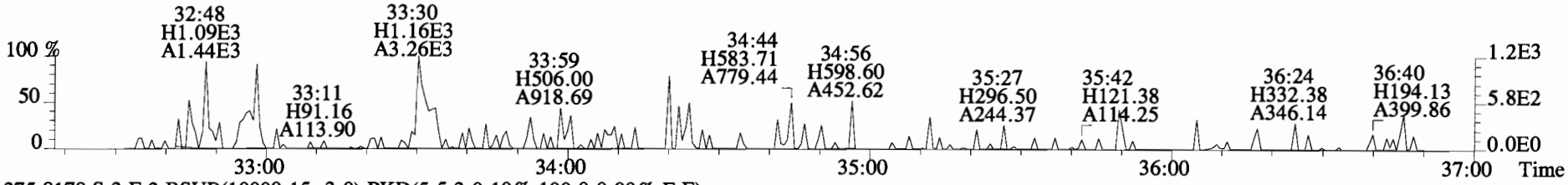


409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

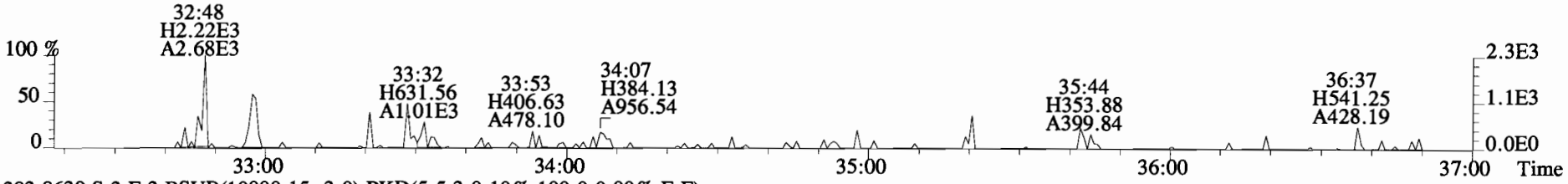


File:141027D2 #1-385 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5

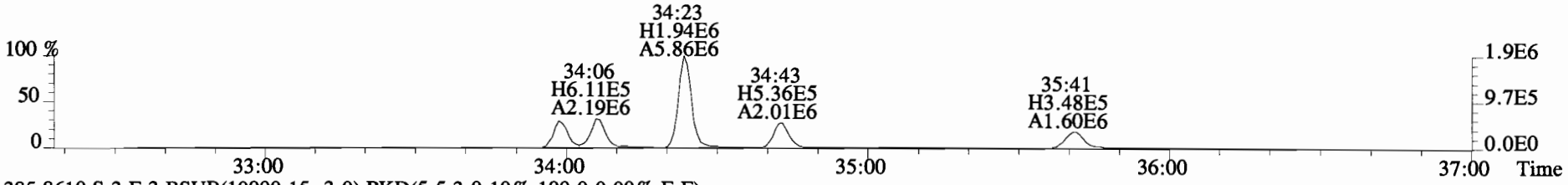
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



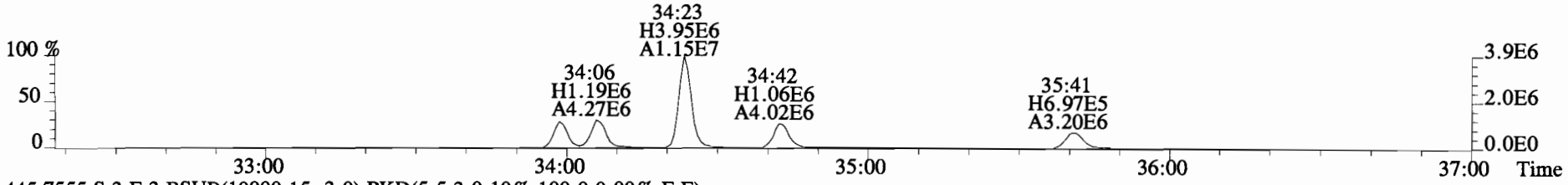
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



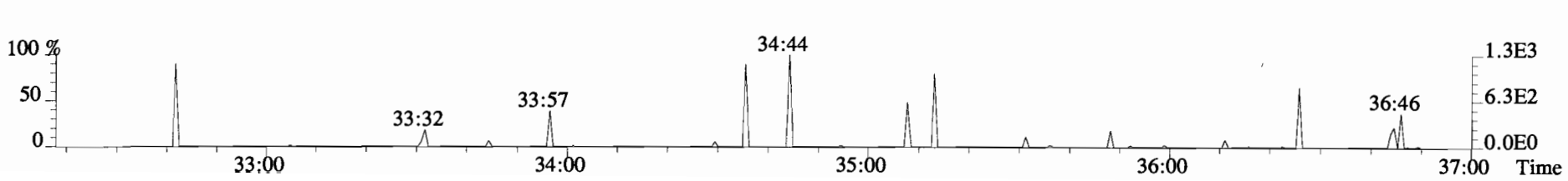
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



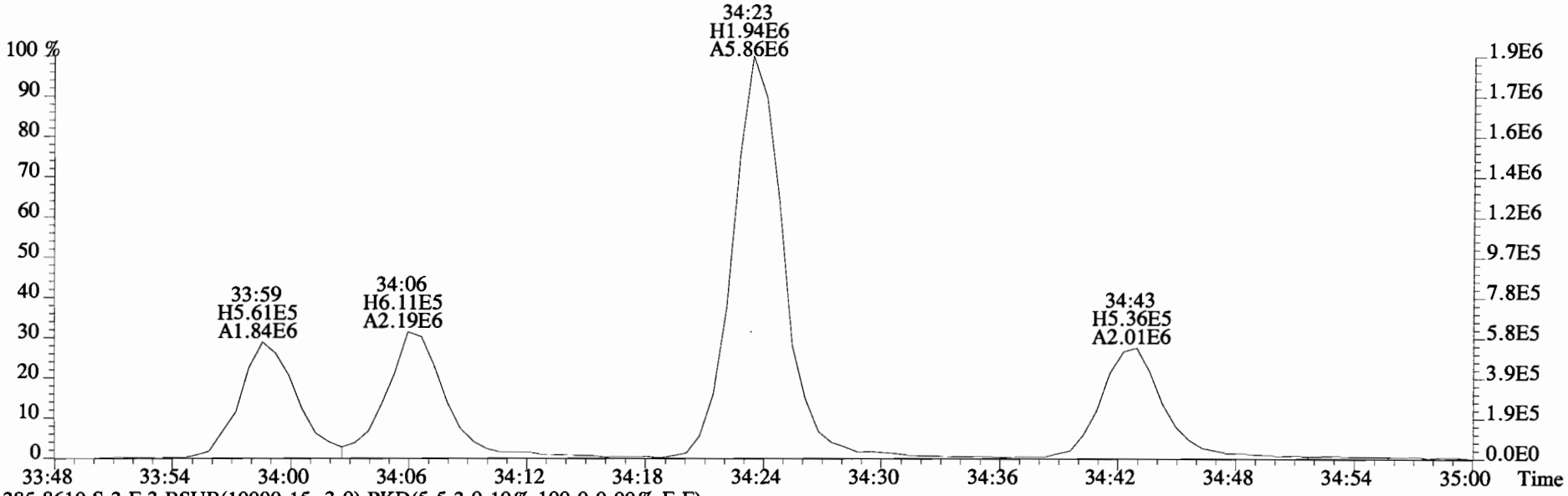
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



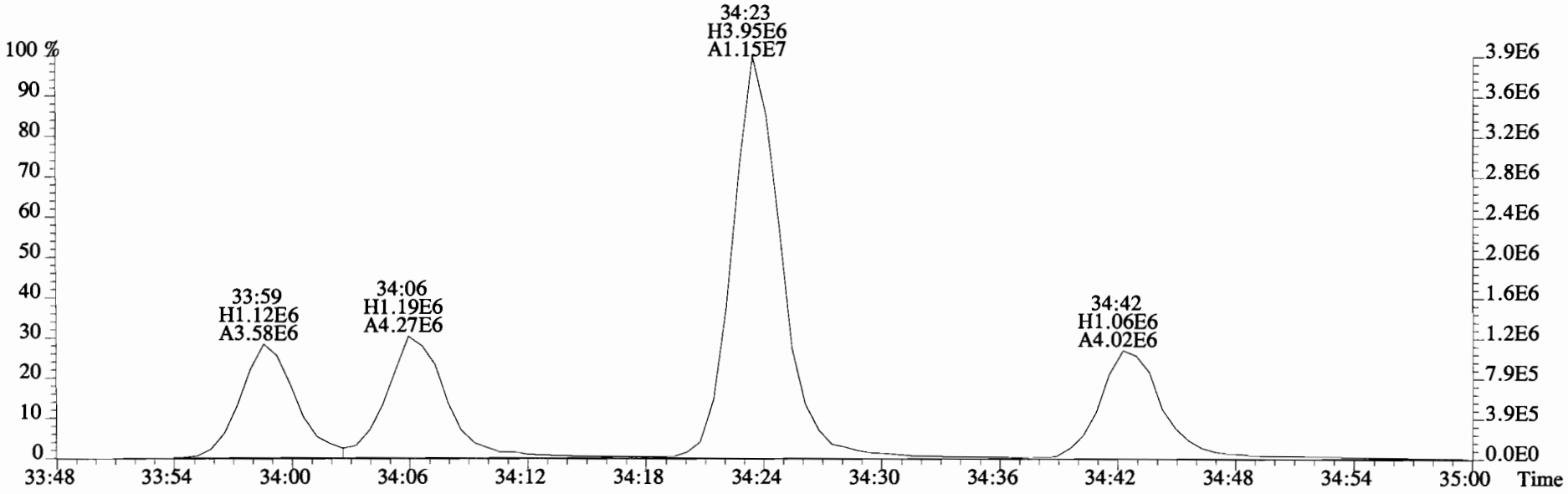
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141027D2 #1-385 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

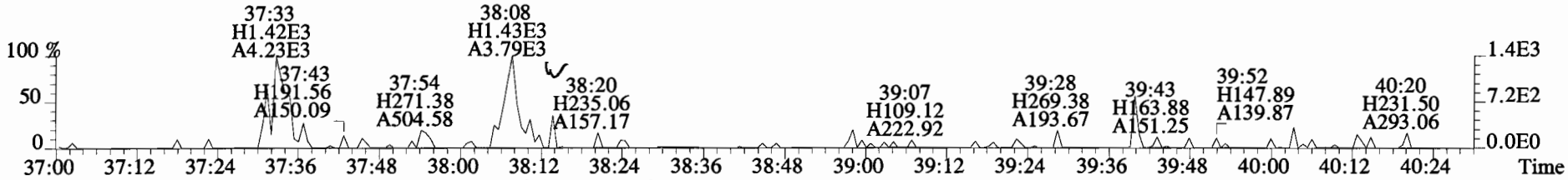


385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

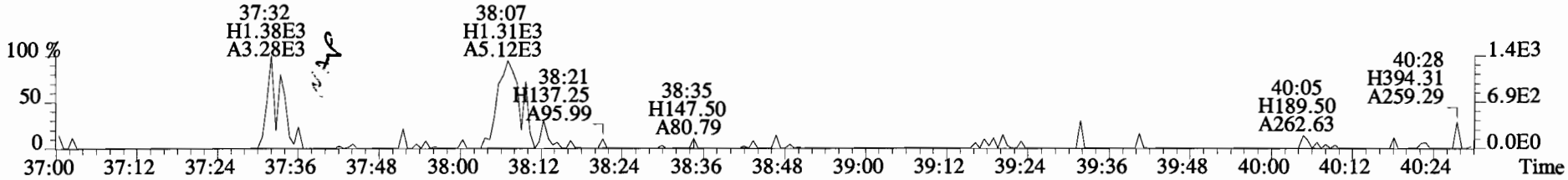


File:141027D2 #1-326 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5

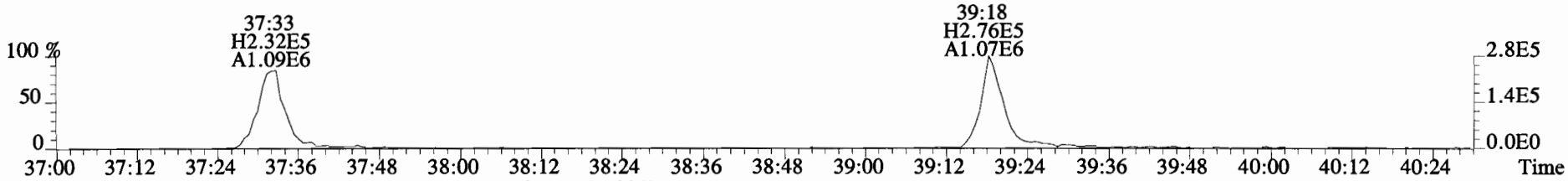
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



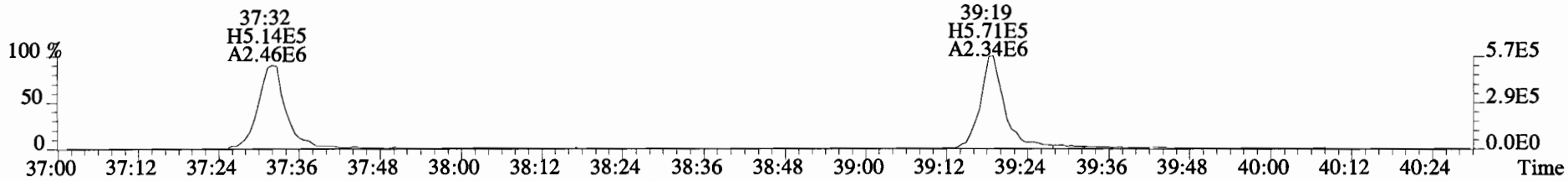
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



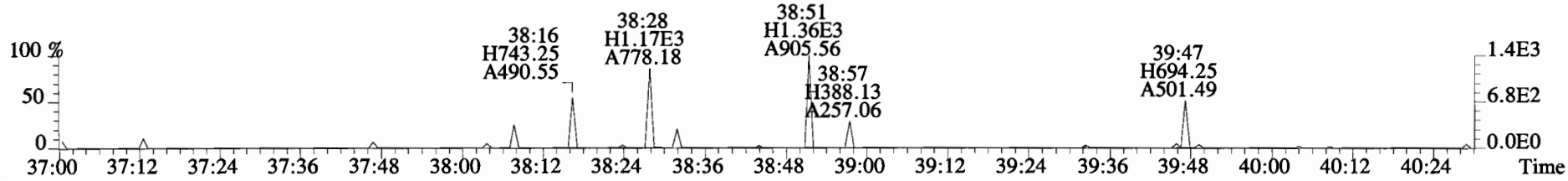
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



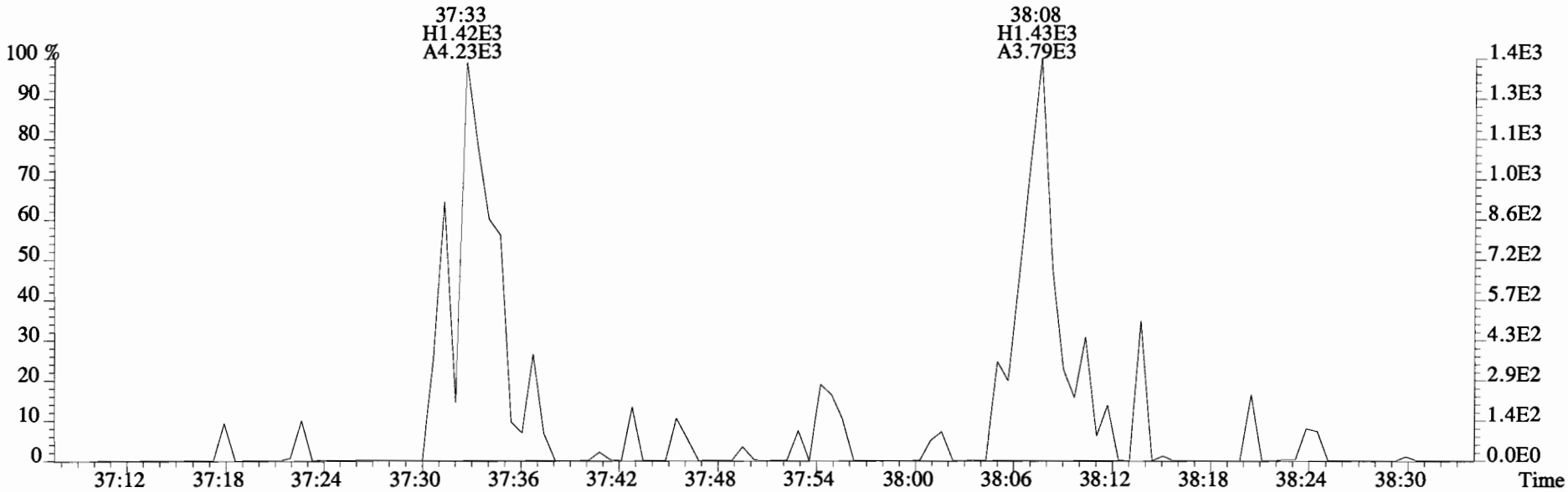
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



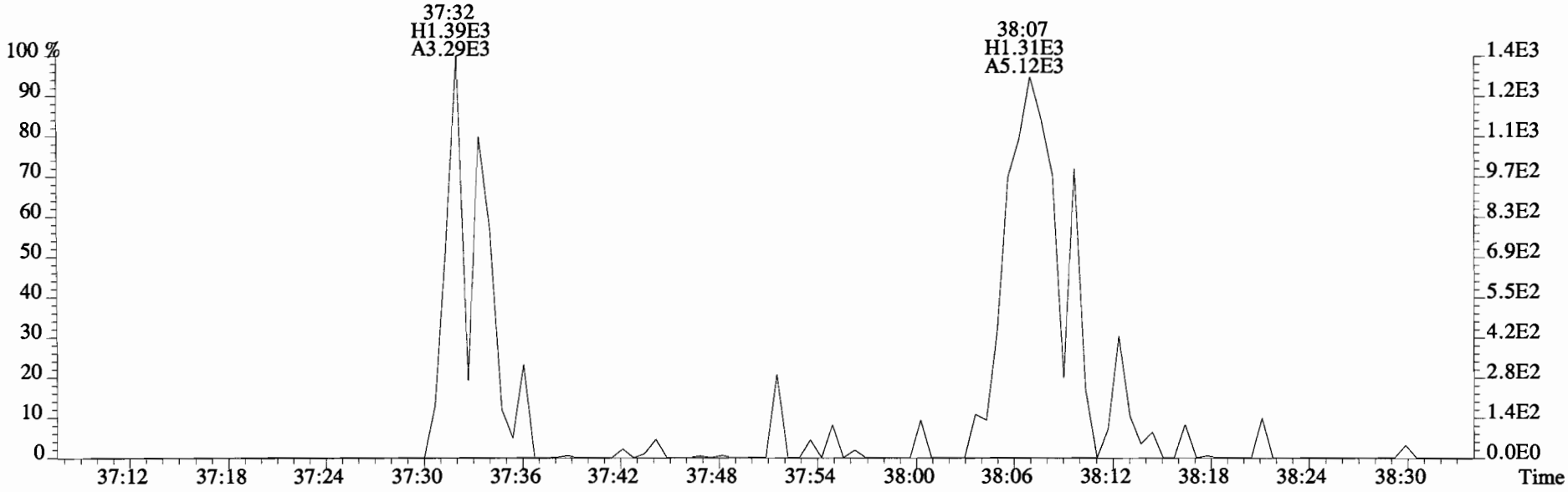
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



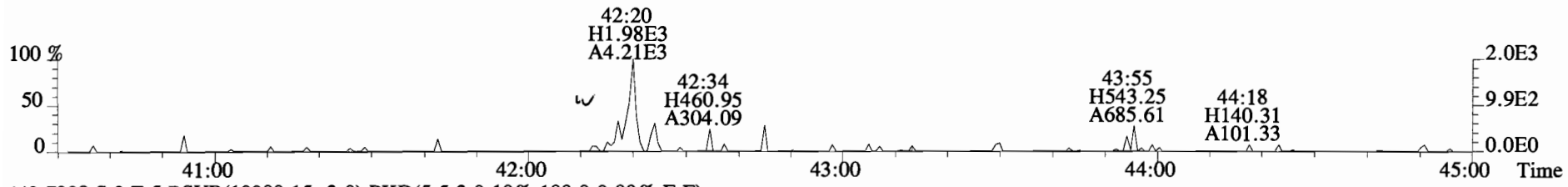
File:141027D2 #1-326 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



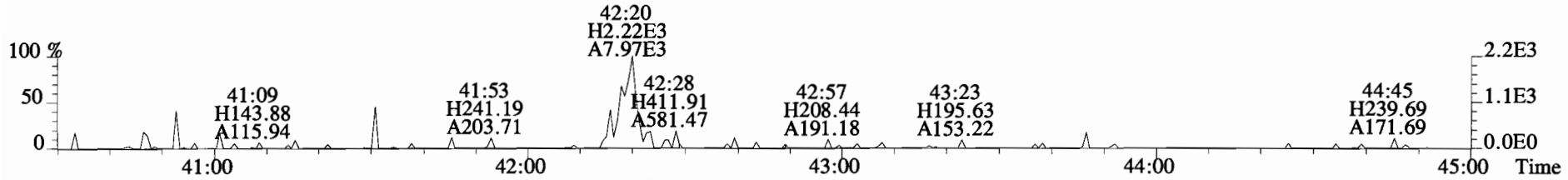
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



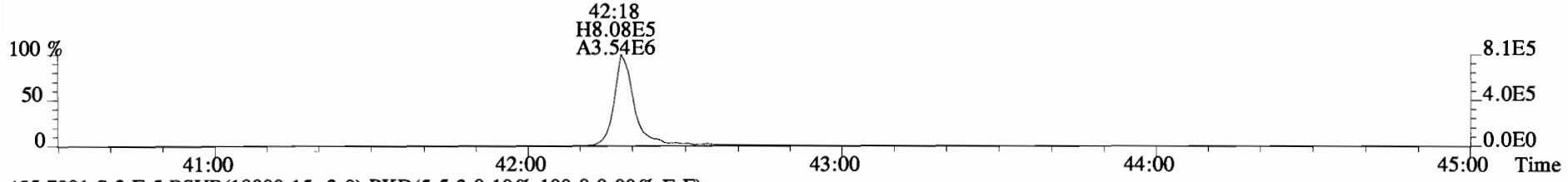
File:141027D2 #1-389 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



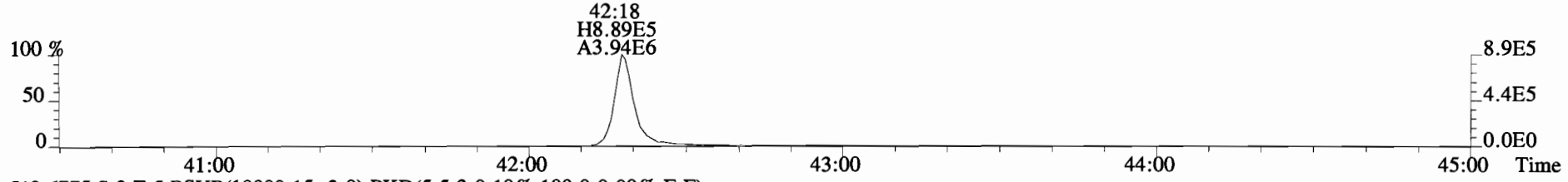
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



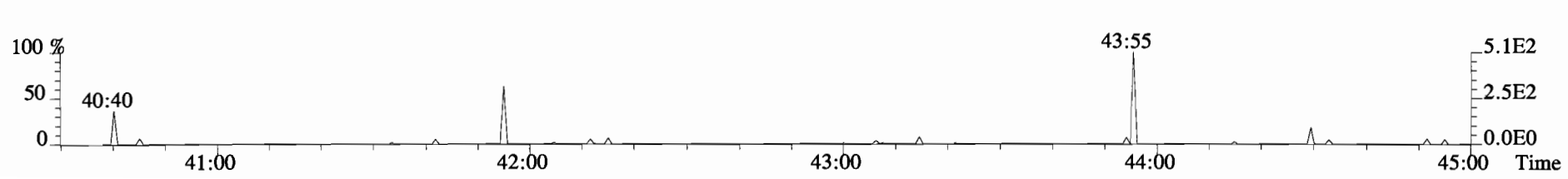
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



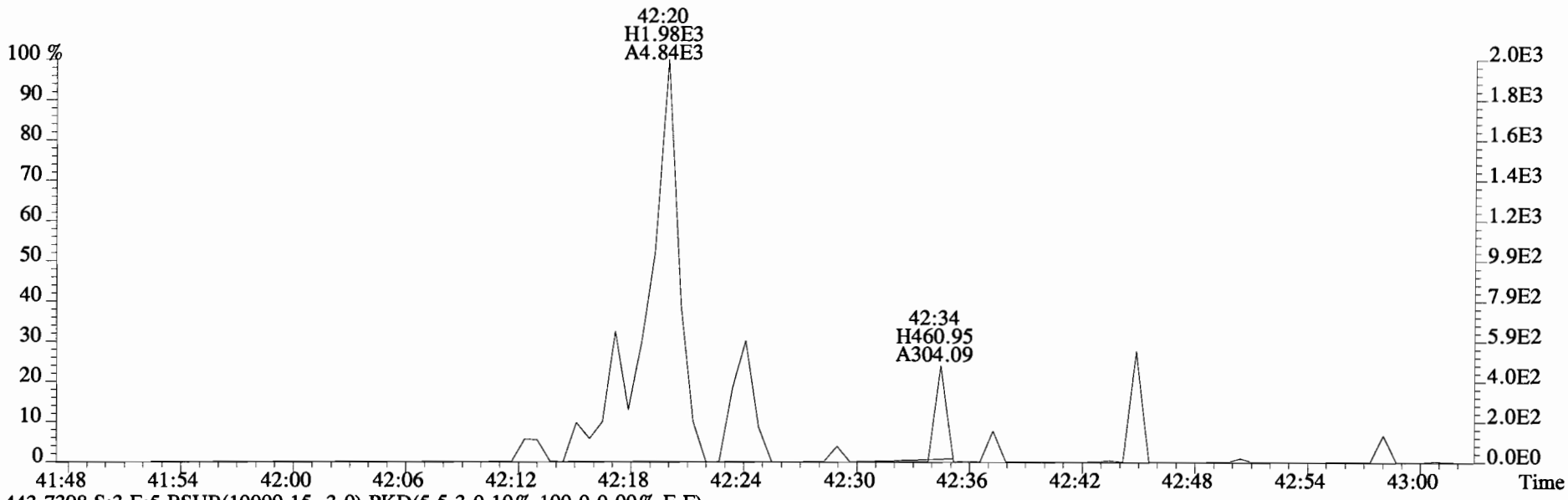
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



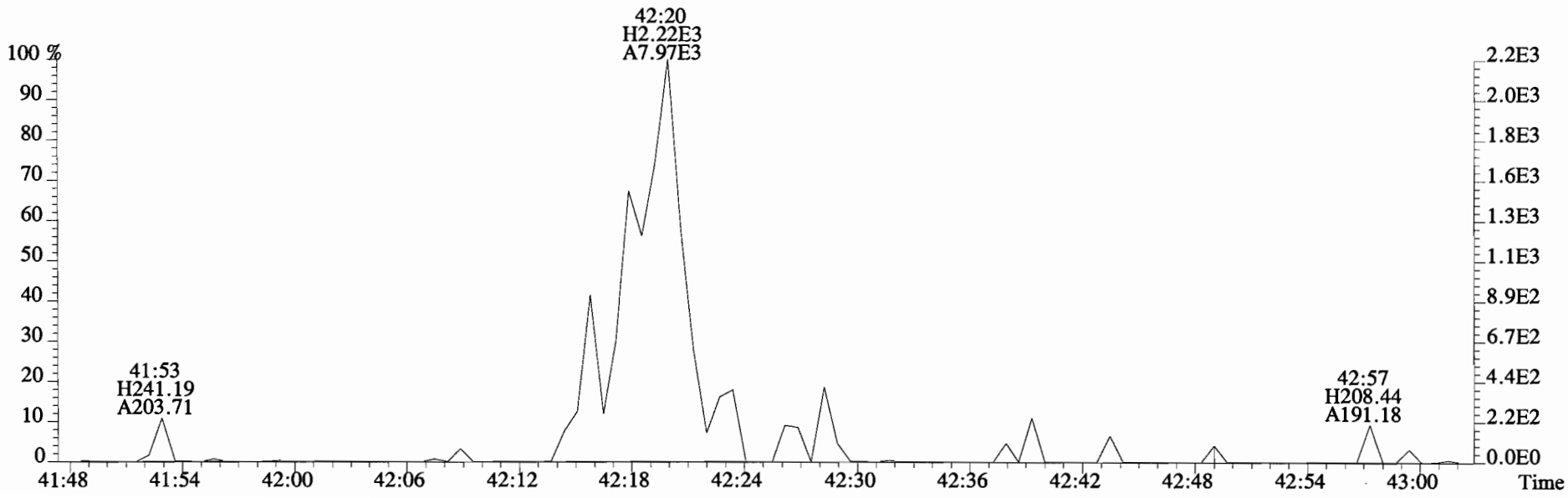
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141027D2 #1-389 Acq:28-OCT-2014 06:56:44 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Vista Analytical Laboratory VG-7 Text:1400781-01 IA-MHS-05-20141020-W 1 Exp:OCDD_DB5
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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



Client ID: IA-CBW-60-20141020-W Filename: 141027D2 S:4 Acq:28-OCT-14 07:45:17 ConCal: ST141027D2-1

Lab ID: 1400781-02 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.026 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	*	*	n	1.18	NotF	*	*		498	2.5	2.38
	1,2,3,7,8-PeCDD	*	*	n	0.92	NotF	*	*		467	2.5	1.83
	1,2,3,4,7,8-HxCDD	*	*	n	1.09	NotF	*	*		502	2.5	3.68
	1,2,3,6,7,8-HxCDD	*	*	n	1.07	NotF	*	*		666	2.5	4.58
	1,2,3,7,8,9-HxCDD	*	*	n	0.93	NotF	*	*		502	2.5	3.63
	1,2,3,4,6,7,8-HpCDD	1.72e+05	1.07	y	1.12	38:46	1.000	69.073		*	2.5	*
	OCDD	1.53e+06	0.86	y	0.95	42:05	1.000	706.25		*	2.5	*
	2,3,7,8-TCDF	*	*	n	1.08	NotF	*	*		649	2.5	2.28
	1,2,3,7,8-PeCDF	*	*	n	1.09	NotF	*	*		460	2.5	2.10
	2,3,4,7,8-PeCDF	*	*	n	1.04	NotF	*	*		460	2.5	2.00
	1,2,3,4,7,8-HxCDF	*	*	n	1.39	NotF	*	*		765	2.5	1.87
	1,2,3,6,7,8-HxCDF	*	*	n	1.26	NotF	*	*		765	2.5	1.98
	2,3,4,6,7,8-HxCDF	*	*	n	1.30	NotF	*	*		765	2.5	2.05
	1,2,3,7,8,9-HxCDF	*	*	n	1.19	NotF	*	*		765	2.5	3.21
	1,2,3,4,6,7,8-HpCDF	1.09e+05	1.03	y	1.62	37:33	1.000	27.141		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	*	*	n	1.53	NotF	*	*		826	2.5	3.13
	OCDF	3.97e+05	0.89	y	1.10	42:19	1.000	135.41		*	2.5	*
IS	13C-2,3,7,8-TCDD	6.07e+06	0.78	y	1.07	27:00	1.022	1211.9				
IS	13C-1,2,3,7,8-PeCDD	6.90e+06	0.62	y	1.24	31:33	1.194	1193.6				
IS	13C-1,2,3,4,7,8-HxCDD	4.87e+06	1.30	y	0.72	34:53	1.014	1002.9				
IS	13C-1,2,3,6,7,8-HxCDD	5.66e+06	1.23	y	0.74	34:60	1.017	1148.4				
IS	13C-1,2,3,7,8,9-HxCDD	6.42e+06	1.23	y	0.86	35:18	1.026	1122.1				
IS	13C-1,2,3,4,6,7,8-HpCDD	4.36e+06	1.10	y	0.64	38:45	1.127	1012.3				
IS	13C-OCDD	8.88e+06	0.91	y	0.78	42:05	1.223	1695.0				
IS	13C-2,3,7,8-TCDF	9.22e+06	0.78	y	0.92	26:14	0.992	1256.3				
IS	13C-1,2,3,7,8-PeCDF	8.70e+06	1.64	y	0.95	30:22	1.149	1151.8				
IS	13C-2,3,4,7,8-PeCDF	9.23e+06	1.60	y	0.97	31:16	1.183	1195.7				
IS	13C-1,2,3,4,7,8-HxCDF	6.72e+06	0.51	y	0.99	33:59	0.988	1013.1				
IS	13C-1,2,3,6,7,8-HxCDF	7.86e+06	0.52	y	1.10	34:07	0.992	1068.8				
IS	13C-2,3,4,6,7,8-HxCDF	7.35e+06	0.51	y	1.03	34:43	1.009	1064.2				
IS	13C-1,2,3,7,8,9-HxCDF	6.32e+06	0.53	y	0.86	35:42	1.038	1100.2				
IS	13C-1,2,3,4,6,7,8-HpCDF	4.83e+06	0.44	y	0.71	37:32	1.091	1012.1				
IS	13C-1,2,3,4,7,8,9-HpCDF	4.41e+06	0.43	y	0.71	39:19	1.143	930.29				
IS	13C-OCDF	1.04e+07	0.92	y	0.87	42:19	1.230	1773.3				
C/Up	37Cl-2,3,7,8-TCDD	3.71e+06			1.21	27:02	1.023	656.33				
RS/RT	13C-1,2,3,4-TCDD	9.09e+06	0.80	y	1.00	26:26	*	1949.2				
RS	13C-1,2,3,4-TCDF	1.55e+07	0.77	y	1.00	24:60	*	1949.2				
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.30e+07	0.51	y	1.00	34:24	*	1949.2				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		498	2.38
Total Penta-Dioxins	*	*		467	1.83
Total Hexa-Dioxins	8.36	8.36		*	*
Total Hepta-Dioxins	114	114		*	*
Total Tetra-Furans	*	2.78		*	*
Total Penta-Furans	0.0000	0.0000		855	3.81
Total Hexa-Furans	6.72	13.3		*	*
Total Hepta-Furans	80.8	80.8		*	*

	Rec	Qual
IS	62.2	
IS	61.2	
IS	51.5	
IS	58.9	
IS	57.6	
IS	51.9	
IS	43.5	
IS	64.5	
IS	59.1	
IS	61.3	
IS	52.0	
IS	54.8	
IS	54.6	
IS	56.4	
IS	51.9	
IS	47.7	
IS	45.5	
C/Up	84.2	
RS/RT		
RS		
RS/RT		

Integrations by Analyst: MS Date: 10/29/14

Reviewed by Analyst: [illegible] Date: 10/29/14

Totals class: HxCDD EMPC Entry #: 23

Run: 9 File: 141027D2 S: 4 I: 1 F: 3
Acquired: 28-OCT-14 07:45:17 Processed: 28-OCT-14 09:17:33

Total Concentration: 8.3622 Unnamed Concentration: 8.362

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
33:20	4.537e+03	3.642e+03	1.25	y	8.180e+03	2.7597	
34:11	8.807e+03	7.798e+03	1.13	y	1.661e+04	5.6025	

Totals class: HpCDD EMPC Entry #: 25

Run: 9 File: 141027D2 S: 4 I: 1 F: 4
Acquired: 28-OCT-14 07:45:17 Processed: 28-OCT-14 09:17:33

Total Concentration: 113.64 Unnamed Concentration: 44.569

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:56	5.607e+04	5.517e+04	1.02 y	1.112e+05	44.569	
38:46	8.927e+04	8.313e+04	1.07 y	1.724e+05	69.073	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 9 File: 141027D2 S: 4 I: 1 F: 1
Acquired: 28-OCT-14 07:45:17 Processed: 28-OCT-14 09:17:33

Total Concentration: 2.7843 Unnamed Concentration: 2.784

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
26:34	9.800e+03	8.016e+03	1.22	n	1.419e+04	2.7843	

Totals class: HxCDF EMPC Entry #: 33

Run: 9 File: 141027D2 S: 4 I: 1 F: 3
Acquired: 28-OCT-14 07:45:17 Processed: 28-OCT-14 09:17:33

Total Concentration: 13.289 Unnamed Concentration: 13.289

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
32:47	6.573e+03	5.118e+03	1.28	y	1.169e+04	2.5063	
32:57	2.637e+04	1.368e+04	1.93	n	3.064e+04	6.5692	
33:30	1.036e+04	9.293e+03	1.11	y	1.965e+04	4.2135	

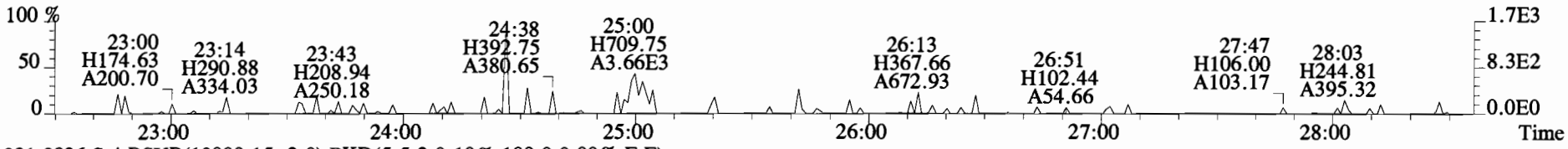
Totals class: HpCDF EMPC Entry #: 35

Run: 9 File: 141027D2 S: 4 I: 1 F: 4
Acquired: 28-OCT-14 07:45:17 Processed: 28-OCT-14 09:17:33

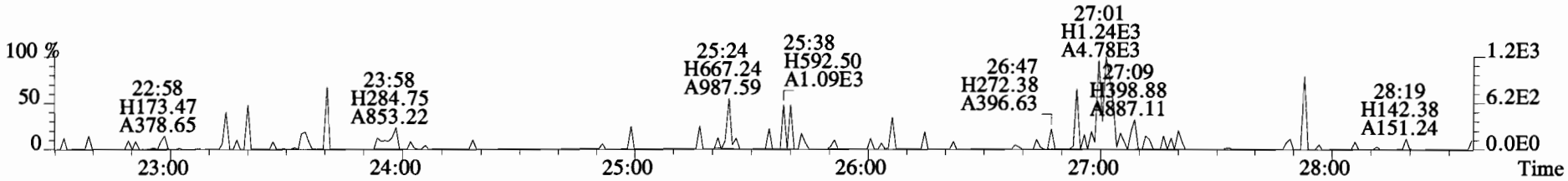
Total Concentration: 80.839 Unnamed Concentration: 53.698

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:33	5.530e+04	5.347e+04	1.03 y	1.088e+05	27.141	1,2,3,4,6,7,8-HpCDF
38:07	1.022e+05	9.786e+04	1.04 y	2.000e+05	53.698	

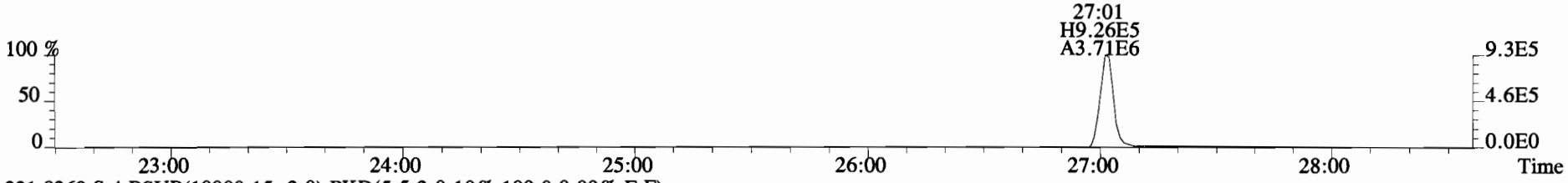
File:141027D2 #1-552 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



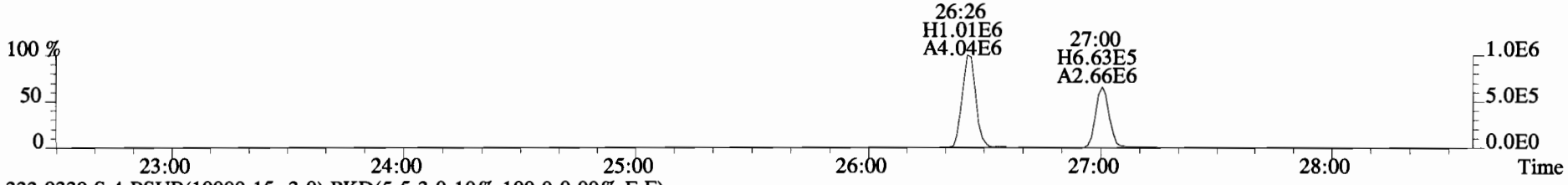
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



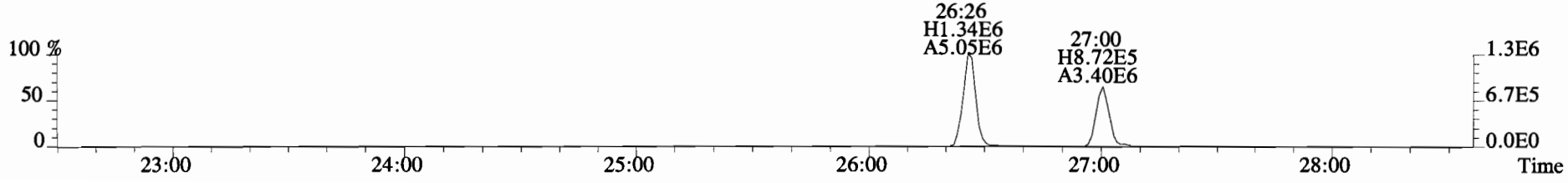
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



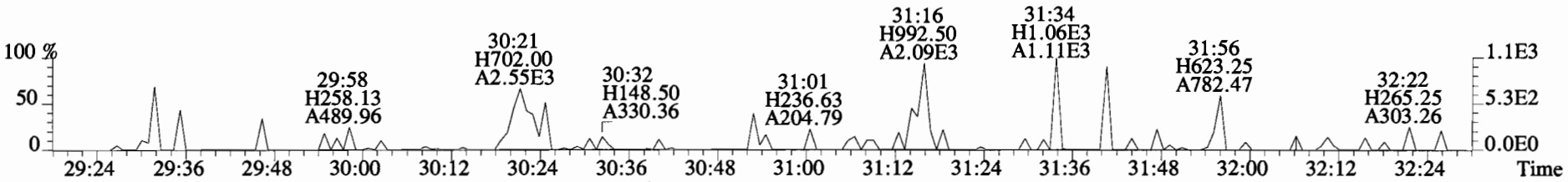
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



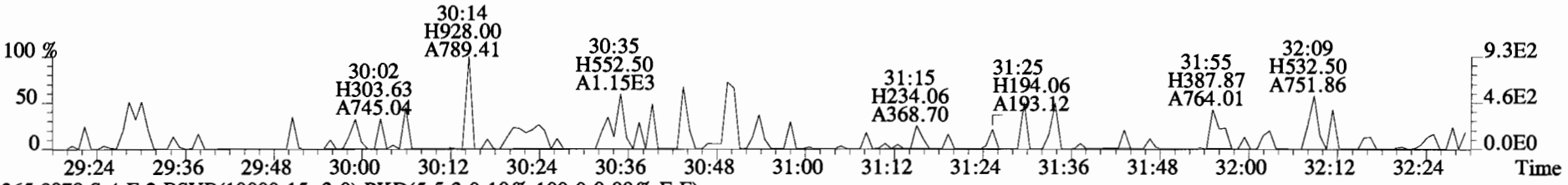
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



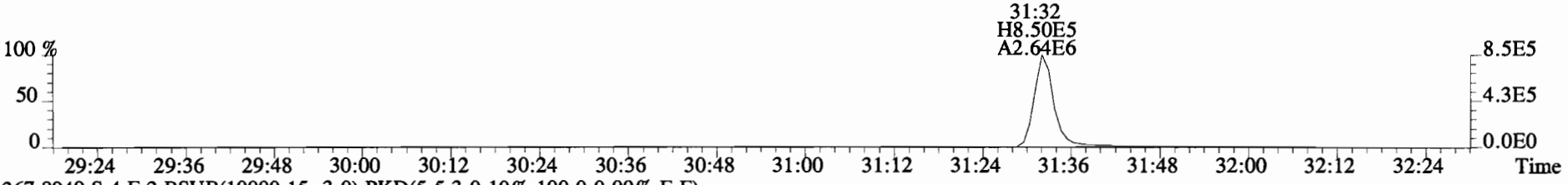
File:141027D2 #1-256 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



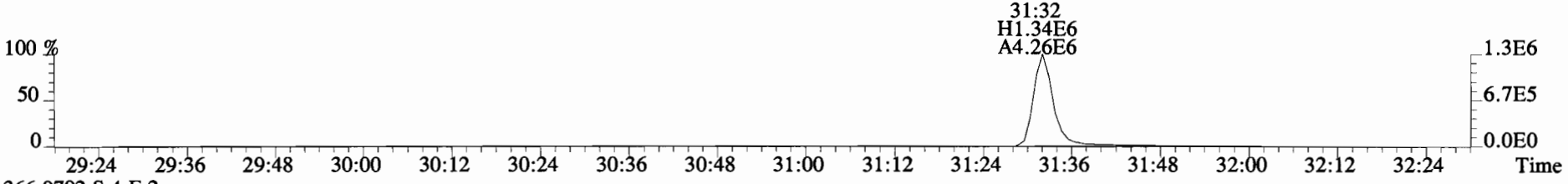
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



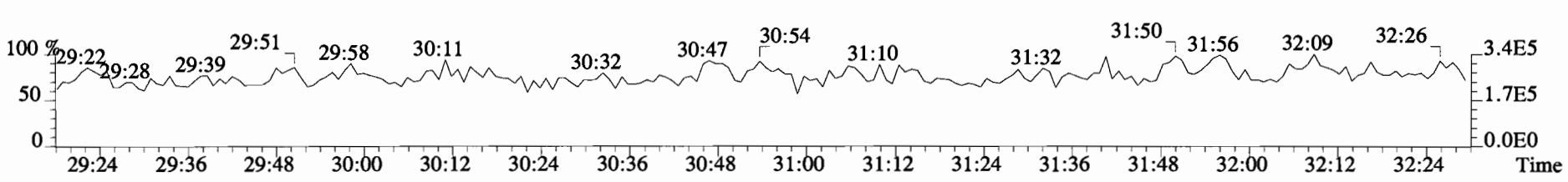
365.8978 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

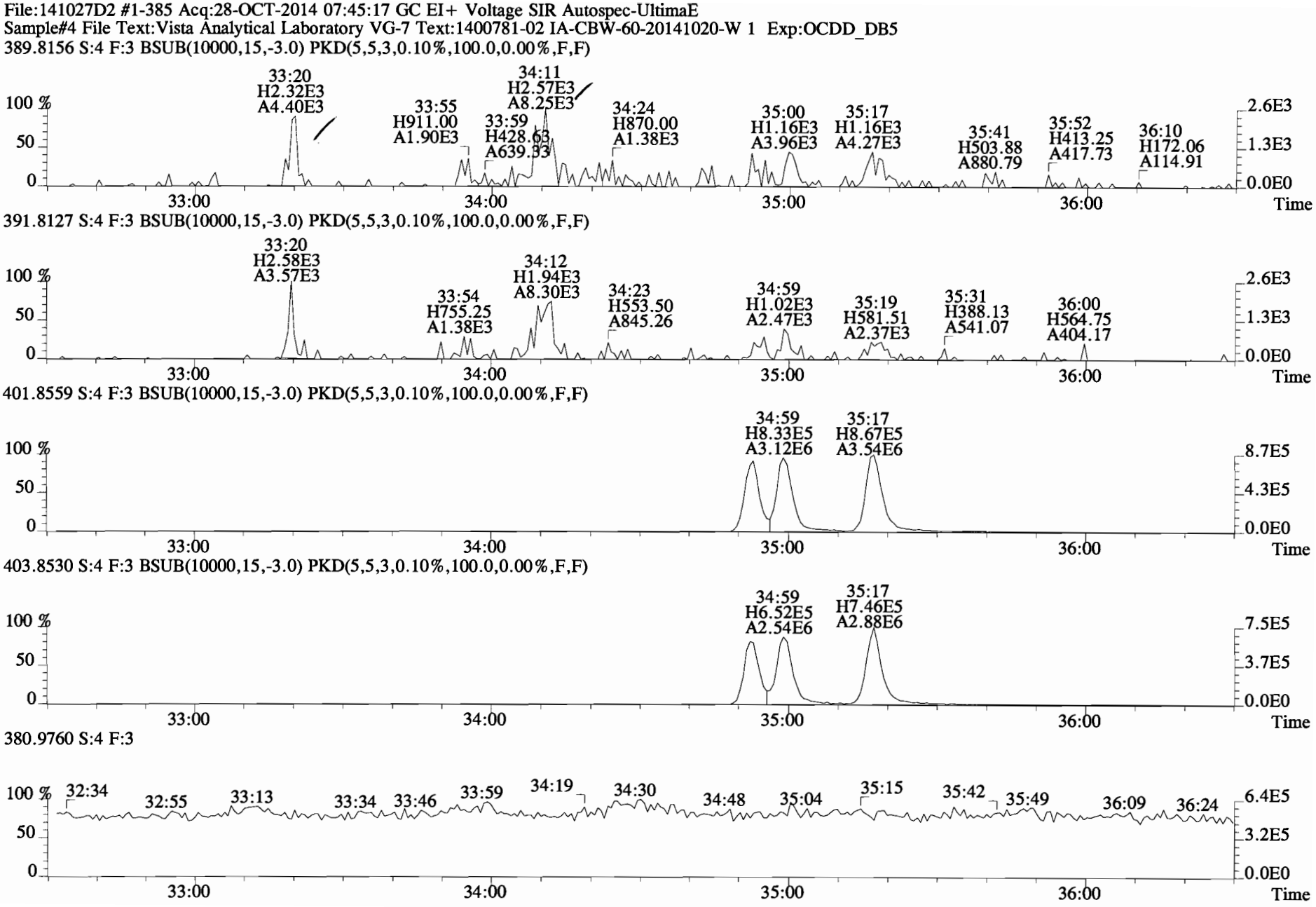


367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

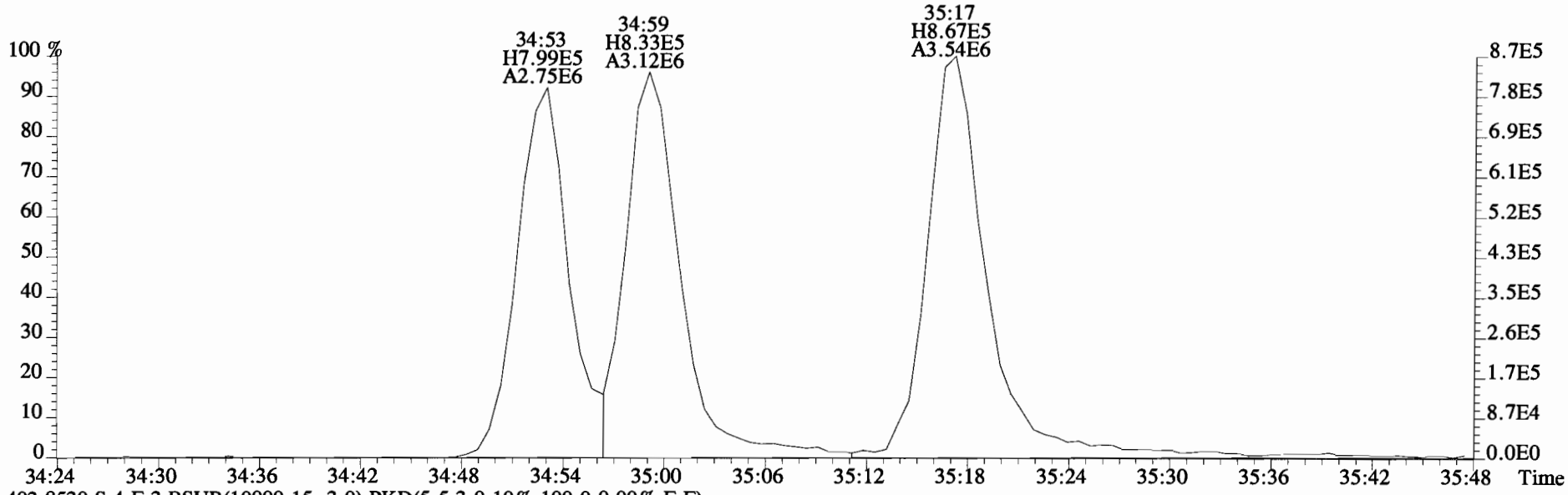


366.9792 S:4 F:2

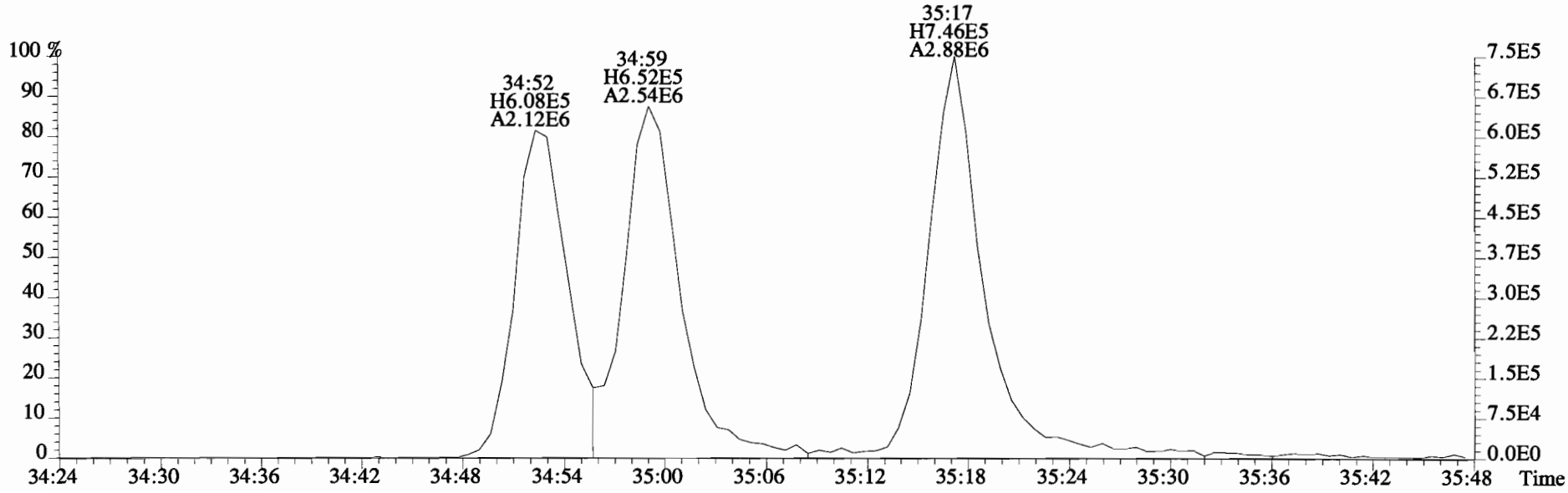



File:141027D2 #1-385 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:20 H2.32E3 A4.40E3
33:55 H911.00 A1.90E3
33:59 H428.63 A639.33
34:11 H2.57E3 A8.25E3
34:24 H870.00 A1.38E3
35:00 H1.16E3 A3.96E3
35:17 H1.16E3 A4.27E3
35:41 H503.88 A880.79
35:52 H413.25 A417.73
36:10 H172.06 A114.91
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:20 H2.58E3 A3.57E3
33:54 H755.25 A1.38E3
34:12 H1.94E3 A8.30E3
34:23 H553.50 A845.26
34:59 H1.02E3 A2.47E3
35:19 H581.51 A2.37E3
35:31 H388.13 A541.07
36:00 H564.75 A404.17
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:59 H8.33E5 A3.12E6
35:17 H8.67E5 A3.54E6
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:59 H6.52E5 A2.54E6
35:17 H7.46E5 A2.88E6
380.9760 S:4 F:3
32:34
32:55
33:13
33:34
33:46
33:59
34:19
34:30
34:48
35:04
35:15
35:42
35:49
36:09
36:24
100 %
50
0
33:00
34:00
35:00
36:00
Time
2.6E3
1.3E3
0.0E0
8.7E5
4.3E5
7.5E5
3.7E5
6.4E5
3.2E5

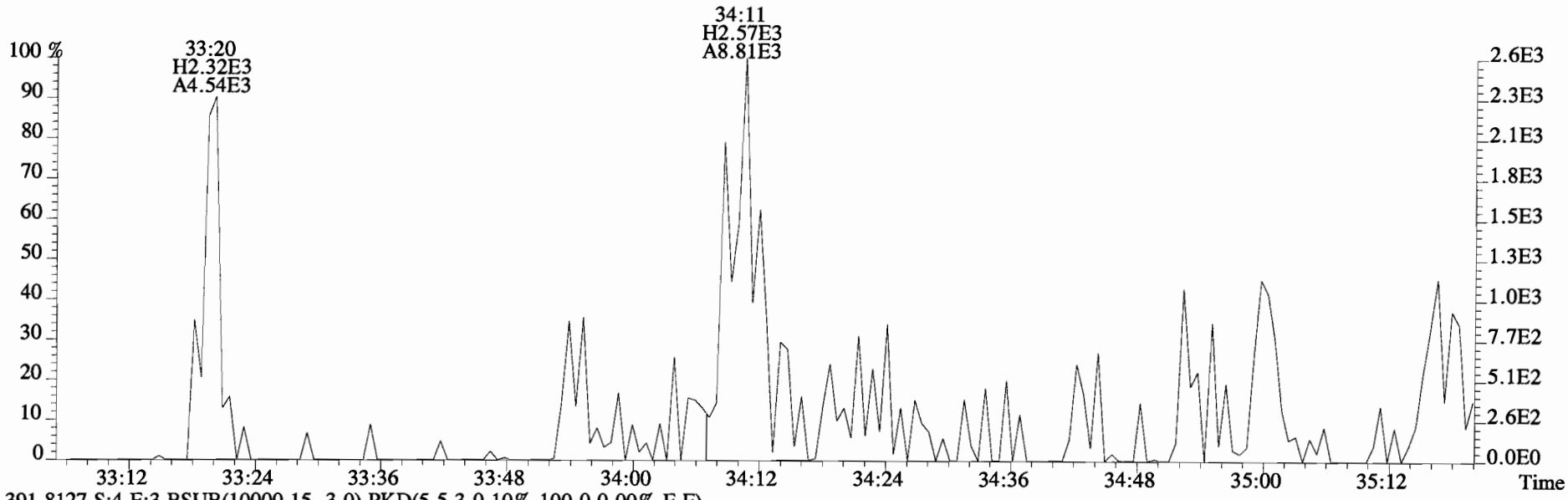
File:141027D2 #1-385 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



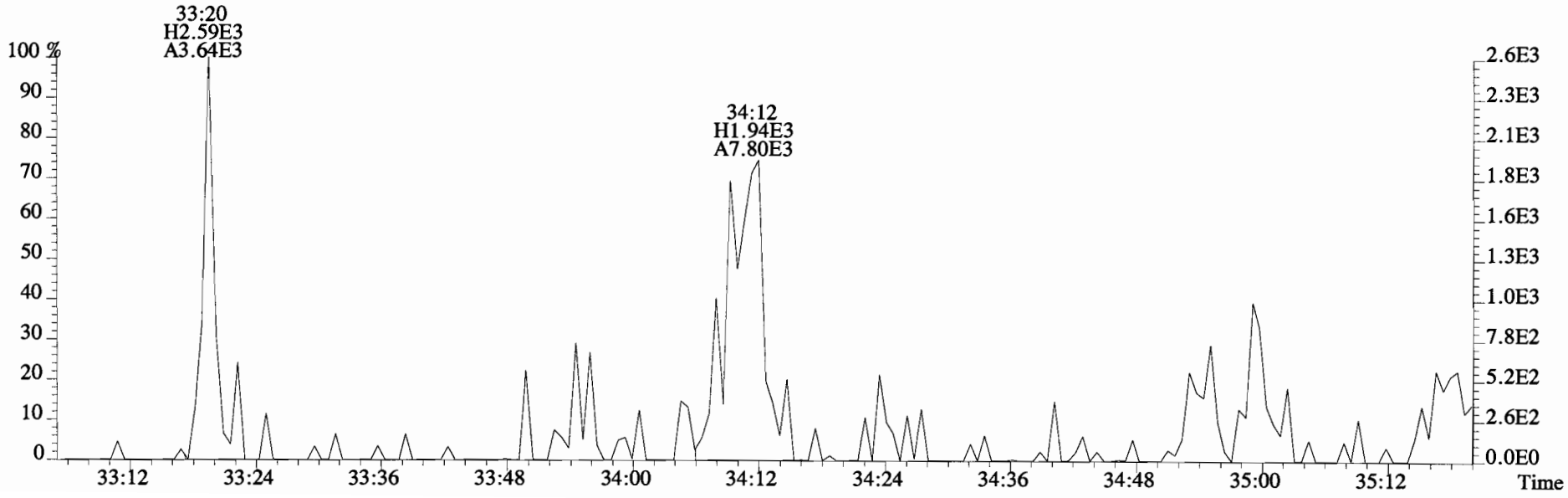
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



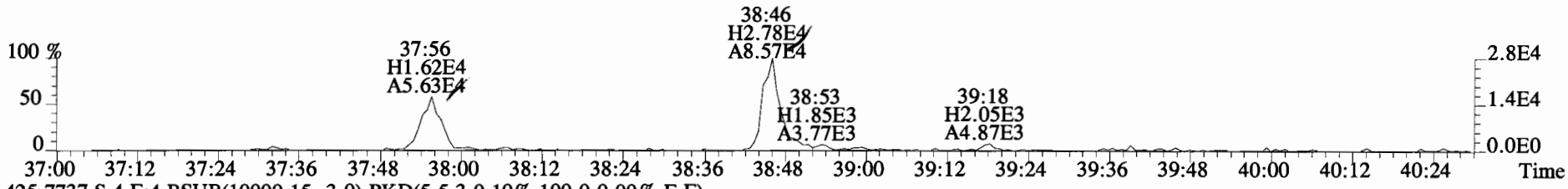
File:141027D2 #1-385 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



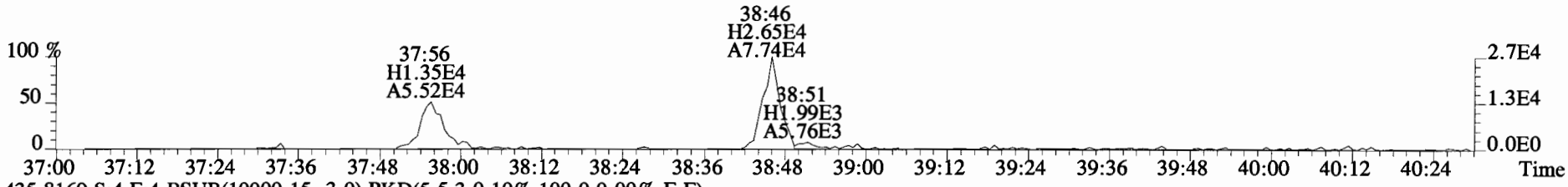
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



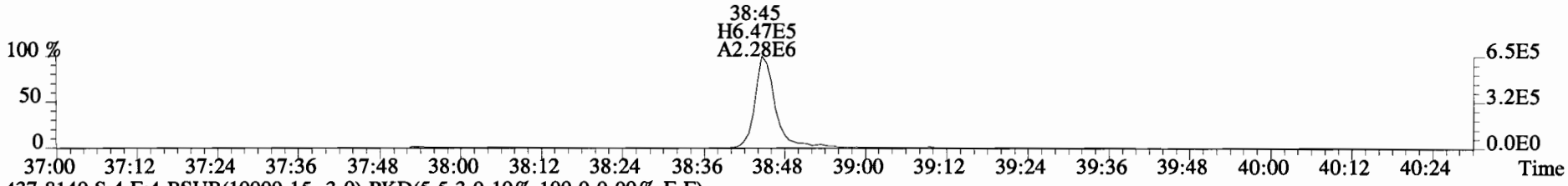
File:141027D2 #1-326 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



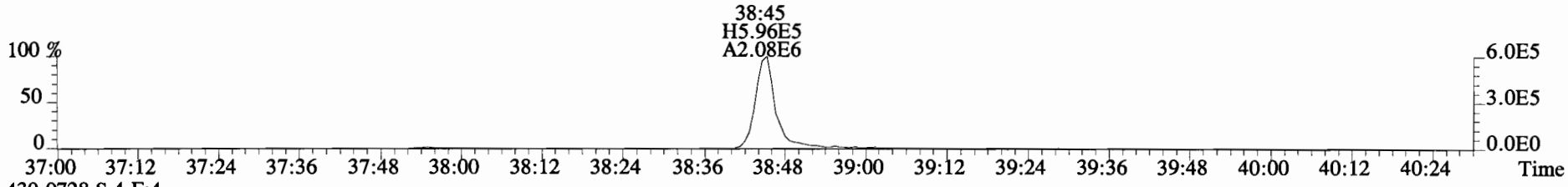
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



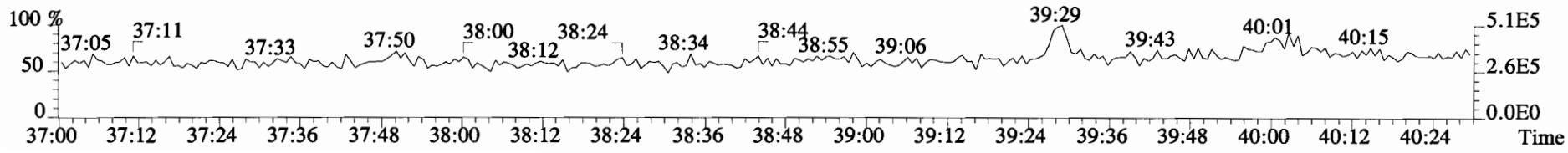
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



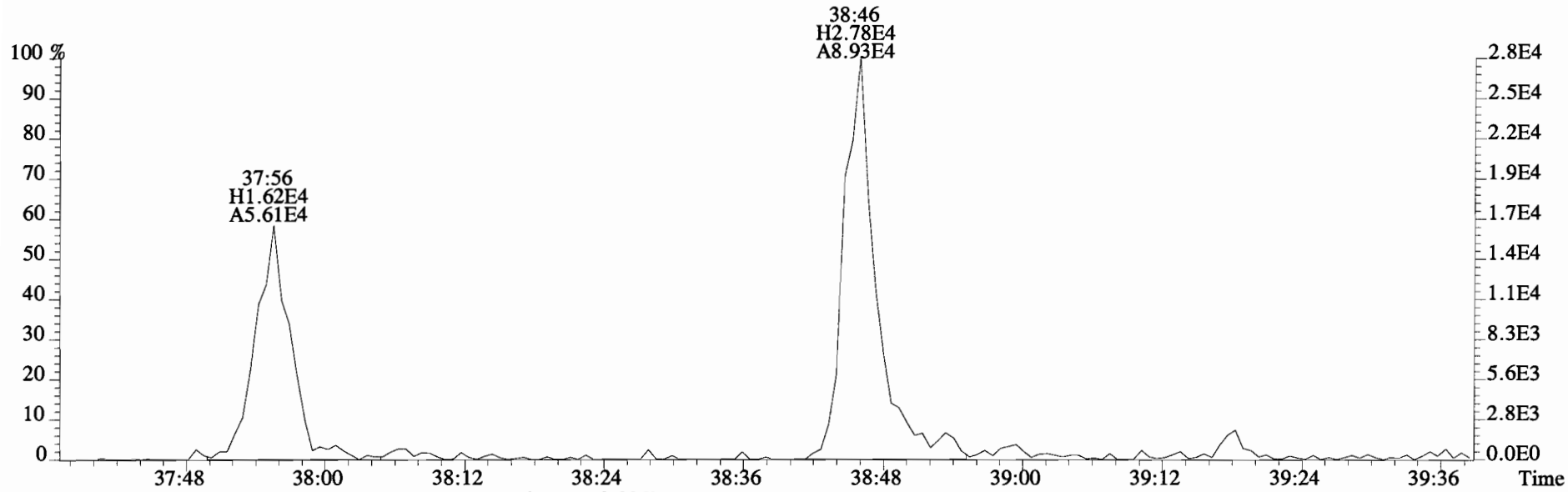
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



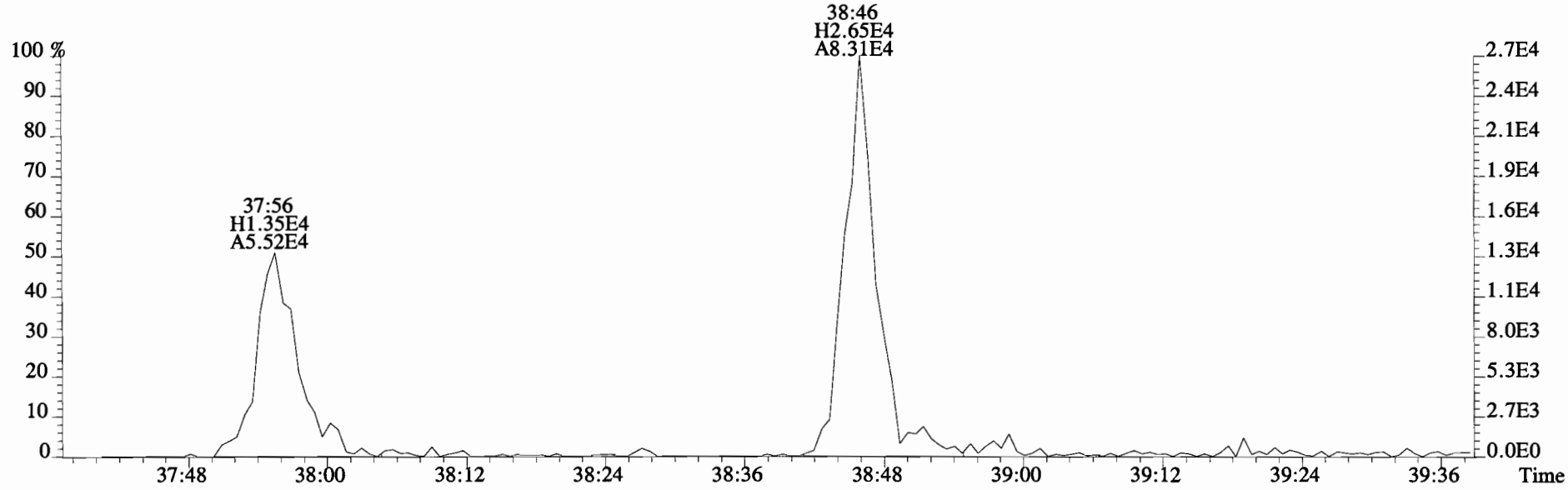
430.9728 S:4 F:4



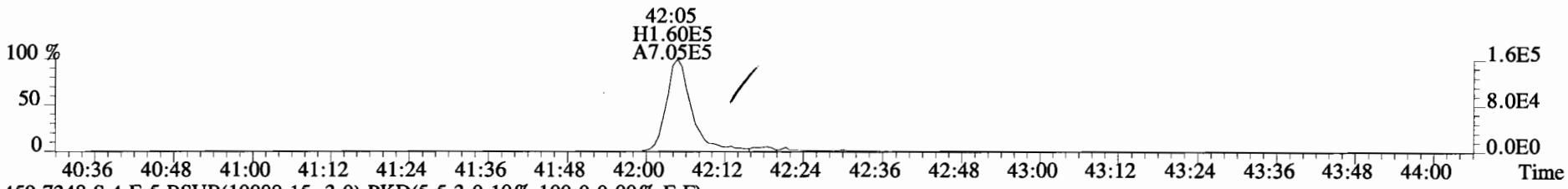
File:141027D2 #1-326 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



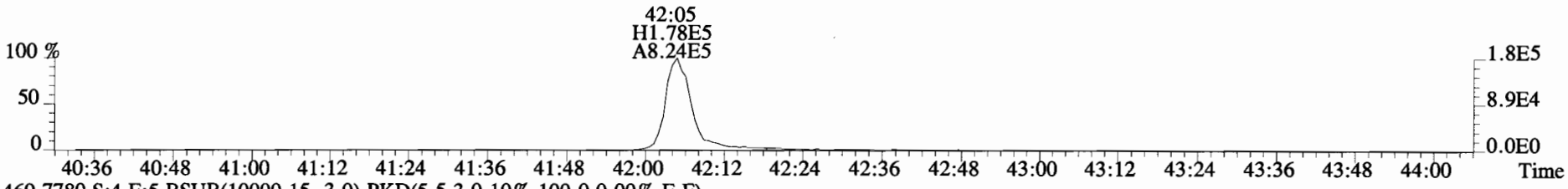
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



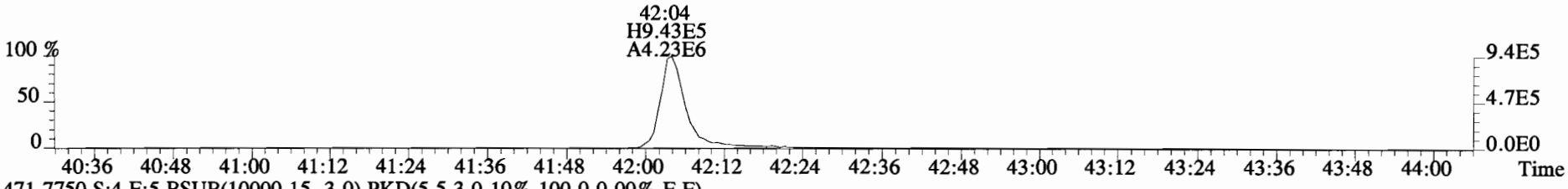
File:141027D2 #1-389 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



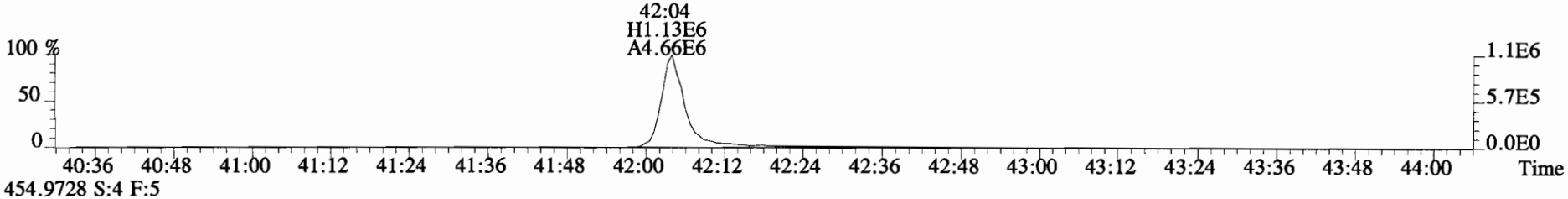
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



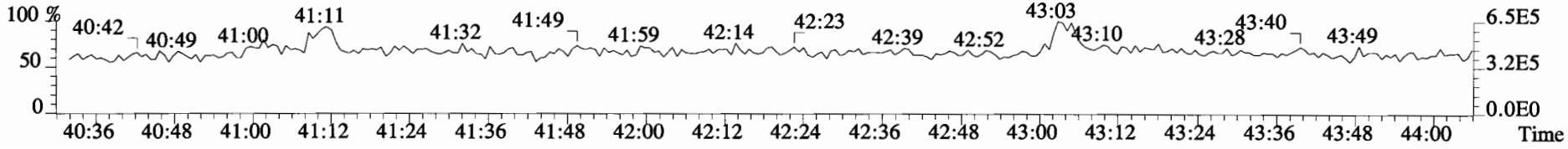
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

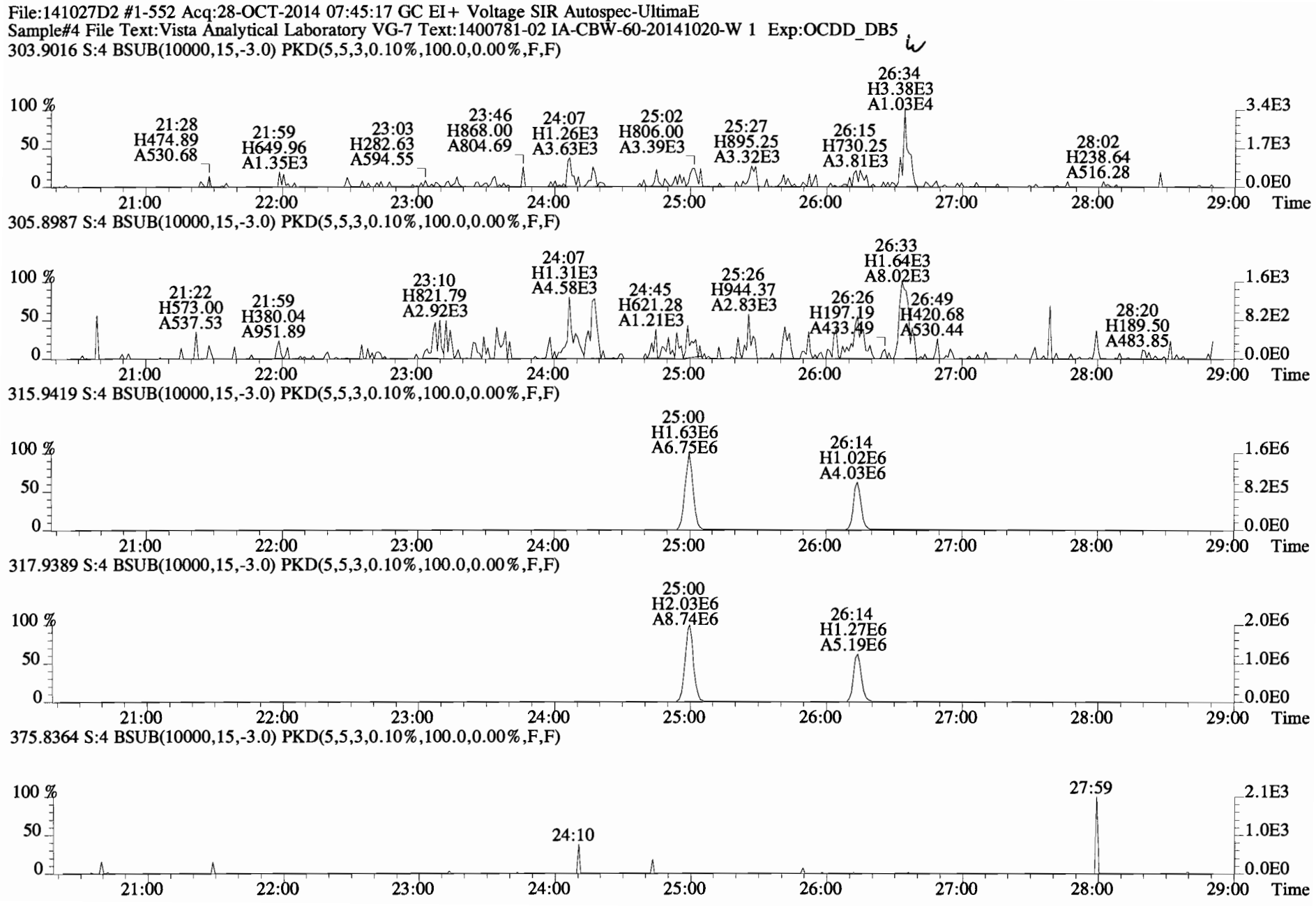


471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

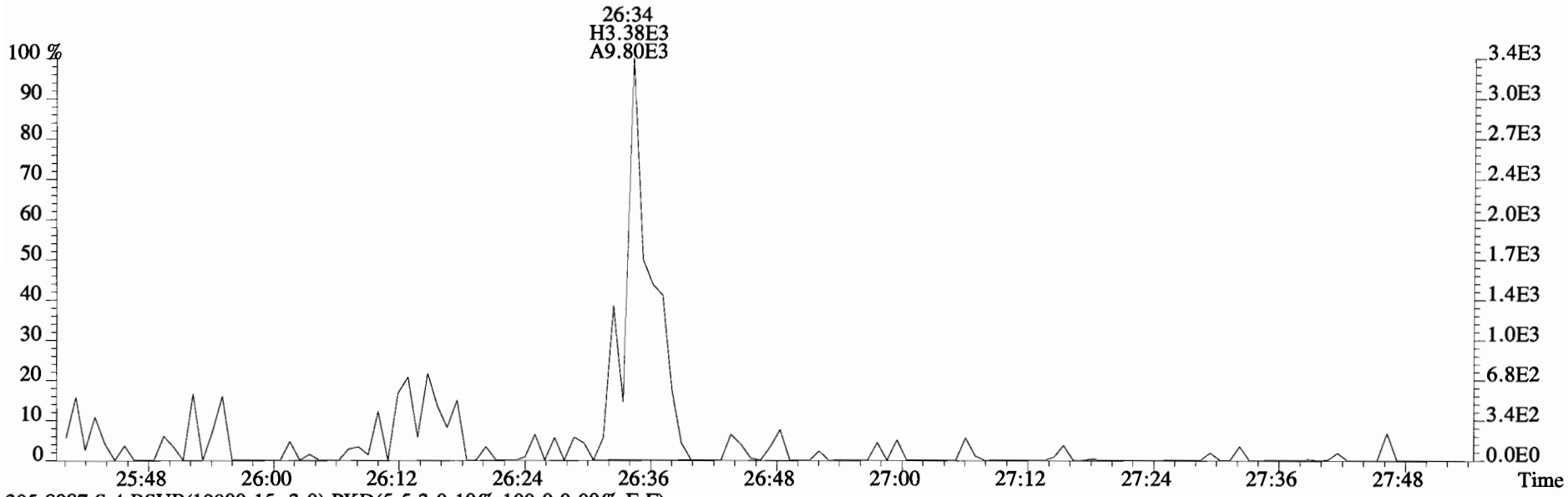


454.9728 S:4 F:5

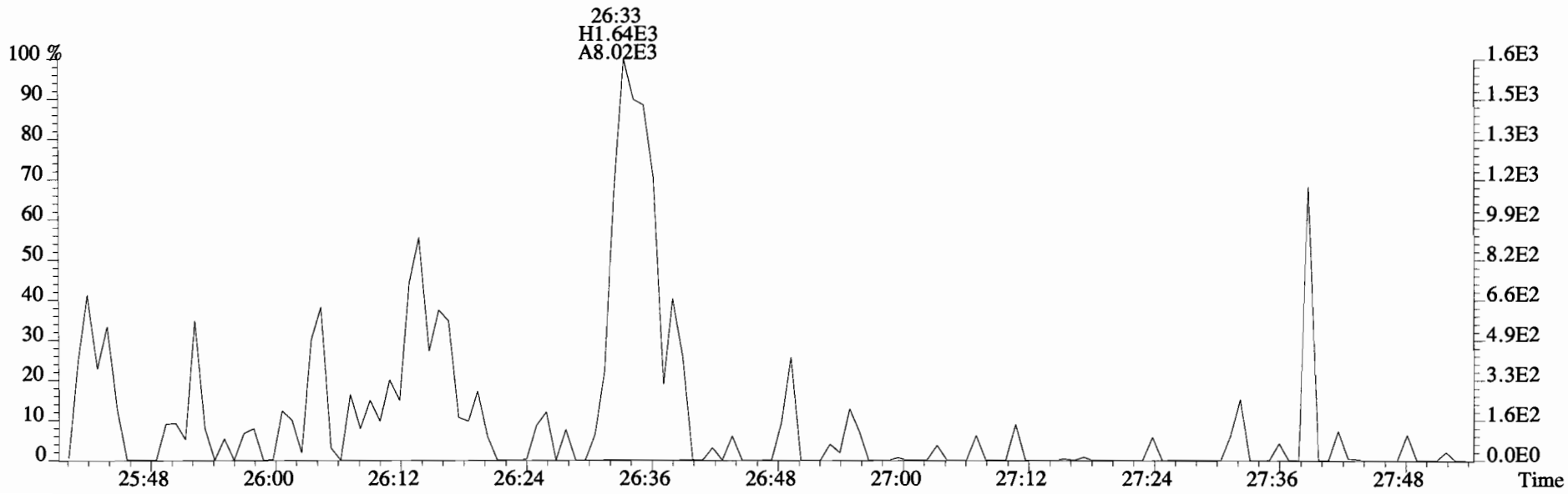



File:141027D2 #1-552 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:28 H474.89 A530.68
21:59 H649.96 A1.35E3
23:03 H282.63 A594.55
23:46 H868.00 A804.69
24:07 H1.26E3 A3.63E3
25:02 H806.00 A3.39E3
25:27 H895.25 A3.32E3
26:15 H730.25 A3.81E3
26:34 H3.38E3 A1.03E4
28:02 H238.64 A516.28
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:22 H573.00 A537.53
21:59 H380.04 A951.89
23:10 H821.79 A2.92E3
24:07 H1.31E3 A4.58E3
24:45 H621.28 A1.21E3
25:26 H944.37 A2.83E3
26:26 H197.19 A433.49
26:33 H1.64E3 A8.02E3
26:49 H420.68 A530.44
28:20 H189.50 A483.85
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:00 H1.63E6 A6.75E6
26:14 H1.02E6 A4.03E6
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:00 H2.03E6 A8.74E6
26:14 H1.27E6 A5.19E6
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:10
27:59
100 %
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
28:00
29:00
Time
3.4E3
1.7E3
0.0E0
1.6E3
8.2E2
1.6E6
8.2E5
2.0E6
1.0E6
2.1E3
1.0E3

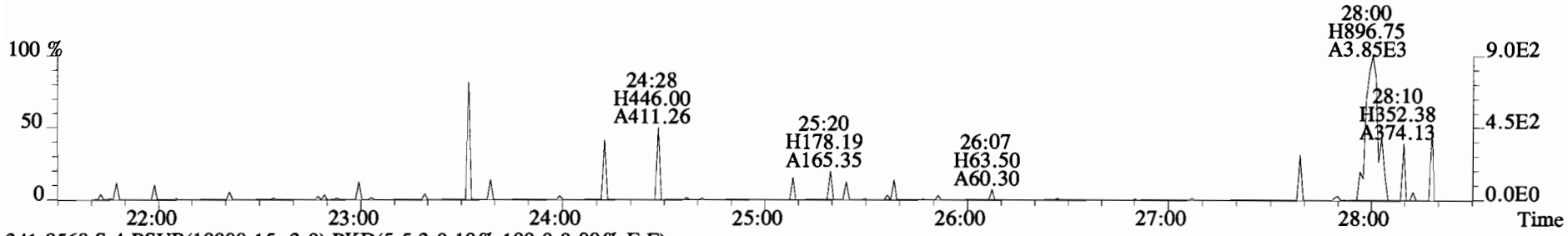
File:141027D2 #1-552 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



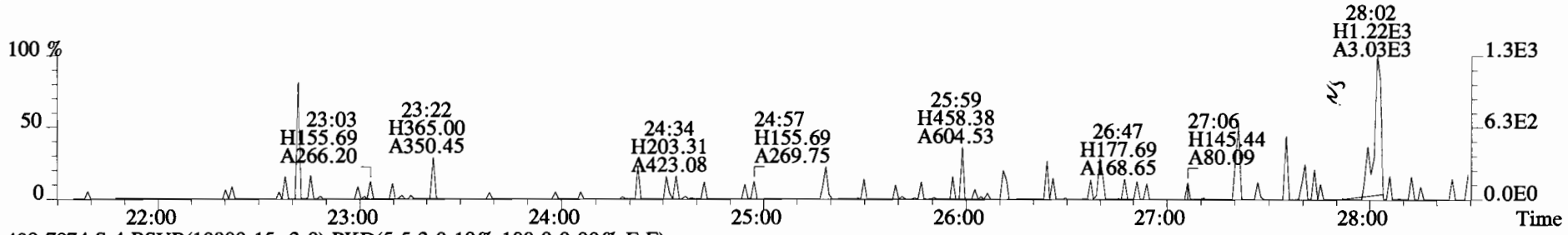
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



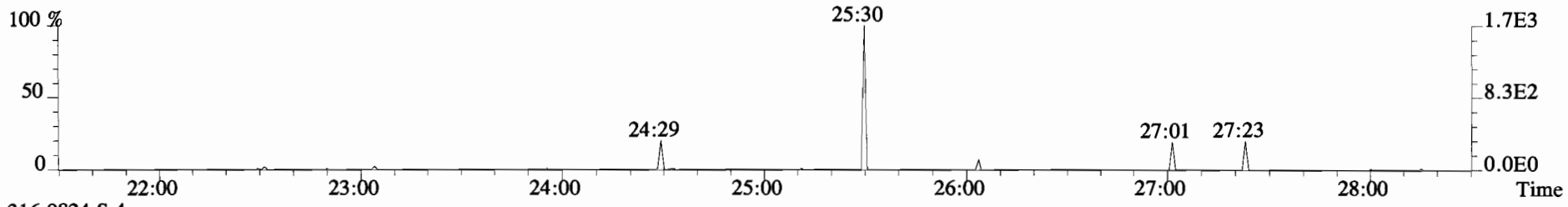
File:141027D2 #1-552 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



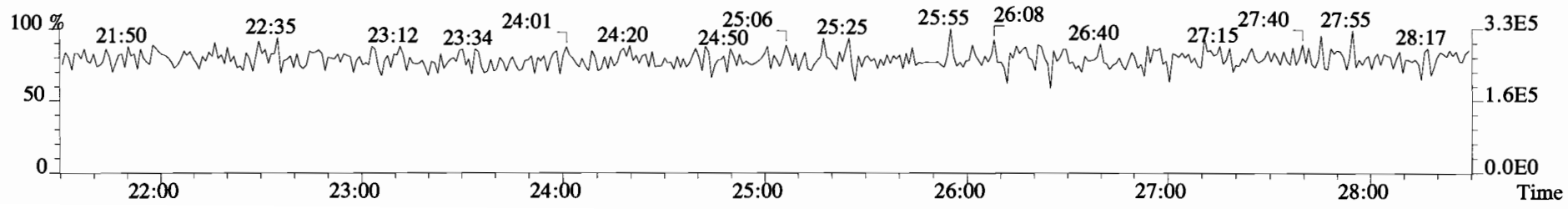
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

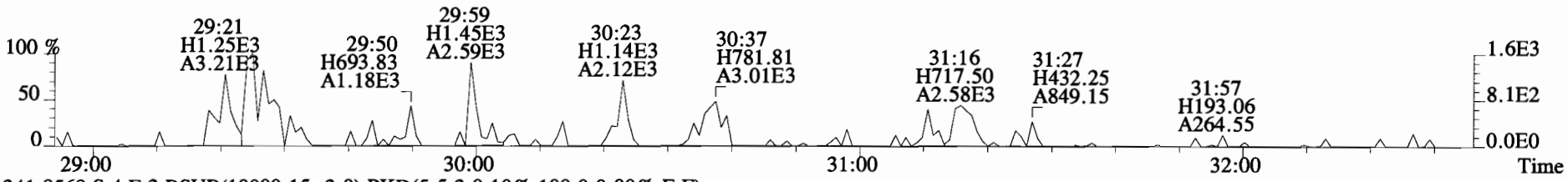


316.9824 S:4

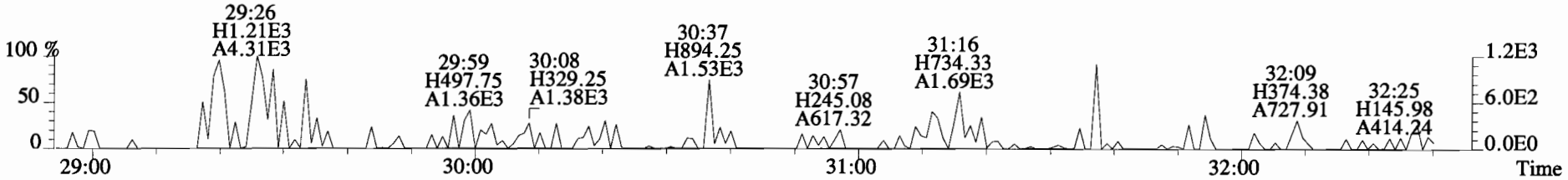


File:141027D2 #1-256 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5

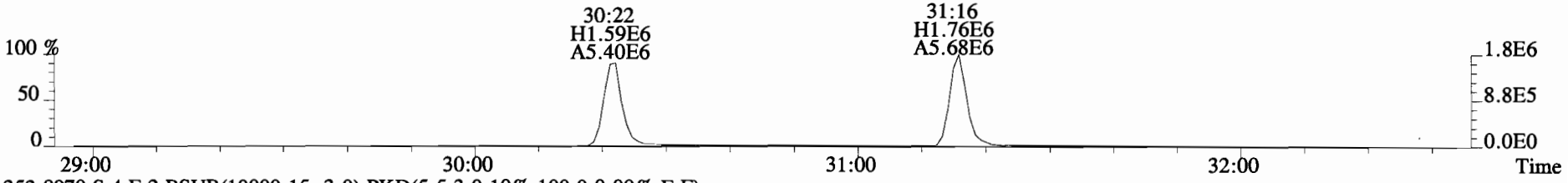
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



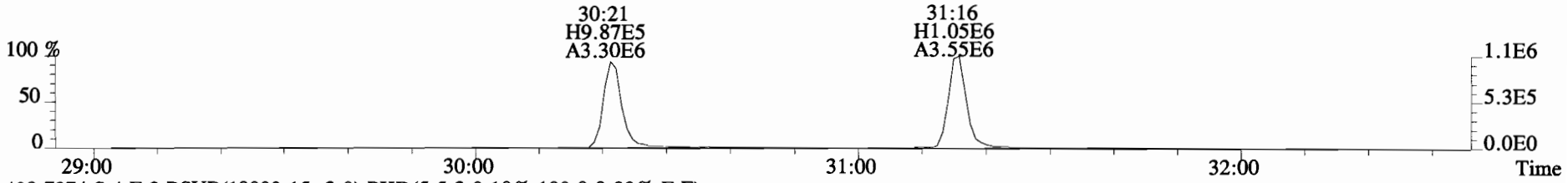
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



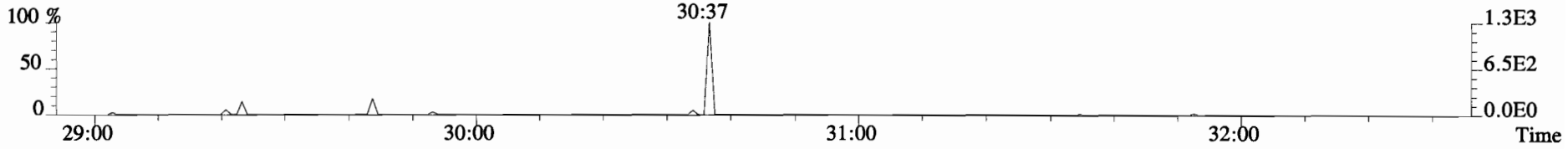
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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

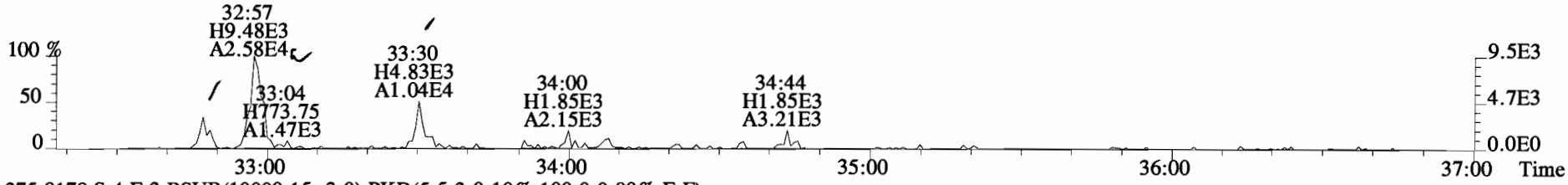


409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

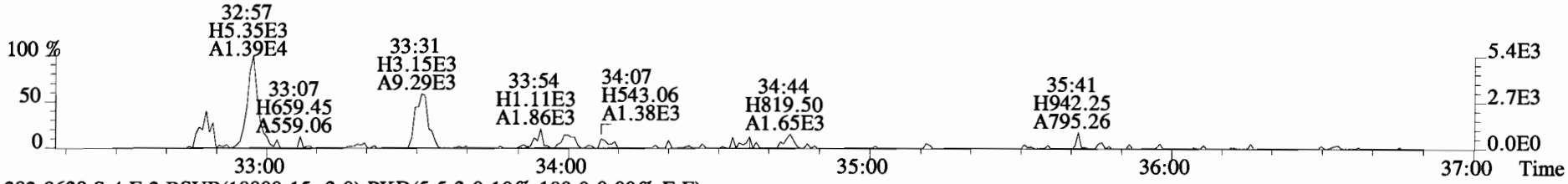


File:141027D2 #1-385 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5

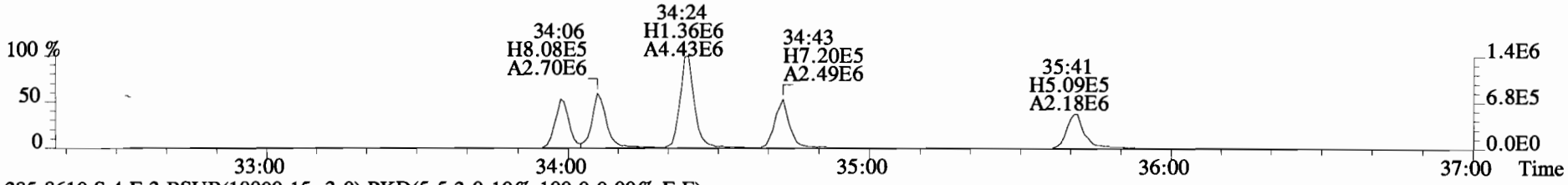
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



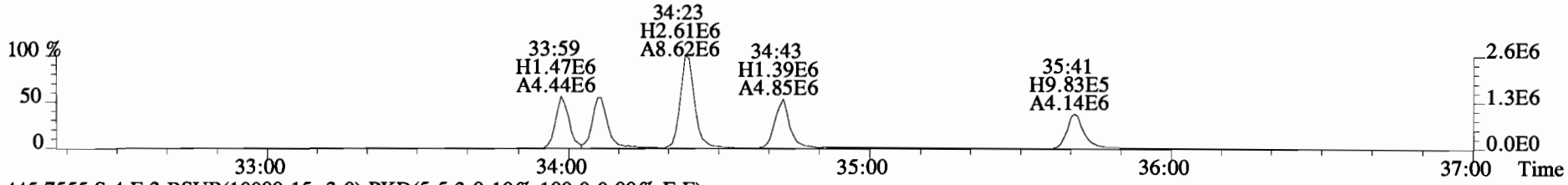
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



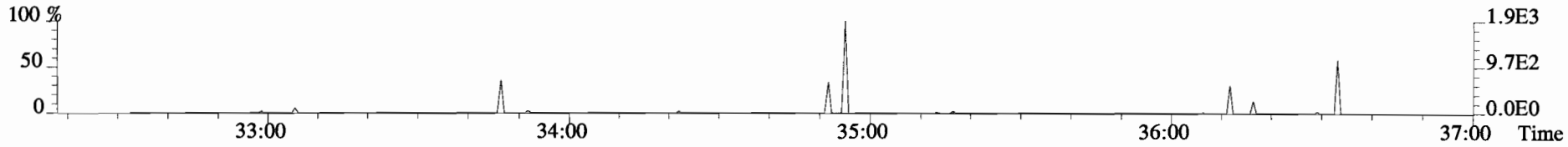
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



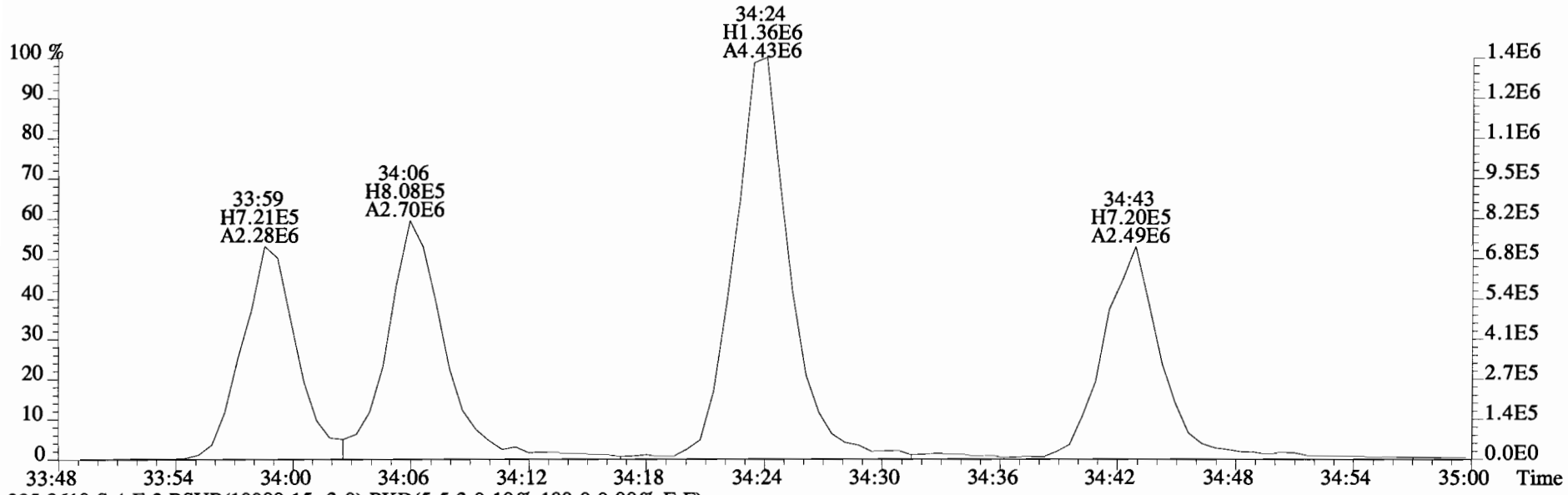
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



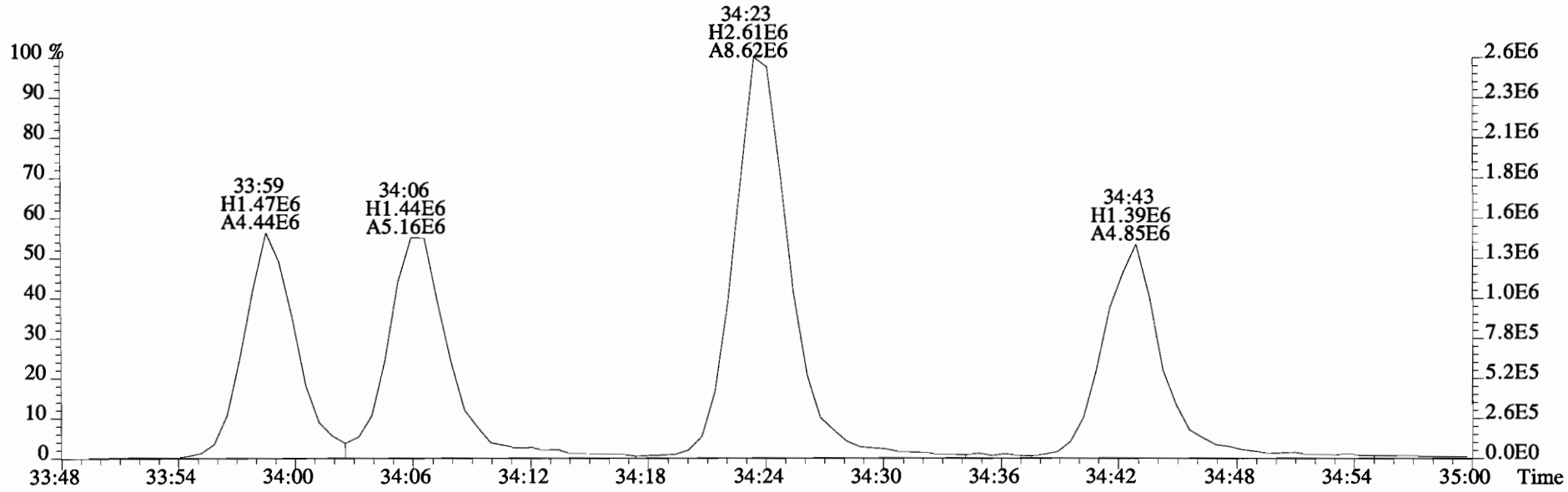
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



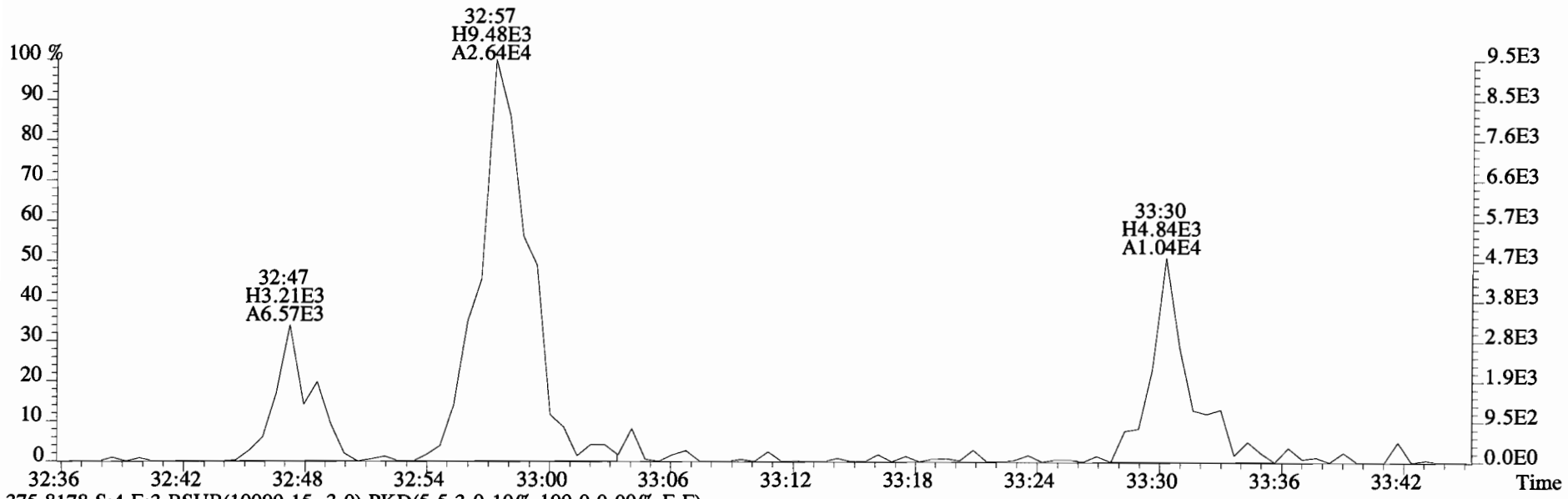
File:141027D2 #1-385 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



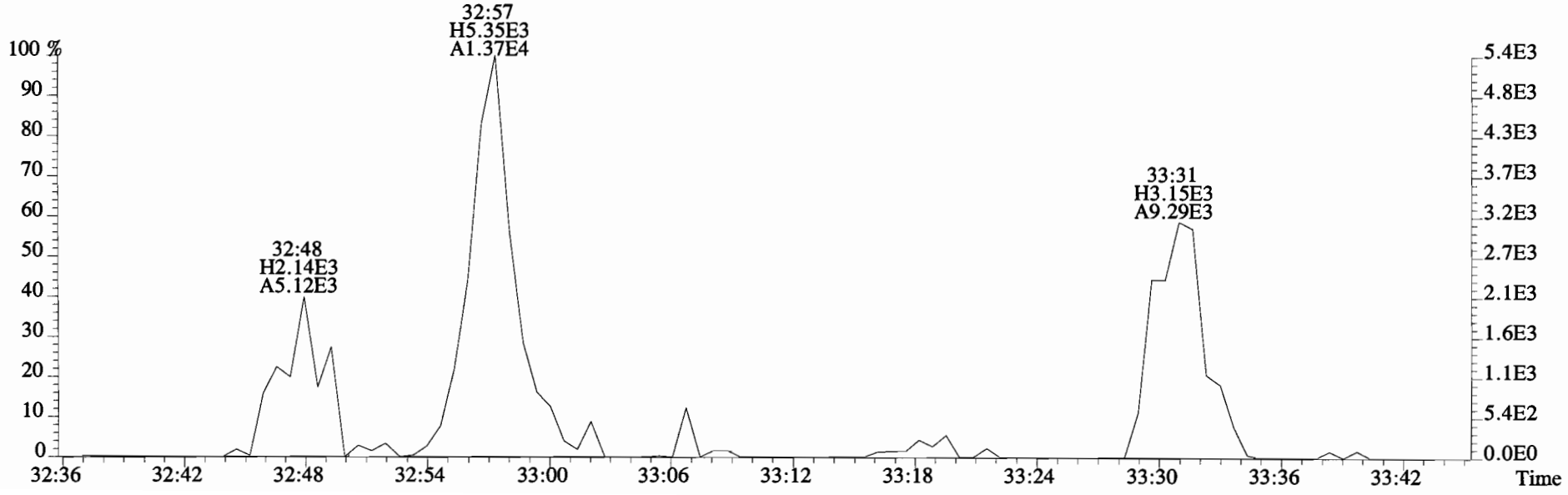
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



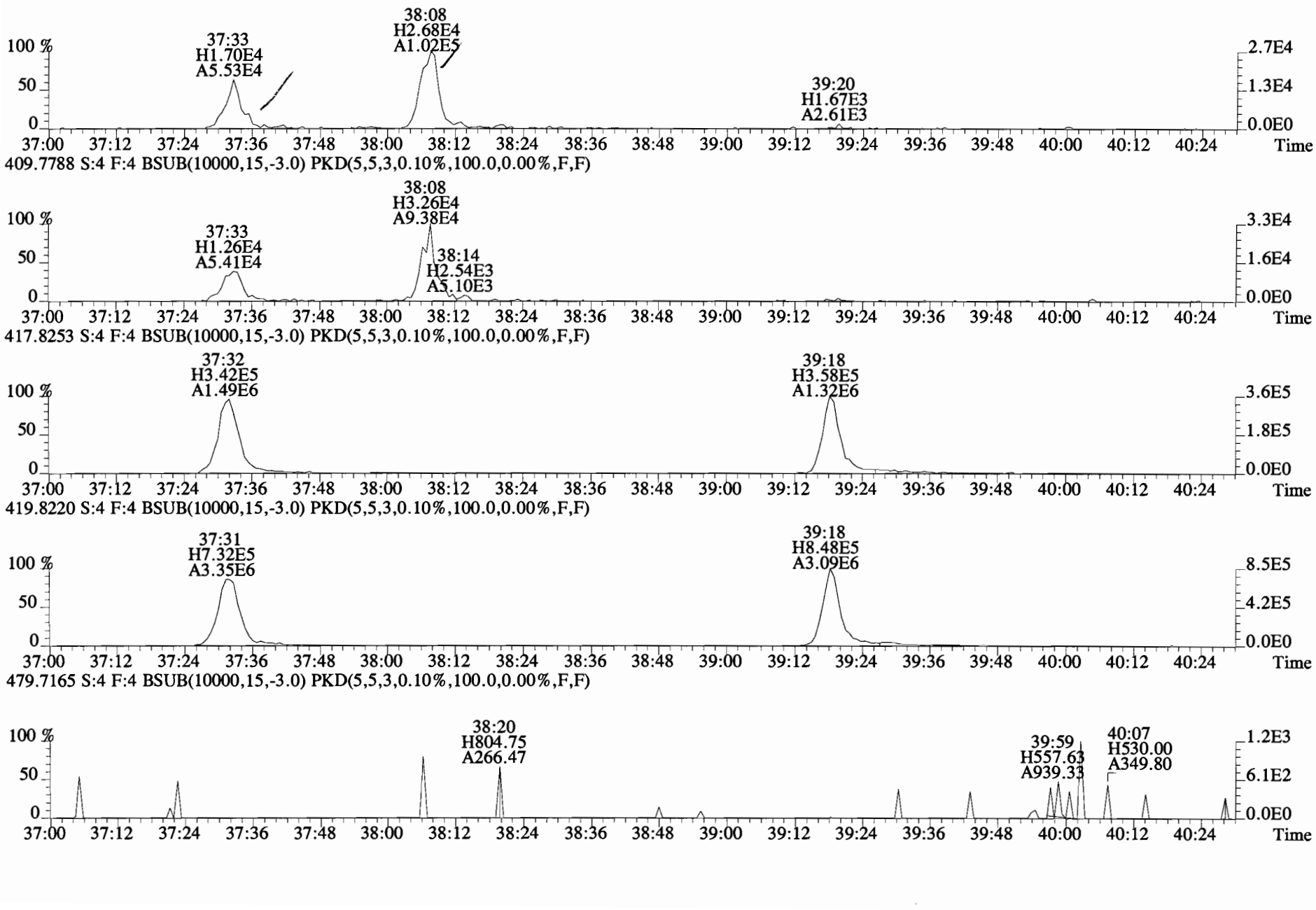
File:141027D2 #1-385 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



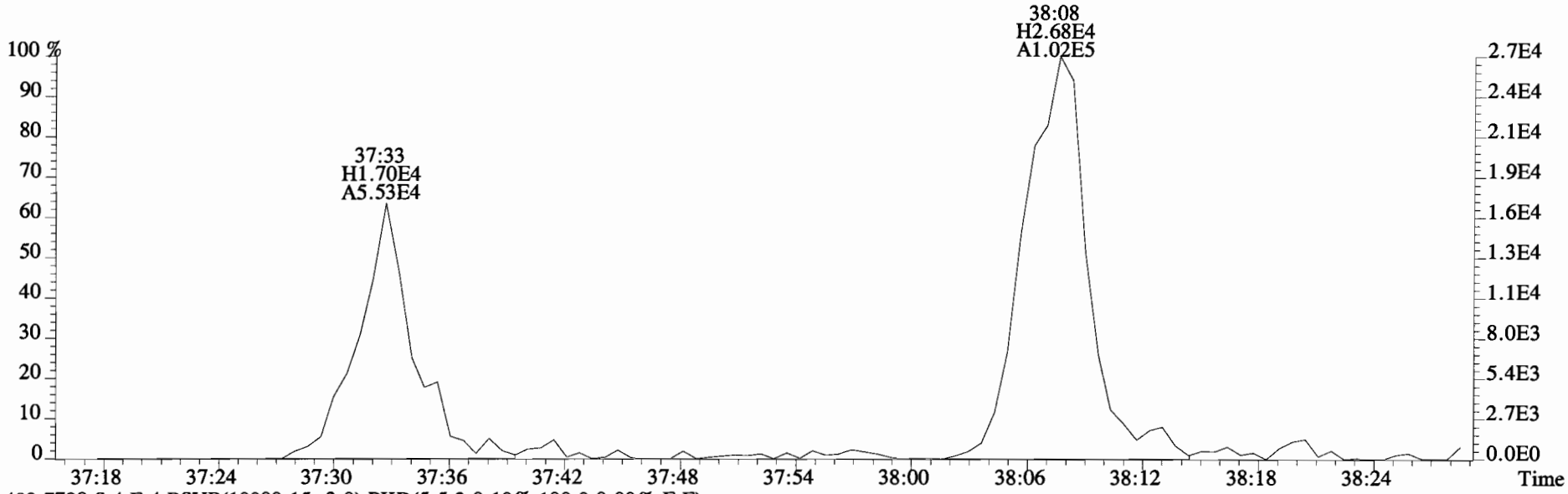
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



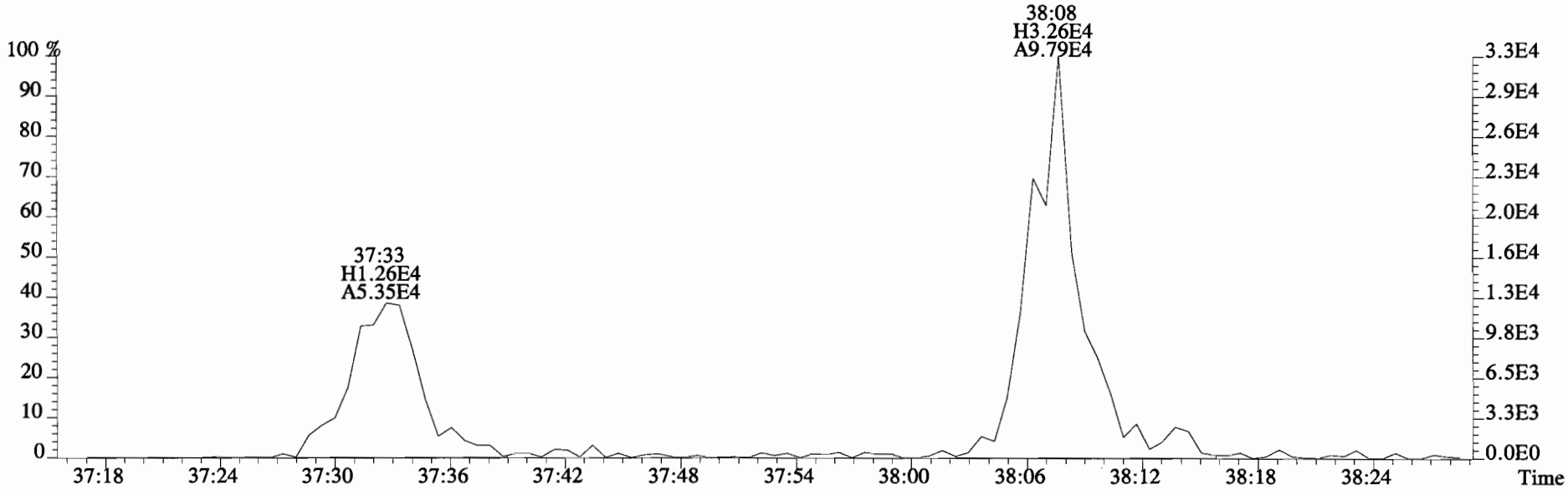
File:141027D2 #1-326 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5



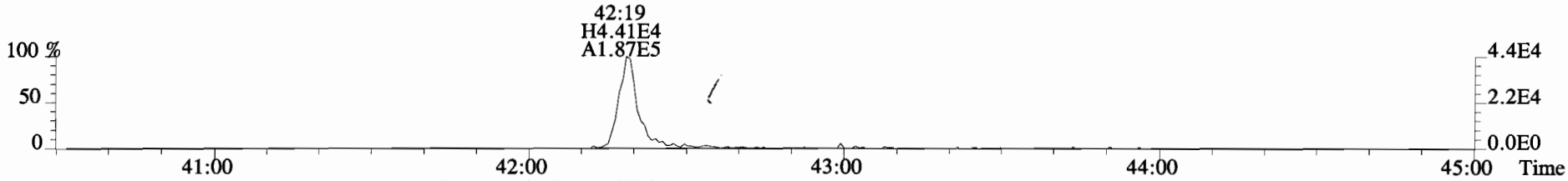
File:141027D2 #1-326 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



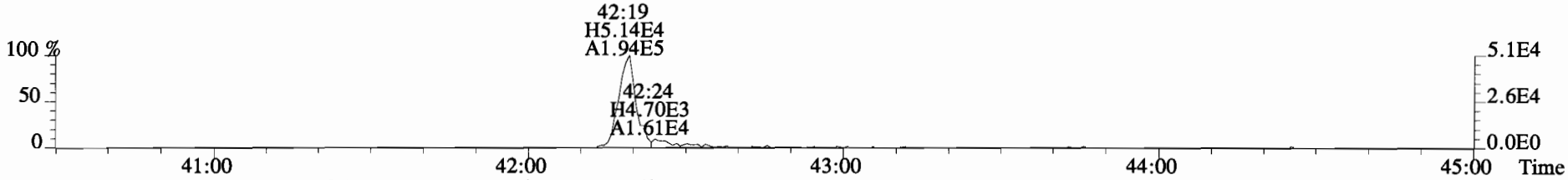
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



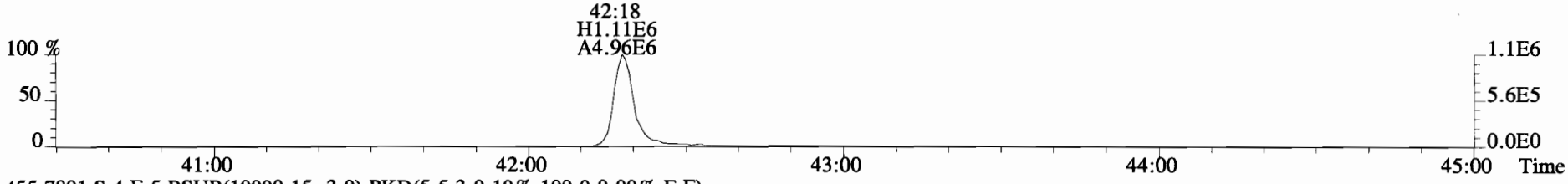
File:141027D2 #1-389 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:OCDD_DB5
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



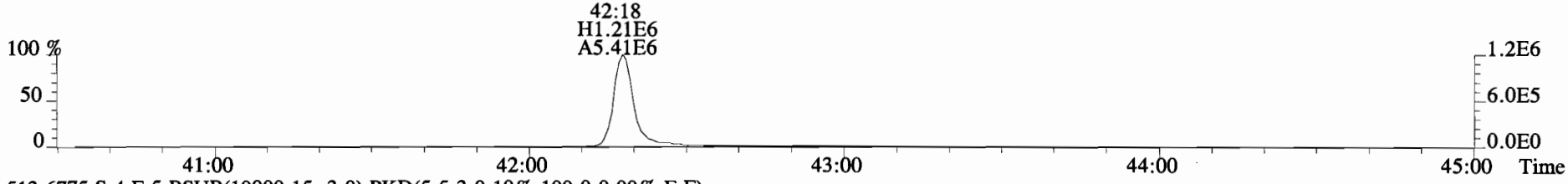
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



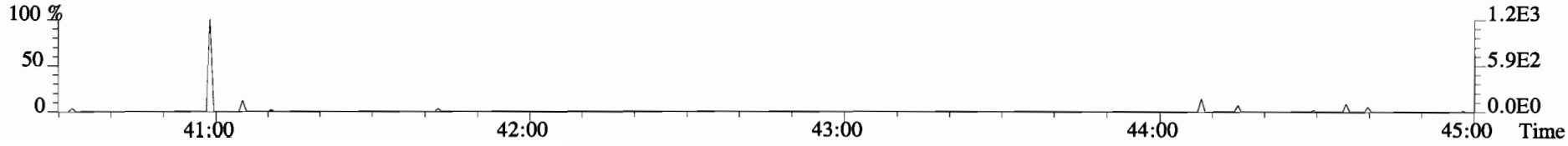
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



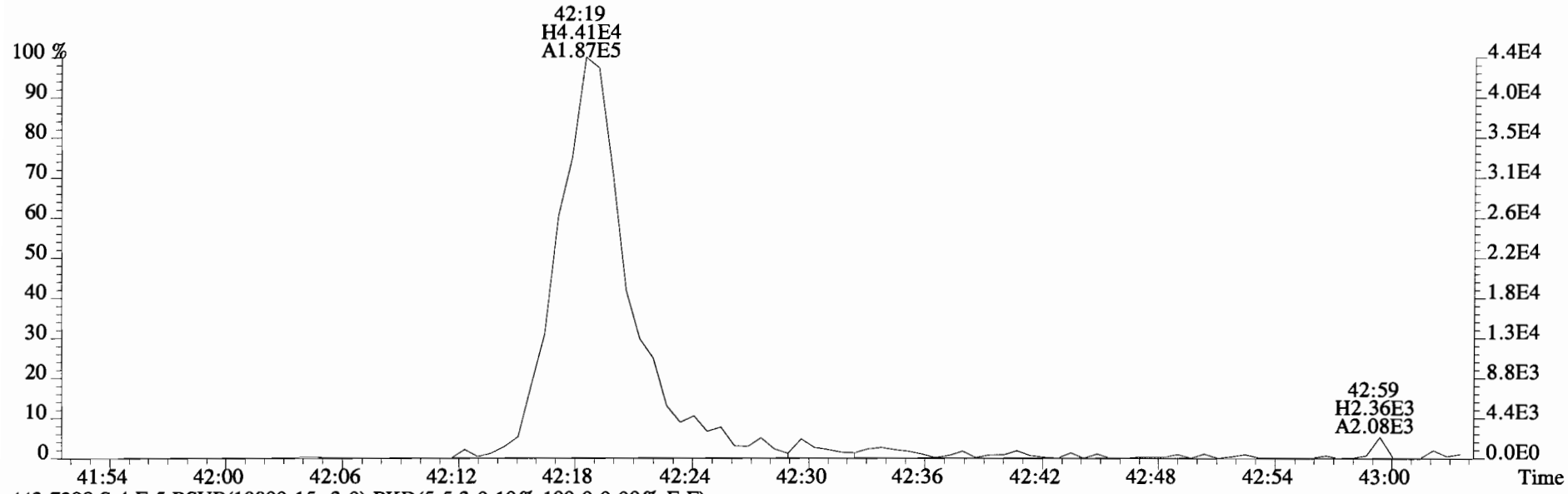
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



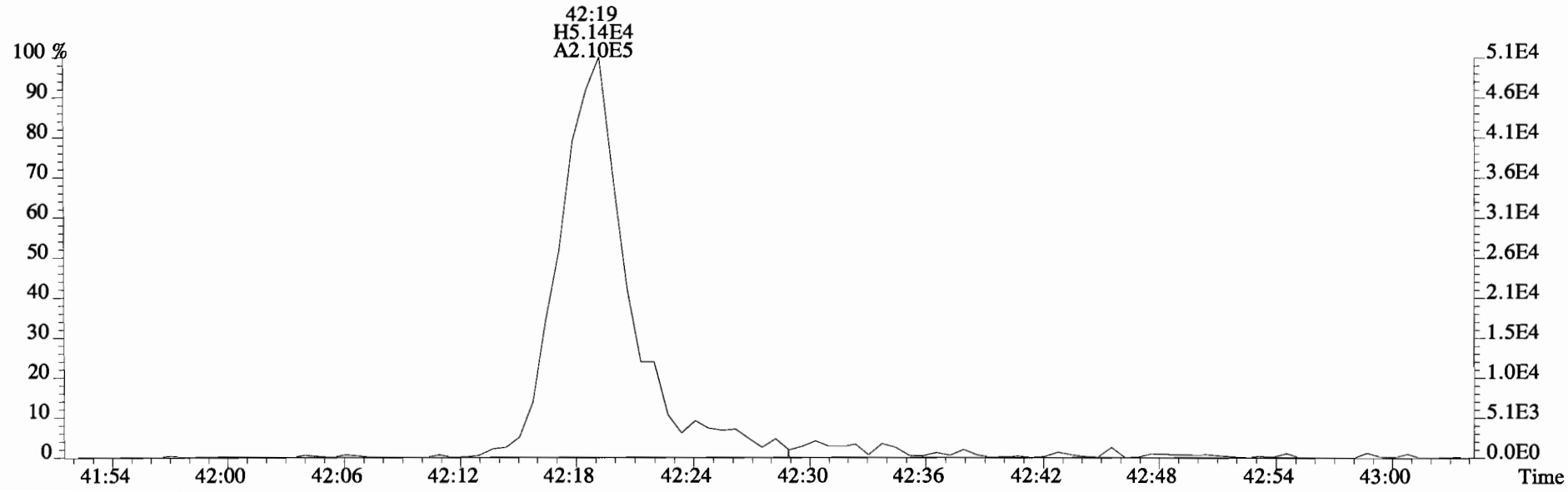
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141027D2 #1-389 Acq:28-OCT-2014 07:45:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-7 Text:1400781-02 IA-CBW-60-20141020-W 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)



	Name	Resp	RA		RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	*	*	n	1.18	NotF	*	*		515	2.5	1.48
	1,2,3,7,8-PeCDD	*	*	n	0.92	NotF	*	*		715	2.5	1.98
	1,2,3,4,7,8-HxCDD	*	*	n	1.09	NotF	*	*		755	2.5	3.87
	1,2,3,6,7,8-HxCDD	*	*	n	1.07	NotF	*	*		959	2.5	4.85
	1,2,3,7,8,9-HxCDD	*	*	n	0.93	NotF	*	*		959	2.5	5.31
	1,2,3,4,6,7,8-HpCDD	1.70e+05	1.02	y	1.12	38:46	1.000	47.524		*	2.5	*
	OCDD	8.39e+05	0.96	y	0.95	42:05	1.000	295.98		*	2.5	*
	2,3,7,8-TCDF	*	*	n	1.08	NotF	*	*		816	2.5	1.78
	1,2,3,7,8-PeCDF	*	*	n	1.09	NotF	*	*		573	2.5	1.62
	2,3,4,7,8-PeCDF	*	*	n	1.04	NotF	*	*		573	2.5	1.84
	1,2,3,4,7,8-HxCDF	*	*	n	1.39	NotF	*	*		1150	2.5	2.11
	1,2,3,6,7,8-HxCDF	*	*	n	1.26	NotF	*	*		1150	2.5	2.10
	2,3,4,6,7,8-HxCDF	*	*	n	1.30	NotF	*	*		1150	2.5	2.14
	1,2,3,7,8,9-HxCDF	*	*	n	1.19	NotF	*	*		1150	2.5	3.64
	1,2,3,4,6,7,8-HpCDF	1.07e+05	1.06	y	1.62	37:33	1.000	19.412		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	*	*	n	1.53	NotF	*	*		437	2.5	1.25
	OCDF	1.40e+05	0.95	y	1.10	42:19	1.000	36.861		*	2.5	*
IS	13C-2,3,7,8-TCDD	9.91e+06	0.78	y	1.07	27:01	1.022	1121.9				
IS	13C-1,2,3,7,8-PeCDD	9.88e+06	0.62	y	1.24	31:33	1.193	968.97				
IS	13C-1,2,3,4,7,8-HxCDD	6.92e+06	1.31	y	0.72	34:52	1.014	984.45				
IS	13C-1,2,3,6,7,8-HxCDD	8.08e+06	1.23	y	0.74	34:60	1.017	1132.4				
IS	13C-1,2,3,7,8,9-HxCDD	8.55e+06	1.26	y	0.86	35:18	1.026	1030.8				
IS	13C-1,2,3,4,6,7,8-HpCDD	6.34e+06	1.07	y	0.64	38:46	1.127	1015.2				
IS	13C-OCDD	1.18e+07	0.88	y	0.78	42:05	1.223	1551.0				
IS	13C-2,3,7,8-TCDF	1.45e+07	0.76	y	0.92	26:14	0.992	1160.2				
IS	13C-1,2,3,7,8-PeCDF	1.32e+07	1.59	y	0.95	30:22	1.149	1030.0				
IS	13C-2,3,4,7,8-PeCDF	1.30e+07	1.59	y	0.97	31:16	1.183	991.99				
IS	13C-1,2,3,4,7,8-HxCDF	9.43e+06	0.51	y	0.99	33:59	0.988	981.15				
IS	13C-1,2,3,6,7,8-HxCDF	1.09e+07	0.51	y	1.10	34:07	0.992	1025.7				
IS	13C-2,3,4,6,7,8-HxCDF	1.04e+07	0.50	y	1.03	34:43	1.009	1035.4				
IS	13C-1,2,3,7,8,9-HxCDF	8.55e+06	0.51	y	0.86	35:42	1.038	1027.0				
IS	13C-1,2,3,4,6,7,8-HpCDF	6.72e+06	0.43	y	0.71	37:32	1.091	971.55				
IS	13C-1,2,3,4,7,8,9-HpCDF	6.41e+06	0.43	y	0.71	39:18	1.143	933.84				
IS	13C-OCDF	1.36e+07	0.90	y	0.87	42:19	1.230	1607.9				
C/Up	37Cl-2,3,7,8-TCDD	6.95e+06			1.21	27:01	1.022	696.92				
RS/RT	13C-1,2,3,4-TCDD	1.62e+07	0.77	y	1.00	26:26	*	1973.4				
RS	13C-1,2,3,4-TCDF	2.66e+07	0.77	y	1.00	24:60	*	1973.4				
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.91e+07	0.51	y	1.00	34:24	*	1973.4				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		515	1.48
Total Penta-Dioxins	*	*		1980	5.48
Total Hexa-Dioxins	10.2	10.2		*	*
Total Hepta-Dioxins	83.0	83.0		*	*
Total Tetra-Furans	*	*		1590	3.46
Total Penta-Furans	0.0000	2.0510		*	*
Total Hexa-Furans	10.3	13.1		*	*
Total Hepta-Furans	39.3	39.3		*	*

	Rec	Qual
IS	56.9	
IS	49.1	
IS	49.9	
IS	57.4	
IS	52.2	
IS	51.4	
IS	39.3	
IS	58.8	
IS	52.2	
IS	50.3	
IS	49.7	
IS	52.0	
IS	52.5	
IS	52.0	
IS	49.2	
IS	47.3	
IS	40.7	
C/Up	88.3	
RS/RT		
RS		
RS/RT		

Integrations by Analyst: MJ Date: 10/29/14

Reviewed by Analyst: [illegible] Date: 10/29/14

Totals class: HxCDD EMPC Entry #: 23

Run: 10 File: 141027D2 S: 5 I: 1 F: 3
Acquired: 28-OCT-14 08:33:50 Processed: 28-OCT-14 09:21:42

Total Concentration: 10.244 Unnamed Concentration: 10.244

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
33:20	8.273e+03	6.404e+03	1.29	y	1.468e+04	3.6080	
34:10	1.546e+04	1.153e+04	1.34	y	2.699e+04	6.6356	

Totals class: HpCDD EMPC Entry #: 25

Run: 10 File: 141027D2 S: 5 I: 1 F: 4
Acquired: 28-OCT-14 08:33:50 Processed: 28-OCT-14 09:21:42

Total Concentration: 83.031 Unnamed Concentration: 35.507

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:55	6.482e+04	6.237e+04	1.04 y	1.272e+05	35.507	
38:46	8.610e+04	8.413e+04	1.02 y	1.702e+05	47.524	1,2,3,4,6,7,8-HpCDD

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

Run: 10 File: 141027D2 S: 5 I: 1 F: 1
Acquired: 28-OCT-14 08:33:50 Processed: 28-OCT-14 09:21:42

Total Concentration: 2.0510 Unnamed Concentration: 2.051

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
28:00	8.816e+03	7.205e+03	1.22	n	1.450e+04	2.0510	

Totals class: HxCDF EMPC Entry #: 33

Run: 10 File: 141027D2 S: 5 I: 1 F: 3
Acquired: 28-OCT-14 08:33:50 Processed: 28-OCT-14 09:21:42

Total Concentration: 13.070 Unnamed Concentration: 13.070

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
32:47	8.570e+03	6.269e+03	1.37	y	1.484e+04	2.3174	
32:57	2.702e+04	2.390e+04	1.13	y	5.092e+04	7.9522	
33:30	9.928e+03	9.507e+03	1.04	n	1.793e+04	2.8008	

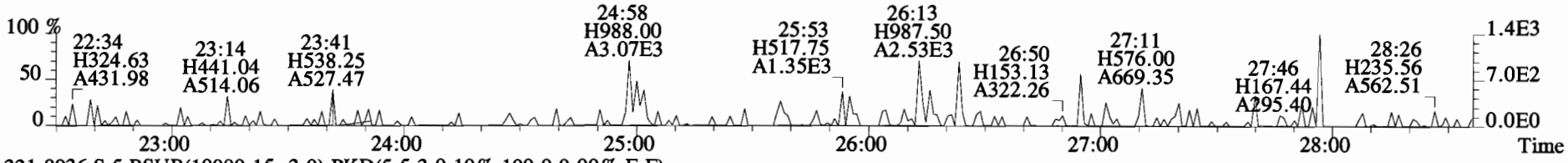
Totals class: HpCDF EMPC Entry #: 35

Run: 10 File: 141027D2 S: 5 I: 1 F: 4
Acquired: 28-OCT-14 08:33:50 Processed: 28-OCT-14 09:21:42

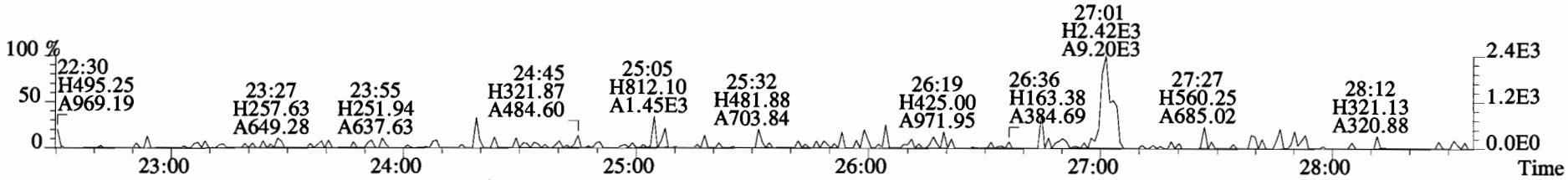
Total Concentration: 39.296 Unnamed Concentration: 19.883

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:33	5.492e+04	5.193e+04	1.06	y	1.069e+05	19.412	1,2,3,4,6,7,8-HpCDF
38:07	5.503e+04	4.892e+04	1.12	y	1.039e+05	19.883	

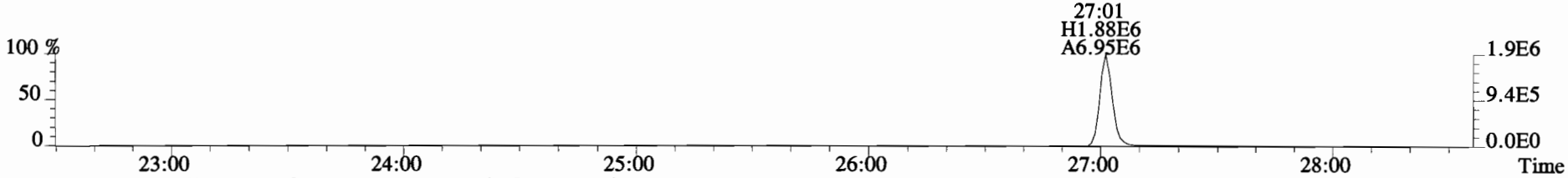
File:141027D2 #1-552 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



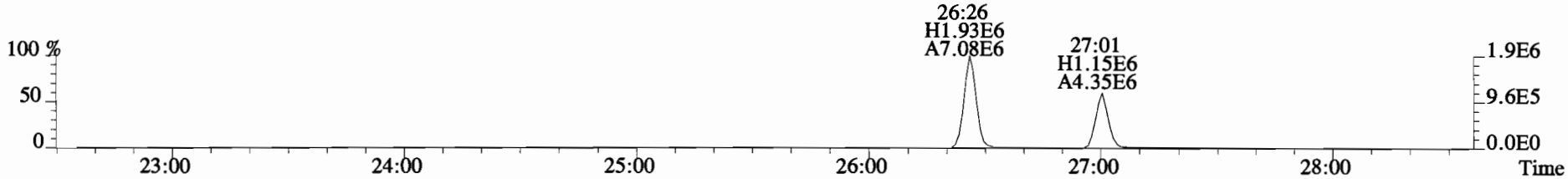
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



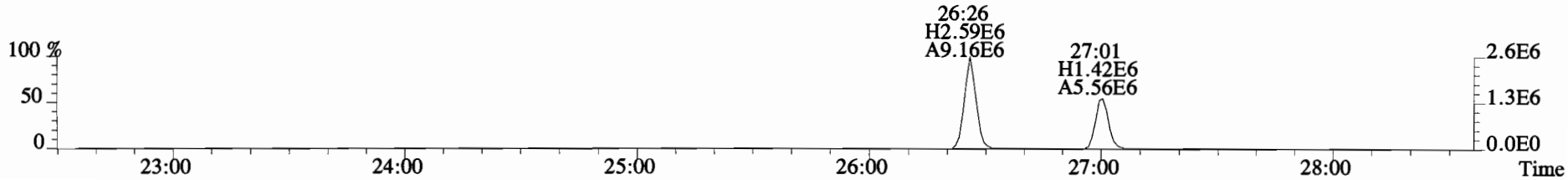
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



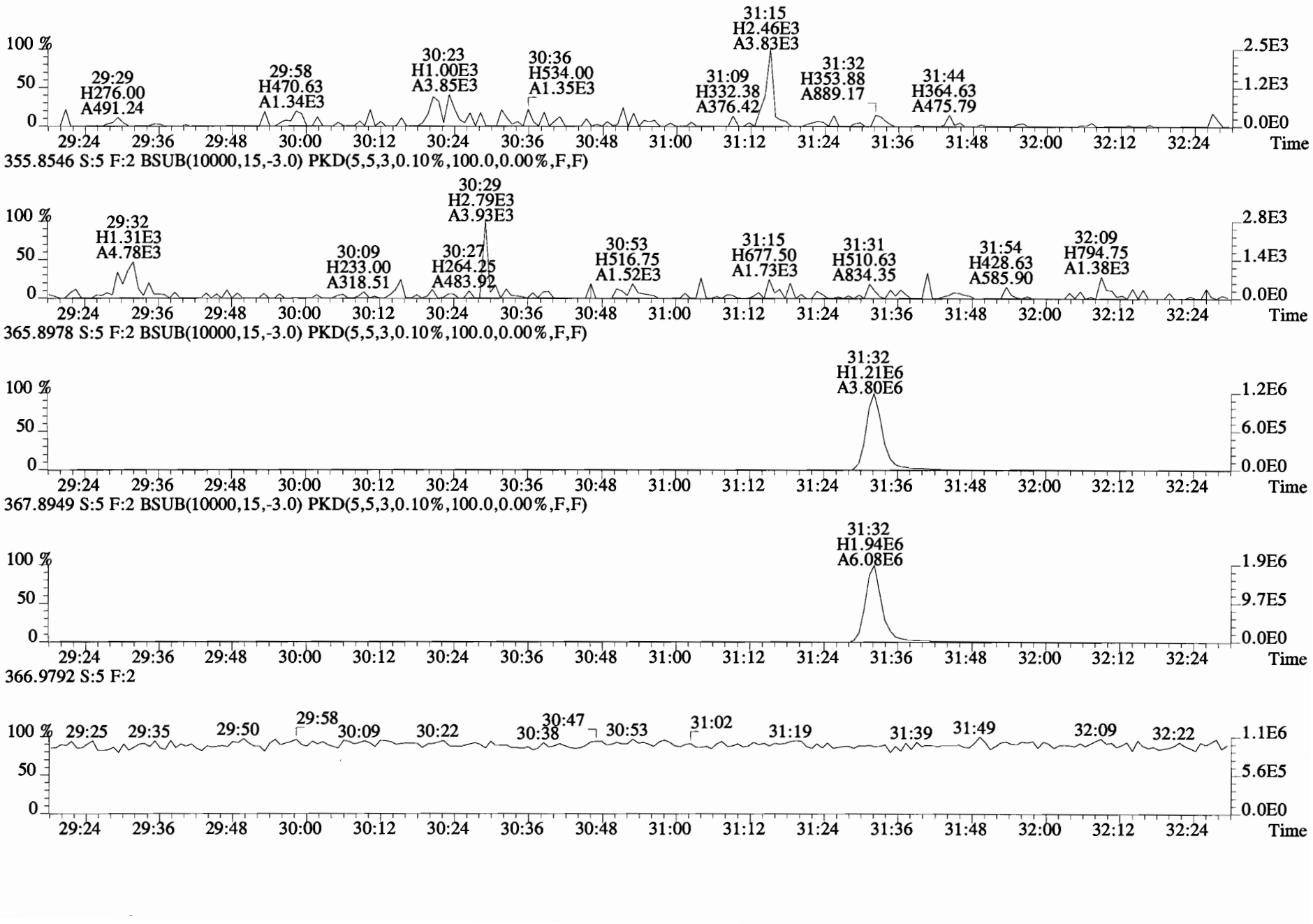
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



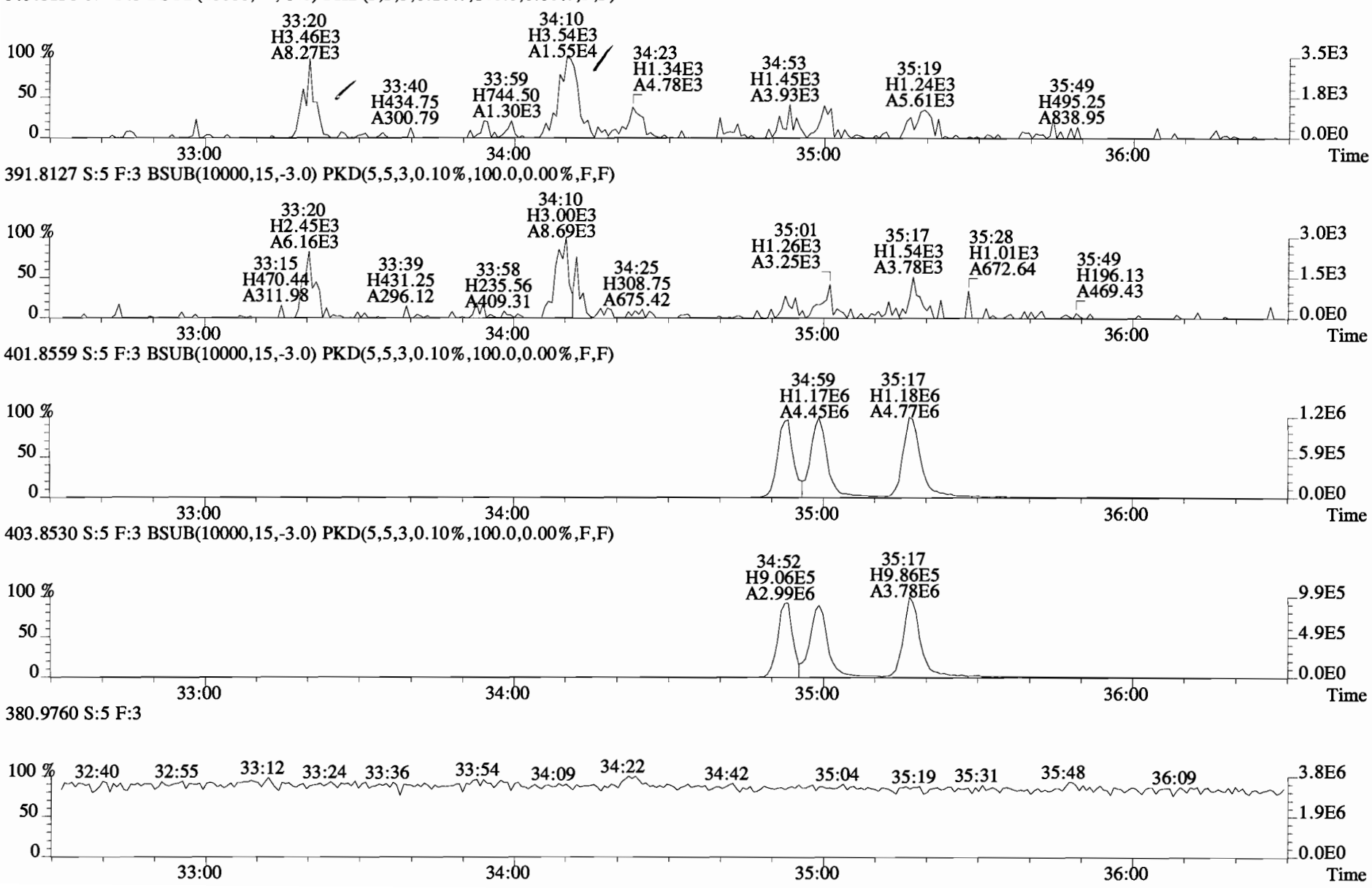
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



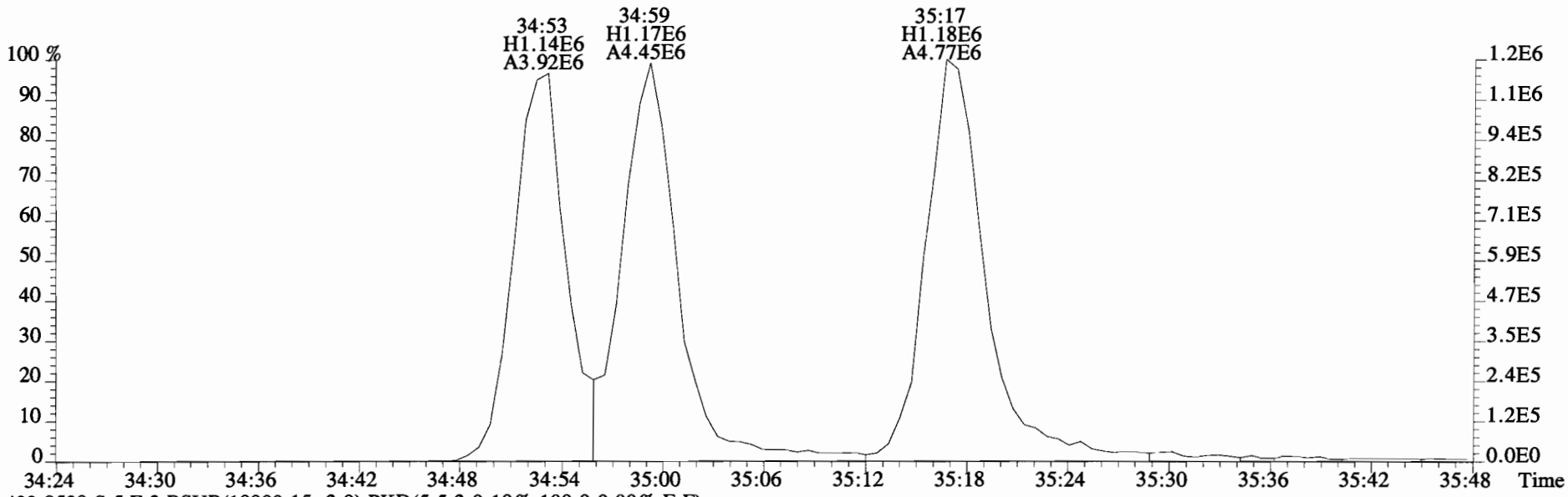
File:141027D2 #1-256 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5



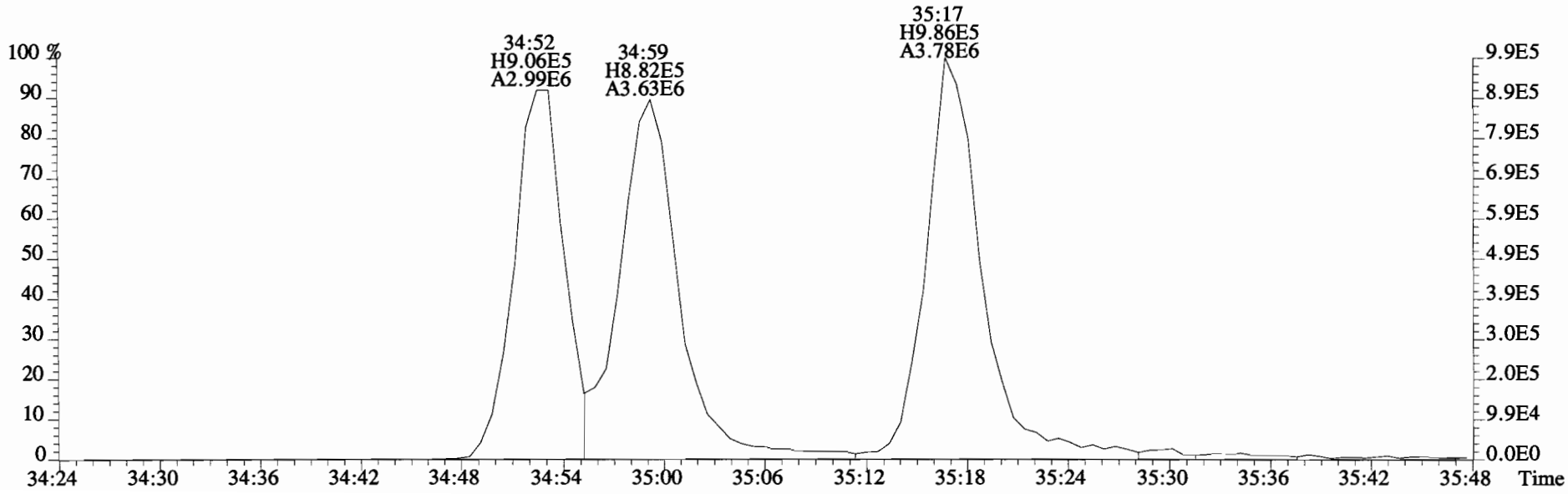
File:141027D2 #1-385 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5



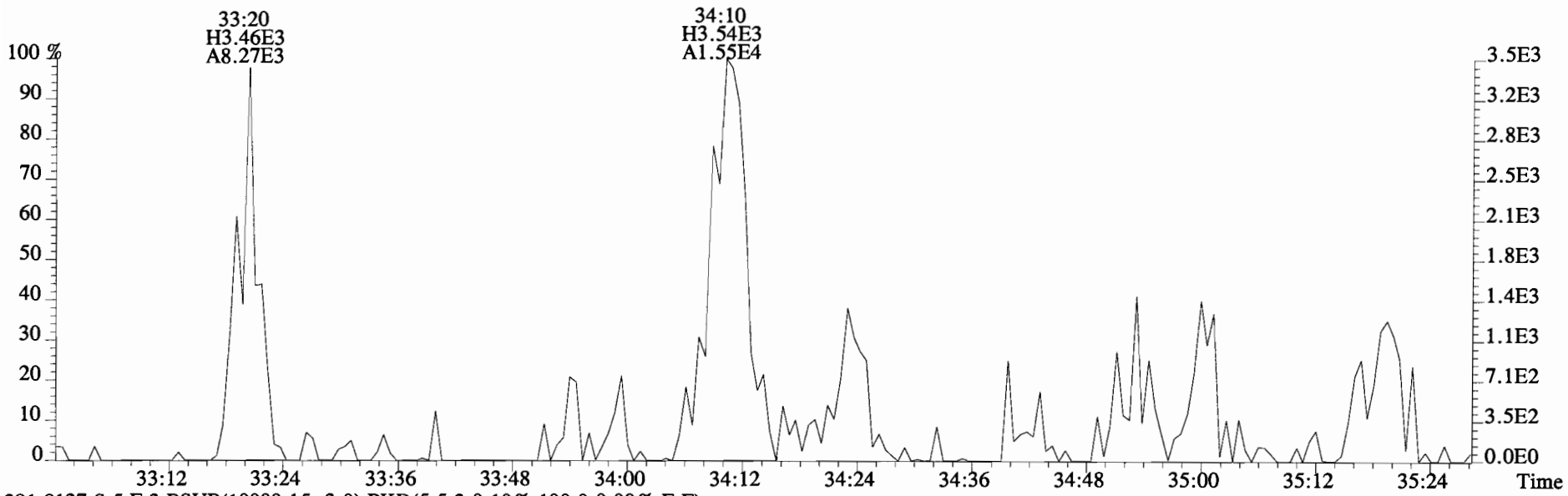
File:141027D2 #1-385 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



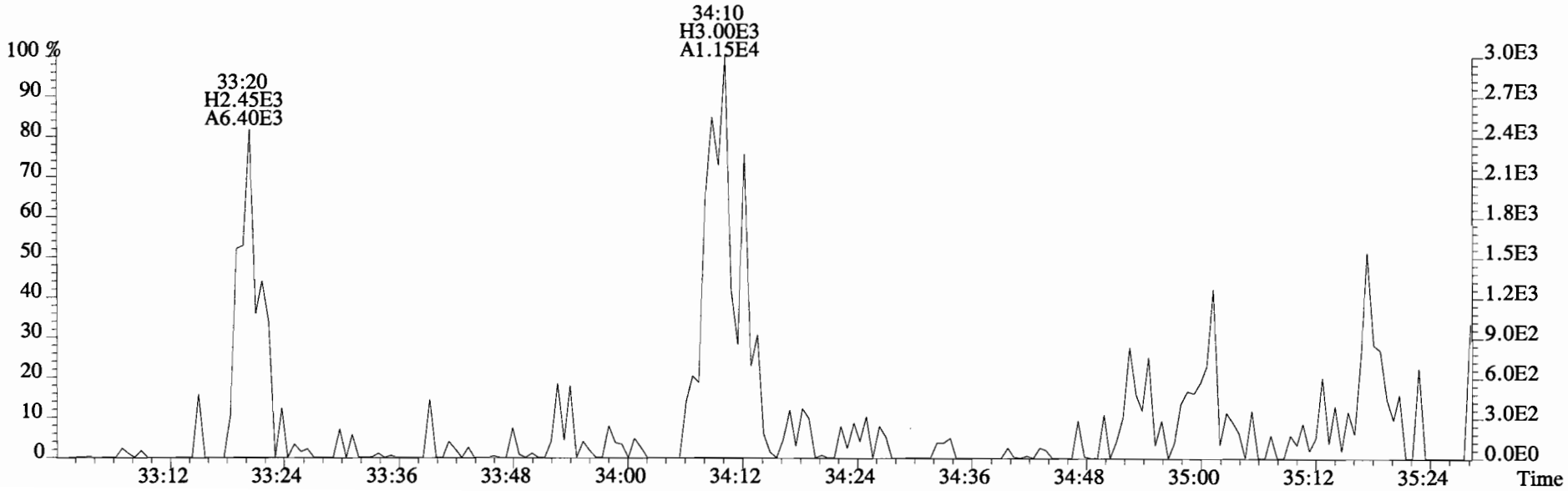
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

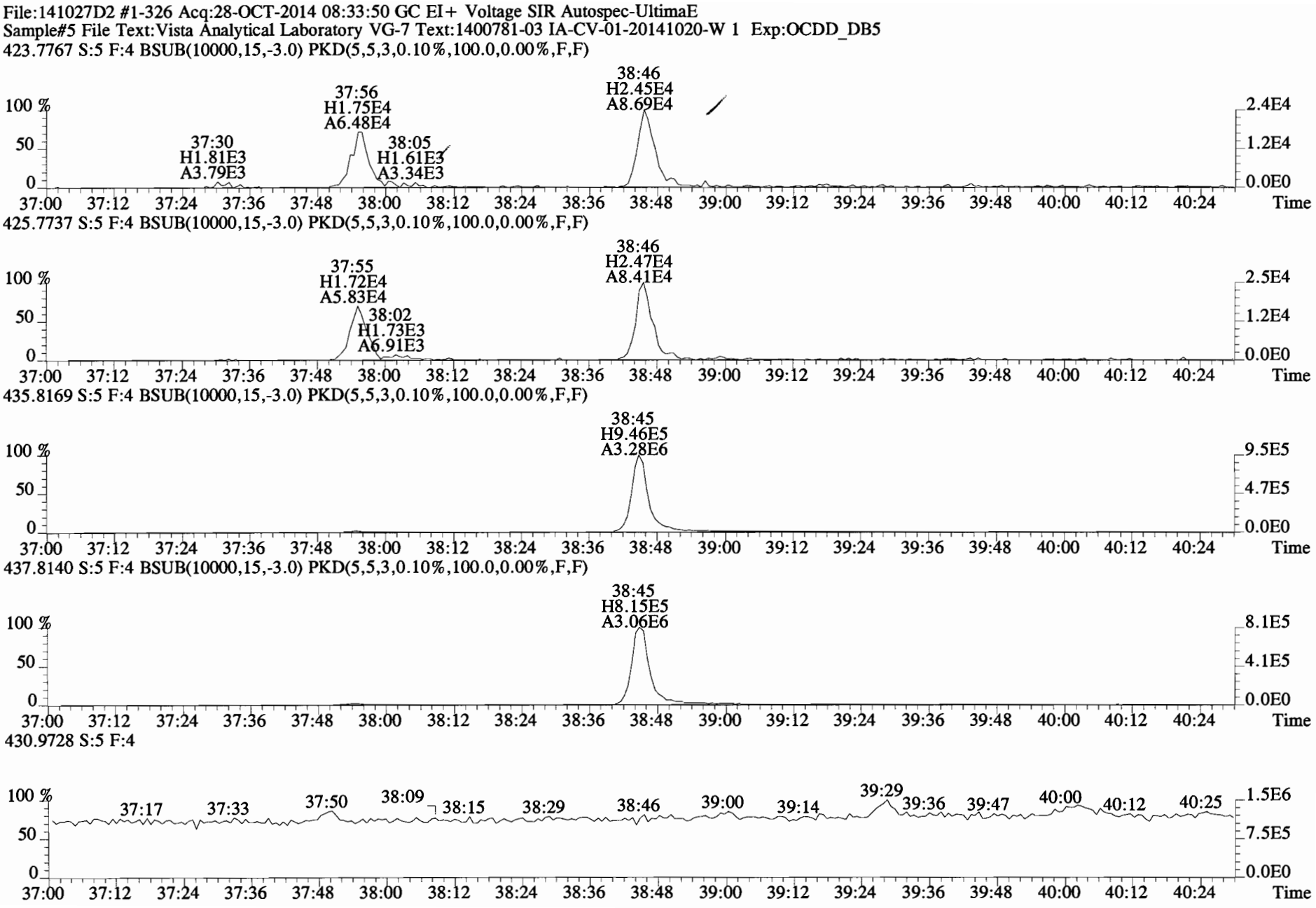


File:141027D2 #1-385 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

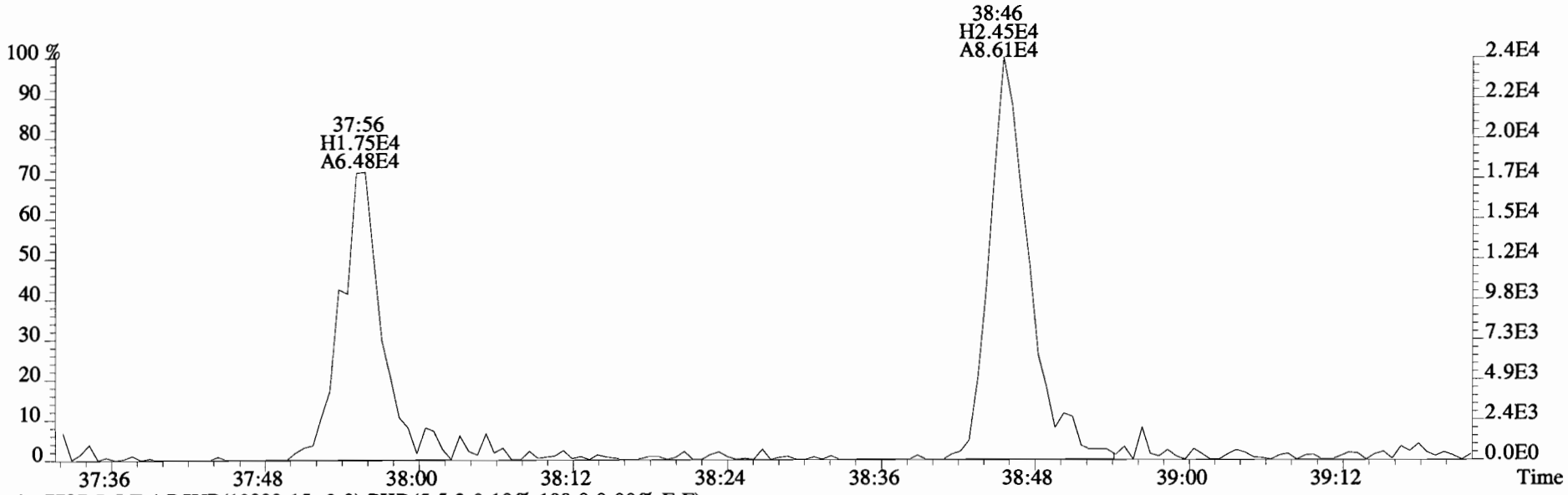


391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

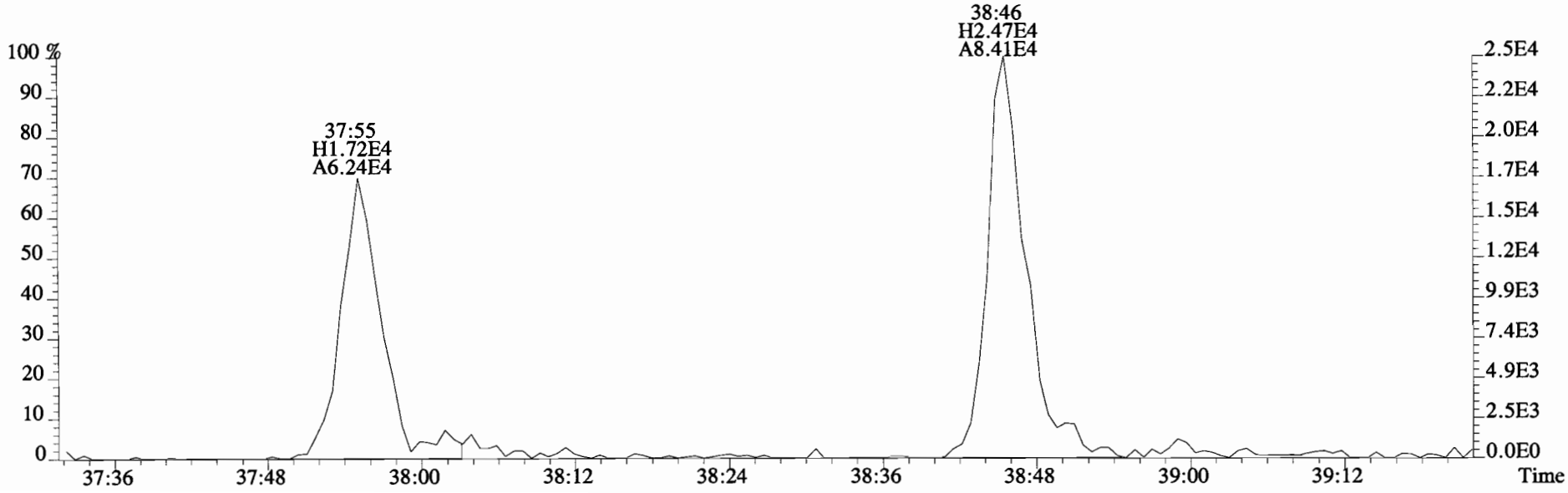



File:141027D2 #1-326 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:30 H1.81E3 A3.79E3
37:56 H1.75E4 A6.48E4
38:05 H1.61E3 A3.34E3
38:46 H2.45E4 A8.69E4
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:55 H1.72E4 A5.83E4
38:02 H1.73E3 A6.91E3
38:46 H2.47E4 A8.41E4
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
38:45 H9.46E5 A3.28E6
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
38:45 H8.15E5 A3.06E6
430.9728 S:5 F:4
37:17 37:33 37:50 38:09 38:15 38:29 38:46 39:00 39:14 39:29 39:36 39:47 40:00 40:12 40:25
100 %
50
0
37:00 37:12 37:24 37:36 37:48 38:00 38:12 38:24 38:36 38:48 39:00 39:12 39:24 39:36 39:48 40:00 40:12 40:24 Time
2.4E4 1.2E4 0.0E0
2.5E4 1.2E4 0.0E0
9.5E5 4.7E5 0.0E0
8.1E5 4.1E5 0.0E0
1.5E6 7.5E5 0.0E0

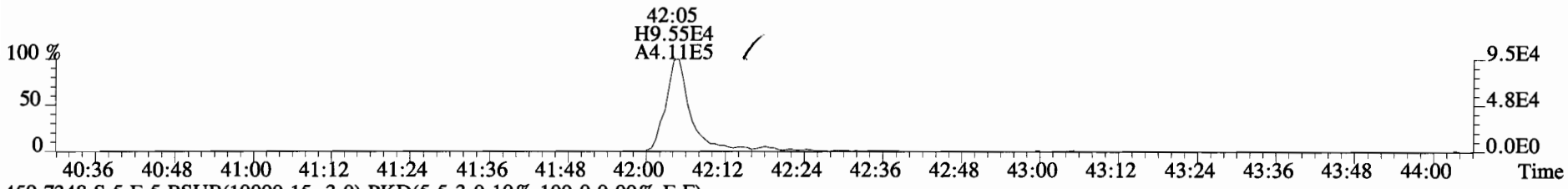
File:141027D2 #1-326 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



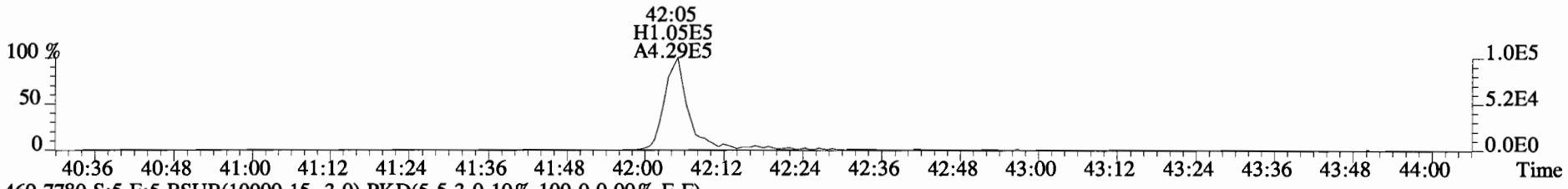
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



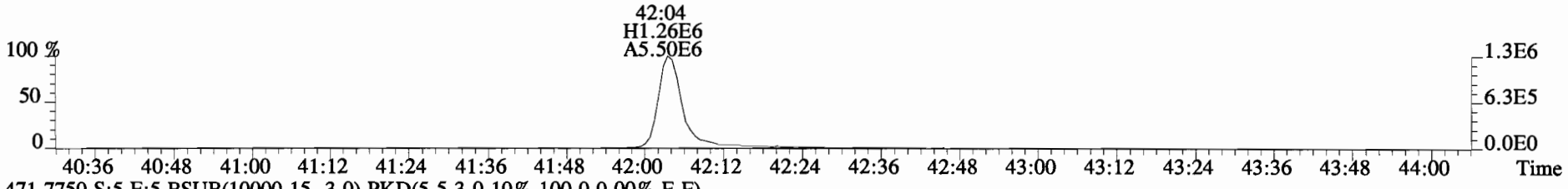
File:141027D2 #1-388 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



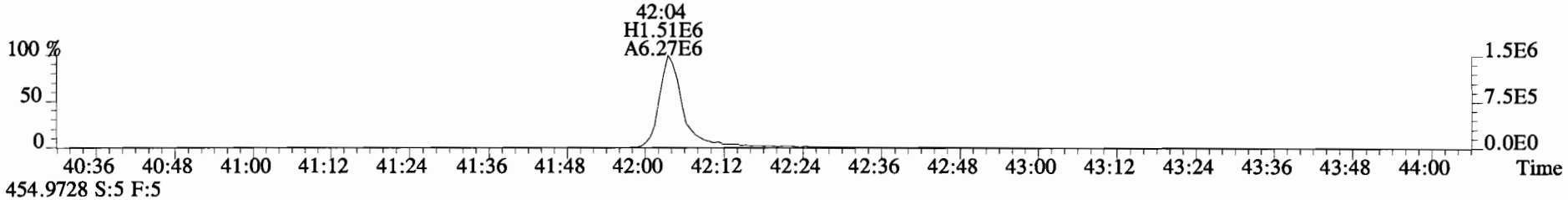
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



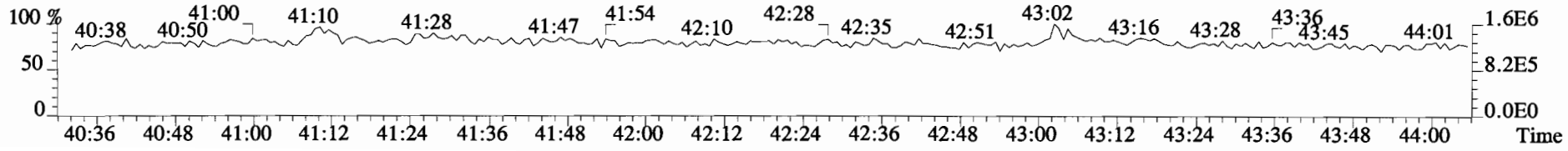
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



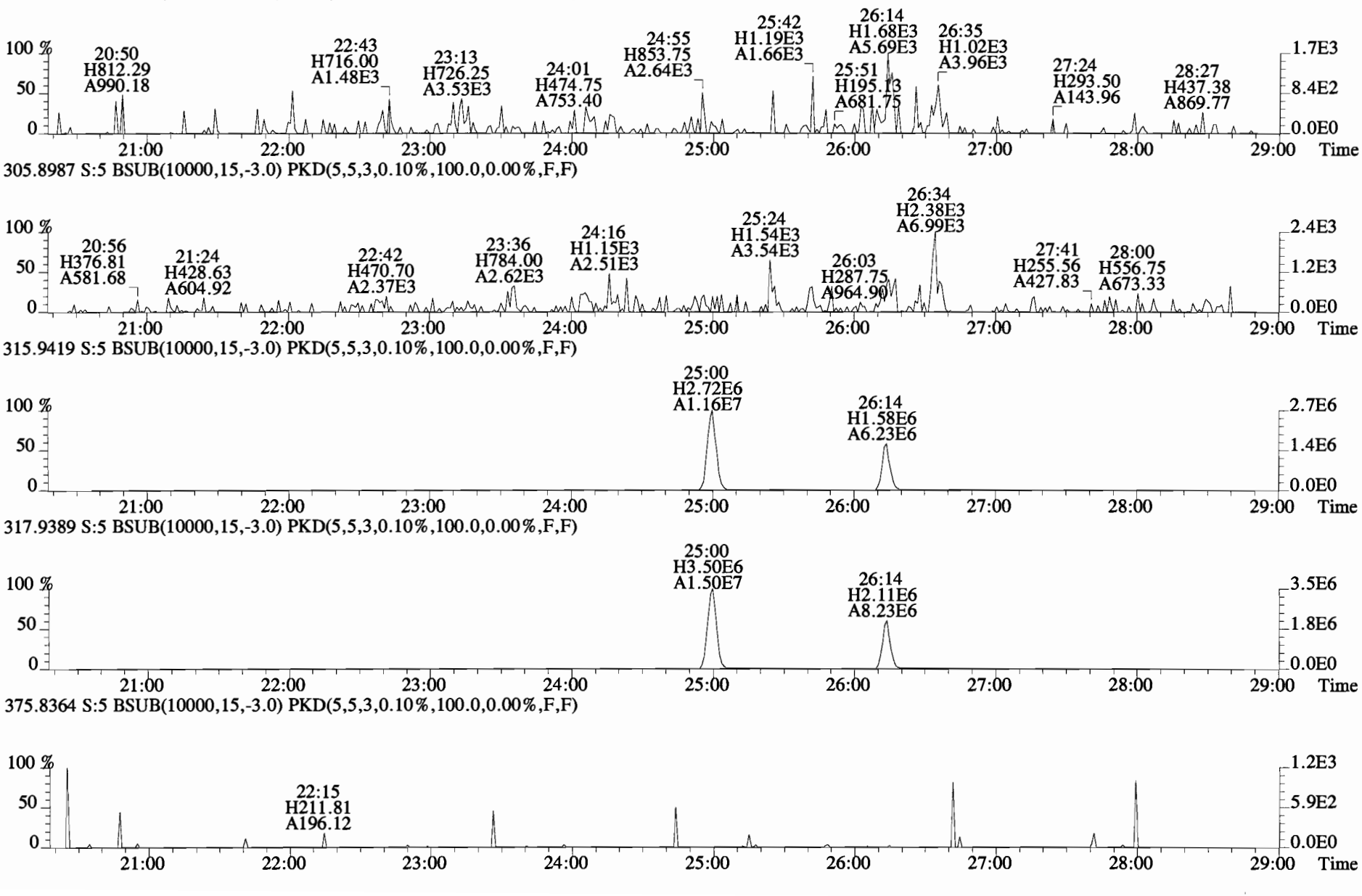
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



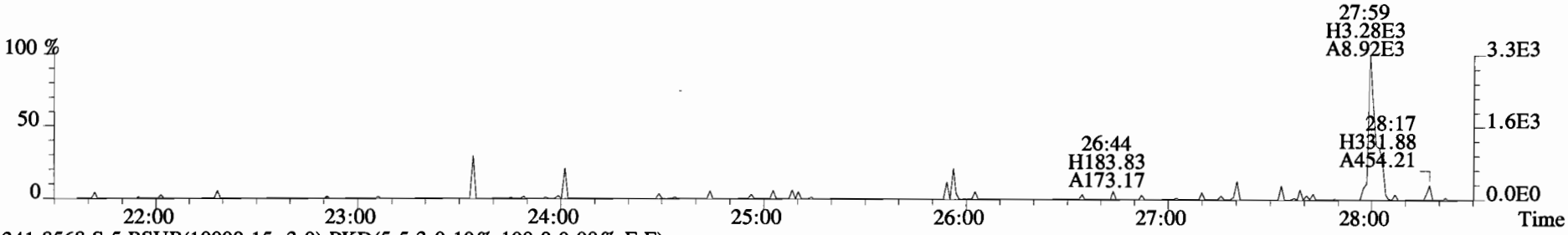
454.9728 S:5 F:5



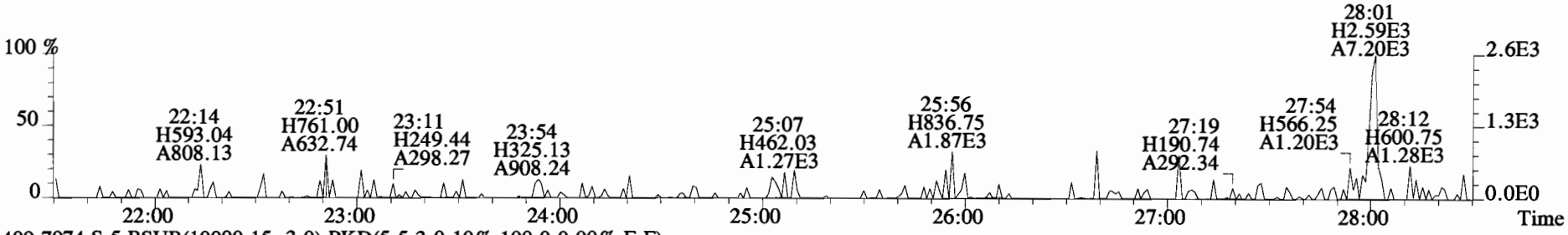
File:141027D2 #1-552 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5



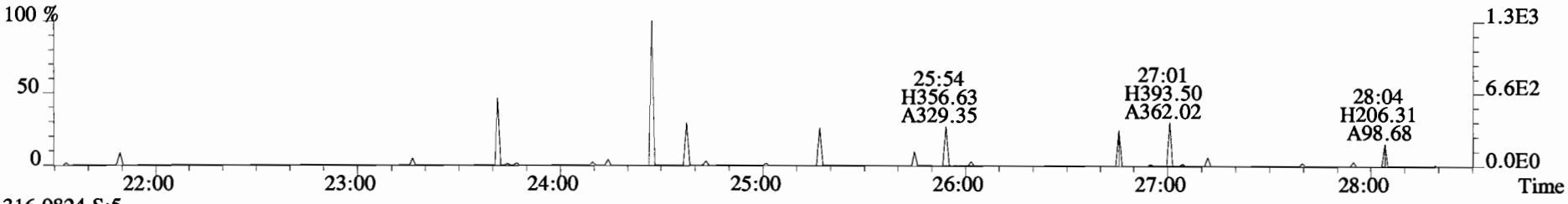
File:141027D2 #1-552 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



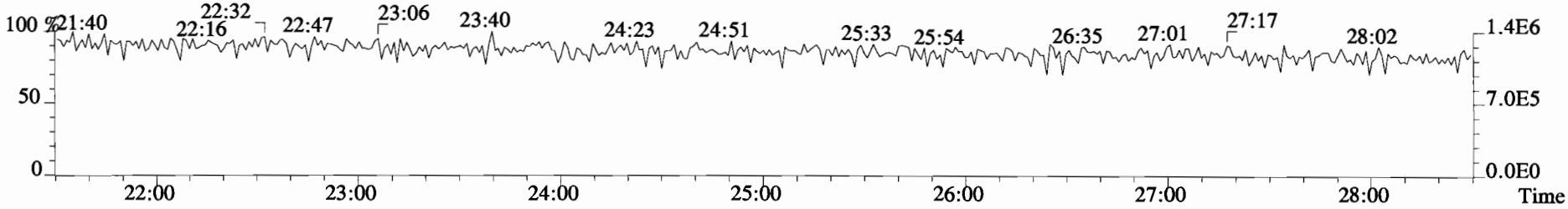
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



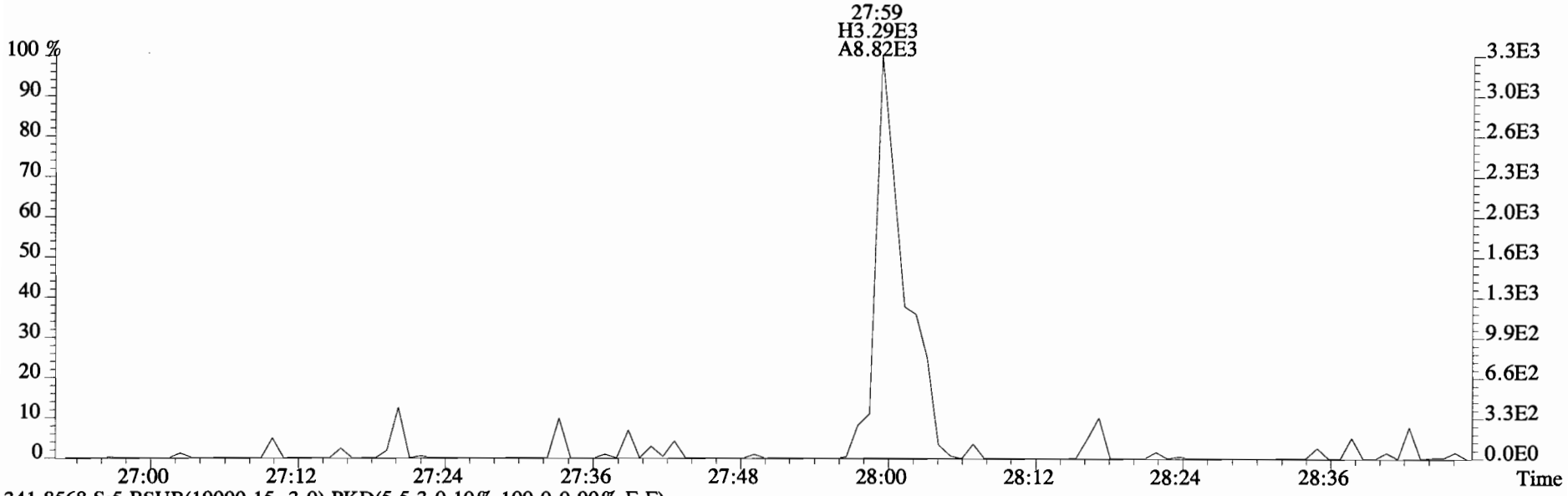
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



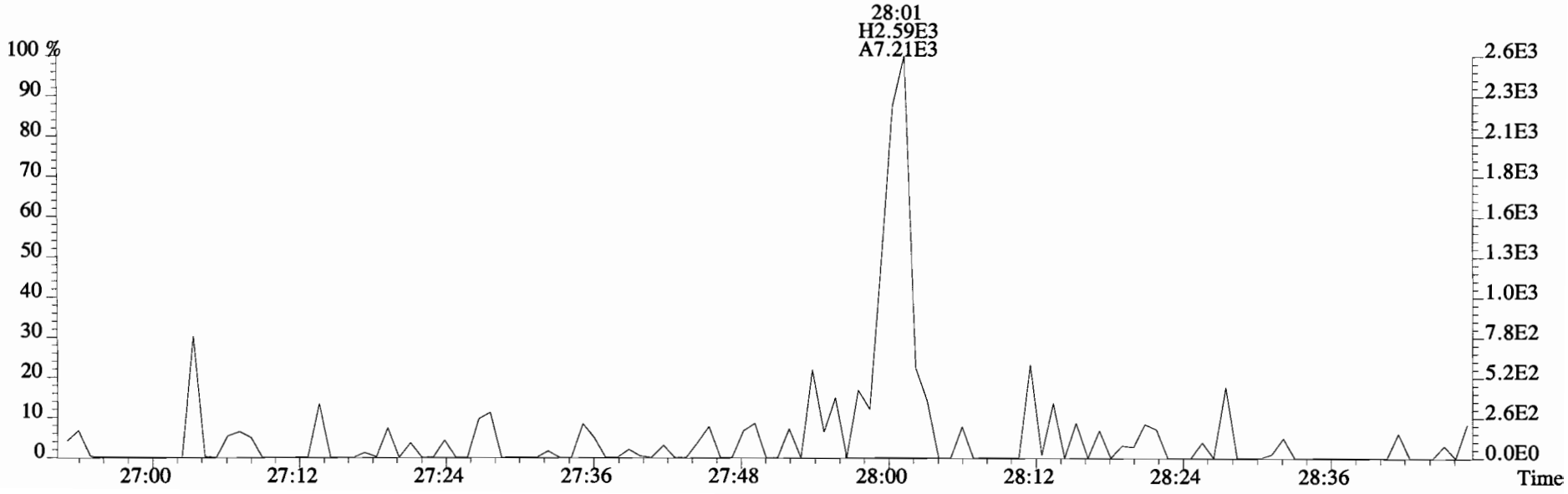
316.9824 S:5



File:141027D2 #1-552 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

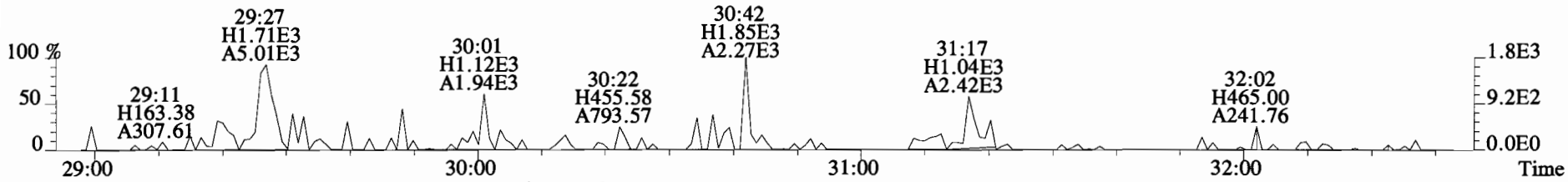


341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

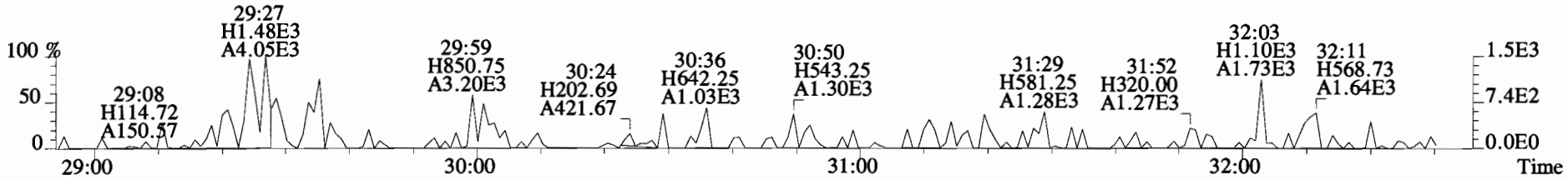


File:141027D2 #1-256 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5

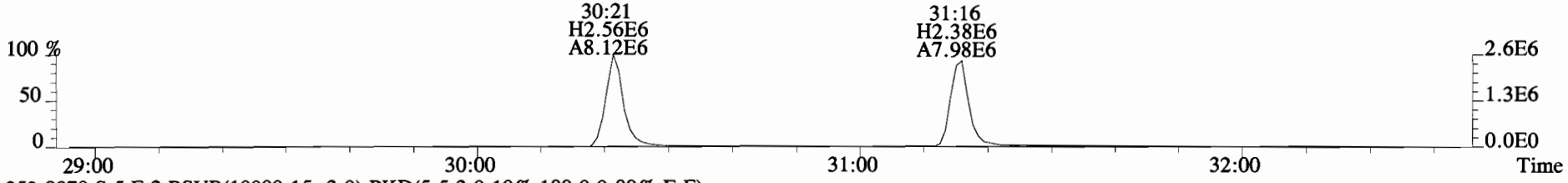
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



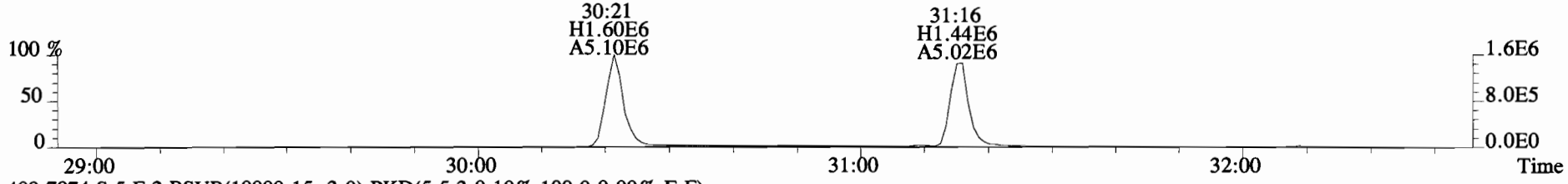
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



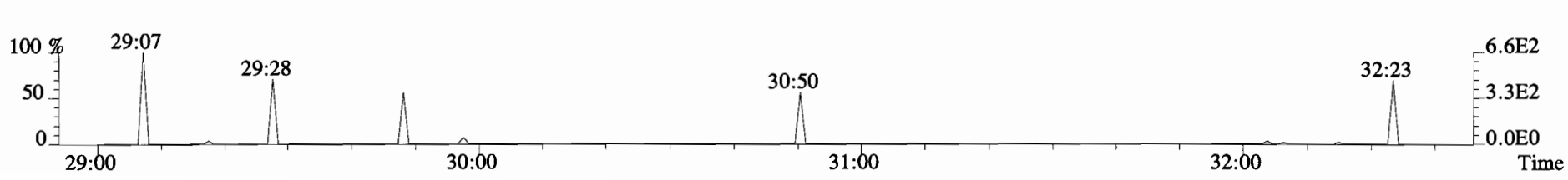
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



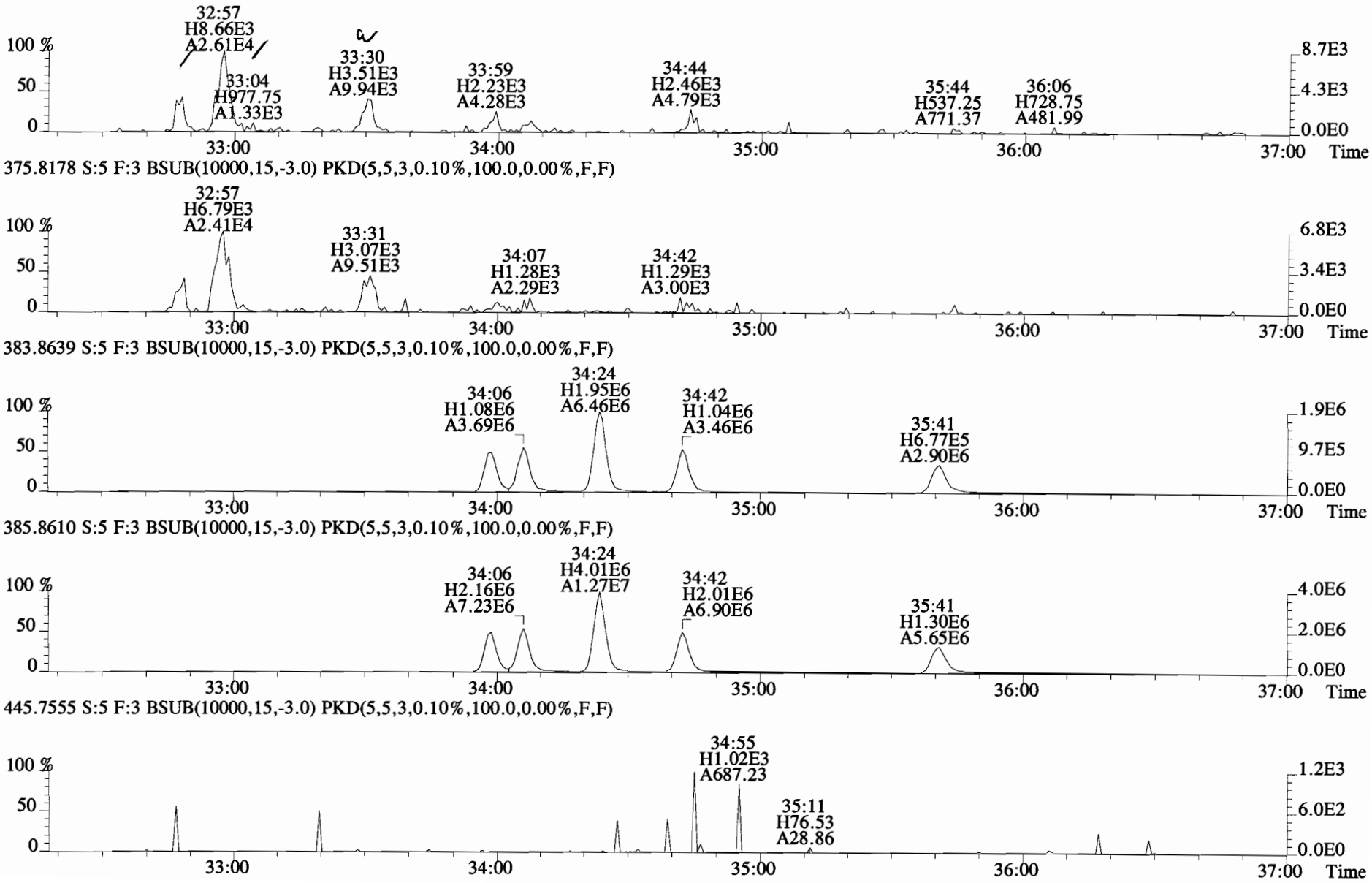
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



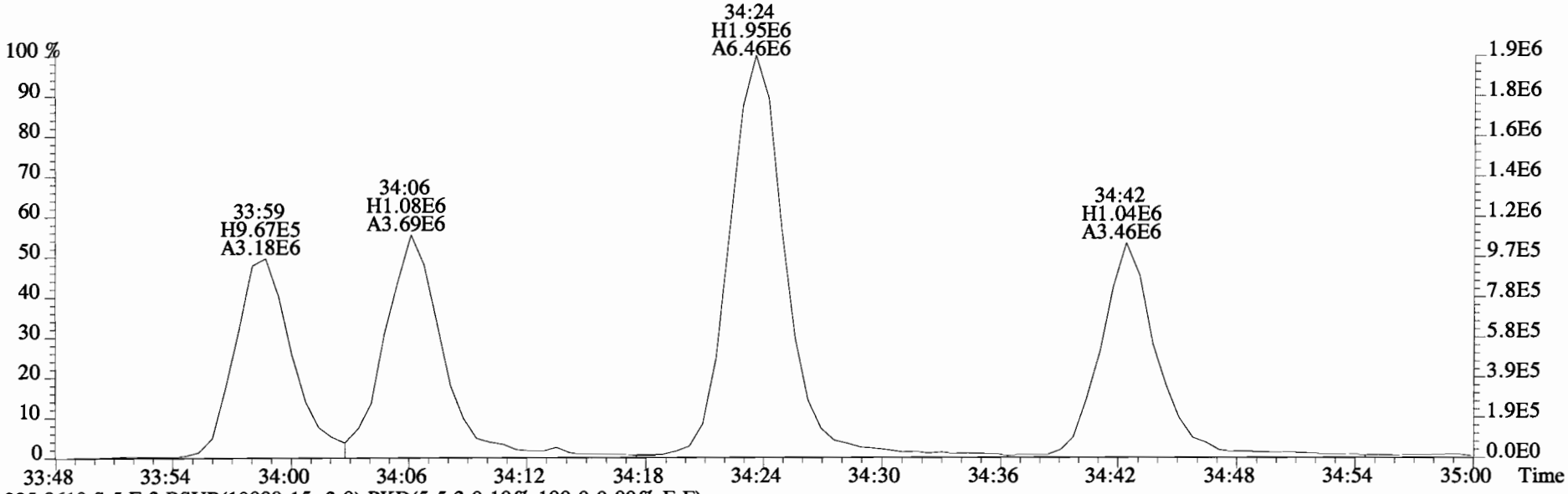
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



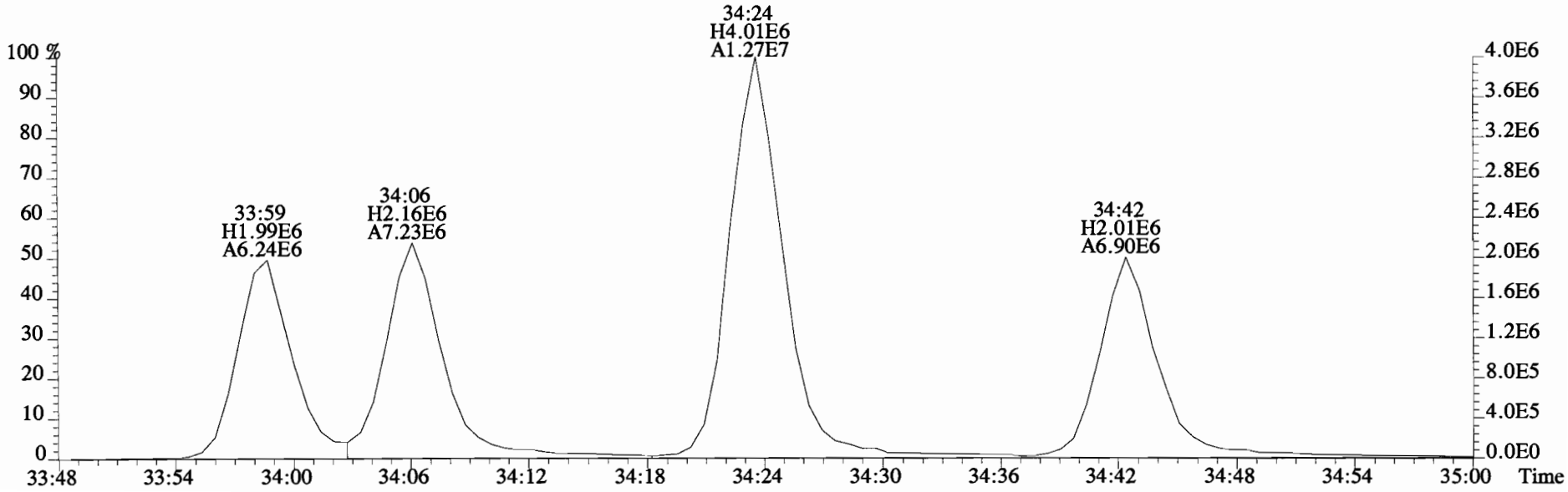
File:141027D2 #1-385 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5



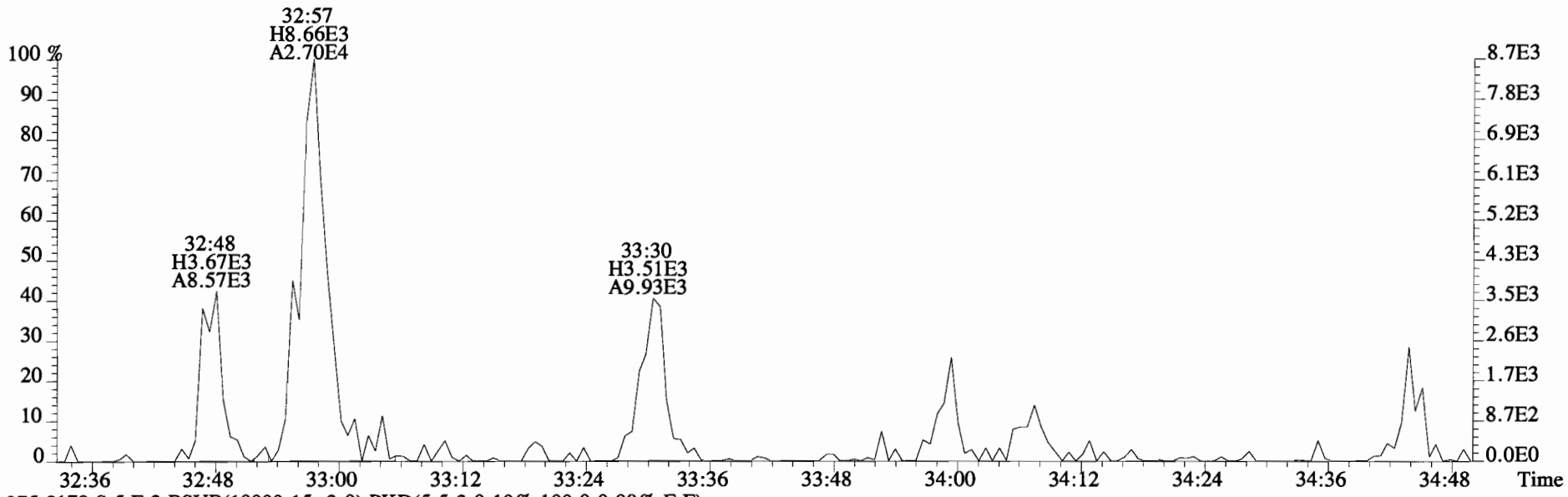
File:141027D2 #1-385 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



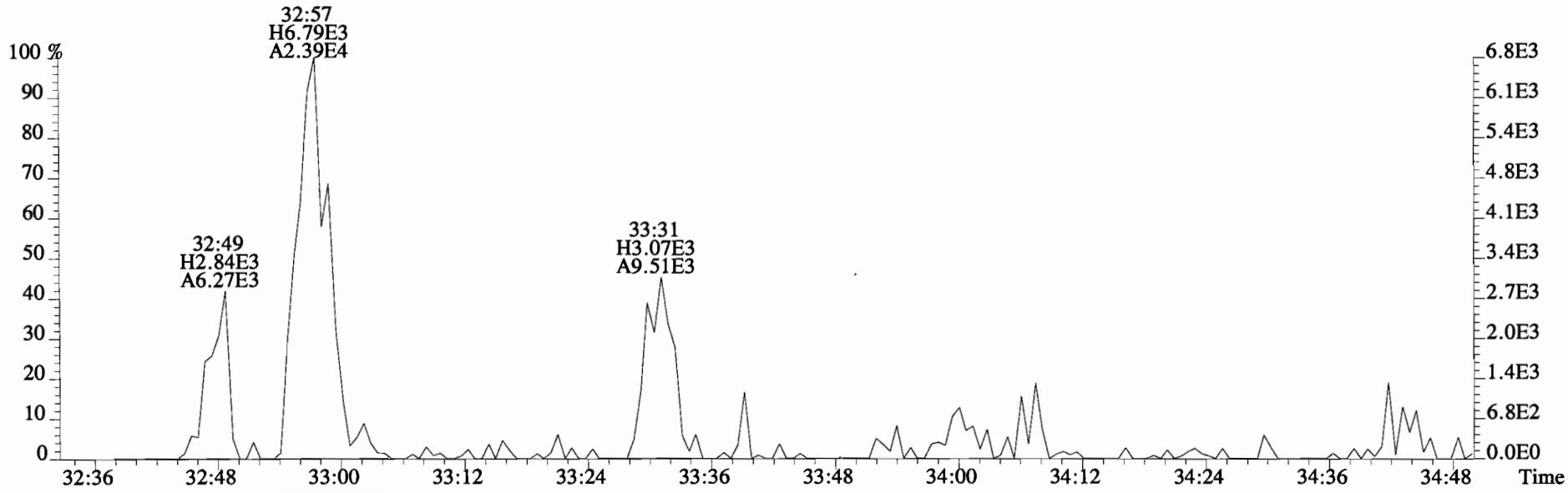
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



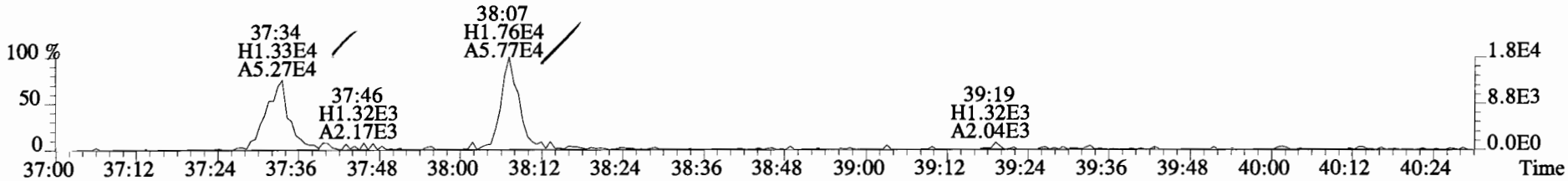
File:141027D2 #1-385 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



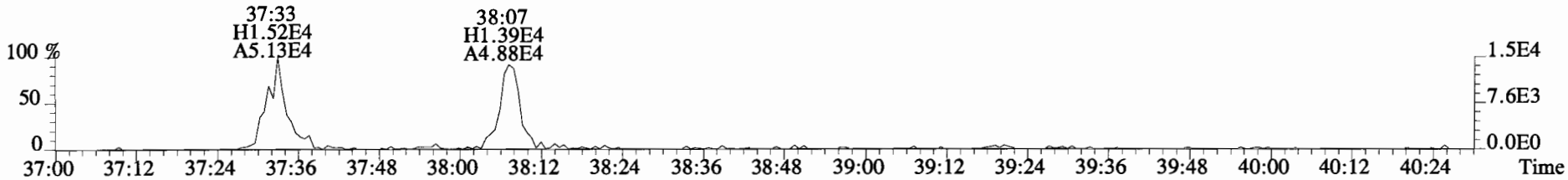
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



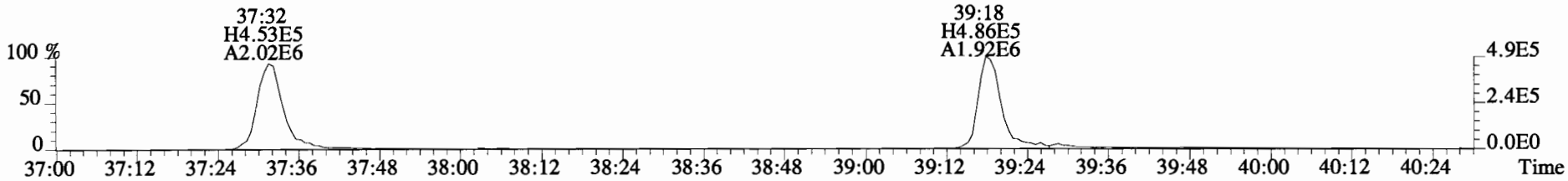
File:141027D2 #1-326 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



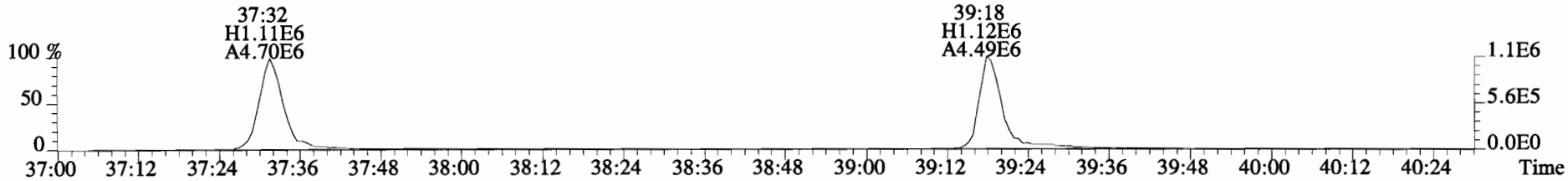
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



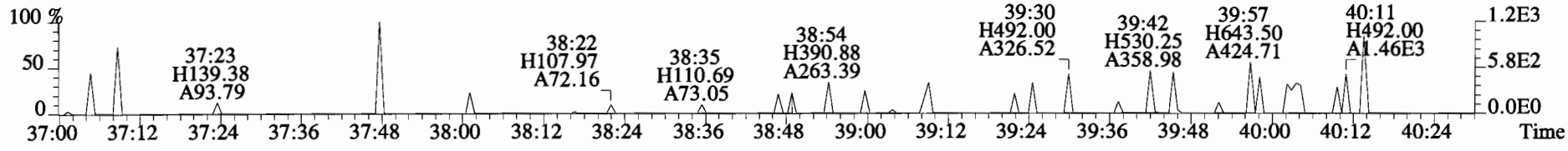
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



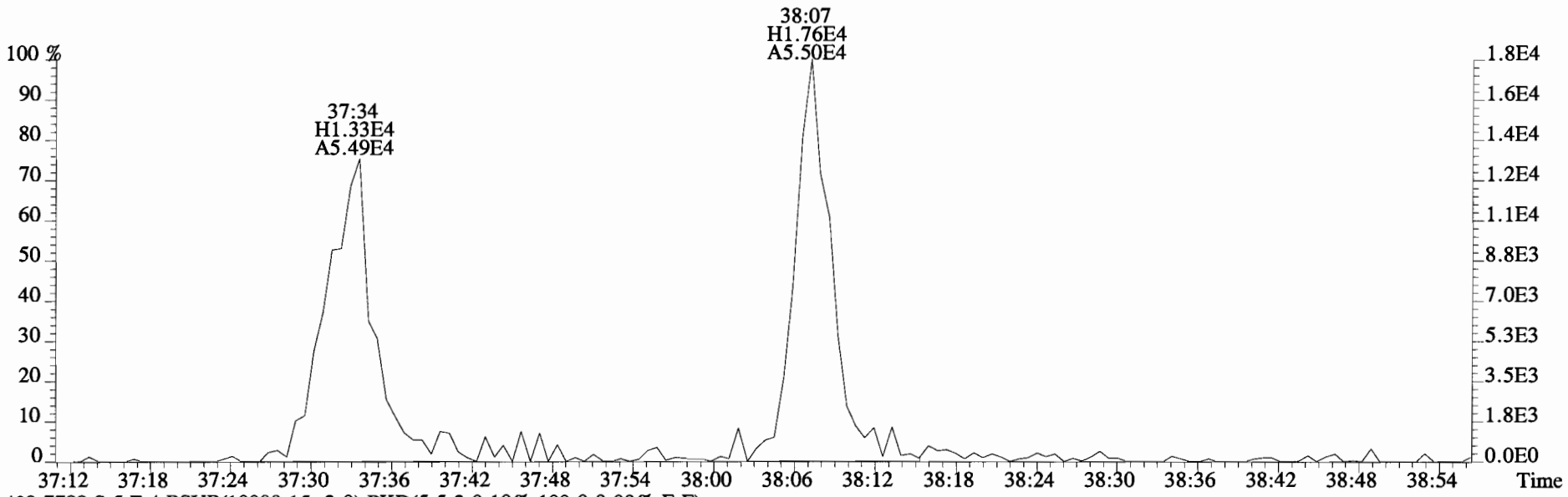
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



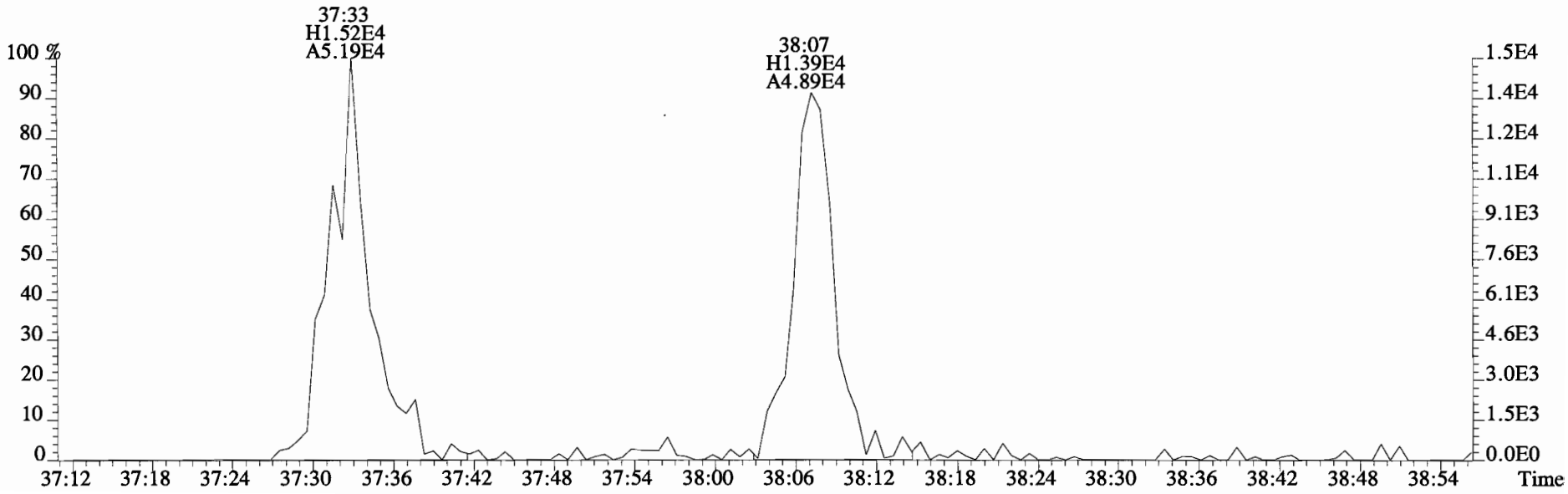
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



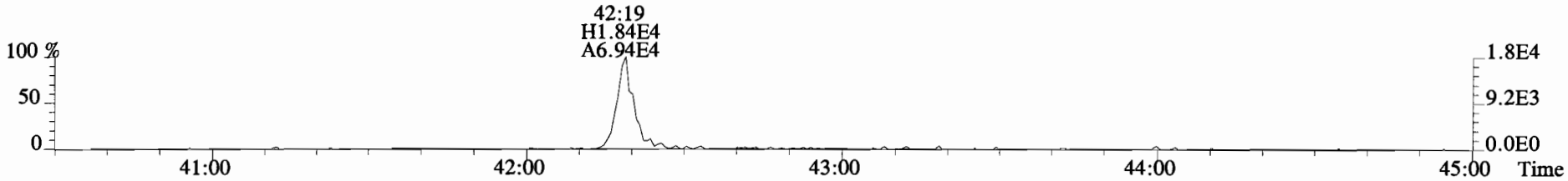
File:141027D2 #1-326 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



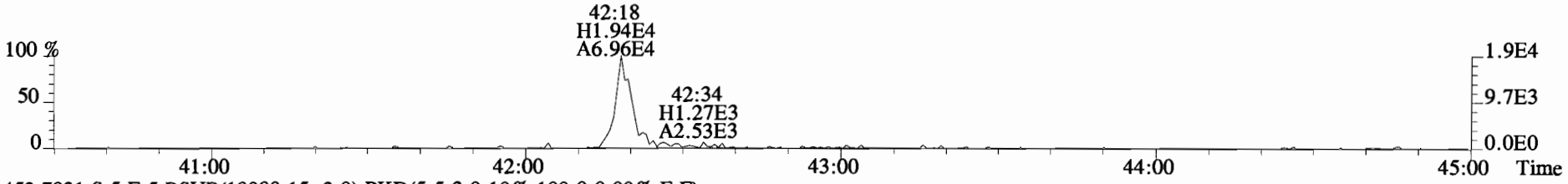
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



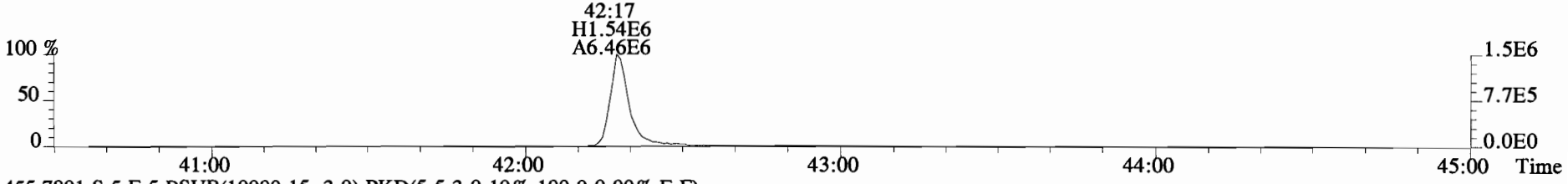
File:141027D2 #1-388 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 Exp:OCDD_DB5
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



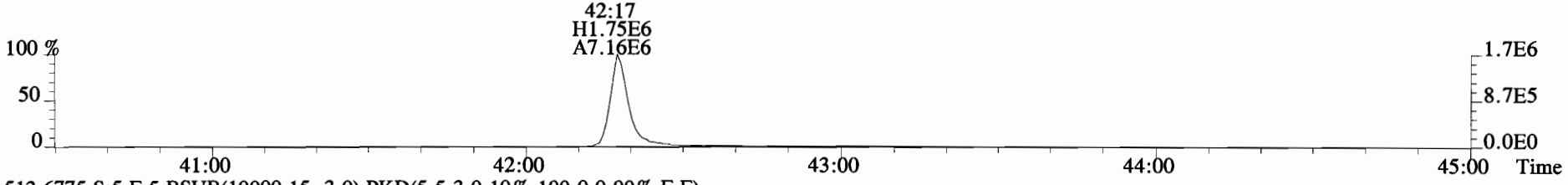
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



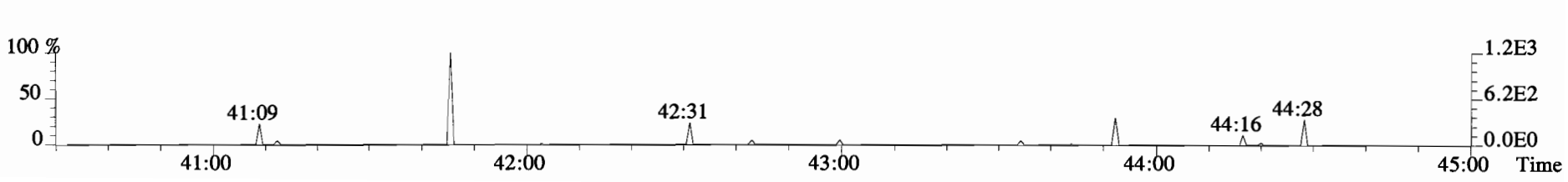
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



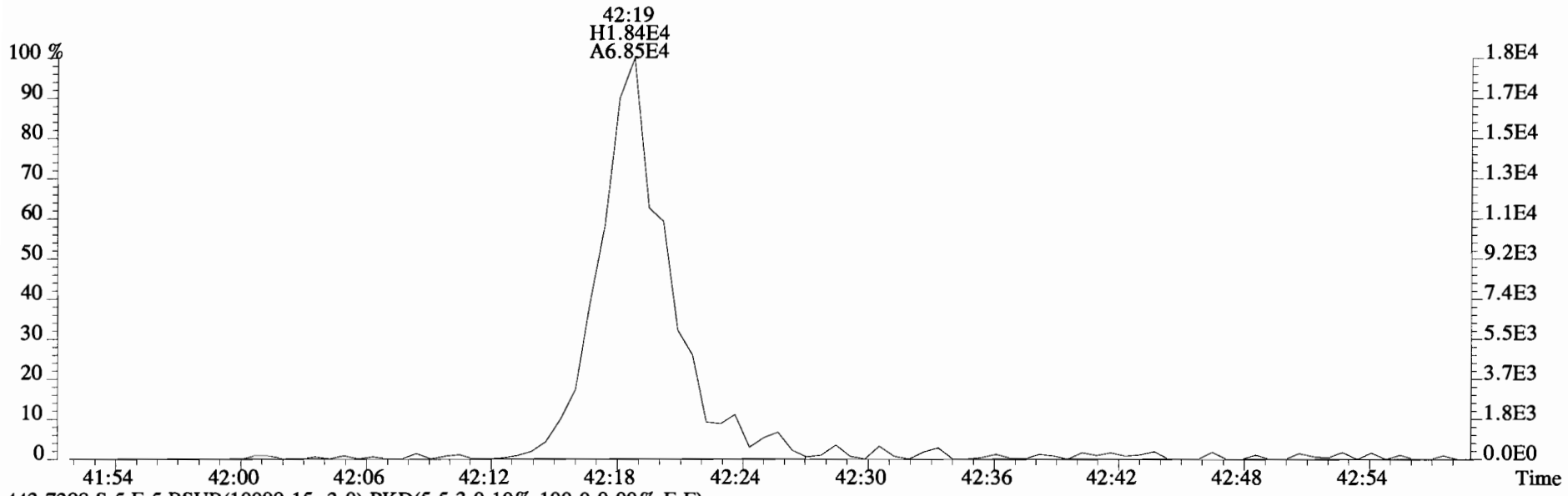
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



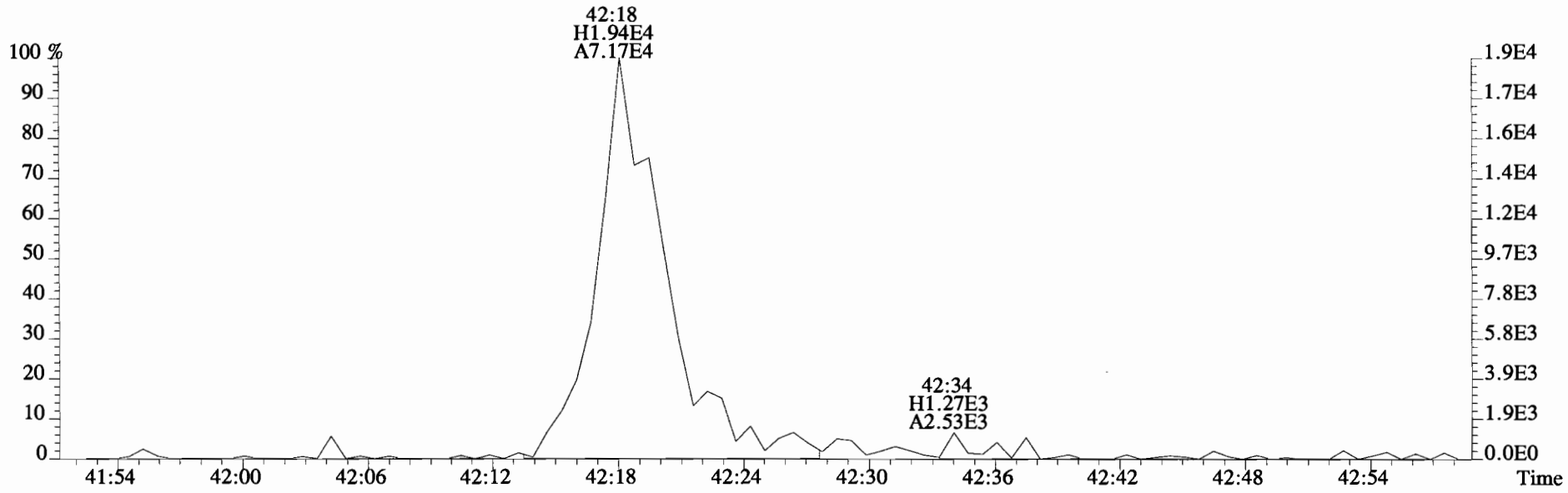
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:141027D2 #1-388 Acq:28-OCT-2014 08:33:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Vista Analytical Laboratory VG-7 Text:1400781-03 IA-CV-01-20141020-W 1 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)



SAMPLE DATA

EPA Method 1668C

Client ID: Method Blank Filename: 141031E1 S:4 Acq:31-OCT-14 12:01:25 ConCal: ST141031E1-1

Lab ID: B4J0155-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	*		3400	2.5	3.38	*	0.996	1.006
Mono	PCB-2	*	*	n	NotF	1.18	*		3400	2.5	3.45	*	0.983	0.993
Mono	PCB-3	*	*	n	NotF	1.22	*		3400	2.5	3.34	*	0.996	1.006
Di	PCB-4/10	*	*	n	NotF	1.55	*		10400	2.5	8.31	*	0.998	1.008
Di	PCB-7/9	*	*	n	NotF	1.27	*		10400	2.5	6.79	*	0.865	0.873
Di	PCB-6	*	*	n	NotF	1.26	*		10400	2.5	6.84	*	0.890	0.899
Di	PCB-5/8	*	*	n	NotF	1.23	*		10400	2.5	6.98	*	0.906	0.916
Di	PCB-14	*	*	n	NotF	1.23	*		10400	2.5	5.99	*	0.949	0.959
Di	PCB-11	1.51e+06	1.51	y	25:10	1.16	37.9		*	2.5	*	1.001	0.996	1.006
Di	PCB-12/13	*	*	n	NotF	1.10	*		10400	2.5	6.71	*	1.010	1.020
Di	PCB-15	*	*	n	NotF	1.21	*		10400	2.5	6.11	*	1.024	1.034
Tri	PCB-19	*	*	n	NotF	1.30	*		1960	2.5	1.65	*	0.996	1.006
Tri	PCB-30	*	*	n	NotF	1.83	*		1960	2.5	1.17	*	1.032	1.042
Tri	PCB-18	*	*	n	NotF	0.86	*		1960	2.5	1.59	*	0.949	0.959
Tri	PCB-17	*	*	n	NotF	0.90	*		1960	2.5	1.51	*	0.955	0.965
Tri	PCB-24/27	*	*	n	NotF	1.18	*		1960	2.5	1.16	*	0.976	0.986
Tri	PCB-16/32	*	*	n	NotF	1.03	*		1960	2.5	1.32	*	0.995	1.005
Tri	PCB-34	*	*	n	NotF	1.26	*		2240	2.5	1.49	*	0.956	0.966
Tri	PCB-23	*	*	n	NotF	1.31	*		2240	2.5	1.43	*	0.959	0.969
Tri	PCB-29	*	*	n	NotF	1.33	*		2240	2.5	1.41	*	0.967	0.977
Tri	PCB-26	*	*	n	NotF	1.29	*		2240	2.5	1.46	*	0.974	0.984
Tri	PCB-25	*	*	n	NotF	1.34	*		2240	2.5	1.40	*	0.980	0.990
Tri	PCB-31	6.58e+04	1.80	n	28:52	1.42	1.66	R	*	2.5	*	0.997	0.992	1.002
Tri	PCB-28	*	*	n	NotF	1.38	*		2240	2.5	1.36	*	0.996	1.006
Tri	PCB-20/21/33	*	*	n	NotF	1.31	*		2240	2.5	1.43	*	1.017	1.027
Tri	PCB-22	*	*	n	NotF	1.32	*		2240	2.5	1.42	*	1.032	1.042
Tri	PCB-36	*	*	n	NotF	1.38	*		2240	2.5	1.35	*	0.929	0.939
Tri	PCB-39	*	*	n	NotF	1.42	*		2240	2.5	1.31	*	0.943	0.953
Tri	PCB-38	*	*	n	NotF	1.35	*		2240	2.5	1.38	*	0.967	0.976
Tri	PCB-35	*	*	n	NotF	1.38	*		2240	2.5	1.35	*	0.982	0.992
Tri	PCB-37	*	*	n	NotF	1.39	*		2240	2.5	1.34	*	0.996	1.006
Tetra	PCB-54	*	*	n	NotF	1.20	*		2240	2.5	1.54	*	0.996	1.006
Tetra	PCB-50	*	*	n	NotF	0.97	*		2240	2.5	1.91	*	1.037	1.047
Tetra	PCB-53	*	*	n	NotF	1.19	*		2240	2.5	1.83	*	0.941	0.951
Tetra	PCB-51	*	*	n	NotF	1.15	*		2240	2.5	1.89	*	0.952	0.962
Tetra	PCB-45	*	*	n	NotF	0.97	*		2240	2.5	2.25	*	0.966	0.976
Tetra	PCB-46	*	*	n	NotF	0.95	*		2240	2.5	2.29	*	0.982	0.992

Integrations by:

Analyst: DMS

Date: 11/3/14

Reviewed by: CT

Date: 11/3/14

Client ID: Method Blank Filename: 141031E1 S:4 Acq:31-OCT-14 12:01:25 ConCal: ST141031E1-1
Lab ID: B4J0155-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	*		2240	2.5	1.70	*	0.996	1.006
Tetra	PCB-73	*	*	n	NotF¶	1.37	*		2240	2.5	1.59	*	1.000	1.010
Tetra	PCB-43/49	*	*	n	NotF¶	1.11	*		2240	2.5	1.95	*	1.005	1.015
Tetra	PCB-47	*	*	n	NotF¶	1.13	*		2240	2.5	1.79	*	0.996	1.006
Tetra	PCB-48/75	*	*	n	NotF¶	1.30	*		2240	2.5	1.55	*	0.999	1.009
Tetra	PCB-65	*	*	n	NotF¶	1.33	*		2240	2.5	1.52	*	1.007	1.017
Tetra	PCB-62	*	*	n	NotF¶	1.29	*		2240	2.5	1.57	*	1.011	1.021
Tetra	PCB-44	*	*	n	NotF¶	0.94	*		2240	2.5	2.16	*	1.020	1.030
Tetra	PCB-42/59	*	*	n	NotF¶	1.22	*		2240	2.5	1.67	*	1.028	1.038
Tetra	PCB-41/64/71/72	*	*	n	NotF¶	1.31	*		2240	2.5	1.55	*	1.046	1.056
Tetra	PCB-68	*	*	n	NotF¶	1.49	*		2240	2.5	1.37	*	1.054	1.064
Tetra	PCB-40	*	*	n	NotF¶	0.82	*		2240	2.5	2.48	*	1.061	1.071
Tetra	PCB-57	*	*	n	NotF¶	1.11	*		2240	2.5	1.34	*	0.965	0.975
Tetra	PCB-67	*	*	n	NotF¶	1.07	*		2240	2.5	1.39	*	0.974	0.984
Tetra	PCB-58	*	*	n	NotF¶	1.10	*		2240	2.5	1.36	*	0.977	0.987
Tetra	PCB-63	*	*	n	NotF¶	1.12	*		2240	2.5	1.34	*	0.982	0.992
Tetra	PCB-74	*	*	n	NotF¶	1.20	*		2240	2.5	1.24	*	0.990	1.000
Tetra	PCB-61/70	*	*	n	NotF¶	1.08	*		2240	2.5	1.38	*	0.994	1.004
Tetra	PCB-76/66	*	*	n	NotF¶	1.14	*		2240	2.5	1.31	*	1.001	1.011
Tetra	PCB-80	*	*	n	NotF¶	1.28	*		2240	2.5	1.19	*	0.996	1.006
Tetra	PCB-55	*	*	n	NotF¶	1.11	*		2240	2.5	1.37	*	1.005	1.015
Tetra	PCB-56/60	4.60e+04	0.99	n	36:35	1.09	1.36	R	*	2.5	*	1.024	1.018	1.028
Tetra	PCB-79	*	*	n	NotF¶	1.12	*		2240	2.5	1.36	*	1.048	1.058
Tetra	PCB-78	*	*	n	NotF¶	1.24	*		2240	2.5	1.32	*	0.982	0.992
Tetra	PCB-81	*	*	n	NotF¶	1.38	*		2240	2.5	1.18	*	0.995	1.005
Tetra	PCB-77	*	*	n	NotF¶	1.21	*		2240	2.5	1.33	*	0.995	1.005
Penta	PCB-104	*	*	n	NotF¶	1.26	*		2510	2.5	3.42	*	0.996	1.006
Penta	PCB-96	*	*	n	NotF¶	1.09	*		2510	2.5	3.93	*	1.034	1.044
Penta	PCB-103	*	*	n	NotF¶	0.93	*		2510	2.5	4.61	*	1.050	1.060
Penta	PCB-100	*	*	n	NotF¶	1.00	*		2510	2.5	4.29	*	1.061	1.071
Penta	PCB-94	*	*	n	NotF¶	1.11	*		2510	2.5	4.96	*	0.981	0.991
Penta	PCB-95/98/102	*	*	n	NotF¶	1.21	*		2510	2.5	4.52	*	0.994	1.004
Penta	PCB-93	*	*	n	NotF¶	1.13	*		2510	2.5	4.86	*	0.998	1.008
Penta	PCB-88/91	*	*	n	NotF¶	1.02	*		1530	2.5	3.29	*	1.006	1.016
Penta	PCB-121	*	*	n	NotF¶	1.90	*		1530	2.5	1.76	*	1.009	1.019
Penta	PCB-84/92	*	*	n	NotF¶	1.05	*		1530	2.5	2.82	*	0.986	0.996
Penta	PCB-89	*	*	n	NotF¶	1.02	*		1530	2.5	2.91	*	0.991	1.001

Analyst: DMS

Date: 11/3/14

Client ID: Method Blank Filename: 141031E1 S:4 Acq:31-OCT-14 12:01:25 ConCal: ST141031E1-1

Lab ID: B4J0155-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	*	*	n NotF¶	1.19	*		1530	2.5	2.49	*	0.996	1.006
Penta	PCB-113	*	*	n NotF¶	1.35	*		1530	2.5	2.19	*	1.002	1.012
Penta	PCB-99	*	*	n NotF¶	1.29	*		1530	2.5	2.30	*	1.005	1.015
Penta	PCB-119	*	*	n NotF¶	1.72	*		1530	2.5	1.90	*	0.982	0.992
Penta	PCB-108/112	*	*	n NotF¶	1.29	*		1530	2.5	2.54	*	0.986	0.996
Penta	PCB-83	*	*	n NotF¶	1.52	*		1530	2.5	2.16	*	0.991	1.001
Penta	PCB-97	*	*	n NotF¶	1.25	*		1530	2.5	2.63	*	0.996	1.006
Penta	PCB-86	*	*	n NotF¶	1.02	*		1530	2.5	3.21	*	1.000	1.010
Penta	PCB-87/117/125	*	*	n NotF¶	1.56	*		1530	2.5	2.10	*	1.002	1.012
Penta	PCB-111/115	*	*	n NotF¶	1.75	*		1530	2.5	1.87	*	1.007	1.017
Penta	PCB-85/116	*	*	n NotF¶	1.30	*		1530	2.5	2.52	*	1.010	1.020
Penta	PCB-120	*	*	n NotF¶	1.78	*		1530	2.5	1.84	*	1.016	1.026
Penta	PCB-110	*	*	n NotF¶	1.68	*		1530	2.5	1.95	*	1.020	1.030
Penta	PCB-82	*	*	n NotF¶	0.74	*		1530	2.5	3.25	*	0.972	0.982
Penta	PCB-124	*	*	n NotF¶	1.32	*		1530	2.5	1.81	*	0.988	0.998
Penta	PCB-107/109	*	*	n NotF¶	1.22	*		1530	2.5	1.96	*	0.991	1.001
Penta	PCB-123	*	*	n NotF¶	1.22	*		1530	2.5	1.97	*	0.995	1.005
Penta	PCB-106/118	*	*	n NotF¶	1.22	*		1530	2.5	1.90	*	0.996	1.006
Penta	PCB-114	*	*	n NotF¶	1.36	*		1640	2.5	1.53	*	0.995	1.005
Penta	PCB-122	*	*	n NotF¶	1.24	*		1640	2.5	1.68	*	0.999	1.009
Penta	PCB-105	*	*	n NotF¶	1.28	*		1640	2.5	1.45	*	0.995	1.005
Penta	PCB-127	*	*	n NotF¶	1.14	*		1640	2.5	1.51	*	0.995	1.005
Penta	PCB-126	*	*	n NotF¶	1.28	*		1640	2.5	1.58	*	0.995	1.005
Hexa	PCB-155	*	*	n NotF¶	1.14	*		2110	2.5	3.63	*	0.966	1.006
Hexa	PCB-150	*	*	n NotF¶	1.06	*		2110	2.5	3.88	*	1.030	1.040
Hexa	PCB-152	*	*	n NotF¶	1.10	*		2110	2.5	3.75	*	1.043	1.053
Hexa	PCB-145	*	*	n NotF¶	1.09	*		2110	2.5	3.77	*	1.055	1.065
Hexa	PCB-136	*	*	n NotF¶	1.08	*		2110	2.5	3.80	*	1.064	1.074
Hexa	PCB-148	*	*	n NotF¶	0.74	*		1320	2.5	3.48	*	1.066	1.076
Hexa	PCB-154	*	*	n NotF¶	0.88	*		1320	2.5	2.91	*	1.079	1.089
Hexa	PCB-151	*	*	n NotF¶	0.81	*		1320	2.5	3.19	*	1.097	1.107
Hexa	PCB-135	*	*	n NotF¶	0.78	*		1320	2.5	3.31	*	1.101	1.113
Hexa	PCB-144	*	*	n NotF¶	0.82	*		1320	2.5	3.14	*	1.105	1.116
Hexa	PCB-147	*	*	n NotF¶	0.83	*		1320	2.5	3.11	*	1.011	1.120
Hexa	PCB-139/149	*	*	n NotF¶	0.84	*		1320	2.5	3.05	*	1.115	1.127
Hexa	PCB-140	*	*	n NotF¶	0.79	*		1320	2.5	3.28	*	1.120	1.132
Hexa	PCB-134/143	*	*	n NotF¶	0.93	*		1600	2.5	2.00	*	0.970	0.980

Analyst: DMS

Date: 11/3/14

Client ID: Method Blank Filename: 141031E1 S:4 Acq:31-OCT-14 12:01:25 ConCal: ST141031E1-1
Lab ID: B4J0155-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	*		1600	2.5	1.96	*	0.977-0.987
Hexa	PCB-131	*	*	n NotF¶	0.91	*		1600	2.5	2.03	*	0.981-0.991
Hexa	PCB-146/165	*	*	n NotF¶	1.16	*		1600	2.5	1.60	*	0.986-0.996
Hexa	PCB-132/161	*	*	n NotF¶	1.11	*		1600	2.5	1.66	*	0.992-1.002
Hexa	PCB-153	*	*	n NotF¶	1.18	*		1600	2.5	1.57	*	0.995-1.005
Hexa	PCB-168	*	*	n NotF¶	1.37	*		1600	2.5	1.35	*	1.000-1.010
Hexa	PCB-141	*	*	n NotF¶	0.97	*		1600	2.5	1.89	*	0.996-1.005
Hexa	PCB-137	*	*	n NotF¶	1.07	*		1600	2.5	1.72	*	1.004-1.014
Hexa	PCB-130	*	*	n NotF¶	0.85	*		1600	2.5	2.18	*	1.007-1.017
Hexa	PCB-138/163/164	*	*	n NotF¶	1.23	*		1600	2.5	1.49	*	0.996-1.006
Hexa	PCB-158/160	*	*	n NotF¶	1.29	*		1600	2.5	1.41	*	1.001-1.011
Hexa	PCB-129	*	*	n NotF¶	0.92	*		1600	2.5	1.97	*	1.007-1.017
Hexa	PCB-166	*	*	n NotF¶	1.12	*		1600	2.5	1.42	*	0.988-0.998
Hexa	PCB-159	*	*	n NotF¶	1.16	*		1600	2.5	1.36	*	0.995-1.005
Hexa	PCB-128/162	*	*	n NotF¶	1.02	*		1600	2.5	1.55	*	1.002-1.012
Hexa	PCB-167	*	*	n NotF¶	1.06	*		1600	2.5	1.37	*	0.995-1.005
Hexa	PCB-156	*	*	n NotF¶	1.18	*		1600	2.5	1.31	*	0.995-1.005
Hexa	PCB-157	*	*	n NotF¶	1.08	*		1600	2.5	1.37	*	0.995-1.005
Hexa	PCB-169	*	*	n NotF¶	1.11	*		1600	2.5	1.36	*	0.995-1.005
Hepta	PCB-188	*	*	n NotF¶	1.40	*		1540	2.5	1.13	*	0.995-1.005
Hepta	PCB-184	*	*	n NotF¶	1.24	*		1540	2.5	1.29	*	1.006-1.016
Hepta	PCB-179	*	*	n NotF¶	1.30	*		1540	2.5	1.22	*	1.024-1.034
Hepta	PCB-176	*	*	n NotF¶	1.36	*		1540	2.5	1.17	*	1.035-1.045
Hepta	PCB-186	*	*	n NotF¶	1.28	*		1540	2.5	1.25	*	1.049-1.059
Hepta	PCB-178	*	*	n NotF¶	0.94	*		1540	2.5	1.70	*	1.061-1.071
Hepta	PCB-175	*	*	n NotF¶	0.97	*		1540	2.5	1.64	*	1.069-1.079
Hepta	PCB-182/187	*	*	n NotF¶	1.01	*		1540	2.5	1.57	*	1.073-1.083
Hepta	PCB-183	*	*	n NotF¶	1.08	*		1540	2.5	1.47	*	1.080-1.090
Hepta	PCB-185	*	*	n NotF¶	1.34	*		1540	2.5	1.32	*	0.951-0.961
Hepta	PCB-174	*	*	n NotF¶	1.34	*		1540	2.5	1.32	*	0.958-0.968
Hepta	PCB-181	*	*	n NotF¶	1.36	*		1540	2.5	1.30	*	0.961-0.971
Hepta	PCB-177	*	*	n NotF¶	1.24	*		1540	2.5	1.42	*	0.964-0.974
Hepta	PCB-171	*	*	n NotF¶	1.31	*		1540	2.5	1.35	*	0.970-0.980
Hepta	PCB-173	*	*	n NotF¶	1.16	*		1540	2.5	1.52	*	0.979-0.989
Hepta	PCB-172	*	*	n NotF¶	1.22	*		1540	2.5	1.45	*	0.988-0.998
Hepta	PCB-192	*	*	n NotF¶	1.53	*		1540	2.5	1.16	*	0.991-1.001
Hepta	PCB-180	*	*	n NotF¶	1.43	*		1540	2.5	1.24	*	0.995-1.005

Analyst: DMS

Date: 11/3/14

Client ID: Method Blank Filename: 141031E1 S:4 Acq:31-OCT-14 12:01:25 ConCal: ST141031E1-1
Lab ID: B4J0155-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	*		1540	2.5	1.07	*	0.999	1.009
Hepta	PCB-191	*	*	n NotF╖	1.67	*		1540	2.5	1.06	*	1.004	1.014
Hepta	PCB-170	*	*	n NotF╖	1.50	*		1540	2.5	1.33	*	0.995	1.005
Hepta	PCB-190	*	*	n NotF╖	2.02	*		1540	2.5	0.989	*	0.998	1.008
Hepta	PCB-189	*	*	n NotF╖	1.54	*		1540	2.5	1.03	*	0.995	1.005
Octa	PCB-202	*	*	n NotF╖	1.04	*		1430	2.5	1.99	*	0.995	1.005
Octa	PCB-201	*	*	n NotF╖	1.10	*		1430	2.5	1.88	*	1.006	1.016
Octa	PCB-204	*	*	n NotF╖	0.99	*		1430	2.5	2.08	*	1.009	1.019
Octa	PCB-197	*	*	n NotF╖	1.07	*		1430	2.5	1.93	*	1.015	1.025
Octa	PCB-200	*	*	n NotF╖	1.02	*		1430	2.5	2.03	*	1.032	1.044
Octa	PCB-198	*	*	n NotF╖	0.74	*		1430	2.5	2.78	*	1.058	1.068
Octa	PCB-199	*	*	n NotF╖	0.73	*		1430	2.5	2.84	*	1.060	1.070
Octa	PCB-196/203	*	*	n NotF╖	0.77	*		1430	2.5	2.68	*	1.066	1.076
Octa	PCB-195	*	*	n NotF╖	1.20	*		1570	2.5	1.43	*	0.979	0.989
Octa	PCB-194	*	*	n NotF╖	1.25	*		1570	2.5	1.37	*	0.995	1.005
Octa	PCB-205	*	*	n NotF╖	1.41	*		1570	2.5	1.21	*	1.001	1.011
Nona	PCB-208	*	*	n NotF╖	0.96	*		1490	2.5	1.09	*	0.995	1.005
Nona	PCB-207	*	*	n NotF╖	0.92	*		1490	2.5	1.14	*	1.001	1.011
Nona	PCB-206	*	*	n NotF╖	1.03	*		1490	2.5	2.27	*	0.995	1.005
Deca	PCB-209	*	*	n NotF╖	1.18	*		1090	2.5	2.48	*	0.995	1.005

Analyst: DMS

Date: 11/3/14

Client ID: Method Blank Filename: 141031E1 S:4 Acq:31-OCT-14 12:01:25 ConCal: ST141031E1-1
Lab ID: B4J0155-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	1.51e+06	1.51	y	25:10	1.21	37.9276	
Total Tri-PCB	*	*	n	NotFnd	1.16	*	
Total Tri-PCB	*	*	n	NotFnd	1.35	*	Sum:0.00000
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:40.9536920000

Integrations by Analyst: DMS

Date: 11/3/14

Client ID: Method Blank Filename: 141031E1 S:4 Acq:31-OCT-14 12:01:25 ConCal: ST141031E1-1
Lab ID: B4J0155-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	5.60e+07	3.45	y	0.89	16:20	0.632	0.622	0.628	1290	64.6
13C-PCB-3	6.02e+07	3.30	y	0.93	18:50	0.729	0.721	0.729	1330	66.7
13C-PCB-4	3.78e+07	1.57	y	0.55	20:07	0.778	0.772	0.780	1420	70.8
13C-PCB-9	5.67e+07	1.58	y	0.83	21:51	0.845	0.840	0.848	1410	70.4
13C-PCB-11	6.88e+07	1.56	y	0.94	25:09	0.973	0.968	0.978	1510	75.3
13C-PCB-19	3.54e+07	1.09	y	0.53	24:10	0.935	0.929	0.939	1370	68.3
13C-PCB-28	5.58e+07	1.03	y	0.89	28:57	1.003	0.999	1.009	1440	72.1
13C-PCB-32	5.72e+07	1.10	y	0.81	27:01	1.045	1.041	1.051	1440	72.1
13C-PCB-37	5.60e+07	1.03	y	0.83	32:48	1.137	1.131	1.143	1540	77.2
13C-PCB-47	4.46e+07	0.81	y	0.74	31:50	0.870	0.867	0.875	1490	74.3
13C-PCB-52	4.26e+07	0.79	y	0.71	31:19	0.856	0.853	0.861	1490	74.6
13C-PCB-54	4.80e+07	0.81	y	0.85	27:52	0.762	0.758	0.766	1400	70.0
13C-PCB-70	6.16e+07	0.82	y	0.94	35:20	0.966	0.961	0.971	1620	80.8
13C-PCB-77	6.16e+07	0.80	y	0.89	39:28	1.079	1.073	1.083	1710	85.4
13C-PCB-80	6.22e+07	0.83	y	0.96	35:44	0.977	0.972	0.982	1600	80.0
13C-PCB-81	5.72e+07	0.80	y	0.84	38:52	1.062	1.057	1.067	1690	84.5
13C-PCB-95	2.73e+07	1.65	y	0.74	35:39	0.913	0.908	0.918	1490	74.3
13C-PCB-97	2.83e+07	1.63	y	0.69	38:37	0.989	0.984	0.994	1660	83.1
13C-PCB-101	3.05e+07	1.60	y	0.79	37:19	0.956	0.951	0.961	1570	78.7
13C-PCB-104	3.39e+07	1.57	y	1.00	32:30	0.833	0.829	0.837	1380	68.9
13C-PCB-105	5.39e+07	1.61	y	1.24	42:54	0.929	0.924	0.934	1610	80.5
13C-PCB-114	5.00e+07	1.64	y	1.21	42:02	0.910	0.905	0.915	1530	76.6
13C-PCB-118	4.03e+07	1.60	y	0.98	41:22	1.060	1.054	1.064	1650	82.7
13C-PCB-123	3.81e+07	1.54	y	0.95	41:11	1.055	1.049	1.059	1620	81.2
13C-PCB-126	5.33e+07	1.60	y	1.16	45:08	0.977	0.972	0.982	1700	84.8
13C-PCB-127	5.86e+07	1.61	y	1.34	43:13	0.935	0.931	0.941	1610	80.7
13C-PCB-138	4.71e+07	1.24	y	1.04	44:38	0.966	0.961	0.971	1670	83.4
13C-PCB-141	4.72e+07	1.29	y	1.07	43:47	0.948	0.943	0.953	1630	81.6
13C-PCB-153	4.72e+07	1.28	y	1.11	43:02	0.931	0.927	0.937	1570	78.5
13C-PCB-155	2.59e+07	1.25	y	0.83	36:51	0.944	0.939	0.949	1260	63.0
13C-PCB-156	5.79e+07	1.29	y	1.24	47:55	1.037	1.032	1.042	1720	86.0
13C-PCB-157	6.20e+07	1.29	y	1.31	48:11	1.043	1.037	1.047	1750	87.5
13C-PCB-159	5.41e+07	1.28	y	1.20	45:55	0.994	0.989	0.999	1670	83.4
13C-PCB-167	6.01e+07	1.28	y	1.32	46:36	1.009	1.004	1.014	1680	84.1
13C-PCB-169	5.60e+07	1.30	y	1.22	50:16	1.088	1.082	1.092	1700	85.2
13C-PCB-170	2.48e+07	0.47	y	0.54	50:38	1.096	1.089	1.101	1710	85.6
13C-PCB-180	3.01e+07	0.47	y	0.67	49:12	1.065	1.059	1.069	1660	82.8
13C-PCB-188	3.36e+07	0.46	y	0.94	42:41	0.924	0.919	0.929	1330	66.4
13C-PCB-189	3.24e+07	0.46	y	0.72	52:06	1.128	1.120	1.132	1680	83.8
13C-PCB-194	3.74e+07	0.91	y	0.81	53:36	0.994	0.990	1.000	1830	91.7
13C-PCB-202	3.26e+07	0.93	y	0.83	48:08	1.042	1.036	1.046	1450	72.5
13C-PCB-206	2.88e+07	0.78	y	0.66	55:19	1.026	1.021	1.031	1740	86.8
13C-PCB-208	4.76e+07	0.77	y	1.12	52:51	0.981	0.976	0.986	1680	84.1
13C-PCB-209	2.23e+07	1.20	y	0.61	56:38	1.051	1.044	1.054	1440	72.1

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	6.96e+07	0.78	y	1.01	37:38	1.029	1.023	1.033	1710	85.7
13C-PCB-178	2.84e+07	0.47	y	0.63	45:29	0.984	0.979	0.989	1660	83.2

PS vs. IS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	6.96e+07	0.78	y	1.20	37:38	0.968	0.963	0.973	2030	101
13C-PCB-178	2.84e+07	0.47	y	0.94	45:29	0.924	0.920	0.930	2010	100

RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	9.75e+07	1.59	y	1.00	25:51	2000
13C-PCB-31	8.73e+07	1.06	y	1.00	28:51	2000
13C-PCB-60	8.07e+07	0.79	y	1.00	36:35	2000
13C-PCB-111	4.94e+07	1.54	y	1.00	39:02	2000
13C-PCB-128	5.41e+07	1.29	y	1.00	46:12	2000
13C-PCB-205	5.04e+07	0.90	y	1.00	53:54	2000

Analyst: DMS

Date: 11/3/14

File:141031E1 #1-728 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
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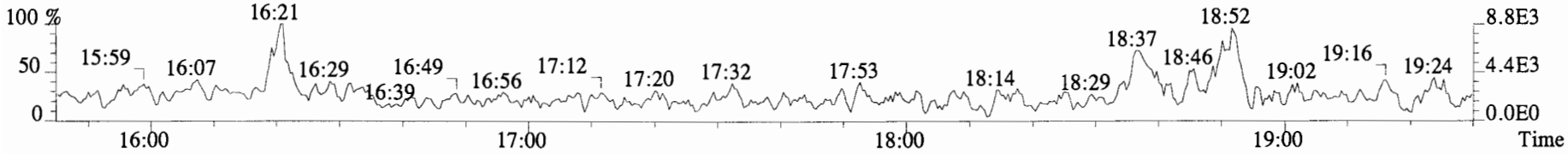

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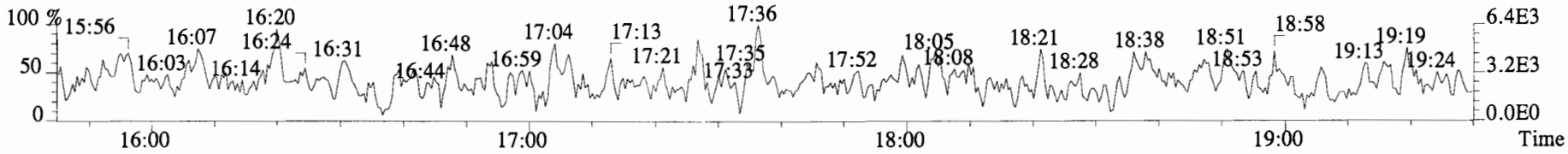
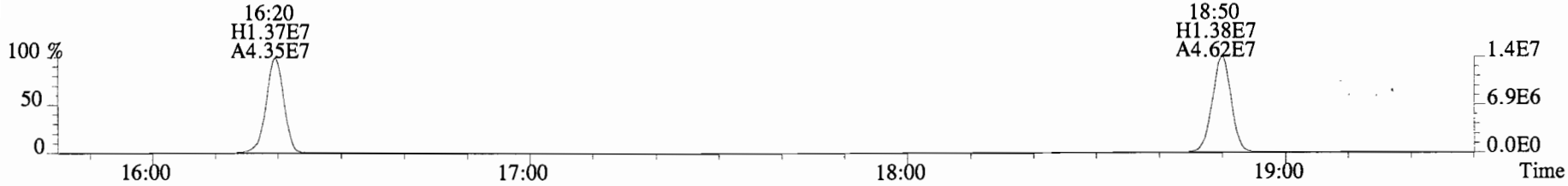
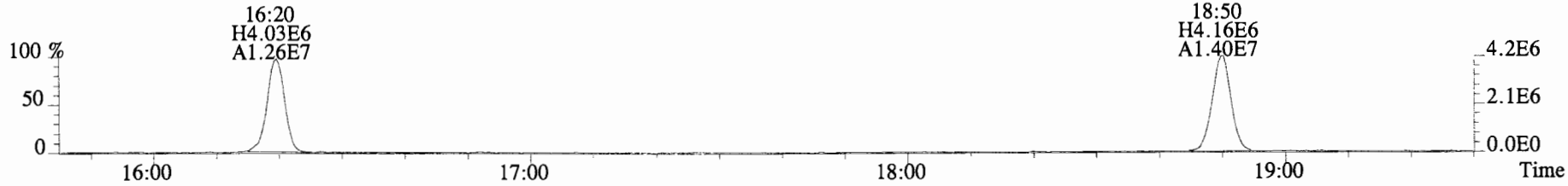


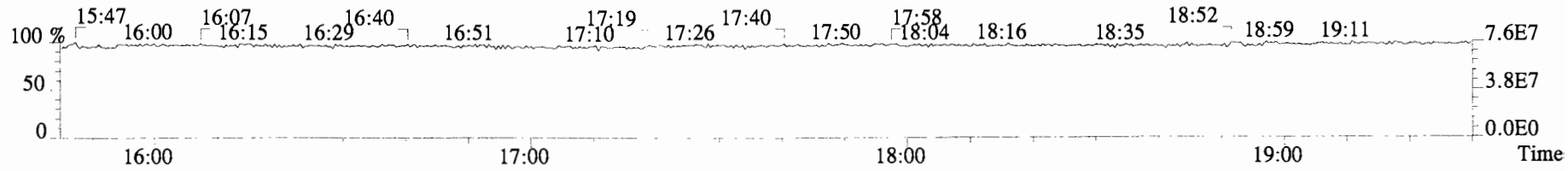
200.0795 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4480.0,0.00%,F,F)



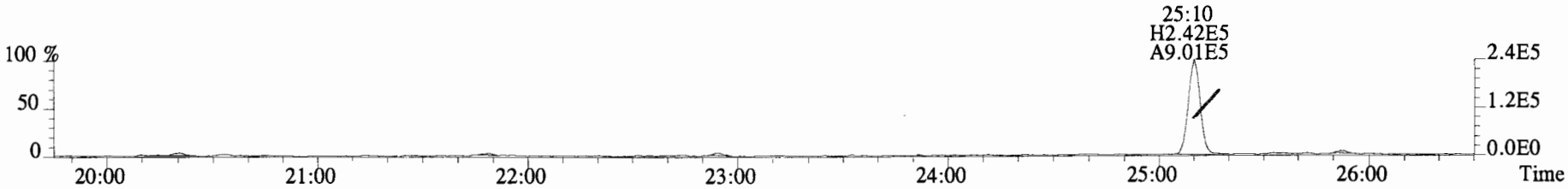
202.0766 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,34752.0,0.00%,F,F)



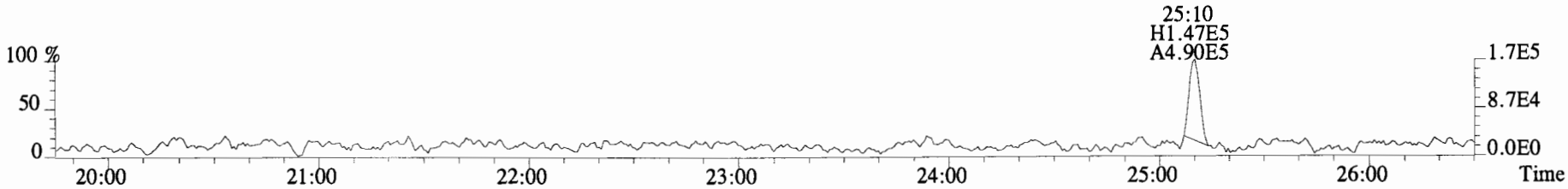
180.9880 S:4



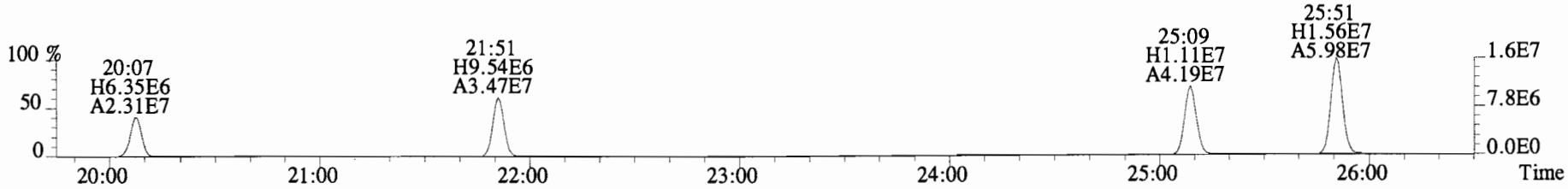
File:141031E1 #1-757 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2960.0,0.00%,F,F)



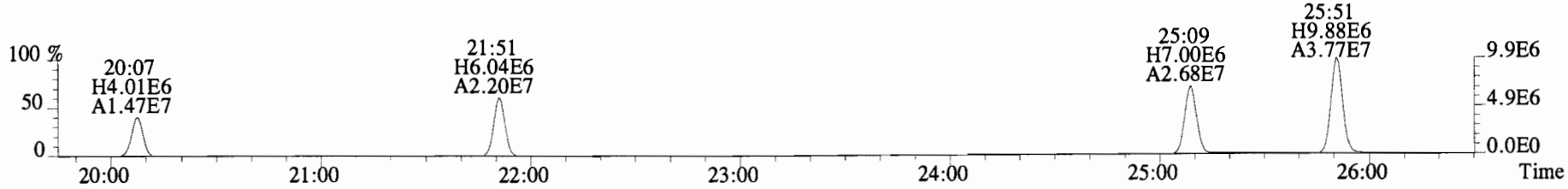
223.9974 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25772.0,0.00%,F,F)



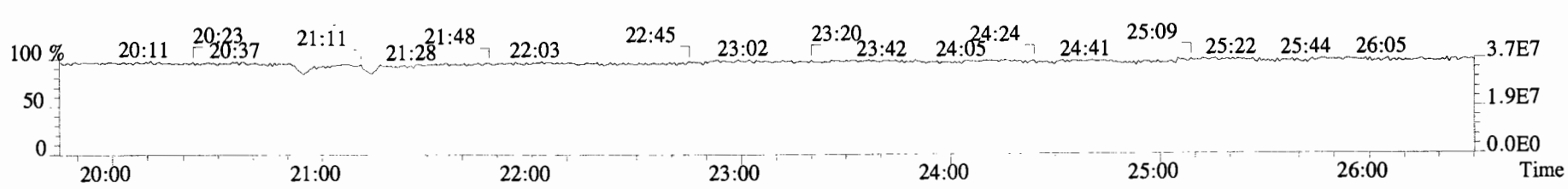
234.0406 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5372.0,0.00%,F,F)



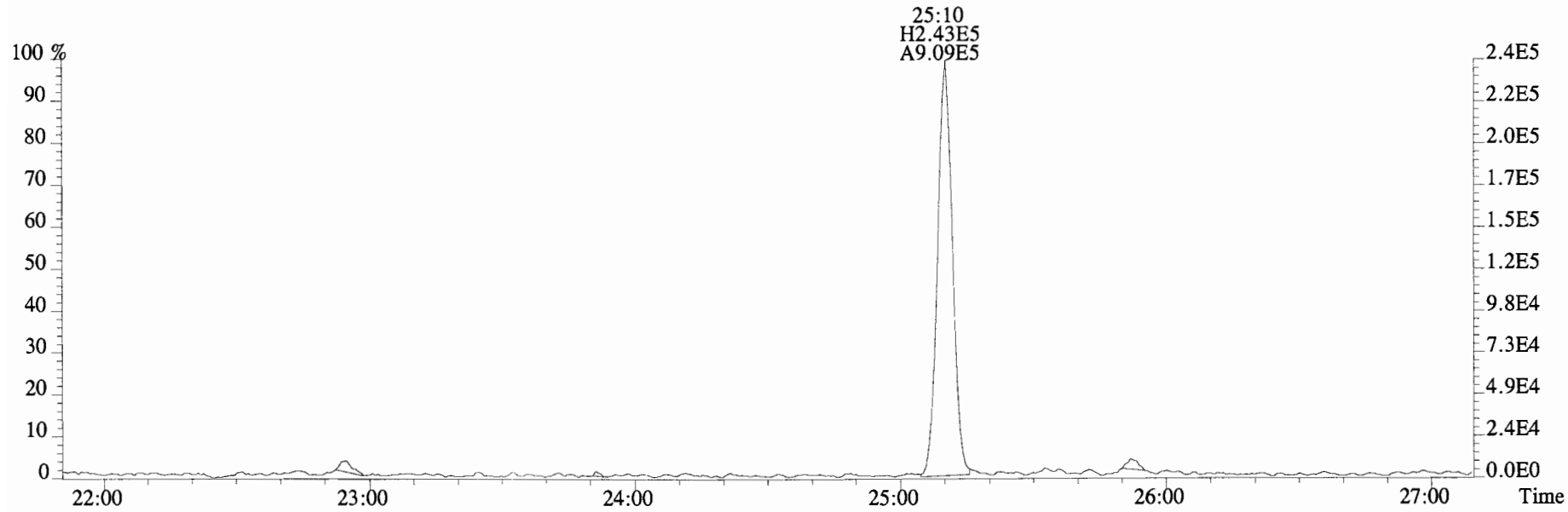
236.0376 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5776.0,0.00%,F,F)



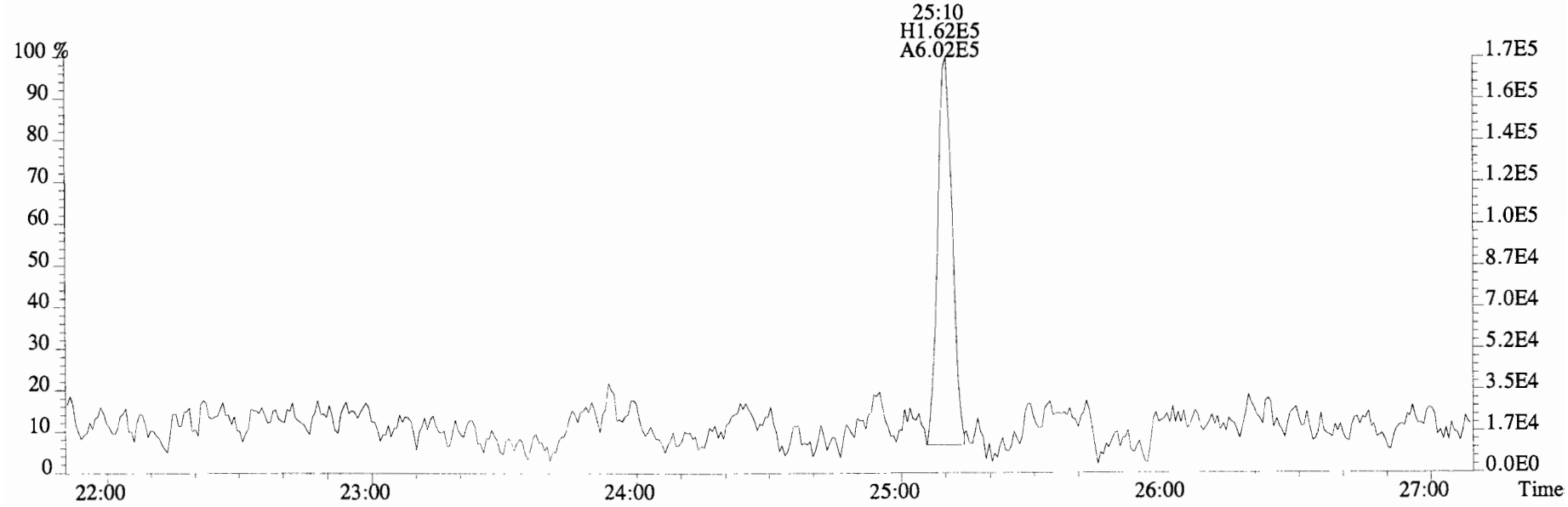
230.9856 S:4 F:2



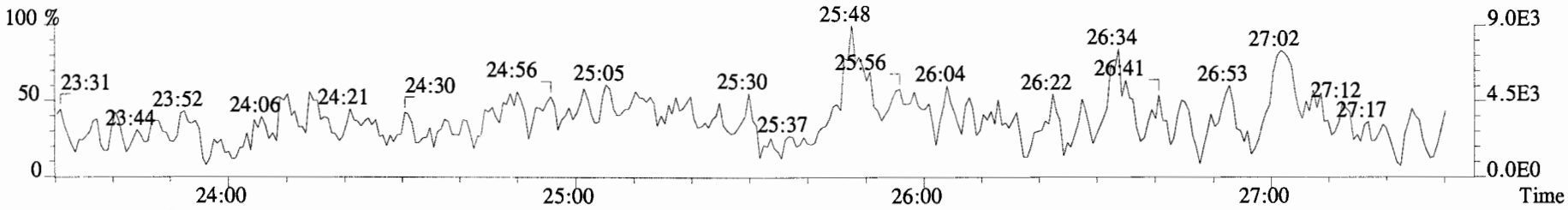
File:141031E1 #1-757 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2960.0,0.00%,F,F)



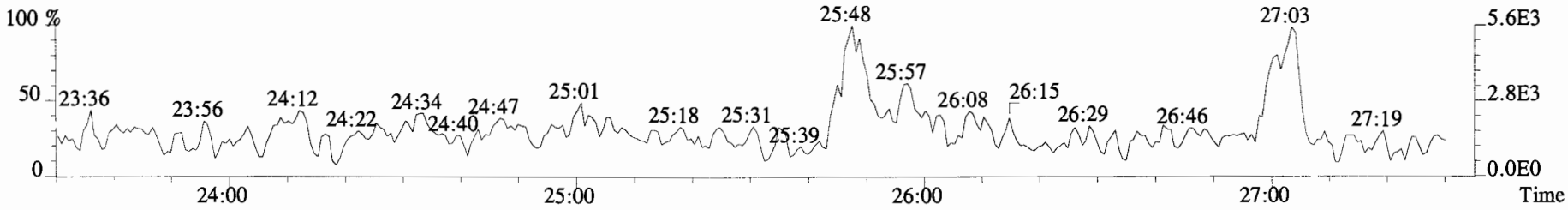
223.9974 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25772.0,0.00%,F,F)



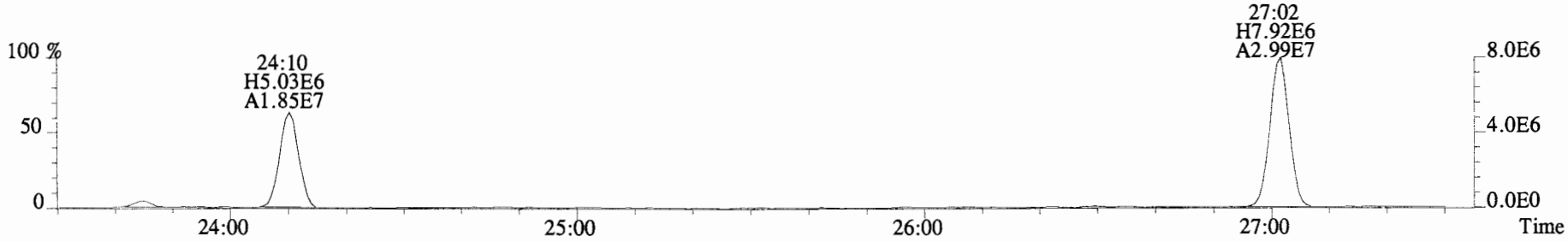
File:141031E1 #1-757 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4172.0,0.00%,F,F)



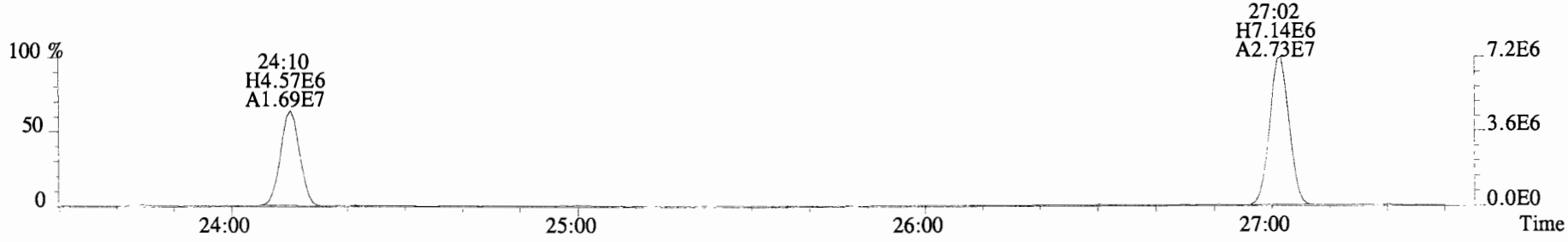
257.9584 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1956.0,0.00%,F,F)



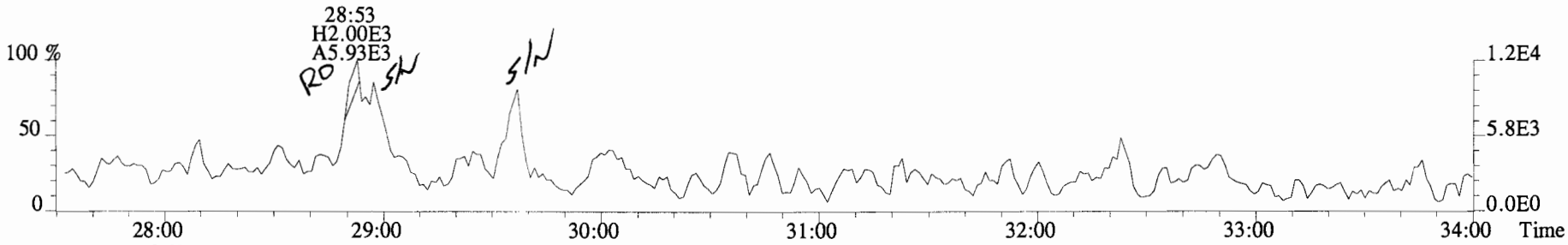
268.0016 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,50444.0,0.00%,F,F)



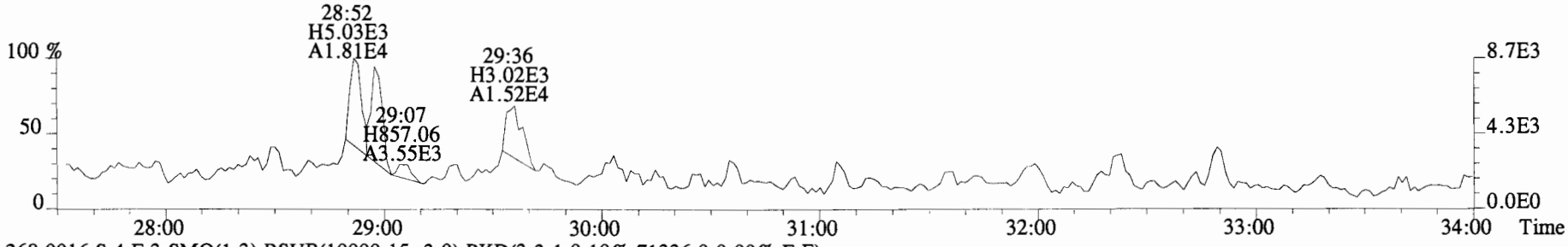
269.9986 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,34436.0,0.00%,F,F)



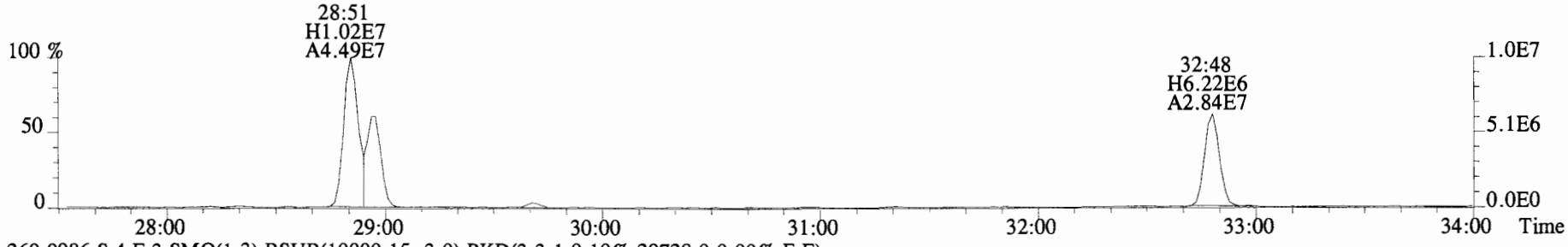
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3228.0,0.00%,F,F)



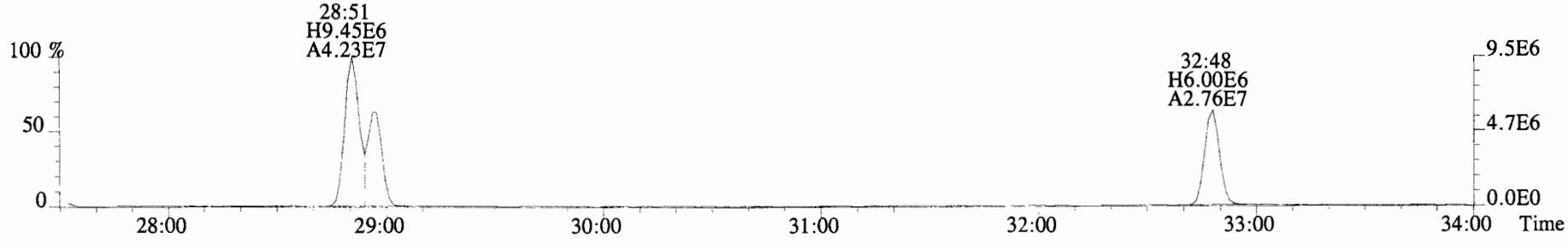
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2244.0,0.00%,F,F)



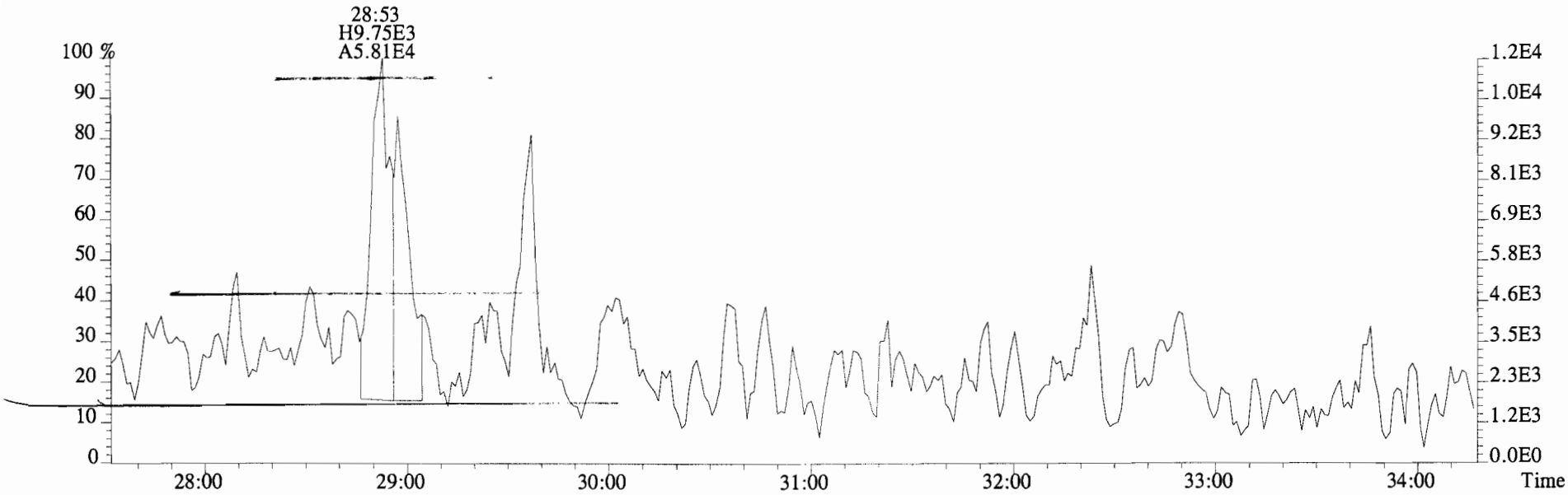
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,71336.0,0.00%,F,F)



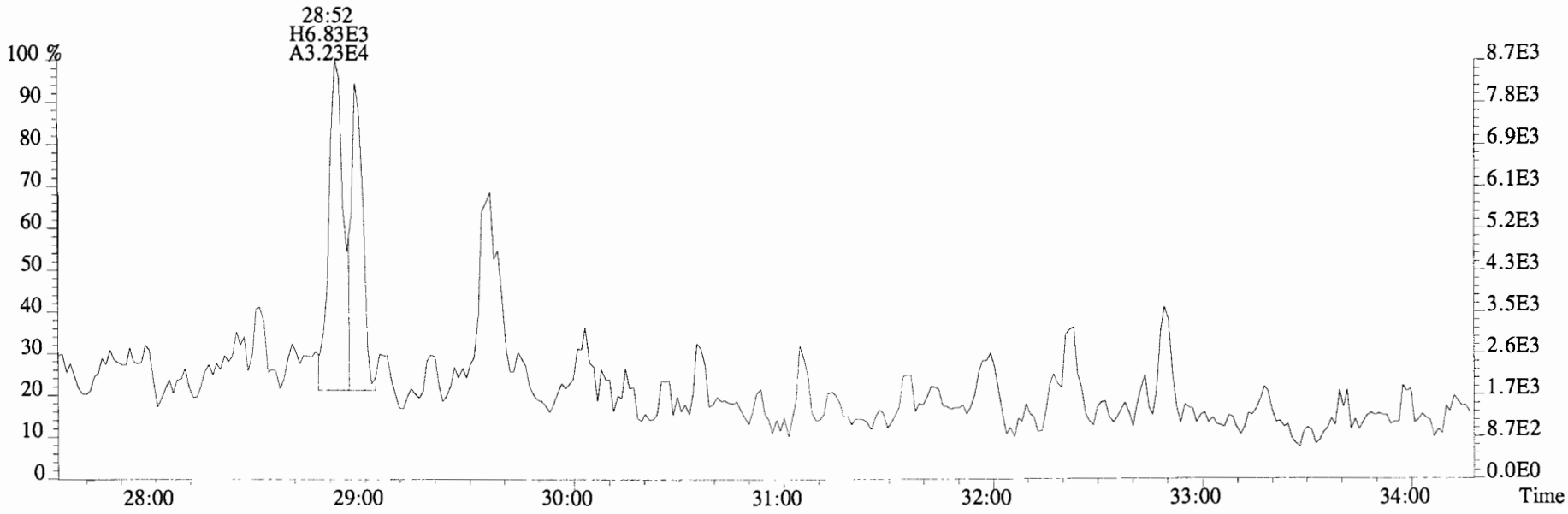
269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,29728.0,0.00%,F,F)



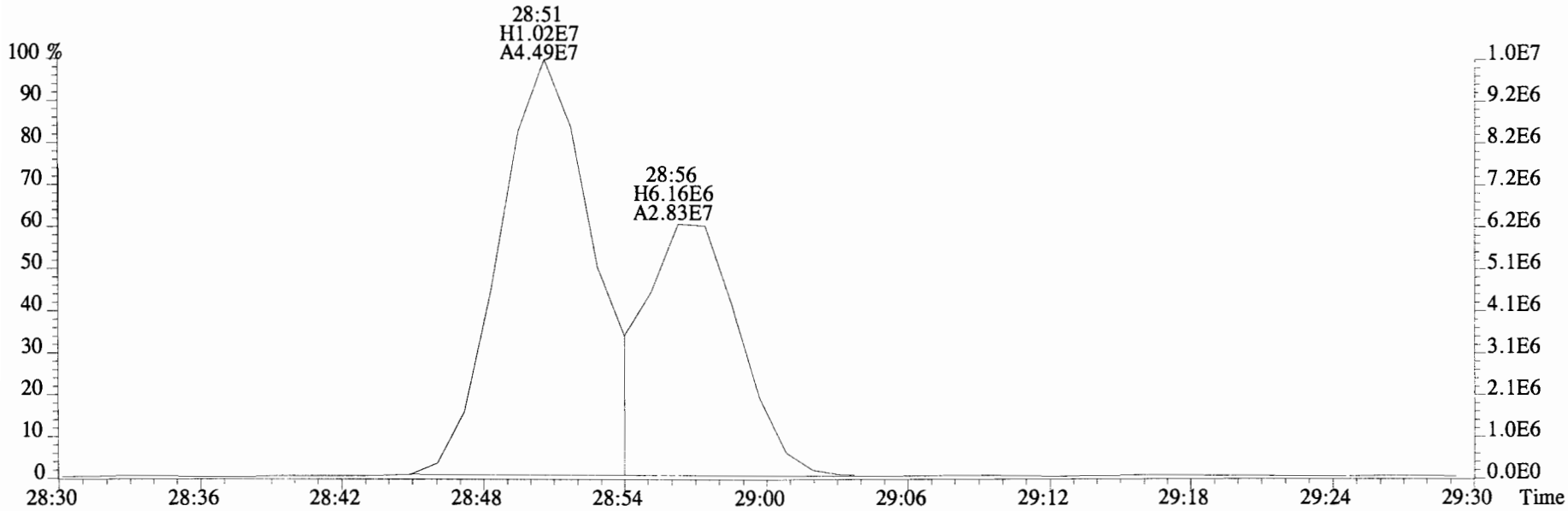
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3228.0,0.00%,F,F)



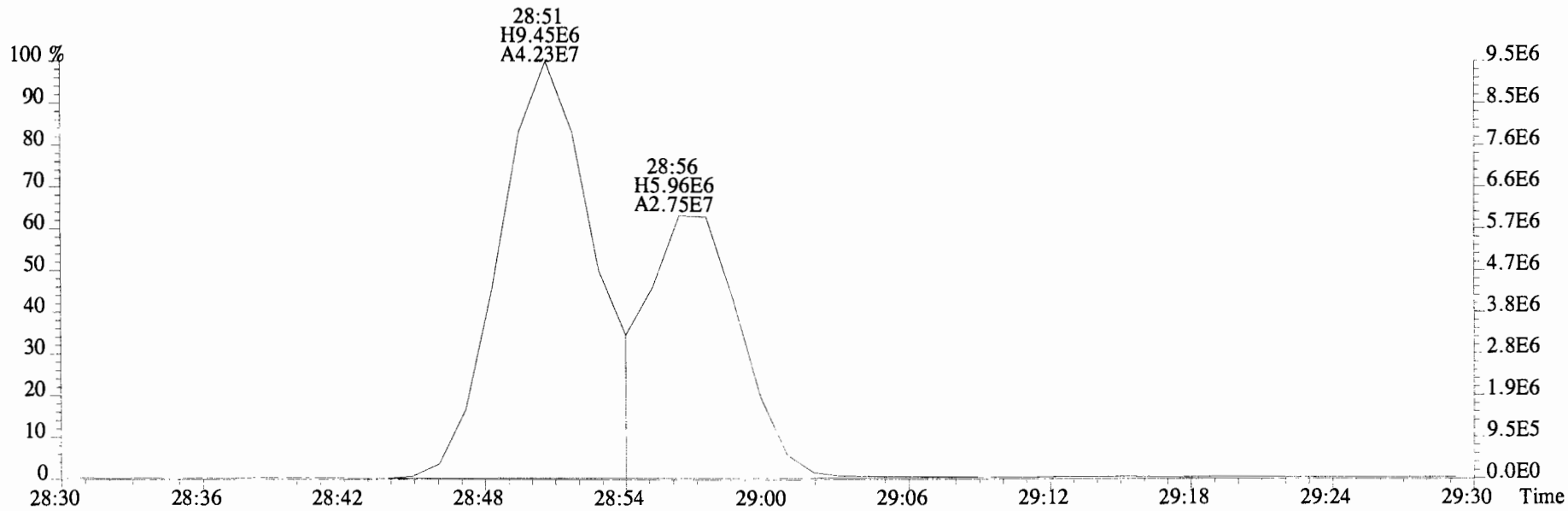
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2244.0,0.00%,F,F)



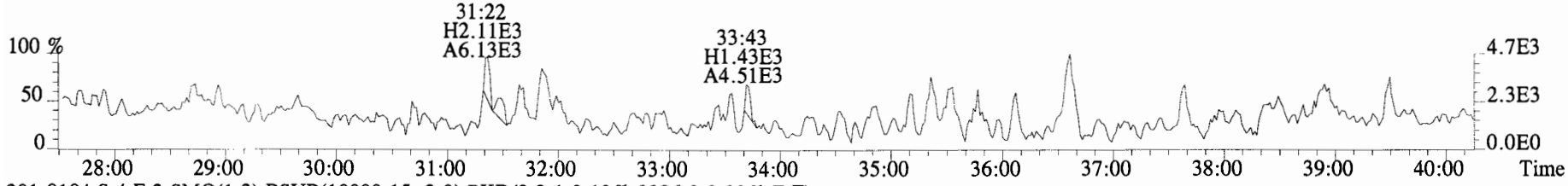
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,71336.0,0.00%,F,F)



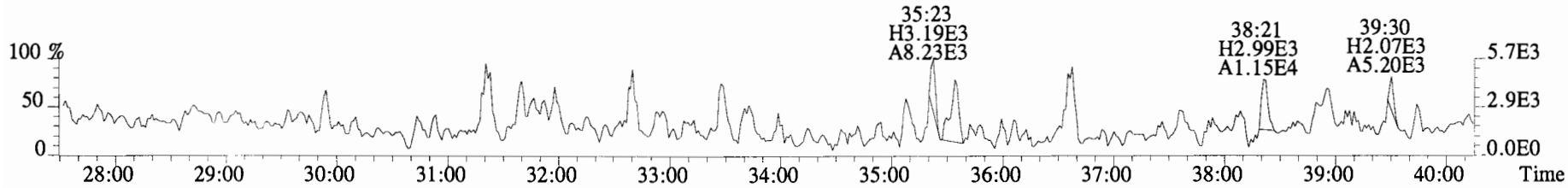
269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,29728.0,0.00%,F,F)



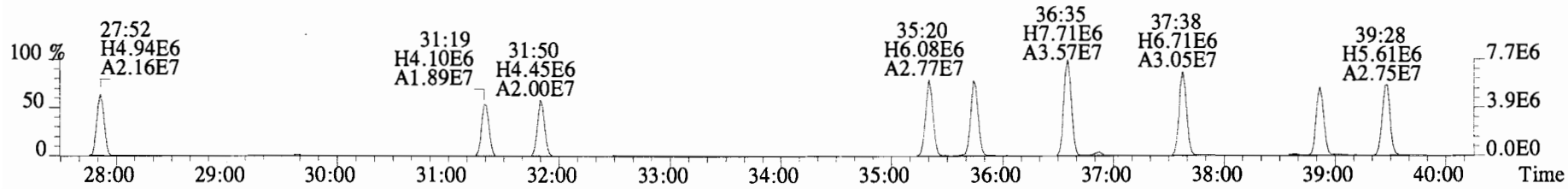
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1988.0,0.00%,F,F)



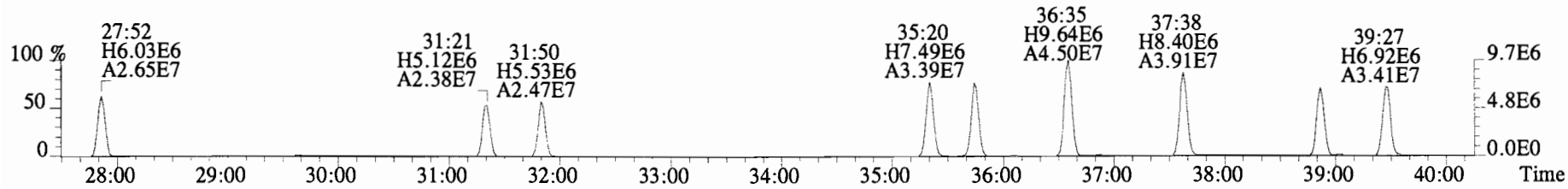
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2236.0,0.00%,F,F)



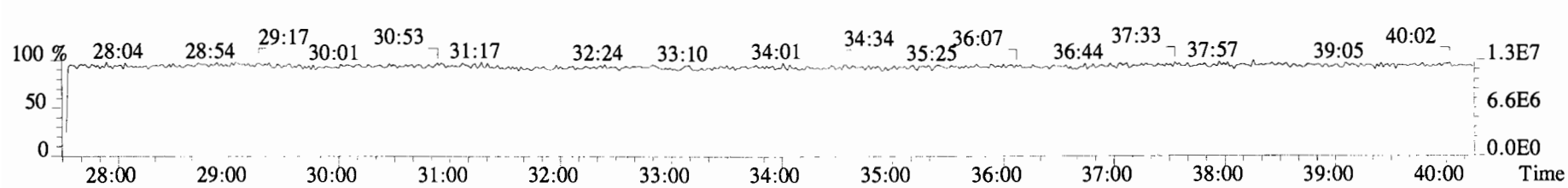
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12076.0,0.00%,F,F)



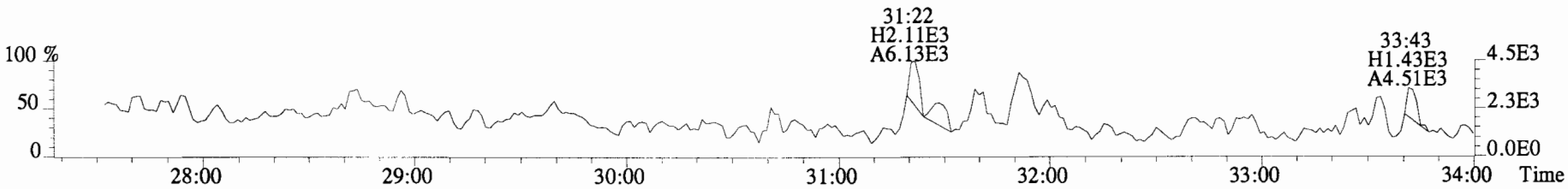
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10936.0,0.00%,F,F)



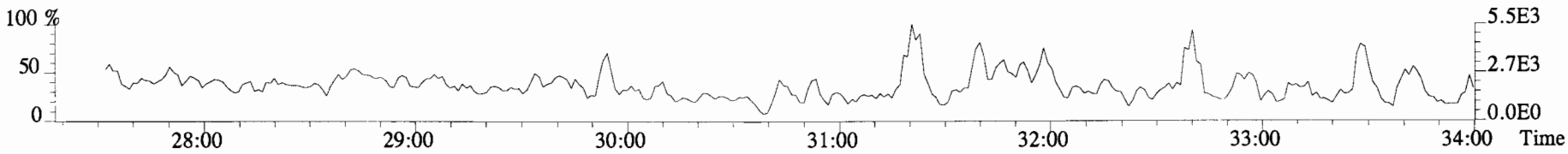
330.9792 S:4 F:3



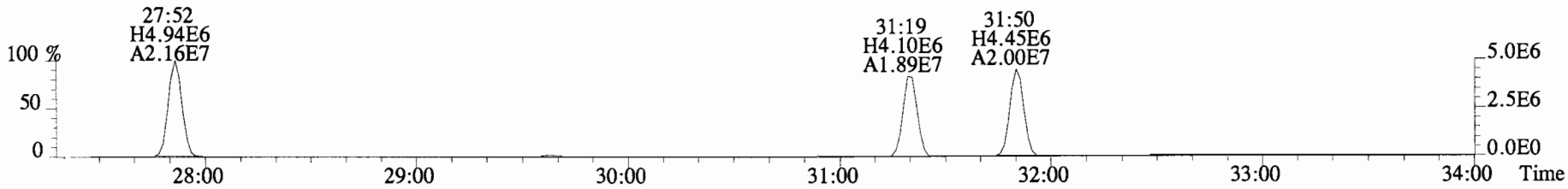
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1988.0,0.00%,F,F)



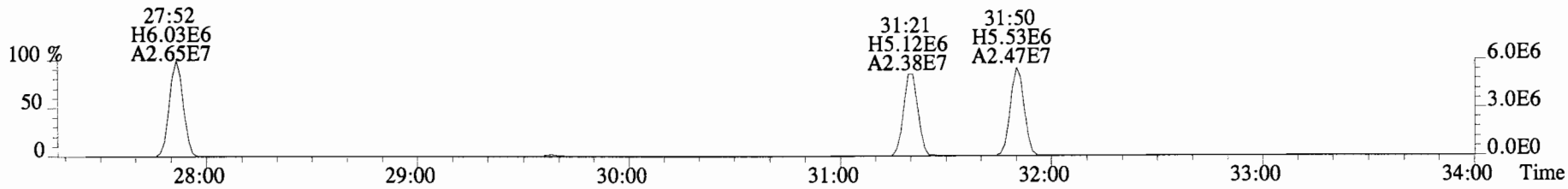
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2236.0,0.00%,F,F)



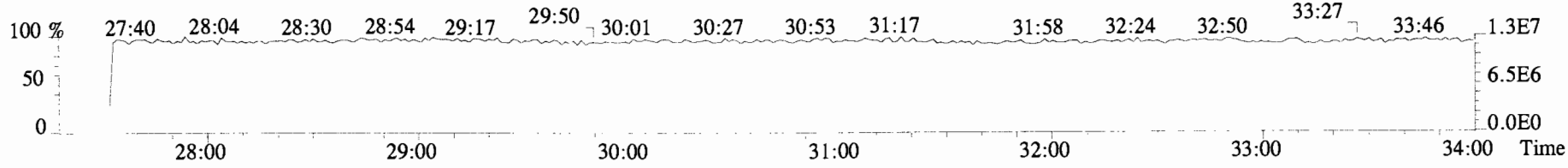
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12076.0,0.00%,F,F)



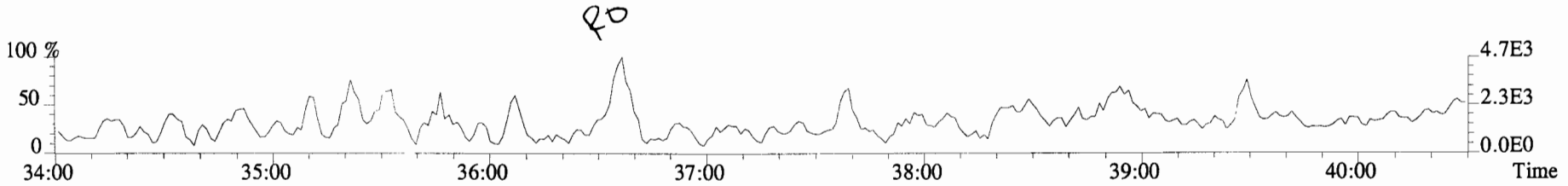
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10936.0,0.00%,F,F)



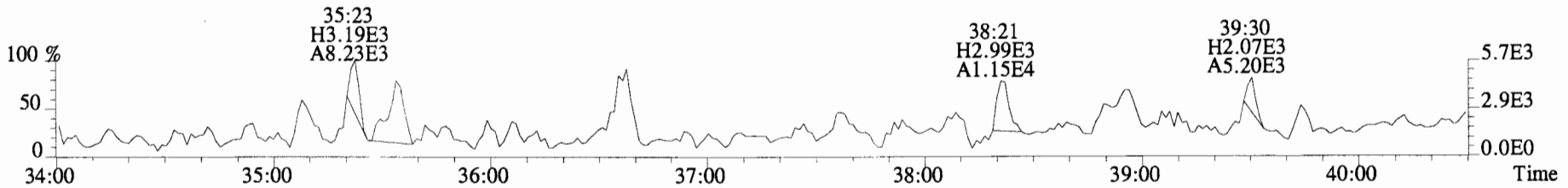
330.9792 S:4 F:3



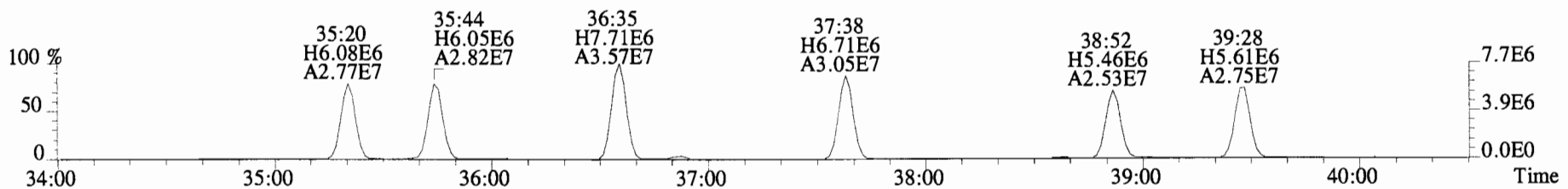
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1988.0,0.00%,F,F)



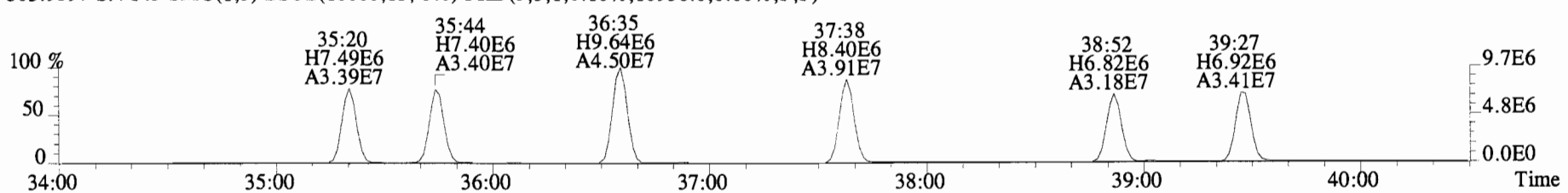
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2236.0,0.00%,F,F)



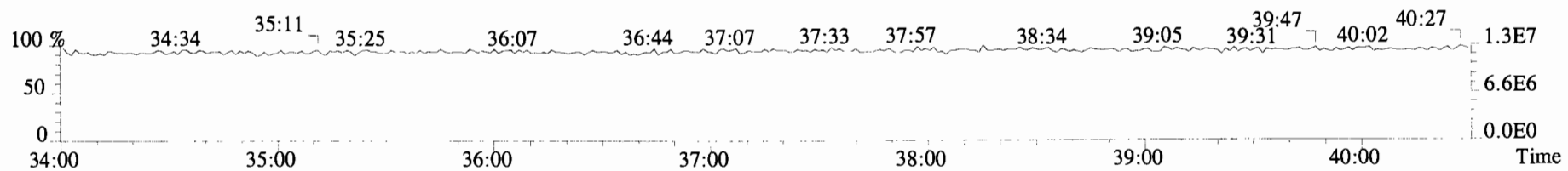
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12076.0,0.00%,F,F)



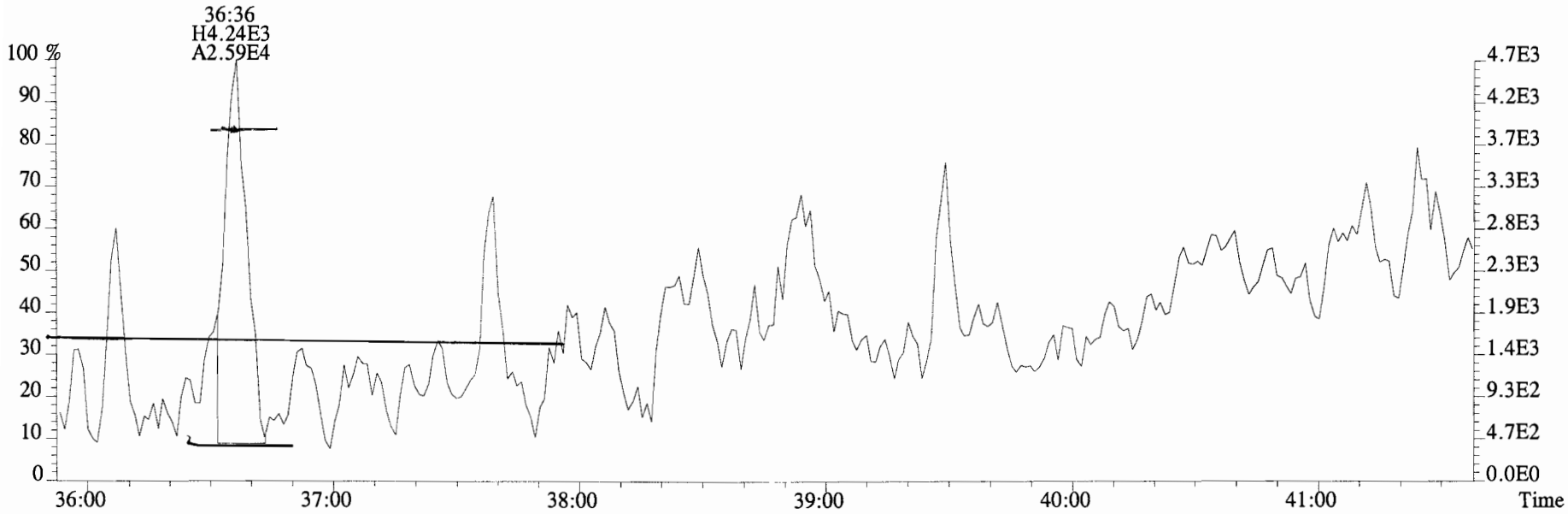
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10936.0,0.00%,F,F)



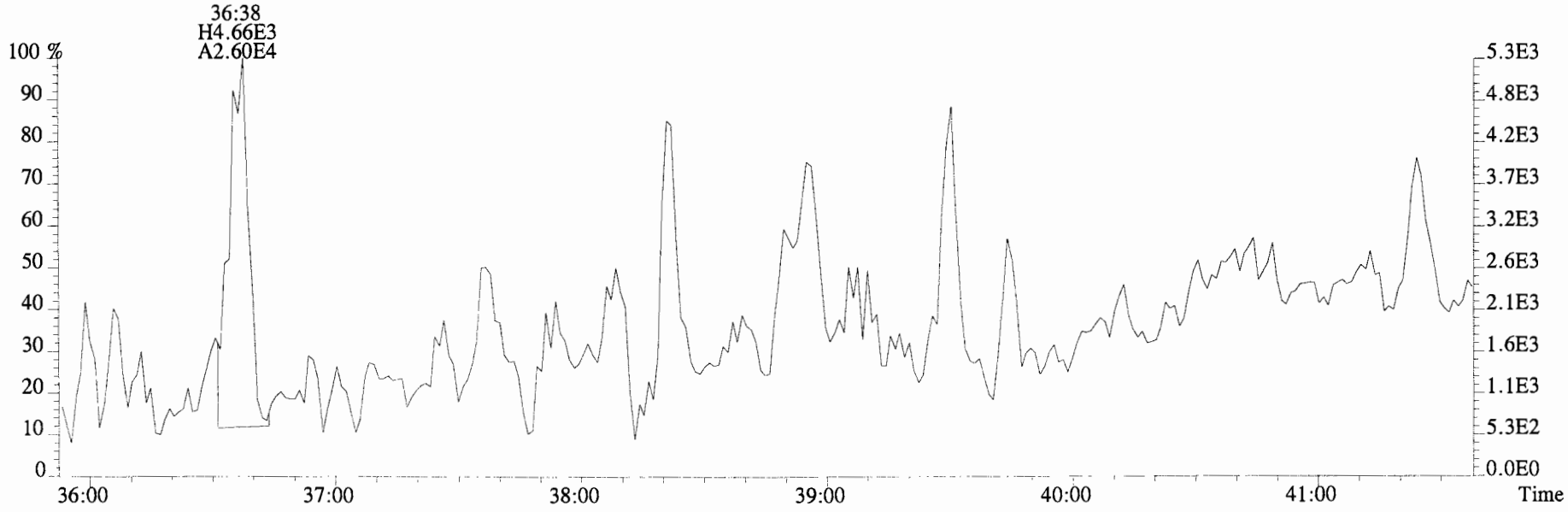
330.9792 S:4 F:3



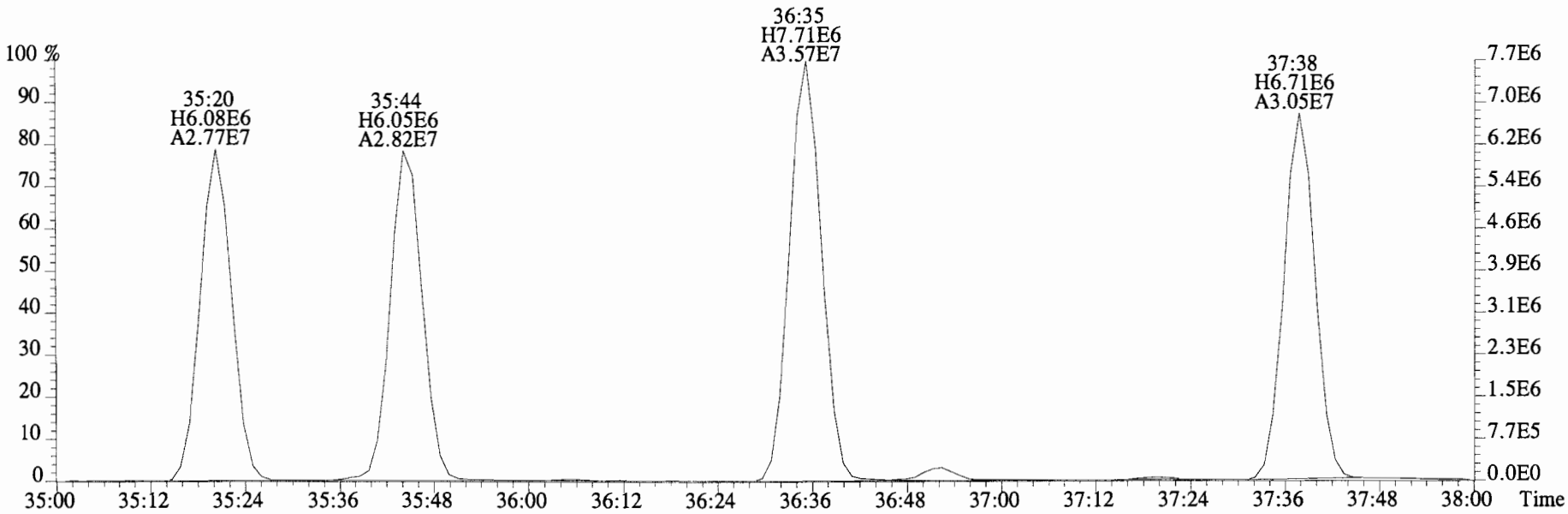
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1988.0,0.00%,F,F)



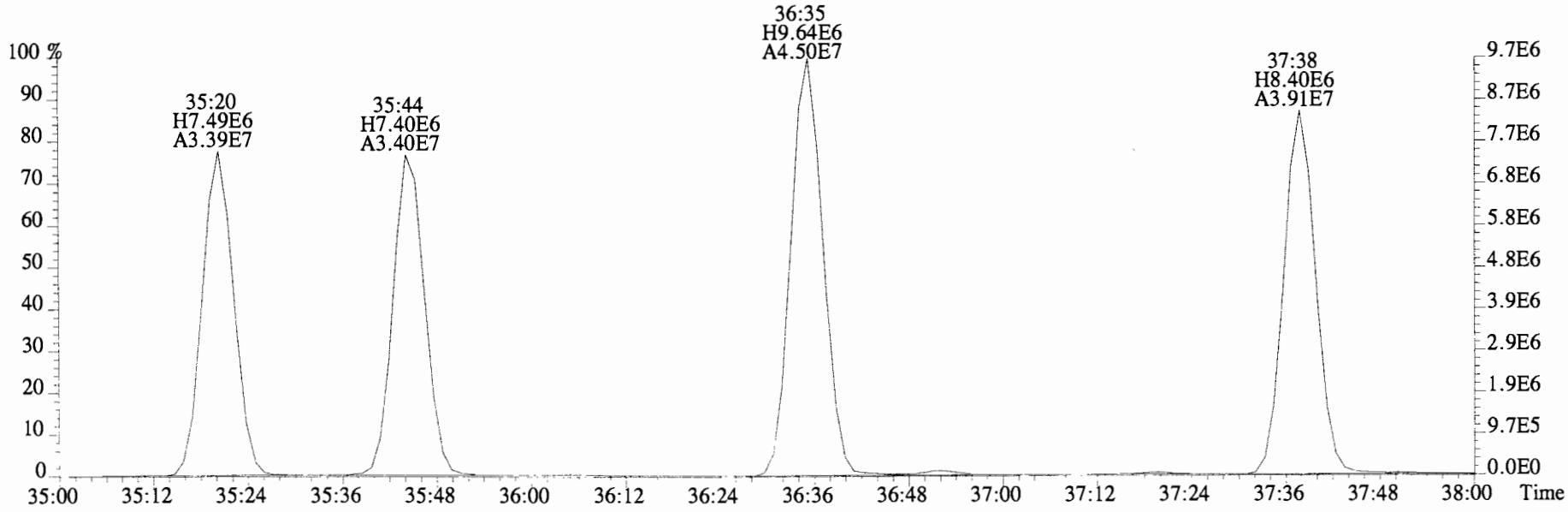
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2236.0,0.00%,F,F)



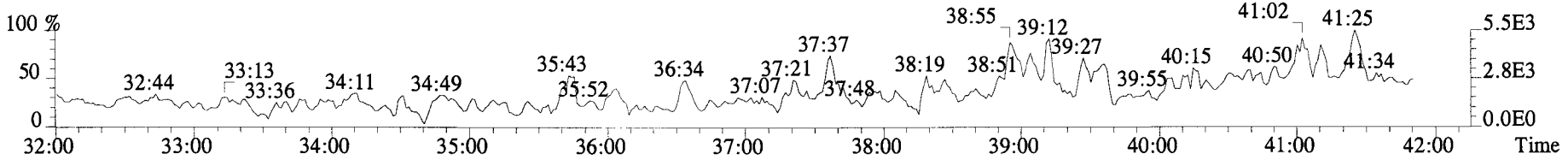
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12076.0,0.00%,F,F)



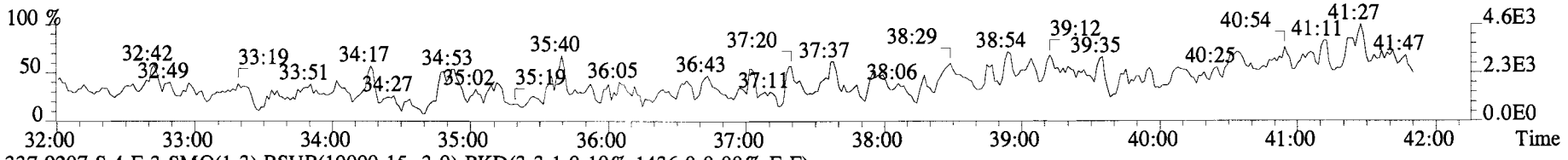
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10936.0,0.00%,F,F)



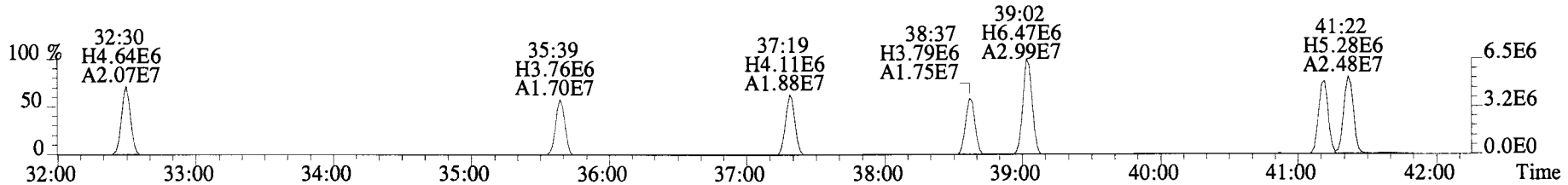
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)



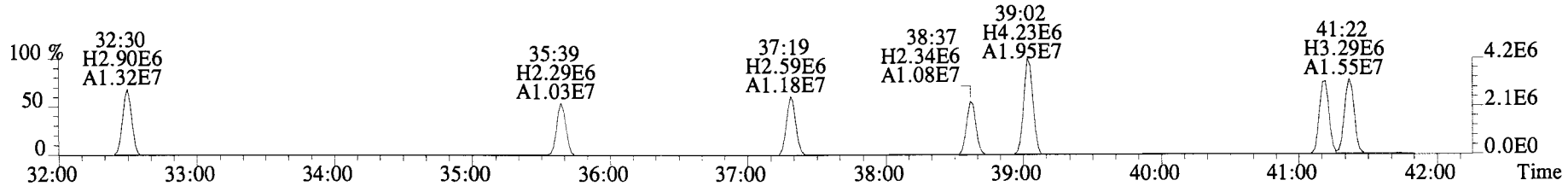
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2508.0,0.00%,F,F)



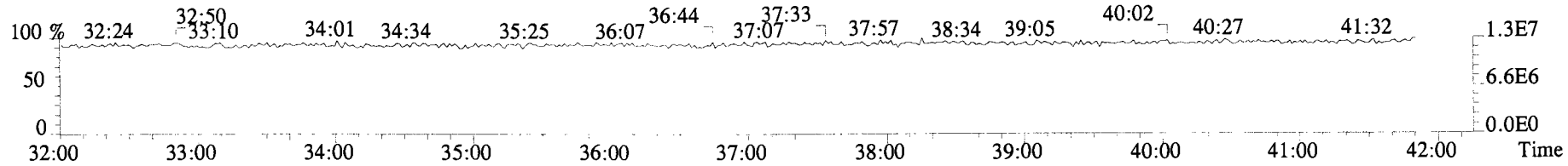
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1436.0,0.00%,F,F)



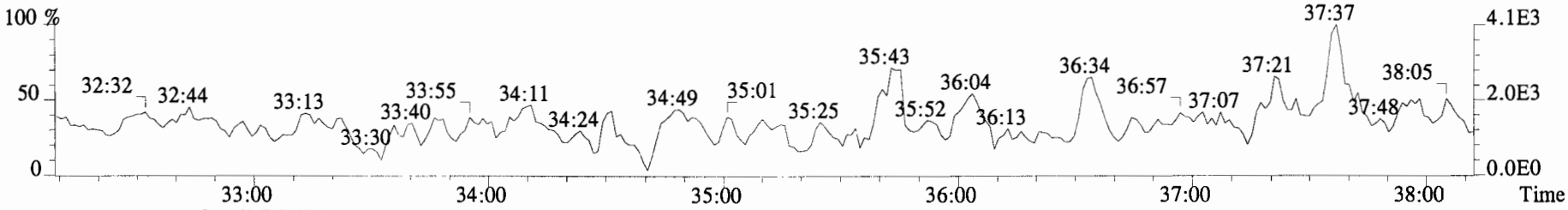
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1728.0,0.00%,F,F)



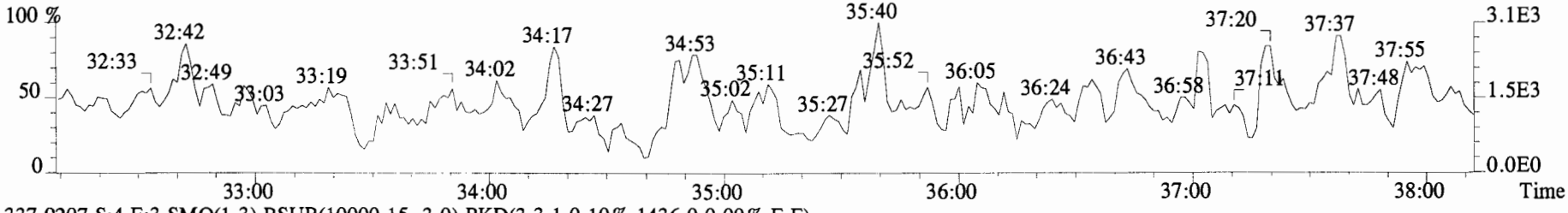
330.9792 S:4 F:3



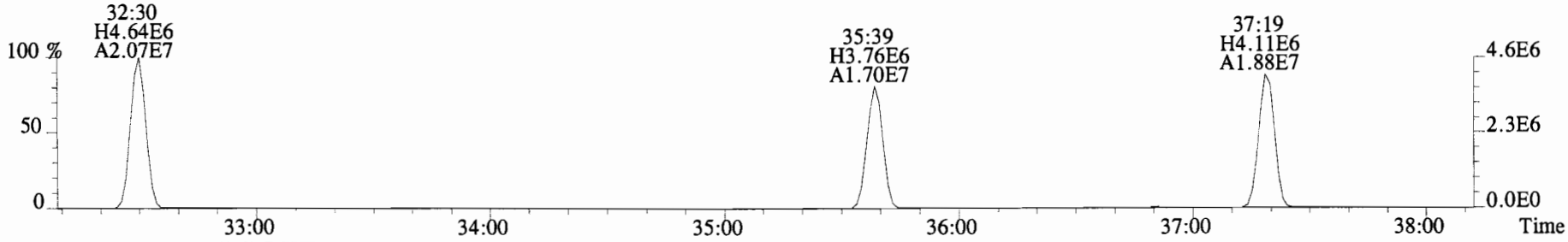
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)



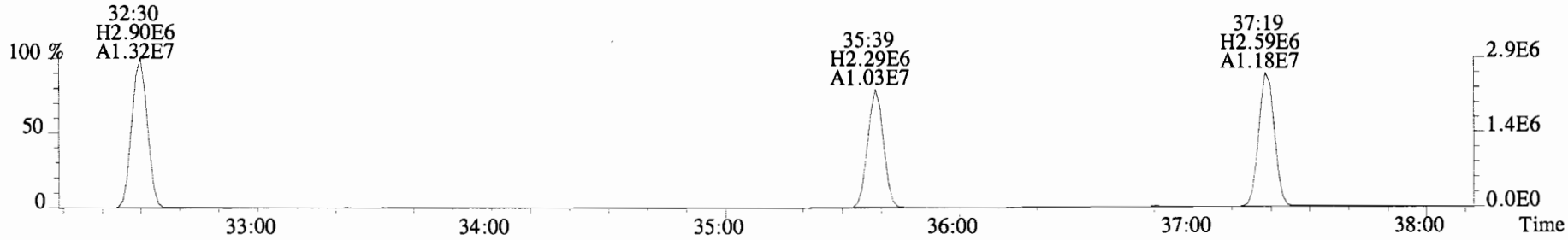
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2508.0,0.00%,F,F)



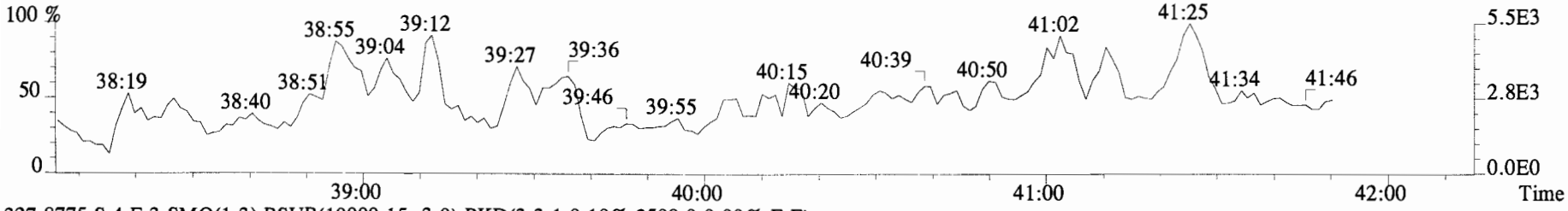
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1436.0,0.00%,F,F)



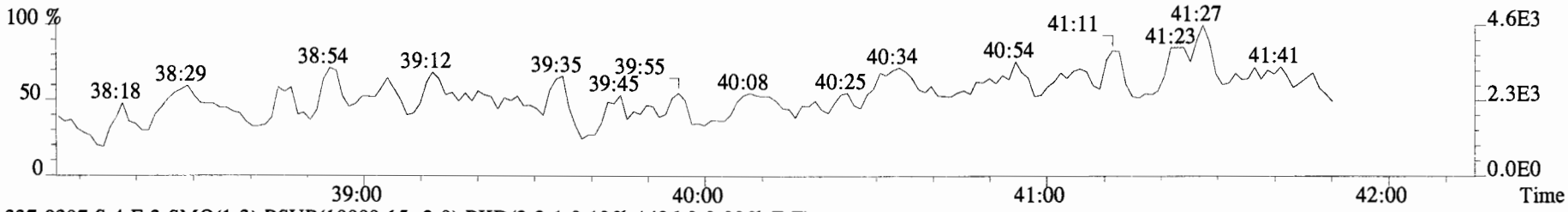
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1728.0,0.00%,F,F)



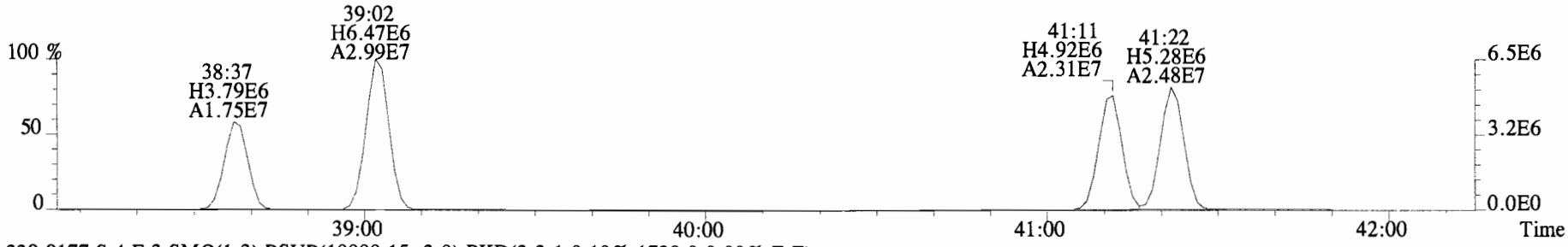
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2400.0,0.00%,F,F)



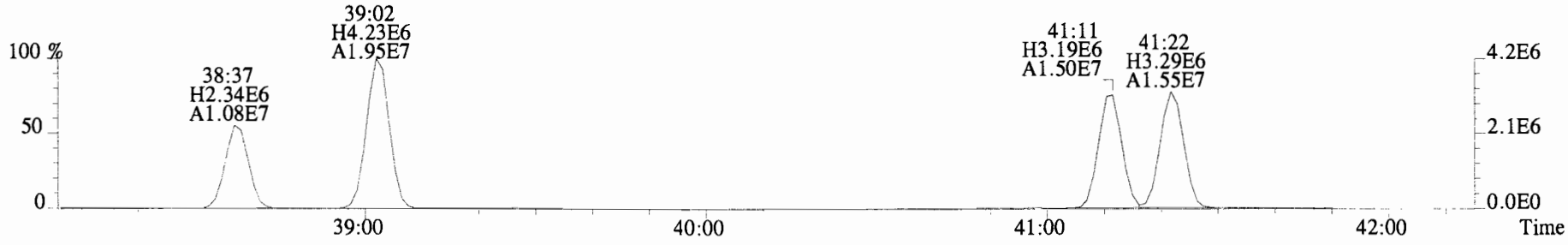
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2508.0,0.00%,F,F)



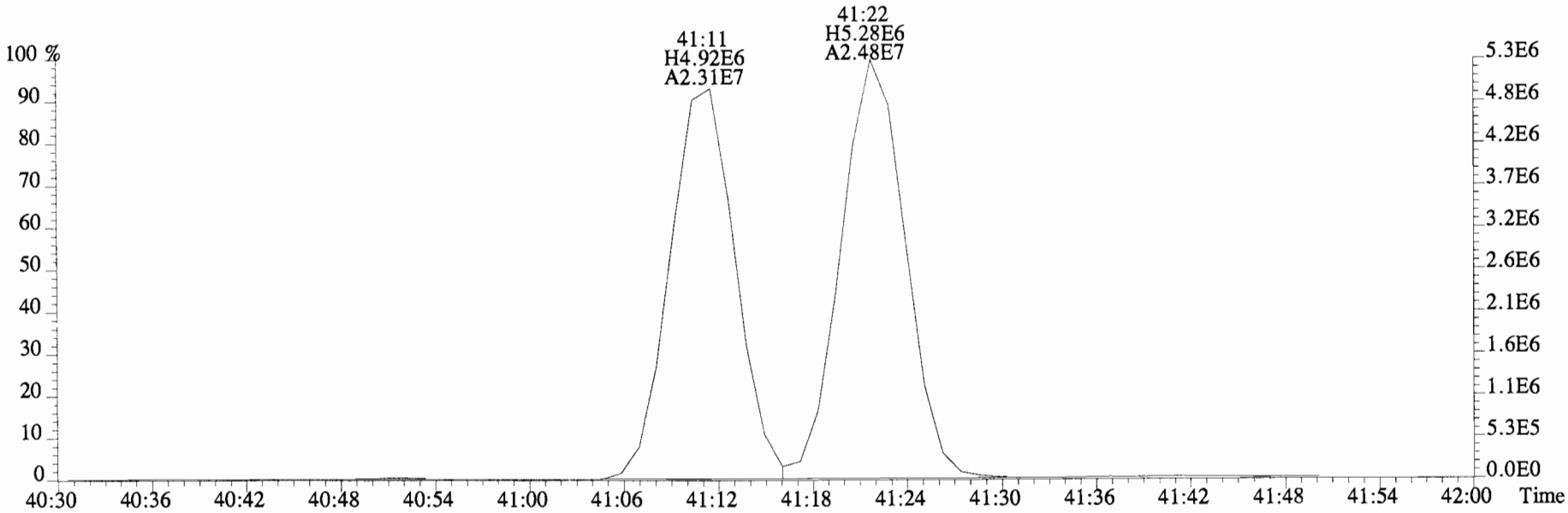
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1436.0,0.00%,F,F)



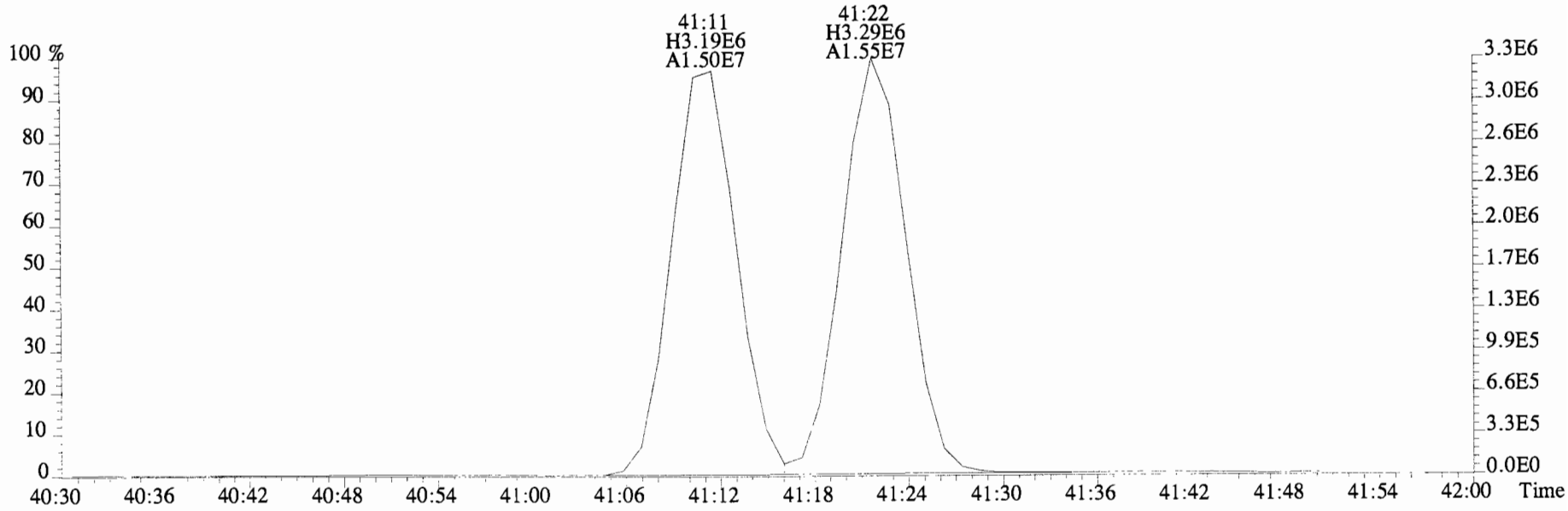
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1728.0,0.00%,F,F)



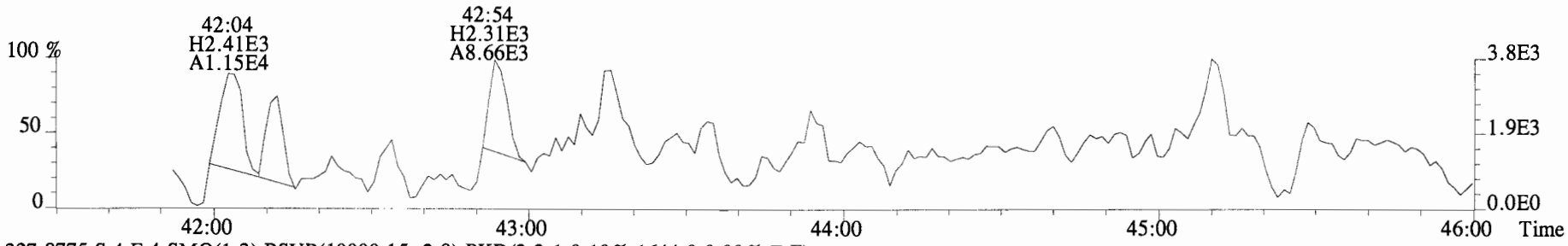
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1436.0,0.00%,F,F)



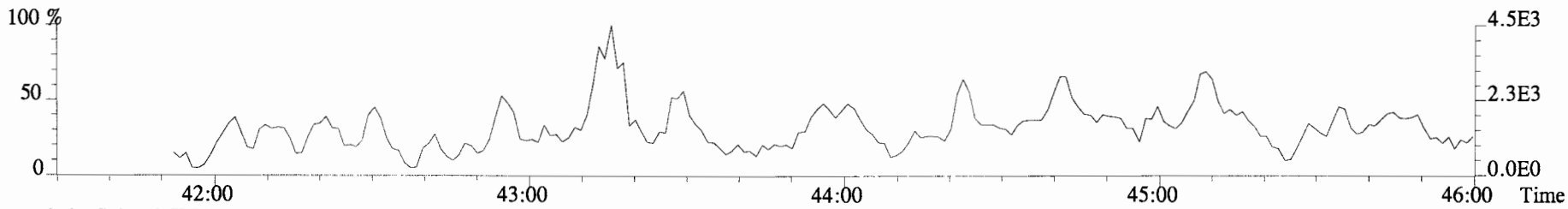
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1728.0,0.00%,F,F)



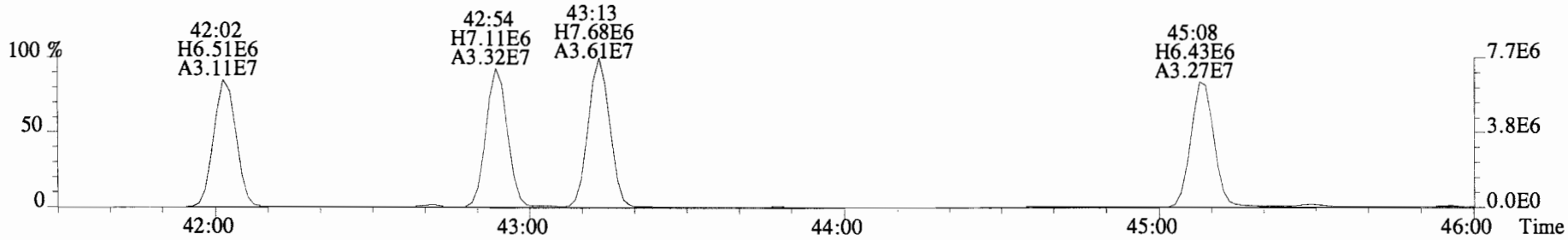
File:141031E1 #1-552 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
325.8804 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1628.0,0.00%,F,F)



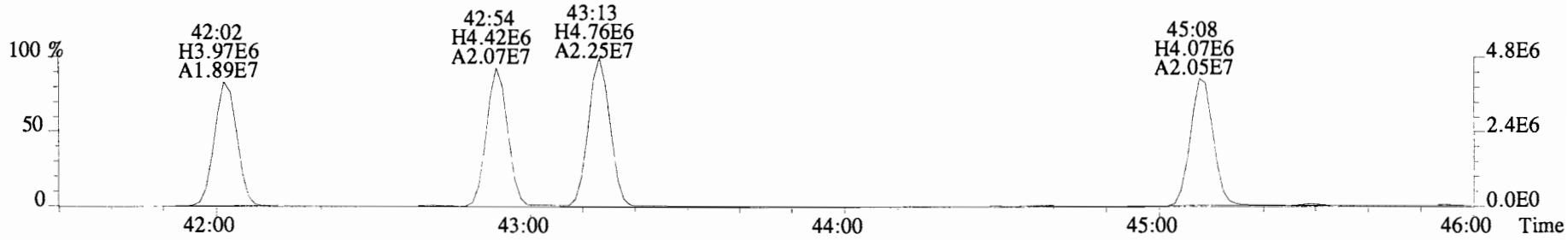
327.8775 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1644.0,0.00%,F,F)



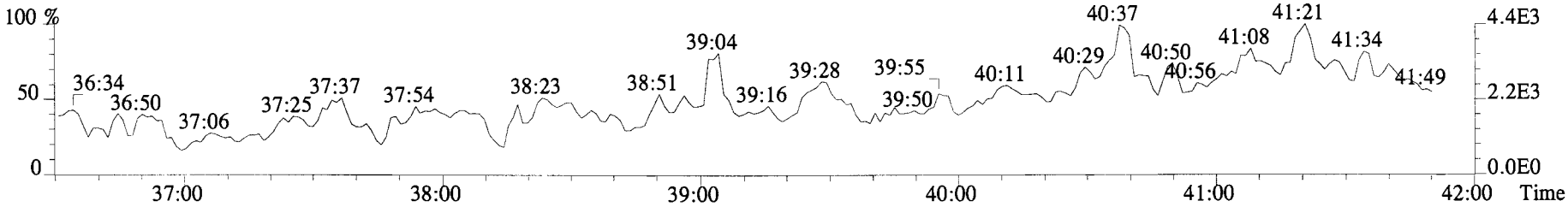
337.9207 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9684.0,0.00%,F,F)



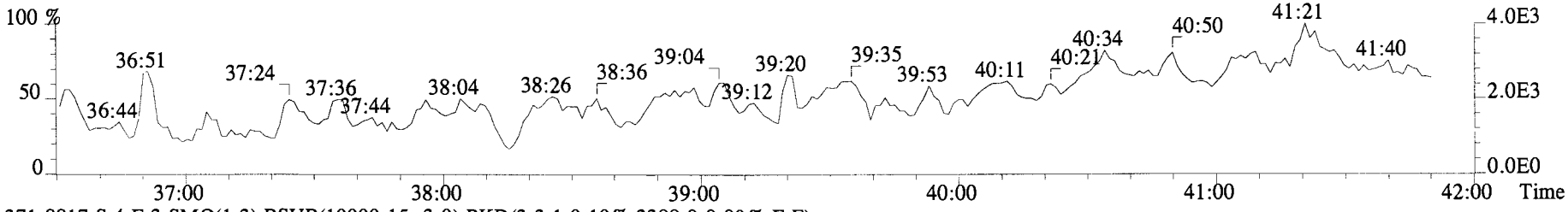
339.9177 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6904.0,0.00%,F,F)



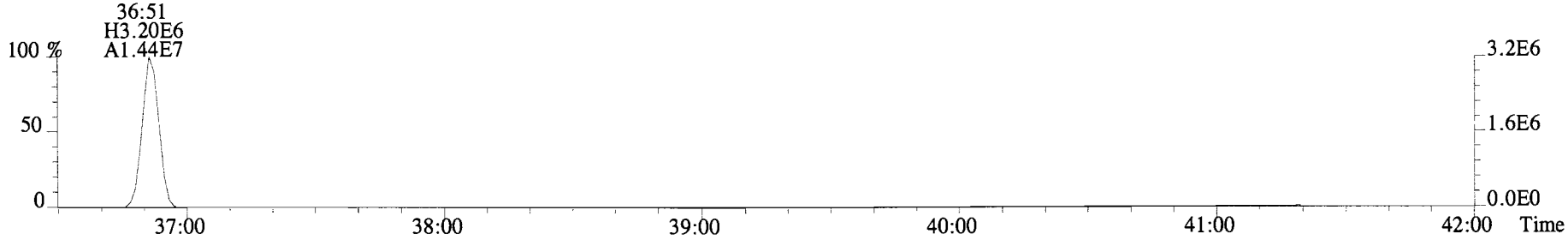
File:141031E1 #1-756 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2044.0,0.00%,F,F)



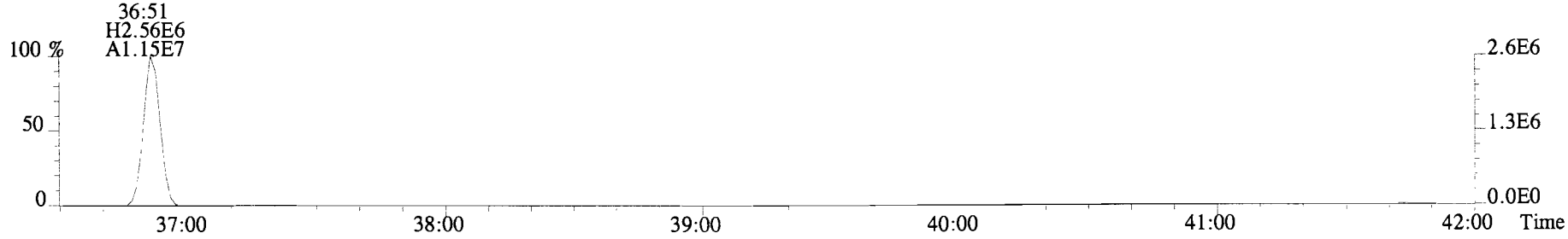
361.8385 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2112.0,0.00%,F,F)



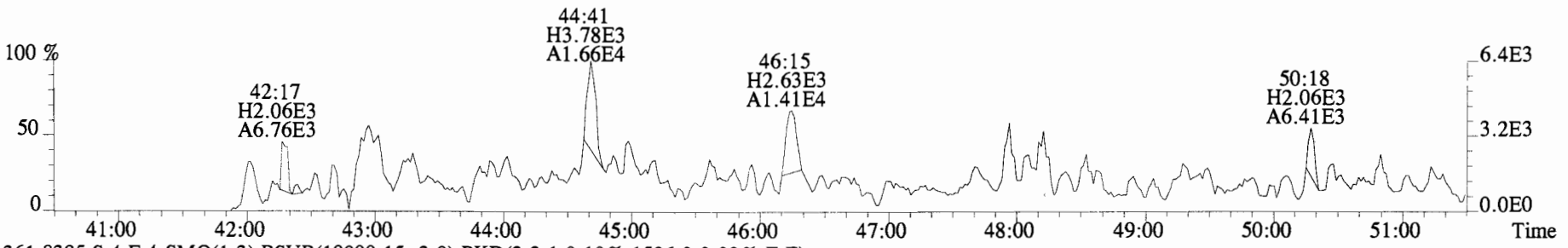
371.8817 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2388.0,0.00%,F,F)



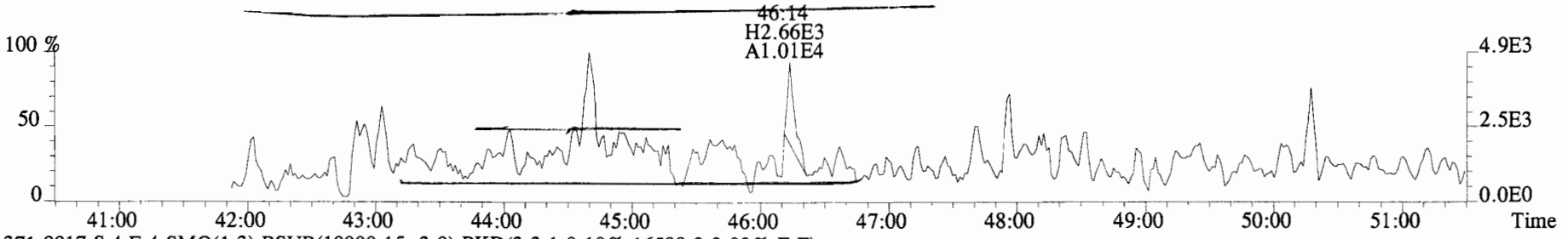
373.8788 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2840.0,0.00%,F,F)



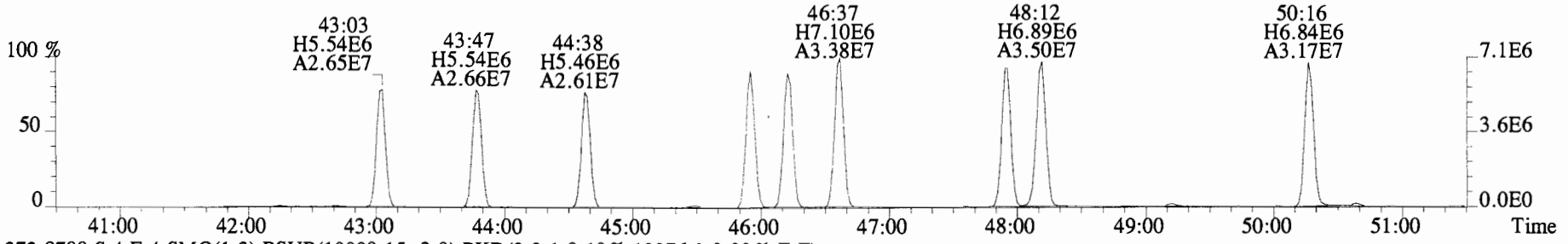
File:141031E1 #1-552 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1552.0,0.00%,F,F)



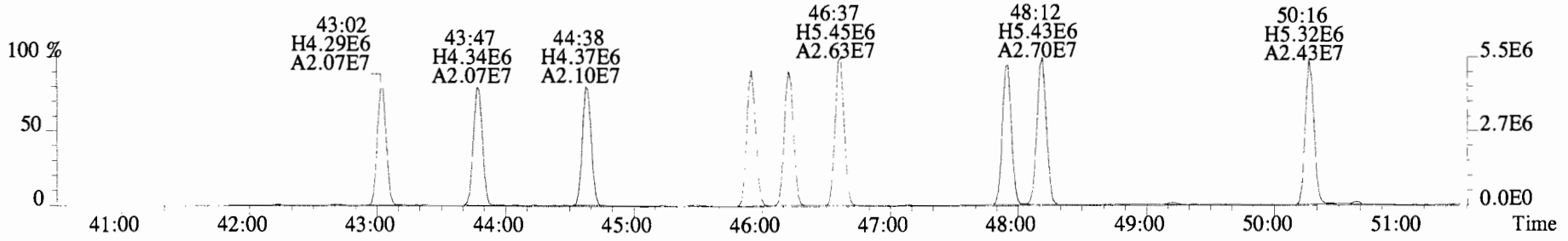
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1596.0,0.00%,F,F)



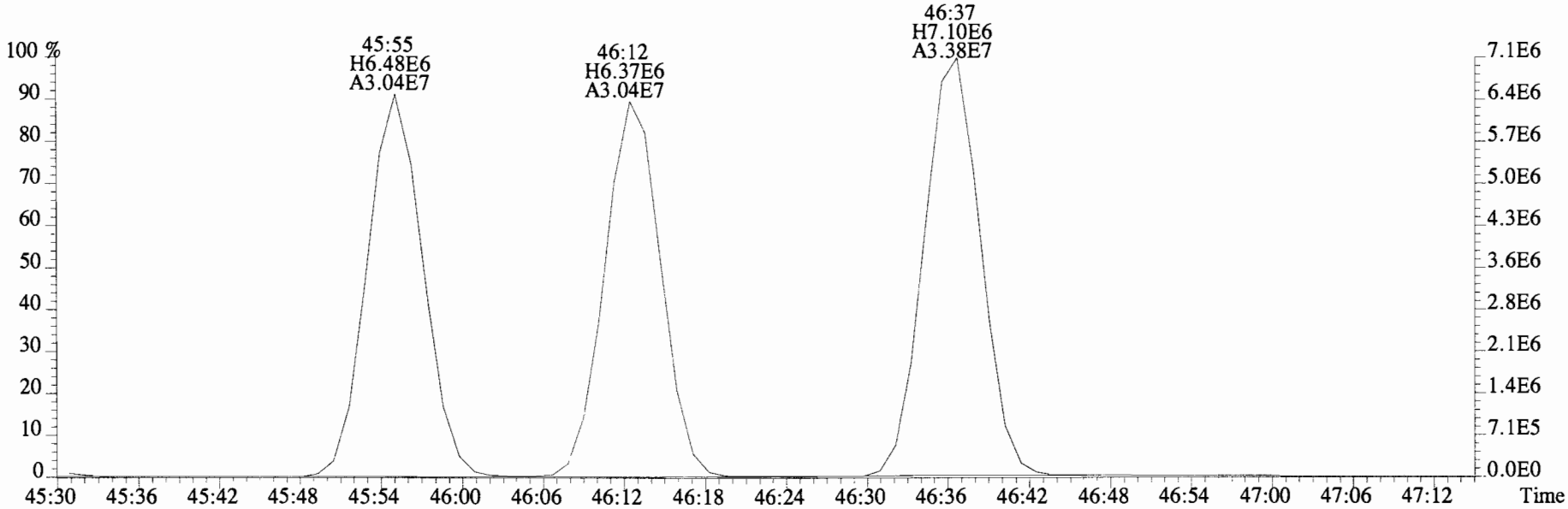
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16588.0,0.00%,F,F)



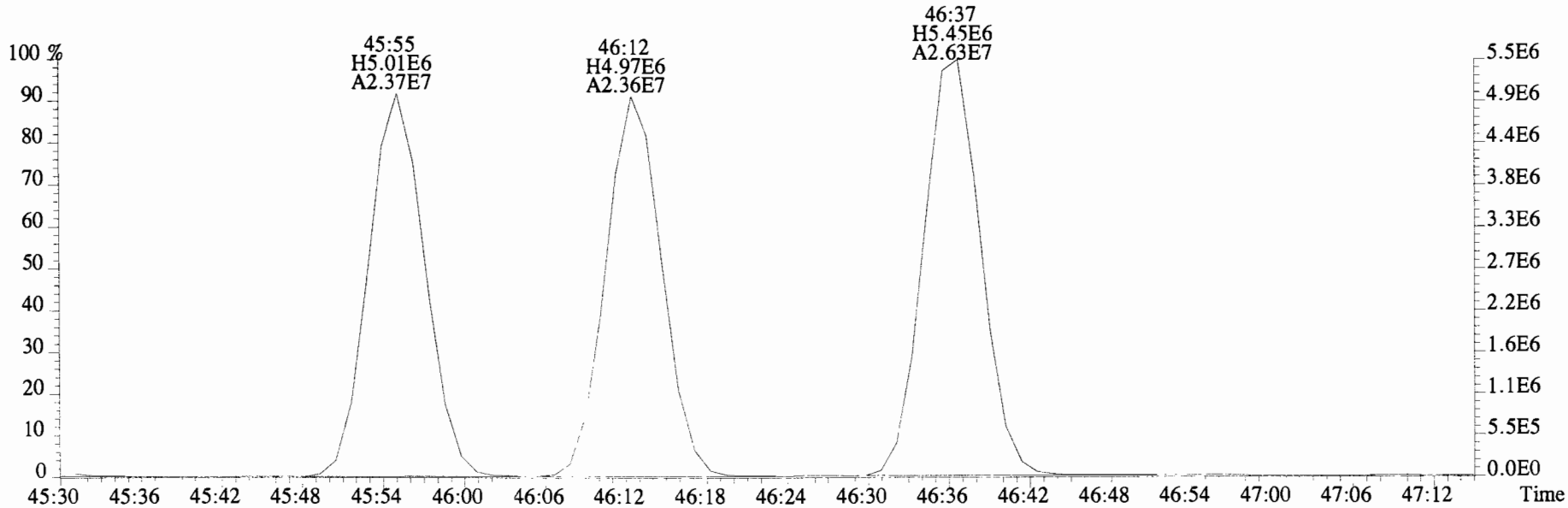
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13376.0,0.00%,F,F)



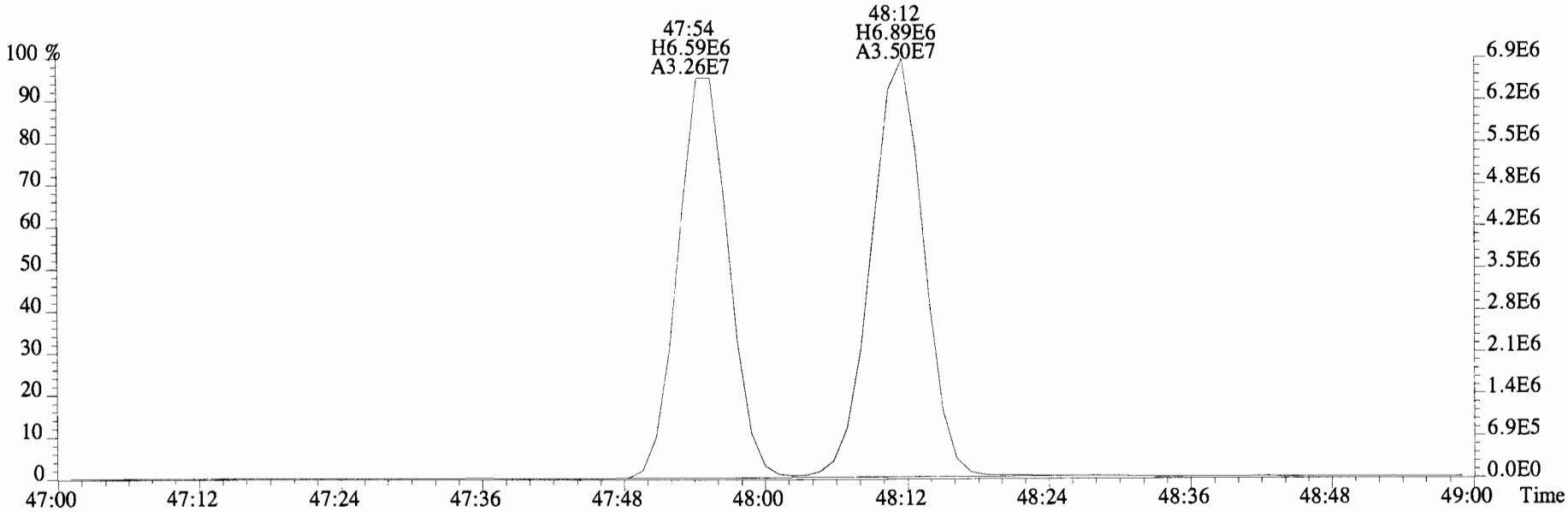
File:141031E1 #1-552 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16588.0,0.00%,F,F)



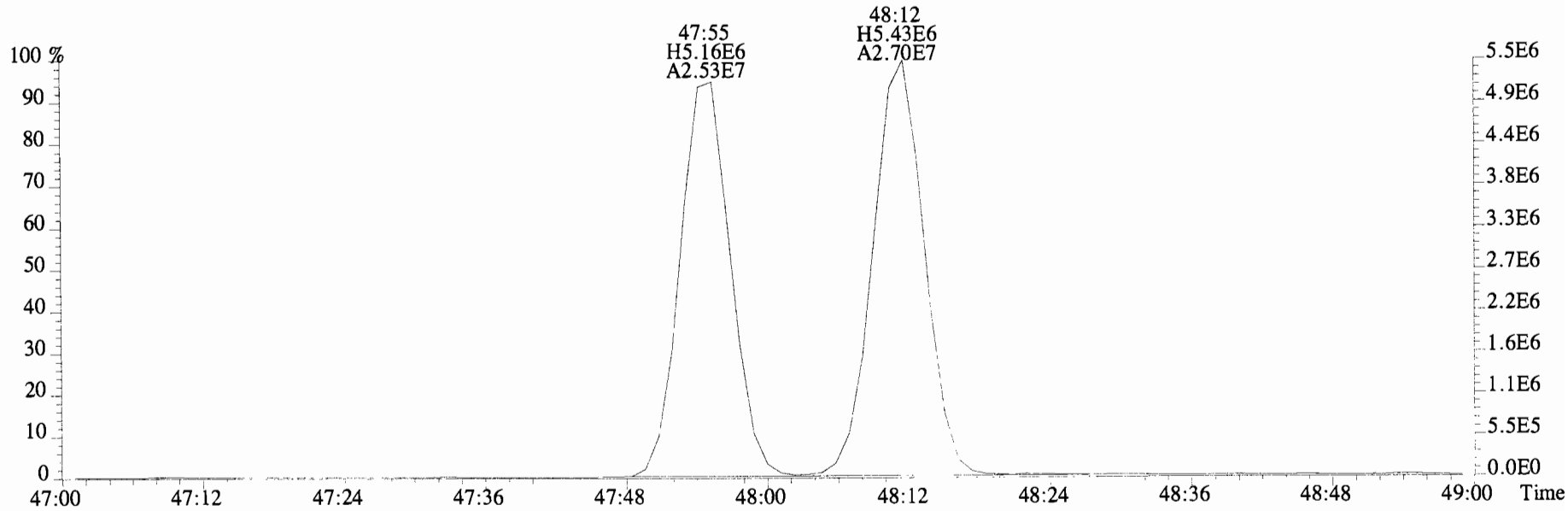
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13376.0,0.00%,F,F)



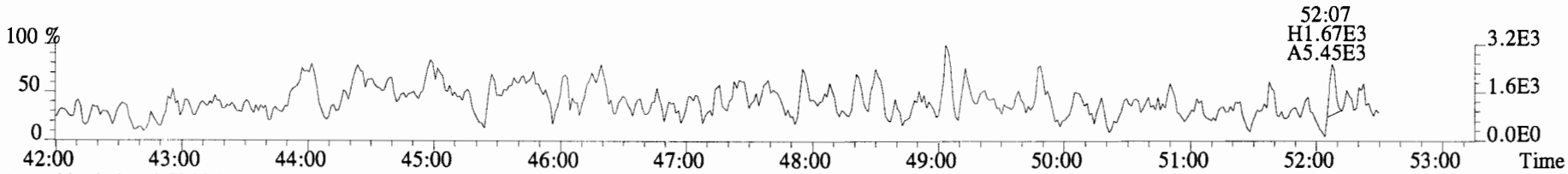
File:141031E1 #1-552 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16588.0,0.00%,F,F)



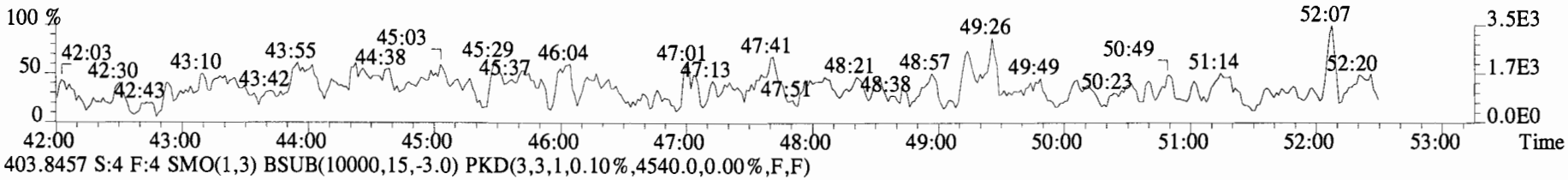
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13376.0,0.00%,F,F)



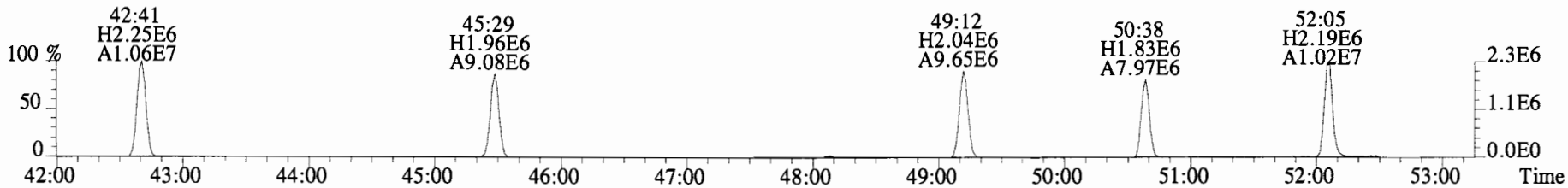
File:141031E1 #1-552 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1536.0,0.00%,F,F)



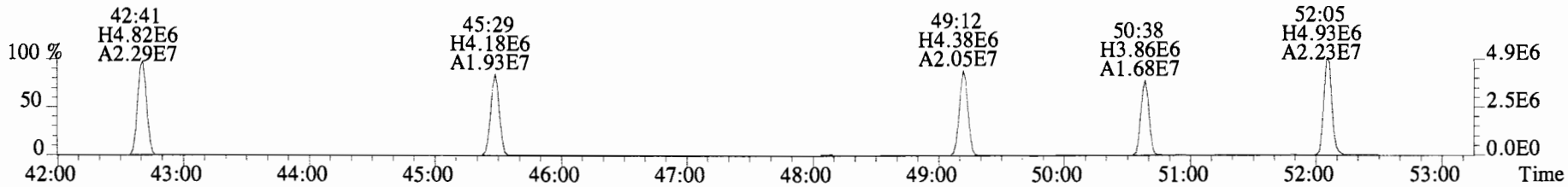
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1540.0,0.00%,F,F)



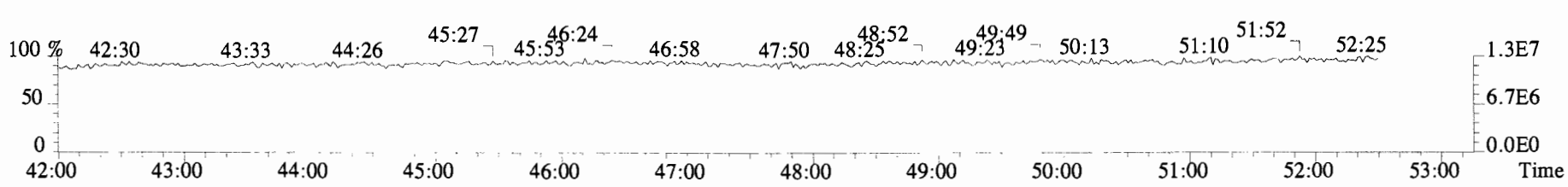
403.8457 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4540.0,0.00%,F,F)



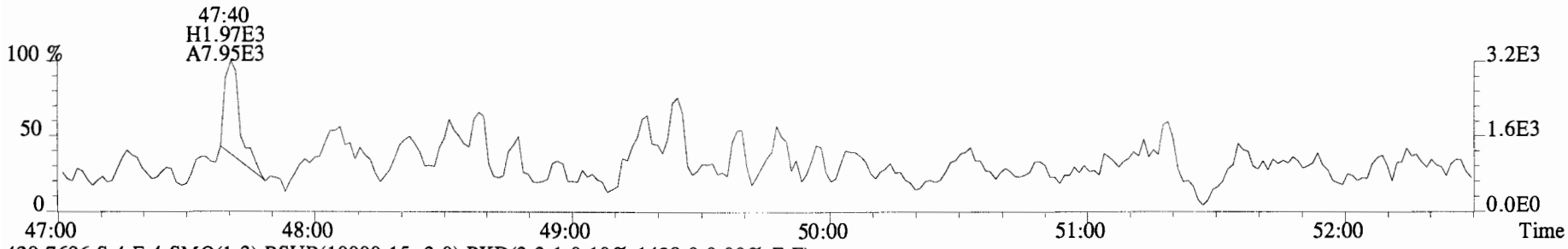
405.8428 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8844.0,0.00%,F,F)



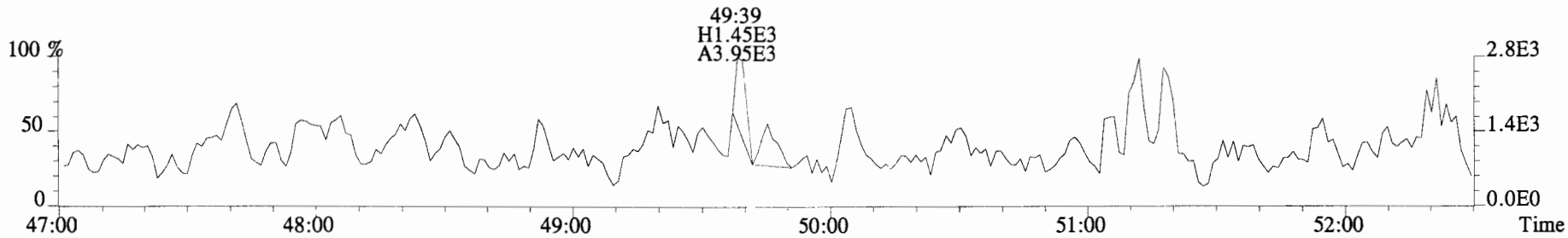
380.9760 S:4 F:4



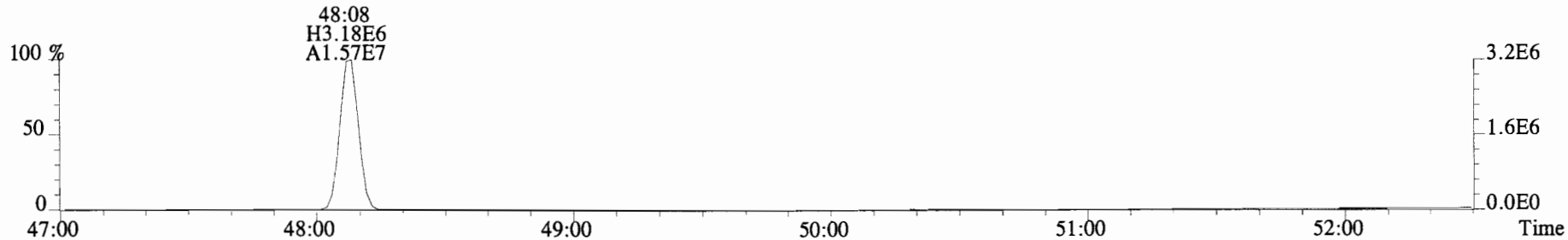
File:141031E1 #1-552 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
427.7635 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1300.0,0.00%,F,F)



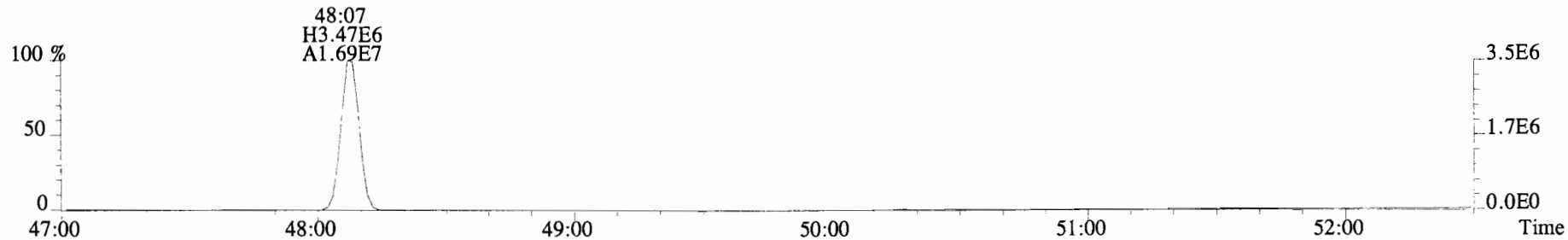
429.7606 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1428.0,0.00%,F,F)



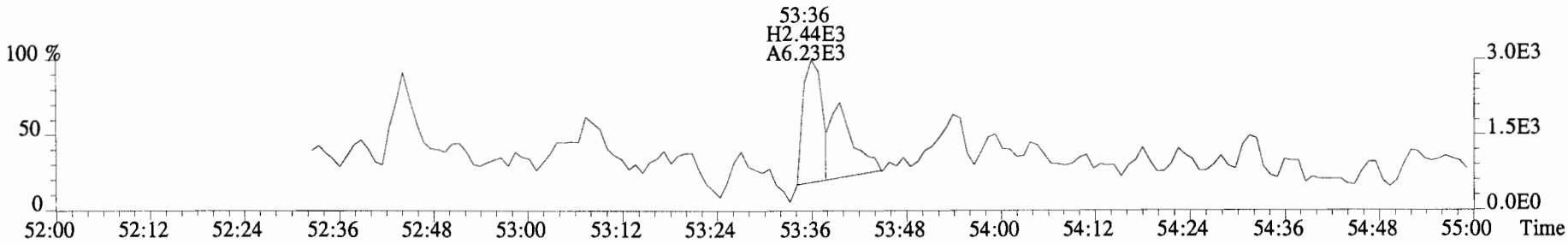
439.8038 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1744.0,0.00%,F,F)



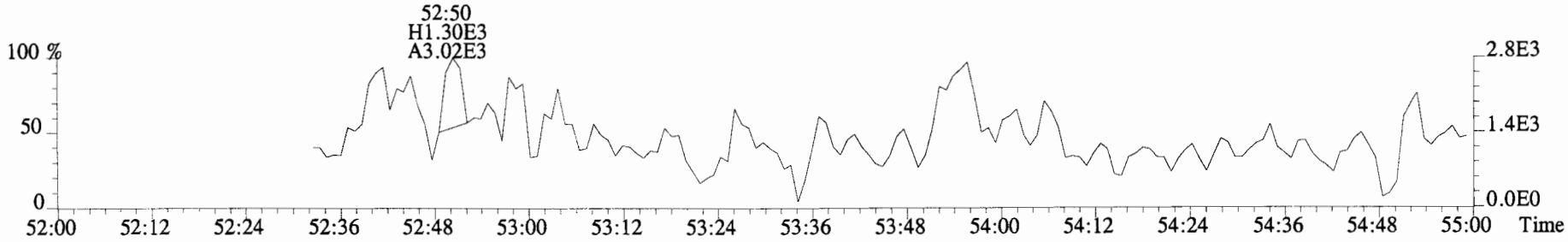
441.8008 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1676.0,0.00%,F,F)



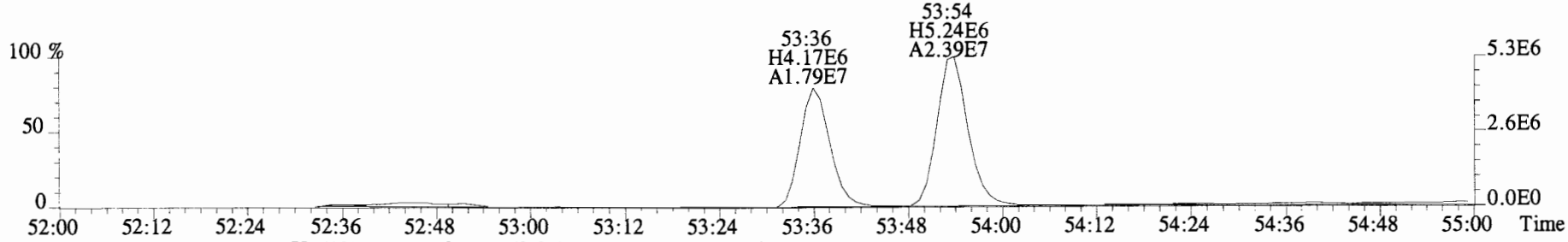
File:141031E1 #1-435 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
427.7635 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1388.0,0.00%,F,F)



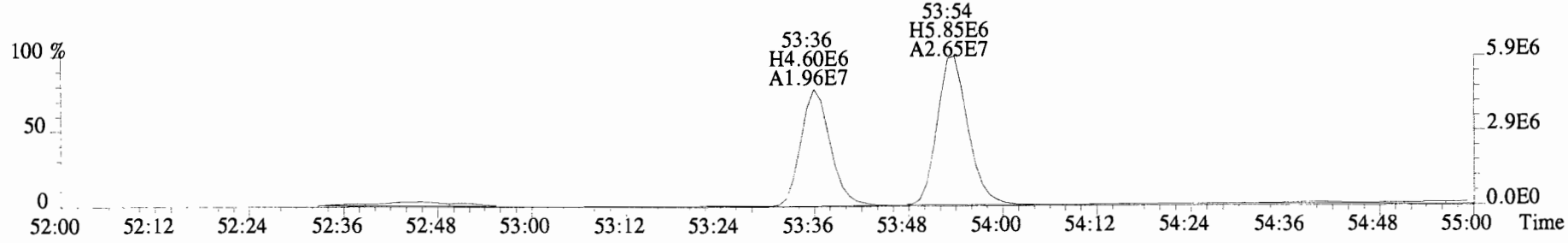
429.7606 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1568.0,0.00%,F,F)



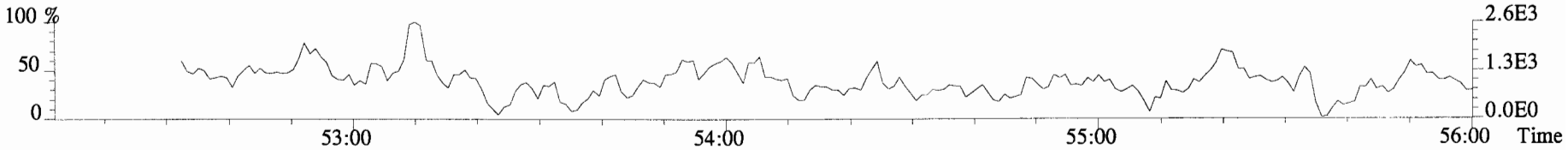
439.8038 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2676.0,0.00%,F,F)



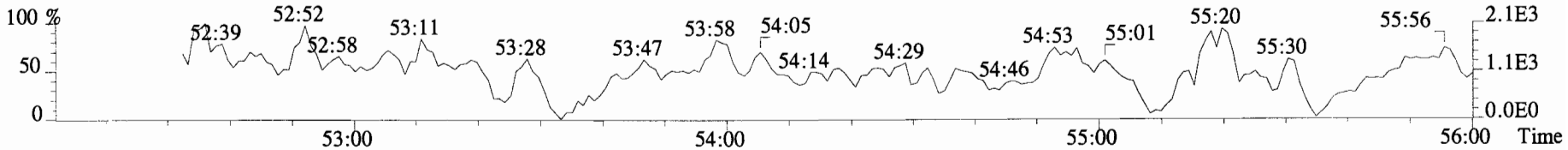
441.8008 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2984.0,0.00%,F,F)



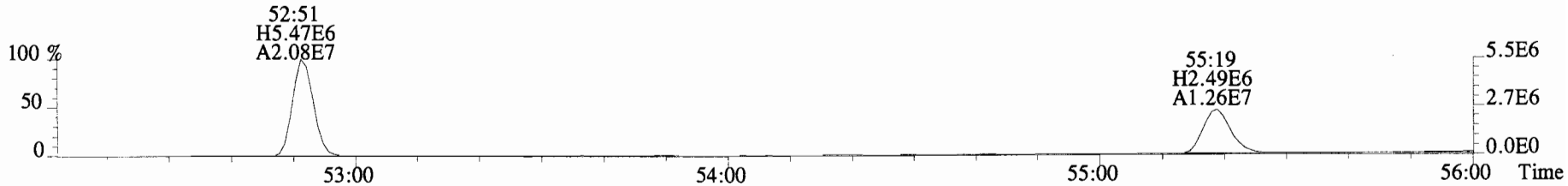
File:141031E1 #1-435 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
463.7216 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1384.0,0.00%,F,F)



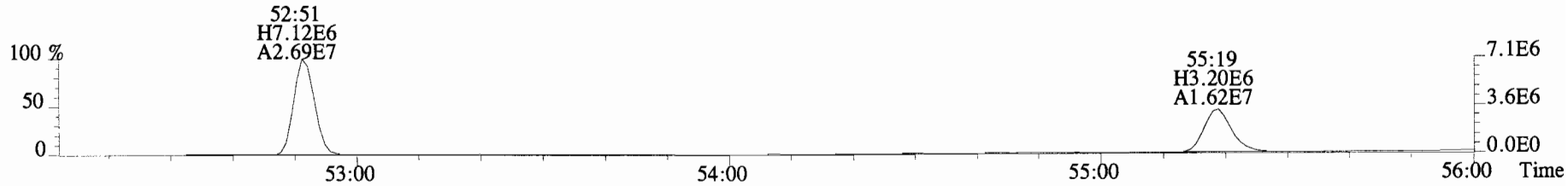
465.7186 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1488.0,0.00%,F,F)



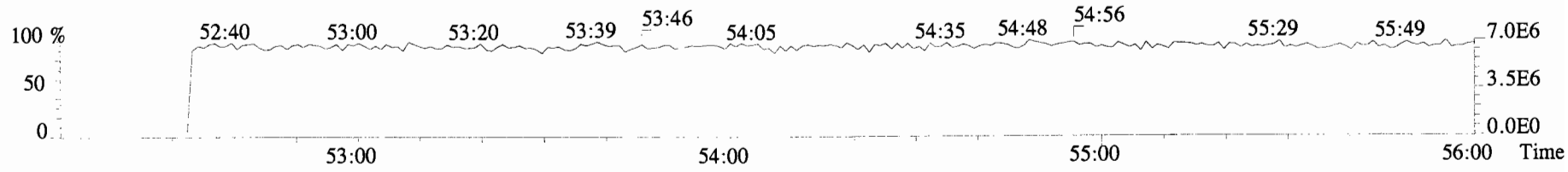
473.7648 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15164.0,0.00%,F,F)



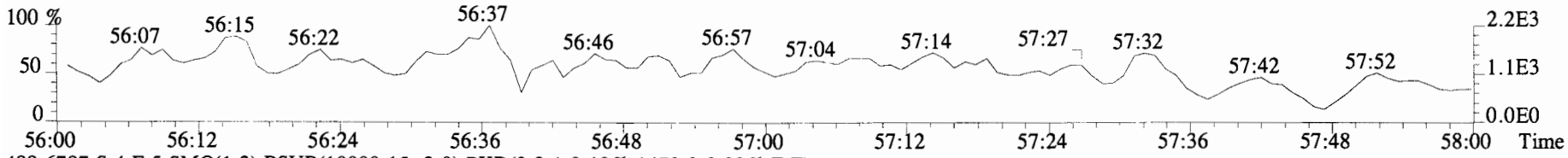
475.7619 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,19256.0,0.00%,F,F)



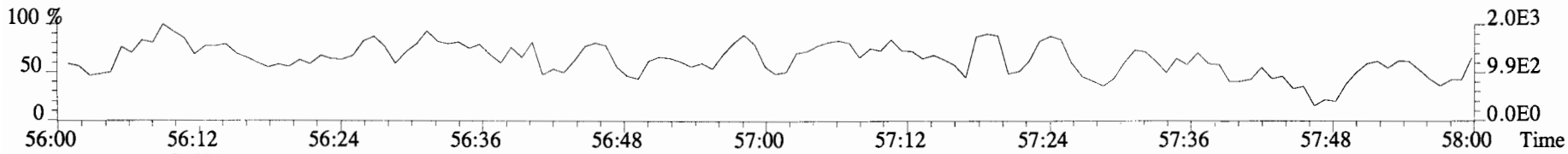
492.9697 S:4 F:5



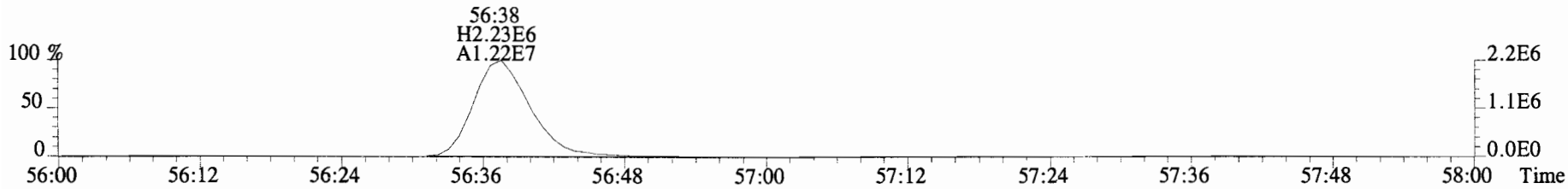
File:141031E1 #1-435 Acq:31-OCT-2014 12:01:25 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BLK1 Method Blank 1 Exp:PCB_ZB1
497.6826 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1400.0,0.00%,F,F)



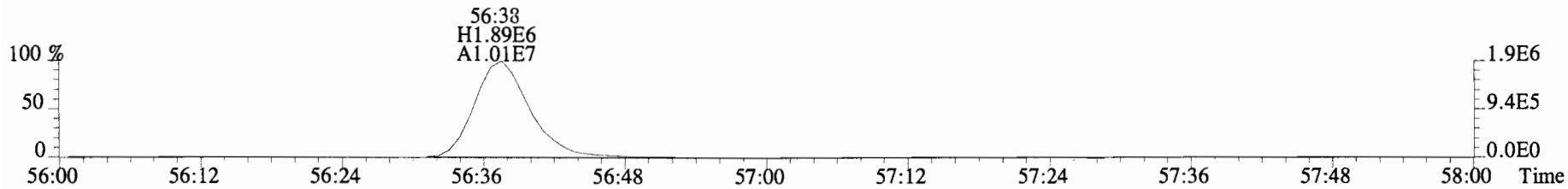
499.6797 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1472.0,0.00%,F,F)



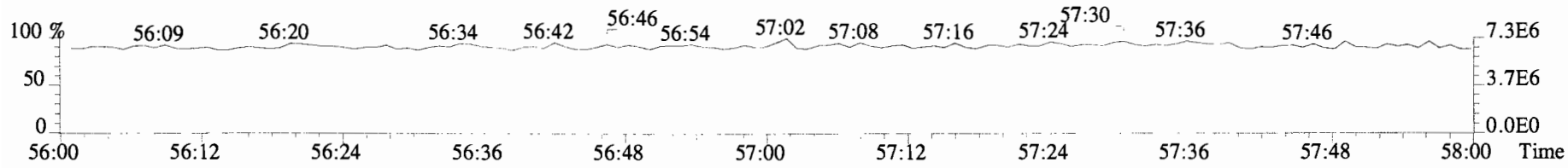
509.7229 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1424.0,0.00%,F,F)



511.7199 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1428.0,0.00%,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: B4J0155-BS1

Matrix : AQUEOUS Ext. Date: 10-29-14 Analysis Date: 31-OCT-14 Time: 09:53:53

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	57.5	30.0-67.5	13C-PCB-1	100	44.6	15-145	13C-PCB-79	100	87.0	40-145
PCB-3	50	56.4	30.0-67.5	13C-PCB-3	100	49.2	15-145	13C-PCB-178	100	85.7	40-145
PCB-4/10	200	219.6	120-270	13C-PCB-4	100	54.5	15-145				
PCB-15	100	110.7	60.0-135	13C-PCB-11	100	68.6	15-145				
PCB-19	50	55.8	30.0-67.5	13C-PCB-19	100	57.6	15-145				
PCB-37	50	48.3	30.0-67.5	13C-PCB-37	100	82.9	15-145				
PCB-54	50	54.9	30.0-67.5	13C-PCB-54	100	62.5	15-145				
PCB-81	50	53.9	30.0-67.5	13C-PCB-81	100	90.7	40-145				
PCB-77	50	56.4	30.0-67.5	13C-PCB-77	100	89.9	40-145				
PCB-104	50	55.5	30.0-67.5	13C-PCB-104	100	67.9	40-145				
PCB-123	50	55.9	30.0-67.5	13C-PCB-123	100	87.6	40-145				
PCB-106/118	100	109.4	60.0-135	13C-PCB-118	100	87.6	40-145				
PCB-114	50	53.6	30.0-67.5	13C-PCB-114	100	83.1	40-145				
PCB-105	50	55.3	30.0-67.5	13C-PCB-105	100	84.6	40-145				
PCB-126	50	54.5	30.0-67.5	13C-PCB-126	100	89.2	40-145				
PCB-155	50	57.9	30.0-67.5	13C-PCB-155	100	66.4	40-145				
PCB-167	50	57.4	30.0-67.5	13C-PCB-167	100	90.4	40-145				
PCB-156	50	55.0	30.0-67.5	13C-PCB-156	100	91.5	40-145				
PCB-157	50	56.7	30.0-67.5	13C-PCB-157	100	91.3	40-145				
PCB-169	50	55.0	30.0-67.5	13C-PCB-169	100	91.7	40-145				
PCB-188	50	56.4	30.0-67.5	13C-PCB-188	100	73.8	40-145				
PCB-189	50	58.9	30.0-67.5	13C-PCB-189	100	89.5	40-145				
PCB-202	50	54.6	30.0-67.5	13C-PCB-202	100	79.4	40-145				
PCB-205	50	52.1	30.0-67.5	13C-PCB-194	100	97.3	40-145				
PCB-208	50	54.7	30.0-67.5	13C-PCB-208	100	89.9	40-145				
PCB-206	50	53.9	30.0-67.5	13C-PCB-206	100	92.8	40-145				
PCB-209	50	56.3	30.0-67.5	13C-PCB-209	100	75.8	40-145				

Analyst: DMS

Date: 11/3/14

Client ID: OPR Filename: 141031E1 S:2 Acq:31-OCT-14 09:53:53 ConCal: ST141031E1-1

Lab ID: B4J0155-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-1	2.96e+07	3.06	y	1.25	16:21	1.001	0.996	1.006	57.4650
	PCB-2	3.30e+07	3.07	y	1.18	18:37	0.988	0.983	0.993	59.1314
	PCB-3	3.25e+07	3.01	y	1.22	18:51	1.001	0.996	1.006	56.4491
	PCB-4/10	1.05e+08	1.63	y	1.55	20:10	1.002	0.998	1.008	219.604
	PCB-7/9	1.37e+08	1.63	y	1.27	21:54	0.871	0.865	0.873	220.657
	PCB-6	7.03e+07	1.64	y	1.26	22:32	0.896	0.890	0.899	113.708
	PCB-5/8	1.44e+08	1.64	y	1.23	22:56	0.912	0.906	0.916	238.730
	PCB-14	8.45e+07	1.65	y	1.23	24:00	0.954	0.949	0.959	103.216
	PCB-11	8.54e+07	1.65	y	1.16	25:10	1.001	0.996	1.006	110.907
	PCB-12/13	1.64e+08	1.65	y	1.10	25:34	1.017	1.010	1.020	224.481
	PCB-15	8.90e+07	1.66	y	1.21	25:52	1.028	1.024	1.034	110.713
	PCB-19	2.29e+07	1.08	y	1.30	24:11	1.001	0.996	1.006	55.7840
	PCB-30	3.45e+07	1.07	y	1.83	25:03	1.037	1.032	1.042	59.4083
	PCB-18	2.62e+07	1.09	y	0.86	25:47	0.954	0.949	0.959	56.6297
	PCB-17	2.75e+07	1.07	y	0.90	25:58	0.961	0.955	0.965	56.7756
	PCB-24/27	7.23e+07	1.08	y	1.18	26:32	0.982	0.976	0.986	114.187
-	PCB-16/32	6.43e+07	1.07	y	1.03	27:02	1.000	0.995	1.005	115.945
-	PCB-34	3.59e+07	1.01	y	1.26	27:49	0.961	0.956	0.966	61.7553
	PCB-23	3.11e+07	1.03	y	1.31	27:54	0.964	0.959	0.969	51.5798
	PCB-29	3.34e+07	1.04	y	1.33	28:09	0.972	0.967	0.977	54.6303
	PCB-26	3.07e+07	1.02	y	1.29	28:20	0.979	0.974	0.984	51.6534
	PCB-25	3.33e+07	1.03	y	1.34	28:31	0.985	0.980	0.990	53.8341
	PCB-31	3.08e+07	1.11	y	1.42	28:51	0.997	0.992	1.002	47.1288
	PCB-28	3.27e+07	0.90	y	1.38	28:58	1.001	0.996	1.006	51.5464
	PCB-20/21/33	1.00e+08	1.02	y	1.31	29:34	1.021	1.017	1.027	166.034
	PCB-22	3.34e+07	1.02	y	1.32	30:02	1.037	1.032	1.042	54.8755
	PCB-36	3.49e+07	1.02	y	1.38	30:37	0.933	0.929	0.939	47.4963
	PCB-39	3.70e+07	1.02	y	1.42	31:05	0.948	0.943	0.953	48.7552
	PCB-38	3.75e+07	1.01	y	1.35	31:52	0.972	0.967	0.976	51.8962
	PCB-35	3.57e+07	1.01	y	1.38	32:23	0.987	0.982	0.992	48.5427
	PCB-37	3.59e+07	1.04	y	1.39	32:49	1.001	0.996	1.006	48.3459
	PCB-54	2.93e+07	0.79	y	1.20	27:52	1.000	0.996	1.006	54.8630
	PCB-50	2.36e+07	0.78	y	0.97	29:01	1.041	1.037	1.047	54.8343
	PCB-53	2.54e+07	0.78	y	1.19	29:39	0.946	0.941	0.951	47.5397
	PCB-51	2.52e+07	0.78	y	1.15	29:59	0.957	0.952	0.962	48.6095
	PCB-45	2.22e+07	0.79	y	0.97	30:25	0.971	0.966	0.976	51.1557
	PCB-46	2.22e+07	0.79	y	0.95	30:55	0.987	0.982	0.992	51.9489

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	6.44e+07	0.77	y	1.28	31:22	1.001	0.996	1.006	112.018
PCB-73	3.47e+07	0.79	y	1.37	31:29	1.005	1.000	1.010	56.3049
PCB-43/49	5.55e+07	0.77	y	1.11	31:39	1.010	1.005	1.015	110.844
PCB-47	2.74e+07	0.78	y	1.13	31:51	1.000	0.996	1.006	50.8708
PCB-48/75	6.80e+07	0.79	y	1.30	31:58	1.004	0.999	1.009	109.640
PCB-65	3.39e+07	0.77	y	1.33	32:15	1.013	1.007	1.017	53.4565
PCB-62	3.39e+07	0.80	y	1.29	32:20	1.015	1.011	1.021	55.2239
PCB-44	2.56e+07	0.77	y	0.94	32:38	1.025	1.020	1.030	57.2651
PCB-42/59	6.50e+07	0.78	y	1.22	32:52	1.032	1.028	1.038	112.284
PCB-41/64/71/72	1.42e+08	0.78	y	1.31	33:27	1.050	1.046	1.056	227.539
PCB-68	4.01e+07	0.78	y	1.49	33:42	1.058	1.054	1.064	56.7933
PCB-40	2.33e+07	0.78	y	0.82	33:57	1.066	1.061	1.071	59.8664
PCB-57	3.86e+07	0.77	y	1.11	34:16	0.969	0.965	0.975	53.4343
PCB-67	3.74e+07	0.77	y	1.07	34:35	0.978	0.974	0.984	53.7557
PCB-58	3.91e+07	0.79	y	1.10	34:42	0.982	0.977	0.987	54.6731
PCB-63	4.07e+07	0.79	y	1.12	34:51	0.986	0.982	0.992	56.0917
PCB-74	4.19e+07	0.78	y	1.20	35:08	0.994	0.990	1.000	53.6496
PCB-61/70	7.80e+07	0.78	y	1.08	35:20	1.000	0.994	1.004	111.341
PCB-76/66	8.11e+07	0.77	y	1.14	35:32	1.005	1.001	1.011	110.112
PCB-80	4.62e+07	0.79	y	1.28	35:45	1.000	0.996	1.006	54.5297
PCB-55	4.17e+07	0.80	y	1.11	36:06	1.010	1.005	1.015	56.7287
PCB-56/60	8.06e+07	0.78	y	1.09	36:36	1.024	1.018	1.028	111.929
PCB-79	4.27e+07	0.78	y	1.12	37:38	1.053	1.048	1.058	57.2718
PCB-78	4.41e+07	0.77	y	1.24	38:20	0.986	0.982	0.992	55.7912
PCB-81	4.75e+07	0.79	y	1.38	38:52	1.000	0.995	1.005	53.8551
PCB-77	4.60e+07	0.83	y	1.21	39:29	1.000	0.995	1.005	56.4244
PCB-104	2.49e+07	1.60	y	1.26	32:30	1.000	0.996	1.006	55.5000
PCB-96	2.32e+07	1.62	y	1.09	33:47	1.039	1.034	1.044	59.5976
PCB-103	2.04e+07	1.65	y	0.93	34:17	1.055	1.050	1.060	61.2245
PCB-100	2.17e+07	1.59	y	1.00	34:39	1.066	1.061	1.071	60.8139
PCB-94	1.89e+07	1.62	y	1.11	35:07	0.985	0.981	0.991	55.4162
PCB-95/98/102	6.09e+07	1.60	y	1.21	35:37	0.999	0.994	1.004	162.653
PCB-93	1.90e+07	1.65	y	1.13	35:45	1.003	0.998	1.008	54.5173
PCB-88/91	3.72e+07	1.61	y	1.02	36:02	1.011	1.006	1.016	118.220
PCB-121	3.07e+07	1.58	y	1.90	36:08	1.014	1.009	1.019	52.2545
PCB-84/92	3.89e+07	1.61	y	1.05	36:58	0.991	0.986	0.996	109.334
PCB-89	1.96e+07	1.66	y	1.02	37:09	0.996	0.991	1.001	57.0524

RL: MONO, TRI - DECA: —

RL: DI : —

Integrations by Analyst: DMS Date: 11/3/14

Reviewed by Analyst: CT Date: 11/3/14

Client ID: OPR Filename: 141031E1 S:2 Acq:31-OCT-14 09:53:53 ConCal: ST141031E1-1

Lab ID: B4J0155-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-90/101	4.40e+07	1.61	y	1.19	37:19	1.000	0.996	1.006	109.407
	PCB-113	2.59e+07	1.58	y	1.35	37:34	1.007	1.002	1.012	56.6923
	PCB-99	2.35e+07	1.63	y	1.29	37:40	1.009	1.005	1.015	53.9267
	PCB-119	2.96e+07	1.58	y	1.72	38:07	0.987	0.982	0.992	53.0102
	PCB-108/112	4.57e+07	1.58	y	1.29	38:17	0.991	0.986	0.996	109.525
	PCB-83	2.73e+07	1.62	y	1.52	38:26	0.995	0.991	1.001	55.3316
	PCB-97	2.20e+07	1.62	y	1.25	38:39	1.000	0.996	1.006	54.4272
	PCB-86	1.83e+07	1.61	y	1.02	38:47	1.004	1.000	1.010	55.2842
	B-87/117/125	8.17e+07	1.62	y	1.56	38:55	1.007	1.002	1.012	161.686
	PCB-111/115	5.73e+07	1.61	y	1.75	39:04	1.011	1.007	1.017	100.894
	PCB-85/116	4.77e+07	1.60	y	1.30	39:12	1.015	1.010	1.020	113.147
	PCB-120	3.07e+07	1.62	y	1.78	39:25	1.020	1.016	1.026	53.1716
	PCB-110	2.98e+07	1.64	y	1.68	39:34	1.024	1.020	1.030	54.7049
	PCB-82	1.91e+07	1.65	y	0.74	40:13	0.977	0.972	0.982	58.8565
	PCB-124	3.21e+07	1.62	y	1.32	40:53	0.993	0.988	0.998	55.3407
	PCB-107/109	5.96e+07	1.60	y	1.22	41:02	0.996	0.991	1.001	111.201
	PCB-123	2.99e+07	1.61	y	1.22	41:12	1.000	0.995	1.005	55.8741
-	PCB-106/118	6.10e+07	1.62	y	1.22	41:25	1.001	0.996	1.006	109.378
-	PCB-114	4.17e+07	1.59	y	1.36	42:02	1.000	0.995	1.005	53.5580
	PCB-122	4.00e+07	1.60	y	1.24	42:10	1.003	0.999	1.009	56.3441
	PCB-105	4.25e+07	1.63	y	1.28	42:55	1.000	0.995	1.005	55.3118
	PCB-127	4.08e+07	1.63	y	1.14	43:14	1.000	0.995	1.005	55.1482
	PCB-126	4.16e+07	1.64	y	1.28	45:09	1.000	0.995	1.005	54.5162
	PCB-155	1.92e+07	1.29	y	1.14	36:53	1.000	0.966	1.006	57.8546
	PCB-150	1.95e+07	1.28	y	1.06	38:09	1.035	1.030	1.040	62.6680
	PCB-152	2.02e+07	1.28	y	1.10	38:38	1.048	1.043	1.053	63.1029
	PCB-145	1.94e+07	1.28	y	1.09	39:05	1.060	1.055	1.065	60.9740
	PCB-136	2.11e+07	1.29	y	1.08	39:24	1.069	1.064	1.074	66.6290
	PCB-148	1.35e+07	1.31	y	0.74	39:30	1.071	1.066	1.076	62.2933
	PCB-154	1.70e+07	1.26	y	0.88	39:59	1.085	1.079	1.089	65.8355
	PCB-151	1.57e+07	1.29	y	0.81	40:38	1.102	1.097	1.107	66.4983
	PCB-135	1.50e+07	1.31	y	0.78	40:50	1.108	1.101	1.113	65.8590
	PCB-144	1.63e+07	1.36	y	0.82	40:57	1.111	1.105	1.116	68.1922
	PCB-147	1.61e+07	1.25	y	0.83	41:05	1.114	1.011	1.120	66.4552
	PCB-139/149	3.29e+07	1.29	y	0.84	41:21	1.122	1.115	1.127	133.487
-	PCB-140	1.58e+07	1.27	y	0.79	41:32	1.127	1.120	1.132	68.7860
-	PCB-134/143	5.57e+07	1.26	y	0.93	41:59	0.976	0.970	0.980	111.044

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	5.64e+07	1.26	y	0.95	42:16	0.982	0.977	0.987	110.397
PCB-131	2.75e+07	1.26	y	0.91	42:26	0.986	0.981	0.991	55.6677
PCB-146/165	6.95e+07	1.25	y	1.16	42:38	0.991	0.986	0.996	111.153
PCB-132/161	6.58e+07	1.24	y	1.11	42:54	0.997	0.992	1.002	109.372
PCB-153	3.72e+07	1.25	y	1.18	43:03	1.000	0.995	1.005	58.4257
PCB-168	4.03e+07	1.26	y	1.37	43:16	1.005	1.000	1.010	54.4490
PCB-141	2.95e+07	1.27	y	0.97	43:48	1.000	0.996	1.005	56.3504
PCB-137	3.23e+07	1.25	y	1.07	44:12	1.010	1.004	1.014	56.1168
PCB-130	2.75e+07	1.29	y	0.85	44:17	1.011	1.007	1.017	60.2299
PCB-138/163/164	1.11e+08	1.26	y	1.23	44:41	1.001	0.996	1.006	171.095
PCB-158/160	7.98e+07	1.27	y	1.29	44:56	1.007	1.001	1.011	117.092
PCB-129	2.81e+07	1.24	y	0.92	45:09	1.012	1.007	1.017	57.4829
PCB-166	3.91e+07	1.26	y	1.12	45:37	0.993	0.988	0.998	56.5525
PCB-159	4.10e+07	1.25	y	1.16	45:56	1.000	0.995	1.005	56.7903
PCB-128/162	7.13e+07	1.22	y	1.02	46:13	1.007	1.002	1.012	113.030
PCB-167	4.16e+07	1.26	y	1.06	46:37	1.000	0.995	1.005	57.3982
PCB-156	4.23e+07	1.23	y	1.18	47:56	1.000	0.995	1.005	54.9520
PCB-157	4.21e+07	1.24	y	1.08	48:12	1.000	0.995	1.005	56.7055
PCB-169	3.89e+07	1.27	y	1.11	50:17	1.000	0.995	1.005	55.0310
PCB-188	3.13e+07	1.07	y	1.40	42:42	1.001	0.995	1.005	56.4429
PCB-184	2.90e+07	1.06	y	1.24	43:09	1.011	1.006	1.016	59.3927
PCB-179	3.17e+07	1.07	y	1.30	43:56	1.030	1.024	1.034	61.4880
PCB-176	3.32e+07	1.07	y	1.36	44:24	1.041	1.035	1.045	61.7053
PCB-186	3.16e+07	1.04	y	1.28	45:01	1.055	1.049	1.059	62.6329
PCB-178	2.44e+07	1.08	y	0.94	45:30	1.066	1.061	1.071	65.9799
PCB-175	2.67e+07	1.07	y	0.97	45:51	1.075	1.069	1.079	69.7671
PCB-182/187	5.51e+07	1.06	y	1.01	46:01	1.079	1.073	1.083	137.406
PCB-183	2.73e+07	1.05	y	1.08	46:20	1.086	1.080	1.090	63.8139
PCB-185	2.58e+07	1.07	y	1.34	47:00	0.955	0.951	0.961	56.2440
PCB-174	2.61e+07	1.05	y	1.34	47:22	0.963	0.958	0.968	56.9859
PCB-181	2.62e+07	1.06	y	1.36	47:29	0.965	0.961	0.971	56.3324
PCB-177	2.46e+07	1.06	y	1.24	47:39	0.968	0.964	0.974	58.0391
PCB-171	2.52e+07	1.05	y	1.31	47:57	0.975	0.970	0.980	56.1270
PCB-173	2.30e+07	1.07	y	1.16	48:23	0.983	0.979	0.989	58.0591
PCB-172	2.46e+07	1.07	y	1.22	48:49	0.992	0.988	0.998	58.8592
PCB-192	3.06e+07	1.07	y	1.53	49:01	0.996	0.991	1.001	58.6145
PCB-180	2.78e+07	1.06	y	1.43	49:13	1.000	0.995	1.005	56.9029

RL: MONO, TRI - DECA: _____

Integrations by Analyst: DMS

Date: 11/3/14

Client ID: OPR Filename: 141031E1 S:2 Acq:31-OCT-14 09:53:53 ConCal: ST141031E1-1
Lab ID: B4J0155-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-193	3.27e+07	1.09	y	1.65	49:25	1.004	0.999	1.009	57.8040
	PCB-191	3.32e+07	1.05	y	1.67	49:39	1.009	1.004	1.014	58.0613
	PCB-170	2.41e+07	1.07	y	1.50	50:39	1.000	0.995	1.005	56.1850
	PCB-190	3.30e+07	1.05	y	2.02	50:49	1.004	0.998	1.008	57.1915
	PCB-189	3.33e+07	1.07	y	1.54	52:06	1.000	0.995	1.005	58.9316
	PCB-202	2.15e+07	0.91	y	1.04	48:09	1.001	0.995	1.005	54.6498
	PCB-201	2.42e+07	0.91	y	1.10	48:38	1.011	1.006	1.016	57.9254
	PCB-204	2.13e+07	0.91	y	0.99	48:47	1.014	1.009	1.019	56.6003
	PCB-197	2.30e+07	0.92	y	1.07	49:05	1.020	1.015	1.025	56.7606
	PCB-200	2.32e+07	0.93	y	1.02	49:57	1.038	1.032	1.044	60.2523
	PCB-198	1.57e+07	0.91	y	0.74	51:13	1.064	1.058	1.068	55.9706
	PCB-199	1.83e+07	0.91	y	0.73	51:19	1.067	1.060	1.070	66.3665
-	PCB-196/203	3.55e+07	0.91	y	0.77	51:35	1.072	1.066	1.076	121.451
-	PCB-195	2.68e+07	0.88	y	1.20	52:44	0.984	0.979	0.989	55.6016
	PCB-194	2.66e+07	0.90	y	1.25	53:37	1.000	0.995	1.005	53.1328
	PCB-205	2.96e+07	0.92	y	1.41	53:54	1.006	1.001	1.011	52.1215
	PCB-208	2.71e+07	1.34	y	0.96	52:52	1.000	0.995	1.005	54.7059
	PCB-207	2.71e+07	1.34	y	0.92	53:11	1.006	1.001	1.011	57.5067
	PCB-206	1.73e+07	1.34	y	1.03	55:18	1.000	0.995	1.005	53.9258
	PCB-209	1.57e+07	1.16	y	1.18	56:37	1.000	0.995	1.005	56.2602

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	9.51e+07	3.06	y	16:21	1.22	173.110	
Total Di-PCB	8.82e+08	1.63	y	20:10	1.21	1344.86	
Total Tri-PCB	2.48e+08	1.08	y	24:11	1.16	458.730	
Total Tri-PCB	5.53e+08	1.01	y	27:49	1.35	854.319	Sum:1313.05
Total Tetra-PCB	1.44e+09	0.79	y	27:53	1.17	2267.81	
Total Penta-PCB	1.00e+09	1.60	y	32:30	1.21	2272.91	
Total Penta-PCB	2.18e+08	1.59	y	42:02	1.26	290.066	Sum:2562.97
Total Hexa-PCB	2.41e+08	1.29	y	36:53	0.92	908.635	
Total Hexa-PCB	9.88e+08	1.26	y	41:59	1.08	1597.16	Sum:2505.80
Total Hepta-PCB	6.90e+08	1.07	y	42:42	1.27	1462.80	
Total Octa-PCB	1.83e+08	0.91	y	48:09	0.92	529.977	
Total Octa-PCB	8.45e+07	0.88	y	52:44	1.29	163.678	Sum:693.655
Total Nona-PCB	7.27e+07	1.34	y	52:52	0.96	168.853	
Total Deca-PCB	1.57e+07	1.16	y	56:37	1.18	56.2602	

Total PCB Conc:12506.4899480

RL: MONO, TRI - DECA: —

Integrations by Analyst: DMS

Date: 11/3/14

Client ID: OPR Filename: 141031E1 S:2 Acq:31-OCT-14 09:53:53 ConCal: ST141031E1-1

Lab ID: B4J0155-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	4.10e+07	3.51 y	0.89	16:20	0.632	0.622	0.628	44.6	44.6
13C-PCB-3	4.72e+07	3.48 y	0.93	18:50	0.729	0.721	0.729	49.2	49.2
13C-PCB-4	3.09e+07	1.58 y	0.55	20:08	0.779	0.772	0.780	54.5	54.5
13C-PCB-9	4.91e+07	1.59 y	0.83	21:51	0.845	0.840	0.848	57.4	57.4
13C-PCB-11	6.65e+07	1.56 y	0.94	25:09	0.973	0.968	0.978	68.6	68.6
13C-PCB-19	3.18e+07	1.12 y	0.53	24:10	0.935	0.929	0.939	57.6	57.6
13C-PCB-28	4.60e+07	1.04 y	0.89	28:57	1.003	0.999	1.009	66.9	66.9
13C-PCB-32	5.38e+07	1.11 y	0.81	27:02	1.046	1.041	1.051	63.9	63.9
13C-PCB-37	5.34e+07	1.05 y	0.83	32:48	1.137	1.131	1.143	82.9	82.9
13C-PCB-47	4.75e+07	0.81 y	0.74	31:51	0.871	0.867	0.875	76.1	76.1
13C-PCB-52	4.50e+07	0.79 y	0.71	31:20	0.856	0.853	0.861	75.6	75.6
13C-PCB-54	4.46e+07	0.80 y	0.85	27:52	0.762	0.758	0.766	62.5	62.5
13C-PCB-70	6.48e+07	0.82 y	0.94	35:21	0.966	0.961	0.971	81.7	81.7
13C-PCB-77	6.75e+07	0.80 y	0.89	39:28	1.079	1.073	1.083	89.9	89.9
13C-PCB-80	6.63e+07	0.80 y	0.96	35:45	0.977	0.972	0.982	82.1	82.1
13C-PCB-81	6.39e+07	0.81 y	0.84	38:52	1.062	1.057	1.067	90.7	90.7
13C-PCB-95	3.08e+07	1.59 y	0.74	35:39	0.913	0.908	0.918	78.5	78.5
13C-PCB-97	3.24e+07	1.60 y	0.69	38:38	0.990	0.984	0.994	89.1	89.1
13C-PCB-101	3.38e+07	1.62 y	0.79	37:19	0.956	0.951	0.961	81.6	81.6
13C-PCB-104	3.57e+07	1.60 y	1.00	32:30	0.833	0.829	0.837	67.9	67.9
13C-PCB-105	6.00e+07	1.59 y	1.24	42:54	0.928	0.924	0.934	84.6	84.6
13C-PCB-114	5.74e+07	1.60 y	1.21	42:02	0.909	0.905	0.915	83.1	83.1
13C-PCB-118	4.55e+07	1.63 y	0.98	41:22	1.060	1.054	1.064	87.6	87.6
13C-PCB-123	4.39e+07	1.58 y	0.95	41:11	1.055	1.049	1.059	87.6	87.6
13C-PCB-126	5.94e+07	1.61 y	1.16	45:08	0.977	0.972	0.982	89.2	89.2
13C-PCB-127	6.49e+07	1.59 y	1.34	43:13	0.935	0.931	0.941	84.5	84.5
13C-PCB-138	5.28e+07	1.28 y	1.04	44:38	0.966	0.961	0.971	88.5	88.5
13C-PCB-141	5.38e+07	1.27 y	1.07	43:47	0.947	0.943	0.953	87.7	87.7
13C-PCB-153	5.41e+07	1.30 y	1.11	43:02	0.931	0.927	0.937	84.9	84.9
13C-PCB-155	2.92e+07	1.27 y	0.83	36:52	0.944	0.939	0.949	66.4	66.4
13C-PCB-156	6.51e+07	1.29 y	1.24	47:55	1.037	1.032	1.042	91.5	91.5
13C-PCB-157	6.85e+07	1.33 y	1.31	48:11	1.043	1.037	1.047	91.3	91.3
13C-PCB-159	6.19e+07	1.28 y	1.20	45:55	0.994	0.989	0.999	90.2	90.2
13C-PCB-167	6.83e+07	1.26 y	1.32	46:36	1.008	1.004	1.014	90.4	90.4
13C-PCB-169	6.37e+07	1.31 y	1.22	50:17	1.088	1.082	1.092	91.7	91.7
13C-PCB-170	2.86e+07	0.47 y	0.54	50:38	1.096	1.089	1.101	93.5	93.5
13C-PCB-180	3.42e+07	0.47 y	0.67	49:12	1.065	1.059	1.069	88.7	88.7
13C-PCB-188	3.95e+07	0.46 y	0.94	42:40	0.923	0.919	0.929	73.8	73.8
13C-PCB-189	3.67e+07	0.46 y	0.72	52:05	1.127	1.120	1.132	89.5	89.5
13C-PCB-194	4.02e+07	0.94 y	0.81	53:36	0.995	0.990	1.000	97.3	97.3
13C-PCB-202	3.78e+07	0.91 y	0.83	48:07	1.041	1.036	1.046	79.4	79.4
13C-PCB-206	3.11e+07	0.81 y	0.66	55:18	1.026	1.021	1.031	92.8	92.8
13C-PCB-208	5.15e+07	0.77 y	1.12	52:51	0.981	0.976	0.986	89.9	89.9
13C-PCB-209	2.37e+07	1.19 y	0.61	56:36	1.050	1.044	1.054	75.8	75.8

OK

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	7.35e+07	0.80 y	1.01	37:38	1.029	1.023	1.033	87.0	87.0
13C-PCB-178	3.09e+07	0.47 y	0.63	45:29	0.984	0.979	0.989	85.7	85.7

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	7.35e+07	0.80 y	1.20	37:38	0.968	0.963	0.973	95.9	95.9
13C-PCB-178	3.09e+07	0.47 y	0.94	45:29	0.924	0.920	0.930	96.5	96.5

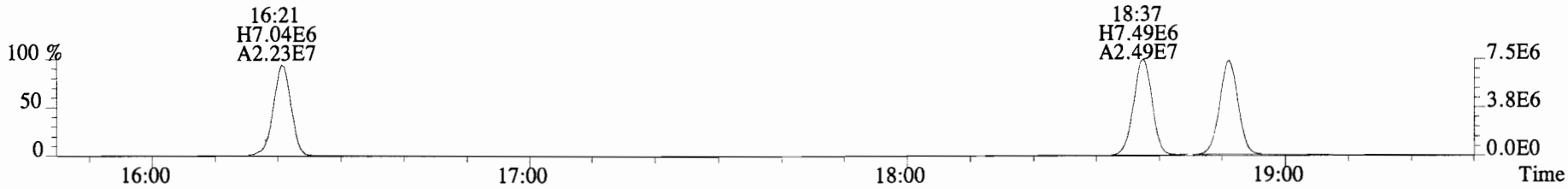
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.04e+08	1.59	y	1.00	25:51	100
13C-PCB-31	7.75e+07	1.04	y	1.00	28:51	100
13C-PCB-60	8.40e+07	0.80	y	1.00	36:35	100
13C-PCB-111	5.28e+07	1.58	y	1.00	39:02	100
13C-PCB-128	5.72e+07	1.28	y	1.00	46:13	100
13C-PCB-205	5.10e+07	0.92	y	1.00	53:53	100

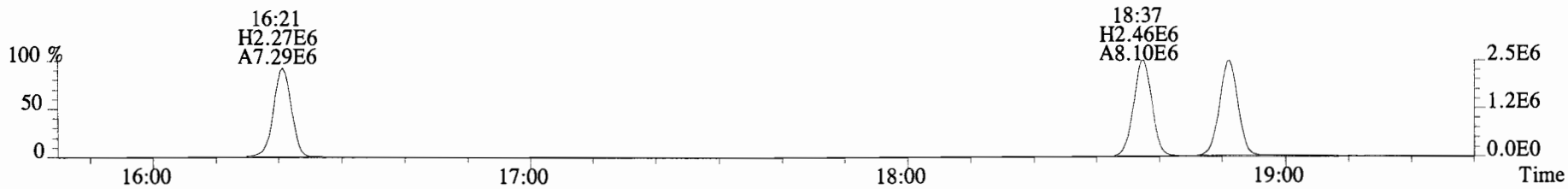
Analyst: DMS

Date: 11/3/14

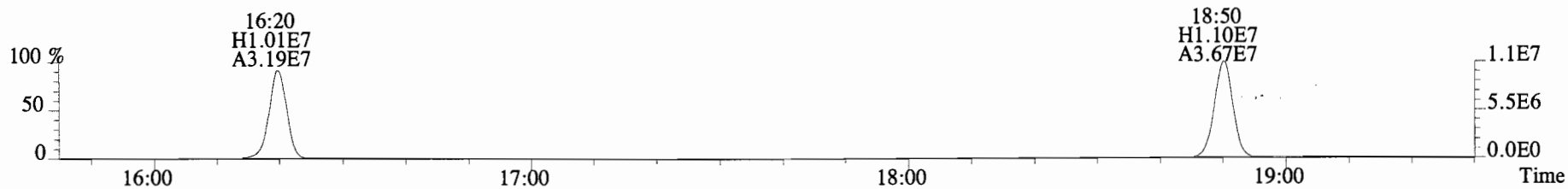
File:141031E1 #1-728 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
188.0393 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2956.0,0.00%,F,F)



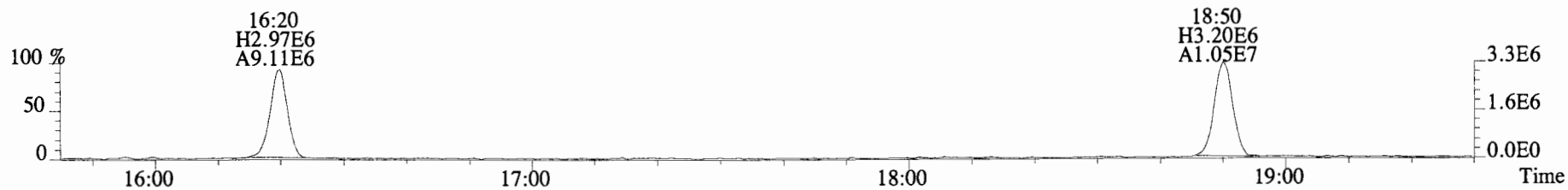
190.0363 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3652.0,0.00%,F,F)



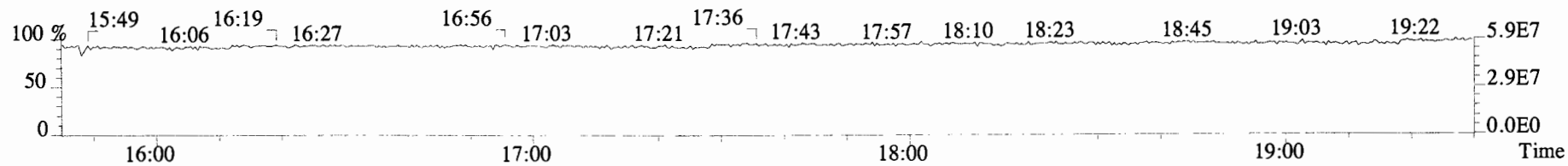
200.0795 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5236.0,0.00%,F,F)



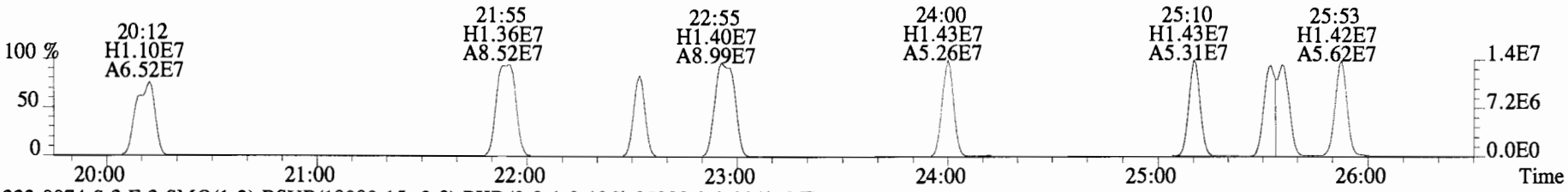
202.0766 S:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,45212.0,0.00%,F,F)



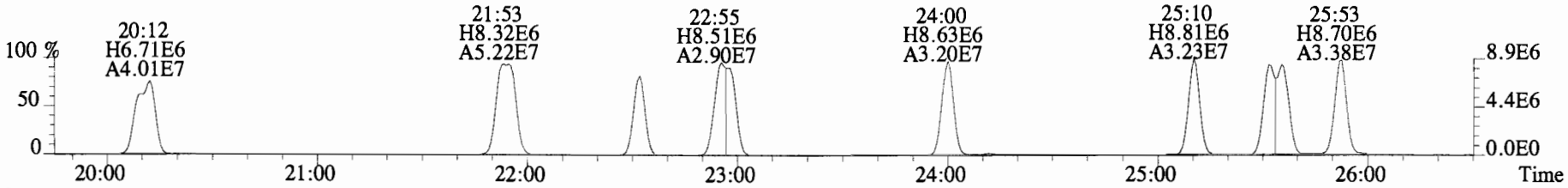
180.9880 S:2



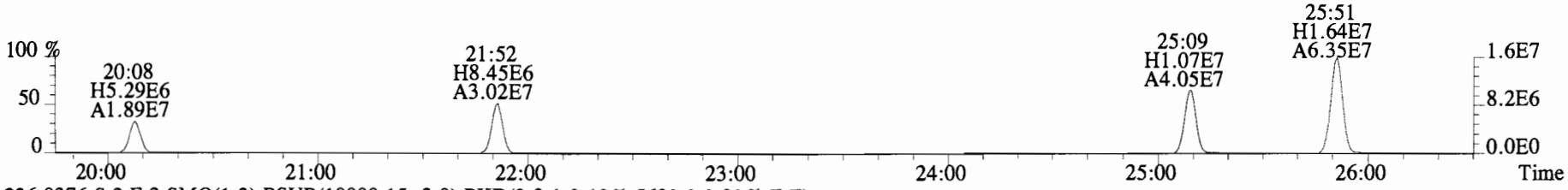
File:141031E1 #1-758 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
222.0003 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9080.0,0.00%,F,F)



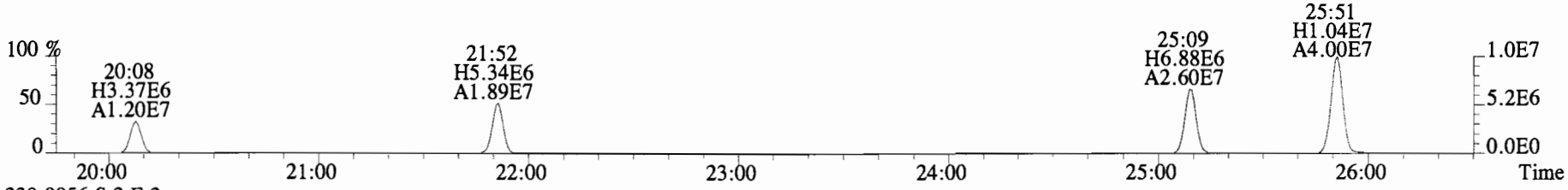
223.9974 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25288.0,0.00%,F,F)



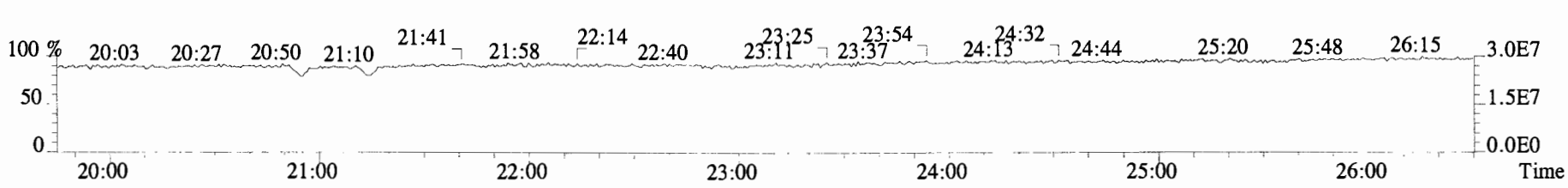
234.0406 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4708.0,0.00%,F,F)

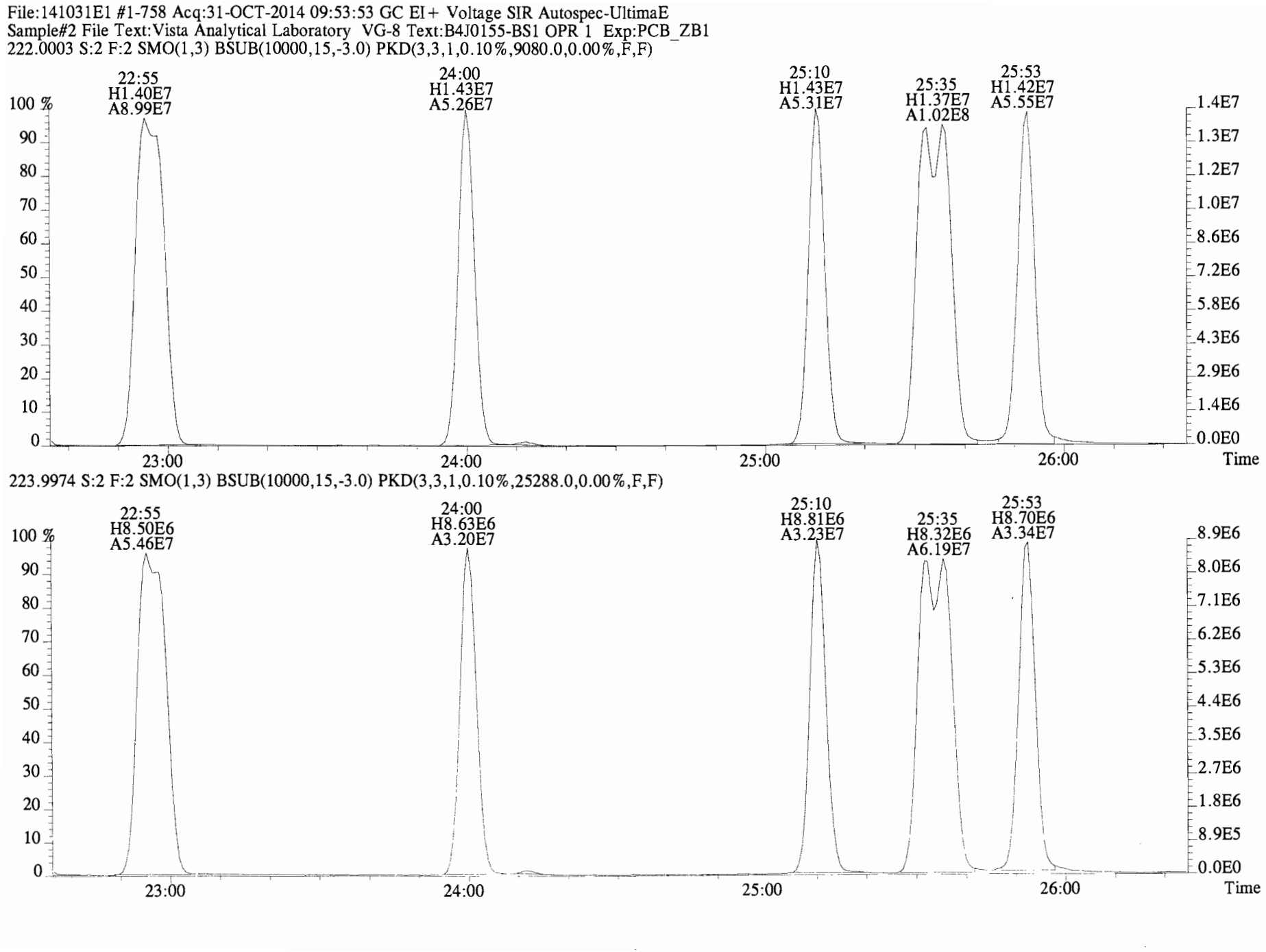


236.0376 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5600.0,0.00%,F,F)

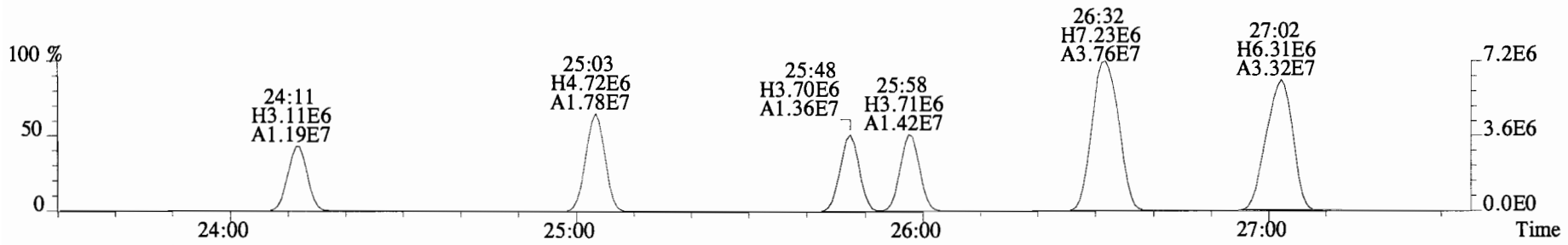


230.9856 S:2 F:2

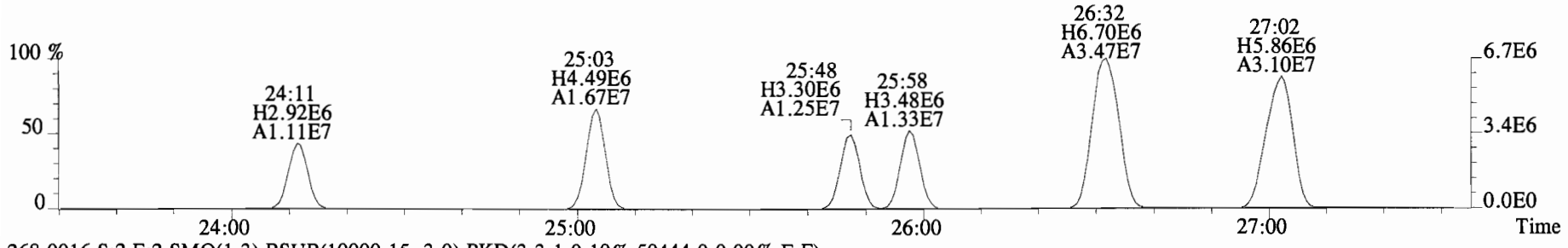



File:141031E1 #1-758 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
222.0003 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9080.0,0.00%,F,F)
22:55
H1.40E7
A8.99E7
24:00
H1.43E7
A5.26E7
25:10
H1.43E7
A5.31E7
25:35
H1.37E7
A1.02E8
25:53
H1.42E7
A5.55E7
100 %
90
80
70
60
50
40
30
20
10
0
1.4E7
1.3E7
1.2E7
1.0E7
8.6E6
7.2E6
5.8E6
4.3E6
2.9E6
1.4E6
0.0E0
23:00
24:00
25:00
26:00
Time
223.9974 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25288.0,0.00%,F,F)
22:55
H8.50E6
A5.46E7
24:00
H8.63E6
A3.20E7
25:10
H8.81E6
A3.23E7
25:35
H8.32E6
A6.19E7
25:53
H8.70E6
A3.34E7
100 %
90
80
70
60
50
40
30
20
10
0
8.9E6
8.0E6
7.1E6
6.2E6
5.3E6
4.4E6
3.5E6
2.7E6
1.8E6
8.9E5
0.0E0
23:00
24:00
25:00
26:00
Time

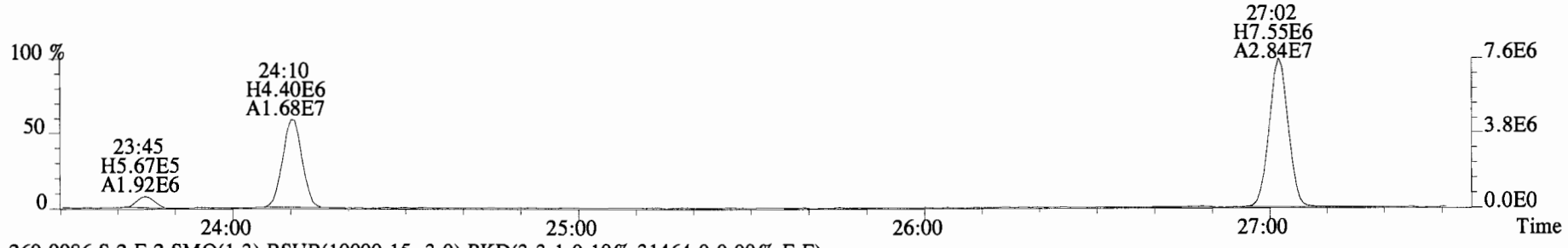
File:141031E1 #1-758 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4116.0,0.00%,F,F)



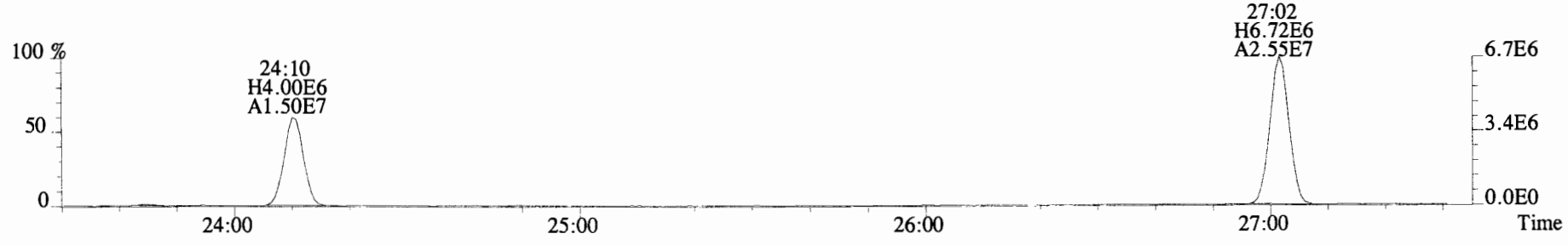
257.9584 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1900.0,0.00%,F,F)



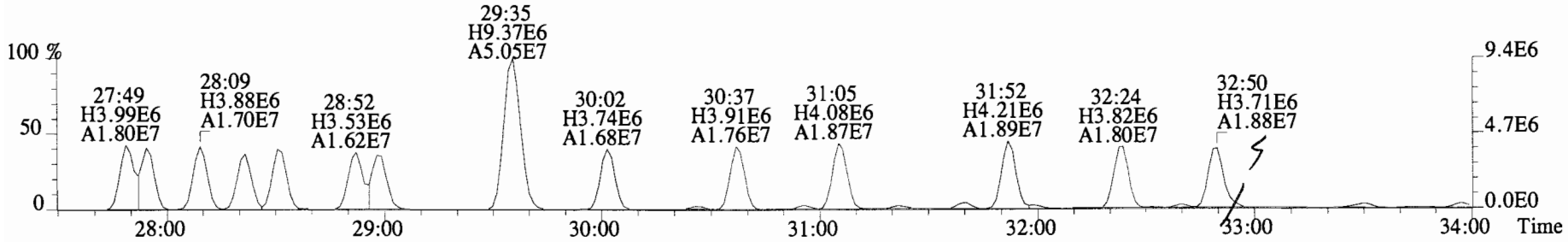
268.0016 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,50444.0,0.00%,F,F)



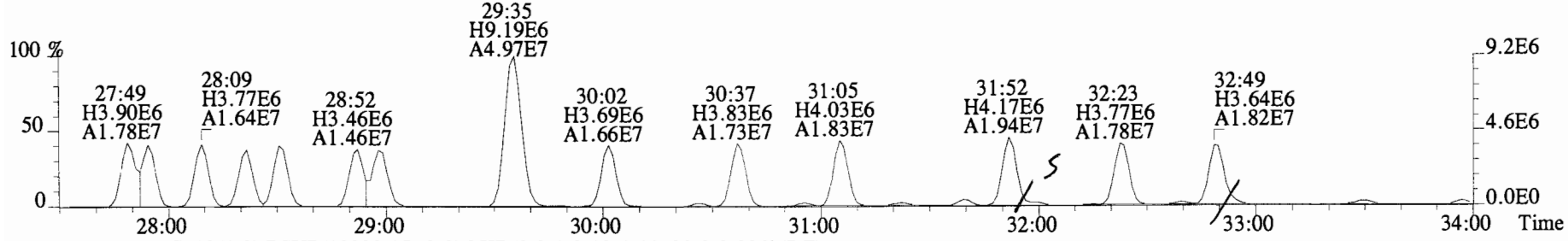
269.9986 S:2 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,31464.0,0.00%,F,F)



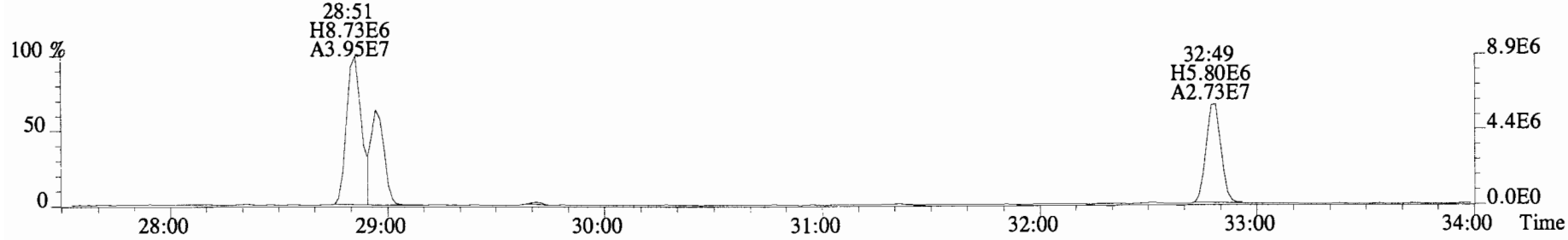
File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18804.0,0.00%,F,F)



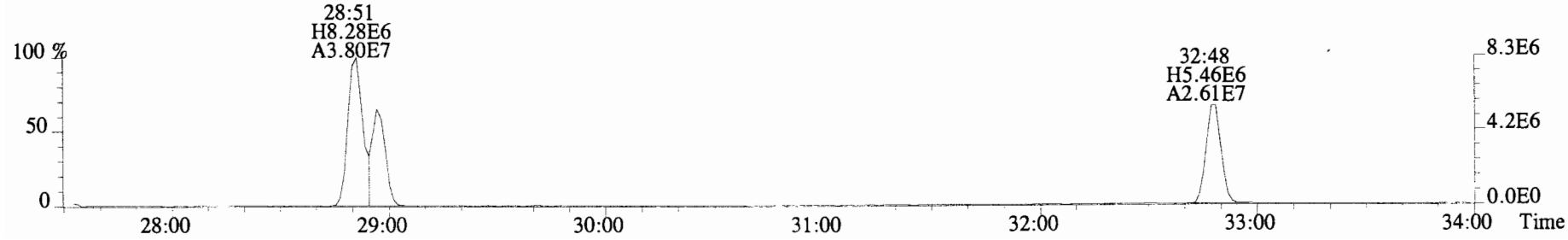
257.9584 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,17248.0,0.00%,F,F)



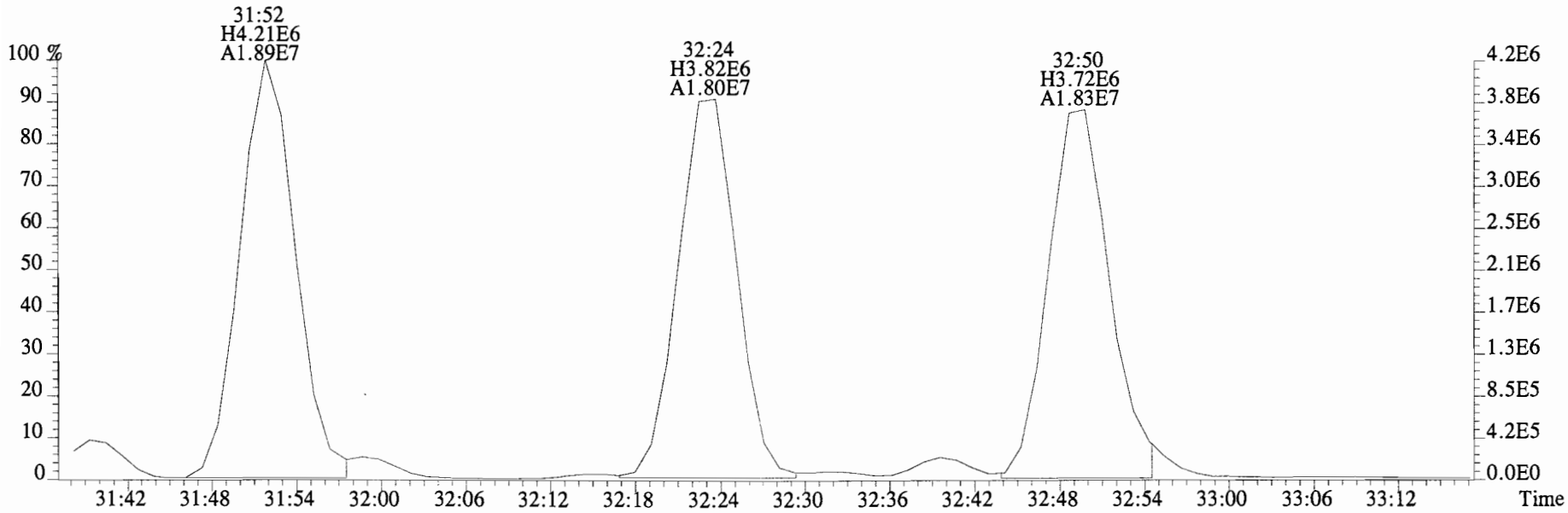
268.0016 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,88532.0,0.00%,F,F)



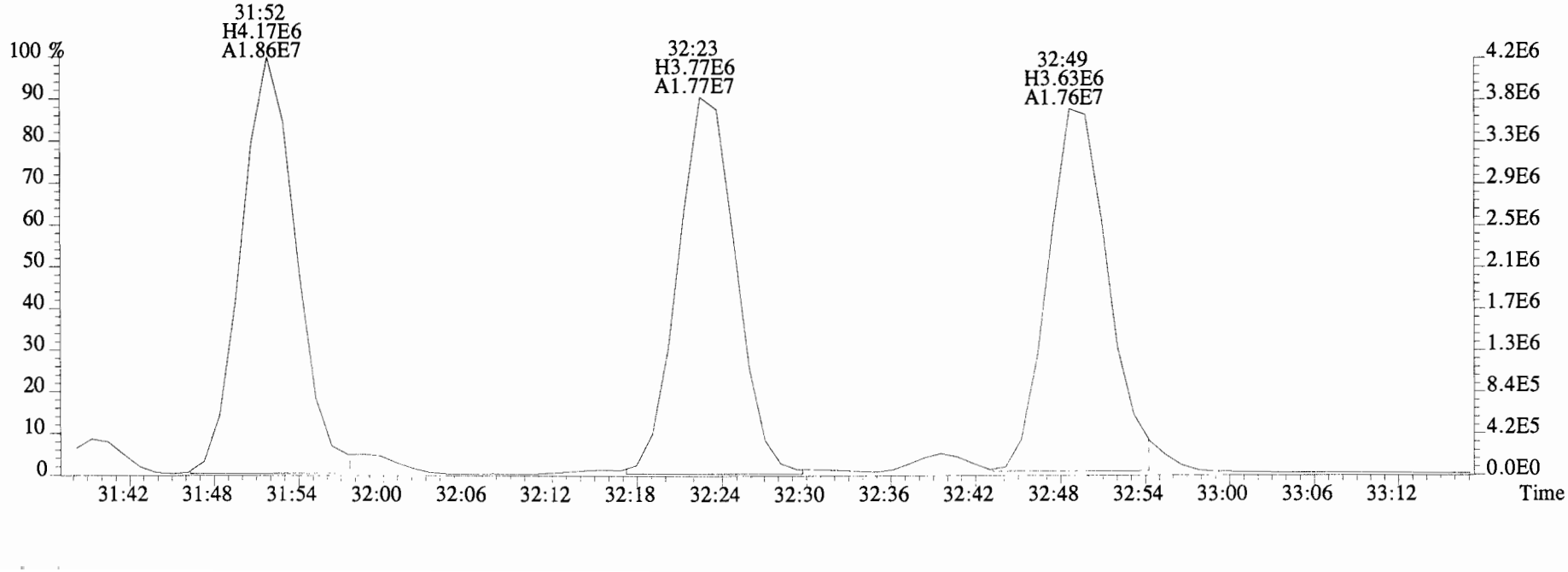
269.9986 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,31668.0,0.00%,F,F)



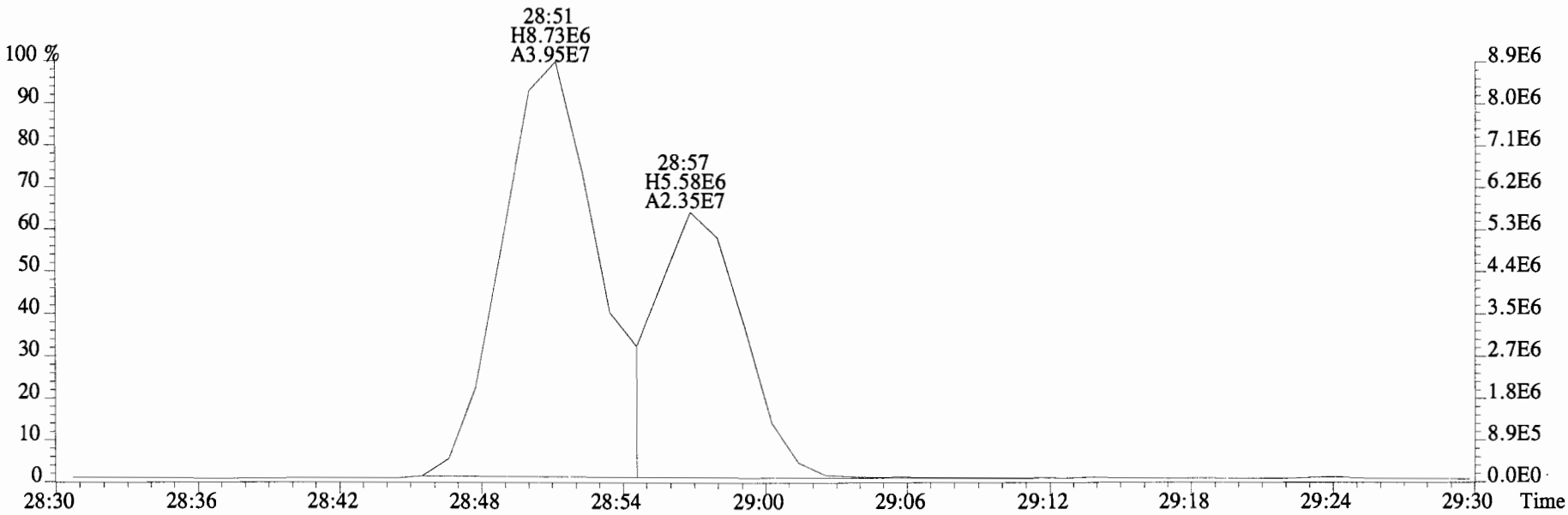
File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
255.9613 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18804.0,0.00%,F,F)



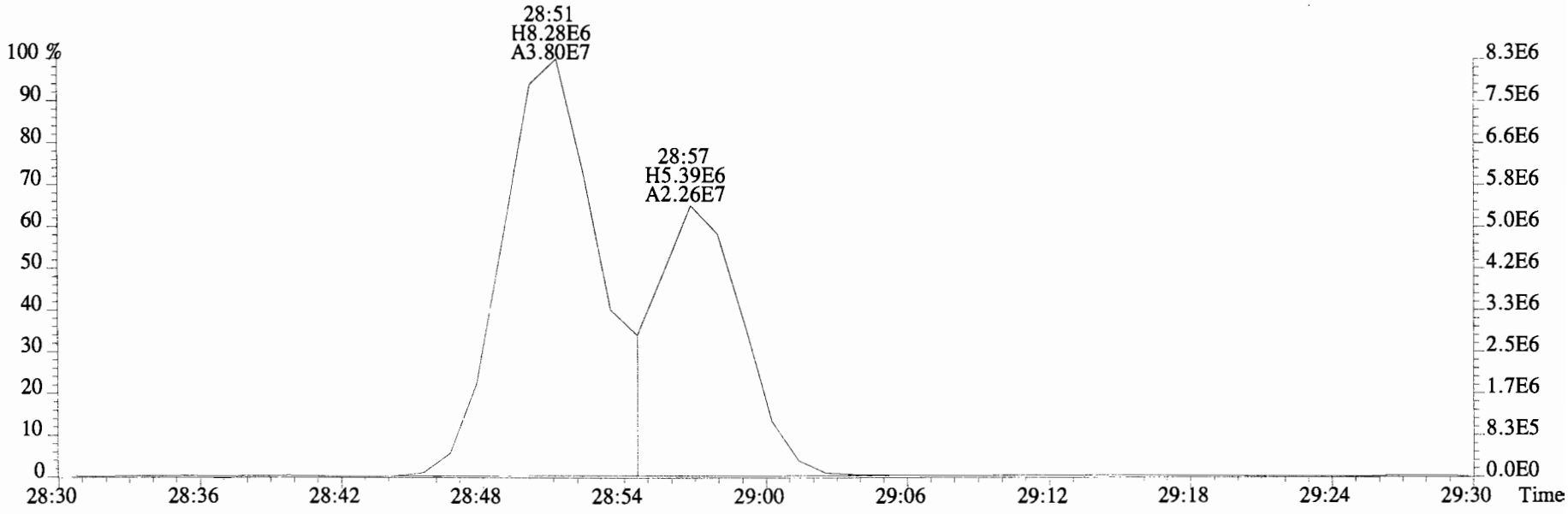
257.9584 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,17248.0,0.00%,F,F)

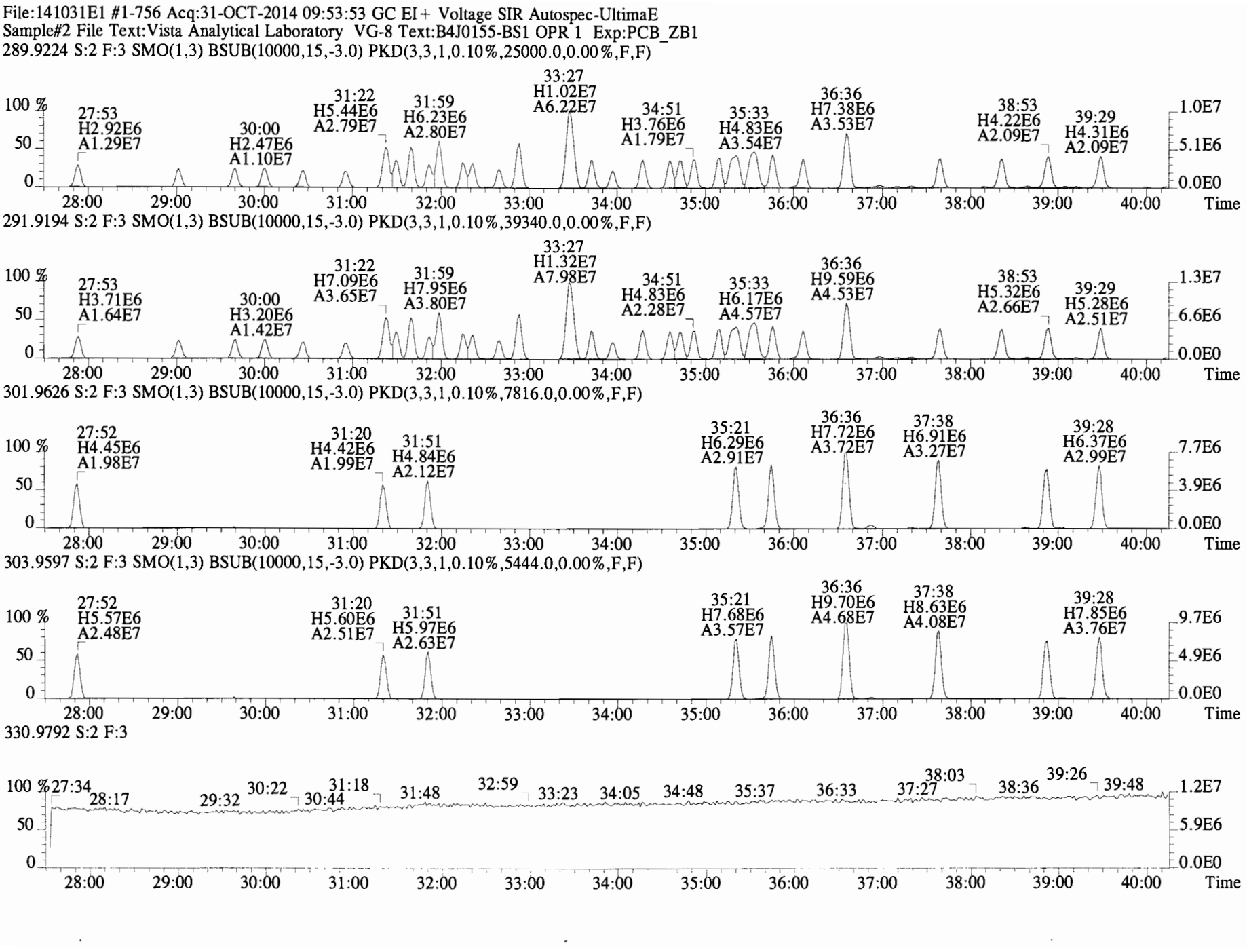


File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
268.0016 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,88532.0,0.00%,F,F)

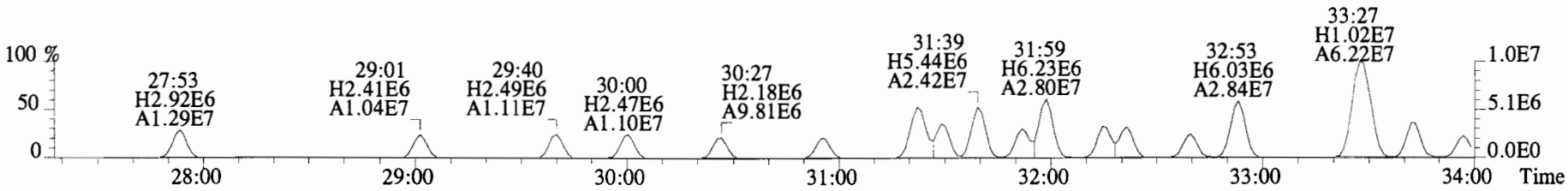


269.9986 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,31668.0,0.00%,F,F)

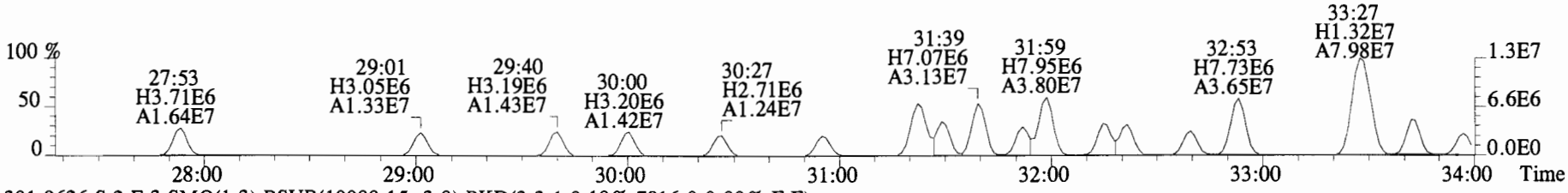



File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25000.0,0.00%,F,F)
27:53 H2.92E6 A1.29E7
30:00 H2.47E6 A1.10E7
31:22 H5.44E6 A2.79E7
31:59 H6.23E6 A2.80E7
33:27 H1.02E7 A6.22E7
34:51 H3.76E6 A1.79E7
35:33 H4.83E6 A3.54E7
36:36 H7.38E6 A3.53E7
38:53 H4.22E6 A2.09E7
39:29 H4.31E6 A2.09E7
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,39340.0,0.00%,F,F)
27:53 H3.71E6 A1.64E7
30:00 H3.20E6 A1.42E7
31:22 H7.09E6 A3.65E7
31:59 H7.95E6 A3.80E7
33:27 H1.32E7 A7.98E7
34:51 H4.83E6 A2.28E7
35:33 H6.17E6 A4.57E7
36:36 H9.59E6 A4.53E7
38:53 H5.32E6 A2.66E7
39:29 H5.28E6 A2.51E7
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7816.0,0.00%,F,F)
27:52 H4.45E6 A1.98E7
31:20 H4.42E6 A1.99E7
31:51 H4.84E6 A2.12E7
35:21 H6.29E6 A2.91E7
36:36 H7.72E6 A3.72E7
37:38 H6.91E6 A3.27E7
39:28 H6.37E6 A2.99E7
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5444.0,0.00%,F,F)
27:52 H5.57E6 A2.48E7
31:20 H5.60E6 A2.51E7
31:51 H5.97E6 A2.63E7
35:21 H7.68E6 A3.57E7
36:36 H9.70E6 A4.68E7
37:38 H8.63E6 A4.08E7
39:28 H7.85E6 A3.76E7
330.9792 S:2 F:3
27:34 28:17 29:32 30:22 30:44 31:18 31:48 32:59 33:23 34:05 34:48 35:37 36:33 37:27 38:03 38:36 39:26 39:48
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
1.0E7
5.1E6
0.0E0
1.3E7
6.6E6
7.7E6
3.9E6
9.7E6
4.9E6
1.2E7
5.9E6

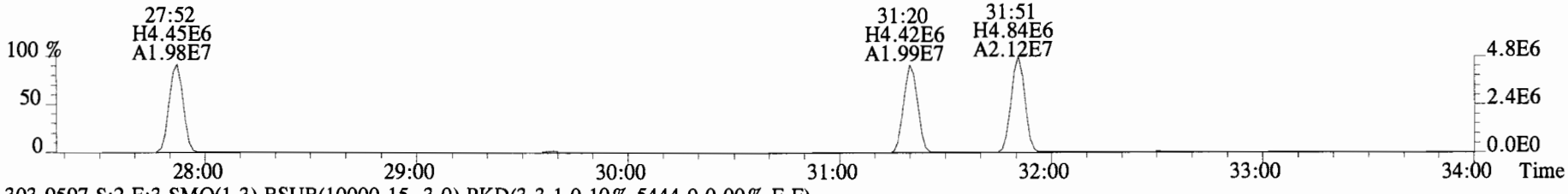
File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25000.0,0.00%,F,F)



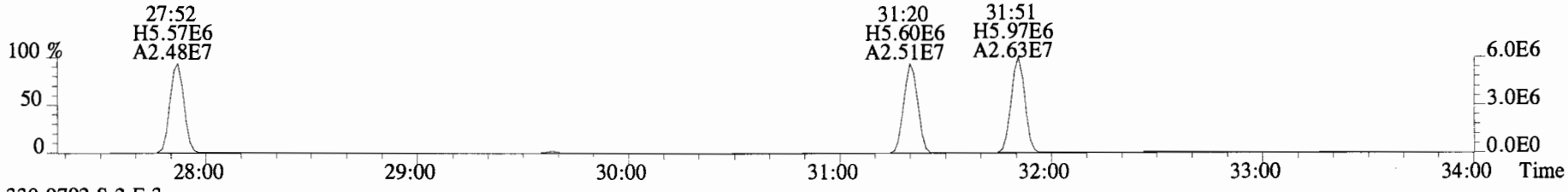
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,39340.0,0.00%,F,F)



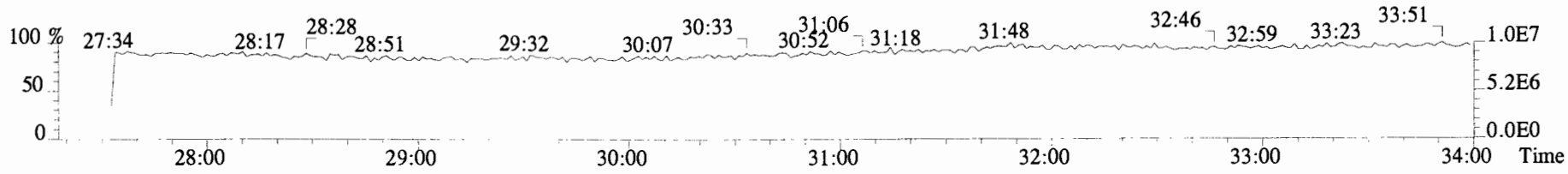
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7816.0,0.00%,F,F)



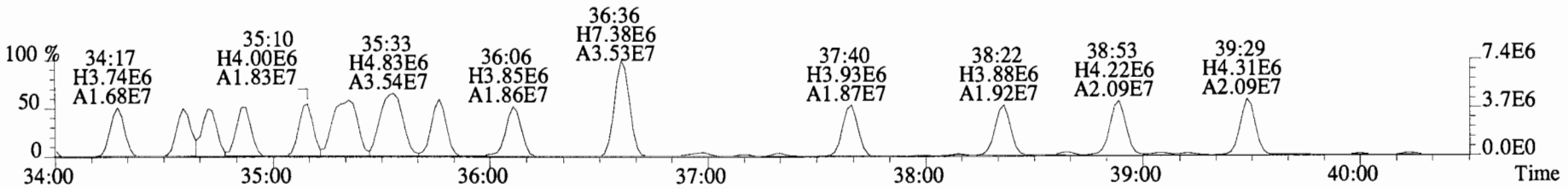
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5444.0,0.00%,F,F)



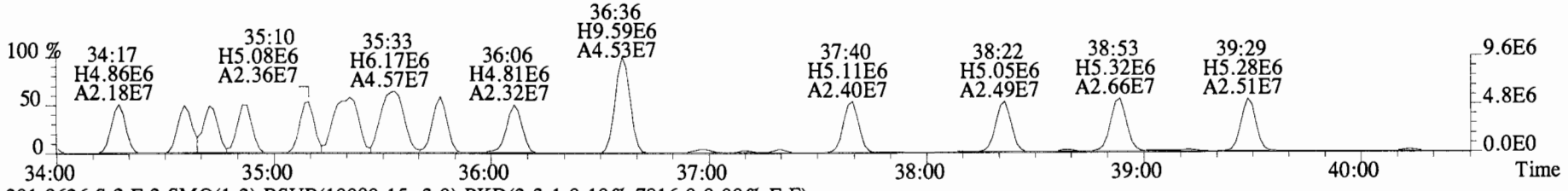
330.9792 S:2 F:3



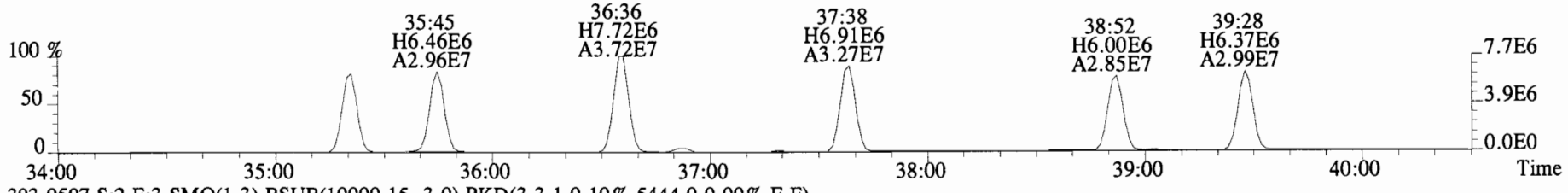
File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25000.0,0.00%,F,F)



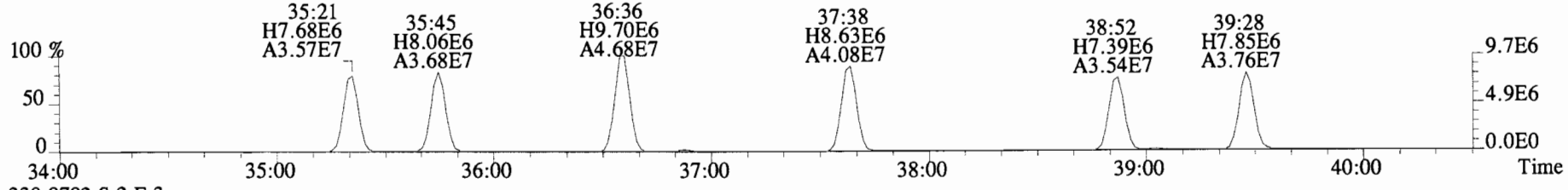
291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,39340.0,0.00%,F,F)



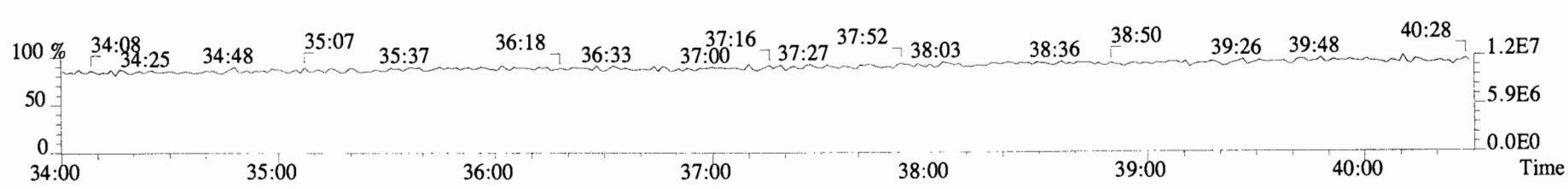
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7816.0,0.00%,F,F)



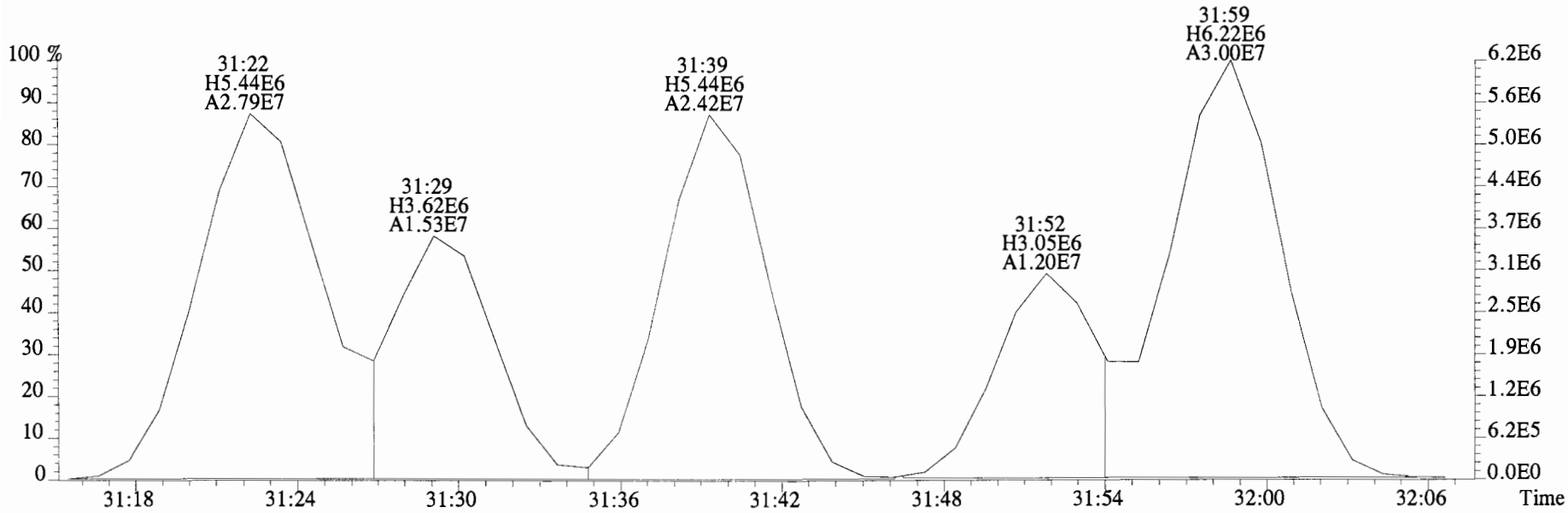
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5444.0,0.00%,F,F)



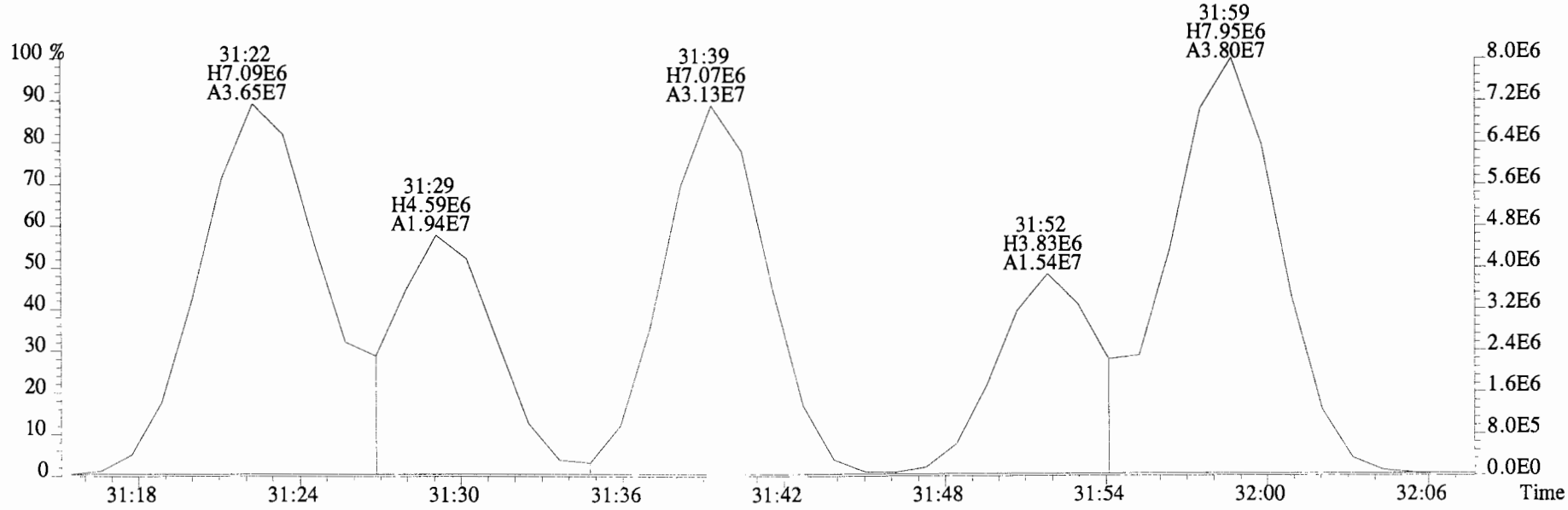
330.9792 S:2 F:3

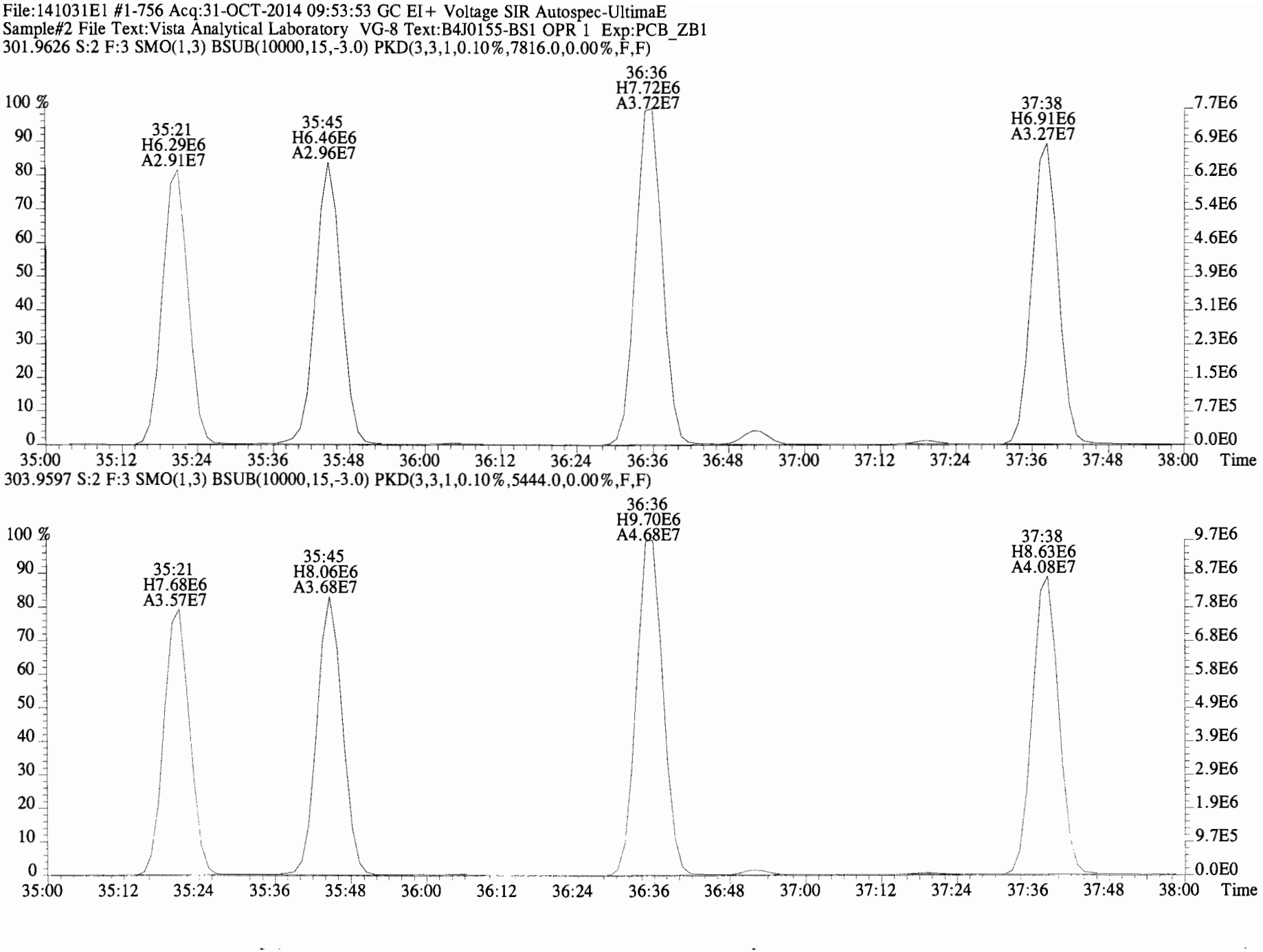


File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
289.9224 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25000.0,0.00%,F,F)

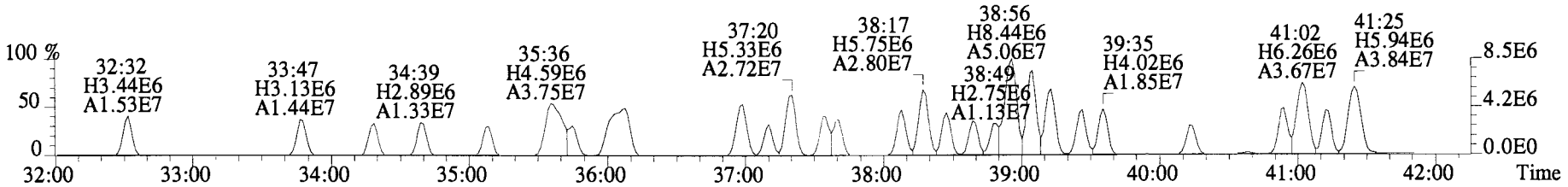


291.9194 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,39340.0,0.00%,F,F)

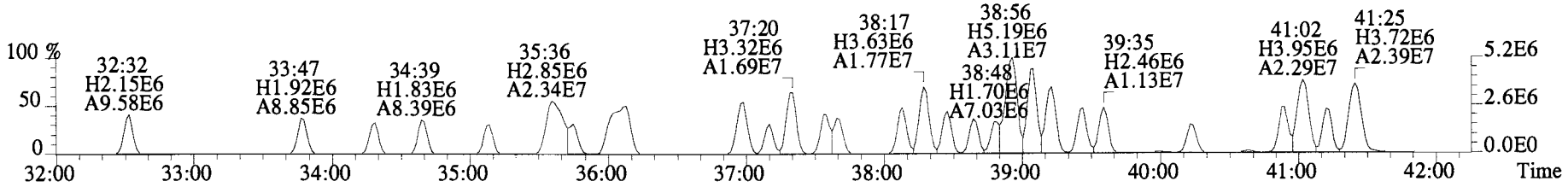



File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
301.9626 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7816.0,0.00%,F,F)
35:21 H6.29E6 A2.91E7
35:45 H6.46E6 A2.96E7
36:36 H7.72E6 A3.72E7
37:38 H6.91E6 A3.27E7
100 %
90
80
70
60
50
40
30
20
10
0
7.7E6
6.9E6
6.2E6
5.4E6
4.6E6
3.9E6
3.1E6
2.3E6
1.5E6
7.7E5
0.0E0
35:00 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 Time
303.9597 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5444.0,0.00%,F,F)
35:21 H7.68E6 A3.57E7
35:45 H8.06E6 A3.68E7
36:36 H9.70E6 A4.68E7
37:38 H8.63E6 A4.08E7
100 %
90
80
70
60
50
40
30
20
10
0
9.7E6
8.7E6
7.8E6
6.8E6
5.8E6
4.9E6
3.9E6
2.9E6
1.9E6
9.7E5
0.0E0
35:00 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 Time

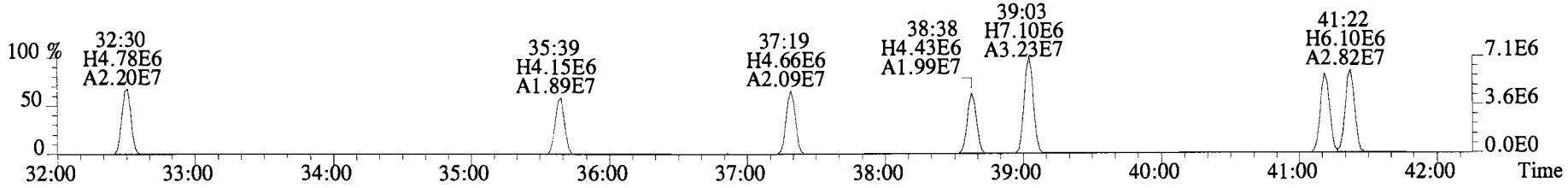
File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1732.0,0.00%,F,F)



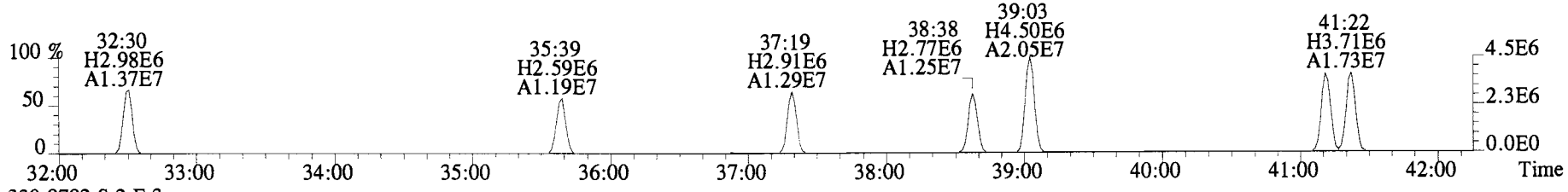
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2648.0,0.00%,F,F)



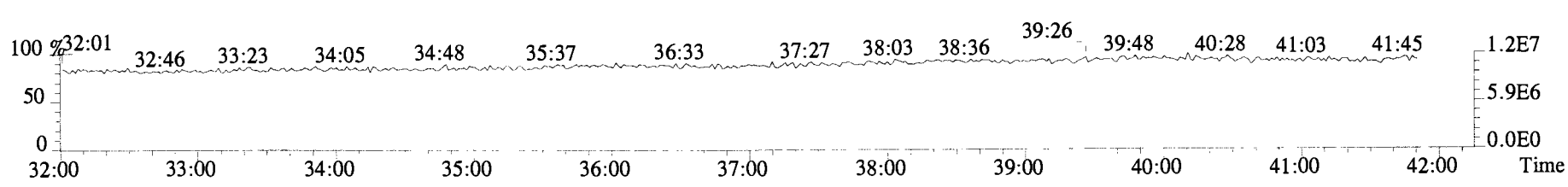
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2536.0,0.00%,F,F)



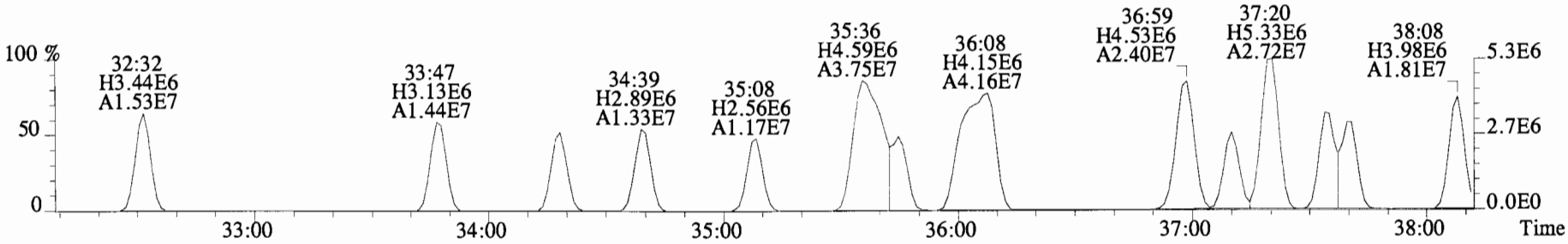
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1824.0,0.00%,F,F)



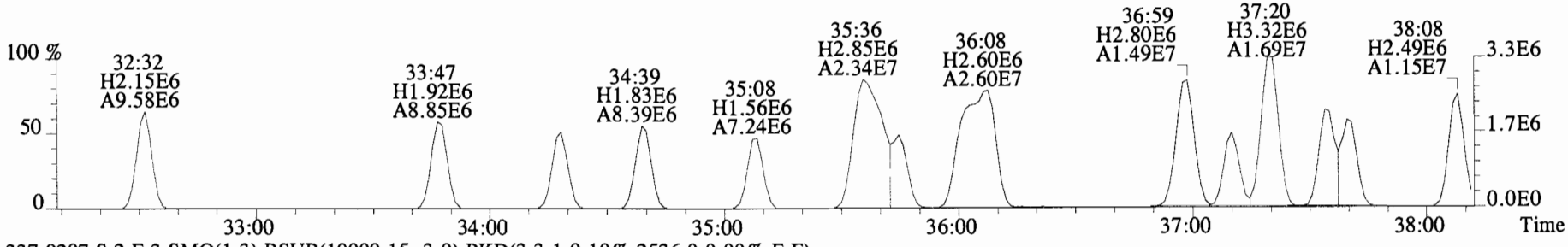
330.9792 S:2 F:3



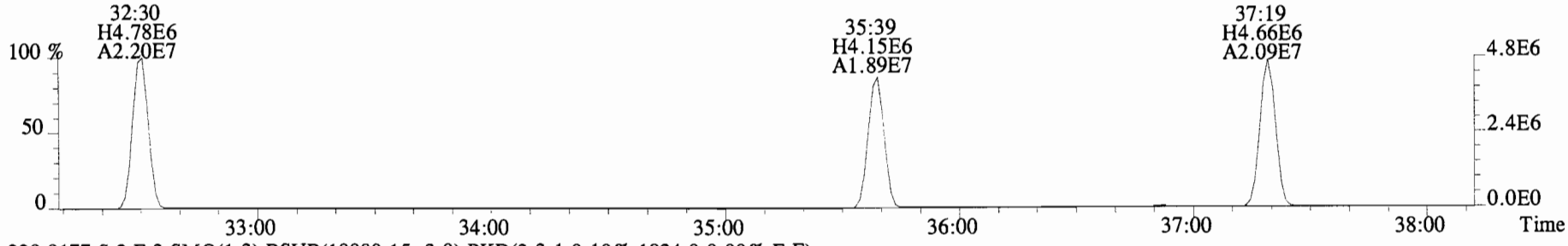
File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1732.0,0.00%,F,F)



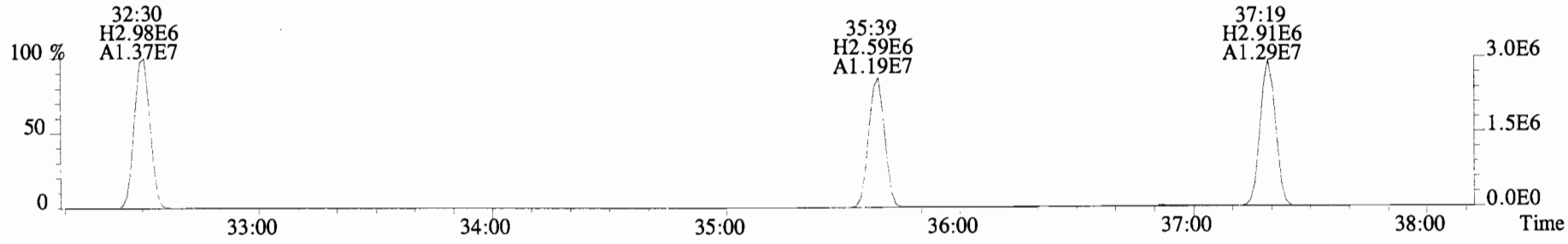
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2648.0,0.00%,F,F)



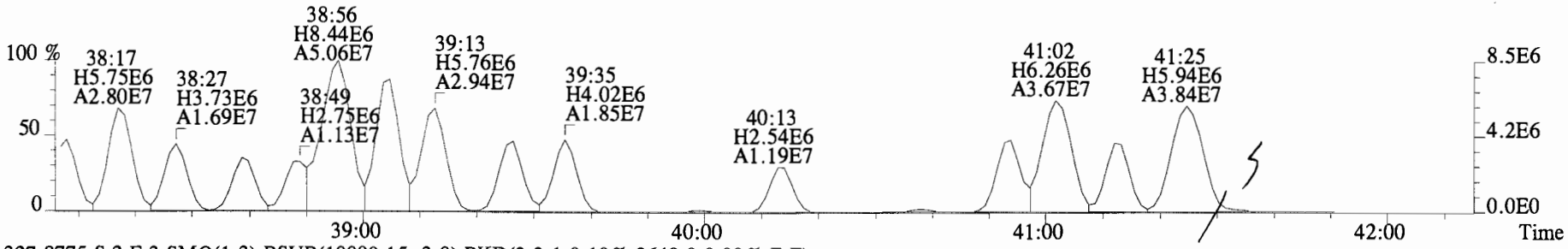
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2536.0,0.00%,F,F)



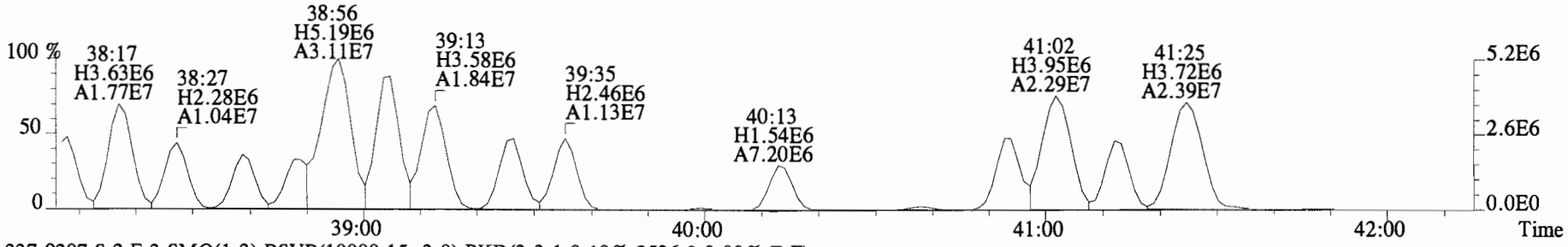
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1824.0,0.00%,F,F)



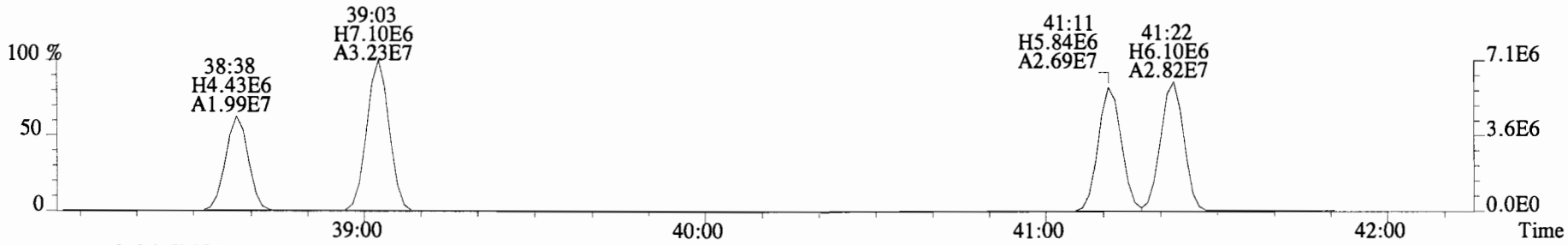
File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1732.0,0.00%,F,F)



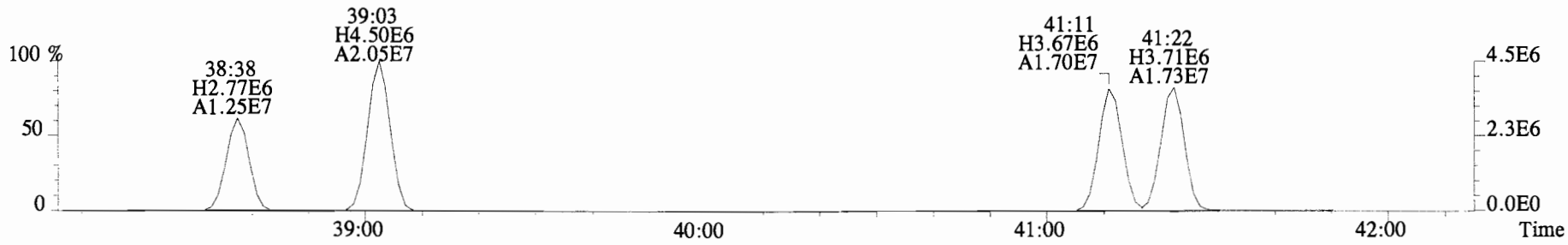
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2648.0,0.00%,F,F)



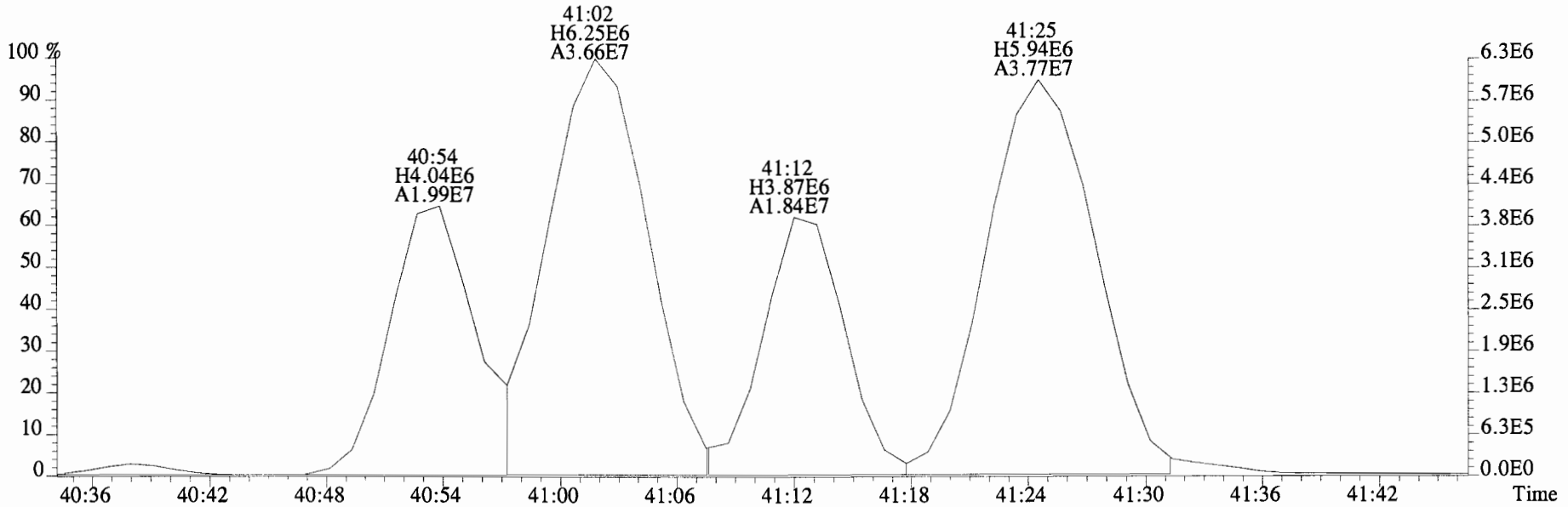
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2536.0,0.00%,F,F)



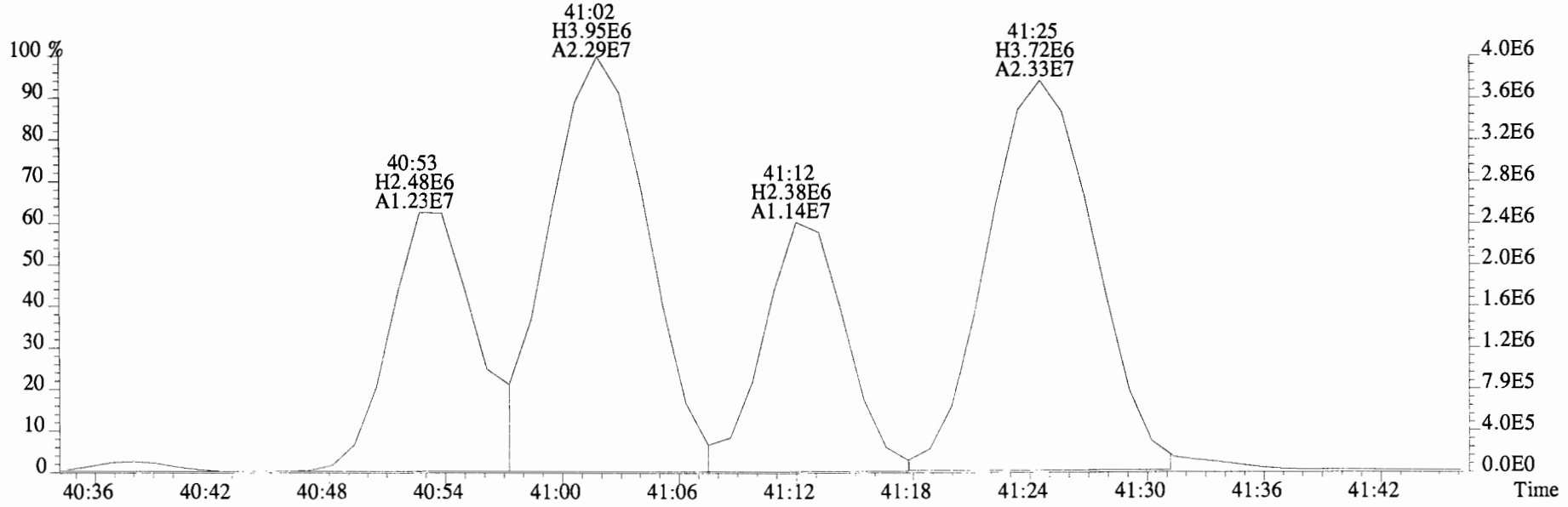
339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1824.0,0.00%,F,F)



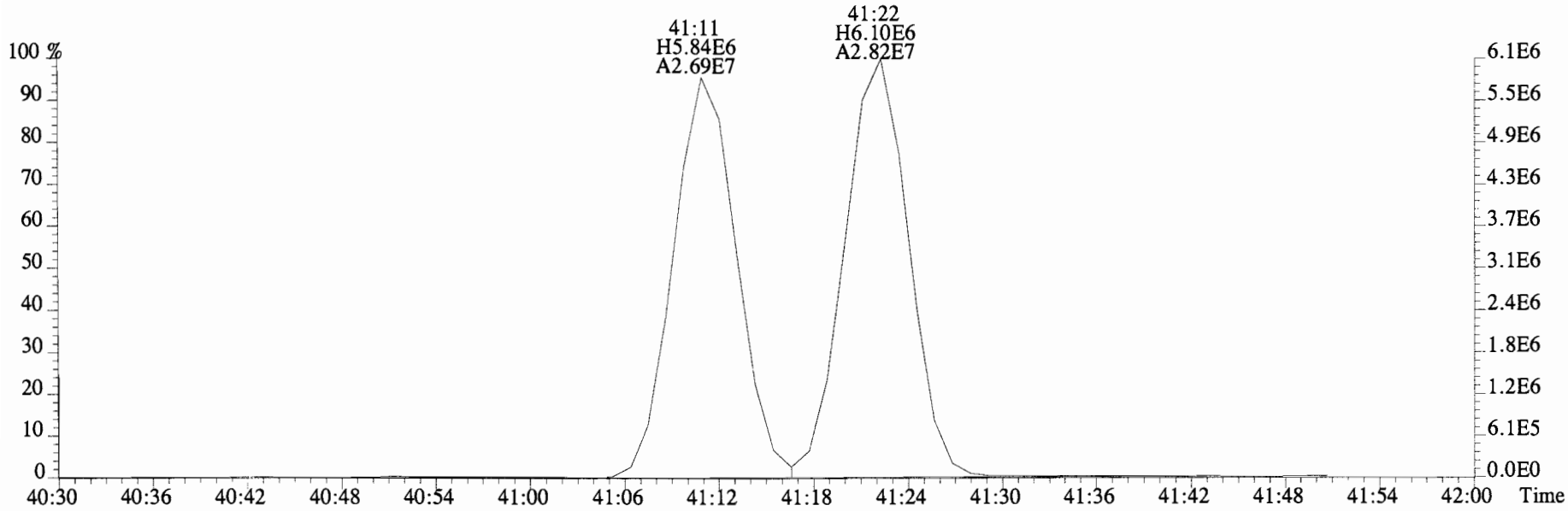
File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1732.0,0.00%,F,F)



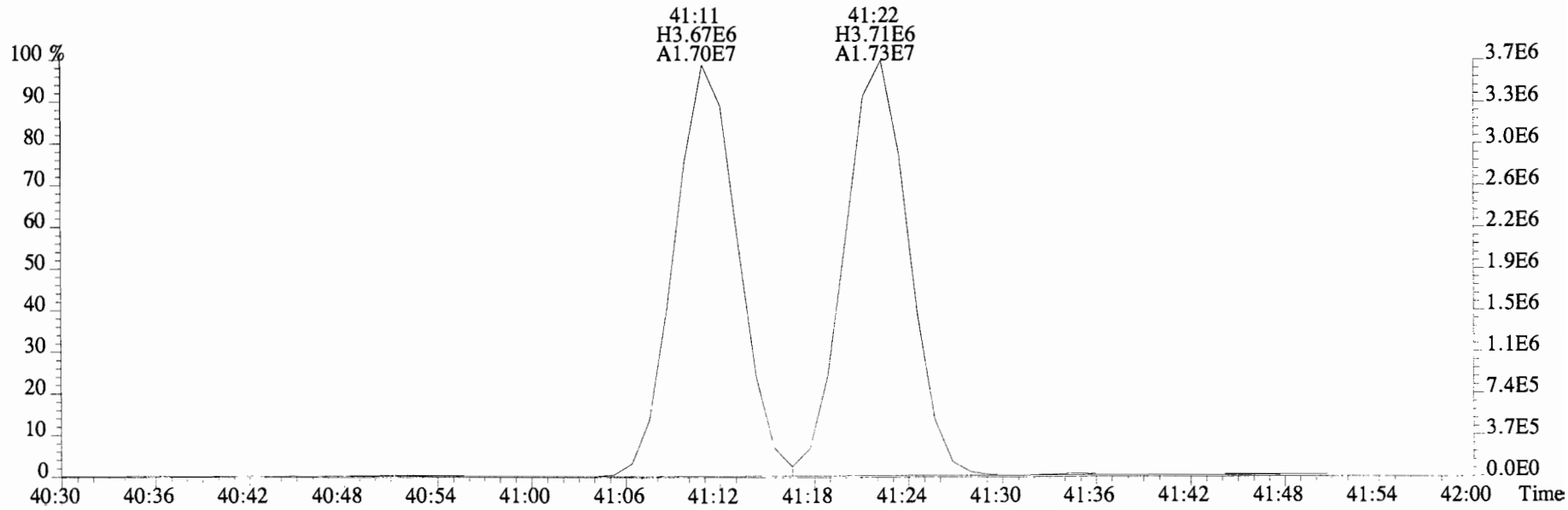
327.8775 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2648.0,0.00%,F,F)

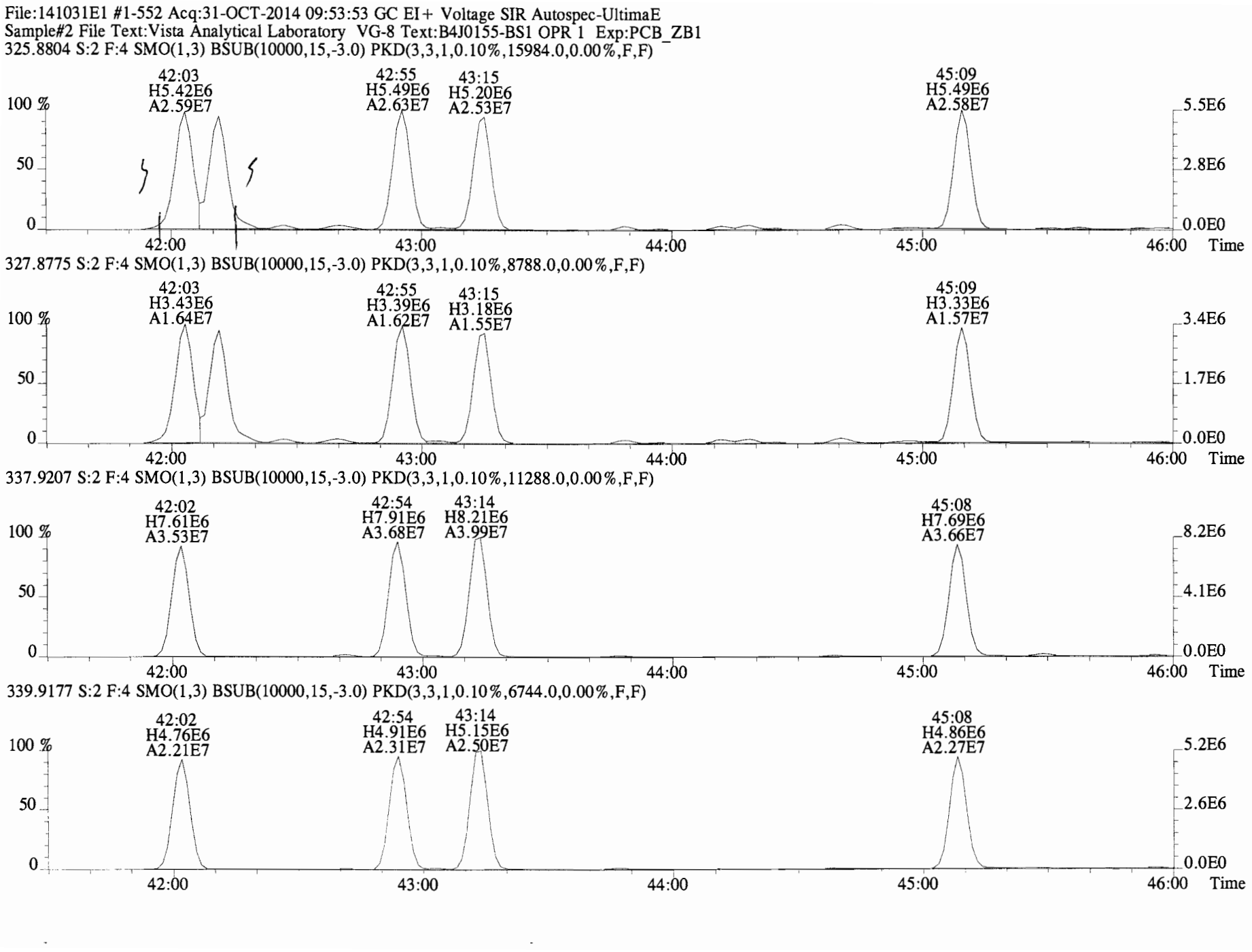


File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
337.9207 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2536.0,0.00%,F,F)

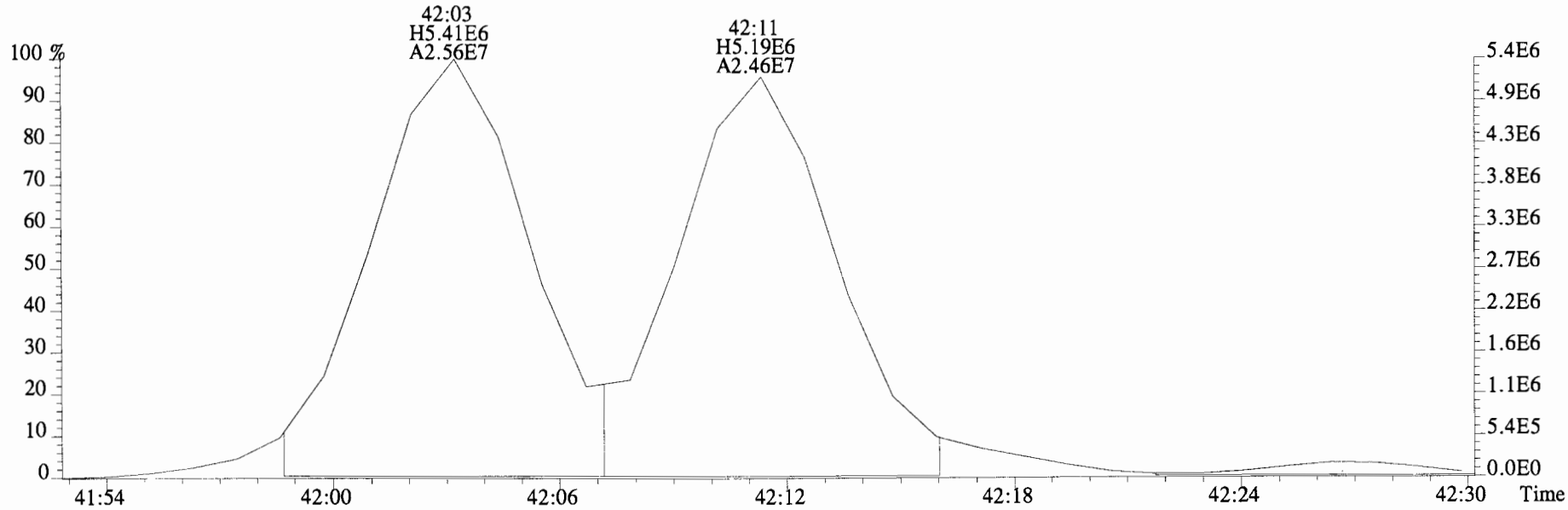


339.9177 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1824.0,0.00%,F,F)

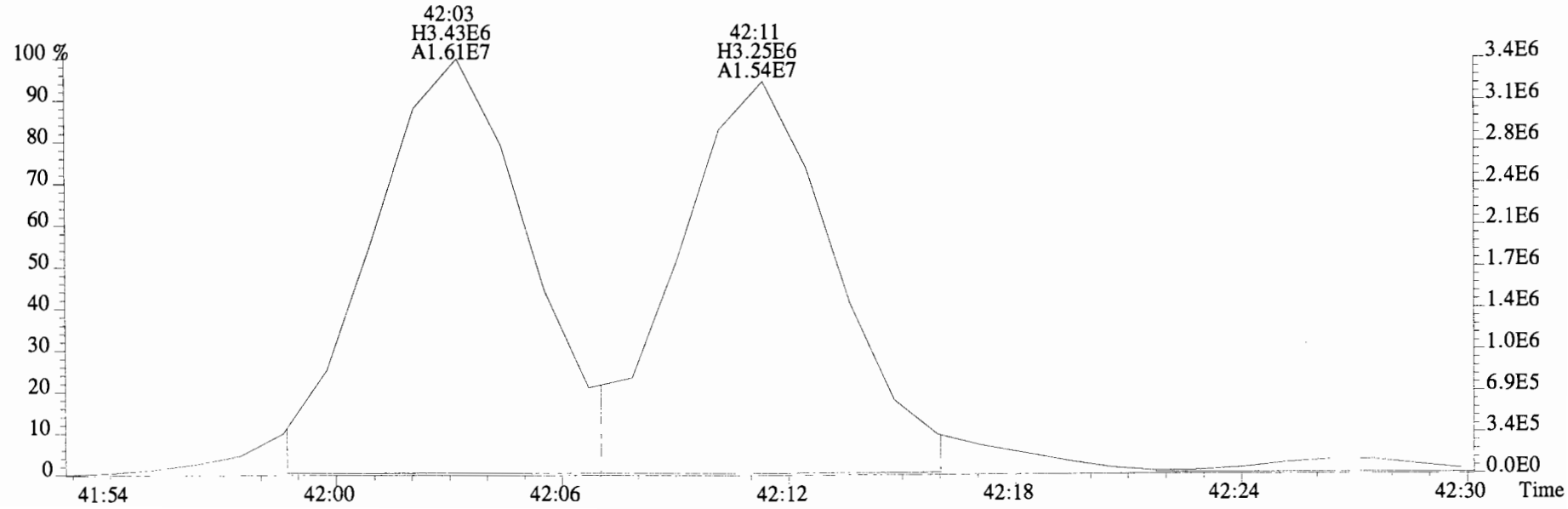



File:141031E1 #1-552 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15984.0,0.00%,F,F)
42:03 H5.42E6 A2.59E7
42:55 H5.49E6 A2.63E7
43:15 H5.20E6 A2.53E7
45:09 H5.49E6 A2.58E7
100 %
50
0
5.5E6
2.8E6
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%,8788.0,0.00%,F,F)
42:03 H3.43E6 A1.64E7
42:55 H3.39E6 A1.62E7
43:15 H3.18E6 A1.55E7
45:09 H3.33E6 A1.57E7
3.4E6
1.7E6
0.0E0
337.9207 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11288.0,0.00%,F,F)
42:02 H7.61E6 A3.53E7
42:54 H7.91E6 A3.68E7
43:14 H8.21E6 A3.99E7
45:08 H7.69E6 A3.66E7
8.2E6
4.1E6
0.0E0
339.9177 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6744.0,0.00%,F,F)
42:02 H4.76E6 A2.21E7
42:54 H4.91E6 A2.31E7
43:14 H5.15E6 A2.50E7
45:08 H4.86E6 A2.27E7
5.2E6
2.6E6
0.0E0

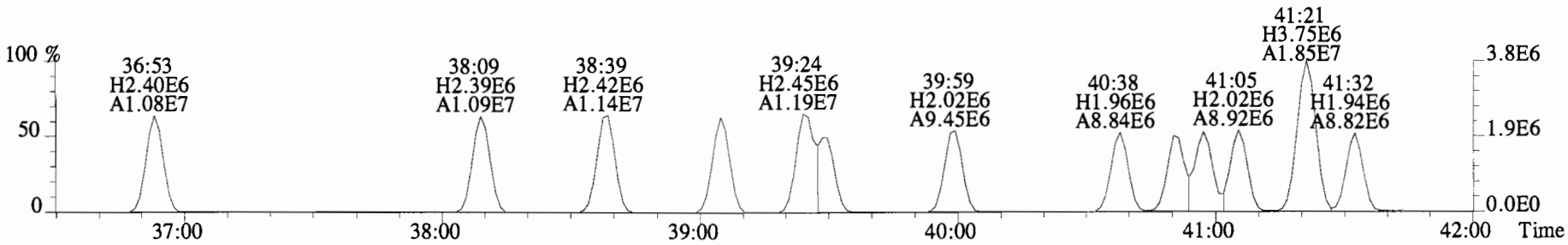
File:141031E1 #1-552 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
325.8804 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15984.0,0.00%,F,F)



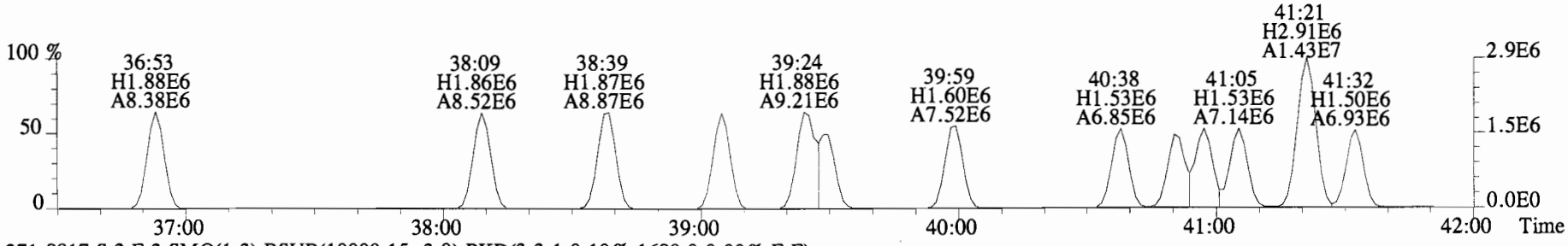
327.8775 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8788.0,0.00%,F,F)



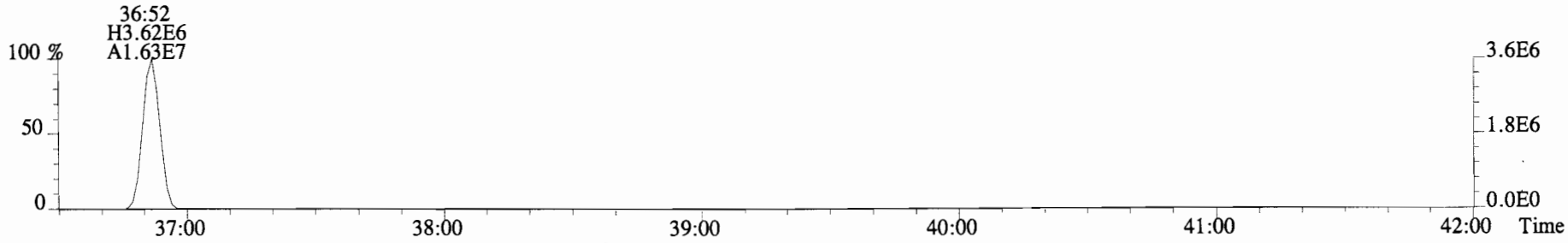
File:141031E1 #1-756 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1560.0,0.00%,F,F)



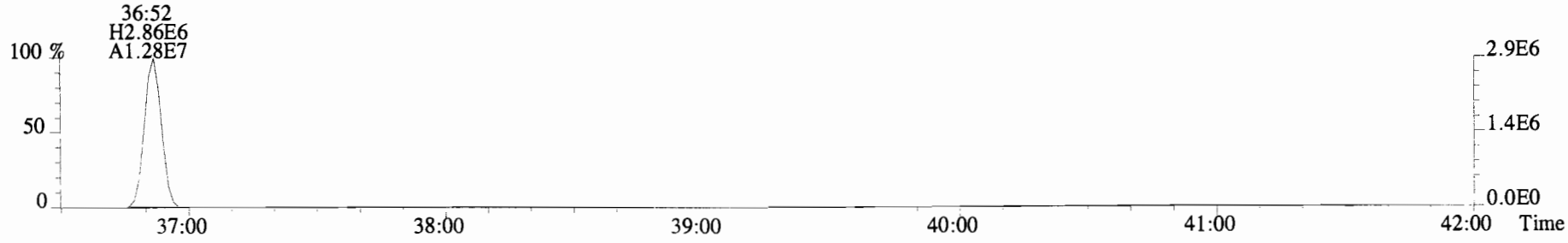
361.8385 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1680.0,0.00%,F,F)



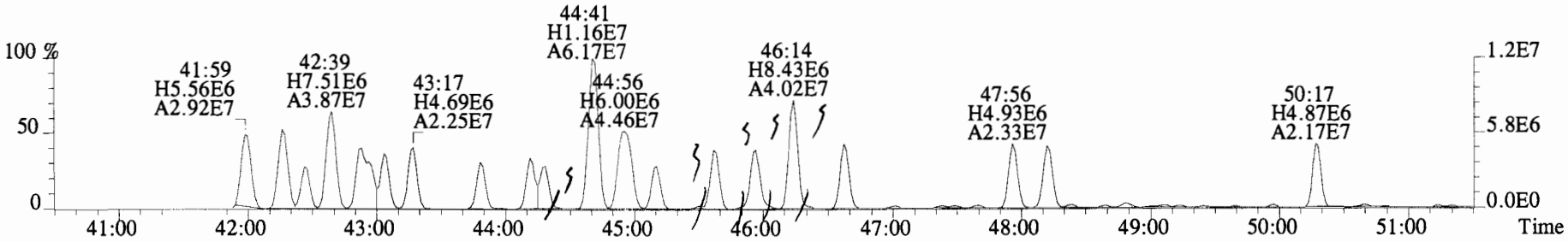
371.8817 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1680.0,0.00%,F,F)



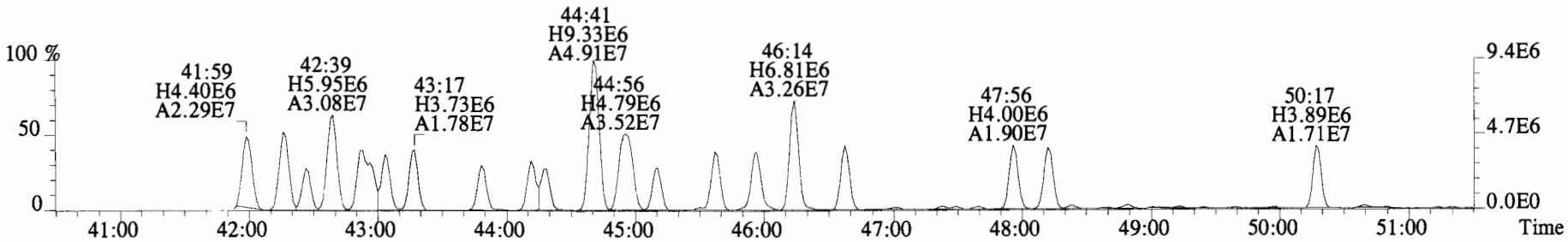
373.8788 S:2 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1680.0,0.00%,F,F)



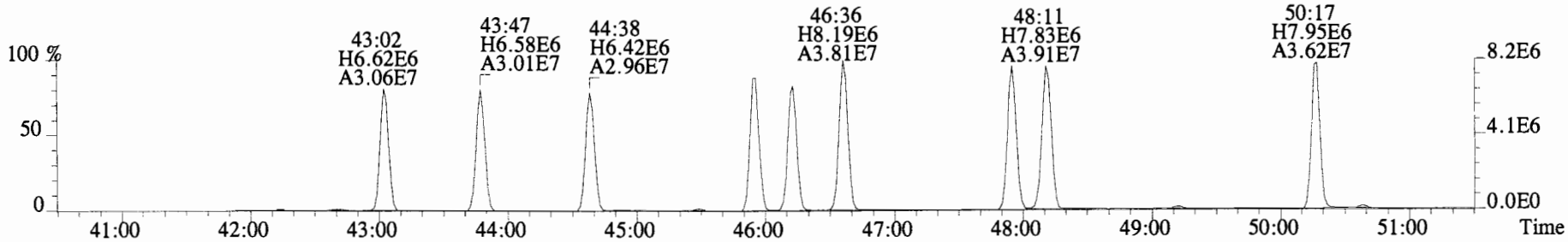
File:141031E1 #1-552 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,43404.0,0.00%,F,F)



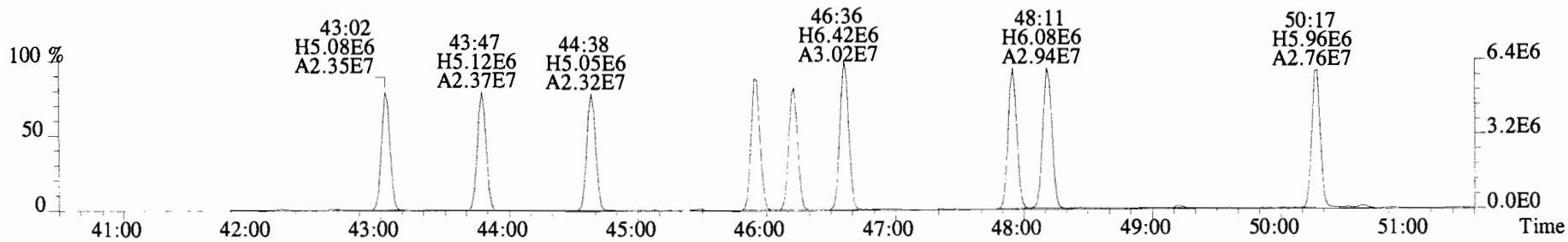
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35224.0,0.00%,F,F)



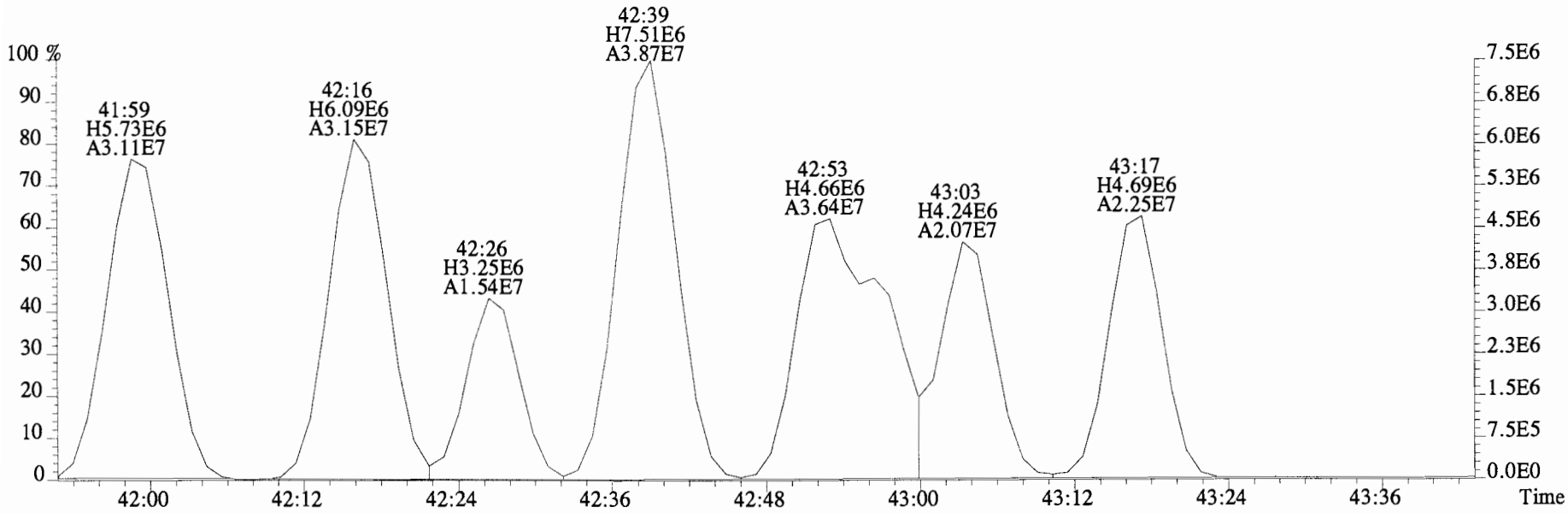
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,14652.0,0.00%,F,F)



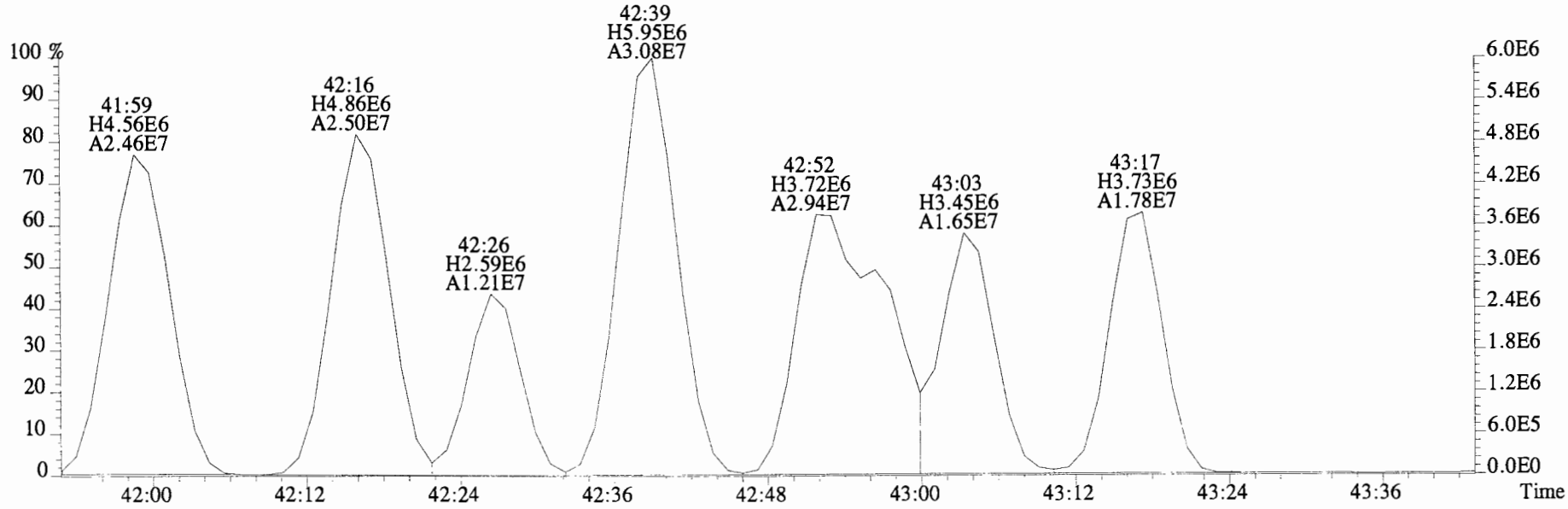
373.8788 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,14076.0,0.00%,F,F)



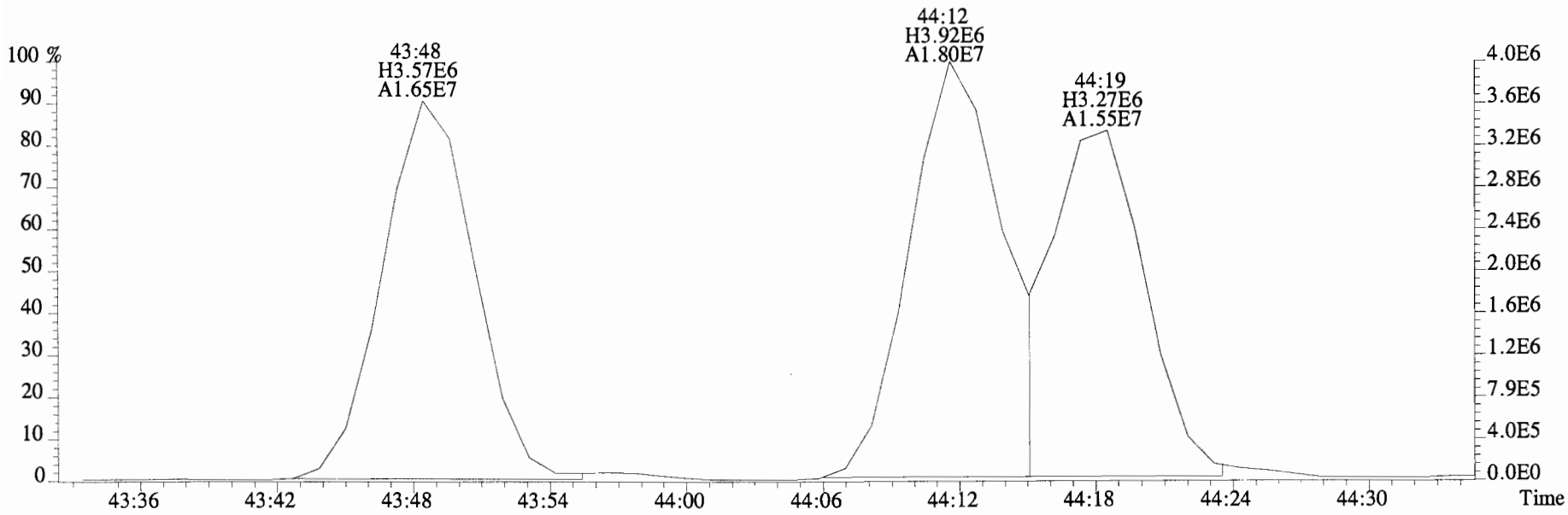
File:141031E1 #1-552 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,43404.0,0.00%,F,F)



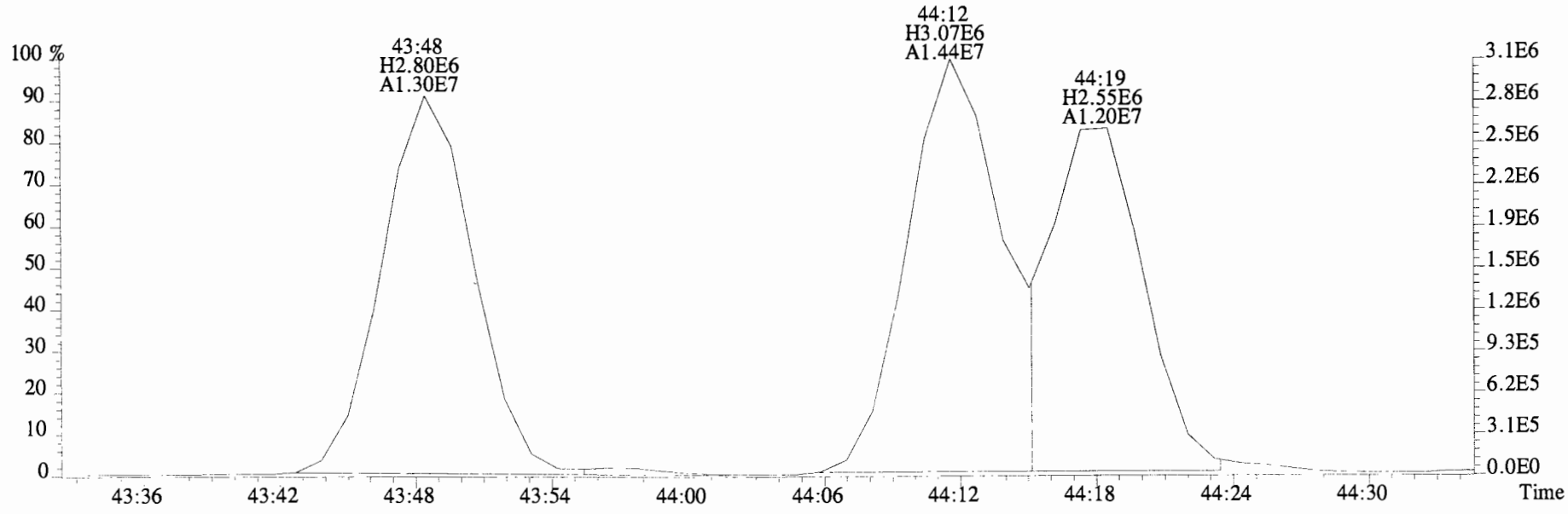
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35224.0,0.00%,F,F)



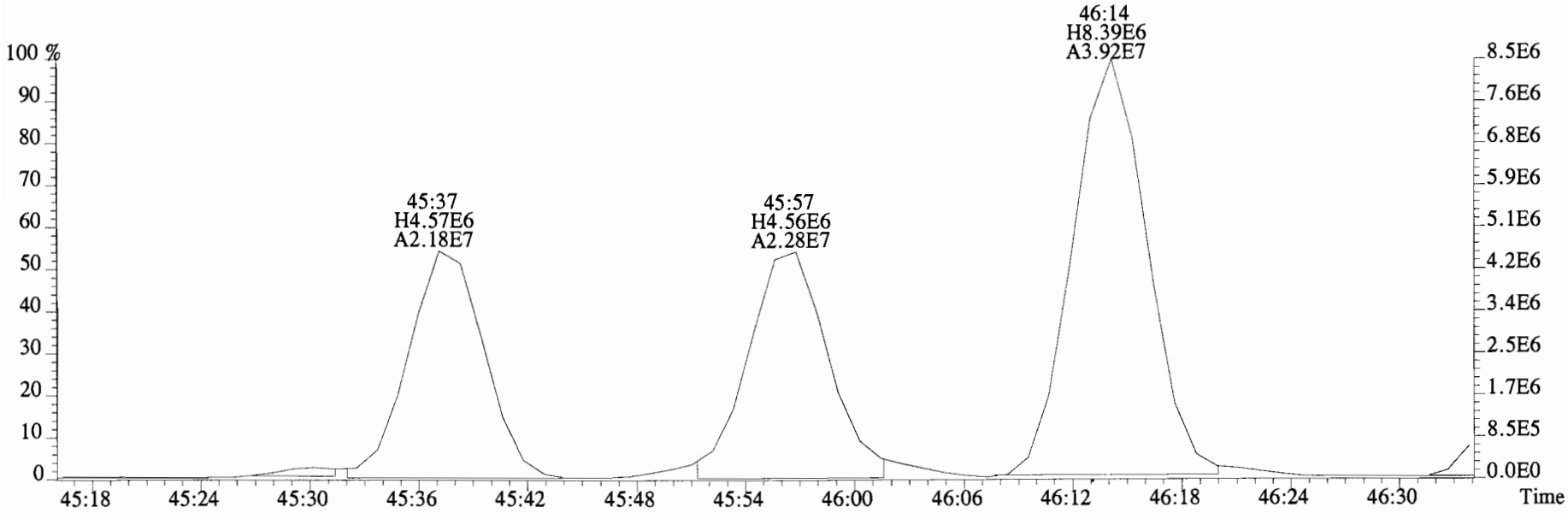
File:141031E1 #1-552 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,43404.0,0.00%,F,F)



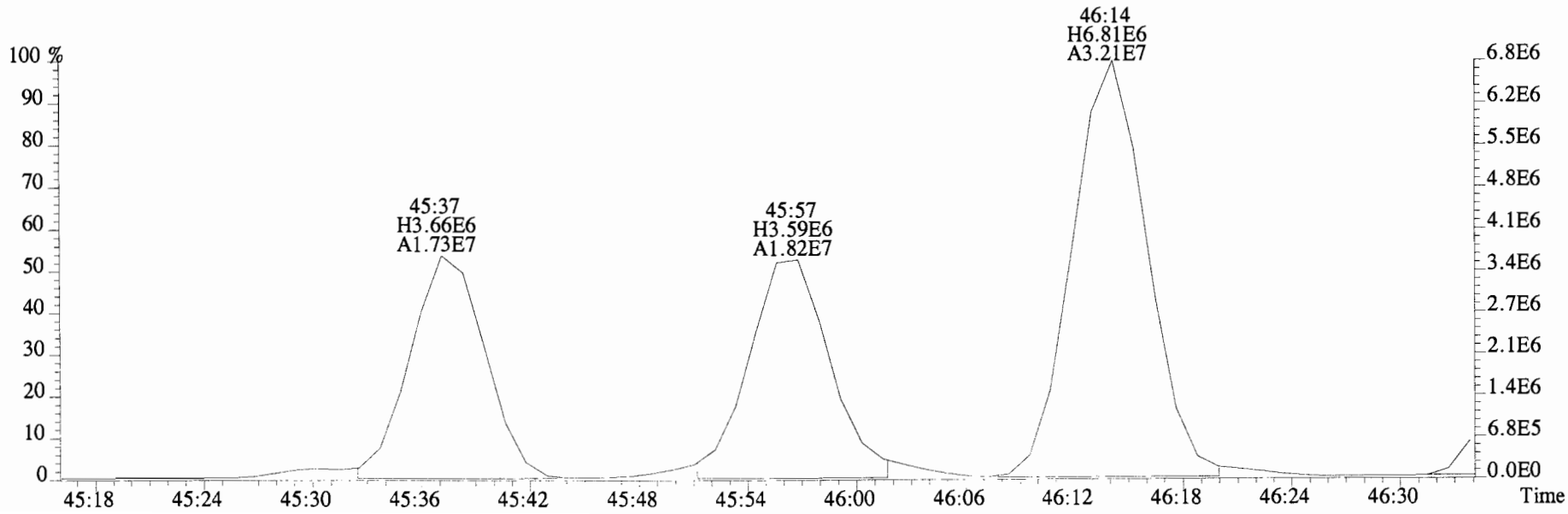
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35224.0,0.00%,F,F)



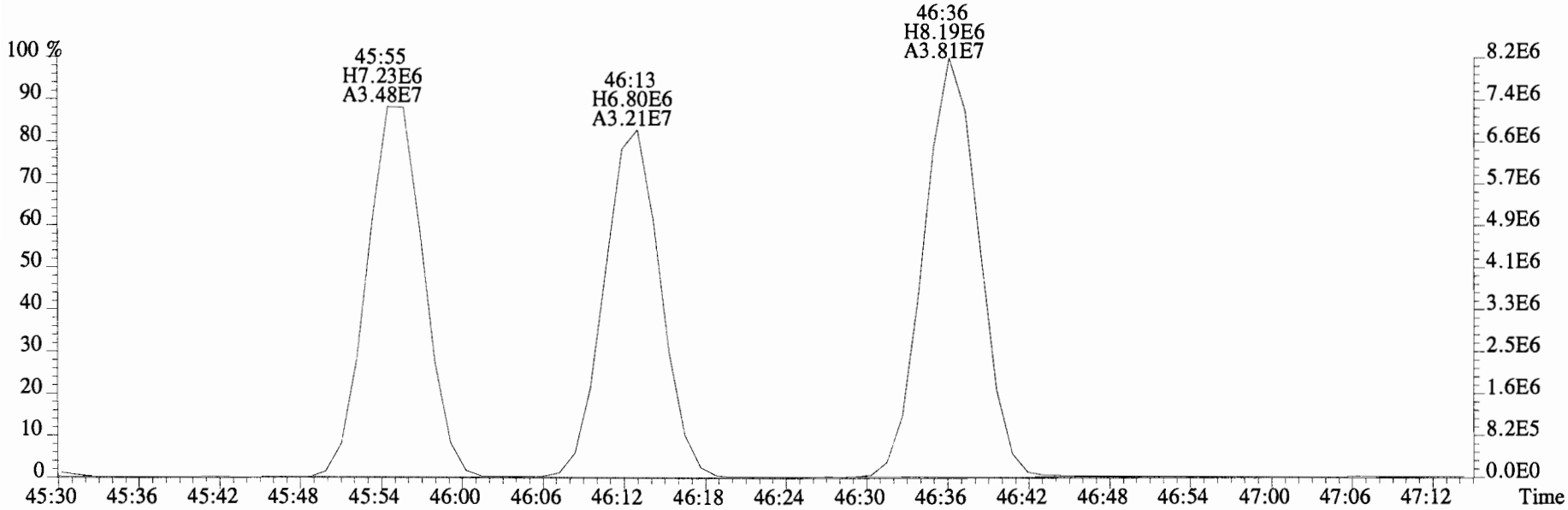
File:141031E1 #1-552 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
359.8415 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,43404.0,0.00%,F,F)



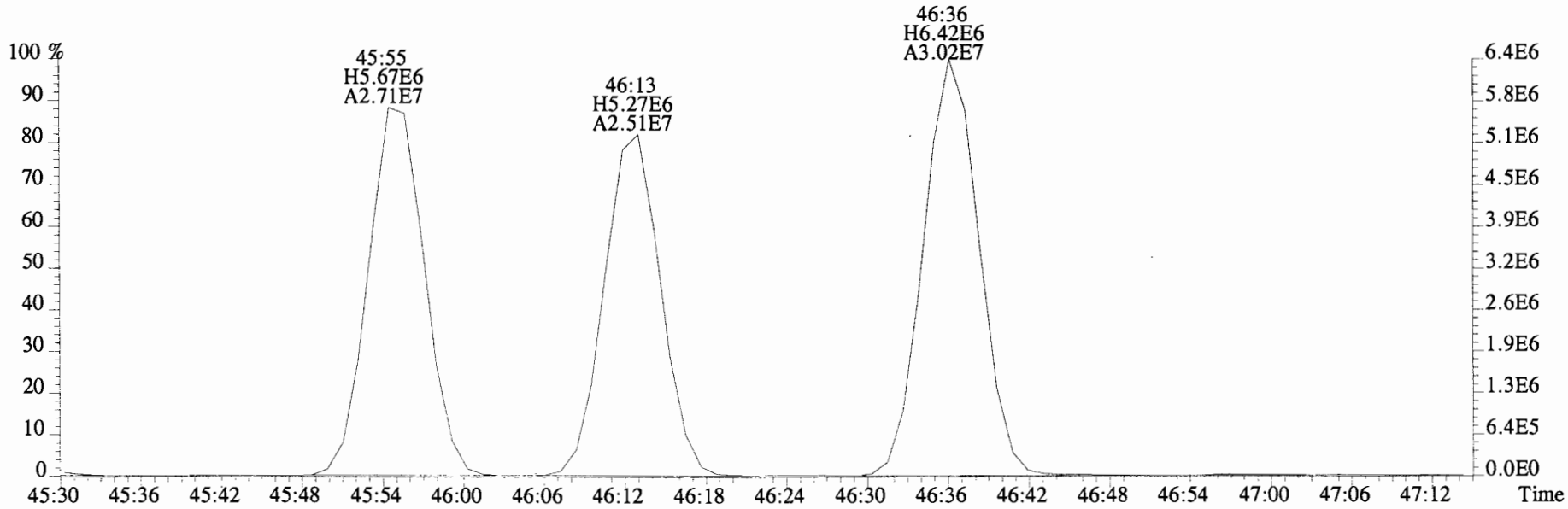
361.8385 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35224.0,0.00%,F,F)



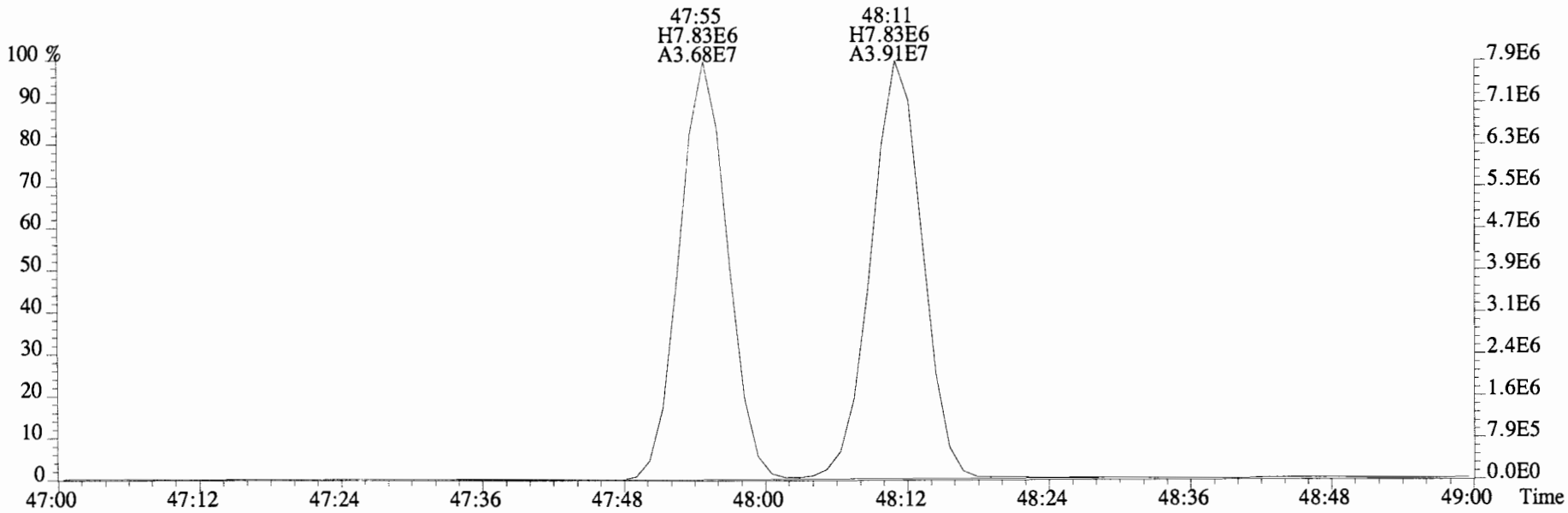
File:141031E1 #1-552 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,14652.0,0.00%,F,F)



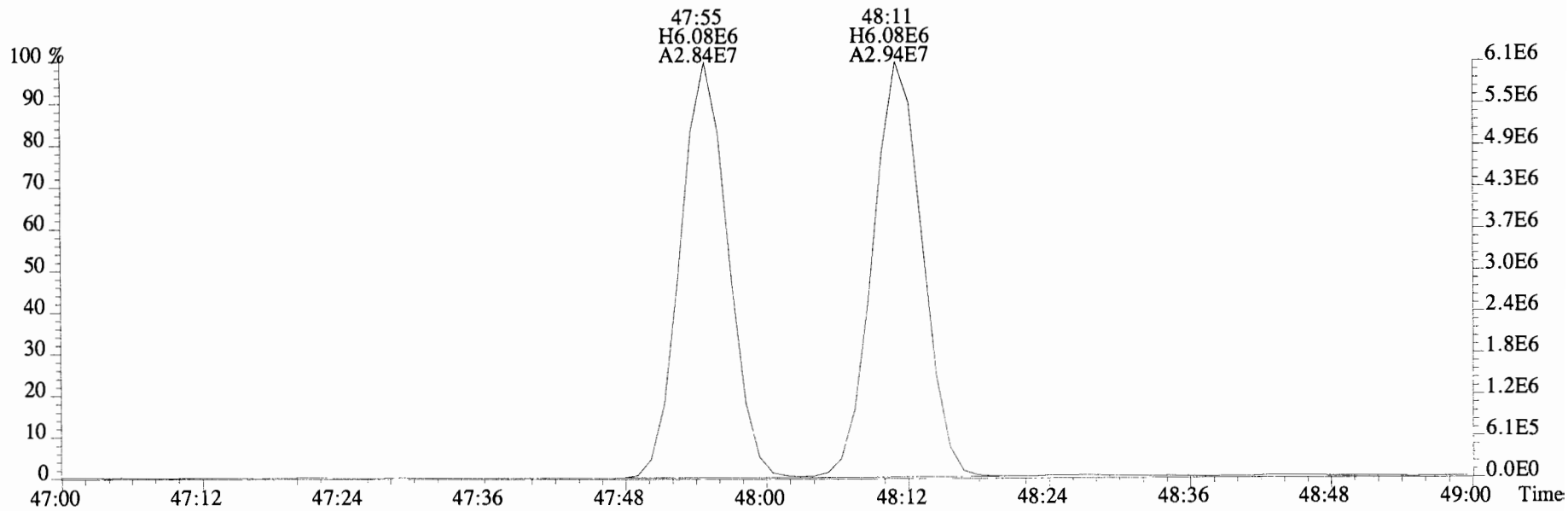
373.8788 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,14076.0,0.00%,F,F)

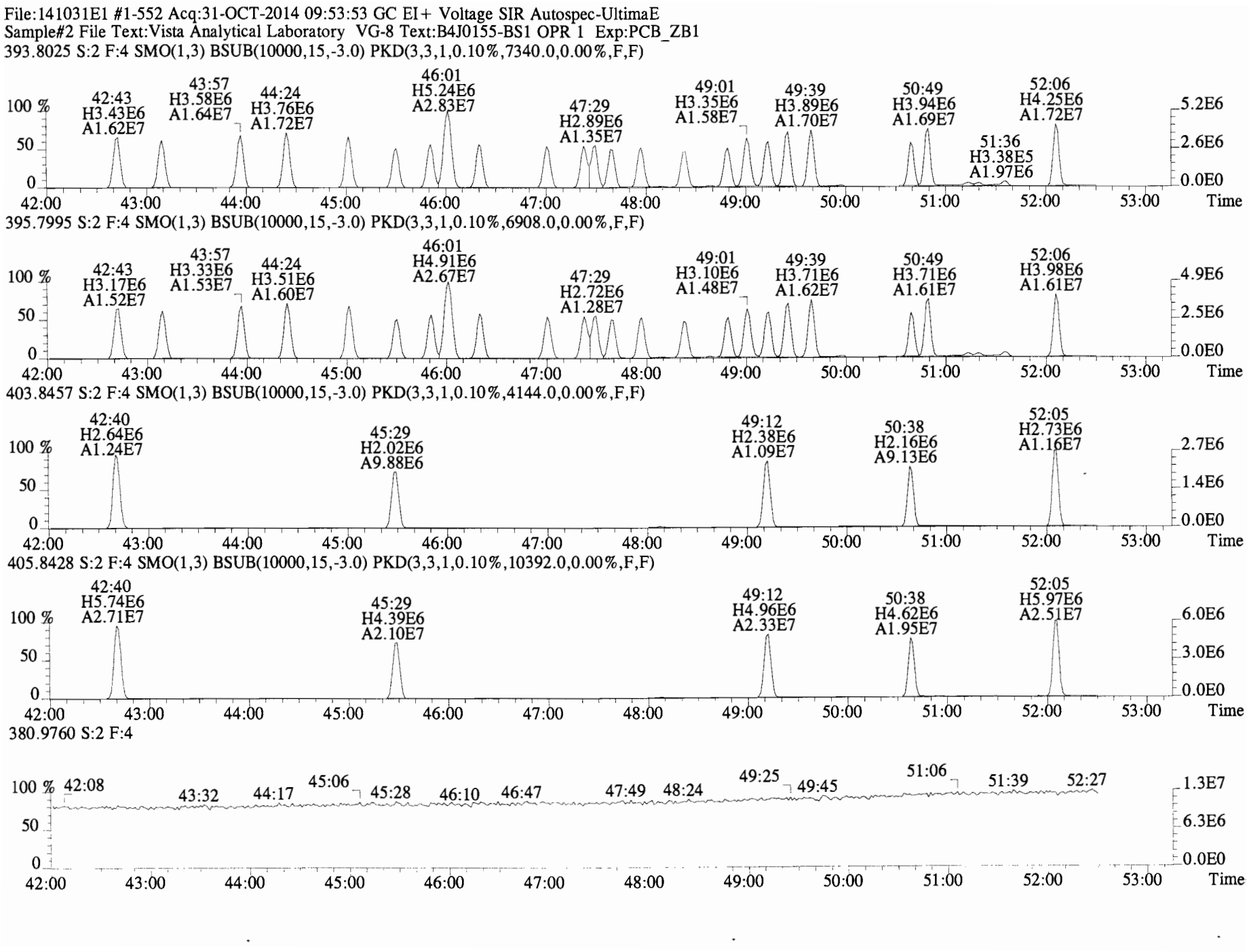


File:141031E1 #1-552 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
371.8817 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,14652.0,0.00%,F,F)

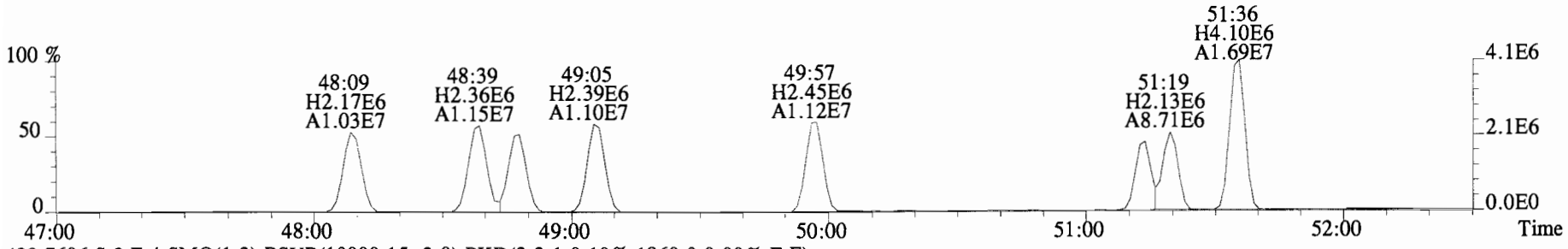


373.8788 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,14076.0,0.00%,F,F)

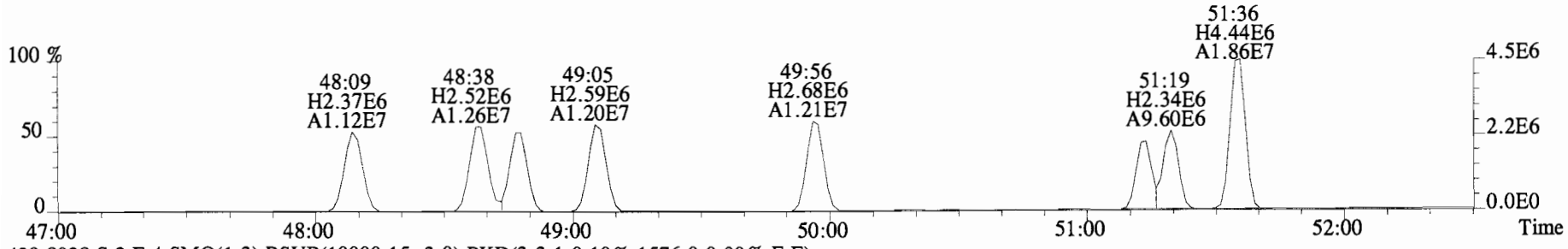



File:141031E1 #1-552 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
393.8025 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7340.0,0.00%,F,F)
42:43 H3.43E6 A1.62E7
43:57 H3.58E6 A1.64E7
44:24 H3.76E6 A1.72E7
46:01 H5.24E6 A2.83E7
47:29 H2.89E6 A1.35E7
49:01 H3.35E6 A1.58E7
49:39 H3.89E6 A1.70E7
50:49 H3.94E6 A1.69E7
51:36 H3.38E5 A1.97E6
52:06 H4.25E6 A1.72E7
395.7995 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6908.0,0.00%,F,F)
42:43 H3.17E6 A1.52E7
43:57 H3.33E6 A1.53E7
44:24 H3.51E6 A1.60E7
46:01 H4.91E6 A2.67E7
47:29 H2.72E6 A1.28E7
49:01 H3.10E6 A1.48E7
49:39 H3.71E6 A1.62E7
50:49 H3.71E6 A1.61E7
52:06 H3.98E6 A1.61E7
403.8457 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4144.0,0.00%,F,F)
42:40 H2.64E6 A1.24E7
45:29 H2.02E6 A9.88E6
49:12 H2.38E6 A1.09E7
50:38 H2.16E6 A9.13E6
52:05 H2.73E6 A1.16E7
405.8428 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10392.0,0.00%,F,F)
42:40 H5.74E6 A2.71E7
45:29 H4.39E6 A2.10E7
49:12 H4.96E6 A2.33E7
50:38 H4.62E6 A1.95E7
52:05 H5.97E6 A2.51E7
380.9760 S:2 F:4
42:08
43:32
44:17
45:06
45:28
46:10
46:47
47:49
48:24
49:25
49:45
51:06
51:39
52:27
100 %
50
0
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
51:00
52:00
53:00
Time
5.2E6
2.6E6
0.0E0
4.9E6
2.5E6
2.7E6
1.4E6
6.0E6
3.0E6
1.3E7
6.3E6

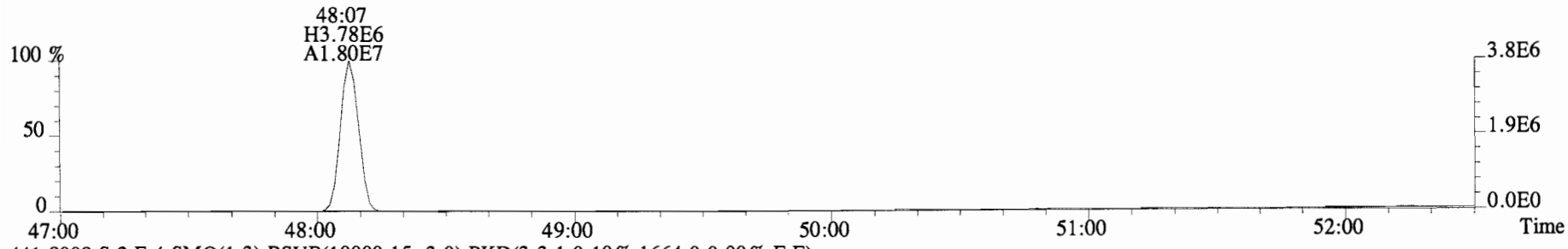
File:141031E1 #1-552 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
427.7635 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)



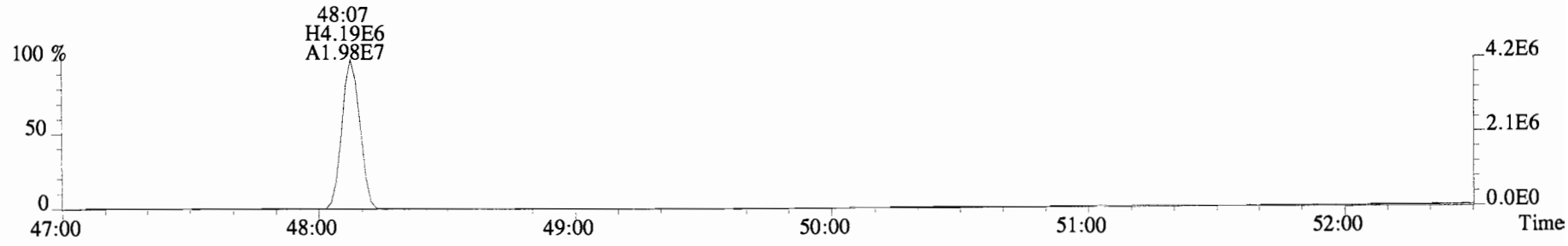
429.7606 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1860.0,0.00%,F,F)



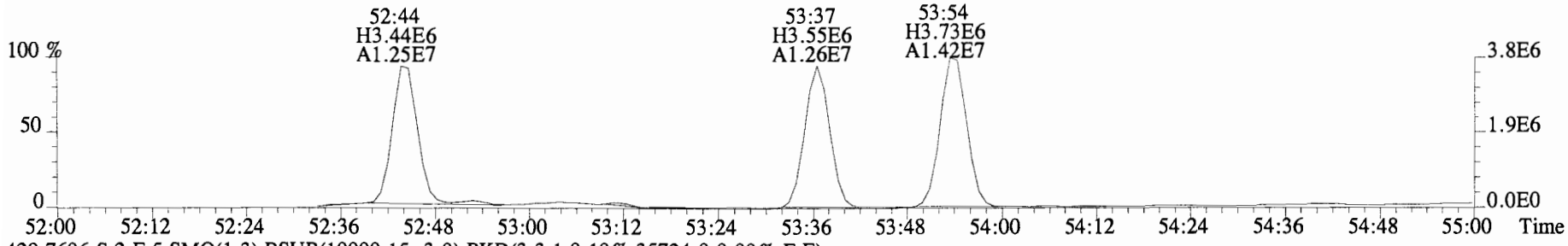
439.8038 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1576.0,0.00%,F,F)



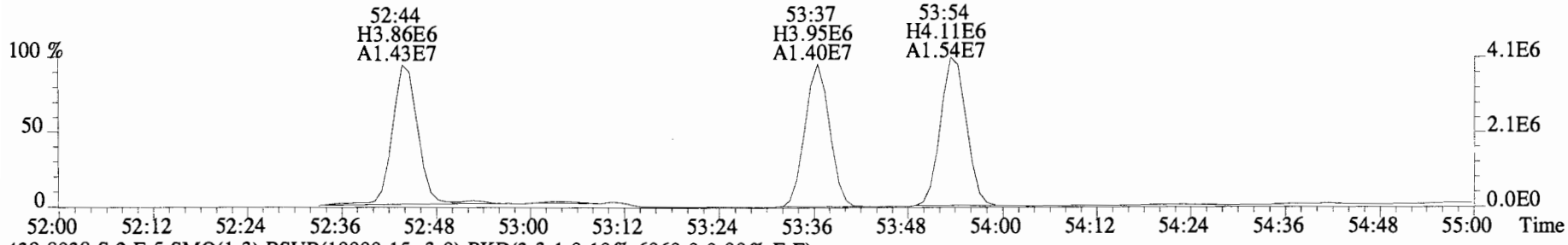
441.8008 S:2 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1664.0,0.00%,F,F)



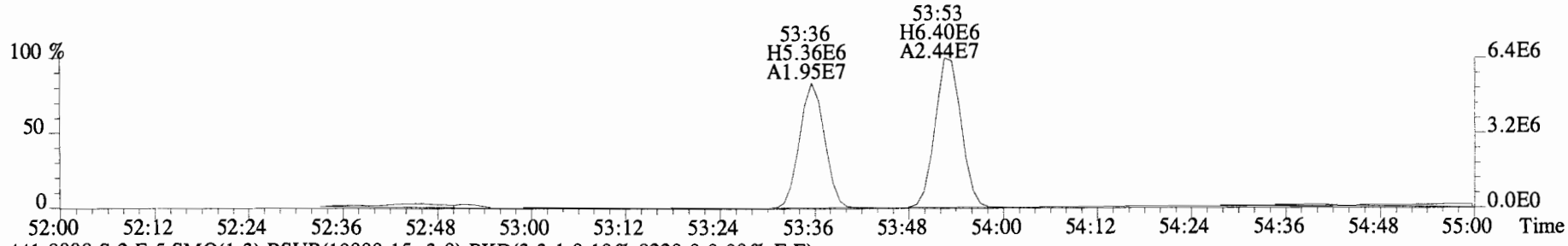
File:141031E1 #1-434 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
427.7635 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,29236.0,0.00%,F,F)



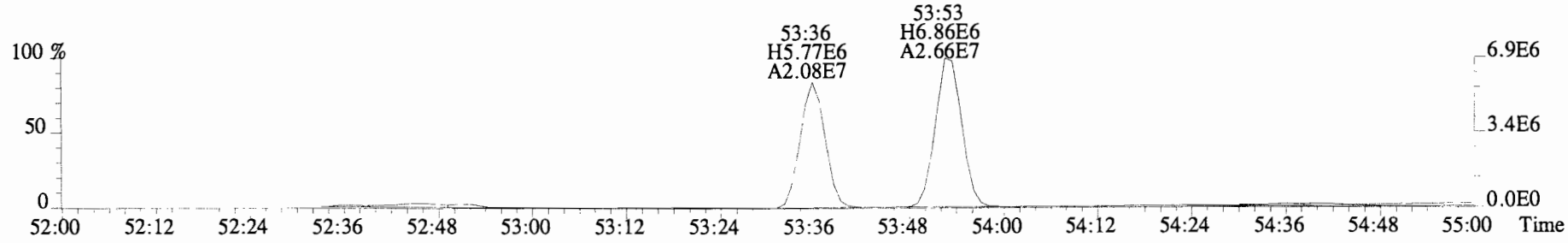
429.7606 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35724.0,0.00%,F,F)



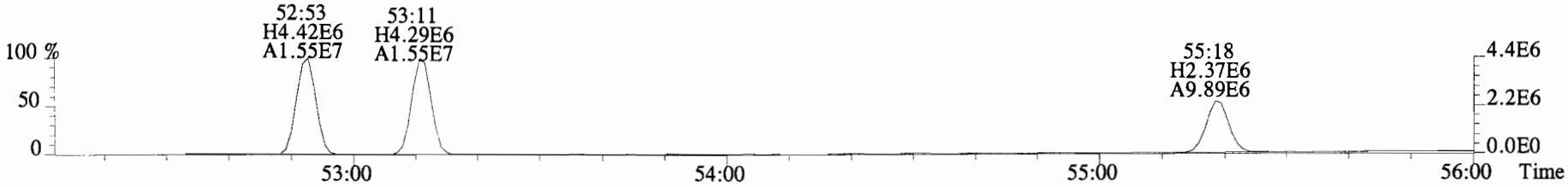
439.8038 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6060.0,0.00%,F,F)



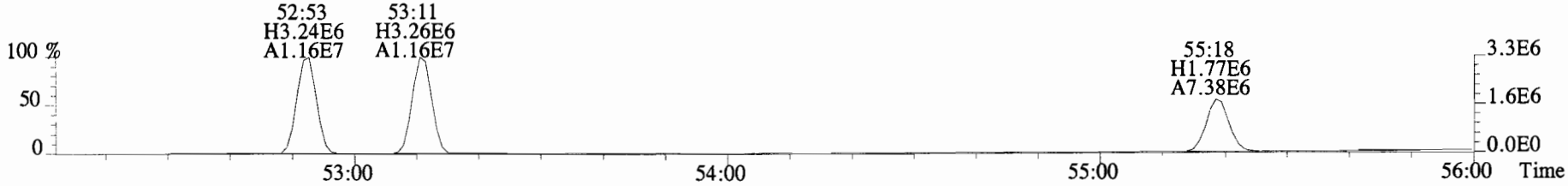
441.8008 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8220.0,0.00%,F,F)



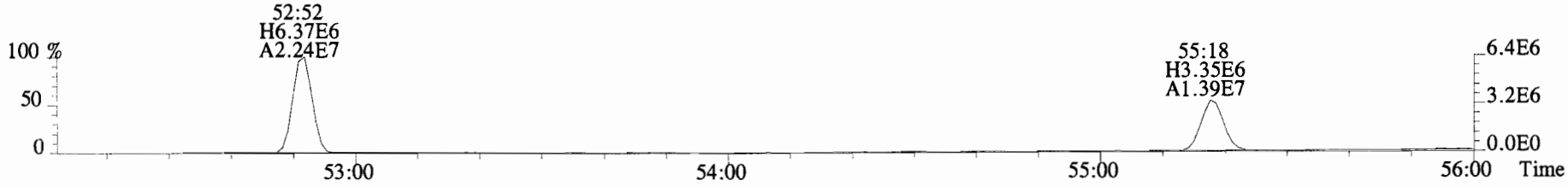
File:141031E1 #1-434 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
463.7216 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13044.0,0.00%,F,F)



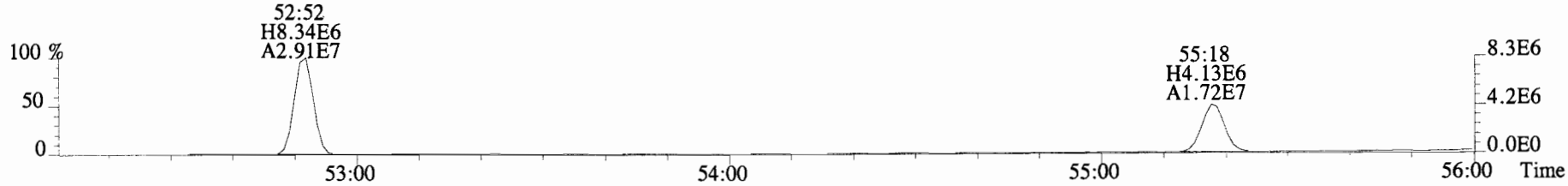
465.7186 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10740.0,0.00%,F,F)



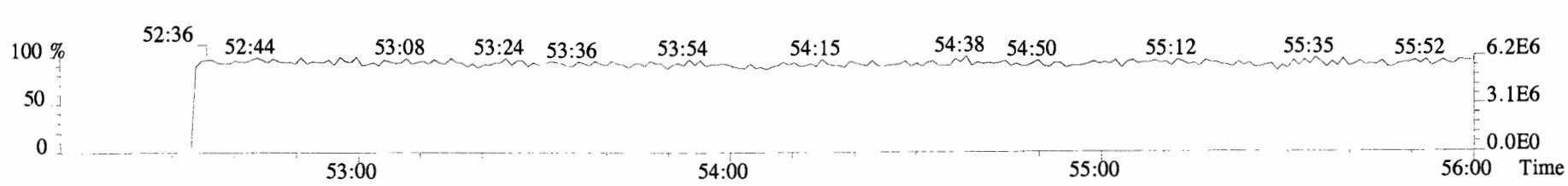
473.7648 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16960.0,0.00%,F,F)



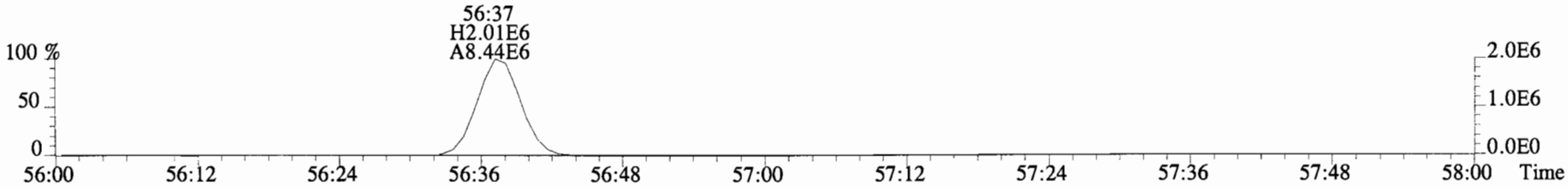
475.7619 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,28664.0,0.00%,F,F)



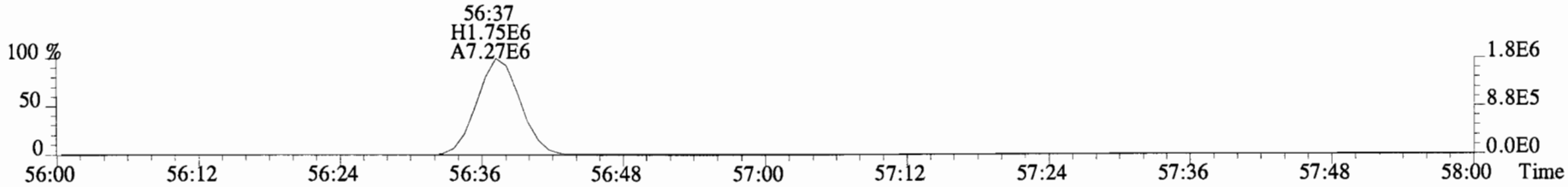
492.9697 S:2 F:5



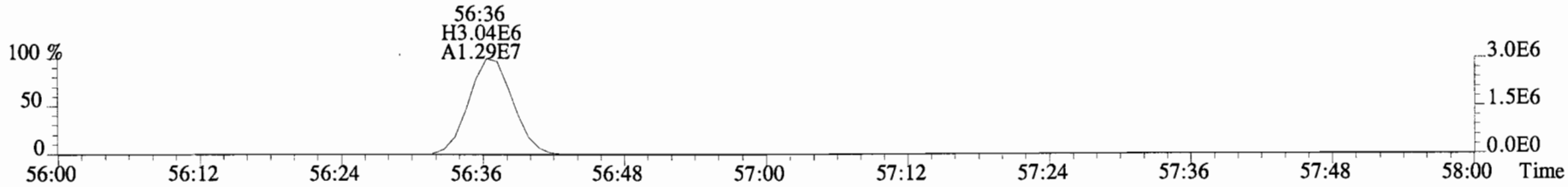
File:141031E1 #1-434 Acq:31-OCT-2014 09:53:53 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Vista Analytical Laboratory VG-8 Text:B4J0155-BS1 OPR 1 Exp:PCB_ZB1
497.6826 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1500.0,0.00%,F,F)



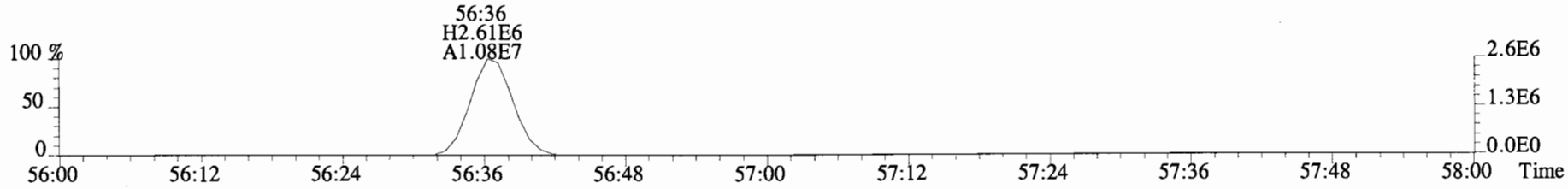
499.6797 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1440.0,0.00%,F,F)



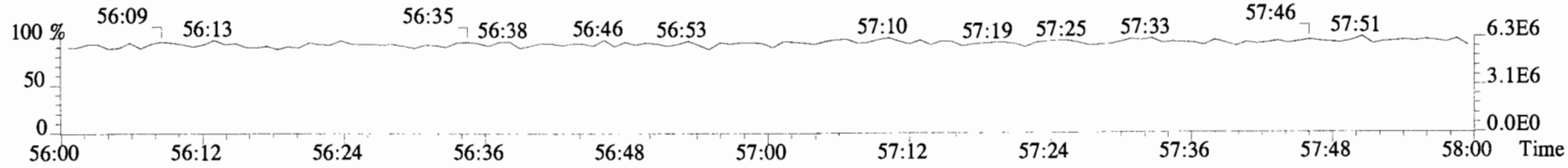
509.7229 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1808.0,0.00%,F,F)



511.7199 S:2 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1740.0,0.00%,F,F)



492.9697 S:2 F:5



Client ID: Method Blank Filename: 141106E1 S:7 Acq: 6-NOV-14 22:32:51 ConCal: ST141106E1-1 Page 4

Lab ID: B4K0011-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 / EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n NotF¶	1.25	*		3140	2.5	5.29	*	0.996	1.006
Mono	PCB-2	*	*	n NotF¶	1.18	*		3140	2.5	5.58	*	0.983	0.993
Mono	PCB-3	*	*	n NotF¶	1.22	*		3140	2.5	5.41	*	0.996	1.006
Di	PCB-4/10	*	*	n NotF¶	1.55	*		14400	2.5	25.1	*	0.998	1.008
Di	PCB-7/9	*	*	n NotF¶	1.27	*		14400	2.5	20.5	*	0.865	0.873
Di	PCB-6	*	*	n NotF¶	1.26	*		14400	2.5	20.6	*	0.890	0.899
Di	PCB-5/8	*	*	n NotF¶	1.23	*		14400	2.5	21.1	*	0.906	0.916
Di	PCB-14	*	*	n NotF¶	1.23	*		14400	2.5	17.9	*	0.949	0.959
Di	PCB-11	*	*	n NotF¶	1.16	*		14400	2.5	19.0	*	0.996	1.006
Di	PCB-12/13	*	*	n NotF¶	1.10	*		14400	2.5	20.0	*	1.010	1.020
Di	PCB-15	*	*	n NotF¶	1.21	*		14400	2.5	18.2	*	1.024	1.034
Tri	PCB-19	*	*	n NotF¶	1.30	*		1740	2.5	2.55	*	0.996	1.006
Tri	PCB-30	*	*	n NotF¶	1.83	*		1740	2.5	1.81	*	1.032	1.042
Tri	PCB-18	*	*	n NotF¶	0.86	*		1740	2.5	2.45	*	0.949	0.959
Tri	PCB-17	*	*	n NotF¶	0.90	*		1740	2.5	2.33	*	0.955	0.965
Tri	PCB-24/27	*	*	n NotF¶	1.18	*		1740	2.5	1.79	*	0.976	0.986
Tri	PCB-16/32	7.30e+04	1.03	y 26:59	1.03	4.28		*	2.5	*	1.000	0.995	1.005
Tri	PCB-34	*	*	n NotF¶	1.26	*		1590	2.5	1.93	*	0.956	0.966
Tri	PCB-23	*	*	n NotF¶	1.31	*		1590	2.5	1.85	*	0.959	0.969
Tri	PCB-29	*	*	n NotF¶	1.33	*		1590	2.5	1.83	*	0.967	0.977
Tri	PCB-26	*	*	n NotF¶	1.29	*		1590	2.5	1.88	*	0.974	0.984
Tri	PCB-25	*	*	n NotF¶	1.34	*		1590	2.5	1.81	*	0.980	0.990
Tri	PCB-31	*	*	n NotF¶	1.42	*		1590	2.5	1.71	*	0.992	1.002
Tri	PCB-28	*	*	n NotF¶	1.38	*		1590	2.5	1.76	*	0.996	1.006
Tri	PCB-20/21/33	*	*	n NotF¶	1.31	*		1590	2.5	1.85	*	1.017	1.027
Tri	PCB-22	*	*	n NotF¶	1.32	*		1590	2.5	1.84	*	1.032	1.042
Tri	PCB-36	*	*	n NotF¶	1.38	*		1590	2.5	1.89	*	0.929	0.939
Tri	PCB-39	*	*	n NotF¶	1.42	*		1590	2.5	1.83	*	0.943	0.953
Tri	PCB-38	*	*	n NotF¶	1.35	*		1590	2.5	1.92	*	0.967	0.976
Tri	PCB-35	*	*	n NotF¶	1.38	*		1590	2.5	1.89	*	0.982	0.992
Tri	PCB-37	*	*	n NotF¶	1.39	*		1590	2.5	1.87	*	0.996	1.006
Tetra	PCB-54	*	*	n NotF¶	1.20	*		1800	2.5	2.31	*	0.996	1.006
Tetra	PCB-50	*	*	n NotF¶	0.97	*		1800	2.5	2.86	*	1.037	1.047
Tetra	PCB-53	*	*	n NotF¶	1.19	*		1800	2.5	2.45	*	0.941	0.951
Tetra	PCB-51	*	*	n NotF¶	1.15	*		1800	2.5	2.53	*	0.952	0.962
Tetra	PCB-45	*	*	n NotF¶	0.97	*		1800	2.5	3.02	*	0.966	0.976
Tetra	PCB-46	*	*	n NotF¶	0.95	*		1800	2.5	3.06	*	0.982	0.992

Integrations by:

Analyst: DMS

Date: 11/7/14

Reviewed by: CT Date: 11/10/14

Client ID: Method Blank Filename: 141106E1 S:7 Acq: 6-NOV-14 22:32:51 ConCal: ST141106E1-1
Lab ID: B4K0011-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	*	*	n	NotF¶	1.28	*		1800	2.5	2.28	*	0.996	1.006
Tetra	PCB-73	*	*	n	NotF¶	1.37	*		1800	2.5	2.13	*	1.000	1.010
Tetra	PCB-43/49	*	*	n	NotF¶	1.11	*		1800	2.5	2.62	*	1.005	1.015
Tetra	PCB-47	*	*	n	NotF¶	1.13	*		1800	2.5	2.44	*	0.996	1.006
Tetra	PCB-48/75	*	*	n	NotF¶	1.30	*		1800	2.5	2.12	*	0.999	1.009
Tetra	PCB-65	*	*	n	NotF¶	1.33	*		1800	2.5	2.07	*	1.007	1.017
Tetra	PCB-62	*	*	n	NotF¶	1.29	*		1800	2.5	2.14	*	1.011	1.021
Tetra	PCB-44	*	*	n	NotF¶	0.94	*		1800	2.5	2.94	*	1.020	1.030
Tetra	PCB-42/59	*	*	n	NotF¶	1.22	*		1800	2.5	2.27	*	1.028	1.038
Tetra	PCB-41/64/71/72	*	*	n	NotF¶	1.31	*		1800	2.5	2.10	*	1.046	1.056
Tetra	PCB-68	*	*	n	NotF¶	1.49	*		1800	2.5	1.86	*	1.054	1.064
Tetra	PCB-40	*	*	n	NotF¶	0.82	*		1800	2.5	3.37	*	1.061	1.071
Tetra	PCB-57	*	*	n	NotF¶	1.11	*		1800	2.5	1.91	*	0.965	0.975
Tetra	PCB-67	*	*	n	NotF¶	1.07	*		1800	2.5	1.99	*	0.974	0.984
Tetra	PCB-58	*	*	n	NotF¶	1.10	*		1800	2.5	1.94	*	0.977	0.987
Tetra	PCB-63	*	*	n	NotF¶	1.12	*		1800	2.5	1.91	*	0.982	0.992
Tetra	PCB-74	*	*	n	NotF¶	1.20	*		1800	2.5	1.77	*	0.990	1.000
Tetra	PCB-61/70	*	*	n	NotF¶	1.08	*		1800	2.5	1.98	*	0.994	1.004
Tetra	PCB-76/66	*	*	n	NotF¶	1.14	*		1800	2.5	1.88	*	1.001	1.011
Tetra	PCB-80	*	*	n	NotF¶	1.28	*		1800	2.5	1.60	*	0.996	1.006
Tetra	PCB-55	*	*	n	NotF¶	1.11	*		1800	2.5	1.84	*	1.005	1.015
Tetra	PCB-56/60	*	*	n	NotF¶	1.09	*		1800	2.5	1.88	*	1.018	1.028
Tetra	PCB-79	*	*	n	NotF¶	1.12	*		1800	2.5	1.82	*	1.048	1.058
Tetra	PCB-78	*	*	n	NotF¶	1.24	*		1800	2.5	1.95	*	0.982	0.992
Tetra	PCB-81	*	*	n	NotF¶	1.38	*		1800	2.5	1.75	*	0.995	1.005
Tetra	PCB-77	*	*	n	NotF¶	1.21	*		1800	2.5	1.79	*	0.995	1.005
Penta	PCB-104	*	*	n	NotF¶	1.26	*		1590	2.5	3.24	*	0.996	1.006
Penta	PCB-96	*	*	n	NotF¶	1.09	*		1590	2.5	3.73	*	1.034	1.044
Penta	PCB-103	*	*	n	NotF¶	0.93	*		1590	2.5	4.36	*	1.050	1.060
Penta	PCB-100	*	*	n	NotF¶	1.00	*		1590	2.5	4.06	*	1.061	1.071
Penta	PCB-94	*	*	n	NotF¶	1.11	*		1590	2.5	4.65	*	0.981	0.991
Penta	PCB-95/98/102	*	*	n	NotF¶	1.21	*		1590	2.5	4.24	*	0.994	1.004
Penta	PCB-93	*	*	n	NotF¶	1.13	*		1590	2.5	4.56	*	0.998	1.008
Penta	PCB-88/91	*	*	n	NotF¶	1.02	*		1590	2.5	5.05	*	1.006	1.016
Penta	PCB-121	*	*	n	NotF¶	1.90	*		1590	2.5	2.71	*	1.009	1.019
Penta	PCB-84/92	*	*	n	NotF¶	1.05	*		1590	2.5	4.36	*	0.986	0.996
Penta	PCB-89	*	*	n	NotF¶	1.02	*		1590	2.5	4.50	*	0.991	1.001

Analyst: DMS

Date: 11/7/14

Client ID: Method Blank Filename: 141106E1 S:7 Acq: 6-NOV-14 22:32:51 ConCal: ST141106E1-1
Lab ID: B4K0011-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	*	*	n	NotF	1.19	*		1590	2.5	3.85	*	0.996	1.006
Penta	PCB-113	*	*	n	NotF	1.35	*		1590	2.5	3.39	*	1.002	1.012
Penta	PCB-99	*	*	n	NotF	1.29	*		1590	2.5	3.56	*	1.005	1.015
Penta	PCB-119	*	*	n	NotF	1.72	*		1590	2.5	2.90	*	0.982	0.992
Penta	PCB-108/112	*	*	n	NotF	1.29	*		1590	2.5	3.87	*	0.986	0.996
Penta	PCB-83	*	*	n	NotF	1.52	*		1590	2.5	3.28	*	0.991	1.001
Penta	PCB-97	*	*	n	NotF	1.25	*		1590	2.5	4.00	*	0.996	1.006
Penta	PCB-86	*	*	n	NotF	1.02	*		1590	2.5	4.88	*	1.000	1.010
Penta	PCB-87/117/125	*	*	n	NotF	1.56	*		1590	2.5	3.20	*	1.002	1.012
Penta	PCB-111/115	*	*	n	NotF	1.75	*		1590	2.5	2.85	*	1.007	1.017
Penta	PCB-85/116	*	*	n	NotF	1.30	*		1590	2.5	3.83	*	1.010	1.020
Penta	PCB-120	*	*	n	NotF	1.78	*		1590	2.5	2.80	*	1.016	1.026
Penta	PCB-110	*	*	n	NotF	1.68	*		1590	2.5	2.97	*	1.020	1.030
Penta	PCB-82	*	*	n	NotF	0.74	*		1590	2.5	5.04	*	0.972	0.982
Penta	PCB-124	*	*	n	NotF	1.32	*		1590	2.5	2.81	*	0.988	0.998
Penta	PCB-107/109	*	*	n	NotF	1.22	*		1590	2.5	3.05	*	0.991	1.001
Penta	PCB-123	*	*	n	NotF	1.22	*		1590	2.5	3.05	*	0.995	1.005
Penta	PCB-106/118	*	*	n	NotF	1.22	*		1590	2.5	3.00	*	0.996	1.006
Penta	PCB-114	*	*	n	NotF	1.36	*		1850	2.5	3.43	*	0.995	1.005
Penta	PCB-122	*	*	n	NotF	1.24	*		1850	2.5	3.76	*	0.999	1.009
Penta	PCB-105	*	*	n	NotF	1.28	*		1850	2.5	3.37	*	0.995	1.005
Penta	PCB-127	*	*	n	NotF	1.14	*		1850	2.5	3.52	*	0.995	1.005
Penta	PCB-126	*	*	n	NotF	1.28	*		1850	2.5	3.63	*	0.995	1.005
Hexa	PCB-155	*	*	n	NotF	1.14	*		1400	2.5	3.00	*	0.966	1.006
Hexa	PCB-150	*	*	n	NotF	1.06	*		1400	2.5	3.20	*	1.030	1.040
Hexa	PCB-152	*	*	n	NotF	1.10	*		1400	2.5	3.10	*	1.043	1.053
Hexa	PCB-145	*	*	n	NotF	1.09	*		1400	2.5	3.11	*	1.055	1.065
Hexa	PCB-136	*	*	n	NotF	1.08	*		1400	2.5	3.14	*	1.064	1.074
Hexa	PCB-148	*	*	n	NotF	0.74	*		1400	2.5	4.59	*	1.066	1.076
Hexa	PCB-154	*	*	n	NotF	0.88	*		1400	2.5	3.85	*	1.079	1.089
Hexa	PCB-151	*	*	n	NotF	0.81	*		1400	2.5	4.21	*	1.097	1.107
Hexa	PCB-135	*	*	n	NotF	0.78	*		1400	2.5	4.37	*	1.101	1.113
Hexa	PCB-144	*	*	n	NotF	0.82	*		1400	2.5	4.15	*	1.105	1.116
Hexa	PCB-147	*	*	n	NotF	0.83	*		1400	2.5	4.11	*	1.011	1.120
Hexa	PCB-139/149	6.03e+04	1.36	y	41:18	0.84	6.56		*	2.5	*	1.121	1.115	1.127
Hexa	PCB-140	*	*	n	NotF	0.79	*		1400	2.5	4.34	*	1.120	1.132
Hexa	PCB-134/143	*	*	n	NotF	0.93	*		2020	2.5	4.33	*	0.970	0.980

Analyst: DMS

Date: 11/7/14

Client ID: Method Blank Filename: 141106E1 S:7 Acq: 6-NOV-14 22:32:51 ConCal: ST141106E1-1
Lab ID: B4K0011-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	*	*	n	NotF	0.95	*		2020	2.5	4.24	*	0.977	0.987
Hexa	PCB-131	*	*	n	NotF	0.91	*		2020	2.5	4.39	*	0.981	0.991
Hexa	PCB-146/165	*	*	n	NotF	1.16	*		2020	2.5	3.47	*	0.986	0.996
Hexa	PCB-132/161	*	*	n	NotF	1.11	*		2020	2.5	3.60	*	0.992	1.002
Hexa	PCB-153	*	*	n	NotF	1.18	*		2020	2.5	3.40	*	0.995	1.005
Hexa	PCB-168	*	*	n	NotF	1.37	*		2020	2.5	2.93	*	1.000	1.010
Hexa	PCB-141	*	*	n	NotF	0.97	*		2020	2.5	4.23	*	0.996	1.005
Hexa	PCB-137	*	*	n	NotF	1.07	*		2020	2.5	3.85	*	1.004	1.014
Hexa	PCB-130	*	*	n	NotF	0.85	*		2020	2.5	4.86	*	1.007	1.017
Hexa	PCB-138/163/164	*	*	n	NotF	1.23	*		2020	2.5	3.38	*	0.996	1.006
Hexa	PCB-158/160	*	*	n	NotF	1.29	*		2020	2.5	3.21	*	1.001	1.011
Hexa	PCB-129	*	*	n	NotF	0.92	*		2020	2.5	4.48	*	1.007	1.017
Hexa	PCB-166	*	*	n	NotF	1.12	*		2020	2.5	3.38	*	0.988	0.998
Hexa	PCB-159	*	*	n	NotF	1.16	*		2020	2.5	3.23	*	0.995	1.005
Hexa	PCB-128/162	*	*	n	NotF	1.02	*		2020	2.5	3.70	*	1.002	1.012
Hexa	PCB-167	*	*	n	NotF	1.06	*		2020	2.5	3.15	*	0.995	1.005
Hexa	PCB-156	*	*	n	NotF	1.18	*		2020	2.5	3.03	*	0.995	1.005
Hexa	PCB-157	*	*	n	NotF	1.08	*		2020	2.5	3.28	*	0.995	1.005
Hexa	PCB-169	5.76e+04	1.54	n	50:17	1.11	3.50	R	*	2.5	*	1.001	0.995	1.005
Hepta	PCB-188	*	*	n	NotF	1.40	*		1660	2.5	1.86	*	0.995	1.005
Hepta	PCB-184	*	*	n	NotF	1.24	*		1660	2.5	2.11	*	1.006	1.016
Hepta	PCB-179	*	*	n	NotF	1.30	*		1660	2.5	2.00	*	1.024	1.034
Hepta	PCB-176	*	*	n	NotF	1.36	*		1660	2.5	1.91	*	1.035	1.045
Hepta	PCB-186	*	*	n	NotF	1.28	*		1660	2.5	2.04	*	1.049	1.059
Hepta	PCB-178	*	*	n	NotF	0.94	*		1660	2.5	2.78	*	1.061	1.071
Hepta	PCB-175	*	*	n	NotF	0.97	*		1660	2.5	2.69	*	1.069	1.079
Hepta	PCB-182/187	*	*	n	NotF	1.01	*		1660	2.5	2.57	*	1.073	1.083
Hepta	PCB-183	*	*	n	NotF	1.08	*		1660	2.5	2.41	*	1.080	1.090
Hepta	PCB-185	*	*	n	NotF	1.34	*		1660	2.5	2.51	*	0.951	0.961
Hepta	PCB-174	*	*	n	NotF	1.34	*		1660	2.5	2.52	*	0.958	0.968
Hepta	PCB-181	*	*	n	NotF	1.36	*		1660	2.5	2.48	*	0.961	0.971
Hepta	PCB-177	*	*	n	NotF	1.24	*		1660	2.5	2.72	*	0.964	0.974
Hepta	PCB-171	*	*	n	NotF	1.31	*		1660	2.5	2.57	*	0.970	0.980
Hepta	PCB-173	*	*	n	NotF	1.16	*		1660	2.5	2.91	*	0.979	0.989
Hepta	PCB-172	*	*	n	NotF	1.22	*		1660	2.5	2.76	*	0.988	0.998
Hepta	PCB-192	*	*	n	NotF	1.53	*		1660	2.5	2.21	*	0.991	1.001
Hepta	PCB-180	*	*	n	NotF	1.43	*		1660	2.5	2.36	*	0.995	1.005

Analyst: DMS

Date: 11/7/14

Client ID: Method Blank Filename: 141106E1 S:7 Acq: 6-NOV-14 22:32:51 ConCal: ST141106E1-1 Page 4 o

Lab ID: B4K0011-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	*	*	n	NotF¶	1.65	*		1660	2.5	2.04	*	0.999	1.009
Hepta	PCB-191	*	*	n	NotF¶	1.67	*		1660	2.5	2.02	*	1.004	1.014
Hepta	PCB-170	*	*	n	NotF¶	1.50	*		1660	2.5	2.53	*	0.995	1.005
Hepta	PCB-190	*	*	n	NotF¶	2.02	*		1660	2.5	1.88	*	0.998	1.008
Hepta	PCB-189	4.09e+04	1.18	y	52:05	1.54	2.79		*	2.5	*	1.000	0.995	1.005
Octa	PCB-202	*	*	n	NotF¶	1.04	*		1640	2.5	3.16	*	0.995	1.005
Octa	PCB-201	*	*	n	NotF¶	1.10	*		1640	2.5	2.98	*	1.006	1.016
Octa	PCB-204	*	*	n	NotF¶	0.99	*		1640	2.5	3.31	*	1.009	1.019
Octa	PCB-197	*	*	n	NotF¶	1.07	*		1640	2.5	3.06	*	1.015	1.025
Octa	PCB-200	*	*	n	NotF¶	1.02	*		1640	2.5	3.23	*	1.032	1.044
Octa	PCB-198	*	*	n	NotF¶	0.74	*		1640	2.5	4.42	*	1.058	1.068
Octa	PCB-199	*	*	n	NotF¶	0.73	*		1640	2.5	4.51	*	1.060	1.070
Octa	PCB-196/203	*	*	n	NotF¶	0.77	*		1640	2.5	4.25	*	1.066	1.076
Octa	PCB-195	*	*	n	NotF¶	1.20	*		1630	2.5	2.86	*	0.979	0.989
Octa	PCB-194	*	*	n	NotF¶	1.25	*		1630	2.5	2.75	*	0.995	1.005
Octa	PCB-205	*	*	n	NotF¶	1.41	*		1630	2.5	2.43	*	1.001	1.011
Nona	PCB-208	*	*	n	NotF¶	0.96	*		1300	2.5	1.73	*	0.995	1.005
Nona	PCB-207	*	*	n	NotF¶	0.92	*		1300	2.5	1.82	*	1.001	1.011
Nona	PCB-206	*	*	n	NotF¶	1.03	*		1300	2.5	3.04	*	0.995	1.005
Deca	PCB-209	*	*	n	NotF¶	1.18	*		1430	2.5	3.46	*	0.995	1.005

Analyst: DMS

Date: 11/7/14

Lab ID: B4K0011-BLK1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.5000 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	7.30e+04	1.03	y	26:59	1.16	4.28331	
Total Tri-PCB	*	*	n	NotFnd	1.35	*	Sum:4.28331
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	6.03e+04	1.36	y	41:18	0.92	6.56224	
Total Hexa-PCB	*	*	n	NotFnd	1.08	*	Sum:6.56224
Total Hepta-PCB	4.09e+04	1.18	y	52:05	1.27	2.79052	
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:17.1335650000

Integrations
by
Analyst: DMS

Date: 11/7/14

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.27e+08	3.26	y	0.89	16:18	0.631	0.622	0.628	6660	83.2
13C-PCB-3	1.35e+08	3.32	y	0.93	18:48	0.728	0.721	0.729	6790	84.9
13C-PCB-4	6.89e+07	1.57	y	0.55	20:06	0.778	0.772	0.780	5860	73.3
13C-PCB-9	1.05e+08	1.57	y	0.83	21:49	0.845	0.840	0.848	5920	73.9
13C-PCB-11	1.28e+08	1.56	y	0.94	25:07	0.973	0.968	0.978	6370	79.6
13C-PCB-19	8.29e+07	1.09	y	0.53	24:08	0.935	0.929	0.939	7260	90.7
13C-PCB-28	1.11e+08	1.06	y	0.89	28:55	1.003	0.999	1.009	5770	72.2
13C-PCB-32	1.32e+08	1.08	y	0.81	26:60	1.045	1.041	1.051	7580	94.8
13C-PCB-37	1.19e+08	1.06	y	0.83	32:46	1.137	1.131	1.143	6570	82.2
13C-PCB-47	1.05e+08	0.77	y	0.74	31:49	0.870	0.867	0.875	6390	79.9
13C-PCB-52	9.84e+07	0.78	y	0.71	31:18	0.856	0.853	0.861	6310	78.9
13C-PCB-54	1.08e+08	0.81	y	0.85	27:49	0.761	0.758	0.766	5760	72.0
13C-PCB-70	1.42e+08	0.79	y	0.94	35:18	0.966	0.961	0.971	6840	85.5
13C-PCB-77	1.42e+08	0.78	y	0.89	39:26	1.079	1.073	1.083	7220	90.3
13C-PCB-80	1.46e+08	0.80	y	0.96	35:43	0.977	0.972	0.982	6870	85.9
13C-PCB-81	1.32e+08	0.81	y	0.84	38:50	1.063	1.057	1.067	7170	89.6
13C-PCB-95	7.39e+07	1.63	y	0.74	35:36	0.913	0.908	0.918	6510	81.4
13C-PCB-97	7.60e+07	1.62	y	0.69	38:36	0.989	0.984	0.994	7210	90.2
13C-PCB-101	8.39e+07	1.63	y	0.79	37:17	0.956	0.951	0.961	6990	87.4
13C-PCB-104	9.28e+07	1.61	y	1.00	32:28	0.832	0.829	0.837	6100	76.3
13C-PCB-105	1.07e+08	1.61	y	1.24	42:52	0.929	0.924	0.934	6410	80.1
13C-PCB-114	9.97e+07	1.60	y	1.21	42:00	0.910	0.905	0.915	6150	76.8
13C-PCB-118	1.07e+08	1.63	y	0.98	41:20	1.060	1.054	1.064	7090	88.6
13C-PCB-123	1.04e+08	1.59	y	0.95	41:09	1.055	1.049	1.059	7160	89.5
13C-PCB-126	1.02e+08	1.60	y	1.16	45:07	0.977	0.972	0.982	6510	81.4
13C-PCB-127	1.17e+08	1.59	y	1.34	43:12	0.936	0.931	0.941	6510	81.4
13C-PCB-138	1.03e+08	1.27	y	1.04	44:36	0.966	0.961	0.971	7360	92.0
13C-PCB-141	1.04e+08	1.27	y	1.07	43:46	0.948	0.943	0.953	7200	90.0
13C-PCB-153	1.05e+08	1.29	y	1.11	43:01	0.932	0.927	0.937	7050	88.1
13C-PCB-155	8.71e+07	1.28	y	0.83	36:50	0.944	0.939	0.949	6850	85.7
13C-PCB-156	1.23e+08	1.28	y	1.24	47:53	1.037	1.032	1.042	7360	92.0
13C-PCB-157	1.28e+08	1.29	y	1.31	48:09	1.043	1.037	1.047	7280	91.1
13C-PCB-159	1.19e+08	1.27	y	1.20	45:53	0.994	0.989	0.999	7390	92.3
13C-PCB-167	1.29e+08	1.27	y	1.32	46:35	1.009	1.004	1.014	7290	91.2
13C-PCB-169	1.19e+08	1.28	y	1.22	50:15	1.088	1.082	1.092	7280	91.0
13C-PCB-170	5.68e+07	0.47	y	0.54	50:37	1.096	1.089	1.101	7890	98.7
13C-PCB-180	6.88e+07	0.46	y	0.67	49:10	1.065	1.059	1.069	7600	95.0
13C-PCB-188	8.61e+07	0.46	y	0.94	42:39	0.924	0.919	0.929	6850	85.7
13C-PCB-189	7.61e+07	0.45	y	0.72	52:05	1.128	1.120	1.132	7920	99.0
13C-PCB-194	7.58e+07	0.90	y	0.81	53:36	0.995	0.990	1.000	7310	91.3
13C-PCB-202	9.03e+07	0.91	y	0.83	48:06	1.042	1.036	1.046	8070	101
13C-PCB-206	6.94e+07	0.78	y	0.66	55:18	1.026	1.021	1.031	8240	103
13C-PCB-208	1.03e+08	0.77	y	1.12	52:50	0.981	0.976	0.986	7180	89.7
13C-PCB-209	7.58e+07	1.18	y	0.61	56:37	1.051	1.044	1.054	9650	121

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.68e+08	0.78	y	1.01	37:36	1.029	1.023	1.033	7580	94.7
13C-PCB-178	6.56e+07	0.46	y	0.63	45:26	0.984	0.979	0.989	7750	96.8

PS vs. IS

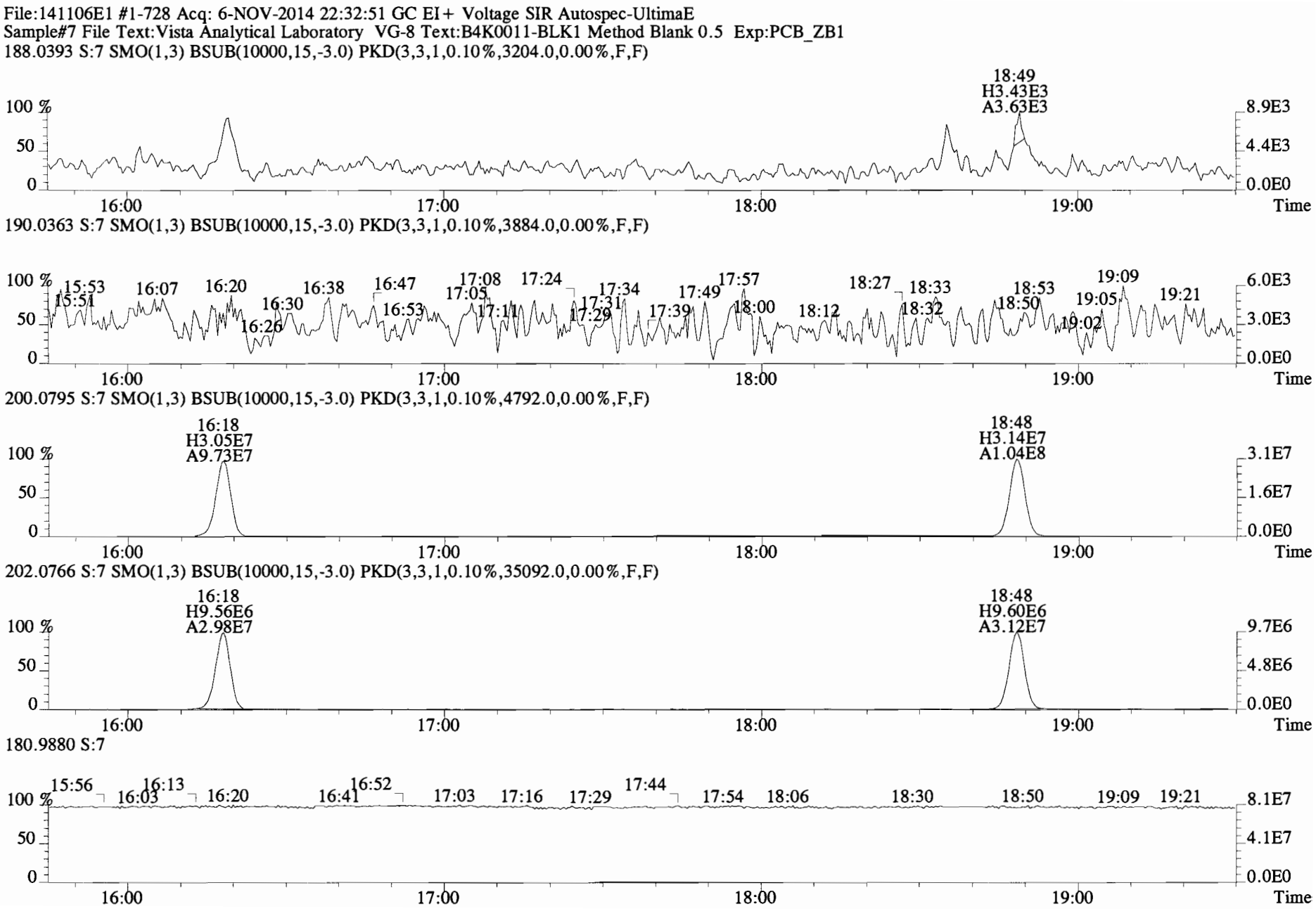
Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.68e+08	0.78	y	1.20	37:36	0.968	0.963	0.973	8460	106
13C-PCB-178	6.56e+07	0.46	y	0.94	45:26	0.924	0.920	0.930	8150	102

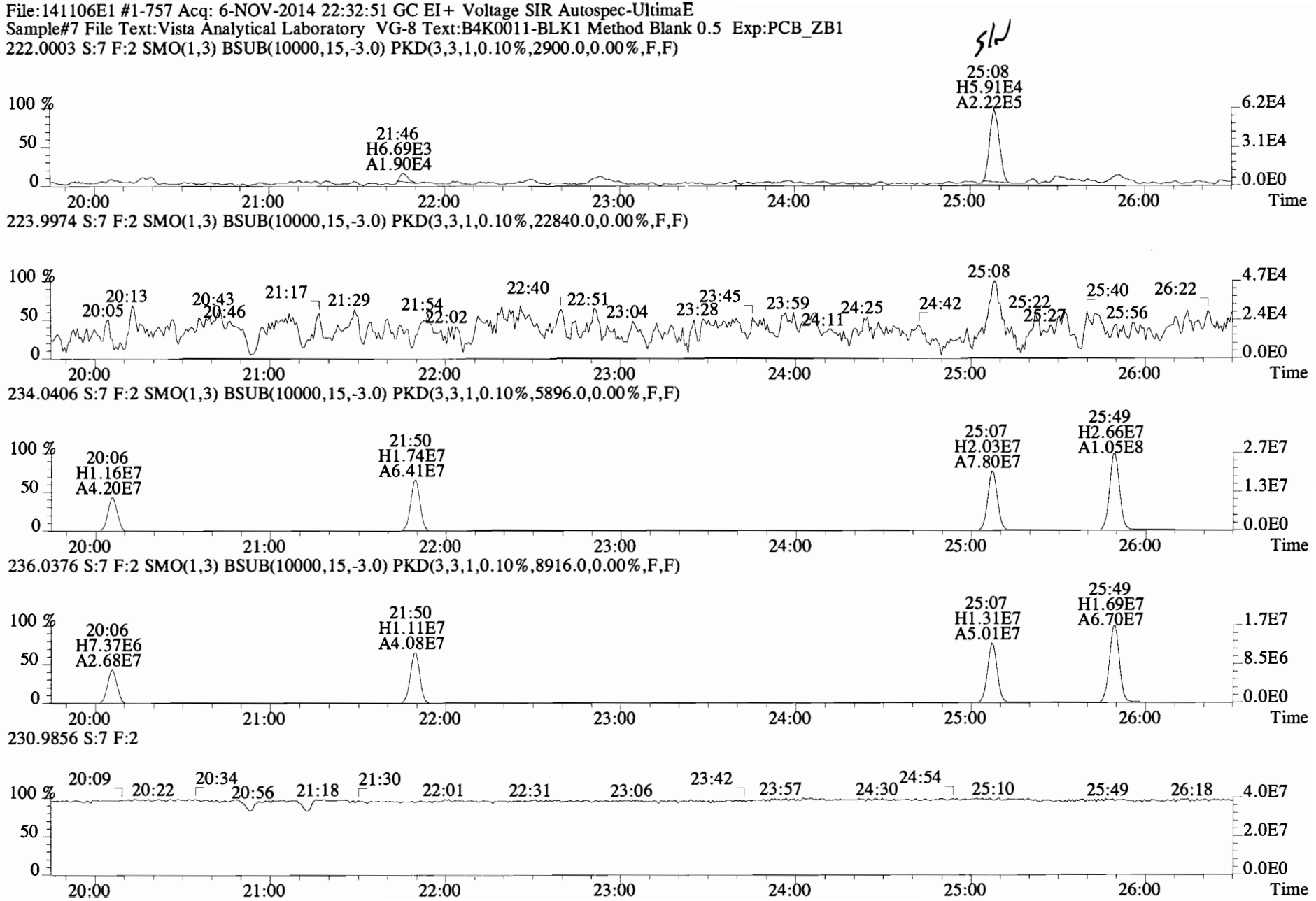
RS

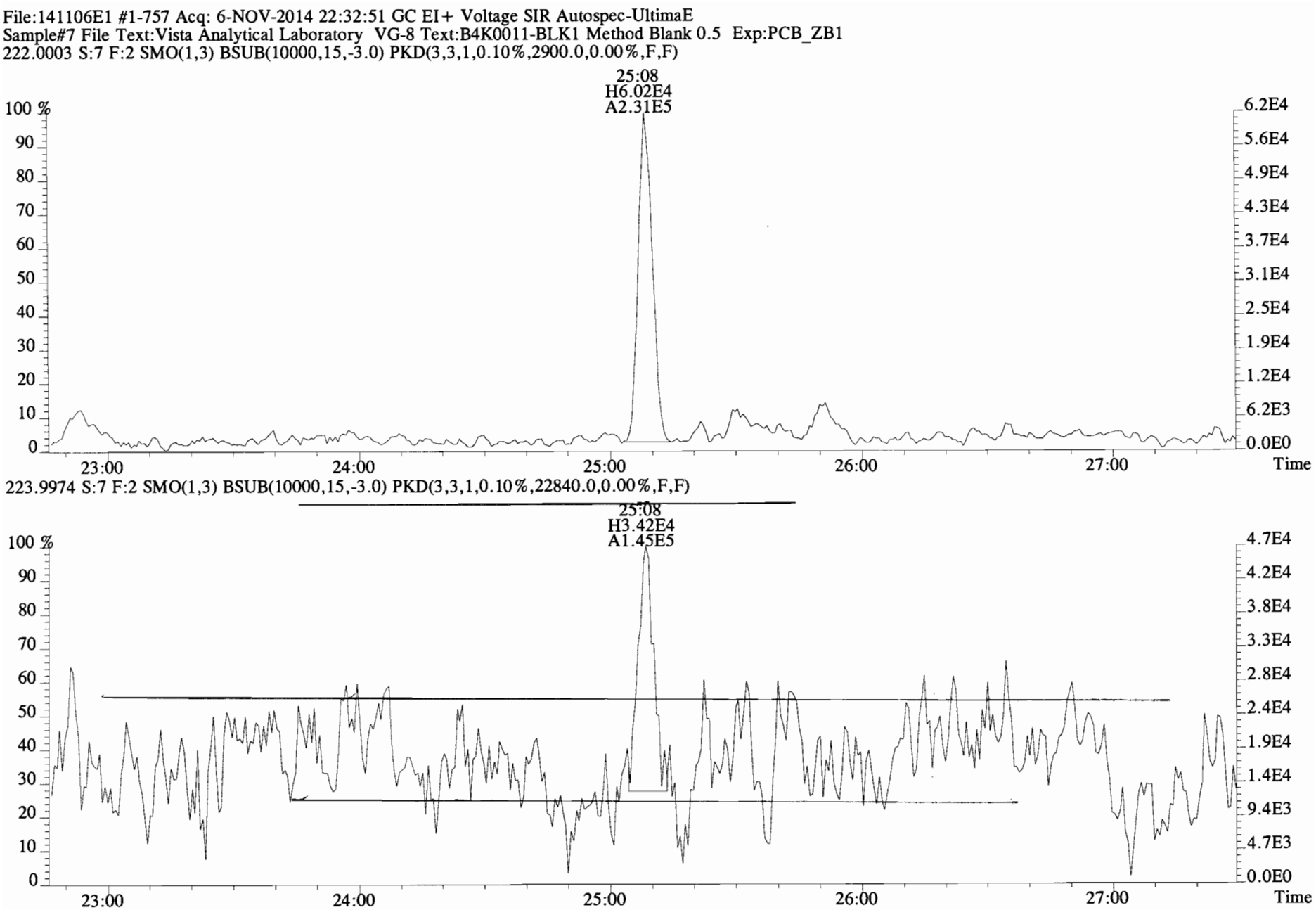
Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.72e+08	1.56	y	1.00	25:49	8000
13C-PCB-31	1.74e+08	1.05	y	1.00	28:49	8000
13C-PCB-60	1.76e+08	0.77	y	1.00	36:33	8000
13C-PCB-111	1.22e+08	1.61	y	1.00	39:01	8000
13C-PCB-128	1.07e+08	1.24	y	1.00	46:10	8000
13C-PCB-205	1.02e+08	0.91	y	1.00	53:53	8000

Analyst: DMS

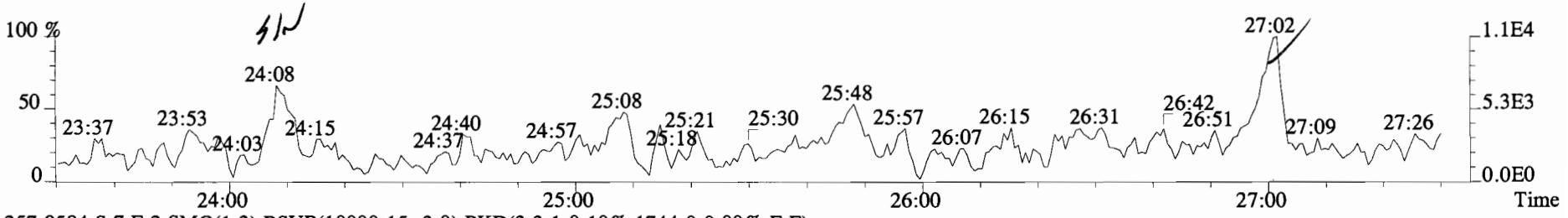
Date: 11/7/14


File:141106E1 #1-728 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
188.0393 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3204.0,0.00%,F,F)
18:49
H3.43E3
A3.63E3
8.9E3
4.4E3
0.0E0
190.0363 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3884.0,0.00%,F,F)
6.0E3
3.0E3
0.0E0
200.0795 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4792.0,0.00%,F,F)
16:18
H3.05E7
A9.73E7
18:48
H3.14E7
A1.04E8
3.1E7
1.6E7
0.0E0
202.0766 S:7 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35092.0,0.00%,F,F)
16:18
H9.56E6
A2.98E7
18:48
H9.60E6
A3.12E7
9.7E6
4.8E6
0.0E0
180.9880 S:7
8.1E7
4.1E7
0.0E0
100 %
50
0
16:00
17:00
18:00
19:00
Time

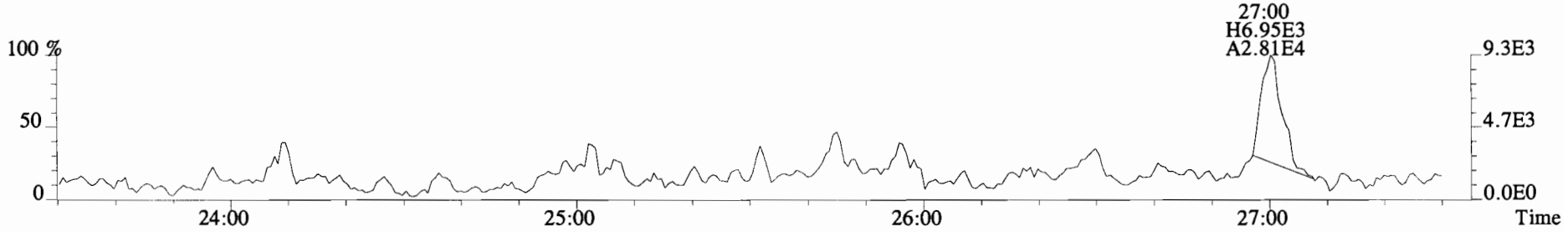

File:141106E1 #1-757 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
222.0003 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2900.0,0.00%,F,F)
25:08
H5.91E4
A2.22E5
21:46
H6.69E3
A1.90E4
223.9974 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,22840.0,0.00%,F,F)
234.0406 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5896.0,0.00%,F,F)
20:06
H1.16E7
A4.20E7
21:50
H1.74E7
A6.41E7
25:07
H2.03E7
A7.80E7
25:49
H2.66E7
A1.05E8
236.0376 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8916.0,0.00%,F,F)
20:06
H7.37E6
A2.68E7
21:50
H1.11E7
A4.08E7
25:07
H1.31E7
A5.01E7
25:49
H1.69E7
A6.70E7
230.9856 S:7 F:2
100 %
50
0
20:00
21:00
22:00
23:00
24:00
25:00
26:00
Time
6.2E4
3.1E4
0.0E0
4.7E4
2.4E4
2.7E7
1.3E7
1.7E7
8.5E6
4.0E7
2.0E7


File:141106E1 #1-757 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
222.0003 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2900.0,0.00%,F,F)
25:08
H6.02E4
A2.31E5
100 %
90
80
70
60
50
40
30
20
10
0
6.2E4
5.6E4
4.9E4
4.3E4
3.7E4
3.1E4
2.5E4
1.9E4
1.2E4
6.2E3
0.0E0
23:00
24:00
25:00
26:00
27:00
Time
223.9974 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,22840.0,0.00%,F,F)
25:08
H3.42E4
A1.45E5
100 %
90
80
70
60
50
40
30
20
10
0
4.7E4
4.2E4
3.8E4
3.3E4
2.8E4
2.4E4
1.9E4
1.4E4
9.4E3
4.7E3
0.0E0
23:00
24:00
25:00
26:00
27:00
Time

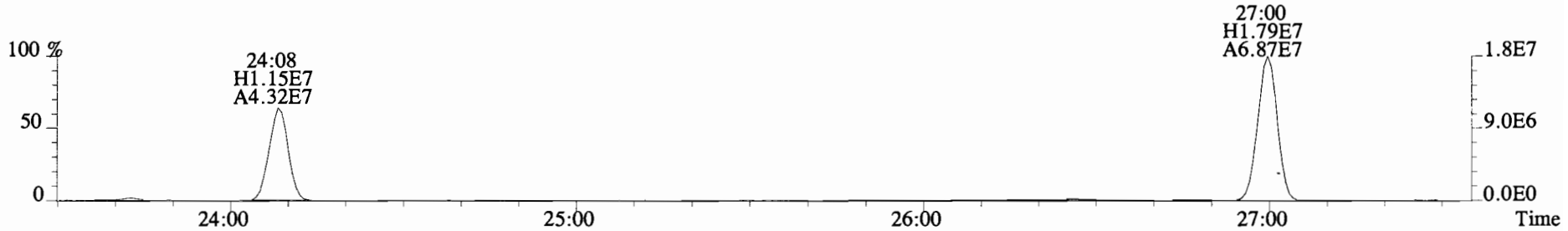
File:141106E1 #1-757 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
255.9613 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2920.0,0.00%,F,F)



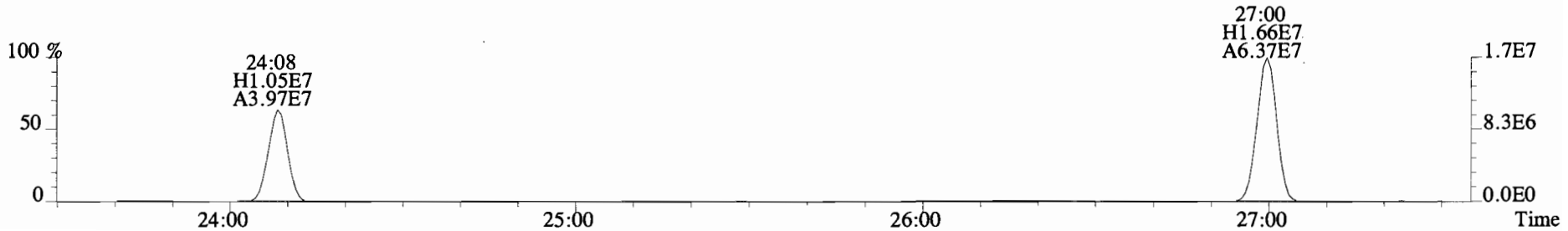
257.9584 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1744.0,0.00%,F,F)



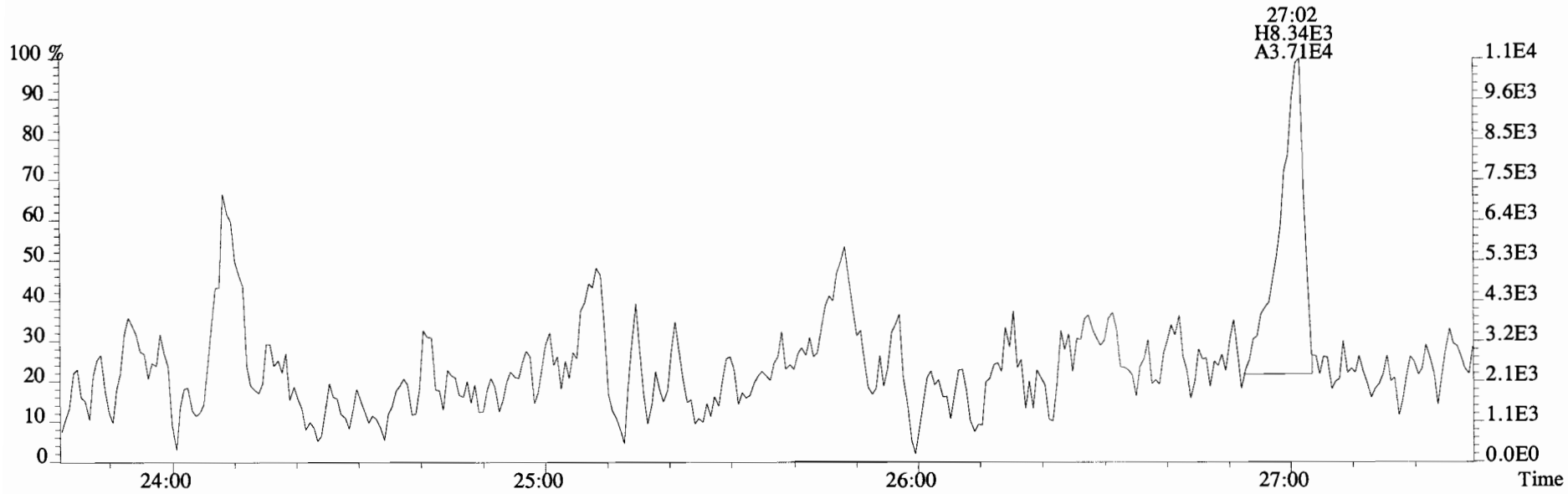
268.0016 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,40288.0,0.00%,F,F)



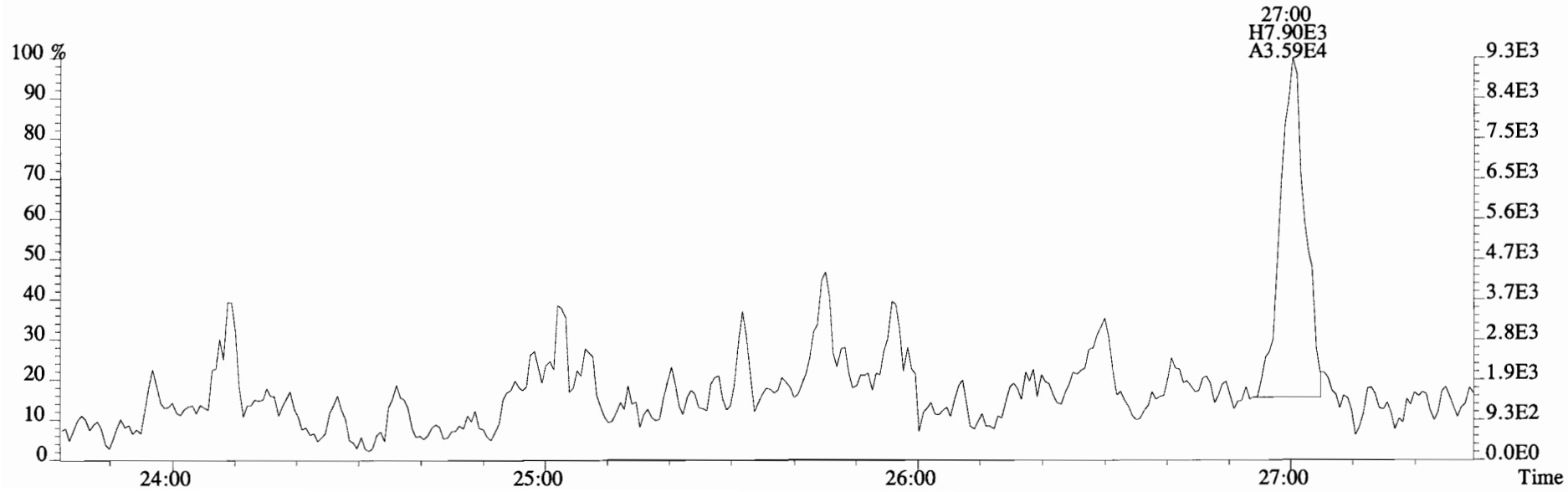
269.9986 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,30220.0,0.00%,F,F)



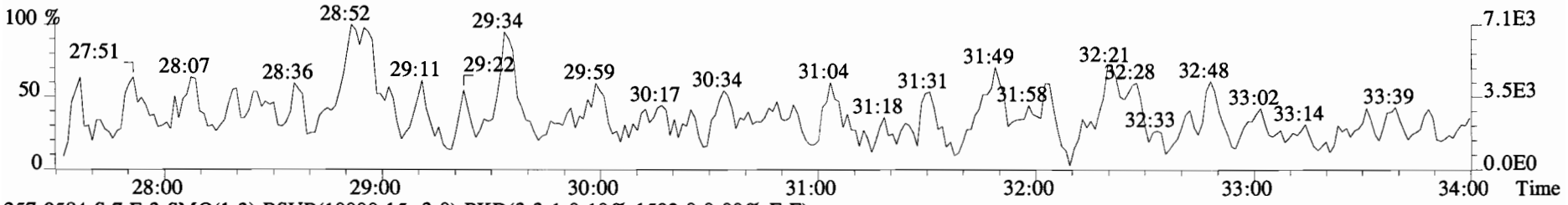
File:141106E1 #1-757 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
255.9613 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2920.0,0.00%,F,F)



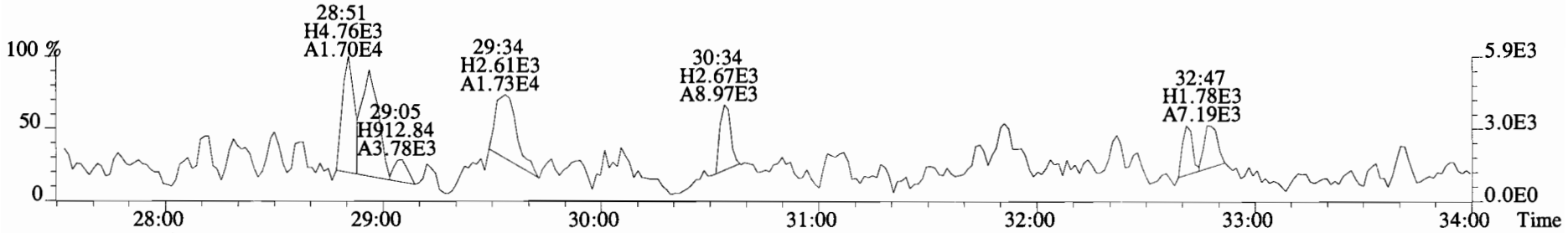
257.9584 S:7 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1744.0,0.00%,F,F)



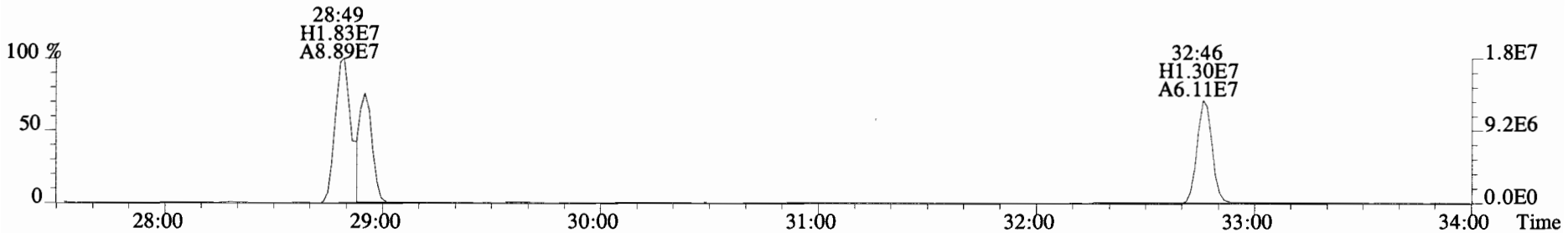
File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
255.9613 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3084.0,0.00%,F,F)



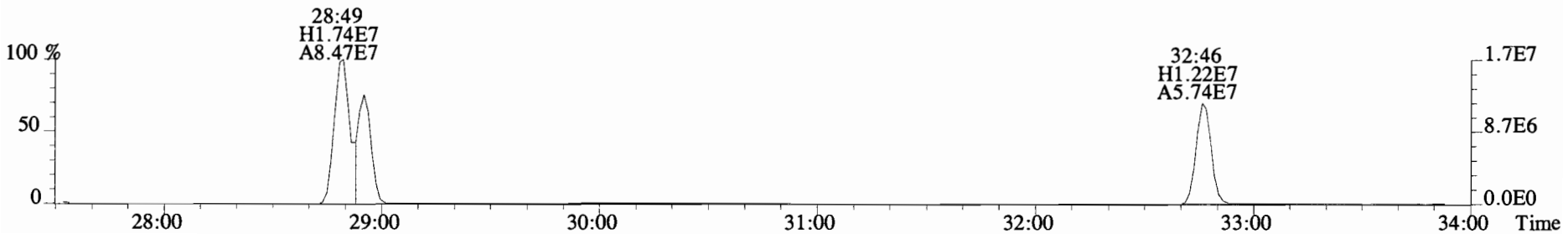
257.9584 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1592.0,0.00%,F,F)



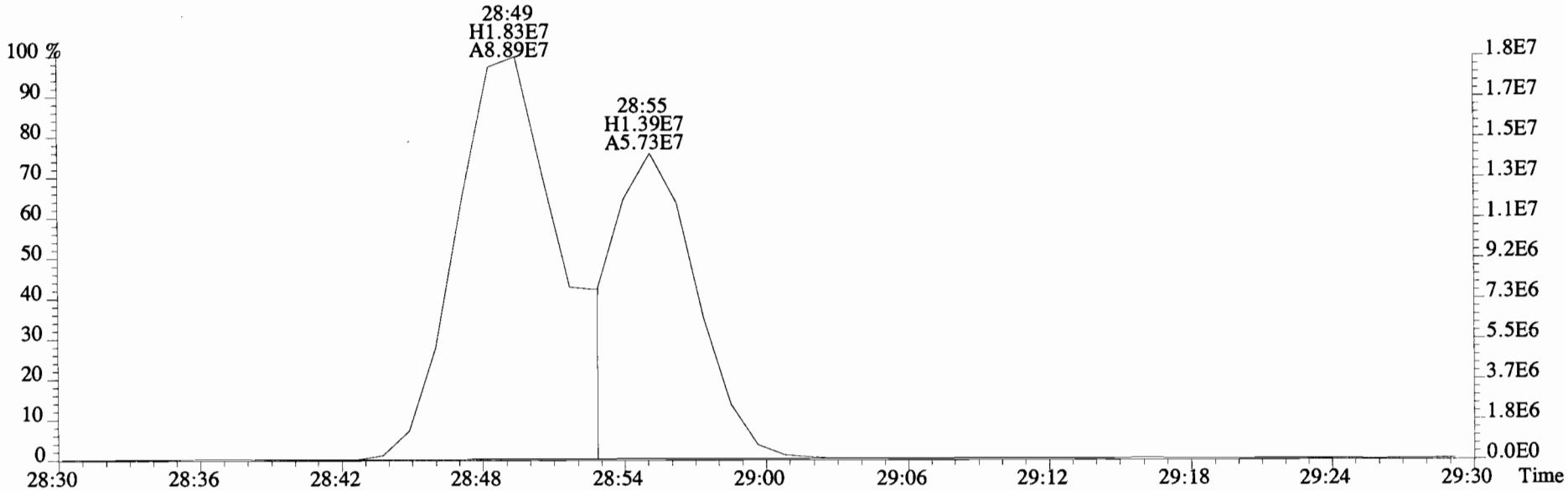
268.0016 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,48792.0,0.00%,F,F)



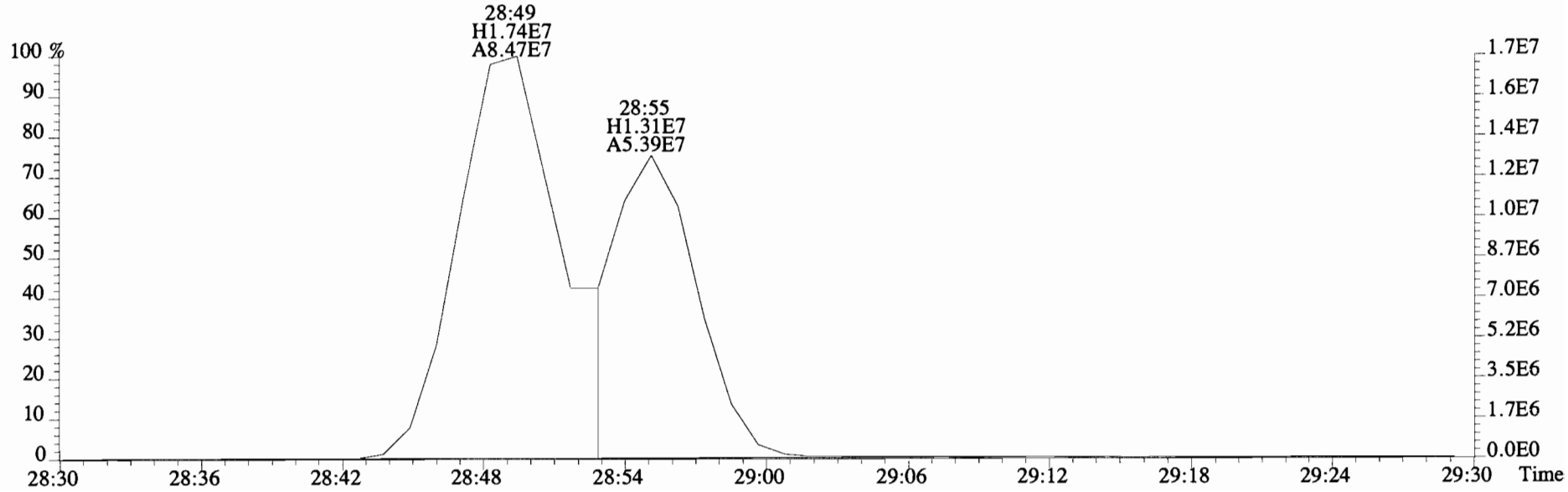
269.9986 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26532.0,0.00%,F,F)

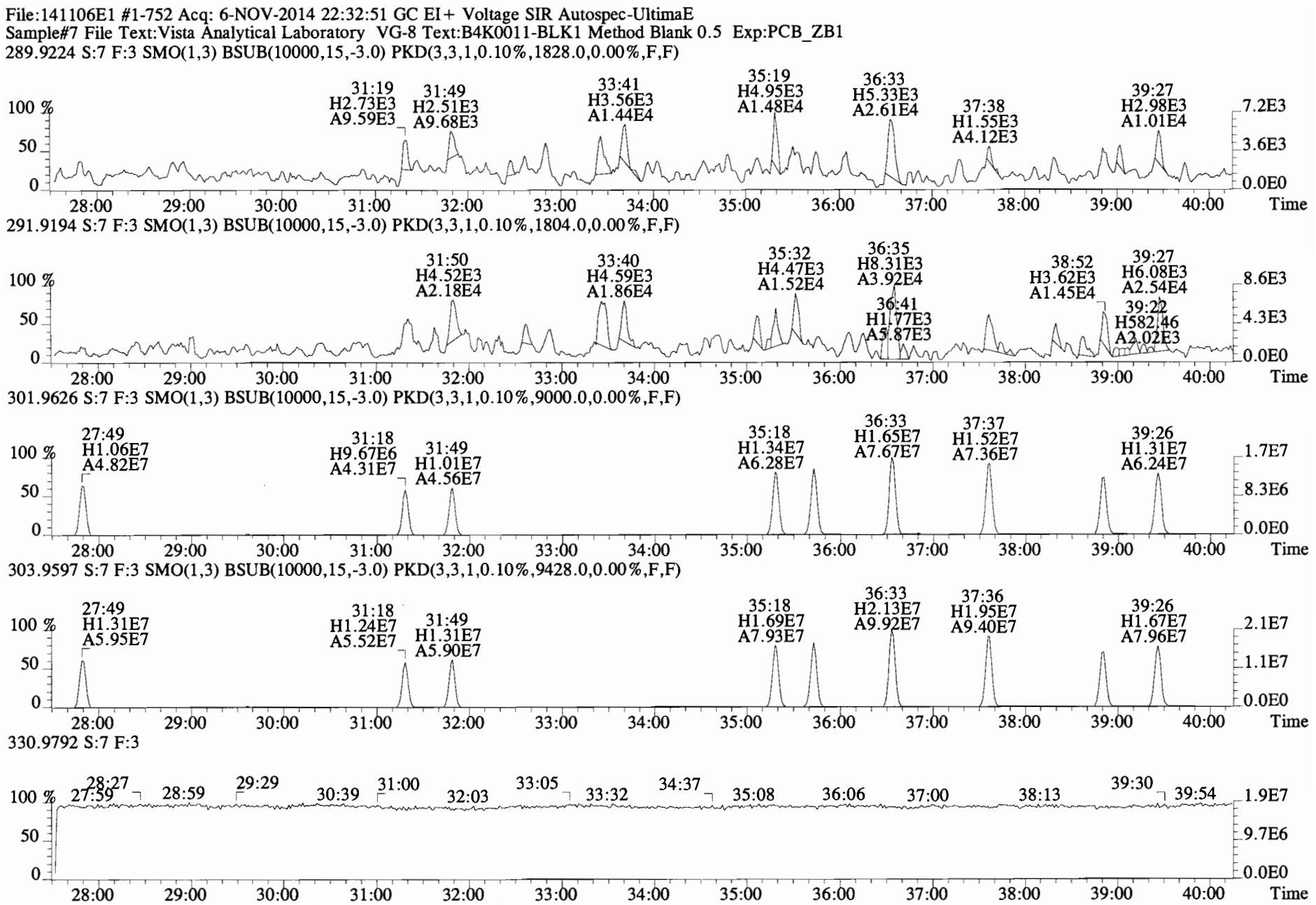


File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
268.0016 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,48792.0,0.00%,F,F)



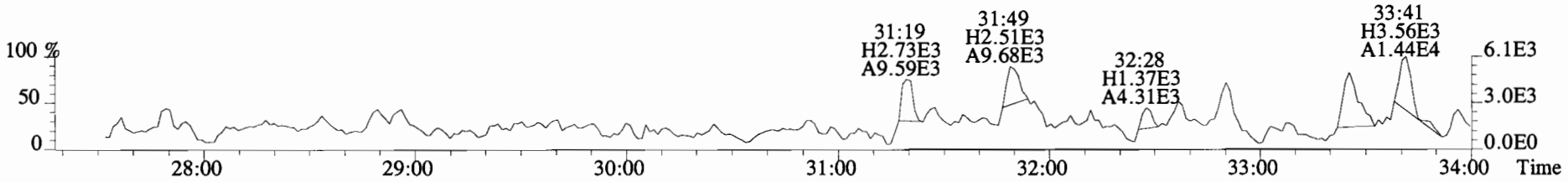
269.9986 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26532.0,0.00%,F,F)



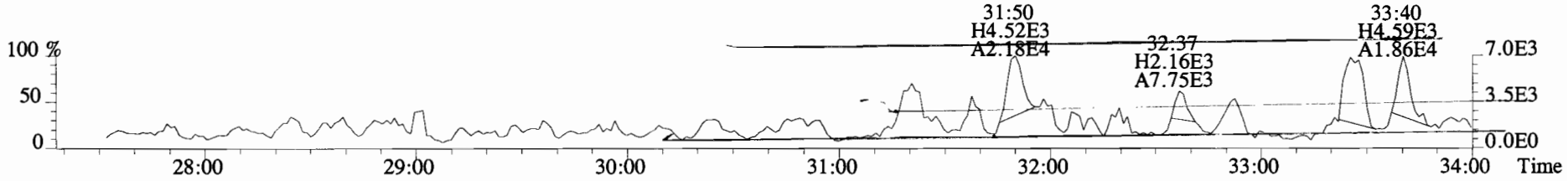

File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1828.0,0.00%,F,F)
31:19 H2.73E3 A9.59E3
31:49 H2.51E3 A9.68E3
33:41 H3.56E3 A1.44E4
35:19 H4.95E3 A1.48E4
36:33 H5.33E3 A2.61E4
37:38 H1.55E3 A4.12E3
39:27 H2.98E3 A1.01E4
7.2E3
3.6E3
0.0E0
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1804.0,0.00%,F,F)
31:50 H4.52E3 A2.18E4
33:40 H4.59E3 A1.86E4
35:32 H4.47E3 A1.52E4
36:35 H8.31E3 A3.92E4
36:41 H1.77E3 A5.87E3
38:52 H3.62E3 A1.45E4
39:27 H6.08E3 A2.54E4
39:22 H582.46 A2.02E3
8.6E3
4.3E3
0.0E0
301.9626 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9000.0,0.00%,F,F)
27:49 H1.06E7 A4.82E7
31:18 H9.67E6 A4.31E7
31:49 H1.01E7 A4.56E7
35:18 H1.34E7 A6.28E7
36:33 H1.65E7 A7.67E7
37:37 H1.52E7 A7.36E7
39:26 H1.31E7 A6.24E7
1.7E7
8.3E6
0.0E0
303.9597 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9428.0,0.00%,F,F)
27:49 H1.31E7 A5.95E7
31:18 H1.24E7 A5.52E7
31:49 H1.31E7 A5.90E7
35:18 H1.69E7 A7.93E7
36:33 H2.13E7 A9.92E7
37:36 H1.95E7 A9.40E7
39:26 H1.67E7 A7.96E7
2.1E7
1.1E7
0.0E0
330.9792 S:7 F:3
28:27
27:59
28:59
29:29
30:39
31:00
32:03
33:05
33:32
34:37
35:08
36:06
37:00
38:13
39:30
39:54
1.9E7
9.7E6
0.0E0
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

File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1

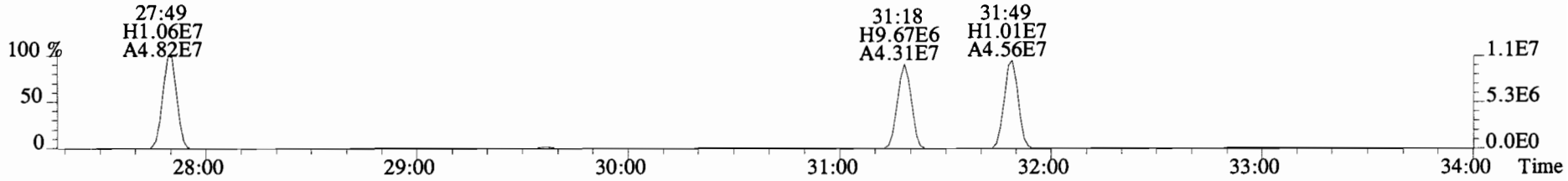
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1828.0,0.00%,F,F)



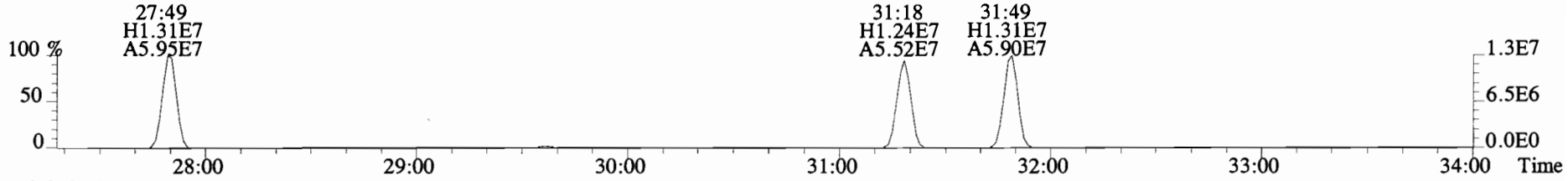
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1804.0,0.00%,F,F)



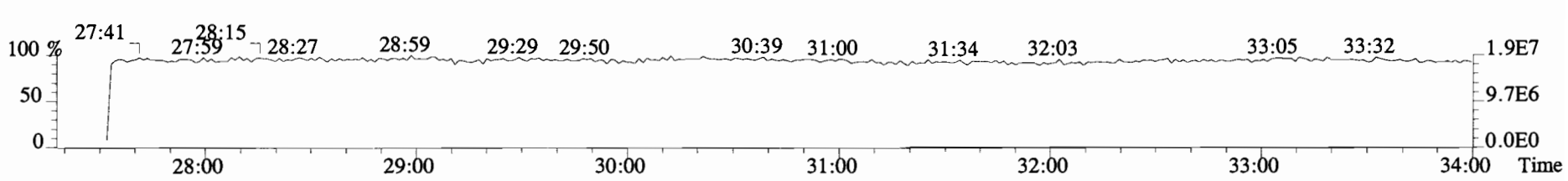
301.9626 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9000.0,0.00%,F,F)

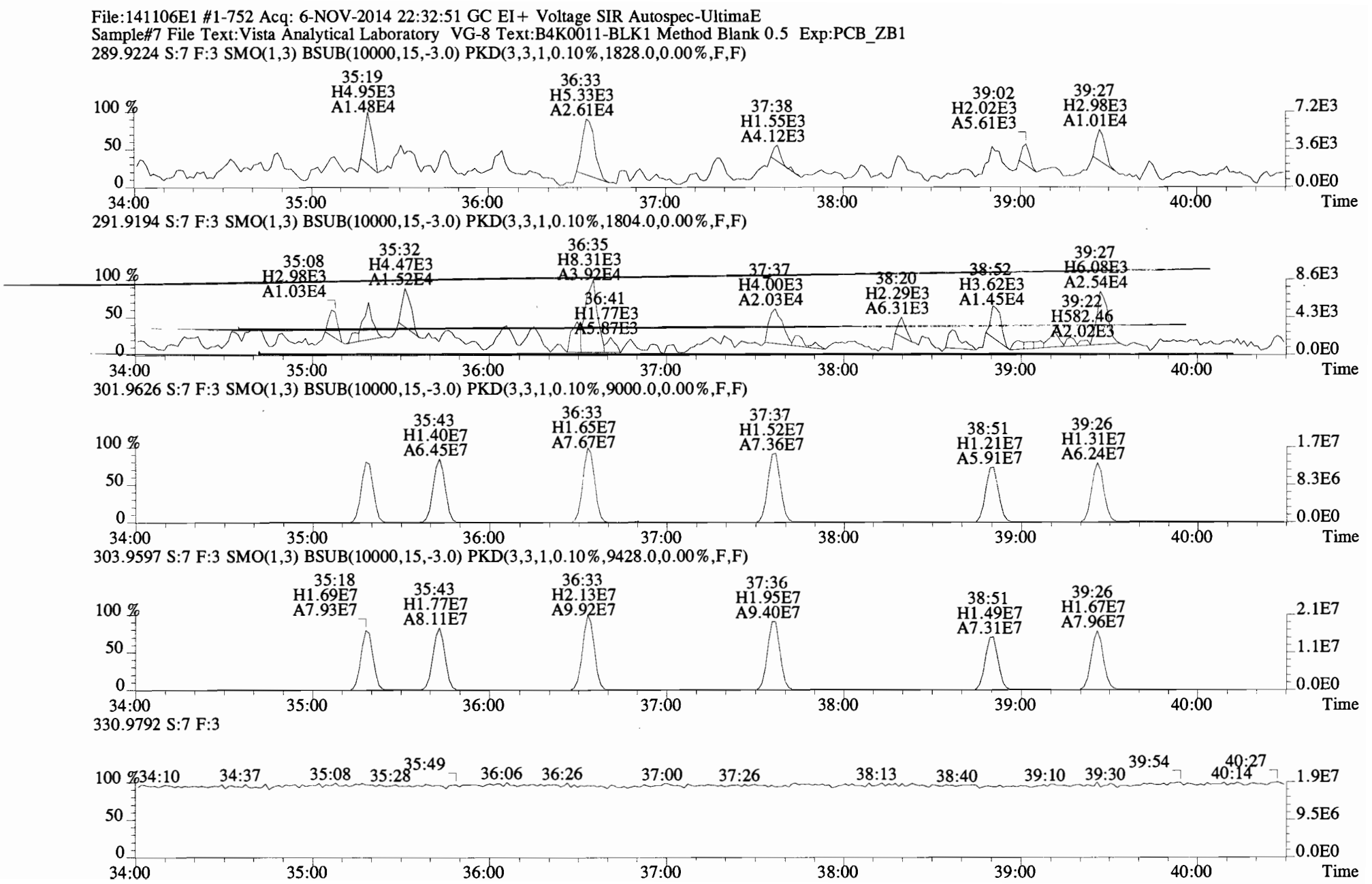


303.9597 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9428.0,0.00%,F,F)

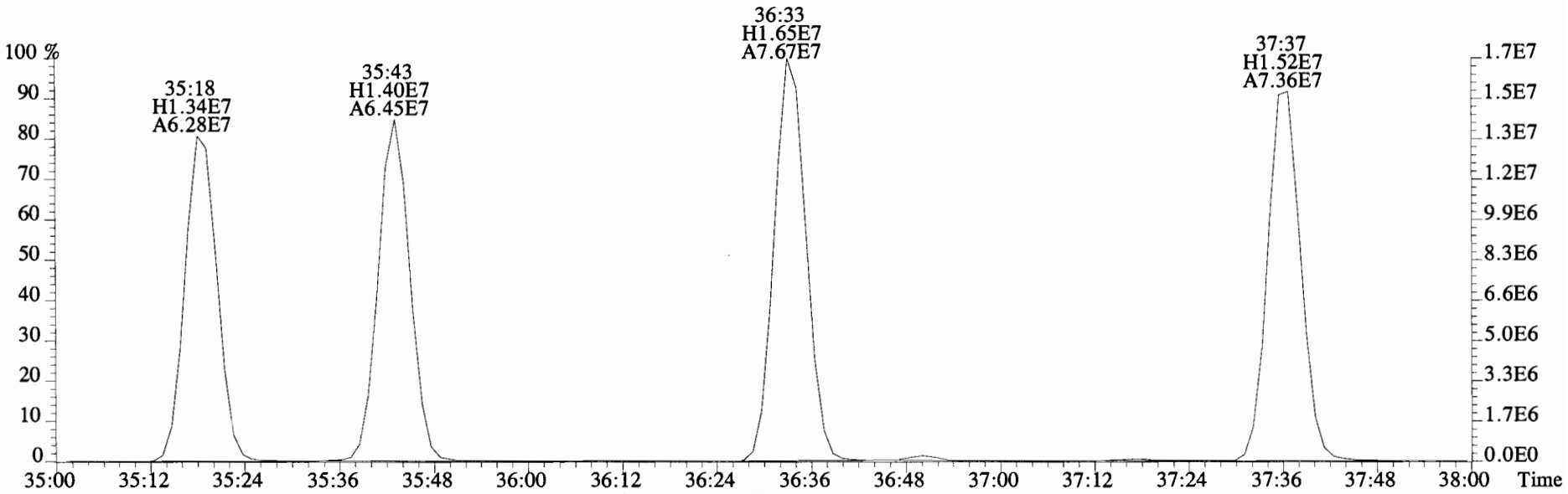


330.9792 S:7 F:3

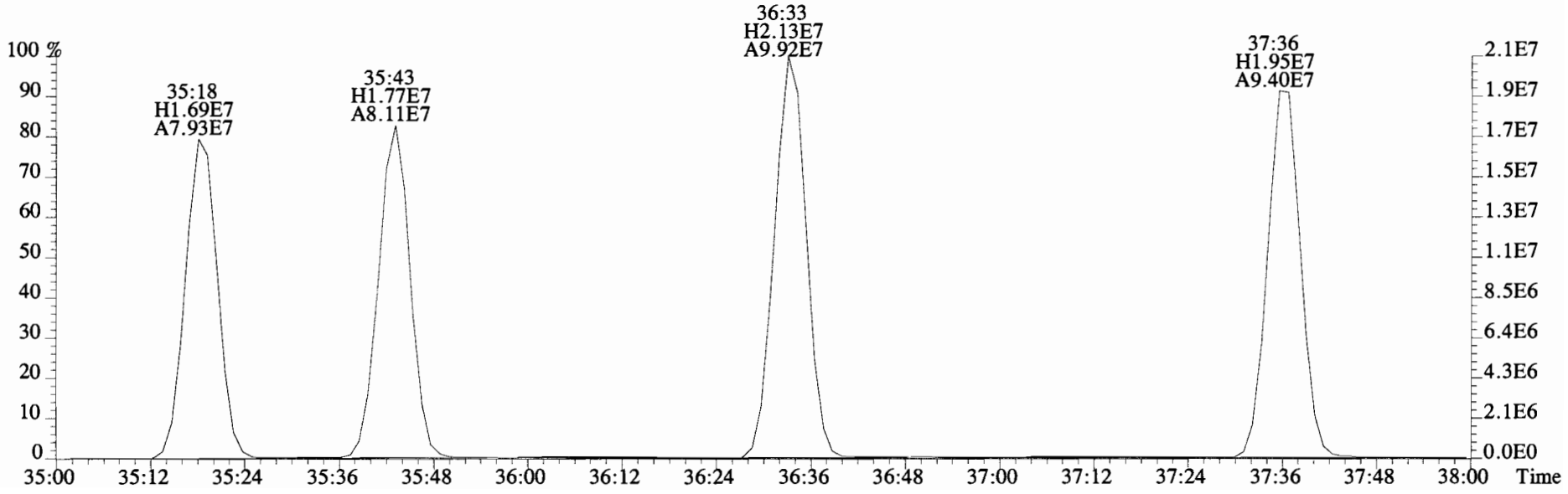


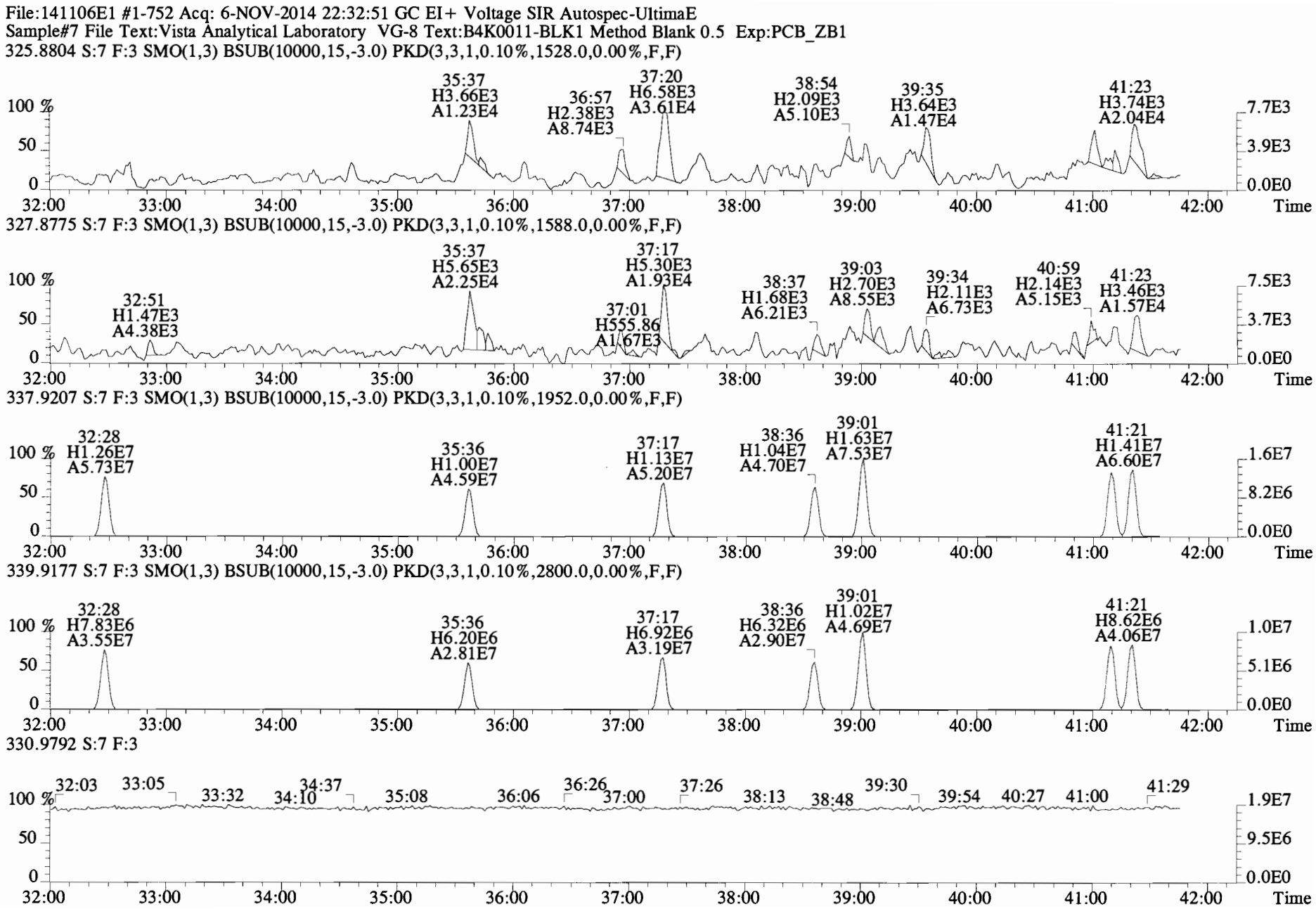

File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
289.9224 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1828.0,0.00%,F,F)
35:19 H4.95E3 A1.48E4
36:33 H5.33E3 A2.61E4
37:38 H1.55E3 A4.12E3
39:02 H2.02E3 A5.61E3
39:27 H2.98E3 A1.01E4
291.9194 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1804.0,0.00%,F,F)
35:08 H2.98E3 A1.03E4
35:32 H4.47E3 A1.52E4
36:35 H8.31E3 A3.92E4
36:41 H1.77E3 A5.87E3
37:37 H4.00E3 A2.03E4
38:20 H2.29E3 A6.31E3
38:52 H3.62E3 A1.45E4
39:22 H582.46 A2.02E3
39:27 H6.08E3 A2.54E4
301.9626 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9000.0,0.00%,F,F)
35:43 H1.40E7 A6.45E7
36:33 H1.65E7 A7.67E7
37:37 H1.52E7 A7.36E7
38:51 H1.21E7 A5.91E7
39:26 H1.31E7 A6.24E7
303.9597 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9428.0,0.00%,F,F)
35:18 H1.69E7 A7.93E7
35:43 H1.77E7 A8.11E7
36:33 H2.13E7 A9.92E7
37:36 H1.95E7 A9.40E7
38:51 H1.49E7 A7.31E7
39:26 H1.67E7 A7.96E7
330.9792 S:7 F:3
34:10 34:37 35:08 35:28 35:49 36:06 36:26 37:00 37:26 38:13 38:40 39:10 39:30 39:54 40:14 40:27
100 %
50
0
34:00 35:00 36:00 37:00 38:00 39:00 40:00 Time
7.2E3 3.6E3 0.0E0
8.6E3 4.3E3 0.0E0
1.7E7 8.3E6 0.0E0
2.1E7 1.1E7 0.0E0
1.9E7 9.5E6 0.0E0

File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
301.9626 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9000.0,0.00%,F,F)

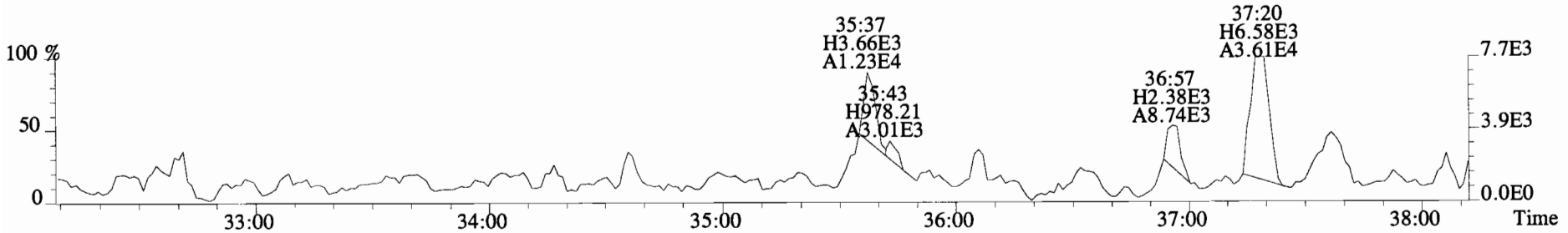


303.9597 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9428.0,0.00%,F,F)

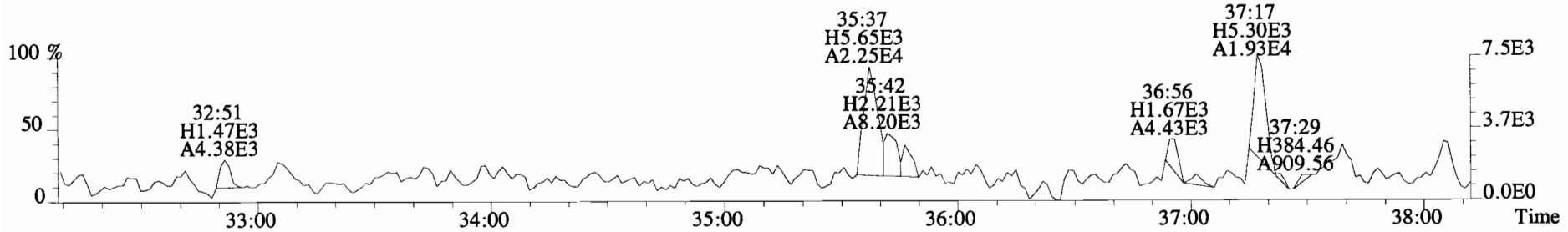



File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1528.0,0.00%,F,F)
35:37 H3.66E3 A1.23E4
36:57 H2.38E3 A8.74E3
37:20 H6.58E3 A3.61E4
38:54 H2.09E3 A5.10E3
39:35 H3.64E3 A1.47E4
41:23 H3.74E3 A2.04E4
7.7E3
3.9E3
0.0E0
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1588.0,0.00%,F,F)
32:51 H1.47E3 A4.38E3
35:37 H5.65E3 A2.25E4
37:01 H555.86 A1.67E3
37:17 H5.30E3 A1.93E4
38:37 H1.68E3 A6.21E3
39:03 H2.70E3 A8.55E3
39:34 H2.11E3 A6.73E3
40:59 H2.14E3 A5.15E3
41:23 H3.46E3 A1.57E4
7.5E3
3.7E3
0.0E0
337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1952.0,0.00%,F,F)
32:28 H1.26E7 A5.73E7
35:36 H1.00E7 A4.59E7
37:17 H1.13E7 A5.20E7
38:36 H1.04E7 A4.70E7
39:01 H1.63E7 A7.53E7
41:21 H1.41E7 A6.60E7
1.6E7
8.2E6
0.0E0
339.9177 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2800.0,0.00%,F,F)
32:28 H7.83E6 A3.55E7
35:36 H6.20E6 A2.81E7
37:17 H6.92E6 A3.19E7
38:36 H6.32E6 A2.90E7
39:01 H1.02E7 A4.69E7
41:21 H8.62E6 A4.06E7
1.0E7
5.1E6
0.0E0
330.9792 S:7 F:3
32:03 33:05 33:32 34:10 34:37 35:08 36:06 36:26 37:00 37:26 38:13 38:48 39:30 39:54 40:27 41:00 41:29
1.9E7
9.5E6
0.0E0
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

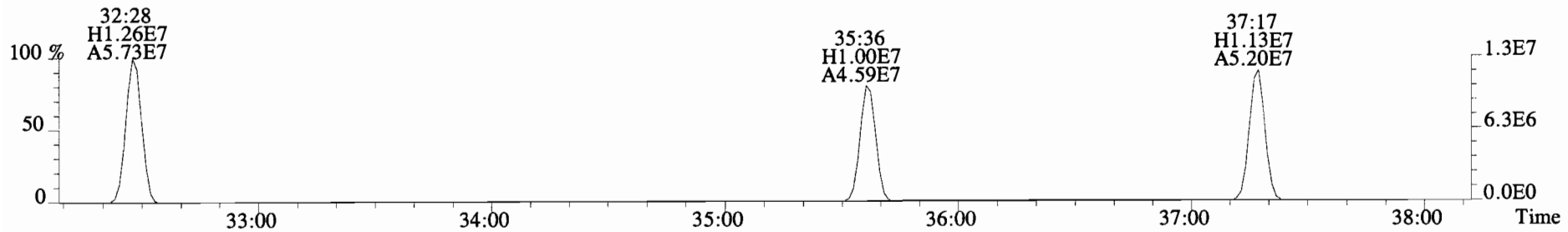
File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1528.0,0.00%,F,F)



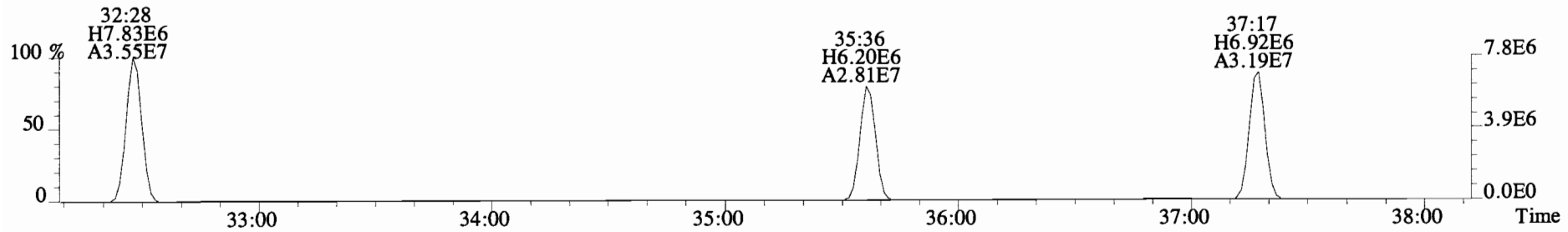
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1588.0,0.00%,F,F)

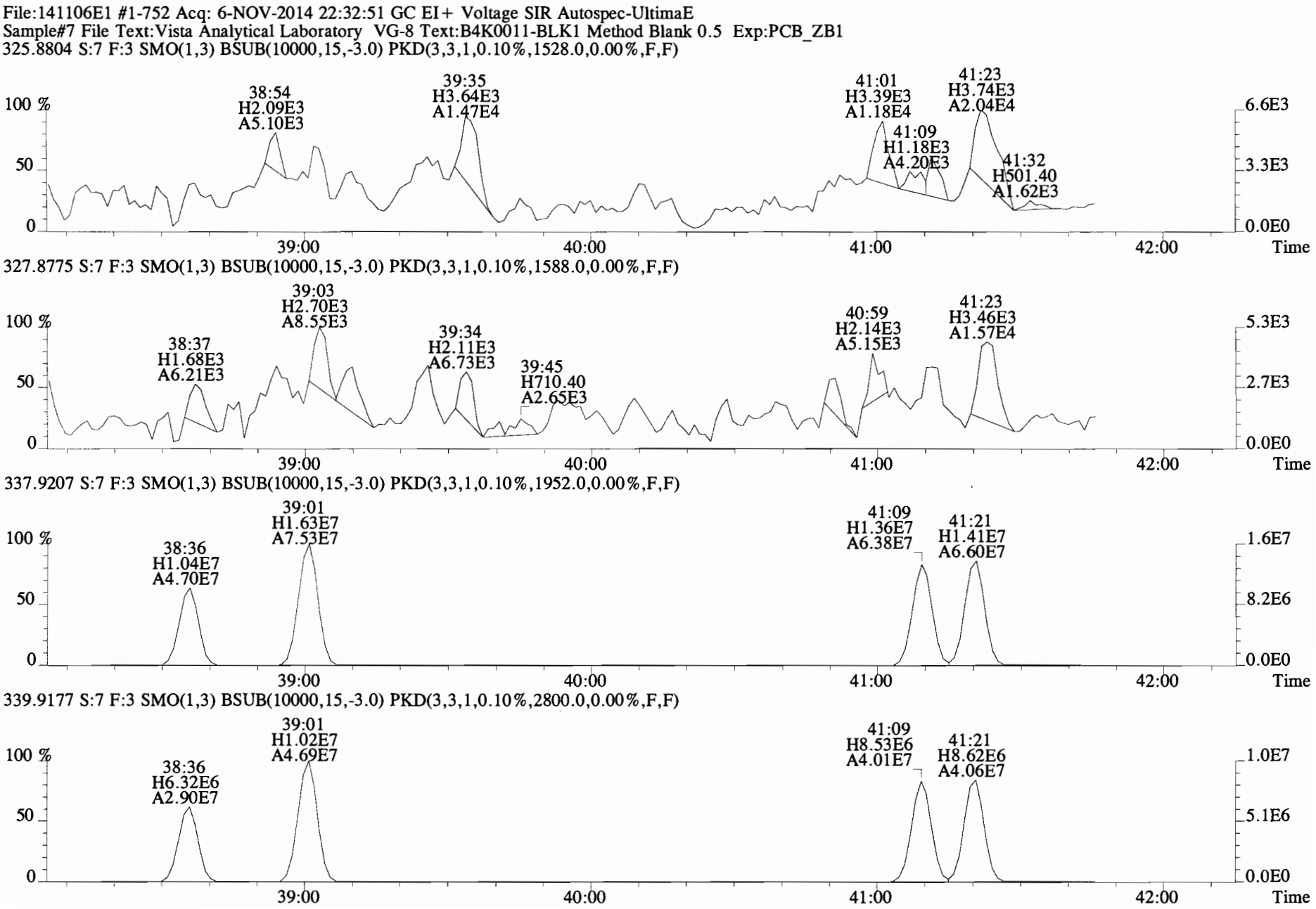


337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1952.0,0.00%,F,F)

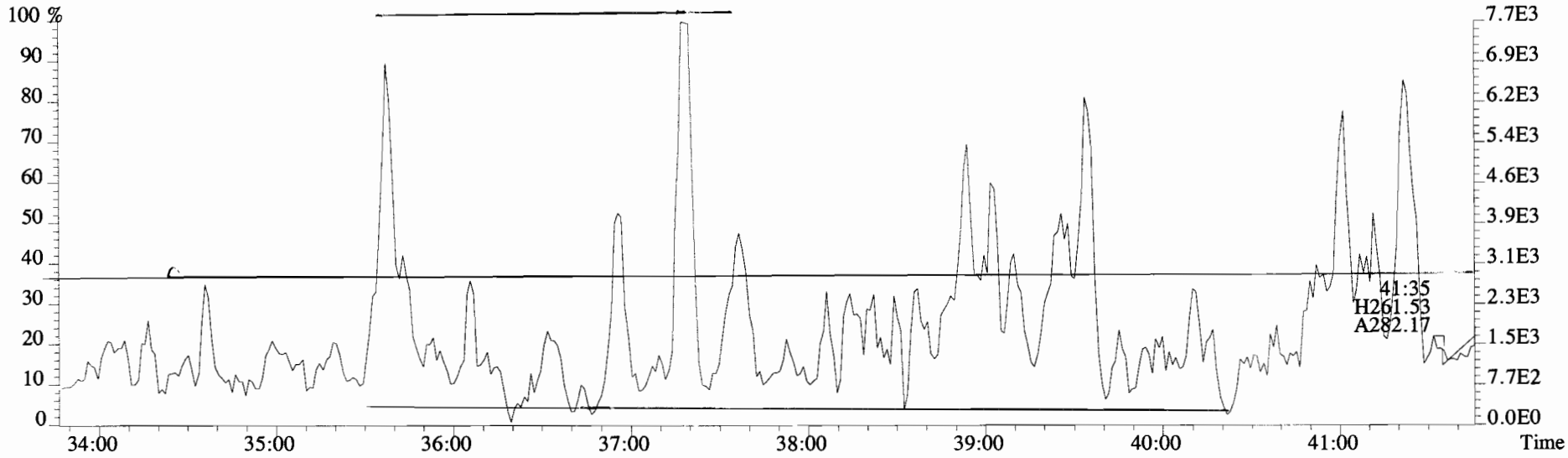


339.9177 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2800.0,0.00%,F,F)

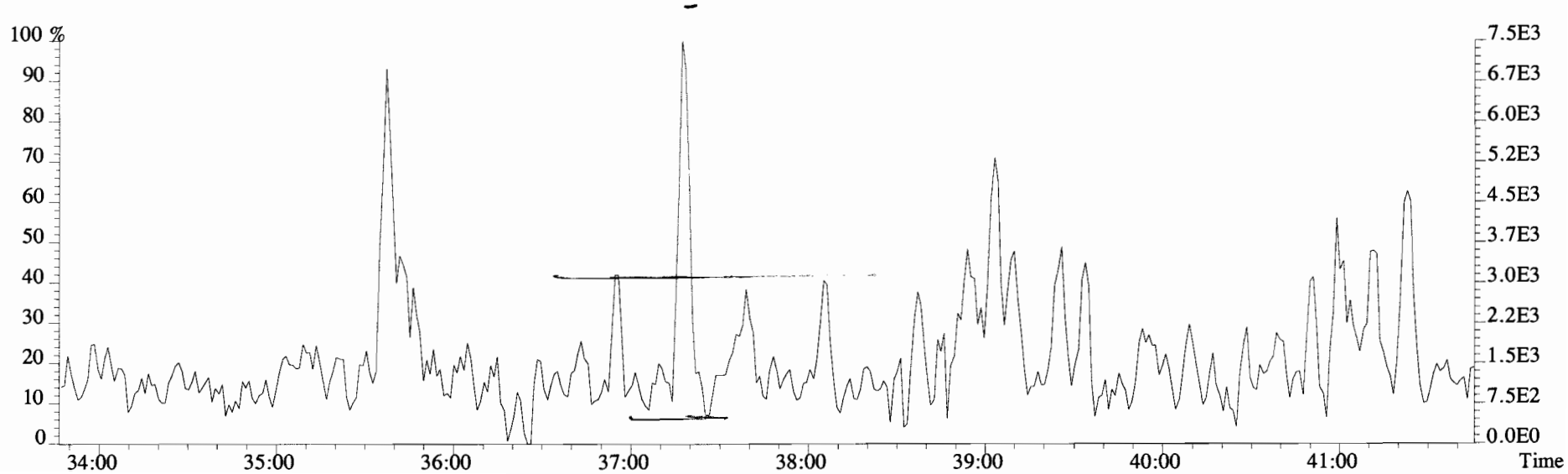



File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1528.0,0.00%,F,F)
38:54 H2.09E3 A5.10E3
39:35 H3.64E3 A1.47E4
41:01 H3.39E3 A1.18E4
41:09 H1.18E3 A4.20E3
41:23 H3.74E3 A2.04E4
41:32 H501.40 A1.62E3
100 %
50
0
6.6E3
3.3E3
0.0E0
39:00
40:00
41:00
42:00
Time
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1588.0,0.00%,F,F)
38:37 H1.68E3 A6.21E3
39:03 H2.70E3 A8.55E3
39:34 H2.11E3 A6.73E3
39:45 H710.40 A2.65E3
40:59 H2.14E3 A5.15E3
41:23 H3.46E3 A1.57E4
100 %
50
0
5.3E3
2.7E3
0.0E0
39:00
40:00
41:00
42:00
Time
337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1952.0,0.00%,F,F)
38:36 H1.04E7 A4.70E7
39:01 H1.63E7 A7.53E7
41:09 H1.36E7 A6.38E7
41:21 H1.41E7 A6.60E7
100 %
50
0
1.6E7
8.2E6
0.0E0
39:00
40:00
41:00
42:00
Time
339.9177 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2800.0,0.00%,F,F)
38:36 H6.32E6 A2.90E7
39:01 H1.02E7 A4.69E7
41:09 H8.53E6 A4.01E7
41:21 H8.62E6 A4.06E7
100 %
50
0
1.0E7
5.1E6
0.0E0
39:00
40:00
41:00
42:00
Time

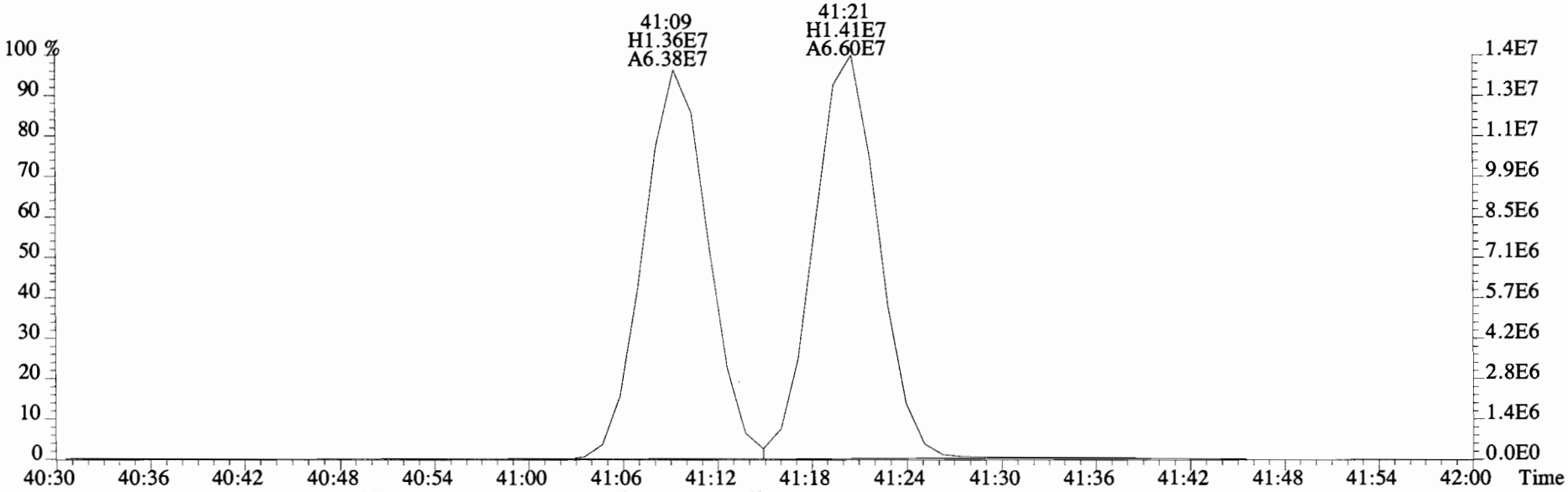
File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
325.8804 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)



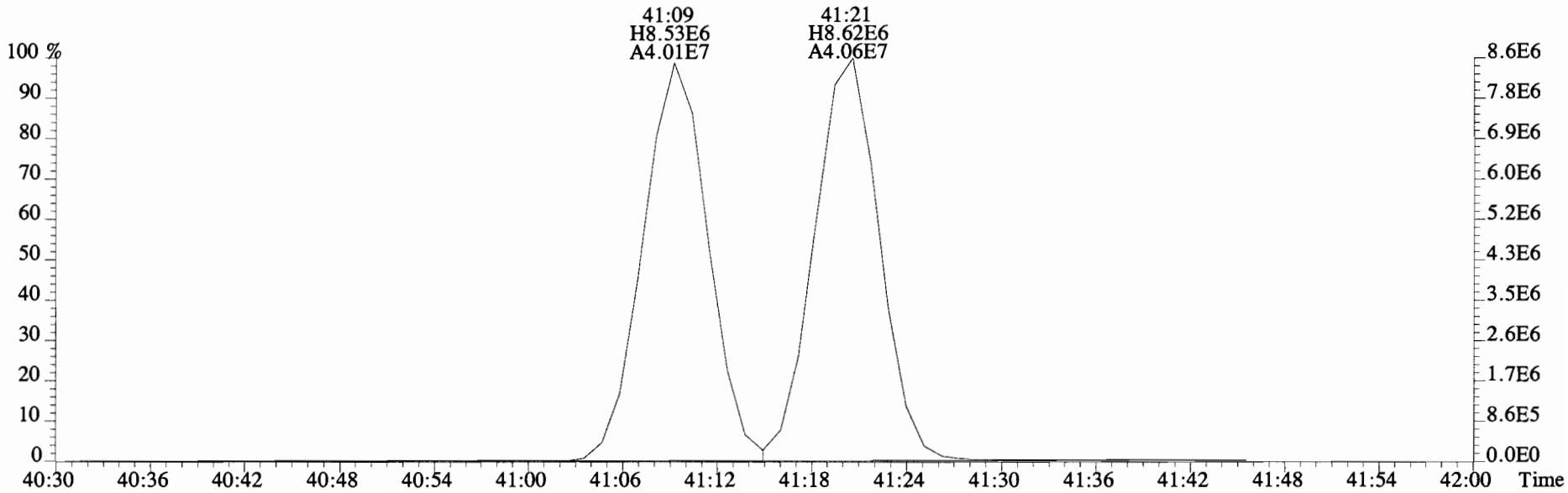
327.8775 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0)

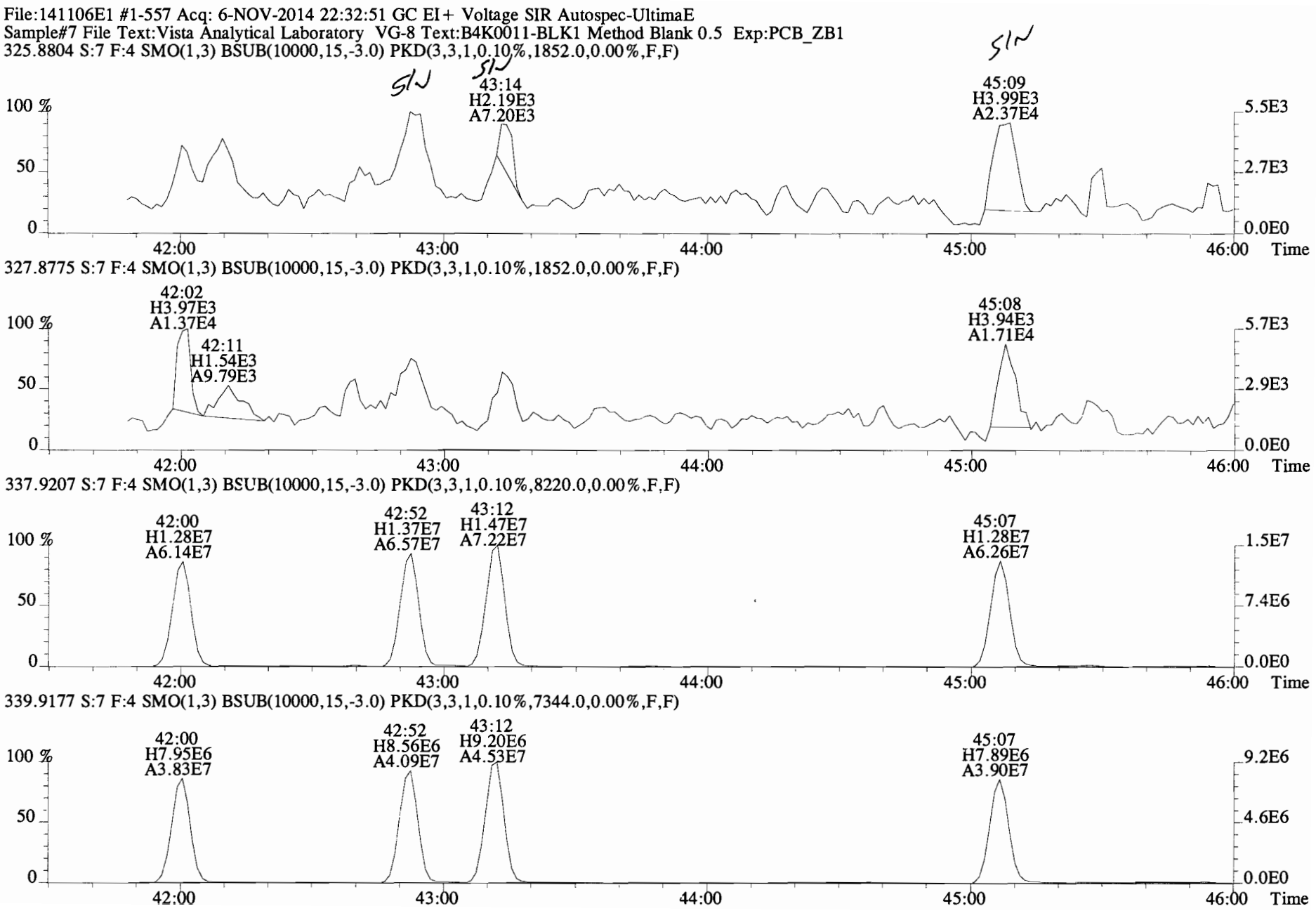


File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
337.9207 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1952.0,0.00%,F,F)

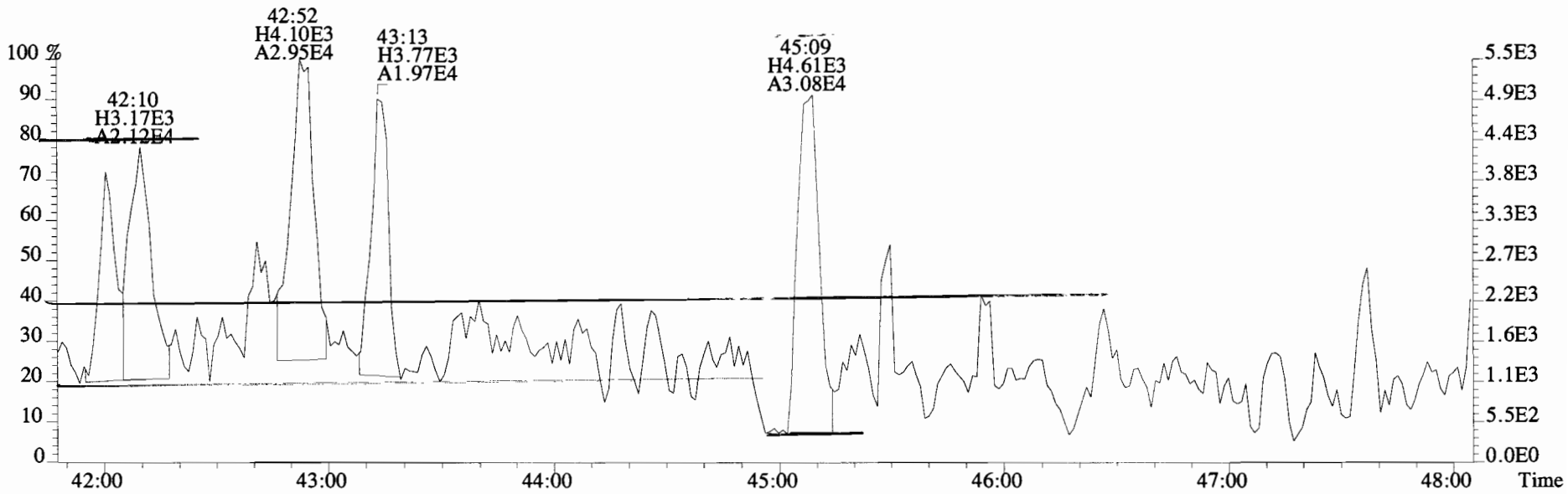


339.9177 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2800.0,0.00%,F,F)

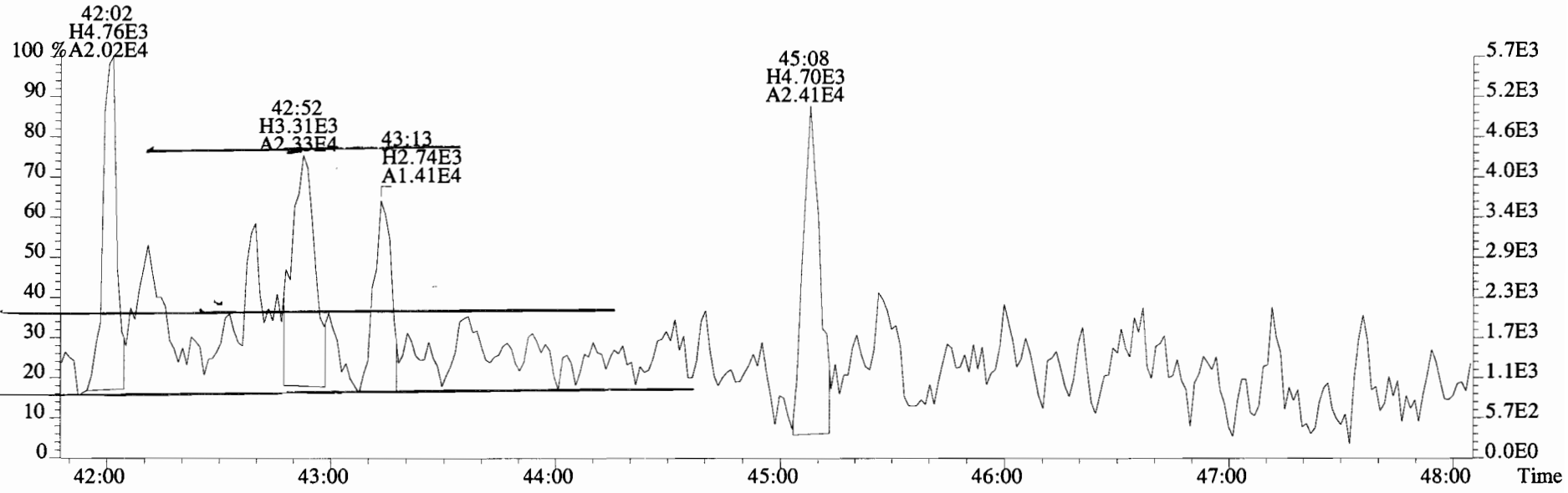


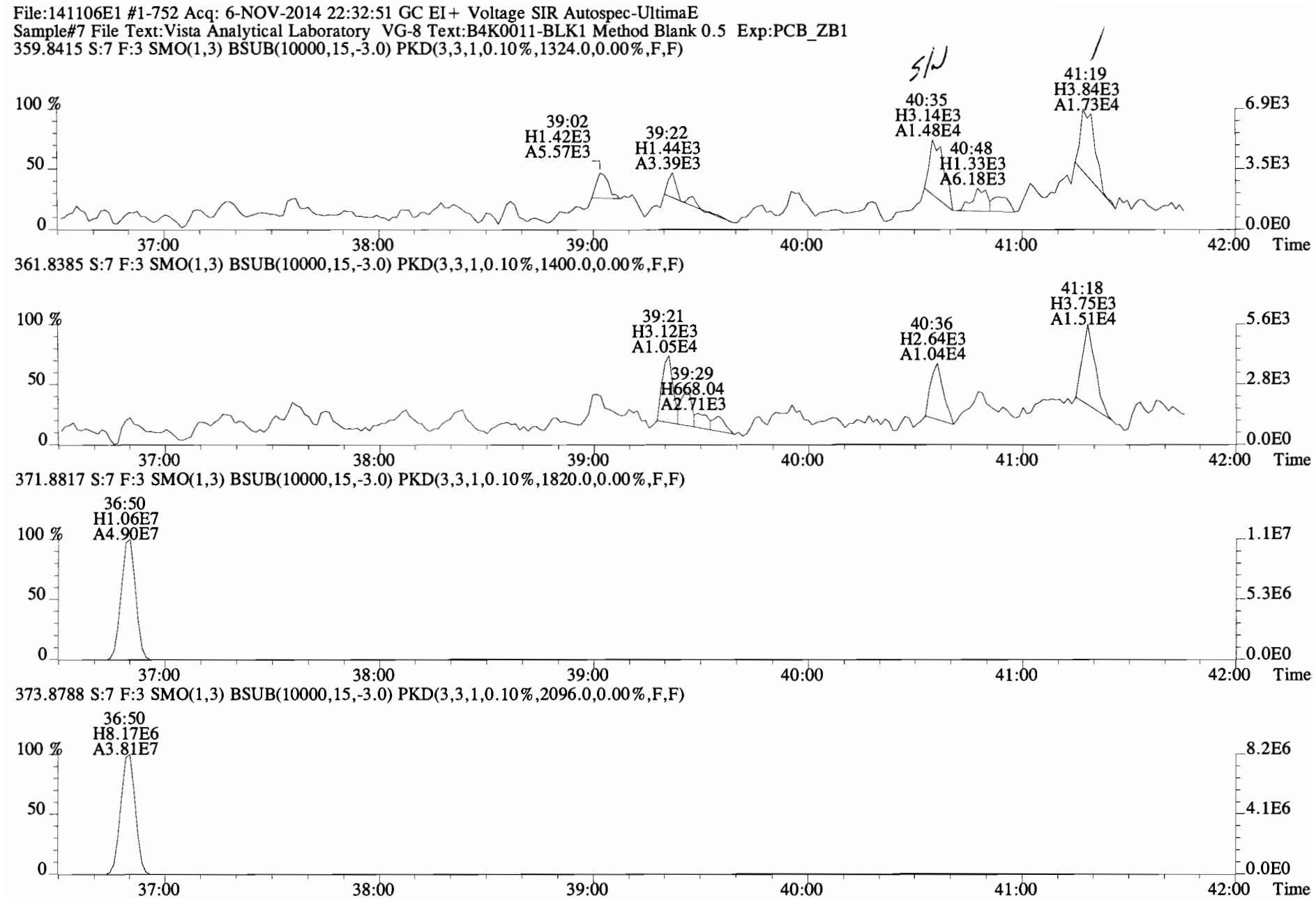

File:141106E1 #1-557 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
325.8804 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1852.0,0.00%,F,F)
SIN
SIN
SIN
43:14
H2.19E3
A7.20E3
45:09
H3.99E3
A2.37E4
100 %
50
0
5.5E3
2.7E3
0.0E0
42:00
43:00
44:00
45:00
46:00
Time
327.8775 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1852.0,0.00%,F,F)
42:02
H3.97E3
A1.37E4
42:11
H1.54E3
A9.79E3
45:08
H3.94E3
A1.71E4
100 %
50
0
5.7E3
2.9E3
0.0E0
42:00
43:00
44:00
45:00
46:00
Time
337.9207 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8220.0,0.00%,F,F)
42:00
H1.28E7
A6.14E7
42:52
H1.37E7
A6.57E7
43:12
H1.47E7
A7.22E7
45:07
H1.28E7
A6.26E7
100 %
50
0
1.5E7
7.4E6
0.0E0
42:00
43:00
44:00
45:00
46:00
Time
339.9177 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7344.0,0.00%,F,F)
42:00
H7.95E6
A3.83E7
42:52
H8.56E6
A4.09E7
43:12
H9.20E6
A4.53E7
45:07
H7.89E6
A3.90E7
100 %
50
0
9.2E6
4.6E6
0.0E0
42:00
43:00
44:00
45:00
46:00
Time

File:141106E1 #1-557 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
325.8804 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)

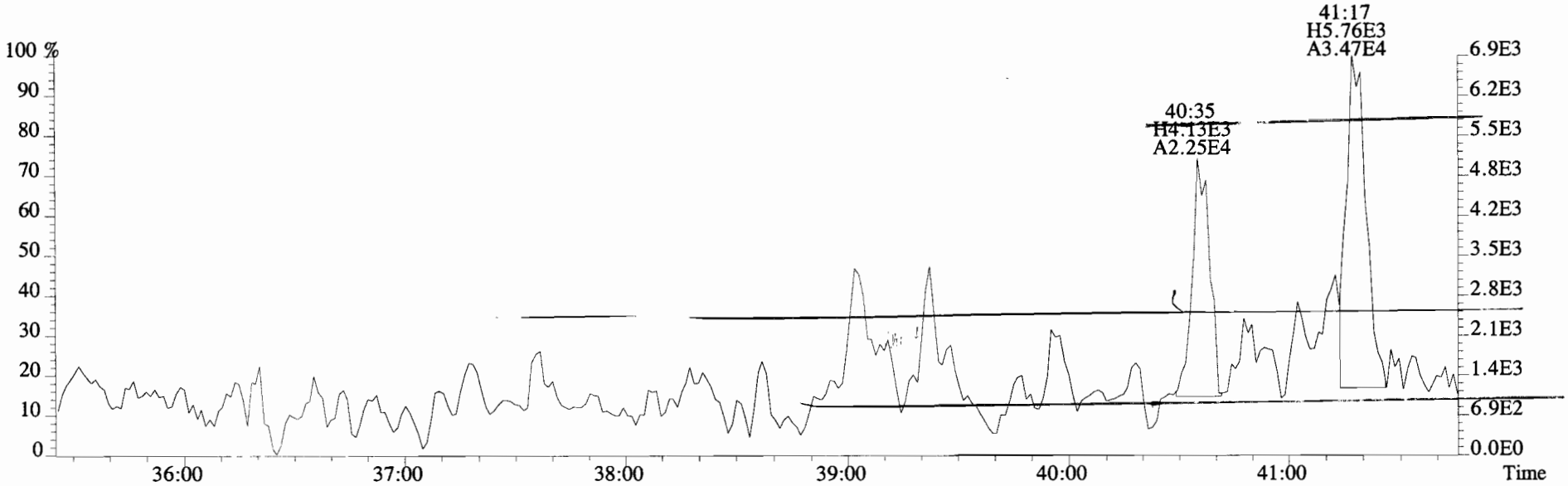


327.8775 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0)

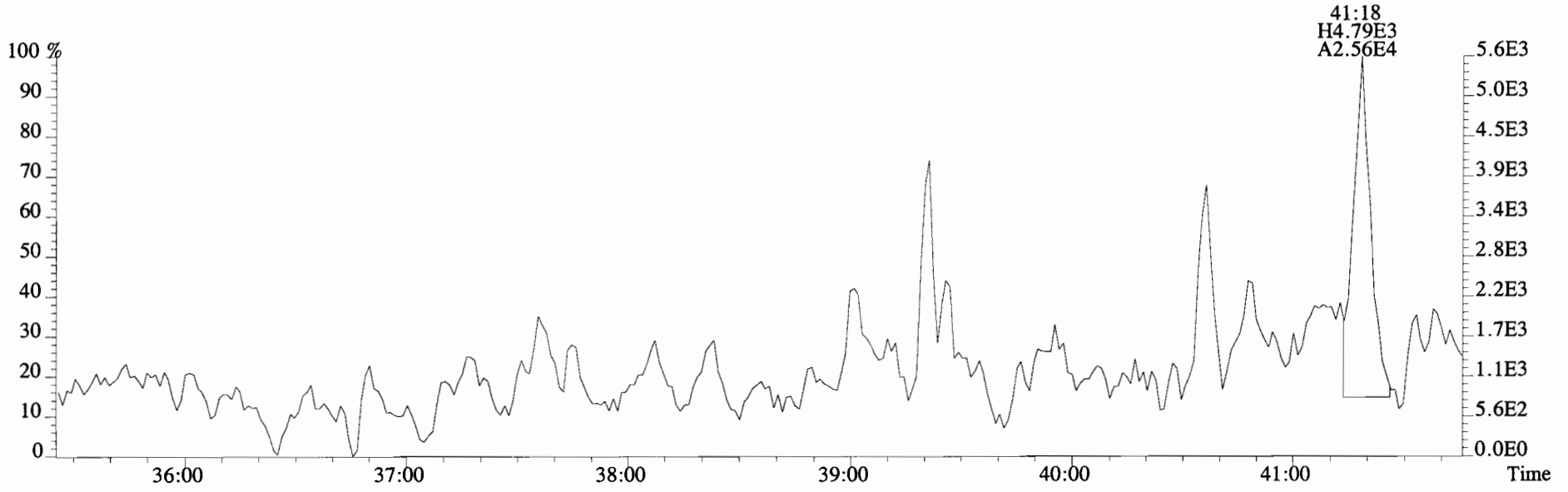


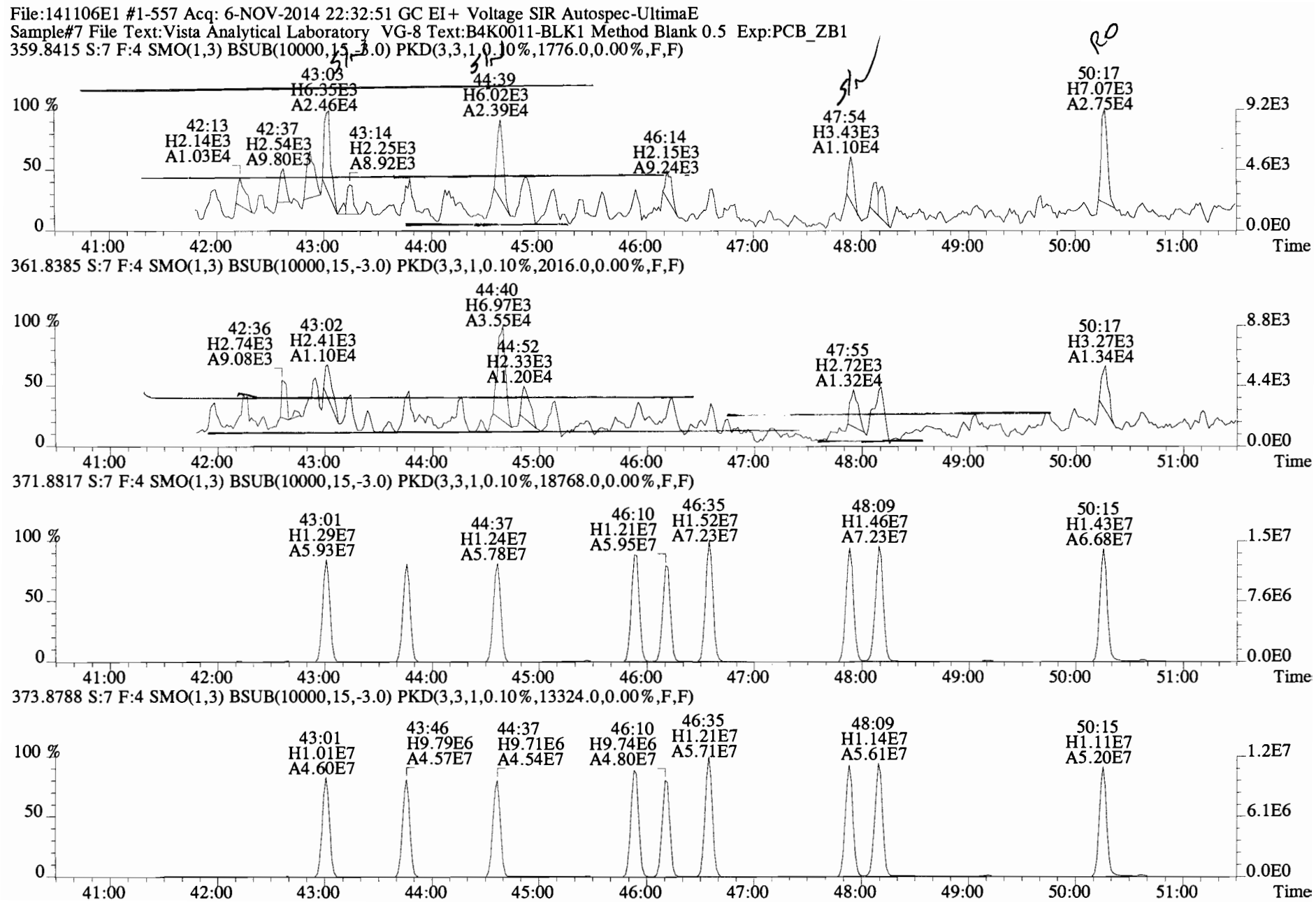

File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
359.8415 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1324.0,0.00%,F,F)
S/N
39:02 H1.42E3 A5.57E3
39:22 H1.44E3 A3.39E3
40:35 H3.14E3 A1.48E4
40:48 H1.33E3 A6.18E3
41:19 H3.84E3 A1.73E4
100 %
50
0
6.9E3
3.5E3
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time
361.8385 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1400.0,0.00%,F,F)
39:21 H3.12E3 A1.05E4
39:29 H668.04 A2.71E3
40:36 H2.64E3 A1.04E4
41:18 H3.75E3 A1.51E4
100 %
50
0
5.6E3
2.8E3
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time
371.8817 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1820.0,0.00%,F,F)
36:50 H1.06E7 A4.90E7
100 %
50
0
1.1E7
5.3E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time
373.8788 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2096.0,0.00%,F,F)
36:50 H8.17E6 A3.81E7
100 %
50
0
8.2E6
4.1E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time

File:141106E1 #1-752 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
359.8415 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1324.0,0.00%,F,F)

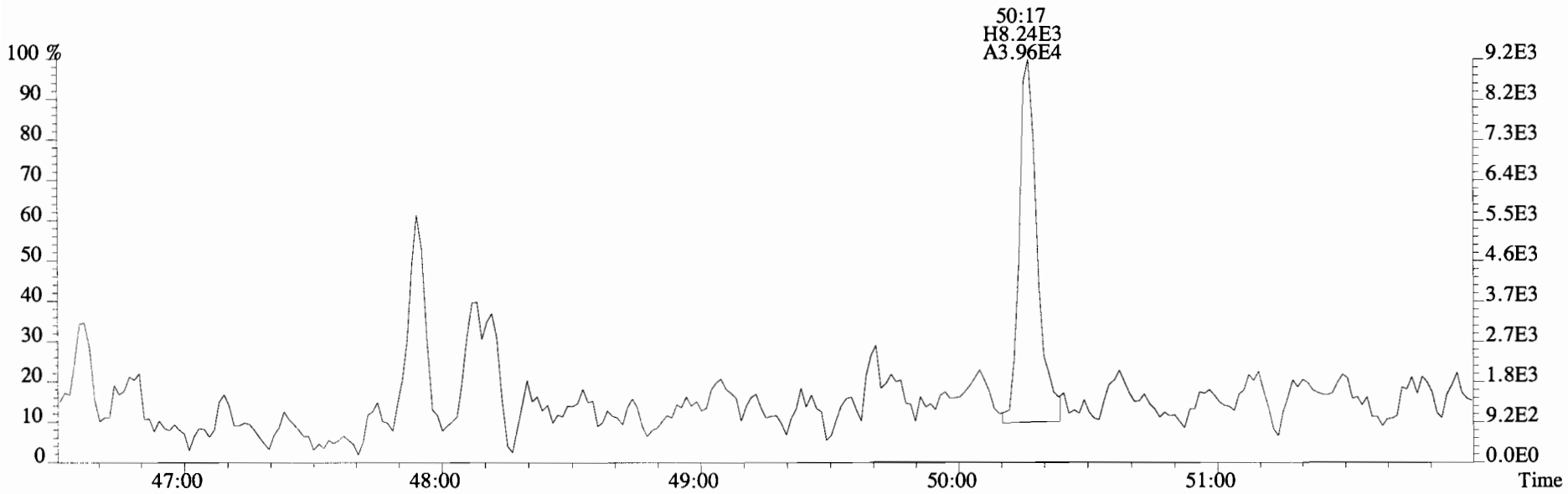


361.8385 S:7 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1400.0,0.00%,F,F)

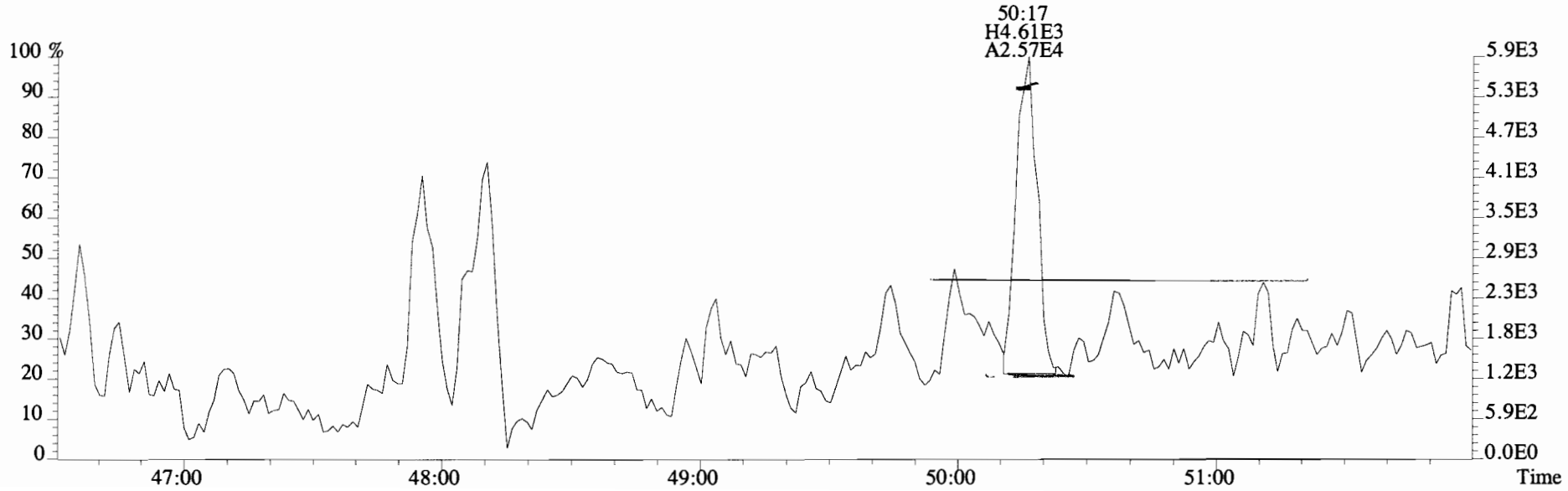



File:141106E1 #1-557 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
359.8415 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1776.0,0.00%,F,F)
42:13 H2.14E3 A1.03E4
42:37 H2.54E3 A9.80E3
43:03 H6.35E3 A2.46E4
43:14 H2.25E3 A8.92E3
44:39 H6.02E3 A2.39E4
46:14 H2.15E3 A9.24E3
47:54 H3.43E3 A1.10E4
50:17 H7.07E3 A2.75E4
361.8385 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2016.0,0.00%,F,F)
42:36 H2.74E3 A9.08E3
43:02 H2.41E3 A1.10E4
44:40 H6.97E3 A3.55E4
44:52 H2.33E3 A1.20E4
47:55 H2.72E3 A1.32E4
50:17 H3.27E3 A1.34E4
371.8817 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18768.0,0.00%,F,F)
43:01 H1.29E7 A5.93E7
44:37 H1.24E7 A5.78E7
46:10 H1.21E7 A5.95E7
46:35 H1.52E7 A7.23E7
48:09 H1.46E7 A7.23E7
50:15 H1.43E7 A6.68E7
373.8788 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13324.0,0.00%,F,F)
43:01 H1.01E7 A4.60E7
43:46 H9.79E6 A4.57E7
44:37 H9.71E6 A4.54E7
46:10 H9.74E6 A4.80E7
46:35 H1.21E7 A5.71E7
48:09 H1.14E7 A5.61E7
50:15 H1.11E7 A5.20E7
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
9.2E3
4.6E3
0.0E0
8.8E3
4.4E3
1.5E7
7.6E6
1.2E7
6.1E6

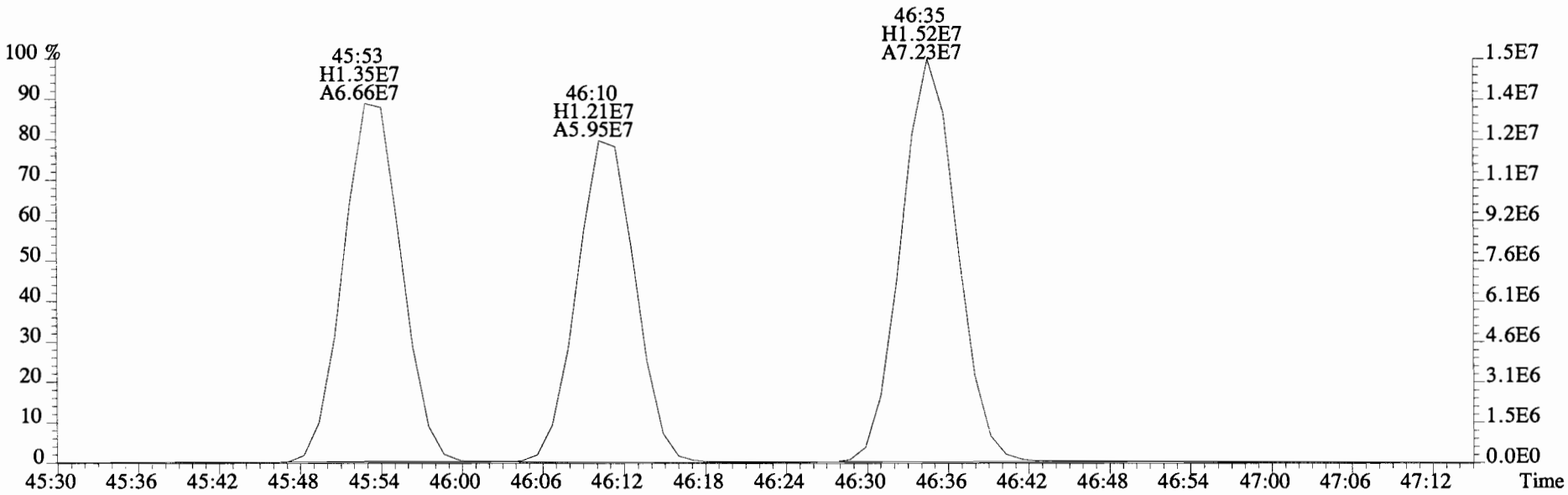
File:141106E1 #1-557 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
359.8415 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1776.0,0.00%,F,F)



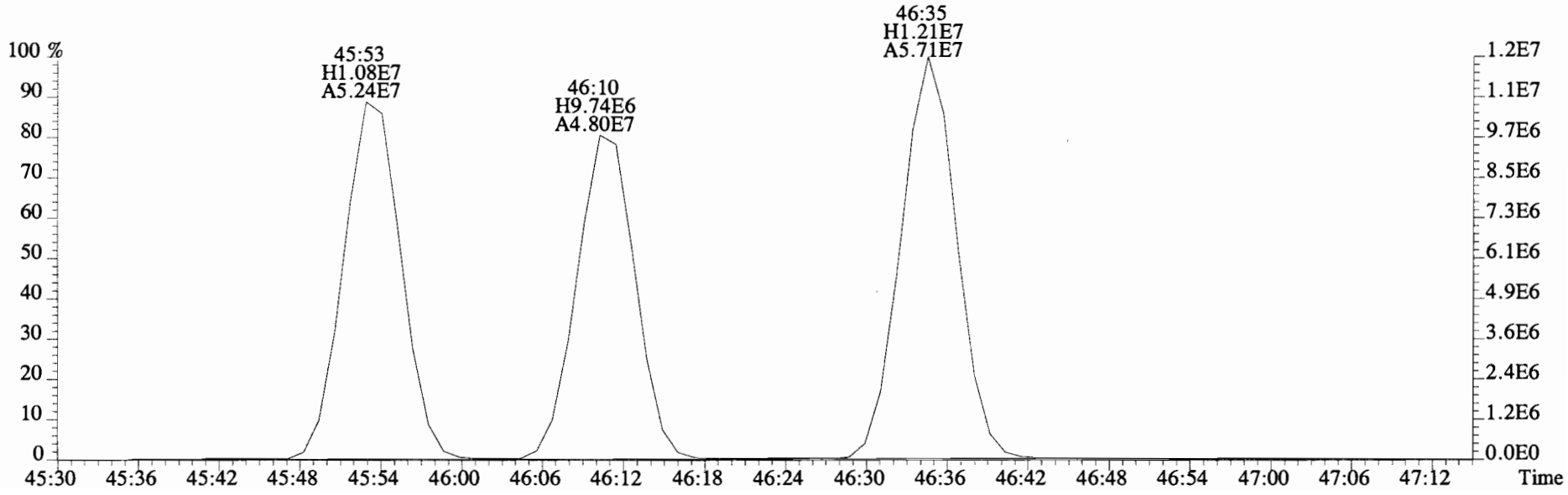
361.8385 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2016.0,0.00%,F,F)



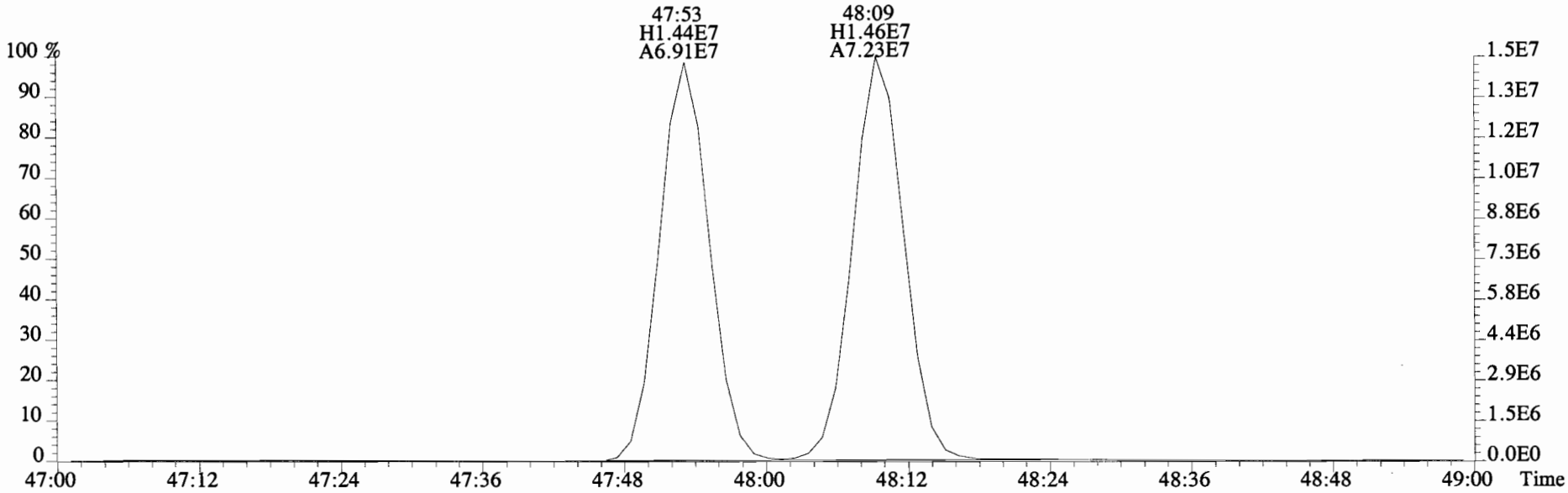
File:141106E1 #1-557 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
371.8817 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18768.0,0.00%,F,F)



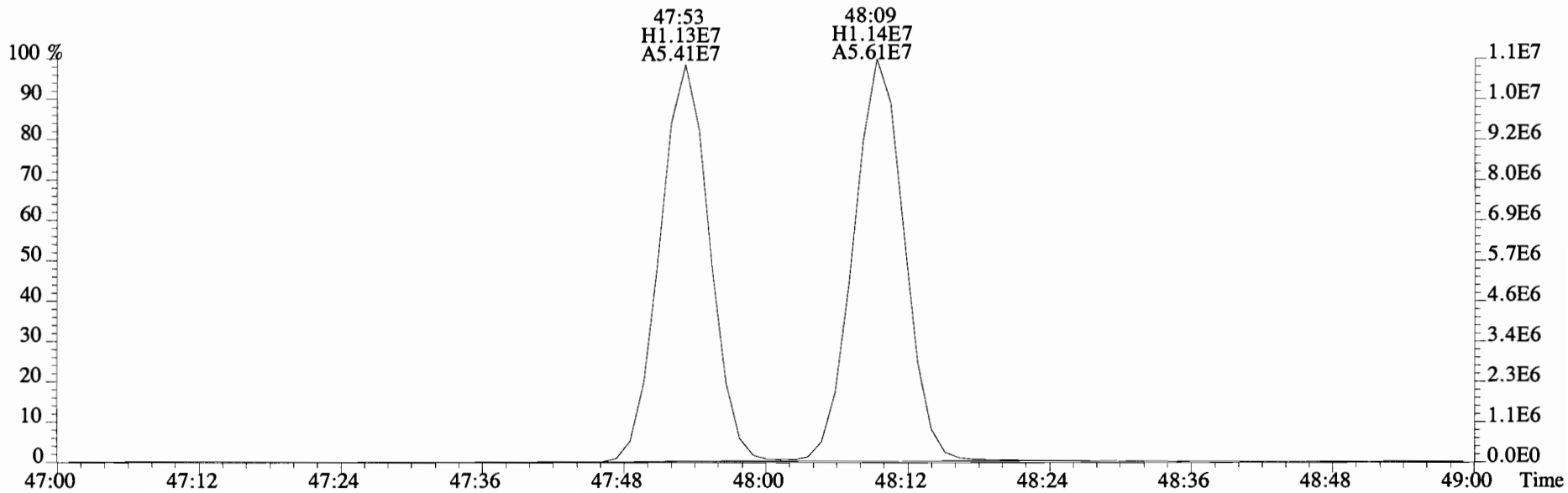
373.8788 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13324.0,0.00%,F,F)

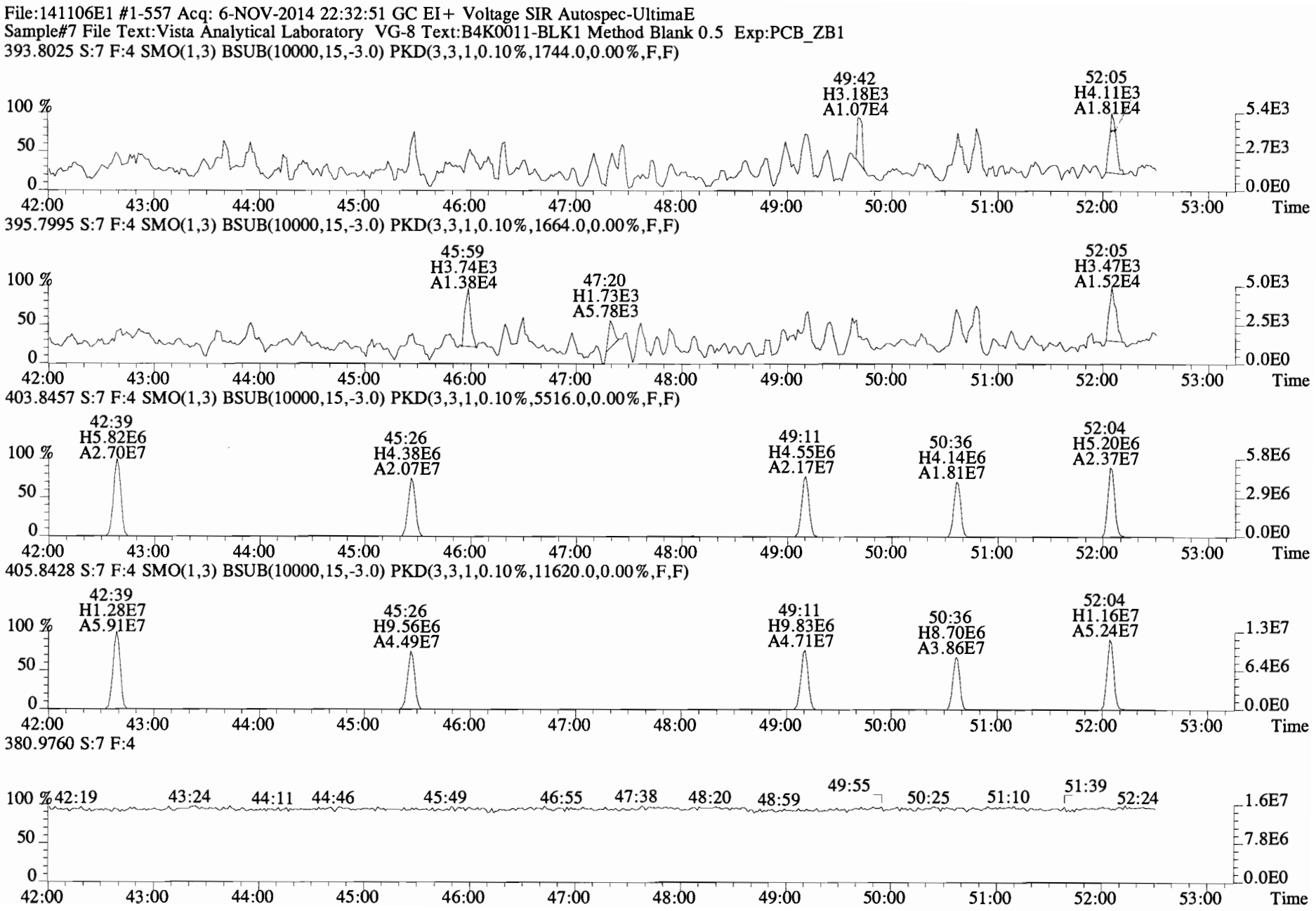


File:141106E1 #1-557 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
371.8817 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18768.0,0.00%,F,F)

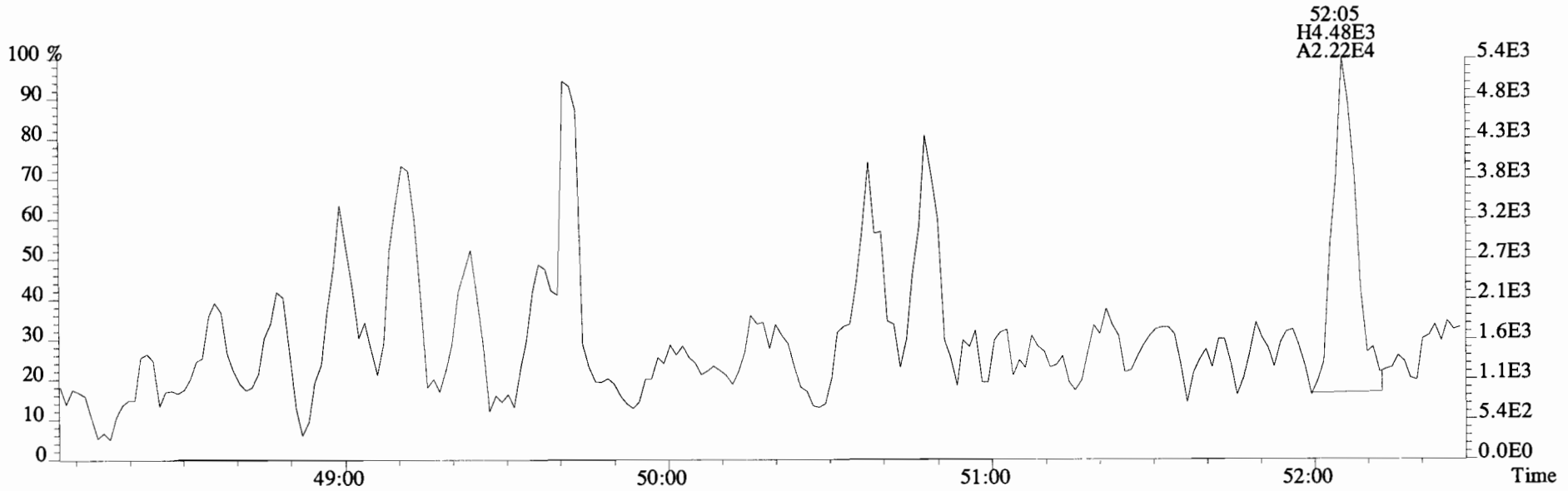


373.8788 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,13324.0,0.00%,F,F)

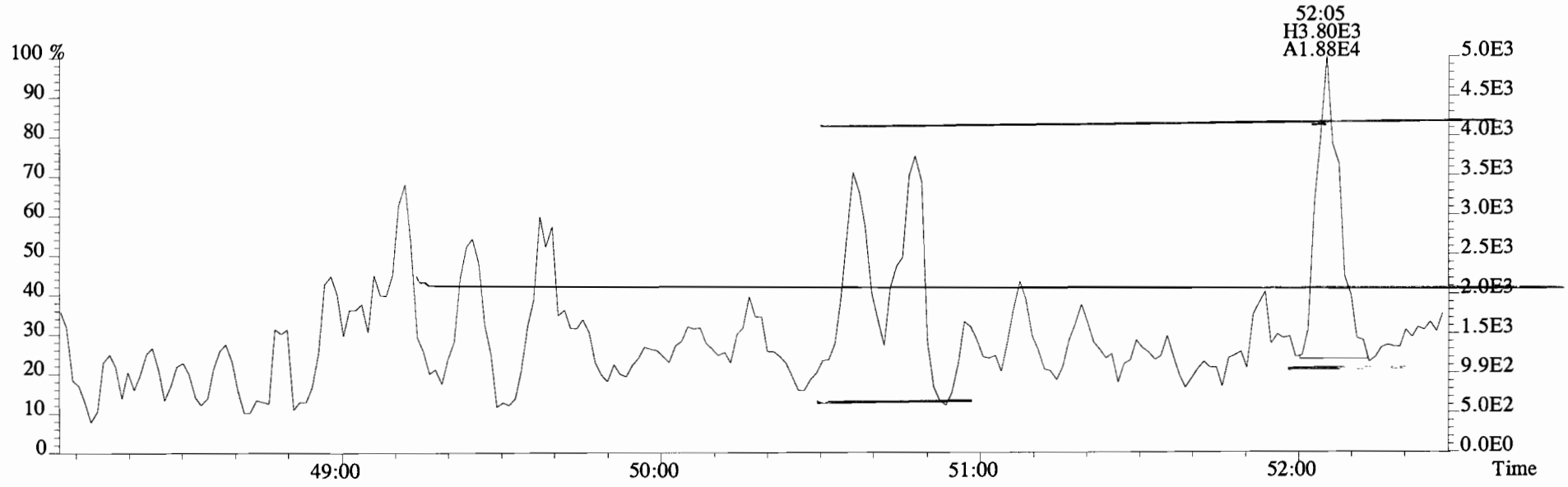



File:141106E1 #1-557 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1744.0,0.00%,F,F)
49:42 H3.18E3 A1.07E4
52:05 H4.11E3 A1.81E4
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1664.0,0.00%,F,F)
45:59 H3.74E3 A1.38E4
47:20 H1.73E3 A5.78E3
52:05 H3.47E3 A1.52E4
403.8457 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5516.0,0.00%,F,F)
42:39 H5.82E6 A2.70E7
45:26 H4.38E6 A2.07E7
49:11 H4.55E6 A2.17E7
50:36 H4.14E6 A1.81E7
52:04 H5.20E6 A2.37E7
405.8428 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11620.0,0.00%,F,F)
42:39 H1.28E7 A5.91E7
45:26 H9.56E6 A4.49E7
49:11 H9.83E6 A4.71E7
50:36 H8.70E6 A3.86E7
52:04 H1.16E7 A5.24E7
380.9760 S:7 F:4
42:19 43:24 44:11 44:46 45:49 46:55 47:38 48:20 48:59 49:55 50:25 51:10 51:39 52:24
100 %
50
0
42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 51:00 52:00 53:00 Time
5.4E3 2.7E3 0.0E0
5.0E3 2.5E3 0.0E0
5.8E6 2.9E6 0.0E0
1.3E7 6.4E6 0.0E0
1.6E7 7.8E6 0.0E0

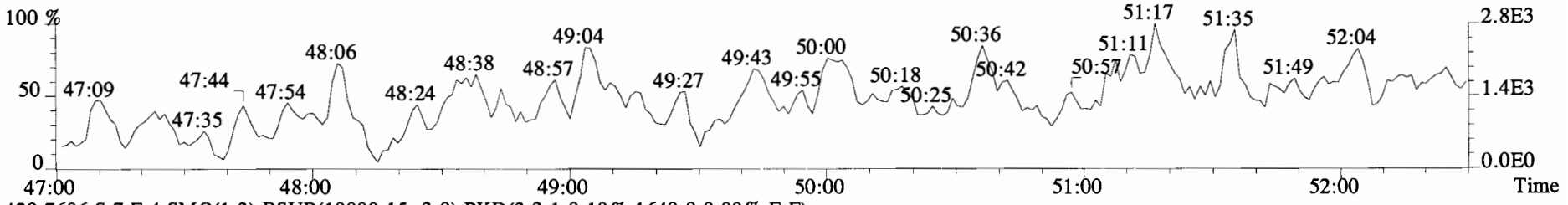
File:141106E1 #1-557 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
393.8025 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1744.0,0.00%,F,F)



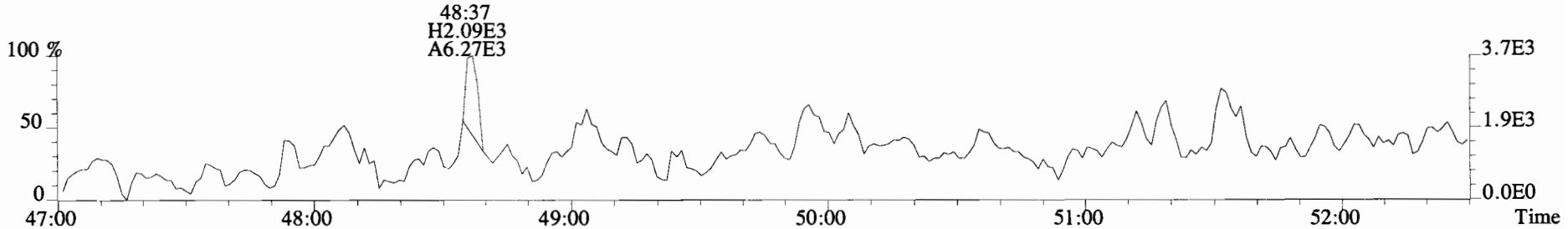
395.7995 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1664.0,0.00%,F,F)



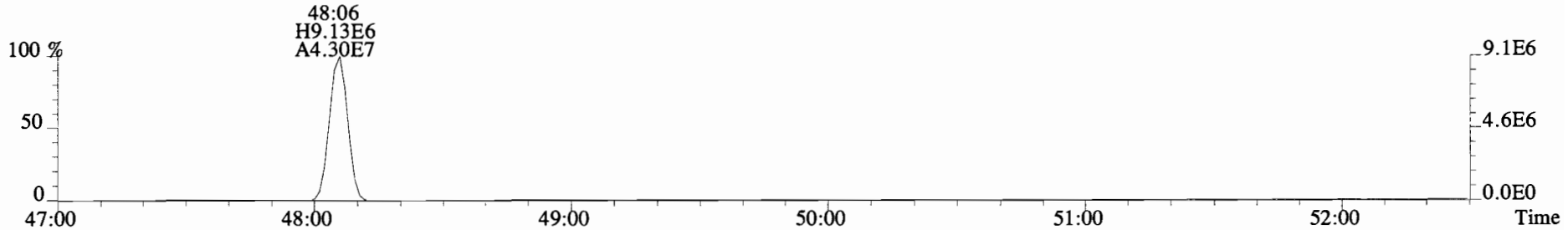
File:141106E1 #1-557 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
427.7635 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1796.0,0.00%,F,F)



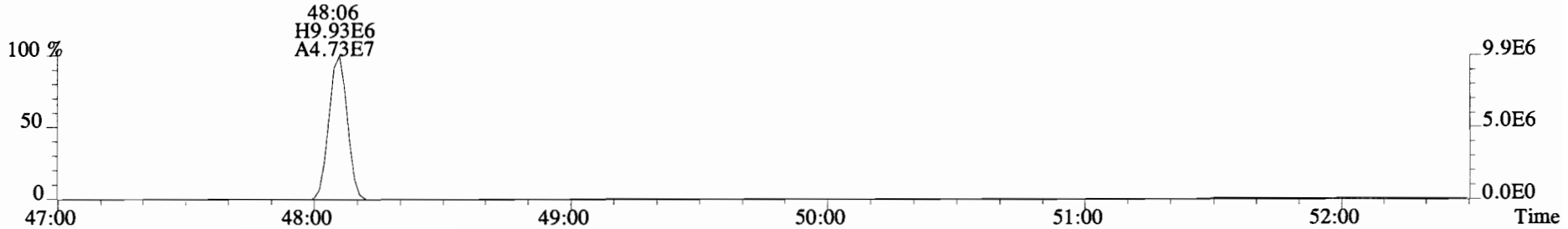
429.7606 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1640.0,0.00%,F,F)



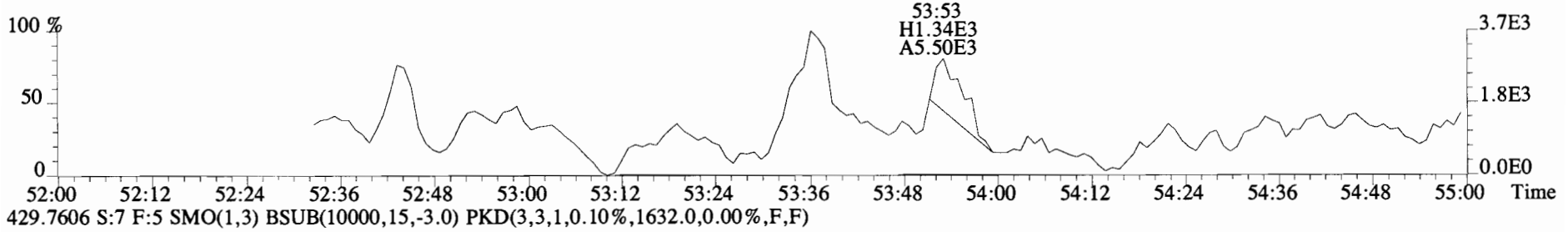
439.8038 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1244.0,0.00%,F,F)



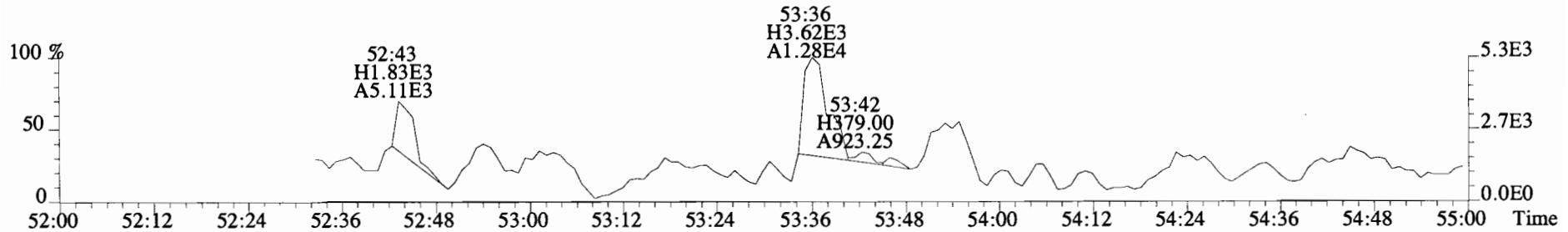
441.8008 S:7 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1280.0,0.00%,F,F)



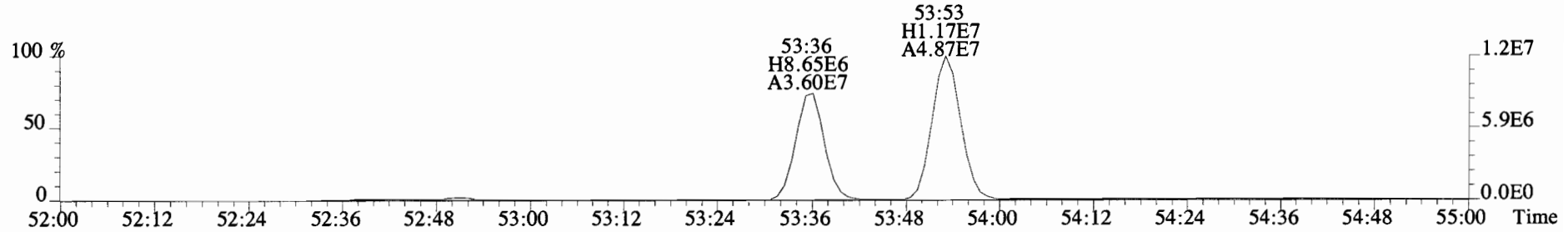
File:141106E1 #1-435 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
427.7635 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1372.0,0.00%,F,F)



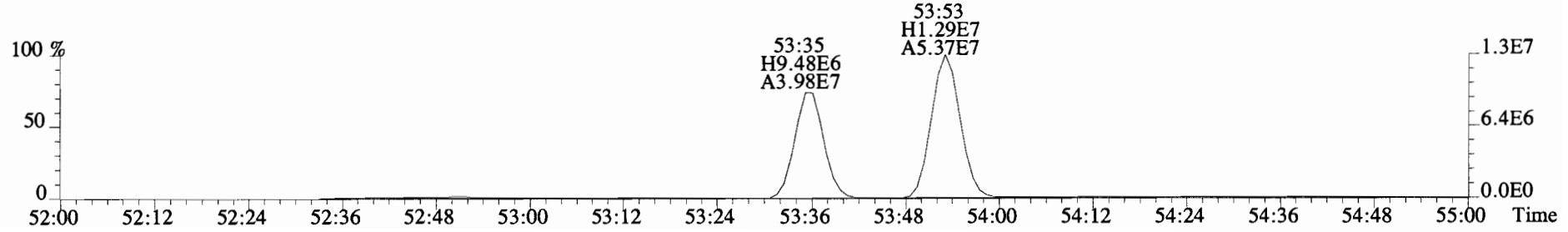
429.7606 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1632.0,0.00%,F,F)



439.8038 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4708.0,0.00%,F,F)

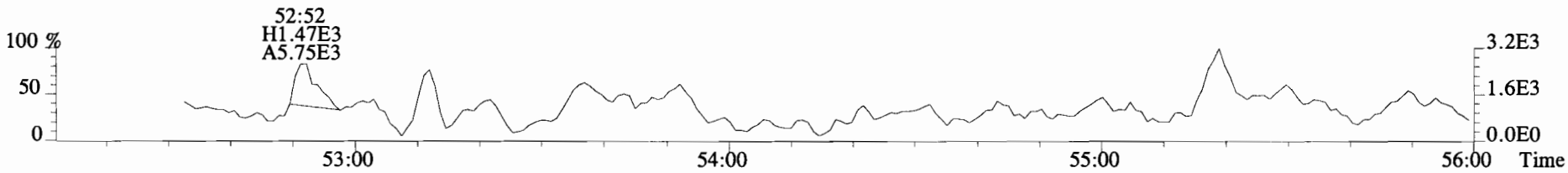


441.8008 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6324.0,0.00%,F,F)

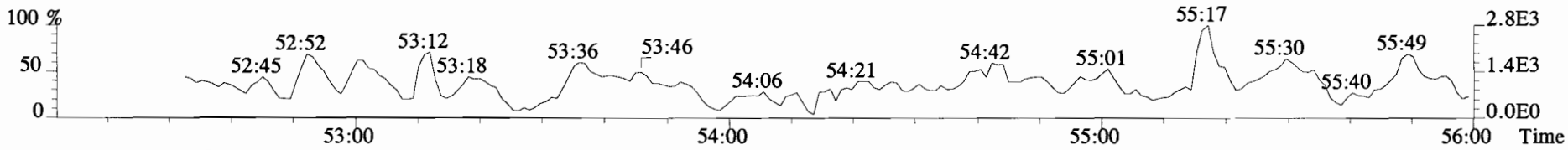


File:141106E1 #1-435 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1

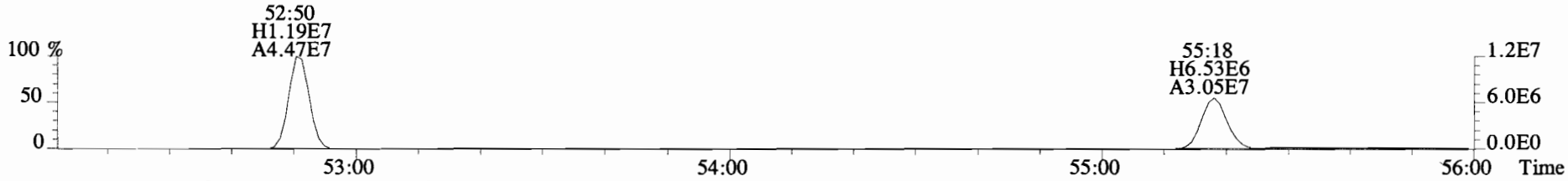
463.7216 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1340.0,0.00%,F,F)



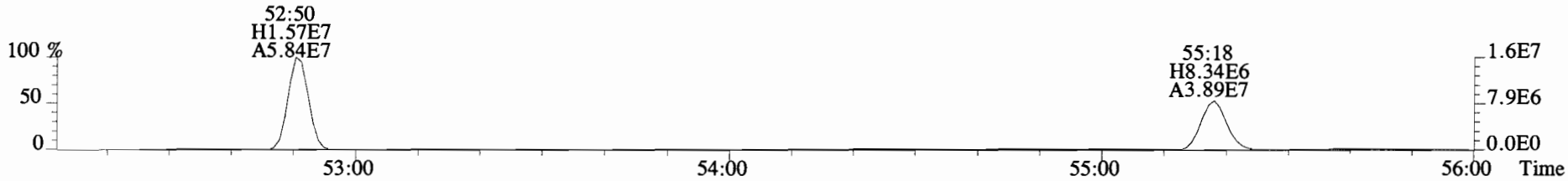
465.7186 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1304.0,0.00%,F,F)



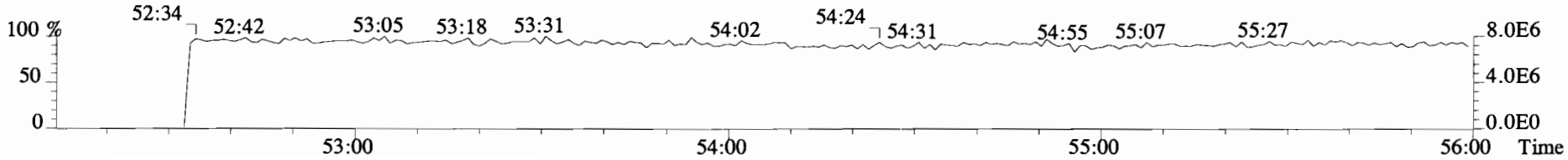
473.7648 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,19044.0,0.00%,F,F)

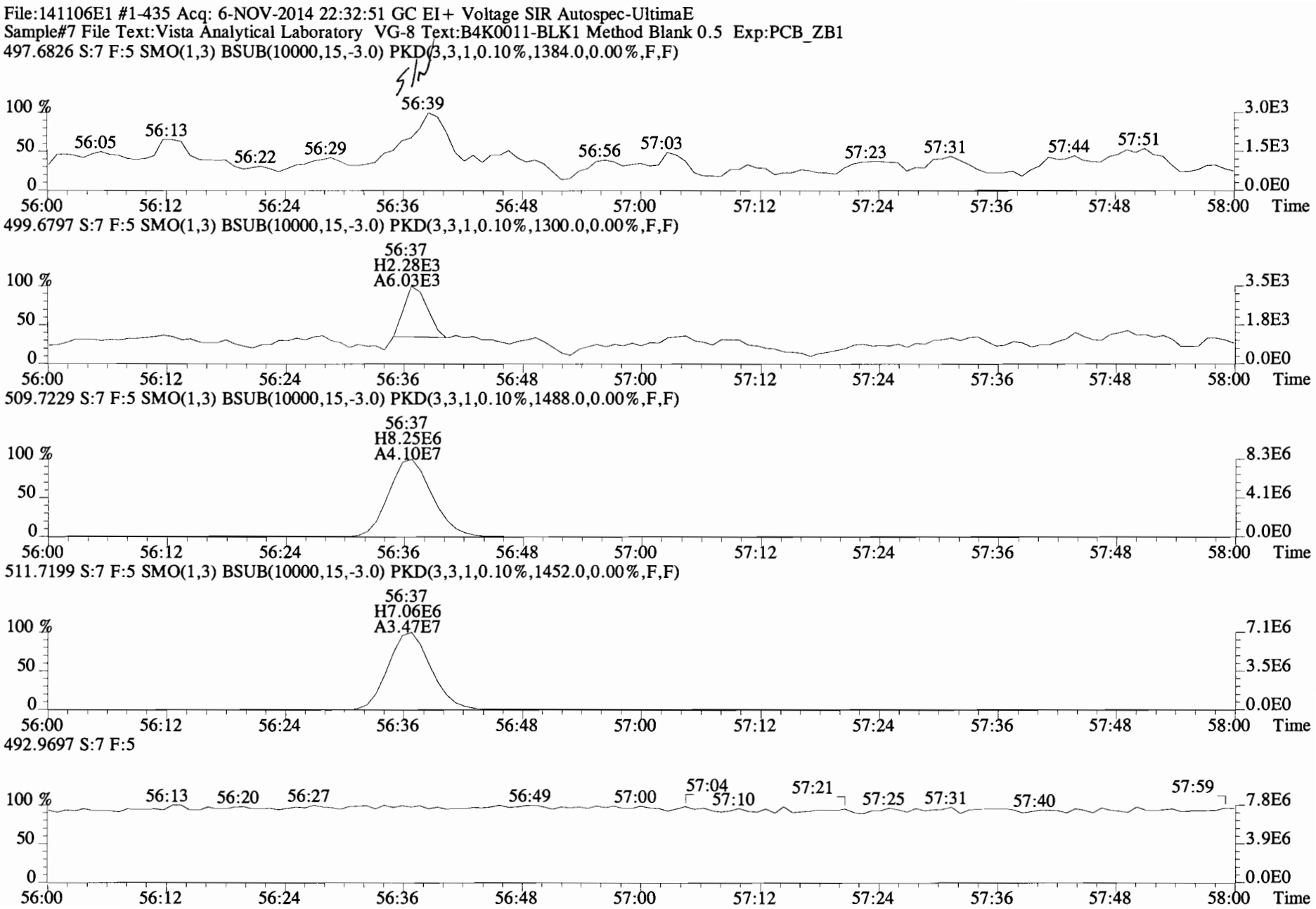


475.7619 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,22236.0,0.00%,F,F)



492.9697 S:7 F:5




File:141106E1 #1-435 Acq: 6-NOV-2014 22:32:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BLK1 Method Blank 0.5 Exp:PCB_ZB1
497.6826 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1384.0,0.00%,F,F)
100 %
50
0
56:05
56:13
56:22
56:29
56:39
56:56
57:03
57:23
57:31
57:44
57:51
3.0E3
1.5E3
0.0E0
56:00
56:12
56:24
56:36
56:48
57:00
57:12
57:24
57:36
57:48
58:00
Time
499.6797 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1300.0,0.00%,F,F)
56:37
H2.28E3
A6.03E3
100 %
50
0
3.5E3
1.8E3
0.0E0
56:00
56:12
56:24
56:36
56:48
57:00
57:12
57:24
57:36
57:48
58:00
Time
509.7229 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1488.0,0.00%,F,F)
56:37
H8.25E6
A4.10E7
100 %
50
0
8.3E6
4.1E6
0.0E0
56:00
56:12
56:24
56:36
56:48
57:00
57:12
57:24
57:36
57:48
58:00
Time
511.7199 S:7 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1452.0,0.00%,F,F)
56:37
H7.06E6
A3.47E7
100 %
50
0
7.1E6
3.5E6
0.0E0
56:00
56:12
56:24
56:36
56:48
57:00
57:12
57:24
57:36
57:48
58:00
Time
492.9697 S:7 F:5
100 %
50
0
56:13
56:20
56:27
56:49
57:00
57:04
57:10
57:21
57:25
57:31
57:40
57:59
7.8E6
3.9E6
0.0E0
56:00
56:12
56:24
56:36
56:48
57:00
57:12
57:24
57:36
57:48
58:00
Time

EPA METHOD 1668C PCB ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Vista Analytical Laboratory OPR Data Filename: B4K0011-BS1

Matrix : AQUEOUS Ext. Date: 11-5-14 Analysis Date: 6-NOV-14 Time: 19:21:31

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	47.8	30.0-67.5	13C-PCB-1	100	85.3	15-145	13C-PCB-79	100	93.5	40-145
PCB-3	50	48.4	30.0-67.5	13C-PCB-3	100	85.8	15-145	13C-PCB-178	100	99.6	40-145
PCB-4/10	200	215.7	120-270	13C-PCB-4	100	73.6	15-145				
PCB-15	100	104.2	60.0-135	13C-PCB-11	100	82.6	15-145				
PCB-19	50	52.2	30.0-67.5	13C-PCB-19	100	91.5	15-145				
PCB-37	50	51.6	30.0-67.5	13C-PCB-37	100	88.0	15-145				
PCB-54	50	52.9	30.0-67.5	13C-PCB-54	100	72.8	15-145				
PCB-81	50	50.6	30.0-67.5	13C-PCB-81	100	93.4	40-145				
PCB-77	50	51.9	30.0-67.5	13C-PCB-77	100	92.8	40-145				
PCB-104	50	52.9	30.0-67.5	13C-PCB-104	100	76.5	40-145				
PCB-123	50	55.3	30.0-67.5	13C-PCB-123	100	90.9	40-145				
PCB-106/118	100	105.9	60.0-135	13C-PCB-118	100	91.7	40-145				
PCB-114	50	53.1	30.0-67.5	13C-PCB-114	100	80.1	40-145				
PCB-105	50	55.6	30.0-67.5	13C-PCB-105	100	83.5	40-145				
PCB-126	50	54.6	30.0-67.5	13C-PCB-126	100	83.7	40-145				
PCB-155	50	55.2	30.0-67.5	13C-PCB-155	100	88.1	40-145				
PCB-167	50	55.2	30.0-67.5	13C-PCB-167	100	94.4	40-145				
PCB-156	50	53.4	30.0-67.5	13C-PCB-156	100	95.7	40-145				
PCB-157	50	55.1	30.0-67.5	13C-PCB-157	100	94.6	40-145				
PCB-169	50	54.3	30.0-67.5	13C-PCB-169	100	93.7	40-145				
PCB-188	50	55.4	30.0-67.5	13C-PCB-188	100	91.1	40-145				
PCB-189	50	57.9	30.0-67.5	13C-PCB-189	100	101.7	40-145				
PCB-202	50	51.6	30.0-67.5	13C-PCB-202	100	104.2	40-145				
PCB-205	50	56.5	30.0-67.5	13C-PCB-194	100	93.8	40-145				
PCB-208	50	54.0	30.0-67.5	13C-PCB-208	100	95.1	40-145				
PCB-206	50	53.3	30.0-67.5	13C-PCB-206	100	108.6	40-145				
PCB-209	50	55.9	30.0-67.5	13C-PCB-209	100	125.1	40-145				

Analyst: DMS

Date: 11/7/14

Client ID: OPR Filename: 141106E1 S:4 Acq: 6-NOV-14 19:21:31 ConCal: ST141106E1-1
Lab ID: B4K0011-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-1	8.31e+07	2.89	y	1.25	16:19	1.001	0.996	1.006	47.7956
	PCB-2	8.55e+07	2.91	y	1.18	18:36	0.989	0.983	0.993	49.8072
	PCB-3	8.57e+07	2.88	y	1.22	18:49	1.001	0.996	1.006	48.3799
	PCB-4/10	2.47e+08	1.62	y	1.55	20:09	1.003	0.998	1.008	215.736
	PCB-7/9	3.08e+08	1.63	y	1.27	21:52	0.870	0.865	0.873	215.155
	PCB-6	1.56e+08	1.63	y	1.26	22:30	0.895	0.890	0.899	109.351
	PCB-5/8	3.12e+08	1.61	y	1.23	22:54	0.911	0.906	0.916	224.267
	PCB-14	1.76e+08	1.64	y	1.23	23:58	0.954	0.949	0.959	100.977
	PCB-11	1.73e+08	1.65	y	1.16	25:08	1.000	0.996	1.006	105.481
	PCB-12/13	3.33e+08	1.65	y	1.10	25:32	1.016	1.010	1.020	214.167
	PCB-15	1.78e+08	1.68	y	1.21	25:50	1.028	1.024	1.034	104.224
	PCB-19	6.02e+07	1.05	y	1.30	24:10	1.001	0.996	1.006	52.2254
	PCB-30	8.81e+07	1.05	y	1.83	25:01	1.037	1.032	1.042	54.0995
	PCB-18	6.46e+07	1.04	y	0.86	25:46	0.954	0.949	0.959	51.2310
	PCB-17	6.88e+07	1.05	y	0.90	25:56	0.961	0.955	0.965	52.0504
	PCB-24/27	1.91e+08	1.05	y	1.18	26:30	0.982	0.976	0.986	110.394
-	PCB-16/32	1.58e+08	1.04	y	1.03	26:60	1.000	0.995	1.005	104.574
-	PCB-34	9.38e+07	1.07	y	1.26	27:47	0.961	0.956	0.966	59.9078
	PCB-23	8.07e+07	1.08	y	1.31	27:53	0.964	0.959	0.969	49.5831
	PCB-29	8.89e+07	1.06	y	1.33	28:07	0.972	0.967	0.977	53.8689
	PCB-26	8.71e+07	1.06	y	1.29	28:19	0.979	0.974	0.984	54.2718
	PCB-25	9.33e+07	1.06	y	1.34	28:29	0.985	0.980	0.990	55.9109
	PCB-31	8.58e+07	1.20	n	1.42	28:50	0.997	0.992	1.002	48.6881
	PCB-28	9.82e+07	0.97	y	1.38	28:56	1.000	0.996	1.006	57.4146
	PCB-20/21/33	2.75e+08	1.07	y	1.31	29:33	1.022	1.017	1.027	168.903
	PCB-22	9.51e+07	1.07	y	1.32	29:59	1.037	1.032	1.042	57.9290
	PCB-36	9.32e+07	1.08	y	1.38	30:35	0.933	0.929	0.939	51.6000
	PCB-39	9.62e+07	1.08	y	1.42	31:04	0.948	0.943	0.953	51.6262
	PCB-38	9.32e+07	1.09	y	1.35	31:50	0.972	0.967	0.976	52.4467
	PCB-35	9.73e+07	1.09	y	1.38	32:21	0.987	0.982	0.992	53.8530
	PCB-37	9.41e+07	1.04	y	1.39	32:47	1.001	0.996	1.006	51.5525
	PCB-54	7.47e+07	0.78	y	1.20	27:51	1.001	0.996	1.006	52.9386
	PCB-50	6.30e+07	0.77	y	0.97	28:60	1.042	1.037	1.047	55.2906
	PCB-53	6.57e+07	0.78	y	1.19	29:38	0.947	0.941	0.951	49.8451
	PCB-51	6.66e+07	0.76	y	1.15	29:58	0.957	0.952	0.962	52.0882
	PCB-45	5.61e+07	0.76	y	0.97	30:24	0.971	0.966	0.976	52.3946
	PCB-46	5.41e+07	0.78	y	0.95	30:53	0.987	0.982	0.992	51.3204

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-52/69	1.42e+08	0.76	y	1.28	31:21	1.001	0.996	1.006	100.508
	PCB-73	8.92e+07	0.78	y	1.37	31:27	1.005	1.000	1.010	58.6826
	PCB-43/49	1.31e+08	0.77	y	1.11	31:38	1.010	1.005	1.015	106.346
	PCB-47	6.62e+07	0.77	y	1.13	31:50	1.001	0.996	1.006	49.5126
	PCB-48/75	1.64e+08	0.77	y	1.30	31:57	1.004	0.999	1.009	106.800
	PCB-65	8.26e+07	0.77	y	1.33	32:13	1.013	1.007	1.017	52.4551
	PCB-62	8.00e+07	0.77	y	1.29	32:20	1.016	1.011	1.021	52.4968
	PCB-44	6.15e+07	0.76	y	0.94	32:38	1.026	1.020	1.030	55.4027
	PCB-42/59	1.54e+08	0.77	y	1.22	32:51	1.033	1.028	1.038	107.456
	PCB-41/64/71/72	3.37e+08	0.76	y	1.31	33:26	1.051	1.046	1.056	217.335
	PCB-68	9.43e+07	0.76	y	1.49	33:40	1.058	1.054	1.064	53.8108
	PCB-40	5.44e+07	0.76	y	0.82	33:55	1.066	1.061	1.071	56.2787
	PCB-57	9.10e+07	0.77	y	1.11	34:15	0.970	0.965	0.975	51.8149
	PCB-67	9.02e+07	0.75	y	1.07	34:34	0.979	0.974	0.984	53.2823
	PCB-58	9.05e+07	0.77	y	1.10	34:41	0.982	0.977	0.987	52.1378
	PCB-63	9.51e+07	0.76	y	1.12	34:50	0.987	0.982	0.992	53.9672
	PCB-74	9.88e+07	0.77	y	1.20	35:07	0.995	0.990	1.000	52.0769
	PCB-61/70	1.83e+08	0.76	y	1.08	35:18	1.000	0.994	1.004	107.676
	PCB-76/66	1.86e+08	0.76	y	1.14	35:31	1.006	1.001	1.011	104.020
	PCB-80	1.08e+08	0.77	y	1.28	35:44	1.001	0.996	1.006	51.8932
	PCB-55	9.45e+07	0.77	y	1.11	36:05	1.010	1.005	1.015	52.4801
	PCB-56/60	1.91e+08	0.76	y	1.09	36:34	1.024	1.018	1.028	108.327
	PCB-79	9.91e+07	0.77	y	1.12	37:38	1.053	1.048	1.058	54.3262
	PCB-78	9.46e+07	0.76	y	1.24	38:20	0.987	0.982	0.992	51.2574
	PCB-81	1.04e+08	0.77	y	1.38	38:51	1.000	0.995	1.005	50.6083
	PCB-77	9.90e+07	0.78	y	1.21	39:27	1.000	0.995	1.005	51.8665
	PCB-104	6.66e+07	1.56	y	1.26	32:29	1.001	0.996	1.006	52.9390
	PCB-96	6.08e+07	1.55	y	1.09	33:45	1.040	1.034	1.044	55.6367
	PCB-103	5.27e+07	1.55	y	0.93	34:16	1.056	1.050	1.060	56.3881
	PCB-100	5.73e+07	1.55	y	1.00	34:37	1.066	1.061	1.071	57.0767
	PCB-94	4.85e+07	1.57	y	1.11	35:06	0.986	0.981	0.991	54.0221
	PCB-95/98/102	1.59e+08	1.54	y	1.21	35:34	0.999	0.994	1.004	161.617
	PCB-93	4.80e+07	1.63	y	1.13	35:43	1.003	0.998	1.008	52.3294
	PCB-88/91	9.95e+07	1.58	y	1.02	36:00	1.011	1.006	1.016	120.422
	PCB-121	7.95e+07	1.56	y	1.90	36:06	1.014	1.009	1.019	51.5077
	PCB-84/92	1.03e+08	1.57	y	1.05	36:56	0.991	0.986	0.996	104.104
	PCB-89	5.26e+07	1.57	y	1.02	37:07	0.995	0.991	1.001	55.1680

RL: MONO, TRI - DECA: ~~———~~

RL: DI : ~~———~~

Integrations by Analyst: DMS Date: 11/7/14

Reviewed by Analyst: CT Date: 11/10/14

Client ID: OPR Filename: 141106E1 S:4 Acq: 6-NOV-14 19:21:31 ConCal: ST141106E1-1
Lab ID: B4K0011-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
	PCB-90/101	1.18e+08	1.56 y	1.19	37:17	1.000	0.996	1.006	106.029
	PCB-113	6.98e+07	1.54 y	1.35	37:32	1.007	1.002	1.012	55.0787
	PCB-99	6.08e+07	1.60 y	1.29	37:38	1.009	1.005	1.015	50.3676
	PCB-119	7.71e+07	1.56 y	1.72	38:05	0.987	0.982	0.992	52.5920
	PCB-108/112	1.17e+08	1.57 y	1.29	38:15	0.991	0.986	0.996	106.255
	PCB-83	6.92e+07	1.58 y	1.52	38:25	0.995	0.991	1.001	53.4305
	PCB-97	5.76e+07	1.59 y	1.25	38:37	1.001	0.996	1.006	54.1625
	PCB-86	4.87e+07	1.55 y	1.02	38:45	1.004	1.000	1.010	55.9761
	B-87/117/125	2.11e+08	1.57 y	1.56	38:53	1.007	1.002	1.012	159.155
	PCB-111/115	1.51e+08	1.57 y	1.75	39:02	1.011	1.007	1.017	101.453
	PCB-85/116	1.23e+08	1.58 y	1.30	39:10	1.015	1.010	1.020	111.383
	PCB-120	7.84e+07	1.56 y	1.78	39:24	1.021	1.016	1.026	51.6531
	PCB-110	7.58e+07	1.61 y	1.68	39:33	1.025	1.020	1.030	52.9269
	PCB-82	4.64e+07	1.56 y	0.74	40:11	0.976	0.972	0.982	55.3986
	PCB-124	8.08e+07	1.58 y	1.32	40:51	0.993	0.988	0.998	53.8142
	PCB-107/109	1.52e+08	1.58 y	1.22	41:00	0.996	0.991	1.001	109.750
	PCB-123	7.65e+07	1.57 y	1.22	41:10	1.000	0.995	1.005	55.3201
-	PCB-106/118	1.54e+08	1.59 y	1.22	41:23	1.001	0.996	1.006	105.898
-	PCB-114	7.87e+07	1.59 y	1.36	42:01	1.000	0.995	1.005	53.0707
	PCB-122	7.65e+07	1.60 y	1.24	42:09	1.003	0.999	1.009	56.5542
	PCB-105	8.35e+07	1.59 y	1.28	42:53	1.000	0.995	1.005	55.5919
	PCB-127	7.88e+07	1.61 y	1.14	43:12	1.000	0.995	1.005	54.5021
	PCB-126	7.71e+07	1.60 y	1.28	45:08	1.000	0.995	1.005	54.5588
	PCB-155	6.05e+07	1.26 y	1.14	36:51	1.001	0.966	1.006	55.2332
	PCB-150	6.08e+07	1.24 y	1.06	38:07	1.035	1.030	1.040	59.2384
	PCB-152	6.21e+07	1.28 y	1.10	38:36	1.048	1.043	1.053	58.6354
	PCB-145	6.21e+07	1.27 y	1.09	39:03	1.060	1.055	1.065	58.9558
	PCB-136	6.67e+07	1.25 y	1.08	39:22	1.069	1.064	1.074	63.7508
	PCB-148	3.95e+07	1.26 y	0.74	39:28	1.072	1.066	1.076	55.3021
	PCB-154	5.08e+07	1.26 y	0.88	39:57	1.085	1.079	1.089	59.6331
	PCB-151	4.59e+07	1.26 y	0.81	40:36	1.102	1.097	1.107	58.8494
	PCB-135	4.46e+07	1.23 y	0.78	40:49	1.108	1.101	1.113	59.4241
	PCB-144	4.76e+07	1.24 y	0.82	40:55	1.111	1.105	1.116	60.1971
	PCB-147	4.89e+07	1.28 y	0.83	41:03	1.115	1.011	1.120	61.1547
	PCB-139/149	1.01e+08	1.26 y	0.84	41:19	1.122	1.115	1.127	123.839
-	PCB-140	4.66e+07	1.27 y	0.79	41:31	1.127	1.120	1.132	61.5722
-	PCB-134/143	1.10e+08	1.23 y	0.93	41:57	0.975	0.970	0.980	101.355

	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
	PCB-133/142	1.14e+08	1.24 y	0.95	42:14	0.982	0.977	0.987	103.131
	PCB-131	5.49e+07	1.22 y	0.91	42:25	0.986	0.981	0.991	51.2364
	PCB-146/165	1.41e+08	1.23 y	1.16	42:36	0.990	0.986	0.996	103.684
	PCB-132/161	1.37e+08	1.23 y	1.11	42:51	0.996	0.992	1.002	104.843
	PCB-153	7.49e+07	1.24 y	1.18	43:02	1.001	0.995	1.005	54.1856
	PCB-168	8.46e+07	1.22 y	1.37	43:15	1.006	1.000	1.010	52.6456
	PCB-141	6.05e+07	1.22 y	0.97	43:47	1.001	0.996	1.005	54.9271
	PCB-137	6.83e+07	1.25 y	1.07	44:10	1.009	1.004	1.014	56.4122
	PCB-130	5.57e+07	1.22 y	0.85	44:16	1.012	1.007	1.017	58.0765
	PCB-138/163/164	2.28e+08	1.24 y	1.23	44:39	1.001	0.996	1.006	165.760
	PCB-158/160	1.62e+08	1.23 y	1.29	44:53	1.006	1.001	1.011	112.182
	PCB-129	5.63e+07	1.22 y	0.92	45:08	1.012	1.007	1.017	54.2890
	PCB-166	8.03e+07	1.23 y	1.12	45:36	0.994	0.988	0.998	55.6704
	PCB-159	7.93e+07	1.24 y	1.16	45:54	1.000	0.995	1.005	52.6103
	PCB-128/162	1.42e+08	1.23 y	1.02	46:13	1.007	1.002	1.012	108.080
	PCB-167	8.27e+07	1.24 y	1.06	46:36	1.001	0.995	1.005	55.1671
	PCB-156	8.51e+07	1.22 y	1.18	47:54	1.000	0.995	1.005	53.3847
	PCB-157	8.37e+07	1.22 y	1.08	48:11	1.001	0.995	1.005	55.0702
	PCB-169	7.76e+07	1.24 y	1.11	50:17	1.001	0.995	1.005	54.3026
	PCB-188	7.50e+07	1.05 y	1.40	42:40	1.000	0.995	1.005	55.3550
	PCB-184	6.82e+07	1.04 y	1.24	43:07	1.011	1.006	1.016	57.1033
	PCB-179	7.14e+07	1.04 y	1.30	43:55	1.030	1.024	1.034	56.7352
	PCB-176	7.56e+07	1.05 y	1.36	44:22	1.041	1.035	1.045	57.4986
	PCB-186	7.15e+07	1.05 y	1.28	44:59	1.055	1.049	1.059	58.0404
	PCB-178	5.41e+07	1.06 y	0.94	45:28	1.066	1.061	1.071	59.8653
	PCB-175	5.66e+07	1.05 y	0.97	45:49	1.074	1.069	1.079	60.5278
	PCB-182/187	1.18e+08	1.06 y	1.01	45:60	1.079	1.073	1.083	120.398
	PCB-183	5.96e+07	1.05 y	1.08	46:18	1.086	1.080	1.090	57.0235
	PCB-185	5.56e+07	1.06 y	1.34	46:59	0.955	0.951	0.961	53.8117
	PCB-174	5.75e+07	1.05 y	1.34	47:21	0.963	0.958	0.968	55.7994
	PCB-181	5.65e+07	1.04 y	1.36	47:27	0.965	0.961	0.971	53.9517
	PCB-177	5.28e+07	1.04 y	1.24	47:37	0.968	0.964	0.974	55.2894
	PCB-171	5.50e+07	1.06 y	1.31	47:55	0.974	0.970	0.980	54.4323
	PCB-173	4.97e+07	1.05 y	1.16	48:21	0.983	0.979	0.989	55.7104
	PCB-172	5.25e+07	1.06 y	1.22	48:48	0.992	0.988	0.998	55.7953
	PCB-192	6.74e+07	1.03 y	1.53	48:59	0.996	0.991	1.001	57.3525
	PCB-180	6.04e+07	1.06 y	1.43	49:12	1.000	0.995	1.005	54.9430

RL: MONO, TRI - DECA: —

Integrations by Analyst: DMS

Date: 11/7/17

Client ID: OPR Filename: 141106E1 S:4 Acq: 6-NOV-14 19:21:31 ConCal: ST141106E1-1
Lab ID: B4K0011-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: NA

	Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
	PCB-193	7.04e+07	1.04 y	1.65	49:23	1.004	0.999	1.009	55.3242
	PCB-191	7.22e+07	1.05 y	1.67	49:37	1.009	1.004	1.014	56.0786
	PCB-170	5.26e+07	1.05 y	1.50	50:38	1.000	0.995	1.005	55.4115
	PCB-190	7.09e+07	1.03 y	2.02	50:48	1.004	0.998	1.008	55.5275
	PCB-189	7.35e+07	1.05 y	1.54	52:06	1.000	0.995	1.005	57.8804
	PCB-202	5.28e+07	0.89 y	1.04	48:07	1.000	0.995	1.005	51.6294
	PCB-201	5.90e+07	0.89 y	1.10	48:37	1.011	1.006	1.016	54.4754
	PCB-204	5.46e+07	0.84 y	0.99	48:46	1.014	1.009	1.019	55.8485
	PCB-197	5.74e+07	0.88 y	1.07	49:04	1.020	1.015	1.025	54.4642
	PCB-200	5.79e+07	0.88 y	1.02	49:55	1.038	1.032	1.044	57.9158
	PCB-198	4.05e+07	0.87 y	0.74	51:12	1.065	1.058	1.068	55.4916
	PCB-199	4.28e+07	0.89 y	0.73	51:19	1.067	1.060	1.070	59.8114
-	PCB-196/203	8.95e+07	0.88 y	0.77	51:34	1.072	1.066	1.076	117.848
-	PCB-195	5.18e+07	0.91 y	1.20	52:44	0.984	0.979	0.989	52.4533
	PCB-194	5.48e+07	0.91 y	1.25	53:37	1.000	0.995	1.005	53.4098
	PCB-205	6.57e+07	0.91 y	1.41	53:55	1.006	1.001	1.011	56.4892
	PCB-208	6.01e+07	1.33 y	0.96	52:52	1.000	0.995	1.005	53.9981
	PCB-207	6.10e+07	1.32 y	0.92	53:11	1.006	1.001	1.011	57.5176
	PCB-206	4.25e+07	1.33 y	1.03	55:19	1.000	0.995	1.005	53.3182
	PCB-209	5.47e+07	1.19 y	1.18	56:38	1.000	0.995	1.005	55.9423

Name	Resp	RA	RT	RRF	Conc	
Total Mono-PCB	2.54e+08	2.89 y	16:19	1.22	145.983	
Total Di-PCB	1.88e+09	1.62 y	20:09	1.21	1289.36	
Total Tri-PCB	6.31e+08	1.05 y	24:10	1.16	424.575	
Total Tri-PCB	1.40e+09	1.07 y	27:47	1.35	825.387	Sum:1249.96
Total Tetra-PCB	3.47e+09	0.78 y	27:51	1.17	2235.23	
Total Penta-PCB	2.60e+09	1.56 y	32:29	1.21	2215.89	
Total Penta-PCB	4.15e+08	1.59 y	42:01	1.26	288.536	Sum:2504.43
Total Hexa-PCB	7.37e+08	1.26 y	36:51	0.92	835.785	
Total Hexa-PCB	1.99e+09	1.23 y	41:57	1.08	1517.74	Sum:2353.52
Total Hepta-PCB	1.51e+09	1.05 y	42:40	1.27	1372.01	
Total Octa-PCB	4.55e+08	0.89 y	48:07	0.92	507.484	
Total Octa-PCB	1.77e+08	0.91 y	52:44	1.29	166.538	Sum:674.022
Total Nona-PCB	1.65e+08	1.33 y	52:52	0.96	165.955	
Total Deca-PCB	5.47e+07	1.19 y	56:38	1.18	55.9423	

Total PCB Conc:12033.5659020

RL: MONO, TRI - DECA: ———

Integrations by Analyst: DMS

Date: 11/7/14

Client ID: OPR Filename: 141106E1 S:4 Acq: 6-NOV-14 19:21:31 ConCal: ST141106E1-1
Lab ID: B4K0011-BS1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:1.0000 EndCAL: NA

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.39e+08	3.30	y	0.89	16:18	0.631	0.622	0.628	85.3	85.3
13C-PCB-3	1.45e+08	3.30	y	0.93	18:48	0.728	0.721	0.729	85.8	85.8
13C-PCB-4	7.36e+07	1.58	y	0.55	20:06	0.778	0.772	0.780	73.6	73.6
13C-PCB-9	1.13e+08	1.58	y	0.83	21:50	0.845	0.840	0.848	74.9	74.9
13C-PCB-11	1.41e+08	1.56	y	0.94	25:08	0.973	0.968	0.978	82.6	82.6
13C-PCB-19	8.90e+07	1.08	y	0.53	24:08	0.935	0.929	0.939	91.5	91.5
13C-PCB-28	1.24e+08	1.05	y	0.89	28:55	1.003	0.999	1.009	78.1	78.1
13C-PCB-32	1.47e+08	1.06	y	0.81	26:60	1.045	1.041	1.051	98.9	98.9
13C-PCB-37	1.31e+08	1.07	y	0.83	32:46	1.137	1.131	1.143	88.0	88.0
13C-PCB-47	1.18e+08	0.79	y	0.74	31:49	0.870	0.867	0.875	83.3	83.3
13C-PCB-52	1.11e+08	0.79	y	0.71	31:18	0.856	0.853	0.861	82.2	82.2
13C-PCB-54	1.18e+08	0.80	y	0.85	27:50	0.761	0.758	0.766	72.8	72.8
13C-PCB-70	1.58e+08	0.79	y	0.94	35:18	0.966	0.961	0.971	87.6	87.6
13C-PCB-77	1.58e+08	0.79	y	0.89	39:26	1.079	1.073	1.083	92.8	92.8
13C-PCB-80	1.62e+08	0.79	y	0.96	35:43	0.977	0.972	0.982	88.6	88.6
13C-PCB-81	1.49e+08	0.79	y	0.84	38:50	1.063	1.057	1.067	93.4	93.4
13C-PCB-95	8.11e+07	1.60	y	0.74	35:36	0.913	0.908	0.918	82.9	82.9
13C-PCB-97	8.52e+07	1.65	y	0.69	38:36	0.989	0.984	0.994	94.0	94.0
13C-PCB-101	9.38e+07	1.62	y	0.79	37:17	0.956	0.951	0.961	90.8	90.8
13C-PCB-104	1.00e+08	1.61	y	1.00	32:28	0.832	0.829	0.837	76.5	76.5
13C-PCB-105	1.17e+08	1.60	y	1.24	42:52	0.928	0.924	0.934	83.5	83.5
13C-PCB-114	1.09e+08	1.60	y	1.21	42:00	0.910	0.905	0.915	80.1	80.1
13C-PCB-118	1.19e+08	1.63	y	0.98	41:20	1.060	1.054	1.064	91.7	91.7
13C-PCB-123	1.14e+08	1.58	y	0.95	41:09	1.055	1.049	1.059	90.9	90.9
13C-PCB-126	1.10e+08	1.60	y	1.16	45:07	0.977	0.972	0.982	83.7	83.7
13C-PCB-127	1.27e+08	1.58	y	1.34	43:12	0.935	0.931	0.941	83.4	83.4
13C-PCB-138	1.12e+08	1.27	y	1.04	44:37	0.966	0.961	0.971	95.0	95.0
13C-PCB-141	1.13e+08	1.29	y	1.07	43:46	0.948	0.943	0.953	93.2	93.2
13C-PCB-153	1.17e+08	1.28	y	1.11	43:01	0.931	0.927	0.937	93.1	93.1
13C-PCB-155	9.64e+07	1.24	y	0.83	36:50	0.944	0.939	0.949	88.1	88.1
13C-PCB-156	1.35e+08	1.28	y	1.24	47:53	1.037	1.032	1.042	95.7	95.7
13C-PCB-157	1.40e+08	1.27	y	1.31	48:09	1.043	1.037	1.047	94.6	94.6
13C-PCB-159	1.29e+08	1.26	y	1.20	45:54	0.994	0.989	0.999	95.2	95.2
13C-PCB-167	1.41e+08	1.27	y	1.32	46:35	1.009	1.004	1.014	94.4	94.4
13C-PCB-169	1.29e+08	1.26	y	1.22	50:15	1.088	1.082	1.092	93.7	93.7
13C-PCB-170	6.33e+07	0.46	y	0.54	50:37	1.096	1.089	1.101	104	104
13C-PCB-180	7.69e+07	0.46	y	0.67	49:11	1.065	1.059	1.069	101	101
13C-PCB-188	9.65e+07	0.47	y	0.94	42:39	0.923	0.919	0.929	91.1	91.1
13C-PCB-189	8.24e+07	0.46	y	0.72	52:05	1.128	1.120	1.132	102	102
13C-PCB-194	8.23e+07	0.90	y	0.81	53:36	0.994	0.990	1.000	93.8	93.8
13C-PCB-202	9.82e+07	0.90	y	0.83	48:06	1.041	1.036	1.046	104	104
13C-PCB-206	7.74e+07	0.79	y	0.66	55:18	1.026	1.021	1.031	109	109
13C-PCB-208	1.16e+08	0.77	y	1.12	52:51	0.981	0.976	0.986	95.1	95.1
13C-PCB-209	8.32e+07	1.19	y	0.61	56:37	1.050	1.044	1.054	125	125

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.79e+08	0.79	y	1.01	37:36	1.029	1.023	1.033	93.5	93.5
13C-PCB-178	7.11e+07	0.46	y	0.63	45:26	0.984	0.979	0.989	99.6	99.6

PS vs. IS

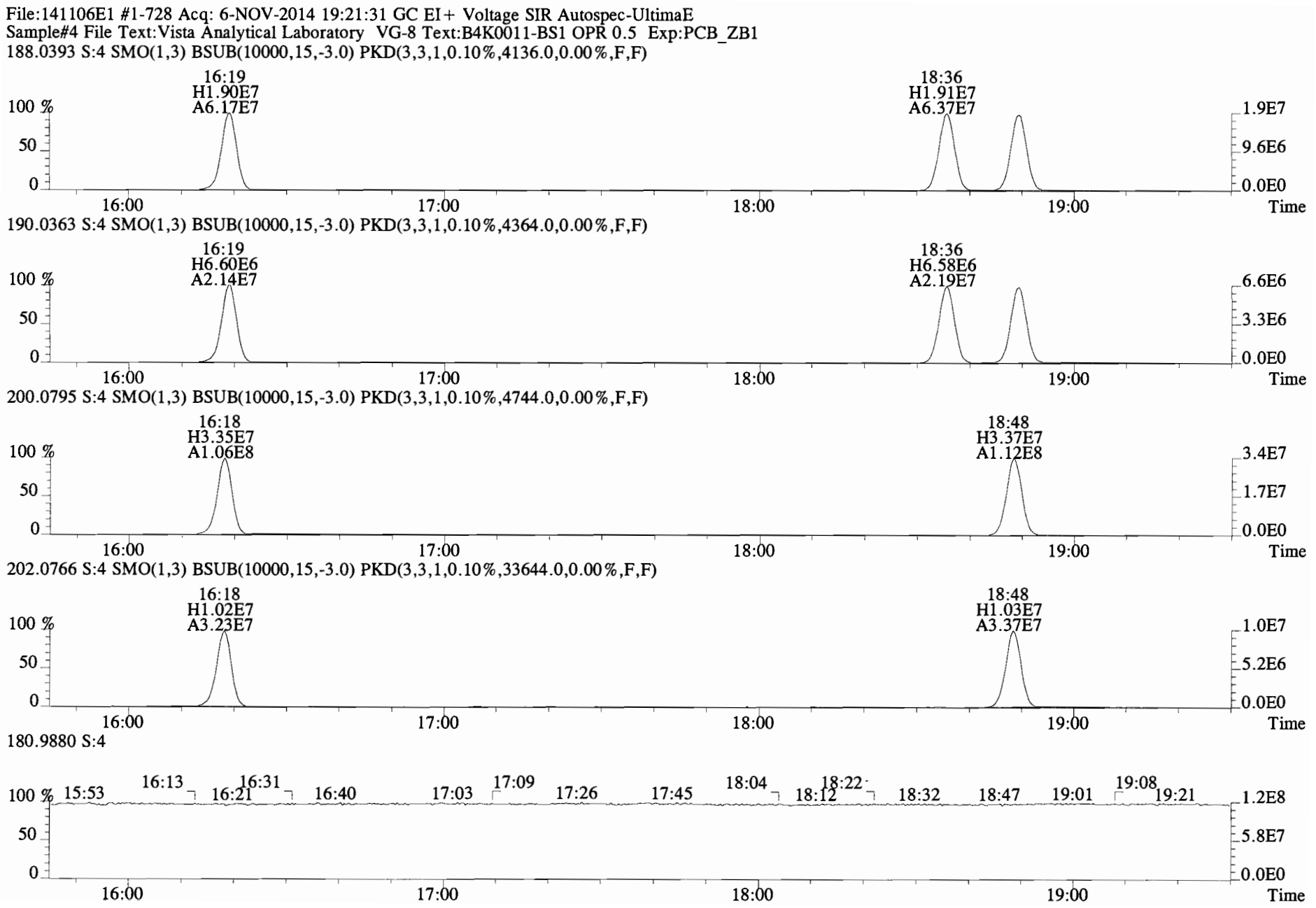
Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.79e+08	0.79	y	1.20	37:36	0.968	0.963	0.973	100	100
13C-PCB-178	7.11e+07	0.46	y	0.94	45:26	0.924	0.920	0.930	98.6	98.6

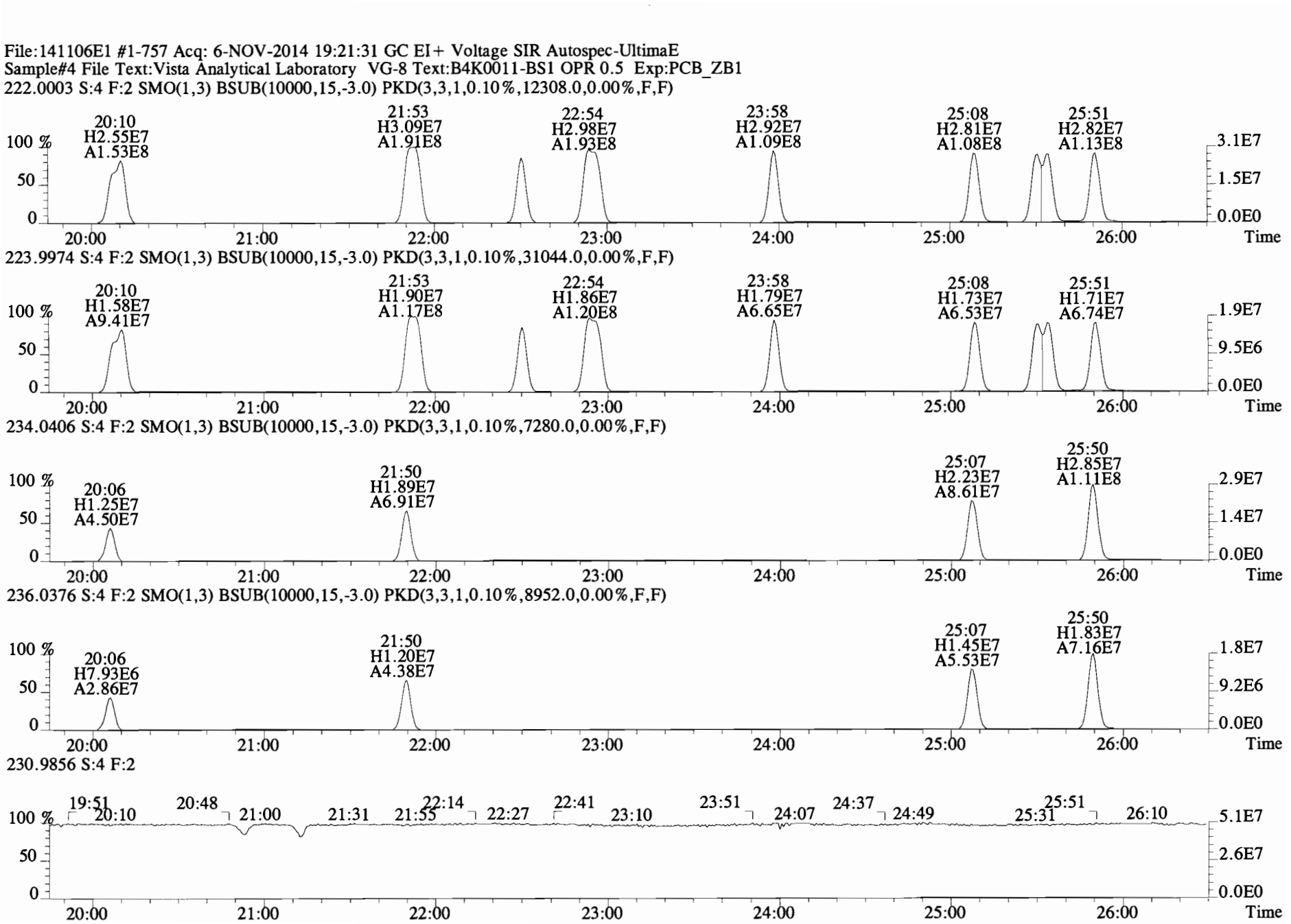
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.83e+08	1.55	y	1.00	25:50	100
13C-PCB-31	1.79e+08	1.05	y	1.00	28:49	100
13C-PCB-60	1.91e+08	0.79	y	1.00	36:33	100
13C-PCB-111	1.32e+08	1.62	y	1.00	39:01	100
13C-PCB-128	1.13e+08	1.25	y	1.00	46:11	100
13C-PCB-205	1.08e+08	0.91	y	1.00	53:54	100

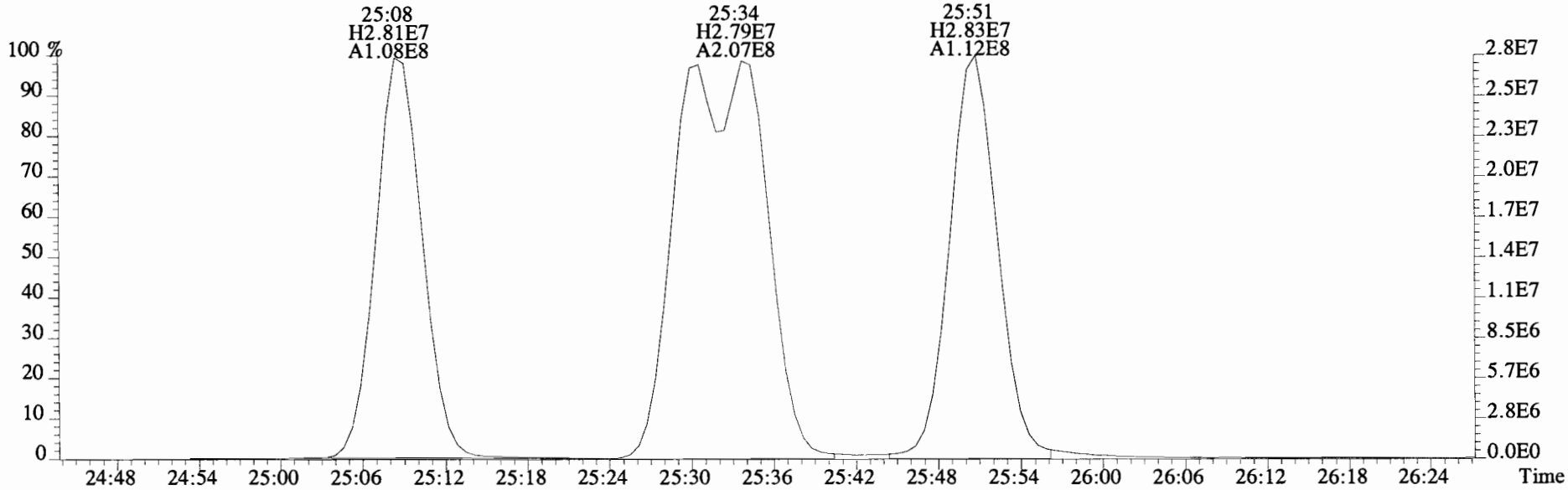
Analyst: DMS

Date: 11/7/14

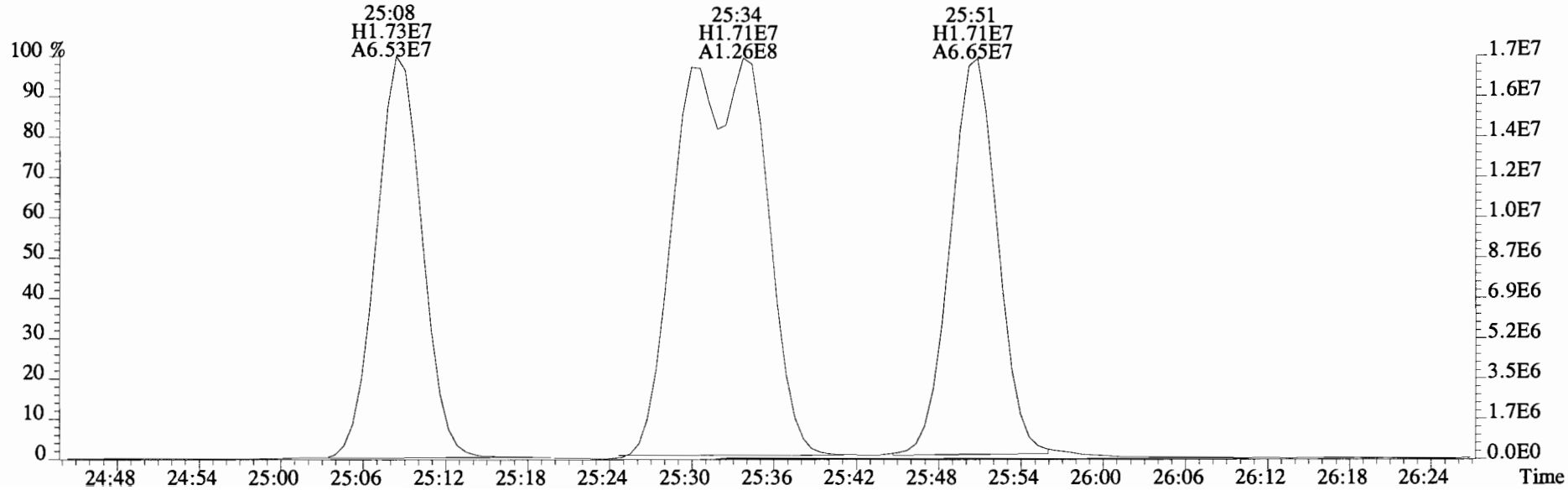

File:141106E1 #1-728 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
188.0393 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4136.0,0.00%,F,F)
16:19
H1.90E7
A6.17E7
18:36
H1.91E7
A6.37E7
100 %
50
0
1.9E7
9.6E6
0.0E0
16:00
17:00
18:00
19:00
Time
190.0363 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4364.0,0.00%,F,F)
16:19
H6.60E6
A2.14E7
18:36
H6.58E6
A2.19E7
6.6E6
3.3E6
0.0E0
200.0795 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4744.0,0.00%,F,F)
16:18
H3.35E7
A1.06E8
18:48
H3.37E7
A1.12E8
3.4E7
1.7E7
0.0E0
202.0766 S:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,33644.0,0.00%,F,F)
16:18
H1.02E7
A3.23E7
18:48
H1.03E7
A3.37E7
1.0E7
5.2E6
0.0E0
180.9880 S:4
15:53
16:13
16:21
16:31
16:40
17:03
17:09
17:26
17:45
18:04
18:12
18:22
18:32
18:47
19:01
19:08
19:21
1.2E8
5.8E7
0.0E0

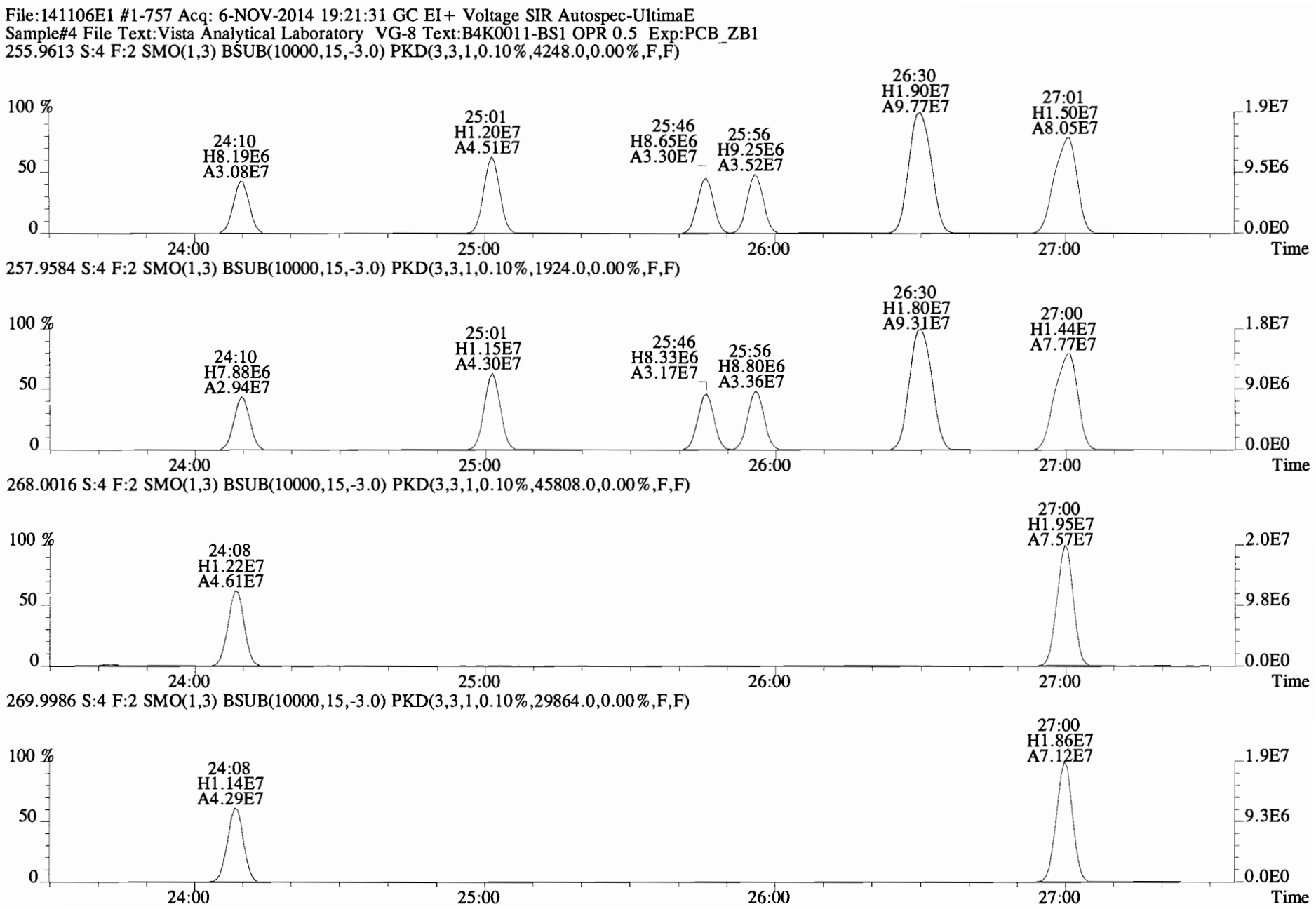

File:141106E1 #1-757 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12308.0,0.00%,F,F)
20:10 H2.55E7 A1.53E8
21:53 H3.09E7 A1.91E8
22:54 H2.98E7 A1.93E8
23:58 H2.92E7 A1.09E8
25:08 H2.81E7 A1.08E8
25:51 H2.82E7 A1.13E8
100 %
50
0
3.1E7
1.5E7
0.0E0
20:00
21:00
22:00
23:00
24:00
25:00
26:00
Time
223.9974 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,31044.0,0.00%,F,F)
20:10 H1.58E7 A9.41E7
21:53 H1.90E7 A1.17E8
22:54 H1.86E7 A1.20E8
23:58 H1.79E7 A6.65E7
25:08 H1.73E7 A6.53E7
25:51 H1.71E7 A6.74E7
100 %
50
0
1.9E7
9.5E6
0.0E0
20:00
21:00
22:00
23:00
24:00
25:00
26:00
Time
234.0406 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7280.0,0.00%,F,F)
20:06 H1.25E7 A4.50E7
21:50 H1.89E7 A6.91E7
25:07 H2.23E7 A8.61E7
25:50 H2.85E7 A1.11E8
100 %
50
0
2.9E7
1.4E7
0.0E0
20:00
21:00
22:00
23:00
24:00
25:00
26:00
Time
236.0376 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8952.0,0.00%,F,F)
20:06 H7.93E6 A2.86E7
21:50 H1.20E7 A4.38E7
25:07 H1.45E7 A5.53E7
25:50 H1.83E7 A7.16E7
100 %
50
0
1.8E7
9.2E6
0.0E0
20:00
21:00
22:00
23:00
24:00
25:00
26:00
Time
230.9856 S:4 F:2
19:51
20:10
20:48
21:00
21:31
21:55
22:14
22:27
22:41
23:10
23:51
24:07
24:37
24:49
25:31
25:51
26:10
100 %
50
0
5.1E7
2.6E7
0.0E0
20:00
21:00
22:00
23:00
24:00
25:00
26:00
Time

File:141106E1 #1-757 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
222.0003 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12308.0,0.00%,F,F)

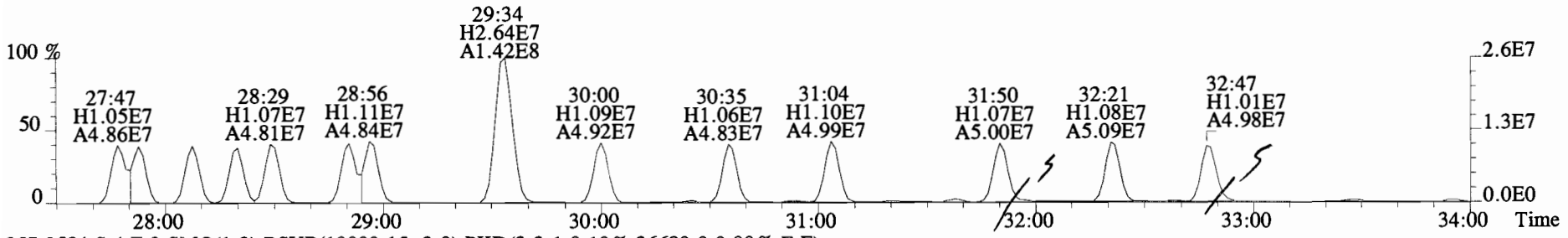


223.9974 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,31044.0,0.00%,F,F)

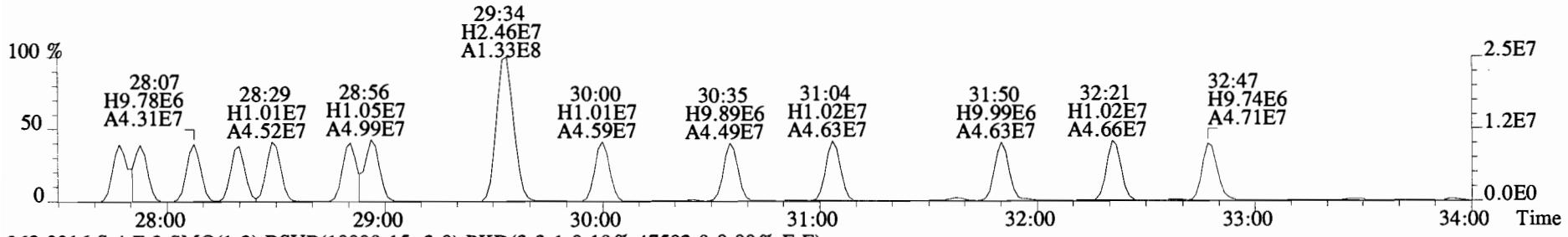



File:141106E1 #1-757 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
255.9613 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4248.0,0.00%,F,F)
24:10 H8.19E6 A3.08E7
25:01 H1.20E7 A4.51E7
25:46 H8.65E6 A3.30E7
25:56 H9.25E6 A3.52E7
26:30 H1.90E7 A9.77E7
27:01 H1.50E7 A8.05E7
257.9584 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1924.0,0.00%,F,F)
24:10 H7.88E6 A2.94E7
25:01 H1.15E7 A4.30E7
25:46 H8.33E6 A3.17E7
25:56 H8.80E6 A3.36E7
26:30 H1.80E7 A9.31E7
27:00 H1.44E7 A7.77E7
268.0016 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,45808.0,0.00%,F,F)
24:08 H1.22E7 A4.61E7
27:00 H1.95E7 A7.57E7
269.9986 S:4 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,29864.0,0.00%,F,F)
24:08 H1.14E7 A4.29E7
27:00 H1.86E7 A7.12E7
100 %
50
0
24:00
25:00
26:00
27:00
Time
1.9E7
9.5E6
0.0E0
1.8E7
9.0E6
2.0E7
9.8E6
1.9E7
9.3E6

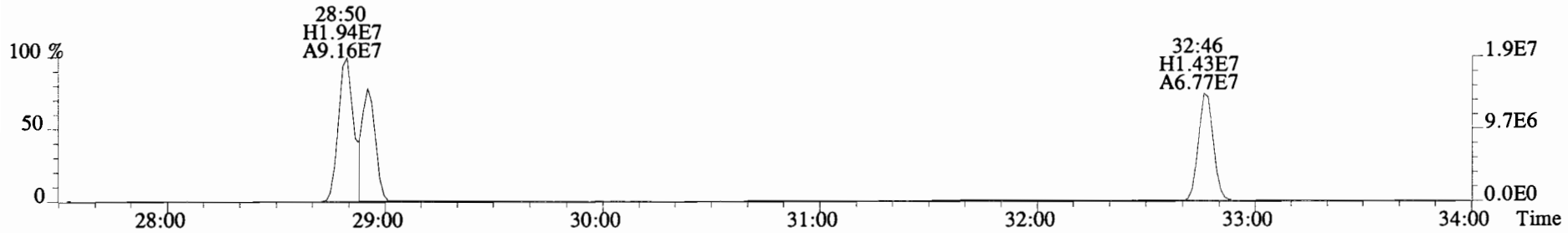
File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,37116.0,0.00%,F,F)



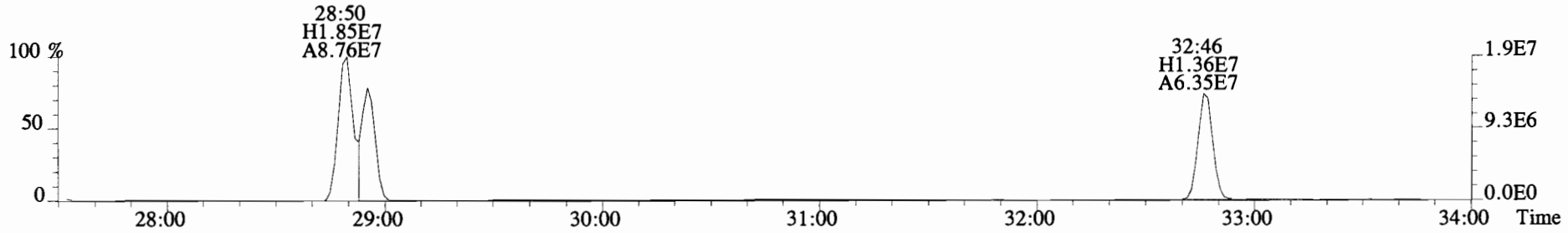
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,36680.0,0.00%,F,F)

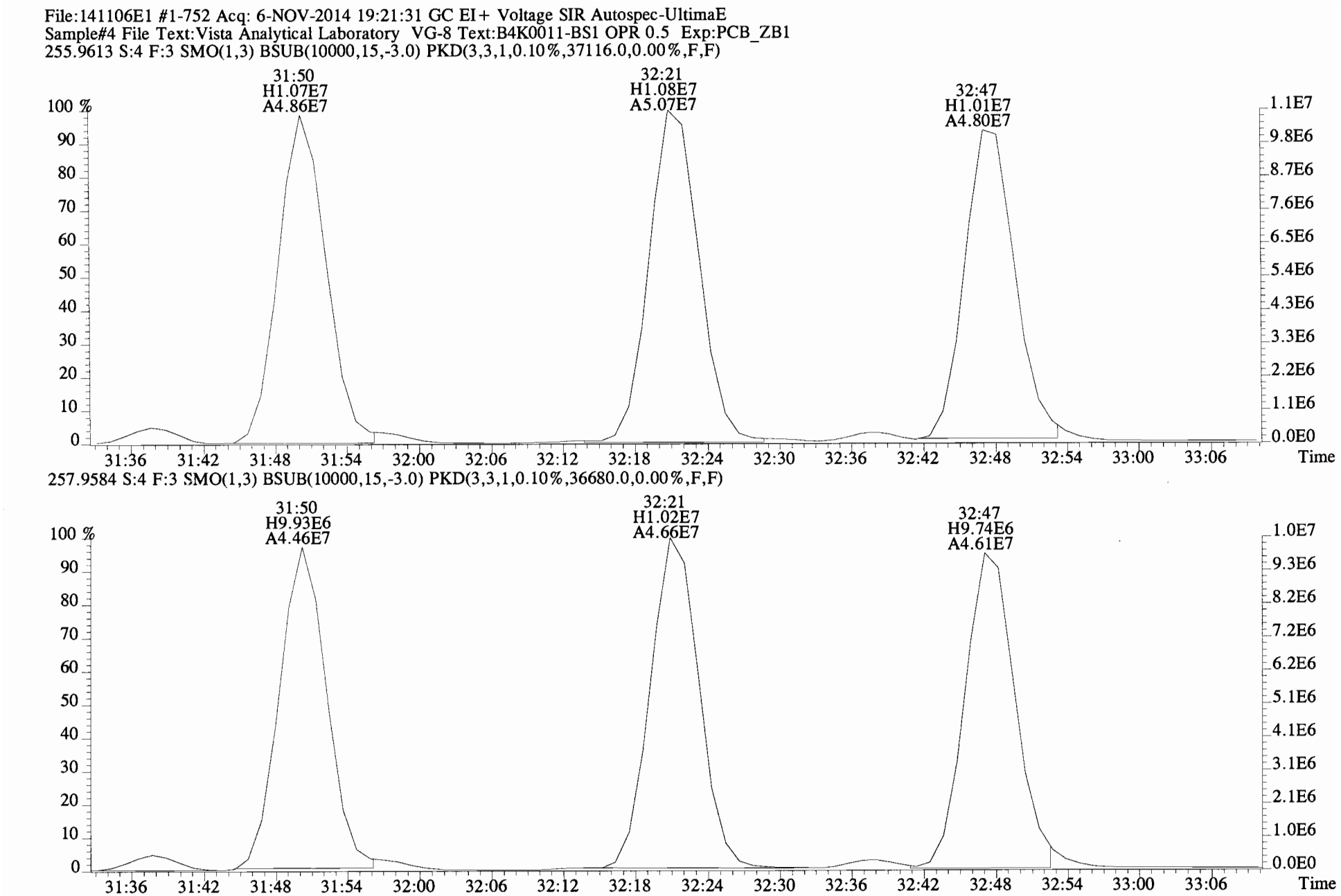


268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,47592.0,0.00%,F,F)

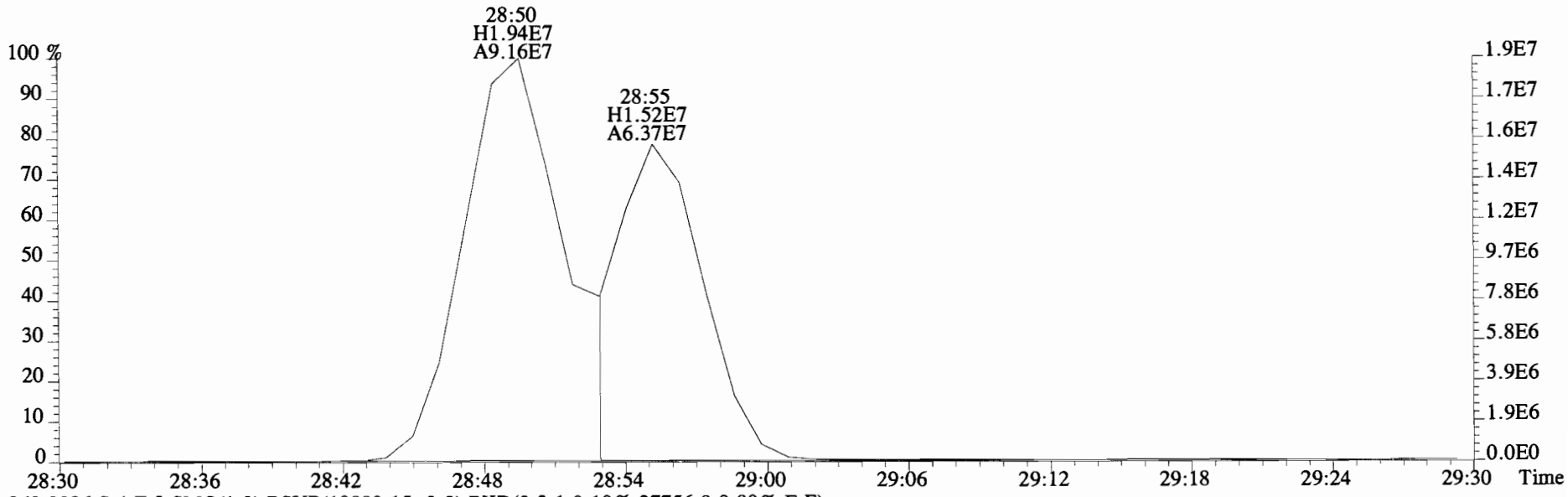


269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,27756.0,0.00%,F,F)

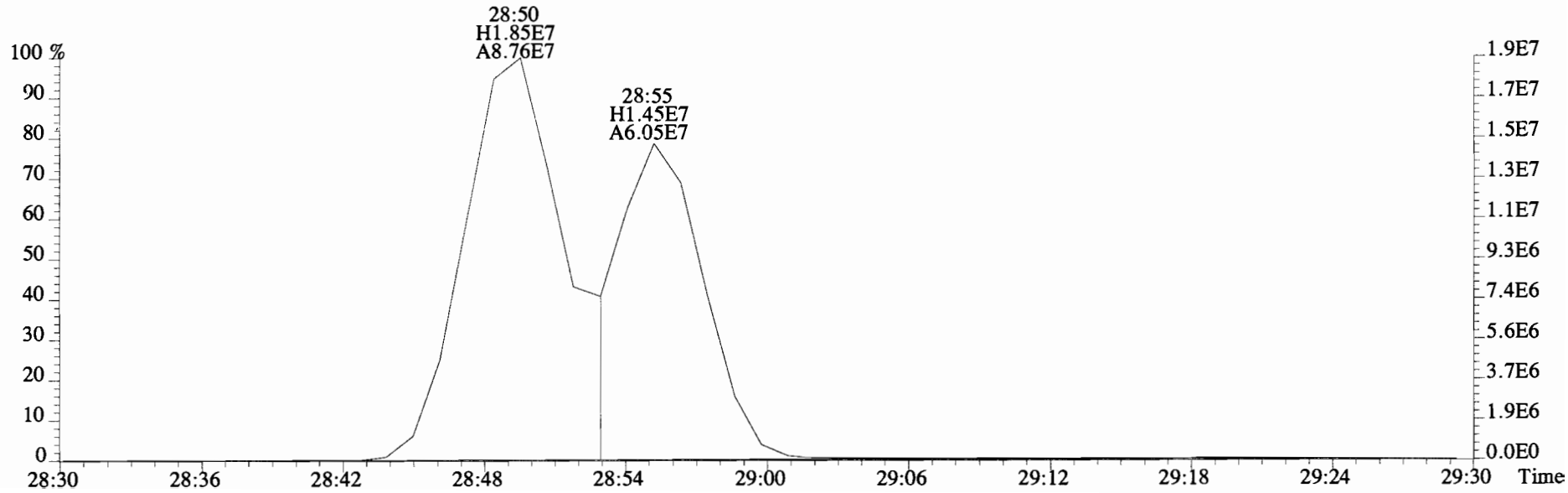


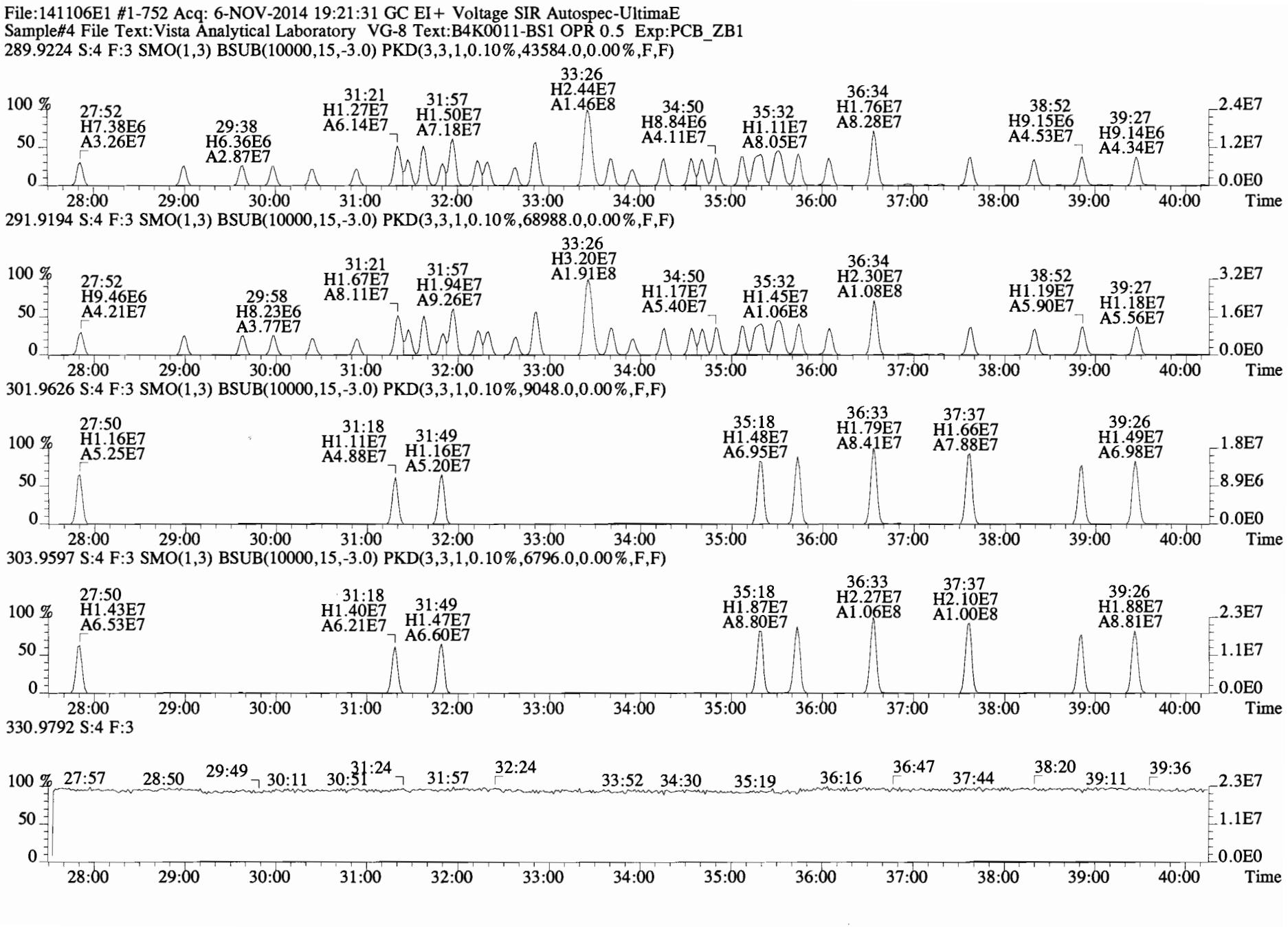

File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
255.9613 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,37116.0,0.00%,F,F)
31:50
H1.07E7
A4.86E7
32:21
H1.08E7
A5.07E7
32:47
H1.01E7
A4.80E7
100 %
90
80
70
60
50
40
30
20
10
0
1.1E7
9.8E6
8.7E6
7.6E6
6.5E6
5.4E6
4.3E6
3.3E6
2.2E6
1.1E6
0.0E0
31:36
31:42
31:48
31:54
32:00
32:06
32:12
32:18
32:24
32:30
32:36
32:42
32:48
32:54
33:00
33:06
Time
257.9584 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,36680.0,0.00%,F,F)
31:50
H9.93E6
A4.46E7
32:21
H1.02E7
A4.66E7
32:47
H9.74E6
A4.61E7
100 %
90
80
70
60
50
40
30
20
10
0
1.0E7
9.3E6
8.2E6
7.2E6
6.2E6
5.1E6
4.1E6
3.1E6
2.1E6
1.0E6
0.0E0
31:36
31:42
31:48
31:54
32:00
32:06
32:12
32:18
32:24
32:30
32:36
32:42
32:48
32:54
33:00
33:06
Time

File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
268.0016 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,47592.0,0.00%,F,F)

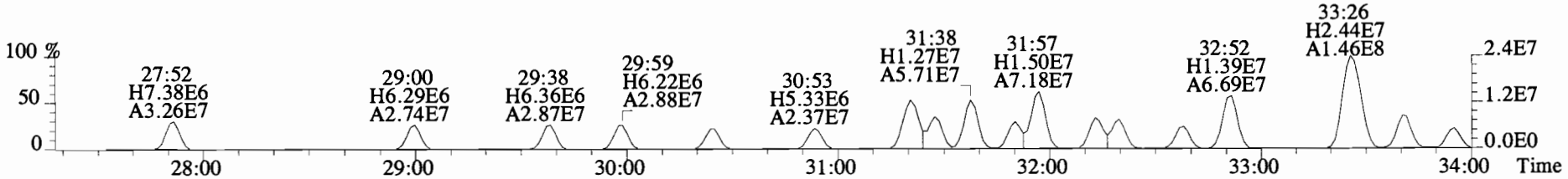


269.9986 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,27756.0,0.00%,F,F)

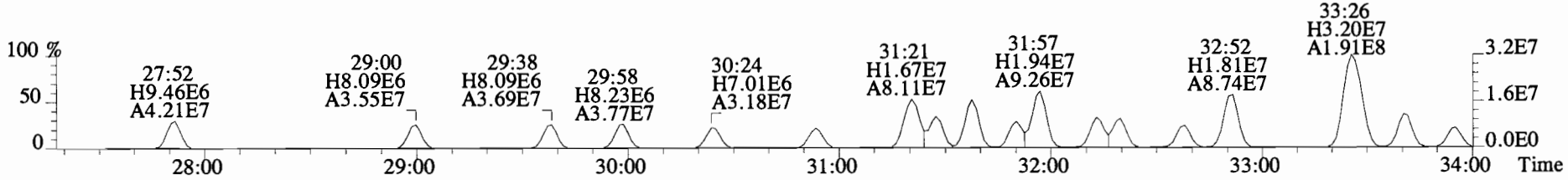



File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,43584.0,0.00%,F,F)
27:52 H7.38E6 A3.26E7
29:38 H6.36E6 A2.87E7
31:21 H1.27E7 A6.14E7
31:57 H1.50E7 A7.18E7
33:26 H2.44E7 A1.46E8
34:50 H8.84E6 A4.11E7
35:32 H1.11E7 A8.05E7
36:34 H1.76E7 A8.28E7
38:52 H9.15E6 A4.53E7
39:27 H9.14E6 A4.34E7
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,68988.0,0.00%,F,F)
27:52 H9.46E6 A4.21E7
29:58 H8.23E6 A3.77E7
31:21 H1.67E7 A8.11E7
31:57 H1.94E7 A9.26E7
33:26 H3.20E7 A1.91E8
34:50 H1.17E7 A5.40E7
35:32 H1.45E7 A1.06E8
36:34 H2.30E7 A1.08E8
38:52 H1.19E7 A5.90E7
39:27 H1.18E7 A5.56E7
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9048.0,0.00%,F,F)
27:50 H1.16E7 A5.25E7
31:18 H1.11E7 A4.88E7
31:49 H1.16E7 A5.20E7
35:18 H1.48E7 A6.95E7
36:33 H1.79E7 A8.41E7
37:37 H1.66E7 A7.88E7
39:26 H1.49E7 A6.98E7
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6796.0,0.00%,F,F)
27:50 H1.43E7 A6.53E7
31:18 H1.40E7 A6.21E7
31:49 H1.47E7 A6.60E7
35:18 H1.87E7 A8.80E7
36:33 H2.27E7 A1.06E8
37:37 H2.10E7 A1.00E8
39:26 H1.88E7 A8.81E7
330.9792 S:4 F:3
27:57 28:50 29:49 30:11 30:51 31:24 31:57 32:24 33:52 34:30 35:19 36:16 36:47 37:44 38:20 39:11 39:36
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
2.4E7 1.2E7 0.0E0
3.2E7 1.6E7 0.0E0
1.8E7 8.9E6 0.0E0
2.3E7 1.1E7 0.0E0
2.3E7 1.1E7 0.0E0

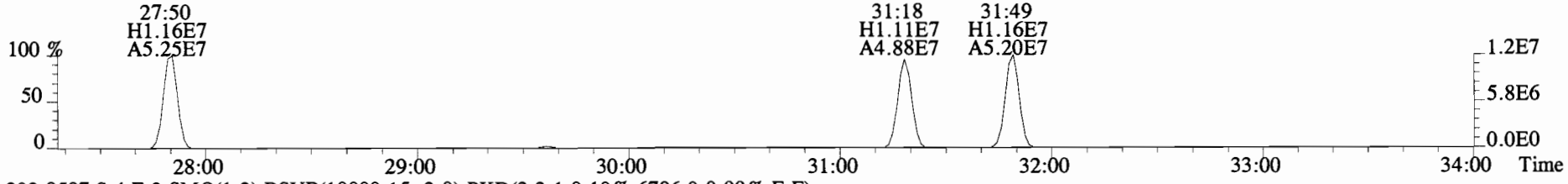
File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,43584.0,0.00%,F,F)



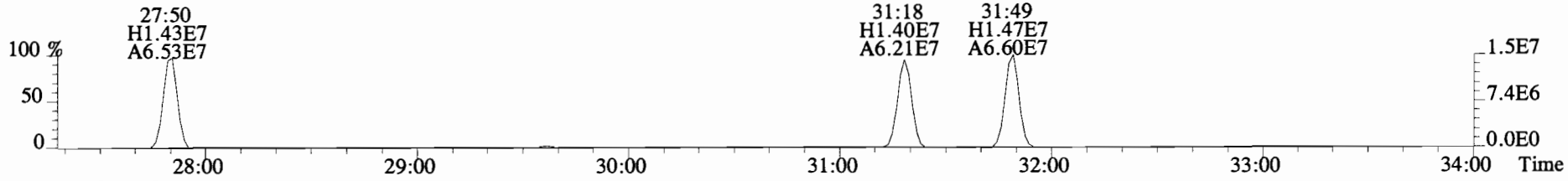
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,68988.0,0.00%,F,F)



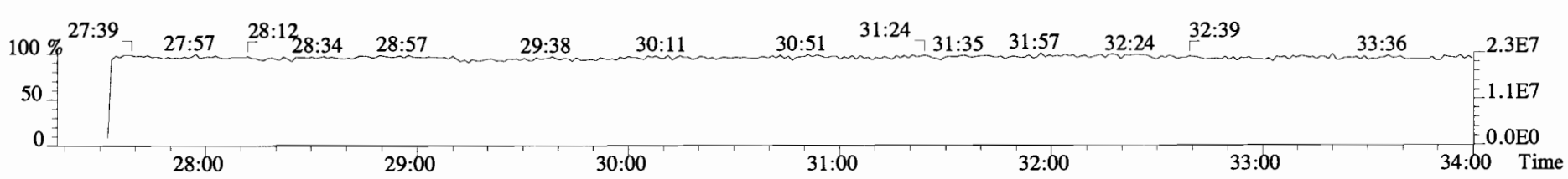
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9048.0,0.00%,F,F)

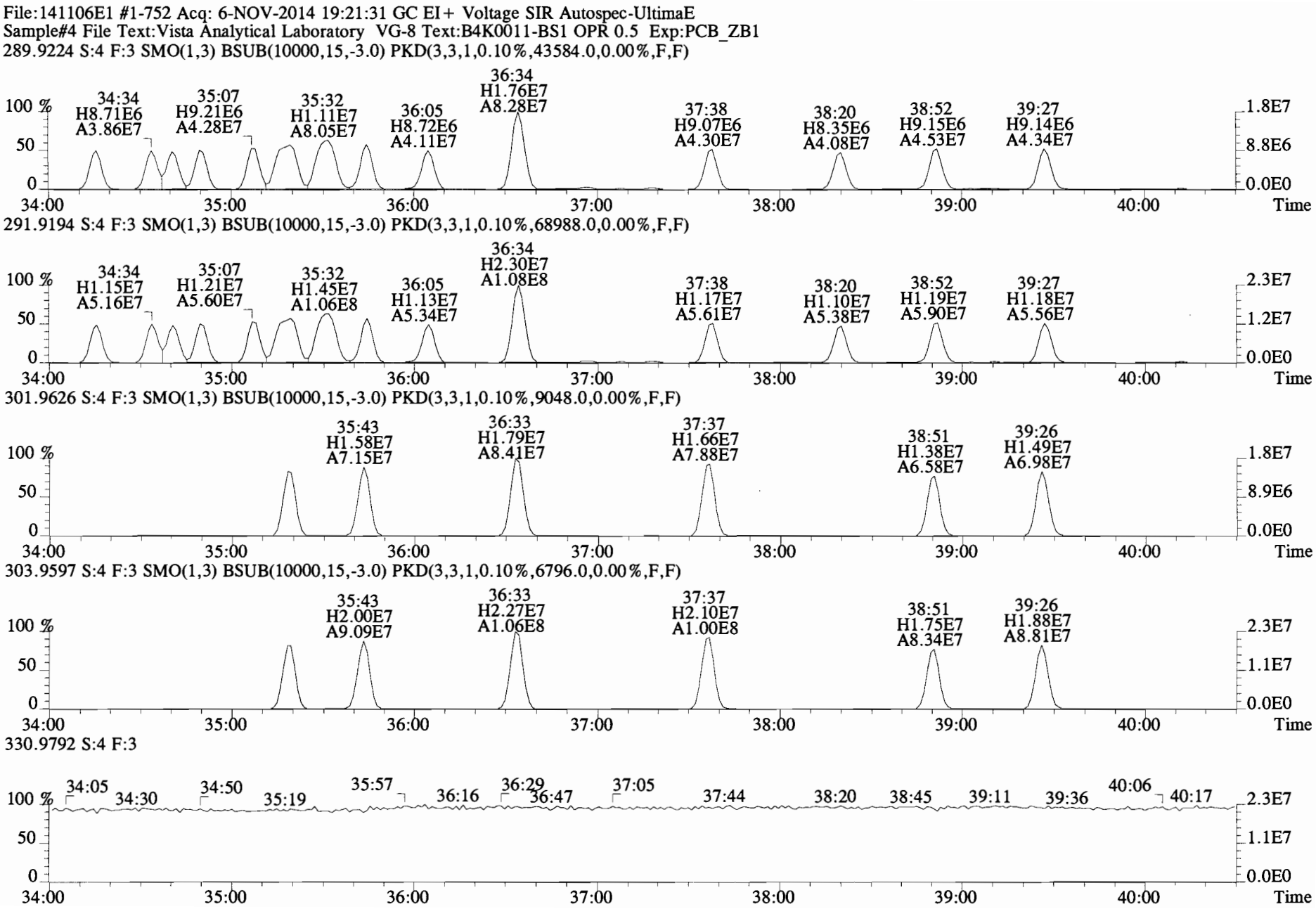


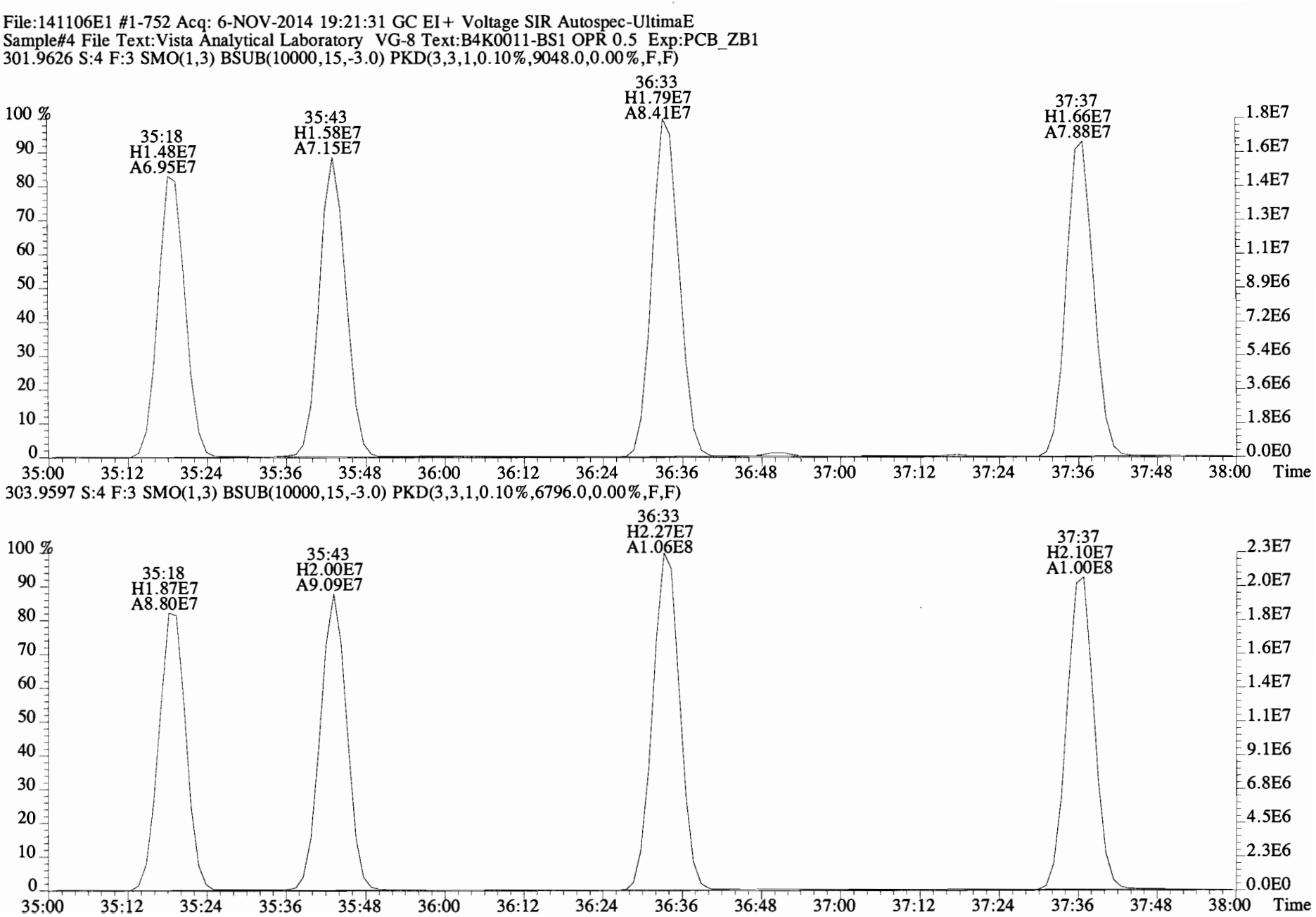
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6796.0,0.00%,F,F)

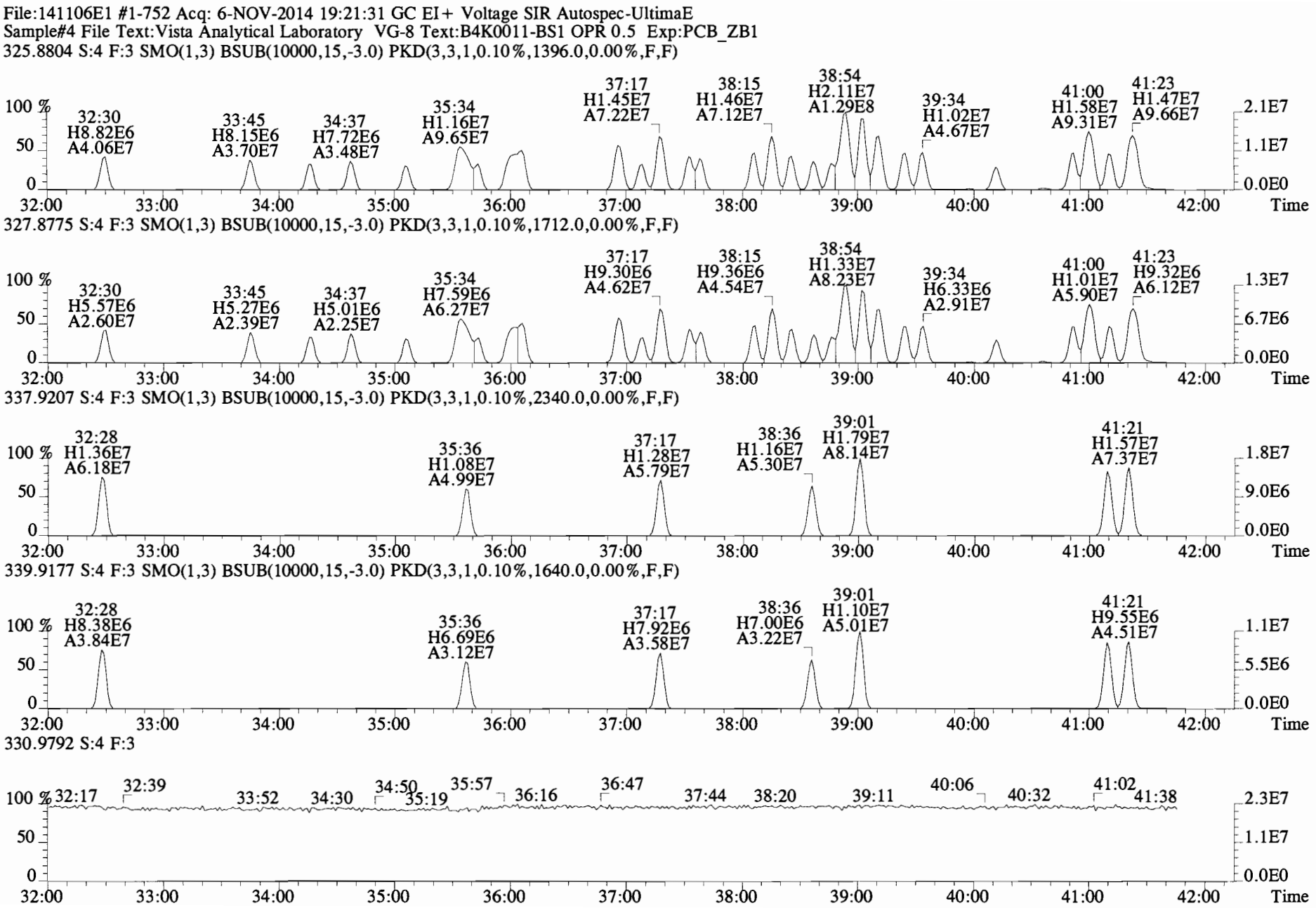


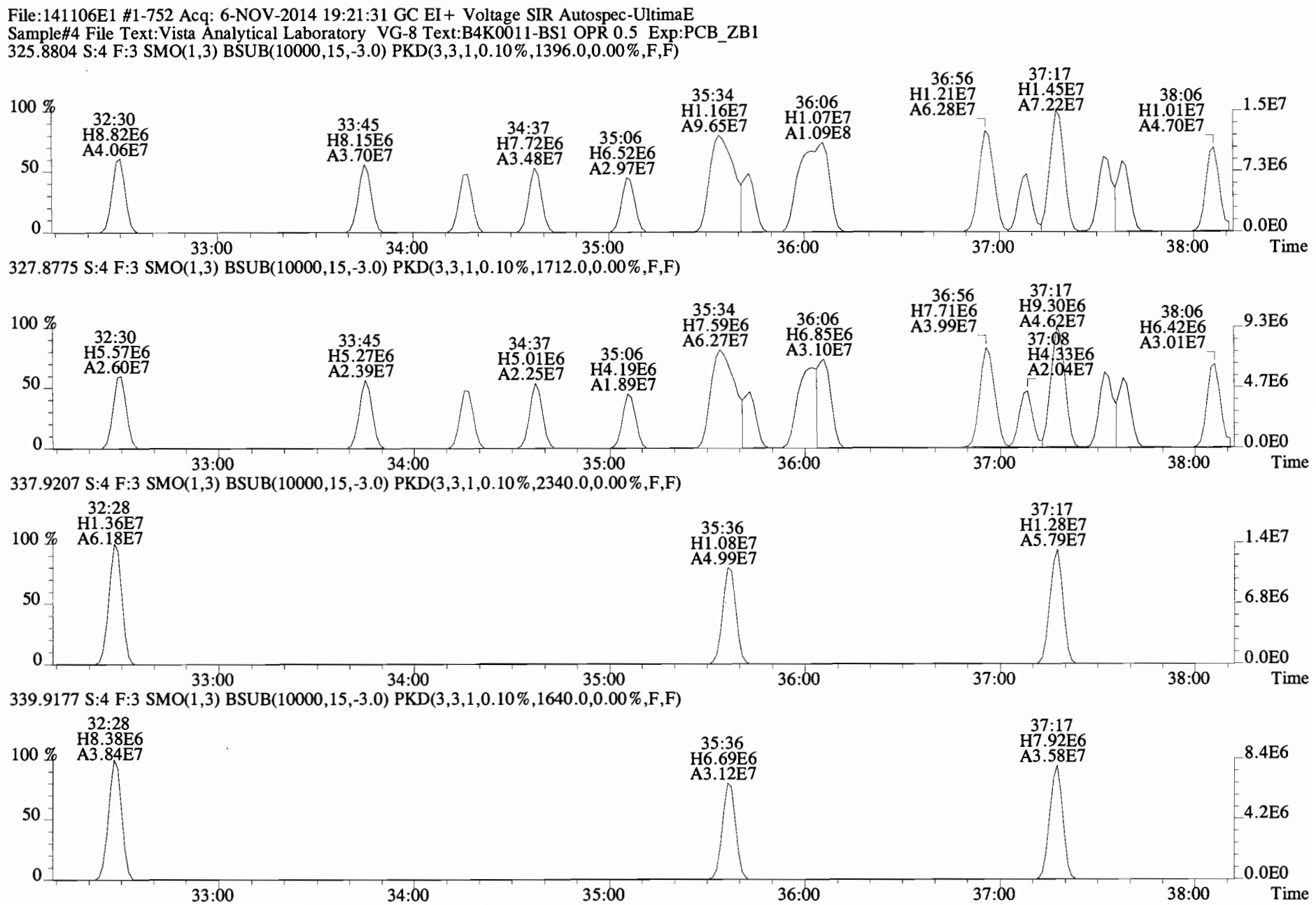
330.9792 S:4 F:3

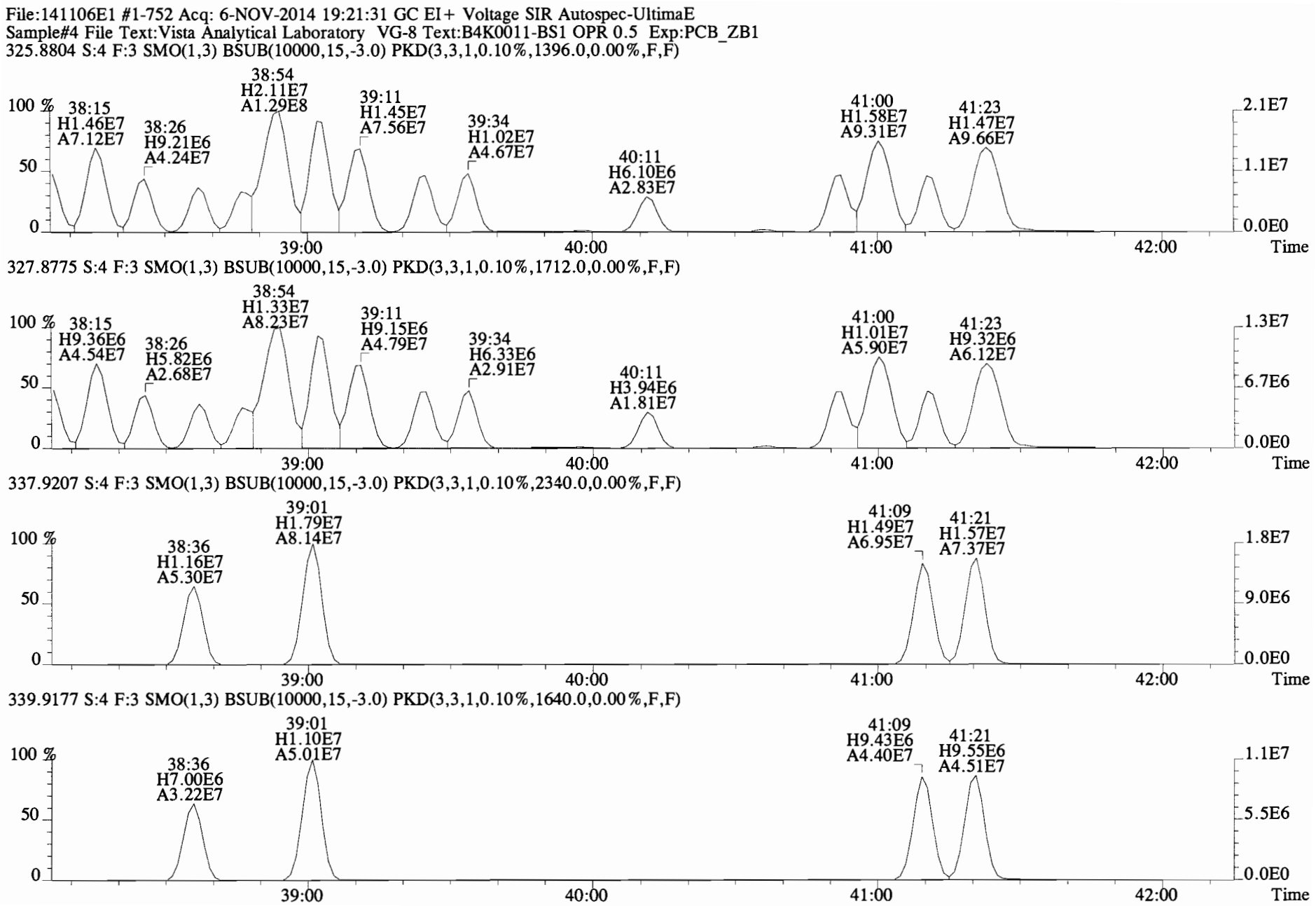



File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
289.9224 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,43584.0,0.00%,F,F)
34:34 H8.71E6 A3.86E7
35:07 H9.21E6 A4.28E7
35:32 H1.11E7 A8.05E7
36:05 H8.72E6 A4.11E7
36:34 H1.76E7 A8.28E7
37:38 H9.07E6 A4.30E7
38:20 H8.35E6 A4.08E7
38:52 H9.15E6 A4.53E7
39:27 H9.14E6 A4.34E7
291.9194 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,68988.0,0.00%,F,F)
34:34 H1.15E7 A5.16E7
35:07 H1.21E7 A5.60E7
35:32 H1.45E7 A1.06E8
36:05 H1.13E7 A5.34E7
36:34 H2.30E7 A1.08E8
37:38 H1.17E7 A5.61E7
38:20 H1.10E7 A5.38E7
38:52 H1.19E7 A5.90E7
39:27 H1.18E7 A5.56E7
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9048.0,0.00%,F,F)
35:43 H1.58E7 A7.15E7
36:33 H1.79E7 A8.41E7
37:37 H1.66E7 A7.88E7
38:51 H1.38E7 A6.58E7
39:26 H1.49E7 A6.98E7
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6796.0,0.00%,F,F)
35:43 H2.00E7 A9.09E7
36:33 H2.27E7 A1.06E8
37:37 H2.10E7 A1.00E8
38:51 H1.75E7 A8.34E7
39:26 H1.88E7 A8.81E7
330.9792 S:4 F:3
34:05 34:30 34:50 35:19 35:57 36:16 36:29 36:47 37:05 37:44 38:20 38:45 39:11 39:36 40:06 40:17
100 %
50
0
34:00 35:00 36:00 37:00 38:00 39:00 40:00 Time
1.8E7 8.8E6 0.0E0
2.3E7 1.2E7 0.0E0
1.8E7 8.9E6 0.0E0
2.3E7 1.1E7 0.0E0
2.3E7 1.1E7 0.0E0

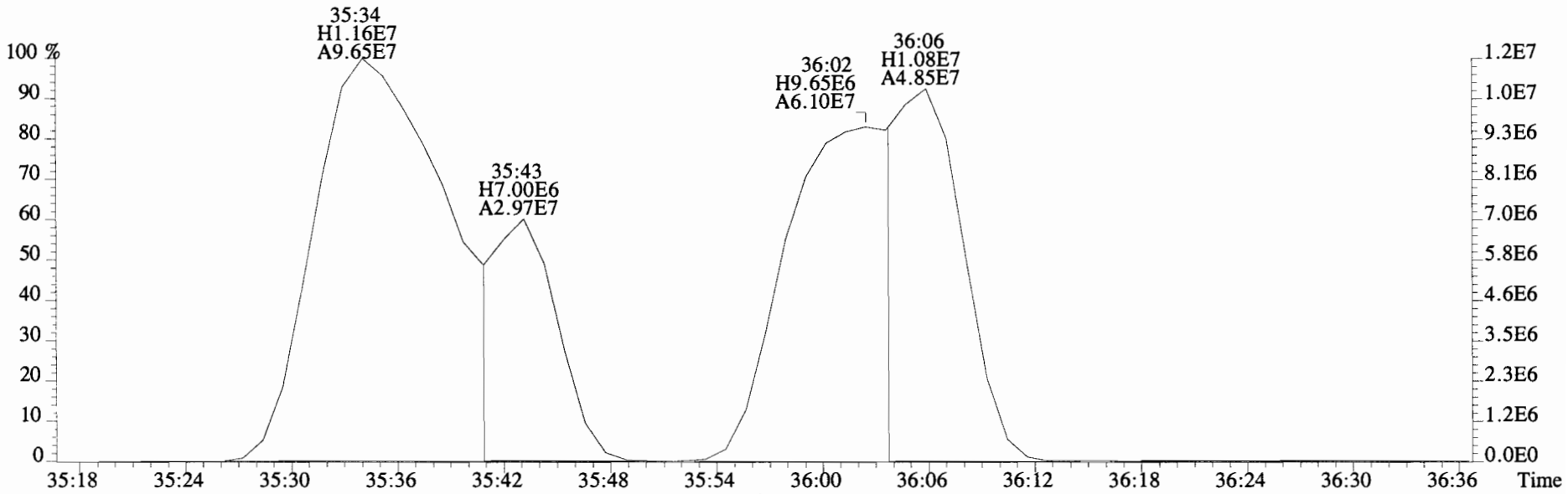

File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
301.9626 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9048.0,0.00%,F,F)
35:18 H1.48E7 A6.95E7
35:43 H1.58E7 A7.15E7
36:33 H1.79E7 A8.41E7
37:37 H1.66E7 A7.88E7
100 %
Time
303.9597 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6796.0,0.00%,F,F)
35:18 H1.87E7 A8.80E7
35:43 H2.00E7 A9.09E7
36:33 H2.27E7 A1.06E8
37:37 H2.10E7 A1.00E8
100 %
Time


File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1396.0,0.00%,F,F)
32:30 H8.82E6 A4.06E7
33:45 H8.15E6 A3.70E7
34:37 H7.72E6 A3.48E7
35:34 H1.16E7 A9.65E7
37:17 H1.45E7 A7.22E7
38:15 H1.46E7 A7.12E7
38:54 H2.11E7 A1.29E8
39:34 H1.02E7 A4.67E7
41:00 H1.58E7 A9.31E7
41:23 H1.47E7 A9.66E7
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1712.0,0.00%,F,F)
32:30 H5.57E6 A2.60E7
33:45 H5.27E6 A2.39E7
34:37 H5.01E6 A2.25E7
35:34 H7.59E6 A6.27E7
37:17 H9.30E6 A4.62E7
38:15 H9.36E6 A4.54E7
38:54 H1.33E7 A8.23E7
39:34 H6.33E6 A2.91E7
41:00 H1.01E7 A5.90E7
41:23 H9.32E6 A6.12E7
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2340.0,0.00%,F,F)
32:28 H1.36E7 A6.18E7
35:36 H1.08E7 A4.99E7
37:17 H1.28E7 A5.79E7
38:36 H1.16E7 A5.30E7
39:01 H1.79E7 A8.14E7
41:21 H1.57E7 A7.37E7
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1640.0,0.00%,F,F)
32:28 H8.38E6 A3.84E7
35:36 H6.69E6 A3.12E7
37:17 H7.92E6 A3.58E7
38:36 H7.00E6 A3.22E7
39:01 H1.10E7 A5.01E7
41:21 H9.55E6 A4.51E7
330.9792 S:4 F:3
32:17
32:39
33:52
34:30
34:50
35:19
35:57
36:16
36:47
37:44
38:20
39:11
40:06
40:32
41:02
41:38
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
2.1E7
1.1E7
0.0E0
1.3E7
6.7E6
1.8E7
9.0E6
1.1E7
5.5E6
2.3E7

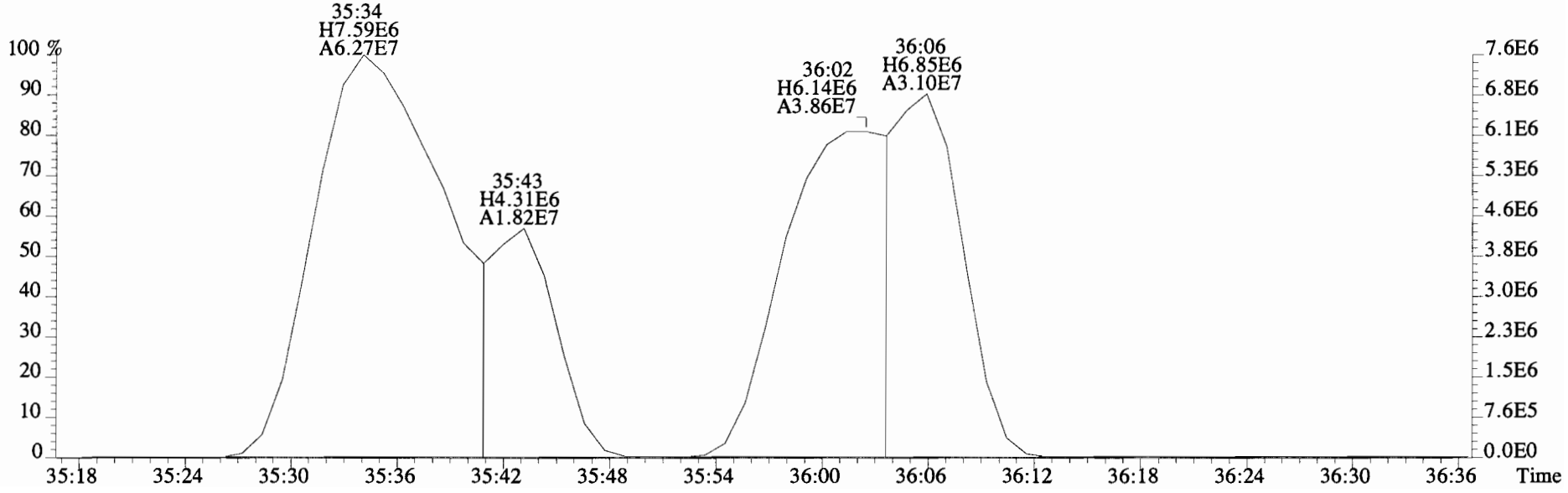

File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1396.0,0.00%,F,F)
32:30 H8.82E6 A4.06E7
33:45 H8.15E6 A3.70E7
34:37 H7.72E6 A3.48E7
35:06 H6.52E6 A2.97E7
35:34 H1.16E7 A9.65E7
36:06 H1.07E7 A1.09E8
36:56 H1.21E7 A6.28E7
37:17 H1.45E7 A7.22E7
38:06 H1.01E7 A4.70E7
100 %
50
0
1.5E7
7.3E6
0.0E0
33:00
34:00
35:00
36:00
37:00
38:00
Time
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1712.0,0.00%,F,F)
32:30 H5.57E6 A2.60E7
33:45 H5.27E6 A2.39E7
34:37 H5.01E6 A2.25E7
35:06 H4.19E6 A1.89E7
35:34 H7.59E6 A6.27E7
36:06 H6.85E6 A3.10E7
36:56 H7.71E6 A3.99E7
37:17 H9.30E6 A4.62E7
37:08 H4.33E6 A2.04E7
38:06 H6.42E6 A3.01E7
100 %
50
0
9.3E6
4.7E6
0.0E0
33:00
34:00
35:00
36:00
37:00
38:00
Time
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2340.0,0.00%,F,F)
32:28 H1.36E7 A6.18E7
35:36 H1.08E7 A4.99E7
37:17 H1.28E7 A5.79E7
100 %
50
0
1.4E7
6.8E6
0.0E0
33:00
34:00
35:00
36:00
37:00
38:00
Time
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1640.0,0.00%,F,F)
32:28 H8.38E6 A3.84E7
35:36 H6.69E6 A3.12E7
37:17 H7.92E6 A3.58E7
100 %
50
0
8.4E6
4.2E6
0.0E0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1396.0,0.00%,F,F)
38:15 H1.46E7 A7.12E7
38:26 H9.21E6 A4.24E7
38:54 H2.11E7 A1.29E8
39:11 H1.45E7 A7.56E7
39:34 H1.02E7 A4.67E7
40:11 H6.10E6 A2.83E7
41:00 H1.58E7 A9.31E7
41:23 H1.47E7 A9.66E7
100 %
50
0
2.1E7
1.1E7
0.0E0
39:00
40:00
41:00
42:00
Time
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1712.0,0.00%,F,F)
38:15 H9.36E6 A4.54E7
38:26 H5.82E6 A2.68E7
38:54 H1.33E7 A8.23E7
39:11 H9.15E6 A4.79E7
39:34 H6.33E6 A2.91E7
40:11 H3.94E6 A1.81E7
41:00 H1.01E7 A5.90E7
41:23 H9.32E6 A6.12E7
1.3E7
6.7E6
0.0E0
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2340.0,0.00%,F,F)
38:36 H1.16E7 A5.30E7
39:01 H1.79E7 A8.14E7
41:09 H1.49E7 A6.95E7
41:21 H1.57E7 A7.37E7
1.8E7
9.0E6
0.0E0
339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1640.0,0.00%,F,F)
38:36 H7.00E6 A3.22E7
39:01 H1.10E7 A5.01E7
41:09 H9.43E6 A4.40E7
41:21 H9.55E6 A4.51E7
1.1E7
5.5E6
0.0E0

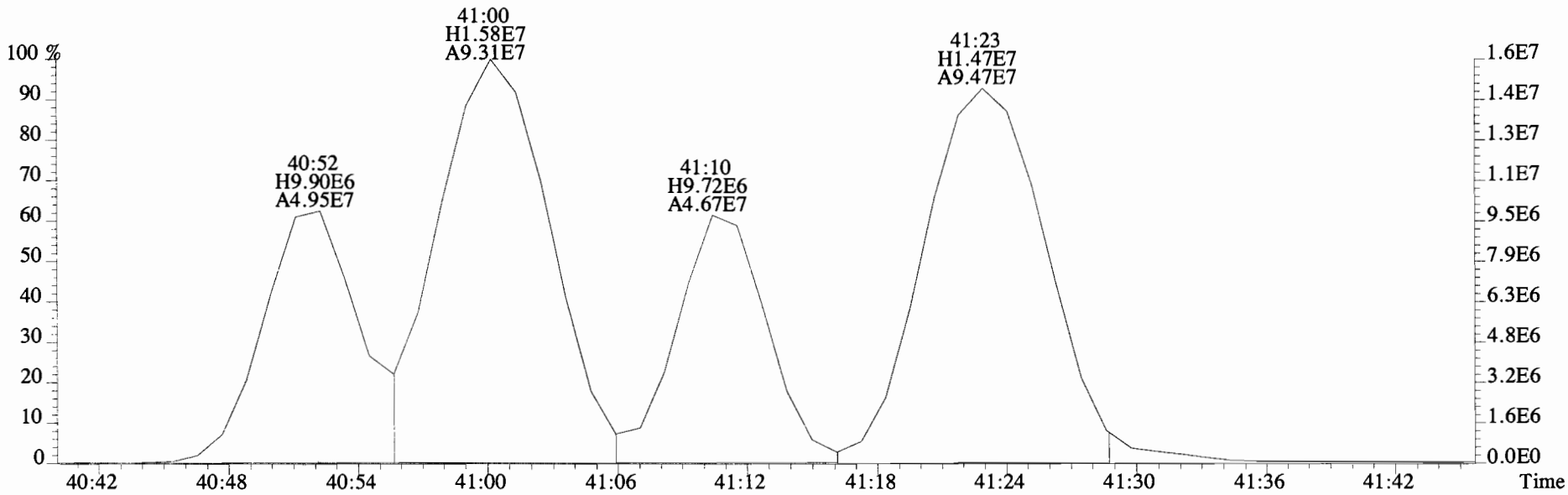
File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1396.0,0.00%,F,F)



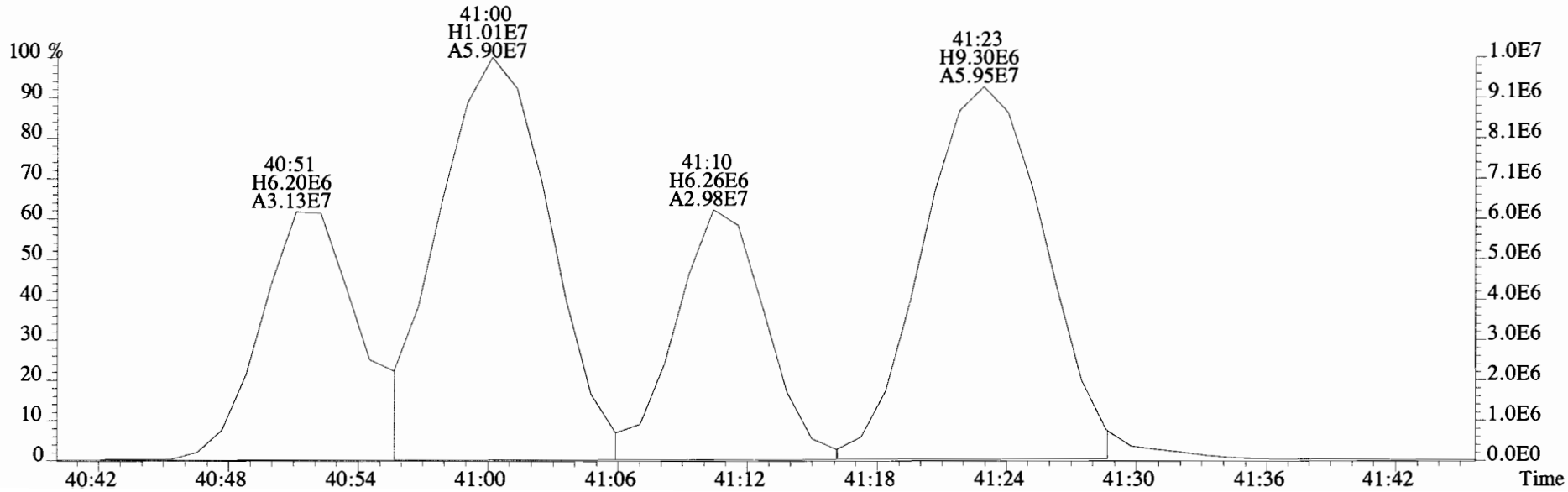
327.8775 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1712.0,0.00%,F,F)



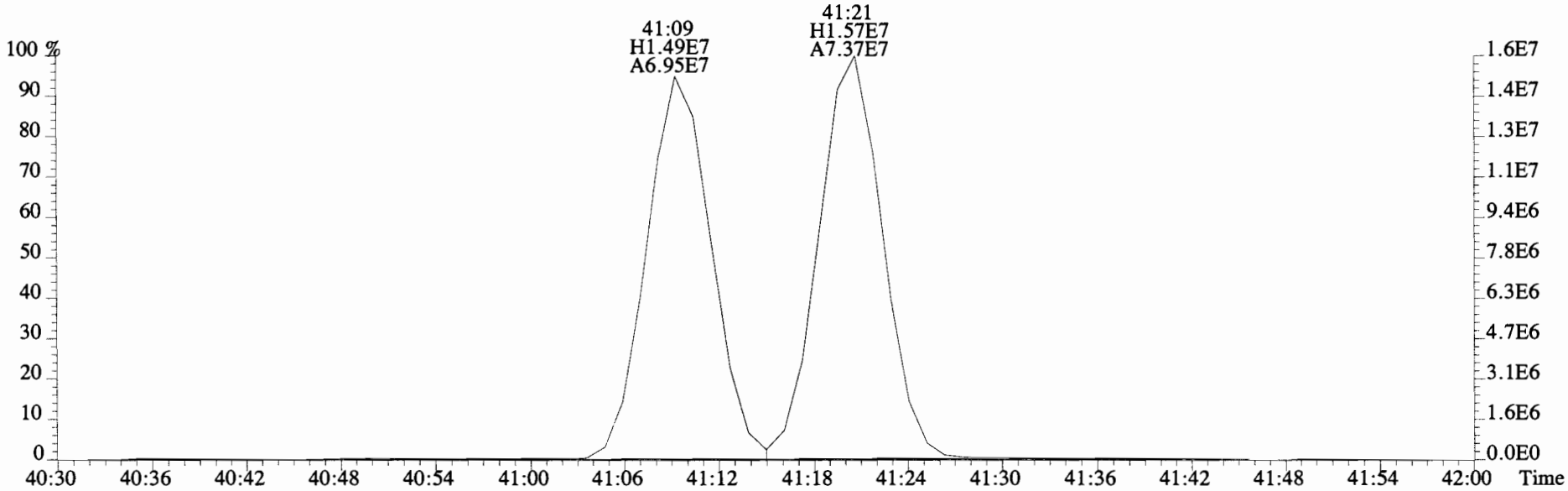
File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
325.8804 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1396.0,0.00%,F,F)



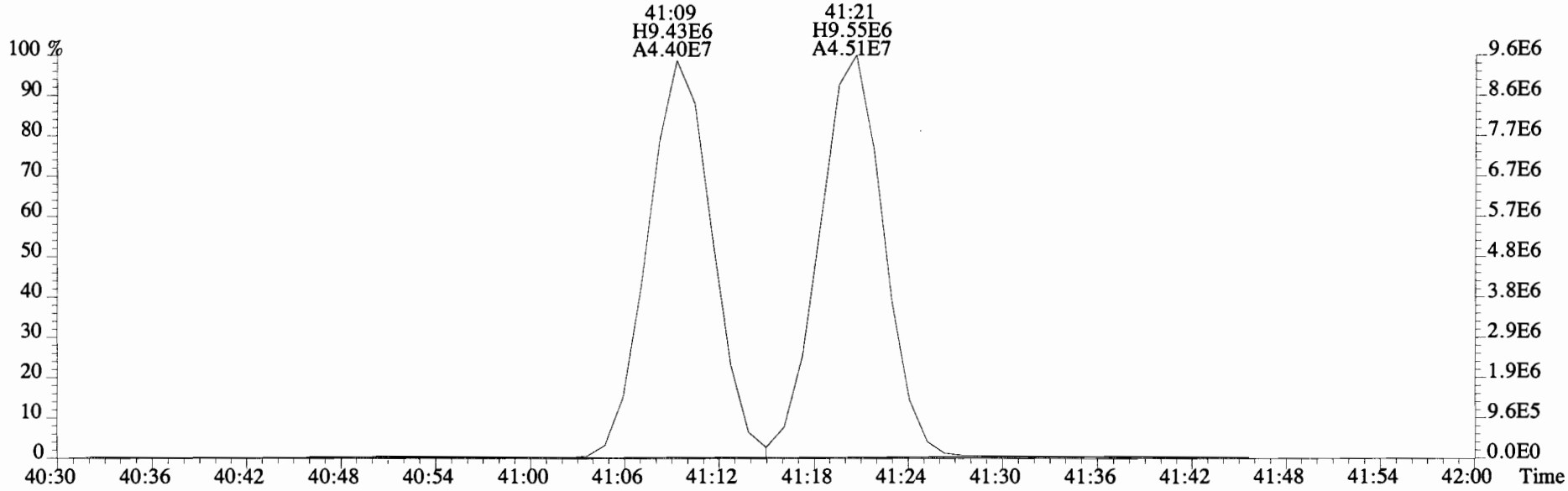
327.8775 S:4 F:3 SMO(1,3) BSUR(10000,15,-3.0) PKD(3,3,1,0.10%,1712.0,0.00%,F,F)

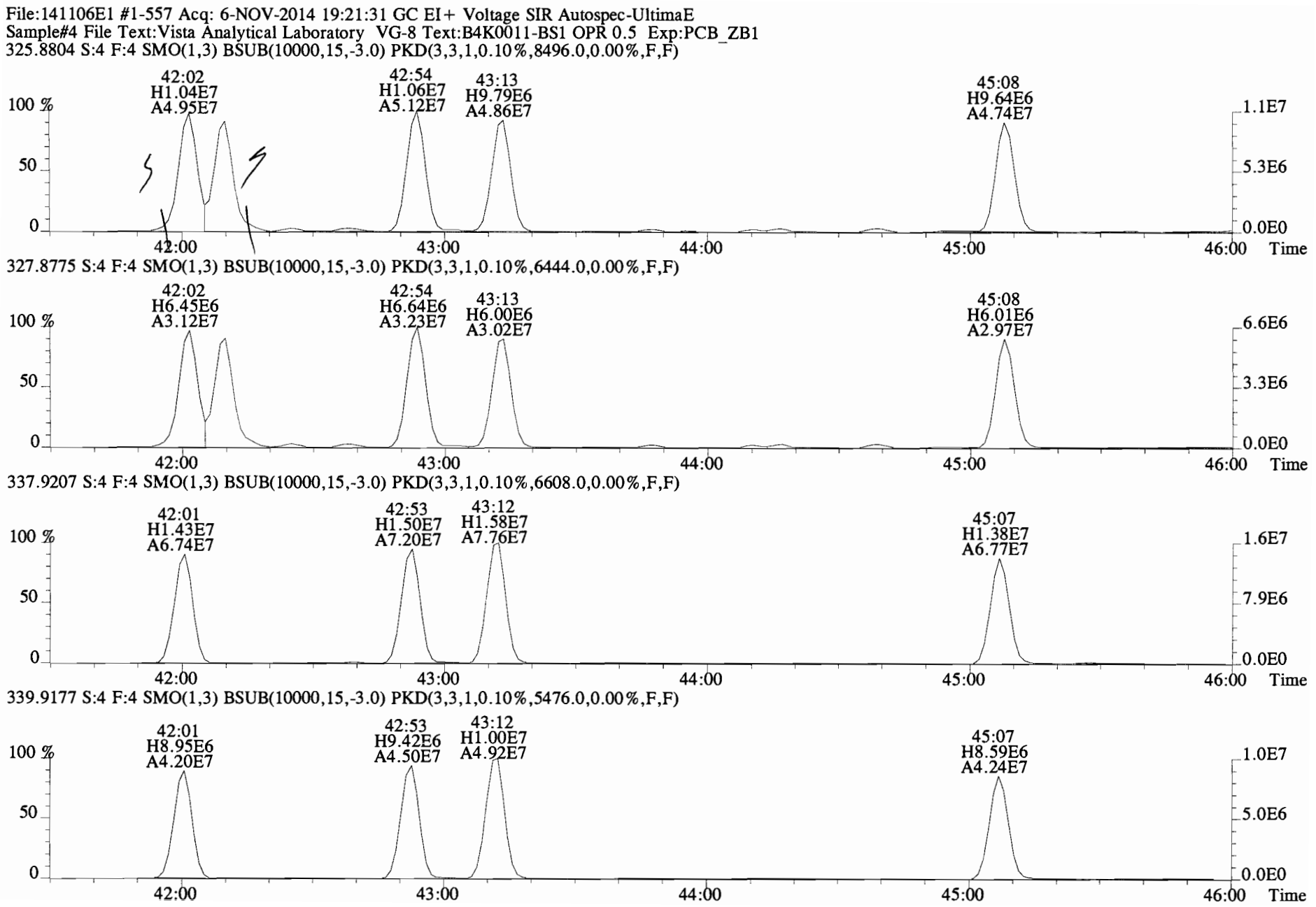


File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
337.9207 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2340.0,0.00%,F,F)

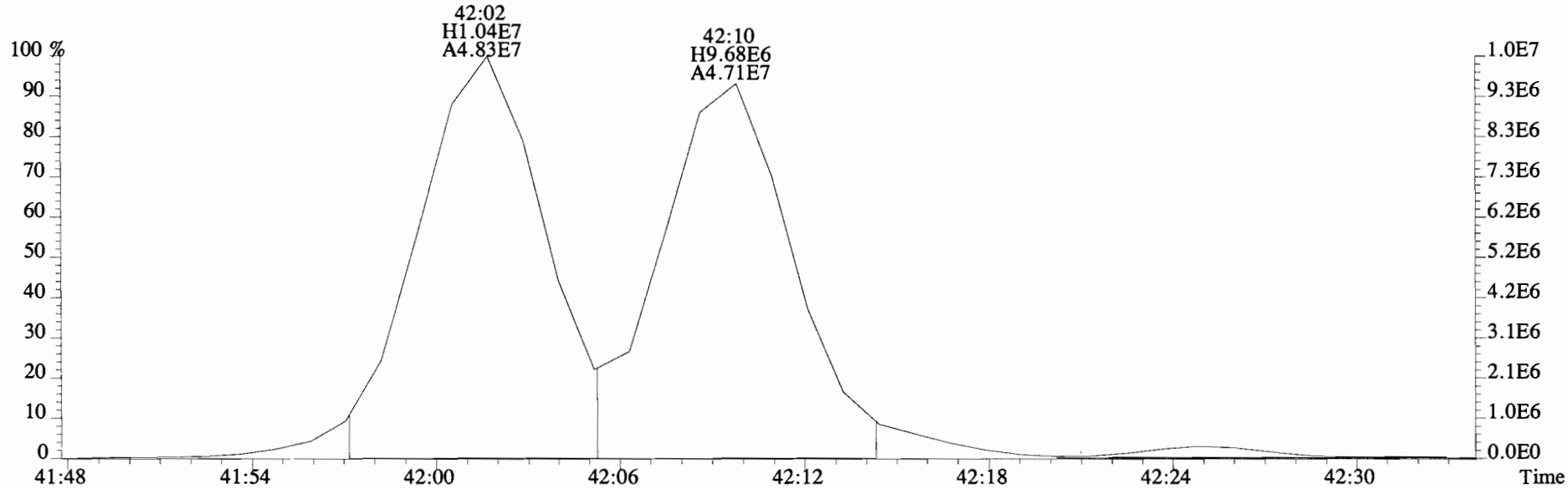


339.9177 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1640.0,0.00%,F,F)

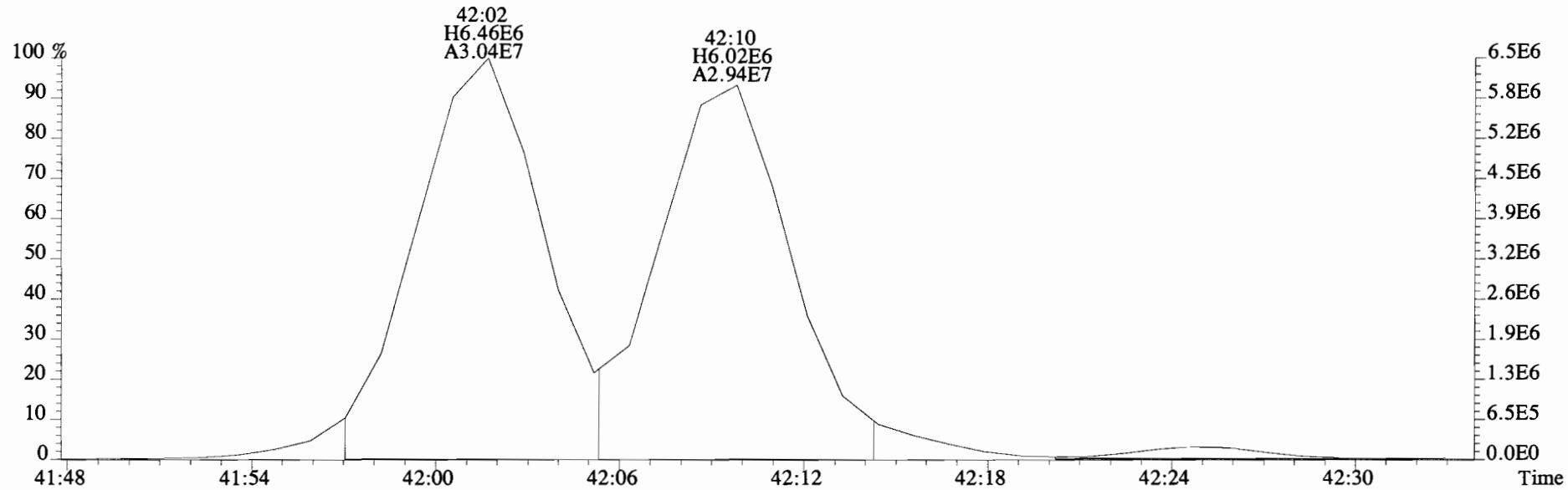



File:141106E1 #1-557 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
325.8804 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8496.0,0.00%,F,F)
42:02 H1.04E7 A4.95E7
42:54 H1.06E7 A5.12E7
43:13 H9.79E6 A4.86E7
45:08 H9.64E6 A4.74E7
100 %
50
0
1.1E7
5.3E6
0.0E0
42:00
43:00
44:00
45:00
46:00
Time
327.8775 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6444.0,0.00%,F,F)
42:02 H6.45E6 A3.12E7
42:54 H6.64E6 A3.23E7
43:13 H6.00E6 A3.02E7
45:08 H6.01E6 A2.97E7
6.6E6
3.3E6
337.9207 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6608.0,0.00%,F,F)
42:01 H1.43E7 A6.74E7
42:53 H1.50E7 A7.20E7
43:12 H1.58E7 A7.76E7
45:07 H1.38E7 A6.77E7
1.6E7
7.9E6
339.9177 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5476.0,0.00%,F,F)
42:01 H8.95E6 A4.20E7
42:53 H9.42E6 A4.50E7
43:12 H1.00E7 A4.92E7
45:07 H8.59E6 A4.24E7
1.0E7
5.0E6

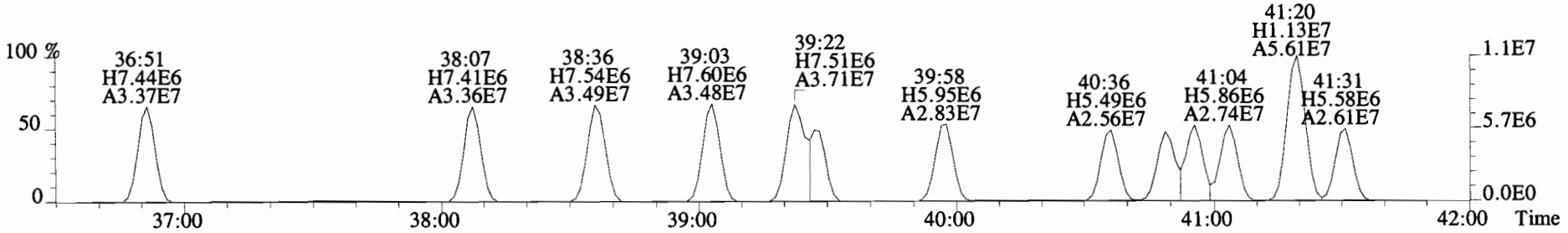
File:141106E1 #1-557 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
325.8804 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8496.0,0.00%,F,F)



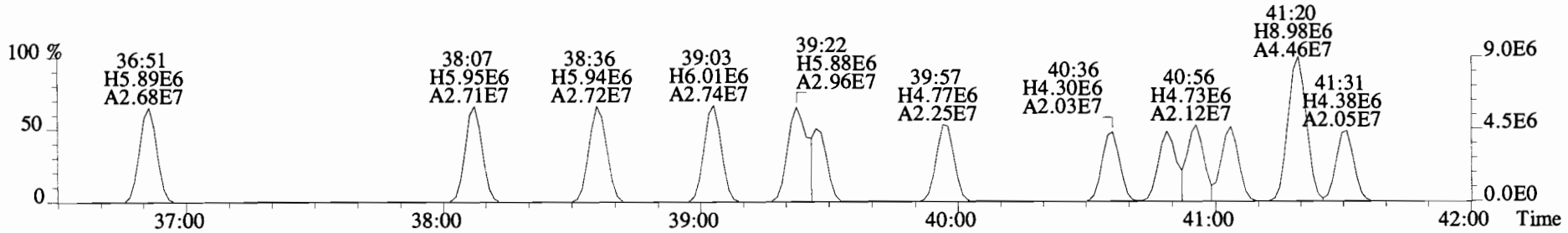
327.8775 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6444.0,0.00%,F,F)



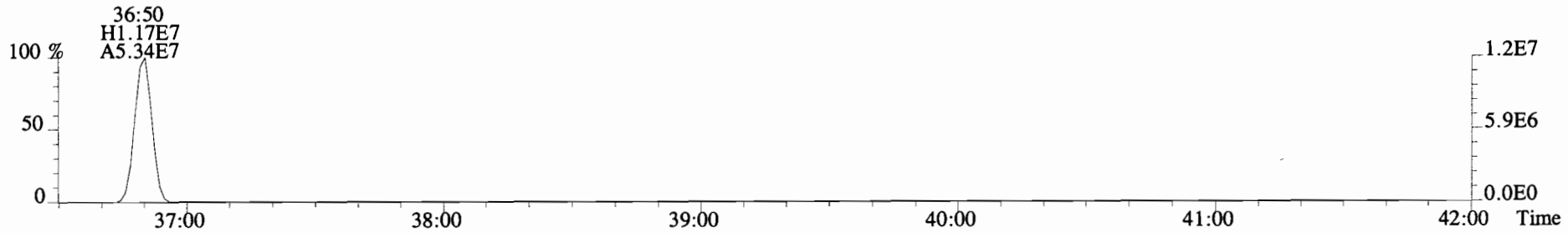
File:141106E1 #1-752 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
359.8415 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1232.0,0.00%,F,F)



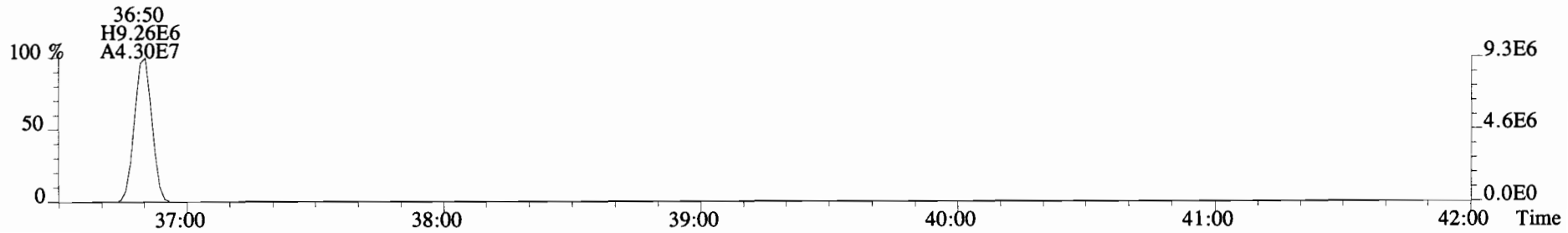
361.8385 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1256.0,0.00%,F,F)

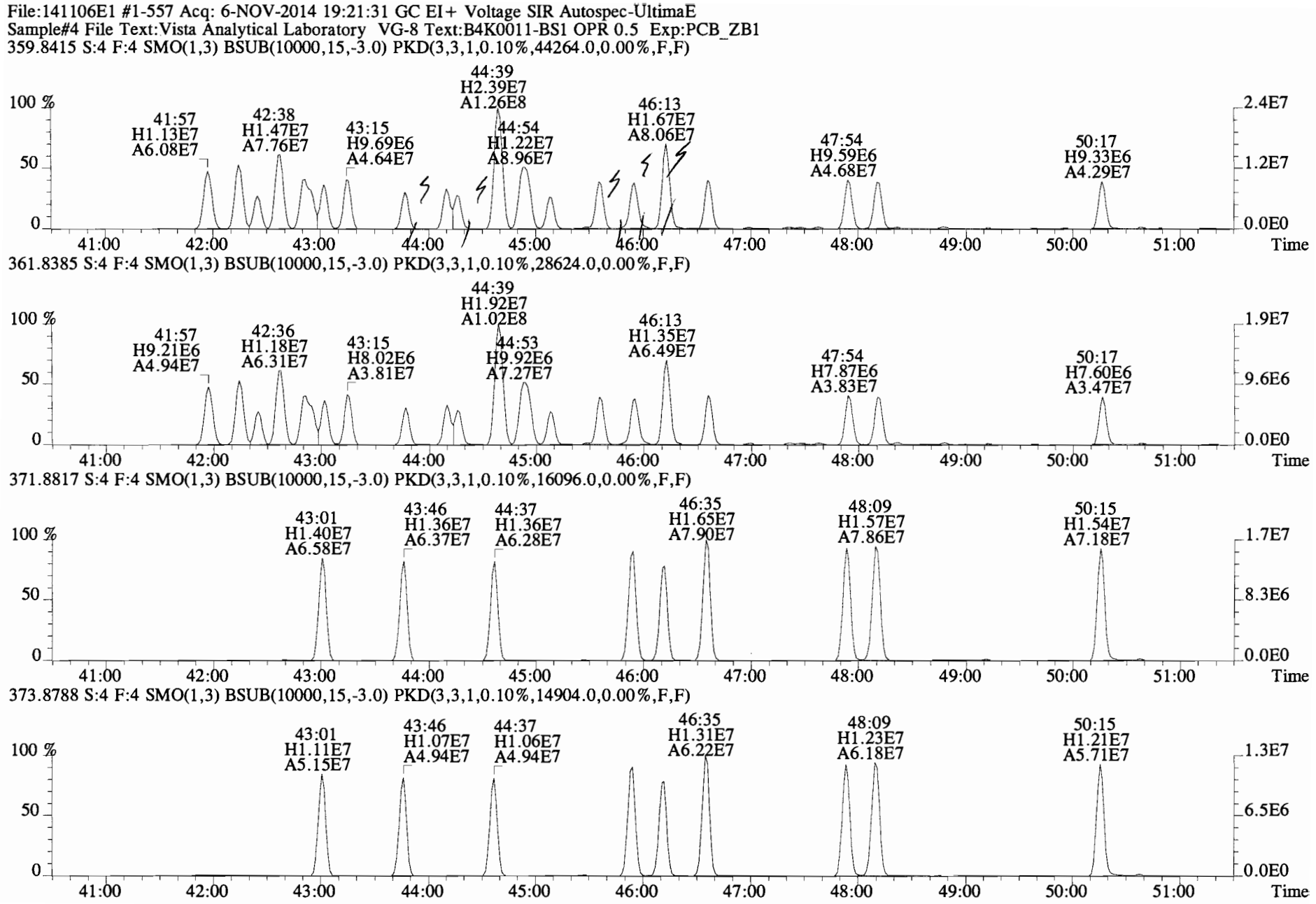


371.8817 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1612.0,0.00%,F,F)

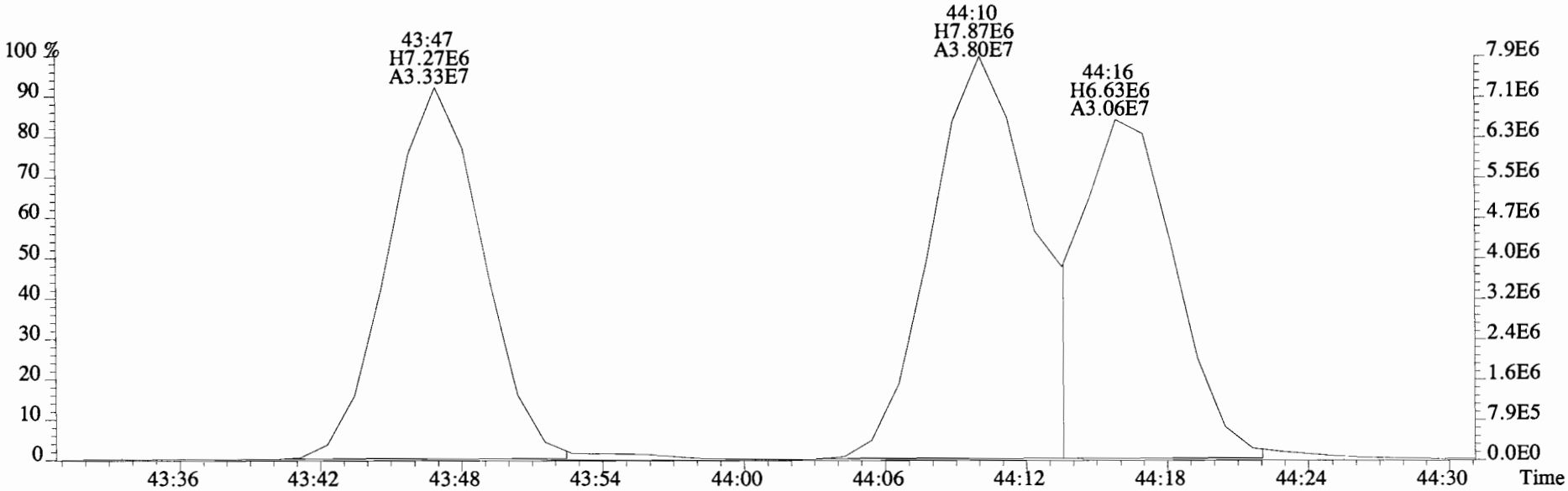


373.8788 S:4 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1720.0,0.00%,F,F)

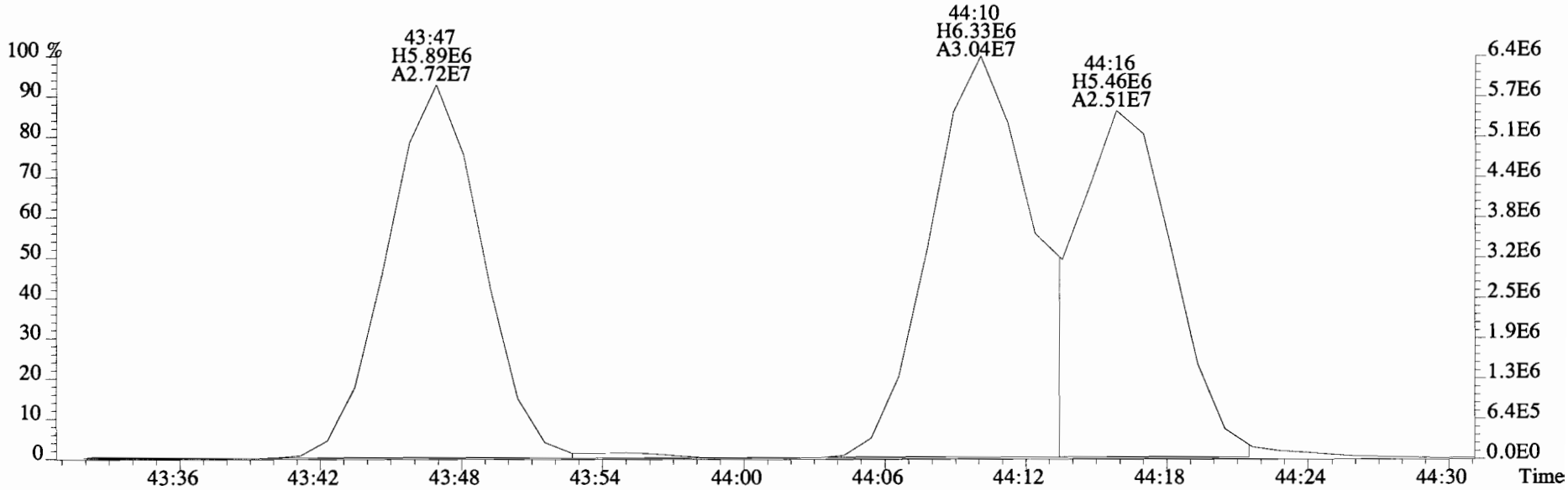



File:141106E1 #1-557 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,44264.0,0.00%,F,F)
41:57 H1.13E7 A6.08E7
42:38 H1.47E7 A7.76E7
43:15 H9.69E6 A4.64E7
44:39 H2.39E7 A1.26E8
44:54 H1.22E7 A8.96E7
46:13 H1.67E7 A8.06E7
47:54 H9.59E6 A4.68E7
50:17 H9.33E6 A4.29E7
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,28624.0,0.00%,F,F)
41:57 H9.21E6 A4.94E7
42:36 H1.18E7 A6.31E7
43:15 H8.02E6 A3.81E7
44:39 H1.92E7 A1.02E8
44:53 H9.92E6 A7.27E7
46:13 H1.35E7 A6.49E7
47:54 H7.87E6 A3.83E7
50:17 H7.60E6 A3.47E7
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16096.0,0.00%,F,F)
43:01 H1.40E7 A6.58E7
43:46 H1.36E7 A6.37E7
44:37 H1.36E7 A6.28E7
46:35 H1.65E7 A7.90E7
48:09 H1.57E7 A7.86E7
50:15 H1.54E7 A7.18E7
373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,14904.0,0.00%,F,F)
43:01 H1.11E7 A5.15E7
43:46 H1.07E7 A4.94E7
44:37 H1.06E7 A4.94E7
46:35 H1.31E7 A6.22E7
48:09 H1.23E7 A6.18E7
50:15 H1.21E7 A5.71E7
100 %
50
0
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
51:00
Time
2.4E7
1.2E7
0.0E0
1.9E7
9.6E6
1.7E7
8.3E6
1.3E7
6.5E6

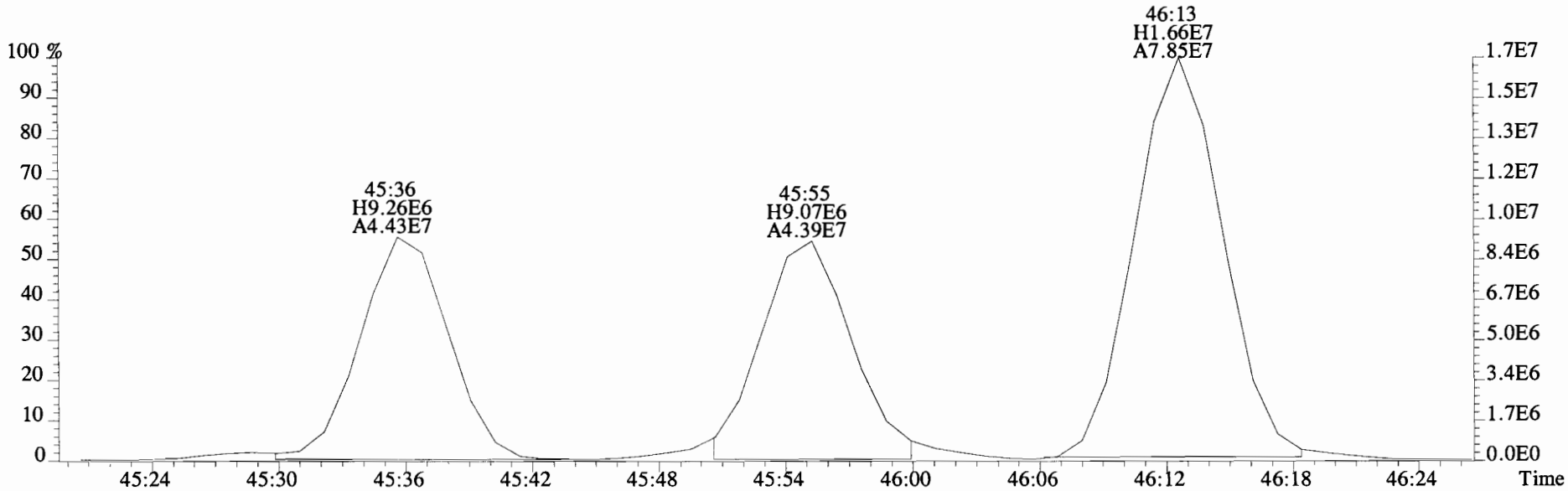
File:141106E1 #1-557 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,44264.0,0.00%,F,F)



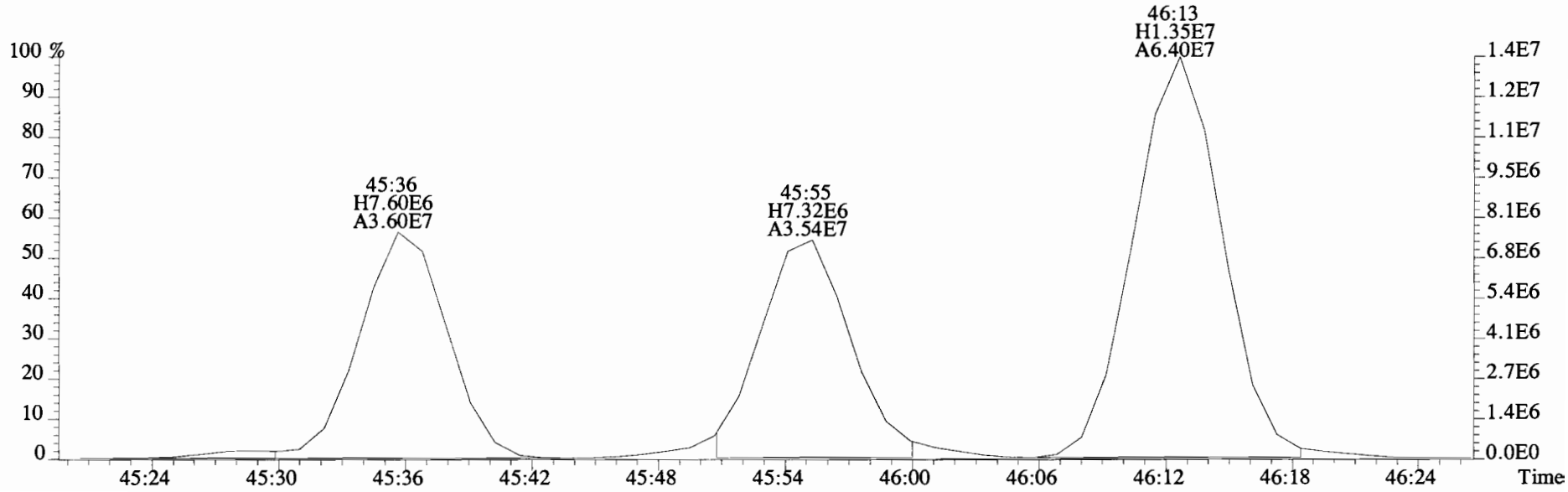
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,28624.0,0.00%,F,F)



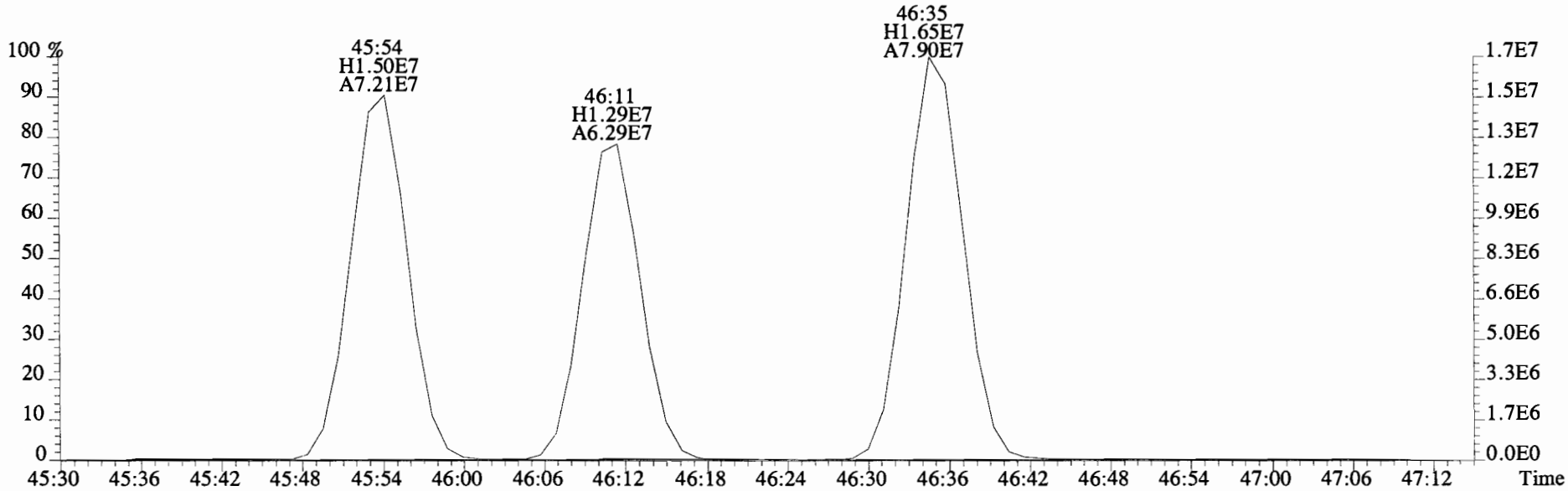
File:141106E1 #1-557 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
359.8415 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,44264.0,0.00%,F,F)



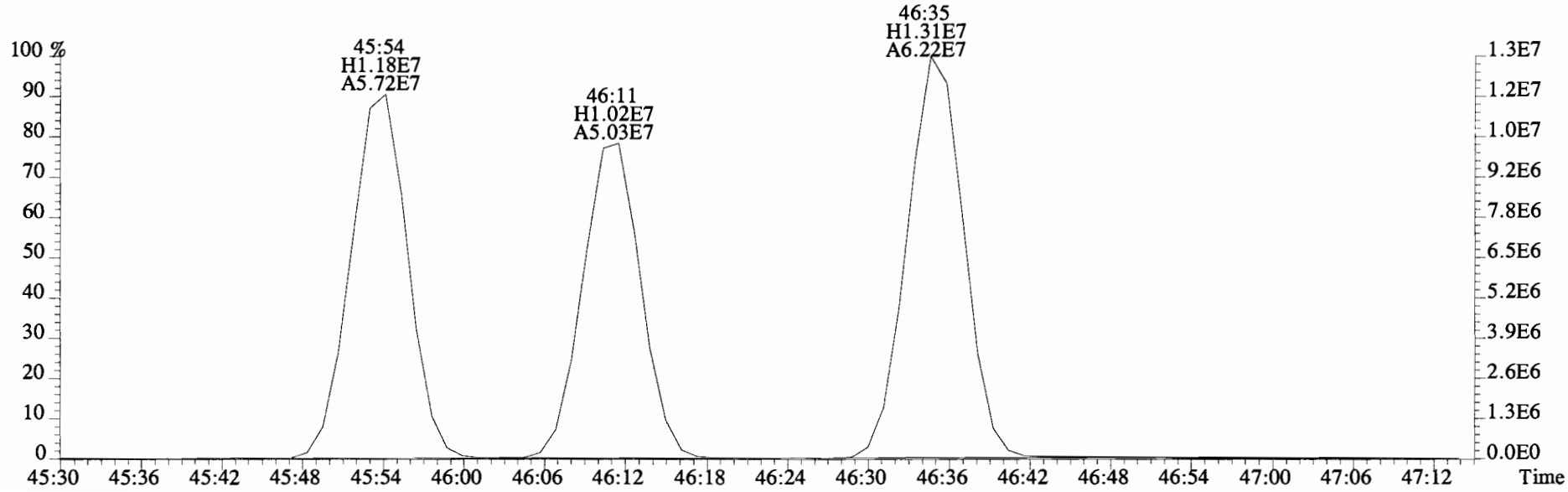
361.8385 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,28624.0,0.00%,F,F)

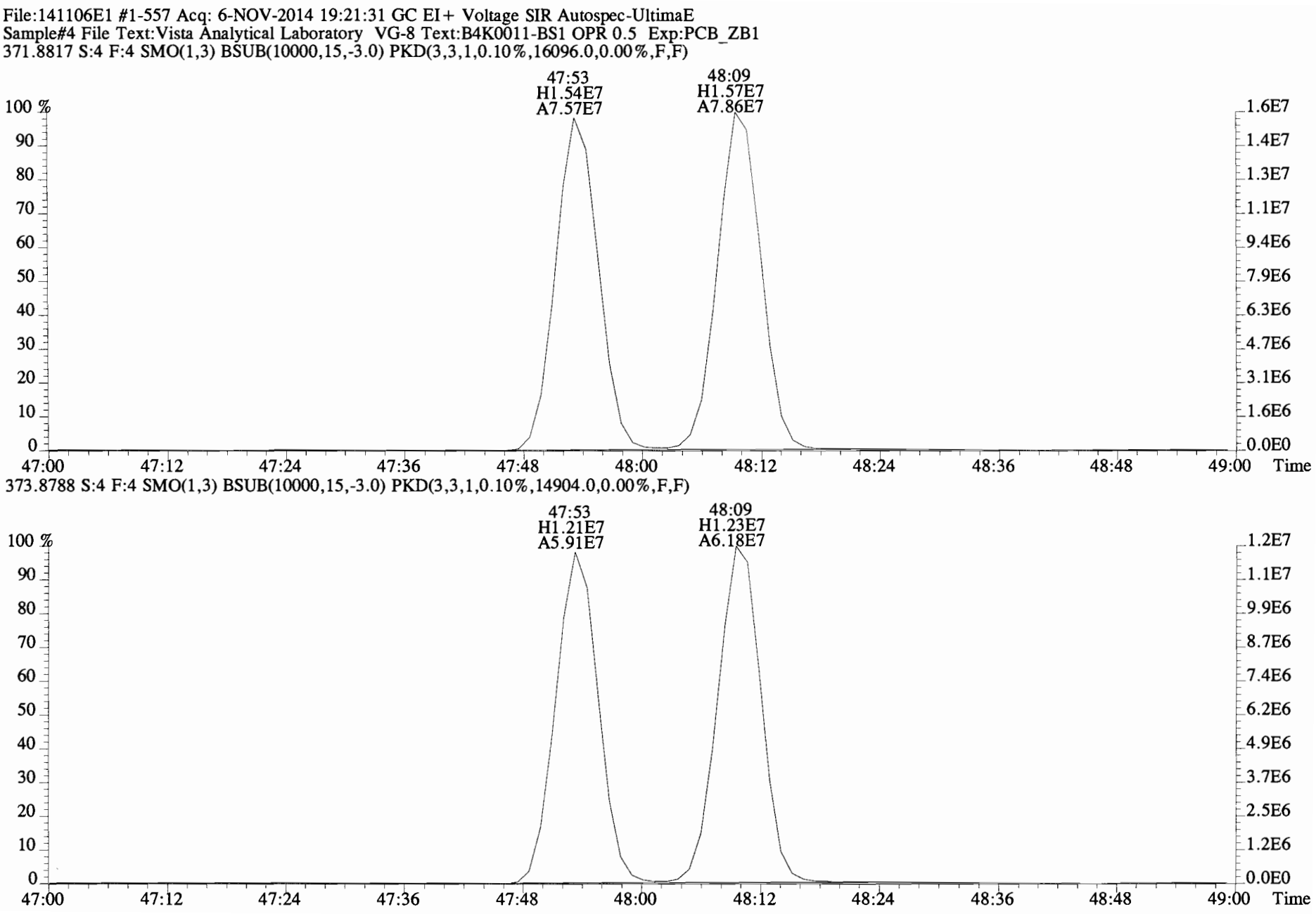


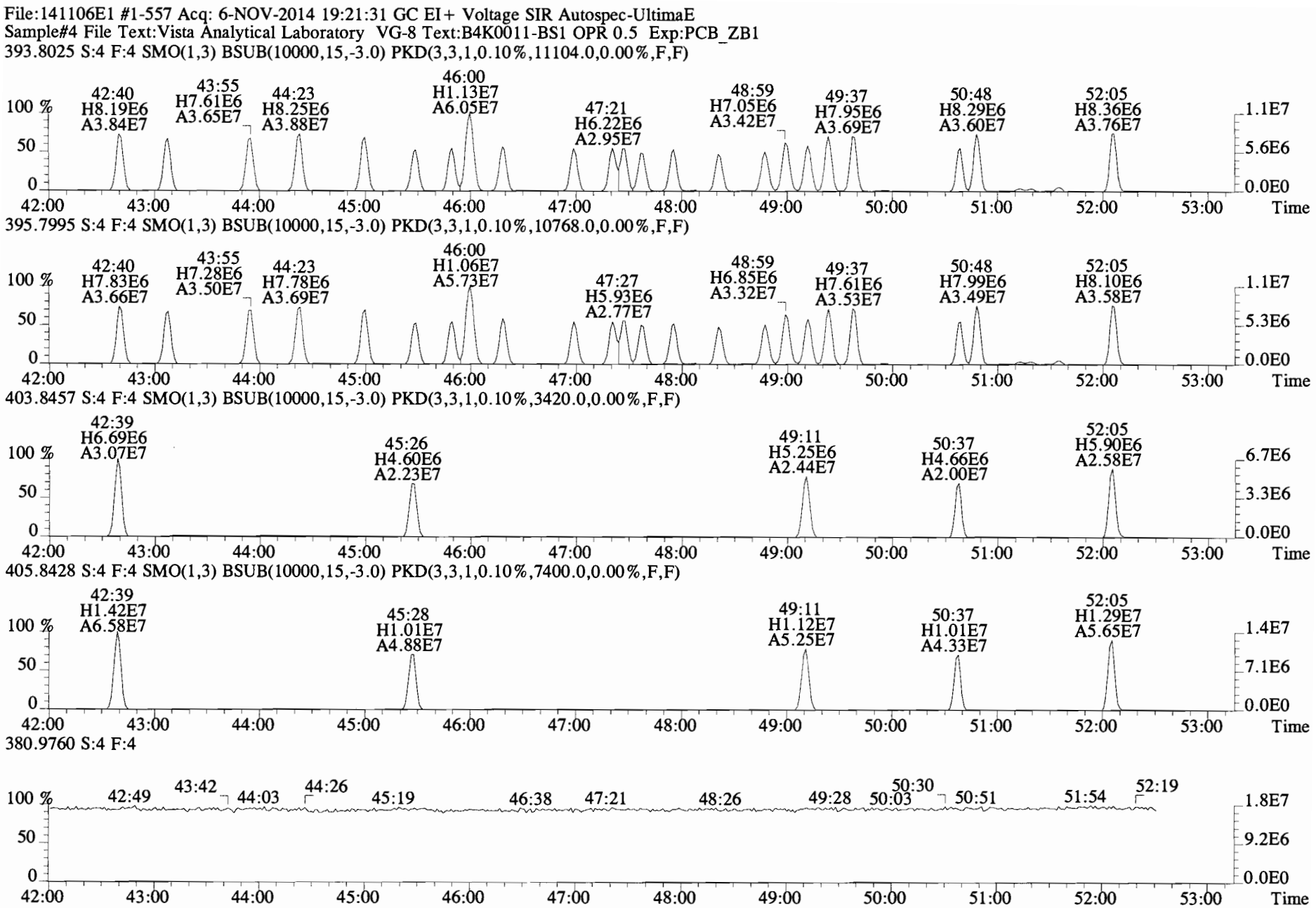
File:141106E1 #1-557 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16096.0,0.00%,F,F)

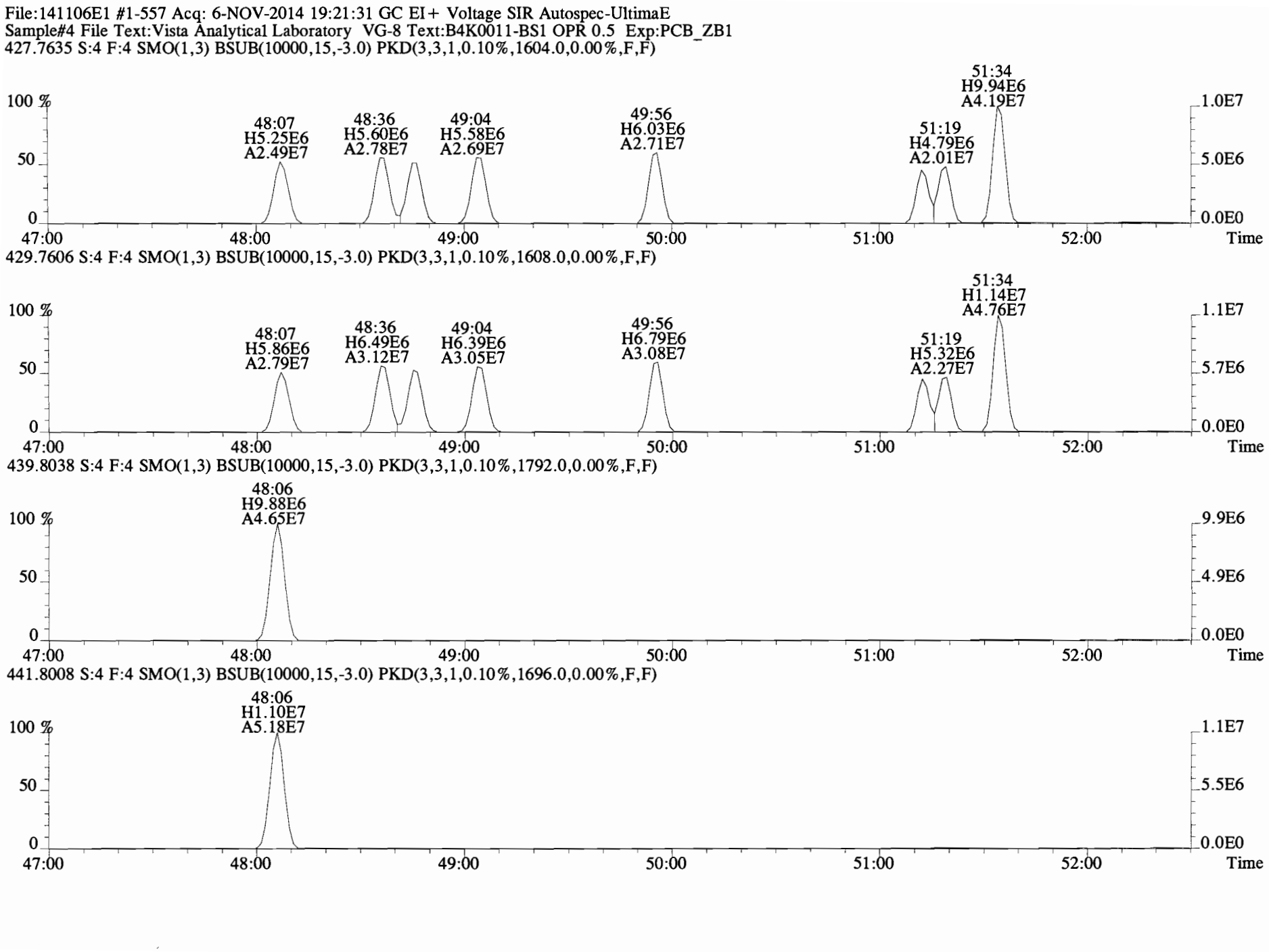


373.8788 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,14904.0,0.00%,F,F)

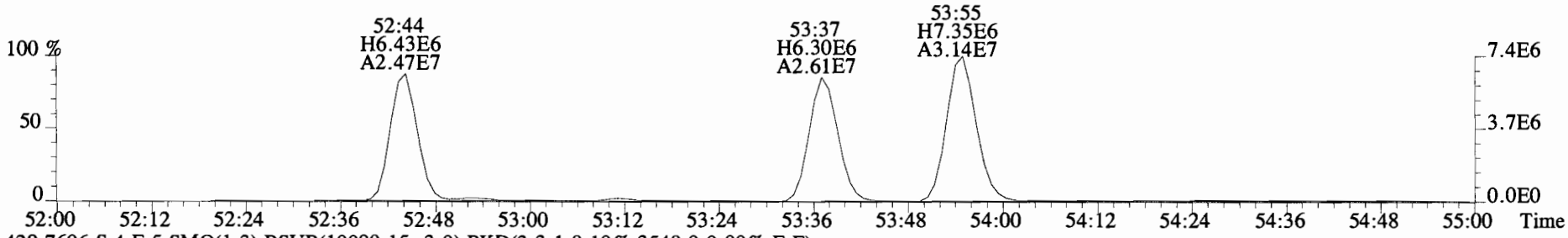



File:141106E1 #1-557 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
371.8817 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16096.0,0.00%,F,F)
47:53
H1.54E7
A7.57E7
48:09
H1.57E7
A7.86E7
100 %
90
80
70
60
50
40
30
20
10
0
1.6E7
1.4E7
1.3E7
1.1E7
9.4E6
7.9E6
6.3E6
4.7E6
3.1E6
1.6E6
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(3,3,1,0.10%,14904.0,0.00%,F,F)
47:53
H1.21E7
A5.91E7
48:09
H1.23E7
A6.18E7
100 %
90
80
70
60
50
40
30
20
10
0
1.2E7
1.1E7
9.9E6
8.7E6
7.4E6
6.2E6
4.9E6
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

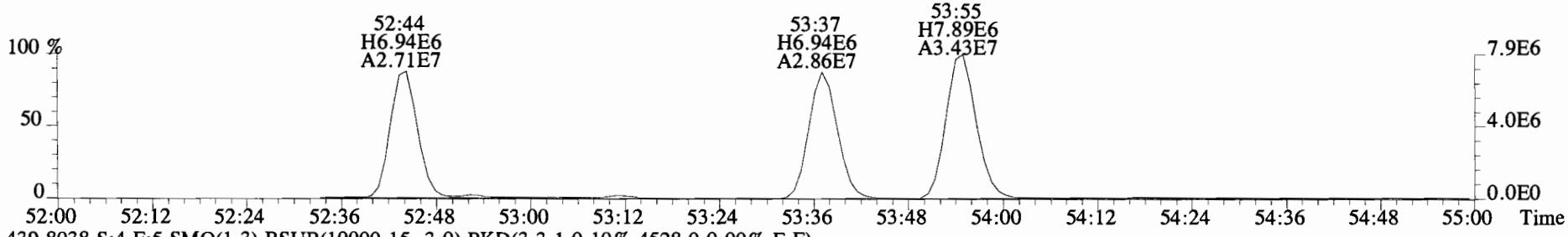

File:141106E1 #1-557 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
393.8025 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11104.0,0.00%,F,F)
42:40 H8.19E6 A3.84E7
43:55 H7.61E6 A3.65E7
44:23 H8.25E6 A3.88E7
46:00 H1.13E7 A6.05E7
47:21 H6.22E6 A2.95E7
48:59 H7.05E6 A3.42E7
49:37 H7.95E6 A3.69E7
50:48 H8.29E6 A3.60E7
52:05 H8.36E6 A3.76E7
100 %
50
0
1.1E7
5.6E6
0.0E0
42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 51:00 52:00 53:00 Time
395.7995 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10768.0,0.00%,F,F)
42:40 H7.83E6 A3.66E7
43:55 H7.28E6 A3.50E7
44:23 H7.78E6 A3.69E7
46:00 H1.06E7 A5.73E7
47:27 H5.93E6 A2.77E7
48:59 H6.85E6 A3.32E7
49:37 H7.61E6 A3.53E7
50:48 H7.99E6 A3.49E7
52:05 H8.10E6 A3.58E7
100 %
50
0
1.1E7
5.3E6
0.0E0
42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 51:00 52:00 53:00 Time
403.8457 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3420.0,0.00%,F,F)
42:39 H6.69E6 A3.07E7
45:26 H4.60E6 A2.23E7
49:11 H5.25E6 A2.44E7
50:37 H4.66E6 A2.00E7
52:05 H5.90E6 A2.58E7
100 %
50
0
6.7E6
3.3E6
0.0E0
42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 51:00 52:00 53:00 Time
405.8428 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7400.0,0.00%,F,F)
42:39 H1.42E7 A6.58E7
45:28 H1.01E7 A4.88E7
49:11 H1.12E7 A5.25E7
50:37 H1.01E7 A4.33E7
52:05 H1.29E7 A5.65E7
100 %
50
0
1.4E7
7.1E6
0.0E0
42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 51:00 52:00 53:00 Time
380.9760 S:4 F:4
42:49 43:42 44:03 44:26 45:19 46:38 47:21 48:26 49:28 50:03 50:30 50:51 51:54 52:19
100 %
50
0
1.8E7
9.2E6
0.0E0
42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 51:00 52:00 53:00 Time


File:141106E1 #1-557 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
427.7635 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1604.0,0.00%,F,F)
48:07 H5.25E6 A2.49E7
48:36 H5.60E6 A2.78E7
49:04 H5.58E6 A2.69E7
49:56 H6.03E6 A2.71E7
51:19 H4.79E6 A2.01E7
51:34 H9.94E6 A4.19E7
100 %
50
0
1.0E7
5.0E6
0.0E0
47:00
48:00
49:00
50:00
51:00
52:00
Time
429.7606 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1608.0,0.00%,F,F)
48:07 H5.86E6 A2.79E7
48:36 H6.49E6 A3.12E7
49:04 H6.39E6 A3.05E7
49:56 H6.79E6 A3.08E7
51:19 H5.32E6 A2.27E7
51:34 H1.14E7 A4.76E7
100 %
50
0
1.1E7
5.7E6
0.0E0
47:00
48:00
49:00
50:00
51:00
52:00
Time
439.8038 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1792.0,0.00%,F,F)
48:06 H9.88E6 A4.65E7
100 %
50
0
9.9E6
4.9E6
0.0E0
47:00
48:00
49:00
50:00
51:00
52:00
Time
441.8008 S:4 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1696.0,0.00%,F,F)
48:06 H1.10E7 A5.18E7
100 %
50
0
1.1E7
5.5E6
0.0E0
47:00
48:00
49:00
50:00
51:00
52:00
Time

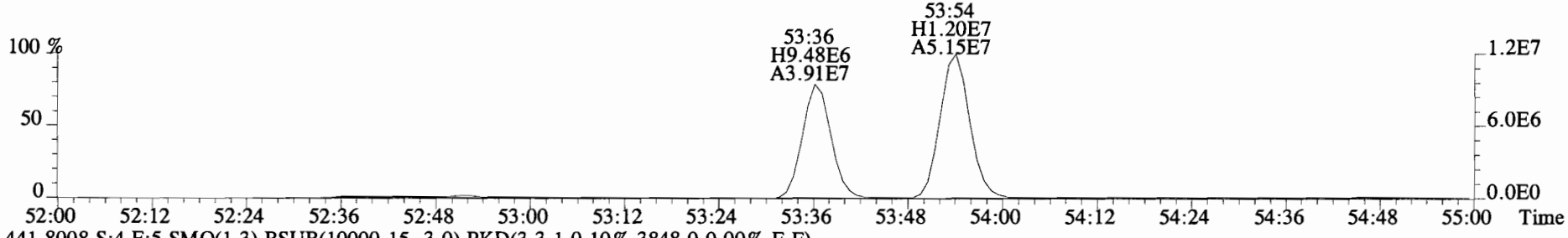
File:141106E1 #1-435 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
427.7635 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3228.0,0.00%,F,F)



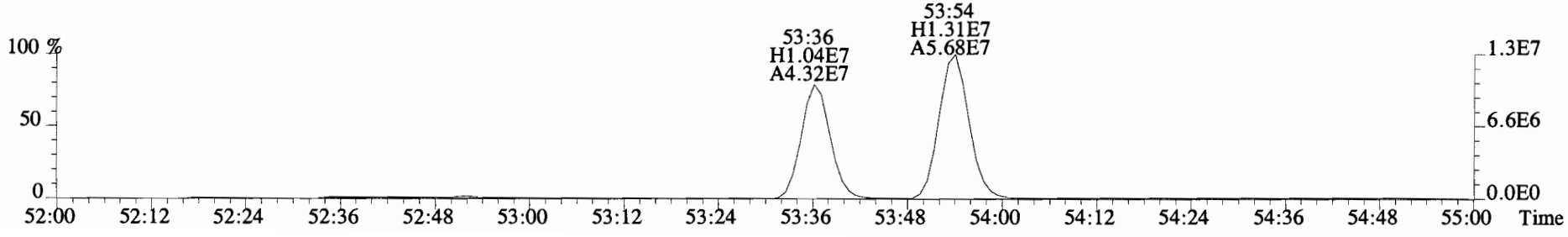
429.7606 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3540.0,0.00%,F,F)



439.8038 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4528.0,0.00%,F,F)

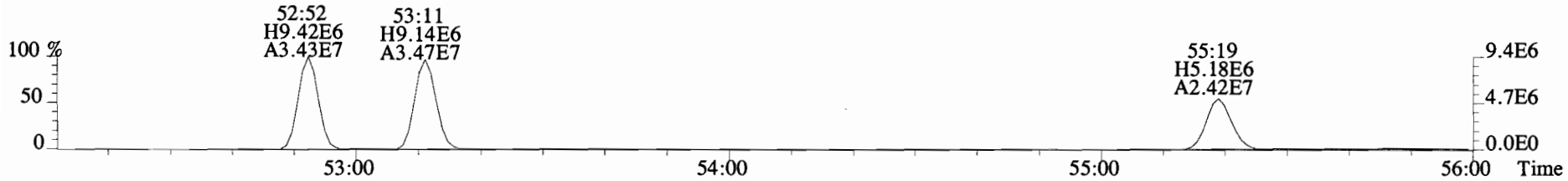


441.8008 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3848.0,0.00%,F,F)

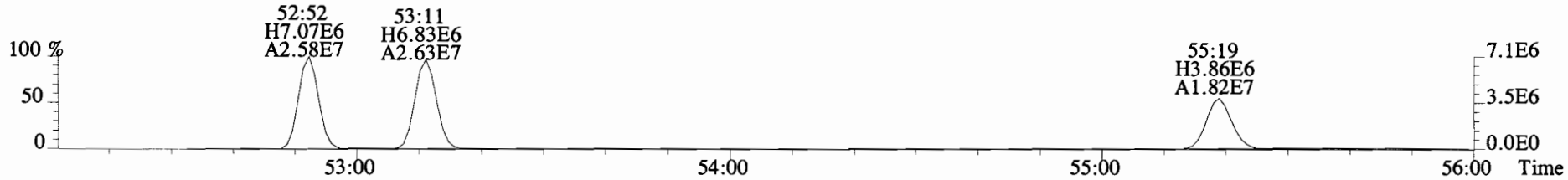


File:141106E1 #1-435 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1

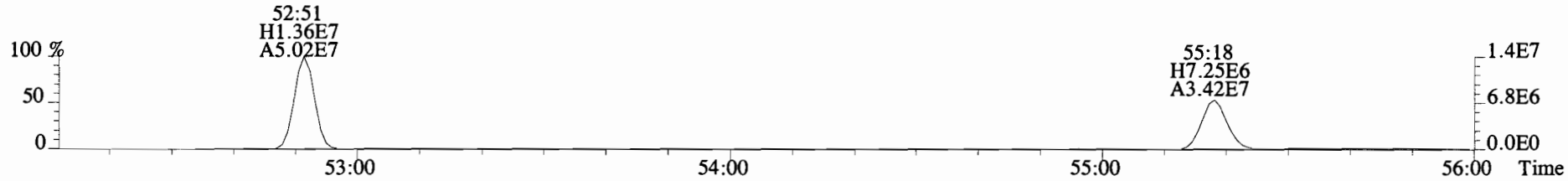
463.7216 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16872.0,0.00%,F,F)



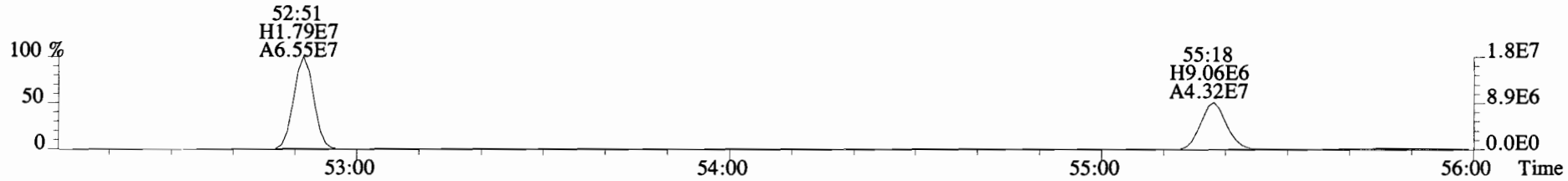
465.7186 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10412.0,0.00%,F,F)



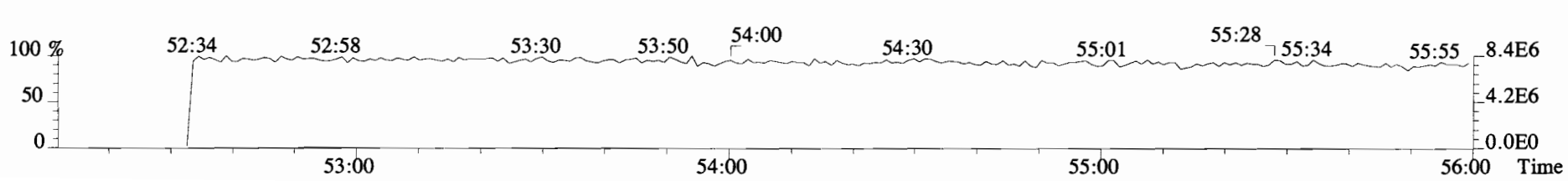
473.7648 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18284.0,0.00%,F,F)



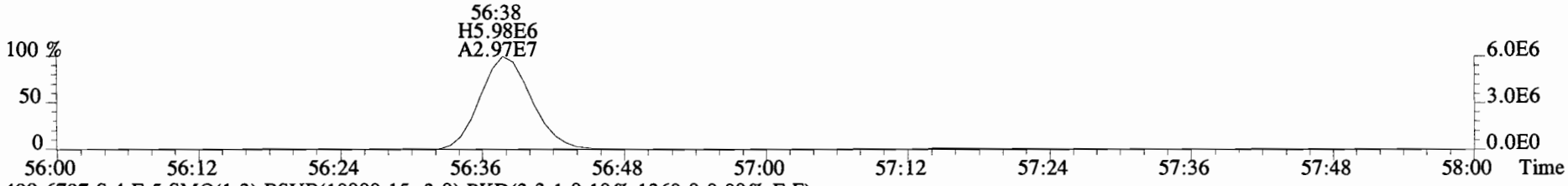
475.7619 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,24344.0,0.00%,F,F)



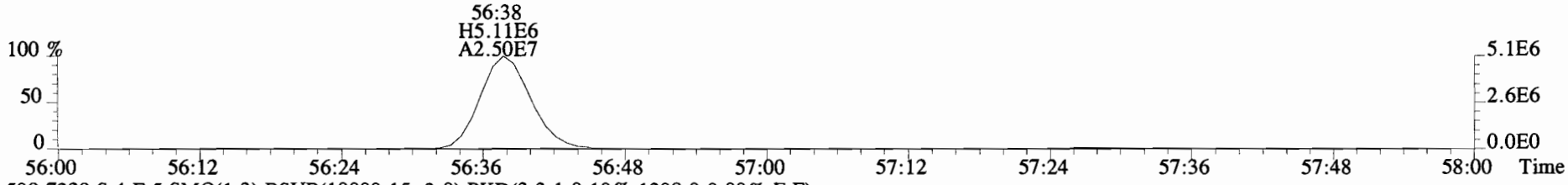
492.9697 S:4 F:5



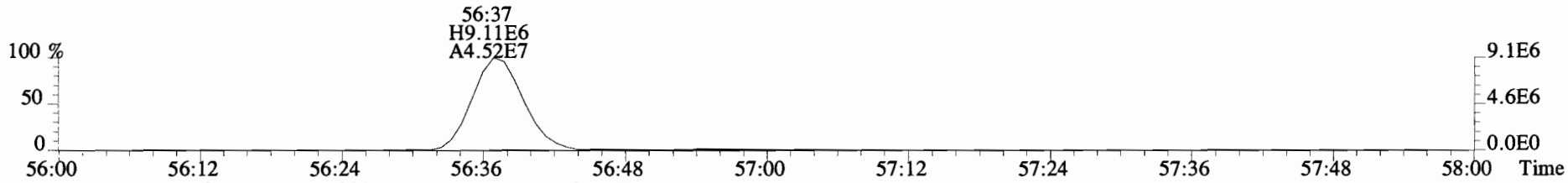
File:141106E1 #1-435 Acq: 6-NOV-2014 19:21:31 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Vista Analytical Laboratory VG-8 Text:B4K0011-BS1 OPR 0.5 Exp:PCB_ZB1
497.6826 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1484.0,0.00%,F,F)



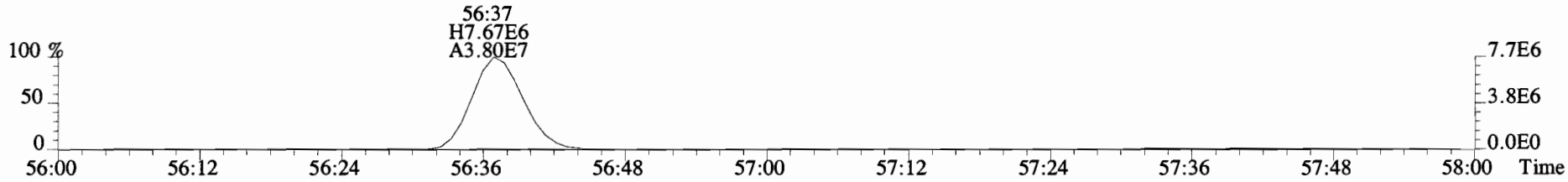
499.6797 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1360.0,0.00%,F,F)



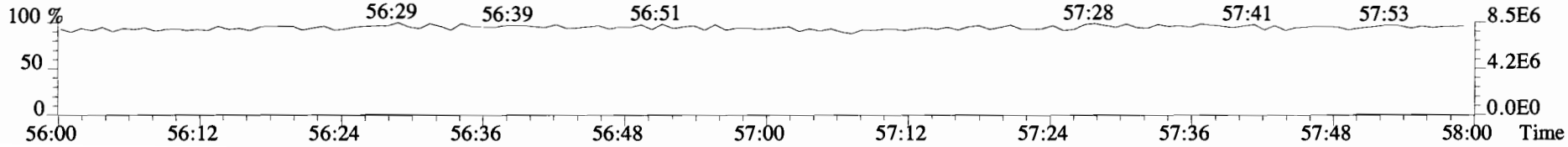
509.7229 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1308.0,0.00%,F,F)



511.7199 S:4 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1508.0,0.00%,F,F)



492.9697 S:4 F:5



Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	*	*	n	NotF¶	1.25	*		3230	2.5	6.59	*	0.996	1.006
Mono	PCB-2	*	*	n	NotF¶	1.18	*		3230	2.5	7.03	*	0.983	0.993
Mono	PCB-3	*	*	n	NotF¶	1.22	*		3230	2.5	6.81	*	0.996	1.006
Di	PCB-4/10	*	*	n	NotF¶	1.55	*		12300	2.5	24.1	*	0.998	1.008
Di	PCB-7/9	*	*	n	NotF¶	1.27	*		12300	2.5	19.6	*	0.865	0.873
Di	PCB-6	*	*	n	NotF¶	1.26	*		12300	2.5	19.7	*	0.890	0.899
Di	PCB-5/8	*	*	n	NotF¶	1.23	*		12300	2.5	20.2	*	0.906	0.916
Di	PCB-14	*	*	n	NotF¶	1.23	*		12300	2.5	17.6	*	0.949	0.959
Di	PCB-11	4.70e+05	1.90	n	25:08	1.16	28.0	R	*	2.5	*	1.001	0.996	1.006
Di	PCB-12/13	*	*	n	NotF¶	1.10	*		12300	2.5	19.7	*	1.010	1.020
Di	PCB-15	*	*	n	NotF¶	1.21	*		12300	2.5	17.9	*	1.024	1.034
Tri	PCB-19	*	*	n	NotF¶	1.30	*		2980	2.5	5.54	*	0.996	1.006
Tri	PCB-30	*	*	n	NotF¶	1.83	*		2980	2.5	3.93	*	1.032	1.042
Tri	PCB-18	1.42e+05	1.11	y	25:45	0.86	12.1		*	2.5	*	0.954	0.949	0.959
Tri	PCB-17	4.93e+04	1.16	y	25:56	0.90	4.02		*	2.5	*	0.961	0.955	0.965
Tri	PCB-24/27	*	*	n	NotF¶	1.18	*		2980	2.5	3.78	*	0.976	0.986
Tri	PCB-16/32	1.25e+05	1.03	y	27:00	1.03	8.92		*	2.5	*	1.000	0.995	1.005
Tri	PCB-34	*	*	n	NotF¶	1.26	*		1630	2.5	2.24	*	0.956	0.966
Tri	PCB-23	*	*	n	NotF¶	1.31	*		1630	2.5	2.15	*	0.959	0.969
Tri	PCB-29	*	*	n	NotF¶	1.33	*		1630	2.5	2.12	*	0.967	0.977
Tri	PCB-26	*	*	n	NotF¶	1.29	*		1630	2.5	2.18	*	0.974	0.984
Tri	PCB-25	*	*	n	NotF¶	1.34	*		1630	2.5	2.10	*	0.980	0.990
Tri	PCB-31	1.84e-05	1.02	y	28:50	1.42	9.46		*	2.5	*	0.997	0.992	1.002
Tri	PCB-28	1.71e+05	0.91	y	28:57	1.38	9.06		*	2.5	*	1.001	0.996	1.006
Tri	PCB-20/21/33	1.63e+05	1.04	y	29:34	1.31	9.07		*	2.5	*	1.022	1.017	1.027
Tri	PCB-22	8.60e+04	1.04	y	29:59	1.32	4.76		*	2.5	*	1.037	1.032	1.042
Tri	PCB-36	*	*	n	NotF¶	1.38	*		1630	2.5	2.39	*	0.929	0.939
Tri	PCB-39	*	*	n	NotF¶	1.42	*		1630	2.5	2.32	*	0.943	0.953
Tri	PCB-38	*	*	n	NotF¶	1.35	*		1630	2.5	2.43	*	0.967	0.976
Tri	PCB-35	*	*	n	NotF¶	1.38	*		1630	2.5	2.39	*	0.982	0.992
Tri	PCB-37	*	*	n	NotF¶	1.39	*		1630	2.5	2.37	*	0.996	1.006
Tetra	PCB-54	*	*	n	NotF¶	1.20	*		2030	2.5	3.02	*	0.996	1.006
Tetra	PCB-50	*	*	n	NotF¶	0.97	*		2030	2.5	3.74	*	1.037	1.047
Tetra	PCB-53	*	*	n	NotF¶	1.19	*		2030	2.5	3.25	*	0.941	0.951
Tetra	PCB-51	7.44e+04	1.01	n	29:57	1.15	6.06	R	*	2.5	*	0.957	0.952	0.962
Tetra	PCB-45	*	*	n	NotF¶	0.97	*		2030	2.5	4.00	*	0.966	0.976
Tetra	PCB-46	*	*	n	NotF¶	0.95	*		2030	2.5	4.06	*	0.982	0.992

Integrations by:

Analyst: DMS

Date: 11/10/14

Reviewed by: CT

Date: 11/10/14

Client ID: IA-MHS-05-20141020-W RX Filename: 141106E1 S:10 Acq: 7-NOV-14 01:44:09 ConCal: ST141106E1-1
Lab ID: 1400781-01RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	2.21e+05	0.58	n 31:19	1.28	16.2	R	*	2.5	*	1.000	0.996	1.006
Tetra	PCB-73	*	*	n NotFnd	1.37	*		2030	2.5	2.82	*	1.000	1.010
Tetra	PCB-43/49	1.21e+05	0.80	y 31:37	1.11	10.2		*	2.5	*	1.010	1.005	1.015
Tetra	PCB-47	7.59e+05	0.78	y 31:50	1.13	59.7		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-48/75	*	*	n NotFnd	1.30	*		2030	2.5	2.82	*	0.999	1.009
Tetra	PCB-65	*	*	n NotFnd	1.33	*		2030	2.5	2.76	*	1.007	1.017
Tetra	PCB-62	*	*	n NotFnd	1.29	*		2030	2.5	2.85	*	1.011	1.021
Tetra	PCB-44	1.30e+05	0.88	y 32:37	0.94	12.3		*	2.5	*	1.025	1.020	1.030
Tetra	PCB-42/59	*	*	n NotFnd	1.22	*		2030	2.5	3.03	*	1.028	1.038
Tetra	PCB-41/64/71/72	1.85e+05	0.68	y 33:27	1.31	12.6		*	2.5	*	1.051	1.046	1.056
Tetra	PCB-68	1.49e+05	0.78	y 33:41	1.49	8.96		*	2.5	*	1.059	1.054	1.064
Tetra	PCB-40	*	*	n NotFnd	0.82	*		2030	2.5	4.50	*	1.061	1.071
Tetra	PCB-57	*	*	n NotFnd	1.11	*		2030	2.5	2.63	*	0.965	0.975
Tetra	PCB-67	*	*	n NotFnd	1.07	*		2030	2.5	2.73	*	0.974	0.984
Tetra	PCB-58	*	*	n NotFnd	1.10	*		2030	2.5	2.66	*	0.977	0.987
Tetra	PCB-63	*	*	n NotFnd	1.12	*		2030	2.5	2.62	*	0.982	0.992
Tetra	PCB-74	8.80e+04	0.75	y 35:08	1.20	4.96		*	2.5	*	0.994	0.990	1.000
Tetra	PCB-61/70	3.33e+05	0.67	y 35:21	1.08	20.9		*	2.5	*	1.001	0.994	1.004
Tetra	PCB-76/66	1.73e+05	0.70	y 35:33	1.14	10.3		*	2.5	*	1.006	1.001	1.011
Tetra	PCB-80	*	*	n NotFnd	1.28	*		2030	2.5	2.33	*	0.996	1.006
Tetra	PCB-55	*	*	n NotFnd	1.11	*		2030	2.5	2.68	*	1.005	1.015
Tetra	PCB-56/60	1.17e+05	1.04	n 36:35	1.09	6.91	R	*	2.5	*	1.023	1.018	1.028
Tetra	PCB-79	*	*	n NotFnd	1.12	*		2030	2.5	2.65	*	1.048	1.058
Tetra	PCB-78	*	*	n NotFnd	1.24	*		2030	2.5	2.92	*	0.982	0.992
Tetra	PCB-81	*	*	n NotFnd	1.38	*		2030	2.5	2.61	*	0.995	1.005
Tetra	PCB-77	*	*	n NotFnd	1.21	*		2030	2.5	2.84	*	0.995	1.005
Penta	PCB-104	*	*	n NotFnd	1.26	*		1560	2.5	3.73	*	0.996	1.006
Penta	PCB-96	*	*	n NotFnd	1.09	*		1560	2.5	4.29	*	1.034	1.044
Penta	PCB-103	*	*	n NotFnd	0.93	*		1560	2.5	5.03	*	1.050	1.060
Penta	PCB-100	*	*	n NotFnd	1.00	*		1560	2.5	4.68	*	1.061	1.071
Penta	PCB-94	*	*	n NotFnd	1.11	*		1560	2.5	5.64	*	0.981	0.991
Penta	PCB-95/98/102	3.01e+05	1.56	y 35:39	1.21	32.2		*	2.5	*	1.001	0.994	1.004
Penta	PCB-93	*	*	n NotFnd	1.13	*		1560	2.5	5.53	*	0.998	1.008
Penta	PCB-88/91	*	*	n NotFnd	1.02	*		1560	2.5	6.13	*	1.006	1.016
Penta	PCB-121	5.14e+04	1.44	y 36:03	1.90	3.51		*	2.5	*	1.012	1.009	1.019
Penta	PCB-84/92	1.28e+05	1.58	y 36:57	1.05	14.3		*	2.5	*	0.990	0.986	0.996
Penta	PCB-89	*	*	n NotFnd	1.02	*		1560	2.5	5.50	*	0.991	1.001

Analyst: DMS

Date: 11/7/14

Client ID: IA-MHS-05-20141020-W RX Filename: 141106E1 S:10 Acq: 7-NOV-14 01:44:09 ConCal: ST141106E1-1
Lab ID: 1400781-01RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Penta	PCB-90/101	4.56e+05	1.52	y 37:20	1.19	45.0		*	2.5	*	1.000	0.996	1.006
Penta	PCB-113	*	*	n NotF¶	1.35	*		1560	2.5	4.14	*	1.002	1.012
Penta	PCB-99	1.66e+05	1.75	y 37:40	1.29	15.2		*	2.5	*	1.009	1.005	1.015
Penta	PCB-119	*	*	n NotF¶	1.72	*		1560	2.5	3.63	*	0.982	0.992
Penta	PCB-108/112	*	*	n NotF¶	1.29	*		1560	2.5	4.85	*	0.986	0.996
Penta	PCB-83	*	*	n NotF¶	1.52	*		1560	2.5	4.11	*	0.991	1.001
Penta	PCB-97	1.34e+05	1.57	y 38:39	1.25	13.7		*	2.5	*	1.001	0.996	1.006
Penta	PCB-86	*	*	n NotF¶	1.02	*		1560	2.5	6.11	*	1.000	1.010
Penta	PCB-87/117/125	2.23e+05	1.73	y 38:56	1.56	18.3		*	2.5	*	1.008	1.002	1.012
Penta	PCB-111/115	*	*	n NotF¶	1.75	*		1560	2.5	3.56	*	1.007	1.017
Penta	PCB-85/116	6.38e+04	1.29	n 39:12	1.30	6.28	R	*	2.5	*	1.015	1.010	1.020
Penta	PCB-120	*	*	n NotF¶	1.78	*		1560	2.5	3.51	*	1.016	1.026
Penta	PCB-110	7.04e+05	1.59	y 39:35	1.68	53.6		*	2.5	*	1.025	1.020	1.030
Penta	PCB-82	5.27e+04	1.86	n 40:13	0.74	6.91	R	*	2.5	*	0.976	0.972	0.982
Penta	PCB-124	*	*	n NotF¶	1.32	*		1560	2.5	3.77	*	0.988	0.998
Penta	PCB-107/109	*	*	n NotF¶	1.22	*		1560	2.5	4.09	*	0.991	1.001
Penta	PCB-123	*	*	n NotF¶	1.22	*		1560	2.5	4.10	*	0.995	1.005
Penta	PCB-106/118	5.82e+05	1.75	y 41:25	1.22	44.7		*	2.5	*	1.001	0.996	1.006
Penta	PCB-114	*	*	n NotF¶	1.36	*		1800	2.5	4.18	*	0.995	1.005
Penta	PCB-122	*	*	n NotF¶	1.24	*		1800	2.5	4.58	*	0.999	1.009
Penta	PCB-105	2.38e+05	1.99	n 42:57	1.28	17.3	R	*	2.5	*	1.001	0.995	1.005
Penta	PCB-127	*	*	n NotF¶	1.14	*		1800	2.5	4.55	*	0.995	1.005
Penta	PCB-126	*	*	n NotF¶	1.28	*		1800	2.5	4.91	*	0.995	1.005
Hexa	PCB-155	*	*	n NotF¶	1.14	*		1330	2.5	3.33	*	0.966	1.006
Hexa	PCB-150	*	*	n NotF¶	1.06	*		1330	2.5	3.55	*	1.030	1.040
Hexa	PCB-152	*	*	n NotF¶	1.10	*		1330	2.5	3.44	*	1.043	1.053
Hexa	PCB-145	*	*	n NotF¶	1.09	*		1330	2.5	3.45	*	1.055	1.065
Hexa	PCB-136	8.74e+04	1.45	n 39:23	1.08	8.25	R	*	2.5	*	1.069	1.064	1.074
Hexa	PCB-148	*	*	n NotF¶	0.74	*		1330	2.5	5.09	*	1.066	1.076
Hexa	PCB-154	*	*	n NotF¶	0.88	*		1330	2.5	4.27	*	1.079	1.089
Hexa	PCB-151	6.28e+04	1.89	n 40:38	0.81	7.95	R	*	2.5	*	1.102	1.097	1.107
Hexa	PCB-135	*	*	n NotF¶	0.78	*		1330	2.5	4.84	*	1.101	1.113
Hexa	PCB-144	*	*	n NotF¶	0.82	*		1330	2.5	4.61	*	1.105	1.116
Hexa	PCB-147	*	*	n NotF¶	0.83	*		1330	2.5	4.56	*	1.011	1.120
Hexa	PCB-139/149	3.41e+05	1.23	y 41:20	0.84	41.4		*	2.5	*	1.121	1.115	1.127
Hexa	PCB-140	*	*	n NotF¶	0.79	*		1330	2.5	4.81	*	1.120	1.132
Hexa	PCB-134/143	4.83e+04	1.21	y 42:01	0.93	5.08		*	2.5	*	0.976	0.970	0.980

Analyst: DMS

Date: 11/7/14

Client ID: IA-MHS-05-20141020-W RX Filename: 141106E1 S:10 Acq: 7-NOV-14 01:44:09 ConCal: ST141106E1-1
Lab ID: 1400781-01RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Hexa	PCB-133/142	*	*	n NotF	0.95	*		1960	2.5	5.87	*	0.977-0.987
Hexa	PCB-131	*	*	n NotF	0.91	*		1960	2.5	6.07	*	0.981-0.991
Hexa	PCB-146/165	9.47e+04	1.10	y 42:41	1.16	8.00		*	2.5	*	0.991	0.986-0.996
Hexa	PCB-132/161	2.19e+05	1.25	y 42:57	1.11	19.2		*	2.5	*	0.997	0.992-1.002
Hexa	PCB-153	6.19e+05	1.40	y 43:05	1.18	51.3		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-168	*	*	n NotF	1.37	*		1960	2.5	4.05	*	1.000-1.010
Hexa	PCB-141	1.15e+05	1.34	y 43:50	0.97	11.8		*	2.5	*	1.001	0.996-1.005
Hexa	PCB-137	4.32e+04	1.08	y 44:13	1.07	4.04		*	2.5	*	1.009	1.004-1.014
Hexa	PCB-130	4.39e+04	1.21	y 44:19	0.85	5.19		*	2.5	*	1.012	1.007-1.017
Hexa	PCB-138/163/164	8.18e+05	1.16	y 44:42	1.23	68.8		*	2.5	*	1.001	0.996-1.006
Hexa	PCB-158/160	1.28e+05	1.11	y 44:56	1.29	10.3		*	2.5	*	1.006	1.001-1.011
Hexa	PCB-129	*	*	n NotF	0.92	*		1960	2.5	6.37	*	1.007-1.017
Hexa	PCB-166	*	*	n NotF	1.12	*		1960	2.5	4.48	*	0.988-0.998
Hexa	PCB-159	*	*	n NotF	1.16	*		1960	2.5	4.29	*	0.995-1.005
Hexa	PCB-128/162	1.64e+05	1.41	y 46:15	1.02	14.1		*	2.5	*	1.006	1.002-1.012
Hexa	PCB-167	*	*	n NotF	1.06	*		1960	2.5	4.50	*	0.995-1.005
Hexa	PCB-156	1.26e+05	1.37	y 47:58	1.18	9.22		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-157	*	*	n NotF	1.08	*		1960	2.5	4.63	*	0.995-1.005
Hexa	PCB-169	*	*	n NotF	1.11	*		1960	2.5	4.84	*	0.995-1.005
Hepta	PCB-188	*	*	n NotF	1.40	*		1470	2.5	2.23	*	0.995-1.005
Hepta	PCB-184	*	*	n NotF	1.24	*		1470	2.5	2.53	*	1.006-1.016
Hepta	PCB-179	6.17e+04	0.93	y 43:57	1.30	5.63		*	2.5	*	1.029	1.024-1.034
Hepta	PCB-176	*	*	n NotF	1.36	*		1470	2.5	2.30	*	1.035-1.045
Hepta	PCB-186	*	*	n NotF	1.28	*		1470	2.5	2.46	*	1.049-1.059
Hepta	PCB-178	*	*	n NotF	0.94	*		1470	2.5	3.35	*	1.061-1.071
Hepta	PCB-175	*	*	n NotF	0.97	*		1470	2.5	3.24	*	1.069-1.079
Hepta	PCB-182/187	1.24e+05	1.16	y 46:02	1.01	14.6		*	2.5	*	1.078	1.073-1.083
Hepta	PCB-183	7.00e+04	1.11	y 46:22	1.08	7.70		*	2.5	*	1.086	1.080-1.090
Hepta	PCB-185	*	*	n NotF	1.34	*		1470	2.5	3.04	*	0.951-0.961
Hepta	PCB-174	1.10e+05	1.02	y 47:24	1.34	12.3		*	2.5	*	0.963	0.958-0.968
Hepta	PCB-181	*	*	n NotF	1.36	*		1470	2.5	2.99	*	0.961-0.971
Hepta	PCB-177	*	*	n NotF	1.24	*		1470	2.5	3.29	*	0.964-0.974
Hepta	PCB-171	*	*	n NotF	1.31	*		1470	2.5	3.10	*	0.970-0.980
Hepta	PCB-173	*	*	n NotF	1.16	*		1470	2.5	3.51	*	0.979-0.989
Hepta	PCB-172	*	*	n NotF	1.22	*		1470	2.5	3.33	*	0.988-0.998
Hepta	PCB-192	*	*	n NotF	1.53	*		1470	2.5	2.67	*	0.991-1.001
Hepta	PCB-180	2.27e+05	0.92	y 49:16	1.43	23.8		*	2.5	*	1.000	0.995-1.005

Analyst: DMS

Date: 11/6/14

Client ID: IA-MHS-05-20141020-W RX Filename: 141106E1 S:10 Acq: 7-NOV-14 01:44:09 ConCal: ST141106E1-1
Lab ID: 1400781-01RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hepta	PCB-193	*	*	n	NotF	1.65	*		1470	2.5	2.46	*	0.999	1.009
Hepta	PCB-191	*	*	n	NotF	1.67	*		1470	2.5	2.44	*	1.004	1.014
Hepta	PCB-170	1.00e+05	0.95	y	50:41	1.50	12.7		*	2.5	*	1.000	0.995	1.005
Hepta	PCB-190	*	*	n	NotF	2.02	*		1470	2.5	2.32	*	0.998	1.008
Hepta	PCB-189	*	*	n	NotF	1.54	*		1470	2.5	2.38	*	0.995	1.005
Octa	PCB-202	*	*	n	NotF	1.04	*		1210	2.5	3.20	*	0.995	1.005
Octa	PCB-201	*	*	n	NotF	1.10	*		1210	2.5	3.02	*	1.006	1.016
Octa	PCB-204	*	*	n	NotF	0.99	*		1210	2.5	3.35	*	1.009	1.019
Octa	PCB-197	*	*	n	NotF	1.07	*		1210	2.5	3.10	*	1.015	1.025
Octa	PCB-200	*	*	n	NotF	1.02	*		1210	2.5	3.27	*	1.032	1.044
Octa	PCB-198	*	*	n	NotF	0.74	*		1210	2.5	4.48	*	1.058	1.068
Octa	PCB-199	3.54e+04	1.09	n	51:21	0.73	5.47	R	*	2.5	*	1.066	1.060	1.070
Octa	PCB-196/203	3.89e+04	0.58	n	51:37	0.77	5.65	R	*	2.5	*	1.072	1.066	1.076
Octa	PCB-195	*	*	n	NotF	1.20	*		1600	2.5	4.29	*	0.979	0.989
Octa	PCB-194	4.26e+04	0.92	y	53:39	1.25	5.27		*	2.5	*	1.000	0.995	1.005
Octa	PCB-205	*	*	n	NotF	1.41	*		1600	2.5	3.64	*	1.001	1.011
Nona	PCB-208	*	*	n	NotF	0.96	*		1220	2.5	2.50	*	0.995	1.005
Nona	PCB-207	*	*	n	NotF	0.92	*		1220	2.5	2.62	*	1.001	1.011
Nona	PCB-206	*	*	n	NotF	1.03	*		1220	2.5	4.54	*	0.995	1.005
Deca	PCB-209	*	*	n	NotF	1.18	*		1050	2.5	4.31	*	0.995	1.005

Analyst: DMS

Date: 11/7/14

Client ID: IA-MHS-05-20141020-W RX Filename: 141106E1 S:10 Acq: 7-NOV-14 01:44:09 ConCal: ST141106E1-1
Lab ID: 1400781-01RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.5000 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	3.16e+05	1.11	y	25:45	1.16	25.0673	
Total Tri-PCB	6.03e+05	1.02	y	28:50	1.35	32.3455	Sum:57.4127
Total Tetra-PCB	1.94e+06	0.80	y	31:37	1.17	139.855	
Total Penta-PCB	2.75e+06	1.56	y	35:39	1.21	240.537	
Total Penta-PCB	*	*	n	NotFnd	1.26	*	Sum:240.537
Total Hexa-PCB	3.41e+05	1.23	y	41:20	0.92	41.4295	
Total Hexa-PCB	2.42e+06	1.21	y	42:01	1.08	207.115	Sum:248.545
Total Hepta-PCB	6.93e+05	0.93	y	43:57	1.27	76.7526	
Total Octa-PCB	*	*	n	NotFnd	0.92	*	
Total Octa-PCB	4.26e+04	0.92	y	53:39	1.29	5.27139	Sum:5.27139
Total Nona-PCB	*	*	n	NotFnd	0.96	*	
Total Deca-PCB	*	*	n	NotFnd	1.18	*	

Total PCB Conc:883.379523000

Integrations
by
Analyst: DMS

Date: 11/10/14

Client ID: IA-MHS-05-20141020-W RX Filename: 141106E1 S:10 Acq: 7-NOV-14 01:44:09 ConCal: ST141106E1-1
Lab ID: 1400781-01RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:0.5000 EndCAL: NA

Name	Resp	RA	RRF	RT	RRT	LCL	UCL		Conc	Rec
13C-PCB-1	1.10e+08	3.38 y	0.89	16:17	0.631	0.622	0.628	dk	6650	83.1
13C-PCB-3	1.14e+08	3.37 y	0.93	18:47	0.728	0.721	0.729		6620	82.7
13C-PCB-4	6.15e+07	1.60 y	0.55	20:05	0.778	0.772	0.780		6010	75.2
13C-PCB-9	9.53e+07	1.57 y	0.83	21:49	0.845	0.840	0.848		6180	77.3
13C-PCB-11	1.16e+08	1.59 y	0.94	25:07	0.973	0.968	0.978		6620	82.8
13C-PCB-19	6.63e+07	1.10 y	0.53	24:08	0.935	0.929	0.939		6670	83.3
13C-PCB-28	1.09e+08	1.03 y	0.89	28:56	1.004	0.999	1.009		6820	85.3
13C-PCB-32	1.09e+08	1.10 y	0.81	26:59	1.045	1.041	1.051		7180	89.7
13C-PCB-37	1.00e+08	1.04 y	0.83	32:47	1.138	1.131	1.143		6680	83.5
13C-PCB-47	8.99e+07	0.76 y	0.74	31:49	0.870	0.867	0.875		6530	81.6
13C-PCB-52	8.53e+07	0.79 y	0.71	31:19	0.856	0.853	0.861		6510	81.4
13C-PCB-54	9.00e+07	0.80 y	0.85	27:50	0.761	0.758	0.766		5720	71.5
13C-PCB-70	1.18e+08	0.79 y	0.94	35:20	0.966	0.961	0.971		6750	84.4
13C-PCB-77	1.08e+08	0.79 y	0.89	39:29	1.079	1.073	1.083		6520	81.4
13C-PCB-80	1.25e+08	0.79 y	0.96	35:45	0.977	0.972	0.982		6990	87.4
13C-PCB-81	1.03e+08	0.78 y	0.84	38:52	1.063	1.057	1.067		6660	83.2
13C-PCB-95	6.16e+07	1.62 y	0.74	35:38	0.912	0.908	0.918		6480	81.0
13C-PCB-97	6.25e+07	1.61 y	0.69	38:37	0.989	0.984	0.994		7080	88.5
13C-PCB-101	6.81e+07	1.59 y	0.79	37:19	0.955	0.951	0.961		6780	84.8
13C-PCB-104	7.90e+07	1.60 y	1.00	32:28	0.831	0.829	0.837		6210	77.6
13C-PCB-105	8.59e+07	1.57 y	1.24	42:55	0.928	0.924	0.934		6580	82.2
13C-PCB-114	8.34e+07	1.59 y	1.21	42:03	0.910	0.905	0.915		6550	81.9
13C-PCB-118	8.51e+07	1.63 y	0.98	41:23	1.060	1.054	1.064		6750	84.4
13C-PCB-123	8.26e+07	1.59 y	0.95	41:12	1.055	1.049	1.059		6800	85.0
13C-PCB-126	7.94e+07	1.57 y	1.16	45:11	0.977	0.972	0.982		6480	81.0
13C-PCB-127	9.45e+07	1.58 y	1.34	43:16	0.936	0.931	0.941		6670	83.4
13C-PCB-138	7.76e+07	1.28 y	1.04	44:39	0.966	0.961	0.971		7050	88.2
13C-PCB-141	7.99e+07	1.27 y	1.07	43:49	0.947	0.943	0.953		7070	88.4
13C-PCB-153	8.20e+07	1.28 y	1.11	43:04	0.931	0.927	0.937		6990	87.4
13C-PCB-155	7.81e+07	1.28 y	0.83	36:51	0.944	0.939	0.949		7340	91.7
13C-PCB-156	9.26e+07	1.28 y	1.24	47:58	1.037	1.032	1.042		7060	88.2
13C-PCB-157	9.61e+07	1.30 y	1.31	48:14	1.043	1.037	1.047		6950	86.9
13C-PCB-159	9.07e+07	1.25 y	1.20	45:58	0.994	0.989	0.999		7170	89.7
13C-PCB-167	9.66e+07	1.26 y	1.32	46:39	1.009	1.004	1.014		6940	86.7
13C-PCB-169	8.39e+07	1.28 y	1.22	50:20	1.089	1.082	1.092		6550	81.9
13C-PCB-170	4.20e+07	0.47 y	0.54	50:40	1.096	1.089	1.101		7450	93.1
13C-PCB-180	5.34e+07	0.47 y	0.67	49:15	1.065	1.059	1.069		7520	94.0
13C-PCB-188	6.72e+07	0.46 y	0.94	42:41	0.923	0.919	0.929		6810	85.1
13C-PCB-189	5.27e+07	0.46 y	0.72	52:08	1.128	1.120	1.132		6980	87.3
13C-PCB-194	5.19e+07	0.90 y	0.81	53:39	0.994	0.990	1.000		7130	89.1
13C-PCB-202	7.11e+07	0.92 y	0.83	48:09	1.041	1.036	1.046		8110	101
13C-PCB-206	4.72e+07	0.78 y	0.66	55:22	1.026	1.021	1.031		7980	99.7
13C-PCB-208	6.84e+07	0.78 y	1.12	52:53	0.980	0.976	0.986		6770	84.7
13C-PCB-209	5.03e+07	1.19 y	0.61	56:41	1.051	1.044	1.054		9130	114

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.35e+08	0.78 y	1.01	37:38	1.029	1.023	1.033	7240	90.5
13C-PCB-178	5.02e+07	0.46 y	0.63	45:30	0.984	0.979	0.989	7550	94.4

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.35e+08	0.78 y	1.20	37:38	0.968	0.963	0.973	8700	109
13C-PCB-178	5.02e+07	0.46 y	0.94	45:30	0.924	0.920	0.930	8020	100

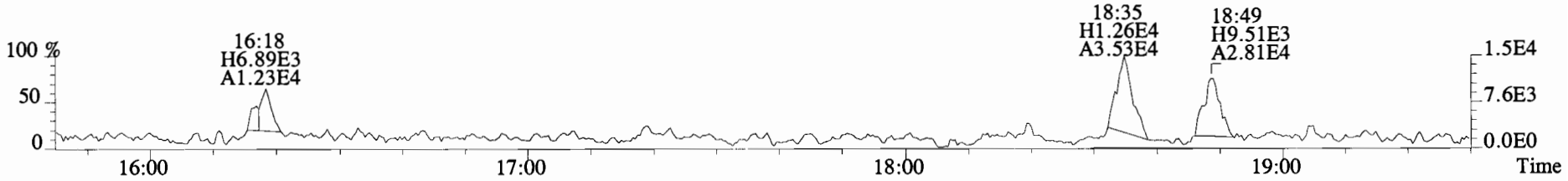
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.49e+08	1.58	y	1.00	25:49	8000
13C-PCB-31	1.45e+08	1.05	y	1.00	28:49	8000
13C-PCB-60	1.48e+08	0.78	y	1.00	36:35	8000
13C-PCB-111	1.02e+08	1.61	y	1.00	39:04	8000
13C-PCB-128	8.43e+07	1.25	y	1.00	46:14	8000
13C-PCB-205	7.19e+07	0.91	y	1.00	53:57	8000

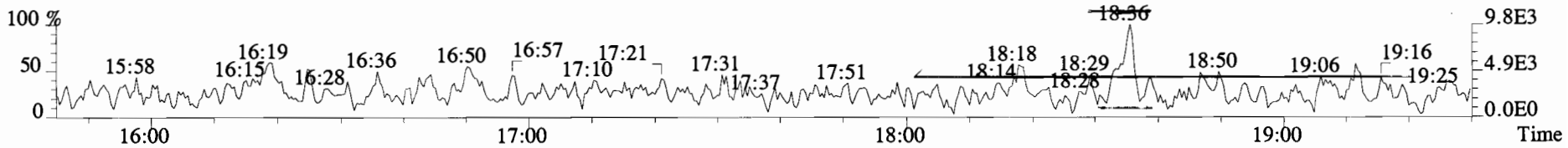
Analyst: DMS

Date: 11/7/14

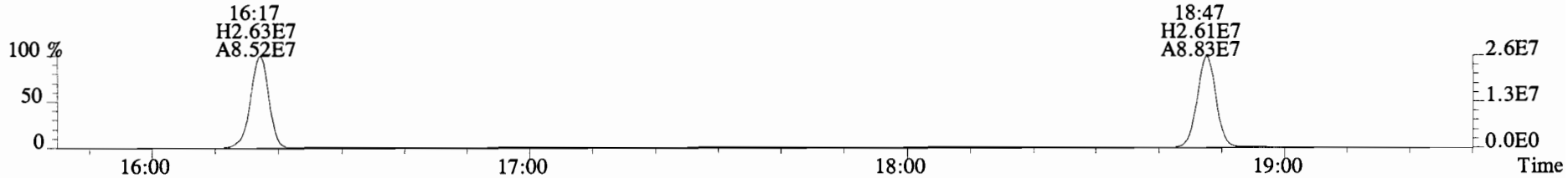
File:141106E1 #1-728 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
188.0393 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2304.0,0.00%,F,F)



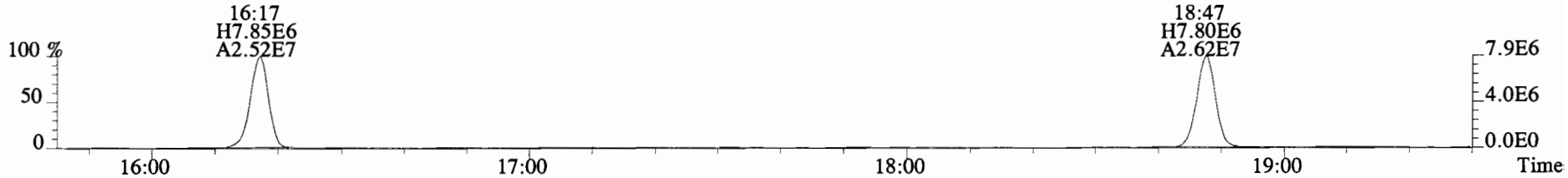
190.0363 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3232.0,0.00%,F,F)



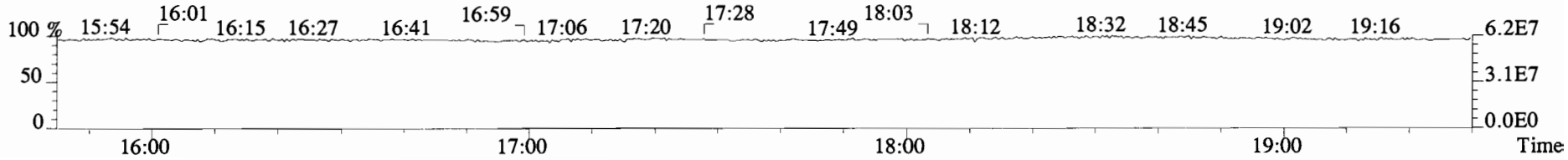
200.0795 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4804.0,0.00%,F,F)



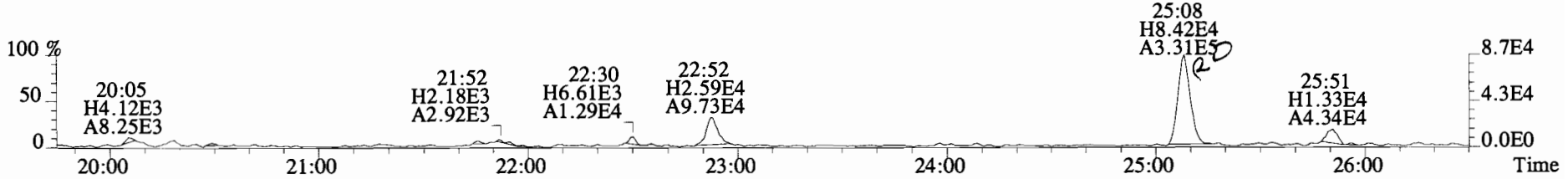
202.0766 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,36288.0,0.00%,F,F)



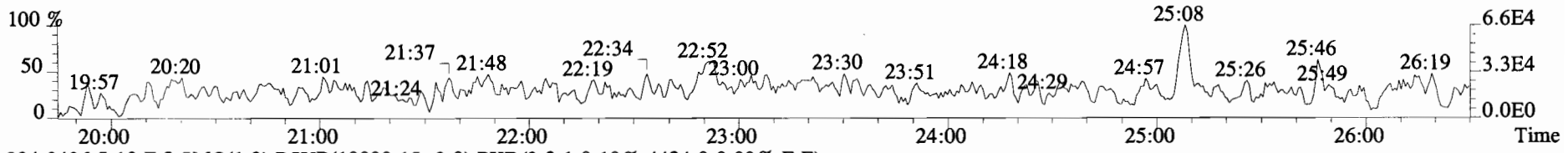
180.9880 S:10



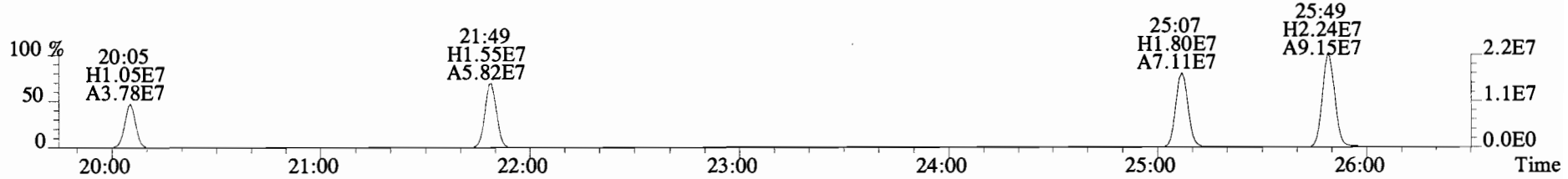
File:141106E1 #1-758 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
222.0003 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2260.0,0.00%,F,F)



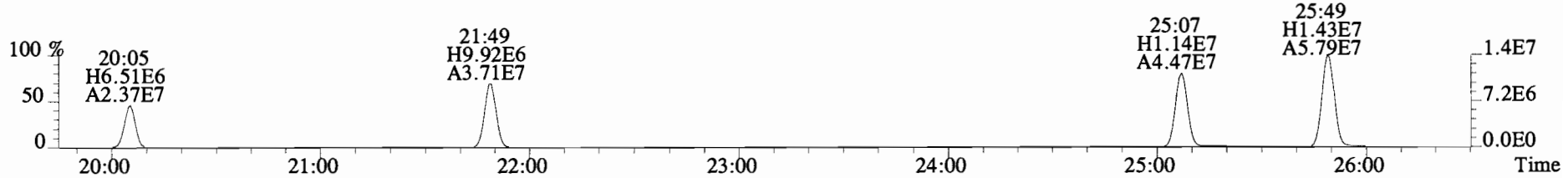
223.9974 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,24068.0,0.00%,F,F)



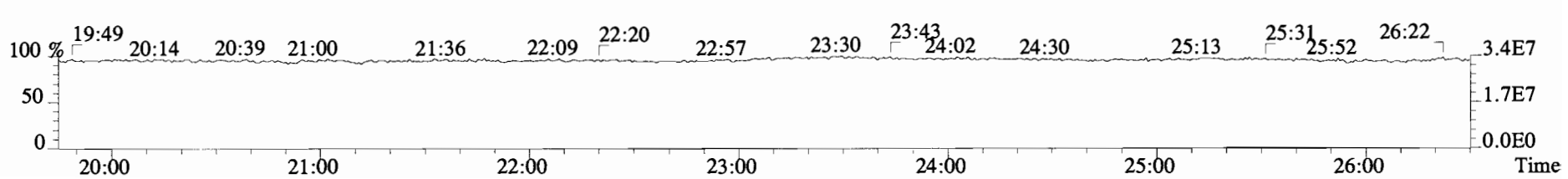
234.0406 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4424.0,0.00%,F,F)



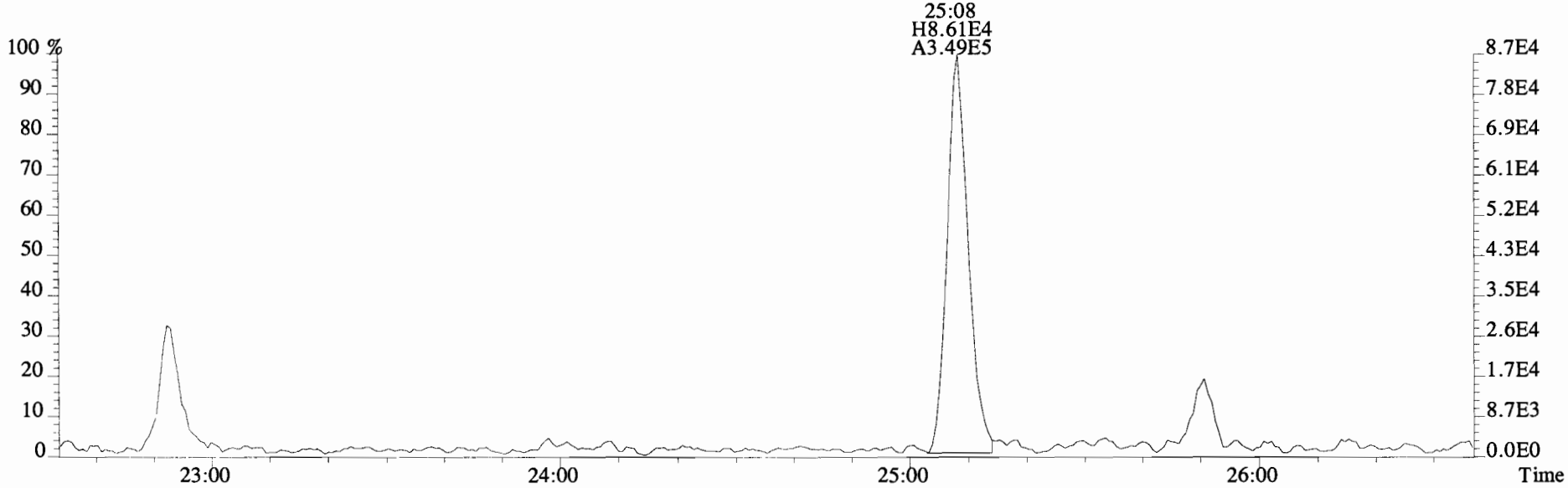
236.0376 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8048.0,0.00%,F,F)



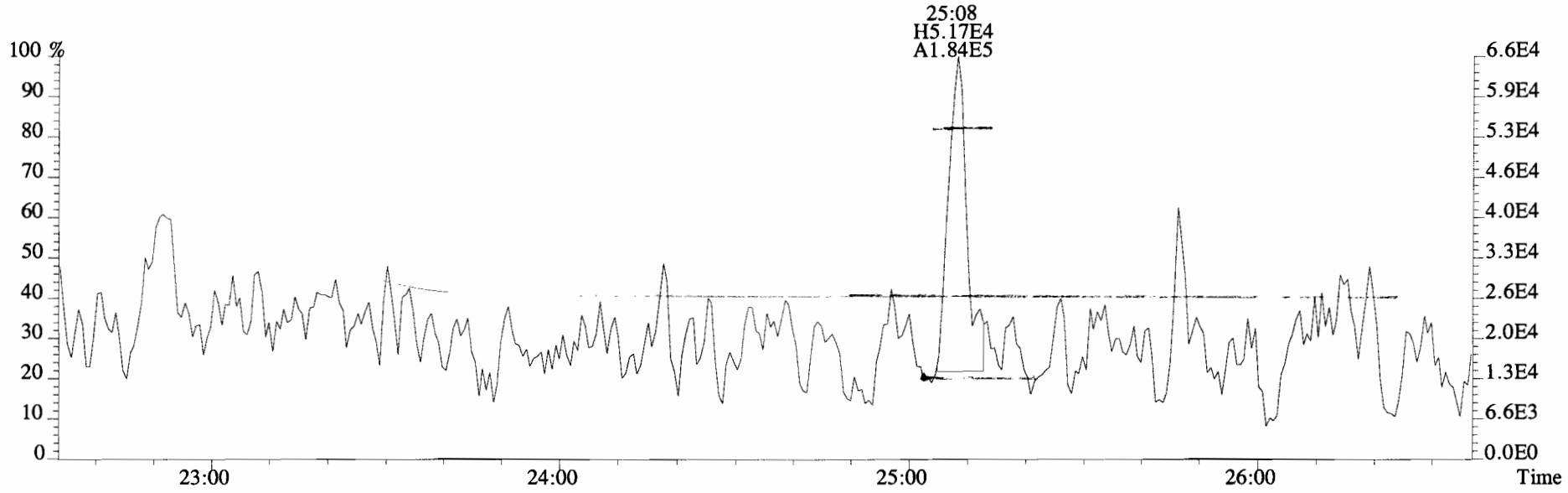
230.9856 S:10 F:2

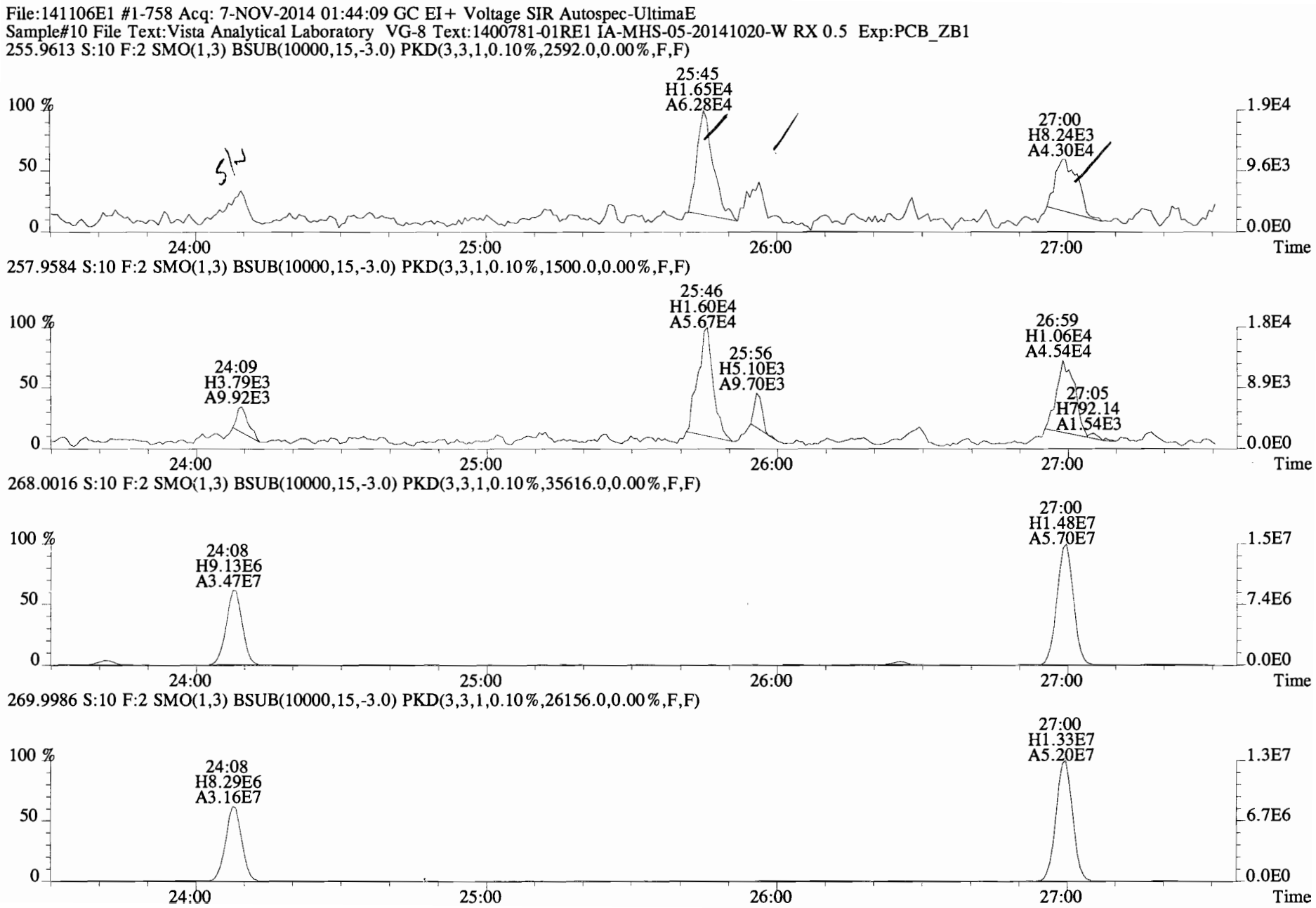


File:141106E1 #1-758 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
222.0003 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0)

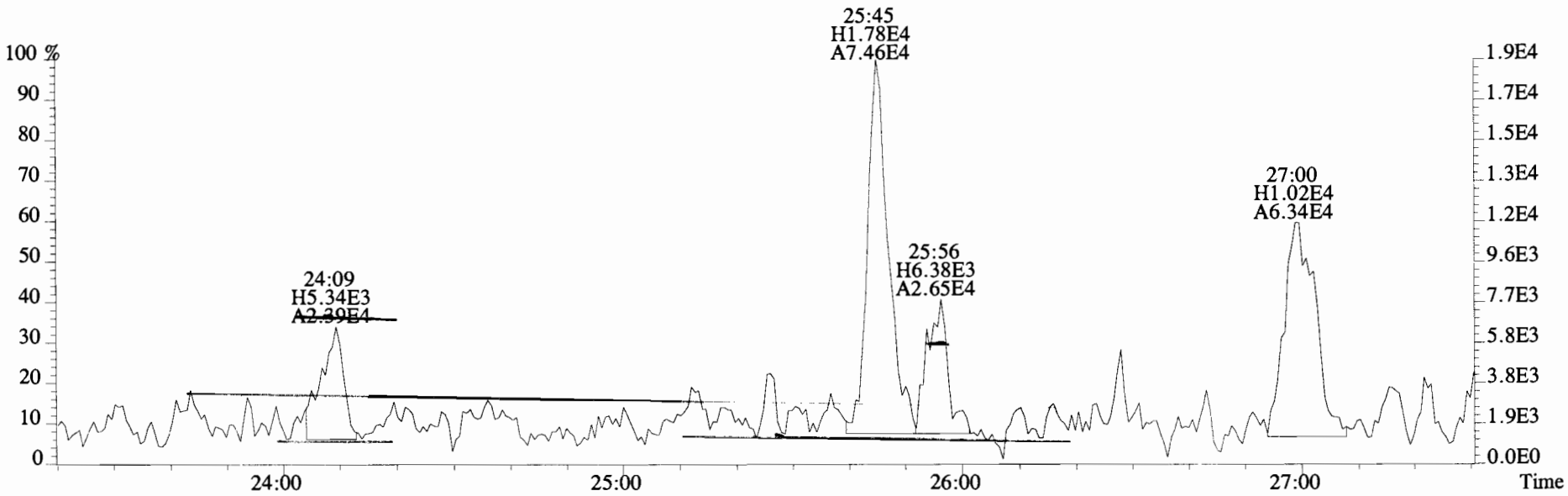


223.9974 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,24068.0,0.00%,F,F)

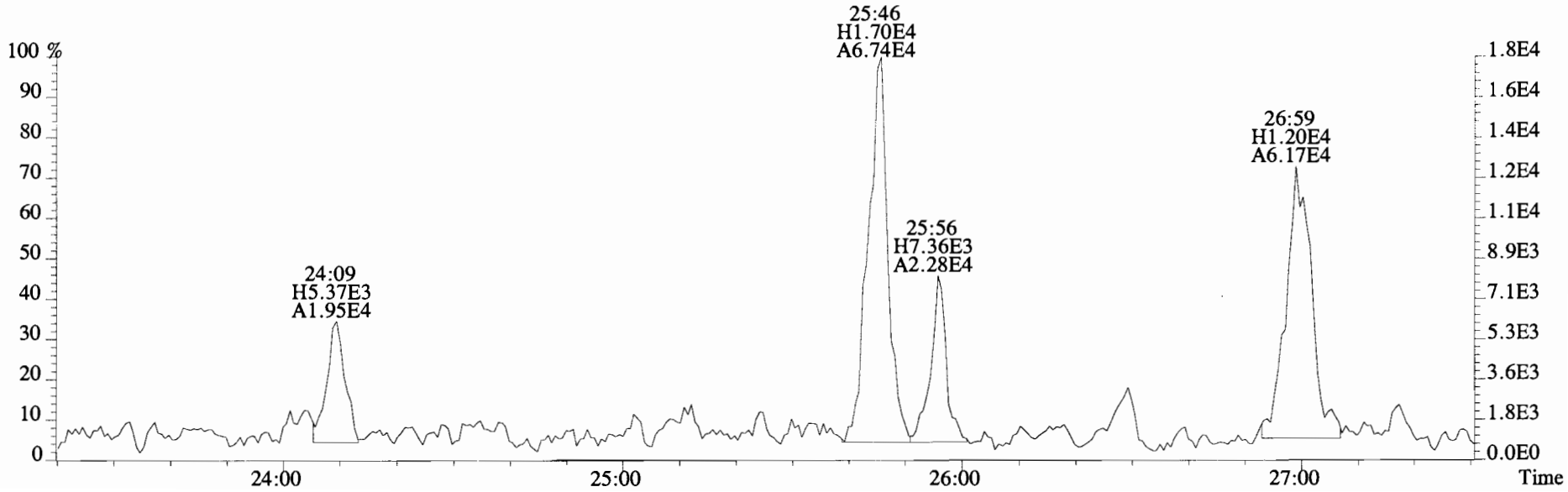


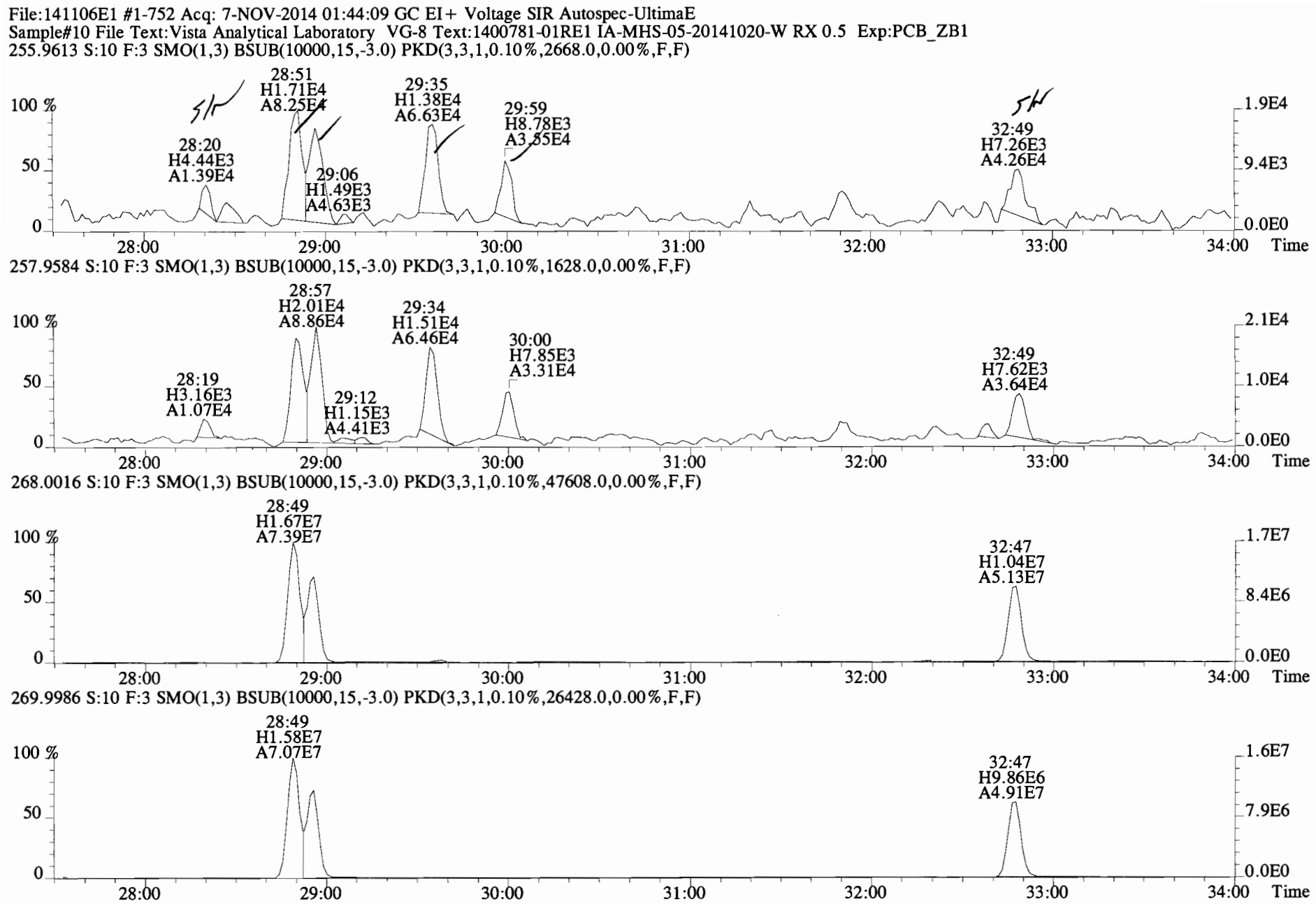

File:141106E1 #1-758 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
255.9613 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2592.0,0.00%,F,F)
25:45
H1.65E4
A6.28E4
27:00
H8.24E3
A4.30E4
100 %
50
0
1.9E4
9.6E3
0.0E0
24:00
25:00
26:00
27:00
Time
257.9584 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1500.0,0.00%,F,F)
25:46
H1.60E4
A5.67E4
24:09
H3.79E3
A9.92E3
25:56
H5.10E3
A9.70E3
26:59
H1.06E4
A4.54E4
27:05
H792.14
A1.54E3
1.8E4
8.9E3
268.0016 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,35616.0,0.00%,F,F)
27:00
H1.48E7
A5.70E7
24:08
H9.13E6
A3.47E7
1.5E7
7.4E6
269.9986 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26156.0,0.00%,F,F)
27:00
H1.33E7
A5.20E7
24:08
H8.29E6
A3.16E7
1.3E7
6.7E6

File:141106E1 #1-758 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
255.9613 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2592.0,0.00%,F,F)

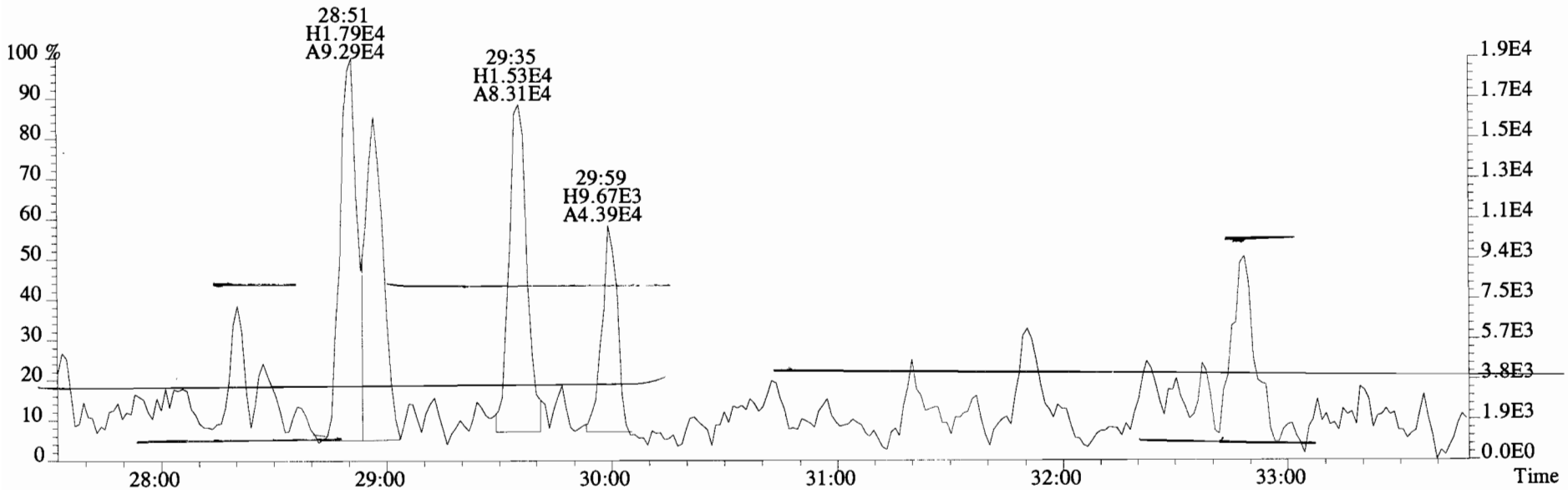


257.9584 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1500.0,0.00%,F,F)

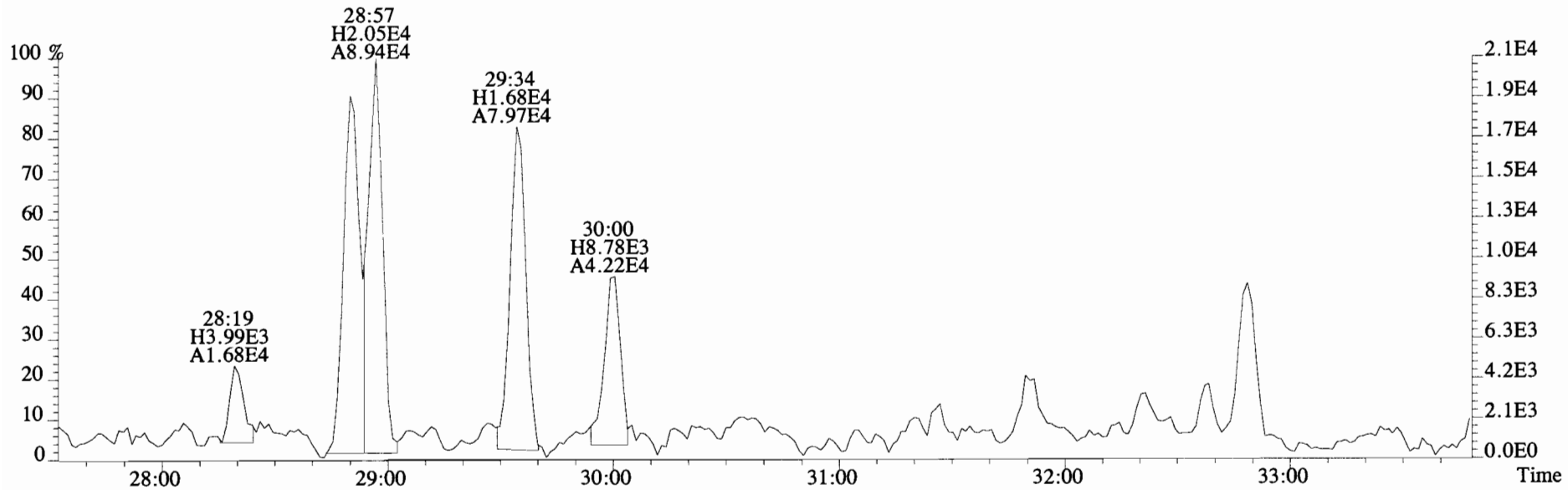



File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
255.9613 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2668.0,0.00%,F,F)
28:51
H1.71E4
A8.25E4
29:35
H1.38E4
A6.63E4
29:59
H8.78E3
A3.85E4
28:20
H4.44E3
A1.39E4
29:06
H1.49E3
A4.63E3
32:49
H7.26E3
A4.26E4
100 %
50
0
1.9E4
9.4E3
0.0E0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
257.9584 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1628.0,0.00%,F,F)
28:57
H2.01E4
A8.86E4
29:34
H1.51E4
A6.46E4
30:00
H7.85E3
A3.31E4
28:19
H3.16E3
A1.07E4
29:12
H1.15E3
A4.41E3
32:49
H7.62E3
A3.64E4
100 %
50
0
2.1E4
1.0E4
0.0E0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
268.0016 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,47608.0,0.00%,F,F)
28:49
H1.67E7
A7.39E7
32:47
H1.04E7
A5.13E7
100 %
50
0
1.7E7
8.4E6
0.0E0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
269.9986 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26428.0,0.00%,F,F)
28:49
H1.58E7
A7.07E7
32:47
H9.86E6
A4.91E7
100 %
50
0
1.6E7
7.9E6
0.0E0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time

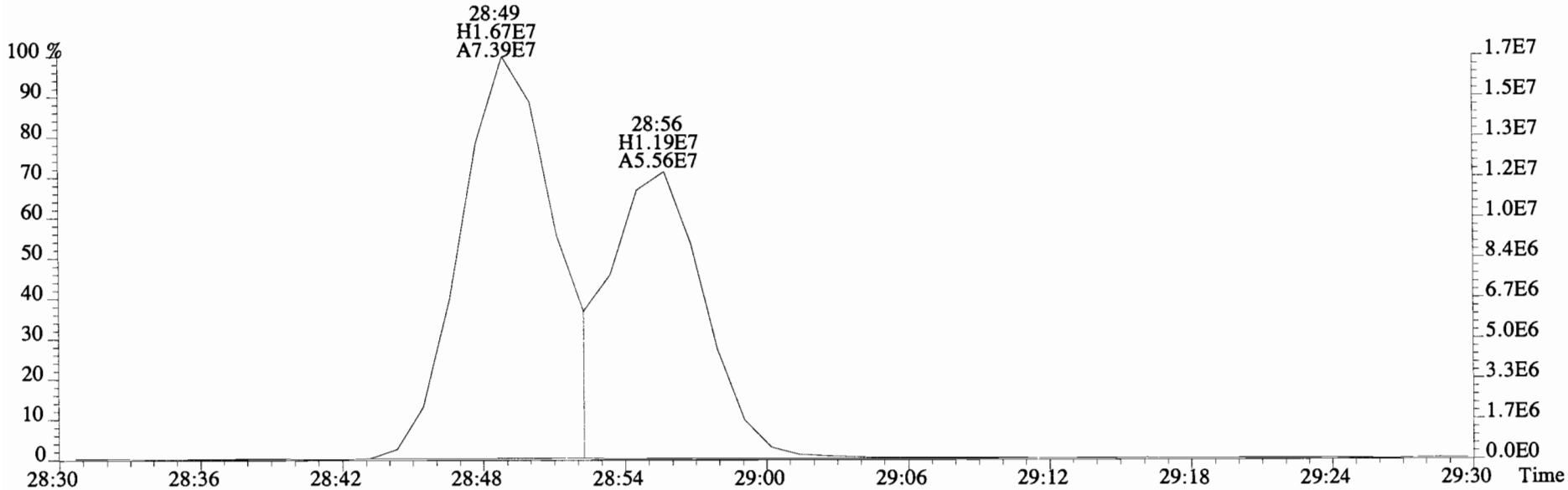
File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
255.9613 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2668.0,0.00%,F,F)



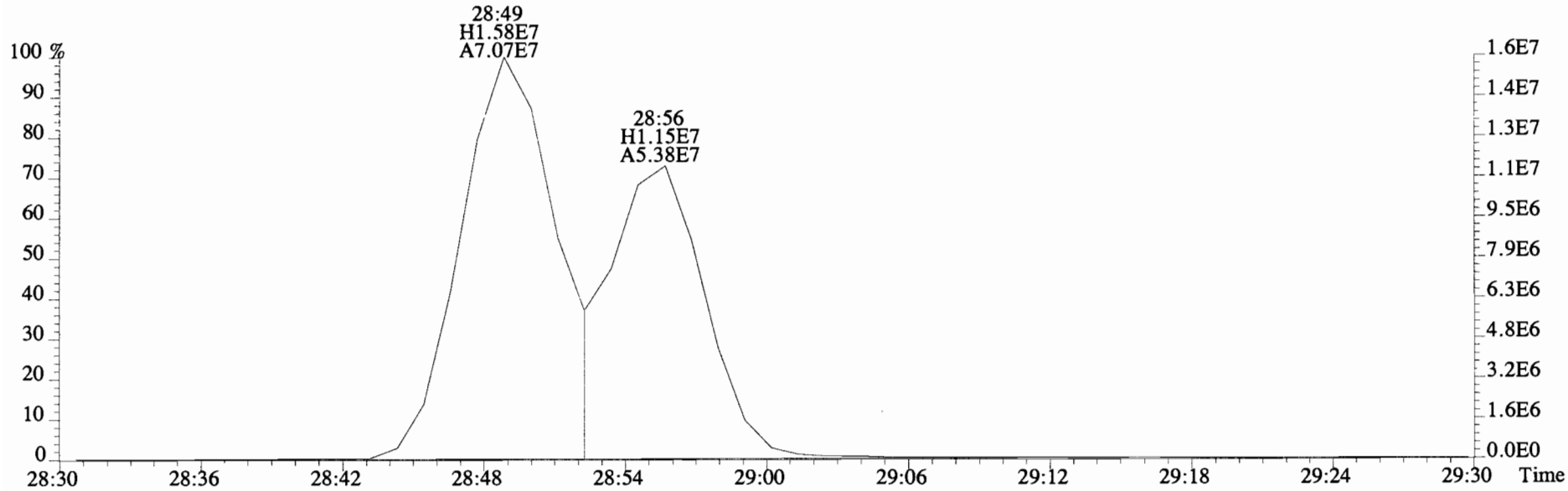
257.9584 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1628.0,0.00%,F,F)

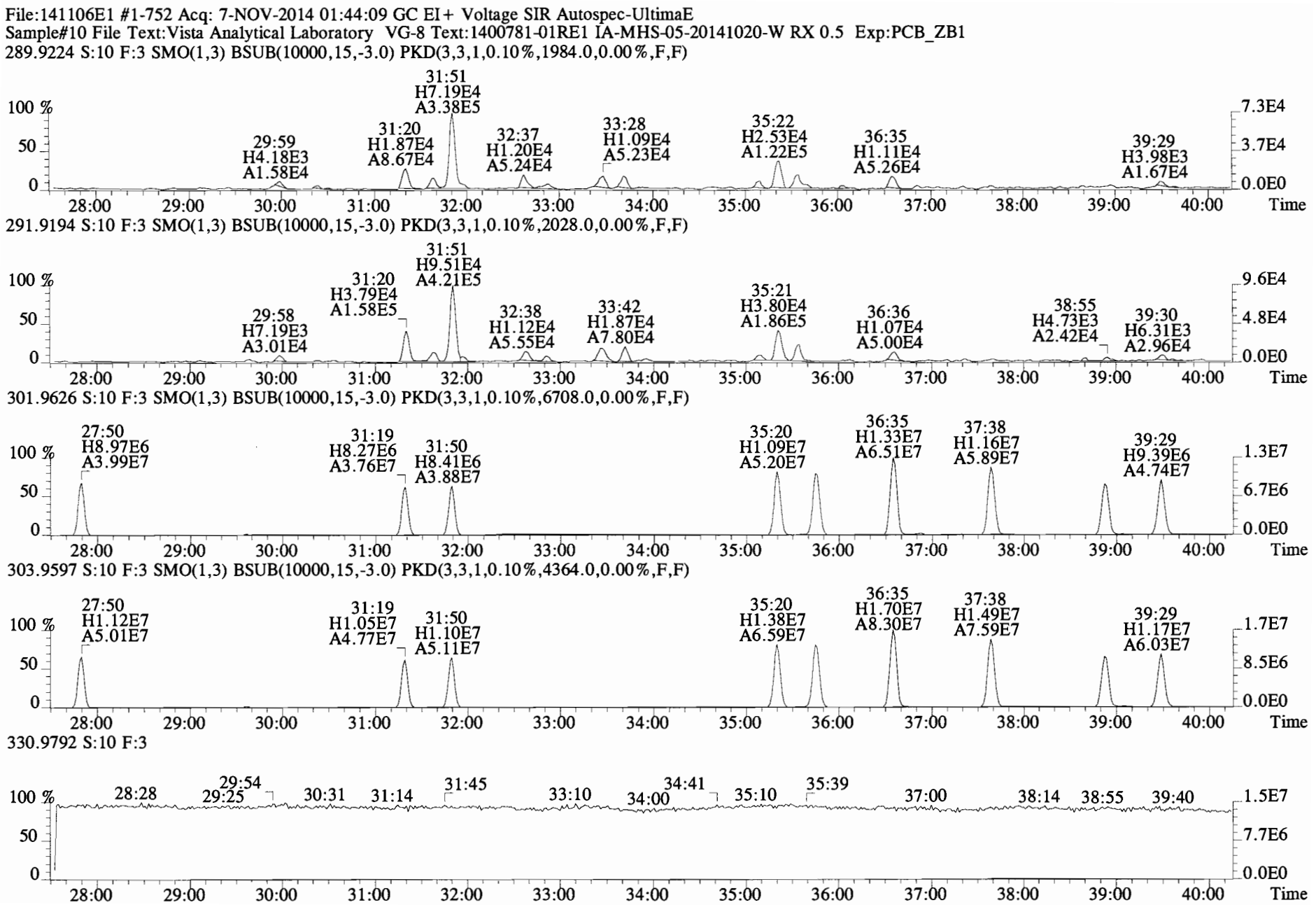


File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
268.0016 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,47608.0,0.00%,F,F)

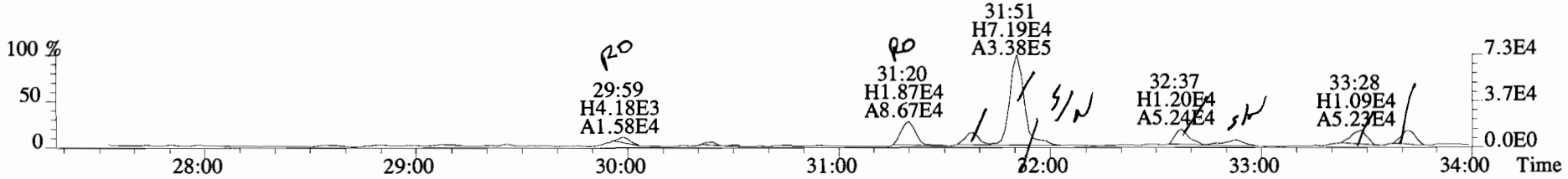


269.9986 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26428.0,0.00%,F,F)

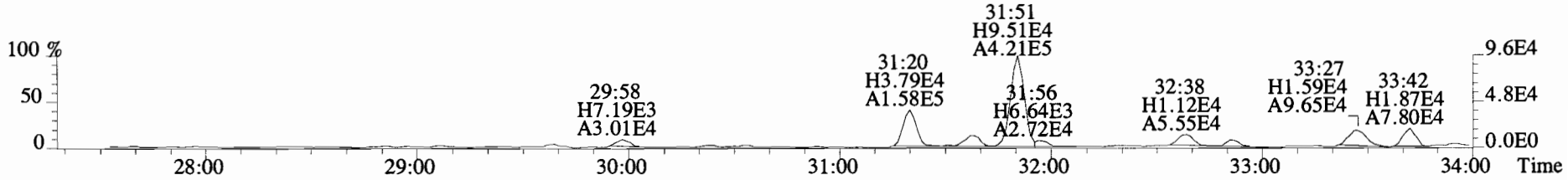



File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1984.0,0.00%,F,F)
31:51 H7.19E4 A3.38E5
31:20 H1.87E4 A8.67E4
29:59 H4.18E3 A1.58E4
32:37 H1.20E4 A5.24E4
33:28 H1.09E4 A5.23E4
35:22 H2.53E4 A1.22E5
36:35 H1.11E4 A5.26E4
39:29 H3.98E3 A1.67E4
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2028.0,0.00%,F,F)
31:51 H9.51E4 A4.21E5
31:20 H3.79E4 A1.58E5
29:58 H7.19E3 A3.01E4
32:38 H1.12E4 A5.55E4
33:42 H1.87E4 A7.80E4
35:21 H3.80E4 A1.86E5
36:36 H1.07E4 A5.00E4
38:55 H4.73E3 A2.42E4
39:30 H6.31E3 A2.96E4
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6708.0,0.00%,F,F)
27:50 H8.97E6 A3.99E7
31:19 H8.27E6 A3.76E7
31:50 H8.41E6 A3.88E7
35:20 H1.09E7 A5.20E7
36:35 H1.33E7 A6.51E7
37:38 H1.16E7 A5.89E7
39:29 H9.39E6 A4.74E7
303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4364.0,0.00%,F,F)
27:50 H1.12E7 A5.01E7
31:19 H1.05E7 A4.77E7
31:50 H1.10E7 A5.11E7
35:20 H1.38E7 A6.59E7
36:35 H1.70E7 A8.30E7
37:38 H1.49E7 A7.59E7
39:29 H1.17E7 A6.03E7
330.9792 S:10 F:3
28:28
29:54
29:25
30:31
31:14
31:45
33:10
34:00
34:41
35:10
35:39
37:00
38:14
38:55
39:40
100 %
50
0
7.3E4
3.7E4
0.0E0
9.6E4
4.8E4
1.3E7
6.7E6
1.7E7
8.5E6
1.5E7
7.7E6
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

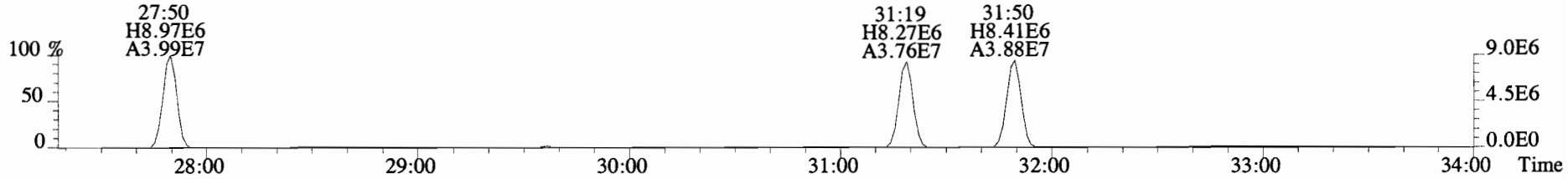
File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1984.0,0.00%,F,F)



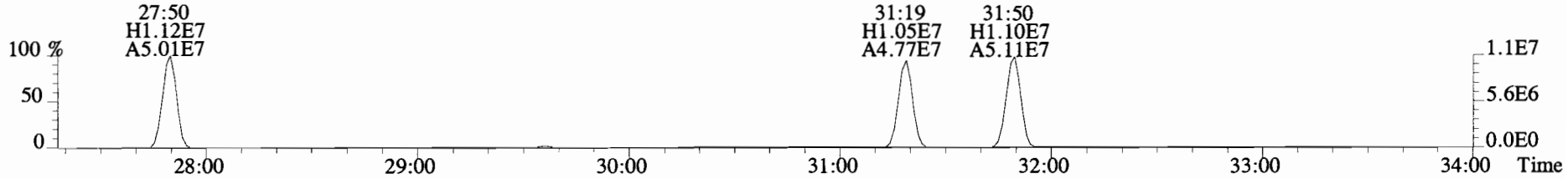
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2028.0,0.00%,F,F)



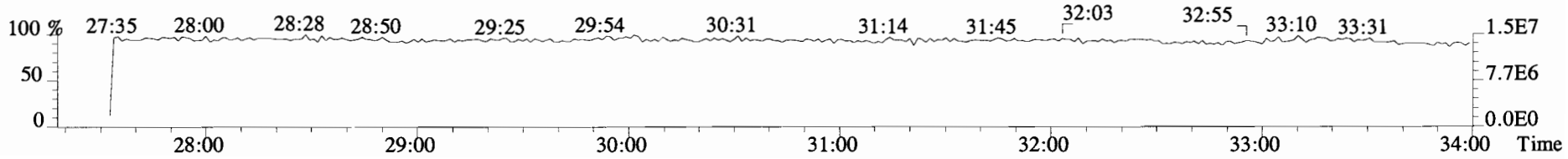
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6708.0,0.00%,F,F)

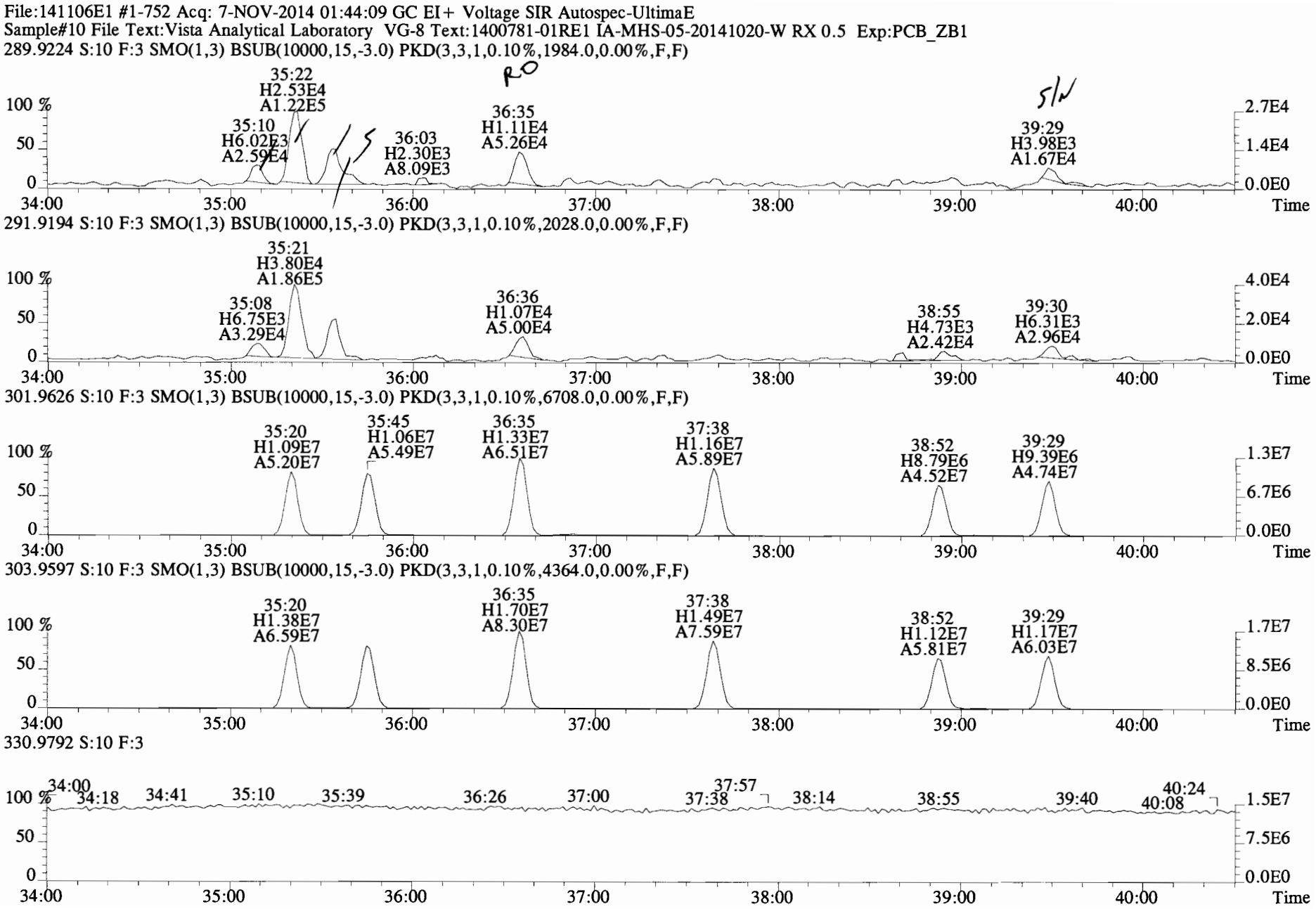


303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4364.0,0.00%,F,F)

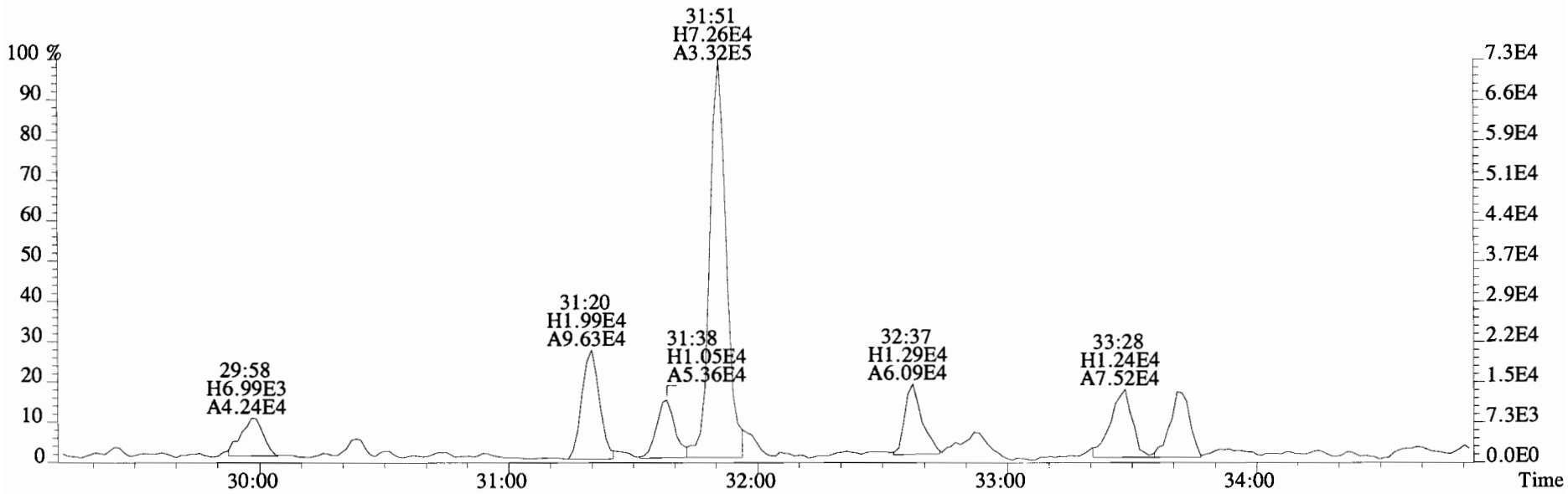


330.9792 S:10 F:3

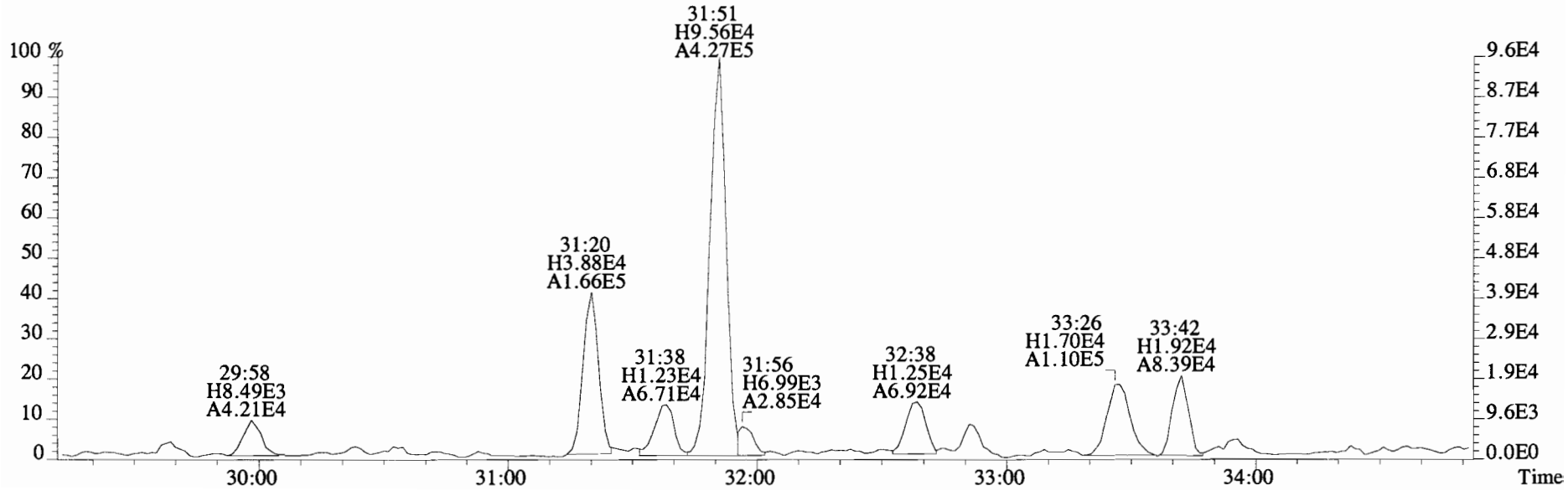



File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1984.0,0.00%,F,F)
35:22 H2.53E4 A1.22E5
35:10 H6.02E3 A2.59E4
36:03 H2.30E3 A8.09E3
36:35 H1.11E4 A5.26E4
39:29 H3.98E3 A1.67E4
RO
S/N
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2028.0,0.00%,F,F)
35:21 H3.80E4 A1.86E5
35:08 H6.75E3 A3.29E4
36:36 H1.07E4 A5.00E4
38:55 H4.73E3 A2.42E4
39:30 H6.31E3 A2.96E4
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6708.0,0.00%,F,F)
35:20 H1.09E7 A5.20E7
35:45 H1.06E7 A5.49E7
36:35 H1.33E7 A6.51E7
37:38 H1.16E7 A5.89E7
38:52 H8.79E6 A4.52E7
39:29 H9.39E6 A4.74E7
303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4364.0,0.00%,F,F)
35:20 H1.38E7 A6.59E7
36:35 H1.70E7 A8.30E7
37:38 H1.49E7 A7.59E7
38:52 H1.12E7 A5.81E7
39:29 H1.17E7 A6.03E7
330.9792 S:10 F:3
34:00 34:18 34:41 35:10 35:39 36:26 37:00 37:38 37:57 38:14 38:55 39:40 40:08 40:24
100 %
50
0
34:00 35:00 36:00 37:00 38:00 39:00 40:00 Time
2.7E4 1.4E4 0.0E0
4.0E4 2.0E4 0.0E0
1.3E7 6.7E6 0.0E0
1.7E7 8.5E6 0.0E0
1.5E7 7.5E6 0.0E0

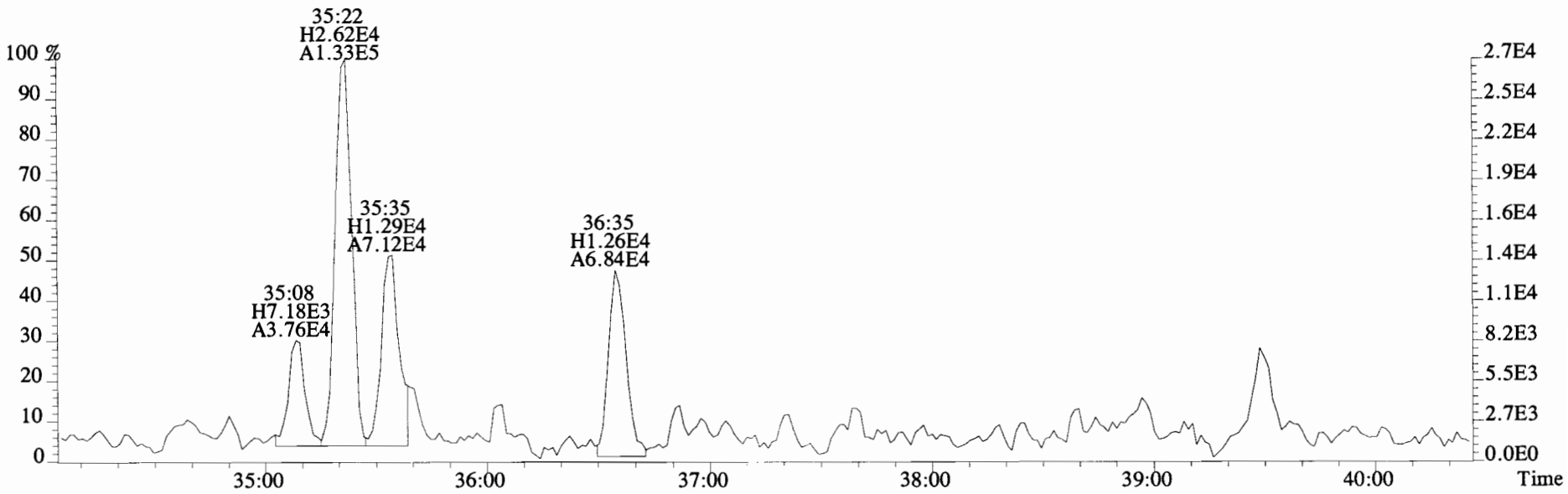
File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



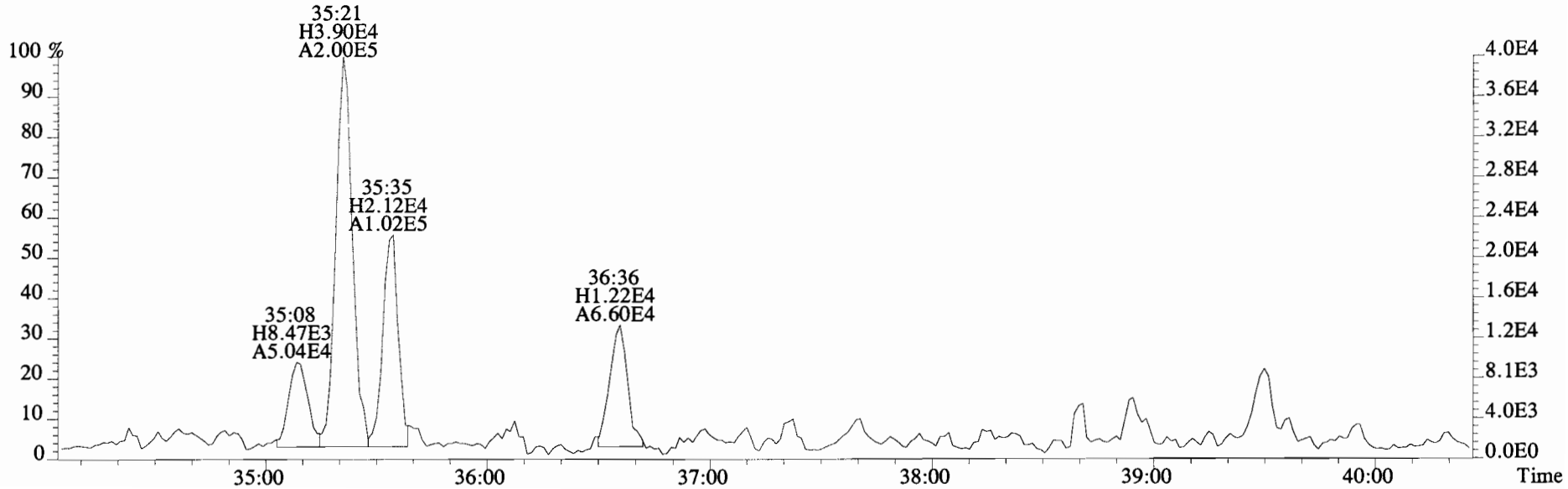
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



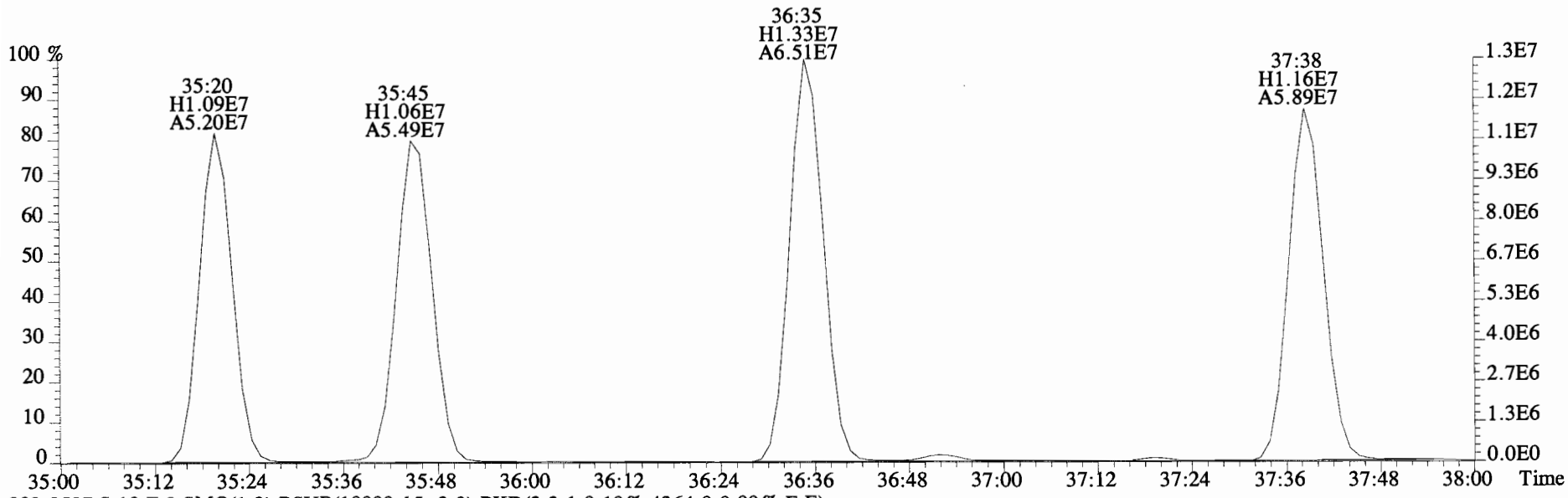
File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



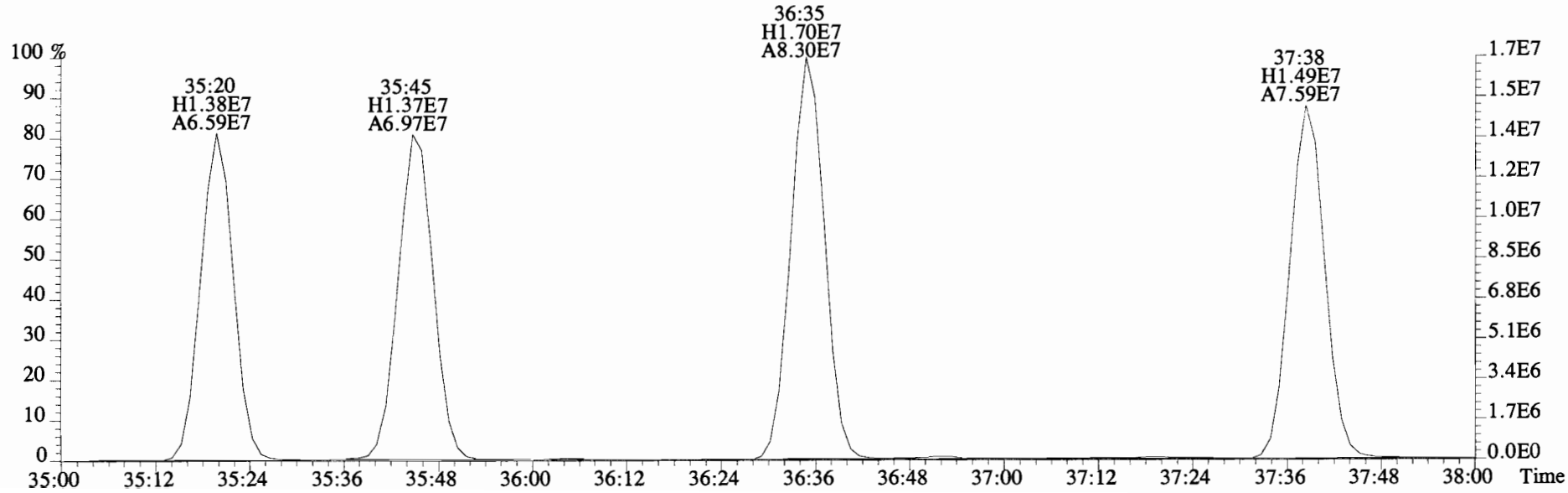
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)

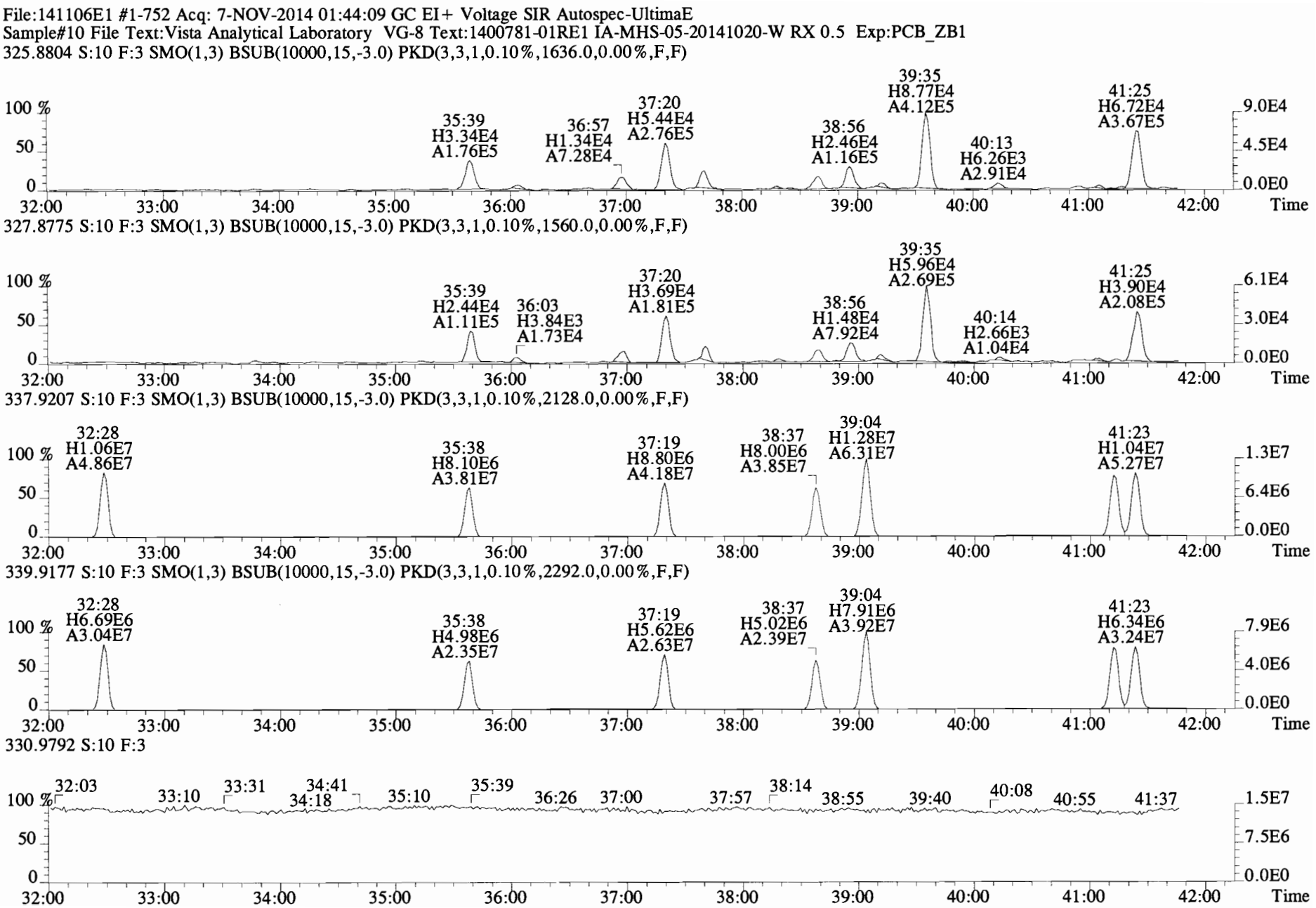


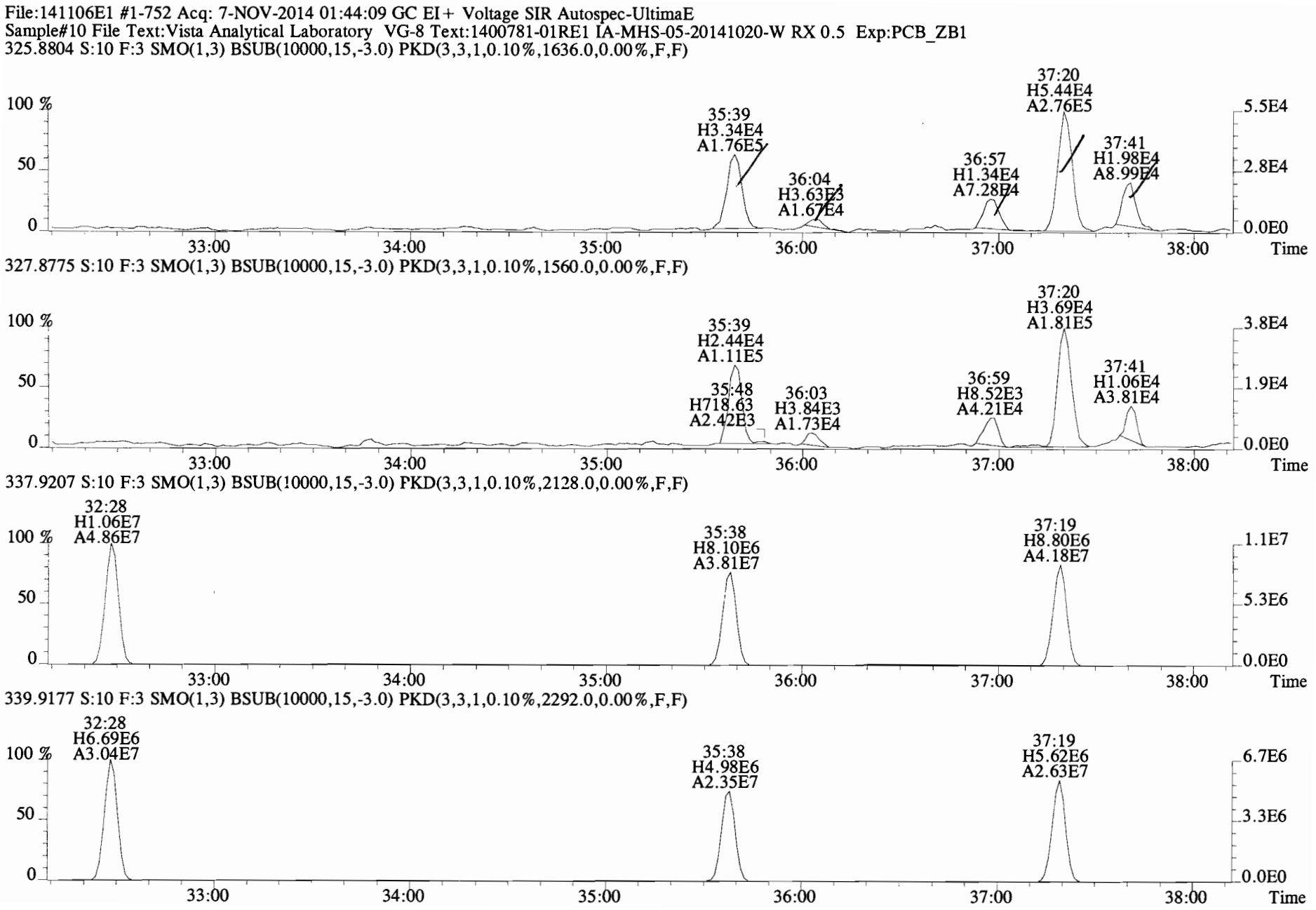
File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6708.0,0.00%,F,F)



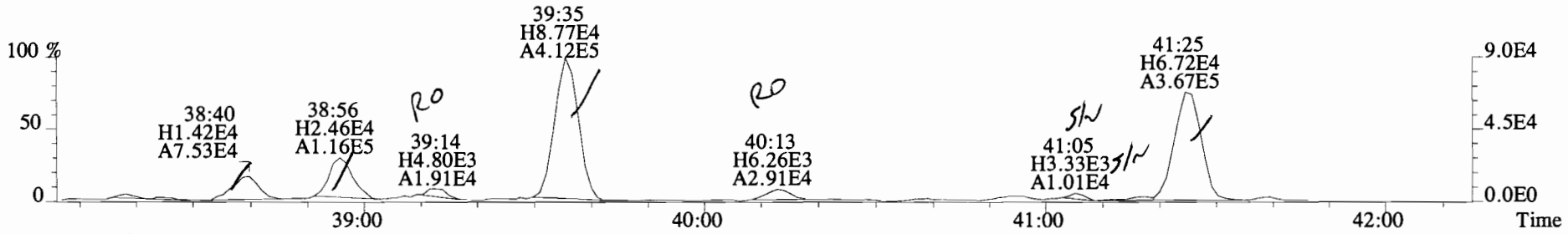
303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4364.0,0.00%,F,F)



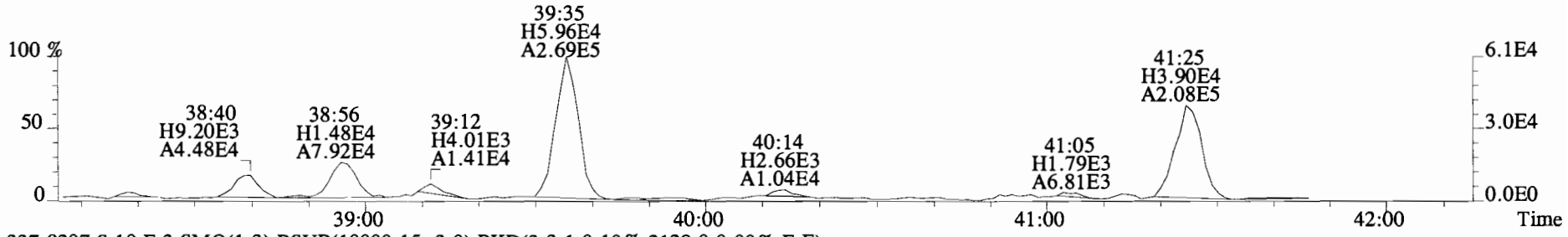

File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)
35:39 H3.34E4 A1.76E5
36:57 H1.34E4 A7.28E4
37:20 H5.44E4 A2.76E5
38:56 H2.46E4 A1.16E5
39:35 H8.77E4 A4.12E5
40:13 H6.26E3 A2.91E4
41:25 H6.72E4 A3.67E5
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1560.0,0.00%,F,F)
35:39 H2.44E4 A1.11E5
36:03 H3.84E3 A1.73E4
37:20 H3.69E4 A1.81E5
38:56 H1.48E4 A7.92E4
39:35 H5.96E4 A2.69E5
40:14 H2.66E3 A1.04E4
41:25 H3.90E4 A2.08E5
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2128.0,0.00%,F,F)
32:28 H1.06E7 A4.86E7
35:38 H8.10E6 A3.81E7
37:19 H8.80E6 A4.18E7
38:37 H8.00E6 A3.85E7
39:04 H1.28E7 A6.31E7
41:23 H1.04E7 A5.27E7
339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2292.0,0.00%,F,F)
32:28 H6.69E6 A3.04E7
35:38 H4.98E6 A2.35E7
37:19 H5.62E6 A2.63E7
38:37 H5.02E6 A2.39E7
39:04 H7.91E6 A3.92E7
41:23 H6.34E6 A3.24E7
330.9792 S:10 F:3
32:03
33:10
33:31
34:18
34:41
35:10
35:39
36:26
37:00
37:57
38:14
38:55
39:40
40:08
40:55
41:37
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
9.0E4
4.5E4
0.0E0
6.1E4
3.0E4
1.3E7
6.4E6
7.9E6
4.0E6
1.5E7
7.5E6


File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)
35:39 H3.34E4 A1.76E5
36:04 H3.63E3 A1.67E4
36:57 H1.34E4 A7.28E4
37:20 H5.44E4 A2.76E5
37:41 H1.98E4 A8.99E4
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1560.0,0.00%,F,F)
35:39 H2.44E4 A1.11E5
35:48 H718.63 A2.42E3
36:03 H3.84E3 A1.73E4
36:59 H8.52E3 A4.21E4
37:20 H3.69E4 A1.81E5
37:41 H1.06E4 A3.81E4
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2128.0,0.00%,F,F)
32:28 H1.06E7 A4.86E7
35:38 H8.10E6 A3.81E7
37:19 H8.80E6 A4.18E7
339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2292.0,0.00%,F,F)
32:28 H6.69E6 A3.04E7
35:38 H4.98E6 A2.35E7
37:19 H5.62E6 A2.63E7
100 %
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
5.5E4
2.8E4
0.0E0
3.8E4
1.9E4
1.1E7
5.3E6
6.7E6
3.3E6

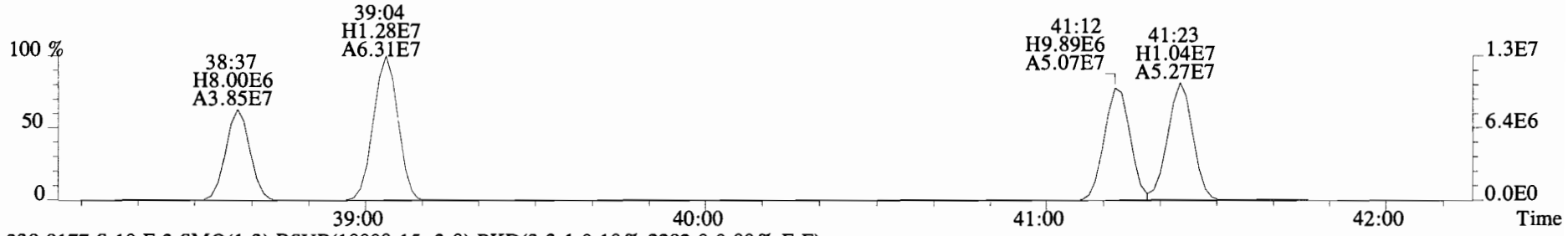
File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)



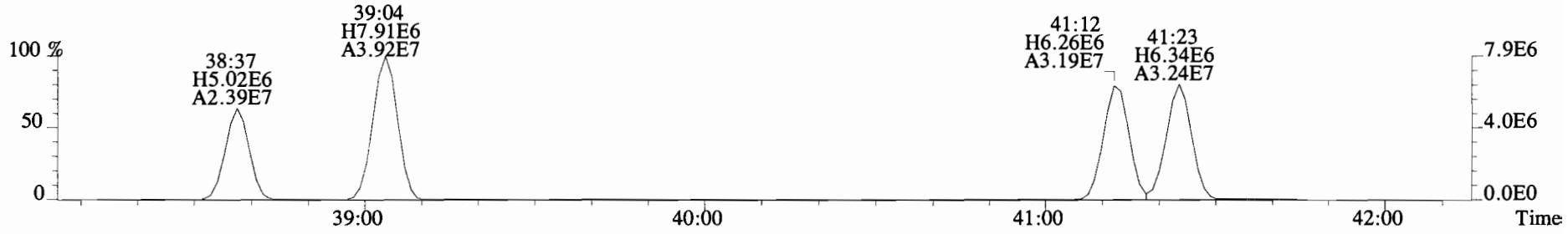
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1560.0,0.00%,F,F)



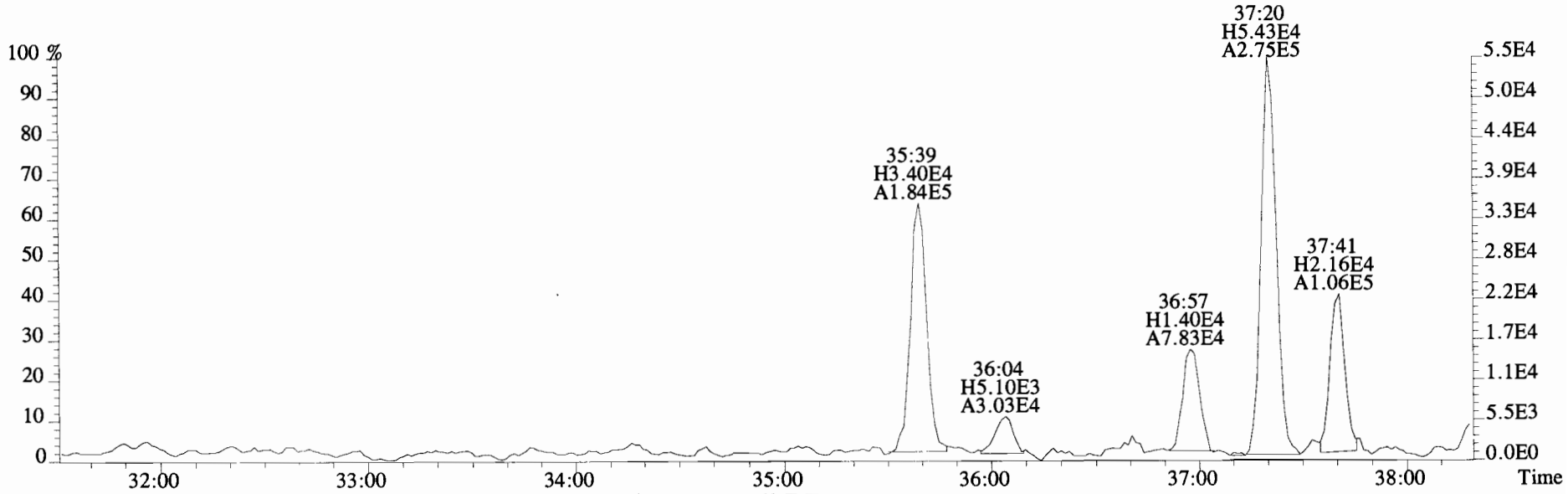
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2128.0,0.00%,F,F)



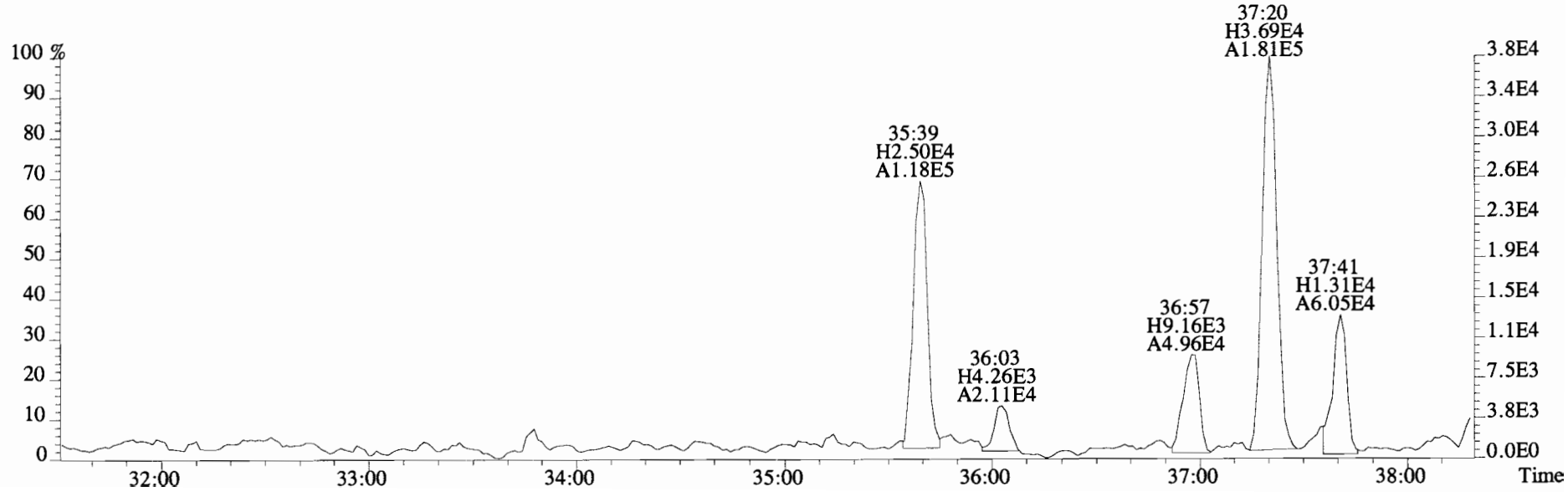
339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2292.0,0.00%,F,F)



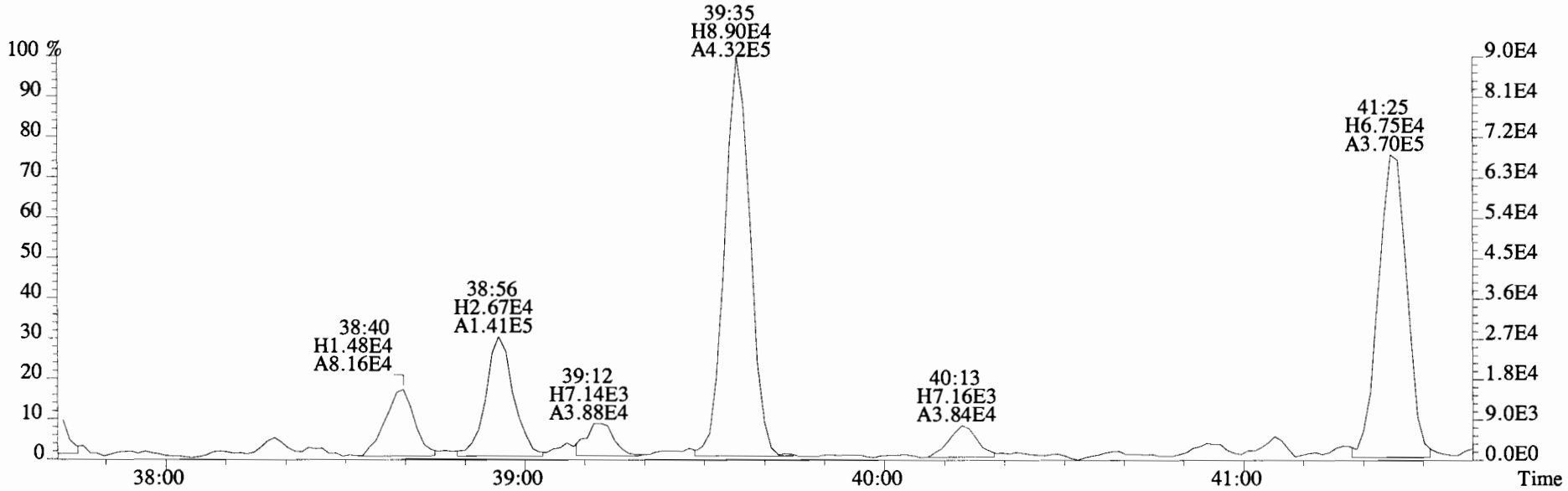
File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)



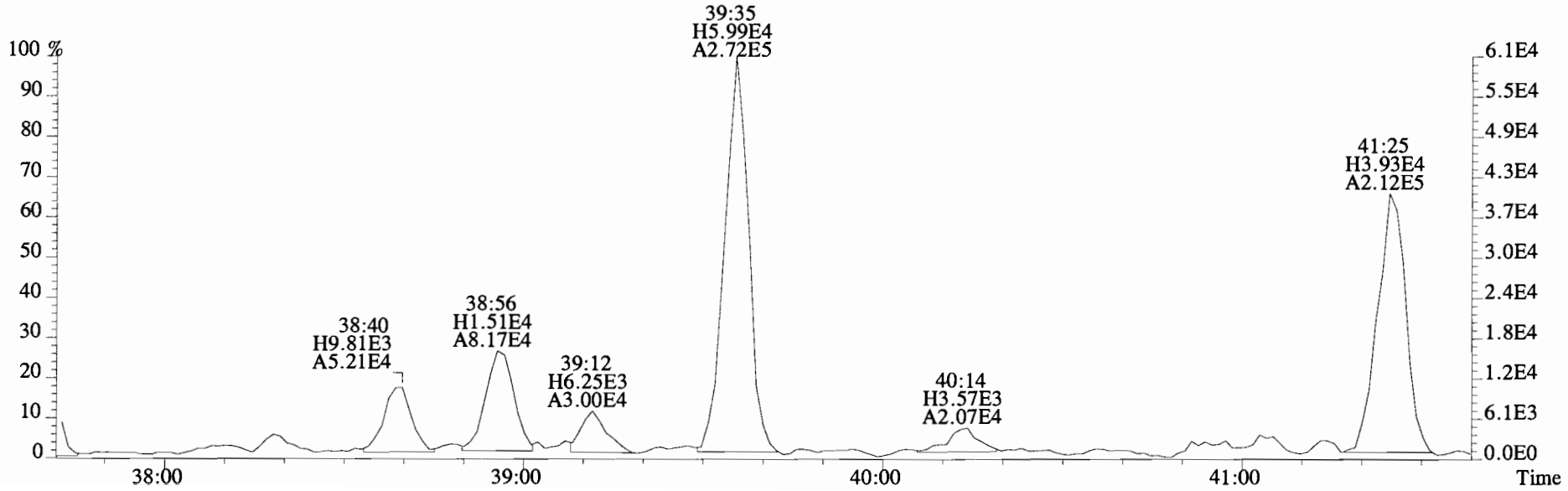
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1560.0,0.00%,F,F)

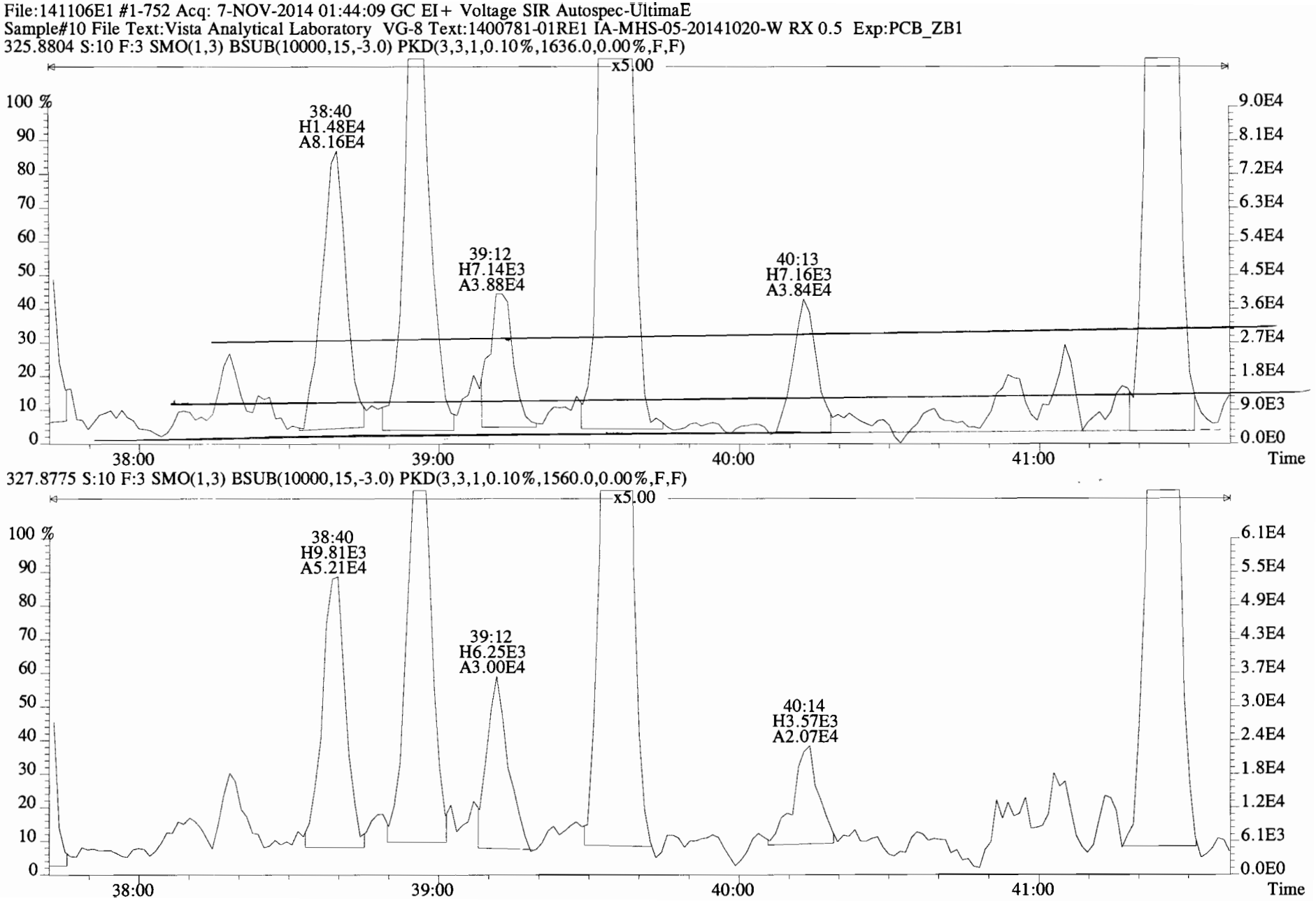


File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)

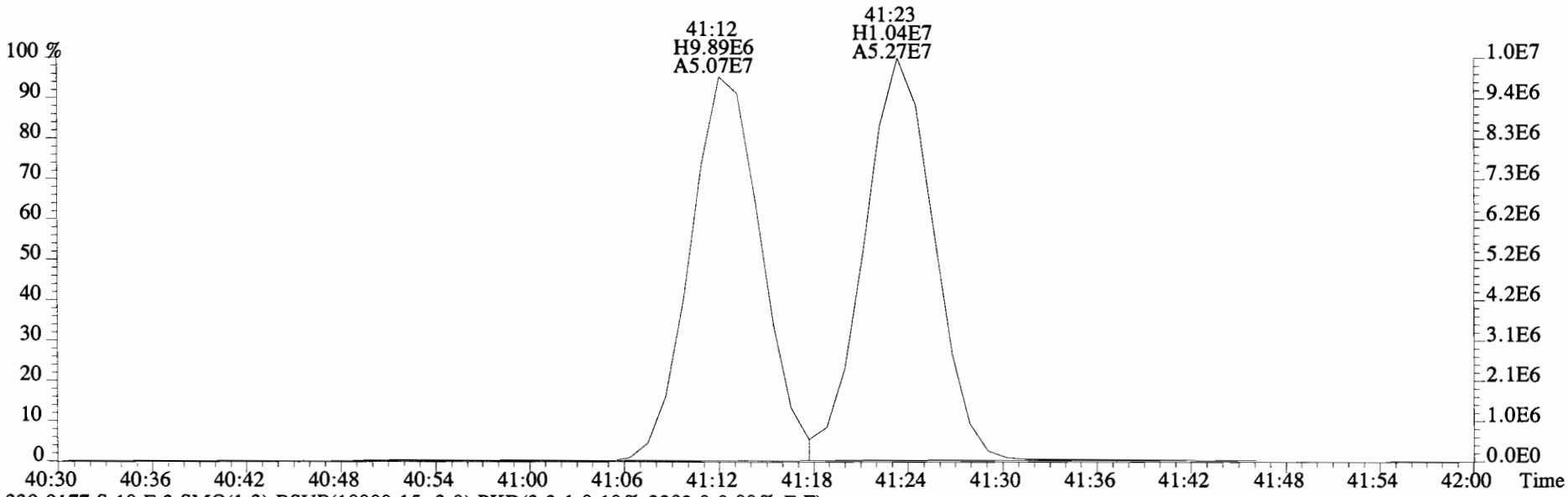


327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1560.0,0.00%,F,F)

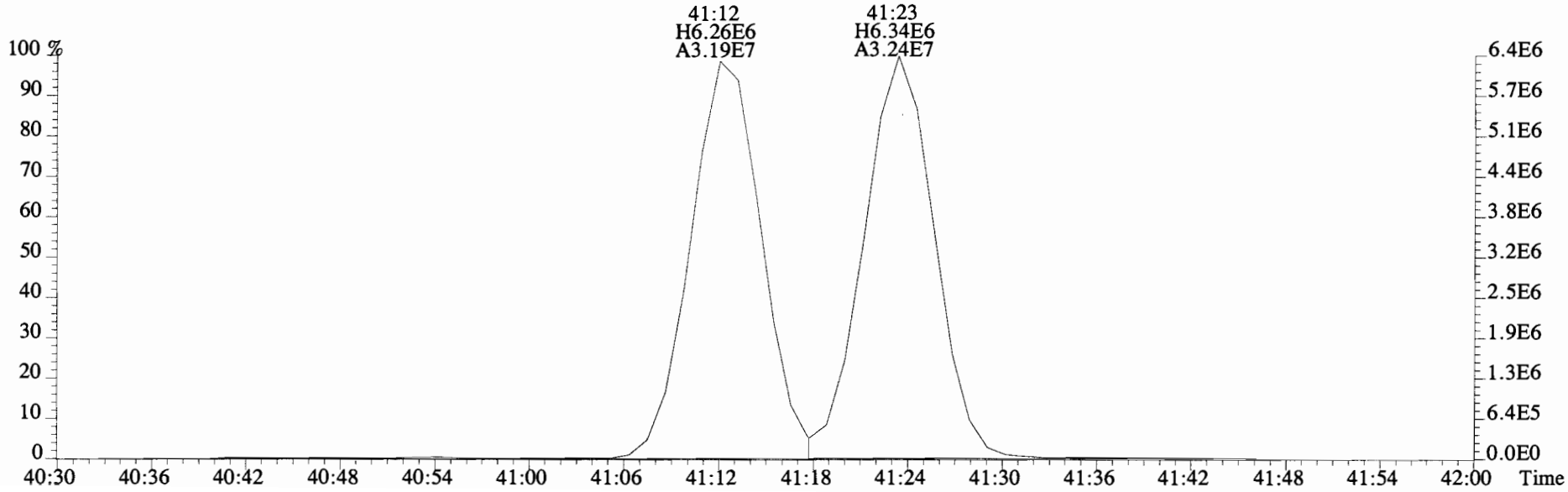


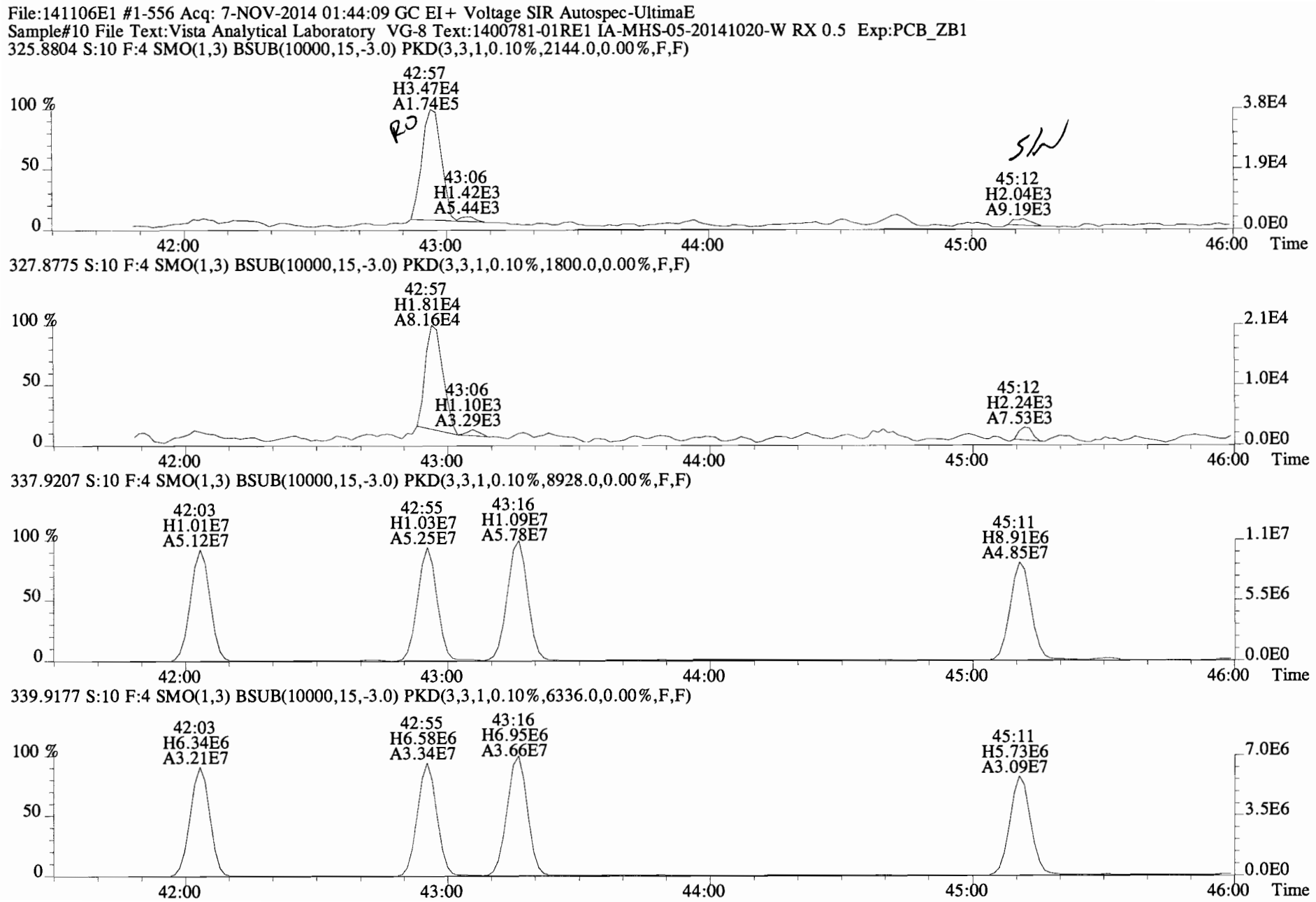

File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1636.0,0.00%,F,F)
x5.00
38:40
H1.48E4
A8.16E4
39:12
H7.14E3
A3.88E4
40:13
H7.16E3
A3.84E4
100 %
90
80
70
60
50
40
30
20
10
0
9.0E4
8.1E4
7.2E4
6.3E4
5.4E4
4.5E4
3.6E4
2.7E4
1.8E4
9.0E3
0.0E0
38:00
39:00
40:00
41:00
Time
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1560.0,0.00%,F,F)
x5.00
38:40
H9.81E3
A5.21E4
39:12
H6.25E3
A3.00E4
40:14
H3.57E3
A2.07E4
100 %
90
80
70
60
50
40
30
20
10
0
6.1E4
5.5E4
4.9E4
4.3E4
3.7E4
3.0E4
2.4E4
1.8E4
1.2E4
6.1E3
0.0E0
38:00
39:00
40:00
41:00
Time

File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2128.0,0.00%,F,F)

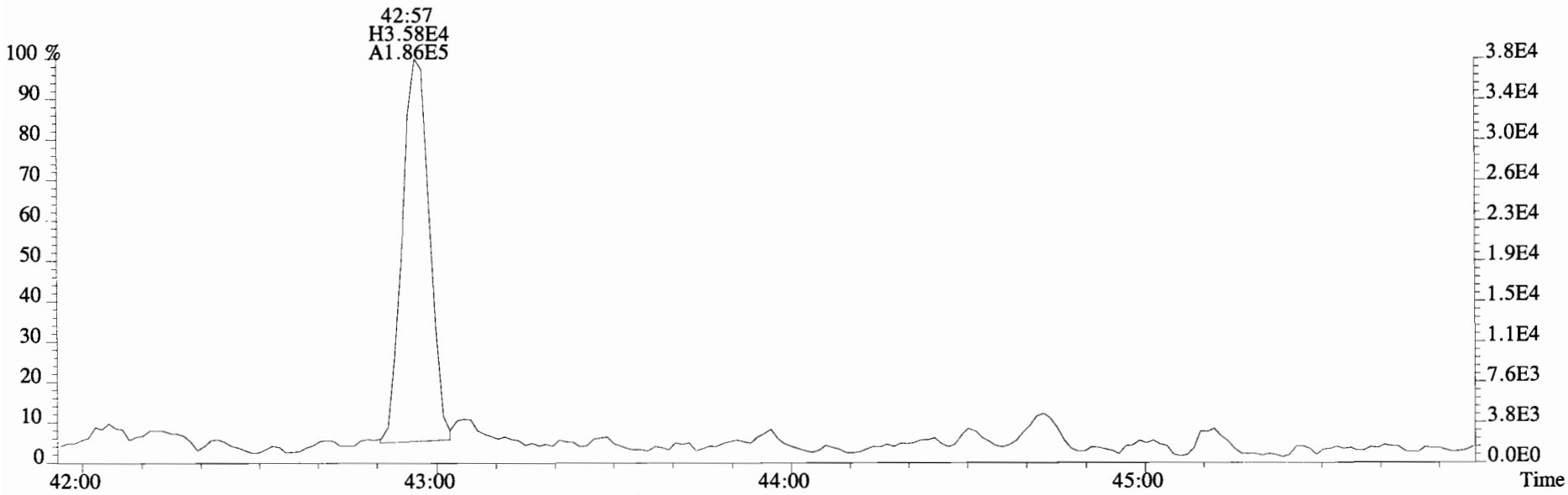


339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2292.0,0.00%,F,F)

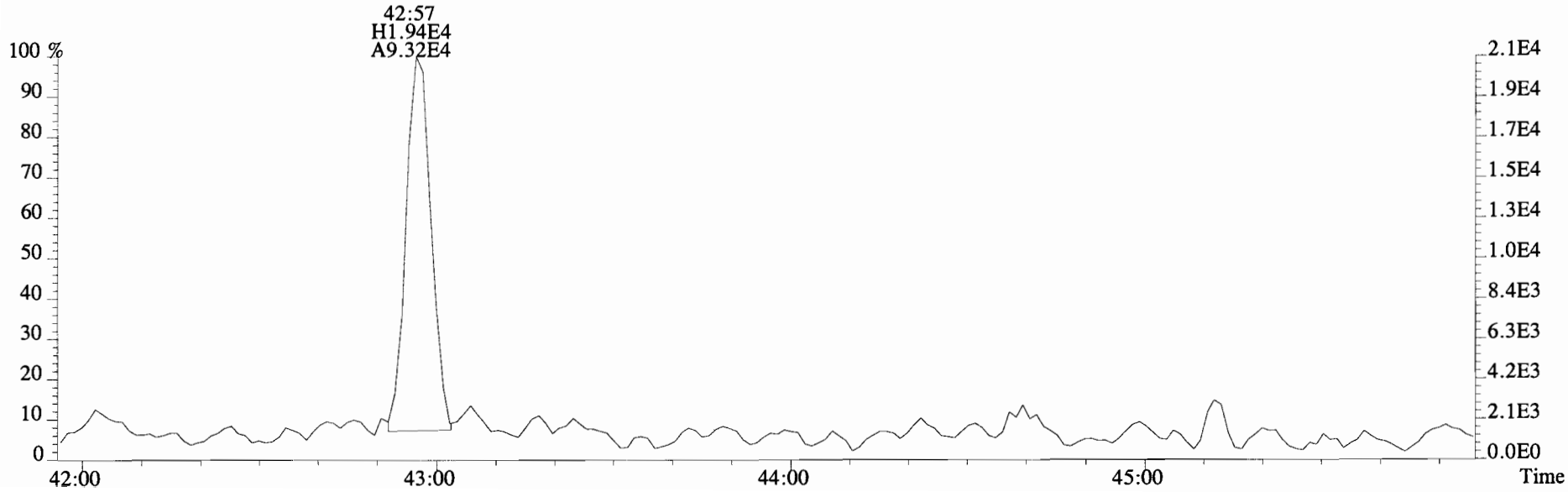



File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2144.0,0.00%,F,F)
42:57
H3.47E4
A1.74E5
43:06
H1.42E3
A5.44E3
45:12
H2.04E3
A9.19E3
100 %
50
0
3.8E4
1.9E4
0.0E0
42:00
43:00
44:00
45:00
46:00
Time
327.8775 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1800.0,0.00%,F,F)
42:57
H1.81E4
A8.16E4
43:06
H1.10E3
A3.29E3
45:12
H2.24E3
A7.53E3
100 %
50
0
2.1E4
1.0E4
0.0E0
42:00
43:00
44:00
45:00
46:00
Time
337.9207 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8928.0,0.00%,F,F)
42:03
H1.01E7
A5.12E7
42:55
H1.03E7
A5.25E7
43:16
H1.09E7
A5.78E7
45:11
H8.91E6
A4.85E7
100 %
50
0
1.1E7
5.5E6
0.0E0
42:00
43:00
44:00
45:00
46:00
Time
339.9177 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6336.0,0.00%,F,F)
42:03
H6.34E6
A3.21E7
42:55
H6.58E6
A3.34E7
43:16
H6.95E6
A3.66E7
45:11
H5.73E6
A3.09E7
100 %
50
0
7.0E6
3.5E6
0.0E0
42:00
43:00
44:00
45:00
46:00
Time

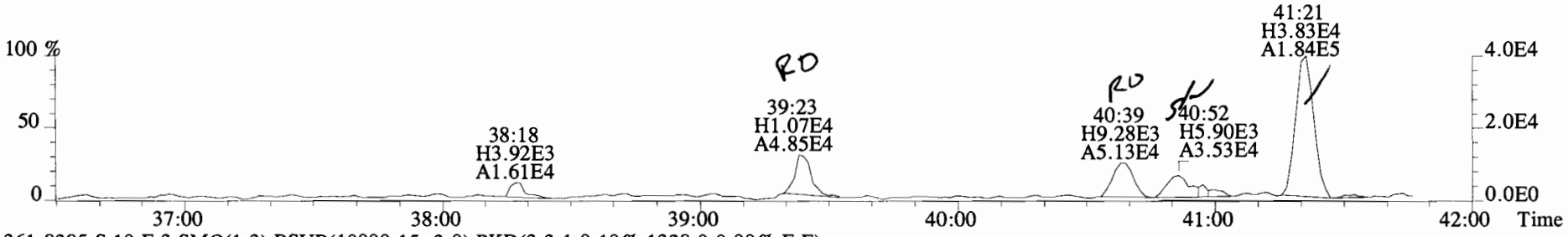
File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2144.0,0.00%,F,F)



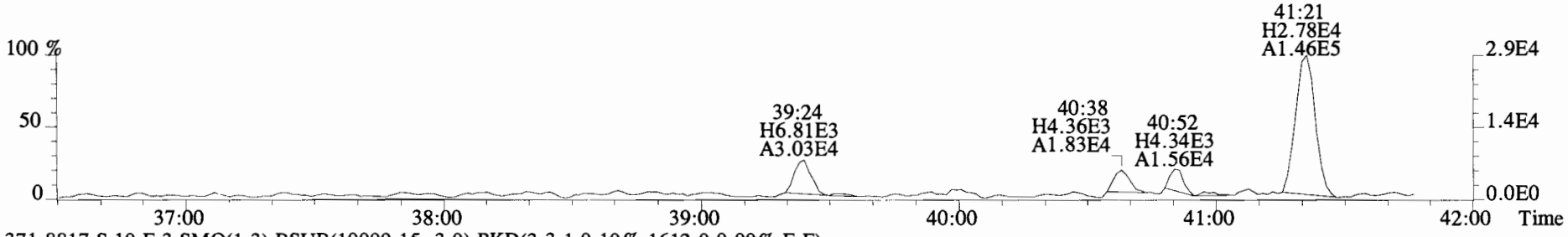
327.8775 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1800.0,0.00%,F,F)



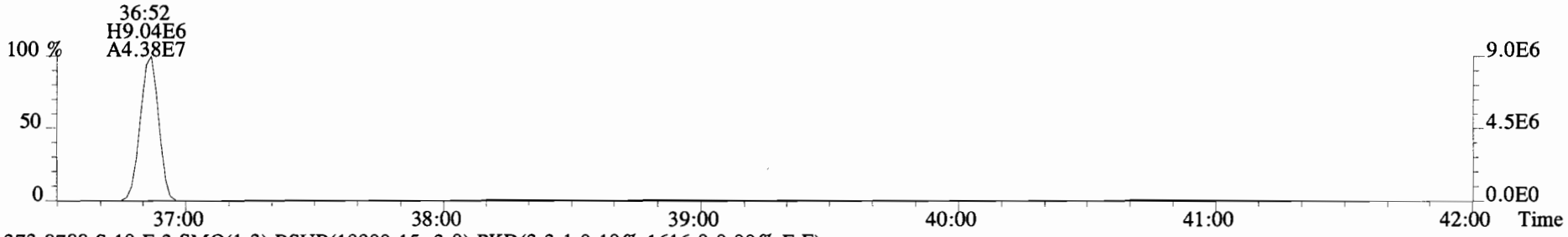
File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1512.0,0.00%,F,F)



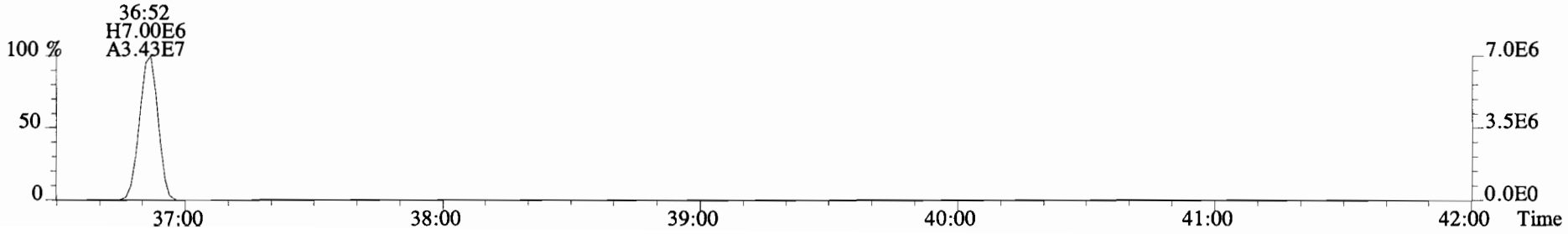
361.8385 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1328.0,0.00%,F,F)



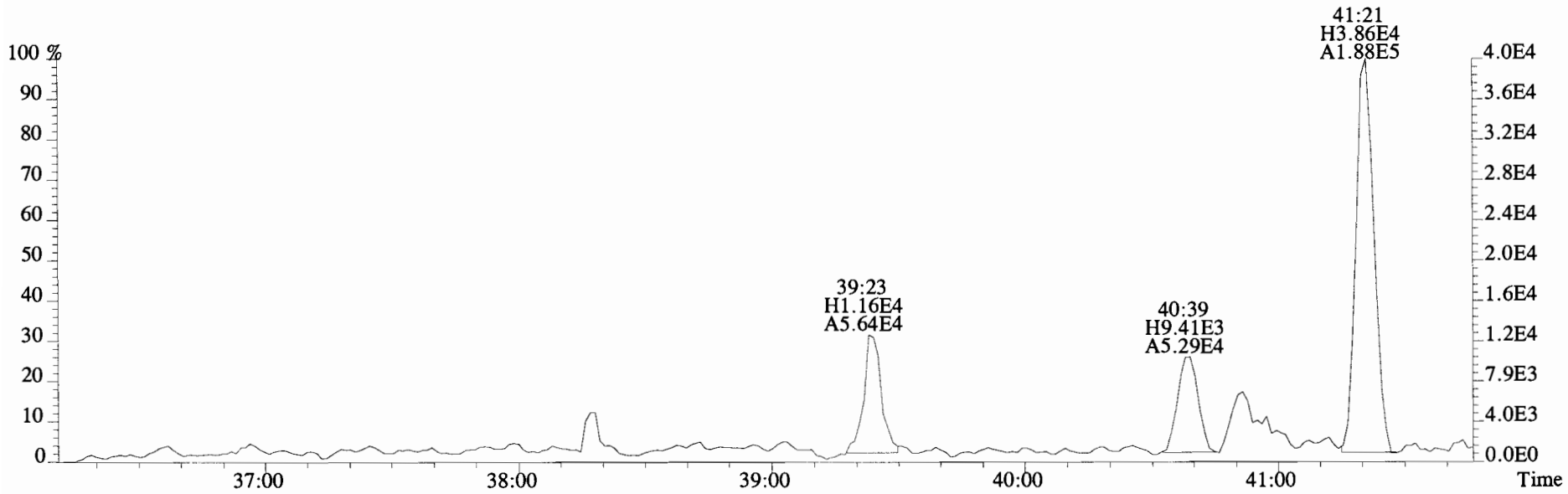
371.8817 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1612.0,0.00%,F,F)



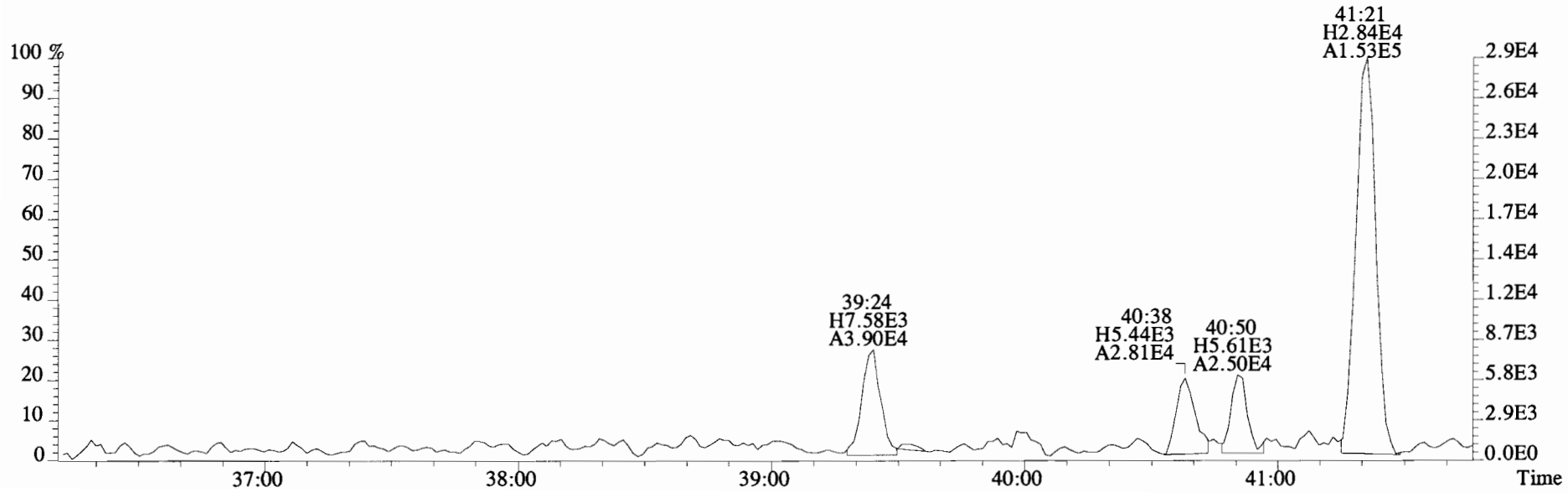
373.8788 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1616.0,0.00%,F,F)

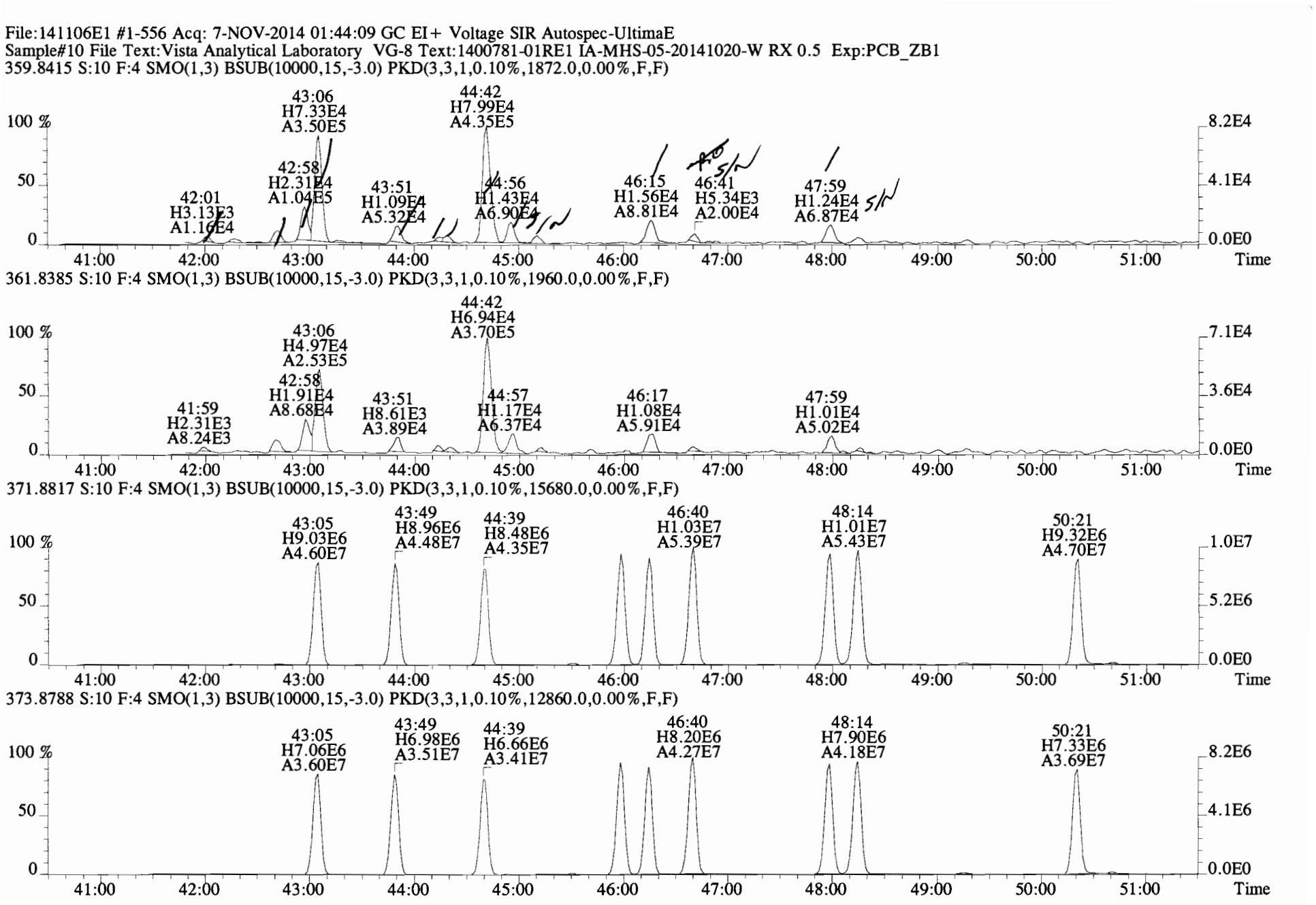


File:141106E1 #1-752 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1512.0,0.00%,F,F)

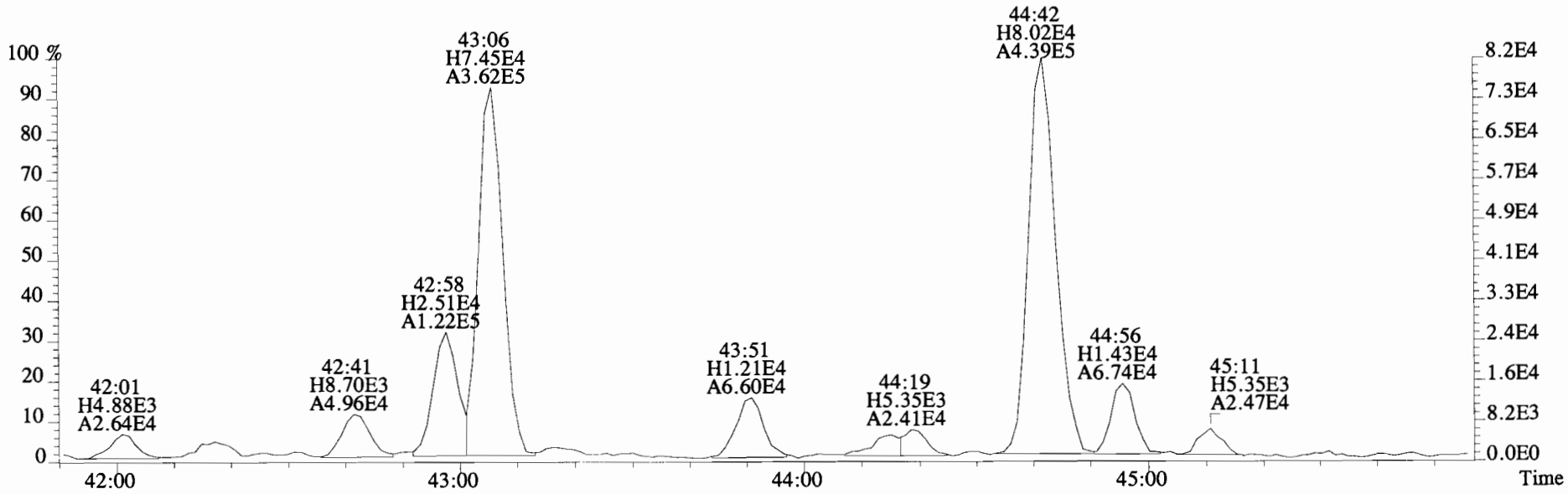


361.8385 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1328.0,0.00%,F,F)

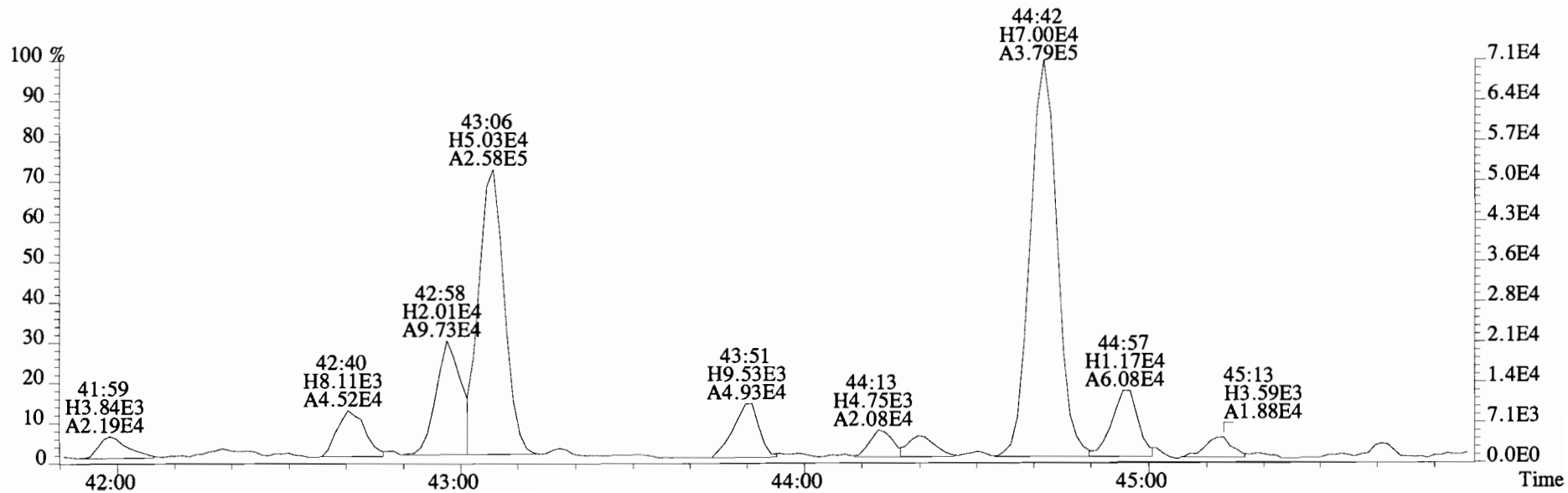


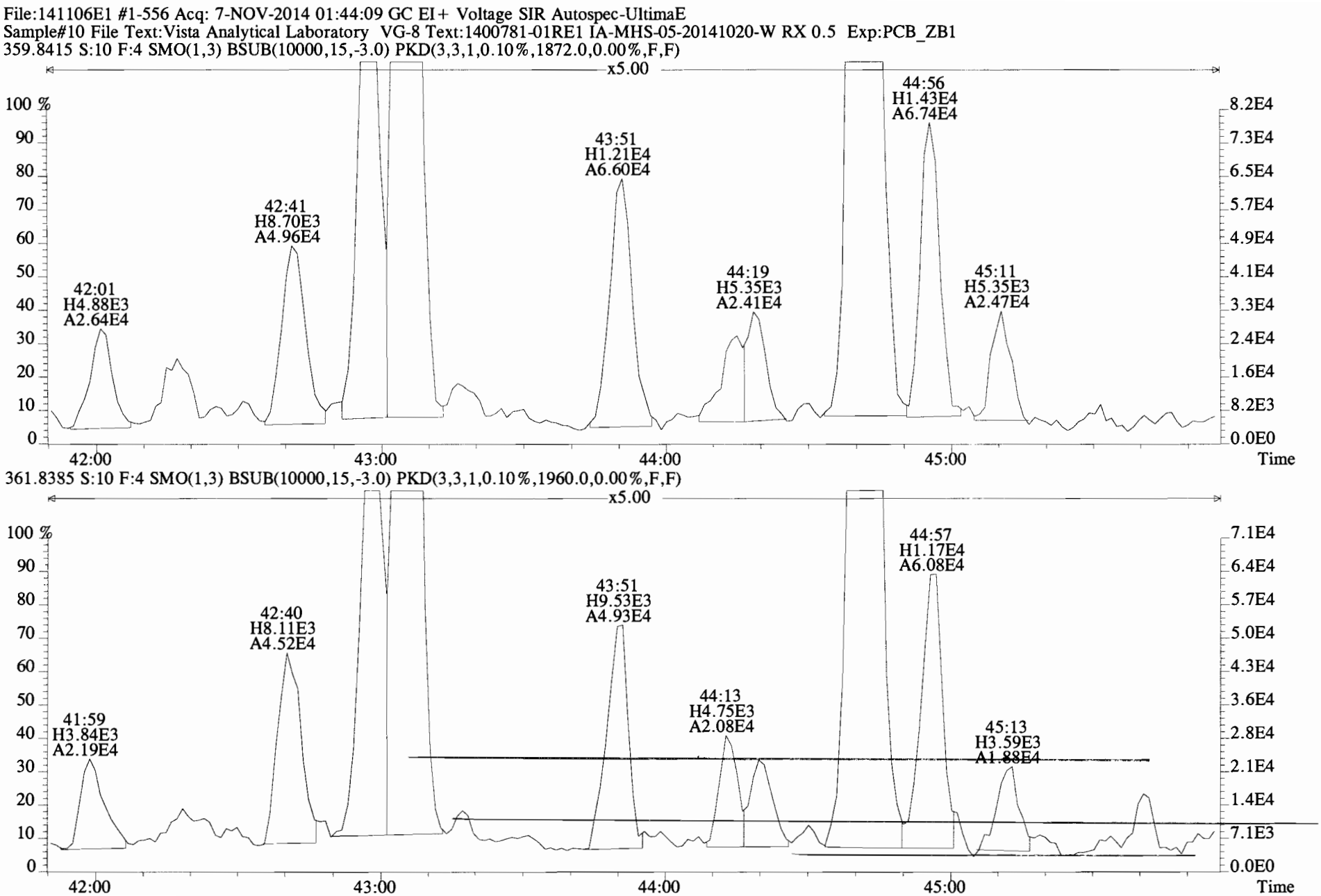

File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1872.0,0.00%,F,F)
43:06 H7.33E4 A3.50E5
44:42 H7.99E4 A4.35E5
42:58 H2.31E4 A1.04E5
42:01 H3.13E3 A1.16E4
43:51 H1.09E4 A5.32E4
44:56 H1.43E4 A6.90E4
46:15 H1.56E4 A8.81E4
46:41 H5.34E3 A2.00E4
47:59 H1.24E4 A6.87E4
361.8385 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1960.0,0.00%,F,F)
44:42 H6.94E4 A3.70E5
43:06 H4.97E4 A2.53E5
42:58 H1.91E4 A8.68E4
41:59 H2.31E3 A8.24E3
43:51 H8.61E3 A3.89E4
44:57 H1.17E4 A6.37E4
46:17 H1.08E4 A5.91E4
47:59 H1.01E4 A5.02E4
371.8817 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15680.0,0.00%,F,F)
43:05 H9.03E6 A4.60E7
43:49 H8.96E6 A4.48E7
44:39 H8.48E6 A4.35E7
46:40 H1.03E7 A5.39E7
48:14 H1.01E7 A5.43E7
50:21 H9.32E6 A4.70E7
373.8788 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12860.0,0.00%,F,F)
43:05 H7.06E6 A3.60E7
43:49 H6.98E6 A3.51E7
44:39 H6.66E6 A3.41E7
46:40 H8.20E6 A4.27E7
48:14 H7.90E6 A4.18E7
50:21 H7.33E6 A3.69E7
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
8.2E4
4.1E4
0.0E0
7.1E4
3.6E4
1.0E7
5.2E6
8.2E6
4.1E6

File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1872.0,0.00%,F,F)

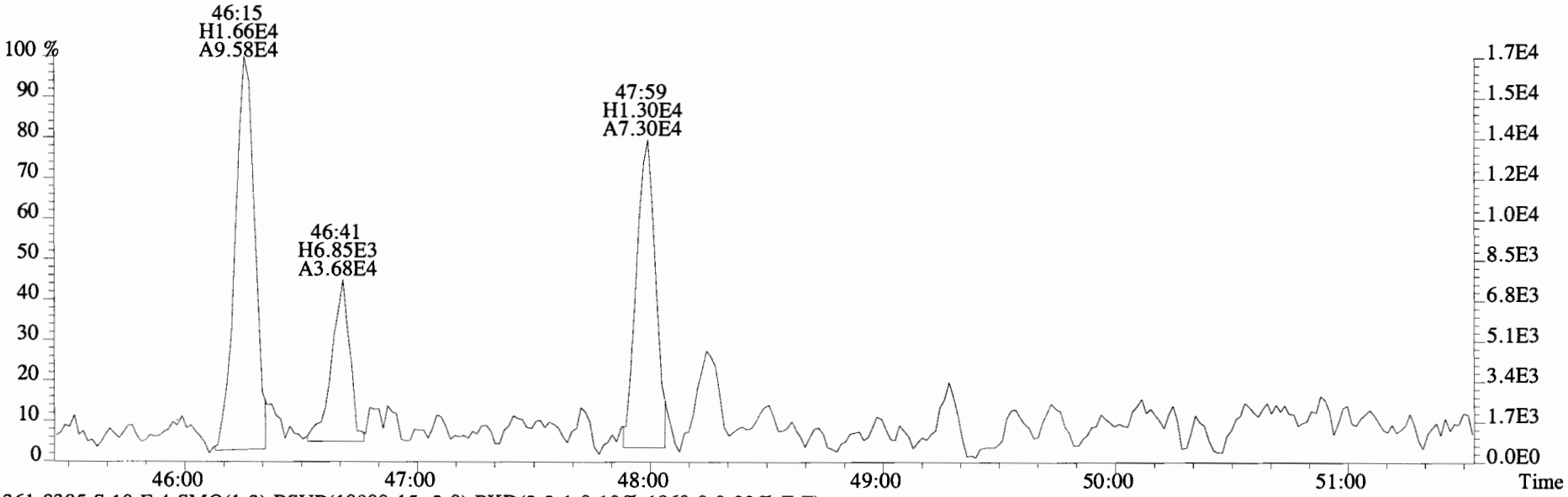


361.8385 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1960.0,0.00%,F,F)

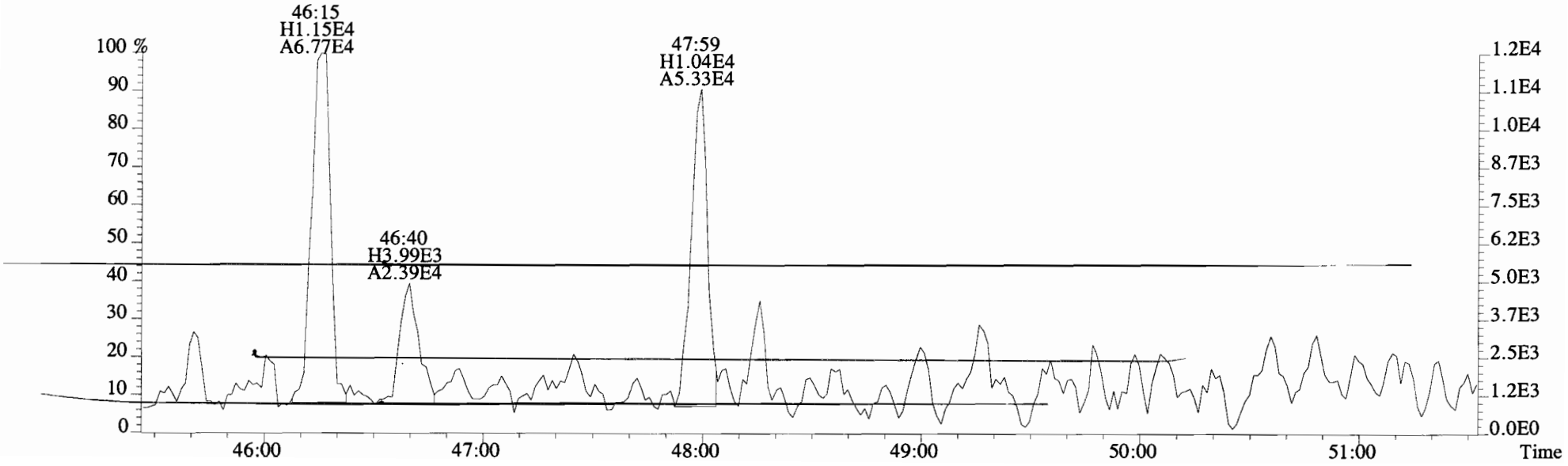


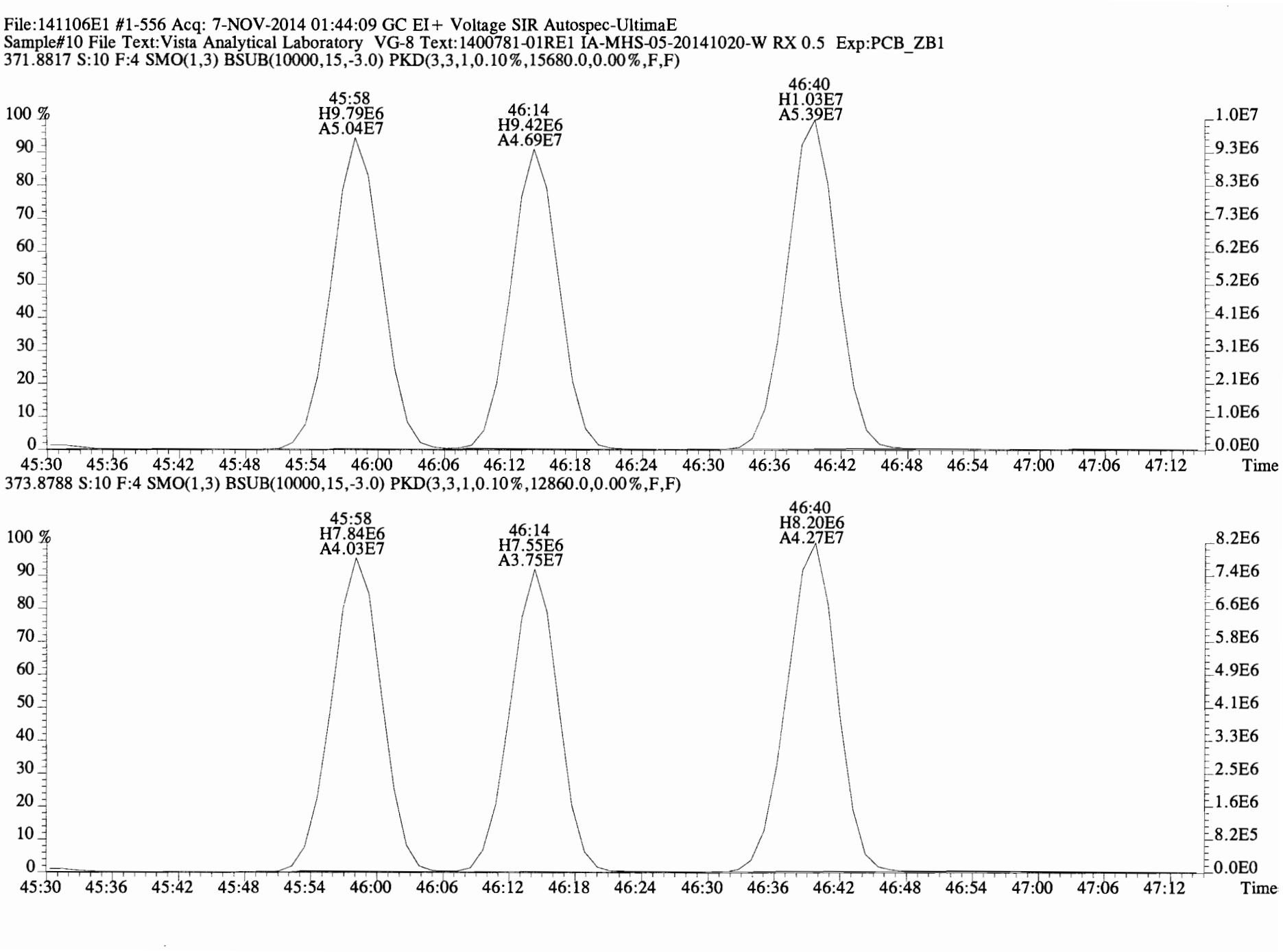

File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1872.0,0.00%,F,F)
x5.00
42:01 H4.88E3 A2.64E4
42:41 H8.70E3 A4.96E4
43:51 H1.21E4 A6.60E4
44:19 H5.35E3 A2.41E4
44:56 H1.43E4 A6.74E4
45:11 H5.35E3 A2.47E4
100 %
90
80
70
60
50
40
30
20
10
0
8.2E4
7.3E4
6.5E4
5.7E4
4.9E4
4.1E4
3.3E4
2.4E4
1.6E4
8.2E3
0.0E0
42:00
43:00
44:00
45:00
Time
361.8385 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1960.0,0.00%,F,F)
x5.00
41:59 H3.84E3 A2.19E4
42:40 H8.11E3 A4.52E4
43:51 H9.53E3 A4.93E4
44:13 H4.75E3 A2.08E4
44:57 H1.17E4 A6.08E4
45:13 H3.59E3 A1.88E4
100 %
90
80
70
60
50
40
30
20
10
0
7.1E4
6.4E4
5.7E4
5.0E4
4.3E4
3.6E4
2.8E4
2.1E4
1.4E4
7.1E3
0.0E0
42:00
43:00
44:00
45:00
Time

File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1872.0,0.00%,F,F)

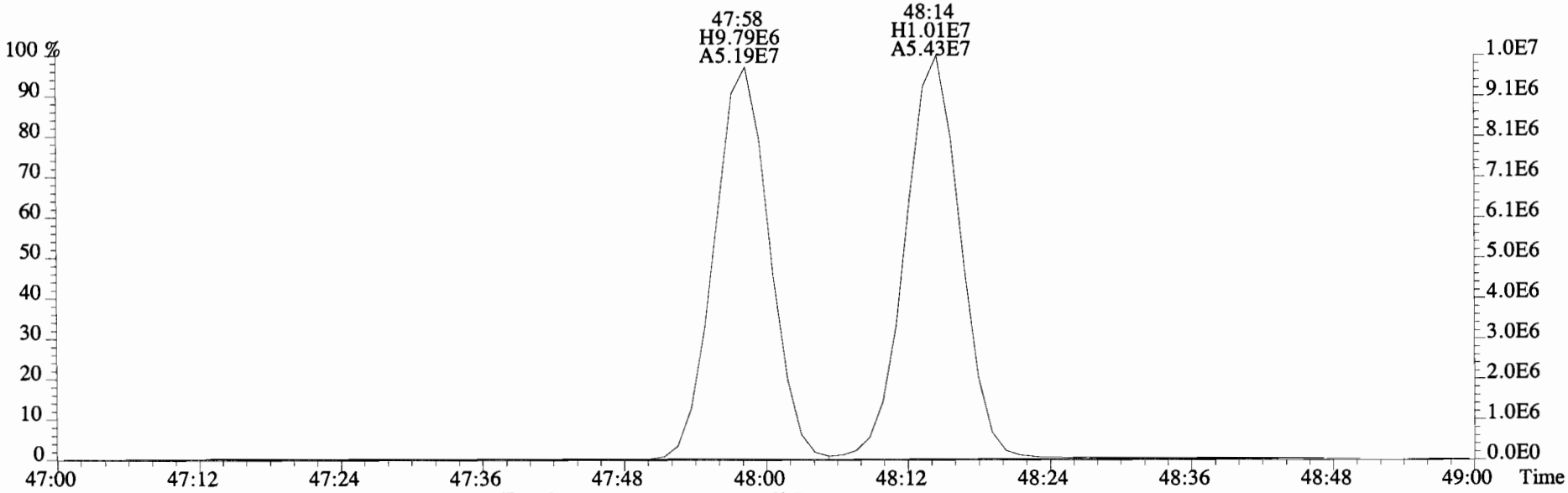


361.8385 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1960.0,0.00%,F,F)

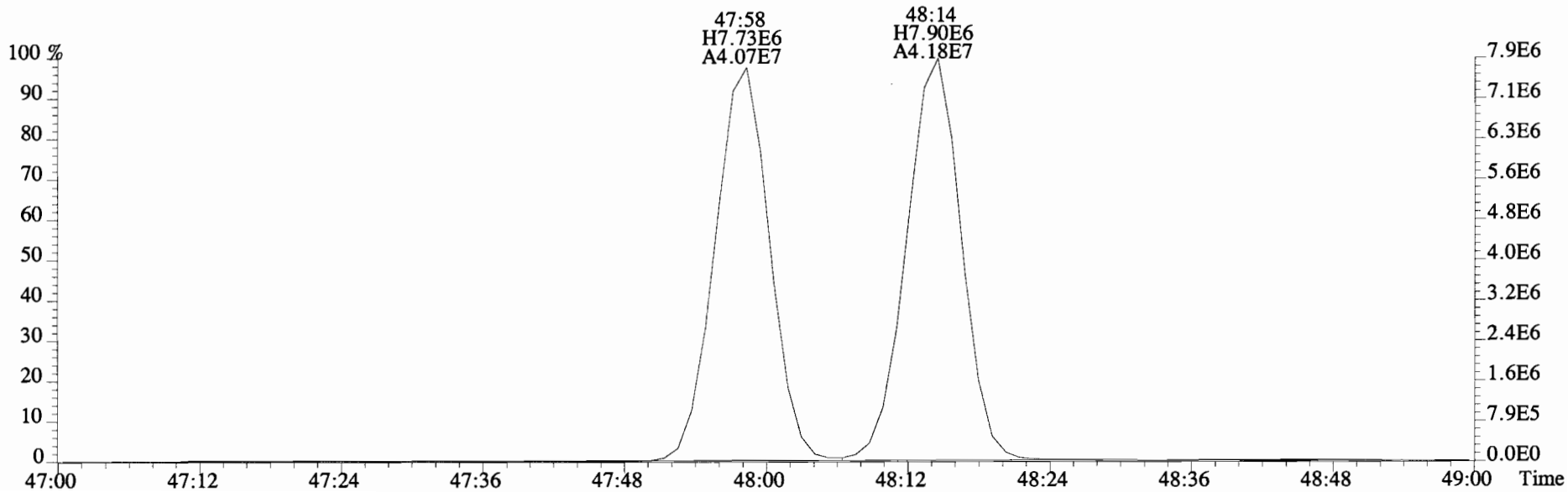


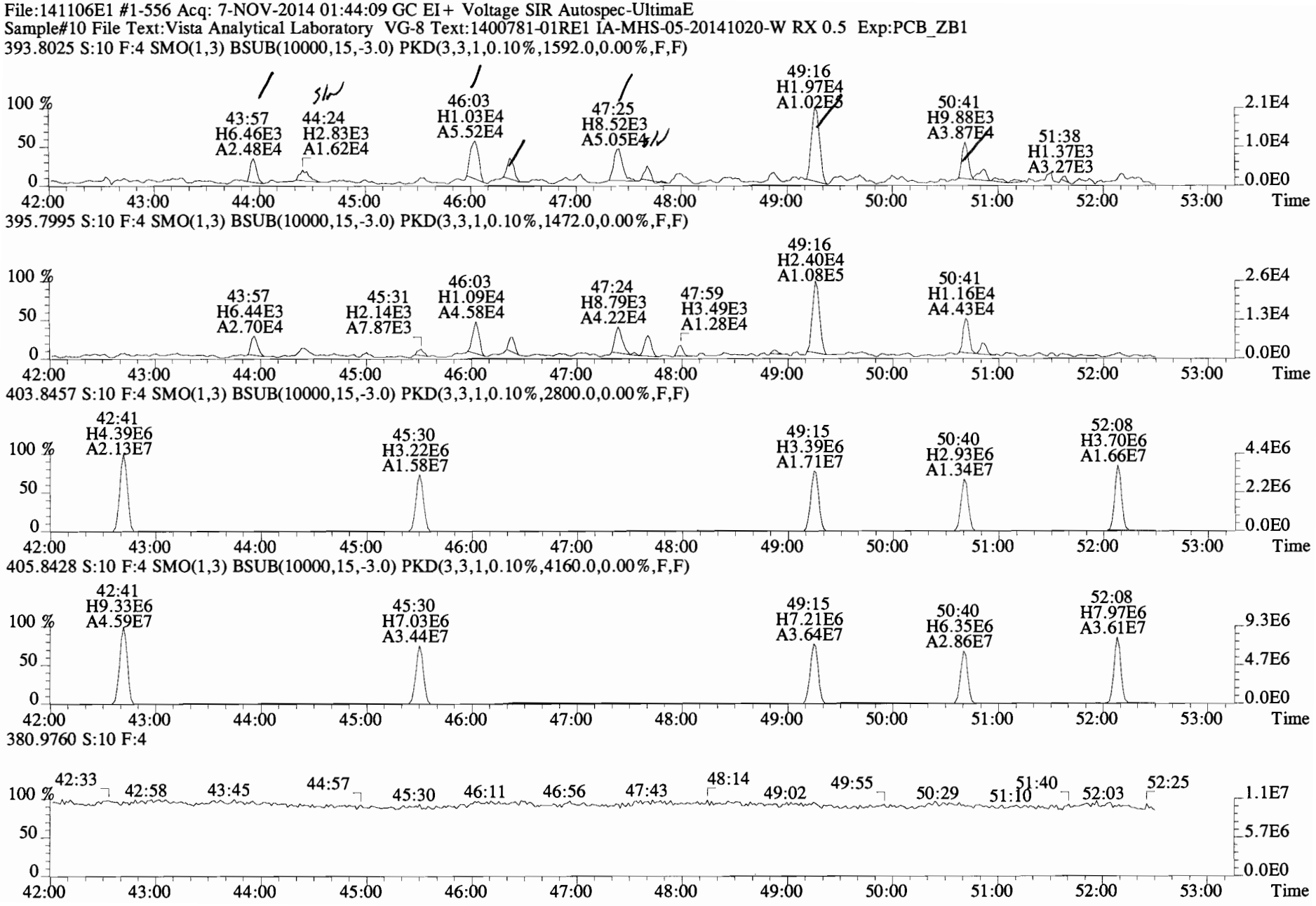

File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
371.8817 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15680.0,0.00%,F,F)
45:58
H9.79E6
A5.04E7
46:14
H9.42E6
A4.69E7
46:40
H1.03E7
A5.39E7
100 %
90
80
70
60
50
40
30
20
10
0
1.0E7
9.3E6
8.3E6
7.3E6
6.2E6
5.2E6
4.1E6
3.1E6
2.1E6
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 46:36 46:42 46:48 46:54 47:00 47:06 47:12
Time
373.8788 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12860.0,0.00%,F,F)
45:58
H7.84E6
A4.03E7
46:14
H7.55E6
A3.75E7
46:40
H8.20E6
A4.27E7
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 46:36 46:42 46:48 46:54 47:00 47:06 47:12
Time

File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
371.8817 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15680.0,0.00%,F,F)

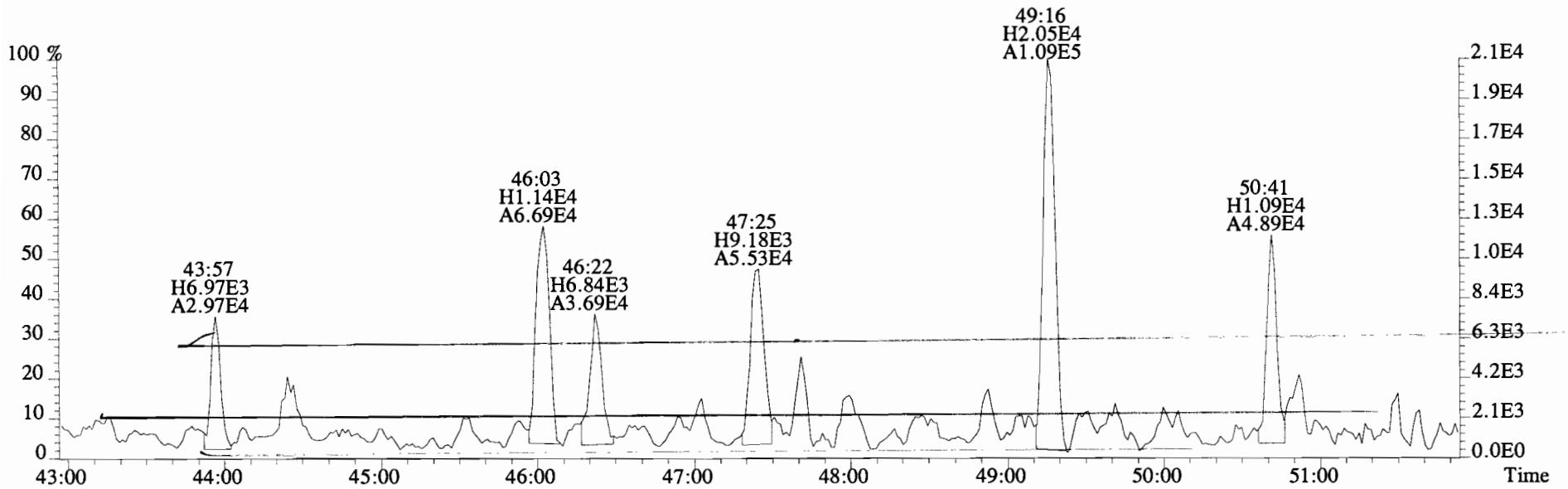


373.8788 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12860.0,0.00%,F,F)

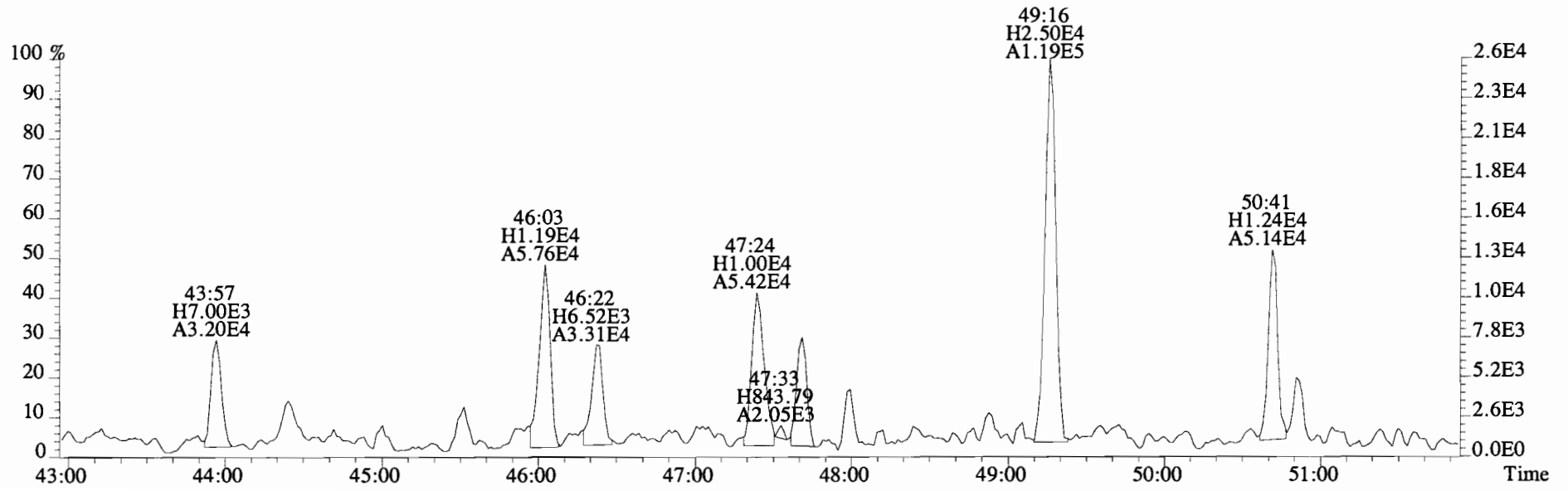


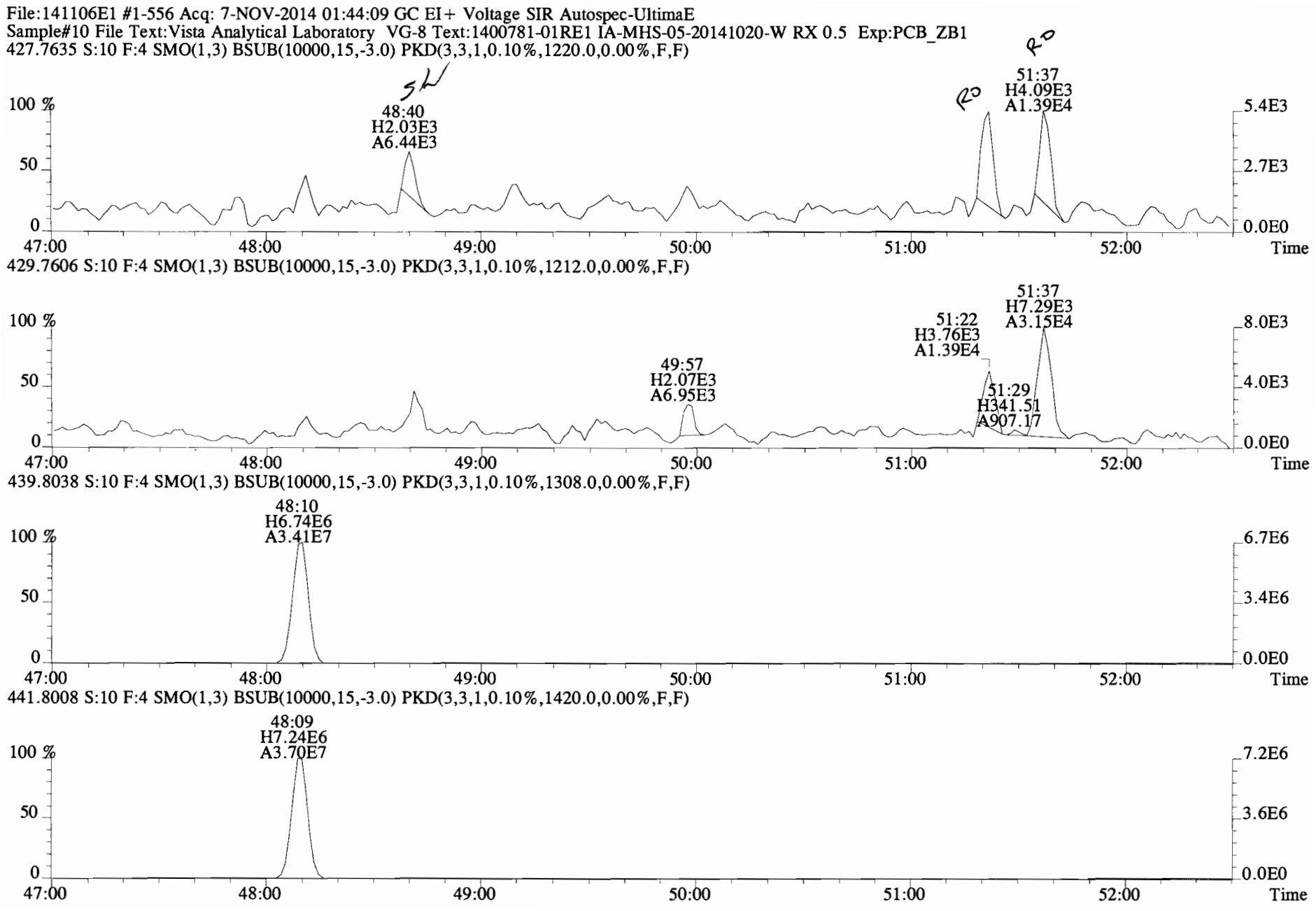

File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
393.8025 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1592.0,0.00%,F,F)
43:57 H6.46E3 A2.48E4
44:24 H2.83E3 A1.62E4
46:03 H1.03E4 A5.52E4
47:25 H8.52E3 A5.05E4
49:16 H1.97E4 A1.02E5
50:41 H9.88E3 A3.87E4
51:38 H1.37E3 A3.27E3
395.7995 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1472.0,0.00%,F,F)
43:57 H6.44E3 A2.70E4
45:31 H2.14E3 A7.87E3
46:03 H1.09E4 A4.58E4
47:24 H8.79E3 A4.22E4
47:59 H3.49E3 A1.28E4
49:16 H2.40E4 A1.08E5
50:41 H1.16E4 A4.43E4
403.8457 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2800.0,0.00%,F,F)
42:41 H4.39E6 A2.13E7
45:30 H3.22E6 A1.58E7
49:15 H3.39E6 A1.71E7
50:40 H2.93E6 A1.34E7
52:08 H3.70E6 A1.66E7
405.8428 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4160.0,0.00%,F,F)
42:41 H9.33E6 A4.59E7
45:30 H7.03E6 A3.44E7
49:15 H7.21E6 A3.64E7
50:40 H6.35E6 A2.86E7
52:08 H7.97E6 A3.61E7
380.9760 S:10 F:4
42:33
42:58
43:45
44:57
45:30
46:11
46:56
47:43
48:14
49:02
49:55
50:29
51:10
51:40
52:03
52:25
100 %
50
0
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
51:00
52:00
53:00
Time
2.1E4
1.0E4
0.0E0
2.6E4
1.3E4
4.4E6
2.2E6
9.3E6
4.7E6
1.1E7
5.7E6

File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
393.8025 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1592.0,0.00%,F,F)

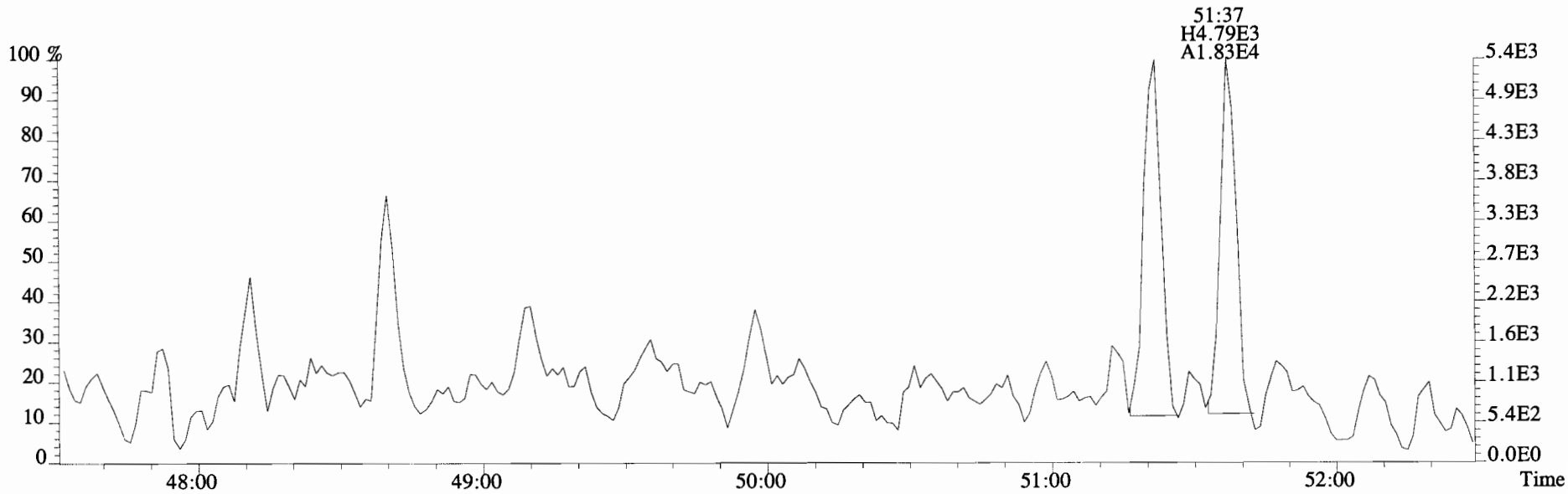


395.7995 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1472.0,0.00%,F,F)

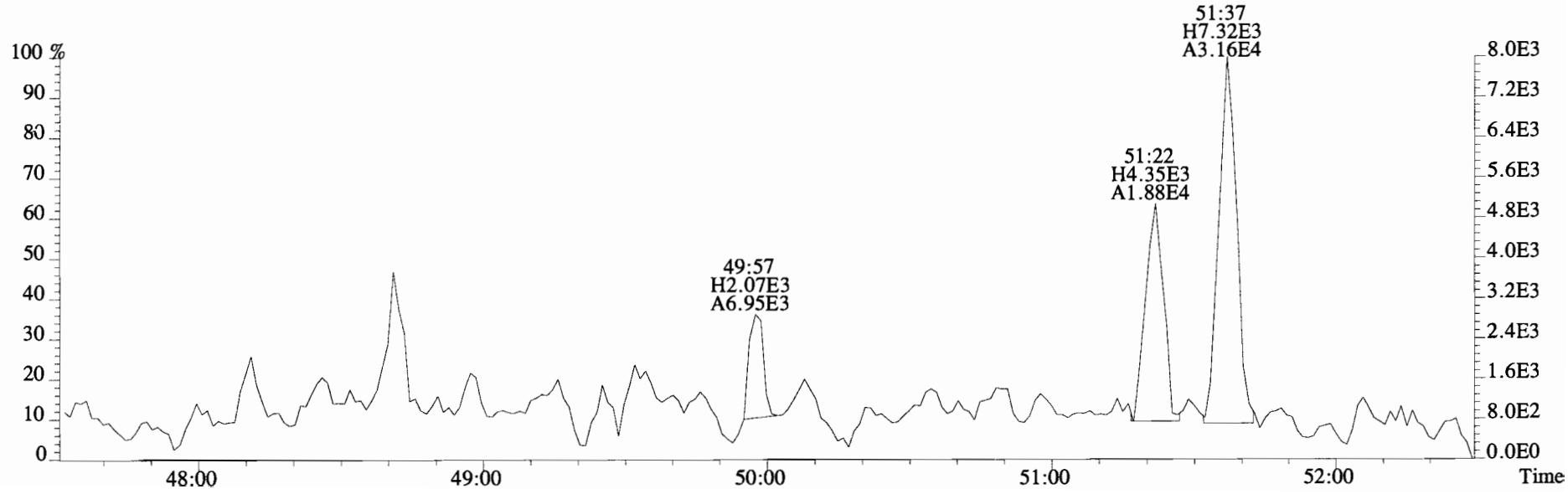


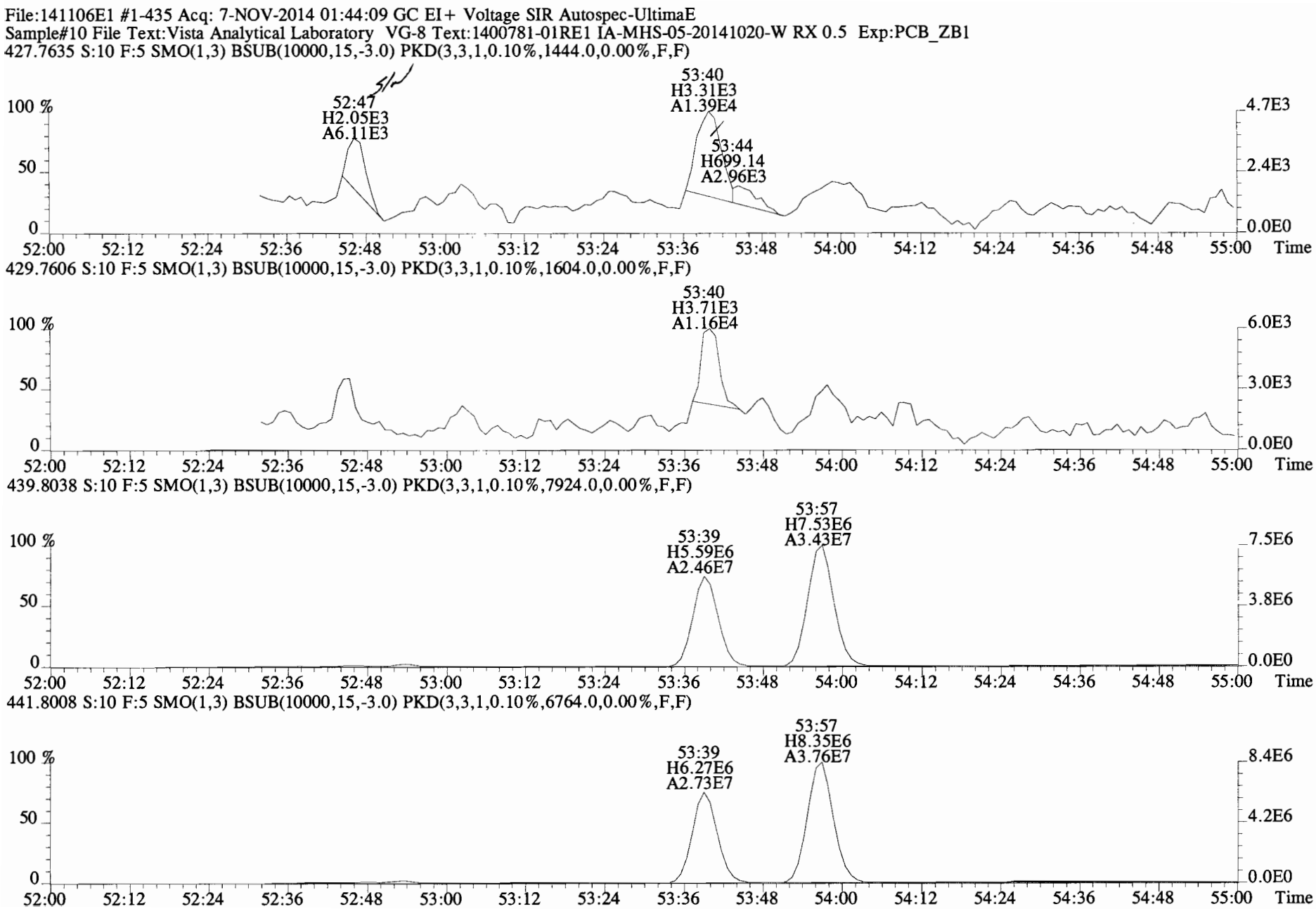

File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
427.7635 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1220.0,0.00%,F,F)
48:40
H2.03E3
A6.44E3
51:37
H4.09E3
A1.39E4
429.7606 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1212.0,0.00%,F,F)
49:57
H2.07E3
A6.95E3
51:22
H3.76E3
A1.39E4
51:37
H7.29E3
A3.15E4
51:29
H341.51
A907.17
439.8038 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1308.0,0.00%,F,F)
48:10
H6.74E6
A3.41E7
441.8008 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1420.0,0.00%,F,F)
48:09
H7.24E6
A3.70E7
100 %
50
0
47:00
48:00
49:00
50:00
51:00
52:00
Time
5.4E3
2.7E3
0.0E0
8.0E3
4.0E3
6.7E6
3.4E6
7.2E6
3.6E6

File:141106E1 #1-556 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
427.7635 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1220.0,0.00%,F,F)

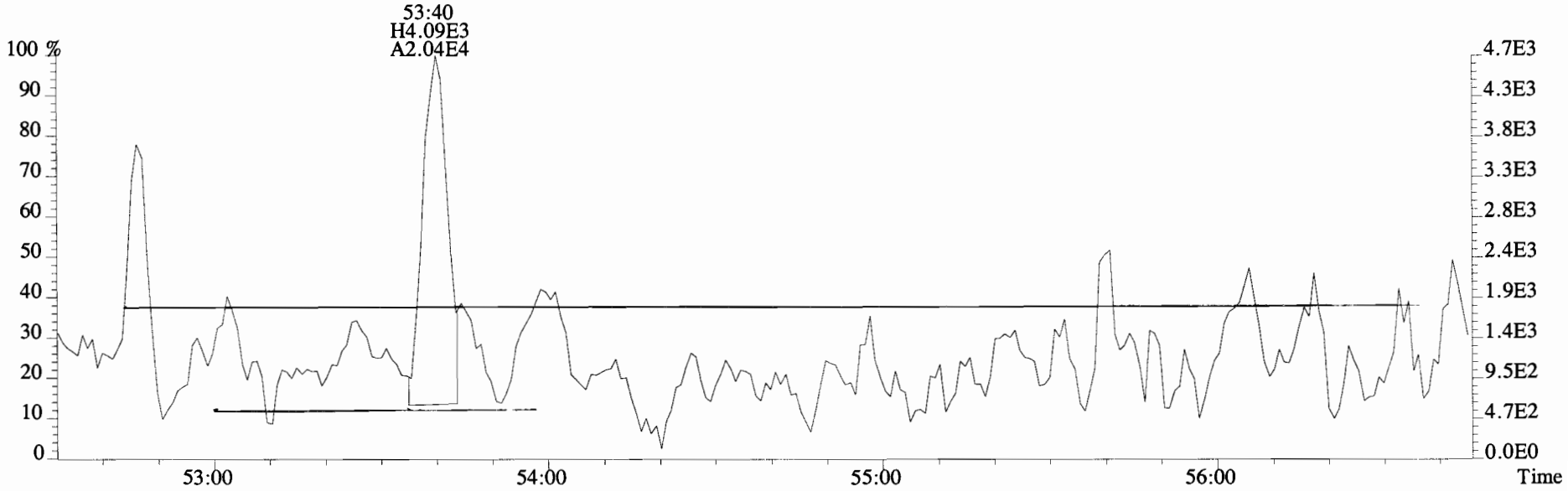


429.7606 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1212.0,0.00%,F,F)

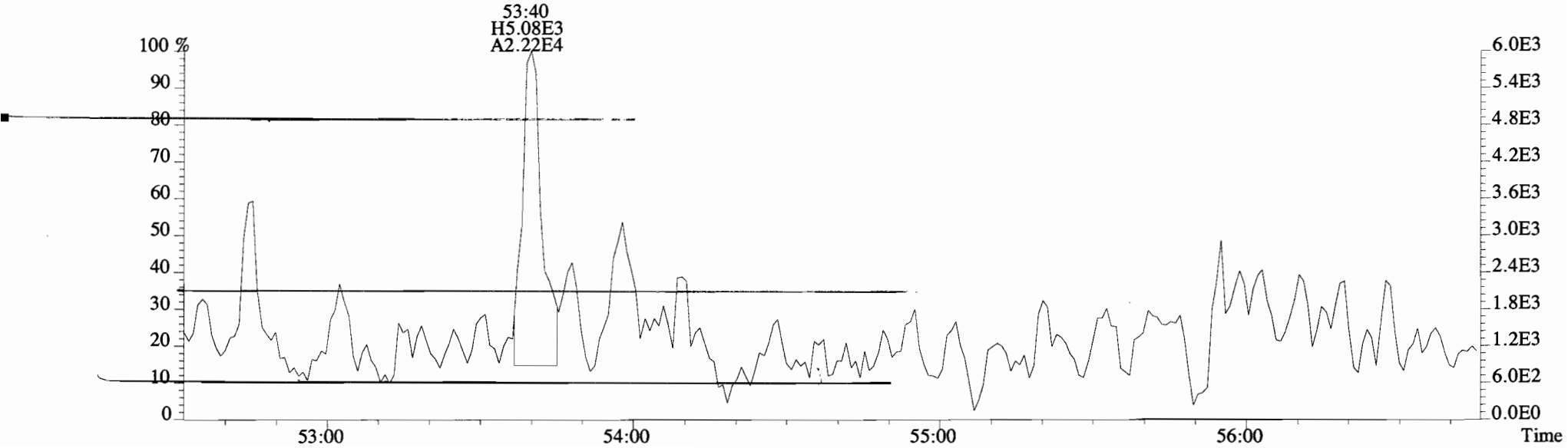



File:141106E1 #1-435 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
427.7635 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1444.0,0.00%,F,F)
52:47
H2.05E3
A6.11E3
53:40
H3.31E3
A1.39E4
53:44
H699.14
A2.96E3
100 %
50
0
4.7E3
2.4E3
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time
429.7606 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1604.0,0.00%,F,F)
53:40
H3.71E3
A1.16E4
100 %
50
0
6.0E3
3.0E3
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time
439.8038 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7924.0,0.00%,F,F)
53:39
H5.59E6
A2.46E7
53:57
H7.53E6
A3.43E7
100 %
50
0
7.5E6
3.8E6
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time
441.8008 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6764.0,0.00%,F,F)
53:39
H6.27E6
A2.73E7
53:57
H8.35E6
A3.76E7
100 %
50
0
8.4E6
4.2E6
0.0E0
52:00 52:12 52:24 52:36 52:48 53:00 53:12 53:24 53:36 53:48 54:00 54:12 54:24 54:36 54:48 55:00 Time

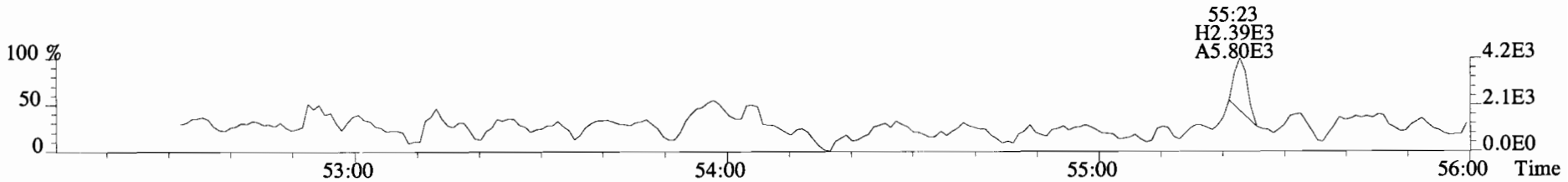
File:141106E1 #1-435 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
427.7635 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1444.0,0.00%,F,F)



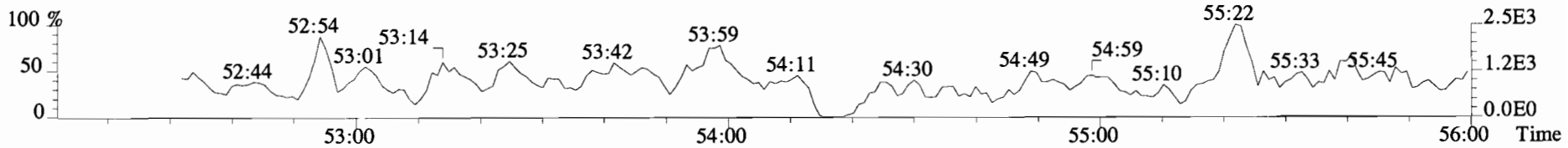
429.7606 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1604.0,0.00%,F,F)



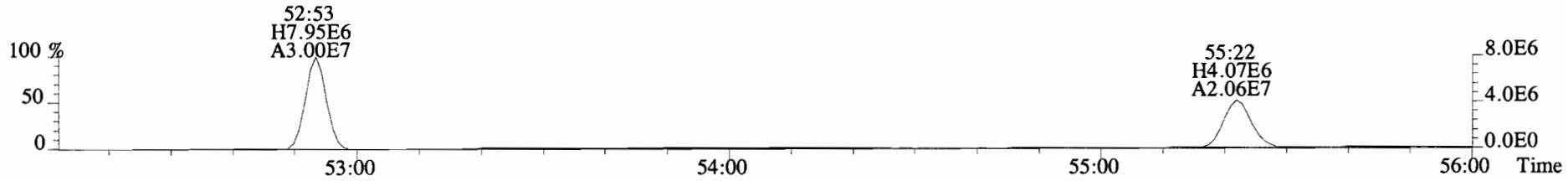
File:141106E1 #1-435 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
463.7216 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1436.0,0.00%,F,F)



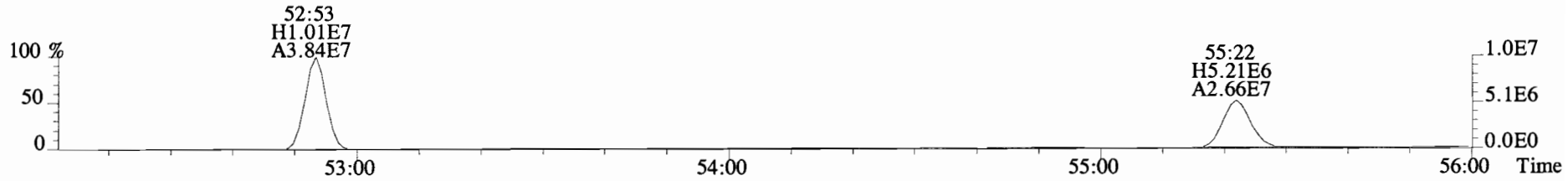
465.7186 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1220.0,0.00%,F,F)



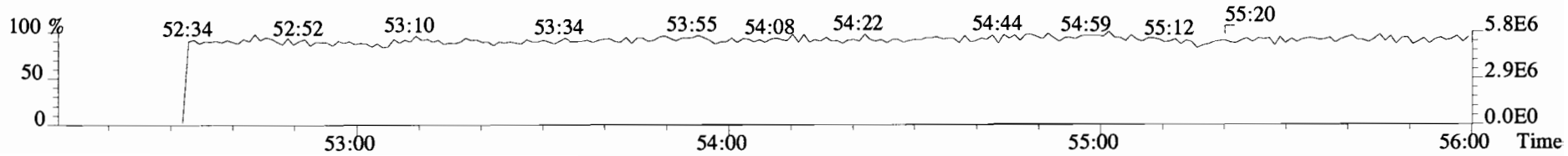
473.7648 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,18800.0,0.00%,F,F)



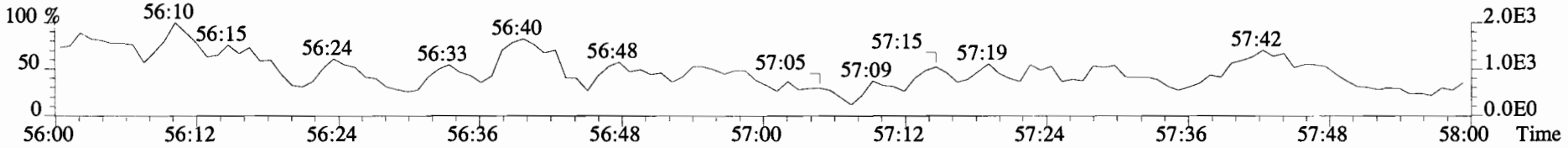
475.7619 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,24944.0,0.00%,F,F)



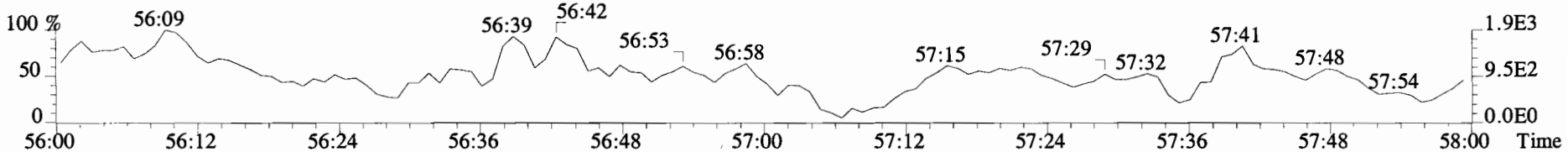
492.9697 S:10 F:5



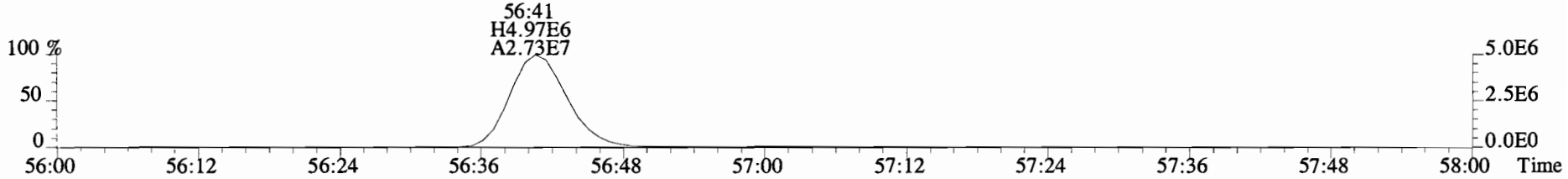
File:141106E1 #1-435 Acq: 7-NOV-2014 01:44:09 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-01RE1 IA-MHS-05-20141020-W RX 0.5 Exp:PCB_ZB1
497.6826 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1188.0,0.00%,F,F)



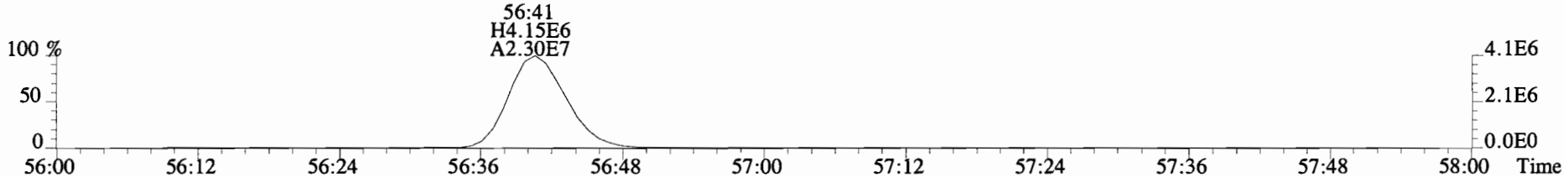
499.6797 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1180.0,0.00%,F,F)



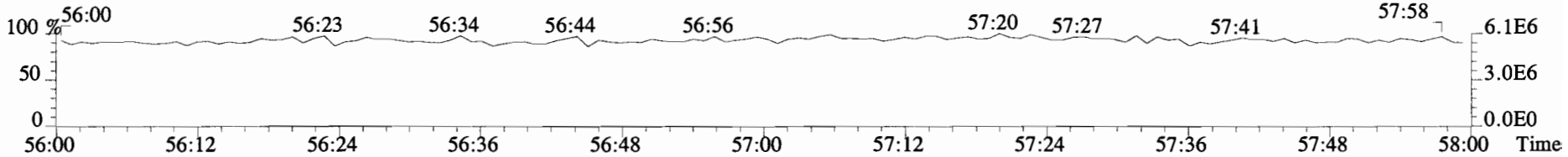
509.7229 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1284.0,0.00%,F,F)



511.7199 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1372.0,0.00%,F,F)



492.9697 S:10 F:5



Client ID: IA-CBW-60-20141020-W 1 Filename: 141031E1 S:10 Acq:31-OCT-14 18:23:59 ✓ ConCal: ST141031E1-1
Lab ID: 1400781-02 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.024 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	1.75e+05	2.79	y 16:21	1.25	5.43		*	2.5	*	1.001	0.996	1.006
Mono	PCB-2	*	*	n NotFnd	1.18	*		3270	2.5	3.94	*	0.983	0.993
Mono	PCB-3	1.27e+05	2.75	y 18:51	1.22	3.89		*	2.5	*	1.000	0.996	1.006
Di	PCB-4/10	*	*	n NotFnd	1.55	*		12400	2.5	10.5	*	0.998	1.008
Di	PCB-7/9	*	*	n NotFnd	1.27	*		12400	2.5	8.70	*	0.865	0.873
Di	PCB-6	*	*	n NotFnd	1.26	*		12400	2.5	8.76	*	0.890	0.899
Di	PCB-5/8	4.89e+05	1.33	y 22:56	1.23	14.5		*	2.5	*	0.911	0.906	0.916
Di	PCB-14	*	*	n NotFnd	1.23	*		12400	2.5	8.01	*	0.949	0.959
Di	PCB-11	1.77e+06	1.54	y 25:12	1.16	46.9		*	2.5	*	1.001	0.996	1.006
Di	PCB-12/13	*	*	n NotFnd	1.10	*		12400	2.5	8.98	*	1.010	1.020
Di	PCB-15	3.83e+05	1.76	y 25:53	1.21	9.74		*	2.5	*	1.028	1.024	1.034
Tri	PCB-19	*	*	n NotFnd	1.30	*		1400	2.5	1.37	*	0.996	1.006
Tri	PCB-30	*	*	n NotFnd	1.83	*		1400	2.5	0.969	*	1.032	1.042
Tri	PCB-18	3.48e+05	0.96	y 25:48	0.86	16.1		*	2.5	*	0.954	0.949	0.959
Tri	PCB-17	1.33e+05	1.00	y 25:59	0.90	5.88		*	2.5	*	0.961	0.955	0.965
Tri	PCB-24/27	*	*	n NotFnd	1.18	*		1400	2.5	0.960	*	0.976	0.986
Tri	PCB-16/32	3.12e+05	1.02	y 27:03	1.03	12.0		*	2.5	*	1.000	0.995	1.005
Tri	PCB-34	*	*	n NotFnd	1.26	*		2330	2.5	1.89	*	0.956	0.966
Tri	PCB-23	*	*	n NotFnd	1.31	*		2330	2.5	1.82	*	0.959	0.969
Tri	PCB-29	*	*	n NotFnd	1.33	*		2330	2.5	1.79	*	0.967	0.977
Tri	PCB-26	1.13e+05	0.89	y 28:22	1.29	3.77		*	2.5	*	0.979	0.974	0.984
Tri	PCB-25	7.15e+04	1.06	y 28:33	1.34	2.30		*	2.5	*	0.985	0.980	0.990
Tri	PCB-31	4.87e+05	0.94	y 28:53	1.42	14.8		*	2.5	*	0.997	0.992	1.002
Tri	PCB-28	4.95e+05	0.94	y 29:00	1.38	15.5		*	2.5	*	1.001	0.996	1.006
Tri	PCB-20/21/33	3.65e+05	1.09	y 29:38	1.31	12.0		*	2.5	*	1.022	1.017	1.027
Tri	PCB-22	1.91e+05	1.02	y 30:03	1.32	6.25		*	2.5	*	1.037	1.032	1.042
Tri	PCB-36	*	*	n NotFnd	1.38	*		2330	2.5	2.03	*	0.929	0.939
Tri	PCB-39	*	*	n NotFnd	1.42	*		2330	2.5	1.97	*	0.943	0.953
Tri	PCB-38	*	*	n NotFnd	1.35	*		2330	2.5	2.07	*	0.967	0.976
Tri	PCB-35	1.37e+05	1.09	y 32:27	1.38	4.78		*	2.5	*	0.988	0.982	0.992
Tri	PCB-37	3.53e+05	0.99	y 32:52	1.39	12.2		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-54	*	*	n NotFnd	1.20	*		2710	2.5	2.15	*	0.996	1.006
Tetra	PCB-50	*	*	n NotFnd	0.97	*		2710	2.5	2.66	*	1.037	1.047
Tetra	PCB-53	1.46e+05	0.77	y 29:41	1.19	6.25		*	2.5	*	0.946	0.941	0.951
Tetra	PCB-51	3.39e+04	0.77	y 30:01	1.15	1.50		*	2.5	*	0.956	0.952	0.962
Tetra	PCB-45	7.84e+04	0.64	n 30:27	0.97	4.14	R	*	2.5	*	0.970	0.966	0.976
Tetra	PCB-46	4.56e+04	0.97	n 30:56	0.95	2.44	R	*	2.5	*	0.986	0.982	0.992

Integrations by:
Analyst: DMS
Date: 11/7/14

Reviewed by: CT Date: 11/10/14

Client ID: IA-CBW-60-20141020-W 1 Filename: 141031E1 S:10 Acq:31-OCT-14 18:23:59 ConCal: ST141031E1-1
Lab ID: 1400781-02 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.024 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Tetra	PCB-52/69	4.27e+06	0.77	y 31:23	1.28	170		*	2.5	*	1.000	0.996-1.006
Tetra	PCB-73	*	*	n NotF	1.37	*		2710	2.5	2.14	*	1.000-1.010
Tetra	PCB-43/49	1.21e+06	0.85	y 31:41	1.11	55.2		*	2.5	*	1.010	1.005-1.015
Tetra	PCB-47	2.86e+05	0.78	y 31:54	1.13	12.3		*	2.5	*	1.001	0.996-1.006
Tetra	PCB-48/75	1.92e+05	0.74	y 32:00	1.30	7.20		*	2.5	*	1.004	0.999-1.009
Tetra	PCB-65	*	*	n NotF	1.33	*		2710	2.5	2.13	*	1.007-1.017
Tetra	PCB-62	*	*	n NotF	1.29	*		2710	2.5	2.20	*	1.011-1.021
Tetra	PCB-44	1.87e+06	0.75	y 32:41	0.94	97.3		*	2.5	*	1.025	1.020-1.030
Tetra	PCB-42/59	3.80e+05	0.79	y 32:55	1.22	15.2		*	2.5	*	1.032	1.028-1.038
Tetra	PCB-41/64/71/72	1.41e+06	0.78	y 33:30	1.31	52.4		*	2.5	*	1.051	1.046-1.056
Tetra	PCB-68	*	*	n NotF	1.49	*		2710	2.5	1.92	*	1.054-1.064
Tetra	PCB-40	1.92e+05	0.69	y 33:59	0.82	11.5		*	2.5	*	1.066	1.061-1.071
Tetra	PCB-57	*	*	n NotF	1.11	*		2710	2.5	2.01	*	0.965-0.975
Tetra	PCB-67	1.36e+05	0.71	y 34:38	1.07	4.80		*	2.5	*	0.978	0.974-0.984
Tetra	PCB-58	*	*	n NotF	1.10	*		2710	2.5	2.03	*	0.977-0.987
Tetra	PCB-63	*	*	n NotF	1.12	*		2710	2.5	2.00	*	0.982-0.992
Tetra	PCB-74	1.57e+06	0.75	y 35:13	1.20	49.6		*	2.5	*	0.995	0.990-1.000
Tetra	PCB-61/70	8.26e+06	0.75	y 35:25	1.08	290		*	2.5	*	1.000	0.994-1.004
Tetra	PCB-76/66	2.72e+06	0.75	y 35:38	1.14	90.6		*	2.5	*	1.007	1.001-1.011
Tetra	PCB-80	*	*	n NotF	1.28	*		2710	2.5	1.90	*	0.996-1.006
Tetra	PCB-55	1.65e+05	0.58	n 36:07	1.11	5.58	R	*	2.5	*	1.008	1.005-1.015
Tetra	PCB-56/60	2.03e+06	0.80	y 36:39	1.09	70.0		*	2.5	*	1.023	1.018-1.028
Tetra	PCB-79	4.24e+05	0.71	y 37:44	1.12	14.1		*	2.5	*	1.054	1.048-1.058
Tetra	PCB-78	*	*	n NotF	1.24	*		2710	2.5	2.35	*	0.982-0.992
Tetra	PCB-81	1.66e+05	0.81	y 38:56	1.38	5.46		*	2.5	*	1.000	0.995-1.005
Tetra	PCB-77	1.47e+06	0.76	y 39:33	1.21	52.7		*	2.5	*	1.000	0.995-1.005
Penta	PCB-104	*	*	n NotF	1.26	*		1570	2.5	2.42	*	0.996-1.006
Penta	PCB-96	7.00e+04	1.36	y 33:48	1.09	4.12		*	2.5	*	1.039	1.034-1.044
Penta	PCB-103	*	*	n NotF	0.93	*		1570	2.5	3.26	*	1.050-1.060
Penta	PCB-100	*	*	n NotF	1.00	*		1570	2.5	3.04	*	1.061-1.071
Penta	PCB-94	*	*	n NotF	1.11	*		1570	2.5	3.85	*	0.981-0.991
Penta	PCB-95/98/102	8.47e+06	1.62	y 35:42	1.21	592		*	2.5	*	1.000	0.994-1.004
Penta	PCB-93	*	*	n NotF	1.13	*		1570	2.5	3.77	*	0.998-1.008
Penta	PCB-88/91	1.24e+06	1.64	y 36:07	1.02	103		*	2.5	*	1.012	1.006-1.016
Penta	PCB-121	*	*	n NotF	1.90	*		1570	2.5	2.24	*	1.009-1.019
Penta	PCB-84/92	6.05e+06	1.62	y 37:02	1.05	448		*	2.5	*	0.991	0.986-0.996
Penta	PCB-89	9.79e+04	1.54	y 37:12	1.02	7.50		*	2.5	*	0.995	0.991-1.001

Analyst: DMS

Date: 11/7/14

Client ID: IA-CBW-60-20141020-W 1 Filename: 141031E1 S:10 Acq:31-OCT-14 18:23:59 ConCal: ST141031E1-1
Lab ID: 1400781-02 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.024 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Penta	PCB-90/101	1.85e+07	1.64	y 37:23	1.19	1210		*	2.5	*	1.000	0.996-1.006
Penta	PCB-113	*	*	n NotF╗	1.35	*		1570	2.5	2.84	*	1.002-1.012
Penta	PCB-99	6.90e+06	1.60	y 37:44	1.29	418		*	2.5	*	1.009	1.005-1.015
Penta	PCB-119	3.19e+05	1.67	y 38:12	1.72	15.8		*	2.5	*	0.988	0.982-0.992
Penta	PCB-108/112	9.04e+05	1.69	y 38:21	1.29	59.8		*	2.5	*	0.991	0.986-0.996
Penta	PCB-83	*	*	n NotF╗	1.52	*		1570	2.5	2.82	*	0.991-1.001
Penta	PCB-97	6.54e+06	1.54	y 38:43	1.25	446		*	2.5	*	1.001	0.996-1.006
Penta	PCB-86	*	*	n NotF╗	1.02	*		1570	2.5	4.19	*	1.000-1.010
Penta	PCB-87/117/125	1.17e+07	1.63	y 39:00	1.56	641		*	2.5	*	1.008	1.002-1.012
Penta	PCB-111/115	2.97e+05	1.40	y 39:08	1.75	14.5		*	2.5	*	1.012	1.007-1.017
Penta	PCB-85/116	3.72e+06	1.57	y 39:15	1.30	244		*	2.5	*	1.015	1.010-1.020
Penta	PCB-120	4.58e+04	2.04	n 39:27	1.78	2.19	R	*	2.5	*	1.020	1.016-1.026
Penta	PCB-110	3.95e+07	1.65	y 39:40	1.68	2000		*	2.5	*	1.025	1.020-1.030
Penta	PCB-82	2.74e+06	1.62	y 40:17	0.74	248		*	2.5	*	0.976	0.972-0.982
Penta	PCB-124	1.97e+06	1.61	y 40:58	1.32	99.5		*	2.5	*	0.993	0.988-0.998
Penta	PCB-107/109	2.71e+06	1.53	y 41:08	1.22	148		*	2.5	*	0.997	0.991-1.001
Penta	PCB-123	5.66e+05	1.60	y 41:17	1.22	31.0		*	2.5	*	1.000	0.995-1.005
Penta	PCB-106/118	4.39e+07	1.60	y 41:29	1.22	2400		*	2.5	*	1.000	0.996-1.006
Penta	PCB-114	1.36e+06	1.62	y 42:09	1.36	51.7		*	2.5	*	1.001	0.995-1.005
Penta	PCB-122	5.20e+05	1.88	n 42:16	1.24	21.6	R	*	2.5	*	1.004	0.999-1.009
Penta	PCB-105	2.87e+07	1.65	y 43:01	1.28	1140		*	2.5	*	1.001	0.995-1.005
Penta	PCB-127	*	*	n NotF╗	1.14	*		8140	2.5	12.7	*	0.995-1.005
Penta	PCB-126	8.40e+05	1.60	y 45:16	1.28	36.6		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-155	*	*	n NotF╗	1.14	*		952	2.5	2.02	*	0.966-1.006
Hexa	PCB-150	*	*	n NotF╗	1.06	*		952	2.5	2.15	*	1.030-1.040
Hexa	PCB-152	*	*	n NotF╗	1.10	*		952	2.5	2.08	*	1.043-1.053
Hexa	PCB-145	*	*	n NotF╗	1.09	*		952	2.5	2.09	*	1.055-1.065
Hexa	PCB-136	2.04e+06	1.28	y 39:27	1.08	153		*	2.5	*	1.069	1.064-1.074
Hexa	PCB-148	*	*	n NotF╗	0.74	*		952	2.5	3.09	*	1.066-1.076
Hexa	PCB-154	1.62e+05	1.30	y 40:03	0.88	14.9		*	2.5	*	1.085	1.079-1.089
Hexa	PCB-151	2.49e+06	1.33	y 40:42	0.81	251		*	2.5	*	1.102	1.097-1.107
Hexa	PCB-135	2.19e+06	1.30	y 40:55	0.78	229		*	2.5	*	1.108	1.101-1.113
Hexa	PCB-144	8.56e+05	1.32	y 41:01	0.82	85.0		*	2.5	*	1.111	1.105-1.116
Hexa	PCB-147	5.23e+05	1.27	y 41:09	0.83	51.5		*	2.5	*	1.115	1.011-1.120
Hexa	PCB-139/149	1.47e+07	1.28	y 41:24	0.84	1420		*	2.5	*	1.121	1.115-1.127
Hexa	PCB-140	1.17e+05	1.12	y 41:37	0.79	12.1		*	2.5	*	1.127	1.120-1.132
Hexa	PCB-134/143	2.42e+06	1.30	y 42:04	0.93	150		*	2.5	*	0.975	0.970-0.980

Analyst: DMS

Date: 11/2/14

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Hexa	PCB-133/142	1.26e+06	1.31	y 42:21	0.95	76.6		*	2.5	*	0.981	0.977-0.987
Hexa	PCB-131	*	*	n NotFnd	0.91	*		1120	2.5	2.13	*	0.981-0.991
Hexa	PCB-146/165	6.54e+06	1.27	y 42:46	1.16	325		*	2.5	*	0.991	0.986-0.996
Hexa	PCB-132/161	1.71e+07	1.25	y 43:01	1.11	883		*	2.5	*	0.997	0.992-1.002
Hexa	PCB-153	4.40e+07	1.25	y 43:10	1.18	2150		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-168	1.00e+05	1.31	y 43:23	1.37	4.22		*	2.5	*	1.005	1.000-1.010
Hexa	PCB-141	9.06e+06	1.26	y 43:54	0.97	563		*	2.5	*	1.000	0.996-1.005
Hexa	PCB-137	3.90e+06	1.26	y 44:18	1.07	220		*	2.5	*	1.009	1.004-1.014
Hexa	PCB-130	3.72e+06	1.24	y 44:24	0.85	266		*	2.5	*	1.011	1.007-1.017
Hexa	PCB-138/163/164	7.17e+07	1.26	y 44:46	1.23	3760		*	2.5	*	1.000	0.996-1.006
Hexa	PCB-158/160	9.51e+06	1.26	y 45:00	1.29	474		*	2.5	*	1.006	1.001-1.011
Hexa	PCB-129	3.52e+06	1.31	y 45:16	0.92	245		*	2.5	*	1.012	1.007-1.017
Hexa	PCB-166	3.10e+05	1.30	y 45:45	1.12	16.1		*	2.5	*	0.993	0.988-0.998
Hexa	PCB-159	*	*	n NotFnd	1.16	*		1120	2.5	1.77	*	0.995-1.005
Hexa	PCB-128/162	1.46e+07	1.29	y 46:20	1.02	831		*	2.5	*	1.006	1.002-1.012
Hexa	PCB-167	4.10e+06	1.26	y 46:46	1.06	214		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-156	1.11e+07	1.28	y 48:04	1.18	559		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-157	2.58e+06	1.25	y 48:20	1.08	129		*	2.5	*	1.000	0.995-1.005
Hexa	PCB-169	*	*	n NotFnd	1.11	*		1120	2.5	2.14	*	0.995-1.005
Hepta	PCB-188	*	*	n NotFnd	1.40	*		1650	2.5	1.68	*	0.995-1.005
Hepta	PCB-184	*	*	n NotFnd	1.24	*		1650	2.5	1.91	*	1.006-1.016
Hepta	PCB-179	1.27e+06	1.07	y 44:01	1.30	75.8		*	2.5	*	1.029	1.024-1.034
Hepta	PCB-176	5.27e+05	1.06	y 44:29	1.36	30.0		*	2.5	*	1.040	1.035-1.045
Hepta	PCB-186	*	*	n NotFnd	1.28	*		1650	2.5	1.85	*	1.049-1.059
Hepta	PCB-178	5.67e+05	1.20	y 45:36	0.94	47.0		*	2.5	*	1.066	1.061-1.071
Hepta	PCB-175	1.63e+05	1.20	y 45:58	0.97	13.1		*	2.5	*	1.075	1.069-1.079
Hepta	PCB-182/187	3.66e+06	1.10	y 46:07	1.01	280		*	2.5	*	1.078	1.073-1.083
Hepta	PCB-183	2.37e+06	1.03	y 46:28	1.08	170		*	2.5	*	1.087	1.080-1.090
Hepta	PCB-185	3.31e+05	1.18	y 47:07	1.34	29.5		*	2.5	*	0.955	0.951-0.961
Hepta	PCB-174	3.95e+06	1.11	y 47:29	1.34	354		*	2.5	*	0.963	0.958-0.968
Hepta	PCB-181	5.80e+04	0.97	y 47:37	1.36	5.11		*	2.5	*	0.965	0.961-0.971
Hepta	PCB-177	2.46e+06	1.09	y 47:45	1.24	237		*	2.5	*	0.968	0.964-0.974
Hepta	PCB-171	1.60e+06	1.15	y 48:04	1.31	146		*	2.5	*	0.974	0.970-0.980
Hepta	PCB-173	1.68e+05	1.07	y 48:29	1.16	17.4		*	2.5	*	0.983	0.979-0.989
Hepta	PCB-172	9.45e+05	1.03	y 48:57	1.22	92.7		*	2.5	*	0.992	0.988-0.998
Hepta	PCB-192	*	*	n NotFnd	1.53	*		1650	2.5	2.52	*	0.991-1.001
Hepta	PCB-180	1.04e+07	1.08	y 49:21	1.43	873		*	2.5	*	1.000	0.995-1.005

Analyst: DMS

Date: 11/7/14

Client ID: IA-CBW-60-20141020-W 1 Filename: 141031E1 S:10 Acq:31-OCT-14 18:23:59 ConCal: ST141031E1-1
Lab ID: 1400781-02 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.024 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Hepta	PCB-193	5.41e+05	1.20	y 49:33	1.65	39.2		*	2.5	*	1.004	0.999-1.009
Hepta	PCB-191	2.87e+05	1.00	y 49:46	1.67	20.6		*	2.5	*	1.009	1.004-1.014
Hepta	PCB-170	5.84e+06	1.10	y 50:45	1.50	658		*	2.5	*	1.000	0.995-1.005
Hepta	PCB-190	1.10e+06	1.02	y 50:56	2.02	92.4		*	2.5	*	1.004	0.998-1.008
Hepta	PCB-189	3.23e+05	1.01	y 52:13	1.54	33.5		*	2.5	*	1.000	0.995-1.005
Octa	PCB-202	1.01e+05	1.10	n 48:15	1.04	9.24	R	*	2.5	*	1.000	0.995-1.005
Octa	PCB-201	7.84e+04	1.22	n 48:45	1.10	6.76	R	*	2.5	*	1.011	1.006-1.016
Octa	PCB-204	*	*	n NotF¶	0.99	*		1850	2.5	4.32	*	1.009-1.019
Octa	PCB-197	*	*	n NotF¶	1.07	*		1850	2.5	3.99	*	1.015-1.025
Octa	PCB-200	9.01e+04	0.95	y 50:03	1.02	8.42		*	2.5	*	1.038	1.032-1.044
Octa	PCB-198	*	*	n NotF¶	0.74	*		1850	2.5	5.76	*	1.058-1.068
Octa	PCB-199	5.08e+05	0.90	y 51:25	0.73	66.4		*	2.5	*	1.066	1.060-1.070
Octa	PCB-196/203	5.98e+05	0.88	y 51:41	0.77	73.7		*	2.5	*	1.072	1.066-1.076
Octa	PCB-195	3.31e+05	0.80	y 52:50	1.20	53.4		*	2.5	*	0.983	0.979-0.989
Octa	PCB-194	1.01e+06	0.91	y 53:46	1.25	157		*	2.5	*	1.001	0.995-1.005
Octa	PCB-205	8.12e+04	0.86	y 54:03	1.41	11.1		*	2.5	*	1.006	1.001-1.011
Nona	PCB-208	*	*	n NotF¶	0.96	*		1480	2.5	4.29	*	0.995-1.005
Nona	PCB-207	*	*	n NotF¶	0.92	*		1480	2.5	4.51	*	1.001-1.011
Nona	PCB-206	1.30e+05	1.72	n 55:31	1.03	44.6	R	*	2.5	*	1.000	0.995-1.005
Deca	PCB-209	*	*	n NotF¶	1.18	*		1380	2.5	27.2	*	0.995-1.005

Analyst: DMF

Date: 11/7/14

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	3.02e+05	2.79	y	16:21	1.22	9.32089	
Total Di-PCB	2.64e+06	1.33	y	22:56	1.21	71.1647	
Total Tri-PCB	7.93e+05	0.96	y	25:48	1.16	34.0134	
Total Tri-PCB	2.21e+06	0.89	y	28:22	1.35	71.6504	Sum:105.664
Total Tetra-PCB	2.68e+07	0.77	y	29:41	1.17	1006.78	
Total Penta-PCB	1.56e+08	1.36	y	33:48	1.21	9126.55	
Total Penta-PCB	3.09e+07	1.62	y	42:09	1.26	1223.64	Sum:10350.2
Total Hexa-PCB	2.31e+07	1.28	y	39:27	0.92	2217.59	
Total Hexa-PCB	2.05e+08	1.30	y	42:04	1.08	10863.8	Sum:13081.3
Total Hepta-PCB	3.66e+07	1.07	y	44:01	1.27	3213.97	
Total Octa-PCB	1.20e+06	0.95	y	50:03	0.92	148.468	
Total Octa-PCB	1.42e+06	0.80	y	52:50	1.29	221.308	Sum:369.776
Total Nona-PCB	*	*	n	NotFnd	0.96	*	
Total Deca-PCB	*	*	n	NotFnd	1.18	*	

Total PCB Conc:28304.7351280

Integrations
by
Analyst: DMS
Date: 11/7/14

Client ID: IA-CBW-60-20141020-W 1 Filename: 141031E1 S:10 Acq:31-OCT-14 18:23:59 ConCal: ST141031E1-1
Lab ID: 1400781-02 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:1.0237 EndCAL: NA

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	5.02e+07	3.51 y	0.89	16:20	0.631	0.622	0.628	1440	73.9
13C-PCB-3	5.21e+07	3.48 y	0.93	18:51	0.728	0.721	0.729	1440	73.6
13C-PCB-4	3.54e+07	1.60 y	0.55	20:08	0.778	0.772	0.780	1650	84.5
13C-PCB-9	5.34e+07	1.59 y	0.83	21:52	0.845	0.840	0.848	1650	84.6
13C-PCB-11	6.37e+07	1.58 y	0.94	25:10	0.972	0.968	0.978	1740	88.9
13C-PCB-19	3.11e+07	1.10 y	0.53	24:11	0.934	0.929	0.939	1490	76.4
13C-PCB-28	4.52e+07	1.03 y	0.89	28:59	1.003	0.999	1.009	1750	89.3
13C-PCB-32	4.92e+07	1.08 y	0.81	27:03	1.045	1.041	1.051	1550	79.1
13C-PCB-37	4.07e+07	1.04 y	0.83	32:51	1.137	1.131	1.143	1680	85.9
13C-PCB-47	4.00e+07	0.80 y	0.74	31:53	0.870	0.867	0.875	1890	96.5
13C-PCB-52	3.83e+07	0.79 y	0.71	31:23	0.856	0.853	0.861	1900	97.2
13C-PCB-54	4.17e+07	0.79 y	0.85	27:53	0.761	0.758	0.766	1720	88.2
13C-PCB-70	5.15e+07	0.80 y	0.94	35:24	0.966	0.961	0.971	1910	97.9
13C-PCB-77	4.52e+07	0.79 y	0.89	39:33	1.079	1.073	1.083	1780	90.9
13C-PCB-80	5.21e+07	0.82 y	0.96	35:49	0.977	0.972	0.982	1900	97.2
13C-PCB-81	4.31e+07	0.81 y	0.84	38:56	1.062	1.057	1.067	1800	92.3
13C-PCB-95	2.30e+07	1.62 y	0.74	35:42	0.912	0.908	0.918	1810	92.5
13C-PCB-97	2.29e+07	1.60 y	0.69	38:41	0.989	0.984	0.994	1940	99.5
13C-PCB-101	2.51e+07	1.53 y	0.79	37:23	0.955	0.951	0.961	1860	95.4
13C-PCB-104	3.04e+07	1.61 y	1.00	32:32	0.831	0.829	0.837	1780	91.3
13C-PCB-105	3.85e+07	1.63 y	1.24	42:59	0.928	0.924	0.934	2010	103
13C-PCB-114	3.81e+07	1.62 y	1.21	42:07	0.909	0.905	0.915	2040	104
13C-PCB-118	2.93e+07	1.62 y	0.98	41:28	1.060	1.054	1.064	1730	88.8
13C-PCB-123	2.93e+07	1.58 y	0.95	41:16	1.055	1.049	1.059	1800	92.2
13C-PCB-126	3.49e+07	1.62 y	1.16	45:16	0.977	0.972	0.982	1940	99.3
13C-PCB-127	4.16e+07	1.63 y	1.34	43:20	0.936	0.931	0.941	2000	102
13C-PCB-138	3.04e+07	1.29 y	1.04	44:45	0.966	0.961	0.971	1880	96.2
13C-PCB-141	3.23e+07	1.29 y	1.07	43:54	0.948	0.943	0.953	1940	99.5
13C-PCB-153	3.40e+07	1.30 y	1.11	43:09	0.932	0.927	0.937	1970	101
13C-PCB-155	2.40e+07	1.34 y	0.83	36:55	0.943	0.939	0.949	1680	86.1
13C-PCB-156	3.28e+07	1.28 y	1.24	48:03	1.037	1.032	1.042	1700	87.0
13C-PCB-157	3.61e+07	1.34 y	1.31	48:19	1.043	1.037	1.047	1780	90.9
13C-PCB-159	3.37e+07	1.29 y	1.20	46:03	0.994	0.989	0.999	1820	92.9
13C-PCB-167	3.53e+07	1.31 y	1.32	46:45	1.009	1.004	1.014	1730	88.4
13C-PCB-169	2.59e+07	1.28 y	1.22	50:26	1.089	1.082	1.092	1380	70.5
13C-PCB-170	1.16e+07	0.45 y	0.54	50:45	1.096	1.089	1.101	1390	71.3
13C-PCB-180	1.63e+07	0.49 y	0.67	49:20	1.065	1.059	1.069	1560	79.9
13C-PCB-188	2.52e+07	0.46 y	0.94	42:46	0.923	0.919	0.929	1740	88.9
13C-PCB-189	1.22e+07	0.47 y	0.72	52:13	1.127	1.120	1.132	1100	56.4
13C-PCB-194	1.01e+07	0.94 y	0.81	53:44	0.994	0.990	1.000	2070	106
13C-PCB-202	2.05e+07	0.89 y	0.83	48:14	1.041	1.036	1.046	1590	81.5
13C-PCB-206	5.54e+06	0.81 y	0.66	55:30	1.027	1.021	1.031	1400	71.4
13C-PCB-208	1.21e+07	0.77 y	1.12	52:58	0.980	0.976	0.986	1790	91.4
13C-PCB-209	3.17e+06	1.18 y	0.61	56:50	1.051	1.044	1.054	857	43.9

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	5.22e+07	0.80 y	1.01	37:43	1.029	1.023	1.033	1820	93.3
13C-PCB-178	1.69e+07	0.47 y	0.63	45:35	0.984	0.979	0.989	1730	88.6

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	5.22e+07	0.80 y	1.20	37:43	0.969	0.963	0.973	1970	101
13C-PCB-178	1.69e+07	0.47 y	0.94	45:35	0.924	0.920	0.930	2160	111

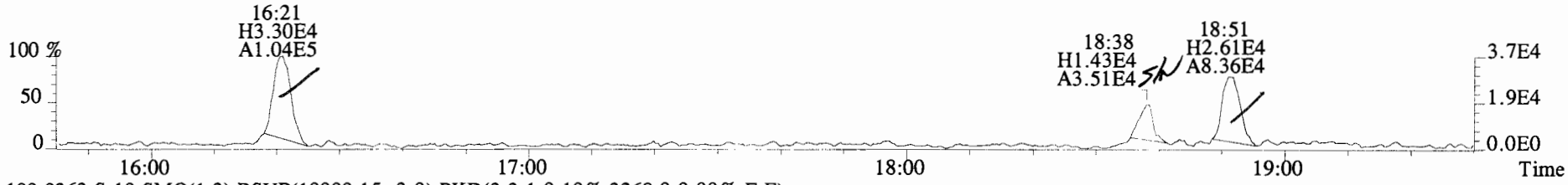
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	7.65e+07	1.59	y	1.00	25:53	1950
13C-PCB-31	5.70e+07	1.01	y	1.00	28:53	1950
13C-PCB-60	5.57e+07	0.80	y	1.00	36:39	1950
13C-PCB-111	3.35e+07	1.54	y	1.00	39:08	1950
13C-PCB-128	3.03e+07	1.30	y	1.00	46:19	1950
13C-PCB-205	1.18e+07	0.95	y	1.00	54:03	1950

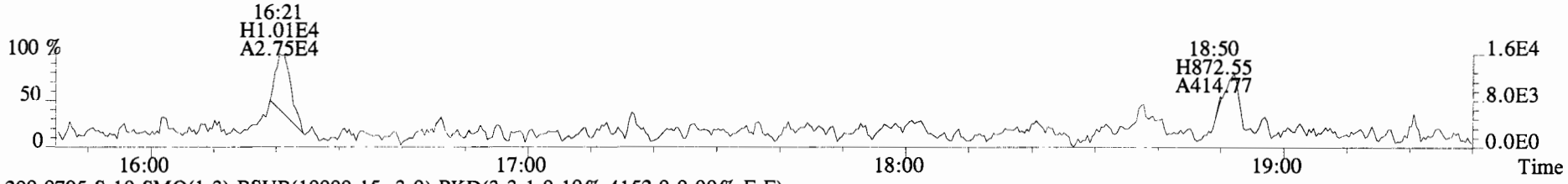
Analyst: DMS

Date: 11/7/14

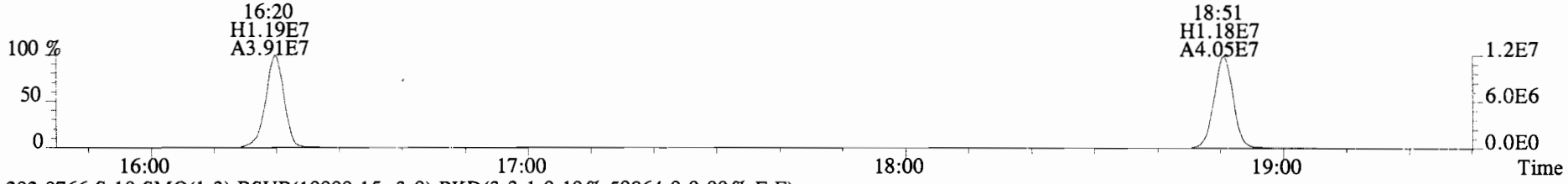
File:141031E1 #1-729 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
188.0393 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2368.0,0.00%,F,F)



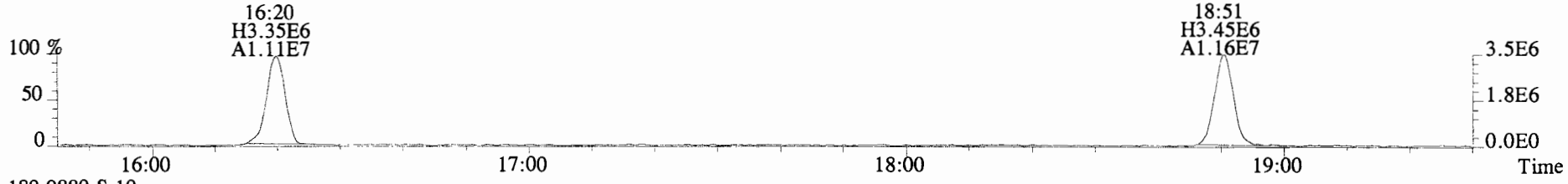
190.0363 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3268.0,0.00%,F,F)



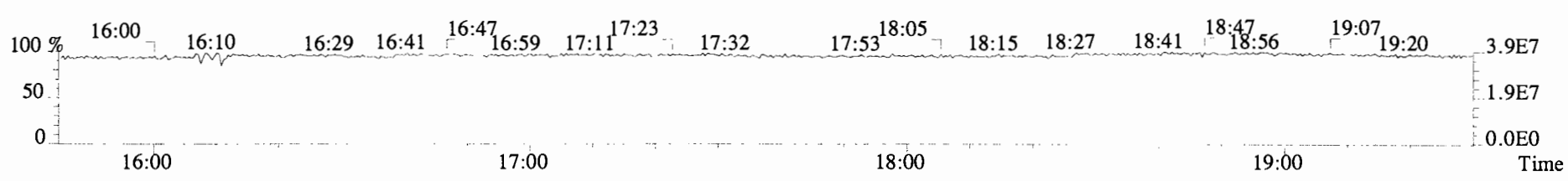
200.0795 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4152.0,0.00%,F,F)



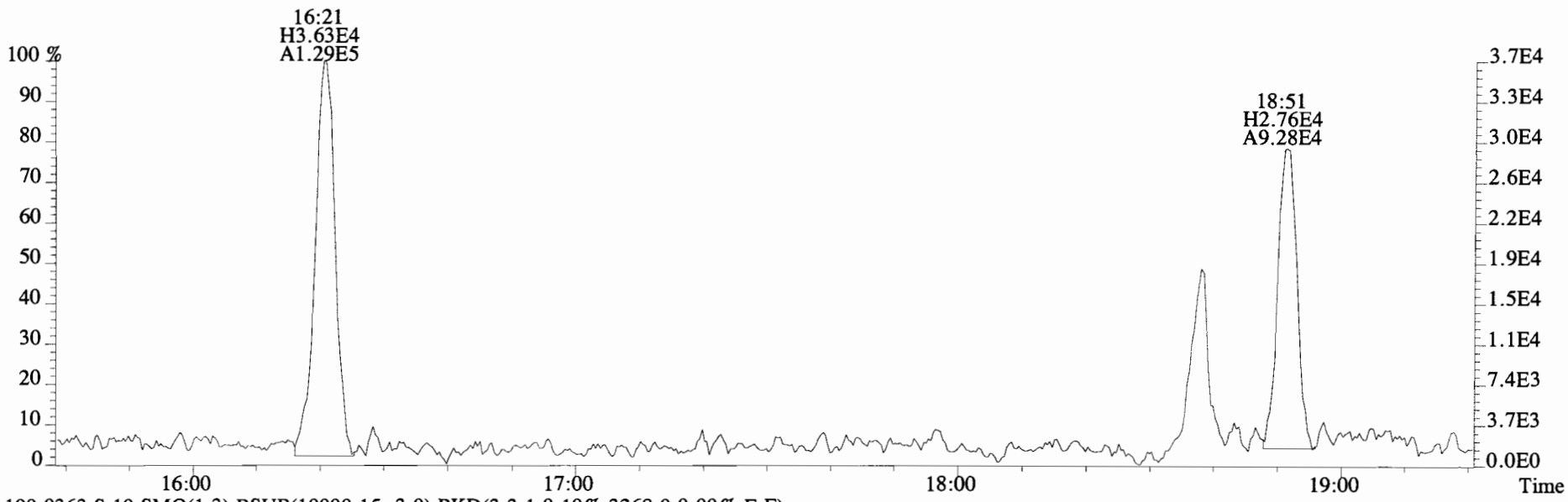
202.0766 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,50864.0,0.00%,F,F)



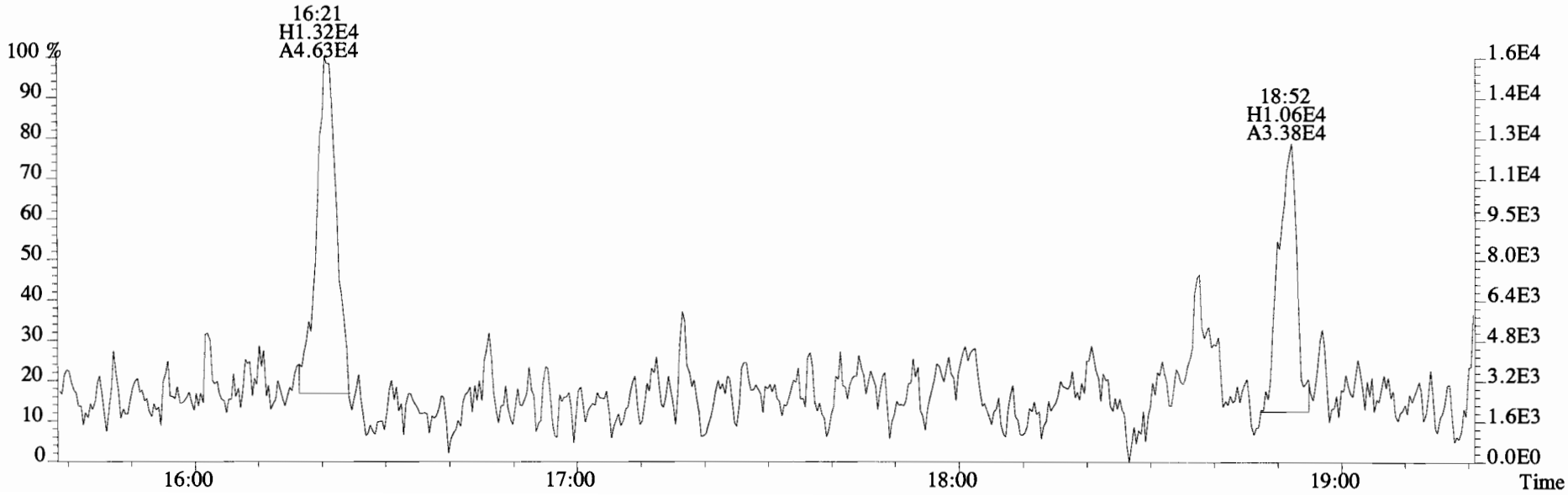
180.9880 S:10



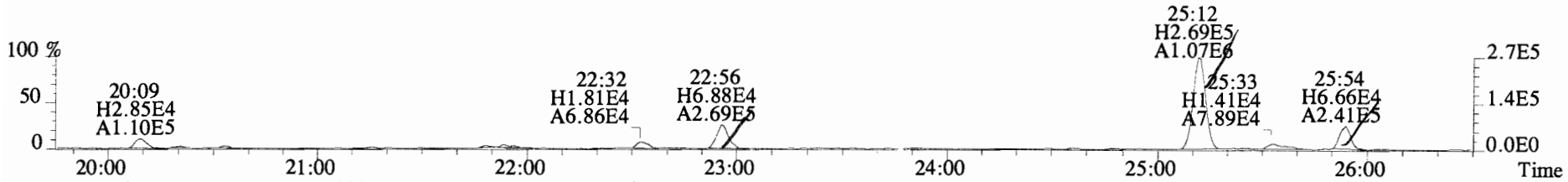
File:141031E1 #1-729 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
188.0393 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2368.0,0.00%,F,F)



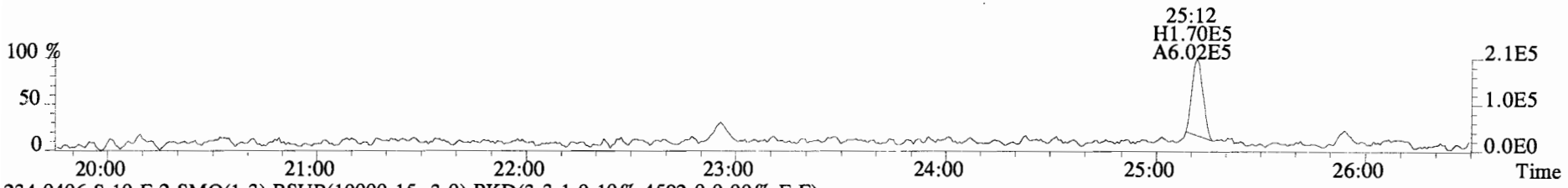
190.0363 S:10 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3268.0,0.00%,F,F)



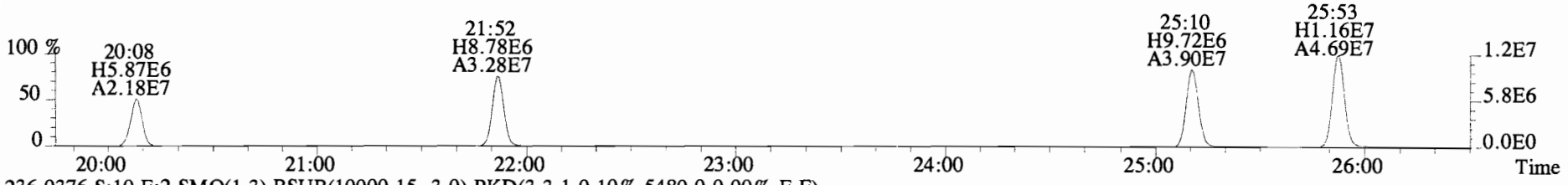
File:141031E1 #1-757 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
222.0003 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2720.0,0.00%,F,F)



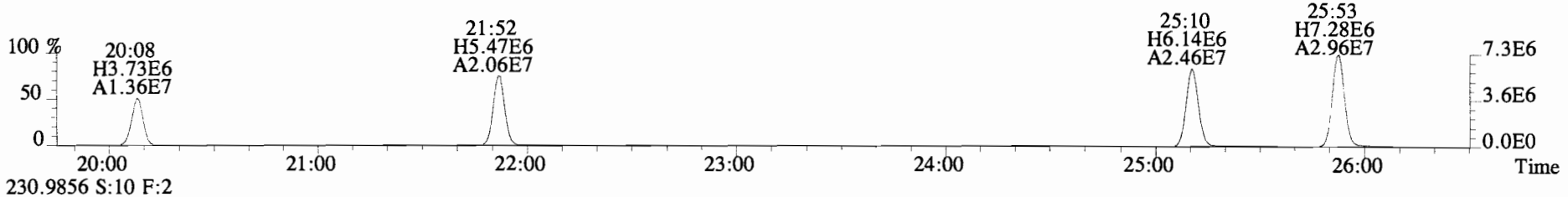
223.9974 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,24636.0,0.00%,F,F)



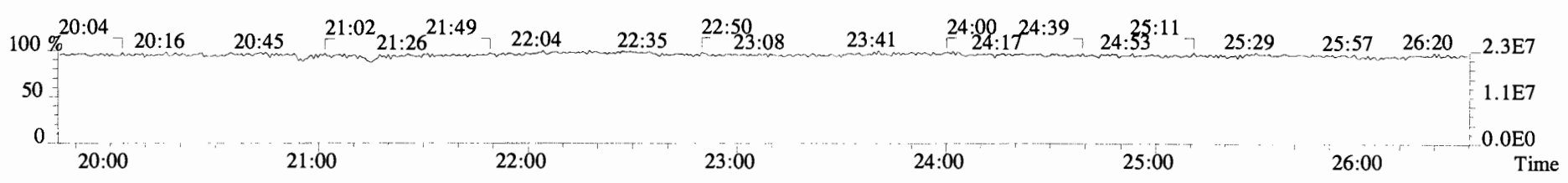
234.0406 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4592.0,0.00%,F,F)



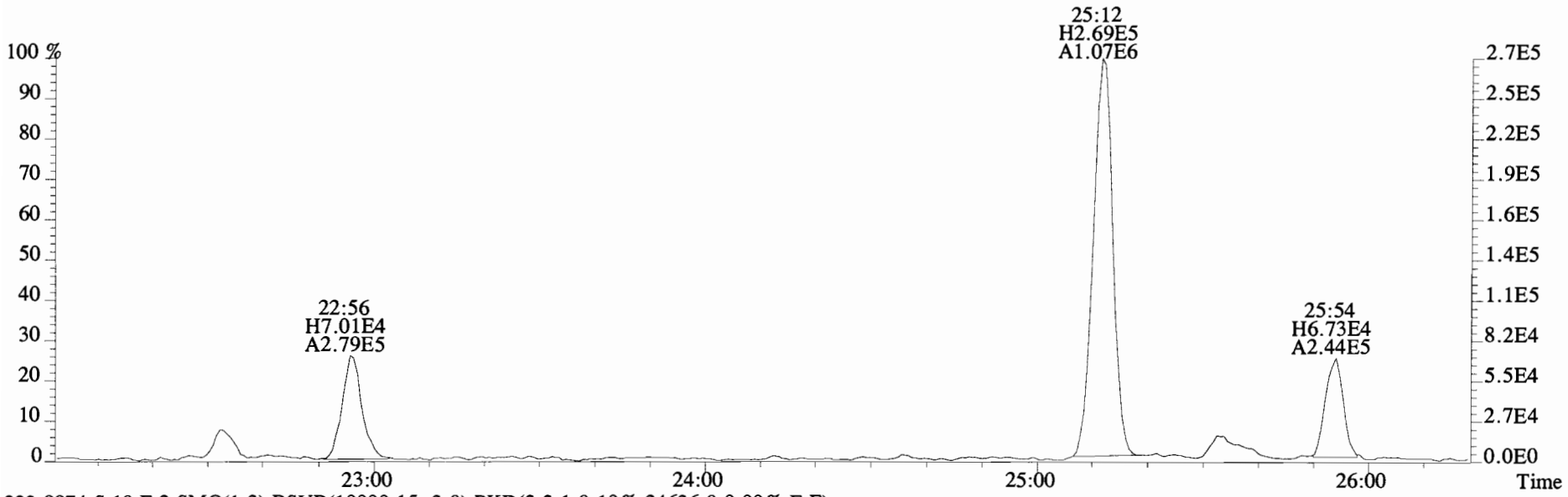
236.0376 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5480.0,0.00%,F,F)



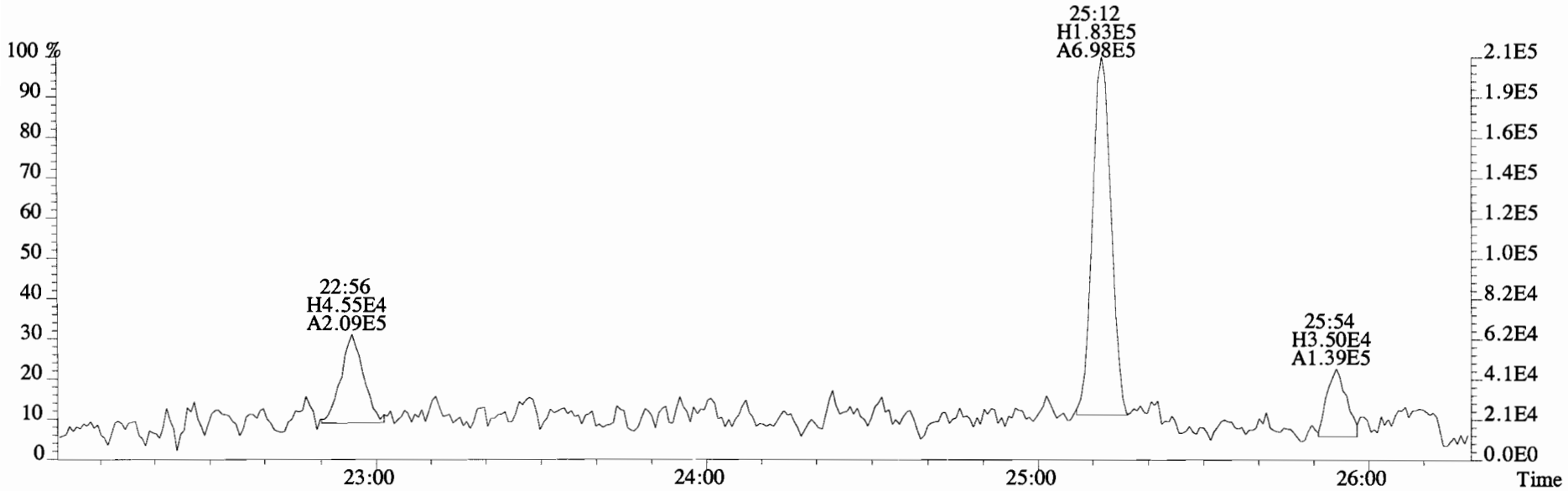
230.9856 S:10 F:2



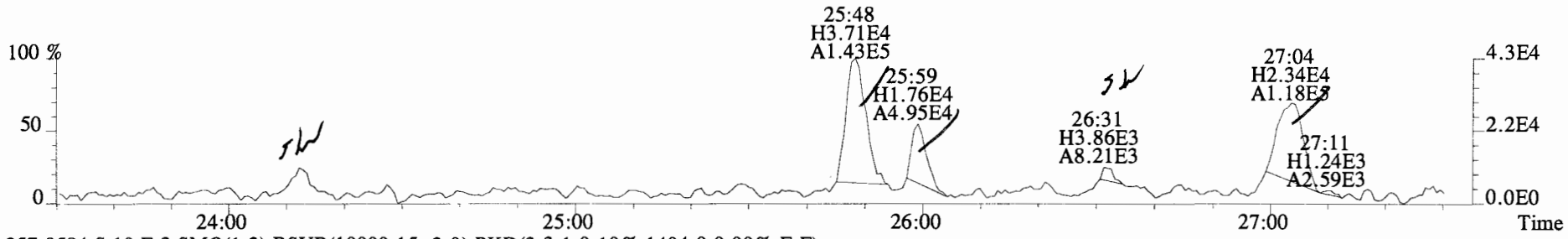
File:141031E1 #1-757 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
222.0003 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2720.0,0.00%,F,F)



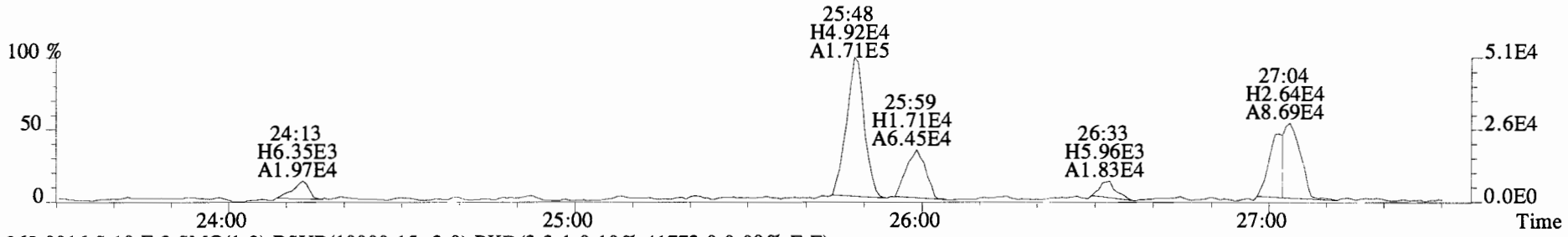
223.9974 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,24636.0,0.00%,F,F)



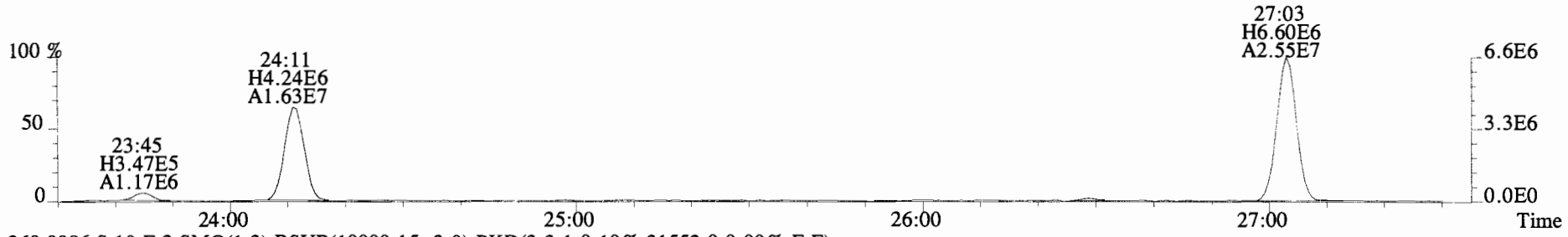
File:141031E1 #1-757 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
255.9613 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4072.0,0.00%,F,F)



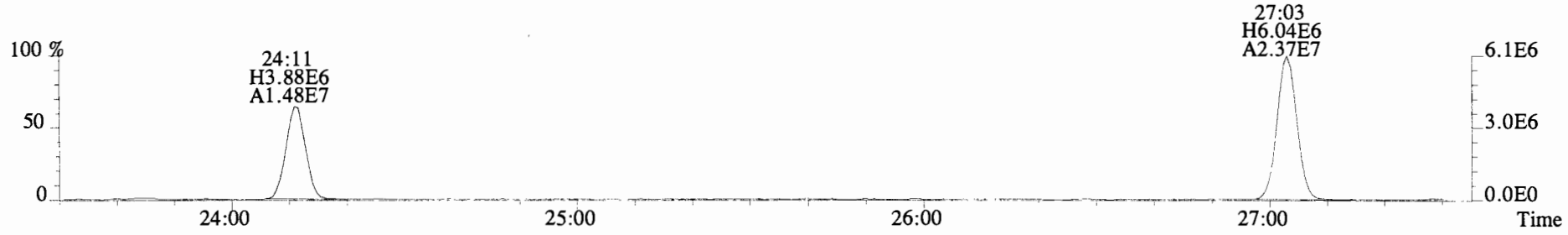
257.9584 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1404.0,0.00%,F,F)



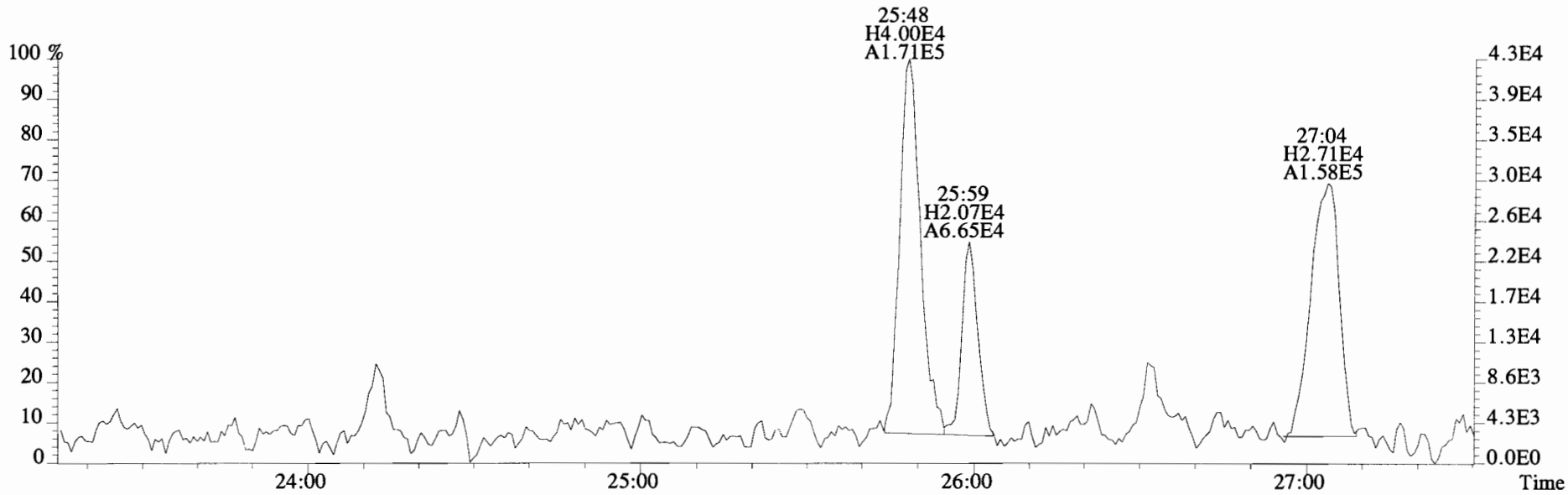
268.0016 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,41772.0,0.00%,F,F)



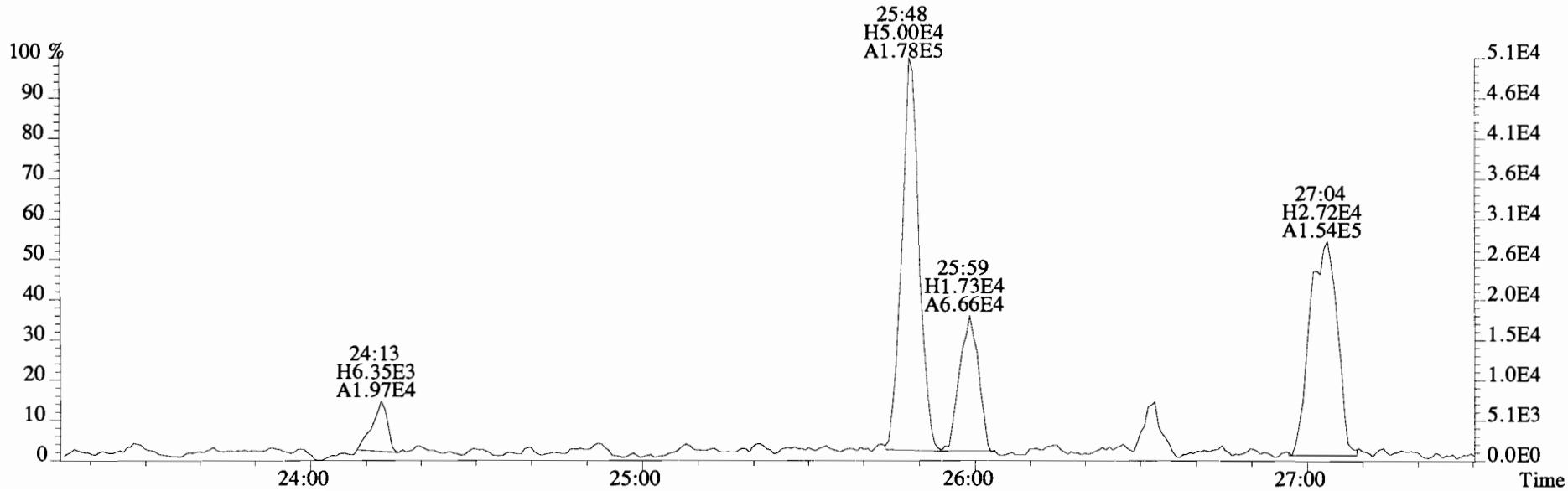
269.9986 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,31552.0,0.00%,F,F)



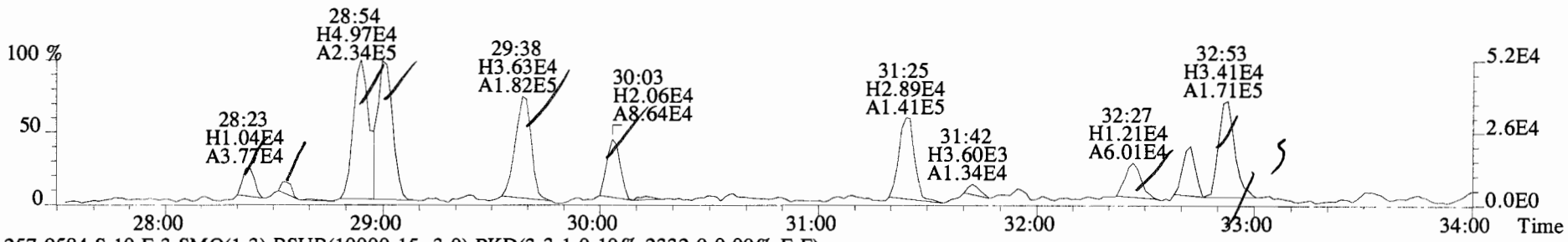
File:141031E1 #1-757 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
255.9613 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4072.0,0.00%,F,F)



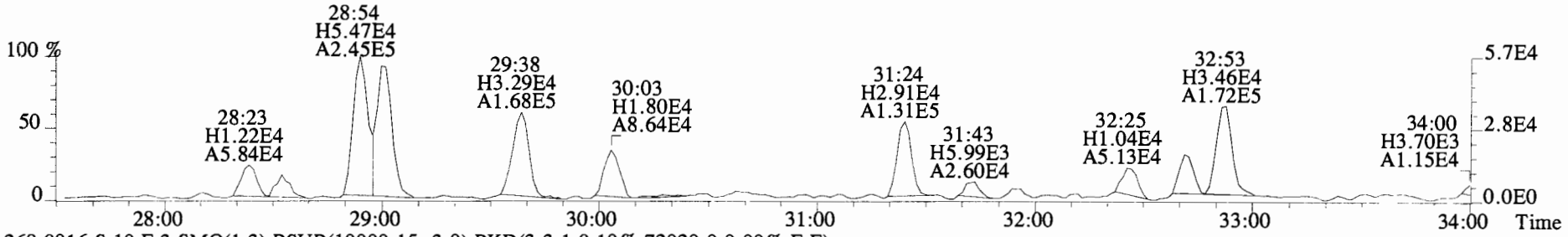
257.9584 S:10 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1404.0,0.00%,F,F)



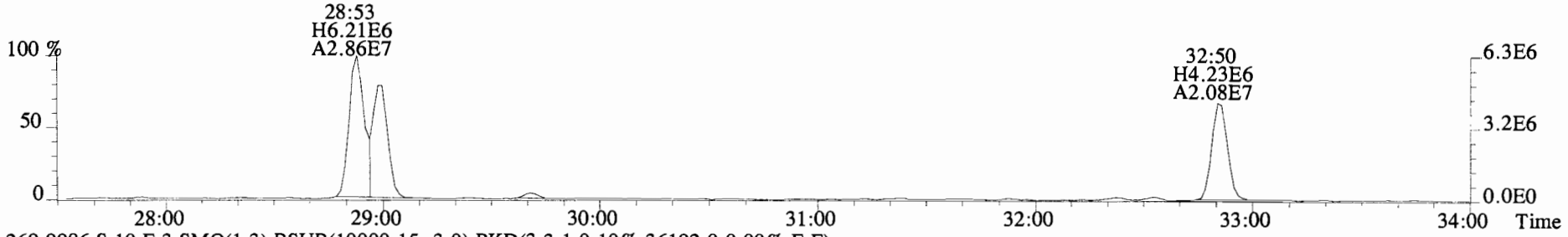
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
255.9613 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2736.0,0.00%,F,F)



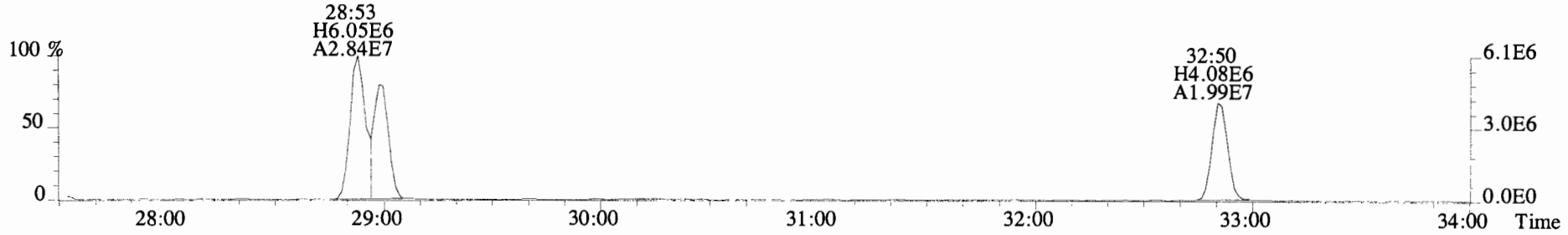
257.9584 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2332.0,0.00%,F,F)



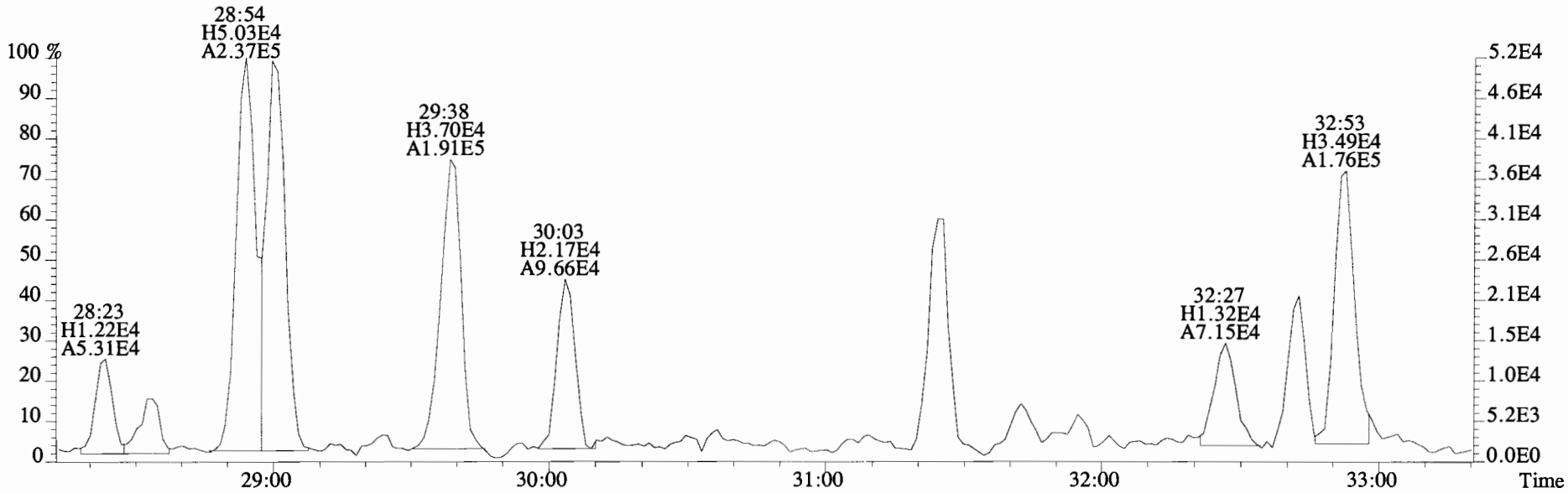
268.0016 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,72020.0,0.00%,F,F)



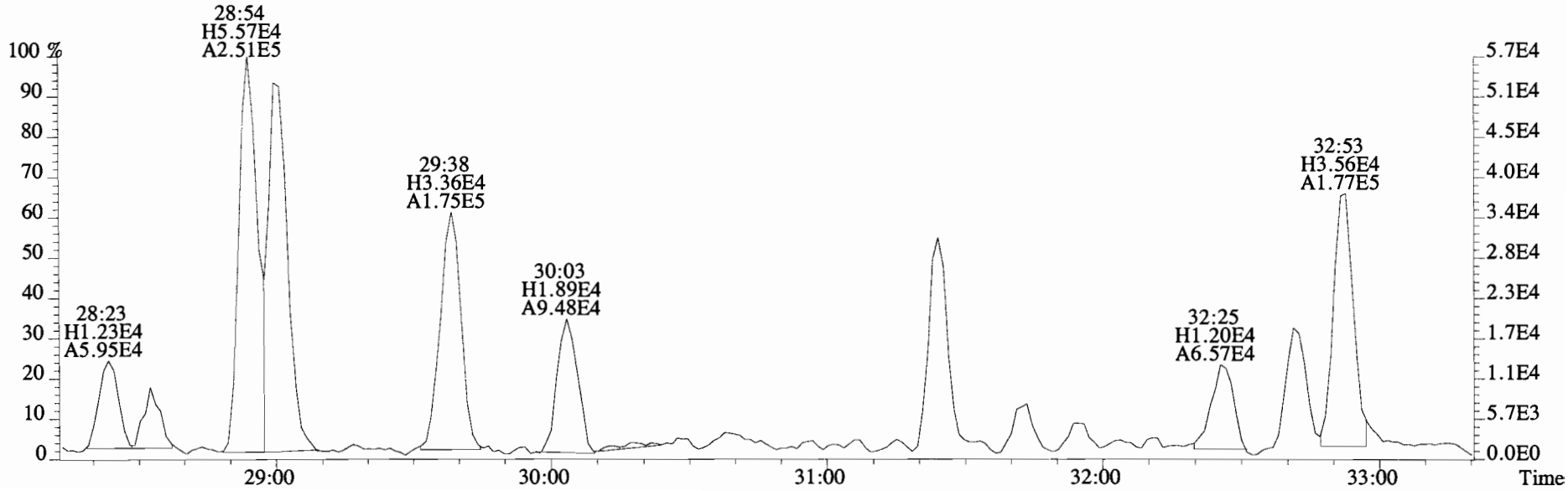
269.9986 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,36192.0,0.00%,F,F)



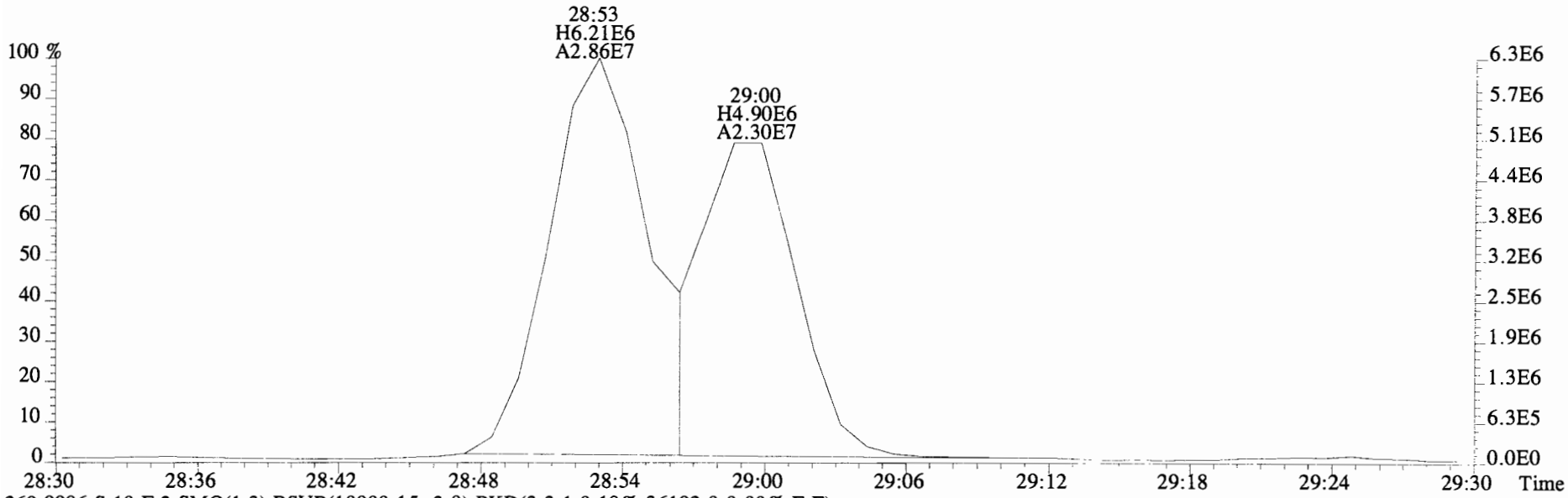
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
255.9613 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2736.0,0.00%,F,F)



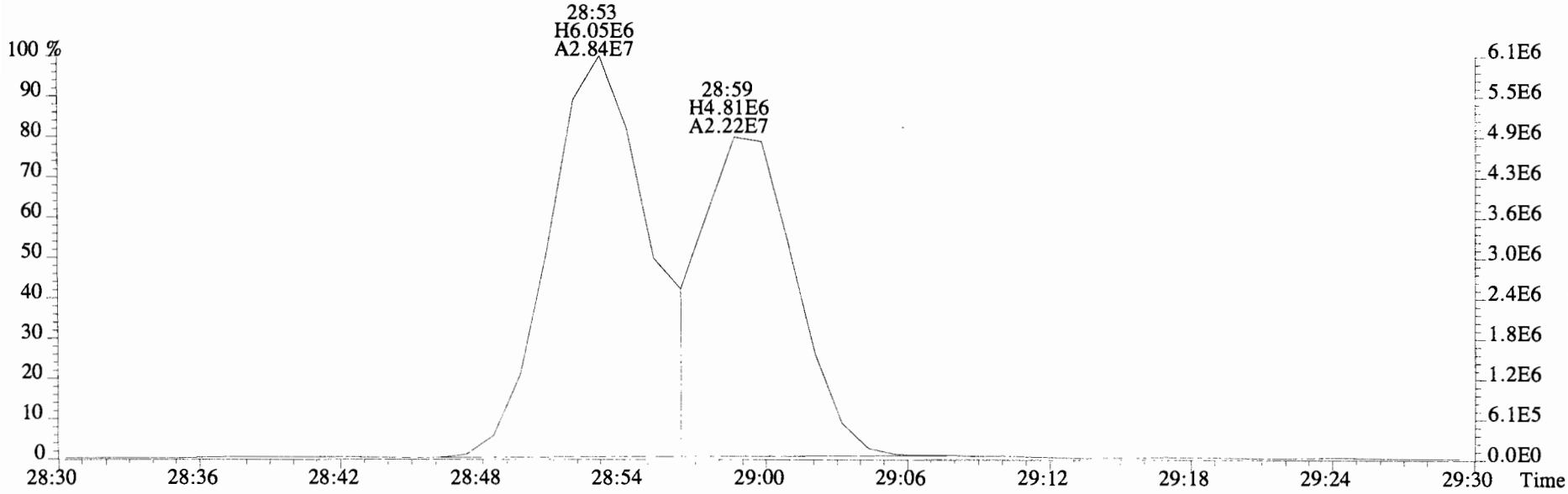
257.9584 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2332.0,0.00%,F,F)



File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
268.0016 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,72020.0,0.00%,F,F)

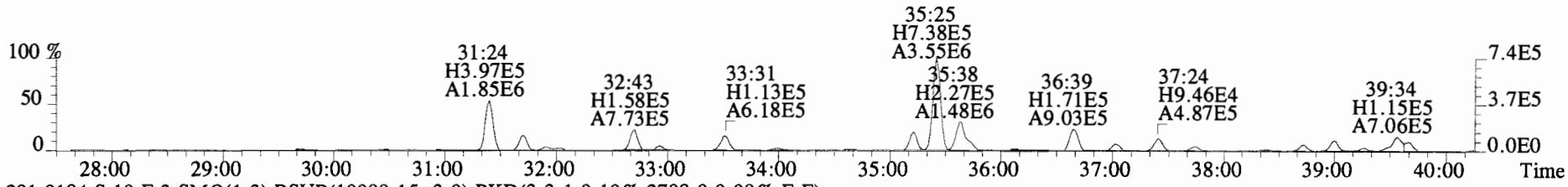


269.9986 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,36192.0,0.00%,F,F)

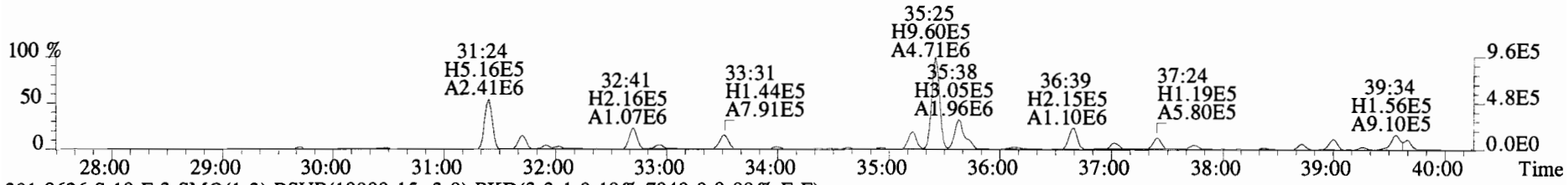


File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1

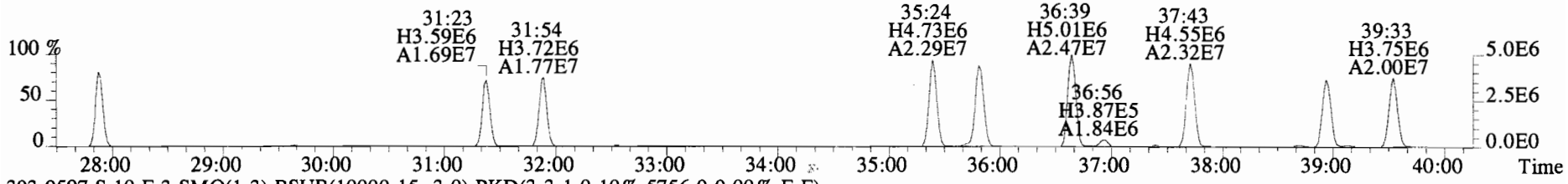
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



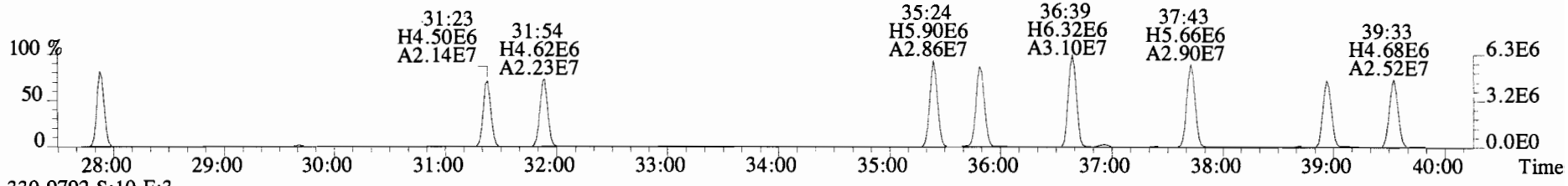
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2708.0,0.00%,F,F)



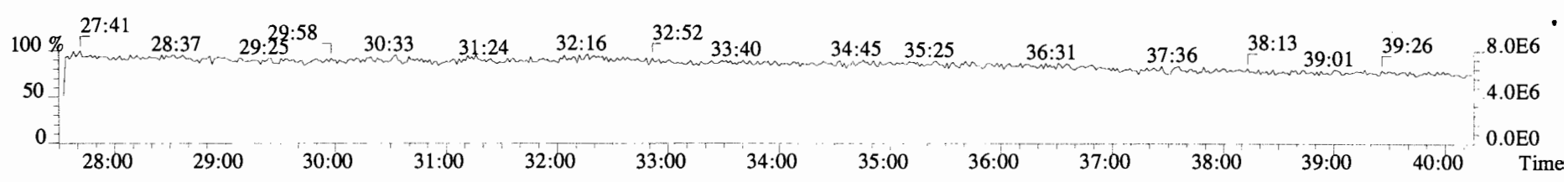
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7040.0,0.00%,F,F)



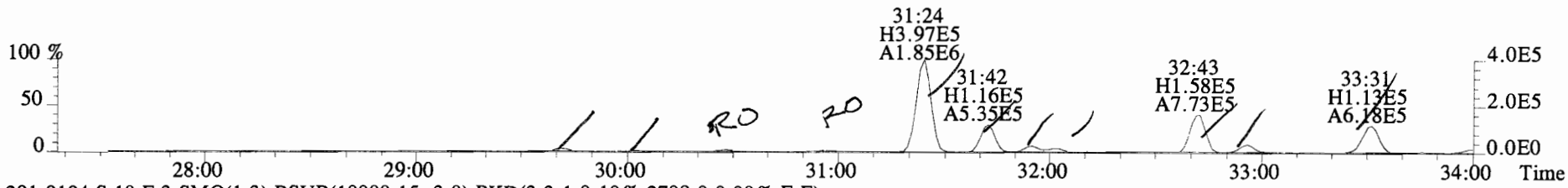
303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5756.0,0.00%,F,F)



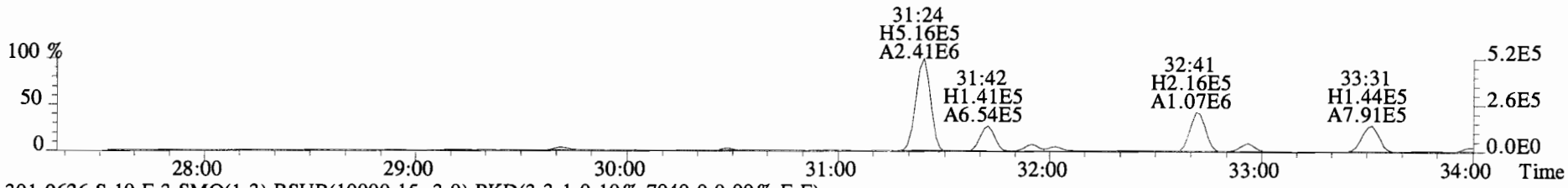
330.9792 S:10 F:3



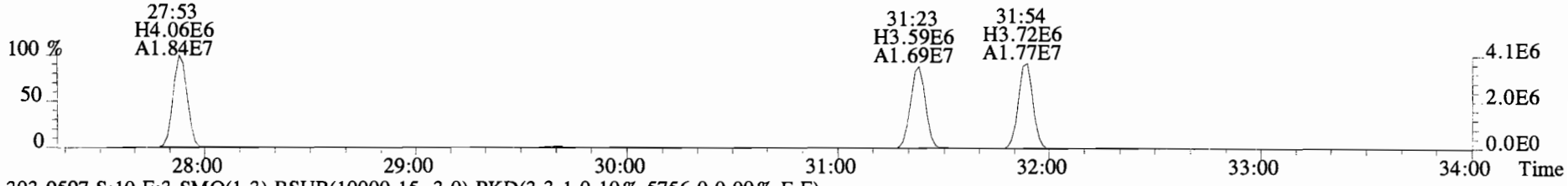
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



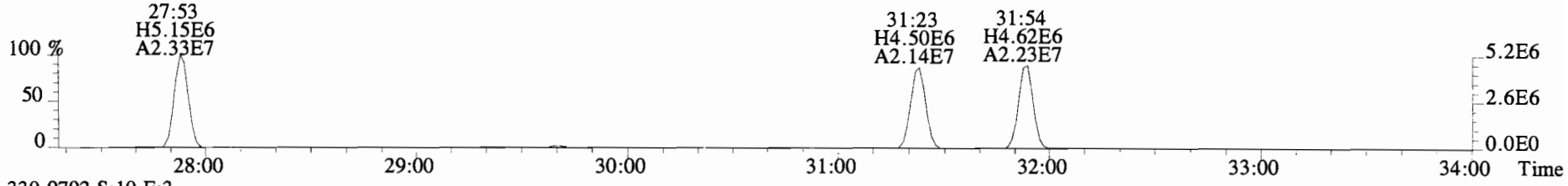
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2708.0,0.00%,F,F)



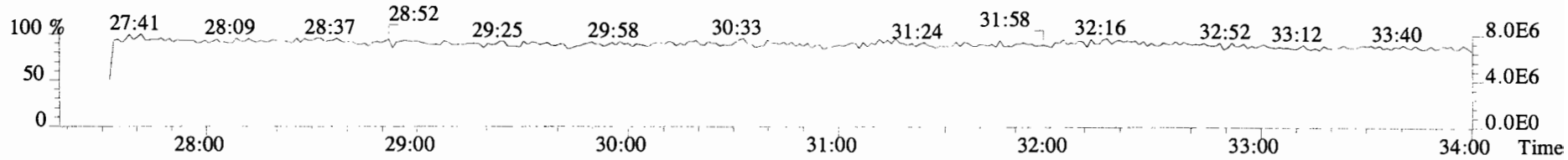
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7040.0,0.00%,F,F)



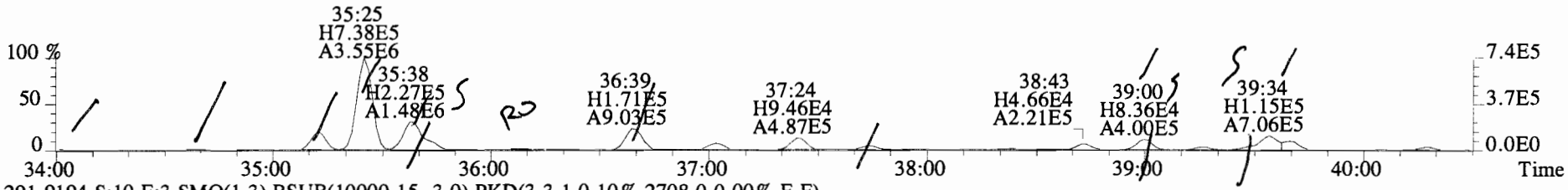
303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5756.0,0.00%,F,F)



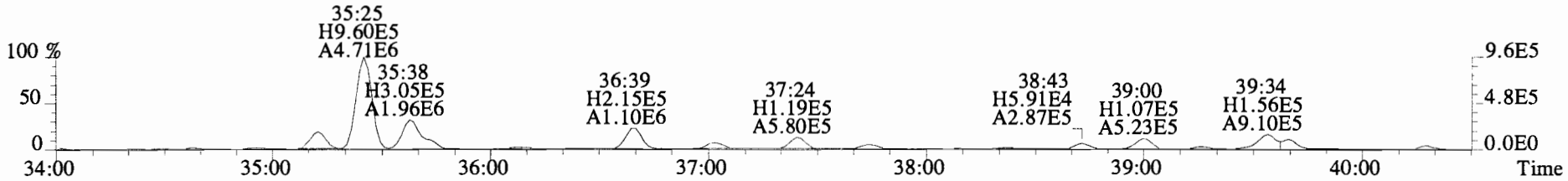
330.9792 S:10 F:3



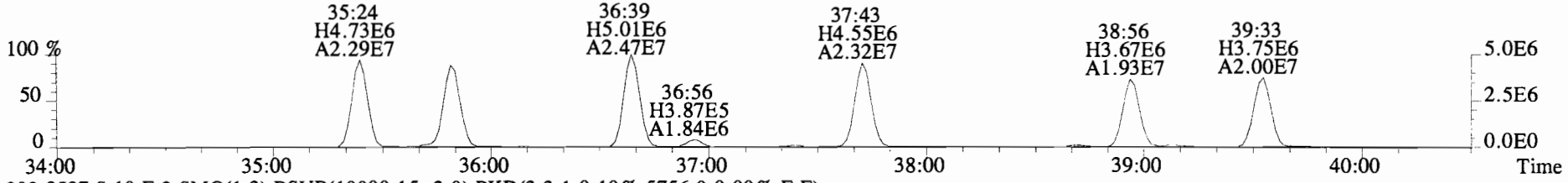
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



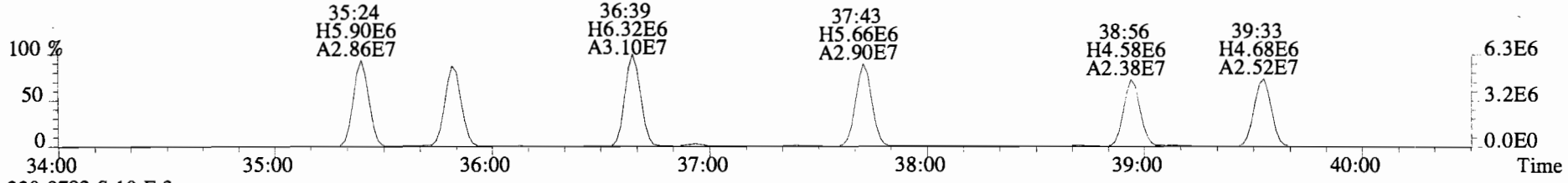
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2708.0,0.00%,F,F)



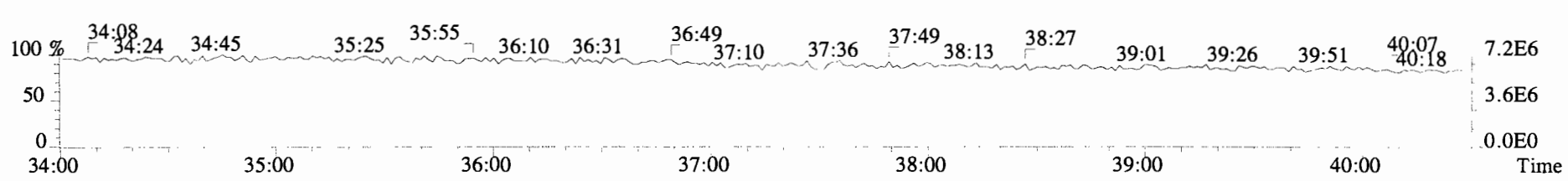
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7040.0,0.00%,F,F)

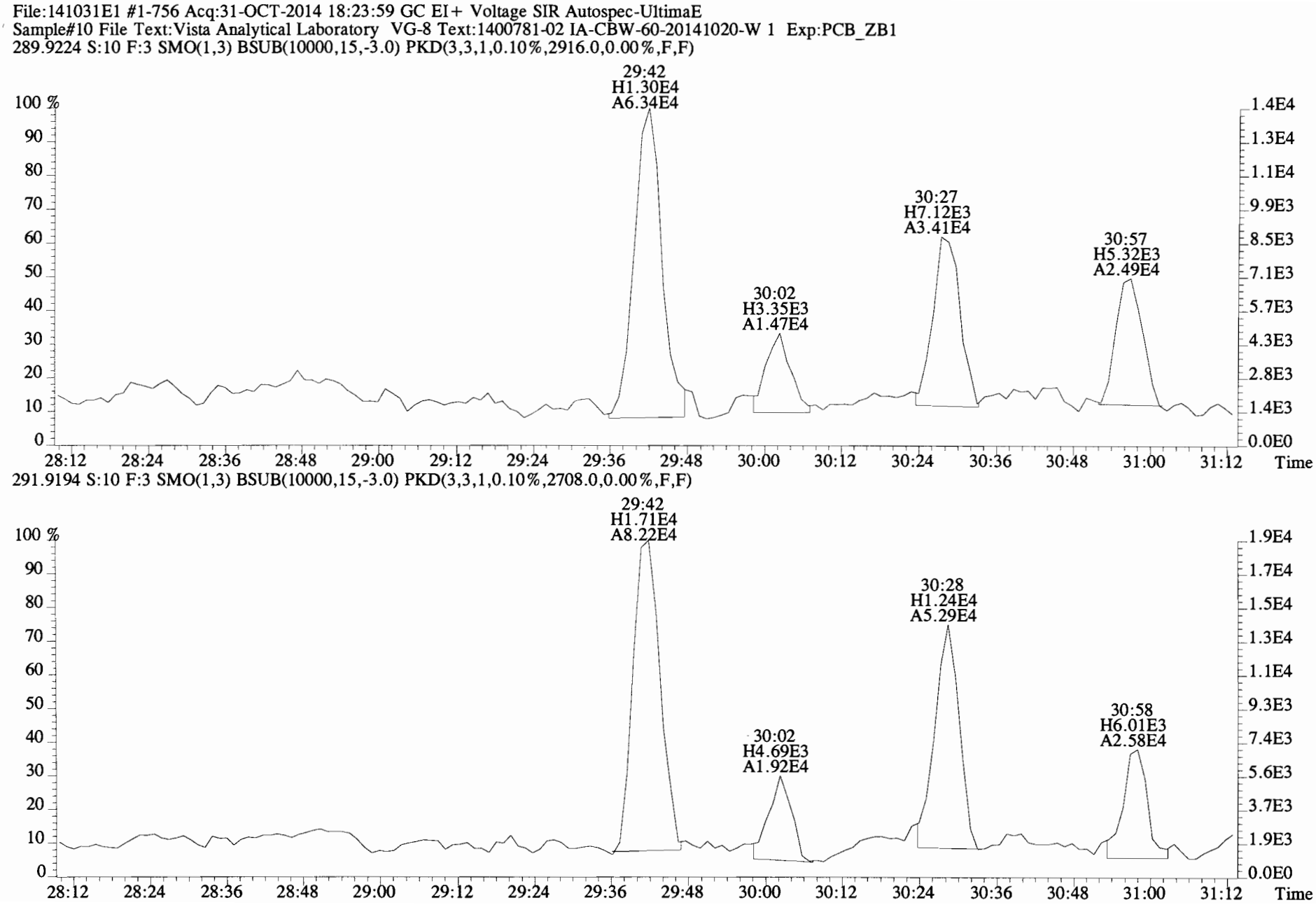


303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5756.0,0.00%,F,F)

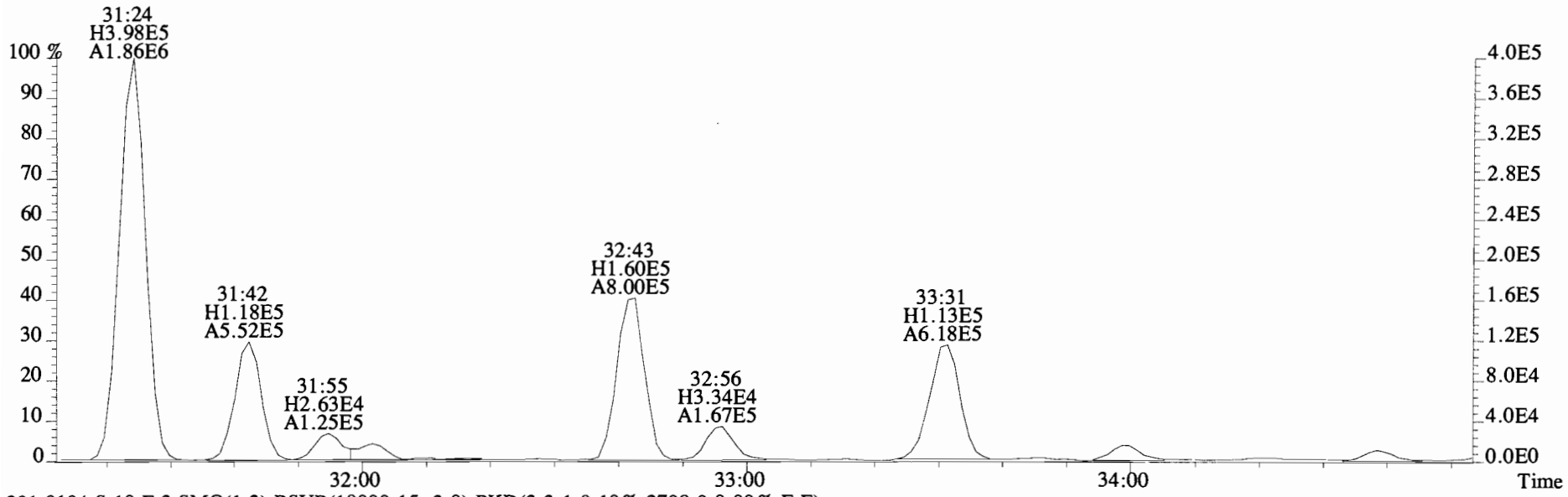


330.9792 S:10 F:3

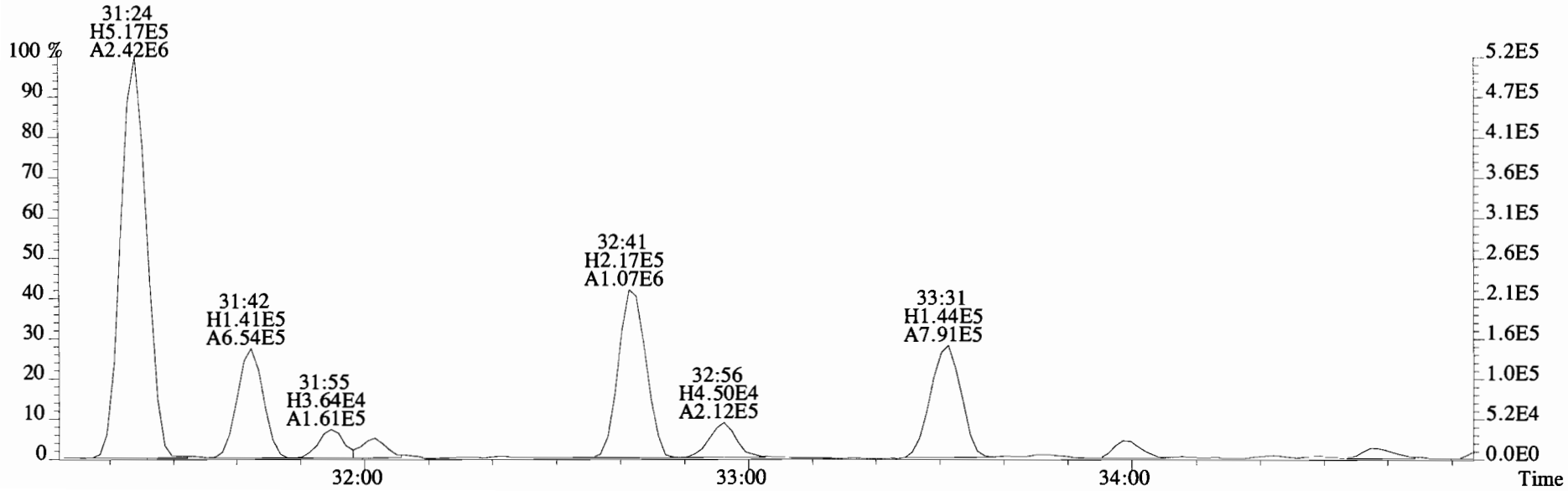


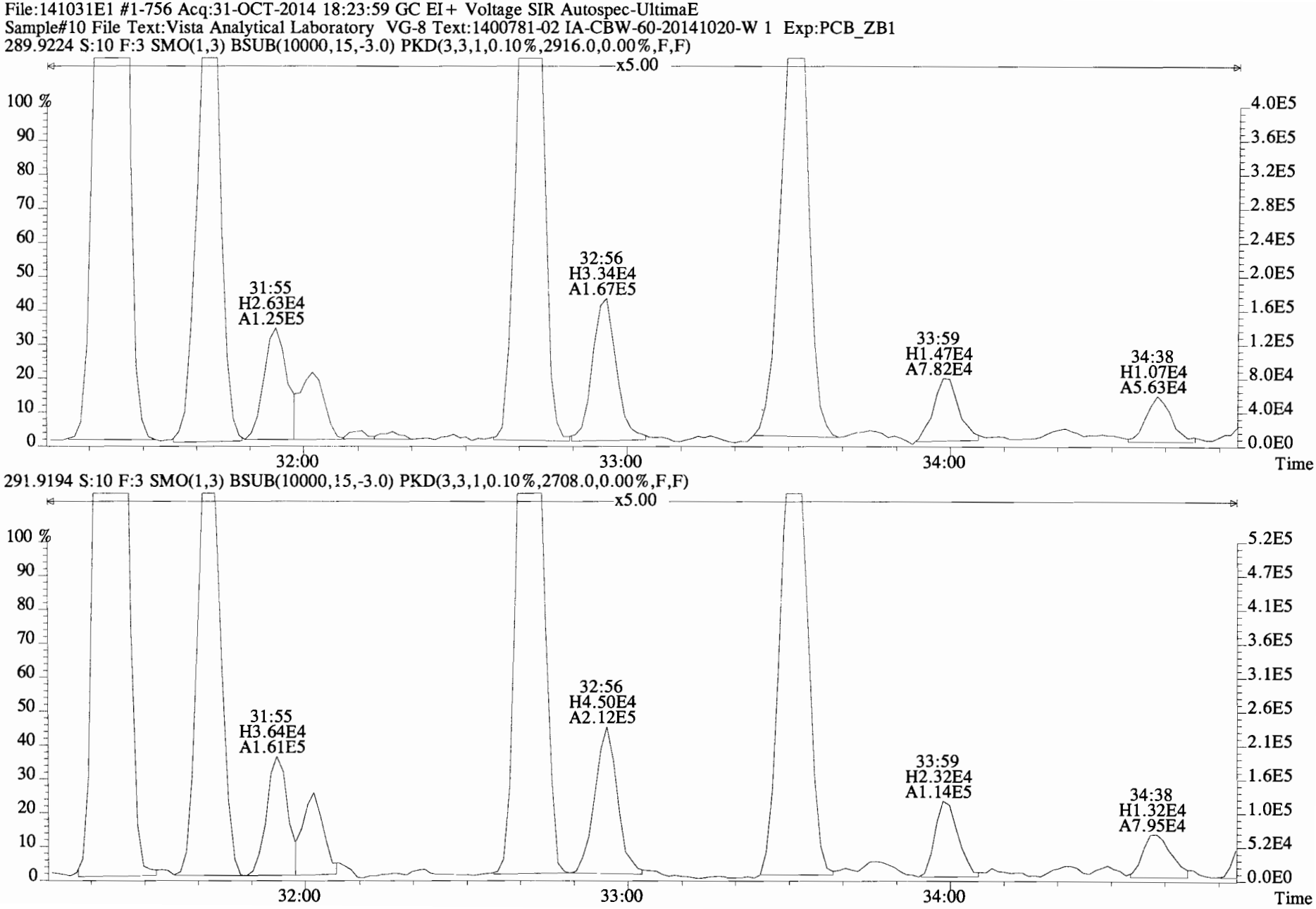

File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)
29:42
H1.30E4
A6.34E4
30:27
H7.12E3
A3.41E4
30:57
H5.32E3
A2.49E4
30:02
H3.35E3
A1.47E4
100 %
90
80
70
60
50
40
30
20
10
0
1.4E4
1.3E4
1.1E4
9.9E3
8.5E3
7.1E3
5.7E3
4.3E3
2.8E3
1.4E3
0.0E0
28:12
28:24
28:36
28:48
29:00
29:12
29:24
29:36
29:48
30:00
30:12
30:24
30:36
30:48
31:00
31:12
Time
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2708.0,0.00%,F,F)
29:42
H1.71E4
A8.22E4
30:28
H1.24E4
A5.29E4
30:58
H6.01E3
A2.58E4
30:02
H4.69E3
A1.92E4
100 %
90
80
70
60
50
40
30
20
10
0
1.9E4
1.7E4
1.5E4
1.3E4
1.1E4
9.3E3
7.4E3
5.6E3
3.7E3
1.9E3
0.0E0
28:12
28:24
28:36
28:48
29:00
29:12
29:24
29:36
29:48
30:00
30:12
30:24
30:36
30:48
31:00
31:12
Time

File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)

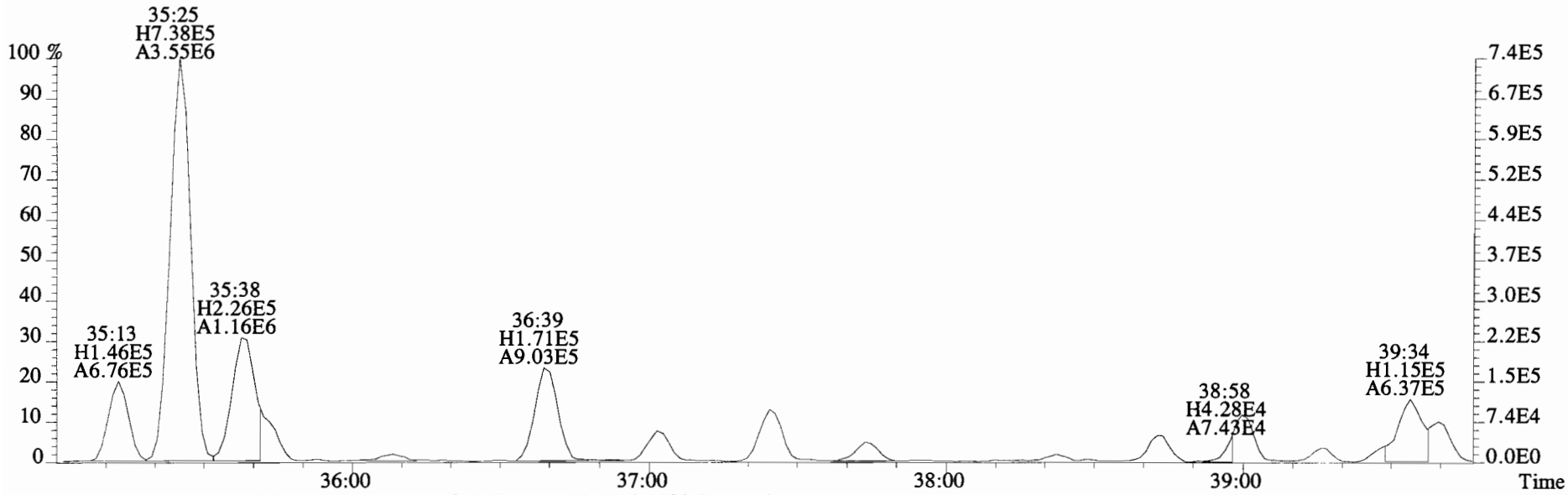


291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2708.0,0.00%,F,F)

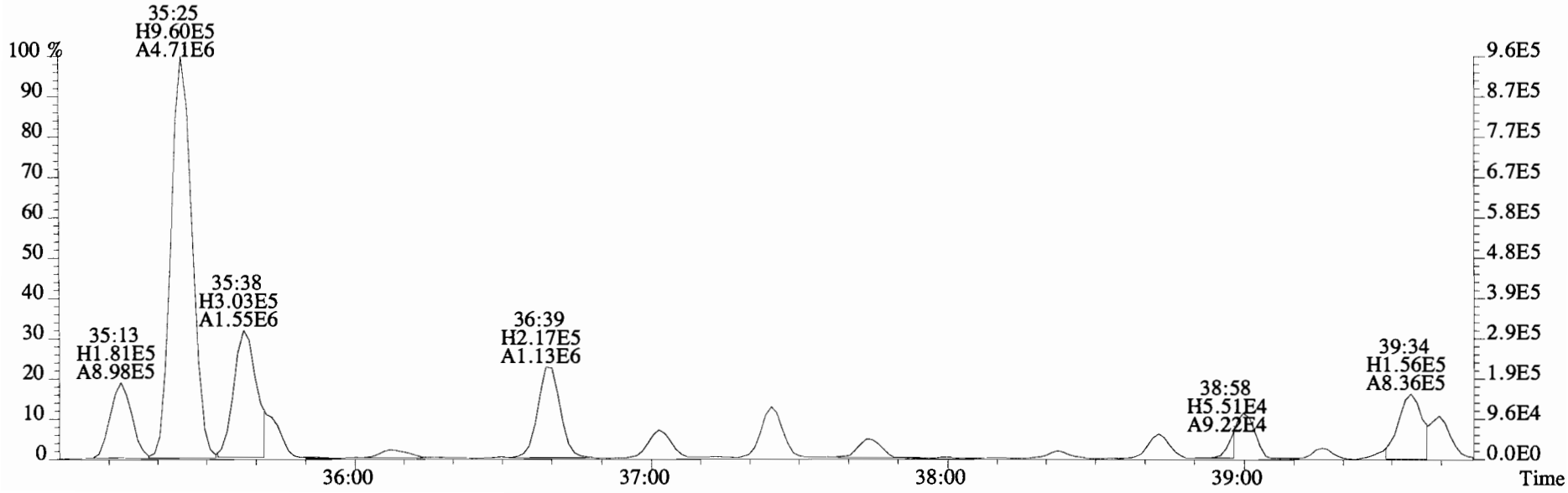



File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
4.0E5
3.6E5
3.2E5
2.8E5
2.4E5
2.0E5
1.6E5
1.2E5
8.0E4
4.0E4
0.0E0
31:55
H2.63E4
A1.25E5
32:56
H3.34E4
A1.67E5
33:59
H1.47E4
A7.82E4
34:38
H1.07E4
A5.63E4
32:00
33:00
34:00
Time
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2708.0,0.00%,F,F)
x5.00
100 %
90
80
70
60
50
40
30
20
10
0
5.2E5
4.7E5
4.1E5
3.6E5
3.1E5
2.6E5
2.1E5
1.6E5
1.0E5
5.2E4
0.0E0
31:55
H3.64E4
A1.61E5
32:56
H4.50E4
A2.12E5
33:59
H2.32E4
A1.14E5
34:38
H1.32E4
A7.95E4
32:00
33:00
34:00
Time

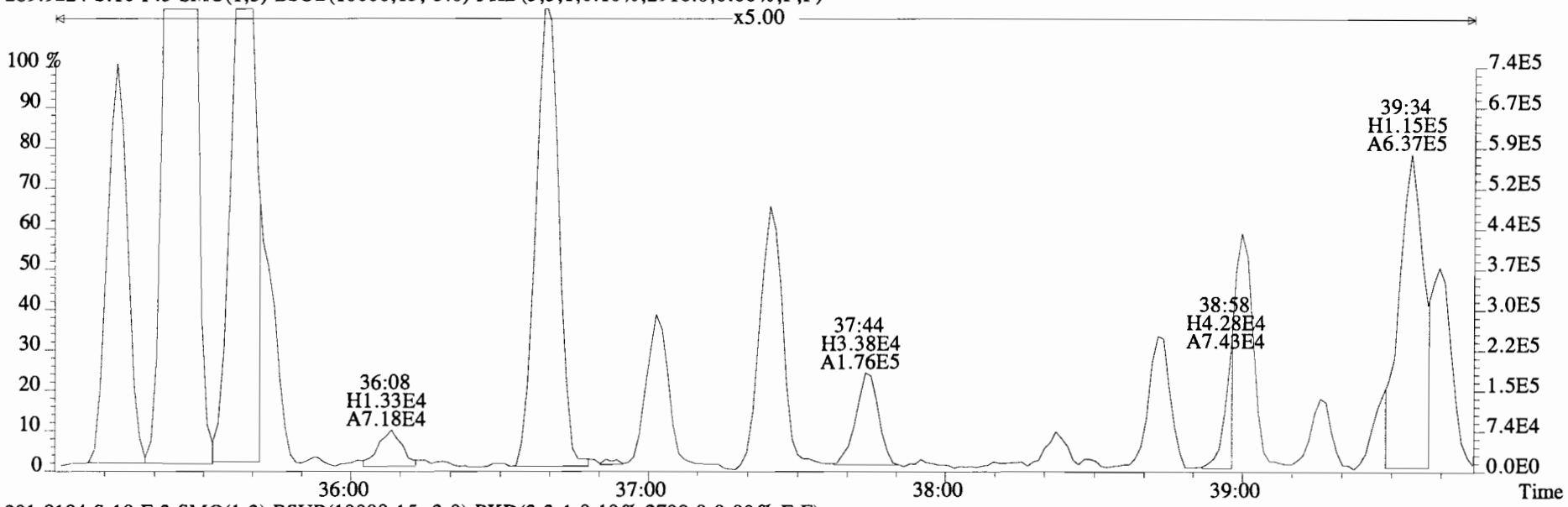
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



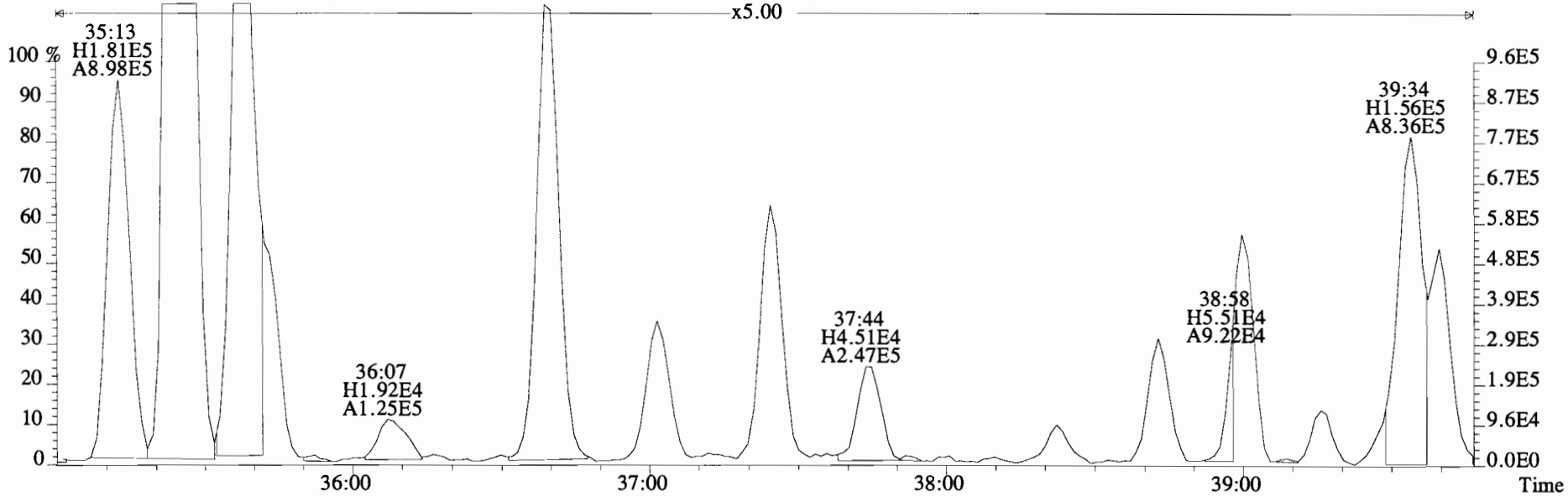
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2708.0,0.00%,F,F)



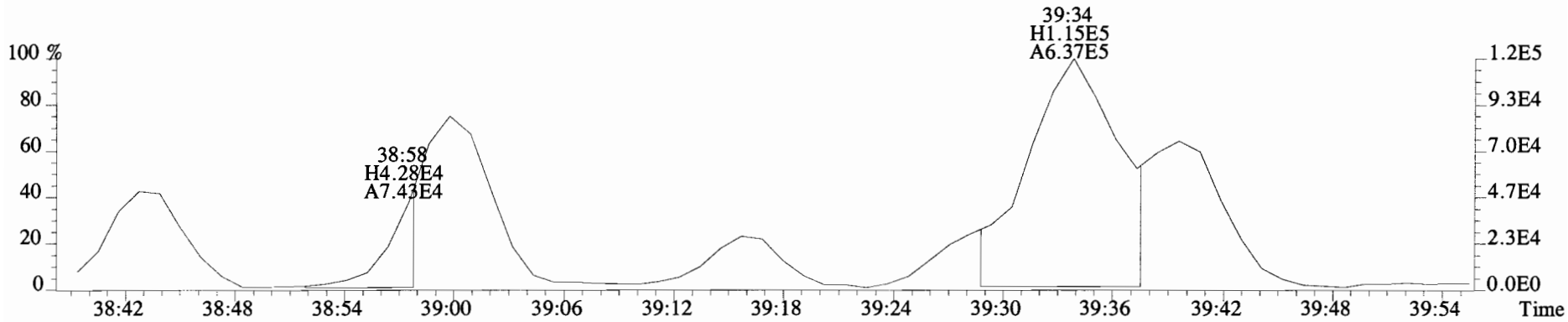
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



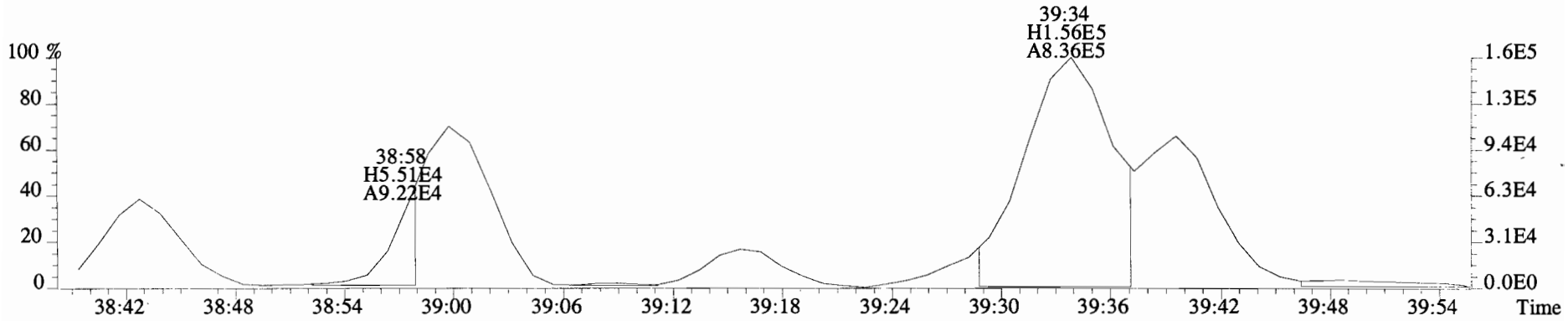
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2708.0,0.00%,F,F)



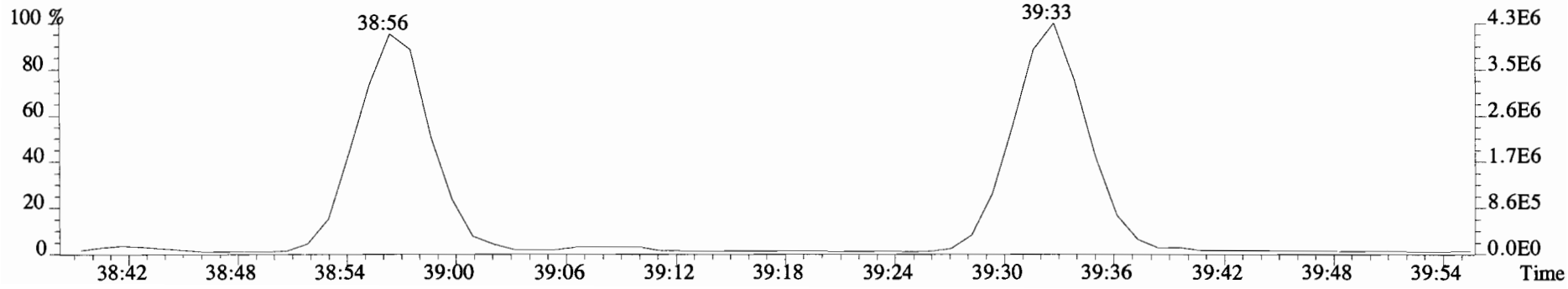
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
289.9224 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2916.0,0.00%,F,F)



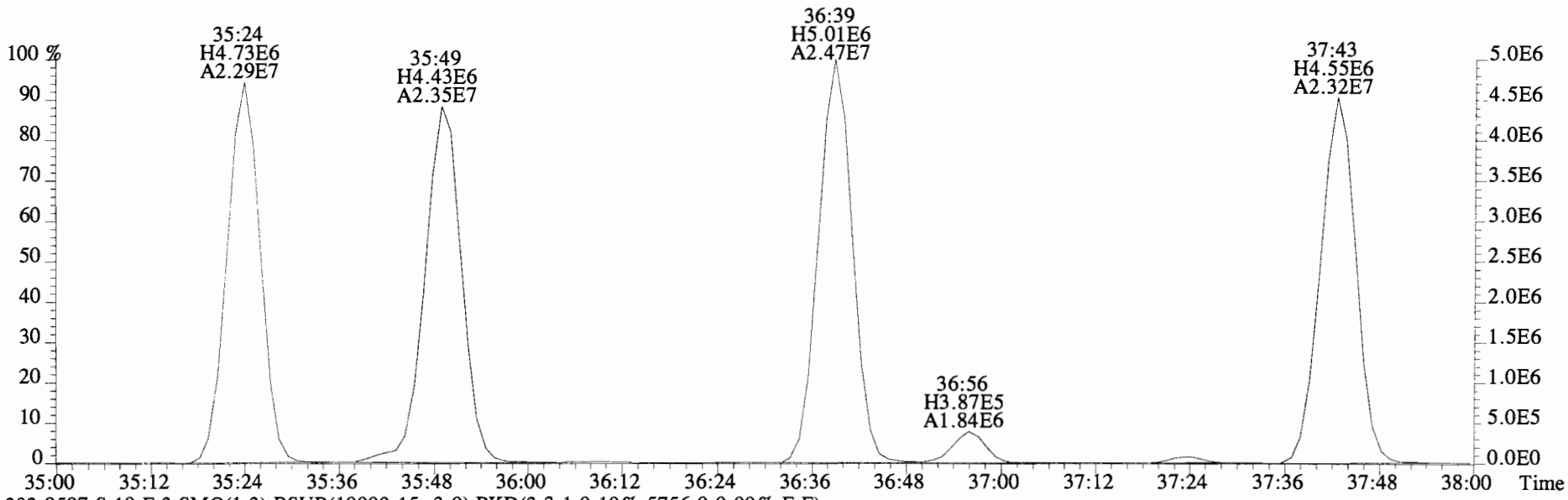
291.9194 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2708.0,0.00%,F,F)



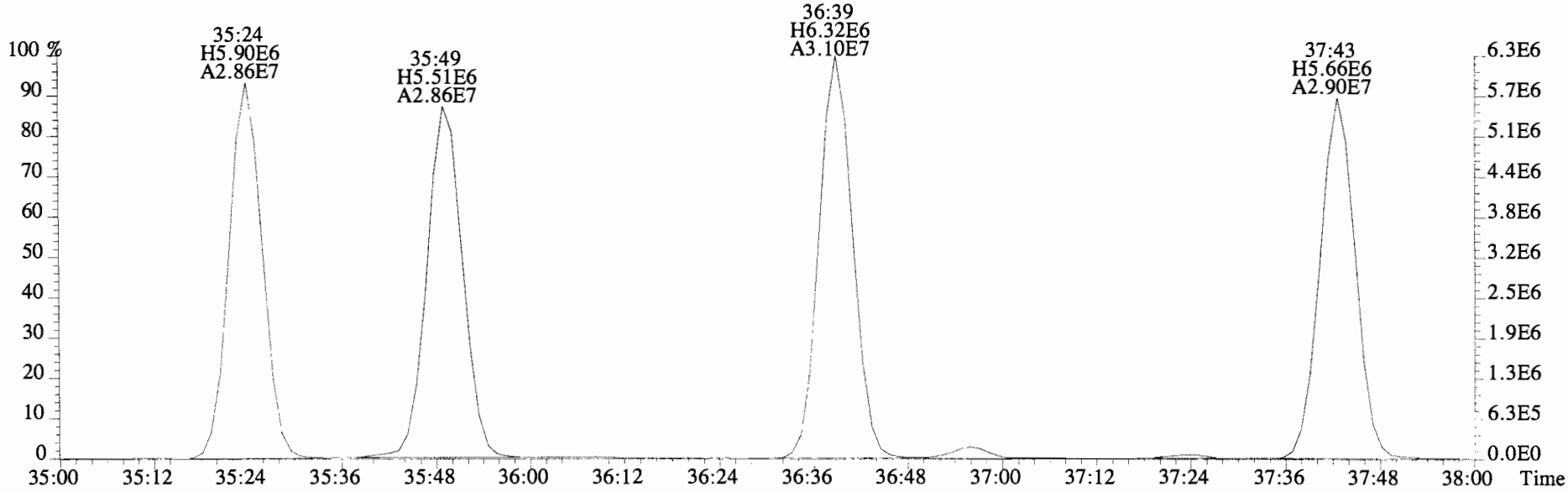
301.9626 S:10 F:3



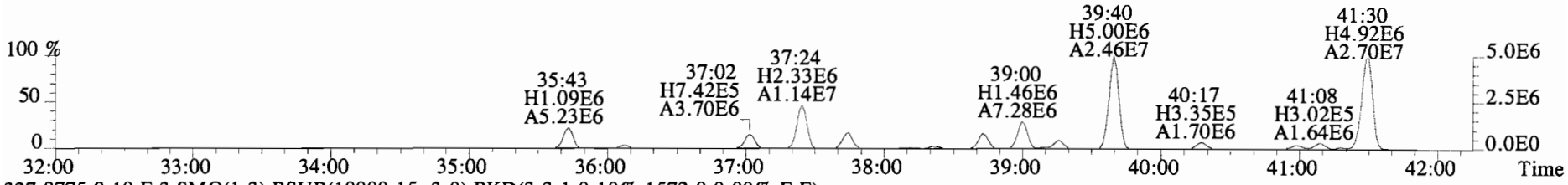
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
301.9626 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7040.0,0.00%,F,F)



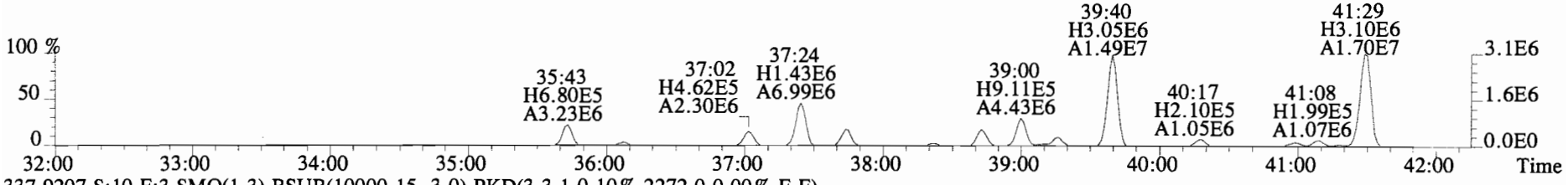
303.9597 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,5756.0,0.00%,F,F)



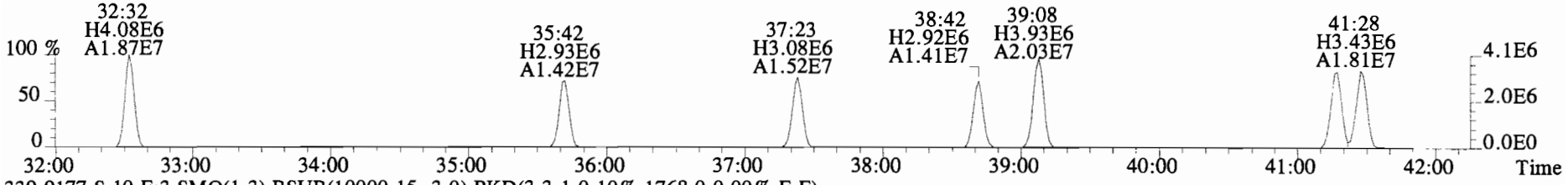
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1568.0,0.00%,F,F)



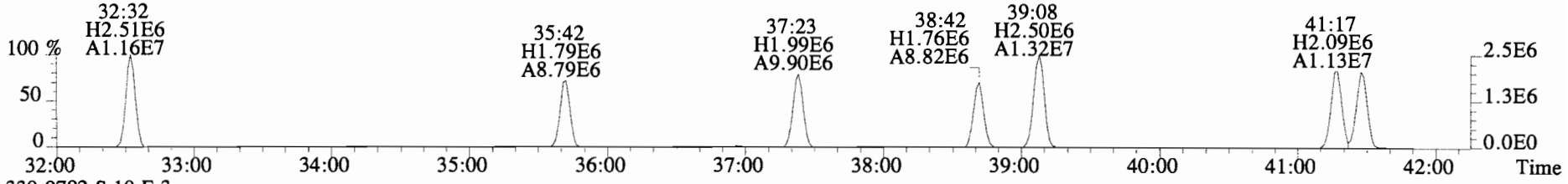
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1572.0,0.00%,F,F)



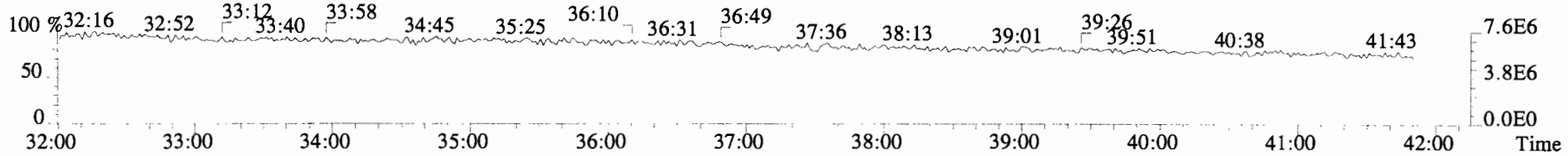
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2272.0,0.00%,F,F)



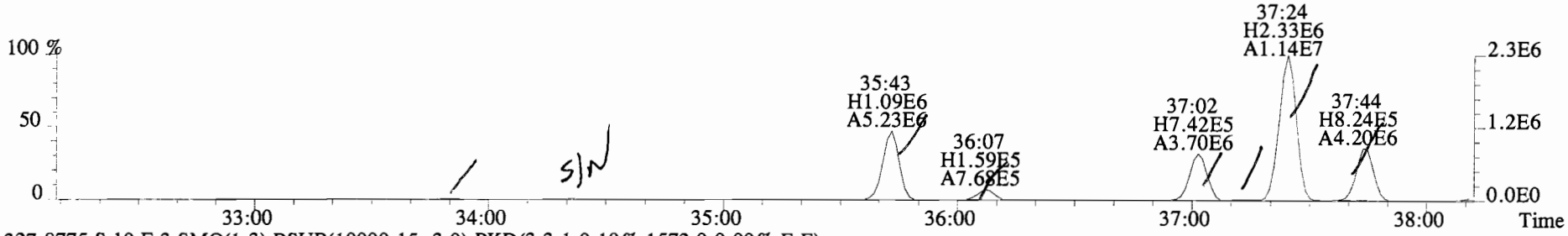
339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1768.0,0.00%,F,F)



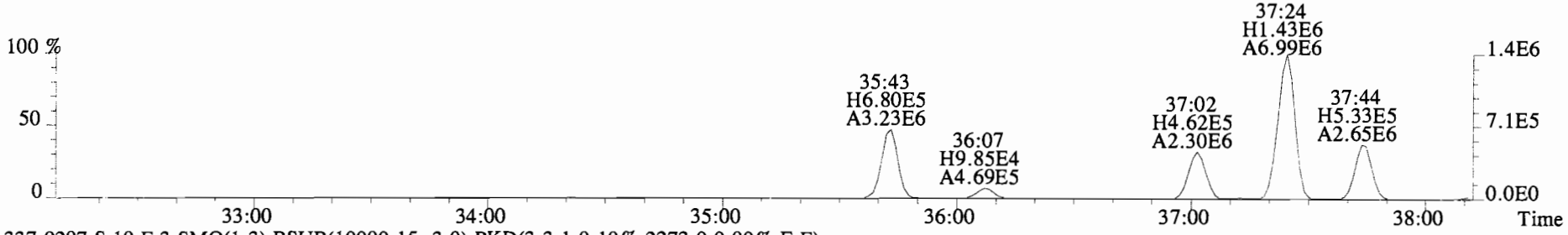
330.9792 S:10 F:3



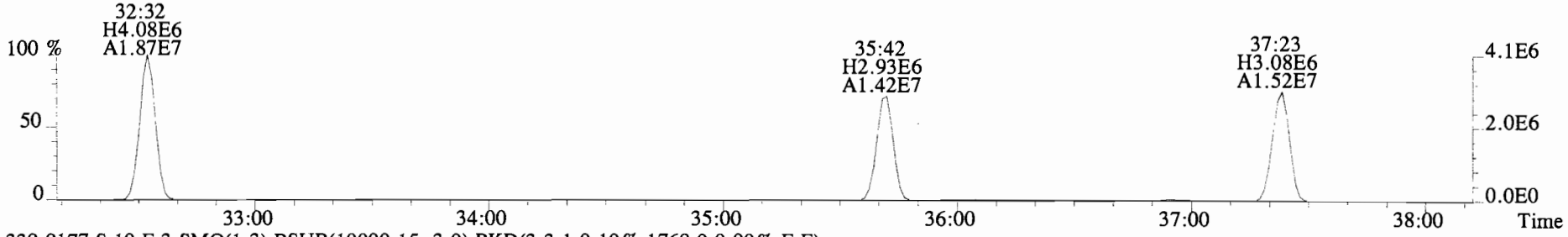
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1568.0,0.00%,F,F)



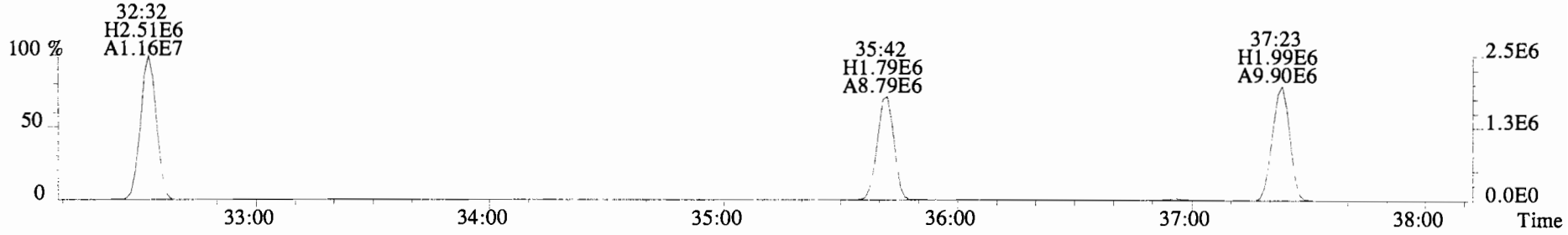
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1572.0,0.00%,F,F)

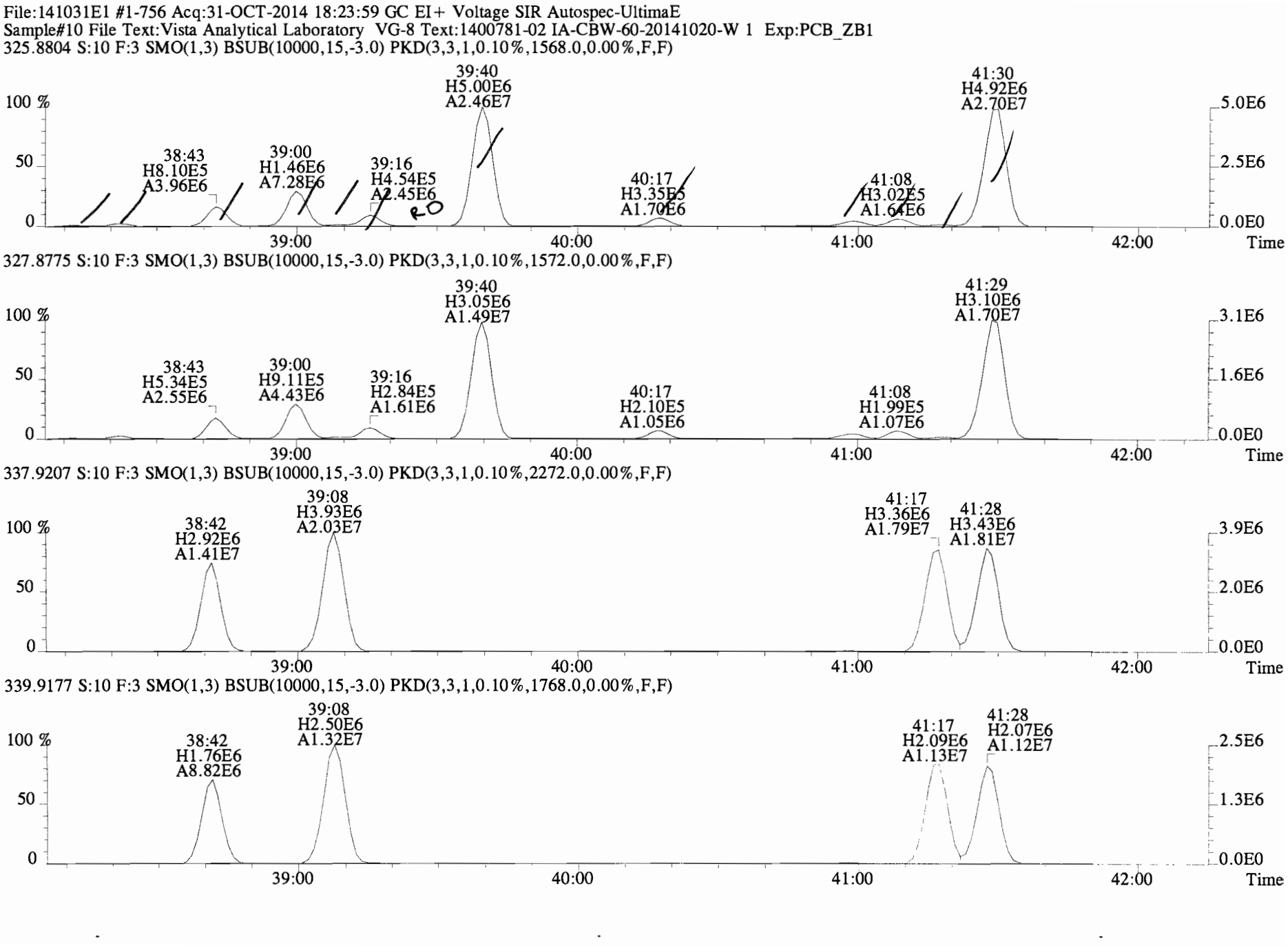


337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2272.0,0.00%,F,F)

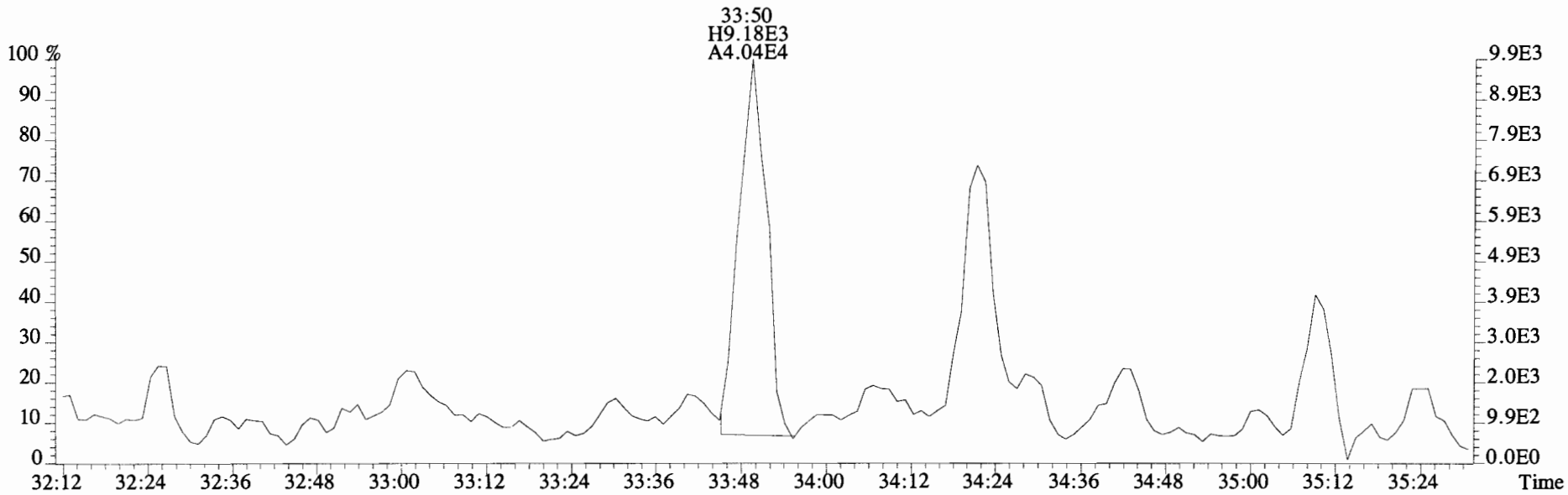


339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1768.0,0.00%,F,F)

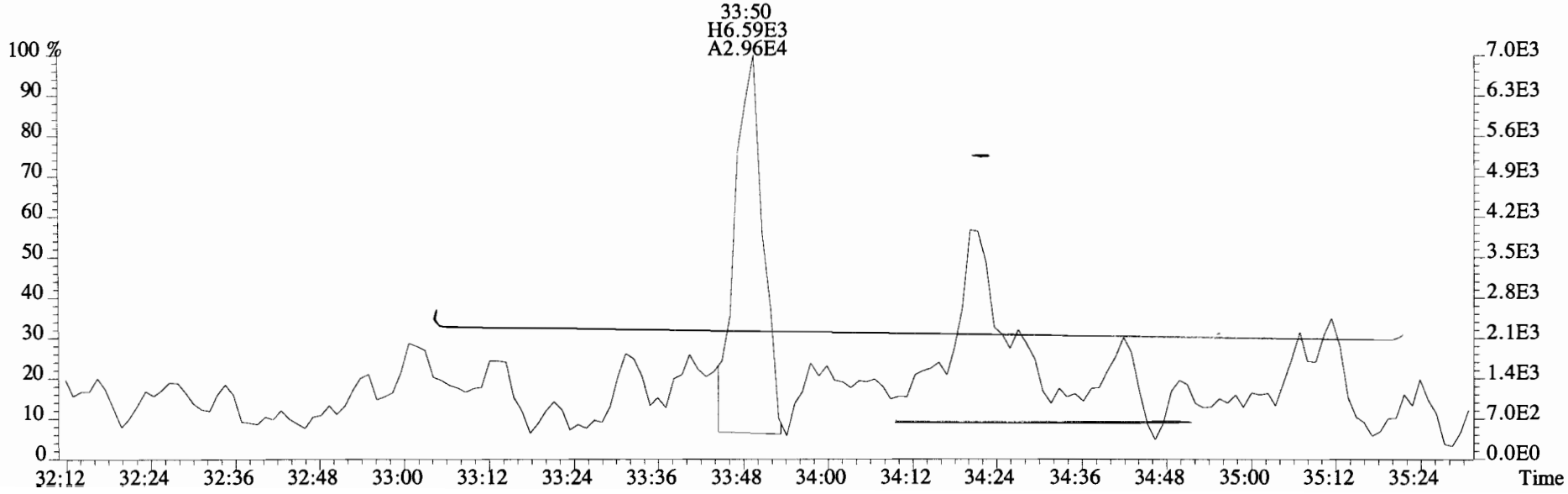



File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1568.0,0.00%,F,F)
38:43 H8.10E5 A3.96E6
39:00 H1.46E6 A7.28E6
39:16 H4.54E5 A2.45E6
39:40 H5.00E6 A2.46E7
40:17 H3.35E5 A1.70E6
41:08 H3.02E5 A1.64E6
41:30 H4.92E6 A2.70E7
RO
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1572.0,0.00%,F,F)
38:43 H5.34E5 A2.55E6
39:00 H9.11E5 A4.43E6
39:16 H2.84E5 A1.61E6
39:40 H3.05E6 A1.49E7
40:17 H2.10E5 A1.05E6
41:08 H1.99E5 A1.07E6
41:29 H3.10E6 A1.70E7
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2272.0,0.00%,F,F)
38:42 H2.92E6 A1.41E7
39:08 H3.93E6 A2.03E7
41:17 H3.36E6 A1.79E7
41:28 H3.43E6 A1.81E7
339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1768.0,0.00%,F,F)
38:42 H1.76E6 A8.82E6
39:08 H2.50E6 A1.32E7
41:17 H2.09E6 A1.13E7
41:28 H2.07E6 A1.12E7
100 %
50
0
39:00
40:00
41:00
42:00
Time
5.0E6
2.5E6
0.0E0
3.1E6
1.6E6
3.9E6
2.0E6
2.5E6
1.3E6

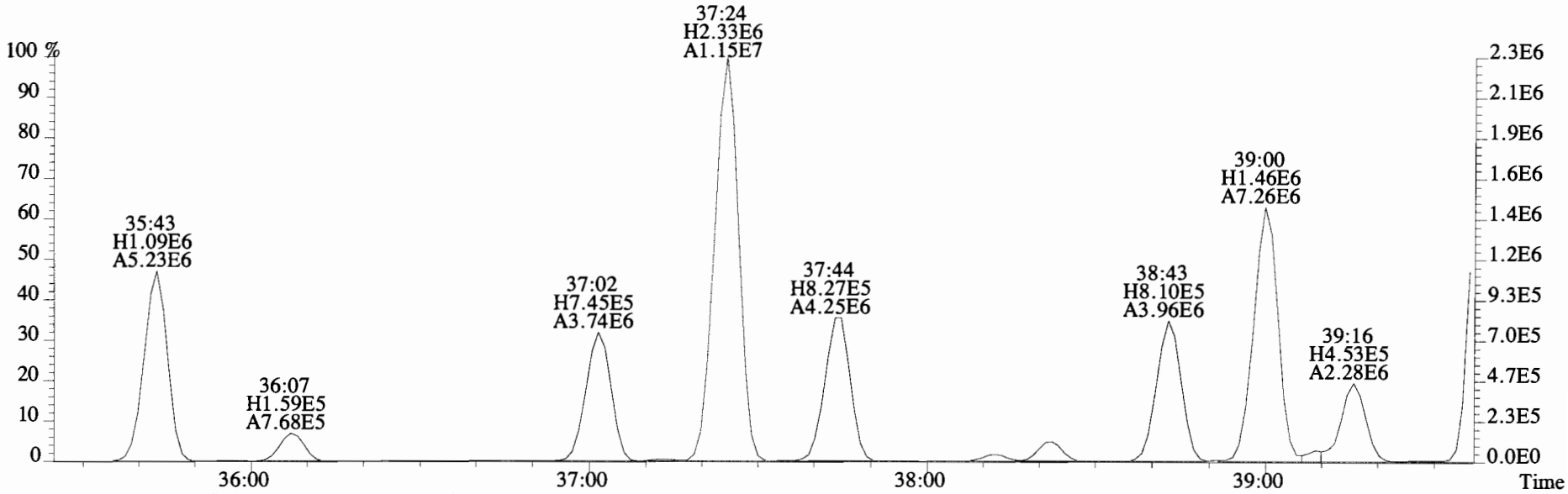
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



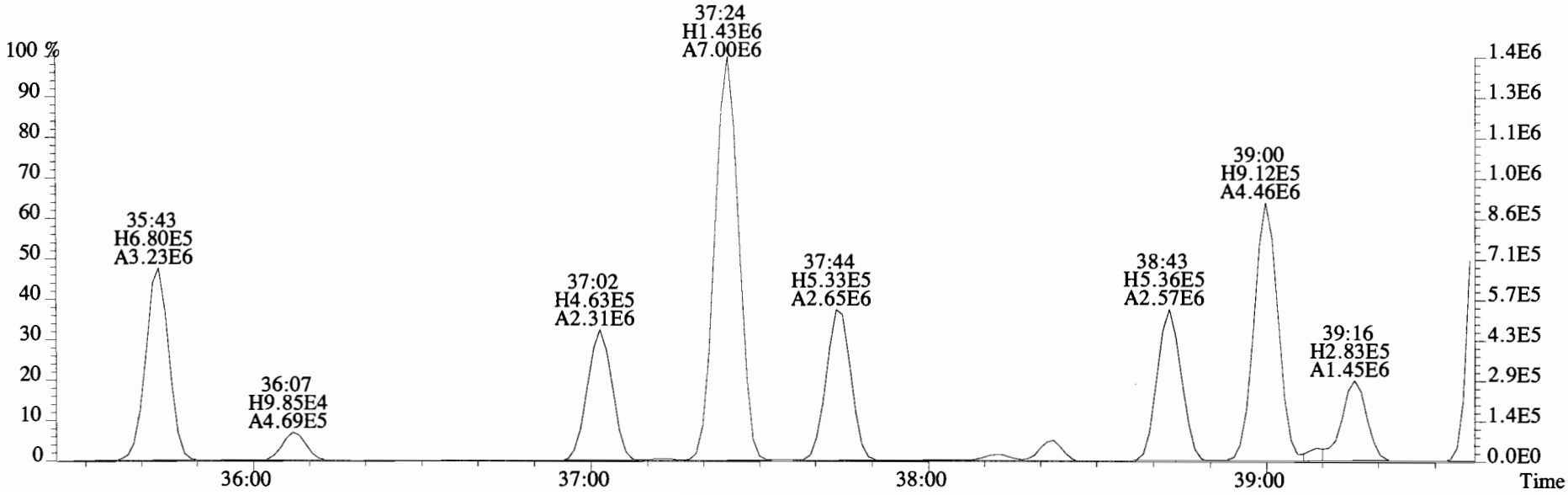
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



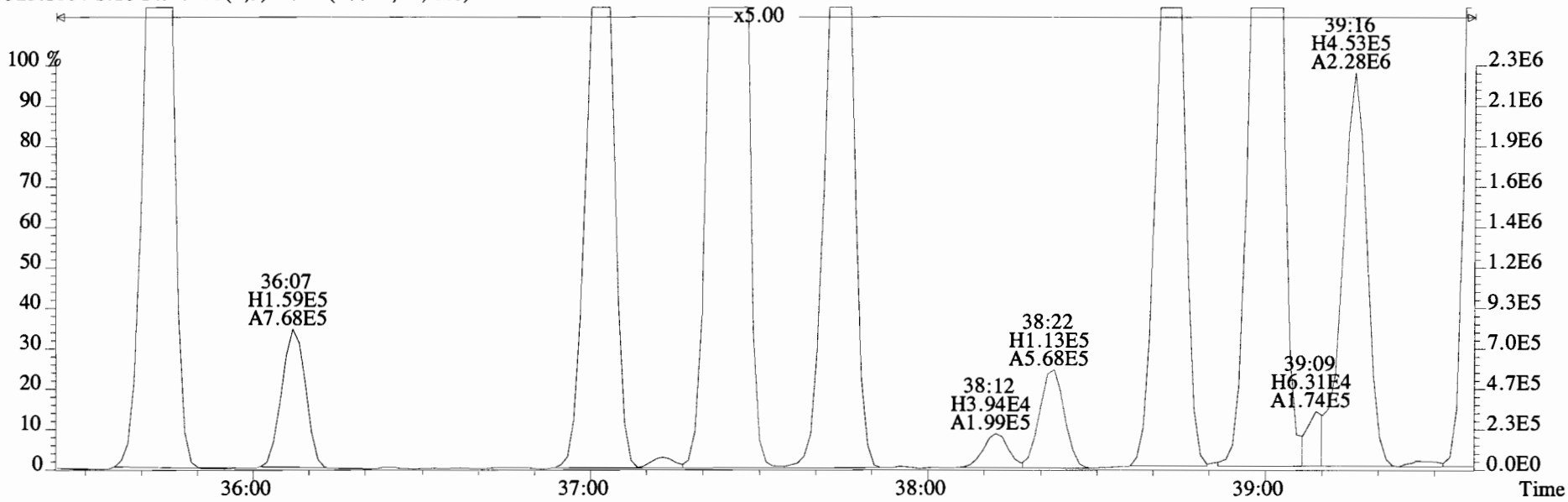
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



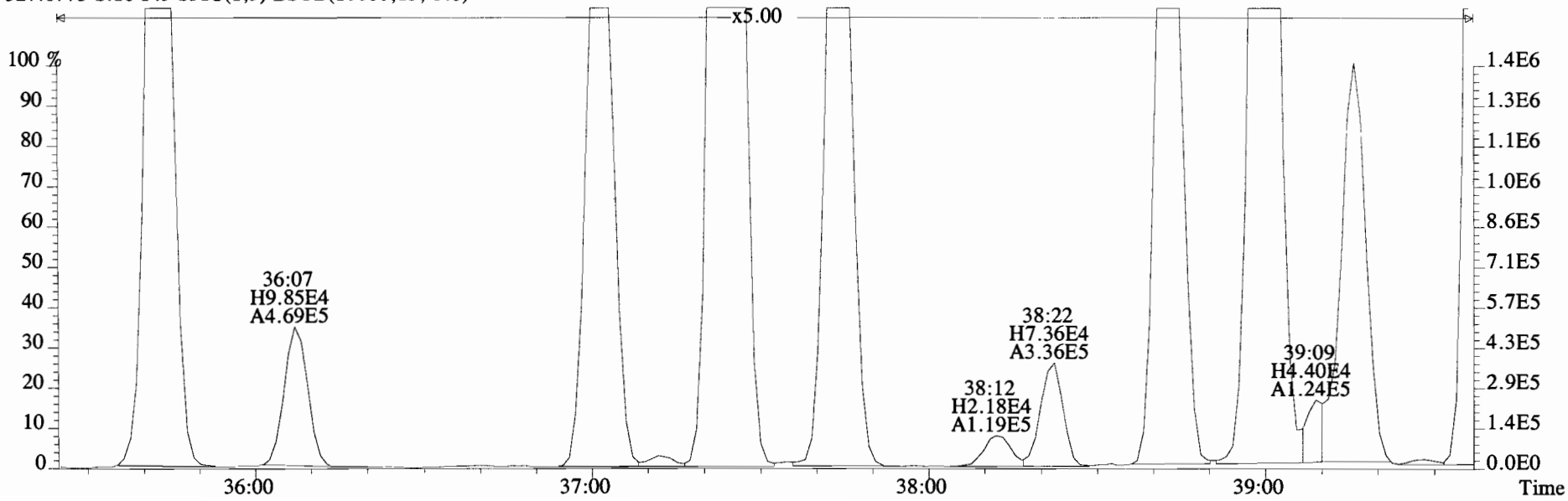
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



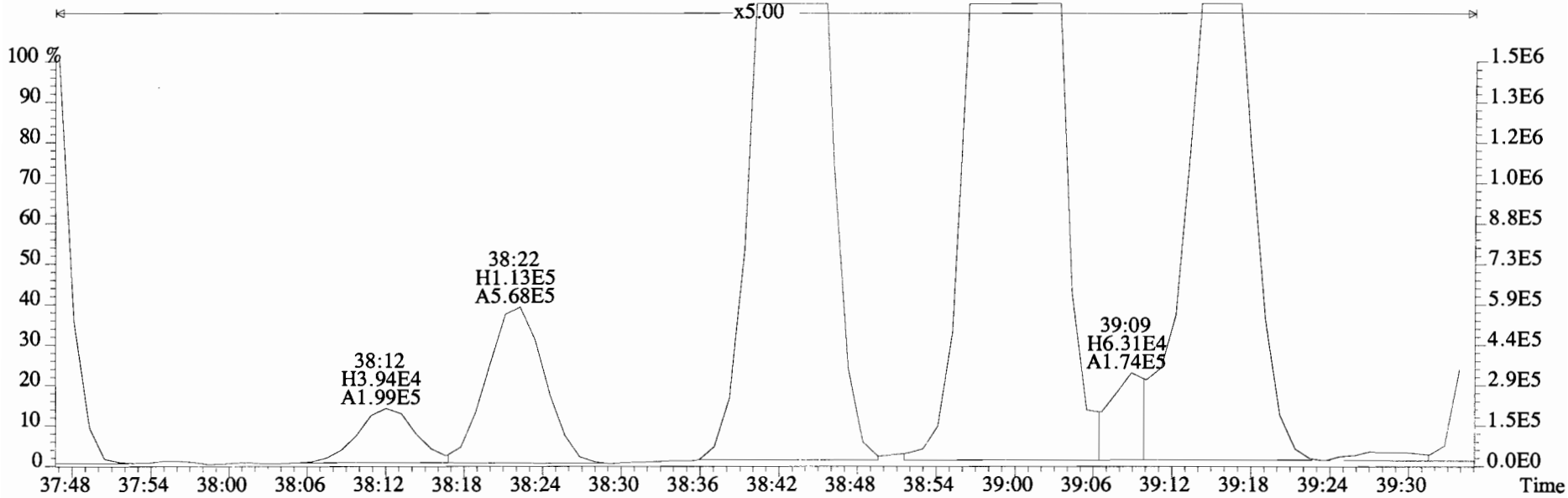
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



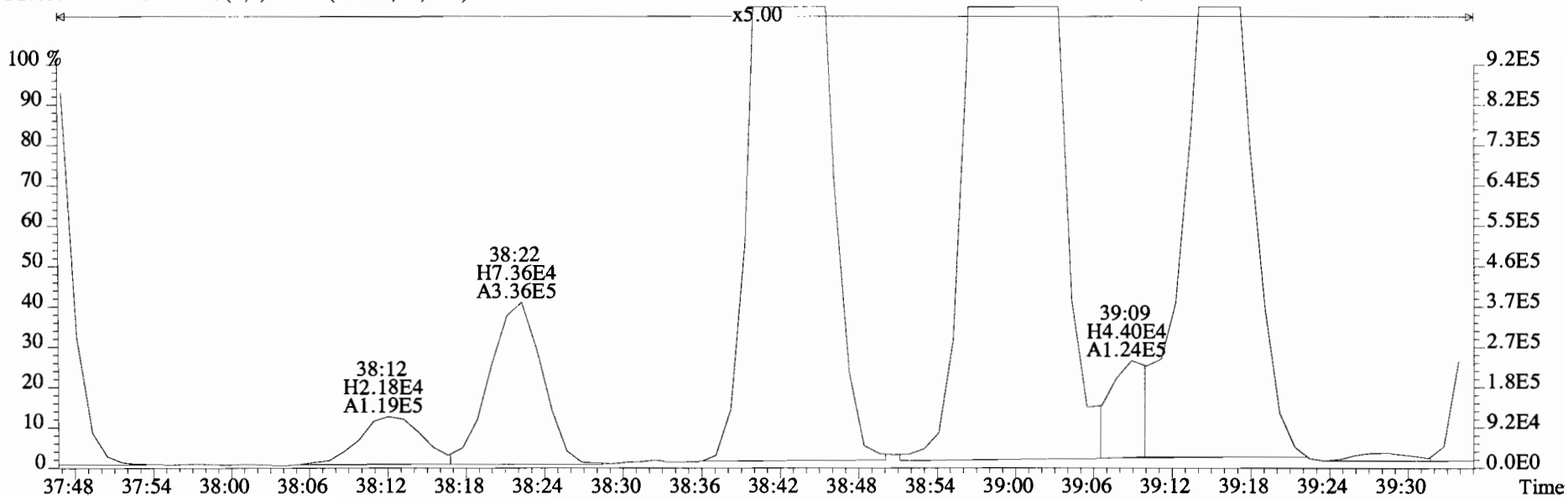
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



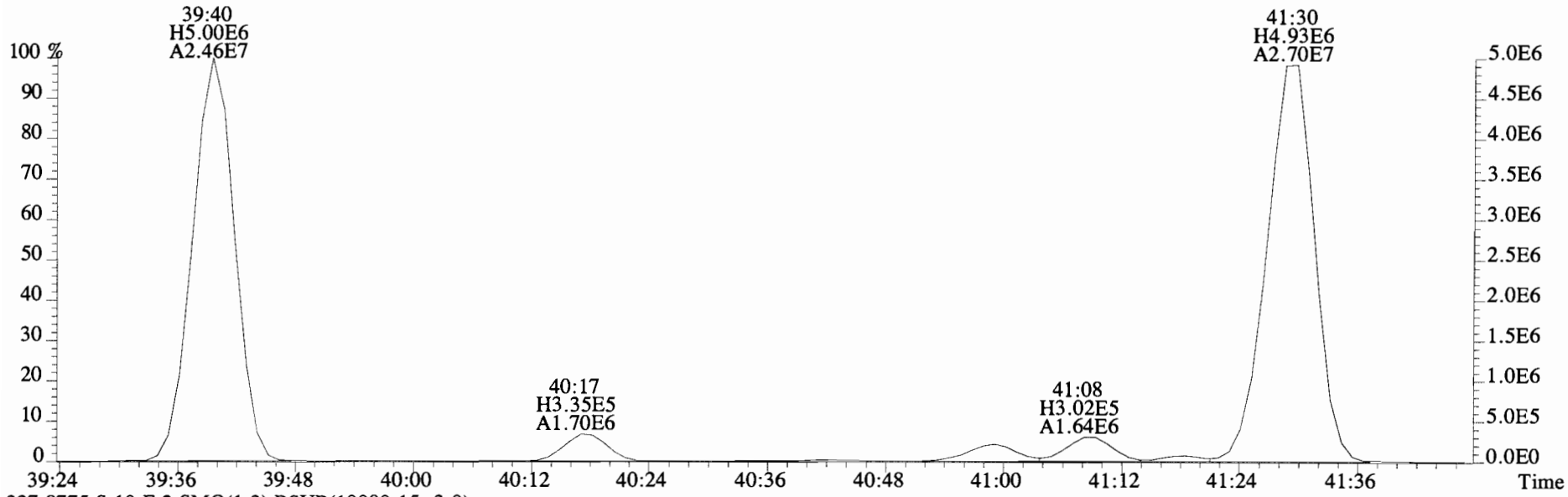
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



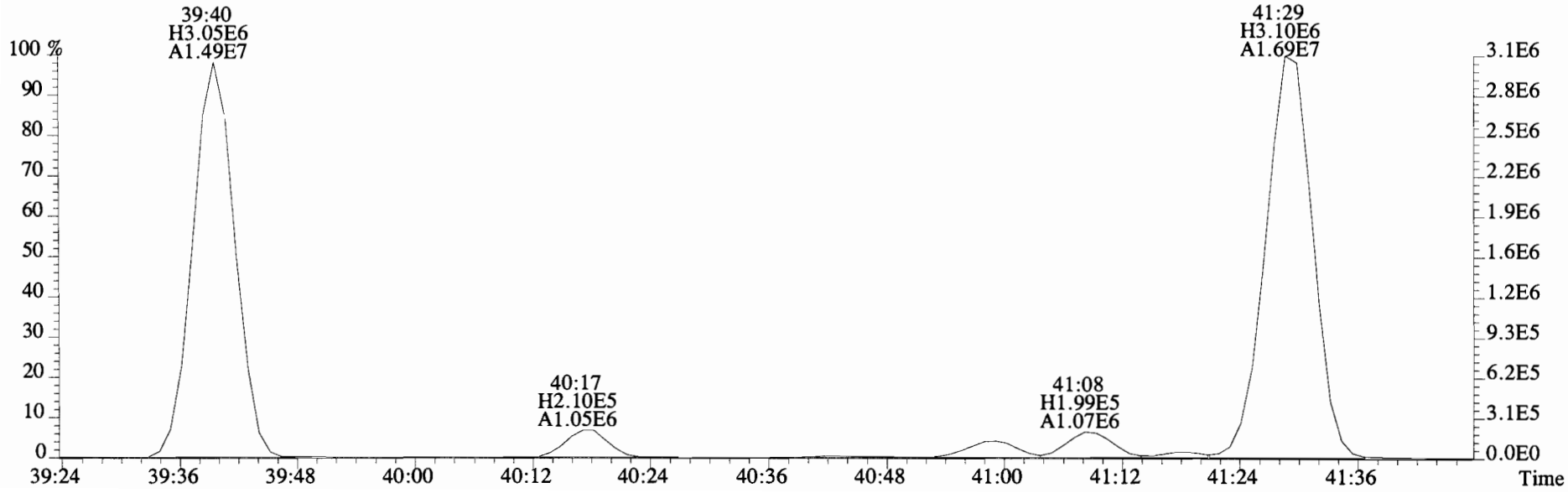
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



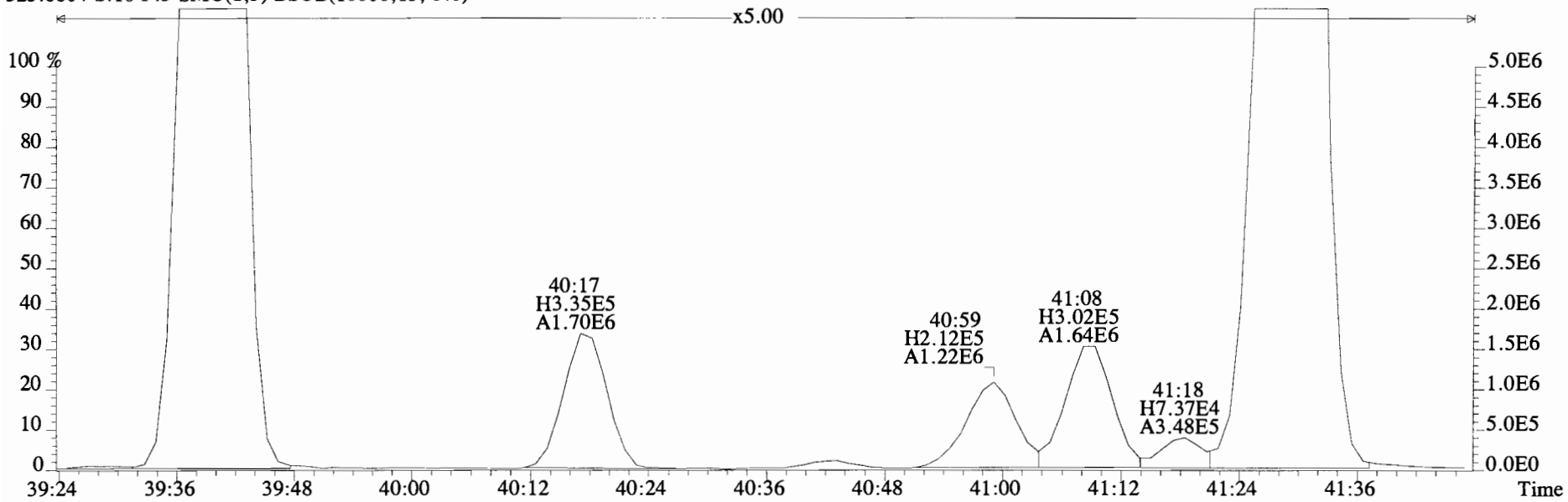
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)



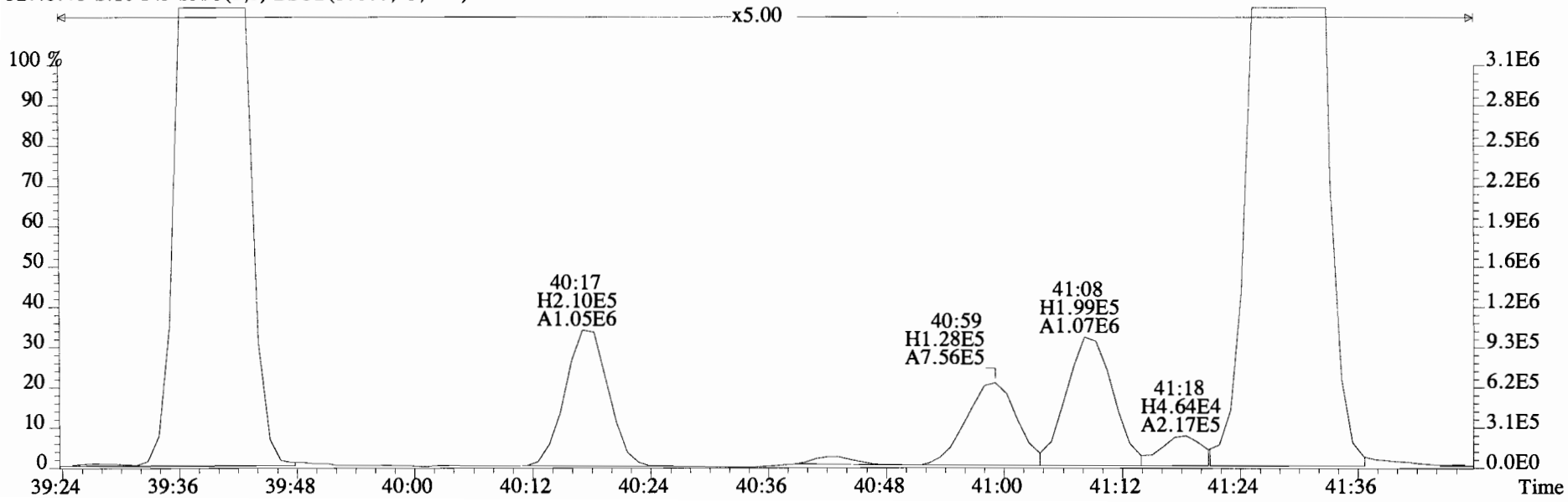
327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)

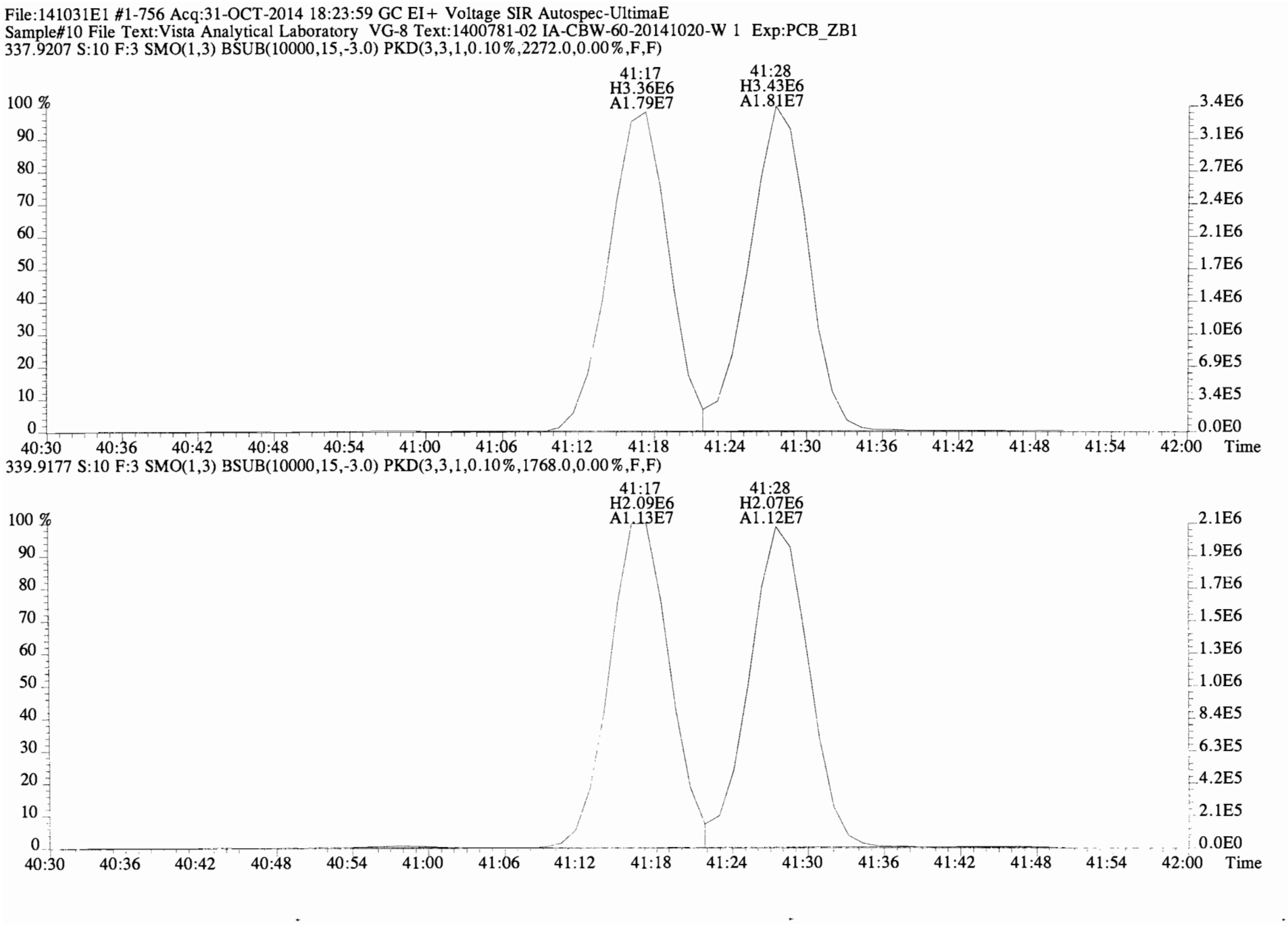


File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
325.8804 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)

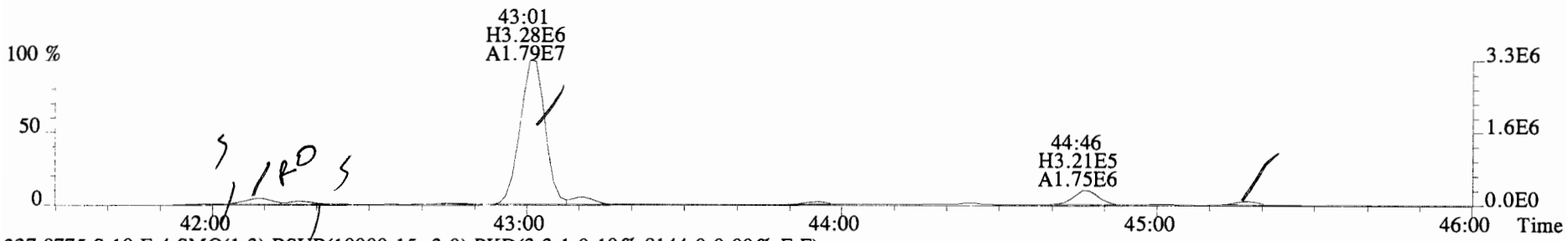


327.8775 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0)

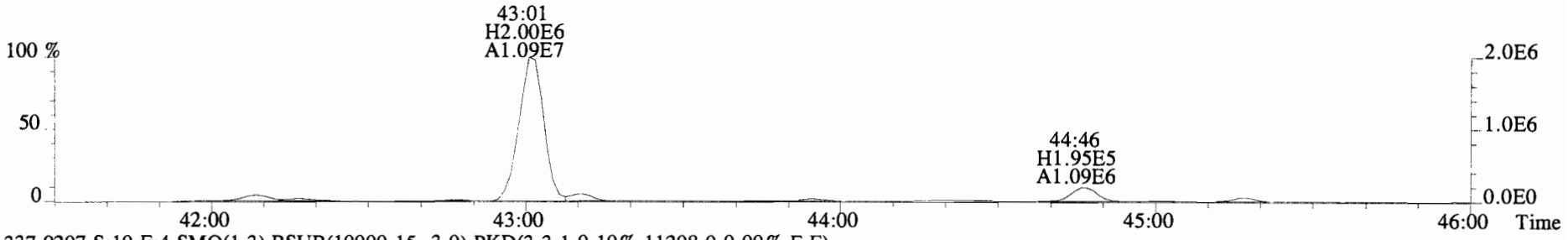



File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
337.9207 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2272.0,0.00%,F,F)
41:17
H3.36E6
A1.79E7
41:28
H3.43E6
A1.81E7
100 %
90
80
70
60
50
40
30
20
10
0
3.4E6
3.1E6
2.7E6
2.4E6
2.1E6
1.7E6
1.4E6
1.0E6
6.9E5
3.4E5
0.0E0
40:30
40:36
40:42
40:48
40:54
41:00
41:06
41:12
41:18
41:24
41:30
41:36
41:42
41:48
41:54
42:00
Time
339.9177 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1768.0,0.00%,F,F)
41:17
H2.09E6
A1.13E7
41:28
H2.07E6
A1.12E7
100 %
90
80
70
60
50
40
30
20
10
0
2.1E6
1.9E6
1.7E6
1.5E6
1.3E6
1.0E6
8.4E5
6.3E5
4.2E5
2.1E5
0.0E0
40:30
40:36
40:42
40:48
40:54
41:00
41:06
41:12
41:18
41:24
41:30
41:36
41:42
41:48
41:54
42:00
Time

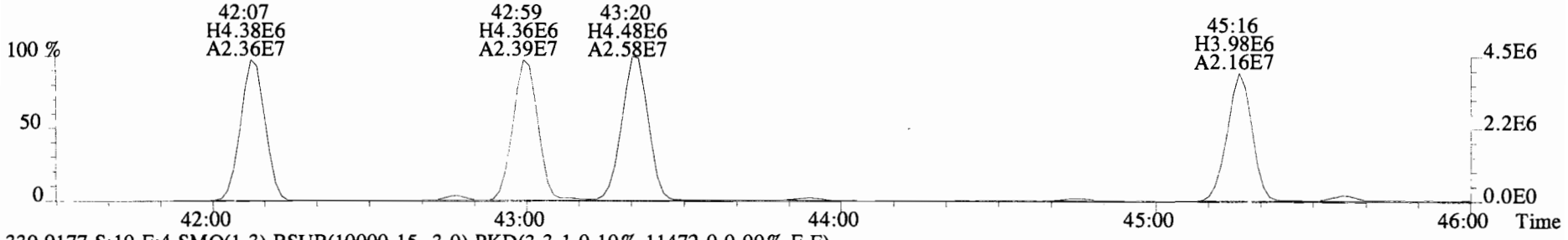
File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
325.8804 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,14316.0,0.00%,F,F)



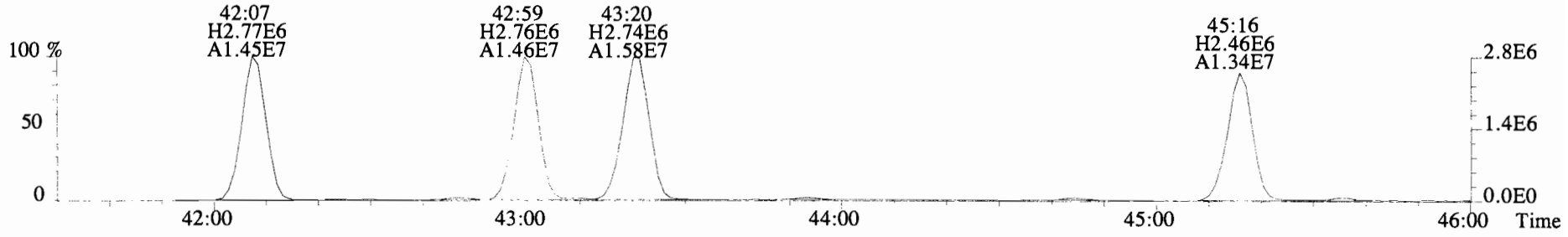
327.8775 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8144.0,0.00%,F,F)

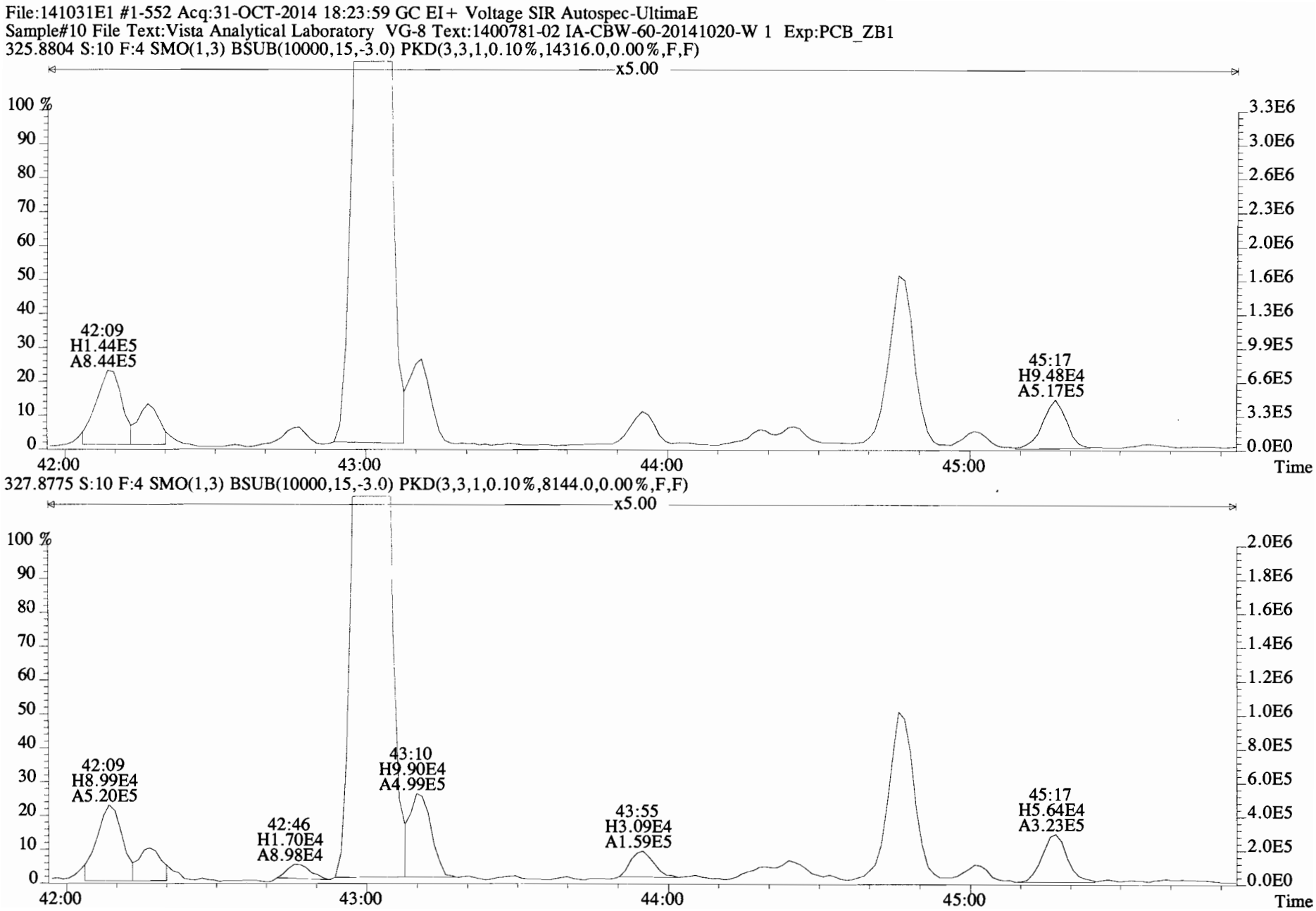


337.9207 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11208.0,0.00%,F,F)

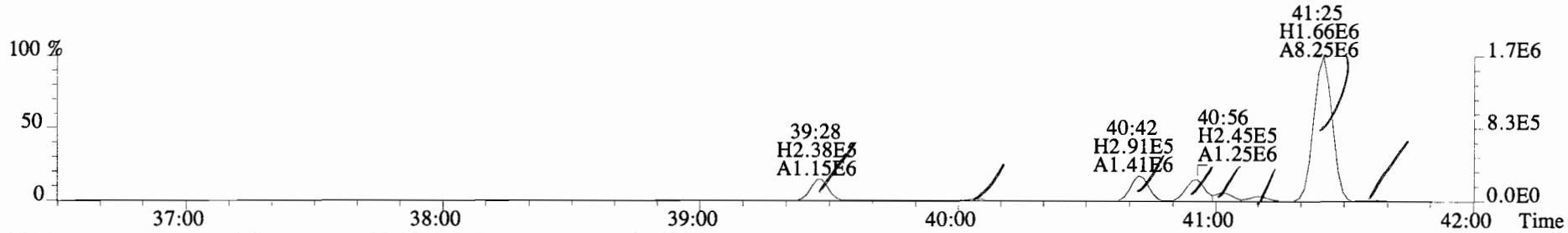


339.9177 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11472.0,0.00%,F,F)

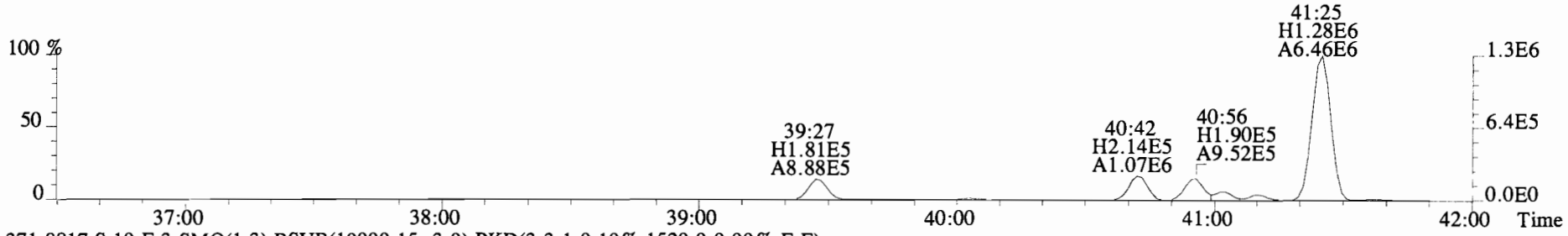



File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
325.8804 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,14316.0,0.00%,F,F)
x5.00
42:09
H1.44E5
A8.44E5
45:17
H9.48E4
A5.17E5
Time
327.8775 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8144.0,0.00%,F,F)
x5.00
42:09
H8.99E4
A5.20E5
42:46
H1.70E4
A8.98E4
43:10
H9.90E4
A4.99E5
43:55
H3.09E4
A1.59E5
45:17
H5.64E4
A3.23E5
Time

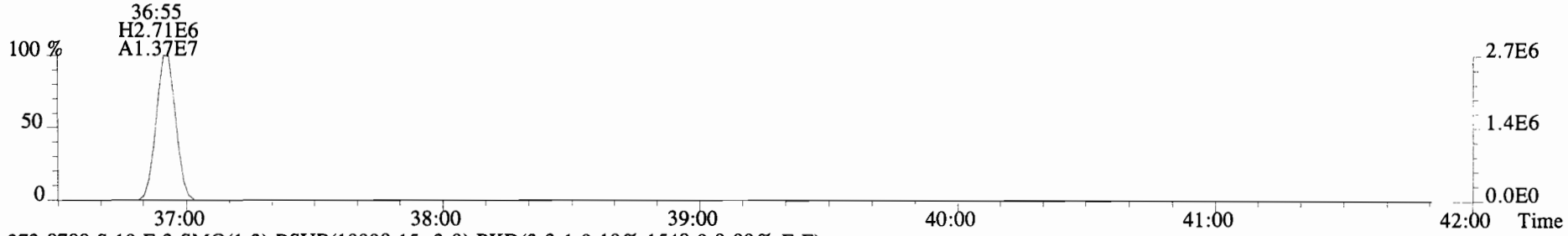
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
359.8415 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1420.0,0.00%,F,F)



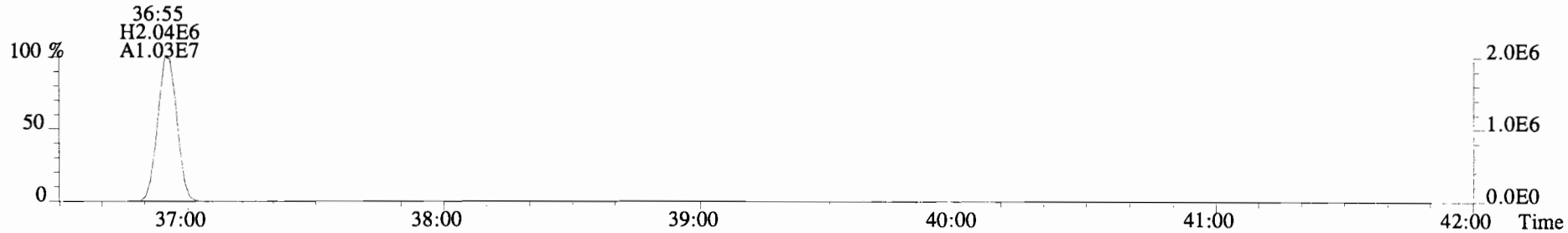
361.8385 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1484.0,0.00%,F,F)



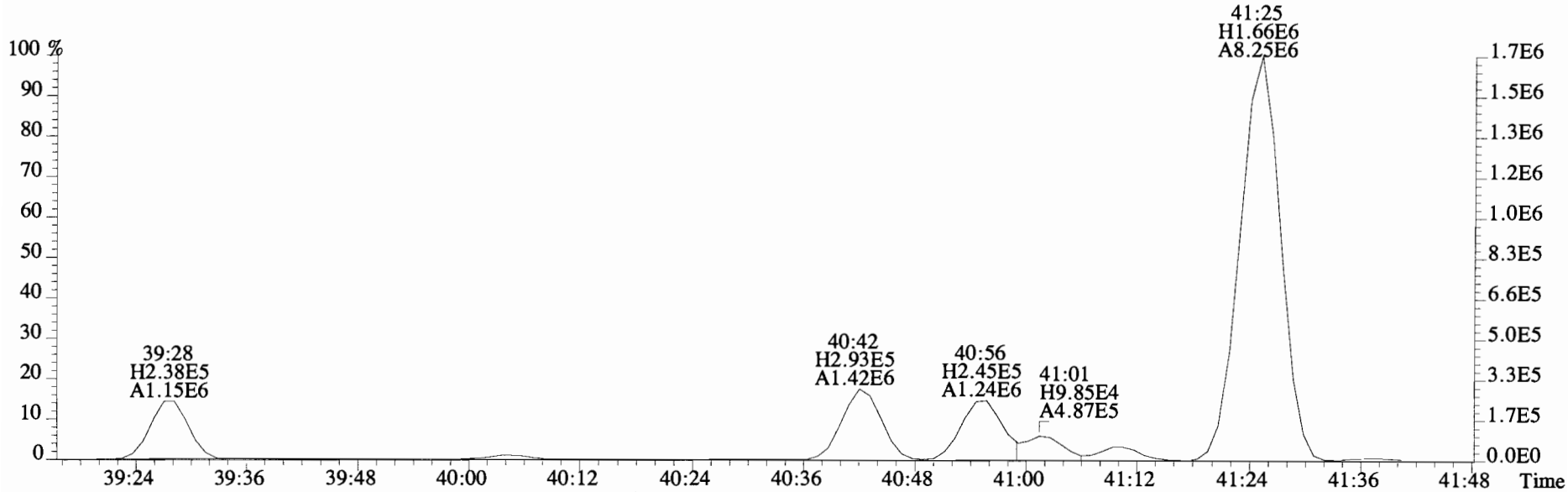
371.8817 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1520.0,0.00%,F,F)



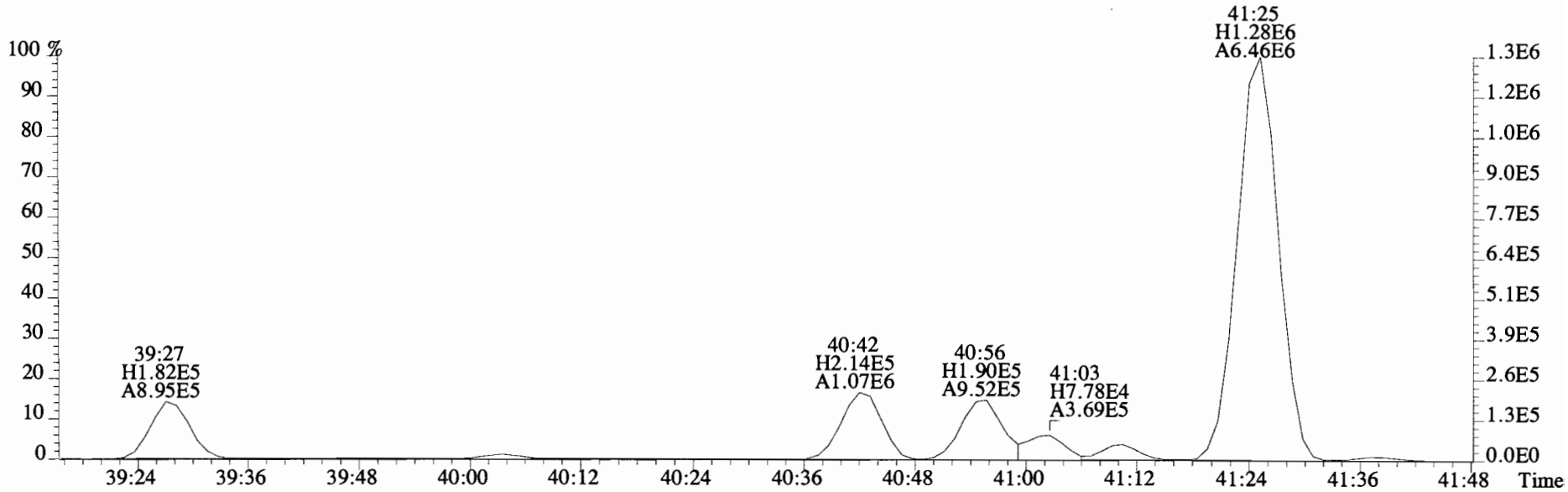
373.8788 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1548.0,0.00%,F,F)



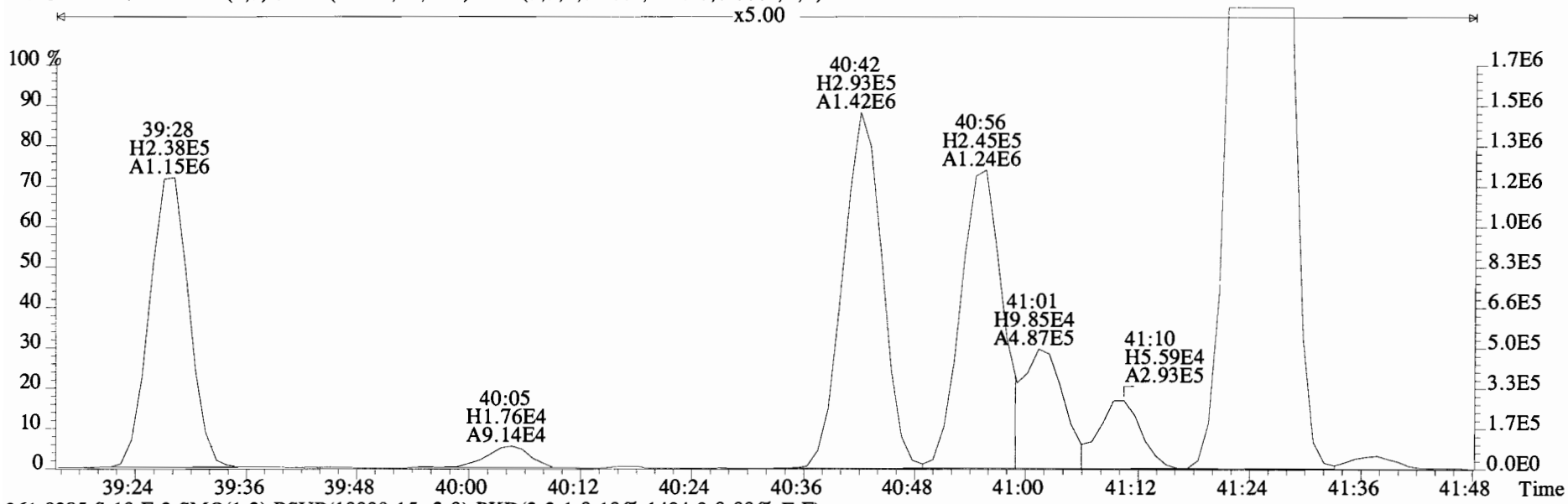
File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
359.8415 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1420.0,0.00%,F,F)



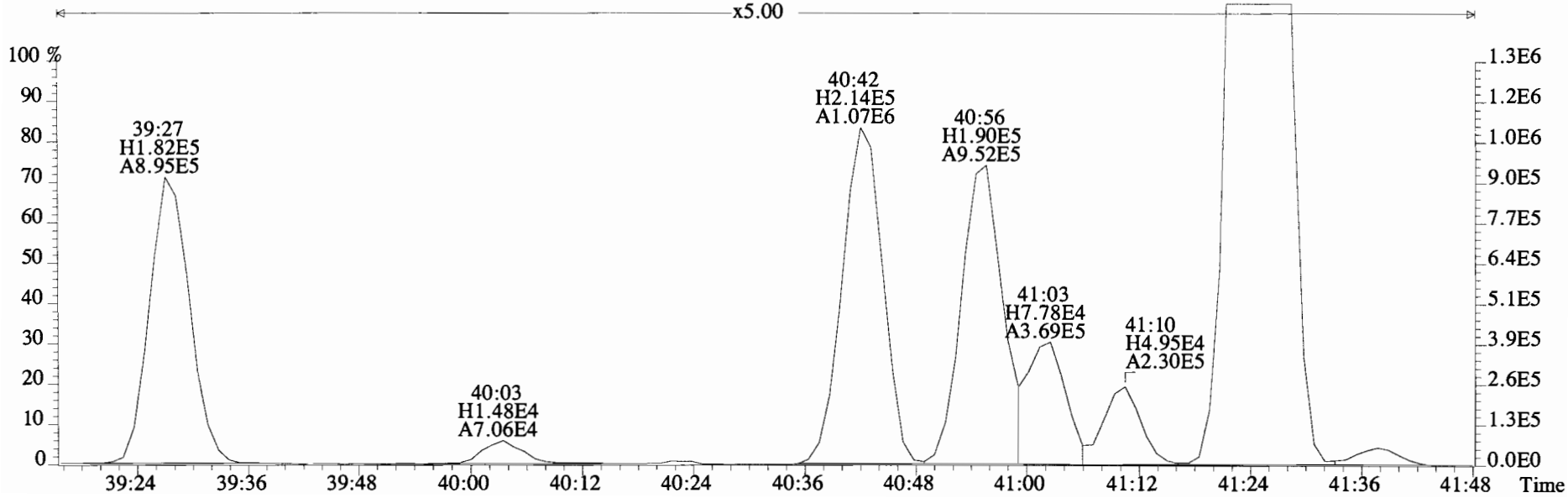
361.8385 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1484.0,0.00%,F,F)

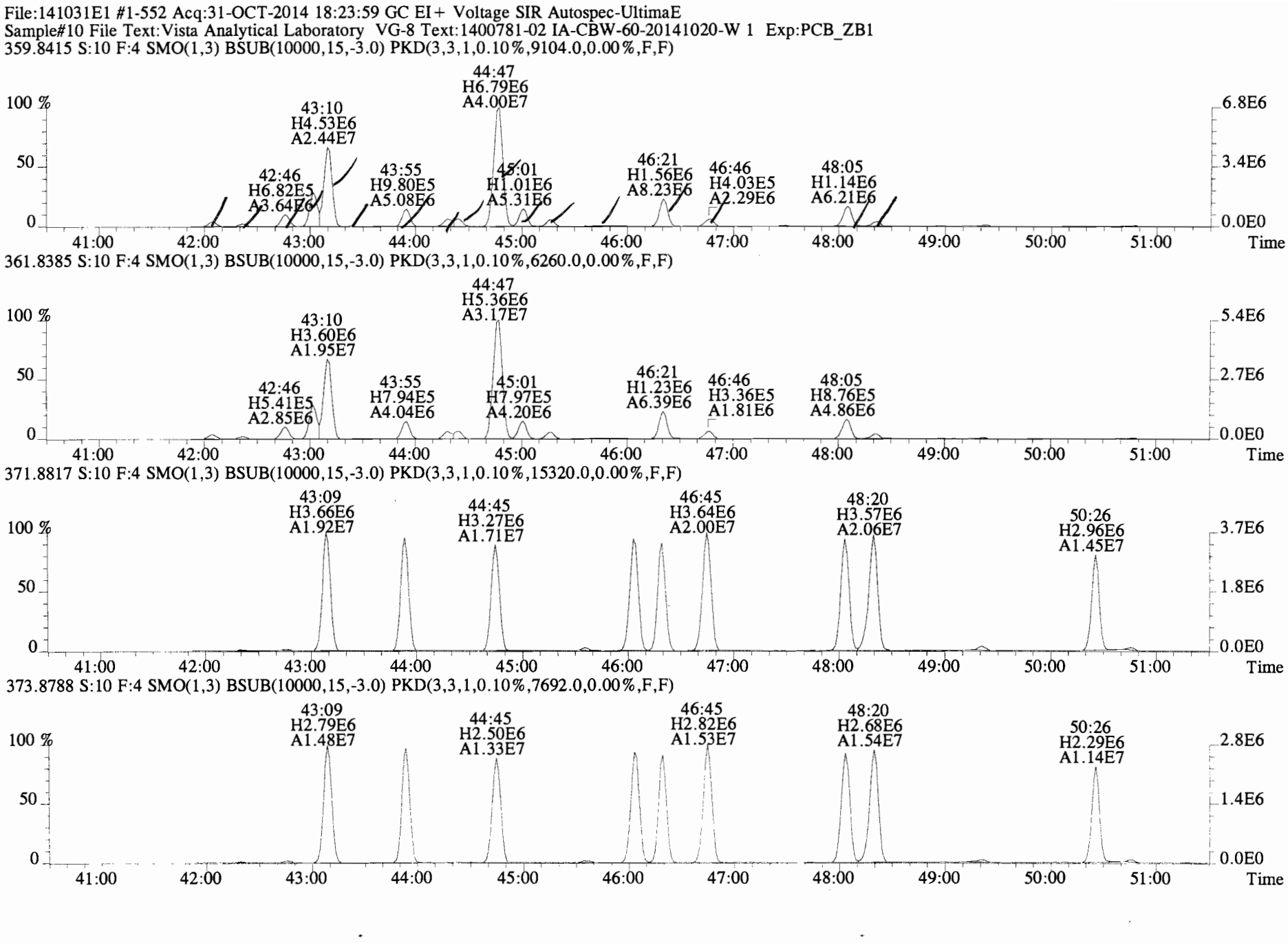


File:141031E1 #1-756 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
359.8415 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1420.0,0.00%,F,F)

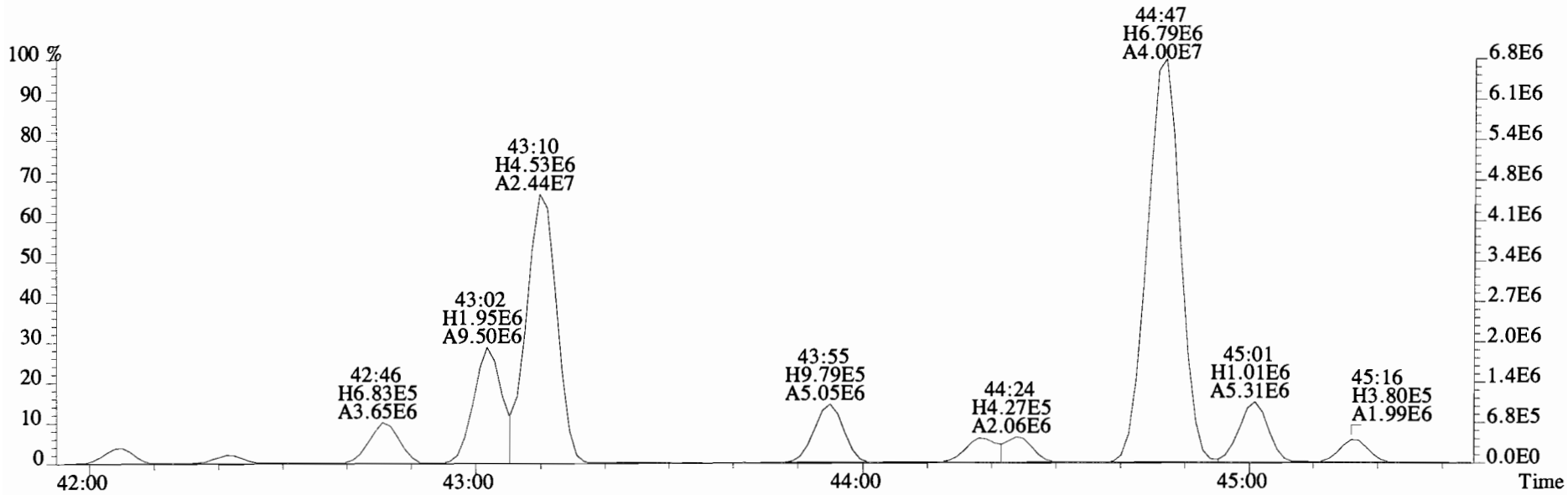


361.8385 S:10 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1484.0,0.00%,F,F)

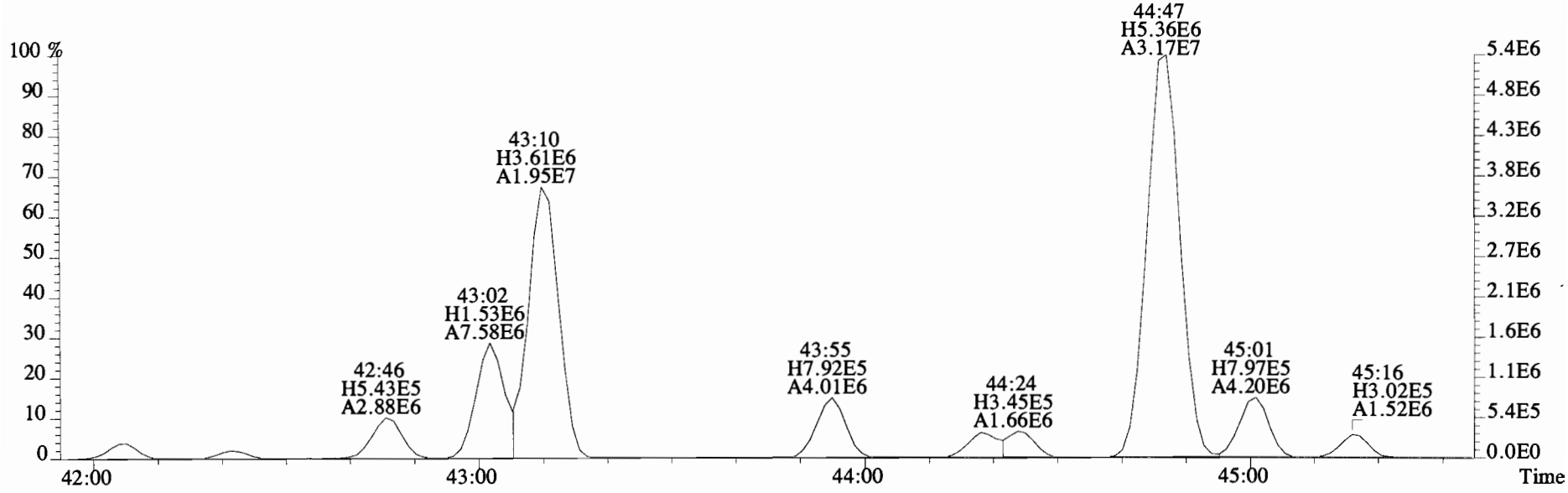


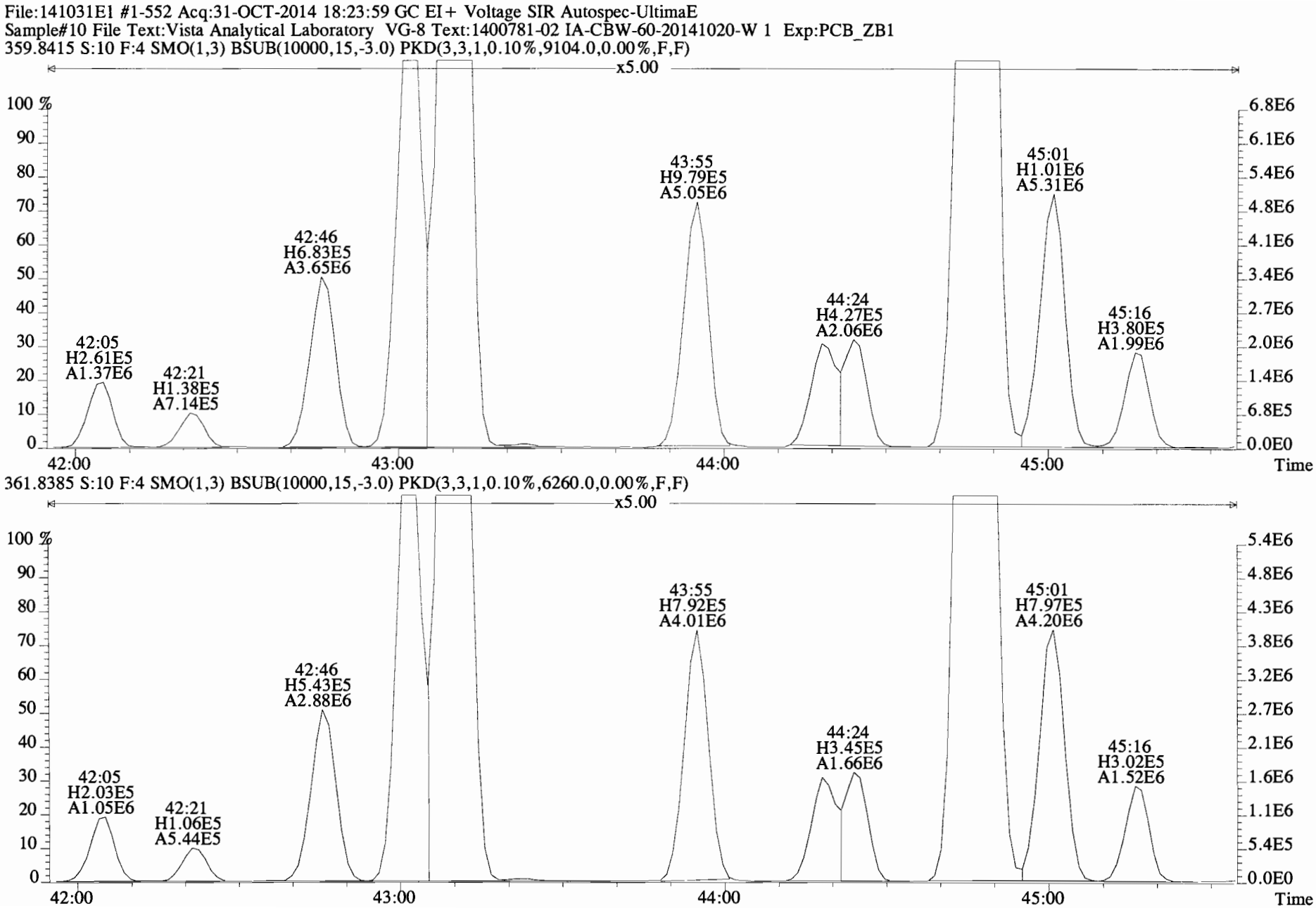

File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
359.8415 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9104.0,0.00%,F,F)
44:47 H6.79E6 A4.00E7
43:10 H4.53E6 A2.44E7
42:46 H6.82E5 A3.64E6
43:55 H9.80E5 A5.08E6
45:01 H1.01E6 A5.31E6
46:21 H1.56E6 A8.23E6
46:46 H4.03E5 A2.29E6
48:05 H1.14E6 A6.21E6
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(3,3,1,0.10%,6260.0,0.00%,F,F)
44:47 H5.36E6 A3.17E7
43:10 H3.60E6 A1.95E7
42:46 H5.41E5 A2.85E6
43:55 H7.94E5 A4.04E6
45:01 H7.97E5 A4.20E6
46:21 H1.23E6 A6.39E6
46:46 H3.36E5 A1.81E6
48:05 H8.76E5 A4.86E6
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(3,3,1,0.10%,15320.0,0.00%,F,F)
43:09 H3.66E6 A1.92E7
44:45 H3.27E6 A1.71E7
46:45 H3.64E6 A2.00E7
48:20 H3.57E6 A2.06E7
50:26 H2.96E6 A1.45E7
100 %
50
0
3.7E6
1.8E6
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(3,3,1,0.10%,7692.0,0.00%,F,F)
43:09 H2.79E6 A1.48E7
44:45 H2.50E6 A1.33E7
46:45 H2.82E6 A1.53E7
48:20 H2.68E6 A1.54E7
50:26 H2.29E6 A1.14E7
100 %
50
0
2.8E6
1.4E6
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

File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
359.8415 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9104.0,0.00%,F,F)

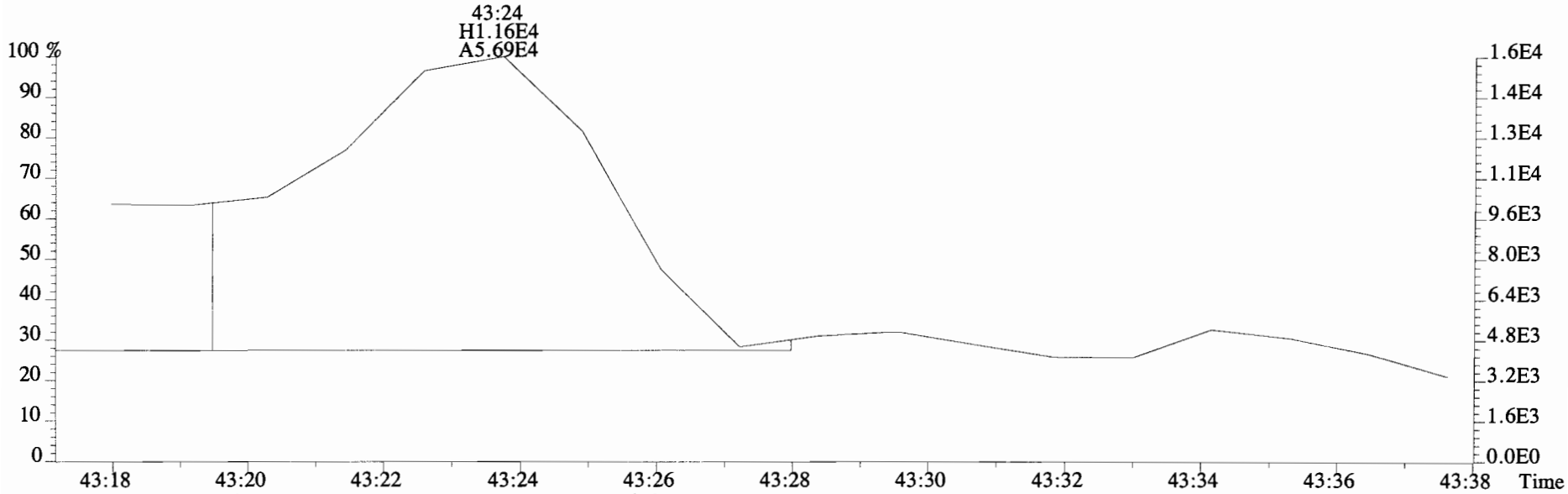


361.8385 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6260.0,0.00%,F,F)

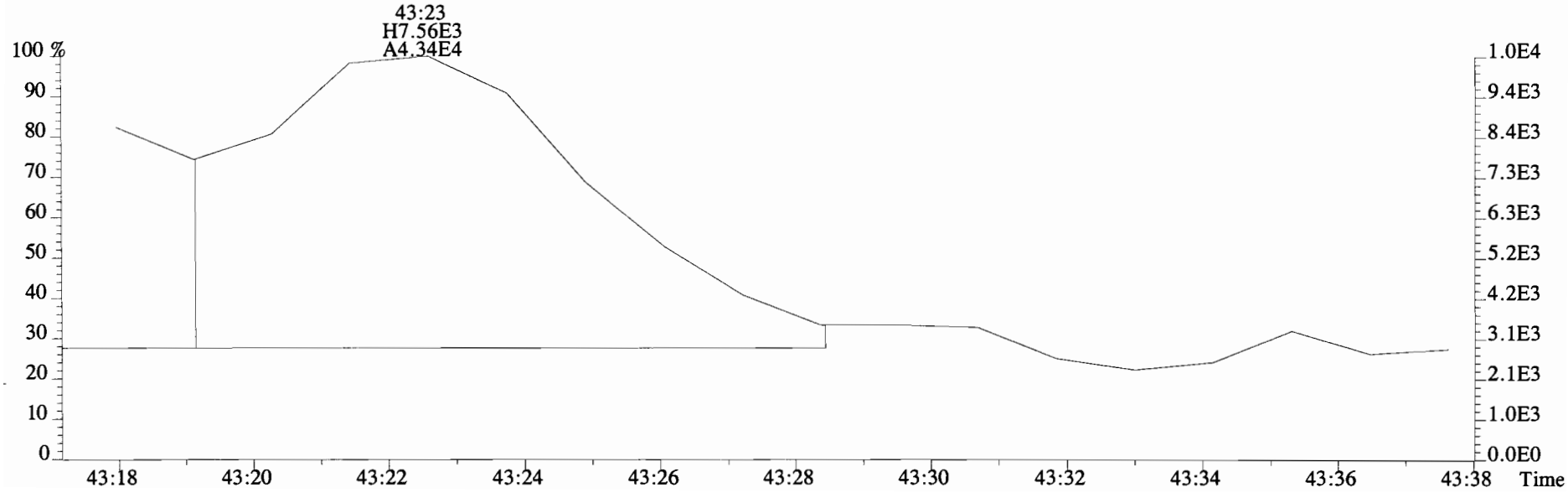



File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
359.8415 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9104.0,0.00%,F,F)
x5.00
42:05 H2.61E5 A1.37E6
42:21 H1.38E5 A7.14E5
42:46 H6.83E5 A3.65E6
43:55 H9.79E5 A5.05E6
44:24 H4.27E5 A2.06E6
45:01 H1.01E6 A5.31E6
45:16 H3.80E5 A1.99E6
Time
361.8385 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6260.0,0.00%,F,F)
x5.00
42:05 H2.03E5 A1.05E6
42:21 H1.06E5 A5.44E5
42:46 H5.43E5 A2.88E6
43:55 H7.92E5 A4.01E6
44:24 H3.45E5 A1.66E6
45:01 H7.97E5 A4.20E6
45:16 H3.02E5 A1.52E6
Time

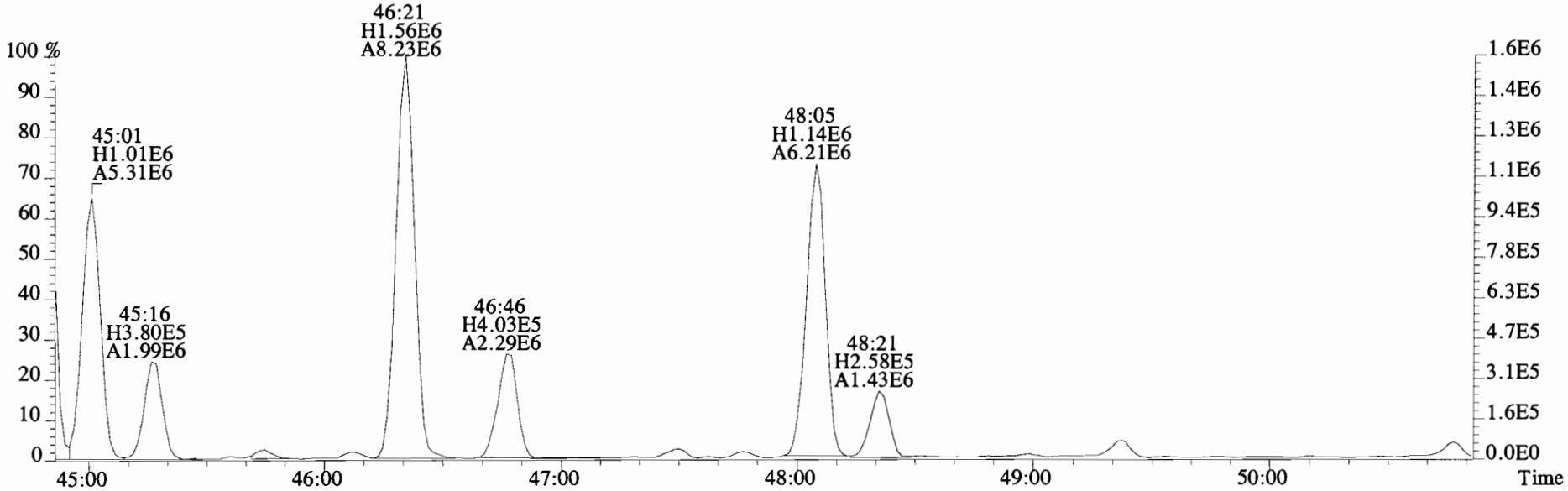
File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
359.8415 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9104.0,0.00%,F,F)



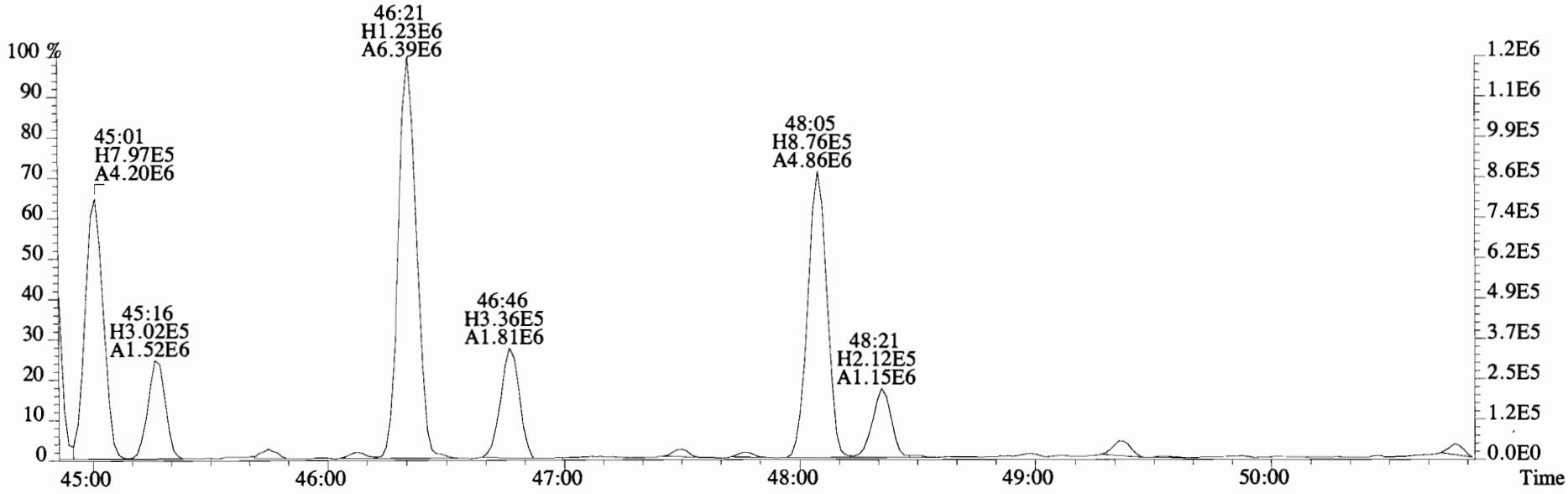
361.8385 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6260.0,0.00%,F,F)



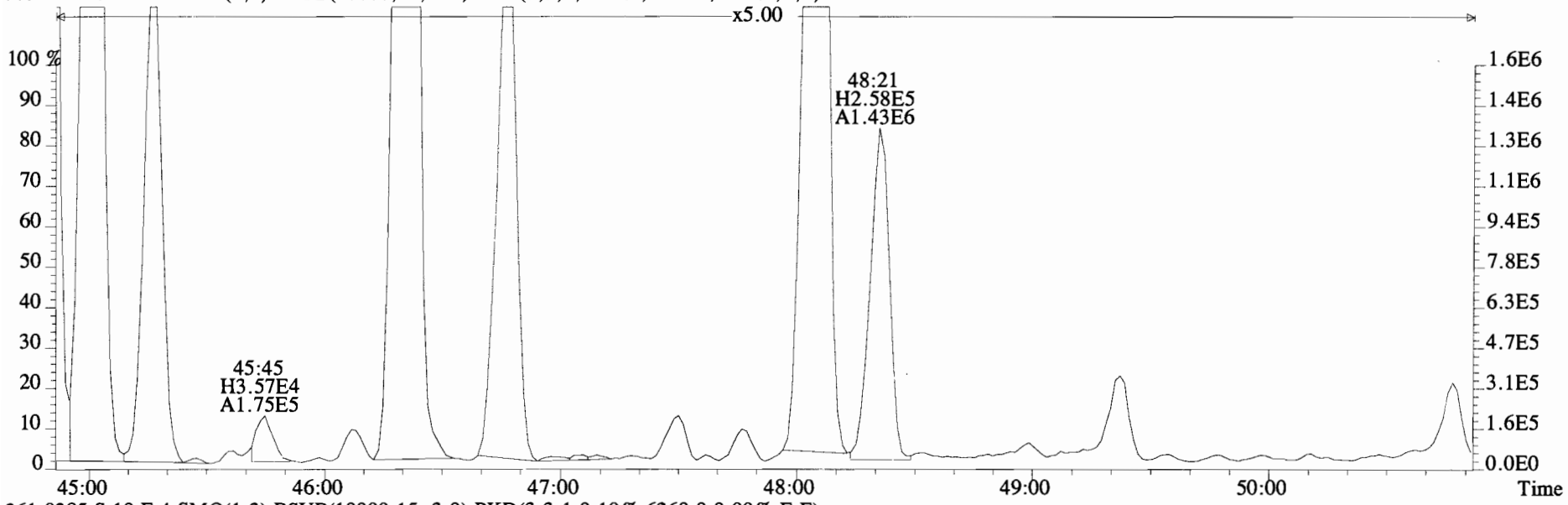
File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
359.8415 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9104.0,0.00%,F,F)



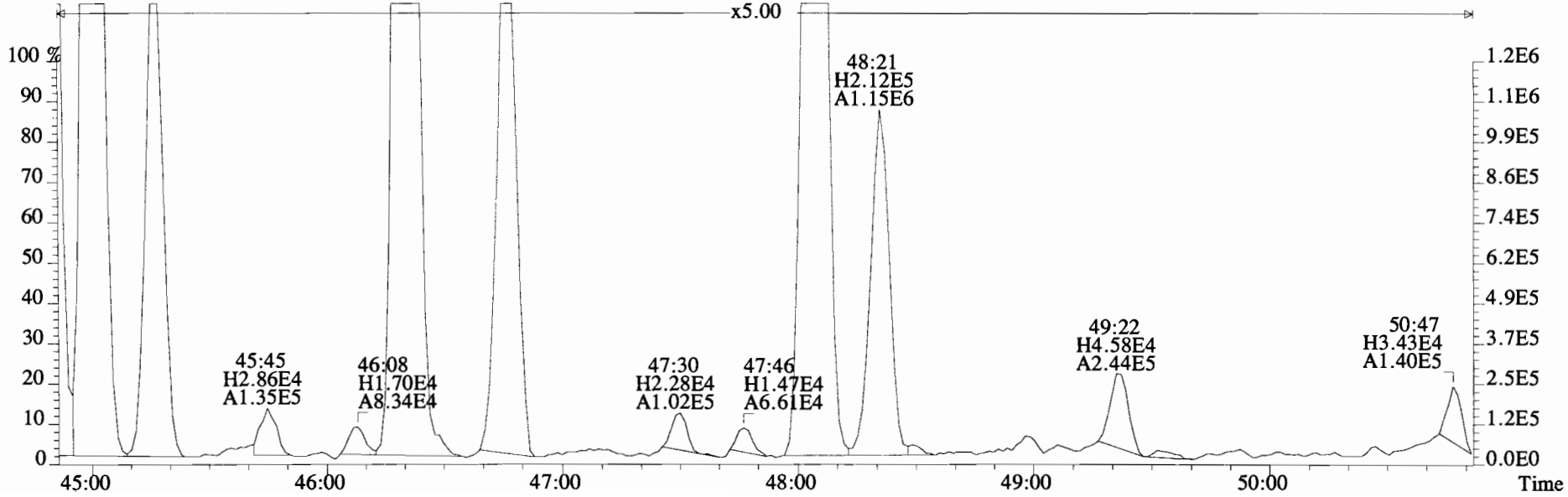
361.8385 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6260.0,0.00%,F,F)



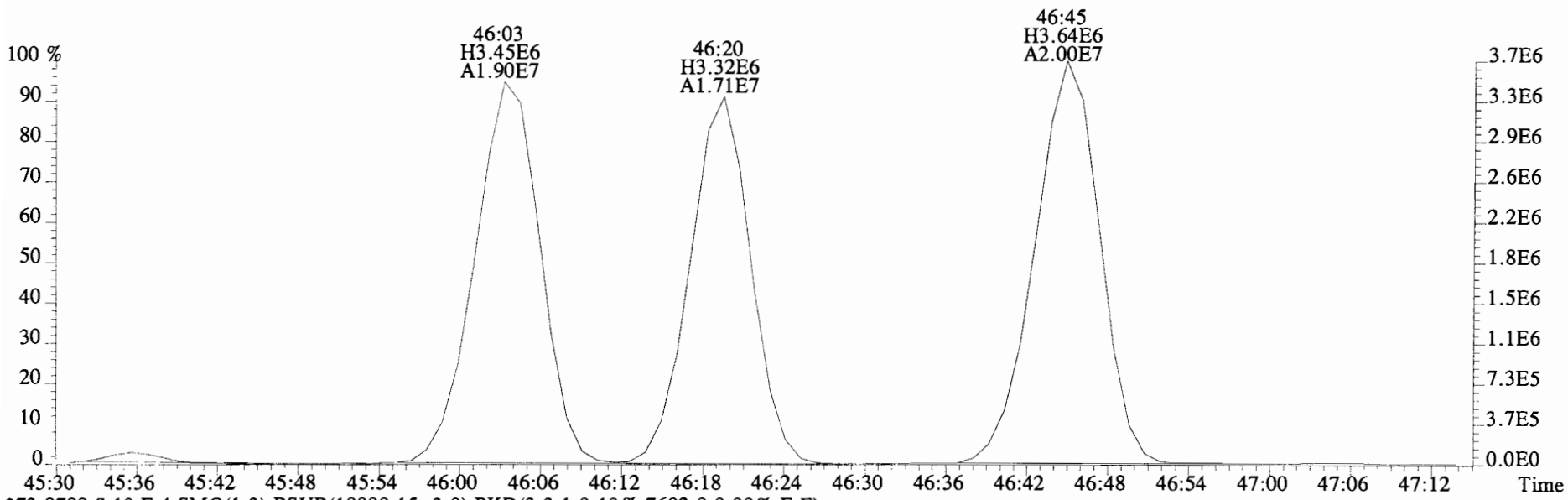
File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
359.8415 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,9104.0,0.00%,F,F)



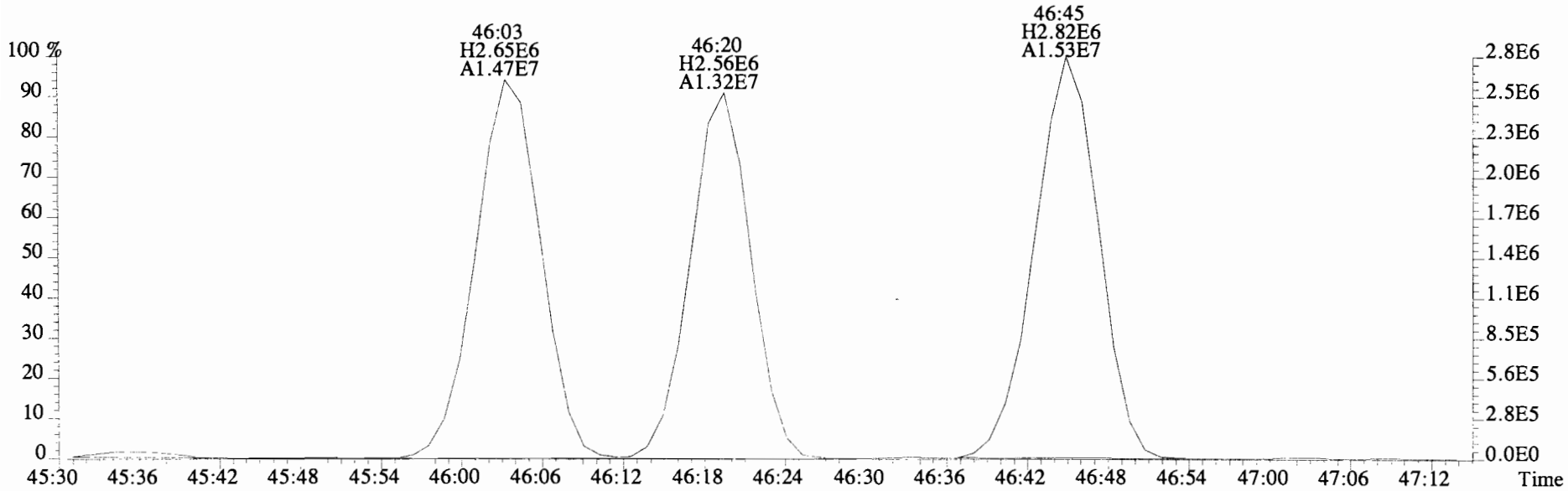
361 8385 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6260.0,0.00%,F,F)



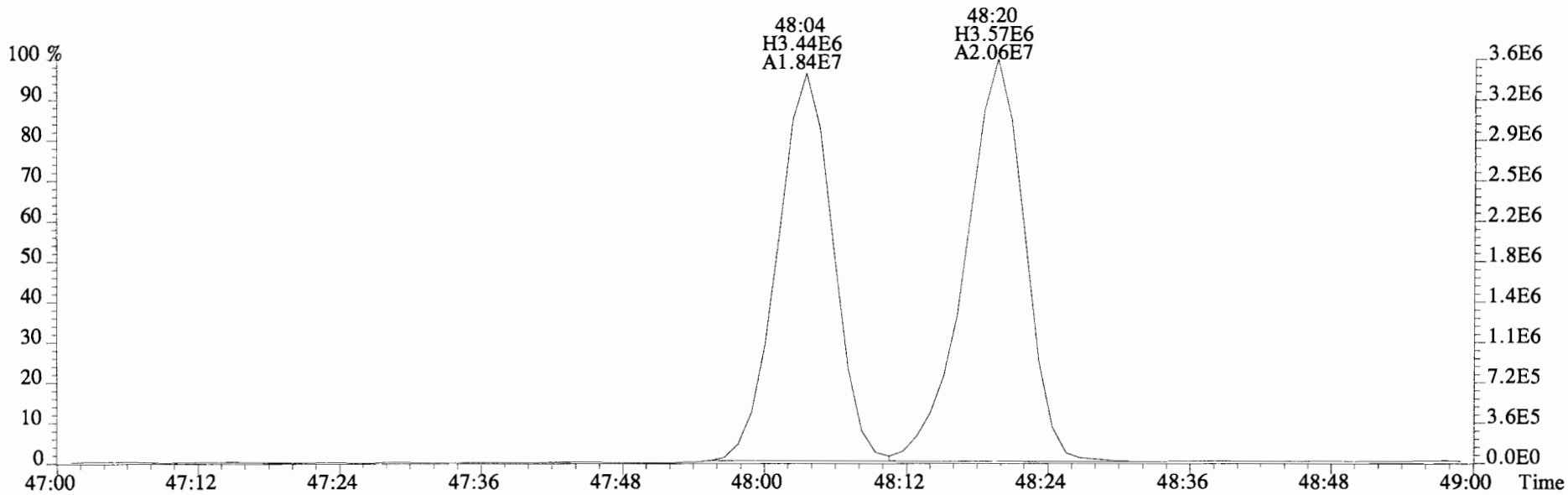
File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
371.8817 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15320.0,0.00%,F,F)



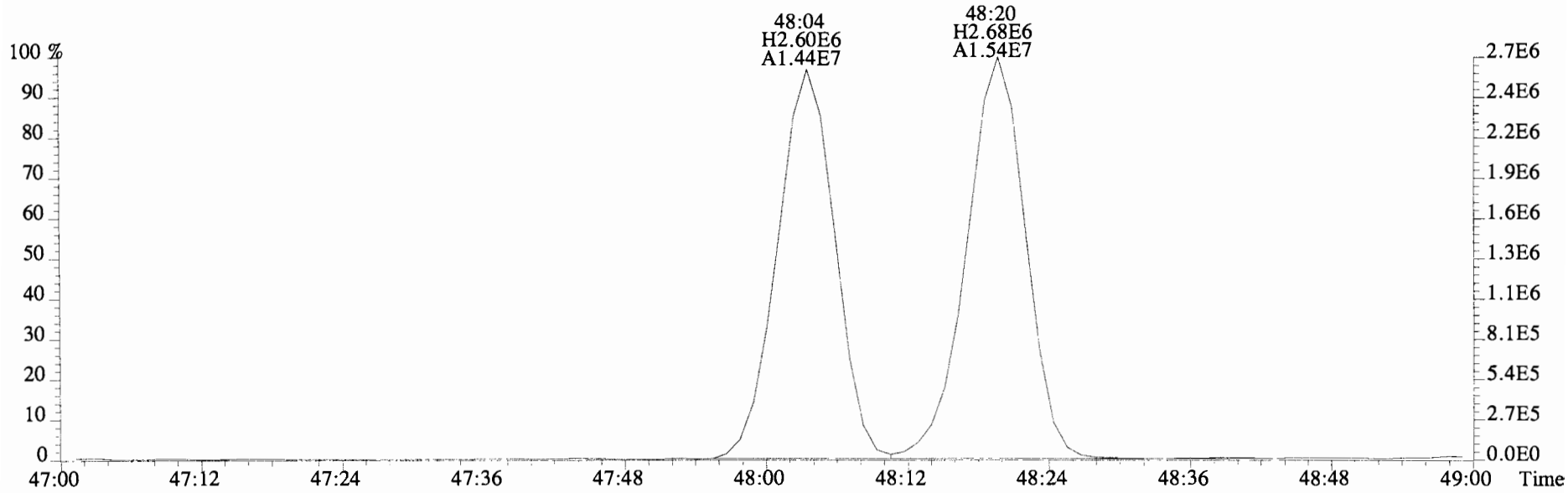
373.8788 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7692.0,0.00%,F,F)

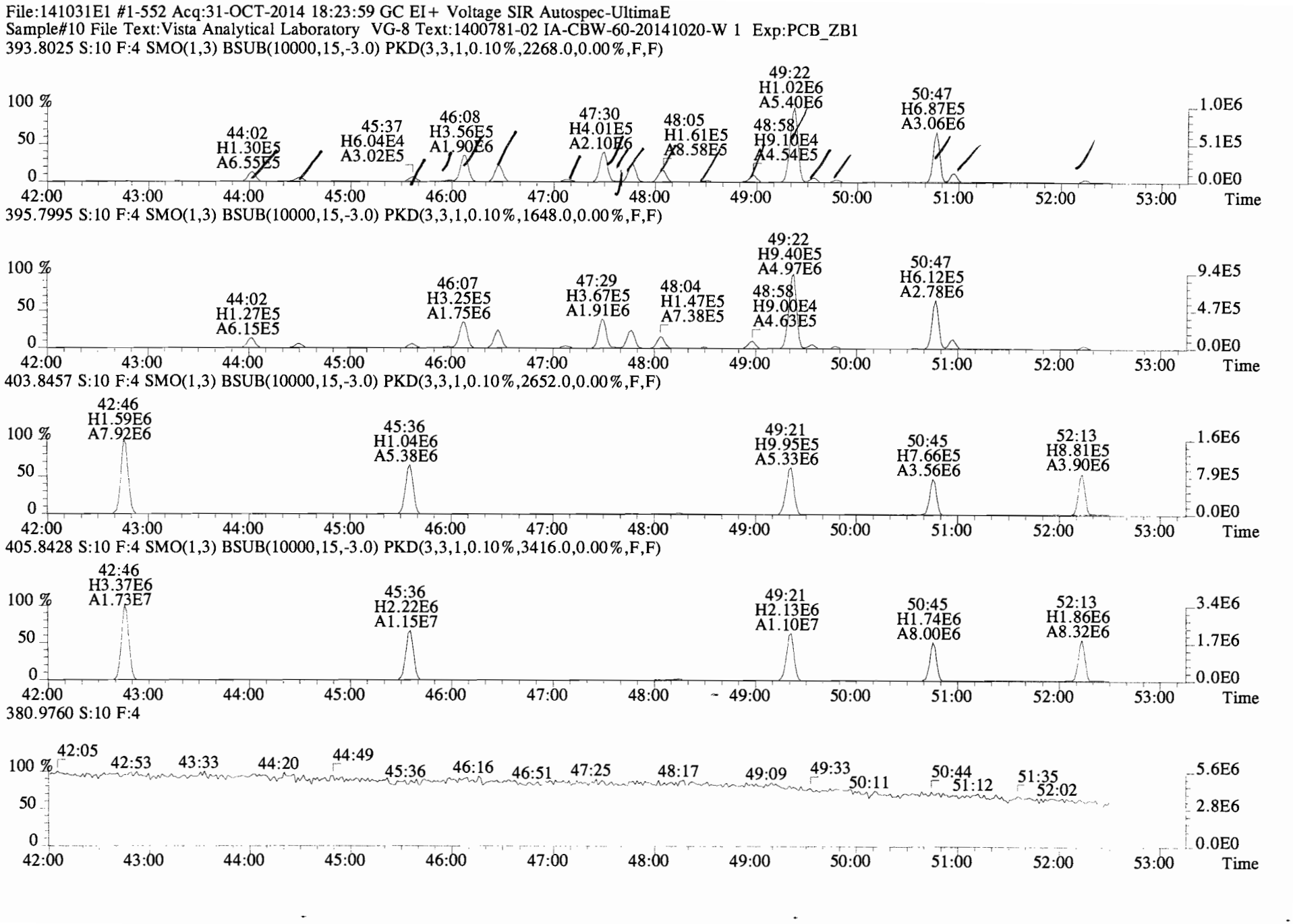


File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
371.8817 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15320.0,0.00%,F,F)

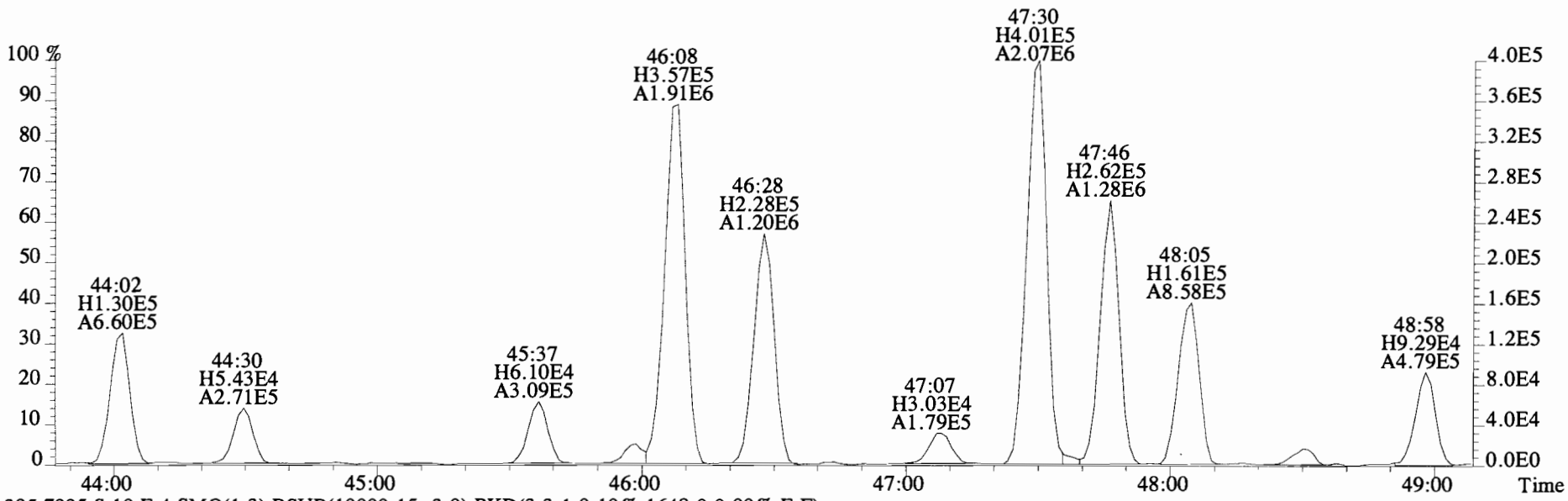


373.8788 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7692.0,0.00%,F,F)

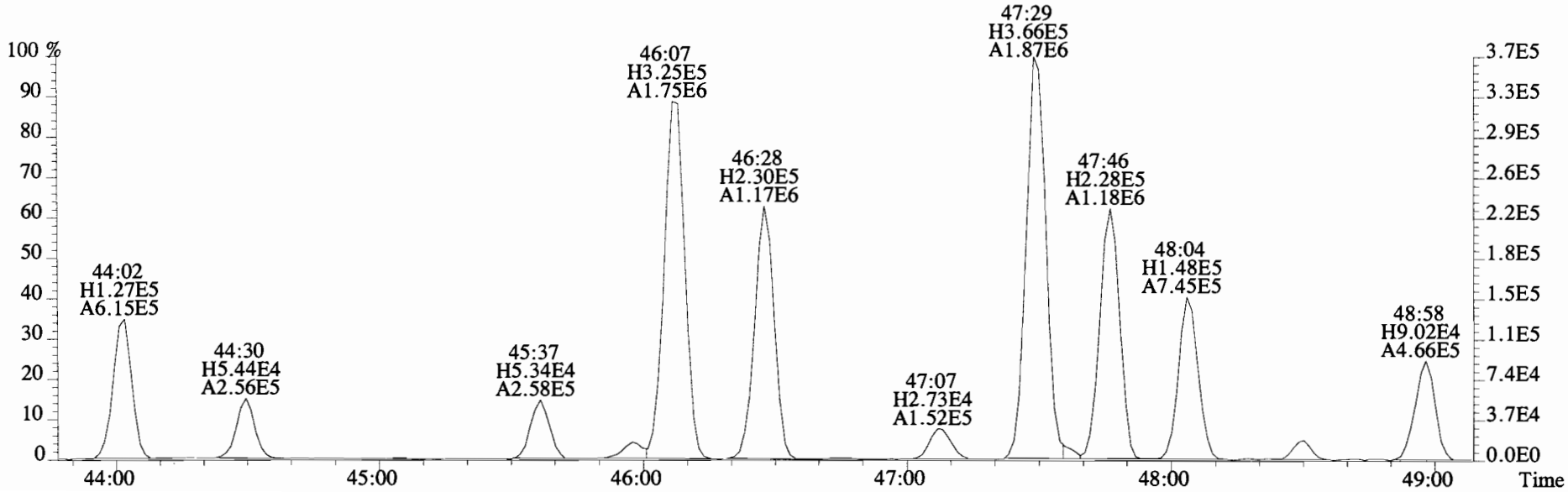



File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
393.8025 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2268.0,0.00%,F,F)
44:02 H1.30E5 A6.55E5
45:37 H6.04E4 A3.02E5
46:08 H3.56E5 A1.90E6
47:30 H4.01E5 A2.10E6
48:05 H1.61E5 A8.58E5
48:58 H9.10E4 A4.54E5
49:22 H1.02E6 A5.40E6
50:47 H6.87E5 A3.06E6
395.7995 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)
44:02 H1.27E5 A6.15E5
46:07 H3.25E5 A1.75E6
47:29 H3.67E5 A1.91E6
48:04 H1.47E5 A7.38E5
48:58 H9.00E4 A4.63E5
49:22 H9.40E5 A4.97E6
50:47 H6.12E5 A2.78E6
403.8457 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2652.0,0.00%,F,F)
42:46 H1.59E6 A7.92E6
45:36 H1.04E6 A5.38E6
49:21 H9.95E5 A5.33E6
50:45 H7.66E5 A3.56E6
52:13 H8.81E5 A3.90E6
405.8428 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3416.0,0.00%,F,F)
42:46 H3.37E6 A1.73E7
45:36 H2.22E6 A1.15E7
49:21 H2.13E6 A1.10E7
50:45 H1.74E6 A8.00E6
52:13 H1.86E6 A8.32E6
380.9760 S:10 F:4
42:05
42:53
43:33
44:20
44:49
45:36
46:16
46:51
47:25
48:17
49:09
49:33
50:11
50:44
51:12
51:35
52:02
100 %
50
0
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
51:00
52:00
53:00
Time
1.0E6
5.1E5
0.0E0
9.4E5
4.7E5
1.6E6
7.9E5
3.4E6
1.7E6
5.6E6
2.8E6

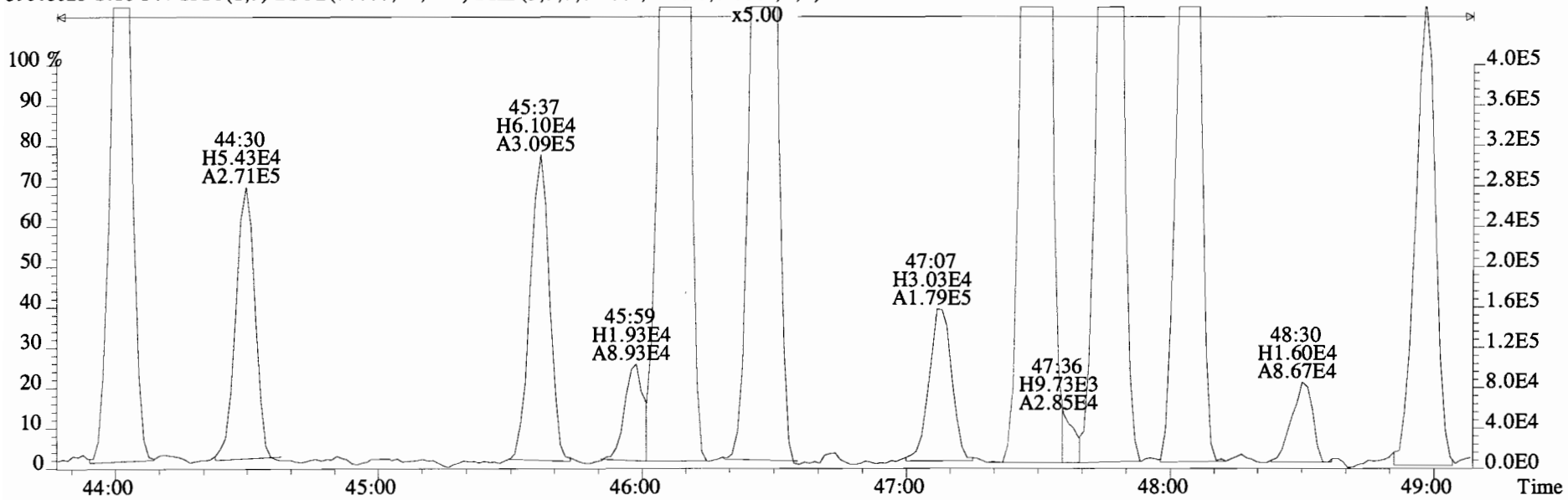
File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
393.8025 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2268.0,0.00%,F,F)



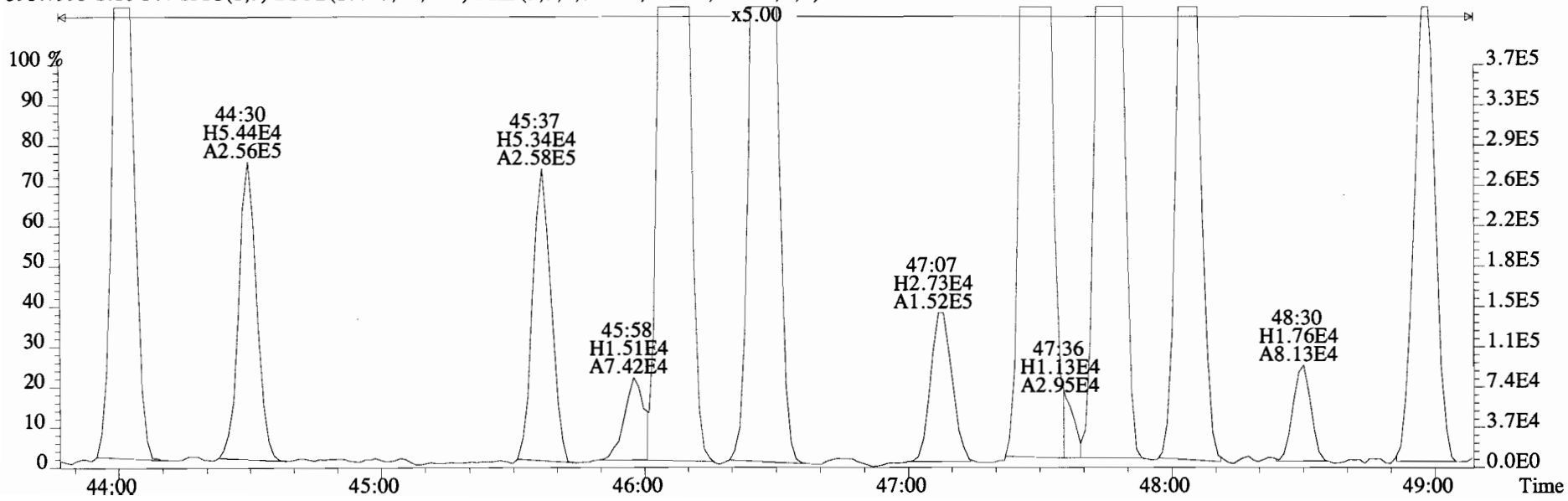
395.7995 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)



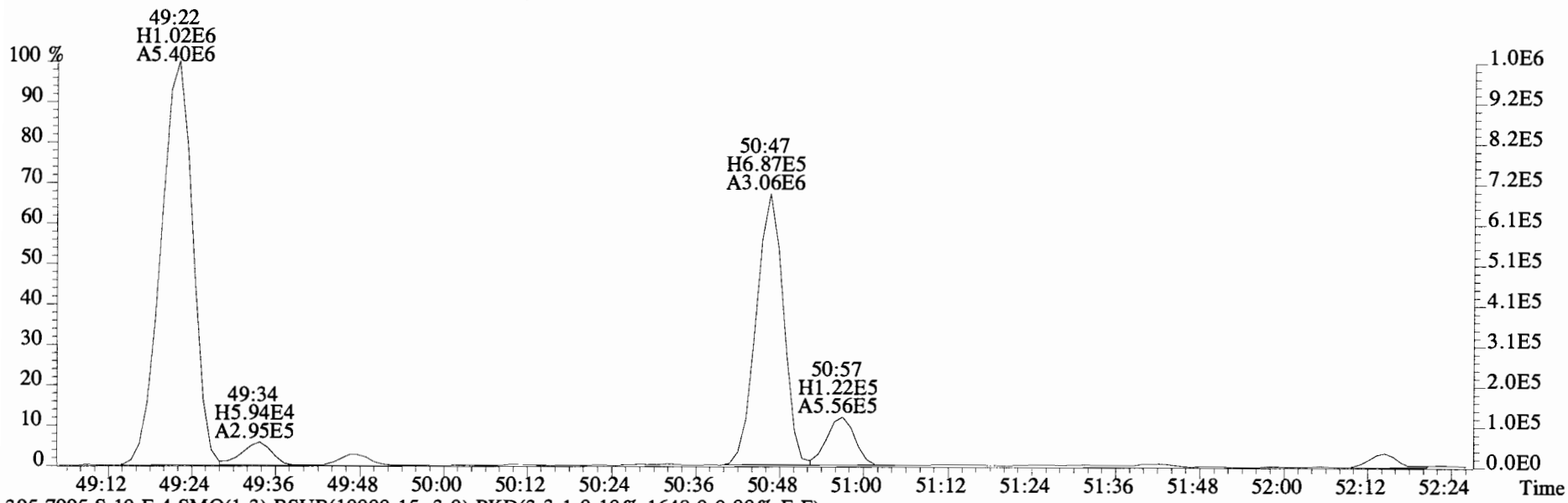
File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
393.8025 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2268.0,0.00%,F,F)



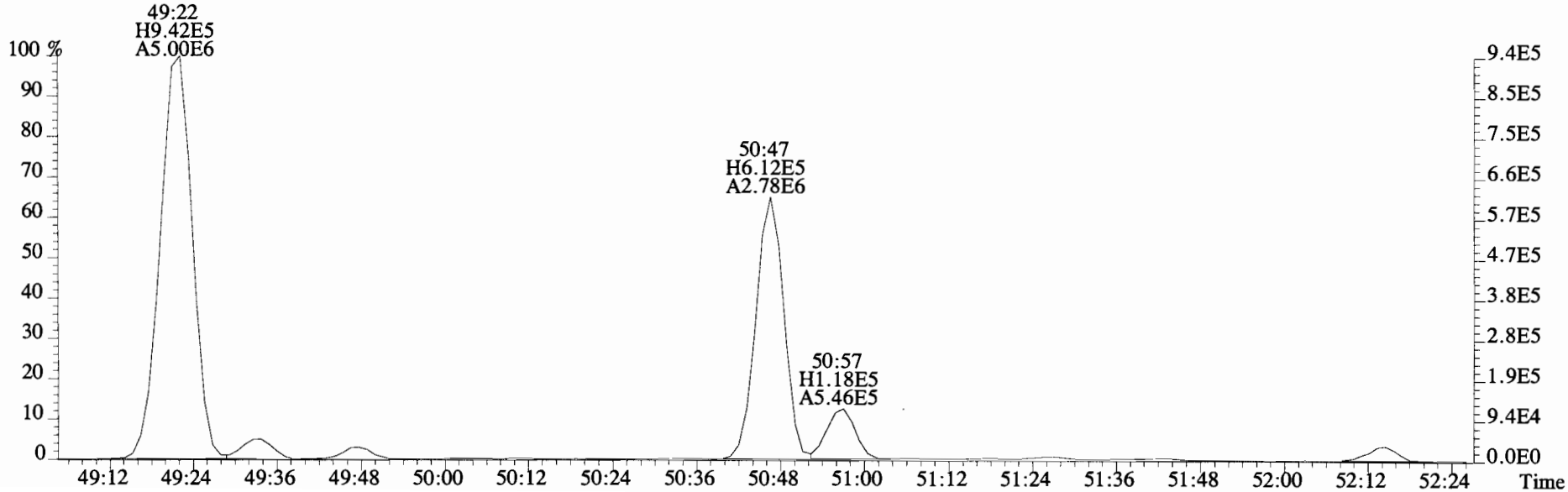
395.7995 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)



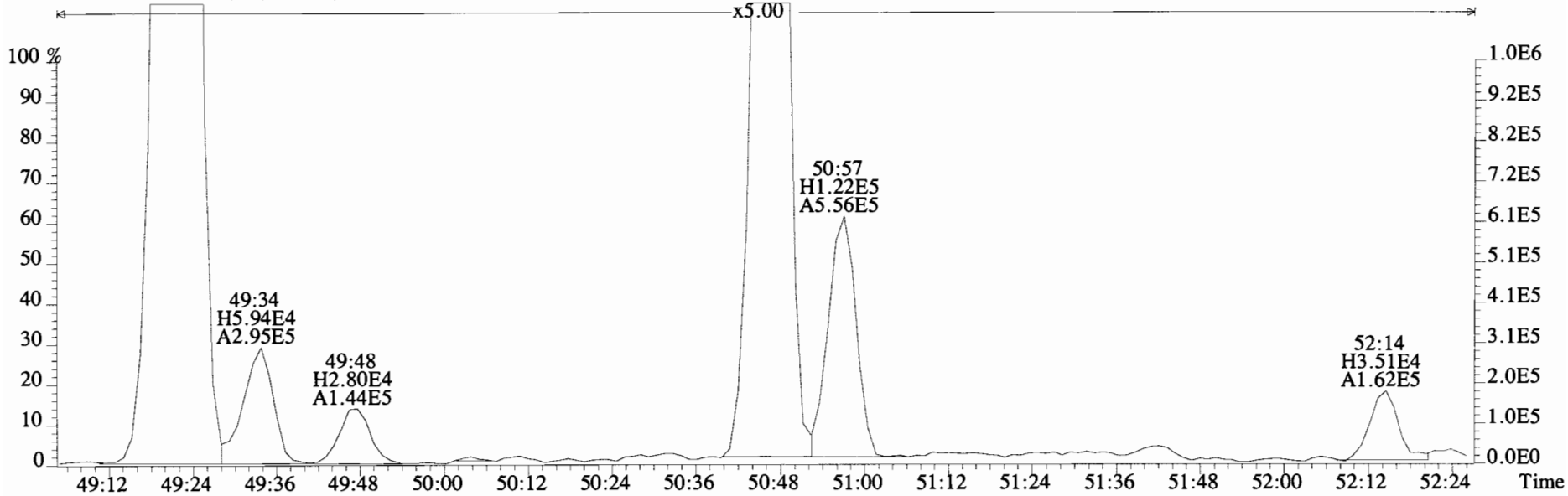
File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
393.8025 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2268.0,0.00%,F,F)



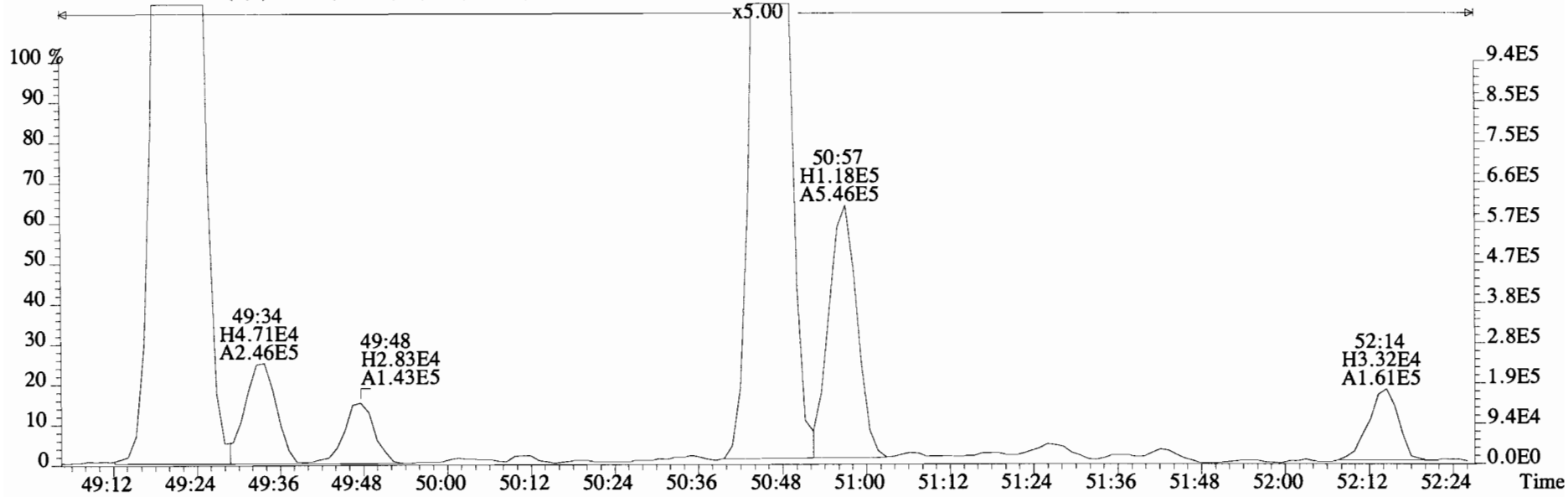
395.7995 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)

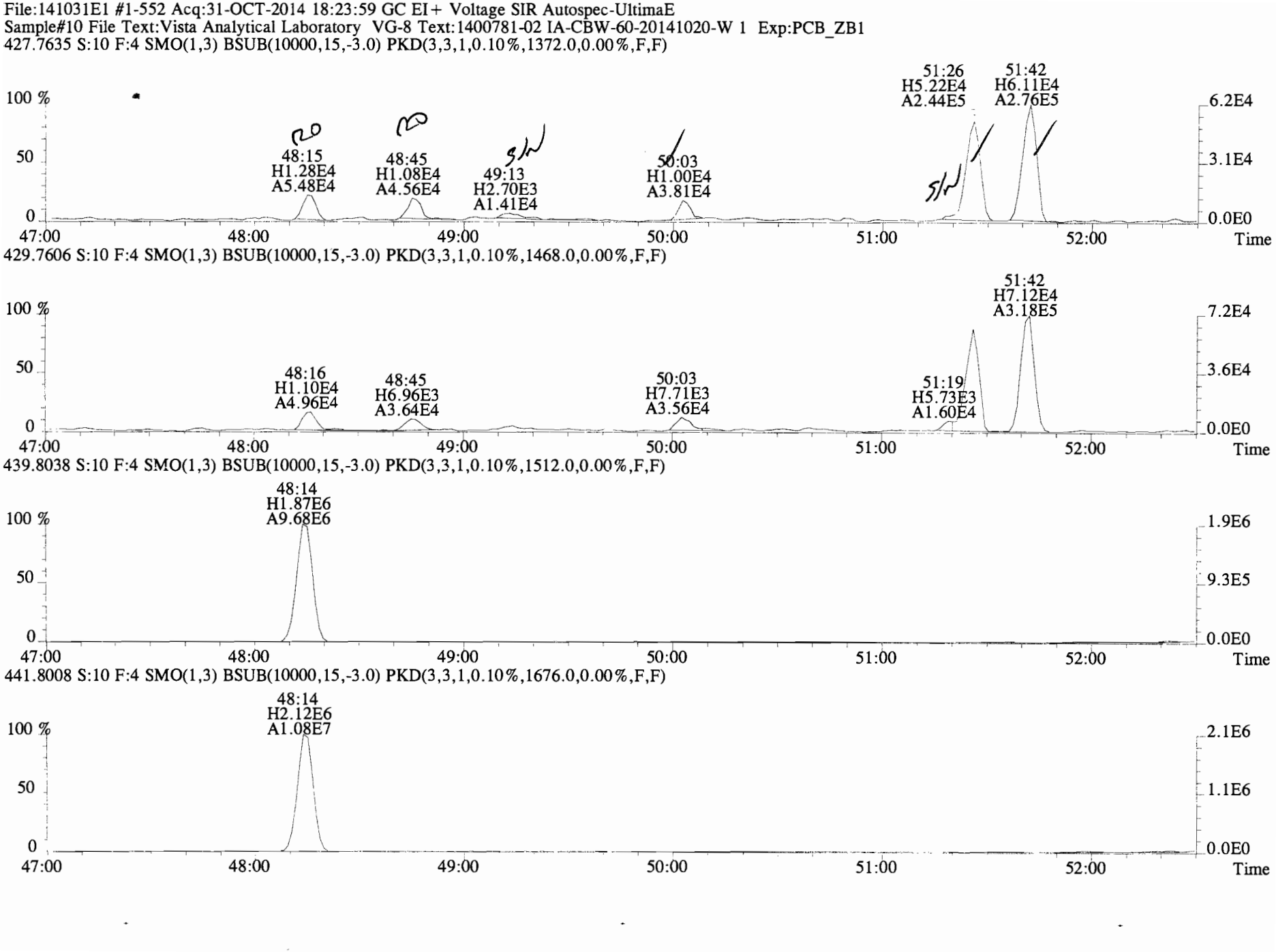


File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
393.8025 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2268.0,0.00%,F,F)

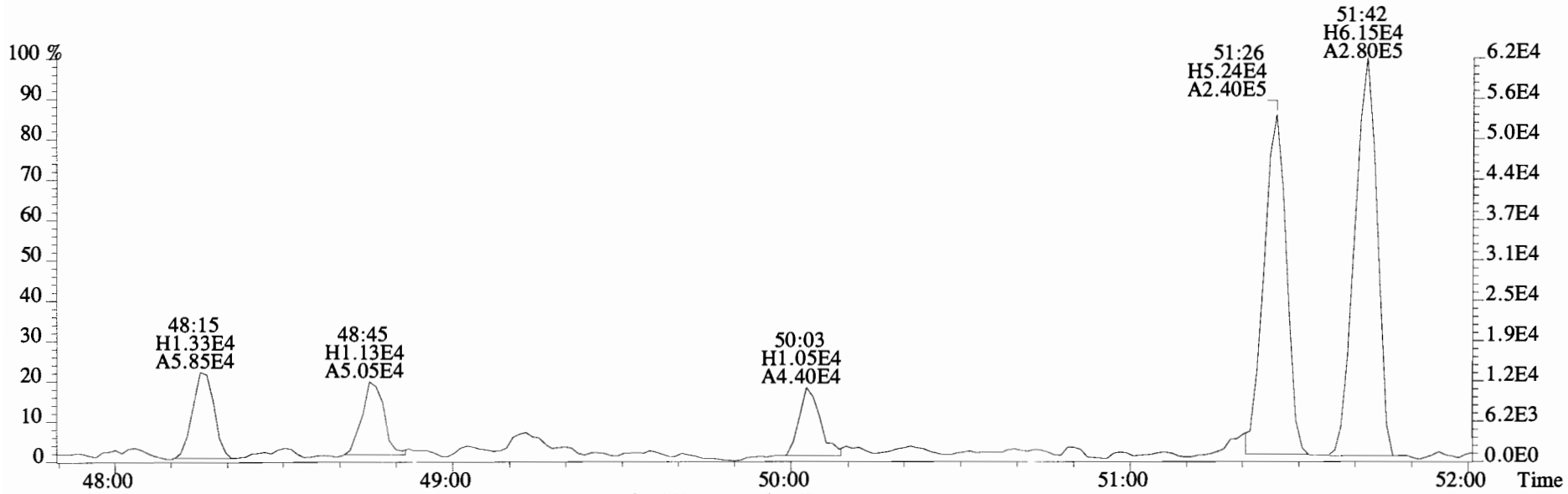


395.7995 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1648.0,0.00%,F,F)

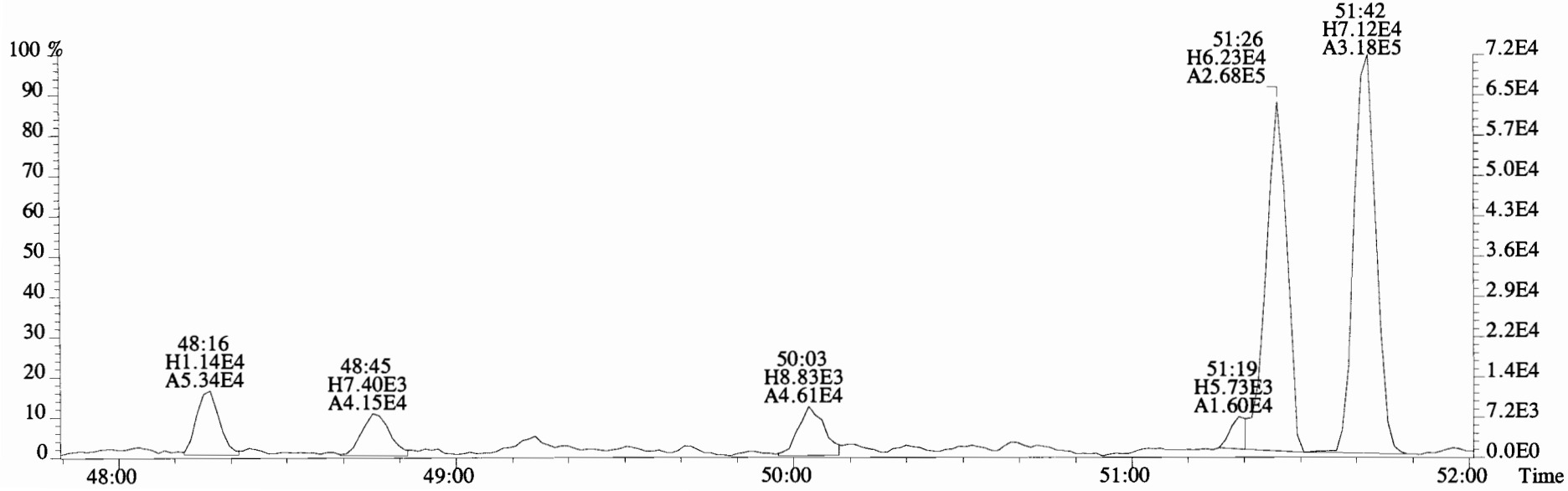



File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
427.7635 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1372.0,0.00%,F,F)
48:15 H1.28E4 A5.48E4
48:45 H1.08E4 A4.56E4
49:13 H2.70E3 A1.41E4
50:03 H1.00E4 A3.81E4
51:26 H5.22E4 A2.44E5
51:42 H6.11E4 A2.76E5
429.7606 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1468.0,0.00%,F,F)
48:16 H1.10E4 A4.96E4
48:45 H6.96E3 A3.64E4
50:03 H7.71E3 A3.56E4
51:19 H5.73E3 A1.60E4
51:42 H7.12E4 A3.18E5
439.8038 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1512.0,0.00%,F,F)
48:14 H1.87E6 A9.68E6
441.8008 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1676.0,0.00%,F,F)
48:14 H2.12E6 A1.08E7
100 %
50
0
47:00
48:00
49:00
50:00
51:00
52:00
Time
6.2E4
3.1E4
0.0E0
7.2E4
3.6E4
1.9E6
9.3E5
2.1E6
1.1E6

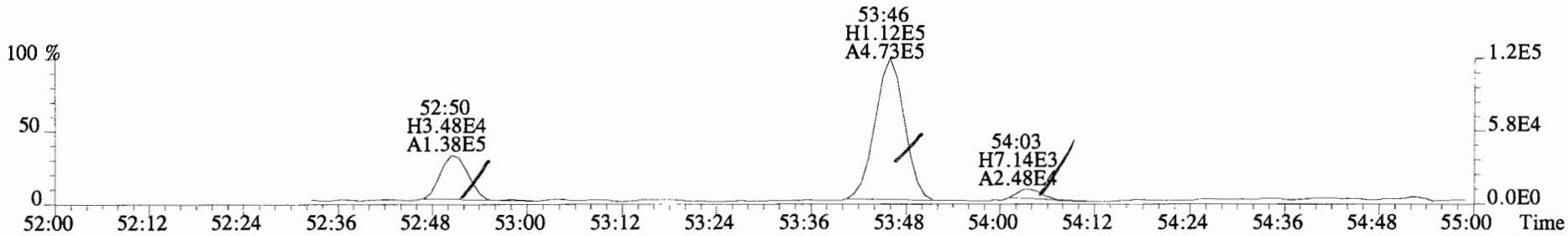
File:141031E1 #1-552 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
427.7635 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1372.0,0.00%,F,F)



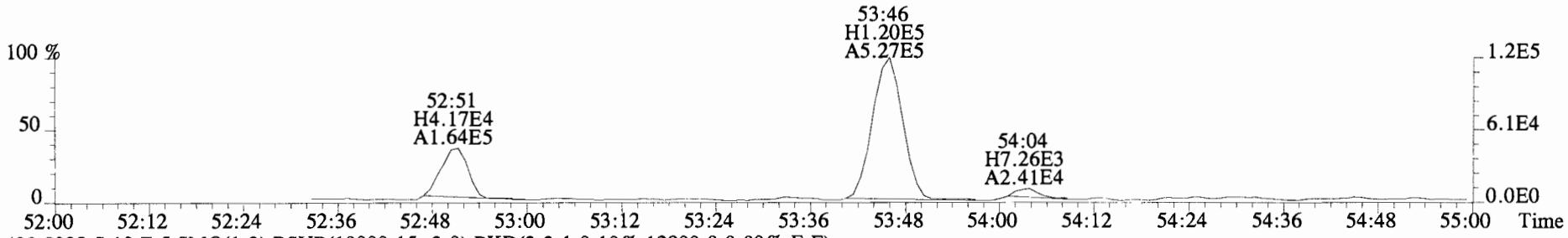
429.7606 S:10 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1468.0,0.00%,F,F)



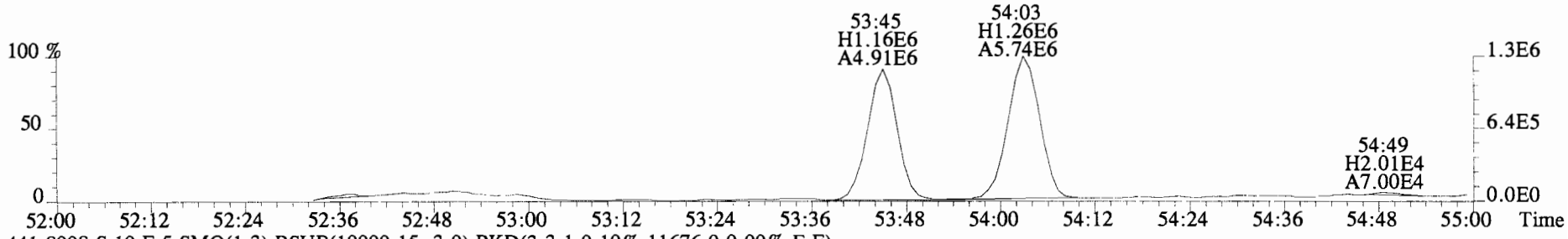
File:141031E1 #1-435 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
427.7635 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3676.0,0.00%,F,F)



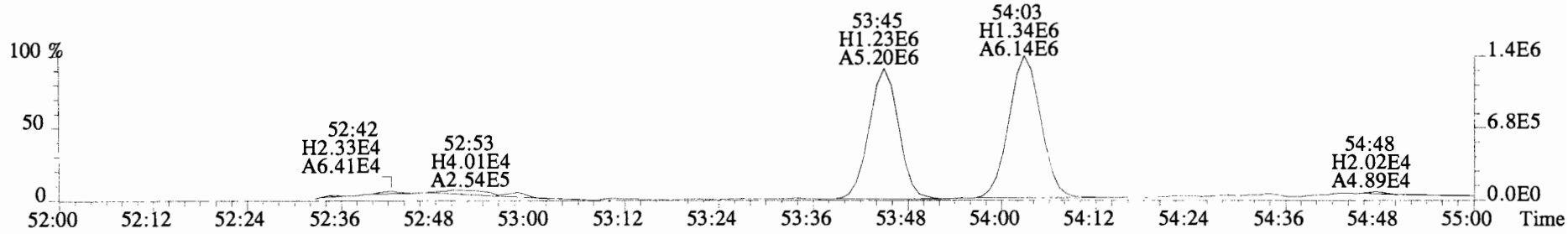
429.7606 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3488.0,0.00%,F,F)



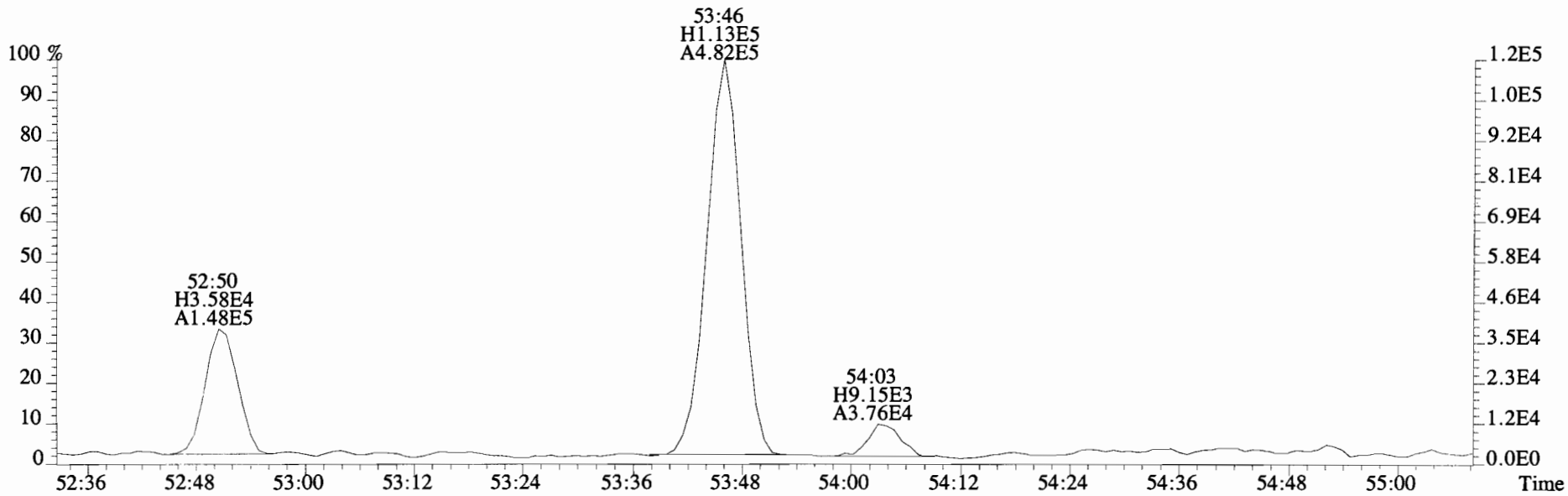
439.8038 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12900.0,0.00%,F,F)



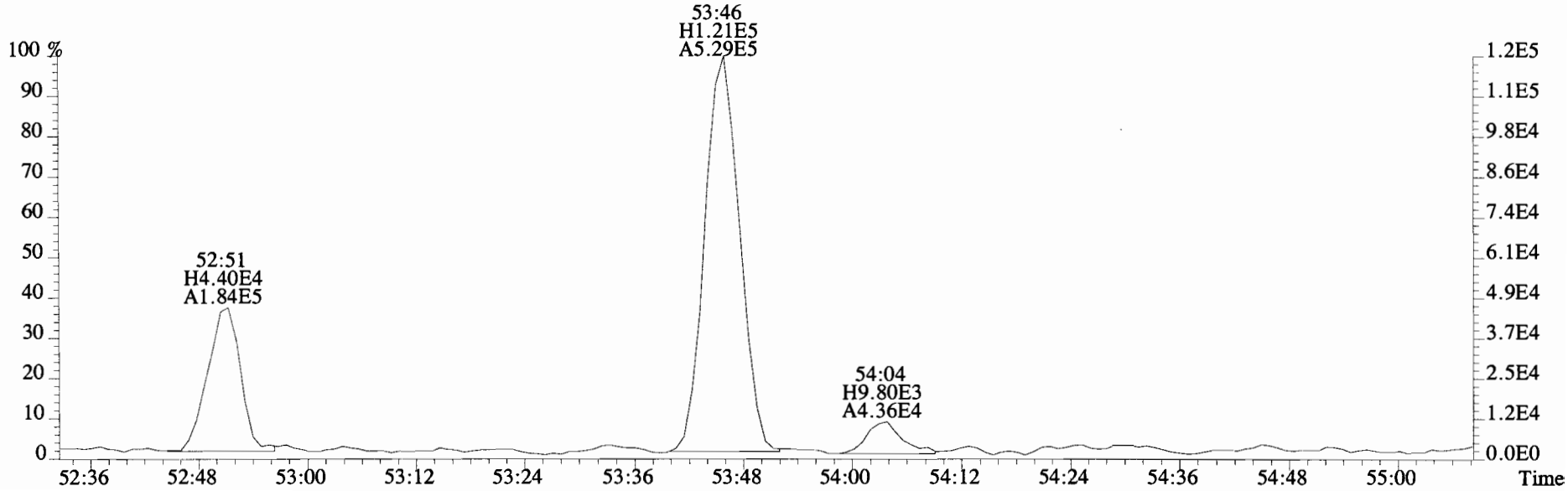
441.8008 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,11676.0,0.00%,F,F)

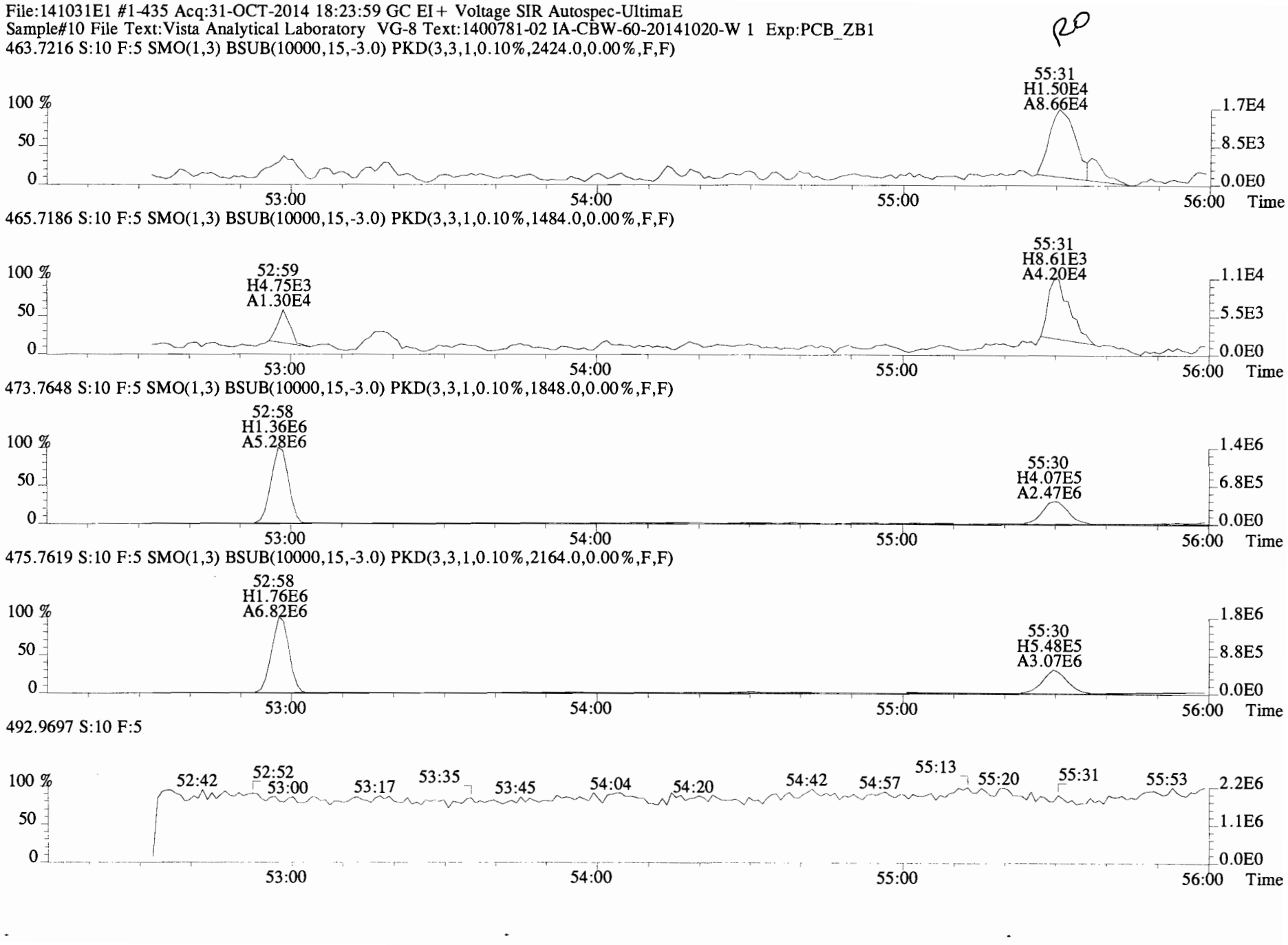


File:141031E1 #1-435 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
427.7635 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3676.0,0.00%,F,F)

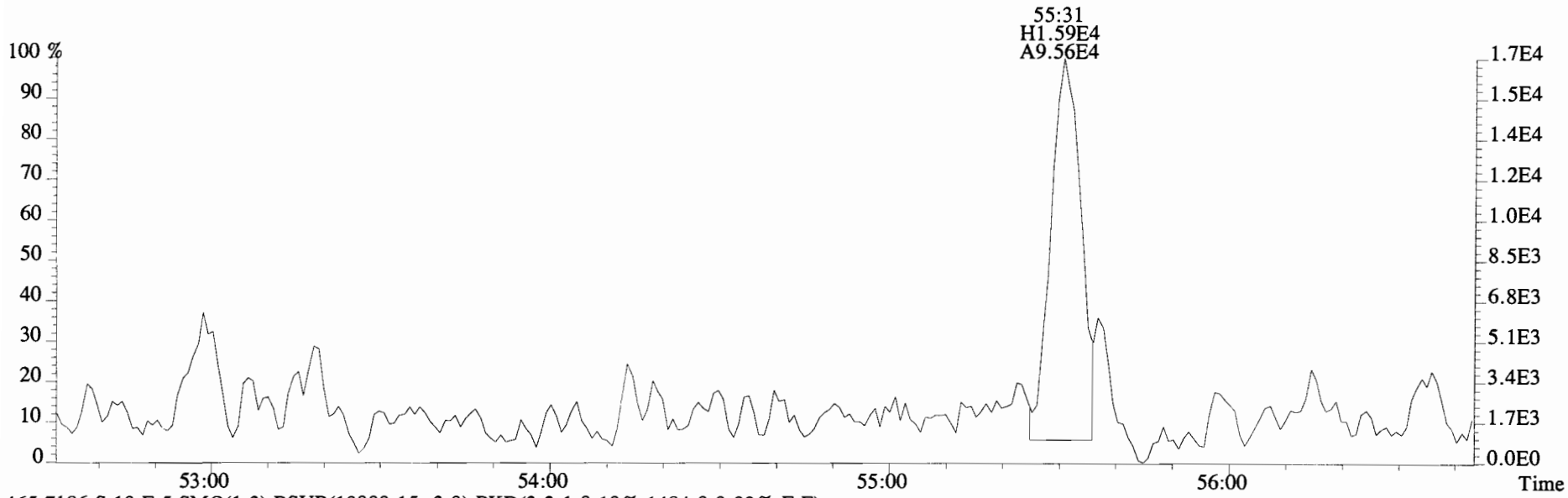


429.7606 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3488.0,0.00%,F,F)

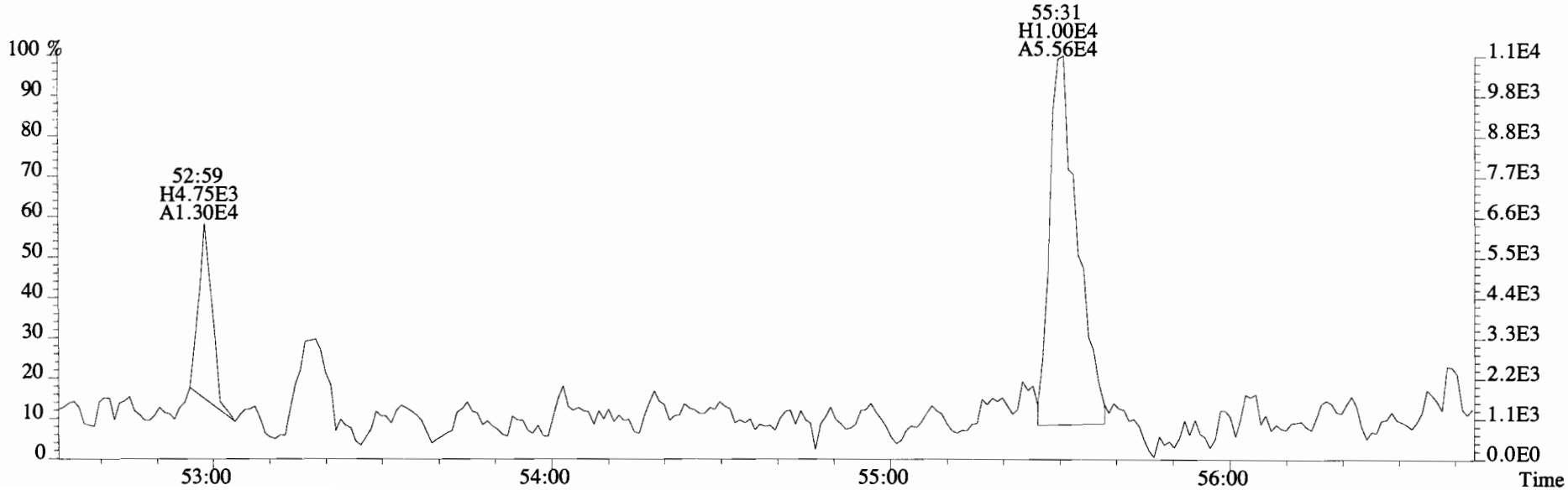



File:141031E1 #1-435 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
463.7216 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2424.0,0.00%,F,F)
55:31
H1.50E4
A8.66E4
465.7186 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1484.0,0.00%,F,F)
52:59
H4.75E3
A1.30E4
55:31
H8.61E3
A4.20E4
473.7648 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1848.0,0.00%,F,F)
52:58
H1.36E6
A5.28E6
55:30
H4.07E5
A2.47E6
475.7619 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2164.0,0.00%,F,F)
52:58
H1.76E6
A6.82E6
55:30
H5.48E5
A3.07E6
492.9697 S:10 F:5
52:42
52:52
53:00
53:17
53:35
53:45
54:04
54:20
54:42
54:57
55:13
55:20
55:31
55:53
100 %
50
0
1.7E4
8.5E3
0.0E0
1.1E4
5.5E3
1.4E6
6.8E5
1.8E6
8.8E5
2.2E6
1.1E6
53:00
54:00
55:00
56:00
Time

File:141031E1 #1-435 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1
463.7216 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2424.0,0.00%,F,F)

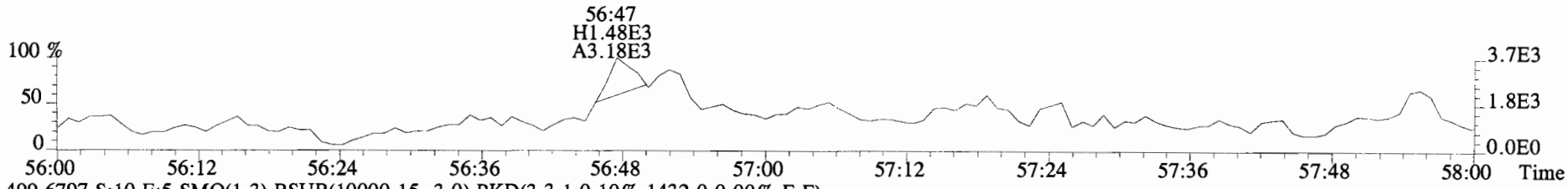


465.7186 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1484.0,0.00%,F,F)

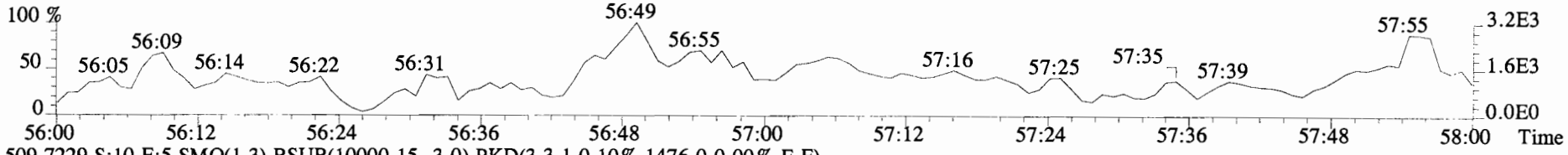


File:141031E1 #1-435 Acq:31-OCT-2014 18:23:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Vista Analytical Laboratory VG-8 Text:1400781-02 IA-CBW-60-20141020-W 1 Exp:PCB_ZB1

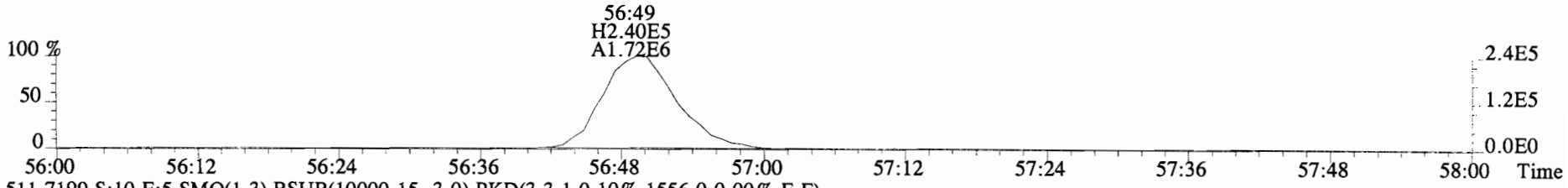
497.6826 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1372.0,0.00%,F,F)



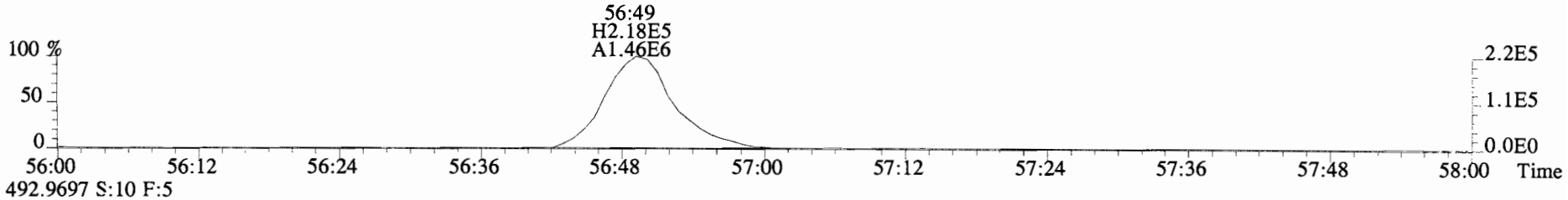
499.6797 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1432.0,0.00%,F,F)



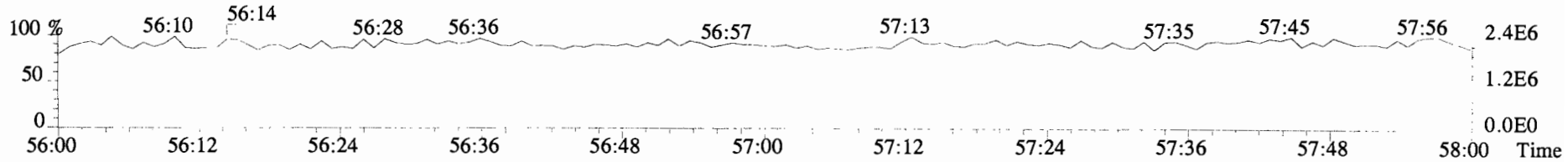
509.7229 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1476.0,0.00%,F,F)



511.7199 S:10 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1556.0,0.00%,F,F)



492.9697 S:10 F:5



Client ID: IA-CV-01-20141020-W RX Filename: 141106E1 S:11 Acq: 7-NOV-14 02:47:54 ConCal: ST141106E1-1

Lab ID: 1400781-03RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Mono	PCB-1	3.07e+05	3.03	y	16:19	1.25	15.5		*	2.5	*	1.001	0.996	1.006
Mono	PCB-2	8.97e+04	2.73	y	18:35	1.18	4.70		*	2.5	*	0.988	0.983	0.993
Mono	PCB-3	1.71e+05	2.70	y	18:49	1.22	8.67		*	2.5	*	1.000	0.996	1.006
Di	PCB-4/10	*	*	n	NotF	1.55	*		11800	2.5	22.3	*	0.998	1.008
Di	PCB-7/9	*	*	n	NotF	1.27	*		11800	2.5	17.6	*	0.865	0.873
Di	PCB-6	*	*	n	NotF	1.26	*		11800	2.5	17.7	*	0.890	0.899
Di	PCB-5/8	4.54e+05	1.44	y	22:53	1.23	28.8		*	2.5	*	0.910	0.906	0.916
Di	PCB-14	*	*	n	NotF	1.23	*		11800	2.5	16.3	*	0.949	0.959
Di	PCB-11	5.50e+05	1.86	n	25:09	1.16	31.2	R	*	2.5	*	1.000	0.996	1.006
Di	PCB-12/13	*	*	n	NotF	1.10	*		11800	2.5	18.2	*	1.010	1.020
Di	PCB-15	4.01e+05	1.74	y	25:51	1.21	21.8		*	2.5	*	1.028	1.024	1.034
Tri	PCB-19	4.64e+04	1.08	y	24:11	1.30	3.66		*	2.5	*	1.001	0.996	1.006
Tri	PCB-30	*	*	n	NotF	1.83	*		2280	2.5	2.51	*	1.032	1.042
Tri	PCB-18	2.17e+05	0.96	y	25:46	0.86	16.2		*	2.5	*	0.954	0.949	0.959
Tri	PCB-17	1.03e+05	1.16	y	25:57	0.90	7.37		*	2.5	*	0.961	0.955	0.965
Tri	PCB-24/27	*	*	n	NotF	1.18	*		2280	2.5	2.47	*	0.976	0.986
Tri	PCB-16/32	2.17e+05	1.01	y	27:00	1.03	13.5		*	2.5	*	1.000	0.995	1.005
Tri	PCB-34	*	*	n	NotF	1.26	*		2150	2.5	2.84	*	0.956	0.966
Tri	PCB-23	*	*	n	NotF	1.31	*		2150	2.5	2.73	*	0.959	0.969
Tri	PCB-29	*	*	n	NotF	1.33	*		2150	2.5	2.70	*	0.967	0.977
Tri	PCB-26	*	*	n	NotF	1.29	*		2150	2.5	2.77	*	0.974	0.984
Tri	PCB-25	*	*	n	NotF	1.34	*		2150	2.5	2.67	*	0.980	0.990
Tri	PCB-31	4.33e+05	1.19	y	28:51	1.42	22.5		*	2.5	*	0.997	0.992	1.002
Tri	PCB-28	3.83e+05	1.17	y	28:58	1.38	20.5		*	2.5	*	1.001	0.996	1.006
Tri	PCB-20/21/33	3.03e+05	1.16	y	29:35	1.31	17.1		*	2.5	*	1.022	1.017	1.027
Tri	PCB-22	1.91e+05	1.10	y	30:01	1.32	10.7		*	2.5	*	1.037	1.032	1.042
Tri	PCB-36	*	*	n	NotF	1.38	*		2150	2.5	2.94	*	0.929	0.939
Tri	PCB-39	*	*	n	NotF	1.42	*		2150	2.5	2.85	*	0.943	0.953
Tri	PCB-38	*	*	n	NotF	1.35	*		2150	2.5	2.99	*	0.967	0.976
Tri	PCB-35	*	*	n	NotF	1.38	*		2150	2.5	2.94	*	0.982	0.992
Tri	PCB-37	2.47e+05	1.03	y	32:49	1.39	13.0		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-54	*	*	n	NotF	1.20	*		2260	2.5	3.01	*	0.996	1.006
Tetra	PCB-50	*	*	n	NotF	0.97	*		2260	2.5	3.73	*	1.037	1.047
Tetra	PCB-53	7.54e+04	0.99	n	29:39	1.19	5.40	R	*	2.5	*	0.946	0.941	0.951
Tetra	PCB-51	3.09e+04	0.48	n	29:58	1.15	2.28	R	*	2.5	*	0.957	0.952	0.962
Tetra	PCB-45	5.45e+04	0.88	y	30:25	0.97	4.80		*	2.5	*	0.971	0.966	0.976
Tetra	PCB-46	4.40e+04	0.69	y	30:54	0.95	3.94		*	2.5	*	0.986	0.982	0.992

Integrations by:

Analyst: DMS

Date: 11/10/14

Reviewed by: CT Date: 11/10/14

Client ID: IA-CV-01-20141020-W RX Filename: 141106E1 S:11 Acq: 7-NOV-14 02:47:54 ConCal: ST141106E1-1
Lab ID: 1400781-03RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Tetra	PCB-52/69	1.54e+06	0.77	y	31:21	1.28	102		*	2.5	*	1.001	0.996	1.006
Tetra	PCB-73	*	*	n	NotF¶	1.37	*		2260	2.5	2.93	*	1.000	1.010
Tetra	PCB-43/49	4.41e+05	0.78	y	31:39	1.11	33.7		*	2.5	*	1.010	1.005	1.015
Tetra	PCB-47	3.35e+05	0.87	y	31:51	1.13	23.4		*	2.5	*	1.000	0.996	1.006
Tetra	PCB-48/75	6.92e+04	0.80	y	31:58	1.30	4.20		*	2.5	*	1.004	0.999	1.009
Tetra	PCB-65	*	*	n	NotF¶	1.33	*		2260	2.5	2.80	*	1.007	1.017
Tetra	PCB-62	*	*	n	NotF¶	1.29	*		2260	2.5	2.89	*	1.011	1.021
Tetra	PCB-44	8.41e+05	0.81	y	32:39	0.94	70.9		*	2.5	*	1.025	1.020	1.030
Tetra	PCB-42/59	2.01e+05	0.70	y	32:53	1.22	13.1		*	2.5	*	1.033	1.028	1.038
Tetra	PCB-41/64/71/72	7.59e+05	0.79	y	33:27	1.31	45.9		*	2.5	*	1.051	1.046	1.056
Tetra	PCB-68	8.57e+04	0.75	y	33:43	1.49	4.57		*	2.5	*	1.059	1.054	1.064
Tetra	PCB-40	8.28e+04	0.92	n	33:55	0.82	8.02	R	*	2.5	*	1.065	1.061	1.071
Tetra	PCB-57	*	*	n	NotF¶	1.11	*		2260	2.5	2.77	*	0.965	0.975
Tetra	PCB-67	*	*	n	NotF¶	1.07	*		2260	2.5	2.88	*	0.974	0.984
Tetra	PCB-58	*	*	n	NotF¶	1.10	*		2260	2.5	2.80	*	0.977	0.987
Tetra	PCB-63	*	*	n	NotF¶	1.12	*		2260	2.5	2.76	*	0.982	0.992
Tetra	PCB-74	6.06e+05	0.80	y	35:09	1.20	30.5		*	2.5	*	0.995	0.990	1.000
Tetra	PCB-61/70	2.47e+06	0.80	y	35:22	1.08	139		*	2.5	*	1.001	0.994	1.004
Tetra	PCB-76/66	1.02e+06	0.84	y	35:34	1.14	54.5		*	2.5	*	1.006	1.001	1.011
Tetra	PCB-80	*	*	n	NotF¶	1.28	*		2260	2.5	2.46	*	0.996	1.006
Tetra	PCB-55	*	*	n	NotF¶	1.11	*		2260	2.5	2.83	*	1.005	1.015
Tetra	PCB-56/60	7.28e+05	0.81	y	36:37	1.09	38.9		*	2.5	*	1.024	1.018	1.028
Tetra	PCB-79	*	*	n	NotF¶	1.12	*		2260	2.5	2.79	*	1.048	1.058
Tetra	PCB-78	*	*	n	NotF¶	1.24	*		2260	2.5	2.99	*	0.982	0.992
Tetra	PCB-81	3.67e+04	0.69	y	38:53	1.38	1.77		*	2.5	*	1.000	0.995	1.005
Tetra	PCB-77	4.33e+05	0.81	y	39:31	1.21	23.4		*	2.5	*	1.001	0.995	1.005
Penta	PCB-104	*	*	n	NotF¶	1.26	*		1900	2.5	4.33	*	0.996	1.006
Penta	PCB-96	*	*	n	NotF¶	1.09	*		1900	2.5	4.99	*	1.034	1.044
Penta	PCB-103	*	*	n	NotF¶	0.93	*		1900	2.5	5.84	*	1.050	1.060
Penta	PCB-100	*	*	n	NotF¶	1.00	*		1900	2.5	5.44	*	1.061	1.071
Penta	PCB-94	*	*	n	NotF¶	1.11	*		1900	2.5	6.18	*	0.981	0.991
Penta	PCB-95/98/102	2.77e+06	1.48	y	35:40	1.21	270		*	2.5	*	1.001	0.994	1.004
Penta	PCB-93	*	*	n	NotF¶	1.13	*		1900	2.5	6.06	*	0.998	1.008
Penta	PCB-88/91	*	*	n	NotF¶	1.02	*		1900	2.5	6.72	*	1.006	1.016
Penta	PCB-121	4.60e+05	1.72	y	36:04	1.90	28.6		*	2.5	*	1.012	1.009	1.019
Penta	PCB-84/92	1.58e+06	1.58	y	36:58	1.05	161		*	2.5	*	0.990	0.986	0.996
Penta	PCB-89	1.97e+04	2.15	n	37:10	1.02	2.07	R	*	2.5	*	0.996	0.991	1.001

Analyst: DMJ

Date: 11/10/14

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Penta	PCB-90/101	4.06e+06	1.51	y 37:21	1.19	364		*	2.5	*	1.001	0.996-1.006
Penta	PCB-113	2.55e+04	0.84	n 37:34	1.35	2.01	R	*	2.5	*	1.006	1.002-1.012
Penta	PCB-99	1.53e+06	1.50	y 37:40	1.29	126		*	2.5	*	1.009	1.005-1.015
Penta	PCB-119	7.11e+04	1.61	y 38:09	1.72	4.89		*	2.5	*	0.987	0.982-0.992
Penta	PCB-108/112	2.51e+05	1.47	y 38:18	1.29	23.0		*	2.5	*	0.991	0.986-0.996
Penta	PCB-83	*	*	n NotF╗	1.52	*		1900	2.5	4.73	*	0.991-1.001
Penta	PCB-97	1.31e+06	1.66	y 38:39	1.25	125		*	2.5	*	1.000	0.996-1.006
Penta	PCB-86	*	*	n NotF╗	1.02	*		1900	2.5	7.03	*	1.000-1.010
Penta	PCB-87/117/125	2.23e+06	1.51	y 38:56	1.56	169		*	2.5	*	1.008	1.002-1.012
Penta	PCB-111/115	9.02e+04	1.60	y 39:06	1.75	6.09		*	2.5	*	1.012	1.007-1.017
Penta	PCB-85/116	7.75e+05	1.78	y 39:12	1.30	70.5		*	2.5	*	1.015	1.010-1.020
Penta	PCB-120	*	*	n NotF╗	1.78	*		1900	2.5	4.03	*	1.016-1.026
Penta	PCB-110	7.50e+06	1.64	y 39:36	1.68	528		*	2.5	*	1.025	1.020-1.030
Penta	PCB-82	5.43e+05	1.51	y 40:14	0.74	64.2		*	2.5	*	0.976	0.972-0.982
Penta	PCB-124	2.87e+05	1.34	y 40:55	1.32	18.9		*	2.5	*	0.992	0.988-0.998
Penta	PCB-107/109	3.64e+05	2.01	n 41:05	1.22	26.0	R	*	2.5	*	0.996	0.991-1.001
Penta	PCB-123	8.71e+04	1.42	y 41:14	1.22	6.24		*	2.5	*	1.000	0.995-1.005
Penta	PCB-106/118	6.17e+06	1.58	y 41:25	1.22	431		*	2.5	*	1.000	0.996-1.006
Penta	PCB-114	1.14e+05	1.39	y 42:05	1.36	7.90		*	2.5	*	1.000	0.995-1.005
Penta	PCB-122	8.60e+04	1.56	y 42:13	1.24	6.55		*	2.5	*	1.003	0.999-1.009
Penta	PCB-105	2.81e+06	1.62	y 42:57	1.28	200		*	2.5	*	1.000	0.995-1.005
Penta	PCB-127	*	*	n NotF╗	1.14	*		2490	2.5	6.76	*	0.995-1.005
Penta	PCB-126	1.17e+05	1.37	y 45:14	1.28	8.94		*	2.5	*	1.001	0.995-1.005
Hexa	PCB-155	*	*	n NotF╗	1.14	*		1700	2.5	4.03	*	0.966-1.006
Hexa	PCB-150	*	*	n NotF╗	1.06	*		1700	2.5	4.30	*	1.030-1.040
Hexa	PCB-152	*	*	n NotF╗	1.10	*		1700	2.5	4.16	*	1.043-1.053
Hexa	PCB-145	*	*	n NotF╗	1.09	*		1700	2.5	4.18	*	1.055-1.065
Hexa	PCB-136	4.80e+05	1.16	y 39:25	1.08	43.3		*	2.5	*	1.069	1.064-1.074
Hexa	PCB-148	*	*	n NotF╗	0.74	*		1700	2.5	6.17	*	1.066-1.076
Hexa	PCB-154	5.11e+04	1.25	y 39:59	0.88	5.66		*	2.5	*	1.084	1.079-1.089
Hexa	PCB-151	5.46e+05	1.17	y 40:39	0.81	66.1		*	2.5	*	1.102	1.097-1.107
Hexa	PCB-135	3.92e+05	1.35	y 40:51	0.78	49.3		*	2.5	*	1.108	1.101-1.113
Hexa	PCB-144	1.71e+05	1.21	y 40:58	0.82	20.5		*	2.5	*	1.111	1.105-1.116
Hexa	PCB-147	7.38e+04	1.63	n 41:06	0.83	8.72	R	*	2.5	*	1.115	1.011-1.120
Hexa	PCB-139/149	2.65e+06	1.25	y 41:22	0.84	307		*	2.5	*	1.122	1.115-1.127
Hexa	PCB-140	2.98e+04	1.20	y 41:34	0.79	3.72		*	2.5	*	1.127	1.120-1.132
Hexa	PCB-134/143	2.97e+05	1.18	y 42:02	0.93	30.5		*	2.5	*	0.975	0.970-0.980

Analyst: DMS

Date: 11/10/14

Client ID: IA-CV-01-20141020-W RX Filename: 141106E1 S:11 Acq: 7-NOV-14 02:47:54 ConCal: ST141106E1-1
Lab ID: 1400781-03RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA		RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL	UCL
Hexa	PCB-133/142	1.49e+05	1.43	y	42:18	0.95	15.1		*	2.5	*	0.982	0.977	0.987
Hexa	PCB-131	*	*	n	NotF	0.91	*		2630	2.5	8.40	*	0.981	0.991
Hexa	PCB-146/165	6.58e+05	1.25	y	42:42	1.16	54.2		*	2.5	*	0.991	0.986	0.996
Hexa	PCB-132/161	1.89e+06	1.18	y	42:58	1.11	162		*	2.5	*	0.997	0.992	1.002
Hexa	PCB-153	4.53e+06	1.22	y	43:07	1.18	366		*	2.5	*	1.001	0.995	1.005
Hexa	PCB-168	*	*	n	NotF	1.37	*		2630	2.5	5.60	*	1.000	1.010
Hexa	PCB-141	1.02e+06	1.21	y	43:51	0.97	104		*	2.5	*	1.000	0.996	1.005
Hexa	PCB-137	3.83e+05	1.35	y	44:15	1.07	35.5		*	2.5	*	1.009	1.004	1.014
Hexa	PCB-130	4.16e+05	1.35	y	44:21	0.85	48.6		*	2.5	*	1.012	1.007	1.017
Hexa	PCB-138/163/164	7.27e+06	1.19	y	44:43	1.23	577		*	2.5	*	1.001	0.996	1.006
Hexa	PCB-158/160	1.02e+06	1.32	y	44:56	1.29	76.9		*	2.5	*	1.005	1.001	1.011
Hexa	PCB-129	3.62e+05	1.14	y	45:13	0.92	38.1		*	2.5	*	1.012	1.007	1.017
Hexa	PCB-166	*	*	n	NotF	1.12	*		2630	2.5	6.64	*	0.988	0.998
Hexa	PCB-159	*	*	n	NotF	1.16	*		2630	2.5	6.36	*	0.995	1.005
Hexa	PCB-128/162	1.49e+06	1.28	y	46:16	1.02	128		*	2.5	*	1.006	1.002	1.012
Hexa	PCB-167	4.21e+05	1.24	y	46:43	1.06	32.6		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-156	1.01e+06	1.21	y	48:01	1.18	75.9		*	2.5	*	1.000	0.995	1.005
Hexa	PCB-157	2.57e+05	1.32	y	48:18	1.08	20.2		*	2.5	*	1.001	0.995	1.005
Hexa	PCB-169	*	*	n	NotF	1.11	*		2630	2.5	7.52	*	0.995	1.005
Hepta	PCB-188	*	*	n	NotF	1.40	*		1480	2.5	2.17	*	0.995	1.005
Hepta	PCB-184	*	*	n	NotF	1.24	*		1480	2.5	2.47	*	1.006	1.016
Hepta	PCB-179	2.52e+05	0.92	y	43:57	1.30	21.1		*	2.5	*	1.029	1.024	1.034
Hepta	PCB-176	9.94e+04	1.00	y	44:26	1.36	7.98		*	2.5	*	1.040	1.035	1.045
Hepta	PCB-186	*	*	n	NotF	1.28	*		1480	2.5	2.39	*	1.049	1.059
Hepta	PCB-178	9.25e+04	0.98	y	45:32	0.94	10.8		*	2.5	*	1.066	1.061	1.071
Hepta	PCB-175	*	*	n	NotF	0.97	*		1480	2.5	3.15	*	1.069	1.079
Hepta	PCB-182/187	5.80e+05	0.98	y	46:03	1.01	62.6		*	2.5	*	1.078	1.073	1.083
Hepta	PCB-183	3.18e+05	1.03	y	46:23	1.08	32.2		*	2.5	*	1.086	1.080	1.090
Hepta	PCB-185	4.98e+04	1.24	n	47:04	1.34	5.91	R	*	2.5	*	0.955	0.951	0.961
Hepta	PCB-174	5.19e+05	0.94	y	47:26	1.34	61.8		*	2.5	*	0.962	0.958	0.968
Hepta	PCB-181	*	*	n	NotF	1.36	*		1480	2.5	3.33	*	0.961	0.971
Hepta	PCB-177	2.96e+05	0.99	y	47:43	1.24	38.0		*	2.5	*	0.968	0.964	0.974
Hepta	PCB-171	1.98e+05	0.91	y	48:00	1.31	24.0		*	2.5	*	0.974	0.970	0.980
Hepta	PCB-173	*	*	n	NotF	1.16	*		1480	2.5	3.91	*	0.979	0.989
Hepta	PCB-172	1.05e+05	1.07	y	48:55	1.22	13.7		*	2.5	*	0.992	0.988	0.998
Hepta	PCB-192	*	*	n	NotF	1.53	*		1480	2.5	2.97	*	0.991	1.001
Hepta	PCB-180	1.25e+06	1.12	y	49:18	1.43	139		*	2.5	*	1.000	0.995	1.005

Analyst: DMS

Date: 11/10/14

Client ID: IA-CV-01-20141020-W RX Filename: 141106E1 S:11 Acq: 7-NOV-14 02:47:54 ConCal: ST141106E1-1
Lab ID: 1400781-03RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.500 EndCAL: NA

Type	Name	Resp	RA	RT	RRF	Conc	Qual	noise	Fac	DL	RRT	LCL UCL
Hepta	PCB-193	7.94e+04	1.19	y 49:29	1.65	7.64		*	2.5	*	1.004	0.999-1.009
Hepta	PCB-191	*	*	n NotF	1.67	*		1480	2.5	2.71	*	1.004-1.014
Hepta	PCB-170	7.03e+05	0.97	y 50:43	1.50	96.3		*	2.5	*	1.000	0.995-1.005
Hepta	PCB-190	1.69e+05	1.17	y 50:54	2.02	17.2		*	2.5	*	1.004	0.998-1.008
Hepta	PCB-189	*	*	n NotF	1.54	*		1480	2.5	2.96	*	0.995-1.005
Octa	PCB-202	*	*	n NotF	1.04	*		1620	2.5	4.49	*	0.995-1.005
Octa	PCB-201	*	*	n NotF	1.10	*		1620	2.5	4.24	*	1.006-1.016
Octa	PCB-204	*	*	n NotF	0.99	*		1620	2.5	4.70	*	1.009-1.019
Octa	PCB-197	*	*	n NotF	1.07	*		1620	2.5	4.35	*	1.015-1.025
Octa	PCB-200	*	*	n NotF	1.02	*		1620	2.5	4.59	*	1.032-1.044
Octa	PCB-198	*	*	n NotF	0.74	*		1620	2.5	6.28	*	1.058-1.068
Octa	PCB-199	1.20e+05	0.77	y 51:24	0.73	18.8		*	2.5	*	1.067	1.060-1.070
Octa	PCB-196/203	1.52e+05	0.76	y 51:39	0.77	22.5		*	2.5	*	1.072	1.066-1.076
Octa	PCB-195	5.79e+04	0.98	y 52:49	1.20	9.00		*	2.5	*	0.983	0.979-0.989
Octa	PCB-194	1.29e+05	0.85	y 53:43	1.25	19.2		*	2.5	*	1.000	0.995-1.005
Octa	PCB-205	*	*	n NotF	1.41	*		2360	2.5	6.81	*	1.001-1.011
Nona	PCB-208	4.10e+04	0.97	n 52:58	0.96	6.05	R	*	2.5	*	1.000	0.995-1.005
Nona	PCB-207	*	*	n NotF	0.92	*		1280	2.5	3.52	*	1.001-1.011
Nona	PCB-206	6.24e+04	1.35	y 55:27	1.03	12.8		*	2.5	*	1.000	0.995-1.005
Deca	PCB-209	*	*	n NotF	1.18	*		1280	2.5	7.05	*	0.995-1.005

Analyst: DMS

Date: 11/12/14

Lab ID: 1400781-03RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 0.5000 EndCAL: NA

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	5.67e+05	3.03	y	16:19	1.22	28.8987	
Total Di-PCB	8.56e+05	1.44	y	22:53	1.21	50.5914	
Total Tri-PCB	5.84e+05	1.08	y	24:11	1.16	40.7375	
Total Tri-PCB	1.56e+06	1.19	y	28:51	1.35	83.7647	Sum:124.502
Total Tetra-PCB	9.66e+06	0.88	y	30:25	1.17	594.283	
Total Penta-PCB	2.97e+07	1.48	y	35:40	1.21	2396.24	
Total Penta-PCB	3.13e+06	1.39	y	42:05	1.26	223.545	Sum:2619.78
Total Hexa-PCB	4.32e+06	1.16	y	39:25	0.92	495.873	
Total Hexa-PCB	2.12e+07	1.18	y	42:02	1.08	1763.62	Sum:2259.50
Total Hepta-PCB	4.66e+06	0.92	y	43:57	1.27	532.495	
Total Octa-PCB	2.72e+05	0.77	y	51:24	0.92	41.2454	
Total Octa-PCB	1.87e+05	0.98	y	52:49	1.29	28.2463	Sum:69.4917
Total Nona-PCB	6.24e+04	1.35	y	55:27	0.96	12.8379	
Total Deca-PCB	*	*	n	NotFnd	1.18	*	

Total PCB Conc:6390.03618200

Integrations
by
Analyst: DMS

Date: 11/10/14

Client ID: IA-CV-01-20141020-W RX Filename: 141106E1 S:11 Acq: 7-NOV-14 02:47:54 ConCal: ST141106E1-1
Lab ID: 1400781-03RE1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:0.5000 EndCAL: NA

Name	Resp	RA		RRF	RT	RRT	LCL	UCL		Conc	Rec
13C-PCB-1	1.26e+08	3.19	y	0.89	16:18	0.631	0.622	0.628	ok	7450	93.1
13C-PCB-3	1.29e+08	3.26	y	0.93	18:48	0.728	0.721	0.729		7340	91.7
13C-PCB-4	6.58e+07	1.58	y	0.55	20:06	0.778	0.772	0.780		6320	79.0
13C-PCB-9	1.02e+08	1.58	y	0.83	21:50	0.845	0.840	0.848		6530	81.6
13C-PCB-11	1.22e+08	1.53	y	0.94	25:08	0.973	0.968	0.978		6830	85.4
13C-PCB-19	7.84e+07	1.05	y	0.53	24:09	0.935	0.929	0.939		7750	96.8
13C-PCB-28	1.08e+08	1.06	y	0.89	28:57	1.004	0.999	1.009		6440	80.5
13C-PCB-32	1.25e+08	1.05	y	0.81	27:00	1.045	1.041	1.051		8070	101
13C-PCB-37	1.09e+08	1.08	y	0.83	32:48	1.137	1.131	1.143		6950	86.9
13C-PCB-47	1.01e+08	0.79	y	0.74	31:50	0.870	0.867	0.875		6720	84.0
13C-PCB-52	9.41e+07	0.80	y	0.71	31:20	0.856	0.853	0.861		6580	82.3
13C-PCB-54	1.01e+08	0.80	y	0.85	27:51	0.761	0.758	0.766		5870	73.4
13C-PCB-70	1.32e+08	0.80	y	0.94	35:21	0.966	0.961	0.971		6920	86.5
13C-PCB-77	1.22e+08	0.80	y	0.89	39:29	1.079	1.073	1.083		6780	84.8
13C-PCB-80	1.38e+08	0.79	y	0.96	35:46	0.977	0.972	0.982		7090	88.6
13C-PCB-81	1.20e+08	0.79	y	0.84	38:54	1.063	1.057	1.067		7070	88.4
13C-PCB-95	6.75e+07	1.59	y	0.74	35:39	0.912	0.908	0.918		6730	84.1
13C-PCB-97	6.76e+07	1.61	y	0.69	38:38	0.989	0.984	0.994		7270	90.8
13C-PCB-101	7.50e+07	1.59	y	0.79	37:20	0.955	0.951	0.961		7070	88.4
13C-PCB-104	8.47e+07	1.58	y	1.00	32:30	0.832	0.829	0.837		6310	78.8
13C-PCB-105	8.77e+07	1.62	y	1.24	42:57	0.928	0.924	0.934		6780	84.8
13C-PCB-114	8.50e+07	1.62	y	1.21	42:05	0.909	0.905	0.915		6740	84.3
13C-PCB-118	9.36e+07	1.59	y	0.98	41:24	1.060	1.054	1.064		7040	88.0
13C-PCB-123	9.17e+07	1.63	y	0.95	41:14	1.055	1.049	1.059		7150	89.4
13C-PCB-126	8.14e+07	1.59	y	1.16	45:13	0.977	0.972	0.982		6700	83.8
13C-PCB-127	9.66e+07	1.58	y	1.34	43:18	0.936	0.931	0.941		6890	86.2
13C-PCB-138	8.24e+07	1.27	y	1.04	44:41	0.966	0.961	0.971		7560	94.5
13C-PCB-141	8.07e+07	1.28	y	1.07	43:50	0.948	0.943	0.953		7210	90.1
13C-PCB-153	8.40e+07	1.27	y	1.11	43:05	0.931	0.927	0.937		7220	90.3
13C-PCB-155	8.17e+07	1.27	y	0.83	36:52	0.944	0.939	0.949		7270	90.9
13C-PCB-156	9.01e+07	1.28	y	1.24	48:00	1.038	1.032	1.042		6930	86.7
13C-PCB-157	9.42e+07	1.29	y	1.31	48:16	1.043	1.037	1.047		6880	86.0
13C-PCB-159	9.17e+07	1.26	y	1.20	46:00	0.994	0.989	0.999		7320	91.5
13C-PCB-167	9.73e+07	1.26	y	1.32	46:42	1.009	1.004	1.014		7060	88.2
13C-PCB-169	7.92e+07	1.28	y	1.22	50:23	1.089	1.082	1.092		6240	78.0
13C-PCB-170	3.89e+07	0.46	y	0.54	50:43	1.096	1.089	1.101		6960	87.0
13C-PCB-180	5.02e+07	0.46	y	0.67	49:18	1.065	1.059	1.069		7140	89.2
13C-PCB-188	7.31e+07	0.46	y	0.94	42:43	0.923	0.919	0.929		7480	93.5
13C-PCB-189	4.51e+07	0.45	y	0.72	52:11	1.128	1.120	1.132		6040	75.5
13C-PCB-194	4.29e+07	0.90	y	0.81	53:43	0.995	0.990	1.000		7180	89.8
13C-PCB-202	7.01e+07	0.91	y	0.83	48:11	1.042	1.036	1.046		8070	101
13C-PCB-206	3.78e+07	0.79	y	0.66	55:27	1.026	1.021	1.031		7780	97.3
13C-PCB-208	5.62e+07	0.77	y	1.12	52:57	0.980	0.976	0.986		6790	84.8
13C-PCB-209	3.93e+07	1.18	y	0.61	56:46	1.051	1.044	1.054		8680	109

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.52e+08	0.79	y	1.01	37:40	1.029	1.023	1.033	7480	93.5
13C-PCB-178	5.38e+07	0.47	y	0.63	45:32	0.984	0.979	0.989	8160	102

PS vs. IS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.52e+08	0.79	y	1.20	37:40	0.968	0.963	0.973	8460	106
13C-PCB-178	5.38e+07	0.47	y	0.94	45:32	0.924	0.920	0.930	9140	114

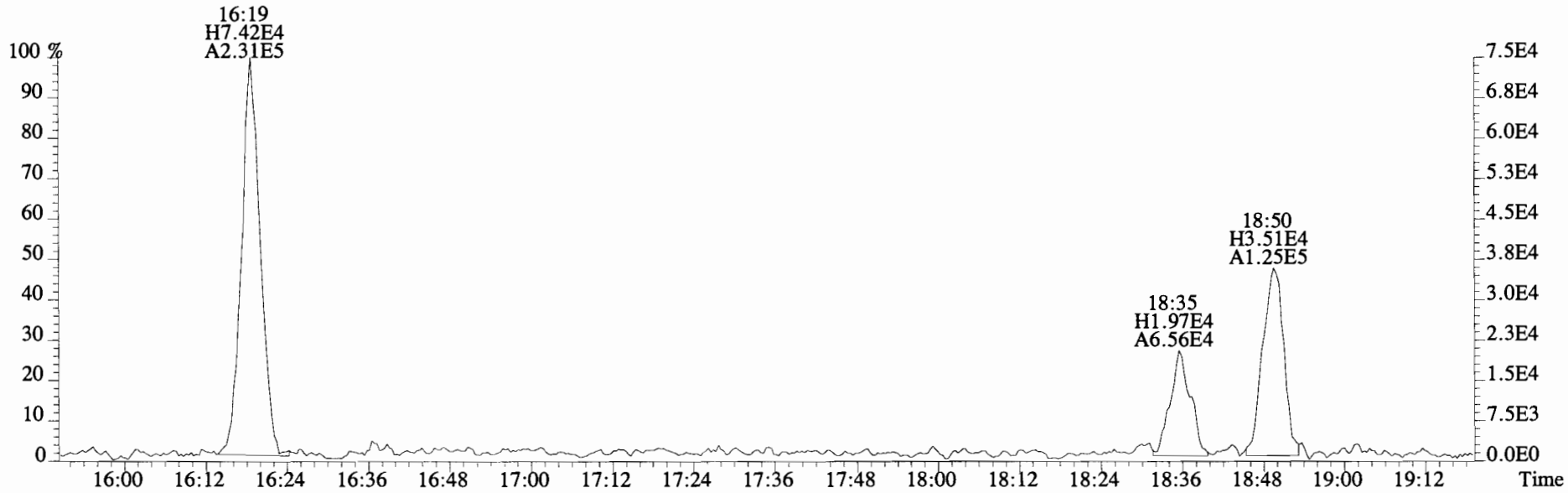
RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.52e+08	1.56	y	1.00	25:50	8000
13C-PCB-31	1.52e+08	1.05	y	1.00	28:50	8000
13C-PCB-60	1.62e+08	0.80	y	1.00	36:36	8000
13C-PCB-111	1.08e+08	1.62	y	1.00	39:04	8000
13C-PCB-128	8.35e+07	1.27	y	1.00	46:16	8000
13C-PCB-205	5.90e+07	0.92	y	1.00	54:01	8000

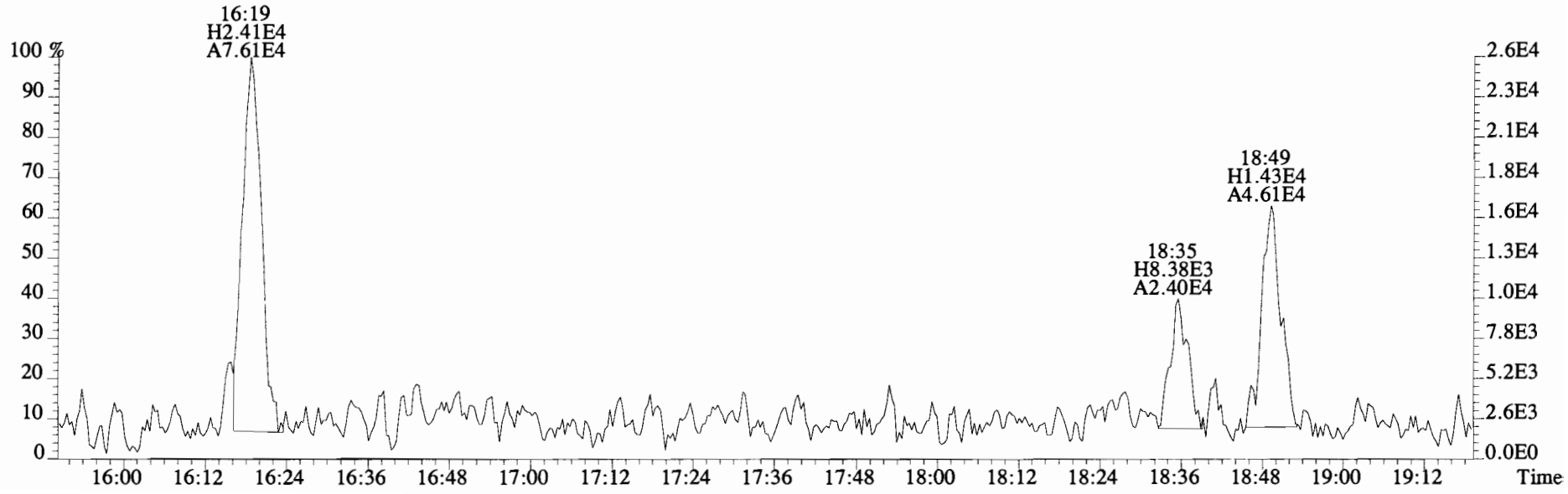
Analyst: DMS

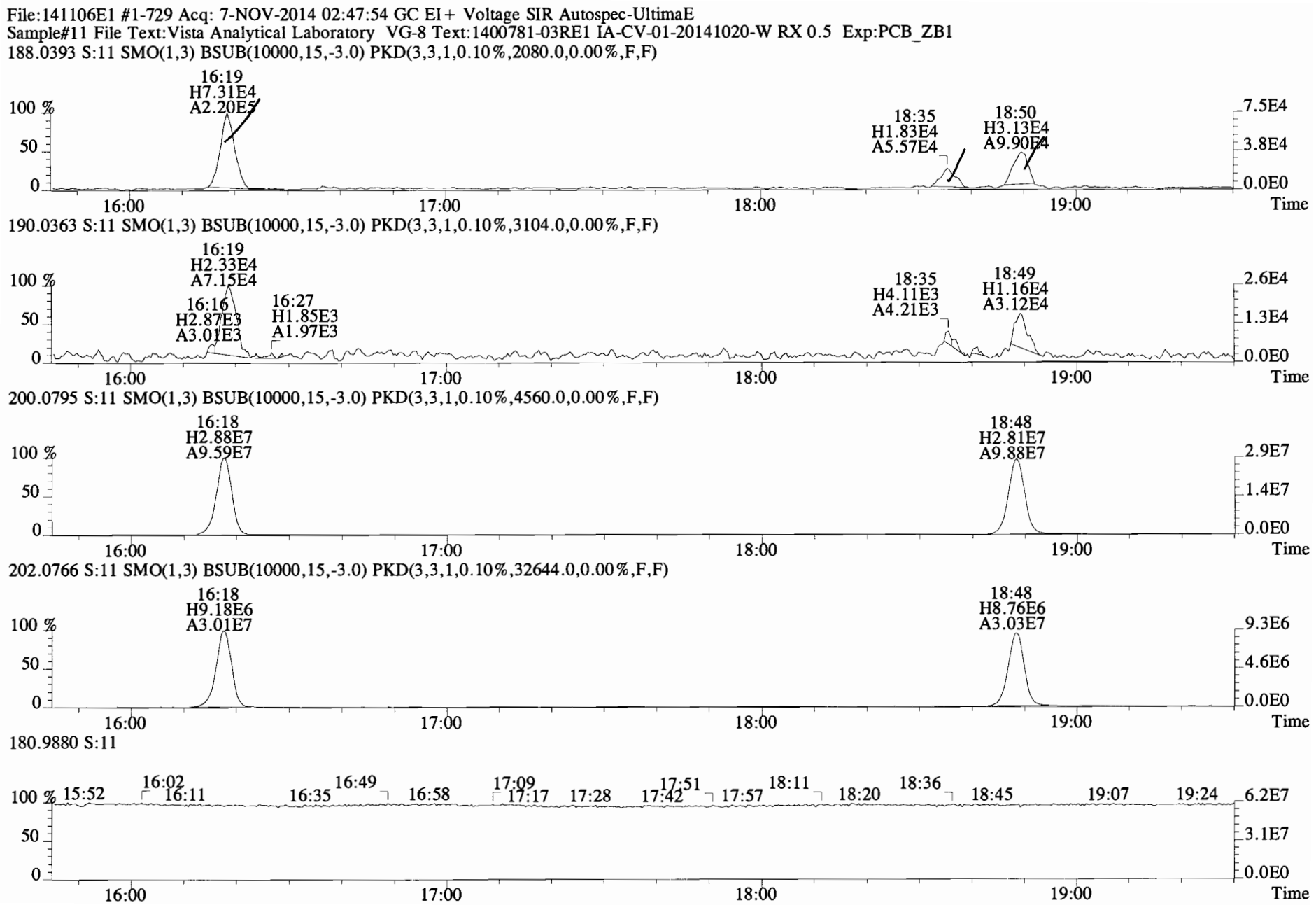
Date: 11/10/14

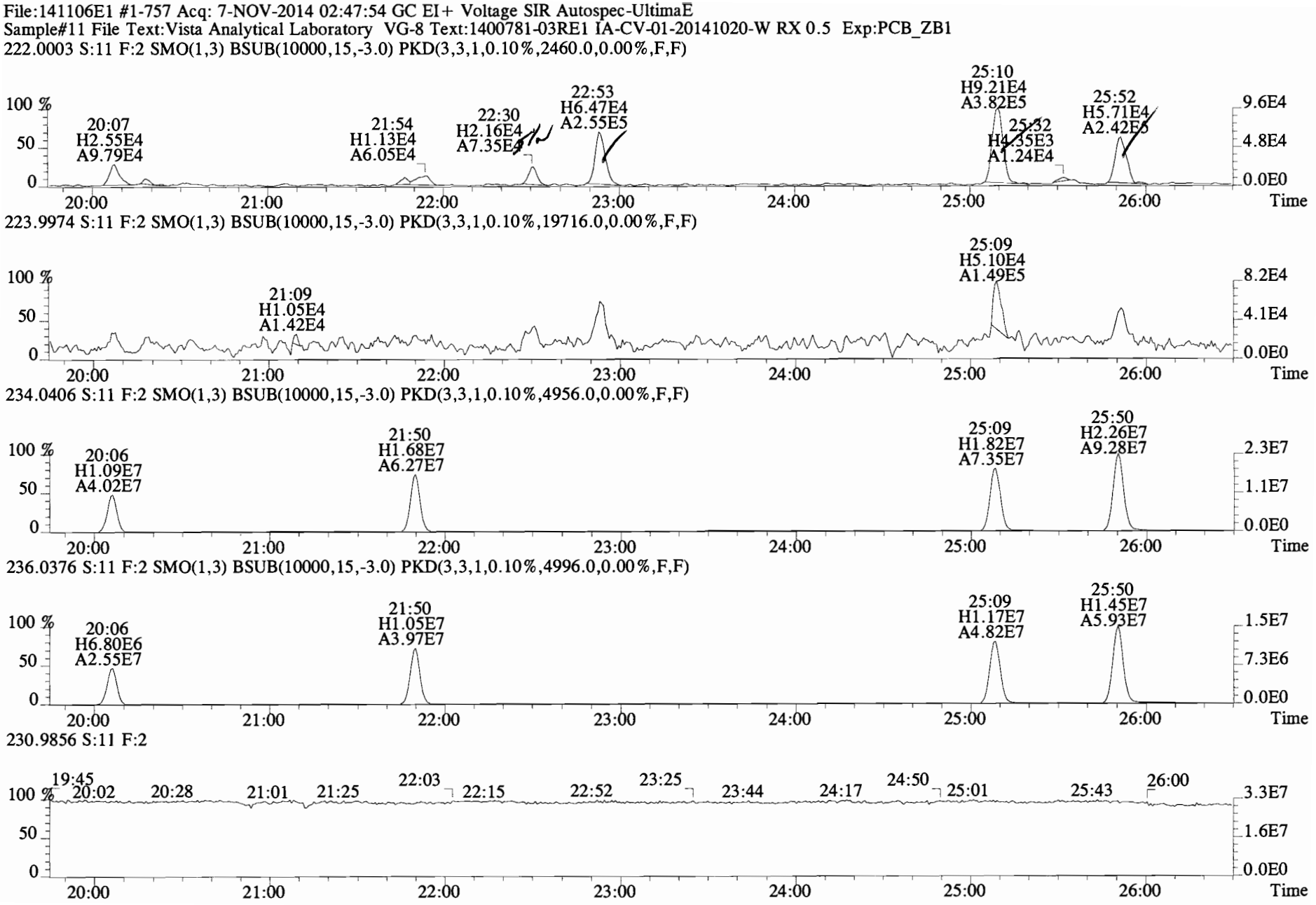
File:141106E1 #1-729 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
188.0393 S:11 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2080.0,0.00%,F,F)



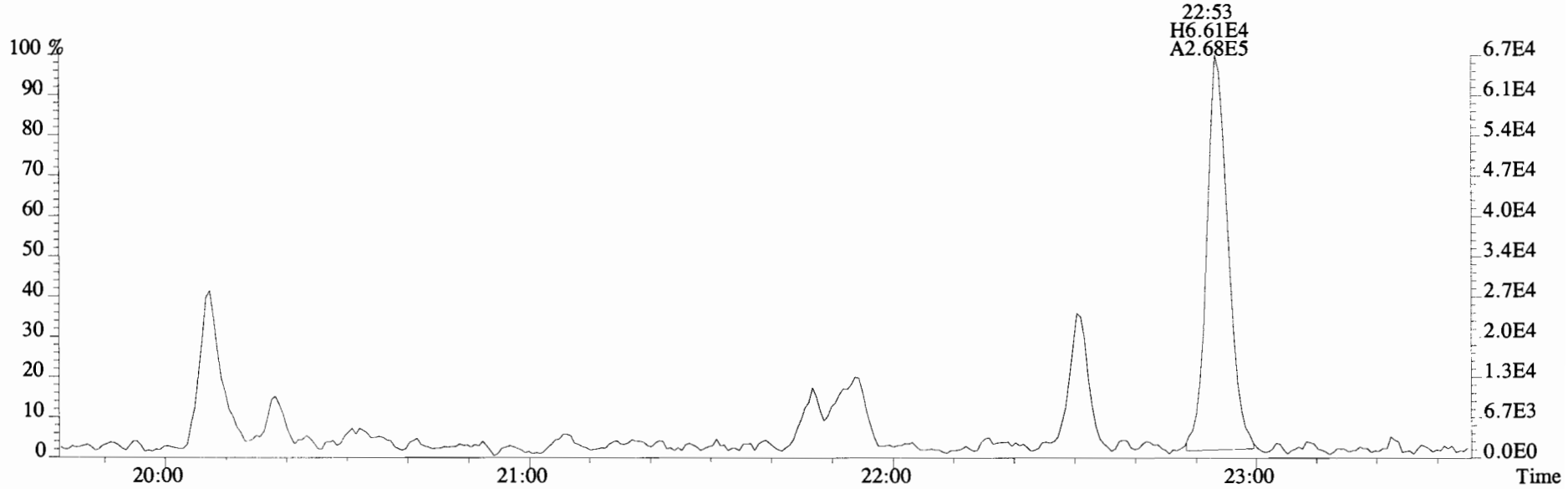
190.0363 S:11 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3104.0,0.00%,F,F)



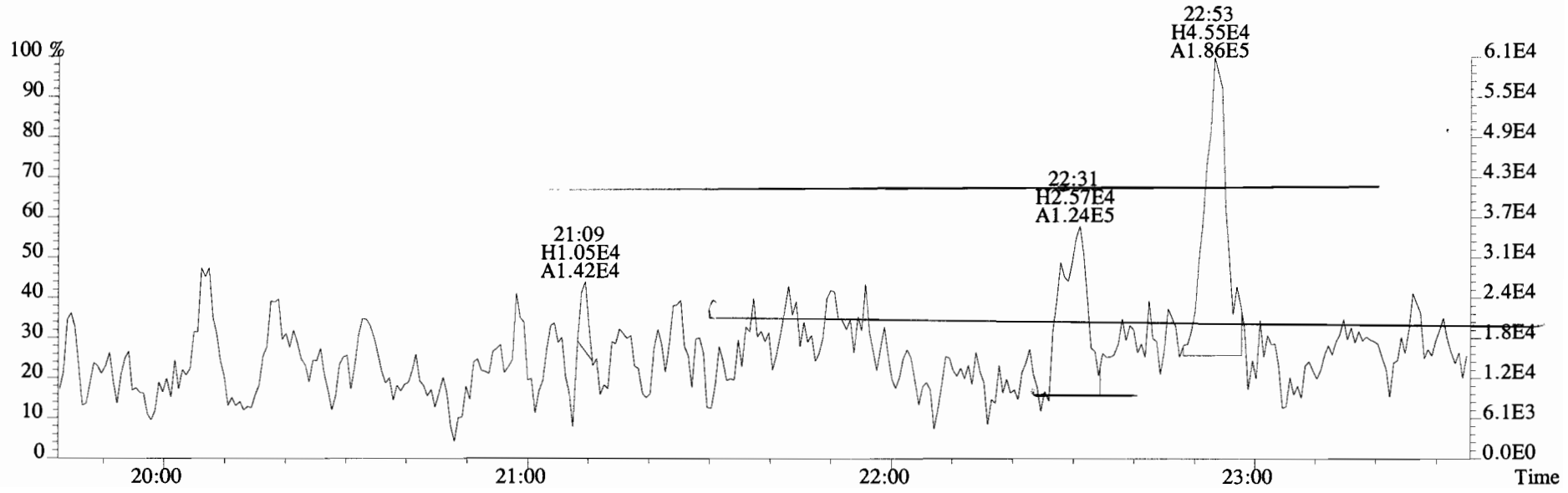

File:141106E1 #1-729 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
188.0393 S:11 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2080.0,0.00%,F,F)
16:19
H7.31E4
A2.20E5
18:35
H1.83E4
A5.57E4
18:50
H3.13E4
A9.90E4
100 %
50
0
7.5E4
3.8E4
0.0E0
16:00
17:00
18:00
19:00
Time
190.0363 S:11 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3104.0,0.00%,F,F)
16:19
H2.33E4
A7.15E4
16:16
H2.87E3
A3.01E3
16:27
H1.85E3
A1.97E3
18:35
H4.11E3
A4.21E3
18:49
H1.16E4
A3.12E4
100 %
50
0
2.6E4
1.3E4
0.0E0
16:00
17:00
18:00
19:00
Time
200.0795 S:11 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4560.0,0.00%,F,F)
16:18
H2.88E7
A9.59E7
18:48
H2.81E7
A9.88E7
100 %
50
0
2.9E7
1.4E7
0.0E0
16:00
17:00
18:00
19:00
Time
202.0766 S:11 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,32644.0,0.00%,F,F)
16:18
H9.18E6
A3.01E7
18:48
H8.76E6
A3.03E7
100 %
50
0
9.3E6
4.6E6
0.0E0
16:00
17:00
18:00
19:00
Time
180.9880 S:11
15:52
16:02
16:11
16:35
16:49
16:58
17:09
17:17
17:28
17:42
17:51
17:57
18:11
18:20
18:36
18:45
19:07
19:24
100 %
50
0
6.2E7
3.1E7
0.0E0
16:00
17:00
18:00
19:00
Time


File:141106E1 #1-757 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
222.0003 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2460.0,0.00%,F,F)
20:07 H2.55E4 A9.79E4
21:54 H1.13E4 A6.05E4
22:30 H2.16E4 A7.35E4
22:53 H6.47E4 A2.55E5
25:10 H9.21E4 A3.82E5
25:32 H4.35E3 A1.24E4
25:52 H5.71E4 A2.42E5
223.9974 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,19716.0,0.00%,F,F)
21:09 H1.05E4 A1.42E4
25:09 H5.10E4 A1.49E5
234.0406 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4956.0,0.00%,F,F)
20:06 H1.09E7 A4.02E7
21:50 H1.68E7 A6.27E7
25:09 H1.82E7 A7.35E7
25:50 H2.26E7 A9.28E7
236.0376 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4996.0,0.00%,F,F)
20:06 H6.80E6 A2.55E7
21:50 H1.05E7 A3.97E7
25:09 H1.17E7 A4.82E7
25:50 H1.45E7 A5.93E7
230.9856 S:11 F:2
19:45 20:02 20:28 21:01 21:25 22:03 22:15 22:52 23:25 23:44 24:17 24:50 25:01 25:43 26:00
100 %
50
0
20:00 21:00 22:00 23:00 24:00 25:00 26:00 Time
9.6E4 4.8E4 0.0E0
8.2E4 4.1E4 0.0E0
2.3E7 1.1E7 0.0E0
1.5E7 7.3E6 0.0E0
3.3E7 1.6E7 0.0E0

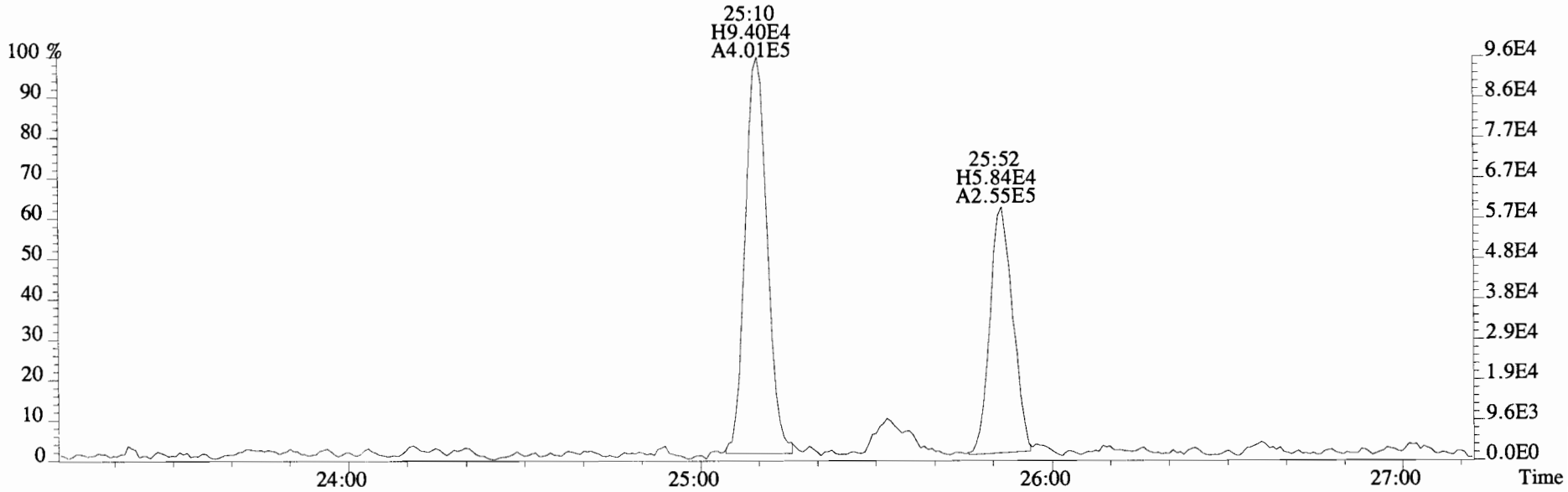
File:141106E1 #1-757 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
222.0003 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0)



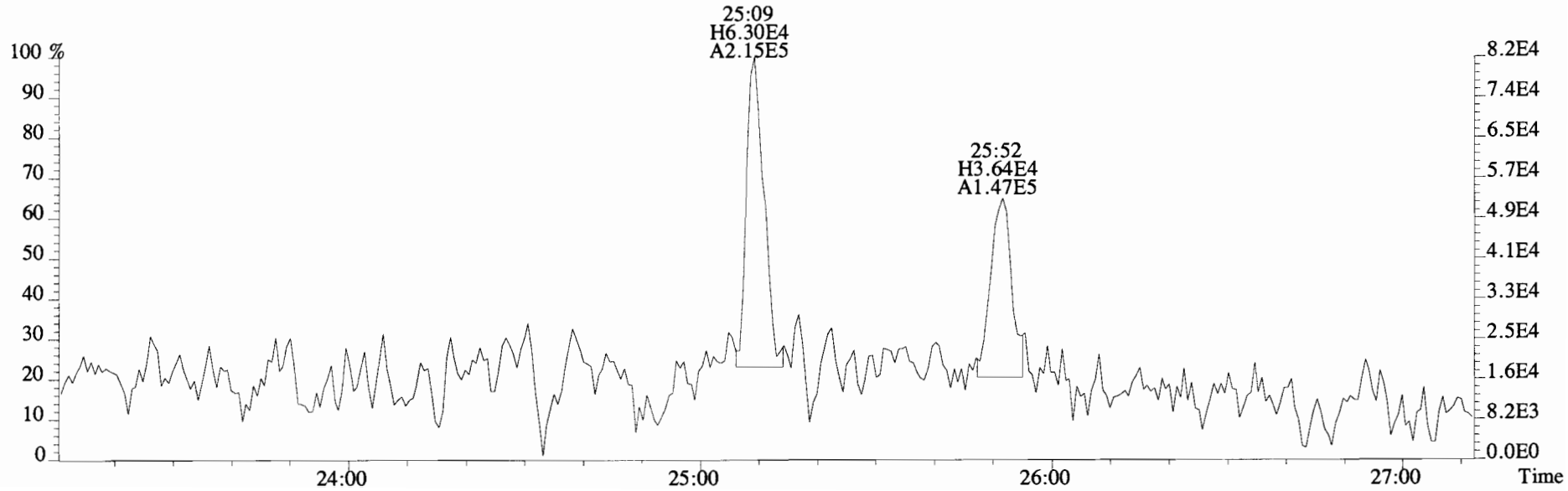
223.9974 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,19716.0,0.00%,F,F)

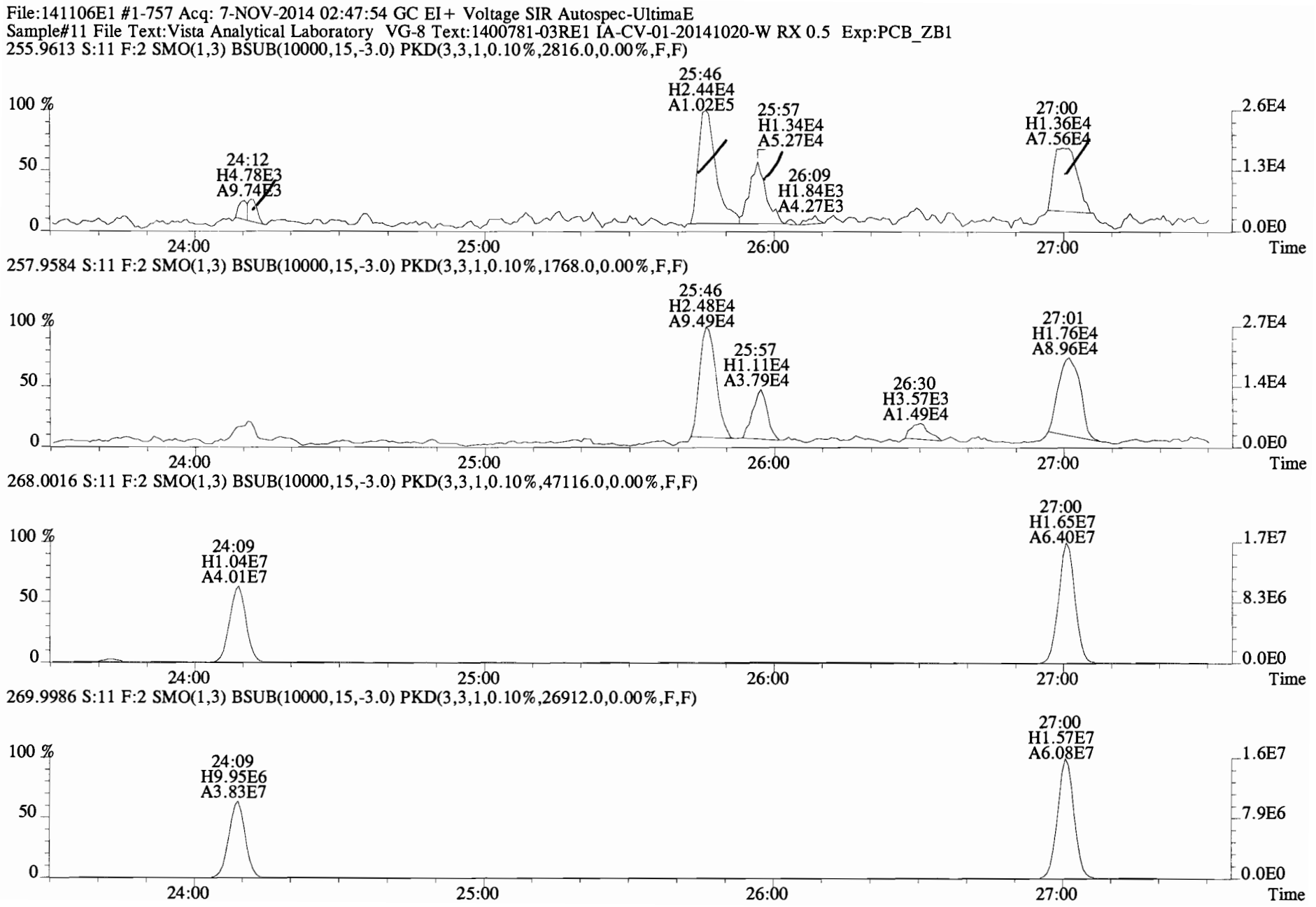


File:141106E1 #1-757 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
222.0003 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0)

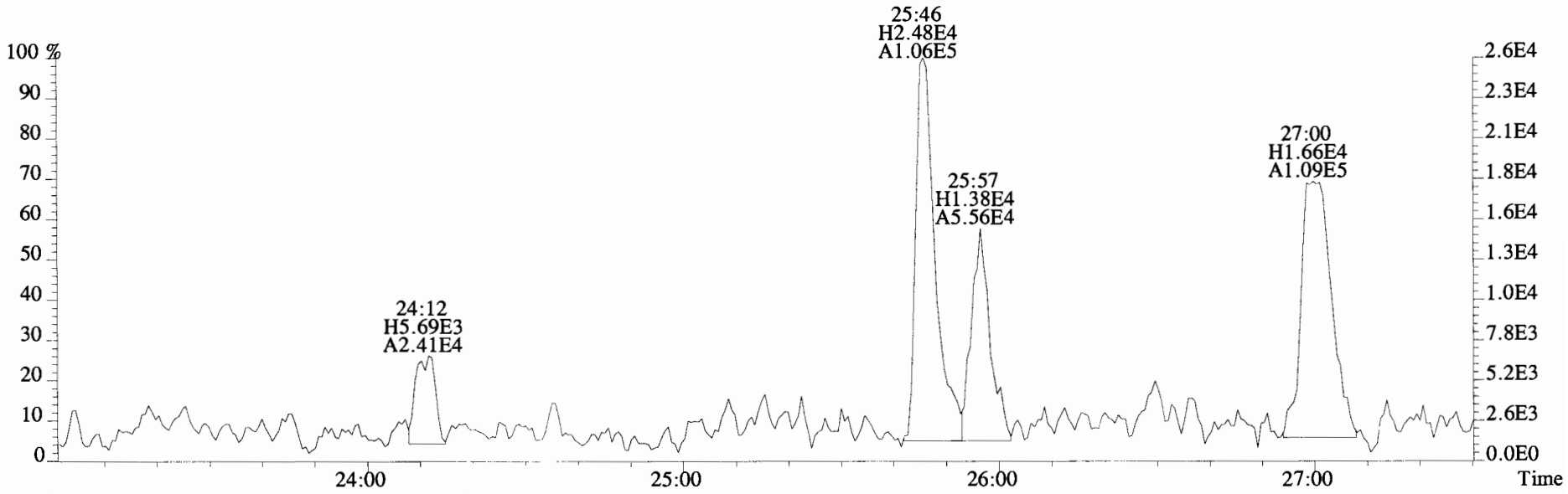


223.9974 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,19716.0,0.00%,F,F)

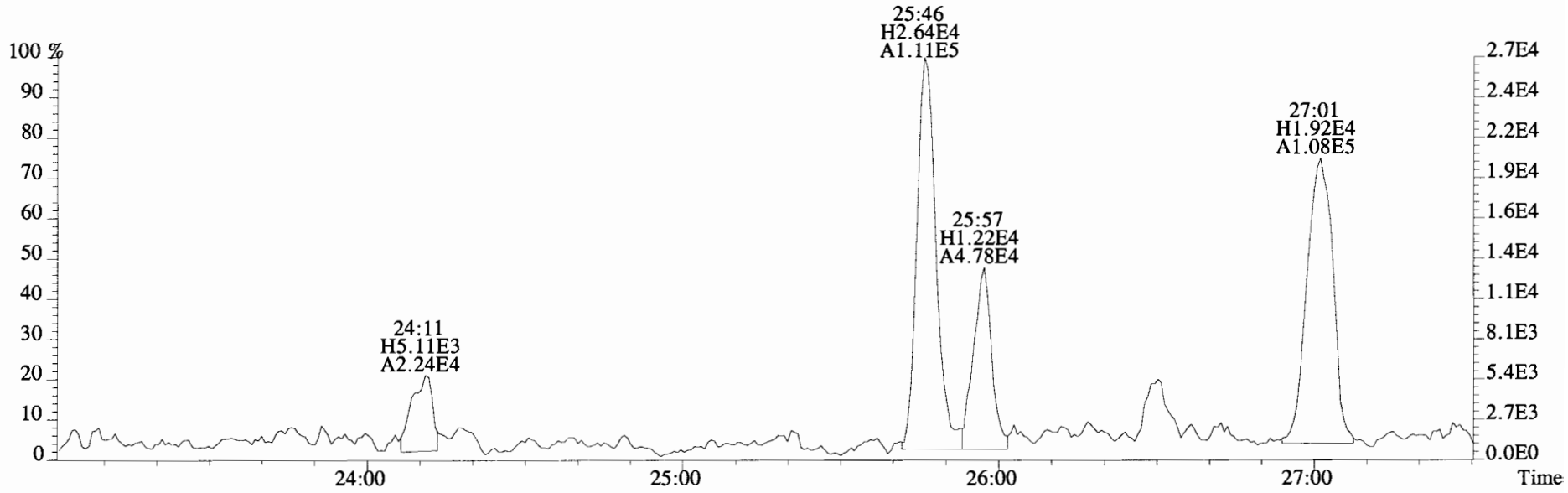


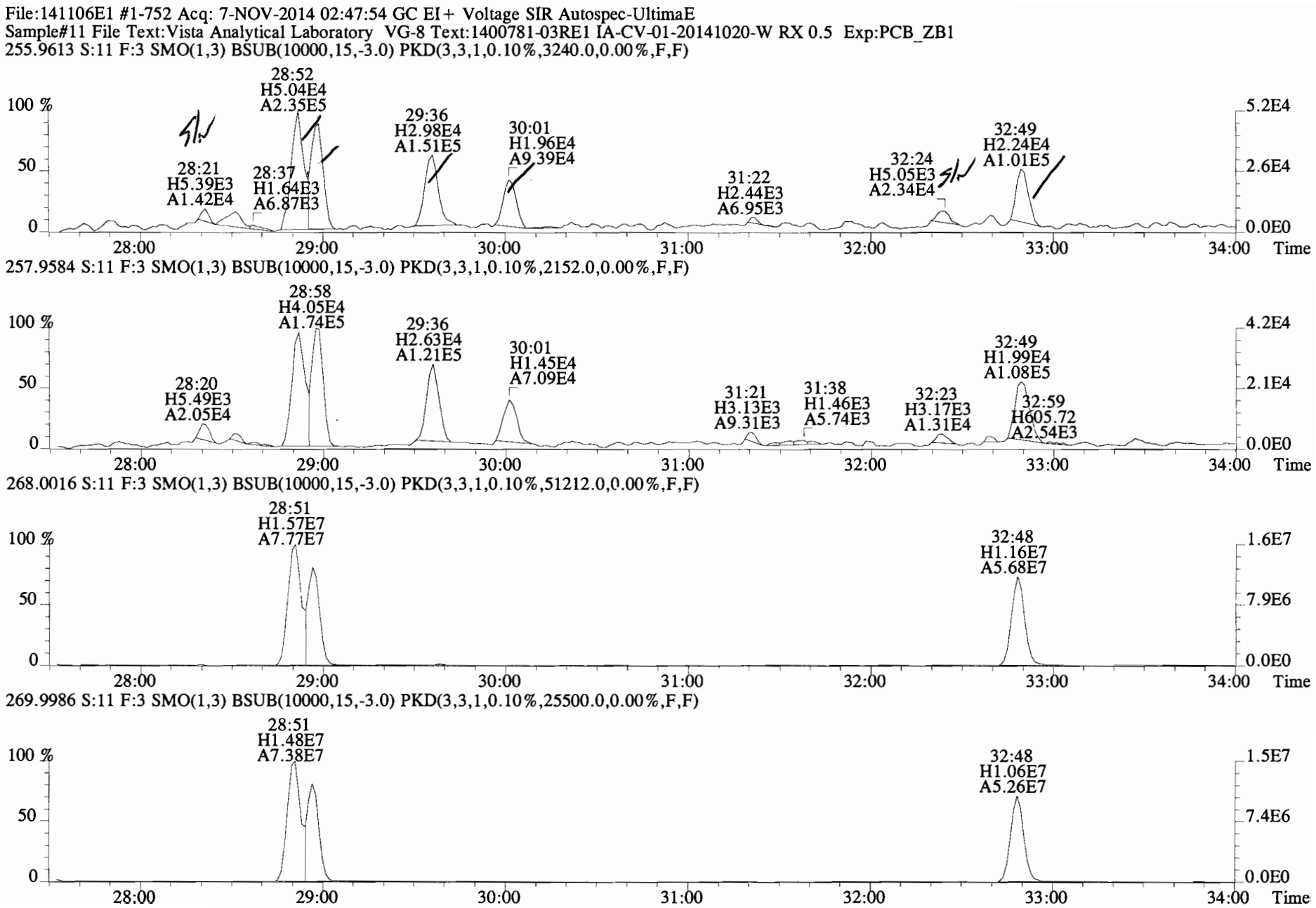

File:141106E1 #1-757 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
255.9613 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2816.0,0.00%,F,F)
25:46 H2.44E4 A1.02E5
25:57 H1.34E4 A5.27E4
27:00 H1.36E4 A7.56E4
24:12 H4.78E3 A9.74E3
26:09 H1.84E3 A4.27E3
100 %
50
0
2.6E4
1.3E4
0.0E0
24:00
25:00
26:00
27:00
Time
257.9584 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1768.0,0.00%,F,F)
25:46 H2.48E4 A9.49E4
25:57 H1.11E4 A3.79E4
27:01 H1.76E4 A8.96E4
26:30 H3.57E3 A1.49E4
100 %
50
0
2.7E4
1.4E4
0.0E0
24:00
25:00
26:00
27:00
Time
268.0016 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,47116.0,0.00%,F,F)
27:00 H1.65E7 A6.40E7
24:09 H1.04E7 A4.01E7
100 %
50
0
1.7E7
8.3E6
0.0E0
24:00
25:00
26:00
27:00
Time
269.9986 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,26912.0,0.00%,F,F)
27:00 H1.57E7 A6.08E7
24:09 H9.95E6 A3.83E7
100 %
50
0
1.6E7
7.9E6
0.0E0
24:00
25:00
26:00
27:00
Time

File:141106E1 #1-757 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
255.9613 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0)

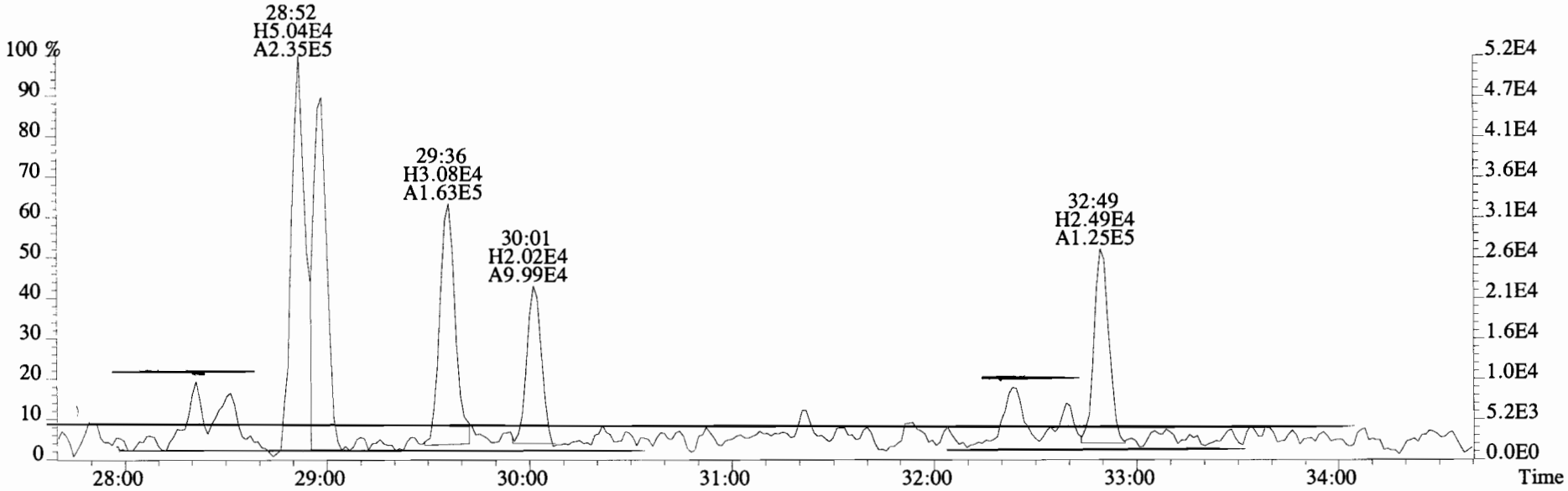


257.9584 S:11 F:2 SMO(1,3) BSUB(10000,15,-3.0)

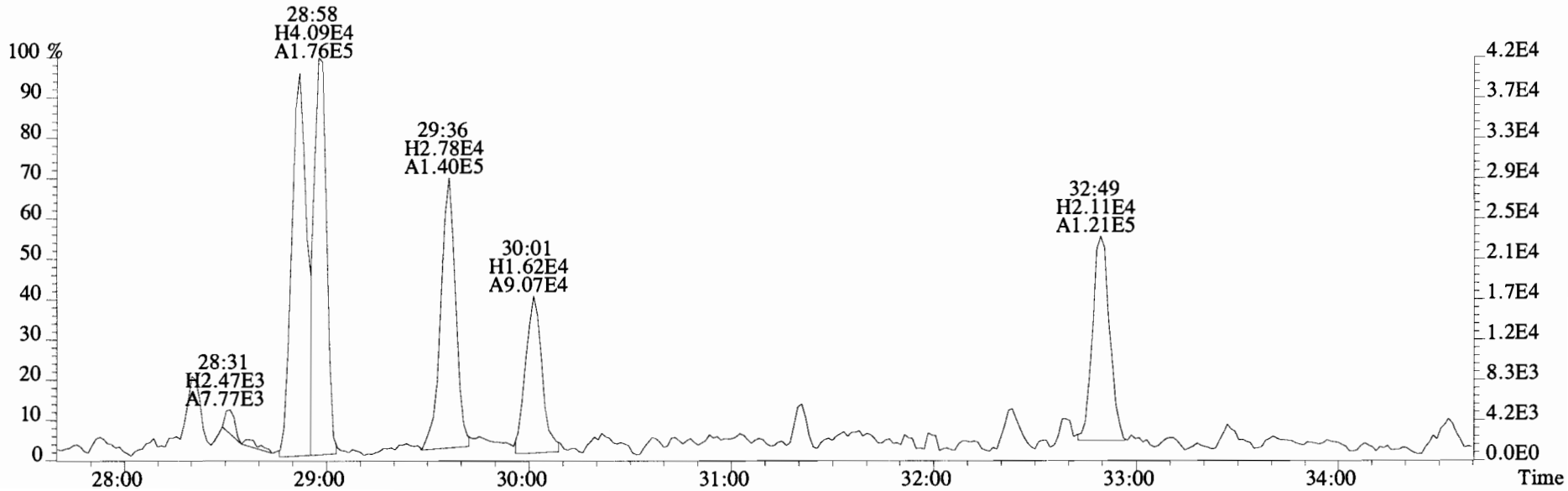



File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
255.9613 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3240.0,0.00%,F,F)
28:52 H5.04E4 A2.35E5
29:36 H2.98E4 A1.51E5
30:01 H1.96E4 A9.39E4
28:21 H5.39E3 A1.42E4
28:37 H1.64E3 A6.87E3
31:22 H2.44E3 A6.95E3
32:24 H5.05E3 A2.34E4
32:49 H2.24E4 A1.01E5
257.9584 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2152.0,0.00%,F,F)
28:58 H4.05E4 A1.74E5
29:36 H2.63E4 A1.21E5
30:01 H1.45E4 A7.09E4
28:20 H5.49E3 A2.05E4
31:21 H3.13E3 A9.31E3
31:38 H1.46E3 A5.74E3
32:23 H3.17E3 A1.31E4
32:49 H1.99E4 A1.08E5
32:59 H605.72 A2.54E3
268.0016 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,51212.0,0.00%,F,F)
28:51 H1.57E7 A7.77E7
32:48 H1.16E7 A5.68E7
269.9986 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25500.0,0.00%,F,F)
28:51 H1.48E7 A7.38E7
32:48 H1.06E7 A5.26E7
100 %
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
Time
5.2E4
2.6E4
0.0E0
4.2E4
2.1E4
1.6E7
7.9E6
1.5E7
7.4E6

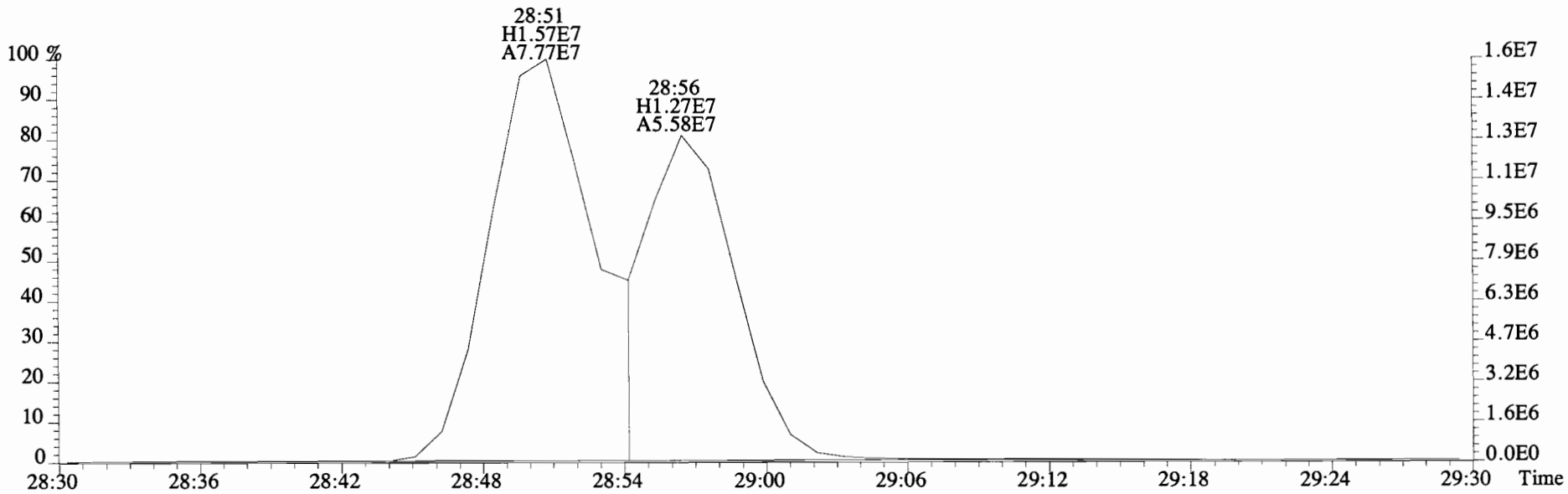
File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
255.9613 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3240.0,0.00%,F,F)



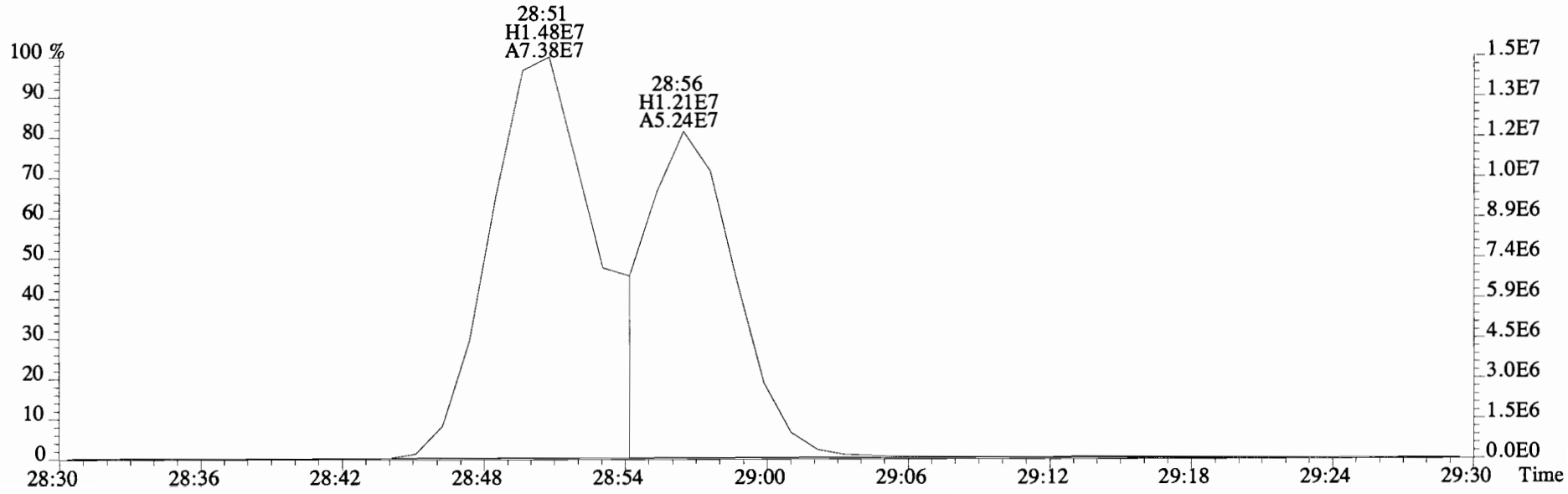
257.9584 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2152.0,0.00%,F,F)



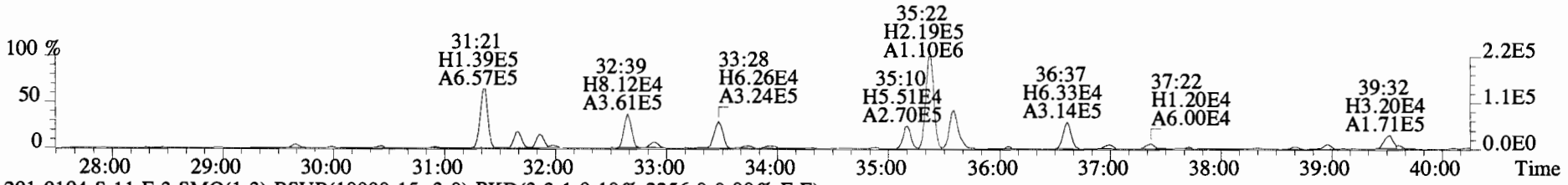
File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
268.0016 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,51212.0,0.00%,F,F)



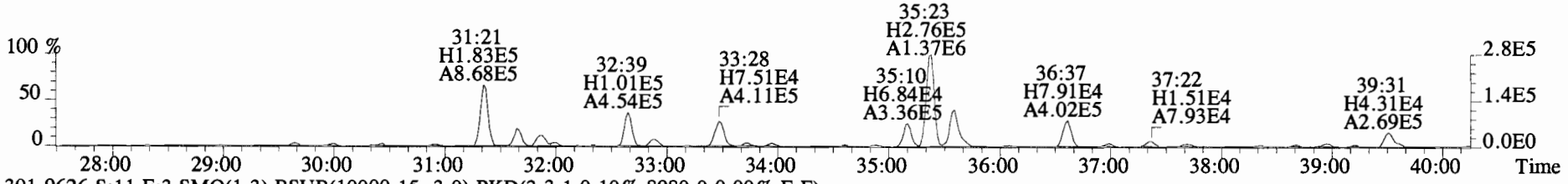
269.9986 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,25500.0,0.00%,F,F)



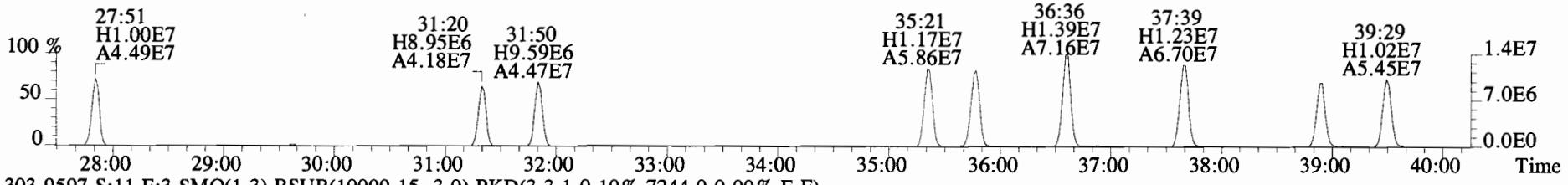
File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1916.0,0.00%,F,F)



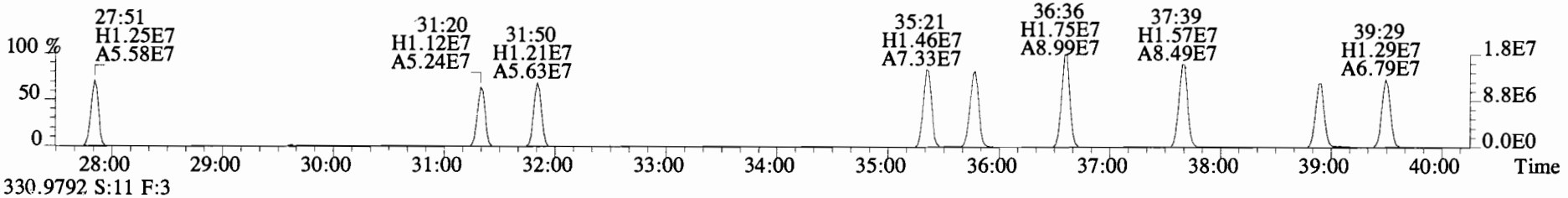
291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2256.0,0.00%,F,F)



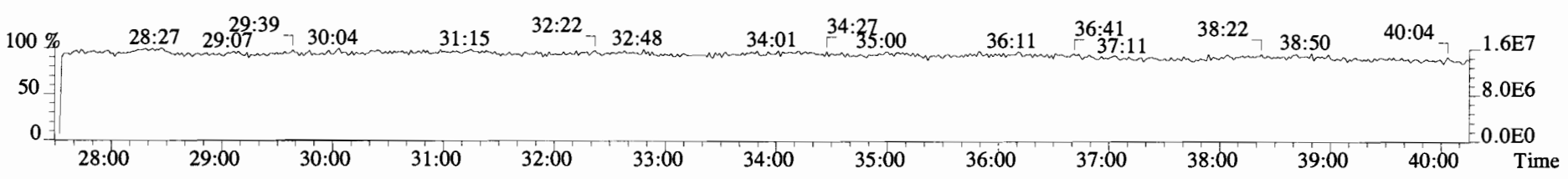
301.9626 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8980.0,0.00%,F,F)



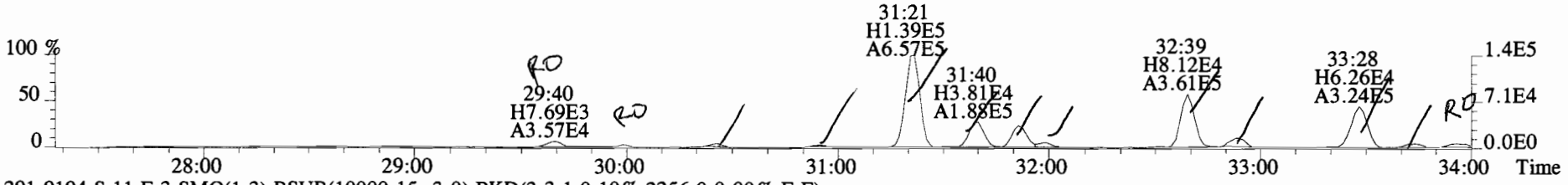
303.9597 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7244.0,0.00%,F,F)



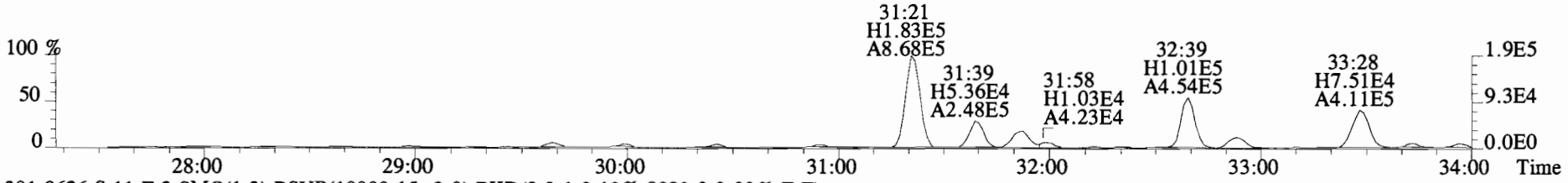
330.9792 S:11 F:3



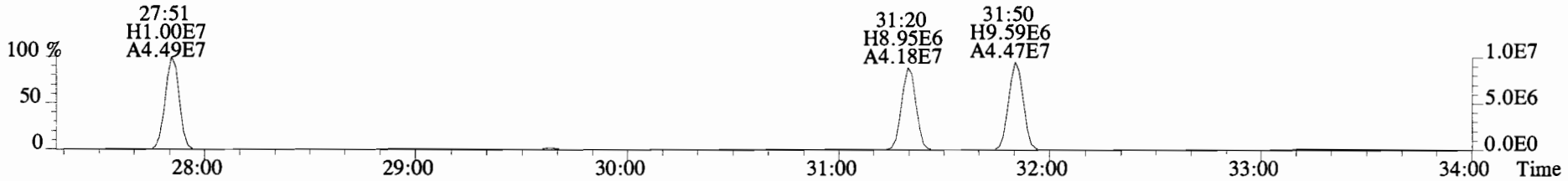
File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1916.0,0.00%,F,F)



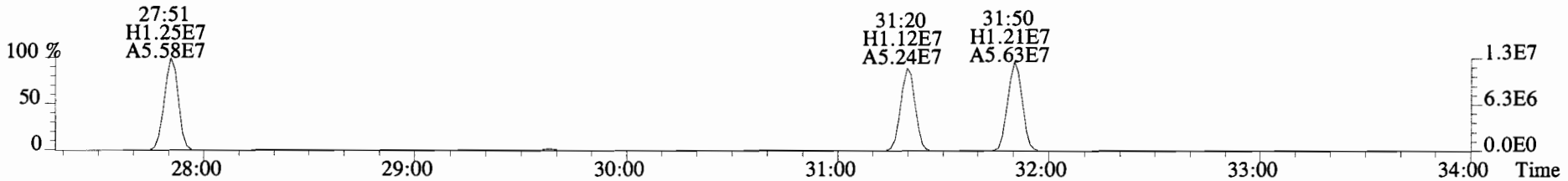
291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2256.0,0.00%,F,F)



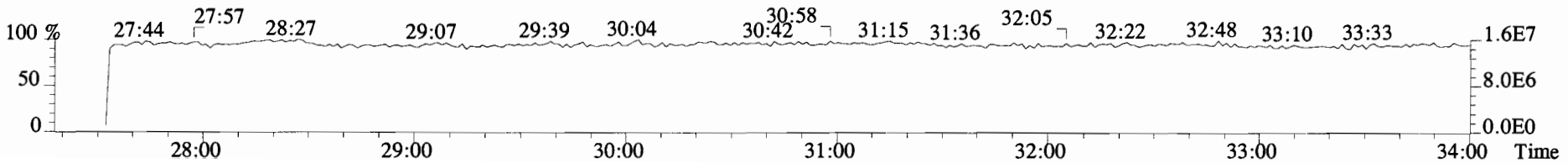
301.9626 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8980.0,0.00%,F,F)

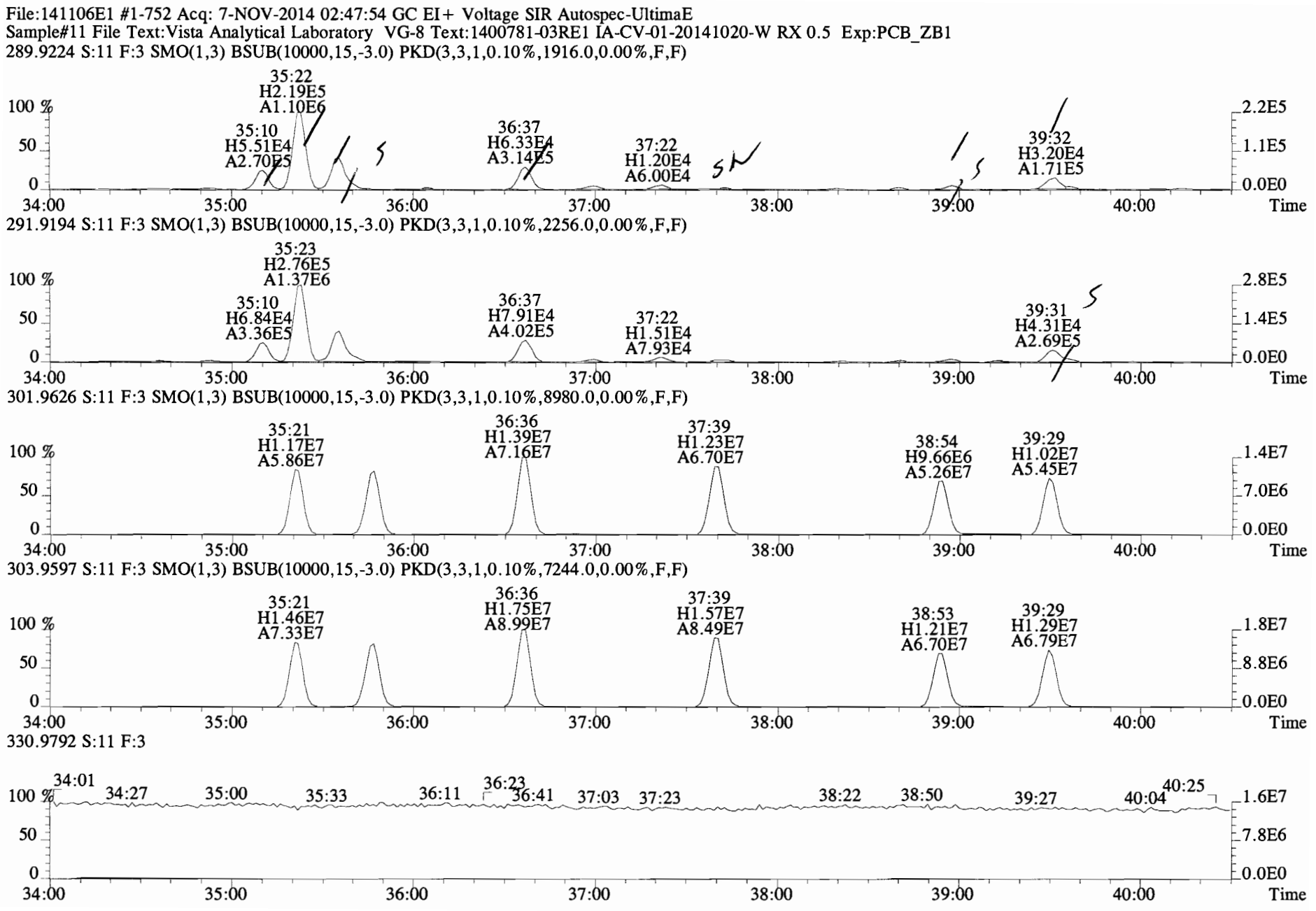


303.9597 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7244.0,0.00%,F,F)

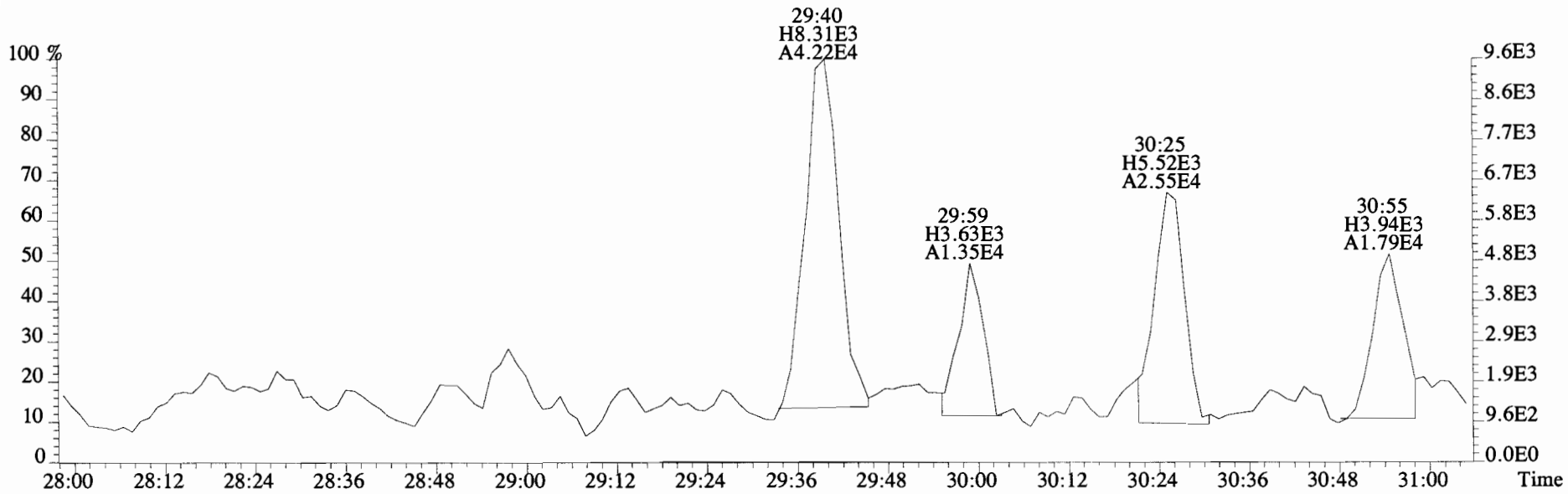


330.9792 S:11 F:3

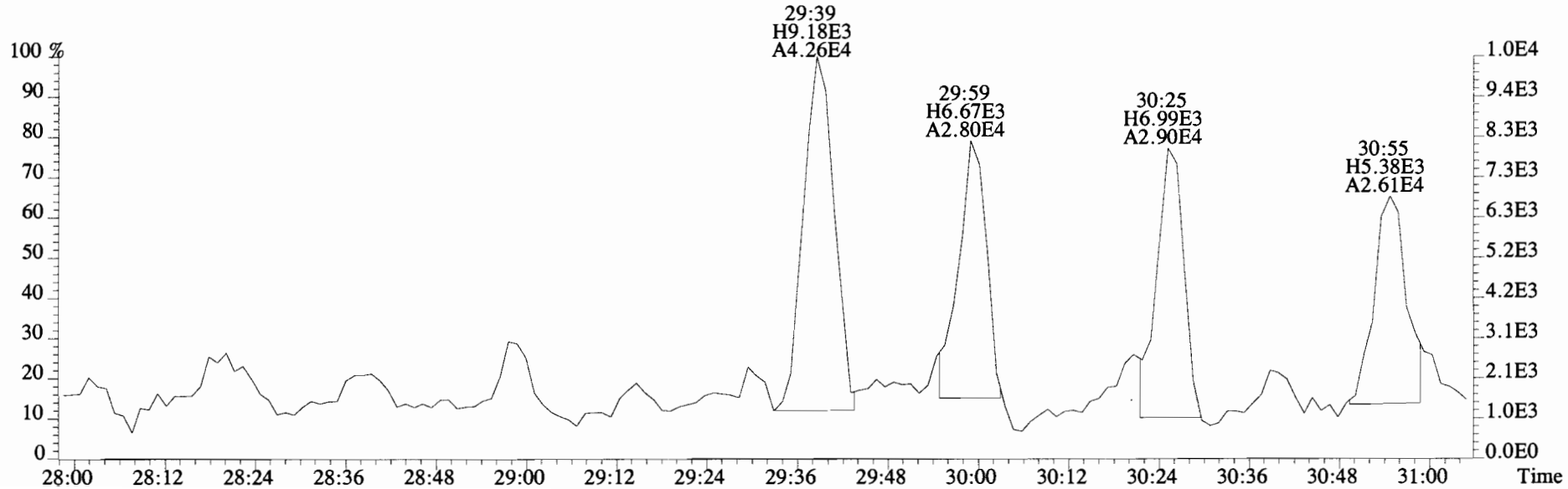



File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1916.0,0.00%,F,F)
35:22 H2.19E5 A1.10E6
35:10 H5.51E4 A2.70E5
36:37 H6.33E4 A3.14E5
37:22 H1.20E4 A6.00E4
39:32 H3.20E4 A1.71E5
291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2256.0,0.00%,F,F)
35:23 H2.76E5 A1.37E6
35:10 H6.84E4 A3.36E5
36:37 H7.91E4 A4.02E5
37:22 H1.51E4 A7.93E4
39:31 H4.31E4 A2.69E5
301.9626 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8980.0,0.00%,F,F)
35:21 H1.17E7 A5.86E7
36:36 H1.39E7 A7.16E7
37:39 H1.23E7 A6.70E7
38:54 H9.66E6 A5.26E7
39:29 H1.02E7 A5.45E7
303.9597 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7244.0,0.00%,F,F)
35:21 H1.46E7 A7.33E7
36:36 H1.75E7 A8.99E7
37:39 H1.57E7 A8.49E7
38:53 H1.21E7 A6.70E7
39:29 H1.29E7 A6.79E7
330.9792 S:11 F:3
34:01 34:27 35:00 35:33 36:11 36:23 36:41 37:03 37:23 38:22 38:50 39:27 40:04 40:25
100 %
50
0
34:00 35:00 36:00 37:00 38:00 39:00 40:00 Time
2.2E5 1.1E5 0.0E0
2.8E5 1.4E5 0.0E0
1.4E7 7.0E6 0.0E0
1.8E7 8.8E6 0.0E0
1.6E7 7.8E6 0.0E0

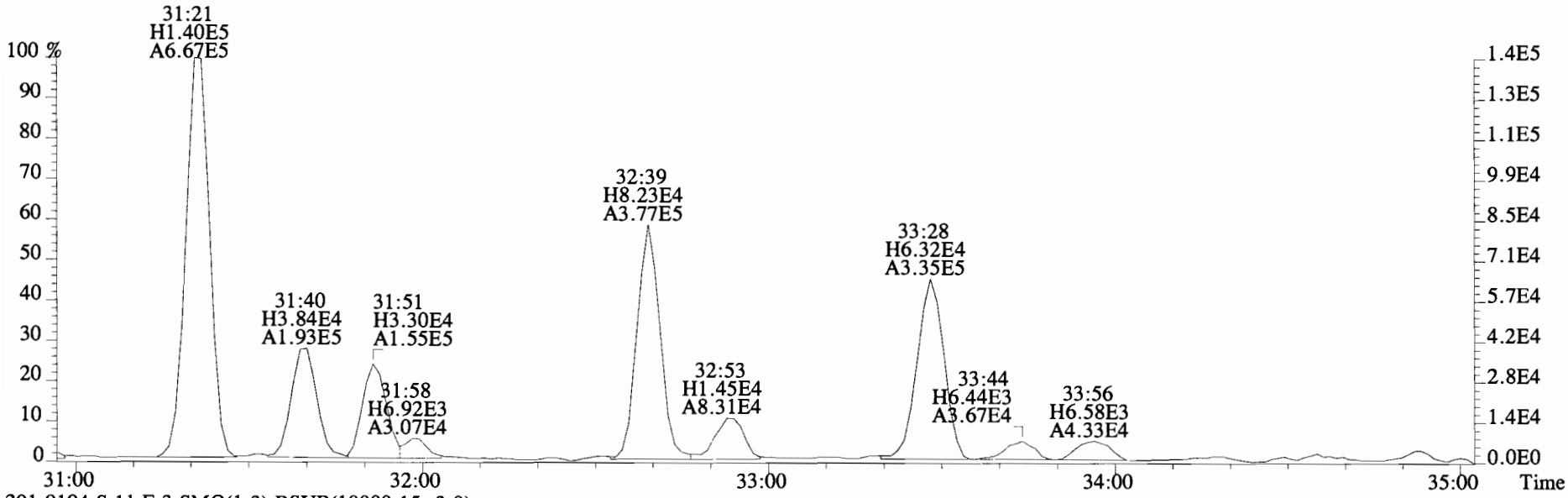
File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0)



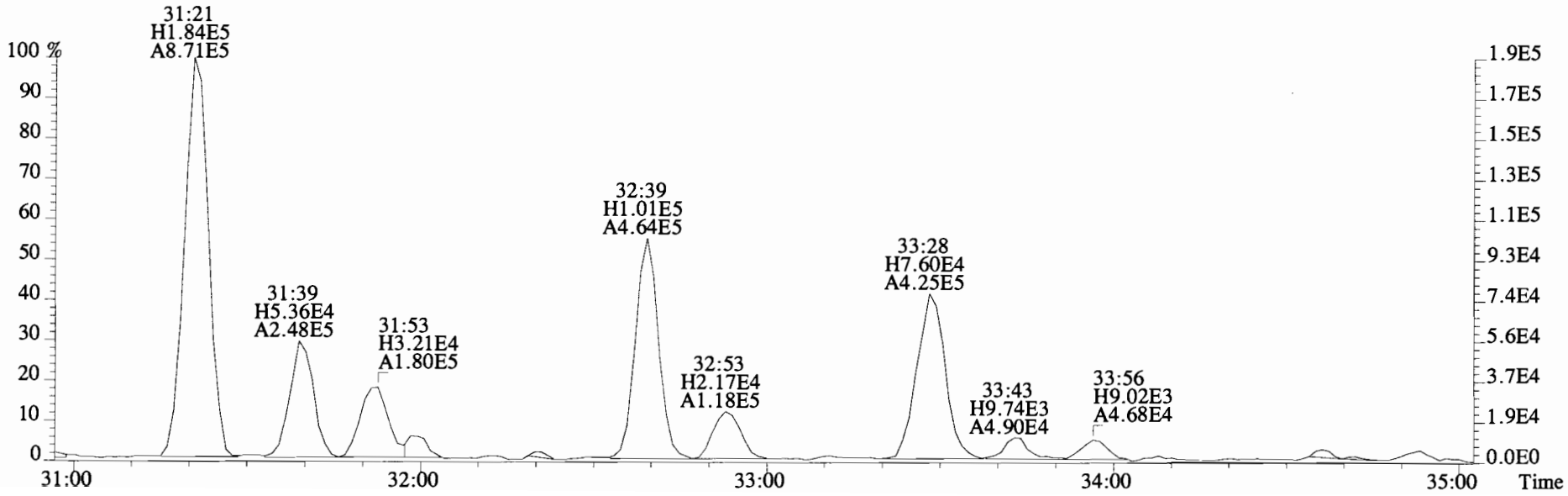
291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0)

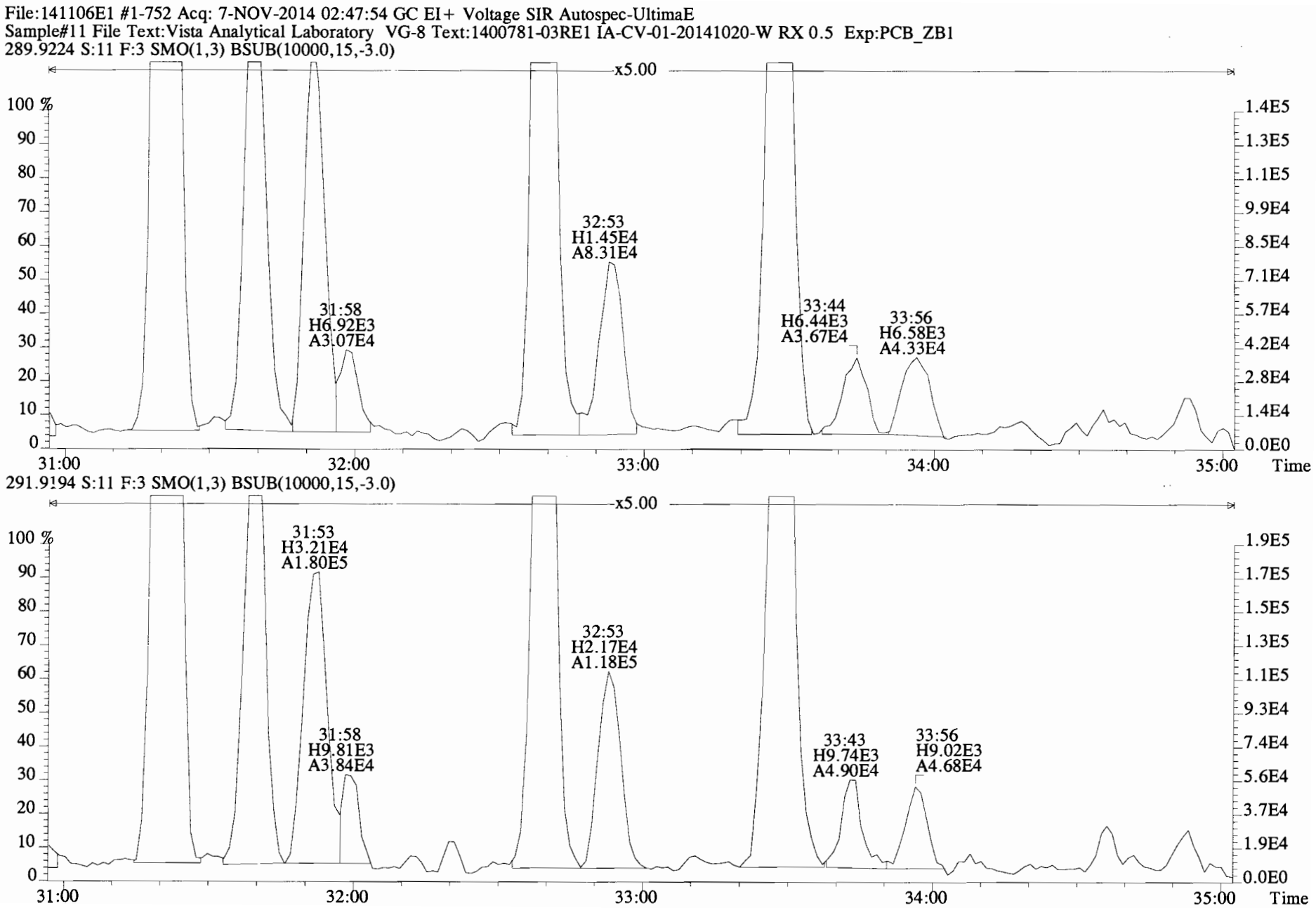


File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0)

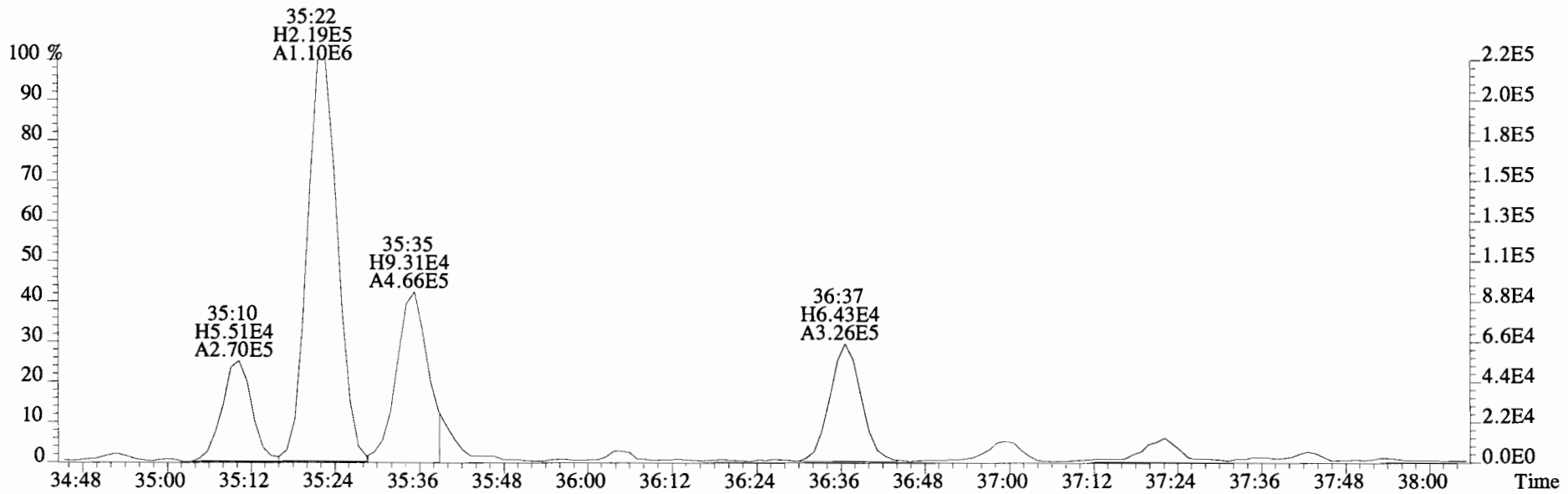


291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0)

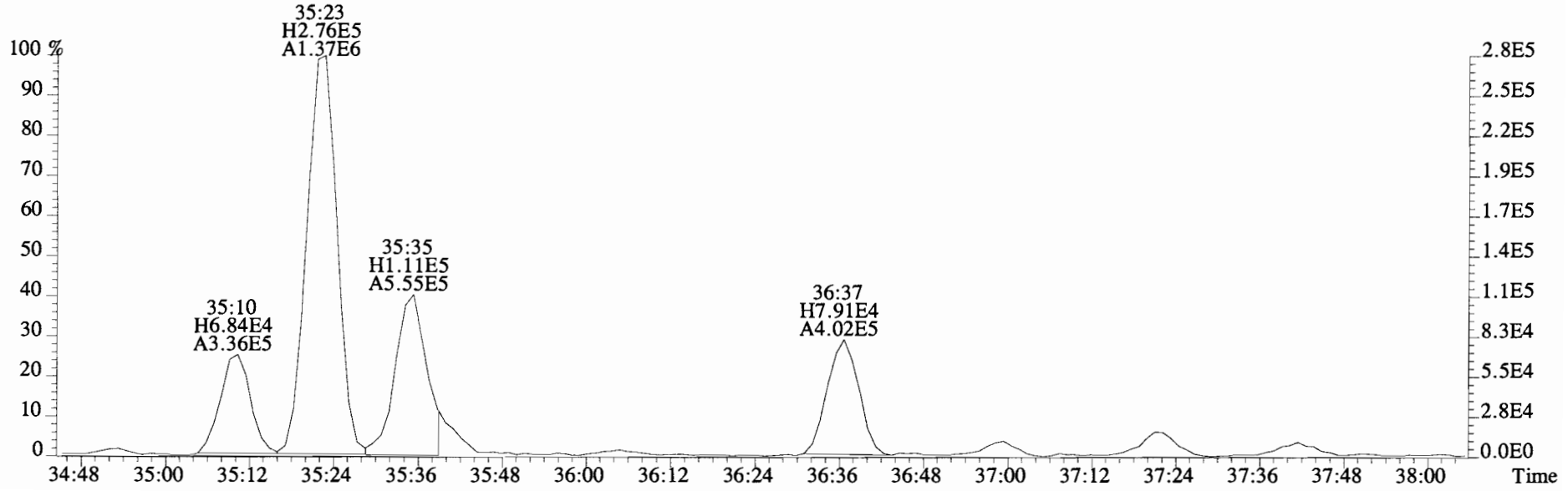



File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
31:58
H6.92E3
A3.07E4
32:53
H1.45E4
A8.31E4
33:44
H6.44E3
A3.67E4
33:56
H6.58E3
A4.33E4
Time
291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
31:53
H3.21E4
A1.80E5
31:58
H9.81E3
A3.84E4
32:53
H2.17E4
A1.18E5
33:43
H9.74E3
A4.90E4
33:56
H9.02E3
A4.68E4
Time

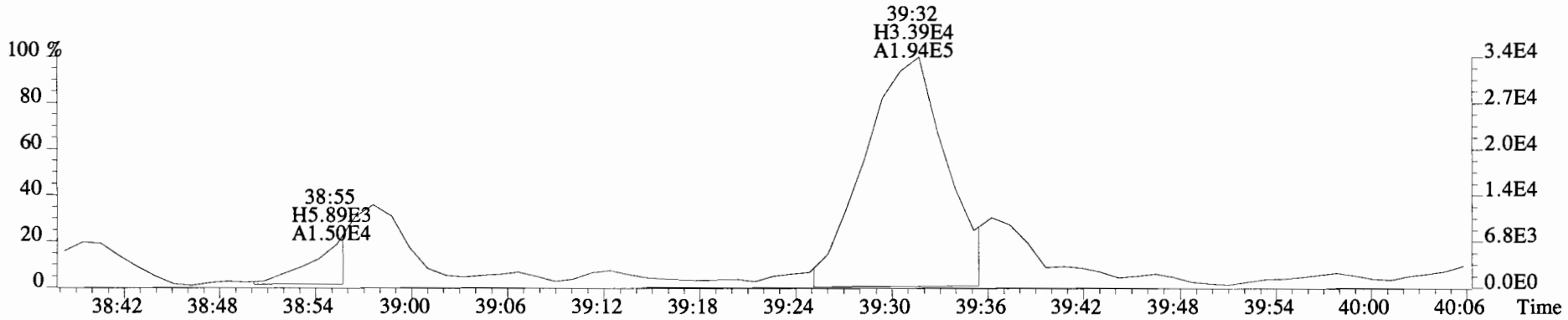
File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0)



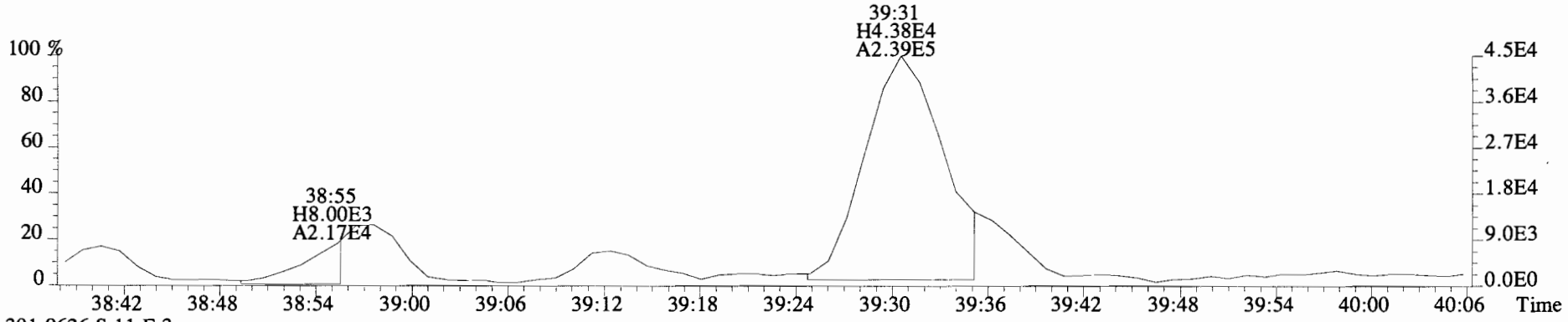
291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0)



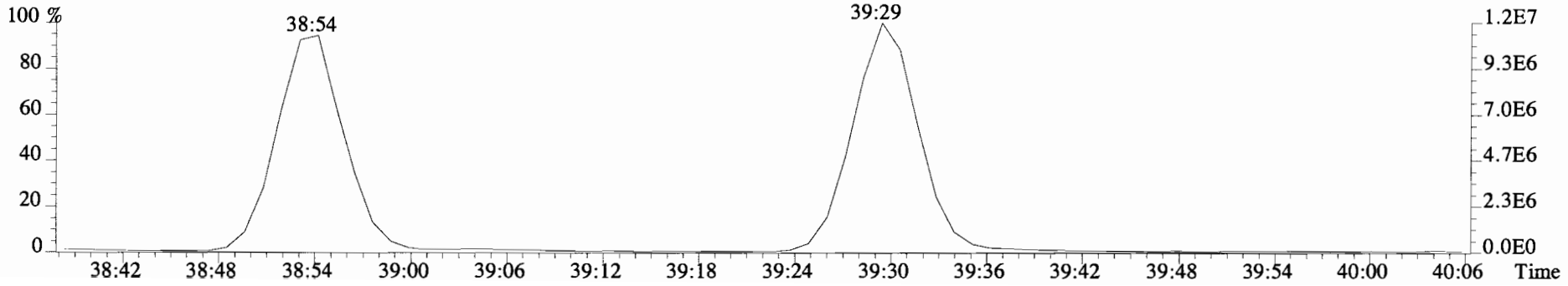
File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
289.9224 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0)



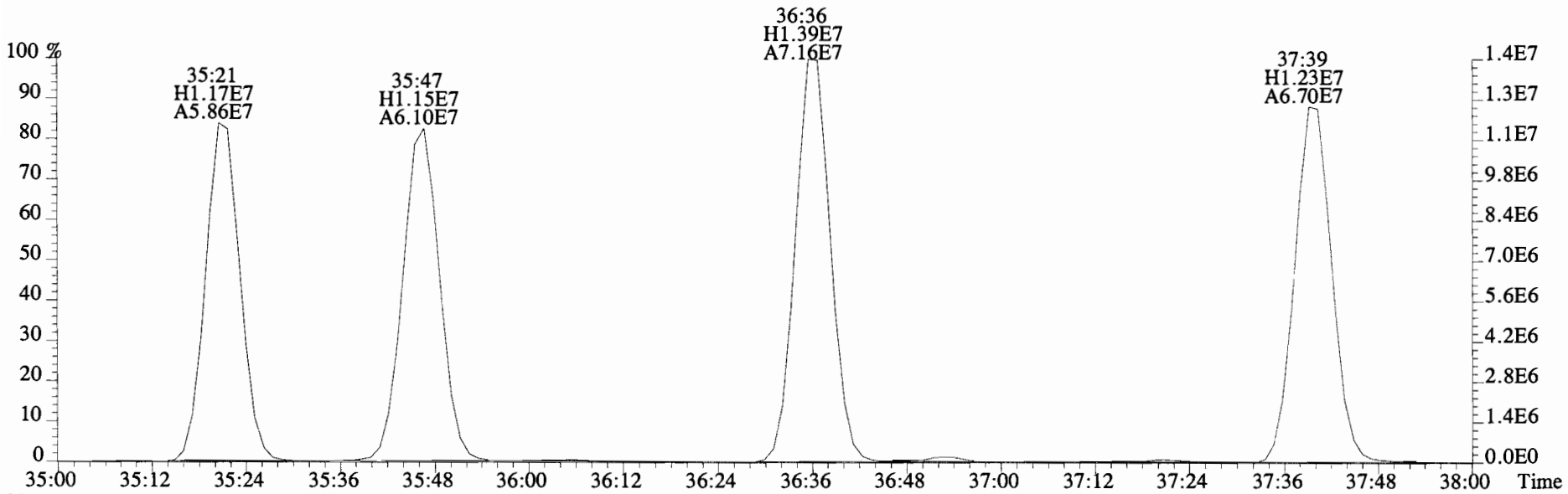
291.9194 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0)



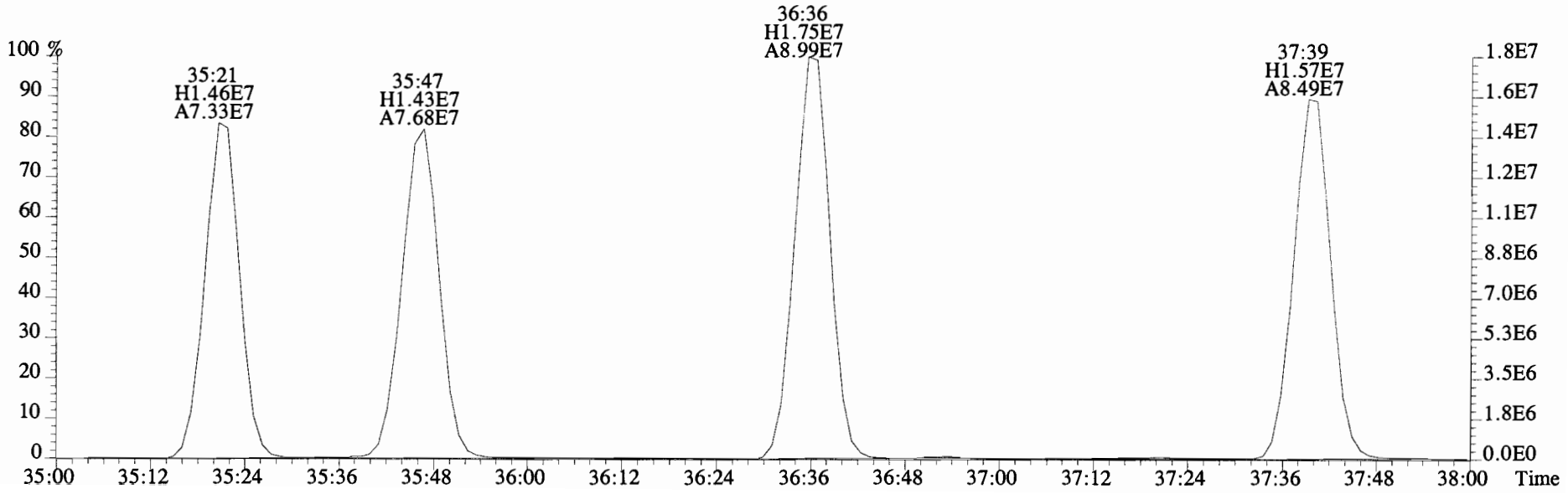
301.9626 S:11 F:3

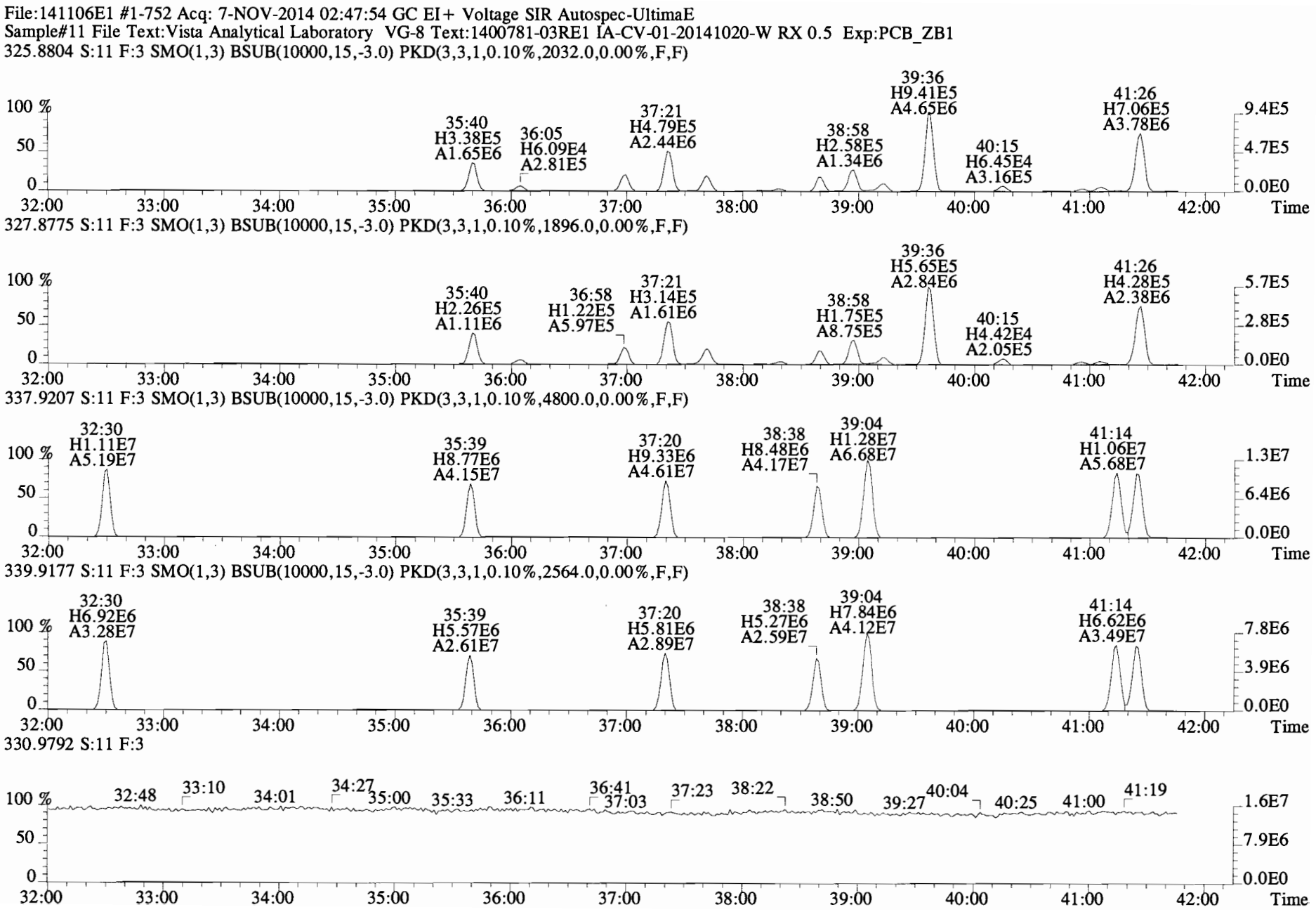


File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
301.9626 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,8980.0,0.00%,F,F)

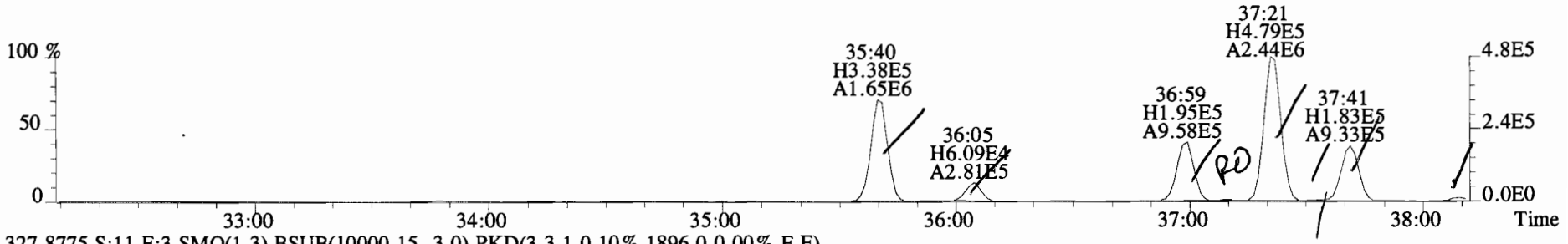


303.9597 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7244.0,0.00%,F,F)

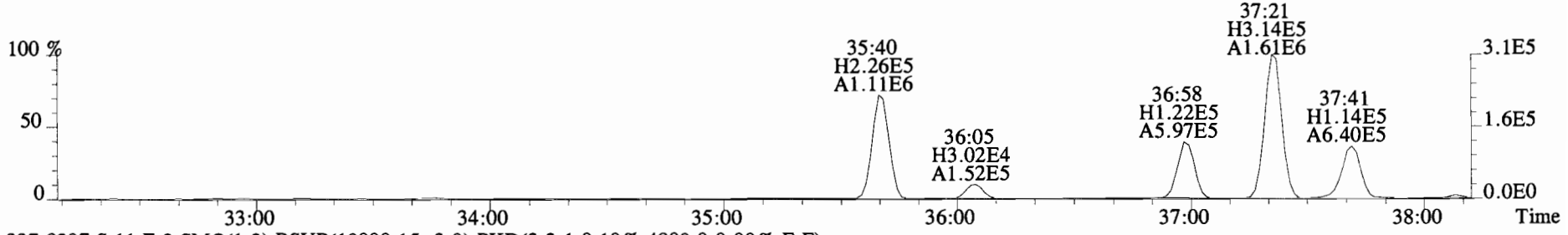



File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2032.0,0.00%,F,F)
35:40 H3.38E5 A1.65E6
36:05 H6.09E4 A2.81E5
37:21 H4.79E5 A2.44E6
38:58 H2.58E5 A1.34E6
39:36 H9.41E5 A4.65E6
40:15 H6.45E4 A3.16E5
41:26 H7.06E5 A3.78E6
327.8775 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1896.0,0.00%,F,F)
35:40 H2.26E5 A1.11E6
36:58 H1.22E5 A5.97E5
37:21 H3.14E5 A1.61E6
38:58 H1.75E5 A8.75E5
39:36 H5.65E5 A2.84E6
40:15 H4.42E4 A2.05E5
41:26 H4.28E5 A2.38E6
337.9207 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4800.0,0.00%,F,F)
32:30 H1.11E7 A5.19E7
35:39 H8.77E6 A4.15E7
37:20 H9.33E6 A4.61E7
38:38 H8.48E6 A4.17E7
39:04 H1.28E7 A6.68E7
41:14 H1.06E7 A5.68E7
339.9177 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2564.0,0.00%,F,F)
32:30 H6.92E6 A3.28E7
35:39 H5.57E6 A2.61E7
37:20 H5.81E6 A2.89E7
38:38 H5.27E6 A2.59E7
39:04 H7.84E6 A4.12E7
41:14 H6.62E6 A3.49E7
330.9792 S:11 F:3
32:48
33:10
34:01
34:27
35:00
35:33
36:11
36:41
37:03
37:23
38:22
38:50
39:27
40:04
40:25
41:00
41:19
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
9.4E5
4.7E5
0.0E0
5.7E5
2.8E5
1.3E7
6.4E6
7.8E6
3.9E6
1.6E7
7.9E6

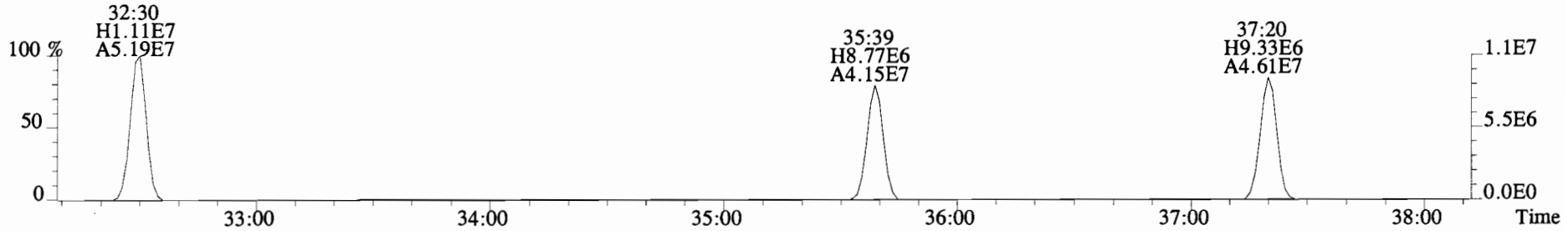
File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2032.0,0.00%,F,F)



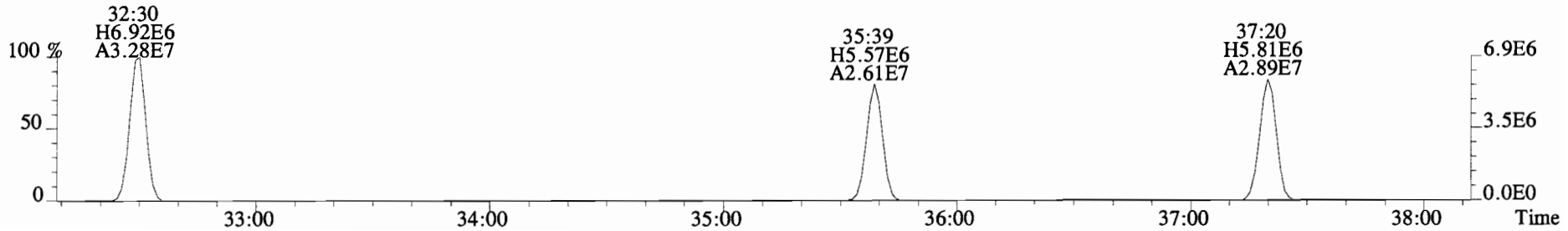
327.8775 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1896.0,0.00%,F,F)

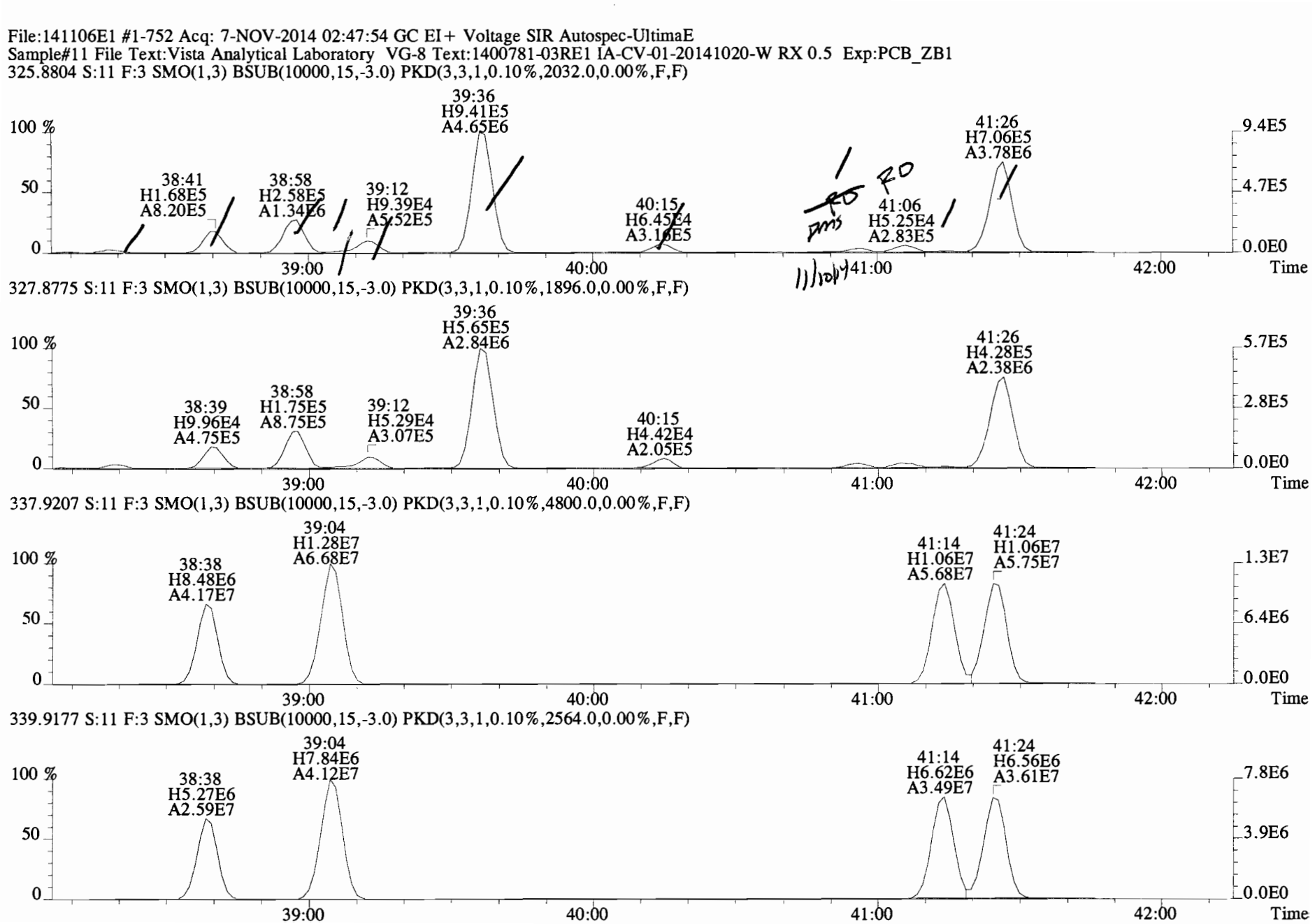


337.9207 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4800.0,0.00%,F,F)

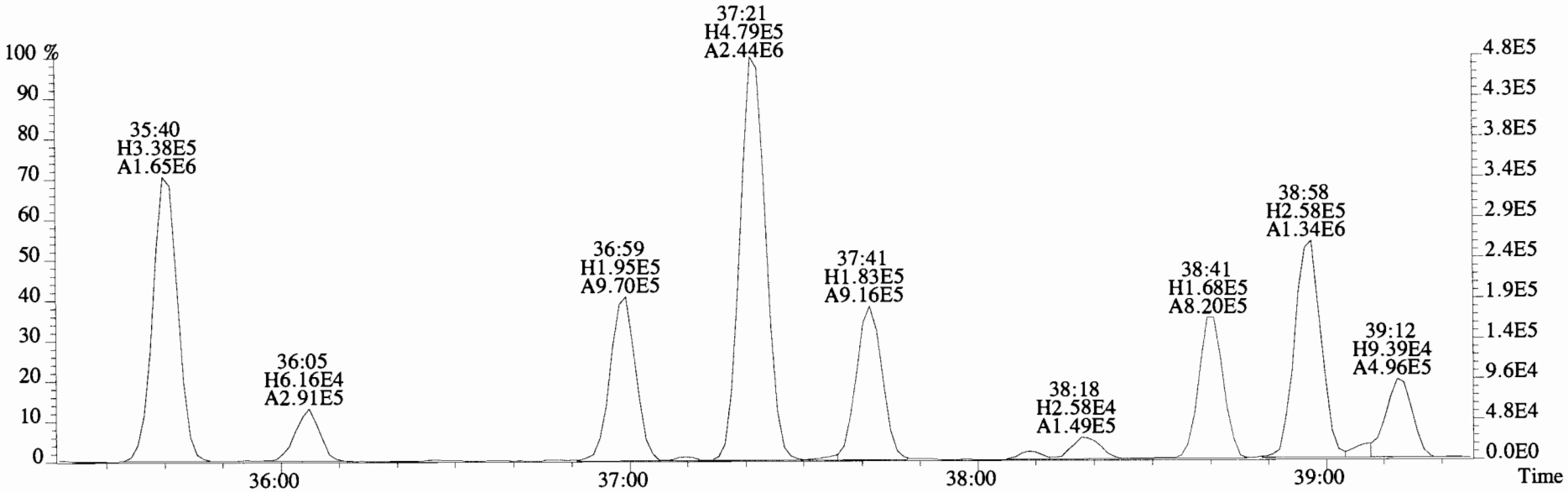


339.9177 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2564.0,0.00%,F,F)

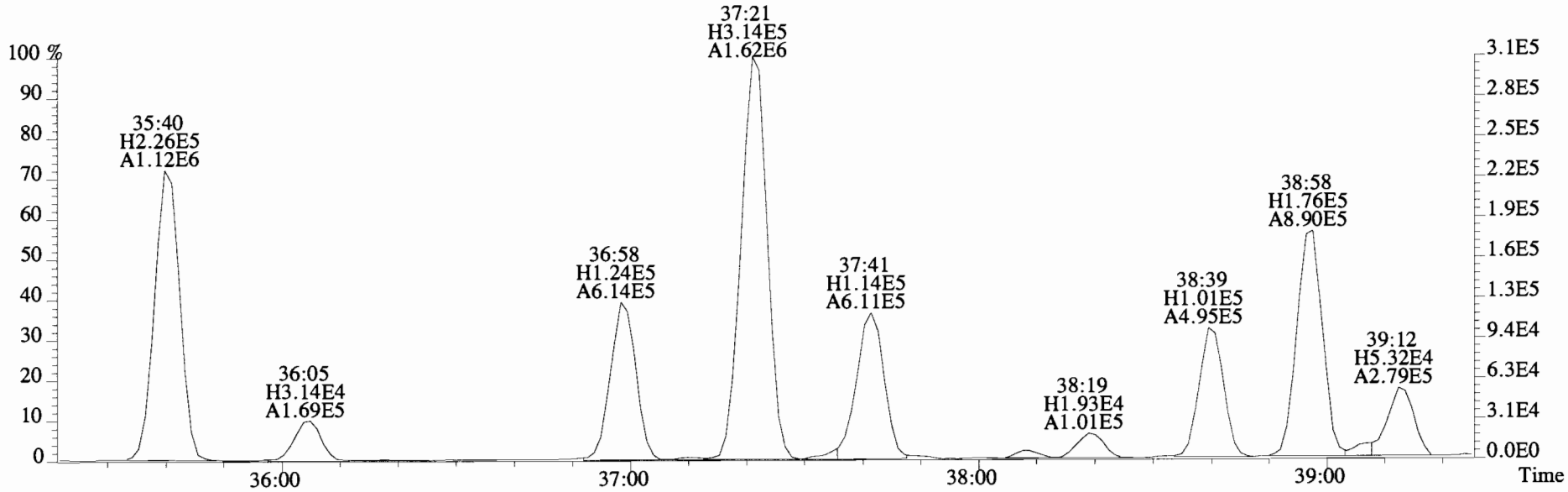


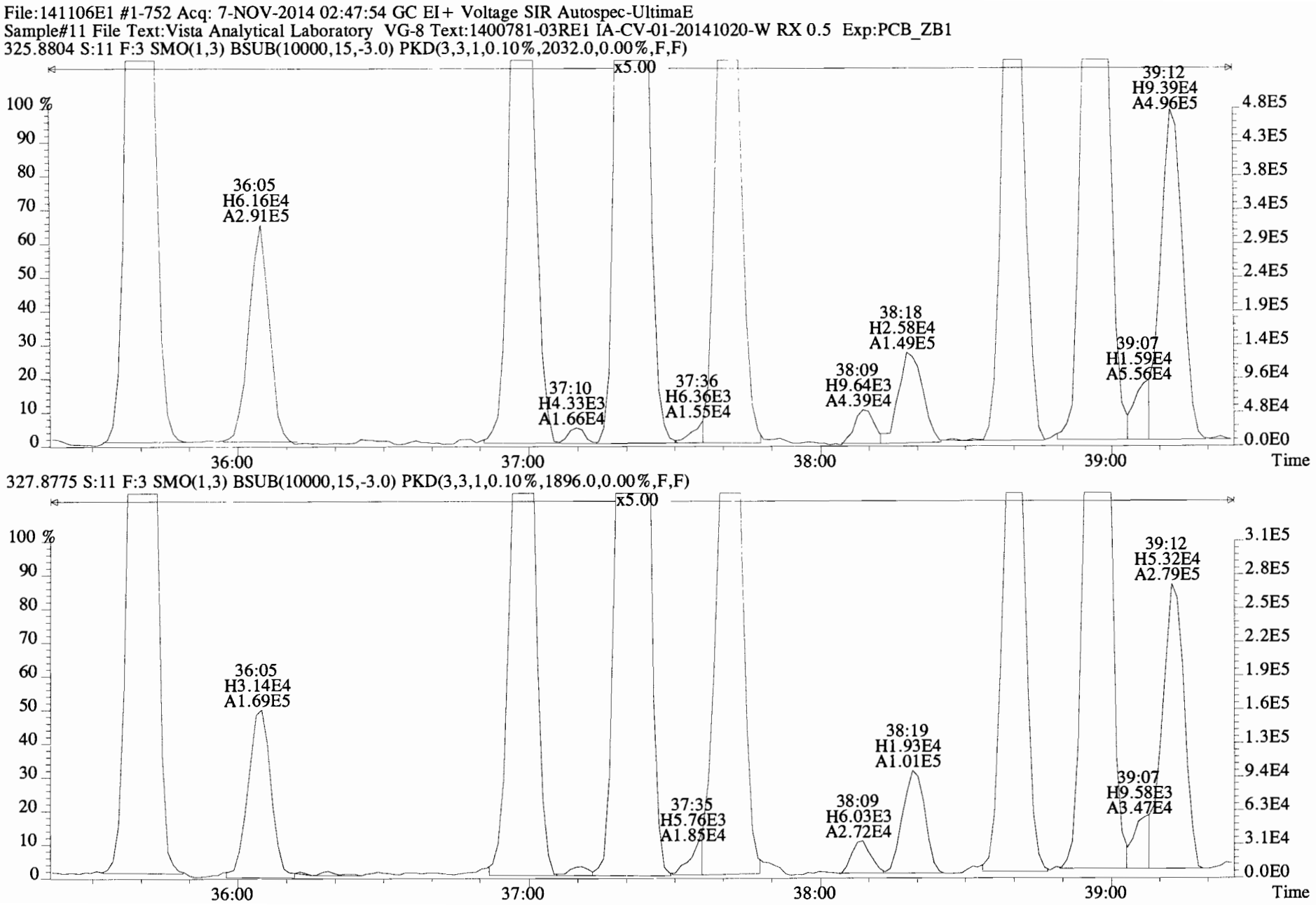

File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2032.0,0.00%,F,F)
39:36 H9.41E5 A4.65E6
41:26 H7.06E5 A3.78E6
38:41 H1.68E5 A8.20E5
38:58 H2.58E5 A1.34E6
39:12 H9.39E4 A5.52E5
40:15 H6.45E4 A3.16E5
41:06 H5.25E4 A2.83E5
100 %
50
0
9.4E5
4.7E5
0.0E0
39:00
40:00
41:00
42:00
Time
327.8775 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1896.0,0.00%,F,F)
39:36 H5.65E5 A2.84E6
41:26 H4.28E5 A2.38E6
38:39 H9.96E4 A4.75E5
38:58 H1.75E5 A8.75E5
39:12 H5.29E4 A3.07E5
40:15 H4.42E4 A2.05E5
100 %
50
0
5.7E5
2.8E5
0.0E0
39:00
40:00
41:00
42:00
Time
337.9207 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4800.0,0.00%,F,F)
39:04 H1.28E7 A6.68E7
41:14 H1.06E7 A5.68E7
41:24 H1.06E7 A5.75E7
38:38 H8.48E6 A4.17E7
100 %
50
0
1.3E7
6.4E6
0.0E0
39:00
40:00
41:00
42:00
Time
339.9177 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2564.0,0.00%,F,F)
39:04 H7.84E6 A4.12E7
41:14 H6.62E6 A3.49E7
41:24 H6.56E6 A3.61E7
38:38 H5.27E6 A2.59E7
100 %
50
0
7.8E6
3.9E6
0.0E0
39:00
40:00
41:00
42:00
Time

File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2032.0,0.00%,F,F)

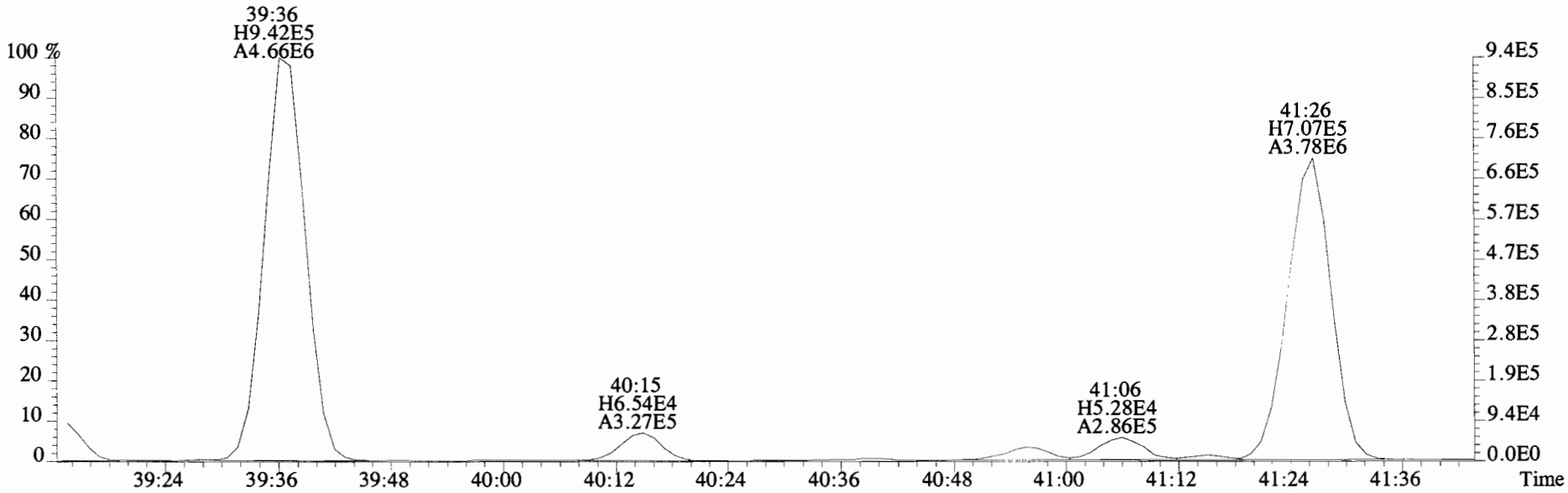


327.8775 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1896.0,0.00%,F,F)

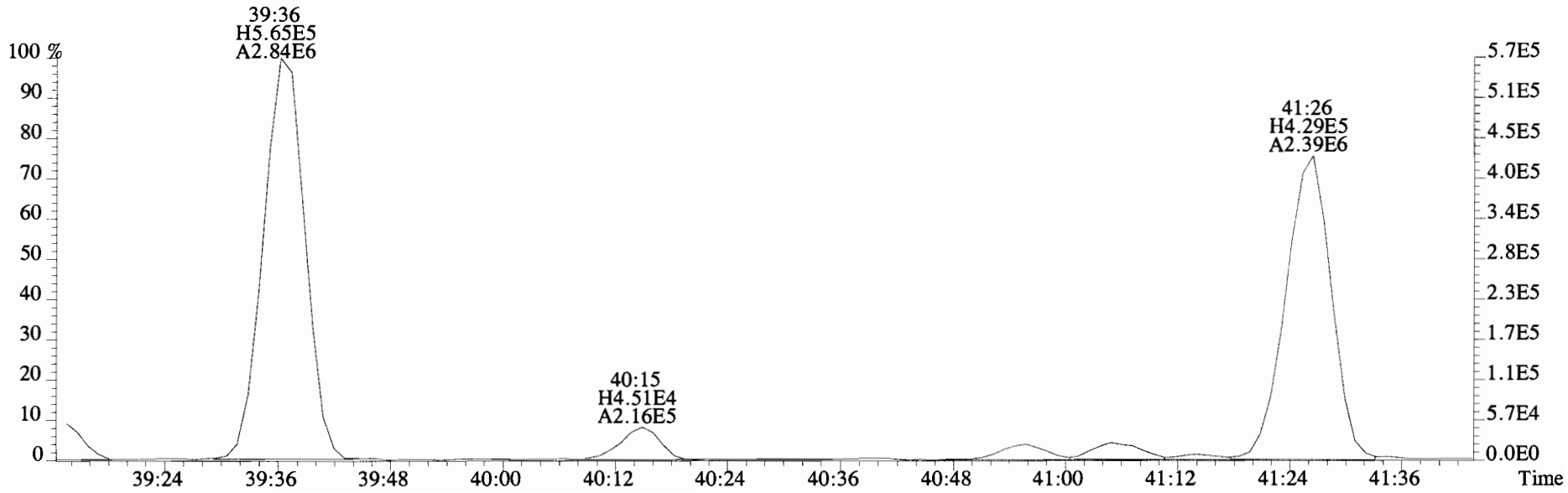


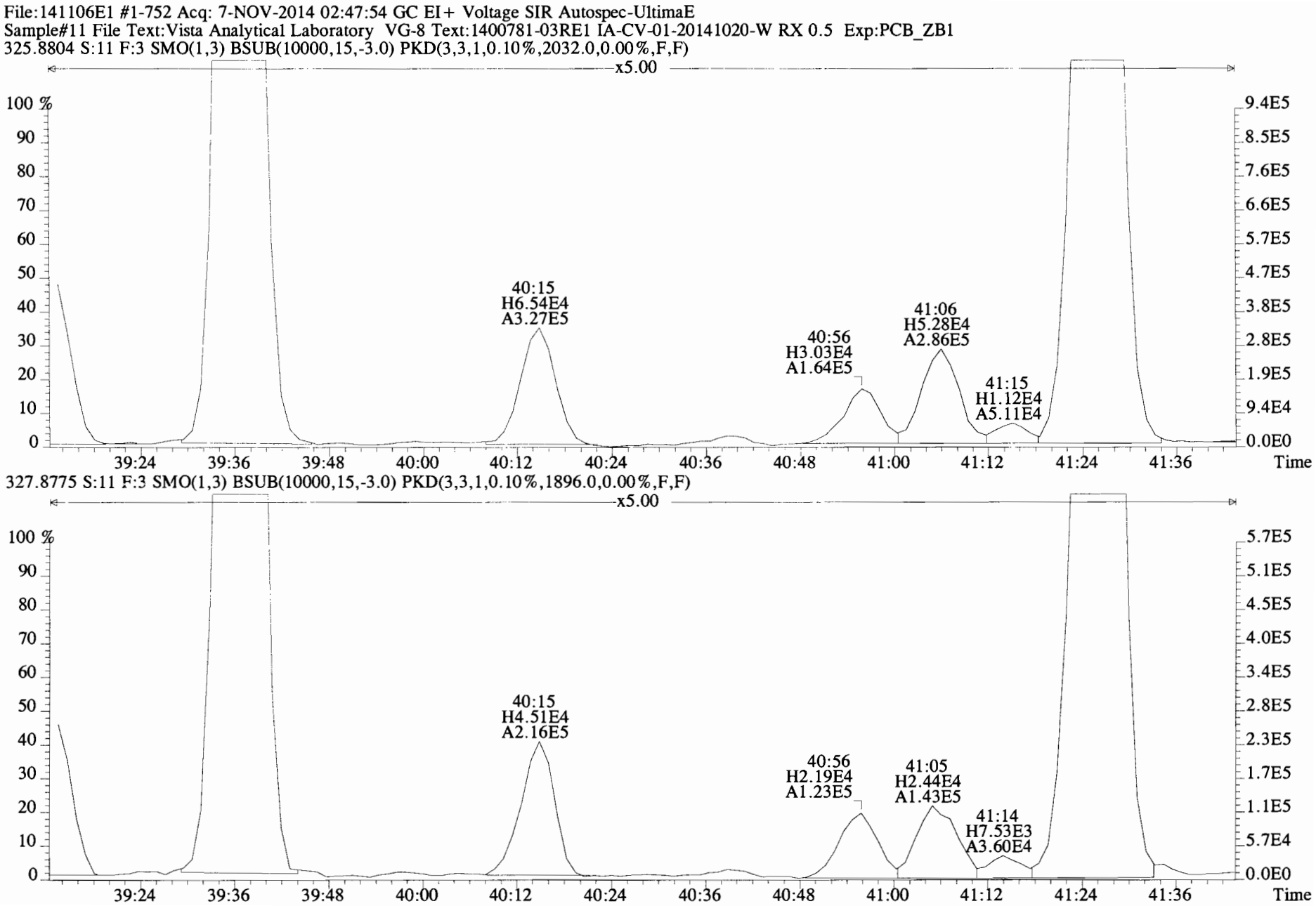

File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2032.0,0.00%,F,F)
x5.00
100 %
36:05
H6.16E4
A2.91E5
37:10
H4.33E3
A1.66E4
37:36
H6.36E3
A1.55E4
38:09
H9.64E3
A4.39E4
38:18
H2.58E4
A1.49E5
39:07
H1.59E4
A5.56E4
39:12
H9.39E4
A4.96E5
4.8E5
4.3E5
3.8E5
3.4E5
2.9E5
2.4E5
1.9E5
1.4E5
9.6E4
4.8E4
0.0E0
36:00
37:00
38:00
39:00
Time
327.8775 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1896.0,0.00%,F,F)
x5.00
100 %
36:05
H3.14E4
A1.69E5
37:35
H5.76E3
A1.85E4
38:09
H6.03E3
A2.72E4
38:19
H1.93E4
A1.01E5
39:07
H9.58E3
A3.47E4
39:12
H5.32E4
A2.79E5
3.1E5
2.8E5
2.5E5
2.2E5
1.9E5
1.6E5
1.3E5
9.4E4
6.3E4
3.1E4
0.0E0
36:00
37:00
38:00
39:00
Time

File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2032.0,0.00%,F,F)

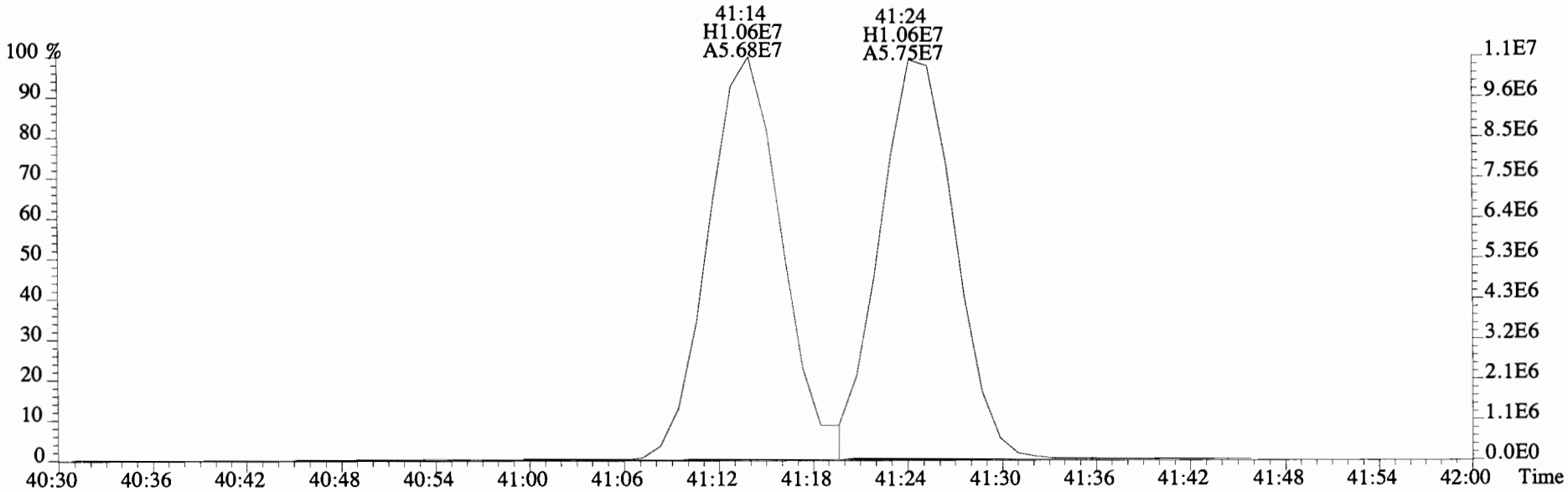


327.8775 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1896.0,0.00%,F,F)

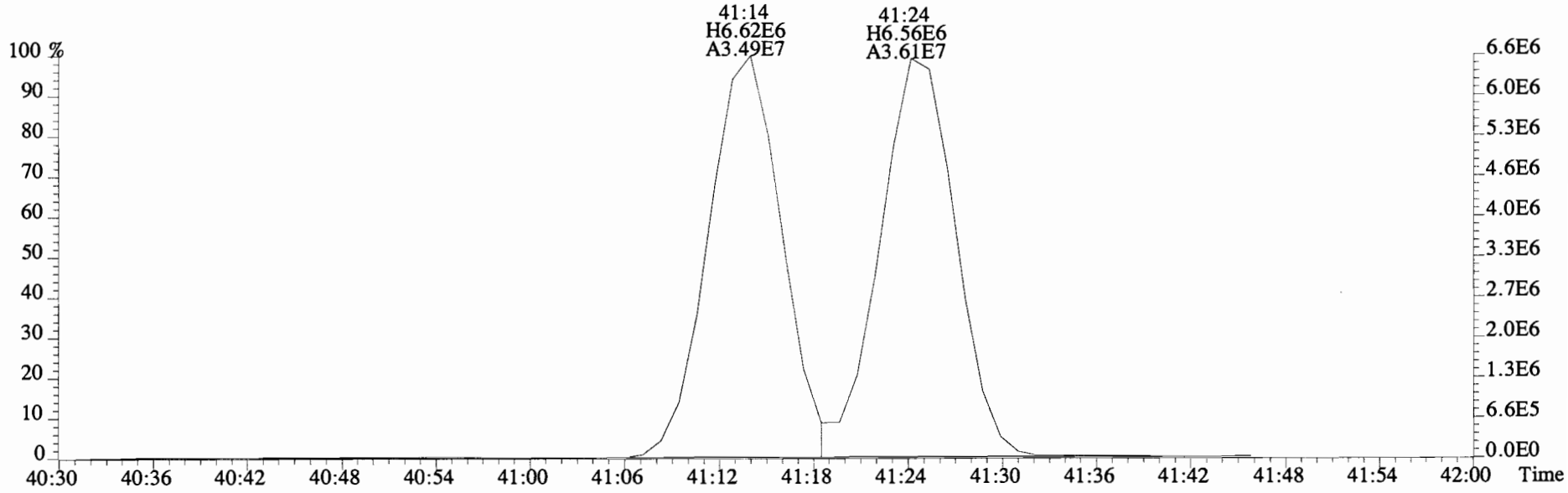


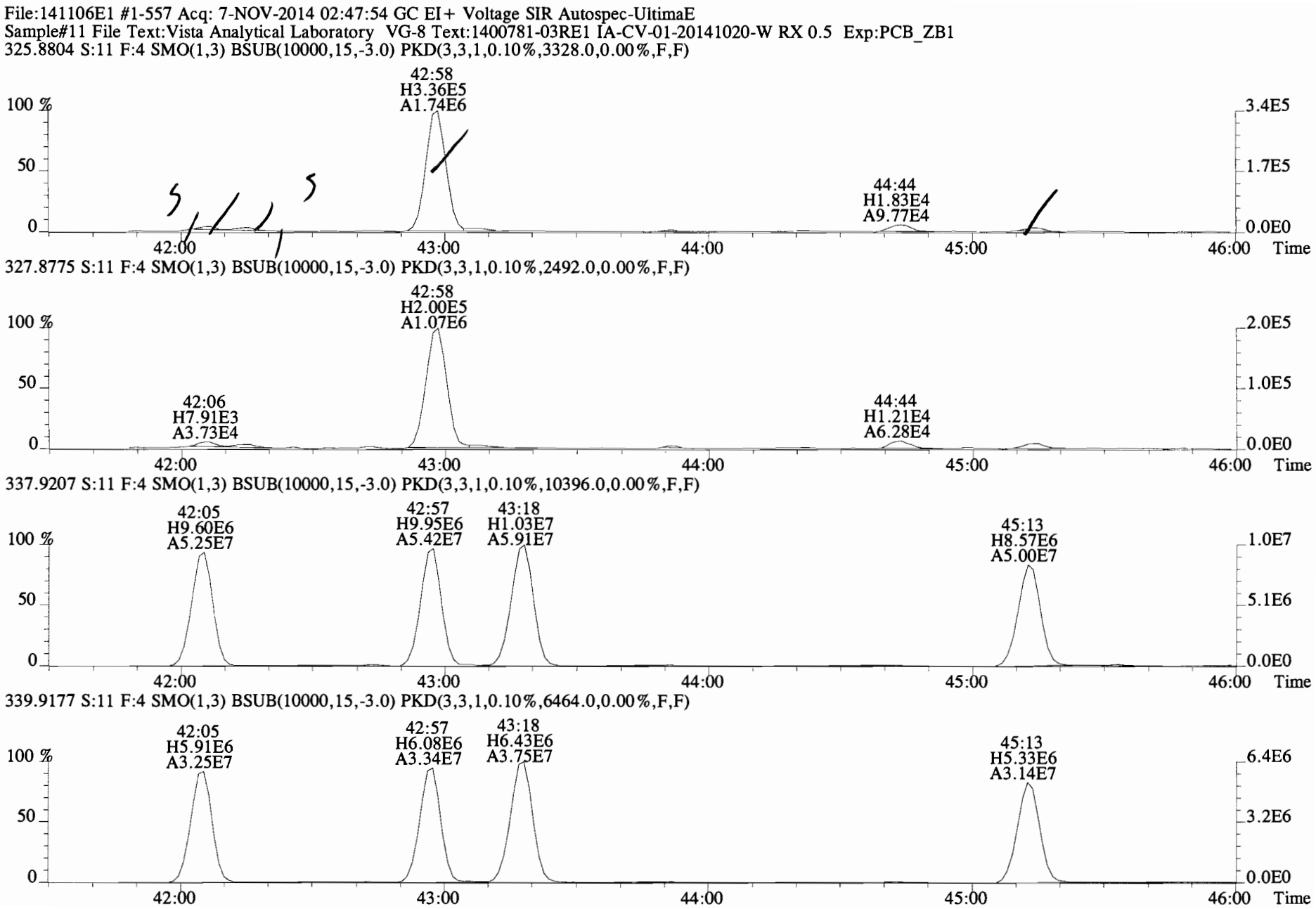

File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2032.0,0.00%,F,F)
x5.00
40:15
H6.54E4
A3.27E5
40:56
H3.03E4
A1.64E5
41:06
H5.28E4
A2.86E5
41:15
H1.12E4
A5.11E4
Time
327.8775 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1896.0,0.00%,F,F)
x5.00
40:15
H4.51E4
A2.16E5
40:56
H2.19E4
A1.23E5
41:05
H2.44E4
A1.43E5
41:14
H7.53E3
A3.60E4
Time

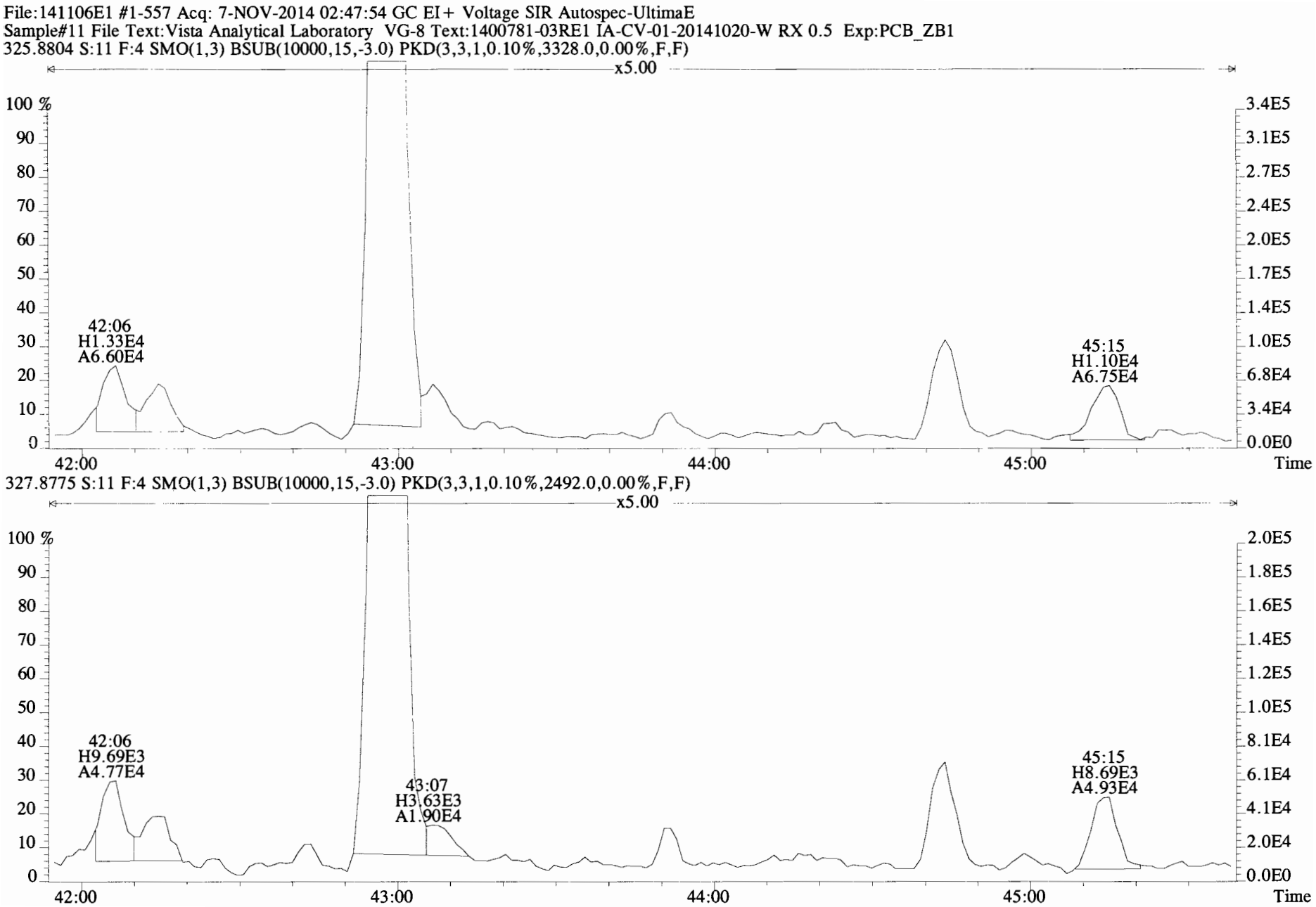
File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
337.9207 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,4800.0,0.00%,F,F)

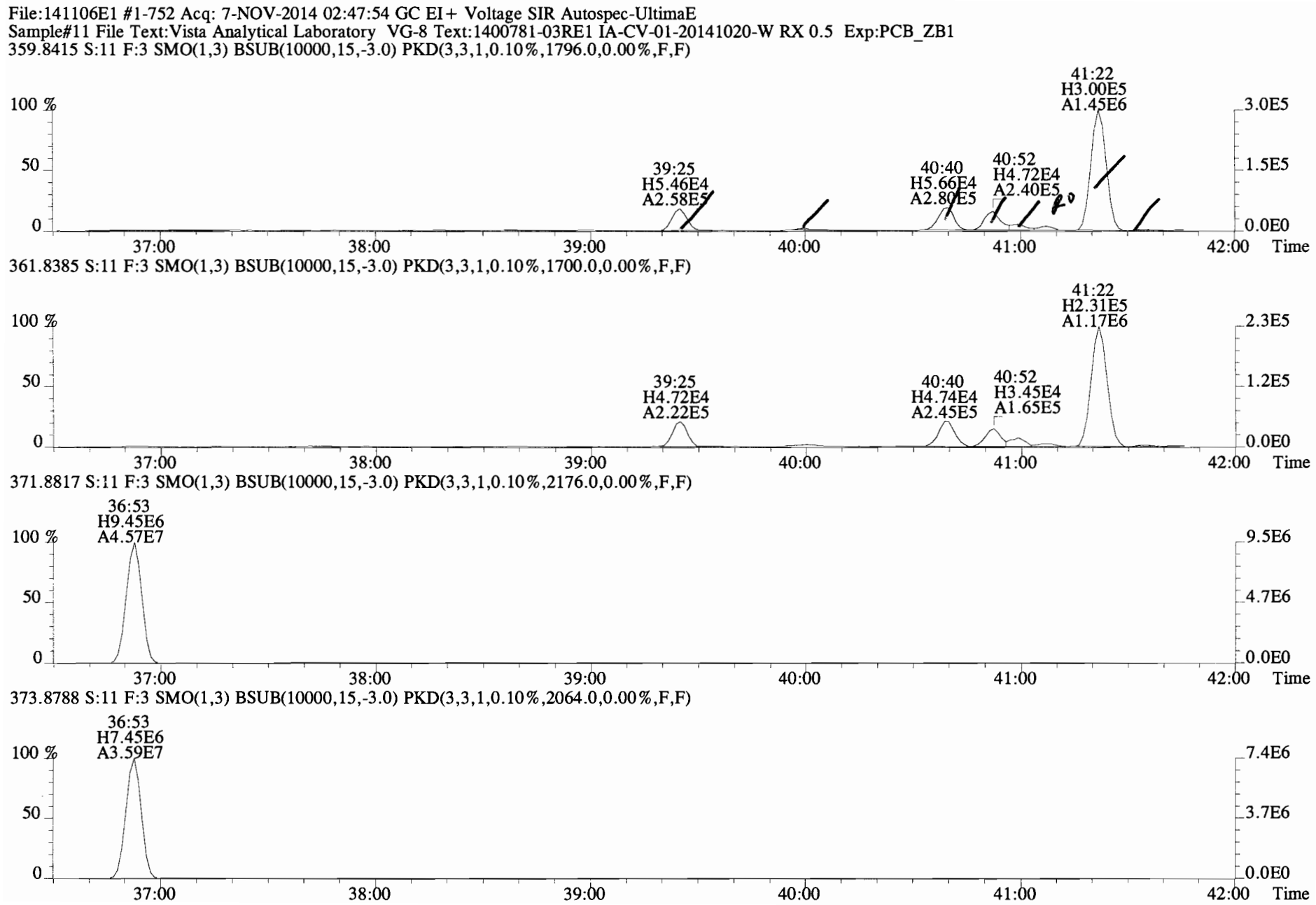


339.9177 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2564.0,0.00%,F,F)

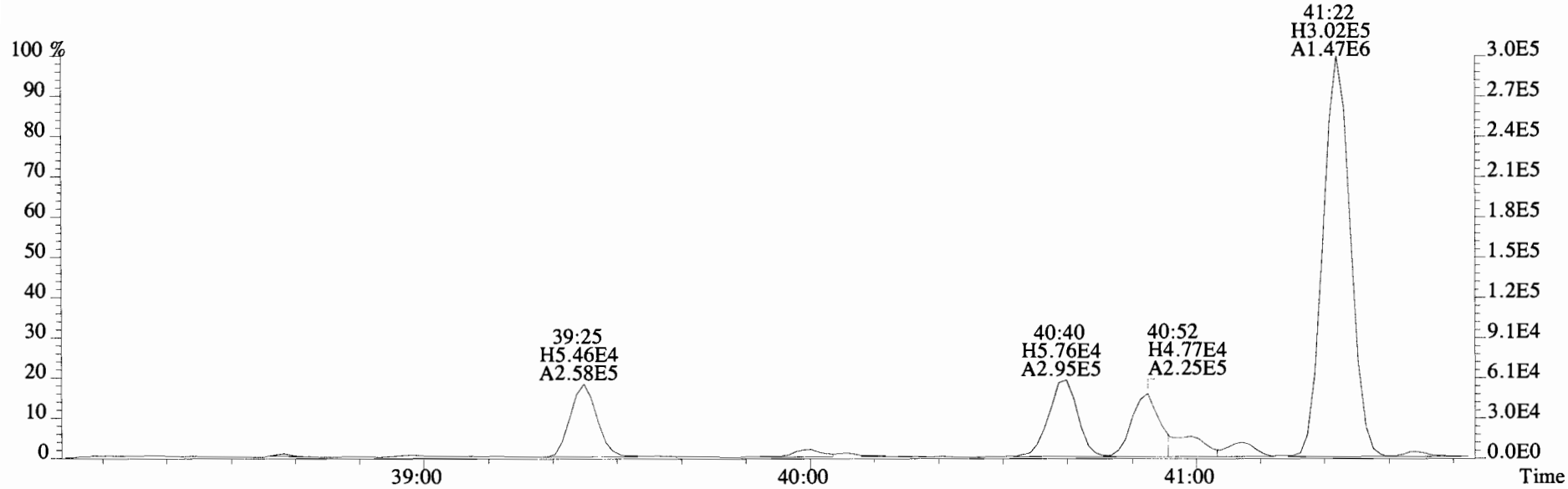



File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3328.0,0.00%,F,F)
42:58
H3.36E5
A1.74E6
44:44
H1.83E4
A9.77E4
100 %
50
0
3.4E5
1.7E5
0.0E0
42:00
43:00
44:00
45:00
46:00
Time
327.8775 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2492.0,0.00%,F,F)
42:58
H2.00E5
A1.07E6
42:06
H7.91E3
A3.73E4
44:44
H1.21E4
A6.28E4
2.0E5
1.0E5
337.9207 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,10396.0,0.00%,F,F)
42:05
H9.60E6
A5.25E7
42:57
H9.95E6
A5.42E7
43:18
H1.03E7
A5.91E7
45:13
H8.57E6
A5.00E7
1.0E7
5.1E6
339.9177 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6464.0,0.00%,F,F)
42:05
H5.91E6
A3.25E7
42:57
H6.08E6
A3.34E7
43:18
H6.43E6
A3.75E7
45:13
H5.33E6
A3.14E7
6.4E6
3.2E6

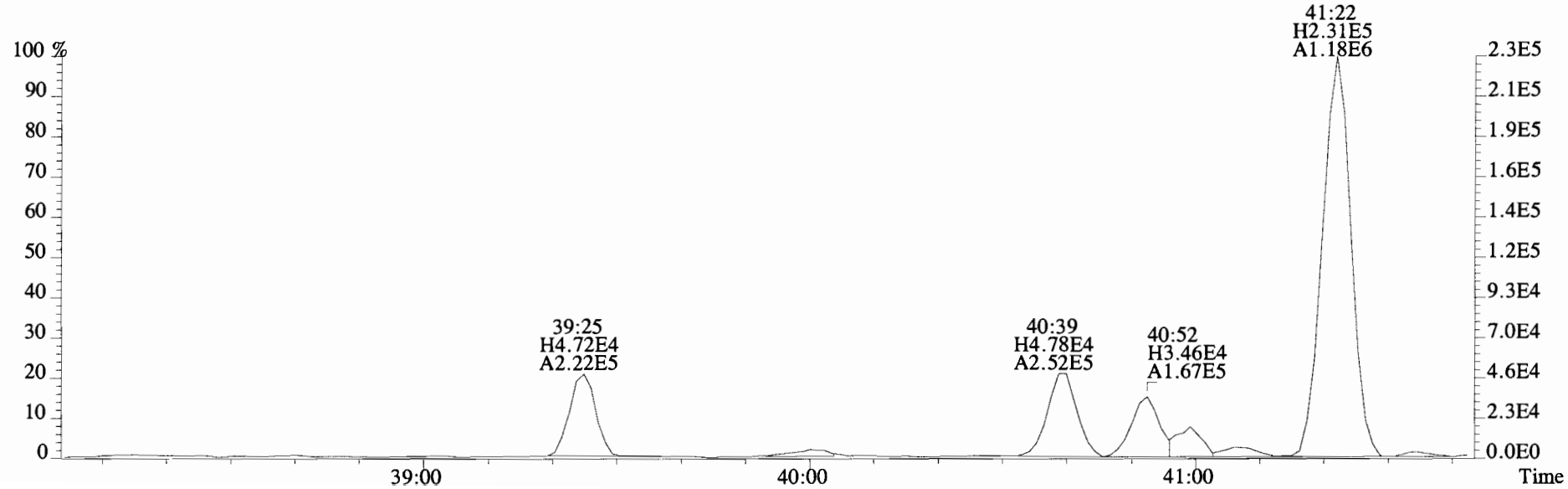

File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
325.8804 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3328.0,0.00%,F,F)
x5.00
42:06
H1.33E4
A6.60E4
45:15
H1.10E4
A6.75E4
Time
327.8775 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2492.0,0.00%,F,F)
x5.00
42:06
H9.69E3
A4.77E4
43:07
H3.63E3
A1.90E4
45:15
H8.69E3
A4.93E4
Time

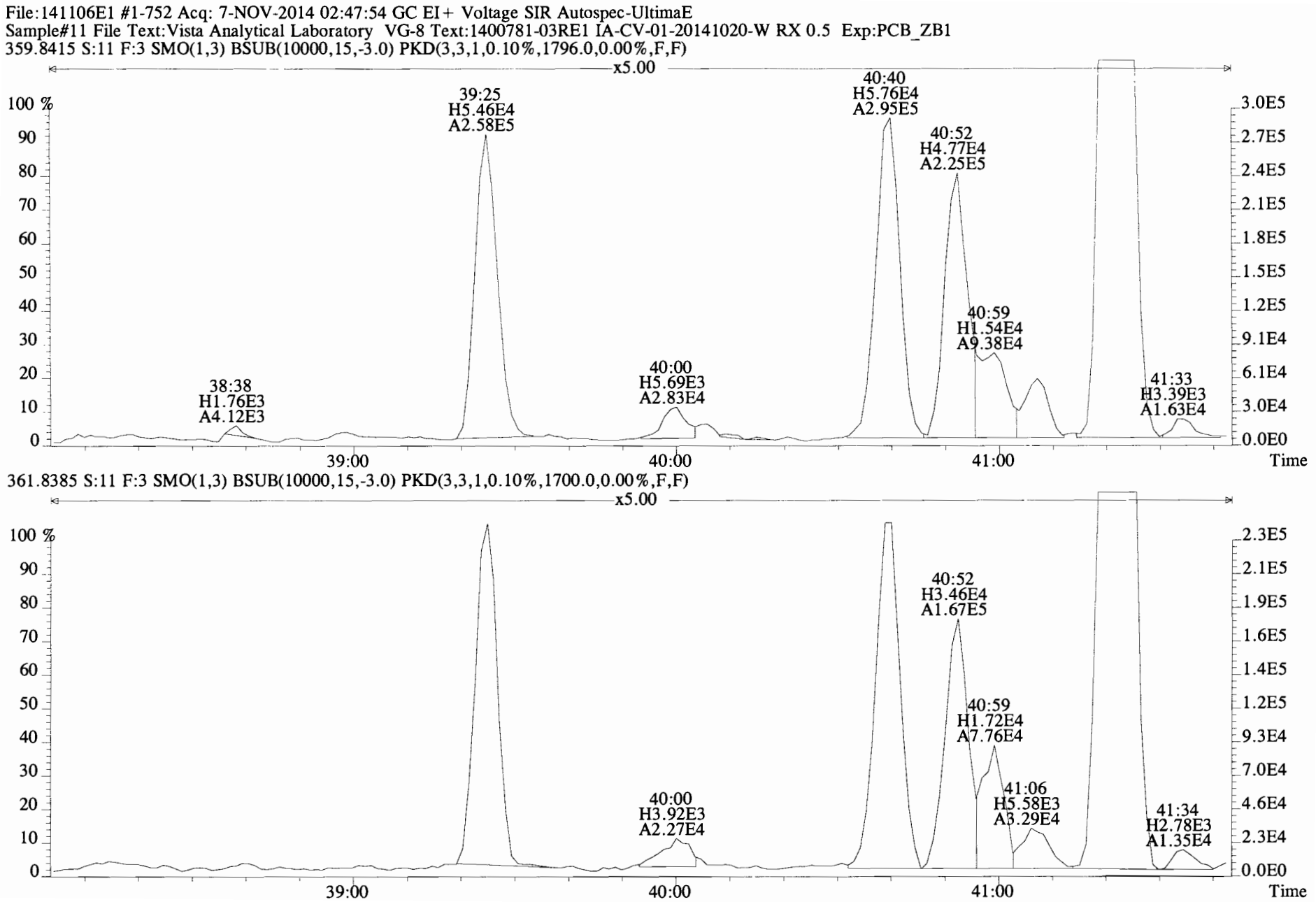

File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1796.0,0.00%,F,F)
41:22
H3.00E5
A1.45E6
39:25
H5.46E4
A2.58E5
40:40
H5.66E4
A2.80E5
40:52
H4.72E4
A2.40E5
100 %
50
0
3.0E5
1.5E5
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time
361.8385 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1700.0,0.00%,F,F)
41:22
H2.31E5
A1.17E6
39:25
H4.72E4
A2.22E5
40:40
H4.74E4
A2.45E5
40:52
H3.45E4
A1.65E5
100 %
50
0
2.3E5
1.2E5
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time
371.8817 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2176.0,0.00%,F,F)
36:53
H9.45E6
A4.57E7
100 %
50
0
9.5E6
4.7E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time
373.8788 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2064.0,0.00%,F,F)
36:53
H7.45E6
A3.59E7
100 %
50
0
7.4E6
3.7E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
Time

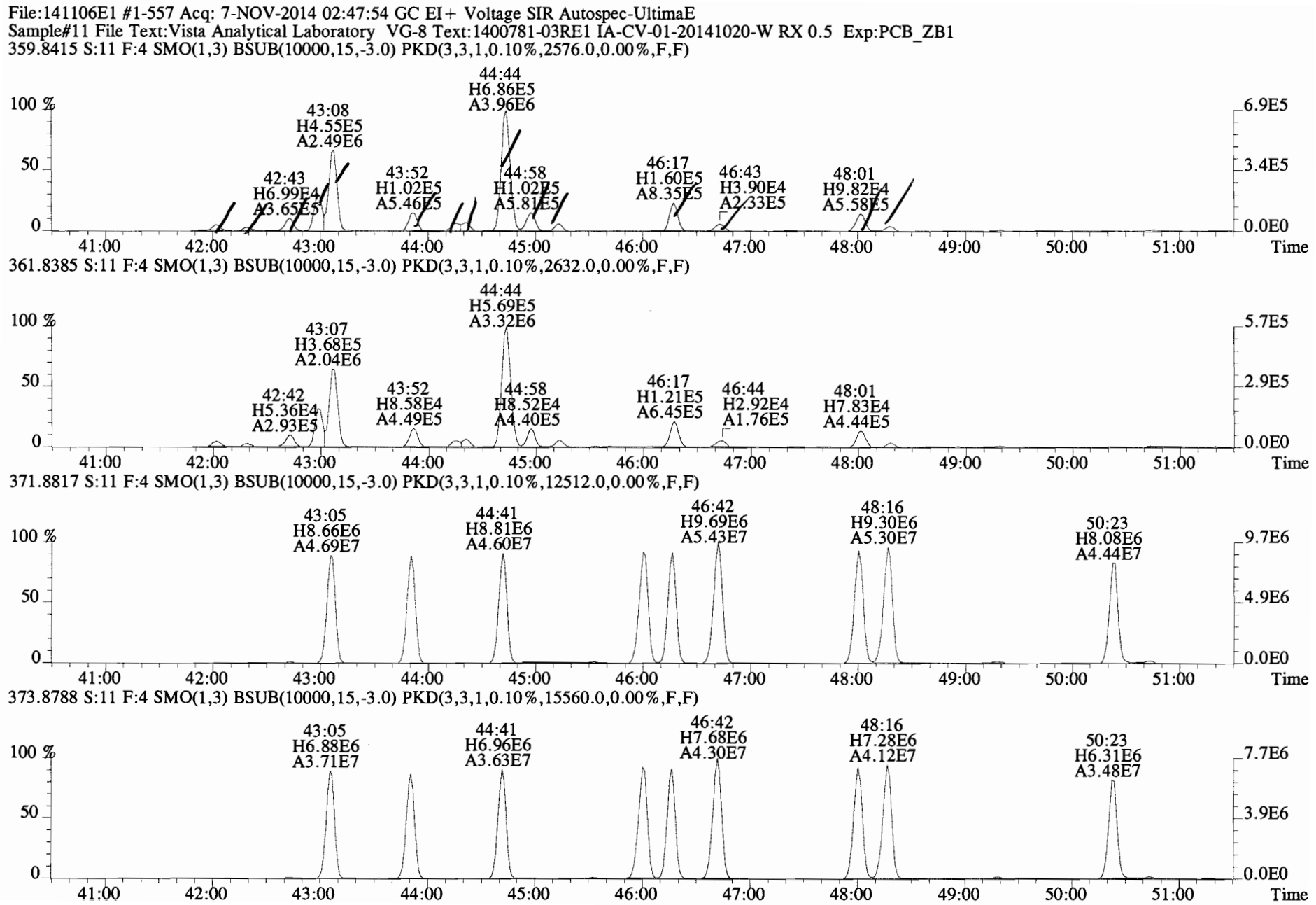
File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1796.0,0.00%,F,F)

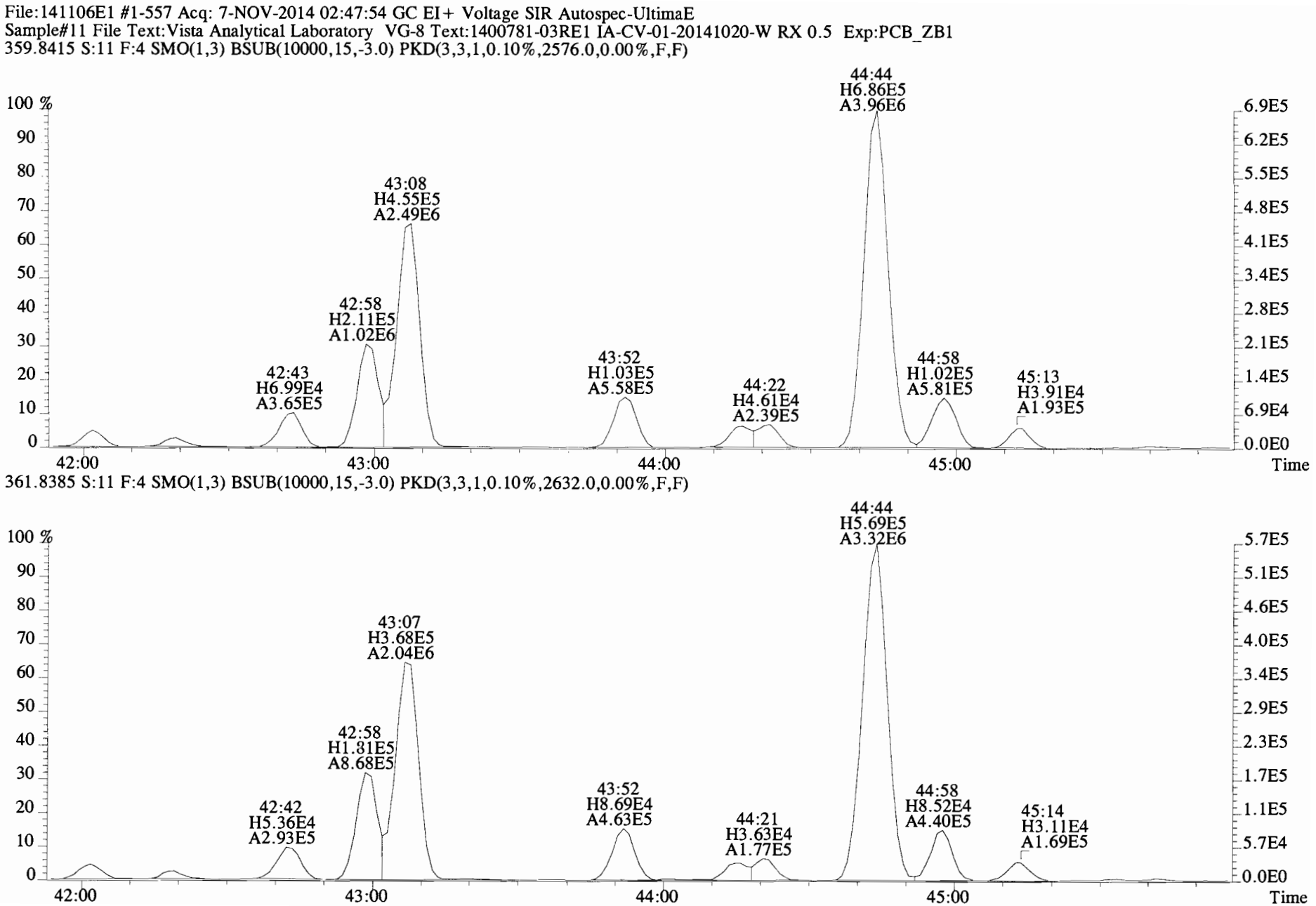


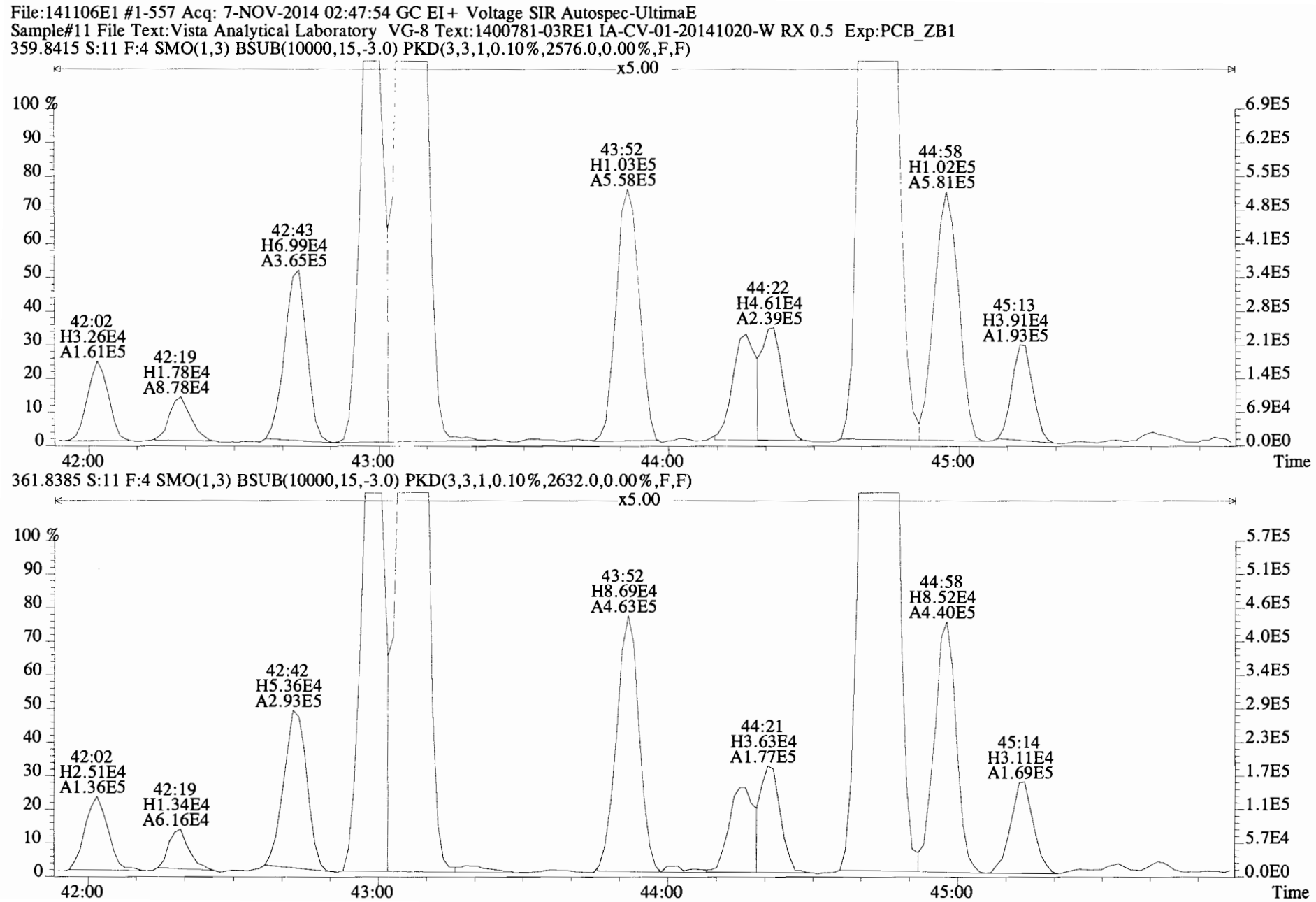
361.8385 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1700.0,0.00%,F,F)



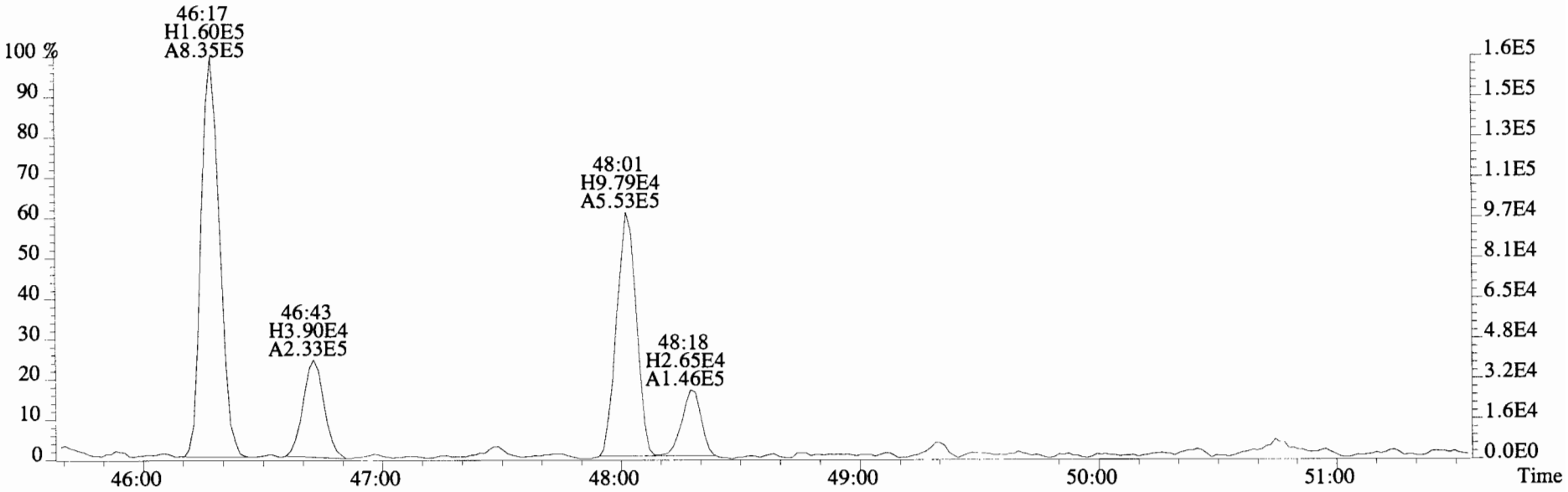

File:141106E1 #1-752 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1796.0,0.00%,F,F)
x5.00
39:25
H5.46E4
A2.58E5
40:40
H5.76E4
A2.95E5
40:52
H4.77E4
A2.25E5
40:59
H1.54E4
A9.38E4
38:38
H1.76E3
A4.12E3
40:00
H5.69E3
A2.83E4
41:33
H3.39E3
A1.63E4
100 %
Time
361.8385 S:11 F:3 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1700.0,0.00%,F,F)
x5.00
40:52
H3.46E4
A1.67E5
40:59
H1.72E4
A7.76E4
41:06
H5.58E3
A3.29E4
40:00
H3.92E3
A2.27E4
41:34
H2.78E3
A1.35E4
100 %
Time


File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2576.0,0.00%,F,F)
44:44 H6.86E5 A3.96E6
43:08 H4.55E5 A2.49E6
42:43 H6.99E4 A3.65E5
43:52 H1.02E5 A5.46E5
44:58 H1.02E5 A5.81E5
46:17 H1.60E5 A8.35E5
46:43 H3.90E4 A2.33E5
48:01 H9.82E4 A5.58E5
100 %
50
0
6.9E5
3.4E5
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
361.8385 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2632.0,0.00%,F,F)
44:44 H5.69E5 A3.32E6
43:07 H3.68E5 A2.04E6
42:42 H5.36E4 A2.93E5
43:52 H8.58E4 A4.49E5
44:58 H8.52E4 A4.40E5
46:17 H1.21E5 A6.45E5
46:44 H2.92E4 A1.76E5
48:01 H7.83E4 A4.44E5
100 %
50
0
5.7E5
2.9E5
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:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12512.0,0.00%,F,F)
43:05 H8.66E6 A4.69E7
44:41 H8.81E6 A4.60E7
46:42 H9.69E6 A5.43E7
48:16 H9.30E6 A5.30E7
50:23 H8.08E6 A4.44E7
100 %
50
0
9.7E6
4.9E6
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:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15560.0,0.00%,F,F)
43:05 H6.88E6 A3.71E7
44:41 H6.96E6 A3.63E7
46:42 H7.68E6 A4.30E7
48:16 H7.28E6 A4.12E7
50:23 H6.31E6 A3.48E7
100 %
50
0
7.7E6
3.9E6
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

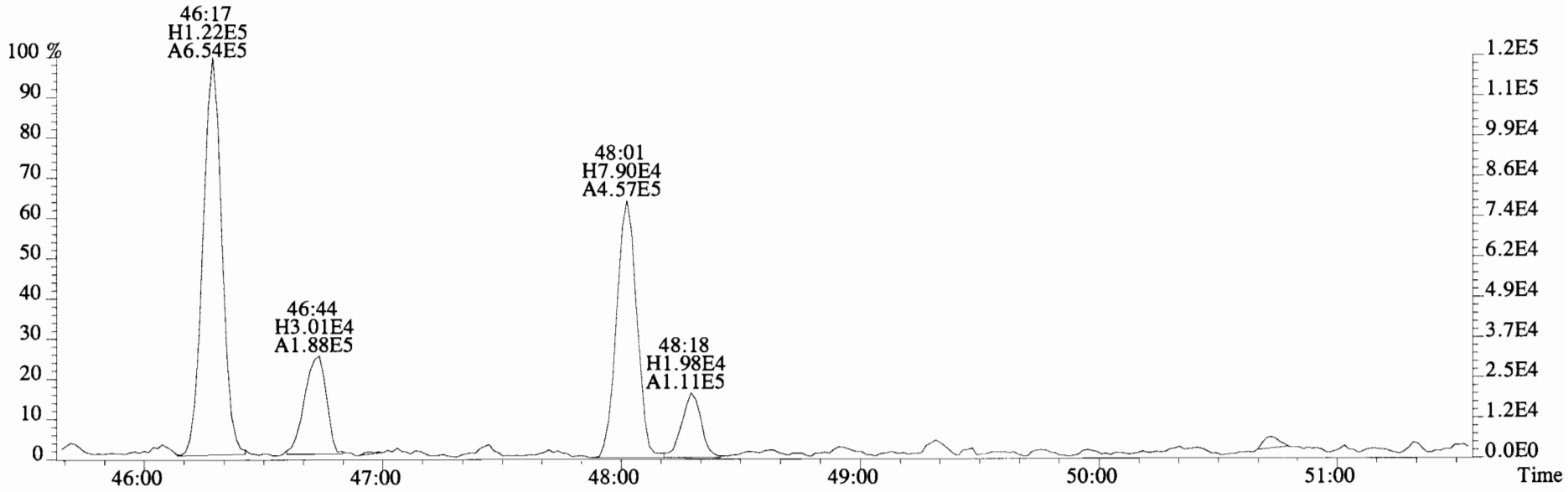

File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2576.0,0.00%,F,F)
42:43 H6.99E4 A3.65E5
42:58 H2.11E5 A1.02E6
43:08 H4.55E5 A2.49E6
43:52 H1.03E5 A5.58E5
44:22 H4.61E4 A2.39E5
44:44 H6.86E5 A3.96E6
44:58 H1.02E5 A5.81E5
45:13 H3.91E4 A1.93E5
100 %
90
80
70
60
50
40
30
20
10
0
6.9E5
6.2E5
5.5E5
4.8E5
4.1E5
3.4E5
2.8E5
2.1E5
1.4E5
6.9E4
0.0E0
42:00
43:00
44:00
45:00
Time
361.8385 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2632.0,0.00%,F,F)
42:42 H5.36E4 A2.93E5
42:58 H1.81E5 A8.68E5
43:07 H3.68E5 A2.04E6
43:52 H8.69E4 A4.63E5
44:21 H3.63E4 A1.77E5
44:44 H5.69E5 A3.32E6
44:58 H8.52E4 A4.40E5
45:14 H3.11E4 A1.69E5
100 %
90
80
70
60
50
40
30
20
10
0
5.7E5
5.1E5
4.6E5
4.0E5
3.4E5
2.9E5
2.3E5
1.7E5
1.1E5
5.7E4
0.0E0
42:00
43:00
44:00
45:00
Time


File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2576.0,0.00%,F,F)
x5.00
42:02 H3.26E4 A1.61E5
42:19 H1.78E4 A8.78E4
42:43 H6.99E4 A3.65E5
43:52 H1.03E5 A5.58E5
44:22 H4.61E4 A2.39E5
44:58 H1.02E5 A5.81E5
45:13 H3.91E4 A1.93E5
Time
361.8385 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2632.0,0.00%,F,F)
x5.00
42:02 H2.51E4 A1.36E5
42:19 H1.34E4 A6.16E4
42:42 H5.36E4 A2.93E5
43:52 H8.69E4 A4.63E5
44:21 H3.63E4 A1.77E5
44:58 H8.52E4 A4.40E5
45:14 H3.11E4 A1.69E5
Time

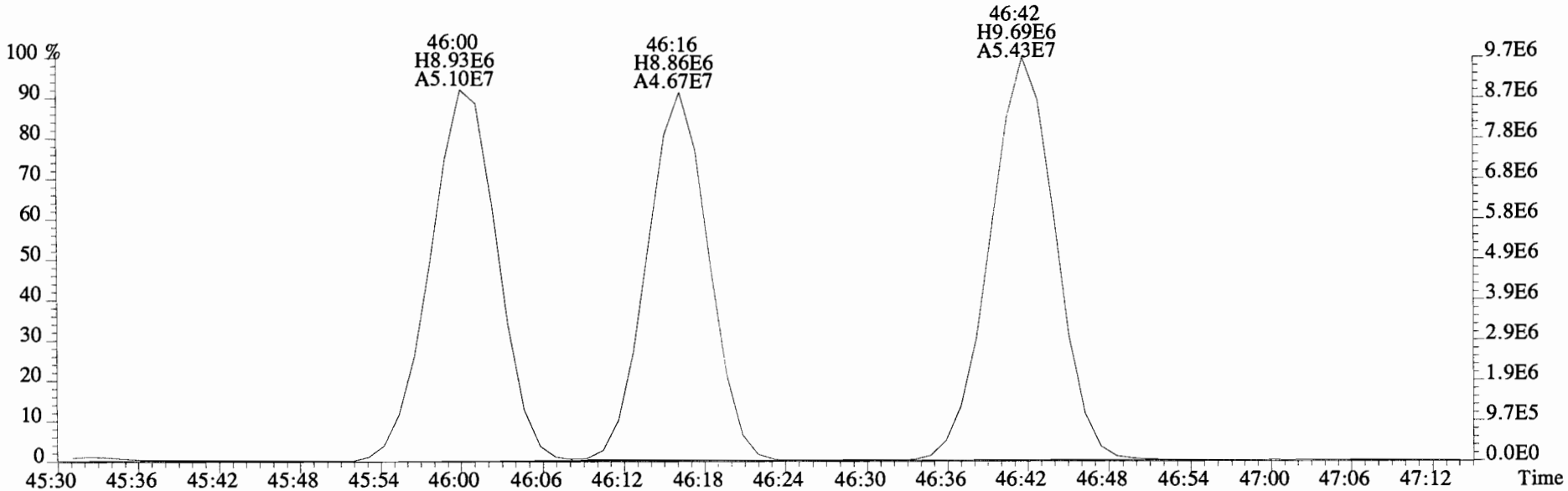
File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
359.8415 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2576.0,0.00%,F,F)



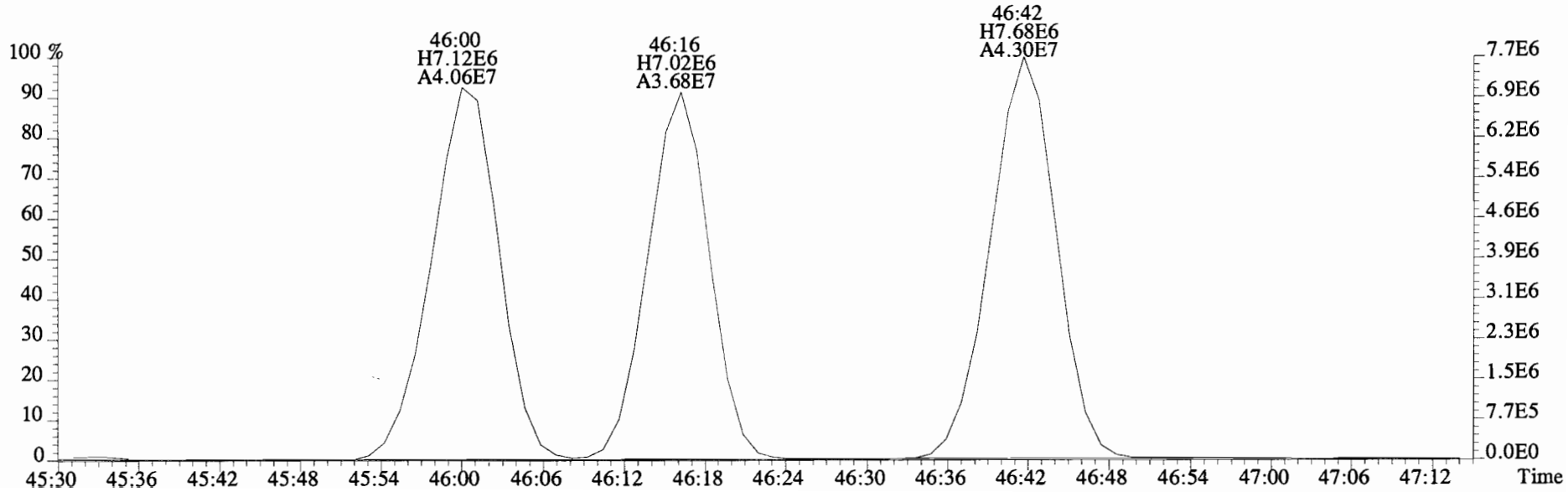
361.8385 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2632.0,0.00%,F,F)



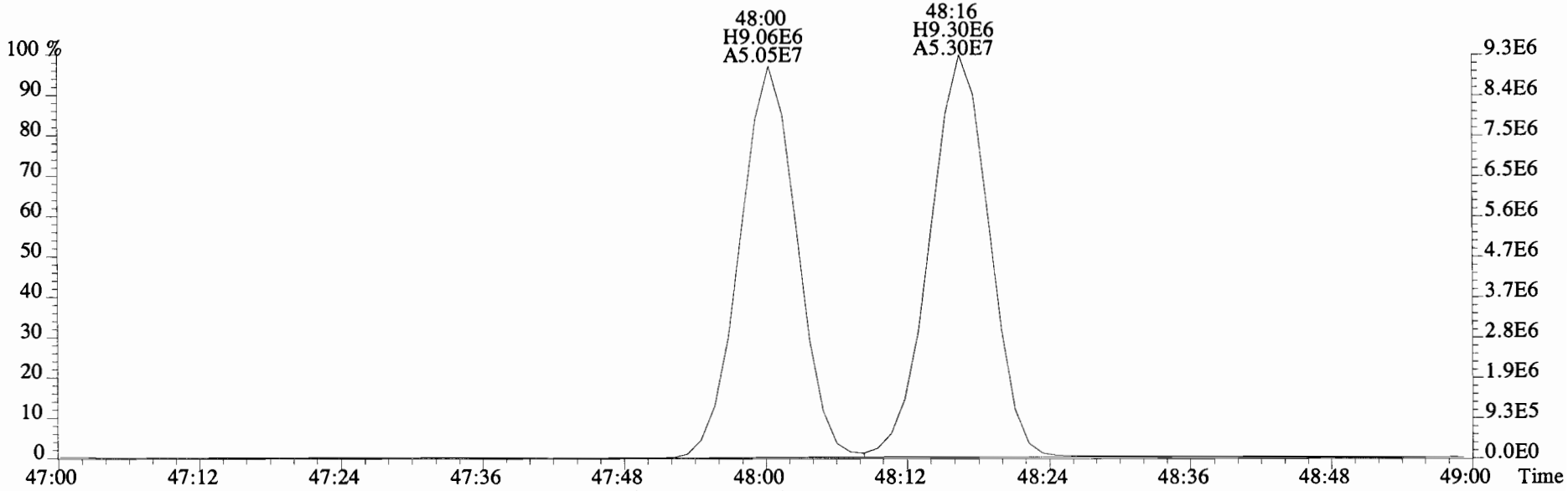
File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
371.8817 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12512.0,0.00%,F,F)



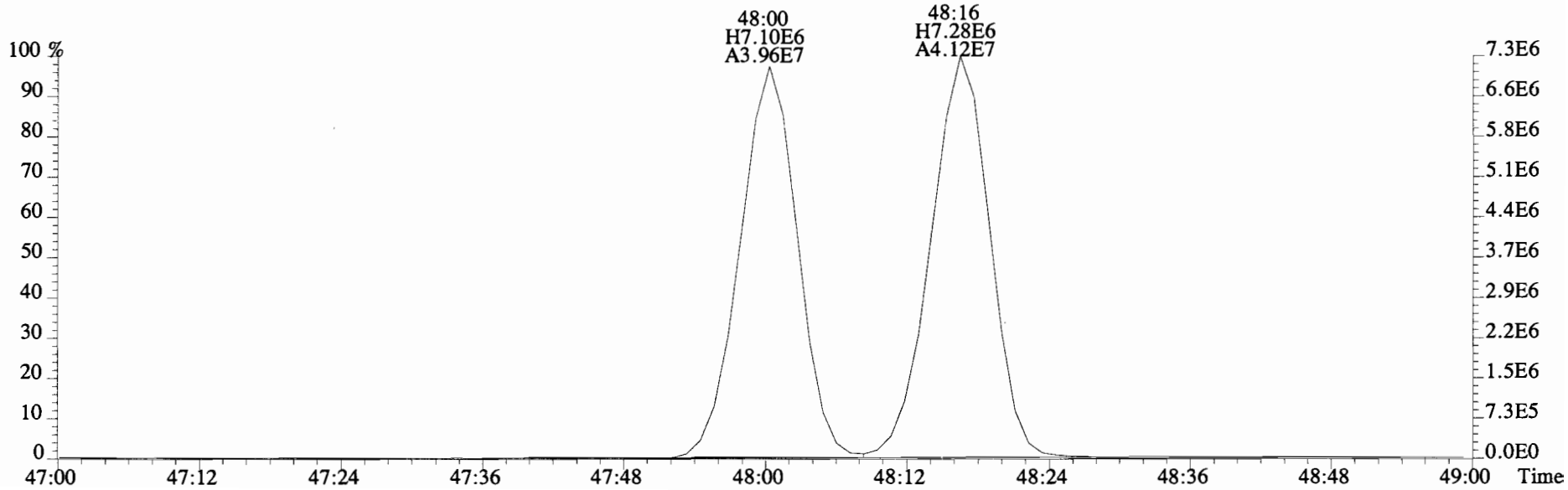
373.8788 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15560.0,0.00%,F,F)

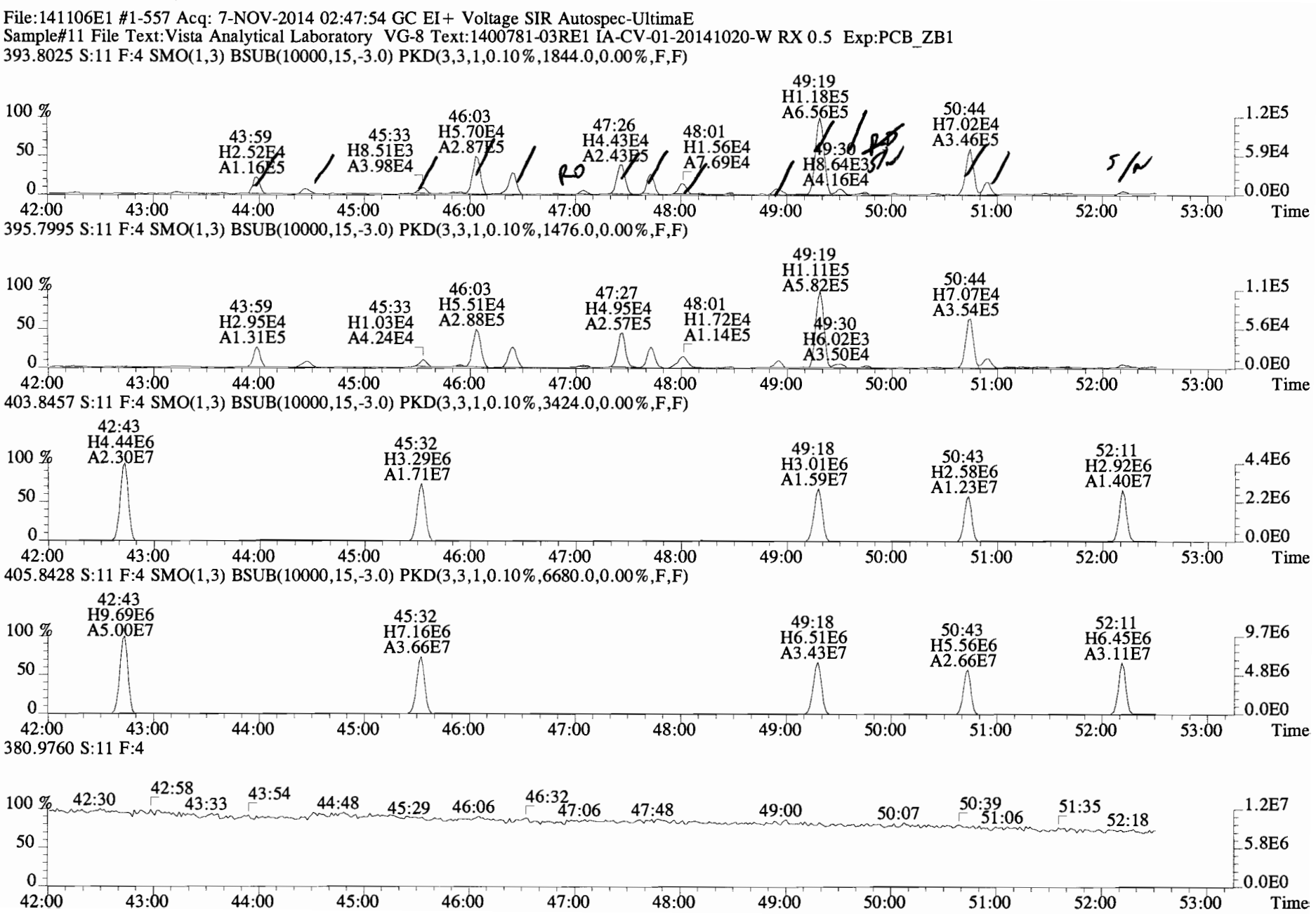


File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
371.8817 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12512.0,0.00%,F,F)

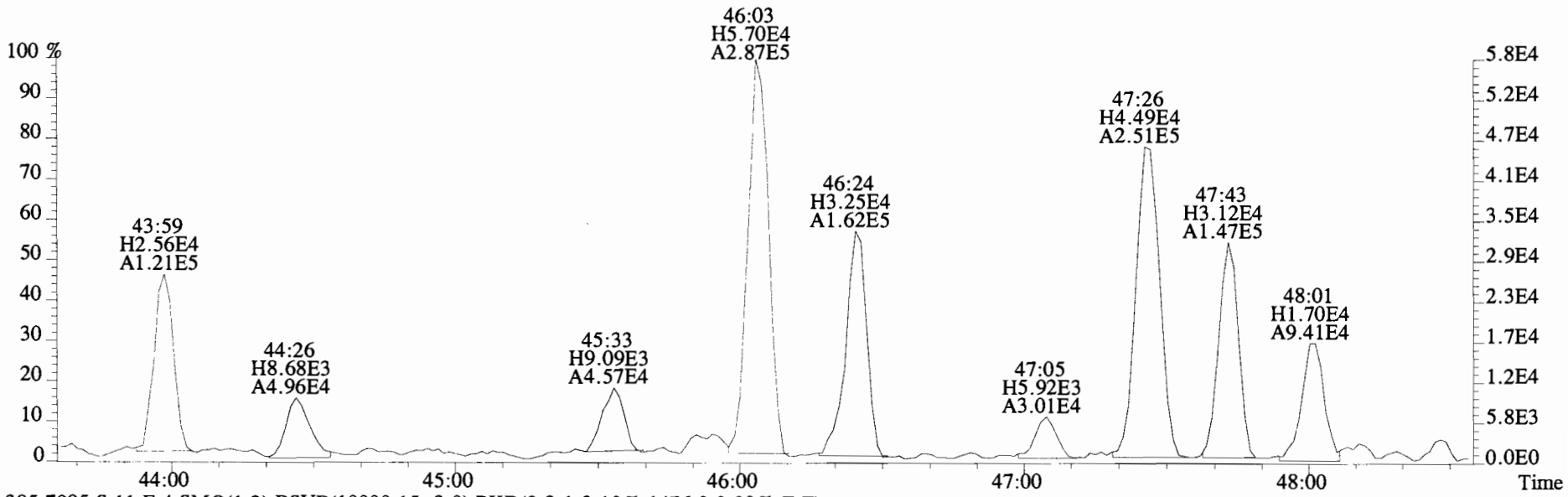


373.8788 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,15560.0,0.00%,F,F)

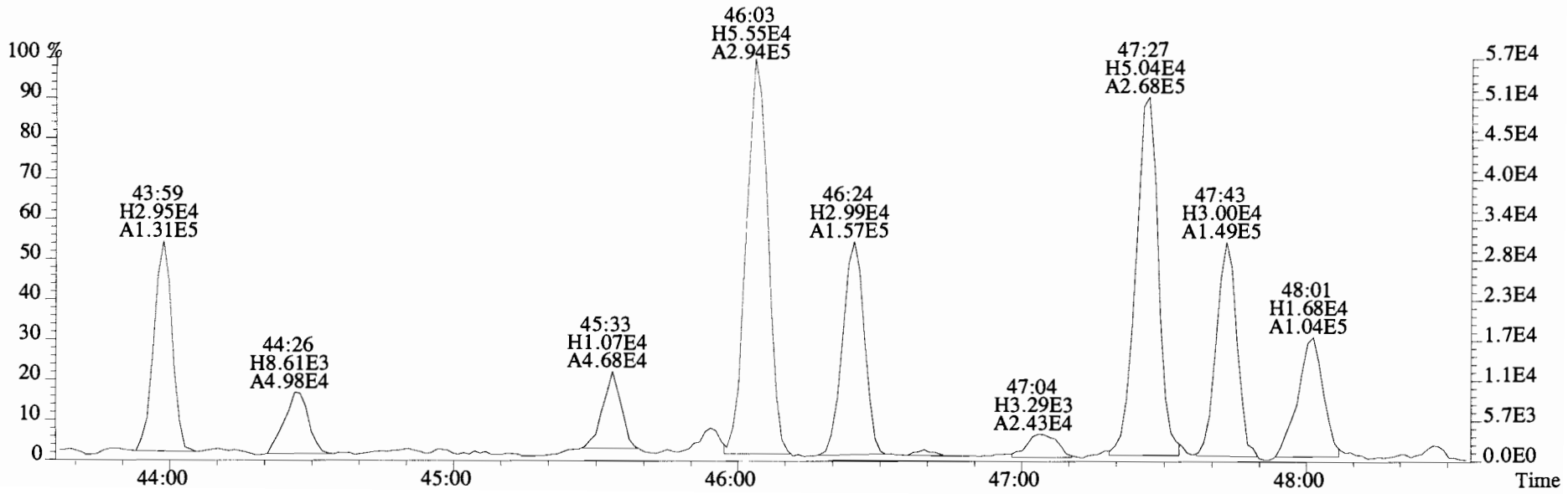



File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
393.8025 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1844.0,0.00%,F,F)
43:59 H2.52E4 A1.16E5
45:33 H8.51E3 A3.98E4
46:03 H5.70E4 A2.87E5
47:26 H4.43E4 A2.43E5
48:01 H1.56E4 A7.69E4
49:19 H1.18E5 A6.56E5
49:30 H8.64E3 A4.16E4
50:44 H7.02E4 A3.46E5
395.7995 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1476.0,0.00%,F,F)
43:59 H2.95E4 A1.31E5
45:33 H1.03E4 A4.24E4
46:03 H5.51E4 A2.88E5
47:27 H4.95E4 A2.57E5
48:01 H1.72E4 A1.14E5
49:19 H1.11E5 A5.82E5
49:30 H6.02E3 A3.50E4
50:44 H7.07E4 A3.54E5
403.8457 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,3424.0,0.00%,F,F)
42:43 H4.44E6 A2.30E7
45:32 H3.29E6 A1.71E7
49:18 H3.01E6 A1.59E7
50:43 H2.58E6 A1.23E7
52:11 H2.92E6 A1.40E7
405.8428 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6680.0,0.00%,F,F)
42:43 H9.69E6 A5.00E7
45:32 H7.16E6 A3.66E7
49:18 H6.51E6 A3.43E7
50:43 H5.56E6 A2.66E7
52:11 H6.45E6 A3.11E7
380.9760 S:11 F:4
42:30
42:58
43:33
43:54
44:48
45:29
46:06
46:32
47:06
47:48
49:00
50:07
50:39
51:06
51:35
52:18
100 %
50
0
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
51:00
52:00
53:00
Time
1.2E5
5.9E4
0.0E0
1.1E5
5.6E4
4.4E6
2.2E6
9.7E6
4.8E6
1.2E7
5.8E6

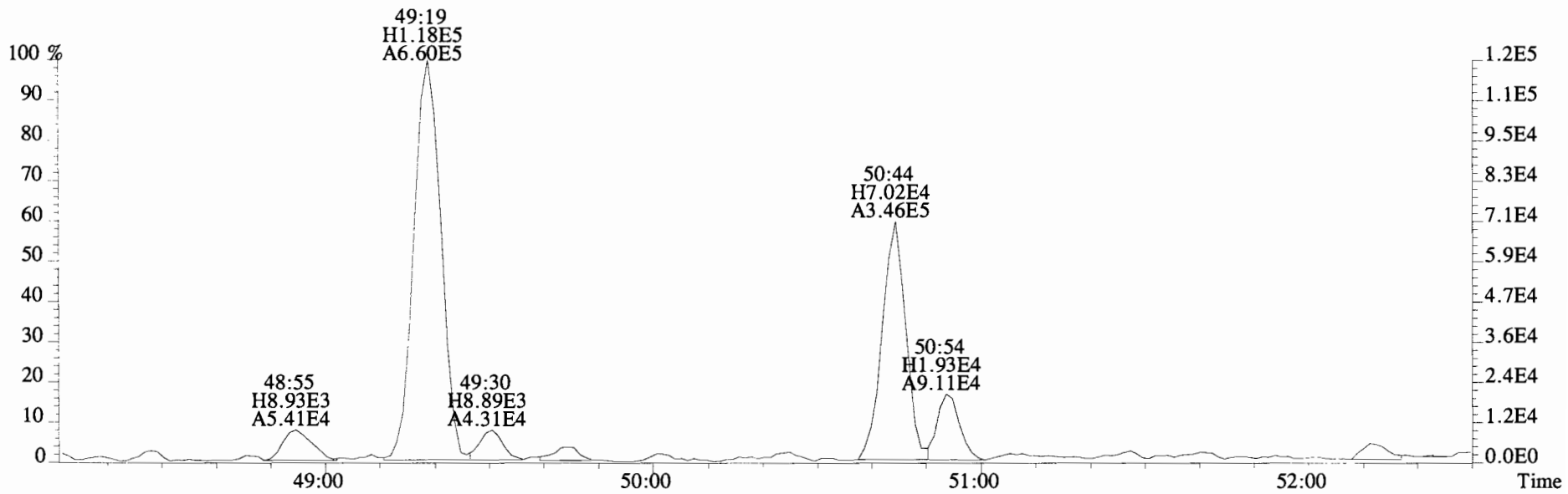
File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
393.8025 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1844.0,0.00%,F,F)



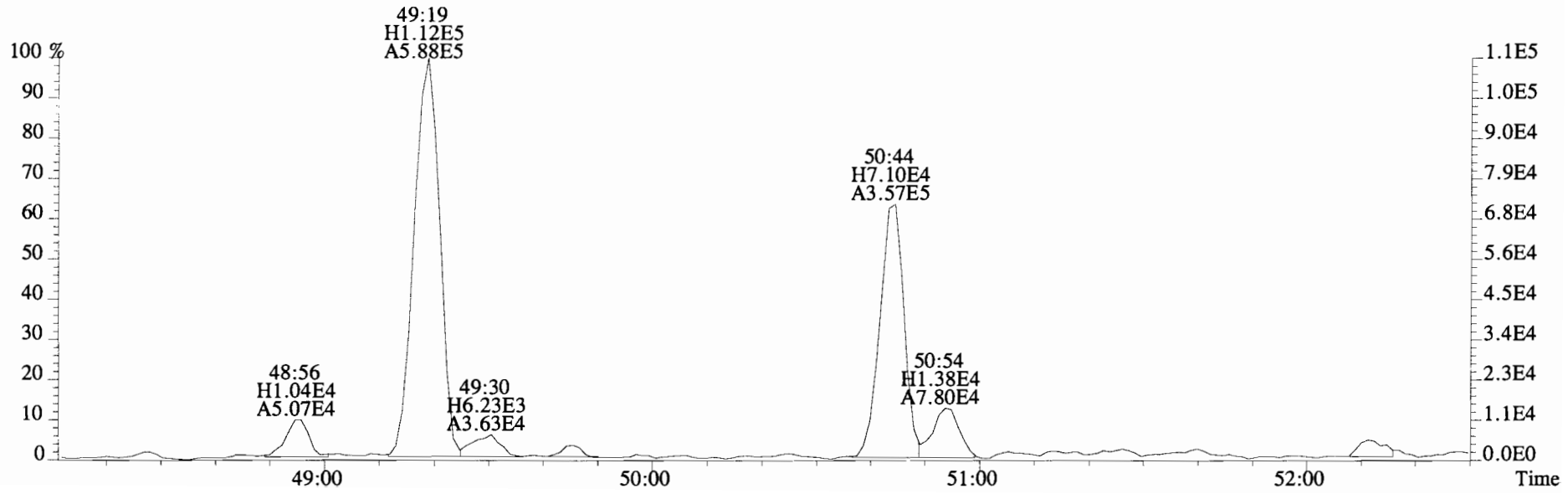
395.7995 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1476.0,0.00%,F,F)

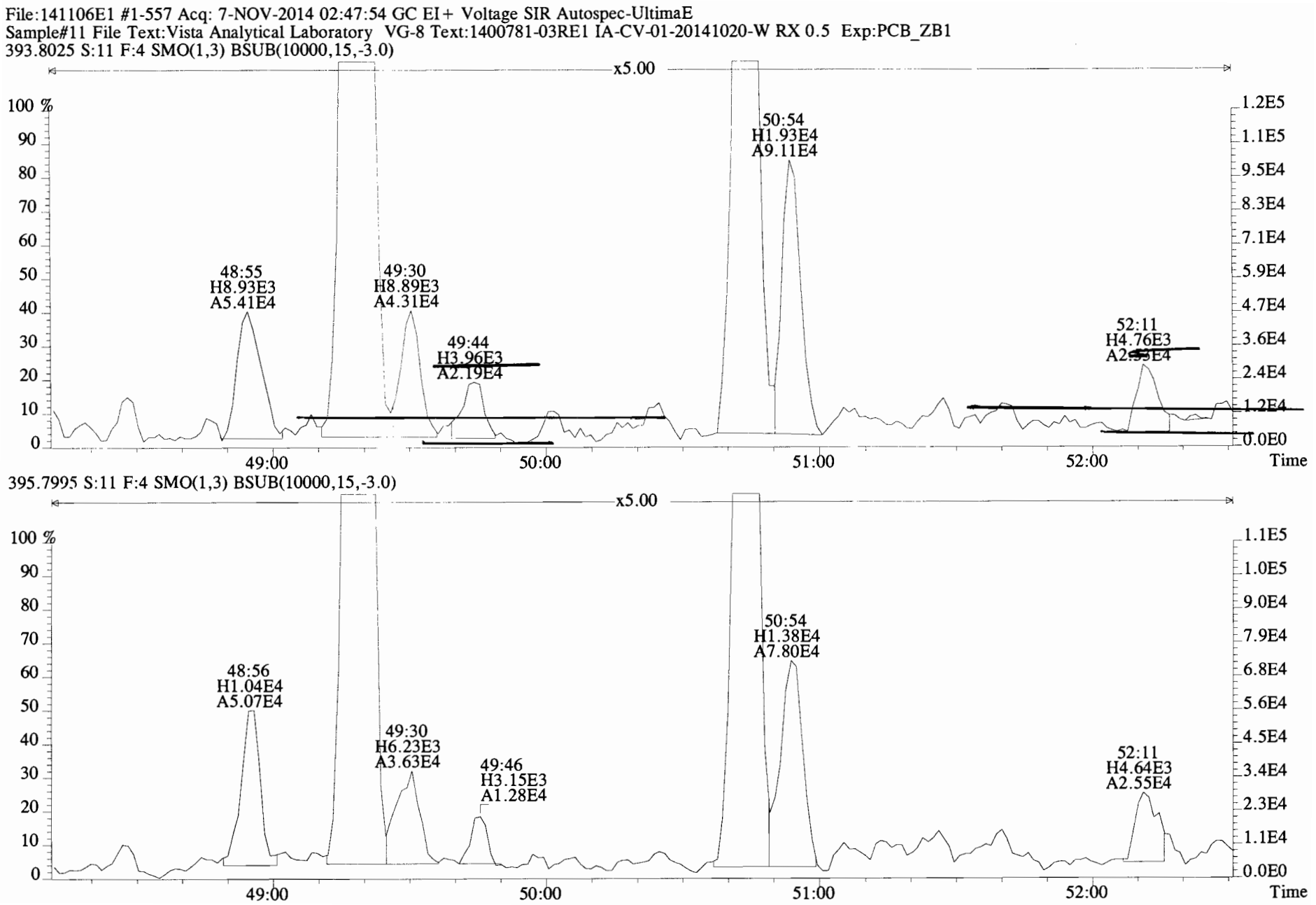


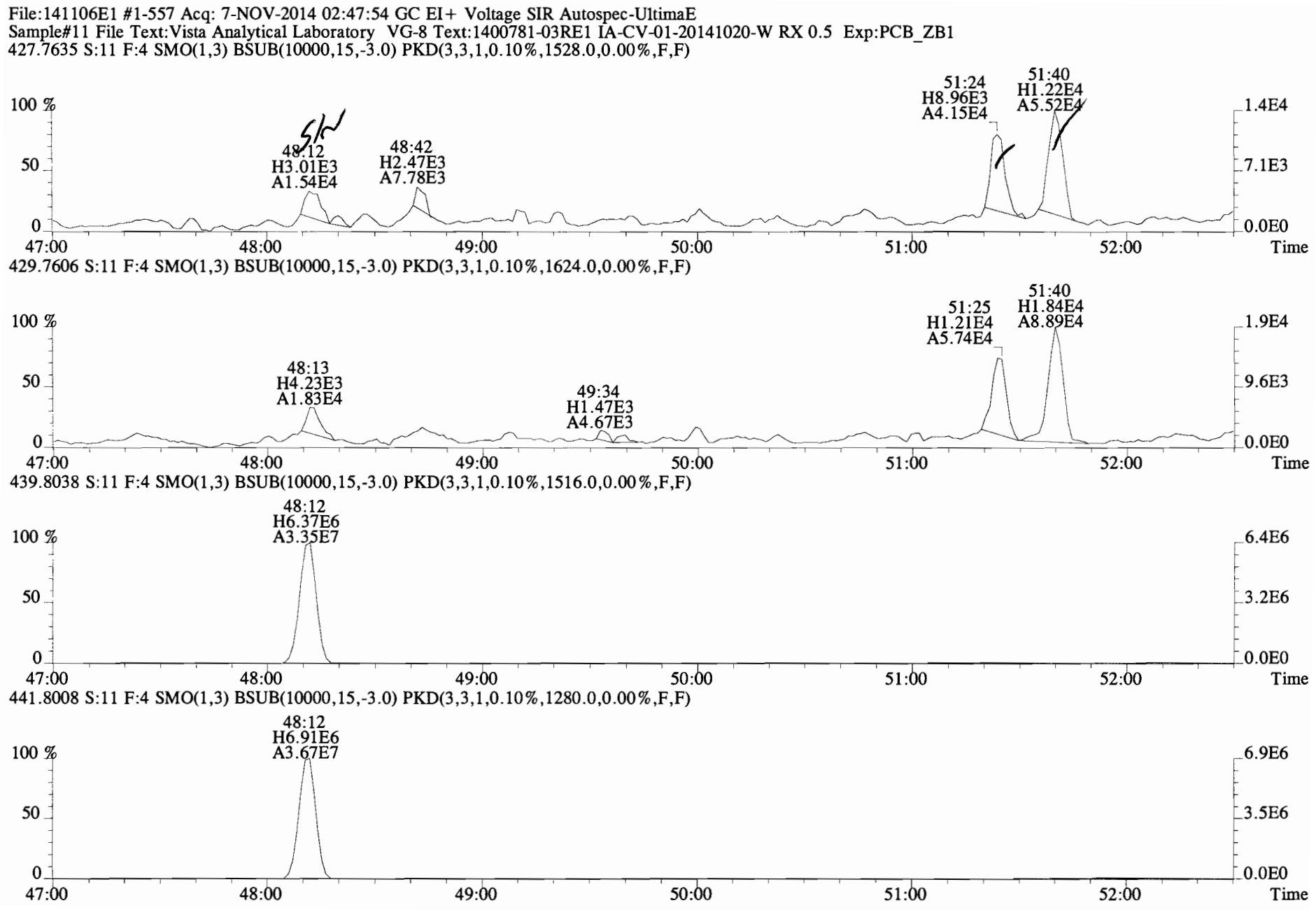
File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
393.8025 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1844.0,0.00%,F,F)



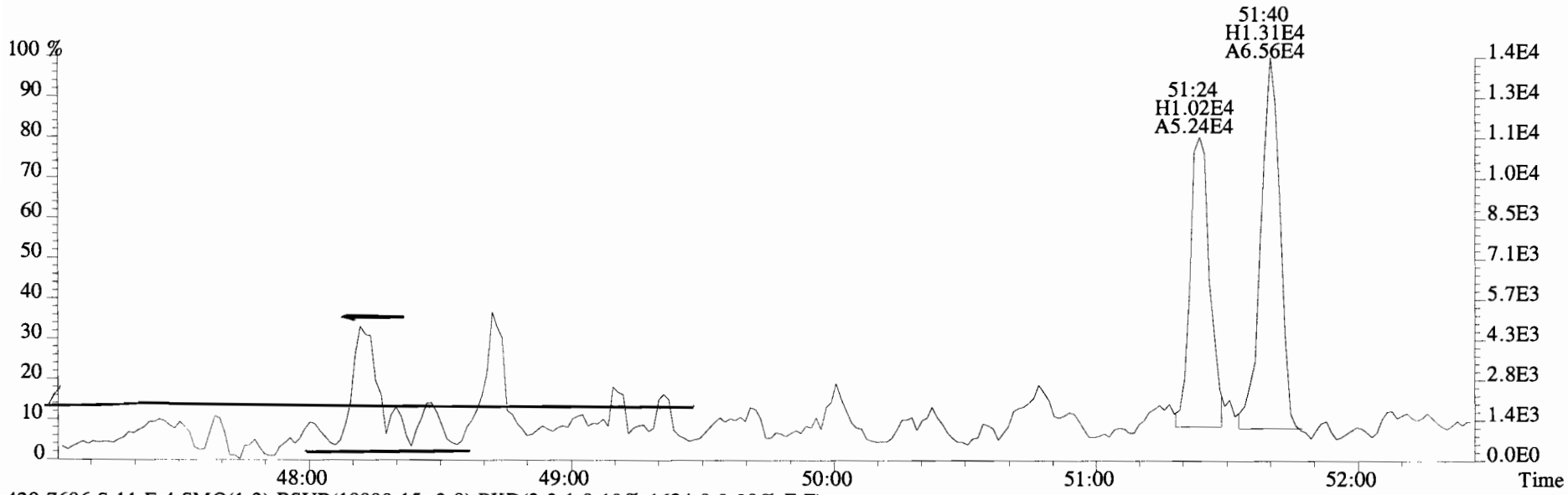
395.7995 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1476.0,0.00%,F,F)



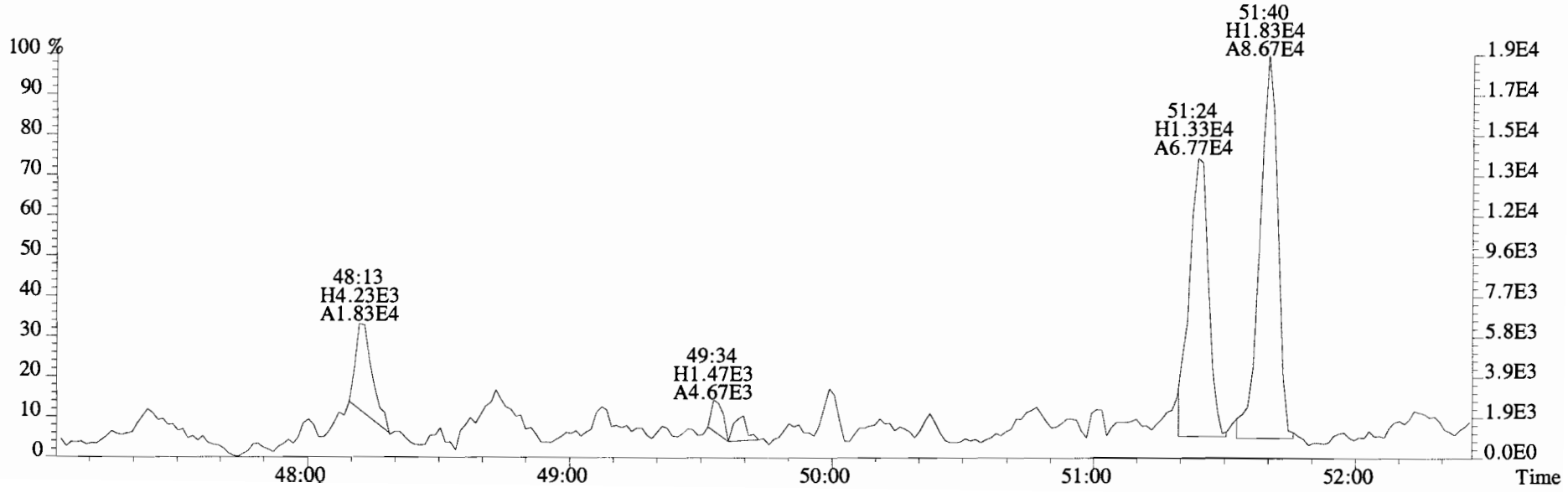

File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
393.8025 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
100 %
48:55
H8.93E3
A5.41E4
49:30
H8.89E3
A4.31E4
49:44
H3.96E3
A2.19E4
50:54
H1.93E4
A9.11E4
52:11
H4.76E3
A2.53E4
1.2E5
1.1E5
9.5E4
8.3E4
7.1E4
5.9E4
4.7E4
3.6E4
2.4E4
1.2E4
0.0E0
49:00
50:00
51:00
52:00
Time
395.7995 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0)
x5.00
100 %
48:56
H1.04E4
A5.07E4
49:30
H6.23E3
A3.63E4
49:46
H3.15E3
A1.28E4
50:54
H1.38E4
A7.80E4
52:11
H4.64E3
A2.55E4
1.1E5
1.0E5
9.0E4
7.9E4
6.8E4
5.6E4
4.5E4
3.4E4
2.3E4
1.1E4
0.0E0
49:00
50:00
51:00
52:00
Time


File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
427.7635 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1528.0,0.00%,F,F)
48:12 H3.01E3 A1.54E4
48:42 H2.47E3 A7.78E3
51:24 H8.96E3 A4.15E4
51:40 H1.22E4 A5.52E4
429.7606 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1624.0,0.00%,F,F)
48:13 H4.23E3 A1.83E4
49:34 H1.47E3 A4.67E3
51:25 H1.21E4 A5.74E4
51:40 H1.84E4 A8.89E4
439.8038 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1516.0,0.00%,F,F)
48:12 H6.37E6 A3.35E7
441.8008 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1280.0,0.00%,F,F)
48:12 H6.91E6 A3.67E7
100 %
50
0
47:00
48:00
49:00
50:00
51:00
52:00
Time
1.4E4
7.1E3
0.0E0
1.9E4
9.6E3
6.4E6
3.2E6
6.9E6
3.5E6

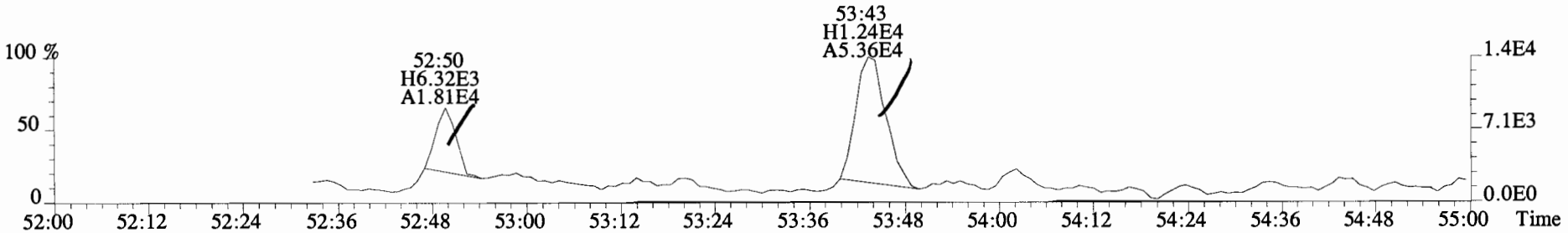
File:141106E1 #1-557 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
427.7635 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1528.0,0.00%,F,F)



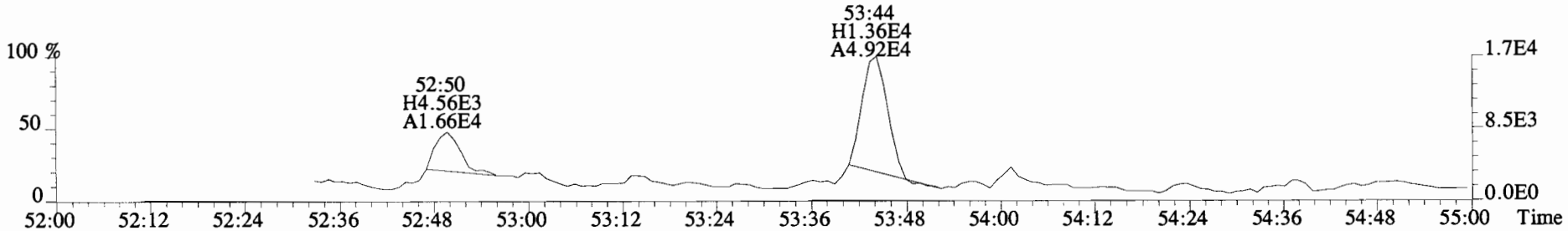
429.7606 S:11 F:4 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1624.0,0.00%,F,F)



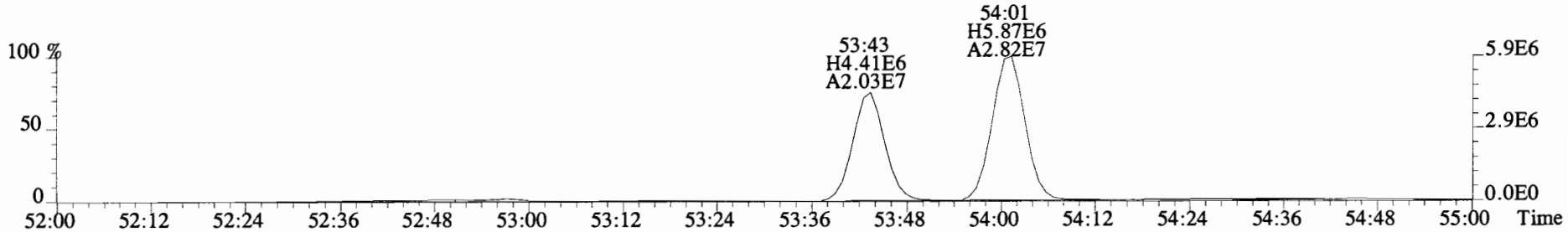
File:141106E1 #1-434 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
427.7635 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)



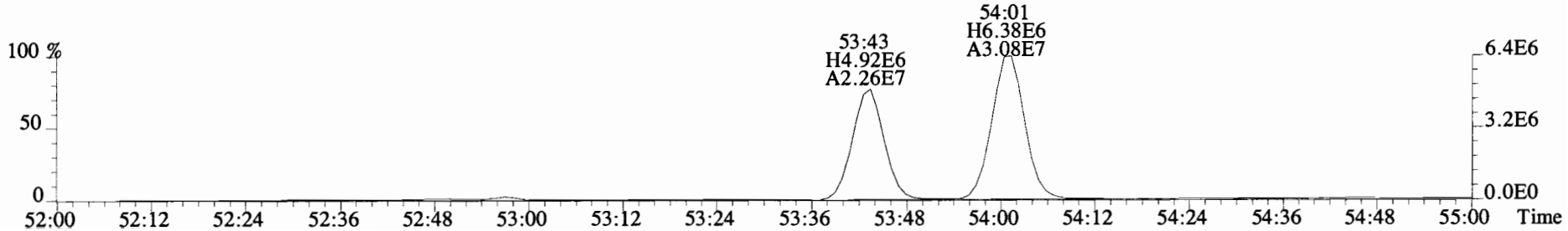
429.7606 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2364.0,0.00%,F,F)



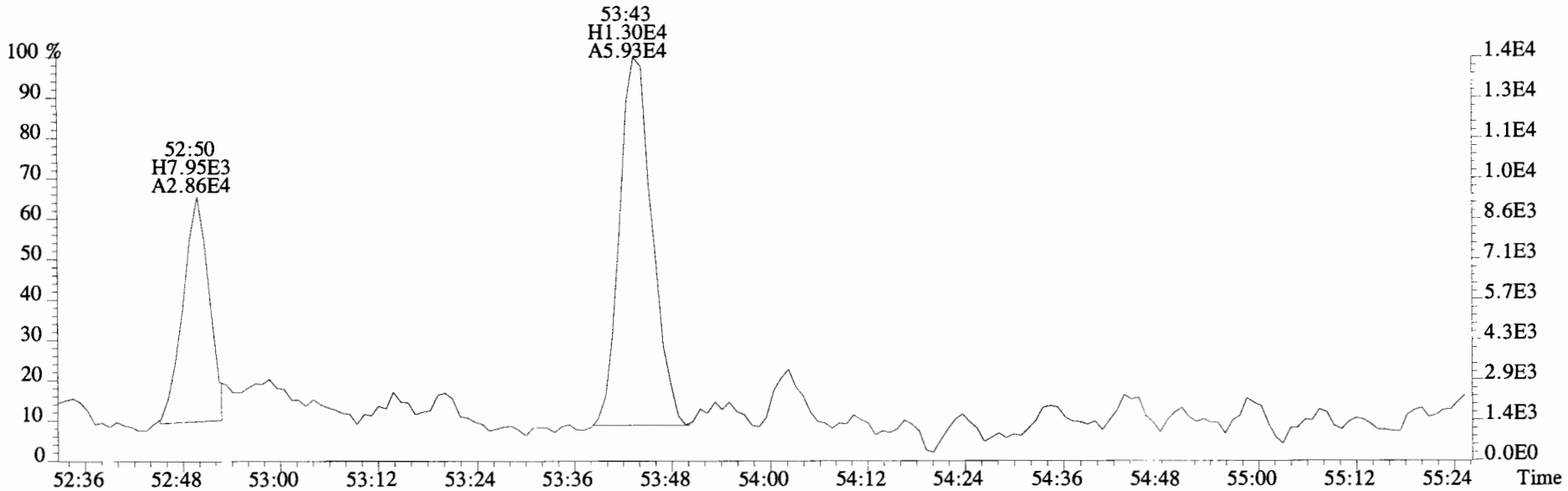
439.8038 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,6080.0,0.00%,F,F)



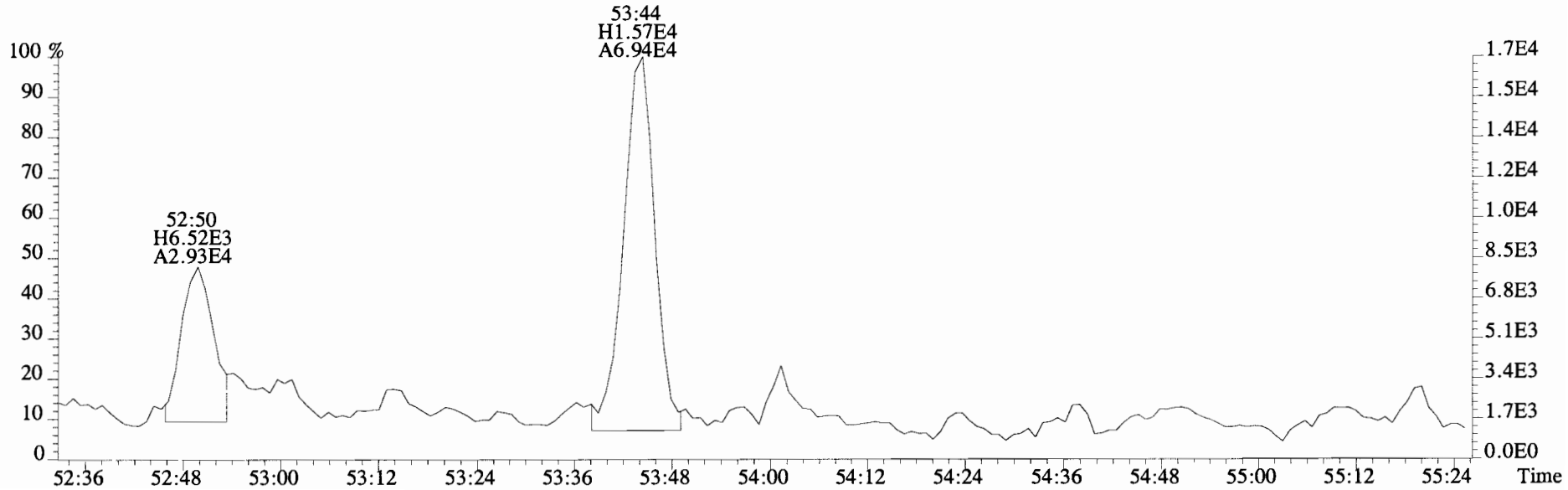
441.8008 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,7344.0,0.00%,F,F)



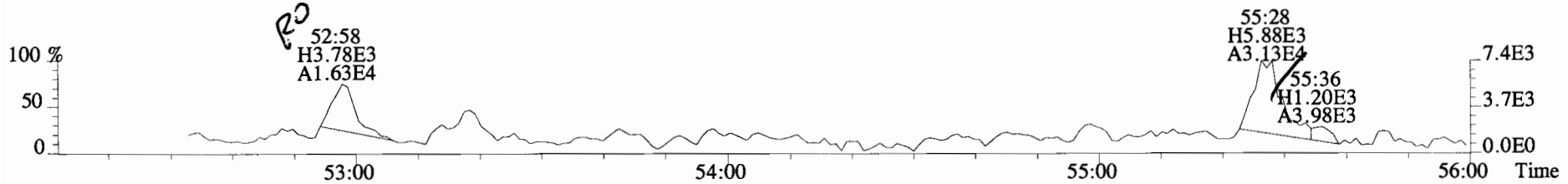
File:141106E1 #1-434 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
427.7635 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2040.0,0.00%,F,F)



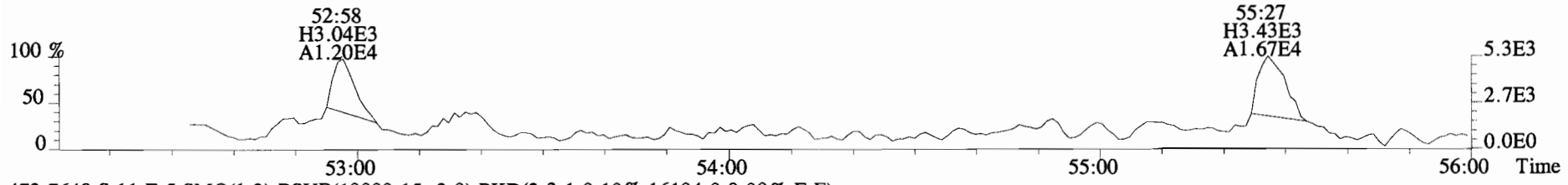
429.7606 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,2364.0,0.00%,F,F)



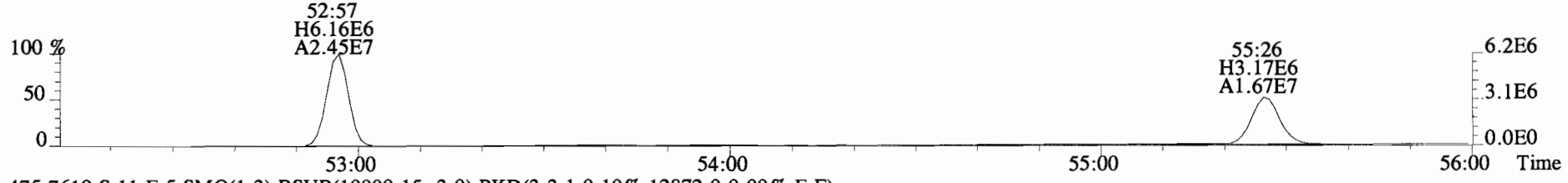
File:141106E1 #1-434 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
463.7216 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1572.0,0.00%,F,F)



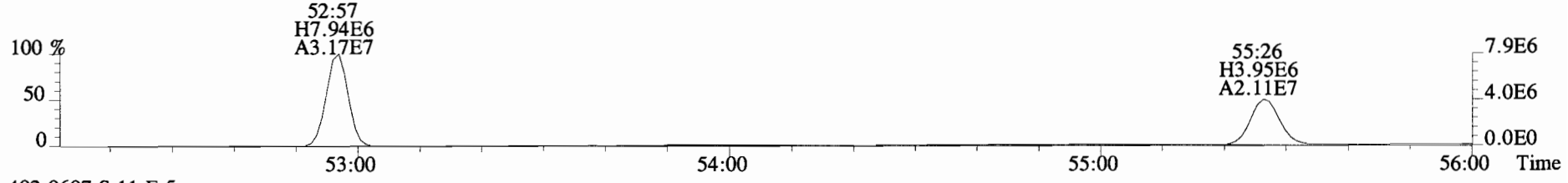
465.7186 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1284.0,0.00%,F,F)



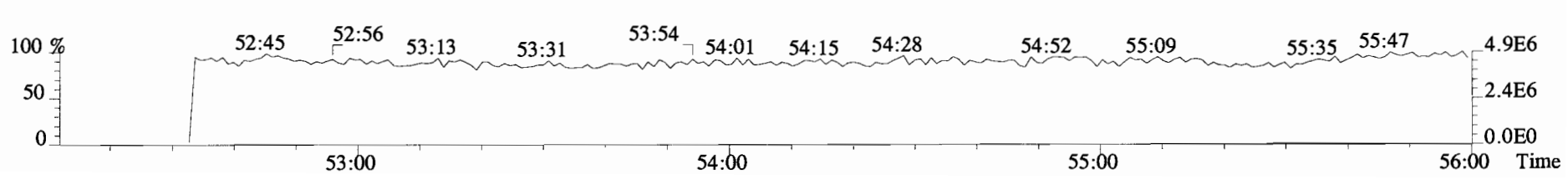
473.7648 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,16104.0,0.00%,F,F)



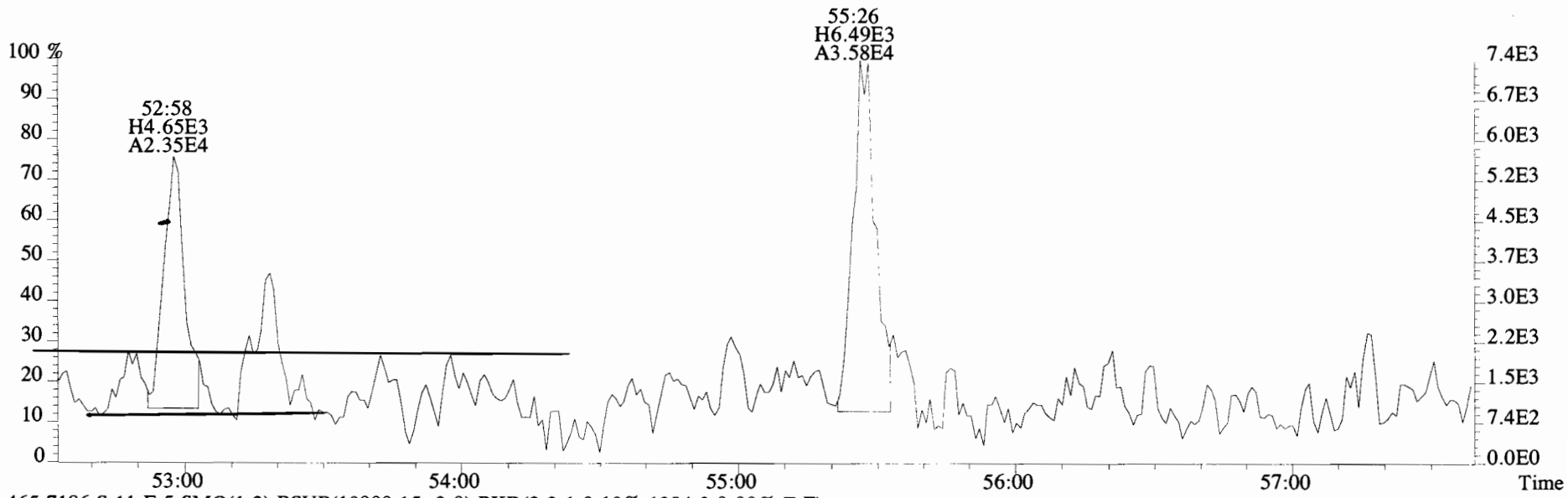
475.7619 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,12872.0,0.00%,F,F)



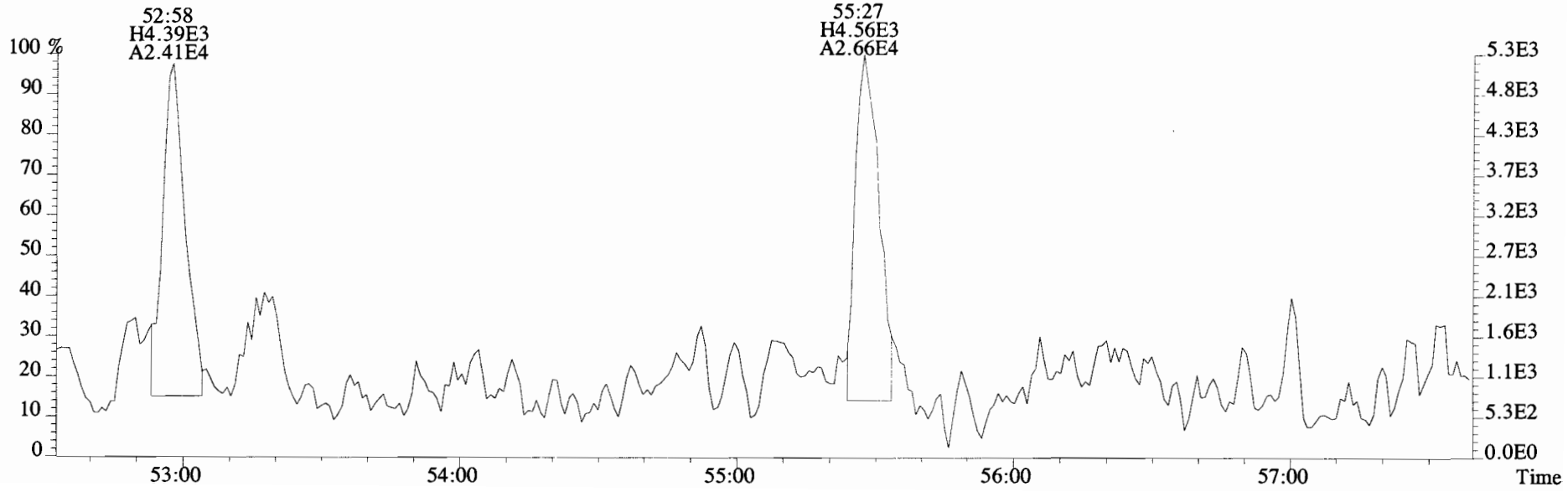
492.9697 S:11 F:5



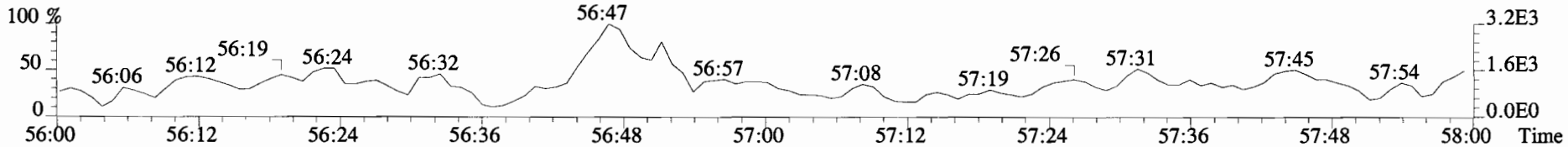
File:141106E1 #1-434 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
463.7216 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1572.0,0.00%,F,F)



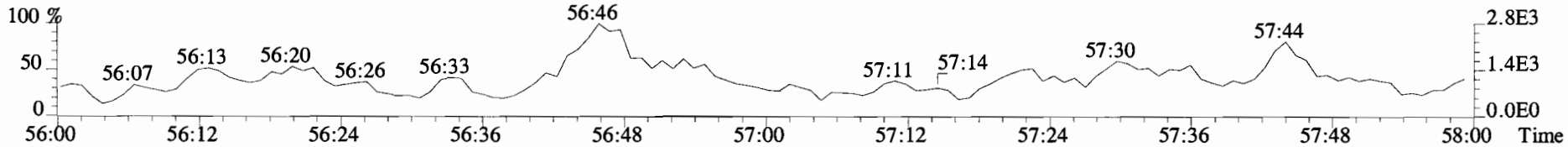
465.7186 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1284.0,0.00%,F,F)



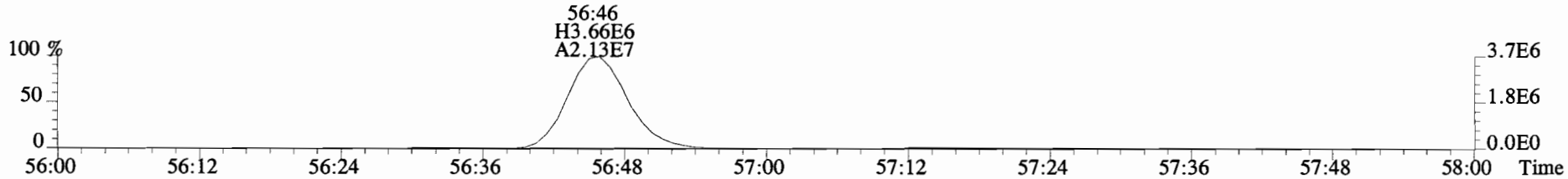
File:141106E1 #1-434 Acq: 7-NOV-2014 02:47:54 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Vista Analytical Laboratory VG-8 Text:1400781-03RE1 IA-CV-01-20141020-W RX 0.5 Exp:PCB_ZB1
497.6826 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1376.0,0.00%,F,F)



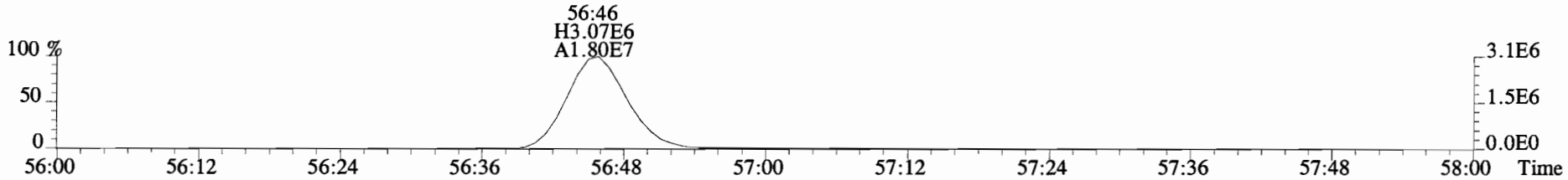
499.6797 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1428.0,0.00%,F,F)



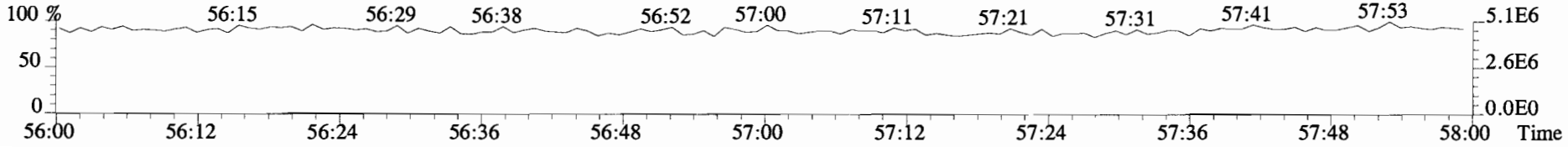
509.7229 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1712.0,0.00%,F,F)



511.7199 S:11 F:5 SMO(1,3) BSUB(10000,15,-3.0) PKD(3,3,1,0.10%,1556.0,0.00%,F,F)



492.9697 S:11 F:5



CONTINUING CALIBRATION

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST141027D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	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	9.47	7.8 - 12.9
						8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M/M+2	0.61	0.54-0.72	y	48.0	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	48.4	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	50.8	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	49.8	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	50.6	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	99.0	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	y	8.74	8.4 - 12.0
						8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	47.8	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	49.3	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	47.1	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	49.5	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.31	1.05-1.43	y	47.0	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.30	1.05-1.43	y	48.0	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.08	0.88-1.20	y	47.8	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.11	0.88-1.20	y	48.5	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	98.0	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: MJ

Date: 10/27/14

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	93.6	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.64	0.54-0.72	y	71.5	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	97.2	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	99.3	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	101	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	98.3	72.0 - 138.0
13C-OCDD	M/M+2	0.87	0.76-1.02	y	168	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.78	0.65-0.89	y	100	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	78.9	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	77.2	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	88.5	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	92.3	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	93.6	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	95.1	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	y	97.6	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.44	0.37-0.51	y	91.9	77.0 - 129.0
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	166	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.83	7.9 - 12.7

(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: M1

Date: 10/27/14

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.: CCAL ID: ST141027D1-1

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	9.47	8.00 - 12.0
1,2,3,7,8-PeCDD	M/M+2	0.61	0.54-0.72	y	48.0	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	48.4	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	50.8	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	49.8	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	50.6	40.0 - 60.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	99.0	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	y	8.74	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	47.8	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	49.3	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	47.1	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	49.5	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.31	1.05-1.43	y	47.0	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.30	1.05-1.43	y	48.0	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.08	0.88-1.20	y	47.8	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.11	0.88-1.20	y	48.5	40.0 - 60.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	98.0	80.0 - 120

Analyst: M)

Date: 10/27/14

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	93.6	70.0 - 130
13C-1,2,3,7,8-PeCDD	M/M+2	0.64	0.54-0.72	y	71.5	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	97.2	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	99.3	70.0 - 130
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	101	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	98.3	70.0 - 130
13C-OCDD	M+2/M+4	0.87	0.76-1.02	y	168	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	100	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	78.9	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	77.2	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	88.5	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	92.3	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	93.6	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	95.1	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	97.6	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	91.9	70.0 - 130
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	166	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					9.83	7.00 - 13.0

Analyst: m)

Date: 10/27/14

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-16-14

RT Window Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

ZB-5MS IS Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

DB_225 IS Data Filename: Analysis Date: Time:

ZB-5MS RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:37	1,3,6,8-TCDF (F)	21:26
1,2,8,9-TCDD (L)	27:54	1,2,8,9-TCDF (L)	28:03
1,2,4,7,9-PeCDD (F)	29:30	1,3,4,6,8-PeCDF (F)	27:60
1,2,3,8,9-PeCDD (L)	31:56	1,2,3,8,9-PeCDF (L)	32:11
1,2,4,6,7,9-HxCDD (F)	33:21	1,2,3,4,6,8-HxCDF (F)	32:48
1,2,3,7,8,9-HxCDD (L)	35:19	1,2,3,7,8,9-HxCDF (L)	35:43
1,2,3,4,6,7,9-HpCDD (F)	37:56	1,2,3,4,6,7,8-HpCDF (F)	37:33
1,2,3,4,6,7,8-HpCDD (L)	38:47	1,2,3,4,7,8,9-HpCDF (L)	39:20

(F) = First eluting isomer (ZB-5MS); (L) = Last eluting isomer (ZB-5MS).

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

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: (M)

Date: 10/24/14

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: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.193	1.000-1.567
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.992	0.923-1.103
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.148	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.183	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: MJ

Date: 10/27/14

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D1 S#1 Analysis Date: 27-OCT-14 Time: 14:31:19

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.988	0.975-1.001
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.992	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.009	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.037	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.026	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.091	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.143	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.127	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.223	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.230	1.091-1.371

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: VM

Date: 10/27/14

Client ID: 1613 CS3 14I1102 Filename: 141027D1 S:1 Acq:27-OCT-14 14:31:19 ConCal: ST141027D1-1

Lab ID: ST141027D1-1 GC Column ID: ZB-5MS ICal: 1613VG7-10-16-14 wt/vol: 1.000 EndCAL: ST141027D1-2

	Name	Resp	RA	RRF	RT	RRT	Conc	Q	noise	Fac	DL
	2,3,7,8-TCDD	2.24e+06	0.77 y	1.18	27:03	1.001	9.4703		*	2.5	*
	1,2,3,7,8-PeCDD	7.78e+06	0.61 y	0.92	31:34	1.000	48.006		*	2.5	*
	1,2,3,4,7,8-HxCDD	7.02e+06	1.25 y	1.09	34:54	1.000	48.419		*	2.5	*
	1,2,3,6,7,8-HxCDD	7.50e+06	1.27 y	1.07	35:01	1.000	50.777		*	2.5	*
	1,2,3,7,8,9-HxCDD	7.55e+06	1.27 y	0.93	35:19	1.000	49.781		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	6.76e+06	1.04 y	1.12	38:47	1.001	50.608		*	2.5	*
	OCDD	1.17e+07	0.89 y	0.95	42:06	1.000	98.955		*	2.5	*
	2,3,7,8-TCDF	2.70e+06	0.76 y	1.08	26:15	1.001	8.7370		*	2.5	*
	1,2,3,7,8-PeCDF	1.21e+07	1.58 y	1.09	30:23	1.000	47.809		*	2.5	*
	2,3,4,7,8-PeCDF	1.19e+07	1.61 y	1.04	31:17	1.000	49.317		*	2.5	*
	1,2,3,4,7,8-HxCDF	1.09e+07	1.28 y	1.39	34:00	1.000	47.058		*	2.5	*
	1,2,3,6,7,8-HxCDF	1.20e+07	1.29 y	1.26	34:08	1.001	49.530		*	2.5	*
	2,3,4,6,7,8-HxCDF	1.12e+07	1.31 y	1.30	34:44	1.001	46.965		*	2.5	*
	1,2,3,7,8,9-HxCDF	8.84e+06	1.30 y	1.19	35:43	1.001	48.024		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	1.02e+07	1.08 y	1.62	37:33	1.000	47.839		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	9.12e+06	1.11 y	1.53	39:20	1.000	48.511		*	2.5	*
	OCDF	1.48e+07	0.91 y	1.10	42:20	1.000	98.037		*	2.5	*
IS	13C-2,3,7,8-TCDD	2.00e+07	0.79 y	1.07	27:01	1.022	93.556				
IS	13C-1,2,3,7,8-PeCDD	1.76e+07	0.64 y	1.24	31:33	1.193	71.549				
IS	13C-1,2,3,4,7,8-HxCDD	1.33e+07	1.26 y	0.72	34:53	1.014	97.223				
IS	13C-1,2,3,6,7,8-HxCDD	1.38e+07	1.23 y	0.74	35:00	1.017	99.332				
IS	13C-1,2,3,7,8,9-HxCDD	1.63e+07	1.24 y	0.86	35:18	1.026	100.65				
IS	13C-1,2,3,4,6,7,8-HpCDD	1.20e+07	1.05 y	0.64	38:46	1.127	98.283				
IS	13C-OCDD	2.49e+07	0.87 y	0.78	42:05	1.223	168.09				
IS	13C-2,3,7,8-TCDF	2.87e+07	0.78 y	0.92	26:14	0.992	100.29				
IS	13C-1,2,3,7,8-PeCDF	2.32e+07	1.62 y	0.95	30:22	1.148	78.935				
IS	13C-2,3,4,7,8-PeCDF	2.32e+07	1.57 y	0.97	31:17	1.183	77.209				
IS	13C-1,2,3,4,7,8-HxCDF	1.66e+07	0.51 y	0.99	33:59	0.988	88.520				
IS	13C-1,2,3,6,7,8-HxCDF	1.92e+07	0.52 y	1.10	34:07	0.992	92.287				
IS	13C-2,3,4,6,7,8-HxCDF	1.83e+07	0.51 y	1.03	34:43	1.009	93.619				
IS	13C-1,2,3,7,8,9-HxCDF	1.55e+07	0.52 y	0.86	35:42	1.037	95.100				
IS	13C-1,2,3,4,6,7,8-HpCDF	1.32e+07	0.44 y	0.71	37:32	1.091	97.634				
IS	13C-1,2,3,4,7,8,9-HpCDF	1.23e+07	0.44 y	0.71	39:19	1.143	91.928				
IS	13C-OCDF	2.75e+07	0.90 y	0.87	42:19	1.230	166.00				
C/Up	37Cl-2,3,7,8-TCDD	2.37e+06		1.21	27:02	1.022	9.8276				
RS/RT	13C-1,2,3,4-TCDD	1.99e+07	0.80 y	1.00	26:27	*	100.00				
RS	13C-1,2,3,4-TCDF	3.10e+07	0.76 y	1.00	24:59	*	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	1.89e+07	0.52 y	1.00	34:24	*	100.00				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	56.7	57.2		*	*
Total Penta-Dioxins	158	158		*	*
Total Hexa-Dioxins	195	196		*	*
Total Hepta-Dioxins	124	125		*	*
Total Tetra-Furans	28.1	28.6		*	*
Total Penta-Furans	208.15	209.59		*	*
Total Hexa-Furans	240	241		*	*
Total Hepta-Furans	97.4	98.8		*	*

	Rec	Qual
IS	93.6	
IS	71.5	
IS	97.2	
IS	99.3	
IS	101	
IS	98.3	
IS	84.0	
IS	100	
IS	78.9	
IS	77.2	
IS	88.5	
IS	92.3	
IS	93.6	
IS	95.1	
IS	97.6	
IS	91.9	
IS	83.0	
C/Up	24.6	

Integrations by Analyst: VM1 Date: 10/27/14

Reviewed by Analyst: [signature] Date: 10/27/14

Vista Analytical Laboratory - Injection Log Run file: 141027D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141027D1	1	ST141027D1-1	MAS	27-OCT-14	14:31:19	ST141027D1-1	ST141027D1-2
141027D1	2	B4J0130-BS1	MAS	27-OCT-14	15:19:49	ST141027D1-1	NA
141027D1	3	B4J0127-BS1	MAS	27-OCT-14	16:08:20	ST141027D1-1	NA
141027D1	4	B4J0128-BS1	MAS	27-OCT-14	16:56:49	ST141027D1-1	ST141027D1-2
141027D1	5	SOLVENT BLANK	MAS	27-OCT-14	17:45:20	NA	NA
141027D1	6	B4J0130-BLK1	MAS	27-OCT-14	18:33:50	ST141027D1-1	NA
141027D1	7	B4J0127-BLK1	MAS	27-OCT-14	19:22:20	ST141027D1-1	NA
141027D1	8	B4J0128-BLK1	MAS	27-OCT-14	20:10:51	ST141027D1-1	ST141027D1-2
141027D1	9	1400777-24	MAS	27-OCT-14	20:59:20	ST141027D1-1	NA
141027D1	10	1400760-01RE1	MAS	27-OCT-14	21:47:50	ST141027D1-1	NA
141027D1	11	1400761-01RE1	MAS	27-OCT-14	22:36:18	ST141027D1-1	NA
141027D1	12	1400712-01RE2	MAS	27-OCT-14	23:24:45	ST141027D1-1	ST141027D1-2
141027D1	13	1400762-03	MAS	28-OCT-14	00:13:15	ST141027D1-1	NA
141027D1	14	1400762-04	MAS	28-OCT-14	01:01:43	ST141027D1-1	NA
141027D1	15	1400762-05	MAS	28-OCT-14	01:50:12	ST141027D1-1	NA
141027D1	16	SOLVENT BLANK	MAS	28-OCT-14	02:38:45	NA	NA
141027D1	17	SOLVENT BLANK	MAS	28-OCT-14	03:27:15	NA	NA
141027D1	18	ST141027D1-2	MAS	28-OCT-14	04:15:46	ST141027D1-1	ST141027D1-2

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST141027D1-1 End Calibration ID: ST141027D1-2

	Beg.	End
Ion abundance within QC limits?	✓	✓
Concentration within range?	✓	✓
First and last eluters present?	✓	✓
Retention Times within criteria?	✓	✓
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	✓	✓
Forms signed and dated?	✓	✓
Correct ICAL referenced?	✓	✓
Run Log:		
-Data file matches Conc Cal ID?	✓	✓
-Correct instrument listed?	✓	✓
-Samples within 12-hour clock?	y	n

	Beg.	End
Mass resolution > 10,000? ▪ Method 1614 > 5,000; CARB 429 > 8,000	✓	✓
TCDD/TCDF valleys < 25%?	✓	✓
Peaks integrated correctly?	✓	✓
Manual integrations included?	✓	✓
8280 CS1 Ending Standard		
-Ratios within limits	NA	
-S/N > 2.5:1		
-CS1 within 12-hour clock	✓	

Comments:

Reviewed by: ✓ 10/28/14
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: ST141027D2-1

Contract No.: SAS No.:

Initial Calibration Date: 10-16-14

Instrument ID: VG-7 GC Column ID: ZB-5MS

VER Data Filename: 141027D2 S#1 Analysis Date: 28-OCT-14 Time: 05:19:42

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	10.1	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M/M+2	0.61	0.54-0.72	y	48.7	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	50.0	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	51.8	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	y	50.8	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	0.86	0.76-1.02	y	97.6	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	y	9.26	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	48.6	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	49.6	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	48.4	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	50.3	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	49.0	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	y	49.3	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.07	0.88-1.20	y	49.4	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.08	0.88-1.20	y	49.3	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	102	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: [signature]

Date: 10/29/14

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: 141027D2 S#1 Analysis Date: 28-OCT-14 Time: 05:19:42

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	90.1	82.0 - 121.0
13C-1,2,3,7,8-PeCDD	M/M+2	0.62	0.54-0.72	y	86.3	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	89.8	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	96.5	85.0 - 118.0
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	94.9	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.10	0.88-1.20	y	91.8	72.0 - 138.0
13C-OCDD	M/M+2	0.89	0.76-1.02	y	165	96.0 - 415.0
13C-2,3,7,8-TCDF	M+2/M+4	0.78	0.65-0.89	y	102	71.0 - 140.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.69	1.32-1.78	y	85.8	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	89.1	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	88.5	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	92.9	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	93.2	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	92.7	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.44	0.37-0.51	y	92.9	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.44	0.37-0.51	y	84.7	77.0 - 129.0
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	170	96.0 - 415.0
CLEANUP STANDARD (3)						
37Cl-2,3,7,8-TCDD					9.39	7.9 - 12.7

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified

(3) No ion abundance ratio; report concentration found.

Analyst: MJ

Date: 10/29/14

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Vista Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 10-16-14

RT Window Data Filename: 141027D2 S#1 Analysis Date: 28-OCT-14 Time: 05:19:42

ZB-5MS IS Data Filename: 141027D2 S#1 Analysis Date: 28-OCT-14 Time: 05:19:42

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)	23:34	1,3,6,8-TCDF (F)	21:23
1,2,8,9-TCDD (L)	27:53	1,2,8,9-TCDF (L)	28:01
1,2,4,7,9-PeCDD (F)	29:29	1,3,4,6,8-PeCDF (F)	27:58
1,2,3,8,9-PeCDD (L)	31:54	1,2,3,8,9-PeCDF (L)	32:09
1,2,4,6,7,9-HxCDD (F)	33:20	1,2,3,4,6,8-HxCDF (F)	32:47
1,2,3,7,8,9-HxCDD (L)	35:18	1,2,3,7,8,9-HxCDF (L)	35:42
1,2,3,4,6,7,9-HpCDD (F)	37:55	1,2,3,4,6,7,8-HpCDF (F)	37:32
1,2,3,4,6,7,8-HpCDD (L)	38:46	1,2,3,4,7,8,9-HpCDF (L)	39:19

(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: [signature]

Date: 10/29/14

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: 141027D2 S#1 Analysis Date: 28-OCT-14 Time: 05:19:42

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	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.976-1.043
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.194	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	1.149	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.183	1.011-1.526
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: MJ

Date: 10/29/14

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: 141027D2 S#1 Analysis Date: 28-OCT-14 Time: 05:19:42

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	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,7,8,9-HxCDD	1.000	0.998-1.004
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.988	0.975-1.001
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	0.992	0.979-1.005
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.009	1.001-1.020
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,4,6,9-HxCDF	1.038	1.002-1.072
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.014	1.002-1.026
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.017	1.007-1.029
13C-1,2,3,7,8,9-HxCDD	13C-1,2,3,4,6,9-HxCDF	1.026	1.014-1.038
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.091	1.069-1.111
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,6,9-HxCDF	1.143	1.098-1.192
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,9-HxCDF	1.127	1.117-1.141
13C-OCDD	13C-1,2,3,4,6,9-HxCDF	1.224	1.085-1.365
13C-OCDF	13C-1,2,3,4,6,9-HxCDF	1.230	1.091-1.371

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

Analyst: MJ

Date: 10/28/14

Client ID: 1613 CS3 14I1102 Filename: 141027D2 S:1 Acq:28-OCT-14 05:19:42 ConCal: ST141027D2-1

Lab ID: ST141027D2-1 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	9.26e+05	0.76 y	1.18	27:01	1.001	10.117		*	2.5	*
	1,2,3,7,8-PeCDD	3.82e+06	0.61 y	0.92	31:33	1.001	48.658		*	2.5	*
	1,2,3,4,7,8-HxCDD	3.54e+06	1.25 y	1.09	34:53	1.000	50.027		*	2.5	*
	1,2,3,6,7,8-HxCDD	3.92e+06	1.22 y	1.07	34:60	1.000	51.762		*	2.5	*
	1,2,3,7,8,9-HxCDD	3.84e+06	1.25 y	0.93	35:18	1.000	50.825		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	3.29e+06	1.05 y	1.12	38:46	1.001	50.015		*	2.5	*
	OCDD	6.01e+06	0.86 y	0.95	42:05	1.000	97.647		*	2.5	*
	2,3,7,8-TCDF	1.25e+06	0.80 y	1.08	26:14	1.001	9.2639		*	2.5	*
	1,2,3,7,8-PeCDF	5.73e+06	1.58 y	1.09	30:22	1.001	48.559		*	2.5	*
	2,3,4,7,8-PeCDF	5.94e+06	1.60 y	1.04	31:16	1.000	49.579		*	2.5	*
	1,2,3,4,7,8-HxCDF	5.89e+06	1.29 y	1.39	33:59	1.000	48.397		*	2.5	*
	1,2,3,6,7,8-HxCDF	6.48e+06	1.28 y	1.26	34:07	1.000	50.349		*	2.5	*
	2,3,4,6,7,8-HxCDF	6.12e+06	1.25 y	1.30	34:43	1.001	49.018		*	2.5	*
	1,2,3,7,8,9-HxCDF	4.66e+06	1.25 y	1.19	35:42	1.000	49.277		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	5.29e+06	1.07 y	1.62	37:32	1.000	49.407		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	4.51e+06	1.08 y	1.53	39:19	1.000	49.293		*	2.5	*
	OCDF	8.33e+06	0.91 y	1.10	42:19	1.000	101.71		*	2.5	*
IS	13C-2,3,7,8-TCDD	7.73e+06	0.77 y	1.07	26:59	1.022	90.130				
IS	13C-1,2,3,7,8-PeCDD	8.55e+06	0.62 y	1.24	31:32	1.194	86.340				
IS	13C-1,2,3,4,7,8-HxCDD	6.50e+06	1.28 y	0.72	34:52	1.014	89.760				
IS	13C-1,2,3,6,7,8-HxCDD	7.09e+06	1.28 y	0.74	34:59	1.017	96.457				
IS	13C-1,2,3,7,8,9-HxCDD	8.11e+06	1.23 y	0.86	35:17	1.026	94.859				
IS	13C-1,2,3,4,6,7,8-HpCDD	5.91e+06	1.10 y	0.64	38:45	1.127	91.775				
IS	13C-OCDD	1.29e+07	0.89 y	0.78	42:05	1.224	165.41				
IS	13C-2,3,7,8-TCDF	1.25e+07	0.78 y	0.92	26:12	0.992	101.83				
IS	13C-1,2,3,7,8-PeCDF	1.08e+07	1.69 y	0.95	30:21	1.149	85.824				
IS	13C-2,3,4,7,8-PeCDF	1.15e+07	1.56 y	0.97	31:15	1.183	89.149				
IS	13C-1,2,3,4,7,8-HxCDF	8.76e+06	0.50 y	0.99	33:58	0.988	88.458				
IS	13C-1,2,3,6,7,8-HxCDF	1.02e+07	0.52 y	1.10	34:06	0.992	92.873				
IS	13C-2,3,4,6,7,8-HxCDF	9.61e+06	0.51 y	1.03	34:42	1.009	93.232				
IS	13C-1,2,3,7,8,9-HxCDF	7.95e+06	0.52 y	0.86	35:41	1.038	92.666				
IS	13C-1,2,3,4,6,7,8-HpCDF	6.63e+06	0.44 y	0.71	37:31	1.091	92.910				
IS	13C-1,2,3,4,7,8,9-HpCDF	6.00e+06	0.44 y	0.71	39:18	1.143	84.739				
IS	13C-OCDF	1.49e+07	0.91 y	0.87	42:19	1.230	170.14				
C/Up	37Cl-2,3,7,8-TCDD	9.10e+05		1.21	27:00	1.022	9.3947				
RS/RT	13C-1,2,3,4-TCDD	7.99e+06	0.80 y	1.00	26:25	*	100.00				
RS	13C-1,2,3,4-TCDF	1.33e+07	0.76 y	1.00	24:58	*	100.00				
RS/RT	13C-1,2,3,4,6,9-HxCDF	9.99e+06	0.50 y	1.00	34:23	*	100.00				

	Name	Conc	EMPC	Qual	noise	DL
Total	Tetra-Dioxins	59.4	59.8		*	*
Total	Penta-Dioxins	150	150		*	*
Total	Hexa-Dioxins	198	200		*	*
Total	Hepta-Dioxins	123	126		*	*
Total	Tetra-Furans	29.6	29.8		*	*
Total	Penta-Furans	199.98	201.65		*	*
Total	Hexa-Furans	246	249		*	*
Total	Hepta-Furans	99.3	101		*	*

	Name	Rec	Qual
IS	13C-2,3,7,8-TCDD	90.1	
IS	13C-1,2,3,7,8-PeCDD	86.3	
IS	13C-1,2,3,4,7,8-HxCDD	89.8	
IS	13C-1,2,3,6,7,8-HxCDD	96.5	
IS	13C-1,2,3,7,8,9-HxCDD	94.9	
IS	13C-1,2,3,4,6,7,8-HpCDD	91.8	
IS	13C-OCDD	82.7	
IS	13C-2,3,7,8-TCDF	102	
IS	13C-1,2,3,7,8-PeCDF	85.8	
IS	13C-2,3,4,7,8-PeCDF	89.1	
IS	13C-1,2,3,4,7,8-HxCDF	88.5	
IS	13C-1,2,3,6,7,8-HxCDF	92.9	
IS	13C-2,3,4,6,7,8-HxCDF	93.2	
IS	13C-1,2,3,7,8,9-HxCDF	92.7	
IS	13C-1,2,3,4,6,7,8-HpCDF	92.9	
IS	13C-1,2,3,4,7,8,9-HpCDF	84.7	
IS	13C-OCDF	85.1	
C/Up	37Cl-2,3,7,8-TCDD	23.5	

Integrations by Analyst: MJ Date: 10/29/14

Reviewed by Analyst: [signature] Date: 10/30/14

Vista Analytical Laboratory - Injection Log Run file: 141027D2 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141027D2	1	ST141027D2-1	MAS	28-OCT-14	05:19:42	ST141027D2-1	NA
141027D2	2	SOLVENT BLANK	MAS	28-OCT-14	06:08:11	ST141027D2-1	NA
141027D2	3	1400781-01	MAS	28-OCT-14	06:56:44	ST141027D2-1	NA
141027D2	4	1400781-02	MAS	28-OCT-14	07:45:17	ST141027D2-1	NA
141027D2	5	1400781-03	MAS	28-OCT-14	08:33:50	ST141027D2-1	NA
141027D2	6	SOLVENT BLANK	MAS	28-OCT-14	09:22:22	ST141027D2-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST141027O2-1 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: L/L 10/28/14
Initials & Date

* *Ending standard criteria applicable to 8290 only.*

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 mh

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141031E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141031E1 S#1 Analysis Date: 31-OCT-14 Time: 08:50:08

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	3.05	2.66-3.60	y	54.2	37.5-62.5	PCB-52/69	0.78	0.65-0.89	y	106.3	75.0-125
PCB-2	3.07	2.66-3.60	y	54.3	37.5-62.5	PCB-73	0.80	0.65-0.89	y	54.2	37.5-62.5
PCB-3	3.03	2.66-3.60	y	52.7	37.5-62.5	PCB-43/49	0.79	0.65-0.89	y	105.5	75.0-125
PCB-4/10	1.61	1.33-1.79	y	206.3	150-250	PCB-47	0.77	0.65-0.89	y	54.5	37.5-62.5
PCB-7/9	1.62	1.33-1.79	y	206.6	150-250	PCB-48/75	0.78	0.65-0.89	y	103.4	75.0-125
PCB-6	1.64	1.33-1.79	y	100.5	75.0-125	PCB-65	0.78	0.65-0.89	y	51.0	37.5-62.5
PCB-5/8	1.64	1.33-1.79	y	210.2	150-250	PCB-62	0.78	0.65-0.89	y	56.0	37.5-62.5
PCB-14	1.64	1.33-1.79	y	103.4	75.0-125	PCB-44	0.78	0.65-0.89	y	53.9	37.5-62.5
PCB-11	1.64	1.33-1.79	y	102.1	75.0-125	PCB-42/59	0.78	0.65-0.89	y	105.5	75.0-125
PCB-12/13	1.64	1.33-1.79	y	209.8	150-250	PCB-41/64/71/72	0.78	0.65-0.89	y	208.2	150-250
PCB-15	1.68	1.33-1.79	y	102.1	75.0-125	PCB-68	0.78	0.65-0.89	y	53.0	37.5-62.5
PCB-19	1.07	0.88-1.20	y	51.9	37.5-62.5	PCB-40	0.78	0.65-0.89	y	53.3	37.5-62.5
PCB-30	1.08	0.88-1.20	y	53.9	37.5-62.5	PCB-57	0.77	0.65-0.89	y	52.7	37.5-62.5
PCB-18	1.06	0.88-1.20	y	55.1	37.5-62.5	PCB-67	0.77	0.65-0.89	y	51.6	37.5-62.5
PCB-17	1.06	0.88-1.20	y	54.4	37.5-62.5	PCB-58	0.78	0.65-0.89	y	53.6	37.5-62.5
PCB-24/27	1.06	0.88-1.20	y	110.6	75.0-125	PCB-63	0.76	0.65-0.89	y	53.4	37.5-62.5
PCB-16/32	1.07	0.88-1.20	y	108.7	75.0-125	PCB-74	0.78	0.65-0.89	y	53.8	37.5-62.5
PCB-34	1.02	0.88-1.20	y	50.8	37.5-62.5	PCB-61/70	0.77	0.65-0.89	y	105.8	75.0-125
PCB-23	1.05	0.88-1.20	y	45.8	37.5-62.5	PCB-76/66	0.78	0.65-0.89	y	104.2	75.0-125
PCB-29	1.02	0.88-1.20	y	52.3	37.5-62.5	PCB-80	0.78	0.65-0.89	y	52.4	37.5-62.5
PCB-26	1.03	0.88-1.20	y	50.4	37.5-62.5	PCB-55	0.78	0.65-0.89	y	55.3	37.5-62.5
PCB-25	1.02	0.88-1.20	y	49.1	37.5-62.5	PCB-56/60	0.77	0.65-0.89	y	108.4	75.0-125
PCB-31	1.01	0.88-1.20	y	45.6	37.5-62.5	PCB-79	0.78	0.65-0.89	y	54.1	37.5-62.5
PCB-28	1.03	0.88-1.20	y	48.2	37.5-62.5	PCB-78	0.77	0.65-0.89	y	52.5	37.5-62.5
PCB-20/21/33	1.04	0.88-1.20	y	145.2	112.5-225	PCB-81	0.78	0.65-0.89	y	52.6	37.5-62.5
PCB-22	1.02	0.88-1.20	y	46.2	37.5-62.5	PCB-77	0.80	0.65-0.89	y	53.4	37.5-62.5
PCB-36	1.03	0.88-1.20	y	45.8	37.5-62.5	PCB-104	1.62	1.32-1.78	y	53.7	37.5-62.5
PCB-39	1.04	0.88-1.20	y	46.0	37.5-62.5	PCB-96	1.60	1.32-1.78	y	53.9	37.5-62.5
PCB-38	1.04	0.88-1.20	y	47.5	37.5-62.5	PCB-103	1.60	1.32-1.78	y	56.2	37.5-62.5
PCB-35	1.04	0.88-1.20	y	47.1	37.5-62.5	PCB-100	1.59	1.32-1.78	y	56.3	37.5-62.5
PCB-37	1.04	0.88-1.20	y	46.6	37.5-62.5	PCB-94	1.63	1.32-1.78	y	53.0	37.5-62.5
PCB-54	0.79	0.65-0.89	y	52.8	37.5-62.5	PCB-95/98/102	1.59	1.32-1.78	y	153.5	112.5-225
PCB-50	0.76	0.65-0.89	y	53.3	37.5-62.5	PCB-93	1.62	1.32-1.78	y	55.3	37.5-62.5
PCB-53	0.77	0.65-0.89	y	51.7	37.5-62.5	PCB-88/91	1.64	1.32-1.78	y	112.1	75.0-125
PCB-51	0.78	0.65-0.89	y	51.2	37.5-62.5	PCB-121	1.60	1.32-1.78	y	53.1	37.5-62.5
PCB-45	0.78	0.65-0.89	y	52.4	37.5-62.5						
PCB-46	0.76	0.65-0.89	y	50.7	37.5-62.5						

Analyst: DMS

Date: 10/31/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141031E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141031E1 S#1 Analysis Date: 31-OCT-14 Time: 08:50:08

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	103.4	75.0-125	PCB-140	1.26	1.05-1.43	y	56.7	37.5-62.5
PCB-89	1.60	1.32-1.78	y	53.3	37.5-62.5	PCB-134/143	1.26	1.05-1.43	y	107.5	75.0-125
PCB-90/101	1.59	1.32-1.78	y	104.3	75.0-125	PCB-133/142	1.27	1.05-1.43	y	105.8	75.0-125
PCB-113	1.57	1.32-1.78	y	52.1	37.5-62.5	PCB-131	1.26	1.05-1.43	y	54.1	37.5-62.5
PCB-99	1.61	1.32-1.78	y	53.3	37.5-62.5	PCB-146/165	1.27	1.05-1.43	y	108.0	75.0-125
PCB-119	1.61	1.32-1.78	y	52.3	37.5-62.5	PCB-132/161	1.25	1.05-1.43	y	105.6	75.0-125
PCB-108/112	1.60	1.32-1.78	y	105.4	75.0-125	PCB-153	1.25	1.05-1.43	y	56.0	37.5-62.5
PCB-83	1.62	1.32-1.78	y	53.7	37.5-62.5	PCB-168	1.26	1.05-1.43	y	53.3	37.5-62.5
PCB-97	1.64	1.32-1.78	y	53.0	37.5-62.5	PCB-141	1.25	1.05-1.43	y	53.1	37.5-62.5
PCB-86	1.51	1.32-1.78	y	49.4	37.5-62.5	PCB-137	1.22	1.05-1.43	y	51.6	37.5-62.5
PCB-87/117/125	1.59	1.32-1.78	y	156.3	112.5-225	PCB-130	1.29	1.05-1.43	y	58.5	37.5-62.5
PCB-111/115	1.60	1.32-1.78	y	98.5	75.0-125	PCB-138/163/164	1.26	1.05-1.43	y	160.6	112.5-225
PCB-85/116	1.59	1.32-1.78	y	110.2	75.0-125	PCB-158/160	1.24	1.05-1.43	y	110.1	75.0-125
PCB-120	1.62	1.32-1.78	y	50.9	37.5-62.5	PCB-129	1.25	1.05-1.43	y	52.9	37.5-62.5
PCB-110	1.60	1.32-1.78	y	51.8	37.5-62.5	PCB-166	1.25	1.05-1.43	y	53.9	37.5-62.5
PCB-82	1.62	1.32-1.78	y	55.1	37.5-62.5	PCB-159	1.25	1.05-1.43	y	52.3	37.5-62.5
PCB-124	1.57	1.32-1.78	y	51.2	37.5-62.5	PCB-128/162	1.25	1.05-1.43	y	107.4	75.0-125
PCB-107/109	1.60	1.32-1.78	y	107.4	75.0-125	PCB-167	1.27	1.05-1.43	y	53.7	37.5-62.5
PCB-123	1.60	1.32-1.78	y	52.9	37.5-62.5	PCB-156	1.27	1.05-1.43	y	52.4	37.5-62.5
PCB-106/118	1.62	1.32-1.78	y	106.7	75.0-125	PCB-157	1.26	1.05-1.43	y	53.3	37.5-62.5
PCB-114	1.60	1.32-1.78	y	50.9	37.5-62.5	PCB-169	1.24	1.05-1.43	y	54.8	37.5-62.5
PCB-122	1.61	1.32-1.78	y	50.8	37.5-62.5	PCB-188	1.06	0.89-1.21	y	53.3	37.5-62.5
PCB-105	1.60	1.32-1.78	y	52.0	37.5-62.5	PCB-184	1.06	0.89-1.21	y	55.0	37.5-62.5
PCB-127	1.62	1.32-1.78	y	51.0	37.5-62.5	PCB-179	1.06	0.89-1.21	y	55.2	37.5-62.5
PCB-126	1.61	1.32-1.78	y	51.9	37.5-62.5	PCB-176	1.05	0.89-1.21	y	55.7	37.5-62.5
PCB-155	1.27	1.05-1.43	y	54.6	37.5-62.5	PCB-186	1.07	0.89-1.21	y	55.6	37.5-62.5
PCB-150	1.29	1.05-1.43	y	55.2	37.5-62.5	PCB-178	1.05	0.89-1.21	y	58.0	37.5-62.5
PCB-152	1.28	1.05-1.43	y	53.8	37.5-62.5	PCB-175	1.07	0.89-1.21	y	60.2	37.5-62.5
PCB-145	1.29	1.05-1.43	y	53.3	37.5-62.5	PCB-182/187	1.06	0.89-1.21	y	119.9	75.0-125
PCB-136	1.26	1.05-1.43	y	54.8	37.5-62.5	PCB-183	1.06	0.89-1.21	y	55.8	37.5-62.5
PCB-148	1.27	1.05-1.43	y	56.3	37.5-62.5	PCB-185	1.05	0.89-1.21	y	53.0	37.5-62.5
PCB-154	1.30	1.05-1.43	y	56.8	37.5-62.5	PCB-174	1.07	0.89-1.21	y	53.8	37.5-62.5
PCB-151	1.29	1.05-1.43	y	56.0	37.5-62.5	PCB-181	1.08	0.89-1.21	y	54.8	37.5-62.5
PCB-135	1.29	1.05-1.43	y	52.9	37.5-62.5	PCB-177	1.06	0.89-1.21	y	56.4	37.5-62.5
PCB-144	1.30	1.05-1.43	y	60.0	37.5-62.5	PCB-171	1.05	0.89-1.21	y	54.1	37.5-62.5
PCB-147	1.31	1.05-1.43	y	55.4	37.5-62.5	PCB-173	1.05	0.89-1.21	y	54.9	37.5-62.5
PCB-139/149	1.32	1.05-1.43	y	113.4	75.0-125	PCB-172	1.07	0.89-1.21	y	55.4	37.5-62.5

Analyst: DMS

Date: 10/31/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141031E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141031E1 S#1 Analysis Date: 31-OCT-14 Time: 08:50:08

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-192	1.07	0.89-1.21	y	56.0	37.5-62.5
PCB-180	1.07	0.89-1.21	y	53.5	37.5-62.5
PCB-193	1.07	0.89-1.21	y	54.6	37.5-62.5
PCB-191	1.08	0.89-1.21	y	55.0	37.5-62.5
PCB-170	1.05	0.89-1.21	y	53.9	37.5-62.5
PCB-190	1.06	0.89-1.21	y	52.9	37.5-62.5
PCB-189	1.05	0.89-1.21	y	55.5	37.5-62.5
PCB-202	0.91	0.76-1.02	y	52.6	37.5-62.5
PCB-201	0.90	0.76-1.02	y	55.6	37.5-62.5
PCB-204	0.91	0.76-1.02	y	53.9	37.5-62.5
PCB-197	0.89	0.76-1.02	y	54.4	37.5-62.5
PCB-200	0.90	0.76-1.02	y	56.5	37.5-62.5
PCB-198	0.90	0.76-1.02	y	52.5	37.5-62.5
PCB-199	0.92	0.76-1.02	y	61.5	37.5-62.5
PCB-196/203	0.92	0.76-1.02	y	113.8	75.0-125
PCB-195	0.90	0.76-1.02	y	54.8	37.5-62.5
PCB-194	0.91	0.76-1.02	y	50.4	37.5-62.5
PCB-205	0.91	0.76-1.02	y	48.4	37.5-62.5
PCB-208	1.34	1.14-1.54	y	50.6	37.5-62.5
PCB-207	1.32	1.14-1.54	y	53.0	37.5-62.5
PCB-206	1.31	1.14-1.54	y	51.2	37.5-62.5
PCB-209	1.18	0.99-1.33	y	52.4	37.5-62.5

Analyst: DMS

Date: 10/31/14

LABELED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141031E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141031E1 S#1 Analysis Date: 31-OCT-14 Time: 08:50:08

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-1	3.40	2.66-3.60	y	101.1	50.0-145
13C-PCB-3	3.43	2.66-3.60	y	102.0	50.0-145
13C-PCB-4	1.58	1.33-1.79	y	101.3	50.0-145
13C-PCB-9	1.59	1.33-1.79	y	100.4	50.0-145
13C-PCB-11	1.56	1.33-1.79	y	100.0	50.0-145
13C-PCB-19	1.08	0.88-1.20	y	95.9	50.0-145
13C-PCB-32	1.09	0.88-1.20	y	94.6	50.0-145
13C-PCB-28	1.03	0.88-1.20	y	95.7	50.0-145
13C-PCB-37	1.06	0.88-1.20	y	101.4	50.0-145
13C-PCB-54	0.81	0.65-0.89	y	91.7	50.0-145
13C-PCB-52	0.81	0.65-0.89	y	94.9	50.0-145
13C-PCB-47	0.82	0.65-0.89	y	95.1	50.0-145
13C-PCB-70	0.81	0.65-0.89	y	95.4	50.0-145
13C-PCB-80	0.81	0.65-0.89	y	94.9	50.0-145
13C-PCB-81	0.81	0.65-0.89	y	98.9	50.0-145
13C-PCB-77	0.80	0.65-0.89	y	99.3	50.0-145
13C-PCB-104	1.60	1.32-1.78	y	87.5	50.0-145
13C-PCB-95	1.59	1.32-1.78	y	92.8	50.0-145
13C-PCB-101	1.62	1.32-1.78	y	97.0	50.0-145
13C-PCB-97	1.57	1.32-1.78	y	100.2	50.0-145
13C-PCB-123	1.62	1.32-1.78	y	98.6	50.0-145
13C-PCB-118	1.55	1.32-1.78	y	97.3	50.0-145
13C-PCB-114	1.60	1.32-1.78	y	93.5	50.0-145
13C-PCB-105	1.61	1.32-1.78	y	95.1	50.0-145
13C-PCB-127	1.61	1.32-1.78	y	96.4	50.0-145
13C-PCB-126	1.60	1.32-1.78	y	94.6	50.0-145
13C-PCB-155	1.30	1.05-1.43	y	86.0	50.0-145
13C-PCB-153	1.27	1.05-1.43	y	95.1	50.0-145
13C-PCB-141	1.30	1.05-1.43	y	98.5	50.0-145
13C-PCB-138	1.29	1.05-1.43	y	98.4	50.0-145
13C-PCB-159	1.29	1.05-1.43	y	98.1	50.0-145
13C-PCB-167	1.28	1.05-1.43	y	98.9	50.0-145
13C-PCB-156	1.29	1.05-1.43	y	99.7	50.0-145
13C-PCB-157	1.31	1.05-1.43	y	100.7	50.0-145

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-169	1.31	1.05-1.43	y	99.2	50 - 145
13C-PCB-188	0.46	0.38-0.52	y	89.0	50 - 145
13C-PCB-180	0.46	0.38-0.52	y	96.8	50 - 145
13C-PCB-170	0.47	0.38-0.52	y	101.5	50 - 145
13C-PCB-189	0.46	0.38-0.52	y	97.3	50 - 145
13C-PCB-202	0.94	0.76-1.02	y	90.1	50 - 145
13C-PCB-194	0.92	0.76-1.02	y	105.7	50 - 145
13C-PCB-208	0.76	0.65-0.89	y	104.1	50 - 145
13C-PCB-206	0.76	0.65-0.89	y	102.4	50 - 145
13C-PCB-209	1.23	0.99-1.33	y	85.5	50 - 145

CRS vs. RS

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-79	0.81	0.65-0.89	y	99.8	75 - 125
13C-PCB-178	0.47	0.38-0.52	y	96.8	75 - 125

Analyst: DMS

Date: 10/31/14

Client ID: PCB CS3 14I1807 Filename: 141031E1 S:1 Acq:31-OCT-14 08:50:08 ConCal: ST141031E1-1
Lab ID: ST141031E1-1 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	8.88e+07	3.05	y	1.25	16:19	1.001	0.996	1.006	54.1801
	PCB-2	8.80e+07	3.07	y	1.18	18:36	0.989	0.983	0.993	54.2795
	PCB-3	8.82e+07	3.03	y	1.22	18:49	1.001	0.996	1.006	52.7261
	PCB-4/10	2.58e+08	1.61	y	1.55	20:09	1.003	0.998	1.008	206.271
	PCB-7/9	3.15e+08	1.62	y	1.27	21:52	0.870	0.865	0.873	206.638
	PCB-6	1.52e+08	1.64	y	1.26	22:30	0.895	0.890	0.899	100.499
	PCB-5/8	3.12e+08	1.64	y	1.23	22:55	0.912	0.906	0.916	210.226
	PCB-14	1.73e+08	1.64	y	1.23	23:58	0.954	0.949	0.959	103.408
	PCB-11	1.61e+08	1.64	y	1.16	25:08	1.000	0.996	1.006	102.127
	PCB-12/13	3.14e+08	1.64	y	1.10	25:32	1.016	1.010	1.020	209.755
	PCB-15	1.68e+08	1.68	y	1.21	25:51	1.029	1.024	1.034	102.103
	PCB-19	4.98e+07	1.07	y	1.30	24:10	1.001	0.996	1.006	51.8870
	PCB-30	7.32e+07	1.08	y	1.83	25:01	1.036	1.032	1.042	53.9444
	PCB-18	5.29e+07	1.06	y	0.86	25:46	0.954	0.949	0.959	55.1170
	PCB-17	5.47e+07	1.06	y	0.90	25:56	0.961	0.955	0.965	54.4213
	PCB-24/27	1.45e+08	1.06	y	1.18	26:30	0.982	0.976	0.986	110.590
-	PCB-16/32	1.25e+08	1.07	y	1.03	27:00	1.000	0.995	1.005	108.668
-	PCB-34	6.52e+07	1.02	y	1.26	27:47	0.960	0.956	0.966	50.8140
	PCB-23	6.11e+07	1.05	y	1.31	27:53	0.964	0.959	0.969	45.8498
	PCB-29	7.07e+07	1.02	y	1.33	28:07	0.972	0.967	0.977	52.3169
	PCB-26	6.62e+07	1.03	y	1.29	28:20	0.979	0.974	0.984	50.4187
	PCB-25	6.71e+07	1.02	y	1.34	28:29	0.985	0.980	0.990	49.1110
	PCB-31	6.59e+07	1.01	y	1.42	28:51	0.997	0.992	1.002	45.6469
	PCB-28	6.76e+07	1.03	y	1.38	28:56	1.000	0.996	1.006	48.2202
	PCB-20/21/33	1.94e+08	1.04	y	1.31	29:34	1.022	1.017	1.027	145.150
	PCB-22	6.21e+07	1.02	y	1.32	30:00	1.037	1.032	1.042	46.1960
	PCB-36	6.37e+07	1.03	y	1.38	30:35	0.933	0.929	0.939	45.8111
	PCB-39	6.59e+07	1.04	y	1.42	31:04	0.948	0.943	0.953	45.9913
	PCB-38	6.49e+07	1.04	y	1.35	31:50	0.971	0.967	0.976	47.4930
	PCB-35	6.55e+07	1.04	y	1.38	32:21	0.987	0.982	0.992	47.1068
	PCB-37	6.54e+07	1.04	y	1.39	32:47	1.000	0.996	1.006	46.5704
	PCB-54	5.98e+07	0.79	y	1.20	27:51	1.001	0.996	1.006	52.8097
	PCB-50	4.88e+07	0.76	y	0.97	28:60	1.042	1.037	1.047	53.3395
	PCB-53	5.00e+07	0.77	y	1.19	29:38	0.947	0.941	0.951	51.6772
	PCB-51	4.81e+07	0.78	y	1.15	29:59	0.958	0.952	0.962	51.1560
	PCB-45	4.12e+07	0.78	y	0.97	30:25	0.971	0.966	0.976	52.3767
	PCB-46	3.93e+07	0.76	y	0.95	30:54	0.987	0.982	0.992	50.6851

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-52/69	1.11e+08	0.78	y	1.28	31:21	1.001	0.996	1.006	106.299
	PCB-73	6.06e+07	0.80	y	1.37	31:28	1.005	1.000	1.010	54.2480
	PCB-43/49	9.56e+07	0.79	y	1.11	31:38	1.010	1.005	1.015	105.458
	PCB-47	5.30e+07	0.77	y	1.13	31:50	1.001	0.996	1.006	54.5232
	PCB-48/75	1.16e+08	0.78	y	1.30	31:57	1.004	0.999	1.009	103.372
	PCB-65	5.84e+07	0.78	y	1.33	32:13	1.013	1.007	1.017	51.0063
	PCB-62	6.21e+07	0.78	y	1.29	32:20	1.016	1.011	1.021	55.9708
	PCB-44	4.35e+07	0.78	y	0.94	32:38	1.026	1.020	1.030	53.9170
	PCB-42/59	1.10e+08	0.78	y	1.22	32:51	1.033	1.028	1.038	105.526
	PCB-41/64/71/72	2.35e+08	0.78	y	1.31	33:26	1.051	1.046	1.056	208.160
	PCB-68	6.76e+07	0.78	y	1.49	33:41	1.059	1.054	1.064	52.9849
	PCB-40	3.75e+07	0.78	y	0.82	33:55	1.066	1.061	1.071	53.3124
	PCB-57	6.42e+07	0.77	y	1.11	34:16	0.970	0.965	0.975	52.6694
	PCB-67	6.05e+07	0.77	y	1.07	34:34	0.979	0.974	0.984	51.5536
	PCB-58	6.46e+07	0.78	y	1.10	34:41	0.982	0.977	0.987	53.6314
	PCB-63	6.52e+07	0.76	y	1.12	34:50	0.987	0.982	0.992	53.3675
	PCB-74	7.08e+07	0.78	y	1.20	35:08	0.995	0.990	1.000	53.7723
	PCB-61/70	1.25e+08	0.77	y	1.08	35:18	1.000	0.994	1.004	105.822
	PCB-76/66	1.29e+08	0.78	y	1.14	35:31	1.006	1.001	1.011	104.171
	PCB-80	7.42e+07	0.78	y	1.28	35:44	1.001	0.996	1.006	52.4344
	PCB-55	6.79e+07	0.78	y	1.11	36:05	1.010	1.005	1.015	55.2727
	PCB-56/60	1.30e+08	0.77	y	1.09	36:34	1.024	1.018	1.028	108.394
	PCB-79	6.73e+07	0.78	y	1.12	37:38	1.054	1.048	1.058	54.1131
	PCB-78	6.54e+07	0.77	y	1.24	38:20	0.987	0.982	0.992	52.5384
	PCB-81	7.31e+07	0.78	y	1.38	38:52	1.000	0.995	1.005	52.5520
	PCB-77	6.95e+07	0.80	y	1.21	39:27	1.000	0.995	1.005	53.4230
	PCB-104	4.39e+07	1.62	y	1.26	32:30	1.001	0.996	1.006	53.6954
	PCB-96	3.82e+07	1.60	y	1.09	33:45	1.039	1.034	1.044	53.9118
	PCB-103	3.41e+07	1.60	y	0.93	34:16	1.055	1.050	1.060	56.2287
	PCB-100	3.67e+07	1.59	y	1.00	34:37	1.066	1.061	1.071	56.3186
	PCB-94	3.03e+07	1.63	y	1.11	35:06	0.985	0.981	0.991	52.9988
	PCB-95/98/102	9.60e+07	1.59	y	1.21	35:35	0.999	0.994	1.004	153.466
	PCB-93	3.22e+07	1.62	y	1.13	35:43	1.003	0.998	1.008	55.3038
	PCB-88/91	5.89e+07	1.64	y	1.02	36:00	1.011	1.006	1.016	112.077
	PCB-121	5.21e+07	1.60	y	1.90	36:06	1.013	1.009	1.019	53.0828
	PCB-84/92	6.19e+07	1.61	y	1.05	36:56	0.990	0.986	0.996	103.410
	PCB-89	3.09e+07	1.60	y	1.02	37:08	0.996	0.991	1.001	53.3314

RL: MONO, TRI - DECA: ———

RL: DI : ———

Integrations by Analyst: DMS Date: 10/31/14

Reviewed by Analyst: [illegible] Date: 11/2/14

Client ID: PCB CS3 14I1807 Filename: 141031E1 S:1 Acq:31-OCT-14 08:50:08 ConCal: ST141031E1-1

Lab ID: ST141031E1-1 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	7.07e+07	1.59	y	1.19	37:17	1.000	0.996	1.006	104.339
	PCB-113	4.01e+07	1.57	y	1.35	37:32	1.007	1.002	1.012	52.0973
	PCB-99	3.90e+07	1.61	y	1.29	37:38	1.009	1.005	1.015	53.2517
	PCB-119	4.64e+07	1.61	y	1.72	38:05	0.987	0.982	0.992	52.2897
	PCB-108/112	7.00e+07	1.60	y	1.29	38:15	0.991	0.986	0.996	105.380
	PCB-83	4.21e+07	1.62	y	1.52	38:26	0.996	0.991	1.001	53.7040
	PCB-97	3.41e+07	1.64	y	1.25	38:37	1.001	0.996	1.006	52.9821
	PCB-86	2.60e+07	1.51	y	1.02	38:46	1.004	1.000	1.010	49.3799
	B-87/117/125	1.26e+08	1.59	y	1.56	38:53	1.007	1.002	1.012	156.258
	PCB-111/115	8.90e+07	1.60	y	1.75	39:02	1.011	1.007	1.017	98.4947
	PCB-85/116	7.39e+07	1.59	y	1.30	39:10	1.015	1.010	1.020	110.152
	PCB-120	4.68e+07	1.62	y	1.78	39:24	1.021	1.016	1.026	50.9454
	PCB-110	4.49e+07	1.60	y	1.68	39:34	1.025	1.020	1.030	51.7960
	PCB-82	2.84e+07	1.62	y	0.74	40:11	0.976	0.972	0.982	55.1104
	PCB-124	4.74e+07	1.57	y	1.32	40:51	0.993	0.988	0.998	51.2430
	PCB-107/109	9.17e+07	1.60	y	1.22	41:00	0.996	0.991	1.001	107.440
	PCB-123	4.50e+07	1.60	y	1.22	41:10	1.000	0.995	1.005	52.9040
-	PCB-106/118	9.35e+07	1.62	y	1.22	41:23	1.001	0.996	1.006	106.693
-	PCB-114	6.09e+07	1.60	y	1.36	42:02	1.001	0.995	1.005	50.9188
	PCB-122	5.55e+07	1.61	y	1.24	42:10	1.004	0.999	1.009	50.8426
	PCB-105	6.15e+07	1.60	y	1.28	42:54	1.001	0.995	1.005	52.0421
	PCB-127	5.88e+07	1.62	y	1.14	43:12	1.000	0.995	1.005	51.0075
	PCB-126	5.73e+07	1.61	y	1.28	45:08	1.001	0.995	1.005	51.9029
	PCB-155	3.31e+07	1.27	y	1.14	36:51	1.001	0.966	1.006	54.5556
	PCB-150	3.14e+07	1.29	y	1.06	38:07	1.035	1.030	1.040	55.2302
	PCB-152	3.16e+07	1.28	y	1.10	38:37	1.048	1.043	1.053	53.8397
	PCB-145	3.11e+07	1.29	y	1.09	39:03	1.060	1.055	1.065	53.3210
	PCB-136	3.18e+07	1.26	y	1.08	39:22	1.069	1.064	1.074	54.8293
	PCB-148	2.23e+07	1.27	y	0.74	39:28	1.071	1.066	1.076	56.2699
	PCB-154	2.68e+07	1.30	y	0.88	39:57	1.085	1.079	1.089	56.7862
	PCB-151	2.42e+07	1.29	y	0.81	40:36	1.102	1.097	1.107	55.9512
	PCB-135	2.20e+07	1.29	y	0.78	40:49	1.108	1.101	1.113	52.9164
	PCB-144	2.63e+07	1.30	y	0.82	40:56	1.111	1.105	1.116	60.0065
	PCB-147	2.45e+07	1.31	y	0.83	41:04	1.115	1.011	1.120	55.3947
	PCB-139/149	5.11e+07	1.32	y	0.84	41:19	1.122	1.115	1.127	113.382
-	PCB-140	2.38e+07	1.26	y	0.79	41:31	1.127	1.120	1.132	56.7405
-	PCB-134/143	8.24e+07	1.26	y	0.93	41:57	0.975	0.970	0.980	107.501

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	8.27e+07	1.27	y	0.95	42:14	0.982	0.977	0.987	105.757
PCB-131	4.09e+07	1.26	y	0.91	42:25	0.986	0.981	0.991	54.0919
PCB-146/165	1.03e+08	1.27	y	1.16	42:36	0.991	0.986	0.996	108.003
PCB-132/161	9.72e+07	1.25	y	1.11	42:52	0.997	0.992	1.002	105.590
PCB-153	5.46e+07	1.25	y	1.18	43:02	1.001	0.995	1.005	56.0382
PCB-168	6.04e+07	1.26	y	1.37	43:14	1.005	1.000	1.010	53.3078
PCB-141	4.27e+07	1.25	y	0.97	43:47	1.001	0.996	1.005	53.0566
PCB-137	4.56e+07	1.22	y	1.07	44:10	1.009	1.004	1.014	51.5698
PCB-130	4.09e+07	1.29	y	0.85	44:16	1.012	1.007	1.017	58.5264
PCB-138/163/164	1.58e+08	1.26	y	1.23	44:39	1.001	0.996	1.006	160.610
PCB-158/160	1.14e+08	1.24	y	1.29	44:54	1.007	1.001	1.011	110.133
PCB-129	3.93e+07	1.25	y	0.92	45:08	1.012	1.007	1.017	52.9087
PCB-166	5.54e+07	1.25	y	1.12	45:35	0.993	0.988	0.998	53.9293
PCB-159	5.60e+07	1.25	y	1.16	45:54	1.000	0.995	1.005	52.2505
PCB-128/162	1.01e+08	1.25	y	1.02	46:12	1.007	1.002	1.012	107.376
PCB-167	5.82e+07	1.27	y	1.06	46:36	1.001	0.995	1.005	53.6909
PCB-156	6.01e+07	1.27	y	1.18	47:54	1.000	0.995	1.005	52.4024
PCB-157	5.96e+07	1.26	y	1.08	48:10	1.000	0.995	1.005	53.3350
PCB-169	5.71e+07	1.24	y	1.11	50:15	1.000	0.995	1.005	54.7607
PCB-188	4.87e+07	1.06	y	1.40	42:41	1.001	0.995	1.005	53.3246
PCB-184	4.43e+07	1.06	y	1.24	43:07	1.011	1.006	1.016	55.0166
PCB-179	4.68e+07	1.06	y	1.30	43:55	1.030	1.024	1.034	55.1557
PCB-176	4.94e+07	1.05	y	1.36	44:23	1.040	1.035	1.045	55.6927
PCB-186	4.61e+07	1.07	y	1.28	44:60	1.055	1.049	1.059	55.5732
PCB-178	3.54e+07	1.05	y	0.94	45:28	1.066	1.061	1.071	57.9901
PCB-175	3.80e+07	1.07	y	0.97	45:49	1.074	1.069	1.079	60.2407
PCB-182/187	7.92e+07	1.06	y	1.01	45:60	1.078	1.073	1.083	119.895
PCB-183	3.93e+07	1.06	y	1.08	46:19	1.086	1.080	1.090	55.8446
PCB-185	3.63e+07	1.05	y	1.34	46:59	0.955	0.951	0.961	53.0111
PCB-174	3.67e+07	1.07	y	1.34	47:21	0.963	0.958	0.968	53.7671
PCB-181	3.80e+07	1.08	y	1.36	47:27	0.965	0.961	0.971	54.7933
PCB-177	3.57e+07	1.06	y	1.24	47:38	0.969	0.964	0.974	56.4346
PCB-171	3.62e+07	1.05	y	1.31	47:55	0.975	0.970	0.980	54.1182
PCB-173	3.24e+07	1.05	y	1.16	48:21	0.983	0.979	0.989	54.8708
PCB-172	3.45e+07	1.07	y	1.22	48:47	0.992	0.988	0.998	55.4383
PCB-192	4.36e+07	1.07	y	1.53	48:59	0.996	0.991	1.001	56.0273
PCB-180	3.90e+07	1.07	y	1.43	49:11	1.000	0.995	1.005	53.5199

RL: MONO, TRI - DECA: —

Integrations by Analyst: DMS

Date: 10/31/14

Client ID: PCB CS3 14I1807 Filename: 141031E1 S:1 Acq:31-OCT-14 08:50:08 ConCal: ST141031E1-1
Lab ID: ST141031E1-1 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	4.60e+07	1.07	y	1.65	49:23	1.004	0.999	1.009	54.5895
	PCB-191	4.68e+07	1.08	y	1.67	49:37	1.009	1.004	1.014	54.9723
	PCB-170	3.43e+07	1.05	y	1.50	50:37	1.000	0.995	1.005	53.8659
	PCB-190	4.53e+07	1.06	y	2.02	50:47	1.004	0.998	1.008	52.8524
	PCB-189	4.65e+07	1.05	y	1.54	52:04	1.000	0.995	1.005	55.4627
	PCB-202	3.21e+07	0.91	y	1.04	48:07	1.000	0.995	1.005	52.6365
	PCB-201	3.60e+07	0.90	y	1.10	48:37	1.011	1.006	1.016	55.5760
	PCB-204	3.14e+07	0.91	y	0.99	48:46	1.014	1.009	1.019	53.8648
	PCB-197	3.43e+07	0.89	y	1.07	49:04	1.020	1.015	1.025	54.4229
	PCB-200	3.37e+07	0.90	y	1.02	49:54	1.038	1.032	1.044	56.4721
	PCB-198	2.29e+07	0.90	y	0.74	51:11	1.064	1.058	1.068	52.5225
	PCB-199	2.63e+07	0.92	y	0.73	51:18	1.067	1.060	1.070	61.4915
-	PCB-196/203	5.16e+07	0.92	y	0.77	51:33	1.072	1.066	1.076	113.759
-	PCB-195	3.76e+07	0.90	y	1.20	52:42	0.984	0.979	0.989	54.8452
	PCB-194	3.59e+07	0.91	y	1.25	53:35	1.000	0.995	1.005	50.4373
	PCB-205	3.91e+07	0.91	y	1.41	53:53	1.006	1.001	1.011	48.4489
	PCB-208	3.80e+07	1.34	y	0.96	52:51	1.000	0.995	1.005	50.6435
	PCB-207	3.79e+07	1.32	y	0.92	53:10	1.006	1.001	1.011	52.9864
	PCB-206	2.37e+07	1.31	y	1.03	55:17	1.000	0.995	1.005	51.1622
	PCB-209	2.16e+07	1.18	y	1.18	56:35	1.000	0.995	1.005	52.3761

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	2.65e+08	3.05	y	16:19	1.22	161.186	
Total Di-PCB	1.85e+09	1.61	y	20:09	1.21	1241.03	
Total Tri-PCB	5.01e+08	1.07	y	24:10	1.16	434.628	
Total Tri-PCB	1.06e+09	1.02	y	27:47	1.35	775.824	Sum:1210.45
Total Tetra-PCB	2.48e+09	0.79	y	27:51	1.17	2232.89	
Total Penta-PCB	1.57e+09	1.62	y	32:30	1.21	2172.59	
Total Penta-PCB	3.11e+08	1.60	y	42:02	1.26	271.853	Sum:2444.45
Total Hexa-PCB	3.80e+08	1.27	y	36:51	0.92	779.224	
Total Hexa-PCB	1.43e+09	1.26	y	41:57	1.08	1522.31	Sum:2301.53
Total Hepta-PCB	9.86e+08	1.06	y	42:41	1.27	1342.01	
Total Octa-PCB	2.68e+08	0.91	y	48:07	0.92	500.745	
Total Octa-PCB	1.15e+08	0.90	y	52:42	1.29	156.969	Sum:657.714
Total Nona-PCB	1.05e+08	1.34	y	52:51	0.96	163.200	
Total Deca-PCB	2.16e+07	1.18	y	56:35	1.18	52.3761	

Total PCB Conc:11727.2363620

RL: MONO, TRI - DECA: _____

Integrations by Analyst: DMS

Date: 10/31/14

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.31e+08	3.40	y	0.89	16:18	0.631	0.622	0.628*	101	101
13C-PCB-3	1.37e+08	3.43	y	0.93	18:48	0.728	0.721	0.729	102	102
13C-PCB-4	8.05e+07	1.58	y	0.55	20:06	0.778	0.772	0.780	101	101
13C-PCB-9	1.20e+08	1.59	y	0.83	21:50	0.845	0.840	0.848	100	100
13C-PCB-11	1.36e+08	1.56	y	0.94	25:08	0.973	0.968	0.978	100.0	100.0
13C-PCB-19	7.41e+07	1.08	y	0.53	24:09	0.935	0.929	0.939	95.9	95.9
13C-PCB-28	1.02e+08	1.03	y	0.89	28:56	1.004	0.999	1.009	95.7	95.7
13C-PCB-32	1.12e+08	1.09	y	0.81	27:00	1.046	1.041	1.051	94.6	94.6
13C-PCB-37	1.01e+08	1.06	y	0.83	32:47	1.137	1.131	1.143	101	101
13C-PCB-47	8.59e+07	0.82	y	0.74	31:49	0.870	0.867	0.875	95.1	95.1
13C-PCB-52	8.15e+07	0.81	y	0.71	31:18	0.856	0.853	0.861	94.9	94.9
13C-PCB-54	9.46e+07	0.81	y	0.85	27:50	0.761	0.758	0.766	91.7	91.7
13C-PCB-70	1.09e+08	0.81	y	0.94	35:19	0.966	0.961	0.971	95.4	95.4
13C-PCB-77	1.08e+08	0.80	y	0.89	39:26	1.078	1.073	1.083	99.3	99.3
13C-PCB-80	1.11e+08	0.81	y	0.96	35:43	0.977	0.972	0.982	94.9	94.9
13C-PCB-81	1.01e+08	0.81	y	0.84	38:50	1.062	1.057	1.067	98.9	98.9
13C-PCB-95	5.15e+07	1.59	y	0.74	35:37	0.913	0.908	0.918	92.8	92.8
13C-PCB-97	5.16e+07	1.57	y	0.69	38:36	0.989	0.984	0.994	100	100
13C-PCB-101	5.69e+07	1.62	y	0.79	37:17	0.956	0.951	0.961	97.0	97.0
13C-PCB-104	6.50e+07	1.60	y	1.00	32:28	0.832	0.829	0.837	87.5	87.5
13C-PCB-105	9.21e+07	1.61	y	1.24	42:52	0.928	0.924	0.934	95.1	95.1
13C-PCB-114	8.82e+07	1.60	y	1.21	42:00	0.909	0.905	0.915	93.5	93.5
13C-PCB-118	7.16e+07	1.55	y	0.98	41:21	1.060	1.054	1.064	97.3	97.3
13C-PCB-123	6.99e+07	1.62	y	0.95	41:09	1.055	1.049	1.059	98.6	98.6
13C-PCB-126	8.60e+07	1.60	y	1.16	45:07	0.977	0.972	0.982	94.6	94.6
13C-PCB-127	1.01e+08	1.61	y	1.34	43:12	0.935	0.931	0.941	96.4	96.4
13C-PCB-138	8.03e+07	1.29	y	1.04	44:36	0.966	0.961	0.971	98.4	98.4
13C-PCB-141	8.25e+07	1.30	y	1.07	43:46	0.947	0.943	0.953	98.5	98.5
13C-PCB-153	8.28e+07	1.27	y	1.11	43:00	0.931	0.927	0.937	95.1	95.1
13C-PCB-155	5.34e+07	1.30	y	0.83	36:50	0.944	0.939	0.949	86.0	86.0
13C-PCB-156	9.70e+07	1.29	y	1.24	47:53	1.037	1.032	1.042	99.7	99.7
13C-PCB-157	1.03e+08	1.31	y	1.31	48:09	1.043	1.037	1.047	101	101
13C-PCB-159	9.20e+07	1.29	y	1.20	45:54	0.994	0.989	0.999	98.1	98.1
13C-PCB-167	1.02e+08	1.28	y	1.32	46:34	1.008	1.004	1.014	98.9	98.9
13C-PCB-169	9.42e+07	1.31	y	1.22	50:15	1.088	1.082	1.092	99.2	99.2
13C-PCB-170	4.25e+07	0.47	y	0.54	50:36	1.096	1.089	1.101	101	101
13C-PCB-180	5.09e+07	0.46	y	0.67	49:10	1.065	1.059	1.069	96.8	96.8
13C-PCB-188	6.51e+07	0.46	y	0.94	42:39	0.923	0.919	0.929	89.0	89.0
13C-PCB-189	5.44e+07	0.46	y	0.72	52:04	1.127	1.120	1.132	97.3	97.3
13C-PCB-194	5.72e+07	0.92	y	0.81	53:34	0.995	0.990	1.000	106	106
13C-PCB-202	5.86e+07	0.94	y	0.83	48:06	1.041	1.036	1.046	90.1	90.1
13C-PCB-206	4.50e+07	0.76	y	0.66	55:16	1.026	1.021	1.031	102	102
13C-PCB-208	7.81e+07	0.76	y	1.12	52:50	0.981	0.976	0.986	104	104
13C-PCB-209	3.50e+07	1.23	y	0.61	56:35	1.050	1.044	1.054	85.5	85.5

CRS vs. RS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.22e+08	0.81	y	1.01	37:37	1.029	1.023	1.033	99.8	99.8
13C-PCB-178	4.77e+07	0.47	y	0.63	45:27	0.984	0.979	0.989	96.8	96.8

PS vs. IS

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.22e+08	0.81	y	1.20	37:37	0.968	0.963	0.973	101	101
13C-PCB-178	4.77e+07	0.47	y	0.94	45:27	0.924	0.920	0.930	99.9	99.9

RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.45e+08	1.56	y	1.00	25:49	100
13C-PCB-31	1.20e+08	1.03	y	1.00	28:49	100
13C-PCB-60	1.21e+08	0.80	y	1.00	36:34	100
13C-PCB-111	7.47e+07	1.64	y	1.00	39:01	100
13C-PCB-128	7.82e+07	1.31	y	1.00	46:11	100
13C-PCB-205	6.67e+07	0.90	y	1.00	53:52	100

* RRT limits used for DATA processing only. RRT within 1668C method limits.
DMS 10/31/14

Analyst: DMS

Date: 10/31/14

Vista Analytical Laboratory - Injection Log Run file: 141031E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141031E1	1	ST141031E1-1	DMS	31-OCT-14	08:50:08	ST141031E1-1	NA
141031E1	2	B4J0155-BS1	DMS	31-OCT-14	09:53:53	ST141031E1-1	NA
141031E1	3	SOLVENT BLANK	DMS	31-OCT-14	10:57:39	ST141031E1-1	NA
141031E1	4	B4J0155-BLK1	DMS	31-OCT-14	12:01:25	ST141031E1-1	NA
141031E1	5	1400779-01	DMS	31-OCT-14	13:05:12	ST141031E1-1	NA
141031E1	6	1400781-01	DMS	31-OCT-14	14:08:57	ST141031E1-1	NA
141031E1	7	1400781-02@2X	DMS	31-OCT-14	15:12:44	ST141031E1-1	NA
141031E1	8	1400781-03@5X	DMS	31-OCT-14	16:16:30	ST141031E1-1	NA
141031E1	9	1400781-01@2X	DMS	31-OCT-14	17:20:15	ST141031E1-1	NA
141031E1	10	1400781-02	DMS	31-OCT-14	18:23:59	ST141031E1-1	NA
141031E1	11	SOLVENT BLANK	DMS	31-OCT-14	19:27:46	ST141031E1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST14031E1-1 End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	✓	NA
Concentration within range?	✓	
First and last eluters present?	✓	
Retention Times within criteria?	✓ 2/3/14	
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	✓	
Forms signed and dated?	✓	
Correct ICAL referenced?	✓	
Run Log:		
-Data file matches Conc Cal ID?	✓	
-Correct instrument listed?	✓	✓
-Samples within 12-hour clock?	y	n

	Beg.	End
Mass resolution > 10,000? ▪ Method 1614 > 5,000; CARB 429 > 8,000	✓	✓
TCDD/TCDF valleys < 25%?	NA	NA
Peaks integrated correctly?	✓	
Manual integrations included?	✓	
8280 CS1 Ending Standard		
-Ratios within limits		
-S/N > 2.5:1		
-CS1 within 12-hour clock		✓

Comments:

Reviewed by: ✓ 11/21/14
Initials & Date

* *Ending standard criteria applicable to 8290 only.*

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 rmh

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141106E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141106E1 S#1 Analysis Date: 6-NOV-14 Time: 16:10:12

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-1	2.94	2.66-3.60	y	47.7	37.5-62.5
PCB-2	2.95	2.66-3.60	y	49.1	37.5-62.5
PCB-3	2.92	2.66-3.60	y	47.8	37.5-62.5
PCB-4/10	1.63	1.33-1.79	y	208.6	150-250
PCB-7/9	1.63	1.33-1.79	y	203.8	150-250
PCB-6	1.63	1.33-1.79	y	98.5	75.0-125
PCB-5/8	1.63	1.33-1.79	y	207.4	150-250
PCB-14	1.63	1.33-1.79	y	100.4	75.0-125
PCB-11	1.63	1.33-1.79	y	100.6	75.0-125
PCB-12/13	1.63	1.33-1.79	y	202.8	150-250
PCB-15	1.64	1.33-1.79	y	98.3	75.0-125
PCB-19	1.06	0.88-1.20	y	50.9	37.5-62.5
PCB-30	1.05	0.88-1.20	y	52.9	37.5-62.5
PCB-18	1.05	0.88-1.20	y	52.7	37.5-62.5
PCB-17	1.05	0.88-1.20	y	53.1	37.5-62.5
PCB-24/27	1.05	0.88-1.20	y	106.0	75.0-125
PCB-16/32	1.04	0.88-1.20	y	104.6	75.0-125
PCB-34	1.05	0.88-1.20	y	46.0	37.5-62.5
PCB-23	1.06	0.88-1.20	y	47.5	37.5-62.5
PCB-29	1.03	0.88-1.20	y	44.5	37.5-62.5
PCB-26	1.05	0.88-1.20	y	44.6	37.5-62.5
PCB-25	1.07	0.88-1.20	y	46.2	37.5-62.5
PCB-31	1.04	0.88-1.20	y	42.2	37.5-62.5
PCB-28	1.07	0.88-1.20	y	49.1	37.5-62.5
PCB-20/21/33	1.04	0.88-1.20	y	135.0	112.5-225
PCB-22	1.06	0.88-1.20	y	47.8	37.5-62.5
PCB-36	1.05	0.88-1.20	y	47.3	37.5-62.5
PCB-39	1.05	0.88-1.20	y	48.8	37.5-62.5
PCB-38	1.05	0.88-1.20	y	48.7	37.5-62.5
PCB-35	1.05	0.88-1.20	y	48.8	37.5-62.5
PCB-37	1.03	0.88-1.20	y	48.2	37.5-62.5
PCB-54	0.77	0.65-0.89	y	51.1	37.5-62.5
PCB-50	0.76	0.65-0.89	y	52.0	37.5-62.5
PCB-53	0.76	0.65-0.89	y	49.0	37.5-62.5
PCB-51	0.75	0.65-0.89	y	51.8	37.5-62.5
PCB-45	0.75	0.65-0.89	y	50.7	37.5-62.5
PCB-46	0.75	0.65-0.89	y	47.7	37.5-62.5
PCB-52/69	0.76	0.65-0.89	y	98.6	75.0-125
PCB-73	0.76	0.65-0.89	y	55.0	37.5-62.5
PCB-43/49	0.76	0.65-0.89	y	101.2	75.0-125
PCB-47	0.76	0.65-0.89	y	48.5	37.5-62.5
PCB-48/75	0.76	0.65-0.89	y	102.3	75.0-125
PCB-65	0.76	0.65-0.89	y	50.4	37.5-62.5
PCB-62	0.77	0.65-0.89	y	50.1	37.5-62.5
PCB-44	0.76	0.65-0.89	y	51.1	37.5-62.5
PCB-42/59	0.76	0.65-0.89	y	101.0	75.0-125
PCB-41/64/71/72	0.76	0.65-0.89	y	204.0	150-250
PCB-68	0.76	0.65-0.89	y	51.1	37.5-62.5
PCB-40	0.76	0.65-0.89	y	50.5	37.5-62.5
PCB-57	0.75	0.65-0.89	y	49.7	37.5-62.5
PCB-67	0.76	0.65-0.89	y	50.5	37.5-62.5
PCB-58	0.77	0.65-0.89	y	48.7	37.5-62.5
PCB-63	0.76	0.65-0.89	y	51.4	37.5-62.5
PCB-74	0.76	0.65-0.89	y	48.9	37.5-62.5
PCB-61/70	0.76	0.65-0.89	y	101.5	75.0-125
PCB-76/66	0.75	0.65-0.89	y	100.9	75.0-125
PCB-80	0.77	0.65-0.89	y	50.2	37.5-62.5
PCB-55	0.75	0.65-0.89	y	51.2	37.5-62.5
PCB-56/60	0.76	0.65-0.89	y	99.7	75.0-125
PCB-79	0.77	0.65-0.89	y	50.1	37.5-62.5
PCB-78	0.76	0.65-0.89	y	49.6	37.5-62.5
PCB-81	0.77	0.65-0.89	y	49.2	37.5-62.5
PCB-77	0.78	0.65-0.89	y	50.5	37.5-62.5
PCB-104	1.57	1.32-1.78	y	50.3	37.5-62.5
PCB-96	1.55	1.32-1.78	y	51.3	37.5-62.5
PCB-103	1.53	1.32-1.78	y	50.9	37.5-62.5
PCB-100	1.55	1.32-1.78	y	51.6	37.5-62.5
PCB-94	1.54	1.32-1.78	y	49.5	37.5-62.5
PCB-95/98/102	1.55	1.32-1.78	y	152.4	112.5-225
PCB-93	1.58	1.32-1.78	y	47.5	37.5-62.5
PCB-88/91	1.50	1.32-1.78	y	109.5	75.0-125
PCB-121	1.65	1.32-1.78	y	46.1	37.5-62.5

Analyst: DMS

Date: 11/7/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141106E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141106E1 S#1 Analysis Date: 6-NOV-14 Time: 16:10:12

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	1.55	1.32-1.78	y	98.8	75.0-125	PCB-140	1.24	1.05-1.43	y	52.0	37.5-62.5
PCB-89	1.55	1.32-1.78	y	50.5	37.5-62.5	PCB-134/143	1.23	1.05-1.43	y	101.0	75.0-125
PCB-90/101	1.54	1.32-1.78	y	99.2	75.0-125	PCB-133/142	1.23	1.05-1.43	y	99.6	75.0-125
PCB-113	1.55	1.32-1.78	y	51.6	37.5-62.5	PCB-131	1.24	1.05-1.43	y	50.6	37.5-62.5
PCB-99	1.57	1.32-1.78	y	48.3	37.5-62.5	PCB-146/165	1.24	1.05-1.43	y	101.6	75.0-125
PCB-119	1.55	1.32-1.78	y	49.8	37.5-62.5	PCB-132/161	1.23	1.05-1.43	y	101.6	75.0-125
PCB-108/112	1.55	1.32-1.78	y	99.4	75.0-125	PCB-153	1.24	1.05-1.43	y	53.2	37.5-62.5
PCB-83	1.57	1.32-1.78	y	50.5	37.5-62.5	PCB-168	1.22	1.05-1.43	y	50.9	37.5-62.5
PCB-97	1.55	1.32-1.78	y	49.5	37.5-62.5	PCB-141	1.22	1.05-1.43	y	52.1	37.5-62.5
PCB-86	1.55	1.32-1.78	y	50.7	37.5-62.5	PCB-137	1.24	1.05-1.43	y	51.6	37.5-62.5
PCB-87/117/125	1.53	1.32-1.78	y	148.4	112.5-225	PCB-130	1.23	1.05-1.43	y	56.2	37.5-62.5
PCB-111/115	1.55	1.32-1.78	y	94.1	75.0-125	PCB-138/163/164	1.24	1.05-1.43	y	156.6	112.5-225
PCB-85/116	1.55	1.32-1.78	y	104.4	75.0-125	PCB-158/160	1.24	1.05-1.43	y	105.8	75.0-125
PCB-120	1.56	1.32-1.78	y	48.3	37.5-62.5	PCB-129	1.21	1.05-1.43	y	51.4	37.5-62.5
PCB-110	1.56	1.32-1.78	y	48.9	37.5-62.5	PCB-166	1.22	1.05-1.43	y	53.2	37.5-62.5
PCB-82	1.56	1.32-1.78	y	52.0	37.5-62.5	PCB-159	1.27	1.05-1.43	y	50.7	37.5-62.5
PCB-124	1.54	1.32-1.78	y	49.3	37.5-62.5	PCB-128/162	1.22	1.05-1.43	y	102.6	75.0-125
PCB-107/109	1.55	1.32-1.78	y	100.9	75.0-125	PCB-167	1.22	1.05-1.43	y	52.4	37.5-62.5
PCB-123	1.50	1.32-1.78	y	50.1	37.5-62.5	PCB-156	1.23	1.05-1.43	y	50.6	37.5-62.5
PCB-106/118	1.56	1.32-1.78	y	98.5	75.0-125	PCB-157	1.24	1.05-1.43	y	52.3	37.5-62.5
PCB-114	1.61	1.32-1.78	y	50.7	37.5-62.5	PCB-169	1.22	1.05-1.43	y	52.3	37.5-62.5
PCB-122	1.63	1.32-1.78	y	52.3	37.5-62.5	PCB-188	1.05	0.89-1.21	y	52.3	37.5-62.5
PCB-105	1.63	1.32-1.78	y	51.3	37.5-62.5	PCB-184	1.06	0.89-1.21	y	53.6	37.5-62.5
PCB-127	1.67	1.32-1.78	y	51.0	37.5-62.5	PCB-179	1.04	0.89-1.21	y	52.4	37.5-62.5
PCB-126	1.67	1.32-1.78	y	51.0	37.5-62.5	PCB-176	1.05	0.89-1.21	y	53.1	37.5-62.5
PCB-155	1.25	1.05-1.43	y	51.8	37.5-62.5	PCB-186	1.05	0.89-1.21	y	53.6	37.5-62.5
PCB-150	1.27	1.05-1.43	y	51.3	37.5-62.5	PCB-178	1.06	0.89-1.21	y	55.0	37.5-62.5
PCB-152	1.24	1.05-1.43	y	50.2	37.5-62.5	PCB-175	1.05	0.89-1.21	y	56.1	37.5-62.5
PCB-145	1.26	1.05-1.43	y	50.0	37.5-62.5	PCB-182/187	1.05	0.89-1.21	y	112.2	75.0-125
PCB-136	1.24	1.05-1.43	y	53.6	37.5-62.5	PCB-183	1.04	0.89-1.21	y	52.6	37.5-62.5
PCB-148	1.26	1.05-1.43	y	49.8	37.5-62.5	PCB-185	1.05	0.89-1.21	y	53.5	37.5-62.5
PCB-154	1.27	1.05-1.43	y	51.6	37.5-62.5	PCB-174	1.04	0.89-1.21	y	53.2	37.5-62.5
PCB-151	1.25	1.05-1.43	y	50.4	37.5-62.5	PCB-181	1.09	0.89-1.21	y	55.1	37.5-62.5
PCB-135	1.25	1.05-1.43	y	48.8	37.5-62.5	PCB-177	1.04	0.89-1.21	y	55.1	37.5-62.5
PCB-144	1.31	1.05-1.43	y	51.9	37.5-62.5	PCB-171	1.06	0.89-1.21	y	53.8	37.5-62.5
PCB-147	1.18	1.05-1.43	y	50.5	37.5-62.5	PCB-173	1.03	0.89-1.21	y	53.5	37.5-62.5
PCB-139/149	1.24	1.05-1.43	y	102.9	75.0-125	PCB-172	1.04	0.89-1.21	y	53.4	37.5-62.5

Analyst: DMS

Date: 11/7/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141106E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141106E1 S#1 Analysis Date: 6-NOV-14 Time: 16:10:12

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-192	1.05	0.89-1.21	y	54.5	37.5-62.5
PCB-180	1.04	0.89-1.21	y	52.3	37.5-62.5
PCB-193	1.05	0.89-1.21	y	52.6	37.5-62.5
PCB-191	1.05	0.89-1.21	y	52.9	37.5-62.5
PCB-170	1.07	0.89-1.21	y	52.5	37.5-62.5
PCB-190	1.06	0.89-1.21	y	52.9	37.5-62.5
PCB-189	1.05	0.89-1.21	y	53.7	37.5-62.5
PCB-202	0.90	0.76-1.02	y	49.1	37.5-62.5
PCB-201	0.88	0.76-1.02	y	49.6	37.5-62.5
PCB-204	0.88	0.76-1.02	y	50.1	37.5-62.5
PCB-197	0.88	0.76-1.02	y	49.3	37.5-62.5
PCB-200	0.89	0.76-1.02	y	51.1	37.5-62.5
PCB-198	0.88	0.76-1.02	y	48.5	37.5-62.5
PCB-199	0.89	0.76-1.02	y	54.5	37.5-62.5
PCB-196/203	0.89	0.76-1.02	y	103.5	75.0-125
PCB-195	0.92	0.76-1.02	y	52.5	37.5-62.5
PCB-194	0.90	0.76-1.02	y	51.8	37.5-62.5
PCB-205	0.90	0.76-1.02	y	53.6	37.5-62.5
PCB-208	1.31	1.14-1.54	y	51.0	37.5-62.5
PCB-207	1.31	1.14-1.54	y	53.1	37.5-62.5
PCB-206	1.31	1.14-1.54	y	51.7	37.5-62.5
PCB-209	1.19	0.99-1.33	y	51.9	37.5-62.5

Analyst: DMS

Date: 11/7/14

LABELED 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST141106E1-1 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 141106E1 S#1 Analysis Date: 6-NOV-14 Time: 16:10:12

LABELED IS	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
13C-PCB-1	3.32	2.66-3.60	y	124.9	50.0-145
13C-PCB-3	3.48	2.66-3.60	y	118.9	50.0-145
13C-PCB-4	1.57	1.33-1.79	y	99.9	50.0-145
13C-PCB-9	1.58	1.33-1.79	y	99.7	50.0-145
13C-PCB-11	1.55	1.33-1.79	y	99.1	50.0-145
13C-PCB-19	1.09	0.88-1.20	y	109.7	50.0-145
13C-PCB-32	1.10	0.88-1.20	y	109.1	50.0-145
13C-PCB-28	1.05	0.88-1.20	y	106.8	50.0-145
13C-PCB-37	1.04	0.88-1.20	y	101.4	50.0-145
13C-PCB-54	0.81	0.65-0.89	y	95.0	50.0-145
13C-PCB-52	0.78	0.65-0.89	y	97.5	50.0-145
13C-PCB-47	0.77	0.65-0.89	y	98.8	50.0-145
13C-PCB-70	0.77	0.65-0.89	y	97.6	50.0-145
13C-PCB-80	0.78	0.65-0.89	y	98.0	50.0-145
13C-PCB-81	0.78	0.65-0.89	y	98.7	50.0-145
13C-PCB-77	0.77	0.65-0.89	y	97.5	50.0-145
13C-PCB-104	1.58	1.32-1.78	y	92.9	50.0-145
13C-PCB-95	1.61	1.32-1.78	y	94.1	50.0-145
13C-PCB-101	1.65	1.32-1.78	y	97.1	50.0-145
13C-PCB-97	1.61	1.32-1.78	y	99.6	50.0-145
13C-PCB-123	1.63	1.32-1.78	y	95.6	50.0-145
13C-PCB-118	1.63	1.32-1.78	y	96.3	50.0-145
13C-PCB-114	1.58	1.32-1.78	y	86.3	50.0-145
13C-PCB-105	1.56	1.32-1.78	y	87.0	50.0-145
13C-PCB-127	1.55	1.32-1.78	y	87.3	50.0-145
13C-PCB-126	1.56	1.32-1.78	y	88.2	50.0-145
13C-PCB-155	1.28	1.05-1.43	y	106.8	50.0-145
13C-PCB-153	1.28	1.05-1.43	y	95.8	50.0-145
13C-PCB-141	1.29	1.05-1.43	y	97.2	50.0-145
13C-PCB-138	1.30	1.05-1.43	y	100.1	50.0-145
13C-PCB-159	1.26	1.05-1.43	y	99.8	50.0-145
13C-PCB-167	1.25	1.05-1.43	y	97.3	50.0-145
13C-PCB-156	1.28	1.05-1.43	y	97.9	50.0-145
13C-PCB-157	1.28	1.05-1.43	y	97.3	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	94.8	50 - 145
13C-PCB-188	0.47	0.38-0.52	y	97.5	50 - 145
13C-PCB-180	0.46	0.38-0.52	y	99.8	50 - 145
13C-PCB-170	0.47	0.38-0.52	y	102.3	50 - 145
13C-PCB-189	0.46	0.38-0.52	y	100.5	50 - 145
13C-PCB-202	0.90	0.76-1.02	y	112.5	50 - 145
13C-PCB-194	0.91	0.76-1.02	y	98.2	50 - 145
13C-PCB-208	0.77	0.65-0.89	y	100.4	50 - 145
13C-PCB-206	0.79	0.65-0.89	y	110.2	50 - 145
13C-PCB-209	1.18	0.99-1.33	y	132.7	50 - 145

CRS vs. RS

13C-PCB-79	0.76	0.65-0.89	y	100.5	75 - 125
13C-PCB-178	0.45	0.38-0.52	y	105.2	75 - 125

Analyst: DMS

Date: 11/7/14

Client ID: PCB CS3 14I1807 Filename: 141106E1 S:1 Acq: 6-NOV-14 16:10:12 ConCal: ST141106E1-1

Lab ID: ST141106E1-1 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	8.48e+07	2.94	y	1.25	16:17	1.001	0.996	1.006	47.7092
PCB-2	8.15e+07	2.95	y	1.18	18:34	0.989	0.983	0.993	49.1075
PCB-3	8.19e+07	2.92	y	1.22	18:48	1.001	0.996	1.006	47.8327
PCB-4/10	2.26e+08	1.63	y	1.55	20:07	1.002	0.998	1.008	208.635
PCB-7/9	2.71e+08	1.63	y	1.27	21:50	0.870	0.865	0.873	203.802
PCB-6	1.30e+08	1.63	y	1.26	22:28	0.895	0.890	0.899	98.5448
PCB-5/8	2.68e+08	1.63	y	1.23	22:53	0.912	0.906	0.916	207.374
PCB-14	1.46e+08	1.63	y	1.23	23:56	0.954	0.949	0.959	100.393
PCB-11	1.38e+08	1.63	y	1.16	25:07	1.001	0.996	1.006	100.558
PCB-12/13	2.64e+08	1.63	y	1.10	25:31	1.017	1.010	1.020	202.815
PCB-15	1.41e+08	1.64	y	1.21	25:49	1.029	1.024	1.034	98.3374
PCB-19	4.91e+07	1.06	y	1.30	24:08	1.001	0.996	1.006	50.9454
PCB-30	7.21e+07	1.05	y	1.83	24:60	1.037	1.032	1.042	52.9188
PCB-18	5.12e+07	1.05	y	0.86	25:44	0.954	0.949	0.959	52.6703
PCB-17	5.41e+07	1.05	y	0.90	25:54	0.961	0.955	0.965	53.1493
PCB-24/27	1.41e+08	1.05	y	1.18	26:29	0.982	0.976	0.986	106.020
PCB-16/32	1.22e+08	1.04	y	1.03	26:58	1.000	0.995	1.005	104.624
PCB-34	6.23e+07	1.05	y	1.26	27:45	0.960	0.956	0.966	46.0484
PCB-23	6.68e+07	1.06	y	1.31	27:50	0.963	0.959	0.969	47.4919
PCB-29	6.35e+07	1.03	y	1.33	28:05	0.972	0.967	0.977	44.5275
PCB-26	6.19e+07	1.05	y	1.29	28:18	0.979	0.974	0.984	44.6377
PCB-25	6.65e+07	1.07	y	1.34	28:28	0.985	0.980	0.990	46.1720
PCB-31	6.42e+07	1.04	y	1.42	28:48	0.997	0.992	1.002	42.1722
PCB-28	7.26e+07	1.07	y	1.38	28:55	1.001	0.996	1.006	49.1119
PCB-20/21/33	1.90e+08	1.04	y	1.31	29:32	1.022	1.017	1.027	135.015
PCB-22	6.78e+07	1.06	y	1.32	29:58	1.037	1.032	1.042	47.7884
PCB-36	6.21e+07	1.05	y	1.38	30:34	0.933	0.929	0.939	47.2652
PCB-39	6.61e+07	1.05	y	1.42	31:02	0.948	0.943	0.953	48.8146
PCB-38	6.29e+07	1.05	y	1.35	31:49	0.972	0.967	0.976	48.6910
PCB-35	6.40e+07	1.05	y	1.38	32:20	0.987	0.982	0.992	48.7583
PCB-37	6.40e+07	1.03	y	1.39	32:46	1.001	0.996	1.006	48.1782
PCB-54	5.96e+07	0.77	y	1.20	27:49	1.001	0.996	1.006	51.1261
PCB-50	4.89e+07	0.76	y	0.97	28:58	1.042	1.037	1.047	51.9671
PCB-53	4.84e+07	0.76	y	1.19	29:36	0.946	0.941	0.951	48.9823
PCB-51	4.97e+07	0.75	y	1.15	29:57	0.957	0.952	0.962	51.8403
PCB-45	4.07e+07	0.75	y	0.97	30:23	0.971	0.966	0.976	50.7202
PCB-46	3.77e+07	0.75	y	0.95	30:52	0.987	0.982	0.992	47.6985

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	1.05e+08	0.76	y	1.28	31:19	1.001	0.996	1.006	98.5792
PCB-73	6.28e+07	0.76	y	1.37	31:26	1.005	1.000	1.010	55.0410
PCB-43/49	9.36e+07	0.76	y	1.11	31:36	1.010	1.005	1.015	101.205
PCB-47	4.86e+07	0.76	y	1.13	31:49	1.001	0.996	1.006	48.4826
PCB-48/75	1.18e+08	0.76	y	1.30	31:55	1.004	0.999	1.009	102.336
PCB-65	5.96e+07	0.76	y	1.33	32:12	1.013	1.007	1.017	50.4133
PCB-62	5.73e+07	0.77	y	1.29	32:18	1.016	1.011	1.021	50.0779
PCB-44	4.25e+07	0.76	y	0.94	32:36	1.026	1.020	1.030	51.0761
PCB-42/59	1.09e+08	0.76	y	1.22	32:50	1.033	1.028	1.038	101.030
PCB-41/64/71/72	2.37e+08	0.76	y	1.31	33:25	1.051	1.046	1.056	203.990
PCB-68	6.73e+07	0.76	y	1.49	33:39	1.059	1.054	1.064	51.1265
PCB-40	3.66e+07	0.76	y	0.82	33:54	1.066	1.061	1.071	50.5139
PCB-57	6.14e+07	0.75	y	1.11	34:14	0.970	0.965	0.975	49.6588
PCB-67	6.02e+07	0.76	y	1.07	34:33	0.979	0.974	0.984	50.5340
PCB-58	5.96e+07	0.77	y	1.10	34:40	0.982	0.977	0.987	48.6885
PCB-63	6.38e+07	0.76	y	1.12	34:49	0.987	0.982	0.992	51.3976
PCB-74	6.54e+07	0.76	y	1.20	35:06	0.995	0.990	1.000	48.9139
PCB-61/70	1.22e+08	0.76	y	1.08	35:17	1.000	0.994	1.004	101.497
PCB-76/66	1.27e+08	0.75	y	1.14	35:30	1.006	1.001	1.011	100.914
PCB-80	7.28e+07	0.77	y	1.28	35:43	1.001	0.996	1.006	50.1862
PCB-55	6.45e+07	0.75	y	1.11	36:03	1.010	1.005	1.015	51.1781
PCB-56/60	1.23e+08	0.76	y	1.09	36:33	1.024	1.018	1.028	99.6752
PCB-79	6.40e+07	0.77	y	1.12	37:37	1.053	1.048	1.058	50.1202
PCB-78	6.11e+07	0.76	y	1.24	38:19	0.987	0.982	0.992	49.5583
PCB-81	6.77e+07	0.77	y	1.38	38:50	1.000	0.995	1.005	49.1550
PCB-77	6.40e+07	0.78	y	1.21	39:26	1.000	0.995	1.005	50.4531
PCB-104	4.94e+07	1.57	y	1.26	32:28	1.001	0.996	1.006	50.3041
PCB-96	4.37e+07	1.55	y	1.09	33:44	1.040	1.034	1.044	51.3455
PCB-103	3.70e+07	1.53	y	0.93	34:15	1.056	1.050	1.060	50.8867
PCB-100	4.04e+07	1.55	y	1.00	34:36	1.067	1.061	1.071	51.6431
PCB-94	3.24e+07	1.54	y	1.11	35:05	0.986	0.981	0.991	49.5440
PCB-95/98/102	1.09e+08	1.55	y	1.21	35:33	0.999	0.994	1.004	152.443
PCB-93	3.17e+07	1.58	y	1.13	35:42	1.003	0.998	1.008	47.5345
PCB-88/91	6.59e+07	1.50	y	1.02	35:59	1.011	1.006	1.016	109.507
PCB-121	5.18e+07	1.65	y	1.90	36:05	1.014	1.009	1.019	46.0792
PCB-84/92	6.68e+07	1.55	y	1.05	36:55	0.991	0.986	0.996	98.7567
PCB-89	3.31e+07	1.55	y	1.02	37:06	0.995	0.991	1.001	50.5234

RL: MONO, TRI - DECA: _____

RL: DI : _____

Integrations by Analyst: DMS

Date: 11/7/14

Reviewed by Analyst: _____

Date: _____

Client ID: PCB CS3 14I1807 Filename: 141106E1 S:1 Acq: 6-NOV-14 16:10:12 ConCal: ST141106E1-1

Lab ID: ST141106E1-1 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	7.60e+07	1.54	y	1.19	37:16	1.000	0.996	1.006	99.1674
	PCB-113	4.49e+07	1.55	y	1.35	37:31	1.007	1.002	1.012	51.6068
	PCB-99	4.01e+07	1.57	y	1.29	37:37	1.009	1.005	1.015	48.3308
	PCB-119	4.97e+07	1.55	y	1.72	38:04	0.987	0.982	0.992	49.7890
	PCB-108/112	7.42e+07	1.55	y	1.29	38:14	0.991	0.986	0.996	99.3936
	PCB-83	4.45e+07	1.57	y	1.52	38:23	0.995	0.991	1.001	50.5162
	PCB-97	3.58e+07	1.55	y	1.25	38:36	1.001	0.996	1.006	49.5290
	PCB-86	3.01e+07	1.55	y	1.02	38:44	1.004	1.000	1.010	50.7411
	B-87/117/125	1.34e+08	1.53	y	1.56	38:52	1.007	1.002	1.012	148.371
	PCB-111/115	9.56e+07	1.55	y	1.75	39:01	1.011	1.007	1.017	94.1077
	PCB-85/116	7.87e+07	1.55	y	1.30	39:09	1.015	1.010	1.020	104.356
	PCB-120	4.99e+07	1.56	y	1.78	39:22	1.020	1.016	1.026	48.3392
	PCB-110	4.76e+07	1.56	y	1.68	39:32	1.025	1.020	1.030	48.8679
	PCB-82	2.94e+07	1.56	y	0.74	40:10	0.976	0.972	0.982	51.9934
	PCB-124	5.00e+07	1.54	y	1.32	40:50	0.993	0.988	0.998	49.3357
	PCB-107/109	9.44e+07	1.55	y	1.22	40:59	0.996	0.991	1.001	100.873
	PCB-123	4.67e+07	1.50	y	1.22	41:09	1.000	0.995	1.005	50.0883
-	PCB-106/118	9.66e+07	1.56	y	1.22	41:22	1.001	0.996	1.006	98.5425
-	PCB-114	5.42e+07	1.61	y	1.36	41:59	1.000	0.995	1.005	50.7013
	PCB-122	5.10e+07	1.63	y	1.24	42:07	1.003	0.999	1.009	52.2507
	PCB-105	5.36e+07	1.63	y	1.28	42:53	1.001	0.995	1.005	51.2972
	PCB-127	5.16e+07	1.67	y	1.14	43:11	1.000	0.995	1.005	51.0356
	PCB-126	5.08e+07	1.67	y	1.28	45:07	1.001	0.995	1.005	50.9625
	PCB-155	4.41e+07	1.25	y	1.14	36:50	1.001	0.966	1.006	51.8069
	PCB-150	4.10e+07	1.27	y	1.06	38:06	1.035	1.030	1.040	51.3241
	PCB-152	4.14e+07	1.24	y	1.10	38:35	1.048	1.043	1.053	50.2083
	PCB-145	4.10e+07	1.26	y	1.09	39:02	1.060	1.055	1.065	49.9860
	PCB-136	4.37e+07	1.24	y	1.08	39:21	1.069	1.064	1.074	53.6484
	PCB-148	2.77e+07	1.26	y	0.74	39:27	1.072	1.066	1.076	49.8181
	PCB-154	3.42e+07	1.27	y	0.88	39:56	1.085	1.079	1.089	51.6228
	PCB-151	3.06e+07	1.25	y	0.81	40:35	1.102	1.097	1.107	50.3676
	PCB-135	2.85e+07	1.25	y	0.78	40:48	1.108	1.101	1.113	48.7661
	PCB-144	3.20e+07	1.31	y	0.82	40:55	1.111	1.105	1.116	51.9428
	PCB-147	3.14e+07	1.18	y	0.83	41:02	1.115	1.011	1.120	50.4700
	PCB-139/149	6.52e+07	1.24	y	0.84	41:18	1.122	1.115	1.127	102.894
-	PCB-140	3.06e+07	1.24	y	0.79	41:30	1.127	1.120	1.132	51.9840
-	PCB-134/143	7.56e+07	1.23	y	0.93	41:56	0.975	0.970	0.980	100.982

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	7.60e+07	1.23	y	0.95	42:13	0.982	0.977	0.987	99.6489
PCB-131	3.73e+07	1.24	y	0.91	42:24	0.986	0.981	0.991	50.6355
PCB-146/165	9.48e+07	1.24	y	1.16	42:35	0.991	0.986	0.996	101.580
PCB-132/161	9.13e+07	1.23	y	1.11	42:51	0.997	0.992	1.002	101.570
PCB-153	5.06e+07	1.24	y	1.18	43:01	1.001	0.995	1.005	53.2038
PCB-168	5.63e+07	1.22	y	1.37	43:13	1.005	1.000	1.010	50.9213
PCB-141	4.00e+07	1.22	y	0.97	43:46	1.001	0.996	1.005	52.0612
PCB-137	4.36e+07	1.24	y	1.07	44:09	1.009	1.004	1.014	51.6440
PCB-130	3.76e+07	1.23	y	0.85	44:15	1.012	1.007	1.017	56.2235
PCB-138/163/164	1.52e+08	1.24	y	1.23	44:38	1.001	0.996	1.006	156.574
PCB-158/160	1.08e+08	1.24	y	1.29	44:53	1.007	1.001	1.011	105.757
PCB-129	3.75e+07	1.21	y	0.92	45:07	1.012	1.007	1.017	51.3616
PCB-166	5.38e+07	1.22	y	1.12	45:34	0.993	0.988	0.998	53.2478
PCB-159	5.35e+07	1.27	y	1.16	45:54	1.000	0.995	1.005	50.6705
PCB-128/162	9.48e+07	1.22	y	1.02	46:11	1.007	1.002	1.012	102.622
PCB-167	5.41e+07	1.22	y	1.06	46:35	1.000	0.995	1.005	52.3762
PCB-156	5.52e+07	1.23	y	1.18	47:53	1.000	0.995	1.005	50.6305
PCB-157	5.47e+07	1.24	y	1.08	48:09	1.000	0.995	1.005	52.2785
PCB-169	5.05e+07	1.22	y	1.11	50:15	1.000	0.995	1.005	52.2660
PCB-188	5.07e+07	1.05	y	1.40	42:39	1.001	0.995	1.005	52.3010
PCB-184	4.58e+07	1.06	y	1.24	43:06	1.011	1.006	1.016	53.5559
PCB-179	4.72e+07	1.04	y	1.30	43:53	1.030	1.024	1.034	52.3635
PCB-176	5.00e+07	1.05	y	1.36	44:21	1.041	1.035	1.045	53.1067
PCB-186	4.72e+07	1.05	y	1.28	44:59	1.055	1.049	1.059	53.5933
PCB-178	3.56e+07	1.06	y	0.94	45:27	1.066	1.061	1.071	55.0169
PCB-175	3.75e+07	1.05	y	0.97	45:48	1.075	1.069	1.079	56.0884
PCB-182/187	7.86e+07	1.05	y	1.01	45:59	1.079	1.073	1.083	112.215
PCB-183	3.93e+07	1.04	y	1.08	46:18	1.086	1.080	1.090	52.5977
PCB-185	3.66e+07	1.05	y	1.34	46:58	0.955	0.951	0.961	53.5085
PCB-174	3.62e+07	1.04	y	1.34	47:20	0.963	0.958	0.968	53.2213
PCB-181	3.81e+07	1.09	y	1.36	47:26	0.965	0.961	0.971	55.0596
PCB-177	3.48e+07	1.04	y	1.24	47:37	0.969	0.964	0.974	55.0760
PCB-171	3.60e+07	1.06	y	1.31	47:54	0.975	0.970	0.980	53.8405
PCB-173	3.16e+07	1.03	y	1.16	48:20	0.983	0.979	0.989	53.5170
PCB-172	3.32e+07	1.04	y	1.22	48:46	0.992	0.988	0.998	53.3599
PCB-192	4.24e+07	1.05	y	1.53	48:58	0.996	0.991	1.001	54.5184
PCB-180	3.80e+07	1.04	y	1.43	49:11	1.000	0.995	1.005	52.3188

RL: MONO, TRI - DECA: _____

Integrations by Analyst: DmE

Date: 11/7/14

Client ID: PCB CS3 14I1807 Filename: 141106E1 S:1 Acq: 6-NOV-14 16:10:12 ConCal: ST141106E1-1

Lab ID: ST141106E1-1 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	4.43e+07	1.05	y	1.65	49:22	1.004	0.999	1.009	52.5973
	PCB-191	4.50e+07	1.05	y	1.67	49:37	1.009	1.004	1.014	52.8747
	PCB-170	3.27e+07	1.07	y	1.50	50:37	1.000	0.995	1.005	52.5285
	PCB-190	4.42e+07	1.06	y	2.02	50:47	1.003	0.998	1.008	52.8509
	PCB-189	4.51e+07	1.05	y	1.54	52:05	1.000	0.995	1.005	53.7485
	PCB-202	3.62e+07	0.90	y	1.04	48:06	1.000	0.995	1.005	49.0803
	PCB-201	3.88e+07	0.88	y	1.10	48:36	1.011	1.006	1.016	49.5827
	PCB-204	3.53e+07	0.88	y	0.99	48:45	1.014	1.009	1.019	50.0590
	PCB-197	3.75e+07	0.88	y	1.07	49:03	1.020	1.015	1.025	49.2606
	PCB-200	3.69e+07	0.89	y	1.02	49:54	1.038	1.032	1.044	51.1090
	PCB-198	2.56e+07	0.88	y	0.74	51:11	1.065	1.058	1.068	48.4609
	PCB-199	2.82e+07	0.89	y	0.73	51:18	1.067	1.060	1.070	54.5241
-	PCB-196/203	5.68e+07	0.89	y	0.77	51:34	1.072	1.066	1.076	103.535
-	PCB-195	3.60e+07	0.92	y	1.20	52:43	0.984	0.979	0.989	52.5416
	PCB-194	3.69e+07	0.90	y	1.25	53:37	1.000	0.995	1.005	51.7826
	PCB-205	4.33e+07	0.90	y	1.41	53:54	1.006	1.001	1.011	53.5782
	PCB-208	3.98e+07	1.31	y	0.96	52:51	1.000	0.995	1.005	51.0420
	PCB-207	3.95e+07	1.31	y	0.92	53:10	1.006	1.001	1.011	53.1347
	PCB-206	2.77e+07	1.31	y	1.03	55:19	1.000	0.995	1.005	51.6762
	PCB-209	3.57e+07	1.19	y	1.18	56:38	1.000	0.995	1.005	51.8930

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	2.48e+08	2.94	y	16:17	1.22	144.649	
Total Di-PCB	1.59e+09	1.63	y	20:07	1.21	1222.73	
Total Tri-PCB	4.90e+08	1.06	y	24:08	1.16	420.328	
Total Tri-PCB	1.05e+09	1.05	y	27:45	1.35	752.749	Sum:1173.08
Total Tetra-PCB	2.41e+09	0.77	y	27:49	1.17	2128.27	
Total Penta-PCB	1.68e+09	1.57	y	32:28	1.21	2056.24	
Total Penta-PCB	2.71e+08	1.61	y	41:59	1.26	266.242	Sum:2322.48
Total Hexa-PCB	4.91e+08	1.25	y	36:50	0.92	714.839	
Total Hexa-PCB	1.33e+09	1.23	y	41:56	1.08	1459.20	Sum:2174.04
Total Hepta-PCB	9.77e+08	1.05	y	42:39	1.27	1299.16	
Total Octa-PCB	2.95e+08	0.90	y	48:06	0.92	455.611	
Total Octa-PCB	1.18e+08	0.92	y	52:43	1.29	160.028	Sum:615.640
Total Nona-PCB	1.09e+08	1.31	y	52:51	0.96	158.766	
Total Deca-PCB	3.57e+07	1.19	y	56:38	1.18	51.8930	

Total PCB Conc:11229.2195990

RL: MONO, TRI - DECA: ———

Integrations by Analyst: DMS

Date: 11/7/14

Client ID: PCB CS3 14I1807 Filename: 141106E1 S:1 Acq: 6-NOV-14 16:10:12 ConCal: ST141106E1-1

Lab ID: ST141106E1-1 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol:1.0000 EndCAL: NA

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.42e+08	3.32 y	0.89	16:16	0.630	0.622	0.628 *	125	125
13C-PCB-3	1.40e+08	3.48 y	0.93	18:47	0.728	0.721	0.729	119	119
13C-PCB-4	6.97e+07	1.57 y	0.55	20:04	0.778	0.772	0.780	99.9	99.9
13C-PCB-9	1.05e+08	1.58 y	0.83	21:48	0.845	0.840	0.848	99.7	99.7
13C-PCB-11	1.18e+08	1.55 y	0.94	25:06	0.973	0.968	0.978	99.1	99.1
13C-PCB-19	7.44e+07	1.09 y	0.53	24:07	0.935	0.929	0.939	110	110
13C-PCB-28	1.07e+08	1.05 y	0.89	28:54	1.004	0.999	1.009	107	107
13C-PCB-32	1.13e+08	1.10 y	0.81	26:58	1.045	1.041	1.051	109	109
13C-PCB-37	9.54e+07	1.04 y	0.83	32:45	1.138	1.131	1.143	101	101
13C-PCB-47	8.86e+07	0.77 y	0.74	31:48	0.870	0.867	0.875	98.8	98.8
13C-PCB-52	8.31e+07	0.78 y	0.71	31:17	0.856	0.853	0.861	97.5	97.5
13C-PCB-54	9.73e+07	0.81 y	0.85	27:48	0.761	0.758	0.766	95.0	95.0
13C-PCB-70	1.11e+08	0.77 y	0.94	35:17	0.966	0.961	0.971	97.6	97.6
13C-PCB-77	1.05e+08	0.77 y	0.89	39:25	1.079	1.073	1.083	97.5	97.5
13C-PCB-80	1.14e+08	0.78 y	0.96	35:42	0.977	0.972	0.982	98.0	98.0
13C-PCB-81	9.96e+07	0.78 y	0.84	38:49	1.063	1.057	1.067	98.7	98.7
13C-PCB-95	5.91e+07	1.61 y	0.74	35:35	0.913	0.908	0.918	94.1	94.1
13C-PCB-97	5.80e+07	1.61 y	0.69	38:35	0.989	0.984	0.994	99.6	99.6
13C-PCB-101	6.44e+07	1.65 y	0.79	37:16	0.956	0.951	0.961	97.1	97.1
13C-PCB-104	7.81e+07	1.58 y	1.00	32:27	0.832	0.829	0.837	92.9	92.9
13C-PCB-105	8.15e+07	1.56 y	1.24	42:51	0.928	0.924	0.934	87.0	87.0
13C-PCB-114	7.88e+07	1.58 y	1.21	41:59	0.909	0.905	0.915	86.3	86.3
13C-PCB-118	8.01e+07	1.63 y	0.98	41:19	1.060	1.054	1.064	96.3	96.3
13C-PCB-123	7.66e+07	1.63 y	0.95	41:08	1.055	1.049	1.059	95.6	95.6
13C-PCB-126	7.76e+07	1.56 y	1.16	45:06	0.977	0.972	0.982	88.2	88.2
13C-PCB-127	8.87e+07	1.55 y	1.34	43:11	0.935	0.931	0.941	87.3	87.3
13C-PCB-138	7.91e+07	1.30 y	1.04	44:35	0.966	0.961	0.971	100	100
13C-PCB-141	7.89e+07	1.29 y	1.07	43:45	0.947	0.943	0.953	97.2	97.2
13C-PCB-153	8.07e+07	1.28 y	1.11	42:60	0.931	0.927	0.937	95.8	95.8
13C-PCB-155	7.50e+07	1.28 y	0.83	36:49	0.944	0.939	0.949	107	107
13C-PCB-156	9.22e+07	1.28 y	1.24	47:53	1.037	1.032	1.042	97.9	97.9
13C-PCB-157	9.66e+07	1.28 y	1.31	48:09	1.043	1.037	1.047	97.3	97.3
13C-PCB-159	9.06e+07	1.26 y	1.20	45:53	0.994	0.989	0.999	99.8	99.8
13C-PCB-167	9.72e+07	1.25 y	1.32	46:34	1.009	1.004	1.014	97.3	97.3
13C-PCB-169	8.72e+07	1.27 y	1.22	50:15	1.088	1.082	1.092	94.8	94.8
13C-PCB-170	4.15e+07	0.47 y	0.54	50:36	1.096	1.089	1.101	102	102
13C-PCB-180	5.09e+07	0.46 y	0.67	49:10	1.065	1.059	1.069	99.8	99.8
13C-PCB-188	6.91e+07	0.47 y	0.94	42:38	0.923	0.919	0.929	97.5	97.5
13C-PCB-189	5.44e+07	0.46 y	0.72	52:04	1.128	1.120	1.132	100	100
13C-PCB-194	5.72e+07	0.91 y	0.81	53:36	0.995	0.990	1.000	98.2	98.2
13C-PCB-202	7.09e+07	0.90 y	0.83	48:05	1.041	1.036	1.046	113	113
13C-PCB-206	5.21e+07	0.79 y	0.66	55:18	1.026	1.021	1.031	110	110
13C-PCB-208	8.10e+07	0.77 y	1.12	52:50	0.981	0.976	0.986	100	100
13C-PCB-209	5.85e+07	1.18 y	0.61	56:37	1.051	1.044	1.054	133	133

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.22e+08	0.76 y	1.01	37:35	1.029	1.023	1.033	100	100
13C-PCB-178	5.02e+07	0.45 y	0.63	45:26	0.984	0.979	0.989	105	105

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.22e+08	0.76 y	1.20	37:35	0.968	0.963	0.973	102	102
13C-PCB-178	5.02e+07	0.45 y	0.94	45:26	0.924	0.920	0.930	105	105

RS

Name	Resp	RA		RRF	RT	Conc
13C-PCB-15	1.27e+08	1.57	y	1.00	25:48	100
13C-PCB-31	1.13e+08	1.04	y	1.00	28:47	100
13C-PCB-60	1.20e+08	0.77	y	1.00	36:32	100
13C-PCB-111	8.44e+07	1.59	y	1.00	38:60	100
13C-PCB-128	7.57e+07	1.27	y	1.00	46:10	100
13C-PCB-205	7.19e+07	0.92	y	1.00	53:53	100

* OK RRT limits used for DATA processing only. RRT within 1668C METHOD limits

DMS 11/7/14

Analyst: DMS

Date: 11/7/14

Vista Analytical Laboratory - Injection Log Run file: 141106E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141106E1	1	ST141106E1-1	DMS	6-NOV-14	16:10:12	ST141106E1-1	NA
141106E1	2	SOLVENT BLANK	DMS	6-NOV-14	17:13:58	ST141106E1-1	NA
141106E1	3	SOLVENT BLANK	DMS	6-NOV-14	18:17:45	ST141106E1-1	NA
141106E1	4	B4K0011-BS1	DMS	6-NOV-14	19:21:31	ST141106E1-1	NA
141106E1	5	B4K0016-BS1	DMS	6-NOV-14	20:25:18	ST141106E1-1	NA
141106E1	6	SOLVENT BLANK	DMS	6-NOV-14	21:29:04	ST141106E1-1	NA
141106E1	7	B4K0011-BLK1	DMS	6-NOV-14	22:32:51	ST141106E1-1	NA
141106E1	8	B4K0016-BLK1	DMS	6-NOV-14	23:36:37	ST141106E1-1	NA
141106E1	9	1400839-01	DMS	7-NOV-14	00:40:24	ST141106E1-1	NA
141106E1	10	1400781-01RE1	DMS	7-NOV-14	01:44:09	ST141106E1-1	NA
141106E1	11	1400781-03RE1	DMS	7-NOV-14	02:47:54	ST141106E1-1	NA
141106E1	12	SOLVENT BLANK	DMS	7-NOV-14	03:51:39	ST141106E1-1	NA

CALIBRATION STANDARDS REVIEW CHECKLIST

Vista Analytical Laboratory

Beg. Calibration ID: ST141106E1-1 End Calibration ID: NA

	Beg.	End
Ion abundance within QC limits?	✓	NA
Concentration within range?	✓	
First and last eluters present?	✓	
Retention Times within criteria?	✓ 11/7/14	
Verification Std. named correctly? (ST-Year-Month-Day-VG ID)	✓	
Forms signed and dated?	✓	
Correct ICAL referenced?	✓	
Run Log:		
-Data file matches Conc Cal ID?	✓	
-Correct instrument listed?	✓	
-Samples within 12-hour clock?	(y)	n

	Beg.	End
Mass resolution > (10,000?)	✓	✓
▪ Method 1614 > 5,000; CARB 429 > 8,000		
TCDD/TCDF valleys < 25%?	NA	NA
Peaks integrated correctly?	✓	
Manual integrations included?	✓	
8280 CS1 Ending Standard		
-Ratios within limits		
-S/N > 2.5:1		
-CS1 within 12-hour clock		

Comments:

Reviewed by: MD 11/7/14
Initials & Date

* *Ending standard criteria applicable to 8290 only.*

Vista Analytical Laboratory
El Dorado Hills, CA 95762

Calib.Stds.Review 12/2009 rmh

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

	RRT Limits		Samp# 1	Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 7
			10	0.25	0.50	2.0	40	200
Name	Lower	Upper	RRT#1	RRT#2	RRT#3	RRT#4	RRT#5	RRT#6
2,3,7,8-TCDD	0.999	-1.002	1.001	1.001	1.001	1.001	1.001	1.001
1,2,3,7,8-PeCDD	0.999	-1.002	1.000	1.000	1.000	1.000	1.000	1.000
1,2,3,4,7,8-HxCDD	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
1,2,3,6,7,8-HxCDD	0.998	-1.004	1.001	1.000	1.000	1.000	1.000	1.000
1,2,3,7,8,9-HxCDD	0.998	-1.004	1.000	1.000	1.000	1.000	1.000	1.001
1,2,3,4,6,7,8-HpCDD	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
OCDD	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
2,3,7,8-TCDF	0.999	-1.003	1.001	1.001	1.001	1.001	1.001	1.001
1,2,3,7,8-PeCDF	0.999	-1.002	1.000	1.001	1.000	1.000	1.000	1.000
2,3,4,7,8-PeCDF	0.999	-1.002	1.000	1.000	1.000	1.000	1.000	1.000
1,2,3,4,7,8-HxCDF	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.001
1,2,3,6,7,8-HxCDF	0.997	-1.005	1.001	1.000	1.001	1.001	1.001	1.000
2,3,4,6,7,8-HxCDF	0.999	-1.001	1.001	1.000	1.000	1.001	1.001	1.000
1,2,3,7,8,9-HxCDF	0.999	-1.001	1.000	1.000	1.000	1.001	1.000	1.000
1,2,3,4,6,7,8-HpCDF	0.999	-1.001	1.000	1.001	1.000	1.000	1.000	1.000
1,2,3,4,7,8,9-HpCDF	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
OCDF	0.999	-1.001	1.000	1.000	1.000	1.000	1.000	1.000
13C-2,3,7,8-TCDD	0.976	-1.043	1.021	1.021	1.021	1.021	1.021	1.021
13C-1,2,3,7,8-PeCDD	1.000	-1.567	1.192	1.191	1.191	1.191	1.191	1.191
13C-1,2,3,4,7,8-HxCDD	1.002	-1.026	1.014	1.014	1.014	1.014	1.014	1.014
13C-1,2,3,6,7,8-HxCDD	1.007	-1.029	1.017	1.017	1.017	1.017	1.017	1.017
13C-1,2,3,7,8,9-HxCDD	1.014	-1.038	1.026	1.026	1.026	1.026	1.026	1.026
13C-1,2,3,4,6,7,8-HpCDD	1.117	-1.141	1.127	1.126	1.126	1.126	1.126	1.126
13C-OCDD	1.085	-1.365	1.224	1.223	1.223	1.223	1.223	1.223
13C-2,3,7,8-TCDF	0.923	-1.103	0.992	0.992	0.992	0.992	0.992	0.992
13C-1,2,3,7,8-PeCDF	1.000	-1.425	1.148	1.147	1.147	1.147	1.147	1.147
13C-2,3,4,7,8-PeCDF	1.011	-1.526	1.182	1.181	1.180	1.180	1.180	1.181
13C-1,2,3,4,7,8-HxCDF	0.975	-1.001	0.988	0.988	0.988	0.988	0.988	0.988
13C-1,2,3,6,7,8-HxCDF	0.979	-1.005	0.991	0.991	0.992	0.992	0.992	0.992
13C-2,3,4,6,7,8-HxCDF	1.001	-1.020	1.009	1.009	1.009	1.009	1.009	1.009
13C-1,2,3,7,8,9-HxCDF	1.002	-1.072	1.037	1.037	1.038	1.038	1.037	1.037
13C-1,2,3,4,6,7,8-HpCDF	1.069	-1.111	1.091	1.091	1.091	1.091	1.091	1.091
13C-1,2,3,4,7,8,9-HpCDF	1.098	-1.192	1.143	1.142	1.143	1.143	1.143	1.142
13C-OCDF	1.091	-1.371	1.230	1.230	1.230	1.230	1.230	1.230
37Cl-2,3,7,8-TCDD	0.989	-1.052	1.022	1.022	1.022	1.022	1.022	1.022
13C-1,2,3,4-TCDD	0.000	-0.000	*	*	*	*	*	*
13C-1,2,3,4-TCDF	0.000	-0.000	*	*	*	*	*	*
13C-1,2,3,4,6,9-HxCDF	0.000	-0.000	*	*	*	*	*	*

Filename: 141016D1 S: 1 Acquired: 16-OCT-14 11:05:57
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-1 1613 CS3 14I1102

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.11
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.11
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.93
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	0.93
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.02
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.02
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.12
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	1.12
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.00
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.00
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	1.07
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	1.07
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	1.07
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	1.07
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.28
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.28
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.57
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.57

Filename: 141016D1 S: 3 Acquired: 16-OCT-14 12:42:43
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-2 1613 CS0 14I1819

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.36
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.36
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.94
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	0.94
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.07
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	1.07
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.04
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.04
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.16
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	1.16
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	1.08
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	1.08
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	1.08
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	1.08
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.33
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.33
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.62
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.62

Filename: 141016D1 S: 4 Acquired: 16-OCT-14 13:31:08
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-3 1613 CS1 14I1820

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.22
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.22
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.93
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	0.93
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.03
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	1.03
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.14
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.14
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.15
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	1.15
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	1.05
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	1.05
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	1.05
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	1.05
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.30
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.30
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.60
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.60

Filename: 141016D1 S: 5 Acquired: 16-OCT-14 14:19:34
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-4 1613 CS2 14I1821

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.06
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.06
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.84
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	0.84
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	0.94
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	0.94
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.07
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.07
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	0.99
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	0.99
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	0.98
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	0.98
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	0.98
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	0.98
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.19
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.19
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.44
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.44

Filename: 141016D1 S: 6 Acquired: 16-OCT-14 15:08:00
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-5 1613 CS4 14I1822

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.16
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.16
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.93
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	0.93
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.04
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	1.04
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.14
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.14
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.08
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	1.08
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	1.09
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	1.09
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	1.09
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	1.09
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.31
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.31
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.59
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.59

Filename: 141016D1 S: 7 Acquired: 16-OCT-14 15:56:26
Run: 141016D1 Analyte: Cal: 1613VG7-10-16-14 Results:
Sample text: ST141016D1-6 1613 CS5 14I1823

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.20
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.20
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.95
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	0.95
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.06
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	1.06
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.17
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.17
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.08
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	1.08
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	1.11
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	1.11
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	1.11
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	1.11
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.32
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.32
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.60
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.60

Run: 141016D1 Analyte: Cal: 1613VG7-10-16-1 Inst. ID. VG-7

Data filename: 141016D1

Name	Mean RRF	%RSD	Samp# 1 10 RRF#1	Samp# 3 0.25 RRF#2	Samp# 4 0.50 RRF#3	Samp# 5 2.0 RRF#4	Samp# 6 40 RRF#5	Samp# 7 200 RRF#6
Total Tetra-Dioxins	1.18	8.84 %	1.11	1.36	1.22	1.06	1.16	1.20
TCDD EMPC	1.18	8.84 %	1.11	1.36	1.22	1.06	1.16	1.20
Total Penta-Dioxins	0.92	4.24 %	0.93	0.94	0.93	0.84	0.93	0.95
PeCDD EMPC	0.92	4.24 %	0.93	0.94	0.93	0.84	0.93	0.95
Total Hexa-Dioxins	1.02	4.51 %	1.02	1.07	1.03	0.94	1.04	1.06
HxCDD EMPC	1.02	4.51 %	1.02	1.07	1.03	0.94	1.04	1.06
Total Hepta-Dioxins	1.12	4.25 %	1.12	1.04	1.14	1.07	1.14	1.17
HpCDD EMPC	1.12	4.25 %	1.12	1.04	1.14	1.07	1.14	1.17
Total Tetra-Furans	1.08	6.64 %	1.00	1.16	1.15	0.99	1.08	1.08
TCDF EMPC	1.08	6.64 %	1.00	1.16	1.15	0.99	1.08	1.08
1st Func. Penta-Furans	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
1st Func. PeCDF EMPC	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
Total Penta-Furans	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
PeCDF EMPC	1.06	4.30 %	1.07	1.08	1.05	0.98	1.09	1.11
Total Hexa-Furans	1.29	3.86 %	1.28	1.33	1.30	1.19	1.31	1.32
HxCDF EMPC	1.29	3.86 %	1.28	1.33	1.30	1.19	1.31	1.32
Total Hepta-Furans	1.57	4.23 %	1.57	1.62	1.60	1.44	1.59	1.60
HpCDF EMPC	1.57	4.23 %	1.57	1.62	1.60	1.44	1.59	1.60

Vista Analytical Laboratory - Injection Log Run file: 141016D1 Instrument ID: VG-7 GC Column ID: ZB-5MS

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
141016D1	1	ST141016D1-1	MAS	16-OCT-14	11:05:57	ST141016D1-1	NA
141016D1	2	SOLVENT BLANK	MAS	16-OCT-14	11:54:17	ST141016D1-1	NA
141016D1	3	ST141016D1-2	MAS	16-OCT-14	12:42:43	ST141016D1-1	NA
141016D1	4	ST141016D1-3	MAS	16-OCT-14	13:31:08	ST141016D1-1	NA
141016D1	5	ST141016D1-4	MAS	16-OCT-14	14:19:34	ST141016D1-1	NA
141016D1	6	ST141016D1-5	MAS	16-OCT-14	15:08:00	ST141016D1-1	NA
141016D1	7	ST141016D1-6	MAS	16-OCT-14	15:56:26	ST141016D1-1	NA
141016D1	8	SOLVENT BLANK	MAS	16-OCT-14	16:44:52	ST141016D1-1	NA
141016D1	9	SS141016D1-1	MAS	16-OCT-14	17:33:17	ST141016D1-1	NA
141016D1	10	SOLVENT BLANK	MAS	16-OCT-14	18:21:38	ST141016D1-1	NA

Initial Calibration RRF Summary (ICAL) Vista Analytical Laboratory
Run: 140620E1 Analyte: Cal: PCBVG8-6-20-14 Inst. ID. VG-8

Data filename: 140620E1

			Samp# 1	Samp# 2	Samp# 3	Samp# 4	Samp# 5	Samp# 6
			0.25	1.0	2.5	50	400	750
Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
PCB-1	1.25	8.70 %	1.37	1.26	1.26	1.31	1.05	1.27
PCB-2	1.18	8.61 %	1.27	1.26	1.14	1.24	1.00	1.18
PCB-3	1.22	8.48 %	1.31	1.29	1.23	1.26	1.02	1.20
PCB-4/10	1.55	8.01 %	1.67	1.64	1.55	1.61	1.32	1.54
PCB-7/9	1.27	8.90 %	1.43	1.30	1.26	1.30	1.08	1.25
PCB-6	1.26	11.24 %	1.49	1.29	1.26	1.26	1.06	1.20
PCB-5/8	1.23	6.34 %	1.29	1.29	1.23	1.28	1.08	1.23
PCB-14	1.23	11.07 %	1.45	1.24	1.21	1.27	1.03	1.20
PCB-11	1.16	9.82 %	1.33	1.19	1.16	1.18	0.97	1.13
PCB-12/13	1.10	7.82 %	1.20	1.12	1.10	1.14	0.94	1.09
PCB-15	1.21	10.03 %	1.40	1.19	1.22	1.24	1.02	1.18
PCB-19	1.30	14.66 %	1.63	1.31	1.26	1.28	1.05	1.23
PCB-30	1.83	9.12 %	2.06	1.88	1.82	1.87	1.54	1.82
PCB-18	0.86	12.65 %	1.03	0.90	0.85	0.87	0.70	0.81
PCB-17	0.90	11.34 %	1.04	0.96	0.89	0.92	0.74	0.86
PCB-24/27	1.18	9.77 %	1.33	1.20	1.18	1.22	0.98	1.15
PCB-16/32	1.03	12.28 %	1.23	1.08	1.02	1.03	0.84	0.98
PCB-34	1.26	11.67 %	1.47	1.39	1.25	1.23	1.07	1.16
PCB-23	1.31	14.20 %	1.54	1.27	1.41	1.44	1.02	1.19
PCB-29	1.33	17.31 %	1.74	1.32	1.32	1.36	1.06	1.18
PCB-26	1.29	15.40 %	1.62	1.31	1.32	1.31	1.03	1.16
PCB-25	1.34	13.58 %	1.63	1.37	1.36	1.38	1.09	1.21
PCB-31	1.42	18.76 %	1.87	1.40	1.46	1.41	1.05	1.32
PCB-28	1.38	11.74 %	1.60	1.43	1.41	1.45	1.18	1.20
PCB-20/21/33	1.31	12.96 %	1.59	1.33	1.32	1.34	1.08	1.21
PCB-22	1.32	10.73 %	1.50	1.38	1.35	1.39	1.09	1.23
PCB-36	1.38	8.85 %	1.47	1.49	1.38	1.43	1.16	1.32
PCB-39	1.42	9.22 %	1.58	1.49	1.41	1.46	1.19	1.39
PCB-38	1.35	7.47 %	1.39	1.45	1.36	1.41	1.16	1.35
PCB-35	1.38	8.01 %	1.52	1.38	1.35	1.44	1.19	1.38
PCB-37	1.39	9.07 %	1.58	1.40	1.39	1.41	1.18	1.39
PCB-54	1.20	8.53 %	1.29	1.28	1.18	1.24	1.01	1.18
PCB-50	0.97	9.30 %	1.08	1.01	0.96	0.99	0.81	0.95
PCB-53	1.19	11.55 %	1.42	1.24	1.14	1.19	1.00	1.14
PCB-51	1.15	7.40 %	1.21	1.18	1.17	1.23	0.99	1.14
PCB-45	0.97	8.59 %	1.04	0.99	1.00	1.02	0.81	0.93
PCB-46	0.95	15.50 %	1.21	0.98	0.90	0.95	0.77	0.88
PCB-52/69	1.28	8.47 %	1.35	1.33	1.33	1.35	1.07	1.23
PCB-73	1.37	6.52 %	1.42	1.39	1.31	1.43	1.22	1.45
PCB-43/49	1.11	10.59 %	1.30	1.13	1.10	1.13	0.94	1.08
PCB-47	1.13	11.84 %	1.34	1.18	1.04	1.20	0.96	1.07

DMS 6/23/14

6/23/14

PCB-48/75	1.30	10.70 %	1.52	1.28	1.33	1.31	1.08	1.30
PCB-65	1.33	13.12 %	1.67	1.30	1.28	1.32	1.15	1.30
PCB-62	1.29	10.74 %	1.39	1.40	1.30	1.38	1.03	1.25
PCB-44	0.94	10.79 %	1.08	0.90	0.98	0.98	0.78	0.92
PCB-42/59	1.22	9.45 %	1.36	1.25	1.21	1.26	1.01	1.21
PCB-41/64/71/72	1.31	8.83 %	1.48	1.32	1.28	1.35	1.12	1.33
PCB-68	1.49	9.40 %	1.63	1.59	1.48	1.51	1.23	1.46
PCB-40	0.82	12.75 %	0.99	0.83	0.82	0.83	0.67	0.78
PCB-57	1.11	10.20 %	1.26	1.18	1.11	1.15	0.92	1.07
PCB-67	1.07	9.89 %	1.05	1.20	1.12	1.15	0.90	1.03
PCB-58	1.10	11.05 %	1.29	1.13	1.12	1.09	0.91	1.07

PCB-63	1.12	7.49 %	1.17	1.17	1.14	1.16	0.95	1.12
PCB-74	1.20	8.89 %	1.31	1.27	1.22	1.25	1.00	1.18
PCB-61/70	1.08	8.22 %	1.18	1.13	1.08	1.10	0.92	1.06
PCB-76/66	1.14	10.54 %	1.31	1.18	1.12	1.17	0.94	1.10
PCB-80	1.28	9.96 %	1.46	1.33	1.28	1.28	1.07	1.24
PCB-55	1.11	7.19 %	1.16	1.17	1.10	1.14	0.96	1.12
PCB-56/60	1.09	10.58 %	1.26	1.12	1.07	1.09	0.91	1.07
PCB-79	1.12	8.90 %	1.26	1.11	1.12	1.15	0.95	1.13
PCB-78	1.24	11.08 %	1.43	1.32	1.20	1.27	1.02	1.18
PCB-81	1.38	9.94 %	1.51	1.50	1.41	1.41	1.14	1.31
PCB-77	1.21	8.98 %	1.33	1.26	1.22	1.25	1.02	1.17
PCB-104	1.26	10.21 %	1.42	1.31	1.28	1.27	1.03	1.22
PCB-96	1.09	9.49 %	1.24	1.12	1.08	1.10	0.92	1.10
PCB-103	0.93	8.17 %	1.00	0.98	0.89	0.95	0.80	0.98
PCB-100	1.00	7.45 %	1.03	1.08	0.97	1.01	0.87	1.05
PCB-94	1.11	11.35 %	1.31	1.11	1.11	1.13	0.91	1.08
PCB-95/98/102	1.21	9.28 %	1.36	1.25	1.18	1.30	1.04	1.17
PCB-93	1.13	18.48 %	1.36	1.34	1.21	0.95	0.84	1.08
PCB-88/91	1.02	8.29 %	1.00	1.06	1.02	1.15	0.89	1.00
PCB-121	1.90	16.11 %	2.27	2.21	1.94	1.69	1.46	1.85
PCB-84/92	1.05	9.56 %	1.15	1.13	1.05	1.09	0.87	1.02
PCB-89	1.02	10.73 %	1.15	1.04	1.02	1.08	0.83	0.98
PCB-90/101	1.19	9.91 %	1.34	1.26	1.19	1.21	0.99	1.15
PCB-113	1.35	10.72 %	1.54	1.26	1.32	1.51	1.16	1.33
PCB-99	1.29	12.88 %	1.43	1.48	1.35	1.20	1.03	1.24
PCB-119	1.72	7.60 %	1.78	1.88	1.72	1.73	1.48	1.73
PCB-108/112	1.29	7.44 %	1.31	1.39	1.29	1.33	1.10	1.30
PCB-83	1.52	7.96 %	1.66	1.53	1.51	1.58	1.30	1.54
PCB-97	1.25	8.07 %	1.35	1.26	1.27	1.32	1.06	1.23
PCB-86	1.02	10.03 %	1.19	0.96	1.05	0.98	0.90	1.06
PCB-87/117/125	1.56	6.32 %	1.67	1.60	1.55	1.59	1.37	1.57
PCB-111/115	1.75	13.48 %	2.16	1.80	1.69	1.76	1.43	1.66
PCB-85/116	1.30	6.67 %	1.30	1.35	1.33	1.34	1.13	1.35
PCB-120	1.78	10.02 %	2.08	1.80	1.76	1.75	1.52	1.77
PCB-110	1.68	10.37 %	1.90	1.78	1.65	1.72	1.38	1.64
PCB-82	0.74	11.58 %	0.83	0.83	0.73	0.73	0.60	0.71
PCB-124	1.32	11.30 %	1.54	1.34	1.33	1.32	1.07	1.33
PCB-107/109	1.22	8.01 %	1.35	1.31	1.18	1.24	1.08	1.17
PCB-123	1.22	9.00 %	1.30	1.30	1.23	1.28	1.01	1.20
PCB-106/118	1.22	9.57 %	1.37	1.27	1.25	1.26	1.01	1.19
PCB-114	1.36	10.69 %	1.57	1.37	1.36	1.37	1.11	1.35
PCB-122	1.24	10.69 %	1.41	1.32	1.20	1.25	1.02	1.22
PCB-105	1.28	7.83 %	1.36	1.29	1.33	1.34	1.09	1.28
PCB-127	1.14	11.20 %	1.33	1.18	1.14	1.16	0.94	1.09
PCB-126	1.28	9.08 %	1.46	1.28	1.28	1.32	1.10	1.27
PCB-155	1.14	7.40 %	1.11	1.20	1.18	1.20	0.98	1.15
PCB-150	1.06	7.11 %	1.15	1.04	1.05	1.11	0.94	1.10
PCB-152	1.10	11.78 %	1.32	1.08	1.06	1.12	0.92	1.09
PCB-145	1.09	12.69 %	1.35	1.06	1.05	1.11	0.92	1.08
PCB-136	1.08	11.65 %	1.25	1.02	1.08	1.14	0.88	1.14

PCB-148	0.74	7.71 %	0.84	0.75	0.68	0.75	0.70	0.72
PCB-154	0.88	8.65 %	0.96	0.88	0.88	0.93	0.74	0.91
PCB-151	0.81	9.63 %	0.91	0.82	0.78	0.86	0.68	0.81
PCB-135	0.78	6.32 %	0.83	0.75	0.76	0.81	0.70	0.82
PCB-144	0.82	10.98 %	0.93	0.81	0.78	0.90	0.68	0.82
PCB 147	0.83	12.38 %	1.00	0.76	0.78	0.88	0.70	0.85
PCB-139/149	0.84	7.77 %	0.91	0.82	0.83	0.91	0.73	0.86
PCB-140	0.79	11.18 %	0.91	0.73	0.76	0.86	0.66	0.80
PCB-134/143	0.93	12.49 %	1.13	0.94	0.90	0.94	0.78	0.87
PCB-133/142	0.95	11.69 %	1.12	0.98	0.91	0.96	0.79	0.90
PCB-131	0.91	13.39 %	1.11	0.96	0.90	0.90	0.74	0.87

PCB-146/165	1.16	9.91 %	1.33	1.19	1.14	1.16	0.97	1.13
PCB-132/161	1.11	10.87 %	1.31	1.14	1.09	1.13	0.93	1.07
PCB-153	1.18	8.19 %	1.21	1.24	1.26	1.18	0.99	1.18
PCB-168	1.37	10.18 %	1.56	1.44	1.37	1.37	1.14	1.35
PCB-141	0.97	8.49 %	1.08	1.00	0.97	0.99	0.83	0.99
PCB-137	1.07	6.76 %	1.12	1.16	1.05	1.03	0.96	1.11
PCB-130	0.85	9.16 %	0.85	0.83	0.87	0.94	0.71	0.89
PCB-138/163/164	1.23	7.23 %	1.30	1.28	1.22	1.26	1.05	1.24
PCB-158/160	1.29	7.06 %	1.37	1.33	1.29	1.34	1.11	1.29
PCB-129	0.92	10.90 %	1.06	0.98	0.93	0.93	0.76	0.88
PCB-166	1.12	8.09 %	1.17	1.21	1.11	1.13	0.94	1.13
PCB-159	1.16	9.05 %	1.24	1.24	1.18	1.17	0.96	1.20
PCB-128/162	1.02	8.78 %	1.10	1.03	1.04	1.07	0.85	1.03
PCB-167	1.06	9.67 %	1.20	1.04	1.10	1.09	0.88	1.05
PCB-156	1.18	12.60 %	1.44	1.20	1.18	1.17	0.98	1.12
PCB-157	1.08	8.46 %	1.17	1.12	1.13	1.11	0.91	1.06
PCB-169	1.11	8.78 %	1.24	1.15	1.12	1.11	0.94	1.09
PCB-188	1.40	9.77 %	1.59	1.44	1.43	1.43	1.17	1.37
PCB-184	1.24	9.34 %	1.35	1.30	1.25	1.28	1.02	1.23
PCB-179	1.30	11.40 %	1.50	1.37	1.32	1.31	1.05	1.28
PCB-176	1.36	12.01 %	1.55	1.47	1.35	1.38	1.07	1.34
PCB-186	1.28	10.58 %	1.46	1.30	1.25	1.31	1.05	1.29
PCB-178	0.94	10.89 %	0.99	1.05	0.96	0.96	0.75	0.92
PCB-175	0.97	9.63 %	1.03	1.01	0.98	1.02	0.78	0.99
PCB-182/187	1.01	8.25 %	1.07	1.03	1.01	1.06	0.85	1.07
PCB-183	1.08	11.32 %	1.18	1.17	1.08	1.10	0.85	1.12
PCB-185	1.34	11.43 %	1.58	1.37	1.30	1.36	1.10	1.35
PCB-174	1.34	6.35 %	1.41	1.36	1.36	1.32	1.18	1.40
PCB-181	1.36	12.64 %	1.56	1.48	1.28	1.43	1.08	1.33
PCB-177	1.24	12.38 %	1.50	1.23	1.20	1.28	1.03	1.21
PCB-171	1.31	10.27 %	1.52	1.33	1.34	1.31	1.10	1.28
PCB-173	1.16	12.99 %	1.43	1.13	1.15	1.17	0.97	1.11
PCB-172	1.22	11.23 %	1.47	1.18	1.22	1.24	1.05	1.18
PCB-192	1.53	7.91 %	1.69	1.58	1.49	1.56	1.33	1.51
PCB-180	1.43	12.38 %	1.72	1.48	1.44	1.42	1.18	1.34
PCB-193	1.65	9.91 %	1.90	1.71	1.65	1.68	1.40	1.59
PCB-191	1.67	12.03 %	2.04	1.63	1.65	1.68	1.43	1.61
PCB-170	1.50	10.78 %	1.66	1.67	1.51	1.50	1.23	1.44
PCB-190	2.02	10.04 %	2.33	2.09	1.97	2.04	1.70	1.98
PCB-189	1.54	8.43 %	1.70	1.58	1.55	1.59	1.30	1.54
PCB-202	1.04	12.36 %	1.24	1.11	1.01	1.04	0.85	0.99
PCB-201	1.10	11.84 %	1.33	1.11	1.06	1.11	0.92	1.09
PCB-204	0.99	8.55 %	1.10	0.99	0.99	1.04	0.84	1.00
PCB-197	1.07	11.41 %	1.28	1.04	1.04	1.12	0.90	1.06
PCB-200	1.02	8.06 %	1.11	1.02	1.02	1.07	0.87	1.02
PCB-198	0.74	13.95 %	0.90	0.81	0.69	0.77	0.60	0.70
PCB-199	0.73	6.67 %	0.75	0.75	0.73	0.77	0.63	0.74
PCB-196/203	0.77	7.49 %	0.82	0.80	0.75	0.81	0.67	0.79
PCB-195	1.20	7.95 %	1.32	1.23	1.17	1.25	1.04	1.19
PCB-194	1.25	15.62 %	1.61	1.21	1.22	1.24	1.02	1.17

PCB-205	1.41	12.03 %	1.70	1.44	1.41	1.41	1.17	1.36
PCB-208	0.96	16.01 %	1.25	0.95	0.93	0.95	0.78	0.91
PCB-207	0.92	8.32 %	0.99	0.97	0.91	0.93	0.78	0.91
PCB-206	1.03	12.39 %	1.24	1.05	1.03	1.02	0.84	0.98
PCB-209	1.18	8.31 %	1.27	1.19	1.21	1.23	0.99	1.16
Total Mono-PCB	1.22	8.44 %	1.32	1.27	1.21	1.27	1.02	1.22
Total Di-PCB	1.21	8.72 %	1.35	1.24	1.21	1.25	1.03	1.19
Total Tri-PCB	1.16	11.17 %	1.36	1.20	1.15	1.18	0.96	1.12

Total Tri-PCB	1.35	11.56 %	1.58	1.38	1.36	1.39	1.11	1.26
Total Tetra-PCB	1.17	9.20 %	1.32	1.21	1.17	1.21	0.99	1.15
Total Penta-PCB	1.21	8.50 %	1.33	1.27	1.21	1.24	1.03	1.21
Total Penta-PCB	1.26	9.64 %	1.42	1.29	1.26	1.29	1.05	1.24
Total Hexa-PCB	0.92	8.86 %	1.03	0.90	0.89	0.96	0.78	0.93
Total Hexa-PCB	1.08	8.82 %	1.20	1.12	1.08	1.10	0.91	1.07
Total Hepta-PCB	1.27	10.02 %	1.44	1.31	1.27	1.30	1.05	1.26
Total Octa-PCB	0.92	9.46 %	1.04	0.94	0.89	0.95	0.77	0.91
Total Octa-PCB	1.29	11.68 %	1.54	1.29	1.26	1.30	1.08	1.24
Total Nona-PCB	0.96	11.85 %	1.15	0.98	0.94	0.96	0.79	0.93
Total Deca-PCB	1.18	8.31 %	1.27	1.19	1.21	1.23	0.99	1.16
13C-PCB-1	0.89	8.16 %	0.97	0.94	0.91	0.88	0.88	0.76
13C-PCB-3	0.93	4.27 %	0.98	0.94	0.94	0.93	0.91	0.86
13C-PCB-4	0.55	3.55 %	0.56	0.57	0.56	0.55	0.53	0.52
13C-PCB-9	0.83	2.91 %	0.84	0.85	0.84	0.82	0.80	0.79
13C-PCB-11	0.94	1.99 %	0.94	0.96	0.96	0.92	0.93	0.91
13C-PCB-19	0.53	4.01 %	0.55	0.55	0.55	0.53	0.52	0.50
13C-PCB-32	0.81	1.81 %	0.83	0.82	0.83	0.81	0.81	0.79
13C-PCB-28	0.89	8.44 %	0.79	0.91	0.83	0.85	0.96	0.98
13C-PCB-37	0.83	4.85 %	0.80	0.83	0.80	0.80	0.87	0.89
13C-PCB-54	0.85	5.64 %	0.86	0.89	0.91	0.84	0.83	0.77
13C-PCB-52	0.71	4.89 %	0.72	0.74	0.75	0.70	0.68	0.66
13C-PCB-47	0.74	4.31 %	0.74	0.78	0.78	0.73	0.73	0.70
13C-PCB-70	0.94	2.25 %	0.96	0.97	0.96	0.93	0.94	0.91
13C-PCB-80	0.96	2.89 %	0.96	1.00	0.99	0.95	0.95	0.92
13C-PCB-81	0.84	2.20 %	0.83	0.82	0.84	0.82	0.86	0.86
13C-PCB-77	0.89	1.89 %	0.88	0.87	0.90	0.88	0.91	0.91
13C-PCB-104	1.00	6.42 %	0.99	1.06	1.07	0.98	0.96	0.90
13C-PCB-95	0.74	2.70 %	0.74	0.78	0.75	0.73	0.74	0.72
13C-PCB-101	0.79	2.14 %	0.79	0.81	0.79	0.77	0.78	0.77
13C-PCB-97	0.69	1.41 %	0.70	0.69	0.70	0.69	0.69	0.67
13C-PCB-123	0.95	4.62 %	0.88	0.92	0.98	1.00	0.95	0.97
13C-PCB-118	0.98	3.93 %	0.92	0.95	0.99	1.03	1.01	0.99
13C-PCB-114	1.21	3.28 %	1.26	1.20	1.21	1.18	1.25	1.15
13C-PCB-105	1.24	3.05 %	1.26	1.24	1.25	1.20	1.29	1.19
13C-PCB-127	1.34	2.73 %	1.37	1.34	1.38	1.29	1.36	1.30
13C-PCB-126	1.16	2.72 %	1.16	1.17	1.20	1.12	1.19	1.14
13C-PCB-155	0.83	3.93 %	0.86	0.87	0.84	0.83	0.81	0.78
13C-PCB-153	1.11	2.81 %	1.14	1.11	1.13	1.10	1.15	1.06
13C-PCB-141	1.07	3.72 %	1.13	1.09	1.09	1.06	1.06	1.01
13C-PCB-138	1.04	2.24 %	1.06	1.05	1.06	1.02	1.06	1.01
13C-PCB-159	1.20	1.72 %	1.21	1.19	1.22	1.17	1.22	1.19
13C-PCB-167	1.32	1.88 %	1.32	1.33	1.36	1.29	1.32	1.31
13C-PCB-156	1.24	1.98 %	1.23	1.25	1.28	1.21	1.26	1.24
13C-PCB-157	1.31	1.61 %	1.31	1.31	1.34	1.28	1.33	1.29
13C-PCB-169	1.22	1.81 %	1.22	1.21	1.25	1.19	1.22	1.20
13C-PCB-188	0.94	3.81 %	0.97	0.93	0.93	0.93	0.98	0.88
13C-PCB-180	0.67	2.62 %	0.71	0.67	0.67	0.67	0.67	0.65
13C-PCB-170	0.54	1.49 %	0.55	0.54	0.54	0.53	0.54	0.52
13C-PCB-189	0.72	1.73 %	0.72	0.70	0.73	0.73	0.71	0.70
13C-PCB-202	0.83	2.31 %	0.86	0.83	0.83	0.84	0.84	0.80

13C-PCB-194	0.81	1.33 %	0.82	0.82	0.82	0.80	0.81	0.79
13C-PCB-208	1.12	2.11 %	1.10	1.14	1.13	1.14	1.14	1.09
13C-PCB-206	0.66	3.31 %	0.63	0.65	0.66	0.70	0.65	0.65
13C-PCB-209	0.61	2.62 %	0.59	0.60	0.62	0.64	0.61	0.62
13C-PCB-15	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-31	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-60	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-111	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-128	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-PCB-205	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00

13C-PCB-79	1.01	4.78 %	0.97	0.97	0.99	1.09	0.99	1.02
13C-PCB-178	0.63	4.30 %	0.62	0.61	0.62	0.69	0.62	0.62
13C-PCB-79	1.20	5.38 %	1.18	1.18	1.17	1.33	1.15	1.19
13C-PCB-178	0.94	5.01 %	0.88	0.91	0.92	1.02	0.93	0.96

Filename: 140620E1 S: 1 Acquired: 20-JUN-14 09:31:44
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-1 PCB CS0 13H1202

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	0.25	4.35e+05	2.82 y	16:14	-	1.37
2	Mono	PCB-2	0.25	4.10e+05	3.17 y	18:35	-	1.27
3	Mono	PCB-3	0.25	4.22e+05	2.92 y	18:49	-	1.31
4	Di	PCB-4/10	1.00	1.23e+06	1.61 y	20:10	-	1.67
5	Di	PCB-7/9	1.00	1.58e+06	1.70 y	21:56	-	1.43
6	Di	PCB-6	0.50	8.23e+05	1.36 y	22:35	-	1.49
7	Di	PCB-5/8	1.00	1.42e+06	1.76 y	23:00	-	1.29
8	Di	PCB-14	0.50	8.96e+05	1.59 y	24:05	-	1.45
9	Di	PCB-11	0.50	8.18e+05	1.39 y	25:16	-	1.33
10	Di	PCB-12/13	1.00	1.48e+06	1.71 y	25:40	-	1.20
11	Di	PCB-15	0.50	8.65e+05	1.43 y	25:58	-	1.40
12	Tri	PCB-19	0.25	2.94e+05	1.11 y	24:16	-	1.63
13	Tri	PCB-30	0.25	3.70e+05	0.89 y	25:09	-	2.06
14	Tri	PCB-18	0.25	2.78e+05	1.19 y	25:54	-	1.03
15	Tri	PCB-17	0.25	2.82e+05	0.94 y	26:04	-	1.04
16	Tri	PCB-24/27	0.50	7.21e+05	1.01 y	26:38	-	1.33
17	Tri	PCB-16/32	0.50	6.64e+05	1.06 y	27:09	-	1.23
18	Tri	PCB-34	0.25	3.70e+05	1.06 y	27:56	-	1.47
19	Tri	PCB-23	0.25	3.85e+05	1.19 y	28:02	-	1.54
20	Tri	PCB-29	0.25	4.36e+05	1.18 y	28:17	-	1.74
21	Tri	PCB-26	0.25	4.07e+05	0.97 y	28:29	-	1.62
22	Tri	PCB-25	0.25	4.10e+05	1.07 y	28:39	-	1.63
23	Tri	PCB-31	0.25	4.70e+05	1.15 y	29:00	-	1.87
24	Tri	PCB-28	0.25	4.03e+05	1.12 y	29:07	-	1.60
25	Tri	PCB-20/21/33	0.75	1.20e+06	1.11 y	29:43	-	1.59
26	Tri	PCB-22	0.25	3.76e+05	1.05 y	30:10	-	1.50
27	Tri	PCB-36	0.25	3.74e+05	1.12 y	30:47	-	1.47
28	Tri	PCB-39	0.25	3.99e+05	1.02 y	31:14	-	1.58
29	Tri	PCB-38	0.25	3.51e+05	1.20 y	32:00	-	1.39
30	Tri	PCB-35	0.25	3.85e+05	1.07 y	32:32	-	1.52
31	Tri	PCB-37	0.25	4.00e+05	0.99 y	32:58	-	1.58
32	Tetra	PCB-54	0.25	3.02e+05	0.84 y	27:59	-	1.29
33	Tetra	PCB-50	0.25	2.51e+05	0.85 y	29:09	-	1.08
34	Tetra	PCB-53	0.25	2.75e+05	0.70 y	29:47	-	1.42
35	Tetra	PCB-51	0.25	2.35e+05	0.68 y	30:08	-	1.21
36	Tetra	PCB-45	0.25	2.02e+05	0.82 y	30:34	-	1.04
37	Tetra	PCB-46	0.25	2.36e+05	0.75 y	31:04	-	1.21
38	Tetra	PCB-52/69	0.50	5.24e+05	0.82 y	31:32	-	1.35
39	Tetra	PCB-73	0.25	2.76e+05	0.88 y	31:39	-	1.42
40	Tetra	PCB-43/49	0.50	5.07e+05	0.72 y	31:49	-	1.30

41	Tetra	PCB-47	0.25	2.69e+05	0.78	y	32:00	-	1.34
42	Tetra	PCB-48/75	0.50	6.11e+05	0.75	y	32:07	-	1.52
43	Tetra	PCB-65	0.25	3.35e+05	0.81	y	32:23	-	1.67
44	Tetra	PCB-62	0.25	2.78e+05	0.66	y	32:30	-	1.39
45	Tetra	PCB-44	0.25	2.18e+05	0.67	y	32:48	-	1.08
46	Tetra	PCB-42/59	0.50	5.48e+05	0.72	y	33:02	-	1.36
47	Tetra	PCB-41/64/71/72	1.00	1.19e+06	0.71	y	33:37	-	1.48
48	Tetra	PCB-68	0.25	3.28e+05	0.80	y	33:52	-	1.63
49	Tetra	PCB-40	0.25	1.99e+05	0.82	y	34:05	-	0.99
50	Tetra	PCB-57	0.25	3.26e+05	0.66	y	34:27	-	1.26
51	Tetra	PCB-67	0.25	2.73e+05	0.74	y	34:45	-	1.05

52	Tetra	PCB-58	0.25	3.35e+05	0.79	y	34:52	-	1.29
53	Tetra	PCB-63	0.25	3.04e+05	0.78	y	35:01	-	1.17
54	Tetra	PCB-74	0.25	3.39e+05	0.76	y	35:18	-	1.31
55	Tetra	PCB-61/70	0.50	6.13e+05	0.75	y	35:29	-	1.18
56	Tetra	PCB-76/66	0.50	6.79e+05	0.81	y	35:42	-	1.31
57	Tetra	PCB-80	0.25	3.81e+05	0.73	y	35:56	-	1.46
58	Tetra	PCB-55	0.25	3.04e+05	0.81	y	36:16	-	1.16
59	Tetra	PCB-56/60	0.50	6.61e+05	0.75	y	36:46	-	1.26
60	Tetra	PCB-79	0.25	3.31e+05	0.86	y	37:48	-	1.26
61	Tetra	PCB-78	0.25	3.20e+05	0.80	y	38:30	-	1.43
62	Tetra	PCB-81	0.25	3.39e+05	0.75	y	39:02	-	1.51
63	Tetra	PCB-77	0.25	3.19e+05	0.68	y	39:38	-	1.33
64	Penta	PCB-104	0.25	2.39e+05	1.52	y	32:40	-	1.42
65	Penta	PCB-96	0.25	2.08e+05	1.62	y	33:56	-	1.24
66	Penta	PCB-103	0.25	1.68e+05	1.38	y	34:27	-	1.00
67	Penta	PCB-100	0.25	1.73e+05	1.61	y	34:49	-	1.03
68	Penta	PCB-94	0.25	1.64e+05	1.42	y	35:17	-	1.31
69	Penta	PCB-95/98/102	0.75	5.11e+05	1.73	y	35:45	-	1.36
70	Penta	PCB-93	0.25	1.71e+05	1.64	y	35:54	-	1.36
71	Penta	PCB-88/91	0.50	2.51e+05	1.76	y	36:10	-	1.00
72	Penta	PCB-121	0.25	2.86e+05	1.39	y	36:17	-	2.27
73	Penta	PCB-84/92	0.50	3.08e+05	1.45	y	37:07	-	1.15
74	Penta	PCB-89	0.25	1.54e+05	1.32	y	37:19	-	1.15
75	Penta	PCB-90/101	0.50	3.59e+05	1.43	y	37:29	-	1.34
76	Penta	PCB-113	0.25	2.06e+05	1.63	y	37:44	-	1.54
77	Penta	PCB-99	0.25	1.92e+05	1.34	y	37:49	-	1.43
78	Penta	PCB-119	0.25	2.11e+05	1.49	y	38:18	-	1.78
79	Penta	PCB-108/112	0.50	3.11e+05	1.68	y	38:27	-	1.31
80	Penta	PCB-83	0.25	1.96e+05	1.33	y	38:37	-	1.66
81	Penta	PCB-97	0.25	1.60e+05	1.69	y	38:48	-	1.35
82	Penta	PCB-86	0.25	1.41e+05	1.52	y	38:56	-	1.19
83	Penta	PCB-87/117/125	0.75	5.92e+05	1.55	y	39:04	-	1.67
84	Penta	PCB-111/115	0.50	5.11e+05	1.55	y	39:14	-	2.16
85	Penta	PCB-85/116	0.50	3.09e+05	1.69	y	39:22	-	1.30
86	Penta	PCB-120	0.25	2.47e+05	1.58	y	39:35	-	2.08
87	Penta	PCB-110	0.25	2.26e+05	1.34	y	39:44	-	1.90
88	Penta	PCB-82	0.25	1.23e+05	1.66	y	40:23	-	0.83
89	Penta	PCB-124	0.25	2.30e+05	1.74	y	41:02	-	1.54
90	Penta	PCB-107/109	0.50	4.02e+05	1.57	y	41:12	-	1.35
91	Penta	PCB-123	0.25	1.93e+05	1.66	y	41:22	-	1.30
92	Penta	PCB-106/118	0.50	4.29e+05	1.45	y	41:33	-	1.37
93	Penta	PCB-114	0.25	2.76e+05	1.56	y	42:12	-	1.57
94	Penta	PCB-122	0.25	2.48e+05	1.55	y	42:20	-	1.41
95	Penta	PCB-105	0.25	2.42e+05	1.73	y	43:04	-	1.36
96	Penta	PCB-127	0.25	2.56e+05	1.65	y	43:24	-	1.33
97	Penta	PCB-126	0.25	2.38e+05	1.59	y	45:17	-	1.46
98	Hexa	PCB-155	0.25	1.62e+05	1.06	y	37:03	-	1.11
99	Hexa	PCB-150	0.25	1.67e+05	1.15	y	38:19	-	1.15
100	Hexa	PCB-152	0.25	1.92e+05	1.35	y	38:47	-	1.32
101	Hexa	PCB-145	0.25	1.95e+05	1.19	y	39:13	-	1.35

102	Hexa	PCB-136	0.25	1.82e+05	1.10 y	39:34	-	1.25
103	Hexa	PCB-148	0.25	1.22e+05	1.18 y	39:39	-	0.84
104	Hexa	PCB-154	0.25	1.40e+05	1.29 y	40:09	-	0.96
105	Hexa	PCB-151	0.25	1.32e+05	1.38 y	40:47	-	0.91
106	Hexa	PCB-135	0.25	1.21e+05	1.08 y	40:59	-	0.83
107	Hexa	PCB-144	0.25	1.35e+05	1.36 y	41:07	-	0.93
108	Hexa	PCB-147	0.25	1.45e+05	1.24 y	41:14	-	1.00
109	Hexa	PCB-139/149	0.50	2.63e+05	1.42 y	41:30	-	0.91
110	Hexa	PCB-140	0.25	1.32e+05	1.26 y	41:41	-	0.91
111	Hexa	PCB-134/143	0.50	3.60e+05	1.29 y	42:07	-	1.13
112	Hexa	PCB-133/142	0.50	3.59e+05	1.27 y	42:25	-	1.12

113	Hexa	PCB-131	0.25	1.78e-05	1.22 y	42:35	-	1.11
114	Hexa	PCB-146/165	0.50	4.25e+05	1.38 y	42:48	-	1.33
115	Hexa	PCB-132/161	0.50	4.18e+05	1.33 y	43:03	-	1.31
116	Hexa	PCB-153	0.25	1.94e+05	1.33 y	43:13	-	1.21
117	Hexa	PCB-168	0.25	2.50e+05	1.10 y	43:25	-	1.56
118	Hexa	PCB-141	0.25	1.70e+05	1.16 y	43:57	-	1.08
119	Hexa	PCB-137	0.25	1.76e+05	1.34 y	44:20	-	1.12
120	Hexa	PCB-130	0.25	1.34e+05	1.41 y	44:26	-	0.85
121	Hexa	PCB-138/163/164	0.75	5.80e+05	1.22 y	44:49	-	1.30
122	Hexa	PCB-158/160	0.50	4.07e+05	1.26 y	45:04	-	1.37
123	Hexa	PCB-129	0.25	1.58e+05	1.11 y	45:18	-	1.06
124	Hexa	PCB-166	0.25	1.98e+05	1.26 y	45:46	-	1.17
125	Hexa	PCB-159	0.25	2.11e+05	1.18 y	46:04	-	1.24
126	Hexa	PCB-128/162	0.50	3.74e+05	1.26 y	46:22	-	1.10
127	Hexa	PCB-167	0.25	2.22e+05	1.41 y	46:46	-	1.20
128	Hexa	PCB-156	0.25	2.47e+05	1.24 y	48:03	-	1.44
129	Hexa	PCB-157	0.25	2.16e+05	1.36 y	48:20	-	1.17
130	Hexa	PCB-169	0.25	2.12e+05	1.07 y	50:23	-	1.24
131	Hepta	PCB-188	0.25	2.17e+05	1.02 y	42:51	-	1.59
132	Hepta	PCB-184	0.25	1.84e+05	0.94 y	43:18	-	1.35
133	Hepta	PCB-179	0.25	2.05e+05	1.05 y	44:04	-	1.50
134	Hepta	PCB-176	0.25	2.12e+05	1.04 y	44:32	-	1.55
135	Hepta	PCB-186	0.25	2.00e+05	0.97 y	45:09	-	1.46
136	Hepta	PCB-178	0.25	1.35e+05	0.98 y	45:38	-	0.99
137	Hepta	PCB-175	0.25	1.41e+05	1.08 y	45:58	-	1.03
138	Hepta	PCB-182/187	0.50	2.91e+05	0.90 y	46:09	-	1.07
139	Hepta	PCB-183	0.25	1.61e+05	0.95 y	46:29	-	1.18
140	Hepta	PCB-185	0.25	1.56e+05	0.97 y	47:08	-	1.58
141	Hepta	PCB-174	0.25	1.40e+05	1.03 y	47:30	-	1.41
142	Hepta	PCB-181	0.25	1.55e+05	1.17 y	47:37	-	1.56
143	Hepta	PCB-177	0.25	1.49e+05	1.09 y	47:46	-	1.50
144	Hepta	PCB-171	0.25	1.51e+05	0.93 y	48:05	-	1.52
145	Hepta	PCB-173	0.25	1.42e+05	0.96 y	48:30	-	1.43
146	Hepta	PCB-172	0.25	1.45e+05	1.13 y	48:55	-	1.47
147	Hepta	PCB-192	0.25	1.68e+05	0.90 y	49:08	-	1.69
148	Hepta	PCB-180	0.25	1.70e+05	0.97 y	49:20	-	1.72
149	Hepta	PCB-193	0.25	1.88e+05	1.13 y	49:31	-	1.90
150	Hepta	PCB-191	0.25	2.02e+05	1.05 y	49:45	-	2.04
151	Hepta	PCB-170	0.25	1.27e+05	1.19 y	50:44	-	1.66
152	Hepta	PCB-190	0.25	1.78e+05	0.91 y	50:55	-	2.33
153	Hepta	PCB-189	0.25	1.70e+05	1.20 y	52:11	-	1.70
154	Octa	PCB-202	0.25	1.49e+05	0.98 y	48:16	-	1.24
155	Octa	PCB-201	0.25	1.60e+05	1.02 y	48:45	-	1.33
156	Octa	PCB-204	0.25	1.33e+05	0.77 y	48:54	-	1.10
157	Octa	PCB-197	0.25	1.54e+05	0.92 y	49:13	-	1.28
158	Octa	PCB-200	0.25	1.34e+05	1.01 y	50:02	-	1.11
159	Octa	PCB-198	0.25	1.08e+05	0.88 y	51:19	-	0.90
160	Octa	PCB-199	0.25	9.08e+04	0.94 y	51:25	-	0.75
161	Octa	PCB-196/203	0.50	1.98e+05	0.81 y	51:40	-	0.82
162	Octa	PCB-195	0.25	1.39e+05	0.81 y	52:48	-	1.32

163	Octa		PCB-194	0.25	1.70e+05	0.85	y	53:40	- 1.61
164	Octa		PCB-205	0.25	1.79e+05	0.98	y	53:57	- 1.70
165	Nona		PCB-208	0.25	1.78e+05	1.17	y	52:57	- 1.25
166	Nona		PCB-207	0.25	1.41e+05	1.37	y	53:14	- 0.99
167	Nona		PCB-206	0.25	1.02e+05	1.41	y	55:20	- 1.24
168	Deca		PCB-209	0.25	9.69e+04	1.15	y	56:37	- 1.27
169	Tot ╗	Total Mono-PCB		0.00	-	-	n	-	- 1.32
170	Tot ╗	Total Di-PCB		0.00	-	-	n	-	- 1.35

171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.36
172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.58
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.32
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.33
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.42
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.03
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.20
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.44
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.04
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.54
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	1.15
182	Tot ╗	Total Deca-PCB	0.25	9.69e+04	1.15	y	56:37	-	1.27
183	Mono╗	13C-PCB-1	100.00	1.27e+08	3.28	y	16:13	-	0.97
184	Mono╗	13C-PCB-3	100.00	1.29e+08	3.32	y	18:48	-	0.98
185	Di-IS	13C-PCB-4	100.00	7.37e+07	1.59	y	20:07	-	0.56
186	Di-IS	13C-PCB-9	100.00	1.10e+08	1.57	y	21:53	-	0.84
187	Di-IS	13C-PCB-11	100.00	1.24e+08	1.57	y	25:15	-	0.94
188	Tri-╗	13C-PCB-19	100.00	7.18e+07	1.06	y	24:15	-	0.55
189	Tri-╗	13C-PCB-32	100.00	1.08e+08	1.08	y	27:09	-	0.83
190	Tri-╗	13C-PCB-28	100.00	1.00e+08	1.05	y	29:05	-	0.79
191	Tri-╗	13C-PCB-37	100.00	1.01e+08	1.07	y	32:57	-	0.80
192	Tetr╗	13C-PCB-54	100.00	9.33e+07	0.80	y	27:59	-	0.86
193	Tetr╗	13C-PCB-52	100.00	7.77e+07	0.81	y	31:30	-	0.72
194	Tetr╗	13C-PCB-47	100.00	8.03e+07	0.78	y	32:00	-	0.74
195	Tetr╗	13C-PCB-70	100.00	1.04e+08	0.80	y	35:31	-	0.96
196	Tetr╗	13C-PCB-80	100.00	1.05e+08	0.80	y	35:55	-	0.96
197	Tetr╗	13C-PCB-81	100.00	8.95e+07	0.80	y	39:02	-	0.83
198	Tetr╗	13C-PCB-77	100.00	9.58e+07	0.80	y	39:37	-	0.88
199	Pent╗	13C-PCB-104	100.00	6.72e+07	1.63	y	32:39	-	0.99
200	Pent╗	13C-PCB-95	100.00	5.03e+07	1.61	y	35:49	-	0.74
201	Pent╗	13C-PCB-101	100.00	5.37e+07	1.61	y	37:29	-	0.79
202	Pent╗	13C-PCB-97	100.00	4.74e+07	1.63	y	38:47	-	0.70
203	Pent╗	13C-PCB-123	100.00	5.97e+07	1.63	y	41:21	-	0.88
204	Pent╗	13C-PCB-118	100.00	6.28e+07	1.61	y	41:32	-	0.92
205	Pent╗	13C-PCB-114	100.00	7.04e+07	1.59	y	42:11	-	1.26
206	Pent╗	13C-PCB-105	100.00	7.09e+07	1.60	y	43:03	-	1.26
207	Pent╗	13C-PCB-127	100.00	7.69e+07	1.57	y	43:22	-	1.37
208	Pent╗	13C-PCB-126	100.00	6.51e+07	1.55	y	45:17	-	1.16
209	Hexa╗	13C-PCB-155	100.00	5.81e+07	1.27	y	37:02	-	0.86
210	Hexa╗	13C-PCB-153	100.00	6.40e+07	1.30	y	43:12	-	1.14
211	Hexa╗	13C-PCB-141	100.00	6.31e+07	1.28	y	43:56	-	1.13
212	Hexa	13C-PCB-138	100.00	5.96e+07	1.29	y	44:47	-	1.06
213	Hexa╗	13C-PCB-159	100.00	6.79e+07	1.28	y	46:04	-	1.21
214	Hexa╗	13C-PCB-167	100.00	7.42e+07	1.28	y	46:45	-	1.32
215	Hexa╗	13C-PCB-156	100.00	6.87e+07	1.28	y	48:02	-	1.23
216	Hexa╗	13C-PCB-157	100.00	7.37e+07	1.28	y	48:18	-	1.31
217	Hexa╗	13C-PCB-169	100.00	6.83e+07	1.27	y	50:23	-	1.22
218	Hept╗	13C-PCB-188	100.00	5.45e+07	0.46	y	42:50	-	0.97
219	Hept╗	13C-PCB-180	100.00	3.96e+07	0.47	y	49:19	-	0.71
220	Hept╗	13C-PCB-170	100.00	3.06e+07	0.46	y	50:44	-	0.55
221	Hept╗	13C-PCB-189	100.00	4.02e+07	0.46	y	52:11	-	0.72

222	Octa¶	13C-PCB-202	100.00	4.83e+07	0.91	y	48:15	-	0.86
223	Octa¶	13C-PCB-194	100.00	4.22e+07	0.90	y	53:39	-	0.82
224	Nona¶	13C-PCB-208	100.00	5.69e+07	0.78	y	52:56	-	1.10
225	Nona¶	13C-PCB-206	100.00	3.28e+07	0.79	y	55:19	-	0.63
226	Deca¶	13C-PCB-209	100.00	3.05e+07	1.17	y	56:36	-	0.59
227	DI-RS	13C-PCB-15	100.00	1.31e+08	1.57	y	25:58	-	1.00
228	Tri-¶	13C-PCB-31	100.00	1.27e+08	1.06	y	28:59	-	1.00
229	Tetr¶	13C-PCB-60	100.00	1.09e+08	0.78	y	36:45	-	1.00
230	Penta	13C-PCB-111	100.00	6.79e+07	1.58	y	39:12	-	1.00
231	Hexa¶	13C-PCB-128	100.00	5.60e+07	1.28	y	46:20	-	1.00

232	Octa╗	13C-PCB-205	100.00	5.17e+07	0.93	y	53:56	-	1.00
233	CRS	13C-PCB-79	100.00	1.05e+08	0.80	y	37:48	-	0.97
234	CRS	13C-PCB-178	100.00	3.50e+07	0.45	y	45:37	-	0.62
235	PS	13C-PCB-79	100.00	1.05e+08	0.80	y	37:48	-	1.18
236	PS	13C-PCB-178	100.00	3.50e+07	0.45	y	45:37	-	0.88

Filename: 140620E1 S: 2 Acquired: 20-JUN-14 10:35:42
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-2 PCB CS1 13H1204

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	1.00	1.98e+06	3.08 y	16:16	-	1.26
2	Mono	PCB-2	1.00	1.97e+06	2.92 y	18:37	-	1.26
3	Mono	PCB-3	1.00	2.01e+06	3.12 y	18:51	-	1.29
4	Di	PCB-4/10	4.00	6.16e+06	1.55 y	20:12	-	1.64
5	Di	PCB-7/9	4.00	7.32e+06	1.64 y	21:57	-	1.30
6	Di	PCB-6	2.00	3.65e+06	1.60 y	22:37	-	1.29
7	Di	PCB-5/8	4.00	7.27e+06	1.61 y	23:01	-	1.29
8	Di	PCB-14	2.00	3.94e+06	1.66 y	24:06	-	1.24
9	Di	PCB-11	2.00	3.77e+06	1.68 y	25:17	-	1.19
10	Di	PCB-12/13	4.00	7.13e+06	1.61 y	25:41	-	1.12
11	Di	PCB-15	2.00	3.79e+06	1.72 y	26:00	-	1.19
12	Tri	PCB-19	1.00	1.20e+06	1.12 y	24:17	-	1.31
13	Tri	PCB-30	1.00	1.72e+06	1.12 y	25:10	-	1.88
14	Tri	PCB-18	1.00	1.24e+06	1.05 y	25:55	-	0.90
15	Tri	PCB-17	1.00	1.31e+06	1.07 y	26:05	-	0.96
16	Tri	PCB-24/27	2.00	3.29e+06	1.07 y	26:40	-	1.20
17	Tri	PCB-16/32	2.00	2.95e+06	1.04 y	27:10	-	1.08
18	Tri	PCB-34	1.00	1.94e+06	1.06 y	27:58	-	1.39
19	Tri	PCB-23	1.00	1.78e+06	1.00 y	28:04	-	1.27
20	Tri	PCB-29	1.00	1.84e+06	1.07 y	28:18	-	1.32
21	Tri	PCB-26	1.00	1.83e+06	1.06 y	28:31	-	1.31
22	Tri	PCB-25	1.00	1.92e+06	1.07 y	28:40	-	1.37
23	Tri	PCB-31	1.00	1.96e+06	1.10 y	29:02	-	1.40
24	Tri	PCB-28	1.00	2.00e+06	1.03 y	29:07	-	1.43
25	Tri	PCB-20/21/33	3.00	5.56e+06	1.09 y	29:45	-	1.33
26	Tri	PCB-22	1.00	1.93e+06	1.07 y	30:11	-	1.38
27	Tri	PCB-36	1.00	1.90e+06	1.15 y	30:47	-	1.49
28	Tri	PCB-39	1.00	1.91e+06	1.10 y	31:16	-	1.49
29	Tri	PCB-38	1.00	1.86e+06	1.05 y	32:02	-	1.45
30	Tri	PCB-35	1.00	1.77e+06	1.19 y	32:33	-	1.38
31	Tri	PCB-37	1.00	1.80e+06	1.09 y	32:59	-	1.40
32	Tetra	PCB-54	1.00	1.51e+06	0.77 y	28:01	-	1.28
33	Tetra	PCB-50	1.00	1.19e+06	0.86 y	29:11	-	1.01
34	Tetra	PCB-53	1.00	1.21e+06	0.82 y	29:49	-	1.24
35	Tetra	PCB-51	1.00	1.15e+06	0.86 y	30:10	-	1.18
36	Tetra	PCB-45	1.00	9.70e+05	0.76 y	30:36	-	0.99
37	Tetra	PCB-46	1.00	9.57e+05	0.75 y	31:05	-	0.98
38	Tetra	PCB-52/69	2.00	2.60e+06	0.79 y	31:33	-	1.33
39	Tetra	PCB-73	1.00	1.36e+06	0.84 y	31:40	-	1.39
40	Tetra	PCB-43/49	2.00	2.21e+06	0.81 y	31:50	-	1.13
41	Tetra	PCB-47	1.00	1.22e+06	0.72 y	32:02	-	1.18

42	Tetra	PCB-48/75	2.00	2.64e+06	0.76	y	32:09	-	1.28
43	Tetra	PCB-65	1.00	1.34e+06	0.76	y	32:25	-	1.30
44	Tetra	PCB-62	1.00	1.44e+06	0.77	y	32:32	-	1.40
45	Tetra	PCB-44	1.00	9.24e+05	0.78	y	32:50	-	0.90
46	Tetra	PCB-42/59	2.00	2.58e+06	0.75	y	33:04	-	1.25
47	Tetra	PCB-41/64/71/72	4.00	5.45e+06	0.78	y	33:39	-	1.32
48	Tetra	PCB-68	1.00	1.64e+06	0.79	y	33:54	-	1.59
49	Tetra	PCB-40	1.00	8.54e+05	0.76	y	34:07	-	0.83
50	Tetra	PCB-57	1.00	1.51e+06	0.73	y	34:29	-	1.18
51	Tetra	PCB-67	1.00	1.53e+06	0.78	y	34:47	-	1.20
52	Tetra	PCB-58	1.00	1.45e+06	0.75	y	34:54	-	1.13

53	Tetra	PCB-63	1.00	1.51e+06	0.75 y	35:03	-	1.17
54	Tetra	PCB-74	1.00	1.62e+06	0.77 y	35:20	-	1.27
55	Tetra	PCB-61/70	2.00	2.91e+06	0.80 y	35:31	-	1.13
56	Tetra	PCB-76/66	2.00	3.02e+06	0.75 y	35:44	-	1.18
57	Tetra	PCB-80	1.00	1.75e+06	0.82 y	35:57	-	1.33
58	Tetra	PCB-55	1.00	1.55e+06	0.78 y	36:17	-	1.17
59	Tetra	PCB-56/60	2.00	2.96e+06	0.79 y	36:47	-	1.12
60	Tetra	PCB-79	1.00	1.47e+06	0.75 y	37:50	-	1.11
61	Tetra	PCB-78	1.00	1.43e+06	0.78 y	38:32	-	1.32
62	Tetra	PCB-81	1.00	1.62e+06	0.82 y	39:04	-	1.50
63	Tetra	PCB-77	1.00	1.46e+06	0.80 y	39:40	-	1.26
64	Penta	PCB-104	1.00	1.12e+06	1.57 y	32:42	-	1.31
65	Penta	PCB-96	1.00	9.56e+05	1.70 y	33:57	-	1.12
66	Penta	PCB-103	1.00	8.44e+05	1.51 y	34:29	-	0.98
67	Penta	PCB-100	1.00	9.21e+05	1.69 y	34:50	-	1.08
68	Penta	PCB-94	1.00	6.94e+05	1.57 y	35:18	-	1.11
69	Penta	PCB-95/98/102	3.00	2.34e+06	1.61 y	35:47	-	1.25
70	Penta	PCB-93	1.00	8.35e+05	1.78 y	35:55	-	1.34
71	Penta	PCB-88/91	2.00	1.32e+06	1.53 y	36:12	-	1.06
72	Penta	PCB-121	1.00	1.38e+06	1.59 y	36:18	-	2.21
73	Penta	PCB-84/92	2.00	1.48e+06	1.69 y	37:09	-	1.13
74	Penta	PCB-89	1.00	6.78e+05	1.51 y	37:20	-	1.04
75	Penta	PCB-90/101	2.00	1.64e+06	1.61 y	37:31	-	1.26
76	Penta	PCB-113	1.00	8.19e+05	1.58 y	37:44	-	1.26
77	Penta	PCB-99	1.00	9.67e+05	1.59 y	37:50	-	1.48
78	Penta	PCB-119	1.00	1.04e+06	1.76 y	38:18	-	1.88
79	Penta	PCB-108/112	2.00	1.54e+06	1.59 y	38:27	-	1.39
80	Penta	PCB-83	1.00	8.48e+05	1.61 y	38:38	-	1.53
81	Penta	PCB-97	1.00	7.01e+05	1.71 y	38:49	-	1.26
82	Penta	PCB-86	1.00	5.31e+05	1.42 y	38:58	-	0.96
83	Penta	PCB-87/117/125	3.00	2.66e+06	1.67 y	39:05	-	1.60
84	Penta	PCB-111/115	2.00	2.00e+06	1.53 y	39:15	-	1.80
85	Penta	PCB-85/116	2.00	1.50e+06	1.61 y	39:23	-	1.35
86	Penta	PCB-120	1.00	1.00e+06	1.51 y	39:37	-	1.80
87	Penta	PCB-110	1.00	9.88e+05	1.74 y	39:46	-	1.78
88	Penta	PCB-82	1.00	6.18e+05	1.61 y	40:23	-	0.83
89	Penta	PCB-124	1.00	9.98e+05	1.74 y	41:03	-	1.34
90	Penta	PCB-107/109	2.00	1.94e+06	1.58 y	41:12	-	1.31
91	Penta	PCB-123	1.00	9.67e+05	1.61 y	41:22	-	1.30
92	Penta	PCB-106/118	2.00	1.95e+06	1.71 y	41:35	-	1.27
93	Penta	PCB-114	1.00	1.19e+06	1.64 y	42:13	-	1.37
94	Penta	PCB-122	1.00	1.14e+06	1.68 y	42:21	-	1.32
95	Penta	PCB-105	1.00	1.16e+06	1.68 y	43:05	-	1.29
96	Penta	PCB-127	1.00	1.14e+06	1.58 y	43:24	-	1.18
97	Penta	PCB-126	1.00	1.08e+06	1.48 y	45:19	-	1.28
98	Hexa	PCB-155	1.00	8.43e+05	1.23 y	37:03	-	1.20
99	Hexa	PCB-150	1.00	7.33e+05	1.34 y	38:20	-	1.04
100	Hexa	PCB-152	1.00	7.58e+05	1.20 y	38:48	-	1.08
101	Hexa	PCB-145	1.00	7.48e+05	1.15 y	39:15	-	1.06
102	Hexa	PCB-136	1.00	7.19e+05	1.34 y	39:33	-	1.02

103	Hexa	PCB-148	1.00	5.31e-05	1.18 y	39:40	-	0.75
104	Hexa	PCB-154	1.00	6.17e+05	1.37 y	40:10	-	0.88
105	Hexa	PCB-151	1.00	5.78e+05	1.33 y	40:48	-	0.82
106	Hexa	PCB-135	1.00	5.29e+05	1.36 y	41:01	-	0.75
107	Hexa	PCB-144	1.00	5.73e+05	1.29 y	41:08	-	0.81
108	Hexa	PCB-147	1.00	5.38e+05	1.32 y	41:16	-	0.76
109	Hexa	PCB-139/149	2.00	1.16e+06	1.33 y	41:30	-	0.82
110	Hexa	PCB-140	1.00	5.12e+05	1.26 y	41:42	-	0.73
111	Hexa	PCB-134/143	2.00	1.51e+06	1.24 y	42:09	-	0.94
112	Hexa	PCB-133/142	2.00	1.57e+06	1.37 y	42:26	-	0.98
113	Hexa	PCB-131	1.00	7.67e+05	1.32 y	42:36	-	0.96

114	Hexa	PCB-146/165	2.00	1.91e+06	1.21 y	42:48	-	1.19
115	Hexa	PCB-132/161	2.00	1.82e+06	1.22 y	43:03	-	1.14
116	Hexa	PCB-153	1.00	9.94e+05	1.17 y	43:14	-	1.24
117	Hexa	PCB-168	1.00	1.15e+06	1.10 y	43:27	-	1.44
118	Hexa	PCB-141	1.00	7.87e+05	1.28 y	43:58	-	1.00
119	Hexa	PCB-137	1.00	9.10e+05	1.29 y	44:21	-	1.16
120	Hexa	PCB-130	1.00	6.47e+05	1.23 y	44:28	-	0.83
121	Hexa	PCB-138/163/164	3.00	2.92e+06	1.18 y	44:50	-	1.28
122	Hexa	PCB-158/160	2.00	2.01e+06	1.38 y	45:05	-	1.33
123	Hexa	PCB-129	1.00	7.44e+05	1.17 y	45:19	-	0.98
124	Hexa	PCB-166	1.00	1.04e+06	1.28 y	45:46	-	1.21
125	Hexa	PCB-159	1.00	1.07e+06	1.23 y	46:05	-	1.24
126	Hexa	PCB-128/162	2.00	1.76e+06	1.16 y	46:22	-	1.03
127	Hexa	PCB-167	1.00	1.00e+06	1.19 y	46:47	-	1.04
128	Hexa	PCB-156	1.00	1.09e+06	1.12 y	48:04	-	1.20
129	Hexa	PCB-157	1.00	1.06e+06	1.22 y	48:20	-	1.12
130	Hexa	PCB-169	1.00	1.01e+06	1.16 y	50:24	-	1.15
131	Hepta	PCB-188	1.00	9.64e+05	1.15 y	42:52	-	1.44
132	Hepta	PCB-184	1.00	8.74e+05	0.93 y	43:18	-	1.30
133	Hepta	PCB-179	1.00	9.19e+05	1.16 y	44:06	-	1.37
134	Hepta	PCB-176	1.00	9.89e+05	1.02 y	44:34	-	1.47
135	Hepta	PCB-186	1.00	8.74e+05	1.12 y	45:09	-	1.30
136	Hepta	PCB-178	1.00	7.05e+05	1.02 y	45:38	-	1.05
137	Hepta	PCB-175	1.00	6.78e+05	0.95 y	45:59	-	1.01
138	Hepta	PCB-182/187	2.00	1.38e+06	0.98 y	46:11	-	1.03
139	Hepta	PCB-183	1.00	7.83e+05	1.07 y	46:29	-	1.17
140	Hepta	PCB-185	1.00	6.66e+05	0.96 y	47:09	-	1.37
141	Hepta	PCB-174	1.00	6.57e+05	1.07 y	47:31	-	1.36
142	Hepta	PCB-181	1.00	7.19e+05	0.90 y	47:36	-	1.48
143	Hepta	PCB-177	1.00	5.95e+05	0.98 y	47:47	-	1.23
144	Hepta	PCB-171	1.00	6.43e+05	1.06 y	48:04	-	1.33
145	Hepta	PCB-173	1.00	5.49e+05	1.09 y	48:31	-	1.13
146	Hepta	PCB-172	1.00	5.72e+05	1.17 y	48:57	-	1.18
147	Hepta	PCB-192	1.00	7.66e+05	1.07 y	49:09	-	1.58
148	Hepta	PCB-180	1.00	7.16e+05	1.13 y	49:20	-	1.48
149	Hepta	PCB-193	1.00	8.30e+05	1.09 y	49:32	-	1.71
150	Hepta	PCB-191	1.00	7.89e+05	1.14 y	49:46	-	1.63
151	Hepta	PCB-170	1.00	6.49e+05	1.09 y	50:45	-	1.67
152	Hepta	PCB-190	1.00	8.09e+05	1.12 y	50:55	-	2.09
153	Hepta	PCB-189	1.00	8.02e+05	1.19 y	52:12	-	1.58
154	Octa	PCB-202	1.00	6.64e+05	0.98 y	48:17	-	1.11
155	Octa	PCB-201	1.00	6.64e+05	0.96 y	48:46	-	1.11
156	Octa	PCB-204	1.00	5.92e+05	0.96 y	48:55	-	0.99
157	Octa	PCB-197	1.00	6.20e+05	0.87 y	49:13	-	1.04
158	Octa	PCB-200	1.00	6.09e+05	0.92 y	50:03	-	1.02
159	Octa	PCB-198	1.00	4.81e+05	0.77 y	51:20	-	0.81
160	Octa	PCB-199	1.00	4.49e+05	0.78 y	51:25	-	0.75
161	Octa	PCB-196/203	2.00	9.60e+05	0.87 y	51:40	-	0.80
162	Octa	PCB-195	1.00	6.50e+05	0.91 y	52:49	-	1.23
163	Octa	PCB-194	1.00	6.42e+05	1.01 y	53:40	-	1.21

164	Octa	PCB-205	1.00	7.63e+05	0.88	y	53:57	-	1.44
165	Nona	PCB-208	1.00	7.07e+05	1.32	y	52:57	-	0.95
166	Nona	PCB-207	1.00	7.22e+05	1.40	y	53:16	-	0.97
167	Nona	PCB-206	1.00	4.47e+05	1.26	y	55:21	-	1.05
168	Deca	PCB-209	1.00	4.65e+05	1.13	y	56:37	-	1.19
169	Tot ╗	Total Mono-PCB	0.00	-	-	n	-	-	1.27
170	Tot ╗	Total Di-PCB	0.00	-	-	n	-	-	1.24
171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.20

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.38
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.21
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.27
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.29
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.90
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.12
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.31
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.94
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.29
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	0.98
182	Tot ╗	Total Deca-PCB	1.00	4.65e+05	1.13	y	56:37	-	1.19
183	Mono╗	13C-PCB-1	100.00	1.56e+08	3.23	y	16:15	-	0.94
184	Mono╗	13C-PCB-3	100.00	1.56e+08	3.29	y	18:50	-	0.94
185	Di-IS	13C-PCB-4	100.00	9.40e+07	1.58	y	20:09	-	0.57
186	Di-IS	13C-PCB-9	100.00	1.41e+08	1.60	y	21:55	-	0.85
187	Di-IS	13C-PCB-11	100.00	1.59e+08	1.57	y	25:17	-	0.96
188	Tri-╗	13C-PCB-19	100.00	9.18e+07	1.06	y	24:16	-	0.55
189	Tri-╗	13C-PCB-32	100.00	1.37e+08	1.08	y	27:10	-	0.82
190	Tri-╗	13C-PCB-28	100.00	1.40e+08	1.05	y	29:07	-	0.91
191	Tri-╗	13C-PCB-37	100.00	1.28e+08	1.06	y	32:59	-	0.83
192	Tetr╗	13C-PCB-54	100.00	1.18e+08	0.81	y	28:00	-	0.89
193	Tetr╗	13C-PCB-52	100.00	9.78e+07	0.79	y	31:30	-	0.74
194	Tetr╗	13C-PCB-47	100.00	1.03e+08	0.79	y	32:01	-	0.78
195	Tetr╗	13C-PCB-70	100.00	1.28e+08	0.80	y	35:31	-	0.97
196	Tetr╗	13C-PCB-80	100.00	1.32e+08	0.81	y	35:56	-	1.00
197	Tetr╗	13C-PCB-81	100.00	1.09e+08	0.81	y	39:03	-	0.82
198	Tetr╗	13C-PCB-77	100.00	1.16e+08	0.80	y	39:38	-	0.87
199	Pent╗	13C-PCB-104	100.00	8.57e+07	1.62	y	32:41	-	1.06
200	Pent╗	13C-PCB-95	100.00	6.25e+07	1.56	y	35:50	-	0.78
201	Pent╗	13C-PCB-101	100.00	6.52e+07	1.58	y	37:30	-	0.81
202	Pent╗	13C-PCB-97	100.00	5.55e+07	1.65	y	38:48	-	0.69
203	Pent╗	13C-PCB-123	100.00	7.42e+07	1.57	y	41:21	-	0.92
204	Pent╗	13C-PCB-118	100.00	7.69e+07	1.66	y	41:33	-	0.95
205	Pent╗	13C-PCB-114	100.00	8.65e+07	1.61	y	42:12	-	1.20
206	Pent╗	13C-PCB-105	100.00	8.97e+07	1.59	y	43:03	-	1.24
207	Pent╗	13C-PCB-127	100.00	9.70e+07	1.57	y	43:23	-	1.34
208	Pent╗	13C-PCB-126	100.00	8.43e+07	1.60	y	45:18	-	1.17
209	Hexa╗	13C-PCB-155	100.00	7.04e+07	1.28	y	37:03	-	0.87
210	Hexa╗	13C-PCB-153	100.00	8.00e+07	1.28	y	43:13	-	1.11
211	Hexa╗	13C-PCB-141	100.00	7.84e+07	1.29	y	43:57	-	1.09
212	Hexa	13C-PCB-138	100.00	7.60e+07	1.27	y	44:48	-	1.05
213	Hexa╗	13C-PCB-159	100.00	8.60e+07	1.28	y	46:05	-	1.19
214	Hexa╗	13C-PCB-167	100.00	9.61e+07	1.31	y	46:45	-	1.33
215	Hexa╗	13C-PCB-156	100.00	9.01e+07	1.28	y	48:03	-	1.25
216	Hexa╗	13C-PCB-157	100.00	9.47e+07	1.27	y	48:19	-	1.31
217	Hexa╗	13C-PCB-169	100.00	8.76e+07	1.27	y	50:24	-	1.21
218	Hept╗	13C-PCB-188	100.00	6.71e+07	0.47	y	42:51	-	0.93
219	Hept╗	13C-PCB-180	100.00	4.84e+07	0.47	y	49:19	-	0.67
220	Hept╗	13C-PCB-170	100.00	3.88e+07	0.48	y	50:45	-	0.54
221	Hept╗	13C-PCB-189	100.00	5.08e+07	0.46	y	52:10	-	0.70
222	Octa╗	13C-PCB-202	100.00	5.96e+07	0.91	y	48:16	-	0.83

223	Octa¶	13C-PCB-194	100.00	5.30e+07	0.91	y	53:40	-	0.82
224	Nona¶	13C-PCB-208	100.00	7.41e+07	0.77	y	52:56	-	1.14
225	Nona¶	13C-PCB-206	100.00	4.24e+07	0.79	y	55:20	-	0.65
226	Deca¶	13C-PCB-209	100.00	3.91e+07	1.19	y	56:37	-	0.60
227	DI-RS	13C-PCB-15	100.00	1.66e+08	1.58	y	25:59	-	1.00
228	Tri-¶	13C-PCB-31	100.00	1.54e+08	1.06	y	29:00	-	1.00
229	Tetr¶	13C-PCB-60	100.00	1.33e+08	0.79	y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	8.06e+07	1.63	y	39:14	-	1.00
231	Hexa¶	13C-PCB-128	100.00	7.22e+07	1.30	y	46:21	-	1.00
232	Octa¶	13C-PCB-205	100.00	6.47e+07	0.91	y	53:57	-	1.00

233	CRS		13C-PCB-79	100.00	1.28e+08	0.81	y	37:49	- 0.97
234	CRS		13C-PCB-178	100.00	4.42e+07	0.46	y	45:38	- 0.61
235	PS		13C-PCB-79	100.00	1.28e+08	0.81	y	37:49	- 1.18
236	PS		13C-PCB-178	100.00	4.42e+07	0.46	y	45:38	- 0.91

Filename: 140620E1 S: 3 Acquired: 20-JUN-14 11:39:47
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-3 PCB CS2 13H1205

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	2.50	1.09e+07	2.94 y	16:15	-	1.26
2	Mono	PCB-2	2.50	1.01e+07	3.00 y	18:37	-	1.14
3	Mono	PCB-3	2.50	1.09e+07	3.06 y	18:51	-	1.23
4	Di	PCB-4/10	10.00	3.30e+07	1.63 y	20:12	-	1.55
5	Di	PCB-7/9	10.00	4.03e+07	1.63 y	21:58	-	1.26
6	Di	PCB-6	5.00	2.02e+07	1.66 y	22:36	-	1.26
7	Di	PCB-5/8	10.00	3.95e+07	1.65 y	23:01	-	1.23
8	Di	PCB-14	5.00	2.20e+07	1.65 y	24:06	-	1.21
9	Di	PCB-11	5.00	2.10e+07	1.68 y	25:18	-	1.16
10	Di	PCB-12/13	10.00	3.98e+07	1.61 y	25:41	-	1.10
11	Di	PCB-15	5.00	2.21e+07	1.67 y	25:59	-	1.22
12	Tri	PCB-19	2.50	6.55e+06	1.07 y	24:18	-	1.26
13	Tri	PCB-30	2.50	9.41e+06	1.06 y	25:11	-	1.82
14	Tri	PCB-18	2.50	6.63e+06	1.06 y	25:55	-	0.85
15	Tri	PCB-17	2.50	6.98e+06	1.08 y	26:06	-	0.89
16	Tri	PCB-24/27	5.00	1.85e+07	1.06 y	26:40	-	1.18
17	Tri	PCB-16/32	5.00	1.59e+07	1.07 y	27:10	-	1.02
18	Tri	PCB-34	2.50	9.58e+06	1.09 y	27:57	-	1.25
19	Tri	PCB-23	2.50	1.08e+07	1.09 y	28:03	-	1.41
20	Tri	PCB-29	2.50	1.02e+07	1.10 y	28:18	-	1.32
21	Tri	PCB-26	2.50	1.02e+07	1.06 y	28:30	-	1.32
22	Tri	PCB-25	2.50	1.04e+07	1.14 y	28:40	-	1.36
23	Tri	PCB-31	2.50	1.12e+07	1.09 y	29:02	-	1.46
24	Tri	PCB-28	2.50	1.08e+07	1.11 y	29:08	-	1.41
25	Tri	PCB-20/21/33	7.50	3.04e+07	1.09 y	29:45	-	1.32
26	Tri	PCB-22	2.50	1.03e+07	1.06 y	30:11	-	1.35
27	Tri	PCB-36	2.50	1.02e+07	1.08 y	30:48	-	1.38
28	Tri	PCB-39	2.50	1.04e+07	1.08 y	31:16	-	1.41
29	Tri	PCB-38	2.50	1.00e+07	1.09 y	32:03	-	1.36
30	Tri	PCB-35	2.50	9.94e+06	1.07 y	32:33	-	1.35
31	Tri	PCB-37	2.50	1.02e+07	1.12 y	32:59	-	1.39
32	Tetra	PCB-54	2.50	7.98e+06	0.79 y	28:02	-	1.18
33	Tetra	PCB-50	2.50	6.47e+06	0.77 y	29:11	-	0.96
34	Tetra	PCB-53	2.50	6.40e+06	0.77 y	29:50	-	1.14
35	Tetra	PCB-51	2.50	6.58e+06	0.81 y	30:10	-	1.17
36	Tetra	PCB-45	2.50	5.60e+06	0.78 y	30:36	-	1.00
37	Tetra	PCB-46	2.50	5.09e+06	0.75 y	31:05	-	0.90
38	Tetra	PCB-52/69	5.00	1.50e+07	0.79 y	31:33	-	1.33
39	Tetra	PCB-73	2.50	7.36e+06	0.75 y	31:40	-	1.31
40	Tetra	PCB-43/49	5.00	1.23e+07	0.78 y	31:50	-	1.10
41	Tetra	PCB-47	2.50	6.07e+06	0.76 y	32:02	-	1.04

42	Tetra	PCB-48/75	5.00	1.55e+07	0.77 y	32:09	-	1.33
43	Tetra	PCB-65	2.50	7.45e+06	0.79 y	32:25	-	1.28
44	Tetra	PCB-62	2.50	7.60e+06	0.79 y	32:32	-	1.30
45	Tetra	PCB-44	2.50	5.73e+06	0.74 y	32:50	-	0.98
46	Tetra	PCB-42/59	5.00	1.41e+07	0.77 y	33:04	-	1.21
47	Tetra	PCB-41/64/71/72	10.00	2.98e+07	0.78 y	33:39	-	1.28
48	Tetra	PCB-68	2.50	8.64e+06	0.79 y	33:54	-	1.48
49	Tetra	PCB-40	2.50	4.77e+06	0.77 y	34:07	-	0.82
50	Tetra	PCB-57	2.50	7.93e+06	0.79 y	34:28	-	1.11
51	Tetra	PCB-67	2.50	8.04e+06	0.68 y	34:46	-	1.12
52	Tetra	PCB-58	2.50	8.03e+06	0.88 y	34:53	-	1.12

53	Tetra	PCB-63	2.50	8.15e+06	0.80 y	35:03	-	1.14
54	Tetra	PCB-74	2.50	8.76e+06	0.78 y	35:20	-	1.22
55	Tetra	PCB-61/70	5.00	1.56e+07	0.76 y	35:31	-	1.08
56	Tetra	PCB-76/66	5.00	1.60e+07	0.79 y	35:44	-	1.12
57	Tetra	PCB-80	2.50	9.48e+06	0.78 y	35:58	-	1.28
58	Tetra	PCB-55	2.50	8.11e+06	0.77 y	36:17	-	1.10
59	Tetra	PCB-56/60	5.00	1.58e+07	0.77 y	36:47	-	1.07
60	Tetra	PCB-79	2.50	8.31e+06	0.75 y	37:50	-	1.12
61	Tetra	PCB-78	2.50	7.55e+06	0.77 y	38:32	-	1.20
62	Tetra	PCB-81	2.50	8.89e+06	0.79 y	39:04	-	1.41
63	Tetra	PCB-77	2.50	8.13e+06	0.82 y	39:39	-	1.22
64	Penta	PCB-104	2.50	6.23e+06	1.51 y	32:41	-	1.28
65	Penta	PCB-96	2.50	5.23e+06	1.55 y	33:57	-	1.08
66	Penta	PCB-103	2.50	4.30e+06	1.55 y	34:29	-	0.89
67	Penta	PCB-100	2.50	4.69e+06	1.55 y	34:50	-	0.97
68	Penta	PCB-94	2.50	3.79e+06	1.67 y	35:18	-	1.11
69	Penta	PCB-95/98/102	7.50	1.21e+07	1.60 y	35:48	-	1.18
70	Penta	PCB-93	2.50	4.14e+06	1.71 y	35:56	-	1.21
71	Penta	PCB-88/91	5.00	6.98e+06	1.52 y	36:13	-	1.02
72	Penta	PCB-121	2.50	6.62e+06	1.66 y	36:18	-	1.94
73	Penta	PCB-84/92	5.00	7.58e+06	1.59 y	37:08	-	1.05
74	Penta	PCB-89	2.50	3.69e+06	1.55 y	37:20	-	1.02
75	Penta	PCB-90/101	5.00	8.58e+06	1.58 y	37:30	-	1.19
76	Penta	PCB-113	2.50	4.74e+06	1.59 y	37:45	-	1.32
77	Penta	PCB-99	2.50	4.85e+06	1.65 y	37:50	-	1.35
78	Penta	PCB-119	2.50	5.47e+06	1.52 y	38:19	-	1.72
79	Penta	PCB-108/112	5.00	8.21e+06	1.65 y	38:28	-	1.29
80	Penta	PCB-83	2.50	4.81e+06	1.57 y	38:38	-	1.51
81	Penta	PCB-97	2.50	4.05e+06	1.59 y	38:49	-	1.27
82	Penta	PCB-86	2.50	3.35e+06	1.53 y	38:57	-	1.05
83	Penta	PCB-87/117/125	7.50	1.48e+07	1.59 y	39:05	-	1.55
84	Penta	PCB-111/115	5.00	1.08e+07	1.58 y	39:14	-	1.69
85	Penta	PCB-85/116	5.00	8.48e+06	1.60 y	39:22	-	1.33
86	Penta	PCB-120	2.50	5.59e+06	1.63 y	39:37	-	1.76
87	Penta	PCB-110	2.50	5.26e+06	1.59 y	39:45	-	1.65
88	Penta	PCB-82	2.50	3.23e+06	1.69 y	40:24	-	0.73
89	Penta	PCB-124	2.50	5.89e+06	1.57 y	41:04	-	1.33
90	Penta	PCB-107/109	5.00	1.04e+07	1.65 y	41:13	-	1.18
91	Penta	PCB-123	2.50	5.43e+06	1.52 y	41:23	-	1.23
92	Penta	PCB-106/118	5.00	1.13e+07	1.59 y	41:34	-	1.25
93	Penta	PCB-114	2.50	6.81e+06	1.68 y	42:13	-	1.36
94	Penta	PCB-122	2.50	6.01e+06	1.59 y	42:21	-	1.20
95	Penta	PCB-105	2.50	6.91e+06	1.69 y	43:05	-	1.33
96	Penta	PCB-127	2.50	6.53e+06	1.64 y	43:25	-	1.14
97	Penta	PCB-126	2.50	6.39e+06	1.68 y	45:18	-	1.28
98	Hexa	PCB-155	2.50	4.51e+06	1.22 y	37:04	-	1.18
99	Hexa	PCB-150	2.50	4.00e+06	1.22 y	38:20	-	1.05
100	Hexa	PCB-152	2.50	4.04e+06	1.22 y	38:48	-	1.06
101	Hexa	PCB-145	2.50	4.00e+06	1.28 y	39:14	-	1.05
102	Hexa	PCB-136	2.50	4.13e+06	1.32 y	39:34	-	1.08

103	Hexa	PCB-148	2.50	2.58e-06	1.36 y	39:41	-	0.68
104	Hexa	PCB-154	2.50	3.37e+06	1.28 y	40:09	-	0.88
105	Hexa	PCB-151	2.50	2.97e+06	1.35 y	40:48	-	0.78
106	Hexa	PCB-135	2.50	2.92e+06	1.29 y	41:00	-	0.76
107	Hexa	PCB-144	2.50	2.97e+06	1.28 y	41:07	-	0.78
108	Hexa	PCB-147	2.50	2.99e+06	1.23 y	41:15	-	0.78
109	Hexa	PCB-139/149	5.00	6.36e+06	1.23 y	41:31	-	0.83
110	Hexa	PCB-140	2.50	2.90e+06	1.28 y	41:42	-	0.76
111	Hexa	PCB-134/143	5.00	8.39e+06	1.23 y	42:08	-	0.90
112	Hexa	PCB-133/142	5.00	8.52e+06	1.22 y	42:26	-	0.91
113	Hexa	PCB-131	2.50	4.20e+06	1.24 y	42:36	-	0.90

114	Hexa	PCB-146/165	5.00	1.07e+07	1.23 y	42:49	-	1.14
115	Hexa	PCB-132/161	5.00	1.02e+07	1.22 y	43:04	-	1.09
116	Hexa	PCB-153	2.50	5.91e+06	1.25 y	43:13	-	1.26
117	Hexa	PCB-168	2.50	6.38e+06	1.17 y	43:26	-	1.37
118	Hexa	PCB-141	2.50	4.37e+06	1.21 y	43:58	-	0.97
119	Hexa	PCB-137	2.50	4.74e+06	1.24 y	44:21	-	1.05
120	Hexa	PCB-130	2.50	3.95e+06	1.26 y	44:27	-	0.87
121	Hexa	PCB-138/163/164	7.50	1.61e+07	1.23 y	44:50	-	1.22
122	Hexa	PCB-158/160	5.00	1.14e+07	1.26 y	45:04	-	1.29
123	Hexa	PCB-129	2.50	4.07e+06	1.27 y	45:19	-	0.93
124	Hexa	PCB-166	2.50	5.65e+06	1.19 y	45:46	-	1.11
125	Hexa	PCB-159	2.50	5.99e+06	1.25 y	46:05	-	1.18
126	Hexa	PCB-128/162	5.00	1.06e+07	1.20 y	46:23	-	1.04
127	Hexa	PCB-167	2.50	6.20e+06	1.24 y	46:46	-	1.10
128	Hexa	PCB-156	2.50	6.26e+06	1.23 y	48:04	-	1.18
129	Hexa	PCB-157	2.50	6.28e+06	1.27 y	48:20	-	1.13
130	Hexa	PCB-169	2.50	5.82e+06	1.20 y	50:24	-	1.12
131	Hepta	PCB-188	2.50	5.50e+06	1.08 y	42:52	-	1.43
132	Hepta	PCB-184	2.50	4.81e+06	1.08 y	43:19	-	1.25
133	Hepta	PCB-179	2.50	5.06e+06	1.03 y	44:06	-	1.32
134	Hepta	PCB-176	2.50	5.19e+06	1.06 y	44:34	-	1.35
135	Hepta	PCB-186	2.50	4.80e+06	1.01 y	45:11	-	1.25
136	Hepta	PCB-178	2.50	3.68e+06	1.04 y	45:40	-	0.96
137	Hepta	PCB-175	2.50	3.76e+06	1.07 y	46:00	-	0.98
138	Hepta	PCB-182/187	5.00	7.80e+06	1.03 y	46:11	-	1.01
139	Hepta	PCB-183	2.50	4.14e+06	1.08 y	46:30	-	1.08
140	Hepta	PCB-185	2.50	3.61e+06	1.06 y	47:09	-	1.30
141	Hepta	PCB-174	2.50	3.80e+06	1.05 y	47:31	-	1.36
142	Hepta	PCB-181	2.50	3.56e+06	1.02 y	47:38	-	1.28
143	Hepta	PCB-177	2.50	3.33e+06	1.02 y	47:47	-	1.20
144	Hepta	PCB-171	2.50	3.72e+06	1.05 y	48:04	-	1.34
145	Hepta	PCB-173	2.50	3.21e+06	1.03 y	48:31	-	1.15
146	Hepta	PCB-172	2.50	3.40e+06	1.05 y	48:57	-	1.22
147	Hepta	PCB-192	2.50	4.16e+06	1.05 y	49:09	-	1.49
148	Hepta	PCB-180	2.50	4.01e+06	1.10 y	49:21	-	1.44
149	Hepta	PCB-193	2.50	4.60e+06	1.04 y	49:32	-	1.65
150	Hepta	PCB-191	2.50	4.58e+06	1.05 y	49:46	-	1.65
151	Hepta	PCB-170	2.50	3.36e+06	1.02 y	50:45	-	1.51
152	Hepta	PCB-190	2.50	4.37e+06	1.06 y	50:55	-	1.97
153	Hepta	PCB-189	2.50	4.66e+06	1.06 y	52:12	-	1.55
154	Octa	PCB-202	2.50	3.48e+06	0.98 y	48:17	-	1.01
155	Octa	PCB-201	2.50	3.65e+06	0.94 y	48:46	-	1.06
156	Octa	PCB-204	2.50	3.41e+06	0.91 y	48:55	-	0.99
157	Octa	PCB-197	2.50	3.58e+06	0.96 y	49:14	-	1.04
158	Octa	PCB-200	2.50	3.52e+06	0.95 y	50:03	-	1.02
159	Octa	PCB-198	2.50	2.39e+06	0.96 y	51:19	-	0.69
160	Octa	PCB-199	2.50	2.50e+06	0.94 y	51:25	-	0.73
161	Octa	PCB-196/203	5.00	5.16e+06	0.89 y	51:41	-	0.75
162	Octa	PCB-195	2.50	3.62e+06	0.88 y	52:48	-	1.17
163	Octa	PCB-194	2.50	3.77e+06	0.94 y	53:40	-	1.22

164	Octa	PCB-205	2.50	4.34e+06	0.90	y	53:57	-	1.41
165	Nona	PCB-208	2.50	3.94e+06	1.36	y	52:56	-	0.93
166	Nona	PCB-207	2.50	3.87e+06	1.29	y	53:15	-	0.91
167	Nona	PCB-206	2.50	2.57e+06	1.40	y	55:20	-	1.03
168	Deca	PCB-209	2.50	2.82e+06	1.17	y	56:37	-	1.21
169	Tot ╗	Total Mono-PCB	0.00	-	-	n	-	-	1.21
170	Tot ╗	Total Di-PCB	0.00	-	-	n	-	-	1.21
171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.15

172	Tot ╕	Total Tri-PCB	0.00	-	-	n	-	-	1.36
173	Tot ╕	Total Tetra-PCB	0.00	-	-	n	-	-	1.17
174	Tot ╕	Total Penta-PCB	0.00	-	-	n	-	-	1.21
175	Tot ╕	Total Penta-PCB	0.00	-	-	n	-	-	1.26
176	Tot ╕	Total Hexa-PCB	0.00	-	-	n	-	-	0.89
177	Tot ╕	Total Hexa-PCB	0.00	-	-	n	-	-	1.08
178	Tot ╕	Total Hepta-PCB	0.00	-	-	n	-	-	1.27
179	Tot ╕	Total Octa-PCB	0.00	-	-	n	-	-	0.89
180	Tot ╕	Total Octa-PCB	0.00	-	-	n	-	-	1.26
181	Tot ╕	Total Nona-PCB	0.00	-	-	n	-	-	0.94
182	Tot ╕	Total Deca-PCB	2.50	2.82e+06	1.17	y	56:37	-	1.21
183	Mono╕	13C-PCB-1	100.00	3.46e+08	3.25	y	16:14	-	0.91
184	Mono╕	13C-PCB-3	100.00	3.56e+08	3.24	y	18:50	-	0.94
185	Di-IS	13C-PCB-4	100.00	2.13e+08	1.57	y	20:09	-	0.56
186	Di-IS	13C-PCB-9	100.00	3.20e+08	1.57	y	21:55	-	0.84
187	Di-IS	13C-PCB-11	100.00	3.64e+08	1.57	y	25:16	-	0.96
188	Tri-╕	13C-PCB-19	100.00	2.07e+08	1.06	y	24:16	-	0.55
189	Tri-╕	13C-PCB-32	100.00	3.14e+08	1.08	y	27:10	-	0.83
190	Tri-╕	13C-PCB-28	100.00	3.07e+08	1.06	y	29:07	-	0.83
191	Tri-╕	13C-PCB-37	100.00	2.95e+08	1.07	y	32:58	-	0.80
192	Tetr╕	13C-PCB-54	100.00	2.71e+08	0.81	y	28:00	-	0.91
193	Tetr╕	13C-PCB-52	100.00	2.25e+08	0.80	y	31:31	-	0.75
194	Tetr╕	13C-PCB-47	100.00	2.33e+08	0.79	y	32:01	-	0.78
195	Tetr╕	13C-PCB-70	100.00	2.87e+08	0.80	y	35:32	-	0.96
196	Tetr╕	13C-PCB-80	100.00	2.96e+08	0.81	y	35:56	-	0.99
197	Tetr╕	13C-PCB-81	100.00	2.52e+08	0.80	y	39:03	-	0.84
198	Tetr╕	13C-PCB-77	100.00	2.67e+08	0.80	y	39:38	-	0.90
199	Pent╕	13C-PCB-104	100.00	1.94e+08	1.60	y	32:40	-	1.07
200	Pent╕	13C-PCB-95	100.00	1.37e+08	1.60	y	35:50	-	0.75
201	Pent╕	13C-PCB-101	100.00	1.44e+08	1.61	y	37:30	-	0.79
202	Pent╕	13C-PCB-97	100.00	1.27e+08	1.61	y	38:48	-	0.70
203	Pent╕	13C-PCB-123	100.00	1.77e+08	1.58	y	41:22	-	0.98
204	Pent╕	13C-PCB-118	100.00	1.80e+08	1.61	y	41:33	-	0.99
205	Pent╕	13C-PCB-114	100.00	2.01e+08	1.59	y	42:12	-	1.21
206	Pent╕	13C-PCB-105	100.00	2.08e+08	1.59	y	43:04	-	1.25
207	Pent╕	13C-PCB-127	100.00	2.30e+08	1.60	y	43:23	-	1.38
208	Pent╕	13C-PCB-126	100.00	2.00e+08	1.58	y	45:18	-	1.20
209	Hexa╕	13C-PCB-155	100.00	1.53e+08	1.28	y	37:03	-	0.84
210	Hexa╕	13C-PCB-153	100.00	1.87e+08	1.28	y	43:13	-	1.13
211	Hexa╕	13C-PCB-141	100.00	1.81e+08	1.27	y	43:57	-	1.09
212	Hexa	13C-PCB-138	100.00	1.75e+08	1.26	y	44:48	-	1.06
213	Hexa╕	13C-PCB-159	100.00	2.03e+08	1.26	y	46:04	-	1.22
214	Hexa╕	13C-PCB-167	100.00	2.26e+08	1.29	y	46:46	-	1.36
215	Hexa╕	13C-PCB-156	100.00	2.13e+08	1.27	y	48:03	-	1.28
216	Hexa╕	13C-PCB-157	100.00	2.22e+08	1.29	y	48:20	-	1.34
217	Hexa╕	13C-PCB-169	100.00	2.08e+08	1.29	y	50:23	-	1.25
218	Hept╕	13C-PCB-188	100.00	1.54e+08	0.47	y	42:51	-	0.93
219	Hept╕	13C-PCB-180	100.00	1.11e+08	0.47	y	49:20	-	0.67
220	Hept╕	13C-PCB-170	100.00	8.90e+07	0.47	y	50:44	-	0.54
221	Hept╕	13C-PCB-189	100.00	1.21e+08	0.46	y	52:11	-	0.73
222	Octa╕	13C-PCB-202	100.00	1.38e+08	0.91	y	48:16	-	0.83

223	Octa╗	13C-PCB-194	100.00	1.24e+08	0.92 y	53:39	-	0.82
224	Nona╗	13C-PCB-208	100.00	1.70e+08	0.78 y	52:56	-	1.13
225	Nona╗	13C-PCB-206	100.00	1.00e+08	0.81 y	55:19	-	0.66
226	Deca╗	13C-PCB-209	100.00	9.32e+07	1.21 y	56:36	-	0.62
227	DI-RS	13C-PCB-15	100.00	3.79e+08	1.56 y	25:59	-	1.00
228	Tri-╗	13C-PCB-31	100.00	3.70e+08	1.06 y	29:01	-	1.00
229	Tetr╗	13C-PCB-60	100.00	2.98e+08	0.79 y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	1.81e+08	1.61 y	39:13	-	1.00
231	Hexa╗	13C-PCB-128	100.00	1.66e+08	1.28 y	46:22	-	1.00
232	Octa╗	13C-PCB-205	100.00	1.51e+08	0.90 y	53:56	-	1.00

233	CRS		13C-PCB-79	100.00	2.94e+08	0.79	y	37:49	- 0.99
234	CRS		13C-PCB-178	100.00	1.02e+08	0.47	y	45:38	- 0.62
235	PS		13C-PCB-79	100.00	2.94e+08	0.79	y	37:49	- 1.17
236	PS		13C-PCB-178	100.00	1.02e+08	0.47	y	45:38	- 0.92

Filename: 140620E1 S: 4 Acquired: 20-JUN-14 12:43:46
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-4 PCB CS3 14F1901

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	50.00	7.81e+07	2.96 y	16:15	-	1.31
2	Mono	PCB-2	50.00	7.76e+07	2.98 y	18:36	-	1.24
3	Mono	PCB-3	50.00	7.92e+07	2.99 y	18:50	-	1.26
4	Di	PCB-4/10	200.00	2.38e+08	1.63 y	20:12	-	1.61
5	Di	PCB-7/9	200.00	2.89e+08	1.64 y	21:57	-	1.30
6	Di	PCB-6	100.00	1.40e+08	1.64 y	22:36	-	1.26
7	Di	PCB-5/8	200.00	2.85e+08	1.64 y	23:01	-	1.28
8	Di	PCB-14	100.00	1.58e+08	1.64 y	24:06	-	1.27
9	Di	PCB-11	100.00	1.47e+08	1.66 y	25:17	-	1.18
10	Di	PCB-12/13	200.00	2.83e+08	1.65 y	25:41	-	1.14
11	Di	PCB-15	100.00	1.54e+08	1.67 y	26:00	-	1.24
12	Tri	PCB-19	50.00	4.61e+07	1.05 y	24:17	-	1.28
13	Tri	PCB-30	50.00	6.74e+07	1.06 y	25:10	-	1.87
14	Tri	PCB-18	50.00	4.73e+07	1.06 y	25:55	-	0.87
15	Tri	PCB-17	50.00	4.99e+07	1.05 y	26:05	-	0.92
16	Tri	PCB-24/27	100.00	1.33e+08	1.06 y	26:40	-	1.22
17	Tri	PCB-16/32	100.00	1.13e+08	1.05 y	27:10	-	1.03
18	Tri	PCB-34	50.00	6.57e+07	1.09 y	27:57	-	1.23
19	Tri	PCB-23	50.00	7.68e+07	1.09 y	28:02	-	1.44
20	Tri	PCB-29	50.00	7.27e+07	1.09 y	28:18	-	1.36
21	Tri	PCB-26	50.00	7.01e+07	1.08 y	28:30	-	1.31
22	Tri	PCB-25	50.00	7.40e+07	1.09 y	28:40	-	1.38
23	Tri	PCB-31	50.00	7.56e+07	1.08 y	29:02	-	1.41
24	Tri	PCB-28	50.00	7.73e+07	1.11 y	29:07	-	1.45
25	Tri	PCB-20/21/33	150.00	2.14e+08	1.09 y	29:45	-	1.34
26	Tri	PCB-22	50.00	7.44e+07	1.09 y	30:11	-	1.39
27	Tri	PCB-36	50.00	7.19e+07	1.09 y	30:47	-	1.43
28	Tri	PCB-39	50.00	7.33e+07	1.08 y	31:16	-	1.46
29	Tri	PCB-38	50.00	7.08e+07	1.08 y	32:02	-	1.41
30	Tri	PCB-35	50.00	7.21e+07	1.11 y	32:33	-	1.44
31	Tri	PCB-37	50.00	7.05e+07	1.09 y	32:59	-	1.41
32	Tetra	PCB-54	50.00	5.75e+07	0.77 y	28:01	-	1.24
33	Tetra	PCB-50	50.00	4.62e+07	0.77 y	29:11	-	0.99
34	Tetra	PCB-53	50.00	4.60e+07	0.78 y	29:49	-	1.19
35	Tetra	PCB-51	50.00	4.72e+07	0.78 y	30:10	-	1.23
36	Tetra	PCB-45	50.00	3.93e+07	0.78 y	30:36	-	1.02
37	Tetra	PCB-46	50.00	3.68e+07	0.76 y	31:04	-	0.95
38	Tetra	PCB-52/69	100.00	1.04e+08	0.77 y	31:33	-	1.35
39	Tetra	PCB-73	50.00	5.52e+07	0.77 y	31:39	-	1.43
40	Tetra	PCB-43/49	100.00	8.70e+07	0.78 y	31:50	-	1.13
41	Tetra	PCB-47	50.00	4.87e+07	0.76 y	32:02	-	1.20

42	Tetra	PCB-48/75	100.00	1.06e-08	0.78 y	32:09	-	1.31
43	Tetra	PCB-65	50.00	5.35e-07	0.77 y	32:25	-	1.32
44	Tetra	PCB-62	50.00	5.60e+07	0.77 y	32:32	-	1.38
45	Tetra	PCB-44	50.00	3.98e+07	0.78 y	32:49	-	0.98
46	Tetra	PCB-42/59	100.00	1.02e+08	0.77 y	33:02	-	1.26
47	Tetra	PCB-41/64/71/72	200.00	2.19e+08	0.78 y	33:38	-	1.35
48	Tetra	PCB-68	50.00	6.14e+07	0.78 y	33:54	-	1.51
49	Tetra	PCB-40	50.00	3.36e+07	0.77 y	34:06	-	0.83
50	Tetra	PCB-57	50.00	5.91e+07	0.77 y	34:28	-	1.15
51	Tetra	PCB-67	50.00	5.87e+07	0.78 y	34:46	-	1.15
52	Tetra	PCB-58	50.00	5.57e+07	0.78 y	34:53	-	1.09

53	Tetra	PCB-63	50.00	5.92e+07	0.76 y	35:03	-	1.16
54	Tetra	PCB-74	50.00	6.39e+07	0.77 y	35:20	-	1.25
55	Tetra	PCB-61/70	100.00	1.13e+08	0.78 y	35:30	-	1.10
56	Tetra	PCB-76/66	100.00	1.20e+08	0.77 y	35:43	-	1.17
57	Tetra	PCB-80	50.00	6.75e+07	0.78 y	35:56	-	1.28
58	Tetra	PCB-55	50.00	6.01e+07	0.77 y	36:17	-	1.14
59	Tetra	PCB-56/60	100.00	1.15e+08	0.77 y	36:46	-	1.09
60	Tetra	PCB-79	50.00	6.07e+07	0.78 y	37:50	-	1.15
61	Tetra	PCB-78	50.00	5.78e+07	0.78 y	38:32	-	1.27
62	Tetra	PCB-81	50.00	6.42e+07	0.78 y	39:03	-	1.41
63	Tetra	PCB-77	50.00	6.12e+07	0.79 y	39:39	-	1.25
64	Penta	PCB-104	50.00	4.42e+07	1.62 y	32:41	-	1.27
65	Penta	PCB-96	50.00	3.85e+07	1.59 y	33:57	-	1.10
66	Penta	PCB-103	50.00	3.30e+07	1.58 y	34:29	-	0.95
67	Penta	PCB-100	50.00	3.53e+07	1.61 y	34:49	-	1.01
68	Penta	PCB-94	50.00	2.93e+07	1.58 y	35:18	-	1.13
69	Penta	PCB-95/98/102	150.00	1.01e+08	1.60 y	35:47	-	1.30
70	Penta	PCB-93	50.00	2.46e+07	1.63 y	35:56	-	0.95
71	Penta	PCB-88/91	100.00	5.97e+07	1.61 y	36:12	-	1.15
72	Penta	PCB-121	50.00	4.37e+07	1.56 y	36:19	-	1.69
73	Penta	PCB-84/92	100.00	5.90e+07	1.59 y	37:08	-	1.09
74	Penta	PCB-89	50.00	2.93e+07	1.61 y	37:19	-	1.08
75	Penta	PCB-90/101	100.00	6.59e+07	1.60 y	37:31	-	1.21
76	Penta	PCB-113	50.00	4.09e+07	1.59 y	37:45	-	1.51
77	Penta	PCB-99	50.00	3.25e+07	1.60 y	37:51	-	1.20
78	Penta	PCB-119	50.00	4.22e+07	1.61 y	38:18	-	1.73
79	Penta	PCB-108/112	100.00	6.46e+07	1.63 y	38:27	-	1.33
80	Penta	PCB-83	50.00	3.86e+07	1.62 y	38:38	-	1.58
81	Penta	PCB-97	50.00	3.20e+07	1.59 y	38:49	-	1.32
82	Penta	PCB-86	50.00	2.38e+07	1.53 y	38:58	-	0.98
83	Penta	PCB-87/117/125	150.00	1.16e+08	1.58 y	39:05	-	1.59
84	Penta	PCB-111/115	100.00	8.59e+07	1.72 y	39:15	-	1.76
85	Penta	PCB-85/116	100.00	6.54e+07	1.46 y	39:23	-	1.34
86	Penta	PCB-120	50.00	4.27e+07	1.57 y	39:37	-	1.75
87	Penta	PCB-110	50.00	4.19e+07	1.60 y	39:46	-	1.72
88	Penta	PCB-82	50.00	2.58e+07	1.60 y	40:23	-	0.73
89	Penta	PCB-124	50.00	4.68e+07	1.60 y	41:03	-	1.32
90	Penta	PCB-107/109	100.00	8.79e+07	1.59 y	41:12	-	1.24
91	Penta	PCB-123	50.00	4.52e+07	1.59 y	41:22	-	1.28
92	Penta	PCB-106/118	100.00	9.20e+07	1.60 y	41:35	-	1.26
93	Penta	PCB-114	50.00	5.39e+07	1.62 y	42:13	-	1.37
94	Penta	PCB-122	50.00	4.95e+07	1.62 y	42:21	-	1.25
95	Penta	PCB-105	50.00	5.39e+07	1.63 y	43:05	-	1.34
96	Penta	PCB-127	50.00	5.03e+07	1.65 y	43:24	-	1.16
97	Penta	PCB-126	50.00	4.94e+07	1.62 y	45:19	-	1.32
98	Hexa	PCB-155	50.00	3.50e+07	1.27 y	37:03	-	1.20
99	Hexa	PCB-150	50.00	3.24e+07	1.28 y	38:20	-	1.11
100	Hexa	PCB-152	50.00	3.29e+07	1.26 y	38:48	-	1.12
101	Hexa	PCB-145	50.00	3.24e+07	1.26 y	39:15	-	1.11
102	Hexa	PCB-136	50.00	3.34e+07	1.27 y	39:35	-	1.14

103	Hexa	PCB-148	50.00	2.20e-07	1.30 y	39:40	-	0.75
104	Hexa	PCB-154	50.00	2.71e+07	1.26 y	40:10	-	0.93
105	Hexa	PCB-151	50.00	2.51e+07	1.30 y	40:47	-	0.86
106	Hexa	PCB-135	50.00	2.36e+07	1.28 y	41:01	-	0.81
107	Hexa	PCB-144	50.00	2.64e+07	1.36 y	41:08	-	0.90
108	Hexa	PCB-147	50.00	2.56e+07	1.18 y	41:16	-	0.88
109	Hexa	PCB-139/149	100.00	5.31e+07	1.27 y	41:30	-	0.91
110	Hexa	PCB-140	50.00	2.51e+07	1.27 y	41:42	-	0.86
111	Hexa	PCB-134/143	100.00	6.92e+07	1.24 y	42:08	-	0.94
112	Hexa	PCB-133/142	100.00	7.07e+07	1.23 y	42:26	-	0.96
113	Hexa	PCB-131	50.00	3.31e+07	1.22 y	42:36	-	0.90

114	Hexa	PCB-146/165	100.00	8.55e+07	1.24	y	42:48	- 1.16
115	Hexa	PCB-132/161	100.00	8.32e+07	1.22	y	43:03	- 1.13
116	Hexa	PCB-153	50.00	4.33e+07	1.22	y	43:14	- 1.18
117	Hexa	PCB-168	50.00	5.02e+07	1.21	y	43:27	- 1.37
118	Hexa	PCB-141	50.00	3.51e+07	1.21	y	43:58	- 0.99
119	Hexa	PCB-137	50.00	3.65e+07	1.26	y	44:21	- 1.03
120	Hexa	PCB-130	50.00	3.32e+07	1.23	y	44:27	- 0.94
121	Hexa	PCB-138/163/164	150.00	1.29e+08	1.23	y	44:50	- 1.26
122	Hexa	PCB-158/160	100.00	9.17e+07	1.23	y	45:05	- 1.34
123	Hexa	PCB-129	50.00	3.18e+07	1.24	y	45:19	- 0.93
124	Hexa	PCB-166	50.00	4.43e+07	1.22	y	45:46	- 1.13
125	Hexa	PCB-159	50.00	4.56e+07	1.22	y	46:05	- 1.17
126	Hexa	PCB-128/162	100.00	8.34e+07	1.23	y	46:22	- 1.07
127	Hexa	PCB-167	50.00	4.70e+07	1.21	y	46:47	- 1.09
128	Hexa	PCB-156	50.00	4.75e+07	1.22	y	48:04	- 1.17
129	Hexa	PCB-157	50.00	4.75e+07	1.22	y	48:20	- 1.11
130	Hexa	PCB-169	50.00	4.39e+07	1.23	y	50:24	- 1.11
131	Hepta	PCB-188	50.00	4.42e+07	1.02	y	42:52	- 1.43
132	Hepta	PCB-184	50.00	3.95e+07	1.05	y	43:18	- 1.28
133	Hepta	PCB-179	50.00	4.06e+07	1.05	y	44:06	- 1.31
134	Hepta	PCB-176	50.00	4.27e+07	1.05	y	44:34	- 1.38
135	Hepta	PCB-186	50.00	4.05e+07	1.04	y	45:10	- 1.31
136	Hepta	PCB-178	50.00	2.95e+07	1.05	y	45:39	- 0.96
137	Hepta	PCB-175	50.00	3.17e+07	1.05	y	46:00	- 1.02
138	Hepta	PCB-182/187	100.00	6.54e+07	1.04	y	46:11	- 1.06
139	Hepta	PCB-183	50.00	3.41e+07	1.05	y	46:29	- 1.10
140	Hepta	PCB-185	50.00	3.05e+07	1.05	y	47:09	- 1.36
141	Hepta	PCB-174	50.00	2.96e+07	1.04	y	47:31	- 1.32
142	Hepta	PCB-181	50.00	3.21e+07	1.07	y	47:37	- 1.43
143	Hepta	PCB-177	50.00	2.87e+07	1.06	y	47:48	- 1.28
144	Hepta	PCB-171	50.00	2.95e+07	1.04	y	48:05	- 1.31
145	Hepta	PCB-173	50.00	2.63e+07	1.05	y	48:31	- 1.17
146	Hepta	PCB-172	50.00	2.77e+07	1.03	y	48:57	- 1.24
147	Hepta	PCB-192	50.00	3.49e+07	1.05	y	49:09	- 1.56
148	Hepta	PCB-180	50.00	3.18e+07	1.04	y	49:20	- 1.42
149	Hepta	PCB-193	50.00	3.77e+07	1.05	y	49:32	- 1.68
150	Hepta	PCB-191	50.00	3.78e+07	1.05	y	49:47	- 1.68
151	Hepta	PCB-170	50.00	2.67e+07	1.04	y	50:46	- 1.50
152	Hepta	PCB-190	50.00	3.64e+07	1.03	y	50:55	- 2.04
153	Hepta	PCB-189	50.00	3.89e+07	1.04	y	52:12	- 1.59
154	Octa	PCB-202	50.00	2.93e+07	0.91	y	48:17	- 1.04
155	Octa	PCB-201	50.00	3.13e+07	0.93	y	48:46	- 1.11
156	Octa	PCB-204	50.00	2.91e+07	0.88	y	48:56	- 1.04
157	Octa	PCB-197	50.00	3.14e+07	0.91	y	49:13	- 1.12
158	Octa	PCB-200	50.00	3.00e+07	0.91	y	50:03	- 1.07
159	Octa	PCB-198	50.00	2.15e+07	0.90	y	51:20	- 0.77
160	Octa	PCB-199	50.00	2.15e+07	0.89	y	51:25	- 0.77
161	Octa	PCB-196/203	100.00	4.56e+07	0.90	y	51:41	- 0.81
162	Octa	PCB-195	50.00	2.93e+07	0.91	y	52:49	- 1.25
163	Octa	PCB-194	50.00	2.92e+07	0.90	y	53:41	- 1.24

164	Octa	PCB-205	50.00	3.30e+07	0.92	y	53:58	-	1.41
165	Nona	PCB-208	50.00	3.17e+07	1.33	y	52:57	-	0.95
166	Nona	PCB-207	50.00	3.11e+07	1.32	y	53:16	-	0.93
167	Nona	PCB-206	50.00	2.08e+07	1.33	y	55:21	-	1.02
168	Deca	PCB-209	50.00	2.28e+07	1.19	y	56:38	-	1.23
169	Tot ╗	Total Mono-PCB	0.00	-	-	n	-	-	1.27
170	Tot ╗	Total Di-PCB	0.00	-	-	n	-	-	1.25
171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.18

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.39
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.21
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.24
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.29
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.96
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.10
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.30
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.95
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.30
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	0.96
182	Tot ╗	Total Deca-PCB	50.00	2.28e+07	1.19	y	56:38	-	1.23
183	Mono╗	13C-PCB-1	100.00	1.19e+08	3.24	y	16:14	-	0.88
184	Mono╗	13C-PCB-3	100.00	1.26e+08	3.30	y	18:49	-	0.93
185	Di-IS	13C-PCB-4	100.00	7.38e+07	1.60	y	20:09	-	0.55
186	Di-IS	13C-PCB-9	100.00	1.12e+08	1.59	y	21:55	-	0.82
187	Di-IS	13C-PCB-11	100.00	1.24e+08	1.58	y	25:16	-	0.92
188	Tri-╗	13C-PCB-19	100.00	7.23e+07	1.06	y	24:16	-	0.53
189	Tri-╗	13C-PCB-32	100.00	1.09e+08	1.07	y	27:10	-	0.81
190	Tri-╗	13C-PCB-28	100.00	1.07e+08	1.05	y	29:07	-	0.85
191	Tri-╗	13C-PCB-37	100.00	1.00e+08	1.07	y	32:59	-	0.80
192	Tetr╗	13C-PCB-54	100.00	9.29e+07	0.81	y	28:00	-	0.84
193	Tetr╗	13C-PCB-52	100.00	7.70e+07	0.79	y	31:30	-	0.70
194	Tetr╗	13C-PCB-47	100.00	8.12e+07	0.80	y	32:01	-	0.73
195	Tetr╗	13C-PCB-70	100.00	1.02e+08	0.79	y	35:31	-	0.93
196	Tetr╗	13C-PCB-80	100.00	1.05e+08	0.80	y	35:56	-	0.95
197	Tetr╗	13C-PCB-81	100.00	9.11e+07	0.80	y	39:03	-	0.82
198	Tetr╗	13C-PCB-77	100.00	9.78e+07	0.81	y	39:38	-	0.88
199	Pent╗	13C-PCB-104	100.00	6.97e+07	1.58	y	32:40	-	0.98
200	Pent╗	13C-PCB-95	100.00	5.18e+07	1.63	y	35:49	-	0.73
201	Pent╗	13C-PCB-101	100.00	5.42e+07	1.60	y	37:30	-	0.77
202	Pent╗	13C-PCB-97	100.00	4.87e+07	1.60	y	38:48	-	0.69
203	Pent╗	13C-PCB-123	100.00	7.09e+07	1.58	y	41:21	-	1.00
204	Pent╗	13C-PCB-118	100.00	7.31e+07	1.59	y	41:32	-	1.03
205	Pent╗	13C-PCB-114	100.00	7.90e+07	1.61	y	42:12	-	1.18
206	Pent╗	13C-PCB-105	100.00	8.02e+07	1.61	y	43:03	-	1.20
207	Pent╗	13C-PCB-127	100.00	8.65e+07	1.59	y	43:23	-	1.29
208	Pent╗	13C-PCB-126	100.00	7.48e+07	1.61	y	45:18	-	1.12
209	Hexa╗	13C-PCB-155	100.00	5.86e+07	1.27	y	37:02	-	0.83
210	Hexa╗	13C-PCB-153	100.00	7.35e+07	1.25	y	43:13	-	1.10
211	Hexa╗	13C-PCB-141	100.00	7.09e+07	1.28	y	43:57	-	1.06
212	Hexa	13C-PCB-138	100.00	6.83e+07	1.26	y	44:48	-	1.02
213	Hexa╗	13C-PCB-159	100.00	7.82e+07	1.30	y	46:05	-	1.17
214	Hexa╗	13C-PCB-167	100.00	8.59e+07	1.26	y	46:45	-	1.29
215	Hexa╗	13C-PCB-156	100.00	8.11e+07	1.27	y	48:03	-	1.21
216	Hexa╗	13C-PCB-157	100.00	8.59e+07	1.29	y	48:19	-	1.28
217	Hexa╗	13C-PCB-169	100.00	7.93e+07	1.27	y	50:24	-	1.19
218	Hept╗	13C-PCB-188	100.00	6.19e+07	0.46	y	42:51	-	0.93
219	Hept╗	13C-PCB-180	100.00	4.49e+07	0.47	y	49:19	-	0.67
220	Hept╗	13C-PCB-170	100.00	3.58e+07	0.45	y	50:45	-	0.53
221	Hept╗	13C-PCB-189	100.00	4.91e+07	0.46	y	52:11	-	0.73
222	Octa╗	13C-PCB-202	100.00	5.62e+07	0.92	y	48:16	-	0.84

223	Octa╗	13C-PCB-194	100.00	4.69e+07	0.91 y	53:40	-	0.80
224	Nona╗	13C-PCB-208	100.00	6.66e+07	0.78 y	52:56	-	1.14
225	Nona╗	13C-PCB-206	100.00	4.07e+07	0.77 y	55:20	-	0.70
226	Deca╗	13C-PCB-209	100.00	3.70e+07	1.21 y	56:37	-	0.64
227	DI-RS	13C-PCB-15	100.00	1.35e+08	1.56 y	25:58	-	1.00
228	Tri-╗	13C-PCB-31	100.00	1.25e+08	1.06 y	29:00	-	1.00
229	Tetr╗	13C-PCB-60	100.00	1.11e+08	0.80 y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	7.09e+07	1.59 y	39:14	-	1.00
231	Hexa╗	13C-PCB-128	100.00	6.69e+07	1.26 y	46:21	-	1.00
232	Octa╗	13C-PCB-205	100.00	5.82e+07	0.91 y	53:57	-	1.00

233	CRS		13C-PCB-79	100.00	1.21e+08	0.80 y	37:49	-	1.09
234	CRS		13C-PCB-178	100.00	4.58e+07	0.46 y	45:38	-	0.69
235	PS		13C-PCB-79	100.00	1.21e+08	0.80 y	37:49	-	1.33
236	PS		13C-PCB-178	100.00	4.58e+07	0.46 y	45:38	-	1.02

Filename: 140620E1 S: 5 Acquired: 20-JUN-14 13:47:50
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-5 PCB CS4 13H1206

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	400.00	6.95e+08	2.97 y	16:15	-	1.05
2	Mono	PCB-2	400.00	6.84e+08	2.99 y	18:36	-	1.00
3	Mono	PCB-3	400.00	7.00e+08	3.00 y	18:50	-	1.02
4	Di	PCB-4/10	1600.00	2.12e+09	1.63 y	20:12	-	1.32
5	Di	PCB-7/9	1600.00	2.61e+09	1.63 y	21:57	-	1.08
6	Di	PCB-6	800.00	1.28e+09	1.64 y	22:36	-	1.06
7	Di	PCB-5/8	1600.00	2.62e+09	1.64 y	23:01	-	1.08
8	Di	PCB-14	800.00	1.44e+09	1.64 y	24:06	-	1.03
9	Di	PCB-11	800.00	1.36e+09	1.65 y	25:17	-	0.97
10	Di	PCB-12/13	1600.00	2.65e+09	1.64 y	25:41	-	0.94
11	Di	PCB-15	800.00	1.43e+09	1.63 y	26:00	-	1.02
12	Tri	PCB-19	400.00	4.09e+08	1.05 y	24:17	-	1.05
13	Tri	PCB-30	400.00	5.99e+08	1.06 y	25:10	-	1.54
14	Tri	PCB-18	400.00	4.25e+08	1.06 y	25:55	-	0.70
15	Tri	PCB-17	400.00	4.49e+08	1.05 y	26:05	-	0.74
16	Tri	PCB-24/27	800.00	1.19e+09	1.05 y	26:39	-	0.98
17	Tri	PCB-16/32	800.00	1.02e+09	1.06 y	27:10	-	0.84
18	Tri	PCB-34	400.00	6.61e+08	1.09 y	27:57	-	1.07
19	Tri	PCB-23	400.00	6.32e+08	1.10 y	28:03	-	1.02
20	Tri	PCB-29	400.00	6.52e+08	1.09 y	28:18	-	1.06
21	Tri	PCB-26	400.00	6.34e+08	1.11 y	28:30	-	1.03
22	Tri	PCB-25	400.00	6.76e+08	1.08 y	28:39	-	1.09
23	Tri	PCB-31	400.00	6.48e+08	1.08 y	29:01	-	1.05
24	Tri	PCB-28	400.00	7.30e+08	1.09 y	29:08	-	1.18
25	Tri	PCB-20/21/33	1200.00	2.00e+09	1.09 y	29:44	-	1.08
26	Tri	PCB-22	400.00	6.74e+08	1.09 y	30:10	-	1.09
27	Tri	PCB-36	400.00	6.53e+08	1.09 y	30:47	-	1.16
28	Tri	PCB-39	400.00	6.69e+08	1.09 y	31:15	-	1.19
29	Tri	PCB-38	400.00	6.54e+08	1.09 y	32:02	-	1.16
30	Tri	PCB-35	400.00	6.68e+08	1.09 y	32:32	-	1.19
31	Tri	PCB-37	400.00	6.65e+08	1.09 y	33:00	-	1.18
32	Tetra	PCB-54	400.00	5.24e+08	0.78 y	28:01	-	1.01
33	Tetra	PCB-50	400.00	4.18e+08	0.77 y	29:10	-	0.81
34	Tetra	PCB-53	400.00	4.29e+08	0.78 y	29:49	-	1.00
35	Tetra	PCB-51	400.00	4.24e+08	0.77 y	30:09	-	0.99
36	Tetra	PCB-45	400.00	3.49e+08	0.77 y	30:35	-	0.81
37	Tetra	PCB-46	400.00	3.30e+08	0.78 y	31:05	-	0.77
38	Tetra	PCB-52/69	800.00	9.21e+08	0.77 y	31:32	-	1.07
39	Tetra	PCB-73	400.00	5.23e+08	0.78 y	31:39	-	1.22
40	Tetra	PCB-43/49	800.00	8.03e+08	0.77 y	31:49	-	0.94
41	Tetra	PCB-47	400.00	4.43e+08	0.77 y	32:02	-	0.96

42	Tetra	PCB-48/75	800.00	9.95e+08	0.78 y	32:08	-	1.08
43	Tetra	PCB-65	400.00	5.26e+08	0.77 y	32:24	-	1.15
44	Tetra	PCB-62	400.00	4.75e+08	0.78 y	32:31	-	1.03
45	Tetra	PCB-44	400.00	3.59e+08	0.78 y	32:49	-	0.78
46	Tetra	PCB-42/59	800.00	9.31e+08	0.78 y	33:03	-	1.01
47	Tetra	PCB-41/64/71/72	1600.00	2.06e+09	0.78 y	33:38	-	1.12
48	Tetra	PCB-68	400.00	5.66e+08	0.78 y	33:53	-	1.23
49	Tetra	PCB-40	400.00	3.06e+08	0.78 y	34:07	-	0.67
50	Tetra	PCB-57	400.00	5.45e+08	0.78 y	34:27	-	0.92
51	Tetra	PCB-67	400.00	5.29e+08	0.77 y	34:45	-	0.90
52	Tetra	PCB-58	400.00	5.39e+08	0.78 y	34:53	-	0.91

53	Tetra	PCB-63	400.00	5.63e+08	0.78 y	35:02	-	0.95
54	Tetra	PCB-74	400.00	5.92e-08	0.78 y	35:19	-	1.00
55	Tetra	PCB-61/70	800.00	1.09e+09	0.78 y	35:30	-	0.92
56	Tetra	PCB-76/66	800.00	1.11e+09	0.78 y	35:43	-	0.94
57	Tetra	PCB-80	400.00	6.36e+08	0.78 y	35:57	-	1.07
58	Tetra	PCB-55	400.00	5.70e+08	0.78 y	36:16	-	0.96
59	Tetra	PCB-56/60	800.00	1.08e+09	0.77 y	36:46	-	0.91
60	Tetra	PCB-79	400.00	5.68e+08	0.78 y	37:49	-	0.95
61	Tetra	PCB-78	400.00	5.53e+08	0.77 y	38:31	-	1.02
62	Tetra	PCB-81	400.00	6.17e+08	0.77 y	39:03	-	1.14
63	Tetra	PCB-77	400.00	5.82e+08	0.80 y	39:38	-	1.02
64	Penta	PCB-104	400.00	3.92e+08	1.60 y	32:41	-	1.03
65	Penta	PCB-96	400.00	3.47e+08	1.59 y	33:56	-	0.92
66	Penta	PCB-103	400.00	3.03e+08	1.60 y	34:28	-	0.80
67	Penta	PCB-100	400.00	3.29e+08	1.60 y	34:50	-	0.87
68	Penta	PCB-94	400.00	2.68e+08	1.60 y	35:18	-	0.91
69	Penta	PCB-95/98/102	1200.00	9.09e+08	1.60 y	35:47	-	1.04
70	Penta	PCB-93	400.00	2.47e+08	1.60 y	35:56	-	0.84
71	Penta	PCB-88/91	800.00	5.23e+08	1.56 y	36:12	-	0.89
72	Penta	PCB-121	400.00	4.29e+08	1.64 y	36:18	-	1.46
73	Penta	PCB-84/92	800.00	5.39e+08	1.60 y	37:08	-	0.87
74	Penta	PCB-89	400.00	2.55e+08	1.60 y	37:20	-	0.83
75	Penta	PCB-90/101	800.00	6.11e+08	1.59 y	37:30	-	0.99
76	Penta	PCB-113	400.00	3.59e+08	1.58 y	37:45	-	1.16
77	Penta	PCB-99	400.00	3.19e+08	1.61 y	37:50	-	1.03
78	Penta	PCB-119	400.00	4.01e+08	1.59 y	38:18	-	1.48
79	Penta	PCB-108/112	800.00	5.97e+08	1.60 y	38:28	-	1.10
80	Penta	PCB-83	400.00	3.51e+08	1.60 y	38:37	-	1.30
81	Penta	PCB-97	400.00	2.87e+08	1.60 y	38:48	-	1.06
82	Penta	PCB-86	400.00	2.42e+08	1.63 y	38:58	-	0.90
83	Penta	PCB-87/117/125	1200.00	1.11e+09	1.59 y	39:05	-	1.37
84	Penta	PCB-111/115	800.00	7.75e+08	1.58 y	39:15	-	1.43
85	Penta	PCB-85/116	800.00	6.10e+08	1.63 y	39:23	-	1.13
86	Penta	PCB-120	400.00	4.12e+08	1.59 y	39:36	-	1.52
87	Penta	PCB-110	400.00	3.74e+08	1.60 y	39:45	-	1.38
88	Penta	PCB-82	400.00	2.25e+08	1.60 y	40:23	-	0.60
89	Penta	PCB-124	400.00	4.01e+08	1.59 y	41:04	-	1.07
90	Penta	PCB-107/109	800.00	8.08e+08	1.60 y	41:12	-	1.08
91	Penta	PCB-123	400.00	3.78e+08	1.60 y	41:22	-	1.01
92	Penta	PCB-106/118	800.00	8.07e+08	1.60 y	41:34	-	1.01
93	Penta	PCB-114	400.00	4.81e+08	1.63 y	42:13	-	1.11
94	Penta	PCB-122	400.00	4.40e+08	1.59 y	42:21	-	1.02
95	Penta	PCB-105	400.00	4.86e+08	1.61 y	43:04	-	1.09
96	Penta	PCB-127	400.00	4.44e+08	1.65 y	43:24	-	0.94
97	Penta	PCB-126	400.00	4.53e+08	1.69 y	45:18	-	1.10
98	Hexa	PCB-155	400.00	3.12e+08	1.27 y	37:04	-	0.98
99	Hexa	PCB-150	400.00	2.99e+08	1.28 y	38:19	-	0.94
100	Hexa	PCB-152	400.00	2.95e+08	1.28 y	38:47	-	0.92
101	Hexa	PCB-145	400.00	2.95e+08	1.27 y	39:15	-	0.92
102	Hexa	PCB-136	400.00	2.81e+08	1.31 y	39:34	-	0.88

103	Hexa	PCB-148	400.00	2.24e+08	1.24 y	39:40	-	0.70
104	Hexa	PCB-154	400.00	2.37e+08	1.27 y	40:09	-	0.74
105	Hexa	PCB-151	400.00	2.17e+08	1.27 y	40:48	-	0.68
106	Hexa	PCB-135	400.00	2.24e+08	1.25 y	41:00	-	0.70
107	Hexa	PCB-144	400.00	2.17e+08	1.28 y	41:07	-	0.68
108	Hexa	PCB-147	400.00	2.25e+08	1.29 y	41:15	-	0.70
109	Hexa	PCB-139/149	800.00	4.68e+08	1.28 y	41:31	-	0.73
110	Hexa	PCB-140	400.00	2.12e+08	1.27 y	41:42	-	0.66
111	Hexa	PCB-134/143	800.00	6.17e+08	1.24 y	42:08	-	0.78
112	Hexa	PCB-133/142	800.00	6.26e+08	1.23 y	42:26	-	0.79
113	Hexa	PCB-131	400.00	2.95e+08	1.25 y	42:36	-	0.74

114	Hexa	PCB-146/165	800.00	7.73e+08	1.24 y	42:49	-	0.97
115	Hexa	PCB-132/161	800.00	7.41e+08	1.23 y	43:04	-	0.93
116	Hexa	PCB-153	400.00	3.95e+08	1.23 y	43:13	-	0.99
117	Hexa	PCB-168	400.00	4.52e+08	1.23 y	43:26	-	1.14
118	Hexa	PCB-141	400.00	3.03e+08	1.23 y	43:57	-	0.83
119	Hexa	PCB-137	400.00	3.53e+08	1.24 y	44:20	-	0.96
120	Hexa	PCB-130	400.00	2.61e+08	1.22 y	44:27	-	0.71
121	Hexa	PCB-138/163/164	1200.00	1.16e+09	1.23 y	44:49	-	1.05
122	Hexa	PCB-158/160	800.00	8.21e+08	1.23 y	45:04	-	1.11
123	Hexa	PCB-129	400.00	2.80e+08	1.23 y	45:18	-	0.76
124	Hexa	PCB-166	400.00	3.99e+08	1.23 y	45:46	-	0.94
125	Hexa	PCB-159	400.00	4.06e+08	1.26 y	46:06	-	0.96
126	Hexa	PCB-128/162	800.00	7.15e+08	1.23 y	46:23	-	0.85
127	Hexa	PCB-167	400.00	4.05e+08	1.22 y	46:46	-	0.88
128	Hexa	PCB-156	400.00	4.28e+08	1.23 y	48:03	-	0.98
129	Hexa	PCB-157	400.00	4.21e+08	1.24 y	48:20	-	0.91
130	Hexa	PCB-169	400.00	3.99e+08	1.23 y	50:23	-	0.94
131	Hepta	PCB-188	400.00	3.97e+08	1.04 y	42:51	-	1.17
132	Hepta	PCB-184	400.00	3.45e+08	1.05 y	43:18	-	1.02
133	Hepta	PCB-179	400.00	3.55e+08	1.05 y	44:05	-	1.05
134	Hepta	PCB-176	400.00	3.64e+08	1.05 y	44:33	-	1.07
135	Hepta	PCB-186	400.00	3.55e+08	1.05 y	45:10	-	1.05
136	Hepta	PCB-178	400.00	2.55e+08	1.05 y	45:39	-	0.75
137	Hepta	PCB-175	400.00	2.66e+08	1.05 y	46:00	-	0.78
138	Hepta	PCB-182/187	800.00	5.78e+08	1.06 y	46:10	-	0.85
139	Hepta	PCB-183	400.00	2.87e+08	1.05 y	46:29	-	0.85
140	Hepta	PCB-185	400.00	2.56e+08	1.05 y	47:09	-	1.10
141	Hepta	PCB-174	400.00	2.74e+08	1.04 y	47:30	-	1.18
142	Hepta	PCB-181	400.00	2.51e+08	1.05 y	47:37	-	1.08
143	Hepta	PCB-177	400.00	2.40e+08	1.05 y	47:47	-	1.03
144	Hepta	PCB-171	400.00	2.57e+08	1.05 y	48:05	-	1.10
145	Hepta	PCB-173	400.00	2.26e+08	1.05 y	48:30	-	0.97
146	Hepta	PCB-172	400.00	2.44e+08	1.05 y	48:57	-	1.05
147	Hepta	PCB-192	400.00	3.09e+08	1.05 y	49:08	-	1.33
148	Hepta	PCB-180	400.00	2.75e+08	1.05 y	49:20	-	1.18
149	Hepta	PCB-193	400.00	3.25e+08	1.06 y	49:31	-	1.40
150	Hepta	PCB-191	400.00	3.32e+08	1.05 y	49:46	-	1.43
151	Hepta	PCB-170	400.00	2.30e+08	1.05 y	50:45	-	1.23
152	Hepta	PCB-190	400.00	3.17e+08	1.05 y	50:55	-	1.70
153	Hepta	PCB-189	400.00	3.22e+08	1.05 y	52:11	-	1.30
154	Octa	PCB-202	400.00	2.47e+08	0.91 y	48:16	-	0.85
155	Octa	PCB-201	400.00	2.67e+08	0.90 y	48:45	-	0.92
156	Octa	PCB-204	400.00	2.45e+08	0.91 y	48:54	-	0.84
157	Octa	PCB-197	400.00	2.62e+08	0.91 y	49:13	-	0.90
158	Octa	PCB-200	400.00	2.51e+08	0.91 y	50:03	-	0.87
159	Octa	PCB-198	400.00	1.73e+08	0.90 y	51:19	-	0.60
160	Octa	PCB-199	400.00	1.84e+08	0.91 y	51:25	-	0.63
161	Octa	PCB-196/203	800.00	3.87e+08	0.90 y	51:41	-	0.67
162	Octa	PCB-195	400.00	2.55e+08	0.91 y	52:49	-	1.04
163	Octa	PCB-194	400.00	2.51e+08	0.92 y	53:40	-	1.02

164	Octa		PCB-205	400.00	2.86e+08	0.92	y	53:57	- 1.17
165	Nona		PCB-208	400.00	2.69e+08	1.32	y	52:57	- 0.78
166	Nona		PCB-207	400.00	2.66e+08	1.33	y	53:15	- 0.78
167	Nona		PCB-206	400.00	1.66e+08	1.33	y	55:21	- 0.84
168	Deca		PCB-209	400.00	1.83e+08	1.19	y	56:38	- 0.99
169	Tot ╗	Total Mono-PCB		0.00	-	-	n	-	- 1.02
170	Tot ╗	Total Di-PCB		0.00	-	-	n	-	- 1.03
171	Tot ╗	Total Tri-PCB		0.00	-	-	n	-	- 0.96

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.11
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	0.99
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.03
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.05
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.78
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.91
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.05
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.77
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.08
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	0.79
182	Tot ╗	Total Deca-PCB	400.00	1.83e+08	1.19	y	56:38	-	0.99
183	Mono╗	13C-PCB-1	100.00	1.66e+08	3.23	y	16:14	-	0.88
184	Mono╗	13C-PCB-3	100.00	1.71e+08	3.33	y	18:49	-	0.91
185	Di-IS	13C-PCB-4	100.00	1.00e+08	1.57	y	20:08	-	0.53
186	Di-IS	13C-PCB-9	100.00	1.51e+08	1.58	y	21:55	-	0.80
187	Di-IS	13C-PCB-11	100.00	1.75e+08	1.57	y	25:16	-	0.93
188	Tri-╗	13C-PCB-19	100.00	9.71e+07	1.07	y	24:16	-	0.52
189	Tri-╗	13C-PCB-32	100.00	1.52e+08	1.07	y	27:10	-	0.81
190	Tri-╗	13C-PCB-28	100.00	1.54e+08	1.06	y	29:06	-	0.96
191	Tri-╗	13C-PCB-37	100.00	1.41e+08	1.06	y	32:58	-	0.87
192	Tetr╗	13C-PCB-54	100.00	1.29e+08	0.81	y	27:60	-	0.83
193	Tetr╗	13C-PCB-52	100.00	1.07e+08	0.80	y	31:31	-	0.68
194	Tetr╗	13C-PCB-47	100.00	1.15e+08	0.80	y	32:00	-	0.73
195	Tetr╗	13C-PCB-70	100.00	1.48e+08	0.80	y	35:31	-	0.94
196	Tetr╗	13C-PCB-80	100.00	1.49e+08	0.80	y	35:56	-	0.95
197	Tetr╗	13C-PCB-81	100.00	1.35e+08	0.82	y	39:03	-	0.86
198	Tetr╗	13C-PCB-77	100.00	1.43e+08	0.81	y	39:38	-	0.91
199	Pent╗	13C-PCB-104	100.00	9.47e+07	1.61	y	32:40	-	0.96
200	Pent╗	13C-PCB-95	100.00	7.32e+07	1.57	y	35:49	-	0.74
201	Pent╗	13C-PCB-101	100.00	7.72e+07	1.62	y	37:30	-	0.78
202	Pent╗	13C-PCB-97	100.00	6.76e+07	1.59	y	38:48	-	0.69
203	Pent╗	13C-PCB-123	100.00	9.35e+07	1.62	y	41:21	-	0.95
204	Pent╗	13C-PCB-118	100.00	9.95e+07	1.59	y	41:32	-	1.01
205	Pent╗	13C-PCB-114	100.00	1.08e+08	1.58	y	42:12	-	1.25
206	Pent╗	13C-PCB-105	100.00	1.12e+08	1.60	y	43:04	-	1.29
207	Pent╗	13C-PCB-127	100.00	1.18e+08	1.58	y	43:23	-	1.36
208	Pent╗	13C-PCB-126	100.00	1.03e+08	1.56	y	45:18	-	1.19
209	Hexa╗	13C-PCB-155	100.00	7.98e+07	1.30	y	37:03	-	0.81
210	Hexa╗	13C-PCB-153	100.00	9.94e+07	1.27	y	43:12	-	1.15
211	Hexa╗	13C-PCB-141	100.00	9.18e+07	1.28	y	43:57	-	1.06
212	Hexa	13C-PCB-138	100.00	9.22e+07	1.27	y	44:48	-	1.06
213	Hexa╗	13C-PCB-159	100.00	1.06e+08	1.27	y	46:04	-	1.22
214	Hexa╗	13C-PCB-167	100.00	1.14e+08	1.27	y	46:45	-	1.32
215	Hexa╗	13C-PCB-156	100.00	1.09e+08	1.27	y	48:03	-	1.26
216	Hexa╗	13C-PCB-157	100.00	1.15e+08	1.31	y	48:19	-	1.33
217	Hexa╗	13C-PCB-169	100.00	1.06e+08	1.26	y	50:23	-	1.22
218	Hept╗	13C-PCB-188	100.00	8.49e+07	0.47	y	42:50	-	0.98
219	Hept╗	13C-PCB-180	100.00	5.82e+07	0.47	y	49:20	-	0.67
220	Hept╗	13C-PCB-170	100.00	4.66e+07	0.46	y	50:44	-	0.54
221	Hept╗	13C-PCB-189	100.00	6.18e+07	0.46	y	52:11	-	0.71
222	Octa╗	13C-PCB-202	100.00	7.25e+07	0.90	y	48:16	-	0.84

223	Octa╗	13C-PCB-194	100.00	6.13e+07	0.91 y	53:40	-	0.81
224	Nona╗	13C-PCB-208	100.00	8.58e+07	0.78 y	52:56	-	1.14
225	Nona╗	13C-PCB-206	100.00	4.92e+07	0.81 y	55:20	-	0.65
226	Deca╗	13C-PCB-209	100.00	4.62e+07	1.22 y	56:37	-	0.61
227	DI-RS	13C-PCB-15	100.00	1.89e+08	1.58 y	25:58	-	1.00
228	Tri-╗	13C-PCB-31	100.00	1.61e+08	1.07 y	28:60	-	1.00
229	Tetr╗	13C-PCB-60	100.00	1.57e+08	0.80 y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	9.86e+07	1.61 y	39:13	-	1.00
231	Hexa╗	13C-PCB-128	100.00	8.68e+07	1.28 y	46:21	-	1.00
232	Octa╗	13C-PCB-205	100.00	7.56e+07	0.92 y	53:57	-	1.00

233	CRS		13C-PCB-79	100.00	1.55e+08	0.79 y	37:49	-	0.99
234	CRS		13C-PCB-178	100.00	5.41e+07	0.47 y	45:38	-	0.62
235	PS		13C-PCB-79	100.00	1.55e+08	0.79 y	37:49	-	1.15
236	PS		13C-PCB-178	100.00	5.41e+07	0.47 y	45:38	-	0.93

Filename: 140620E1 S: 6 Acquired: 20-JUN-14 14:51:49
Run: 140620E1 Analyte: ICal: PCBVG8-6-20-14 Results:
Sample text: ST140620E1-6 PCB CS5 13H1207

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Mono	PCB-1	750.00	1.43e+09	2.96 y	16:15	-	1.27
2	Mono	PCB-2	750.00	1.51e+09	2.98 y	18:36	-	1.18
3	Mono	PCB-3	750.00	1.54e+09	2.98 y	18:50	-	1.20
4	Di	PCB-4/10	3000.00	4.71e+09	1.64 y	20:12	-	1.54
5	Di	PCB-7/9	3000.00	5.85e+09	1.64 y	21:57	-	1.25
6	Di	PCB-6	1500.00	2.81e+09	1.64 y	22:36	-	1.20
7	Di	PCB-5/8	3000.00	5.77e+09	1.64 y	23:01	-	1.23
8	Di	PCB-14	1500.00	3.24e+09	1.64 y	24:06	-	1.20
9	Di	PCB-11	1500.00	3.05e+09	1.65 y	25:17	-	1.13
10	Di	PCB-12/13	3000.00	5.91e+09	1.64 y	25:41	-	1.09
11	Di	PCB-15	1500.00	3.20e+09	1.64 y	26:00	-	1.18
12	Tri	PCB-19	750.00	9.08e+08	1.05 y	24:17	-	1.23
13	Tri	PCB-30	750.00	1.34e+09	1.06 y	25:10	-	1.82
14	Tri	PCB-18	750.00	9.50e+08	1.05 y	25:55	-	0.81
15	Tri	PCB-17	750.00	1.00e+09	1.05 y	26:05	-	0.86
16	Tri	PCB-24/27	1500.00	2.69e+09	1.05 y	26:40	-	1.15
17	Tri	PCB-16/32	1500.00	2.29e+09	1.06 y	27:10	-	0.98
18	Tri	PCB-34	750.00	1.45e+09	1.09 y	27:57	-	1.16
19	Tri	PCB-23	750.00	1.49e+09	1.09 y	28:03	-	1.19
20	Tri	PCB-29	750.00	1.47e+09	1.09 y	28:18	-	1.18
21	Tri	PCB-26	750.00	1.45e+09	1.10 y	28:30	-	1.16
22	Tri	PCB-25	750.00	1.51e+09	1.09 y	28:40	-	1.21
23	Tri	PCB-31	750.00	1.64e+09	1.06 y	29:01	-	1.32
24	Tri	PCB-28	750.00	1.49e+09	1.12 y	29:08	-	1.20
25	Tri	PCB-20/21/33	2250.00	4.54e+09	1.09 y	29:44	-	1.21
26	Tri	PCB-22	750.00	1.53e+09	1.09 y	30:11	-	1.23
27	Tri	PCB-36	750.00	1.49e+09	1.09 y	30:47	-	1.32
28	Tri	PCB-39	750.00	1.57e+09	1.09 y	31:15	-	1.39
29	Tri	PCB-38	750.00	1.52e+09	1.09 y	32:03	-	1.35
30	Tri	PCB-35	750.00	1.55e+09	1.09 y	32:33	-	1.38
31	Tri	PCB-37	750.00	1.56e+09	1.09 y	32:59	-	1.39
32	Tetra	PCB-54	750.00	1.18e+09	0.78 y	28:01	-	1.18
33	Tetra	PCB-50	750.00	9.47e+08	0.78 y	29:11	-	0.95
34	Tetra	PCB-53	750.00	9.66e+08	0.78 y	29:49	-	1.14
35	Tetra	PCB-51	750.00	9.67e+08	0.77 y	30:10	-	1.14
36	Tetra	PCB-45	750.00	7.90e+08	0.77 y	30:35	-	0.93
37	Tetra	PCB-46	750.00	7.50e+08	0.77 y	31:05	-	0.88
38	Tetra	PCB-52/69	1500.00	2.10e+09	0.77 y	31:33	-	1.23
39	Tetra	PCB-73	750.00	1.23e+09	0.78 y	31:40	-	1.45
40	Tetra	PCB-43/49	1500.00	1.83e+09	0.78 y	31:50	-	1.08
41	Tetra	PCB-47	750.00	9.58e+08	0.77 y	32:02	-	1.07

42	Tetra	PCB-48/75	1500.00	2.33e+09	0.78 y	32:09	-	1.30
43	Tetra	PCB-65	750.00	1.16e+09	0.77 y	32:25	-	1.30
44	Tetra	PCB-62	750.00	1.12e+09	0.78 y	32:32	-	1.25
45	Tetra	PCB-44	750.00	8.19e+08	0.78 y	32:49	-	0.92
46	Tetra	PCB-42/59	1500.00	2.16e+09	0.77 y	33:03	-	1.21
47	Tetra	PCB-41/64/71/72	3000.00	4.74e+09	0.78 y	33:38	-	1.33
48	Tetra	PCB-68	750.00	1.31e+09	0.78 y	33:54	-	1.46
49	Tetra	PCB-40	750.00	6.99e+08	0.78 y	34:07	-	0.78
50	Tetra	PCB-57	750.00	1.25e+09	0.77 y	34:28	-	1.07
51	Tetra	PCB-67	750.00	1.21e+09	0.77 y	34:46	-	1.03
52	Tetra	PCB-58	750.00	1.25e+09	0.78 y	34:53	-	1.07

53	Tetra	PCB-63	750.00	1.31e+09	0.77 y	35:03	-	1.12
54	Tetra	PCB-74	750.00	1.38e+09	0.81 y	35:20	-	1.18
55	Tetra	PCB-61/70	1500.00	2.48e+09	0.75 y	35:31	-	1.06
56	Tetra	PCB-76/66	1500.00	2.59e+09	0.78 y	35:44	-	1.10
57	Tetra	PCB-80	750.00	1.47e+09	0.78 y	35:57	-	1.24
58	Tetra	PCB-55	750.00	1.33e+09	0.78 y	36:17	-	1.12
59	Tetra	PCB-56/60	1500.00	2.53e+09	0.78 y	36:47	-	1.07
60	Tetra	PCB-79	750.00	1.34e+09	0.78 y	37:50	-	1.13
61	Tetra	PCB-78	750.00	1.30e+09	0.78 y	38:32	-	1.18
62	Tetra	PCB-81	750.00	1.44e+09	0.77 y	39:04	-	1.31
63	Tetra	PCB-77	750.00	1.37e+09	0.79 y	39:39	-	1.17
64	Penta	PCB-104	750.00	8.87e+08	1.60 y	32:41	-	1.22
65	Penta	PCB-96	750.00	7.97e+08	1.60 y	33:56	-	1.10
66	Penta	PCB-103	750.00	7.09e+08	1.60 y	34:28	-	0.98
67	Penta	PCB-100	750.00	7.64e+08	1.60 y	34:50	-	1.05
68	Penta	PCB-94	750.00	6.22e+08	1.59 y	35:18	-	1.08
69	Penta	PCB-95/98/102	2250.00	2.03e+09	1.58 y	35:47	-	1.17
70	Penta	PCB-93	750.00	6.23e+08	1.66 y	35:56	-	1.08
71	Penta	PCB-88/91	1500.00	1.15e+09	1.55 y	36:12	-	1.00
72	Penta	PCB-121	750.00	1.07e+09	1.65 y	36:18	-	1.85
73	Penta	PCB-84/92	1500.00	1.26e+09	1.59 y	37:08	-	1.02
74	Penta	PCB-89	750.00	6.06e+08	1.66 y	37:20	-	0.98
75	Penta	PCB-90/101	1500.00	1.42e+09	1.58 y	37:30	-	1.15
76	Penta	PCB-113	750.00	8.20e+08	1.61 y	37:45	-	1.33
77	Penta	PCB-99	750.00	7.64e+08	1.59 y	37:50	-	1.24
78	Penta	PCB-119	750.00	9.38e+08	1.60 y	38:18	-	1.73
79	Penta	PCB-108/112	1500.00	1.41e+09	1.59 y	38:28	-	1.30
80	Penta	PCB-83	750.00	8.35e+08	1.61 y	38:37	-	1.54
81	Penta	PCB-97	750.00	6.67e+08	1.59 y	38:49	-	1.23
82	Penta	PCB-86	750.00	5.75e+08	1.59 y	38:57	-	1.06
83	Penta	PCB-87/117/125	2250.00	2.55e+09	1.60 y	39:05	-	1.57
84	Penta	PCB-111/115	1500.00	1.80e+09	1.61 y	39:14	-	1.66
85	Penta	PCB-85/116	1500.00	1.47e+09	1.60 y	39:22	-	1.35
86	Penta	PCB-120	750.00	9.60e+08	1.60 y	39:36	-	1.77
87	Penta	PCB-110	750.00	8.91e+08	1.60 y	39:45	-	1.64
88	Penta	PCB-82	750.00	5.54e+08	1.60 y	40:23	-	0.71
89	Penta	PCB-124	750.00	1.04e+09	1.59 y	41:04	-	1.33
90	Penta	PCB-107/109	1500.00	1.83e+09	1.60 y	41:12	-	1.17
91	Penta	PCB-123	750.00	9.32e+08	1.60 y	41:23	-	1.20
92	Penta	PCB-106/118	1500.00	1.91e+09	1.60 y	41:34	-	1.19
93	Penta	PCB-114	750.00	1.21e+09	1.60 y	42:13	-	1.35
94	Penta	PCB-122	750.00	1.09e+09	1.62 y	42:22	-	1.22
95	Penta	PCB-105	750.00	1.17e+09	1.61 y	43:05	-	1.28
96	Penta	PCB-127	750.00	1.10e+09	1.63 y	43:25	-	1.09
97	Penta	PCB-126	750.00	1.11e+09	1.70 y	45:18	-	1.27
98	Hexa	PCB-155	750.00	7.23e+08	1.27 y	37:04	-	1.15
99	Hexa	PCB-150	750.00	6.95e+08	1.28 y	38:19	-	1.10
100	Hexa	PCB-152	750.00	6.85e+08	1.28 y	38:48	-	1.09
101	Hexa	PCB-145	750.00	6.77e+08	1.27 y	39:14	-	1.08
102	Hexa	PCB-136	750.00	7.15e+08	1.29 y	39:34	-	1.14

103	Hexa	PCB-148	750.00	4.56e+08	1.26 y	39:41	-	0.72
104	Hexa	PCB-154	750.00	5.75e+08	1.28 y	40:09	-	0.91
105	Hexa	PCB-151	750.00	5.08e+08	1.28 y	40:48	-	0.81
106	Hexa	PCB-135	750.00	5.16e+08	1.27 y	41:00	-	0.82
107	Hexa	PCB-144	750.00	5.14e+08	1.29 y	41:07	-	0.82
108	Hexa	PCB-147	750.00	5.36e+08	1.28 y	41:15	-	0.85
109	Hexa	PCB-139/149	1500.00	1.09e+09	1.28 y	41:31	-	0.86
110	Hexa	PCB-140	750.00	5.03e+08	1.28 y	41:42	-	0.80
111	Hexa	PCB-134/143	1500.00	1.43e+09	1.24 y	42:09	-	0.87
112	Hexa	PCB-133/142	1500.00	1.48e+09	1.23 y	42:26	-	0.90
113	Hexa	PCB-131	750.00	7.12e+08	1.24 y	42:36	-	0.87

114	Hexa	PCB-146/165	1500.00	1.86e+09	1.24 y	42:49	-	1.13
115	Hexa	PCB-132/161	1500.00	1.76e+09	1.23 y	43:04	-	1.07
116	Hexa	PCB-153	750.00	9.65e+08	1.23 y	43:14	-	1.18
117	Hexa	PCB-168	750.00	1.10e+09	1.23 y	43:27	-	1.35
118	Hexa	PCB-141	750.00	7.68e+08	1.23 y	43:58	-	0.99
119	Hexa	PCB-137	750.00	8.69e+08	1.22 y	44:21	-	1.11
120	Hexa	PCB-130	750.00	6.96e+08	1.25 y	44:28	-	0.89
121	Hexa	PCB-138/163/164	2250.00	2.89e+09	1.23 y	44:50	-	1.24
122	Hexa	PCB-158/160	1500.00	2.02e+09	1.23 y	45:05	-	1.29
123	Hexa	PCB-129	750.00	6.88e+08	1.23 y	45:19	-	0.88
124	Hexa	PCB-166	750.00	1.04e+09	1.22 y	45:46	-	1.13
125	Hexa	PCB-159	750.00	1.10e+09	1.22 y	46:05	-	1.20
126	Hexa	PCB-128/162	1500.00	1.89e+09	1.23 y	46:23	-	1.03
127	Hexa	PCB-167	750.00	1.07e+09	1.23 y	46:47	-	1.05
128	Hexa	PCB-156	750.00	1.08e+09	1.23 y	48:04	-	1.12
129	Hexa	PCB-157	750.00	1.06e+09	1.24 y	48:21	-	1.06
130	Hexa	PCB-169	750.00	1.01e+09	1.24 y	50:24	-	1.09
131	Hepta	PCB-188	750.00	9.34e+08	1.05 y	42:52	-	1.37
132	Hepta	PCB-184	750.00	8.40e+08	1.05 y	43:19	-	1.23
133	Hepta	PCB-179	750.00	8.75e+08	1.05 y	44:05	-	1.28
134	Hepta	PCB-176	750.00	9.17e+08	1.06 y	44:33	-	1.34
135	Hepta	PCB-186	750.00	8.77e+08	1.05 y	45:10	-	1.29
136	Hepta	PCB-178	750.00	6.27e+08	1.05 y	45:39	-	0.92
137	Hepta	PCB-175	750.00	6.73e+08	1.05 y	45:60	-	0.99
138	Hepta	PCB-182/187	1500.00	1.46e+09	1.05 y	46:10	-	1.07
139	Hepta	PCB-183	750.00	7.62e+08	1.05 y	46:29	-	1.12
140	Hepta	PCB-185	750.00	6.80e+08	1.05 y	47:09	-	1.35
141	Hepta	PCB-174	750.00	7.07e+08	1.04 y	47:31	-	1.40
142	Hepta	PCB-181	750.00	6.72e+08	1.06 y	47:38	-	1.33
143	Hepta	PCB-177	750.00	6.12e+08	1.05 y	47:47	-	1.21
144	Hepta	PCB-171	750.00	6.44e+08	1.05 y	48:05	-	1.28
145	Hepta	PCB-173	750.00	5.59e+08	1.05 y	48:31	-	1.11
146	Hepta	PCB-172	750.00	5.96e+08	1.04 y	48:57	-	1.18
147	Hepta	PCB-192	750.00	7.62e+08	1.05 y	49:09	-	1.51
148	Hepta	PCB-180	750.00	6.75e+08	1.05 y	49:21	-	1.34
149	Hepta	PCB-193	750.00	8.02e+08	1.05 y	49:32	-	1.59
150	Hepta	PCB-191	750.00	8.11e+08	1.05 y	49:46	-	1.61
151	Hepta	PCB-170	750.00	5.79e+08	1.05 y	50:45	-	1.44
152	Hepta	PCB-190	750.00	7.99e+08	1.05 y	50:55	-	1.98
153	Hepta	PCB-189	750.00	8.34e+08	1.05 y	52:11	-	1.54
154	Octa	PCB-202	750.00	6.16e+08	0.91 y	48:17	-	0.99
155	Octa	PCB-201	750.00	6.74e+08	0.90 y	48:46	-	1.09
156	Octa	PCB-204	750.00	6.20e+08	0.90 y	48:55	-	1.00
157	Octa	PCB-197	750.00	6.60e+08	0.90 y	49:13	-	1.06
158	Octa	PCB-200	750.00	6.36e+08	0.90 y	50:03	-	1.02
159	Octa	PCB-198	750.00	4.35e+08	0.90 y	51:19	-	0.70
160	Octa	PCB-199	750.00	4.62e+08	0.92 y	51:25	-	0.74
161	Octa	PCB-196/203	1500.00	9.78e+08	0.91 y	51:41	-	0.79
162	Octa	PCB-195	750.00	6.36e+08	0.92 y	52:48	-	1.19
163	Octa	PCB-194	750.00	6.26e+08	0.92 y	53:40	-	1.17

164	Octa	PCB-205	750.00	7.28e+08	0.91	y	53:57	-	1.36
165	Nona	PCB-208	750.00	6.70e+08	1.33	y	52:57	-	0.91
166	Nona	PCB-207	750.00	6.71e+08	1.33	y	53:15	-	0.91
167	Nona	PCB-206	750.00	4.30e+08	1.34	y	55:19	-	0.98
168	Deca	PCB-209	750.00	4.91e+08	1.19	y	56:35	-	1.16
169	Tot ╗	Total Mono-PCB	0.00	-	-	n	-	-	1.22
170	Tot ╗	Total Di-PCB	0.00	-	-	n	-	-	1.19
171	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.12

172	Tot ╗	Total Tri-PCB	0.00	-	-	n	-	-	1.26
173	Tot ╗	Total Tetra-PCB	0.00	-	-	n	-	-	1.15
174	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.21
175	Tot ╗	Total Penta-PCB	0.00	-	-	n	-	-	1.24
176	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	0.93
177	Tot ╗	Total Hexa-PCB	0.00	-	-	n	-	-	1.07
178	Tot ╗	Total Hepta-PCB	0.00	-	-	n	-	-	1.26
179	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	0.91
180	Tot ╗	Total Octa-PCB	0.00	-	-	n	-	-	1.24
181	Tot ╗	Total Nona-PCB	0.00	-	-	n	-	-	0.93
182	Tot ╗	Total Deca-PCB	750.00	4.91e+08	1.19	y	56:35	-	1.16
183	Mono╗	13C-PCB-1	100.00	1.50e+08	3.31	y	16:14	-	0.76
184	Mono╗	13C-PCB-3	100.00	1.70e+08	3.29	y	18:49	-	0.86
185	Di-IS	13C-PCB-4	100.00	1.02e+08	1.58	y	20:08	-	0.52
186	Di-IS	13C-PCB-9	100.00	1.56e+08	1.60	y	21:55	-	0.79
187	Di-IS	13C-PCB-11	100.00	1.80e+08	1.58	y	25:16	-	0.91
188	Tri-╗	13C-PCB-19	100.00	9.83e+07	1.04	y	24:16	-	0.50
189	Tri-╗	13C-PCB-32	100.00	1.56e+08	1.07	y	27:10	-	0.79
190	Tri-╗	13C-PCB-28	100.00	1.66e+08	1.06	y	29:07	-	0.98
191	Tri-╗	13C-PCB-37	100.00	1.50e+08	1.08	y	32:58	-	0.89
192	Tetr╗	13C-PCB-54	100.00	1.33e+08	0.80	y	27:59	-	0.77
193	Tetr╗	13C-PCB-52	100.00	1.13e+08	0.80	y	31:31	-	0.66
194	Tetr╗	13C-PCB-47	100.00	1.19e+08	0.80	y	32:01	-	0.70
195	Tetr╗	13C-PCB-70	100.00	1.56e+08	0.81	y	35:31	-	0.91
196	Tetr╗	13C-PCB-80	100.00	1.58e+08	0.80	y	35:56	-	0.92
197	Tetr╗	13C-PCB-81	100.00	1.47e+08	0.81	y	39:03	-	0.86
198	Tetr╗	13C-PCB-77	100.00	1.56e+08	0.81	y	39:38	-	0.91
199	Pent╗	13C-PCB-104	100.00	9.67e+07	1.59	y	32:40	-	0.90
200	Pent╗	13C-PCB-95	100.00	7.69e+07	1.59	y	35:49	-	0.72
201	Pent╗	13C-PCB-101	100.00	8.24e+07	1.61	y	37:30	-	0.77
202	Pent╗	13C-PCB-97	100.00	7.23e+07	1.63	y	38:48	-	0.67
203	Pent╗	13C-PCB-123	100.00	1.04e+08	1.60	y	41:22	-	0.97
204	Pent╗	13C-PCB-118	100.00	1.07e+08	1.61	y	41:33	-	0.99
205	Pent╗	13C-PCB-114	100.00	1.19e+08	1.61	y	42:12	-	1.15
206	Pent╗	13C-PCB-105	100.00	1.23e+08	1.59	y	43:04	-	1.19
207	Pent╗	13C-PCB-127	100.00	1.34e+08	1.58	y	43:23	-	1.30
208	Pent╗	13C-PCB-126	100.00	1.17e+08	1.57	y	45:18	-	1.14
209	Hexa╗	13C-PCB-155	100.00	8.39e+07	1.28	y	37:03	-	0.78
210	Hexa╗	13C-PCB-153	100.00	1.09e+08	1.28	y	43:13	-	1.06
211	Hexa╗	13C-PCB-141	100.00	1.04e+08	1.29	y	43:57	-	1.01
212	Hexa	13C-PCB-138	100.00	1.04e+08	1.28	y	44:48	-	1.01
213	Hexa╗	13C-PCB-159	100.00	1.22e+08	1.26	y	46:04	-	1.19
214	Hexa╗	13C-PCB-167	100.00	1.35e+08	1.27	y	46:45	-	1.31
215	Hexa╗	13C-PCB-156	100.00	1.28e+08	1.27	y	48:03	-	1.24
216	Hexa╗	13C-PCB-157	100.00	1.33e+08	1.28	y	48:19	-	1.29
217	Hexa╗	13C-PCB-169	100.00	1.24e+08	1.28	y	50:23	-	1.20
218	Hept╗	13C-PCB-188	100.00	9.09e+07	0.46	y	42:51	-	0.88
219	Hept╗	13C-PCB-180	100.00	6.73e+07	0.47	y	49:20	-	0.65
220	Hept╗	13C-PCB-170	100.00	5.38e+07	0.46	y	50:44	-	0.52
221	Hept╗	13C-PCB-189	100.00	7.24e+07	0.47	y	52:11	-	0.70
222	Octa╗	13C-PCB-202	100.00	8.28e+07	0.92	y	48:16	-	0.80

223	Octa╗	13C-PCB-194	100.00	7.14e+07	0.92 y	53:39	-	0.79
224	Nona╗	13C-PCB-208	100.00	9.82e+07	0.76 y	52:56	-	1.09
225	Nona╗	13C-PCB-206	100.00	5.84e+07	0.80 y	55:19	-	0.65
226	Deca╗	13C-PCB-209	100.00	5.63e+07	1.21 y	56:35	-	0.62
227	DI-RS	13C-PCB-15	100.00	1.97e+08	1.56 y	25:59	-	1.00
228	Tri-╗	13C-PCB-31	100.00	1.69e+08	1.06 y	28:60	-	1.00
229	Tetr╗	13C-PCB-60	100.00	1.71e+08	0.80 y	36:46	-	1.00
230	Penta	13C-PCB-111	100.00	1.07e+08	1.60 y	39:13	-	1.00
231	Hexa╗	13C-PCB-128	100.00	1.03e+08	1.28 y	46:21	-	1.00
232	Octa╗	13C-PCB-205	100.00	9.02e+07	0.91 y	53:56	-	1.00

233	CRS		13C-PCB-79	100.00	1.75e+08	0.80 y	37:49	-	1.02
234	CRS		13C-PCB-178	100.00	6.43e+07	0.47 y	45:38	-	0.62
235	PS		13C-PCB-79	100.00	1.75e+08	0.80 y	37:49	-	1.19
236	PS		13C-PCB-178	100.00	6.43e+07	0.47 y	45:38	-	0.96

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST140620E1-4 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 140620E1 S#4 Analysis Date: 20-JUN-14 Time: 12:43:46

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-1	2.96	2.66-3.60	y	52.3	37.5-62.5
PCB-2	2.98	2.66-3.60	y	52.3	37.5-62.5
PCB-3	2.98	2.66-3.60	y	51.7	37.5-62.5
PCB-4/10	1.64	1.33-1.79	y	206.7	150-250
PCB-7/9	1.64	1.33-1.79	y	204.6	150-250
PCB-6	1.64	1.33-1.79	y	99.9	75.0-125
PCB-5/8	1.64	1.33-1.79	y	206.9	150-250
PCB-14	1.65	1.33-1.79	y	102.3	75.0-125
PCB-11	1.66	1.33-1.79	y	101.6	75.0-125
PCB-12/13	1.63	1.33-1.79	y	205.7	150-250
PCB-15	1.66	1.33-1.79	y	101.1	75.0-125
PCB-19	1.05	0.88-1.20	y	49.4	37.5-62.5
PCB-30	1.06	0.88-1.20	y	51.2	37.5-62.5
PCB-18	1.05	0.88-1.20	y	50.4	37.5-62.5
PCB-17	1.05	0.88-1.20	y	51.0	37.5-62.5
PCB-24/27	1.06	0.88-1.20	y	103.5	75.0-125
PCB-16/32	1.05	0.88-1.20	y	100.5	75.0-125
PCB-34	1.08	0.88-1.20	y	57.4	37.5-62.5
PCB-23	1.11	0.88-1.20	y	46.4	37.5-62.5
PCB-29	1.09	0.88-1.20	y	51.1	37.5-62.5
PCB-26	1.08	0.88-1.20	y	50.7	37.5-62.5
PCB-25	1.09	0.88-1.20	y	51.5	37.5-62.5
PCB-31	1.08	0.88-1.20	y	49.7	37.5-62.5
PCB-28	1.11	0.88-1.20	y	52.5	37.5-62.5
PCB-20/21/33	1.09	0.88-1.20	y	152.7	112.5-225
PCB-22	1.08	0.88-1.20	y	52.6	37.5-62.5
PCB-36	1.09	0.88-1.20	y	52.3	37.5-62.5
PCB-39	1.08	0.88-1.20	y	51.7	37.5-62.5
PCB-38	1.10	0.88-1.20	y	52.4	37.5-62.5
PCB-35	1.11	0.88-1.20	y	52.7	37.5-62.5
PCB-37	1.09	0.88-1.20	y	51.2	37.5-62.5
PCB-54	0.76	0.65-0.89	y	51.7	37.5-62.5
PCB-50	0.77	0.65-0.89	y	51.4	37.5-62.5
PCB-53	0.78	0.65-0.89	y	50.2	37.5-62.5
PCB-51	0.78	0.65-0.89	y	53.2	37.5-62.5
PCB-45	0.78	0.65-0.89	y	52.8	37.5-62.5
PCB-46	0.76	0.65-0.89	y	50.1	37.5-62.5
PCB-52/69	0.77	0.65-0.89	y	105.4	75.0-125
PCB-73	0.77	0.65-0.89	y	52.2	37.5-62.5
PCB-43/49	0.77	0.65-0.89	y	101.6	75.0-125
PCB-47	0.76	0.65-0.89	y	53.7	37.5-62.5
PCB-48/75	0.77	0.65-0.89	y	99.8	75.0-125
PCB-65	0.77	0.65-0.89	y	49.4	37.5-62.5
PCB-62	0.77	0.65-0.89	y	53.4	37.5-62.5
PCB-44	0.78	0.65-0.89	y	51.3	37.5-62.5
PCB-42/59	0.77	0.65-0.89	y	103.4	75.0-125
PCB-41/64/71/72	0.78	0.65-0.89	y	205.8	150-250
PCB-68	0.78	0.65-0.89	y	50.9	37.5-62.5
PCB-40	0.77	0.65-0.89	y	50.7	37.5-62.5
PCB-57	0.77	0.65-0.89	y	51.8	37.5-62.5
PCB-67	0.77	0.65-0.89	y	53.3	37.5-62.5
PCB-58	0.78	0.65-0.89	y	49.3	37.5-62.5
PCB-63	0.76	0.65-0.89	y	51.7	37.5-62.5
PCB-74	0.77	0.65-0.89	y	51.8	37.5-62.5
PCB-61/70	0.78	0.65-0.89	y	101.8	75.0-125
PCB-76/66	0.77	0.65-0.89	y	103.1	75.0-125
PCB-80	0.78	0.65-0.89	y	50.2	37.5-62.5
PCB-55	0.77	0.65-0.89	y	51.5	37.5-62.5
PCB-56/60	0.77	0.65-0.89	y	100.3	75.0-125
PCB-79	0.78	0.65-0.89	y	51.2	37.5-62.5
PCB-78	0.78	0.65-0.89	y	51.1	37.5-62.5
PCB-81	0.78	0.65-0.89	y	50.9	37.5-62.5
PCB-77	0.79	0.65-0.89	y	52.0	37.5-62.5
PCB-104	1.61	1.32-1.78	y	50.4	37.5-62.5
PCB-96	1.59	1.32-1.78	y	50.5	37.5-62.5
PCB-103	1.58	1.32-1.78	y	50.8	37.5-62.5
PCB-100	1.61	1.32-1.78	y	50.5	37.5-62.5
PCB-94	1.58	1.32-1.78	y	50.8	37.5-62.5
PCB-95/98/102	1.60	1.32-1.78	y	160.1	112.5-225
PCB-93	1.63	1.32-1.78	y	42.1	37.5-62.5
PCB-88/91	1.59	1.32-1.78	y	114.0	75.0-125
PCB-121	1.59	1.32-1.78	y	43.7	37.5-62.5

Analyst: DMS

Date: 6/23/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST140620E1-4 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 140620E1 S#4 Analysis Date: 20-JUN-14 Time: 12:43:46

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)	ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC. FOUND	CONC. RANGE (ng/mL)
PCB-84/92	1.59	1.32-1.78	y	103.4	75.0-125	PCB-140	1.28	1.05-1.43	y	54.6	37.5-62.5
PCB-89	1.61	1.32-1.78	y	53.1	37.5-62.5	PCB-134/143	1.24	1.05-1.43	y	102.9	75.0-125
PCB-90/101	1.60	1.32-1.78	y	102.1	75.0-125	PCB-133/142	1.23	1.05-1.43	y	102.0	75.0-125
PCB-113	1.58	1.32-1.78	y	56.1	37.5-62.5	PCB-131	1.22	1.05-1.43	y	49.4	37.5-62.5
PCB-99	1.64	1.32-1.78	y	46.1	37.5-62.5	PCB-146/165	1.24	1.05-1.43	y	100.9	75.0-125
PCB-119	1.61	1.32-1.78	y	50.3	37.5-62.5	PCB-132/161	1.22	1.05-1.43	y	102.0	75.0-125
PCB-108/112	1.63	1.32-1.78	y	103.0	75.0-125	PCB-153	1.22	1.05-1.43	y	50.2	37.5-62.5
PCB-83	1.62	1.32-1.78	y	52.1	37.5-62.5	PCB-168	1.21	1.05-1.43	y	50.2	37.5-62.5
PCB-97	1.60	1.32-1.78	y	52.6	37.5-62.5	PCB-141	1.21	1.05-1.43	y	50.4	37.5-62.5
PCB-86	1.58	1.32-1.78	y	48.0	37.5-62.5	PCB-137	1.24	1.05-1.43	y	48.3	37.5-62.5
PCB-87/117/125	1.60	1.32-1.78	y	154.2	112.5-225	PCB-130	1.26	1.05-1.43	y	54.3	37.5-62.5
PCB-111/115	1.68	1.32-1.78	y	102.0	75.0-125	PCB-138/163/164	1.23	1.05-1.43	y	154.4	112.5-225
PCB-85/116	1.48	1.32-1.78	y	101.9	75.0-125	PCB-158/160	1.23	1.05-1.43	y	104.2	75.0-125
PCB-120	1.57	1.32-1.78	y	49.2	37.5-62.5	PCB-129	1.25	1.05-1.43	y	50.6	37.5-62.5
PCB-110	1.61	1.32-1.78	y	51.1	37.5-62.5	PCB-166	1.22	1.05-1.43	y	51.1	37.5-62.5
PCB-82	1.59	1.32-1.78	y	49.3	37.5-62.5	PCB-159	1.23	1.05-1.43	y	52.7	37.5-62.5
PCB-124	1.60	1.32-1.78	y	49.9	37.5-62.5	PCB-128/162	1.22	1.05-1.43	y	104.6	75.0-125
PCB-107/109	1.59	1.32-1.78	y	101.7	75.0-125	PCB-167	1.21	1.05-1.43	y	51.6	37.5-62.5
PCB-123	1.59	1.32-1.78	y	52.4	37.5-62.5	PCB-156	1.22	1.05-1.43	y	49.4	37.5-62.5
PCB-106/118	1.62	1.32-1.78	y	104.7	75.0-125	PCB-157	1.22	1.05-1.43	y	51.2	37.5-62.5
PCB-114	1.64	1.32-1.78	y	50.7	37.5-62.5	PCB-169	1.22	1.05-1.43	y	49.9	37.5-62.5
PCB-122	1.64	1.32-1.78	y	51.0	37.5-62.5	PCB-188	1.02	0.89-1.21	y	50.8	37.5-62.5
PCB-105	1.62	1.32-1.78	y	51.4	37.5-62.5	PCB-184	1.04	0.89-1.21	y	51.3	37.5-62.5
PCB-127	1.64	1.32-1.78	y	51.1	37.5-62.5	PCB-179	1.04	0.89-1.21	y	50.2	37.5-62.5
PCB-126	1.62	1.32-1.78	y	51.1	37.5-62.5	PCB-176	1.04	0.89-1.21	y	50.5	37.5-62.5
PCB-155	1.27	1.05-1.43	y	52.7	37.5-62.5	PCB-186	1.04	0.89-1.21	y	51.2	37.5-62.5
PCB-150	1.28	1.05-1.43	y	51.9	37.5-62.5	PCB-178	1.04	0.89-1.21	y	50.8	37.5-62.5
PCB-152	1.27	1.05-1.43	y	51.1	37.5-62.5	PCB-175	1.04	0.89-1.21	y	52.7	37.5-62.5
PCB-145	1.26	1.05-1.43	y	50.6	37.5-62.5	PCB-182/187	1.04	0.89-1.21	y	104.2	75.0-125
PCB-136	1.27	1.05-1.43	y	52.1	37.5-62.5	PCB-183	1.04	0.89-1.21	y	50.9	37.5-62.5
PCB-148	1.30	1.05-1.43	y	51.3	37.5-62.5	PCB-185	1.04	0.89-1.21	y	50.3	37.5-62.5
PCB-154	1.25	1.05-1.43	y	52.4	37.5-62.5	PCB-174	1.03	0.89-1.21	y	49.1	37.5-62.5
PCB-151	1.30	1.05-1.43	y	52.9	37.5-62.5	PCB-181	1.06	0.89-1.21	y	52.4	37.5-62.5
PCB-135	1.28	1.05-1.43	y	51.8	37.5-62.5	PCB-177	1.05	0.89-1.21	y	51.2	37.5-62.5
PCB-144	1.36	1.05-1.43	y	55.0	37.5-62.5	PCB-171	1.04	0.89-1.21	y	49.7	37.5-62.5
PCB-147	1.18	1.05-1.43	y	52.9	37.5-62.5	PCB-173	1.05	0.89-1.21	y	49.7	37.5-62.5
PCB-139/149	1.27	1.05-1.43	y	107.6	75.0-125	PCB-172	1.02	0.89-1.21	y	49.8	37.5-62.5

Analyst: DMS

Date: 6/23/14

NATIVE 1668C CONTINUING CALIBRATION VERIFICATION

Lab Name: Vista Analytical Laboratory Lab ID: ST140620E1-4 Instrument ID: VG-8

Initial Calibration Date: 6-20-14 ICal ID: PCBVG8-6-20-14 GC Column ID: ZB-1

VER Data Filename: 140620E1 S#4 Analysis Date: 20-JUN-14 Time: 12:43:46

ANALYTES	ION ABUND. RATIO	QC LIMITS	PASS	CONC FOUND	CONC. RANGE (ng/mL)
PCB-192	1.05	0.89-1.21	y	50.5	37.5-62.5
PCB-180	1.04	0.89-1.21	y	49.1	37.5-62.5
PCB-193	1.05	0.89-1.21	y	50.4	37.5-62.5
PCB-191	1.06	0.89-1.21	y	50.0	37.5-62.5
PCB-170	1.03	0.89-1.21	y	49.6	37.5-62.5
PCB-190	1.02	0.89-1.21	y	50.5	37.5-62.5
PCB-189	1.04	0.89-1.21	y	51.7	37.5-62.5
PCB-202	0.91	0.76-1.02	y	50.0	37.5-62.5
PCB-201	0.93	0.76-1.02	y	50.4	37.5-62.5
PCB-204	0.88	0.76-1.02	y	52.0	37.5-62.5
PCB-197	0.91	0.76-1.02	y	52.0	37.5-62.5
PCB-200	0.91	0.76-1.02	y	52.4	37.5-62.5
PCB-198	0.90	0.76-1.02	y	51.5	37.5-62.5
PCB-199	0.89	0.76-1.02	y	52.5	37.5-62.5
PCB-196/203	0.90	0.76-1.02	y	104.9	75.0-125
PCB-195	0.90	0.76-1.02	y	51.9	37.5-62.5
PCB-194	0.90	0.76-1.02	y	49.9	37.5-62.5
PCB-205	0.91	0.76-1.02	y	49.6	37.5-62.5
PCB-208	1.33	1.14-1.54	y	49.5	37.5-62.5
PCB-207	1.32	1.14-1.54	y	50.8	37.5-62.5
PCB-206	1.33	1.14-1.54	y	49.7	37.5-62.5
PCB-209	1.19	0.99-1.33	y	52.5	37.5-62.5

Analyst: DMS

Date: 6/23/14

Client ID: PCB CS3 14F1901 Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46 ConCal: ST140620E1-4

Lab ID: ST140620E1-4 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: ST140620E1-8

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-1	7.79e+07	2.96 y	1.25	16:15	1.001	0.996	1.006	52.3077
PCB-2	7.75e+07	2.98 y	1.18	18:36	0.988	0.983	0.993	52.2846
PCB-3	7.90e+07	2.98 y	1.22	18:50	1.001	0.996	1.006	51.6788
PCB-4/10	2.37e+08	1.64 y	1.55	20:12	1.003	0.998	1.008	206.748
PCB-7/9	2.89e+08	1.64 y	1.27	21:57	0.869	0.865	0.873	204.628
PCB-6	1.40e+08	1.64 y	1.26	22:36	0.894	0.890	0.899	99.9095
PCB-5/8	2.84e+08	1.64 y	1.23	23:01	0.911	0.906	0.916	206.862
PCB-14	1.57e+08	1.65 y	1.23	24:06	0.954	0.949	0.959	102.294
PCB-11	1.47e+08	1.66 y	1.16	25:17	1.000	0.996	1.006	101.627
PCB-12/13	2.82e+08	1.63 y	1.10	25:41	1.016	1.010	1.020	205.694
PCB-15	1.52e+08	1.66 y	1.21	26:00	1.029	1.024	1.034	101.148
PCB-19	4.60e+07	1.05 y	1.30	24:17	1.001	0.996	1.006	49.3886
PCB-30	6.73e+07	1.06 y	1.83	25:10	1.037	1.032	1.042	51.1589
PCB-18	4.72e+07	1.05 y	0.86	25:55	0.954	0.949	0.959	50.4475
PCB-17	5.00e+07	1.05 y	0.90	26:05	0.960	0.955	0.965	50.9703
PCB-24/27	1.33e+08	1.06 y	1.18	26:40	0.981	0.976	0.986	103.472
- PCB-16/32	1.13e+08	1.05 y	1.03	27:10	1.000	0.995	1.005	100.505
- PCB-34	7.74e+07	1.08 y	1.26	27:58	0.961	0.956	0.966	57.3995
PCB-23	6.51e+07	1.11 y	1.31	28:04	0.964	0.959	0.969	46.4036
PCB-29	7.26e+07	1.09 y	1.33	28:18	0.972	0.967	0.977	51.0903
PCB-26	7.01e+07	1.08 y	1.29	28:30	0.979	0.974	0.984	50.7150
PCB-25	7.40e+07	1.09 y	1.34	28:40	0.985	0.980	0.990	51.5314
PCB-31	7.55e+07	1.08 y	1.42	29:02	0.997	0.992	1.002	49.7377
PCB-28	7.73e+07	1.11 y	1.38	29:07	1.000	0.996	1.006	52.4521
PCB-20/21/33	2.14e+08	1.09 y	1.31	29:45	1.022	1.017	1.027	152.731
PCB-22	7.44e+07	1.08 y	1.32	30:11	1.037	1.032	1.042	52.6344
PCB-36	7.16e+07	1.09 y	1.38	30:47	0.933	0.929	0.939	52.3141
PCB-39	7.29e+07	1.08 y	1.42	31:16	0.948	0.943	0.953	51.6606
PCB-38	7.06e+07	1.10 y	1.35	32:02	0.971	0.967	0.976	52.4183
PCB-35	7.21e+07	1.11 y	1.38	32:33	0.987	0.982	0.992	52.6668
PCB-37	7.08e+07	1.09 y	1.39	32:59	1.000	0.996	1.006	51.1869
PCB-54	5.75e+07	0.76 y	1.20	28:01	1.001	0.996	1.006	51.7229
PCB-50	4.61e+07	0.77 y	0.97	29:11	1.042	1.037	1.047	51.4094
PCB-53	4.59e+07	0.78 y	1.19	29:49	0.946	0.941	0.951	50.2276
PCB-51	4.72e+07	0.78 y	1.15	30:10	0.957	0.952	0.962	53.1558
PCB-45	3.92e+07	0.78 y	0.97	30:35	0.971	0.966	0.976	52.7585
PCB-46	3.67e+07	0.76 y	0.95	31:04	0.986	0.982	0.992	50.0611

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc
PCB-52/69	1.04e+08	0.77 y	1.28	31:33	1.001	0.996	1.006	105.426
PCB-73	5.51e+07	0.77 y	1.37	31:39	1.005	1.000	1.010	52.1810
PCB-43/49	8.70e+07	0.77 y	1.11	31:50	1.010	1.005	1.015	101.562
PCB-47	4.93e+07	0.76 y	1.13	32:02	1.000	0.996	1.006	53.6979
PCB-48/75	1.06e+08	0.77 y	1.30	32:09	1.004	0.999	1.009	99.7567
PCB-65	5.34e+07	0.77 y	1.33	32:25	1.012	1.007	1.017	49.3948
PCB-62	5.60e+07	0.77 y	1.29	32:32	1.016	1.011	1.021	53.4188
PCB-44	3.91e+07	0.78 y	0.94	32:50	1.025	1.020	1.030	51.2578
PCB-42/59	1.02e+08	0.77 y	1.22	33:02	1.032	1.028	1.038	103.394
PCB-41/64/71/72	2.19e+08	0.78 y	1.31	33:38	1.050	1.046	1.056	205.816
PCB-68	6.14e+07	0.78 y	1.49	33:54	1.059	1.054	1.064	50.9457
PCB-40	3.37e+07	0.77 y	0.82	34:06	1.065	1.061	1.071	50.7163
PCB-57	5.90e+07	0.77 y	1.11	34:28	0.970	0.965	0.975	51.7966
PCB-67	5.86e+07	0.77 y	1.07	34:46	0.979	0.974	0.984	53.3170
PCB-58	5.56e+07	0.78 y	1.10	34:53	0.982	0.977	0.987	49.2975
PCB-63	5.91e+07	0.76 y	1.12	35:03	0.987	0.982	0.992	51.7181
PCB-74	6.38e+07	0.77 y	1.20	35:20	0.995	0.990	1.000	51.8367
PCB-61/70	1.12e+08	0.78 y	1.08	35:30	0.999	0.994	1.004	101.842
PCB-76/66	1.20e+08	0.77 y	1.14	35:43	1.005	1.001	1.011	103.088
PCB-80	6.74e+07	0.78 y	1.28	35:56	1.000	0.996	1.006	50.2410
PCB-55	6.01e+07	0.77 y	1.11	36:17	1.010	1.005	1.015	51.5207
PCB-56/60	1.15e+08	0.77 y	1.09	36:46	1.023	1.018	1.028	100.313
PCB-79	6.04e+07	0.78 y	1.12	37:50	1.053	1.048	1.058	51.1728
PCB-78	5.76e+07	0.78 y	1.24	38:32	0.987	0.982	0.992	51.0794
PCB-81	6.41e+07	0.78 y	1.38	39:03	1.000	0.995	1.005	50.9258
PCB-77	6.12e+07	0.79 y	1.21	39:39	1.000	0.995	1.005	51.9669
PCB-104	4.41e+07	1.61 y	1.26	32:41	1.000	0.996	1.006	50.3835
PCB-96	3.84e+07	1.59 y	1.09	33:57	1.039	1.034	1.044	50.4976
PCB-103	3.30e+07	1.58 y	0.93	34:29	1.055	1.050	1.060	50.7622
PCB-100	3.52e+07	1.61 y	1.00	34:49	1.066	1.061	1.071	50.4670
PCB-94	2.91e+07	1.58 y	1.11	35:18	0.985	0.981	0.991	50.7908
PCB-95/98/102	1.01e+08	1.60 y	1.21	35:47	0.999	0.994	1.004	160.143
PCB-93	2.46e+07	1.63 y	1.13	35:56	1.003	0.998	1.008	42.0683
PCB-88/91	6.02e+07	1.59 y	1.02	36:12	1.010	1.006	1.016	114.032
PCB-121	4.31e+07	1.59 y	1.90	36:19	1.014	1.009	1.019	43.6820
PCB-84/92	5.90e+07	1.59 y	1.05	37:08	0.990	0.986	0.996	103.399
PCB-89	2.93e+07	1.61 y	1.02	37:19	0.995	0.991	1.001	53.0820

RL: MONO, TRI - DECA: —

RL: DI : —

Integrations by Analyst: DMS Date: 6/23/14

Reviewed by Analyst: _____ Date: _____

Client ID: PCB CS3 14F1901 Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46 ConCal: ST140620E1-4

Lab ID: ST140620E1-4 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: ST140620E1-8

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-90/101	6.59e+07	1.60	y	1.19	37:31	1.001	0.996	1.006	102.056
	PCB-113	4.11e+07	1.58	y	1.35	37:45	1.007	1.002	1.012	56.0520
	PCB-99	3.22e+07	1.64	y	1.29	37:51	1.010	1.005	1.015	46.1415
	PCB-119	4.21e+07	1.61	y	1.72	38:18	0.987	0.982	0.992	50.2990
	PCB-108/112	6.45e+07	1.63	y	1.29	38:27	0.991	0.986	0.996	102.978
	PCB-83	3.85e+07	1.62	y	1.52	38:38	0.996	0.991	1.001	52.0737
	PCB-97	3.19e+07	1.60	y	1.25	38:49	1.000	0.996	1.006	52.5654
	PCB-86	2.39e+07	1.58	y	1.02	38:58	1.004	1.000	1.010	48.0340
	B-87/117/125	1.17e+08	1.60	y	1.56	39:05	1.007	1.002	1.012	154.194
	PCB-111/115	8.69e+07	1.68	y	1.75	39:15	1.012	1.007	1.017	101.981
	PCB-85/116	6.45e+07	1.48	y	1.30	39:23	1.015	1.010	1.020	101.910
	PCB-120	4.26e+07	1.57	y	1.78	39:37	1.021	1.016	1.026	49.1740
	PCB-110	4.18e+07	1.61	y	1.68	39:46	1.025	1.020	1.030	51.1450
	PCB-82	2.58e+07	1.59	y	0.74	40:23	0.976	0.972	0.982	49.2945
	PCB-124	4.68e+07	1.60	y	1.32	41:03	0.993	0.988	0.998	49.9220
	PCB-107/109	8.79e+07	1.59	y	1.22	41:12	0.996	0.991	1.001	101.669
	PCB-123	4.52e+07	1.59	y	1.22	41:22	1.000	0.995	1.005	52.4448
-	PCB-106/118	9.37e+07	1.62	y	1.22	41:35	1.001	0.996	1.006	104.679
-	PCB-114	5.41e+07	1.64	y	1.36	42:13	1.000	0.995	1.005	50.6622
	PCB-122	4.97e+07	1.64	y	1.24	42:21	1.004	0.999	1.009	50.9693
	PCB-105	5.28e+07	1.62	y	1.28	43:05	1.001	0.995	1.005	51.3611
	PCB-127	5.04e+07	1.64	y	1.14	43:24	1.000	0.995	1.005	51.1125
	PCB-126	4.91e+07	1.62	y	1.28	45:19	1.001	0.995	1.005	51.0683
	PCB-155	3.50e+07	1.27	y	1.14	37:04	1.001	0.966	1.006	52.6727
	PCB-150	3.23e+07	1.28	y	1.06	38:20	1.035	1.030	1.040	51.8920
	PCB-152	3.28e+07	1.27	y	1.10	38:49	1.048	1.043	1.053	51.0615
	PCB-145	3.24e+07	1.26	y	1.09	39:15	1.060	1.055	1.065	50.6281
	PCB-136	3.31e+07	1.27	y	1.08	39:35	1.069	1.064	1.074	52.0720
	PCB-148	2.22e+07	1.30	y	0.74	39:40	1.071	1.066	1.076	51.2670
	PCB-154	2.71e+07	1.25	y	0.88	40:10	1.084	1.079	1.089	52.4052
	PCB-151	2.51e+07	1.30	y	0.81	40:48	1.102	1.097	1.107	52.9183
	PCB-135	2.36e+07	1.28	y	0.78	41:01	1.107	1.101	1.113	51.8361
	PCB-144	2.64e+07	1.36	y	0.82	41:08	1.110	1.105	1.116	54.9912
	PCB-147	2.56e+07	1.18	y	0.83	41:16	1.114	1.011	1.120	52.8823
	PCB-139/149	5.32e+07	1.27	y	0.84	41:31	1.121	1.115	1.127	107.613
-	PCB-140	2.51e+07	1.28	y	0.79	41:43	1.126	1.120	1.132	54.6052
-	PCB-134/143	7.01e+07	1.24	y	0.93	42:08	0.975	0.970	0.980	102.949

Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
PCB-133/142	7.08e+07	1.23	y	0.95	42:26	0.982	0.977	0.987	102.037
PCB-131	3.32e+07	1.22	y	0.91	42:36	0.986	0.981	0.991	49.4221
PCB-146/165	8.56e+07	1.24	y	1.16	42:48	0.991	0.986	0.996	100.884
PCB-132/161	8.34e+07	1.22	y	1.11	43:03	0.996	0.992	1.002	102.031
PCB-153	4.34e+07	1.22	y	1.18	43:14	1.001	0.995	1.005	50.1872
PCB-168	5.04e+07	1.21	y	1.37	43:27	1.006	1.000	1.010	50.1556
PCB-141	3.48e+07	1.21	y	0.97	43:58	1.001	0.996	1.005	50.4291
PCB-137	3.66e+07	1.24	y	1.07	44:21	1.009	1.004	1.014	48.2814
PCB-130	3.25e+07	1.26	y	0.85	44:27	1.012	1.007	1.017	54.2556
PCB-138/163/164	1.29e+08	1.23	y	1.23	44:50	1.001	0.996	1.006	154.435
PCB-158/160	9.17e+07	1.23	y	1.29	45:05	1.007	1.001	1.011	104.238
PCB-129	3.19e+07	1.25	y	0.92	45:19	1.012	1.007	1.017	50.5660
PCB-166	4.45e+07	1.22	y	1.12	45:46	0.993	0.988	0.998	51.1070
PCB-159	4.79e+07	1.23	y	1.16	46:05	1.000	0.995	1.005	52.6640
PCB-128/162	8.32e+07	1.22	y	1.02	46:22	1.006	1.002	1.012	104.591
PCB-167	4.69e+07	1.21	y	1.06	46:47	1.001	0.995	1.005	51.5594
PCB-156	4.73e+07	1.22	y	1.18	48:04	1.000	0.995	1.005	49.4312
PCB-157	4.74e+07	1.22	y	1.08	48:20	1.000	0.995	1.005	51.2216
PCB-169	4.38e+07	1.22	y	1.11	50:24	1.000	0.995	1.005	49.8867
PCB-188	4.41e+07	1.02	y	1.40	42:52	1.000	0.995	1.005	50.7803
PCB-184	3.92e+07	1.04	y	1.24	43:18	1.011	1.006	1.016	51.2869
PCB-179	4.05e+07	1.04	y	1.30	44:06	1.029	1.024	1.034	50.2126
PCB-176	4.26e+07	1.04	y	1.36	44:34	1.040	1.035	1.045	50.5434
PCB-186	4.04e+07	1.04	y	1.28	45:10	1.054	1.049	1.059	51.1676
PCB-178	2.94e+07	1.04	y	0.94	45:39	1.066	1.061	1.071	50.8281
PCB-175	3.16e+07	1.04	y	0.97	46:00	1.074	1.069	1.079	52.7165
PCB-182/187	6.54e+07	1.04	y	1.01	46:11	1.078	1.073	1.083	104.234
PCB-183	3.41e+07	1.04	y	1.08	46:29	1.085	1.080	1.090	50.9232
PCB-185	3.03e+07	1.04	y	1.34	47:09	0.956	0.951	0.961	50.2993
PCB-174	2.95e+07	1.03	y	1.34	47:31	0.963	0.958	0.968	49.0649
PCB-181	3.20e+07	1.06	y	1.36	47:37	0.966	0.961	0.971	52.3684
PCB-177	2.85e+07	1.05	y	1.24	47:48	0.969	0.964	0.974	51.2147
PCB-171	2.93e+07	1.04	y	1.31	48:05	0.975	0.970	0.980	49.7433
PCB-173	2.59e+07	1.05	y	1.16	48:31	0.984	0.979	0.989	49.7232
PCB-172	2.73e+07	1.02	y	1.22	48:57	0.993	0.988	0.998	49.7746
PCB-192	3.46e+07	1.05	y	1.53	49:09	0.996	0.991	1.001	50.4921
PCB-180	3.15e+07	1.04	y	1.43	49:20	1.000	0.995	1.005	49.0865

RL: MONO, TRI - DECA: ———

Integrations by Analyst: DMS

Date: 6/23/14

Client ID: PCB CS3 14F1901 Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46 ConCal: ST140620E1-4
Lab ID: ST140620E1-4 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.0000 EndCAL: ST140620E1-8

	Name	Resp	RA		RRF	RT	RRT	LCL	UCL	Conc
	PCB-193	3.74e+07	1.05	y	1.65	49:32	1.004	0.999	1.009	50.3769
	PCB-191	3.75e+07	1.06	y	1.67	49:47	1.009	1.004	1.014	49.9945
	PCB-170	2.66e+07	1.03	y	1.50	50:46	1.000	0.995	1.005	49.6074
	PCB-190	3.64e+07	1.02	y	2.02	50:55	1.003	0.998	1.008	50.4804
	PCB-189	3.90e+07	1.04	y	1.54	52:12	1.000	0.995	1.005	51.6684
	PCB-202	2.92e+07	0.91	y	1.04	48:17	1.000	0.995	1.005	49.9695
	PCB-201	3.12e+07	0.93	y	1.10	48:46	1.011	1.006	1.016	50.3688
	PCB-204	2.91e+07	0.88	y	0.99	48:56	1.014	1.009	1.019	52.0459
	PCB-197	3.14e+07	0.91	y	1.07	49:13	1.020	1.015	1.025	51.9828
	PCB-200	3.00e+07	0.91	y	1.02	50:03	1.037	1.032	1.044	52.4432
	PCB-198	2.15e+07	0.90	y	0.74	51:20	1.063	1.058	1.068	51.5297
	PCB-199	2.15e+07	0.89	y	0.73	51:25	1.065	1.060	1.070	52.5143
-	PCB-196/203	4.56e+07	0.90	y	0.77	51:41	1.071	1.066	1.076	104.918
-	PCB-195	2.91e+07	0.90	y	1.20	52:49	0.984	0.979	0.989	51.8965
	PCB-194	2.91e+07	0.90	y	1.25	53:41	1.000	0.995	1.005	49.8808
	PCB-205	3.28e+07	0.91	y	1.41	53:58	1.006	1.001	1.011	49.5944
	PCB-208	3.18e+07	1.33	y	0.96	52:57	1.000	0.995	1.005	49.4830
	PCB-207	3.10e+07	1.32	y	0.92	53:16	1.006	1.001	1.011	50.7809
	PCB-206	2.07e+07	1.33	y	1.03	55:21	1.000	0.995	1.005	49.7349
	PCB-209	2.28e+07	1.19	y	1.18	56:38	1.000	0.995	1.005	52.4674

Name	Resp	RA		RT	RRF	Conc	
Total Mono-PCB	2.34e+08	2.96	y	16:15	1.22	156.271	
Total Di-PCB	1.69e+09	1.64	y	20:12	1.21	1228.91	
Total Tri-PCB	4.56e+08	1.05	y	24:17	1.16	405.942	
Total Tri-PCB	1.17e+09	1.08	y	27:58	1.35	834.371	Sum:1240.31
Total Tetra-PCB	2.26e+09	0.76	y	28:01	1.17	2169.09	
Total Penta-PCB	1.49e+09	1.61	y	32:41	1.21	2099.97	
Total Penta-PCB	2.69e+08	1.64	y	42:13	1.26	267.736	Sum:2367.71
Total Hexa-PCB	3.94e+08	1.27	y	37:04	0.92	736.844	
Total Hexa-PCB	1.17e+09	1.24	y	42:08	1.08	1448.04	Sum:2184.88
Total Hepta-PCB	8.19e+08	1.02	y	42:52	1.27	1225.74	
Total Octa-PCB	2.40e+08	0.91	y	48:17	0.92	465.773	
Total Octa-PCB	9.28e+07	0.90	y	52:49	1.29	154.410	Sum:620.183
Total Nona-PCB	8.35e+07	1.33	y	52:57	0.96	149.999	
Total Deca-PCB	2.28e+07	1.19	y	56:38	1.18	52.4674	

Total PCB Conc:11327.5526340

RL: MONO, TRI - DECA: —

Integrations by Analyst: DMS

Date: 6/23/14

Client ID: PCB CS3 14F1901 Filename: 140620E1 S:4 Acq:20-JUN-14 12:43:46 ConCal: ST140620E1-4

Lab ID: ST140620E1-4 GC Column ID: ZB-1 ICal: PCBVG8-6-20-14 wt/vol: 1.000 EndCAL: ST140620E1-8

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-1	1.19e+08	3.24 y	0.89	16:14	0.625	0.622	0.628	98.9	98.9
13C-PCB-3	1.25e+08	3.32 y	0.93	18:49	0.725	0.721	0.729	100	100
13C-PCB-4	7.38e+07	1.60 y	0.55	20:09	0.776	0.772	0.780	99.9	99.9
13C-PCB-9	1.11e+08	1.59 y	0.83	21:55	0.844	0.840	0.848	100.0	100.0
13C-PCB-11	1.25e+08	1.58 y	0.94	25:16	0.973	0.968	0.978	98.6	98.6
13C-PCB-19	7.19e+07	1.04 y	0.53	24:16	0.934	0.929	0.939	100	100
13C-PCB-28	1.07e+08	1.05 y	0.89	29:07	1.004	0.999	1.009	96.1	96.1
13C-PCB-32	1.09e+08	1.07 y	0.81	27:10	1.046	1.041	1.051	99.3	99.3
13C-PCB-37	9.94e+07	1.06 y	0.83	32:59	1.137	1.131	1.143	95.3	95.3
13C-PCB-47	8.11e+07	0.81 y	0.74	32:01	0.871	0.867	0.875	98.7	98.7
13C-PCB-52	7.70e+07	0.79 y	0.71	31:30	0.857	0.853	0.861	98.5	98.5
13C-PCB-54	9.29e+07	0.81 y	0.85	28:00	0.762	0.758	0.766	99.0	99.0
13C-PCB-70	1.02e+08	0.79 y	0.94	35:31	0.966	0.961	0.971	98.1	98.1
13C-PCB-77	9.74e+07	0.81 y	0.89	39:38	1.078	1.073	1.083	98.7	98.7
13C-PCB-80	1.05e+08	0.80 y	0.96	35:56	0.977	0.972	0.982	99.0	99.0
13C-PCB-81	9.10e+07	0.80 y	0.84	39:03	1.062	1.057	1.067	98.4	98.4
13C-PCB-95	5.18e+07	1.63 y	0.74	35:49	0.913	0.908	0.918	98.4	98.4
13C-PCB-97	4.86e+07	1.60 y	0.69	38:48	0.989	0.984	0.994	99.7	99.7
13C-PCB-101	5.42e+07	1.60 y	0.79	37:30	0.956	0.951	0.961	97.6	97.6
13C-PCB-104	6.97e+07	1.58 y	1.00	32:40	0.833	0.829	0.837	99.0	99.0
13C-PCB-105	8.01e+07	1.61 y	1.24	43:03	0.929	0.924	0.934	96.7	96.7
13C-PCB-114	7.88e+07	1.61 y	1.21	42:12	0.910	0.905	0.915	97.6	97.6
13C-PCB-118	7.31e+07	1.59 y	0.98	41:32	1.059	1.054	1.064	105	105
13C-PCB-123	7.08e+07	1.58 y	0.95	41:21	1.054	1.049	1.059	105	105
13C-PCB-126	7.48e+07	1.61 y	1.16	45:18	0.977	0.972	0.982	96.2	96.2
13C-PCB-127	8.64e+07	1.59 y	1.34	43:23	0.936	0.931	0.941	96.3	96.3
13C-PCB-138	6.82e+07	1.26 y	1.04	44:48	0.966	0.961	0.971	97.7	97.7
13C-PCB-141	7.08e+07	1.28 y	1.07	43:57	0.948	0.943	0.953	98.8	98.8
13C-PCB-153	7.34e+07	1.25 y	1.11	43:13	0.932	0.927	0.937	98.6	98.6
13C-PCB-155	5.85e+07	1.27 y	0.83	37:02	0.944	0.939	0.949	99.4	99.4
13C-PCB-156	8.09e+07	1.27 y	1.24	48:03	1.037	1.032	1.042	97.2	97.2
13C-PCB-157	8.55e+07	1.28 y	1.31	48:19	1.042	1.037	1.047	97.5	97.5
13C-PCB-159	7.80e+07	1.30 y	1.20	46:05	0.994	0.989	0.999	97.3	97.3
13C-PCB-167	8.57e+07	1.25 y	1.32	46:45	1.009	1.004	1.014	97.0	97.0
13C-PCB-169	7.92e+07	1.27 y	1.22	50:24	1.087	1.082	1.092	97.5	97.5
13C-PCB-170	3.58e+07	0.46 y	0.54	50:45	1.095	1.089	1.101	99.9	99.9
13C-PCB-180	4.49e+07	0.47 y	0.67	49:19	1.064	1.059	1.069	99.6	99.6
13C-PCB-188	6.18e+07	0.46 y	0.94	42:51	0.924	0.919	0.929	98.8	98.8
13C-PCB-189	4.90e+07	0.46 y	0.72	52:11	1.126	1.120	1.132	102	102
13C-PCB-194	4.68e+07	0.91 y	0.81	53:40	0.995	0.990	1.000	99.2	99.2
13C-PCB-202	5.62e+07	0.92 y	0.83	48:16	1.041	1.036	1.046	101	101
13C-PCB-206	4.05e+07	0.78 y	0.66	55:20	1.026	1.021	1.031	106	106
13C-PCB-208	6.67e+07	0.78 y	1.12	52:56	0.981	0.976	0.986	102	102
13C-PCB-209	3.70e+07	1.21 y	0.61	56:37	1.049	1.044	1.054	103	103

CRS vs. RS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.21e+08	0.80 y	1.01	37:49	1.028	1.023	1.033	109	109
13C-PCB-178	4.58e+07	0.46 y	0.63	45:38	0.984	0.979	0.989	109	109

PS vs. IS

Name	Resp	RA	RRF	RT	RRT	LCL	UCL	Conc	Rec
13C-PCB-79	1.21e+08	0.80 y	1.20	37:49	0.968	0.963	0.973	110	110
13C-PCB-178	4.58e+07	0.46 y	0.94	45:38	0.925	0.920	0.930	109	109

RS

Name	Resp	RA	RRF	RT	Conc
13C-PCB-15	1.35e+08	1.56 y	1.00	25:58	100
13C-PCB-31	1.25e+08	1.07 y	1.00	29:00	100
13C-PCB-60	1.10e+08	0.80 y	1.00	36:46	100
13C-PCB-111	7.08e+07	1.59 y	1.00	39:14	100
13C-PCB-128	6.69e+07	1.27 y	1.00	46:21	100
13C-PCB-205	5.82e+07	0.91 y	1.00	53:57	100

Analyst: DMS

Date: 6/23/14

Vista Analytical Laboratory - Injection Log Run file: 140620E1 Instrument ID: VG-8 GC Column ID: ZB-1

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
140620E1	1	ST140620E1-1	DMS	20-JUN-14	09:31:44	NA	NA
140620E1	2	ST140620E1-2	DMS	20-JUN-14	10:35:42	NA	NA
140620E1	3	ST140620E1-3	DMS	20-JUN-14	11:39:47	NA	NA
140620E1	4	ST140620E1-4	DMS	20-JUN-14	12:43:46	ST140620E1-4	ST140620E1-8
140620E1	5	ST140620E1-5	DMS	20-JUN-14	13:47:50	NA	NA
140620E1	6	ST140620E1-6	DMS	20-JUN-14	14:51:49	NA	NA
140620E1	8	ST140620E1-7	DMS	20-JUN-14	15:57:15	NA	NA
140620E1	9	B4F0047-BS1	DMS	20-JUN-14	17:01:12	ST140620E1-4	ST140620E1-8
140620E1	10	SOLVENT BLANK	DMS	20-JUN-14	18:05:10	NA	NA
140620E1	11	B4F0047-BLK1	DMS	20-JUN-14	19:09:06	ST140620E1-4	ST140620E1-8
140620E1	12	1400406-01	DMS	20-JUN-14	20:13:09	ST140620E1-4	ST140620E1-8
140620E1	13	1400434-01	DMS	20-JUN-14	21:17:10	ST140620E1-4	NA
140620E1	14	1400434-02	DMS	20-JUN-14	22:21:13	ST140620E1-4	NA
140620E1	15	1400434-03	DMS	20-JUN-14	23:25:09	ST140620E1-4	NA
140620E1	16	SOLVENT BLANK	DMS	21-JUN-14	00:29:07	ST140620E1-4	NA
140620E1	17	ST140620E1-8	DMS	21-JUN-14	01:33:10	ST140620E1-4	ST140620E1-8

Attachment Q-5
Split Sample Results

Analytical Resources, Incorporated
Analytical Chemists and Consultants

November 10, 2014

Nate Lewis
Windward Environmental
200 West Mercer Street Suite 401
Seattle, WA 98119

RE: IAA NPDES and MISC
ARI Job: ZH29 and ZJ36

Dear Nate:

Please find enclosed the original Chain-of-Custody (COC) record, sample receipt documentation, and the final data report for samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted three water samples were received on October 24, 2014. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for SVOCs, Total Metals and conventionals, as requested on the COC. The SVOCs were extracted and analyzed outside of the method recommended holding time due to a laboratory error.

The SVOCs CCAL is out of control high for all associated FORM III "Q" flagged analytes with the exception of benzidine which is out of control low. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The SVOCs LCS and/or LCSD are out of control low for 4-Chloroaniline and/or out of control high for 4,6-Dinitro-2-Methylphenol.

There were no other anomalies associated with the analyses of these samples.

An electronic copy of this report as well as all associated raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
kellyb@arilabs.com
206-695-6211

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

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

Client Contact	Project Manager:	Site Contact:	Date:	COC No:
Windward Env.		Lab Contact:	Carrier: Courier	1 of 1 COCs
Nate Lewis	Tel/Fax:			Sampler:
Phone 206-812-5402	**Analysis Turnaround Time** ☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:** Walk-in Client:
FAX	TAT if different from Below 3 Weeks			Lab Sampling:
Project Name: IAA NPDES # M.SC	☐ 2 weeks			Job / SDG No.:
Site: IAA	☐ 1 week			
PO#	☐ 2 days ☐ 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:
IA-MHS-05-20141020-W	10/20/14	1150	C	W	8	N		2	1		2			1	1	1	
IA-CBN-LO-20141020-W	10/20/14	1250	C	W	8	N		2	1		2			1	1	1	2 - containers for pH, Sc, Alk, Anions
IA-CV-01-20141020-W	10/20/14	1430	C	W	8	N		2	1		2			1	1	1	"
									4					3			

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other MeOH

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

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

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: Melissa Ivancevich 10/20/14	Company: Leidos	Date/Time: 10/20/14 1505	Received by: Chad Wiggins	Company: Windward Env	Date/Time: 10/20/14 1505
Relinquished by: Chad Wiggins	Company: Windward	Date/Time: 10/24/14 1125	Received by:	Company: ARI	Date/Time: 10/24/14 1125
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Windward Project Name: LAA NPDES 3M;SC

COC No(s): _____ (NA) Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other: _____

Assigned ARI Job No: ZH29 Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 4.5 ___ ___ ___ ___ ___
Time: _____

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90897952

Cooler Accepted by: AV Date: 10/24/14 Time: 1125

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		(YES)	NO
What kind of packing material was used? ...	Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	NA	(YES)	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

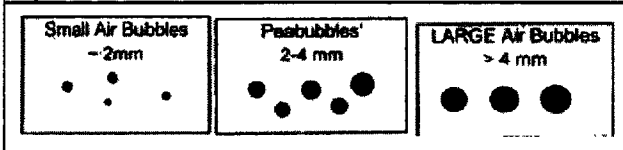
Samples Logged by: TT Date: 10-22-14 Time: 1141

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: ZH29
Client: Windward Environmental, LLC
Project Event: N/A
Project Name: IAA NPDES & Misc

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	IA-MH5-05-20141020-W	ZH29A	14-23106	Water	10/20/14 11:50	10/24/14 11:25
2.	IA-CBN-60-20141020-W	ZH29B	14-23107	Water	10/20/14 12:50	10/24/14 11:25
3.	IA-CV-01-20141020-W	ZH29C	14-23108	Water	10/20/14 14:30	10/24/14 11:25

PRESERVATION VERIFICATION 10/24/14

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **ZH29**

PC: Kelly
VTSR: 10/24/14

Inquiry Number: NONE
Analysis Requested: 10/24/14
Contact: Lewis, Nate
Client: Windward Environmental, LLC
Logged by: TS
Sample Set Used: Yes-481
Validatable Package: No
Deliverables:

Project #:
Project: IAA NPDES & Misc
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	TPHD <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
14-23106 **ZH29A**	IA-MH5-05-20141020-W						TOT Pass					Pass					N					
14-23107 **ZH29B**	IA-CBN-60-20141020-W						TOT Pass					Pass					N					
14-23108 **ZH29C**	IA-CV-01-20141020-W						TOT Pass					Pass					N					

Checked By TJ Date 10-24-14

Subject: IAA Cost Estimate
From: Nate Lewis <NateL@windwardenv.com>
Date: 10/21/2014 11:00 AM
To: Kelly Bottem <kellyb@arilabs.com>

Hi Kelly,

Can you please provide me a quote for the analysis of three water samples for SVOCs, specific conductance, pH, alkalinity, anions (Cl, nitrate as N, and sulfate), TOC, DOC, TSS, and metals (Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Th, Zn, and Hg)? This would be for IAA. Thanks!

Nate

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: ZJ36
Client: Windward Environmental, LLC
Project Event: N/A
Project Name: IAA NPDES & Misc

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	IA-MH5-05-20141020-W	ZJ36A	14-24294	Water	10/20/14 11:50	10/24/14 11:25
2.	IA-CBN-60-20141020-W	ZJ36B	14-24295	Water	10/20/14 12:50	10/24/14 11:25
3.	IA-CV-01-20141020-W	ZJ36C	14-24296	Water	10/20/14 14:30	10/24/14 11:25

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: IA-MH5-05-20141020-W
SAMPLE

Lab Sample ID: ZH29A
LIMS ID: 14-23106
Matrix: Water
Data Release Authorized:
Reported: 11/05/14

QC Report No: ZH29-Windward Environmental, LLC
Project: IAA NPDES & Misc

Date Sampled: 10/20/14
Date Received: 10/24/14

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	µg/L	Q
200.8	10/29/14	200.8	10/31/14	**7440-36-0**	**Antimony**	0.2	**0.6**	
200.8	10/29/14	200.8	10/31/14	**7440-38-2**	**Arsenic**	0.2	**0.2**	
200.8	10/29/14	200.8	10/31/14	7440-41-7	Beryllium	0.2	0.2	U
200.8	10/29/14	200.8	10/31/14	7440-43-9	Cadmium	0.1	0.1	U
200.8	10/29/14	200.8	10/31/14	**7440-47-3**	**Chromium**	0.5	**1.3**	
200.8	10/29/14	200.8	10/31/14	**7440-50-8**	**Copper**	0.5	**7.3**	
200.8	10/29/14	200.8	10/31/14	**7439-92-1**	**Lead**	0.1	**3.6**	
7470A	10/29/14	7470A	11/04/14	7439-97-6	Mercury	0.1	0.1	U
200.8	10/29/14	200.8	10/31/14	**7440-02-0**	**Nickel**	0.5	**1.6**	
200.8	10/29/14	200.8	10/31/14	7782-49-2	Selenium	0.5	0.5	U
200.8	10/29/14	200.8	10/31/14	7440-28-0	Thallium	0.2	0.2	U
200.8	10/29/14	200.8	10/31/14	**7440-66-6**	**Zinc**	4	**37**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: IA-MH5-05-20141020-W DUPLICATE

Lab Sample ID: ZH29A
LIMS ID: 14-23106
Matrix: Water
Data Release Authorized:
Reported: 11/05/14

QC Report No: ZH29-Windward Environmental, LLC
Project: IAA NPDES & Misc

Date Sampled: 10/20/14
Date Received: 10/24/14

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	200.8	0.6	0.6	0.0%	+/- 0.2	L
Arsenic	200.8	0.2	0.2 U	0.0%	+/- 0.2	L
Beryllium	200.8	0.2 U	0.2 U	0.0%	+/- 0.2	L
Cadmium	200.8	0.1 U	0.1 U	0.0%	+/- 0.1	L
Chromium	200.8	1.3	1.2	8.0%	+/- 0.5	L
Copper	200.8	7.3	7.3	0.0%	+/- 20%	
Lead	200.8	3.6	3.6	0.0%	+/- 20%	
Mercury	7470A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Nickel	200.8	1.6	1.6	0.0%	+/- 0.5	L
Selenium	200.8	0.5 U	0.5 U	0.0%	+/- 0.5	L
Thallium	200.8	0.2 U	0.2 U	0.0%	+/- 0.2	L
Zinc	200.8	37	38	2.7%	+/- 20%	

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: IA-MH5-05-20141020-W
MATRIX SPIKE

Lab Sample ID: ZH29A
LIMS ID: 14-23106
Matrix: Water
Data Release Authorized:
Reported: 11/05/14

QC Report No: ZH29-Windward Environmental, LLC
Project: IAA NPDES & Misc

Date Sampled: 10/20/14
Date Received: 10/24/14

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	200.8	0.6	24.9	25.0	97.2%	
Arsenic	200.8	0.2	24.4	25.0	96.8%	
Beryllium	200.8	0.2 U	22.5	25.0	90.0%	
Cadmium	200.8	0.1 U	23.7	25.0	94.8%	
Chromium	200.8	1.3	25.7	25.0	97.6%	
Copper	200.8	7.3	32.6	25.0	101%	
Lead	200.8	3.6	27.9	25.0	97.2%	
Mercury	7470A	0.1 U	1.1	1.0	110%	
Nickel	200.8	1.63	26.9	25.0	101%	
Selenium	200.8	0.5 U	70.8	80.0	88.5%	
Thallium	200.8	0.2 U	25.9	25.0	104%	
Zinc	200.8	37	107	80	87.5%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked
NR-Not Recovered

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: IA-CBN-60-20141020-W
SAMPLE

Lab Sample ID: ZH29B
LIMS ID: 14-23107
Matrix: Water
Data Release Authorized:
Reported: 11/05/14

QC Report No: ZH29-Windward Environmental, LLC
Project: IAA NPDES & Misc

Date Sampled: 10/20/14
Date Received: 10/24/14

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	µg/L	Q
200.8	10/29/14	200.8	10/31/14	**7440-36-0**	**Antimony**	0.2	**0.6**	
200.8	10/29/14	200.8	10/31/14	**7440-38-2**	**Arsenic**	0.2	**0.5**	
200.8	10/29/14	200.8	10/31/14	7440-41-7	Beryllium	0.2	0.2	U
200.8	10/29/14	200.8	10/31/14	**7440-43-9**	**Cadmium**	0.1	**0.1**	
200.8	10/29/14	200.8	10/31/14	**7440-47-3**	**Chromium**	0.5	**1.2**	
200.8	10/29/14	200.8	10/31/14	**7440-50-8**	**Copper**	0.5	**19.3**	
200.8	10/29/14	200.8	10/31/14	**7439-92-1**	**Lead**	0.1	**9.7**	
7470A	10/29/14	7470A	11/04/14	7439-97-6	Mercury	0.1	0.1	U
200.8	10/29/14	200.8	10/31/14	**7440-02-0**	**Nickel**	0.5	**0.9**	
200.8	10/29/14	200.8	10/31/14	7782-49-2	Selenium	0.5	0.5	U
200.8	10/29/14	200.8	10/31/14	7440-28-0	Thallium	0.2	0.2	U
200.8	10/29/14	200.8	10/31/14	**7440-66-6**	**Zinc**	4	**75**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: IA-CV-01-20141020-W
SAMPLE

Lab Sample ID: ZH29C
LIMS ID: 14-23108
Matrix: Water
Data Release Authorized:
Reported: 11/05/14

QC Report No: ZH29-Windward Environmental, LLC
Project: IAA NPDES & Misc

Date Sampled: 10/20/14
Date Received: 10/24/14

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	µg/L	Q
200.8	10/29/14	200.8	10/31/14	**7440-36-0**	**Antimony**	0.2	**1.0**	
200.8	10/29/14	200.8	10/31/14	**7440-38-2**	**Arsenic**	0.2	**0.6**	
200.8	10/29/14	200.8	10/31/14	7440-41-7	Beryllium	0.2	0.2	U
200.8	10/29/14	200.8	10/31/14	**7440-43-9**	**Cadmium**	0.1	**0.1**	
200.8	10/29/14	200.8	10/31/14	**7440-47-3**	**Chromium**	0.5	**2.1**	
200.8	10/29/14	200.8	10/31/14	**7440-50-8**	**Copper**	0.5	**9.2**	
200.8	10/29/14	200.8	10/31/14	**7439-92-1**	**Lead**	0.1	**17.0**	
7470A	10/29/14	7470A	11/04/14	7439-97-6	Mercury	0.1	0.1	U
200.8	10/29/14	200.8	10/31/14	**7440-02-0**	**Nickel**	0.5	**1.7**	
200.8	10/29/14	200.8	10/31/14	7782-49-2	Selenium	0.5	0.5	U
200.8	10/29/14	200.8	10/31/14	7440-28-0	Thallium	0.2	0.2	U
200.8	10/29/14	200.8	10/31/14	**7440-66-6**	**Zinc**	4	**54**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: ZH29MB
LIMS ID: 14-23107
Matrix: Water
Data Release Authorized:
Reported: 11/05/14

QC Report No: ZH29-Windward Environmental, LLC
Project: IAA NPDES & Misc

Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	µg/L	Q
200.8	10/29/14	200.8	10/31/14	7440-36-0	Antimony	0.2	0.2	U
200.8	10/29/14	200.8	10/31/14	7440-38-2	Arsenic	0.2	0.2	U
200.8	10/29/14	200.8	10/31/14	7440-41-7	Beryllium	0.2	0.2	U
200.8	10/29/14	200.8	10/31/14	7440-43-9	Cadmium	0.1	0.1	U
200.8	10/29/14	200.8	10/31/14	7440-47-3	Chromium	0.5	0.5	U
200.8	10/29/14	200.8	10/31/14	7440-50-8	Copper	0.5	0.5	U
200.8	10/29/14	200.8	10/31/14	7439-92-1	Lead	0.1	0.1	U
7470A	10/29/14	7470A	11/04/14	7439-97-6	Mercury	0.1	0.1	U
200.8	10/29/14	200.8	10/31/14	7440-02-0	Nickel	0.5	0.5	U
200.8	10/29/14	200.8	10/31/14	7782-49-2	Selenium	0.5	0.5	U
200.8	10/29/14	200.8	10/31/14	7440-28-0	Thallium	0.2	0.2	U
200.8	10/29/14	200.8	10/31/14	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: LAB CONTROL

Lab Sample ID: ZH29LCS
LIMS ID: 14-23107
Matrix: Water
Data Release Authorized:
Reported: 11/05/14

QC Report No: ZH29-Windward Environmental, LLC
Project: IAA NPDES & Misc

Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	200.8	23.8	25.0	95.2%	
Arsenic	200.8	24.1	25.0	96.4%	
Beryllium	200.8	22.4	25.0	89.6%	
Cadmium	200.8	23.6	25.0	94.4%	
Chromium	200.8	23.9	25.0	95.6%	
Copper	200.8	24.7	25.0	98.8%	
Lead	200.8	24.1	25.0	96.4%	
Mercury	7470A	2.2	2.0	110%	
Nickel	200.8	24.4	25.0	97.6%	
Selenium	200.8	70.3	80.0	87.9%	
Thallium	200.8	25.3	25.0	101%	
Zinc	200.8	75	80	93.8%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3510C
Page 1 of 2

Sample ID: IA-MH5-05-20141020-W
SAMPLE

Lab Sample ID: ZJ36A
LIMS ID: 14-24294
Matrix: Water
Data Release Authorized: MW
Reported: 11/10/14

QC Report No: ZJ36-Windward Environmental, LLC
Project: IAA NPDES & Misc
NA
Date Sampled: 10/20/14
Date Received: 10/24/14

Date Extracted: 11/07/14
Date Analyzed: 11/08/14 11:10
Instrument/Analyst: NT6/VTS

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	2.0	< 2.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	3.0	< 3.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	20	< 20 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	3.0	< 3.0 U
59-50-7	4-Chloro-3-methylphenol	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	3.0	< 3.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	3.0	< 3.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	3.0	< 3.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	20	< 20 U
100-02-7	4-Nitrophenol	10	< 10 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	3.0	< 3.0 U
121-14-2	2,4-Dinitrotoluene	3.0	< 3.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3510C

Sample ID: IA-MH5-05-20141020-W
SAMPLE

Lab Sample ID: ZJ36A
LIMS ID: 14-24294
Matrix: Water
Date Analyzed: 11/08/14 11:10

QC Report No: ZJ36-Windward Environmental, LLC
Project: IAA NPDES & Misc
NA

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	1.0	< 1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	3.0	< 3.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	10	< 10 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	3.0	< 3.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	2.0	< 2.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	67.6%	2-Fluorobiphenyl	67.6%
d14-p-Terphenyl	72.0%	d4-1,2-Dichlorobenzene	62.0%
d5-Phenol	34.4%	2-Fluorophenol	46.9%
2,4,6-Tribromophenol	74.7%	d4-2-Chlorophenol	69.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3510C

Sample ID: IA-CBN-60-20141020-W
SAMPLE

Lab Sample ID: ZJ36B
LIMS ID: 14-24295
Matrix: Water
Data Release Authorized:
Reported: 11/10/14

QC Report No: ZJ36-Windward Environmental, LLC
Project: IAA NPDES & Misc
NA
Date Sampled: 10/20/14
Date Received: 10/24/14

Date Extracted: 11/07/14
Date Analyzed: 11/08/14 11:44
Instrument/Analyst: NT6/VTS

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	2.0	< 2.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	3.0	< 3.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	20	< 20 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	3.0	< 3.0 U
59-50-7	4-Chloro-3-methylphenol	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	3.0	< 3.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	3.0	< 3.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	3.0	< 3.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	20	< 20 U
100-02-7	4-Nitrophenol	10	< 10 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	3.0	< 3.0 U
121-14-2	2,4-Dinitrotoluene	3.0	< 3.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3510C
Page 2 of 2

Sample ID: IA-CBN-60-20141020-W
SAMPLE

Lab Sample ID: ZJ36B
LIMS ID: 14-24295
Matrix: Water
Date Analyzed: 11/08/14 11:44

QC Report No: ZJ36-Windward Environmental, LLC
Project: IAA NPDES & Misc
NA

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	1.0	< 1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	3.0	< 3.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	10	< 10 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	3.0	< 3.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	2.0	< 2.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.8%	2-Fluorobiphenyl	73.6%
d14-p-Terphenyl	78.4%	d4-1,2-Dichlorobenzene	68.0%
d5-Phenol	36.8%	2-Fluorophenol	53.6%
2,4,6-Tribromophenol	78.7%	d4-2-Chlorophenol	75.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3510C

Sample ID: IA-CV-01-20141020-W
SAMPLE

Lab Sample ID: ZJ36C
LIMS ID: 14-24296
Matrix: Water
Data Release Authorized: MW
Reported: 11/10/14

QC Report No: ZJ36-Windward Environmental, LLC
Project: IAA NPDES & Misc
NA
Date Sampled: 10/20/14
Date Received: 10/24/14

Date Extracted: 11/07/14
Date Analyzed: 11/08/14 12:18
Instrument/Analyst: NT6/VTS

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	2.0	< 2.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	3.0	< 3.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	20	< 20 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	3.0	< 3.0 U
59-50-7	4-Chloro-3-methylphenol	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	3.0	< 3.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	3.0	< 3.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	3.0	< 3.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	20	< 20 U
100-02-7	4-Nitrophenol	10	< 10 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	3.0	< 3.0 U
121-14-2	2,4-Dinitrotoluene	3.0	< 3.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: IA-CV-01-20141020-W**
Extraction Method: SW3510C **SAMPLE**

Lab Sample ID: ZJ36C QC Report No: ZJ36-Windward Environmental, LLC
LIMS ID: 14-24296 Project: IAA NPDES & Misc
Matrix: Water NA
Date Analyzed: 11/08/14 12:18

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	1.0	< 1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	3.0	< 3.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	10	< 10 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**3.0**	**4.3**
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	2.0	< 2.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	70.4%	2-Fluorobiphenyl	70.4%
d14-p-Terphenyl	69.2%	d4-1,2-Dichlorobenzene	62.8%
d5-Phenol	35.7%	2-Fluorophenol	48.5%
2,4,6-Tribromophenol	75.5%	d4-2-Chlorophenol	70.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3510C
Page 1 of 2

Sample ID: MB-110714
METHOD BLANK

Lab Sample ID: MB-110714
LIMS ID: 14-24294
Matrix: Water
Data Release Authorized:
Reported: 11/10/14

QC Report No: ZJ36-Windward Environmental, LLC
Project: IAA NPDES & Misc
NA
Date Sampled: NA
Date Received: NA

Date Extracted: 11/07/14
Date Analyzed: 11/08/14 09:29
Instrument/Analyst: NT6/VTS

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	2.0	< 2.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	3.0	< 3.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	20	< 20 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	3.0	< 3.0 U
59-50-7	4-Chloro-3-methylphenol	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	3.0	< 3.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	3.0	< 3.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	3.0	< 3.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	20	< 20 U
100-02-7	4-Nitrophenol	10	< 10 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	3.0	< 3.0 U
121-14-2	2,4-Dinitrotoluene	3.0	< 3.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: MB-110714**
Extraction Method: SW3510C **METHOD BLANK**

Lab Sample ID: MB-110714 QC Report No: ZJ36-Windward Environmental, LLC
LIMS ID: 14-24294 Project: IAA NPDES & Misc
Matrix: Water NA
Date Analyzed: 11/08/14 09:29

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	1.0	< 1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	3.0	< 3.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	10	< 10 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	3.0	< 3.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	2.0	< 2.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.0%	2-Fluorobiphenyl	66.8%
d14-p-Terphenyl	77.6%	d4-1,2-Dichlorobenzene	58.0%
d5-Phenol	40.5%	2-Fluorophenol	55.2%
2,4,6-Tribromophenol	73.6%	d4-2-Chlorophenol	75.5%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: ZJ36-Windward Environmental, LLC
Project: IAA NPDES & Misc

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-110714	74.0%	66.8%	77.6%	58.0%	40.5%	55.2%	73.6%	75.5%	0
LCS-110714	77.6%	76.0%	77.6%	69.2%	43.2%	56.8%	94.4%	79.7%	0
LCSD-110714	77.2%	79.2%	82.0%	67.6%	42.7%	55.7%	100%	77.9%	0
IA-MH5-05-20141020	67.6%	67.6%	72.0%	62.0%	34.4%	46.9%	74.7%	69.1%	0
IA-CBN-60-20141020	72.8%	73.6%	78.4%	68.0%	36.8%	53.6%	78.7%	75.7%	0
IA-CV-01-20141020-	70.4%	70.4%	69.2%	62.8%	35.7%	48.5%	75.5%	70.7%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(38-120)	(38-120)
(FBP) = 2-Fluorobiphenyl	(40-120)	(40-120)
(TPH) = d14-p-Terphenyl	(39-120)	(39-120)
(DCB) = d4-1,2-Dichlorobenzene	(33-120)	(33-120)
(PHL) = d5-Phenol	(12-120)	(12-120)
(2FP) = 2-Fluorophenol	(21-120)	(21-120)
(TBP) = 2,4,6-Tribromophenol	(37-126)	(37-126)
(2CP) = d4-2-Chlorophenol	(33-120)	(33-120)

Prep Method: SW3510C
Log Number Range: 14-24294 to 14-24296

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: LCS-110714**
Page 1 of 2 **LCS/LCSD**

Lab Sample ID: LCS-110714 QC Report No: ZJ36-Windward Environmental, LLC
LIMS ID: 14-24294 Project: IAA NPDES & Misc
Matrix: Water
Data Release Authorized: Date Sampled: 10/20/14
Reported: 11/10/14 Date Received: 10/24/14

Date Extracted LCS/LCSD: 11/07/14 Sample Amount LCS: 500 mL
LCSD: 500 mL
Date Analyzed LCS: 11/08/14 10:03 Final Extract Volume LCS: 0.50 mL
LCSD: 11/08/14 10:36 LCSD: 0.50 mL
Instrument/Analyst LCS: NT6/VTS Dilution Factor LCS: 1.00
LCSD: NT6/VTS LCSD: 1.00
GPC Cleanup: NO

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	10.1	25.0	40.4%	10.3	25.0	41.2%	2.0%
Bis-(2-Chloroethyl) Ether	18.7	25.0	74.8%	19.1	25.0	76.4%	2.1%
2-Chlorophenol	19.0	25.0	76.0%	19.7	25.0	78.8%	3.6%
1,3-Dichlorobenzene	15.5	25.0	62.0%	15.9	25.0	63.6%	2.5%
1,4-Dichlorobenzene	15.7	25.0	62.8%	16.1	25.0	64.4%	2.5%
Benzyl Alcohol	11.1	25.0	44.4%	11.6	25.0	46.4%	4.4%
1,2-Dichlorobenzene	16.2	25.0	64.8%	16.7	25.0	66.8%	3.0%
2-Methylphenol	18.4	25.0	73.6%	19.0	25.0	76.0%	3.2%
2,2'-Oxybis(1-Chloropropane)	18.7	25.0	74.8%	19.2	25.0	76.8%	2.6%
4-Methylphenol	18.0	25.0	72.0%	18.3	25.0	73.2%	1.7%
N-Nitroso-Di-N-Propylamine	19.8	25.0	79.2%	20.1	25.0	80.4%	1.5%
Hexachloroethane	14.9	25.0	59.6%	15.2	25.0	60.8%	2.0%
Nitrobenzene	18.7	25.0	74.8%	19.6	25.0	78.4%	4.7%
Isophorone	20.5	25.0	82.0%	20.9	25.0	83.6%	1.9%
2-Nitrophenol	21.3	25.0	85.2%	21.8	25.0	87.2%	2.3%
2,4-Dimethylphenol	62.2	75.0	82.9%	62.7	75.0	83.6%	0.8%
Benzoic Acid	67.8	138	49.1%	68.9	138	49.9%	1.6%
bis(2-Chloroethoxy) Methane	19.2	25.0	76.8%	20.1	25.0	80.4%	4.6%
2,4-Dichlorophenol	70.3	75.0	93.7%	72.2	75.0	96.3%	2.7%
1,2,4-Trichlorobenzene	16.7	25.0	66.8%	18.0	25.0	72.0%	7.5%
Naphthalene	19.5	25.0	78.0%	20.5	25.0	82.0%	5.0%
4-Chloroaniline	6.3	75.0	8.4%	7.0	75.0	9.3%	10.5%
Hexachlorobutadiene	16.3	25.0	65.2%	16.9	25.0	67.6%	3.6%
4-Chloro-3-methylphenol	72.2	75.0	96.3%	73.6	75.0	98.1%	1.9%
2-Methylnaphthalene	13.9	25.0	55.6%	14.4	25.0	57.6%	3.5%
Hexachlorocyclopentadiene	45.2	75.0	60.3%	47.5	75.0	63.3%	5.0%
2,4,6-Trichlorophenol	65.8	75.0	87.7%	68.8	75.0	91.7%	4.5%
2,4,5-Trichlorophenol	72.0	75.0	96.0%	74.8	75.0	99.7%	3.8%
2-Chloronaphthalene	18.3	25.0	73.2%	19.7	25.0	78.8%	7.4%
2-Nitroaniline	50.4	75.0	67.2%	52.2	75.0	69.6%	3.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-110714
LCS/LCSD

Lab Sample ID: LCS-110714
LIMS ID: 14-24294
Matrix: Water
Date Analyzed LCS: 11/08/14 10:03
LCSD: 11/08/14 10:36

QC Report No: ZJ36-Windward Environmental, LLC
Project: IAA NPDES & Misc

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Dimethylphthalate	21.1		25.0	84.4%	22.2		25.0	88.8%	5.1%
Acenaphthylene	20.5		25.0	82.0%	21.8		25.0	87.2%	6.1%
3-Nitroaniline	52.0	Q	75.0	69.3%	57.3	Q	75.0	76.4%	9.7%
Acenaphthene	20.5		25.0	82.0%	21.8		25.0	87.2%	6.1%
2,4-Dinitrophenol	134		138	97.1%	139		138	101%	3.7%
4-Nitrophenol	41.1	Q	75.0	54.8%	42.3	Q	75.0	56.4%	2.9%
Dibenzofuran	14.8		25.0	59.2%	15.7		25.0	62.8%	5.9%
2,6-Dinitrotoluene	65.7		75.0	87.6%	69.8		75.0	93.1%	6.1%
2,4-Dinitrotoluene	65.3		75.0	87.1%	68.3		75.0	91.1%	4.5%
Diethylphthalate	20.9		25.0	83.6%	22.4		25.0	89.6%	6.9%
4-Chlorophenyl-phenylether	20.5		25.0	82.0%	21.8		25.0	87.2%	6.1%
Fluorene	21.8		25.0	87.2%	23.1		25.0	92.4%	5.8%
4-Nitroaniline	55.6		75.0	74.1%	60.7		75.0	80.9%	8.8%
4,6-Dinitro-2-Methylphenol	158		138	114%	167	E	138	121%	5.5%
N-Nitrosodiphenylamine	21.1		25.0	84.4%	22.5		25.0	90.0%	6.4%
4-Bromophenyl-phenylether	22.0		25.0	88.0%	22.6		25.0	90.4%	2.7%
Hexachlorobenzene	22.0		25.0	88.0%	23.1		25.0	92.4%	4.9%
Pentachlorophenol	64.0		75.0	85.3%	66.1		75.0	88.1%	3.2%
Phenanthrene	23.0		25.0	92.0%	24.1		25.0	96.4%	4.7%
Carbazole	22.4		25.0	89.6%	23.5		25.0	94.0%	4.8%
Anthracene	22.6		25.0	90.4%	23.8		25.0	95.2%	5.2%
Di-n-Butylphthalate	22.0		25.0	88.0%	23.1		25.0	92.4%	4.9%
Fluoranthene	24.7		25.0	98.8%	26.4		25.0	106%	6.7%
Pyrene	21.3		25.0	85.2%	22.9		25.0	91.6%	7.2%
Butylbenzylphthalate	20.2		25.0	80.8%	22.0		25.0	88.0%	8.5%
3,3'-Dichlorobenzidine	75.5		75.0	101%	80.0		75.0	107%	5.8%
Benzo(a)anthracene	22.5		25.0	90.0%	23.9		25.0	95.6%	6.0%
bis(2-Ethylhexyl)phthalate	21.8		25.0	87.2%	23.1		25.0	92.4%	5.8%
Chrysene	21.5		25.0	86.0%	22.5		25.0	90.0%	4.5%
Di-n-Octyl phthalate	22.1		25.0	88.4%	23.2		25.0	92.8%	4.9%
Benzo(a)pyrene	24.3		25.0	97.2%	25.8		25.0	103%	6.0%
Indeno(1,2,3-cd)pyrene	22.9		25.0	91.6%	23.8		25.0	95.2%	3.9%
Dibenz(a,h)anthracene	23.4		25.0	93.6%	24.0		25.0	96.0%	2.5%
Benzo(g,h,i)perylene	22.8		25.0	91.2%	24.8		25.0	99.2%	8.4%
1-Methylnaphthalene	20.7		25.0	82.8%	21.2		25.0	84.8%	2.4%
Total Benzofluoranthenes	50.0		50.0	100%	53.2		50.0	106%	6.2%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	77.6%	77.2%
2-Fluorobiphenyl	76.0%	79.2%
d14-p-Terphenyl	77.6%	82.0%
d4-1,2-Dichlorobenzene	69.2%	67.6%
d5-Phenol	43.2%	42.7%
2-Fluorophenol	56.8%	55.7%
2,4,6-Tribromophenol	94.4%	100%
d4-2-Chlorophenol	79.7%	77.9%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

FORM III

SAMPLE RESULTS-CONVENTIONALS
ZH29-Windward Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 11/05/14

Project: IAA NPDES & Misc
Event: NA
Date Sampled: 10/20/14
Date Received: 10/24/14

Client ID: IA-MH5-05-20141020-W
ARI ID: 14-23106 ZH29A

Analyte	Date Batch	Method	Units	RL	Sample
pH	10/24/14 102414#1	EPA 150.1	std units	0.01	5.80
Alkalinity	11/03/14 110314#1	SM 2320	mg/L CaCO3	1.0	2.8
Carbonate	11/03/14	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Bicarbonate	11/03/14	SM 2320	mg/L CaCO3	1.0	2.8
Hydroxide	11/03/14	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Conductivity	10/28/14 102814#1	EPA 120.1	umhos/cm	1.00	12.5
Total Suspended Solids	10/28/14 102814#1	SM2540D	mg/L	1.1	3.0
Chloride	10/24/14 102414#1	EPA 300.0	mg/L	0.1	0.4
N-Nitrate	10/24/14 102414#1	EPA 300.0	mg-N/L	0.1	0.1
Sulfate	10/24/14 102414#1	EPA 300.0	mg/L	0.1	0.8
Total Organic Carbon	10/24/14 102414#1	EPA 9060	mg/L	1.50	3.95
Dissolved Organic Carbon	10/24/14 102414#1	EPA 9060	mg/L	1.50	3.06

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
ZH29-Windward Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 11/05/14

Project: IAA NPDES & Misc
Event: NA
Date Sampled: 10/20/14
Date Received: 10/24/14

Client ID: IA-CBN-60-20141020-W
ARI ID: 14-23107 ZH29B

Analyte	Date Batch	Method	Units	RL	Sample
pH	10/24/14 102414#1	EPA 150.1	std units	0.01	6.40
Alkalinity	11/03/14 110314#1	SM 2320	mg/L CaCO3	1.0	13.4
Carbonate	11/03/14	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Bicarbonate	11/03/14	SM 2320	mg/L CaCO3	1.0	13.4
Hydroxide	11/03/14	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Conductivity	10/28/14 102814#1	EPA 120.1	umhos/cm	1.00	39.2
Total Suspended Solids	10/28/14 102814#1	SM2540D	mg/L	1.1	3.8
Chloride	10/24/14 102414#1	EPA 300.0	mg/L	0.1	0.7
N-Nitrate	10/24/14 102414#1	EPA 300.0	mg-N/L	0.1	0.3
Sulfate	10/24/14 102414#1	EPA 300.0	mg/L	0.1	1.5
Total Organic Carbon	10/24/14 102414#1	EPA 9060	mg/L	1.50	4.16
Dissolved Organic Carbon	10/24/14 102414#1	EPA 9060	mg/L	1.50	3.35

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
ZH29-Windward Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 11/05/14

Project: IAA NPDES & Misc
Event: NA
Date Sampled: 10/20/14
Date Received: 10/24/14

Client ID: IA-CV-01-20141020-W
ARI ID: 14-23108 ZH29C

Analyte	Date Batch	Method	Units	RL	Sample
pH	10/24/14 102414#1	EPA 150.1	std units	0.01	6.57
Alkalinity	11/03/14 110314#1	SM 2320	mg/L CaCO3	1.0	9.8
Carbonate	11/03/14	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Bicarbonate	11/03/14	SM 2320	mg/L CaCO3	1.0	9.8
Hydroxide	11/03/14	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Conductivity	10/28/14 102814#1	EPA 120.1	umhos/cm	1.00	35.6
Total Suspended Solids	10/28/14 102814#1	SM2540D	mg/L	1.1	3.5
Chloride	10/24/14 102414#1	EPA 300.0	mg/L	0.1	1.9
N-Nitrate	10/24/14 102414#1	EPA 300.0	mg-N/L	0.1	0.1
Sulfate	10/24/14 102414#1	EPA 300.0	mg/L	0.1	1.5
Total Organic Carbon	10/24/14 102414#1	EPA 9060	mg/L	1.50	4.87
Dissolved Organic Carbon	10/24/14 102414#1	EPA 9060	mg/L	1.50	3.46

RL Analytical reporting limit
U Undetected at reported detection limit

METHOD BLANK RESULTS-CONVENTIONALS
ZH29-Windward Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 11/05/14

Project: IAA NPDES & Misc
Event: NA
Date Sampled: NA
Date Received: NA

Analyte	Method	Date	Units	Blank	ID
Conductivity	EPA 120.1	10/28/14	umhos/cm	< 1.00 U	
Total Suspended Solids	SM2540D	10/28/14	mg/L	< 1.0 U	
Chloride	EPA 300.0	10/24/14	mg/L	< 0.1 U	
N-Nitrate	EPA 300.0	10/24/14	mg-N/L	< 0.1 U	
Sulfate	EPA 300.0	10/24/14	mg/L	< 0.1 U	
Total Organic Carbon	EPA 9060	10/24/14	mg/L	< 1.50 U	
Dissolved Organic Carbon	EPA 9060	10/24/14	mg/L	< 1.50 U	
		10/24/14		< 1.50 U	FB

FB Filtration Blank

LAB CONTROL RESULTS-CONVENTIONALS
ZH29-Windward Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 11/05/14

Project: IAA NPDES & Misc
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
pH EPA 150.1	ICVL	10/24/14	std units	6.99	7.00	0.01
Total Suspended Solids SM2540D	ICVL	10/28/14	mg/L	49.3	50.0	98.6%

pH is evaluated as the Absolute Difference between the values rather than Percent Recovery.

STANDARD REFERENCE RESULTS-CONVENTIONALS
ZH29-Windward Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 11/05/14

Project: IAA NPDES & Misc
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Method	Date	Units	SRM	True Value	Recovery
Alkalinity ERA #P114506	SM 2320	11/03/14	mg/L CaCO3	63.4	61.7	102.8%
Conductivity Ricca #4401B14	EPA 120.1	10/28/14	umhos/cm	990	1,000	99.0%
Chloride ERA #290313	EPA 300.0	10/24/14	mg/L	2.9	3.0	96.7%
N-Nitrate ERA #320614	EPA 300.0	10/24/14	mg-N/L	2.8	3.0	93.3%
Sulfate ERA 131013	EPA 300.0	10/24/14	mg/L	2.9	3.0	96.7%
Total Organic Carbon ERA #0408-13-02	EPA 9060	10/24/14	mg/L	18.8	20.0	94.0%
Dissolved Organic Carbon ERA #0408-13-02	EPA 9060	10/24/14	mg/L	18.8	20.0	94.0%

REPLICATE RESULTS-CONVENTIONALS
ZH29-Windward Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 11/05/14

Project: IAA NPDES & Misc
Event: NA
Date Sampled: 10/20/14
Date Received: 10/24/14

Analyte	Method	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: ZH29A Client ID: IA-MH5-05-20141020-W						
pH	EPA 150.1	10/24/14	std units	5.80	5.82	0.02
Alkalinity	SM 2320	11/03/14	mg/L CaCO3	2.8	2.7	3.6%
Carbonate	SM 2320	11/03/14	mg/L CaCO3	< 1.0	< 1.0	NA
Bicarbonate	SM 2320	11/03/14	mg/L CaCO3	2.8	2.7	3.6%
Hydroxide	SM 2320	11/03/14	mg/L CaCO3	< 1.0	< 1.0	NA
Conductivity	EPA 120.1	10/28/14	umhos/cm	12.5	12.6	0.8%

pH is evaluated as the Absolute Difference between the values rather than Relative Percent Difference