OGDEN ENERGY GROUP, INC.

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ENVIRONMENTAL TEST REPORT

VOLUME 2

AIR KINETICS, INC.

REPORT ON COMPLIANCE TESTING - REPORT NO. 2424

September 9, 1999

PREPARED FOR:	Ogden Martin Systems of Lee, Inc. 10500 Buckingham Road Suite 400 Ft. Meyers, FL 33905
REGULATORY AGENCY:	Florida Department of Environmental Protection Permit No. PSD-FL-151A.
PURPOSE:	Determination of Compliance with Permitted Emission Limits and DEP Rule 62-296.416(3)(a)1.
TEST DATES:	August 18-19, 1999
ASSOCIATED REPORT:	OEG Report No. 2331, 2414

COMPLIANCE TEST REPORT

UNIT NO. 1

Source Location:

Ogden Martin Systems of Lee, Inc.
10500 Buckingham Road
Fort Myers, Florida 33905

Test Date: August 18 and 19, 1999
Issue Date: September 8, 1999
Revision: 0

Prepared for:

Ogden Energy Group, Inc.
40 Lane Road
Fairfield, New Jersey 07007

Prepared by:

AirKinetics, Inc.
AKI No.: 10644

Prepared By: _____
Shawn Graham
Project Supervisor

Reviewed By: _____
Tony Wong
for Project Manager

AirKinetics, Inc.
EMISSIONS CHARACTERIZATION
AND TESTING SERVICES

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1.0 SUMMARY

1.1 Source Information

Plant Name and Address:	Ogden Martin Systems Of Lee, Inc. 10500 Buckingham Road Fort Myers, Florida 33905
Source Tested:	Unit No. 1
Permit ID #:	PSD-FL-151
Plant Contact:	Tom Eriksen, Facility Manager
Phone Number:	(941) 337-2200

1.2 Testing Firm Information

Firm Name and Address:	AirKinetics, Inc. 5932 Bolsa Avenue, Suite 105 Huntington Beach, CA 92649
Firm Contact:	Tony Wong, Project Manager
Phone Number:	(714) 373-0998 Ext. 18
Subcontractors:	Paradigm Analytical Laboratories, Inc., Wilmington, NC

1.3 Test Information

Test Requested By:	Ogden Energy Group, Inc.
Firm Contact:	Joe Aldina, Sr. Vice President, Environmental Testing/CEM
Phone Number:	(973) 882-4136
Test Objective:	Demonstration of compliance with Florida Department of Environmental Protection Permit No. PSD-FL-151 and with 40 CFR 60, Appendix F.

Test Methods:

EPA 1	Sampling Point Determination
EPA 2	Velocity and Flow Rate
EPA 3	Molecular Weight
EPA 4	Flue Gas Moisture Content
EPA 23	Dioxins/Furans

Test Dates: August 18 and 19, 1999

1.4 Test Personnel

Test Coordinator:	Jacqueline Heard, Ogden Energy Group, Inc.
Test Observers:	Earl F. Baker, Florida EPA Becky Bigari, Ogden Martin Systems of Lee, Inc.
AirKinetics Test Personnel:	Shawn Graham, Project Supervisor Mike Chavez, Team Leader

2.0 TEST RESULTS AND DATA PRESENTATION

The results of the testing are summarized in Table 2-1. Results tabulations are presented in Appendix A. Example calculations are given in Appendix B. Field data are given in Appendix C. Analytical data are provided in Appendix D. Calibration data are presented in Appendix E. A sampling train schematic is presented in Appendix F. A complete raw data package including chromatograms is included in Appendix G.

TABLE 2-1

UNIT NO. 1 TEST RESULTS

	Run 1	Run 2	Run 3	Average	Permit Limit
STACK					
Concentration, ng/DSCM @ 7% O_2					
PCDD/PCDF	25.1	30.0	28.8	28.0	30
Emission Rate, lb/hr					
PCDD/PCDF	5.77E-06	6.88E-06	6.55E-06	6.40E-06	7.00E-06
Emission Rate, lb/MMBtu					
PCDD/PCDF	2.26E-08	2.69E-08	2.58E-08	2.51E-08	2.54E-08

3.0 INTRODUCTION

On August 18 and 19, 1999 AirKinetics, Inc. conducted source emissions testing for Ogden Energy Group, Inc. at Ogden Martin Systems of Lee, Inc. in Fort Myers, Florida. The objective of the test program was to perform the yearly compliance test as outlined in the Permit-To-Operate (PTO). The testing was conducted on Unit No. 1. The methods used during this test program were EPA Method 1 for sampling point determination, EPA Method 2 for velocity and flow rate, EPA Method 3 for molecular weight, EPA Method 4 for flue gas moisture content, and EPA Method 23 for dioxin/furans.

One test run was conducted on August 18 and two test runs were completed on August 19, 1999.

4.0 SOURCE PROCESS AND EQUIPMENT DESCRIPTION

4.1 Process Description

The facility consists of two identical municipal solid waste-fired boilers of Martin GmbH Stoker Combustion System design. The facility is rated at 600 tons of municipal solid waste per day (600 TPD/boiler) and generates approximately 39.7 megawatts of electricity.

4.2 Location Description

The sampling location for Unit No. 1 stack is 78 inches in diameter. The upstream and downstream distances to the nearest flow disturbance are 54 feet (8.3 equivalent diameters) and 236 feet (363 equivalent diameters), respectively. Two six inch test ports were available for sampling. Six traverse points were sampled per port.

5.0 SAMPLING AND ANALYTICAL PROCEDURES

Following are brief descriptions of the sampling and analytical procedures employed during this test program.

5.1 EPA Method 1 - Sampling Point Determination

The number and locations of the sampling and/or traverse points were determined according to the procedures outlined in EPA Method 1.

5.2 EPA Method 2 - Flue Gas Velocity and Flow Rate

The flue gas velocity and volumetric flow rate were determined according to the procedures outlined in EPA Method 2. Velocity measurements were made using Type S Pitot tubes conforming to the geometric specifications in the test method. Accordingly, each has been assigned a coefficient of 0.84. Differential pressures were measured with Magnehelic gauges of appropriate range or with fluid manometers. Effluent gas temperatures were measured with Type K (chromel-alumel) thermocouples equipped with hand-held digital readouts.

5.3 EPA Method 3 - Flue Gas Molecular Weight

Sample Collection. Flue gas analyses for carbon dioxide, oxygen and the calculation of percent excess air and flue gas dry molecular weight were performed in accordance with EPA Method 3. Multi-point, integrated sampling was used to obtain a flue gas sample concurrent with isokinetic testing. A stainless steel probe was affixed to the isokinetic sampling probe for this purpose. A peristaltic pump delivering 500 to 750 ml/min of flue gas was used to fill a Tedlar bag. Moisture was removed from the sample gas by means of a knockout jar located prior to the pump. Sampling was of the same duration (except purges following port changes) as the test runs.

Sample Analysis. Analyses were performed by Orsat apparatus. Prior to each series of analyses, the Orsat was leak checked to confirm that there is less than 0.2 ml change in five minutes. Analyses for a given sample must agree within 0.3% by volume.

5.4 EPA Method 4 - Flue Gas Moisture Content

The flue gas moisture content was determined in conjunction with each isokinetic type train and according to the sampling and analytical procedures outlined in EPA Method 4. The impingers were connected in series and contained DI water. The impingers were contained in an ice bath to assure condensation of the flue gas stream moisture. Any moisture that was not condensed in the impingers was captured in the silica gel; therefore, all moisture was weighed and entered into moisture content calculations.

5.5 EPA Method 23 - Dioxin/Furans

The sampling and analytical procedures outlined in EPA Method 23 were used to determine the dioxin/furans.

Sampling Train Description. The sampling train consisted of a glass nozzle, a heated glass probe, a heated Teflon-coated glass fiber filter, a water-cooled condenser, a XAD sorbent trap, four chilled impingers in series, a pump, a dry gas meter and a calibrated orifice. The filter was housed in glass filter holder and supported on a Teflon frit. The condenser was placed above the XAD sorbent trap allowing the condensate to drain vertically through the sorbent for removal of the organic constituents in the gas. The sorbent trap was charged with the precleaned resin. The first impinger was empty, the second contained distilled, DI water, the third was empty and the fourth contained preweighed silica gel.

Care was taken to ensure that the XAD resin was stored on ice before and after sample collection to prevent resin decomposition.

All glassware including the sorbent trap glassware was precleaned prior to sampling according to the procedure listed below.

1. Soak in hot soapy water
2. Rinse three times with tap water
3. Rinse three times with DI water
4. Rinse three times with acetone rinse
5. Rinse three times with hexane
6. Rinse three times with methylene chloride
7. Cap glassware with methylene chloride-rinsed aluminum foil.

Sampling Train Operation. The sample train was operated according to EPA Method 23. All testing was conducted for four (4) hours. The entire sample train was leak tested to ensure that leakage did not exceed the lesser of a) 4 percent of the average sampling rate, or b) 0.02 cfm. The probe exit temperature was maintained above 248°F, and the filter compartment was maintained at 248°F $\pm$ 25°F during sampling. Sampling was maintained within $\pm$ 10 percent of isokinetics. The temperature of the gas entering the sorbent trap was maintained at or below 60 °F. Sealing greases were not used on the sample train.

Sample Recovery. The XAD trap was removed and capped. The filter was removed and placed in a petri dish and sealed with Teflon tape and stored on ice. The contents of the first three impingers were returned to the original jar, weighed, the weight recorded and the liquid level marked. The silica gel was returned to the original jar, weighed and the weight recorded.

The front half of the train including the nozzle, probe and front half of the filter holder was rinsed three times each with acetone and methylene chloride into a glass jar. The back half of the filter holder and the condenser and connectors were rinsed three times each with acetone and methylene chloride and placed into a glass jar. The front half and back half fractions were then rinsed three times with toluene. The samples were maintained at 0-4 °C from the time of collection to extraction using ice and cold packs. Recovery of the samples and assembly of the sample trains were conducted in an environment free from uncontrolled dust. A blank train was assembled, leak checked, recovered and analyzed in the same manner as a test run.

Sample Analyses. Analyses for dioxin/furans was performed by Paradigm Analytical Laboratories, Inc. The XAD trap, filter and rinses were analyzed for dioxin/furans according to EPA Method 23. The analytical method entails the addition of internal standards in known quantities, matrix-specific extraction of the sample, preliminary fractionating and cleanup of extracts (if necessary) and analysis of the processed extract for dioxin/furans. The analyses were conducted using high resolution capillary column gas chromatography coupled with high resolution mass spectrometry (HRGC/HRMS).

6.0 TEST CRITIQUE

A method blank was conducted with 0.0110 ng of dioxin/furans detected. All internal standard recoveries and duplicate analyses were within acceptable limits. A field blank train was analyzed with 0.474 ng of total dioxin/furans detected.

APPENDIX A

RESULTS TABULATION

ISOKINETIC SAMPLING TRAIN RESULTS - METHOD: EPA 23

Client Name	OGDEN ENERGY GROUP	Operator	MC
Plant Name	OMS OF LEE,INC.	Project #	10644
Sampling Location	UNIT 1	Standard Temperature, °F	68

USE IN AVERAGE OF RUN SET? 1 or 0 =>		1	1	1	SET
Run Number		1-S-M23-1	1-S-M23-2	1-S-M23-3	AVERAGE
Run Date		8/18/99	8/19/99	8/19/99	NA
Run Start Time	hh:mm	1212	712	1143	NA
Run Stop Time	hh:mm	1622	1120	1558	NA
Meter Calibration Factor	Y	1.0038	1.0038	1.0038	NA
Pitot Tube Coefficient	C_p	0.84	0.84	0.84	NA
Actual Nozzle Diameter	in	0.193	0.193	0.216	NA
Sample Volume	ft^3	126.830	128.035	158.520	137.795
Total Sampling Time	min	240	240	240	240
Average Meter Temperature	°F	99.8	95.6	98.5	98.0
Average Stack Temperature	°F	290	289	290	290
Barometric Pressure	in Hg	29.9	29.9	29.9	29.9
Stack/Duct Static Pressure	in H_2O	-1.00	-1.00	-1.00	-1.00
Absolute Stack/Duct Pressure	in Hg	29.8	29.8	29.8	29.8
Average Delta H	in H_2O	0.84	0.85	1.31	1.00
Absolute Meter Pressure	in Hg	30.0	30.0	30.0	30.0
Avg Differential Pressure (Delta P)	in H_2O	1.066	1.090	1.087	1.081
Total Water Volume Collected	mL	617.4	640.9	905.5	721.3
Standard Water Vapor Volume	SCF	29.061	30.167	42.622	33.950
Standard Meter Volume	DSCF	120.198	122.271	150.759	131.076
Calculated Stack Moisture	% H_20	19.5	19.8	22.0	20.4
Saturated Stack Moisture	% H_20	100.0	100.0	100.0	100.0
Reported Stack Moisture Content	% H_20	19.5	19.8	22.0	20.4
Carbon Dioxide Percentage	% CO_2	9.4	9.2	9.6	9.4
Oxygen Percentage	% O_2	10.2	10.3	10.1	10.2
Carbon Monoxide Percentage	% CO	0.0	0.0	0.0	0.0
Nitrogen Percentage	% N_2	80.4	80.5	80.3	80.4
Dry Mole Fraction	decimal	0.805	0.802	0.780	0.796
Dry Gas Molecular Weight	lb/lb-mole	29.91	29.88	29.94	29.91
Wet Stack Gas Molecular Weight	lb/lb-mole	27.59	27.53	27.31	27.48
Flue Gas Density	lb/ft^3	0.072	0.071	0.071	0.071
Calculated Fuel Factor	F_o	1.14	1.15	1.13	1.14
F-Factor	DSCF/MM	9570	9570	9570	9570
Heat Input Rate	MMBtu/hr	256	255	254	255
Percent Excess Air	% EA	92.5	94.0	91.0	92.5
Stack Cross-Sectional Area	in^2	4778	4778	4778	4778
Stack Cross-Sectional Area	ft^2	33.2	33.2	33.2	33.2
Percent of Isokinetic Rate	% ISO	102.7	103.6	104.7	103.7

Volumetric Flow Rate Data					
Average Stack Gas Velocity	ft/sec	70.78	71.62	71.84	71.41
Actual Stack Flow/Minute	ACFM	140,917	142,581	143,026	142,175
Dry Standard Stack Flow/Minute	DSCFM	79,654	80,317	78,285	79,418

ISOKINETIC SAMPLING TRAIN RESULTS - METHOD: EPA 2

	LABORATORY DATA			1-S-M23-1		1-S-M23-2		1-S-M23-3		Conversion
	Compound	Fwt	Unit	Pre	Amt	Pre	Amt	Pre	Amt	Unit
1	2,3,7,8-TCDD		ng		0.137		0.158		0.193	1E+09
2	Total TCDD		ng		2.64		2.8		3.5	1E+09
3	1,2,3,7,8-PeCDD		ng		0.323		0.341		0.438	1E+09
4	Total PeCDD		ng		3.82		3.74		4.62	1E+09
5	1,2,3,4,7,8-HxCDD		ng		0.185		0.172		0.208	1E+09
6	1,2,3,6,7,8-HxCDD		ng		0.411		0.355		0.42	1E+09
7	1,2,3,7,8,9-HxCDD		ng		0.34		0.278		0.341	1E+09
8	Total HxCDD		ng		4.75		4.17		4.94	1E+09
9	1,2,3,4,6,7,8-HpCDD		ng		2.5		1.6		1.74	1E+09
10	Total-HpCDD		ng		4.93		3.14		3.42	1E+09
11	OCDD		ng		4.92		2.51		2.37	1E+09
12	2,3,7,8-TCDF		ng		0.586		0.971		1.21	1E+09
13	Total TCDF		ng		20.2		31.1		36.1	1E+09
14	1,2,3,7,8-PeCDF		ng		0.962		1.28		1.69	1E+09
15	2,3,4,7,8-PeCDF		ng		0.964		1.25		1.59	1E+09
16	Total PeCDF		ng		13.6		20.3		25.5	1E+09
17	1,2,3,4,7,8-HxCDF		ng		0.789		0.882		1.24	1E+09
18	1,2,3,6,7,8-HxCDF		ng		0.869		0.986		1.34	1E+09
19	2,3,4,6,7,8-HxCDF		ng		0.68		0.731		0.977	1E+09
20	1,2,3,7,8,9-HxCDF		ng		0.146		0.148		0.193	1E+09
21	Total HxCDF		ng		7.59		8.41		11.4	1E+09
22	1,2,3,4,6,7,8-HpCDF		ng		1.86		1.87		2.23	1E+09
23	1,2,3,4,7,8,9-HpCDF		ng		0.195		0.146		0.189	1E+09
24	Total HpCDF		ng		2.84		2.69		3.24	1E+09
25	OCDF		ng		0.55		0.33		0.318	1E+09

Plant Name: OMS OF LEE,INC.
Sampling Location: UNIT 1
Run Number: 1-S-M23-1
Run Date: 8/18/99

Parameter	Totals						
	Catch Weight	Concentrations			Emission Rate		
	(ng)	(ng/DSCM)	(12% CO_2)	(@ 7% O_2)	(gms/sec)	(lbs/hr)	(lbs/MMBtu)
PCDDs							
Total TCDD	2.64	7.76E-01	9.90E-01	1.01E+00	2.92E-08	2.31E-07	9.05E-10
Total PeCDD	3.82	1.12E+00	1.43E+00	1.46E+00	4.22E-08	3.35E-07	1.31E-09
Total HxCDD	4.75	1.40E+00	1.78E+00	1.81E+00	5.25E-08	4.16E-07	1.63E-09
Total-HpCDD	4.93	1.45E+00	1.85E+00	1.88E+00	5.45E-08	4.32E-07	1.69E-09
OCDD	4.92	1.45E+00	1.85E+00	1.88E+00	5.43E-08	4.31E-07	1.69E-09
PCDFs							
Total TCDF	20.2	5.93E+00	7.58E+00	7.71E+00	2.23E-07	1.77E-06	6.93E-09
Total PeCDF	13.6	4.00E+00	5.10E+00	5.19E+00	1.50E-07	1.19E-06	4.66E-09
Total HxCDF	7.59	2.23E+00	2.85E+00	2.90E+00	8.38E-08	6.65E-07	2.60E-09
Total HpCDF	2.84	8.34E-01	1.07E+00	1.08E+00	3.14E-08	2.49E-07	9.74E-10
OCDF	0.55	1.62E-01	2.06E-01	2.10E-01	6.07E-09	4.82E-08	1.89E-10
Total PCDDs and PCDFs	66	1.93E+01	2.47E+01	2.51E+01	7.27E-07	5.77E-06	2.26E-08

Plant Name: OMS OF LEE,INC.
Sampling Location: UNIT 1
Run Number: 1-S-M23-2
Run Date: 8/19/99

Parameter	Totals						
	Catch Weight	Concentrations			Emission Rate		
	(ng)	(ng/DSCM)	(12% CO_2)	(@ 7% O_2)	(gms/sec)	(lbs/hr)	(lbs/MMBtu)
PCDDs							
Total TCDD	2.8	8.09E-01	1.05E+00	1.06E+00	3.07E-08	2.43E-07	9.53E-10
Total PeCDD	3.74	1.08E+00	1.41E+00	1.42E+00	4.09E-08	3.25E-07	1.27E-09
Total HxCDD	4.17	1.20E+00	1.57E+00	1.58E+00	4.57E-08	3.62E-07	1.42E-09
Total-HpCDD	3.14	9.07E-01	1.18E+00	1.19E+00	3.44E-08	2.73E-07	1.07E-09
OCDD	2.51	7.25E-01	9.45E-01	9.51E-01	2.75E-08	2.18E-07	8.54E-10
PCDFs							
Total TCDF	31.1	8.98E+00	1.17E+01	1.18E+01	3.40E-07	2.70E-06	1.06E-08
Total PeCDF	20.3	5.86E+00	7.65E+00	7.69E+00	2.22E-07	1.76E-06	6.91E-09
Total HxCDF	8.41	2.43E+00	3.17E+00	3.18E+00	9.21E-08	7.31E-07	2.86E-09
Total HpCDF	2.69	7.77E-01	1.01E+00	1.02E+00	2.94E-08	2.34E-07	9.15E-10
OCDF	0.33	9.53E-02	1.24E-01	1.25E-01	3.61E-09	2.87E-08	1.12E-10
Total PCDDs and PCDFs	79	2.29E+01	2.98E+01	3.00E+01	8.67E-07	6.88E-06	2.69E-08

Plant Name: OMS OF LEE,INC.
Sampling Location: UNIT 1
Run Number: 1-S-M23-3
Run Date: 8/19/99

Parameter	Totals						
	Catch Weight	Concentrations			Emission Rate		
	(ng)	(ng/DSCM)	(12% CO_2)	(@ 7% O_2)	(gms/sec)	(lbs/hr)	(lbs/MMBtu)
PCDDs							
Total TCDD	3.5	8.20E-01	1.02E+00	1.06E+00	3.03E-08	2.40E-07	9.48E-10
Total PeCDD	4.62	1.08E+00	1.35E+00	1.39E+00	4.00E-08	3.17E-07	1.25E-09
Total HxCDD	4.94	1.16E+00	1.45E+00	1.49E+00	4.28E-08	3.39E-07	1.34E-09
Total-HpCDD	3.42	8.01E-01	1.00E+00	1.03E+00	2.96E-08	2.35E-07	9.26E-10
OCDD	2.37	5.55E-01	6.94E-01	7.14E-01	2.05E-08	1.63E-07	6.42E-10
PCDFs							
Total TCDF	36.1	8.46E+00	1.06E+01	1.09E+01	3.12E-07	2.48E-06	9.78E-09
Total PeCDF	25.5	5.97E+00	7.47E+00	7.69E+00	2.21E-07	1.75E-06	6.91E-09
Total HxCDF	11.4	2.67E+00	3.34E+00	3.44E+00	9.87E-08	7.83E-07	3.09E-09
Total HpCDF	3.24	7.59E-01	9.49E-01	9.77E-01	2.80E-08	2.23E-07	8.77E-10
OCDF	0.318	7.45E-02	9.31E-02	9.59E-02	2.75E-09	2.18E-08	8.61E-11
Total PCDDs and PCDFs	95	2.23E+01	2.79E+01	2.88E+01	8.26E-07	6.55E-06	2.58E-08

APPENDIX B

EXAMPLE CALCULATIONS

EXAMPLE CALCULATIONS RUN 1-S-M23-1

ABSOLUTE PRESSURE, INCHES OF MERCURY

Ps = Pbar + Pg/13.6
= 29.90 + -1.00/13.6
= 29.83

SAMPLED VOLUME OF SOURCE GAS, DRY STANDARD CUBIC FEET

Vmstd = [(Tstd + 460)/Pstd] * Y * Vm * (Pbar + Delta-H/13.6) / (460 + tm)
= [(68 + 460)/29.92] * 1.0038 * 126.830 * (29.90 + 0.836/13.6) / (460 + 100)
= 120.198

VOLUME OF WATER VAPOR, STANDARD CUBIC FEET

Vwstd = 0.002667 * [(Tstd + 460) / Pstd] * Vlc
= 0.002667 * [(68 + 460) / 29.92] * 617.4
= 29.061

MOISTURE CONTENT, PERCENT BY VOLUME

%H2O = Vwstd / (Vwstd + Vmstd)
= 29.061 / (120.198 + 29.061)
= 19.47

DRY MOLE FRACTION, LB-MOLE/LB-MOLE

Mfd = 1 - %H2O/100
= 1 - 19.47/100
= 0.805

DRY MOLECULAR WEIGHT, LB/LB-MOLE

Md = 44*(%CO2/100) + 32*(%O2/100) + 28*{[100-(%CO2+%O2)]/100}
= 44*(9.4/100) + 32*(10.2/100) + 28*{[100-(9.4+10.2)]/100}
= 29.91

WET MOLECULAR WEIGHT, LB/LB-MOLE

Ms = Md*Mfd + 18.0*%H2O/100
= 29.91*0.805 + 18.0*19.47/100
= 27.59

FUEL FACTOR

Fo = (20.9 - %O2) / %CO2
= (20.9 - 10.2) / 9.4
= 1.138

ISOKINETIC SAMPLING RATE, PERCENT

%I = Pstd/(Tstd + 460) * (100/60) * Vmstd*(ts + 460)/[Ps*vs*Mfd*Theta*(PI*Dia*Dia/576)]
= 29.92/(68 + 460) * (100/60) * 120.198*(290 + 460)/[29.83*70.78*0.805*240.00*(PI*0.193*0.193/576)]
= 102.7

VELOCITY, FEET PER SECOND

vs = 85.49 * Cp * SQRT[Delta-p*(460+ts)/Ps/Ms]
= 85.49 * 0.84 * SQRT[1.0663*(460+290)/-1.00/27.59]
= 70.78

VOLUMETRIC FLOW RATE, ACTUAL CUBIC FEET PER MINUTE

Qaw = (60/144) * vs * A
= (60/144) * 70.78 * 4778
= 140917

VOLUMETRIC FLOW RATE, DRY STANDARD CUBIC FEET PER MINUTE

Qsd = (60/144) * Mfd * vs * A * (Tstd + 460)/(ts + 460) * (Ps/Pstd)
= (60/144) * 0.805 * 70.78 * 4778 * (68 + 460)/(290 + 460) * (29.83/29.92)
= 79654

TOTAL PCDD AND PCDFS, CONCENTRATION, NANOGRAMS PER DRY STANDARD CUBIC METER"

ng/DSCM = (Catch/Conversion) * 1,000,000,000 / (Vmstd * 0.02832)

= (66/1000000000) * 1,000,000,000 / (120.198* 0.02832)

= 19.34

TOTAL PCDD AND PCDFS, CONCENTRATION, NG/DSCM @ 12% CO2

ng@12%CO2 = ng/DSCM * 12 / %CO2

= 19.3 * 12 / 9.4

= 24.69

TOTAL PCDD AND PCDFS, CONCENTRATION, NG/DSCM @ 7% O2

ng@7%O2 = ng/DSCM * (20.9-7) / (20.9-%O2)

= 19.3 * (20.9-7 /(20.9- 10.2)

= 25.13

TOTAL PCDD AND PCDFS, EMISSION RATE, GRAMS PER SECOND

gms/sec = (Catch/Conversion) * Qsd / 60 / Vmstd

= (66/1000000000) * 79654 / 60 / 120.198

= 0.000000727

TOTAL PCDD AND PCDFS, EMISSION RATE, POUNDS PER HOUR

lb/hr = 60 * (Catch/Conversion) * Qsd / 453.592 / Vmstd

= 60*(66/1000000000) * 79654 / 453.592 / 120.198

= 0.000005771

APPENDIX C

FIELD DATA

METHOD 3 (ORSAT) FIELD DATA

Client	Ogden Energy Group	Job No.	10644
Plant Name	OMS Lee	Fuel Type	Municipal Waste
City/State	Ft. Myers, FL		
Sampling Location	Unit 1 Stack		

Operator: SCG

Run/Sample No. 1-O-M23-1 | Date 8/18/99 | Leak Check OK? Yes

Time of Sample Collection	Time of Analysis	CO_2 Reading (A)	O_2 Reading (B)	% O_2 (B-A)	Concurrent Runs to Share Orsat Data
1212	1630	9.5	19.8	10.3	
to	1637	9.3	19.5	10.2	
1622	1645	9.4	19.6	10.2	
	Average	9.4	Average	10.2	

Orsat I.D. 4 | Tedlar Bag I.D. B142 | F_o 1.135

Operator: SCG

Run/Sample No. 1-O-M23-2 | Date 8/19/99 | Leak Check OK? Yes

Time of Sample Collection	Time of Analysis	CO_2 Reading (A)	O_2 Reading (B)	% O_2 (B-A)	Concurrent Runs to Share Orsat Data
712	1122	9.2	19.6	10.4	
to	1130	9.2	19.4	10.2	
1120	1138	9.2	19.5	10.3	
	Average	9.2	Average	10.3	

Orsat I.D. 4 | Tedlar Bag I.D. B120 | F_o 1.152

Operator: SCG

Run/Sample No. 1-O-M23-3 | Date 8/19/99 | Leak Check OK? Yes

Time of Sample Collection	Time of Analysis	CO_2 Reading (A)	O_2 Reading (B)	% O_2 (B-A)	Concurrent Runs to Share Orsat Data
1143	1604	9.6	19.7	10.1	
to	1612	9.6	19.7	10.1	
1558	1620	9.6	19.7	10.1	
	Average	9.6	Average	10.1	

Orsat I.D. 4 | Tedlar Bag I.D. B6 | F_o 1.125

Reviewer SCG

AirKinetics, Inc.

ISOKINETIC SAMPLING TRAIN DATASHEET - METH EPA 23

Client Name	OGDEN ENERGY GROUP	Run #	1-S-M23-1		
Plant Name	OMS OF LEE,INC.	Project #	10644	Run Start	1212
Plant City, State	FORT MYERS, FL	Personnel	MC	Run End	1622
Test Location	UNIT 1	Tester Signature			
Date of Test	8/18/99	Checked By			

Isokinetic Factor Setup		Pressures		Sampling Equipment		Filter ID & Tare		Actuals
ΔH @ 0.75 SCFM	1.72	Pbar	29.9	Meter Console #	MB9	NA	NA	CO_2
Meter Calibration Factor	1.0038	Pstatic	-1.00	Ideal Nozzle Diameter	0.234			9.4
Pitot Tube Coefficient	0.840	Abs P	29.8	Nozzle #	C011			O_2
Estimated Dry Gas Meter Temp	100	Tstd, °F	68	Actual Nozzle Diameter	0.193			10.2
Estimated Stack Temp or M2 Avg.	290	Pstd	29.92	Probe Lgth/ID # 8	8-2			CO
Estimated Delta P or M2 Avg.	1.100	Estimates		Liner Material	G	XAD ID & Tares		0.0
Estimated Moisture Content	17.0	CO_2	8.0	Filter Box #	NA	SM23	337.2	N_2
Estimated Dry Molecular Weight	29.68	O_2	10.0	Cold Box ID #	NA			80.4
Estimated Velocity, ft/sec	71.8	CO	0.0	Umbilical ID #	NA			H_2O
K Factor (delta H/delta P)	0.78	N_2	82.0	TC ID #s	8-2			617.4

Equipment & Leak Check Data, OK? Y or N					Leak Checks	1	2	3	4	5	6	Status
Tambien	93	94	PRE	POST	DGM initial		109.280					109.280
Thermocouples			Y	Y	Vacuum	15	10	10				15
Pitots			Y	Y	Leak Rate	0.002	0.002	0.002				OK
Tedlar Bag	B142		Y	Y	DGM final		109.300					109.300

Point #	Clock Time	Test Time	Dry Gas Meter Reading	Velocit Head	Desired Orifice ΔH	Actual Orifice ΔH	Pump Vac.	DGM Inlet Temp	DGM Outlet Temp	Stack Temp	Filter Temp	Imp. Exit Temp	Cond. Exit Temp
	24 hr	min	ft^3	in H_2O	in H_2O	in H_2O	in Hg	°F	°F	°F	°F	°F	°F
A 1	1212	0.0	47.320	0.82	0.64	0.64	5	93	93	288	245	49	48
A 1		5.0	49.600	0.85	0.66	0.66	5	94	93	288	245	49	48
A 1		10.0	51.920	0.87	0.68	0.68	5	95	93	289	246	49	48
A 1		15.0	54.270	0.89	0.70	0.70	5	96	94	289	246	50	48
A 2		20.0	56.630	0.90	0.70	0.70	5	97	94	289	247	50	49
A 2		25.0	58.990	0.95	0.74	0.74	5	98	95	290	247	50	49
A 2		30.0	61.450	0.98	0.77	0.77	5	98	95	290	248	50	50
A 2		35.0	64.020	1.00	0.78	0.78	5	99	95	290	248	50	50
A 3		40.0	66.570	0.98	0.77	0.77	5	99	95	290	249	50	50
A 3		45.0	69.080	1.00	0.78	0.78	5	99	95	291	249	51	51
A 3		50.0	71.660	1.05	0.82	0.82	5	100	96	291	250	51	51
A 3		55.0	74.300	1.05	0.82	0.82	5	100	96	291	251	51	51
A 4		60.0	76.910	1.08	0.84	0.84	5	100	96	291	252	51	52
A 4		65.0	79.510	1.10	0.86	0.86	5	100	96	289	253	51	52
A 4		70.0	82.100	1.15	0.90	0.90	6	100	96	289	254	52	53
A 4		75.0	84.840	1.15	0.90	0.90	6	101	96	289	255	52	53
A 5		80.0	87.620	1.20	0.94	0.94	6	101	96	289	257	52	52
A 5		85.0	90.440	1.20	0.94	0.94	6	101	96	290	259	52	52
A 5		90.0	93.280	1.20	0.94	0.94	6	101	96	290	263	52	51
A 5		95.0	96.030	1.20	0.94	0.94	6	101	96	290	265	53	51
A 6		100.0	98.800	1.10	0.86	0.86	6	102	97	290	265	53	51
A 6		105.0	101.490	1.05	0.82	0.82	6	102	97	289	266	53	51
A 6		110.0	104.090	1.00	0.78	0.78	6	102	97	289	267	53	50
A 6		115.0	106.680	1.00	0.78	0.78	6	102	97	289	266	54	50

Point #	Clock Time	Test Time	Dry Gas Meter Reading	Velocit Head	Desired Orifice ΔH	Actual Orifice ΔH	Pump Vac.	DGM Inlet Temp	DGM Outlet Temp	Stack Temp	Filter Temp	Imp. Exit Temp	Cond. Exit Temp
	24 hr	min	ft^3	in H_2O	in H_2O	in H_2O	in Hg	°F	°F	°F	°F	°F	°F
B 1		120.0	109.280	0.98	0.77	0.77	6	102	97	288	258	54	50
B 1		125.0	111.840	0.98	0.77	0.77	6	103	98	290	258	54	50
B 1		130.0	114.420	1.00	0.78	0.78	6	103	98	290	258	54	51
B 1		135.0	117.010	0.95	0.74	0.74	6	103	98	290	257	54	51
B 2		140.0	119.510	1.00	0.78	0.78	6	103	98	290	257	55	52
B 2		145.0	122.060	1.00	0.78	0.78	7	103	98	290	257	55	52
B 2		150.0	124.660	1.10	0.86	0.86	7	104	99	290	256	55	52
B 2		155.0	127.310	1.05	0.82	0.82	7	104	99	290	256	55	52
B 3		160.0	129.920	1.10	0.86	0.86	7	104	99	290	256	55	52
B 3		165.0	132.630	1.10	0.86	0.86	7	104	99	290	255	55	53
B 3		170.0	135.320	1.15	0.90	0.90	7	104	99	290	255	54	53
B 3		175.0	138.060	1.15	0.90	0.90	7	105	100	290	255	54	53
B 4		180.0	140.830	1.20	0.94	0.94	7	105	100	290	257	54	54
B 4		185.0	143.660	1.20	0.94	0.94	7	105	100	291	257	53	54
B 4		190.0	146.420	1.30	1.02	1.02	7	105	100	291	257	53	54
B 4		195.0	149.380	1.30	1.02	1.02	7	105	100	291	257	53	55
B 5		200.0	152.310	1.20	0.94	0.94	7	106	101	291	256	52	55
B 5		205.0	155.160	1.20	0.94	0.94	7	106	101	291	256	52	52
B 5		210.0	158.020	1.20	0.94	0.94	7	106	101	291	256	52	52
B 5		215.0	160.820	1.20	0.94	0.94	7	107	101	290	256	51	52
B 6		220.0	163.610	1.10	0.86	0.86	7	107	101	290	255	51	51
B 6		225.0	166.330	1.00	0.78	0.78	8	107	102	290	255	51	51
B 6		230.0	168.900	1.10	0.86	0.86	8	108	102	290	255	50	50
B 6		235.0	171.550	1.00	0.78	0.78	8	108	102	290	254	50	50
-	1622	240.0	174.170										
Final Reading		240.0											
Average Values		240.0	126.830	1.066	0.84	0.84	8	102.0	97.6	289.9			

ISOKINETIC SAMPLING TRAIN DATASHEET - METH EPA 23

Client Name	OGDEN ENERGY GROUP	Run #	1-S-M23-2		
Plant Name	OMS OF LEE,INC.	Project #	10644	Run Start	712
Plant City, State	FORT MYERS, FL.	Personnel	MC	Run End	1120
Test Location	UNIT 1	Tester Signature			
Date of Test	8/19/99	Checked By			

Isokinetic Factor Setup		Pressures		Sampling Equipment		Filter ID & Tare		Actuals
ΔH @ 0.75 SCFM	1.72	Pbar	29.9	Meter Console #	MB9			CO_2
Meter Calibration Factor	1.0038	Pstatic	-1.00	Ideal Nozzle Diameter	0.234			9.2
Pitot Tube Coefficient	0.840	Abs P	29.8	Nozzle #	C011			O_2
Estimated Dry Gas Meter Temp	100	Tstd, °F	68	Actual Nozzle Diameter	0.193			10.3
Estimated Stack Temp or M2 Avg.	290	Pstd	29.92	Probe Lgth/ID # 8	1			CO
Estimated Delta P or M2 Avg.	1.100	Estimates		Liner Material	G	XAD ID & Tares		0.0
Estimated Moisture Content	17.0	CO_2	8.0	Filter Box #	NA	SM23	370.2	N_2
Estimated Dry Molecular Weight	29.68	O_2	10.0	Cold Box ID #	NA			80.5
Estimated Velocity, ft/sec	71.8	CO	0.0	Umbilical ID #	NA			H_2O
K Factor (delta H/delta P)	0.78	N_2	82.0	TC ID #s	S-1			640.9

Equipment & Leak Check Data, OK? Y or N					Leak Checks	1	2	3	4	5	6	Status
Tambien	93	96	PRE	POST	DGM initial		210.510					210.510
Thermocouples			Y	Y	Vacuum	15	10	10				15
Pitots			Y	Y	Leak Rate	0.002	0.002	0.002				OK
Tedlar Bag		B120	Y	Y	DGM final		210.525					210.525

Point #	Clock Time	Test Time	Dry Gas Meter Reading	Velocit Head	Desired Orifice ΔH	Actual Orifice ΔH	Pump Vac.	DGM Inlet Temp	DGM Outlet Temp	Stack Temp	Filter Temp	Imp. Exit Temp	Cond. Exit Temp
	24 hr	min	ft^3	in H_2O	in H_2O	in H_2O	in Hg	°F	°F	°F	°F	°F	°F
A 1	712	0.0	147.250	0.95	0.74	0.74	5	93	91	288	250	40	37
A 1		5.0	149.700	0.97	0.76	0.76	5	93	91	289	251	40	37
A 1		10.0	152.210	0.98	0.77	0.77	5	93	91	289	250	40	37
A 1		15.0	154.720	0.98	0.77	0.77	5	93	91	289	251	40	39
A 2		20.0	157.250	1.00	0.78	0.78	5	93	91	289	252	41	39
A 2		25.0	159.730	1.00	0.78	0.78	5	94	92	289	252	41	40
A 2		30.0	162.320	1.00	0.78	0.78	5	94	92	290	253	41	40
A 2		35.0	164.900	1.00	0.78	0.78	5	94	92	290	253	42	40
A 3		40.0	167.380	1.10	0.86	0.86	5	94	92	290	254	42	41
A 3		45.0	170.050	1.10	0.86	0.86	5	94	92	290	254	43	42
A 3		50.0	172.740	1.00	0.78	0.78	5	95	93	290	254	44	42
A 3		55.0	175.270	1.10	0.86	0.86	5	95	93	290	255	44	42
A 4		60.0	178.010	1.10	0.86	0.86	5	95	93	290	255	44	42
A 4		65.0	180.710	1.15	0.90	0.90	5	95	93	289	255	45	43
A 4		70.0	183.400	1.15	0.90	0.90	5	95	93	289	255	45	44
A 4		75.0	186.110	1.15	0.90	0.90	5	96	93	289	254	45	44
A 5		80.0	188.820	1.15	0.90	0.90	5	96	93	289	254	46	45
A 5		85.0	191.620	1.20	0.94	0.94	5	96	93	289	253	46	45
A 5		90.0	194.420	1.20	0.94	0.94	5	96	93	290	252	47	45
A 5		95.0	197.230	1.20	0.94	0.94	5	96	93	290	252	47	46
A 6		100.0	200.000	1.10	0.86	0.86	5	97	93	289	254	48	46
A 6		105.0	202.690	1.10	0.86	0.86	5	97	93	289	254	47	46
A 6		110.0	205.380	1.10	0.86	0.86	5	97	93	290	255	48	47
A 6		115.0	208.020	1.00	0.78	0.78	5	97	93	290	255	49	48

Point #	Clock Time	Test Time	Dry Gas Meter Reading	Velocit Head	Desired Orifice ΔH	Actual Orifice ΔH	Pump Vac.	DGM Inlet Temp	DGM Outlet Temp	Stack Temp	Filter Temp	Imp. Exit Temp	Cond. Exit Temp
	24 hr	min	ft^3	in H_2O	in H_2O	in H_2O	in Hg	°F	°F	°F	°F	°F	°F
B 1		120.0	210.510	0.98	0.77	0.77	5	97	93	289	256	49	48
B 1		125.0	213.060	0.98	0.77	0.77	5	98	93	289	256	50	48
B 1		130.0	215.620	1.00	0.78	0.78	5	98	94	289	255	50	48
B 1		135.0	218.210	1.00	0.78	0.78	5	98	94	290	255	50	48
B 2		140.0	220.800	1.10	0.86	0.86	5	98	94	290	255	51	49
B 2		145.0	223.480	1.10	0.86	0.86	5	98	94	289	256	51	49
B 2		150.0	226.110	1.00	0.78	0.78	5	99	94	289	255	52	50
B 2		155.0	228.600	1.00	0.78	0.78	5	99	95	290	255	52	50
B 3		160.0	231.180	1.15	0.90	0.90	5	99	95	289	256	52	50
B 3		165.0	234.010	1.20	0.94	0.94	5	99	95	290	256	53	51
B 3		170.0	236.910	1.20	0.94	0.94	5	99	95	289	254	53	51
B 3		175.0	239.720	1.15	0.90	0.90	5	100	95	290	254	54	52
B 4		180.0	242.500	1.20	0.94	0.94	5	100	95	290	254	54	52
B 4		185.0	245.240	1.20	0.94	0.94	5	100	95	290	256	55	52
B 4		190.0	248.080	1.20	0.94	0.94	5	101	95	289	256	55	52
B 4		195.0	250.910	1.15	0.90	0.90	5	101	95	289	256	56	52
B 5		200.0	253.570	1.15	0.90	0.90	5	101	95	289	257	56	52
B 5		205.0	256.350	1.20	0.94	0.94	5	101	95	289	255	56	53
B 5		210.0	259.170	1.20	0.94	0.94	5	102	96	290	255	55	53
B 5		215.0	261.940	1.20	0.94	0.94	5	102	96	290	254	56	54
B 6		220.0	264.720	1.15	0.90	0.90	5	102	96	290	254	57	54
B 6		225.0	267.500	1.10	0.86	0.86	5	103	96	290	254	57	55
B 6		230.0	270.190	1.00	0.78	0.78	5	103	96	290	255	57	55
B 6		235.0	272.750	1.00	0.78	0.78	5	103	97	290	255	57	55
-	1120	240.0	275.300										
Final Reading		240.0											
Average Values		240.0	128.035	1.090	0.85	0.85	5	97	94	289			

ISOKINETIC SAMPLING TRAIN DATASHEET - METH EPA 23

Client Name	OGDEN ENERGY GROUP	Run #	1-S-M23-3		
Plant Name	OMS OF LEE,INC.	Project #	10644	Run Start	1143
Plant City, State	FORT MYERS, FL	Personnel	MC	Run End	1558
Test Location	UNIT 1	Tester Signature			
Date of Test	8/19/99	Checked By			

Isokinetic Factor Setup		Pressures		Sampling Equipment		Filter ID & Tare		Actuals
ΔH @ 0.75 SCFM	1.72	Pbar	29.9	Meter Console #	MB9			CO_2
Meter Calibration Factor	1.0038	Pstatic	-1.00	Ideal Nozzle Diameter	0.237			9.6
Pitot Tube Coefficient	0.840	Abs P	29.8	Nozzle #	D024			O_2
Estimated Dry Gas Meter Temp	100	Tstd, °F	68	Actual Nozzle Diameter	0.216			10.1
Estimated Stack Temp or M2 Avg.	290	Pstd	29.92	Probe Lgth/ID # 8	~~8-1~~ 8-2			CO
Estimated Delta P or M2 Avg.	1.100	Estimates		Liner Material	G	XAD ID & Tares		0.0
Estimated Moisture Content	19.0	CO_2	8.0	Filter Box #	NA	m23-3	345	N_2
Estimated Dry Molecular Weight	29.68	O_2	10.0	Cold Box ID #	NA			80.3
Estimated Velocity, ft/sec	72.1	CO	0.0	Umbilical ID #	NA			H_2O
K Factor (delta H/delta P)	1.18	N_2	82.0	TC ID #s	8-1			~~906.6~~ 905.5

Equipment & Leak Check Data, OK? Y or N					Leak Checks	1	2	3	4	5	6	Status
Tambien	96	94	PRE	POST	DGM initial		385.110					385.110
Thermocouples			Y	Y	Vacuum	15	10	10				15
Pitots			Y	Y	Leak Rate	0.002	0.002	0.002				OK
Tedlar Bag		B-6	Y	Y	DGM final		385.140					385.140

Point #	Clock Time	Test Time	Dry Gas Meter Reading	Velocit Head	Desired Orifice ΔH	Actual Orifice ΔH	Pump Vac.	DGM Inlet Temp	DGM Outlet Temp	Stack Temp	Filter Temp	Imp. Exit Temp	Cond. Exit Temp
	24 hr	min	ft^3	in H_2O	in H_2O	in H_2O	in Hg	°F	°F	°F	°F	°F	°F
A 1	1143	0.0	305.000	0.98	1.16	1.20	5	99	94	289	251	47	47
A 1		5.0	308.180	1.00	1.18	1.23	5	99	94	289	251	47	47
A 1		10.0	311.320	1.00	1.18	1.23	5	100	94	290	250	48	48
A 1		15.0	314.500	1.00	1.18	1.23	5	100	95	290	253	48	48
A 2		20.0	317.710	1.10	1.30	1.35	5	101	95	289	253	48	48
A 2		25.0	321.070	1.00	1.18	1.23	5	101	95	289	252	49	49
A 2		30.0	324.260	1.05	1.24	1.29	5	102	96	288	253	49	49
A 2		35.0	327.510	1.10	1.30	1.35	5	103	96	289	253	49	49
A 3		40.0	330.920	1.10	1.30	1.35	5	103	96	289	253	49	50
A 3		45.0	334.260	1.10	1.30	1.35	5	103	96	289	254	49	50
A 3		50.0	337.650	1.15	1.36	1.41	5	104	96	290	255	49	50
A 3		55.0	340.990	1.15	1.36	1.41	5	104	96	290	255	49	51
A 4		60.0	344.360	1.15	1.36	1.41	5	104	96	290	256	49	51
A 4		65.0	347.770	1.20	1.41	1.47	5	105	97	290	255	50	52
A 4		70.0	351.150	1.20	1.41	1.47	5	105	97	289	253	50	52
A 4		75.0	354.690	1.20	1.41	1.47	5	105	98	289	256	47	52
A 5		80.0	358.070	1.10	1.30	1.35	5	105	99	290	257	44	52
A 5		85.0	361.470	1.10	1.30	1.35	5	105	99	290	254	47	52
A 5		90.0	365.000	1.15	1.36	1.41	5	106	99	290	254	48	50
A 5		95.0	368.510	1.20	1.41	1.47	5	106	99	289	255	50	50
A 6		100.0	371.940	1.05	1.24	1.29	5	106	99	289	255	50	50
A 6		105.0	375.100	1.05	1.24	1.29	5	106	99	289	254	50	50
A 6		110.0	378.440	1.00	1.18	1.23	5	106	99	290	254	53	51
A 6		115.0	381.800	1.00	1.18	1.23	5	106	99	290	257	54	57

Point #	Clock Time	Test Time	Dry Gas Meter Reading	Velocit Head	Desired Orifice ΔH	Actual Orifice ΔH	Pump Vac.	DGM Inlet Temp	DGM Outlet Temp	Stack Temp	Filter Temp	Imp. Exit Temp	Cond. Exit Temp
	24 hr	min	ft^3	in H_2O	in H_2O	in H_2O	in Hg	°F	°F	°F	°F	°F	°F
B 1		120.0	385.110	0.95	1.12	1.12	5	101	98	290	255	54	47
B 1		125.0	388.100	0.98	1.16	1.16	5	101	98	290	255	55	47
B 1		130.0	391.180	1.00	1.18	1.18	5	101	98	290	255	50	48
B 1		135.0	394.220	1.00	1.18	1.18	5	100	97	291	254	48	49
B 2		140.0	397.310	1.00	1.18	1.18	5	99	96	290	254	52	51
B 2		145.0	400.400	1.10	1.30	1.30	5	98	95	290	254	52	51
B 2		150.0	403.450	1.15	1.36	1.36	5	98	95	290	255	52	52
B 2		155.0	406.810	1.10	1.30	1.30	5	99	95	290	255	52	52
B 3		160.0	410.100	1.05	1.24	1.24	5	99	94	290	253	51	53
B 3		165.0	413.320	1.05	1.24	1.24	5	99	93	290	255	47	48
B 3		170.0	416.600	1.10	1.30	1.30	5	99	93	290	254	50	46
B 3		175.0	419.980	1.10	1.30	1.30	5	99	93	290	254	50	46
B 4		180.0	423.400	1.15	1.36	1.36	5	99	93	290	256	46	47
B 4		185.0	426.880	1.15	1.36	1.36	5	99	93	289	254	45	47
B 4		190.0	430.350	1.20	1.41	1.41	5	99	93	289	254	44	47
B 4		195.0	433.770	1.25	1.47	1.47	5	99	93	289	254	45	46
B 5		200.0	437.300	1.20	1.41	1.41	5	99	94	289	254	46	49
B 5		205.0	440.730	1.20	1.41	1.41	5	99	93	290	255	43	50
B 5		210.0	444.210	1.15	1.36	1.36	5	100	93	290	255	43	51
B 5		215.0	447.620	1.10	1.30	1.30	5	100	93	290	254	44	52
B 6		220.0	450.840	1.05	1.24	1.24	5	100	93	290	255	44	52
B 6		225.0	454.050	1.00	1.18	1.18	5	100	93	291	255	44	51
B 6		230.0	457.150	1.00	1.18	1.18	5	100	93	291	254	44	51
B 6		235.0	460.320	1.10	1.30	1.30	5	99	93	290	256	43	46
-	1558	240.0	463.550										
-													
-													
-													
-													
-													
-													
-													
-													
-													
-													
Final Reading		240.0											
Average Values		240.0	158.520	1.087	1.28	1.31	5	101	96	290			

APPENDIX D

ANALYTICAL DATA

MOISTURE ANALYTICAL RESULTS - METHOD EPA 23

Plant Name: OMS Lee — Job No. 10644

City/State: Ft. Myers, Fl — Sampling Location: Unit No. 1 Outlet

Run Number	1-S-M23-1	1-S-M23-1	1-S-M23-1
Sampling Date	8/18/99	8/19/99	8/19/99
Analysis Date	8/18/99	8/19/99	8/19/99
Analyst	SCG	SCG	SCG

Reagent: DI H2O

Final Weight, g	690.0	698.0	968.0
Tared Weight, g	100.0	100.0	100.0
Water Catch, g	590.0	598.0	868.0

Reagent: XAD

Final Weight, g	342.4	375.4	351.0
Tared Weight, g	337.2	370.2	344.5
Water Catch, g	5.2	5.2	6.5

Reagent: _____

Final Weight, g			
_____ ml used, g*			
Empty Tared Weight, g			
Water Catch, g			

*Weight of Reagent calculated by multiplying ml of $KMnO_4$ by density of 1.1 g/ml

CONDENSED WATER, g	595.2	603.2	874.5

Silica Gel

Final Weight, g	422.2	437.7	431.0
Tared Weight, g	400.0	400.0	400.0
ADSORBED WATER, g	22.2	37.7	31.0

TOTAL WATER COLLECTED, g	617.4	640.9	905.5

Balance No. V-1200 ☐ Triple Beam ☒ Electronic

Balance located in stable, draft-free area? ☒ Yes ☐ No

Comments _____

Reviewer SCG

AirKinetics, Inc.

Box No. NA Assembly Date NA Assembled By NA

Client Ogden Energy Group Job No. 10CAA

Plant OMS Lee City / State Ft. Myers, FL

Sampling Location Unit 1 Stack Method EPA 23

Individual Tare of Reagent 100 (ml) (gm) of DI H2O

Individual Tare of Reagent _____ (ml) (gm) of _____

Individual Tare of Reagent _____ (ml) (gm) of _____

Individual Tare of Silca Gel _____ gm _____

Other (specify)

Run Number	Run Date	Filter or XAD Number	Filter or XAD Tare, grams	Liquid Tare at Mark?	Inits.	Sample Recovery Date	% Sil. Gel Spent	Liquid Level Marked	Initials
1-S-M23-1	8/18	1-S-M23-1	337.2	✓	SG	8/18	50	✓	SG
1-S-M23-2	8/19	1-S-M23-2	370.2	✓	SG	8/19	50	✓	SG
1-S-M23-3	8/19	1-S-M23-3	394.5	✓	SG	8/19	75	✓	SG

Filter Appearance* Clean

Reagent Appearance* Clear

Filter Appearance* Clean

Reagent Appearance* Clear

Filter Appearance* Clean

Reagent Appearance* Clear

Filter Appearance*

Reagent Appearance*

* Use "REMARKS" section if needed.

All liquid levels at mark? (circle) (YES) NO (estimate loss if not at mark; use "REMARKS" section if needed.)

REMARKS _____

PARADIGM ANALYTICAL LABORATORIES, INC.
2627 Northchase Parkway S.E.
Wilmington, North Carolina 28405
(910) 350-1903
Fax (910) 350-1557

24 AUG 99

Tony Wong
AirKinetics, Inc.
5932 Bolsa Avenue
Suite 105
Huntington Beach, CA 92649

Ph.: 714-373-0998
Fax: 714-895-1915

Subject: Polychlorinated Dibenzo-*p*-Dioxins & Dibenzofurans Measurements

Dear Tony;

Enclosed are the final results for the flue gas samples under your Project **"OMS - Lee"**. The analytical procedures conformed to or exceeded the ones described in Method 23 using isotope-dilution high-resolution gas chromatography combined with high-resolution mass spectrometry. The **Level II** reporting format is described on the next page.

A general summary of the analytical results is presented in Table 1. Figures 1and 2 show the TEQs and total homologues corresponding to Table 1 data. The TEQs are computed using the ITEFs (Table 2).

No. of Samples Received:	**4**
No. of Samples Analyzed:	**4**
No. of Lab. Method Blanks:	**1**
Your Project Number:	**OMS - Lee**
PAL Project No.:	**G370-4**

Remarks:

- **Data meet QA/QC requirements.**

We wanted to thank you for the opportunity to serve you. Please, feel free to contact us if you have questions or should you need additional technical support.

Sincerely,

Yves Tondeur, Ph.D.

Level II Report

Section 1: **Cover Letter**, contains a brief description of the project, the client and PAL Project Numbers, the number and type of samples, the methodology used to process the samples, QC remarks where any analytical difficulties are discussed and the impact on the quality of the data presented, a summary table with the analyte concentrations, detection limits, the client sample identification numbers, units to report the concentrations, and a graphical representation of the TEQs and totals.

Section 2: **Project Synopsis**, contains the Sample Tracking & Management Forms, Communications Form, any correspondence, chain-of-custody and the last page is always a copy of the sample injection log(s). This section is designed to help the laboratory and the data reviewer with an overall view of the entire analytical procedure, the initials and dates of who did what when on which sample. Spiking solution IDs are recorded along with the batch numbers of the supplies and reagents used.

Section 3: **Analytical Results**, contains the sample results topsheets (one set of two per sample), the raw data (i.e., the selected ion current profiles, the areas, heights, ion abundance ratios, signal-to-noise ratios, and retention times of the GC peaks).

Section 4: **System Performance**, contains the documentation on the GC/MS system performance. In particular, the mass resolution checks, GC column performance checks, initial and continuing calibration summary tables and, when applicable, associated raw data.

Table 1: Analyte Concentrations in "ng" per Sampling Train

Analyte	LMB	1-S-M23-1	1-S-M23-2	1-S-M23-3	1-S-M23-FB
2,3,7,8-TCDD	(0.0025)	0.137	0.158	0.193	[0.00327]
1,2,3,7,8-PeCDD	(0.0021)	0.323	0.341	0.438	[0.00484]
1,2,3,4,7,8-HxCDD	(0.0037)	0.185	0.172	0.208	0.0046
1,2,3,6,7,8-HxCDD	(0.0036)	0.411	0.355	0.420	0.0088
1,2,3,7,8,9-HxCDD	(0.0034)	0.340	0.278	0.341	0.0079
1,2,3,4,6,7,8-HpCDD	(0.0040)	2.50	1.60	1.74	0.0646
OCDD	0.0110	4.92	2.51	2.37	0.105
2,3,7,8-TCDF[a]	(0.0018)	0.586	0.971	1.21	0.0036
1,2,3,7,8-PeCDF	(0.0010)	0.962	1.28	1.69	0.0064
2,3,4,7,8-PeCDF	(0.0010)	0.964	1.25	1.59	0.0074
1,2,3,4,7,8-HxCDF	(0.0010)	0.789	0.882	1.24	0.0065
1,2,3,6,7,8-HxCDF	(0.0010)	0.869	0.986	1.34	0.0067
2,3,4,6,7,8-HxCDF	(0.0010)	0.680	0.731	0.977	0.0059
1,2,3,7,8,9-HxCDF	(0.0010)	0.146	0.148	0.193	(0.0011)
1,2,3,4,6,7,8-HpCDF	(0.0013)	1.86	1.87	2.23	0.0168
1,2,3,4,7,8,9-HpCDF	(0.0017)	0.195	0.146	0.189	0.0023
OCDF	(0.0026)	0.550	0.330	0.318	0.0082
Total TCDDs	(0.0025)	2.64	2.80	3.50	0.0053
Total PeCDDs	(0.0021)	3.82	3.74	4.62	0.0296
Total HxCDDs	(0.0034)	4.75	4.17	4.94	0.0586
Total HpCDDs	(0.0040)	4.93	3.14	3.42	0.121
Total TCDFs	(0.0018)	20.2	31.1	36.1	0.0280
Total PeCDFs	(0.0010)	13.6	20.3	25.5	0.0509
Total HxCDFs	(0.0010)	7.59	8.41	11.4	0.0450
Total HpCDFs	(0.0013)	2.84	2.69	3.24	0.0227
Total PCDD/Fs[b]	**0.0110**	**65.8**	**79.2**	**95.4**	**0.474**
TEQ (ND=0)[c]	0.0000	1.28	1.51	1.93	0.0094
TEQ (ND=1/2)[d]	0.0029	1.28	1.51	1.93	0.0105
TEQ EMPC (ND=0)[e]	0.0000	1.28	1.51	1.93	0.0150
TEQ EMPC (ND=1/2)	0.0029	1.28	1.51	1.93	0.0151

a) When applicable, result obtained from an isomer-specific analysis.
b) Total PCDD/Fs represent the sum of all polychlorinated dibenzo-p-dioxins & dibenzofurans.
c) TEQ computed using ITEF and setting non detected analytes with a "Zero" concentration.
d) TEQ computed using ITEF and setting non detected analytes with a concentration half the calculated detection limit.
e) TEQ computed using ITEF and setting the concentration of EMPC analytes to the EMPC value.

NOTE:

( ) = ND using DL value.
[ ] = EMPC value.

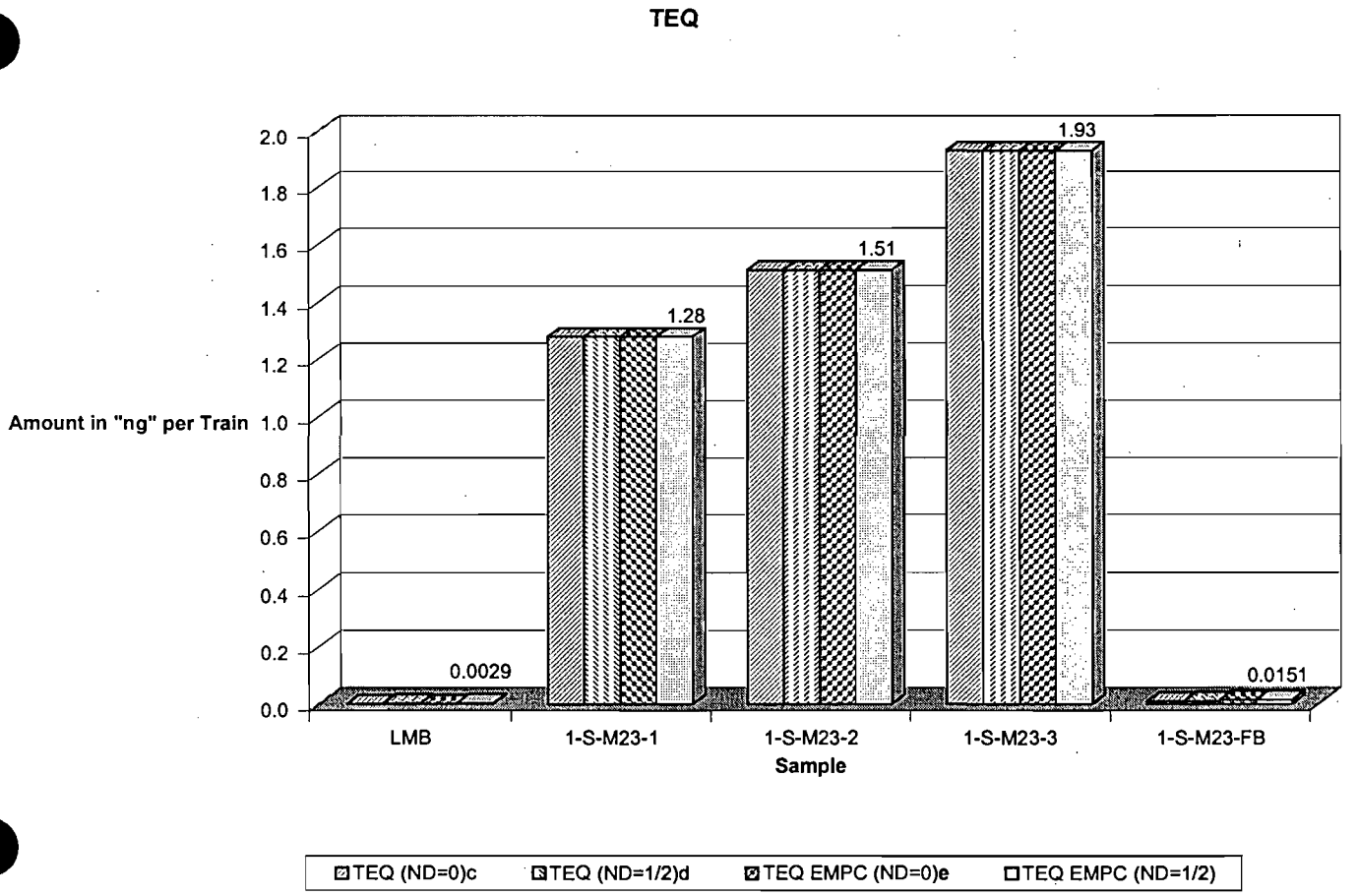


Figure 1: Graphical representation of the TEQs

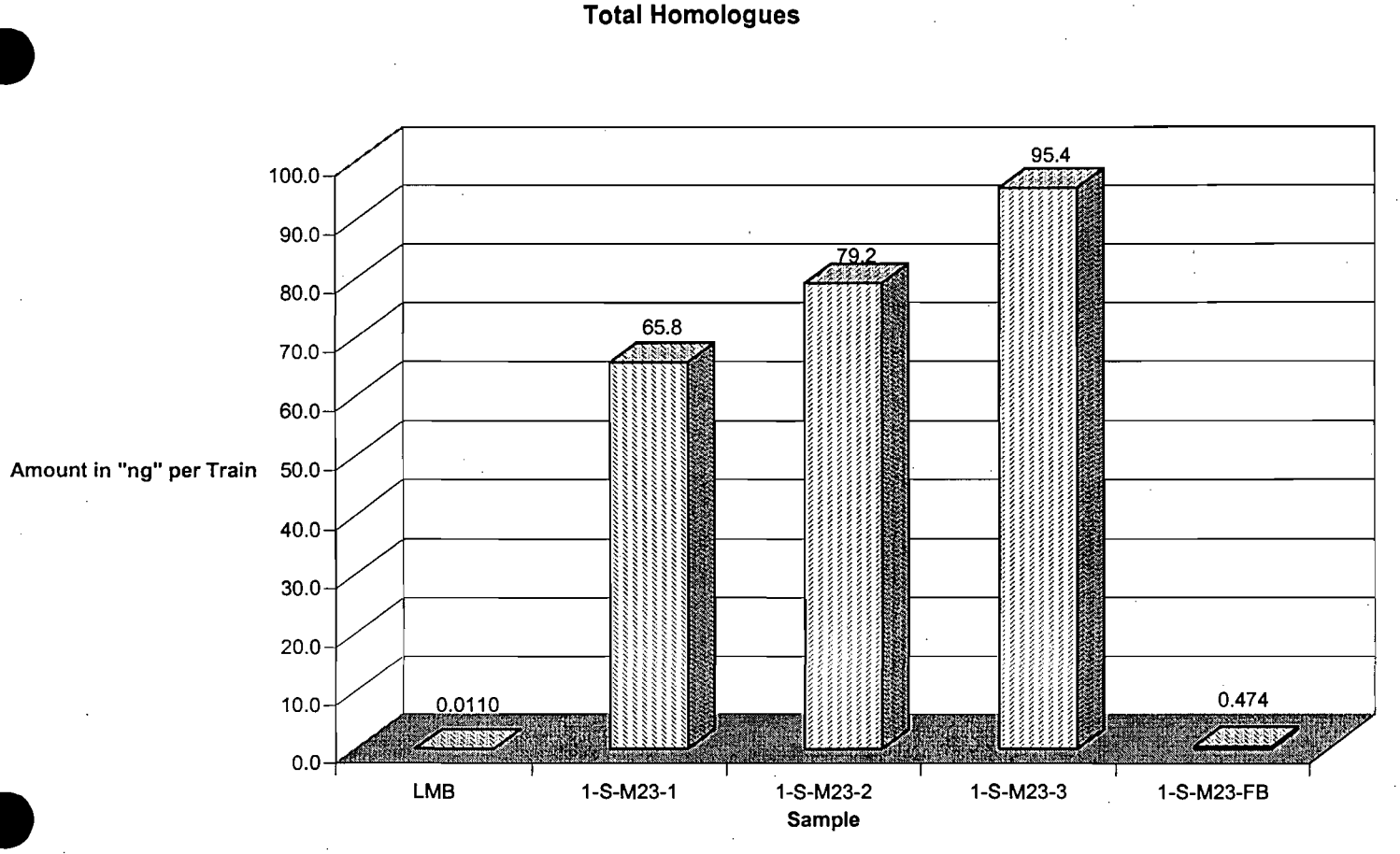


Figure 2: Graphical representation of the totals (tetra- through octachlorinated congeners)

Table 2: Toxic Equivalency Factors

Analyte	International TEF ITEF
2,3,7,8-TCDD	1
1,2,3,7,8-PeCDD	0.5
1,2,3,4,7,8-HxCDD	0.1
1,2,3,6,7,8-HxCDD	0.1
1,2,3,7,8,9-HxCDD	0.1
1,2,3,4,6,7,8-HpCDD	0.01
OCDD	0.001
2,3,7,8-TCDF	0.1
1,2,3,7,8-PeCDF	0.05
2,3,4,7,8-PeCDF	0.5
1,2,3,4,7,8-HxCDF	0.1
1,2,3,6,7,8-HxCDF	0.1
2,3,4,6,7,8-HxCDF	0.1
1,2,3,7,8,9-HxCDF	0.1
1,2,3,4,6,7,8-HpCDF	0.01
1,2,3,4,7,8,9-HpCDF	0.01
OCDF	0.001
Total TCDDs	0
Total PeCDDs	0
Total HxCDDs	0
Total HpCDDs	0
Total TCDFs	0
Total PeCDFs	0
Total HxCDFs	0
Total HpCDFs	0

APPENDIX E

EQUIPMENT CALIBRATION RECORDS

GLASS NOZZLE CALIBRATION
C (3/16 inch = 0.197 inches diameter)

Nozzle ID	Date	Calib. By	Dia. 1	Dia. 2	Dia. 3	Dia. 4	Dia. 5	Average	Inactive
C001	5/7/99	JO	0.190	0.191	0.191	0.191	0.191	**0.191**	
C002	5/7/99	JO	0.191	0.192	0.191	0.191	0.192	**0.191**	
C003	5/7/99	JO	0.192	0.192	0.192	0.191	0.192	**0.192**	
C004	5/7/99	JO	0.193	0.192	0.191	0.192	0.192	**0.192**	
C005	5/7/99	JO	0.193	0.192	0.191	0.191	0.191	**0.192**	
C006	5/7/99	JO	0.190	0.192	0.192	0.190	0.190	**0.191**	
C007	5/7/99	JO	0.193	0.192	0.191	0.191	0.192	**0.192**	
C008	5/7/99	JO	0.193	0.194	0.193	0.192	0.193	**0.193**	
C009	5/7/99	JO	0.190	0.191	0.191	0.190	0.190	**0.190**	
C010	5/7/99	JO	0.194	0.193	0.192	0.191	0.191	**0.192**	
C011	6/14/99	NP	0.193	0.192	0.193	0.192	0.193	**0.193**	
C012	6/14/99	NP	0.191	0.191	0.191	0.191	0.191	**0.191**	
C013	6/14/99	NP	0.191	0.191	0.192	0.191	0.192	**0.191**	
C014	6/14/99	NP	0.191	0.191	0.191	0.191	0.192	**0.191**	
C015	6/14/99	NP	0.191	0.191	0.192	0.191	0.192	**0.191**	
C016	6/14/99	NP	0.192	0.191	0.192	0.191	0.192	**0.192**	
C017	6/14/99	NP	0.192	0.191	0.191	0.192	0.192	**0.192**	
C018	6/14/99	NP	0.193	0.192	0.192	0.192	0.191	**0.192**	
C019	6/14/99	NP	0.192	0.192	0.191	0.192	0.192	**0.192**	
C020	6/14/99	NP	0.190	0.191	0.190	0.190	0.190	**0.190**	
C021								**#DIV/0!**	
C022								**#DIV/0!**	
C023								**#DIV/0!**	
C024								**#DIV/0!**	
C025								**#DIV/0!**	
C026								**#DIV/0!**	
C027								**#DIV/0!**	
C028								**#DIV/0!**	
C029								**#DIV/0!**	
C030								**#DIV/0!**	
C031								**#DIV/0!**	
C032								**#DIV/0!**	
C033								**#DIV/0!**	
C034								**#DIV/0!**	
C035								**#DIV/0!**	

Note: 1. All diameters measured in inches.
2. Maximum 0.004 from lowest to highest diameter.

GLASS NOZZLE CALIBRATION
D (7/32 inch = 0.220 inches diameter)

Nozzle ID	Date	Calib. By	Dia. 1	Dia. 2	Dia. 3	Dia. 4	Dia. 5	Average	Inactive
D001	2/4/99	NP	0.220	0.221	0.223	0.222	0.222	**0.222**	
D002	2/4/99	NP	0.222	0.222	0.222	0.221	0.221	**0.222**	
D003	2/4/99	NP	0.221	0.222	0.222	0.222	0.222	**0.222**	
D004	2/4/99	NP	0.222	0.223	0.223	0.223	0.223	**0.223**	
D005	2/4/99	NP	0.222	0.223	0.223	0.222	0.223	**0.223**	
D006	2/4/99	NP	0.222	0.222	0.224	0.224	0.222	**0.223**	
D007	2/4/99	NP	0.224	0.223	0.223	0.222	0.224	**0.223**	
D008	2/4/99	NP	0.224	0.224	0.225	0.225	0.224	**0.224**	
D009	2/4/99	NP	0.221	0.223	0.223	0.223	0.222	**0.222**	
D010	2/4/99	NP	0.224	0.226	0.225	0.226	0.225	**0.225**	
D011	2/4/99	NP	0.222	0.222	0.224	0.221	0.222	**0.222**	
D012	4/27/99	AG	0.225	0.225	0.224	0.226	0.225	**0.225**	
D013	4/27/99	AG	0.222	0.223	0.223	0.223	0.224	**0.223**	
D014	4/27/99	AG	0.223	0.223	0.223	0.221	0.222	**0.222**	
D015	4/27/99	AG	0.216	0.216	0.216	0.215	0.218	**0.216**	
D016	4/27/99	AG	0.209	0.209	0.209	0.208	0.207	**0.208**	
D017	4/27/99	AG	0.216	0.216	0.216	0.216	0.214	**0.216**	
D018	4/27/99	AG	0.215	0.215	0.217	0.217	0.217	**0.216**	
D019	4/27/99	AG	0.216	0.217	0.218	0.218	0.218	**0.217**	
D020	4/27/99	AG	0.215	0.216	0.216	0.216	0.216	**0.216**	
D021	4/27/99	AG	0.213	0.214	0.216	0.215	0.216	**0.215**	
D022	6/14/99	NP	0.225	0.225	0.223	0.225	0.223	**0.224**	
D023	6/14/99	NP	0.216	0.216	0.216	0.216	0.216	**0.216**	
D024	6/14/99	NP	0.217	0.216	0.217	0.216	0.216	**0.216**	
D025	6/14/99	NP	0.216	0.217	0.216	0.216	0.216	**0.216**	
D026	6/14/99	NP	0.225	0.225	0.224	0.224	0.224	**0.224**	
D027	6/14/99	NP	0.224	0.226	0.225	0.226	0.225	**0.225**	
D028	6/14/99	NP	0.225	0.225	0.223	0.224	0.225	**0.224**	
D029	6/14/99	NP	0.224	0.225	0.225	0.225	0.225	**0.225**	
D030	6/14/99	NP	0.225	0.226	0.225	0.225	0.226	**0.225**	
D031								**#DIV/0!**	
D032								**#DIV/0!**	
D033								**#DIV/0!**	
D034								**#DIV/0!**	
D035								**#DIV/0!**	

Note: 1. All diameters measured in inches.
2. Maximum 0.004 from lowest to highest diameter.

Isokinetic Meterbox Full-Test Calibration

Meterbox ID: MB9
Calibrated by: AG
Date: 4/14/99

Range	Low			Low Medium			Medium			High		
Run No.	1A		1B	1A		1B	2A		2B	3A		3B
Stand. Crit. Orifice (SCRIT)												
SCRIT ID#	48	48	48	55	55	55	63	63	63	73	73	73
SCRIT K' Factor	0.3522	0.3522	0.3522	0.4657	0.4657	0.4657	0.5962	0.5962	0.5962	0.8213	0.8213	0.8213
Min. SCRIT Vac., V_{cr} in. Hg	15	15	15	15	15	15	14	14	14	14	14	14
Amb Temp, t_{amb} °F	64	64	64	64	64	64	64	64	64	64	64	64
Bar. Pressure, Pb in. Hg	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25
Meterbox (MB)												
Leak-check OK? *(Y or N)*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MB Orifice Delta H in. H2O	0.63	0.63	0.63	1.15	1.15	1.15	1.92	1.92	1.92	3.65	3.65	3.65
Initial MB Vol. Reading, V_{di} acf	320.268	325.310	330.333	337.031	344.324	351.038	369.530	376.701	386.117	407.827	417.804	426.660
Final MB Vol. Reading, V_{df} acf	325.310	330.333	335.396	344.324	351.038	357.740	376.701	386.117	393.591	417.804	426.660	437.108
Difference ≥ *5.0 cf?*	5.042	5.023	5.063	7.293	6.714	6.702	7.171	9.416	7.474	9.977	8.856	10.448
Initial MB Temp, t_{di} °F	66	67	69	72	73	74	71	73	74	77	78	78
Final MB Temp, t_{df} °F	67	69	71	73	74	75	73	74	75	78	78	78
Pump Vac *(> V_{cr} in. HG?)*	18	18	18	18	18	18	18	18	18	18	18	18
Time, Minutes (M)	11	11	11	12	11	11	9	12	9	8	8	9
Time, Seconds (S)	0	0	0	0	0	0	30	0	30	29	45	34
Calculations												
M5 DGM Factor, Y_i	0.99987	1.00651	1.00234	1.00712	1.00469	1.00838	1.03522	0.99868	0.99792	0.92086	1.07103	0.99256
Average, $Y_{ab(avg)}$		1.0029			1.0067			1.0106			0.9948	
Diff = $Y_{i(avg)}$ -$Y_{ab(avg)}$ *(≤ ± 0.02)?*	0.001		ok	-0.003		ok	-0.007		ok	0.009		ok
Delta $H_{@i}$	1.661	1.656	1.650	1.717	1.714	1.710	1.754	1.749	1.746	1.746	1.745	1.745
Average, Delta $H_{@ab(avg)}$		1.656			1.714			1.749			1.745	
Diff=Delta $H_{@i(avg)}$ - Delta $H_{@ab(avg)}$ *(≤ ± 0.20)?*	0.060		ok	0.002		ok	-0.033		ok	-0.029		ok

$Y_{I(avg)}$	1.0038
SCAQMD Delta $H_{@I(avg)}$	1.742
EPA Delta $H_{@I(avg)}$	1.716

$$Y_i = \frac{K'P_b\left(\frac{t_{di}+t_{df}}{2}+460\right)\left(M+\frac{S}{60}\right)}{17.65\left(V_{df}-V_{di}\right)\left(P_b+\frac{\Delta H}{13.6}\right)\sqrt{t_{amb}+460}}$$

$$\Delta H_{@i} = \frac{9.926\,\Delta H\left(P_b+\frac{\Delta H}{13.6}\right)}{\left(K'P_b\right)^2}\,\frac{\left(t_{amb}+460\right)}{\left(\frac{t_{di}+t_{df}}{2}+460\right)}$$

QA/QC Check
Completeness ✓ Legibility ✓ Accuracy ✓ Specifications ✓ Reasonableness ✓

Checked By: Tony Wong 4/15/99
QA Administrator (Signature/Date)

THERMOCOUPLE CALIBRATION

Thermocouple No.: 8-1

Date: 1/6/99 Calibrated By: NP

Barometric Pressure, in. Hg: 30.16 Ambient Temperature, °F: 72

Calibration System Used	Reference Thermometer	Reference Thermometer Temperature (T_r, °F)	Test Digital Thermometer I.D. No	Test Thermocouple Temperature (T_t, °F)	Temperature Difference, % (Allowable ≤ 1.5%)
ICE BATH	5002	33	F74	34.2	-0.24
		33		33.4	-0.08
		33		32.8	0.04
BOILING WATER	5002	212	F74	211.4	0.09
		212		211.2	0.12
		212		211.4	0.09
BOILING OIL	1008	423	F74	423.8	-0.09
		423		428.6	-0.63
		423		424.8	-0.20

$$\text{Temperature Difference} = \frac{T_r - T_t}{T_r + 460} * 100$$

QA/QC Check

Completeness: ✓ Legibility: ✓ Accuracy: ✓

Specifications: ✓ Resonableness: ✓

Checked By: Sokhalin Finnie

QC Administrator (Signature / Date)

THERMOCOUPLE CALIBRATION

Thermocouple No.: 8-2

Date: 1/6/99 Calibrated By: NP

Barometric Pressure, in. Hg: 30.16 Ambient Temperature, °F: 72

Calibration System Used	Reference Thermometer	Reference Thermometer Temperature (T_r, °F)	Test Digital Thermometer I.D. No.	Test Thermocouple Temperature (T_t, °F)	Temperature Difference, % (Allowable: ≤ 1.5%)
ICE BATH	5002	33	F74	33.6	-0.12
		33		34	-0.20
		33		33.2	-0.04
BOILING WATER	5002	212	F74	211.4	0.09
		212		211.2	0.12
		212		211	0.15
BOILING OIL	1008	424	F74	424.8	-0.09
		424		425	-0.11
		424		424.2	-0.02

$$\text{Temperature Difference} = \frac{T_r - T_t}{T_r + 460} * 100$$

QA/QC Check

Completeness: ✓ Legibility: ✓ Accuracy: ✓

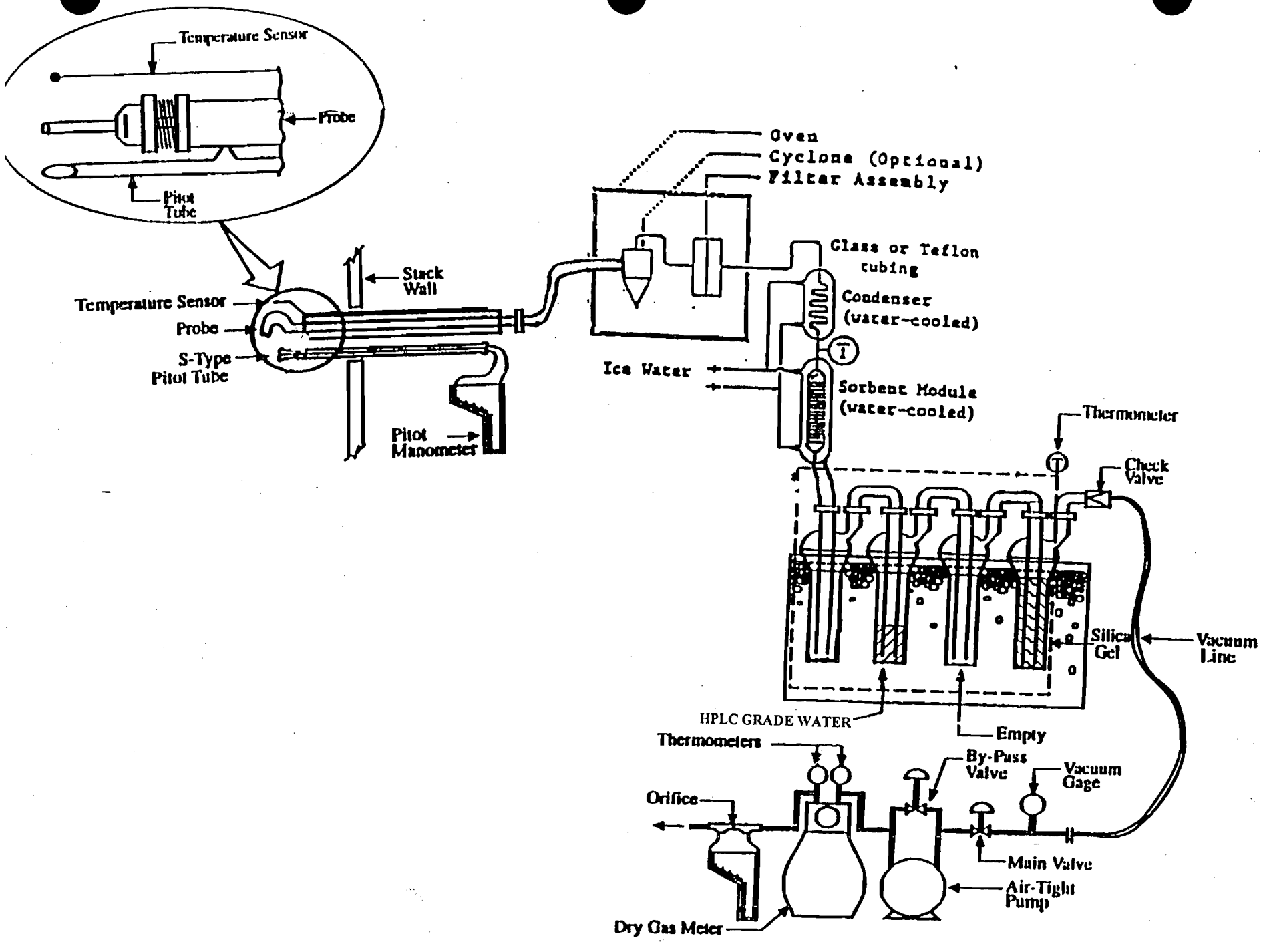
Specifications: ✓ Resonableness: ✓

Checked By: Sakhalin Finnie

QC Administrator (Signature / Date)

APPENDIX F

SAMPLING TRAIN SCHEMATIC



EPA METHOD 23 SAMPLING TRAIN

APPENDIX G

RAW ANALYTICAL DATA

PAL Project No.: G-370-4

Paradigm Analytical Labs

Section 2

Project Overview

&

Sample Tracking & Communication Forms

Project Overview for the Analysis of Polychlorinated Dibenzo-*p*-Dioxins & Dibenzofurans

PAL Project No.: G-370-4

Method 23 | *Method 23* | *Method 23* | *Method 23* | *Method 23*

Probe Rinse

Concentration *SOP SP-N-02*

Filter

XAD
Sampling Modules Prep. Project No.: 6370-3

Spike Profile

ES:	23	4 ng (1-2)
SS:	23	4 ng (1-1)
JS:	23	2 ng (1)

Add *M23-ES-S0* 4 -169A
Vol.: 40 µL; **Conc.:** 0.1 ng/µL *SOP SP-S-01*

Soxhlet 16 H Toluene *SOP SP-E-01*

Concentration & Solvent Exchange *SOP SP-N-01*

Split Extract *SOP SP-D-01*

Archive 50% *SOP SP-D-01*

Special Instructions:

Fractionation *SOP SP-U-03*

Concentration *SOP SP-N-01*

Add *M23-JS-S0* 4 -163,173
Vol.: 20 µL; **Conc.:** 0.1 ng/µL *SOP SP-S-01*

HRGC - HRMS *SP-A-01*

Project Overview for the Analysis of Polychlorinated Dibenzo-*p*-Dioxins & Dibenzofurans

PAL Project No.: G-370-4

Method 23 *Method 23* *Method 23* *Method 23* *Method 23*

SOP SP-A-01

Reporting Level: I (II) III II+ III+

Sample Extract Fortified with JS

8 A.M. *8 P.M.*

MS → **GC** → **Calibration** → **Blank** → **Samples** → **ConCal** → **MS**

Report *SOP RP-G-01*

Data Package Assembly *SOP SH-A-01*

Archive Data *SOP RP-A-01*

Ship Data *SOP SH-D-01*

Special Instructions:

60

Communication Exchanges Form for the Analysis of PCDD/PCDFs

PAL Project No.: G-370-4

Method 23 *Method 23* *Method 23* *Method 23* *Method 23*

24 Aug 99

Da[redacted]h Prep Table ✓

SDS

Batch ID	Logbook#	Page#
WG	2	286

Method: M23

	Sample ID*	Client Proj. ID	Pre-Sox Time	SDS Start	SDS Finish	Sample Amt g	Tridecane (mL)	ES Amt. (µL)	MX Amt. (µL)	Analyst (initials)	Date*
1	WG2286-1	N/A	1030 - 1230	1600	8:00	10	0.5	40 ✓	N/A	[redacted]	20-Aug
2	WG2286-2	N/A	1030 - 1230	1600	8:00	10	0.5	40 ✓	20 ✓		20-Aug
3	70733 ·	G370-4	1030 - 1230	1600	8:00	N/A	0.5	40 ✓	N/A		20-Aug
4	70734 ·	G370-4	1030 - 1230	1600	8:00	N/A	0.5	40 ✓	N/A		20-Aug
5	70735 ·	G370-4	1030 - 1230	1600	8:00	N/A	0.5	40 ✓	N/A		20-Aug
6	70736 ·	G370-4	1030 - 1230	1600	8:00	N/A	0.5	40 ✓	N/A		20-Aug
7											
8											
9											
10											
11											
12											
13											
14											

Item	Lot #'s
Toluene MeCl2	BV686
Tridecane	8-Jul-99
Sand	18-Jun-99
Thimbles	12-Aug-99
Extraction Std.	S04-169A
Matrix Spk. Std.	S04-170

Comments:

	Conc. (ng/µL)	
	0.1 ✓	—
	0.01 ✓	

* = To be entered in the Prep Table.

Continued on next Page? no

PCU-F Sample Fractionation

	Sample ID	Train	CS Amt. (µL)	Archived* (%)	Analyst (initials)	Date	Comments
		1		none			
A		2					
	WG2286-1	3		50		23-Aug	
	WG2286-2	4	40	50		23-Aug	
	70733	5		50		23-Aug	G370-4 Air
B	70734	6		50		23-Aug	G370-4 Air
	70735	7		50		23-Aug	G370-4 Air
	70736	8		50		23-Aug	G370-4 Air

Item	Lot #'s		
Hexane	BV167	**Comments:**	
Methylene Chloride	BV110		
Silica	3-Aug-99		
Fluorosil	SP1787		
Salt	10-Jul-99	**Conc.** (ng/µL)	
Cleanup Std.	S04-161	0.100	

* = to be entered in the Prep table.

Log Book: 1 : 266

Injecti... Prep Log

	Sam...ID	IJ STD Lot#	IJ Amt (µL)	IJ Conc. (ng/µL)	...Vol.* (µL)	Analyst (initials)	Date	Commen...
1	WG2286-1	S04-163	20	0.1	20	HMK	23AUG99	
2	WG2286-2	S04-173	↓	↓	↓	↓	↓	
3	70733.	S04-163	–	–				
4	70734.	S04-173						
5	70735'	↓						
6	70736'	↓	↓	↓				
7	69977E	S04-148	10	0.2	↓	↓	↓	Water sent back for PCU - has low tridecane
8								
9								
10								
11								
12								
13								
14								
15					HMK 8/23/99			
16								
17								
18								
19								
20								

* = to be entered in the Prep table.

Logbook: 2 Page: 36

Lab_Proj	Client Sample ID	D_STAT	Client_prog	Client	Sample	Date Colle	Date Rec	Date Due	riorit	ottl	Matrix	ocatio	Dept	Report	Analyses
G370-4	1-S-M23-1	LOGN:DONE	OMS-Lee	370	70733	8/18/99	8/20/99	8/24/99	Rush	2	Rinse	W2	17	EX	M23
G370-4	1-S-M23-1	LOGN:DONE	OMS-Lee	370	70733	8/18/99	8/20/99	8/24/99	Rush	1	Filter	W2	17	EX	M23
G370-4	1-S-M23-1	LOGN:DONE	OMS-Lee	370	70733	8/18/99	8/20/99	8/24/99	Rush	1	Trap	W2	17	EX	M23
G370-4	1-S-M23-2	LOGN:DONE	OMS-Lee	370	70734	8/19/99	8/20/99	8/24/99	Rush	2	Rinse	W2	17	EX	M23
G370-4	1-S-M23-2	LOGN:DONE	OMS-Lee	370	70734	8/19/99	8/20/99	8/24/99	Rush	1	Filter	W2	17	EX	M23
G370-4	1-S-M23-2	LOGN:DONE	OMS-Lee	370	70734	8/19/99	8/20/99	8/24/99	Rush	1	Trap	W2	17	EX	M23
G370-4	1-S-M23-3	LOGN:DONE	OMS-Lee	370	70735	8/19/99	8/20/99	8/24/99	Rush	2	Rinse	W2	17	EX	M23
G370-4	1-S-M23-3	LOGN:DONE	OMS-Lee	370	70735	8/19/99	8/20/99	8/24/99	Rush	1	Filter	W2	17	EX	M23
G370-4	1-S-M23-3	LOGN:DONE	OMS-Lee	370	70735	8/19/99	8/20/99	8/24/99	Rush	1	Trap	W2	17	EX	M23
G370-4	1-S-M23-FB	LOGN:DONE	OMS-Lee	370	70736	8/19/99	8/20/99	8/24/99	Rush	2	Rinse	W2	17	EX	M23
G370-4	1-S-M23-FB	LOGN:DONE	OMS-Lee	370	70736	8/19/99	8/20/99	8/24/99	Rush	1	Filter	W2	17	EX	M23
G370-4	1-S-M23-FB	LOGN:DONE	OMS-Lee	370	70736	8/19/99	8/20/99	8/24/99	Rush	1	Trap	W2	17	EX	M23

AirKinetics, Inc.

EMISSIONS CHARACTERIZATION AND TESTING SERVICES

REQUEST FOR ANALYSIS

23704

PURCHASE ORDER No.: _____ JOB NAME: OMS - Lee

LABORATORY: Paradigm Analytical Labs JOB No.: 10644

DATE SAMPLES WERE TRANSMITTED: 8/19/99 EXPECTED DATE OF RESULTS: 8/24/99

SAMPLE MATRIX: Acetone, Methylene Chloride and Toluene

TYPE OF ANALYSIS REQUIRED: Please analyze according to EPA Method 23 for dioxin/furans. Please provide faxed results by the afternoon of Tuesday 8/24 as we discussed. Please also provide a full raw data package with the final copy of the test results.

Sample / Run ID #	Sample Collection Date	Sample Components	Sample Matrix	Condition of Samples *
1-S-M23-1	8/18/99	Ace./MeCl2 Rinse	Ace./MeCl2	I have
		Toluene Rinse	Toluene	
		Filter	Filter	
		XAD Trap	XAD resin	
1-S-M23-2	8/19/99	Ace./MeCl2 Rinse	Ace./MeCl2	I have
		Toluene Rinse	Toluene	
		Filter	Filter	
		XAD Trap	XAD resin	
1-S-M23-3	8/19/99	Ace./MeCl2 Rinse	Ace./MeCl2	I have
		Toluene Rinse	Toluene	
		Filter	Filter	
		XAD Trap	XAD resin	
1-S-M23-FB	8/19/99	Ace./MeCl2 Rinse	Ace./MeCl2	I have
		Toluene Rinse	Toluene	
		Filter	Filter	
		XAD Trap	XAD resin	

* For Laboratory Comments (temp., labels, etc.)

Samples Relinquished by: Shawn Graham Date/Time: 8/19/99

Transported by: FedEx Date/Time: 8/19/99

Transported to: Paradigm Analytical Labs
2627 Northchase Parkway, SE
Wilmington. NC 28405

Received by: [signature] Date/Time: 8/20/99 9:43

*5932 Bolsa Avenue, Suite 105 * Huntington Beach, CA 92649 * Phone (714) 373-0998 * Fax (714) 895-1915*

Paradigm Analytical Labs

Sample Receipt Checklist (SRC)

Client: **AirKinetics, Inc.** Lab Proj. ID: **G370-4**

Client Proj. ID: **OMS-Lee**

1. [X] Shipped
   [ ] Hand Delivered
   Notes:

2. [X] COC Present on Receipt
   [ ] No COC
   [ ] Additional Transmittal Forms
   Notes:

3. [ ] Custody Tape on Container
   [X] No Custody Tape
   Notes:

4. [X] Samples Intact
   [ ] Samples Broken / Leaking
   [ ] VOA Vials Checked for Air Bubbles
   Notes:

5. [X] Chilled on Receipt Actual Temp.(s) in °C: ice
   [ ] Ambient on Receipt
   [ ] Walk-in on Ice; Coming down to temp.
   Notes:

6. [X] Sufficient Sample Submitted
   [ ] Insufficient Sample Submitted
   Notes:

7. [ ] Samples Preserved Correctly
   [ ] Improper Preservative(s)
   [X] None recommended (N/A)
   (see preservative checklist where applicable)
   Notes:

8. [X] Received Within Holding Time
   [ ] Not Received Within Holding Time
   [ ] N/A
   Notes:

9. [X] No Discrepancies Noted
   [ ] Discrepancies Noted
   [ ] No COC Received
   Notes:

Comments:

nspected and Logged in by: EMR Date / Time: Fri-8/20/99 11:56

Preparation of the XAD-2 Resin for Method 23 Sampling Session

No. Sampling Modules: 7 (3 new)
No. Filters: >10

PAL Project No.: G-370-3

Order Received: 16 AUG 99
Due Date: 18 AUG 99
Client Project ID: N/A

AirKinetics, Inc.

To ensure proper handling of the samples, please return this form with the field samples to:

Paradigm Analytical Labs
2627 Northchase Pkwy S.E.
Wilmington, NC 28405

Thank you for your cooperation. Our phone number is 910-350-2839. (Fax: 910-350-1557)

Method 23 Sampling *Method 23 Sampling* *Method 23 Sampling*

Mailing Address: **Tom Eriksen (Ogden) / Shawn Graham (AirKinetics)**
(no P.O. Box) **Ogden Martin Systems of Lee, Inc.**
10500 Buckingham Road
Fort Myers, Florida 33905
Ph.: 941-337-2200

Special Instructions: **Use one filter per dish, place remaining filters in last petri dish. Use 4 traps fromG-370-1 project.**

Note: An amount of resin equal to one module was fortified as described above, retained by the laboratory and kept at 4°C. Upon return of the field samples, this aliquot will be used to process the Laboratory Method Blank QC sample.

Filters

Batch No.: _____
Size: _85_ mm diameter special cut

Type: Glass Fiber Quartz

XAD-2 Resin Modules

Batch No.: RH-1164
Type: Ball/Socket O-Ring Ball/Socket Screw Cap

Add M23-SS-__-S04-161
Vol.: 40 µL; **Conc.:** 0.1 ng/µL
Preparation Date: 9/17/99
[Two-week holding time]

Analyst: DD

Paradigm Sample Log

Data File S	Sample ID	Analyst	Acq. Date	Time
b23aug99a;1	;RETCON	;HMK	23-AUG-99	15:28:01
b23aug99a;2	;SB	;HMK	23-AUG-99	16:14:19
b23aug99a;3	;WG2286-1 x1/2	;HMK	23-AUG-99	17:00:38
b23aug99a;4	;WG2274-1 x1/1	;HMK	23-AUG-99	17:46:57
b23aug99a;5	;70733 x1/2	;HMK	23-AUG-99	18:33:16
b23aug99a;6	;70734 x1/2	;HMK	23-AUG-99	19:19:34
b23aug99a;7	;70735 x1/2	;HMK	23-AUG-99	20:05:52
b23aug99a;8	;70736 x1/2	;HMK	23-AUG-99	20:52:07
b23aug99a;9	;69977E x1/1	;HMK	23-AUG-99	21:38:25
b23aug99a;10	;68700 x1/1	;HMK	23-AUG-99	22:24:43
b23aug99a;11	;68701 x1/1	;HMK	23-AUG-99	23:10:57
b23aug99a;12	;68702 x1/1	;HMK	23-AUG-99	23:57:16
b23aug99a;13	;68703 x1/1	;HMK	24-AUG-99	00:43:35
b23aug99a;14	;WG2286-2	;HMK	24-AUG-99	01:29:53
b23aug99a;15	;RETCON	;HMK	24-AUG-99	02:16:12

Paradigm Analytical Labs

Section 3

Analytical Results

Documentation for the Analysis

of

Polychlorinated Dibenzo-*p*-Dioxins & Dibenzofurans

330-4
II

Method 23 - QC BLANK Results

LMB

Analytical Data Summary Sheet

Analyte	Amount (ng)	DL (ng)	EMPC (ng)	RT (min.)	Ratio	Qualifier
2,3,7,8--TCDD	ND	0.0025				
1,2,3,7,8-PeCDD	ND	0.0021				
1,2,3,4,7,8-HxCDD	ND	0.0037		35:34	1.50	
1,2,3,6,7,8-HxCDD	ND	0.0036		35:39	0.61	
1,2,3,7,8,9-HxCDD	ND	0.0034				
1,2,3,4,6,7,8-HpCDD	ND	0.0040		38:33	0.35	
OCDD	0.0110	0.0046		42:14	0.83	
2,3,7,8--TCDF	ND	0.0018				
1,2,3,7,8-PeCDF	ND	< 0.0010				
2,3,4,7,8-PeCDF	ND	< 0.0010				
1,2,3,4,7,8-HxCDF	ND	< 0.0010		34:54	1.61	
1,2,3,6,7,8-HxCDF	ND	< 0.0010		34:59	1.46	
2,3,4,6,7,8-HxCDF	ND	< 0.0010		35:25	5.33	
1,2,3,7,8,9-HxCDF	ND	< 0.0010		36:09	3.37	
1,2,3,4,6,7,8-HpCDF	ND	0.0013		37:27	1.90	
1,2,3,4,7,8,9-HpCDF	ND	0.0017				
OCDF	ND	0.0026		42:30	1.97	
Total TCDDs	ND	0.0025				
Total PeCDDs	ND	0.0021				
Total HxCDDs	ND	0.0034				
Total HpCDDs	ND	0.0040				
Total TCDFs	ND	0.0018				
Total PeCDFs	ND	< 0.0010				
Total HxCDFs	ND	< 0.0010				
Total HpCDFs	ND	0.0013				
TEQ (ND=0)	0.0000		0.0000			ITEF
TEQ (ND=½)	0.0029		0.0029			ITEF

Laboratory Information

Sample ID: WG2286-1

Extraction Date: 20-Aug-99
Analysis Date: 23-Aug-99

Sample Information

Matrix: Air
Weight / Volume:
Moisture / Lipids:
Original pH : NA

Filename: b23aug99a-3
Retchk: b23aug99a-1
Begin ConCal: b23aug99a-1
End ConCal: b23aug99a-15
Initial Cal: m8290-b060499a

Method 23 - QC BLANK Results

LMB

Analytical Data Summary Sheet

Labeled Standard	Expected Amount (ng)	Measured Amount (ng)	Percent Recovery (%)	RT (min.)	Ratio	Qualifier
Extraction Standards						
$^{13}C_{12}$-2,3,7,8-TCDD	4	3.24	81.0	29:22	0.79	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	4	3.24	81.0	33:10	1.57	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	4	3.37	84.3	35:37	1.28	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	4	3.20	80.0	38:32	1.06	
$^{13}C_{12}$-OCDD	8	4.47	55.9	42:14	0.9	
$^{13}C_{12}$-2,3,7,8-TCDF	4	3.22	80.5	28:26	0.79	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	4	3.06	76.5	32:25	1.56	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	4	3.29	82.3	34:59	0.53	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	4	2.96	74.0	37:26	0.45	
Sampling Standards						
$^{37}Cl_4$-2,3,7,8-TCDD	4	4.13	103.3			
$^{13}C_{12}$-2,3,4,7,8-PeCDF	4	4.56	114.0	32:59	1.58	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	4	3.70	92.5	35:32	1.28	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	4	3.77	94.3	34:53	0.52	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	4	4.02	100.5	39:07	0.44	
Injection Standards						
$^{13}C_{12}$-1,2,3,4-TCDD				28:40	0.8	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD				35:50	1.28	

Laboratory Information

Sample ID: WG2286-1

Extraction Date: 20-Aug-99
Analysis Date: 23-Aug-99

Sample Information

Matrix: Air
Weight / Volume:
Moisture / Lipids:
Original pH: NA

Filename: b23aug99a-3
Retchk: b23aug99a-1
Begin ConCal: b23aug99a-1
End ConCal: b23aug99a-15
Initial Cal: m8290-b060499a

Reviewed by: Y.T.

Date Reviewed: 24 Aug 99

Filename ; b23aug99a
Sample ; 3
Acquired ; 23-AUG-99 17:00:38
Processed ; 24-AUG-99 08:02:48
Sample ID ; WG2286-1 x1/2
Cal Table ; m8290-b060499a
Results Table ; m8290-b082399a
Comments ;

Typ	Name	Resp	Ion 1	Ion 2	RA;?;	RT;	Conc;	DL;	S/N1;?;	S/N2;? ;	mod?
Unk	2,3,7,8-TCDD	*	*	*	*;n;NotFnd		*	0.0631	*;n;	*;n ;	no
Unk	1,2,3,7,8-PeCDD	*	*	*	*;n;NotFnd		*	0.0521	*;n;	*;n ;	no
Unk	1,2,3,4,7,8-HxCDD	2.34e+04	1.41e+04	9.39e+03	1.50;n	35:34	0.023	0.0921	1;n;	1;n ;	no
Unk	1,2,3,6,7,8-HxCDD	2.33e+04	8.85e+03	1.44e+04	0.61;n	35:39	0.022	0.0898	1;n;	1;n ;	no
Unk	1,2,3,7,8,9-HxCDD	*	*	*	*;n;NotFnd		*	0.0847	*;n;	*;n ;	no
Unk	1,2,3,4,6,7,8-HpCDD	5.23e+04	1.35e+04	3.87e+04	0.35;n	38:33	0.062	0.1001	2;n;	2;n ;	no
Unk	OCDD	1.50e+05	6.83e+04	8.20e+04	0.83;y	42:14	0.276	0.1159	5;y;	8;y ;	yes // .
Unk	2,3,7,8-TCDF	*	*	*	*;n;NotFnd		*	0.0449	*;n;	*;n ;	no
Unk	1,2,3,7,8-PeCDF	*	*	*	*;n;NotFnd		*	0.0235	*;n;	*;n ;	no
Unk	2,3,4,7,8-PeCDF	*	*	*	*;n;NotFnd		*	0.0229	*;n;	*;n ;	no
Unk	1,2,3,4,7,8-HxCDF	3.33e+04	2.06e+04	1.27e+04	1.61;n	34:54	0.022	0.0170	4;y;	3;n ;	no
Unk	1,2,3,6,7,8-HxCDF	2.58e+04	1.53e+04	1.05e+04	1.46;n	34:59	0.015	0.0154	2;n;	3;y ;	no
Unk	2,3,4,6,7,8-HxCDF	1.87e+04	1.58e+04	2.96e+03	5.33;n	35:25	0.013	0.0179	3;y;	1;n ;	no
Unk	1,2,3,7,8,9-HxCDF	1.31e+04	1.01e+04	2.99e+03	3.37;n	36:09	0.010	0.0198	3;y;	2;n ;	no
Unk	1,2,3,4,6,7,8-HpCDF	2.29e+04	1.50e+04	7.87e+03	1.90;n	37:27	0.018	0.0325	2;n;	2;n ;	no
Unk	1,2,3,4,7,8,9-HpCDF	*	*	*	*;n;NotFnd		*	0.0413	*;n;	*;n ;	no
Unk	OCDF	9.83e+03	6.52e+03	3.31e+03	1.97;n	42:30	0.017	0.0658	5;y;	1;n ;	no
ES/RT	13C-2,3,7,8-TCDD	1.39e+08	6.14e+07	7.79e+07	0.79;y	29:22	80.887	0.1428	1237;y	2037;y ;	no
ES	13C-1,2,3,7,8-PeCDD	1.19e+08	7.30e+07	4.64e+07	1.57;y	33:10	81.012	0.0432	9080;y	13948;y ;	no
ES	13C-1,2,3,6,7,8-HxCDD	1.10e+08	6.18e+07	4.81e+07	1.28;y	35:37	84.127	0.0354	6833;y	8237;y ;	no
ES	13C-1,2,3,4,6,7,8-HpCDD	8.99e+07	4.63e+07	4.37e+07	1.06;y	38:32	79.936	0.1567	791;y	2985;y ;	no
ES	13C-OCDD	1.08e+08	5.08e+07	5.68e+07	0.90;y	42:14	111.743	0.0434	3862;y	6301;y ;	no
ES/RT	13C-2,3,7,8-TCDF	1.96e+08	8.63e+07	1.10e+08	0.79;y	28:26	80.554	0.0359	5536;y	7428;y ;	no
ES	13C-1,2,3,7,8-PeCDF	1.67e+08	1.02e+08	6.52e+07	1.56;y	32:25	76.564	0.0281	22019;y	11843;y ;	no
ES	13C-1,2,3,6,7,8-HxCDF	1.42e+08	4.88e+07	9.28e+07	0.53;y	34:59	82.361	0.0593	3108;y	7032;y ;	no
ES	13C-1,2,3,4,6,7,8-HpCDF	8.46e+07	2.62e+07	5.84e+07	0.45;y	37:26	73.891	0.1055	1518;y	2399;y ;	no
JS	13C-1,2,3,4-TCDD	1.61e+08	7.17e+07	8.94e+07	0.80;y	28:40	125.395	-;	1554;y	2496;y ;	no
JS	13C-1,2,3,7,8,9-HxCDD	1.31e+08	7.36e+07	5.76e+07	1.28;y	35:50	123.726	-;	7812;y	9608;y ;	no
CS	37Cl-2,3,7,8-TCDD	1.44e+08	1.44e+08	-	-;-;NotFnd		83.541	0.0207	11834;y	-; -;	no
CS	13C-2,3,4,7,8-PeCDF	1.82e+08	1.12e+08	7.08e+07	1.58;y	32:59	87.310	0.0294	24435;y	13525;y ;	no
CS	13C-1,2,3,4,7,8-HxCDD	8.63e+07	4.84e+07	3.79e+07	1.28;y	35:32	77.759	0.0417	6703;y	8364;y ;	no
CS	13C-1,2,3,4,7,8-HxCDF	1.19e+08	4.06e+07	7.79e+07	0.52;y	34:53	77.615	0.0667	2960;y	6775;y ;	no
CS	13C-1,2,3,4,7,8,9-HpCDF	7.17e+07	2.19e+07	4.98e+07	0.44;y	39:07	74.239	0.1251	997;y	1601;y ;	no
SS	37Cl-2,3,7,8-TCDD	1.44e+08	1.44e+08	-	-;-;NotFnd		103.296	0.0275	11834;y	-; -;	no
SS	13C-2,3,4,7,8-PeCDF	1.82e+08	1.12e+08	7.08e+07	1.58;y	32:59	114.050	0.0190	24435;y	13525;y ;	no
SS	13C-1,2,3,4,7,8-HxCDD	8.63e+07	4.84e+07	3.79e+07	1.28;y	35:32	92.412	0.0479	6703;y	8364;y ;	no
SS	13C-1,2,3,4,7,8-HxCDF	1.19e+08	4.06e+07	7.79e+07	0.52;y	34:53	94.215	0.0689	2960;y	6775;y ;	no
SS	13C-1,2,3,4,7,8,9-HpCDF	7.17e+07	2.19e+07	4.98e+07	0.44;y	39:07	100.473	0.1749	997;y	1601;y ;	no

	Conc	Empc	Flags
TCDF	0	0	FALSE
TCDD	0	0	FALSE
PeCDF	0	0	FALSE
PeCDD	0	0	FALSE
HxCDF	0	0	FALSE
HxCDD	0	0	FALSE
HpCDF	0	0	FALSE
HpCDD	0	0	FALSE

Filename:	b23aug99a	Name of Homolog Group:	Total Tetra-Furans
Sample:	3	Number of Peaks Found:	0
Acquired:	23-AUG-99 17:00:38	RRF Used For Totals:	0.9883
Processed:	24-AUG-99 08:02:48	Detection Limit:	0.0449
Sample ID:	WG2286-1 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	
Results Table:	m8290-b082399a	End Window:	

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	*	*	*	*	n	NotFnd	*		*	n	*	n	n

Filename:	b23aug99a	Name of Homolog Group:	Total Tetra-Dioxins
Sample:	3	Number of Peaks Found:	1
Acquired:	23-AUG-99 17:00:38	RRF Used For Totals:	1.0802
Processed:	24-AUG-99 08:02:48	Detection Limit:	0.0631
Sample ID:	WG2286-1 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	25:50:00
Results Table:	m8290-b082399a	End Window:	30:28:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	8.40E+04	74400	9600	7.76	n	28:26	0.056	S2N	5.6	y	1.1	n	n

Filename:	b23aug99a	Name of Homolog Group:	Total Penta-Furans Fn1
Sample:	3	Number of Peaks Found:	0
Acquired:	23-AUG-99 17:00:38	RRF Used For Totals:	0.9679
Processed:	24-AUG-99 08:02:48	Detection Limit:	0.0202
Sample ID:	WG2286-1 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	
Results Table:	m8290-b082399a	End Window:	

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	*	*	*	*	n	NotFnd	*		*	n	*	n	n

Filename:	b23aug99a	Name of Homolog Group:	Total Penta-Furans Fn2
Sample:	3	Number of Peaks Found:	0
Acquired:	23-AUG-99 17:00:38	RRF Used For Totals:	0.9679
Processed:	24-AUG-99 08:02:48	Detection Limit:	0.0232
Sample ID:	WG2286-1 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	
Results Table:	m8290-b082399a	End Window:	

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	*	*	*	*	n	NotFnd	*		*	n	*	n	n

Filename:	b23aug99a	Name of Homolog Group:	Total Penta-Dioxins
Sample:	3	Number of Peaks Found:	0
Acquired:	23-AUG-99 17:00:38	RRF Used For Totals:	0.9837
Processed:	24-AUG-99 08:02:48	Detection Limit:	0.0521
Sample ID:	WG2286-1 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	
Results Table:	m8290-b082399a	End Window:	

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	*	*	*	*	n	NotFnd	*		*	n	*	n	n

Filename:	b23aug99a	Name of Homolog Group:	Total Hexa-Furans
Sample:	3	Number of Peaks Found:	32
Acquired:	23-AUG-99 17:00:38	RRF Used For Totals:	1.0623
Processed:	24-AUG-99 08:02:48	Detection Limit:	0.0175
Sample ID:	WG2286-1 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	33:51:00
Results Table:	m8290-b082399a	End Window:	36:21:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	8.66E+03	5130	3540	1.45	n	34:08	0.006	S2N	1.9	n	1.7	n	n
	2	3.56E+03	1210	2350	0.51	n	34:13	0.002	S2N	0.47	n	1	n	n
	3	1.85E+03	893	959	0.93	n	34:18	0.001	S2N	0.44	n	0.49	n	n
	4	3.35E+03	1370	1970	0.7	n	34:22	0.002	S2N	0.72	n	1.3	n	n
	5	1.02E+04	4910	5270	0.93	n	34:24	0.007	S2N	1.7	n	2.6	n	n
	6	4.81E+03	1680	3130	0.54	n	34:29	0.003	S2N	0.71	n	1.6	n	n
	7	1.23E+04	9170	3130	2.93	n	34:33	0.008	S2N	1.9	n	0.79	n	n
	8	5.68E+03	4180	1500	2.78	n	34:39	0.004	S2N	1.1	n	0.73	n	n
	9	2.75E+03	1010	1740	0.58	n	34:43	0.002	S2N	0.73	n	0.72	n	n
	10	4.62E+03	2610	2020	1.29	y	34:46	0.003	S2N	0.9	n	1	n	n
1,2,3,4,7,8-HxCDF	11	3.33E+04	20600	12700	1.61	n	34:54	0.022	S2N	4.1	y	2.8	n	n
1,2,3,6,7,8-HxCDF	12	2.58E+04	15300	10500	1.46	n	34:59	0.015	S2N	2.1	n	3.2	y	n
	13	8.26E+03	5380	2880	1.87	n	35:07	0.005	S2N	1.1	n	1.5	n	n
	14	4.87E+03	3840	1030	3.72	n	35:11	0.003	S2N	1	n	0.65	n	n
	15	3.16E+03	1080	2080	0.52	n	35:16	0.002	S2N	0.44	n	0.8	n	n
	16	5.04E+03	3050	199	1.53	n	35:19	0.003	S2N	1	n	.1	n	n

	17	4.44E+03	2450	19[redacted]	1.23 y	35:21	0.003 S2N	0.88 n	1.1 n	n
	18	4.44E+03	2450	19[redacted]	1.23 y	35:22	0.003 S2N	1 n	1.1 n	n
2,3,4,6,7,8-HxCDF	19	1.87E+04	15800	2960	5.33 n	35:25	0.013 S2N	3.2 y	1.4 n	n
	20	7.13E+03	4170	2960	1.41 y	35:29	0.005 S2N	1.8 n	1.4 n	n
	21	5.89E+03	3210	2680	1.2 y	35:42	0.004 S2N	1.2 n	1 n	n
	22	3.32E+03	1810	1510	1.2 y	35:47	0.002 S2N	1 n	0.72 n	n
	23	9.65E+03	2830	6820	0.41 n	35:49	0.006 S2N	1.2 n	2.3 n	n
	24	1.67E+04	9880	6820	1.45 n	35:51	0.011 S2N	1.9 n	2.3 n	n
	25	6.04E+03	2880	3170	0.91 n	35:55	0.004 S2N	1.2 n	1.3 n	n
	26	3.64E+03	1680	1970	0.85 n	35:57	0.002 S2N	0.8 n	0.86 n	n
	27	3.95E+03	1980	1970	1.01 n	35:59	0.003 S2N	1 n	0.86 n	n
	28	4.47E+03	1720	2750	0.63 n	36:02	0.003 S2N	0.68 n	0.97 n	n
	29	1.96E+04	13500	6160	2.19 n	36:07	0.013 S2N	3 y	1.9 n	n
1,2,3,7,8,9-HxCDF	30	1.31E+04	10100	2990	3.37 n	36:09	0.01 S2N	3.4 y	1.6 n	n
	31	4.21E+03	2340	1860	1.26 y	36:15	0.003 S2N	0.98 n	1.5 n	n
	32	6.02E+03	4160	1860	2.23 n	36:17	0.004 S2N	0.94 n	1.5 n	n

Filename:	b23aug99a	Name of Homolog Group:	Total Hexa-Dioxins
Sample:	3	Number of Peaks Found:	21
Acquired:	23-AUG-99 17:00:38	RRF Used For Totals:	0.9699
Processed:	24-AUG-99 08:02:48	Detection Limit:	0.0888
Sample ID:	WG2286-1 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	34:17:00
Results Table:	m8290-b082399a	End Window:	35:55:00

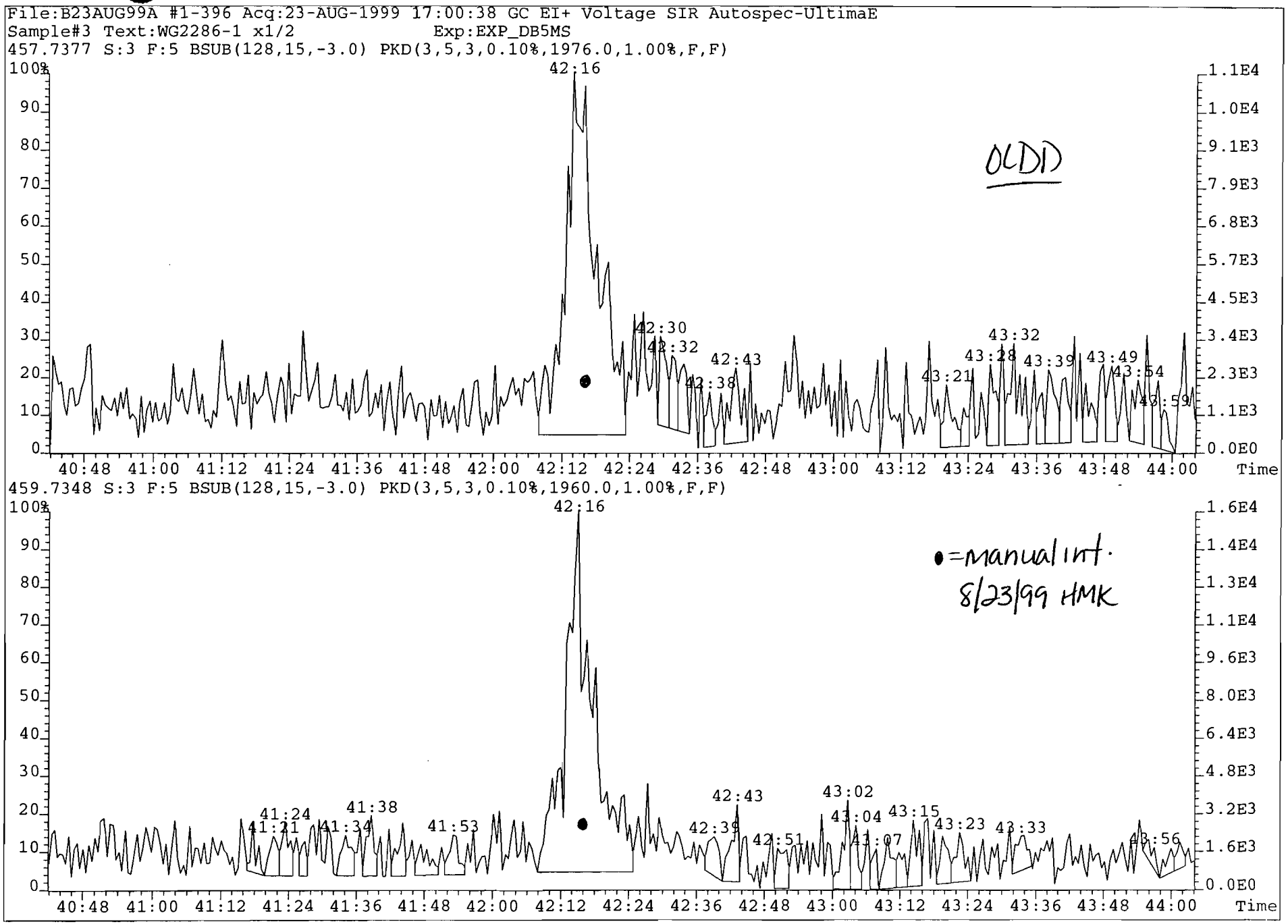
Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	2.82E+04	20000	8210	2.43 n		34:26	0.026	S2N	1.4 n		1.1 n		n
	2	7.73E+03	3950	3790	1.04 n		34:29	0.007	S2N	0.58 n		0.42 n		n
	3	1.67E+04	11800	4950	2.38 n		34:33	0.016	S2N	0.92 n		0.92 n		n
	4	1.46E+04	10400	4260	2.44 n		34:36	0.014	S2N	0.96 n		0.76 n		n
	5	2.49E+04	14700	10200	1.45 n		34:41	0.023	S2N	0.93 n		0.8 n		n
	6	2.02E+04	11700	8500	1.37 y		34:45	0.019	S2N	0.85 n		0.89 n		n
	7	8.54E+03	2960	5580	0.53 n		34:48	0.008	S2N	0.49 n		0.93 n		n
	8	1.32E+05	94400	37100	2.54 n		34:53	0.123	S2N	7 y		2.6 n		n
	9	1.27E+05	99600	27500	3.62 n		34:59	0.119	S2N	6.6 y		2.6 n		n
	10	2.73E+04	18300	8980	2.04 n		35:02	0.026	S2N	1.6 n		1.5 n		n
	11	2.87E+04	14000	14700	0.95 n		35:06	0.027	S2N	1.3 n		1.1 n		n
	12	2.16E+04	15300	6280	2.44 n		35:08	0.02	S2N	0.78 n		0.99 n		n
	13	1.26E+04	10300	2330	4.41 n		35:14	0.012	S2N	0.72 n		0.58 n		n
	14	1.31E+04	7440	5640	1.32 y		35:18	0.012	S2N	0.61 n		0.65 n		n
	15	1.68E+04	1410	15300	0.09 n		35:21	0.016	S2N	0.31 n		1.5 n		n
	16	2.36E+04	8210	15300	0.54 n		35:22	0.022	S2N	0.86 n		1.5 n		n
	17	8.87E+03	3540	5330	0.66 n		35:26	0.008	S2N	0.58 n		0.78 n		n
	18	1.08E+04	5440	5330	1.02 n		35:27	0.01	S2N	0.84 n		0.78 n		n
1,2,3,4,7,8-HxCDD	19	2.34E+04	14100	9390	1.5 n		35:34	0.023	S2N	1 n		1.5 n		n
	20	2.11E+04	6640	14400	0.46 n		35:37	0.02	S2N	0.89 n		1.4 n		n
1,2,3,6,7,8-HxCDD	21	2.33E+04	8850	14400	0.61 n		35:39	0.022	S2N	1.2 n		1.4 n		n

Filename:	b23aug99a	Name of Homolog Group:	Total Hepta-Furans
Sample:	3	Number of Peaks Found:	9
Acquired:	23-AUG-99 17:00:38	RRF Used For Totals:	1.3281
Processed:	24-AUG-99 08:02:48	Detection Limit:	0.0364
Sample ID:	WG2286-1 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	37:15:00
Results Table:	m8290-b082399a	End Window:	39:22:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
1,2,3,4,6,7,8-HpCDI	1	2.29E+04	15000	7870	1.9	n	37:27	0.018	S2N	2.3	n	1.8	n	n
	2	9.54E+03	5530	4010	1.38	n	37:31	0.008	S2N	0.93	n	1.3	n	n
	3	5.31E+03	1600	3720	0.43	n	37:33	0.005	S2N	0.49	n	1.2	n	n
	4	7.48E+03	3770	3720	1.01	y	37:36	0.007	S2N	0.62	n	1.2	n	n
	5	5.05E+03	2490	2560	0.97	y	37:52	0.004	S2N	0.7	n	1.1	n	n
	6	1.49E+04	13000	1900	6.87	n	37:57	0.013	S2N	1.9	n	0.57	n	n
	7	6.26E+03	3650	2610	1.4	n	38:10	0.006	S2N	1.1	n	0.78	n	n
	8	8.20E+03	3730	4480	0.83	n	38:49	0.007	S2N	0.78	n	1.4	n	n
	9	6.43E+03	5540	884	6.27	n	39:00	0.006	S2N	1.2	n	0.4	n	n

Filename:	b23aug99a	Name of Homolog Group:	Total Hepta-Dioxins
Sample:	3	Number of Peaks Found:	6
Acquired:	23-AUG-99 17:00:38	RRF Used For Totals:	0.944
Processed:	24-AUG-99 08:02:48	Detection Limit:	0.1001
Sample ID:	WG2286-1 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	37:32:00
Results Table:	m8290-b082399a	End Window:	37:52:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	5.16E+04	43400	8220	5.28	n	37:26	0.061	RT	4.4	y	1	n	n
1,2,3,4,6,7,8-HpCDI	2	5.23E+04	13500	38700	0.35	n	38:33	0.062	RT	1.7	n	2.3	n	n
	3	1.55E+04	3430	12100	0.28	n	38:38	0.018	RT	0.56	n	2	n	n
	4	2.99E+03	909	2080	0.44	n	39:02	0.004	RT	0.18	n	0.65	n	n
	5	5.30E+04	40700	12300	3.31	n	39:06	0.062	RT	2.9	n	1.7	n	n
	6	1.42E+04	2610	11600	0.22	n	39:12	0.017	RT	0.5	n	1.4	n	n


File:B23AUG99A #1-396 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
457.7377 S:3 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1976.0,1.00%,F,F)
42:16
42:30
42:32
42:43
42:38
43:32
43:28
43:21
43:39
43:49
43:54
43:59
OLDID
Time
459.7348 S:3 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1960.0,1.00%,F,F)
42:16
41:24
41:21
41:38
41:34
41:53
42:43
42:39
42:51
43:02
43:04
43:15
41:07
43:23
43:33
43:56
●=manual int.
8/23/99 HMK
Time

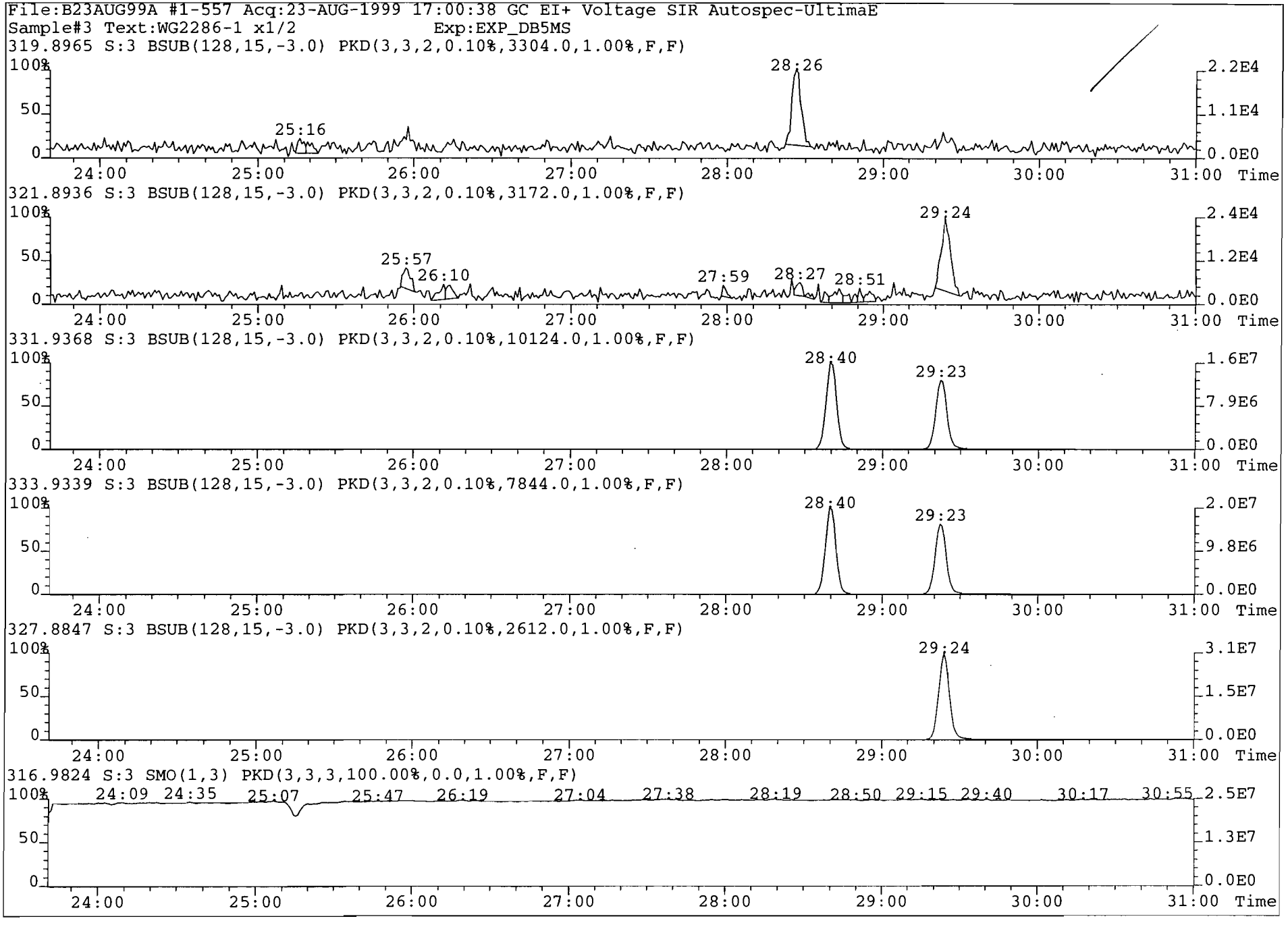
12

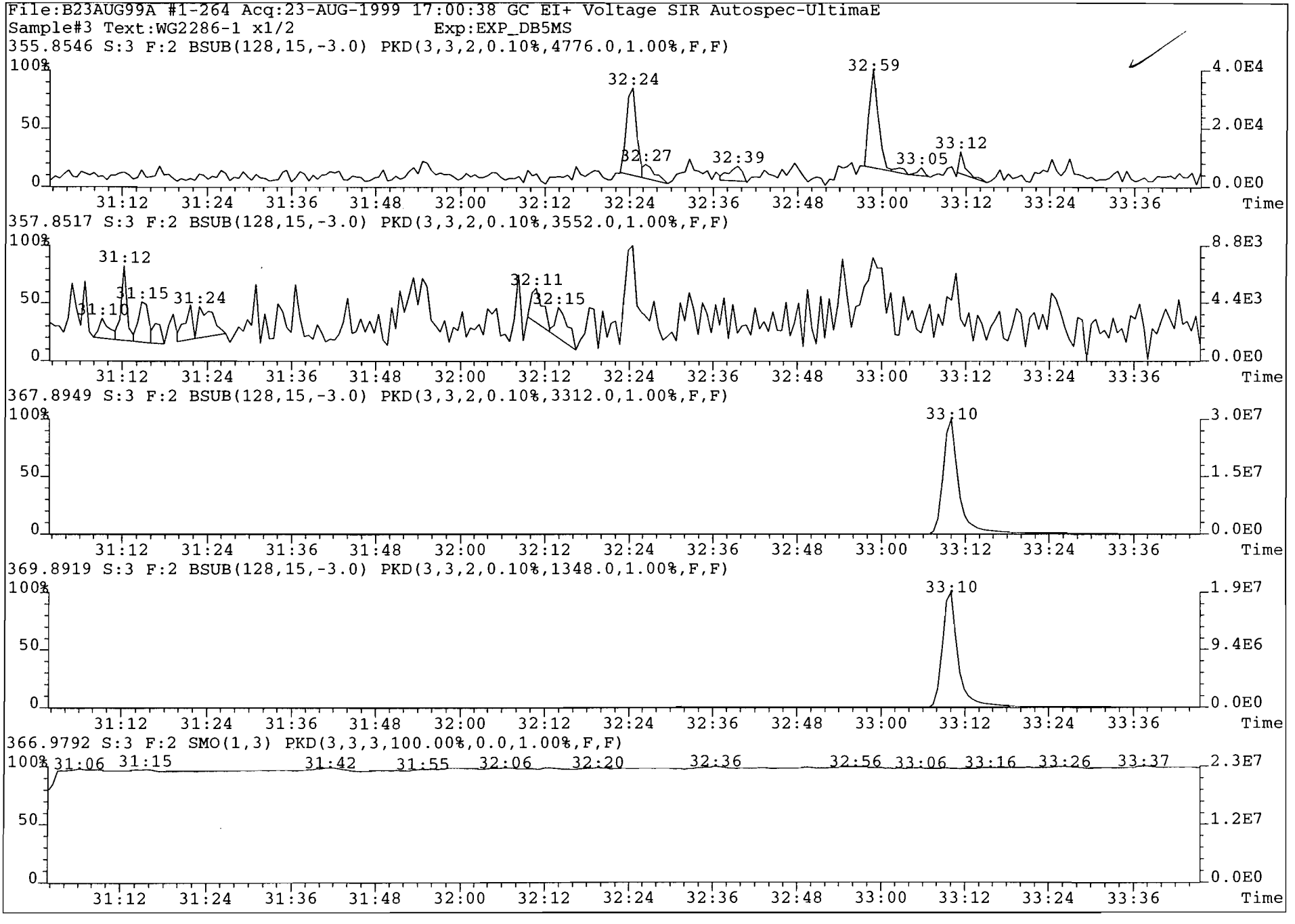
OPUSquan 24-AUG-1999 Page 1

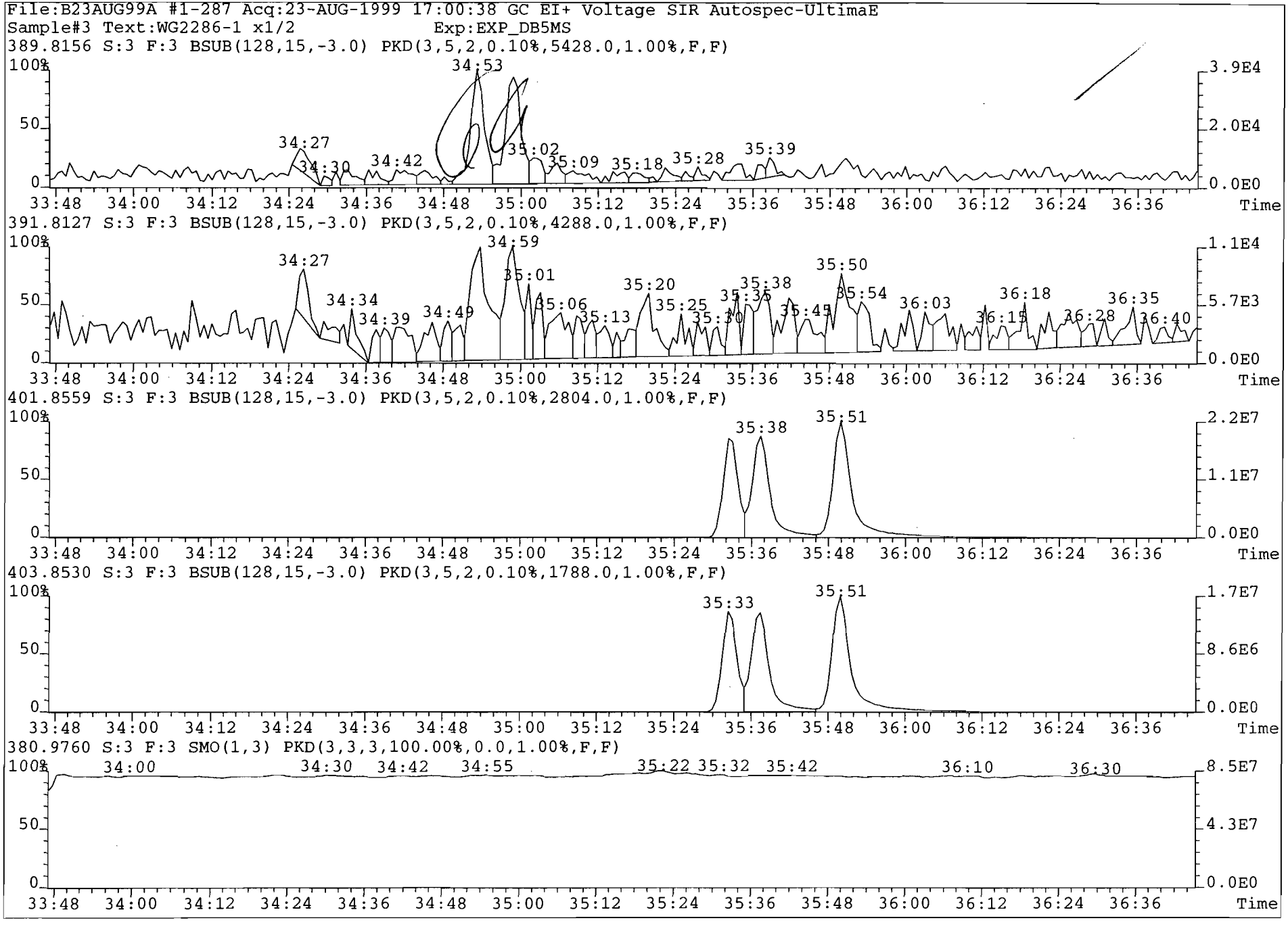
Filename ; b23aug99a
Sample ; 3
Acquired ; 23-AUG-99 17:00:38
Processed ; 24-AUG-99 08:02:48
Sample ID ; WG2286-1 x1/2
Cal Table ; m8290-b060499a
Results Table ; M8290-B082399A
Comments ;

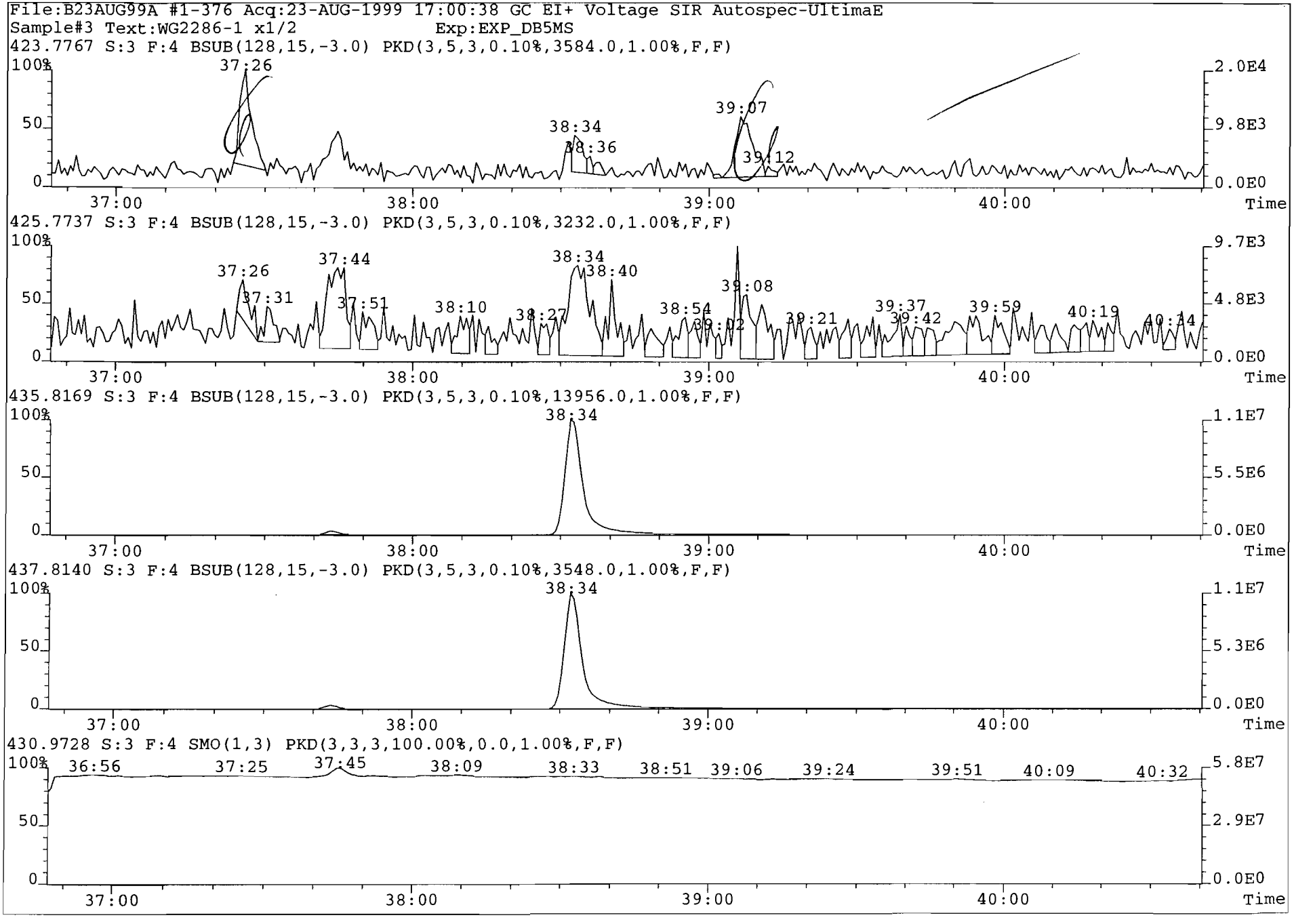
M.E.

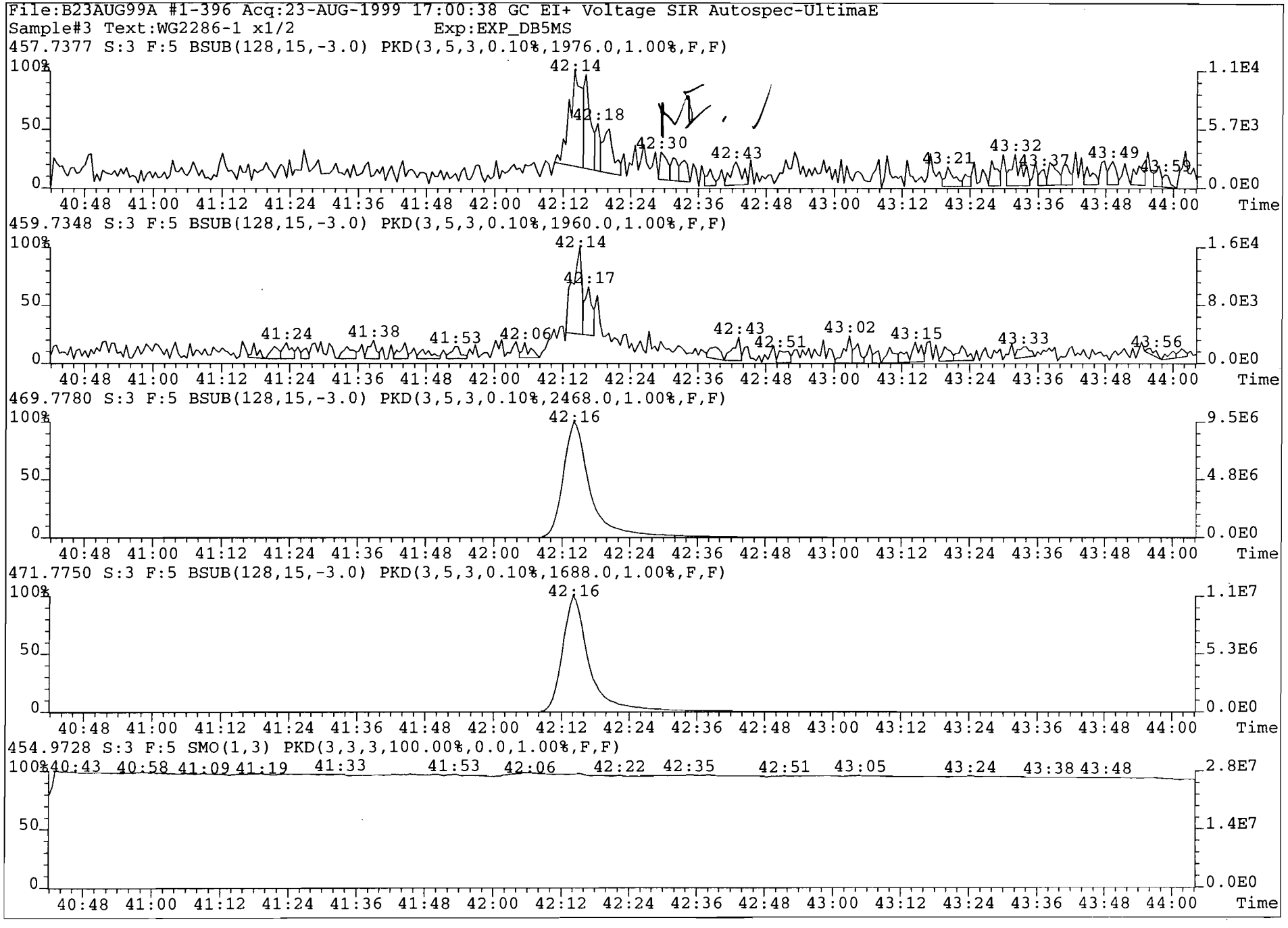
Typ	Name	Resp	Ion 1	Ion 2	RA;?; RT	Conc	DL	S/N1;?;	S/N2;?	mod?
Unk	2,3,7,8-TCDD	*	*	*	*;n;NotFnd	*	0.0631	*;n;	*;n	no
Unk	1,2,3,7,8-PeCDD	*	*	*	*;n;NotFnd	*	0.0521	*;n;	*;n	no
Unk	1,2,3,4,7,8-HxCDD	2.34e+04	1.41e+04	9.39e+03	1.50;n; 35:34	0.023	0.0921	1;n;	1;n	no
Unk	1,2,3,6,7,8-HxCDD	2.33e+04	8.85e+03	1.44e+04	0.61;n; 35:39	0.022	0.0898	1;n;	1;n	no
Unk	1,2,3,7,8,9-HxCDD	*	*	*	*;n;NotFnd	*	0.0847	*;n;	*;n	no
Unk	1,2,3,4,6,7,8-HpCDD	5.23e+04	1.35e+04	3.87e+04	0.35;n; 38:33	0.062	0.1001	2;n;	2;n	no
Unk	OCDD	2.22e+04	1.22e+04	9.97e+03	1.23;n; 42:16	0.041	0.1159	5;y;	3;y	no
Unk	2,3,7,8-TCDF	*	*	*	*;n;NotFnd	*	0.0449	*;n;	*;n	no
Unk	1,2,3,7,8-PeCDF	*	*	*	*;n;NotFnd	*	0.0235	*;n;	*;n	no
Unk	2,3,4,7,8-PeCDF	*	*	*	*;n;NotFnd	*	0.0229	*;n;	*;n	no
Unk	1,2,3,4,7,8-HxCDF	3.33e+04	2.06e+04	1.27e+04	1.61;n; 34:54	0.022	0.0170	4;y;	3;n	no
Unk	1,2,3,6,7,8-HxCDF	2.58e+04	1.53e+04	1.05e+04	1.46;n; 34:59	0.015	0.0154	2;n;	3;y	no
Unk	2,3,4,6,7,8-HxCDF	1.87e+04	1.58e+04	2.96e+03	5.33;n; 35:25	0.013	0.0179	3;y;	1;n	no
Unk	1,2,3,7,8,9-HxCDF	1.31e+04	1.01e+04	2.99e+03	3.37;n; 36:09	0.010	0.0198	3;y;	2;n	no
Unk	1,2,3,4,6,7,8-HpCDF	2.29e+04	1.50e+04	7.87e+03	1.90;n; 37:27	0.018	0.0325	2;n;	2;n	no
Unk	1,2,3,4,7,8,9-HpCDF	*	*	*	*;n;NotFnd	*	0.0413	*;n;	*;n	no
Unk	OCDF	9.83e+03	6.52e+03	3.31e+03	1.97;n; 42:30	0.017	0.0658	5;y;	1;n	no
ES/RT	13C-2,3,7,8-TCDD	1.39e+08	6.14e+07	7.79e+07	0.79;y; 29:22	80.887	0.1428	1237;y	2037;y	no
ES	13C-1,2,3,7,8-PeCDD	1.19e+08	7.30e+07	4.64e+07	1.57;y; 33:10	81.012	0.0432	9080;y	13948;y	no
ES	13C-1,2,3,6,7,8-HxCDD	1.10e+08	6.18e+07	4.81e+07	1.28;y; 35:37	84.127	0.0354	6833;y	8237;y	no
ES	13C-1,2,3,4,6,7,8-HpCDD	8.99e+07	4.63e+07	4.37e+07	1.06;y; 38:32	79.936	0.1567	791;y	2985;y	no
ES	13C-OCDD	1.08e+08	5.08e+07	5.68e+07	0.90;y; 42:14	111.743	0.0434	3862;y	6301;y	no
ES/RT	13C-2,3,7,8-TCDF	1.96e+08	8.63e+07	1.10e+08	0.79;y; 28:26	80.554	0.0359	5536;y	7428;y	no
ES	13C-1,2,3,7,8-PeCDF	1.67e+08	1.02e+08	6.52e+07	1.56;y; 32:25	76.564	0.0281	22019;y	11843;y	no
ES	13C-1,2,3,6,7,8-HxCDF	1.42e+08	4.88e+07	9.28e+07	0.53;y; 34:59	82.361	0.0593	3108;y	7032;y	no
ES	13C-1,2,3,4,6,7,8-HpCDF	8.46e+07	2.62e+07	5.84e+07	0.45;y; 37:26	73.891	0.1055	1518;y	2399;y	no
JS	13C-1,2,3,4-TCDD	1.61e+08	7.17e+07	8.94e+07	0.80;y; 28:40	125.395	-	1554;y	2496;y	no
JS	13C-1,2,3,7,8,9-HxCDD	1.31e+08	7.36e+07	5.76e+07	1.28;y; 35:50	123.726	-	7812;y	9608;y	no
CS	37Cl-2,3,7,8-TCDD	1.44e+08	1.44e+08	-	-;-;NotFnd	83.541	0.0207	11834;y	-; -	no
CS	13C-2,3,4,7,8-PeCDF	1.82e+08	1.12e+08	7.08e+07	1.58;y; 32:59	87.310	0.0294	24435;y	13525;y	no
CS	13C-1,2,3,4,7,8-HxCDD	8.63e+07	4.84e+07	3.79e+07	1.28;y; 35:32	77.759	0.0417	6703;y	8364;y	no
CS	13C-1,2,3,4,7,8-HxCDF	1.19e+08	4.06e+07	7.79e+07	0.52;y; 34:53	77.615	0.0667	2960;y	6775;y	no
CS	13C-1,2,3,4,7,8,9-HpCDF	7.17e+07	2.19e+07	4.98e+07	0.44;y; 39:07	74.239	0.1251	997;y	1601;y	no
SS	37Cl-2,3,7,8-TCDD	1.44e+08	1.44e+08	-	-;-;NotFnd	103.296	0.0275	11834;y	-; -	no
SS	13C-2,3,4,7,8-PeCDF	1.82e+08	1.12e+08	7.08e+07	1.58;y; 32:59	114.050	0.0190	24435;y	13525;y	no
SS	13C-1,2,3,4,7,8-HxCDD	8.63e+07	4.84e+07	3.79e+07	1.28;y; 35:32	92.412	0.0479	6703;y	8364;y	no
SS	13C-1,2,3,4,7,8-HxCDF	1.19e+08	4.06e+07	7.79e+07	0.52;y; 34:53	94.215	0.0689	2960;y	6775;y	no
SS	13C-1,2,3,4,7,8,9-HpCDF	7.17e+07	2.19e+07	4.98e+07	0.44;y; 39:07	100.473	0.1749	997;y	1601;y	no

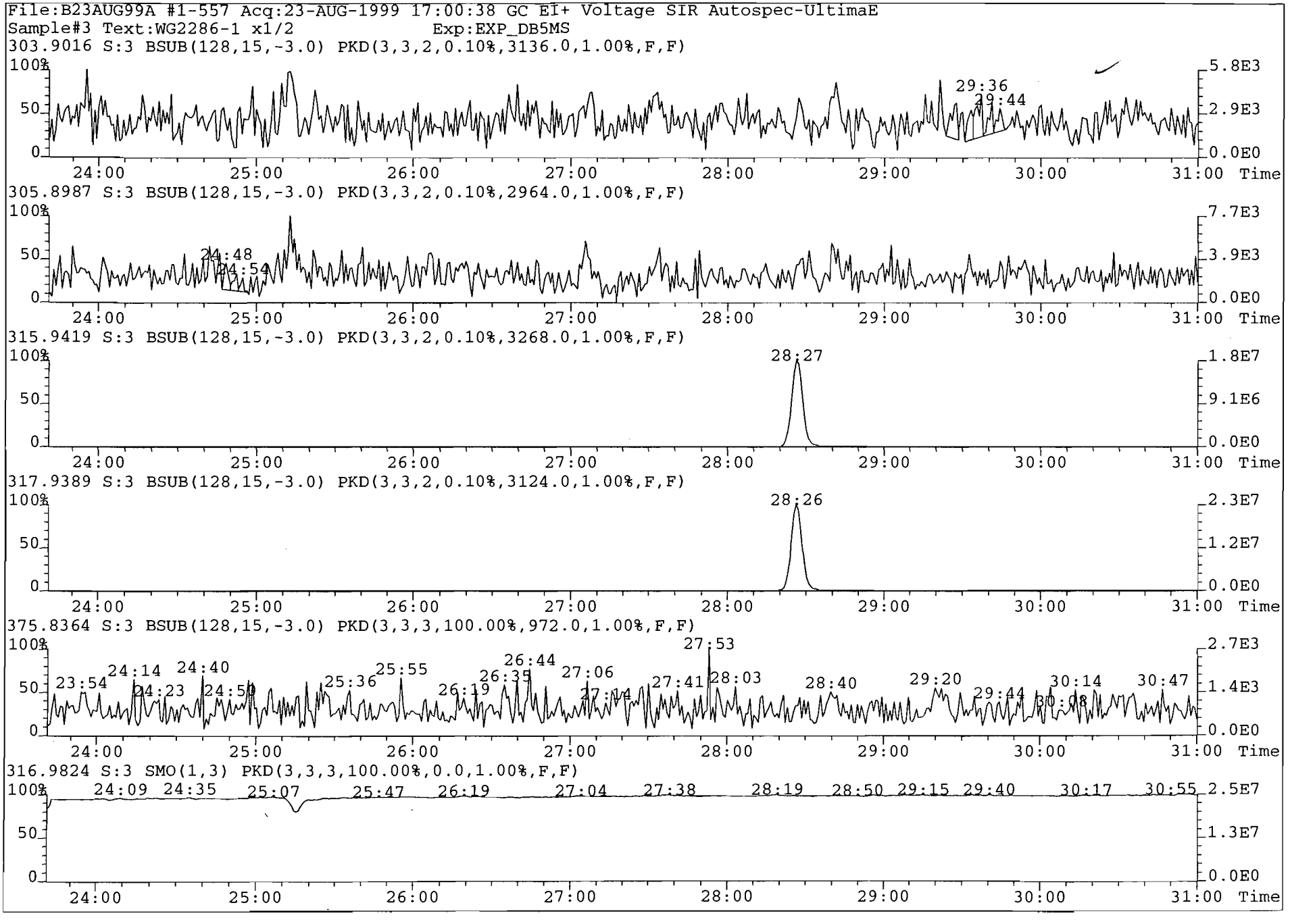

File:B23AUG99A #1-557 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
319.8965 S:3 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3304.0,1.00%,F,F)
28:26
25:16
321.8936 S:3 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3172.0,1.00%,F,F)
29:24
25:57
26:10
27:59
28:27
28:51
331.9368 S:3 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,10124.0,1.00%,F,F)
28:40
29:23
333.9339 S:3 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,7844.0,1.00%,F,F)
28:40
29:23
327.8847 S:3 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2612.0,1.00%,F,F)
29:24
316.9824 S:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
24:09 24:35 25:07 25:47 26:19 27:04 27:38 28:19 28:50 29:15 29:40 30:17 30:55
100%
50
0
24:00 25:00 26:00 27:00 28:00 29:00 30:00 31:00 Time
2.2E4 1.1E4 0.0E0
2.4E4 1.2E4 0.0E0
1.6E7 7.9E6 0.0E0
2.0E7 9.8E6 0.0E0
3.1E7 1.5E7 0.0E0
2.5E7 1.3E7 0.0E0

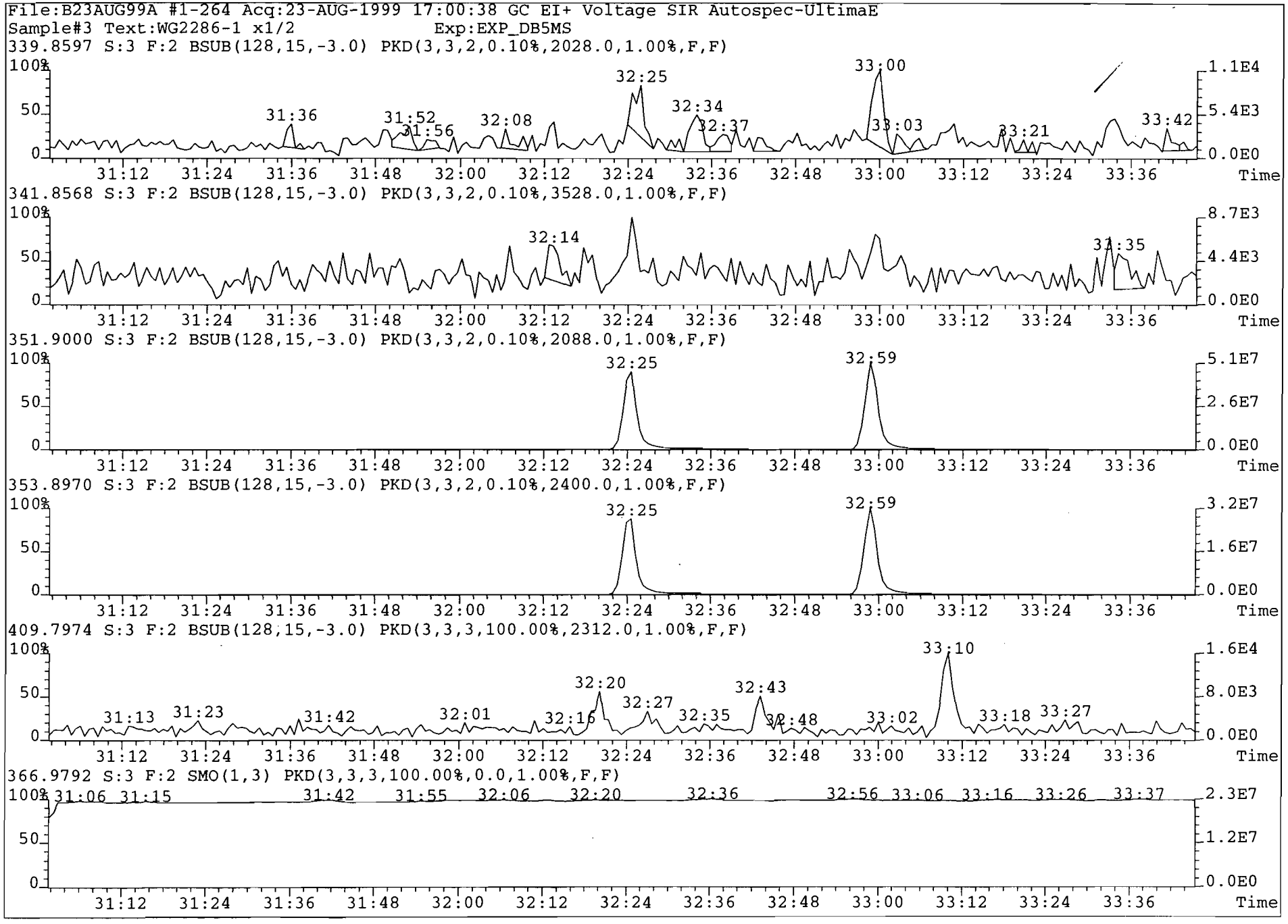

File:B23AUG99A #1-264 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
355.8546 S:3 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,4776.0,1.00%,F,F)
32:24
32:59
32:27
32:39
33:05
33:12
4.0E4
2.0E4
0.0E0
357.8517 S:3 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3552.0,1.00%,F,F)
31:12
31:10
31:15
31:24
32:11
32:15
8.8E3
4.4E3
0.0E0
367.8949 S:3 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3312.0,1.00%,F,F)
33:10
3.0E7
1.5E7
0.0E0
369.8919 S:3 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1348.0,1.00%,F,F)
33:10
1.9E7
9.4E6
0.0E0
366.9792 S:3 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
31:06
31:15
31:42
31:55
32:06
32:20
32:36
32:56
33:06
33:16
33:26
33:37
2.3E7
1.2E7
0.0E0
100%
50
0
31:12
31:24
31:36
31:48
32:00
32:12
32:24
32:36
32:48
33:00
33:12
33:24
33:36
Time

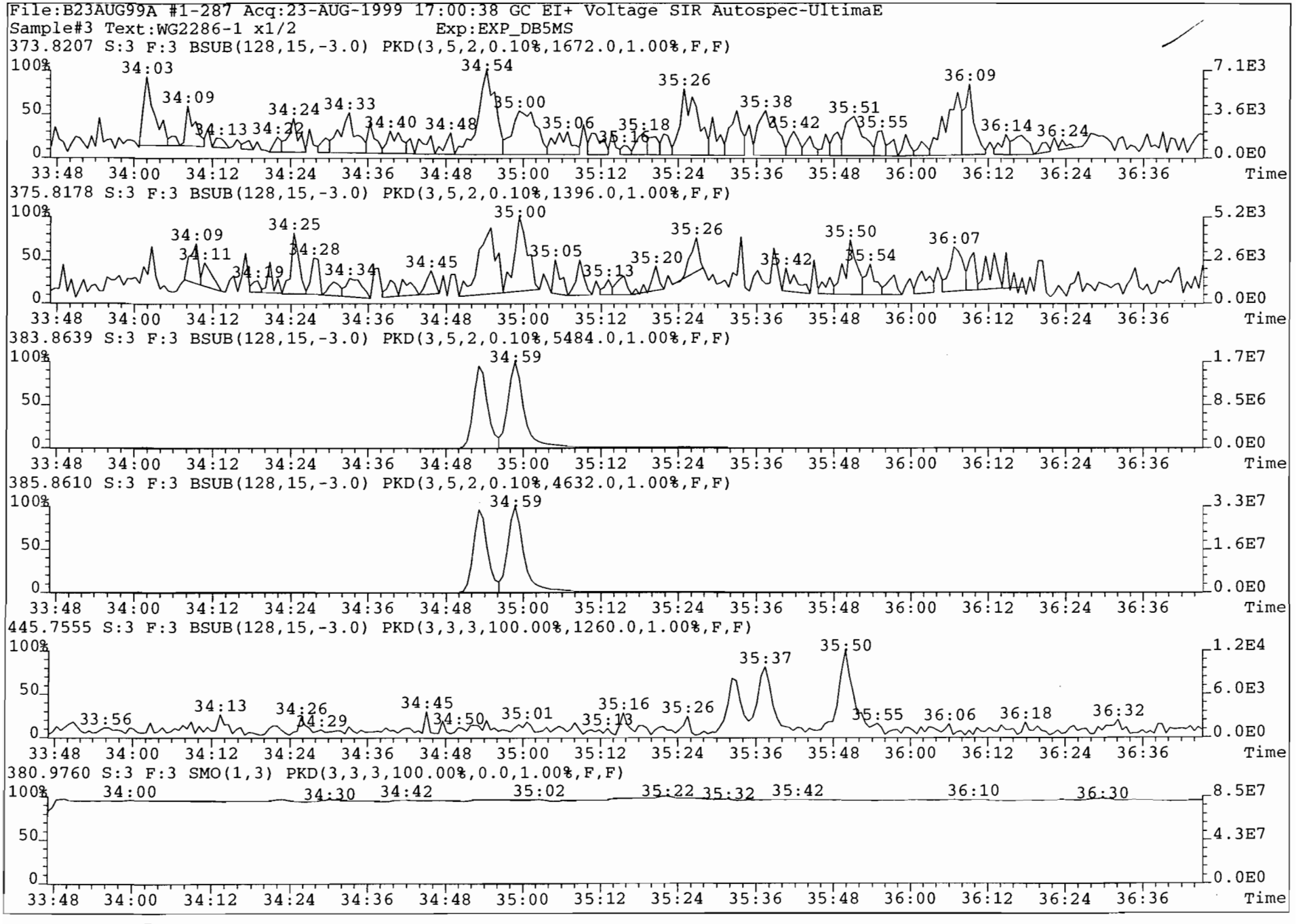

File:B23AUG99A #1-287 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
389.8156 S:3 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,5428.0,1.00%,F,F)
391.8127 S:3 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,4288.0,1.00%,F,F)
401.8559 S:3 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,2804.0,1.00%,F,F)
403.8530 S:3 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,1788.0,1.00%,F,F)
380.9760 S:3 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
100%
50
0
Time
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36
34:53
34:27
34:30
34:42
35:02
35:09
35:18
35:28
35:39
3.9E4
2.0E4
0.0E0
34:59
34:27
34:34
34:39
34:49
35:01
35:06
35:13
35:20
35:25
35:30
35:35
35:38
35:45
35:50
35:54
36:03
36:15
36:18
36:28
36:35
36:40
1.1E4
5.7E3
0.0E0
35:38
35:51
2.2E7
1.1E7
0.0E0
35:33
35:51
1.7E7
8.6E6
0.0E0
34:00
34:30
34:42
34:55
35:22
35:32
35:42
36:10
36:30
8.5E7
4.3E7
0.0E0

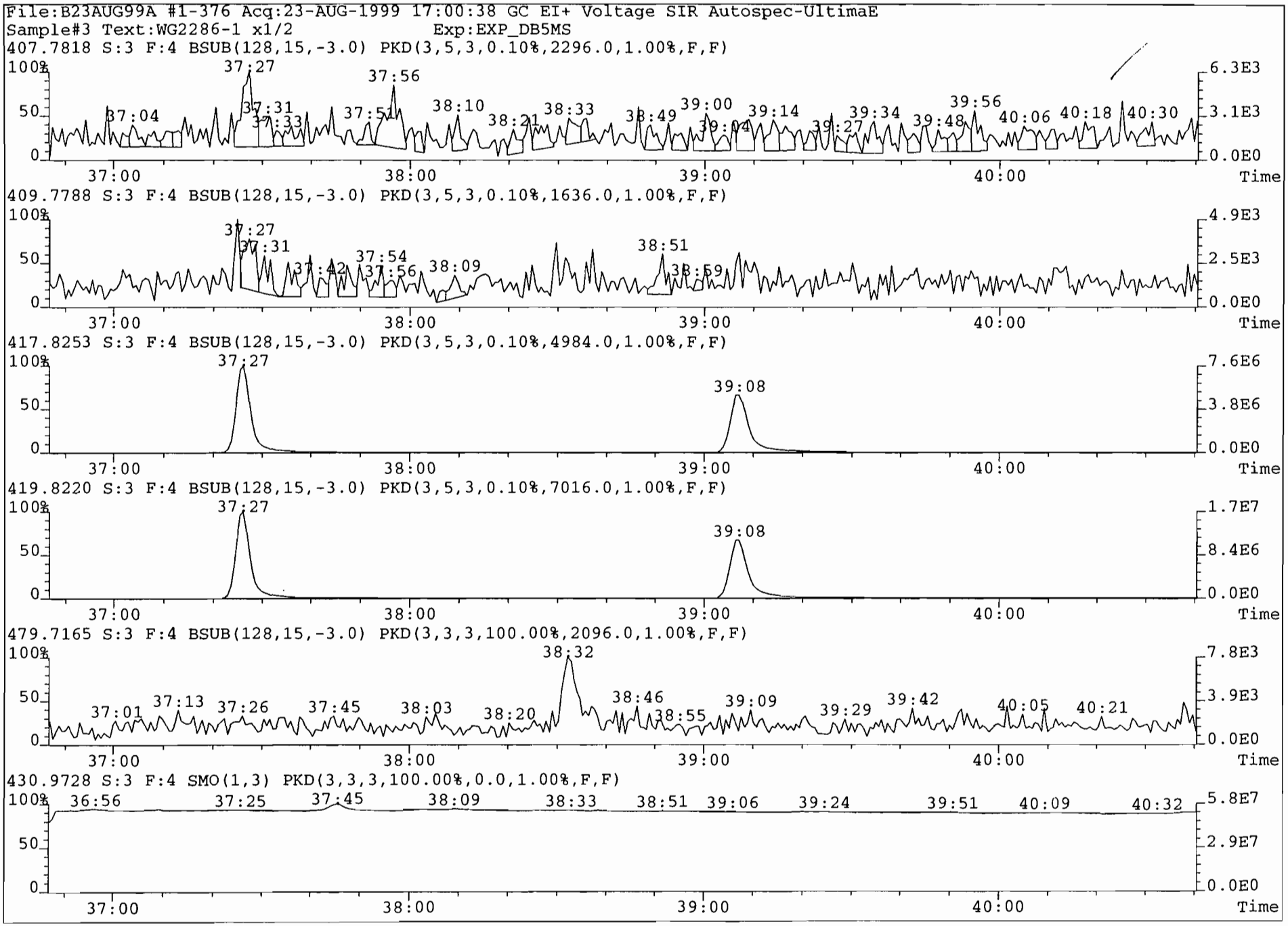

File:B23AUG99A #1-376 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
423.7767 S:3 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3584.0,1.00%,F,F)
37:26
38:34
38:36
39:07
39:12
2.0E4
9.8E3
0.0E0
425.7737 S:3 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3232.0,1.00%,F,F)
37:26
37:31
37:44
37:51
38:10
38:27
38:34
38:40
38:54
39:02
39:08
39:21
39:37
39:42
39:59
40:19
40:44
9.7E3
4.8E3
0.0E0
435.8169 S:3 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,13956.0,1.00%,F,F)
38:34
1.1E7
5.5E6
0.0E0
437.8140 S:3 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3548.0,1.00%,F,F)
38:34
1.1E7
5.3E6
0.0E0
430.9728 S:3 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
36:56
37:25
37:45
38:09
38:33
38:51
39:06
39:24
39:51
40:09
40:32
5.8E7
2.9E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
Time

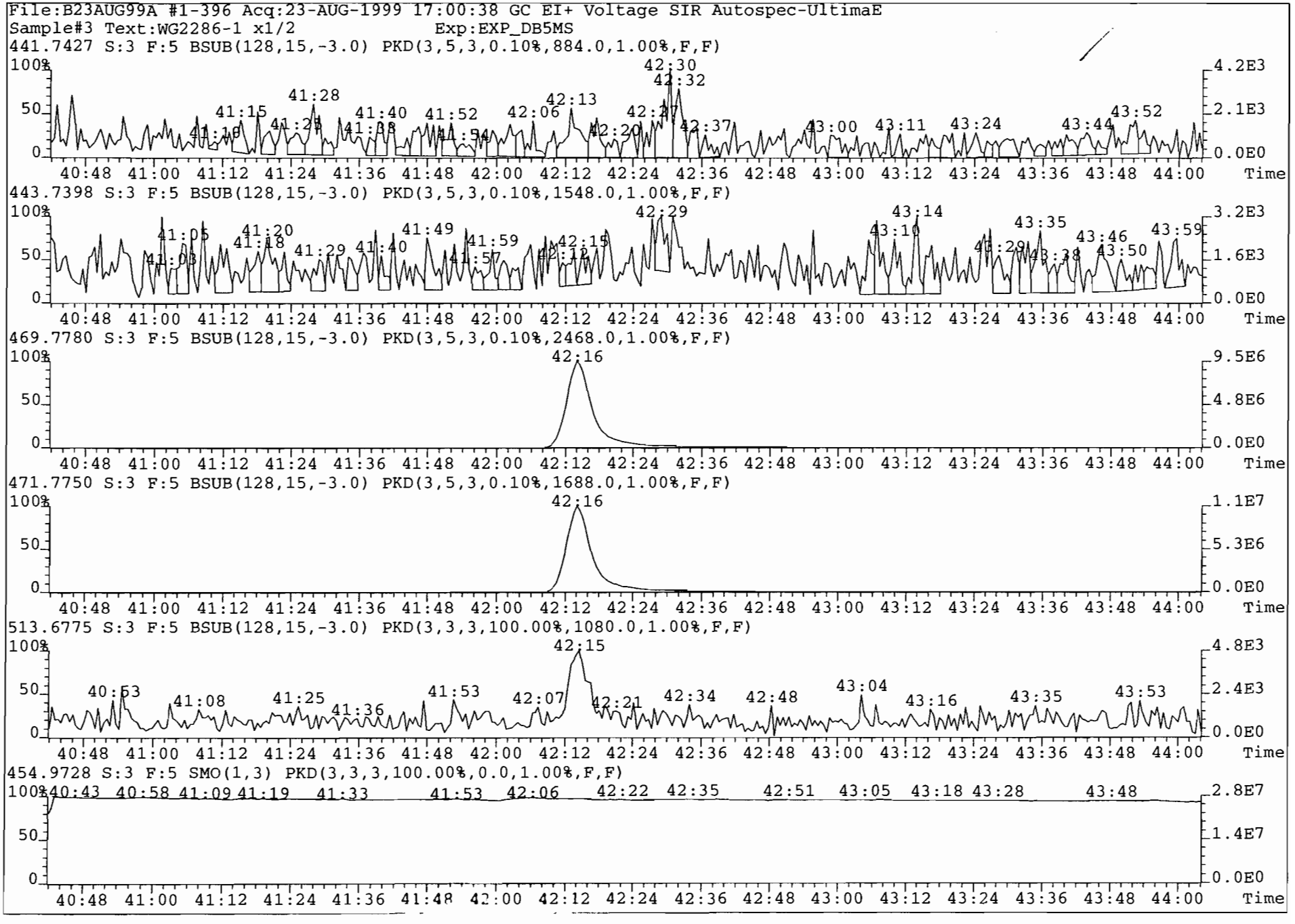

File:B23AUG99A #1-396 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
457.7377 S:3 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1976.0,1.00%,F,F)
42:14
42:18
42:30
42:43
43:21
43:32
43:37
43:49
43:59
1.1E4
5.7E3
0.0E0
459.7348 S:3 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1960.0,1.00%,F,F)
42:14
42:17
41:24
41:38
41:53
42:06
42:43
42:51
43:02
43:15
43:33
43:56
1.6E4
8.0E3
0.0E0
469.7780 S:3 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2468.0,1.00%,F,F)
42:16
9.5E6
4.8E6
0.0E0
471.7750 S:3 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1688.0,1.00%,F,F)
42:16
1.1E7
5.3E6
0.0E0
454.9728 S:3 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
40:43 40:58 41:09 41:19 41:33 41:53 42:06 42:22 42:35 42:51 43:05 43:24 43:38 43:48
2.8E7
1.4E7
0.0E0
100%
50
0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time

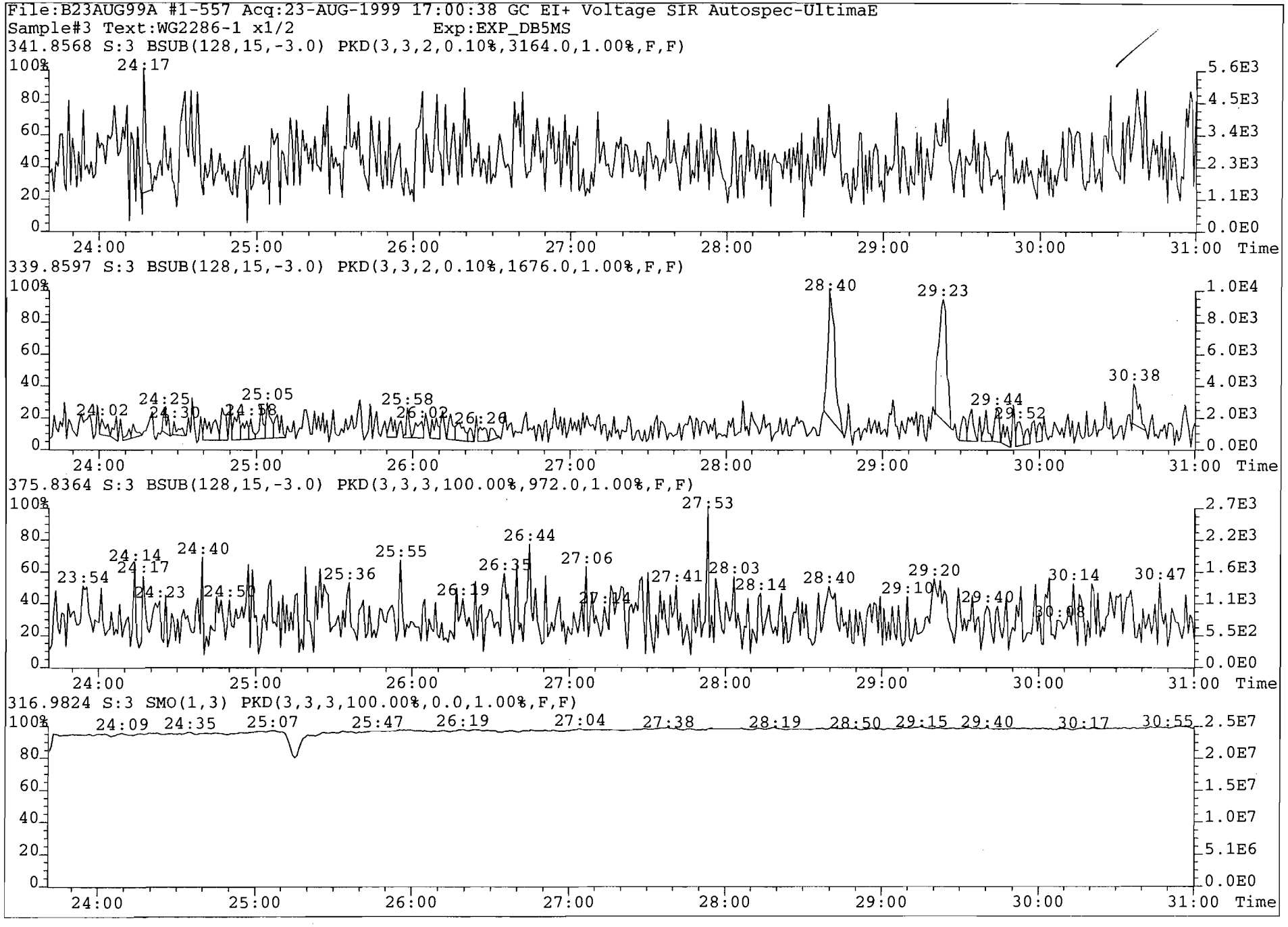

File:B23AUG99A #1-557 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
303.9016 S:3 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3136.0,1.00%,F,F)
29:36
29:44
5.8E3
2.9E3
0.0E0
305.8987 S:3 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2964.0,1.00%,F,F)
24:48
24:54
7.7E3
3.9E3
0.0E0
315.9419 S:3 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3268.0,1.00%,F,F)
28:27
1.8E7
9.1E6
0.0E0
317.9389 S:3 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3124.0,1.00%,F,F)
28:26
2.3E7
1.2E7
0.0E0
375.8364 S:3 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,972.0,1.00%,F,F)
27:53
23:54 24:14 24:40 24:23 24:59 25:36 25:55 26:19 26:35 26:44 27:06 27:14 27:41 28:03 28:40 29:20 29:44 30:14 30:47
2.7E3
1.4E3
0.0E0
316.9824 S:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
24:09 24:35 25:07 25:47 26:19 27:04 27:38 28:19 28:50 29:15 29:40 30:17 30:55
2.5E7
1.3E7
0.0E0
100%
50
0
24:00 25:00 26:00 27:00 28:00 29:00 30:00 31:00 Time


File:B23AUG99A #1-264 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
339.8597 S:3 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2028.0,1.00%,F,F)
341.8568 S:3 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3528.0,1.00%,F,F)
351.9000 S:3 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2088.0,1.00%,F,F)
353.8970 S:3 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2400.0,1.00%,F,F)
409.7974 S:3 F:2 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,2312.0,1.00%,F,F)
366.9792 S:3 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
Time


File:B23AUG99A #1-287 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
373.8207 S:3 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,1672.0,1.00%,F,F)
375.8178 S:3 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,1396.0,1.00%,F,F)
383.8639 S:3 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,5484.0,1.00%,F,F)
385.8610 S:3 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,4632.0,1.00%,F,F)
445.7555 S:3 F:3 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1260.0,1.00%,F,F)
380.9760 S:3 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
100%
50
0
Time
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36


File:B23AUG99A #1-376 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
407.7818 S:3 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2296.0,1.00%,F,F)
409.7788 S:3 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1636.0,1.00%,F,F)
417.8253 S:3 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,4984.0,1.00%,F,F)
419.8220 S:3 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,7016.0,1.00%,F,F)
479.7165 S:3 F:4 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,2096.0,1.00%,F,F)
430.9728 S:3 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
Time


File:B23AUG99A #1-396 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
441.7427 S:3 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,884.0,1.00%,F,F)
443.7398 S:3 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1548.0,1.00%,F,F)
469.7780 S:3 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2468.0,1.00%,F,F)
471.7750 S:3 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1688.0,1.00%,F,F)
513.6775 S:3 F:5 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1080.0,1.00%,F,F)
454.9728 S:3 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
Time


File:B23AUG99A #1-557 Acq:23-AUG-1999 17:00:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:WG2286-1 x1/2 Exp:EXP_DB5MS
341.8568 S:3 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3164.0,1.00%,F,F)
24:17
339.8597 S:3 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1676.0,1.00%,F,F)
28:40
29:23
30:38
24:02
24:25
24:30
24:58
25:05
25:58
26:02
26:26
29:44
29:52
375.8364 S:3 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,972.0,1.00%,F,F)
27:53
26:44
24:14
24:17
24:40
25:55
27:06
23:54
24:23
24:50
25:36
26:19
26:35
27:41
28:03
28:14
28:40
29:10
29:20
29:40
30:14
30:47
316.9824 S:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
24:09
24:35
25:07
25:47
26:19
27:04
27:38
28:19
28:50
29:15
29:40
30:17
30:55
Time

Method 23

1-S-M23-1

AirKinetics, Inc.

Analytical Data Summary Sheet

Analyte	Amount (ng)	DL (ng)	EMPC (ng)	RT (min.)	Ratio	Qualifier
2,3,7,8-TCDD	0.137	0.0026		29:24	0.78	
1,2,3,7,8-PeCDD	0.323	0.0031		33:11	1.55	
1,2,3,4,7,8-HxCDD	0.185	0.0039		35:33	1.25	
1,2,3,6,7,8-HxCDD	0.411	0.0038		35:38	1.25	
1,2,3,7,8,9-HxCDD	0.340	0.0036		35:50	1.25	
1,2,3,4,6,7,8-HpCDD	2.50	0.0091		38:33	1.02	
OCDD	4.92	0.0049		42:15	0.88	
2,3,7,8--TCDF	0.586	0.0245		28:28	0.76	
1,2,3,7,8-PeCDF	0.962	0.0095		32:25	1.54	
2,3,4,7,8-PeCDF	0.964	0.0092		32:59	1.54	
1,2,3,4,7,8-HxCDF	0.789	0.0142		34:54	1.22	
1,2,3,6,7,8-HxCDF	0.869	0.0128		34:59	1.23	
2,3,4,6,7,8-HxCDF	0.680	0.0150		35:26	1.24	
1,2,3,7,8,9-HxCDF	0.146	0.0165		36:08	1.41	
1,2,3,4,6,7,8-HpCDF	1.86	0.0033		37:27	1.02	
1,2,3,4,7,8,9-HpCDF	0.195	0.0042		39:08	1.01	
OCDF	0.550	0.0026		42:30	0.89	
Total TCDDs	2.64	0.0026				
Total PeCDDs	3.82	0.0031				
Total HxCDDs	4.75	0.0036	4.76			
Total HpCDDs	4.93	0.0091				
Total TCDFs	20.2	0.0245	21.0			
Total PeCDFs	13.6	0.0092				
Total HxCDFs	7.59	0.0128				
Total HpCDFs	2.84	0.0033				
TEQ (ND=0)	1.28		1.28			ITEF
TEQ (ND=½)	1.28		1.28			ITEF

Client Information

Project Name: OMS-Lee
Sample ID: 1-S-M23-1

Laboratory Information

Project ID: G370-4
Sample ID: 70733

Collection Date: 18-Aug-99
Receipt Date: 20-Aug-99
Extraction Date: 20-Aug-99
Analysis Date: 23-Aug-99

Sample Information

Matrix: Air
Weight / Volume:
Moisture / Lipids:
Original pH: NA

Filename: b23aug99a-5
Retchk: b23aug99a-1
Begin ConCal: b23aug99a-1
End ConCal: b23aug99a-15
Initial Cal: m8290-b060499a

Method 23

1-S-M23-1

AirKinetics, Inc.

Analytical Data Summary Sheet

Labeled Standard	Expected Amount (ng)	Measured Amount (ng)	Percent Recovery (%)	RT (min.)	Ratio	Qualifier
Extraction Standards						
$^{13}C_{12}$-2,3,7,8-TCDD	4	3.34	83.5	29:22	0.8	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	4	3.23	80.8	33:10	1.55	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	4	3.44	86.0	35:37	1.28	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	4	3.53	88.3	38:32	1.06	
$^{13}C_{12}$-OCDD	8	6.04	75.5	42:15	0.9	
$^{13}C_{12}$-2,3,7,8-TCDF	4	3.33	83.3	28:26	0.78	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	4	3.12	78.0	32:25	1.57	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	4	3.31	82.8	34:59	0.53	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	4	3.22	80.5	37:26	0.45	
Sampling Standards						
$^{37}Cl_4$-2,3,7,8-TCDD	4	4.06	101.5	29:24		
$^{13}C_{12}$-2,3,4,7,8-PeCDF	4	4.38	109.5	32:59	1.58	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	4	3.69	92.3	35:32	1.28	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	4	3.78	94.5	34:53	0.52	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	4	4.04	101.0	39:07	0.46	
Injection Standards						
$^{13}C_{12}$-1,2,3,4-TCDD				28:40	0.8	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD				35:50	1.27	

Client Information

Project Name: OMS-Lee
Sample ID: 1-S-M23-1

Laboratory Information

Project ID: G370-4
Sample ID: 70733

Collection Date: 18-Aug-99
Receipt Date: 20-Aug-99
Extraction Date: 20-Aug-99
Analysis Date: 23-Aug-99

Sample Information

Matrix: Air
Weight / Volume:
Moisture / Lipids:
Original pH: NA

Filename: b23aug99a-5
Retchk: b23aug99a-1
Begin ConCal: b23aug99a-1
End ConCal: b23aug99a-15
Initial Cal: m8290-b060499a

Reviewed by: Y.T.

Date Reviewed: 24Aug99

OPUSquan 24-AUG-1999 Page 1

Filename ; b23aug99a
Sample ; 5
Acquired ; 23-AUG-99 18:33:16
Processed ; 24-AUG-99 08:03:30
Sample ID ; 70733 x1/2
Cal Table ; m8290-b060499a
Results Table ; M8290-B082399A
Comments ;

Typ	Name	Resp	Ion 1	Ion 2	RA;?;	RT	Conc	DL	S/N1;?;	S/N2;? ;	mod?
Unk	2,3,7,8-TCDD	5.46e+06	2.36e+06	3.10e+06	0.76;y;	29:24	3.473	0.0642	150;y;	188;y ;	no
Unk	1,2,3,7,8-PeCDD	9.58e+06	5.83e+06	3.76e+06	1.55;y;	33:11	8.069	0.0763	313;y;	391;y ;	no
Unk	1,2,3,4,7,8-HxCDD	5.06e+06	2.81e+06	2.25e+06	1.25;y;	35:33	4.615	0.0970	177;y;	152;y ;	no
Unk	1,2,3,6,7,8-HxCDD	1.16e+07	6.41e+06	5.14e+06	1.25;y;	35:38	10.274	0.0946	374;y;	321;y ;	no
Unk	1,2,3,7,8,9-HxCDD	1.01e+07	5.63e+06	4.50e+06	1.25;y;	35:50	8.493	0.0892	266;y;	238;y ;	no
Unk	1,2,3,4,6,7,8-HpCDD	6.11e+07	3.09e+07	3.02e+07	1.02;y;	38:33	62.376	0.2275	517;y;	2294;y ;	no
Unk	OCDD	9.45e+07	4.42e+07	5.03e+07	0.88;y;	42:15	123.082	0.1226	2146;y;	4648;y ;	no
Unk	2,3,7,8-TCDF	2.98e+07	1.29e+07	1.69e+07	0.76;y;	28:28	14.660	0.6118	147;y;	55;y ;	no
Unk	1,2,3,7,8-PeCDF	3.96e+07	2.40e+07	1.56e+07	1.54;y;	32:25	24.055	0.2362	340;y;	274;y ;	no
Unk	2,3,4,7,8-PeCDF	4.08e+07	2.47e+07	1.61e+07	1.54;y;	32:59	24.101	0.2302	329;y;	266;y ;	no
Unk	1,2,3,4,7,8-HxCDF	3.20e+07	1.76e+07	1.44e+07	1.22;y;	34:54	19.720	0.3553	193;y;	161;y ;	no
Unk	1,2,3,6,7,8-HxCDF	3.90e+07	2.15e+07	1.75e+07	1.23;y;	34:59	21.729	0.3209	228;y;	188;y ;	no
Unk	2,3,4,6,7,8-HxCDF	2.62e+07	1.45e+07	1.17e+07	1.24;y;	35:26	17.001	0.3746	145;y;	116;y ;	no
Unk	1,2,3,7,8,9-HxCDF	5.08e+06	2.98e+06	2.10e+06	1.41;y;	36:08	3.643	0.4133	22;y;	17;y ;	no
Unk	1,2,3,4,6,7,8-HpCDF	6.65e+07	3.36e+07	3.29e+07	1.02;y;	37:27	46.462	0.0818	3478;y;	1081;y ;	no
Unk	1,2,3,4,7,8,9-HpCDF	5.49e+06	2.77e+06	2.73e+06	1.01;y;	39:08	4.879	0.1039	228;y;	71;y ;	no
Unk	OCDF	1.15e+07	5.41e+06	6.08e+06	0.89;y;	42:30	13.747	0.0658	722;y;	549;y ;	no
ES/RT	13C-2,3,7,8-TCDD	1.46e+08	6.46e+07	8.09e+07	0.80;y;	29:22	83.387	0.1144	1505;y;	2878;y ;	no
ES	13C-1,2,3,7,8-PeCDD	1.21e+08	7.33e+07	4.74e+07	1.55;y;	33:10	80.782	0.0354	12732;y;	13839;y ;	no
ES	13C-1,2,3,6,7,8-HxCDD	1.17e+08	6.59e+07	5.14e+07	1.28;y;	35:37	85.901	0.0364	8157;y;	7099;y ;	no
ES	13C-1,2,3,4,6,7,8-HpCDD	1.04e+08	5.33e+07	5.05e+07	1.06;y;	38:32	88.206	0.0451	3824;y;	6066;y ;	no
ES	13C-OCDD	1.52e+08	7.18e+07	8.01e+07	0.90;y;	42:15	150.943	0.0426	5167;y;	8380;y ;	no
ES/RT	13C-2,3,7,8-TCDF	2.06e+08	9.02e+07	1.15e+08	0.78;y;	28:26	83.374	0.0253	8647;y;	10273;y ;	no
ES	13C-1,2,3,7,8-PeCDF	1.73e+08	1.05e+08	6.70e+07	1.57;y;	32:25	77.973	0.0286	18816;y;	14088;y ;	no
ES	13C-1,2,3,6,7,8-HxCDF	1.49e+08	5.12e+07	9.75e+07	0.53;y;	34:59	82.751	0.0568	2892;y;	8457;y ;	no
ES	13C-1,2,3,4,6,7,8-HpCDF	9.63e+07	2.97e+07	6.66e+07	0.45;y;	37:26	80.425	0.1104	1472;y;	2780;y ;	no
JS	13C-1,2,3,4-TCDD	1.63e+08	7.26e+07	9.07e+07	0.80;y;	28:40	127.092	-;	1816;y;	3419;y ;	no
JS	13C-1,2,3,7,8,9-HxCDD	1.37e+08	7.68e+07	6.03e+07	1.27;y;	35:50	129.307	-;	8870;y;	7644;y ;	no
CS	37Cl-2,3,7,8-TCDD	1.48e+08	1.48e+08	-;	-;-;	29:24	84.725	0.0232	10576;y;	-; -;	no
CS	13C-2,3,4,7,8-PeCDF	1.81e+08	1.11e+08	7.00e+07	1.58;y;	32:59	85.374	0.0299	19997;y;	15145;y ;	no
CS	13C-1,2,3,4,7,8-HxCDD	9.18e+07	5.15e+07	4.04e+07	1.28;y;	35:32	79.173	0.0428	7449;y;	6477;y ;	no
CS	13C-1,2,3,4,7,8-HxCDF	1.25e+08	4.27e+07	8.21e+07	0.52;y;	34:53	78.253	0.0640	2628;y;	7811;y ;	no
CS	13C-1,2,3,4,7,8,9-HpCDF	8.20e+07	2.58e+07	5.61e+07	0.46;y;	39:07	81.154	0.1309	959;y;	1809;y ;	no
SS	37Cl-2,3,7,8-TCDD	1.48e+08	1.48e+08	-;	-;-;	29:24	101.619	0.0296	10576;y;	-; -;	no
SS	13C-2,3,4,7,8-PeCDF	1.81e+08	1.11e+08	7.00e+07	1.58;y;	32:59	109.507	0.0189	19997;y;	15145;y ;	no
SS	13C-1,2,3,4,7,8-HxCDD	9.18e+07	5.15e+07	4.04e+07	1.28;y;	35:32	92.149	0.0461	7449;y;	6477;y ;	no
SS	13C-1,2,3,4,7,8-HxCDF	1.25e+08	4.27e+07	8.21e+07	0.52;y;	34:53	94.543	0.0664	2628;y;	7811;y ;	no
SS	13C-1,2,3,4,7,8,9-HpCDF	8.20e+07	2.58e+07	5.61e+07	0.46;y;	39:07	100.906	0.1629	959;y;	1809;y ;	no

Totals Raw Data

	Conc	Empc	Flags
TCDF	503.094	523.791	TRUE
TCDD	65.99490625	65.99490625	FALSE
PeCDF	339.078	339.078	FALSE
PeCDD	95.375	95.375	FALSE
HxCDF	189.695	189.695	FALSE
HxCDD	118.859	119.057	TRUE
HpCDF	71.037	71.037	FALSE
HpCDD	123.143	123.143	FALSE

Filename:	b23aug99a	Name of Homolog Group:	Total Tetra-Furans
Sample:	5	Number of Peaks Found:	23
Acquired:	23-AUG-99 18:33:16	RRF Used For Totals:	0.9883
Processed:	24-AUG-99 08:03:30	Detection Limit:	0.6118
Sample ID:	70733 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	24:09:00
Results Table:	M8290-B082399A	End Window:	30:31:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	6.91E+07	30100000	39000000	0.77	y	24:16	34.013	OK	360	y	130	y	n
	2	3.94E+07	17100000	22300000	0.76	y	24:41	19.38	OK	210	y	76	y	n
	3	2.17E+07	9690000	12000000	0.81	y	25:13	10.659	OK	120	y	46	y	n
	4	2.41E+07	10400000	13700000	0.76	y	25:25	11.861	OK	130	y	48	y	n
	5	2.11E+08	91700000	119000000	0.77	y	25:33	103.796	OK	870	y	320	y	n
	6	3.66E+07	14300000	22300000	0.64	n	25:47	18.025	EMPC	210	y	77	y	n
	7	9.66E+07	43300000	53300000	0.81	y	25:52	47.53	OK	440	y	170	y	n
	8	3.54E+07	15300000	20100000	0.76	y	26:13	17.414	OK	180	y	67	y	n
	9	2.68E+07	11700000	15100000	0.77	y	26:18	13.205	OK	150	y	54	y	n
	10	5.28E+07	22900000	29900000	0.76	y	26:29	25.978	OK	280	y	100	y	n
	11	3.75E+07	16200000	21300000	0.76	y	26:47	18.453	OK	190	y	71	y	n
	12	2.96E+07	12700000	16900000	0.75	y	26:56	14.566	OK	160	y	58	y	n
	13	1.21E+08	52400000	68500000	0.76	y	27:06	59.467	OK	480	y	180	y	n
	14	5.58E+07	24000000	31800000	0.75	y	27:33	27.464	OK	240	y	87	y	n
	15	2.58E+07	11100000	14800000	0.75	y	27:49	12.711	OK	130	y	50	y	n
	16	2.25E+07	9660000	12900000	0.75	y	28:01	11.095	OK	110	y	41	y	n
	17	3.67E+07	15800000	20900000	0.75	y	28:14	18.041	OK	160	y	60	y	n
	18	2.01E+07	8720000	11400000	0.76	y	28:21	9.907	OK	100	y	39	y	n
2,3,7,8-TCDF	19	2.98E+07	12900000	16900000	0.76	y	28:28	14.66	OK	150	y	55	y	n
	20	6.30E+07	27600000	35400000	0.78	y	28:50	31.023	OK	300	y	110	y	n
	21	5.43E+06	2630000	2800000	0.94	n	29:03	2.672	EMPC	28	y	9.6	y	n
	22	3.80E+06	1760000	2040000	0.86	y	29:19	1.871	OK	20	y	7.1	y	n
	23	3.40E+06	1540000	1860000	0.83	y	30:36	1.673	RT	15	y	5.3	y	n

Filename:	b23aug99a	Name of Homolog Group:	Total Tetra-Dioxins
Sample:	5	Number of Peaks Found:	17
Acquired:	23-AUG-99 18:33:16	RRF Used For Totals:	1.0802
Processed:	24-AUG-99 08:03:30	Detection Limit:	0.0642

Totals Raw Data

Sample ID: 70733 x1/2
Cal Table: m8290-b060499a
Results Table: M8290-B082399A
Begin Window: 25:50:00
End Window: 30:28:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	2.08E+07	9110000	11700000	0.78	y	25:57	13.227	OK	610	y	750	y	n
	2	9.54E+06	4140000	5400000	0.77	y	26:14	6.07	OK	280	y	350	y	n
	3	4.59E+06	2020000	2570000	0.78	y	26:36	2.92	OK	140	y	170	y	n
	4	4.97E+05	218000	279000	0.78	y	27:18	0.316	OK	15	y	18	y	n
	5	1.18E+07	5190000	6600000	0.79	y	27:33	7.498	OK	290	y	360	y	n
	6	1.48E+07	6560000	8270000	0.79	y	27:44	9.431	OK	420	y	500	y	n
	7	4.72E+06	2040000	2670000	0.76	y	27:55	3.001	OK	140	y	160	y	n
	8	2.55E+06	1110000	1440000	0.78	y	28:10	1.621	OK	71	y	88	y	n
	9	5.53E+06	2410000	3120000	0.77	y	28:19	3.515	OK	160	y	190	y	n
	10	3.40E+06	1500000	1910000	0.78	y	28:40	2.165	OK	94	y	120	y	n
	11	1.55E+06	684000	868000	0.79	y	28:50	0.987	OK	46	y	53	y	n
	12	8.92E+06	3930000	4990000	0.79	y	29:06	5.676	OK	170	y	200	y	n
	13	1.39E+06	603000	788000	0.77	y	29:13	0.885	OK	50	y	59	y	n
2,3,7,8-TCDD	14	5.46E+06	2360000	3100000	0.78439996	y	29:24	3.41490625	OK	150	y	190	y	n
	15	5.96E+06	2630000	3330000	0.79	y	29:45	3.791	OK	160	y	200	y	n
	16	1.14E+06	495000	649000	0.76	y	29:55	0.728	OK	33	y	38	y	n
	17	1.18E+06	534000	644000	0.83	y	30:28	0.749	OK	33	y	39	y	n

Filename: b23aug99a
Sample: 5
Acquired: 23-AUG-99 18:33:16
Processed: 24-AUG-99 08:03:30
Sample ID: 70733 x1/2
Cal Table: m8290-b060499a
Results Table: M8290-B082399A
Name of Homolog Group: Total Penta-Furans Fn1
Number of Peaks Found: 3
RRF Used For Totals: 0.9679
Detection Limit: 0.0229
Begin Window: 30:41:00
End Window: 31:01:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	1.82E+05	71300	111000	0.64	y	30:23	0.109	RT	6.2	y	12	y	n
	2	7.95E+07	30900000	48600000	0.64	y	30:37	47.589	RT	1800	y	4600	y	n
	3	4.40E+05	182000	257000	0.71	y	30:57	0.263	OK	14	y	33	y	n

Filename: b23aug99a
Sample: 5
Acquired: 23-AUG-99 18:33:16
Processed: 24-AUG-99 08:03:30
Sample ID: 70733 x1/2
Cal Table: m8290-b060499a
Results Table: M8290-B082399A
Name of Homolog Group: Total Penta-Furans Fn2
Number of Peaks Found: 16
RRF Used For Totals: 0.9679
Detection Limit: 0.2332
Begin Window: 30:43:00
End Window: 33:47:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	9.29E+05	568000	361000	1.58	y	31:28	0.556	OK	6.8	y	5.3	y	n
	2	1.07E+08	64500000	42500000	1.52	y	31:45	64.064	OK	600	y	490	y	n

	3	1.64E+08	99100000	651000	1.52	y	31:51	98.31	OK	810	y	660	y n
	4	1.49E+07	9150000	5780000	1.58	y	31:57	8.944	OK	130	y	98	y n
	5	1.67E+07	10100000	6600000	1.53	y	32:05	10.017	OK	110	y	85	y n
	6	9.84E+06	5970000	3870000	1.54	y	32:09	5.894	OK	100	y	81	y n
	7	4.88E+07	29600000	19200000	1.54	y	32:13	29.206	OK	350	y	280	y n
	8	1.40E+07	8550000	5480000	1.56	y	32:19	8.409	OK	130	y	99	y n
1,2,3,7,8-PeCDF	9	3.96E+07	24000000	15600000	1.54	y	32:25	24.055	OK	340	y	270	y n
	10	5.00E+07	30200000	19800000	1.52	y	32:33	29.955	OK	300	y	250	y n
	11	9.61E+06	5820000	3790000	1.54	y	32:38	5.756	OK	70	y	56	y n
	12	5.19E+06	3170000	2010000	1.58	y	32:51	3.106	OK	53	y	41	y n
	13	3.78E+07	22800000	15000000	1.52	y	32:55	22.669	OK	300	y	240	y n
2,3,4,7,8-PeCDF	14	4.08E+07	24700000	16100000	1.54	y	32:59	24.101	OK	330	y	270	y n
	15	3.29E+06	2010000	1270000	1.58	y	33:09	1.968	OK	26	y	20	y n
	16	3.01E+06	1820000	1190000	1.53	y	33:34	1.805	OK	27	y	22	y n

Filename:	b23aug99a	Name of Homolog Group:	Total Penta-Dioxins
Sample:	5	Number of Peaks Found:	11
Acquired:	23-AUG-99 18:33:16	RRF Used For Totals:	0.9837
Processed:	24-AUG-99 08:03:30	Detection Limit:	0.0763
Sample ID:	70733 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	31:48:00
Results Table:	M8290-B082399A	End Window:	33:30:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	2.82E+07	17100000	11100000		1.55 y	31:54	23.747	OK	690	y	880	y	n
	2	3.55E+06	2140000	1410000		1.52 y	32:11	2.986	OK	120	y	160	y	n
	3	2.07E+07	12600000	8080000		1.56 y	32:27	17.39	OK	790	y	990	y	n
	4	8.74E+06	5310000	3430000		1.55 y	32:33	7.36	OK	340	y	430	y	n
	5	1.57E+07	9560000	6120000		1.56 y	32:35	13.207	OK	470	y	600	y	n
	6	1.22E+07	7420000	4800000		1.55 y	32:43	10.289	OK	290	y	360	y	n
	7	6.43E+06	3880000	2550000		1.52 y	32:55	5.411	OK	200	y	260	y	n
	8	1.70E+04	8020	8960		0.9 n	33:03	0.014	S2N	0.58	n	1.9	n	n
1,2,3,7,8-PeCDD	9	9.58E+06	5830000	3760000		1.55 y	33:11	8.069	OK	310	y	390	y	n
	10	4.04E+06	2400000	1640000		1.46 y	33:13	3.398	OK	130	y	170	y	n
	11	4.18E+06	2510000	1670000		1.5 y	33:24	3.518	OK	130	y	160	y	n

Filename:	b23aug99a	Name of Homolog Group:	Total Hexa-Furans
Sample:	5	Number of Peaks Found:	17
Acquired:	23-AUG-99 18:33:16	RRF Used For Totals:	1.0623
Processed:	24-AUG-99 08:03:30	Detection Limit:	0.365
Sample ID:	70733 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	33:51:00
Results Table:	M8290-B082399A	End Window:	36:21:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	2.83E+07	15600000	12700000		1.23 y	34:02	17.932	OK	200	y	160	y	n

	2	1.03E+08	56300000	46300000	1.22 y	34:10	64.996	OK	690 y	560 y	n
	3	9.38E+06	5180000	4200000	1.23 y	34:18	5.937	OK	58 y	47 y	n
	4	1.12E+07	6130000	5080000	1.21 y	34:24	7.096	OK	73 y	61 y	n
	5	4.49E+06	2460000	2020000	1.22 y	34:33	2.842	OK	29 y	24 y	n
	6	1.01E+05	67500	33100	2.04 n	34:43	0.064	S2N	0.78 n	0.39 n	n
	7	2.56E+07	14100000	11500000	1.23 y	34:49	16.201	OK	170 y	130 y	n
1,2,3,4,7,8-HxCDF	8	3.20E+07	17600000	14400000	1.22 y	34:54	19.72	OK	190 y	160 y	n
1,2,3,6,7,8-HxCDF	9	3.90E+07	21500000	17500000	1.23 y	34:59	21.729	OK	230 y	190 y	n
	10	6.44E+06	3580000	2860000	1.25 y	35:06	4.075	OK	36 y	29 y	n
	11	5.46E+06	3040000	2420000	1.25 y	35:12	3.458	OK	35 y	28 y	n
	12	8.00E+06	4410000	3590000	1.23 y	35:17	5.065	OK	45 y	36 y	n
2,3,4,6,7,8-HxCDF	13	2.62E+07	14500000	11700000	1.24 y	35:26	17.001	OK	150 y	120 y	n
	14	1.53E+05	89900	63100	1.42 y	35:42	0.097	S2N	0.76 n	0.6 n	n
	15	8.99E+04	64700	25200	2.57 n	35:50	0.057	S2N	0.5 n	0.34 n	n
	16	1.89E+04	12600	6350	1.98 n	35:55	0.012	S2N	0.19 n	0.13 n	n
1,2,3,7,8,9-HxCDF	17	5.08E+06	2980000	2100000	1.41 y	36:08	3.643	OK	22 y	17 y	n

Filename:	b23aug99a	Name of Homolog Group:	Total Hexa-Dioxins
Sample:	5	Number of Peaks Found:	20
Acquired:	23-AUG-99 18:33:16	RRF Used For Totals:	0.9699
Processed:	24-AUG-99 08:03:30	Detection Limit:	0.0935
Sample ID:	70733 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	34:17:00
Results Table:	M8290-B082399A	End Window:	35:55:00

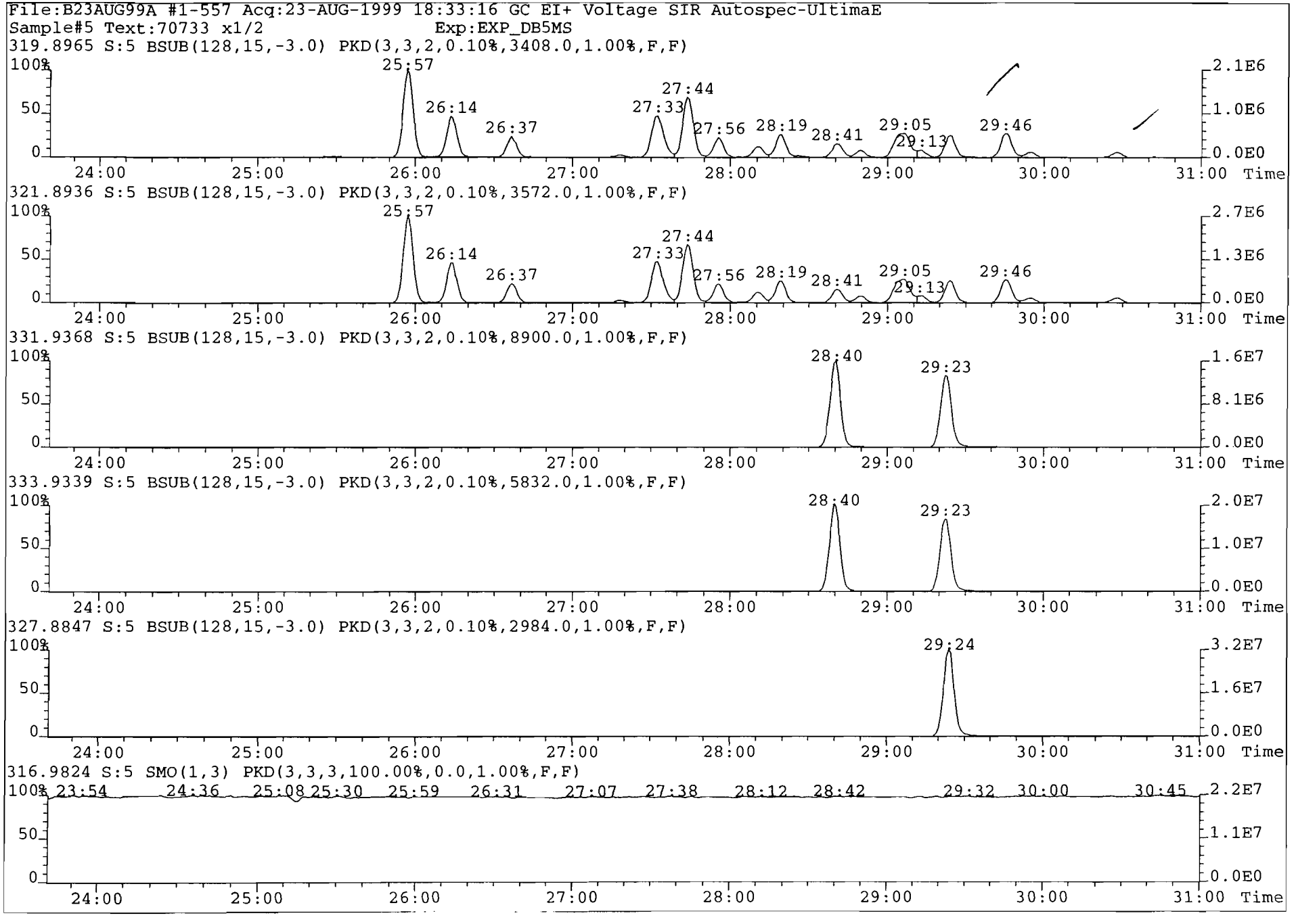
Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	1.55E+07	8610000	6840000		1.26 y	34:26	13.579	OK	600 y		510 y		n
	2	1.28E+05	80500	47100		1.71 n	34:34	0.112	S2N	5.2 y		3.2 y		n
	3	4.78E+04	41900	5900		7.1 n	34:40	0.042	S2N	2.5 n		0.62 n		n
	4	6.82E+03	5030	1780		2.82 n	34:44	0.006	S2N	0.71 n		0.37 n		n
	5	4.52E+07	25100000	20100000		1.25 y	34:51	39.684	OK	1600 y		1300 y		n
	6	3.81E+07	21400000	16700000		1.29 y	35:02	33.507	OK	1100 y		890 y		n
	7	5.11E+06	2680000	2440000		1.1 y	35:07	4.494	OK	140 y		120 y		n
	8	2.25E+05	186000	39200		4.74 n	35:17	0.198	EMPC	6.9 y		4.1 y		n
	9	8.76E+04	55100	32500		1.69 n	35:26	0.077	S2N	4 y		2.2 n		n
	10	7.15E+04	39000	32500		1.2 y	35:28	0.063	S2N	2.8 n		2.2 n		n
1,2,3,4,7,8-HxCDD	11	5.06E+06	2810000	2250000		1.25 y	35:33	4.615	OK	180 y		150 y		n
1,2,3,6,7,8-HxCDD	12	1.16E+07	6410000	5140000		1.25 y	35:38	10.274	OK	370 y		320 y		n
	13	4.79E+06	2690000	2110000		1.27 y	35:46	4.213	OK	170 y		140 y		n
1,2,3,7,8,9-HxCDD	14	1.01E+07	5630000	4500000		1.25 y	35:50	8.493	OK	270 y		240 y		n
	15	5.36E+04	28100	25500		1.1 y	36:12	0.047	RT	2.4 n		1.4 n		n
	16	3.99E+04	14300	25500		0.56 n	36:13	0.035	RT	2 n		1.4 n		n
	17	3.09E+04	23700	7200		3.29 n	36:16	0.027	RT	2.1 n		1.3 n		n
	18	2.51E+04	11400	13700		0.83 n	36:20	0.022	RT	1.2 n		1.2 n		n
	19	2.55E+04	22000	3490		6.31 n	36:23	0.022	RT	1.1 n		0.6 n		n
	20	1.06E+04	5630	4960		1.14 y	36:28	0.009	RT	0.63 n		0.56 n		n

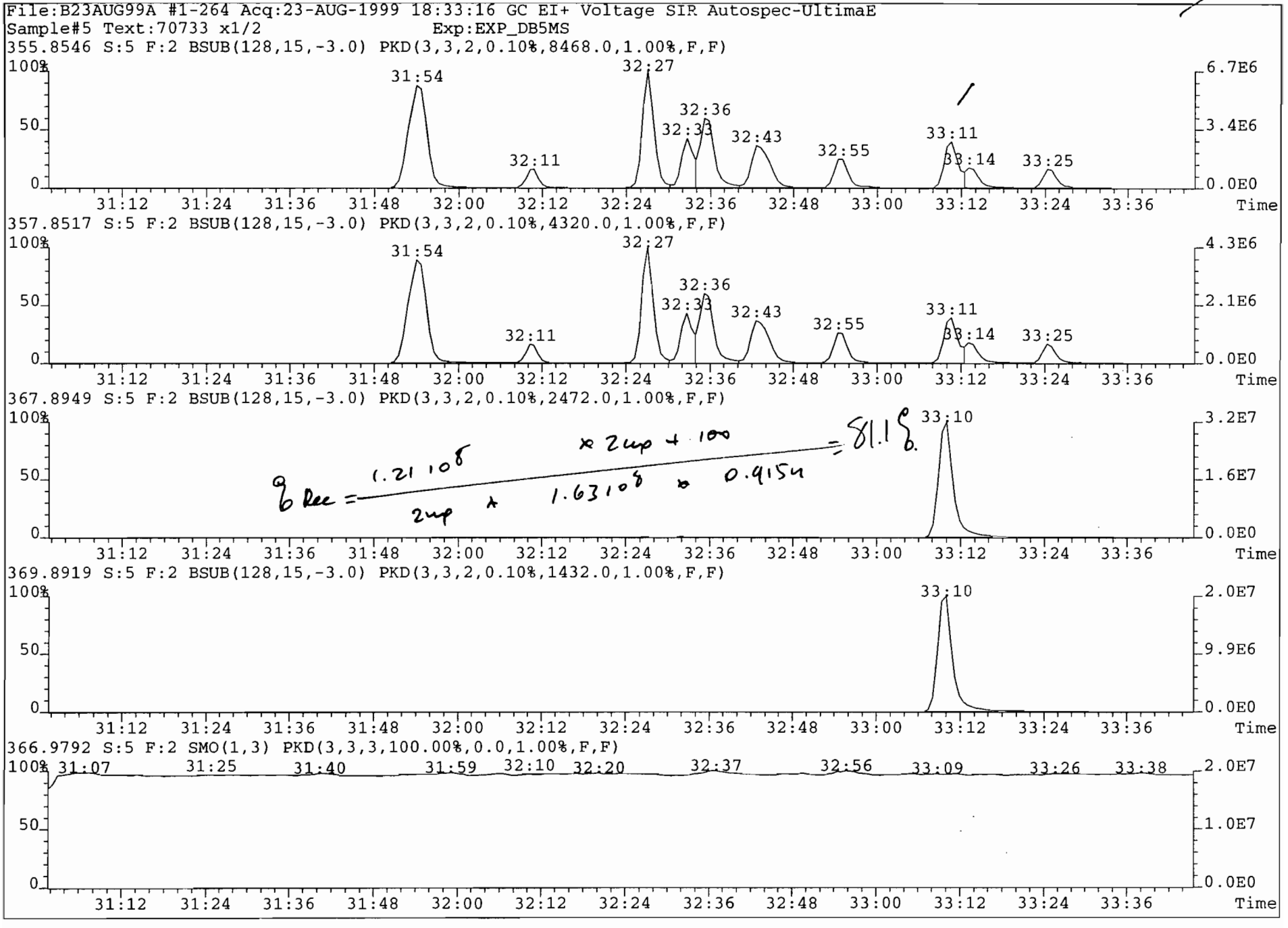
Filename:	b23aug99a	Name of Homolog Group:	Total Hepta-Furans
Sample:	5	Number of Peaks Found:	10
Acquired:	23-AUG-99 18:33:16	RRF Used For Totals:	1.3281
Processed:	24-AUG-99 08:03:30	Detection Limit:	0.0915
Sample ID:	70733 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	37:15:00
Results Table:	M8290-B082399A	End Window:	39:22:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
1,2,3,4,6,7,8-HpCDI	1	6.65E+07	33600000	32900000		1.02	y	37:27	46.462	OK	3500	y	1100	y	n
	2	1.42E+07	7240000	6950000		1.04	y	37:45	11.098	OK	750	y	230	y	n
	3	1.10E+07	5590000	5400000		1.03	y	37:54	8.598	OK	520	y	160	y	n
	4	9.25E+04	57700	34800		1.66	n	38:06	0.072	S2N	9.9	y	2	n	n
	5	6.75E+04	32700	34800		0.94	y	38:08	0.053	S2N	7.1	y	2	n	n
	6	5.44E+04	34900	19600		1.78	n	38:11	0.043	S2N	5.4	y	1.3	n	n
	7	4.56E+04	24400	21200		1.15	y	38:13	0.036	S2N	4.6	y	0.84	n	n
1,2,3,4,7,8,9-HpCDI	8	5.49E+06	2770000	2730000		1.01	y	39:08	4.879	OK	230	y	71	y	n
	9	5.94E+04	21700	37700		0.58	n	39:21	0.046	S2N	3.6	y	1.4	n	n
	10	1.40E+04	4520	9450		0.48	n	39:31	0.011	RT	0.89	n	0.52	n	n

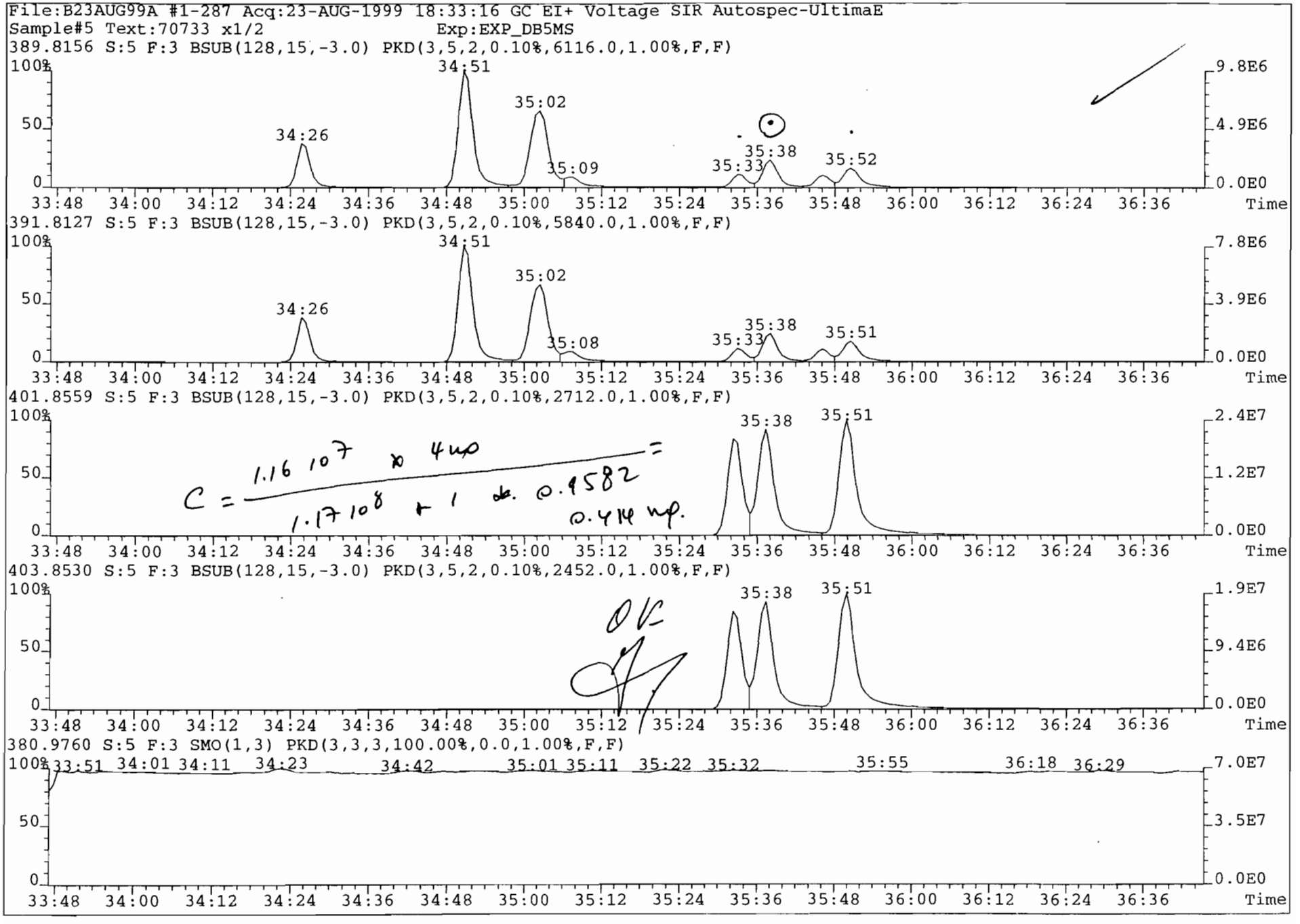
Filename:	b23aug99a	Name of Homolog Group:	Total Hepta-Dioxins
Sample:	5	Number of Peaks Found:	10
Acquired:	23-AUG-99 18:33:16	RRF Used For Totals:	0.944
Processed:	24-AUG-99 08:03:30	Detection Limit:	0.2275
Sample ID:	70733 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	37:32:00
Results Table:	M8290-B082399A	End Window:	37:52:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	5.95E+07	30100000	29400000		1.03	y	37:44	60.767	OK	580	y	2600	y	n
	2	1.11E+05	60000	50900		1.18	y	38:07	0.113	RT	1.3	n	7.1	y	n
	3	5.47E+04	25500	29200		0.87	n	38:12	0.056	RT	0.97	n	4.1	y	n
	4	4.94E+04	19300	30200		0.64	n	38:15	0.05	RT	0.65	n	3.3	y	n
	5	3.06E+04	10500	20100		0.52	n	38:18	0.031	RT	0.33	n	2.2	n	n
1,2,3,4,6,7,8-HpCDI	6	6.11E+07	30900000	30200000		1.02	y	38:33	62.376	RT	520	y	2300	y	n
	7	3.42E+05	199000	143000		1.39	n	38:56	0.35	RT	2.5	n	12	y	n
	8	7.36E+04	26700	46900		0.57	n	39:04	0.075	RT	1.2	n	6.1	y	n
	9	1.79E+05	77600	102000		0.76	n	39:07	0.183	RT	1.6	n	7	y	n
	10	3.91E+04	14700	24500		0.6	n	39:10	0.04	RT	0.62	n	4.4	y	n


File:B23AUG99A #1-557 Acq:23-AUG-1999 18:33:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:70733 x1/2 Exp:EXP_DB5MS
319.8965 S:5 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3408.0,1.00%,F,F)
25:57
26:14
26:37
27:33
27:44
27:56
28:19
28:41
29:05
29:13
29:46
2.1E6
1.0E6
0.0E0
321.8936 S:5 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3572.0,1.00%,F,F)
25:57
26:14
26:37
27:33
27:44
27:56
28:19
28:41
29:05
29:13
29:46
2.7E6
1.3E6
0.0E0
331.9368 S:5 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,8900.0,1.00%,F,F)
28:40
29:23
1.6E7
8.1E6
0.0E0
333.9339 S:5 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,5832.0,1.00%,F,F)
28:40
29:23
2.0E7
1.0E7
0.0E0
327.8847 S:5 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2984.0,1.00%,F,F)
29:24
3.2E7
1.6E7
0.0E0
316.9824 S:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
23:54
24:36
25:08
25:30
25:59
26:31
27:07
27:38
28:12
28:42
29:32
30:00
30:45
2.2E7
1.1E7
0.0E0
100%
50
0
24:00
25:00
26:00
27:00
28:00
29:00
30:00
31:00
Time

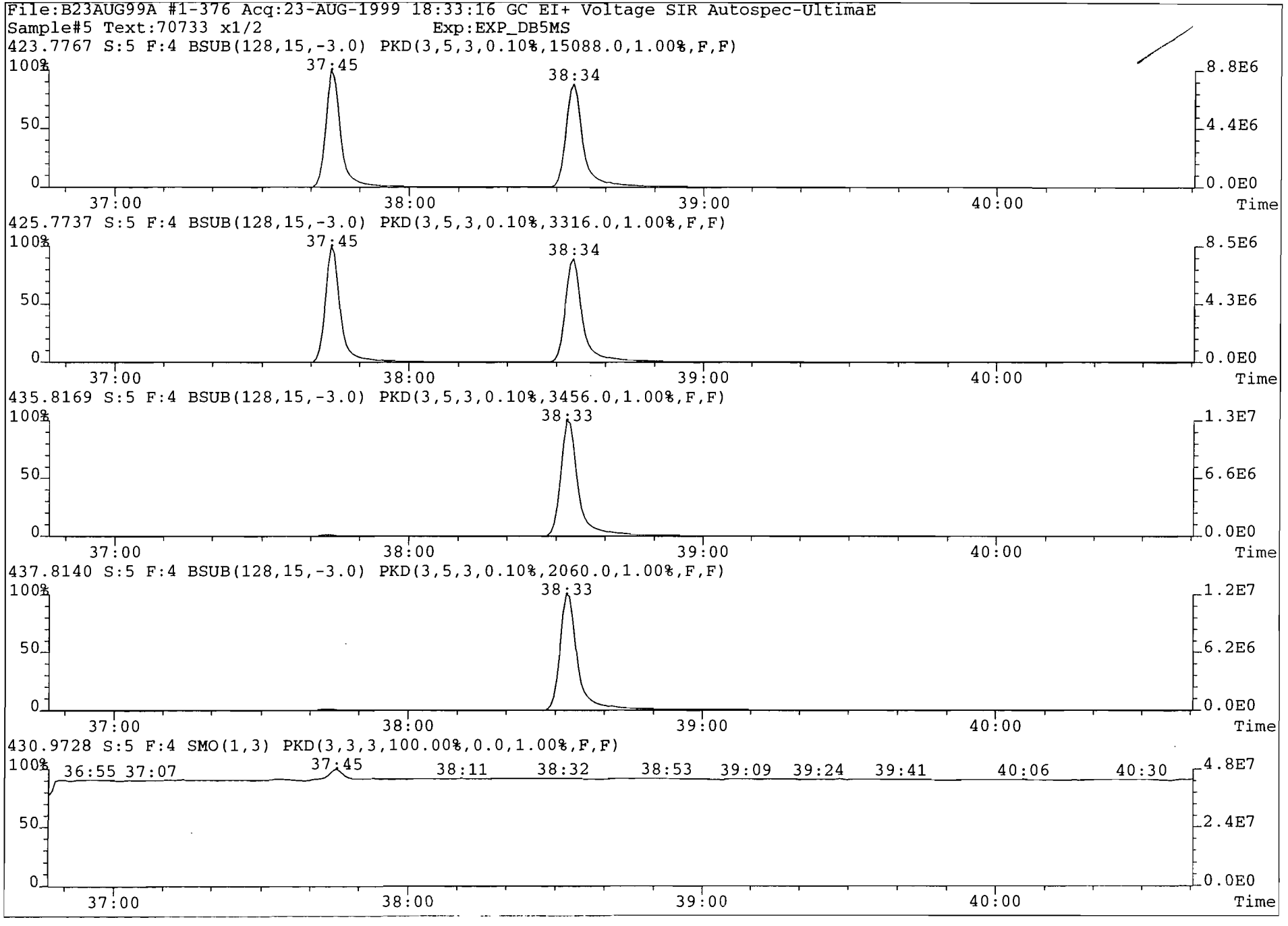


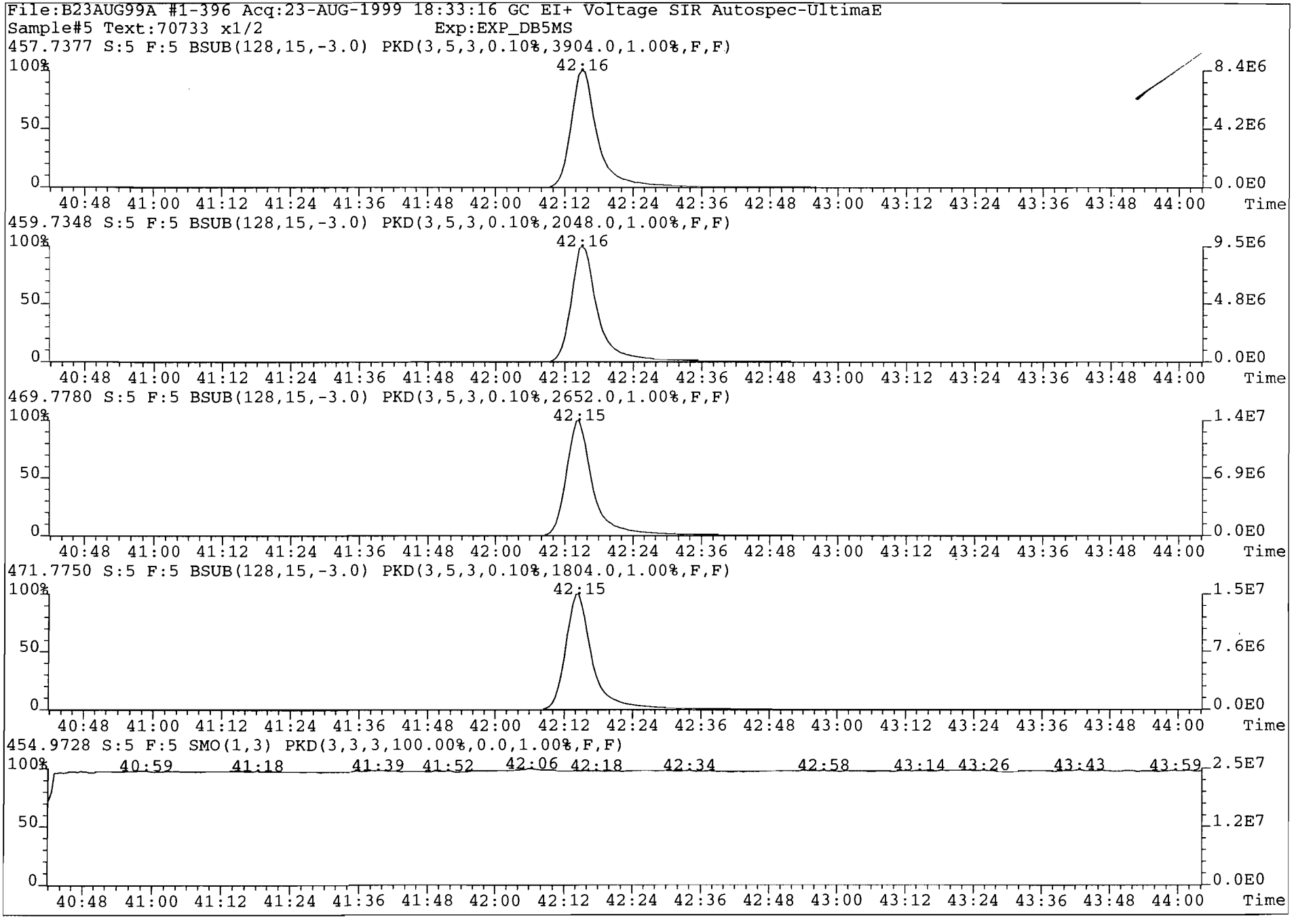
$$\%\,Rec = \frac{1.21 \times 10^{8} \times 2ng + 100}{2ng \times 1.63 \times 10^{8} \times 0.915} = 81.1\%$$

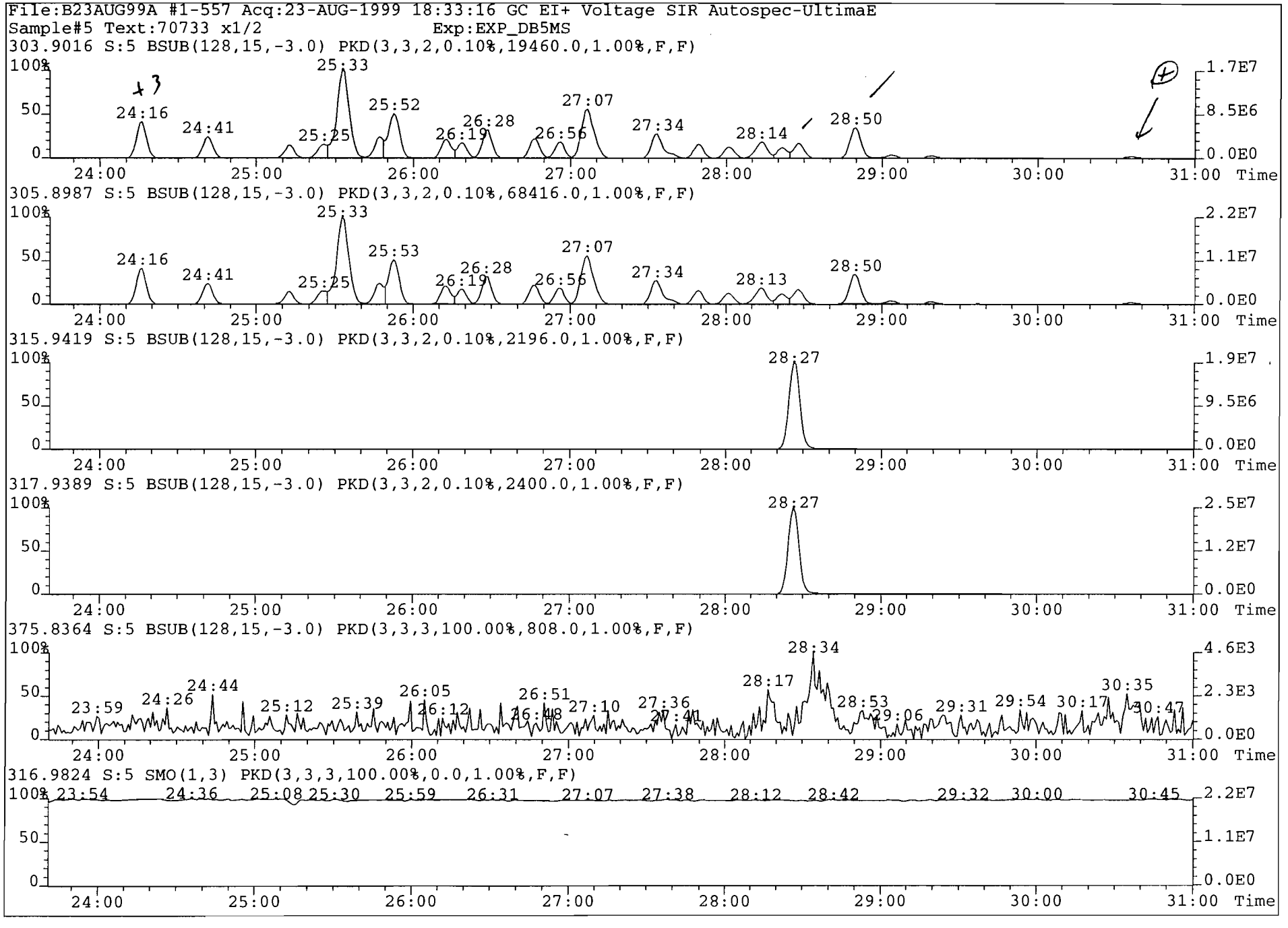


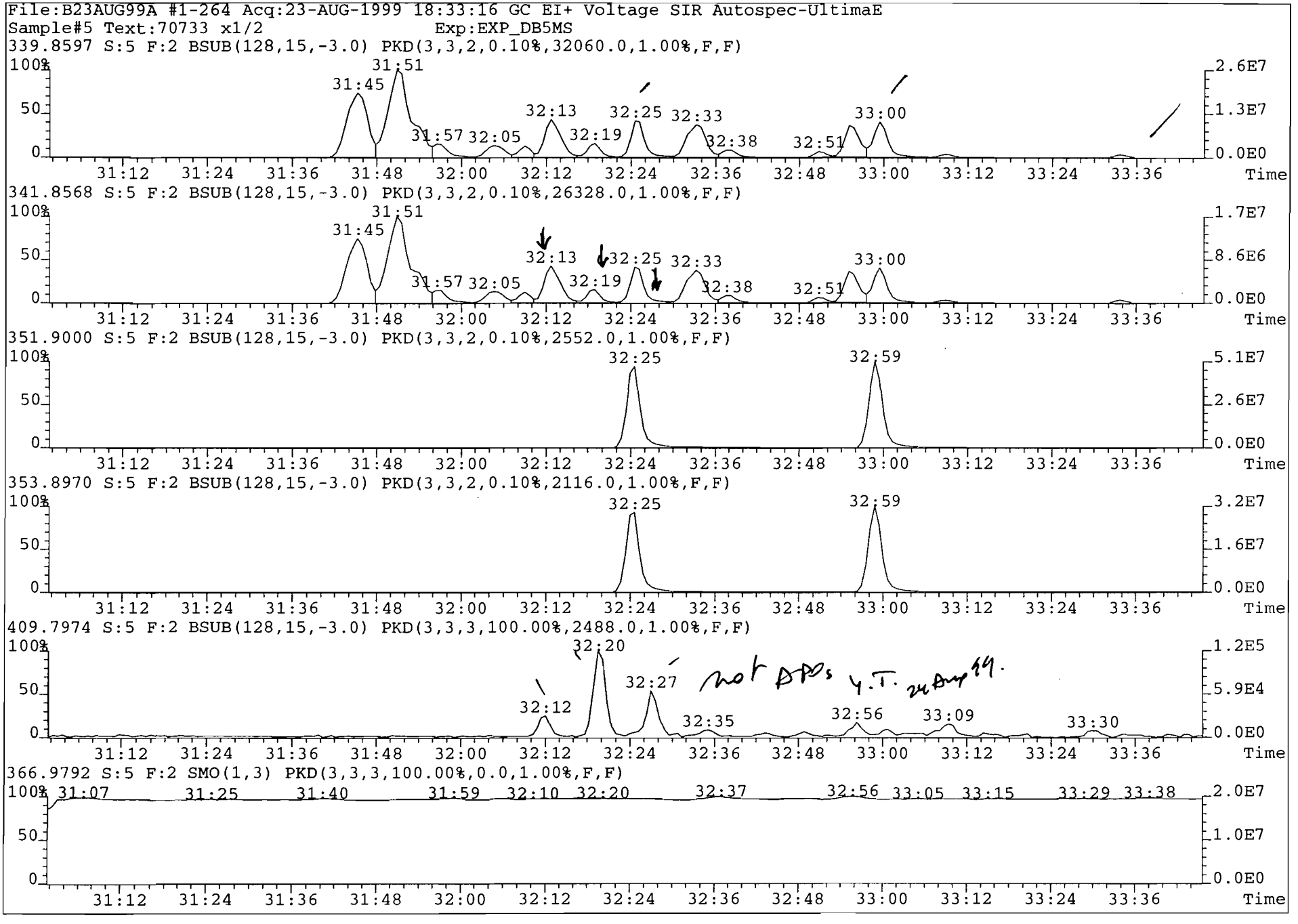
$$C = \frac{1.16\,107 \times 4\,\text{mg}}{1.17\,108 + 1} = 0.4582 \quad 0.414\ \text{mg}.$$

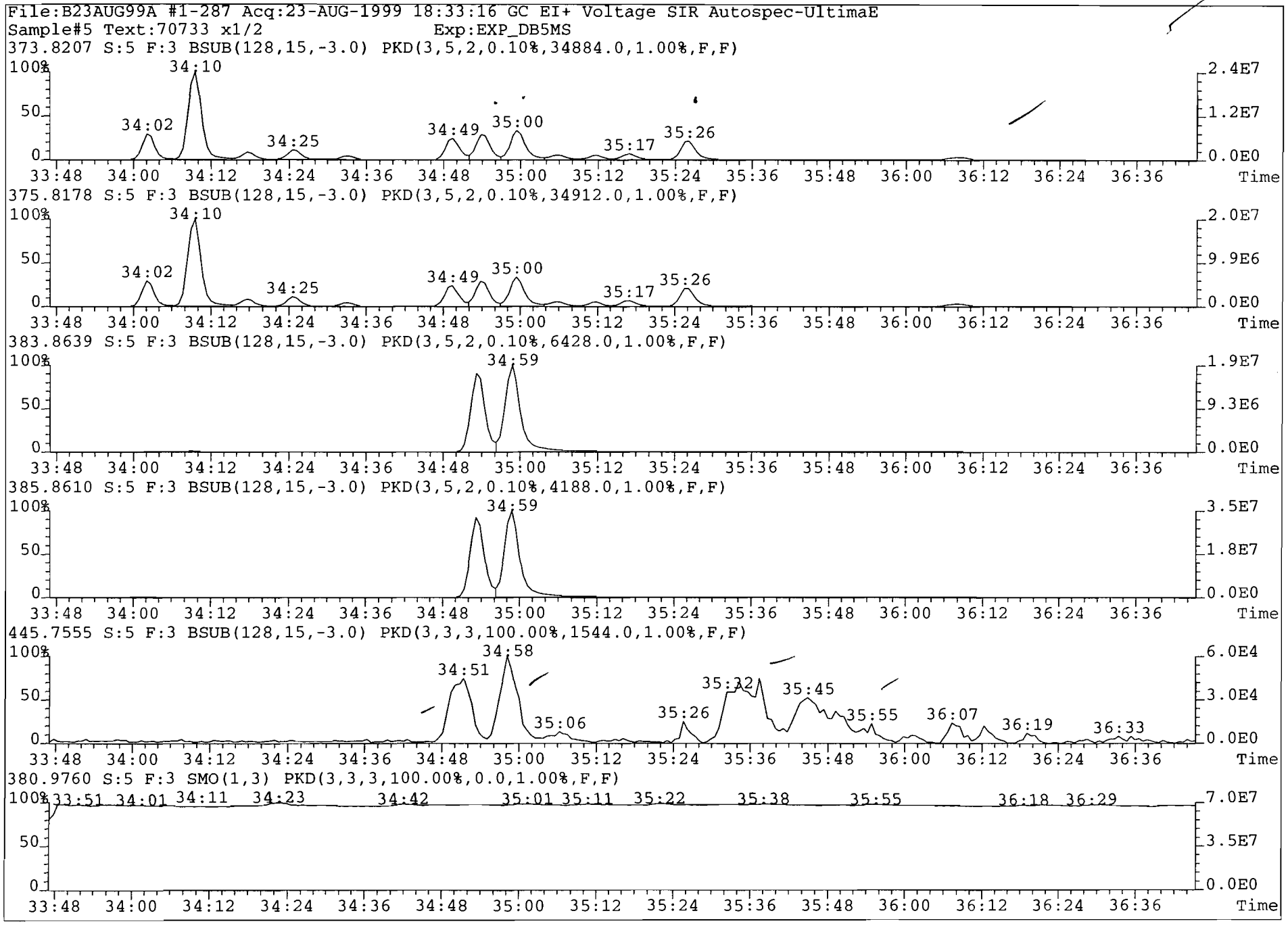
OK

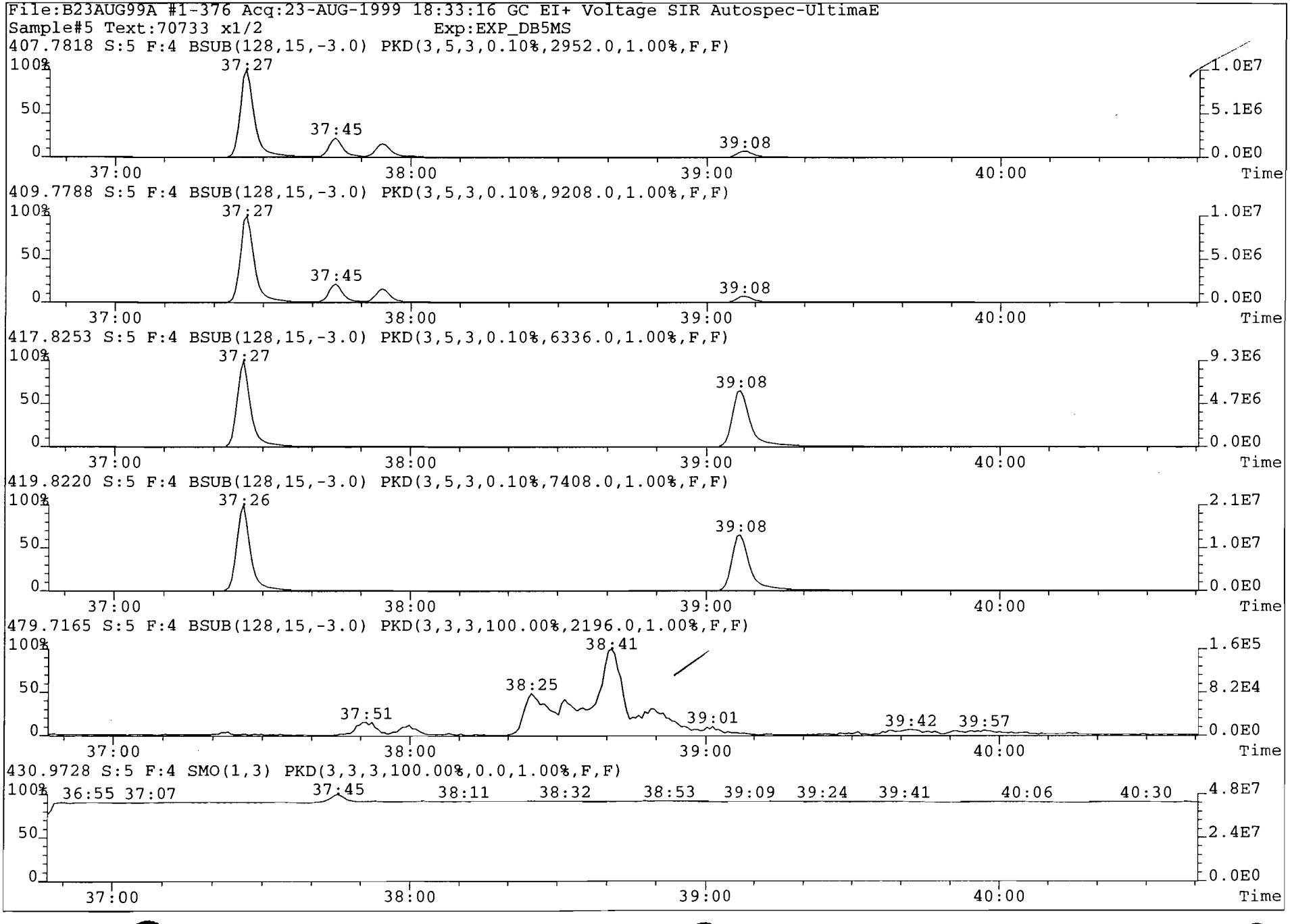

File:B23AUG99A #1-376 Acq:23-AUG-1999 18:33:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:70733 x1/2 Exp:EXP_DB5MS
423.7767 S:5 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,15088.0,1.00%,F,F)
37:45
38:34
8.8E6
4.4E6
0.0E0
425.7737 S:5 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3316.0,1.00%,F,F)
37:45
38:34
8.5E6
4.3E6
0.0E0
435.8169 S:5 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3456.0,1.00%,F,F)
38:33
1.3E7
6.6E6
0.0E0
437.8140 S:5 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2060.0,1.00%,F,F)
38:33
1.2E7
6.2E6
0.0E0
430.9728 S:5 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
36:55 37:07
37:45
38:11
38:32
38:53
39:09
39:24
39:41
40:06
40:30
4.8E7
2.4E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
Time

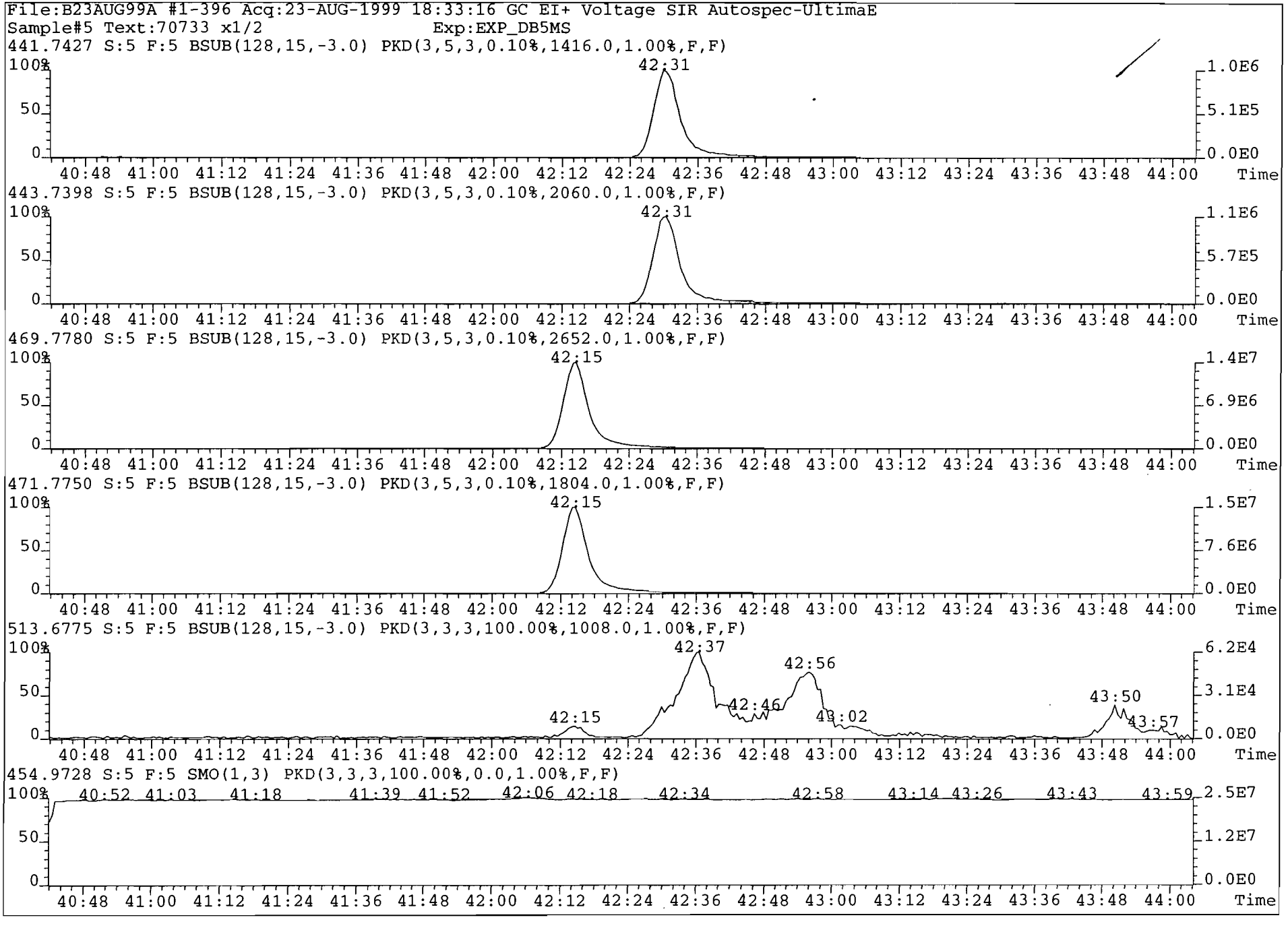

File:B23AUG99A #1-396 Acq:23-AUG-1999 18:33:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:70733 x1/2 Exp:EXP_DB5MS
457.7377 S:5 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3904.0,1.00%,F,F)
42:16
8.4E6
4.2E6
0.0E0
459.7348 S:5 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2048.0,1.00%,F,F)
42:16
9.5E6
4.8E6
0.0E0
469.7780 S:5 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2652.0,1.00%,F,F)
42:15
1.4E7
6.9E6
0.0E0
471.7750 S:5 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1804.0,1.00%,F,F)
42:15
1.5E7
7.6E6
0.0E0
454.9728 S:5 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
40:59 41:18 41:39 41:52 42:06 42:18 42:34 42:58 43:14 43:26 43:43 43:59
2.5E7
1.2E7
0.0E0
100%
50
0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time

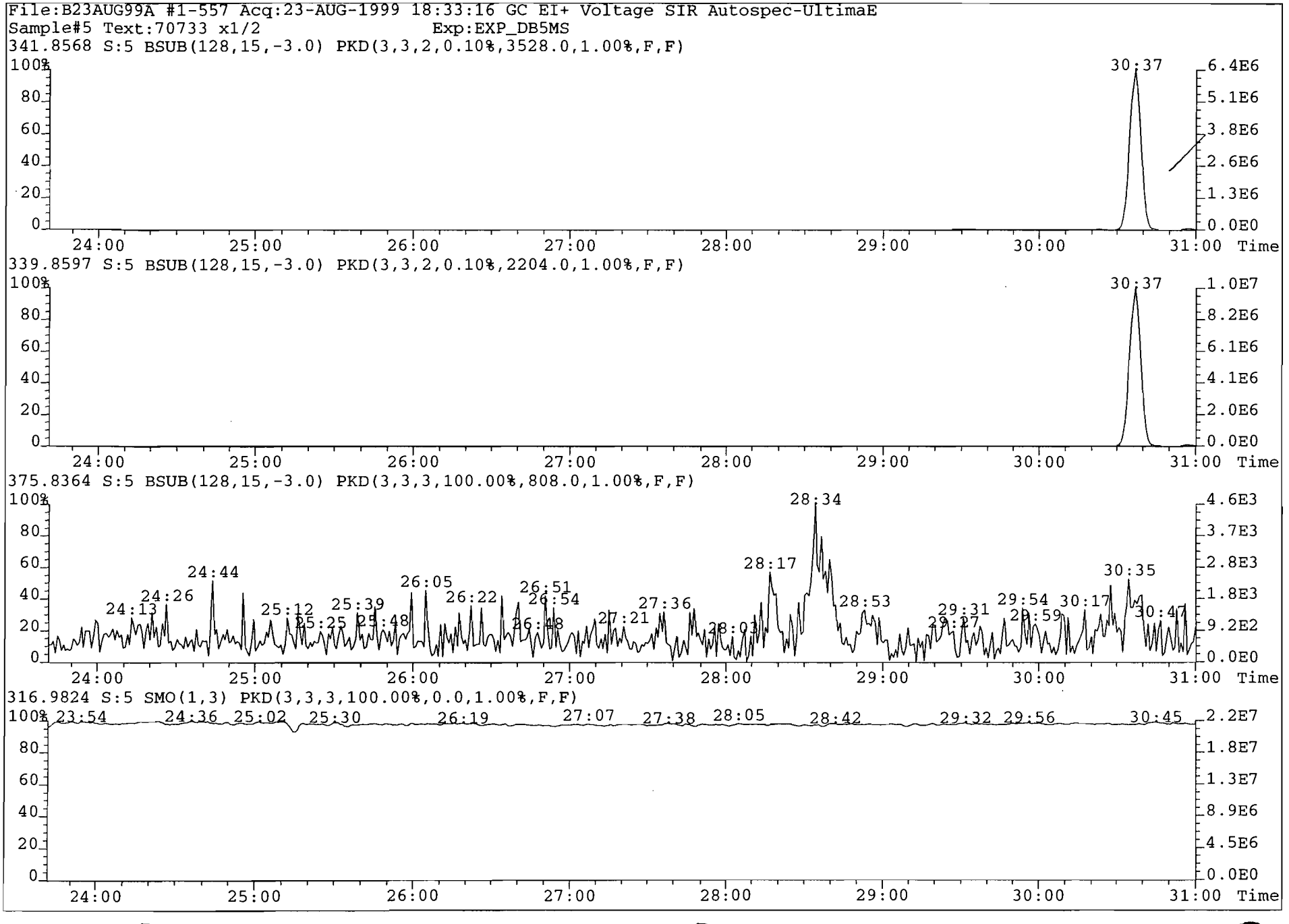

File:B23AUG99A #1-557 Acq:23-AUG-1999 18:33:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:70733 x1/2 Exp:EXP_DB5MS
303.9016 S:5 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,19460.0,1.00%,F,F)
305.8987 S:5 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,68416.0,1.00%,F,F)
315.9419 S:5 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2196.0,1.00%,F,F)
317.9389 S:5 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2400.0,1.00%,F,F)
375.8364 S:5 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,808.0,1.00%,F,F)
316.9824 S:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
Time


File:B23AUG99A #1-264 Acq:23-AUG-1999 18:33:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:70733 x1/2 Exp:EXP_DB5MS
339.8597 S:5 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,32060.0,1.00%,F,F)
31:45 31:51 31:57 32:05 32:13 32:19 32:25 32:33 32:38 32:51 33:00
2.6E7 1.3E7 0.0E0
341.8568 S:5 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,26328.0,1.00%,F,F)
31:45 31:51 31:57 32:05 32:13 32:19 32:25 32:33 32:38 32:51 33:00
1.7E7 8.6E6 0.0E0
351.9000 S:5 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2552.0,1.00%,F,F)
32:25 32:59
5.1E7 2.6E7 0.0E0
353.8970 S:5 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2116.0,1.00%,F,F)
32:25 32:59
3.2E7 1.6E7 0.0E0
409.7974 S:5 F:2 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,2488.0,1.00%,F,F)
32:12 32:20 32:27 32:35 32:56 33:09 33:30
not DPs Y.T. 24 Aug 99.
1.2E5 5.9E4 0.0E0
366.9792 S:5 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
31:07 31:25 31:40 31:59 32:10 32:20 32:37 32:56 33:05 33:15 33:29 33:38
2.0E7 1.0E7 0.0E0
31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36 Time


File:B23AUG99A #1-287 Acq:23-AUG-1999 18:33:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:70733 x1/2 Exp:EXP_DB5MS
373.8207 S:5 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,34884.0,1.00%,F,F)
34:10
34:02
34:25
34:49
35:00
35:17
35:26
2.4E7
1.2E7
0.0E0
375.8178 S:5 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,34912.0,1.00%,F,F)
34:10
34:02
34:25
34:49
35:00
35:17
35:26
2.0E7
9.9E6
0.0E0
383.8639 S:5 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,6428.0,1.00%,F,F)
34:59
1.9E7
9.3E6
0.0E0
385.8610 S:5 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,4188.0,1.00%,F,F)
34:59
3.5E7
1.8E7
0.0E0
445.7555 S:5 F:3 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1544.0,1.00%,F,F)
34:58
34:51
35:06
35:26
35:32
35:45
35:55
36:07
36:19
36:33
6.0E4
3.0E4
0.0E0
380.9760 S:5 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
33:51 34:01 34:11 34:23 34:42 35:01 35:11 35:22 35:38 35:55 36:18 36:29
7.0E7
3.5E7
0.0E0
100%
50
0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36
Time


File:B23AUG99A #1-376 Acq:23-AUG-1999 18:33:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:70733 x1/2 Exp:EXP_DB5MS
407.7818 S:5 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2952.0,1.00%,F,F)
37:27
37:45
39:08
1.0E7
5.1E6
0.0E0
409.7788 S:5 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,9208.0,1.00%,F,F)
37:27
37:45
39:08
1.0E7
5.0E6
0.0E0
417.8253 S:5 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,6336.0,1.00%,F,F)
37:27
39:08
9.3E6
4.7E6
0.0E0
419.8220 S:5 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,7408.0,1.00%,F,F)
37:26
39:08
2.1E7
1.0E7
0.0E0
479.7165 S:5 F:4 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,2196.0,1.00%,F,F)
38:41
38:25
37:51
39:01
39:42
39:57
1.6E5
8.2E4
0.0E0
430.9728 S:5 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
36:55 37:07
37:45
38:11
38:32
38:53
39:09
39:24
39:41
40:06
40:30
4.8E7
2.4E7
0.0E0
37:00
38:00
39:00
40:00
Time


File:B23AUG99A #1-396 Acq:23-AUG-1999 18:33:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:70733 x1/2 Exp:EXP_DB5MS
441.7427 S:5 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1416.0,1.00%,F,F)
42:31
1.0E6
5.1E5
0.0E0
443.7398 S:5 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2060.0,1.00%,F,F)
42:31
1.1E6
5.7E5
0.0E0
469.7780 S:5 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2652.0,1.00%,F,F)
42:15
1.4E7
6.9E6
0.0E0
471.7750 S:5 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1804.0,1.00%,F,F)
42:15
1.5E7
7.6E6
0.0E0
513.6775 S:5 F:5 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1008.0,1.00%,F,F)
42:37
42:56
42:46
43:02
42:15
43:50
43:57
6.2E4
3.1E4
0.0E0
454.9728 S:5 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
40:52 41:03 41:18 41:39 41:52 42:06 42:18 42:34 42:58 43:14 43:26 43:43 43:59
2.5E7
1.2E7
0.0E0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time


File:B23AUG99A #1-557 Acq:23-AUG-1999 18:33:16 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:70733 x1/2 Exp:EXP_DB5MS
341.8568 S:5 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3528.0,1.00%,F,F)
30:37
339.8597 S:5 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2204.0,1.00%,F,F)
30:37
375.8364 S:5 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,808.0,1.00%,F,F)
28:34
28:17
24:44
24:26
24:13
25:12
25:39
26:05
26:22
26:51
26:54
27:36
28:53
30:35
316.9824 S:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
23:54
24:36
25:02
25:30
26:19
27:07
27:38
28:05
28:42
29:32
29:56
30:45
Time

Method 23

1-S-M23-2

AirKinetics, Inc.

Analytical Data Summary Sheet

Analyte	Amount (ng)	DL (ng)	EMPC (ng)	RT (min.)	Ratio	Qualifier
2,3,7,8-TCDD	0.158	0.0029		29:24	0.77	
1,2,3,7,8-PeCDD	0.341	0.0027		33:11	1.53	
1,2,3,4,7,8-HxCDD	0.172	0.0049		35:34	1.25	
1,2,3,6,7,8-HxCDD	0.355	0.0048		35:38	1.26	
1,2,3,7,8,9-HxCDD	0.278	0.0045		35:50	1.26	
1,2,3,4,6,7,8-HpCDD	1.60	0.0064		38:33	1.03	
OCDD	2.51	0.0039		42:16	0.88	
2,3,7,8--TCDF	0.971	0.0364		28:28	0.76	
1,2,3,7,8-PeCDF	1.28	0.0111		32:25	1.54	
2,3,4,7,8-PeCDF	1.25	0.0109		32:59	1.55	
1,2,3,4,7,8-HxCDF	0.882	0.0158		34:54	1.23	
1,2,3,6,7,8-HxCDF	0.986	0.0143		34:59	1.22	
2,3,4,6,7,8-HxCDF	0.731	0.0167		35:26	1.21	
1,2,3,7,8,9-HxCDF	0.148	0.0184		36:08	1.21	
1,2,3,4,6,7,8-HpCDF	1.87	0.0031		37:27	1.02	
1,2,3,4,7,8,9-HpCDF	0.146	0.0040		39:08	1.09	
OCDF	0.330	0.0027		42:30	0.89	
Total TCDDs	2.80	0.0029	2.84			
Total PeCDDs	3.74	0.0027				
Total HxCDDs	4.17	0.0045				
Total HpCDDs	3.14	0.0064				
Total TCDFs	31.1	0.0364	31.2			
Total PeCDFs	20.3	0.0109				
Total HxCDFs	8.41	0.0143				
Total HpCDFs	2.69	0.0031				
TEQ (ND=0)	1.51		1.51			ITEF
TEQ (ND=½)	1.51		1.51			ITEF

Client Information

Project Name: OMS-Lee
Sample ID: 1-S-M23-2

Laboratory Information

Project ID: G370-4
Sample ID: 70734

Collection Date: 19-Aug-99
Receipt Date: 20-Aug-99
Extraction Date: 20-Aug-99
Analysis Date: 23-Aug-99

Sample Information

Matrix: Air
Weight / Volume:
Moisture / Lipids:
Original pH: NA

Filename: b23aug99a-6
Retchk: b23aug99a-1
Begin ConCal: b23aug99a-1
End ConCal: b23aug99a-15
Initial Cal: m8290-b060499a

Method 23

1-S-M23-2

AirKinetics, Inc.

Analytical Data Summary Sheet

Labeled Standard	Expected Amount (ng)	Measured Amount (ng)	Percent Recovery (%)	RT (min.)	Ratio	Qualifier
Extraction Standards						
$^{13}C_{12}$-2,3,7,8-TCDD	4	3.22	80.5	29:22	0.79	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	4	3.07	76.8	33:10	1.59	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	4	3.26	81.5	35:37	1.29	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	4	3.35	83.8	38:32	1.05	
$^{13}C_{12}$-OCDD	8	5.26	65.8	42:15	0.9	
$^{13}C_{12}$-2,3,7,8-TCDF	4	3.21	80.3	28:26	0.79	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	4	2.95	73.8	32:24	1.59	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	4	3.21	80.3	34:59	0.52	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	4	3.07	76.8	37:26	0.45	
Sampling Standards						
$^{37}Cl_4$-2,3,7,8-TCDD	4	3.86	96.5	29:24		
$^{13}C_{12}$-2,3,4,7,8-PeCDF	4	4.35	108.8	32:59	1.59	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	4	3.54	88.5	35:32	1.28	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	4	3.68	92.0	34:53	0.52	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	4	3.94	98.5	39:07	0.44	
Injection Standards						
$^{13}C_{12}$-1,2,3,4-TCDD				28:40	0.81	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD				35:50	1.28	

Client Information

Project Name: OMS-Lee
Sample ID: 1-S-M23-2

Laboratory Information

Project ID: G370-4
Sample ID: 70734

Collection Date: 19-Aug-99
Receipt Date: 20-Aug-99
Extraction Date: 20-Aug-99
Analysis Date: 23-Aug-99

Sample Information

Matrix: Air
Weight / Volume:
Moisture / Lipids:
Original pH : NA

Filename: b23aug99a-6
Retchk: b23aug99a-1
Begin ConCal: b23aug99a-1
End ConCal: b23aug99a-15
Initial Cal: m8290-b060499a

Reviewed by: _____ Date Reviewed: 24 Aug 99

Filename ; b23aug99a
Sample ; 6
Acquired ; 23-AUG-99 19:19:34
Processed ; 24-AUG-99 08:03:51
Sample ID ; 70734 x1/2
Cal Table ; m8290-b060499a
Results Table ; M8290-B082399A
Comments ;

Typ	Name	Resp	Ion 1	Ion 2	RA;?;	RT	Conc	DL	S/N1;?;	S/N2;?	mod?
Unk	2,3,7,8-TCDD	5.90e+06	2.53e+06	3.36e+06	0.75;y;	29:24	4.016	0.0724	139;y;	199;y	no
Unk	1,2,3,7,8-PeCDD	9.33e+06	5.64e+06	3.69e+06	1.53;y;	33:11	8.533	0.0668	394;y;	451;y	no
Unk	1,2,3,4,7,8-HxCDD	4.24e+06	2.36e+06	1.89e+06	1.25;y;	35:34	4.292	0.1234	112;y;	114;y	no
Unk	1,2,3,6,7,8-HxCDD	9.00e+06	5.02e+06	3.98e+06	1.26;y;	35:38	8.878	0.1203	234;y;	233;y	no
Unk	1,2,3,7,8,9-HxCDD	7.49e+06	4.18e+06	3.31e+06	1.26;y;	35:50	6.962	0.1134	161;y;	163;y	no
Unk	1,2,3,4,6,7,8-HpCDD	3.54e+07	1.79e+07	1.75e+07	1.03;y;	38:33	40.088	0.1610	535;y;	1486;y	no
Unk	OCDD	4.00e+07	1.87e+07	2.13e+07	0.88;y;	42:16	62.857	0.0982	1704;y;	2248;y	no
Unk	2,3,7,8-TCDF	4.60e+07	1.99e+07	2.61e+07	0.76;y;	28:28	24.285	0.9089	57;y;	99;y	no
Unk	1,2,3,7,8-PeCDF	4.83e+07	2.93e+07	1.91e+07	1.54;y;	32:25	32.042	0.2785	341;y;	341;y	no
Unk	2,3,4,7,8-PeCDF	4.85e+07	2.95e+07	1.90e+07	1.55;y;	32:59	31.356	0.2715	320;y;	317;y	no
Unk	1,2,3,4,7,8-HxCDF	3.30e+07	1.82e+07	1.48e+07	1.23;y;	34:54	22.046	0.3953	172;y;	185;y	no
Unk	1,2,3,6,7,8-HxCDF	4.08e+07	2.24e+07	1.84e+07	1.22;y;	34:59	24.639	0.3570	209;y;	225;y	no
Unk	2,3,4,6,7,8-HxCDF	2.59e+07	1.42e+07	1.17e+07	1.21;y;	35:26	18.264	0.4167	120;y;	130;y	no
Unk	1,2,3,7,8,9-HxCDF	4.77e+06	2.61e+06	2.15e+06	1.21;y;	36:08	3.706	0.4598	17;y;	19;y	no
Unk	1,2,3,4,6,7,8-HpCDF	6.07e+07	3.06e+07	3.01e+07	1.02;y;	37:27	46.789	0.0779	1536;y;	2357;y	no
Unk	1,2,3,4,7,8,9-HpCDF	3.71e+06	1.93e+06	1.78e+06	1.09;y;	39:08	3.638	0.0989	77;y;	116;y	no
Unk	OCDF	5.71e+06	2.69e+06	3.02e+06	0.89;y;	42:30	8.246	0.0677	436;y;	354;y	no
ES/RT	13C-2,3,7,8-TCDD	1.36e+08	6.00e+07	7.59e+07	0.79;y;	29:22	80.436	0.0897	2332;y;	2951;y	no
ES	13C-1,2,3,7,8-PeCDD	1.11e+08	6.82e+07	4.30e+07	1.59;y;	33:10	76.802	0.0387	11741;y;	10295;y	no
ES	13C-1,2,3,6,7,8-HxCDD	1.06e+08	5.96e+07	4.62e+07	1.29;y;	35:37	81.525	0.0404	6173;y;	7433;y	no
ES	13C-1,2,3,4,6,7,8-HpCDD	9.35e+07	4.80e+07	4.55e+07	1.05;y;	38:32	83.678	0.1007	1455;y;	3389;y	no
ES	13C-OCDD	1.26e+08	5.95e+07	6.64e+07	0.90;y;	42:15	131.523	0.0402	4422;y;	8343;y	no
ES/RT	13C-2,3,7,8-TCDF	1.92e+08	8.47e+07	1.07e+08	0.79;y;	28:26	80.246	0.0302	6944;y;	9081;y	no
ES	13C-1,2,3,7,8-PeCDF	1.58e+08	9.70e+07	6.09e+07	1.59;y;	32:24	73.726	0.0359	12462;y;	13321;y	no
ES	13C-1,2,3,6,7,8-HxCDF	1.37e+08	4.69e+07	9.01e+07	0.52;y;	34:59	80.290	0.0457	3853;y;	9148;y	no
ES	13C-1,2,3,4,6,7,8-HpCDF	8.73e+07	2.70e+07	6.03e+07	0.45;y;	37:26	76.731	0.1320	1304;y;	1904;y	no
JS	13C-1,2,3,4-TCDD	1.58e+08	7.06e+07	8.75e+07	0.81;y;	28:40	123.033	-	2781;y;	3480;y	no
JS	13C-1,2,3,7,8,9-HxCDD	1.30e+08	7.32e+07	5.71e+07	1.28;y;	35:50	122.890	-	6898;y;	8317;y	no
CS	37Cl-2,3,7,8-TCDD	1.31e+08	1.31e+08	-	-;-;	29:24	77.611	0.0177	12951;y;	-; -	no
CS	13C-2,3,4,7,8-PeCDF	1.65e+08	1.01e+08	6.35e+07	1.59;y;	32:59	80.258	0.0375	13033;y;	13595;y	no
CS	13C-1,2,3,4,7,8-HxCDD	7.95e+07	4.46e+07	3.48e+07	1.28;y;	35:32	72.073	0.0476	5253;y;	6389;y	no
CS	13C-1,2,3,4,7,8-HxCDF	1.12e+08	3.81e+07	7.38e+07	0.52;y;	34:53	73.788	0.0514	3449;y;	8174;y	no
CS	13C-1,2,3,4,7,8,9-HpCDF	7.25e+07	2.23e+07	5.02e+07	0.44;y;	39:07	75.559	0.1565	850;y;	1270;y	no
SS	37Cl-2,3,7,8-TCDD	1.31e+08	1.31e+08	-	-;-;	29:24	96.501	0.0224	12951;y;	-; -	no
SS	13C-2,3,4,7,8-PeCDF	1.65e+08	1.01e+08	6.35e+07	1.59;y;	32:59	108.873	0.0244	13033;y;	13595;y	no
SS	13C-1,2,3,4,7,8-HxCDD	7.95e+07	4.46e+07	3.48e+07	1.28;y;	35:32	88.388	0.0530	5253;y;	6389;y	no
SS	13C-1,2,3,4,7,8-HxCDF	1.12e+08	3.81e+07	7.38e+07	0.52;y;	34:53	91.881	0.0542	3449;y;	8174;y	no
SS	13C-1,2,3,4,7,8,9-HpCDF	7.25e+07	2.23e+07	5.02e+07	0.44;y;	39:07	98.473	0.2135	850;y;	1270;y	no

Totals Raw Data

	Conc	Empc	Flags
TCDF	778.178	778.178	FALSE
TCDD	69.93116715	71.04416715	TRUE
PeCDF	444.722	444.722	FALSE
PeCDD	93.585	93.585	FALSE
HxCDF	210.201	210.201	FALSE
HxCDD	104.238	104.238	FALSE
HpCDF	67.303	67.303	FALSE
HpCDD	78.614	78.614	FALSE

Filename: b23aug99a
Sample: 6
Acquired: 23-AUG-99 19:19:34
Processed: 24-AUG-99 08:03:51
Sample ID: 70734 x1/2
Cal Table: m8290-b060499a
Results Table: M8290-B082399A

Name of Homolog Group: Total Tetra-Furans
Number of Peaks Found: 23
RRF Used For Totals: 0.9883
Detection Limit: 0.9089
Begin Window: 24:09:00
End Window: 30:31:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	9.84E+07	42800000	55600000		0.77 y	24:15	51.96	OK		140 y		240 y	n
	2	5.26E+07	22800000	29800000		0.76 y	24:41	27.769	OK		74 y		120 y	n
	3	2.80E+07	12100000	15900000		0.76 y	25:13	14.768	OK		45 y		76 y	n
	4	3.47E+07	15000000	19600000		0.76 y	25:25	18.314	OK		53 y		88 y	n
	5	3.02E+08	131000000	170000000		0.77 y	25:33	159.499	OK		350 y		580 y	n
	6	5.38E+07	23300000	30500000		0.76 y	25:48	28.404	OK		79 y		130 y	n
	7	1.33E+08	58100000	75100000		0.77 y	25:52	70.352	OK		180 y		290 y	n
	8	4.95E+07	21400000	28000000		0.76 y	26:13	26.134	OK		67 y		110 y	n
	9	3.59E+07	15600000	20300000		0.77 y	26:18	18.967	OK		53 y		88 y	n
	10	7.64E+07	33100000	43300000		0.77 y	26:29	40.364	OK		110 y		180 y	n
	11	5.51E+07	23900000	31200000		0.77 y	26:46	29.122	OK		76 y		130 y	n
	12	3.73E+07	16100000	21200000		0.76 y	26:56	19.712	OK		54 y		93 y	n
	13	1.60E+08	69700000	90700000		0.77 y	27:06	84.712	OK		170 y		290 y	n
	14	8.11E+07	34900000	46200000		0.76 y	27:32	42.809	OK		95 y		160 y	n
	15	3.50E+07	15200000	19800000		0.77 y	27:49	18.48	OK		50 y		82 y	n
	16	2.67E+07	11700000	15100000		0.78 y	28:01	14.114	OK		36 y		59 y	n
	17	4.69E+07	20400000	26500000		0.77 y	28:14	24.762	OK		57 y		93 y	n
	18	2.46E+07	10700000	13900000		0.77 y	28:21	13.001	OK		36 y		60 y	n
2,3,7,8-TCDF	19	4.60E+07	19900000	26100000		0.76 y	28:28	24.285	OK		57 y		99 y	n
	20	8.46E+07	36800000	47800000		0.77 y	28:49	44.695	OK		110 y		190 y	n
	21	6.59E+06	2810000	3780000		0.74 y	29:03	3.48	OK		9.7 y		16 y	n
	22	4.69E+06	1950000	2740000		0.71 y	29:19	2.475	OK		6.8 y		12 y	n
	23	3.73E+06	1440000	2280000		0.63 n	30:36	1.968	RT		4.5 y		8.3 y	n

Filename: b23aug99a
Sample: 6
Acquired: 23-AUG-99 19:19:34
Processed: [redacted]AUG-99 08:03:51

Name of Homolog Group: Total Tetra-Dioxins
Number of Peaks Found: 17
RRF Used For Totals: 1.0802
Detection Limit: 0.0724

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Sample ID: [redacted]0734 x1/2
Cal Table: m8290-b060499a
Results Table: M8290-B082399A
Begin Window: 25:50:00
End Window: 30:28:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	1.74E+07	7640000	9730000	0.78	y	25:57	11.835	OK	440	y	600	y	n
	2	8.06E+06	3540000	4520000	0.78	y	26:14	5.488	OK	200	y	290	y	n
	3	4.63E+06	2000000	2630000	0.76	y	26:36	3.157	OK	120	y	160	y	n
	4	5.15E+05	218000	297000	0.74	y	27:18	0.351	OK	15	y	19	y	n
	5	1.30E+07	5730000	7320000	0.78	y	27:32	8.889	OK	280	y	380	y	n
	6	1.45E+07	6400000	8090000	0.79	y	27:44	9.867	OK	350	y	490	y	n
	7	5.02E+06	2240000	2780000	0.81	y	27:55	3.419	OK	130	y	170	y	n
	8	2.95E+06	1320000	1630000	0.81	y	28:10	2.01	OK	78	y	110	y	n
	9	5.76E+06	2550000	3220000	0.79	y	28:19	3.926	OK	140	y	190	y	n
	10	3.53E+06	1580000	1950000	0.81	y	28:40	2.403	OK	86	y	110	y	n
	11	1.80E+06	792000	1010000	0.79	y	28:50	1.227	OK	46	y	58	y	n
	12	9.65E+06	4150000	5500000	0.76	y	29:06	6.574	OK	150	y	210	y	n
	13	1.63E+06	781000	853000	0.92	n	29:13	1.113	EMPC	46	y	67	y	n
2,3,7,8-TCDD	14	5.90E+06	2530000	3360000	0.77153908	y	29:24	3.95416715	OK	140	y	200	y	n
	15	7.22E+06	3130000	4090000	0.76	y	29:45	4.916	OK	180	y	240	y	n
	16	1.49E+06	674000	819000	0.82	y	29:55	1.017	OK	34	y	46	y	n
	17	1.32E+06	586000	732000	0.8	y	30:28	0.898	OK	34	y	44	y	n

Filename: b23aug99a
Sample: 6
Acquired: 23-AUG-99 19:19:34
Processed: 24-AUG-99 08:03:51
Sample ID: 70734 x1/2
Cal Table: m8290-b060499a
Results Table: M8290-B082399A
Name of Homolog Group: Total Penta-Furans Fn1
Number of Peaks Found: 3
RRF Used For Totals: 0.9679
Detection Limit: 0.0212
Begin Window: 30:40:00
End Window: 31:00:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	2.10E+05	91200	119000	0.77	n	30:24	0.138	RT	7.9	y	17	y	n
	2	9.45E+07	36600000	57800000	0.63	y	30:37	61.815	RT	2500	y	5700	y	n
	3	3.53E+05	135000	218000	0.62	y	30:56	0.231	DL	14	y	31	y	n

Filename: b23aug99a
Sample: 6
Acquired: 23-AUG-99 19:19:34
Processed: 24-AUG-99 08:03:51
Sample ID: 70734 x1/2
Cal Table: m8290-b060499a
Results Table: M8290-B082399A
Name of Homolog Group: Total Penta-Furans Fn2
Number of Peaks Found: 16
RRF Used For Totals: 0.9679
Detection Limit: 0.275
Begin Window: 30:42:00
End Window: 33:46:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	1.05E+06	641000	409000	1.56	y	31:28	0.687	OK	6.4	y	6.6	y	n
	2	1.31E+08	79100000	51800000	1.53	y	31:45	85.673	OK	610	y	600	y	n

	3	2.04E+08	123000000	80500000	1.53	y	31:51	133.317	OK	860 y	850 y n
	4	1.89E+07	11400000	7430000	1.54	y	31:57	12.335	OK	130 y	130 y n
	5	1.99E+07	12000000	7930000	1.51	y	32:05	13.046	OK	110 y	110 y n
	6	1.04E+07	6290000	4150000	1.51	y	32:09	6.834	OK	83 y	84 y n
	7	5.43E+07	32900000	21500000	1.53	y	32:13	35.552	OK	320 y	310 y n
	8	1.54E+07	9340000	6060000	1.54	y	32:19	10.072	OK	120 y	110 y n
1,2,3,7,8-PeCDF	9	4.83E+07	29300000	19100000	1.54	y	32:25	32.042	OK	340 y	340 y n
	10	5.91E+07	35800000	23400000	1.53	y	32:33	38.686	OK	300 y	290 y n
	11	1.16E+07	7080000	4530000	1.56	y	32:38	7.597	OK	74 y	70 y n
	12	6.49E+06	3990000	2500000	1.6	y	32:51	4.245	OK	53 y	51 y n
	13	4.40E+07	26700000	17300000	1.54	y	32:55	28.779	OK	280 y	280 y n
2,3,4,7,8-PeCDF	14	4.85E+07	29500000	19000000	1.55	y	32:59	31.356	OK	320 y	320 y n
	15	3.15E+06	1980000	1170000	1.69	y	33:09	2.059	OK	22 y	21 y n
	16	3.73E+06	2320000	1410000	1.64	y	33:34	2.442	OK	26 y	25 y n

Filename:	b23aug99a	Name of Homolog Group:	Total Penta-Dioxins
Sample:	6	Number of Peaks Found:	11
Acquired:	23-AUG-99 19:19:34	RRF Used For Totals:	0.9837
Processed:	24-AUG-99 08:03:51	Detection Limit:	0.0668
Sample ID:	70734 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	31:48:00
Results Table:	M8290-B082399A	End Window:	33:30:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	2.42E+07	14700000	9460000		1.56 y	31:55	22.114	OK	760 y		870 y		n
	2	3.51E+06	2120000	1400000		1.52 y	32:10	3.215	OK	170 y		180 y		n
	3	1.67E+07	10200000	6560000		1.55 y	32:27	15.302	OK	850 y		990 y		n
	4	8.48E+06	5110000	3380000		1.51 y	32:33	7.758	OK	430 y		510 y		n
	5	1.32E+07	8030000	5190000		1.55 y	32:35	12.092	OK	540 y		660 y		n
	6	1.21E+07	7350000	4740000		1.55 y	32:43	11.053	OK	380 y		440 y		n
	7	6.21E+06	3840000	2370000		1.62 y	32:55	5.68	OK	250 y		280 y		n
	8	2.67E+04	19600	7050		2.78 n	33:05	0.024	S2N	1.8 n		1.2 n		n
1,2,3,7,8-PeCDD	9	9.33E+06	5640000	3690000		1.53 y	33:11	8.533	OK	390 y		450 y		n
	10	4.24E+06	2610000	1630000		1.6 y	33:13	3.881	OK	180 y		200 y		n
	11	4.33E+06	2660000	1670000		1.6 y	33:24	3.957	OK	160 y		190 y		n

Filename:	b23aug99a	Name of Homolog Group:	Total Hexa-Furans
Sample:	6	Number of Peaks Found:	26
Acquired:	23-AUG-99 19:19:34	RRF Used For Totals:	1.0623
Processed:	24-AUG-99 08:03:51	Detection Limit:	0.406
Sample ID:	70734 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	33:51:00
Results Table:	M8290-B082399A	End Window:	36:21:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	2.83E+07	15600000	1270000		1.23 y	34:02	19.433	OK	160 y		80 y		n

	2	1.07E+08	58800000	48000	1.23	y	34:10	73.287	OK	620 y	60 y n
	3	9.71E+06	5370000	4340000	1.24	y	34:18	6.667	OK	51 y	55 y n
	4	1.14E+07	6270000	5160000	1.21	y	34:24	7.846	OK	61 y	65 y n
	5	4.27E+06	2300000	1970000	1.17	y	34:33	2.93	OK	25 y	27 y n
	6	2.57E+07	14100000	11600000	1.22	y	34:49	17.652	OK	140 y	150 y n
1,2,3,4,7,8-HxCDF	7	3.30E+07	18200000	14800000	1.23	y	34:54	22.046	OK	170 y	190 y n
1,2,3,6,7,8-HxCDF	8	4.08E+07	22400000	18400000	1.22	y	34:59	24.639	OK	210 y	230 y n
	9	6.34E+06	3560000	2790000	1.28	y	35:06	4.355	OK	29 y	32 y n
	10	5.33E+06	2840000	2480000	1.15	y	35:12	3.657	OK	27 y	31 y n
	11	8.33E+06	4550000	3780000	1.2	y	35:17	5.719	OK	40 y	44 y n
2,3,4,6,7,8-HxCDF	12	2.59E+07	14200000	11700000	1.21	y	35:26	18.264	OK	120 y	130 y n
	13	3.05E+05	186000	119000	1.57	n	35:38	0.21	S2N	1 n	1.2 n n
	14	9.33E+04	40200	53100	0.76	n	35:45	0.064	S2N	0.51 n	0.5 n n
	15	5.24E+04	19700	32600	0.6	n	35:48	0.036	S2N	0.31 n	0.62 n n
	16	7.49E+04	42300	32600	1.3	y	35:50	0.051	S2N	0.33 n	0.62 n n
	17	3.14E+04	15900	15500	1.03	n	35:55	0.022	S2N	0.21 n	0.32 n n
	18	1.52E+05	80800	71400	1.13	y	36:01	0.105	S2N	0.57 n	0.62 n n
1,2,3,7,8,9-HxCDF	19	4.77E+06	2610000	2150000	1.21	y	36:08	3.706	OK	17 y	19 y n
	20	1.55E+05	85100	70300	1.21	y	36:17	0.107	S2N	0.48 n	0.65 n n
	21	3.62E+04	9040	27100	0.33	n	36:23	0.025	RT	0.17 n	0.28 n n
	22	3.20E+04	9550	22500	0.43	n	36:25	0.022	RT	0.18 n	0.31 n n
	23	2.70E+04	12700	14300	0.89	n	36:27	0.019	RT	0.17 n	0.24 n n
	24	3.07E+04	10400	20300	0.51	n	36:31	0.021	RT	0.13 n	0.28 n n
	25	3.59E+04	15600	20300	0.77	n	36:32	0.025	RT	0.18 n	0.28 n n
	26	1.24E+04	2170	10200	0.21	n	36:40	0.008	RT	0.034 n	0.16 n n

Filename:	b23aug99a	Name of Homolog Group:	Total Hexa-Dioxins
Sample:	6	Number of Peaks Found:	23
Acquired:	23-AUG-99 19:19:34	RRF Used For Totals:	0.9699
Processed:	24-AUG-99 08:03:51	Detection Limit:	0.1189
Sample ID:	70734 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	34:17:00
Results Table:	M8290-B082399A	End Window:	35:55:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	1.27E+07	7040000	5700000	1.23	y	34:26	12.416	OK	370	y	380	y	n
	2	3.06E+04	11400	19200	0.59	n	34:40	0.03	S2N	1.1	n	1.4	n	n
	3	2.12E+04	13600	7590	1.8	n	34:43	0.021	S2N	0.95	n	0.71	n	n
	4	3.52E+07	19500000	15800000	1.23	y	34:51	34.317	OK	950	y	980	y	n
	5	3.01E+07	16900000	13200000	1.28	y	35:02	29.291	OK	660	y	670	y	n
	6	4.29E+06	2210000	2080000	1.06	y	35:07	4.179	OK	95	y	92	y	n
	7	3.16E+04	16800	14800	1.13	y	35:26	0.031	S2N	2.1	n	1.4	n	n
	8	5.16E+04	36800	14800	2.49	n	35:28	0.05	S2N	1.8	n	1.4	n	n
1,2,3,4,7,8-HxCDD	9	4.24E+06	2360000	1890000	1.25	y	35:34	4.292	OK	110	y	110	y	n
1,2,3,6,7,8-HxCDD	10	9.00E+06	5020000	3980000	1.26	y	35:38	8.878	OK	230	y	230	y	n
	11	4.01E+06	2200000	1800000	1.22	y	35:46	3.903	OK	110	y	110	y	n
1,2,3,7,8,9-HxCDD	12	7.49E+06	4180000	3310000	1.26	y	35:50	6.962	OK	160	y	160	y	n
	13	2.22E+05	105000	117000	0.89	n	36:03	0.216	RT	3.3	y	4.3	y	n

	14	6.12E+04	27500	33700	0.82 n	36:09	0.06 RT	1.7 n	1.9 n	n
	15	5.08E+04	17100	33700	0.51 n	36:11	0.05 RT	1.1 n	1.9 n	n
	16	2.73E+04	6440	20900	0.31 n	36:13	0.027 RT	0.75 n	2 n	n
	17	3.84E+04	17300	21100	0.82 n	36:15	0.037 RT	0.73 n	1.2 n	n
	18	1.21E+04	5670	6440	0.88 n	36:18	0.012 RT	0.49 n	0.89 n	n
	19	1.36E+04	7160	6440	1.11 y	36:21	0.013 RT	0.46 n	0.89 n	n
	20	1.61E+04	8580	7490	1.15 y	36:26	0.016 RT	0.92 n	0.61 n	n
	21	3.82E+04	24400	13800	1.77 n	36:33	0.037 RT	0.76 n	0.91 n	n
	22	8.38E+03	4200	4180	1.01 n	36:40	0.008 RT	0.54 n	0.42 n	n
	23	1.81E+04	6350	11700	0.54 n	36:41	0.018 RT	0.58 n	0.8 n	n

Filename:	b23aug99a	Name of Homolog Group:	Total Hepta-Furans
Sample:	6	Number of Peaks Found:	20
Acquired:	23-AUG-99 19:19:34	RRF Used For Totals:	1.3281
Processed:	24-AUG-99 08:03:51	Detection Limit:	0.0871
Sample ID:	70734 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	37:15:00
Results Table:	M8290-B082399A	End Window:	39:22:00

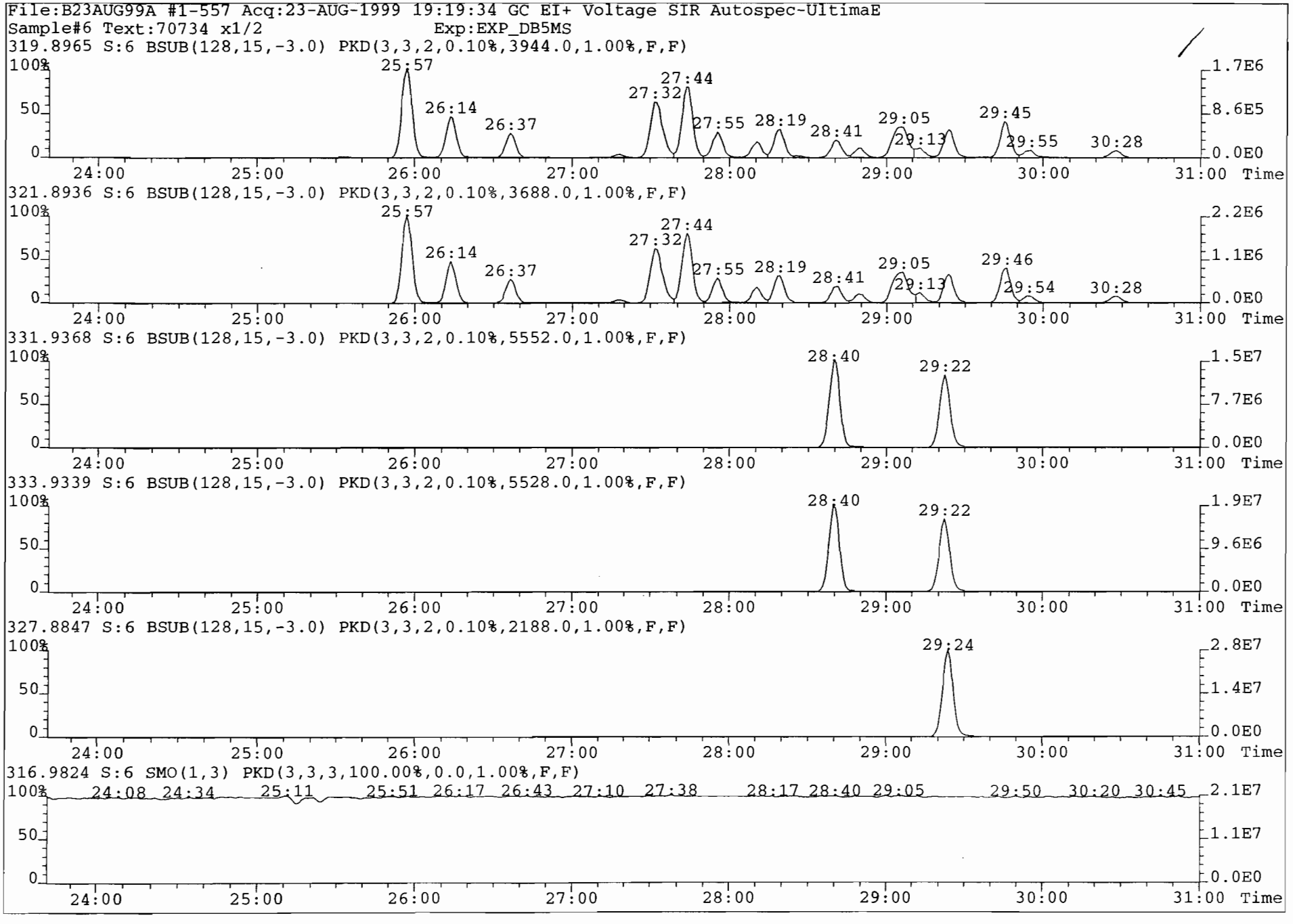
Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
1,2,3,4,6,7,8-HpCDI	1	6.07E+07	30600000	30100000		1.02 y	37:27	46.789	OK	1500	y	2400	y	n
	2	1.10E+07	5530000	5460000		1.01 y	37:45	9.473	OK	260	y	410	y	n
	3	8.58E+06	4320000	4270000		1.01 y	37:54	7.403	OK	200	y	320	y	n
	4	1.02E+05	33000	68900		0.48 n	38:06	0.088	S2N	2.5	n	6.1	y	n
	5	4.92E+04	28400	20800		1.36 n	38:08	0.042	S2N	1.7	n	2.7	n	n
	6	1.01E+04	4610	5480		0.84 n	38:16	0.009	S2N	0.47	n	0.95	n	n
	7	1.82E+04	12000	6240		1.92 n	38:30	0.016	S2N	1	n	0.85	n	n
	8	2.31E+04	16900	6240		2.7 n	38:33	0.02	S2N	1.1	n	0.85	n	n
1,2,3,4,7,8,9-HpCDI	9	3.71E+06	1930000	1780000		1.09 y	39:08	3.638	OK	77	y	120	y	n
	10	8.12E+04	65800	15400		4.28 n	39:19	0.07	S2N	2.5	n	2.3	n	n
	11	4.37E+04	37400	6290		5.94 n	39:27	0.038	RT	1.5	n	1.1	n	n
	12	1.36E+04	9270	4330		2.14 n	39:34	0.012	RT	0.85	n	0.63	n	n
	13	1.62E+04	11800	4330		2.73 n	39:37	0.014	RT	0.64	n	0.63	n	n
	14	9.01E+03	4950	4050		1.22 n	39:44	0.008	RT	0.48	n	0.46	n	n
	15	1.16E+04	7500	4050		1.85 n	39:46	0.01	RT	0.92	n	0.46	n	n
	16	1.06E+04	7990	2620		3.05 n	39:48	0.009	RT	0.83	n	0.52	n	n
	17	1.83E+04	15600	2620		5.97 n	39:50	0.016	RT	0.82	n	0.52	n	n
	18	1.56E+04	9350	6270		1.49 n	40:10	0.013	RT	0.6	n	0.86	n	n
	19	1.16E+04	8950	2690		3.32 n	40:14	0.01	RT	0.46	n	0.34	n	n
	20	1.03E+04	6090	4190		1.46 n	40:24	0.009	RT	0.52	n	0.5	n	n

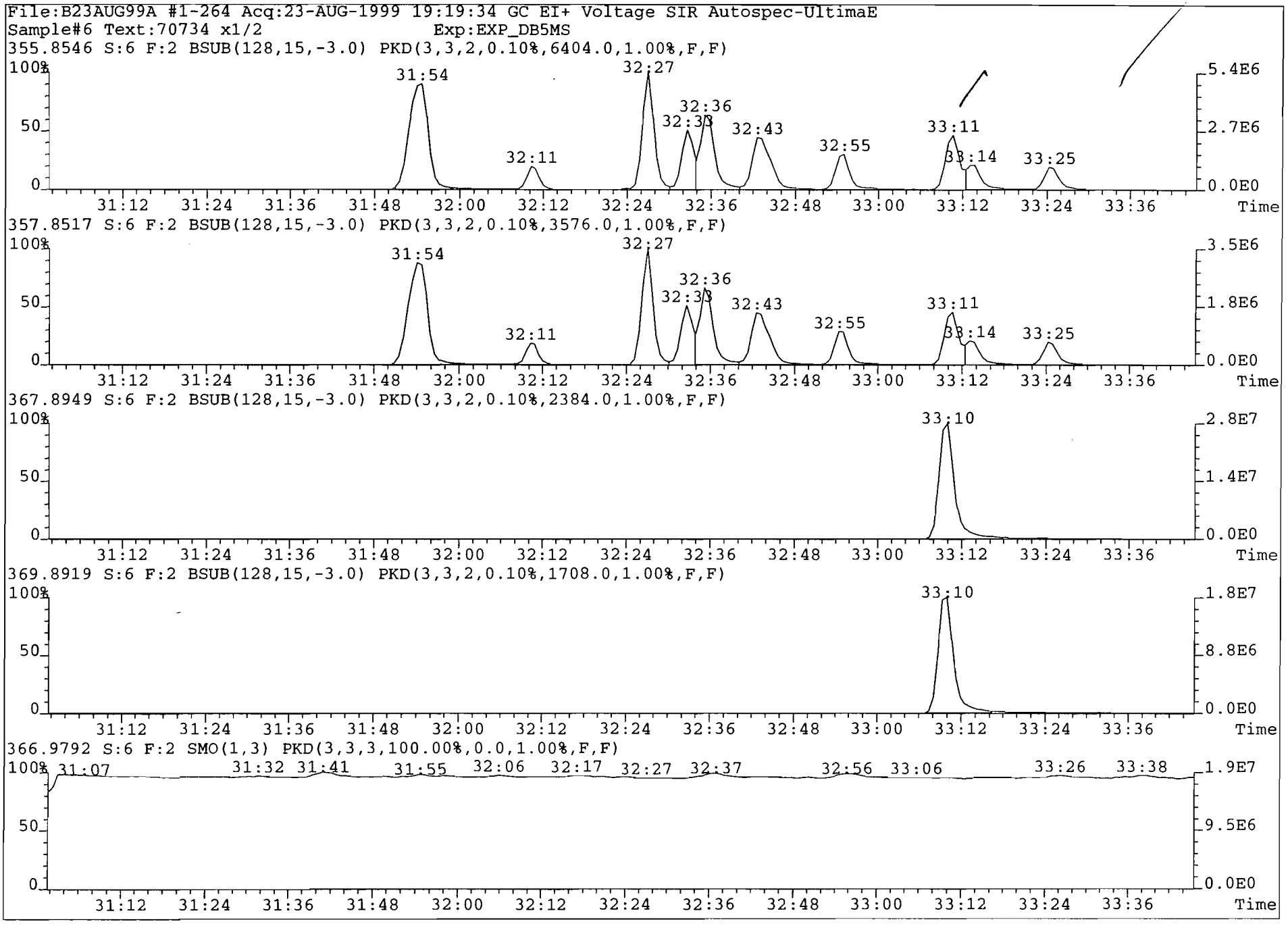
Filename:	b23aug99a	Name of Homolog Group:	Total Hepta-Dioxins
Sample:	6	Number of Peaks Found:	20
Acquired:	23-AUG-99 19:19:34	RRF Used For Totals	0 944
Processed:	24-AUG-99 08:03:51	Detection Limit	0 161
Sample ID:	70734 x1/2		

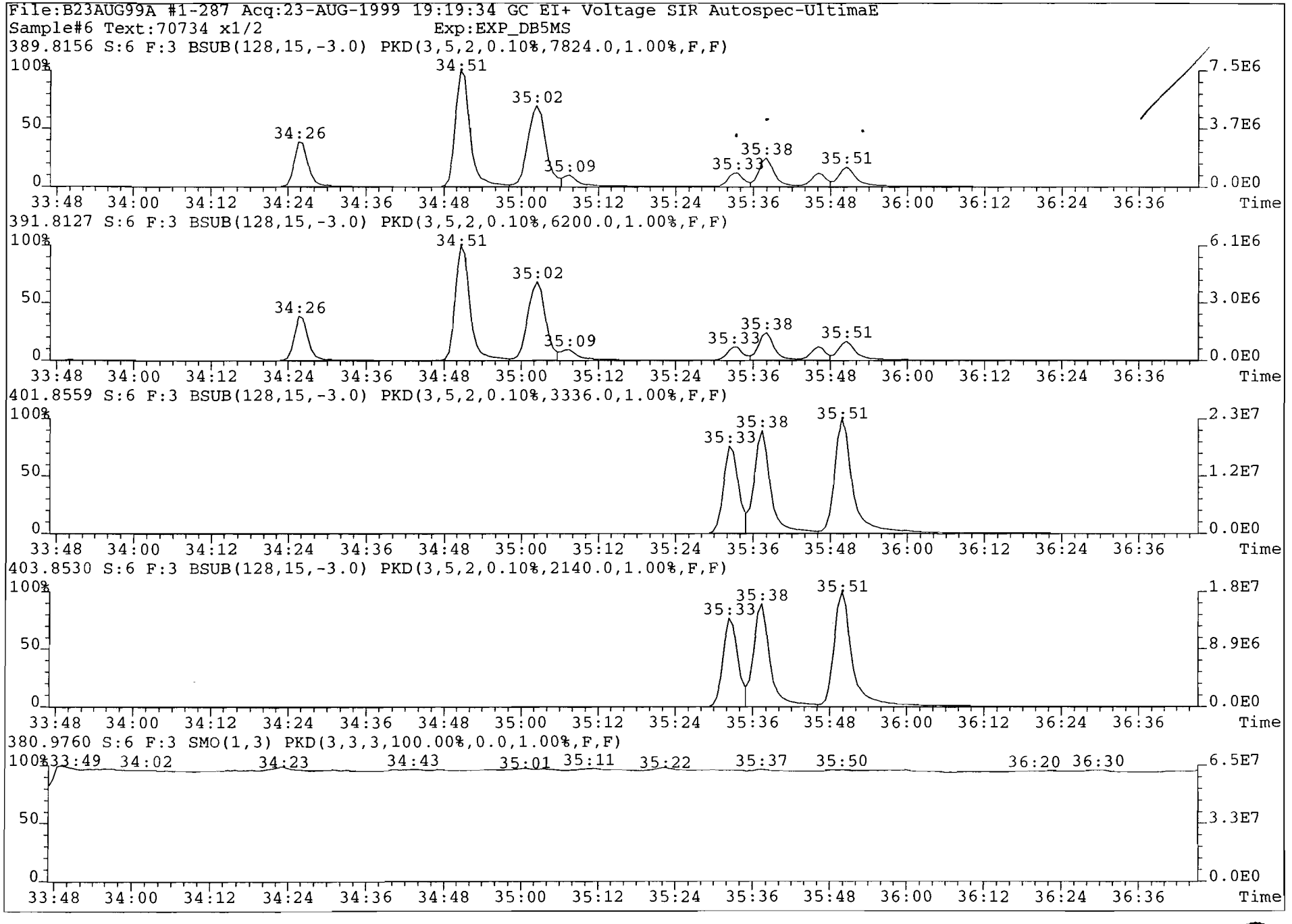
Totals Raw Data

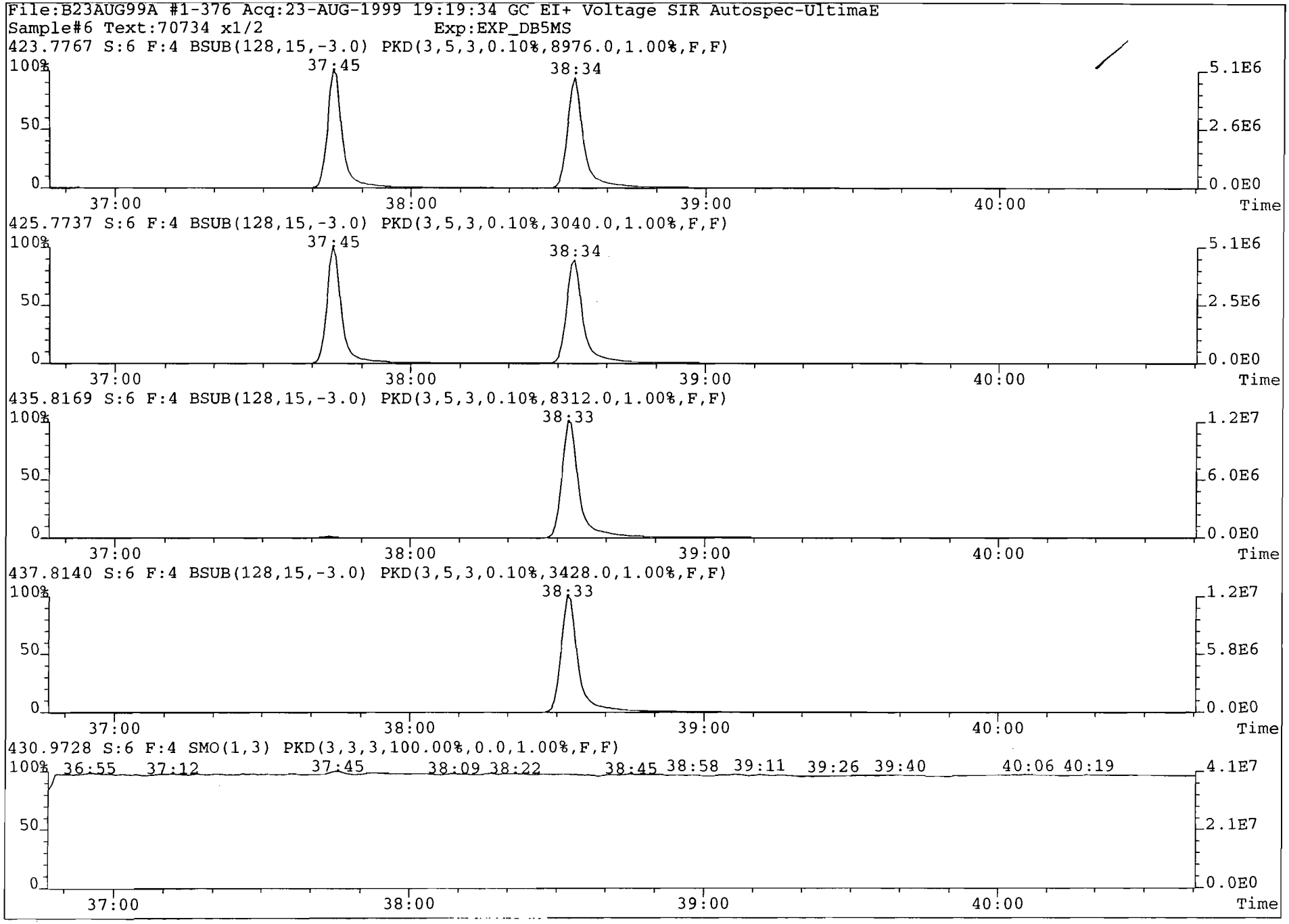
Cal Table: [redacted]8290-b060499a Begin Window: 37:32:00
Results Table: M8290-B082399A End Window: 37:52:00

Name	#	Response		Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1		3.40E+07	17200000	16800000	1.02	y	37:44	38.526	OK	570	y	1700	y	n
	2		7.49E+04	31900	43000	0.74	n	38:00	0.085	RT	3.2	y	8.4	y	n
	3		1.09E+05	53200	55700	0.95	y	38:02	0.123	RT	2.8	n	6.7	y	n
	4		9.94E+04	46500	52900	0.88	n	38:05	0.113	RT	2.1	n	6	y	n
	5		5.69E+04	25000	31800	0.79	n	38:08	0.064	RT	1.5	n	4.9	y	n
	6		5.16E+04	19800	31800	0.62	n	38:11	0.059	RT	1.1	n	4.9	y	n
	7		4.47E+04	19900	24800	0.81	n	38:12	0.051	RT	0.8	n	3.5	y	n
	8		8.38E+03	5370	3010	1.78	n	38:26	0.009	RT	0.4	n	1.1	n	n
1,2,3,4,6,7,8-HpCDI	9		3.54E+07	17900000	17500000	1.03	y	38:33	40.088	RT	530	y	1500	y	n
	10		3.89E+05	202000	187000	1.08	y	38:48	0.44	RT	6.4	y	20	y	n
	11		9.67E+04	32700	64000	0.51	n	38:53	0.11	RT	3.2	y	10	y	n
	12		1.09E+05	44800	64000	0.7	n	38:54	0.123	RT	3	n	10	y	n
	13		9.82E+04	27900	70300	0.4	n	38:56	0.111	RT	2.8	n	7.8	y	n
	14		1.07E+05	36400	70300	0.52	n	38:58	0.121	RT	2.4	n	7.8	y	n
	15		1.09E+05	48900	60100	0.81	n	38:59	0.124	RT	2.4	n	6.4	y	n
	16		9.62E+04	22400	73800	0.3	n	39:03	0.109	RT	1.6	n	6.1	y	n
	17		1.47E+05	72900	73800	0.99	y	39:06	0.166	RT	1.9	n	6.1	y	n
	18		5.36E+04	24700	28800	0.86	n	39:09	0.061	RT	1.9	n	3.4	y	n
	19		3.35E+04	20200	13300	1.52	n	39:14	0.038	RT	0.84	n	1.9	n	n
	20		1.25E+04	8340	4190	1.99	n	39:21	0.014	RT	0.54	n	0.87	n	n

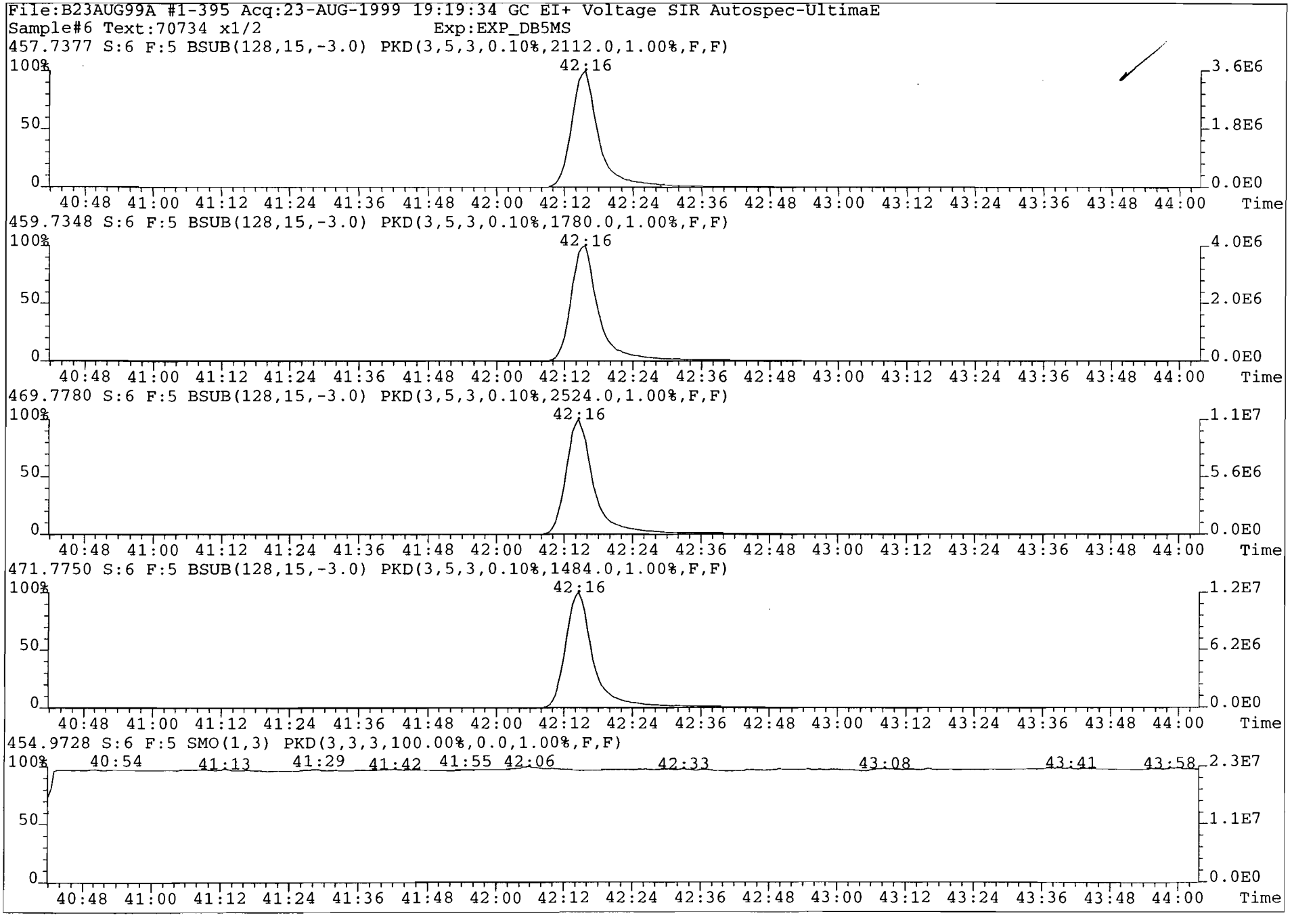

File:B23AUG99A #1-557 Acq:23-AUG-1999 19:19:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:70734 x1/2 Exp:EXP_DB5MS
319.8965 S:6 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3944.0,1.00%,F,F)
25:57
26:14
26:37
27:32
27:44
27:55
28:19
28:41
29:05
29:13
29:45
29:55
30:28
1.7E6
8.6E5
0.0E0
321.8936 S:6 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3688.0,1.00%,F,F)
25:57
26:14
26:37
27:32
27:44
27:55
28:19
28:41
29:05
29:13
29:46
29:54
30:28
2.2E6
1.1E6
0.0E0
331.9368 S:6 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,5552.0,1.00%,F,F)
28:40
29:22
1.5E7
7.7E6
0.0E0
333.9339 S:6 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,5528.0,1.00%,F,F)
28:40
29:22
1.9E7
9.6E6
0.0E0
327.8847 S:6 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2188.0,1.00%,F,F)
29:24
2.8E7
1.4E7
0.0E0
316.9824 S:6 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
24:08 24:34 25:11 25:51 26:17 26:43 27:10 27:38 28:17 28:40 29:05 29:50 30:20 30:45
2.1E7
1.1E7
0.0E0
100%
50
0
24:00
25:00
26:00
27:00
28:00
29:00
30:00
31:00
Time

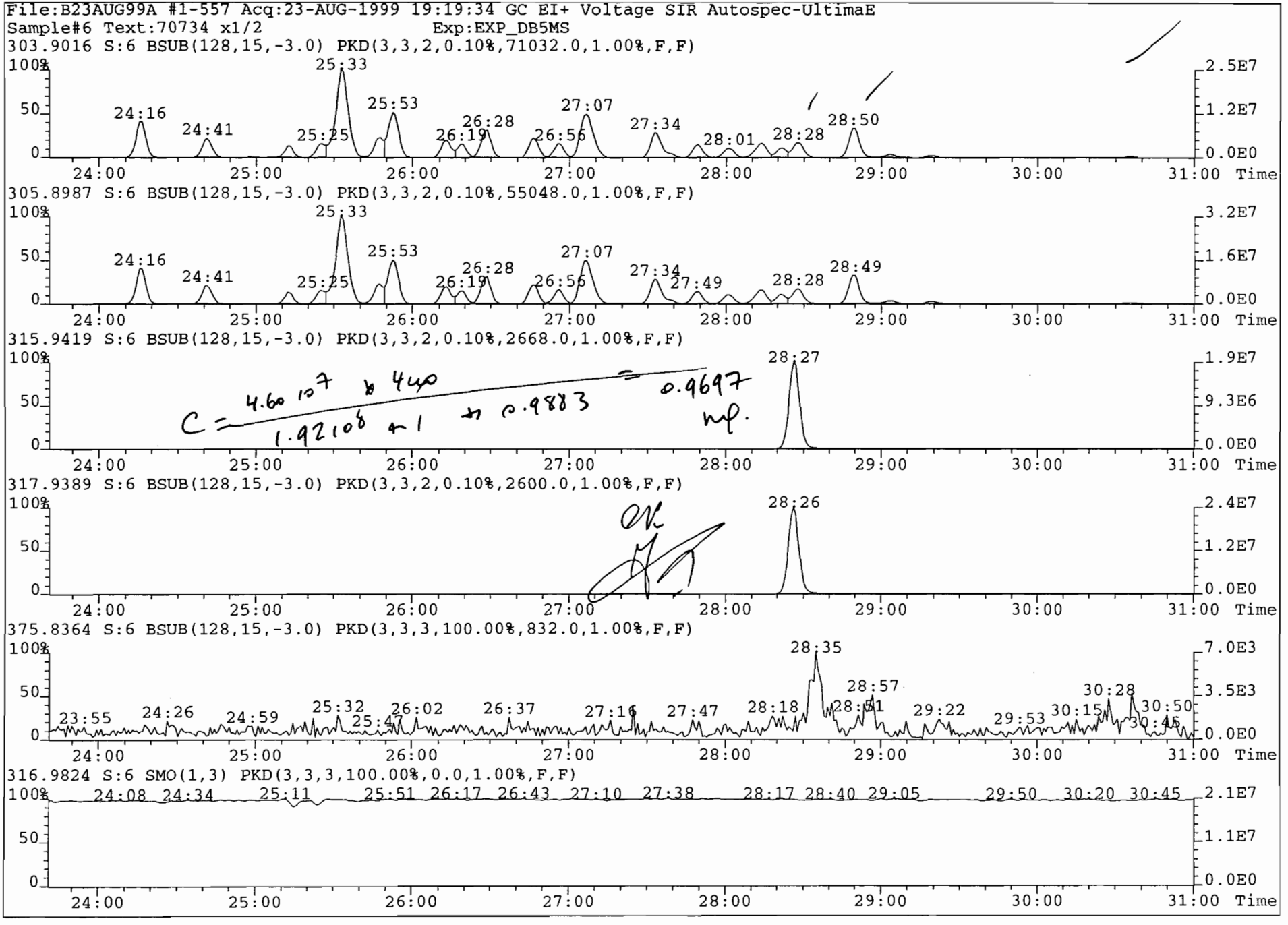

File:B23AUG99A #1-264 Acq:23-AUG-1999 19:19:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:70734 x1/2 Exp:EXP_DB5MS
355.8546 S:6 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,6404.0,1.00%,F,F)
31:54
32:27
32:36
32:38
32:43
32:11
32:55
33:11
33:14
33:25
5.4E6
2.7E6
0.0E0
357.8517 S:6 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3576.0,1.00%,F,F)
3.5E6
1.8E6
0.0E0
367.8949 S:6 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2384.0,1.00%,F,F)
33:10
2.8E7
1.4E7
0.0E0
369.8919 S:6 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1708.0,1.00%,F,F)
1.8E7
8.8E6
0.0E0
366.9792 S:6 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
31:07
31:32
31:41
31:55
32:06
32:17
32:27
32:37
32:56
33:06
33:26
33:38
1.9E7
9.5E6
0.0E0
100%
50
0
31:12
31:24
31:36
31:48
32:00
32:12
32:24
32:36
32:48
33:00
33:12
33:24
33:36
Time


File:B23AUG99A #1-287 Acq:23-AUG-1999 19:19:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:70734 x1/2 Exp:EXP_DB5MS
389.8156 S:6 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,7824.0,1.00%,F,F)
34:51
35:02
34:26
35:09
35:33
35:38
35:51
7.5E6
3.7E6
0.0E0
391.8127 S:6 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,6200.0,1.00%,F,F)
6.1E6
3.0E6
401.8559 S:6 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3336.0,1.00%,F,F)
2.3E7
1.2E7
403.8530 S:6 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,2140.0,1.00%,F,F)
1.8E7
8.9E6
380.9760 S:6 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
33:49 34:02 34:23 34:43 35:01 35:11 35:22 35:37 35:50 36:20 36:30
6.5E7
3.3E7
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36
Time

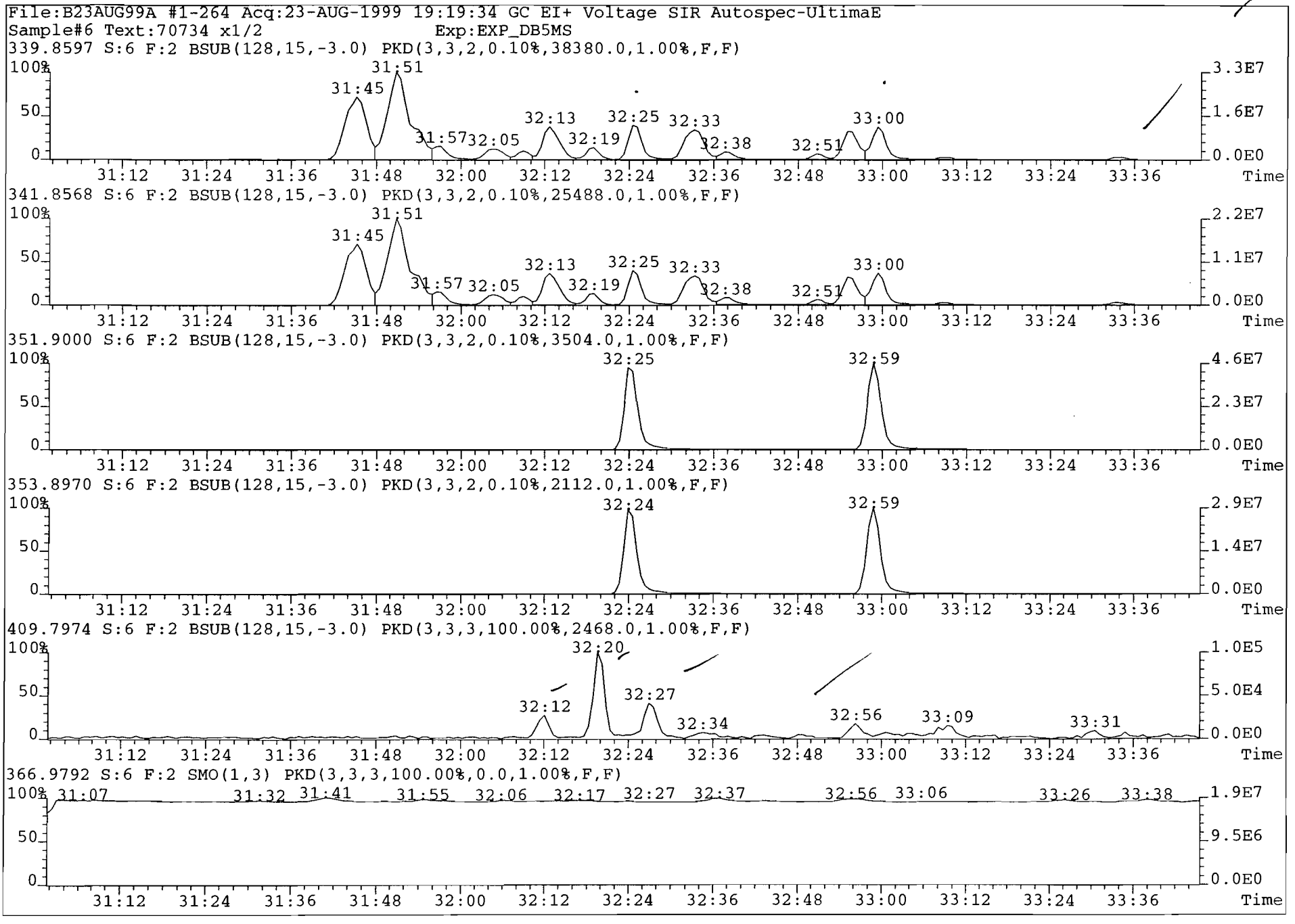

File:B23AUG99A #1-376 Acq:23-AUG-1999 19:19:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:70734 x1/2 Exp:EXP_DB5MS
423.7767 S:6 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,8976.0,1.00%,F,F)
37:45
38:34
5.1E6
2.6E6
0.0E0
425.7737 S:6 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3040.0,1.00%,F,F)
37:45
38:34
5.1E6
2.5E6
0.0E0
435.8169 S:6 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,8312.0,1.00%,F,F)
38:33
1.2E7
6.0E6
0.0E0
437.8140 S:6 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3428.0,1.00%,F,F)
38:33
1.2E7
5.8E6
0.0E0
430.9728 S:6 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
36:55 37:12 37:45 38:09 38:22 38:45 38:58 39:11 39:26 39:40 40:06 40:19
4.1E7
2.1E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
Time

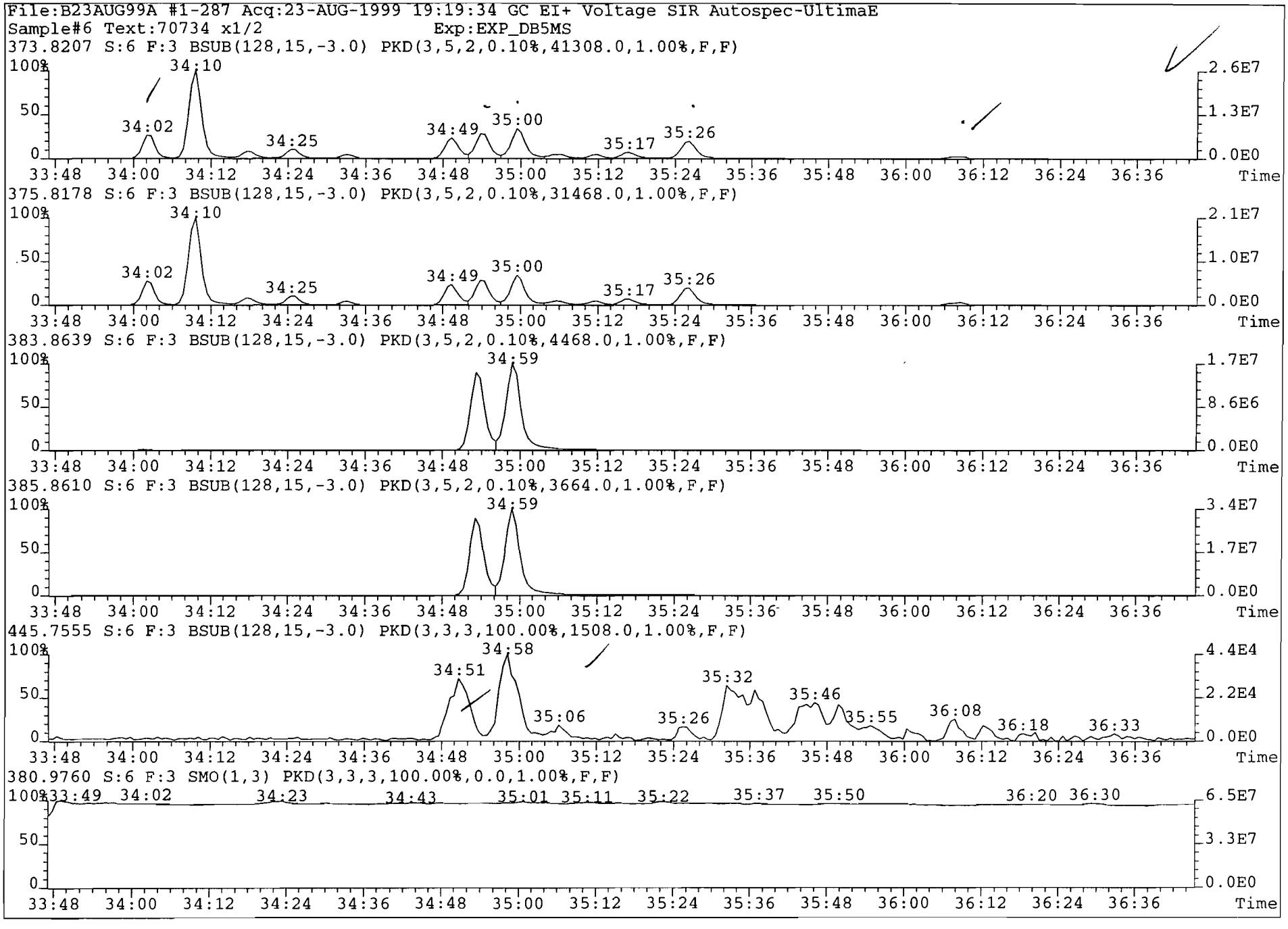
17

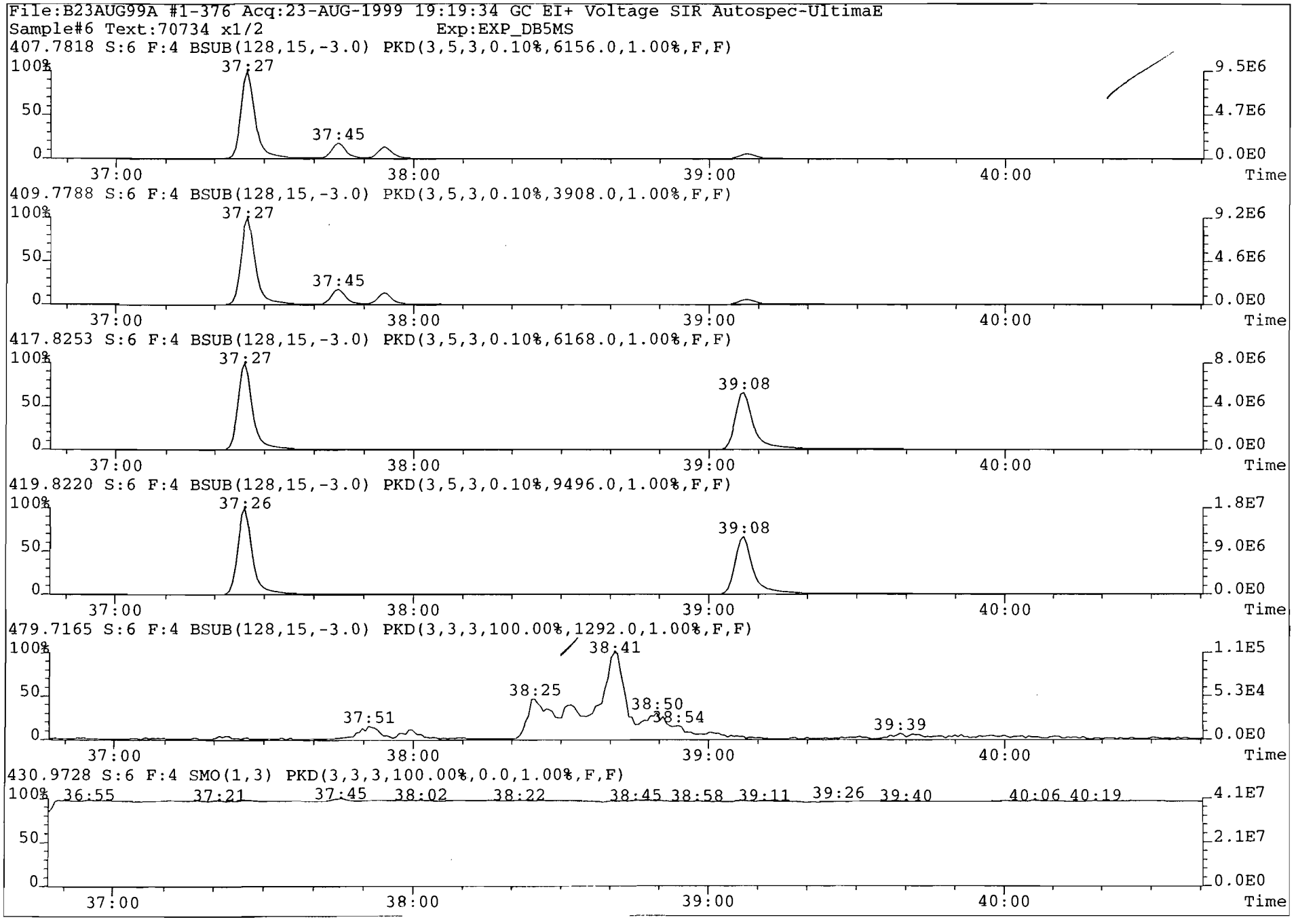

File:B23AUG99A #1-395 Acq:23-AUG-1999 19:19:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:70734 x1/2 Exp:EXP_DB5MS
457.7377 S:6 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2112.0,1.00%,F,F)
42:16
3.6E6
1.8E6
0.0E0
459.7348 S:6 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1780.0,1.00%,F,F)
42:16
4.0E6
2.0E6
0.0E0
469.7780 S:6 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2524.0,1.00%,F,F)
42:16
1.1E7
5.6E6
0.0E0
471.7750 S:6 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1484.0,1.00%,F,F)
42:16
1.2E7
6.2E6
0.0E0
454.9728 S:6 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
40:54 41:13 41:29 41:42 41:55 42:06 42:33 43:08 43:41 43:58
2.3E7
1.1E7
0.0E0
100%
50
0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time

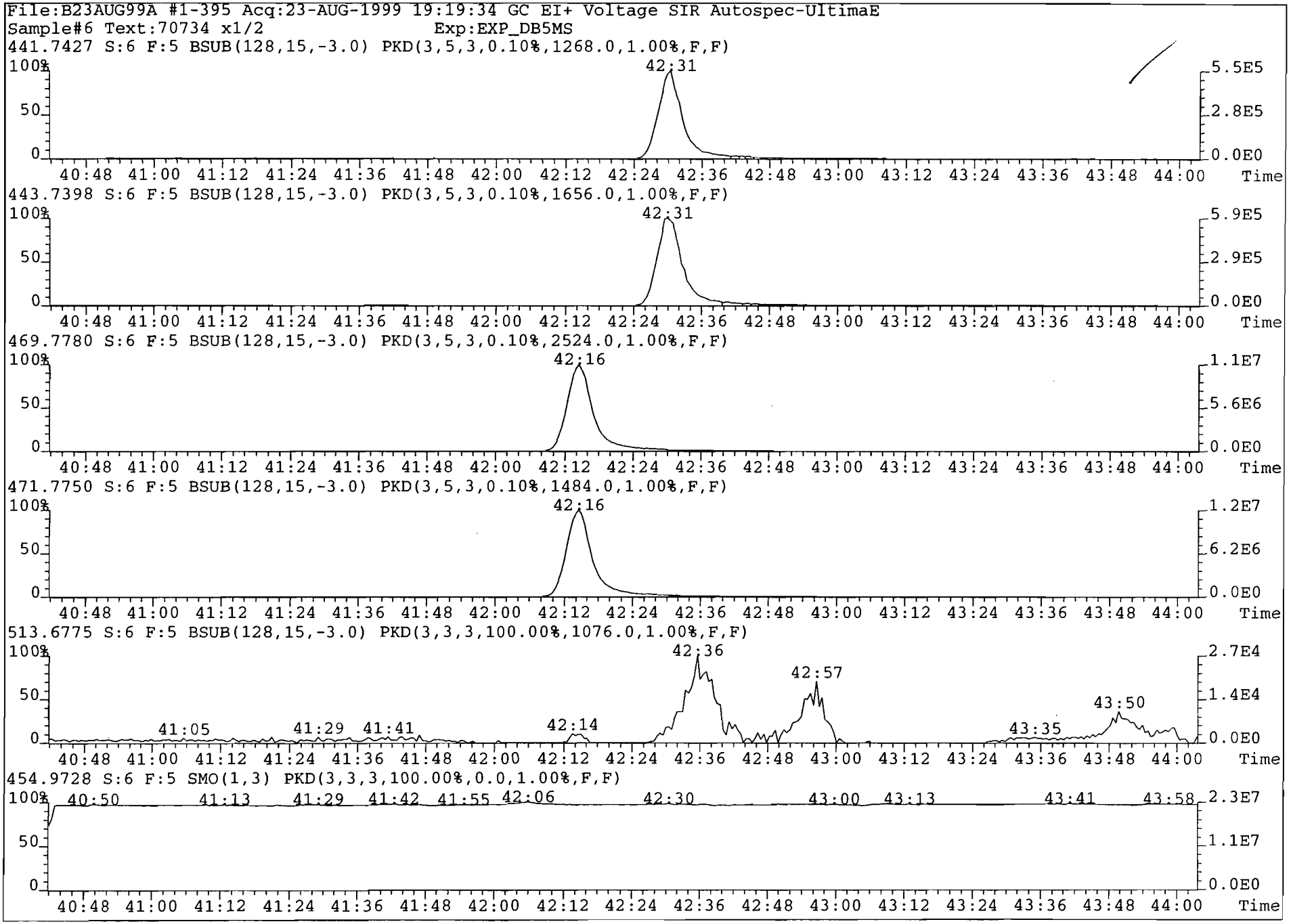


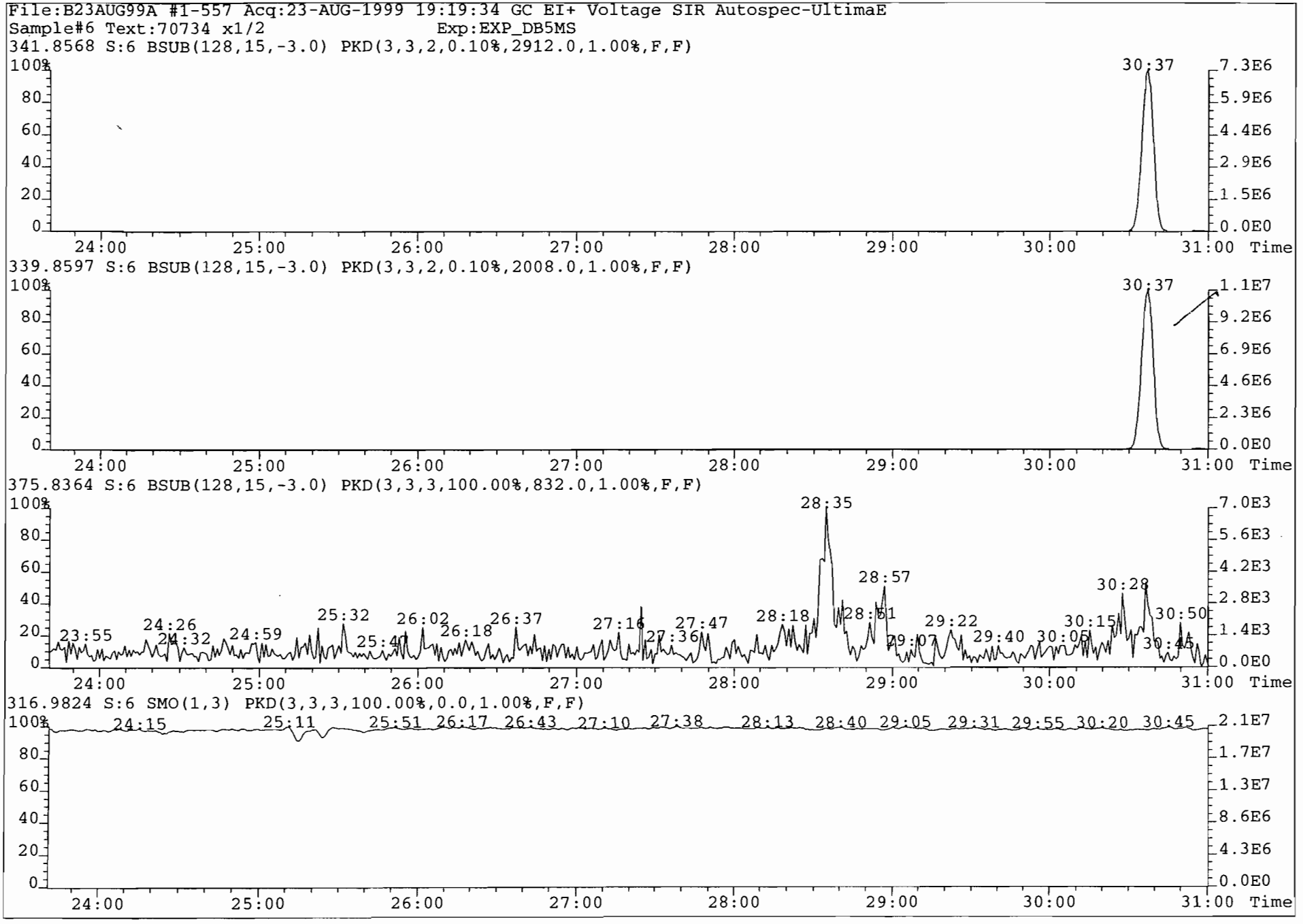
$C = \frac{4.60 \times 10^{7} \times 440}{1.92 \times 10^{8} + 1} = 0.9883 \quad 0.9697$ mg.


File:B23AUG99A #1-264 Acq:23-AUG-1999 19:19:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:70734 x1/2 Exp:EXP_DB5MS
339.8597 S:6 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,38380.0,1.00%,F,F)
31:45 31:51 31:57 32:05 32:13 32:19 32:25 32:33 32:38 32:51 33:00
341.8568 S:6 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,25488.0,1.00%,F,F)
31:45 31:51 31:57 32:05 32:13 32:19 32:25 32:33 32:38 32:51 33:00
351.9000 S:6 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3504.0,1.00%,F,F)
32:25 32:59
353.8970 S:6 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2112.0,1.00%,F,F)
32:24 32:59
409.7974 S:6 F:2 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,2468.0,1.00%,F,F)
32:12 32:20 32:27 32:34 32:56 33:09 33:31
366.9792 S:6 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
31:07 31:32 31:41 31:55 32:06 32:17 32:27 32:37 32:56 33:06 33:26 33:38
100%
50
0
Time
31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36
3.3E7 1.6E7 0.0E0
2.2E7 1.1E7 0.0E0
4.6E7 2.3E7 0.0E0
2.9E7 1.4E7 0.0E0
1.0E5 5.0E4 0.0E0
1.9E7 9.5E6 0.0E0


File:B23AUG99A #1-287 Acq:23-AUG-1999 19:19:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:70734 x1/2 Exp:EXP_DB5MS
373.8207 S:6 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,41308.0,1.00%,F,F)
34:10
34:02
34:25
34:49
35:00
35:17
35:26
2.6E7
1.3E7
0.0E0
375.8178 S:6 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,31468.0,1.00%,F,F)
34:10
34:02
34:25
34:49
35:00
35:17
35:26
2.1E7
1.0E7
0.0E0
383.8639 S:6 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,4468.0,1.00%,F,F)
34:59
1.7E7
8.6E6
0.0E0
385.8610 S:6 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3664.0,1.00%,F,F)
34:59
3.4E7
1.7E7
0.0E0
445.7555 S:6 F:3 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1508.0,1.00%,F,F)
34:58
34:51
35:06
35:26
35:32
35:46
35:55
36:08
36:18
36:33
4.4E4
2.2E4
0.0E0
380.9760 S:6 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
33:49 34:02 34:23 34:43 35:01 35:11 35:22 35:37 35:50 36:20 36:30
6.5E7
3.3E7
0.0E0
100%
50
0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36
Time


File:B23AUG99A #1-376 Acq:23-AUG-1999 19:19:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:70734 x1/2 Exp:EXP_DB5MS
407.7818 S:6 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,6156.0,1.00%,F,F)
37:27
37:45
9.5E6
4.7E6
409.7788 S:6 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3908.0,1.00%,F,F)
37:27
37:45
9.2E6
4.6E6
417.8253 S:6 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,6168.0,1.00%,F,F)
37:27
39:08
8.0E6
4.0E6
419.8220 S:6 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,9496.0,1.00%,F,F)
37:26
39:08
1.8E7
9.0E6
479.7165 S:6 F:4 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1292.0,1.00%,F,F)
38:41
38:25
38:50
38:54
37:51
39:39
1.1E5
5.3E4
430.9728 S:6 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
36:55 37:21 37:45 38:02 38:22 38:45 38:58 39:11 39:26 39:40 40:06 40:19
4.1E7
2.1E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
Time


File:B23AUG99A #1-395 Acq:23-AUG-1999 19:19:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:70734 x1/2 Exp:EXP_DB5MS
441.7427 S:6 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1268.0,1.00%,F,F)
42:31
5.5E5
2.8E5
0.0E0
443.7398 S:6 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1656.0,1.00%,F,F)
42:31
5.9E5
2.9E5
0.0E0
469.7780 S:6 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2524.0,1.00%,F,F)
42:16
1.1E7
5.6E6
0.0E0
471.7750 S:6 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1484.0,1.00%,F,F)
42:16
1.2E7
6.2E6
0.0E0
513.6775 S:6 F:5 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1076.0,1.00%,F,F)
42:36
42:57
43:50
41:05
41:29
41:41
42:14
43:35
2.7E4
1.4E4
0.0E0
454.9728 S:6 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
40:50
41:13
41:29
41:42
41:55
42:06
42:30
43:00
43:13
43:41
43:58
2.3E7
1.1E7
0.0E0
100%
50
0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time


File:B23AUG99A #1-557 Acq:23-AUG-1999 19:19:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:70734 x1/2 Exp:EXP_DB5MS
341.8568 S:6 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2912.0,1.00%,F,F)
30:37
339.8597 S:6 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2008.0,1.00%,F,F)
30:37
375.8364 S:6 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,832.0,1.00%,F,F)
28:35
28:57
316.9824 S:6 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
Time

Method 23

1-S-M23-3

AirKinetics, Inc.

Analytical Data Summary Sheet

Analyte	Amount (ng)	DL (ng)	EMPC (ng)	RT (min.)	Ratio	Qualifier
2,3,7,8-TCDD	0.193	0.0031		29:24	0.78	
1,2,3,7,8-PeCDD	0.438	0.0031		33:11	1.52	
1,2,3,4,7,8-HxCDD	0.208	0.0055		35:33	1.26	
1,2,3,6,7,8-HxCDD	0.420	0.0054		35:38	1.25	
1,2,3,7,8,9-HxCDD	0.341	0.0051		35:50	1.28	
1,2,3,4,6,7,8-HpCDD	1.74	0.0089		38:33	1.03	
OCDD	2.37	0.0048		42:16	0.88	
2,3,7,8--TCDF	1.21	0.0506		28:28	0.77	
1,2,3,7,8-PeCDF	1.69	0.0118		32:25	1.54	
2,3,4,7,8-PeCDF	1.59	0.0115		32:59	1.56	
1,2,3,4,7,8-HxCDF	1.24	0.0193		34:54	1.23	
1,2,3,6,7,8-HxCDF	1.34	0.0174		34:59	1.23	
2,3,4,6,7,8-HxCDF	0.977	0.0203		35:26	1.21	
1,2,3,7,8,9-HxCDF	0.193	0.0224		36:08	1.26	
1,2,3,4,6,7,8-HpCDF	2.23	0.0035		37:27	1.01	
1,2,3,4,7,8,9-HpCDF	0.189	0.0045		39:08	0.92	
OCDF	0.318	0.0021		42:30	0.9	
Total TCDDs	3.50	0.0031				
Total PeCDDs	4.62	0.0031				
Total HxCDDs	4.94	0.0051				
Total HpCDDs	3.42	0.0089				
Total TCDFs	36.1	0.0506	36.6			
Total PeCDFs	25.5	0.0115	25.5			
Total HxCDFs	11.4	0.0174				
Total HpCDFs	3.24	0.0035				
TEQ (ND=0)	1.93		1.93			ITEF
TEQ (ND=½)	1.93		1.93			ITEF

Client Information

Project Name: OMS-Lee
Sample ID: 1-S-M23-3

Laboratory Information

Project ID: G370-4
Sample ID: 70735

Collection Date: 19-Aug-99
Receipt Date: 20-Aug-99
Extraction Date: 20-Aug-99
Analysis Date: 23-Aug-99

Sample Information

Matrix: Air
Weight / Volume:
Moisture / Lipids:
Original pH : NA

Filename: b23aug99a-7
Retchk: b23aug99a-1
Begin ConCal: b23aug99a-1
End ConCal: b23aug99a-15
Initial Cal: m8290-b060499a

Method 23

1-S-M23-3

AirKinetics, Inc.

Analytical Data Summary Sheet

Labeled Standard	Expected Amount (ng)	Measured Amount (ng)	Percent Recovery (%)	RT (min.)	Ratio	Qualifier
Extraction Standards						
$^{13}C_{12}$-2,3,7,8-TCDD	4	3.32	83.0	29:22	0.79	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	4	3.15	78.8	33:10	1.57	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	4	3.42	85.5	35:37	1.29	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	4	3.57	89.3	38:32	1.04	
$^{13}C_{12}$-OCDD	8	5.67	70.9	42:15	0.91	
$^{13}C_{12}$-2,3,7,8-TCDF	4	3.34	83.5	28:26	0.79	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	4	3.05	76.3	32:24	1.59	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	4	3.36	84.0	34:59	0.53	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	4	3.28	82.0	37:26	0.45	
Sampling Standards						
$^{37}Cl_4$-2,3,7,8-TCDD	4	3.82	95.5	29:24		
$^{13}C_{12}$-2,3,4,7,8-PeCDF	4	4.10	102.5	32:59	1.6	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	4	3.55	88.8	35:32	1.29	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	4	3.72	93.0	34:53	0.52	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	4	4.00	100.0	39:07	0.45	
Injection Standards						
$^{13}C_{12}$-1,2,3,4-TCDD				28:40	0.81	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD				35:50	1.29	

Client Information

Project Name: OMS-Lee
Sample ID: 1-S-M23-3

Laboratory Information

Project ID: G370-4
Sample ID: 70735

Collection Date: 19-Aug-99
Receipt Date: 20-Aug-99
Extraction Date: 20-Aug-99
Analysis Date: 23-Aug-99

Sample Information

Matrix: Air
Weight / Volume:
Moisture / Lipids:
Original pH : NA

Filename: b23aug99a-7
Retchk: b23aug99a-1
Begin ConCal: b23aug99a-1
End ConCal: b23aug99a-15
Initial Cal: m8290-b060499a

Reviewed by: Y.T.

Date Reviewed: 24 Aug 99

80

Filename ; b23aug99a
Sample ; 7
Acquired ; 23-AUG-99 20:05:52
Processed ; 24-AUG-99 08:04:13
Sample ID ; 70735 x1/2
Cal Table ; m8290-b060499a
Results Table ; M8290-B082399A
Comments ;

Typ	Name	Resp	Ion 1	Ion 2	RA;?;	RT	Conc	DL;	S/N1;?;	S/N2;? ;	mod?
Unk	2,3,7,8-TCDD	7.38e+06	3.19e+06	4.19e+06	0.76;y;	29:24	4.868	0.0773;	183;y;	211;y ;	no
Unk	1,2,3,7,8-PeCDD	1.23e+07	7.42e+06	4.87e+06	1.52;y;	33:11	10.957	0.0772;	515;y;	369;y ;	no
Unk	1,2,3,4,7,8-HxCDD	5.27e+06	2.94e+06	2.33e+06	1.26;y;	35:33	5.199	0.1382;	115;y;	166;y ;	no
Unk	1,2,3,6,7,8-HxCDD	1.09e+07	6.07e+06	4.84e+06	1.25;y;	35:38	10.491	0.1348;	211;y;	302;y ;	no
Unk	1,2,3,7,8,9-HxCDD	9.41e+06	5.28e+06	4.13e+06	1.28;y;	35:50	8.529	0.1270;	158;y;	223;y ;	no
Unk	1,2,3,4,6,7,8-HpCDD	4.01e+07	2.03e+07	1.97e+07	1.03;y;	38:33	43.555	0.2233;	379;y;	1630;y ;	no
Unk	OCDD	3.96e+07	1.86e+07	2.11e+07	0.88;y;	42:16	59.259	0.1195;	1215;y;	1935;y ;	no
Unk	2,3,7,8-TCDF	5.96e+07	2.60e+07	3.36e+07	0.77;y;	28:28	30.264	1.2658;	57;y;	78;y ;	no
Unk	1,2,3,7,8-PeCDF	6.59e+07	3.99e+07	2.60e+07	1.54;y;	32:25	42.142	0.2942;	471;y;	402;y ;	no
Unk	2,3,4,7,8-PeCDF	6.38e+07	3.88e+07	2.49e+07	1.56;y;	32:59	39.788	0.2868;	416;y;	348;y ;	no
Unk	1,2,3,4,7,8-HxCDF	4.74e+07	2.62e+07	2.12e+07	1.23;y;	34:54	31.068	0.4822;	199;y;	234;y ;	no
Unk	1,2,3,6,7,8-HxCDF	5.67e+07	3.13e+07	2.54e+07	1.23;y;	34:59	33.568	0.4355;	225;y;	263;y ;	no
Unk	2,3,4,6,7,8-HxCDF	3.54e+07	1.94e+07	1.60e+07	1.21;y;	35:26	24.419	0.5083;	129;y;	148;y ;	no
Unk	1,2,3,7,8,9-HxCDF	6.32e+06	3.53e+06	2.79e+06	1.26;y;	36:08	4.814	0.5609;	18;y;	21;y ;	no
Unk	1,2,3,4,6,7,8-HpCDF	7.55e+07	3.80e+07	3.75e+07	1.01;y;	37:27	55.838	0.0878;	2292;y;	1651;y ;	no
Unk	1,2,3,4,7,8,9-HpCDF	5.04e+06	2.42e+06	2.62e+06	0.92;y;	39:08	4.733	0.1115;	131;y;	92;y ;	no
Unk	OCDF	5.78e+06	2.73e+06	3.05e+06	0.90;y;	42:30	7.938	0.0520;	553;y;	419;y ;	no
ES/RT;	13C-2,3,7,8-TCDD	1.40e+08	6.21e+07	7.83e+07	0.79;y;	29:22	82.964	0.0885;	2062;y;	3348;y ;	no
ES ;	13C-1,2,3,7,8-PeCDD	1.14e+08	6.96e+07	4.43e+07	1.57;y;	33:10	78.653	0.0367;	13438;y;	10901;y ;	no
ES ;	13C-1,2,3,6,7,8-HxCDD	1.08e+08	6.10e+07	4.74e+07	1.29;y;	35:37	85.568	0.0413;	6995;y;	6820;y ;	no
ES ;	13C-1,2,3,4,6,7,8-HpCDD	9.74e+07	4.97e+07	4.77e+07	1.04;y;	38:32	89.281	0.0406;	4000;y;	7887;y ;	no
ES ;	13C-OCDD	1.32e+08	6.29e+07	6.95e+07	0.91;y;	42:15	141.701	0.0380;	6241;y;	7091;y ;	no
ES/RT;	13C-2,3,7,8-TCDF	1.99e+08	8.82e+07	1.11e+08	0.79;y;	28:26	83.391	0.0266;	9772;y;	8710;y ;	no
ES ;	13C-1,2,3,7,8-PeCDF	1.64e+08	1.00e+08	6.31e+07	1.59;y;	32:24	76.250	0.0272;	19977;y;	15518;y ;	no
ES ;	13C-1,2,3,6,7,8-HxCDF	1.40e+08	4.83e+07	9.16e+07	0.53;y;	34:59	83.926	0.0539;	3239;y;	9204;y ;	no
ES ;	13C-1,2,3,4,6,7,8-HpCDF	9.10e+07	2.84e+07	6.26e+07	0.45;y;	37:26	81.897	0.1058;	1685;y;	2760;y ;	no
JS ;	13C-1,2,3,4-TCDD	1.58e+08	7.06e+07	8.77e+07	0.81;y;	28:40	123.218	-;	2480;y;	4074;y ;	no
JS ;	13C-1,2,3,7,8,9-HxCDD	1.27e+08	7.17e+07	5.55e+07	1.29;y;	35:50	120.012	-;	7425;y;	7151;y ;	no
CS ;	37Cl-2,3,7,8-TCDD	1.34e+08	1.34e+08	-;	-;-;	29:24	79.311	0.0180;	13014;y;	-; -;	no
CS ;	13C-2,3,4,7,8-PeCDF	1.60e+08	9.88e+07	6.16e+07	1.60;y;	32:59	78.127	0.0284;	19395;y;	14546;y ;	no
CS ;	13C-1,2,3,4,7,8-HxCDD	8.17e+07	4.60e+07	3.57e+07	1.29;y;	35:32	75.894	0.0486;	6120;y;	6016;y ;	no
CS ;	13C-1,2,3,4,7,8-HxCDF	1.16e+08	3.97e+07	7.60e+07	0.52;y;	34:53	78.076	0.0606;	2940;y;	8460;y ;	no
CS ;	13C-1,2,3,4,7,8,9-HpCDF	7.67e+07	2.36e+07	5.31e+07	0.45;y;	39:07	81.812	0.1255;	1122;y;	1875;y ;	no
SS ;	37Cl-2,3,7,8-TCDD	1.34e+08	1.34e+08	-;	-;-;	29:24	95.609	0.0233;	13014;y;	-; -;	no
SS ;	13C-2,3,4,7,8-PeCDF	1.60e+08	9.88e+07	6.16e+07	1.60;y;	32:59	102.475	0.0174;	19395;y;	14546;y ;	no
SS ;	13C-1,2,3,4,7,8-HxCDD	8.17e+07	4.60e+07	3.57e+07	1.29;y;	35:32	88.676	0.0511;	6120;y;	6016;y ;	no
SS ;	13C-1,2,3,4,7,8-HxCDF	1.16e+08	[illegible]	7.60e+07	0.52;y;	34:53	93.007	0.0600;	2940;y;	8460;y ;	no
SS ;	13C-1,2,3,4,7,8,9-HpCDF	7.67e+07	[illegible]	5.31e+07	0.45;y;	39:07	99.898	0.1543;	1122;y;	1875;y ;	no

Totals Raw Data

	Conc	Empc	Flags
TCDF	899.686	912.868	TRUE
TCDD	87.39345505	87.39345505	FALSE
PeCDF	562.592	562.979	TRUE
PeCDD	115.618	115.618	FALSE
HxCDF	285.918	285.918	FALSE
HxCDD	123.558	123.558	FALSE
HpCDF	80.93	80.93	FALSE
HpCDD	85.595	85.595	FALSE

Filename: b23aug99a
Sample: 7
Acquired: 23-AUG-99 20:05:52
Processed: 24-AUG-99 08:04:13
Sample ID: 70735 x1/2
Cal Table: m8290-b060499a
Results Table: M8290-B082399A

Name of Homolog Group: Total Tetra-Furans
Number of Peaks Found: 24
RRF Used For Totals: 0.9883
Detection Limit: 1.2658
Begin Window: 24:09:00
End Window: 30:31:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	1.20E+08	51800000	67900000	0.76	y	24:16	60.729	OK	130	y	180	y	n
	2	6.56E+07	28400000	37200000	0.77	y	24:41	33.291	OK	73	y	100	y	n
	3	2.96E+07	13000000	16700000	0.78	y	25:12	15.036	OK	34	y	47	y	n
	4	2.60E+07	9700000	16300000	0.6	n	25:25	13.182	EMPC	39	y	53	y	n
	5	3.63E+08	160000000	203000000	0.79	y	25:33	184.349	OK	320	y	420	y	n
	6	5.54E+07	24000000	31300000	0.77	y	25:47	28.109	OK	70	y	94	y	n
	7	1.67E+08	72700000	94100000	0.77	y	25:52	84.663	OK	160	y	220	y	n
	8	5.98E+07	25800000	34000000	0.76	y	26:13	30.34	OK	64	y	86	y	n
	9	4.48E+07	19400000	25400000	0.76	y	26:18	22.728	OK	50	y	68	y	n
	10	9.24E+07	40000000	52400000	0.76	y	26:29	46.916	OK	100	y	130	y	n
	11	6.65E+07	28500000	38000000	0.75	y	26:46	33.744	OK	71	y	98	y	n
	12	4.95E+07	21100000	28300000	0.75	y	26:56	25.108	OK	55	y	75	y	n
	13	1.99E+08	86300000	113000000	0.76	y	27:07	101.196	OK	170	y	220	y	n
	14	1.03E+08	44100000	58800000	0.75	y	27:33	52.225	OK	90	y	120	y	n
	15	4.51E+07	19600000	25500000	0.77	y	27:49	22.894	OK	49	y	66	y	n
	16	3.52E+07	15300000	19900000	0.77	y	28:01	17.843	OK	36	y	49	y	n
	17	6.12E+07	27100000	34100000	0.79	y	28:14	31.068	OK	55	y	74	y	n
	18	3.12E+07	13200000	18100000	0.73	y	28:21	15.852	OK	35	y	47	y	n
2,3,7,8-TCDF	19	5.96E+07	26000000	33600000	0.77	y	28:28	30.264	OK	57	y	78	y	n
	20	1.10E+08	48100000	62400000	0.77	y	28:50	56.074	OK	120	y	150	y	n
	21	8.17E+06	3550000	4610000	0.77	y	29:03	4.144	OK	9	y	12	y	n
	22	6.14E+06	2550000	3590000	0.71	y	29:19	3.113	OK	6.5	y	9.2	y	n
	23	2.18E+05	77600	140000	0.55	n	29:27	0.111	S2N	0.24	n	0.45	n	n
	24	5.04E+06	2180000	2870000	0.76	y	30:35	2.559	RT	4.9	y	6.5	y	n

Filename: b23aug99a
Sample: [redacted] 7
Acquired: [redacted]-AUG-99 20:05:52

Name of Homolog Group: Total Tetra-Dioxins
Number of Peaks Found: 18
RRF Used For Totals: 1.0802

Processed: 24-AUG-99 08:04:13 Detection Limit: 0.0773
Sample ID: 70735 x1/2
Cal Table: m8290-b060499a Begin Window: 25:50:00
Results Table: M8290-B082399A End Window: 30:28:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	3.73E+04	31900	5380	5.93	n	25:29	0.025	RT	2.4	n	0.6	n	n
	2	2.14E+07	9370000	12000000	0.78	y	25:57	14.089	OK	590	y	640	y	n
	3	9.97E+06	4390000	5580000	0.79	y	26:14	6.574	OK	260	y	280	y	n
	4	5.91E+06	2560000	3350000	0.76	y	26:37	3.895	OK	170	y	170	y	n
	5	7.37E+05	320000	417000	0.77	y	27:18	0.486	OK	21	y	24	y	n
	6	1.65E+07	7290000	9250000	0.79	y	27:32	10.907	OK	370	y	400	y	n
	7	1.90E+07	8300000	10700000	0.78	y	27:44	12.511	OK	490	y	550	y	n
	8	6.45E+06	2800000	3650000	0.77	y	27:55	4.256	OK	160	y	180	y	n
	9	3.78E+06	1610000	2170000	0.74	y	28:10	2.491	OK	100	y	110	y	n
	10	7.45E+06	3300000	4160000	0.79	y	28:19	4.914	OK	200	y	210	y	n
	11	4.55E+06	1990000	2560000	0.78	y	28:40	3	OK	110	y	130	y	n
	12	2.29E+06	1010000	1280000	0.79	y	28:50	1.509	OK	58	y	63	y	n
	13	1.21E+07	5290000	6850000	0.77	y	29:06	8.001	OK	210	y	230	y	n
	14	2.35E+06	1050000	1300000	0.81	y	29:13	1.551	OK	68	y	68	y	n
2,3,7,8-TCDD	15	7.38E+06	3190000	4190000	0.77666431	y	29:24	4.81345505	OK	180	y	210	y	n
	16	9.20E+06	4030000	5170000	0.78	y	29:46	6.068	OK	240	y	260	y	n
	17	1.81E+06	756000	1050000	0.72	y	29:55	1.193	OK	45	y	49	y	n
	18	1.72E+06	733000	988000	0.74	y	30:28	1.135	OK	43	y	50	y	n

Filename: b23aug99a Name of Homolog Group: Total Penta-Furans Fn1
Sample: 7 Number of Peaks Found: 3
Acquired: 23-AUG-99 20:05:52 RRF Used For Totals: 0.9679
Processed: 24-AUG-99 08:04:13 Detection Limit: 0.0189
Sample ID: 70735 x1/2
Cal Table: m8290-b060499a Begin Window: 30:40:00
Results Table: M8290-B082399A End Window: 31:00:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	2.57E+05	113000	144000	0.79	n	30:23	0.162	RT	9.2	y	24	y	n
	2	1.18E+08	45400000	72300000	0.63	y	30:37	74.342	RT	3000	y	8800	y	n
	3	6.13E+05	198000	415000	0.48	n	30:58	0.387	EMPC	20	y	66	y	n

Filename: b23aug99a Name of Homolog Group: Total Penta-Furans Fn2
Sample: 7 Number of Peaks Found: 16
Acquired: 23-AUG-99 20:05:52 RRF Used For Totals: 0.9679
Processed: 24-AUG-99 08:04:13 Detection Limit: 0.2905
Sample ID: 70735 x1/2
Cal Table: m8290-b060499a Begin Window: 30:42:00
Results Table: M8290-B082399A End Window: 33:46:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?

	1	1.39E+06	882000	509000	1.73	y	31:29	0.878 OK	8	y	6.3 y n
	2	1.71E+08	104000000	67500000	1.54	y	31:45	108.201 OK	740	y	610 y n
	3	2.62E+08	159000000	103000000	1.54	y	31:51	165.479 OK	1100	y	880 y n
	4	2.21E+07	13500000	8530000	1.59	y	31:57	13.943 OK	150	y	130 y n
	5	2.51E+07	15200000	9820000	1.55	y	32:05	15.826 OK	130	y	110 y n
	6	1.41E+07	8520000	5590000	1.52	y	32:09	8.911 OK	110	y	91 y n
	7	7.51E+07	45700000	29400000	1.55	y	32:13	47.436 OK	420	y	340 y n
	8	2.02E+07	12300000	7940000	1.55	y	32:19	12.78 OK	140	y	120 y n
1,2,3,7,8-PeCDF	9	6.59E+07	39900000	26000000	1.54	y	32:25	42.142 OK	470	y	400 y n
	10	7.84E+07	47500000	31000000	1.53	y	32:33	49.552 OK	360	y	310 y n
	11	1.53E+07	9320000	5990000	1.56	y	32:38	9.675 OK	91	y	77 y n
	12	8.34E+06	5110000	3240000	1.58	y	32:51	5.272 OK	62	y	53 y n
	13	5.86E+07	35500000	23100000	1.54	y	32:55	36.988 OK	360	y	310 y n
2,3,4,7,8-PeCDF	14	6.38E+07	38800000	24900000	1.56	y	32:59	39.788 OK	420	y	350 y n
	15	4.01E+06	2440000	1570000	1.55	y	33:09	2.532 OK	27	y	23 y n
	16	5.05E+06	3090000	1960000	1.58	y	33:34	3.189 OK	34	y	28 y n

Filename:	b23aug99a	Name of Homolog Group:	Total Penta-Dioxins
Sample:	7	Number of Peaks Found:	11
Acquired:	23-AUG-99 20:05:52	RRF Used For Totals:	0.9837
Processed:	24-AUG-99 08:04:13	Detection Limit:	0.0772
Sample ID:	70735 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	31:48:00
Results Table:	M8290-B082399A	End Window:	33:30:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	2.95E+07	17900000	11600000	1.55	y	31:54	26.318	OK	960	y	720	y	n
	2	4.78E+06	2930000	1860000	1.58	y	32:10	4.266	OK	220	y	160	y	n
	3	1.71E+04	8870	8200	1.08	n	32:16	0.015	S2N	1.1	n	1.1	n	n
	4	2.08E+07	12700000	8100000	1.57	y	32:27	18.549	OK	980	y	700	y	n
	5	1.13E+07	6860000	4410000	1.56	y	32:33	10.052	OK	540	y	390	y	n
	6	1.66E+07	10200000	6410000	1.59	y	32:35	14.778	OK	660	y	490	y	n
	7	1.60E+07	9820000	6180000	1.59	y	32:43	14.27	OK	510	y	390	y	n
	8	7.43E+06	4630000	2800000	1.65	y	32:54	6.63	OK	310	y	230	y	n
1,2,3,7,8-PeCDD	9	1.23E+07	7420000	4870000	1.52	y	33:11	10.957	OK	510	y	370	y	n
	10	5.39E+06	3310000	2080000	1.59	y	33:13	4.809	OK	230	y	170	y	n
	11	5.59E+06	3440000	2160000	1.59	y	33:24	4.989	OK	220	y	160	y	n

Filename:	b23aug99a	Name of Homolog Group:	Total Hexa-Furans
Sample:	7	Number of Peaks Found:	17
Acquired:	23-AUG-99 20:05:52	RRF Used For Totals:	1.0623
Processed:	24-AUG-99 08:04:13	Detection Limit:	0.4953
Sample ID:	70735 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	33:51:00
Results Table:	M8290-B082399A	End Window:	36:21:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	3.85E+07	21200000	17300000	1.22	y	34:02	25.913	OK	180	y	210	y	n
	2	1.49E+08	82100000	66900000	1.23	y	34:10	100.265	OK	650	y	760	y	n
	3	1.30E+07	7200000	5810000	1.24	y	34:18	8.749	OK	53	y	62	y	n
	4	1.52E+07	8400000	6830000	1.23	y	34:25	10.249	OK	62	y	74	y	n
	5	5.65E+06	3100000	2550000	1.22	y	34:33	3.804	OK	25	y	30	y	n
	6	5.51E+04	34900	20200	1.73	n	34:42	0.037	S2N	0.35	n	0.25	n	n
	7	5.90E+04	38700	20200	1.92	n	34:43	0.04	S2N	0.47	n	0.25	n	n
	8	3.67E+07	20200000	16500000	1.23	y	34:49	24.687	OK	160	y	180	y	n
1,2,3,4,7,8-HxCDF	9	4.74E+07	26200000	21200000	1.23	y	34:54	31.068	OK	200	y	230	y	n
1,2,3,6,7,8-HxCDF	10	5.67E+07	31300000	25400000	1.23	y	34:59	33.568	OK	230	y	260	y	n
	11	8.82E+06	4850000	3970000	1.22	y	35:06	5.933	OK	32	y	38	y	n
	12	7.16E+06	3960000	3200000	1.24	y	35:12	4.816	OK	29	y	33	y	n
	13	1.13E+07	6270000	5080000	1.24	y	35:17	7.633	OK	42	y	49	y	n
2,3,4,6,7,8-HxCDF	14	3.54E+07	19400000	16000000	1.21	y	35:26	24.419	OK	130	y	150	y	n
	15	5.53E+04	14800	40500	0.37	n	35:46	0.037	S2N	0.21	n	0.39	n	n
	16	6.16E+04	29000	32600	0.89	n	35:52	0.041	S2N	0.14	n	0.4	n	n
1,2,3,7,8,9-HxCDF	17	6.32E+06	3530000	2790000	1.26	y	36:08	4.814	OK	18	y	21	y	n

Filename:	b23aug99a	Name of Homolog Group:	Total Hexa-Dioxins
Sample:	7	Number of Peaks Found:	24
Acquired:	23-AUG-99 20:05:52	RRF Used For Totals:	0.9699
Processed:	24-AUG-99 08:04:13	Detection Limit:	0.1332
Sample ID:	70735 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	34:17:00
Results Table:	M8290-B082399A	End Window:	35:55:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	3.87E+04	22700	16000	1.42	y	34:10	0.037	RT	0.82	n	1.1	n	n
	2	3.57E+04	14400	21300	0.68	n	34:15	0.034	RT	0.51	n	1.2	n	n
	3	8.66E+03	5720	2950	1.94	n	34:19	0.008	S2N	0.35	n	0.42	n	n
	4	1.58E+07	8810000	6990000	1.26	y	34:26	15.015	OK	360	y	530	y	n
	5	1.32E+05	83000	48600	1.71	n	34:35	0.125	S2N	3.2	y	3.3	y	n
	6	3.73E+04	17300	19900	0.87	n	34:39	0.035	S2N	1.3	n	1.5	n	n
	7	3.64E+04	16400	19900	0.82	n	34:41	0.035	S2N	0.71	n	1.5	n	n
	8	4.25E+07	23500000	19000000	1.24	y	34:51	40.394	OK	890	y	1300	y	n
	9	3.62E+07	20100000	16100000	1.24	y	35:03	34.425	OK	620	y	890	y	n
	10	4.98E+06	2730000	2250000	1.21	y	35:07	4.731	OK	80	y	120	y	n
1,2,3,4,7,8-HxCDD	11	5.27E+06	2940000	2330000	1.26	y	35:33	5.199	OK	120	y	170	y	n
1,2,3,6,7,8-HxCDD	12	1.09E+07	6070000	4840000	1.25	y	35:38	10.491	OK	210	y	300	y	n
	13	5.02E+06	2770000	2250000	1.23	y	35:46	4.774	OK	110	y	150	y	n
1,2,3,7,8,9-HxCDD	14	9.41E+06	5280000	4130000	1.28	y	35:50	8.529	OK	160	y	220	y	n
	15	3.20E+04	17600	14400	1.23	y	36:09	0.03	RT	0.71	n	1.2	n	n
	16	2.02E+04	5860	14400	0.41	n	36:11	0.019	RT	0.58	n	1.2	n	n
	17	1.95E+04	13900	5570	2.49	n	36:14	0.019	RT	0.71	n	0.58	n	n
	18	1.72E+04	6460	10800	0.6	n	36:20	0.016	RT	0.46	n	0.82	n	n
	19	1.59E+04	5110	10800	0.48	n	36:24	0.015	RT	0.38	n	0.82	n	n
	20	1.51E+04	8210	6930	1.19	y	36:27	0.014	RT	0.46	n	1.2	n	n

	21	1.73E+04	6710	10600	0.63 n	36:34	0.016 RT	0.36 n	0.86 n	n
	22	1.29E+04	6480	6430	1.01 n	36:37	0.012 RT	0.55 n	0.94 n	n
	23	1.88E+04	9290	9530	0.98 n	36:39	0.018 RT	0.46 n	0.59 n	n
	24	1.37E+04	4160	9530	0.44 n	36:42	0.013 RT	0.28 n	0.59 n	n

Filename:	b23aug99a	Name of Homolog Group:	Total Hepta-Furans
Sample:	7	Number of Peaks Found:	18
Acquired:	23-AUG-99 20:05:52	RRF Used For Totals:	1.3281
Processed:	24-AUG-99 08:04:13	Detection Limit:	0.0982
Sample ID:	70735 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	37:15:00
Results Table:	M8290-B082399A	End Window:	39:22:00

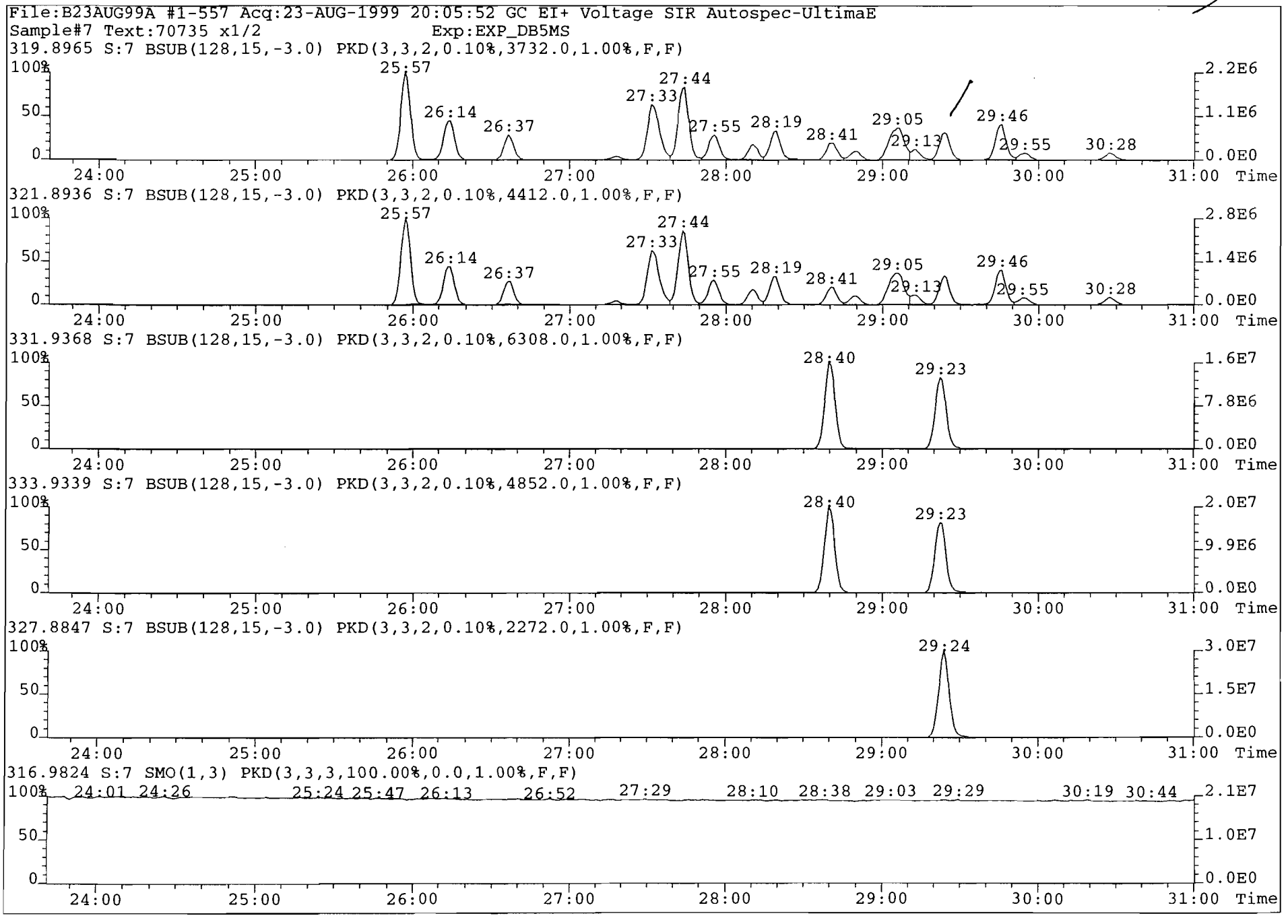
Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
1,2,3,4,6,7,8-HpCDI	1	7.55E+07	38000000	37500000		1.01 y	37:27	55.838	OK	2300	y	1700	y	n
	2	1.43E+07	7240000	7080000		1.02 y	37:45	11.849	OK	410	y	290	y	n
	3	1.03E+07	5190000	5090000		1.02 y	37:54	8.51	OK	280	y	210	y	n
	4	7.45E+04	41200	33200		1.24 n	38:07	0.062	S2N	4.3	y	2.2	n	n
	5	4.55E+04	30300	15200		1.99 n	38:10	0.038	S2N	1.7	n	1.2	n	n
	6	2.77E+04	14100	13600		1.04 y	38:21	0.023	S2N	0.94	n	0.71	n	n
	7	2.25E+04	8880	13600		0.65 n	38:24	0.019	S2N	0.67	n	0.71	n	n
	8	2.91E+04	11100	18000		0.62 n	38:30	0.024	S2N	1.2	n	1.3	n	n
	9	5.57E+04	25300	30400		0.83 n	38:33	0.046	S2N	1.6	n	1.2	n	n
1,2,3,4,7,8,9-HpCDI	10	5.04E+06	2420000	2620000		0.92 y	39:08	4.733	OK	130	y	92	y	n
	11	3.19E+04	11500	20500		0.56 n	39:24	0.026	RT	1.3	n	1.4	n	n
	12	3.21E+04	8740	23300		0.37 n	39:29	0.027	RT	0.79	n	1.2	n	n
	13	2.01E+04	8970	11100		0.81 n	39:43	0.017	RT	0.62	n	0.6	n	n
	14	1.22E+04	8910	3280		2.71 n	39:47	0.01	RT	0.79	n	0.47	n	n
	15	2.39E+04	12000	11900		1.01 y	39:56	0.02	RT	1	n	0.63	n	n
	16	1.55E+04	6040	9460		0.64 n	40:03	0.013	RT	0.59	n	0.51	n	n
	17	1.48E+04	8690	6080		1.43 n	40:08	0.012	RT	0.57	n	0.52	n	n
	18	1.10E+04	5120	5920		0.87 n	40:22	0.009	RT	0.43	n	0.42	n	n

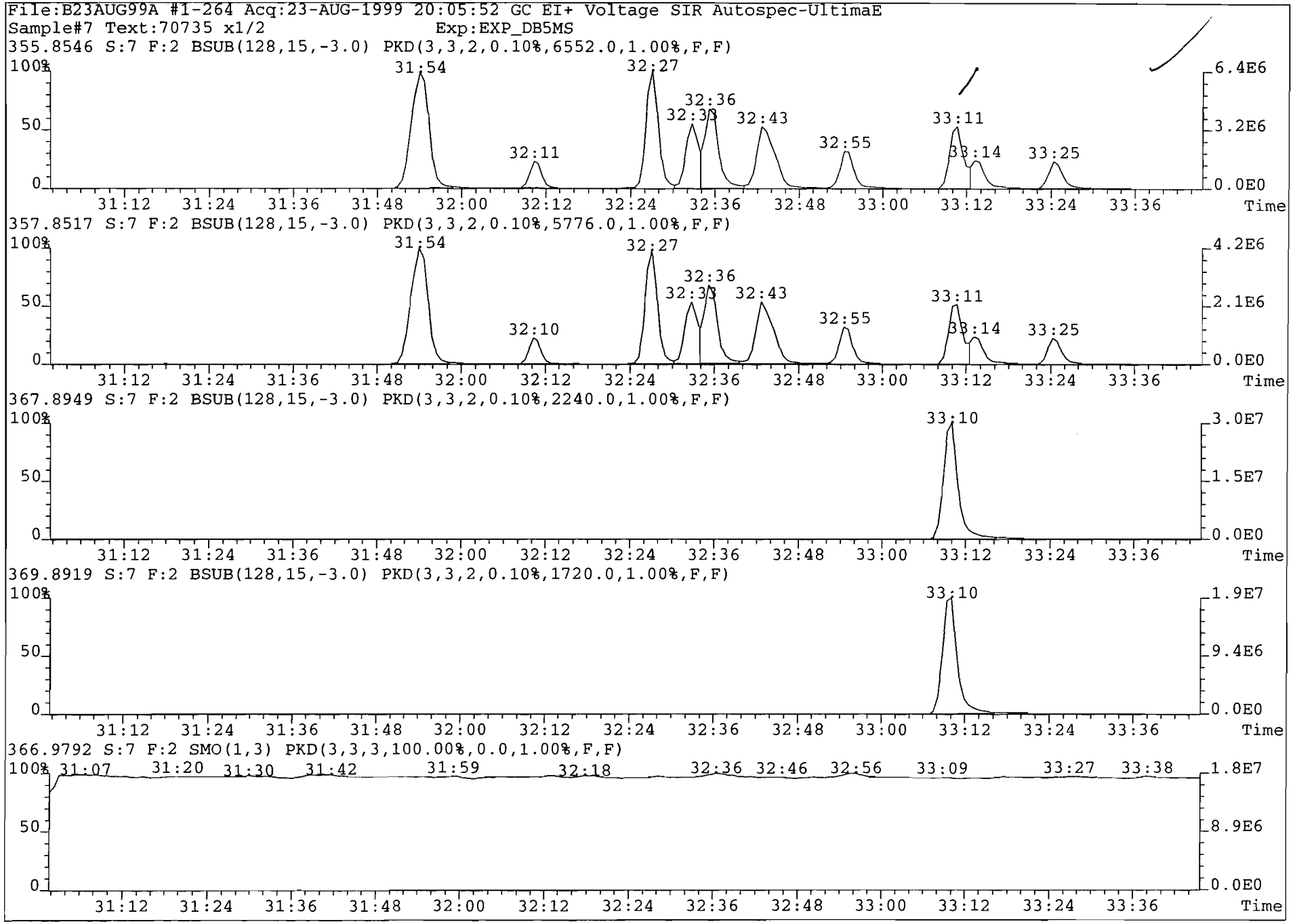
Filename:	b23aug99a	Name of Homolog Group:	Total Hepta-Dioxins
Sample:	7	Number of Peaks Found:	6
Acquired:	23-AUG-99 20:05:52	RRF Used For Totals:	0.944
Processed:	24-AUG-99 08:04:13	Detection Limit:	0.2233
Sample ID:	70735 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	37:32:00
Results Table:	M8290-B082399A	End Window:	37:52:00

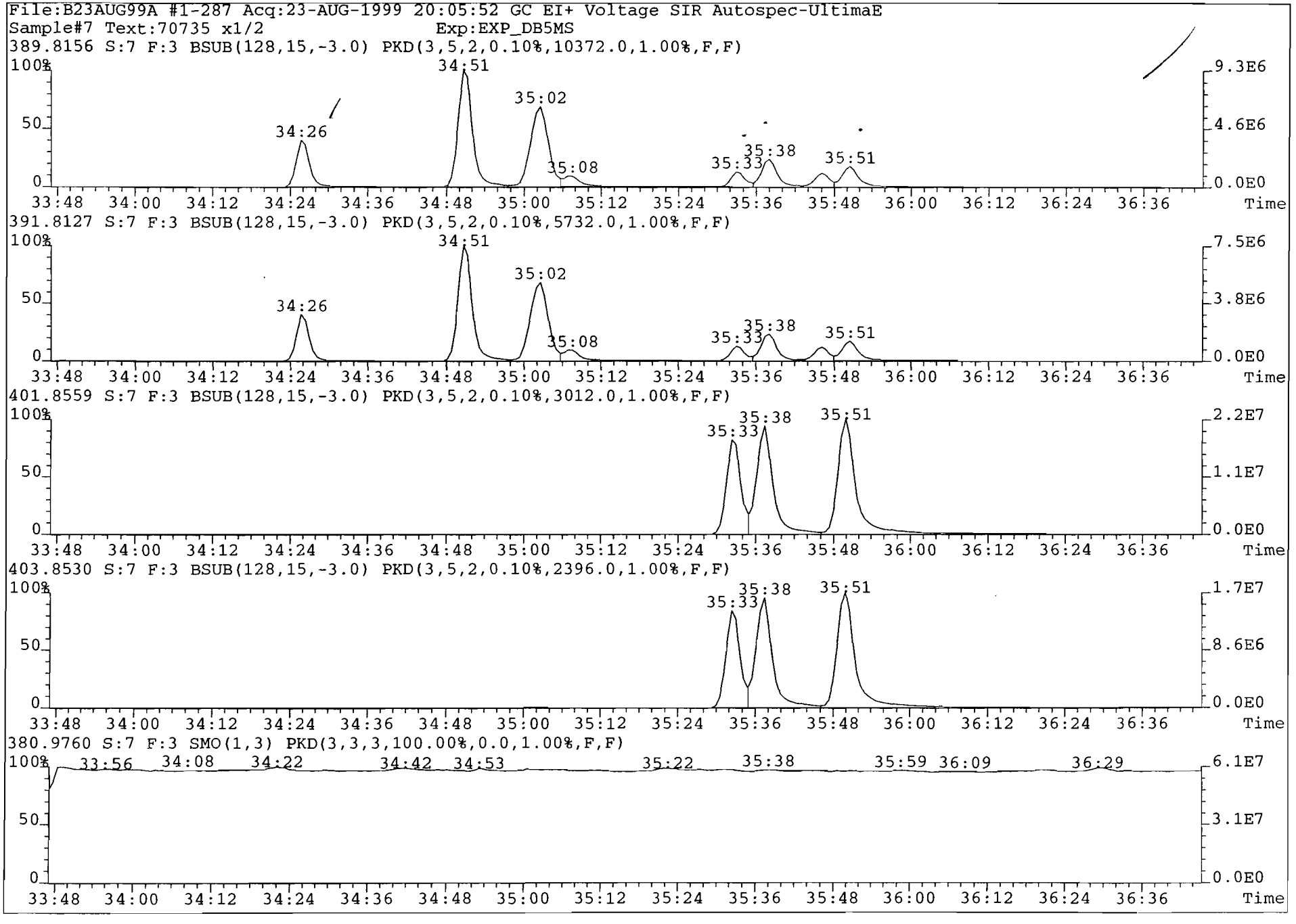
Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	3.87E+07	19700000	19000000		1.04 y	37:44	42.04	OK	420	y	1800	y	n
	2	5.83E+04	23100	35200		0.66 n	38:08	0.063	RT	0.86	n	5.2	y	n
	3	4.86E+04	25900	22700		1.14 y	38:10	0.053	RT	0.81	n	3.8	y	n
1,2,3,4,6,7,8-HpCD	4	4.01E+07	20300000	19700000		1.03 y	38:33	43.555	RT	380	y	[illegible]00	y	n

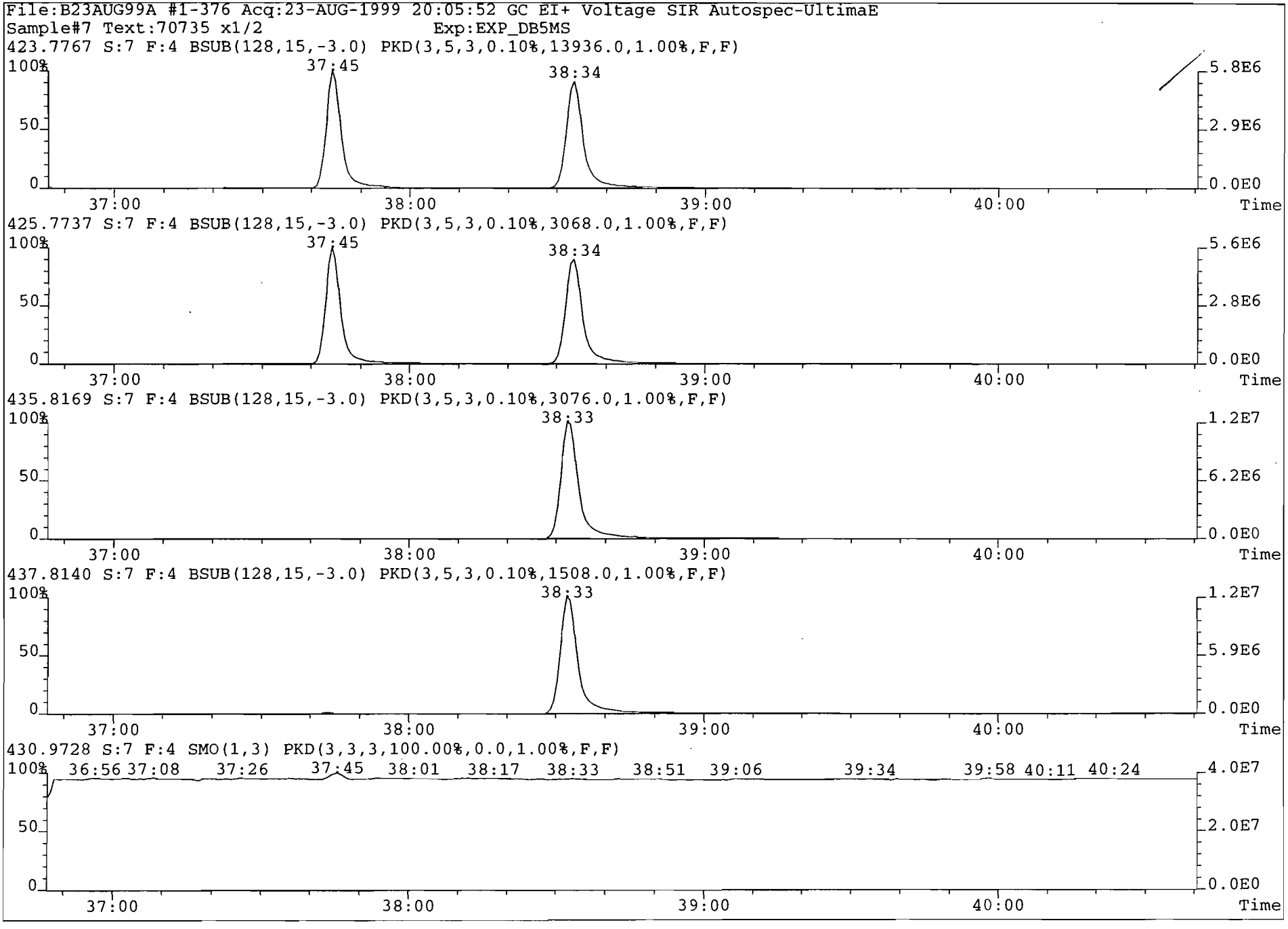
Totals Raw Data

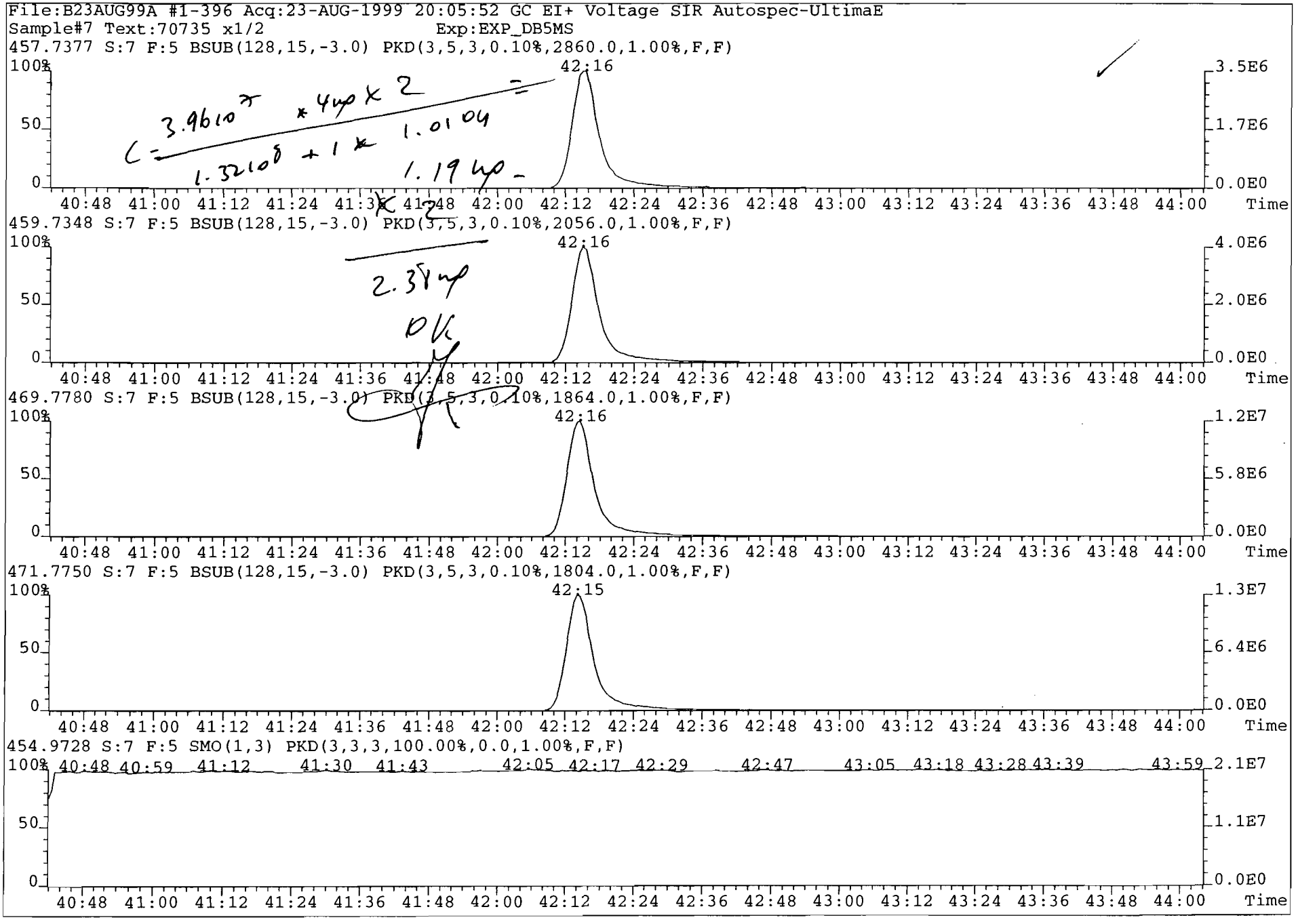
	5	1.16E+05	39300	76700	0.51 n	38:56	0.126 RT	1.2 n	7.7 y n
	6	5.03E+04	11000	39300	0.28 n	38:59	0.055 RT	0.53 n	5.6 y n

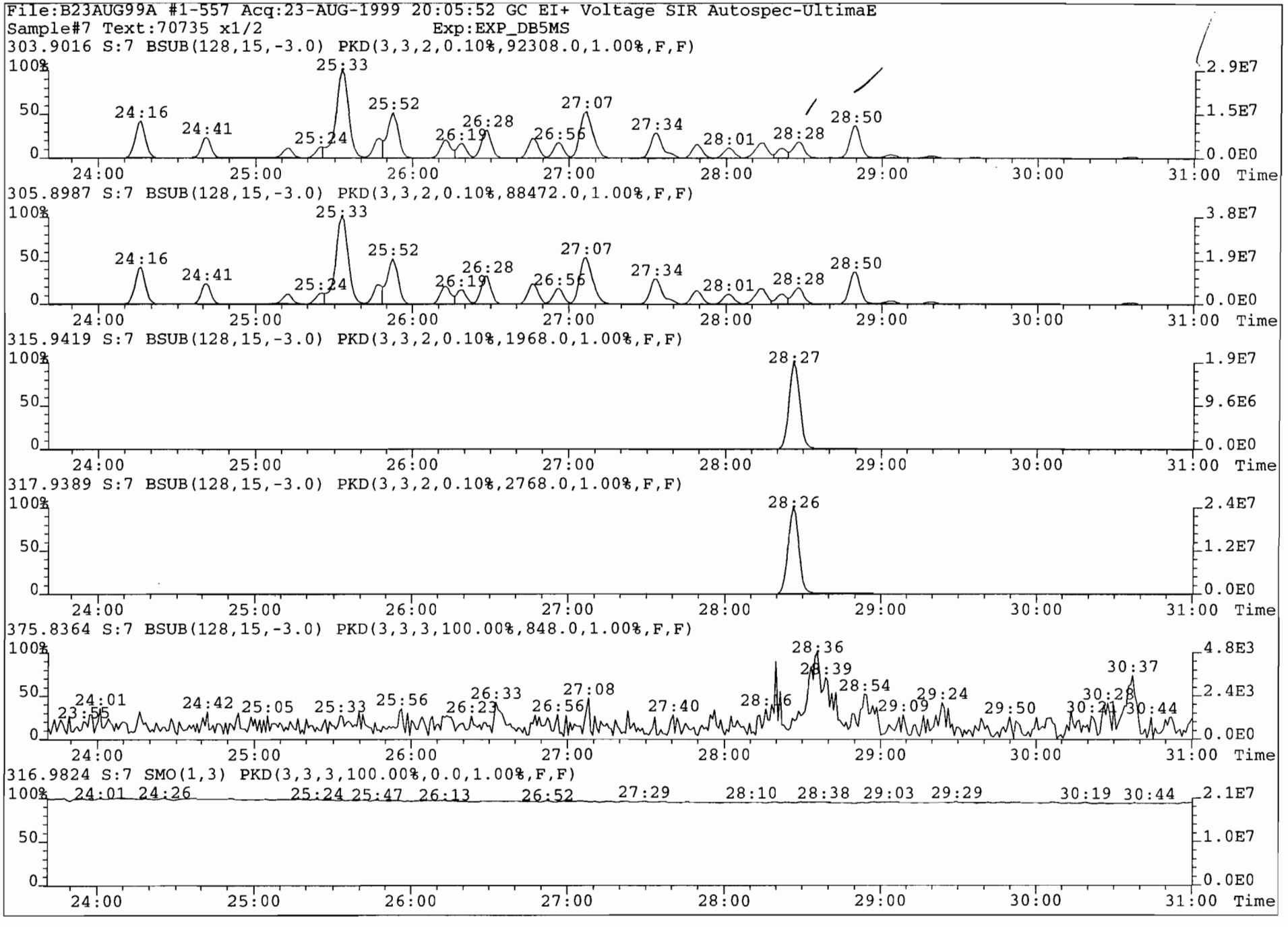

File:B23AUG99A #1-557 Acq:23-AUG-1999 20:05:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:70735 x1/2 Exp:EXP_DB5MS
319.8965 S:7 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3732.0,1.00%,F,F)
25:57
26:14
26:37
27:33
27:44
27:55
28:19
28:41
29:05
29:13
29:46
29:55
30:28
2.2E6
1.1E6
0.0E0
321.8936 S:7 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,4412.0,1.00%,F,F)
2.8E6
1.4E6
0.0E0
331.9368 S:7 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,6308.0,1.00%,F,F)
28:40
29:23
1.6E7
7.8E6
0.0E0
333.9339 S:7 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,4852.0,1.00%,F,F)
2.0E7
9.9E6
0.0E0
327.8847 S:7 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2272.0,1.00%,F,F)
29:24
3.0E7
1.5E7
0.0E0
316.9824 S:7 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
24:01 24:26 25:24 25:47 26:13 26:52 27:29 28:10 28:38 29:03 29:29 30:19 30:44
2.1E7
1.0E7
0.0E0
100%
50
0
24:00
25:00
26:00
27:00
28:00
29:00
30:00
31:00
Time

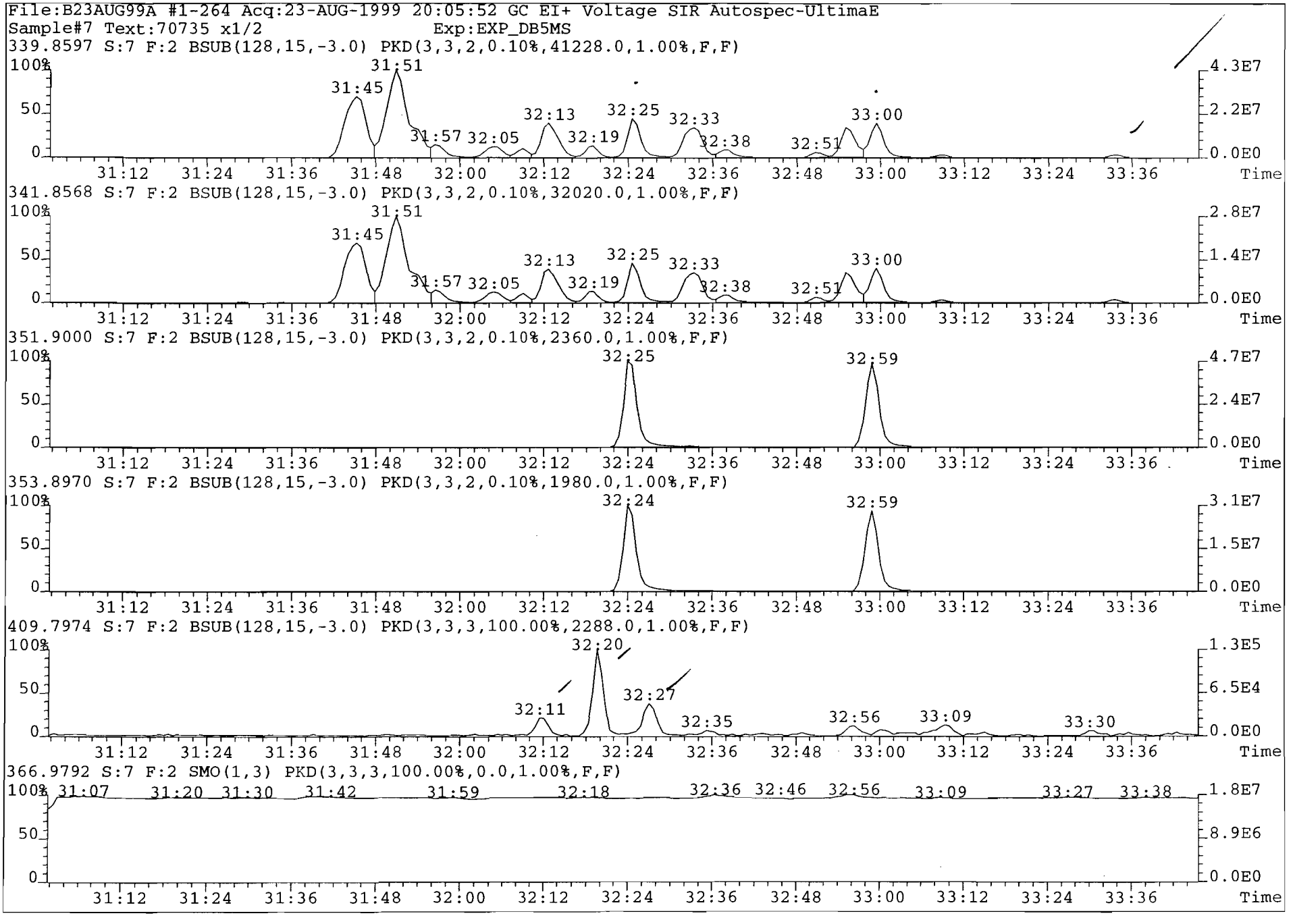

File:B23AUG99A #1-264 Acq:23-AUG-1999 20:05:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:70735 x1/2 Exp:EXP_DB5MS
355.8546 S:7 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,6552.0,1.00%,F,F)
31:54
32:27
32:36
32:38
32:43
32:11
32:55
33:11
33:14
33:25
6.4E6
3.2E6
0.0E0
357.8517 S:7 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,5776.0,1.00%,F,F)
31:54
32:27
32:36
32:38
32:43
32:10
32:55
33:11
33:14
33:25
4.2E6
2.1E6
0.0E0
367.8949 S:7 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2240.0,1.00%,F,F)
33:10
3.0E7
1.5E7
0.0E0
369.8919 S:7 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1720.0,1.00%,F,F)
33:10
1.9E7
9.4E6
0.0E0
366.9792 S:7 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
31:07
31:20
31:30
31:42
31:59
32:18
32:36
32:46
32:56
33:09
33:27
33:38
1.8E7
8.9E6
0.0E0
100%
50
0
31:12
31:24
31:36
31:48
32:00
32:12
32:24
32:36
32:48
33:00
33:12
33:24
33:36
Time

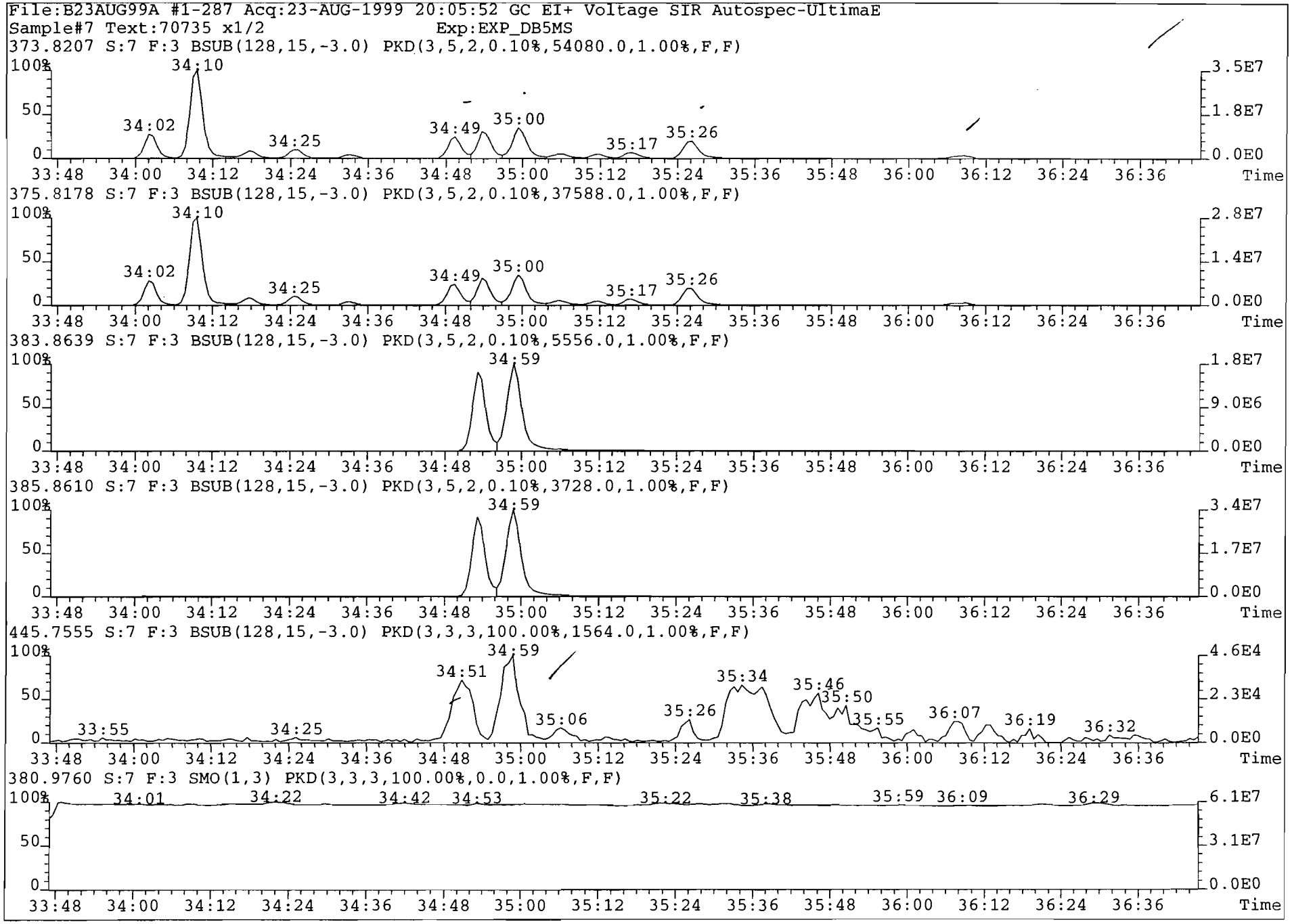

File:B23AUG99A #1-287 Acq:23-AUG-1999 20:05:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:70735 x1/2 Exp:EXP_DB5MS
389.8156 S:7 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,10372.0,1.00%,F,F)
34:26
34:51
35:02
35:08
35:33
35:38
35:51
9.3E6
4.6E6
0.0E0
391.8127 S:7 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,5732.0,1.00%,F,F)
7.5E6
3.8E6
401.8559 S:7 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3012.0,1.00%,F,F)
2.2E7
1.1E7
403.8530 S:7 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,2396.0,1.00%,F,F)
1.7E7
8.6E6
380.9760 S:7 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
33:56
34:08
34:22
34:42
34:53
35:22
35:38
35:59
36:09
36:29
6.1E7
3.1E7
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36
Time

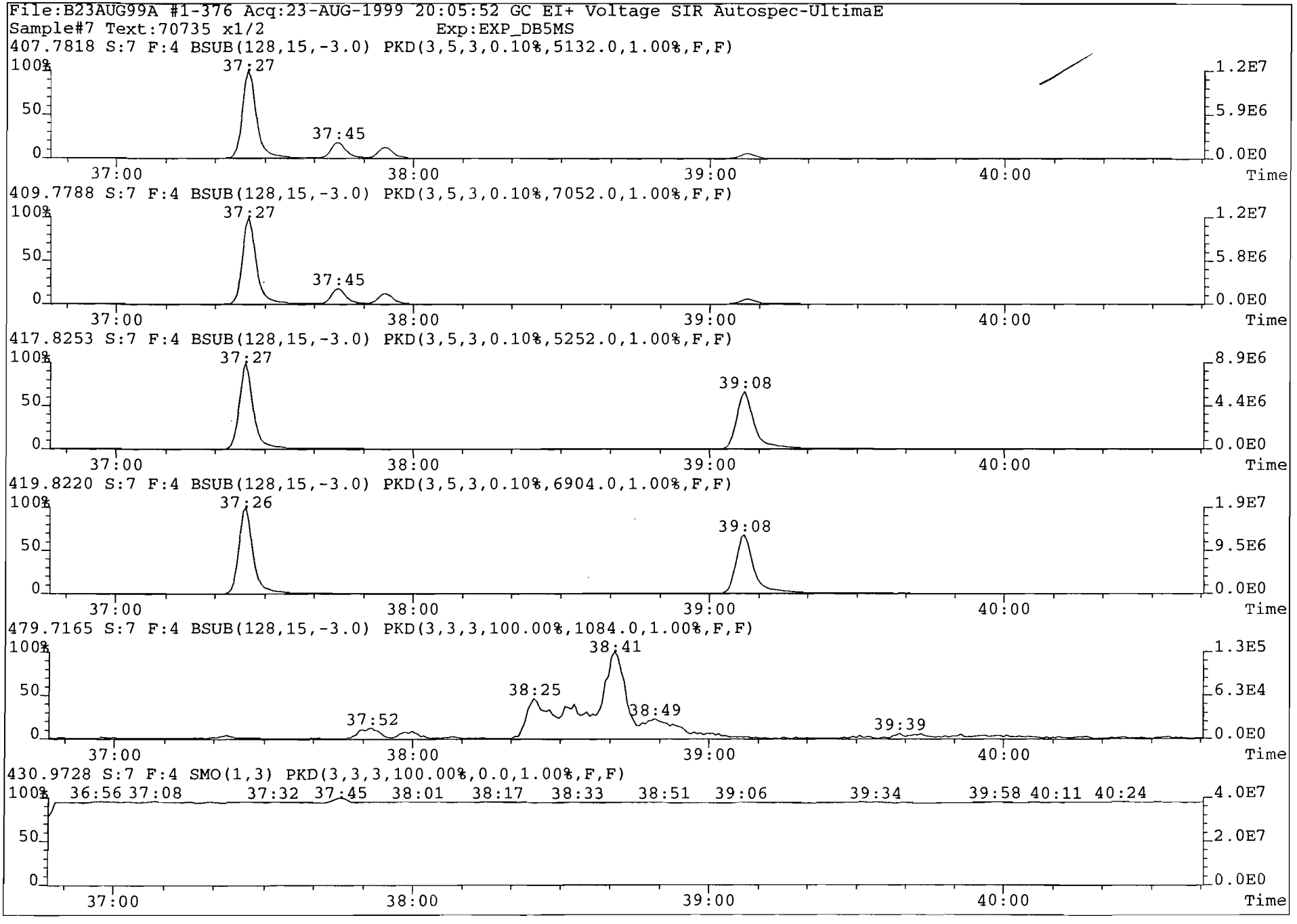

File:B23AUG99A #1-376 Acq:23-AUG-1999 20:05:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:70735 x1/2 Exp:EXP_DB5MS
423.7767 S:7 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,13936.0,1.00%,F,F)
37:45
38:34
5.8E6
2.9E6
425.7737 S:7 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3068.0,1.00%,F,F)
37:45
38:34
5.6E6
2.8E6
435.8169 S:7 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3076.0,1.00%,F,F)
38:33
1.2E7
6.2E6
437.8140 S:7 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1508.0,1.00%,F,F)
38:33
1.2E7
5.9E6
430.9728 S:7 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
36:56 37:08 37:26 37:45 38:01 38:17 38:33 38:51 39:06 39:34 39:58 40:11 40:24
4.0E7
2.0E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
Time

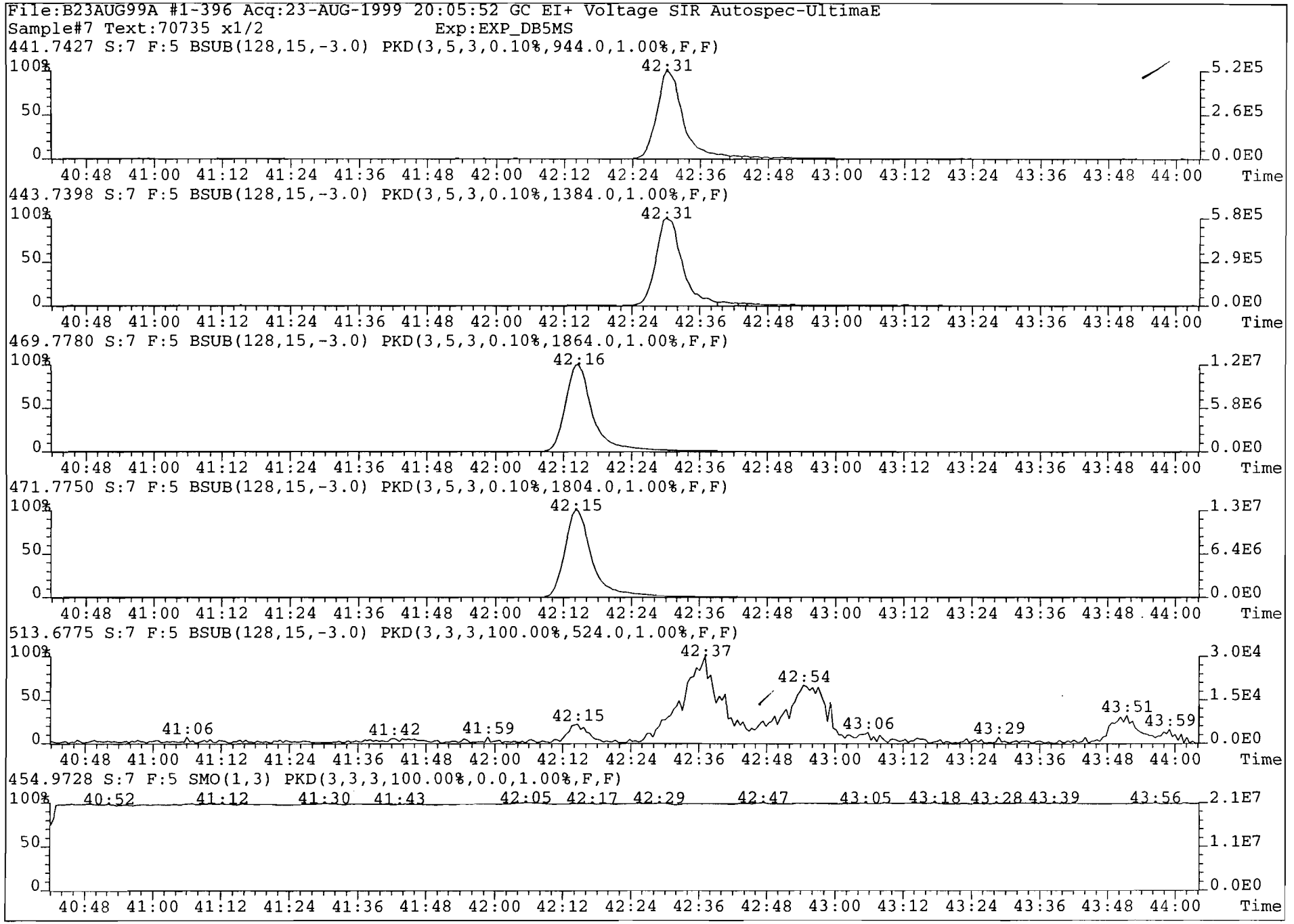

File:B23AUG99A #1-396 Acq:23-AUG-1999 20:05:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:70735 x1/2 Exp:EXP_DB5MS
457.7377 S:7 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2860.0,1.00%,F,F)
42:16
459.7348 S:7 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2056.0,1.00%,F,F)
42:16
469.7780 S:7 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1864.0,1.00%,F,F)
42:16
471.7750 S:7 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1804.0,1.00%,F,F)
42:15
454.9728 S:7 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
100%
50
0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time
3.5E6
1.7E6
0.0E0
4.0E6
2.0E6
1.2E7
5.8E6
1.3E7
6.4E6
2.1E7
1.1E7

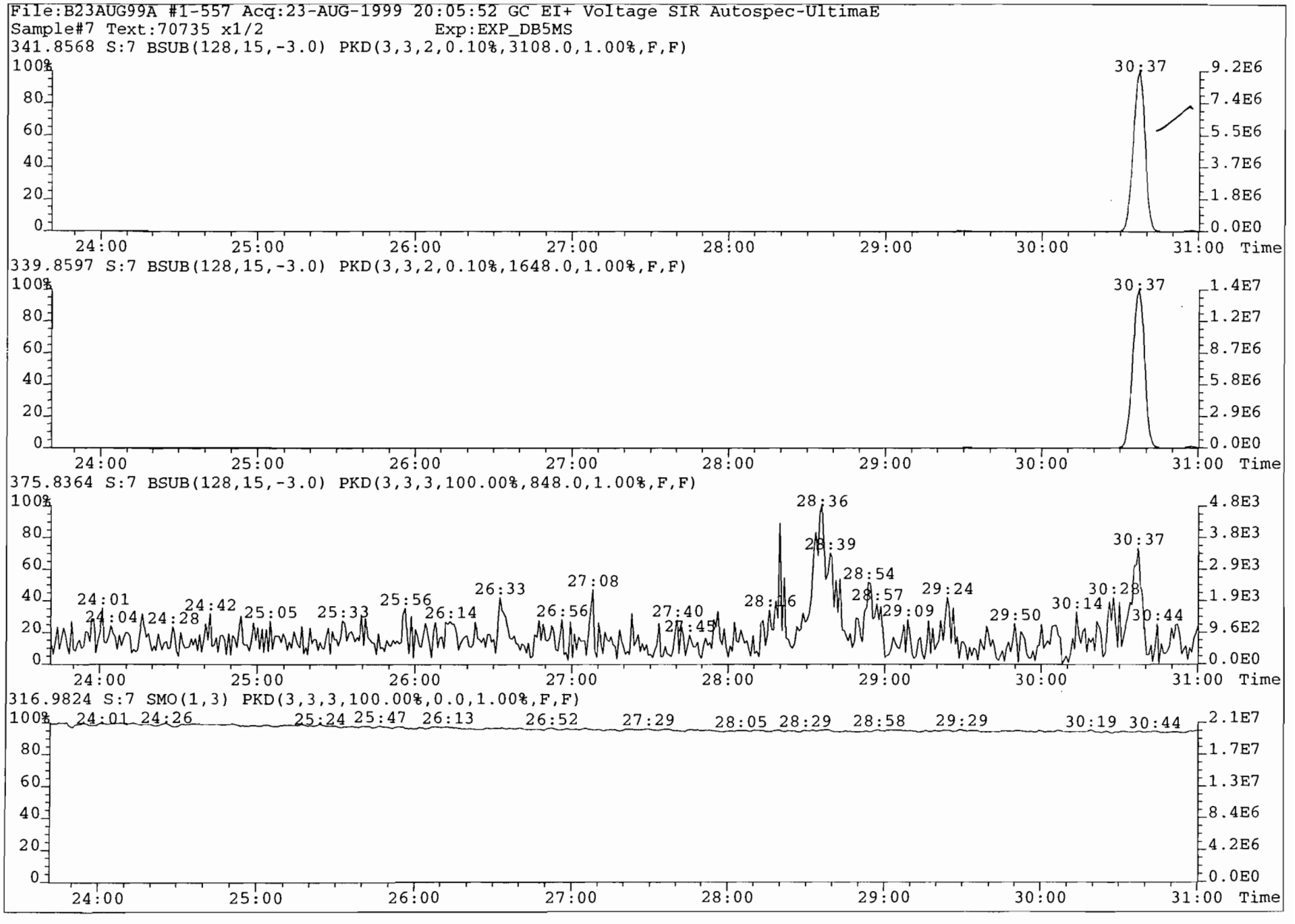

File:B23AUG99A #1-557 Acq:23-AUG-1999 20:05:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:70735 x1/2 Exp:EXP_DB5MS
303.9016 S:7 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,92308.0,1.00%,F,F)
305.8987 S:7 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,88472.0,1.00%,F,F)
315.9419 S:7 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1968.0,1.00%,F,F)
317.9389 S:7 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2768.0,1.00%,F,F)
375.8364 S:7 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,848.0,1.00%,F,F)
316.9824 S:7 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
Time


File:B23AUG99A #1-264 Acq:23-AUG-1999 20:05:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:70735 x1/2 Exp:EXP_DB5MS
339.8597 S:7 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,41228.0,1.00%,F,F)
31:45 31:51 31:57 32:05 32:13 32:19 32:25 32:33 32:38 32:51 33:00
341.8568 S:7 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,32020.0,1.00%,F,F)
31:45 31:51 31:57 32:05 32:13 32:19 32:25 32:33 32:38 32:51 33:00
351.9000 S:7 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2360.0,1.00%,F,F)
32:25 32:59
353.8970 S:7 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1980.0,1.00%,F,F)
32:24 32:59
409.7974 S:7 F:2 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,2288.0,1.00%,F,F)
32:11 32:20 32:27 32:35 32:56 33:09 33:30
366.9792 S:7 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
31:07 31:20 31:30 31:42 31:59 32:18 32:36 32:46 32:56 33:09 33:27 33:38
100%
50
0
31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36
Time
4.3E7 2.2E7 0.0E0
2.8E7 1.4E7 0.0E0
4.7E7 2.4E7 0.0E0
3.1E7 1.5E7 0.0E0
1.3E5 6.5E4 0.0E0
1.8E7 8.9E6 0.0E0


File:B23AUG99A #1-287 Acq:23-AUG-1999 20:05:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:70735 x1/2 Exp:EXP_DB5MS
373.8207 S:7 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,54080.0,1.00%,F,F)
34:10
34:02
34:25
34:49
35:00
35:17
35:26
3.5E7
1.8E7
0.0E0
375.8178 S:7 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,37588.0,1.00%,F,F)
34:10
34:02
34:25
34:49
35:00
35:17
35:26
2.8E7
1.4E7
0.0E0
383.8639 S:7 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,5556.0,1.00%,F,F)
34:59
1.8E7
9.0E6
0.0E0
385.8610 S:7 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3728.0,1.00%,F,F)
34:59
3.4E7
1.7E7
0.0E0
445.7555 S:7 F:3 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1564.0,1.00%,F,F)
34:59
34:51
33:55
34:25
35:06
35:26
35:34
35:46
35:50
35:55
36:07
36:19
36:32
4.6E4
2.3E4
0.0E0
380.9760 S:7 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
34:01
34:22
34:42
34:53
35:22
35:38
35:59
36:09
36:29
6.1E7
3.1E7
0.0E0
100%
50
0
33:48
34:00
34:12
34:24
34:36
34:48
35:00
35:12
35:24
35:36
35:48
36:00
36:12
36:24
36:36
Time


File:B23AUG99A #1-376 Acq:23-AUG-1999 20:05:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:70735 x1/2 Exp:EXP_DB5MS
407.7818 S:7 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,5132.0,1.00%,F,F)
37:27
37:45
1.2E7
5.9E6
0.0E0
409.7788 S:7 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,7052.0,1.00%,F,F)
37:27
37:45
1.2E7
5.8E6
0.0E0
417.8253 S:7 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,5252.0,1.00%,F,F)
37:27
39:08
8.9E6
4.4E6
0.0E0
419.8220 S:7 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,6904.0,1.00%,F,F)
37:26
39:08
1.9E7
9.5E6
0.0E0
479.7165 S:7 F:4 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1084.0,1.00%,F,F)
38:41
38:25
37:52
38:49
39:39
1.3E5
6.3E4
0.0E0
430.9728 S:7 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
36:56 37:08 37:32 37:45 38:01 38:17 38:33 38:51 39:06 39:34 39:58 40:11 40:24
4.0E7
2.0E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
Time


File:B23AUG99A #1-396 Acq:23-AUG-1999 20:05:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:70735 x1/2 Exp:EXP_DB5MS
441.7427 S:7 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,944.0,1.00%,F,F)
42:31
5.2E5
2.6E5
0.0E0
443.7398 S:7 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1384.0,1.00%,F,F)
42:31
5.8E5
2.9E5
0.0E0
469.7780 S:7 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1864.0,1.00%,F,F)
42:16
1.2E7
5.8E6
0.0E0
471.7750 S:7 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1804.0,1.00%,F,F)
42:15
1.3E7
6.4E6
0.0E0
513.6775 S:7 F:5 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,524.0,1.00%,F,F)
42:37
42:54
42:15
41:06
41:42
41:59
43:06
43:29
43:51
43:59
3.0E4
1.5E4
0.0E0
454.9728 S:7 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
40:52 41:12 41:30 41:43 42:05 42:17 42:29 42:47 43:05 43:18 43:28 43:39 43:56
2.1E7
1.1E7
0.0E0
100%
50
0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time


File:B23AUG99A #1-557 Acq:23-AUG-1999 20:05:52 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:70735 x1/2 Exp:EXP_DB5MS
341.8568 S:7 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3108.0,1.00%,F,F)
30:37
9.2E6
7.4E6
5.5E6
3.7E6
1.8E6
0.0E0
339.8597 S:7 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1648.0,1.00%,F,F)
30:37
1.4E7
1.2E7
8.7E6
5.8E6
2.9E6
0.0E0
375.8364 S:7 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,848.0,1.00%,F,F)
28:36
28:39
28:54
28:57
30:37
30:28
30:44
29:24
29:09
29:50
30:14
26:33
27:08
26:56
25:56
26:14
25:33
25:05
24:42
24:28
24:04
24:01
27:40
27:45
4.8E3
3.8E3
2.9E3
1.9E3
9.6E2
0.0E0
316.9824 S:7 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
24:01 24:26 25:24 25:47 26:13 26:52 27:29 28:05 28:29 28:58 29:29 30:19 30:44
2.1E7
1.7E7
1.3E7
8.4E6
4.2E6
0.0E0
24:00
25:00
26:00
27:00
28:00
29:00
30:00
31:00
Time

Method 23

1-S-M23-FB

AirKinetics, Inc.

Analytical Data Summary Sheet

Analyte	Amount (ng)	DL (ng)	EMPC (ng)	RT (min.)	Ratio	Qualifier
2,3,7,8-TCDD	EMPC	0.0015	0.0033	29:22	0.98	
1,2,3,7,8-PeCDD	EMPC	0.0016	0.0048	33:11	3.7	
1,2,3,4,7,8-HxCDD	0.0046	0.0029		35:34	1.18	
1,2,3,6,7,8-HxCDD	0.0088	0.0028		35:37	1.41	
1,2,3,7,8,9-HxCDD	0.0079	0.0026		35:50	1.37	
1,2,3,4,6,7,8-HpCDD	0.0646	0.0028		38:33	1.01	
OCDD	0.105	0.0036		42:15	0.86	
2,3,7,8--TCDF	0.0036	0.0014		28:27	0.84	
1,2,3,7,8-PeCDF	0.0064	0.0011		32:25	1.52	
2,3,4,7,8-PeCDF	0.0074	0.0010		32:59	1.71	
1,2,3,4,7,8-HxCDF	0.0065	< 0.0010		34:54	1.27	
1,2,3,6,7,8-HxCDF	0.0067	< 0.0010		34:59	1.16	
2,3,4,6,7,8-HxCDF	0.0059	< 0.0010		35:26	1.21	
1,2,3,7,8,9-HxCDF	ND	0.0011		36:08	1.35	
1,2,3,4,6,7,8-HpCDF	0.0168	0.0011		37:26	1.07	
1,2,3,4,7,8,9-HpCDF	0.0023	0.0013		39:08	1.01	
OCDF	0.0082	0.0020		42:30	0.81	
Total TCDDs	0.0053	0.0015	0.0187			
Total PeCDDs	0.0296	0.0016	0.0503			
Total HxCDDs	0.0586	0.0026	0.0806			
Total HpCDDs	0.121	0.0028				
Total TCDFs	0.0280	0.0014	0.0562			
Total PeCDFs	0.0509	0.0010	0.0695			
Total HxCDFs	0.0450	< 0.0010	0.0508			
Total HpCDFs	0.0227	0.0011	0.0271			
TEQ (ND=0)	0.0094		0.0150			ITEF
TEQ (ND=½)	0.0105		0.0151			ITEF

Client Information

Project Name: OMS-Lee
Sample ID: 1-S-M23-FB

Laboratory Information

Project ID: G370-4
Sample ID: 70736

Collection Date: 19-Aug-99
Receipt Date: 20-Aug-99
Extraction Date: 20-Aug-99
Analysis Date: 23-Aug-99

Sample Information

Matrix: Air
Weight / Volume:
Moisture / Lipids:
Original pH: NA

Filename: b23aug99a-8
Retchk: b23aug99a-1
Begin ConCal: b23aug99a-1
End ConCal: b23aug99a-15
Initial Cal: m8290-b060499a

99

Method 23

1-S-M23-FB

AirKinetics, Inc.

Analytical Data Summary Sheet

Labeled Standard	Expected Amount (ng)	Measured Amount (ng)	Percent Recovery (%)	RT (min.)	Ratio	Qualifier
Extraction Standards						
$^{13}C_{12}$-2,3,7,8-TCDD	4	3.30	82.5	29:22	0.8	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	4	3.09	77.3	33:09	1.56	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	4	3.21	80.3	35:37	1.29	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	4	3.52	88.0	38:32	1.05	
$^{13}C_{12}$-OCDD	8	5.78	72.3	42:14	0.9	
$^{13}C_{12}$-2,3,7,8-TCDF	4	3.27	81.8	28:26	0.79	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	4	3.13	78.3	32:24	1.58	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	4	3.26	81.5	34:59	0.51	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	4	3.16	79.0	37:25	0.45	
Sampling Standards						
$^{37}Cl_4$-2,3,7,8-TCDD	4	3.95	98.8	29:22		
$^{13}C_{12}$-2,3,4,7,8-PeCDF	4	4.11	102.8	32:59	1.59	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	4	3.91	97.8	35:32	1.27	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	4	3.63	90.8	34:53	0.53	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	4	4.13	103.3	39:06	0.44	
Injection Standards						
$^{13}C_{12}$-1,2,3,4-TCDD				28:40	0.8	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD				35:50	1.28	

Client Information

Project Name: OMS-Lee
Sample ID: 1-S-M23-FB

Laboratory Information

Project ID: G370-4
Sample ID: 70736

Collection Date: 19-Aug-99
Receipt Date: 20-Aug-99
Extraction Date: 20-Aug-99
Analysis Date: 23-Aug-99

Sample Information

Matrix: Air
Weight / Volume:
Moisture / Lipids:
Original pH : NA

Filename: b23aug99a-8
Retchk: b23aug99a-1
Begin ConCal: b23aug99a-1
End ConCal: b23aug99a-15
Initial Cal: m8290-b060499a

Reviewed by: Y.T.

Date Reviewed: 24 Aug 99

100

Filename ; b23aug99a
Sample ; 8
Acquired ; 23-AUG-99 20:52:07
Processed ; 24-AUG-99 08:04:35
Sample ID ; 70736 x1/2
Cal Table ; m8290-b060499a
Results Table ; m8290-b082399a
Comments ;

Typ	Name	Resp	Ion 1	Ion 2	RA;?;	RT	Conc	DL	S/N1;?;	S/N2;? ;	mod?
Unk	2,3,7,8-TCDD	1.79e+05	5.24e+04	1.27e+05	0.41;n;	29:22	0.138	0.0368	6;y;	17;y ;	yes
Unk	1,2,3,7,8-PeCDD	1.15e+05	9.01e+04	2.44e+04	3.70;n;	33:11	0.121	0.0393	14;y;	4;y ;	yes
Unk	1,2,3,4,7,8-HxCDD	9.65e+04	5.23e+04	4.42e+04	1.18;y;	35:34	0.114	0.0719	5;y;	5;y ;	yes
Unk	1,2,3,6,7,8-HxCDD	1.90e+05	1.11e+05	7.90e+04	1.41;y;	35:37	0.220	0.0701	11;y;	8;y ;	yes
Unk	1,2,3,7,8,9-HxCDD	1.81e+05	1.05e+05	7.64e+04	1.37;y;	35:50	0.197	0.0661	10;y;	7;y ;	yes
Unk	1,2,3,4,6,7,8-HpCDD	1.30e+06	6.51e+05	6.47e+05	1.01;y;	38:33	1.614	0.0709	69;y;	79;y ;	no
Unk	OCDD	1.59e+06	7.35e+05	8.55e+05	0.86;y;	42:15	2.629	0.0906	82;y;	114;y ;	no
Unk	2,3,7,8-TCDF	1.52e+05	6.92e+04	8.23e+04	0.84;y;	28:27	0.091	0.0359	9;y;	8;y ;	no
Unk	1,2,3,7,8-PeCDF	2.21e+05	1.33e+05	8.80e+04	1.52;y;	32:25	0.160	0.0264	36;y;	12;y ;	no
Unk	2,3,4,7,8-PeCDF	2.61e+05	1.65e+05	9.62e+04	1.71;y;	32:59	0.184	0.0257	40;y;	11;y ;	yes
Unk	1,2,3,4,7,8-HxCDF	2.15e+05	1.20e+05	9.48e+04	1.27;y;	34:54	0.163	0.0237	23;y;	23;y ;	no
Unk	1,2,3,6,7,8-HxCDF	2.45e+05	1.31e+05	1.13e+05	1.16;y;	34:59	0.168	0.0214	23;y;	28;y ;	no
Unk	2,3,4,6,7,8-HxCDF	1.84e+05	1.01e+05	8.30e+04	1.21;y;	35:26	0.147	0.0249	18;y;	22;y ;	no
Unk	1,2,3,7,8,9-HxCDF	4.77e+04	2.74e+04	2.03e+04	1.35;y;	36:08	0.042	0.0275	3;y;	4;y ;	yes
Unk	1,2,3,4,6,7,8-HpCDF	4.87e+05	2.51e+05	2.36e+05	1.07;y;	37:26	0.421	0.0263	64;y;	41;y ;	no
Unk	1,2,3,4,7,8,9-HpCDF	5.30e+04	2.67e+04	2.63e+04	1.01;y;	39:08	0.058	0.0335	9;y;	5;y ;	no
Unk	OCDF	1.35e+05	6.04e+04	7.46e+04	0.81;y;	42:30	0.205	0.0504	18;y;	14;y ;	yes
ES/RT	13C-2,3,7,8-TCDD	1.21e+08	5.34e+07	6.71e+07	0.80;y;	29:22	82.602	0.0936	1940;y;	3686;y ;	no
ES	13C-1,2,3,7,8-PeCDD	9.66e+07	5.89e+07	3.77e+07	1.56;y;	33:09	77.274	0.0484	9237;y;	9815;y ;	no
ES	13C-1,2,3,6,7,8-HxCDD	9.02e+07	5.08e+07	3.94e+07	1.29;y;	35:37	80.272	0.0326	7345;y;	8954;y ;	no
ES	13C-1,2,3,4,6,7,8-HpCDD	8.52e+07	4.36e+07	4.16e+07	1.05;y;	38:32	88.099	0.0444	4337;y;	5338;y ;	no
ES	13C-OCDD	1.20e+08	5.68e+07	6.29e+07	0.90;y;	42:14	144.522	0.0348	6290;y;	8776;y ;	no
ES/RT	13C-2,3,7,8-TCDF	1.69e+08	7.45e+07	9.43e+07	0.79;y;	28:26	81.840	0.0243	10702;y;	9576;y ;	no
ES	13C-1,2,3,7,8-PeCDF	1.45e+08	8.85e+07	5.61e+07	1.58;y;	32:24	78.171	0.0275	22120;y;	13822;y ;	no
ES	13C-1,2,3,6,7,8-HxCDF	1.20e+08	4.05e+07	7.99e+07	0.51;y;	34:59	81.481	0.0487	3068;y;	9364;y ;	no
ES	13C-1,2,3,4,6,7,8-HpCDF	7.78e+07	2.42e+07	5.37e+07	0.45;y;	37:25	79.058	0.0843	1772;y;	3529;y ;	no
JS	13C-1,2,3,4-TCDD	1.37e+08	6.08e+07	7.57e+07	0.80;y;	28:40	106.266	-;	2210;y;	4206;y ;	no
JS	13C-1,2,3,7,8,9-HxCDD	1.13e+08	6.33e+07	4.95e+07	1.28;y;	35:50	106.358	-;	8547;y;	10356;y ;	no
CS	37Cl-2,3,7,8-TCDD	1.19e+08	1.19e+08	-;	-;-;	29:22	81.493	0.0165	14408;y;	-; -;	no
CS	13C-2,3,4,7,8-PeCDF	1.42e+08	8.71e+07	5.49e+07	1.59;y;	32:59	80.223	0.0287	21422;y;	13140;y ;	no
CS	13C-1,2,3,4,7,8-HxCDD	7.50e+07	4.19e+07	3.30e+07	1.27;y;	35:32	78.574	0.0383	7042;y;	8695;y ;	no
CS	13C-1,2,3,4,7,8-HxCDF	9.72e+07	3.39e+07	6.33e+07	0.53;y;	34:53	74.044	0.0549	2939;y;	9039;y ;	no
CS	13C-1,2,3,4,7,8,9-HpCDF	6.78e+07	2.08e+07	4.70e+07	0.44;y;	39:06	81.610	0.1000	1207;y;	2444;y ;	no
SS	37Cl-2,3,7,8-TCDD	1.19e+08	1.19e+08	-;	-;-;	29:22	98.672	0.0202	14408;y;	-; -;	yes
SS	13C-2,3,4,7,8-PeCDF	1.42e+08	8.71e+07	5.49e+07	1.59;y;	32:59	102.639	0.0175	21422;y;	13140;y ;	no
SS	13C-1,2,3,4,7,8-HxCDD	7.50e+07	4.19e+07	3.30e+07	1.27;y;	35:32	97.865	0.0443	7042;y;	8695;y ;	no
SS	13C-1,2,3,4,7,8-HxCDF	9.72e+07	3.39e+07	6.33e+07	0.53;y;	34:53	90.852	0.0612	2939;y;	9039;y ;	no
SS	13C-1,2,3,4,7,8,9-HpCDF	6.78e+07	2.08e+07	4.70e+07	0.44;y;	39:06	103.229	0.1318	1207;y;	2444;y ;	no

4.84

Totals Raw Data

	Conc	Empc	Flags
TCDF	0.699	1.406	TRUE
TCDD	0.132	0.466693764	TRUE
PeCDF	1.097	1.561	TRUE
PeCDD	0.739	1.258	TRUE
HxCDF	1.124	1.27	TRUE
HxCDD	1.466	2.014	TRUE
HpCDF	0.568	0.678	TRUE
HpCDD	3.026	3.026	FALSE

Filename:	b23aug99a	Name of Homolog Group:	Total Tetra-Furans
Sample:	8	Number of Peaks Found:	23
Acquired:	23-AUG-99 20:52:07	RRF Used For Totals:	0.9883
Processed:	24-AUG-99 08:04:35	Detection Limit:	0.0359
Sample ID:	70736 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	24:09:00
Results Table:	m8290-b082399a	End Window:	30:31:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	1.44E+05	66600	77900	0.86	y	24:16	0.087	OK	10	y	7.3	y	n
	2	5.72E+04	16300	40800	0.4	n	24:41	0.034	DL	4.3	y	4	y	n
	3	5.56E+04	25900	29700	0.87	y	25:11	0.033	S2N	4.7	y	3.2	y	n
	4	3.33E+04	25400	7960	3.19	n	25:26	0.02	S2N	4.1	y	1.3	n	n
	5	4.95E+05	240000	255000	0.94	n	25:32	0.297	EMPC	24	y	18	y	n
	6	7.55E+04	35900	39600	0.91	n	25:47	0.045	EMPC	7.3	y	4.4	y	n
	7	2.46E+05	109000	137000	0.79	y	25:52	0.148	OK	14	y	11	y	n
	8	8.41E+04	35500	48500	0.73	y	26:11	0.05	OK	5.9	y	5.7	y	n
	9	4.80E+04	6200	41800	0.15	n	26:16	0.029	S2N	2.7	n	3.8	y	n
	10	6.17E+04	19900	41800	0.48	n	26:19	0.037	S2N	3.8	y	3.8	y	n
	11	1.10E+05	41700	68100	0.61	n	26:27	0.066	EMPC	6.6	y	6	y	n
	12	9.82E+04	35700	62500	0.57	n	26:47	0.059	EMPC	5.3	y	5.7	y	n
	13	5.17E+04	33500	18200	1.84	n	26:55	0.031	DL	6.4	y	4	y	n
	14	3.18E+05	124000	193000	0.64	n	27:06	0.19	EMPC	14	y	13	y	n
	15	1.80E+05	71100	109000	0.66	y	27:33	0.108	OK	9.8	y	8.7	y	n
	16	8.27E+04	27500	55200	0.5	n	27:49	0.05	EMPC	5.8	y	4.8	y	n
	17	4.60E+04	17600	28500	0.62	n	28:00	0.028	S2N	3.1	y	3.3	y	n
	18	1.04E+05	41100	62700	0.66	y	28:13	0.062	OK	6.6	y	4.3	y	n
	19	6.15E+04	22100	39400	0.56	n	28:21	0.037	S2N	6.5	y	3.4	y	n
2,3,7,8-TCDF	20	1.52E+05	69200	82300	0.84	y	28:27	0.091	OK	9.2	y	7.7	y	n
	21	4.95E+03	2220	2730	0.81	y	28:35	0.003	S2N	1.3	n	0.47	n	n
	22	2.55E+05	109000	146000	0.75	y	28:49	0.153	OK	14	y	12	y	n
	23	1.15E+04	2970	8530	0.35	n	29:02	0.007	S2N	1.1	n	1.1	n	n

Filename:	b23aug99a	Name of Homolog Group:	Total Tetra-Dioxins
Sample:	8	Number of Peaks Found	16
Acquired:	23-AUG-99 20:52:07	RRF Used For Totals	1 0802
Processed:	AUG-99 08:04:35	Detection Limit	0 0368

Sample ID: 70736 x1/2
Cal Table: m8290-b060499a Begin Window: 25:50:00
Results Table: m8290-b082399a End Window: 30:28:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	1.01E+05	38500	62500	0.62	n	25:58	0.078	EMPC	6.2	y	8	y	n
	2	9.38E+04	32600	61100	0.53	n	26:14	0.072	EMPC	4.6	y	8.3	y	n
	3	1.94E+04	5690	13700	0.41	n	26:37	0.015	S2N	1.7	n	2.7	n	n
	4	4.75E+03	3460	1290	2.68	n	27:25	0.004	S2N	1.8	n	0.58	n	n
	5	7.49E+04	39600	35200	1.12	n	27:32	0.057	EMPC	4.6	y	4.3	y	n
	6	1.72E+05	69700	102000	0.68	y	27:44	0.132	OK	10	y	13	y	n
	7	4.22E+04	20900	21300	0.98	n	27:55	0.032	S2N	3.4	y	3.3	y	n
	8	4.64E+04	17900	28500	0.63	n	28:18	0.036	S2N	2.9	n	4.7	y	n
	9	6.20E+04	58400	3590	16.28	n	28:26	0.048	S2N	8.7	y	0.87	n	n
	10	2.50E+04	16400	8610	1.91	n	28:41	0.019	S2N	2.5	n	2.2	n	n
	11	3.65E+04	13400	23000	0.58	n	29:02	0.028	S2N	2.9	n	4.3	y	n
	12	1.95E+04	6680	12800	0.52	n	29:05	0.015	S2N	3.3	y	3.5	y	n
	13	2.32E+04	10500	12800	0.82	y	29:07	0.018	S2N	3.2	y	3.5	y	n
	14	1.26E+04	3080	9550	0.32	n	29:10	0.01	S2N	1.3	n	1.8	n	n
2,3,7,8-TCDD	15	1.79E+05	52400	127000	0.9782489	n	29:22	0.08169376	EMPC	5.7	y	17	y	y
	16	5.95E+04	28600	30900	0.93	n	29:45	0.046	EMPC	4.8	y	6.1	y	n

Filename: b23aug99a Name of Homolog Group: Total Penta-Furans Fn1
Sample: 8 Number of Peaks Found: 4
Acquired: 23-AUG-99 20:52:07 RRF Used For Totals: 0.9679
Processed: 24-AUG-99 08:04:35 Detection Limit: 0.0171
Sample ID: 70736 x1/2
Cal Table: m8290-b060499a Begin Window: 30:40:00
Results Table: m8290-b082399a End Window: 31:00:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	2.46E+05	98600	147000	0.67	y	30:37	0.176	RT	9.9	y	24	y	n
	2	5.52E+03	1860	3660	0.51	n	30:47	0.004	S2N	0.4	n	1.2	n	n
	3	4.88E+03	1220	3660	0.33	n	30:50	0.003	S2N	0.22	n	1.2	n	n
	4	5.65E+03	4000	1650	2.43	n	30:56	0.004	S2N	1.1	n	0.55	n	n

Filename: b23aug99a Name of Homolog Group: Total Penta-Furans Fn2
Sample: 8 Number of Peaks Found: 13
Acquired: 23-AUG-99 20:52:07 RRF Used For Totals: 0.9679
Processed: 24-AUG-99 08:04:35 Detection Limit: 0.026
Sample ID: 70736 x1/2
Cal Table: m8290-b060499a Begin Window: 30:42:00
Results Table: m8290-b082399a End Window: 33:46:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	4.13E+05	266000	146000	1.82	n	31:45	0.295	EMPC	49	y	13	y	n
	2	6.37E+05	393000	244000	1.61	y	31:51	0.455	OK	68	y	18	y	n

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	3	4.79E+04	32100	15900	2.02	n	31:57	0.034	S2N	7.1	y	1.9 n n
	4	5.91E+04	36200	22900	1.58	y	32:05	0.042	S2N	7.2	y	2.3 n n
	5	3.05E+04	21600	8940	2.42	n	32:08	0.022	S2N	6.4	y	1.4 n n
	6	2.08E+05	133000	74900	1.78	y	32:12	0.149	OK	27	y	9.2 y n
	7	5.92E+04	33900	25300	1.34	y	32:19	0.042	S2N	11	y	3.4 y n
1,2,3,7,8-PeCDF	8	2.21E+05	133000	88000	1.52	y	32:25	0.16	OK	36	y	12 y n
	9	2.37E+05	163000	73900	2.21	n	32:34	0.169	EMPC	30	y	7 y n
	10	4.40E+04	31700	12300	2.58	n	32:38	0.031	S2N	6.5	y	1.9 n n
	11	2.98E+04	18100	11600	1.56	y	32:51	0.021	S2N	5.1	y	1.5 n n
	12	2.09E+05	122000	86300	1.42	y	32:55	0.149	OK	30	y	9.9 y n
2,3,4,7,8-PeCDF	13	2.61E+05	165000	96200	1.71	y	32:59	0.184	OK	40	y	11 y n

Filename:	b23aug99a	Name of Homolog Group:	Total Penta-Dioxins
Sample:	8	Number of Peaks Found:	14
Acquired:	23-AUG-99 20:52:07	RRF Used For Totals:	0.9837
Processed:	24-AUG-99 08:04:35	Detection Limit:	0.0393
Sample ID:	70736 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	31:47:00
Results Table:	m8290-b082399a	End Window:	33:29:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	2.62E+05	158000	104000	1.53	y	31:54	0.276	OK	16	y	18	y	n
	2	3.83E+03	1960	1880	1.04	n	32:03	0.004	S2N	0.39	n	0.45	n	n
	3	5.28E+03	3400	1880	1.81	n	32:05	0.006	S2N	0.74	n	0.45	n	n
	4	9.16E+04	36600	55000	0.67	n	32:24	0.096	EMPC	7.5	y	15	y	n
	5	1.71E+05	116000	55000	2.11	n	32:26	0.18	EMPC	18	y	15	y	n
	6	9.58E+04	60300	35500	1.7	y	32:33	0.101	OK	8	y	10	y	n
	7	1.69E+05	99900	68700	1.46	y	32:35	0.177	OK	14	y	12	y	n
	8	1.18E+05	71200	47200	1.51	y	32:43	0.125	OK	7.9	y	8.5	y	n
	9	9.42E+03	5450	3970	1.37	y	32:48	0.01	S2N	0.79	n	1.3	n	n
	10	5.97E+04	31500	28200	1.12	n	32:54	0.063	EMPC	4.7	y	5	y	n
	11	5.25E+04	42600	9840	4.33	n	32:59	0.055	S2N	7.6	y	2.7	n	n
1,2,3,7,8-PeCDD	12	1.15E+05	90100	24400	3.7	n	33:11	0.121	EMPC	14	y	4.1	y	y
	13	5.57E+04	31400	24400	1.29	n	33:14	0.059	EMPC	4.8	y	4.1	y	y
	14	5.67E+04	33700	23100	1.46	y	33:24	0.06	OK	4.9	y	4	y	n

Filename:	b23aug99a	Name of Homolog Group:	Total Hexa-Furans
Sample:	8	Number of Peaks Found:	37
Acquired:	23-AUG-99 20:52:07	RRF Used For Totals:	1.0623
Processed:	24-AUG-99 08:04:35	Detection Limit:	0.0243
Sample ID:	70736 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	33:51:00
Results Table:	m8290-b082399a	End Window:	36:21:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	1.23E+05	70400	5300	1.33	y	34:02	0.096	OK	17	y	21	y	n

	2	5.19E+05	287000	2320[illegible]	1.24	y	34:10	0.406	OK	62 y	59 y n
	3	4.19E+04	22100	19800	1.12	y	34:18	0.033	OK	4.3 y	5.4 y n
	4	6.32E+04	31800	31400	1.01	n	34:24	0.049	EMPC	8.6 y	9 y n
	5	4.19E+04	20200	21700	0.93	n	34:33	0.033	EMPC	4.8 y	7.1 y n
	6	2.71E+03	1070	1640	0.66	n	34:39	0.002	S2N	0.38 n	0.89 n n
	7	2.89E+03	1160	1730	0.67	n	34:40	0.002	S2N	0.53 n	0.92 n n
	8	3.02E+03	1710	1310	1.31	y	34:44	0.002	S2N	0.47 n	0.56 n n
	9	2.96E+03	1650	1310	1.26	y	34:45	0.002	S2N	0.69 n	0.56 n n
	10	1.42E+05	75900	66600	1.14	y	34:49	0.111	OK	16 y	17 y n
1,2,3,4,7,8-HxCDF	11	2.15E+05	120000	94800	1.27	y	34:54	0.163	OK	23 y	23 y n
1,2,3,6,7,8-HxCDF	12	2.45E+05	131000	113000	1.16	y	34:59	0.168	OK	23 y	28 y n
	13	3.06E+04	14100	16500	0.85	n	35:06	0.024	S2N	3.1 y	4 y n
	14	3.54E+04	17500	17900	0.98	n	35:12	0.028	S2N	3.3 y	4.5 y n
	15	4.18E+04	14900	26800	0.56	n	35:16	0.033	EMPC	5.2 y	5.9 y n
	16	3.93E+04	12500	26800	0.47	n	35:17	0.031	EMPC	4.1 y	5.9 y n
2,3,4,6,7,8-HxCDF	17	1.84E+05	101000	83000	1.21	y	35:26	0.147	OK	18 y	22 y n
	18	9.34E+03	4780	4560	1.05	n	35:30	0.007	S2N	2.4 n	1.8 n n
	19	1.20E+04	7480	4560	1.64	n	35:32	0.009	S2N	1.4 n	1.8 n n
	20	9.76E+03	4500	5260	0.86	n	35:38	0.008	S2N	0.91 n	1.1 n n
	21	5.68E+03	3390	2290	1.48	n	35:41	0.004	S2N	0.82 n	0.84 n n
	22	6.35E+03	3890	2460	1.58	n	35:48	0.005	S2N	0.71 n	0.93 n n
	23	7.94E+03	6310	1630	3.86	n	35:50	0.006	S2N	1.5 n	0.6 n n
	24	4.29E+03	1890	2400	0.79	n	35:57	0.003	S2N	0.56 n	0.75 n n
	25	4.78E+03	2210	2560	0.86	n	36:02	0.004	S2N	0.61 n	0.88 n n
1,2,3,7,8,9-HxCDF	26	4.77E+04	27400	20300	1.35	y	36:08	0.042	S2N	3.4 y	3.7 y y
	27	3.99E+03	1580	2410	0.66	n	36:15	0.003	S2N	0.69 n	1.4 n n
	28	3.51E+03	1100	2410	0.46	n	36:18	0.003	S2N	0.38 n	1.4 n n
	29	4.02E+03	1910	2110	0.91	n	36:20	0.003	S2N	0.63 n	0.81 n n
	30	4.52E+03	2900	1630	1.78	n	36:23	0.004	RT	1.1 n	0.77 n n
	31	2.03E+03	1170	859	1.36	y	36:26	0.002	RT	0.51 n	0.41 n n
	32	3.59E+03	2220	1370	1.62	n	36:29	0.003	RT	0.74 n	0.55 n n
	33	5.70E+03	3720	1980	1.88	n	36:32	0.004	RT	0.66 n	1.2 n n
	34	3.02E+03	1360	1660	0.82	n	36:36	0.002	RT	0.4 n	0.73 n n
	35	2.75E+03	732	2020	0.36	n	36:38	0.002	RT	0.25 n	1.3 n n
	36	2.95E+03	937	2020	0.46	n	36:40	0.002	RT	0.33 n	1.3 n n
	37	5.14E+03	2320	2830	0.82	n	36:43	0.004	RT	0.6 n	1 n n

Filename:	b23aug99a	Name of Homolog Group:	Total Hexa-Dioxins
Sample:	8	Number of Peaks Found:	19
Acquired:	23-AUG-99 20:52:07	RRF Used For Totals:	0.9699
Processed:	24-AUG-99 08:04:35	Detection Limit:	0.0693
Sample ID:	70736 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	34:17:00
Results Table:	m8290-b082399a	End Window:	35:55:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	1.74E+05	92400	81600		1.13 y	34:26	0.199	OK	13 y		9.6 y	n	
	2	4.80E+05	282000	197000		1.43 n	34:51	0.548	EMPC	28 y		24 y	n	

	3	6.43E+05	352000	292000	1.21 y	35:02	0.736	OK	31 y	24 y	n
	4	1.07E+04	8560	2130	4.02 n	35:15	0.012	S2N	1.2 n	0.43 n	n
	5	6.30E+03	3460	2840	1.22 y	35:18	0.007	S2N	0.81 n	0.44 n	n
1,2,3,4,7,8-HxCDD	6	9.65E+04	52300	44200	1.18 y	35:34	0.114	OK	5.4 y	4.5 y	n
1,2,3,6,7,8-HxCDD	7	1.90E+05	111000	79000	1.41 y	35:37	0.22	OK	11 y	8.3 y	n
	8	8.34E+04	45700	37800	1.21 y	35:46	0.095	S2N	4.6 y	3.5 y	n
1,2,3,7,8,9-HxCDD	9	1.81E+05	105000	76400	1.37 y	35:50	0.197	OK	9.6 y	7.2 y	n
	10	7.84E+03	4340	3510	1.24 y	35:58	0.009	RT	1.1 n	0.79 n	n
	11	1.15E+04	6520	4950	1.32 y	36:00	0.013	RT	1.4 n	0.7 n	n
	12	1.10E+04	6050	4950	1.22 y	36:02	0.013	RT	1.5 n	0.7 n	n
	13	1.41E+04	6630	7460	0.89 n	36:04	0.016	RT	0.75 n	1.3 n	n
	14	1.30E+04	6990	6030	1.16 y	36:10	0.015	RT	1.1 n	0.91 n	n
	15	8.68E+03	4660	4020	1.16 y	36:14	0.01	RT	1.1 n	0.54 n	n
	16	1.35E+04	7080	6470	1.09 y	36:18	0.015	RT	0.85 n	0.84 n	n
	17	9.80E+03	3330	6470	0.51 n	36:21	0.011	RT	0.93 n	0.84 n	n
	18	1.02E+04	5820	4400	1.32 y	36:24	0.012	RT	1.1 n	0.69 n	n
	19	1.03E+04	4960	5380	0.92 n	36:29	0.012	RT	0.65 n	1 n	n

Filename:	b23aug99a	Name of Homolog Group:	Total Hepta-Furans
Sample:	8	Number of Peaks Found:	13
Acquired:	23-AUG-99 20:52:07	RRF Used For Totals:	1.3281
Processed:	24-AUG-99 08:04:35	Detection Limit:	0.0295
Sample ID:	70736 x1/2		
Cal Table:	m8290-b060499a	Begin Window:	37:15:00
Results Table:	m8290-b082399a	End Window:	39:21:00

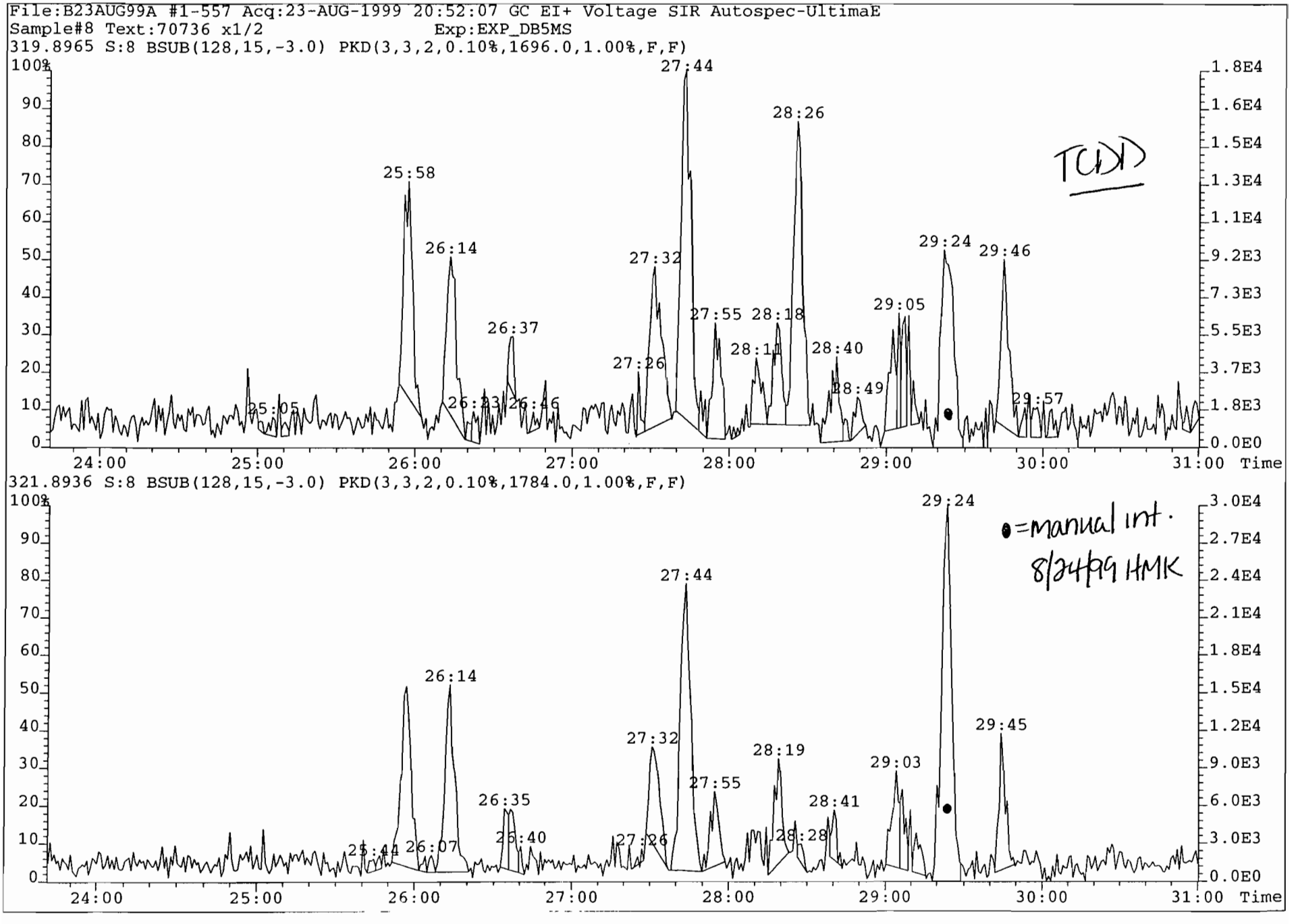
Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
1,2,3,4,6,7,8-HpCDI	1	4.87E+05	251000	236000		1.07 y	37:26	0.421	OK		64 y		41 y	n
	2	1.14E+05	52600	61000		0.86 n	37:44	0.11	EMPC		13 y		9.7 y	n
	3	9.18E+04	46900	44900		1.04 y	37:54	0.089	OK		12 y		10 y	n
	4	6.86E+03	2200	4660		0.47 n	38:05	0.007	S2N		0.72 n		1.7 n	n
	5	9.89E+03	4520	5370		0.84 n	38:33	0.01	S2N		1.3 n		1.3 n	n
1,2,3,4,7,8,9-HpCDI	6	5.30E+04	26700	26300		1.01 y	39:08	0.058	OK		8.7 y		5.1 y	n
	7	4.84E+03	2730	2110		1.29 n	39:16	0.005	S2N		1.4 n		0.61 n	n
	8	4.07E+03	1140	2930		0.39 n	39:39	0.004	RT		0.62 n		0.79 n	n
	9	3.42E+03	2080	1350		1.54 n	39:41	0.003	RT		0.79 n		0.46 n	n
	10	5.11E+03	2730	2380		1.15 y	39:47	0.005	RT		1 n		0.54 n	n
	11	2.74E+03	1170	1570		0.74 n	39:57	0.003	RT		0.52 n		0.61 n	n
	12	2.37E+03	899	1470		0.61 n	40:24	0.002	RT		0.5 n		0.42 n	n
	13	2.30E+03	837	1470		0.57 n	40:25	0.002	RT		0.44 n		0.42 n	n

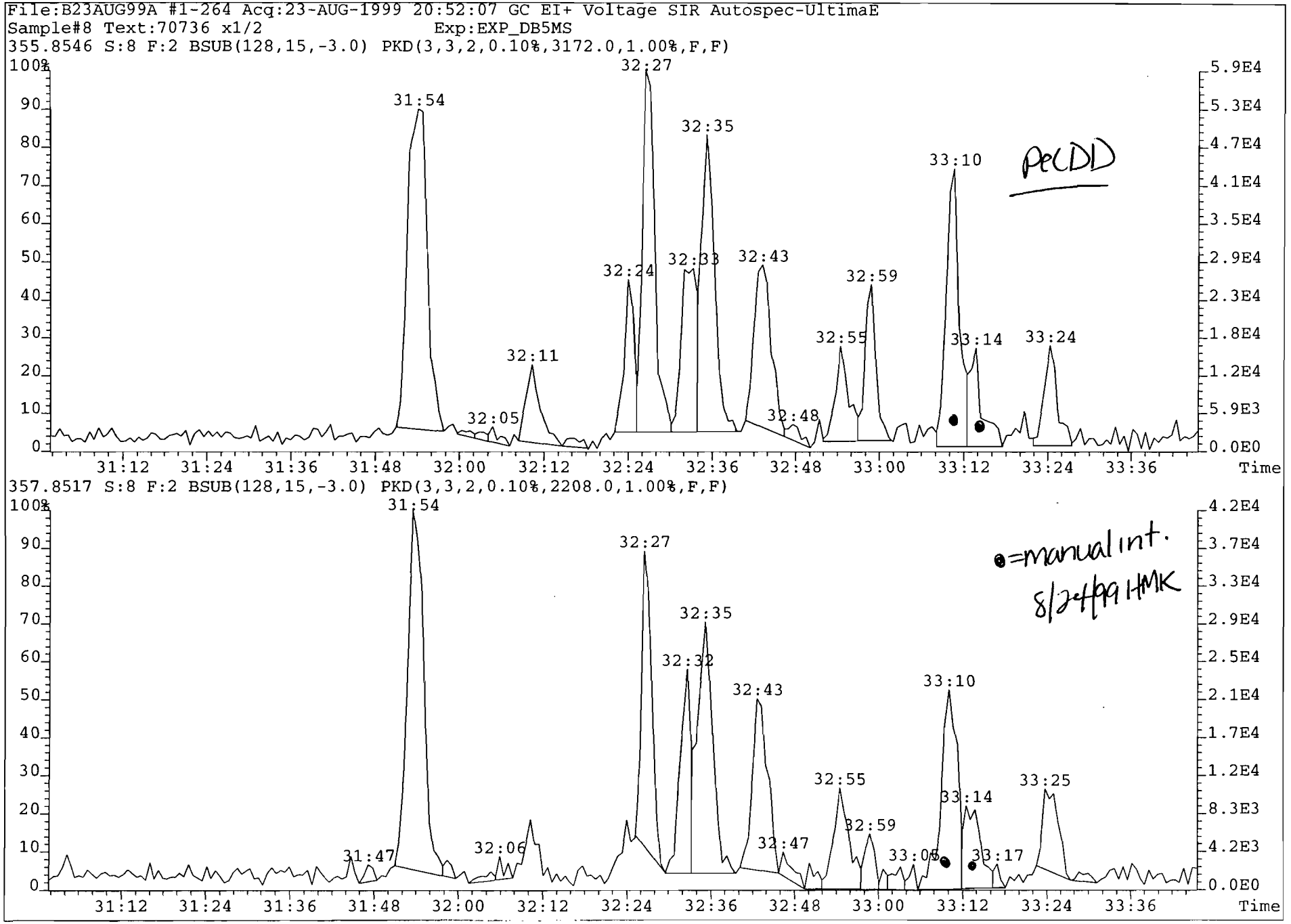
Filename:	b23aug99a	Name of Homolog Group:	Total Hepta-Dioxins
Sample:	8	Number of Peaks Found:	11
Acquired:	23-AUG-99 20:52:07	RRF Used For Totals:	0.944
Processed:	[redacted]AUG-99 08:04:35	Detection Limit:	0.0709

Totals Raw Data

Sample ID: [redacted]0736 x1/2
Cal Table: m8290-b060499a
Results Table: m8290-b082399a
Begin Window: 37:32:00
End Window: 37:52:00

Name	#	Response	Ion 1	Ion 2	RA	?	RT	Conc	Status	S/N1	?	S/N2	?	Mod?
	1	4.88E+04	35300	13500	2.62	n	37:26	0.061	RT	5.2	y	2.5	n	n
	2	1.14E+06	562000	574000	0.98	y	37:44	1.412	OK	66	y	75	y	n
	3	1.83E+04	6680	11600	0.57	n	37:50	0.023	DL	2.5	n	2.1	n	n
	4	2.15E+04	9890	11600	0.85	n	37:52	0.027	DL	2.3	n	2.1	n	n
	5	8.10E+03	4700	3400	1.38	n	38:02	0.01	RT	0.72	n	0.83	n	n
	6	9.17E+03	5040	4130	1.22	n	38:15	0.011	RT	0.95	n	0.75	n	n
1,2,3,4,6,7,8-HpCDI	7	1.30E+06	651000	647000	1.01	y	38:33	1.614	RT	69	y	79	y	n
	8	3.45E+04	22000	12500	1.77	n	39:07	0.043	RT	2.6	n	1.7	n	n
	9	7.11E+03	3630	3470	1.05	y	39:22	0.009	RT	0.61	n	0.82	n	n
	10	1.03E+04	5180	5150	1.01	y	40:30	0.013	RT	0.78	n	0.81	n	n
	11	4.09E+03	1880	2220	0.85	n	40:32	0.005	RT	0.55	n	0.56	n	n


File:B23AUG99A #1-557 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
319.8965 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1696.0,1.00%,F,F)
25:58
26:14
26:37
27:44
27:32
27:55
28:18
28:26
28:40
29:05
29:24
29:46
TCDD
321.8936 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1784.0,1.00%,F,F)
26:14
26:35
27:44
27:32
27:55
28:19
28:41
29:03
29:24
29:45
●=manual int.
8/24/99 HMK
Time


File:B23AUG99A #1-264 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
355.8546 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3172.0,1.00%,F,F)
31:54
32:27
32:35
33:10
PeCDD
32:24
32:33
32:43
32:59
32:11
32:55
33:14
33:24
32:05
32:48
Time
357.8517 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2208.0,1.00%,F,F)
31:54
32:27
●=manual int.
8/24/99 HMK
32:35
32:32
32:43
33:10
32:55
33:25
33:14
32:59
31:47
32:06
32:47
33:05
33:17
Time

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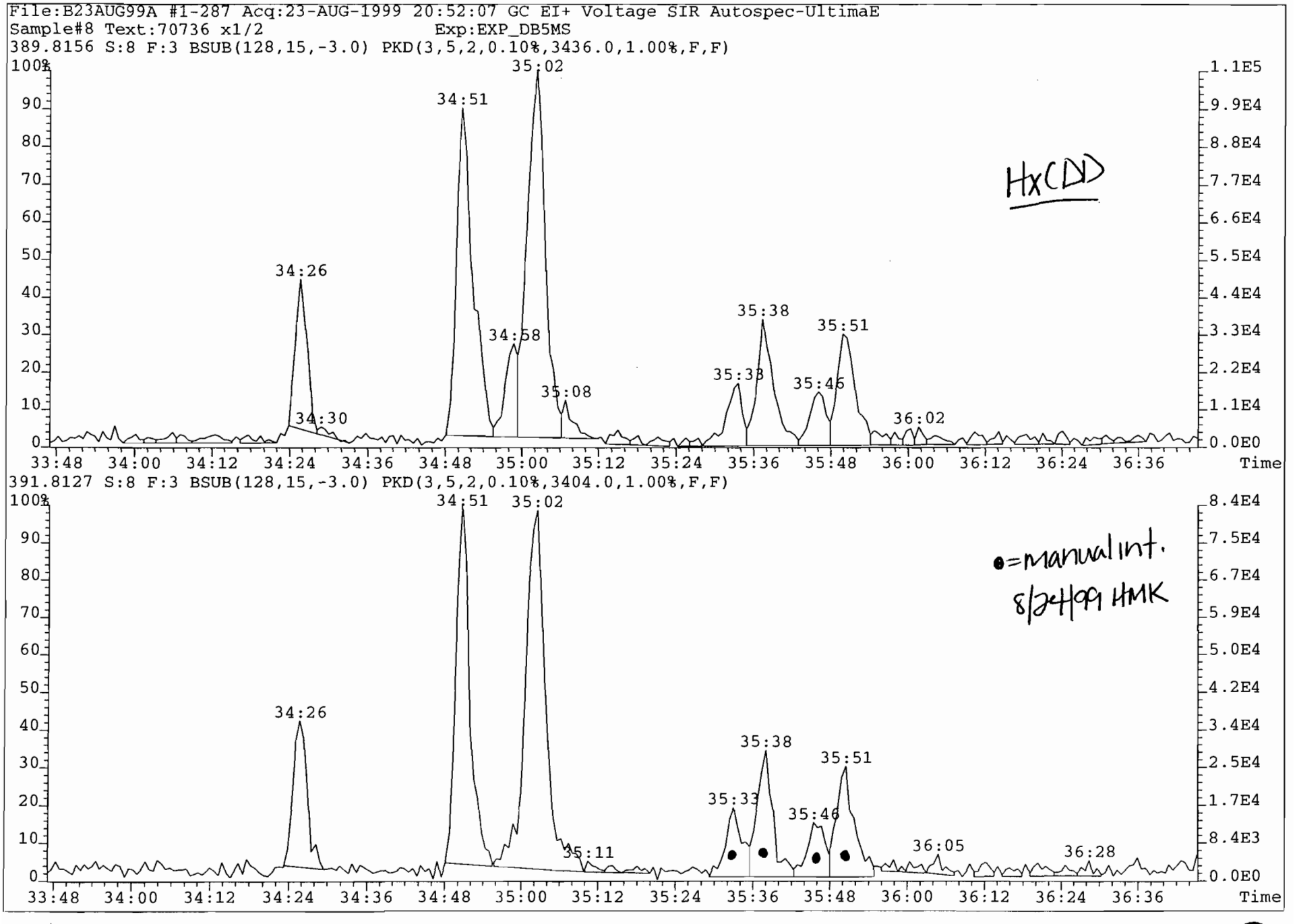
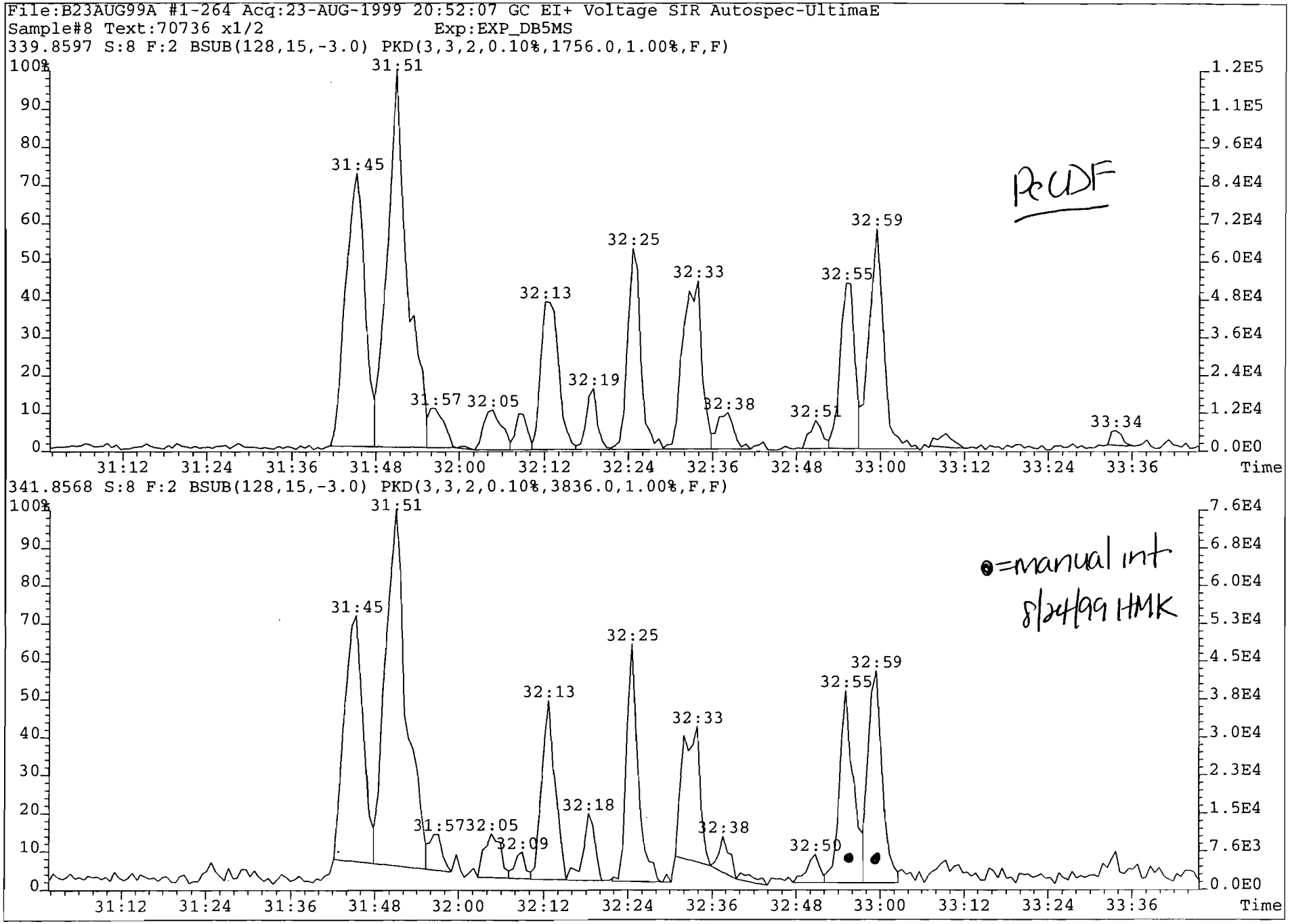
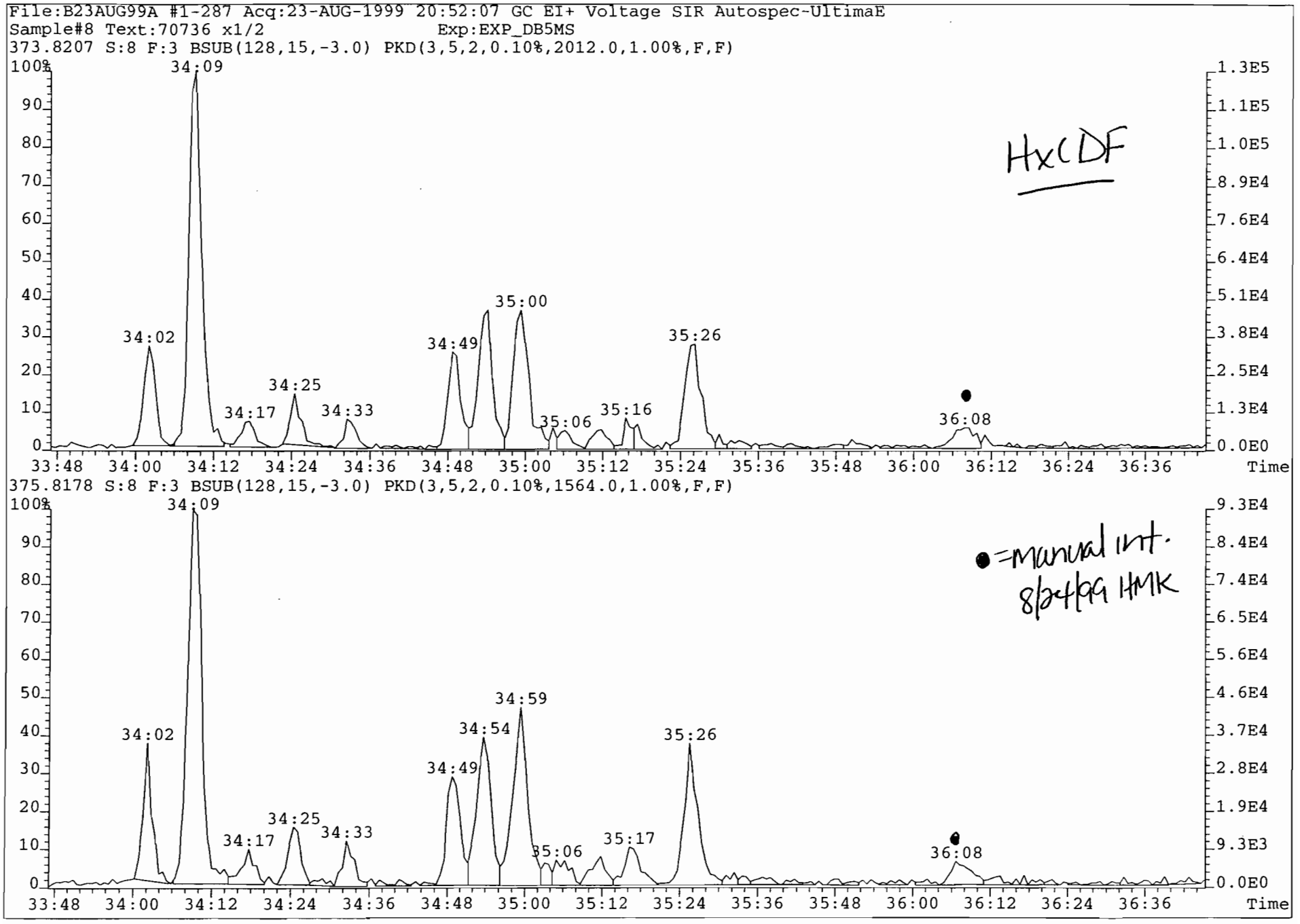
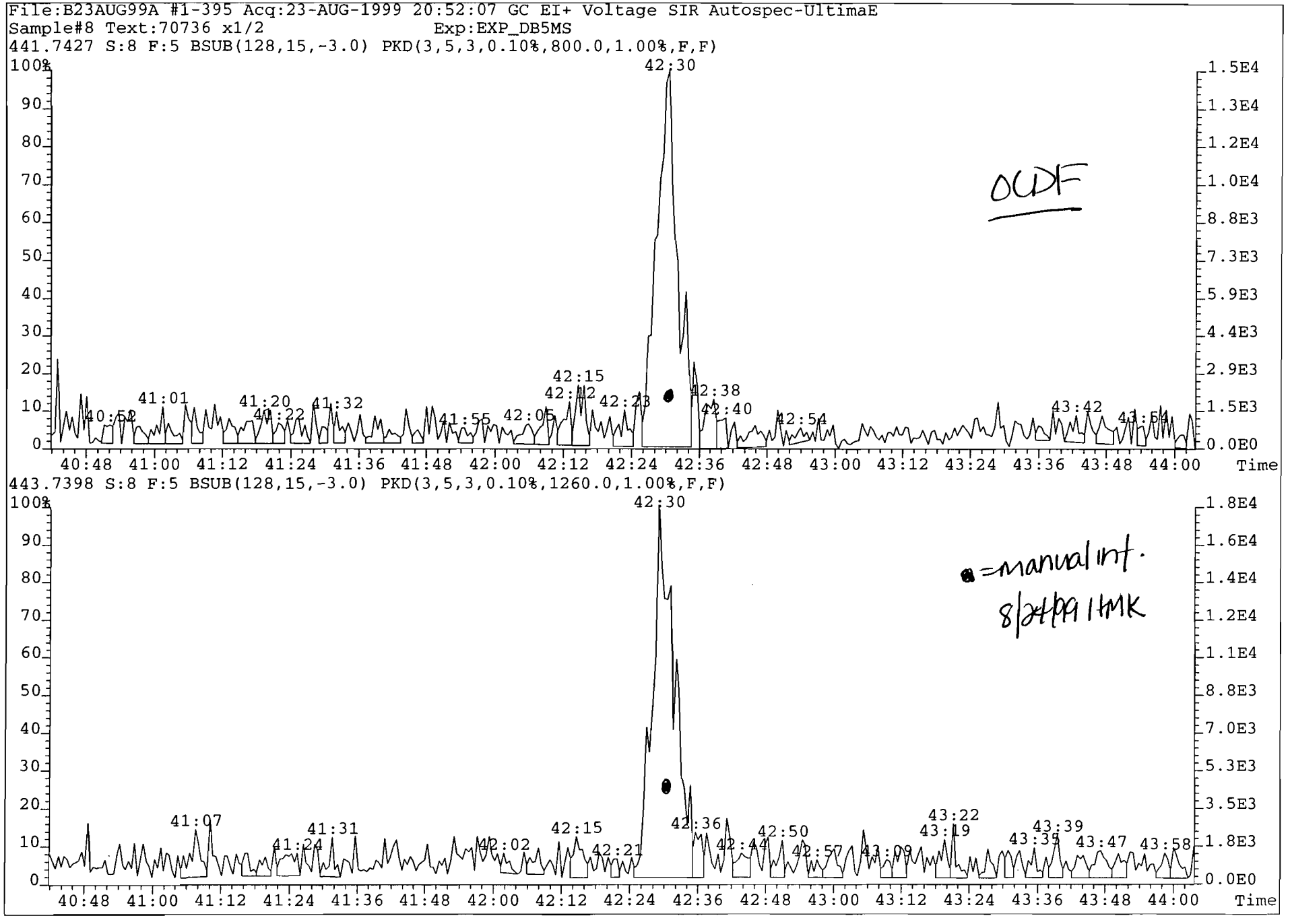

File:B23AUG99A #1-287 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
389.8156 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3436.0,1.00%,F,F)
34:26
34:30
34:51
34:58
35:02
35:08
35:33
35:38
35:46
35:51
36:02
Hx(Cl)
391.8127 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3404.0,1.00%,F,F)
34:26
34:51
35:02
35:11
35:33
35:38
35:46
35:51
36:05
36:28
●=manual int.
8/24/99 HMK
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36
Time


File:B23AUG99A #1-264 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
339.8597 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1756.0,1.00%,F,F)
31:51
31:45
31:57
32:05
32:13
32:19
32:25
32:33
32:38
32:51
32:55
32:59
33:34
PeCDF
Time
341.8568 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3836.0,1.00%,F,F)
31:51
31:45
31:57
32:05
32:09
32:13
32:18
32:25
32:33
32:38
32:50
32:55
32:59
●=manual int
8/24/99 HMK
Time


File:B23AUG99A #1-287 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
373.8207 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,2012.0,1.00%,F,F)
100%
34:09
34:02
34:17
34:25
34:33
34:49
35:00
35:06
35:16
35:26
36:08
HxCDF
1.3E5
1.1E5
1.0E5
8.9E4
7.6E4
6.4E4
5.1E4
3.8E4
2.5E4
1.3E4
0.0E0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36 Time
375.8178 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,1564.0,1.00%,F,F)
100%
34:09
34:02
34:17
34:25
34:33
34:49
34:54
34:59
35:06
35:17
35:26
36:08
●=manual int.
8/24/99 HMK
9.3E4
8.4E4
7.4E4
6.5E4
5.6E4
4.6E4
3.7E4
2.8E4
1.9E4
9.3E3
0.0E0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36 Time


File:B23AUG99A #1-395 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
441.7427 S:8 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,800.0,1.00%,F,F)
OCDF
443.7398 S:8 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1260.0,1.00%,F,F)
*=manual int.
8/24/99 HMK
Time

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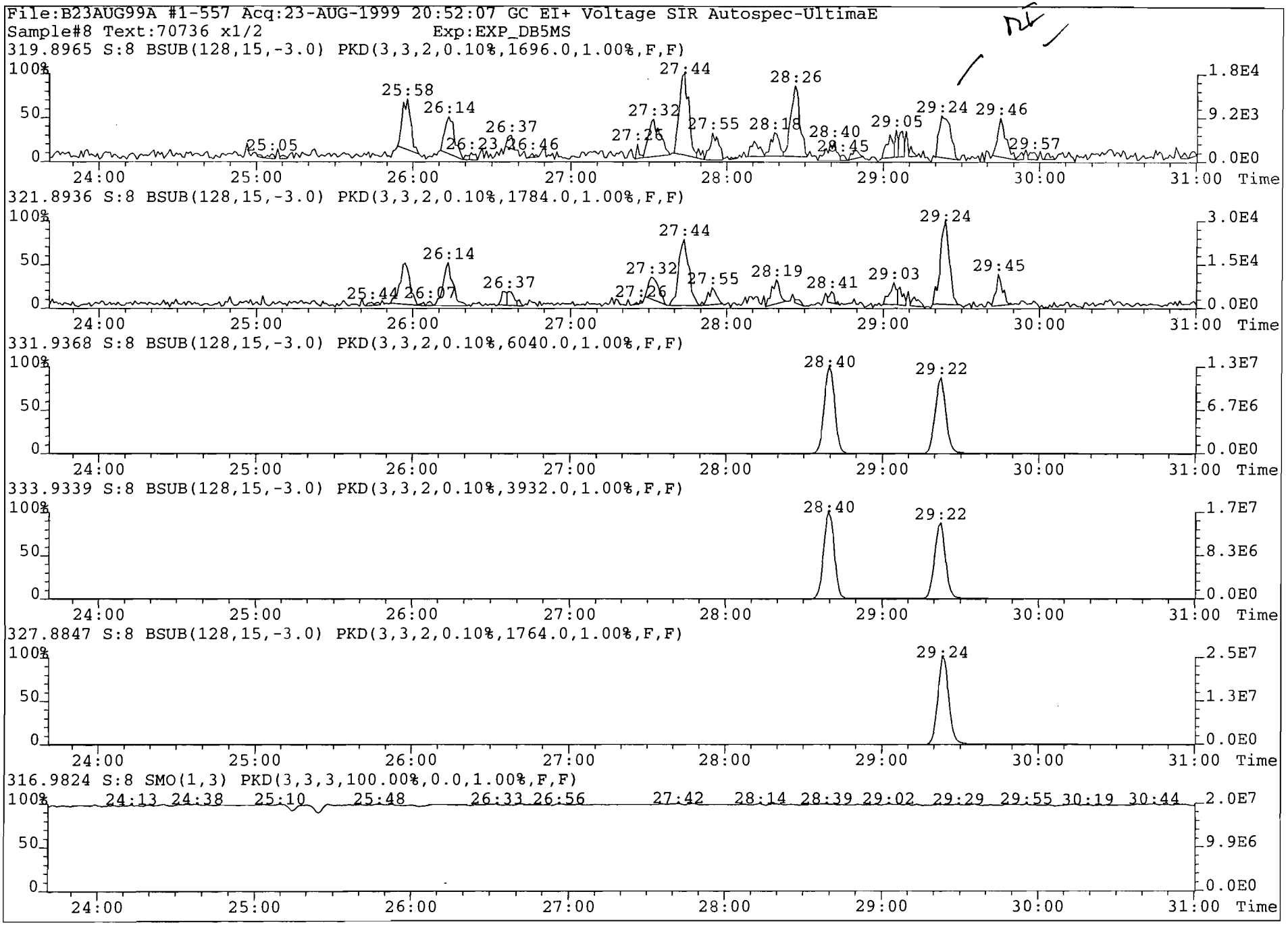
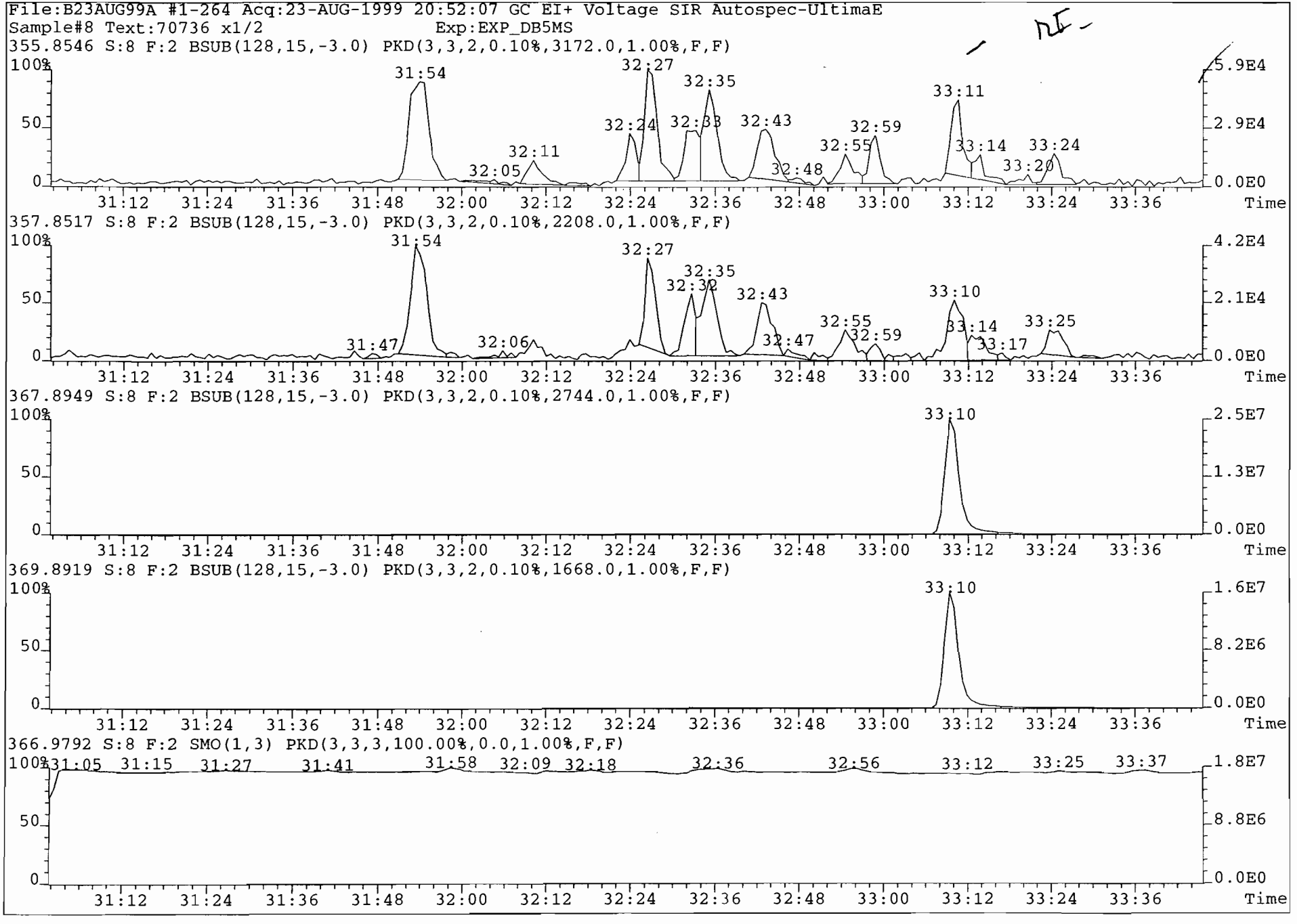
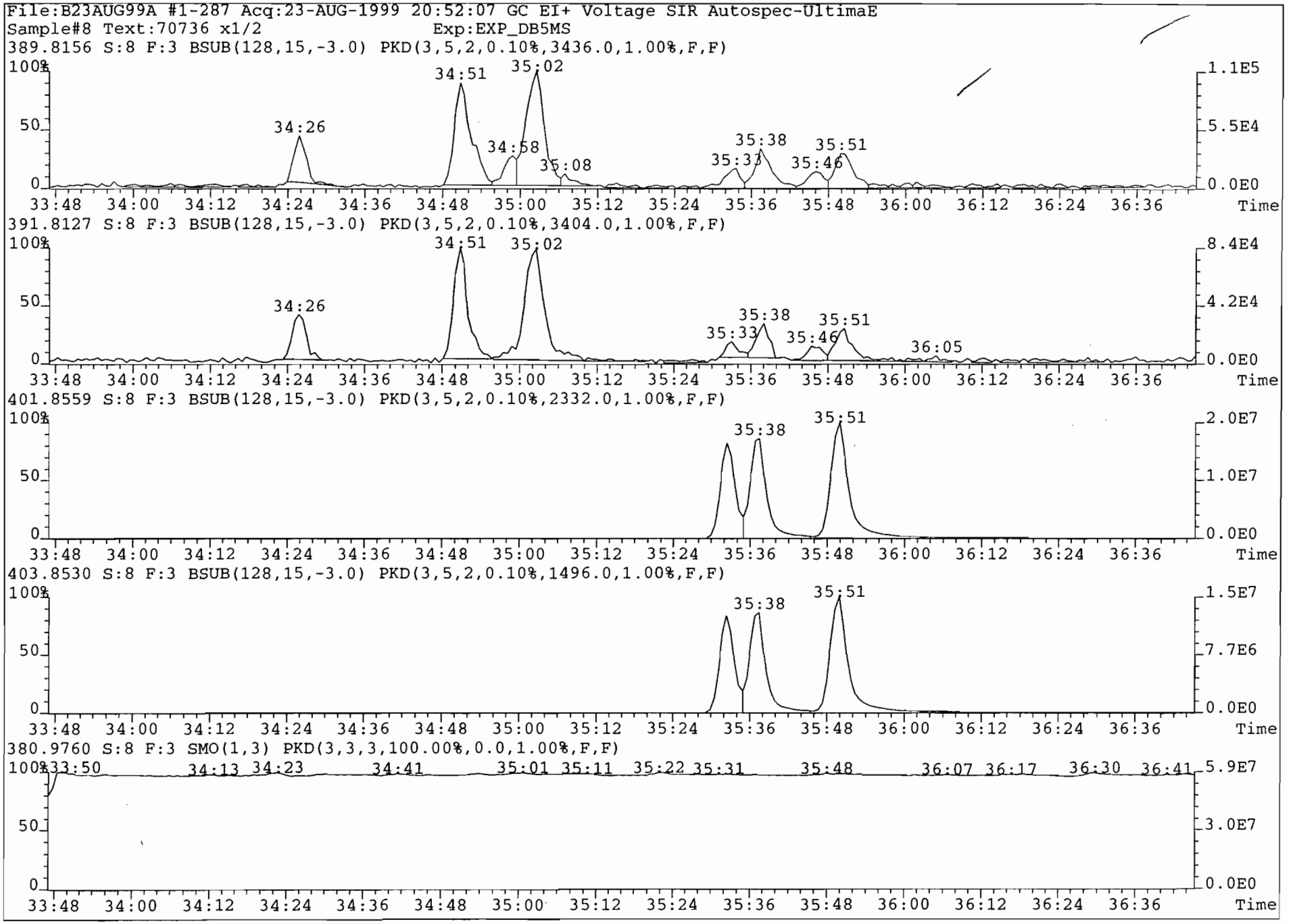
M.I.

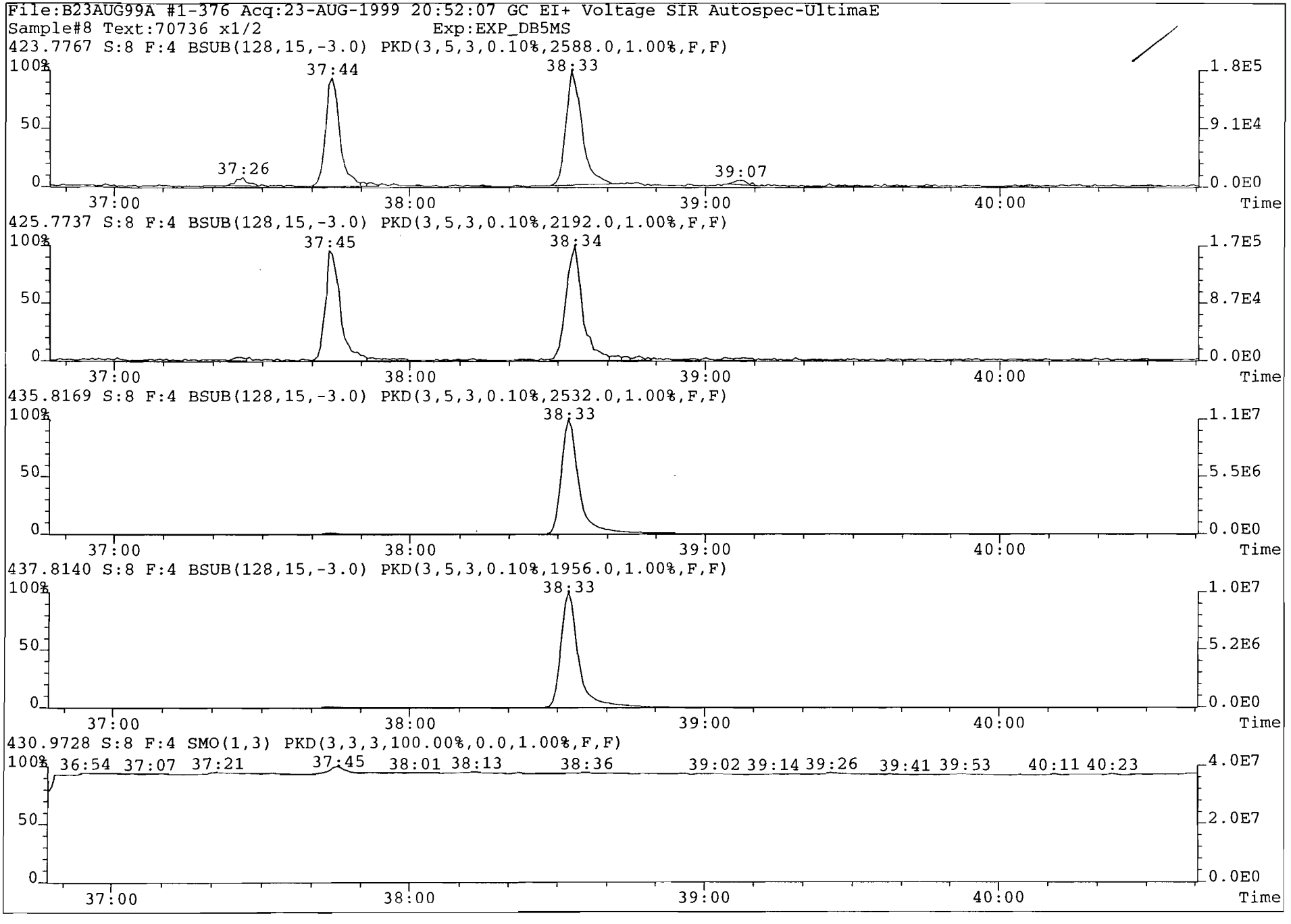
Filename ; b23aug99a
Sample ; 8
Acquired ; 23-AUG-99 20:52:07
Processed ; 24-AUG-99 08:04:35
Sample ID ; 70736 x1/2
Cal Table ; m8290-b060499a
Results Table ; M8290-B082399A
Comments ;

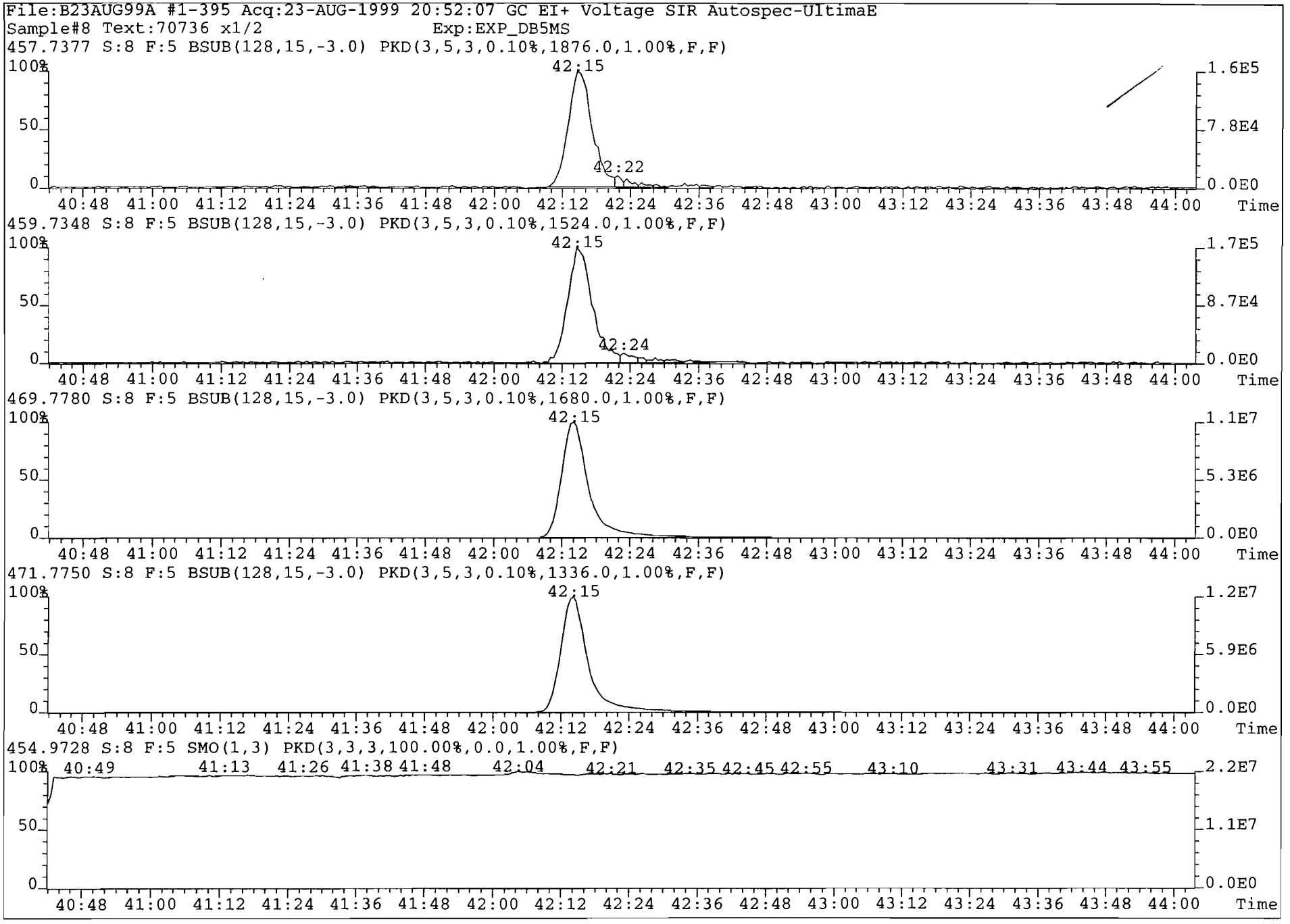
Typ	Name;	Resp;	Ion 1;	Ion 2;	RA;?;	RT;	Conc;	DL;	S/N1;?;	S/N2;? ;	mod?
Unk	2,3,7,8-TCDD;	1.59e+05;	4.42e+04;	1.15e+05;	0.38;n;	29:22;	0.122;	0.0368;	5;y;	16;y ;	no
Unk	1,2,3,7,8-PeCDD;	9.45e+04;	7.01e+04;	2.44e+04;	2.88;n;	33:11;	0.099;	0.0393;	12;y;	4;y ;	no
Unk	1,2,3,4,7,8-HxCDD;	7.68e+04;	5.23e+04;	2.45e+04;	2.13;n;	35:34;	0.091;	0.0719;	5;y;	3;y ;	no
Unk	1,2,3,6,7,8-HxCDD;	1.68e+05;	1.11e+05;	5.64e+04;	1.97;n;	35:37;	0.194;	0.0701;	11;y;	7;y ;	no
Unk	1,2,3,7,8,9-HxCDD;	1.73e+05;	1.05e+05;	6.87e+04;	1.52;n;	35:50;	0.189;	0.0661;	10;y;	7;y ;	no
Unk	1,2,3,4,6,7,8-HpCDD;	1.30e+06;	6.51e+05;	6.47e+05;	1.01;y;	38:33;	1.614;	0.0709;	69;y;	79;y ;	no
Unk	OCDD;	1.59e+06;	7.35e+05;	8.55e+05;	0.86;y;	42:15;	2.629;	0.0906;	82;y;	114;y ;	no
Unk	2,3,7,8-TCDF;	1.52e+05;	6.92e+04;	8.23e+04;	0.84;y;	28:27;	0.091;	0.0359;	9;y;	8;y ;	no
Unk	1,2,3,7,8-PeCDF;	2.21e+05;	1.33e+05;	8.80e+04;	1.52;y;	32:25;	0.160;	0.0264;	36;y;	12;y ;	no
Unk	2,3,4,7,8-PeCDF;	2.49e+05;	1.65e+05;	8.41e+04;	1.96;n;	32:59;	0.176;	0.0257;	40;y;	10;y ;	no
Unk	1,2,3,4,7,8-HxCDF;	2.15e+05;	1.20e+05;	9.48e+04;	1.27;y;	34:54;	0.163;	0.0237;	23;y;	23;y ;	no
Unk	1,2,3,6,7,8-HxCDF;	2.45e+05;	1.31e+05;	1.13e+05;	1.16;y;	34:59;	0.168;	0.0214;	23;y;	28;y ;	no
Unk	2,3,4,6,7,8-HxCDF;	1.84e+05;	1.01e+05;	8.30e+04;	1.21;y;	35:26;	0.147;	0.0249;	18;y;	22;y ;	no
Unk	1,2,3,7,8,9-HxCDF;	3.56e+04;	1.52e+04;	2.03e+04;	0.75;n;	36:09;	0.031;	0.0275;	3;n;	4;y ;	no
Unk	1,2,3,4,6,7,8-HpCDF;	4.87e+05;	2.51e+05;	2.36e+05;	1.07;y;	37:26;	0.421;	0.0263;	64;y;	41;y ;	no
Unk	1,2,3,4,7,8,9-HpCDF;	5.30e+04;	2.67e+04;	2.63e+04;	1.01;y;	39:08;	0.058;	0.0335;	9;y;	5;y ;	no
Unk	OCDF;	6.40e+04;	5.22e+04;	1.17e+04;	4.46;n;	42:30;	0.097;	0.0504;	18;y;	11;y ;	no
ES/RT;	13C-2,3,7,8-TCDD;	1.21e+08;	5.34e+07;	6.71e+07;	0.80;y;	29:22;	82.602;	0.0936;	1940;y;	3686;y ;	no
ES ;	13C-1,2,3,7,8-PeCDD;	9.66e+07;	5.89e+07;	3.77e+07;	1.56;y;	33:09;	77.274;	0.0484;	9237;y;	9815;y ;	no
ES ;	13C-1,2,3,6,7,8-HxCDD;	9.02e+07;	5.08e+07;	3.94e+07;	1.29;y;	35:37;	80.272;	0.0326;	7345;y;	8954;y ;	no
ES ;	13C-1,2,3,4,6,7,8-HpCDD;	8.52e+07;	4.36e+07;	4.16e+07;	1.05;y;	38:32;	88.099;	0.0444;	4337;y;	5338;y ;	no
ES ;	13C-OCDD;	1.20e+08;	5.68e+07;	6.29e+07;	0.90;y;	42:14;	144.522;	0.0348;	6290;y;	8776;y ;	no
ES/RT;	13C-2,3,7,8-TCDF;	1.69e+08;	7.45e+07;	9.43e+07;	0.79;y;	28:26;	81.840;	0.0243;	10702;y;	9576;y ;	no
ES ;	13C-1,2,3,7,8-PeCDF;	1.45e+08;	8.85e+07;	5.61e+07;	1.58;y;	32:24;	78.171;	0.0275;	22120;y;	13822;y ;	no
ES ;	13C-1,2,3,6,7,8-HxCDF;	1.20e+08;	4.05e+07;	7.99e+07;	0.51;y;	34:59;	81.481;	0.0487;	3068;y;	9364;y ;	no
ES ;	13C-1,2,3,4,6,7,8-HpCDF;	7.78e+07;	2.42e+07;	5.37e+07;	0.45;y;	37:25;	79.058;	0.0843;	1772;y;	3529;y ;	no
JS ;	13C-1,2,3,4-TCDD;	1.37e+08;	6.08e+07;	7.57e+07;	0.80;y;	28:40;	106.266;	-;	2210;y;	4206;y ;	no
JS ;	13C-1,2,3,7,8,9-HxCDD;	1.13e+08;	6.33e+07;	4.95e+07;	1.28;y;	35:50;	106.358;	-;	8547;y;	10356;y ;	no
CS ;	37Cl-2,3,7,8-TCDD;	1.19e+08;	1.19e+08;	-;	-;-;	29:22;	81.493;	0.0165;	14408;y;	-; -;	no
CS ;	13C-2,3,4,7,8-PeCDF;	1.42e+08;	8.71e+07;	5.49e+07;	1.59;y;	32:59;	80.223;	0.0287;	21422;y;	13140;y ;	no
CS ;	13C-1,2,3,4,7,8-HxCDD;	7.50e+07;	4.19e+07;	3.30e+07;	1.27;y;	35:32;	78.574;	0.0383;	7042;y;	8695;y ;	no
CS ;	13C-1,2,3,4,7,8-HxCDF;	9.72e+07;	3.39e+07;	6.33e+07;	0.53;y;	34:53;	74.044;	0.0549;	2939;y;	9039;y ;	no
CS ;	13C-1,2,3,4,7,8,9-HpCDF;	6.78e+07;	2.08e+07;	4.70e+07;	0.44;y;	39:06;	81.610;	0.1000;	1207;y;	2444;y ;	no
SS ;	37Cl-2,3,7,8-TCDD;	1.19e+08;	1.19e+08;	-;	-;-;	29:22;	98.672;	0.0202;	14408;y;	-; -;	no
SS ;	13C-2,3,4,7,8-PeCDF;	1.42e+08;	8.71e+07;	5.49e+07;	1.59;y;	32:59;	102.639;	0.0175;	21422;y;	13140;y ;	no
SS ;	13C-1,2,3,4,7,8-HxCDD;	7.50e+07;	4.19e+07;	3.30e+07;	1.27;y;	35:32;	97.865;	0.0443;	7042;y;	8695;y ;	no
SS ;	13C-1,2,3,4,7,8-HxCDF;	9.72e+07;	3.39e+07;	6.33e+07;	0.53;y;	34:53;	90.852;	0.0612;	2939;y;	9039;y ;	no
SS ;	13C-1,2,3,4,7,8,9-HpCDF;	6.78e+07;	2.08e+07;	4.70e+07;	0.44;y;	39:06;	103.229;	0.1318;	1207;y;	2444;y ;	no

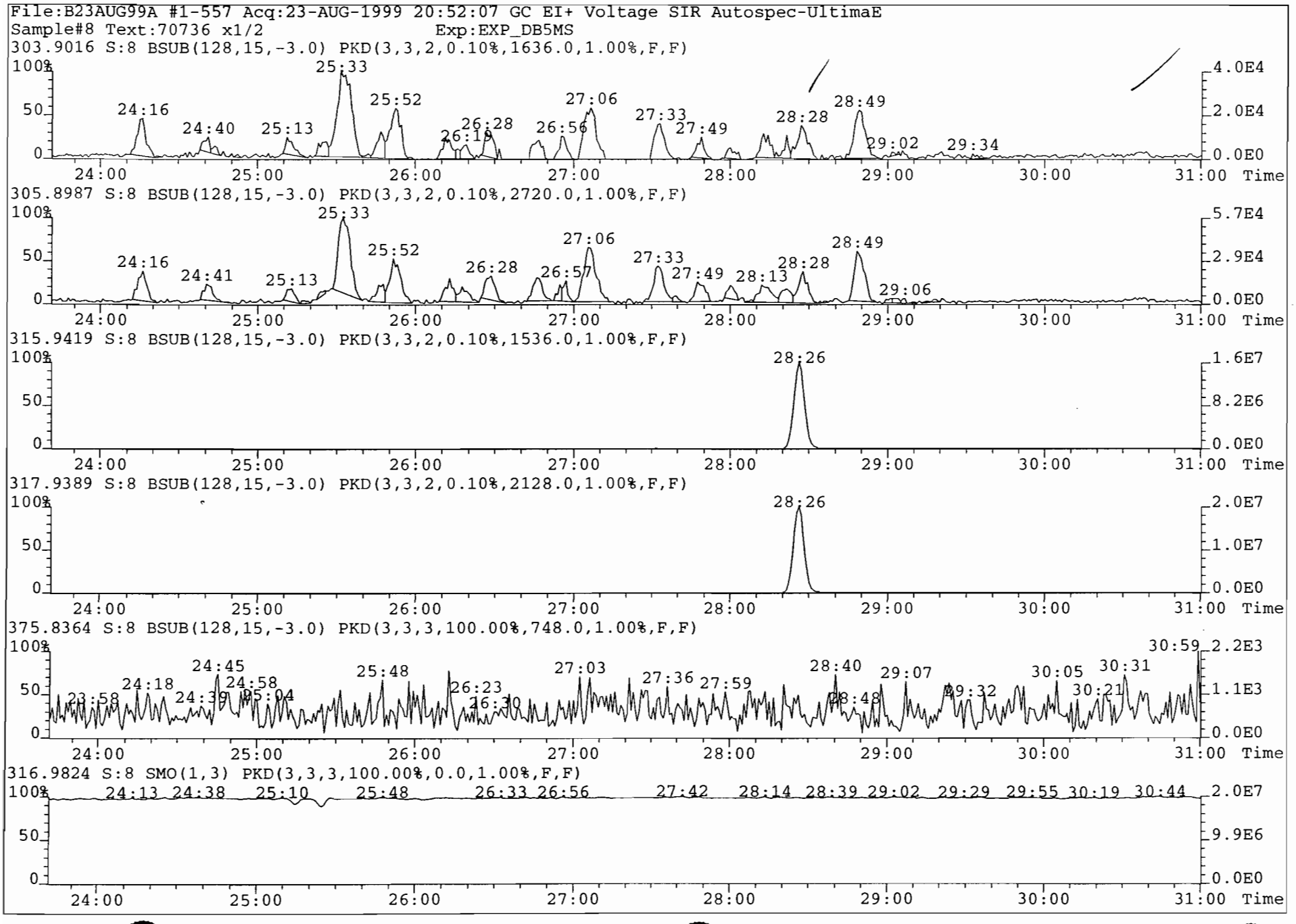

File:B23AUG99A #1-557 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
319.8965 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1696.0,1.00%,F,F)
321.8936 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1784.0,1.00%,F,F)
331.9368 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,6040.0,1.00%,F,F)
333.9339 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3932.0,1.00%,F,F)
327.8847 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1764.0,1.00%,F,F)
316.9824 S:8 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
Time

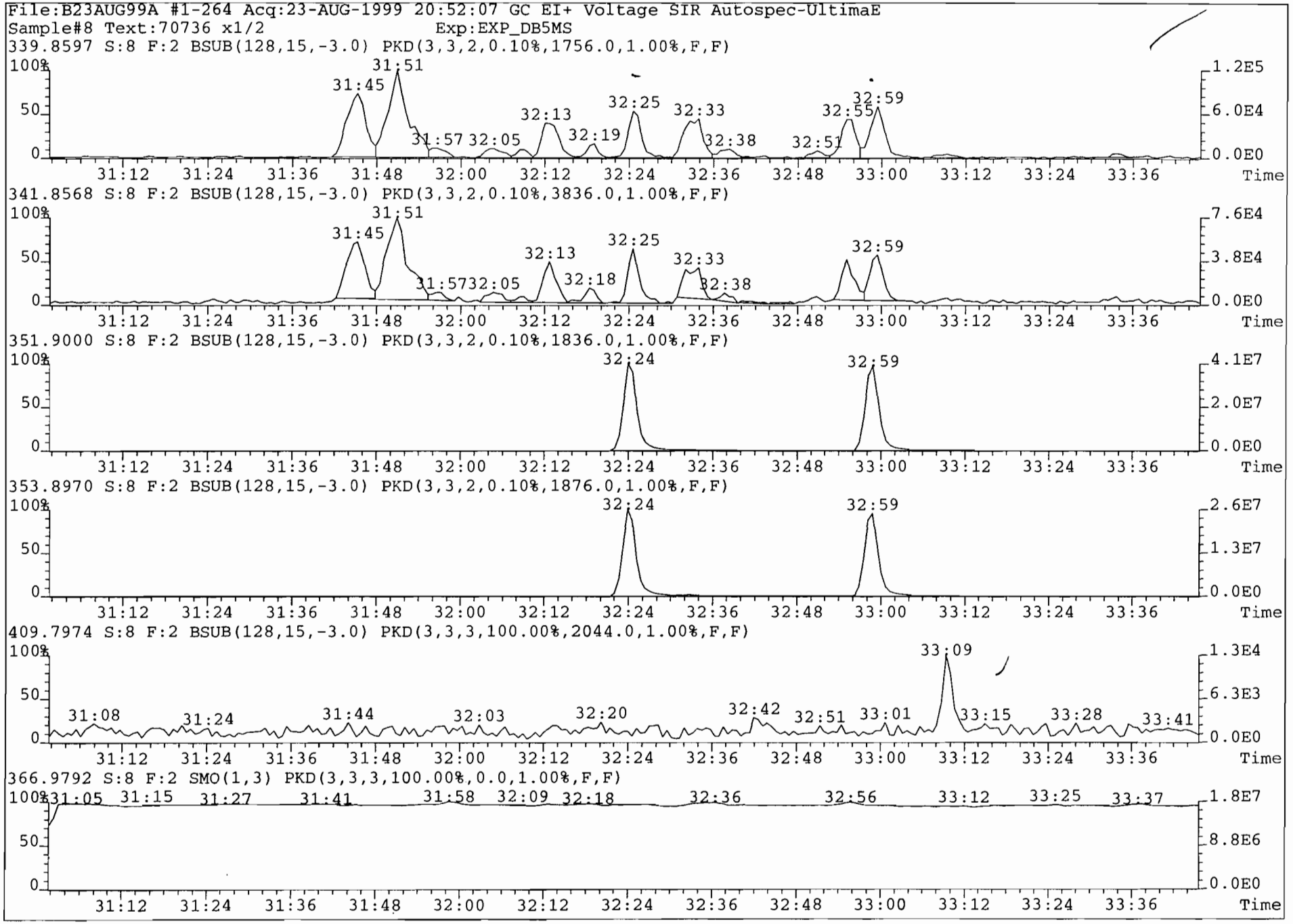

File:B23AUG99A #1-264 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
355.8546 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3172.0,1.00%,F,F)
100%
50
0
31:54
32:27
32:35
33:11
32:24
32:33
32:43
32:59
32:55
32:11
32:05
32:48
33:14
33:24
33:20
5.9E4
2.9E4
0.0E0
31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36
Time
357.8517 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2208.0,1.00%,F,F)
100%
50
0
31:54
32:27
32:35
32:32
32:43
33:10
32:55
32:59
33:14
33:25
31:47
32:06
32:47
33:17
4.2E4
2.1E4
0.0E0
31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36
Time
367.8949 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2744.0,1.00%,F,F)
100%
50
0
33:10
2.5E7
1.3E7
0.0E0
31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36
Time
369.8919 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1668.0,1.00%,F,F)
100%
50
0
33:10
1.6E7
8.2E6
0.0E0
31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36
Time
366.9792 S:8 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
100%
50
0
31:05 31:15 31:27 31:41 31:58 32:09 32:18 32:36 32:56 33:12 33:25 33:37
1.8E7
8.8E6
0.0E0
31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36
Time

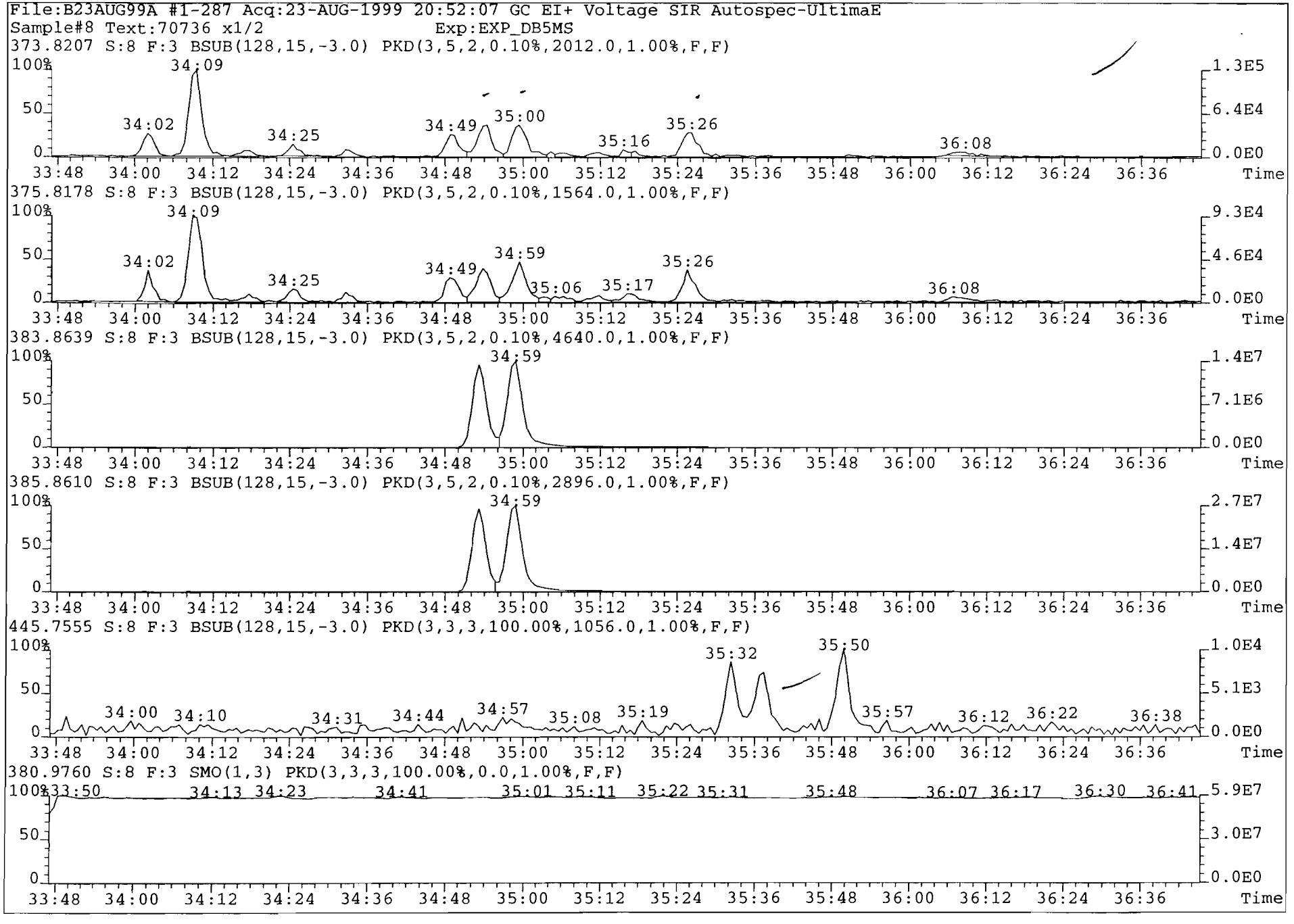

File:B23AUG99A #1-287 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
389.8156 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3436.0,1.00%,F,F)
34:26
34:51
35:02
34:58
35:08
35:33
35:38
35:46
35:51
1.1E5
5.5E4
0.0E0
391.8127 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3404.0,1.00%,F,F)
34:26
34:51
35:02
35:33
35:38
35:46
35:51
36:05
8.4E4
4.2E4
0.0E0
401.8559 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,2332.0,1.00%,F,F)
35:38
35:51
2.0E7
1.0E7
0.0E0
403.8530 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,1496.0,1.00%,F,F)
35:38
35:51
1.5E7
7.7E6
0.0E0
380.9760 S:8 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
33:50
34:13
34:23
34:41
35:01
35:11
35:22
35:31
35:48
36:07
36:17
36:30
36:41
5.9E7
3.0E7
0.0E0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36
Time

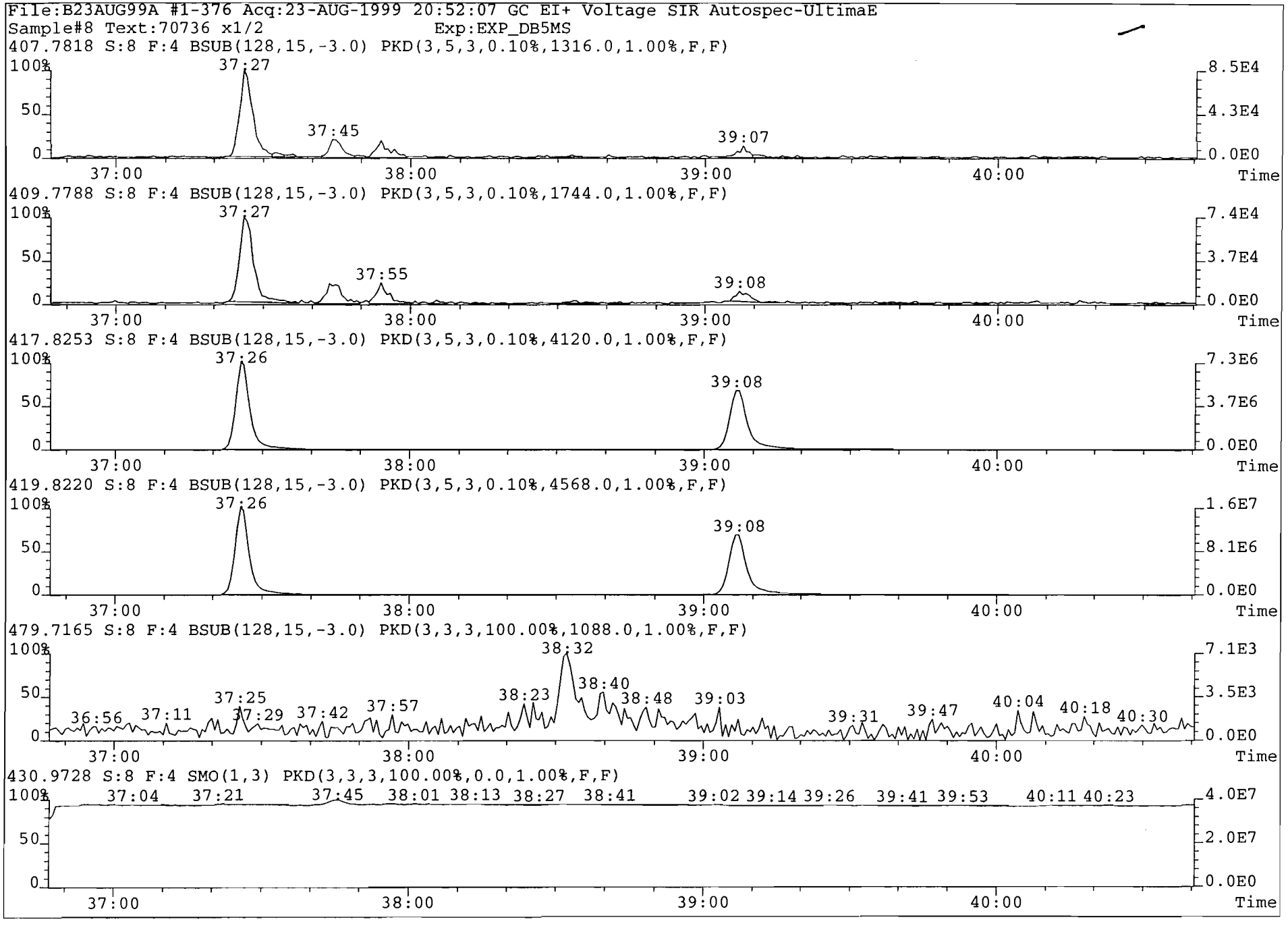

File:B23AUG99A #1-376 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
423.7767 S:8 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2588.0,1.00%,F,F)
37:44
38:33
37:26
39:07
1.8E5
9.1E4
425.7737 S:8 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2192.0,1.00%,F,F)
37:45
38:34
1.7E5
8.7E4
435.8169 S:8 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2532.0,1.00%,F,F)
38:33
1.1E7
5.5E6
437.8140 S:8 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1956.0,1.00%,F,F)
38:33
1.0E7
5.2E6
430.9728 S:8 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
36:54 37:07 37:21 37:45 38:01 38:13 38:36 39:02 39:14 39:26 39:41 39:53 40:11 40:23
4.0E7
2.0E7
0.0E0
37:00
38:00
39:00
40:00
Time

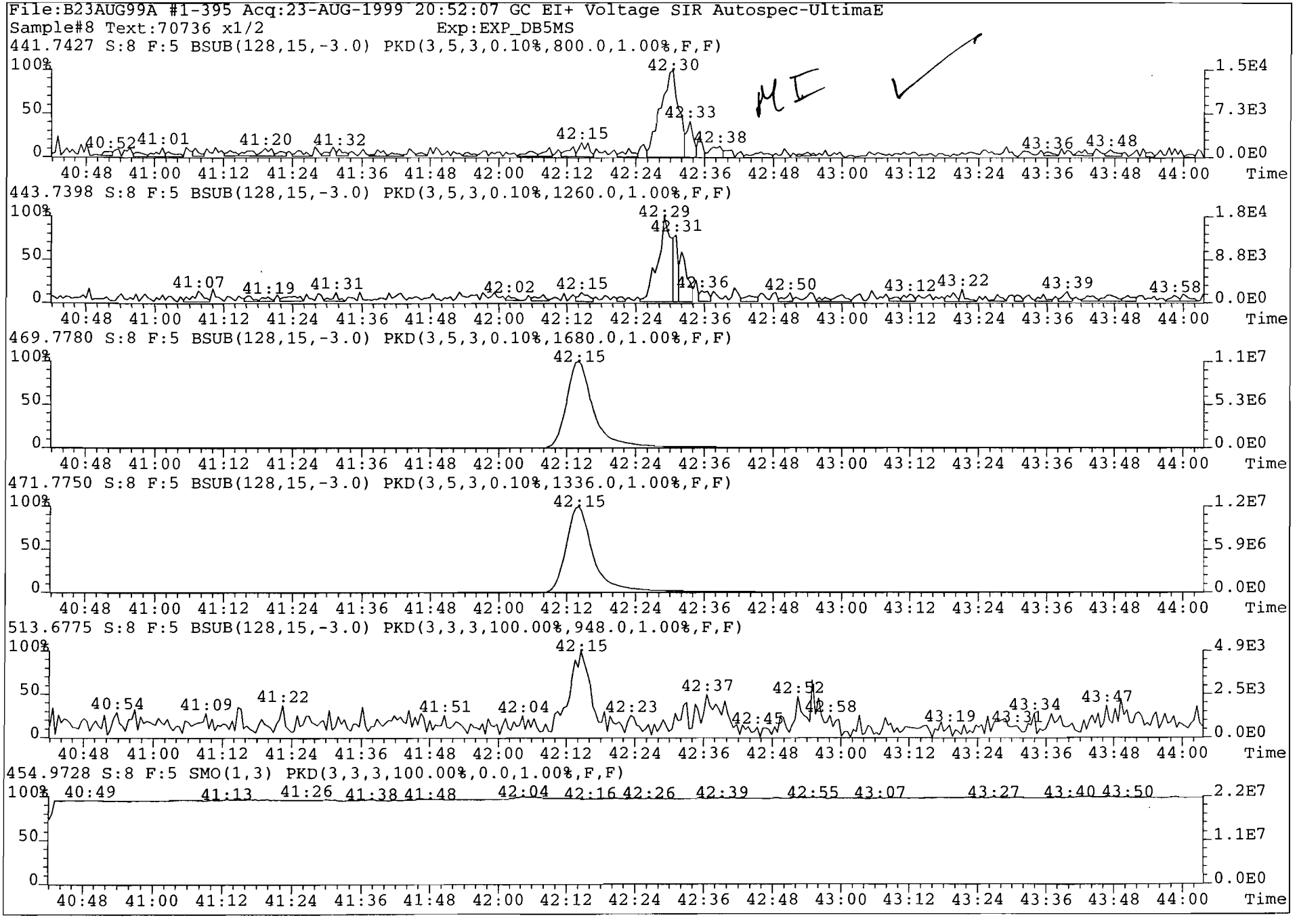

File:B23AUG99A #1-395 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
457.7377 S:8 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1876.0,1.00%,F,F)
42:15
42:22
1.6E5
7.8E4
0.0E0
459.7348 S:8 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1524.0,1.00%,F,F)
42:15
42:24
1.7E5
8.7E4
0.0E0
469.7780 S:8 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1680.0,1.00%,F,F)
42:15
1.1E7
5.3E6
0.0E0
471.7750 S:8 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1336.0,1.00%,F,F)
42:15
1.2E7
5.9E6
0.0E0
454.9728 S:8 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
40:49 41:13 41:26 41:38 41:48 42:04 42:21 42:35 42:45 42:55 43:10 43:31 43:44 43:55
2.2E7
1.1E7
0.0E0
100%
50
0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time

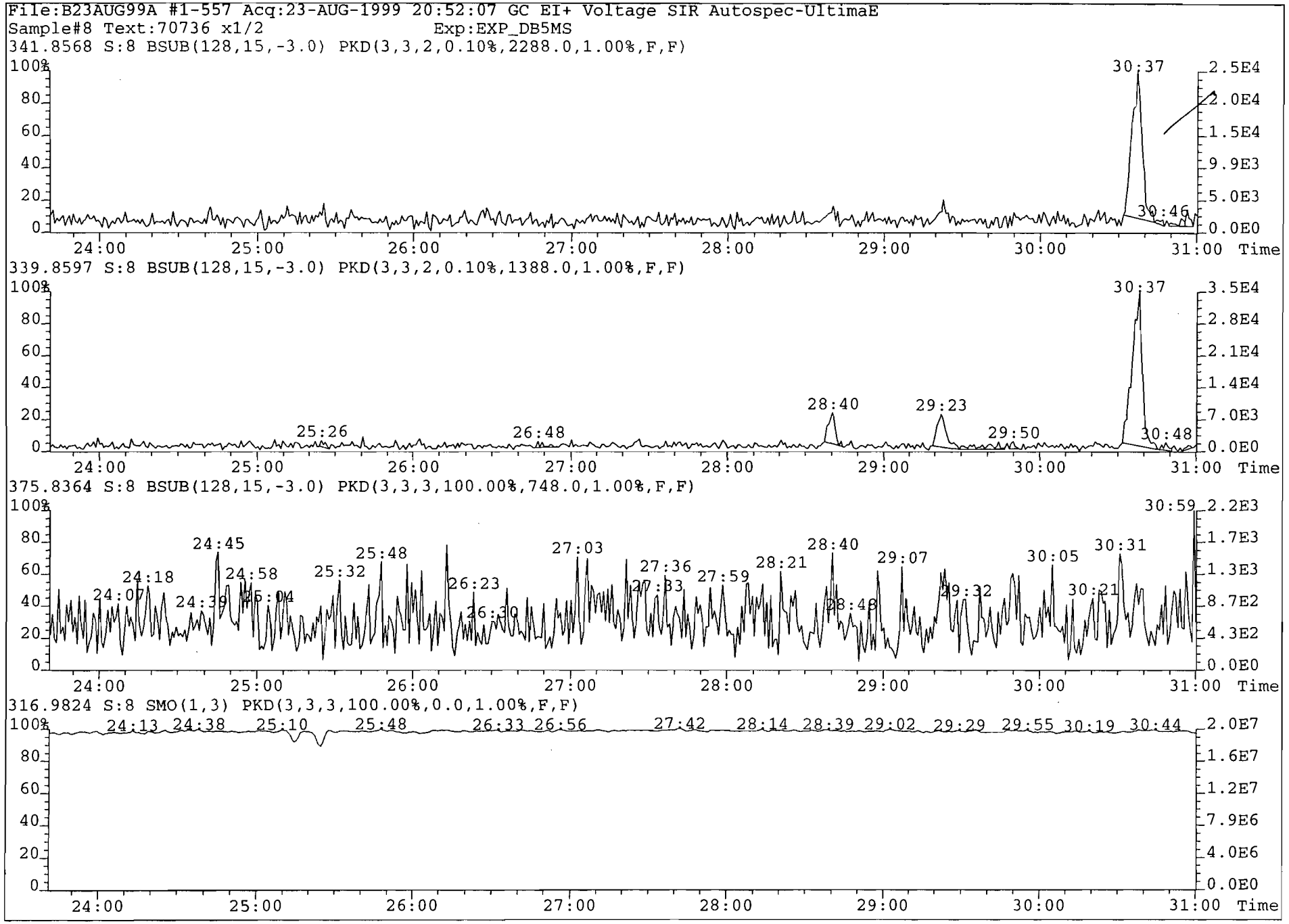

File:B23AUG99A #1-557 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
303.9016 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1636.0,1.00%,F,F)
305.8987 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2720.0,1.00%,F,F)
315.9419 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1536.0,1.00%,F,F)
317.9389 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2128.0,1.00%,F,F)
375.8364 S:8 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,748.0,1.00%,F,F)
316.9824 S:8 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
Time


File:B23AUG99A #1-264 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
339.8597 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1756.0,1.00%,F,F)
341.8568 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3836.0,1.00%,F,F)
351.9000 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1836.0,1.00%,F,F)
353.8970 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1876.0,1.00%,F,F)
409.7974 S:8 F:2 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,2044.0,1.00%,F,F)
366.9792 S:8 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
Time


File:B23AUG99A #1-287 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
373.8207 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,2012.0,1.00%,F,F)
34:09
34:02
34:25
34:49
35:00
35:16
35:26
36:08
1.3E5
6.4E4
0.0E0
375.8178 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,1564.0,1.00%,F,F)
34:09
34:02
34:25
34:49
34:59
35:06
35:17
35:26
36:08
9.3E4
4.6E4
0.0E0
383.8639 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,4640.0,1.00%,F,F)
34:59
1.4E7
7.1E6
0.0E0
385.8610 S:8 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,2896.0,1.00%,F,F)
34:59
2.7E7
1.4E7
0.0E0
445.7555 S:8 F:3 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1056.0,1.00%,F,F)
35:32
35:50
34:00
34:10
34:31
34:44
34:57
35:08
35:19
35:57
36:12
36:22
36:38
1.0E4
5.1E3
0.0E0
380.9760 S:8 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
33:50
34:13
34:23
34:41
35:01
35:11
35:22
35:31
35:48
36:07
36:17
36:30
36:41
5.9E7
3.0E7
0.0E0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36
Time


File:B23AUG99A #1-376 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
407.7818 S:8 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1316.0,1.00%,F,F)
37:27
37:45
39:07
8.5E4
4.3E4
0.0E0
409.7788 S:8 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1744.0,1.00%,F,F)
37:27
37:55
39:08
7.4E4
3.7E4
0.0E0
417.8253 S:8 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,4120.0,1.00%,F,F)
37:26
39:08
7.3E6
3.7E6
0.0E0
419.8220 S:8 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,4568.0,1.00%,F,F)
37:26
39:08
1.6E7
8.1E6
0.0E0
479.7165 S:8 F:4 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1088.0,1.00%,F,F)
38:32
38:40
37:25
38:23
38:48
39:03
36:56
37:11
37:29
37:42
37:57
39:31
39:47
40:04
40:18
40:30
7.1E3
3.5E3
0.0E0
430.9728 S:8 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
37:04 37:21 37:45 38:01 38:13 38:27 38:41 39:02 39:14 39:26 39:41 39:53 40:11 40:23
4.0E7
2.0E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
Time


File:B23AUG99A #1-395 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
441.7427 S:8 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,800.0,1.00%,F,F)
42:30
42:33
42:15
42:38
40:52
41:01
41:20
41:32
43:36
43:48
443.7398 S:8 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1260.0,1.00%,F,F)
42:29
42:31
41:07
41:19
41:31
42:02
42:15
42:36
42:50
43:12
43:22
43:39
43:58
469.7780 S:8 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1680.0,1.00%,F,F)
42:15
471.7750 S:8 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1336.0,1.00%,F,F)
42:15
513.6775 S:8 F:5 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,948.0,1.00%,F,F)
42:15
42:37
42:52
40:54
41:09
41:22
41:51
42:04
42:23
42:45
42:58
43:19
43:34
43:47
454.9728 S:8 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
40:49
41:13
41:26
41:38
41:48
42:04
42:16
42:26
42:39
42:55
43:07
43:27
43:40
43:50
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time


File:B23AUG99A #1-557 Acq:23-AUG-1999 20:52:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:70736 x1/2 Exp:EXP_DB5MS
341.8568 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2288.0,1.00%,F,F)
30:37
30:46
339.8597 S:8 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1388.0,1.00%,F,F)
30:37
28:40
29:23
25:26
26:48
29:50
30:48
375.8364 S:8 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,748.0,1.00%,F,F)
30:59
24:45
24:18
24:58
25:32
25:48
27:03
27:36
28:40
29:07
30:05
30:31
316.9824 S:8 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
24:13 24:38 25:10 25:48 26:33 26:56 27:42 28:14 28:39 29:02 29:29 29:55 30:19 30:44
Time

Section 4

System Performance

Paradigm Analytical Labs

Section 4-1

Mass Spectrometer Performance Check

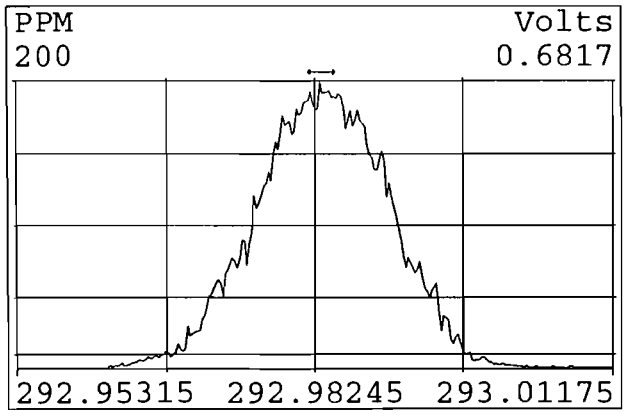
Mass Resolution

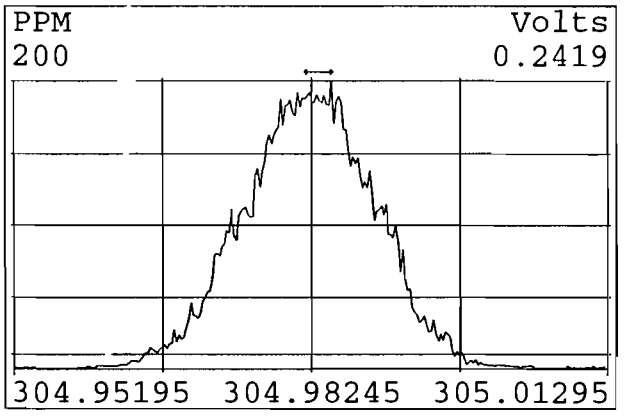
Documentation for the Analysis

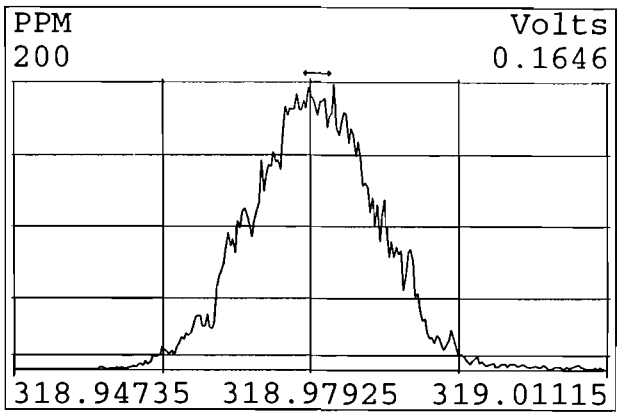
of

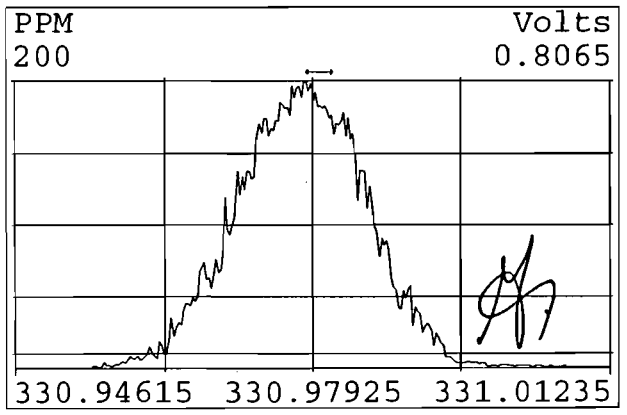
Polychlorinated Dibenzo-*p*-Dioxins & Dibenzofurans

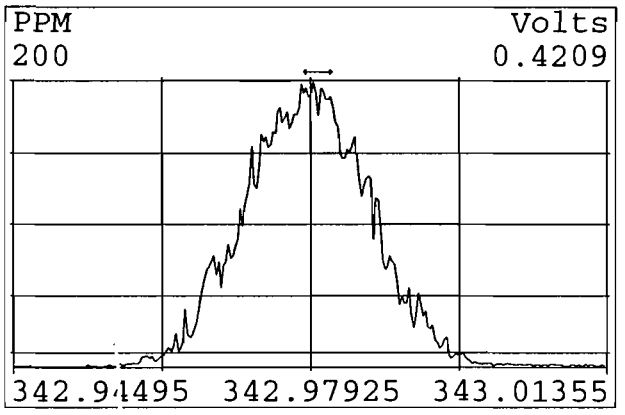
Peak Locate Examina ion:23-AUG-1999:15:26 File:B23AUG99A_L
Experiment:EXP_DB5MS Function:1 Reference:PFK

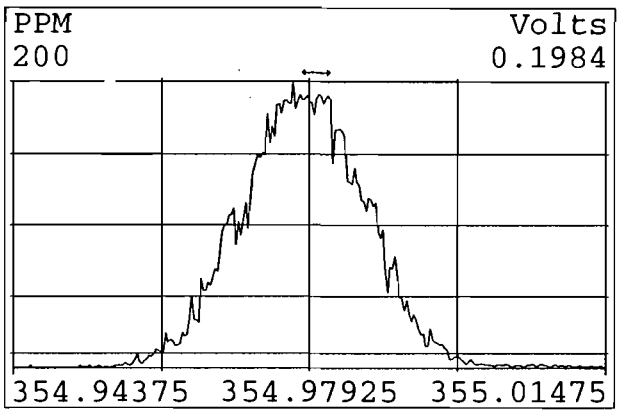


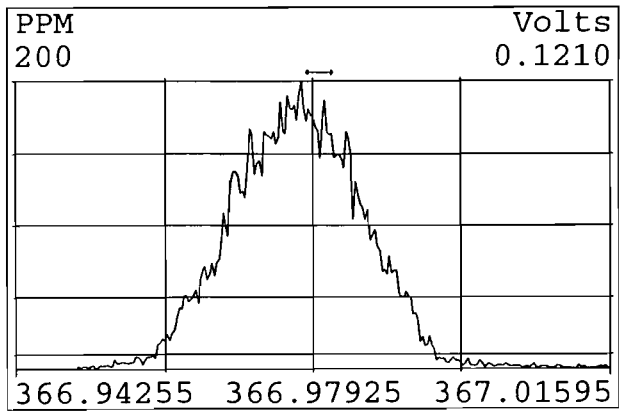


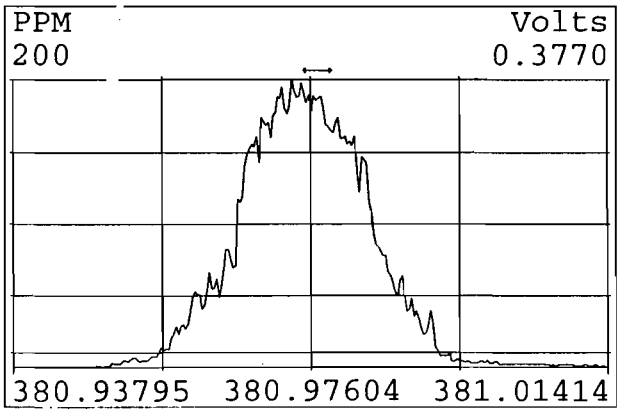




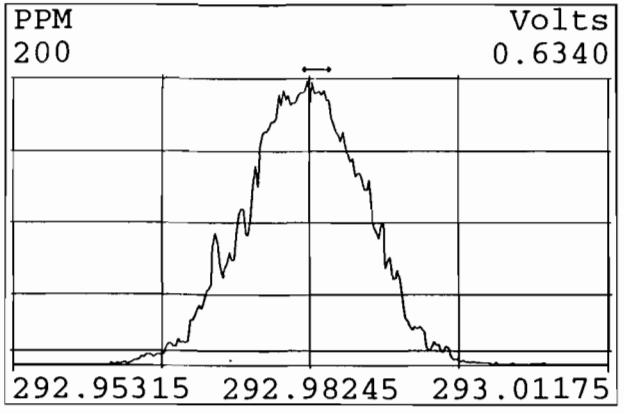


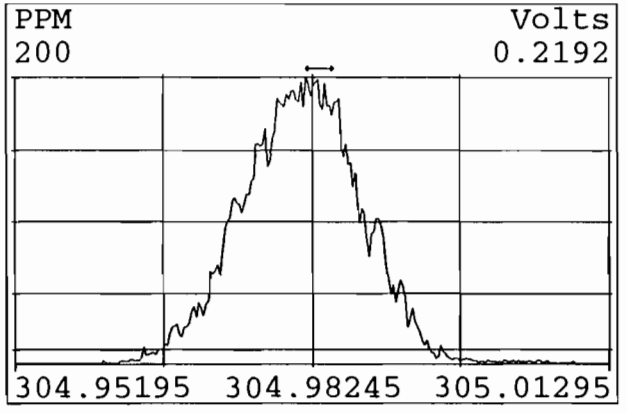


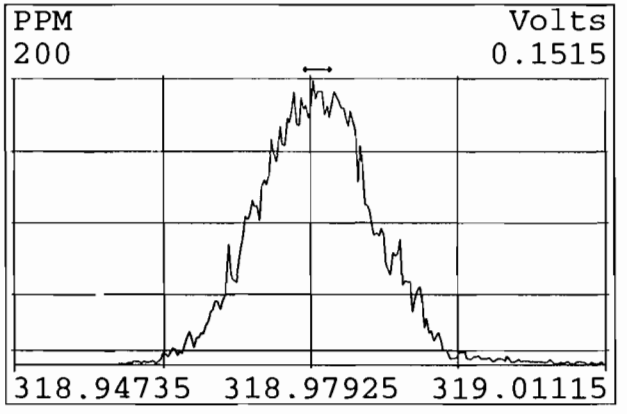


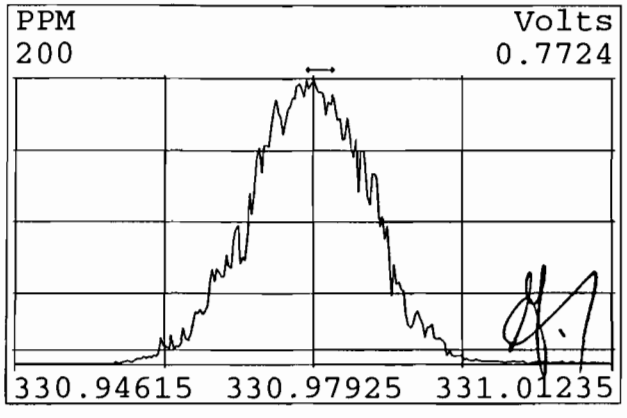


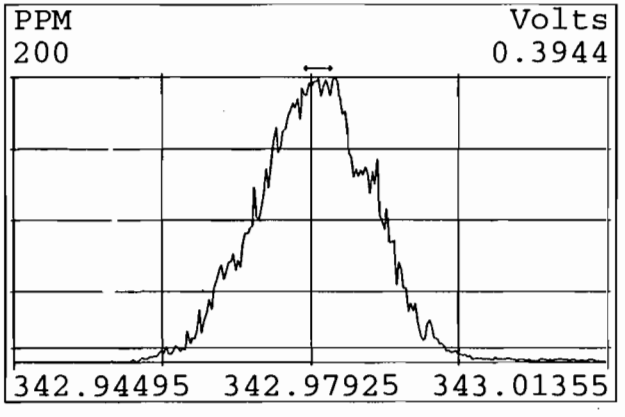
Peak Locate Examination:24-AUG-1999:03:02 File:B23AUG99A_RES_CHECK
Experiment:EXP_DB5MS Function:1 Reference:PFK

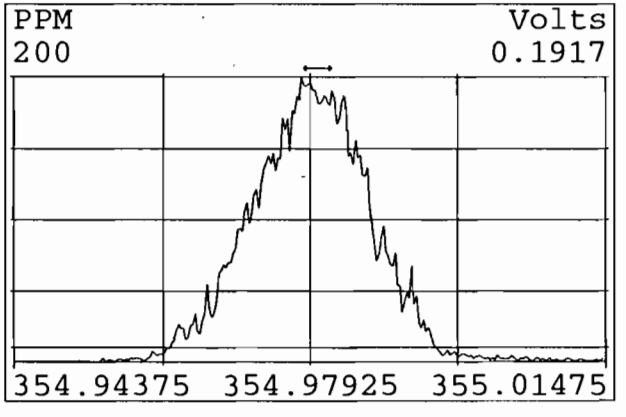


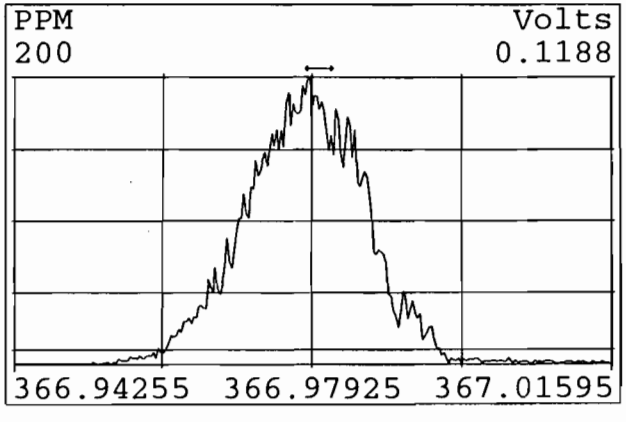


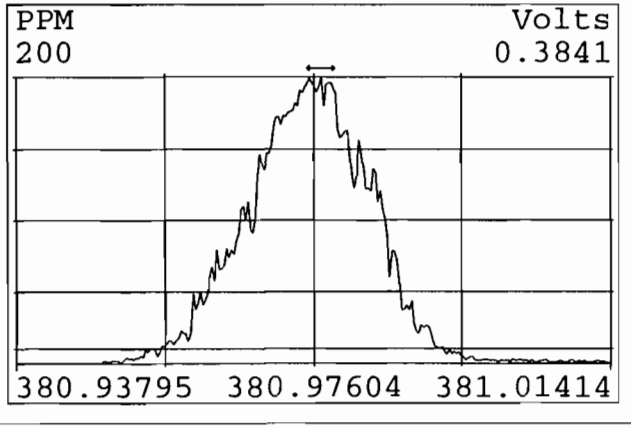












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Section 4

System Performance

Paradigm Analytical Labs

Section 4-2

Gas Chromatography Performance Check

Isomer Specificity & Retention Time Windows

Documentation for the Analysis

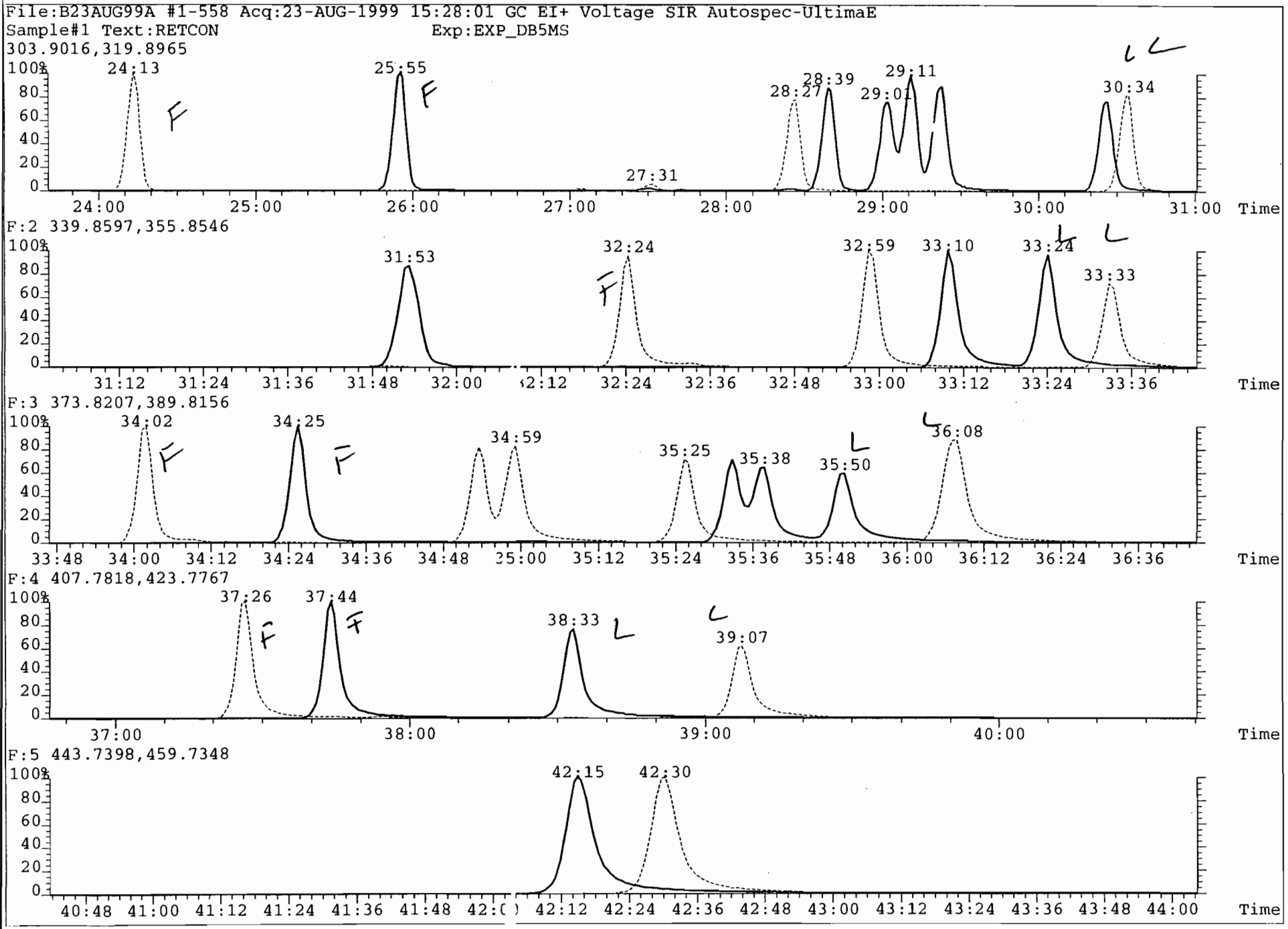
of

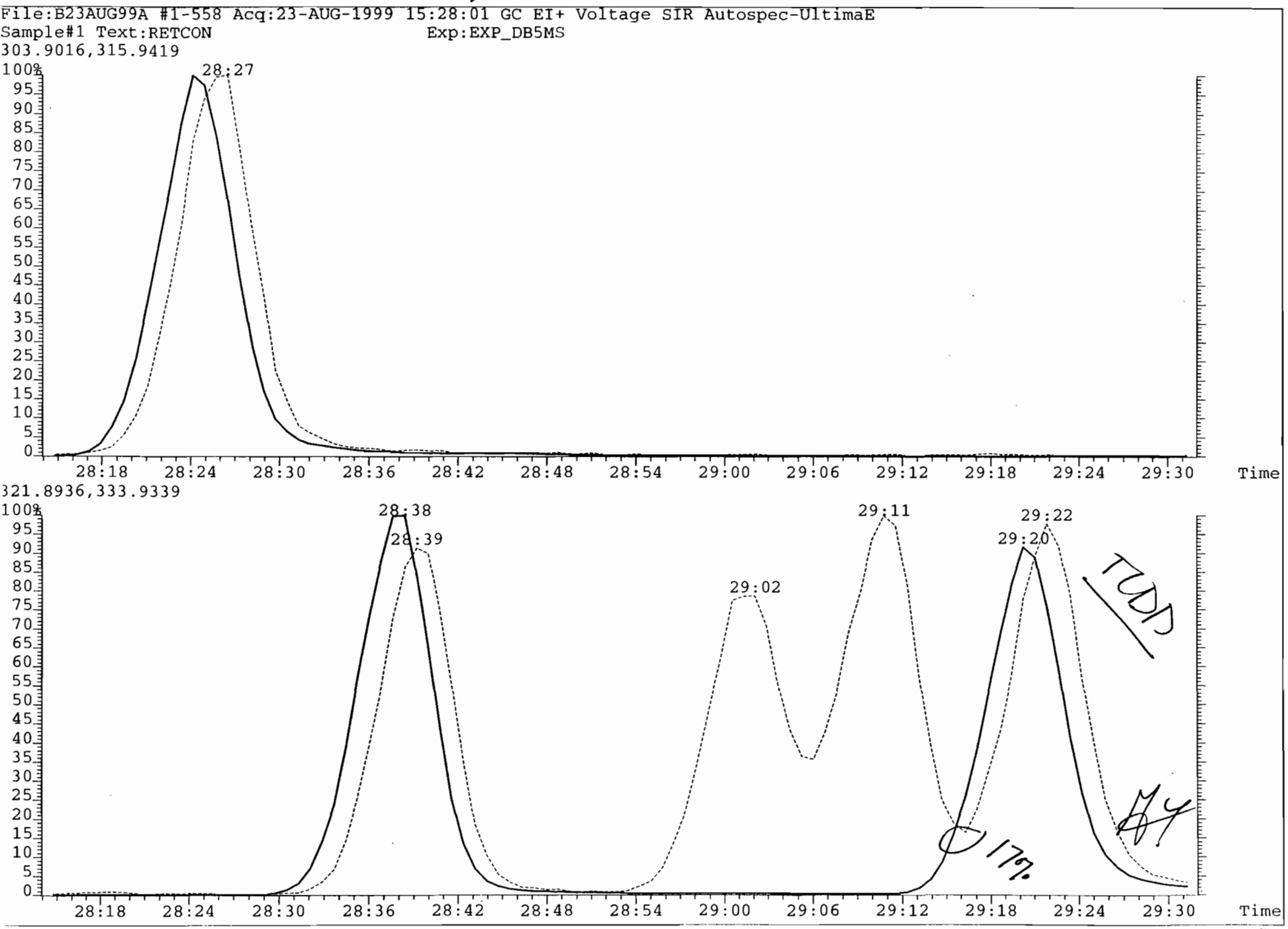
Polychlorinated Dibenzo-*p*-Dioxins & Dibenzofurans

Page 1

Filename ; b23aug99a
Sample ; 1
Acquired ; 23-AUG-99 15:28:01
Processed ; 24-AUG-99 08:01:03
Sample ID ; RETCON

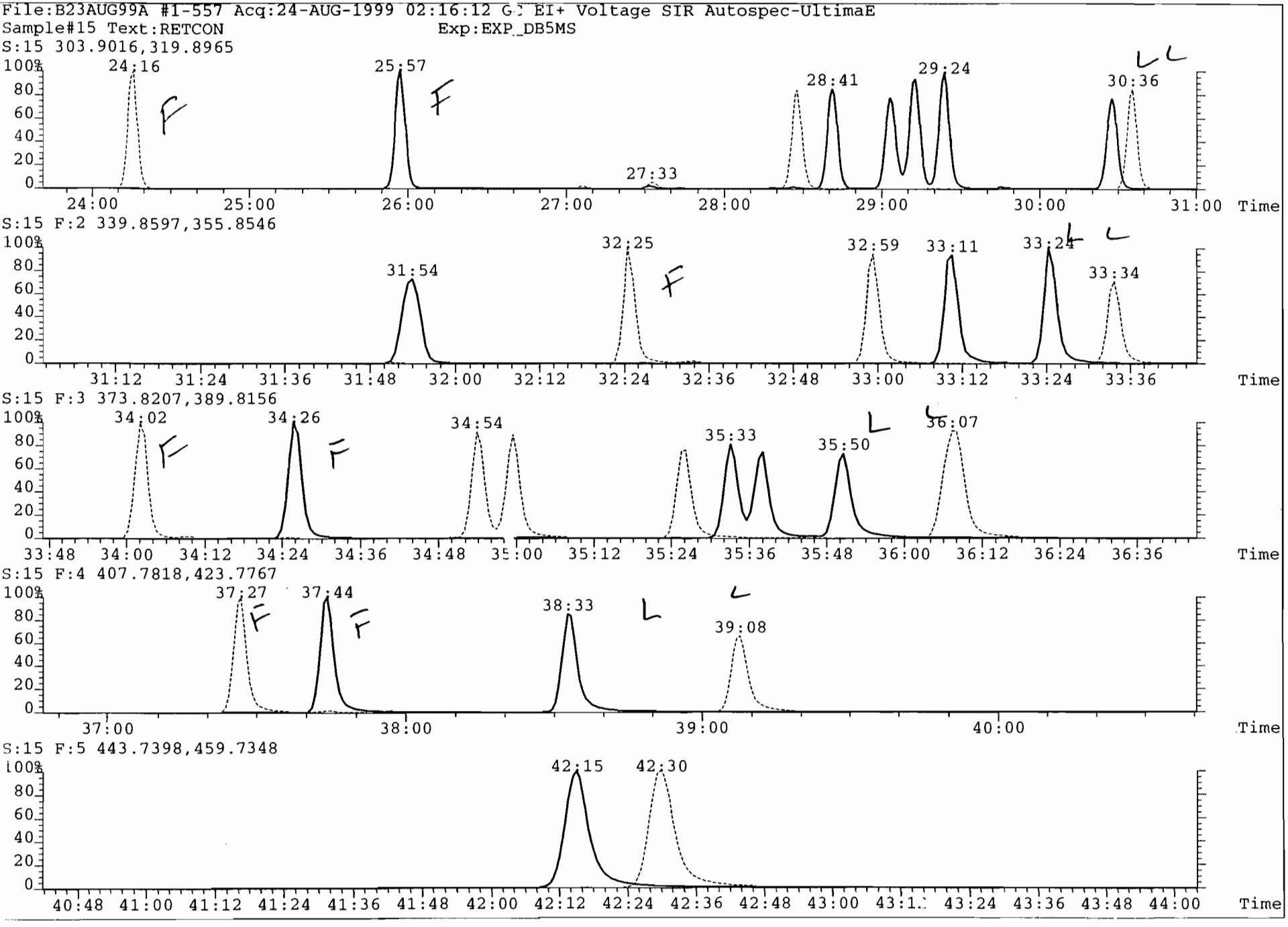
Name	First Eluter RT	Last Eluter RT
TCDD	25:55	30:26
PeCDD	31:53	33:24
HxCDD	34:25	35:50
HpCDD	37:44	38:33
OCDD	42:15	
TCDF	24:13	30:34
PeCDF	30:34	33:33
HxCDF	34:02	36:08
HpCDF	37:26	39:07
OCDF	42:30	

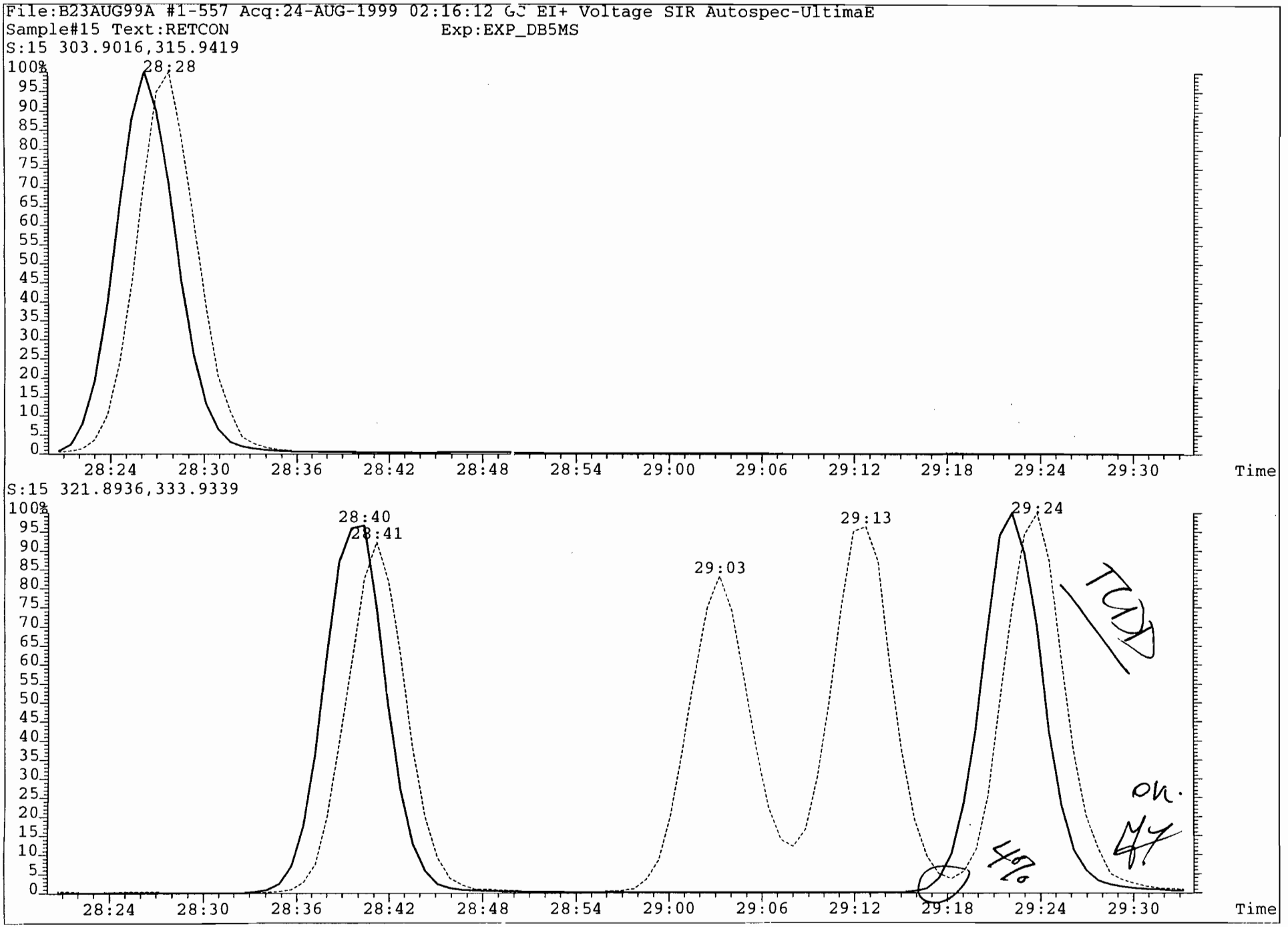

File:B23AUG99A #1-558 Acq:23-AUG-1999 15:28:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_DB5MS
303.9016,319.8965
24:13
25:55
27:31
28:27
28:39
29:01
29:11
30:34
F:2 339.8597,355.8546
31:53
32:24
32:59
33:10
33:24
33:33
F:3 373.8207,389.8156
34:02
34:25
34:59
35:25
35:38
35:50
36:08
F:4 407.7818,423.7767
37:26
37:44
38:33
39:07
F:5 443.7398,459.7348
42:15
42:30
Time


File:B23AUG99A #1-558 Acq:23-AUG-1999 15:28:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_DB5MS
303.9016,315.9419
28:27
321.8936,333.9339
28:38
28:39
29:02
29:11
29:20
29:22
TUDD
17%
Time

Filename ; b23aug99a
Sample ; 15
Acquired ; 24-AUG-99 02:16:12
Processed ; 24-AUG-99 08:01:20
Sample ID ; RETCON

Name	First Eluter RT	Last Eluter RT
TCDD	25:57	30:28
PeCDD	31:54	33:24
HxCDD	34:26	35:50
HpCDD	37:44	38:33
OCDD	42:15	
TCDF	24:16	30:36
PeCDF	30:36	33:34
HxCDF	34:02	36:07
HpCDF	37:27	39:08
OCDF	42:30	


File:B23AUG99A #1-557 Acq:24-AUG-1999 02:16:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON
Exp:EXP_DB5MS
S:15 303.9016,319.8965
24:16
25:57
27:33
28:41
29:24
30:36
S:15 F:2 339.8597,355.8546
31:54
32:25
32:59
33:11
33:24
33:34
S:15 F:3 373.8207,389.8156
34:02
34:26
34:54
35:33
35:50
36:07
S:15 F:4 407.7818,423.7767
37:27
37:44
38:33
39:08
S:15 F:5 443.7398,459.7348
42:15
42:30
Time


File:B23AUG99A #1-557 Acq:24-AUG-1999 02:16:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON
Exp:EXP_DB5MS
S:15 303.9016,315.9419
28:28
S:15 321.8936,333.9339
28:40
28:41
29:03
29:13
29:24
TCDD
on.
4%
Time

Section 4

System Performance

Paradigm Analytical Labs

Section 4-3

Initial Calibrations

Documentation for the Analysis

of

Polychlorinated Dibenzo-*p*-Dioxins & Dibenzofurans

m8290-b06041nc

Run: b04jun99a Analyte: m8290-b06» Cal: m8290-b06» Results: Version: V3.6 31-JUL-1998 10:51:59

Name	Mean RRF	S. D.	%RSD	04jun99a S1 RRF#1	SD	04jun99a S2 RRF#2	SD	04jun99a S4 RRF#3	SD	04jun99a S5 RRF#4	SD	04jun99a S6 RRF#5	SD
2,3,7,8-TCDD	1.0802	0.027	2.53 %	1.09	0.5	1.09	0.3	1.03	-1.8	1.10	0.7	1.09	0.3
1,2,3,7,8-PeCDD	0.9837	0.030	3.04 %	0.99	0.3	0.93	-1.6	0.98	-0.2	1.00	0.6	1.01	0.9
1,2,3,4,7,8-HxCDD	0.9346	0.039	4.14 %	0.92	-0.4	0.91	-0.6	0.90	-0.8	0.94	0.1	1.00	1.7
1,2,3,6,7,8-HxCDD	0.9582	0.018	1.91 %	0.93	-1.5	0.96	-0.2	0.95	-0.2	0.97	0.8	0.98	1.0
1,2,3,7,8,9-HxCDD	1.0168	0.019	1.83 %	1.01	-0.5	1.01	-0.5	1.00	-1.1	1.03	0.9	1.04	1.2
1,2,3,4,6,7,8-HpCDD	0.9440	0.036	3.83 %	0.95	0.3	0.88	-1.7	0.94	-0.1	0.97	0.7	0.97	0.8
OCDD	1.0104	0.037	3.68 %	1.02	0.2	0.95	-1.5	1.00	-0.4	1.05	1.0	1.04	0.7
2,3,7,8-TCDF	0.9883	0.033	3.30 %	0.99	0.1	0.93	-1.7	0.99	0.1	1.01	0.7	1.02	0.8
1,2,3,7,8-PeCDF	0.9555	0.018	1.89 %	0.96	0.5	0.93	-1.6	0.95	-0.3	0.97	1.1	0.96	0.3
2,3,4,7,8-PeCDF	0.9803	0.022	2.25 %	0.98	0.0	0.94	-1.7	0.99	0.2	1.00	0.8	1.00	0.7
1,2,3,4,7,8-HxCDF	1.0911	0.041	3.77 %	1.13	0.9	1.03	-1.4	1.07	-0.6	1.09	0.1	1.13	1.0
1,2,3,6,7,8-HxCDF	1.2082	0.031	2.56 %	1.22	0.5	1.15	-1.7	1.21	0.1	1.22	0.5	1.23	0.7
2,3,4,6,7,8-HxCDF	1.0350	0.034	3.28 %	1.05	0.4	0.98	-1.7	1.04	0.1	1.05	0.4	1.06	0.8
1,2,3,7,8,9-HxCDF	0.9380	0.021	2.28 %	0.94	0.1	0.91	-1.2	0.92	-0.7	0.95	0.5	0.97	1.3
1,2,3,4,6,7,8-HpCDF	1.4866	0.049	3.31 %	1.51	0.4	1.40	-1.8	1.50	0.2	1.52	0.8	1.50	0.3
1,2,3,4,7,8,9-HpCDF	1.1696	0.057	4.85 %	1.20	0.5	1.09	-1.4	1.13	-0.7	1.24	1.2	1.19	0.4
OCDF	1.1001	0.082	7.43 %	1.09	-0.1	1.01	-1.1	1.03	-0.8	1.15	0.6	1.21	1.3
13C-2,3,7,8-TCDD	1.0690	0.032	2.96 %	1.06	-0.2	1.05	-0.6	1.05	-0.5	1.06	-0.4	1.12	1.8
13C-1,2,3,7,8-PeCDD	0.9154	0.056	6.13 %	0.91	-0.2	0.89	-0.4	0.87	-0.8	0.89	-0.4	1.01	1.7
13C-1,2,3,6,7,8-HxCDD	0.9959	0.009	0.89 %	1.01	1.2	1.00	0.0	0.99	-0.2	1.00	0.5	0.98	-1.5
13C-1,2,3,4,6,7,8-HpCDD	0.8573	0.012	1.35 %	0.86	0.1	0.87	1.4	0.84	-1.3	0.86	0.4	0.85	-0.6
13C-OCDD	0.7342	0.030	4.04 %	0.73	-0.2	0.72	-0.3	0.70	-1.1	0.73	-0.1	0.78	1.6
13C-2,3,7,8-TCDF	1.5104	0.016	1.08 %	1.51	0.3	1.50	-0.9	1.50	-0.3	1.50	-0.6	1.54	1.6
13C-1,2,3,7,8-PeCDF	1.3549	0.086	6.34 %	1.34	-0.2	1.32	-0.4	1.29	-0.7	1.32	-0.4	1.51	1.8
13C-1,2,3,6,7,8-HxCDF	1.3099	0.021	1.60 %	1.28	-1.3	1.34	1.5	1.30	-0.3	1.31	0.1	1.31	0.0
13C-1,2,3,4,6,7,8-HpCDF	0.8729	0.016	1.78 %	0.86	-0.7	0.88	0.5	0.86	-0.8	0.87	-0.5	0.90	1.5
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-
37Cl-2,3,7,8-TCDD	1.0700	0.043	3.99 %	1.08	0.4	1.03	-0.9	1.03	-0.9	1.07	0.0	1.13	1.5
13C-2,3,4,7,8-PeCDF	1.2970	0.086	6.63 %	1.27	-0.3	1.26	-0.4	1.24	-0.7	1.26	-0.4	1.45	1.8
13C-1,2,3,4,7,8-HxCDD	0.8458	0.020	2.33 %	0.83	-1.0	0.84	-0.1	0.83	-0.6	0.85	0.1	0.88	1.6
13C-1,2,3,4,7,8-HxCDF	1.1635	0.020	1.74 %	1.17	0.1	1.16	-0.4	1.14	-1.0	1.16	-0.3	1.20	1.6
13C-1,2,3,4,7,8,9-HpCDF	0.7364	0.017	2.35 %	0.73	-0.4	0.75	0.9	0.71	-1.5	0.74	0.3	0.75	0.8
37Cl-2,3,7,8-TCDD	1.0008	0.019	1.92 %	1.02	1.0	0.98	-1.0	0.98	-1.2	1.02	0.8	1.01	0.3
13C-2,3,4,7,8-PeCDF	0.9571	0.003	0.37 %	0.95	-1.2	0.96	-0.1	0.96	0.3	0.96	-0.5	0.96	1.5
13C-1,2,3,4,7,8-HxCDD	0.8494	0.027	3.15 %	0.82	-1.1	0.85	0.0	0.84	-0.4	0.85	-0.1	0.89	1.6
13C-1,2,3,4,7,8-HxCDF	0.8884	0.022	2.50 %	0.91	0.9	0.86	-1.2	0.88	-0.6	0.88	-0.3	0.91	1.1
13C-1,2,3,4,7,8,9-HpCDF	0.8436	0.012	1.48 %	0.85	0.1	0.85	0.8	0.83	-1.4	0.86	1.0	0.84	-0.5
Total Tetra-Furans	0.9883	0.033	3.30 %	0.99	0.1	0.93	-1.7	0.99	0.1	1.01	0.7	1.02	0.8
Total Tetra-Dioxins	1.0802	0.027	2.53 %	1.09	0.5	1.09	0.3	1.03	-1.8	1.10	0.7	1.09	0.3
Total Penta-Furans Fn1	0.9679	0.020	2.02 %	0.97	0.2	0.94	-1.7	0.97	0.0	0.99	1.0	0.98	0.5

QC ok 08 Jun 99

B

ORIGINAL

Section 4

System Performance

Paradigm Analytical Labs

Section 4-4

Continuing Calibrations

Documentation for the Analysis

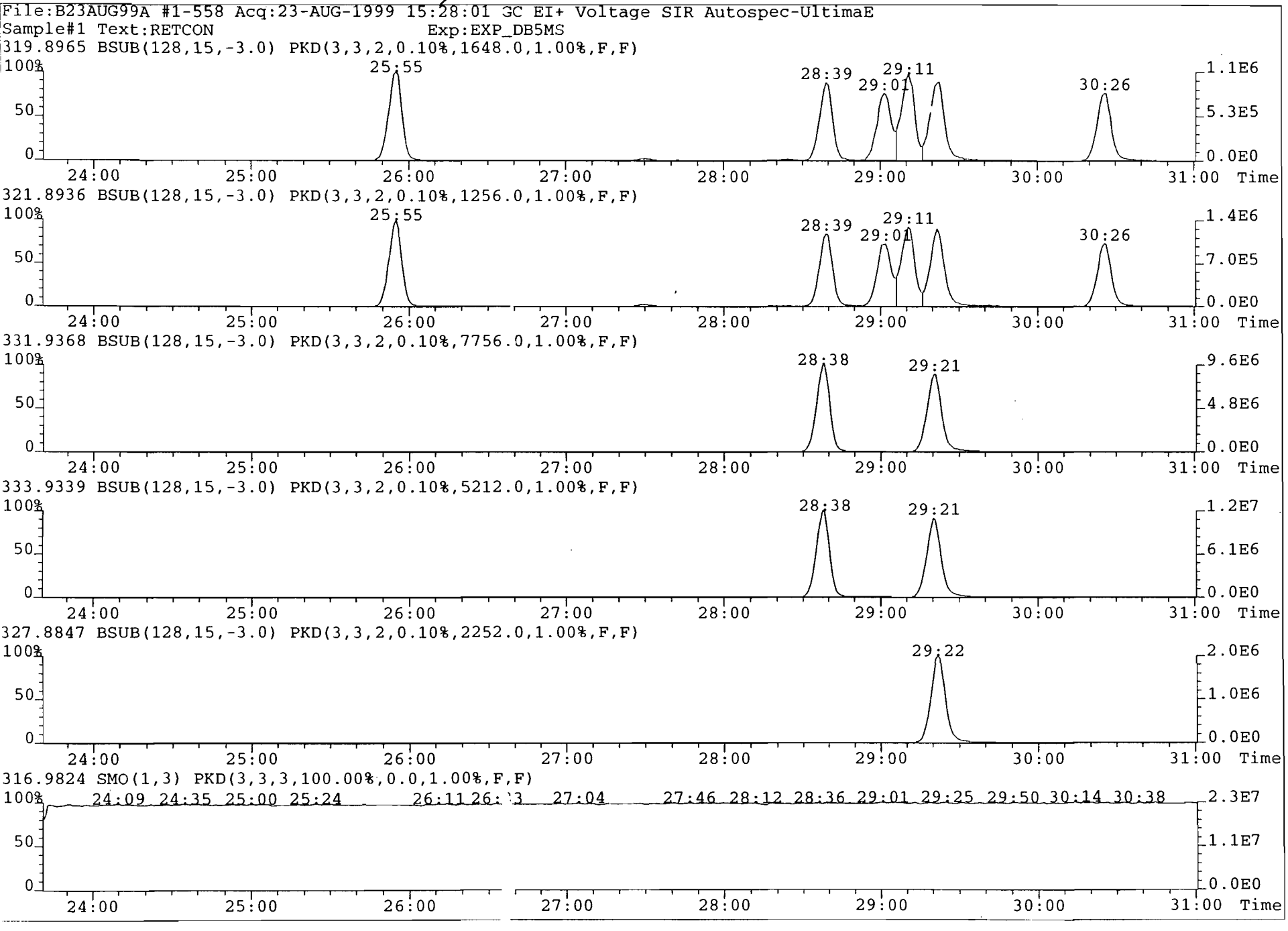
of

Polychlorinated Dibenzo-*p*-Dioxins & Dibenzofurans

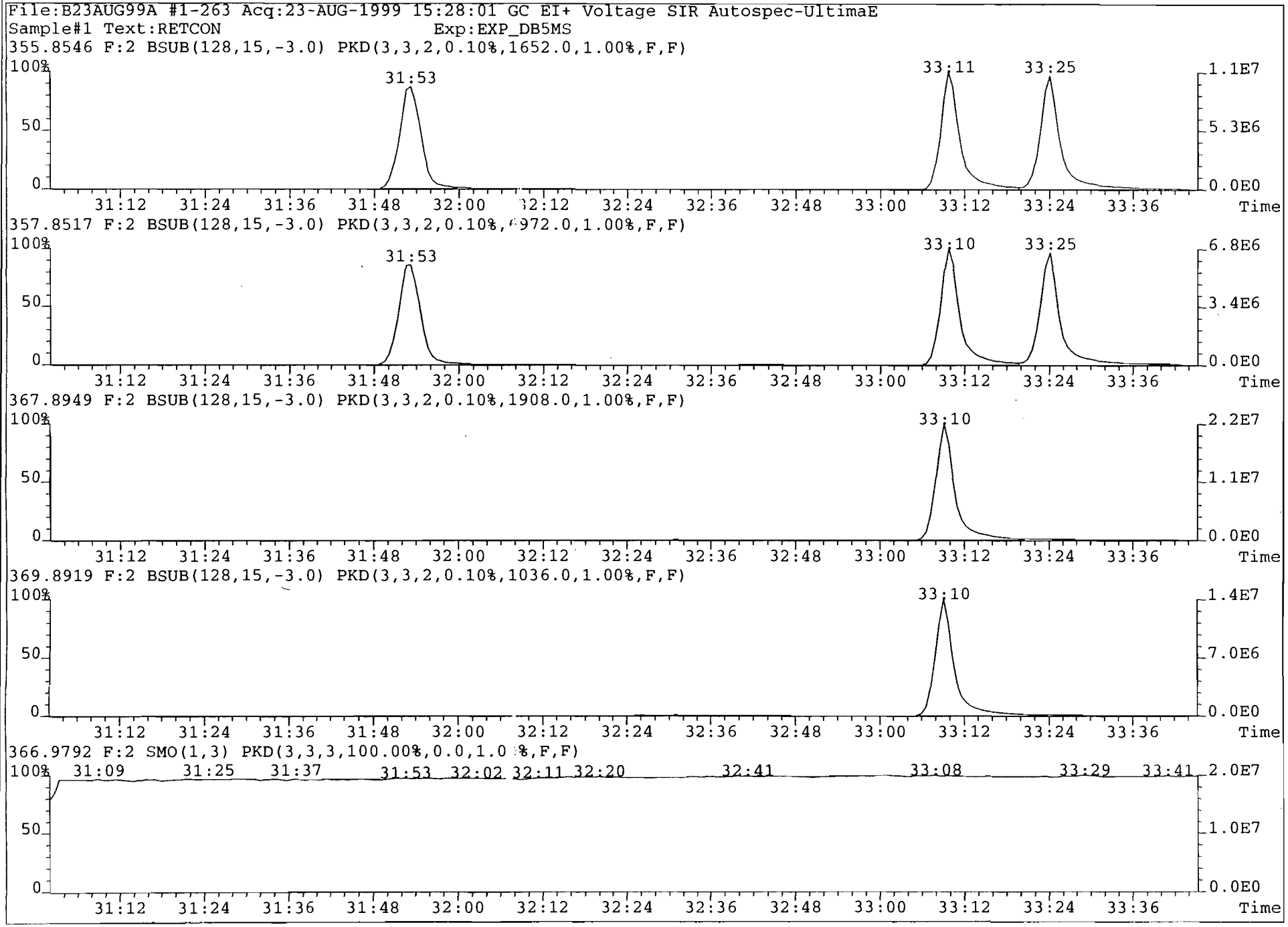
Run #6 Filename b23aug99a S: 1 I: 1 Acquired: 23-AUG-99 15:28:01 Processed: 24-AUG-99 07:58:37
Run: b04jun99a Analyte: m8290-b08» Cal: m8290-b06» Results: Quan : V3.6 31-JUL-1998 10:51:59
Sample text: RETCON Comments: OPUS : V3.6X 31-JUL-1998 11:15:12

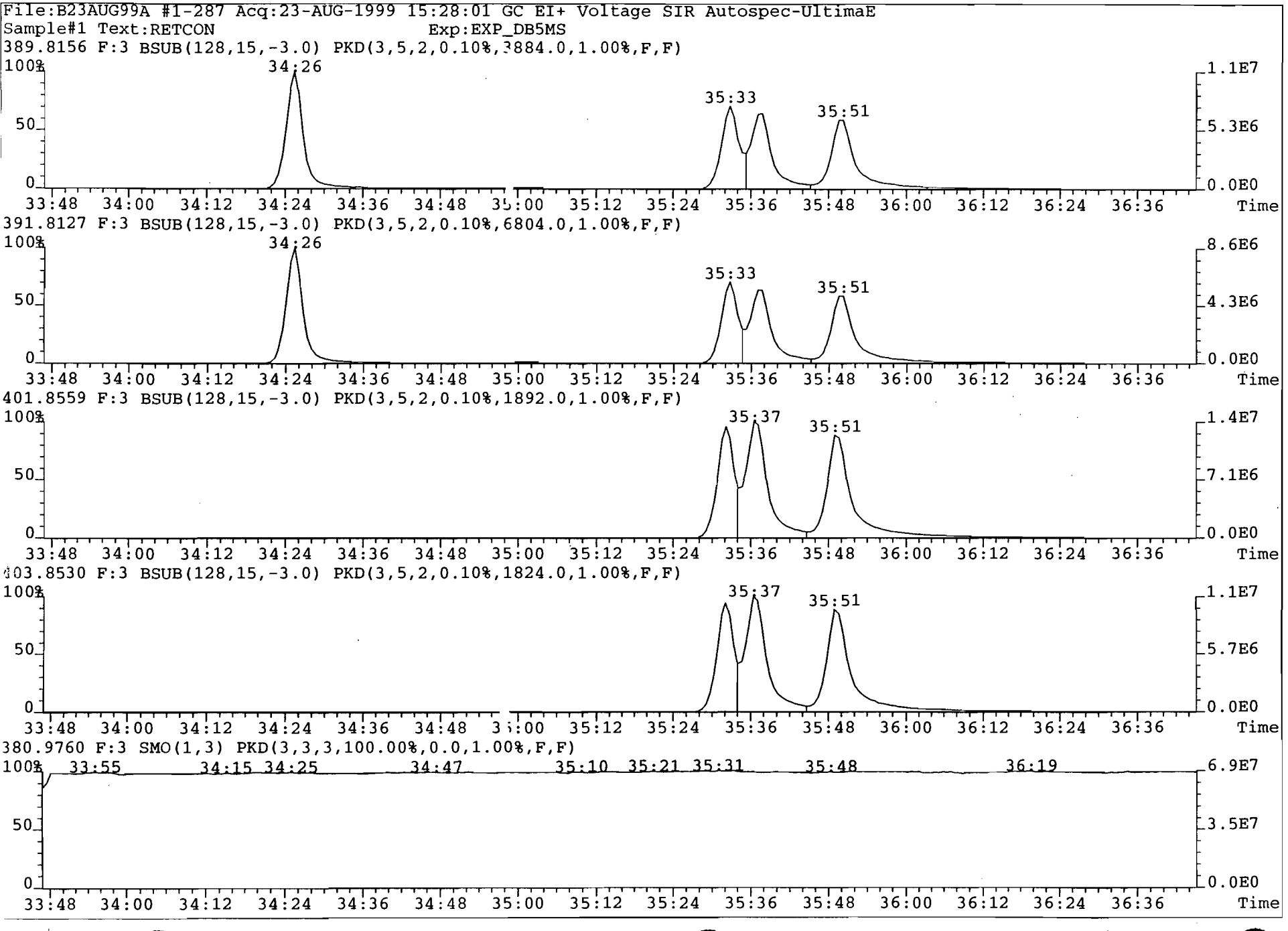
Typ	Name	Resp	RA		RT	Conc	Dev'n	CCAL RRF	ICAL RRF	Mod?
Unk	2,3,7,8-TCDD	1.4e+07	0.77	y	29:23	10.23	2.3	1.1051	1.0802	n
Unk	1,2,3,7,8-PeCDD	5.3e+07	1.56	y	33:10	50.21	0.4	0.9878	0.9837	n
Unk	1,2,3,4,7,8-HxCDD	4.1e+07	1.35	y	35:33	43.38	-13.2	0.8109	0.9346	n
Unk	1,2,3,6,7,8-HxCDD	4.7e+07	1.17	y	35:38	49.13	-1.7	0.9415	0.9582	n
Unk	1,2,3,7,8,9-HxCDD	4.9e+07	1.24	y	35:50	48.00	-4.0	0.9761	1.0168	n
Unk	1,2,3,4,6,7,8-HpCDD	3.7e+07	1.06	y	38:33	47.79	-4.4	0.9023	0.9440	n
Unk	OCDD	6.4e+07	0.91	y	42:15	98.01	-2.0	0.9902	1.0104	n
Unk	2,3,7,8-TCDF	1.8e+07	0.76	y	28:27	9.744	-2.6	0.9629	0.9883	n
Unk	1,2,3,7,8-PeCDF	6.9e+07	1.52	y	32:24	46.78	-6.4	0.8940	0.9555	n
Unk	2,3,4,7,8-PeCDF	7.4e+07	1.53	y	32:59	49.12	-1.8	0.9630	0.9803	n
Unk	1,2,3,4,7,8-HxCDF	5.9e+07	1.21	y	34:54	40.25	-19.5	0.8783	1.0911	n
Unk	1,2,3,6,7,8-HxCDF	7.5e+07	1.22	y	34:59	46.38	-7.2	1.1207	1.2082	n
Unk	2,3,4,6,7,8-HxCDF	6.0e+07	1.22	y	35:25	43.76	-12.5	0.9058	1.0350	n
Unk	1,2,3,7,8,9-HxCDF	1.0e+08	1.22	y	36:08	80.73	-19.3	0.7573	0.9380	n
Unk	1,2,3,4,6,7,8-HpCDF	5.4e+07	1.02	y	37:26	44.99	-10.0	1.3378	1.4866	n
Unk	1,2,3,4,7,8,9-HpCDF	4.2e+07	1.02	y	39:07	43.66	-12.7	1.0213	1.1696	n
Unk	OCDF	6.9e+07	0.90	y	42:30	97.81	-2.2	1.0760	1.1001	n
ES/RT	13C-2,3,7,8-TCDD	1.2e+08	0.78	y	29:20	91.38	-8.6	0.9768	1.0690	n
ES	13C-1,2,3,7,8-PeCDD	1.1e+08	1.54	y	33:09	93.09	-6.9	0.8521	0.9154	n
ES	13C-1,2,3,6,7,8-HxCDD	1.0e+08	1.28	y	35:36	100.6	0.6	1.0020	0.9959	n
ES	13C-1,2,3,4,6,7,8-HpCDD	8.2e+07	1.05	y	38:32	95.31	-4.7	0.8171	0.8573	n
ES	13C-OCDD	1.3e+08	0.90	y	42:14	173.9	-13.1	0.6383	0.7342	n
ES/RT	13C-2,3,7,8-TCDF	1.8e+08	0.80	y	28:24	95.46	-4.5	1.4418	1.5104	n
ES	13C-1,2,3,7,8-PeCDF	1.5e+08	1.57	y	32:24	89.43	-10.6	1.2116	1.3549	n
ES	13C-1,2,3,6,7,8-HxCDF	1.3e+08	0.53	y	34:58	101.3	1.3	1.3268	1.3099	n
ES	13C-1,2,3,4,6,7,8-HpCDF	8.1e+07	0.45	y	37:26	92.59	-7.4	0.8083	0.8729	n
JS	13C-1,2,3,4-TCDD	1.3e+08	0.80	y	28:38	98.82	-	-	-	n
JS	13C-1,2,3,7,8,9-HxCDD	1.0e+08	1.27	y	35:49	94.87	-	-	-	n
CS	37Cl-2,3,7,8-TCDD	1.3e+07	1.58	y	29:22	9.350	-6.5	1.0004	1.0700	n
CS	13C-2,3,4,7,8-PeCDF	1.5e+08	1.27	y	32:58	93.79	-6.2	1.2165	1.2970	n
CS	13C-1,2,3,4,7,8-HxCDD	7.1e+07	0.52	y	35:32	83.50	-16.5	0.7063	0.8458	n
CS	13C-1,2,3,4,7,8-HxCDF	1.0e+08	0.43	y	34:53	86.58	-13.4	1.0074	1.1635	n
CS	13C-1,2,3,4,7,8,9-HpCDF	6.4e+07	1.58	y	39:07	86.58	-13.4	0.6376	0.7364	n
SS	37Cl-2,3,7,8-TCDD	1.3e+07	1.27	y	29:22	10.23	2.3	1.0242	1.0008	n
SS	13C-2,3,4,7,8-PeCDF	1.5e+08	0.52	y	32:58	104.9	4.9	1.0040	0.9571	n
SS	13C-1,2,3,4,7,8-HxCDD	7.1e+07	0.43	y	35:32	82.98	-17.0	0.7049	0.8494	n
SS	13C-1,2,3,4,7,8-HxCDF	1.0e+08			34:53	85.47	-14.5	0.7593	0.8884	n
SS	13C-1,2,3,4,7,8,9-HpCDF	6.4e+07			39:07	93.50	-6.5	0.7888	0.8436	n
DPE	HxCDPE	*			NotFnd	*	-	-	-	n
DPE	HpCDPE	*			NotFnd	*	-	-	-	n

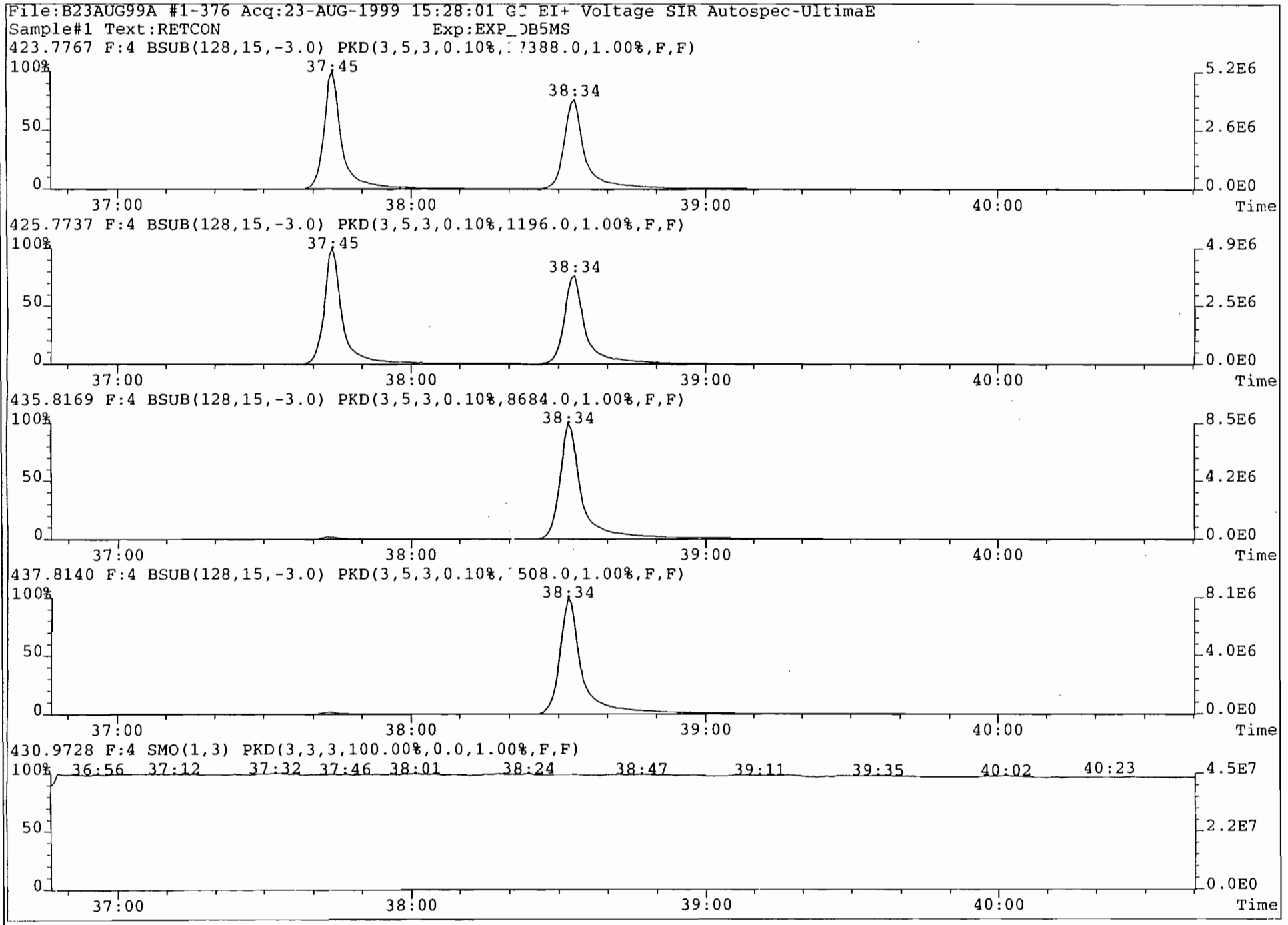
OK

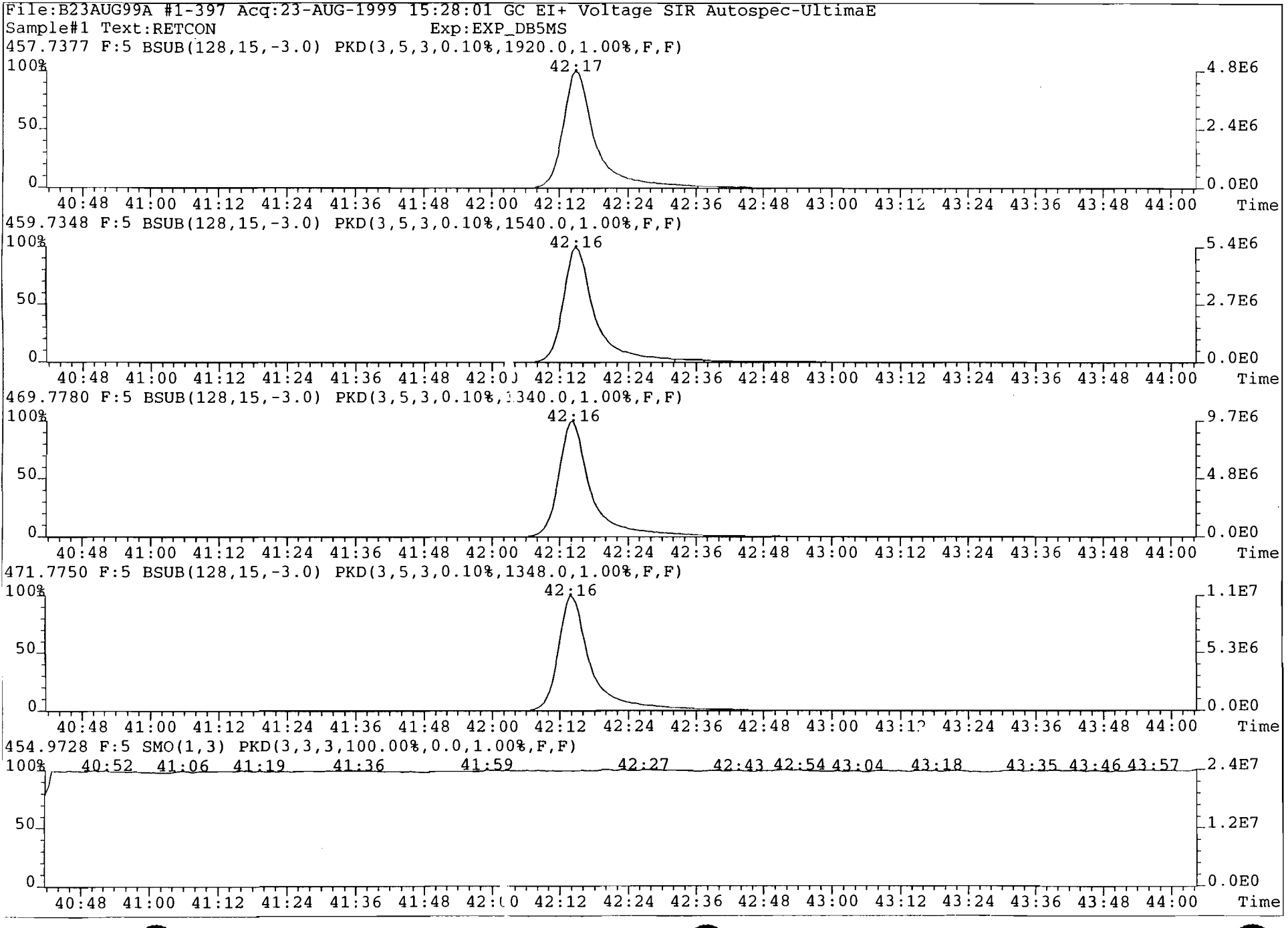

File:B23AUG99A #1-558 Acq:23-AUG-1999 15:28:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_DB5MS
319.8965 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1648.0,1.00%,F,F)
25:55
28:39
29:01
29:11
30:26
1.1E6
5.3E5
0.0E0
321.8936 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1256.0,1.00%,F,F)
25:55
28:39
29:01
29:11
30:26
1.4E6
7.0E5
0.0E0
331.9368 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,7756.0,1.00%,F,F)
28:38
29:21
9.6E6
4.8E6
0.0E0
333.9339 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,5212.0,1.00%,F,F)
28:38
29:21
1.2E7
6.1E6
0.0E0
327.8847 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2252.0,1.00%,F,F)
29:22
2.0E6
1.0E6
0.0E0
316.9824 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
24:09 24:35 25:00 25:24 26:11 26:3 27:04 27:46 28:12 28:36 29:01 29:25 29:50 30:14 30:38
2.3E7
1.1E7
0.0E0
100%
50
0
24:00
25:00
26:00
27:00
28:00
29:00
30:00
31:00
Time

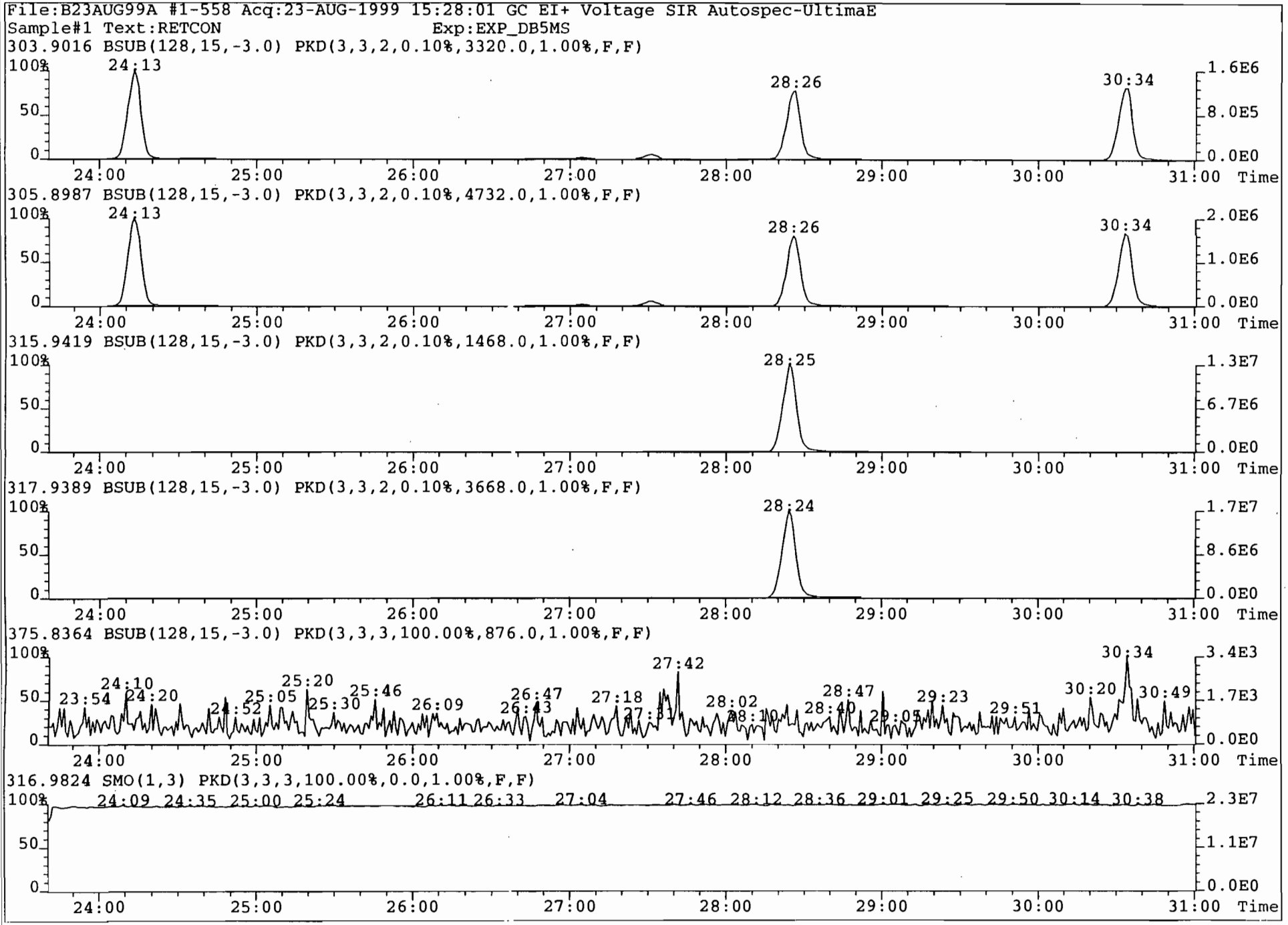
140

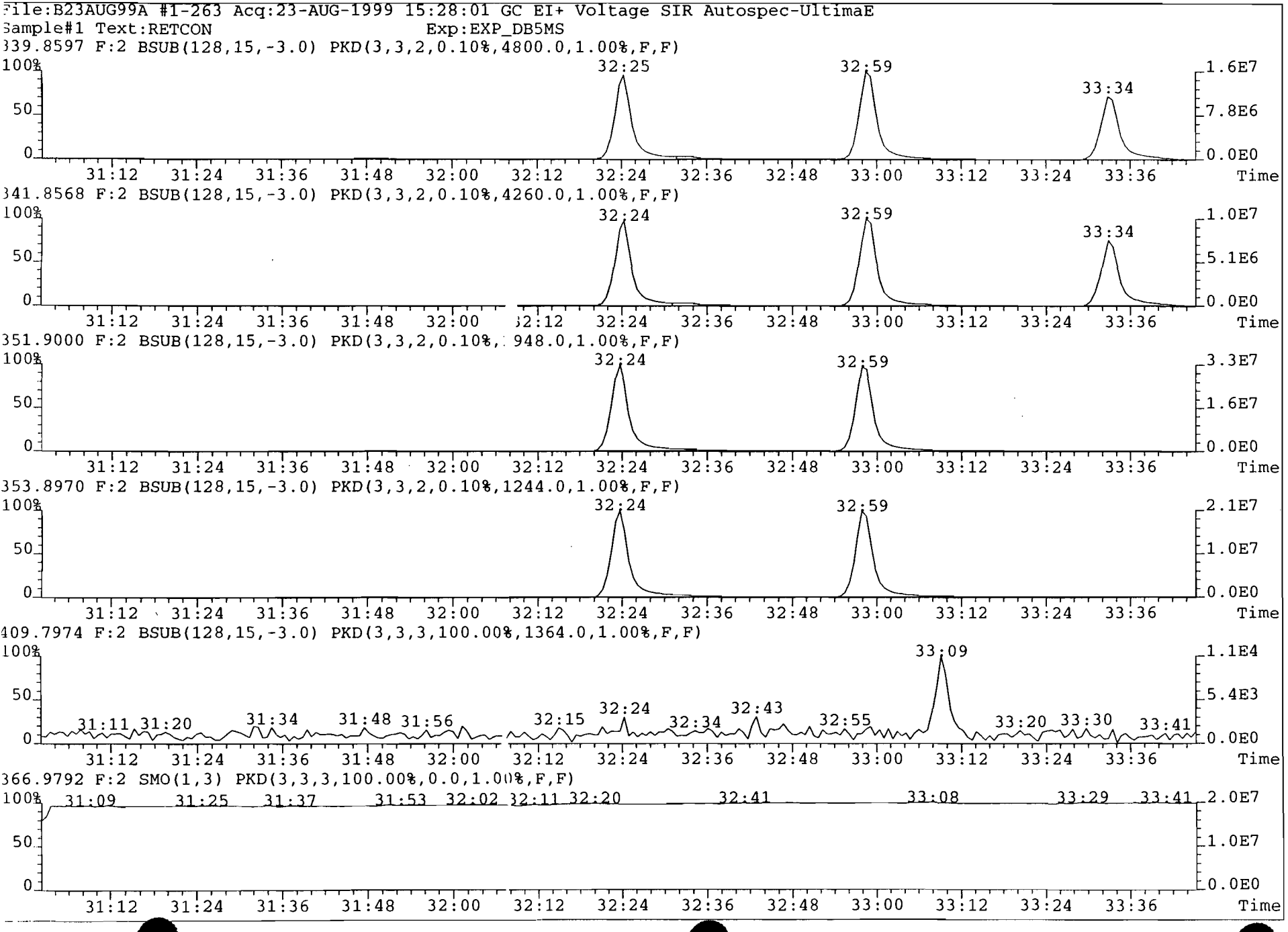

File:B23AUG99A #1-263 Acq:23-AUG-1999 15:28:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_DB5MS
355.8546 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1652.0,1.00%,F,F)
31:53
33:11
33:25
1.1E7
5.3E6
0.0E0
357.8517 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1972.0,1.00%,F,F)
31:53
33:10
33:25
6.8E6
3.4E6
0.0E0
367.8949 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1908.0,1.00%,F,F)
33:10
2.2E7
1.1E7
0.0E0
369.8919 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1036.0,1.00%,F,F)
33:10
1.4E7
7.0E6
0.0E0
366.9792 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.0%,F,F)
31:09 31:25 31:37 31:53 32:02 32:11 32:20 32:41 33:08 33:29 33:41
2.0E7
1.0E7
0.0E0
31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36
Time

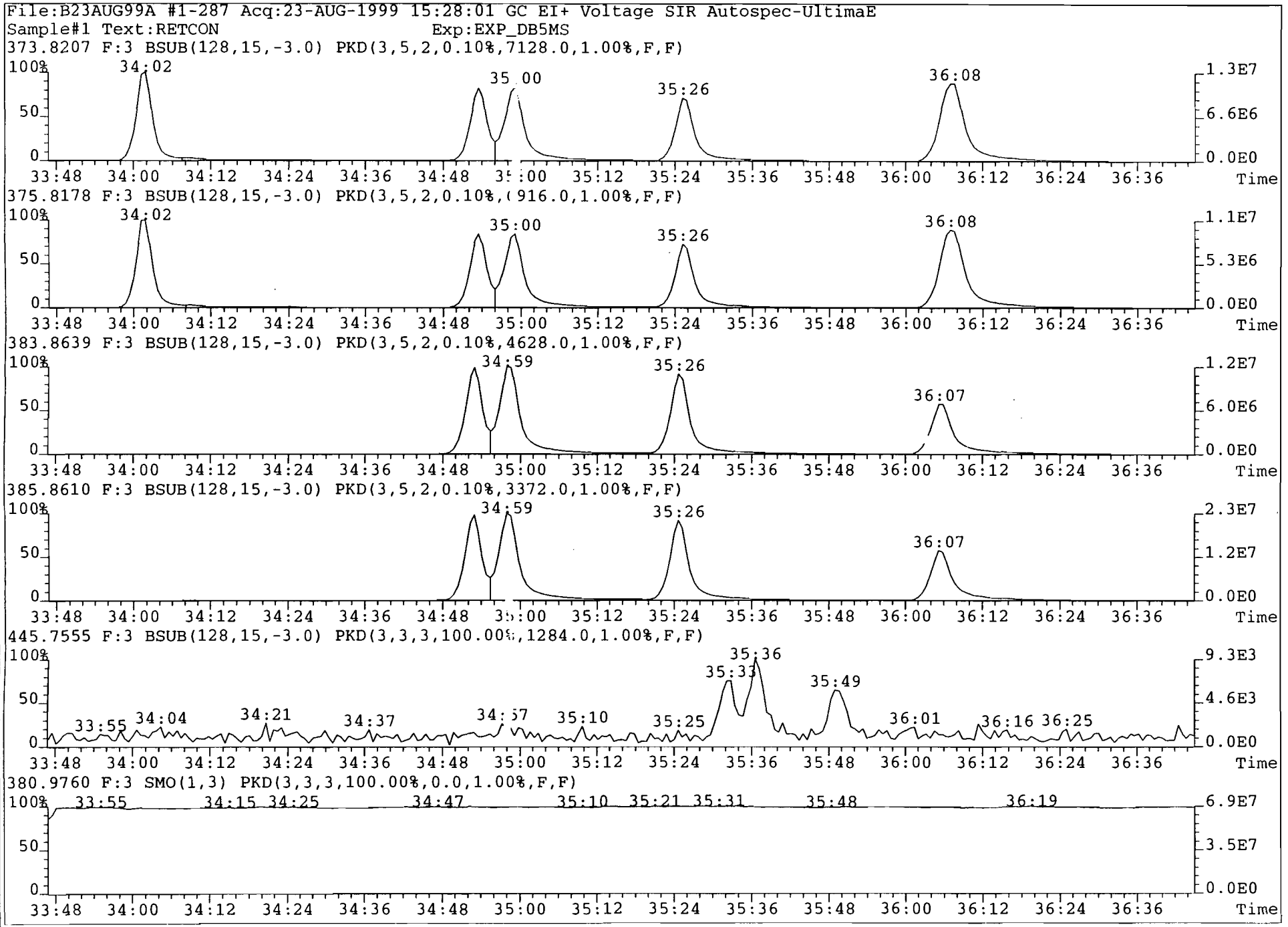

File:B23AUG99A #1-287 Acq:23-AUG-1999 15:28:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_DB5MS
389.8156 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3884.0,1.00%,F,F)
34:26
35:33
35:51
1.1E7
5.3E6
0.0E0
391.8127 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,6804.0,1.00%,F,F)
34:26
35:33
35:51
8.6E6
4.3E6
0.0E0
401.8559 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,1892.0,1.00%,F,F)
35:37
35:51
1.4E7
7.1E6
0.0E0
403.8530 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,1824.0,1.00%,F,F)
35:37
35:51
1.1E7
5.7E6
0.0E0
380.9760 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
33:55
34:15
34:25
34:47
35:10
35:21
35:31
35:48
36:19
6.9E7
3.5E7
0.0E0
100%
50
0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36
Time

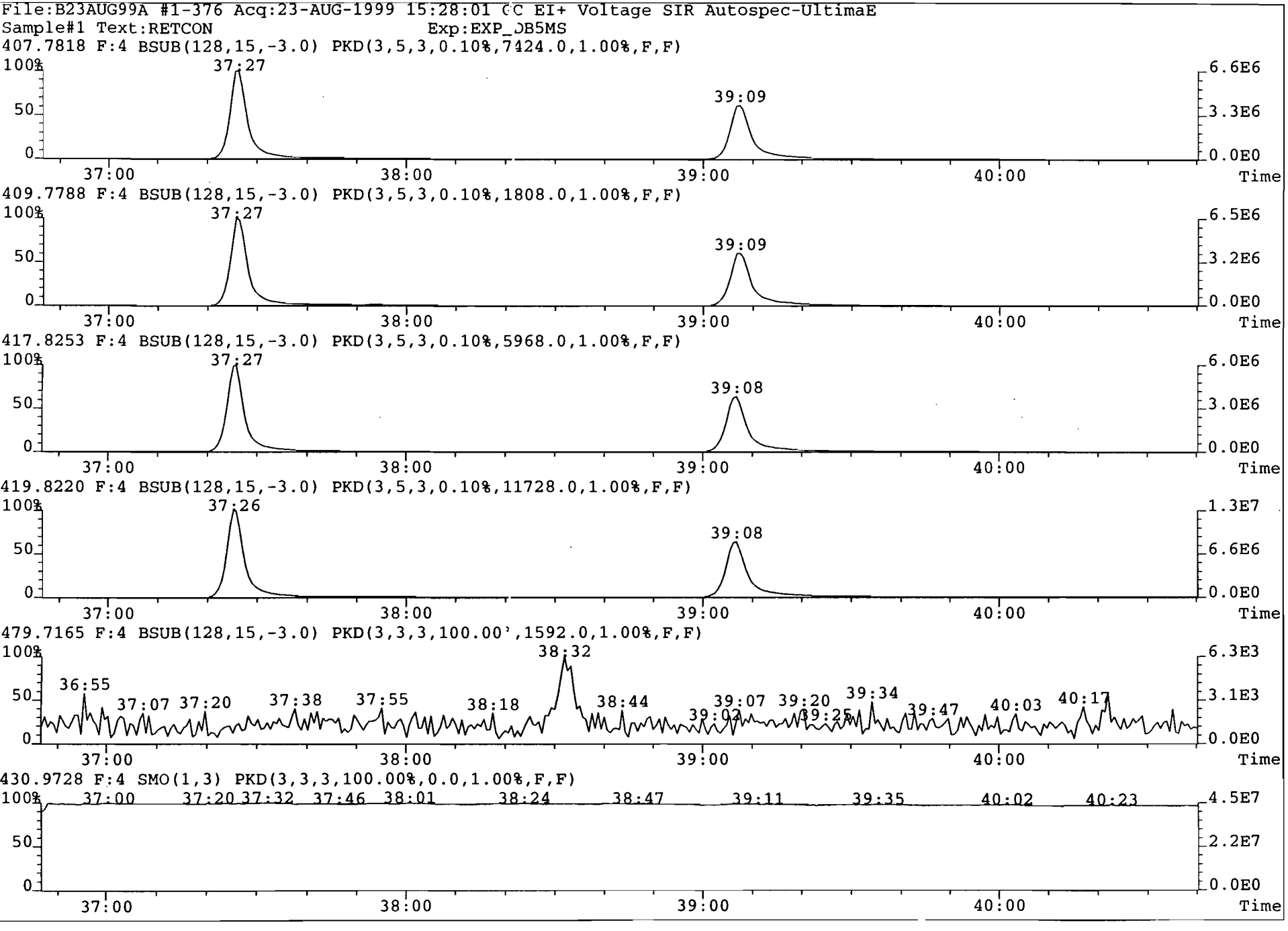

File:B23AUG99A #1-376 Acq:23-AUG-1999 15:28:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_DB5MS
423.7767 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,7388.0,1.00%,F,F)
37:45
38:34
5.2E6
2.6E6
0.0E0
425.7737 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1196.0,1.00%,F,F)
37:45
38:34
4.9E6
2.5E6
0.0E0
435.8169 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,8684.0,1.00%,F,F)
38:34
8.5E6
4.2E6
0.0E0
437.8140 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,8508.0,1.00%,F,F)
38:34
8.1E6
4.0E6
0.0E0
430.9728 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
36:56 37:12 37:32 37:46 38:01 38:24 38:47 39:11 39:35 40:02 40:23
4.5E7
2.2E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
Time

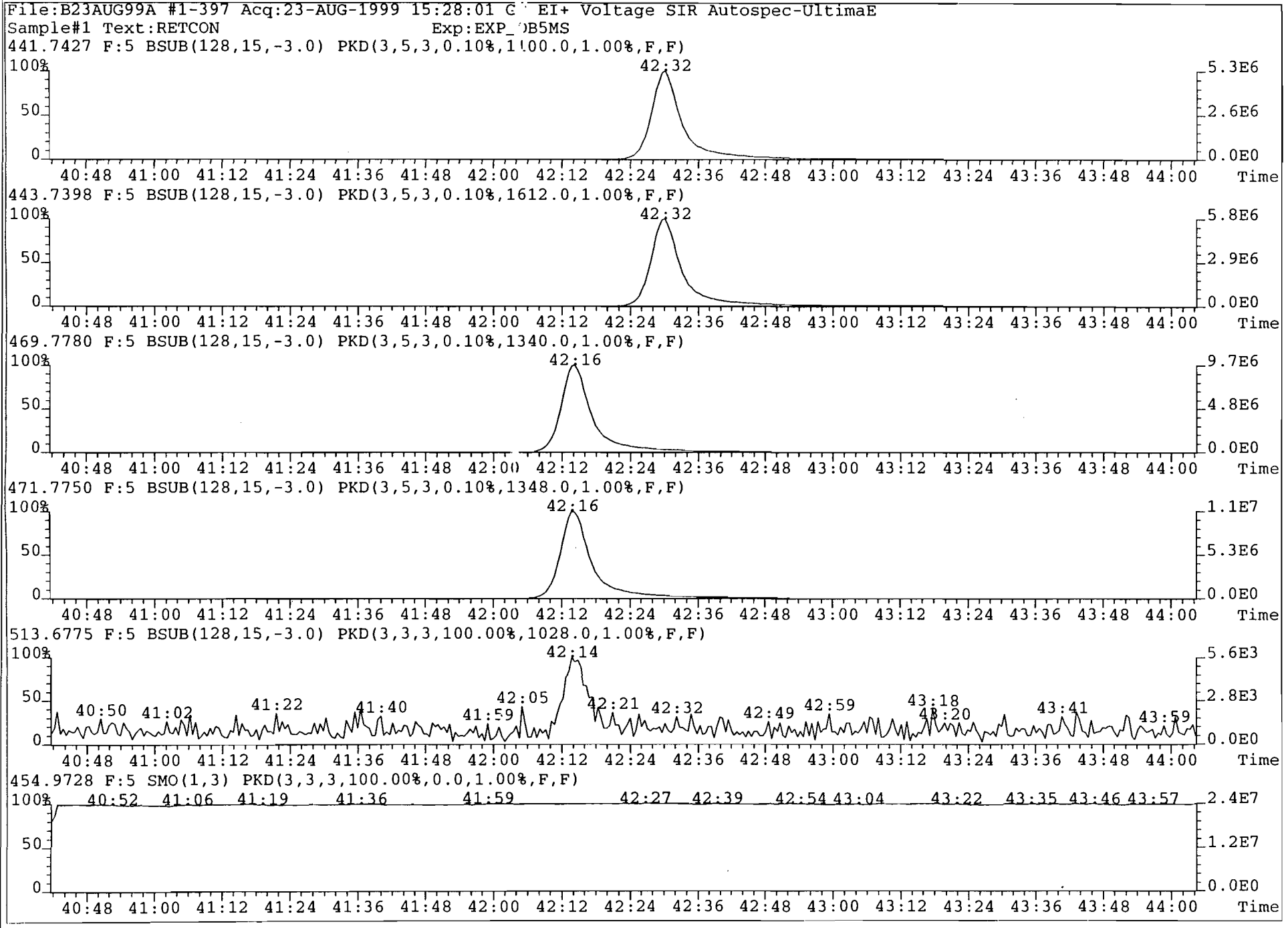

File:B23AUG99A #1-397 Acq:23-AUG-1999 15:28:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_DB5MS
457.7377 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1920.0,1.00%,F,F)
42:17
4.8E6
2.4E6
0.0E0
459.7348 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1540.0,1.00%,F,F)
42:16
5.4E6
2.7E6
0.0E0
469.7780 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1340.0,1.00%,F,F)
42:16
9.7E6
4.8E6
0.0E0
471.7750 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1348.0,1.00%,F,F)
42:16
1.1E7
5.3E6
0.0E0
454.9728 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
40:52 41:06 41:19 41:36 41:59 42:27 42:43 42:54 43:04 43:18 43:35 43:46 43:57
2.4E7
1.2E7
0.0E0
100%
50
0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time

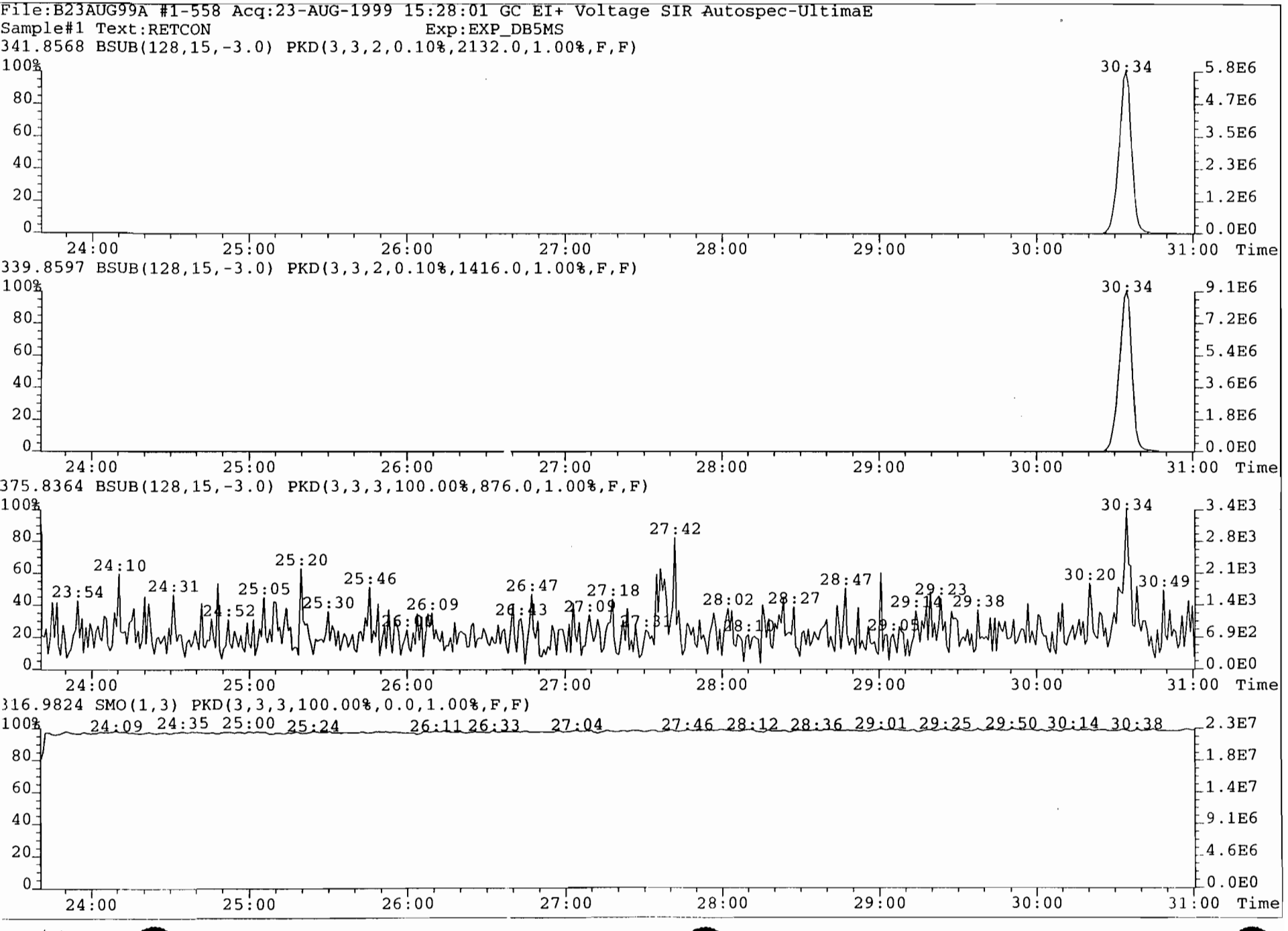

File:B23AUG99A #1-558 Acq:23-AUG-1999 15:28:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_DB5MS
303.9016 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3320.0,1.00%,F,F)
24:13
28:26
30:34
1.6E6
8.0E5
0.0E0
305.8987 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,4732.0,1.00%,F,F)
24:13
28:26
30:34
2.0E6
1.0E6
0.0E0
315.9419 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1468.0,1.00%,F,F)
28:25
1.3E7
6.7E6
0.0E0
317.9389 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3668.0,1.00%,F,F)
28:24
1.7E7
8.6E6
0.0E0
375.8364 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,876.0,1.00%,F,F)
27:42
30:34
3.4E3
1.7E3
0.0E0
316.9824 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
2.3E7
1.1E7
0.0E0
24:00
25:00
26:00
27:00
28:00
29:00
30:00
31:00
Time




File:B23AUG99A #1-287 Acq:23-AUG-1999 15:28:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_DB5MS
373.8207 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,7128.0,1.00%,F,F)
34:02
35:00
35:26
36:08
1.3E7
6.6E6
0.0E0
375.8178 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,(916.0,1.00%,F,F)
34:02
35:00
35:26
36:08
1.1E7
5.3E6
0.0E0
383.8639 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,4628.0,1.00%,F,F)
34:59
35:26
36:07
1.2E7
6.0E6
0.0E0
385.8610 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3372.0,1.00%,F,F)
34:59
35:26
36:07
2.3E7
1.2E7
0.0E0
445.7555 F:3 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1284.0,1.00%,F,F)
33:55
34:04
34:21
34:37
35:10
35:25
35:33
35:36
35:49
36:01
36:16
36:25
9.3E3
4.6E3
0.0E0
380.9760 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
33:55
34:15
34:25
34:47
35:10
35:21
35:31
35:48
36:19
6.9E7
3.5E7
0.0E0
100%
50
0
33:48
34:00
34:12
34:24
34:36
34:48
35:00
35:12
35:24
35:36
35:48
36:00
36:12
36:24
36:36
Time


File:B23AUG99A #1-376 Acq:23-AUG-1999 15:28:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_DB5MS
407.7818 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,7424.0,1.00%,F,F)
37:27
39:09
6.6E6
3.3E6
0.0E0
409.7788 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1808.0,1.00%,F,F)
37:27
39:09
6.5E6
3.2E6
0.0E0
417.8253 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,5968.0,1.00%,F,F)
37:27
39:08
6.0E6
3.0E6
0.0E0
419.8220 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,11728.0,1.00%,F,F)
37:26
39:08
1.3E7
6.6E6
0.0E0
479.7165 F:4 BSUB(128,15,-3.0) PKD(3,3,3,100.00',1592.0,1.00%,F,F)
38:32
36:55
37:07 37:20
37:38
37:55
38:18
38:44
39:02
39:07 39:20
39:25
39:34
39:47
40:03
40:17
6.3E3
3.1E3
0.0E0
430.9728 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
37:00 37:20 37:32 37:46 38:01 38:24 38:47 39:11 39:35 40:02 40:23
4.5E7
2.2E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
Time

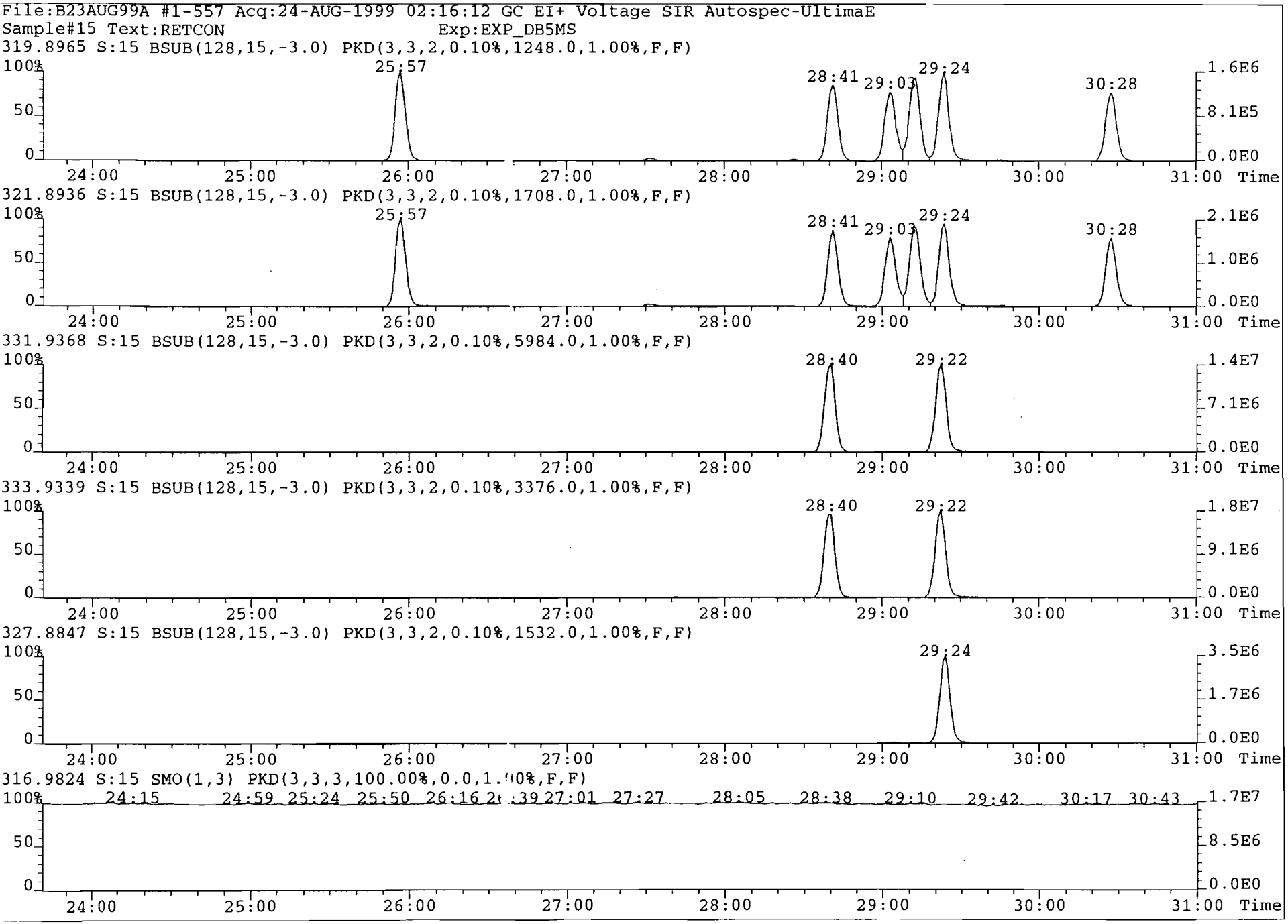

File:B23AUG99A #1-397 Acq:23-AUG-1999 15:28:01 C EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_ DB5MS
441.7427 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1 00.0,1.00%,F,F)
42:32
443.7398 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1612.0,1.00%,F,F)
42:32
469.7780 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1340.0,1.00%,F,F)
42:16
471.7750 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1348.0,1.00%,F,F)
42:16
513.6775 F:5 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1028.0,1.00%,F,F)
42:14
40:50 41:02 41:22 41:40 41:59 42:05 42:21 42:32 42:49 42:59 43:18 43:20 43:41 43:59
454.9728 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
40:52 41:06 41:19 41:36 41:59 42:27 42:39 42:54 43:04 43:22 43:35 43:46 43:57
100%
50
0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time
5.3E6
2.6E6
0.0E0
5.8E6
2.9E6
9.7E6
4.8E6
1.1E7
5.3E6
5.6E3
2.8E3
2.4E7
1.2E7

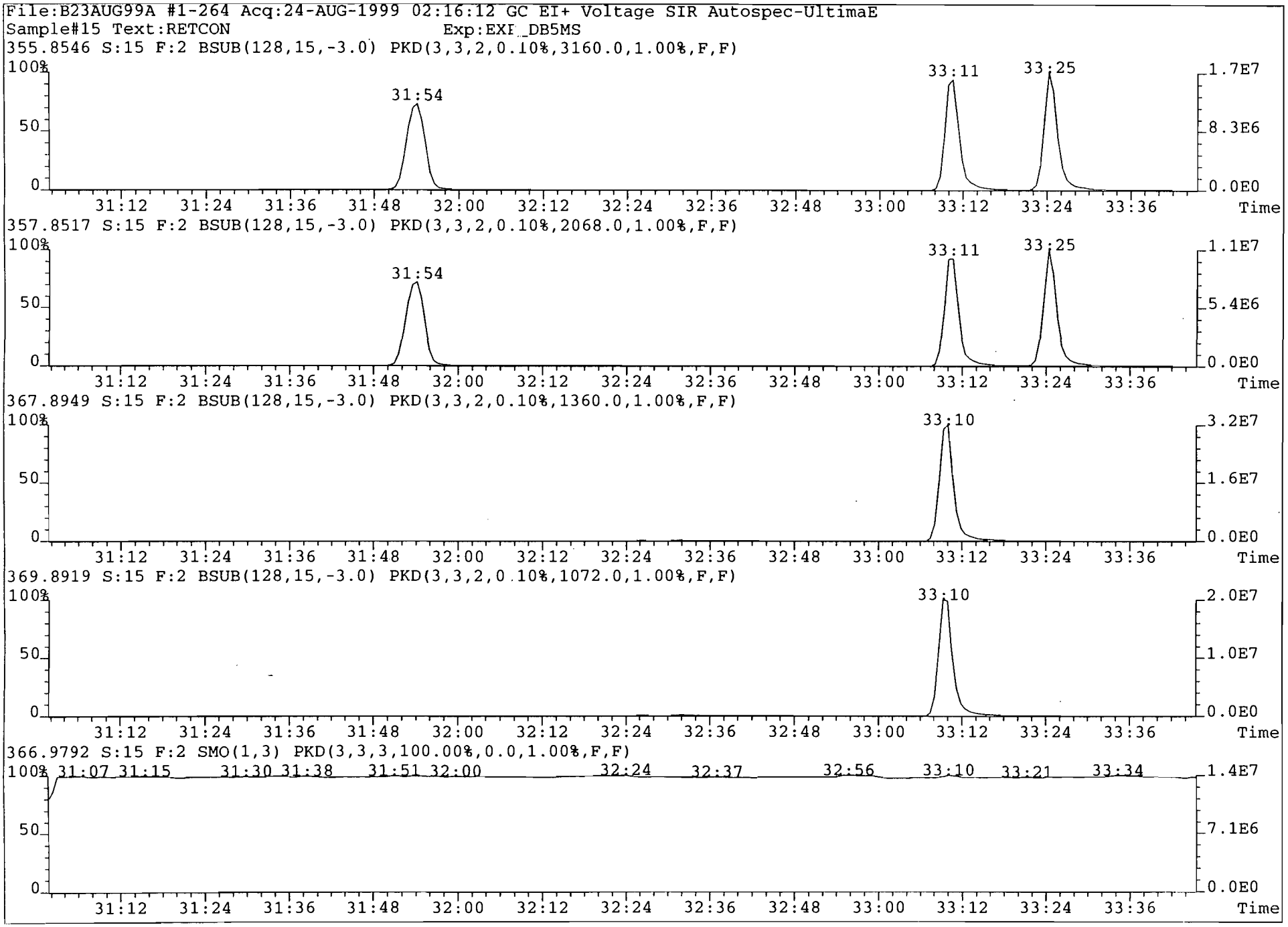

File:B23AUG99A #1-558 Acq:23-AUG-1999 15:28:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:RETCON Exp:EXP_DB5MS
341.8568 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2132.0,1.00%,F,F)
30:34
339.8597 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1416.0,1.00%,F,F)
30:34
375.8364 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,876.0,1.00%,F,F)
27:42
30:34
316.9824 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
24:09 24:35 25:00 25:24 26:11 26:33 27:04 27:46 28:12 28:36 29:01 29:25 29:50 30:14 30:38
Time

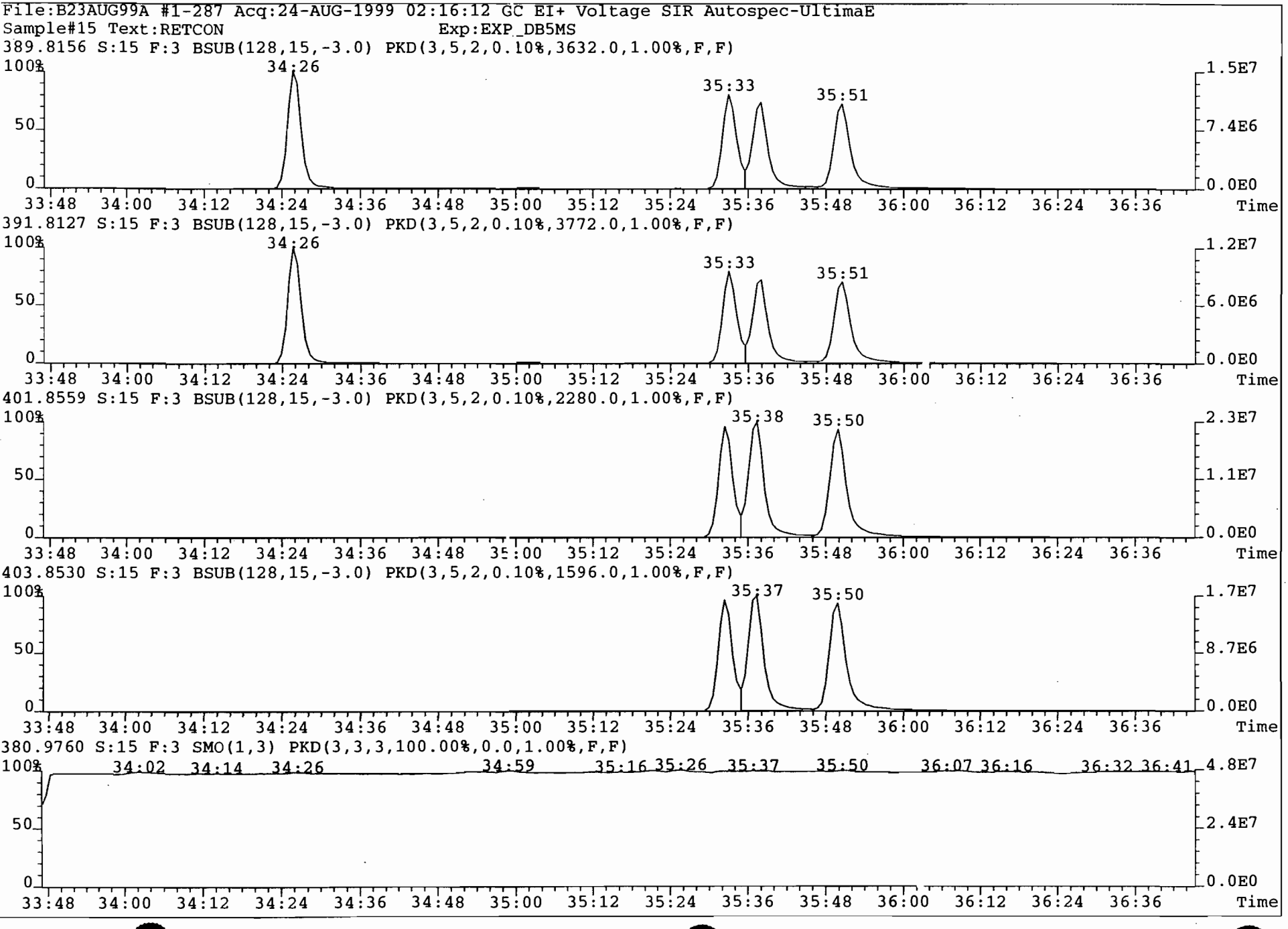
Run #7 Filename b23aug99a S: 15 I: 1 Acquired: 24-AUG-99 02:16:12 Processed: 24-AUG-99 07:59:47
Run: b04jun99a Analyte: m8290-b08» Cal: m8290-b06» Results: Quan : V3.6 31-JUL-1998 10:51:59
Sample text: RETCON Comments: OPUS : V3.6X 31-JUL-1998 11:15:12

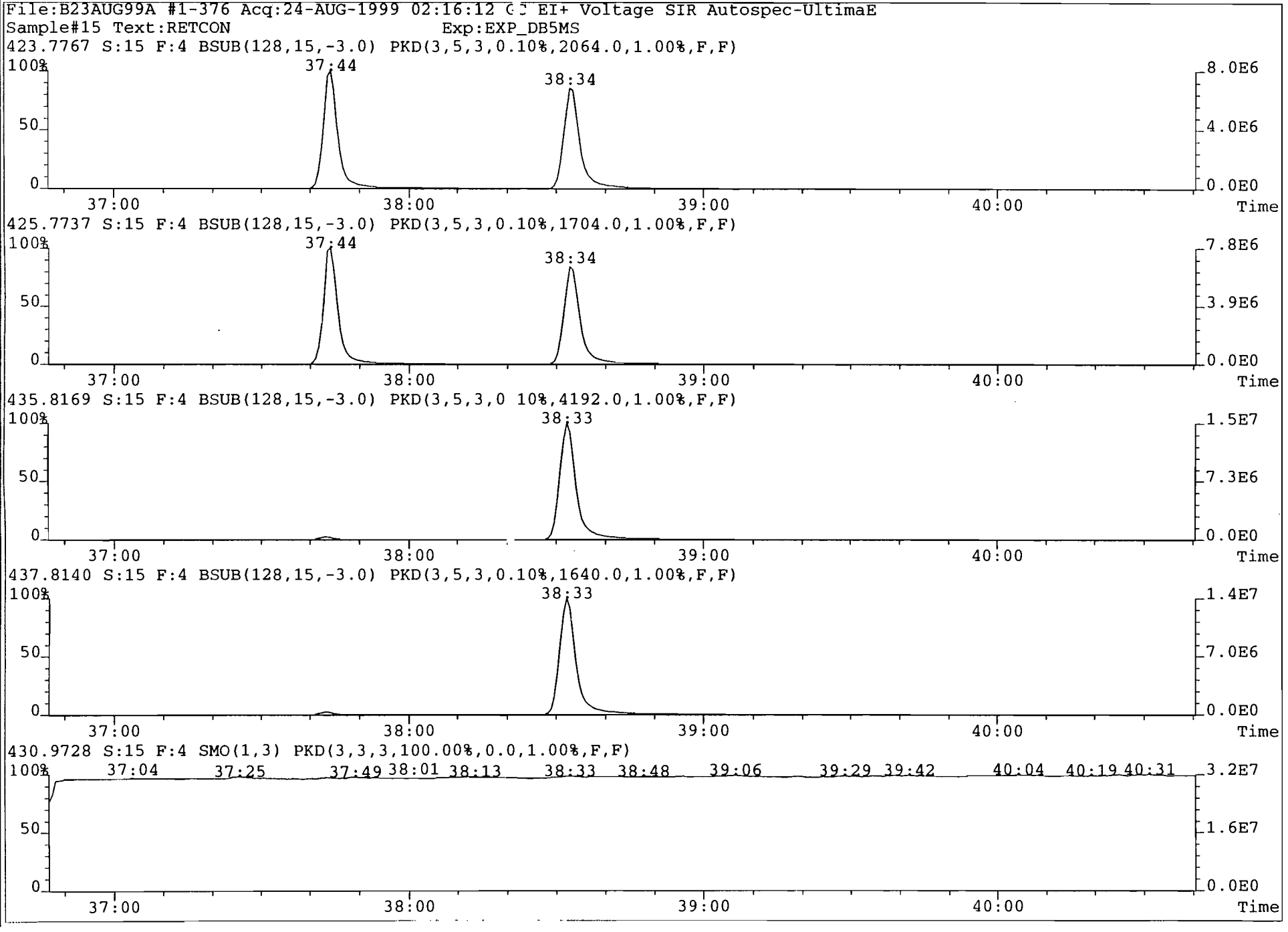
Typ	Name	Resp	RA		RT	Conc	Dev'n	CCAL RRF	ICAL RRF	Mod?
Unk	2,3,7,8-TCDD	1.6e+07	0.80	y	29:24	10.09	0.9	1.0895	1.0802	n
Unk	1,2,3,7,8-PeCDD	5.9e+07	1.55	y	33:11	49.84	-0.3	0.9805	0.9837	n
Unk	1,2,3,4,7,8-HxCDD	5.3e+07	1.26	y	35:33	49.76	-0.5	0.9301	0.9346	n
Unk	1,2,3,6,7,8-HxCDD	5.4e+07	1.26	y	35:38	49.84	-0.3	0.9551	0.9582	n
Unk	1,2,3,7,8,9-HxCDD	5.9e+07	1.27	y	35:50	50.53	1.1	1.0275	1.0168	n
Unk	1,2,3,4,6,7,8-HpCDD	5.0e+07	1.04	y	38:33	49.18	-1.6	0.9285	0.9440	n
Unk	OCDD	9.2e+07	0.88	y	42:15	98.67	-1.3	0.9969	1.0104	n
Unk	2,3,7,8-TCDF	2.1e+07	0.78	y	28:28	9.639	-3.6	0.9526	0.9883	n
Unk	1,2,3,7,8-PeCDF	3.2e+07	1.55	y	32:25	48.62	-2.8	0.9291	0.9555	n
Unk	2,3,4,7,8-PeCDF	3.2e+07	1.55	y	32:59	47.60	-4.8	0.9333	0.9803	n
Unk	1,2,3,4,7,8-HxCDF	7.7e+07	1.23	y	34:54	49.06	-1.9	1.0706	1.0911	n
Unk	1,2,3,6,7,8-HxCDF	3.3e+07	1.23	y	34:59	47.44	-5.1	1.1463	1.2082	n
Unk	2,3,4,6,7,8-HxCDF	7.2e+07	1.23	y	35:26	48.40	-3.2	1.0020	1.0350	n
Unk	1,2,3,7,8,9-HxCDF	1.3e+08	1.24	y	36:07	95.58	-4.4	0.8965	0.9380	n
Unk	1,2,3,4,6,7,8-HpCDF	6.8e+07	1.03	y	37:27	45.34	-9.3	1.3480	1.4866	n
Unk	1,2,3,4,7,8,9-HpCDF	5.7e+07	1.03	y	39:08	48.73	-2.5	1.1400	1.1696	n
Unk	OCDF	9.9e+07	0.90	y	42:30	97.17	-2.8	1.0689	1.1001	n
ES/RT	13C-2,3,7,8-TCDD	1.5e+08	0.79	y	29:22	94.95	-5.1	1.0149	1.0690	n
ES	13C-1,2,3,7,8-PeCDD	1.2e+08	1.57	y	33:10	90.26	-9.7	0.8263	0.9154	n
ES	13C-1,2,3,6,7,8-HxCDD	1.1e+08	1.29	y	35:37	99.98	0.0	0.9958	0.9959	n
ES	13C-1,2,3,4,6,7,8-HpCDD	1.1e+08	1.05	y	38:32	109.6	9.6	0.9396	0.8573	n
ES	13C-OCDD	1.8e+08	0.90	y	42:14	219.5	9.8	0.8058	0.7342	n
ES/RT	13C-2,3,7,8-TCDF	2.2e+08	0.79	y	28:26	98.33	-1.7	1.4852	1.5104	n
ES	13C-1,2,3,7,8-PeCDF	1.8e+08	1.57	y	32:24	88.54	-11.5	1.1997	1.3549	n
ES	13C-1,2,3,6,7,8-HxCDF	1.4e+08	0.53	y	34:59	96.12	-3.9	1.2591	1.3099	n
ES	13C-1,2,3,4,6,7,8-HpCDF	1.0e+08	0.45	y	37:26	100.8	0.8	0.8796	0.8729	n
JS	13C-1,2,3,4-TCDD	1.5e+08	0.80	y	28:40	114.2	-	-	-	n
JS	13C-1,2,3,7,8,9-HxCDD	1.1e+08	1.28	y	35:50	107.9	-	-	-	n
CS	37Cl-2,3,7,8-TCDD	1.5e+07	1.58	y	29:24	9.840	-1.6	1.0528	1.0700	n
CS	13C-2,3,4,7,8-PeCDF	1.7e+08	1.28	y	32:59	90.13	-9.9	1.1690	1.2970	n
CS	13C-1,2,3,4,7,8-HxCDD	9.6e+07	0.52	y	35:32	98.91	-1.1	0.8366	0.8458	n
CS	13C-1,2,3,4,7,8-HxCDF	1.3e+08	0.45	y	34:53	97.99	-2.0	1.1402	1.1635	n
CS	13C-1,2,3,4,7,8,9-HpCDF	8.8e+07	1.58	y	39:06	104.9	4.9	0.7727	0.7364	n
SS	37Cl-2,3,7,8-TCDD	1.5e+07	1.28	y	29:24	10.37	3.7	1.0373	1.0008	n
SS	13C-2,3,4,7,8-PeCDF	1.7e+08	0.52	y	32:59	101.8	1.8	0.9744	0.9571	n
SS	13C-1,2,3,4,7,8-HxCDD	9.6e+07	0.45	y	35:32	98.90	-1.1	0.8401	0.8494	n
SS	13C-1,2,3,4,7,8-HxCDF	1.3e+08			34:53	101.9	1.9	0.9056	0.8884	n
SS	13C-1,2,3,4,7,8,9-HpCDF	8.8e+07			39:06	104.1	4.1	0.8784	0.8436	n
DPE	HxCDPE	*			NotFnd	*	-	-	-	n
DPE	HpCDPE	*			NotFnd	*	-	-	-	n

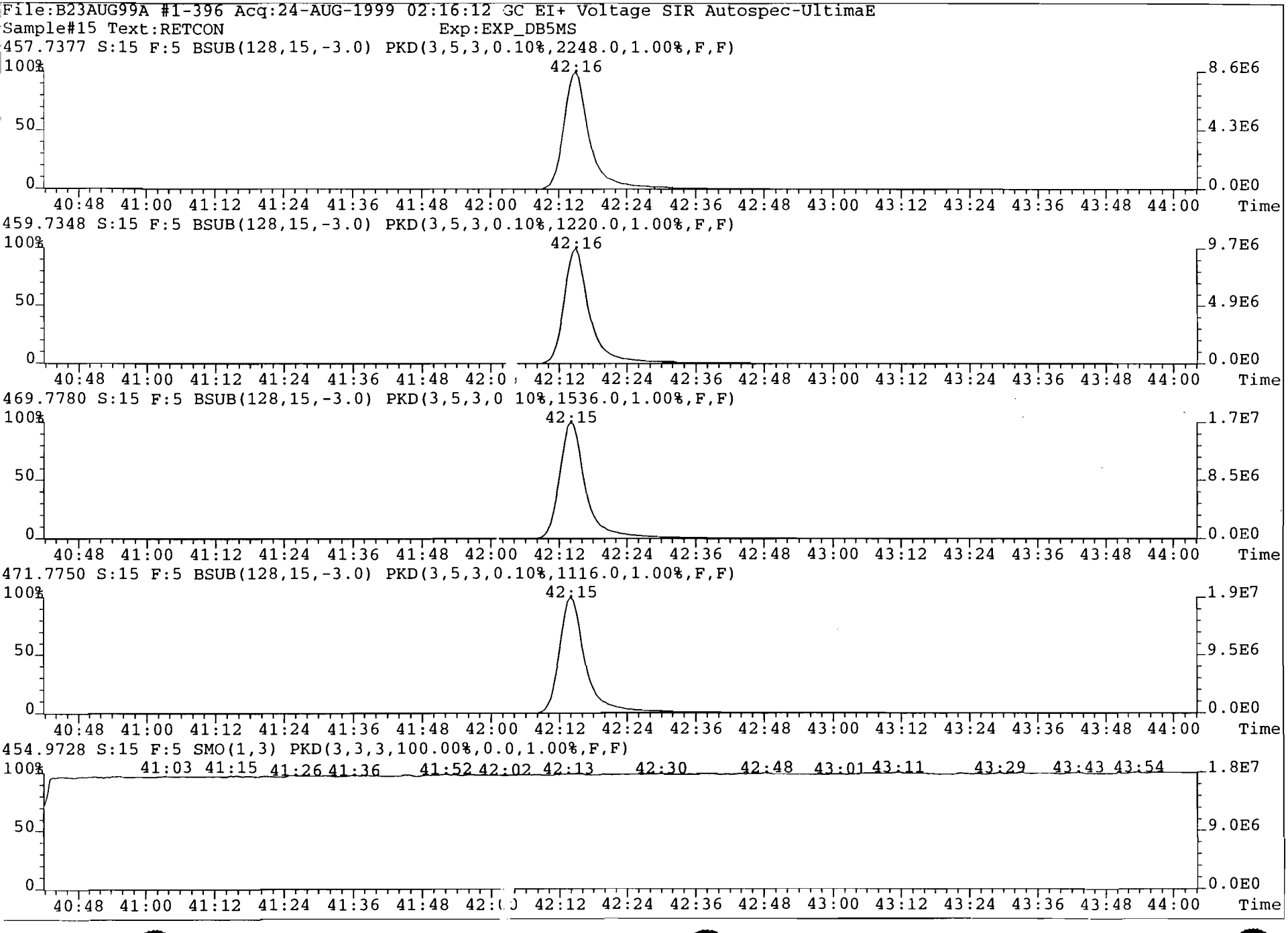
OK

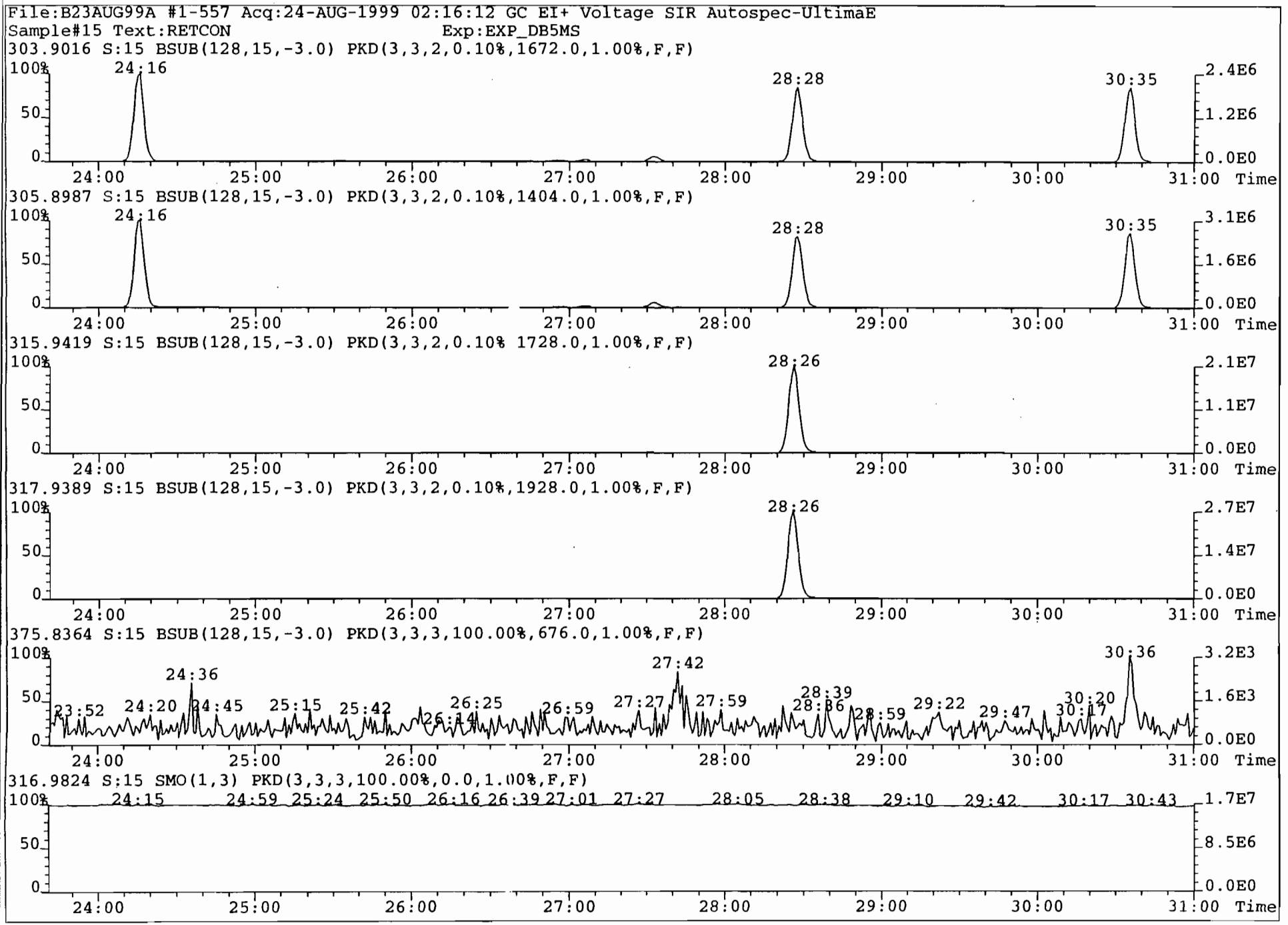

File:B23AUG99A #1-557 Acq:24-AUG-1999 02:16:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON Exp:EXP_DB5MS
319.8965 S:15 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1248.0,1.00%,F,F)
25:57
28:41
29:03
29:24
30:28
1.6E6
8.1E5
0.0E0
321.8936 S:15 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1708.0,1.00%,F,F)
25:57
28:41
29:03
29:24
30:28
2.1E6
1.0E6
0.0E0
331.9368 S:15 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,5984.0,1.00%,F,F)
28:40
29:22
1.4E7
7.1E6
0.0E0
333.9339 S:15 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3376.0,1.00%,F,F)
28:40
29:22
1.8E7
9.1E6
0.0E0
327.8847 S:15 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1532.0,1.00%,F,F)
29:24
3.5E6
1.7E6
0.0E0
316.9824 S:15 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
24:15 24:59 25:24 25:50 26:16 27:01 27:27 28:05 28:38 29:10 29:42 30:17 30:43
1.7E7
8.5E6
0.0E0
100%
50
0
24:00
25:00
26:00
27:00
28:00
29:00
30:00
31:00
Time

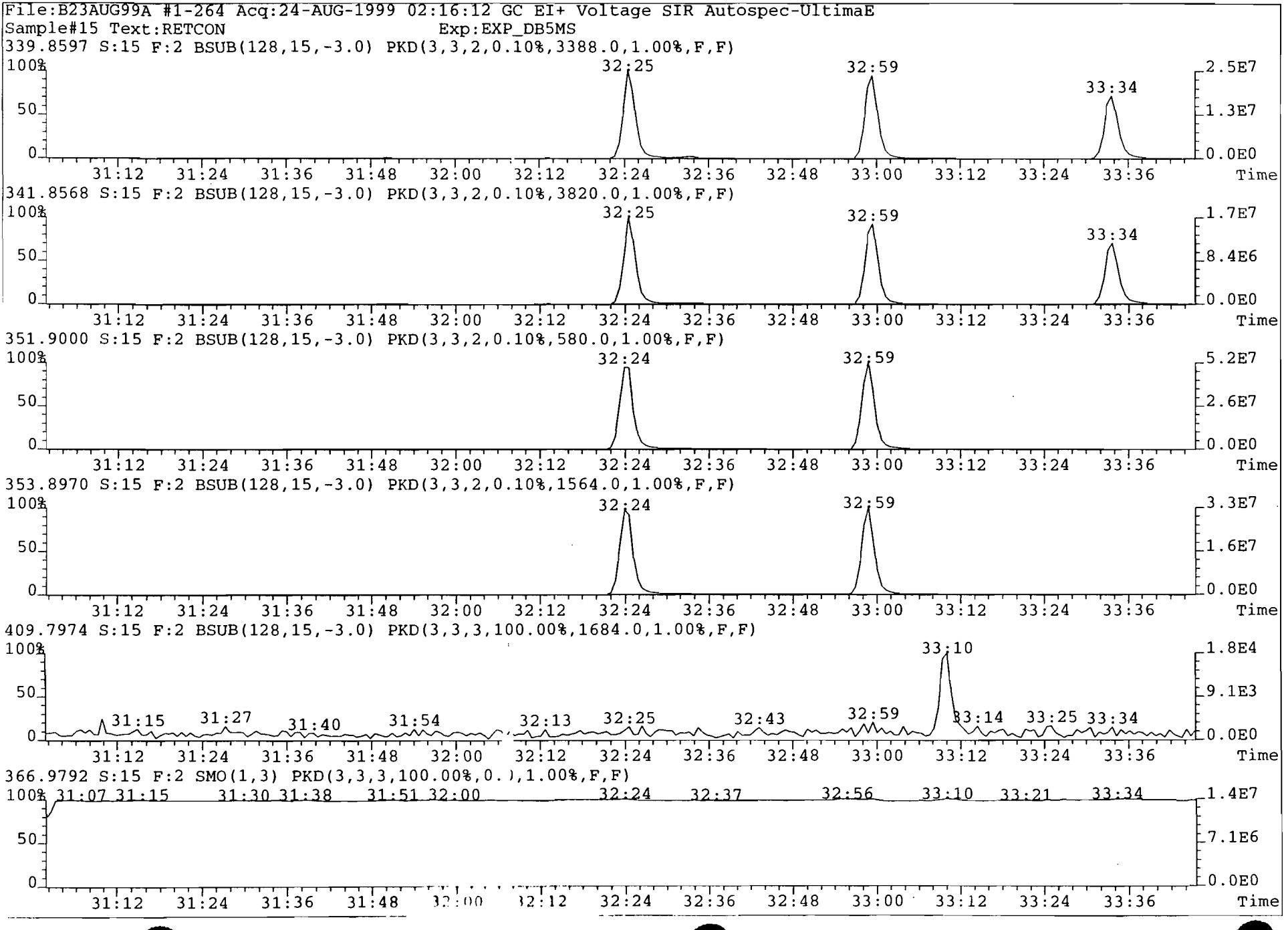

File:B23AUG99A #1-264 Acq:24-AUG-1999 02:16:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON Exp:EXP_DB5MS
355.8546 S:15 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3160.0,1.00%,F,F)
31:54
33:11
33:25
1.7E7
8.3E6
0.0E0
357.8517 S:15 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,2068.0,1.00%,F,F)
31:54
33:11
33:25
1.1E7
5.4E6
0.0E0
367.8949 S:15 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1360.0,1.00%,F,F)
33:10
3.2E7
1.6E7
0.0E0
369.8919 S:15 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1072.0,1.00%,F,F)
33:10
2.0E7
1.0E7
0.0E0
366.9792 S:15 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
31:07 31:15 31:30 31:38 31:51 32:00 32:24 32:37 32:56 33:10 33:21 33:34
1.4E7
7.1E6
0.0E0
100%
50
0
31:12 31:24 31:36 31:48 32:00 32:12 32:24 32:36 32:48 33:00 33:12 33:24 33:36
Time

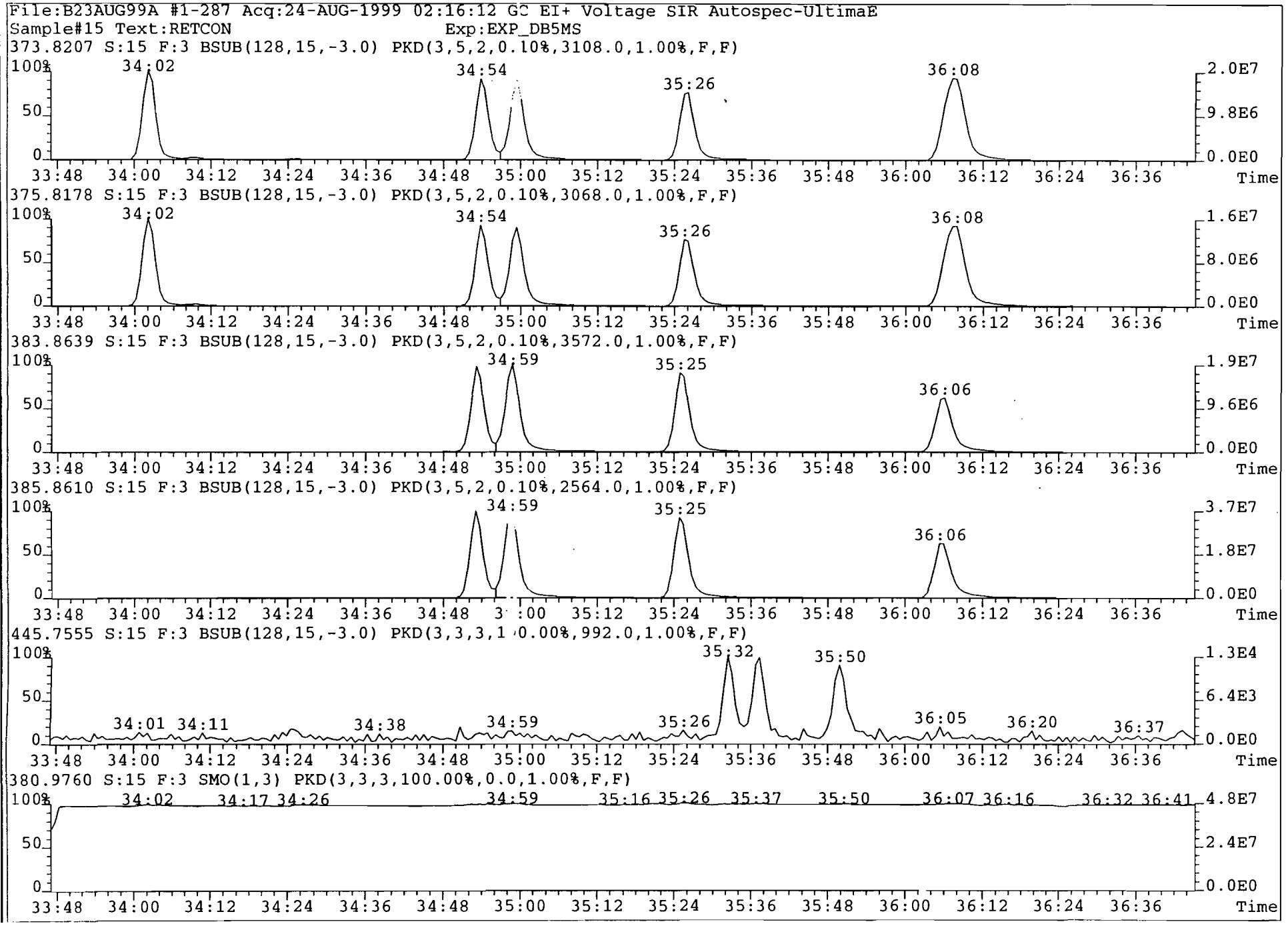

File:B23AUG99A #1-287 Acq:24-AUG-1999 02:16:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON Exp:EXP_DB5MS
389.8156 S:15 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3632.0,1.00%,F,F)
34:26
35:33
35:51
1.5E7
7.4E6
0.0E0
391.8127 S:15 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3772.0,1.00%,F,F)
34:26
35:33
35:51
1.2E7
6.0E6
0.0E0
401.8559 S:15 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,2280.0,1.00%,F,F)
35:38
35:50
2.3E7
1.1E7
0.0E0
403.8530 S:15 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,1596.0,1.00%,F,F)
35:37
35:50
1.7E7
8.7E6
0.0E0
380.9760 S:15 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
34:02 34:14 34:26 34:59 35:16 35:26 35:37 35:50 36:07 36:16 36:32 36:41
4.8E7
2.4E7
0.0E0
100%
50
0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36
Time

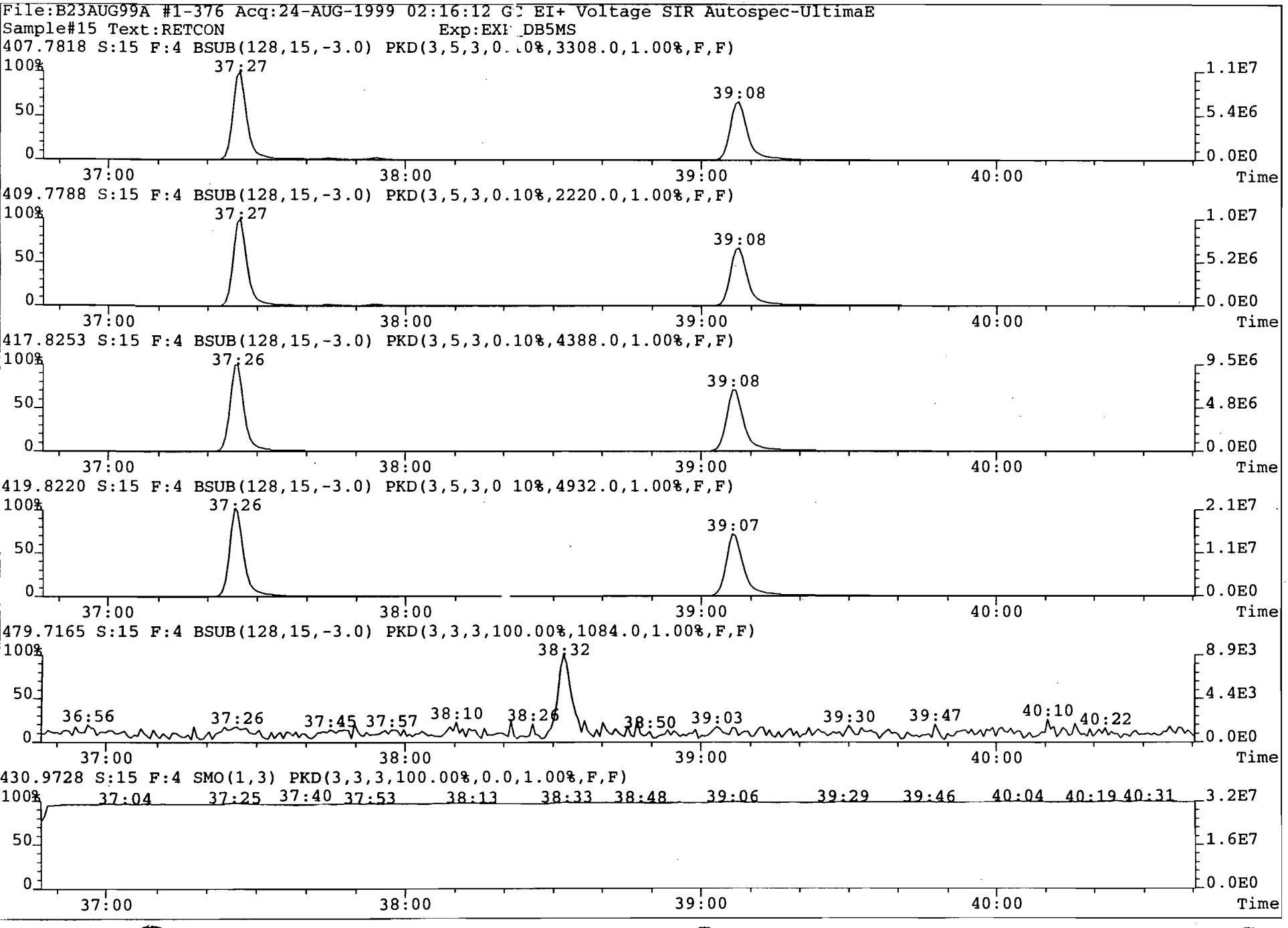

File:B23AUG99A #1-376 Acq:24-AUG-1999 02:16:12 EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON Exp:EXP_DB5MS
423.7767 S:15 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2064.0,1.00%,F,F)
37:44
38:34
8.0E6
4.0E6
425.7737 S:15 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1704.0,1.00%,F,F)
37:44
38:34
7.8E6
3.9E6
435.8169 S:15 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0 10%,4192.0,1.00%,F,F)
38:33
1.5E7
7.3E6
437.8140 S:15 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1640.0,1.00%,F,F)
38:33
1.4E7
7.0E6
430.9728 S:15 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
37:04 37:25 37:49 38:01 38:13 38:33 38:48 39:06 39:29 39:42 40:04 40:19 40:31
3.2E7
1.6E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
Time

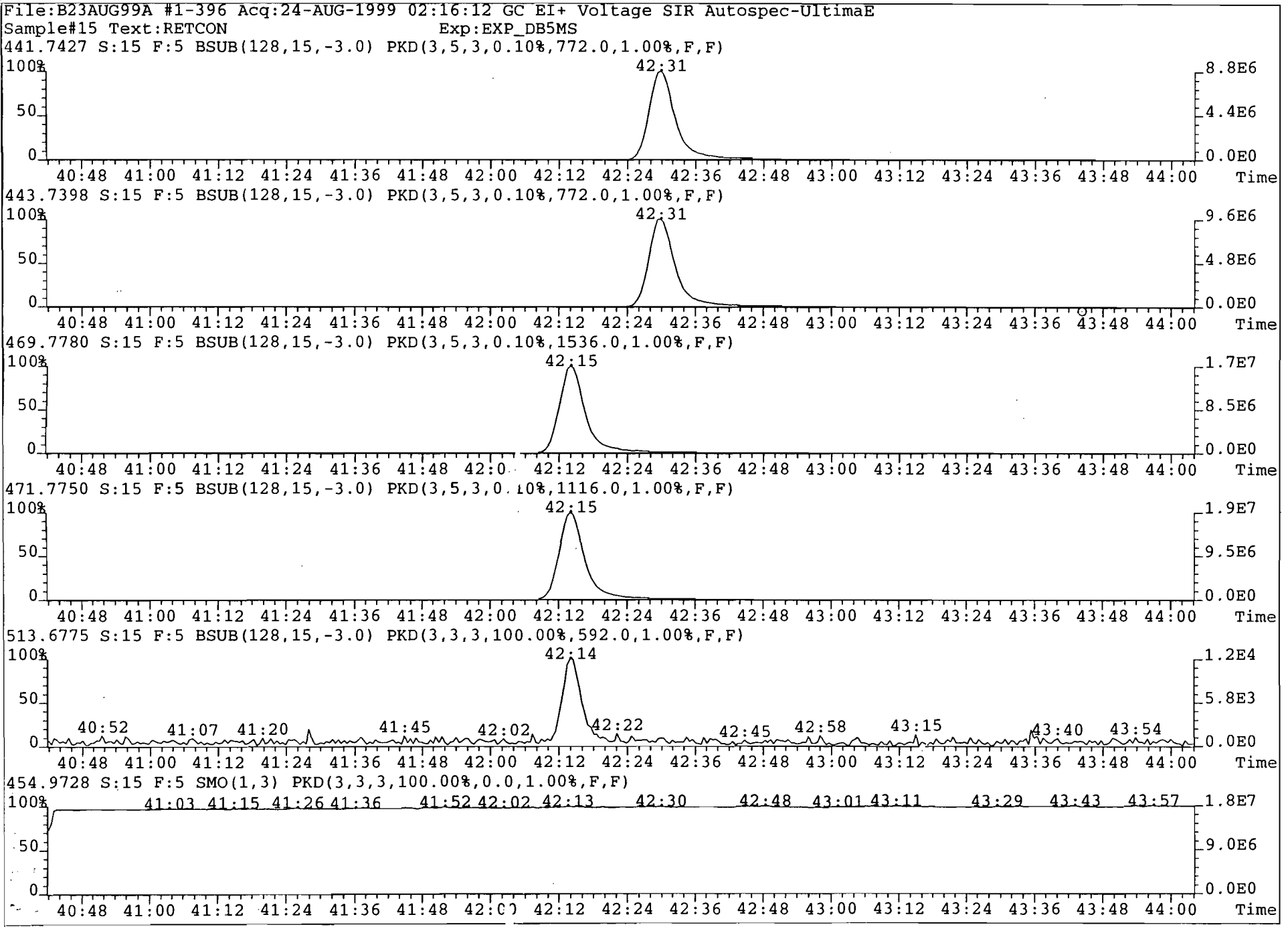

File:B23AUG99A #1-396 Acq:24-AUG-1999 02:16:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON Exp:EXP_DB5MS
457.7377 S:15 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2248.0,1.00%,F,F)
42:16
8.6E6
4.3E6
0.0E0
459.7348 S:15 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1220.0,1.00%,F,F)
42:16
9.7E6
4.9E6
0.0E0
469.7780 S:15 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0 10%,1536.0,1.00%,F,F)
42:15
1.7E7
8.5E6
0.0E0
471.7750 S:15 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1116.0,1.00%,F,F)
42:15
1.9E7
9.5E6
0.0E0
454.9728 S:15 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
41:03 41:15 41:26 41:36 41:52 42:02 42:13 42:30 42:48 43:01 43:11 43:29 43:43 43:54
1.8E7
9.0E6
0.0E0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time

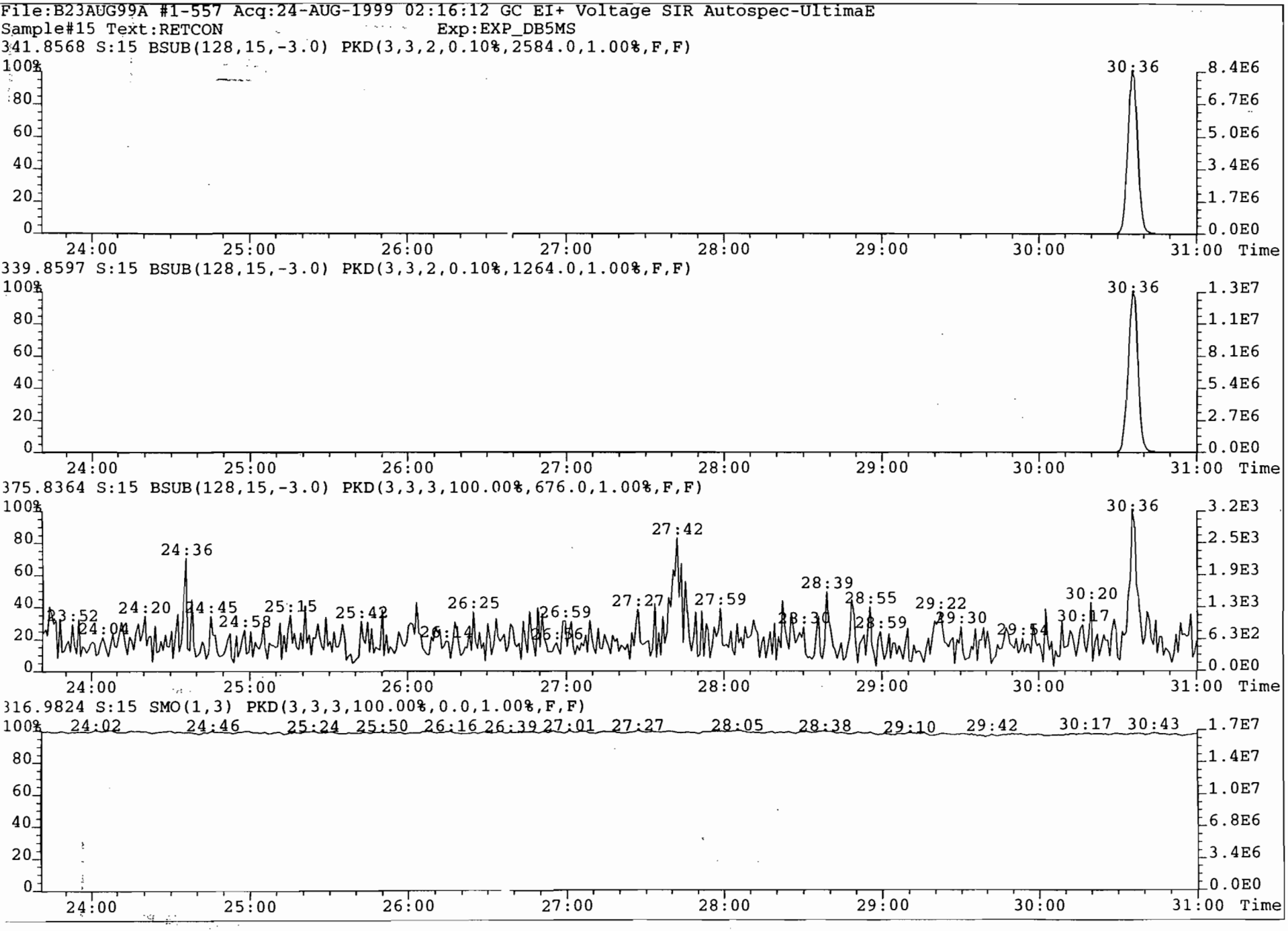

File:B23AUG99A #1-557 Acq:24-AUG-1999 02:16:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON Exp:EXP_DB5MS
303.9016 S:15 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1672.0,1.00%,F,F)
24:16
28:28
30:35
2.4E6
1.2E6
0.0E0
305.8987 S:15 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1404.0,1.00%,F,F)
24:16
28:28
30:35
3.1E6
1.6E6
0.0E0
315.9419 S:15 BSUB(128,15,-3.0) PKD(3,3,2,0.10% 1728.0,1.00%,F,F)
28:26
2.1E7
1.1E7
0.0E0
317.9389 S:15 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1928.0,1.00%,F,F)
28:26
2.7E7
1.4E7
0.0E0
375.8364 S:15 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,676.0,1.00%,F,F)
24:36
27:42
30:36
3.2E3
1.6E3
0.0E0
316.9824 S:15 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
1.7E7
8.5E6
0.0E0
24:00
25:00
26:00
27:00
28:00
29:00
30:00
31:00
Time


File:B23AUG99A #1-264 Acq:24-AUG-1999 02:16:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON Exp:EXP_DB5MS
339.8597 S:15 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3388.0,1.00%,F,F)
32:25
32:59
33:34
2.5E7
1.3E7
0.0E0
341.8568 S:15 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,3820.0,1.00%,F,F)
32:25
32:59
33:34
1.7E7
8.4E6
0.0E0
351.9000 S:15 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,580.0,1.00%,F,F)
32:24
32:59
5.2E7
2.6E7
0.0E0
353.8970 S:15 F:2 BSUB(128,15,-3.0) PKD(3,3,2,0.10%,1564.0,1.00%,F,F)
32:24
32:59
3.3E7
1.6E7
0.0E0
409.7974 S:15 F:2 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1684.0,1.00%,F,F)
33:10
31:15
31:27
31:40
31:54
32:13
32:25
32:43
32:59
33:14
33:25
33:34
1.8E4
9.1E3
0.0E0
366.9792 S:15 F:2 SMO(1,3) PKD(3,3,3,100.00%,0.
),1.00%,F,F)
31:07
31:15
31:30
31:38
31:51
32:00
32:24
32:37
32:56
33:10
33:21
33:34
1.4E7
7.1E6
0.0E0
100%
50
0
31:12
31:24
31:36
31:48
32:00
32:12
32:24
32:36
32:48
33:00
33:12
33:24
33:36
Time


File:B23AUG99A #1-287 Acq:24-AUG-1999 02:16:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON Exp:EXP_DB5MS
373.8207 S:15 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3108.0,1.00%,F,F)
34:02
34:54
35:26
36:08
2.0E7
9.8E6
0.0E0
375.8178 S:15 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3068.0,1.00%,F,F)
34:02
34:54
35:26
36:08
1.6E7
8.0E6
0.0E0
383.8639 S:15 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,3572.0,1.00%,F,F)
34:59
35:25
36:06
1.9E7
9.6E6
0.0E0
385.8610 S:15 F:3 BSUB(128,15,-3.0) PKD(3,5,2,0.10%,2564.0,1.00%,F,F)
34:59
35:25
36:06
3.7E7
1.8E7
0.0E0
445.7555 S:15 F:3 BSUB(128,15,-3.0) PKD(3,3,3,1 0.00%,992.0,1.00%,F,F)
35:32
35:50
34:01 34:11
34:38
34:59
35:26
36:05
36:20
36:37
1.3E4
6.4E3
0.0E0
380.9760 S:15 F:3 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
34:02 34:17 34:26
34:59
35:16 35:26 35:37
35:50
36:07 36:16
36:32 36:41
4.8E7
2.4E7
0.0E0
33:48 34:00 34:12 34:24 34:36 34:48 35:00 35:12 35:24 35:36 35:48 36:00 36:12 36:24 36:36
Time


File:B23AUG99A #1-376 Acq:24-AUG-1999 02:16:12 G? EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON Exp:EXI DB5MS
407.7818 S:15 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,3308.0,1.00%,F,F)
37:27
39:08
1.1E7
5.4E6
0.0E0
409.7788 S:15 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,2220.0,1.00%,F,F)
37:27
39:08
1.0E7
5.2E6
0.0E0
417.8253 S:15 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,4388.0,1.00%,F,F)
37:26
39:08
9.5E6
4.8E6
0.0E0
419.8220 S:15 F:4 BSUB(128,15,-3.0) PKD(3,5,3,0 10%,4932.0,1.00%,F,F)
37:26
39:07
2.1E7
1.1E7
0.0E0
479.7165 S:15 F:4 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,1084.0,1.00%,F,F)
38:32
36:56 37:26 37:45 37:57 38:10 38:26 38:50 39:03 39:30 39:47 40:10 40:22
8.9E3
4.4E3
0.0E0
430.9728 S:15 F:4 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
37:04 37:25 37:40 37:53 38:13 38:33 38:48 39:06 39:29 39:46 40:04 40:19 40:31
3.2E7
1.6E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
Time


File:B23AUG99A #1-396 Acq:24-AUG-1999 02:16:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:RETCON Exp:EXP_DB5MS
441.7427 S:15 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,772.0,1.00%,F,F)
42:31
8.8E6
4.4E6
0.0E0
443.7398 S:15 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,772.0,1.00%,F,F)
42:31
9.6E6
4.8E6
0.0E0
469.7780 S:15 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1536.0,1.00%,F,F)
42:15
1.7E7
8.5E6
0.0E0
471.7750 S:15 F:5 BSUB(128,15,-3.0) PKD(3,5,3,0.10%,1116.0,1.00%,F,F)
42:15
1.9E7
9.5E6
0.0E0
513.6775 S:15 F:5 BSUB(128,15,-3.0) PKD(3,3,3,100.00%,592.0,1.00%,F,F)
42:14
40:52 41:07 41:20 41:45 42:02 42:22 42:45 42:58 43:15 43:40 43:54
1.2E4
5.8E3
0.0E0
454.9728 S:15 F:5 SMO(1,3) PKD(3,3,3,100.00%,0.0,1.00%,F,F)
41:03 41:15 41:26 41:36 41:52 42:02 42:13 42:30 42:48 43:01 43:11 43:29 43:43 43:57
1.8E7
9.0E6
0.0E0
100%
50
0
40:48 41:00 41:12 41:24 41:36 41:48 42:00 42:12 42:24 42:36 42:48 43:00 43:12 43:24 43:36 43:48 44:00
Time



Paradigm Sample Log

Data File S	Sample ID	Analyst	Acq. Date	Time
b23aug99a;1	;RETCON	;HMK	23-AUG-99	15:28:01
b23aug99a;2	;SB	;HMK	23-AUG-99	16:14:19
b23aug99a;3	;WG2286-1 x1/2	;HMK	23-AUG-99	17:00:38
b23aug99a;4	;WG2274-1 x1/1	;HMK	23-AUG-99	17:46:57
b23aug99a;5	;70733 x1/2	;HMK	23-AUG-99	18:33:16
b23aug99a;6	;70734 x1/2	;HMK	23-AUG-99	19:19:34
b23aug99a;7	;70735 x1/2	;HMK	23-AUG-99	20:05:52
b23aug99a;8	;70736 x1/2	;HMK	23-AUG-99	20:52:07
b23aug99a;9	;69977E x1/1	;HMK	23-AUG-99	21:38:25
b23aug99a;10	;68700 x1/1	;HMK	23-AUG-99	22:24:43
b23aug99a;11	;68701 x1/1	;HMK	23-AUG-99	23:10:57
b23aug99a;12	;68702 x1/1	;HMK	23-AUG-99	23:57:16
b23aug99a;13	;68703 x1/1	;HMK	24-AUG-99	00:43:35
b23aug99a;14	;WG2286-2	;HMK	24-AUG-99	01:29:53
b23aug99a;15	;RETCON	;HMK	24-AUG-99	02:16:12