Hazardous Waste Section

File Room Document Transmittal Sheet

Your Name:	Robert McDaniel
EPA ID:	N C D 0 0 3 2 1 3 9 0 7
Facility Name:	Alcatel-Lucent
Document Group:	Groundwater (GW)
Document Type:	Other (O)
Description:	First 2011 Semi-Annual Report & Effectiveness Evaluation
Date of Doc:	8/1/2011
Author of Doc:	Gary Fisher

File Room Use Only

	Month	Day	Year
Date Recieved by File Room:	8	15	2011
Date Scanned:	8	15	2011

Scanner's Initials: RKB

Alcatel·Lucent

600 Mountain Avenue
Room 7D-401
Murray Hill, NJ 07974

August 1, 2011

RECEIVED
AUG 2011
Hazardous Waste Section

Mr. Rob McDaniel
Hazardous Waste Facility Management Branch
NCDENR
401 Oberlin Road, Suite 150
Raleigh, NC 27611-9603

RE: First 2011 Semi-Annual Sampling Report & Effectiveness Evaluation
Alcatel-Lucent USA Inc.
Winston-Salem, North Carolina
NCD 003 213 907

Dear Mr. McDaniel:

In compliance with the RCRA Permit, I am enclosing the First 2011 Semi-Annual Sampling Report & Effectiveness Evaluation, dated August 1, 2011. An appropriate certification statement accompanies this submission. Authority to sign the Certification on behalf of the named Permittee has been delegated to me (delegation letter attached).

If you have any questions you may contact me at (908) 582-5771.

Sincerely,

Gary M. Fisher
Alcatel-Lucent USA Inc.

cc: Erin Stewart, AECOM

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: August 1, 2011

Gary M. Fisher

EH&S Remediation Manager

Alcatel-Lucent USA Inc.

Designated Signatory

Patrick D. Morrison

Vice President

Alcatel USA Inc.

Permittee

Alcatel·Lucent

December 23, 2008

Subject: Delegation of Authority

Effective immediately, I hereby assign and delegate Rich Quick, Senior Manager, Alcatel-Lucent Real Estate, the authority and responsibility to sign on behalf of Alcatel-Lucent, each report, certification, application, permit and any other documentation which may be required by, or reasonably necessary for submission to local, state or federal agencies with authority for environmental, health and safety matters.

In the absence of the above delegated individual, the foregoing authority and responsibility to sign is assigned and delegated to:

Brian Lynch	Real Estate Director
James Giordano, P.E.	Environmental Health and Safety Manager
Gary Fisher	EHS Remediation Manager

Patrick Morrison

Vice President
Alcatel-Lucent USA Inc.

Copy to:
Brian Lynch
Rich Quick

AECOM Environment

Prepared for:
Alcatel-Lucent USA Inc.
Murray Hill, New Jersey

Prepared by:
AECOM
Raleigh, NC
60194417.3000
August 2011

First 2011 Semi-Annual Sampling Report and Effectiveness Evaluation - RCRA Post Closure Care and Corrective Action Monitoring System

Alcatel-Lucent USA Inc.
Former North Carolina Works
Lexington Road Plant
(NCD003213907)

Erin Stewart

Prepared By Erin Stewart, P.G.

Reviewed By David H. Simpson, P.G.

Contents

1.0 Introduction 1-1

1.1 Groundwater Monitoring Program 1-1

1.2 Groundwater Extraction Well System 1-1

1.3 Evaluation of the Corrective Action System 1-2

2.0 Sampling Methods 2-1

2.1 Sampling Procedures 2-1

2.1.1 Effectiveness and Point of Compliance Wells 2-1

2.1.2 Extraction Well and System Composite Samples 2-2

2.2 Analytical Methods and Results 2-2

2.2.1 Effectiveness and Point of Compliance Wells 2-2

2.2.2 Extraction Well and System Composite Samples 2-4

2.3 Quality Assurance and Quality Control 2-4

2.3.1 Quality Assurance and Quality Control Samples 2-4

2.3.2 Data Validation 2-5

3.0 Discussion of the Results 3-1

3.1 Trends in Volatile Organic Compound Concentration 3-1

3.1.1 Point of Compliance Well 3-1

3.1.2 Comparison to North Carolina NCAC 2L Groundwater Quality Standard 3-2

3.1.3 Extent and Distribution of Volatile Organic Compounds 3-2

3.1.4 Temporal Trends in Volatile Organic Compounds Concentrations 3-2

3.2 Trends in Indicator Parameters 3-3

3.3 Groundwater Elevations 3-3

4.0 Effectiveness Evaluation 4-1

4.1 Groundwater Remediation System 4-1

4.1.1 Operational Data 4-2

4.1.2 Operational Issues and Repairs 4-2

4.1.3 Mass Removal 4-3

4.1.4 Hydraulic Control 4-3

4.1.5 Recommendations for Enhancing System Effectiveness 4-3

4.2 Soil Remediation Systems 4-4

4.2.1 Operational Data 4-5

4.2.2 Operational Issues and Repairs 4-5

4.2.3 Mass Removal 4-5

4.2.4 Recommendations for Enhancing System Effectiveness 4-5

5.0 Conclusions and Recommendations 5-1

6.0 References 6-2

List of Appendices

Appendix A Groundwater Sampling Records

Appendix B Laboratory Reports

Appendix C Summary of Detected Appendix IX Parameters

Appendix D Data Validation Reports

List of Tables

1-1 Summary Groundwater Monitoring Wells, Parameters, and Sampling Frequency

1-2 Summary of VOC and TPH System Extraction Wells

2-1 Monitoring Well Groundwater Elevations and Total Depths

2-2 Field Indicator Parameters

2-3 Summary of Analytical Results – RCRA Parameters for Monitoring Wells

2-4 Summary of Analytical Results – RCRA Parameters for Extraction Wells

2-5 Summary of Analytical Results – RCRA Parameters for Composite System Samples

2-6 Total Petroleum Hydrocarbon Groundwater Analytical Results

2-7a Field Precision Data

2-7b Qualified Analytical Data

4-1 Extraction and Pumping Well Construction Details

4-2 Summary of Water Levels, Drawdown, and Pumping Rates for Extraction and Pumping Wells

4-3 Specific Capacity Calculation

4-4 Estimated Total VOC Mass Removal and Removal Rates

4-5 Oil House SVE System – Hours of Operation

4-6 Oil House SVE System – Exhaust Analytical Data

4-7 Oil House SVE System – Operating Parameters

4-8 Oil House SVE System – Estimated Monthly Mass Removal

List of Figures

1-1 Site Location Map

1-2 Site Plan

3-1a Effectiveness/POC Wells – Historical PCE Data

3-1b Effectiveness/POC Wells – Historical PCE Data

3-2a System A Extraction Wells – Historical PCE Data

3-2b System B Extraction Wells – Historical PCE Data

3-3a Effectiveness/POC Wells – Historical TCE Data

3-3b Effectiveness/POC Wells – Historical TCE Data

3-4a System A Extraction Wells – Historical TCE Data

3-4b System B Extraction Wells – Historical TCE Data

3-5 PCE Concentrations – Plan View

3-6 PCE Concentrations – Cross Section View from A – A'

3-7 TCE Concentrations – Plan View

3-8 TCE Concentrations – Cross Section View from A – A'

3-9 Groundwater Potentiometric Surface Map – Plan View

3-10 Potentiometric Surface Map – Cross Section View from A – A'

4-1 Comparison of Gallons Pumped/Total Mass Removed/Estimated Removal Rate

4-2 Oil House SVE System – Exhaust Analytical Data

4-3 Oil House SVE System – Estimated Monthly Mass Removal

List of Acronyms

2,3,7,8-TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
2L Standards	North Carolina NCAC 2L Groundwater Quality Standard
AECOM	AECOM North Carolina, Inc.
Alcatel-Lucent	Alcatel-Lucent USA Inc.
Appendix IX	40 CFR Part 264 Appendix IX
COC	chain of custody
DBM	Design Basis Memorandum
DRO	diesel range organics
EPA	United States Environmental Protection Agency
GC/MS	Chromatography/Mass Spectrometry
HpCDD	heptachlorodibenzo-p-dioxin
HpCDF	heptachlorodibenzofuran
HWS	North Carolina Hazardous Waste Section
mg/L	milligrams per liter
MS/MSD	matrix spike/matrix spike duplicate
NCDENR	North Carolina Department of Environment and Natural Resources
OCDD	octachlorodibenzo-p-dioxin
PCB	polychlorinated biphenyl
PCDD	polychlorinated dibenzo-p-dioxins
PCDF	polychlorinated dibenzo-p-furans
PCE	tetrachloroethene
pg/L	picograms per liter
PLC	programmable logic controller
POC	point of compliance

ppmv	per million by volume
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
SVE	soil vapor extraction
SVOC	semi-volatile organic compounds
TCE	trichloroethene
TOC	top of casing
TPH	total petroleum hydrocarbon
UST	underground storage tank
VOC	volatile organic compounds
µg/L	micrograms per liter

1.0 Introduction

This report presents the results from the first 2011 semi-annual (March 2011) groundwater monitoring event for the Alcatel-Lucent USA Inc. (Alcatel-Lucent) Former North Carolina Works – Lexington Road Plant (the Site) located at 3370 Lexington Road, Winston-Salem, North Carolina (NCD003213907). Figure 1-1 presents the plant location.

1.1 Groundwater Monitoring Program

The first semi-annual groundwater sampling event for 2011 was conducted in March 2011 (a confirmation sampling round was conducted in May 2011) in accordance with the Site's Resource Conservation and Recovery Act (RCRA) Part B Permit requirements set forth by Part III (Post Closure Care), Part IV (Groundwater Protection) and Part V (Corrective Action of Solid Waste Management Units). Monitoring under these requirements began in 1994, with significant modifications approved and implemented in March 2000. Additional modifications to the RCRA Permit were proposed in the 10-year permit reapplication submitted in 2003 to the North Carolina Department of Environment and Natural Resources (NCDENR). The changes to the monitoring program proposed in the March 2003 permit application were implemented in September 2005 and are reflected in the contents and format of this report. These include changing the sampling schedule of the point of compliance (POC) well, corrective action system effectiveness wells, and extraction wells to an annual sampling schedule, which occurs in March of each year.

Figure 1-2 shows the layout of the entire monitoring and extraction well network. The permit wells include twenty-four effectiveness wells, one POC well and fifteen extraction wells. Table 1-1 lists the POC and effectiveness monitoring wells and summarizes the permit defined monitoring requirements. In addition to the requirements listed in Table 1-1, POC well MW-2A is sampled for constituents listed in 40 CFR Part 264 Appendix IX (Appendix IX) constituents every five years as required by the RCRA Permit. Appendix IX constituents were sampled during the March 2011 sampling event and are discussed in more detail in Section 2.2 below. Table 1-2 lists the volatile organic compound (VOC) and total petroleum hydrocarbon (TPH) system extraction wells and summarizes the permit defined monitoring requirements. Monitoring of these wells fulfills the RCRA permit requirement to demonstrate the state of corrective action efforts.

1.2 Groundwater Extraction Well System

The groundwater extraction well system was brought on-line in November 1995, with the exception of extraction wells EW-14, EW-17, EW-22, EW-18, TF-1, TF-2 and TF-3, which were brought on-line as indicated on Table 1-2.

The fifteen active extraction wells include thirteen wells to remove dissolved phase VOC and two wells to remove dissolved phase TPH. The remediation system influent is divided into two segregated systems designated System A and System B. System A consists of TPH extraction wells (TF-2 and DT-1) and VOC extraction wells (EW-4, EW-6, EW-12, EW-14, EW-16, EW-18, and EW-21). The TPH wells (and EW-18) are manifolded to a common influent pipeline that enters the treatment plant separately from the other wells on System A. System B consists of VOC extraction wells (EW-5, EW-15, EW-17, EW-19, EW-22, and VOC-1).

In accordance with the March 2000 modifications to the RCRA Part B Permit, extraction wells are sampled once annually, during the March semi-annual event. During the September semi-annual sampling event, samples are collected only from the System A influent line, System B influent line and the TPH System influent line. Further discussion regarding extraction well sampling is located in Section 2.0 of this report.

1.3 Evaluation of the Corrective Action System

An evaluation of the groundwater extraction well system is included in Section 4.0 of this report. The evaluation includes a review of operational data, operational issues and repairs, mass removal, hydraulic control, and concentrations of target compounds.

An evaluation of the one soil vapor extraction (SVE) system operating at the Site is presented in Section 4.2. The evaluation includes a review of operational data, mass removal, and concentrations of target compounds.

2.0 Sampling Methods

Groundwater samples were collected on March 1 and 2, 2011 from the POC well, effectiveness wells, extraction wells, and groundwater treatment system influents. Samples were submitted for laboratory analysis of VOCs by United States Environmental Protection Agency (EPA) SW-846 Method 8260. Selected samples were also analyzed for oil and grease by EPA Method 1664A and diesel range organics (DRO) by EPA Method 8015 Modified. In addition to semi-annual groundwater activities, on March 16, 2011 POC well MW-2A was sampled for Appendix IX constituents as required every five years by the RCRA Permit. Appendix IX compounds were collected on a different date due to the complexity of the bottle order and effort required to coordinate with several subcontract laboratories.

Personnel from AECOM North Carolina, Inc. (AECOM) and Environmental Field Management, Inc. (Pittsboro, North Carolina) conducted the sampling event. Laboratory analyses were performed by Prism Laboratories, Inc. in Charlotte, North Carolina or one of Prism's subcontracted laboratories.

2.1 Sampling Procedures

2.1.1 Effectiveness and Point of Compliance Wells

Groundwater levels were measured for each monitoring well (except those that were dry or inaccessible). Table 2-1 summarizes the water levels and total well depth measurements for the monitoring wells. The calculated groundwater elevations in the monitoring wells and the average groundwater elevations for the extraction wells are included on the groundwater potentiometric surface maps discussed in Section 3.0 of this report.

Groundwater samples were obtained from twenty of the twenty-five effectiveness and POC wells scheduled to be sampled during this sampling event. Effectiveness wells MW-9B, MW-16B, and MW-19A were dry and MW-20A went dry while purging and did not recharge sufficiently to collect a sample during this sampling event. Effectiveness well and MW-30A was not sampled during this event due to a historical obstruction in the well. Complete purging of C-7 and MW-26A as outlined in the Site Sampling and Analysis Plan (SAP) (ENSR, 1999) was not possible due to the historical obstructions.

Samples were collected in sequence from the lowest to highest historical VOC concentration, in accordance with the SAP. Before collecting samples, the sampling team calibrated pH and conductivity meters daily in accordance with manufacturer instructions. Either a disposable polyethylene bailer or a decontaminated submersible pump and disposable polyethylene tubing were used to purge each well (ENSR, 1999).

Temperature, pH and specific conductance were measured and recorded for each well volume purged. A minimum of three well volumes was purged from each well. The wells were considered purged when measurements of groundwater temperature, pH, and specific conductance were stable and after a minimum of three well volumes were removed from the well (or the well was purged dry twice). Field parameters were considered stable if consecutive measurements of temperature, pH, and specific conductance were within ten percent of the previous measurement (ENSR, 1999). Field measurements and other sampling details were recorded on groundwater sample collection records included in Appendix A. Table 2-2 summarizes field indicator parameter measurements.

Samples were collected and transported according to requirements of the RCRA permit and the SAP. Sample containers were labeled in the field and a chain-of-custody (COC) form was completed. Samples were delivered to Prism laboratory. Prism laboratory subcontracted portions of the Appendix IX analyses to other laboratories, including Analytical Environmental Services (Atlanta, Georgia), Test America (Savannah, Georgia), and Cape Fear Analytical (Wilmington, North Carolina). Purged groundwater was placed into labeled 55-gallon drums and then transferred into the on-site groundwater remediation system for treatment.

2.1.2 Extraction Well and System Composite Samples

Each extraction well is equipped with a sampling port near the well head. A decontaminated, dedicated hose was attached to each sample port spigot and approximately 1 gallon of water was purged from the line at each well prior to sample collection. A groundwater sample was obtained from each of the extraction wells with the exception of TF-1, where the water level was below the pump intake during this sampling event. A groundwater sample collection record was prepared for each well (Appendix A). Purged groundwater was placed into labeled 55-gallon drums and then transferred into the on-site groundwater remediation system for treatment.

System A and B composite samples were collected from sample ports located on the influent piping at the A and B feed water tanks. An additional influent sample designated Composite System TPH was taken at the influent side of the oil/water separator. The Composite System TPH sample provides data for evaluating contaminant levels of EW-18, TF-2 and DT-1 prior to passing through carbon filter AF-208. The influent piping for the combined flow from the TPH wells (and EW-18) enters the treatment building, passes through the oil-water separator, passes through the AF-208 filter and then combines with the System A influent piping. Note that the composite sampling results were not used in the calculations of total mass removal as discussed in Section 4.1.3.

Samples were collected and transported according to requirements of the RCRA permit and SAP. Sample containers were labeled in the field and a COC form was completed. Samples were delivered to Prism laboratory.

2.2 Analytical Methods and Results

2.2.1 Effectiveness and Point of Compliance Wells

Groundwater samples collected from effectiveness wells and POC well were analyzed for VOCs using EPA SW-846 Method 8260. Fourteen VOCs were reported in accordance with Alcatel-Lucent's RCRA Part B Permit. Table 2-3 summarizes the analytical results and complete laboratory analytical reports are presented in Appendix B.

The POC well MW-2A is sampled for fourteen VOCs during each March semi-annual monitoring event. In addition, this well is sampled for Appendix IX constituents every five years at least six-months prior to the permit anniversary date (June 6, 2007); therefore, MW-2A was also analyzed for herbicides, pesticides, metals, sulfide, cyanide, VOCs (full list), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), polychlorinated dibenzo-p-dioxins (PCDDs), and polychlorinated dibenzofurans (PCDFs) during the March 2011 sampling event. A summary of detected Appendix IX constituents is presented in Appendix C.

2.2.1.1 Volatile Organic Compounds

Both tetrachloroethene (PCE) and trichloroethene (TCE) have been detected in monitoring well MW-2A previously and were detected again during the March 2011 Appendix IX constituent sampling event. No other VOCs were detected. Based on a comparison of the PCE and TCE analytical data from the March 2011 and March 2010 sampling event, the PCE and TCE concentrations in MW-2A are consistent with recent data and show continued concentration reductions for both compounds.

2.2.1.2 Metals

The following metals were detected during this sampling event: barium, beryllium, chromium, copper, lead, nickel, vanadium, and zinc (Appendix C). Based on a review of historic sampling data, each of these metals has been detected previously at similar concentrations. For the March 2011 sampling event, only chromium (0.019 milligrams per liter [mg/L]) was detected at a concentration slightly above the North Carolina NCAC 2L Groundwater Quality Standard (2L Standard), which is 0.01 mg/L.

Based on a review of the field sampling records, we conclude that the chromium detected in the sample collected from MW-2A was the result of turbidity due to the method used to collect the sample (bailer). Therefore, the results are not representative of groundwater quality in respect to the metals analyses. The sample records note that the water sampled was tan in color. The turbidity was relatively low when the purging began and was observed to increase to a level above 100 NTUs by the time the sample was collected.

In order to obtain a non-turbid sample from this well it would be necessary to collect the sample using different methods (e.g.; low flow purge or quiescent methods). Based on the extensive volume of historical analytical data already available for this Site, it is not recommended that this well be resampled.

2.2.1.3 Polychlorinated Dibenzo-p-dioxins / Polychlorinated Dibenzofurans

PCDD compounds were detected at very low estimated concentrations in the initial sample collected on March 16, 2011 from MW-2A (Appendix C). Because all identification criteria were not met, Cape Fear Analytical reported 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) at an estimated maximum possible concentration of 2.07 picograms per liter (pg/L). Additionally, this compound was qualified as estimated by the laboratory due to the uncertainty of the quantitation since the concentration detected was below the sample quantitation limit. Consequently, this result was qualified as estimated (J).

Total heptachlorodibenzo-p-dioxin (HpCDD) was also detected, but was determined to be present as a result of laboratory contamination as evidenced by the presence of this compound in the associated laboratory method blank. Consequently, this result is considered to be not detected. Appendix C presents the laboratory data and validation results.

As a result of data quality questions regarding the March sampling event, Alcatel-Lucent elected to resample compliance well MW-2A (including a field duplicate) to further evaluate the PCDD detections. The re-sampling event was completed on May 10, 2011. The samples were sent to a different laboratory (Test America) in order to rule out any laboratory specific analytical problems. Results of the confirmation samples were received from the laboratory on May 27, 2011 and preliminarily indicated the presence of low levels of PCDD/PCDF compounds, although data validation had not yet been performed at that time. The North Carolina Hazardous Waste Section (HWS) was formally notified via an email to Mr. Rob McDaniel on June 3, 2011 that the confirmation sampling had been conducted, the un-validated results suggested the potential presence of low levels of

PCDD/PCDF compounds, and that data validation procedures would be conducted by AECOM to evaluate the results.

The confirmatory analyses of MW-2A and the associated field duplicate did not contain 2,3,7,8-TCDD.

Total HpCDD was again detected in the confirmation samples for MW-2A and the associated field duplicate sample; however, total HpCDD and three other PCDD/PCDFs (octachlorodibenzo-p-dioxin), 1,2,3,4,6,7,8-heptachlorodibenzofuran (HpCDF), and total HpCDF) detected in these samples were subsequently determined during data validation to be present as a result of laboratory contamination as evidenced by the presence of these compounds in the associated laboratory method blank. Consequently, these results are considered to be not detected.

Details regarding data validation are presented in Section 2.3.2 below. Appendix C presents a summary table which includes the PCDD/PCDF laboratory results. Laboratory and data validation results were summarized in a letter submitted to the HWS on July 15, 2011.

2.2.2 Extraction Well and System Composite Samples

Samples collected from extraction wells and system influents (A and B and composite TPH) were analyzed for VOCs using EPA SW-846 Method 8260. Fourteen VOCs were reported in accordance with Alcatel-Lucent's RCRA permit. Table 2-4 summarizes extraction well VOC results and Table 2-5 summarizes system influent VOC results.

Petroleum area extraction wells TF-1, TF-2, TF-3, and DT-1 and Composite System A and Composite System TPH samples were also analyzed for oil and grease by EPA Method 1664A and DRO by EPA Method 8015 Modified. Table 2-6 presents historical TPH analytical results for TF-1, TF-2, TF-3, and DT 1. Laboratory analytical reports are presented in Appendix B.

2.3 Quality Assurance and Quality Control

2.3.1 Quality Assurance and Quality Control Samples

The following quality control samples were collected:

- Duplicate groundwater samples were collected from: EW-6 (DUP-01), EW-16 (DUP-02), EW-18 (DUP-03), VOC-1 (DUP-04), Composite System B (DUP-05), and MW-32 (DUP-06).
- One trip blank (TRIP BLANK 02) was prepared by and submitted to the laboratory. The trip blank consisted of a 40-milliliter glass sample container that contained laboratory provided de-ionized organic-free water. The trip blank accompanied sample containers to the field and back to the laboratory.
- Two bailer blanks (BAILER BLANK 01 and BAILER BLANK 02) were collected. Bailer blanks consisted of laboratory provided de ionized organic-free water that was poured over a disposable polyethylene bailer prior to sampling.
- Two pump blanks (PUMP BLANK 01 and PUMP BLANK 02) were collected. Pump blanks consisted of laboratory provided de ionized organic-free water that was poured over a submersible pump after decontamination.
- One duplicate sample was also collected on May 10, 2011 when a confirmation sample was collected from MW-2A and analyzed for PCDD/PCDF compounds.

2.3.2 Data Validation

2.3.2.1 March 2011

The analytical data package from Prism (including subcontracted analyzes) were reviewed for conformance to method specifications and the validation criteria set forth in the EPA *Contract Laboratory Program (CLP) National Functional Guidelines for Superfund Organic Methods Data Review,* USEPA-540-R-07-003, July 2008, with additional reference to EPA *Contract Laboratory Program National Functional Guidelines for Organic Data Review*, EPA 540/R-99-008, May 1999 as they applied to the methodology used. Inorganic data were evaluated based on method specifications and the validation criteria set forth in the EPA *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, EPA-540-R-04-004*, October 2004, as they applied to the analytical methods employed. PCDD/PCDF data were evaluated using the guidance provided in EPA's *Contract Lab Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Reviews* (September 2005). Field duplicate relative percent difference control limits were taken from the EPA Region I *Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, February 1988, upheld in DRAFT 1993.

Analyses requested included:

- Method 8260B – VOCs by Gas Chromatography/Mass Spectrometry (GC/MS);
- Method 8015 – DRO;
- Method 8290A – High-Resolution PCDDs and PCDFs;
- Method 8141A – Organophosphorous Pesticides;
- Method 8151A – Chlorinated Herbicides;
- Method 8270D – SVOCs by GC/MS;
- Method 8081B – Organochlorine Pesticides by Gas Chromatography/Electron Capture Detector;
- Method 8082A – PCBs by Gas Chromatography/Electron Capture Device;
- Method 6010C – Metals by Inductively Coupled Plasma – Atomic Emission Spectrometry;
- Method 7470A – Mercury by Cold-Vapor Atomic Absorption;
- Method 9014 – Total Cyanide;
- Method SM4500-S-E – Sulfide; and
- Method 1664A – Hexane Extractable Material - Oil and Grease.

Results of the VOC quality control data are found in Tables 2-7a and 2-7b. The complete data validation reports are presented in Appendix D. Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with COC requests;
- Holding times/sample preservation;
- Method blanks/trip blanks;
- Surrogate results;

- Laboratory control sample results;
- Matrix spike/matrix spike duplicate (MS/MSD) results; and
- Field precision results.

In general, the data results are valid as reported and may be used for decision making purposes. No data were rejected, but selected data points were qualified due to nonconformances of certain quality control criteria. A complete list of qualified laboratory data is provided in Appendix D.

2.3.2.2 May 2011

In order to provide the highest quality analytical data results, AECOM performed full validation on the May 2011 PCDD/PCDF confirmation sample data package using the guidance provided in the EPA's *Contract Lab Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Reviews* (September 2005). The analysis performed was PCDDs and PCDFs by Method 8290. Appendix B contains the full Level IV laboratory report (on compact disc) and Appendix D contains the full data validation report. Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with COC requests;
- Holding times/sample preservation;
- GC/MS Performance Checks;
- Calibrations;
- Laboratory blanks/equipment blanks;
- MS/MSD results;
- Ongoing precision and recovery results;
- Field duplicate results;
- Labeled compound recoveries;
- Compound Identification; and
- Sample results and quantitation/detection limits.

In general, the data are valid as reported and may be used for decision making purposes. No data were rejected, but selected data points were qualified as non-detect due to nonconformances of certain quality control criteria.

3.0 Discussion of the Results

The first 2011 semi-annual sampling event was conducted on March 1 and 2, 2011. The sampling event included the POC well, effectiveness wells, extraction wells, and composite influent system samples. The analytical results are listed in Tables 2-3, 2-4, and 2-5. The 2L Standard for each compound is also listed on these tables. Historic PCE and TCE concentrations versus time are graphed for the POC and effectiveness wells (Figures 3-1a and 3-1b and Figures 3-3a and 3 3b, respectively) and the extraction wells (Figures 3-2a and 3 2b and Figures 3-4a and 3 4b, respectively). Laboratory results are contained in Appendix B. A sampling event to collect Appendix IX constituents from POC well MW-2A was conducted on March 16, 2011 and a confirmation sampling event for PCDDs/PCDFs was conducted on May 10, 2011. A summary of detected Appendix IX constituents is presented in Appendix C.

3.1 Trends in Volatile Organic Compound Concentration

The groundwater analytical results from the March 2011 sampling event, along with historic groundwater analytical results, were reviewed and evaluated for the POC well, the effectiveness wells, and the extraction wells. The following sections discuss trends in VOC concentrations.

3.1.1 Point of Compliance Well

POC well MW-2A was sampled for Appendix IX constituents (as required every five years by the RCRA permit) during the March 2011 sampling event. The water level in monitoring well MW-2A was approximately 1.11 feet higher than measured during the last sampling event in September 2010. PCE concentrations in monitoring well MW-2A have generally been decreasing since the September 2004 sampling event. PCE concentrations have decreased from 6,000 micrograms per liter (µg/L) in September 2004 to 110 µg/L in March 2011. TCE concentrations have been non-detect during the same period.

A total of eight metals were detected during this sampling event: barium, beryllium, chromium, copper, lead, nickel, vanadium, and zinc (Appendix C). Based on review of historic sampling data, these constituents have been detected previously at similar concentrations and only chromium was detected at concentrations slightly exceeding its 2L Standard. Based on a review of field sampling records and historical sampling data for this well, metals detected in MW-2A are likely due to excessive turbidity; therefore, the results are not representative of groundwater quality in respect to the metal analyses. Based on the extensive volume of historical analytical data already available for this Site, it is not recommended that this well be resampled for metals.

The PCDD 2,3,7,8-TCDD was detected at an estimated concentration of 2.07 pg/L in MW-2A during the initial Appendix IX sampling that was conducted in March 2011. The result was estimated because all identification criteria for 2,3,7,8-TCDD were not met and the concentration detected was below the sample quantitation limit. All other PCDD/PCDF compounds were non-detect (Appendix C).

Confirmation samples collected in May 2011 were non-detect for 2,3,7,8-TCDD. All other PCDD/PCDF compounds were also non-detect in both the parent and duplicate confirmation samples (Appendix C).

It should be noted that PCDD/PCDF compounds are formed as a result of many industrial processes including waste incineration, chemical manufacturing, pulp and paper bleaching, and ore smelting. Historical operations at the site involved the manufacture of telephone switching and other communication equipment until 1989. In 1995, the facility was purchased by the owners of the Salem Business Park, which currently leases space to several tenants. Based on historical operations at the facility, it is unlikely that PDCC/PCDF compounds would have been produced or discharged to soil or groundwater at the facility.

3.1.2 Comparison to North Carolina NCAC 2L Groundwater Quality Standard

A total of fourteen VOCs were reported. The analytical results are listed in Tables 2-3, 2-4, and 2-5. The 2L Standard for each compound is also listed on these tables. PCE was detected in twenty-four wells (thirteen monitoring wells and eleven extraction wells) during this monitoring event at concentrations above the 2L Standard of 0.7 µg/L. TCE was detected in twenty-one of the wells (eleven monitoring wells and ten extraction wells) at concentrations above the 2L Standard of 3.0 µg/L.

The laboratory detection limits were above the 2L Standards for vinyl chloride (0.03 µg/L), 1,2-dichloroethane (0.4 µg/L), carbon tetrachloride (0.3 µg/L), and PCE (0.7 µg/L).

Chromium and 2,3,7,8-TCDD were the only Appendix IX constituents detected besides PCE and TCE. Chromium was detected a concentration of 0.019 mg/L, which is slightly above the 2L Standard of 0.01 mg/L. The slight chromium 2L Standard exceedance likely resulted from excess turbidity caused by the sampling method and does not warrant additional sampling. The PCDD/PCDF confirmation sampling results did not confirm the presence of 2,3,7,8-TCDD, or any other PCDD/PCDF compounds.

3.1.3 Extent and Distribution of Volatile Organic Compounds

Figures 3-5 and 3-6 depict PCE isoconcentration contours in plan view and profile view. Figures 3-7 and 3-8 depict TCE isoconcentration contours in plan view and profile view. Figures 3-6 and 3-8 are cross sections oriented south to north and extend from monitoring well MW-32 to monitoring well MW-26A. PCE (Figure 3-6) and TCE (Figure 3-8) concentrations are plotted at the center of the screened interval for each of the wells.

In general, the highest concentrations of PCE occur in bedrock groundwater beneath the former Underground Storage Tank (UST) Disposal Area near VOC-1, C-2, and EW-17. The highest TCE concentrations occur in bedrock groundwater beneath the Oil House Area near EW-18, MW-6A, EW-17, and EW-22.

Compared to the plume maps and profiles from the March 2010 sampling event, the horizontal and vertical extent of the PCE and TCE plume is very similar.

3.1.4 Temporal Trends in Volatile Organic Compounds Concentrations

Figures 3-1a and 3-1b are plots of historical PCE concentrations for the effectiveness wells and POC well. The PCE concentration in POC well MW-2A increased slightly since September 2010 (160 µg/L vs. 30 µg/L), but the general trend for this well since 2005 has been decreasing. Concentrations of PCE in effectiveness wells have generally been stable or declining since March 2005 (Figures 3-1a and 3-1b).

Figures 3-2a and 3-2b are plots of the historical PCE concentrations for the ten System A and six System B extraction wells. Overall, concentrations of PCE in System A and System B extraction wells have been steady or declining over the past several years.

Figures 3-3a and 3-3b depict historical TCE concentrations for the effectiveness and POC wells. TCE concentrations in these wells have been decreasing or stable since March 2005.

Figures 3-4a and 3-4b depict historical TCE concentrations for the extraction wells. In general, TCE concentrations have been declining in System A, System B, and TPH extraction wells since March 2003.

In general, it appears that 2005 marked a turning period for VOC concentrations in groundwater beneath the Site, when concentrations in most wells began to decrease or plateau. This may have been due to source removal by the SVE systems in the UST Disposal Area and Oil House Areas that had been running since 2003 or from enhancements made to the groundwater treatment systems in the early 2000s.

3.2 Trends in Indicator Parameters

Table 2-2 presents field measurements of temperature, pH and specific conductance from the effectiveness and POC wells. Measurements were compared to the field measurements reported for the March 2010 sampling event. In general, all parameters were similar to the previous event.

3.3 Groundwater Elevations

Depth to water measurements were collected manually on March 1, 2011 from sixty-three shallow and deep monitoring wells and piezometers using a Solinst Model 122 interface probe. Groundwater elevations calculated for each monitoring well were based on the known top of casing (TOC) elevations. Water level measurements for the extraction wells were calculated using an average of hourly data collected during the monitoring period.

Monitoring well and extraction well groundwater elevations were plotted and contoured as Figure 3-9 (plan view) and Figure 3-10 (cross-section view). The data included on Figure 3-9 is restricted to extraction wells and "A" wells, which include only the deeper wells screened in the bedrock. These contoured plots were used to evaluate the groundwater flow across the Site and to establish the approximate zone of capture for the active pumping system.

Figure 3-9 demonstrates that the active pumping system has significantly depressed the potentiometric surface and that groundwater flow across the majority of the Site has been redirected by the system to flow into the extraction wells. The estimated zone of capture as shown on Figure 3-9 encompasses most of the Site, including nearly the entire dissolved phase plume of PCE and TCE as identified by the March 2011 analytical data.

Figure 3-10 is a cross section oriented south to north across the Site from monitoring well MW-32 to monitoring well MW 26A. Groundwater elevations are plotted on this section at the center of the screened interval for each of the wells. A contoured plot of these elevations indicates the direction of groundwater flow in the subsurface. Based on Figures 3-9 and 3-10, the most recent measurements suggest that bedrock groundwater in the vicinity of MW 29 and EW-22 is captured by the extraction well network. A downward gradient is demonstrated by the potentiometric levels measured at the MW-29 well cluster. The zone of capture in the mapped interval (as shown on Figure 3-9) appears to

be approximately coincident with the MW-31 well cluster. South of this area, however, shallow groundwater is moving south and is outside of the zone of capture.

4.0 Effectiveness Evaluation

This section presents an effectiveness evaluation of the corrective action program for the first 2011 semi-annual sampling event, which was prepared in accordance with Section IV.I.2 of the RCRA Permit. The associated groundwater sampling event established groundwater quality and groundwater elevation conditions in March 2011, approximately 15½ years after startup of the groundwater remediation system in November 1995. Section 4.1 discusses the groundwater remediation system.

In addition to the groundwater remediation system, the original corrective action system also included SVE systems located at the Tank Farm Area and the Day Tank Area. Two additional SVE systems were installed in the Oil House Area and the UST Disposal Area in April 2003 and September 2003, respectively. All four systems operated until June 29, 2010 when the Tank Farm, Day Tank, and UST Disposal Area SVE systems were shutdown following soil sampling that indicated remedial goals had been met in the three areas. The Oil House Area SVE system was the only system SVE that operated at the Site during this evaluation period (October 1, 2010 through March 31, 2011). Section 4.2 discusses the Oil House Area SVE system.

4.1 Groundwater Remediation System

This effectiveness evaluation is intended to provide a summary of extraction well operating parameters, groundwater level, and water quality changes over the duration of system operation. The objectives of this effectiveness evaluation include:

- Evaluate the performance of the system based on the operational data collected during the monitoring period (October 1, 2010 – March 31, 2011);
- Estimate the total mass of VOCs removed by the system during the monitoring period based on the groundwater sampling results and pumping rates;
- Evaluate hydraulic capture based on a review of the vertical and horizontal groundwater flow regime; and
- Provide recommendations for enhancing and improving the effectiveness of the system.

Information provided in this report results from a review of the data obtained between October 1, 2010 and March 31, 2011. This report also considers previously reported data, including those presented in the First 2010 Semi-Annual Sampling Report and Effectiveness Evaluation (AECOM, August 2010a) and the Second 2010 Semi-Annual Sampling Report and Effectiveness Evaluation (AECOM, January 2011a).

The following data tables are provided as part of the effectiveness evaluation:

- Table 4-1 includes extraction well and pump installation details;
- Table 4-2 presents extraction well water levels, pumping rates, and estimated drawdown;
- Table 4-3 estimates specific capacities based on average drawdown and average pumping rates; and

- Table 4-4 presents estimated total VOC mass removed by the extraction well system and estimated VOC removal rates (Figure 4-1 presents this data graphically).

4.1.1 Operational Data

The remediation system operational data was recorded on a one minute frequency during the monitoring period from October 1, 2010 through March 31, 2011. This data was used to calculate average water levels, average pumping rates, and average drawdown in each extraction well during the monitoring period.

Table 4-1 summarizes construction details for extraction wells at the Site. This information includes TOC and ground surface elevations, well bottom elevations, upper and lower operating set points, and the static water level for each well. The static water level elevations provided in Table 4-1 were obtained prior to system start up in 1995.

Table 4-2 provides information on water levels and drawdown for each extraction well during the monitoring period. The average water level elevation for each extraction well was used to prepare the groundwater elevation maps and cross-sections included in this report (Figures 3-9 and 3 10). The average drawdown values shown on Table 4-2 are calculated based on the difference between the static water levels and average water level elevation observed in each well during the monitoring period. The water level in the pumping well located in the former tank farm area (TF-2) was below the pump throughout most of the period. TF-1 and TF-3 are no longer active extraction wells; therefore, the drawdown calculations are not applied to these wells.

Table 4-3 includes the average pumping rate, drawdown, and specific capacity for each of the extraction wells during the monitoring period. The average specific capacity is calculated using the average pumping rate and the average drawdown. The units for specific capacity are gallons per minute of discharge per foot of drawdown in the well. It should be noted that the specific capacity for a well is not a linear relationship because specific capacity decreases with increasing drawdown (Driscoll, 1986). Compared to the 3-year average specific capacity shown on Table 4-3, the average specific capacity for the current monitoring period was lower in most extraction wells. Extraction well VOC-1 shows a 28 percent decrease in specific capacity for the reporting period compared to the three-year average. AECOM has reviewed performance records for VOC-1 and has not identified any obvious problems with the well. Well EW-15 shows an almost 39 percent decrease in specific capacity, which is a result of only operating the well when the on-site operator is present because of the numerous operational issues this well creates. Well EW-15 is discussed in more detail in Section 4.1.5 below.

4.1.2 Operational Issues and Repairs

This section includes a summary of the operational issues and repairs that were completed during the monitoring period.

- The "B" system was shut down from October 4th-7th because the water level sensor (LT-144) in tray stripper AS-144 malfunctioned and required replacement. Following the repair the "B" system resumed operation but was erratic due to sluggish functioning of the tray air stripper's discharge valve (LCV-144). The "B" system was shut down again between on October 22nd and December 12th, pending arrival of a discharge valve rebuild kit.
- Intermittent communication errors occurred at several extraction wells from October through February, which resulted in extraction wells being intermittently shut down. Several repairs

were made in attempt to resolve the communication errors including: replacing a failed programmable logic controller (PLC) at EW-6, first reprogramming then replacing the PLC at EW-18, repairing a broken fiber optics strand at TF-1, and finally reprogramming the communication software on the operations computer. Communication with all extraction wells was fully restored on February 7th.

- A new potentiometer was installed on the system discharge flow meter (FE-151) on February 17th because the potentiometer was erratically transmitting flow data to the operations computer.
- The water level transducers were replaced on extraction well EW-4 and EW-5 on February 18th.
- The pump seals and stuffing box cover were replaced on feed water pump FP-109 on February 21st.
- The motor starter failed on recycle pump RP-140 on March 10th. The starter was replaced with a spare unit and the pump was returned to normal operation the same day.

4.1.3 Mass Removal

Mass removal for the period October to March is estimated using the contributions of individual extraction wells. For the period April to September, mass removal is estimated using System A, System B and TPH System influent data.

Table 4-4 provides estimates of the total VOC mass removed and an estimated removal rate for each well. The mass removal estimate is based on the total gallons pumped by each well during the monitoring period and the average concentrations of volatile compound measured in each of the extraction wells during the monitoring period. The removal rate is in units of pounds of VOCs removed per 1,000 gallons pumped. The total groundwater pumped during the monitoring period was 13,482,272 gallons and the total estimated mass of VOCs removed was 277 pounds. As shown on Figure 4-1, extraction wells VOC-1 and EW-17 produced approximately 70 percent of the total VOCs removed.

4.1.4 Hydraulic Control

Figure 3-10 demonstrates that the active pumping system has significantly depressed the potentiometric surface and that groundwater flow across the majority of the Site has been redirected by the system to flow into the extraction wells. The estimated zone of capture as shown on Figure 3-10 encompasses most of the Site, including nearly the entire dissolved phase plume of PCE (Figure 3-6) and TCE (Figure 3-8) as identified by the March 2011 groundwater sampling event.

Using Figures 3-9 and 3-10, the most recent data suggest that bedrock groundwater in the vicinity of MW-29 and EW-22 is captured by the existing extraction well network. A downward gradient is demonstrated by the potentiometric levels measured in the vicinity of the MW-29 well cluster. The zone of capture in the mapped interval (as shown on Figure 3-9) appears to be approximately coincident with the MW-31 well cluster. South of this area, however, shallow groundwater is moving south and is outside of the zone of capture. For further details, refer to Section 3.3.

4.1.5 Recommendations for Enhancing System Effectiveness

Extraction well EW-15 has historically required a significant amount of well maintenance, as well as creating a number of performance issues for the overall system. The resources required to maintain

this well and the resultant additional maintenance, repairs and lost operation time to the overall system are not justified based on the very limited contribution (Table 4-4) of this well to the overall hydraulic capture and treatment goals for the Site. In a letter dated June 22, 2010, AECOM and Alcatel-Lucent requested permission from NCDENR to discontinue operation of the well. NCDENR approved the shutdown of EW-15 in a letter dated June 15, 2011. Extraction well EW-15 was subsequently shut down.

Alcatel-Lucent is currently evaluating other ways to improve the operational performance and cost effectiveness of the hydraulic containment/groundwater treatment system. In response to this, AECOM prepared a Design Basis Memorandum (DBM) (AECOM, 2011b) for the groundwater treatment system, which provides the conceptual basis for replacement of the treatment system with a smaller, more efficient treatment system. The DBM was submitted to NCDENR on March 31, 2011, along with a request to replace the groundwater treatment system. NCDENR approved the proposed groundwater treatment system replacement as a Class 1 RCRA Permit modification in a letter dated June 15, 2011.

4.2 Soil Remediation Systems

Four separate areas of the Site have been undergoing soil remediation via SVE for several years. These areas are the Day Tank, Tank Farm, Oil House and UST Disposal Areas (Figure 1-2). In October and November 2009, AECOM performed soil sampling in each of the four SVE areas to monitor the progress of soil remediation. Based on the results of this assessment and recommendations presented in the *Soil Assessment Report for the Day Tank, Tank Farm, Oil House and UST Disposal Areas* (AECOM, 2010b) and with verbal approval from NCDENR (May 18, 2010), the SVE systems in the Tank Farm Area, Day Tank Area and UST Disposal Area were shut down on June 29, 2010. The Oil House Area SVE system was the only system SVE that operated at the Site during this evaluation period (October 1, 2010 through March 31, 2011).

This section of the report summarizes the Oil House SVE system performance and makes recommendations for operational changes to be implemented during subsequent monitoring periods. The effectiveness evaluation is intended to provide a continuing database of SVE system operating parameters over the duration of system operation. The objectives of this effectiveness evaluation include:

- Evaluate the performance of the systems based on the operational data collected during the monitoring period (October 1, 2010 – March 31, 2011);
- Estimate the total mass of VOC removed by the system during the monitoring period based on the SVE exhaust sampling results;
- Provide recommendations for enhancing and improving the effectiveness of the system.

This effectiveness evaluation has been developed based on operational and SVE exhaust analytical data collected during the monitoring period. The following data tables are provided as part of the effectiveness evaluation:

- Table 4-5 – Hours of Operation;
- Table 4-6 – Exhaust Analytical Data (Figure 4-2 presents this data graphically);
- Table 4-7 – Operating Parameters;
- Table 4-8 – Estimated Monthly Mass Removal (Figure 4-3 presents this data graphically); and

4.2.1 Operational Data

4.2.1.1 Oil House Area

The Oil House SVE system started operation on April 7, 2003. During the current monitoring period the system operated for a total of 7,560 hours (Table 4-5). The Oil House Area SVE system ran consistently on a 24 hour per-day basis throughout the monitoring period. The system extracts approximately 185 standard cubic feet per minute (Table 4-7) from five SVE wells. Vacuum at the individual wellheads averages 9 inches of water column.

4.2.2 Operational Issues and Repairs

This section includes a summary of operational issues and repairs that were completed during the monitoring period.

- The Oil House SVE system was down for approximately 49 hours in January and 77 hours in February due to communication errors between the SVE system and the Site operations computer.

4.2.3 Mass Removal

Samples were collected from the exhaust of the Oil House SVE system on a quarterly basis using summa canisters. The samples are analyzed for VOCs by EPA Method TO-14 by Air Toxics Ltd. (Air Toxics) of Folsom, California. The analytical data is summarized in Table 4-6. Operating parameters collected in conjunction with the sampling events are provided in Table 4-7.

4.2.3.1 Oil House Area

Quarterly effluent samples averaged 3.7 parts per million by volume (ppmv) PCE and 1.55 ppmv TCE. Analytical results are summarized on Table 4-6 and presented graphically on Figure 4-2. During this monitoring period, approximately 75 pounds of PCE and 27 pounds of TCE were removed by the Oil House Area SVE system. See Table 4-8 and Figure 4-3 for additional details on mass removal.

4.2.4 Recommendations for Enhancing System Effectiveness

Results from the October and November 2009 soil samples collected in the Oil House Area indicated that concentrations of target VOCs had been reduced in the majority of the area, but also indicated the presence of remaining soil impacts near the former Oil House sump that the SVE system may not have been effectively remediating. In February and March 2011, AECOM performed soil sampling and SVE pilot test activities at the Oil House Area in accordance with the *SVE System Assessment Work Plan: Oil House Area* (AECOM, 2010c). The results of that effort were reported in the *SVE System Assessment Report for the Oil House Area (*AECOM, 2011c*)* and are summarized below:

- Soil impacts appear to be limited to soils in the immediate vicinity of the Oil House sump at depths of approximately 24-40 feet below ground surface;
- The existing SVE well network is not sufficient to effectively remediate soil impacts in the area around the Oil House sump, so a new, deeper SVE pilot test well was installed adjacent to the Oil House sump; and
- Results of the pilot test indicated that the existing SVE blower should be adequate to remediate remaining soil impacts if system flows are rebalanced away from three SVE wells

where soil impacts are very minimal and the new pilot test well is incorporated into the SVE system as a regular SVE well.

On July 6, 2011, AECOM submitted the *Work Plan to Modify the Oil House Area Soil Vapor Extraction System* (AECOM, 2011d) to NCDENR to describe the work required to add the new pilot test well to the Oil House SVE system. The new well will be added to the SVE system following NCDENR approval of the work plan.

5.0 Conclusions and Recommendations

The following conclusions and recommendations are based on AECOM's review of the data provided in this effectiveness evaluation.

- The remedial system continues to function effectively to recover and remediate VOC impacted groundwater and to control the groundwater flow at the Site.
- The system is providing hydraulic control across the majority of the Site. The groundwater elevation data collected during the March 2011 sampling event indicate that the downgradient limit of the zone of capture in the deep interval is in the vicinity of the MW-31 well cluster. The shallow groundwater flow south of Cassell Street is towards the south.
- The calculated total mass of VOC recovered by the groundwater remediation system was estimated to be approximately 277 pounds during the monitoring period. The system pumped a total of 13,482,272 gallons of groundwater during the monitoring period.
- In total, AECOM estimates that approximately 24,380 pounds of VOC have been removed from groundwater since October 1996.
- A comparison of the PCE and TCE plume maps indicate similar aerial extent for both plumes.
- A comparison of the current PCE and TCE plumes and those from historical monitoring events show that concentrations on the perimeter of the plume remain generally unchanged and concentrations in the core of the plume are shrinking.
- Chromium and 2,3,7,8-TCDD were the only Appendix IX constituents detected above the 2L Standards in POC well MW-2A besides PCE and TCE. Chromium likely originated from turbidity in the sample. The detections of 2,3,7,8-TCDD from the first round of sampling were only estimated results, and are considered anomalous, given that the confirmation samples subsequently analyzed for PCDDs/PCDFs were non-detect and that there were no historic operations at the site conducive to the formation of PCDD/PCDF compounds.
- Alcatel-Lucent is currently evaluating ways to improve the operational performance and cost effectiveness of the hydraulic containment/groundwater treatment system. In conjunction with these efforts, Alcatel-Lucent received permission to replace the groundwater treatment system and discontinue operation of extraction well EW-15 because of bio-fouling issues. Design for the replacement system is currently underway.
- Based on airflow and analytical data, the Oil House SVE system removed a total of approximately 75 pounds of PCE and 27 pounds of TCE from the soil during the monitoring period.
- As a result of a focused assessment in the Oil House Area, Alcatel-Lucent has requested permission to add a newly installed SVE pilot test well to the SVE system. Approval from NCDENR is pending.

6.0 References

ENSR, 1999. Sampling and Analysis Plan, Revision 3.0, Former North Carolina Works – Lexington Road Plant, Winston-Salem, NC. ENSR Consulting and Engineering, December 1999.

AECOM, 2010a. First 2010 Semi-Annual Sampling Report and Effectiveness Evaluation – Former North Carolina Works, Lexington Road Plant, Winston-Salem, North Carolina. AECOM, August 2010.

AECOM, 2010b. Soil Assessment Report for the Day Tank, Tank Farm, Oil House and UST Disposal Areas – Former North Carolina Works, Lexington Road Plant, Winston-Salem, NC. AECOM, March 2010.

AECOM 2010c. SVE System Assessment Work Plan: Oil House Area – Former North Carolina Works, Lexington Road Plant, Winston-Salem, North Carolina. AECOM, November 2010.

AECOM, 2011a. Second 2010 Semi-Annual Sampling Report and Effectiveness Evaluation – Former North Carolina Works, Lexington Road Plant, Winston-Salem, North Carolina. AECOM, January 2011.

AECOM, 2011b. Design Basis Memorandum, Groundwater Treatment System Replacement – Former North Carolina Works, Lexington Road Plant, Winston-Salem, NC. AECOM, March 2011.

AECOM, 2011c. SVE System Assessment Report for the Oil House Area – Former North Carolina Works, Lexington Road Plant, Winston-Salem, North Carolina. AECOM, June 2011.

AECOM, 2011d. Work Plan to Modify the Oil House Area Soil Vapor Extraction System – Former North Carolina Works, Lexington Road Plant, Winston-Salem, North Carolina. AECOM, July 2011.

TABLE 1-1

Summary of Groundwater Monitoring Wells, Parameters and Sampling Frequency

March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Well Number	Monitoring Parameters*	Sampling Frequency
Point of Compliance		
MW-2A	VOC	Annual
Effectiveness		
C-2	VOC	Annual
C-5	VOC	Annual
C-7	VOC	Annual
MW-6A	VOC	Annual
MW-7A	VOC	Annual
MW-8A	VOC	Annual
MW-9B	VOC	Annual
MW-10A	VOC	Annual
MW-12A	VOC	Annual
MW-16B	VOC	Annual
MW-18A	VOC	Annual
MW-19A	VOC	Annual
MW-20A	VOC	Annual
MW-26A	VOC	Annual
MW-27A	VOC	Annual
MW-28A	VOC	Annual
MW-29	VOC	Annual
MW-29A	VOC	Annual
MW-29B	VOC	Annual
MW-30A	VOC	Annual
MW-30B	VOC	Annual
MW-31A	VOC	Annual
MW-31B	VOC	Annual
MW-32	VOC	Annual

Note:
* VOC - Volatile Organic Compounds listed in Table 2-3

TABLE 1-2
Summary of VOC and TPH System Extraction Wells
March 2011
Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Well Number	Monitoring Parameters*	Sampling Frequency
VOC Extraction		
EW-4	VOC	Annual
EW-5	VOC	Annual
EW-6	VOC	Annual
EW-12	VOC	Annual
EW-14 (8/7/97)	VOC	Annual
EW-15	VOC	Annual
EW-16	VOC	Annual
EW-17 (6/30/97)	VOC	Annual
EW-18 (5/23/02)	VOC	Annual
EW-19	VOC	Annual
EW-22 (7/18/00)	VOC	Annual
EW-21	VOC	Annual
VOC-1	VOC	Annual
TPH Extraction		
DT-1	VOC and TPH	Annual
TF-1 (6/11/97)	VOC and TPH	Annual
TF-2 (6/10/97)	VOC and TPH	Annual
TF-3 (6/12/97)	VOC and TPH	Annual

Note:

VOC=Volatile Organic Compounds are listed in Table 2-4. The extraction wells are sampled annually during the March sampling event. EW-14, EW-17, EW-18, TF-1, TF-2 and TF-3 were brought on-line on the indicated dates and were sampled for the 1st time during October 1997 event. EW-22, not a part of the original system, was brought on-line on the indicated date and was sampled for the 1st time during the September 2000 event. TF-1 was deactivated 8/00. TF-3 was deactivated on 4/02.

TABLE 2-1

Monitoring Well Groundwater Elevations and Total Depths

March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Well Name	Water Level Below TOC (Feet)	Measuring Point Elevation at TOC (Ft., MSL)	Groundwater Elevation (Ft., MSL)	Total Well Depth (Feet)	Top of Screened (Open) Interval	Base of Screened (Open) Interval
C-2	41.55	902.87	861.32	126.10	819.90	809.90
C-3	32.67	919.03	886.36	81.90	64.50	74.50
C-4	56.40	903.75	847.35	137.90	775.70	765.70
C-5	66.50	902.83	836.33	224.00	689.80	679.80
C-6	52.60	889.65	837.05	171.50	729.20	719.20
C-7	24.98	878.94	853.96	208.00	691.00	671.00
C-8	21.52	878.91	857.39	105.50	787.00	777.00
MW-1A	43.06	906.39	863.33	67.00	850.06	845.06
MW-1B	DRY	906.05	BSI	34.00	874.45	871.45
MW-2A	42.48	906.46	863.98	55.60	859.98	854.98
MW-2B	DRY	906.78	BSI	34.00	876.45	871.45
MW-3A	42.05	907.71	865.66	57.00	857.30	852.30
MW-3B	DRY	907.83	BSI	34.90	876.50	871.50
MW-4A	35.85	914.25	878.40	52.00	866.33	861.33
MW-4B	35.58	920.25	884.67	41.20	883.05	878.05
MW-5A	42.07	904.93	862.86	55.10	854.60	849.80
MW-5B	DRY	NA	BSI	34.11	NA	NA
MW-6A	45.61	902.33	856.72	78.30	828.30	823.30
MW-6B	DRY	903.07	BSI	36.80	NA	NA

Notes:

TOC is Top of Casing, MSL is Mean Sea Level, BSI is less than Base of Screened (Open) Interval, NA is Not Applicable

TABLE 2-1

Monitoring Well Groundwater Elevations and Total Depths

March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Well Name	Water Level Below TOC (Feet)	Measuring Point Elevation at TOC (Ft., MSL)	Groundwater Elevation (Ft., MSL)	Total Well Depth (Feet)	Top of Screened (Open) Interval	Base of Screened (Open) Interval
MW-7A	15.85	891.85	876.00	93.50	NA	NA
MW-7B	15.58	892.14	876.56	16.58	NA	NA
MW-8A	60.16	888.90	828.74	70.00	823.90	818.90
MW-8B	DRY	NA	BSI	NA	NA	NA
MW-9A	DRY	880.33	BSI	NA	NA	NA
MW-9B	DRY	880.58	BSI	19.50	NA	NA
MW-10A	20.75	883.21	862.46	31.20	NA	NA
MW-11	DRY	886.79	BSI	19.53	NA	NA
MW-12A	45.96	904.89	858.93	90.30	819.90	814.90
MW-12B	DRY	905.53	BSI	34.50	876.40	871.40
MW-13A	48.84	902.54	853.70	70.20	837.60	832.80
MW-13B	DRY	903.66	BSI	36.50	871.80	866.80
MW-14A	34.10	896.23	862.13	90.40	811.80	807.00
MW-14B	DRY	896.26	BSI	24.50	876.50	871.70
MW-15A	DRY	901.55	BSI	29.10	876.00	871.00
MW-16B	DRY	904.36	BSI	32.00	877.40	872.40
MW-17B	30.30	905.57	875.27	32.00	878.50	873.50
MW-18A	48.75	911.26	862.51	79.40	837.10	832.10
MW-18B	DRY	911.97	BSI	36.00	880.90	876.10

Notes:

TOC is Top of Casing, MSL is Mean Sea Level, BSI is less than Base of Screened (Open) Interval, NA is Not Applicable

TABLE 2-1

Monitoring Well Groundwater Elevations and Total Depths

March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Well Name	Water Level Below TOC (Feet)	Measuring Point Elevation at TOC (Ft., MSL)	Groundwater Elevation (Ft., MSL)	Total Well Depth (Feet)	Top of Screened (Open) Interval	Base of Screened (Open) Interval
MW-19A	DRY	907.63	BSI	85.30	825.50	820.50
MW-20A	40.35	904.51	864.16	42.20	867.50	862.50
MW-21A	DRY	901.46	BSI	51.20	855.20	850.20
MW-21B	DRY	902.30	BSI	36.50	870.72	865.72
MW-22A	37.90	915.15	877.25	57.80	862.10	857.10
MW-22B	38.87	916.13	877.26	41.50	878.60	873.60
MW-23A	28.27	912.91	884.64	29.00	889.30	884.30
MW-24A	20.00	900.08	880.08	46.10	858.20	853.20
MW-24B	20.21	900.31	880.10	28.00	875.70	870.90
MW-25A	22.72	891.12	868.40	95.00	800.12	795.12
MW-26A	21.05	877.75	856.70	59.50	823.80	818.80
MW-27A	46.20	904.02	857.82	46.20	860.96	855.96
MW-28A	42.60	909.58	866.98	43.10	871.87	867.07
MW-29	34.62	901.11	866.49	150.00	761.11	751.11
MW-29A	31.60	901.49	869.89	122.52	791.24	781.24
MW-29B	29.36	901.02	871.66	42.80	870.10	860.10
MW-30A	46.00	905.46	859.46	92.00	829.46	819.46
MW-30B	45.32	905.75	860.43	63.05	852.97	842.97
MW-31A	13.74	883.74	870.00	96.00	818.74	798.74

Notes:

TOC is Top of Casing, MSL is Mean Sea Level, BSI is less than Base of Screened (Open) Interval, NA is Not Applicable

TABLE 2-1

Monitoring Well Groundwater Elevations and Total Depths

March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Well Name	Water Level Below TOC (Feet)	Measuring Point Elevation at TOC (Ft., MSL)	Groundwater Elevation (Ft., MSL)	Total Well Depth (Feet)	Top of Screened (Open) Interval	Base of Screened (Open) Interval
MW-31B	14.04	884.08	870.04	18.00	876.08	866.08
MW-32	10.07	869.69	859.62	141.00	735.85	725.83
P-1	20.85	883.02	862.17	35.00	851.50	846.50
P-2	21.51	883.51	862.00	24.10	863.10	858.10
P-5	38.01	900.15	862.14	40.30	863.90	858.90
P-6	DRY	902.48	BSI	36.28	871.20	866.20

Notes:

TOC is Top of Casing, MSL is Mean Sea Level, BSI is less than Base of Screened (Open) Interval, NA is Not Applicable

TABLE 2-2
Field Indicator Parameters
March 2011
Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Well Name	Temperature (C)	pH (Units)	Specific Conductance (umhos)
Composite System A	17.1	6.83	315
Composite System B	17.2	6.92	165
Composite System TPH	18.3	6.19	146
C-2	19.2	7.07	188
C-5	19.2	9.12	183
C-7	17.3	9.22	222
DT-1	21.4	6.06	121
EW-4	17.5	7.70	179
EW-5	16.2	6.71	108
EW-6	13.0	6.58	259
EW-12	16.5	7.11	162
EW-14	17.0	6.81	135
EW-15	18.2	6.80	186
EW-16	17.6	6.88	136
EW-17	17.2	6.83	169
EW-18	20.4	6.53	165
EW-19	16.8	7.00	69
EW-21	17.5	6.35	95
EW-22	18.1	6.71	184
MW-2A	17.7	8.22	207
MW-6A	18.4	6.46	147
MW-7A	17.0	6.01	104
MW-8A	17.4	6.19	33.1

Note:
MW-20A was purged dry and did not recharge enough to collect a sample.
MW-30A is obstructed and could not be sampled.
Wells MW-9B, MW-16B, MW-19A, and TF-1 were dry and could not be sampled.

TABLE 2-2
Field Indicator Parameters
March 2011
Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Well Name	Temperature (C)	pH (Units)	Specific Conductance (umhos)
MW-10A	15.3	6.16	173.9
MW-12A	16.8	6.33	142.4
MW-18A	20.4	7.90	136
MW-26A	17.0	10.01	207
MW-27A	16.7	6.20	202.6
MW-28A	17.9	6.37	114.8
MW-29	20.8	10.28	301
MW-29A	19.1	5.96	136
MW-29B	18.8	6.51	41.8
MW-30B	16.8	6.38	83
MW-31A	14.7	5.84	129
MW-31B	13.7	5.67	76
MW-32	16.3	8.72	150
TF-2	16.6	6.77	246
TF-3	16.8	6.79	785
VOC-1	14.9	7.06	168

Note:
MW-20A was purged dry and did not recharge enough to collect a sample.
MW-30A is obstructed and could not be sampled.
Wells MW-9B, MW-16B, MW-19A, and TF-1 were dry and could not be sampled.

TABLE 2-3

Summary of Analytical Results - RCRA Parameters for Monitoring Wells
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Parameter	Monitoring Wells																							
Sample Date	MW-2A	MW-6A	MW-7A	MW-8A	MW-9B	MW-10A	MW-12A	MW-16B	MW-18A	MW-19A	MW-20A	MW-26A	MW-27A	MW-28A	MW-29	MW-29A	MW-29B	MW-30A	MW-30B	MW-31A	MW-31B	MW-32	C-2	C-5	C-7
1,1,1-Trichloroethane	NCAC 2L Standard - 200 ug/L																								
3/1/2011	<1.0				NS	<1.0		NS		NS	NS	<1.0	<1.0	<1.0			<1.0	NS	<1.0						<1.0
3/2/2011		<40	<1.0	<1.0	NS		<1.0	NS	7.6	NS	NS				<1.0	<1.0		NS		<1.0	<1.0	<1.0	<100	<20	
3/16/2011	<5.0				NS			NS		NS	NS							NS							
1,1-Dichloroethane	NCAC 2L Standard - 6 ug/L																								
3/1/2011	<1.0				NS	<1.0		NS		NS	NS	<1.0	<1.0	<1.0			<1.0	NS	<1.0						<1.0
3/2/2011		<40	<1.0	<1.0	NS		0.53 J	NS	<1.0	NS	NS				<1.0	<1.0		NS		<1.0	<1.0	<1.0	<100	<20	
3/16/2011	<5.0				NS			NS		NS	NS							NS							
1,1-Dichloroethylene	NCAC 2L Standard - 7 ug/L																								
3/1/2011	<1.0				NS	<1.0		NS		NS	NS	<1.0	<1.0	<1.0			<1.0	NS	<1.0						<1.0
3/2/2011		<40	<1.0	0.94 J	NS		<1.0	NS	2.2	NS	NS				5.9	<1.0		NS		<1.0	<1.0	<1.0	<100	<20	
3/16/2011	<5.0				NS			NS		NS	NS							NS							
1,2-Dichloroethane	NCAC 2L Standard - 0.4 ug/L																								
3/1/2011	<1.0				NS	<1.0		NS		NS	NS	<1.0	<1.0	<1.0			<1.0	NS	<1.0						<1.0
3/2/2011		<40	<1.0	<1.0	NS		<1.0	NS	<1.0	NS	NS				1.4	<1.0		NS		<1.0	<1.0	<1.0	<100	<20	
3/16/2011	<5.0				NS			NS		NS	NS							NS							

NOTE:

NS = Not sampled
J = Estimated value
Results are shown in micrograms per liter (ug/L)
Wells MW-9B, MW-16B, and MW-19A were dry and could not be sampled.
MW-20A was purged dry and did not recharge enough to collect a sample.
MW-30A is obstructed and could not be sampled.

TABLE 2-3

Summary of Analytical Results - RCRA Parameters for Monitoring Wells
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Parameter	Monitoring Wells																							
Sample Date	MW-2A	MW-6A	MW-7A	MW-8A	MW-9B	MW-10A	MW-12A	MW-16B	MW-18A	MW-19A	MW-20A	MW-26A	MW-27A	MW-28A	MW-29	MW-29A	MW-29B	MW-30A	MW-30B	MW-31A	MW-31B	MW-32	C-2	C-5	C-7
Acetone	NCAC 2L Standard - 6000 ug/L																								
3/1/2011	<10				NS	<10		NS		NS	NS	<10	<10	<10			<10	NS	<10						<10
3/2/2011		<400	<10	<10	NS		<10	NS	<10	NS	NS				<10	<10		NS		<10	<10	<10	<1000	<200	
3/16/2011	<50				NS			NS		NS	NS							NS							
Carbon Tetrachloride	NCAC 2L Standard - 0.3 ug/L																								
3/1/2011	<2.0				NS	<2.0		NS		NS	NS	<2.0	<2.0	<2.0			<2.0	NS	<2.0						<2.0
3/2/2011		<80	<2.0	<2.0	NS		<2.0	NS	38	NS	NS				<2.0	<2.0		NS		<2.0	<2.0	<2.0	<200	<40	
3/16/2011	<5.0				NS			NS		NS	NS							NS							
Chloroform	NCAC 2L Standard - 70 ug/L																								
3/1/2011	<1.0				NS	<1.0		NS		NS	NS	<1.0	<1.0	<1.0			<1.0	NS	<1.0						<1.0
3/2/2011		<40	0.65 J	<1.0	NS		0.68 J	NS	13	NS	NS				2.6	0.53 J		NS		<1.0	<1.0	<1.0	<100	<20	
3/16/2011	<5.0				NS			NS		NS	NS							NS							
cis-1,2-Dichloroethene	NCAC 2L Standard - 70 ug/L																								
3/1/2011	<1.0				NS	<1.0		NS		NS	NS	<1.0	<1.0	<1.0			<1.0	NS	<1.0						<1.0
3/2/2011		<40	<1.0	0.73 J	NS		<1.0	NS	<1.0	NS	NS				3.9	<1.0		NS		<1.0	<1.0	2.7	<100	840	

NOTE:

NS = Not sampled
J = Estimated value
Results are shown in micrograms per liter (ug/L)
Wells MW-9B, MW-16B, and MW-19A were dry and could not be sampled.
MW-20A was purged dry and did not recharge enough to collect a sample.
MW-30A is obstructed and could not be sampled.

TABLE 2-3

Summary of Analytical Results - RCRA Parameters for Monitoring Wells
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Parameter	Monitoring Wells																							
Sample Date	MW-2A	MW-6A	MW-7A	MW-8A	MW-9B	MW-10A	MW-12A	MW-16B	MW-18A	MW-19A	MW-20A	MW-26A	MW-27A	MW-28A	MW-29	MW-29A	MW-29B	MW-30A	MW-30B	MW-31A	MW-31B	MW-32	C-2	C-5	C-7
Methyl Ethyl Ketone (MEK) NCAC 2L Standard - 4000 ug/L																									
3/1/2011	<5.0				NS	<5.0 UJ		NS		NS	NS	<5.0	<5.0	<5.0			<5.0	NS	<5.0						<5.0
3/2/2011		<200	<5.0	<5.0	NS		<5.0	NS	<5.0	NS	NS				<5.0	<5.0		NS		<5.0	<5.0	<5.0	<500	<100	
3/16/2011	<50				NS			NS		NS	NS							NS							
Methylene Chloride NCAC 2L Standard - 5 ug/L																									
3/1/2011	<2.0				NS	<2.0		NS		NS	NS	<2.0	<2.0	<2.0			<2.0	NS	<2.0						<2.0
3/2/2011		<80	<2.0	<2.0	NS		<2.0	NS	<2.0	NS	NS				<2.0	<2.0		NS		<2.0	<2.0	<2.0	<200	<40	
3/16/2011	<5.0				NS			NS		NS	NS							NS							
Tetrachloroethene (PCE) NCAC 2L Standard - 0.7 ug/L																									
3/1/2011	160				NS	<1.0		NS		NS	NS	<1.0	<1.0	<1.0			<1.0	NS	<1.0						2.9
3/2/2011		440	<1.0	4.1	NS		280	NS	160	NS	NS				26	33		NS		27	7.7	1.6	7100	690	
3/16/2011	110				NS			NS		NS	NS							NS							
trans-1,2-Dichloroethene NCAC 2L Standard - 100 ug/L																									
3/1/2011	<2.0				NS	<2.0		NS		NS	NS	<2.0	<2.0	<2.0			<2.0	NS	<2.0						<2.0
3/2/2011		<80	<2.0	<2.0	NS		<2.0	NS	<2.0	NS	NS				<2.0	<2.0		NS		<2.0	<2.0	<2.0	<200	<40	
3/16/2011	<5.0				NS			NS		NS	NS							NS							

NOTE:

NS = Not sampled
J = Estimated value
Results are shown in micrograms per liter (ug/L)
Wells MW-9B, MW-16B, and MW-19A were dry and could not be sampled.
MW-20A was purged dry and did not recharge enough to collect a sample.
MW-30A is obstructed and could not be sampled.

TABLE 2-3

Summary of Analytical Results - RCRA Parameters for Monitoring Wells
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Parameter	Monitoring Wells																							
Sample Date	MW-2A	MW-6A	MW-7A	MW-8A	MW-9B	MW-10A	MW-12A	MW-16B	MW-18A	MW-19A	MW-20A	MW-26A	MW-27A	MW-28A	MW-29	MW-29A	MW-29B	MW-30A	MW-30B	MW-31A	MW-31B	MW-32	C-2	C-5	C-7
Trichloroethene (TCE)	NCAC 2L Standard - 3 ug/L																								
3/1/2011	1.8 J				NS	<2.0		NS		NS	NS	<2.0	<2.0	<2.0			<2.0	NS	<2.0						7.3
3/2/2011		1500	<2.0	7.3	NS		3.2	NS	160	NS	NS				320	5.5		NS		7.9	1.7 J	11	<200	280	
3/16/2011	<5.0				NS			NS		NS	NS							NS							
Vinyl Chloride	NCAC 2L Standard - 0.03 ug/L																								
3/1/2011	<2.0				NS	<2.0		NS		NS	NS	<2.0	<2.0	<2.0			<2.0	NS	<2.0						<2.0
3/2/2011		<80	<2.0	<2.0	NS		<2.0	NS	<2.0	NS	NS				<2.0	<2.0		NS		<2.0	<2.0	<2.0	<200	15 J	
3/16/2011	<2.0				NS			NS		NS	NS							NS							

NOTE:

NS = Not sampled

J = Estimated value

Results are shown in micrograms per liter (ug/L)

Wells MW-9B, MW-16B, and MW-19A were dry and could not be sampled.

MW-20A was purged dry and did not recharge enough to collect a sample.

MW-30A is obstructed and could not be sampled.

TABLE 2-4

Summary of Analytical Results - RCRA Parameters for Extraction Wells

March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Parameter	Extraction Wells																
Sample Date	EW-4	EW-5	EW-6	EW-12	EW-14	EW-15	EW-16	EW-17	EW-18	EW-19	EW-21	EW-22	VOC-1	TF-1	TF-2	TF-3	DT-1
1,1,1-Trichloroethane	NCAC 2L Standard - 200 ug/L																
3/1/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<20	<40	210	<20	<1.0	<20	<400	NS	<1.0		<1.0
3/2/2011														NS		<1.0	
1,1-Dichloroethane	NCAC 2L Standard - 6 ug/L																
3/1/2011	<1.0	<1.0	1.7	<1.0	<1.0	<10	<20	<40	<20	<20	<1.0	<20	<400	NS	<1.0		<1.0
3/2/2011														NS		<1.0	
1,1-Dichloroethylene	NCAC 2L Standard - 7 ug/L																
3/1/2011	<1.0	3.5	3.4	<1.0	<1.0	<10	11 J	72	51 J	35	<1.0	21	<400	NS	<1.0		<1.0
3/2/2011														NS		<1.0	

NOTE:

NS = Not sampled
Results are show in units of micrograms per liter (ug/L)
J = Estimated value
TF-1 was dry and could not be sampled.

TABLE 2-4

Summary of Analytical Results - RCRA Parameters for Extraction Wells

March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Parameter	Extraction Wells																
Sample Date	EW-4	EW-5	EW-6	EW-12	EW-14	EW-15	EW-16	EW-17	EW-18	EW-19	EW-21	EW-22	VOC-1	TF-1	TF-2	TF-3	DT-1
1,2-Dichloroethane	NCAC 2L Standard - 0.4 ug/L																
3/1/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<20	<40	<20	<20	3.5	<20	<400	NS	<1.0		<1.0
3/2/2011														NS		<1.0	
Acetone	NCAC 2L Standard - 6000 ug/L																
3/1/2011	<10	<10	5.7 J	<10	<10	<100	<200	<400	<200	<200	<10	<200	<4000	NS	10		<10
3/2/2011														NS		<10	
Carbon Tetrachloride	NCAC 2L Standard - 0.3 ug/L																
3/1/2011	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<40	74 J	540 J	52	0.62 J	40	<800	NS	<2.0		<2.0
3/2/2011														NS		<2.0	

NOTE:

NS = Not sampled
Results are show in units of micrograms per liter (ug/L)
J = Estimated value
TF-1 was dry and could not be sampled.

TABLE 2-4

Summary of Analytical Results - RCRA Parameters for Extraction Wells

March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Parameter	Extraction Wells																
Sample Date	EW-4	EW-5	EW-6	EW-12	EW-14	EW-15	EW-16	EW-17	EW-18	EW-19	EW-21	EW-22	VOC-1	TF-1	TF-2	TF-3	DT-1
Chloroform	NCAC 2L Standard - 70 ug/L																
3/1/2011	0.55 J	0.81 J	2.5	<1.0	<1.0	<10	<20	<40	9.8 J	10 J	2.5	11 J	<400	NS	<1.0		<1.0
3/2/2011														NS		<1.0	
cis-1,2-Dichloroethene	NCAC 2L Standard - 70 ug/L																
3/1/2011	<1.0	290	13	<1.0	<1.0	1600	420	91	<20	<20	2.1	<20	1200	NS	<1.0		<1.0
3/2/2011														NS		<1.0	
Methyl Ethyl Ketone (MEK)	NCAC 2L Standard - 4000 ug/L																
3/1/2011	<5.0	<5.0	16 J	<5.0	<5.0	<50	<50	<200	<50	<100	<5.0	<100	<2000	NS	3.0 J		<5.0
3/2/2011														NS		<5.0	

NOTE:

NS = Not sampled
Results are show in units of micrograms per liter (ug/L)
J = Estimated value
TF-1 was dry and could not be sampled.

TABLE 2-4

Summary of Analytical Results - RCRA Parameters for Extraction Wells

March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Parameter	Extraction Wells																
Sample Date	EW-4	EW-5	EW-6	EW-12	EW-14	EW-15	EW-16	EW-17	EW-18	EW-19	EW-21	EW-22	VOC-1	TF-1	TF-2	TF-3	DT-1
Methylene Chloride	NCAC 2L Standard - 5 ug/L																
3/1/2011	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<40	<80	<40	<40	<2.0	<40	<800	NS	<2.0		<2.0
3/2/2011														NS		<2.0	
Tetrachloroethene (PCE)	NCAC 2L Standard - 0.7 ug/L																
3/1/2011	<1.0	390	110	<1.0	<1.0	3600	1300	2900	960	1000	14	130	80000	NS	<1.0		24
3/2/2011														NS		<1.0	
trans-1,2-Dichloroethene	NCAC 2L Standard - 100 ug/L																
3/1/2011	<2.0	1.8 J	<2.0	<2.0	<2.0	9.8 J	<40	<80	<40	<40	<2.0	<40	<800	NS	<2.0		<2.0
3/2/2011														NS		<2.0	

NOTE:

NS = Not sampled
Results are show in units of micrograms per liter (ug/L)
J = Estimated value
TF-1 was dry and could not be sampled.

TABLE 2-4

Summary of Analytical Results - RCRA Parameters for Extraction Wells

March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Parameter	Extraction Wells																
Sample Date	EW-4	EW-5	EW-6	EW-12	EW-14	EW-15	EW-16	EW-17	EW-18	EW-19	EW-21	EW-22	VOC-1	TF-1	TF-2	TF-3	DT-1
Trichloroethene (TCE)		NCAC 2L Standard - 3 ug/L															
3/1/2011	<2.0	100	32	2.2	2.2	360	82	2100	3600	930	63	960	460 J	NS	<2.0		1.4 J
3/2/2011														NS		<2.0	
Vinyl Chloride		NCAC 2L Standard - 0.03 ug/L															
3/1/2011	<2.0	<2.0	<2.0	<2.0	<2.0	68	<40	<80	<40	<40	<2.0	<40	<800	NS	<2.0		<2.0
3/2/2011														NS		<2.0	

NOTE:

NS = Not sampled
Results are show in units of micrograms per liter (ug/L)
J = Estimated value
TF-1 was dry and could not be sampled.

TABLE 2-5

Summary of Analytical Results - RCRA Parameters for Composite System Samples

March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

Parameter	Standard	Sample Date	Composite System A	Composite System B	Composite System TPH
1,1,1-Trichloroethane	NCAC 2L Standard - 200 ug/L	3/1/2011	<1.0	<20	87
1,1-Dichloroethane	NCAC 2L Standard - 6 ug/L	3/1/2011	1.1	<20	<10
1,1-Dichloroethylene	NCAC 2L Standard - 7 ug/L	3/1/2011	3.3	32	21
1,2-Dichloroethane	NCAC 2L Standard - 0.4 ug/L	3/1/2011	<1.0	<20	<10
Acetone	NCAC 2L Standard - 6000 ug/L	3/1/2011	<10	<200	<100
Carbon Tetrachloride	NCAC 2L Standard - 0.3 ug/L	3/1/2011	<2.0	37 J	220
Chloroform	NCAC 2L Standard - 70 ug/L	3/1/2011	1.7	6.4 J	<10
cis-1,2-Dichloroethene	NCAC 2L Standard - 70 ug/L	3/1/2011	64	400	<10
Methyl Ethyl Ketone (MEK)	NCAC 2L Standard - 4000 ug/L	3/1/2011	<5.0	<50	<50
Methylene Chloride	NCAC 2L Standard - 5 ug/L	3/1/2011	<2.0	<40	<20
Tetrachloroethene (PCE)	NCAC 2L Standard - 0.7 ug/L	3/1/2011	250	2900 J	450
trans-1,2-Dichloroethene	NCAC 2L Standard - 100 ug/L	3/1/2011	<2.0	<40	<20
Trichloroethene (TCE)	NCAC 2L Standard - 3 ug/L	3/1/2011	30	970	1600
Vinyl Chloride	NCAC 2L Standard - 0.03 ug/L	3/1/2011	<2.0	14 J	<20

NOTE:

Composite System A sample includes extraction wells EW-4, EW-6, EW-12, EW-14, EW-16, and EW-21.
Composite System B sample includes extraction wells EW-5, EW-15, EW-17, EW-19, EW-22, and VOC-1.
Composite System TPH sample includes extraction wells EW-18, TF-2, and DT-1.
Results are shown in units of micrograms per liter (ug/L).
J = Estimated value

Table 2-6
Total Petroleum Hydrocarbon Groundwater Analytical Results
March 2011
Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina

Well	Mar 1997	Oct 1997	Mar 1998	Sept 1998	Mar 1999	Oct 1999	Mar 2000	Mar 2001	Mar 2002	Mar 2003	Mar 2004	Mar 2005	Mar 2006	Mar 2007	Mar 2008	Mar 2009	Mar 2010	Mar 2011
DT-1	2.6	<0.2	<1	<1	<1	<1	<1	<1	<1.00	<5	<5	<5	<5	<5	<5.0	<5.0	< 5.0	<5.0
TF-1		<0.2												<5			1.4 J	
TF-2		3.5				<1		10	1300	190	160	<5	59	170	179	25.4	12	60
TF-3		<0.2	2.62	<1	2.1	<1	2	<1		15	92	<5	<5	45	6.1	<5.0	1.8 J	<5.0

Note:

The extraction wells are sampled annually during the March Event.

TF-1 deactivated 8/00

TF-3 deactivated 4/02

Blank spaces indicate that TPH was not sampled

Results are shown in units of milligrams per liter (mg/L)

Table 2-7a
Field Precision Data
March 2011
Alcatel-Lucent USA, Inc.
Winston Salem, NC

Method	Compound	EW-6	DUP-1	Units	% RPD
8260B	1,1-Dichloroethane	1.6	1.7	µg/L	6.1
8260B	1,1-Dichloroethylene	3.4	3.2	µg/L	6.1
8260B	**Acetone**	**110 J**	**5.7 J**	**µg/L**	**180**
8260B	Chloroform	2.5	2.5	µg/L	0
8260B	cis-1,2-Dichloroethylene	13	10	µg/L	26
8260B	**MEK**	**130**	**16**	**µg/L**	**156**
8260B	Tetrachloroethylene	110	100	µg/L	9.5
8260B	Trichloroethylene	32	31	µg/L	3.2

Method	Compound	EW-16	DUP-02	Units	% RPD
8260B	1,1-Dichloroethylene	11 J	11	µg/L	0
8260B	cis-1,2-Dichloroethylene	420	410	µg/L	2.4
8260B	Tetrachloroethylene	1200	1300	µg/L	8.0
8260B	Trichloroethylene	82	78	µg/L	5.0

Method	Compound	EW-18	DUP-03	Units	% RPD
8260B	1,1,1-Trichloroethane	160	210	µg/L	27
8260B	**1,1-Dichloroethylene**	**36**	**51**	**µg/L**	**34**
8260B	**Carbon tetrachloride**	**360**	**540**	**µg/L**	**40**
8260B	Tetrachloroethylene	810	960	µg/L	17
8260B	Trichloroethylene	3100	3600	µg/L	15
8260B	Chloroform	ND	9.8 J	µg/L	NC*

Method	Compound	VOC-1	DUP-04	Units	% RPD
8260B	cis-1,2-Dichloroethylene	1200	1200	µg/L	0
8260B	Tetrachloroethylene	80000	80000	µg/L	0
8260B	Trichloroethylene	400 J	460 J	µg/L	14

Table 2-7a
Field Precision Data
March 2011
Alcatel-Lucent USA, Inc.
Winston Salem, NC

Method	Compound	Comp Sys B	DUP-05	Units	% RPD
8260B	1,1-Dichloroethylene	26	32	µg/L	21
8260B	Carbon tetrachloride	37 J	37	µg/L	0
8260B	cis-1,2-Dichloroethylene	400	390	µg/L	2.5
8260B	**Tetrachloroethylene**	**1900**	**2900**	**µg/L**	**42**
8260B	Trichloroethylene	960	970	µg/L	1.0
8260B	Vinyl chloride	13 J	14 J	µg/L	7.4
8260B	Chloroform	ND	6.4 J	µg/L	NC*

Method	Compound	MW-32	DUP-06	Units	% RPD
8260B	cis-1,2-Dichloroethylene	2.7	2.7	µg/L	0
8260B	Tetrachloroethylene	1.6	1.5	µg/L	6.5
8260B	Trichloroethylene	11	11	µg/L	0

Notes:

% RPD: Relative percent difference between the primary sample result and the sample duplicate result.

ND: Analyte was not detected

NC: The relative percent difference could not be calculated.

Bold font indicates that data qualification was required.

* - The difference between the primary and field duplicate results was less than the reporting limit. Variation of this magnitude is acceptable for results less than five times the reporting limit.

Table 2-7b
Qualified Analytical Data
March 2011
Alcatel-Lucent USA, Inc.
Winston Salem, NC

Qualified Analytical Data

Sample ID	Method	Analyte	Lab Result	Lab Qual.	Validated Result	Validation Qualifier[1]	Units	Reason Codes[2]
DUP-01	8260B	Acetone	5.7	J	5.7	J	µg/L	FD
DUP-01	8260B	MEK	16		16	J	µg/L	FD
DUP-03	8260B	1,1-Dichloroethylene	51		51	J	µg/L	FD
DUP-03	8260B	Carbon Tetrachloride	540		540	J	µg/L	FD
DUP-05	8260B	Tetrachloroethylene	2900		2900	J	µg/L	FD
EW-6	8260B	Acetone	110	E	110	J	µg/L	FD ECR
EW-6	8260B	MEK	130		130	J	µg/L	FD
EW-18	8260B	1,1-Dichloroethylene	36		36	J	µg/L	FD
EW-18	8260B	Carbon Tetrachloride	360		360	J	µg/L	FD
MW-10A	8260B	MEK	ND		5.0	UJ	µg/L	MS
COMP-SYS-B	8260B	Tetrachloroethylene	1900		1900	J	µg/L	FD
MW-2A	8141A	Merphos	1.5	U	1.5	UJ	µg/L	LCS

[1]: USEPA-defined data validation qualifiers applied in this data evaluation:

J: The associated numerical value is the approximate concentration of the analyte in the sample.

UJ: The analyte was not detected; however, the reported quantitation limit is approximated and may be inaccurate or imprecise.

[2]: Reason Codes:

FD: The field duplicate RPD is outside of the advisory limits.

ECR: The reported concentration exceeded the instrument calibration range.

MS: The matrix spike recovery was outside of the advisory limits.

LCS: The laboratory control spike was outside of the quality control limits.

TABLE 4-1
Extraction and Pumping Well Construction Details
March 2011
Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina

Well Number	TOC Elevation (ft msl)	Ground Surface Elevation (ft msl)	Stickup (ft)	Total Depth of Well (ft)	Pump Inlet (ft)	Trans-ducer (ft)	Lower Set Point (ft)	Upper Set Point (ft)	Static Water Level (ft)	Elevations (based on TOC): Well Bottom (ft msl)	Pump Inlet (ft msl)	Trans-ducer (ft msl)	Lower Set Point (ft)	Upper Set Point (ft)	Static Water Level (ft msl)	Available Drawdown Above Lower Set-Point (Non-Pumping) (ft)
EW-4	883.65	890.25	-6.60	138.1	133.1	130.1	120.1	93.1	7.5	745.6	750.6	753.6	763.6	790.6	876.2	112.6
EW-5	894.65	901.21	-6.56	143.6	138.6	135.6	125.6	115.6	18.6	751.1	756.1	759.1	769.1	779.1	876.1	107.0
EW-6	883.73	890.32	-6.59	195.8	190.8	187.8	172.8	155.8	11.9	688.0	693.0	696.0	711.0	728.0	871.9	160.9
EW-12	885.88	884.46	1.42	53.2	48.2	45.2	35.2	28.2	8.2	832.7	837.7	840.7	850.7	857.7	877.7	27.0
EW-14	884.85	891.45	-6.60	50.0	45.0	42.0	32.0	30.0	22.7	834.9	839.9	842.9	852.9	854.9	862.2	9.3
EW-15	895.37	902.00	-6.63	218.0	213.0	210.0	196.0	179.0	16.4	677.3	682.3	685.3	699.3	716.3	879.0	179.7
EW-16	897.89	904.47	-6.58	192.8	187.8	184.8	170.8	156.8	11.6	705.1	710.1	713.1	727.1	741.1	886.3	159.2
EW-17	894.59	901.22	-6.63	180.3	175.3	172.3	158.3	144.3	20.3	714.3	719.3	722.3	736.3	750.3	874.3	138.0
EW-18	913.07	911.00	2.00	96.0	94.0	88.0	76.0	72.0	51.0	817.1	819.1	825.1	837.1	841.1	862.1	25.0
EW-19	896.67	903.73	-7.06	94.4	89.4	86.4	76.4	64.4	22.7	802.2	807.2	810.2	820.2	832.2	874.0	53.7
EW-21	899.88	906.43	-6.55	65.1	60.1	57.1	47.1	31.1	32.0	834.8	839.8	842.8	852.8	868.8	867.8	15.1
EW-22	904.18	902.76	1.42	204.0	199.0	196.0	178.0	174.0	34.0	698.8	705.2	708.2	726.2	730.2	870.2	144.0
VOC-1	898.07	904.69	-6.62	112.7	107.7	104.7	94.7	82.7	16.2	785.4	790.4	793.4	803.4	815.4	881.9	78.5
TF-1	902.07	900.60	1.47	59.2	54.2	51.2	42.2	39.2	27.9	842.8	847.8	850.8	859.8	862.8	874.2	14.4
TF-2	902.10	900.59	1.51	55.8	50.8	47.8	39.8	36.8	24.5	846.3	851.3	854.3	862.3	865.3	877.6	15.3
TF-3	902.07	900.58	1.49	57.9	52.9	49.9	41.9	38.9	23.9	844.1	849.1	852.1	860.1	863.1	878.2	18.0
DT-1	911.70	909.60	2.10	56.4	51.4	48.4	38.4	33.4	28.7	855.3	860.3	863.3	873.3	878.3	883.0	9.7

Notes: *TOC = Top of casing elevation*
Upper and Lower Set-Points are pre-determined elevations within the well at which the pumps switch on and off
Average Pumping Rate for extraction wells is based on levels measured hourly throughout the semi-annual period and includes downtime.
Average Water Elevation in extraction wells is based on levels measured hourly throughout the semi-annual period and includes downtime.

TABLE 4-2
Summary of Water Levels, Drawdown, and Pumping Rates for Extraction and Pumping Wells
March 2011
Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina

	Observed During Period October 2010 through March 2011						
Well Number	Static Water Level (ft msl)	Average Set Point Elevation (ft msl)	Maximum Water Elevation (ft msl)	Minimum Water Elevation (ft msl)	Average Water Elevation (ft msl)	Average Drawdown (ft)	Average Pumping Rate (gpm)
EW-4	876.2	777.09	975.92	753.32	769.47	106.7	4.63
EW-5	876.1	774.09	849.02	758.22	766.75	109.3	0.66
EW-6	871.9	719.46	849.39	712.59	743.99	127.9	23.46
EW-12	877.7	854.19	862.49	840.99	846.40	31.3	0.55
EW-14	862.2	853.85	865.29	851.29	855.74	6.5	0.79
EW-15	879.0	707.83	912.68	688.98	806.25	72.8	0.37
EW-16	886.3	734.12	852.48	728.38	743.39	142.9	7.80
EW-17	874.3	743.30	836.44	712.24	764.10	110.2	9.21
EW-18	862.1	839.10	874.90	832.90	838.82	23.3	3.43
EW-19	874.0	826.23	880.47	812.17	839.81	34.2	0.87
EW-21	867.8	860.78	883.68	843.58	858.07	9.7	0.28
EW-22	870.2	728.20	942.60	712.50	776.09	94.1	1.16
VOC-1	881.9	809.39	907.93	792.63	815.43	66.5	0.43
TF-1	NA	NA	NA	NA	NA	NA	NA
TF-2	877.6	863.77	896.90	853.00	854.63	23.0	0.00
TF-3	NA	NA	NA	NA	NA	NA	NA
DT-1	883.0	875.78	867.50	861.20	862.53	20.5	2.38

Notes: *Average Pumping Rate for extraction wells based on minute measurements throughout semi-annual period including downtime.*
Average Water Elevation in extraction wells based on minute measurements throughtout semi-annual period including downtime.
TF-1 no longer in service as of September 2000.
TF-2 did not operate during the monitoring period due to low water table conditions.
TF-3 no longer in service as of April 2002.

Table 4-3
Specific Capacity Calculation
March 2011
Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina

Well Number	Average Pumping Rate (gpm)	Average Drawdown (ft)	Average Specific Capacity (gpm/ft)	5-Year Average (2008-2011) Specific Capacity (gpm/ft)	Average Specific Capacity Variance (%)
EW-4	4.63	106.7	0.043	0.067	-10.6
EW-5	0.66	109.3	0.006	0.009	-10.9
EW-6	23.46	127.9	0.183	0.151	4.9
EW-12	0.55	31.3	0.018	0.011	12.6
EW-14	0.79	6.5	0.122	0.200	-12.2
EW-15	0.37	72.8	0.005	0.039	-38.5
EW-16	7.80	142.9	0.055	0.045	4.6
EW-17	9.21	110.2	0.084	0.069	4.7
EW-18	3.43	23.3	0.147	0.084	13.6
EW-19	0.87	34.2	0.025	0.024	1.5
EW-21	0.28	9.7	0.029	0.021	8.5
EW-22	1.16	94.1	0.012	0.023	-15.4
VOC-1	0.43	66.5	0.006	0.023	-28.0
TF-1					
TF-2	0.00	23.0	0.000	0.000	NA
TF-3					
DT-1	2.38	20.5	0.116	0.092	5.8

Notes:

TOC = Top of casing elevation

Upper and Lower Set-Points are pre-determined elevations within the well at which the pumps switch on and off.

Average Pumping Rate based on minute measurements throughout the semi-annual period and includes downtime.

Average Water Elevation based on minute measurements throughout the semi-annual period and includes downtime.

TF-1 no longer in service as of September 2000.

TF-2 did not operate during the monitoring period due to low water table conditions.

TF-3 no longer in service as of April 2002.

TABLE 4-4
Estimated Total VOC Mass Removal and Removal Rates
Semi-Annual Groundwater Sampling Report
March 2011
Alcatel-Lucent USA, Inc.
Winston Salem, North Carolina

Well Number	Total Gallons Pumped: (October 2010 through March 2011) *(gallons)*	Total VOCs (March 2011) *(ug/l)*	Estimated Total Mass of VOCs Removed: (October 2010 through March 2011) *(lbs VOC)*	Estimated Removal Rate *(lbs/1000 gallons)*	Percent of Total Mass Removal: (October 2010 through March 2011) *(% of total)*
EW-4	1,164,763	1	0.01	0.000005	0.00%
EW-5	165,487	786	1.25	0.007559	0.45%
EW-6	5,927,573	403	22.94	0.003870	8.28%
EW-12	124,927	2	0.00	0.000021	0.00%
EW-14	177,711	2.2	0.00	0.000021	0.00%
EW-15	93,699	5,638	5.08	0.054210	1.83%
EW-16	1,956,903	1,713.0	32.23	0.016471	11.64%
EW-17	2,311,466	5,237.0	116.40	0.050356	42.02%
EW-18	317,269	4,466.0	13.62	0.042942	4.92%
EW-19	196,007	2,027.0	3.82	0.019490	1.38%
EW-21	69,190	85.7	0.06	0.000824	0.02%
EW-22	271,539	1,162.0	3.03	0.011173	1.10%
VOC-1	99,960	81,600	78.43	0.784615	28.31%
TF-1	NA	NA	NA	NA	NA
TF-2	NA	17.0	NA	NA	NA
TF-3	NA	NA	NA	NA	NA
DT-1	605,778	25.40	0.15	0.000244	0.05%
TOTAL	**13,482,272**	**103,164**	**277.03**	**0.991803**	**100.0%**

Estimated Mass Removal by Monitoring Period (since April 2000)

Report Date	Period	Estimated Mass Removal for Monitoring Period (lbs)	Cumulative Total (lbs)
Jun-11	Oct. 2010 - March 2011	277.03	24,380.32
Dec-10	April 2010 - Sept. 2010	248.8	24,103.29
Jun-10	Oct. 2009 - March 2010	725.38	23,854.49
Dec-09	April 2009 - Sept. 2009	1804.13	23,129.11
Jun-09	Oct. 2008 - March 2009	359.79	21,324.98
Dec-08	April 2008 - Sept. 2008	422.74	20,965.19
Jun-08	Oct. 2007 - March 2008	279.00	20,542.45
Dec-07	April 2007 - Sept. 2007	241.05	20,263.45
Jun-07	Oct. 2006 - March 2007	931.44	20,022.40
Dec-06	April 2006 - Sept. 2006	703.28	19,090.97
Jun-06	Oct. 2005 - March 2006	773.97	18,387.69
Nov-05	April 2005 - Sept. 2005	449.94	17,613.72
Jun-05	Oct. 2004 - March 2005	692.58	17,245.17
Jan-05	April 2004 - Sept. 2004	863.32	16,471.20
Jun-04	Oct. 2003 - March 2004	1090.04	15,607.88
Jan-04	April 2003 - Sept. 2003	1108.89	14,517.84
Jun-03	Oct. 2002 - March 2003	572.17	13,408.95
Jan-03	Sept. 2001 - Sept. 2002	2360.16	12,836.78
Jun-02	Oct. 2001 - March 2002	846.83	10,476.62
Jan-02	Sept. 2000 - Sept. 2001	1834.23	9,629.79
Jun-01	Sept. 2000 - March 2001	1022.31	7,795.56
Dec-00	April 2000 - Sept. 2000	467.36	6,773.25

TABLE 4-5
Oil House SVE System - Hours of Operation
March 2011
Alcatel-Lucent USA, Inc.
Winston-Salem, NC

		Hours of Operation
MONTH	**YEAR**	**Oil House**
October	2010	744
November	2010	720
December	2010	744
January	2011	695
February	2011	595
March	2011	744

TABLE 4-6
Oil House SVE System - Exhaust Analytical Data
March 2011
Alcatel-Lucent USA, Inc.
Winston-Salem, NC

		Tetrachloroethene (ppmv)	Trichloroethene (ppmv)
MONTH	**YEAR**	**Oil House**	**Oil House**
October	2010	NA	NA
November	2010	NA	NA
December	2010	3.2	1.4
January	2011	NA	NA
February	2011	NA	NA
March	2011	4.2	1.7

ppmv - parts per million by volume

NA - Not Applicable

ND - Constituent not detected

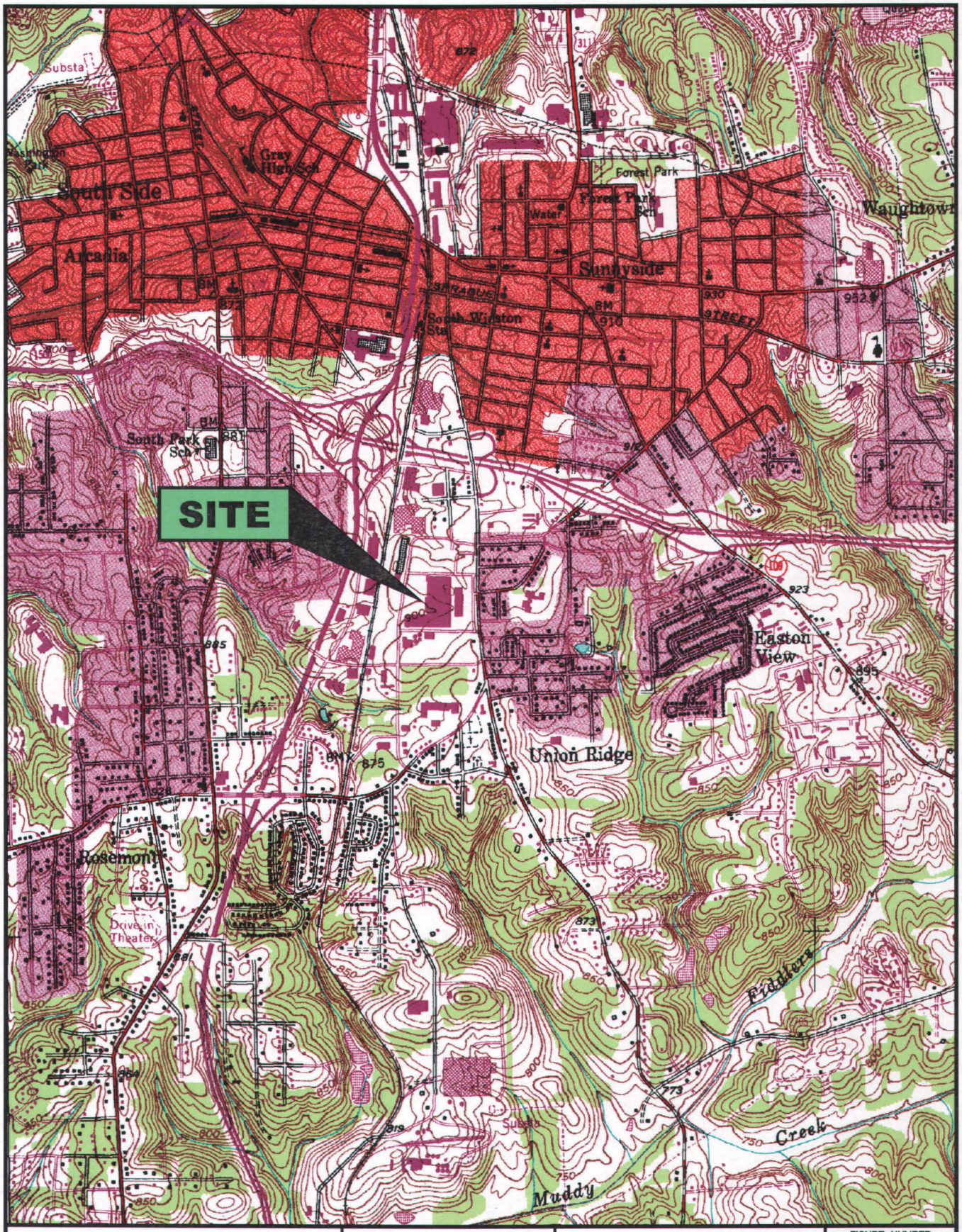
TABLE 4-7
Oil House SVE System - Operating Parameters
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, NC

		Oil House		
MONTH	**YEAR**	**Flow Rate (scfm)**	**Temperature (Deg F)**	**PID (ppm)**
October	2010	185	124	3.1
November	2010	180	120	4.0
December	2010	187	118	3.5
January	2011	185	120	3.3
February	2011	185	115	3.7
March	2011	188	120	3.9

TABLE 4-8
Oil House SVE System - Estimated Monthly Mass Removal
March 2011
Alcatel-Lucent USA, Inc.
Winston-Salem, NC

		Mass of Tetrachloroethene Removed (lbs)	Mass of Trichloroethene Removed (lbs)
MONTH	**YEAR**	**Oil House**	**Oil House**
October	2010	13.092	5.609
November	2010	12.319	5.278
December	2010	11.441	3.967
January	2011	12.194	4.048
February	2011	10.478	3.479
March	2011	15.111	4.847
Total		**74.634**	**27.227**



AECOM

AECOM North Carolina, Inc.
RALEIGH, NORTH CAROLINA 27615
PHONE: (919) 872-6600
FAX: (919) 872-7996
WEB: HTTP://WWW.AECOM.COM

USGS 7-1/2 MINUTE SERIES MAP
Winston-Salem East, NC
1994
TOPOGRAPHIC QUADRANGLE

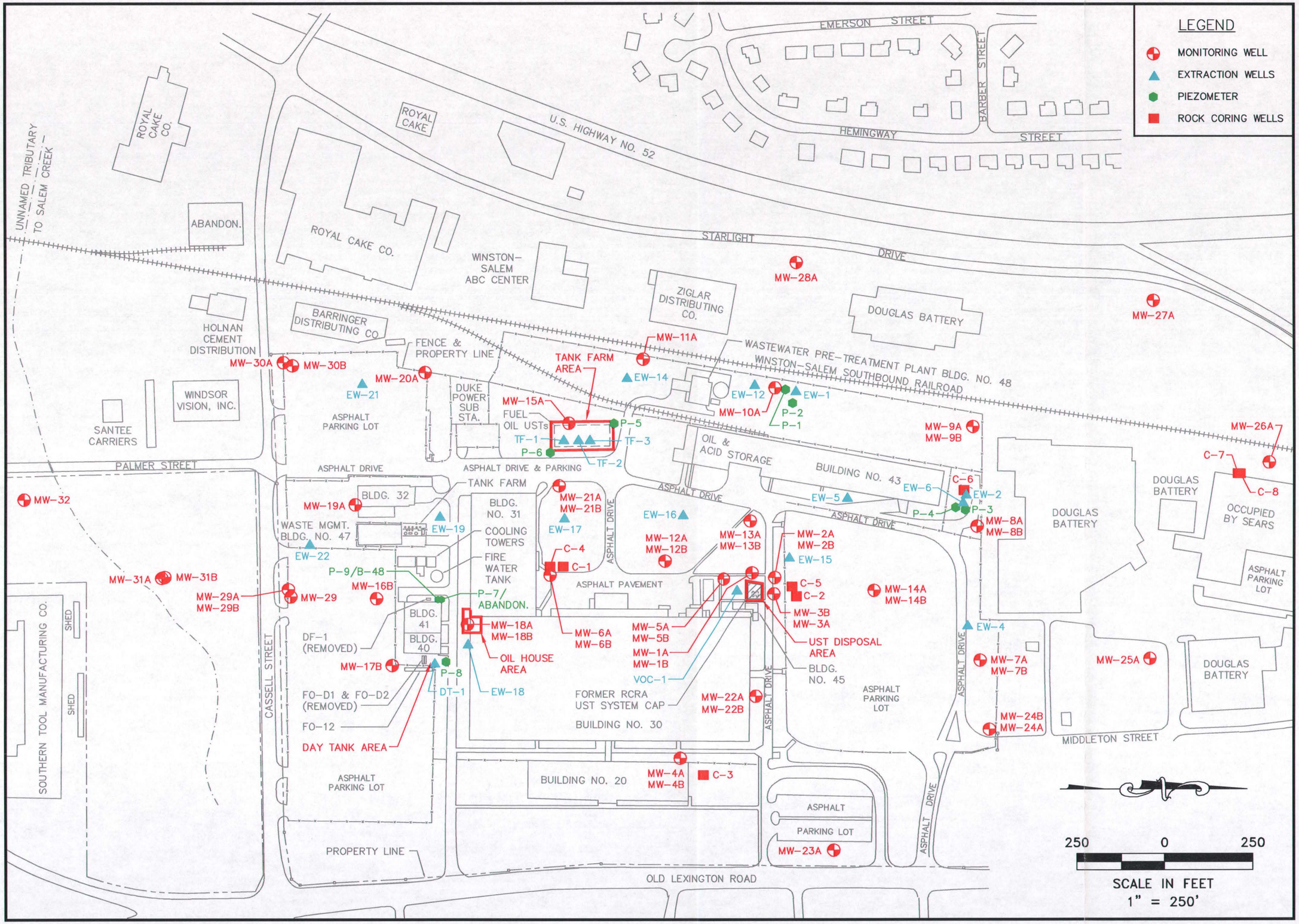
SCALE 1:24000

SITE LOCATION MAP

Alcatel-Lucent USA Inc.
Winston-Salem, North Carolina

FIGURE NUMBER: 1 – 1

DRAWN BY:	DATE:	PROJECT NUMBER:	DRAWING NUMBER:
KLR	05/20/11	60194417.3000	A110318A



REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: KLR
CHECKED BY:
APPROVED BY:

AECOM

AECOM North Carolina, Inc.
RALEIGH, NORTH CAROLINA 27615
PHONE: (919) 872-6800
FAX: (919) 872-7996
WEB: HTTP://WWW.AECOM.COM

SITE PLAN

Alcatel-Lucent USA Inc.
Winston-Salem, North Carolina

SCALE:	DATE:	PROJECT NUMBER:
1"=250'	05/19/11	60194417.3000

FIGURE NUMBER: 1-2

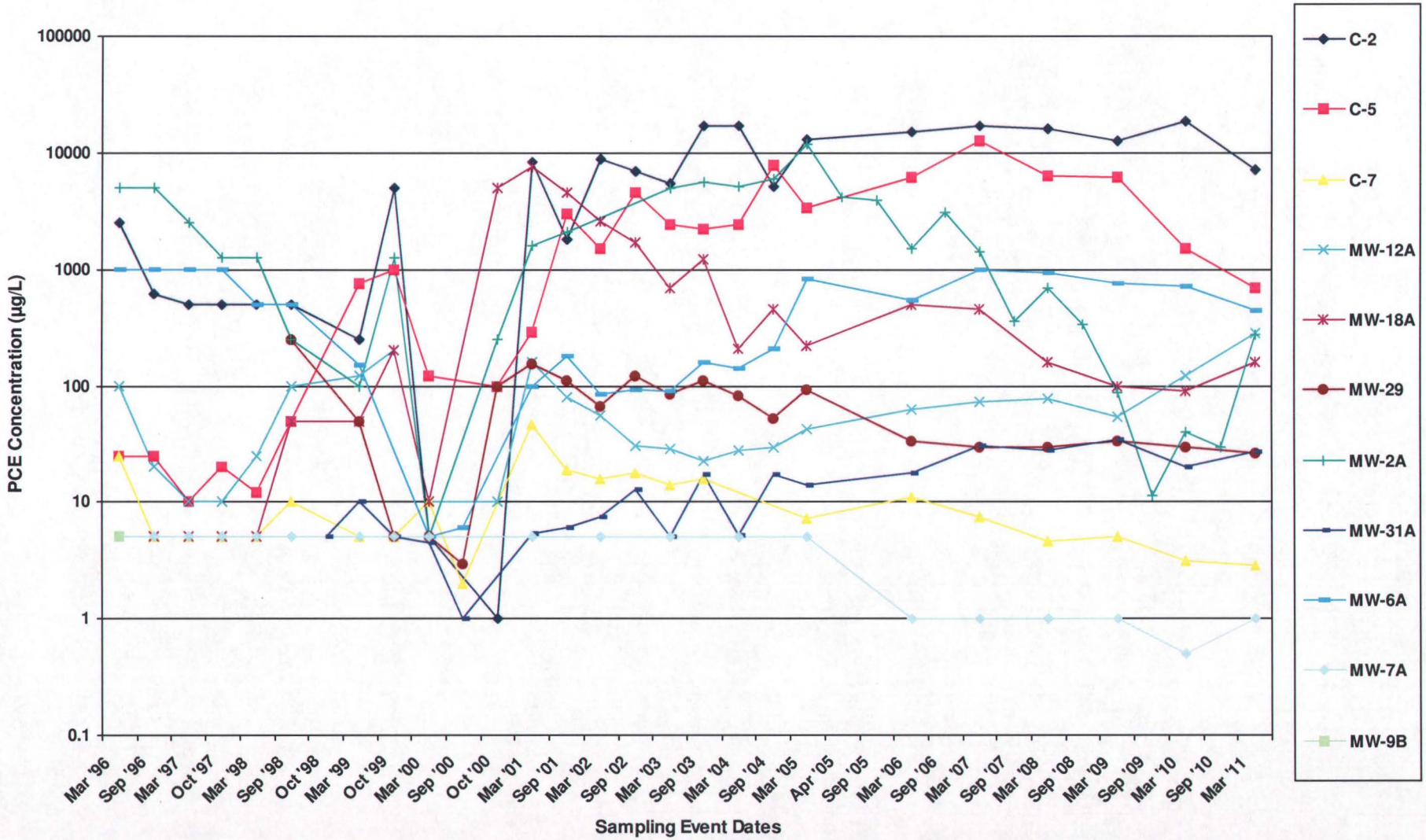
SHEET NUMBER: B110319B

Figure 3-1a

Effectiveness/POC Wells - Historical PCE Data
March 2011

Alcatel-Lucent USA, Inc.

Winston-Salem, North Carolina

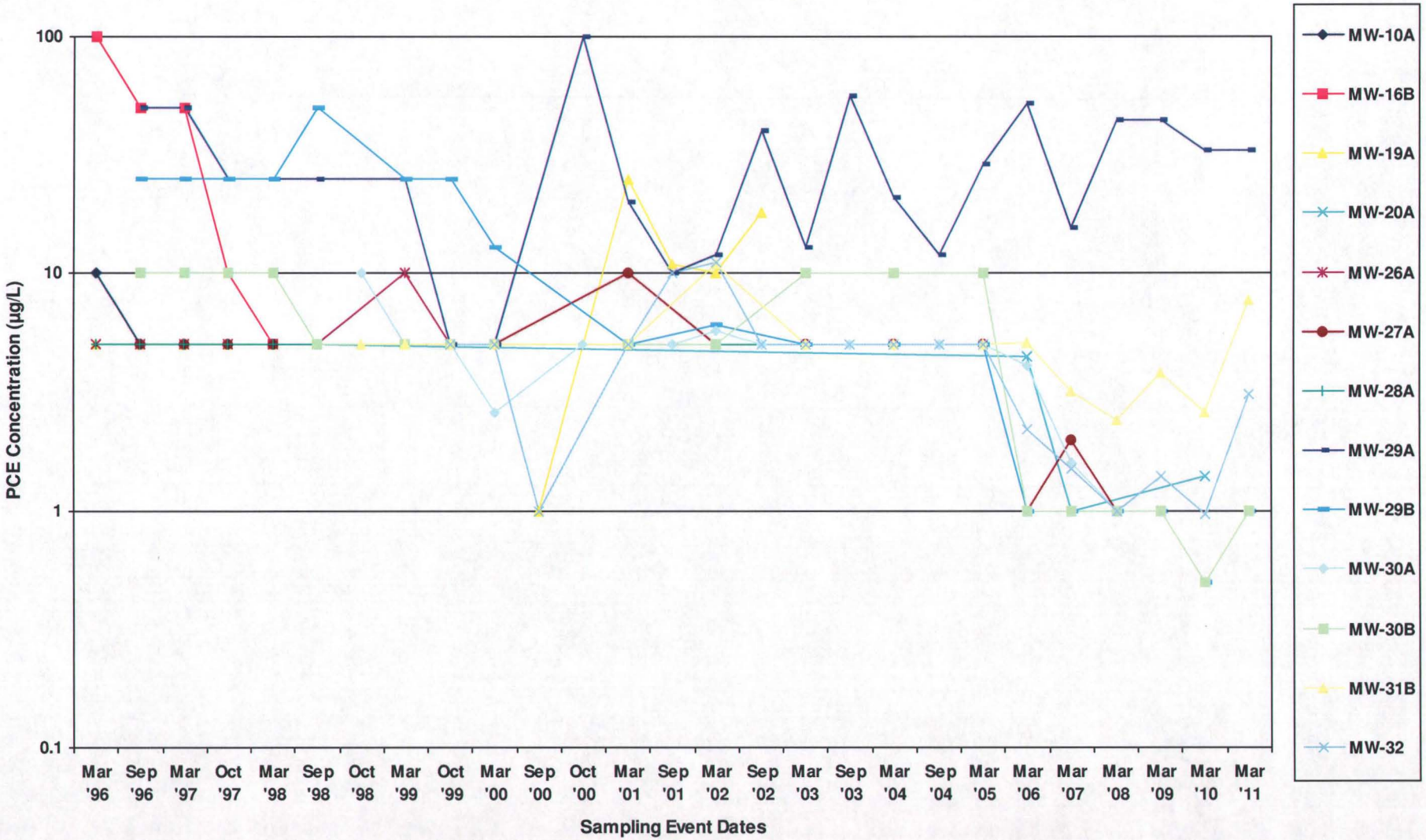


Note: For graphical purposes, the laboratory reporting limit has been used as the sample concentration where PCE was not detected.

Figure 3-1b

Effectiveness/POC Wells - Historical PCE Data
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina

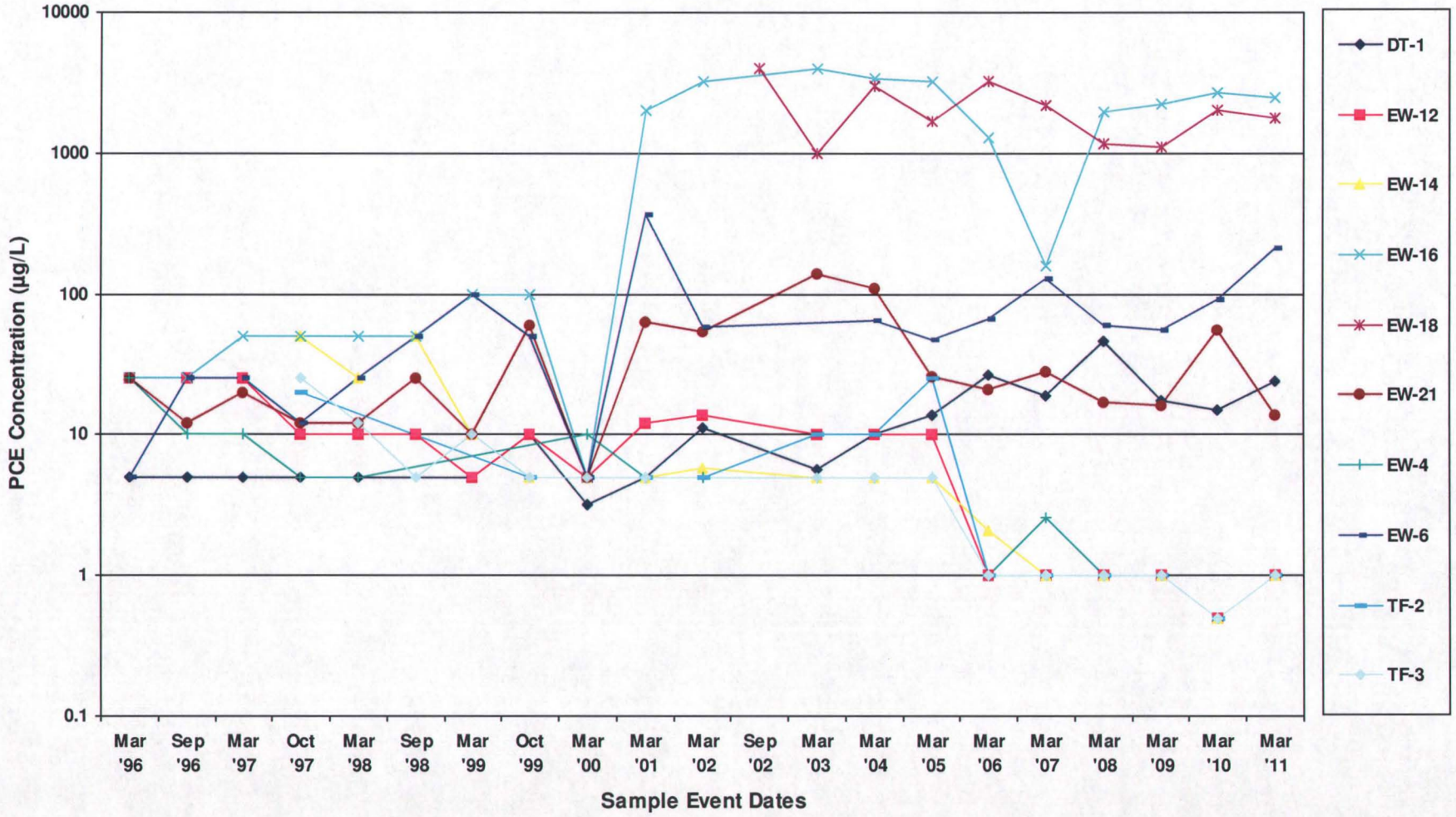


Note: For graphical purposes, the laboratory reporting limit has been used as the sample concentration where PCE was not detected.

Figure 3-2a

System A Extraction Wells - Historical PCE Data
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina

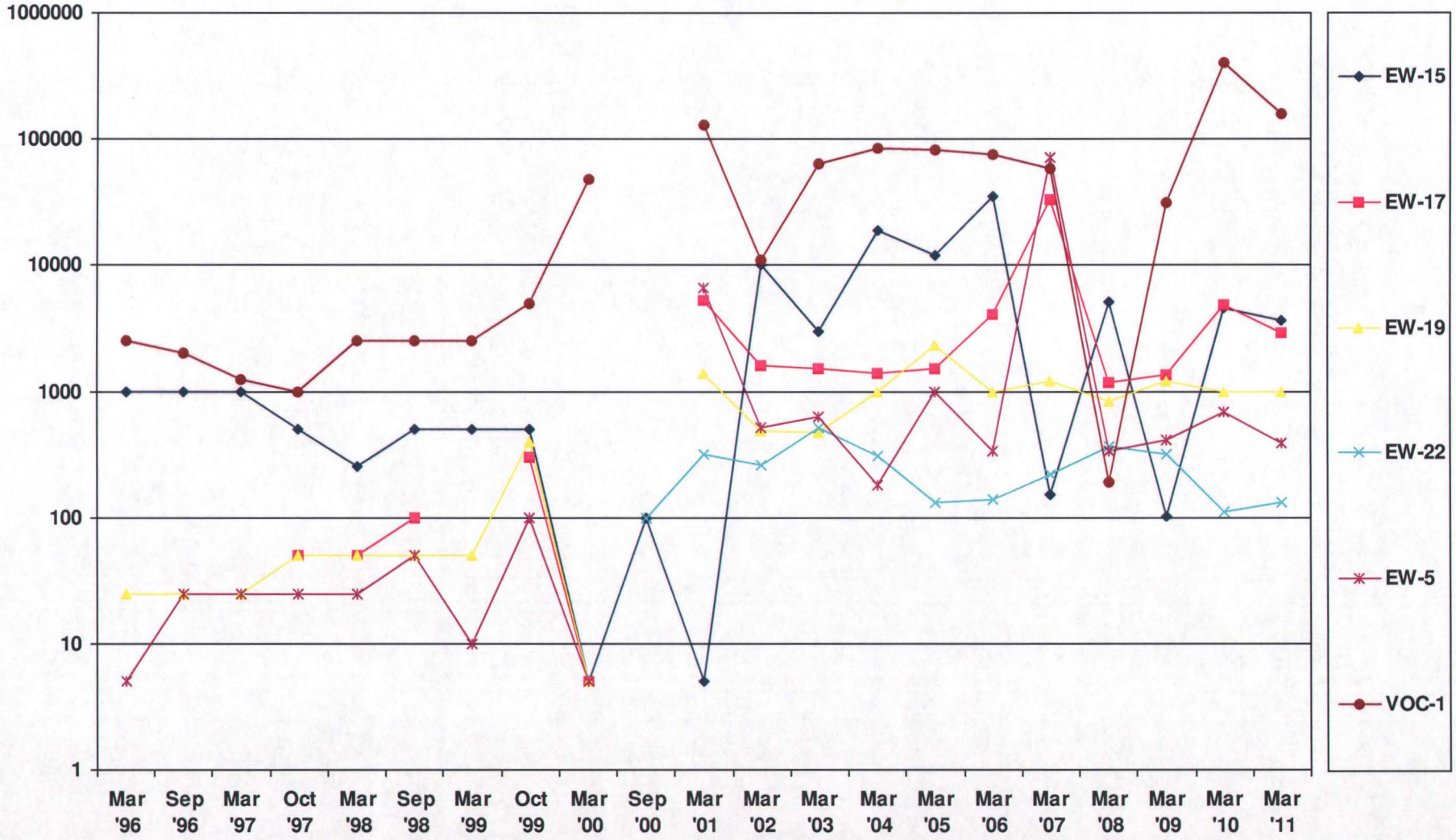


Note: For graphical purposes, the laboratory reporting limit has been used as the sample concentration where PCE was not detected.

Figure 3-2b

System B Extraction Wells - Historical PCE Data
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina

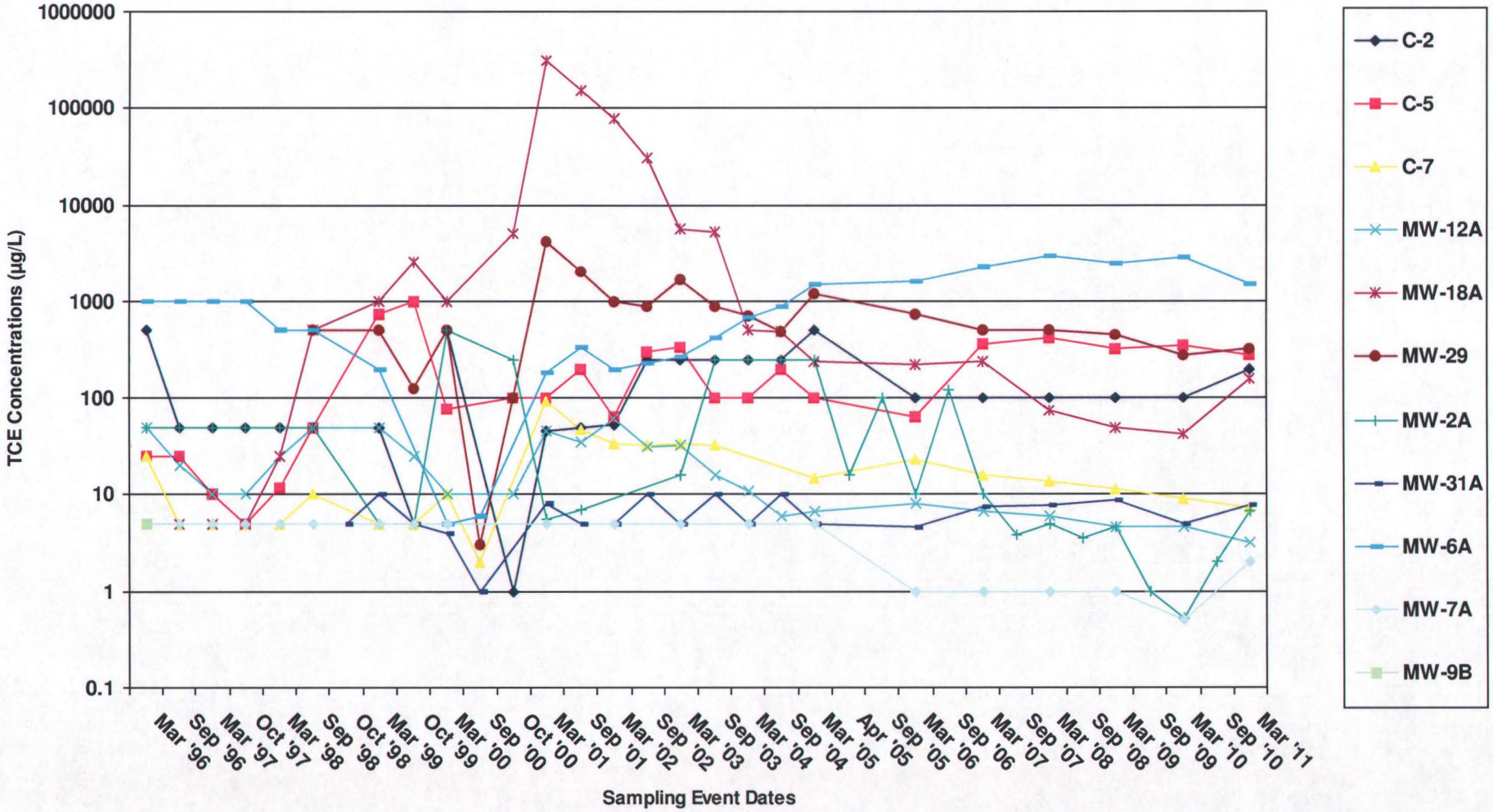


Note: For graphical purposes, the laboratory reporting limit has been used as the sample concentration where PCE was not detected.

Figure 3-3a

Effectiveness/POC Wells - Historical TCE Data
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina

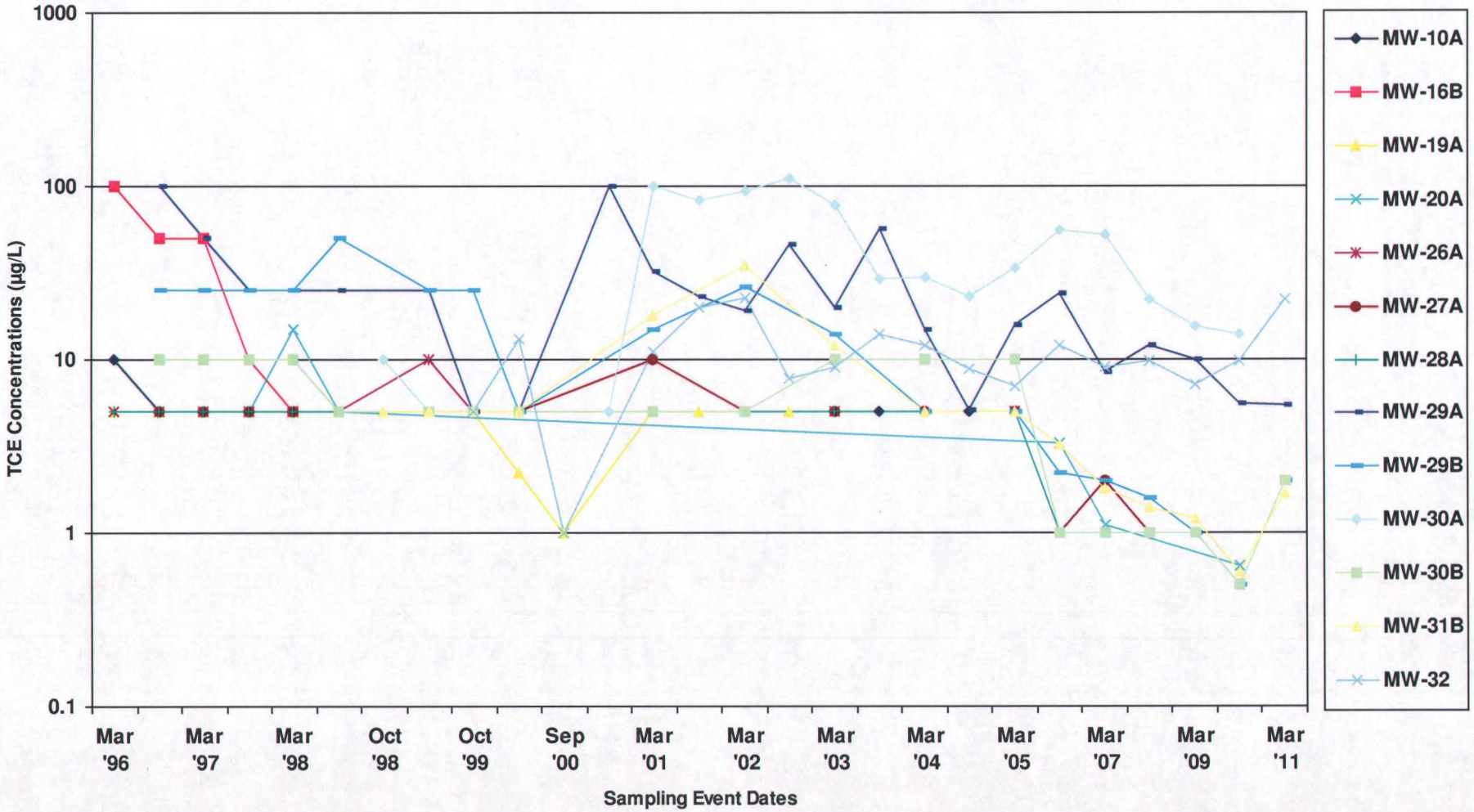


Note: For graphical purposes, the laboratory reporting limit has been used as the sample concentration where TCE was not detected.

Figure 3-3b

Effectiveness/POC Wells - Historical TCE Data
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina

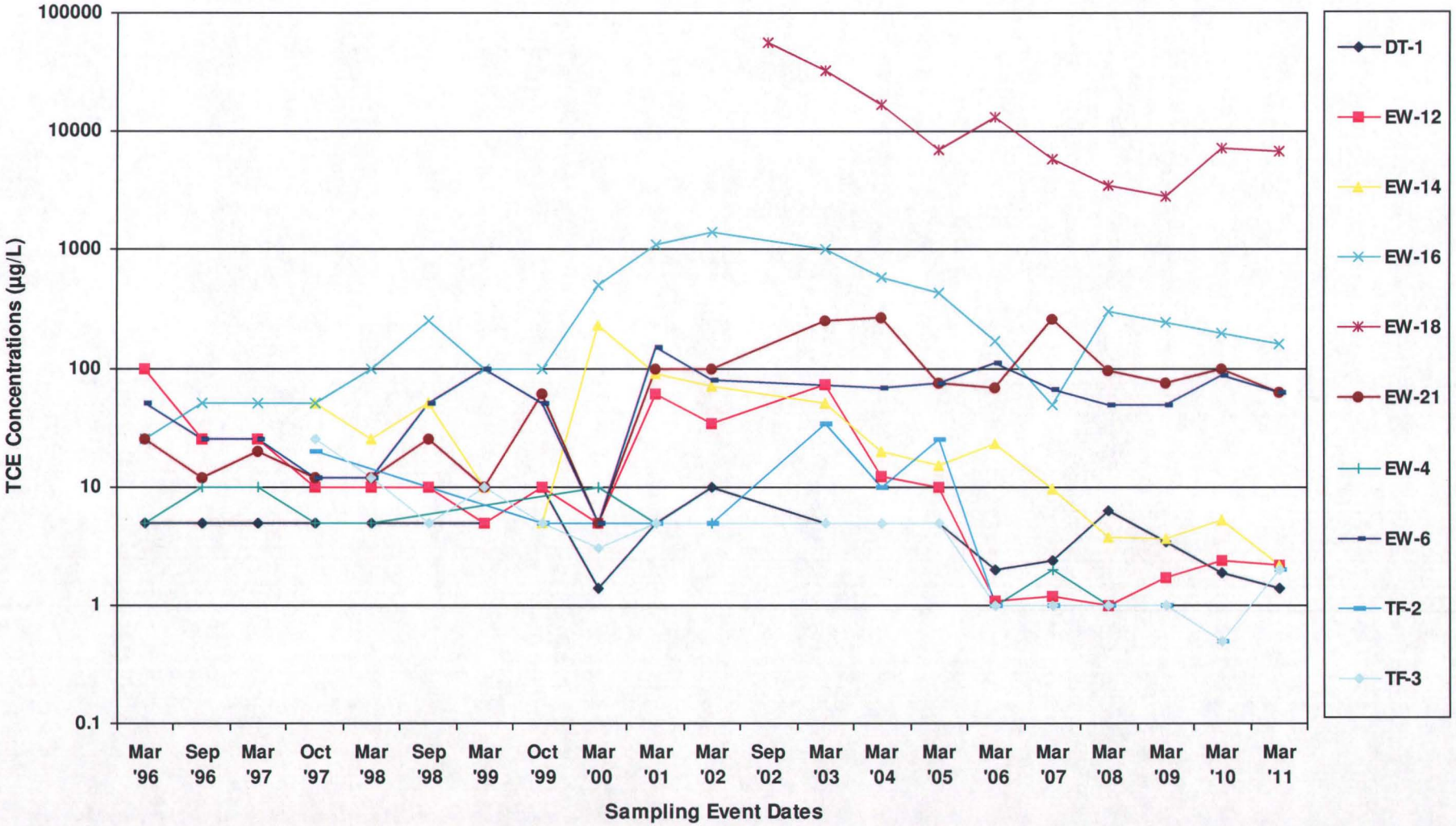


Note: For graphical purposes, the laboratory reporting limit has been used as the sample concentration where TCE was not detected.

Figure 3-4a

System A Extraction Wells - Historical TCE Data
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina

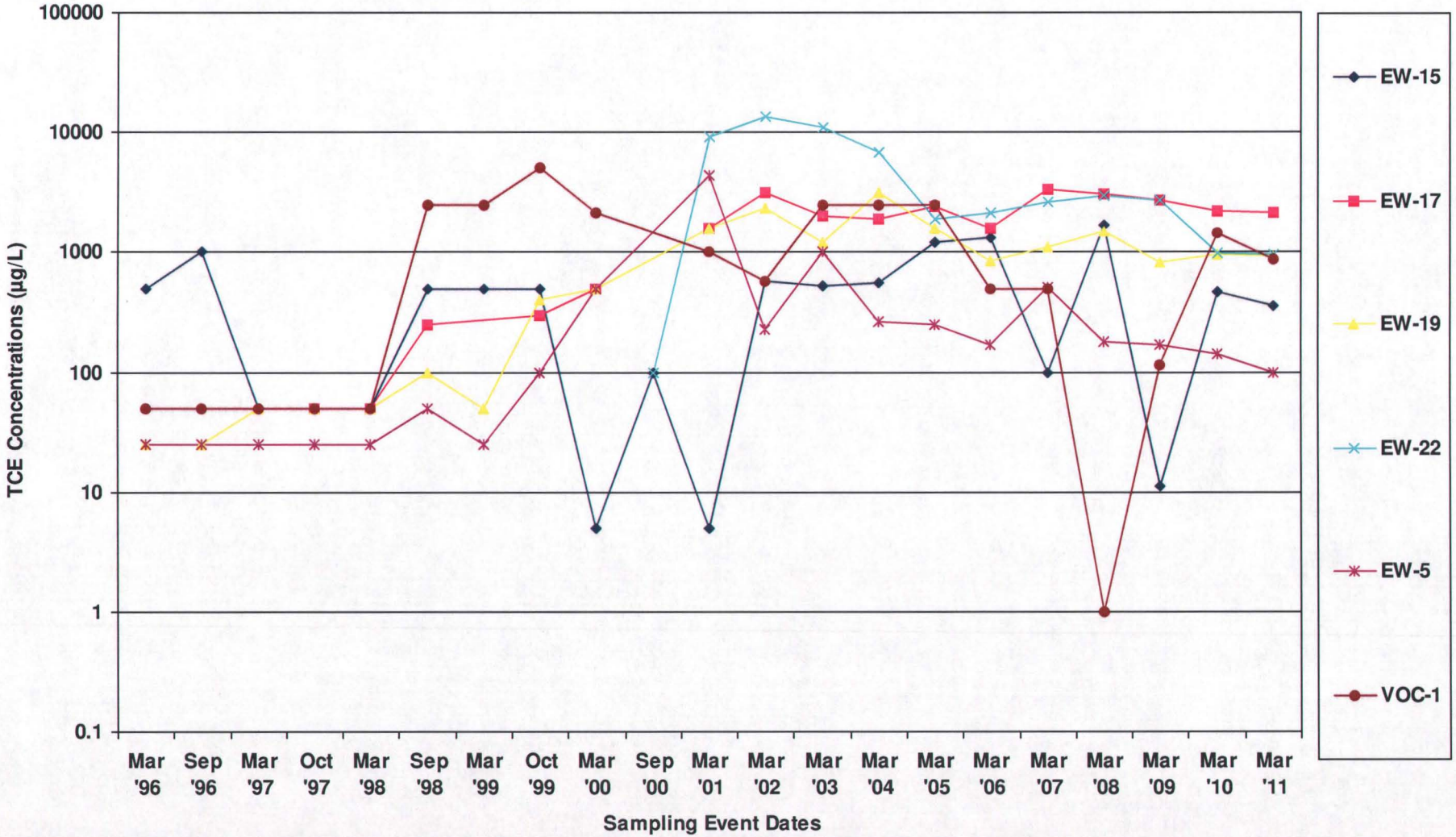


Note: For graphical purposes, the laboratory reporting limit has been used as the sample concentration where TCE was not detected.

Figure 3-4b

System B Extraction Wells - Historical TCE Data
March 2011

Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina



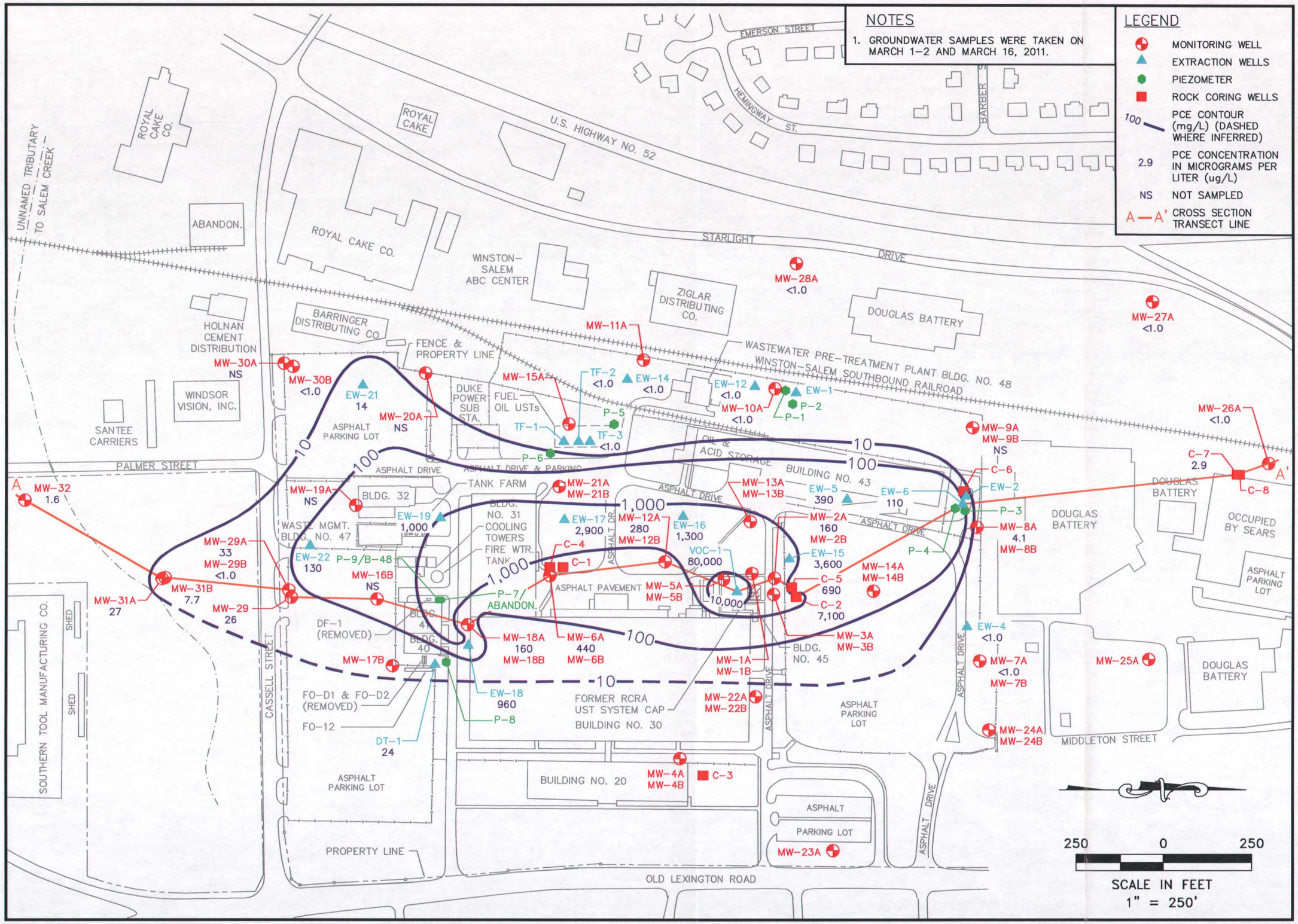
Note: For graphical purposes, the laboratory reporting limit has been used as the sample concentration where TCE was not detected.

NOTES

1. GROUNDWATER SAMPLES WERE TAKEN ON MARCH 1–2 AND MARCH 16, 2011.

LEGEND

- MONITORING WELL
- EXTRACTION WELLS
- PIEZOMETER
- ROCK CORING WELLS
- 100 — PCE CONTOUR (mg/L) (DASHED WHERE INFERRED)
- 2.9 — PCE CONCENTRATION IN MICROGRAMS PER LITER (ug/L)
- NS — NOT SAMPLED
- A — A' — CROSS SECTION TRANSECT LINE



REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY: | DRAWN BY: KLR | CHECKED BY: | APPROVED BY:

AECOM

AECOM North Carolina, Inc.
RALEIGH, NORTH CAROLINA 27615
PHONE: (919) 872-6600
FAX: (919) 872-7996
WEB: HTTP://WWW.AECOM.COM

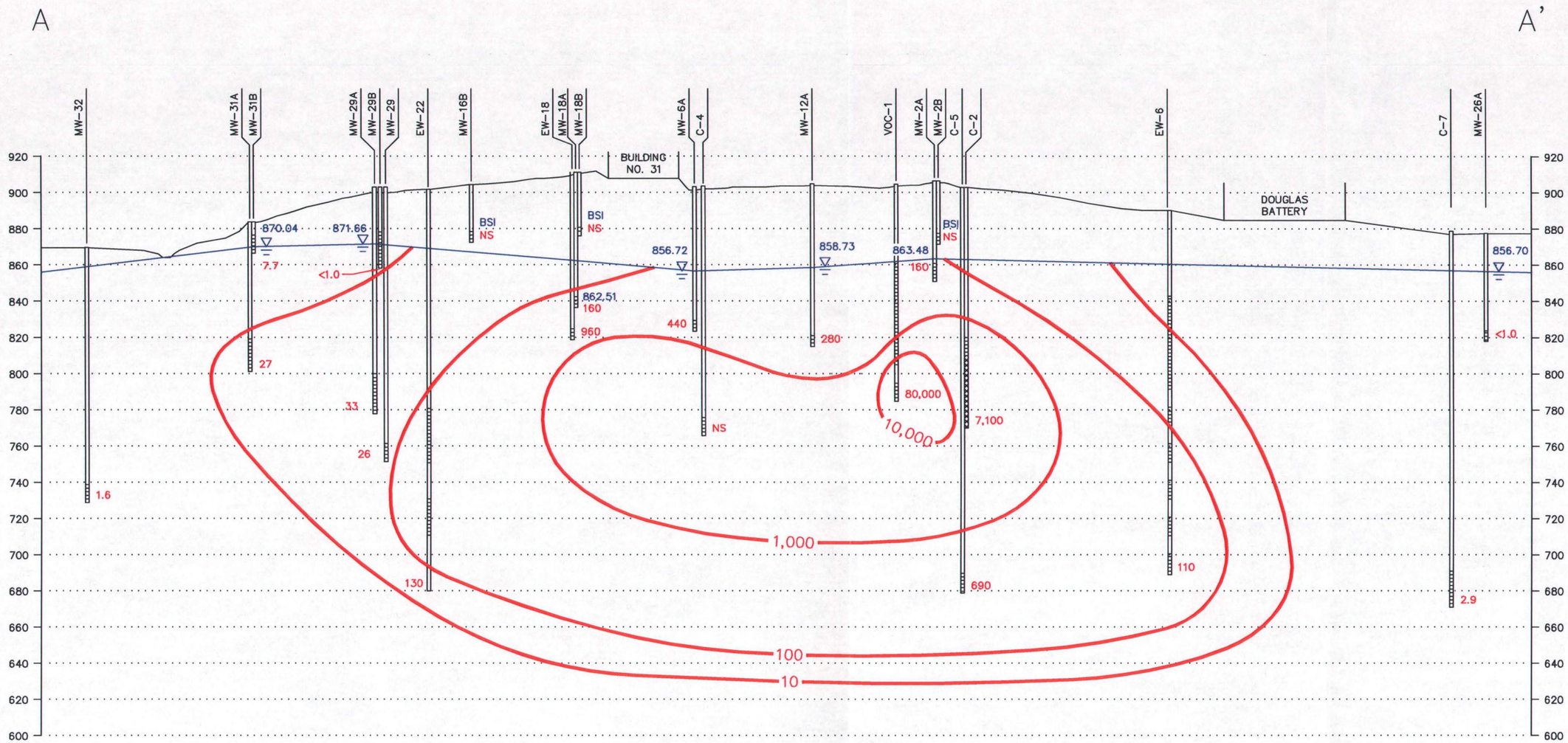
PCE CONCENTRATION PLAN VIEW MARCH 2011

Alcatel-Lucent USA Inc.
Winston-Salem, North Carolina

SCALE:	DATE:	PROJECT NUMBER:
1"=250'	05/19/11	60194417.3000

FIGURE NUMBER: 3-5

SHEET NUMBER: C110321B



LEGEND

- SHALLOW SAPROLITE GROUNDWATER OR SURFACE WATER LEVEL (ft, msl) (DASHED WHERE INFERRED)
- WELL SCREEN INTERVAL
- 790 — PCE CONCENTRATION IN MICROGRAMS PER LITER (ug/L)
- NS — NOT SAMPLED
- BSI — LESS THAN BASE OF SCREENED (OPENED) INTERVAL

HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 60'
VERTICAL EXAGGERATION: 1 : 5

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: KLR
CHECKED BY:
APPROVED BY:

AECOM

AECOM North Carolina, Inc.
RALEIGH, NORTH CAROLINA 27615
PHONE: (919) 872-6800
FAX: (919) 872-7996
WEB: HTTP://WWW.AECOM.COM

PCE CONCENTRATIONS CROSS SECTION VIEW FROM A-A' MARCH 2011

Alcatel-Lucent USA Inc.
Winston-Salem, North Carolina

SCALE: AS SHOWN
DATE: 05/19/11
PROJECT NUMBER: 60194417.3000

FIGURE NUMBER: 3-6

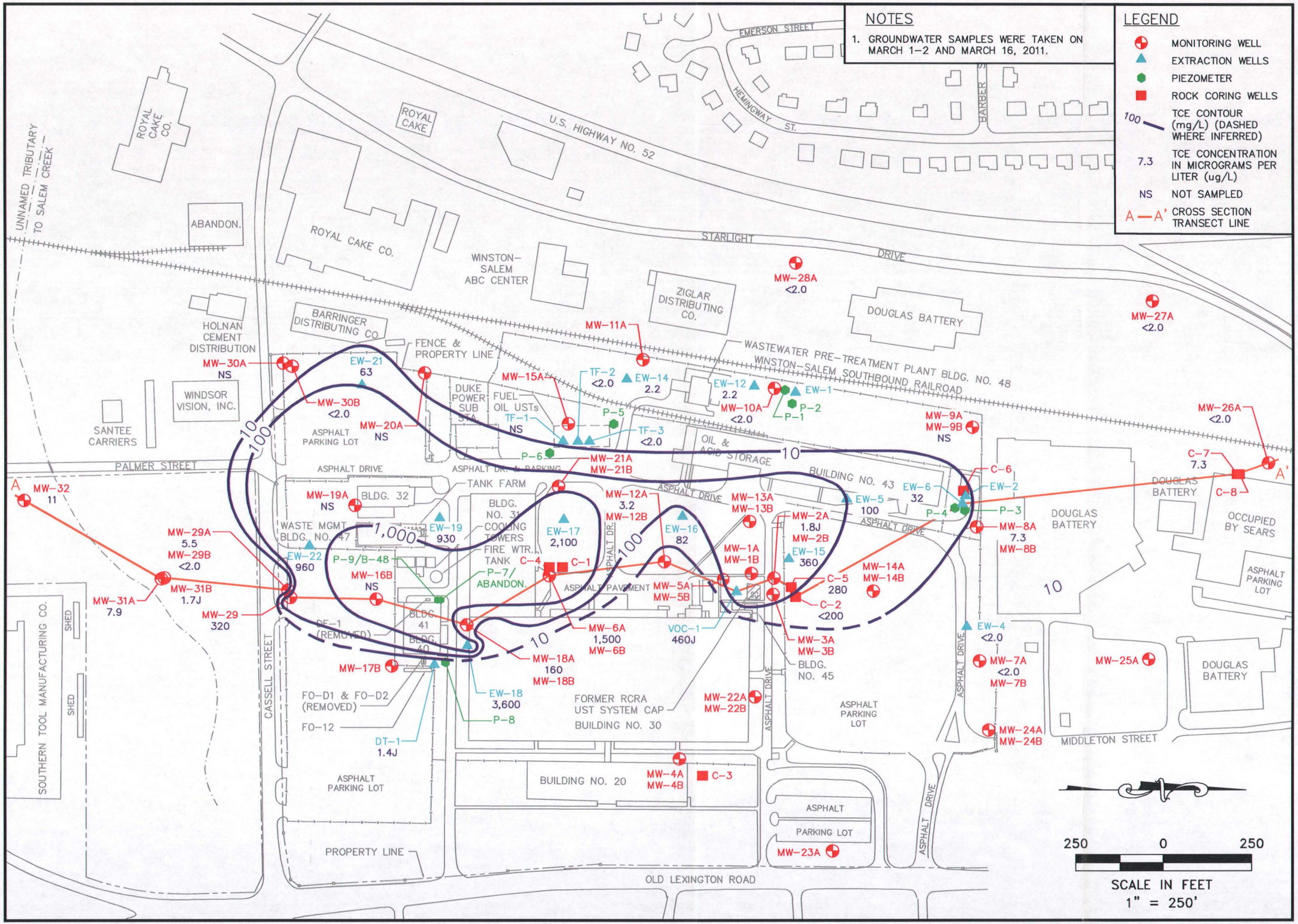
SHEET NUMBER: D110323B

NOTES

1. GROUNDWATER SAMPLES WERE TAKEN ON MARCH 1–2 AND MARCH 16, 2011.

LEGEND

- MONITORING WELL
- EXTRACTION WELLS
- PIEZOMETER
- ROCK CORING WELLS
- 100 — TCE CONTOUR (mg/L) (DASHED WHERE INFERRED)
- 7.3 — TCE CONCENTRATION IN MICROGRAMS PER LITER (ug/L)
- NS — NOT SAMPLED
- A — A' — CROSS SECTION TRANSECT LINE



250 0 250

SCALE IN FEET
1" = 250'

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: KLR
CHECKED BY:
APPROVED BY:

AECOM

AECOM North Carolina, Inc.
RALEIGH, NORTH CAROLINA 27615
PHONE: (919) 872-6800
FAX: (919) 872-7996
WEB: HTTP://WWW.AECOM.COM

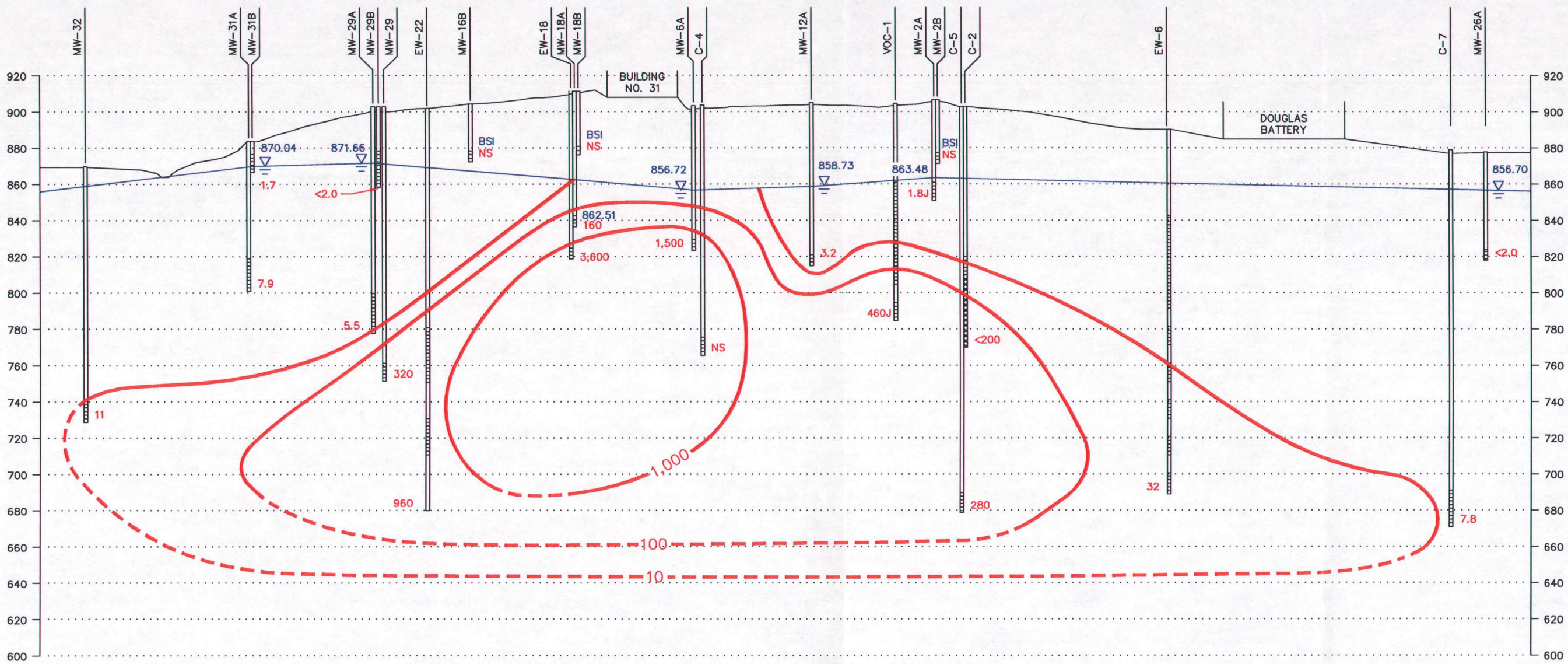
TCE CONCENTRATION PLAN VIEW MARCH 2011

Alcatel-Lucent USA Inc.
Winston-Salem, North Carolina

SCALE:	DATE:	PROJECT NUMBER:
1"=250'	05/19/11	60194417.3000

FIGURE NUMBER: 3-7

SHEET NUMBER: C110322B



LEGEND

- SHALLOW SAPROLITE GROUNDWATER OR SURFACE WATER LEVEL (ft, msl) (DASHED WHERE INFERRED)
- WELL SCREEN INTERVAL
- 180 — TCE CONCENTRATION IN MICROGRAMS PER LITER (ug/L)
- NS — NOT SAMPLED
- BSI — LESS THAN BASE OF SCREENED (OPENED) INTERVAL

HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 60'
VERTICAL EXAGGERATION: 1 : 5

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: KLR
CHECKED BY:
APPROVED BY:

AECOM

AECOM North Carolina, Inc.
RALEIGH, NORTH CAROLINA 27615
PHONE: (919) 872-6600
FAX: (919) 872-7996
WEB: HTTP://WWW.AECOM.COM

TCE CONCENTRATIONS
CROSS SECTION VIEW FROM A-A'
MARCH 2011

Alcatel-Lucent USA Inc.
Winston-Salem, North Carolina

SCALE: AS SHOWN
DATE: 05/20/11
PROJECT NUMBER: 60194417.3000

FIGURE NUMBER: 3-8

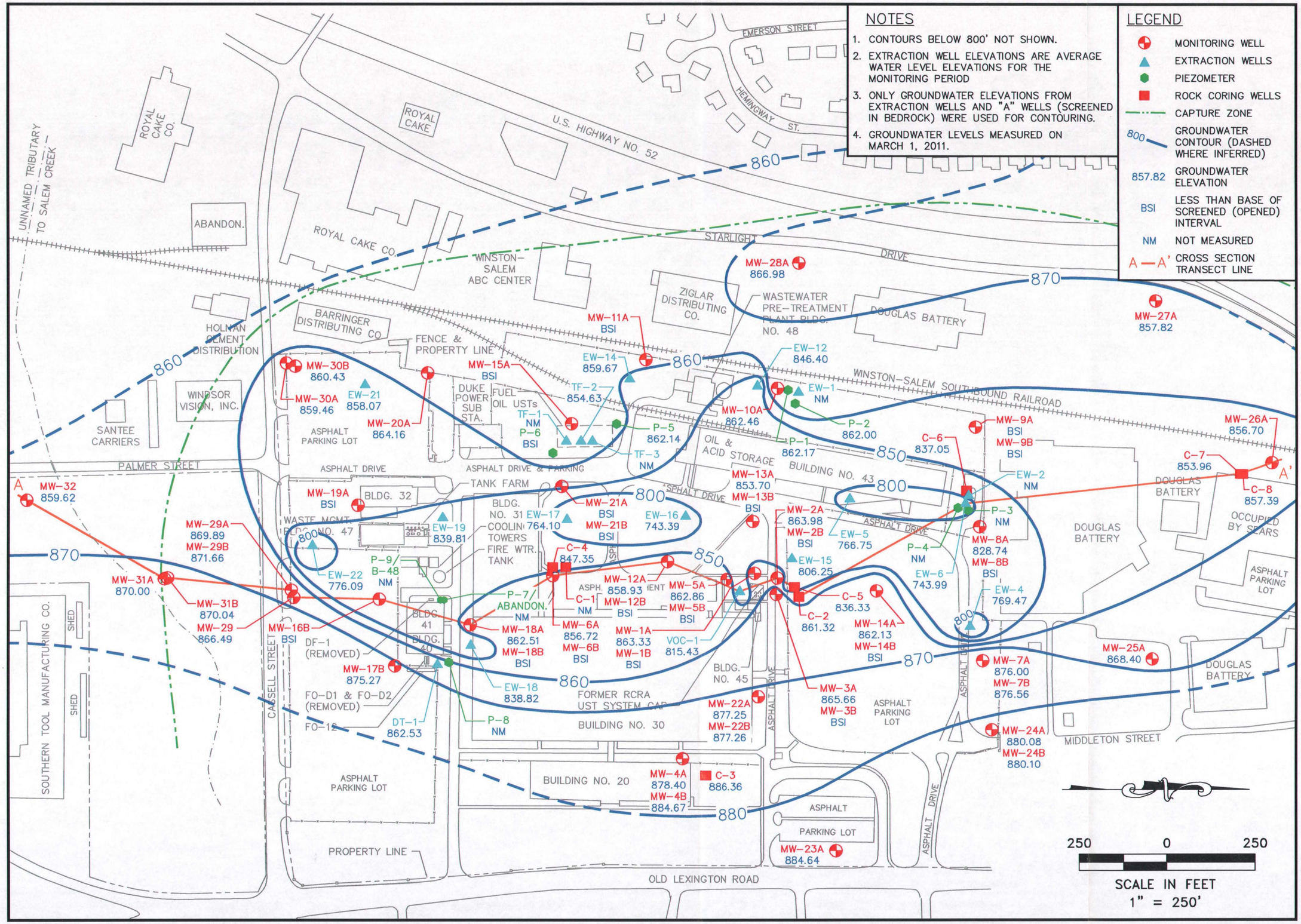
SHEET NUMBER: D110324B

NOTES

1. CONTOURS BELOW 800' NOT SHOWN.
2. EXTRACTION WELL ELEVATIONS ARE AVERAGE WATER LEVEL ELEVATIONS FOR THE MONITORING PERIOD
3. ONLY GROUNDWATER ELEVATIONS FROM EXTRACTION WELLS AND "A" WELLS (SCREENED IN BEDROCK) WERE USED FOR CONTOURING.
4. GROUNDWATER LEVELS MEASURED ON MARCH 1, 2011.

LEGEND

- MONITORING WELL
- EXTRACTION WELLS
- PIEZOMETER
- ROCK CORING WELLS
- CAPTURE ZONE
- 800 — GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- 857.82 — GROUNDWATER ELEVATION
- BSI — LESS THAN BASE OF SCREENED (OPENED) INTERVAL
- NM — NOT MEASURED
- A — A' — CROSS SECTION TRANSECT LINE



REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: KLR
CHECKED BY:
APPROVED BY:

AECOM

AECOM North Carolina, Inc.
RALEIGH, NORTH CAROLINA 27615
PHONE: (919) 872-6600
FAX: (919) 872-7996
WEB: HTTP://WWW.AECOM.COM

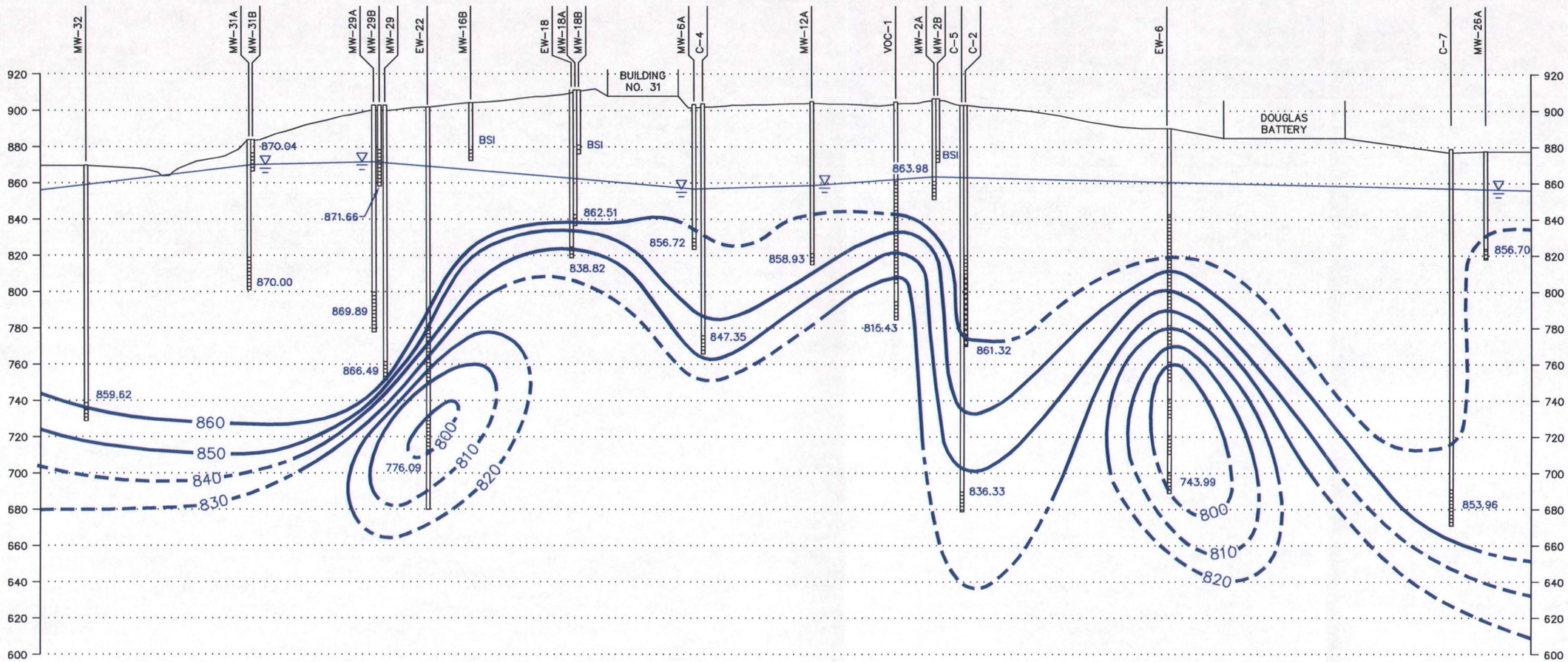
GROUNDWATER POTENTIOMETRIC SURFACE MAP - PLAN VIEW MARCH 2011

Alcatel-Lucent USA Inc.
Winston-Salem, North Carolina

SCALE: 1"=250'
DATE: 05/20/11
PROJECT NUMBER: 60194417.3000

FIGURE NUMBER: 3-9

SHEET NUMBER: B110320B



LEGEND

- SHALLOW SAPROLITE GROUNDWATER OR SURFACE WATER LEVEL (ft, msl) (DASHED WHERE INFERRED)
- WELL SCREEN INTERVAL
- —800— CONTOUR LINE (DASHED WHERE INFERRED)
- NM NOT MEASURED
- BSI LESS THAN BASE OF SCREENED (OPENED) INTERVAL

NOTE:

1. GROUNDWATER LEVELS MEASURED ON MARCH 1, 2011.

HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 60'
VERTICAL EXAGGERATION: 1 : 5

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:
DRAWN BY: KLR
CHECKED BY:
APPROVED BY:

AECOM

AECOM North Carolina, Inc.
RALEIGH, NORTH CAROLINA 27615
PHONE: (919) 872-6600
FAX: (919) 872-7996
WEB: HTTP://WWW.AECOM.COM

POTENTIOMETRIC SURFACE MAP
CROSS SECTION VIEW FROM A-A'
MARCH 2011

Alcatel-Lucent USA Inc.
Winston-Salem, North Carolina

SCALE: AS SHOWN
DATE: 05/20/11
PROJECT NUMBER: 60194417.3000

FIGURE NUMBER: 3-10

SHEET NUMBER: D110325B

FIGURE 4-1
Comparison of Gallons Pumped / Total Mass Removed / Estimated Removal Rate
March 2011
Alcatel-Lucent USA, Inc.
Winston-Salem, North Carolina

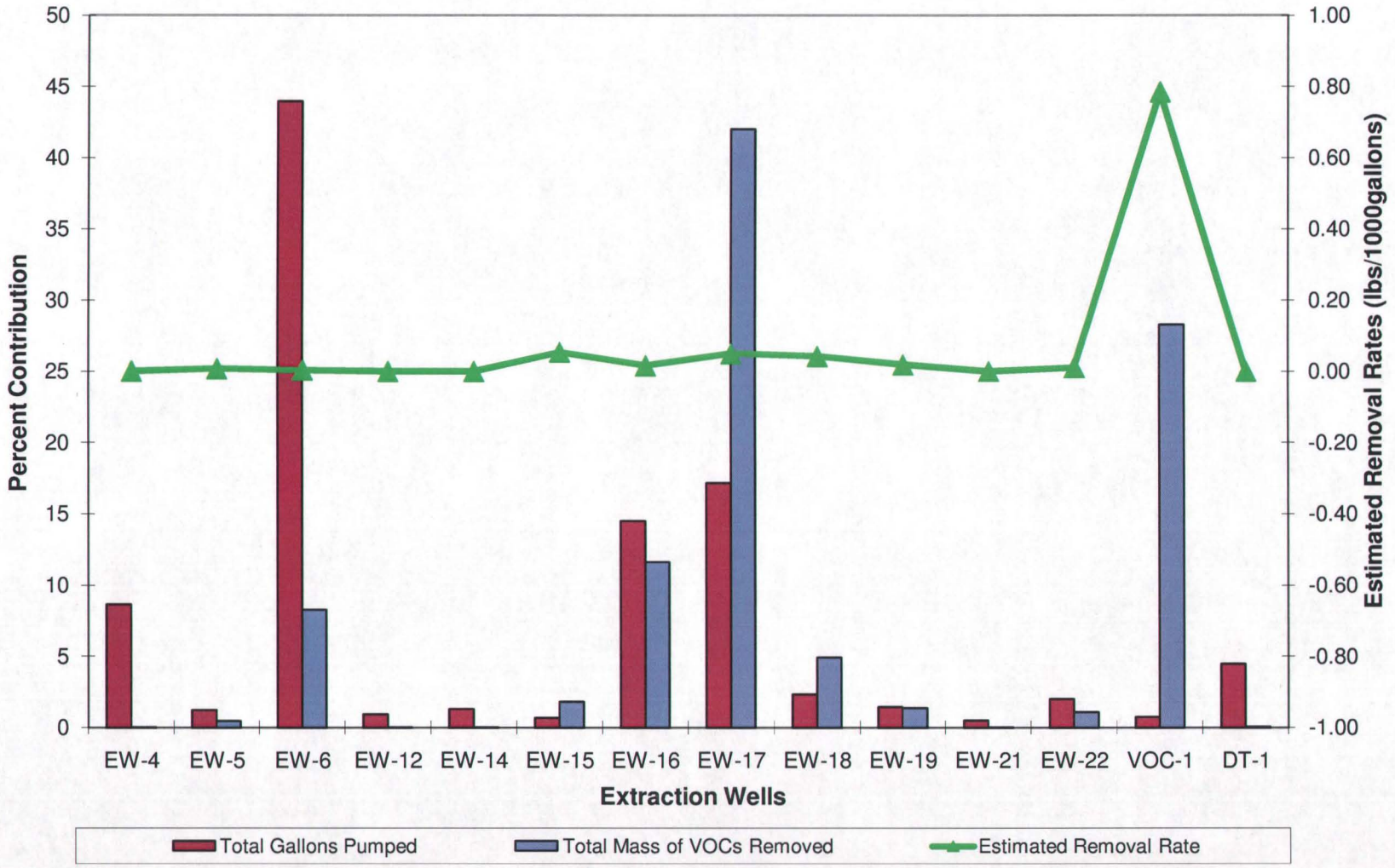
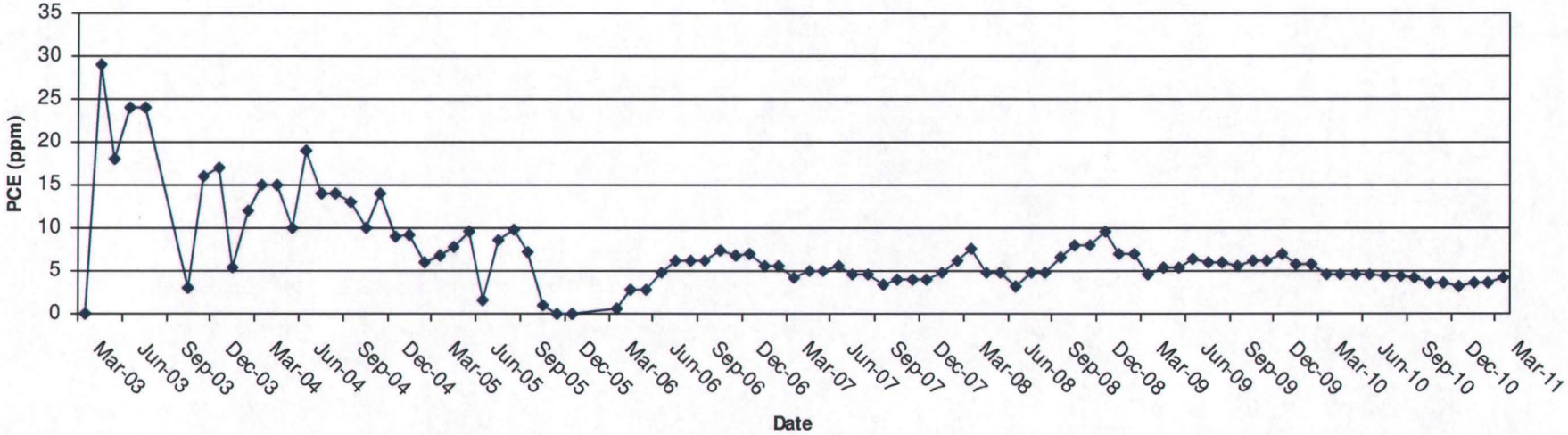


FIGURE 4-2
Oil House SVE System - Exhaust Analytical Data
Alcatel-Lucent USA, Inc.
March 2011
Winston-Salem, NC



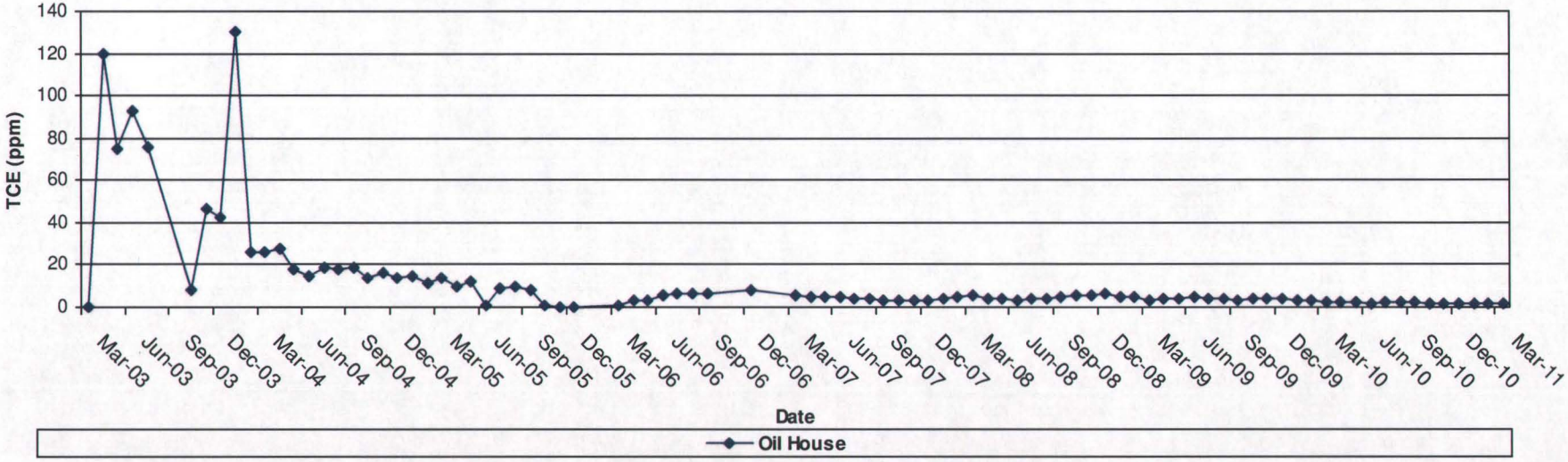
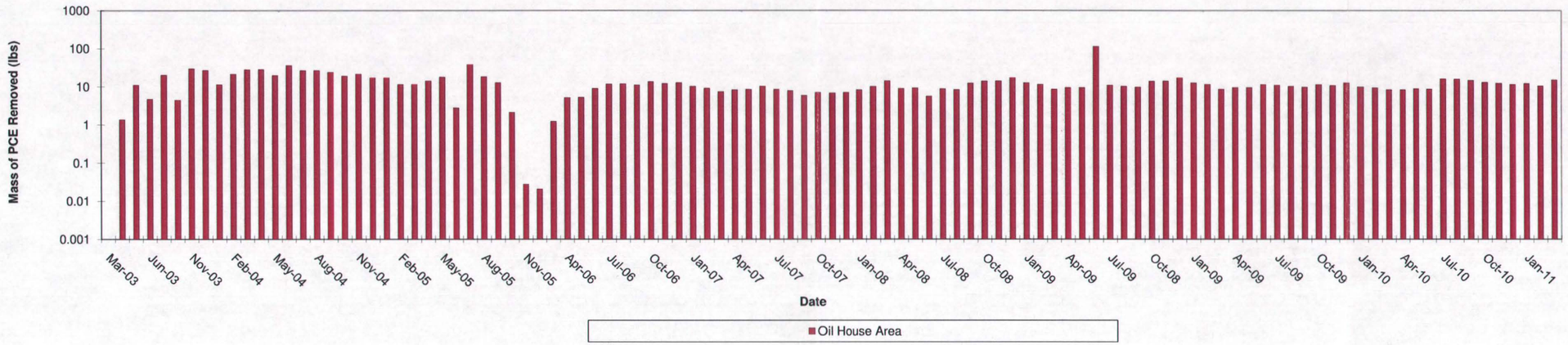
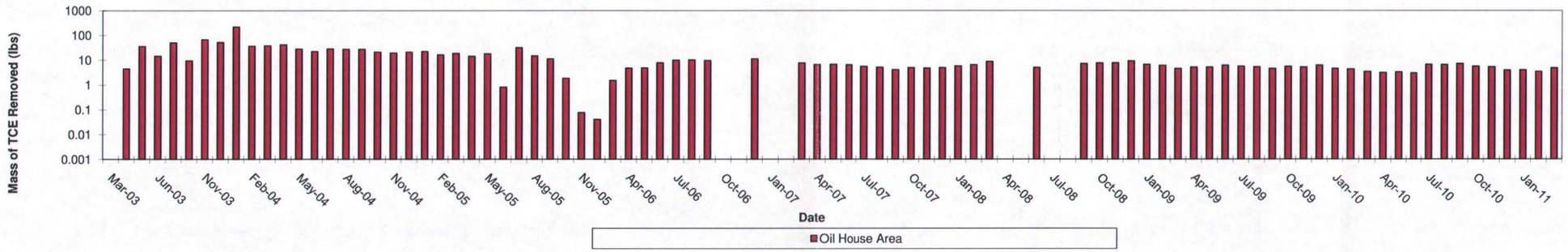


Figure 4-3
Oil House SVE System - Estimated Monthly Mass Removal
Alcatel-Lucent USA, Inc.
Winston-Salem, NC





Appendix A

Groundwater Sampling Records

ENSR | AECOM

Well/Piezo ID: C-2

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 65°
Collector(s): JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/2/11
Time: Start 1514 am/pm
Finish 1556 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 94.15
b. Water Table Depth 41.55
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 52.60 (a-b)
f. Calculated Well Volume (see back) 8.6

WELL PURGING DATA

a. Purge Method _____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 25.7
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1517	INITIAL	18.80	8.31	185	38.7		TAN	STRONG	
1523	9.0	19.09	7.33	187	22.4		clear	↓	
1528	18.0	19.23	7.09	187	18.0		↓		
1535	24.0	19.24	7.07	187	16.1				
1540	27.0	19.24	7.07	188	16.7				

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
C-2	VOA	3	HCL	8260	1545

Comments

Signature Jeff Leaver, Aaron Hill

Date 3/2/11

ENSR | AECOM

Well/Piezo ID: C-5

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 60°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/2/11
Time: Start 1412 am/pm
Finish 1510 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 224.00
b. Water Table Depth 66.50
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 157.50 (a-b)
f. Calculated Well Volume (see back) 25.7

WELL PURGING DATA

a. Purge Method _____ HAND BAIL, (GRUNDFOS PUMP,) EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 77.0
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1416	INITIAL	19.44	8.40	175	4.6		CLEAR	STRONG	
1427	26.0	19.05	9.09	173	3.0		↓	↓	
1438	50.0	19.17	9.13	179	2.7		↓	↓	
1450	65.0	19.17	9.12	181	2.3		↓	↓	
1500	80.0	19.18	9.12	183	1.8		↓	↓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
C-5	VOA	3	HCL	8260	1504

Comments

Signature Jeff Leaver, Aaron Hill

Date 3/2/11

ENSR | AECOM

Well/Piezo ID: C-7

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: CLEAR 48°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/1/11
Time: Start 1840 am/pm
Finish 1910 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☑ Piezometer ☐

a. Total Well Length 206.00
b. Water Table Depth 24.98
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 181.02 (a-b)
f. Calculated Well Volume (see back) 29.5

WELL PURGING DATA

a. Purge Method HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 88.5
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1842	INITIAL	17.15	9.58	225	1.9		CLEAR	NO	
1847	2.0	17.31	9.39	224	3.7		CLEAR	NO	
1850	3.0	17.33	9.27	224	4.1		↓	↓	
1854	4.0	17.30	9.22	222	4.6		↓	↓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☑
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
C-7	VOA	3	HCL	8260	1900

Comments OBSTRUCTION @ 31', PURGE WELL UNTIL WE HIT OBSTRUCTION THEN TAKE SAMPLE

Signature Jeff Leaver

Date 3/1/11

ENSR | AECOM

Well/Piezo ID: EW-4

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 49°
Collector(s): JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/1/11
Time: Start 1320 am/pm
Finish 1235 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1324	INITIAL	17.51	7.70	179	6.1		CLEAR	NO	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-4	VOA	3	HCL	8260	1330

Comments

Signature Jeff Leaver, Aaron Hill Date 3/1/11

ENSR | AECOM

Well/Piezo ID: EW-5

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 53°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/ / /11
Time: Start 1533 am/pm
Finish 1544 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length ___ c. Casing Material ___ e. Length of Water Column ___ (a-b)

b. Water Table Depth ___ d. Casing Diameter ___ f. Calculated Well Volume (see back) ___

WELL PURGING DATA

a. Purge Method ___ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ___ Page # ___

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1537	INITIAL	16.24	6.71	108	8.1		CLEAR	NO	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-5	VOA	3	HCL	8260	1540

Comments

Signature [signature] Date 3/ / /11

ENSR | AECOM

Well/Piezo ID: EW-6

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 52°
Collector(s) JEFF LEAVER, AARON HILL BROOKS CHARLES

Date: 3/1/11
Time: Start 1504 am/pm
Finish 1514 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1507	INITIAL	13.02	6.58	259	17.2		CLEAR	SLIGHT	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-6	VOA	3	HCL	8260	1510

Comments TOOK DUP-01

Signature Jeff Leaver, Aaron Hill Date 3/1/11

ENSR | AECOM

Well/Piezo ID: EW-12

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 50°
Collector(s): JEFF LEAVER, AARON HILL BROOKS CHARLES

Date: 3/1/11
Time: Start 1342 am/pm
Finish 1355 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☐ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1346	INITIAL	16.45	7.11	162	8.7		CLEAR	NO	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-12	VOA	3	HCL	8260	1350

Comments

Signature Jeff Leaver, Aaron Hill Date 3/1/11

ENSR | AECOM

Well/Piezo ID: EW-14

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 51°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/ 1 /11
Time: Start 1400 am/pm
Finish 1414 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☐ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1404	INITIAL	17.03	6.81	135	5.0		CLEAR	NO	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-14	VOA	3	HCL	8260	1410

Comments

Signature Jeff Leaver, Aaron Hill Date 3/ 1 /11

ENSR | AECOM

Well/Piezo ID: EW-15

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 55°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/1/11
Time: Start 1652 am/pm
Finish 1704 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length ___ c. Casing Material ___ e. Length of Water Column ___ (a-b)

b. Water Table Depth ___ d. Casing Diameter ___ f. Calculated Well Volume (see back) ___

WELL PURGING DATA

a. Purge Method ___ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ___ Page # ___

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1656	INITIAL	18.15	6.80	186	7.1		CLEAR	YES	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-15	VOA	3	HCL	8260	1700

Comments

Signature Jeff Leaver, Aaron Hill Date 3/1/11

ENSR | AECOM

Well/Piezo ID: EW-16

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 53°
Collector(s): JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/1/11
Time: Start 1600 am/pm
Finish 1610 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found In Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1604	INITIAL	17.61	6.88	136	4.0		CLEAR	SLIGHT	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-16	VOA	3	HCL	8260	1608

Comments TOOK DUP-02

Signature Jeff Leaver, Aaron Hill Date 3/1/11

ENSR | AECOM

Well/Piezo ID: EW-17

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 54°
Collector(s) JEFF LEAVER, AARON HILL BROOKS CHARLES

Date: 3/ / /11
Time: Start 1640 am/pm
Finish 1650 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1644	INITIAL	17.15	6.83	169	5.5		CLEAR	SLIGHT	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-17	VOA	3	HCL	8260	1648

Comments

Signature Jeff Leaver, Aaron Hill Date 3/ / /11

ENSR | AECOM

Well/Piezo ID: EW-18

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 54°
Collector(s) JEFF LEAVER, AARON HILL BROOKS CHARLES

Date: 3/ 1 /11
Time: Start 1625 am/pm
Finish 1636 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☒ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1628	INITIAL	20.35	6.53	165	2.8		CLEAR	SLIGHT	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-18	VOA	3	HCL	8260	1630

Comments TOOK DUP-03

Signature Jeff Leaver, Aaron Hill Date 3/ 1 /11

ENSR | AECOM

Well/Piezo ID: EW-19

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 54°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/ / /11
Time: Start 1613 am/pm
Finish 1622 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☒ Piezometer ☐

a. Total Well Length ___ c. Casing Material ___ e. Length of Water Column ___ (a-b)

b. Water Table Depth ___ d. Casing Diameter ___ f. Calculated Well Volume (see back) ___

WELL PURGING DATA

a. Purge Method ___ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ___ Page # ___

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1617	INITIAL	16.77	7.00	69	2.5		CLEAR	NO	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-19	VOA	3	HCL	8260	1620

Comments

Signature Jeff Leaver, Aaron Hill Date 3/ / /11

ENSR | AECOM

Well/Piezo ID: EW-21

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 53°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/1/11
Time: Start 1518 am/pm
Finish 1530 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☒ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1521	INITIAL	17.50	6.35	95	19.4		clear	none	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-21	VOA	3	HCL	8260	1526

Comments

Signature Jeff Leaver, Aaron Hill Date 3/1/11

ENSR | AECOM

Well/Piezo ID: EW-22

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 53°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/ 1 /11
Time: Start 1547 am/pm
Finish 1557 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☒ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1550	INITIAL	18.11	6.71	184	37.2		CLEAR	SLIGHT	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
EW-22	VOA	3	HCL	8260	1554

Comments

Signature Jeff Leaver, Aaron Hill Date 3/ 1 /11

ENSR | AECOM

Well/Piezo ID: COMP-SYS A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 52°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/1/11
Time: Start 1735 am/pm
Finish 1750 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☐ Piezometer ☐

a. Total Well Length ___ c. Casing Material ___ e. Length of Water Column ___ (a-b)

b. Water Table Depth ___ d. Casing Diameter ___ f. Calculated Well Volume (see back) ___

WELL PURGING DATA

a. Purge Method ~~HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL~~ N/A

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ___ Page # ___

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1738	INITIAL	17.12	6.83	315	11.7		CLEAR	YES	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☑
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☐	☐	☑

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
COMP SYS A	VOA	3	HCL	8260	1744
↓	LITER AMBER	2	HCL	O&G	↓
↓	LITER CLEAR	2	NONE	DRO	↓

Comments

Signature Jeff Leaver, Aaron Hill Date 3/1/11

ENSR | AECOM

Well/Piezo ID: COMP. SYS. B

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 50°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/1/11
Time: Start 1752 am/pm
Finish 1805 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☐ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ ~~HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL~~ N/A

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1756	INITIAL	17.19	6.92	165	14.0		CLEAR	YES	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☒
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☐	☐	☒

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
COMP. SYS. B	VOA	3	HCL	8260	1800

Comments TOOK DUP-05

Signature Jeff Leaver, Aaron Hill Date 3/1/11

ENSR | AECOM

Well/Piezo ID: COMP. SYS. TPH

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 50°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/1/11
Time: Start 1810 am/pm
Finish 1824 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☐ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ ~~HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL~~ N/A

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1816	INITIAL	18.34	6.19	146	17.7		CLEAR	YES	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☑
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☐	☐	☑

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
COMP. SYS. TPH	VOA	3	HCL	8260	1820
↓	LITER AMBER	2	HCL	O&G	↓
↓	LITER CLEAR	2	NONE	DRO	↓

Comments

Signature Jeff Leaver, Aaron Hill Date 3/1/11

ENSR | AECOM

Well/Piezo ID: DT-1

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 52°
Collector(s): JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/1/11
Time: Start 1442 am/pm
Finish 1500 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length ____ c. Casing Material ____ e. Length of Water Column ____ (a-b)

b. Water Table Depth ____ d. Casing Diameter ____ f. Calculated Well Volume (see back) ____

WELL PURGING DATA

a. Purge Method ____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ____ Page # ____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1445	INITIAL	21.37	6.06	121	3.6		CLEAR	NO	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
DT-1	VOA	3	HCL	8260	1450
↓	LITER AMBER	2	HCL	8260	↓
↓	LITER CLEAR	2	NONE	ORO	↓

Comments

Signature Jeff Leaver, Aaron Hill Date 3/1/11

ENSR | AECOM

Well/Piezo ID: MW-2A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 46°
Collector(s): JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/ / /11
Time: Start 1220 am/pm
Finish 1310 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 55.70
b. Water Table Depth 42.60
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 13.10 (a-b)
f. Calculated Well Volume (see back) 2.1

WELL PURGING DATA

a. Purge Method HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 6.4
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1226	INITIAL	18.77	9.26	210	11.7		CLEAR	NO	
1233	2.0	17.56	8.66	198	87.9		TAN	NO	
1238	4.0	17.67	8.31	202	122.0		↓	↓	
1245	6.0	17.70	8.26	207	141.4		↓	↓	
1248	6.5	17.74	8.22	207	144.7		↓	↓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-2A	VOA	3	HCL	8260	1250

Comments

Signature Jeff Leaver

Date 3/ / /11

ENSR | AECOM

Well/Piezo ID: MW-6A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 60°
Collector(s): JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/2/11
Time: Start 1326 am/pm
Finish 1400 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length 78.30
b. Water Table Depth 45.61
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 32.69 (a-b)
f. Calculated Well Volume (see back) 5.33

WELL PURGING DATA

a. Purge Method HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 16.0
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1330	INITIAL	18.26	7.40	146	3.3		CLEAR	SLIGHT	
1336	5.0	18.37	6.67	143	4.7		↓	↓	
1344	10.0	18.32	6.50	146	22.2		↓	↓	
1350	15.0	18.33	6.47	147	28.5		↓	↓	
1354	17.0	18.35	6.46	147	41.0		LT. TAN	SLIGHT	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-6A	VOA	3	HCL	8260	1357

Comments

Signature Jeff Leaver Date 3/2/11

ENSR | AECOM

Well/Piezo ID: MW-7A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 34°
Collector(s): JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/2/11
Time: Start 0740 am/pm
Finish 0830 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 94.80
b. Water Table Depth 15.85
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 78.95 (a-b)
f. Calculated Well Volume (see back) 12.9

WELL PURGING DATA

a. Purge Method _____ HAND BAIL, (GRUNDFOS PUMP) EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 38.6
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
0744	INITIAL	15.53	8.11	110	34.2		CLOUDY	NO	
0751	13	16.98	6.84	105	41.9		↓	↓	
0757	25	17.00	6.08	103	40.1		↓	↓	
0805	37	16.98	6.03	103	41.4		↓	↓	
0812	44	16.97	6.01	104	42.8		↓	↓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-7A	VOA	3	HCL	8260	0820

Comments

Signature Jeff Leave, Aaron Hill

Date 3/2/11

ENSR | AECOM

Well/Piezo ID: MW-8A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: 360 Sun Collector(s) JEFF LEAVER, AARON HILL BROOKS CHARLES

Date: 3/2/11
Time: Start 0730 am/pm
Finish 0810 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☒ Piezometer ☐

a. Total Well Length 70.00 c. Casing Material SS e. Length of Water Column 9.84 (a-b)

b. Water Table Depth 60.16 d. Casing Diameter 2 f. Calculated Well Volume (see back) 1.6

WELL PURGING DATA

a. Purge Method HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 4.8
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
0732	INITIAL	16.3	6.28	39.4	61		Clear	NO	
0735	1.6	17.0	6.20	35.6	1000+		Brown		
0742	3.2	17.2	6.19	33.1	1000+				
0749	4.8	17.4	6.19	33.1	1000+				

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-8A	VOA	3	HCL	8260	0758

Comments

Signature

Date 3/2/11

ENSR | AECOM

Well/Piezo ID: MW-10A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: 58° Sun
Collector(s) JEFF LEAVER, AARON HILL (BROOKS CHARLES)

Date: 3/ 1 /11
Time: Start 1515 am/pm
Finish 1535 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 26.60
b. Water Table Depth 20.75
c. Casing Material SS
d. Casing Diameter 2
e. Length of Water Column 5.85 (a-b)
f. Calculated Well Volume (see back) 0.95

WELL PURGING DATA

a. Purge Method HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 2.85
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1518	INITIAL	15.5	6.20	192.0	1000+		BROWN	NONE	
1520	1.0	15.4	6.18	190.5	↓		↓	↓	
1522	2.0	15.4	6.14	185.6	↓		↓	↓	
1524	3.0	15.3	6.16	173.9	↓		↓	↓	
					↓		↓	↓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-10A	VOA	3	HCL	8260	1530
↓					↓

Comments

Signature [signature]

Date 3/ 1 /11

ENSR | AECOM

Well/Piezo ID: MW-12A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: 40° Sun Collector(s) JEFF LEAVER, AARON HILL BROOKS CHARLES

Date: 3/2/11
Time: Start 0825 am/pm
Finish 0940 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☐ Piezometer ☐

a. Total Well Length 90.50 c. Casing Material SS e. Length of Water Column 40.38 (a-b)

b. Water Table Depth 50.12 d. Casing Diameter 2 f. Calculated Well Volume (see back) 6.6

WELL PURGING DATA

a. Purge Method HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 19.7
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
0830	INITIAL	15.7	6.30	146.0	503		Yellow	NO	
0845	6.6	17.7	6.39	145.3	293		Brown	↓	
0859	13.2	17.0	6.38	142.4	271		TAN	↓	
0920	20.0	16.8	6.33	142.4	179		↓	↓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-12A	VOA	3	HCL	8260	0930
↓					↓

Comments

Signature [signature] Date 3/2/11

ENSR | AECOM

Well/Piezo ID: MW-18A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 47°
Collector(s) JEFF LEAVER, AARON HILL (BROOKS CHARLES)

Date: 3/2/11
Time: Start 0950 am/pm
Finish 1040 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length 78.90 c. Casing Material SS e. Length of Water Column 30.15 (a-b)

b. Water Table Depth 48.75 d. Casing Diameter 2" f. Calculated Well Volume (see back) 4.9

WELL PURGING DATA

a. Purge Method HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 14.8
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
0954	INITIAL	21.11	8.90	119	2.6		CLEAR	SLIGHT	
1010	5.0	20.50	8.09	125	2.2		↓	↓	
1016	10.0	20.43	7.94	134	1.4				
1028	15.0	20.40	7.90	136	1.7		↓	↓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-18A	VOA	3	HCL	8260	1033

Comments

Signature [signature] Date 3/2/11

ENSR | AECOM

Well/Piezo ID: MW-20A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: CLEAR 50°
Collector(s): JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/ 1 /11
Time: Start 1830 am/pm
Finish 1938 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 40.80
b. Water Table Depth 40.35
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 0.45 (a-b)
f. Calculated Well Volume (see back) 0.07

WELL PURGING DATA

a. Purge Method HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 0.21
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1835	INITIAL / DRY								

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☒
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☐	☐	☒

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
	VOA	3	HCL	8260	
		NO SAMPLE			

Comments WENT WENT DRY WITH NO RECHARGE

Signature Jeff Leaver

Date 3/ 1 /11

ENSR | AECOM

Well/Piezo ID: MW-26A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: CLEAR 50°
Collector(s) JEFF LEAVER, (AARON HILL), BROOKS CHARLES

Date: 3/ / /11
Time: Start 1820 am/pm
Finish 1845 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☑ Piezometer ☐

a. Total Well Length 59.15
b. Water Table Depth 21.05
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 38.10 (a-b)
f. Calculated Well Volume (see back) 6.2

WELL PURGING DATA

a. Purge Method (HAND BAIL), GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 18.6
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1822	INITIAL	16.90	7.79	167	4.1		CLEAR	SLIGHT	
1826	2.0	17.48	9.99	256	44.3		TAN	YES	
1830	4.0	17.47	10.73	302	50.7		↓	↓	
1834	5.0	17.	10.07	199	141.9				
1838	6.0	17.	10.01	207	166.0		↓	↓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☑
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-26A	VOA	3	HCL	8260	1840

Comments OBSTRUCTION @ 25', PURGE WELL UNTIL WE HIT OBSTRUCTION, THEN TAKE SAMPLE (DIESEL FUEL ODOR)

Signature [illegible] Date 3/ / /11

ENSR | AECOM

Well/Piezo ID: MW-27A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: 58° Sunny
Collector(s) JEFF LEAVER, AARON HILL (BROOKS CHARLES)

Date: 3/ 1 /11
Time: Start 1415 am/pm
Finish 1450 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 46.20
b. Water Table Depth 40.04
c. Casing Material SS
d. Casing Diameter 2
e. Length of Water Column 6.16 (a-b)
f. Calculated Well Volume (see back) 1.0

WELL PURGING DATA

a. Purge Method _____ (HAND BAIL), GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 3.0
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1420	INITIAL	16.9	5.29	19.69	1000+		ORANGE	NO	
1426	1.0	16.9	6.32	183.2	1000+		ORANGE/BROWN		
1435	2.0	16.8	6.41	179.3	1000+				
1442	3.0	16.7	6.20	202.6	1000+				

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-27A	VOA	3	HCL	8260	1445

Comments

Signature [signature] Date 3/ 1 /11

ENSR | AECOM

Well/Piezo ID: MW-28A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: 580 Sun
Collector(s) JEFF LEAVER, AARON HILL BROOKS CHARLES

Date: 3/ 1 /11
Time: Start 1330 am/pm
Finish 1408 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☒ Piezometer ☐

a. Total Well Length 42.60 c. Casing Material SS e. Length of Water Column 4.6 (a-b)

b. Water Table Depth 38.00 d. Casing Diameter 2 f. Calculated Well Volume (see back) 0.74

WELL PURGING DATA

a. Purge Method _____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 2.0
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1332	INITIAL	19.2	6.97	220.2	32		Clear	NO	
1341	0.7	17.9	6.48	116.3	63				
1346	1.4	17.9	6.41	115.6	81				
1355	2.1	17.9	6.37	114.8	94				

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-28A	VOA	3	HCL	8260	1405

Comments

Signature [signature] Date 3/ 1 /11

ENSR | AECOM

Well/Piezo ID: MW-29

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 56°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/2/11
Time: Start 1300 am/pm
Finish 1410 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 150.00
b. Water Table Depth 34.62
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 115.38 (a-b)
f. Calculated Well Volume (see back) 18.8

WELL PURGING DATA

a. Purge Method _____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 56.4
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1303	INITIAL	19.07	9.77	278	8.6		CLEAR	SLIGHT	
1315	18.0	20.21	10.09	296	6.1		↓	↓	
1319	20.0 DRY	20.84	10.28	301	6.9		✓	✓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-29	VOA	3	HCL	8260	1400

Comments WELL WENT DRY @ 20 GALLONS, LET WELL RECHARGE THEN SAMPLE

Signature Jeff Leaver, Aaron Hill

Date 3/2/11

ENSR | AECOM

Well/Piezo ID: MW-29A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 56°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/2/11
Time: Start 1212 am/pm
Finish 1255 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 124.25
b. Water Table Depth 31.60
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 92.65 (a-b)
f. Calculated Well Volume (see back) 15.1

WELL PURGING DATA

a. Purge Method _____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 45.3
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1216	INITIAL	18.51	6.76	145	6.1		CLEAR	NO	
1224	15	19.02	6.11	139	4.0		↓	↓	
1232	30	19.07	6.00	137	2.9				
1239	40	19.11	5.97	137	3.4				
1245	48	19.13	5.96	136	3.0				

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-29A	VOA	3	HCL	8260	1250

Comments

Signature Jeff Leaver, Aaron Hill

Date 3/2/11

ENSR | AECOM

Well/Piezo ID: MW-29B

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: 58° Sunny
Collector(s) JEFF LEAVER, AARON HILL (BROOKS CHARLES)

Date: 3/ 1 /11
Time: Start 1550 am/pm
Finish 1630 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☐ Piezometer ☐

a. Total Well Length 40.00
b. Water Table Depth 29.36
c. Casing Material SS
d. Casing Diameter 2
e. Length of Water Column 10.64 (a-b)
f. Calculated Well Volume (see back) 1.7

WELL PURGING DATA

a. Purge Method (HAND BAIL) GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 5.1
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1555	INITIAL	16.9	6.65	36.1	250		TAN	NO	
1605	1.7	18.6	6.50	41.0	300		↓	↓	
1615	3.4	18.7	6.50	41.6	1000+				
1620	5.1	18.8	6.51	41.8	↓				
							↓	↓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-29B	VOA	3	HCL	8260	1623
↓					↓

Comments

Signature [signature] Date 3/ 1 /11

ENSR | AECOM

Well/Piezo ID: MW-30A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 34°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/2/11
Time: Start _____ am/pm
Finish _____ am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 92.00
b. Water Table Depth 46.00
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 46.00 (a-b)
f. Calculated Well Volume (see back) 7.5

WELL PURGING DATA

a. Purge Method _____ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 22.5
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
	INITIAL								

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☒
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☐	☐	☒

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
	VOA	3	HCL	8260	
		NO	SAMPLES		

Comments OBSTRUCTION & BAILER STUCK IN WELL & CAN'T BE PURGED OR SAMPLED

Signature Jeff Leaver, Aaron Hill

Date 3/2/11

ENSR | AECOM

Well/Piezo ID: MW-30R

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: 58° Sunny
Collector(s) JEFF LEAVER, AARON HILL (BROOKS CHARLES)

Date: 3/1/11
Time: Start 1645 am/pm
Finish 1730 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☐ Piezometer ☐

a. Total Well Length 60.00
b. Water Table Depth 45.32
c. Casing Material SS
d. Casing Diameter 2
e. Length of Water Column 14.68 (a-b)
f. Calculated Well Volume (see back) 2.40

WELL PURGING DATA

a. Purge Method _____ (HAND BAIL) GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 7.20
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1648	INITIAL	16.6	6.42	80.0	62		Clear	NO	
1650	2.4	16.5	6.40	81.7	199		Yellowish		
1705	4.8	16.7	6.41	82.9	201				
1718	7.2	16.8	6.38	83.0	208				

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-30R	VOA	3	HCL	8260	1725

Comments

Signature

Date 3/1/11

ENSR | AECOM

Well/Piezo ID: MW-31A

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 41°
Collector(s) JEFF LEAVER, AARON HILL BROOKS CHARLES

Date: 3/2/11
Time: Start 0950 am/pm
Finish 1030 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length 88.30 c. Casing Material SS e. Length of Water Column 74.56 (a-b)

b. Water Table Depth 13.74 d. Casing Diameter 2" f. Calculated Well Volume (see back) 12.2

WELL PURGING DATA

a. Purge Method HAND BAIL, ~~GRUNDFOS PUMP~~, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 36.5
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
0952	INITIAL	13.41	8.50	136	2.7		CLEAR	NO	
1000	12	14.81	5.95	132	3.9		↓	↓	
1008	24	14.71	5.89	130	6.9				
1015	30	14.68	5.86	130	11.2				
1022	37	14.67	5.84	129	11.7		↓	↓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-31A	VOA	3	HCL	8260	1026

Comments HAND BAILED SINCE FALLEN TREE ON ACCESS ROAD AND CAN'T GET EQUIPMENT THROUGH THE WOODS.

Signature Jeff Leaver, Aaron Hill Date 3/2/11

ENSR | AECOM

Well/Piezo ID: MW-31B

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 40°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/2/11
Time: Start 0955 am/pm
Finish 1020 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☒ Piezometer ☐

a. Total Well Length 21.44 c. Casing Material SS e. Length of Water Column 7.40 (a-b)

b. Water Table Depth 14.04 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.2

WELL PURGING DATA

a. Purge Method (HAND BAIL), GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 3.6
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
0956	INITIAL	13.51	7.24	62	11.7		CLEAR	NO	
1000	1.5	13.64	5.88	67	88.4		~~88.4~~	NO	
1006	2.5	13.72	5.74	71	110.2		~~HAZE~~		
1010	3.5	13.74	5.70	74	168.7		TAN		
1013	4.0	13.76	5.67	76	190.0		TAN		

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-31B	VOA	3	HCL	8260	1015

Comments

Signature Jeff Leaver, Aaron Hill Date 3/2/11

ENSR | AECOM

Well/Piezo ID: MW-32

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 37°
Collector(s): JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/2/11
Time: Start 0842 am/pm
Finish 0940 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 141.00
b. Water Table Depth 10.07
c. Casing Material SS
d. Casing Diameter 2"
e. Length of Water Column 130.93 (a-b)
f. Calculated Well Volume (see back) 21.34

WELL PURGING DATA

a. Purge Method _____ HAND BAIL, (GRUNDFOS PUMP,) EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 64.0
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
0850	INITIAL	15.33	7.86	187	19.4		CLEAR	NO	
0900	21	15.49	8.61	160	11.7		↓	↓	
0911	43	16.20	8.70	155	11.0				
0920	60	16.22	8.72	153	9.3				
0926	70	16.25	8.72	150	9.1		↓	↓	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-32	VOA	3	HCL	8260	0930

Comments: TOOK DUP-06

Signature: Jeff Leaver, Aaron Hill

Date: 3/2/11

ENSR | AECOM

Well/Piezo ID: TF-2

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 52°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/ / /11
Time: Start 1420 am/pm
Finish 1435 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length ___ c. Casing Material ___ e. Length of Water Column ___ (a-b)

b. Water Table Depth ___ d. Casing Diameter ___ f. Calculated Well Volume (see back) ___

WELL PURGING DATA

a. Purge Method ___ HAND BAIL, GRUNDFOS PUMP, EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ___ Page # ___

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1424	INITIAL	16.64	6.77	246	41.0		TAN	YES	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
TF-2	VOA	3	HCL	8260	1430
↓	LITER AMBER	2	HCL	8+6	↓
↓	LITER CLEAR	2	NONE	DRO	↓

Comments FUEL ODOR

Signature Jeff Leaver, Aaron Hill Date 3/ / /11

ENSR | AECOM

Well/Piezo ID: TF-3

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 44°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/2/11
Time: Start 1100 am/pm
Finish 1206 am/pm

WATER LEVEL DATA: (measured from Top of Casing)

Well ☒ Piezometer ☐

a. Total Well Length 57.70
b. Water Table Depth 47.30
c. Casing Material SS
d. Casing Diameter 6"
e. Length of Water Column 10.40 (a-b)
f. Calculated Well Volume (see back) 15.6

WELL PURGING DATA

a. Purge Method _____ HAND BAIL, (GRUNDFOS PUMP) EXTRACTION WELL

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) 46.8
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1107	INITIAL	16.36	6.41	777	26.2		CLEAR	YES	
1120	16.0	16.80	6.76	791	422.6		BROWN	↓	
1131	24.0	16.83	6.79	785	506.1		BROWN	↓	
1133	DRY								

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☐	☐	☒
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: DISPOSABLE BAILER

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
TF-3	VOA	3	HCL	8260	1200
↓	LITER AMBER	2	HCL	O&G	↓
↓	LITER CLEAR	2	NONE	DRO	↓

Comments DIESEL ODOR & FILM

Signature Jeff Leaver, Aaron Hill Date 3/2/11

ENSR | AECOM

Well/Piezo ID: VOC-1

Ground Water Sample Collection Record

Client: LUCENT
Project No:
Site Location: WINSTON-SALEM, NC
Weather Conds: SUNNY 55°
Collector(s) JEFF LEAVER, AARON HILL, BROOKS CHARLES

Date: 3/1/11
Time: Start 1707 am/pm
Finish 1718 am/pm

WATER LEVEL DATA: (measured from Top of Casing) Well ☑ Piezometer ☐

a. Total Well Length ___ c. Casing Material ___ e. Length of Water Column ___ (a-b)

b. Water Table Depth ___ d. Casing Diameter ___ f. Calculated Well Volume (see back) ___

WELL PURGING DATA

a. Purge Method ___ HAND BAIL, GRUNDFOS PUMP, (EXTRACTION WELL)

b. Acceptance Criteria defined (from workplan)
- Minimum Required Purge Volume (@ 3 well volumes) N/A
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
OAKTON PH/CON 10		143545
HACH 2100P		010300028078

d. Field Testing Equipment Calibration Documentation Found in Field Notebook # ___ Page # ___

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)		Color	Odor	Other
1710	INITIAL	19.91	7.06	168	8.9		CLEAR	SLIGHT	

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☐	☑
Have parameters stabilized	☑	☐	☐

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: ~~DISPOSABLE BAILER~~ SAMPLE PORT

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
VOC-1	VOA	3	HCL	8260	1714

Comments TOOK DUP-04

Signature Jeff Leaver, Aaron Hill Date 3/1/11

Appendix B

Laboratory Reports

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert No. 37735

Case Narrative

03/18/2011

AECOM (ENSR)
Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem (March Event GW & WW)

Lab Submittal Date: 03/03/2011
Prism Work Order: 1030099

This data package contains the analytical results for the project identified above and includes a Case Narrative, Sample Results and Chain of Custody. Unless otherwise noted, all samples were received in acceptable condition and processed according to the referenced methods.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative.

Please call if you have any questions relating to this analytical report.

Respectfully,

PRISM LABORATORIES, INC.

President/Project Manager

Reviewed By

Data Qualifiers Key Reference:

DO	Surrogates diluted out.
E	Estimated concentration above the calibration range
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
M	Matrix spike outside of the control limits.
MI	Matrix spike outside of the control limits. Matrix interference suspected.
BRL	Below Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
*	Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and reporting limit indicated with a J.

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Sample Receipt Summary

03/18/2011

Prism Work Order: 1030099

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received
TRIP BLANK 01	1030099-01	Water	03/01/11	03/03/11
DUP-01	1030099-02	Water	03/01/11	03/03/11
DUP-02	1030099-03	Water	03/01/11	03/03/11
DUP-03	1030099-04	Water	03/01/11	03/03/11
DUP-04	1030099-05	Water	03/01/11	03/03/11
DUP-05	1030099-06	Water	03/01/11	03/03/11
BAILER BLANK 01	1030099-07	Water	03/01/11	03/03/11
BAILER BLANK 02	1030099-08	Water	03/01/11	03/03/11
MW-2A	1030099-09	Water	03/01/11	03/03/11
EW-4	1030099-10	Water	03/01/11	03/03/11
EW-12	1030099-11	Water	03/01/11	03/03/11
EW-14	1030099-12	Water	03/01/11	03/03/11
TF-2	1030099-13	Water	03/01/11	03/03/11
DT-1	1030099-14	Water	03/01/11	03/03/11
EW-6	1030099-15	Water	03/01/11	03/03/11
EW-21	1030099-16	Water	03/01/11	03/03/11
EW-5	1030099-17	Water	03/01/11	03/03/11
EW-22	1030099-18	Water	03/01/11	03/03/11
EW-16	1030099-19	Water	03/01/11	03/03/11
EW-19	1030099-20	Water	03/01/11	03/03/11
EW-18	1030099-21	Water	03/01/11	03/03/11
EW-17	1030099-22	Water	03/01/11	03/03/11
EW-15	1030099-23	Water	03/01/11	03/03/11
VOC-1	1030099-24	Water	03/01/11	03/03/11
MW-10A	1030099-25	Water	03/01/11	03/03/11
MW-27A	1030099-26	Water	03/01/11	03/03/11
MW-28A	1030099-27	Water	03/01/11	03/03/11
COMP-SYS-TPH	1030099-28	Water	03/01/11	03/03/11
COMP-SYS-A	1030099-29	Water	03/01/11	03/03/11
COMP SYS-B	1030099-30	Water	03/01/11	03/03/11
MW-26A	1030099-31	Water	03/01/11	03/03/11
C-7	1030099-32	Water	03/01/11	03/03/11
MW-29B	1030099-33	Water	03/01/11	03/03/11
MW-30B	1030099-34	Water	03/01/11	03/03/11

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

TRIP BLANK 02	1030099-35	Water	03/02/11	03/03/11
PUMP BLANK 01	1030099-36	Water	03/02/11	03/03/11
PUMP BLANK 02	1030099-37	Water	03/02/11	03/03/11
DUP-06	1030099-38	Water	03/02/11	03/03/11
MW-7A	1030099-39	Water	03/02/11	03/03/11
MW-12A	1030099-40	Water	03/02/11	03/03/11
MW-8A	1030099-41	Water	03/02/11	03/03/11
MW-32	1030099-42	Water	03/02/11	03/03/11
MW-31A	1030099-43	Water	03/02/11	03/03/11
MW-31B	1030099-44	Water	03/02/11	03/03/11
TF-3	1030099-45	Water	03/02/11	03/03/11
MW-29A	1030099-46	Water	03/02/11	03/03/11
MW-29	1030099-47	Water	03/02/11	03/03/11
MW-18A	1030099-48	Water	03/02/11	03/03/11
MW-6A	1030099-49	Water	03/02/11	03/03/11
C-5	1030099-50	Water	03/02/11	03/03/11
C-2	1030099-51	Water	03/02/11	03/03/11

Samples received in good condition at 5.0 degrees C unless otherwise noted.

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: TRIP BLANK 01
Prism Sample ID: 1030099-01
Prism Work Order: 1030099
Time Collected: 03/01/11 00:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 13:15	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 13:15	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 13:15	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 13:15	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 13:15	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 13:15	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 13:15	LMW	P1C0132
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 13:15	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 13:15	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 13:15	LMW	P1C0132
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 13:15	LMW	P1C0132
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 13:15	LMW	P1C0132
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 13:15	LMW	P1C0132
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 13:15	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*101 %*	*80-124*
Dibromofluoromethane	*96 %*	*75-129*
Toluene-d8	*101 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: DUP-01
Prism Sample ID: 1030099-02
Prism Work Order: 1030099
Time Collected: 03/01/11 00:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/8/11 11:43	LMW	P1C0150
1,1-Dichloroethane	**1.7**	**ug/L**	**1.0**	**0.096**	**1**	**8260B**	**3/8/11 11:43**	**LMW**	**P1C0150**
1,1-Dichloroethylene	**3.2**	**ug/L**	**1.0**	**0.078**	**1**	**8260B**	**3/8/11 11:43**	**LMW**	**P1C0150**
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/8/11 11:43	LMW	P1C0150
Acetone	**5.7 J**	**ug/L**	**10**	**0.62**	**1**	**8260B**	**3/8/11 11:43**	**LMW**	**P1C0150**
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 11:43	LMW	P1C0150
Chloroform	**2.5**	**ug/L**	**1.0**	**0.089**	**1**	**8260B**	**3/8/11 11:43**	**LMW**	**P1C0150**
cis-1,2-Dichloroethylene	**10**	**ug/L**	**1.0**	**0.076**	**1**	**8260B**	**3/8/11 11:43**	**LMW**	**P1C0150**
Methyl Ethyl Ketone (2-Butanone)	**16**	**ug/L**	**5.0**	**0.90**	**1**	**8260B**	**3/8/11 11:43**	**LMW**	**P1C0150**
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/8/11 11:43	LMW	P1C0150
Tetrachloroethylene	**100**	**ug/L**	**1.0**	**0.069**	**1**	**8260B**	**3/8/11 11:43**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 11:43	LMW	P1C0150
Trichloroethylene	**31**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/8/11 11:43**	**LMW**	**P1C0150**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/8/11 11:43	LMW	P1C0150

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*96 %*	*80-124*
Dibromofluoromethane	*105 %*	*75-129*
Toluene-d8	*93 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: DUP-02
Prism Sample ID: 1030099-03
Prism Work Order: 1030099
Time Collected: 03/01/11 00:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	10	0.63	10	8260B	3/8/11 12:10	LMW	P1C0150
1,1-Dichloroethane	BRL	ug/L	10	0.96	10	8260B	3/8/11 12:10	LMW	P1C0150
1,1-Dichloroethylene	**11**	**ug/L**	**10**	**0.78**	**10**	**8260B**	**3/8/11 12:10**	**LMW**	**P1C0150**
1,2-Dichloroethane	BRL	ug/L	10	1.4	10	8260B	3/8/11 12:10	LMW	P1C0150
Acetone	BRL	ug/L	100	6.2	10	8260B	3/8/11 12:10	LMW	P1C0150
Carbon Tetrachloride	BRL	ug/L	20	1.2	10	8260B	3/8/11 12:10	LMW	P1C0150
Chloroform	BRL	ug/L	10	0.89	10	8260B	3/8/11 12:10	LMW	P1C0150
cis-1,2-Dichloroethylene	**410**	**ug/L**	**10**	**0.76**	**10**	**8260B**	**3/8/11 12:10**	**LMW**	**P1C0150**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	50	9.0	10	8260B	3/8/11 12:10	LMW	P1C0150
Methylene Chloride	BRL	ug/L	20	4.4	10	8260B	3/8/11 12:10	LMW	P1C0150
Tetrachloroethylene	**1300**	**ug/L**	**100**	**6.9**	**100**	**8260B**	**3/8/11 19:40**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	20	1.2	10	8260B	3/8/11 12:10	LMW	P1C0150
Trichloroethylene	**78**	**ug/L**	**20**	**0.54**	**10**	**8260B**	**3/8/11 12:10**	**LMW**	**P1C0150**
Vinyl chloride	BRL	ug/L	20	1.6	10	8260B	3/8/11 12:10	LMW	P1C0150

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*98 %*	*80-124*
Dibromofluoromethane	*104 %*	*75-129*
Toluene-d8	*94 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: DUP-03
Prism Sample ID: 1030099-04
Prism Work Order: 1030099
Time Collected: 03/01/11 00:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	**210**	**ug/L**	**10**	**0.63**	**10**	**8260B**	**3/8/11 12:36**	**LMW**	**P1C0150**
1,1-Dichloroethane	BRL	ug/L	10	0.96	10	8260B	3/8/11 12:36	LMW	P1C0150
1,1-Dichloroethylene	**51**	**ug/L**	**10**	**0.78**	**10**	**8260B**	**3/8/11 12:36**	**LMW**	**P1C0150**
1,2-Dichloroethane	BRL	ug/L	10	1.4	10	8260B	3/8/11 12:36	LMW	P1C0150
Acetone	BRL	ug/L	100	6.2	10	8260B	3/8/11 12:36	LMW	P1C0150
Carbon Tetrachloride	**540**	**ug/L**	**20**	**1.2**	**10**	**8260B**	**3/8/11 12:36**	**LMW**	**P1C0150**
Chloroform	**9.8 J**	**ug/L**	**10**	**0.89**	**10**	**8260B**	**3/8/11 12:36**	**LMW**	**P1C0150**
cis-1,2-Dichloroethylene	BRL	ug/L	10	0.76	10	8260B	3/8/11 12:36	LMW	P1C0150
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	50	9.0	10	8260B	3/8/11 12:36	LMW	P1C0150
Methylene Chloride	BRL	ug/L	20	4.4	10	8260B	3/8/11 12:36	LMW	P1C0150
Tetrachloroethylene	**960**	**ug/L**	**10**	**0.69**	**10**	**8260B**	**3/8/11 12:36**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	20	1.2	10	8260B	3/8/11 12:36	LMW	P1C0150
Trichloroethylene	**3600**	**ug/L**	**200**	**5.4**	**100**	**8260B**	**3/8/11 22:20**	**LMW**	**P1C0150**
Vinyl chloride	BRL	ug/L	20	1.6	10	8260B	3/8/11 12:36	LMW	P1C0150

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*96 %*	*80-124*
Dibromofluoromethane	*115 %*	*75-129*
Toluene-d8	*93 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: DUP-04
Prism Sample ID: 1030099-05
Prism Work Order: 1030099
Time Collected: 03/01/11 00:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	400	25	400	8260B	3/8/11 13:03	LMW	P1C0150
1,1-Dichloroethane	BRL	ug/L	400	38	400	8260B	3/8/11 13:03	LMW	P1C0150
1,1-Dichloroethylene	BRL	ug/L	400	31	400	8260B	3/8/11 13:03	LMW	P1C0150
1,2-Dichloroethane	BRL	ug/L	400	56	400	8260B	3/8/11 13:03	LMW	P1C0150
Acetone	BRL	ug/L	4000	250	400	8260B	3/8/11 13:03	LMW	P1C0150
Carbon Tetrachloride	BRL	ug/L	800	47	400	8260B	3/8/11 13:03	LMW	P1C0150
Chloroform	BRL	ug/L	400	35	400	8260B	3/8/11 13:03	LMW	P1C0150
cis-1,2-Dichloroethylene	**1200**	**ug/L**	**400**	**30**	**400**	**8260B**	**3/8/11 13:03**	**LMW**	**P1C0150**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	2000	360	400	8260B	3/8/11 13:03	LMW	P1C0150
Methylene Chloride	BRL	ug/L	800	180	400	8260B	3/8/11 13:03	LMW	P1C0150
Tetrachloroethylene	**80000**	**ug/L**	**4000**	**280**	**4000**	**8260B**	**3/8/11 22:46**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	800	46	400	8260B	3/8/11 13:03	LMW	P1C0150
Trichloroethylene	**460 J**	**ug/L**	**800**	**22**	**400**	**8260B**	**3/8/11 13:03**	**LMW**	**P1C0150**
Vinyl chloride	BRL	ug/L	800	62	400	8260B	3/8/11 13:03	LMW	P1C0150

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*96 %*	*80-124*
Dibromofluoromethane	*108 %*	*75-129*
Toluene-d8	*93 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: DUP-05
Prism Sample ID: 1030099-06
Prism Work Order: 1030099
Time Collected: 03/01/11 00:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	10	0.63	10	8260B	3/9/11 0:06	LMW	P1C0150
1,1-Dichloroethane	BRL	ug/L	10	0.96	10	8260B	3/9/11 0:06	LMW	P1C0150
1,1-Dichloroethylene	**32**	**ug/L**	**10**	**0.78**	**10**	**8260B**	**3/9/11 0:06**	**LMW**	**P1C0150**
1,2-Dichloroethane	BRL	ug/L	10	1.4	10	8260B	3/9/11 0:06	LMW	P1C0150
Acetone	BRL	ug/L	100	6.2	10	8260B	3/9/11 0:06	LMW	P1C0150
Carbon Tetrachloride	**37**	**ug/L**	**20**	**1.2**	**10**	**8260B**	**3/9/11 0:06**	**LMW**	**P1C0150**
Chloroform	**6.4 J**	**ug/L**	**10**	**0.89**	**10**	**8260B**	**3/9/11 0:06**	**LMW**	**P1C0150**
cis-1,2-Dichloroethylene	**390**	**ug/L**	**10**	**0.76**	**10**	**8260B**	**3/9/11 0:06**	**LMW**	**P1C0150**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	50	9.0	10	8260B	3/9/11 0:06	LMW	P1C0150
Methylene Chloride	BRL	ug/L	20	4.4	10	8260B	3/9/11 0:06	LMW	P1C0150
Tetrachloroethylene	**2900**	**ug/L**	**100**	**6.9**	**100**	**8260B**	**3/8/11 13:29**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	20	1.2	10	8260B	3/9/11 0:06	LMW	P1C0150
Trichloroethylene	**970**	**ug/L**	**20**	**0.54**	**10**	**8260B**	**3/9/11 0:06**	**LMW**	**P1C0150**
Vinyl chloride	**14 J**	**ug/L**	**20**	**1.6**	**10**	**8260B**	**3/9/11 0:06**	**LMW**	**P1C0150**

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*94 %*	*80-124*
Dibromofluoromethane	*104 %*	*75-129*
Toluene-d8	*92 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: BAILER BLANK 01
Prism Sample ID: 1030099-07
Prism Work Order: 1030099
Time Collected: 03/01/11 12:10
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 13:47	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 13:47	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 13:47	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 13:47	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 13:47	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 13:47	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 13:47	LMW	P1C0132
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 13:47	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 13:47	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 13:47	LMW	P1C0132
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 13:47	LMW	P1C0132
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 13:47	LMW	P1C0132
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 13:47	LMW	P1C0132
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 13:47	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*102 %*	*80-124*
Dibromofluoromethane	*96 %*	*75-129*
Toluene-d8	*100 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: BAILER BLANK 02
Prism Sample ID: 1030099-08
Prism Work Order: 1030099
Time Collected: 03/01/11 13:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 14:19	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 14:19	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 14:19	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 14:19	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 14:19	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 14:19	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 14:19	LMW	P1C0132
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 14:19	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 14:19	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 14:19	LMW	P1C0132
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 14:19	LMW	P1C0132
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 14:19	LMW	P1C0132
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 14:19	LMW	P1C0132
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 14:19	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*101 %*	*80-124*
Dibromofluoromethane	*101 %*	*75-129*
Toluene-d8	*100 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-2A
Prism Sample ID: 1030099-09
Prism Work Order: 1030099
Time Collected: 03/01/11 12:50
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 15:24	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 15:24	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 15:24	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 15:24	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 15:24	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 15:24	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 15:24	LMW	P1C0132
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 15:24	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 15:24	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 15:24	LMW	P1C0132
Tetrachloroethylene	**160**	**ug/L**	**10**	**0.69**	**10**	**8260B**	**3/8/11 5:19**	**LMW**	**P1C0132**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 15:24	LMW	P1C0132
Trichloroethylene	**1.8 J**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/7/11 15:24**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 15:24	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*102 %*	*80-124*
Dibromofluoromethane	*100 %*	*75-129*
Toluene-d8	*101 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

ECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-4
Prism Sample ID: 1030099-10
Prism Work Order: 1030099
Time Collected: 03/01/11 13:30
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 15:56	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 15:56	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 15:56	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 15:56	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 15:56	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 15:56	LMW	P1C0132
Chloroform	**0.55 J**	**ug/L**	**1.0**	**0.089**	**1**	**8260B**	**3/7/11 15:56**	**LMW**	**P1C0132**
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 15:56	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 15:56	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 15:56	LMW	P1C0132
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 15:56	LMW	P1C0132
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 15:56	LMW	P1C0132
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 15:56	LMW	P1C0132
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 15:56	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*101 %*	*80-124*
Dibromofluoromethane	*99 %*	*75-129*
Toluene-d8	*100 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-12
Prism Sample ID: 1030099-11
Prism Work Order: 1030099
Time Collected: 03/01/11 13:50
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 16:28	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 16:28	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 16:28	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 16:28	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 16:28	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 16:28	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 16:28	LMW	P1C0132
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 16:28	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 16:28	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 16:28	LMW	P1C0132
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 16:28	LMW	P1C0132
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 16:28	LMW	P1C0132
Trichloroethylene	**2.2**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/7/11 16:28**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 16:28	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*101 %*	*80-124*
Dibromofluoromethane	*103 %*	*75-129*
Toluene-d8	*100 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-14
Prism Sample ID: 1030099-12
Prism Work Order: 1030099
Time Collected: 03/01/11 14:10
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 17:00	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 17:00	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 17:00	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 17:00	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 17:00	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 17:00	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 17:00	LMW	P1C0132
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 17:00	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 17:00	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 17:00	LMW	P1C0132
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 17:00	LMW	P1C0132
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 17:00	LMW	P1C0132
Trichloroethylene	**2.2**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/7/11 17:00**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 17:00	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*101 %*	*80-124*
Dibromofluoromethane	*104 %*	*75-129*
Toluene-d8	*101 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: TF-2
Prism Sample ID: 1030099-13
Prism Work Order: 1030099
Time Collected: 03/01/11 14:30
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**82 J**	**mg/L**	**100**	**3.9**	**50**	**8015C**	**3/9/11 9:23**	**JMV**	**P1C0157**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*0 %*		*50-144*	*DO*
General Chemistry Parameters									
Oil & Grease (HEM)	**60**	**mg/L**	**5.0**	**1.2**	**1**	***1664A**	**3/9/11 13:40**	**CDE**	**P1C0205**
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 17:32	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 17:32	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 17:32	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 17:32	LMW	P1C0132
Acetone	**10**	**ug/L**	**10**	**0.62**	**1**	**8260B**	**3/7/11 17:32**	**LMW**	**P1C0132**
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 17:32	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 17:32	LMW	P1C0132
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 17:32	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	**3.0 J**	**ug/L**	**5.0**	**0.90**	**1**	**8260B**	**3/7/11 17:32**	**LMW**	**P1C0132**
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 17:32	LMW	P1C0132
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 17:32	LMW	P1C0132
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 17:32	LMW	P1C0132
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 17:32	LMW	P1C0132
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 17:32	LMW	P1C0132
			Surrogate			Recovery		Control Limits	
			4-Bromofluorobenzene			*97 %*		*80-124*	
			Dibromofluoromethane			*103 %*		*75-129*	
			Toluene-d8			*100 %*		*77-123*	

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: DT-1
Prism Sample ID: 1030099-14
Prism Work Order: 1030099
Time Collected: 03/01/11 14:50
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/L	2.0	0.078	1	8015C	3/8/11 19:58	JMV	P1C0157
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*82 %*		*50-144*	
General Chemistry Parameters									
Oil & Grease (HEM)	BRL	mg/L	5.0	1.2	1	*1664A	3/9/11 13:40	CDE	P1C0205
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 18:05	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 18:05	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 18:05	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 18:05	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 18:05	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 18:05	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 18:05	LMW	P1C0132
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 18:05	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 18:05	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 18:05	LMW	P1C0132
Tetrachloroethylene	**24**	**ug/L**	**1.0**	**0.069**	**1**	**8260B**	**3/7/11 18:05**	**LMW**	**P1C0132**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 18:05	LMW	P1C0132
Trichloroethylene	**1.4 J**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/7/11 18:05**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 18:05	LMW	P1C0132
			Surrogate			Recovery		Control Limits	
			4-Bromofluorobenzene			*101 %*		*80-124*	
			Dibromofluoromethane			*99 %*		*75-129*	
			Toluene-d8			*100 %*		*77-123*	

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-6
Prism Sample ID: 1030099-15
Prism Work Order: 1030099
Time Collected: 03/01/11 15:10
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 18:37	LMW	P1C0132
1,1-Dichloroethane	**1.6**	**ug/L**	**1.0**	**0.096**	**1**	**8260B**	**3/7/11 18:37**	**LMW**	**P1C0132**
1,1-Dichloroethylene	**3.4**	**ug/L**	**1.0**	**0.078**	**1**	**8260B**	**3/7/11 18:37**	**LMW**	**P1C0132**
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 18:37	LMW	P1C0132
Acetone	**110 E**	**ug/L**	**10**	**0.62**	**1**	**8260B**	**3/7/11 18:37**	**LMW**	**P1C0132**
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 18:37	LMW	P1C0132
Chloroform	**2.5**	**ug/L**	**1.0**	**0.089**	**1**	**8260B**	**3/7/11 18:37**	**LMW**	**P1C0132**
cis-1,2-Dichloroethylene	**13**	**ug/L**	**1.0**	**0.076**	**1**	**8260B**	**3/7/11 18:37**	**LMW**	**P1C0132**
Methyl Ethyl Ketone (2-Butanone)	**130**	**ug/L**	**50**	**9.0**	**10**	**8260B**	**3/8/11 7:29**	**LMW**	**P1C0132**
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 18:37	LMW	P1C0132
Tetrachloroethylene	**110**	**ug/L**	**10**	**0.69**	**10**	**8260B**	**3/8/11 7:29**	**LMW**	**P1C0132**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 18:37	LMW	P1C0132
Trichloroethylene	**32**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/7/11 18:37**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 18:37	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*101 %*	*80-124*
Dibromofluoromethane	*98 %*	*75-129*
Toluene-d8	*100 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-21
Prism Sample ID: 1030099-16
Prism Work Order: 1030099
Time Collected: 03/01/11 15:26
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 20:13	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 20:13	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 20:13	LMW	P1C0132
1,2-Dichloroethane	**3.5**	**ug/L**	**1.0**	**0.14**	**1**	**8260B**	**3/7/11 20:13**	**LMW**	**P1C0132**
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 20:13	LMW	P1C0132
Carbon Tetrachloride	**0.62 J**	**ug/L**	**2.0**	**0.12**	**1**	**8260B**	**3/7/11 20:13**	**LMW**	**P1C0132**
Chloroform	**2.5**	**ug/L**	**1.0**	**0.089**	**1**	**8260B**	**3/7/11 20:13**	**LMW**	**P1C0132**
cis-1,2-Dichloroethylene	**2.1**	**ug/L**	**1.0**	**0.076**	**1**	**8260B**	**3/7/11 20:13**	**LMW**	**P1C0132**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 20:13	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 20:13	LMW	P1C0132
Tetrachloroethylene	**14**	**ug/L**	**1.0**	**0.069**	**1**	**8260B**	**3/7/11 20:13**	**LMW**	**P1C0132**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 20:13	LMW	P1C0132
Trichloroethylene	**63**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/7/11 20:13**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 20:13	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*101 %*	*80-124*
Dibromofluoromethane	*96 %*	*75-129*
Toluene-d8	*100 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-5
Prism Sample ID: 1030099-17
Prism Work Order: 1030099
Time Collected: 03/01/11 15:40
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/8/11 8:01	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/8/11 8:01	LMW	P1C0132
1,1-Dichloroethylene	**3.5**	**ug/L**	**1.0**	**0.078**	**1**	**8260B**	**3/8/11 8:01**	**LMW**	**P1C0132**
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/8/11 8:01	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/8/11 8:01	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 8:01	LMW	P1C0132
Chloroform	**0.81 J**	**ug/L**	**1.0**	**0.089**	**1**	**8260B**	**3/8/11 8:01**	**LMW**	**P1C0132**
cis-1,2-Dichloroethylene	**290**	**ug/L**	**10**	**0.76**	**10**	**8260B**	**3/7/11 19:41**	**LMW**	**P1C0132**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/8/11 8:01	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/8/11 8:01	LMW	P1C0132
Tetrachloroethylene	**390**	**ug/L**	**10**	**0.69**	**10**	**8260B**	**3/7/11 19:41**	**LMW**	**P1C0132**
trans-1,2-Dichloroethylene	**1.8 J**	**ug/L**	**2.0**	**0.12**	**1**	**8260B**	**3/8/11 8:01**	**LMW**	**P1C0132**
Trichloroethylene	**100**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/8/11 8:01**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/8/11 8:01	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*103 %*	*80-124*
Dibromofluoromethane	*94 %*	*75-129*
Toluene-d8	*99 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-22
Prism Sample ID: 1030099-18
Prism Work Order: 1030099
Time Collected: 03/01/11 15:54
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	20	1.3	20	8260B	3/9/11 14:26	LMW	P1C0150
1,1-Dichloroethane	BRL	ug/L	20	1.9	20	8260B	3/9/11 14:26	LMW	P1C0150
1,1-Dichloroethylene	**21**	**ug/L**	**20**	**1.6**	**20**	**8260B**	**3/9/11 14:26**	**LMW**	**P1C0150**
1,2-Dichloroethane	BRL	ug/L	20	2.8	20	8260B	3/9/11 14:26	LMW	P1C0150
Acetone	BRL	ug/L	200	12	20	8260B	3/9/11 14:26	LMW	P1C0150
Carbon Tetrachloride	**40**	**ug/L**	**40**	**2.4**	**20**	**8260B**	**3/9/11 14:26**	**LMW**	**P1C0150**
Chloroform	**11 J**	**ug/L**	**20**	**1.8**	**20**	**8260B**	**3/9/11 14:26**	**LMW**	**P1C0150**
cis-1,2-Dichloroethylene	BRL	ug/L	20	1.5	20	8260B	3/9/11 14:26	LMW	P1C0150
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	100	18	20	8260B	3/9/11 14:26	LMW	P1C0150
Methylene Chloride	BRL	ug/L	40	8.9	20	8260B	3/9/11 14:26	LMW	P1C0150
Tetrachloroethylene	**130**	**ug/L**	**20**	**1.4**	**20**	**8260B**	**3/9/11 14:26**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	40	2.3	20	8260B	3/9/11 14:26	LMW	P1C0150
Trichloroethylene	**960**	**ug/L**	**40**	**1.1**	**20**	**8260B**	**3/9/11 14:26**	**LMW**	**P1C0150**
Vinyl chloride	BRL	ug/L	40	3.1	20	8260B	3/9/11 14:26	LMW	P1C0150

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*94 %*	*80-124*
Dibromofluoromethane	*100 %*	*75-129*
Toluene-d8	*94 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-16
Prism Sample ID: 1030099-19
Prism Work Order: 1030099
Time Collected: 03/01/11 16:08
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	20	1.3	20	8260B	3/7/11 17:51	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	20	1.9	20	8260B	3/7/11 17:51	LMW	P1C0125
1,1-Dichloroethylene	**11 J**	**ug/L**	**20**	**1.6**	**20**	**8260B**	**3/7/11 17:51**	**LMW**	**P1C0125**
1,2-Dichloroethane	BRL	ug/L	20	2.8	20	8260B	3/7/11 17:51	LMW	P1C0125
Acetone	BRL	ug/L	200	12	20	8260B	3/7/11 17:51	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	40	2.4	20	8260B	3/7/11 17:51	LMW	P1C0125
Chloroform	BRL	ug/L	20	1.8	20	8260B	3/7/11 17:51	LMW	P1C0125
cis-1,2-Dichloroethylene	**420**	**ug/L**	**20**	**1.5**	**20**	**8260B**	**3/7/11 17:51**	**LMW**	**P1C0125**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	100	18	20	8260B	3/7/11 17:51	LMW	P1C0125
Methylene Chloride	BRL	ug/L	40	8.9	20	8260B	3/7/11 17:51	LMW	P1C0125
Tetrachloroethylene	**1200**	**ug/L**	**20**	**1.4**	**20**	**8260B**	**3/7/11 17:51**	**LMW**	**P1C0125**
trans-1,2-Dichloroethylene	BRL	ug/L	40	2.3	20	8260B	3/7/11 17:51	LMW	P1C0125
Trichloroethylene	**82**	**ug/L**	**40**	**1.1**	**20**	**8260B**	**3/7/11 17:51**	**LMW**	**P1C0125**
Vinyl chloride	BRL	ug/L	40	3.1	20	8260B	3/7/11 17:51	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*93 %*	*80-124*
Dibromofluoromethane	*103 %*	*75-129*
Toluene-d8	*92 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-19
Prism Sample ID: 1030099-20
Prism Work Order: 1030099
Time Collected: 03/01/11 16:20
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	20	1.3	20	8260B	3/7/11 18:18	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	20	1.9	20	8260B	3/7/11 18:18	LMW	P1C0125
1,1-Dichloroethylene	**35**	**ug/L**	**20**	**1.6**	**20**	**8260B**	**3/7/11 18:18**	**LMW**	**P1C0125**
1,2-Dichloroethane	BRL	ug/L	20	2.8	20	8260B	3/7/11 18:18	LMW	P1C0125
Acetone	BRL	ug/L	200	12	20	8260B	3/7/11 18:18	LMW	P1C0125
Carbon Tetrachloride	**52**	**ug/L**	**40**	**2.4**	**20**	**8260B**	**3/7/11 18:18**	**LMW**	**P1C0125**
Chloroform	**10 J**	**ug/L**	**20**	**1.8**	**20**	**8260B**	**3/7/11 18:18**	**LMW**	**P1C0125**
cis-1,2-Dichloroethylene	BRL	ug/L	20	1.5	20	8260B	3/7/11 18:18	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	100	18	20	8260B	3/7/11 18:18	LMW	P1C0125
Methylene Chloride	BRL	ug/L	40	8.9	20	8260B	3/7/11 18:18	LMW	P1C0125
Tetrachloroethylene	**1000**	**ug/L**	**20**	**1.4**	**20**	**8260B**	**3/7/11 18:18**	**LMW**	**P1C0125**
trans-1,2-Dichloroethylene	BRL	ug/L	40	2.3	20	8260B	3/7/11 18:18	LMW	P1C0125
Trichloroethylene	**930**	**ug/L**	**40**	**1.1**	**20**	**8260B**	**3/7/11 18:18**	**LMW**	**P1C0125**
Vinyl chloride	BRL	ug/L	40	3.1	20	8260B	3/7/11 18:18	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*94 %*	*80-124*
Dibromofluoromethane	*101 %*	*75-129*
Toluene-d8	*94 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-18
Prism Sample ID: 1030099-21
Prism Work Order: 1030099
Time Collected: 03/01/11 16:30
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	**160**	**ug/L**	**20**	**1.3**	**20**	**8260B**	**3/8/11 0:04**	**LMW**	**P1C0125**
1,1-Dichloroethane	BRL	ug/L	20	1.9	20	8260B	3/8/11 0:04	LMW	P1C0125
1,1-Dichloroethylene	**36**	**ug/L**	**20**	**1.6**	**20**	**8260B**	**3/8/11 0:04**	**LMW**	**P1C0125**
1,2-Dichloroethane	BRL	ug/L	20	2.8	20	8260B	3/8/11 0:04	LMW	P1C0125
Acetone	BRL	ug/L	200	12	20	8260B	3/8/11 0:04	LMW	P1C0125
Carbon Tetrachloride	**360**	**ug/L**	**40**	**2.4**	**20**	**8260B**	**3/8/11 0:04**	**LMW**	**P1C0125**
Chloroform	BRL	ug/L	20	1.8	20	8260B	3/8/11 0:04	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	20	1.5	20	8260B	3/8/11 0:04	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	100	18	20	8260B	3/8/11 0:04	LMW	P1C0125
Methylene Chloride	BRL	ug/L	40	8.9	20	8260B	3/8/11 0:04	LMW	P1C0125
Tetrachloroethylene	**810**	**ug/L**	**20**	**1.4**	**20**	**8260B**	**3/8/11 0:04**	**LMW**	**P1C0125**
trans-1,2-Dichloroethylene	BRL	ug/L	40	2.3	20	8260B	3/8/11 0:04	LMW	P1C0125
Trichloroethylene	**3100**	**ug/L**	**400**	**11**	**200**	**8260B**	**3/8/11 0:31**	**LMW**	**P1C0125**
Vinyl chloride	BRL	ug/L	40	3.1	20	8260B	3/8/11 0:04	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*93 %*	*80-124*
Dibromofluoromethane	*104 %*	*75-129*
Toluene-d8	*91 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-17
Prism Sample ID: 1030099-22
Prism Work Order: 1030099
Time Collected: 03/01/11 16:48
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	40	2.5	40	8260B	3/8/11 1:50	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	40	3.8	40	8260B	3/8/11 1:50	LMW	P1C0125
1,1-Dichloroethylene	**72**	**ug/L**	**40**	**3.1**	**40**	**8260B**	**3/8/11 1:50**	**LMW**	**P1C0125**
1,2-Dichloroethane	BRL	ug/L	40	5.6	40	8260B	3/8/11 1:50	LMW	P1C0125
Acetone	BRL	ug/L	400	25	40	8260B	3/8/11 1:50	LMW	P1C0125
Carbon Tetrachloride	**74 J**	**ug/L**	**80**	**4.7**	**40**	**8260B**	**3/8/11 1:50**	**LMW**	**P1C0125**
Chloroform	BRL	ug/L	40	3.5	40	8260B	3/8/11 1:50	LMW	P1C0125
cis-1,2-Dichloroethylene	**91**	**ug/L**	**40**	**3.0**	**40**	**8260B**	**3/8/11 1:50**	**LMW**	**P1C0125**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	200	36	40	8260B	3/8/11 1:50	LMW	P1C0125
Methylene Chloride	BRL	ug/L	80	18	40	8260B	3/8/11 1:50	LMW	P1C0125
Tetrachloroethylene	**2900**	**ug/L**	**40**	**2.8**	**40**	**8260B**	**3/8/11 1:50**	**LMW**	**P1C0125**
trans-1,2-Dichloroethylene	BRL	ug/L	80	4.6	40	8260B	3/8/11 1:50	LMW	P1C0125
Trichloroethylene	**2100**	**ug/L**	**80**	**2.2**	**40**	**8260B**	**3/8/11 1:50**	**LMW**	**P1C0125**
Vinyl chloride	BRL	ug/L	80	6.2	40	8260B	3/8/11 1:50	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*97 %*	*80-124*
Dibromofluoromethane	*104 %*	*75-129*
Toluene-d8	*94 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: EW-15
Prism Sample ID: 1030099-23
Prism Work Order: 1030099
Time Collected: 03/01/11 17:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	10	0.63	10	8260B	3/7/11 22:17	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	10	0.96	10	8260B	3/7/11 22:17	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	10	0.78	10	8260B	3/7/11 22:17	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	10	1.4	10	8260B	3/7/11 22:17	LMW	P1C0125
Acetone	BRL	ug/L	100	6.2	10	8260B	3/7/11 22:17	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	20	1.2	10	8260B	3/7/11 22:17	LMW	P1C0125
Chloroform	BRL	ug/L	10	0.89	10	8260B	3/7/11 22:17	LMW	P1C0125
cis-1,2-Dichloroethylene	**1600**	**ug/L**	**100**	**7.6**	**100**	**8260B**	**3/7/11 22:44**	**LMW**	**P1C0125**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	50	9.0	10	8260B	3/7/11 22:17	LMW	P1C0125
Methylene Chloride	BRL	ug/L	20	4.4	10	8260B	3/7/11 22:17	LMW	P1C0125
Tetrachloroethylene	**3600**	**ug/L**	**100**	**6.9**	**100**	**8260B**	**3/7/11 22:44**	**LMW**	**P1C0125**
trans-1,2-Dichloroethylene	**9.8 J**	**ug/L**	**20**	**1.2**	**10**	**8260B**	**3/7/11 22:17**	**LMW**	**P1C0125**
Trichloroethylene	**360**	**ug/L**	**20**	**0.54**	**10**	**8260B**	**3/7/11 22:17**	**LMW**	**P1C0125**
Vinyl chloride	**68**	**ug/L**	**20**	**1.6**	**10**	**8260B**	**3/7/11 22:17**	**LMW**	**P1C0125**

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*97 %*	*80-124*
Dibromofluoromethane	*101 %*	*75-129*
Toluene-d8	*96 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: VOC-1
Prism Sample ID: 1030099-24
Prism Work Order: 1030099
Time Collected: 03/01/11 17:14
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	400	25	400	8260B	3/8/11 14:22	LMW	P1C0150
1,1-Dichloroethane	BRL	ug/L	400	38	400	8260B	3/8/11 14:22	LMW	P1C0150
1,1-Dichloroethylene	BRL	ug/L	400	31	400	8260B	3/8/11 14:22	LMW	P1C0150
1,2-Dichloroethane	BRL	ug/L	400	56	400	8260B	3/8/11 14:22	LMW	P1C0150
Acetone	BRL	ug/L	4000	250	400	8260B	3/8/11 14:22	LMW	P1C0150
Carbon Tetrachloride	BRL	ug/L	800	47	400	8260B	3/8/11 14:22	LMW	P1C0150
Chloroform	BRL	ug/L	400	35	400	8260B	3/8/11 14:22	LMW	P1C0150
cis-1,2-Dichloroethylene	**1200**	**ug/L**	**400**	**30**	**400**	**8260B**	**3/8/11 14:22**	**LMW**	**P1C0150**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	2000	360	400	8260B	3/8/11 14:22	LMW	P1C0150
Methylene Chloride	BRL	ug/L	800	180	400	8260B	3/8/11 14:22	LMW	P1C0150
Tetrachloroethylene	**80000**	**ug/L**	**4000**	**280**	**4000**	**8260B**	**3/8/11 23:13**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	800	46	400	8260B	3/8/11 14:22	LMW	P1C0150
Trichloroethylene	**400 J**	**ug/L**	**800**	**22**	**400**	**8260B**	**3/8/11 14:22**	**LMW**	**P1C0150**
Vinyl chloride	BRL	ug/L	800	62	400	8260B	3/8/11 14:22	LMW	P1C0150

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*95 %*	*80-124*
Dibromofluoromethane	*109 %*	*75-129*
Toluene-d8	*91 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-10A
Prism Sample ID: 1030099-25
Prism Work Order: 1030099
Time Collected: 03/01/11 15:30
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 12:32	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 12:32	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 12:32	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 12:32	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 12:32	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 12:32	LMW	P1C0125
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 12:32	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 12:32	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 12:32	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 12:32	LMW	P1C0125
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 12:32	LMW	P1C0125
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 12:32	LMW	P1C0125
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 12:32	LMW	P1C0125
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 12:32	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*97 %*	*80-124*
Dibromofluoromethane	*102 %*	*75-129*
Toluene-d8	*95 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-27A
Prism Sample ID: 1030099-26
Prism Work Order: 1030099
Time Collected: 03/01/11 14:45
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 12:59	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 12:59	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 12:59	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 12:59	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 12:59	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 12:59	LMW	P1C0125
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 12:59	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 12:59	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 12:59	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 12:59	LMW	P1C0125
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 12:59	LMW	P1C0125
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 12:59	LMW	P1C0125
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 12:59	LMW	P1C0125
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 12:59	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*97 %*	*80-124*
Dibromofluoromethane	*103 %*	*75-129*
Toluene-d8	*93 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-28A
Prism Sample ID: 1030099-27
Prism Work Order: 1030099
Time Collected: 03/01/11 14:05
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 13:25	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 13:25	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 13:25	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 13:25	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 13:25	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 13:25	LMW	P1C0125
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 13:25	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 13:25	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 13:25	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 13:25	LMW	P1C0125
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 13:25	LMW	P1C0125
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 13:25	LMW	P1C0125
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 13:25	LMW	P1C0125
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 13:25	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*95 %*	*80-124*
Dibromofluoromethane	*102 %*	*75-129*
Toluene-d8	*95 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: COMP-SYS-TPH
Prism Sample ID: 1030099-28
Prism Work Order: 1030099
Time Collected: 03/01/11 18:20
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/L	2.0	0.078	1	8015C	3/8/11 20:33	JMV	P1C0157
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*93 %*		*50-144*	
General Chemistry Parameters									
Oil & Grease (HEM)	BRL	mg/L	5.0	1.2	1	*1664A	3/9/11 14:25	CDE	P1C0205
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	**87**	**ug/L**	**10**	**0.63**	**10**	**8260B**	**3/7/11 23:10**	**LMW**	**P1C0125**
1,1-Dichloroethane	BRL	ug/L	10	0.96	10	8260B	3/7/11 23:10	LMW	P1C0125
1,1-Dichloroethylene	**21**	**ug/L**	**10**	**0.78**	**10**	**8260B**	**3/7/11 23:10**	**LMW**	**P1C0125**
1,2-Dichloroethane	BRL	ug/L	10	1.4	10	8260B	3/7/11 23:10	LMW	P1C0125
Acetone	BRL	ug/L	100	6.2	10	8260B	3/7/11 23:10	LMW	P1C0125
Carbon Tetrachloride	**220**	**ug/L**	**20**	**1.2**	**10**	**8260B**	**3/7/11 23:10**	**LMW**	**P1C0125**
Chloroform	BRL	ug/L	10	0.89	10	8260B	3/7/11 23:10	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	10	0.76	10	8260B	3/7/11 23:10	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	50	9.0	10	8260B	3/7/11 23:10	LMW	P1C0125
Methylene Chloride	BRL	ug/L	20	4.4	10	8260B	3/7/11 23:10	LMW	P1C0125
Tetrachloroethylene	**450**	**ug/L**	**10**	**0.69**	**10**	**8260B**	**3/7/11 23:10**	**LMW**	**P1C0125**
trans-1,2-Dichloroethylene	BRL	ug/L	20	1.2	10	8260B	3/7/11 23:10	LMW	P1C0125
Trichloroethylene	**1600**	**ug/L**	**200**	**5.4**	**100**	**8260B**	**3/7/11 23:37**	**LMW**	**P1C0125**
Vinyl chloride	BRL	ug/L	20	1.6	10	8260B	3/7/11 23:10	LMW	P1C0125
			Surrogate			Recovery		Control Limits	
			4-Bromofluorobenzene			*95 %*		*80-124*	
			Dibromofluoromethane			*106 %*		*75-129*	
			Toluene-d8			*93 %*		*77-123*	

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: COMP-SYS-A
Prism Sample ID: 1030099-29
Prism Work Order: 1030099
Time Collected: 03/01/11 17:44
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/L	2.0	0.078	1	8015C	3/8/11 21:09	JMV	P1C0157
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*88 %*		*50-144*	
General Chemistry Parameters									
Oil & Grease (HEM)	BRL	mg/L	5.0	1.2	1	*1664A	3/9/11 14:25	CDE	P1C0205
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 16:58	LMW	P1C0125
1,1-Dichloroethane	**1.1**	**ug/L**	**1.0**	**0.096**	**1**	**8260B**	**3/7/11 16:58**	**LMW**	**P1C0125**
1,1-Dichloroethylene	**3.3**	**ug/L**	**1.0**	**0.078**	**1**	**8260B**	**3/7/11 16:58**	**LMW**	**P1C0125**
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 16:58	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 16:58	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 16:58	LMW	P1C0125
Chloroform	**1.7**	**ug/L**	**1.0**	**0.089**	**1**	**8260B**	**3/7/11 16:58**	**LMW**	**P1C0125**
cis-1,2-Dichloroethylene	**64**	**ug/L**	**1.0**	**0.076**	**1**	**8260B**	**3/7/11 16:58**	**LMW**	**P1C0125**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 16:58	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 16:58	LMW	P1C0125
Tetrachloroethylene	**250**	**ug/L**	**10**	**0.69**	**10**	**8260B**	**3/7/11 17:25**	**LMW**	**P1C0125**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 16:58	LMW	P1C0125
Trichloroethylene	**30**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/7/11 16:58**	**LMW**	**P1C0125**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 16:58	LMW	P1C0125
			Surrogate			Recovery		Control Limits	
			4-Bromofluorobenzene			*95 %*		*80-124*	
			Dibromofluoromethane			*99 %*		*75-129*	
			Toluene-d8			*93 %*		*77-123*	

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: COMP SYS-B
Prism Sample ID: 1030099-30
Prism Work Order: 1030099
Time Collected: 03/01/11 18:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	20	1.3	20	8260B	3/8/11 0:57	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	20	1.9	20	8260B	3/8/11 0:57	LMW	P1C0125
1,1-Dichloroethylene	**26**	**ug/L**	**20**	**1.6**	**20**	**8260B**	**3/8/11 0:57**	**LMW**	**P1C0125**
1,2-Dichloroethane	BRL	ug/L	20	2.8	20	8260B	3/8/11 0:57	LMW	P1C0125
Acetone	BRL	ug/L	200	12	20	8260B	3/8/11 0:57	LMW	P1C0125
Carbon Tetrachloride	**37 J**	**ug/L**	**40**	**2.4**	**20**	**8260B**	**3/8/11 0:57**	**LMW**	**P1C0125**
Chloroform	BRL	ug/L	20	1.8	20	8260B	3/8/11 0:57	LMW	P1C0125
cis-1,2-Dichloroethylene	**400**	**ug/L**	**20**	**1.5**	**20**	**8260B**	**3/8/11 0:57**	**LMW**	**P1C0125**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	100	18	20	8260B	3/8/11 0:57	LMW	P1C0125
Methylene Chloride	BRL	ug/L	40	8.9	20	8260B	3/8/11 0:57	LMW	P1C0125
Tetrachloroethylene	**1900**	**ug/L**	**20**	**1.4**	**20**	**8260B**	**3/8/11 0:57**	**LMW**	**P1C0125**
trans-1,2-Dichloroethylene	BRL	ug/L	40	2.3	20	8260B	3/8/11 0:57	LMW	P1C0125
Trichloroethylene	**960**	**ug/L**	**40**	**1.1**	**20**	**8260B**	**3/8/11 0:57**	**LMW**	**P1C0125**
Vinyl chloride	**13 J**	**ug/L**	**40**	**3.1**	**20**	**8260B**	**3/8/11 0:57**	**LMW**	**P1C0125**

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*94 %*	*80-124*
Dibromofluoromethane	*104 %*	*75-129*
Toluene-d8	*93 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-26A
Prism Sample ID: 1030099-31
Prism Work Order: 1030099
Time Collected: 03/01/11 18:40
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 13:52	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 13:52	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 13:52	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 13:52	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 13:52	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 13:52	LMW	P1C0125
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 13:52	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 13:52	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 13:52	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 13:52	LMW	P1C0125
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 13:52	LMW	P1C0125
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 13:52	LMW	P1C0125
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 13:52	LMW	P1C0125
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 13:52	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*93 %*	*80-124*
Dibromofluoromethane	*102 %*	*75-129*
Toluene-d8	*93 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: C-7
Prism Sample ID: 1030099-32
Prism Work Order: 1030099
Time Collected: 03/01/11 19:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 14:19	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 14:19	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 14:19	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 14:19	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 14:19	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 14:19	LMW	P1C0125
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 14:19	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 14:19	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 14:19	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 14:19	LMW	P1C0125
Tetrachloroethylene	**2.9**	**ug/L**	**1.0**	**0.069**	**1**	**8260B**	**3/7/11 14:19**	**LMW**	**P1C0125**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 14:19	LMW	P1C0125
Trichloroethylene	**7.3**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/7/11 14:19**	**LMW**	**P1C0125**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 14:19	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*97 %*	*80-124*
Dibromofluoromethane	*103 %*	*75-129*
Toluene-d8	*94 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-29B
Prism Sample ID: 1030099-33
Prism Work Order: 1030099
Time Collected: 03/01/11 16:23
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 14:45	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 14:45	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 14:45	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 14:45	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 14:45	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 14:45	LMW	P1C0125
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 14:45	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 14:45	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 14:45	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 14:45	LMW	P1C0125
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 14:45	LMW	P1C0125
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 14:45	LMW	P1C0125
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 14:45	LMW	P1C0125
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 14:45	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*96 %*	*80-124*
Dibromofluoromethane	*99 %*	*75-129*
Toluene-d8	*95 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-30B
Prism Sample ID: 1030099-34
Prism Work Order: 1030099
Time Collected: 03/01/11 17:25
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 15:12	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 15:12	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 15:12	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 15:12	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 15:12	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 15:12	LMW	P1C0125
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 15:12	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 15:12	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 15:12	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 15:12	LMW	P1C0125
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 15:12	LMW	P1C0125
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 15:12	LMW	P1C0125
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 15:12	LMW	P1C0125
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 15:12	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*95 %*	*80-124*
Dibromofluoromethane	*105 %*	*75-129*
Toluene-d8	*96 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: TRIP BLANK 02
Prism Sample ID: 1030099-35
Prism Work Order: 1030099
Time Collected: 03/02/11 00:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 11:13	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 11:13	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 11:13	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 11:13	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 11:13	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 11:13	LMW	P1C0125
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 11:13	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 11:13	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 11:13	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 11:13	LMW	P1C0125
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 11:13	LMW	P1C0125
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 11:13	LMW	P1C0125
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 11:13	LMW	P1C0125
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 11:13	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*98 %*	*80-124*
Dibromofluoromethane	*104 %*	*75-129*
Toluene-d8	*94 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: PUMP BLANK 01
Prism Sample ID: 1030099-36
Prism Work Order: 1030099
Time Collected: 03/02/11 07:30
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 11:39	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 11:39	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 11:39	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 11:39	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 11:39	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 11:39	LMW	P1C0125
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 11:39	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 11:39	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 11:39	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 11:39	LMW	P1C0125
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 11:39	LMW	P1C0125
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 11:39	LMW	P1C0125
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 11:39	LMW	P1C0125
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 11:39	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*98 %*	*80-124*
Dibromofluoromethane	*101 %*	*75-129*
Toluene-d8	*95 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: PUMP BLANK 02
Prism Sample ID: 1030099-37
Prism Work Order: 1030099
Time Collected: 03/02/11 12:10
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 12:06	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 12:06	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 12:06	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 12:06	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 12:06	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 12:06	LMW	P1C0125
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 12:06	LMW	P1C0125
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 12:06	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 12:06	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 12:06	LMW	P1C0125
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 12:06	LMW	P1C0125
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 12:06	LMW	P1C0125
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 12:06	LMW	P1C0125
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 12:06	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*97 %*	*80-124*
Dibromofluoromethane	*104 %*	*75-129*
Toluene-d8	*93 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: DUP-06
Prism Sample ID: 1030099-38
Prism Work Order: 1030099
Time Collected: 03/02/11 09:30
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/8/11 23:39	LMW	P1C0150
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/8/11 23:39	LMW	P1C0150
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/8/11 23:39	LMW	P1C0150
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/8/11 23:39	LMW	P1C0150
Acetone	BRL	ug/L	10	0.62	1	8260B	3/8/11 23:39	LMW	P1C0150
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 23:39	LMW	P1C0150
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/8/11 23:39	LMW	P1C0150
cis-1,2-Dichloroethylene	**2.7**	**ug/L**	**1.0**	**0.076**	**1**	**8260B**	**3/8/11 23:39**	**LMW**	**P1C0150**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/8/11 23:39	LMW	P1C0150
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/8/11 23:39	LMW	P1C0150
Tetrachloroethylene	**1.5**	**ug/L**	**1.0**	**0.069**	**1**	**8260B**	**3/8/11 23:39**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 23:39	LMW	P1C0150
Trichloroethylene	**11**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/8/11 23:39**	**LMW**	**P1C0150**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/8/11 23:39	LMW	P1C0150

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*92 %*	*80-124*
Dibromofluoromethane	*109 %*	*75-129*
Toluene-d8	*92 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-7A
Prism Sample ID: 1030099-39
Prism Work Order: 1030099
Time Collected: 03/02/11 08:20
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 15:39	LMW	P1C0125
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 15:39	LMW	P1C0125
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 15:39	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 15:39	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 15:39	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 15:39	LMW	P1C0125
Chloroform	**0.65 J**	**ug/L**	**1.0**	**0.089**	**1**	**8260B**	**3/7/11 15:39**	**LMW**	**P1C0125**
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 15:39	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 15:39	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 15:39	LMW	P1C0125
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/7/11 15:39	LMW	P1C0125
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 15:39	LMW	P1C0125
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/7/11 15:39	LMW	P1C0125
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 15:39	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*98 %*	*80-124*
Dibromofluoromethane	*99 %*	*75-129*
Toluene-d8	*94 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-12A
Prism Sample ID: 1030099-40
Prism Work Order: 1030099
Time Collected: 03/02/11 09:30
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 16:05	LMW	P1C0125
1,1-Dichloroethane	**0.53 J**	**ug/L**	**1.0**	**0.096**	**1**	**8260B**	**3/7/11 16:05**	**LMW**	**P1C0125**
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 16:05	LMW	P1C0125
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 16:05	LMW	P1C0125
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 16:05	LMW	P1C0125
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 16:05	LMW	P1C0125
Chloroform	**0.68 J**	**ug/L**	**1.0**	**0.089**	**1**	**8260B**	**3/7/11 16:05**	**LMW**	**P1C0125**
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/7/11 16:05	LMW	P1C0125
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 16:05	LMW	P1C0125
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 16:05	LMW	P1C0125
Tetrachloroethylene	**280**	**ug/L**	**10**	**0.69**	**10**	**8260B**	**3/7/11 16:32**	**LMW**	**P1C0125**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 16:05	LMW	P1C0125
Trichloroethylene	**3.2**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/7/11 16:05**	**LMW**	**P1C0125**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 16:05	LMW	P1C0125

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*96 %*	*80-124*
Dibromofluoromethane	*101 %*	*75-129*
Toluene-d8	*94 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-8A
Prism Sample ID: 1030099-41
Prism Work Order: 1030099
Time Collected: 03/02/11 07:58
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 19:09	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 19:09	LMW	P1C0132
1,1-Dichloroethylene	**0.94 J**	**ug/L**	**1.0**	**0.078**	**1**	**8260B**	**3/7/11 19:09**	**LMW**	**P1C0132**
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 19:09	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 19:09	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 19:09	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 19:09	LMW	P1C0132
cis-1,2-Dichloroethylene	**0.73 J**	**ug/L**	**1.0**	**0.076**	**1**	**8260B**	**3/7/11 19:09**	**LMW**	**P1C0132**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 19:09	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 19:09	LMW	P1C0132
Tetrachloroethylene	**4.1**	**ug/L**	**1.0**	**0.069**	**1**	**8260B**	**3/7/11 19:09**	**LMW**	**P1C0132**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 19:09	LMW	P1C0132
Trichloroethylene	**7.3**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/7/11 19:09**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 19:09	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*103 %*	*80-124*
Dibromofluoromethane	*96 %*	*75-129*
Toluene-d8	*99 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-32
Prism Sample ID: 1030099-42
Prism Work Order: 1030099
Time Collected: 03/02/11 09:30
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/7/11 23:58	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/7/11 23:58	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/7/11 23:58	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/7/11 23:58	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/7/11 23:58	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 23:58	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/7/11 23:58	LMW	P1C0132
cis-1,2-Dichloroethylene	**2.7**	**ug/L**	**1.0**	**0.076**	**1**	**8260B**	**3/7/11 23:58**	**LMW**	**P1C0132**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/7/11 23:58	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/7/11 23:58	LMW	P1C0132
Tetrachloroethylene	**1.6**	**ug/L**	**1.0**	**0.069**	**1**	**8260B**	**3/7/11 23:58**	**LMW**	**P1C0132**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/7/11 23:58	LMW	P1C0132
Trichloroethylene	**11**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/7/11 23:58**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/7/11 23:58	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*102 %*	*80-124*
Dibromofluoromethane	*101 %*	*75-129*
Toluene-d8	*100 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-31A
Prism Sample ID: 1030099-43
Prism Work Order: 1030099
Time Collected: 03/02/11 10:26
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/8/11 0:30	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/8/11 0:30	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/8/11 0:30	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/8/11 0:30	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/8/11 0:30	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 0:30	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/8/11 0:30	LMW	P1C0132
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/8/11 0:30	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/8/11 0:30	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/8/11 0:30	LMW	P1C0132
Tetrachloroethylene	**27**	**ug/L**	**1.0**	**0.069**	**1**	**8260B**	**3/8/11 0:30**	**LMW**	**P1C0132**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 0:30	LMW	P1C0132
Trichloroethylene	**7.9**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/8/11 0:30**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/8/11 0:30	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*101 %*	*80-124*
Dibromofluoromethane	*102 %*	*75-129*
Toluene-d8	*100 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-31B
Prism Sample ID: 1030099-44
Prism Work Order: 1030099
Time Collected: 03/02/11 10:15
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/8/11 1:02	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/8/11 1:02	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/8/11 1:02	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/8/11 1:02	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/8/11 1:02	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 1:02	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/8/11 1:02	LMW	P1C0132
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/8/11 1:02	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/8/11 1:02	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/8/11 1:02	LMW	P1C0132
Tetrachloroethylene	**7.7**	**ug/L**	**1.0**	**0.069**	**1**	**8260B**	**3/8/11 1:02**	**LMW**	**P1C0132**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 1:02	LMW	P1C0132
Trichloroethylene	**1.7 J**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/8/11 1:02**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/8/11 1:02	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*102 %*	*80-124*
Dibromofluoromethane	*102 %*	*75-129*
Toluene-d8	*101 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: TF-3
Prism Sample ID: 1030099-45
Prism Work Order: 1030099
Time Collected: 03/02/11 12:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**13 J**	**mg/L**	**20**	**0.78**	**10**	**8015C**	**3/9/11 11:14**	**JMV**	**P1C0157**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*0 %*		*50-144*	*DO*
General Chemistry Parameters									
Oil & Grease (HEM)	BRL	mg/L	5.0	1.2	1	*1664A	3/9/11 14:25	CDE	P1C0205
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/8/11 1:34	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/8/11 1:34	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/8/11 1:34	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/8/11 1:34	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/8/11 1:34	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 1:34	LMW	P1C0132
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	3/8/11 1:34	LMW	P1C0132
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/8/11 1:34	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/8/11 1:34	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/8/11 1:34	LMW	P1C0132
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	3/8/11 1:34	LMW	P1C0132
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 1:34	LMW	P1C0132
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	3/8/11 1:34	LMW	P1C0132
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/8/11 1:34	LMW	P1C0132
			Surrogate			Recovery		Control Limits	
			4-Bromofluorobenzene			*100 %*		*80-124*	
			Dibromofluoromethane			*102 %*		*75-129*	
			Toluene-d8			*101 %*		*77-123*	

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-29A
Prism Sample ID: 1030099-46
Prism Work Order: 1030099
Time Collected: 03/02/11 12:50
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/8/11 2:07	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/8/11 2:07	LMW	P1C0132
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	3/8/11 2:07	LMW	P1C0132
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/8/11 2:07	LMW	P1C0132
Acetone	BRL	ug/L	10	0.62	1	8260B	3/8/11 2:07	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 2:07	LMW	P1C0132
Chloroform	**0.53 J**	**ug/L**	**1.0**	**0.089**	**1**	**8260B**	**3/8/11 2:07**	**LMW**	**P1C0132**
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/8/11 2:07	LMW	P1C0132
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/8/11 2:07	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/8/11 2:07	LMW	P1C0132
Tetrachloroethylene	**33**	**ug/L**	**1.0**	**0.069**	**1**	**8260B**	**3/8/11 2:07**	**LMW**	**P1C0132**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 2:07	LMW	P1C0132
Trichloroethylene	**5.5**	**ug/L**	**2.0**	**0.054**	**1**	**8260B**	**3/8/11 2:07**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/8/11 2:07	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*101 %*	*80-124*
Dibromofluoromethane	*102 %*	*75-129*
Toluene-d8	*101 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-29
Prism Sample ID: 1030099-47
Prism Work Order: 1030099
Time Collected: 03/02/11 14:00
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	3/8/11 2:39	LMW	P1C0132
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/8/11 2:39	LMW	P1C0132
1,1-Dichloroethylene	**5.9**	**ug/L**	**1.0**	**0.078**	**1**	**8260B**	**3/8/11 2:39**	**LMW**	**P1C0132**
1,2-Dichloroethane	**1.4**	**ug/L**	**1.0**	**0.14**	**1**	**8260B**	**3/8/11 2:39**	**LMW**	**P1C0132**
Acetone	BRL	ug/L	10	0.62	1	8260B	3/8/11 2:39	LMW	P1C0132
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 2:39	LMW	P1C0132
Chloroform	**2.6**	**ug/L**	**1.0**	**0.089**	**1**	**8260B**	**3/8/11 2:39**	**LMW**	**P1C0132**
cis-1,2-Dichloroethylene	**3.9**	**ug/L**	**1.0**	**0.076**	**1**	**8260B**	**3/8/11 2:39**	**LMW**	**P1C0132**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/8/11 2:39	LMW	P1C0132
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/8/11 2:39	LMW	P1C0132
Tetrachloroethylene	**26**	**ug/L**	**1.0**	**0.069**	**1**	**8260B**	**3/8/11 2:39**	**LMW**	**P1C0132**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 2:39	LMW	P1C0132
Trichloroethylene	**320**	**ug/L**	**20**	**0.54**	**10**	**8260B**	**3/8/11 3:11**	**LMW**	**P1C0132**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/8/11 2:39	LMW	P1C0132

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*101 %*	*80-124*
Dibromofluoromethane	*99 %*	*75-129*
Toluene-d8	*100 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-18A
Prism Sample ID: 1030099-48
Prism Work Order: 1030099
Time Collected: 03/02/11 10:33
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	**7.6**	**ug/L**	**1.0**	**0.063**	**1**	**8260B**	**3/8/11 17:28**	**LMW**	**P1C0150**
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	3/8/11 17:28	LMW	P1C0150
1,1-Dichloroethylene	**2.2**	**ug/L**	**1.0**	**0.078**	**1**	**8260B**	**3/8/11 17:28**	**LMW**	**P1C0150**
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	3/8/11 17:28	LMW	P1C0150
Acetone	BRL	ug/L	10	0.62	1	8260B	3/8/11 17:28	LMW	P1C0150
Carbon Tetrachloride	**38**	**ug/L**	**2.0**	**0.12**	**1**	**8260B**	**3/8/11 17:28**	**LMW**	**P1C0150**
Chloroform	**13**	**ug/L**	**1.0**	**0.089**	**1**	**8260B**	**3/8/11 17:28**	**LMW**	**P1C0150**
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	3/8/11 17:28	LMW	P1C0150
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	3/8/11 17:28	LMW	P1C0150
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	3/8/11 17:28	LMW	P1C0150
Tetrachloroethylene	**160**	**ug/L**	**10**	**0.69**	**10**	**8260B**	**3/9/11 8:01**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	3/8/11 17:28	LMW	P1C0150
Trichloroethylene	**160**	**ug/L**	**20**	**0.54**	**10**	**8260B**	**3/9/11 8:01**	**LMW**	**P1C0150**
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	3/8/11 17:28	LMW	P1C0150

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*95 %*	*80-124*
Dibromofluoromethane	*113 %*	*75-129*
Toluene-d8	*94 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: MW-6A
Prism Sample ID: 1030099-49
Prism Work Order: 1030099
Time Collected: 03/02/11 13:57
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	40	2.5	40	8260B	3/8/11 17:54	LMW	P1C0150
1,1-Dichloroethane	BRL	ug/L	40	3.8	40	8260B	3/8/11 17:54	LMW	P1C0150
1,1-Dichloroethylene	BRL	ug/L	40	3.1	40	8260B	3/8/11 17:54	LMW	P1C0150
1,2-Dichloroethane	BRL	ug/L	40	5.6	40	8260B	3/8/11 17:54	LMW	P1C0150
Acetone	BRL	ug/L	400	25	40	8260B	3/8/11 17:54	LMW	P1C0150
Carbon Tetrachloride	BRL	ug/L	80	4.7	40	8260B	3/8/11 17:54	LMW	P1C0150
Chloroform	BRL	ug/L	40	3.5	40	8260B	3/8/11 17:54	LMW	P1C0150
cis-1,2-Dichloroethylene	BRL	ug/L	40	3.0	40	8260B	3/8/11 17:54	LMW	P1C0150
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	200	36	40	8260B	3/8/11 17:54	LMW	P1C0150
Methylene Chloride	BRL	ug/L	80	18	40	8260B	3/8/11 17:54	LMW	P1C0150
Tetrachloroethylene	**440**	**ug/L**	**40**	**2.8**	**40**	**8260B**	**3/8/11 17:54**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	80	4.6	40	8260B	3/8/11 17:54	LMW	P1C0150
Trichloroethylene	**1500**	**ug/L**	**80**	**2.2**	**40**	**8260B**	**3/8/11 17:54**	**LMW**	**P1C0150**
Vinyl chloride	BRL	ug/L	80	6.2	40	8260B	3/8/11 17:54	LMW	P1C0150

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*92 %*	*80-124*
Dibromofluoromethane	*103 %*	*75-129*
Toluene-d8	*92 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: C-5
Prism Sample ID: 1030099-50
Prism Work Order: 1030099
Time Collected: 03/02/11 15:04
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	20	1.3	20	8260B	3/8/11 18:21	LMW	P1C0150
1,1-Dichloroethane	BRL	ug/L	20	1.9	20	8260B	3/8/11 18:21	LMW	P1C0150
1,1-Dichloroethylene	BRL	ug/L	20	1.6	20	8260B	3/8/11 18:21	LMW	P1C0150
1,2-Dichloroethane	BRL	ug/L	20	2.8	20	8260B	3/8/11 18:21	LMW	P1C0150
Acetone	BRL	ug/L	200	12	20	8260B	3/8/11 18:21	LMW	P1C0150
Carbon Tetrachloride	BRL	ug/L	40	2.4	20	8260B	3/8/11 18:21	LMW	P1C0150
Chloroform	BRL	ug/L	20	1.8	20	8260B	3/8/11 18:21	LMW	P1C0150
cis-1,2-Dichloroethylene	**840**	**ug/L**	**20**	**1.5**	**20**	**8260B**	**3/8/11 18:21**	**LMW**	**P1C0150**
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	100	18	20	8260B	3/8/11 18:21	LMW	P1C0150
Methylene Chloride	BRL	ug/L	40	8.9	20	8260B	3/8/11 18:21	LMW	P1C0150
Tetrachloroethylene	**690**	**ug/L**	**20**	**1.4**	**20**	**8260B**	**3/8/11 18:21**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	40	2.3	20	8260B	3/8/11 18:21	LMW	P1C0150
Trichloroethylene	**280**	**ug/L**	**40**	**1.1**	**20**	**8260B**	**3/8/11 18:21**	**LMW**	**P1C0150**
Vinyl chloride	**15 J**	**ug/L**	**40**	**3.1**	**20**	**8260B**	**3/8/11 18:21**	**LMW**	**P1C0150**

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*94 %*	*80-124*
Dibromofluoromethane	*110 %*	*75-129*
Toluene-d8	*91 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

03/18/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem
(March Event GW & WW)

Sample Matrix: Water

Client Sample ID: C-2
Prism Sample ID: 1030099-51
Prism Work Order: 1030099
Time Collected: 03/02/11 15:45
Time Submitted: 03/03/11 14:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	ug/L	100	6.3	100	8260B	3/8/11 18:47	LMW	P1C0150
1,1-Dichloroethane	BRL	ug/L	100	9.6	100	8260B	3/8/11 18:47	LMW	P1C0150
1,1-Dichloroethylene	BRL	ug/L	100	7.8	100	8260B	3/8/11 18:47	LMW	P1C0150
1,2-Dichloroethane	BRL	ug/L	100	14	100	8260B	3/8/11 18:47	LMW	P1C0150
Acetone	BRL	ug/L	1000	62	100	8260B	3/8/11 18:47	LMW	P1C0150
Carbon Tetrachloride	BRL	ug/L	200	12	100	8260B	3/8/11 18:47	LMW	P1C0150
Chloroform	BRL	ug/L	100	8.9	100	8260B	3/8/11 18:47	LMW	P1C0150
cis-1,2-Dichloroethylene	BRL	ug/L	100	7.6	100	8260B	3/8/11 18:47	LMW	P1C0150
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	500	90	100	8260B	3/8/11 18:47	LMW	P1C0150
Methylene Chloride	BRL	ug/L	200	44	100	8260B	3/8/11 18:47	LMW	P1C0150
Tetrachloroethylene	**7100**	**ug/L**	**100**	**6.9**	**100**	**8260B**	**3/8/11 18:47**	**LMW**	**P1C0150**
trans-1,2-Dichloroethylene	BRL	ug/L	200	12	100	8260B	3/8/11 18:47	LMW	P1C0150
Trichloroethylene	BRL	ug/L	200	5.4	100	8260B	3/8/11 18:47	LMW	P1C0150
Vinyl chloride	BRL	ug/L	200	16	100	8260B	3/8/11 18:47	LMW	P1C0150

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*96 %*	*80-124*
Dibromofluoromethane	*110 %*	*75-129*
Toluene-d8	*92 %*	*77-123*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

ECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem (March Event GW & WW)

Prism Work Order: 1030099
Time Submitted: 3/3/11 2:20:00PM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0125 - 5030B										
Blank (P1C0125-BLK1)				Prepared & Analyzed: 03/07/11						
1,1,1-Trichloroethane	BRL	1.0	ug/L							
1,1-Dichloroethane	BRL	1.0	ug/L							
1,1-Dichloroethylene	BRL	1.0	ug/L							
1,2-Dichloroethane	BRL	1.0	ug/L							
Acetone	BRL	10	ug/L							
Carbon Tetrachloride	BRL	2.0	ug/L							
Chloroform	BRL	1.0	ug/L							
cis-1,2-Dichloroethylene	BRL	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	BRL	5.0	ug/L							
Methylene Chloride	BRL	2.0	ug/L							
Tetrachloroethylene	BRL	1.0	ug/L							
trans-1,2-Dichloroethylene	BRL	2.0	ug/L							
Trichloroethylene	BRL	2.0	ug/L							
Vinyl chloride	BRL	2.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*24.0*		*ug/L*	*25.0*		*96*	*80-124*			
Surrogate: Dibromofluoromethane	*25.0*		*ug/L*	*25.0*		*100*	*75-129*			
Surrogate: Toluene-d8	*23.4*		*ug/L*	*25.0*		*93*	*77-123*			
LCS (P1C0125-BS1)				Prepared & Analyzed: 03/07/11						
1,1,1-Trichloroethane	50.7	1.0	ug/L	50.0		101	75-136			
1,1-Dichloroethane	45.3	1.0	ug/L	50.0		91	78-130			
1,1-Dichloroethylene	50.8	1.0	ug/L	50.0		102	70-154			
1,2-Dichloroethane	51.8	1.0	ug/L	50.0		104	68-131			
Acetone	50.2	10	ug/L	50.0		100	40-166			
Carbon Tetrachloride	57.9	2.0	ug/L	50.0		116	72-142			
Chloroform	50.0	1.0	ug/L	50.0		100	77-130			
cis-1,2-Dichloroethylene	50.0	1.0	ug/L	50.0		100	76-141			
Methyl Ethyl Ketone (2-Butanone)	54.6	5.0	ug/L	50.0		109	71-134			
Methylene Chloride	47.5	2.0	ug/L	50.0		95	73-131			
Tetrachloroethylene	45.9	1.0	ug/L	50.0		92	80-129			
trans-1,2-Dichloroethylene	48.2	2.0	ug/L	50.0		96	76-135			
Trichloroethylene	47.6	2.0	ug/L	50.0		95	77-133			
Vinyl chloride	39.7	2.0	ug/L	50.0		79	57-141			
Surrogate: 4-Bromofluorobenzene	*26.5*		*ug/L*	*25.0*		*106*	*80-124*			
Surrogate: Dibromofluoromethane	*25.1*		*ug/L*	*25.0*		*100*	*75-129*			
Surrogate: Toluene-d8	*24.5*		*ug/L*	*25.0*		*98*	*77-123*			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem (March Event GW & WW)

Prism Work Order: 1030099
Time Submitted: 3/3/11 2:20:00PM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0125 - 5030B										
LCS Dup (P1C0125-BSD1)				Prepared & Analyzed: 03/07/11						
1,1,1-Trichloroethane	54.7	1.0	ug/L	50.0		109	75-136	8		
1,1-Dichloroethane	47.3	1.0	ug/L	50.0		95	78-130	4		
1,1-Dichloroethylene	55.3	1.0	ug/L	50.0		111	70-154	8		
1,2-Dichloroethane	54.5	1.0	ug/L	50.0		109	68-131	5		
Acetone	45.8	10	ug/L	50.0		92	40-166	9		
Carbon Tetrachloride	64.0	2.0	ug/L	50.0		128	72-142	10		
Chloroform	53.0	1.0	ug/L	50.0		106	77-130	6		
cis-1,2-Dichloroethylene	52.9	1.0	ug/L	50.0		106	76-141	6		
Methyl Ethyl Ketone (2-Butanone)	52.5	5.0	ug/L	50.0		105	71-134	4		
Methylene Chloride	51.1	2.0	ug/L	50.0		102	73-131	7		
Tetrachloroethylene	50.5	1.0	ug/L	50.0		101	80-129	9		
trans-1,2-Dichloroethylene	51.8	2.0	ug/L	50.0		104	76-135	7		
Trichloroethylene	50.4	2.0	ug/L	50.0		101	77-133	6		
Vinyl chloride	43.3	2.0	ug/L	50.0		87	57-141	9		
Surrogate: 4-Bromofluorobenzene	*27.0*		*ug/L*	*25.0*		*108*	*80-124*			
Surrogate: Dibromofluoromethane	*25.9*		*ug/L*	*25.0*		*104*	*75-129*			
Surrogate: Toluene-d8	*26.0*		*ug/L*	*25.0*		*104*	*77-123*			
Matrix Spike (P1C0125-MS1)		**Source: 1030099-25**		Prepared & Analyzed: 03/07/11						
1,1,1-Trichloroethane	445	10	ug/L	500	BRL	89	67-145		18	
1,1-Dichloroethane	437	10	ug/L	500	BRL	87	75-134		18	
1,1-Dichloroethylene	456	10	ug/L	500	BRL	91	65-162		20	
1,2-Dichloroethane	507	10	ug/L	500	BRL	101	69-129		17	
Acetone	220	100	ug/L	500	BRL	44	40-162		23	
Carbon Tetrachloride	497	20	ug/L	500	BRL	99	66-149		23	
Chloroform	469	10	ug/L	500	BRL	94	74-136		19	
cis-1,2-Dichloroethylene	475	10	ug/L	500	BRL	95	74-144		17	
Methyl Ethyl Ketone (2-Butanone)	304	50	ug/L	500	BRL	61	65-137		23	M
Methylene Chloride	485	20	ug/L	500	BRL	97	71-134		17	
Tetrachloroethylene	413	10	ug/L	500	BRL	83	76-130		20	
trans-1,2-Dichloroethylene	452	20	ug/L	500	BRL	90	73-141		18	
Trichloroethylene	427	20	ug/L	500	BRL	85	72-133		17	
Vinyl chloride	337	20	ug/L	500	BRL	67	54-146		25	
Surrogate: 4-Bromofluorobenzene	*26.3*		*ug/L*	*25.0*		*105*	*80-124*			
Surrogate: Dibromofluoromethane	*25.5*		*ug/L*	*25.0*		*102*	*75-129*			
Surrogate: Toluene-d8	*25.0*		*ug/L*	*25.0*		*100*	*77-123*			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

ECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem (March Event GW & WW)

Prism Work Order: 1030099
Time Submitted: 3/3/11 2:20:00PM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0125 - 5030B										
Matrix Spike Dup (P1C0125-MSD1)	**Source: 1030099-25**			Prepared & Analyzed: 03/07/11						
1,1,1-Trichloroethane	469	10	ug/L	500	BRL	94	67-145	5	18	
1,1-Dichloroethane	449	10	ug/L	500	BRL	90	75-134	3	18	
1,1-Dichloroethylene	481	10	ug/L	500	BRL	96	65-162	5	20	
1,2-Dichloroethane	514	10	ug/L	500	BRL	103	69-129	1	17	
Acetone	224	100	ug/L	500	BRL	45	40-162	2	23	
Carbon Tetrachloride	522	20	ug/L	500	BRL	104	66-149	5	23	
Chloroform	479	10	ug/L	500	BRL	96	74-136	2	19	
cis-1,2-Dichloroethylene	489	10	ug/L	500	BRL	98	74-144	3	17	
Methyl Ethyl Ketone (2-Butanone)	308	50	ug/L	500	BRL	62	65-137	1	23	M
Methylene Chloride	491	20	ug/L	500	BRL	98	71-134	1	17	
Tetrachloroethylene	432	10	ug/L	500	BRL	86	76-130	4	20	
trans-1,2-Dichloroethylene	473	20	ug/L	500	BRL	95	73-141	5	18	
Trichloroethylene	448	20	ug/L	500	BRL	90	72-133	5	17	
Vinyl chloride	357	20	ug/L	500	BRL	71	54-146	6	25	
Surrogate: 4-Bromofluorobenzene	*26.2*		*ug/L*	*25.0*		*105*	*80-124*			
Surrogate: Dibromofluoromethane	*25.3*		*ug/L*	*25.0*		*101*	*75-129*			
Surrogate: Toluene-d8	*25.3*		*ug/L*	*25.0*		*101*	*77-123*			
Batch P1C0132 - 5030B										
Blank (P1C0132-BLK1)				Prepared & Analyzed: 03/07/11						
1,1,1-Trichloroethane	BRL	1.0	ug/L							
1,1-Dichloroethane	BRL	1.0	ug/L							
1,1-Dichloroethylene	BRL	1.0	ug/L							
1,2-Dichloroethane	BRL	1.0	ug/L							
Acetone	BRL	10	ug/L							
Carbon Tetrachloride	BRL	2.0	ug/L							
Chloroform	BRL	1.0	ug/L							
cis-1,2-Dichloroethylene	BRL	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	BRL	5.0	ug/L							
Methylene Chloride	BRL	2.0	ug/L							
Tetrachloroethylene	BRL	1.0	ug/L							
trans-1,2-Dichloroethylene	BRL	2.0	ug/L							
Trichloroethylene	BRL	2.0	ug/L							
Vinyl chloride	BRL	2.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*25.3*		*ug/L*	*25.0*		*101*	*80-124*			
Surrogate: Dibromofluoromethane	*23.9*		*ug/L*	*25.0*		*96*	*75-129*			
Surrogate: Toluene-d8	*24.9*		*ug/L*	*25.0*		*100*	*77-123*			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem (March Event GW & WW)

Prism Work Order: 1030099
Time Submitted: 3/3/11 2:20:00PM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0132 - 5030B										
LCS (P1C0132-BS1)				Prepared & Analyzed: 03/07/11						
1,1,1-Trichloroethane	49.3	1.0	ug/L	50.0		99	75-136			
1,1-Dichloroethane	47.6	1.0	ug/L	50.0		95	78-130			
1,1-Dichloroethylene	57.8	1.0	ug/L	50.0		116	70-154			
1,2-Dichloroethane	51.6	1.0	ug/L	50.0		103	68-131			
Acetone	55.0	10	ug/L	50.0		110	40-166			
Carbon Tetrachloride	56.6	2.0	ug/L	50.0		113	72-142			
Chloroform	49.2	1.0	ug/L	50.0		98	77-130			
cis-1,2-Dichloroethylene	51.4	1.0	ug/L	50.0		103	76-141			
Methyl Ethyl Ketone (2-Butanone)	52.5	5.0	ug/L	50.0		105	71-134			
Methylene Chloride	48.8	2.0	ug/L	50.0		98	73-131			
Tetrachloroethylene	53.4	1.0	ug/L	50.0		107	80-129			
trans-1,2-Dichloroethylene	51.8	2.0	ug/L	50.0		104	76-135			
Trichloroethylene	53.9	2.0	ug/L	50.0		108	77-133			
Vinyl chloride	45.9	2.0	ug/L	50.0		92	57-141			
Surrogate: 4-Bromofluorobenzene	*25.0*		*ug/L*	*25.0*		*100*	*80-124*			
Surrogate: Dibromofluoromethane	*23.4*		*ug/L*	*25.0*		*94*	*75-129*			
Surrogate: Toluene-d8	*24.7*		*ug/L*	*25.0*		*99*	*77-123*			
LCS Dup (P1C0132-BSD1)				Prepared & Analyzed: 03/07/11						
1,1,1-Trichloroethane	47.2	1.0	ug/L	50.0		94	75-136	4		
1,1-Dichloroethane	46.0	1.0	ug/L	50.0		92	78-130	3		
1,1-Dichloroethylene	56.2	1.0	ug/L	50.0		112	70-154	3		
1,2-Dichloroethane	49.5	1.0	ug/L	50.0		99	68-131	4		
Acetone	44.0	10	ug/L	50.0		88	40-166	22		
Carbon Tetrachloride	53.4	2.0	ug/L	50.0		107	72-142	6		
Chloroform	47.4	1.0	ug/L	50.0		95	77-130	4		
cis-1,2-Dichloroethylene	49.6	1.0	ug/L	50.0		99	76-141	4		
Methyl Ethyl Ketone (2-Butanone)	43.1	5.0	ug/L	50.0		86	71-134	20		
Methylene Chloride	48.2	2.0	ug/L	50.0		96	73-131	1		
Tetrachloroethylene	51.7	1.0	ug/L	50.0		103	80-129	3		
trans-1,2-Dichloroethylene	50.7	2.0	ug/L	50.0		101	76-135	2		
Trichloroethylene	52.3	2.0	ug/L	50.0		105	77-133	3		
Vinyl chloride	44.0	2.0	ug/L	50.0		88	57-141	4		
Surrogate: 4-Bromofluorobenzene	*25.2*		*ug/L*	*25.0*		*101*	*80-124*			
Surrogate: Dibromofluoromethane	*23.2*		*ug/L*	*25.0*		*93*	*75-129*			
Surrogate: Toluene-d8	*24.7*		*ug/L*	*25.0*		*99*	*77-123*			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

ECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem (March Event GW & WW)

Prism Work Order: 1030099
Time Submitted: 3/3/11 2:20:00PM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0132 - 5030B										
Matrix Spike (P1C0132-MS1)	**Source: 1030099-10**			Prepared & Analyzed: 03/07/11						
1,1,1-Trichloroethane	433	10	ug/L	500	BRL	87	67-145		18	
1,1-Dichloroethane	436	10	ug/L	500	BRL	87	75-134		18	
1,1-Dichloroethylene	502	10	ug/L	500	BRL	100	65-162		20	
1,2-Dichloroethane	483	10	ug/L	500	BRL	97	69-129		17	
Acetone	208	100	ug/L	500	BRL	42	40-162		23	
Carbon Tetrachloride	489	20	ug/L	500	BRL	98	66-149		23	
Chloroform	456	10	ug/L	500	0.550	91	74-136		19	
cis-1,2-Dichloroethylene	480	10	ug/L	500	BRL	96	74-144		17	
Methyl Ethyl Ketone (2-Butanone)	330	50	ug/L	500	BRL	66	65-137		23	
Methylene Chloride	460	20	ug/L	500	BRL	92	71-134		17	
Tetrachloroethylene	468	10	ug/L	500	BRL	94	76-130		20	
trans-1,2-Dichloroethylene	467	20	ug/L	500	BRL	93	73-141		18	
Trichloroethylene	477	20	ug/L	500	BRL	95	72-133		17	
Vinyl chloride	389	20	ug/L	500	BRL	78	54-146		25	
Surrogate: 4-Bromofluorobenzene	*25.4*		*ug/L*	*25.0*		*101*	*80-124*			
Surrogate: Dibromofluoromethane	*23.7*		*ug/L*	*25.0*		*95*	*75-129*			
Surrogate: Toluene-d8	*24.7*		*ug/L*	*25.0*		*99*	*77-123*			
Matrix Spike Dup (P1C0132-MSD1)	**Source: 1030099-10**			Prepared & Analyzed: 03/07/11						
1,1,1-Trichloroethane	448	10	ug/L	500	BRL	90	67-145	3	18	
1,1-Dichloroethane	445	10	ug/L	500	BRL	89	75-134	2	18	
1,1-Dichloroethylene	524	10	ug/L	500	BRL	105	65-162	4	20	
1,2-Dichloroethane	492	10	ug/L	500	BRL	98	69-129	2	17	
Acetone	211	100	ug/L	500	BRL	42	40-162	1	23	
Carbon Tetrachloride	498	20	ug/L	500	BRL	100	66-149	2	23	
Chloroform	466	10	ug/L	500	0.550	93	74-136	2	19	
cis-1,2-Dichloroethylene	482	10	ug/L	500	BRL	96	74-144	0.6	17	
Methyl Ethyl Ketone (2-Butanone)	353	50	ug/L	500	BRL	71	65-137	7	23	
Methylene Chloride	472	20	ug/L	500	BRL	94	71-134	3	17	
Tetrachloroethylene	489	10	ug/L	500	BRL	98	76-130	4	20	
trans-1,2-Dichloroethylene	484	20	ug/L	500	BRL	97	73-141	4	18	
Trichloroethylene	498	20	ug/L	500	BRL	100	72-133	4	17	
Vinyl chloride	411	20	ug/L	500	BRL	82	54-146	5	25	
Surrogate: 4-Bromofluorobenzene	*25.1*		*ug/L*	*25.0*		*100*	*80-124*			
Surrogate: Dibromofluoromethane	*23.3*		*ug/L*	*25.0*		*93*	*75-129*			
Surrogate: Toluene-d8	*24.6*		*ug/L*	*25.0*		*99*	*77-123*			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem (March Event GW & WW)

Prism Work Order: 1030099
Time Submitted: 3/3/11 2:20:00PM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0150 - 5030B										
Blank (P1C0150-BLK1)				Prepared & Analyzed: 03/08/11						
1,1,1-Trichloroethane	BRL	1.0	ug/L							
1,1-Dichloroethane	BRL	1.0	ug/L							
1,1-Dichloroethylene	BRL	1.0	ug/L							
1,2-Dichloroethane	BRL	1.0	ug/L							
Acetone	BRL	10	ug/L							
Carbon Tetrachloride	BRL	2.0	ug/L							
Chloroform	BRL	1.0	ug/L							
cis-1,2-Dichloroethylene	BRL	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	BRL	5.0	ug/L							
Methylene Chloride	BRL	2.0	ug/L							
Tetrachloroethylene	BRL	1.0	ug/L							
trans-1,2-Dichloroethylene	BRL	2.0	ug/L							
Trichloroethylene	BRL	2.0	ug/L							
Vinyl chloride	BRL	2.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*23.9*		*ug/L*	*25.0*		*96*	*80-124*			
Surrogate: Dibromofluoromethane	*26.1*		*ug/L*	*25.0*		*104*	*75-129*			
Surrogate: Toluene-d8	*23.4*		*ug/L*	*25.0*		*94*	*77-123*			
LCS (P1C0150-BS1)				Prepared & Analyzed: 03/08/11						
1,1,1-Trichloroethane	51.9	1.0	ug/L	50.0		104	75-136			
1,1-Dichloroethane	49.5	1.0	ug/L	50.0		99	78-130			
1,1-Dichloroethylene	57.4	1.0	ug/L	50.0		115	70-154			
1,2-Dichloroethane	53.5	1.0	ug/L	50.0		107	68-131			
Acetone	49.2	10	ug/L	50.0		98	40-166			
Carbon Tetrachloride	59.3	2.0	ug/L	50.0		119	72-142			
Chloroform	52.0	1.0	ug/L	50.0		104	77-130			
cis-1,2-Dichloroethylene	52.2	1.0	ug/L	50.0		104	76-141			
Methyl Ethyl Ketone (2-Butanone)	50.9	5.0	ug/L	50.0		102	71-134			
Methylene Chloride	53.6	2.0	ug/L	50.0		107	73-131			
Tetrachloroethylene	47.5	1.0	ug/L	50.0		95	80-129			
trans-1,2-Dichloroethylene	53.3	2.0	ug/L	50.0		107	76-135			
Trichloroethylene	48.7	2.0	ug/L	50.0		97	77-133			
Vinyl chloride	49.0	2.0	ug/L	50.0		98	57-141			
Surrogate: 4-Bromofluorobenzene	*26.4*		*ug/L*	*25.0*		*106*	*80-124*			
Surrogate: Dibromofluoromethane	*26.0*		*ug/L*	*25.0*		*104*	*75-129*			
Surrogate: Toluene-d8	*25.3*		*ug/L*	*25.0*		*101*	*77-123*			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

ECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem (March Event GW & WW)

Prism Work Order: 1030099
Time Submitted: 3/3/11 2:20:00PM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0150 - 5030B										
LCS Dup (P1C0150-BSD1)				Prepared & Analyzed: 03/08/11						
1,1,1-Trichloroethane	55.2	1.0	ug/L	50.0		110	75-136	6		
1,1-Dichloroethane	50.8	1.0	ug/L	50.0		102	78-130	3		
1,1-Dichloroethylene	60.6	1.0	ug/L	50.0		121	70-154	5		
1,2-Dichloroethane	55.3	1.0	ug/L	50.0		111	68-131	3		
Acetone	44.9	10	ug/L	50.0		90	40-166	9		
Carbon Tetrachloride	63.4	2.0	ug/L	50.0		127	72-142	7		
Chloroform	52.8	1.0	ug/L	50.0		106	77-130	2		
cis-1,2-Dichloroethylene	54.2	1.0	ug/L	50.0		108	76-141	4		
Methyl Ethyl Ketone (2-Butanone)	47.2	5.0	ug/L	50.0		94	71-134	8		
Methylene Chloride	54.8	2.0	ug/L	50.0		110	73-131	2		
Tetrachloroethylene	49.3	1.0	ug/L	50.0		99	80-129	4		
trans-1,2-Dichloroethylene	55.8	2.0	ug/L	50.0		112	76-135	5		
Trichloroethylene	50.9	2.0	ug/L	50.0		102	77-133	4		
Vinyl chloride	52.3	2.0	ug/L	50.0		105	57-141	7		
Surrogate: 4-Bromofluorobenzene	*26.2*		*ug/L*	*25.0*		*105*	*80-124*			
Surrogate: Dibromofluoromethane	*25.7*		*ug/L*	*25.0*		*103*	*75-129*			
Surrogate: Toluene-d8	*25.3*		*ug/L*	*25.0*		*101*	*77-123*			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem (March Event GW & WW)

Prism Work Order: 1030099
Time Submitted: 3/3/11 2:20:00PM

Diesel Range Organics by GC/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0157 - 3510C GC										
Blank (P1C0157-BLK1)				Prepared & Analyzed: 03/08/11						
Diesel Range Organics	BRL	2.0	mg/L							
Surrogate: o-Terphenyl	*0.0326*		*mg/L*	*0.0400*		*82*	*50-144*			
LCS (P1C0157-BS1)				Prepared & Analyzed: 03/08/11						
Diesel Range Organics	1.63	2.0	mg/L	2.00		82	53-135			J
Surrogate: o-Terphenyl	*0.0298*		*mg/L*	*0.0400*		*75*	*50-144*			
LCS Dup (P1C0157-BSD1)				Prepared & Analyzed: 03/08/11						
Diesel Range Organics	1.71	2.0	mg/L	2.00		86	53-135	5	200	J
Surrogate: o-Terphenyl	*0.0316*		*mg/L*	*0.0400*		*79*	*50-144*			
Matrix Spike (P1C0157-MS1)		**Source: 1030099-13**		Prepared: 03/08/11 Analyzed: 03/09/11						
Diesel Range Organics	81.8	200	mg/L	4.00	81.6	5	51-145			MI, J
Surrogate: o-Terphenyl	*0.00*		*mg/L*	*0.0800*			*50-144*			*DO*
Matrix Spike Dup (P1C0157-MSD1)		**Source: 1030099-13**		Prepared: 03/08/11 Analyzed: 03/09/11						
Diesel Range Organics	98.3	200	mg/L	4.00	81.6	417	51-145	18	22	MI, J
Surrogate: o-Terphenyl	*0.00*		*mg/L*	*0.0800*			*50-144*			*DO*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

ECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent-Winston Salem (March Event GW & WW)

Prism Work Order: 1030099
Time Submitted: 3/3/11 2:20:00PM

General Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0205 - NO PREP										
Blank (P1C0205-BLK1)				Prepared & Analyzed: 03/09/11						
Oil & Grease (HEM)	BRL	5.0	mg/L							
LCS (P1C0205-BS1)				Prepared & Analyzed: 03/09/11						
Oil & Grease (HEM)	37.5	5.0	mg/L	40.0		94	78-114			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

Sample Extraction Data

Prep Method: 3510C GC

Lab Number	Batch	Initial	Final	Date
1030099-13	P1C0157	1000 mL	2 mL	03/08/11
1030099-14	P1C0157	1000 mL	2 mL	03/08/11
1030099-28	P1C0157	1000 mL	2 mL	03/08/11
1030099-29	P1C0157	1000 mL	2 mL	03/08/11
1030099-45	P1C0157	1000 mL	2 mL	03/08/11

NO PREP

Lab Number	Batch	Initial	Final	Date
1030099-13	P1C0205	900 mL	900 mL	03/09/11
1030099-14	P1C0205	825 mL	825 mL	03/09/11
1030099-28	P1C0205	850 mL	850 mL	03/09/11
1030099-29	P1C0205	900 mL	900 mL	03/09/11
1030099-45	P1C0205	825 mL	825 mL	03/09/11

Prep Method: 5030B

Lab Number	Batch	Initial	Final	Date
1030099-01	P1C0132	10 mL	10 mL	03/07/11
1030099-02	P1C0150	10 mL	10 mL	03/08/11
1030099-03	P1C0150	10 mL	10 mL	03/08/11
1030099-03	P1C0150	10 mL	10 mL	03/08/11
1030099-04	P1C0150	10 mL	10 mL	03/08/11
1030099-04	P1C0150	10 mL	10 mL	03/08/11
1030099-05	P1C0150	10 mL	10 mL	03/08/11
1030099-05	P1C0150	10 mL	10 mL	03/08/11
1030099-06	P1C0150	10 mL	10 mL	03/08/11
1030099-06	P1C0150	10 mL	10 mL	03/08/11
1030099-07	P1C0132	10 mL	10 mL	03/07/11
1030099-08	P1C0132	10 mL	10 mL	03/07/11
1030099-09	P1C0132	10 mL	10 mL	03/07/11
1030099-09	P1C0132	10 mL	10 mL	03/07/11
1030099-10	P1C0132	10 mL	10 mL	03/07/11
1030099-11	P1C0132	10 mL	10 mL	03/07/11
1030099-12	P1C0132	10 mL	10 mL	03/07/11
1030099-13	P1C0132	10 mL	10 mL	03/07/11
1030099-14	P1C0132	10 mL	10 mL	03/07/11
1030099-15	P1C0132	10 mL	10 mL	03/07/11
1030099-15	P1C0132	10 mL	10 mL	03/07/11
1030099-16	P1C0132	10 mL	10 mL	03/07/11
1030099-17	P1C0132	10 mL	10 mL	03/07/11
1030099-17	P1C0132	10 mL	10 mL	03/07/11
1030099-18	P1C0150	10 mL	10 mL	03/08/11
1030099-19	P1C0125	10 mL	10 mL	03/07/11
1030099-20	P1C0125	10 mL	10 mL	03/07/11
1030099-21	P1C0125	10 mL	10 mL	03/07/11
1030099-21	P1C0125	10 mL	10 mL	03/07/11
1030099-22	P1C0125	10 mL	10 mL	03/07/11
1030099-23	P1C0125	10 mL	10 mL	03/07/11
1030099-23	P1C0125	10 mL	10 mL	03/07/11
1030099-24	P1C0150	10 mL	10 mL	03/08/11
1030099-24	P1C0150	10 mL	10 mL	03/08/11
1030099-25	P1C0125	10 mL	10 mL	03/07/11
1030099-26	P1C0125	10 mL	10 mL	03/07/11
1030099-27	P1C0125	10 mL	10 mL	03/07/11
1030099-28	P1C0125	10 mL	10 mL	03/07/11
1030099-28	P1C0125	10 mL	10 mL	03/07/11

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Sample Extraction Data

Prep Method: 5030B

Lab Number	Batch	Initial	Final	Date
1030099-29	P1C0125	10 mL	10 mL	03/07/11
1030099-29	P1C0125	10 mL	10 mL	03/07/11
1030099-30	P1C0125	10 mL	10 mL	03/07/11
1030099-31	P1C0125	10 mL	10 mL	03/07/11
1030099-32	P1C0125	10 mL	10 mL	03/07/11
1030099-33	P1C0125	10 mL	10 mL	03/07/11
1030099-34	P1C0125	10 mL	10 mL	03/07/11
1030099-35	P1C0125	10 mL	10 mL	03/07/11
1030099-36	P1C0125	10 mL	10 mL	03/07/11
1030099-37	P1C0125	10 mL	10 mL	03/07/11
1030099-38	P1C0150	10 mL	10 mL	03/08/11
1030099-39	P1C0125	10 mL	10 mL	03/07/11
1030099-40	P1C0125	10 mL	10 mL	03/07/11
1030099-40	P1C0125	10 mL	10 mL	03/07/11
1030099-41	P1C0132	10 mL	10 mL	03/07/11
1030099-42	P1C0132	10 mL	10 mL	03/07/11
1030099-43	P1C0132	10 mL	10 mL	03/07/11
1030099-44	P1C0132	10 mL	10 mL	03/07/11
1030099-45	P1C0132	10 mL	10 mL	03/07/11
1030099-46	P1C0132	10 mL	10 mL	03/07/11
1030099-47	P1C0132	10 mL	10 mL	03/07/11
1030099-47	P1C0132	10 mL	10 mL	03/07/11
1030099-48	P1C0150	10 mL	10 mL	03/08/11
1030099-48	P1C0150	10 mL	10 mL	03/08/11
1030099-49	P1C0150	10 mL	10 mL	03/08/11
1030099-50	P1C0150	10 mL	10 mL	03/08/11
1030099-51	P1C0150	10 mL	10 mL	03/08/11

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 1 OF 4 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: Alcatel / Lucent
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: Erin Stewart
Address: Same

Client Company Name: Aecom
Report To/Contact Name: 8540 Erin Stewart
Reporting Address: 8540 Colonnade Ctr. Dr. Raleigh, NC 27615
Phone: 919-872-6600 Fax (Yes) (No)
Email (Yes) (No) Email Address estewart2@aecom.com
EDD Type: PDF ✓ Excel ___ Other ___
Site Location Name: Alcatel / Lucent
Site Location Physical Address: Winston Salem, NC

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	X		
Received ON WET ICE? Temp 5.0	X		
PROPER PRESERVATIVES indicated?	X		
Received WITHIN HOLDING TIMES?	X		
CUSTODY SEALS INTACT?			X
VOLATILES rec'd W/OUT HEADSPACE?	X		
PROPER CONTAINERS used?	X		

Purchase Order No./Billing Reference _____
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ___ USACE ___ FL ___ NC X
SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO X
Sample Iced Upon Collection: YES X NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260						REMARKS	PRISM LAB ID NO.
TRIPBLANK01	3/1/11	—	DI	VOA	2	40 ml	HCL	X							01
DUP-01		—	GW		3										02
DUP-02		—													03
DUP-03		—													04
DUP-04		—													05
DUP-05		—													06
BAILER BLANK01		1210													07
BAILER BLANK02		1300													08
MW-2A		1250													09
EW-4		1330													10

Sampler's Signature: Austin Hill, Jeff Leaver Sampled By (Print Name): Austin Hill, Jeff Leaver Affiliation: EFM

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Austin Hill	Alex Lassiter	3/10/11	1115
Alex Lassiter		3/3/11	1240
3/3/11 1420	Received For Prism Laboratories By:	3/3/11	14:20

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other _____
COC Group No. 1030099

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 2 OF 6 QUOTE # TO ENSURE PROPER BILLING: _____

Client Company Name: Aecom
Report To/Contact Name: Erin Stewart
Reporting Address: 8540 Colonnade Ctr. Dr. Raleigh, NC 27615
Phone: 919-872-6600 Fax (Yes) (No)
Email (Yes) (No) Email Address Estewart@aecom.com
EDD Type: PDF ✓ Excel Other
Site Location Name: Alcatel/Lucent
Site Location Physical Address: Winston-Salem NC

Project Name: Alcatel/Lucent
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: Erin Stewart
Address: Same

Purchase Order No./Billing Reference _____
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	X		
Received ON WET ICE? Temp 5.0	X		
PROPER PRESERVATIVES indicated?	X		
Received WITHIN HOLDING TIMES?	X		
CUSTODY SEALS INTACT?			X
VOLATILES rec'd W/OUT HEADSPACE?	X		
PROPER CONTAINERS used?	X		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ____ USACE ____ FL ____ NC ____ SC ____ OTHER ____ N/A ____
Water Chlorinated: YES ___ NO ___
Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	8260	8260	DRO				REMARKS	PRISM LAB ID NO.
EW-12	3/1/11	1350	WT	VOA	3	40ml	HCl	X							11
EW-14		1410													12
TF-2		1430		VOA, CG, AG	3,2,2,	40ml,l,l	HCl, HCl, None		X	X					13
DT-1		1450													14
EW-6		1510		VOA	3	40ml	HCl								15
EW-21		1526													16
EW-5		1540													17
EW-22		1554													18
EW-16		1608													19
EW-19		1620													20

Sampler's Signature [signature] Sampled By (Print Name) Aaron Hill, Jeff Leaver Affiliation EFM

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature]	[signature]	3/3/11	1115
[signature]	[signature]	3/3/11	1240
[signature] 3/3/11 1420	[signature]	3/3/11	14:20

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other _____
COC Group No. 1030099

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC
☐ ____	☐ ____	☐ ____	☐ ____	☐ ____	☐ ____	☐ ____	☐ ____	☐ ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 3 OF 6 QUOTE # TO ENSURE PROPER BILLING: _____

Client Company Name: Accom
Report To/Contact Name: Erin Stewart
Reporting Address: 8540 Colonade Ctr. Dr. Raleigh, NC
Phone: 919-872-6600 Fax (Yes) (No):
Email (Yes) (No) Email Address: estewart@accom.com
EDD Type: PDF ✓ Excel ___ Other ___
Site Location Name: Alcatel / Lucent
Site Location Physical Address: Winston-Salem, NC

Project Name: Alcatel / Lucent
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: Erin Stewart
Address: Same

Purchase Order No./Billing Reference _____
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	X		
Received ON WET ICE? Temp 5.0	X		
PROPER PRESERVATIVES indicated?	X		
Received WITHIN HOLDING TIMES?	X		
CUSTODY SEALS INTACT?			X
VOLATILES rec'd W/OUT HEADSPACE?	X		
PROPER CONTAINERS used?	X		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ___ USACE ___ FL ___ NC ___ SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO ___
Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	8260	O&G	DRO				REMARKS	PRISM LAB ID NO.
EW-18	3/1/11	1630	WT	Voa	3	40ml	HCl	X							21
EW-17	↓	1648	↓	↓	↓	↓	↓	↓							22
EW-15		1700													23
VOC-1		1714													24
MW-10A		1530													25
MW-27A		1445													26
MW-28A		1405		↓	↓	↓	↓								27
Comp. SYS. TPH		1820		Voa, CG, AG	3, 2, 2	40ml, 1, 1	HCl, HCl, None		X	X					28
Comp. SYS. A		1744		↓	↓	↓	HCl		↓	↓					29
Comp. SYS B	↓	1800	↓	Voa	3	40ml	↓	↓							30

Sampler's Signature: Ann Hill, Jeff Leaver
Sampled By (Print Name): Ann Hill, Jeff Leaver
Affiliation: EFM

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Ann Hill	Alex Lass. Jr	3/3/11	1115
Relinquished By: (Signature) Alex Lass, Jr	Received By: (Signature)	Date 3/3/11	1240
Relinquished By: (Signature) 3/3/11 1420	Received For Prism Laboratories By:	Date 3/3/11	14:20

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed-Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other _____

COC Group No. 1070099

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC
☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 4 OF 6 QUOTE # TO ENSURE PROPER BILLING: _____

Client Company Name: Aecom
Report To/Contact Name: Erin Stewart
Reporting Address: 8540 Colonnade Ctr Dr. Raleigh, NC
Phone: 919-872-6600 Fax (Yes) (No)
Email (Yes) (No) Email Address: Estewart@aecom.com
EDD Type: PDF ✓ Excel ___ Other ___
Site Location Name: Alcatel / Lucent
Site Location Physical Address: Winston-Salem, NC

Project Name: Alcatel/Lucent
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: Erin Stewart
Address: Same

Purchase Order No./Billing Reference _____
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	X		
Received ON WET ICE? Temp 5.0	X		
PROPER PRESERVATIVES indicated?	X		
Received WITHIN HOLDING TIMES?	X		
CUSTODY SEALS INTACT?			X
VOLATILES rec'd W/OUT HEADSPACE?	X		
PROPER CONTAINERS used?	X		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ___ USACE ___ FL ___ NC ___ SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO ___
Sample Iced Upon Collection: YES ___ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260						REMARKS	PRISM LAB ID NO.
~~MW-20A~~	3/1/11	Alt													
MW-26A	3/1/11	1840	WT	VOA	3	40ml	HCL	X							31
C-7	3/1/11	1900	↓	↓	↓	↓	↓	↓							32
MW-29B	↓	1623													33
MW-30B	↓	1725													34

Sampler's Signature: [signature] Sampled By (Print Name): Aaron Hill / Jeff Leaver Affiliation: EFM

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature]	[signature]	3/8/11	
Relinquished By: (Signature) [signature]	Received By: (Signature) [signature]	3/3/11	1240
Relinquished By: (Signature) [signature] 3/3/11 1420	Received For Prism Laboratories By: [signature]	3/3/11	14:20

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ FedEx ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other ___

COC Group No. 1030099

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC
☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 5 OF 6 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: Alcatel / Lucent
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: Erin Stewart
Address: Same

Client Company Name: Aecom
Report To/Contact Name: Erin Stewart
Reporting Address: 8540 Colonnade Ctr Dr. Raleigh, NC 27615
Phone: 872-6600 (919) Fax (Yes) (No)
Email (Yes) (No) Email Address: Estewart@aecom.com
EDD Type: PDF X Excel ___ Other ___
Site Location Name: Alcatel / Lucent
Site Location Physical Address: Winston-Salem, NC

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	X		
Received ON WET ICE? Temp 5.0	X		
PROPER PRESERVATIVES indicated?	X		
Received WITHIN HOLDING TIMES?	X		
CUSTODY SEALS INTACT?			X
VOLATILES rec'd W/OUT HEADSPACE?	X		
PROPER CONTAINERS used?	X		

Purchase Order No./Billing Reference _____
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ___ USACE ___ FL ___ NC X
SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO X
Sample Iced Upon Collection: YES X NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260						REMARKS	PRISM LAB ID NO.
TRIPBLANK 02	3/2/11	—	DI	VOA	2	40 mL	HCL	X							35
PUMPBLANK 01		0730			3										36
PUMPBLANK 02		1210													37
DUP-06		0930	GW												38
MW-7A		0820													39
MW-12A		0930													40
MW-8A		0758													41
MW-32		0930													42
MW-31A		1026													43
MW-31B		1015													44

Sampler's Signature: Aaron Hill, Jeff Leaver Sampled By (Print Name): Aaron Hill, Jeff Leaver Affiliation: EFM

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
A Hill	Alex Lassiter	3/3/11	1115
Alex Lassiter	[illegible]	3/3/11	1240
[illegible] 3/3/11 1420	Received For Prism Laboratories By: [illegible]	3/3/11	14:20

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other ___
COC Group No. 1030099

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 6 OF 6 QUOTE # TO ENSURE PROPER BILLING: _____

Client Company Name: Aecom
Report To/Contact Name: ERIN STEWART
Reporting Address: 8540 Colonnade Ctr Dr. Raleigh, NC 27615
Phone: 919-872-6600 Fax (Yes) (No): _____
Email (Yes) (No) Email Address: EStewart@Aecom.com
EDD Type: PDF ___ Excel ___ Other ___
Site Location Name: ~~Lucent F~~ Alcatel/Lucent
Site Location Physical Address: Winston-Salem, NC

Project Name: Alcatel/Lucent
Short Hold Analysis: (Yes) (No) • UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: Erin Stewart
Address: Same

Purchase Order No./Billing Reference _____
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	X		
Received ON WET ICE? Temp 5.0	X		
PROPER PRESERVATIVES indicated?	X		
Received WITHIN HOLDING TIMES?	X		
CUSTODY SEALS INTACT?			X
VOLATILES rec'd W/OUT HEADSPACE?	X		
PROPER CONTAINERS used?	X		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC ___ USACE ___ FL ___ NC X
SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO X
Sample Iced Upon Collection: YES X NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	8260	8260	DRO				REMARKS	PRISM LAB ID NO.
TF-3	3/2/11	1200	GW	VOA/G/G	3/2/2	40/Liter	HCL/HCL/—	X	X	X					45
MW-29A	↓	1250	↓	VOA	3	40 ml	HCL	↓							46
MW-29		1400		↓	↓	↓	↓								47
MW-18A		1033													48
MW-6A		1357													49
C-5		1504													50
C-2	↓	1545	↓	↓	↓	↓	↓	↓							51

PRESS DOWN FIRMLY - 3 COPIES

Sampler's Signature: Aaron Hill/Jeff Lewis Sampled By (Print Name): Aaron Hill/Jeff Lewis Affiliation: EFM

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Aaron Hill	Alex Lassik	3/3/11	1115
Alex Lassik	[illegible]	3/3/11	1240
[illegible] 3/3/11 1420	Gary [illegible]	3/3/11	14:20

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other _____

COC Group No. 1030099

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC
☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___	☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert No. 37735

Case Narrative

04/06/2011

AECOM (ENSR)
Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent Appendix IX

Lab Submittal Date: 03/17/2011
Prism Work Order: 1030440

This data package contains the analytical results for the project identified above and includes a Case Narrative, Sample Results and Chain of Custody. Unless otherwise noted, all samples were received in acceptable condition and processed according to the referenced methods.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative.

Narrative Notes:

Appendix IX Dioxin analysis was subcontracted to Cape Fear Analytical. Appendix IX for methods 8260, 8270 and 8151 subcontracted to Analytical Environmental Services Inc. Appendix IX for method 8141 subcontracted to Test America (Savannah, GA). Laboratory reports are attached.

Please call if you have any questions relating to this analytical report.

Respectfully,

PRISM LABORATORIES, INC.

Robbi A. Jones

President/Project Manager

Robbi A. Jones

Reviewed By

Data Qualifiers Key Reference:

A	Surrogate was not added during sample preparation.
BL	MB greater than one half of the RL, but the sample concentrations are less than the RL.
BRL	Below Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
*	Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and reporting limit indicated with a J.

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Sample Receipt Summary

04/06/2011

Prism Work Order: 1030440

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received
MW-2A	1030440-01	Water	03/16/11	03/17/11

Samples received in good condition at 5.8 degrees C unless otherwise noted.

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Laboratory Report

04/06/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent Appendix IX

Sample Matrix: Water

Client Sample ID: MW-2A
Prism Sample ID: 1030440-01
Prism Work Order: 1030440
Time Collected: 03/16/11 11:30
Time Submitted: 03/17/11 08:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
General Chemistry Parameters									
Cyanide	BRL	mg/L	0.0050	0.0018	1	*9014	3/25/11 12:06	MRS	P1C0544
Sulfide	BRL	mg/L	2.0	0.25	1	*SM4500-S E	3/21/11 13:25	MRS	P1C0446
Organochlorine Pesticides by GC/ECD									
4,4'-DDD	BRL	ug/L	0.050	0.013	1	8081B	3/24/11 22:33	JMV	P1C0493
4,4'-DDE	BRL	ug/L	0.050	0.013	1	8081B	3/24/11 22:33	JMV	P1C0493
4,4'-DDT	BRL	ug/L	0.050	0.013	1	8081B	3/24/11 22:33	JMV	P1C0493
Aldrin	BRL	ug/L	0.050	0.014	1	8081B	3/24/11 22:33	JMV	P1C0493
alpha-BHC	BRL	ug/L	0.050	0.0063	1	8081B	3/24/11 22:33	JMV	P1C0493
alpha-Chlordane	BRL	ug/L	0.050	0.012	1	8081B	3/24/11 22:33	JMV	P1C0493
beta-BHC	BRL	ug/L	0.050	0.0073	1	8081B	3/24/11 22:33	JMV	P1C0493
Chlordane	BRL	ug/L	0.50	0.16	1	8081B	3/24/11 22:33	JMV	P1C0493
delta-BHC	BRL	ug/L	0.050	0.0044	1	8081B	3/24/11 22:33	JMV	P1C0493
Dieldrin	BRL	ug/L	0.050	0.011	1	8081B	3/24/11 22:33	JMV	P1C0493
Endosulfan I	BRL	ug/L	0.050	0.012	1	8081B	3/24/11 22:33	JMV	P1C0493
Endosulfan II	BRL	ug/L	0.050	0.019	1	8081B	3/24/11 22:33	JMV	P1C0493
Endosulfan Sulfate	BRL	ug/L	0.050	0.012	1	8081B	3/24/11 22:33	JMV	P1C0493
Endrin	BRL	ug/L	0.050	0.011	1	8081B	3/24/11 22:33	JMV	P1C0493
Endrin Aldehyde	BRL	ug/L	0.050	0.012	1	8081B	3/24/11 22:33	JMV	P1C0493
Endrin Ketone	BRL	ug/L	0.050	0.0094	1	8081B	3/24/11 22:33	JMV	P1C0493
gamma-BHC	BRL	ug/L	0.050	0.0069	1	8081B	3/24/11 22:33	JMV	P1C0493
gamma-Chlordane	BRL	ug/L	0.050	0.012	1	8081B	3/24/11 22:33	JMV	P1C0493
Heptachlor	BRL	ug/L	0.050	0.011	1	8081B	3/24/11 22:33	JMV	P1C0493
Heptachlor Epoxide	BRL	ug/L	0.050	0.010	1	8081B	3/24/11 22:33	JMV	P1C0493
Methoxychlor	BRL	ug/L	0.050	0.015	1	8081B	3/24/11 22:33	JMV	P1C0493
Toxaphene	BRL	ug/L	0.50	0.11	1	8081B	3/24/11 22:33	JMV	P1C0493

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	*107 %*	*13-186*
Tetrachloro-m-xylene	*97 %*	*40-134*

Polychlorinated Biphenyls (PCBs) by GC/ECD									
Aroclor 1016	BRL	ug/L	0.50	0.14	1	*8082A	3/24/11 22:33	JMV	P1C0502
Aroclor 1221	BRL	ug/L	1.0	0.11	1	*8082A	3/24/11 22:33	JMV	P1C0502
Aroclor 1232	BRL	ug/L	0.50	0.16	1	*8082A	3/24/11 22:33	JMV	P1C0502
Aroclor 1242	BRL	ug/L	0.50	0.14	1	*8082A	3/24/11 22:33	JMV	P1C0502
Aroclor 1248	BRL	ug/L	0.50	0.14	1	*8082A	3/24/11 22:33	JMV	P1C0502
Aroclor 1254	BRL	ug/L	0.50	0.16	1	*8082A	3/24/11 22:33	JMV	P1C0502
Aroclor 1260	BRL	ug/L	0.50	0.17	1	*8082A	3/24/11 22:33	JMV	P1C0502

Surrogate	Recovery	Control Limits
Tetrachloro-m-xylene	*102 %*	*30-161*
Decachlorobiphenyl	*109 %*	*32-178*

Total Metals									
Mercury	BRL	mg/L	0.00020	0.000014	1	*7470A	3/22/11 16:15	LTB	P1C0486

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. Full-Service Analytical & Environmental Solutions

Laboratory Report

04/06/2011

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent Appendix IX

Sample Matrix: Water

Client Sample ID: MW-2A
Prism Sample ID: 1030440-01
Prism Work Order: 1030440
Time Collected: 03/16/11 11:30
Time Submitted: 03/17/11 08:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Antimony	BRL	mg/L	0.010	0.0012	1	*6010C	3/21/11 18:42	DWR	P1C0407
Arsenic	BRL	mg/L	0.010	0.0019	1	*6010C	3/21/11 18:42	DWR	P1C0407
Barium	**0.28**	**mg/L**	**0.010**	**0.00064**	**1**	***6010C**	**3/21/11 18:42**	**DWR**	**P1C0407**
Beryllium	**0.0021**	**mg/L**	**0.0020**	**0.00026**	**1**	***6010C**	**3/21/11 18:42**	**DWR**	**P1C0407**
Cadmium	BRL	mg/L	0.0010	0.00015	1	*6010C	3/21/11 18:42	DWR	P1C0407
Chromium	**0.019**	**mg/L**	**0.0050**	**0.00051**	**1**	***6010C**	**3/21/11 18:42**	**DWR**	**P1C0407**
Cobalt	BRL	mg/L	0.0050	0.00031	1	*6010C	3/21/11 18:42	DWR	P1C0407
Copper	**0.018**	**mg/L**	**0.010**	**0.0011**	**1**	***6010C**	**3/21/11 18:42**	**DWR**	**P1C0407**
Lead	**0.0060**	**mg/L**	**0.0050**	**0.00057**	**1**	***6010C**	**3/21/11 18:42**	**DWR**	**P1C0407**
Nickel	**0.011**	**mg/L**	**0.010**	**0.0022**	**1**	***6010C**	**3/22/11 11:21**	**DWR**	**P1C0407**
Selenium	BRL	mg/L	0.020	0.0028	1	*6010C	3/21/11 18:42	DWR	P1C0407
Silver	BRL	mg/L	0.0050	0.00036	1	*6010C	3/21/11 18:42	DWR	P1C0407
Thallium	BRL	mg/L	0.010	0.0016	1	*6010C	3/21/11 18:42	DWR	P1C0407
Tin	BRL	mg/L	0.050	0.0011	1	*6010C	3/21/11 18:42	DWR	P1C0407
Vanadium	**0.049**	**mg/L**	**0.0050**	**0.00025**	**1**	***6010C**	**3/21/11 18:42**	**DWR**	**P1C0407**
Zinc	**0.049**	**mg/L**	**0.030**	**0.0026**	**1**	***6010C**	**3/21/11 18:42**	**DWR**	**P1C0407**

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent Appendix IX

Prism Work Order: 1030440
Time Submitted: 3/17/11 8:00:00AM

Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0493 - 3510C GC										
Blank (P1C0493-BLK1)				Prepared: 03/22/11 Analyzed: 03/24/11						
4,4'-DDD	BRL	0.050	ug/L							
4,4'-DDE	BRL	0.050	ug/L							
4,4'-DDT	BRL	0.050	ug/L							
Aldrin	BRL	0.050	ug/L							
alpha-BHC	BRL	0.050	ug/L							
alpha-Chlordane	BRL	0.050	ug/L							
beta-BHC	BRL	0.050	ug/L							
Chlordane	BRL	0.50	ug/L							
delta-BHC	BRL	0.050	ug/L							
Dieldrin	BRL	0.050	ug/L							
Endosulfan I	BRL	0.050	ug/L							
Endosulfan II	BRL	0.050	ug/L							
Endosulfan Sulfate	BRL	0.050	ug/L							
Endrin	BRL	0.050	ug/L							
Endrin Aldehyde	BRL	0.050	ug/L							
Endrin Ketone	BRL	0.050	ug/L							
gamma-BHC	BRL	0.050	ug/L							
gamma-Chlordane	BRL	0.050	ug/L							
Heptachlor	BRL	0.050	ug/L							
Heptachlor Epoxide	BRL	0.050	ug/L							
Methoxychlor	BRL	0.050	ug/L							
Toxaphene	BRL	0.50	ug/L							
Surrogate: Decachlorobiphenyl	*1.22*		*ug/L*	*1.00*		*122*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*1.02*		*ug/L*	*1.00*		*102*	*40-134*			
LCS (P1C0493-BS1)				Prepared: 03/22/11 Analyzed: 03/24/11						
4,4'-DDD	1.22	0.050	ug/L	1.00		122	66-138			
4,4'-DDE	1.11	0.050	ug/L	1.00		111	67-127			
4,4'-DDT	1.31	0.050	ug/L	1.00		131	66-142			
Aldrin	1.01	0.050	ug/L	1.00		101	62-124			
alpha-BHC	1.09	0.050	ug/L	1.00		109	63-125			
alpha-Chlordane	1.11	0.050	ug/L	1.00		111	68-126			
beta-BHC	1.24	0.050	ug/L	1.00		124	65-137			
delta-BHC	0.990	0.050	ug/L	1.00		99	65-132			
Dieldrin	1.12	0.050	ug/L	1.00		112	69-130			
Endosulfan I	1.13	0.050	ug/L	1.00		113	71-129			
Endosulfan II	1.17	0.050	ug/L	1.00		117	73-135			
Endosulfan Sulfate	1.29	0.050	ug/L	1.00		129	72-137			
Endrin	1.21	0.050	ug/L	1.00		121	69-144			
Endrin Aldehyde	1.22	0.050	ug/L	1.00		122	68-139			
Endrin Ketone	1.27	0.050	ug/L	1.00		127	68-150			
gamma-BHC	1.11	0.050	ug/L	1.00		111	66-129			
gamma-Chlordane	1.09	0.050	ug/L	1.00		109	66-126			
Heptachlor	1.31	0.050	ug/L	1.00		131	61-136			
Heptachlor Epoxide	1.12	0.050	ug/L	1.00		112	69-131			
Methoxychlor	1.37	0.050	ug/L	1.00		137	70-157			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

ECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent Appendix IX

Prism Work Order: 1030440
Time Submitted: 3/17/11 8:00:00AM

Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0493 - 3510C GC										
LCS (P1C0493-BS1)				Prepared: 03/22/11		Analyzed: 03/24/11				
Surrogate: Decachlorobiphenyl	*1.33*		*ug/L*	*1.00*		*133*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*1.09*		*ug/L*	*1.00*		*109*	*40-134*			
LCS (P1C0493-BS2)				Prepared: 03/22/11		Analyzed: 03/24/11				
Chlordane	14.0	0.50	ug/L	10.0		140	50-150			
Surrogate: Decachlorobiphenyl	*1.32*		*ug/L*	*1.00*		*132*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*1.10*		*ug/L*	*1.00*		*110*	*40-134*			
LCS (P1C0493-BS3)				Prepared: 03/22/11		Analyzed: 03/24/11				
Toxaphene	11.1	0.50	ug/L	10.0		111	50-150			
Surrogate: Decachlorobiphenyl	*1.35*		*ug/L*	*1.00*		*135*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*1.14*		*ug/L*	*1.00*		*114*	*40-134*			
LCS Dup (P1C0493-BSD1)				Prepared: 03/22/11		Analyzed: 03/24/11				
4,4'-DDD	1.15	0.050	ug/L	1.00		115	66-138	6	200	
4,4'-DDE	1.05	0.050	ug/L	1.00		105	67-127	6	200	
4,4'-DDT	1.16	0.050	ug/L	1.00		116	66-142	12	200	
Aldrin	0.960	0.050	ug/L	1.00		96	62-124	5	200	
alpha-BHC	1.07	0.050	ug/L	1.00		107	63-125	2	200	
alpha-Chlordane	1.05	0.050	ug/L	1.00		105	68-126	6	200	
beta-BHC	1.20	0.050	ug/L	1.00		120	65-137	3	200	
delta-BHC	0.960	0.050	ug/L	1.00		96	65-132	3	200	
Dieldrin	1.06	0.050	ug/L	1.00		106	69-130	6	200	
Endosulfan I	1.07	0.050	ug/L	1.00		107	71-129	5	200	
Endosulfan II	1.11	0.050	ug/L	1.00		111	73-135	5	200	
Endosulfan Sulfate	1.21	0.050	ug/L	1.00		121	72-137	6	200	
Endrin	1.15	0.050	ug/L	1.00		115	69-144	5	200	
Endrin Aldehyde	1.17	0.050	ug/L	1.00		117	68-139	4	200	
Endrin Ketone	1.21	0.050	ug/L	1.00		121	68-150	5	200	
gamma-BHC	1.08	0.050	ug/L	1.00		108	66-129	3	200	
gamma-Chlordane	1.03	0.050	ug/L	1.00		103	66-126	6	200	
Heptachlor	1.25	0.050	ug/L	1.00		125	61-136	5	200	
Heptachlor Epoxide	1.07	0.050	ug/L	1.00		107	69-131	5	200	
Methoxychlor	1.31	0.050	ug/L	1.00		131	70-157	4	200	
Surrogate: Decachlorobiphenyl	*1.26*		*ug/L*	*1.00*		*126*	*13-186*			
Surrogate: Tetrachloro-m-xylene	*1.06*		*ug/L*	*1.00*		*106*	*40-134*			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent Appendix IX

Prism Work Order: 1030440
Time Submitted: 3/17/11 8:00:00AM

Polychlorinated Biphenyls (PCBs) by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0502 - 3510C GC										
Blank (P1C0502-BLK1)				Prepared: 03/23/11 Analyzed: 03/25/11						
Aroclor 1016	BRL	0.50	ug/L							
Aroclor 1221	BRL	1.0	ug/L							
Aroclor 1232	BRL	0.50	ug/L							
Aroclor 1242	BRL	0.50	ug/L							
Aroclor 1248	BRL	0.50	ug/L							
Aroclor 1254	BRL	0.50	ug/L							
Aroclor 1260	BRL	0.50	ug/L							
Surrogate: Tetrachloro-m-xylene	*1.15*		*ug/L*	*1.00*		*115*	*30-161*			
Surrogate: Decachlorobiphenyl	*1.34*		*ug/L*	*1.00*		*134*	*32-178*			
LCS (P1C0502-BS1)				Prepared: 03/23/11 Analyzed: 03/24/11						
Aroclor 1016	11.2	0.50	ug/L	10.0		112	50-114			
Aroclor 1260	11.6	0.50	ug/L	10.0		116	10-127			
Surrogate: Tetrachloro-m-xylene	*0.0600*		*ug/L*	*1.00*		*6*	*30-161*			*A*
Surrogate: Decachlorobiphenyl	*0.00*		*ug/L*	*1.00*			*32-178*			*A*
LCS Dup (P1C0502-BSD1)				Prepared: 03/23/11 Analyzed: 03/24/11						
Aroclor 1016	10.5	0.50	ug/L	10.0		105	50-114	6	50	
Aroclor 1260	11.1	0.50	ug/L	10.0		111	10-127	4	50	
Surrogate: Tetrachloro-m-xylene	*0.0500*		*ug/L*	*1.00*		*5*	*30-161*			*A*
Surrogate: Decachlorobiphenyl	*0.00*		*ug/L*	*1.00*			*32-178*			*A*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

ECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent Appendix IX

Prism Work Order: 1030440
Time Submitted: 3/17/11 8:00:00AM

Total Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0407 - 3010A										
Blank (P1C0407-BLK1)				Prepared: 03/18/11 Analyzed: 03/21/11						
Antimony	BRL	0.010	mg/L							
Arsenic	BRL	0.010	mg/L							
Barium	BRL	0.010	mg/L							
Beryllium	BRL	0.0020	mg/L							
Cadmium	BRL	0.0010	mg/L							
Chromium	BRL	0.0050	mg/L							
Cobalt	BRL	0.0050	mg/L							
Copper	BRL	0.010	mg/L							
Lead	BRL	0.0050	mg/L							
Nickel	BRL	0.010	mg/L							
Selenium	BRL	0.020	mg/L							
Silver	BRL	0.0050	mg/L							
Thallium	BRL	0.010	mg/L							
Tin	BRL	0.050	mg/L							BL
Vanadium	BRL	0.0050	mg/L							
Zinc	BRL	0.030	mg/L							
CS (P1C0407-BS1)				Prepared: 03/18/11 Analyzed: 03/21/11						
Antimony	0.243	0.010	mg/L	0.250		97	80-120			
Arsenic	0.247	0.010	mg/L	0.250		99	80-120			
Barium	0.254	0.010	mg/L	0.250		101	80-120			
Beryllium	0.250	0.0020	mg/L	0.250		100	80-120			
Cadmium	0.251	0.0010	mg/L	0.250		101	80-120			
Chromium	0.251	0.0050	mg/L	0.250		100	80-120			
Cobalt	0.259	0.0050	mg/L	0.250		104	80-120			
Copper	0.253	0.010	mg/L	0.250		101	80-120			
Lead	0.249	0.0050	mg/L	0.250		99	80-120			
Nickel	0.254	0.010	mg/L	0.250		101	80-120			
Selenium	0.249	0.020	mg/L	0.250		100	80-120			
Silver	0.254	0.0050	mg/L	0.250		102	80-120			
Thallium	0.252	0.010	mg/L	0.250		101	80-120			
Tin	0.264	0.050	mg/L	0.250		105	80-120			
Vanadium	0.249	0.0050	mg/L	0.250		100	80-120			
Zinc	0.248	0.030	mg/L	0.250		99	80-120			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

AECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent Appendix IX

Prism Work Order: 1030440
Time Submitted: 3/17/11 8:00:00AM

Total Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0486 - 7470A										
Blank (P1C0486-BLK1)				Prepared & Analyzed: 03/22/11						
Mercury	BRL	0.00020	mg/L							
LCS (P1C0486-BS1)				Prepared & Analyzed: 03/22/11						
Mercury	0.00992	0.00020	mg/L	0.00938		106	80-120			
Matrix Spike (P1C0486-MS1)		**Source: 1030440-01**		Prepared & Analyzed: 03/22/11						
Mercury	0.00997	0.00020	mg/L	0.00938	0.0000416	106	80-120			
Matrix Spike Dup (P1C0486-MSD1)		**Source: 1030440-01**		Prepared & Analyzed: 03/22/11						
Mercury	0.0100	0.00020	mg/L	0.00938	0.0000416	106	80-120	0.4	20	

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Level II QC Report

4/6/11

ECOM (ENSR)
Attn: Erin Stewart
8540 Colonnade Center Drive SUITE 306
Raleigh, NC 27615

Project: Lucent Appendix IX

Prism Work Order: 1030440
Time Submitted: 3/17/11 8:00:00AM

General Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1C0446 - SM4500-S C										
Blank (P1C0446-BLK1)				Prepared & Analyzed: 03/21/11						
Sulfide	BRL	2.0	mg/L							
LCS (P1C0446-BS1)				Prepared & Analyzed: 03/21/11						
Sulfide	40.1	2.0	mg/L	40.0		100	70-130			
Batch P1C0544 - 9010C										
Blank (P1C0544-BLK1)				Prepared: 03/24/11 Analyzed: 03/25/11						
Cyanide	BRL	0.0050	mg/L							
LCS (P1C0544-BS1)				Prepared: 03/24/11 Analyzed: 03/25/11						
Cyanide	0.0961	0.0050	mg/L	0.100		96	85-115			
Matrix Spike (P1C0544-MS1)		**Source: 1030440-01**		Prepared: 03/24/11 Analyzed: 03/25/11						
Cyanide	0.0979	0.0050	mg/L	0.100	BRL	98	80-120			
Matrix Spike Dup (P1C0544-MSD1)		**Source: 1030440-01**		Prepared: 03/24/11 Analyzed: 03/25/11						
Cyanide	0.100	0.0050	mg/L	0.100	BRL	100	80-120	2	20	

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Sample Extraction Data

Prep Method: 9010C

Lab Number	Batch	Initial	Final	Date
1030440-01	P1C0544	50 mL	50 mL	03/24/11

Prep Method: SM4500-S C

Lab Number	Batch	Initial	Final	Date
1030440-01	P1C0446	200 mL	200 mL	03/21/11

Prep Method: 3510C GC

Lab Number	Batch	Initial	Final	Date
1030440-01	P1C0493	1000 mL	10 mL	03/22/11

Prep Method: 3510C GC

Lab Number	Batch	Initial	Final	Date
1030440-01	P1C0502	1000 mL	10 mL	03/23/11

Prep Method: 3010A

Lab Number	Batch	Initial	Final	Date
1030440-01	P1C0407	50 mL	50 mL	03/18/11
1030440-01	P1C0407	50 mL	50 mL	03/18/11

Prep Method: 7470A

Lab Number	Batch	Initial	Final	Date
1030440-01	P1C0486	20 mL	30 mL	03/22/11

Subcontracted Analyses

The following analyses were subcontracted to Analytical Environmental Services, Inc.

Lab Number	Analysis
1030440-01	8260
1030440-01	8270 (App. IX)
1030440-01	Herbicides (Sub)

The following analyses were subcontracted to Cape Fear Analytical

Lab Number	Analysis
1030440-01	8290 (Sub)

The following analyses were subcontracted to Test America, Inc. (Savannah)

Lab Number	Analysis
1030440-01	8141 (Sub)

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: ALCATEL-LUCENT, WINSTON-SALEM
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: AECOM - RALEIGH
Address: SAME

Client Company Name: AECOM
Report To/Contact Name: ERIN STEWART
Reporting Address: 8540 COLONNADE CTR DR RALEIGH, NC 27615
Phone: 919-872-6600 Fax (Yes) (No): 872-7990
Email (Yes) (No) Email Address _____
EDD Type: PDF____ Excel____ Other____
Site Location Name: ALCATEL-LUCENT WINSTON
Site Location Physical Address: 3370 OLD LEXINGTON WINSTON SALEM, NC

Purchase Order No./Billing Reference _____
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	X		
Received ON WET ICE? Temp 5.8	X		
PROPER PRESERVATIVES indicated?	X		
Received WITHIN HOLDING TIMES?	X		
CUSTODY SEALS INTACT?			X
VOLATILES rec'd W/OUT HEADSPACE?	X		
PROPER CONTAINERS used?	X		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC____ USACE____ FL____ NC____ SC____ OTHER____ N/A____
Water Chlorinated: YES____ NO X
Sample Iced Upon Collection: YES X NO____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	8260	SULFIDE	METALS	CYANIDE	8151	DIOXIN/FURANS	REMARKS	PRISM LAB ID NO.
MW-2A	3-16-11	1130	WATER	VOA	3	40mL	HCL	X						APPENDIX-IX	01
				P	1	L	SOD. HYDROX.		X						
				P	1	1/2 L	HNO3			X					
				~~P~~	~~1~~	~~1/2 L~~	~~ASCORBIC ACID~~				X				
				P	1	1/2L	NAOH				X				
				AG	2	L	NONE					X			
				AG	2	L	NONE						X		

Sampler's Signature _____ Sampled By (Print Name) GREGORY M. STEPHENSON Affiliation AECOM

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature)	Received By: (Signature)	Date 3/16/11	Military/Hours 1520
Relinquished By: (Signature) 3/17/11 8:00	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 3/17/11	800

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other _____
COC Group No. 1030440

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

PDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC
☐	☐	☐	☐	☐	☐	☐	☐	☐

CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 2 OF 2 QUOTE # TO ENSURE PROPER BILLING: _____

Client Company Name: AECOM
Report To/Contact Name: ERIN STEWART
Reporting Address: 8540 COLONNADE CTR. DR. RALEIGH NC 27615
Phone: 919-872-6600 Fax (Yes) (No): 872-7996
Email (Yes) (No) Email Address _____
EDD Type: PDF___ Excel___ Other___
Site Location Name: ALCATEL-LUCENT WINSTON
Site Location Physical Address: 3370 OLD LEXINGTON WINSTON-SALEM, NC

Project Name: ALCATEL-LUCENT WINSTON-SALEM
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: AECOM - RALEIGH
Address: SAME

Purchase Order No./Billing Reference _____
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	X		
Received ON WET ICE? Temp 5.8	X		
PROPER PRESERVATIVES indicated?	X		
Received WITHIN HOLDING TIMES?	X		
CUSTODY SEALS INTACT?			X
VOLATILES rec'd W/OUT HEADSPACE?	X		
PROPER CONTAINERS used?	X		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC____ USACE____ FL____ NC____ SC____ OTHER____ N/A____
Water Chlorinated: YES___ NO X
Sample Iced Upon Collection: YES X NO___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	8141	8270	8081	8082			REMARKS	PRISM LAB ID NO.
MW2-A	3-16-11	1130	WATER	AG	2	L	NONE	X						APPENDIX-IX	01
↓	↓	↓	↓	AG	2	L	NONE		X					↓	↓
				AG	2	L	NONE			X					
				AG	2	L	NONE				X				

Sampler's Signature [signature] Sampled By (Print Name) GREGORY STEPHENSON Affiliation AECOM

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature]	[signature]	3/16/11	1520
Relinquished By: (Signature) [signature] 3/17/11 800	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: [signature]	Date 3/17/11	800

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

COC Group No. 1030440

☐ Fed Ex ☐ UPS ☐ Hand-delivered ☐ Prism Field Service ☐ Other _____

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

PDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☒ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC

CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

ACCESS ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT

Prism Laboratories
PO Box 240543
Charlotte NC 282240543

ATTENTION
Terri W. Cole

PROJECT ID
1030440

LABORATORY REPORT NUMBER
1103H30

DATE
March 24, 2011

Primary Data Review By

Brian Rohr
Project Manager, AES

Secondary Data Review By

Ashley Amick

Project Manager, Access Analytical
aamick@axs-inc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Analytical Environmental Services Inc. (AES Inc), 3785 Presidential Parkway, Atlanta, GA 30340.**
- **AES is SCDHEC certified laboratory # 98016, NCDENR certified lab # 562, GA certified lab # FL-E87582, NELAP certified laboratory # E87582**
- Local support services for this project are provided by Access Analytical, Inc. Access Analytical is a representative of AES serving client in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll fee at 883.315.4243

ACCESS
ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT

Prism Laboratories
PO Box 240543
Charlotte NC 282240543

ATTENTION
Terri W. Cole

PROJECT ID
1030440

LABORATORY REPORT NUMBER
1103H30

DATE
March 24, 2011

Primary Data Review By

Brian Rohr
Project Manager, AES

Secondary Data Review By

Ashley Amick

Project Manager, Access Analytical
aamick@axs-inc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Analytical Environmental Services Inc. (AES Inc), 3785 Presidential Parkway, Atlanta, GA 30340.**
- **AES is SCDHEC certified laboratory # 98016, NCDENR certified lab # 562, GA certified lab # FL-E87582, NELAP certified laboratory # E87582**
- Local support services for this project are provided by Access Analytical, Inc. Access Analytical is a representative of AES serving client in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll fee at 883.315.4243

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Sub to AES 3/17/11

1103H30

SUBCONTRACT ORDER

Prism Laboratories, Inc.

1030440

Certification: NELAC___ USACE___
SC___ Other NC
N/A___

SENDING LABORATORY:

Prism Laboratories, Inc.
P. O. Box 240543
Charlotte, NC 28224-0543
Phone: 800-529-6364
Fax: 704-525-0409
Project Manager: Robbi A. Jones

RECEIVING LABORATORY:

Analytical Environmental Services, Inc.
3785 Presidential Parkway
Atlanta, GA 30340
Phone :(770) 457-8177
Fax: NA

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1030440-01	Water	Sampled:03/16/11 11:30	MW-2A	
Herbicides (Sub) Appendix IX		03/23/11 11:30		
8270 (App. IX)		03/23/11 11:30		
8260 Appendix IX		03/30/11 11:30		Appendix IX

Containers Supplied: 4 Liters Unpreserved
2 VOAS HCL

Released By	Date	Received By	Date
[signature]	3/17/11 @1700	Fed Ex	3/17/11 @1700
Fed Ex			
Released By	Date	Received By AES	Date
Released By	Date	Received By	Date
		[signature]	3/18/11 11:00
Released By	Date	Received By	Date

Analytical Environmental Services, Inc **Date:** 24-Mar-11

Client:	Prism Laboratories	**Client Sample ID:**	MW-2A
Project Name:	1030440	**Collection Date:**	3/16/2011 11:30:00 AM
Lab ID:	1103H30-001	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A					**(SW3510B)**				
2,4,5-T	BRL		0.41	2.0	ug/L	143821	1	03/23/2011 17:00	RF
2,4,5-TP (Silvex)	BRL		0.44	2.0	ug/L	143821	1	03/23/2011 17:00	RF
2,4-D	BRL		0.63	2.0	ug/L	143821	1	03/23/2011 17:00	RF
Dinoseb	BRL		0.97	5.0	ug/L	143821	1	03/23/2011 17:00	RF
Surr: DCAA	107		0	44.1-136	%REC	143821	1	03/23/2011 17:00	RF
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D					**(SW3510B)**				
1,2,4,5-Tetrachlorobenzene	BRL		0.82	10	ug/L	143759	1	03/21/2011 20:40	YH
1,2,4-Trichlorobenzene	BRL		0.95	10	ug/L	143759	1	03/21/2011 20:40	YH
1,3-Dinitrobenzene	BRL		6.9	20	ug/L	143759	1	03/21/2011 20:40	YH
1,4-Napthoquinone	BRL		6.3	10	ug/L	143759	1	03/21/2011 20:40	YH
1-Naphthylamine	BRL		2.5	10	ug/L	143759	1	03/21/2011 20:40	YH
2,3,4,6-Tetrachlorophenol	BRL		0.80	10	ug/L	143759	1	03/21/2011 20:40	YH
2,4,5-Trichlorophenol	BRL		1.5	10	ug/L	143759	1	03/21/2011 20:40	YH
2,4,6-Trichlorophenol	BRL		1.2	10	ug/L	143759	1	03/21/2011 20:40	YH
2,4-Dichlorophenol	BRL		1.3	10	ug/L	143759	1	03/21/2011 20:40	YH
2,4-Dimethylphenol	BRL		0.54	50	ug/L	143759	1	03/21/2011 20:40	YH
2,4-Dinitrophenol	BRL		3.4	50	ug/L	143759	1	03/21/2011 20:40	YH
2,4-Dinitrotoluene	BRL		1.1	10	ug/L	143759	1	03/21/2011 20:40	YH
2,6-Dichlorophenol	BRL		1.0	10	ug/L	143759	1	03/21/2011 20:40	YH
2,6-Dinitrotoluene	BRL		0.74	10	ug/L	143759	1	03/21/2011 20:40	YH
2-Acetylaminofluorene	BRL		6.9	20	ug/L	143759	1	03/21/2011 20:40	YH
2-Chloronaphthalene	BRL		0.72	10	ug/L	143759	1	03/21/2011 20:40	YH
2-Chlorophenol	BRL		1.7	10	ug/L	143759	1	03/21/2011 20:40	YH
2-Methylnaphthalene	BRL		0.89	10	ug/L	143759	1	03/21/2011 20:40	YH
2-Methylphenol	BRL		0.98	10	ug/L	143759	1	03/21/2011 20:40	YH
2-Naphthylamine	BRL		2.9	10	ug/L	143759	1	03/21/2011 20:40	YH
2-Nitroaniline	BRL		0.63	50	ug/L	143759	1	03/21/2011 20:40	YH
2-Nitrophenol	BRL		0.66	10	ug/L	143759	1	03/21/2011 20:40	YH
2-Picoline	BRL		6.9	10	ug/L	143759	1	03/21/2011 20:40	YH
3,3'-Dichlorobenzidine	BRL		2.6	20	ug/L	143759	1	03/21/2011 20:40	YH
3,3'-Dimethylbenzidine	BRL		6.3	20	ug/L	143759	1	03/21/2011 20:40	YH
3,4-Methylphenol	BRL		2.4	10	ug/L	143759	1	03/21/2011 20:40	YH
3-Methylcholanthrene	BRL		0.81	10	ug/L	143759	1	03/21/2011 20:40	YH
3-Nitroaniline	BRL		1.1	50	ug/L	143759	1	03/21/2011 20:40	YH
4,6-Dinitro-2-methylphenol	BRL		1.2	50	ug/L	143759	1	03/21/2011 20:40	YH
4-Aminobiphenyl	BRL		2.7	20	ug/L	143759	1	03/21/2011 20:40	YH
4-Bromophenyl phenyl ether	BRL		0.63	10	ug/L	143759	1	03/21/2011 20:40	YH
4-Chloro-3-methylphenol	BRL		1.3	20	ug/L	143759	1	03/21/2011 20:40	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc Date: 24-Mar-11

Client:	Prism Laboratories	**Client Sample ID:**	MW-2A
Project Name:	1030440	**Collection Date:**	3/16/2011 11:30:00 AM
Lab ID:	1103H30-001	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510B)									
4-Chloroaniline	BRL		1.3	20	ug/L	143759	1	03/21/2011 20:40	YH
4-Chlorophenyl phenyl ether	BRL		0.37	10	ug/L	143759	1	03/21/2011 20:40	YH
4-Nitroaniline	BRL		1.4	20	ug/L	143759	1	03/21/2011 20:40	YH
4-Nitrophenol	BRL		5.3	50	ug/L	143759	1	03/21/2011 20:40	YH
4-Nitroquinoline,1-oxide	BRL		4.4	50	ug/L	143759	1	03/21/2011 20:40	YH
5-Nitro-o-toluidine	BRL		6.2	10	ug/L	143759	1	03/21/2011 20:40	YH
7,12-Dimethylbenz(a)anthracene	BRL		6.4	10	ug/L	143759	1	03/21/2011 20:40	YH
a,a-Dimethylphenethylamine	BRL		19	50	ug/L	143759	1	03/22/2011 16:18	YH
Acenaphthene	BRL		0.59	10	ug/L	143759	1	03/21/2011 20:40	YH
Acenaphthylene	BRL		0.36	10	ug/L	143759	1	03/21/2011 20:40	YH
Acetophenone	BRL		2.3	10	ug/L	143759	1	03/21/2011 20:40	YH
Aniline	BRL		1.1	10	ug/L	143759	1	03/21/2011 20:40	YH
Anthracene	BRL		0.44	10	ug/L	143759	1	03/21/2011 20:40	YH
Aramite	BRL		8.2	10	ug/L	143759	1	03/21/2011 20:40	YH
Benz(a)anthracene	BRL		0.93	10	ug/L	143759	1	03/21/2011 20:40	YH
Benzo(a)pyrene	BRL		1.2	10	ug/L	143759	1	03/21/2011 20:40	YH
Benzo(b)fluoranthene	BRL		0.67	10	ug/L	143759	1	03/21/2011 20:40	YH
Benzo(g,h,i)perylene	BRL		1.0	10	ug/L	143759	1	03/21/2011 20:40	YH
Benzo(k)fluoranthene	BRL		1.4	10	ug/L	143759	1	03/21/2011 20:40	YH
Benzyl alcohol	BRL		1.3	20	ug/L	143759	1	03/21/2011 20:40	YH
Bis(2-chloroethoxy)methane	BRL		0.99	10	ug/L	143759	1	03/21/2011 20:40	YH
Bis(2-chloroethyl)ether	BRL		1.1	10	ug/L	143759	1	03/21/2011 20:40	YH
Bis(2-chloroisopropyl)ether	BRL		1.1	10	ug/L	143759	1	03/21/2011 20:40	YH
Bis(2-ethylhexyl)phthalate	BRL		1.6	20	ug/L	143759	1	03/21/2011 20:40	YH
Butyl benzyl phthalate	BRL		1.1	10	ug/L	143759	1	03/21/2011 20:40	YH
Chlorobenzilate	BRL		6.2	10	ug/L	143759	1	03/21/2011 20:40	YH
Chrysene	BRL		0.68	10	ug/L	143759	1	03/21/2011 20:40	YH
Di-n-butyl phthalate	BRL		0.93	10	ug/L	143759	1	03/21/2011 20:40	YH
Di-n-octyl phthalate	BRL		1.6	10	ug/L	143759	1	03/21/2011 20:40	YH
Diallate	BRL		5.7	10	ug/L	143759	1	03/21/2011 20:40	YH
Dibenz(a,h)anthracene	BRL		1.5	10	ug/L	143759	1	03/21/2011 20:40	YH
Dibenzofuran	BRL		0.29	10	ug/L	143759	1	03/21/2011 20:40	YH
Diethyl phthalate	BRL		0.49	10	ug/L	143759	1	03/21/2011 20:40	YH
Dimethoate	BRL		6.8	20	ug/L	143759	1	03/21/2011 20:40	YH
Dimethyl phthalate	BRL		0.45	10	ug/L	143759	1	03/21/2011 20:40	YH
Diphenylamine	BRL		0.66	10	ug/L	143759	1	03/21/2011 20:40	YH
Disulfoton	BRL		5.5	10	ug/L	143759	1	03/21/2011 20:40	YH
Ethyl methanesulfonate	BRL		1.4	20	ug/L	143759	1	03/21/2011 20:40	YH
Famphur	BRL		7.6	20	ug/L	143759	1	03/21/2011 20:40	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 24-Mar-11

Client:	Prism Laboratories	**Client Sample ID:**	MW-2A
Project Name:	1030440	**Collection Date:**	3/16/2011 11:30:00 AM
Lab ID:	1103H30-001	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D					**(SW3510B)**				
Fluoranthene	BRL		0.75	10	ug/L	143759	1	03/21/2011 20:40	YH
Fluorene	BRL		0.32	10	ug/L	143759	1	03/21/2011 20:40	YH
Hexachlorobenzene	BRL		0.64	10	ug/L	143759	1	03/21/2011 20:40	YH
Hexachlorobutadiene	BRL		1.1	10	ug/L	143759	1	03/21/2011 20:40	YH
Hexachlorocyclopentadiene	BRL		1.1	10	ug/L	143759	1	03/21/2011 20:40	YH
Hexachloroethane	BRL		1.4	10	ug/L	143759	1	03/21/2011 20:40	YH
Hexachlorophene	BRL		0.36	80	ug/L	143759	1	03/21/2011 20:40	YH
Hexachloropropene	BRL		4.8	10	ug/L	143759	1	03/21/2011 20:40	YH
Indeno(1,2,3-cd)pyrene	BRL		1.3	10	ug/L	143759	1	03/21/2011 20:40	YH
Isodrin	BRL		5.2	20	ug/L	143759	1	03/21/2011 20:40	YH
Isophorone	BRL		0.59	10	ug/L	143759	1	03/21/2011 20:40	YH
Isosafrole	BRL		6.0	10	ug/L	143759	1	03/21/2011 20:40	YH
Kepone	BRL		9.6	50	ug/L	143759	1	03/21/2011 20:40	YH
Methapyrilene	BRL		2.7	20	ug/L	143759	1	03/21/2011 20:40	YH
Methyl methanesulfonate	BRL		1.4	10	ug/L	143759	1	03/21/2011 20:40	YH
Methyl parathion	BRL		7.0	10	ug/L	143759	1	03/21/2011 20:40	YH
N-Nitroso-di-n-butylamine	BRL		1.8	10	ug/L	143759	1	03/21/2011 20:40	YH
N-Nitrosodi-n-propylamine	BRL		1.5	10	ug/L	143759	1	03/21/2011 20:40	YH
N-Nitrosodiethylamine	BRL		5.0	20	ug/L	143759	1	03/21/2011 20:40	YH
N-Nitrosodimethylamine	BRL		1.7	20	ug/L	143759	1	03/21/2011 20:40	YH
N-Nitrosodiphenylamine	BRL		0.42	50	ug/L	143759	1	03/21/2011 20:40	YH
N-Nitrosomethylethylamine	BRL		6.0	10	ug/L	143759	1	03/21/2011 20:40	YH
N-Nitrosomorpholine	BRL		4.5	10	ug/L	143759	1	03/21/2011 20:40	YH
N-Nitrosopiperidine	BRL		1.2	20	ug/L	143759	1	03/21/2011 20:40	YH
N-Nitrosopyrrolidine	BRL		5.4	40	ug/L	143759	1	03/21/2011 20:40	YH
Naphthalene	BRL		1.0	10	ug/L	143759	1	03/21/2011 20:40	YH
Nitrobenzene	BRL		1.2	10	ug/L	143759	1	03/21/2011 20:40	YH
O,O,O-Triethylphosphorothioate	BRL		3.6	10	ug/L	143759	1	03/21/2011 20:40	YH
o-Toluidine	BRL		3.9	20	ug/L	143759	1	03/21/2011 20:40	YH
p-Dimethylaminoazobenzene	BRL		0.41	10	ug/L	143759	1	03/21/2011 20:40	YH
p-Phenylenediamine	BRL		88	500	ug/L	143759	1	03/21/2011 20:40	YH
Parathion	BRL		6.8	10	ug/L	143759	1	03/21/2011 20:40	YH
Pentachlorobenzene	BRL		0.73	10	ug/L	143759	1	03/21/2011 20:40	YH
Pentachloronitrobenzene	BRL		1.3	20	ug/L	143759	1	03/21/2011 20:40	YH
Pentachlorophenol	BRL		2.7	50	ug/L	143759	1	03/21/2011 20:40	YH
Phenacetin	BRL		1.0	20	ug/L	143759	1	03/21/2011 20:40	YH
Phenanthrene	BRL		0.52	10	ug/L	143759	1	03/21/2011 20:40	YH
Phenol	BRL		1.6	10	ug/L	143759	1	03/21/2011 20:40	YH
Phorate	BRL		6.9	10	ug/L	143759	1	03/21/2011 20:40	YH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 24-Mar-11

Client:	Prism Laboratories	**Client Sample ID:**	MW-2A
Project Name:	1030440	**Collection Date:**	3/16/2011 11:30:00 AM
Lab ID:	1103H30-001	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D (SW3510B)									
Pronamide	BRL		1.1	10	ug/L	143759	1	03/21/2011 20:40	YH
Pyrene	BRL		0.99	10	ug/L	143759	1	03/21/2011 20:40	YH
Pyridine	BRL		2.2	10	ug/L	143759	1	03/21/2011 20:40	YH
Safrole	BRL		5.7	20	ug/L	143759	1	03/21/2011 20:40	YH
Sym-Trinitrobenzene	BRL		5.4	10	ug/L	143759	1	03/21/2011 20:40	YH
Tetraethyl dithiopyrophosphate	BRL		6.6	10	ug/L	143759	1	03/21/2011 20:40	YH
Thionazin	BRL		6.3	20	ug/L	143759	1	03/21/2011 20:40	YH
Surr: 2,4,6-Tribromophenol	105		0	42.2-151	%REC	143759	1	03/21/2011 20:40	YH
Surr: 2-Fluorobiphenyl	94.8		0	48.2-124	%REC	143759	1	03/21/2011 20:40	YH
Surr: 2-Fluorophenol	64.1		0	21.6-120	%REC	143759	1	03/21/2011 20:40	YH
Surr: 4-Terphenyl-d14	93.4		0	40.8-141	%REC	143759	1	03/21/2011 20:40	YH
Surr: Nitrobenzene-d5	88.2		0	40.2-126	%REC	143759	1	03/21/2011 20:40	YH
Surr: Phenol-d5	47.3		0	6.98-120	%REC	143759	1	03/21/2011 20:40	YH
APPENDIX IX VOLATILE ORGANICS SW8260B (SW5030B)									
1,1,1,2-Tetrachloroethane	BRL		0.47	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,1,1-Trichloroethane	BRL		0.51	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,1,2,2-Tetrachloroethane	BRL		0.22	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,1,2-Trichloroethane	BRL		0.36	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,1-Dichloroethane	BRL		0.40	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,1-Dichloroethene	BRL		1.2	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,2,3-Trichloropropane	BRL		0.23	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,2-Dibromo-3-chloropropane	BRL		0.31	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,2-Dibromoethane	BRL		0.25	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,2-Dichlorobenzene	BRL		0.28	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,2-Dichloroethane	BRL		0.23	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,2-Dichloropropane	BRL		0.24	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,3-Dichlorobenzene	BRL		0.41	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,4-Dichlorobenzene	BRL		0.36	5.0	ug/L	143919	1	03/23/2011 19:11	NH
1,4-Dioxane	BRL		18	150	ug/L	143919	1	03/23/2011 19:11	NH
2-Butanone	BRL		3.5	50	ug/L	143919	1	03/23/2011 19:11	NH
2-Hexanone	BRL		0.76	10	ug/L	143919	1	03/23/2011 19:11	NH
4-Methyl-2-pentanone	BRL		0.78	10	ug/L	143919	1	03/23/2011 19:11	NH
Acetone	BRL		2.0	50	ug/L	143919	1	03/23/2011 19:11	NH
Acetonitrile	BRL		16	100	ug/L	143919	1	03/23/2011 19:11	NH
Acrolein	BRL		0.86	20	ug/L	143919	1	03/23/2011 19:11	NH
Acrylonitrile	BRL		0.39	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Allyl Chloride	BRL		1.4	10	ug/L	143919	1	03/23/2011 19:11	NH
Benzene	BRL		0.38	5.0	ug/L	143919	1	03/23/2011 19:11	NH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc Date: 24-Mar-11

Client:	Prism Laboratories	**Client Sample ID:**	MW-2A
Project Name:	1030440	**Collection Date:**	3/16/2011 11:30:00 AM
Lab ID:	1103H30-001	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
APPENDIX IX VOLATILE ORGANICS SW8260B					(SW5030B)				
Bromodichloromethane	BRL		0.34	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Bromoform	BRL		0.16	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Bromomethane	BRL		0.54	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Carbon disulfide	BRL		3.4	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Carbon tetrachloride	BRL		1.8	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Chlorobenzene	BRL		0.42	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Chloroethane	BRL		0.44	10	ug/L	143919	1	03/23/2011 19:11	NH
Chloroform	BRL		0.26	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Chloromethane	BRL		0.57	10	ug/L	143919	1	03/23/2011 19:11	NH
Chloroprene	BRL		3.6	20	ug/L	143919	1	03/23/2011 19:11	NH
cis-1,3-Dichloropropene	BRL		0.27	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Dibromochloromethane	BRL		0.23	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Dibromomethane	BRL		0.22	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Dichlorodifluoromethane	BRL		0.75	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Ethyl Methacrylate	BRL		0.49	10	ug/L	143919	1	03/23/2011 19:11	NH
Ethylbenzene	BRL		0.48	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Iodomethane	BRL		0.82	10	ug/L	143919	1	03/23/2011 19:11	NH
Isobutyl Alcohol	BRL		61	200	ug/L	143919	1	03/23/2011 19:11	NH
Methyl Methacrylate	BRL		0.65	10	ug/L	143919	1	03/23/2011 19:11	NH
Methylacrylonitrile	BRL		8.2	200	ug/L	143919	1	03/23/2011 19:11	NH
Methylene chloride	BRL		0.63	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Pentachloroethane	BRL		1.1	10	ug/L	143919	1	03/23/2011 19:11	NH
Propionitrile	BRL		26	100	ug/L	143919	1	03/23/2011 19:11	NH
Styrene	BRL		0.29	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Tetrachloroethene	110		0.77	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Toluene	BRL		0.39	5.0	ug/L	143919	1	03/23/2011 19:11	NH
trans-1,2-Dichloroethene	BRL		1.8	5.0	ug/L	143919	1	03/23/2011 19:11	NH
trans-1,3-Dichloropropene	BRL		0.24	5.0	ug/L	143919	1	03/23/2011 19:11	NH
trans-1,4-Dichloro-2-butene	BRL		1.0	10	ug/L	143919	1	03/23/2011 19:11	NH
Trichloroethene	3.8	J	0.31	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Trichlorofluoromethane	BRL		0.48	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Vinyl acetate	BRL		0.56	10	ug/L	143919	1	03/23/2011 19:11	NH
Vinyl chloride	BRL		0.46	2.0	ug/L	143919	1	03/23/2011 19:11	NH
Xylenes, Total	BRL		5.0	5.0	ug/L	143919	1	03/23/2011 19:11	NH
Surr: 4-Bromofluorobenzene	89.4		0	64.7-130	%REC	143919	1	03/23/2011 19:11	NH
Surr: Dibromofluoromethane	109		0	80.7-129	%REC	143919	1	03/23/2011 19:11	NH
Surr: Toluene-d8	90.9		0	71.1-120	%REC	143919	1	03/23/2011 19:11	NH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Access Work Order Number 1103H30

Checklist completed by Mark 3/18/11
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.9 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes __ No ✓

Proceed with Standard TAT as per project history? Yes ✓ No __ Not Applicable __

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by MK

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Lab Order: 1103H30
Client: Access Analytical, Inc.
Project: 1030440

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1103H30-001A	MW-2A	3/16/2011 11:30:00 AM	Aqueous	APPENDIX IX VOLATILE ORGANICS		3/22/2011	3/23/2011
1103H30-001B				APPENDIX XI-SEMIVOLATILE ORGANICS		3/21/2011	3/21/2011
				APPENDIX XI-SEMIVOLATILE ORGANICS		3/21/2011	3/22/2011
				CHLORINATED HERBICIDES, APPENDIX IX LIST		3/22/2011	3/23/2011

Analytical Environmental Services, Inc

Date: 24-Mar-11

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143759

Sample ID: **MB-143759** Client ID: Units: **ug/L** Prep Date: **03/21/2011** Run No: **193103**
SampleType: **MBLK** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **143759** Analysis Date: **03/21/2011** Seq No: **4029416**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2,4,5-Tetrachlorobenzene	BRL	10	0	0	0	0	0	0	0	0	
1,2,4-Trichlorobenzene	BRL	10	0	0	0	0	0	0	0	0	
1,3-Dinitrobenzene	BRL	20	0	0	0	0	0	0	0	0	
1,4-Napthoquinone	BRL	10	0	0	0	0	0	0	0	0	
1-Naphthylamine	BRL	10	0	0	0	0	0	0	0	0	
2,3,4,6-Tetrachlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2,4,5-Trichlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2,4,6-Trichlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2,4-Dichlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2,4-Dimethylphenol	BRL	50	0	0	0	0	0	0	0	0	
2,4-Dinitrophenol	BRL	50	0	0	0	0	0	0	0	0	
2,4-Dinitrotoluene	BRL	10	0	0	0	0	0	0	0	0	
2,6-Dichlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2,6-Dinitrotoluene	BRL	10	0	0	0	0	0	0	0	0	
2-Acetylaminofluorene	BRL	20	0	0	0	0	0	0	0	0	
2-Chloronaphthalene	BRL	10	0	0	0	0	0	0	0	0	
2-Chlorophenol	BRL	10	0	0	0	0	0	0	0	0	
2-Methylnaphthalene	BRL	10	0	0	0	0	0	0	0	0	
2-Methylphenol	BRL	10	0	0	0	0	0	0	0	0	
2-Naphthylamine	BRL	10	0	0	0	0	0	0	0	0	
2-Nitroaniline	BRL	50	0	0	0	0	0	0	0	0	
2-Nitrophenol	BRL	10	0	0	0	0	0	0	0	0	
2-Picoline	BRL	10	0	0	0	0	0	0	0	0	
3,3'-Dichlorobenzidine	BRL	20	0	0	0	0	0	0	0	0	
3,3'-Dimethylbenzidine	BRL	20	0	0	0	0	0	0	0	0	
3,4-Methylphenol	BRL	10	0	0	0	0	0	0	0	0	
3-Methylcholanthrene	BRL	10	0	0	0	0	0	0	0	0	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Analytical Environmental Services, Inc

Date: 24-Mar-11

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143759

Sample ID: **MB-143759** Client ID: Units: **ug/L** Prep Date: **03/21/2011** Run No: **193103**
SampleType: **MBLK** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **143759** Analysis Date: **03/21/2011** Seq No: **4029416**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3-Nitroaniline	BRL	50	0	0	0	0	0	0	0	0	
4,6-Dinitro-2-methylphenol	BRL	50	0	0	0	0	0	0	0	0	
4-Aminobiphenyl	BRL	20	0	0	0	0	0	0	0	0	
4-Bromophenyl phenyl ether	BRL	10	0	0	0	0	0	0	0	0	
4-Chloro-3-methylphenol	BRL	20	0	0	0	0	0	0	0	0	
4-Chloroaniline	BRL	20	0	0	0	0	0	0	0	0	
4-Chlorophenyl phenyl ether	BRL	10	0	0	0	0	0	0	0	0	
4-Nitroaniline	BRL	20	0	0	0	0	0	0	0	0	
4-Nitrophenol	BRL	50	0	0	0	0	0	0	0	0	
4-Nitroquinoline, 1-oxide	BRL	50	0	0	0	0	0	0	0	0	
5-Nitro-o-toluidine	BRL	10	0	0	0	0	0	0	0	0	
7,12-Dimethylbenz(a)anthracene	BRL	10	0	0	0	0	0	0	0	0	
Acenaphthene	BRL	10	0	0	0	0	0	0	0	0	
Acenaphthylene	BRL	10	0	0	0	0	0	0	0	0	
Acetophenone	BRL	10	0	0	0	0	0	0	0	0	
Aniline	BRL	10	0	0	0	0	0	0	0	0	
Anthracene	BRL	10	0	0	0	0	0	0	0	0	
Aramite	BRL	10	0	0	0	0	0	0	0	0	
Benz(a)anthracene	BRL	10	0	0	0	0	0	0	0	0	
Benzo(a)pyrene	BRL	10	0	0	0	0	0	0	0	0	
Benzo(b)fluoranthene	BRL	10	0	0	0	0	0	0	0	0	
Benzo(g,h,i)perylene	BRL	10	0	0	0	0	0	0	0	0	
Benzo(k)fluoranthene	BRL	10	0	0	0	0	0	0	0	0	
Benzyl alcohol	BRL	20	0	0	0	0	0	0	0	0	
Bis(2-chloroethoxy)methane	BRL	10	0	0	0	0	0	0	0	0	
Bis(2-chloroethyl)ether	BRL	10	0	0	0	0	0	0	0	0	
Bis(2-chloroisopropyl)ether	BRL	10	0	0	0	0	0	0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 24-Mar-11

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143759

Sample ID: **MB-143759** Client ID: Units: **ug/L** Prep Date: **03/21/2011** Run No: **193103**
SampleType: **MBLK** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **143759** Analysis Date: **03/21/2011** Seq No: **4029416**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	BRL	20	0	0	0	0	0	0	0	0	
Butyl benzyl phthalate	BRL	10	0	0	0	0	0	0	0	0	
Chlorobenzilate	BRL	10	0	0	0	0	0	0	0	0	
Chrysene	BRL	10	0	0	0	0	0	0	0	0	
Di-n-butyl phthalate	BRL	10	0	0	0	0	0	0	0	0	
Di-n-octyl phthalate	BRL	10	0	0	0	0	0	0	0	0	
Diallate	BRL	10	0	0	0	0	0	0	0	0	
Dibenz(a,h)anthracene	BRL	10	0	0	0	0	0	0	0	0	
Dibenzofuran	BRL	10	0	0	0	0	0	0	0	0	
Diethyl phthalate	BRL	10	0	0	0	0	0	0	0	0	
Dimethoate	BRL	20	0	0	0	0	0	0	0	0	
Dimethyl phthalate	BRL	10	0	0	0	0	0	0	0	0	
Diphenylamine	BRL	10	0	0	0	0	0	0	0	0	
Disulfoton	BRL	10	0	0	0	0	0	0	0	0	
Ethyl methanesulfonate	BRL	20	0	0	0	0	0	0	0	0	
Famphur	BRL	20	0	0	0	0	0	0	0	0	
Fluoranthene	BRL	10	0	0	0	0	0	0	0	0	
Fluorene	BRL	10	0	0	0	0	0	0	0	0	
Hexachlorobenzene	BRL	10	0	0	0	0	0	0	0	0	
Hexachlorobutadiene	BRL	10	0	0	0	0	0	0	0	0	
Hexachlorocyclopentadiene	BRL	10	0	0	0	0	0	0	0	0	
Hexachloroethane	BRL	10	0	0	0	0	0	0	0	0	
Hexachlorophene	BRL	80	0	0	0	0	0	0	0	0	
Hexachloropropene	BRL	10	0	0	0	0	0	0	0	0	
Indeno(1,2,3-cd)pyrene	BRL	10	0	0	0	0	0	0	0	0	
Isodrin	BRL	20	0	0	0	0	0	0	0	0	
Isophorone	BRL	10	0	0	0	0	0	0	0	0	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Analytical Environmental Services, Inc **Date:** 24-Mar-11

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143759

Sample ID: **MB-143759** Client ID: Units: **ug/L** Prep Date: **03/21/2011** Run No: **193103**
SampleType: **MBLK** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **143759** Analysis Date: **03/21/2011** Seq No: **4029416**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Isosafrole	BRL	10	0	0	0	0	0	0	0	0	
Kepone	BRL	50	0	0	0	0	0	0	0	0	
Methapyrilene	BRL	20	0	0	0	0	0	0	0	0	
Methyl methanesulfonate	BRL	10	0	0	0	0	0	0	0	0	
Methyl parathion	BRL	10	0	0	0	0	0	0	0	0	
N-Nitroso-di-n-butylamine	BRL	10	0	0	0	0	0	0	0	0	
N-Nitrosodi-n-propylamine	BRL	10	0	0	0	0	0	0	0	0	
N-Nitrosodiethylamine	BRL	20	0	0	0	0	0	0	0	0	
N-Nitrosodimethylamine	BRL	20	0	0	0	0	0	0	0	0	
N-Nitrosodiphenylamine	BRL	50	0	0	0	0	0	0	0	0	
N-Nitrosomethylethylamine	BRL	10	0	0	0	0	0	0	0	0	
N-Nitrosomorpholine	BRL	10	0	0	0	0	0	0	0	0	
N-Nitrosopiperidine	BRL	20	0	0	0	0	0	0	0	0	
N-Nitrosopyrrolidine	BRL	40	0	0	0	0	0	0	0	0	
Naphthalene	BRL	10	0	0	0	0	0	0	0	0	
Nitrobenzene	BRL	10	0	0	0	0	0	0	0	0	
O,O,O-Triethylphosphorothioate	BRL	10	0	0	0	0	0	0	0	0	
o-Toluidine	BRL	20	0	0	0	0	0	0	0	0	
p-Dimethylaminoazobenzene	BRL	10	0	0	0	0	0	0	0	0	
p-Phenylenediamine	BRL	500	0	0	0	0	0	0	0	0	
Parathion	BRL	10	0	0	0	0	0	0	0	0	
Pentachlorobenzene	BRL	10	0	0	0	0	0	0	0	0	
Pentachloronitrobenzene	BRL	20	0	0	0	0	0	0	0	0	
Pentachlorophenol	BRL	50	0	0	0	0	0	0	0	0	
Phenacetin	BRL	20	0	0	0	0	0	0	0	0	
Phenanthrene	BRL	10	0	0	0	0	0	0	0	0	
Phenol	BRL	10	0	0	0	0	0	0	0	0	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Analytical Environmental Services, Inc

Date: 24-Mar-11

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143759

Sample ID: **MB-143759** Client ID: Units: **ug/L** Prep Date: **03/21/2011** Run No: **193103**
SampleType: **MBLK** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **143759** Analysis Date: **03/21/2011** Seq No: **4029416**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Phorate	BRL	10	0	0	0	0	0	0	0	0	
Pronamide	BRL	10	0	0	0	0	0	0	0	0	
Pyrene	BRL	10	0	0	0	0	0	0	0	0	
Pyridine	BRL	10	0	0	0	0	0	0	0	0	
Safrole	BRL	20	0	0	0	0	0	0	0	0	
Sym-Trinitrobenzene	BRL	10	0	0	0	0	0	0	0	0	
Tetraethyl dithiopyrophosphate	BRL	10	0	0	0	0	0	0	0	0	
Thionazin	BRL	20	0	0	0	0	0	0	0	0	
Surr: 2,4,6-Tribromophenol	96.97	0	100	0	97	42.2	151	0	0	0	
Surr: 2-Fluorobiphenyl	43.79	0	50	0	87.6	48.2	124	0	0	0	
Surr: 2-Fluorophenol	59.25	0	100	0	59.2	21.6	120	0	0	0	
Surr: 4-Terphenyl-d14	48.16	0	50	0	96.3	40.8	141	0	0	0	
Surr: Nitrobenzene-d5	41.74	0	50	0	83.5	40.2	126	0	0	0	
Surr: Phenol-d5	40.45	0	100	0	40.4	6.98	120	0	0	0	

Sample ID: **MB-143759** Client ID: Units: **ug/L** Prep Date: **03/21/2011** Run No: **193256**
SampleType: **MBLK** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **143759** Analysis Date: **03/22/2011** Seq No: **4031287**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
a,a-Dimethylphenethylamine	BRL	50	0	0	0	0	0	0	0	0	

Sample ID: **LCS-143759** Client ID: Units: **ug/L** Prep Date: **03/18/2011** Run No: **193103**
SampleType: **LCS** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **143759** Analysis Date: **03/21/2011** Seq No: **4029420**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	88.69	10	100	0	88.7	61.6	120	0	0	0	
2,4-Dinitrotoluene	90.47	10	100	0	90.5	66.5	117	0	0	0	
2-Chlorophenol	92.19	10	100	0	92.2	68.1	120	0	0	0	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143759

Sample ID: **LCS-143759** Client ID: Units: **ug/L** Prep Date: **03/18/2011** Run No: **193103**
SampleType: **LCS** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **143759** Analysis Date: **03/21/2011** Seq No: **4029420**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4-Chloro-3-methylphenol	85.08	20	100	0	85.1	73.8	122	0	0	0	
4-Nitrophenol	48.62	50	100	0	48.6	20.1	120	0	0	0	J
Acenaphthene	87.13	10	100	0	87.1	70.7	120	0	0	0	
N-Nitrosodi-n-propylamine	103.9	10	100	0	104	62.3	129	0	0	0	
Pentachlorophenol	82.22	50	100	0	82.2	48.1	140	0	0	0	
Phenol	51.88	10	100	0	51.9	23	120	0	0	0	
Pyrene	92.28	10	100	0	92.3	72.7	130	0	0	0	
Surr: 2,4,6-Tribromophenol	108.7	0	100	0	109	42.2	151	0	0	0	
Surr: 2-Fluorobiphenyl	49.76	0	50	0	99.5	48.2	124	0	0	0	
Surr: 2-Fluorophenol	67.31	0	100	0	67.3	21.6	120	0	0	0	
Surr: 4-Terphenyl-d14	51.91	0	50	0	104	40.8	141	0	0	0	
Surr: Nitrobenzene-d5	46.59	0	50	0	93.2	40.2	126	0	0	0	
Surr: Phenol-d5	49.94	0	100	0	49.9	6.98	120	0	0	0	

Sample ID: **1103H61-001AMS** Client ID: Units: **ug/L** Prep Date: **03/21/2011** Run No: **193103**
SampleType: **MS** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **143759** Analysis Date: **03/21/2011** Seq No: **4029451**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	77.99	10	100	0	78	49	120	0	0	0	
2,4-Dinitrotoluene	76.55	10	100	0	76.6	52.3	120	0	0	0	
2-Chlorophenol	83.44	10	100	0	83.4	49.1	120	0	0	0	
4-Chloro-3-methylphenol	76.09	20	100	0	76.1	49.2	129	0	0	0	
4-Nitrophenol	64.65	50	100	0	64.6	24.1	120	0	0	0	
Acenaphthene	77.19	10	100	0	77.2	54.4	120	0	0	0	
N-Nitrosodi-n-propylamine	92.91	10	100	0	92.9	45.3	128	0	0	0	
Pentachlorophenol	76.83	50	100	0	76.8	39.6	147	0	0	0	
Phenol	65.17	10	100	0	65.2	24.8	120	0	0	0	
Pyrene	79.81	10	100	0	79.8	54	125	0	0	0	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Analytical Environmental Services, Inc

Date: 24-Mar-11

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143759

Sample ID: **1103H61-001AMS** Client ID: Units: **ug/L** Prep Date: **03/21/2011** Run No: **193103**
SampleType: **MS** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **143759** Analysis Date: **03/21/2011** Seq No: **4029451**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 2,4,6-Tribromophenol	85.48	0	100	0	85.5	42.2	151	0	0	0	
Surr: 2-Fluorobiphenyl	38.01	0	50	0	76	48.2	124	0	0	0	
Surr: 2-Fluorophenol	64.98	0	100	0	65	21.6	120	0	0	0	
Surr: 4-Terphenyl-d14	40.55	0	50	0	81.1	40.8	141	0	0	0	
Surr: Nitrobenzene-d5	36.23	0	50	0	72.5	40.2	126	0	0	0	
Surr: Phenol-d5	56.96	0	100	0	57	6.98	120	0	0	0	

Sample ID: **1103H61-001AMSD** Client ID: Units: **ug/L** Prep Date: **03/21/2011** Run No: **193103**
SampleType: **MSD** TestCode: **APPENDIX IX-SEMIVOLATILE ORGANICS SW8270D** BatchID: **143759** Analysis Date: **03/21/2011** Seq No: **4029455**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	78.27	10	100	0	78.3	49	120	77.99	0.358	24.3	
2,4-Dinitrotoluene	77.95	10	100	0	78	52.3	120	76.55	1.81	23.8	
2-Chlorophenol	79.65	10	100	0	79.6	49.1	120	83.44	4.65	24.7	
4-Chloro-3-methylphenol	75.11	20	100	0	75.1	49.2	129	76.09	1.3	24.9	
4-Nitrophenol	64.55	50	100	0	64.6	24.1	120	64.65	0.155	27.8	
Acenaphthene	76.12	10	100	0	76.1	54.4	120	77.19	1.4	22.2	
N-Nitrosodi-n-propylamine	89.12	10	100	0	89.1	45.3	128	92.91	4.16	26.2	
Pentachlorophenol	77.42	50	100	0	77.4	39.6	147	76.83	0.765	25.1	
Phenol	60.46	10	100	0	60.5	24.8	120	65.17	7.5	30.3	
Pyrene	79.08	10	100	0	79.1	54	125	79.81	0.919	22.7	
Surr: 2,4,6-Tribromophenol	85.56	0	100	0	85.6	42.2	151	85.48	0	0	
Surr: 2-Fluorobiphenyl	38.08	0	50	0	76.2	48.2	124	38.01	0	0	
Surr: 2-Fluorophenol	61.33	0	100	0	61.3	21.6	120	64.98	0	0	
Surr: 4-Terphenyl-d14	40.77	0	50	0	81.5	40.8	141	40.55	0	0	
Surr: Nitrobenzene-d5	35.65	0	50	0	71.3	40.2	126	36.23	0	0	
Surr: Phenol-d5	53.39	0	100	0	53.4	6.98	120	56.96	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143821

Sample ID: **MB-143821** Client ID: Units: **ug/L** Prep Date: **03/22/2011** Run No: **193357**
SampleType: **MBLK** TestCode: **CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A** BatchID: **143821** Analysis Date: **03/23/2011** Seq No: **4033638**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-T	BRL	2.0	0	0	0	0	0	0	0	0	
2,4,5-TP (Silvex)	BRL	2.0	0	0	0	0	0	0	0	0	
2,4-D	BRL	2.0	0	0	0	0	0	0	0	0	
Dinoseb	BRL	5.0	0	0	0	0	0	0	0	0	
Surr: DCAA	5.639	0	5	0	113	44.1	136	0	0	0	

Sample ID: **LCS-143821** Client ID: Units: **ug/L** Prep Date: **03/22/2011** Run No: **193357**
SampleType: **LCS** TestCode: **CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A** BatchID: **143821** Analysis Date: **03/23/2011** Seq No: **4033639**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-T	5.003	2.0	5	0	100	53.7	129	0	0	0	
2,4,5-TP (Silvex)	4.839	2.0	5	0	96.8	57.5	123	0	0	0	
2,4-D	5.185	2.0	5	0	104	55.4	127	0	0	0	
Surr: DCAA	5.884	0	5	0	118	44.1	136	0	0	0	

Sample ID: **1103H30-001BMS** Client ID: **MW-2A** Units: **ug/L** Prep Date: **03/22/2011** Run No: **193357**
SampleType: **MS** TestCode: **CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A** BatchID: **143821** Analysis Date: **03/23/2011** Seq No: **4033641**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-T	5.043	2.0	5	0	101	45.8	134	0	0	0	
2,4,5-TP (Silvex)	5.003	2.0	5	0	100	56.6	126	0	0	0	
2,4-D	5.262	2.0	5	0	105	47.6	138	0	0	0	
Surr: DCAA	6.116	0	5	0	122	44.1	136	0	0	0	

Sample ID: **1103H30-001BMSD** Client ID: **MW-2A** Units: **ug/L** Prep Date: **03/22/2011** Run No: **193357**
SampleType: **MSD** TestCode: **CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A** BatchID: **143821** Analysis Date: **03/23/2011** Seq No: **4033642**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 24-Mar-11

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143821

Sample ID: **1103H30-001BMSD** Client ID: **MW-2A** Units: **ug/L** Prep Date: **03/22/2011** Run No: **193357**
SampleType: **MSD** TestCode: **CHLORINATED HERBICIDES, APPENDIX IX LIST SW8151A** BatchID: **143821** Analysis Date: **03/23/2011** Seq No: **4033642**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-T	5.085	2.0	5	0	102	45.8	134	5.043	0.834	26.3	
2,4,5-TP (Silvex)	4.909	2.0	5	0	98.2	56.6	126	5.003	1.89	26.7	
2,4-D	5.226	2.0	5	0	105	47.6	138	5.262	0.688	34.9	
Surr: DCAA	5.981	0	5	0	120	44.1	136	6.116	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143919

Sample ID: **MB-143919** Client ID: Units: **ug/L** Prep Date: **03/22/2011** Run No: **193265**
SampleType: **MBLK** TestCode: **APPENDIX IX VOLATILE ORGANICS SW8260B** BatchID: **143919** Analysis Date: **03/23/2011** Seq No: **4032973**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetonitrile	BRL	100	0	0	0	0	0	0	0	0	
Allyl Chloride	BRL	10	0	0	0	0	0	0	0	0	
Chloroprene	BRL	20	0	0	0	0	0	0	0	0	
Ethyl Methacrylate	BRL	10	0	0	0	0	0	0	0	0	
Isobutyl Alcohol	BRL	200	0	0	0	0	0	0	0	0	
Methyl Methacrylate	BRL	10	0	0	0	0	0	0	0	0	
Methylacrylonitrile	BRL	200	0	0	0	0	0	0	0	0	
Pentachloroethane	BRL	10	0	0	0	0	0	0	0	0	
Propionitrile	BRL	100	0	0	0	0	0	0	0	0	
Surr: Dibromofluoromethane	49.16	0	50	0	98.3	80.7	129	0	0	0	
Surr: Toluene-d8	49.64	0	50	0	99.3	71.1	120	0	0	0	

Sample ID: **MB-143919** Client ID: Units: **ug/L** Prep Date: **03/22/2011** Run No: **193190**
SampleType: **MBLK** TestCode: **APPENDIX IX VOLATILE ORGANICS SW8260B** BatchID: **143919** Analysis Date: **03/22/2011** Seq No: **4032982**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,1,2,2-Tetrachloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,1,2-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
1,2,3-Trichloropropane	BRL	5.0	0	0	0	0	0	0	0	0	
1,2-Dibromo-3-chloropropane	BRL	5.0	0	0	0	0	0	0	0	0	
1,2-Dibromoethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,2-Dichlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,2-Dichloropropane	BRL	5.0	0	0	0	0	0	0	0	0	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Analytical Environmental Services, Inc

Date: 24-Mar-11

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143919

Sample ID: **MB-143919** Client ID: Units: **ug/L** Prep Date: **03/22/2011** Run No: **193190**
SampleType: **MBLK** TestCode: **APPENDIX IX VOLATILE ORGANICS SW8260B** BatchID: **143919** Analysis Date: **03/22/2011** Seq No: **4032982**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,3-Dichlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	
1,4-Dichlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0	
2-Butanone	BRL	50	0	0	0	0	0	0	0	0	
2-Hexanone	BRL	10	0	0	0	0	0	0	0	0	
4-Methyl-2-pentanone	BRL	10	0	0	0	0	0	0	0	0	
Acetone	BRL	50	0	0	0	0	0	0	0	0	
Acrolein	BRL	20	0	0	0	0	0	0	0	0	
Acrylonitrile	BRL	5.0	0	0	0	0	0	0	0	0	
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	
Bromodichloromethane	BRL	5.0	0	0	0	0	0	0	0	0	
Bromoform	BRL	5.0	0	0	0	0	0	0	0	0	
Bromomethane	BRL	5.0	0	0	0	0	0	0	0	0	
Carbon disulfide	BRL	5.0	0	0	0	0	0	0	0	0	
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	
Chlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	
Chloroethane	BRL	10	0	0	0	0	0	0	0	0	
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	
Chloromethane	BRL	10	0	0	0	0	0	0	0	0	
cis-1,3-Dichloropropene	BRL	5.0	0	0	0	0	0	0	0	0	
Dibromochloromethane	BRL	5.0	0	0	0	0	0	0	0	0	
Dibromomethane	BRL	5.0	0	0	0	0	0	0	0	0	
Dichlorodifluoromethane	BRL	5.0	0	0	0	0	0	0	0	0	
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	
Iodomethane	BRL	10	0	0	0	0	0	0	0	0	
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	
Styrene	BRL	5.0	0	0	0	0	0	0	0	0	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143919

Sample ID: **MB-143919** Client ID: Units: **ug/L** Prep Date: **03/22/2011** Run No: **193190**
SampleType: **MBLK** TestCode: **APPENDIX IX VOLATILE ORGANICS SW8260B** BatchID: **143919** Analysis Date: **03/22/2011** Seq No: **4032982**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
trans-1,3-Dichloropropene	BRL	5.0	0	0	0	0	0	0	0	0	
trans-1,4-Dichloro-2-butene	BRL	10	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Trichlorofluoromethane	BRL	5.0	0	0	0	0	0	0	0	0	
Vinyl acetate	BRL	10	0	0	0	0	0	0	0	0	
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	
Surr: 4-Bromofluorobenzene	44.80	0	50	0	89.6	64.7	130	0	0	0	
Surr: Dibromofluoromethane	51.93	0	50	0	104	80.7	129	0	0	0	
Surr: Toluene-d8	43.37	0	50	0	86.7	71.1	120	0	0	0	

Sample ID: **LCS-143919** Client ID: Units: **ug/L** Prep Date: **03/22/2011** Run No: **193190**
SampleType: **LCS** TestCode: **APPENDIX IX VOLATILE ORGANICS SW8260B** BatchID: **143919** Analysis Date: **03/22/2011** Seq No: **4032983**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	18.82	5.0	20	0	94.1	60	140	0	0	0	
Benzene	18.46	5.0	20	0	92.3	70	130	0	0	0	
Chlorobenzene	17.71	5.0	20	0	88.6	70	130	0	0	0	
Toluene	16.40	5.0	20	0	82	70	130	0	0	0	
Trichloroethene	17.52	5.0	20	0	87.6	70	130	0	0	0	
Surr: 4-Bromofluorobenzene	53.45	0	50	0	107	64.7	130	0	0	0	
Surr: Dibromofluoromethane	52.33	0	50	0	105	80.7	129	0	0	0	
Surr: Toluene-d8	49.65	0	50	0	99.3	71.1	120	0	0	0	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Analytical Environmental Services, Inc

Date: 24-Mar-11

Client: Prism Laboratories
Project Name: 1030440
Workorder: 1103H30

ANALYTICAL QC SUMMARY REPORT

BatchID: 143919

Sample ID: **1103H93-001AMS** Client ID: Units: **ug/L** Prep Date: **03/22/2011** Run No: **193190**
SampleType: **MS** TestCode: **APPENDIX IX VOLATILE ORGANICS SW8260B** BatchID: **143919** Analysis Date: **03/22/2011** Seq No: **4032986**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	27.08	5.0	20	0	135	46.2	183	0	0	0	
Benzene	24.41	5.0	20	0	122	62.2	143	0	0	0	
Chlorobenzene	22.21	5.0	20	0	111	72.2	137	0	0	0	
Toluene	20.93	5.0	20	0	105	57.8	149	0	0	0	
Trichloroethene	23.63	5.0	20	0	118	70.5	149	0	0	0	
Surr: 4-Bromofluorobenzene	54.25	0	50	0	108	64.7	130	0	0	0	
Surr: Dibromofluoromethane	51.55	0	50	0	103	80.7	129	0	0	0	
Surr: Toluene-d8	49.03	0	50	0	98.1	71.1	120	0	0	0	

Sample ID: **1103H93-001AMSD** Client ID: Units: **ug/L** Prep Date: **03/22/2011** Run No: **193190**
SampleType: **MSD** TestCode: **APPENDIX IX VOLATILE ORGANICS SW8260B** BatchID: **143919** Analysis Date: **03/22/2011** Seq No: **4032987**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	25.43	5.0	20	0	127	46.2	183	27.08	6.28	20	
Benzene	24.11	5.0	20	0	121	62.2	143	24.41	1.24	20	
Chlorobenzene	21.67	5.0	20	0	108	72.2	137	22.21	2.46	20	
Toluene	21.18	5.0	20	0	106	57.8	149	20.93	1.19	20	
Trichloroethene	22.62	5.0	20	0	113	70.5	149	23.63	4.37	20	
Surr: 4-Bromofluorobenzene	56.44	0	50	0	113	64.7	130	54.25	0	0	
Surr: Dibromofluoromethane	52.54	0	50	0	105	80.7	129	51.55	0	0	
Surr: Toluene-d8	49.94	0	50	0	99.9	71.1	120	49.03	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 680-66573-1

Job Description: MW-2a

For:
Access Analytical Services
7478 Carlisle Street
Irmo, SC 29063

Attention: Mr. Ashley Amick

Approved for release.
Sheila Hoffman
Project Manager I
3/25/2011 9:44 AM

Sheila Hoffman
Project Manager I
sheila.hoffman@testamericainc.com
03/25/2011

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

TestAmerica Laboratories, Inc.
TestAmerica Savannah 5102 LaRoche Avenue, Savannah, GA 31404
Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC Semi VOA
Method(s) 8141A: The laboratory control sample (LCS) for batch 680-197818 exceeded control limits for the following analyte(s): merphos. Merphos has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

METHOD / ANALYST SUMMARY

Client: Access Analytical Services

Job Number: 680-66573-1

Method	Analyst	Analyst ID
SW846 8141A	Kellar, Joshua	JK

SAMPLE SUMMARY

Client: Access Analytical Services

Job Number: 680-66573-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-66573-1	1030440-01 (MW-2A)	Water	03/16/2011 1130	03/18/2011 0924

Client: Access Analytical Services

Job Number: 680-66573-1

Client Sample ID: **1030440-01 (MW-2A)**

Lab Sample ID: 680-66573-1

Client Matrix: Water

Date Sampled: 03/16/2011 1130

Date Received: 03/18/2011 0924

8141A Organophosphorous Pesticides (GC)

Method:	8141A	Analysis Batch: 680-197999	Instrument ID:	SGO
Preparation:	3520C	Prep Batch: 680-197818	Initial Weight/Volume:	500 mL
Dilution:	1.0		Final Weight/Volume:	5 mL
Date Analyzed:	03/23/2011 2005		Injection Volume:	2 uL
Date Prepared:	03/22/2011 1422		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Azinphos-methyl	1.0	U	1.0
Bolstar	1.0	U	1.0
Chlorpyrifos	1.0	U	1.0
Coumaphos	1.0	U	1.0
Demeton-O	2.5	U	2.5
Demeton-S	2.5	U	2.5
Diazinon	1.0	U	1.0
Dichlorvos	2.0	U	2.0
Dimethoate	2.0	U	2.0
Disulfoton	2.0	U	2.0
EPN	1.0	U	1.0
Famphur	2.0	U	2.0
Fensulfothion	5.0	U	5.0
Fenthion	1.0	U	1.0
Malathion	1.0	U	1.0
Merphos	1.5	U *	1.5
Methyl parathion	0.50	U	0.50
Mevinphos	2.0	U	2.0
Ethoprop	0.50	U	0.50
Monochrotophos	10	U	10
Naled	5.0	U	5.0
Ethyl Parathion	1.0	U	1.0
Phorate	1.0	U	1.0
Ronnel	1.0	U	1.0
Stirophos	1.0	U	1.0
Sulfotepp	0.50	U	0.50
Thionazin	1.0	U	1.0
Tokuthion	1.0	U	1.0
Trichloronate	1.0	U	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Triphenylphosphate	79		67 - 130

DATA REPORTING QUALIFIERS

Client: Access Analytical Services

Job Number: 680-66573-1

Lab Section	Qualifier	Description
GC Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD exceeds the control limits

Client: Access Analytical Services

Job Number: 680-66573-1

Method Blank - Batch: 680-197818

Method: 8141A
Preparation: 3520C

Lab Sample ID: MB 680-197818/11-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/23/2011 1800
Date Prepared: 03/22/2011 1422

Analysis Batch: 680-197999
Prep Batch: 680-197818
Units: ug/L

Instrument ID: SGO
Lab File ID: oc23010.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 10 mL
Injection Volume: 2 uL
Column ID: PRIMARY

Analyte	Result	Qual	RL
Azinphos-methyl	1.0	U	1.0
Bolstar	1.0	U	1.0
Chlorpyrifos	1.0	U	1.0
Coumaphos	1.0	U	1.0
Demeton-O	2.5	U	2.5
Demeton-S	2.5	U	2.5
Diazinon	1.0	U	1.0
Dichlorvos	2.0	U	2.0
Dimethoate	2.0	U	2.0
Disulfoton	2.0	U	2.0
EPN	1.0	U	1.0
Famphur	2.0	U	2.0
Fensulfothion	5.0	U	5.0
Fenthion	1.0	U	1.0
Malathion	1.0	U	1.0
Merphos	1.5	U	1.5
Methyl parathion	0.50	U	0.50
Mevinphos	2.0	U	2.0
Ethoprop	0.50	U	0.50
Monochrotophos	10	U	10
Naled	5.0	U	5.0
Ethyl Parathion	1.0	U	1.0
Phorate	1.0	U	1.0
Ronnel	1.0	U	1.0
Stirophos	1.0	U	1.0
Sulfotepp	0.50	U	0.50
Thionazin	1.0	U	1.0
Tokuthion	1.0	U	1.0
Trichloronate	1.0	U	1.0

Surrogate	% Rec	Acceptance Limits
Triphenylphosphate	91	67 - 130

Client: Access Analytical Services

Job Number: 680-66573-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-197818

Method: 8141A
Preparation: 3520C

LCS Lab Sample ID:	LCS 680-197818/19-A	Analysis Batch:	680-197999	Instrument ID:	SGO
Client Matrix:	Water	Prep Batch:	680-197818	Lab File ID:	oc23011.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	1000 mL
Date Analyzed:	03/23/2011 1825			Final Weight/Volume:	10 mL
Date Prepared:	03/22/2011 1422			Injection Volume:	2 uL
				Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 680-197818/20-A	Analysis Batch:	680-197999	Instrument ID:	SGO
Client Matrix:	Water	Prep Batch:	680-197818	Lab File ID:	oc23012.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	1000 mL
Date Analyzed:	03/23/2011 1850			Final Weight/Volume:	10 mL
Date Prepared:	03/22/2011 1422			Injection Volume:	2 uL
				Column ID:	PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Azinphos-methyl	89	95	68 - 143	7	50		
Bolstar	89	104	70 - 130	16	50		
Chlorpyrifos	92	98	66 - 130	7	50		
Coumaphos	88	94	68 - 131	6	50		
Diazinon	88	91	70 - 130	3	50		
Dichlorvos	83	84	59 - 130	2	50		
Disulfoton	83	87	66 - 130	6	50		
Fensulfothion	92	103	68 - 170	11	50		
Fenthion	91	90	70 - 130	1	50		
Merphos	54	55	55 - 130	2	50	*	
Methyl parathion	83	87	58 - 131	4	50		
Mevinphos	87	93	70 - 131	7	50		
Ethoprop	94	97	65 - 130	4	50		
Naled	64	71	10 - 183	11	50		
Phorate	86	90	64 - 130	4	50		
Ronnel	90	94	40 - 159	4	50		
Stirophos	97	104	70 - 130	7	50		
Tokuthion	87	99	10 - 200	14	50		
Trichloronate	90	106	70 - 130	16	50		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Triphenylphosphate	98	100	67 - 130

Client: Access Analytical Services

Job Number: 680-66573-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-197818

Method: 8141A
Preparation: 3520C

LCS Lab Sample ID:	LCS 680-197818/21-A	Analysis Batch:	680-197999	Instrument ID:	SGO
Client Matrix:	Water	Prep Batch:	680-197818	Lab File ID:	oc23013.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	1000 mL
Date Analyzed:	03/23/2011 1915			Final Weight/Volume:	10 mL
Date Prepared:	03/22/2011 1422			Injection Volume:	2 uL
				Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 680-197818/22-A	Analysis Batch:	680-197999	Instrument ID:	SGO
Client Matrix:	Water	Prep Batch:	680-197818	Lab File ID:	oc23014.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	1000 mL
Date Analyzed:	03/23/2011 1940			Final Weight/Volume:	10 mL
Date Prepared:	03/22/2011 1422			Injection Volume:	2 uL
				Column ID:	PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Demeton-O	51	58	31 - 130	12	50		
Demeton-S	88	80	44 - 130	9	50		
Dimethoate	94	81	70 - 130	15	50		
EPN	100	96	70 - 130	4	50		
Famphur	91	92	70 - 130	1	50		
Malathion	87	92	70 - 130	5	50		
Monochrotophos	74	67	37 - 130	10	50		
Ethyl Parathion	89	94	70 - 130	6	50		
Sulfotepp	83	87	70 - 130	5	50		
Thionazin	75	76	69 - 130	1	50		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Triphenylphosphate	99	98	67 - 130

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Sub to Test America- Savannah See address below!

SUBCONTRACT ORDER

Prism Laboratories, Inc.

1030440

Certification: NELAC___ USACE___
SC___ Other NC
N/A___

SENDING LABORATORY:

Prism Laboratories, Inc.
P. O. Box 240543
Charlotte, NC 28224-0543
Phone: 800-529-6364
Fax: 704-525-0409
Project Manager: Robbi A. Jones

RECEIVING LABORATORY:

Test America, Inc. (Savannah)
5102 LaRoche Ave.
Savannah, GA 31404
Phone :(912) 354-7858
Fax: -

(Note to TA: This is coming through Ashley Amick/ Access. Report to Prism. Invoice to Access

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1030440-01	**Water**	**Sampled:03/16/11 11:30**	[redacted]	
8141 (Sub) Appendix IX		03/23/11 11:30		

Containers Supplied: 2 Liters unpreserved

680-66573
4.2°C

Released By	Date	Received By	Date
[signature]	3/17/11 @1700	Fed Ex	3/17/11 @1700
Fed Ex			
Released By	Date	Received By	Date
		TA-Savannah	
		[signature]	3/18/11 0924
Released By	Date	Received By	Date
Released By	Date	Received By	Date

ACCESS
ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT:

Prism Laboratories
PO Box 240543
Charlotte, NC 28224
ATTN: Robbi A. Jones

PROJECT:

1030440

DATE:

04.06.11

Access Analytical Project Manager:

Ashley B. Amick
aamick@axs-inc.com

Any questions related to this report should be directed to your Access Analytical project manager listed above at phone 803.781.4243 or via email.

Notes: The following report represents analytical data for Dioxins and Furans via method 8290. Access Analytical utilizes several qualified subcontractors to perform this work.

Analysis of these samples was performed at the following facility: Cape Fear Analytical 3306 Kitty Hawk Road Suite # 120 Wilmington NC 28405

Sub to Cape Fear on 3/17
Access Analytical

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

SUBCONTRACT ORDER

Prism Laboratories, Inc.

1030440

Certification: NELAC___ USACE___
SC___ Other NC
N/A___

SENDING LABORATORY:

Prism Laboratories, Inc.
P. O. Box 240543
Charlotte, NC 28224-0543
Phone: 800-529-6364
Fax: 704-525-0409
Project Manager: Robbi A. Jones

RECEIVING LABORATORY:

Cape Fear Analytical
3306 Kitty Hawk Rd. Ste 120
Wilmington, NC 28405
Phone :(910) 795-0421
Fax: -

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1030440-01	**Water**	**Sampled:03/16/11 11:30**	[redacted]	
8290 (Sub) Appendix IX		03/23/11 11:30		2,3,7,8-TCDD, Dioxins/Furans
Containers Supplied: 2 Liters Unpreserved				

Dioxins
Furans
2,3,7,8-TCDD

WO# 2182
temp. = 0.0°

Released By	Date	Received By	Date
[signature]	3/17/11 @ 1700	Fed Ex	3/17/11 @ 1700
Fed Ex		Cynde Larkins Cape Fear	3/18/11 0940

SAMPLE RECEIPT CHECKLIST
Cape Fear Analytical

Client:	Prism	Work Order:	2182
Received By:	Cynde Larkins	Date/Time Received:	18 MAR 11 0940

Suspected Hazard Information	Yes	NA	No
Shipped as DOT Hazardous?			✓
Samples identified as Foreign Soil?			✓

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other(describe)
2	Chain of Custody documents included with shipment?	✓			
3	Samples requiring cold preservation within 0-6°C?	✓			Preservation Method: (Ice bag) blue ice dry ice none other (describe) 0.0°
4	Samples requiring chemical preservation at proper pH?		✓		Sample IDs, containers affected and pH observed: pH = 7 on both containers If preservative added, Lot#:
5	Samples requiring preservation have no residual chlorine?	✓			Sample IDs, containers affected: If preservative added, Lot#:
6	Samples received within holding time?	✓			Sample IDs, tests affected:
7	Sample IDs on COC match IDs on containers?	✓			Sample IDs, containers affected:
8	Date & time of COC match date & time on containers?	✓			Sample IDs, containers affected:
9	Number of containers received match number indicated on COC?	✓			Sample IDs, containers affected:
10	COC form is properly signed in relinquished/received sections?	✓			

Comments:

Checklist performed by: Initials: CL Date: 18 MAR 11

High Resolution Dioxin and Furan Analysis

Case Narrative

HDOX Case Narrative
Access Analytical, Inc. (AAIS)
SDG 1030440

Method/Analysis Information

Product:	**App. IX list by SW846 Method 8290A in Liquids**
Analytical Method:	SW846 8290A
Extraction Method:	SW846 3520C
Analytical Batch Number:	18547
Clean Up Batch Number:	18485
Extraction Batch Number:	18479

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8290A:

Sample ID	Client ID
2182001	1030440-01
12003008	Laboratory Control Sample (LCS)
12003009	Laboratory Control Sample Duplicate (LCSD)
12003010	Method Blank (MB)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-002 REV# 8.

Raw data reports are processed and reviewed by the analyst using the TargetLynx software package.

Calibration Information

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

Continuing Calibration Verification (CCV) Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Certification Statement
The test results presented in this document are certified to meet all requirements of the 2003 NELAC Standard.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery
The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement
The RPD(s) between the LCS and LCSD met the acceptance limits.

QC Sample Designation
A matrix spike and matrix spike duplicate analysis was not required for this SDG.

Technical Information

Holding Time Specifications
CFA assigns holding times based on the associated methodology, which assigns the date and time from sample collection. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Manual Integrations
Certain standards and QC samples required manual integrations to correctly position the baseline as set in the calibration standard injections. Where manual integrations were performed, copies of all manual integration peak profiles are included in the raw data section of this fraction. Manual integrations were required for data files in this SDG.

System Configuration
This analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
HRP791_3	Waters Autospec Premier high-resolution GC/MS system	Waters Autospec Prem	DB-5MS	60m x 0.25mm, 0.25um

Sample Data Summary

Cape Fear Analytical, LLC

3306 Kitty Hawk Road Suite 120, Wilmington, NC 28405 - (910) 795-0421 - www.capefearanalytical.com

Certificate of Analysis Report
for

AAIS001 Access Analytical, Inc.

Client SDG: 1030440 CFA Work Order: 2182

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- J Value is estimated
- K Estimated Maximum Possible Concentration
- U Analyte was analyzed for , but not detected above the specified detection limit.

Review/Validation

Cape Fear Analytical requires all analytical data to be verified by a qualified data reviewer.

The following data validator verified the information presented in this case narrative:

Signature: Heather Patterson **Name: Heather Patterson**

Date: 05 APR 2011 **Title: Analyst III**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	1030440	**Client:**	AAIS001	**Project:**	AAIS00110
Lab Sample ID:	2182001	**Date Collected:**	03/16/2011 11:30	**Matrix:**	WATER
Client Sample:	8290 TCDD Water	**Date Received:**	03/18/2011 09:40		
Client ID:	1030440-01			**Prep Basis:**	As Received
Batch ID:	18547	**Method:**	SW846 8290A		
Run Date:	03/26/2011 10:19	**Analyst:**	MJC	**Instrument:**	HRP791
Data File:	c25mar11a_2-9			**Dilution:**	1
Prep Batch:	18479	**Prep Method:**	SW846 3520C		
Prep Date:	24-MAR-11	**Aliquot:**	945.9 mL		

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	JK		2.07	pg/L	0.863	10.6
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	.863	3.95	pg/L	0.863	10.6
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	1.15		pg/L	1.15	52.9
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	.839	0.973	pg/L	0.839	52.9
37871-00-4	Total Heptachlorodibenzo-p-dioxin	J	11.7		pg/L	0.992	52.9
30402-14-3	Total Tetrachlorodibenzofuran	U	1.94	29.0	pg/L	1.94	10.6
30402-15-4	Total Pentachlorodibenzofuran	U	.966		pg/L	0.966	52.9
55684-94-1	Total Hexachlorodibenzofuran	U	.742		pg/L	0.742	52.9
38998-75-3	Total Heptachlorodibenzofuran	U	.66		pg/L	0.660	52.9

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1490	2110	pg/L	70.5	(40%-135%)
13C-1,2,3,7,8-PeCDD		1570	2110	pg/L	74.2	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1280	2110	pg/L	60.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1410	2110	pg/L	66.6	(40%-135%)
13C-OCDD		2780	4230	pg/L	65.8	(40%-135%)
13C-2,3,7,8-TCDF		1550	2110	pg/L	73.4	(40%-135%)
13C-1,2,3,7,8-PeCDF		1550	2110	pg/L	73.4	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1220	2110	pg/L	57.8	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1360	2110	pg/L	64.2	(40%-135%)

Comments:

J Value is estimated

K Estimated Maximum Possible Concentration

U Analyte was analyzed for , but not detected above the specified detection limit.

Quality Control Summary

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 1030440

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12003008	LCS for batch 18479	13C-2,3,7,8-TCDD		68.8	(40%-135%)
		13C-1,2,3,7,8-PeCDD		90.4	(40%-135%)
		13C-1,2,3,6,7,8-HxCDD		66.6	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		71.5	(40%-135%)
		13C-OCDD		72.5	(40%-135%)
		13C-2,3,7,8-TCDF		74.5	(40%-135%)
		13C-1,2,3,7,8-PeCDF		90.7	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		63.9	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		67.6	(40%-135%)
12003009	LCSD for batch 18479	13C-2,3,7,8-TCDD		62.5	(40%-135%)
		13C-1,2,3,7,8-PeCDD		82.0	(40%-135%)
		13C-1,2,3,6,7,8-HxCDD		61.8	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		69.0	(40%-135%)
		13C-OCDD		70.7	(40%-135%)
		13C-2,3,7,8-TCDF		69.5	(40%-135%)
		13C-1,2,3,7,8-PeCDF		79.5	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		61.6	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		67.0	(40%-135%)
12003010	MB for batch 18479	13C-2,3,7,8-TCDD		57.4	(40%-135%)
		13C-1,2,3,7,8-PeCDD		70.9	(40%-135%)
		13C-1,2,3,6,7,8-HxCDD		54.0	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		58.4	(40%-135%)
		13C-OCDD		58.4	(40%-135%)
		13C-2,3,7,8-TCDF		64.6	(40%-135%)
		13C-1,2,3,7,8-PeCDF		69.3	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		54.6	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		56.6	(40%-135%)
2182001	1030440-01	13C-2,3,7,8-TCDD		70.5	(40%-135%)
		13C-1,2,3,7,8-PeCDD		74.2	(40%-135%)
		13C-1,2,3,6,7,8-HxCDD		60.6	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		66.6	(40%-135%)
		13C-OCDD		65.8	(40%-135%)
		13C-2,3,7,8-TCDF		73.4	(40%-135%)
		13C-1,2,3,7,8-PeCDF		73.4	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		57.8	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		64.2	(40%-135%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number:	1030440	Sample Type:	Laboratory Control Sample
Client ID:	LCS for batch 18479	Matrix:	WATER
Lab Sample ID:	12003008		
Instrument:	HRP791	Analysis Date:	03/26/2011 04:40
Analyst:	MJC	Prep Batch ID:	18479
		Batch ID:	18547

Dilution: 1

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	200	229	114	70-130

Hi-Res Dioxins/Furans
Quality Control Summary
Spike Recovery Report

SDG Number: 1030440
Client ID: LCSD for batch 18479
Lab Sample ID: 12003009
Instrument: HRP791
Analyst: MJC

Sample Type: Laboratory Control Sample Duplicate
Matrix: WATER
Analysis Date: 03/26/2011 05:28
Dilution: 1
Prep Batch ID: 18479
Batch ID: 18547

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	LCSD	2,3,7,8-TCDD	200	217	109	70-130	5.22	0-20

Method Blank Summary

SDG Number:	**1030440**	**Client:**	**AAIS001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 18479**	**Instrument ID:**	**HRP791**	**Data File:**	**c25mar11a_2-4**
Lab Sample ID:	**12003010**	**Prep Date:**	**24-MAR-11**	**Analyzed:**	**03/26/11 06:17**
Column:					

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 18479	12003008	c25mar11a_2-2	03/26/11	0440
02	LCSD for batch 18479	12003009	c25mar11a_2-3	03/26/11	0528
03	1030440-01	2182001	c25mar11a_2-9	03/26/11	1019

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	1030440	**Client:**	AAIS001	**Project:**	QC
Lab Sample ID:	12003008			**Matrix:**	WATER
Client Sample:	QC for batch 18479				
Client ID:	LCS for batch 18479			**Prep Basis:**	As Received
Batch ID:	18547	**Method:**	SW846 8290A		
Run Date:	03/26/2011 04:40	**Analyst:**	MJC	**Instrument:**	HRP791
Data File:	c25mar11a_2-2			**Dilution:**	1
Prep Batch:	18479	**Prep Method:**	SW846 3520C		
Prep Date:	24-MAR-11	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD		229		pg/L	0.756	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1380	2000	pg/L	68.8	(40%-135%)
13C-1,2,3,7,8-PeCDD		1810	2000	pg/L	90.4	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1330	2000	pg/L	66.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1430	2000	pg/L	71.5	(40%-135%)
13C-OCDD		2900	4000	pg/L	72.5	(40%-135%)
13C-2,3,7,8-TCDF		1490	2000	pg/L	74.5	(40%-135%)
13C-1,2,3,7,8-PeCDF		1810	2000	pg/L	90.7	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1280	2000	pg/L	63.9	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1350	2000	pg/L	67.6	(40%-135%)

Comments:

K Estimated Maximum Possible Concentration

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	1030440	**Client:**	AAIS001	**Project:**	QC
Lab Sample ID:	12003009			**Matrix:**	WATER
Client Sample:	QC for batch 18479				
Client ID:	LCSD for batch 18479			**Prep Basis:**	As Received
Batch ID:	18547	**Method:**	SW846 8290A		
Run Date:	03/26/2011 05:28	**Analyst:**	MJC	**Instrument:**	HRP791
Data File:	c25mar11a_2-3			**Dilution:**	1
Prep Batch:	18479	**Prep Method:**	SW846 3520C		
Prep Date:	24-MAR-11	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD		217		pg/L	0.682	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1250	2000	pg/L	62.5	(40%-135%)
13C-1,2,3,7,8-PeCDD		1640	2000	pg/L	82.0	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1240	2000	pg/L	61.8	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1380	2000	pg/L	69.0	(40%-135%)
13C-OCDD		2830	4000	pg/L	70.7	(40%-135%)
13C-2,3,7,8-TCDF		1390	2000	pg/L	69.5	(40%-135%)
13C-1,2,3,7,8-PeCDF		1590	2000	pg/L	79.5	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1230	2000	pg/L	61.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1340	2000	pg/L	67.0	(40%-135%)

Comments:

K Estimated Maximum Possible Concentration

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	1030440	**Client:**	AAIS001	**Project:**	QC
Lab Sample ID:	12003010			**Matrix:**	WATER
Client Sample:	QC for batch 18479				
Client ID:	MB for batch 18479			**Prep Basis:**	As Received
Batch ID:	18547	**Method:**	SW846 8290A		
Run Date:	03/26/2011 06:17	**Analyst:**	MJC	**Instrument:**	HRP791
Data File:	c25mar11a_2-4			**Dilution:**	1
Prep Batch:	18479	**Prep Method:**	SW846 3520C		
Prep Date:	24-MAR-11	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	U	.574		pg/L	0.574	10.0
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	.574		pg/L	0.574	10.0
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	.936		pg/L	0.936	50.0
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	1.1		pg/L	1.10	50.0
37871-00-4	Total Heptachlorodibenzo-p-dioxin	J	1.30		pg/L	0.610	50.0
30402-14-3	Total Tetrachlorodibenzofuran	U	.562		pg/L	0.562	10.0
30402-15-4	Total Pentachlorodibenzofuran	U	.728		pg/L	0.728	50.0
55684-94-1	Total Hexachlorodibenzofuran	J	1.10		pg/L	0.914	50.0
38998-75-3	Total Heptachlorodibenzofuran	J	1.66		pg/L	0.888	50.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1150	2000	pg/L	57.4	(40%-135%)
13C-1,2,3,7,8-PeCDD		1420	2000	pg/L	70.9	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1080	2000	pg/L	54.0	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1170	2000	pg/L	58.4	(40%-135%)
13C-OCDD		2340	4000	pg/L	58.4	(40%-135%)
13C-2,3,7,8-TCDF		1290	2000	pg/L	64.6	(40%-135%)
13C-1,2,3,7,8-PeCDF		1390	2000	pg/L	69.3	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1090	2000	pg/L	54.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1130	2000	pg/L	56.6	(40%-135%)

Comments:

J Value is estimated

U Analyte was analyzed for , but not detected above the specified detection limit.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica West Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

TestAmerica Job ID: G1E120651
Client Project Description: Alcatel-Lucent

For:
AECOM, Inc
8540 Colonnade Center Drive
Suite 306
Raleigh, NC 27615

Attn: Erin Stewart

Authorized for release by:
06/03/2011 01:15:19 PM

David Alltucker
Project Manager
david.alltucker@testamericainc.com

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

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.testamericainc.com

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Internal Standard Summary 8
QC Sample Results 9
QC Association Summary 11
Lab Chronicle 12
Certification Summary 13
Method Summary 14
Sample Summary 15
Raw Data 16
Chain of Custody 467

Definitions/Glossary

Qualifiers

DIOXIN

Qualifier	Qualifier Description
B	Method blank contamination. The associated method blank contains the target analyte at a reportable level.
J	Estimated result. Result is less than the reporting limit.
Q	Estimated maximum possible concentration (EMPC).

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Case Narrative

TestAmerica West Sacramento Project Number G1E120651

WATER, 8290, Dioxins/Furans, HRGC/HRMS
Sample(s): 2
The analyte OCDD has been qualified with a "Q" flag due to the ion abundance ratios being outside of criteria. The analyte has been reported as an "estimated maximum possible concentration" (EMPC) because the quantitation is based on the theoretical ion abundance ratio for the analyte.

There were no other anomalies associated with this project.

Detection Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Client Sample ID: MW-2A — Lab Sample ID: G1E120651001

Analyte	Result	Qualifier	ML	EDL	Unit	Dil Fac	D	Method	Prep Type
Total HpCDD	1.7		52	1.2	pg/L	1.03		8290	Total
OCDD	10	J B	100	0.53	pg/L	1.03		8290	Total

Client Sample ID: MW-2A DUP — Lab Sample ID: G1E120651002

Analyte	Result	Qualifier	ML	EDL	Unit	Dil Fac	D	Method	Prep Type
Total HpCDD	2.7		54	1.4	pg/L	1.08		8290	Total
OCDD	19	J Q B	110	1.1	pg/L	1.08		8290	Total
1,2,3,4,6,7,8-HpCDF	1.1	J B	54	1.0	pg/L	1.08		8290	Total
Total HpCDF	1.1		54	1.1	pg/L	1.08		8290	Total

Client Sample ID: MW-2A

Lab Sample ID: G1E120651001

Date Collected: 05/10/11 16:00

Matrix: Water

Date Received: 05/12/11 09:30

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290)

Analyte	Result	Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	0.92	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total TCDD	ND		10	0.92	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8-PeCDD	ND		52	0.75	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total PeCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,7,8-HxCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,6,7,8-HxCDD	ND		52	0.83	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8,9-HxCDD	ND		52	0.85	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HxCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,6,7,8-HpCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HpCDD	**1.7**		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
OCDD	**10**	**J B**	100	0.53	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
2,3,7,8-TCDF	ND		10	1.1	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total TCDF	ND		10	1.1	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8-PeCDF	ND		52	1.0	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
2,3,4,7,8-PeCDF	ND		52	1.0	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total PeCDF	ND		52	1.0	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,7,8-HxCDF	ND		52	0.27	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,6,7,8-HxCDF	ND		52	0.21	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
2,3,4,6,7,8-HxCDF	ND		52	0.24	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8,9-HxCDF	ND		52	0.28	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HxCDF	ND		52	0.28	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,6,7,8-HpCDF	ND		52	0.82	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,7,8,9-HpCDF	ND		52	0.72	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HpCDF	ND		52	0.82	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
OCDF	ND		100	1.5	pg/L		05/18/11 09:00	05/23/11 14:17	1.03

Internal Standard	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*90*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,7,8-PeCDD	*100*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,6,7,8-HxCDD	*88*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,4,6,7,8-HpCDD	*81*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-OCDD	*101*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-2,3,7,8-TCDF	*116*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,7,8-PeCDF	*97*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,4,7,8-HxCDF	*90*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,4,6,7,8-HpCDF	*81*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*

Client Sample ID: MW-2A DUP

Lab Sample ID: G1E120651002

Date Collected: 05/10/11 16:00

Matrix: Water

Date Received: 05/12/11 09:30

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290)

Analyte	Result	Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		11	0.78	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total TCDD	ND		11	0.78	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8-PeCDD	ND		54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total PeCDD	ND		54	1.8	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,7,8-HxCDD	ND		54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,6,7,8-HxCDD	ND		54	1.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8,9-HxCDD	ND		54	1.1	pg/L		05/18/11 09:00	05/23/11 15:02	1.08

Client Sample ID: MW-2A DUP

Lab Sample ID: G1E120651002

Date Collected: 05/10/11 16:00

Matrix: Water

Date Received: 05/12/11 09:30

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290) (Continued)

Analyte	Result	Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
Total HxCDD	ND		54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,6,7,8-HpCDD	ND		54	2.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total HpCDD	**2.7**		54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
OCDD	**19**	**J Q B**	110	1.1	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
2,3,7,8-TCDF	ND		11	0.92	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total TCDF	ND		11	0.92	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8-PeCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
2,3,4,7,8-PeCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total PeCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,7,8-HxCDF	ND		54	0.81	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,6,7,8-HxCDF	ND		54	0.43	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
2,3,4,6,7,8-HxCDF	ND		54	0.27	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8,9-HxCDF	ND		54	0.35	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total HxCDF	ND		54	0.81	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,6,7,8-HpCDF	**1.1**	**J B**	54	1.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,7,8,9-HpCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total HpCDF	**1.1**		54	1.1	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
OCDF	ND		110	2.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08

Internal Standard	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*72*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,7,8-PeCDD	*73*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,6,7,8-HxCDD	*79*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,4,6,7,8-HpCDD	*65*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-OCDD	*72*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-2,3,7,8-TCDF	*93*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,7,8-PeCDF	*76*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,4,7,8-HxCDF	*83*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,4,6,7,8-HpCDF	*71*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*

Internal Standard Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290)

Matrix: Water

Prep Type: Total

		Percent Internal Standard Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	PeCDD (40-135)	HxCDD2 (40-135)	HpCDD (40-135)	OCDD (40-135)	TCDF (40-135)	PeCDF1 (40-135)	HxCDF1 (40-135)
G1E120651001	MW-2A	90	100	88	81	101	116	97	90
G1E120651002	MW-2A DUP	72	73	79	65	72	93	76	83
G1E180000127B	INTRA-LAB BLANK	73	83	73	69	75	86	76	85
G1E180000127C	CHECK SAMPLE	78	88	75	74	78	91	78	88

		Percent Internal Standard Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	HpCDF1 (40-135)
G1E120651001	MW-2A	81
G1E120651002	MW-2A DUP	71
G1E180000127B	INTRA-LAB BLANK	70
G1E180000127C	CHECK SAMPLE	72

Internal Standard Legend

TCDD = 13C-2,3,7,8-TCDD
PeCDD = 13C-1,2,3,7,8-PeCDD
HxCDD2 = 13C-1,2,3,6,7,8-HxCDD
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
OCDD = 13C-OCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDF1 = 13C-1,2,3,7,8-PeCDF
HxCDF1 = 13C-1,2,3,4,7,8-HxCDF
HpCDF1 = 13C-1,2,3,4,6,7,8-HpCDF

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290)

Lab Sample ID: G1E180000127B
Matrix: Water
Analysis Batch: 1138127

Client Sample ID: INTRA-LAB BLANK
Prep Type: Total
Prep Batch: 1138127_P

Analyte	MB Result	MB Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	1.2	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total TCDD	ND		10	1.2	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,7,8-PeCDD	ND		50	1.4	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total PeCDD	ND		50	2.1	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,4,7,8-HxCDD	ND		50	1.2	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,6,7,8-HxCDD	ND		50	0.89	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,7,8,9-HxCDD	ND		50	0.91	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total HxCDD	ND		50	1.2	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,4,6,7,8-HpCDD	ND		50	1.0	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total HpCDD	1.1		50	1.0	pg/L		05/18/11 09:00	05/20/11 22:04	1
OCDD	4.0	J	100	1.1	pg/L		05/18/11 09:00	05/20/11 22:04	1
2,3,7,8-TCDF	ND		10	1.6	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total TCDF	ND		10	1.6	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,7,8-PeCDF	ND		50	1.2	pg/L		05/18/11 09:00	05/20/11 22:04	1
2,3,4,7,8-PeCDF	ND		50	1.3	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total PeCDF	ND		50	1.4	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,4,7,8-HxCDF	ND		50	0.60	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,6,7,8-HxCDF	ND		50	0.92	pg/L		05/18/11 09:00	05/20/11 22:04	1
2,3,4,6,7,8-HxCDF	ND		50	0.53	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,7,8,9-HxCDF	ND		50	0.66	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total HxCDF	ND		50	0.92	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,4,6,7,8-HpCDF	1.3	J	50	0.66	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,4,7,8,9-HpCDF	ND		50	0.77	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total HpCDF	1.3		50	0.71	pg/L		05/18/11 09:00	05/20/11 22:04	1
OCDF	ND		100	2.0	pg/L		05/18/11 09:00	05/20/11 22:04	1

Internal Standard	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*73*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,7,8-PeCDD	*83*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,6,7,8-HxCDD	*73*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*69*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-OCDD	*75*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-2,3,7,8-TCDF	*86*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,7,8-PeCDF	*76*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,4,7,8-HxCDF	*85*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*70*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*

Lab Sample ID: G1E180000127C
Matrix: Water
Analysis Batch: 1138127

Client Sample ID: CHECK SAMPLE
Prep Type: Total
Prep Batch: 1138127_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
2,3,7,8-TCDD	200	223		pg/L		111	64 - 142
1,2,3,7,8-PeCDD	1000	943		pg/L		94	71 - 140
1,2,3,4,7,8-HxCDD	1000	1090		pg/L		109	56 - 146
1,2,3,6,7,8-HxCDD	1000	1000		pg/L		100	73 - 144
1,2,3,7,8,9-HxCDD	1000	1060		pg/L		106	71 - 151
1,2,3,4,6,7,8-HpCDD	1000	1030		pg/L		103	78 - 139
OCDD	2000	1950		pg/L		97	80 - 132
2,3,7,8-TCDF	200	231		pg/L		115	71 - 142

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290) (Continued)

Lab Sample ID: G1E180000127C
Matrix: Water
Analysis Batch: 1138127

Client Sample ID: CHECK SAMPLE
Prep Type: Total
Prep Batch: 1138127_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
1,2,3,7,8-PeCDF	1000	1030		pg/L		103	76 - 135
2,3,4,7,8-PeCDF	1000	1010		pg/L		101	74 - 137
1,2,3,4,7,8-HxCDF	1000	975		pg/L		98	75 - 131
1,2,3,6,7,8-HxCDF	1000	1040		pg/L		104	76 - 133
2,3,4,6,7,8-HxCDF	1000	896		pg/L		90	80 - 137
1,2,3,7,8,9-HxCDF	1000	917		pg/L		92	77 - 142
1,2,3,4,6,7,8-HpCDF	1000	1070		pg/L		107	79 - 133
1,2,3,4,7,8,9-HpCDF	1000	1080		pg/L		108	83 - 130
OCDF	2000	1980		pg/L		99	72 - 140

Internal Standard	*LCS % Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*78*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*88*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*75*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*74*		*40 - 135*
13C-OCDD	*78*		*40 - 135*
13C-2,3,7,8-TCDF	*91*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*78*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*88*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*72*		*40 - 135*

QC Association Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

DIOXIN

Analysis Batch: 1138127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
G1E180000127B	INTRA-LAB BLANK	Total	Water	8290	
G1E180000127C	CHECK SAMPLE	Total	Water	8290	
G1E120651001	MW-2A	Total	Water	8290	
G1E120651002	MW-2A DUP	Total	Water	8290	

Prep Batch: 1138127_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
G1E180000127B	INTRA-LAB BLANK	Total	Water	8290	
G1E180000127C	CHECK SAMPLE	Total	Water	8290	
G1E120651001	MW-2A	Total	Water	8290	
G1E120651002	MW-2A DUP	Total	Water	8290	

Lab Chronicle

Client Sample ID: MW-2A — **Lab Sample ID: G1E120651001**
Date Collected: 05/10/11 16:00 — Matrix: Water
Date Received: 05/12/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	8290			1138127_P	05/18/11 09:00	TL	TAL WSC
Total	Analysis	8290		1.03	1138127	05/23/11 14:17	MN	TAL WSC

Client Sample ID: MW-2A DUP — **Lab Sample ID: G1E120651002**
Date Collected: 05/10/11 16:00 — Matrix: Water
Date Received: 05/12/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	8290			1138127_P	05/18/11 09:00	TL	TAL WSC
Total	Analysis	8290		1.08	1138127	05/23/11 15:02	MN	TAL WSC

Laboratory References:
TAL WSC = TestAmerica West Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Certification Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica West Sacramento		US Fish & Wildlife		LE148388-0
TestAmerica West Sacramento		USDA		P330-09-00055
TestAmerica West Sacramento		USEPA UCMR		CA00044
TestAmerica West Sacramento	A2LA	DoD ELAP	0	2928-01
TestAmerica West Sacramento	Alaska	Alaska UST	10	UST-055
TestAmerica West Sacramento	Arizona	State Program	9	AZ0708
TestAmerica West Sacramento	Arkansas	State Program	6	88-0691
TestAmerica West Sacramento	California	NELAC	9	1119CA
TestAmerica West Sacramento	Colorado	State Program	8	N/A
TestAmerica West Sacramento	Connecticut	State Program	1	PH-0691
TestAmerica West Sacramento	Florida	NELAC	4	E87570
TestAmerica West Sacramento	Georgia	State Program	4	960
TestAmerica West Sacramento	Guam	State Program	9	N/A
TestAmerica West Sacramento	Hawaii	State Program	9	N/A
TestAmerica West Sacramento	Illinois	NELAC	5	200060
TestAmerica West Sacramento	Kansas	NELAC	7	E-10375
TestAmerica West Sacramento	Louisiana	NELAC	6	30612
TestAmerica West Sacramento	Michigan	State Program	5	9947
TestAmerica West Sacramento	Nevada	State Program	9	CA44
TestAmerica West Sacramento	New Jersey	NELAC	2	CA005
TestAmerica West Sacramento	New Mexico	State Program	6	N/A
TestAmerica West Sacramento	New York	NELAC	2	11666
TestAmerica West Sacramento	Oregon	NELAC	10	CA200005
TestAmerica West Sacramento	Pennsylvania	NELAC	3	68-01272
TestAmerica West Sacramento	South Carolina	State Program	4	87014
TestAmerica West Sacramento	Texas	NELAC	6	T104704399-08-TX
TestAmerica West Sacramento	Utah	NELAC	8	QUAN1
TestAmerica West Sacramento	Virginia	State Program	3	178
TestAmerica West Sacramento	Washington	State Program	10	C581
TestAmerica West Sacramento	West Virginia	West Virginia DEP	3	334
TestAmerica West Sacramento	West Virginia	West Virginia DHHR (DW)	3	9930C
TestAmerica West Sacramento	Wisconsin	State Program	5	998204680
TestAmerica West Sacramento	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Method	Method Description	Protocol	Laboratory
8290	Dioxins/Furans, HRGC/HRMS (8290)	SW846	TAL WSC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL WSC = TestAmerica West Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Sample ID	Client Sample ID	Matrix	Collected	Received
G1E120651001	MW-2A	Water	05/10/11 16:00	05/12/11 09:30
G1E120651002	MW-2A DUP	Water	05/10/11 16:00	05/12/11 09:30

WATER, 8290, Dioxins/Furans, HRGC/HRMS

QC Summary

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: G1E120651 **Work Order #...:** MJJM91AC **Matrix.....:** WATER
LCS Lot-Sample#: G1E180000-127
Prep Date.....: 05/18/11 **Analysis Date..:** 05/20/11
Prep Batch #...: 1138127
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,3,7,8-TCDD	**111**	**(64 - 142)**	**SW846 8290**
1,2,3,7,8-PeCDD	**94**	**(71 - 140)**	**SW846 8290**
1,2,3,4,7,8-HxCDD	**109**	**(56 - 146)**	**SW846 8290**
1,2,3,6,7,8-HxCDD	**100**	**(73 - 144)**	**SW846 8290**
1,2,3,7,8,9-HxCDD	**106**	**(71 - 151)**	**SW846 8290**
1,2,3,4,6,7,8-HpCDD	**103**	**(78 - 139)**	**SW846 8290**
OCDD	**97**	**(80 - 132)**	**SW846 8290**
2,3,7,8-TCDF	**115**	**(71 - 142)**	**SW846 8290**
1,2,3,7,8-PeCDF	**103**	**(76 - 135)**	**SW846 8290**
2,3,4,7,8-PeCDF	**101**	**(74 - 137)**	**SW846 8290**
1,2,3,4,7,8-HxCDF	**98**	**(75 - 131)**	**SW846 8290**
1,2,3,6,7,8-HxCDF	**104**	**(76 - 133)**	**SW846 8290**
2,3,4,6,7,8-HxCDF	**90**	**(80 - 137)**	**SW846 8290**
1,2,3,7,8,9-HxCDF	**92**	**(77 - 142)**	**SW846 8290**
1,2,3,4,6,7,8-HpCDF	**107**	**(79 - 133)**	**SW846 8290**
1,2,3,4,7,8,9-HpCDF	**108**	**(83 - 130)**	**SW846 8290**
OCDF	**99**	**(72 - 140)**	**SW846 8290**

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	78	(40 - 135)
13C-1,2,3,7,8-PeCDD	88	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	75	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	74	(40 - 135)
13C-OCDD	78	(40 - 135)
13C-2,3,7,8-TCDF	91	(40 - 135)
13C-1,2,3,7,8-PeCDF	78	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	88	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	72	(40 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

Trace Level Organic Compounds

Client Lot #...: G1E120651 **Work Order #...:** MJJM91AC **Matrix.....:** WATER
LCS Lot-Sample#: G1E180000-127
Prep Date.....: 05/18/11 **Analysis Date..:** 05/20/11
Prep Batch #...: 1138127
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2,3,7,8-TCDD	**200**	**223**	**pg/L**	**111**	**SW846 8290**
1,2,3,7,8-PeCDD	**1000**	**943**	**pg/L**	**94**	**SW846 8290**
1,2,3,4,7,8-HxCDD	**1000**	**1090**	**pg/L**	**109**	**SW846 8290**
1,2,3,6,7,8-HxCDD	**1000**	**1000**	**pg/L**	**100**	**SW846 8290**
1,2,3,7,8,9-HxCDD	**1000**	**1060**	**pg/L**	**106**	**SW846 8290**
1,2,3,4,6,7,8-HpCDD	**1000**	**1030**	**pg/L**	**103**	**SW846 8290**
OCDD	**2000**	**1950**	**pg/L**	**97**	**SW846 8290**
2,3,7,8-TCDF	**200**	**231**	**pg/L**	**115**	**SW846 8290**
1,2,3,7,8-PeCDF	**1000**	**1030**	**pg/L**	**103**	**SW846 8290**
2,3,4,7,8-PeCDF	**1000**	**1010**	**pg/L**	**101**	**SW846 8290**
1,2,3,4,7,8-HxCDF	**1000**	**975**	**pg/L**	**98**	**SW846 8290**
1,2,3,6,7,8-HxCDF	**1000**	**1040**	**pg/L**	**104**	**SW846 8290**
2,3,4,6,7,8-HxCDF	**1000**	**896**	**pg/L**	**90**	**SW846 8290**
1,2,3,7,8,9-HxCDF	**1000**	**917**	**pg/L**	**92**	**SW846 8290**
1,2,3,4,6,7,8-HpCDF	**1000**	**1070**	**pg/L**	**107**	**SW846 8290**
1,2,3,4,7,8,9-HpCDF	**1000**	**1080**	**pg/L**	**108**	**SW846 8290**
OCDF	**2000**	**1980**	**pg/L**	**99**	**SW846 8290**

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	78	(40 - 135)
13C-1,2,3,7,8-PeCDD	88	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	75	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	74	(40 - 135)
13C-OCDD	78	(40 - 135)
13C-2,3,7,8-TCDF	91	(40 - 135)
13C-1,2,3,7,8-PeCDF	78	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	88	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	72	(40 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Data file	Smp	Work Order	Sample ID	FV-uL	Method/Matrix	Box	Size	U
22FE11A4D5	1	CP0222	DB-5 CPSM 3732-08 AS				1.00000	
22FE11A4D5	2	ST0222	CS-0.2 11DXN025 AS				1.00000	
22FE11A4D5	3	ST0222A	CS-1 10DXN503 AS				1.00000	
22FE11A4D5	4	ST0222B	CS-2 10DXN504 AS				1.00000	
22FE11A4D5	5	ST0222C	CS-3 10DXN505 AS				1.00000	
22FE11A4D5	6	ST0222D	CS-4 10DXN506 AS				1.00000	
22FE11A4D5	7	ST0222E	CS-5 10DXN507 AS				1.00000	
22FE11A4D5	8	SB0222	Solvent Blank C-14 AS				1.00000	
22FE11A4D5	9	ST0222F	2nd Source 10DXN511 AS				1.00000	
22FE11A4D5	10						1.00000	
22FE11A4D5	11						1.00000	
22FE11A4D5	12						1.00000	
22FE11A4D5	13		AS 02/22/11				1.00000	

log file reviewed
2-22-11 am

Data file	Smp	Work Order	Sample ID	FV-uL	Method/Matrix	Box	Size	U
20MY11D4D5	1	ST0520	CS3 11DXN109				1.00000	
20MY11D4D5	2	CP0520	DB-5 CPSM 3732-13				1.00000	
20MY11D4D5	3	MJHQA-1-AA	G1E170000-179B (572-MB)	20	8290/SOLID	79	10.00000	g
20MY11D4D5	4	MJHQA-1-AC	G1E170000-179C (572-LCS	20	8290/SOLID		10.00000	g
20MY11D4D5	5	MJJM9-1-AA	G1E180000-127B(623-5MB)	20	8290/WATER	78	1.00000	L
20MY11D4D5	6	MJJM9-1-AC	G1E180000-127C(623-5LCS	20	8290/WATER		1.00000	L
20MY11D4D5	7	MH7K7-1-AA	G1E100623-5 (syringe z'd)	20	8290/WATER		0.91293	L
20MY11D4D5	8	MJJRQ-1-AD	G1E180430-6	20	8290/SOLID	77	10.17000	g
20MY11D4D5	9	MJJRT-1-AD	G1E180430-7	20	8290/SOLID		10.15000	g
20MY11D4D5	10	MH65T-1-AT	C1E100572-11	20	8290/SOLID	79	10.26000	g
20MY11D4D5	11	MH65V-1-AT	C1E100572-12	20	8290/SOLID		10.42000	g
20MY11D4D5	12	MH65W-1-AT	C1E100572-13	20	8290/SOLID		10.99000	g
20MY11D4D5	13	MH65X-1-AT	C1E100572-14	20	8290/SOLID		10.01000	g
20MY11D4D5	14	SB0520	Solvent Blank C-14				1.00000	
20MY11D4D5	15	ST0520A	CS3 11DXN109				1.00000	
20MY11D4D5	16						1.00000	
20MY11D4D5	17						1.00000	
20MY11D4D5	18						1.00000	
20MY11D4D5	19						1.00000	
20MY11D4D5	20						1.00000	
20MY11D4D5	21		AM 05-20-11				1.00000	
20MY11D4D5	22						1.00000	

log file reviewed
AS
05-23-2011

Data file	Smp	Work Order	Sample ID	FV-uL	Method/Matrix	Box	Size	U
23MY114D5	1	CP0523	DB-5 CPSM 3732-13				1.00000	
23MY114D5	2	ST0523	CS3 11DXN109				1.00000	
23MY114D5	3	CP0523A	DB-5 CPSM 3732-13				1.00000	
23MY114D5	4	SB0523	Solvent Blank C-14				1.00000	
23MY114D5	5	MJCT7-1-AA	G1E100623-6	20	8290/WATER	78	0.05000	L
23MY114D5	6	MJCVH-1-AG	G1E100623-7	20	8290/WATER		0.05000	L
23MY114D5	7	MJC0C-1-AA	G1E120651-1	20	8290/WATER		0.97145	L
23MY114D5	8	MJC0D-1-AA	G1E120651-2	20	8290/WATER		0.91633	L
23MY114D5	9	MJL7J-1-AD	G1E200446-1	20	8290/SOLID	80	10.14000	g
23MY114D5	10	MJL7L-1-AD	G1E200446-2	20	8290/SOLID		10.27000	g
23MY114D5	11	MJL7M-1-AD	G1E200446-3	20	8290/SOLID		10.96000	g
23MY114D5	12	MJL7N-1-AD	G1E200446-4	20	8290/SOLID		10.64000	g
23MY114D5	13	MJMRL-1-AC	G1E200446-1LCS	20	8290/SOLID		10.00000	g
23MY114D5	14	MJMRL-1-AA	G1E200446-1MB	20	8290/SOLID		10.00000	g
23MY114D5	15	ST0523A	CS3 11DXN109				1.00000	
23MY114D5	16	ST0523B	CS3 11DXN109-Not used				1.00000	
23MY114D5	17						1.00000	
23MY114D5	18						1.00000	
23MY114D5	19						1.00000	
23MY114D5	20						1.00000	
23MY114D5	21		AS 05-23-11				1.00000	

log file checked
5-23-11 am

Sample Data

AECOM, Inc

Client Sample ID: MW-2A

Trace Level Organic Compounds

Lot-Sample #...: G1E120651-001 Work Order #...: MJC0C1AA Matrix.....: WATER
Date Sampled...: 05/10/11 Date Received..: 05/12/11
Prep Date.....: 05/18/11 Analysis Date..: 05/23/11
Prep Batch #...: 1138127
Dilution Factor: 1.03

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	10	pg/L	SW846 8290
Total TCDD	ND	10	pg/L	SW846 8290
1,2,3,7,8-PeCDD	ND	52	pg/L	SW846 8290
Total PeCDD	ND	52	pg/L	SW846 8290
1,2,3,4,7,8-HxCDD	ND	52	pg/L	SW846 8290
1,2,3,6,7,8-HxCDD	ND	52	pg/L	SW846 8290
1,2,3,7,8,9-HxCDD	ND	52	pg/L	SW846 8290
Total HxCDD	ND	52	pg/L	SW846 8290
1,2,3,4,6,7,8-HpCDD	ND	52	pg/L	SW846 8290
Total HpCDD	**1.7**	**52**	**pg/L**	**SW846 8290**
OCDD	**10 J,B**	**100**	**pg/L**	**SW846 8290**
2,3,7,8-TCDF	ND	10	pg/L	SW846 8290
Total TCDF	ND	10	pg/L	SW846 8290
1,2,3,7,8-PeCDF	ND	52	pg/L	SW846 8290
2,3,4,7,8-PeCDF	ND	52	pg/L	SW846 8290
Total PeCDF	ND	52	pg/L	SW846 8290
1,2,3,4,7,8-HxCDF	ND	52	pg/L	SW846 8290
1,2,3,6,7,8-HxCDF	ND	52	pg/L	SW846 8290
2,3,4,6,7,8-HxCDF	ND	52	pg/L	SW846 8290
1,2,3,7,8,9-HxCDF	ND	52	pg/L	SW846 8290
Total HxCDF	ND	52	pg/L	SW846 8290
1,2,3,4,6,7,8-HpCDF	ND	52	pg/L	SW846 8290
1,2,3,4,7,8,9-HpCDF	ND	52	pg/L	SW846 8290
Total HpCDF	ND	52	pg/L	SW846 8290
OCDF	ND	100	pg/L	SW846 8290

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	90	(40 - 135)
13C-1,2,3,7,8-PeCDD	100	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	88	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	81	(40 - 135)
13C-OCDD	101	(40 - 135)
13C-2,3,7,8-TCDF	116	(40 - 135)
13C-1,2,3,7,8-PeCDF	97	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	90	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	81	(40 - 135)

NOTE(S):

J Estimated result. Result is less than the reporting limit.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

(W) 5/25/11

Quantitation Summary TestAmerica West Sacramento Page 5 o

Run text: MJC0C-1-AA Sample text: MJC0C-1-AA :G1E120651-1
Run #11 Filename: 23MY114D5 S: 7 I: 1 Results: 23MY114D58290
Acquired: 23-MAY-11 14:17:41 Processed: 23-MAY-11 15:23:29
Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5
Factor 1:1600.000 Factor 2:20.000 Sample size: 0.971 L

Name	Resp	RA		RT	RRF	Conc	EDL	Rec	M
13C-1,2,3,4-TCDD	90586544	0.76	y	19:43	-	48.978	-	-	n
13C-2,3,7,8-TCDF	116419668	0.83	y	19:08	1.10	2395.119	1.410	116.3	n
2,3,7,8-TCDF	*	*	n	NotFnd	0.78	*	1.080	-	n
Total TCDF	*	*	n	NotFnd	0.78	*	1.080	-	n
13C-2,3,7,8-TCDD	79427600	0.75	y	19:56	0.97	1863.366	4.773	90.5	n
2,3,7,8-TCDD	*	*	n	NotFnd	0.87	*	0.916	-	n
Total TCDD	20161	0.59	n	15:59	0.87	~~0.602~~	0.916	-	n
37Cl-2,3,7,8-TCDD	51010704	1.00	y	19:58	1.43	813.102	0.022	98.7	n
13C-1,2,3,7,8-PeCDF	91416164	1.64	y	24:55	1.04	1999.582	2.104	97.1	n
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.96	*	1.017	-	n
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.94	*	1.040	-	n
Total F2 PeCDF	10324	1.03	n	26:47	0.95	~~0.245~~	~~1.028~~ 1.040	-	n
Total F1 PeCDF	24401	0.47	n	15:19	0.95	~~0.579~~	~~0.702~~	-	n
13C-1,2,3,7,8-PeCDD	63510598	1.72	y	27:17	0.70	2063.323	1.353	100.2	n
1,2,3,7,8-PeCDD	*	*	n	NotFnd	1.04	*	0.746	-	n
Total PeCDD	129353	1.87	n	23:25	1.04	~~4.025~~	~~0.746~~ 1.244	-	n
13C-1,2,3,7,8,9-HxCDD	64895526	1.35	y	33:15	-	49.290	-	-	n
13C-1,2,3,4,7,8-HxCDF	62406556	0.50	y	32:07	1.10 ~~0.87~~	(W) 5/25/11 ~~2274.003~~ 1798.530	5.201	89.9 ~~110.5~~	n
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	1.15	*	0.271	-	n
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	1.46	*	0.213	-	n
2,3,4,6,7,8-HxCDF	9176	1.53	n	32:48	1.30	~~0.232~~	0.238	-	n
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.12	*	0.277	-	n
Total HxCDF	15195	1.92	n	30:57	1.26	~~0.390~~	~~0.247~~ 0.277	-	n
13C-1,2,3,6,7,8-HxCDD	54306596	1.34	y	32:59	0.95	1814.041	0.969	88.1	n
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	0.74	*	1.160	-	n
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.05	*	0.826	-	n
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.02	*	0.846	-	n
Total HxCDD	115610	1.70	n	32:08	0.94	~~4.676~~	~~0.922~~ 1.160	-	n
13C-1,2,3,4,6,7,8-HpCDF	48210255	0.41	y	34:44	0.91	1673.572	11.935	81.3	n
1,2,3,4,6,7,8-HpCDF	25531	1.39	n	34:44	1.32	0.823 DL	~~0.613~~	-	n
1,2,3,4,7,8,9-HpCDF	6956	0.53	n	35:54	1.13	~~0.263~~	0.718	-	n
Total HpCDF	32487	1.39	n	34:44	1.23	~~1.086~~	~~0.661~~ 0.823	-	n
13C-1,2,3,4,6,7,8-HpCDD	48069538	1.01	y	35:33	0.91	1668.794	7.511	81.1	n
1,2,3,4,6,7,8-HpCDD	15612	0.62	n	35:33	1.01	~~0.660~~	1.240	-	n
Total HpCDD	79558	1.13	y	34:60	1.01	~~3.362~~ 1.738	1.240	-	n
13C-OCDD	79012016	0.90	y	38:03	0.60	4165.725	6.467	101.2	n

Totals Results TestAmerica West Sacramento Page 1 of 9

Run Text: MJC0C-1-AA Sample text: MJC0C-1-AA :G1E120651-1

Name: Total TCDF F:1 Mass: 303.902 305.899 Mod? no #Hom:0
Run: 11 File: 23MY114D5 S:7 Acq:23-MAY-11 14:17:41
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	* of which	* named and	* unnamed
Conc:	* of which	* named and	* unnamed

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	NotF	* n	*	*	*	n	n
					*	*	n	n

Totals Results TestAmerica West Sacramento Page 2 of 9

Run Text: MJC0C-1-AA Sample text: MJC0C-1-AA :G1E120651-1

Name: Total TCDD F:1 Mass: 319.897 321.894 Mod? no #Hom:3
Run: 11 File: 23MY114D5 S:7 Acq:23-MAY-11 14:17:41
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	0.825 of which	* named and	0.825 unnamed
Conc:	0.849 of which	* named and	0.849 unnamed

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	15:59	0.589 n	~~0.197~~	2869	1.121	n	n
					4873	1.540	n	n
	2	17:45	1.114 n	~~0.405~~	8537	1.344	n	n
					7665	2.676	n	n
	3	20:51	1.631 n	~~0.247~~	7611	2.283	n	n
					4665	1.457	n	n

Totals Results TestAmerica West Sacramento Page 3 of 9

Run Text: MJC0C-1-AA Sample text: MJC0C-1-AA :G1E120651-1

Name: Total F2 PeCDF F:2 Mass: 339.860 341.857 Mod? no #Hom:1
Run: 11 File: 23MY114D5 S:7 Acq:23-MAY-11 14:17:41
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	0.238 of which	* named and	0.238 unnamed
Conc:	0.245 of which	* named and	0.245 unnamed

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	26:47	1.029 n	0.245	6276	3.953	y	n
					6099	1.313	n	n

Run Text: MJC0C-1-AA Sample text: MJC0C-1-AA :G1E120651-1

Name: Total F1 PeCDF F:1 Mass: 339.860 341.857 Mod? no #Hom:7
Run: 11 File: 23MY114D5 S:7 Acq:23-MAY-11 14:17:41
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	0.563 of which	* named and	0.563	unnamed	
Conc:	0.579 of which	* named and	0.579	unnamed	

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	15:19	0.471 n	~~<0.165~~	4229	13.284	y	n
					8969	1.784	n	n
	2	16:07	0.205 n	~~0.043~~	1101	5.905	y	n
					5369	1.038	n	n
	3	16:49	0.275 n	~~0.099~~	2539	8.171	y	n
					9240	2.105	n	n
	4	17:29	0.282 n	~~0.076~~	1936	6.134	y	n
					6855	1.387	n	n
	5	17:55	0.428 n	~~0.106~~	2713	14.290	y	n
					6336	1.487	n	n
	6	20:18	0.195 n	~~0.033~~	839	4.442	y	n
					4293	1.210	n	n
	7	22:05	0.112 n	~~0.058~~	1476	7.968	y	n
					13160	2.165	n	n

Run Text: MJC0C-1-AA Sample text: MJC0C-1-AA :G1E120651-1

Name: Total PeCDD F:2 Mass: 355.855 357.852 Mod? no #Hom:12
Run: 11 File: 23MY114D5 S:7 Acq:23-MAY-11 14:17:41
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	4.059 of which	* named and	4.059	unnamed	
Conc:	4.178 of which	* named and	4.178	unnamed	

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	23:25	1.870 n	~~0.462~~	10893	3.249	y	n
					5825	38.628	y	n
	2	23:48	2.065 n	~~0.283~~	7365	1.276	n	n
					3566	17.757	y	n
	3	24:55	4.022 n	~~0.248~~	12549	2.824	n	n
					3120	15.999	y	n
	4	25:18	3.158 n	~~0.362~~	14396	5.130	y	n
					4559	29.806	y	n
	5	25:22	4.531 n	~~0.362~~	20657	4.279	y	n
					4559	29.806	y	n
	6	25:32	1.691 y	~~0.292~~	5901	2.014	n	n
					3490	18.347	y	n
	7	25:47	3.210 n	~~0.238~~	9631	1.962	n	n
					3000	23.944	y	n
	8	26:43	3.577 n	1.244 DL	56077	8.879	y	n
					15675	78.431	y	n
	9	27:13	1.226 n	~~0.202~~	5518	1.932	n	n
					4500	33.643	y	n
	10	28:52	8.274 n	~~0.069~~	7164	1.590	n	n
					866	7.444	y	n
	11	29:05	1.053 n	~~0.282~~	5507	1.737	n	n
					5228	31.581	y	n
	12	29:14	11.8 n	~~0.055~~	8226	1.746	n	n
					693	5.583	y	n

Run Text: MJC0C-1-AA Sample text: MJC0C-1-AA :G1E120651-1

Name: Total HxCDF F:3 Mass: 373.821 375.818 Mod? no #Hom:5
Run: 11 File: 23MY114D5 S:7 Acq:23-MAY-11 14:17:41
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	0.549 of which	0.395 named and	0.153	unnamed

Conc: 0.565 of which 0.407 named and 0.158 unnamed

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	30:57	1.921 n	~~0.089~~	2915	1.654	n	n
					1517	9.961	y	n
1,2,3,6,7,8-HxCDF	2	32:14	0.466 n	~~0.175~~	4288	1.615	n	n
					9207	23.472	y	n
	3	32:25	5.291 n	~~0.045~~	4020	1.492	n	n
					760	2.984	n	n
2,3,4,6,7,8-HxCDF	4	32:48	1.526 n	~~0.232~~	6253	1.624	n	n
					4097	16.627	y	n
	5	33:39	6.958 n	~~0.024~~	2851	1.608	n	n
					410	2.953	n	n

Totals Results TestAmerica West Sacramento Page 7 of 9

Run Text: MJC0C-1-AA Sample text: MJC0C-1-AA :G1E120651-1

Name: Total HxCDD F:3 Mass: 389.816 391.813 Mod? no #Hom:4
Run: 11 File: 23MY114D5 S:7 Acq:23-MAY-11 14:17:41
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D5

Amount: 4.542 of which * named and 4.542 unnamed
Conc: 4.676 of which * named and 4.676 unnamed

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?	
	1	32:08	1.698 n	~~0.947~~	17747	4.578	y	n	
					10451	3.364	y	n	
	2	32:46	2.170 n	~~0.404~~	9680	3.422	y	n	
					4461	1.911	n	n	
	3	33:24	2.213 n	~~0.585~~	14288	3.979	y	n	
					6456	1.903	n	n	
	4	34:17	4.106 n	~~2.740~~	124181	24.839	y	n	OW
					30243	8.659	y	n	

Run Text: MJC0C-1-AA Sample text: MJC0C-1-AA :G1E120651-1

Name: Total HpCDF F:4 Mass: 407.782 409.779 Mod? no #Hom:2
Run: 11 File: 23MY114D5 S:7 Acq:23-MAY-11 14:17:41
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	1.055 of which	1.055 named and	* unnamed
Conc:	1.086 of which	1.086 named and	* unnamed

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?	
1,2,3,4,6,7,8-HpCDF	1	34:44	1.389 n	0.823 DL	17384	3.673	y	n	S/N < 2.5
					12515	6.419	y	n	
1,2,3,4,7,8,9-HpCDF	2	35:54	0.532 n	~~0.263~~	3546	1.367	n	n	
					6666	2.652	n	n	

Run Text: MJC0C-1-AA Sample text: MJC0C-1-AA :G1E120651-1

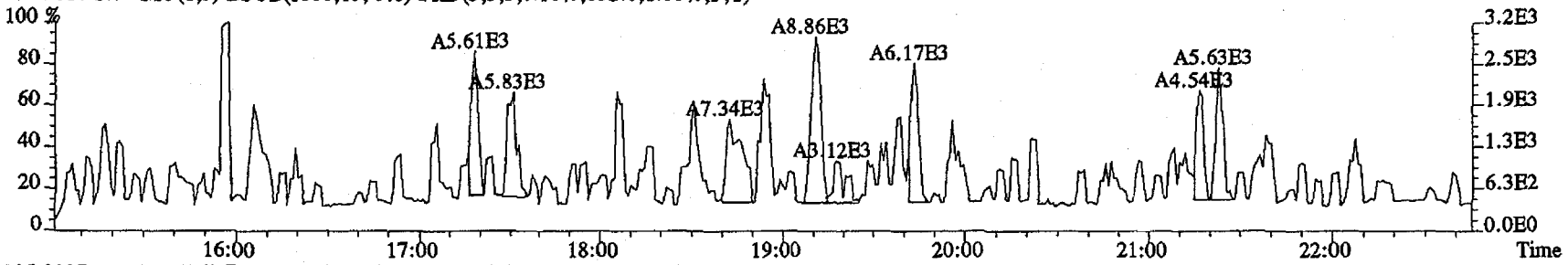
Name: Total HpCDD F:4 Mass: 423.777 425.774 Mod? no #Hom:4
Run: 11 File: 23MY114D5 S:7 Acq:23-MAY-11 14:17:41
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	3.266 of which	0.641 named and	2.625 unnamed
Conc:	3.362 of which	0.660 named and	2.702 unnamed

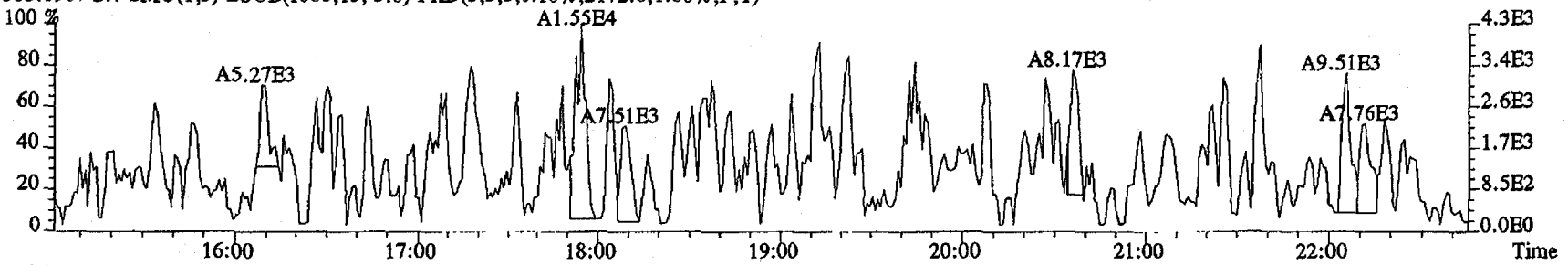
Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	35:00	1.126 y	1.738 ✓	21787	3.981	y	n
					19355	7.667	y	n
1,2,3,4,6,7,8-HpCDD	2	35:33	0.623 n	~~0.660~~	7959	2.278	n	n
					12768	4.492	y	n
	3	35:39	0.695 n	~~0.191~~	2300	0.749	n	n
					3311	1.189	n	n
	4	35:53	0.761 n	~~0.773~~	9326	2.490	n	n
					12262	4.685	y	n

File:23MY114D5 #1-513 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES

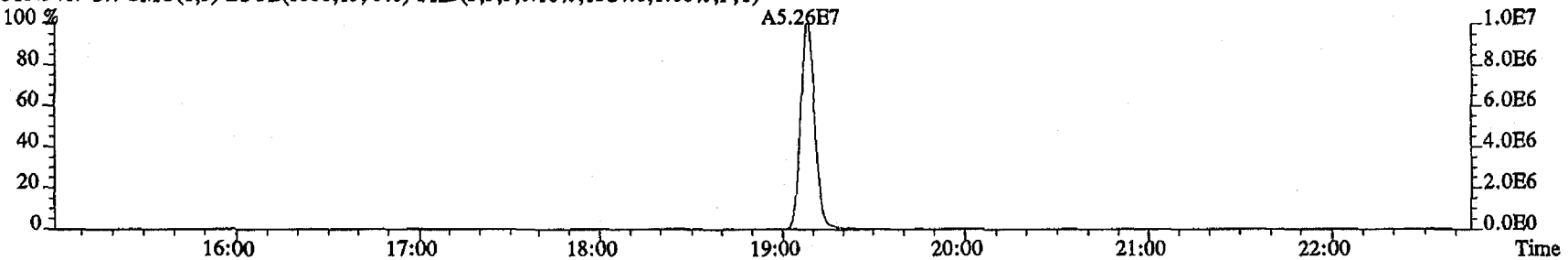
303.9016 S:7 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,852.0,1.00%,F,T)



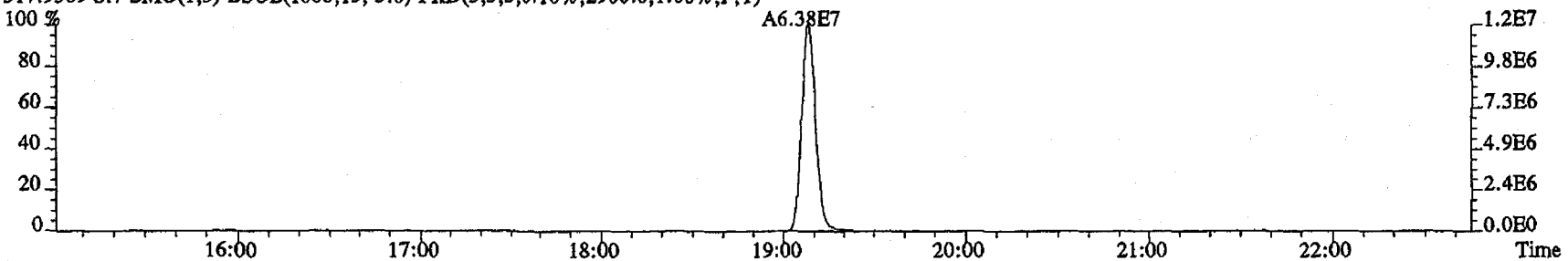
305.8987 S:7 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2172.0,1.00%,F,T)



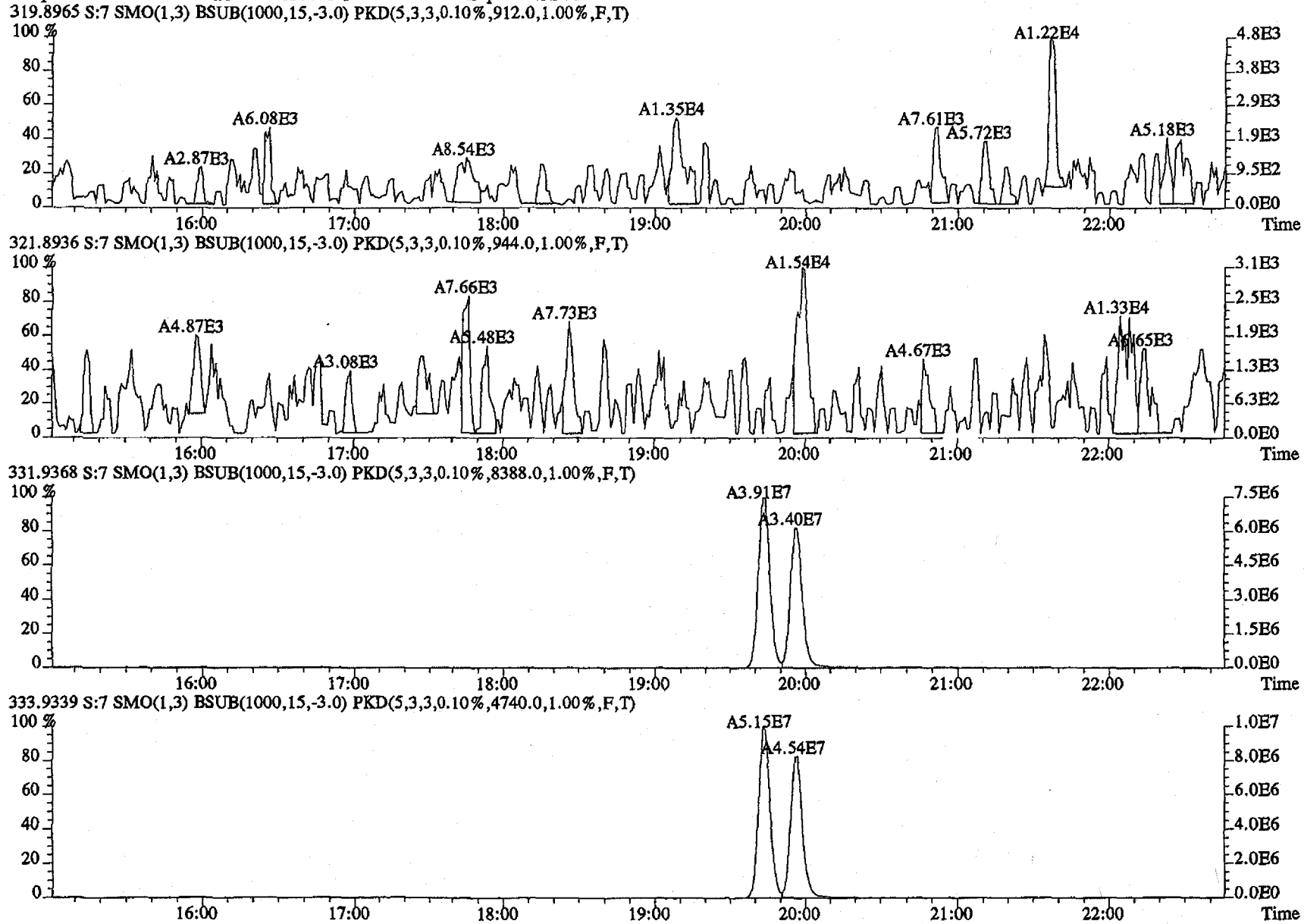
315.9419 S:7 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1524.0,1.00%,F,T)



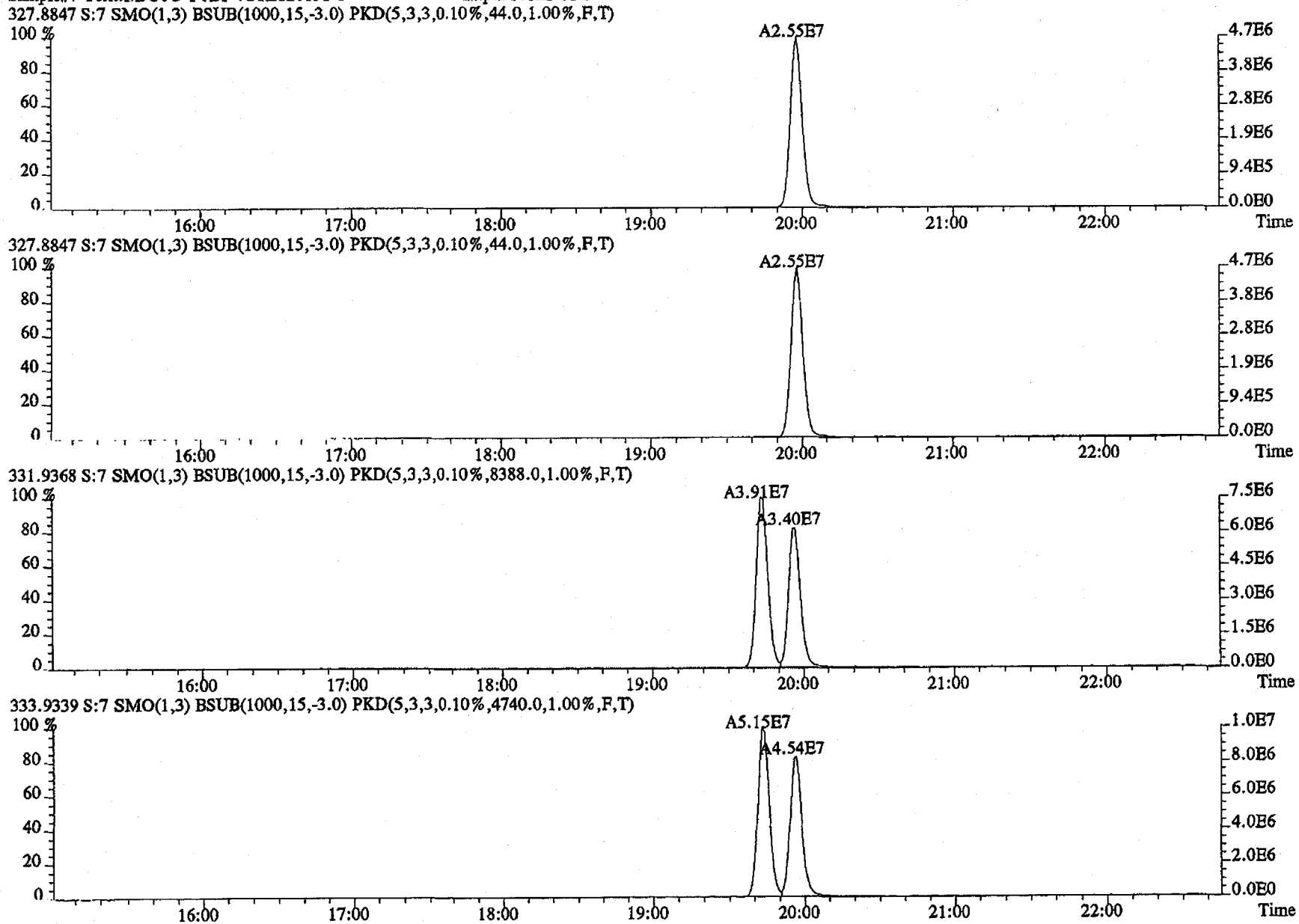
317.9389 S:7 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2900.0,1.00%,F,T)



File:23MY114D5 #1-513 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES

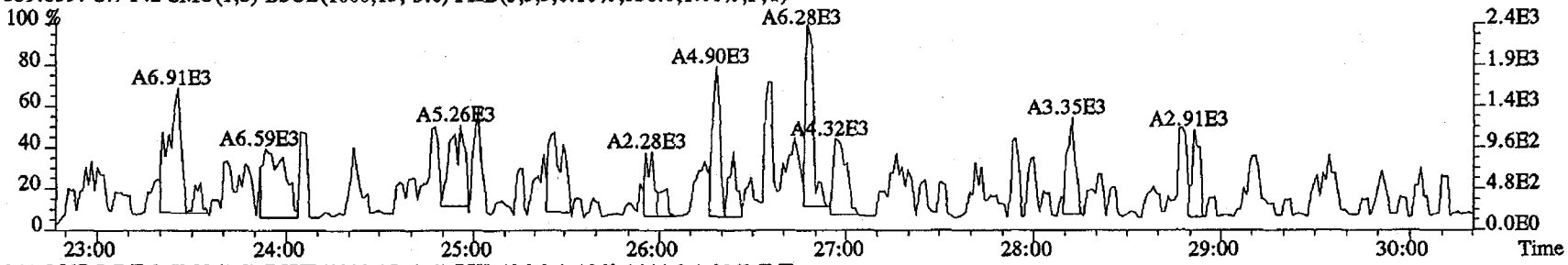


File:23MY114D5 #1-513 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES

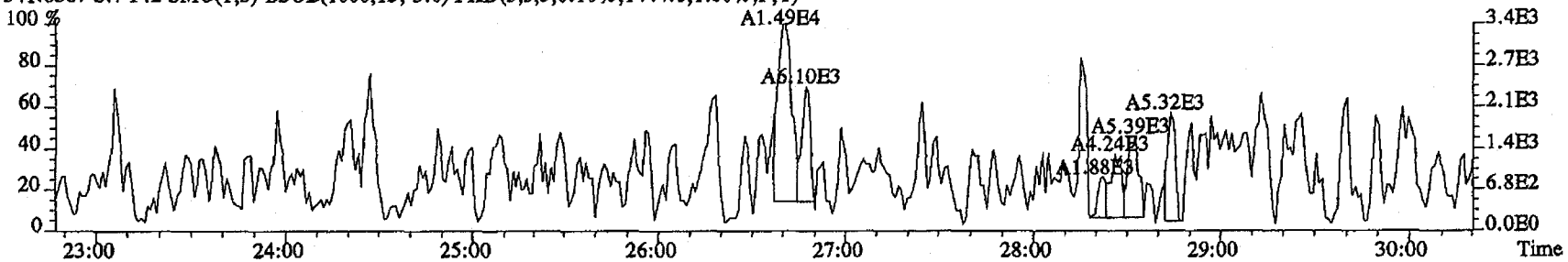


File:23MY114D5 #1-486 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES

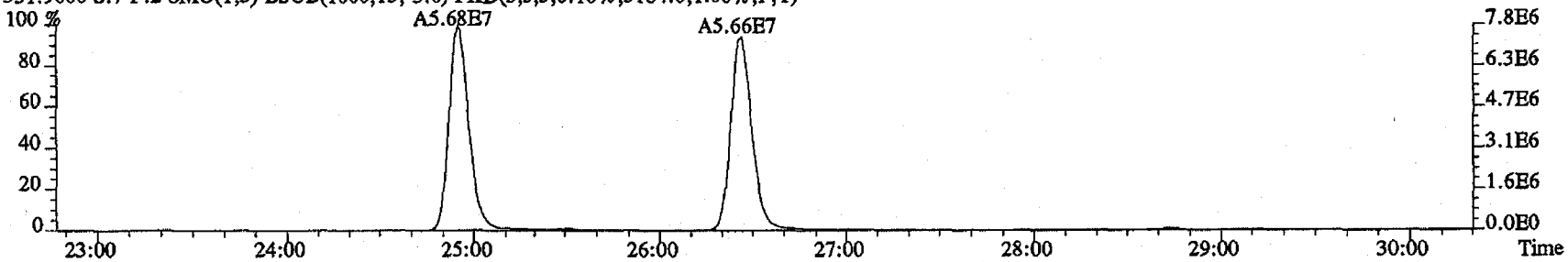
339.8597 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,536.0,1.00%,F,T)



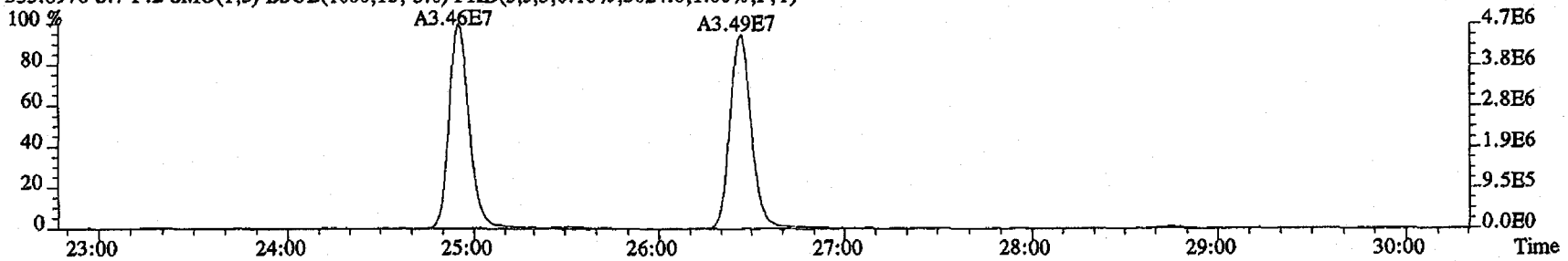
341.8567 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1444.0,1.00%,F,T)



351.9000 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3184.0,1.00%,F,T)

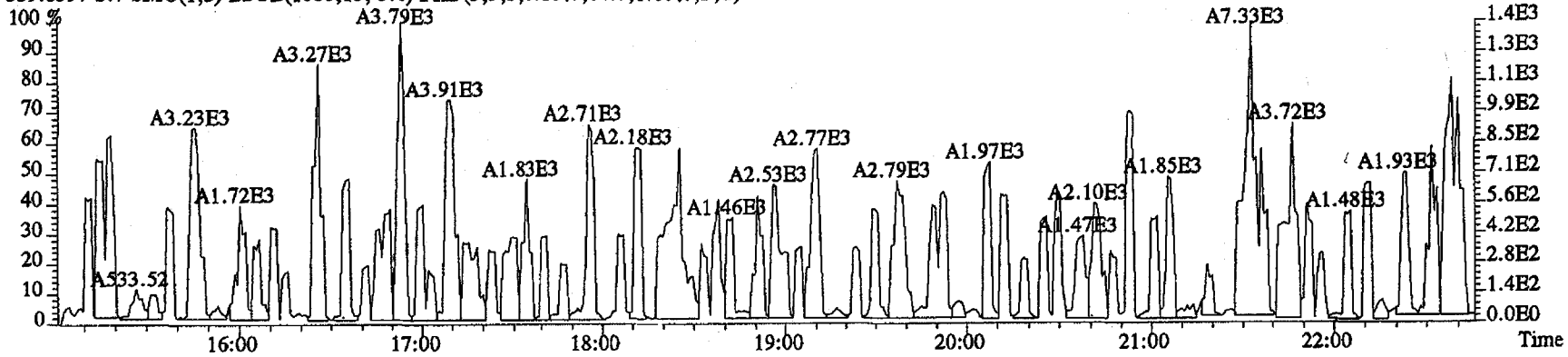


353.8970 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3024.0,1.00%,F,T)

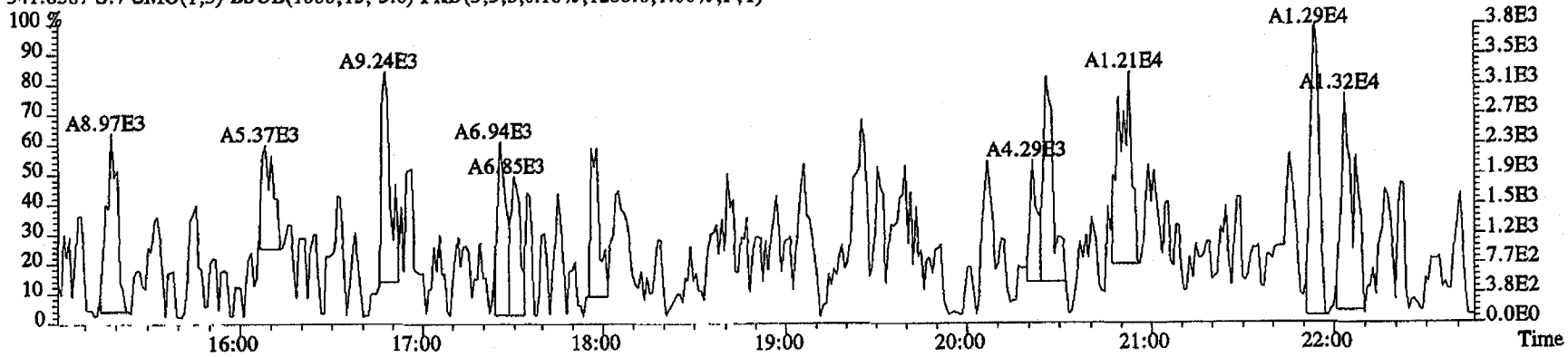


File:23MY114D5 #1-513 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES

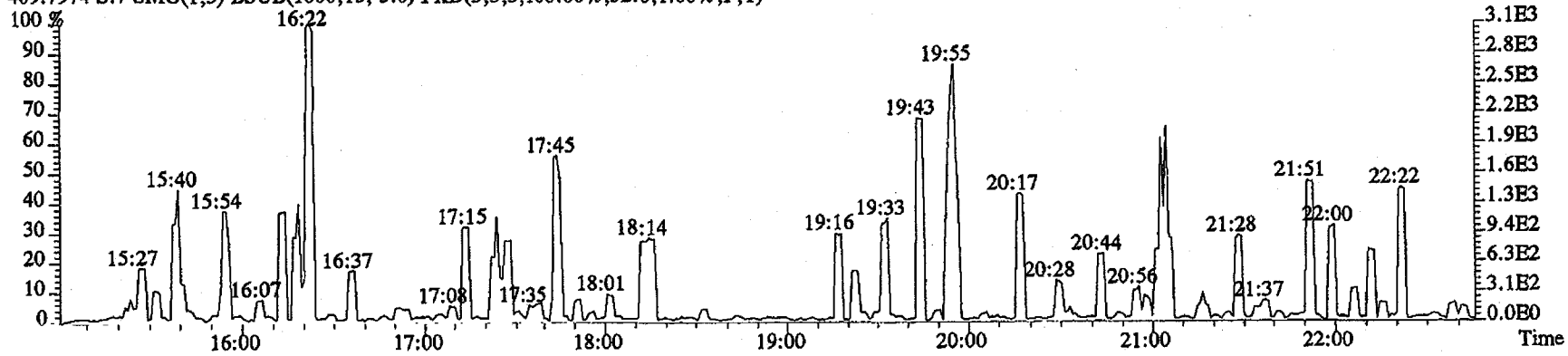
339.8597 S:7 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,64.0,1.00%,F,T)



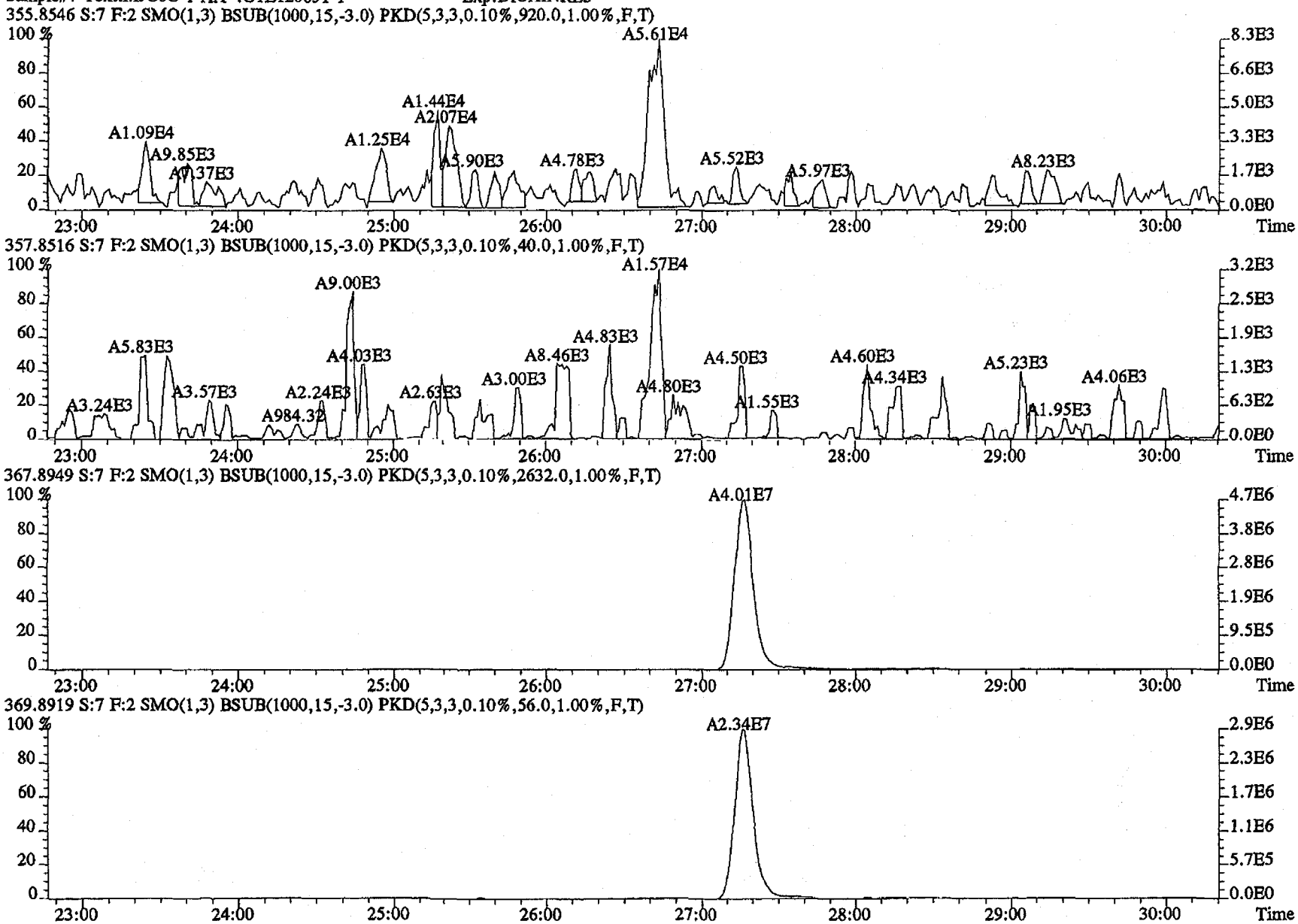
341.8567 S:7 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1288.0,1.00%,F,T)



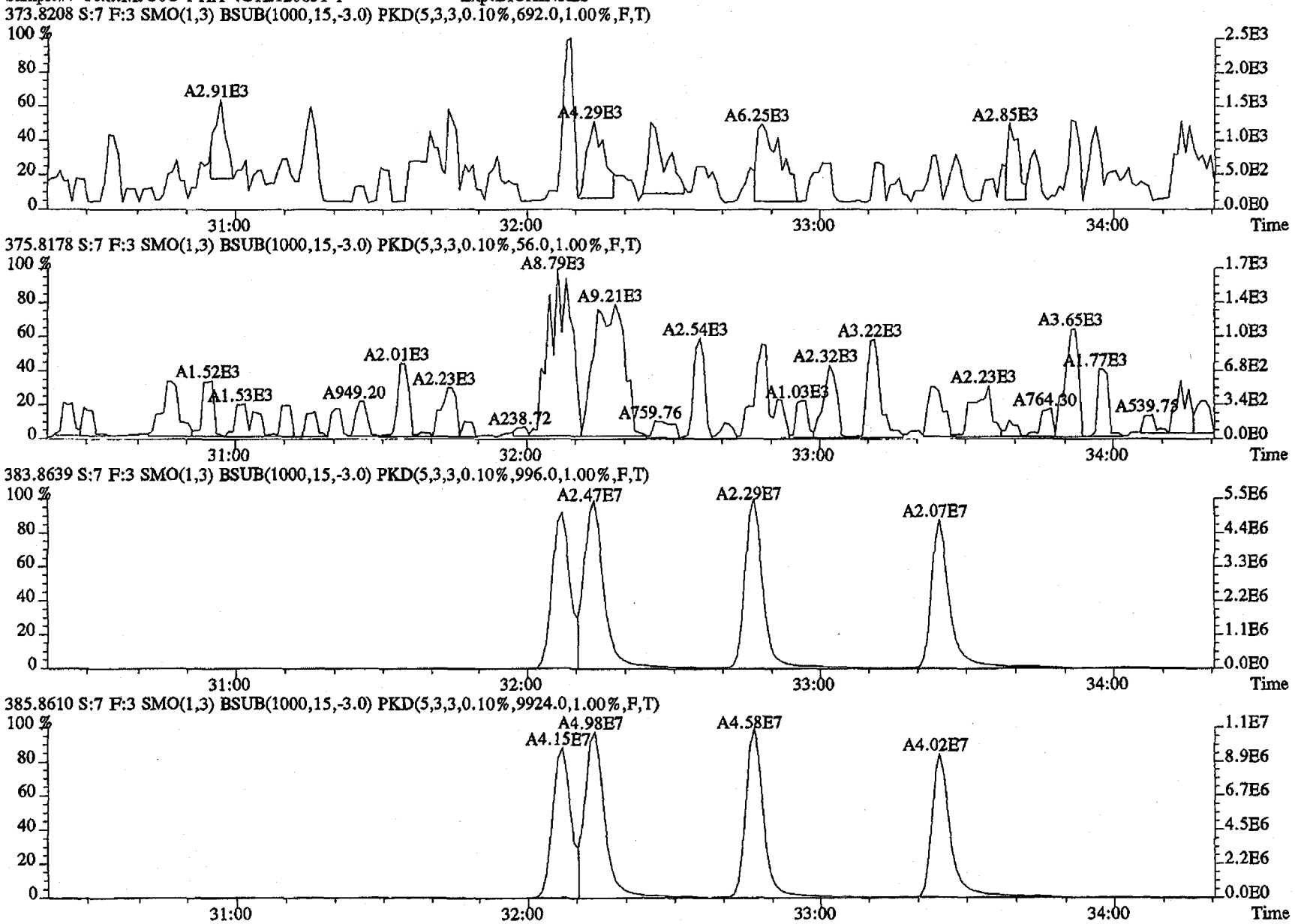
409.7974 S:7 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,52.0,1.00%,F,T)



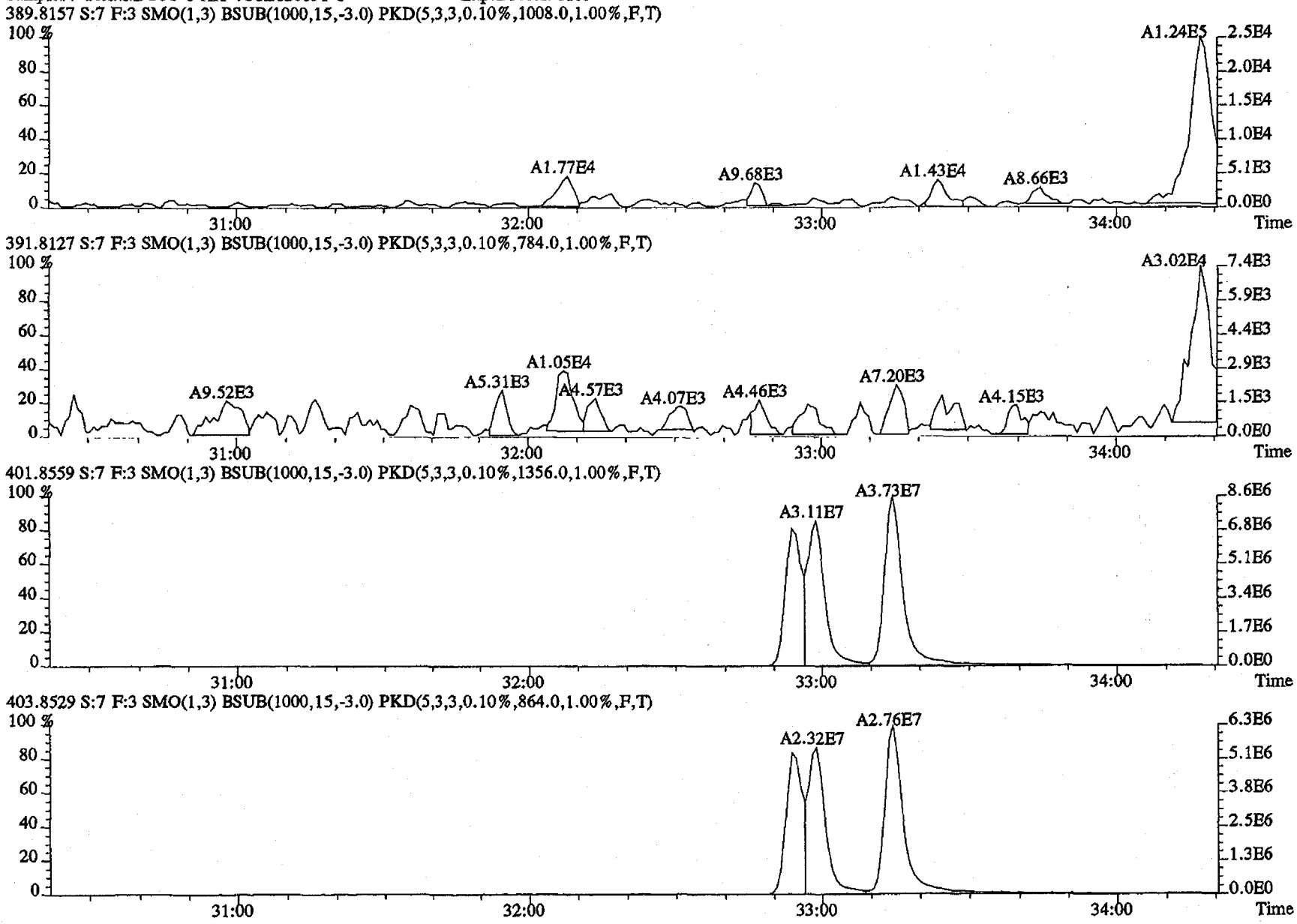
File:23MY114D5 #1-486 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES



File:23MY114D5 #1-287 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES

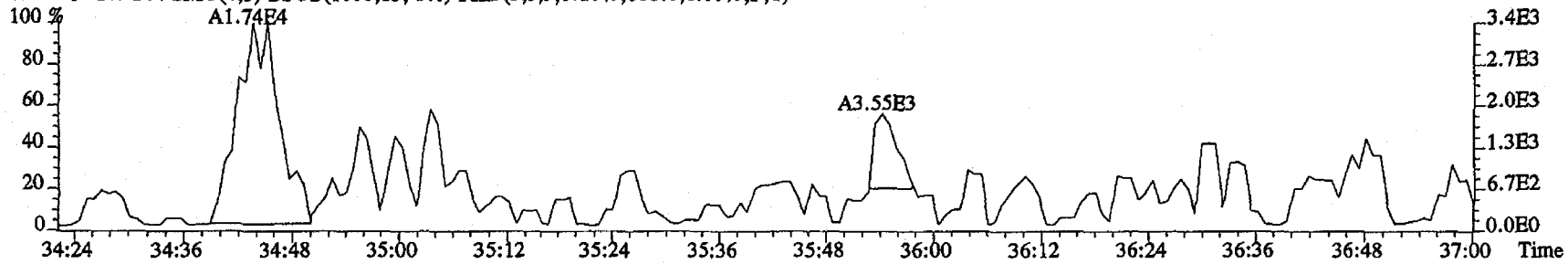


File:23MY114D5 #1-287 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES

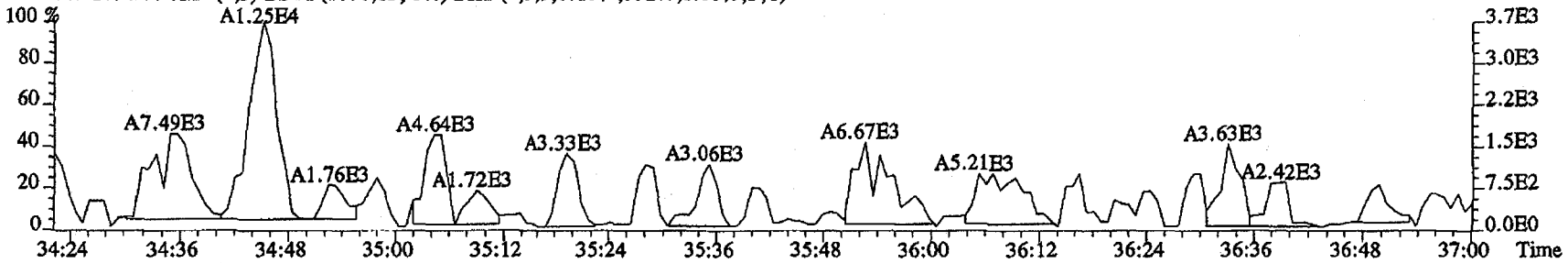


File:23MY114D5 #1-200 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES

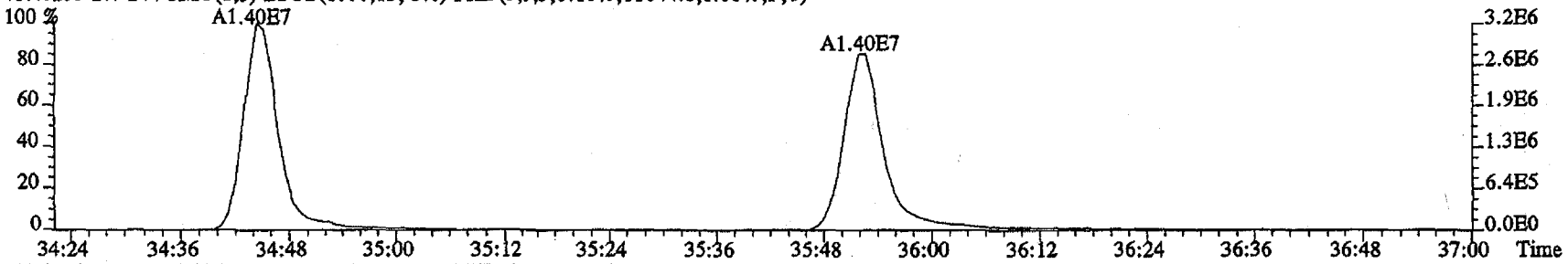
407.7818 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,888.0,1.00%,F,T)



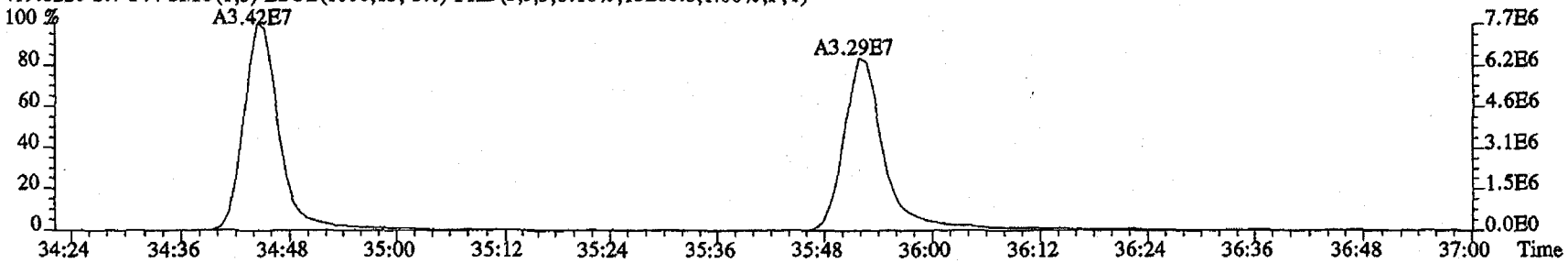
409.7789 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,552.0,1.00%,F,T)



417.8253 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,11044.0,1.00%,F,T)

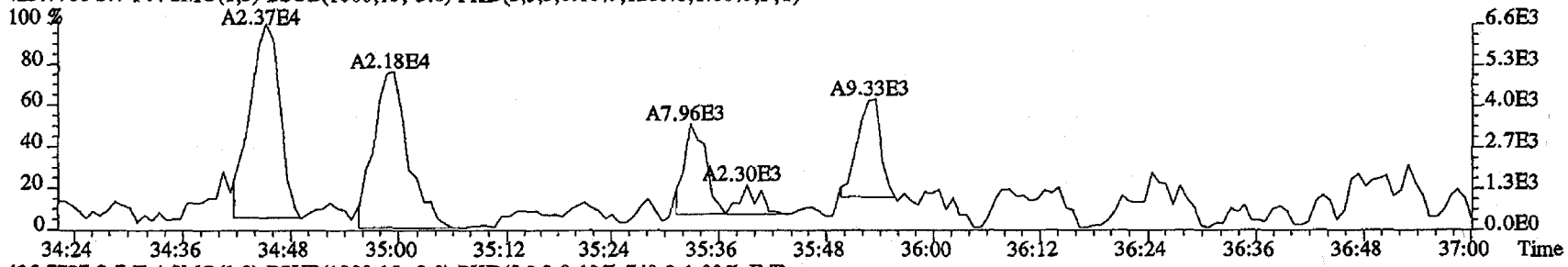


419.8220 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,15260.0,1.00%,F,T)

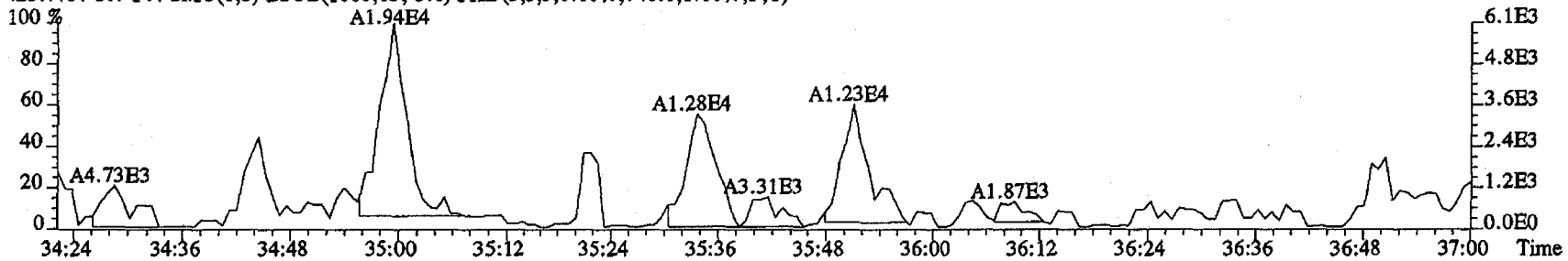


File:23MY114D5 #1-200 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES

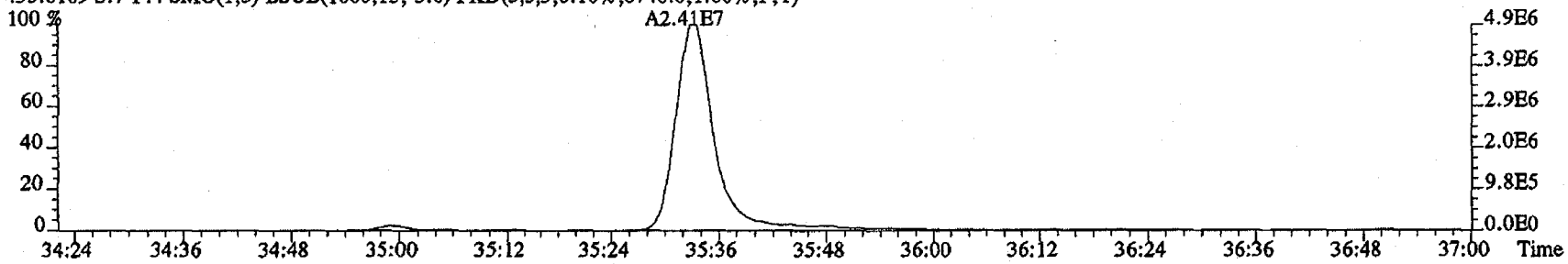
423.7766 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1260.0,1.00%,F,T)



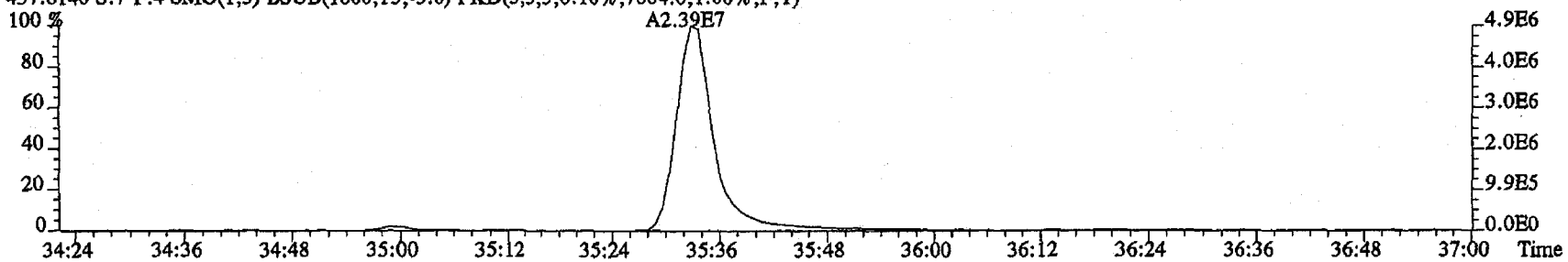
425.7737 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,740.0,1.00%,F,T)



435.8169 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,8748.0,1.00%,F,T)

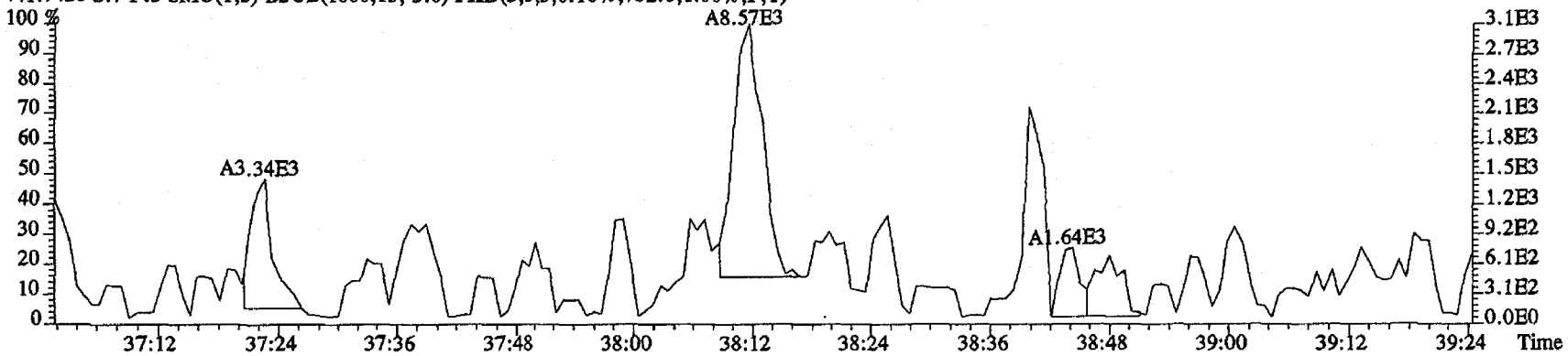


437.8140 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,7804.0,1.00%,F,T)

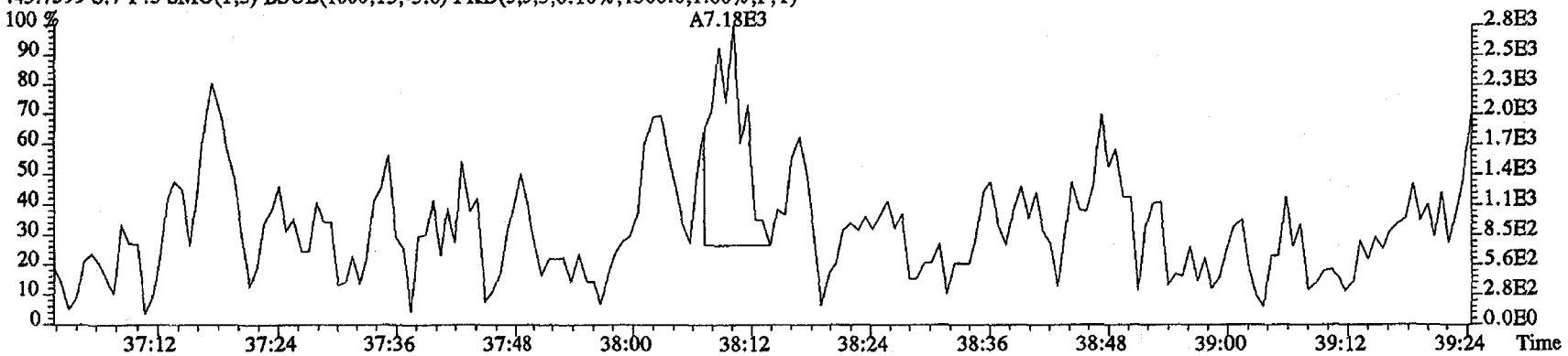


File:23MY114D5 #1-193 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES

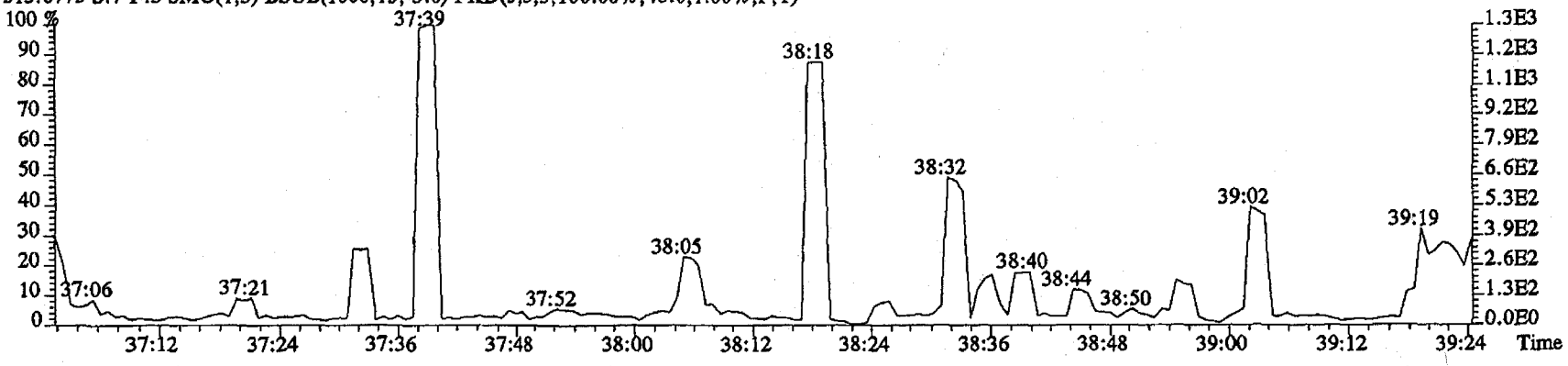
441.7428 S:7 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,732.0,1.00%,F,T)



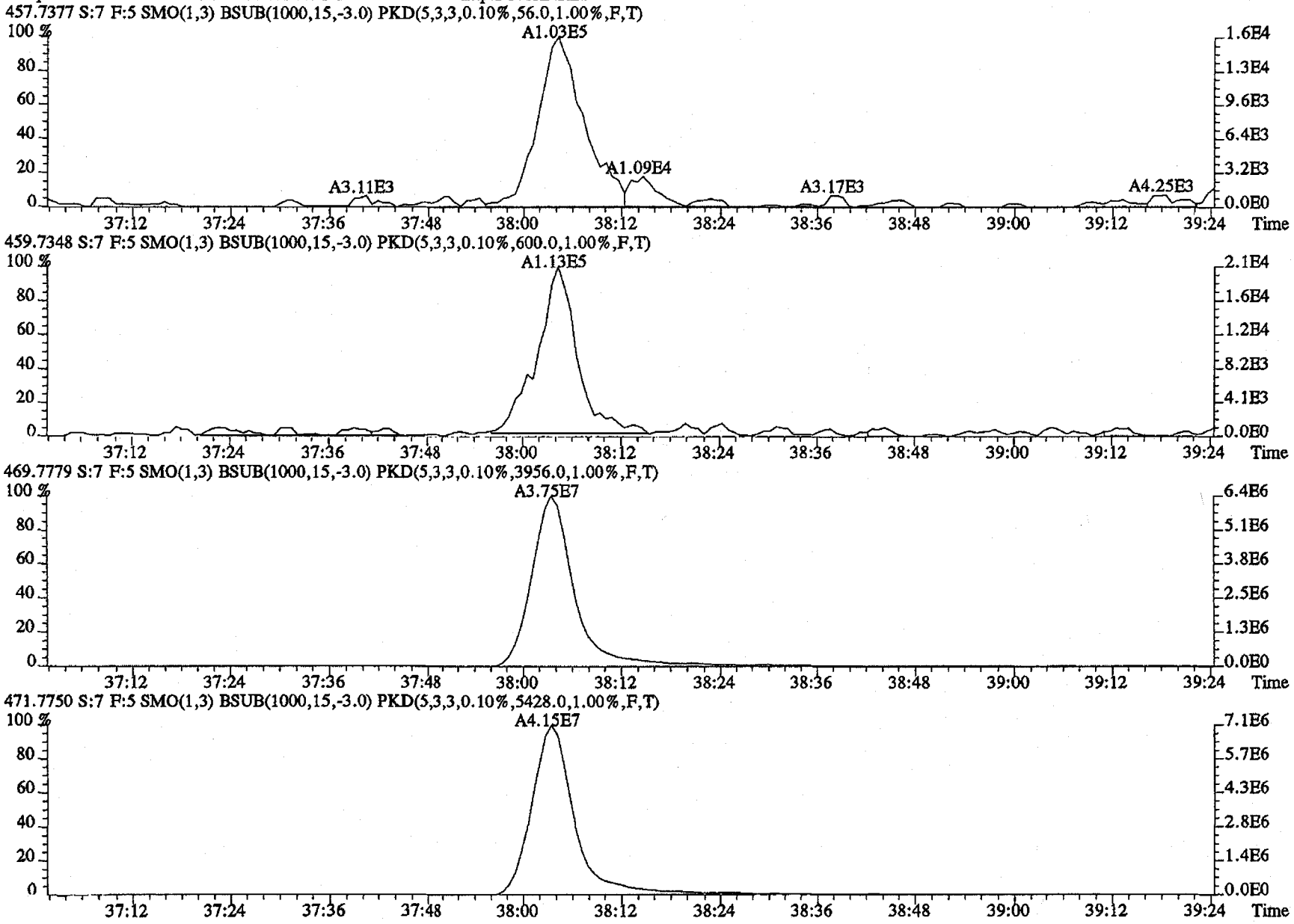
443.7399 S:7 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1300.0,1.00%,F,T)



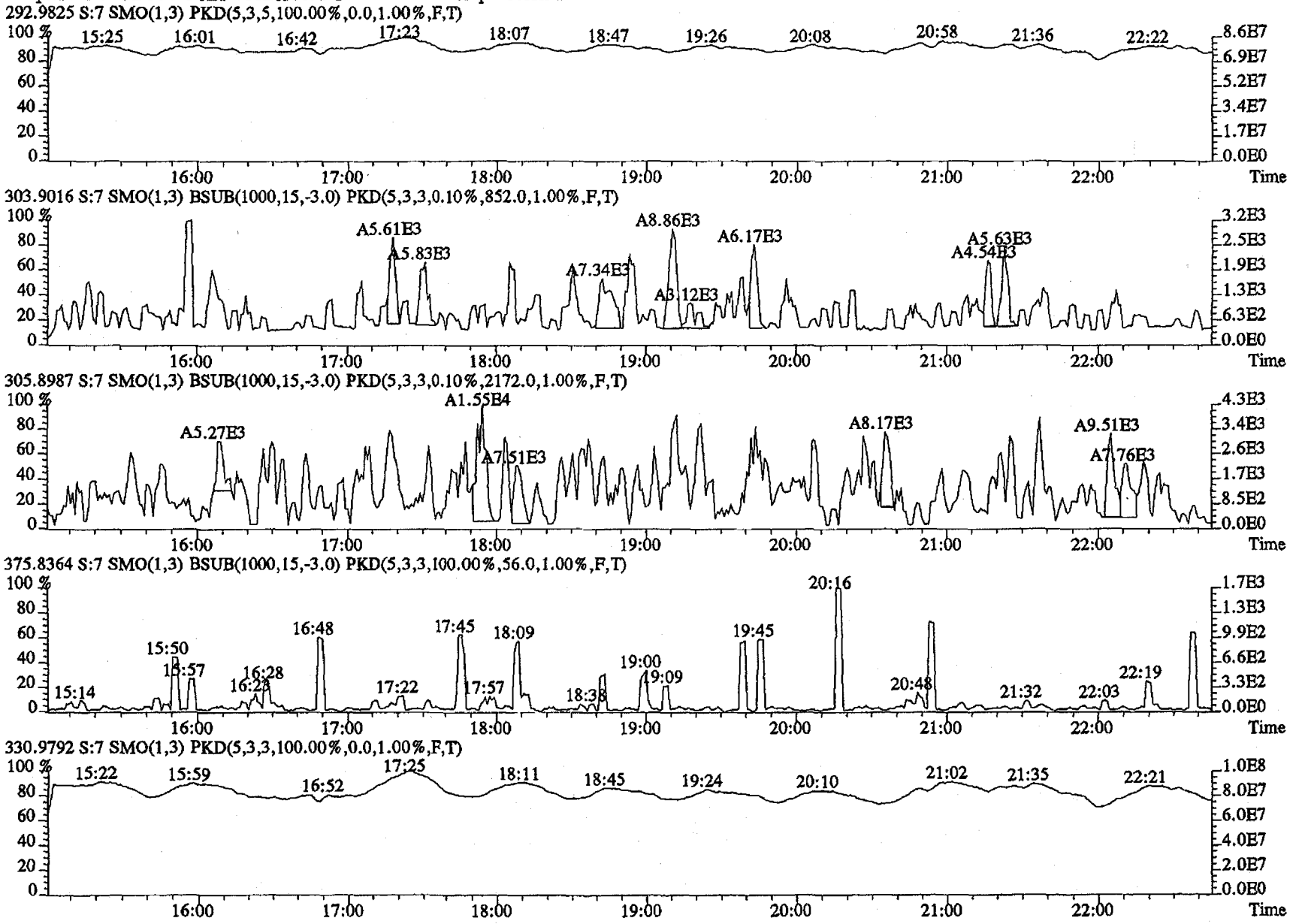
513.6775 S:7 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,48.0,1.00%,F,T)



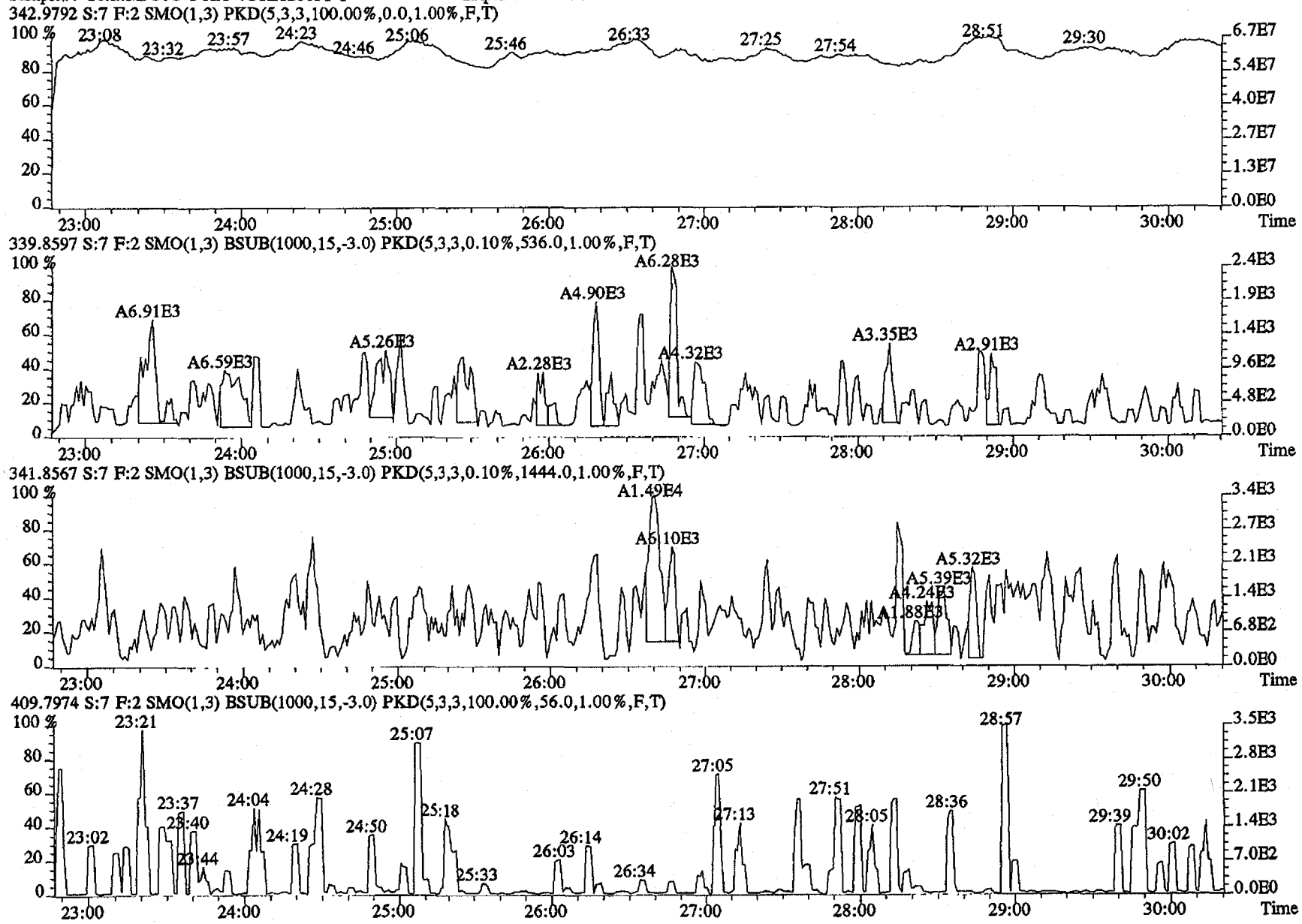
File:23MY114D5 #1-193 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES



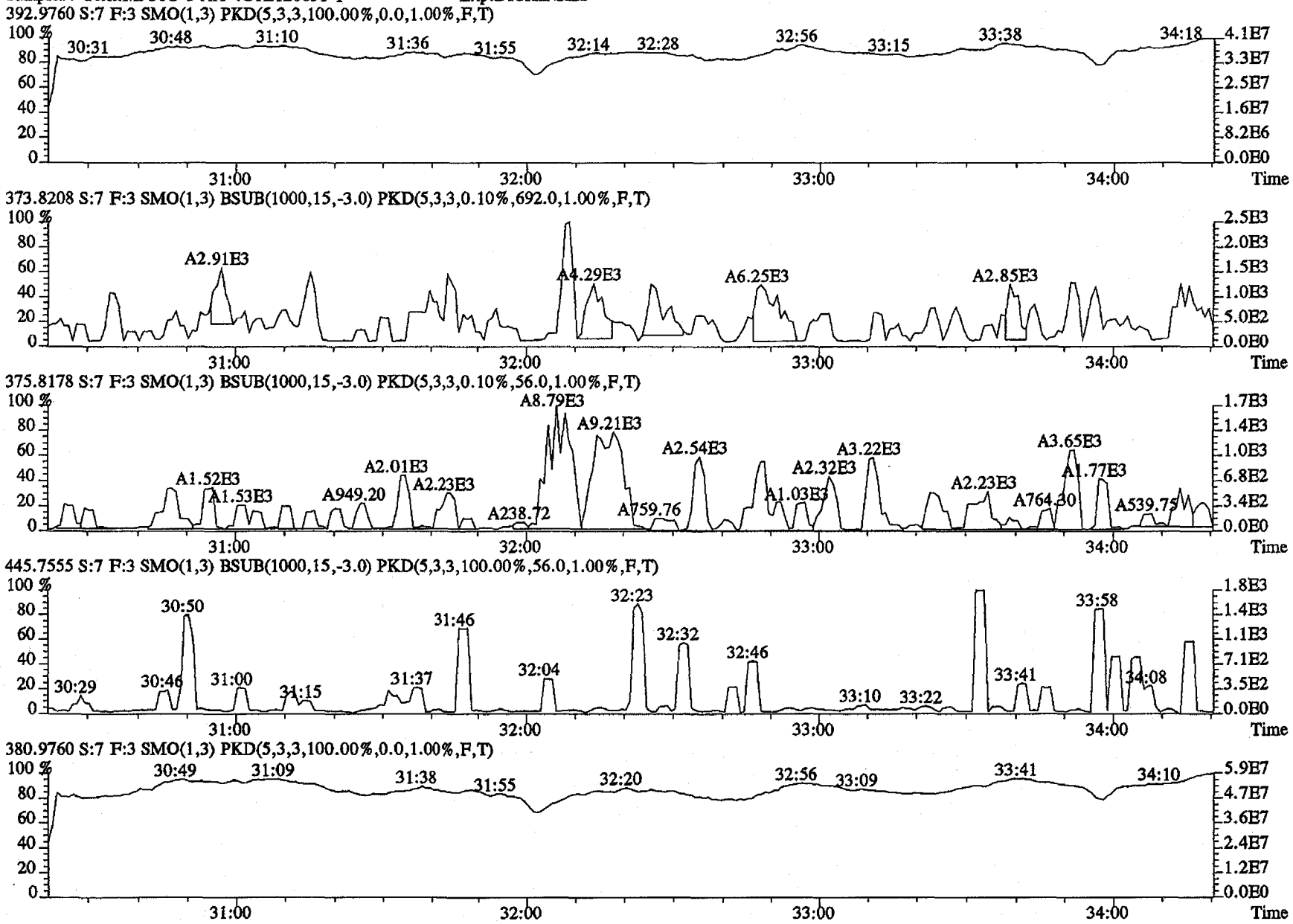
File:23MY114D5 #1-513 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES



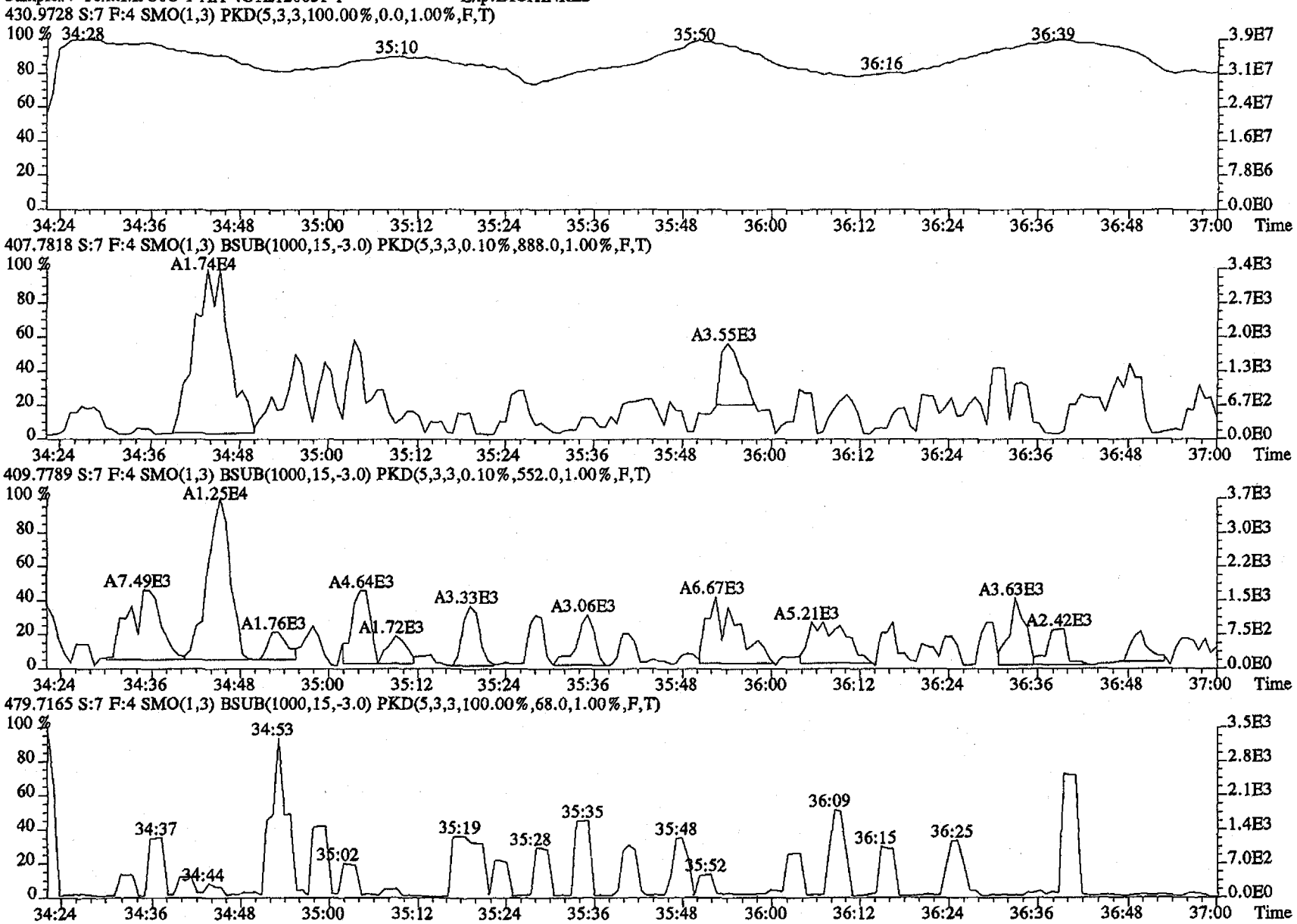
File:23MY114D5 #1-486 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES



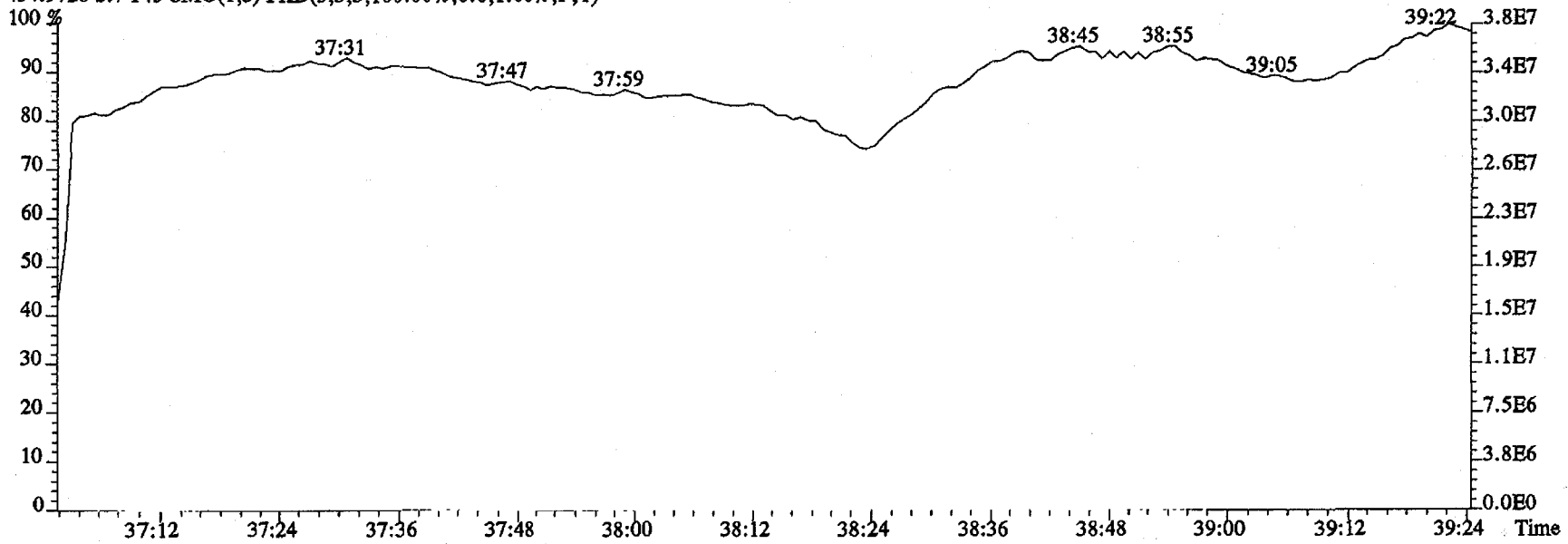
File:23MY114D5 #1-287 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES



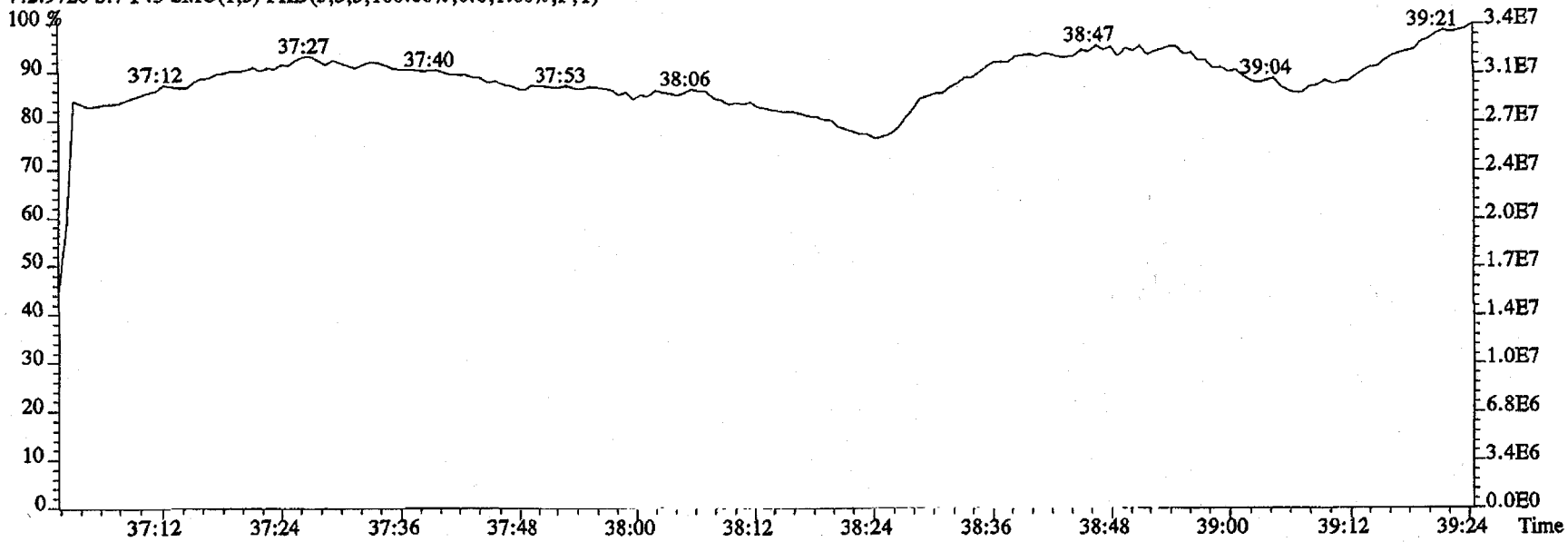
File:23MY114D5 #1-200 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES



File:23MY114D5 #1-193 Acq:23-MAY-2011 14:17:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:MJC0C-1-AA :G1E120651-1 Exp:DIOXINRES
454.9728 S:7 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:7 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



AECOM, Inc

Client Sample ID: MW-2A DUP

Trace Level Organic Compounds

Lot-Sample #...: G1E120651-002 Work Order #...: MJC0D1AA Matrix.....: WATER
Date Sampled...: 05/10/11 Date Received..: 05/12/11
Prep Date.....: 05/18/11 Analysis Date..: 05/23/11
Prep Batch #...: 1138127
Dilution Factor: 1.08

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	11	pg/L	SW846 8290
Total TCDD	ND	11	pg/L	SW846 8290
1,2,3,7,8-PeCDD	ND	54	pg/L	SW846 8290
Total PeCDD	ND	54	pg/L	SW846 8290
1,2,3,4,7,8-HxCDD	ND	54	pg/L	SW846 8290
1,2,3,6,7,8-HxCDD	ND	54	pg/L	SW846 8290
1,2,3,7,8,9-HxCDD	ND	54	pg/L	SW846 8290
Total HxCDD	ND	54	pg/L	SW846 8290
1,2,3,4,6,7,8-HpCDD	ND	54	pg/L	SW846 8290
Total HpCDD	**2.7**	**54**	**pg/L**	**SW846 8290**
OCDD	**19 J,Q,B**	**110**	**pg/L**	**SW846 8290**
2,3,7,8-TCDF	ND	11	pg/L	SW846 8290
Total TCDF	ND	11	pg/L	SW846 8290
1,2,3,7,8-PeCDF	ND	54	pg/L	SW846 8290
2,3,4,7,8-PeCDF	ND	54	pg/L	SW846 8290
Total PeCDF	ND	54	pg/L	SW846 8290
1,2,3,4,7,8-HxCDF	ND	54	pg/L	SW846 8290
1,2,3,6,7,8-HxCDF	ND	54	pg/L	SW846 8290
2,3,4,6,7,8-HxCDF	ND	54	pg/L	SW846 8290
1,2,3,7,8,9-HxCDF	ND	54	pg/L	SW846 8290
Total HxCDF	ND	54	pg/L	SW846 8290
1,2,3,4,6,7,8-HpCDF	**1.1 J,B**	**54**	**pg/L**	**SW846 8290**
1,2,3,4,7,8,9-HpCDF	ND	54	pg/L	SW846 8290
Total HpCDF	**1.1**	**54**	**pg/L**	**SW846 8290**
OCDF	ND	110	pg/L	SW846 8290

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	72	(40 - 135)
13C-1,2,3,7,8-PeCDD	73	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	79	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	65	(40 - 135)
13C-OCDD	72	(40 - 135)
13C-2,3,7,8-TCDF	93	(40 - 135)
13C-1,2,3,7,8-PeCDF	76	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	83	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	71	(40 - 135)

NOTE(S):

J Estimated result. Result is less than the reporting limit.

Q Estimated maximum possible concentration (EMPC).

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

(W) 5/25/11

Quantitation Summary TestAmerica West Sacramento

Run text: MJC0D-1-AA Sample text: MJC0D-1-AA :G1E120651-2
Run #12 Filename: 23MY114D5 S: 8 I: 1 Results: 23MY114D58290
Acquired: 23-MAY-11 15:02:15 Processed: 23-MAY-11 15:46:35
Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5
Factor 1:1600.000 Factor 2:20.000 Sample size: 0.916 L

Name	Resp	RA		RT	RRF	Conc	EDL	Rec	M
13C-1,2,3,4-TCDD	86308524	0.75	y	19:43	-	49.472	-	-	n
13C-2,3,7,8-TCDF	88320780	0.84	y	19:08	1.10	2021.819	2.407	92.6	n
2,3,7,8-TCDF	*	*	n	NotFnd	0.78	*	0.921	-	n
Total TCDF	35700	1.09	n	16:25	0.78	~~1.135~~	0.921	-	n
13C-2,3,7,8-TCDD	60257994	0.74	y	19:56	0.97	1572.968	5.760	72.1	n
2,3,7,8-TCDD	*	*	n	NotFnd	0.87	*	0.785	-	n
Total TCDD	65238	0.63	n	15:24	0.87	~~2.724~~	0.785	-	n
37Cl-2,3,7,8-TCDD	46041512	1.00	y	19:58	1.43	816.605	0.031	93.5	n
13C-1,2,3,7,8-PeCDF	68624848	1.69	y	24:55	1.04	1670.230	1.892	76.5	n
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.96	*	1.158	-	n
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.94	*	1.184	-	n
Total F2 PeCDF	39998	0.57	n	23:06	0.95	~~1.341~~	~~1.171~~ 1.184	-	n
Total F1 PeCDF	29095	0.37	n	16:49	0.95	~~0.976~~	~~0.985~~ ✓	-	n
13C-1,2,3,7,8-PeCDD	43885000	1.65	y	27:16	0.70	1586.411	1.556	72.7	n
1,2,3,7,8-PeCDD	5505	0.57	n	27:18	1.04	~~0.263~~	1.403 ✓	-	n
Total PeCDD	73342	3.08	n	24:47	1.04	~~3.501~~	~~1.403~~ 1.843	-	n
13C-1,2,3,7,8,9-HxCDD	47332386	1.39	y	33:15	-	38.113	-	-	n
						(W) ~~5/23/11~~ 5/25/11		83.5	
13C-1,2,3,4,7,8-HxCDF	39888330	0.49	y	32:07	~~0.87~~ 1.10	~~2112.670~~ 1670.930	8.329	~~96.8~~	n
1,2,3,4,7,8-HxCDF	16965	1.39	y	32:09	1.15	0.808 DL	~~0.304~~	-	n
1,2,3,6,7,8-HxCDF	11465	0.94	n	32:15	1.46	0.429 DL	~~0.239~~	-	n
2,3,4,6,7,8-HxCDF	6390	0.71	n	32:48	1.30	0.268 DL	~~0.267~~	-	n
1,2,3,7,8,9-HxCDF	7091	1.21	y	33:26	1.12	0.346 DL	~~0.311~~ ✓	-	n
Total HxCDF	71639	4.97	n	30:54	1.26	~~3.143~~	~~0.277~~ 0.808	-	n
13C-1,2,3,6,7,8-HxCDD	35329533	1.19	y	32:59	0.95	1715.368	1.301	78.6	n
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	0.74	*	1.444	-	n
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.05	*	1.028	-	n
1,2,3,7,8,9-HxCDD	11349	1.39	y	33:14	1.02	~~0.687~~	1.054	-	n
Total HxCDD	45578	4.80	n	32:06	0.94	~~2.943~~	~~1.148~~ 1.444	-	n
13C-1,2,3,4,6,7,8-HpCDF	30843124	0.41	y	34:45	0.91	1556.282	13.189	71.3	n
1,2,3,4,6,7,8-HpCDF	21378	0.96	y	34:46	1.32	1.142 JB	1.001	-	n
1,2,3,4,7,8,9-HpCDF	11925	1.25	n	35:55	1.13	~~0.747~~	1.173	-	n
Total HpCDF	45576	0.96	y	34:46	1.23	~~2.597~~ 1.142 ✓	1.080	-	n
13C-1,2,3,4,6,7,8-HpCDD	28294563	1.04	y	35:34	0.91	1427.778	7.531	65.4	n
1,2,3,4,6,7,8-HpCDD	26811	1.21	n	35:34	1.01	2.041 DL	~~1.392~~	-	n
Total HpCDD	70829	0.86	n	35:00	1.01	~~5.390~~ 2.689 ✓	1.392	-	
13C-OCDD	41033358	0.88	y	38:04	0.60	3144.557	9.384	72.0	n

Totals Results TestAmerica West Sacramento Page 1 of 9

Run Text: MJC0D-1-AA Sample text: MJC0D-1-AA :G1E120651-2

Name: Total TCDF F:1 Mass: 303.902 305.899 Mod? no #Hom:4
Run: 12 File: 23MY114D5 S:8 Acq:23-MAY-11 15:02:15
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	1.040 of which	* named and	1.040	unnamed	
Conc:	1.135 of which	* named and	1.135	unnamed	

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	16:25	1.086 n	~~0.491~~	9485	9.086	y	n
					8731	1.551	n	n
	2	16:56	0.362 n	~~0.128~~	1751	2.468	n	n
					4841	1.078	n	n
	3	18:19	0.416 n	~~0.309~~	4232	6.101	y	n
					10161	1.791	n	n
	4	18:26	0.154 n	~~0.206~~	2824	4.773	y	n
					18326	2.261	n	n

Totals Results TestAmerica West Sacramento Page 2 of 9

Run Text: MJC0D-1-AA Sample text: MJC0D-1-AA :G1E120651-2

Name: Total TCDD F:1 Mass: 319.897 321.894 Mod? no #Hom:8
Run: 12 File: 23MY114D5 S:8 Acq:23-MAY-11 15:02:15
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	2.496 of which	* named and	2.496	unnamed	
Conc:	2.724 of which	* named and	2.724	unnamed	

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	15:24	0.631 n	~~0.269~~	2801	10.806	y	n
					4436	1.063	n	n
	2	16:14	0.830 y	~~0.351~~	3812	24.188	y	n
					4595	1.274	n	n
	3	16:59	0.618 n	~~0.347~~	3620	11.784	y	n
					5862	1.025	n	n
	4	17:29	0.244 n	~~0.205~~	2140	13.767	y	n
					8756	1.984	n	n
	5	17:35	0.607 n	~~0.510~~	5314	18.314	y	n
					8756	1.984	n	n
	6	18:42	0.767 y	~~0.311~~	3237	20.270	y	n
					4220	1.249	n	n

7	19:41	2.274	n	~~0.403~~	12417	32.019	y	n
					5459	1.548	n	n
8	20:06	0.619	n	~~0.326~~	3400	22.446	y	n
					5492	1.573	n	n

Totals Results TestAmerica West Sacramento Page 3 of 9

Run Text: MJC0D-1-AA Sample text: MJC0D-1-AA :G1E120651-2

Name: Total F2 PeCDF F:2 Mass: 339.860 341.857 Mod? no #Hom:7
Run: 12 File: 23MY114D5 S:8 Acq:23-MAY-11 15:02:15
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	1.229 of which	* named and	1.229	unnamed
Conc:	1.341 of which	* named and	1.341	unnamed

Name	#	R.T.	Ratio		Conc.	Area	S/N	>?	Mod?
	1	23:06	0.568	n	~~0.087~~	1572	7.821	y	n
						2770	0.783	n	n
	2	23:13	0.640	n	~~0.117~~	2114	12.358	y	n
						3304	0.673	n	n
	3	23:24	0.535	n	~~0.220~~	3991	14.438	y	n
						7455	1.271	n	n
	4	23:29	1.167	n	~~0.294~~	5337	31.647	y	n
						4574	1.033	n	n
	5	25:26	0.427	n	~~0.086~~	1556	5.918	y	n
						3642	0.990	n	n
	6	26:15	0.427	n	~~0.100~~	1962	6.877	y	n
						4596	1.241	n	n
	7	26:44	0.410	n	~~0.429~~	7781	29.883	y	n
						18990	2.925	n	n

Run Text: MJC0D-1-AA Sample text: MJC0D-1-AA :G1E120651-2

Name: Total F1 PeCDF F:1 Mass: 339.860 341.857 Mod? no #Hom:5
Run: 12 File: 23MY114D5 S:8 Acq:23-MAY-11 15:02:15
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	0.894 of which	* named and	0.894	unnamed	
Conc:	0.976 of which	* named and	0.976	unnamed	

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	16:49	0.374 n	~~0.199~~	3606	18.626	y	n
					9652	2.288	n	n
	2	19:03	0.558 n	~~0.169~~	3072	19.490	y	n
					5502	1.339	n	n
	3	19:45	0.029 n	~~0.032~~	585	3.608	y	n
					20112	2.371	n	n
	4	21:46	1.606 y	~~0.348~~	6398	27.955	y	n
					3984	1.103	n	n
	5	22:42	0.514 n	~~0.227~~	4112	27.146	y	n
					8000	2.056	n	n

Run Text: MJC0D-1-AA Sample text: MJC0D-1-AA :G1E120651-2

Name: Total PeCDD F:2 Mass: 355.855 357.852 Mod? no #Hom:6
Run: 12 File: 23MY114D5 S:8 Acq:23-MAY-11 15:02:15
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	3.208 of which	0.241 named and	2.967	unnamed	
Conc:	3.501 of which	0.263 named and	3.238	unnamed	

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	24:47	3.082 n	~~0.363~~	9195	1.528	n	n
					2983	10.903	y	n
	2	25:22	5.261 n	~~0.475~~	20521	3.156	y	n
					3901	14.753	y	n
	3	26:40	3.060 n	~~1.843~~ DL	46336	4.311	y	n
					15142	42.586	y	n
1,2,3,7,8-PeCDD	4	27:18	0.568 n	~~0.263~~	3346	0.973	n	n
					5893	15.375	y	n
	5	29:19	1.782 y	~~0.486~~	6522	1.328	n	n
					3661	19.348	y	n
	6	29:41	7.549 n	~~0.071~~	4410	1.484	n	n

584 3.704 y n

Run Text: MJC0D-1-AA Sample text: MJC0D-1-AA :G1E120651-2

Name: Total HxCDF F:3 Mass: 373.821 375.818 Mod? no #Hom:11
Run: 12 File: 23MY114D5 S:8 Acq:23-MAY-11 15:02:15
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	2.880 of which	1.696 named and	1.184 unnamed	
Conc:	3.143 of which	1.851 named and	1.292 unnamed	

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	30:54	4.967 n	~~0.090~~	4604	3.338	y	n
					927	7.218	y	n
	2	31:03	1.309 y	~~0.422~~	5505	2.771	n	n
					4207	17.582	y	n
1,2,3,4,7,8-HxCDF	3	32:09	1.392 y	0.808 DL	9874	4.654	y	n
					7091	27.916	y	n
1,2,3,6,7,8-HxCDF	4	32:15	0.941 n	~~0.429~~	6347	4.103	y	n
					6747	52.225	y	n
,3,4,6,7,8-HxCDF	5	32:48	0.712 n	~~0.268~~	3537	1.676	n	n
					4971	19.252	y	n
	6	33:04	1.570 n	~~0.212~~	3425	1.841	n	n
					2181	12.276	y	n
	7	33:22	0.671 n	~~0.169~~	2155	1.533	n	n
					3213	11.547	y	n
1,2,3,7,8,9-HxCDF	8	33:26	1.207 y	~~0.346~~	3878	3.393	y	n
					3213	11.547	y	n
	9	33:33	1.051 n	~~0.148~~	1882	1.469	n	n
					1791	14.811	y	n
	10	33:36	1.141 y	~~0.167~~	2043	1.256	n	n
					1791	14.811	y	n
	11	33:51	4.786 n	~~0.084~~	4120	3.360	y	n
					861	5.903	y	n

Run Text: MJC0D-1-AA Sample text: MJC0D-1-AA :G1E120651-2

Name: Total HxCDD F:3 Mass: 389.816 391.813 Mod? no #Hom:4
Run: 12 File: 23MY114D5 S:8 Acq:23-MAY-11 15:02:15
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	2.697 of which	0.629 named and	2.067	unnamed
Conc:	2.943 of which	0.687 named and	2.256	unnamed

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	32:06	4.797 n	~~0.399~~	12958	4.454	y	n
					2701	1.485	n	n
	2	32:14	1.428 n	~~1.147~~	11094	4.909	y	n
					7766	2.897	n	n
	3	32:46	1.014 n	~~0.711~~	5969	2.506	n	n
					5885	2.374	n	n
1,2,3,7,8,9-HxCDD	4	33:14	1.387 y	~~0.687~~	6594	2.818	n	n
					4755	2.491	n	n

Run Text: MJC0D-1-AA Sample text: MJC0D-1-AA :G1E120651-2

Name: Total HpCDF F:4 Mass: 407.782 409.779 Mod? no #Hom:4
Run: 12 File: 23MY114D5 S:8 Acq:23-MAY-11 15:02:15
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	2.380 of which	1.731 named and	0.649	unnamed
Conc:	2.597 of which	1.889 named and	0.708	unnamed

Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
1,2,3,4,6,7,8-HpCDF	1	34:46	0.960 y	1.142 ✓	10474	4.100	y	n
					10904	4.828	y	n
1,2,3,4,7,8,9-HpCDF	2	35:55	1.251 n	~~0.747~~	7311	2.103	n	n
					5845	1.978	n	n
	3	36:35	1.798 n	~~0.373~~	5706	1.960	n	n
					3173	1.615	n	n
	4	36:50	0.991 y	~~0.334~~	2887	1.368	n	n
					2912	1.580	n	n

Run Text: MJC0D-1-AA Sample text: MJC0D-1-AA :G1E120651-2

Name: Total HpCDD F:4 Mass: 423.777 425.774 Mod? no #Hom:4
Run: 12 File: 23MY114D5 S:8 Acq:23-MAY-11 15:02:15

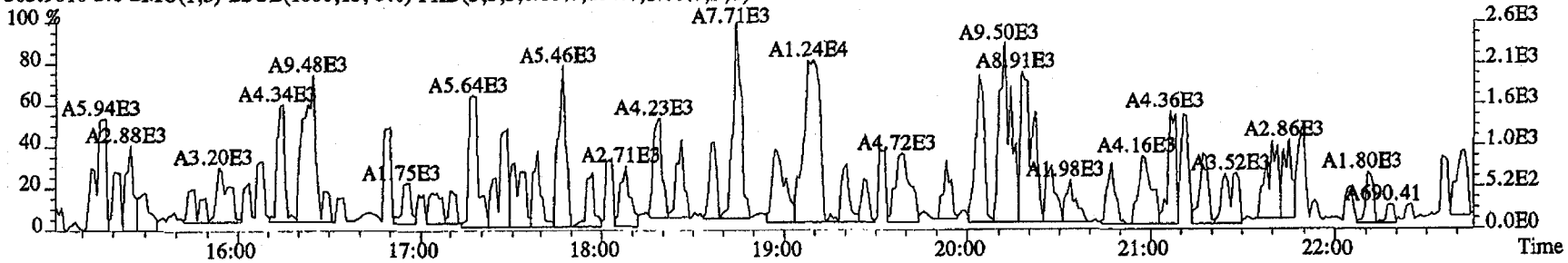
Tables: Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D

Amount:	4.939 of which	1.870 named and	3.070 unnamed		
Conc:	5.390 of which	2.041 named and	3.350 unnamed		

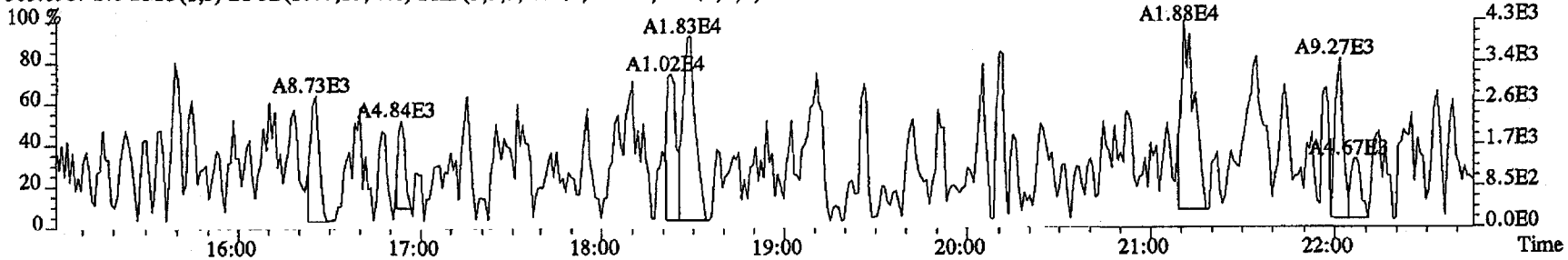
Name	#	R.T.	Ratio	Conc.	Area	S/N	>?	Mod?
	1	35:00	0.861 n	2.689	18012	4.791	y	n
					20922	8.422	y	n
1,2,3,4,6,7,8-HpCDD	2	35:34	1.214 n	~~2.041~~	15949	4.105	y	n
					13143	4.507	y	n
	3	36:24	0.765 n	~~0.398~~	2669	0.774	n	n
					3490	2.134	n	n
	4	36:31	2.124 n	~~0.263~~	3591	1.247	n	n
					1691	1.244	n	n

File:23MY114D5 #1-513 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

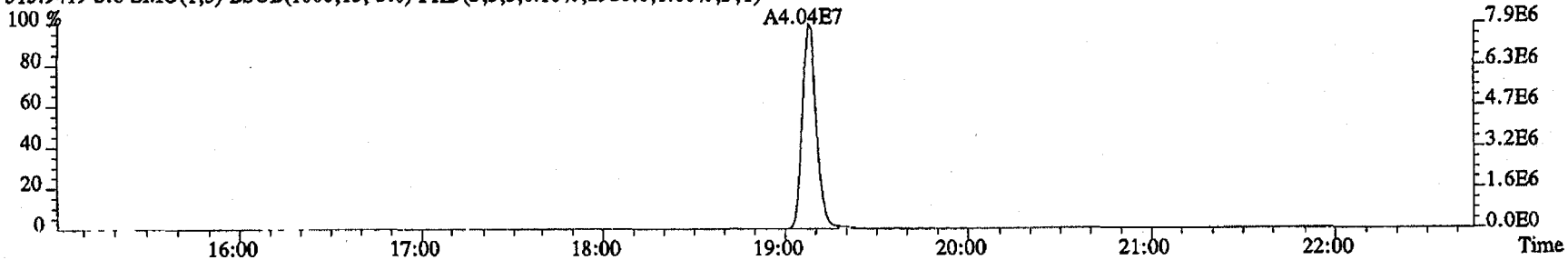
303.9016 S:8 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,204.0,1.00%,F,T)



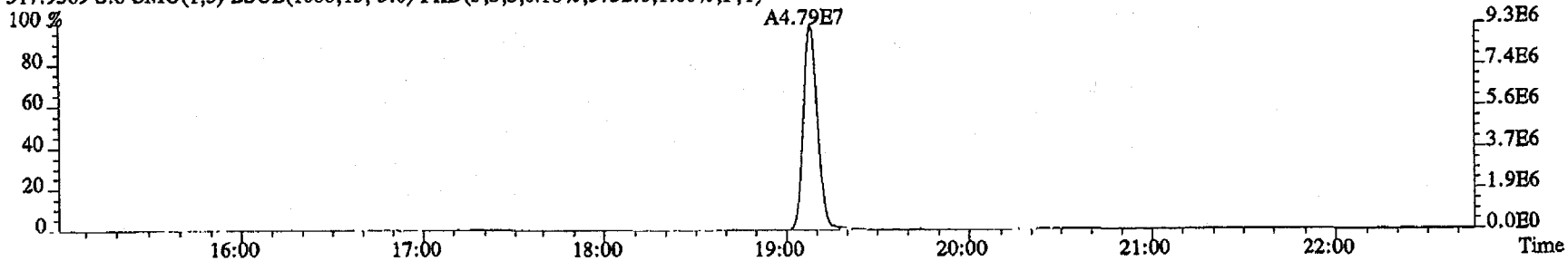
305.8987 S:8 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1672.0,1.00%,F,T)



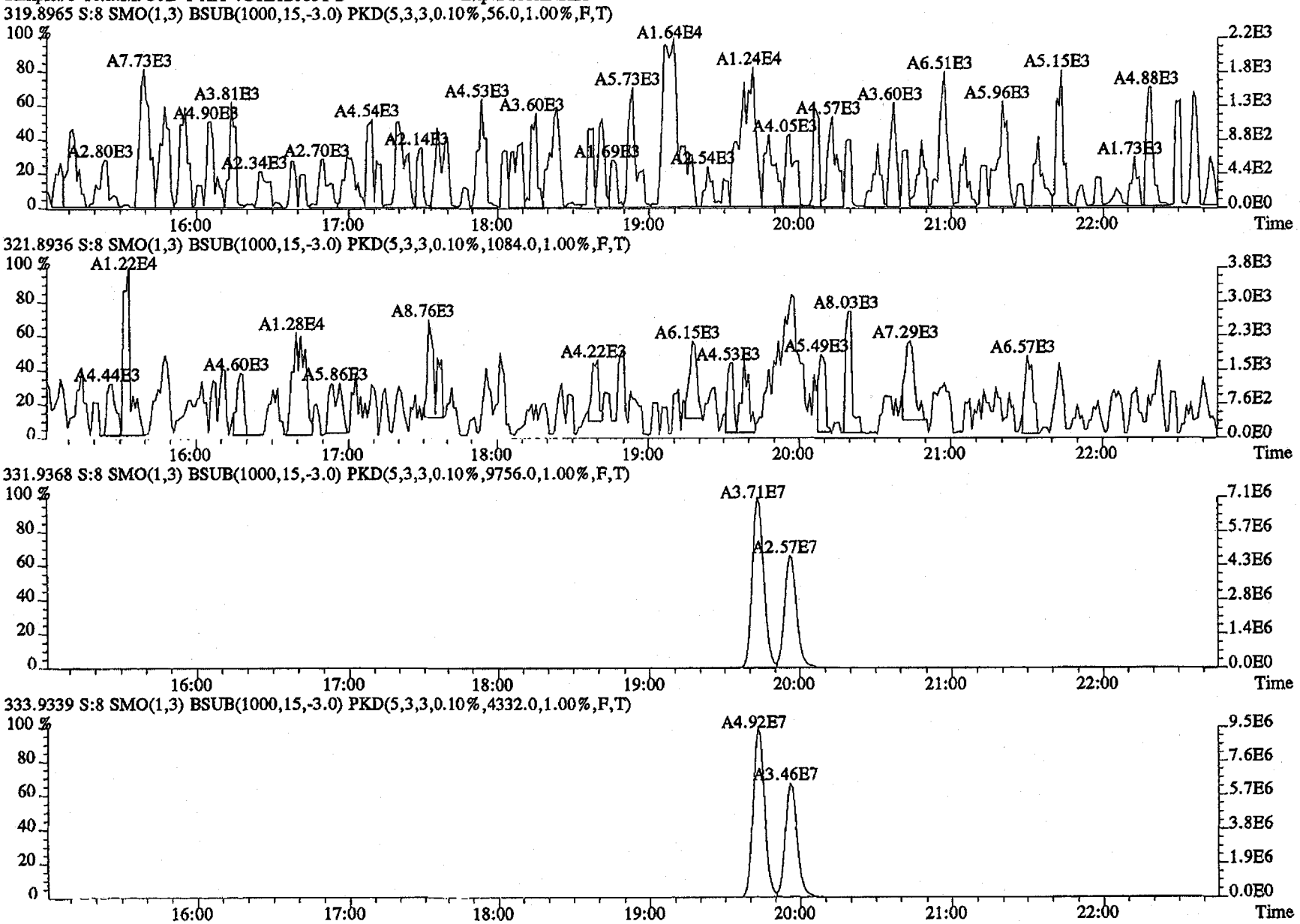
315.9419 S:8 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2980.0,1.00%,F,T)



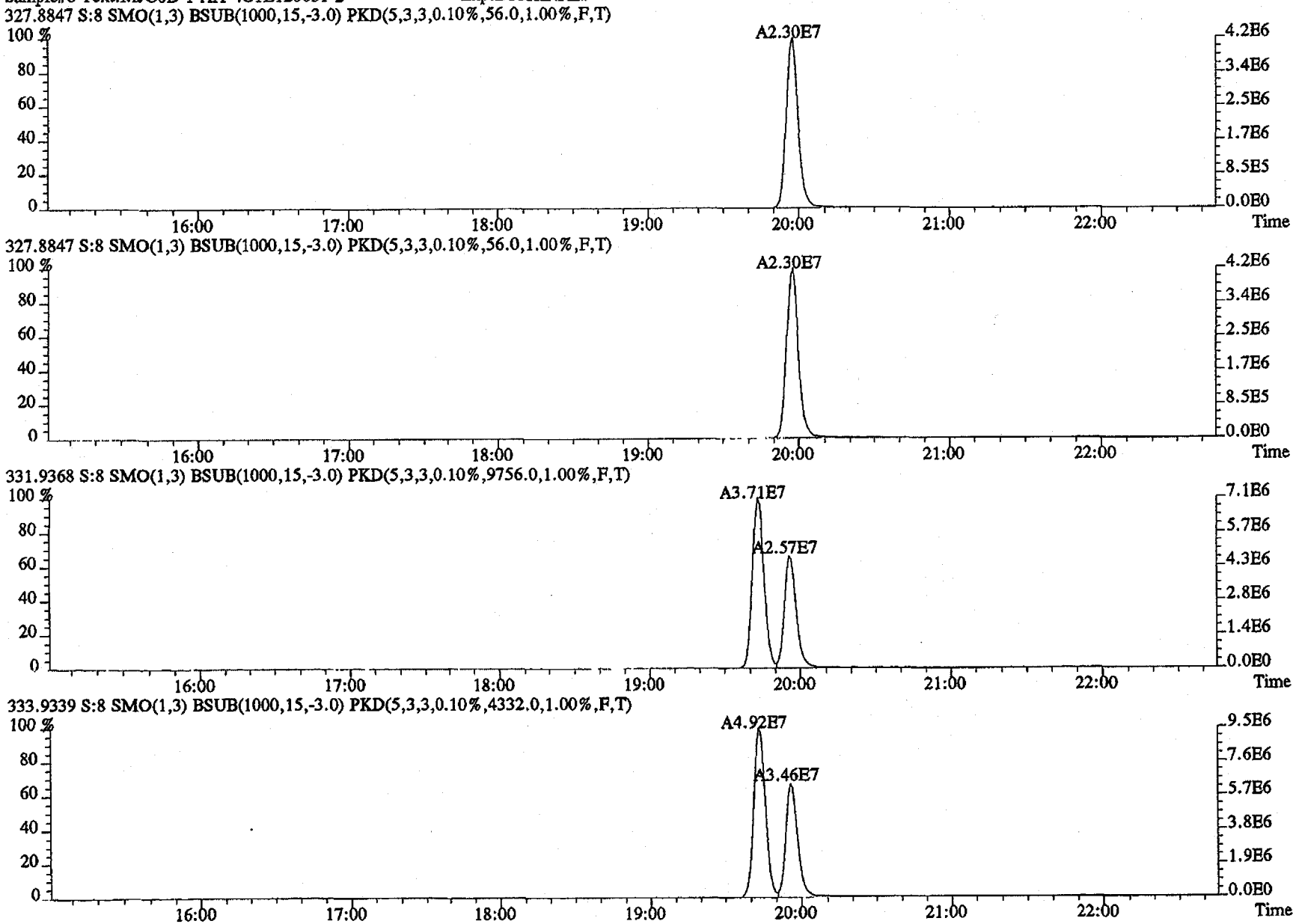
317.9389 S:8 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3732.0,1.00%,F,T)



File:23MY114D5 #1-513 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

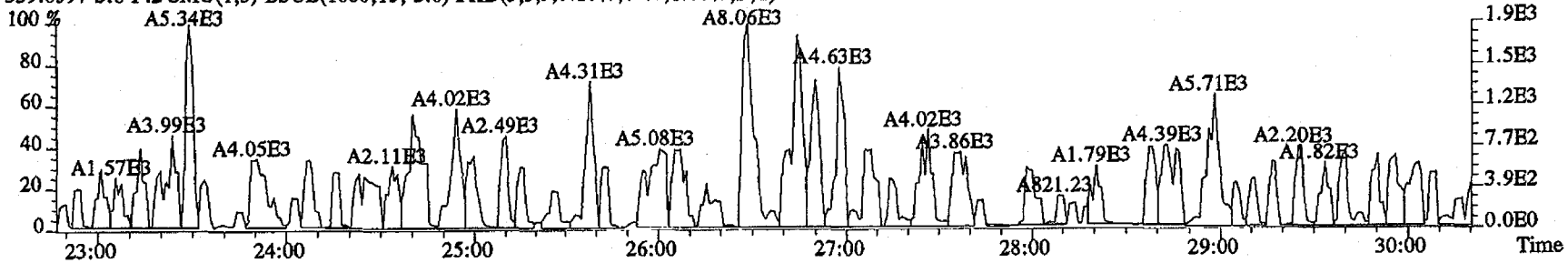


File:23MY114D5 #1-513 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

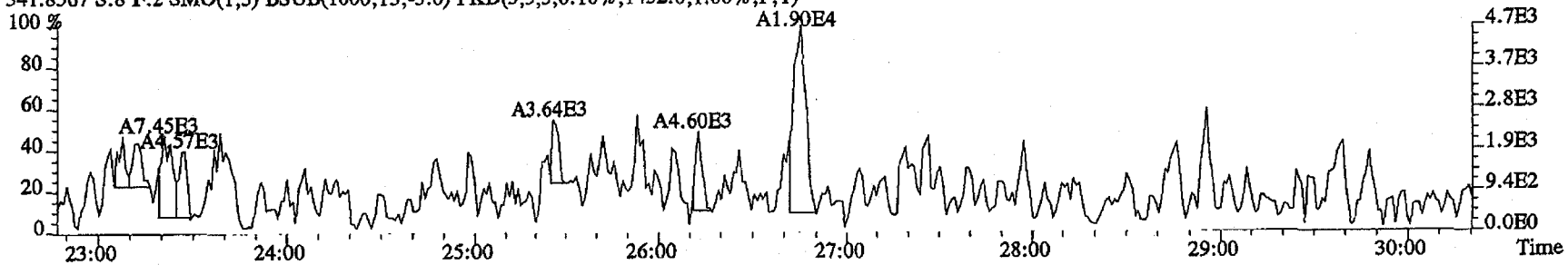


File:23MY114D5 #1-486 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

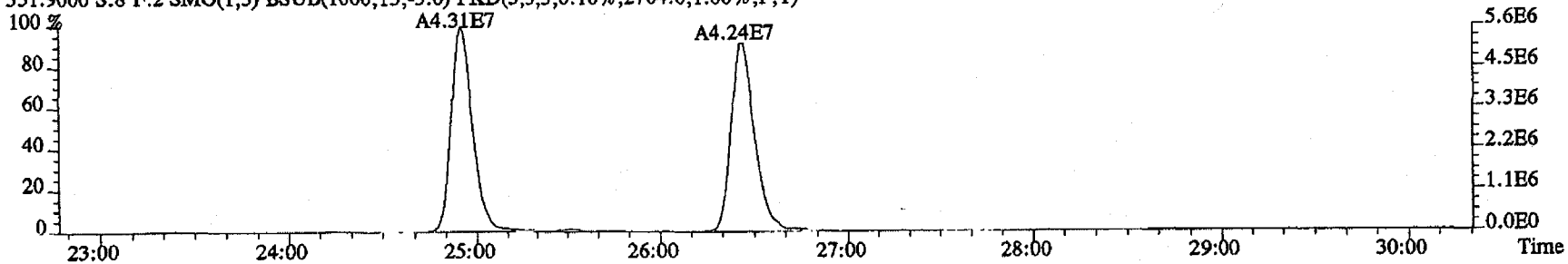
339.8597 S:8 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,60.0,1.00%,F,T)



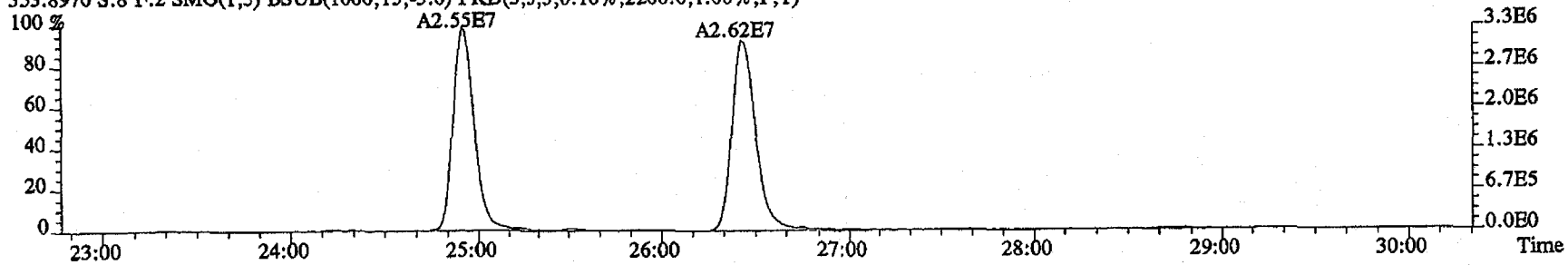
341.8567 S:8 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1452.0,1.00%,F,T)



351.9000 S:8 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2764.0,1.00%,F,T)

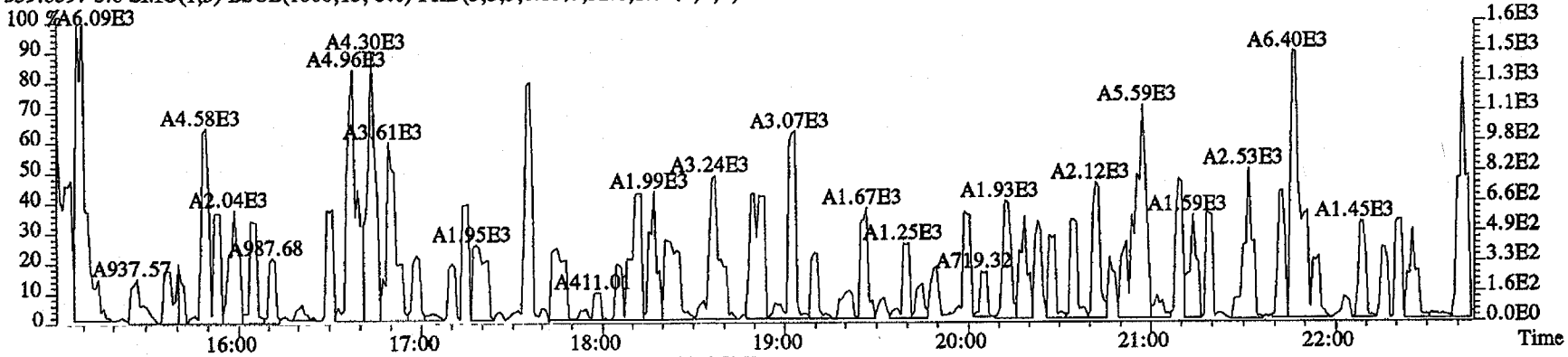


353.8970 S:8 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2200.0,1.00%,F,T)

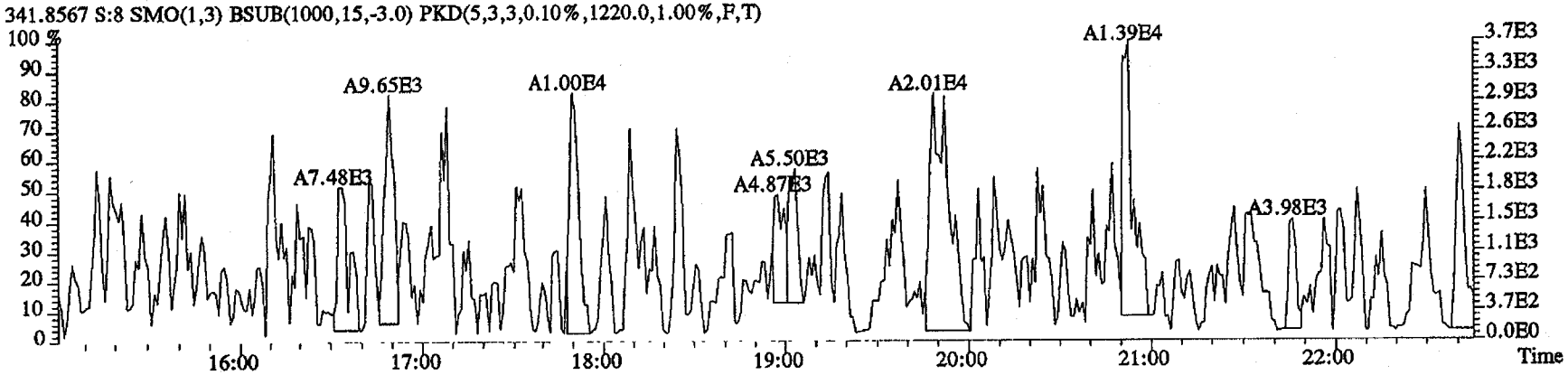


File:23MY114D5 #1-513 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

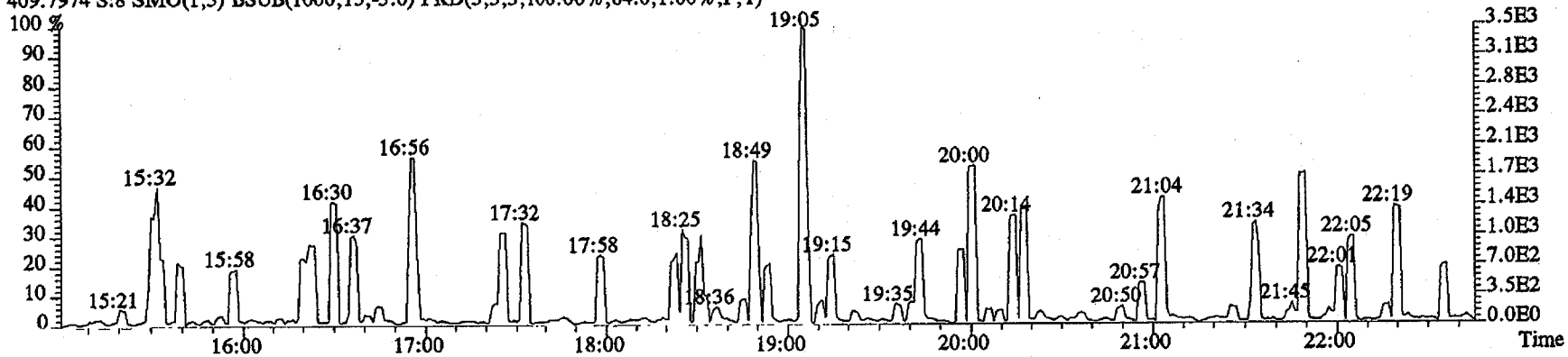
339.8597 S:8 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,52.0,1.00%,F,T)



341.8567 S:8 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1220.0,1.00%,F,T)

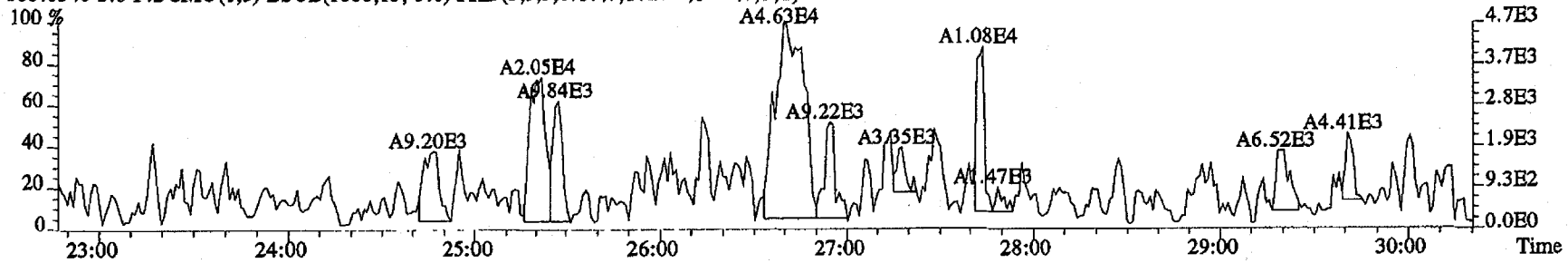


409.7974 S:8 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,64.0,1.00%,F,T)

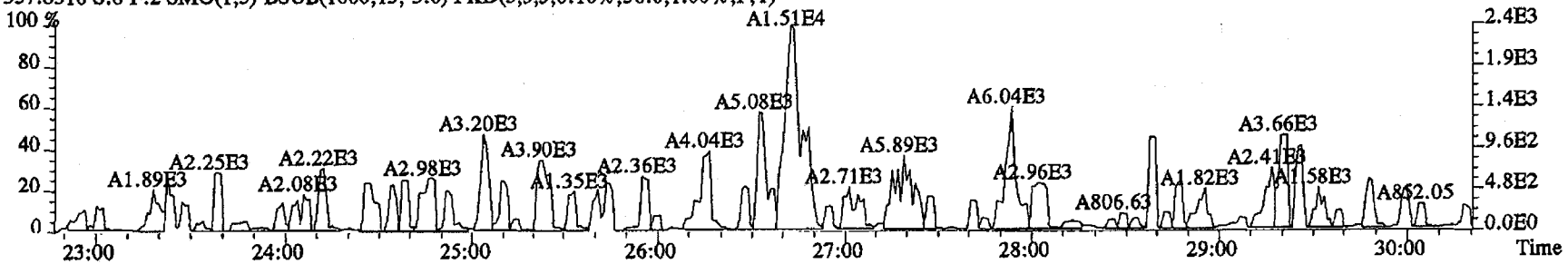


File:23MY114D5 #1-486 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

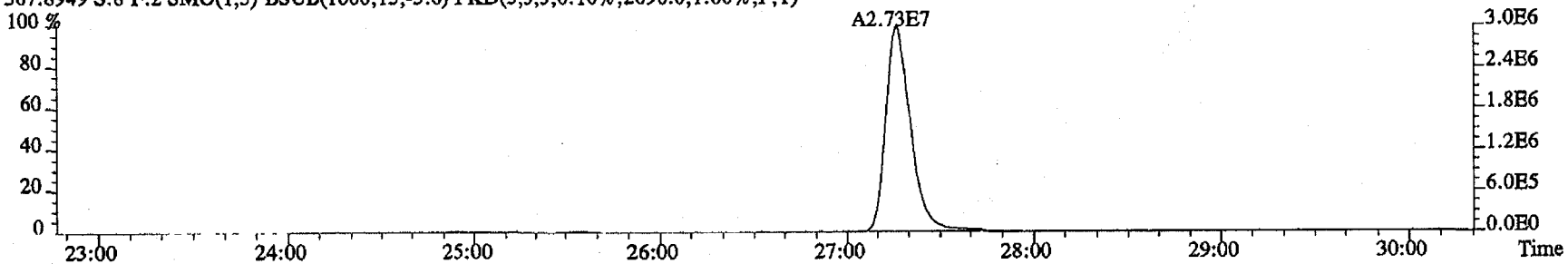
355.8546 S:8 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1028.0,1.00%,F,T)



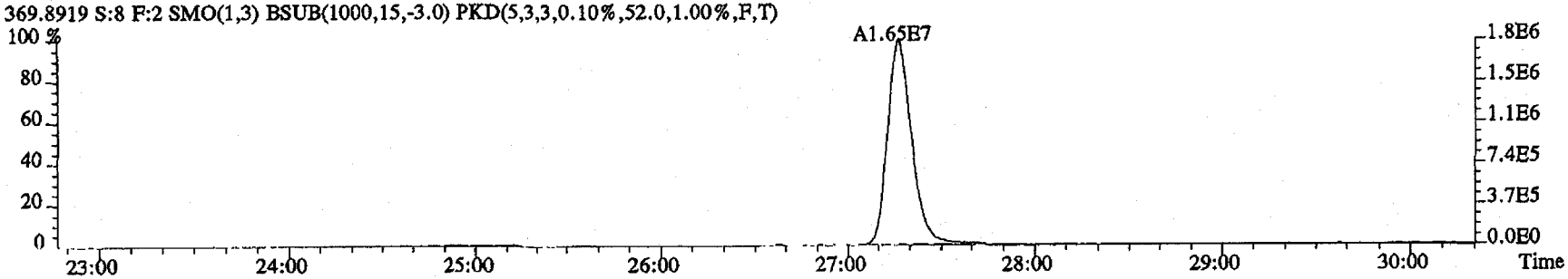
357.8516 S:8 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,56.0,1.00%,F,T)



367.8949 S:8 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2696.0,1.00%,F,T)

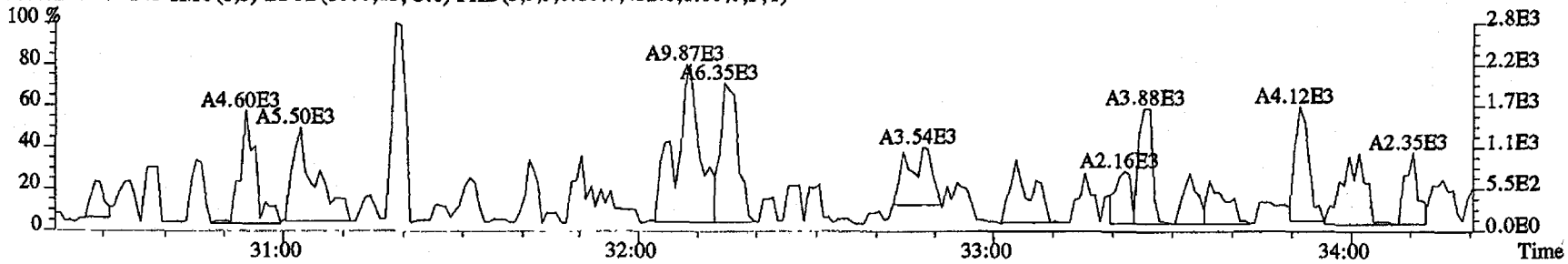


369.8919 S:8 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,52.0,1.00%,F,T)

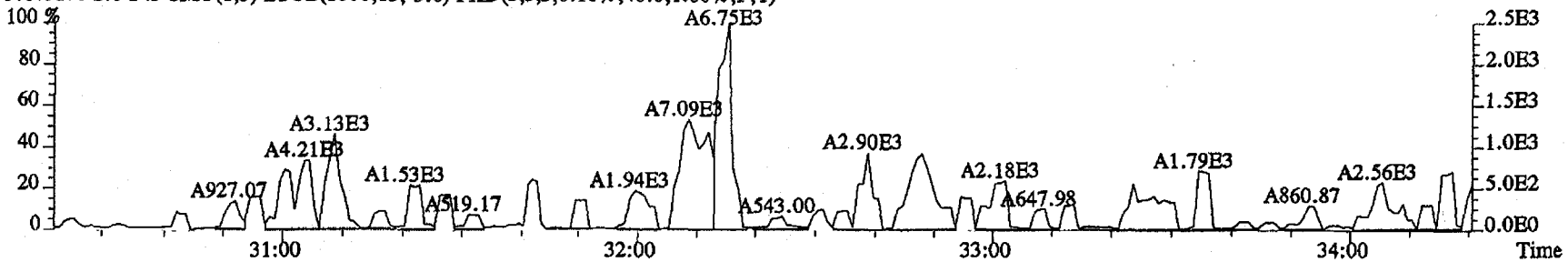


File:23MY114D5 #1-287 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

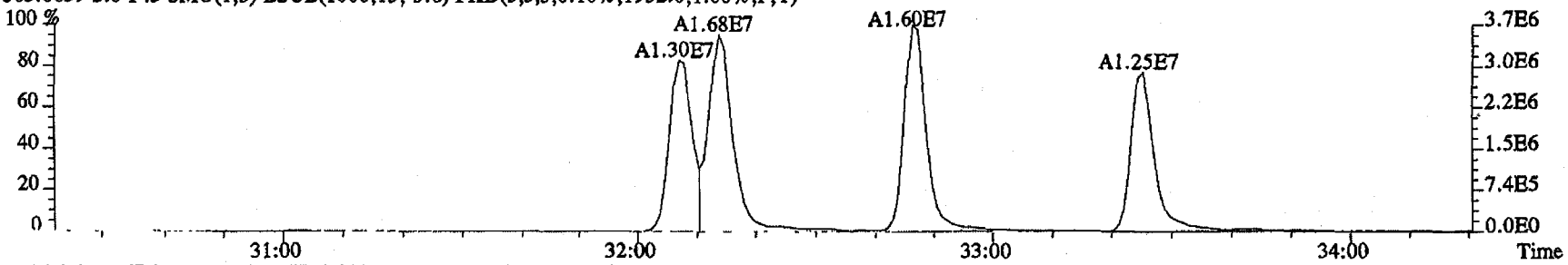
373.8208 S:8 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,452.0,1.00%,F,T)



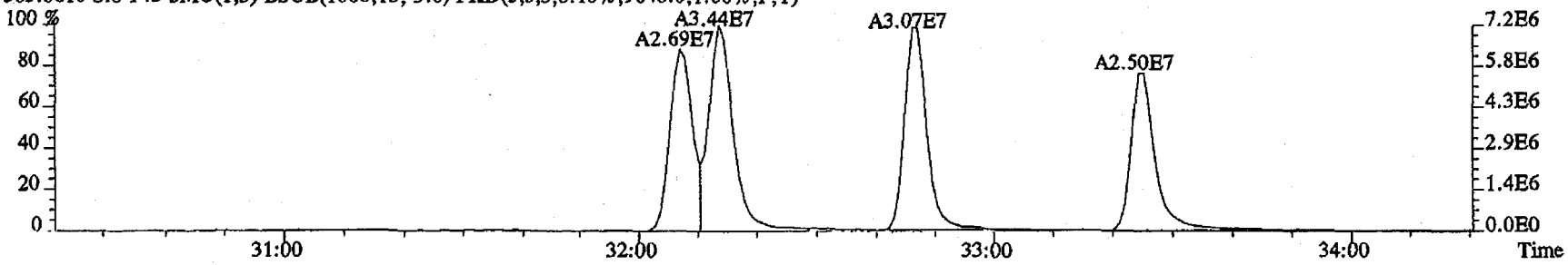
375.8178 S:8 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,48.0,1.00%,F,T)



383.8639 S:8 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1952.0,1.00%,F,T)

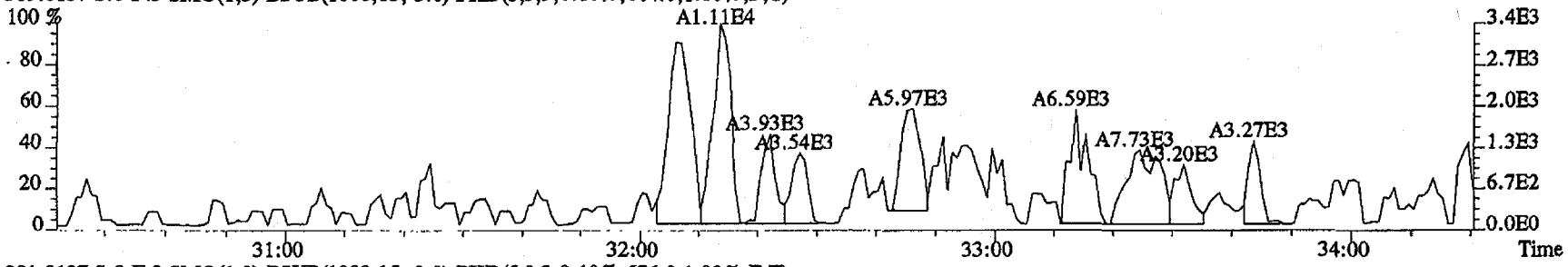


385.8610 S:8 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9648.0,1.00%,F,T)

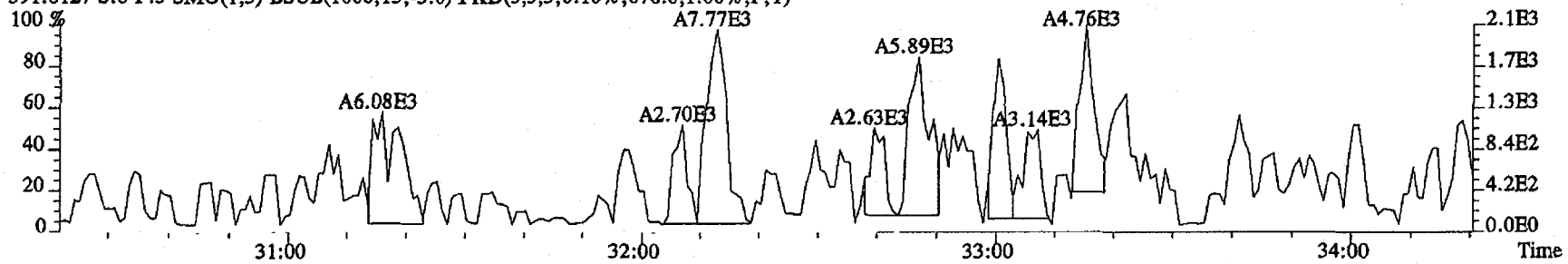


File:23MY114D5 #1-287 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

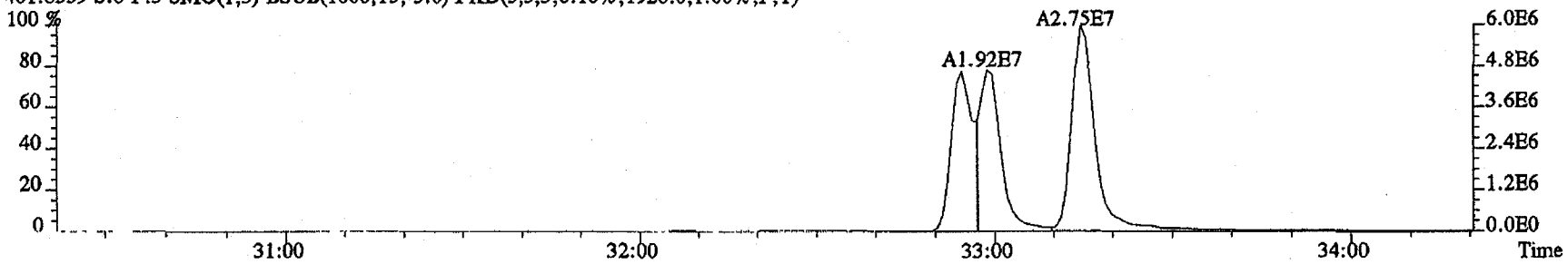
389.8157 S:8 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,664.0,1.00%,F,T)



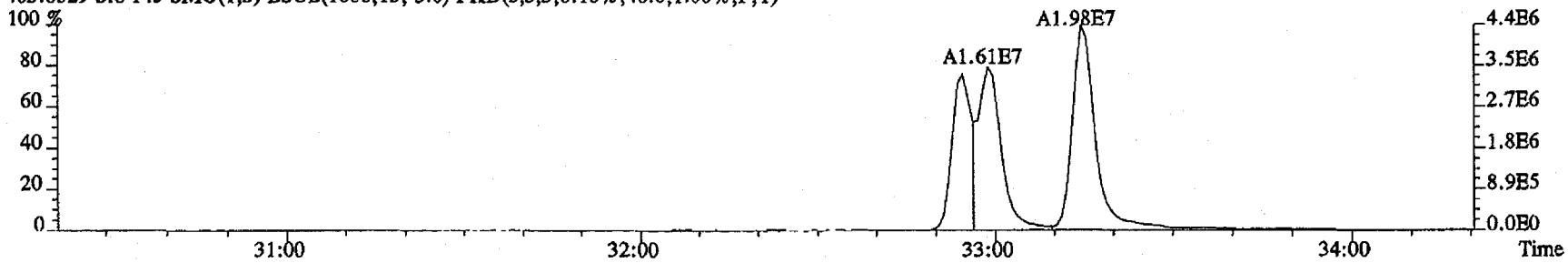
391.8127 S:8 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,676.0,1.00%,F,T)



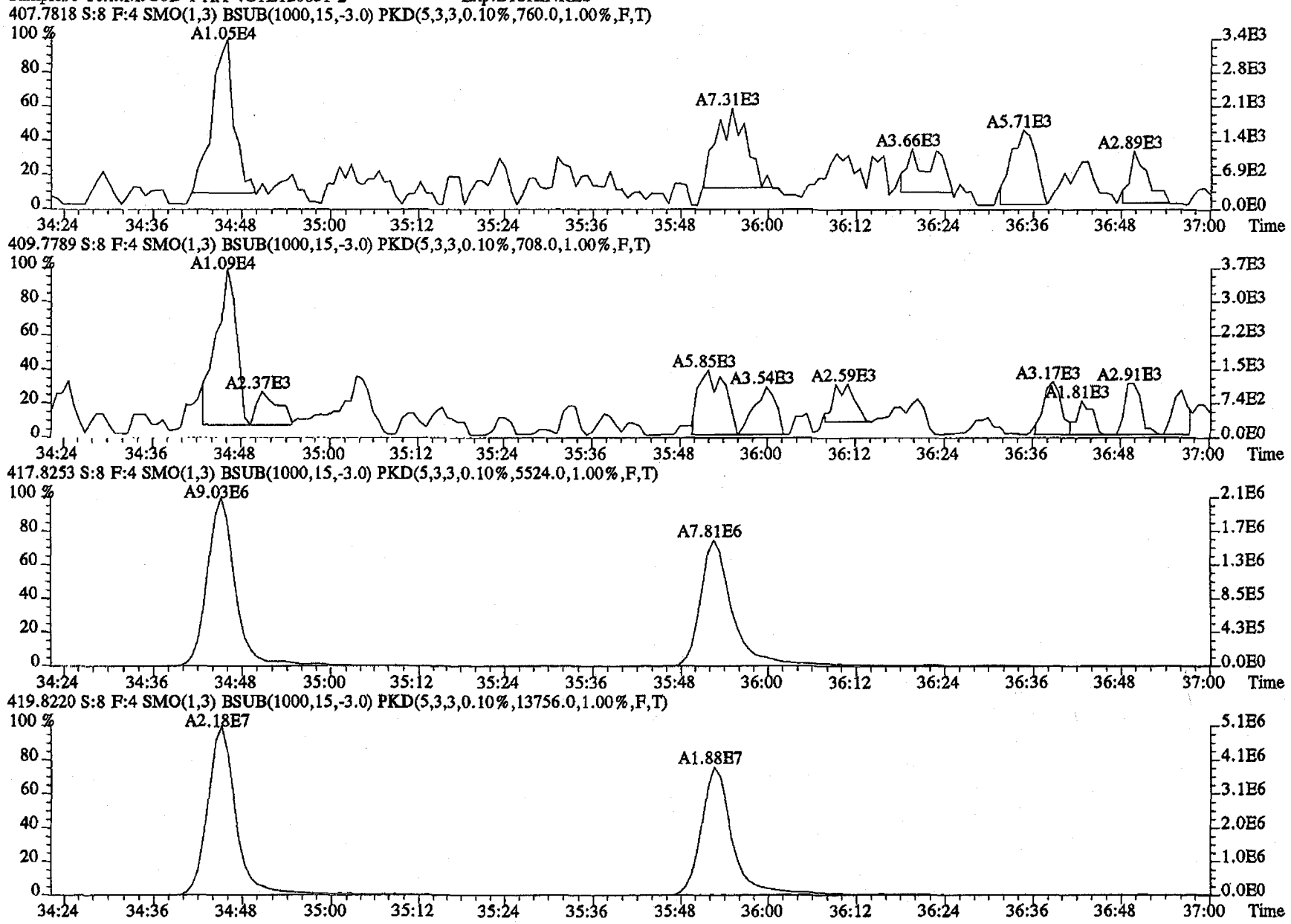
401.8559 S:8 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1928.0,1.00%,F,T)



403.8529 S:8 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,48.0,1.00%,F,T)

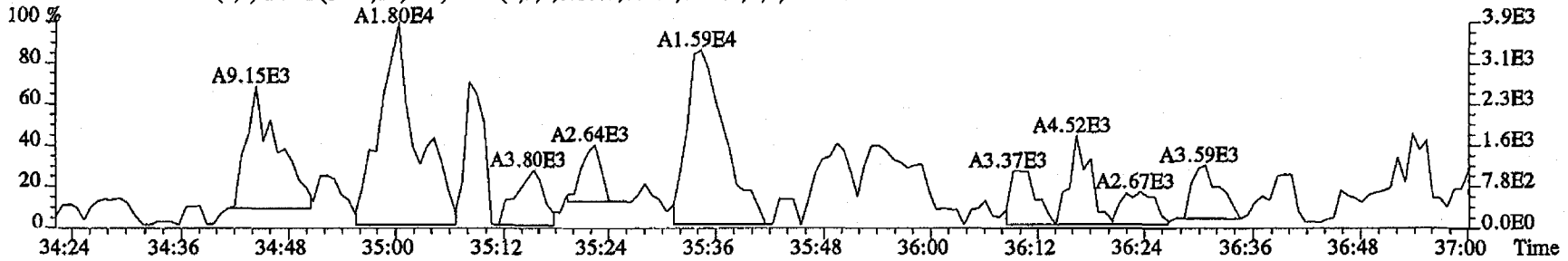


File:23MY114D5 #1-200 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

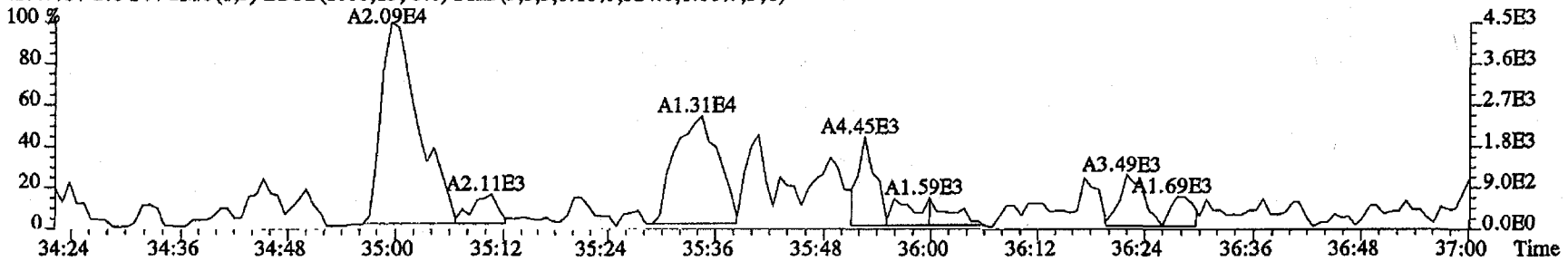


File:23MY114D5 #1-200 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

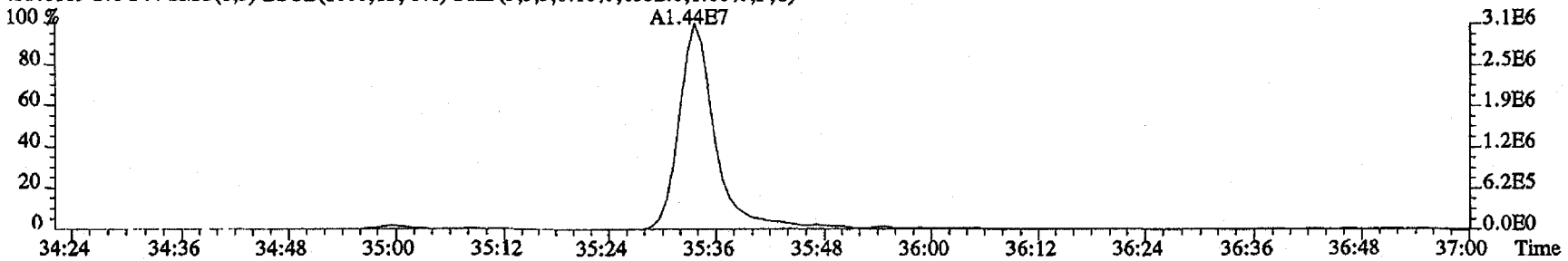
423.7766 S:8 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,800.0,1.00%,F,T)



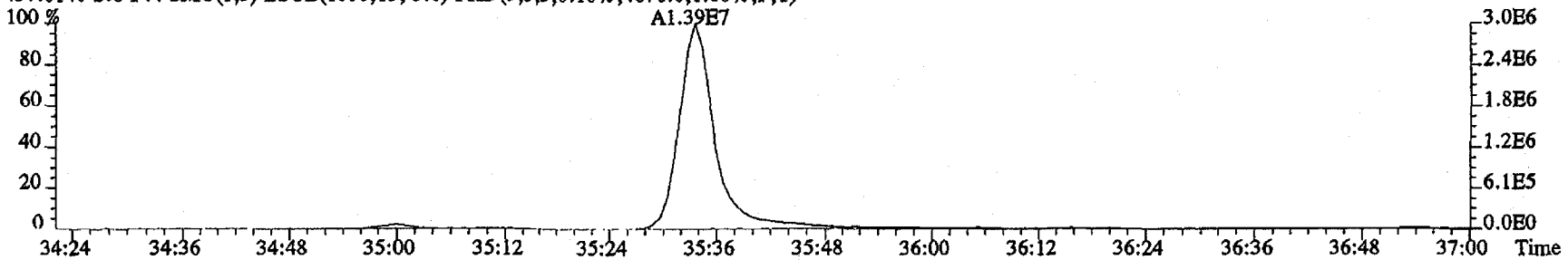
425.7737 S:8 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,524.0,1.00%,F,T)



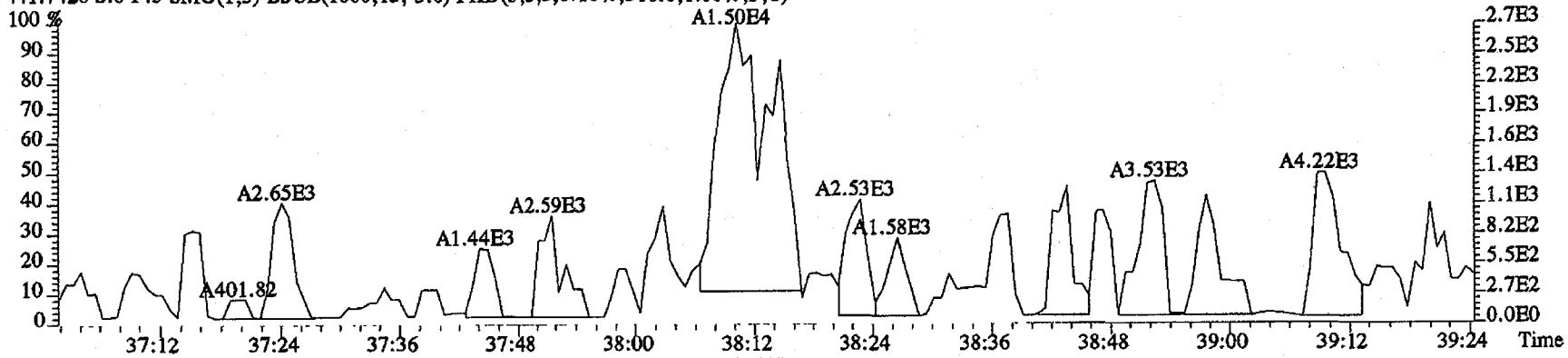
435.8169 S:8 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6332.0,1.00%,F,T)



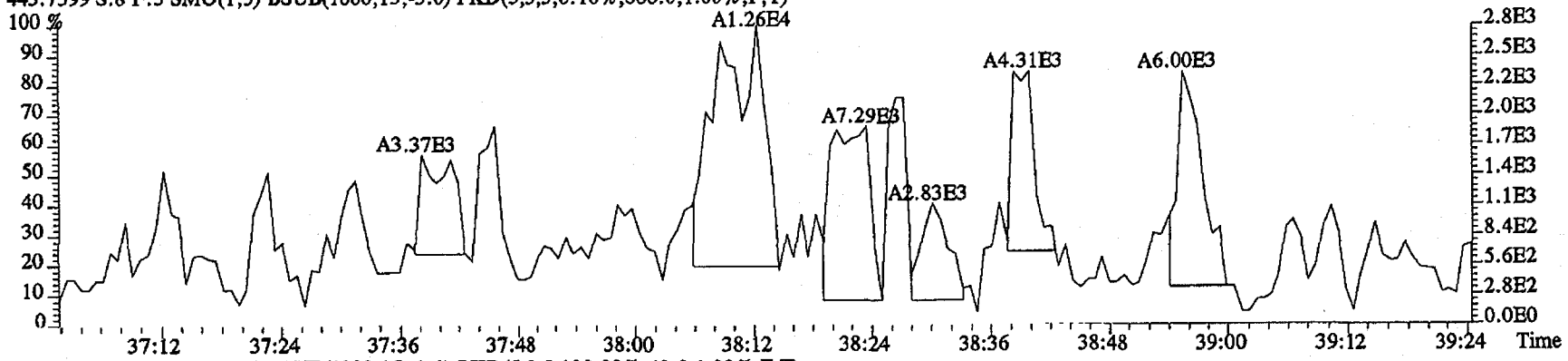
437.8140 S:8 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4676.0,1.00%,F,T)



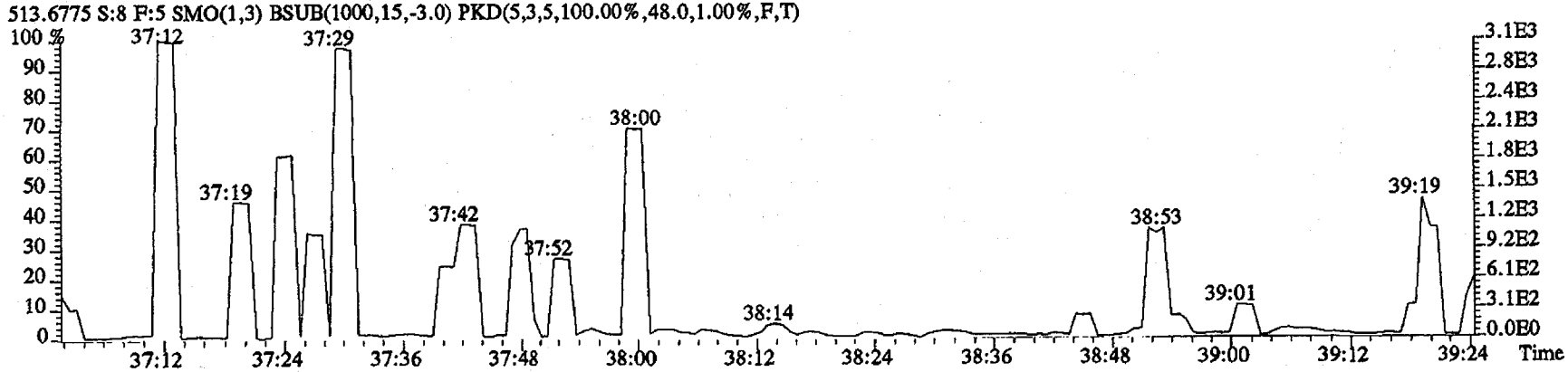
File:23MY114D5 #1-193 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES
441.7428 S:8 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,516.0,1.00%,F,T)



443.7399 S:8 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,888.0,1.00%,F,T)

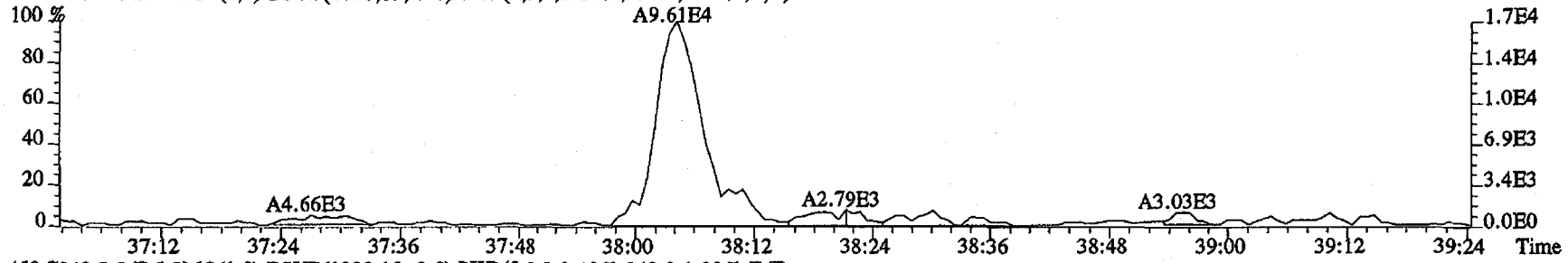


513.6775 S:8 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,48.0,1.00%,F,T)

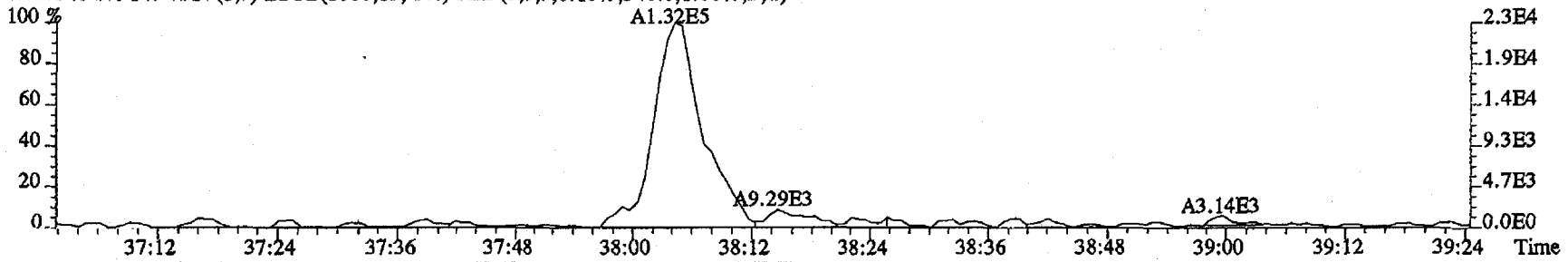


File:23MY114D5 #1-193 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

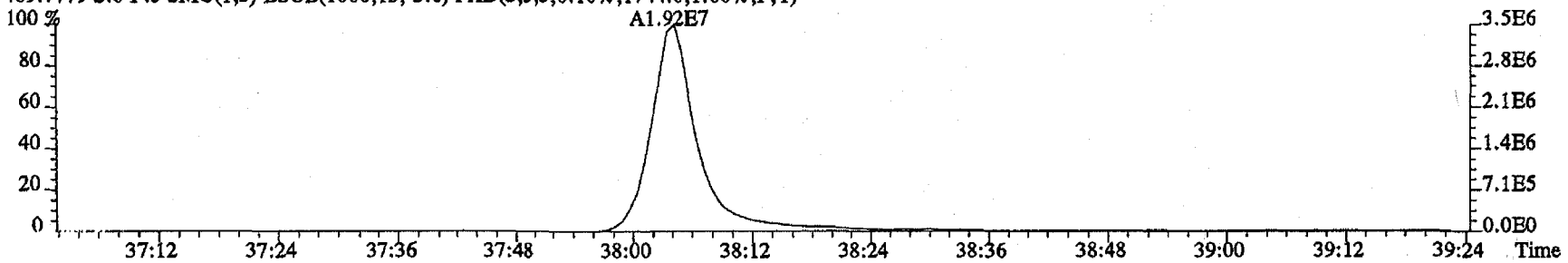
457.7377 S:8 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,356.0,1.00%,F,T)



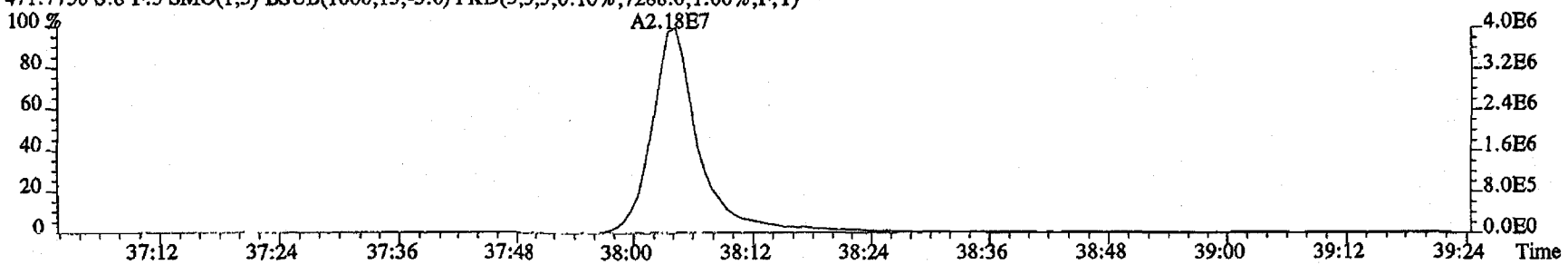
459.7348 S:8 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,340.0,1.00%,F,T)



469.7779 S:8 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1744.0,1.00%,F,T)

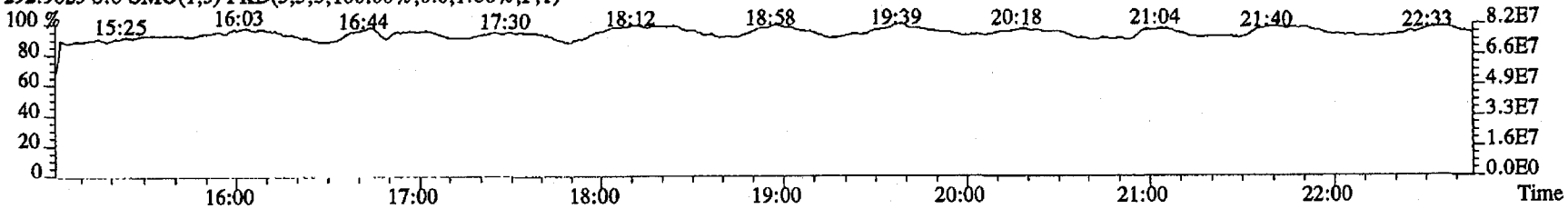


471.7750 S:8 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,7288.0,1.00%,F,T)

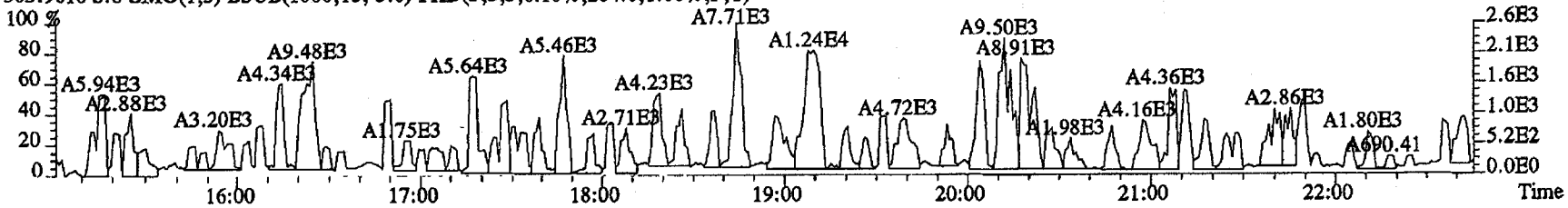


File:23MY114D5 #1-513 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

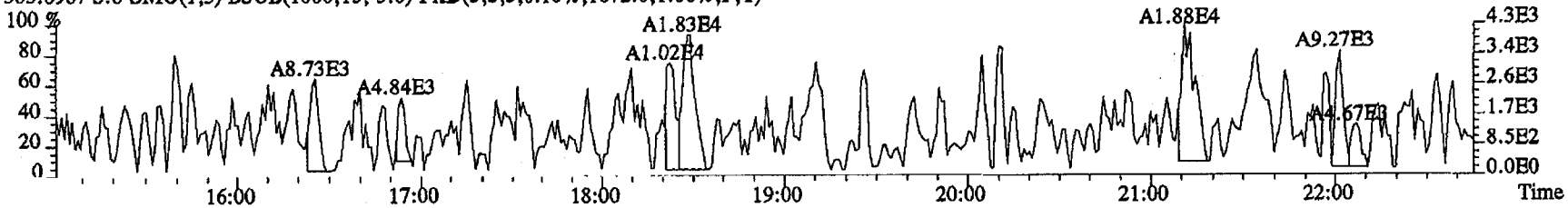
292.9825 S:8 SMO(1,3) PKD(5,3,5,100.00%,0.0,1.00%,F,T)



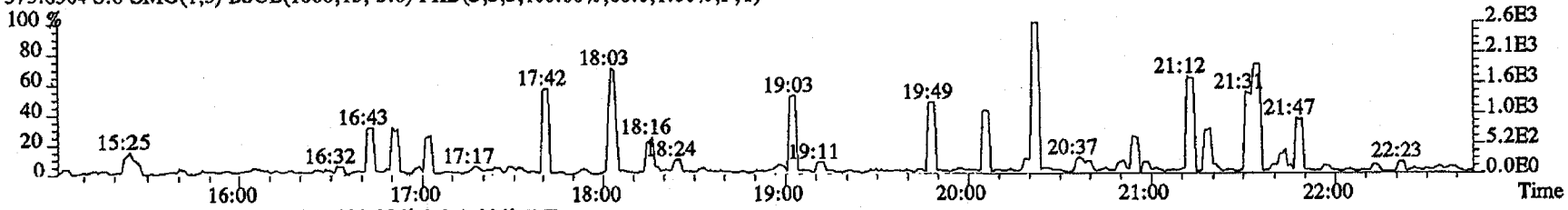
303.9016 S:8 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,204.0,1.00%,F,T)



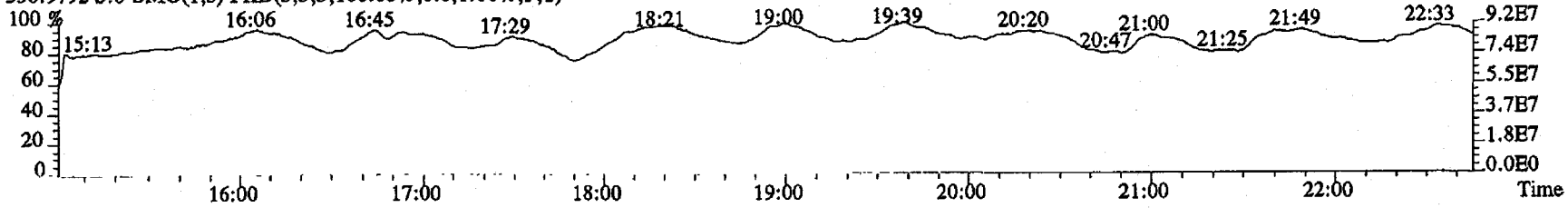
305.8987 S:8 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1672.0,1.00%,F,T)



375.8364 S:8 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,68.0,1.00%,F,T)

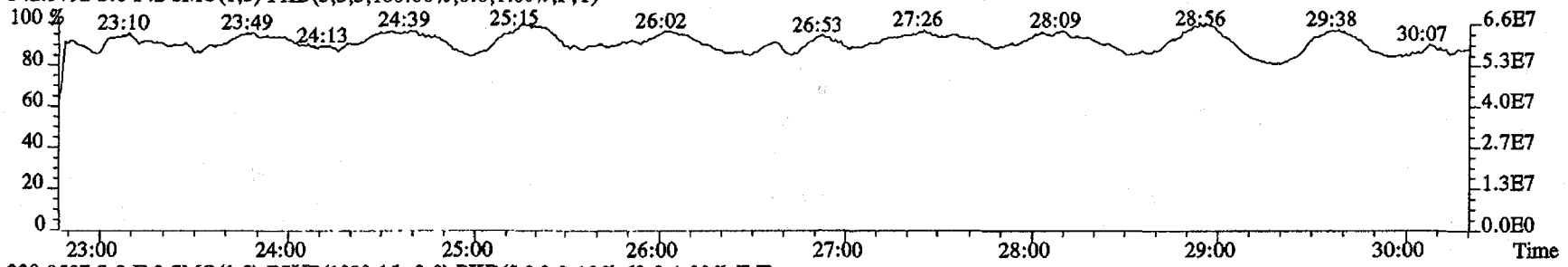


330.9792 S:8 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

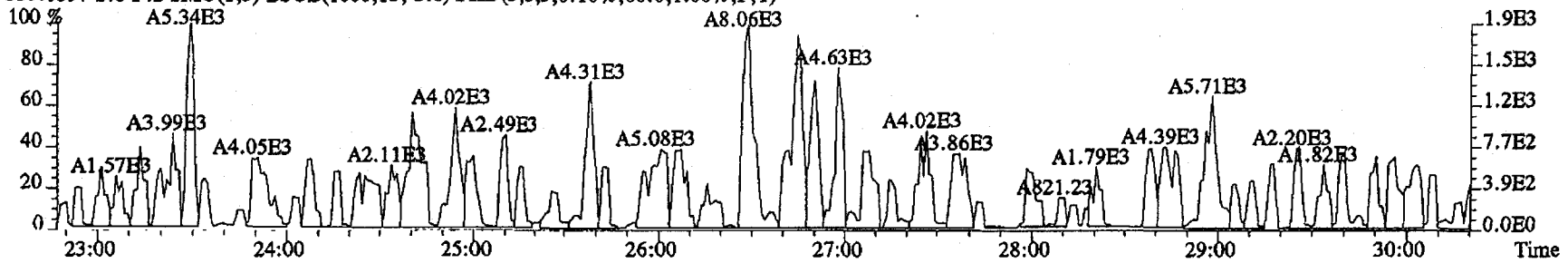


File:23MY114D5 #1-486 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

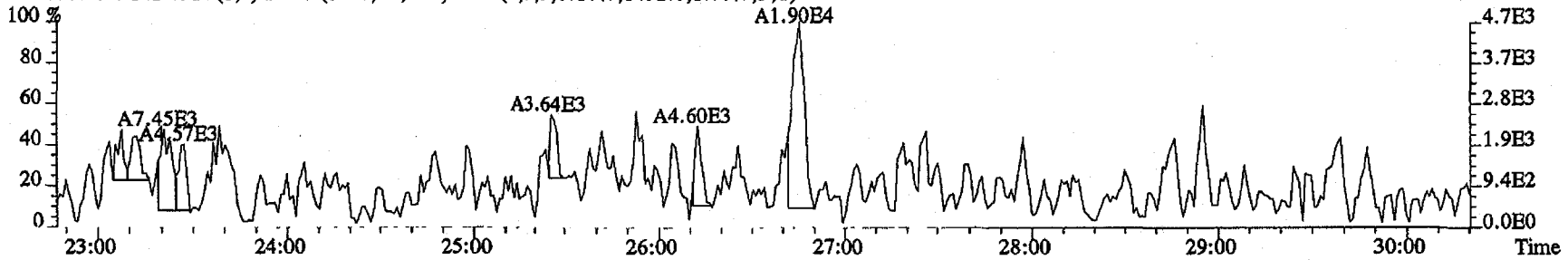
342.9792 S:8 F:2 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



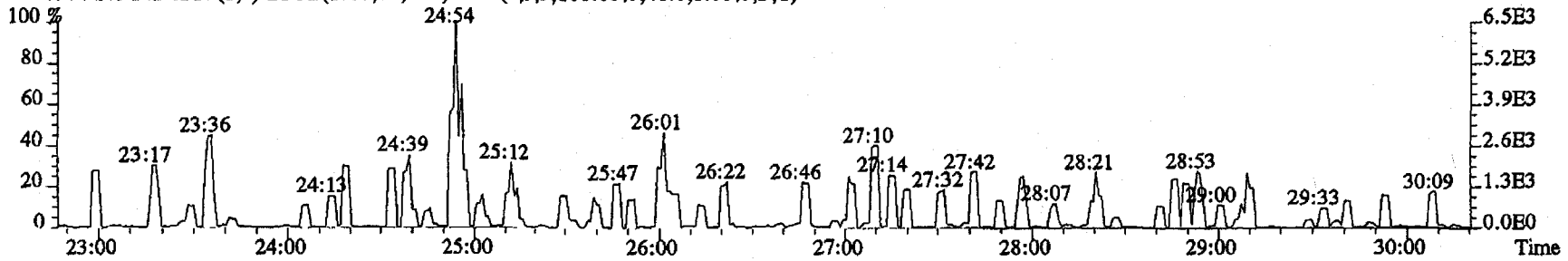
339.8597 S:8 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,60.0,1.00%,F,T)



341.8567 S:8 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1452.0,1.00%,F,T)

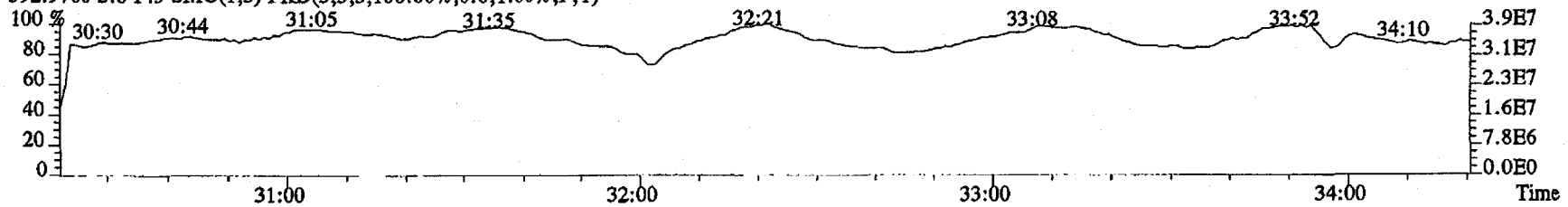


409.7974 S:8 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,48.0,1.00%,F,T)

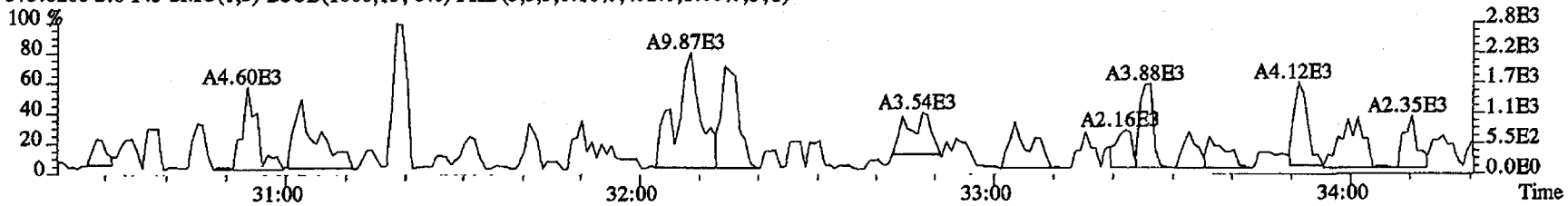


File:23MY114D5 #1-287 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES

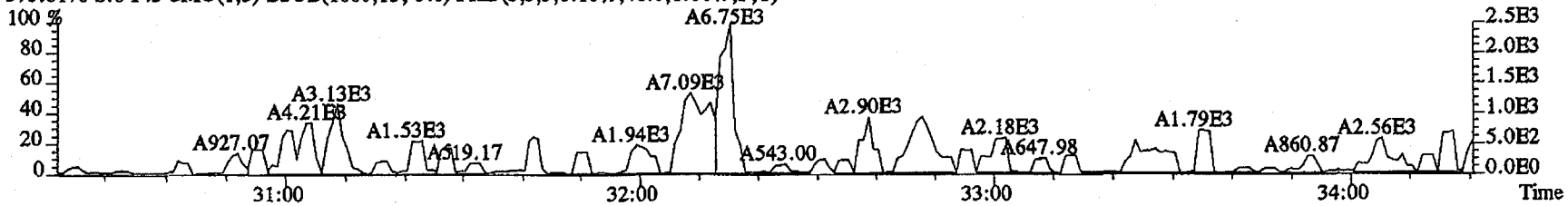
392.9760 S:8 F:3 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



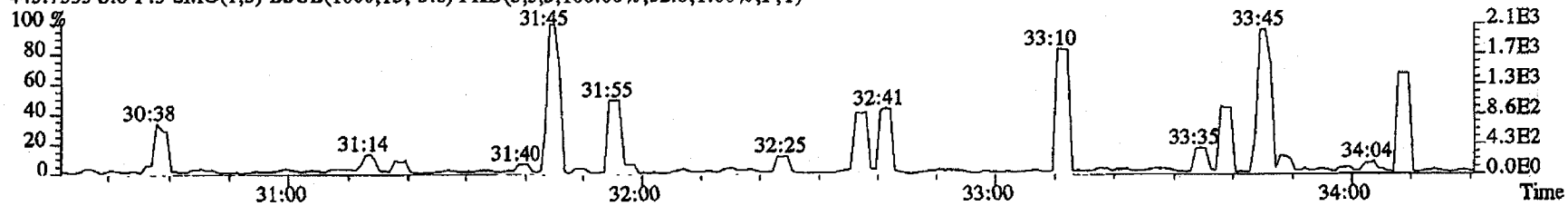
373.8208 S:8 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,452.0,1.00%,F,T)



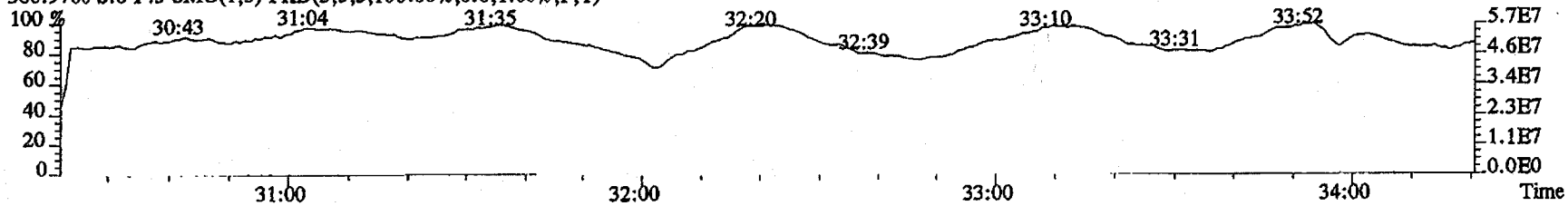
375.8178 S:8 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,48.0,1.00%,F,T)



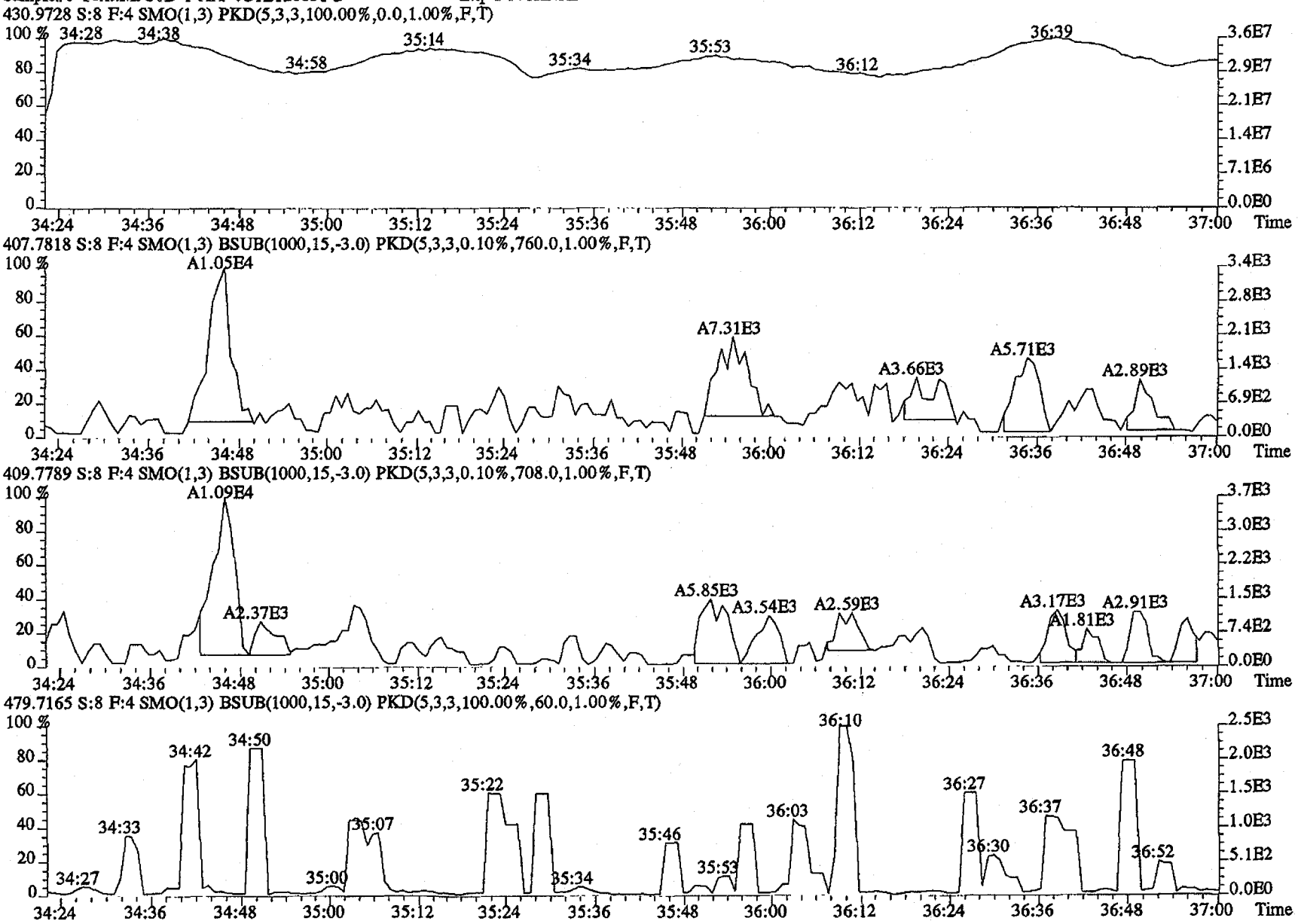
445.7555 S:8 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,52.0,1.00%,F,T)



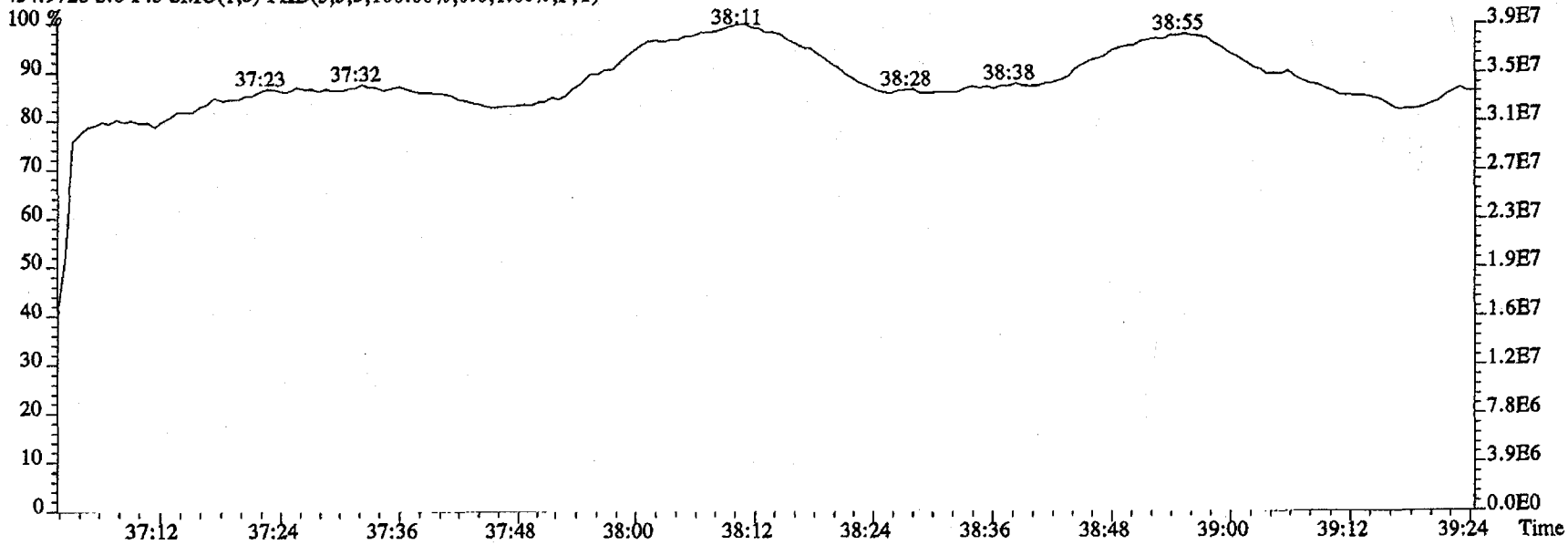
380.9760 S:8 F:3 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



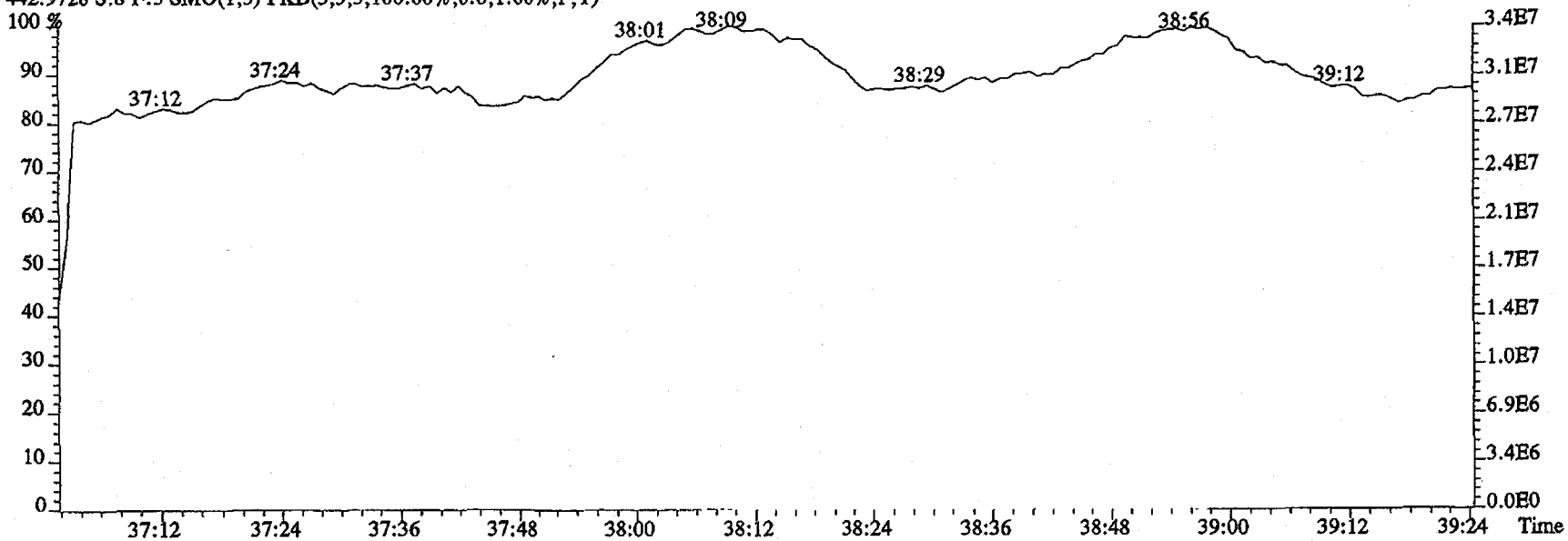
File:23MY114D5 #1-200 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES



File:23MY114D5 #1-193 Acq:23-MAY-2011 15:02:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 Text:MJC0D-1-AA :G1E120651-2 Exp:DIOXINRES
454.9728 S:8 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:8 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



Standards Data

ICAL Data

Test America – West Sacramento

Initial Calibration Checklist
Dioxin Methods

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ICAL ID (8290, 1613, TO9, 23, 0023A, Tetras) 0222114-D5

Method ID 8290, 1613B, TO9, 23, 0023A, Tetras Date Scanned _____

Column ID DB5 Instrument ID 4-D5

STD ID's STO222 → STO222E STD Solution (10DXN) 503, 504, 505, 506, 507 (11DXN025)

GC Program OCDD Multiplier Setting 4-10

Analyzed By AS Date Analyzed 02-22-11

Prepared By AS Date Prepared 02-23-11

Reviewed By M.G. Date Reviewed 2/22/11

ANALYSIS OPTIONS	PREPARED	REVIEWED
Curve summary present?	✓	✓
Hardcopies of chromatograms for CS1-CS5 present?	✓	✓
Copy of log-file present?	✓	✓
Static resolution check present?	✓	✓
Target file RT's correct?	✓	✓
%RSD within method-specified limits?*	✓	✓
Signal-to-noise criteria met?	✓	✓
Isotopic ratios within limits?	✓	✓
High point free of saturation?	✓	✓
Are chromatographic windows correct?	✓	✓
Manual reintegration's checked and hardcopies included?	✓	✓

COMMENTS:

CS3 RT's for 13C-1,2,3,4-TCDD → 19:50
& 13C-1,2,3,7,8,9-HxCDD → 33:17

*Method 8290/TO9/M0023A: %RSD ≤20% for natives, ≤30% for labeled compounds; S/N≥10
Method 1613B: %RSD≤ 20% natives, ≤30% labeled compounds; S/N ≥10
Method 23: %RSD ≤ values specified in Table 5, Method 23; S/N ≥ 2.5

Run: 15SE098D2 Analyte: 8290 Cal: 82900222114D5

ST0222 :CS-0.2 11DXN025 AS ST0222A :CS-1 10DXN503 AS ST0222B :CS-2 10DXN504 AS
ST0222C :CS-3 10DXN505 AS ST0222D :CS-4 10DXN506 AS ST0222E :CS-5 10DXN507 AS

22FE11A4D522FE11A4D522FE11A4D522FE11A4D522FE11A4D522FE11A4D5

Name	Mean	S. D.	%RSD	S2 RRF1	S3 RRF2	S4 RRF3	S5 RRF4	S6 RRF5	S7 RRF6
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-
13C-2,3,7,8-TCDF	1.105	0.049	4.48 %	1.12	1.14	1.14	1.14	1.05	1.03
2,3,7,8-TCDF	0.777	0.054	6.93 %	0.86	0.80	0.80	0.70	0.74	0.76
Total TCDF	0.777	0.054	6.93 %	0.86	0.80	0.80	0.70	0.74	0.76
13C-2,3,7,8-TCDD	0.969	0.023	2.34 %	0.96	0.98	0.99	1.00	0.94	0.95
2,3,7,8-TCDD	0.868	0.030	3.42 %	0.88	0.85	0.91	0.82	0.87	0.87
Total TCDD	0.868	0.030	3.42 %	0.88	0.85	0.91	0.82	0.87	0.87
37Cl-2,3,7,8-TCDD	1.426	0.159	11.2 %	1.74	1.44	1.38	1.37	1.30	1.32
13C-1,2,3,7,8-PeCDF	1.039	0.028	2.72 %	1.01	1.05	1.02	1.09	1.01	1.05
1,2,3,7,8-PeCDF	0.959	0.040	4.22 %	0.97	0.90	0.97	0.93	0.99	1.00
2,3,4,7,8-PeCDF	0.938	0.048	5.09 %	0.99	0.86	0.97	0.90	0.95	0.96
Total F2 PeCDF	0.949	0.042	4.47 %	0.98	0.88	0.97	0.91	0.97	0.98
Total F1 PeCDF	0.949	0.042	4.47 %	0.98	0.88	0.97	0.91	0.97	0.98
13C-1,2,3,7,8-PeCDD	0.700	0.022	3.13 %	0.74	0.70	0.70	0.69	0.67	0.70
1,2,3,7,8-PeCDD	1.042	0.035	3.31 %	1.06	0.99	1.05	1.01	1.07	1.07
Total PeCDD	1.042	0.035	3.31 %	1.06	0.99	1.05	1.01	1.07	1.07
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-
13C-1,2,3,4,7,8-HxCDF	0.871	0.066	7.60 %	0.79	0.82	0.87	0.98	0.88	0.88
1,2,3,4,7,8-HxCDF	1.149	0.052	4.51 %	1.22	1.09	1.18	1.09	1.14	1.17
1,2,3,6,7,8-HxCDF	1.461	0.075	5.14 %	1.52	1.53	1.51	1.33	1.45	1.42
2,3,4,6,7,8-HxCDF	1.304	0.079	6.06 %	1.38	1.34	1.36	1.16	1.28	1.30
1,2,3,7,8,9-HxCDF	1.123	0.098	8.72 %	1.29	1.10	1.16	0.99	1.09	1.11
Total HxCDF	1.259	0.070	5.54 %	1.35	1.26	1.30	1.14	1.24	1.25
13C-1,2,3,6,7,8-HxCDD	0.950	0.033	3.51 %	0.95	0.98	0.93	1.00	0.92	0.92
1,2,3,4,7,8-HxCDD	0.745	0.054	7.27 %	0.71	0.66	0.77	0.73	0.78	0.81

1,2,3,6,7,8-HxCDD	1.046	0.028	2.68 %	1.08	1.01	1.05	1.02	1.06	1.07
1,2,3,7,8,9-HxCDD	1.021	0.043	4.24 %	1.02	0.95	1.05	1.00	1.05	1.05
Total HxCDD	0.937	0.039	4.13 %	0.94	0.87	0.96	0.91	0.96	0.98
13C-1,2,3,4,6,7,8-HpCDF	0.914	0.040	4.40 %	0.85	0.91	0.93	0.98	0.90	0.91
1,2,3,4,6,7,8-HpCDF	1.324	0.021	1.60 %	1.34	1.29	1.34	1.30	1.33	1.34
1,2,3,4,7,8,9-HpCDF	1.130	0.048	4.29 %	1.19	1.05	1.13	1.11	1.15	1.16
Total HpCDF	1.227	0.034	2.79 %	1.27	1.17	1.23	1.20	1.24	1.25
13C-1,2,3,4,6,7,8-HpCDD	0.914	0.047	5.18 %	0.85	0.91	0.92	0.99	0.89	0.92
1,2,3,4,6,7,8-HpCDD	1.014	0.060	5.93 %	1.09	0.92	0.99	1.00	1.05	1.04
Total HpCDD	1.014	0.060	5.93 %	1.09	0.92	0.99	1.00	1.05	1.04
13C-OCDD	0.602	0.034	5.63 %	0.55	0.60	0.59	0.64	0.60	0.64
OCDF	1.272	0.082	6.46 %	1.19	1.17	1.31	1.25	1.35	1.36
OCDD	1.128	0.067	5.95 %	1.24	1.05	1.13	1.07	1.14	1.14

Run #1 Filename 22FB11A4D5 S: 2 I: 1
Acquired: 22-FEB-11 13:37:42 Processed: 23-FEB-11 09:25:08
Run: 15SE098D2 Analyte: 8290 Cal: 82900222114D5
Comments:
Sample text: ST0222 :CS-0.2 11DXN025 AS

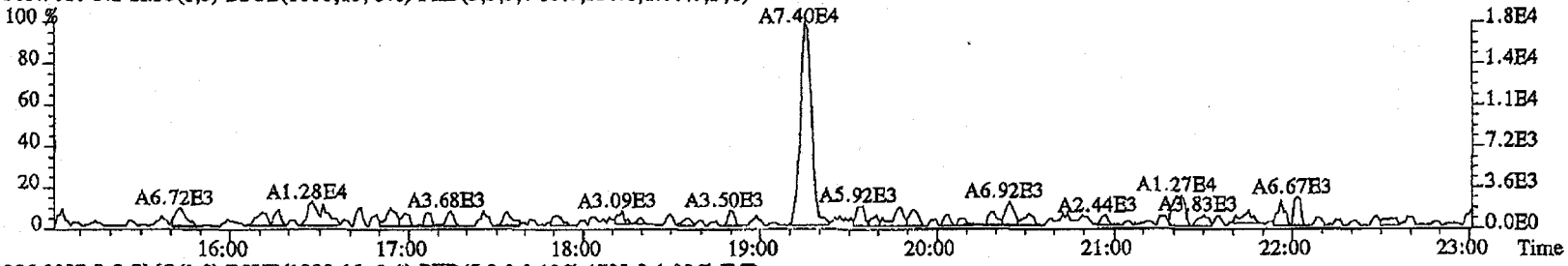
Name	Resp	RA		RT	RRF		Mod?
13C-1,2,3,4-TCDD	171527100	0.79	y	19:50	-	100.00	n
13C-2,3,7,8-TCDF	192860200	0.78	y	19:14	1.1244	100.00	n
2,3,7,8-TCDF	165667	0.81	y	19:15	0.8590	0.10	n
Total TCDF	-	-	n	-	0.8590	0.10	n
13C-2,3,7,8-TCDD	164155500	0.77	y	20:02	0.9570	100.00	n
2,3,7,8-TCDD	144398	0.78	y	20:06	0.8796	0.10	n
Total TCDD	-	-	n	-	0.8796	0.10	n
37Cl-2,3,7,8-TCDD	297766	1.00	y	20:03	1.7360	0.10	n
13C-1,2,3,7,8-PeCDF	173992100	1.61	y	25:04	1.0144	100.00	n
1,2,3,7,8-PeCDF	842363	1.57	y	25:06	0.9683	0.50	n
2,3,4,7,8-PeCDF	857582	1.55	y	26:38	0.9858	0.50	n
Total F2 PeCDF	-	-	n	-	0.9770	1.00	n
Total F1 PeCDF	-	-	n	-	0.9770	1.00	n
13C-1,2,3,7,8-PeCDD	126086500	1.53	y	27:27	0.7351	100.00	n
1,2,3,7,8-PeCDD	668454	1.45	y	27:29	1.0603	0.50	n
Total PeCDD	-	-	n	-	1.0603	0.50	n
13C-1,2,3,7,8,9-HxCDD	132249800	1.31	y	33:17	-	100.00	n
13C-1,2,3,4,7,8-HxCDF	104846300	0.50	y	32:10	0.7928	100.00	n
1,2,3,4,7,8-HxCDF	639753	1.07	y	32:11	1.2204	0.50	n
1,2,3,6,7,8-HxCDF	797620	1.26	y	32:18	1.5215	0.50	n
2,3,4,6,7,8-HxCDF	724479	1.09	y	32:49	1.3820	0.50	n
1,2,3,7,8,9-HxCDF	675136	1.27	y	33:27	1.2879	0.50	n
Total HxCDF	-	-	n	-	1.3529	2.00	n
13C-1,2,3,6,7,8-HxCDD	125151800	1.28	y	33:01	0.9463	100.00	n
1,2,3,4,7,8-HxCDD	444569	1.21	y	32:58	0.7104	0.50	n
1,2,3,6,7,8-HxCDD	674562	1.23	y	33:02	1.0780	0.50	n
1,2,3,7,8,9-HxCDD	637165	1.15	y	33:18	1.0182	0.50	n
Total HxCDD	-	-	n	-	0.9356	1.50	n
13C-1,2,3,4,6,7,8-HpCDF	112885000	0.44	y	34:47	0.8536	100.00	n
1,2,3,4,6,7,8-HpCDF	757506	1.18	y	34:47	1.3421	0.50	y✓
1,2,3,4,7,8,9-HpCDF	671305	1.14	y	35:55	1.1894	0.50	y✓
Total HpCDF	-	-	n	-	1.2657	1.00	n
13C-1,2,3,4,6,7,8-HpCDD	112363800	1.04	y	35:35	0.8496	100.00	n
1,2,3,4,6,7,8-HpCDD	612247	0.91	y	35:36	1.0898	0.50	y✓
Total HpCDD	-	-	n	-	1.0898	0.50	n
13C-OCDD	145235300	0.88	y	38:05	0.5491	200.00	n
OCDF	865117	0.96	y	38:13	1.1913	1.00	n

Run #1 Filename 22FE11A4D5 S: 2 I: 1
Acquired: 22-FEB-11 13:37:42 Processed: 23-FEB-11 09:25:08
Run: 15SE098D2 Analyte: 8290 Cal: 82900222114D5
Comments:
Sample text: ST0222 :CS-0.2 11DXN025 AS

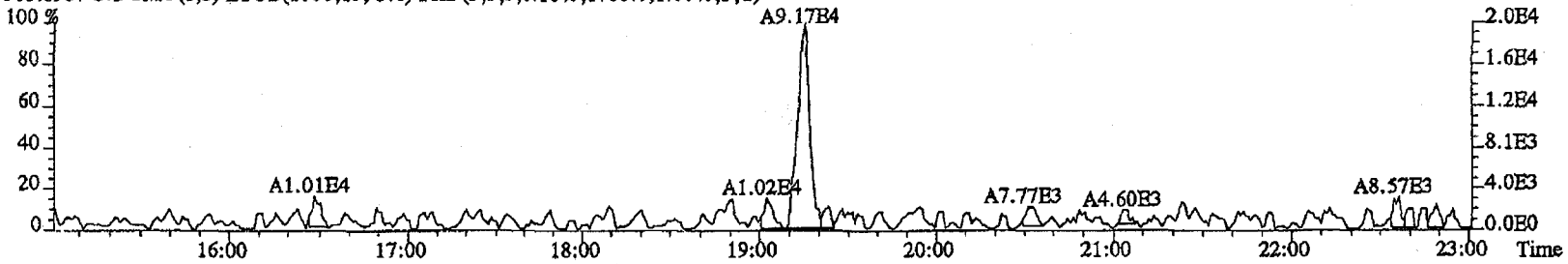
Name	Resp	RA		RT	RRF		Mod?
13C-1,2,3,4-TCDD	171527100	0.79	y	19:50	-	100.00	n
13C-2,3,7,8-TCDF	192860200	0.78	y	19:14	1.1244	100.00	n
2,3,7,8-TCDF	165667	0.81	y	19:15	0.8590	0.10	n
Total TCDF	-	-	n	-	0.8590	0.10	n
13C-2,3,7,8-TCDD	164155500	0.77	y	20:02	0.9570	100.00	n
2,3,7,8-TCDD	144398	0.78	y	20:06	0.8796	0.10	n
Total TCDD	-	-	n	-	0.8796	0.10	n
37Cl-2,3,7,8-TCDD	297766	1.00	y	20:03	1.7360	0.10	n
13C-1,2,3,7,8-PeCDF	173992100	1.61	y	25:04	1.0144	100.00	n
1,2,3,7,8-PeCDF	842363	1.57	y	25:06	0.9683	0.50	n
2,3,4,7,8-PeCDF	857582	1.55	y	26:38	0.9858	0.50	n
Total F2 PeCDF	-	-	n	-	0.9770	1.00	n
Total F1 PeCDF	-	-	n	-	0.9770	1.00	n
13C-1,2,3,7,8-PeCDD	126086500	1.53	y	27:27	0.7351	100.00	n
1,2,3,7,8-PeCDD	668454	1.45	y	27:29	1.0603	0.50	n
Total PeCDD	-	-	n	-	1.0603	0.50	n
13C-1,2,3,7,8,9-HxCDD	132249800	1.31	y	33:17	-	100.00	n
13C-1,2,3,4,7,8-HxCDF	104846300	0.50	y	32:10	0.7928	100.00	n
1,2,3,4,7,8-HxCDF	639753	1.07	y	32:11	1.2204	0.50	n
1,2,3,6,7,8-HxCDF	797620	1.26	y	32:18	1.5215	0.50	n
2,3,4,6,7,8-HxCDF	724479	1.09	y	32:49	1.3820	0.50	n
1,2,3,7,8,9-HxCDF	675136	1.27	y	33:27	1.2879	0.50	n
Total HxCDF	-	-	n	-	1.3529	2.00	n
13C-1,2,3,6,7,8-HxCDD	125151800	1.28	y	33:01	0.9463	100.00	n
1,2,3,4,7,8-HxCDD	444569	1.21	y	32:58	0.7104	0.50	n
1,2,3,6,7,8-HxCDD	674562	1.23	y	33:02	1.0780	0.50	n
1,2,3,7,8,9-HxCDD	637165	1.15	y	33:18	1.0182	0.50	n
Total HxCDD	-	-	n	-	0.9356	1.50	n
13C-1,2,3,4,6,7,8-HpCDF	112885000	0.44	y	34:47	0.8536	100.00	n
1,2,3,4,6,7,8-HpCDF	708753	1.30	n	34:47	1.2557	0.50	n
1,2,3,4,7,8,9-HpCDF	641168	1.25	n	35:55	1.1360	0.50	n
Total HpCDF	-	-	n	-	1.1958	1.00	n
13C-1,2,3,4,6,7,8-HpCDD	112363800	1.04	y	35:35	0.8496	100.00	n
1,2,3,4,6,7,8-HpCDD	547456	0.87	n	35:36	0.9744	0.50	n
Total HpCDD	-	-	n	-	0.9744	0.50	n
13C-OCDD	145235300	0.88	y	38:05	0.5491	200.00	n
OCDF	865117	0.96	y	38:13	1.1913	1.00	n

File:22FB11A4D5 #1-530 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES

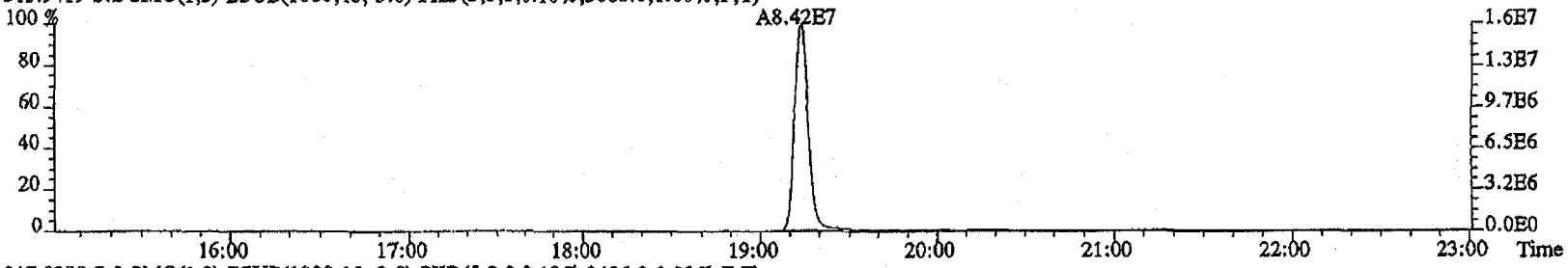
303.9016 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,536.0,1.00%,F,T)



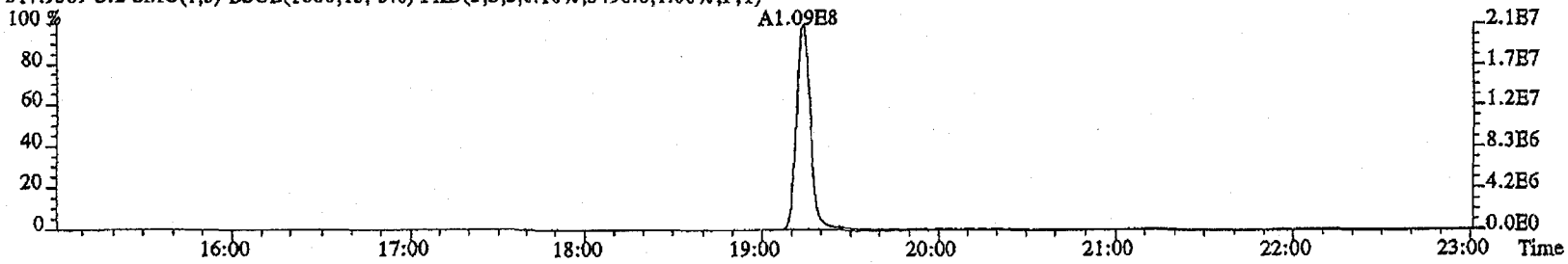
305.8987 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1708.0,1.00%,F,T)



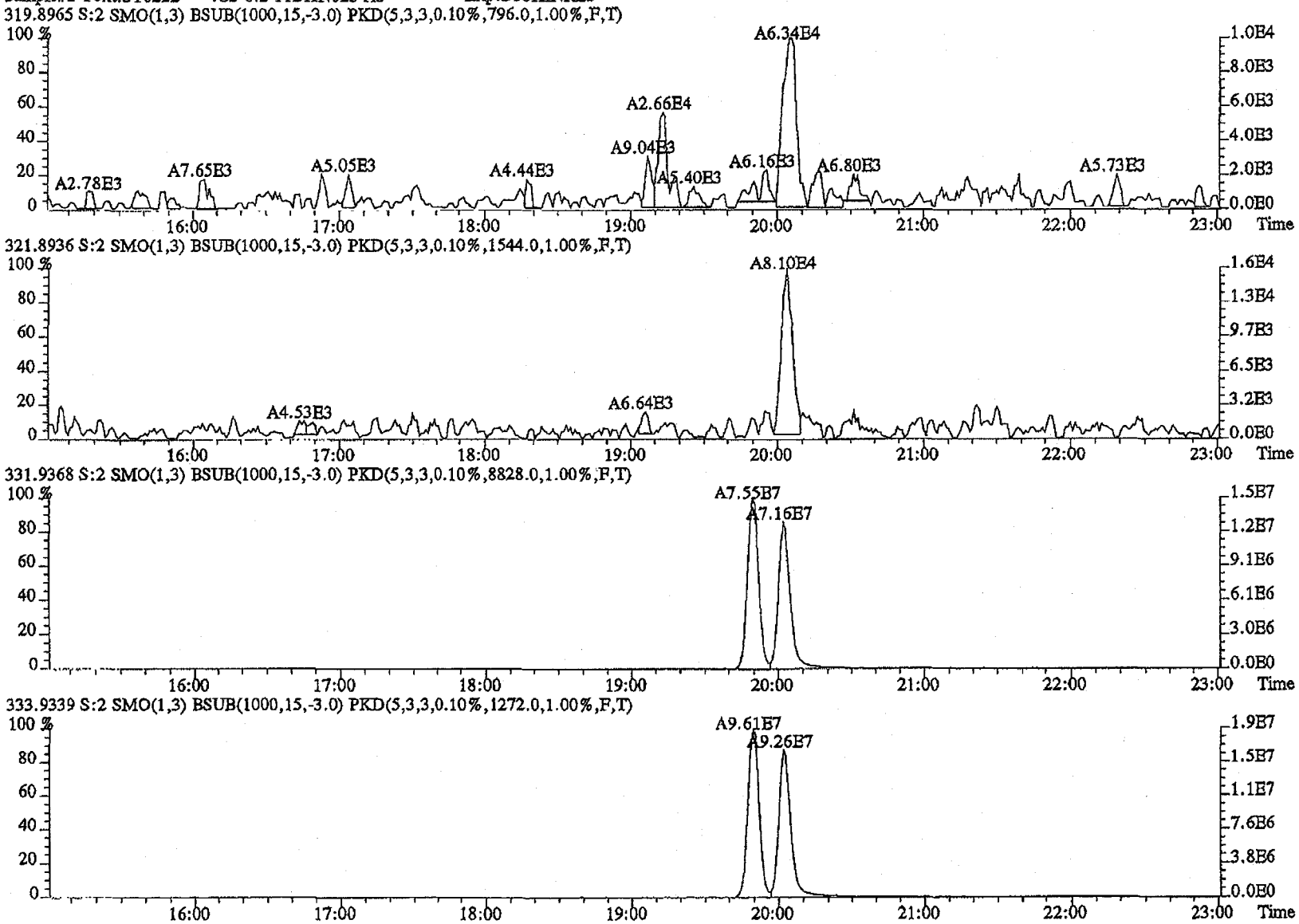
315.9419 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3068.0,1.00%,F,T)



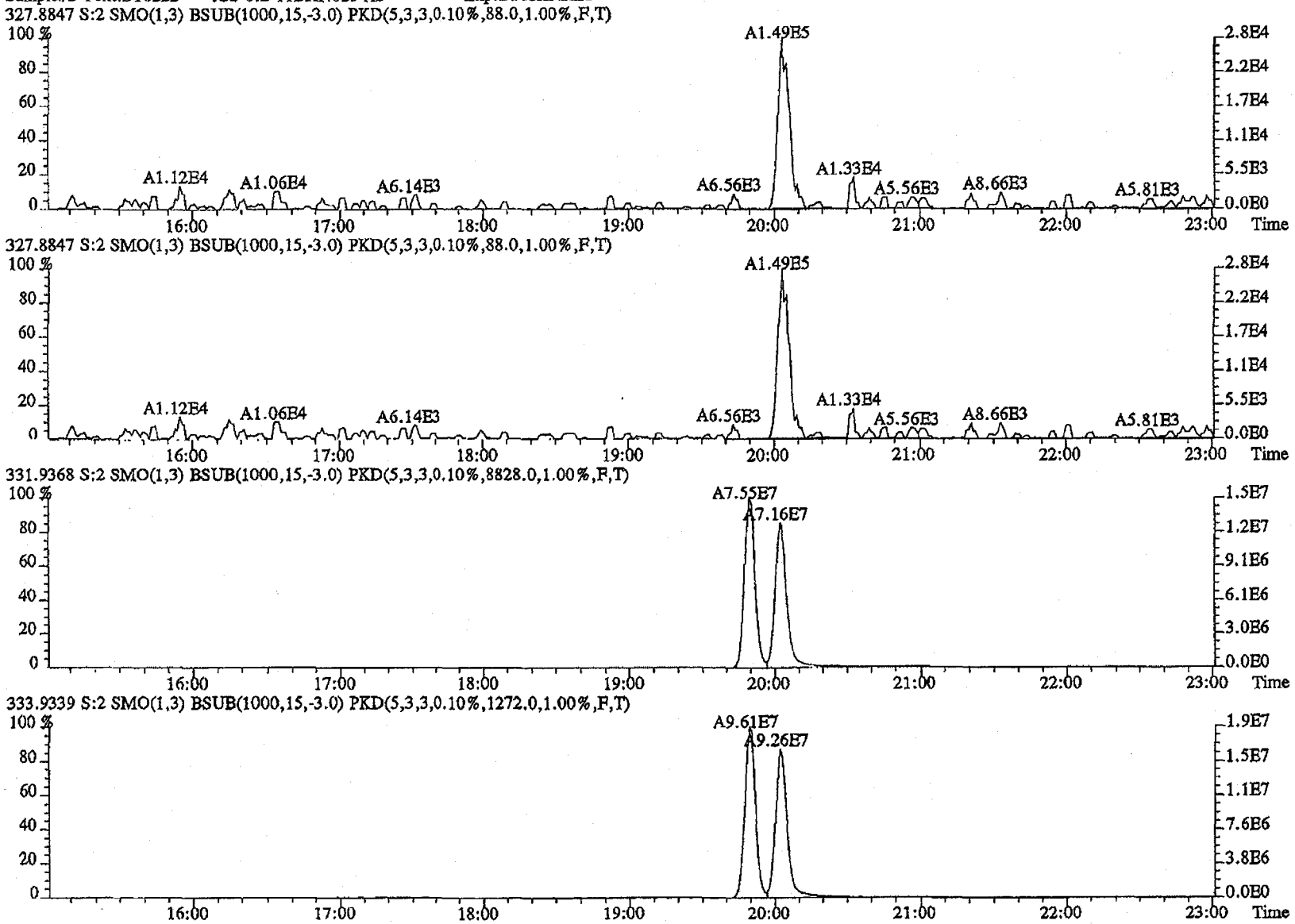
317.9389 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3496.0,1.00%,F,T)



File:22FE11A4D5 #1-530 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES

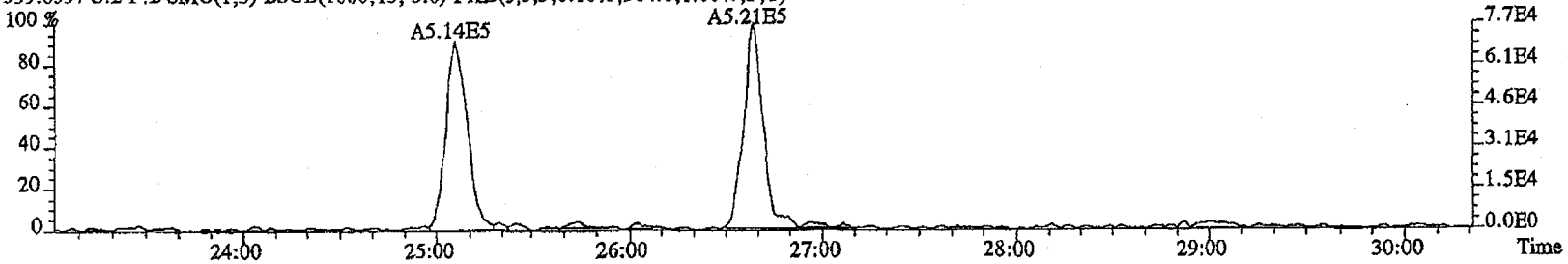


File:22FE11A4D5 #1-530 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES

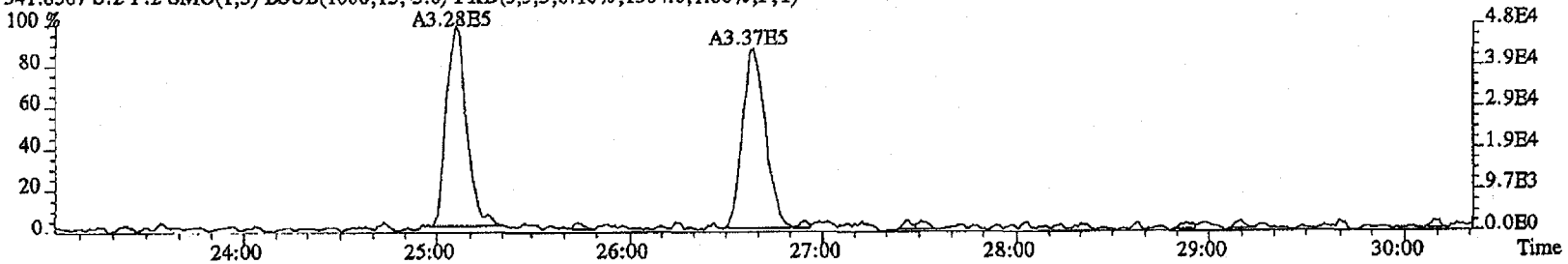


File:22FE11A4D5 #1-470 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES

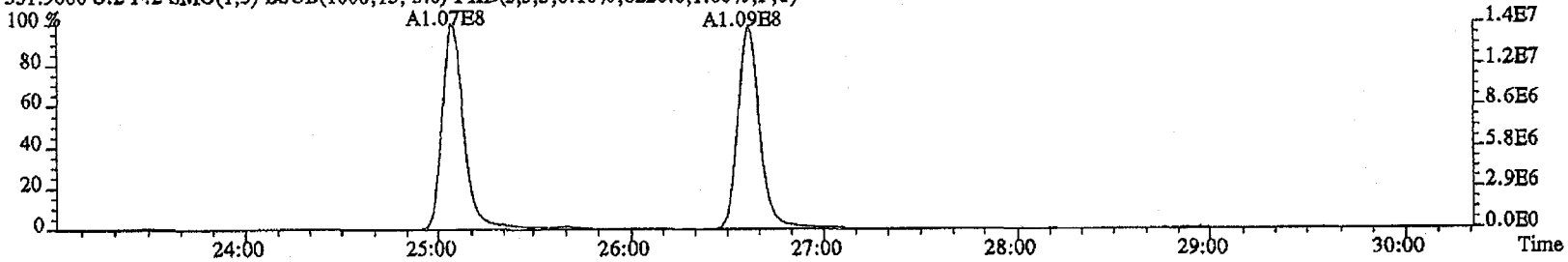
339.8597 S:2 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,904.0,1.00%,F,T)



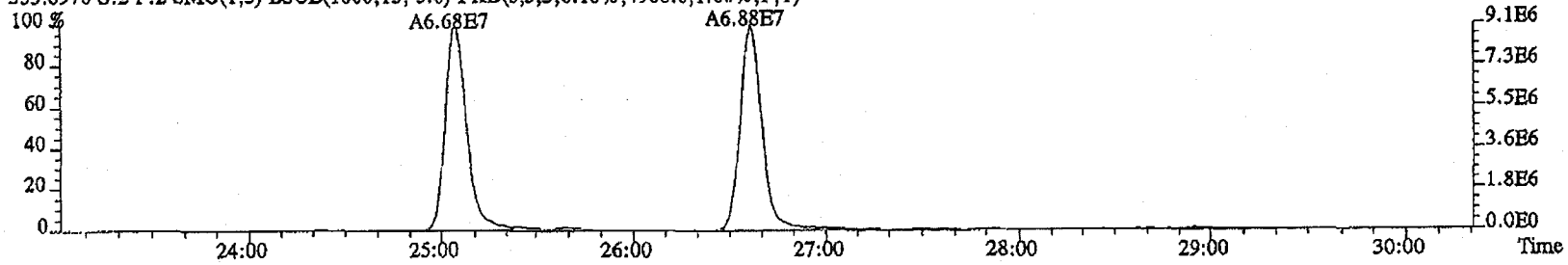
341.8567 S:2 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1304.0,1.00%,F,T)



351.9000 S:2 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,8220.0,1.00%,F,T)

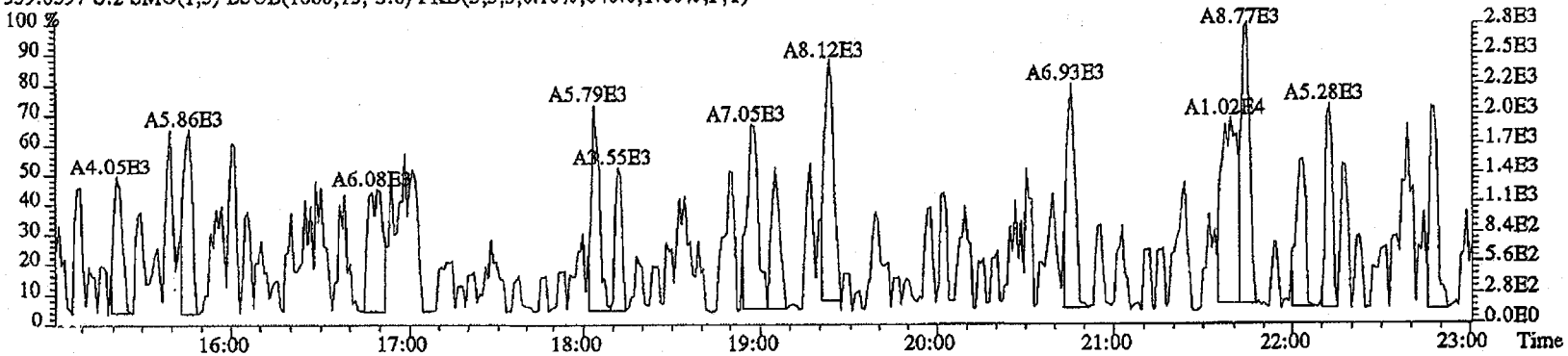


353.8970 S:2 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4908.0,1.00%,F,T)

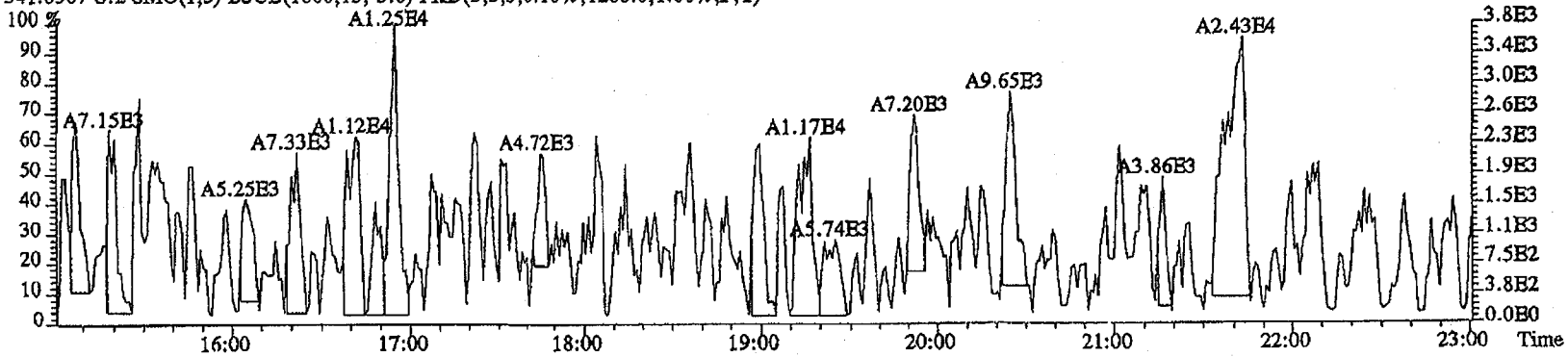


File:22FE11A4D5 #1-530 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaB
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES

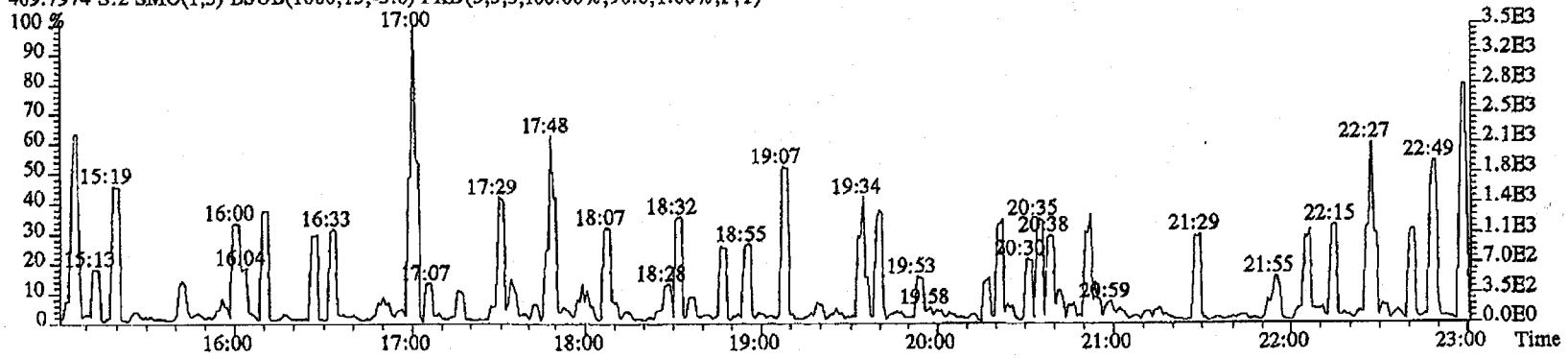
339.8597 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,840.0,1.00%,F,T)



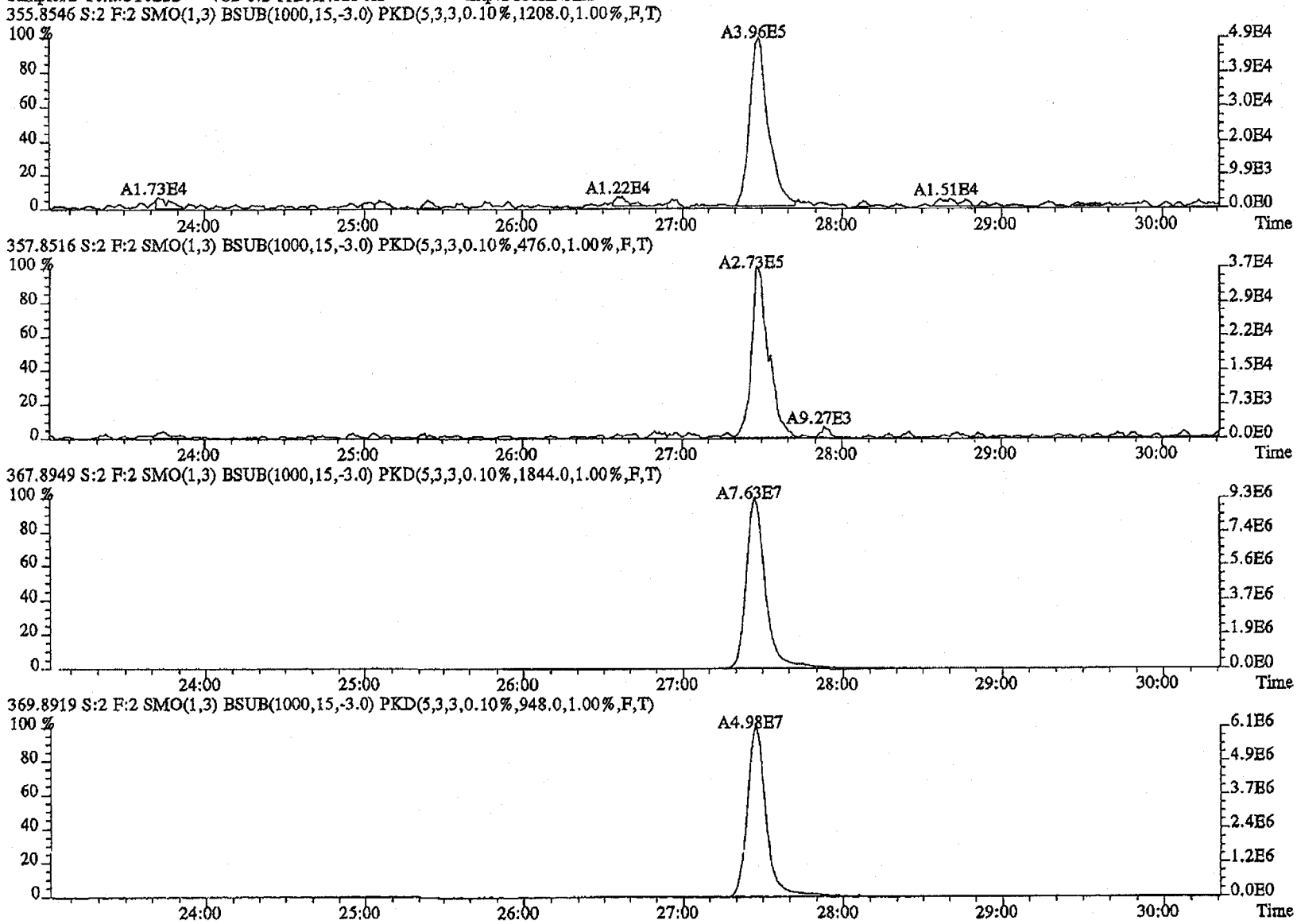
341.8567 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1268.0,1.00%,F,T)



409.7974 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,96.0,1.00%,F,T)

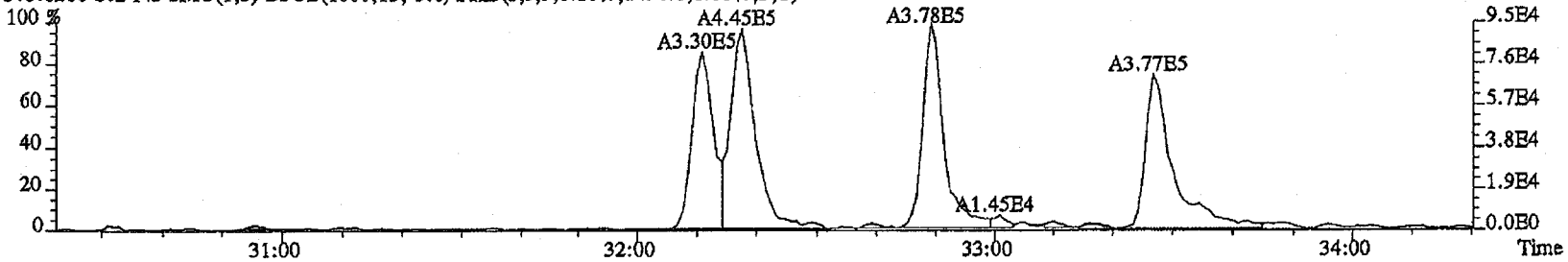


File:22FE11A4D5 #1-470 Acq:22-FEB-2011 13:37:42 GC BI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES

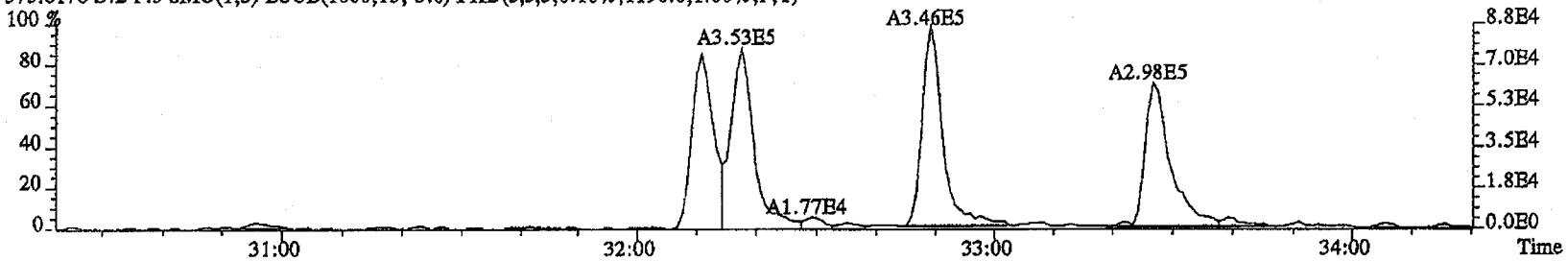


File:22FE11A4D5 #1-286 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES

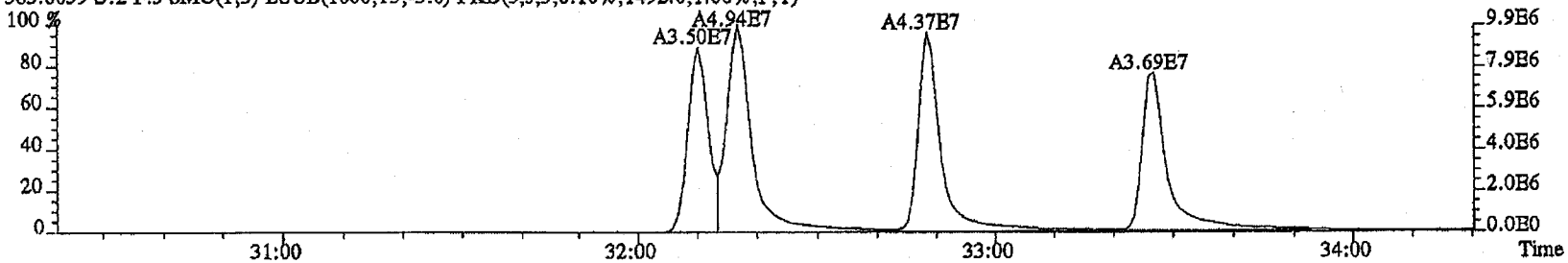
373.8208 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1496.0,1.00%,F,T)



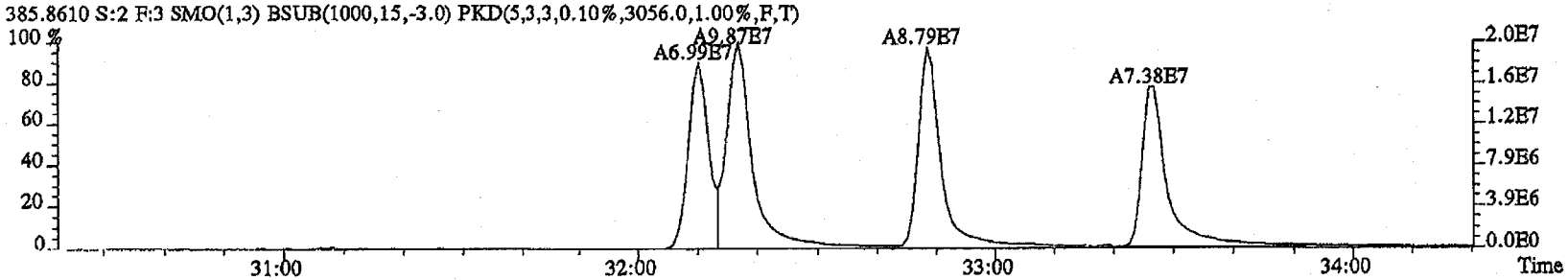
375.8178 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1196.0,1.00%,F,T)



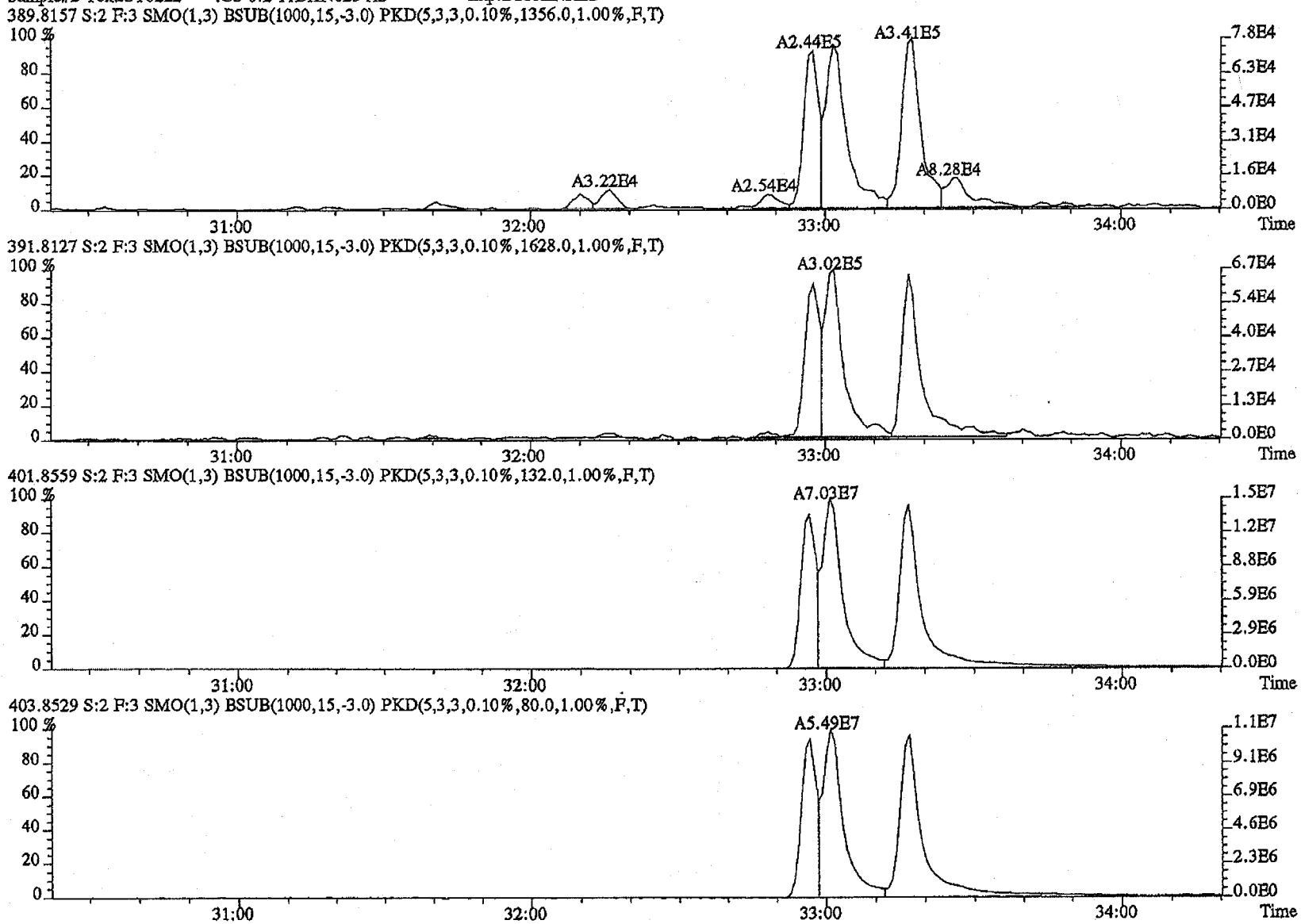
383.8639 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1492.0,1.00%,F,T)



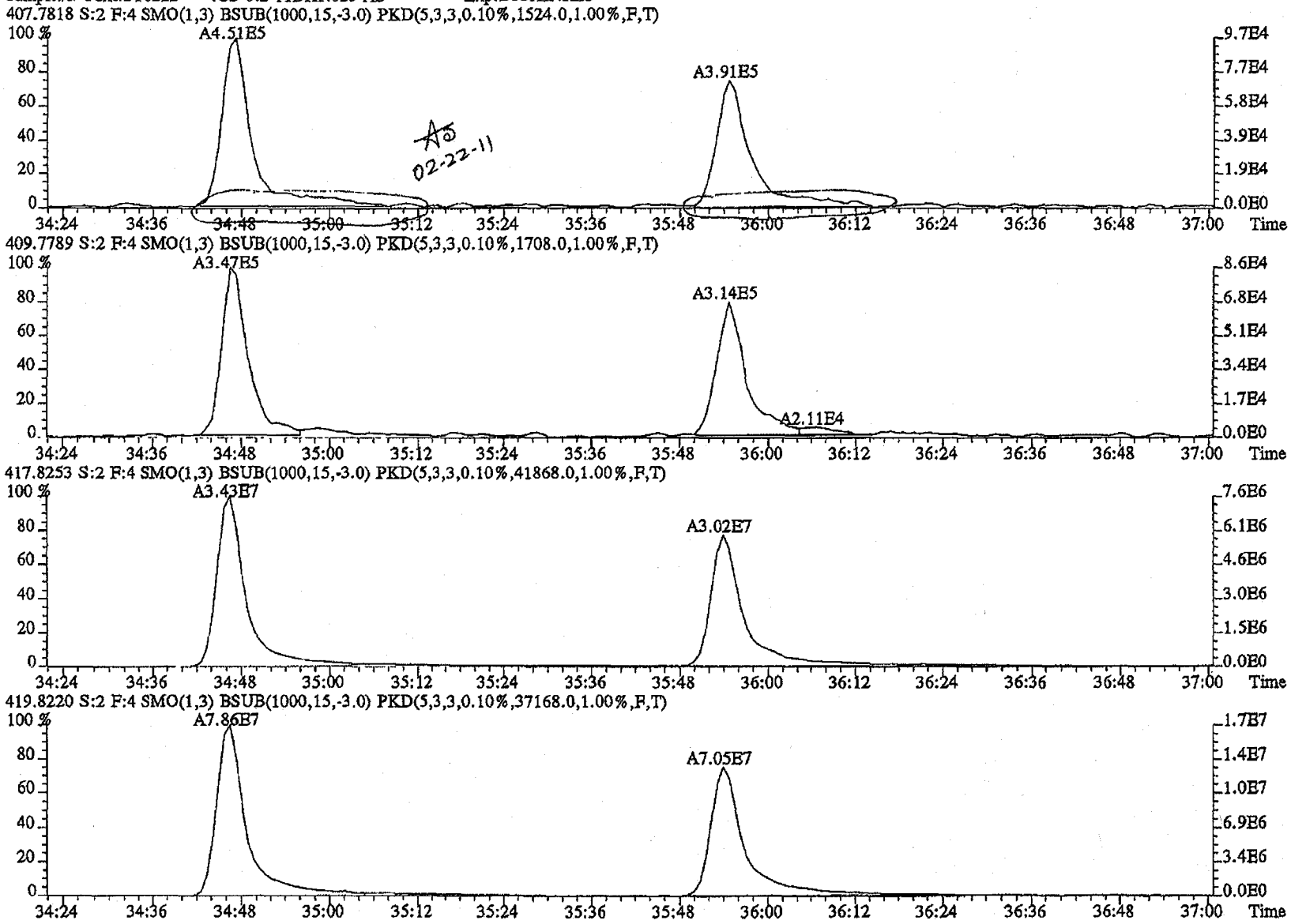
385.8610 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3056.0,1.00%,F,T)



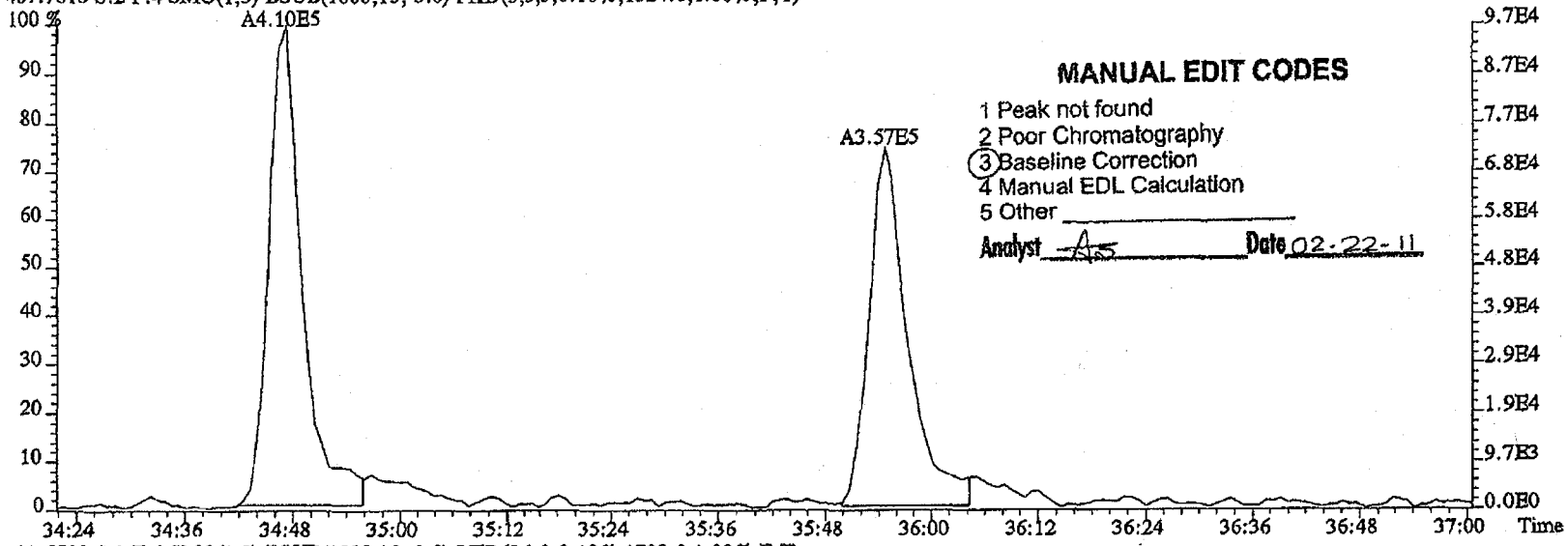
File:22FB11A4D5 #1-286 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES



File:22FE11A4D5 #1-201 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES



File:22FE11A4D5 #1-201 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES
407.7818 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1524.0,1.00%,F,T)

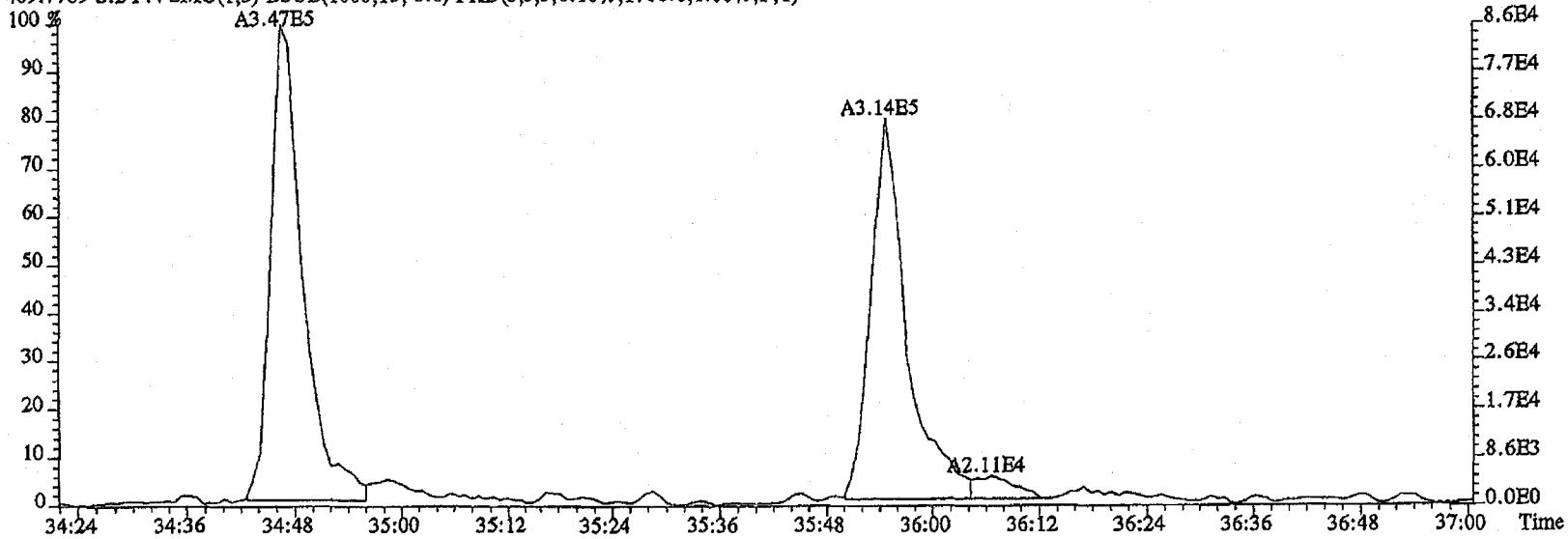


MANUAL EDIT CODES

1 Peak not found
2 Poor Chromatography
(3) Baseline Correction
4 Manual EDL Calculation
5 Other _____

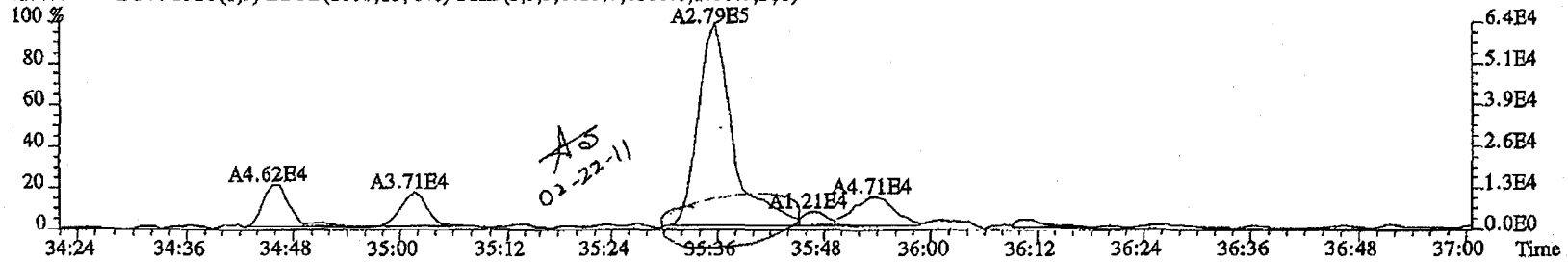
Analyst AS Date 02-22-11

409.7789 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1708.0,1.00%,F,T)

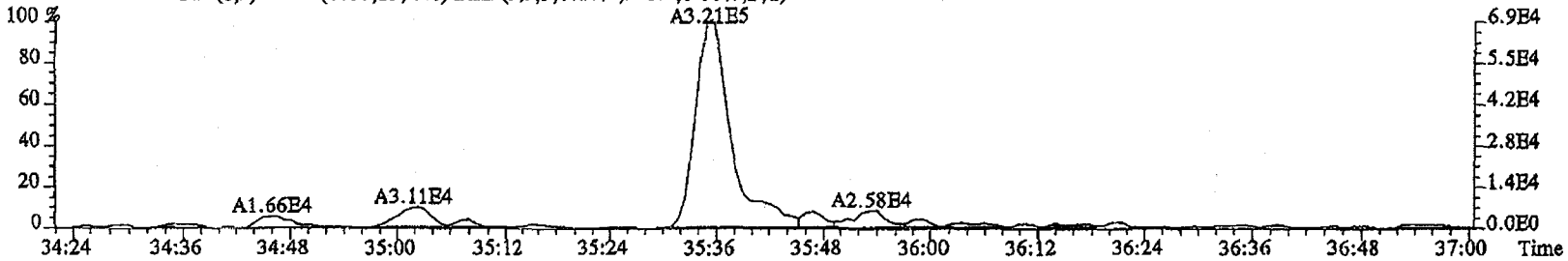


File:22FB11A4D5 #1-201 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES

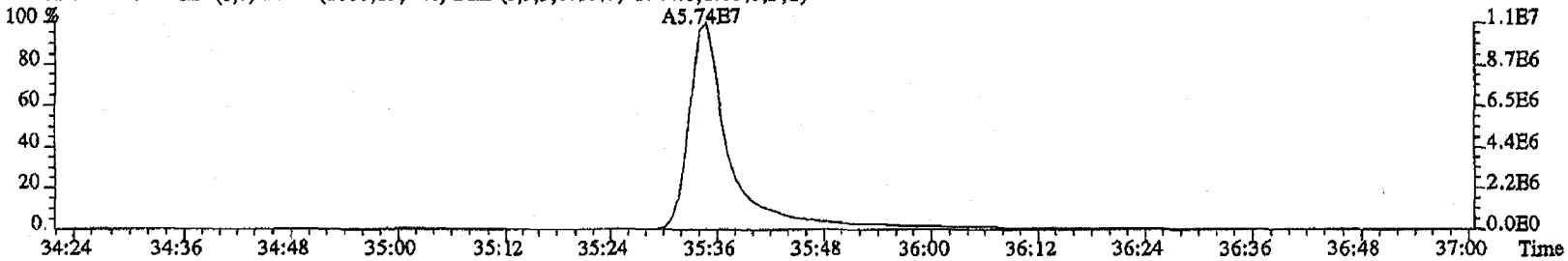
423.7766 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1580.0,1.00%,F,T)



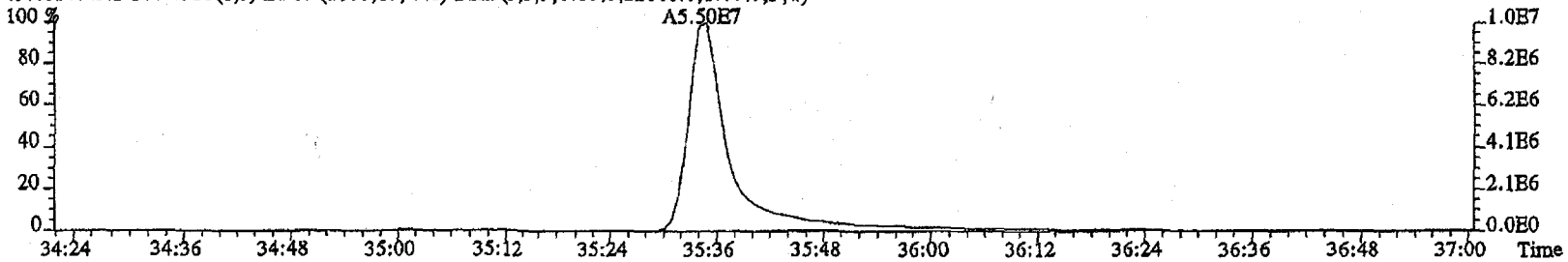
425.7737 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,908.0,1.00%,F,T)



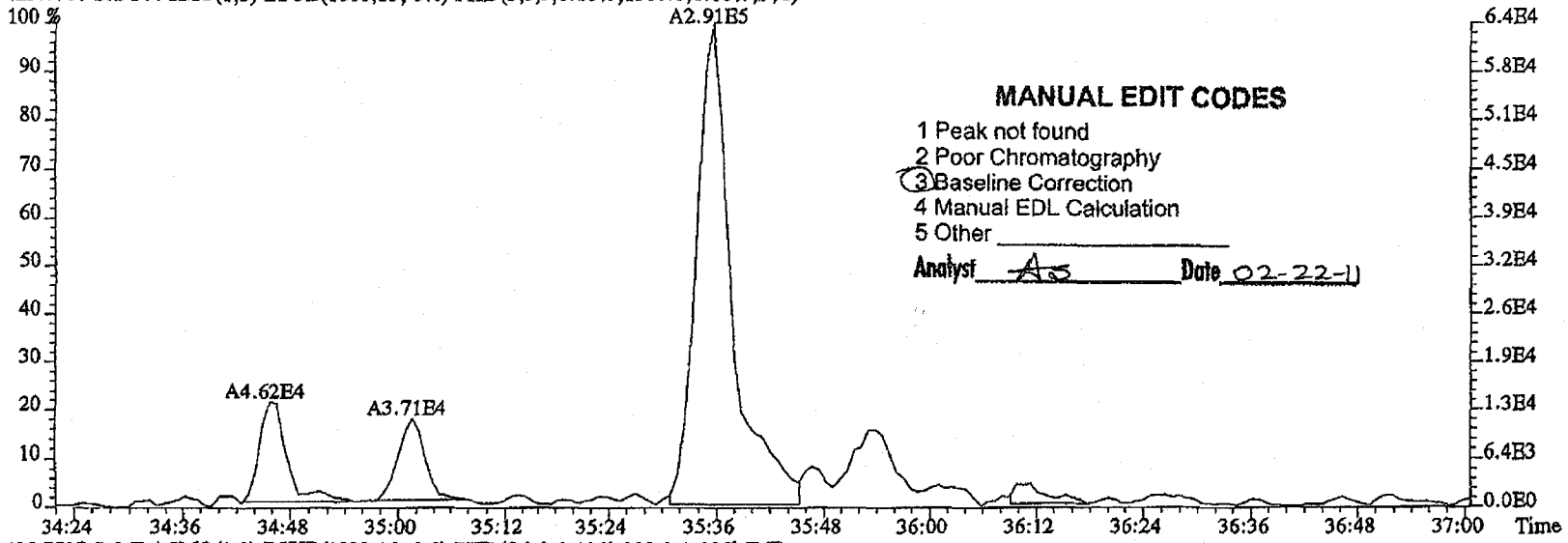
435.8169 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,21744.0,1.00%,F,T)



437.8140 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,22868.0,1.00%,F,T)



File:22FB11A4D5 #1-201 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES
423.7766 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1580.0,1.00%,F,T)

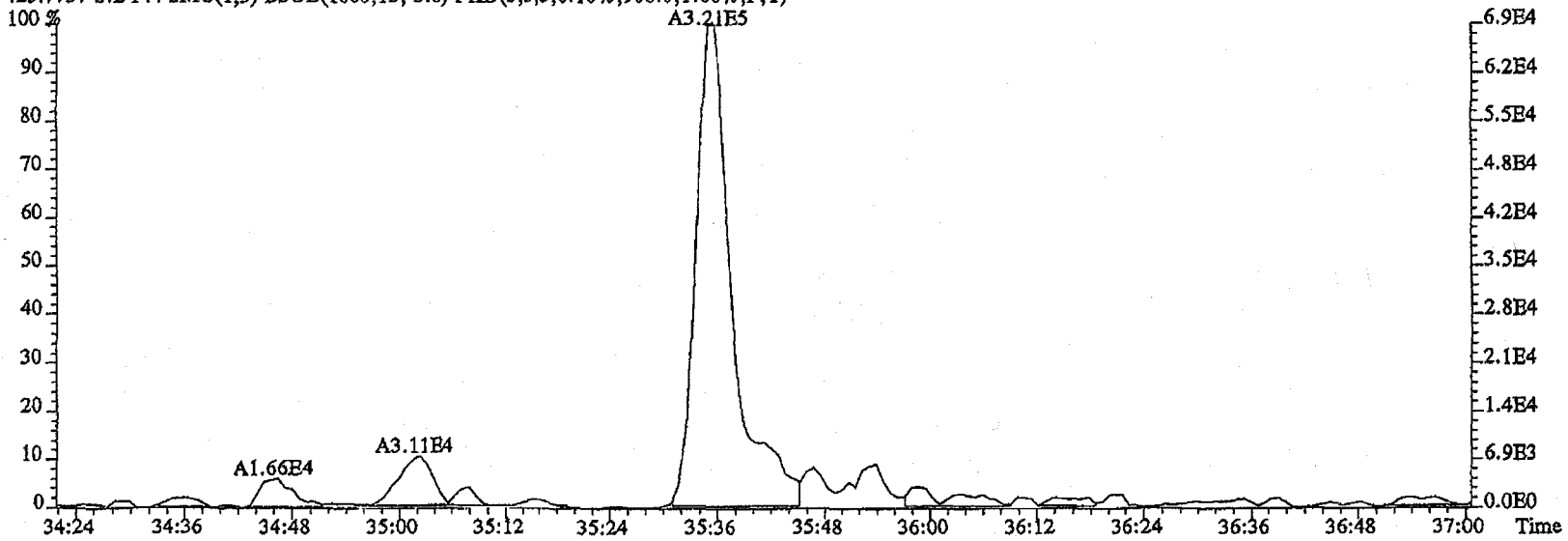


MANUAL EDIT CODES

1 Peak not found
2 Poor Chromatography
3 Baseline Correction
4 Manual EDL Calculation
5 Other _____

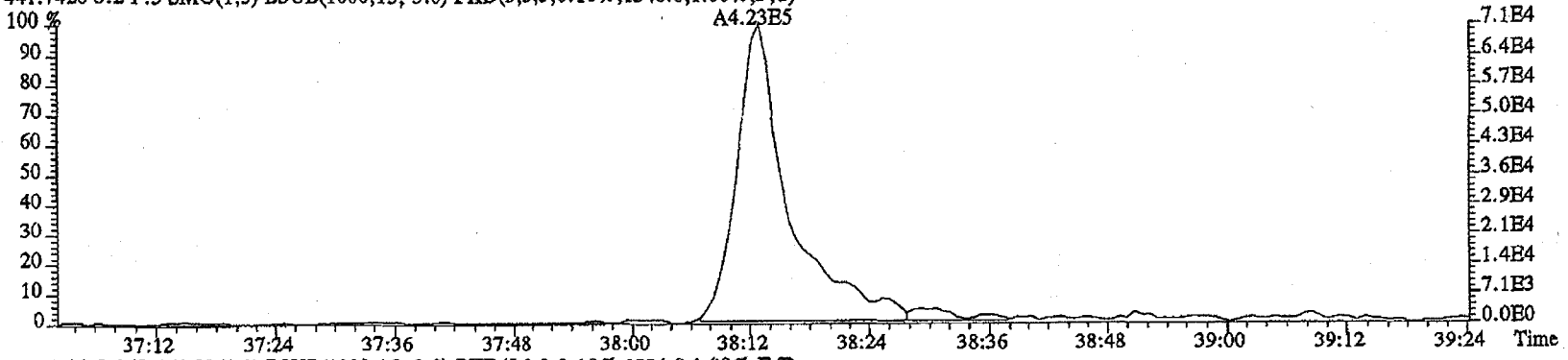
Analyst AS Date 02-22-11

425.7737 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,908.0,1.00%,F,T)

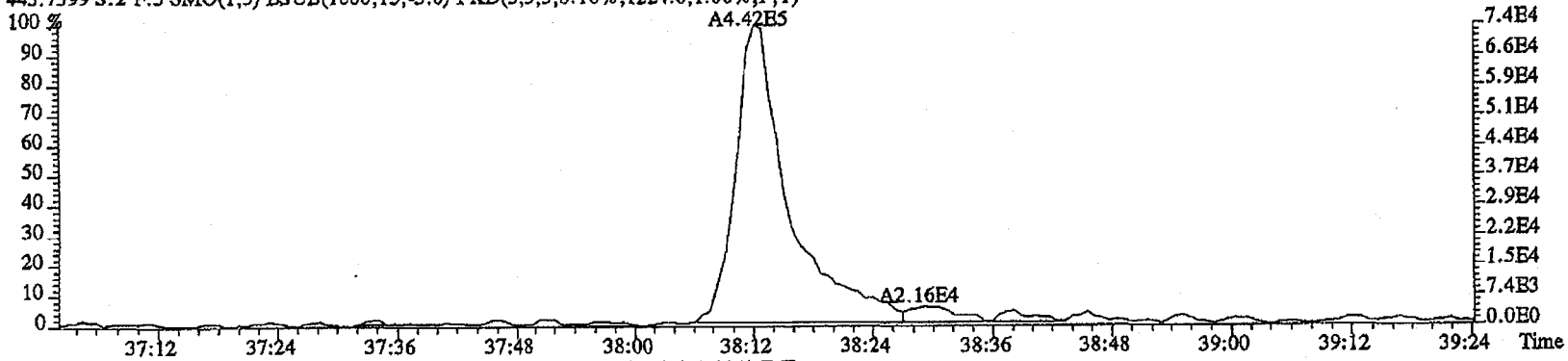


File:22FB11A4D5 #1-192 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES

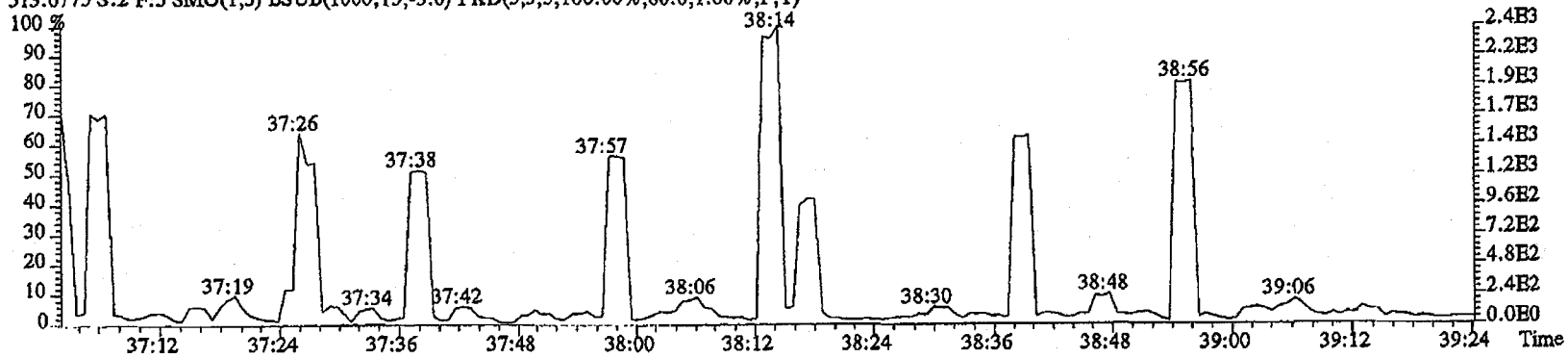
441.7428 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1348.0,1.00%,F,T)



443.7399 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1224.0,1.00%,F,T)

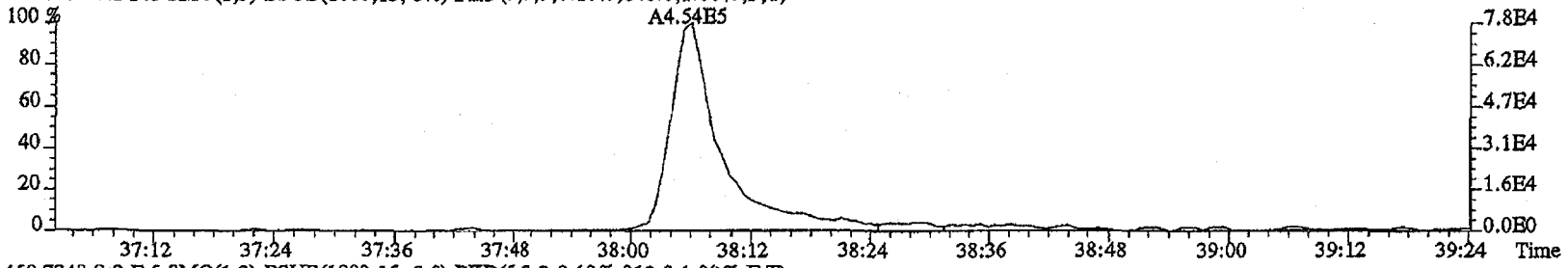


513.6775 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,80.0,1.00%,F,T)

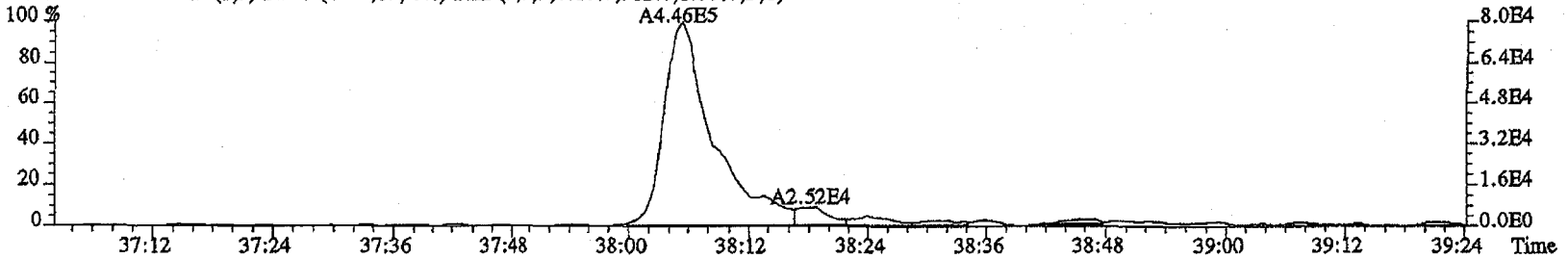


File:22FE11A4D5 #1-192 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES

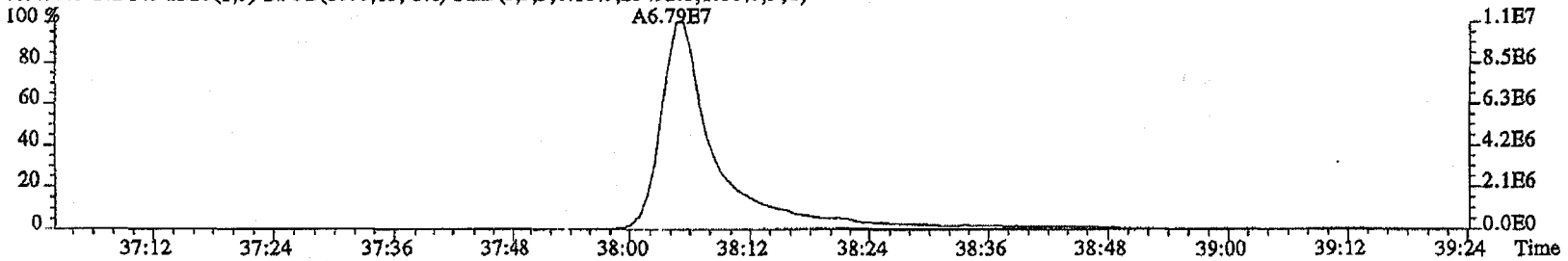
457.7377 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,648.0,1.00%,F,T)



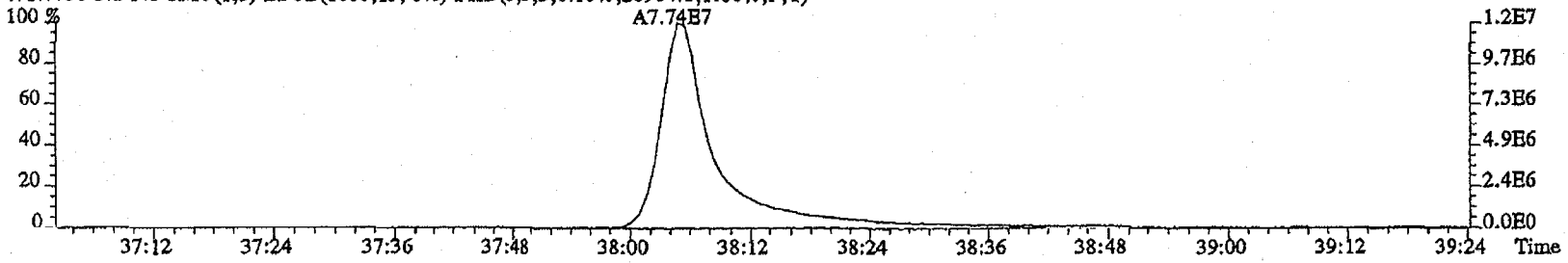
459.7348 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,912.0,1.00%,F,T)



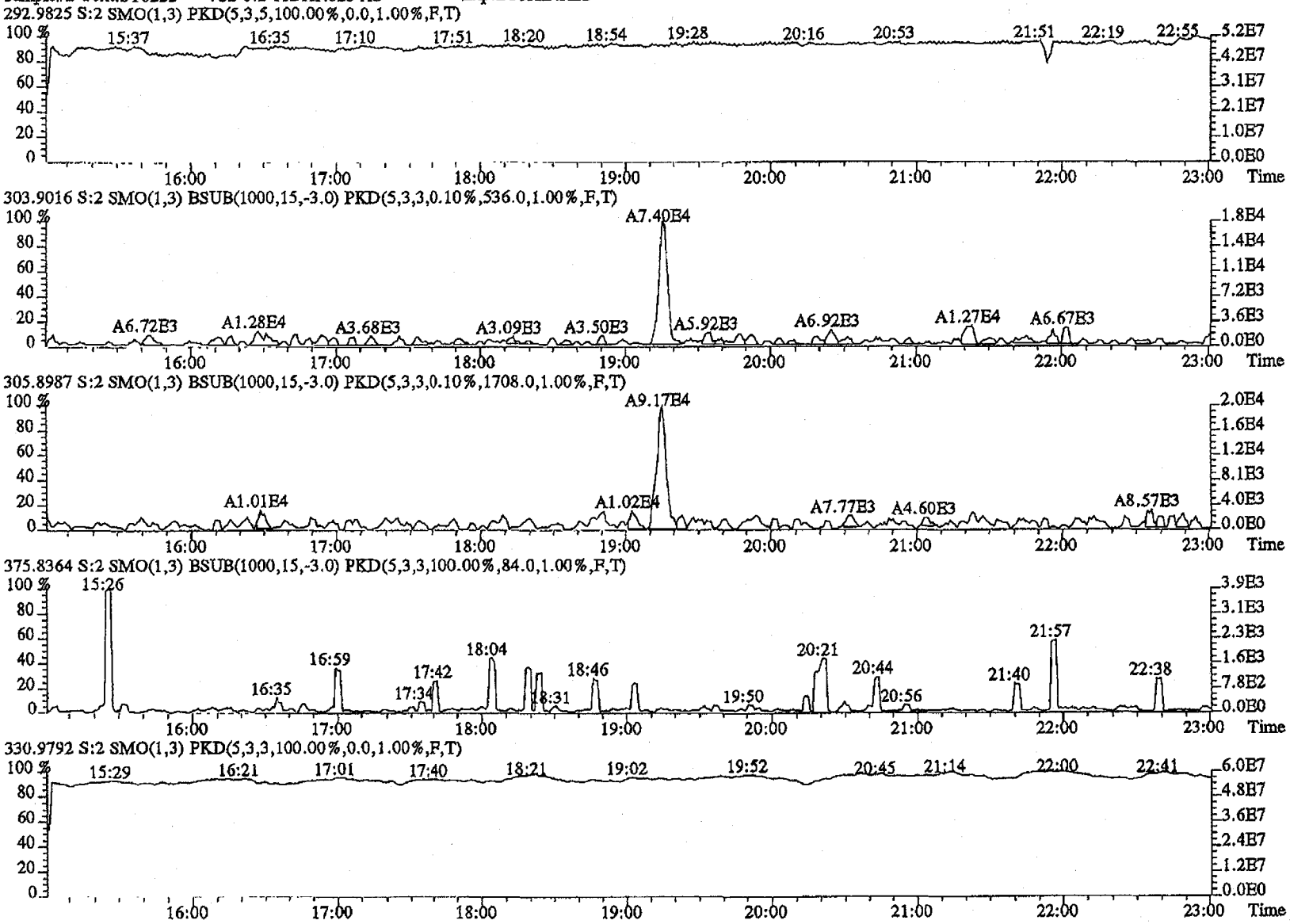
469.7779 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,25492.0,1.00%,F,T)



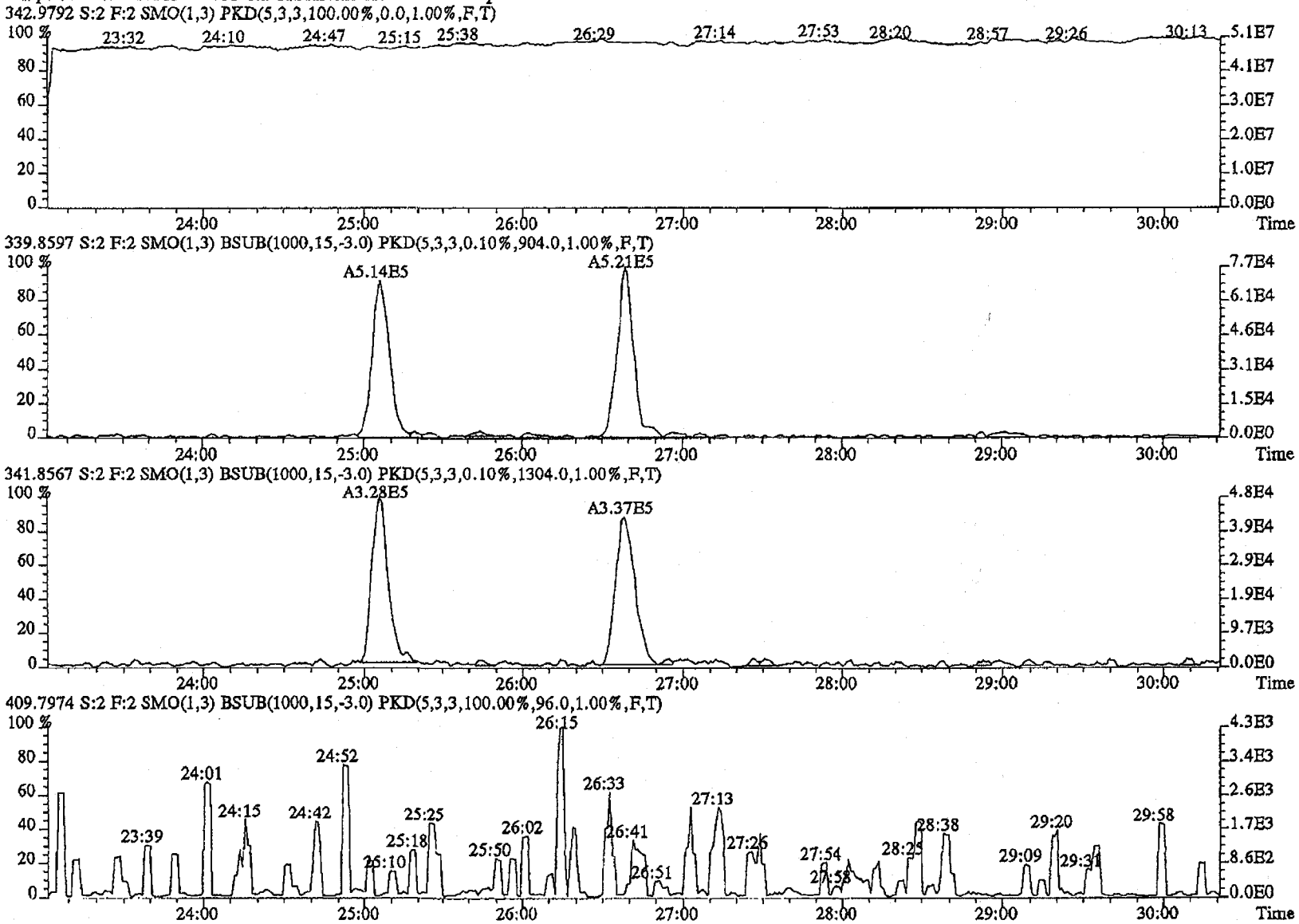
471.7750 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,20904.0,1.00%,F,T)



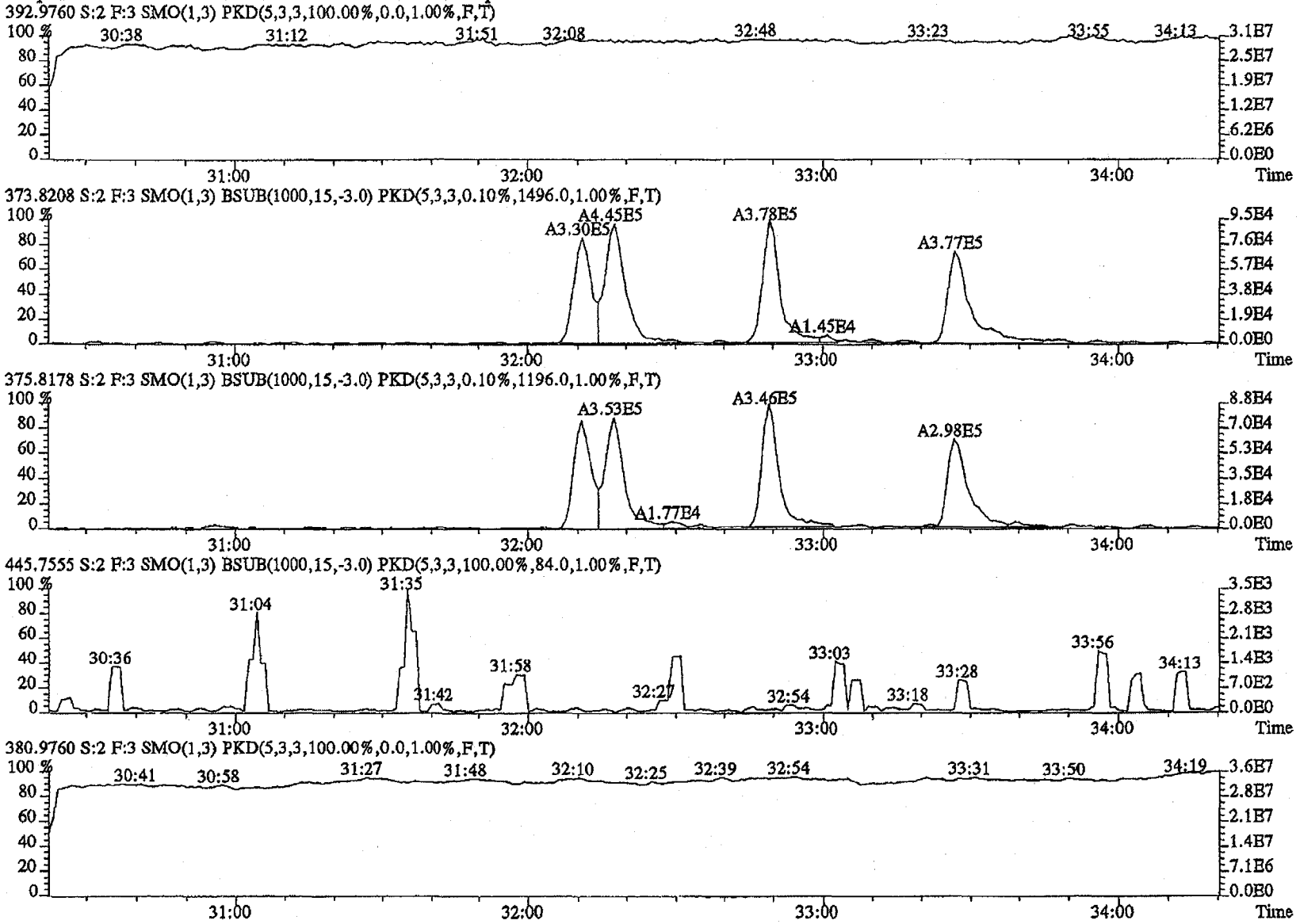
File:22FB11A4D5 #1-530 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES



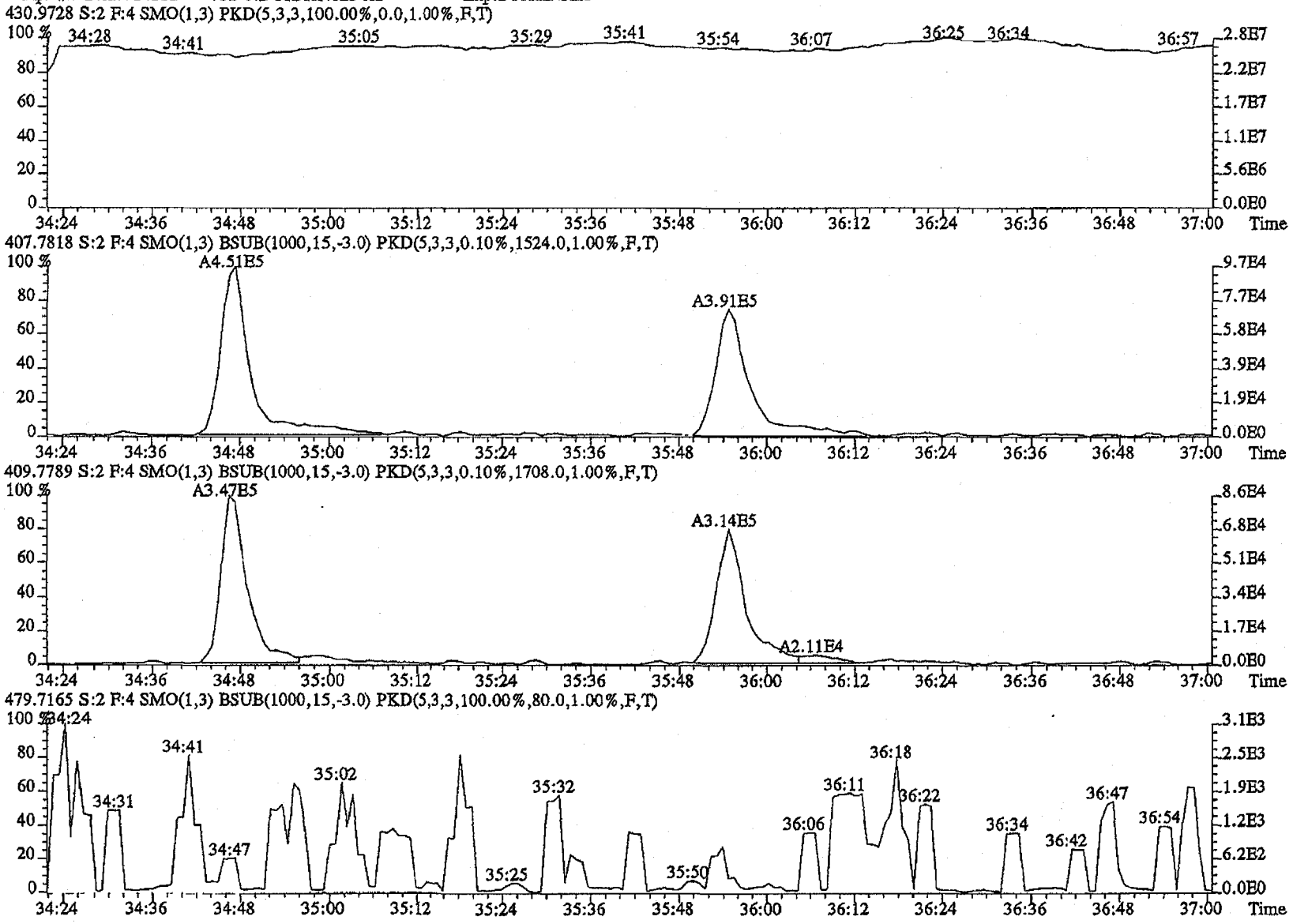
File:22FB11A4D5 #1-470 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES



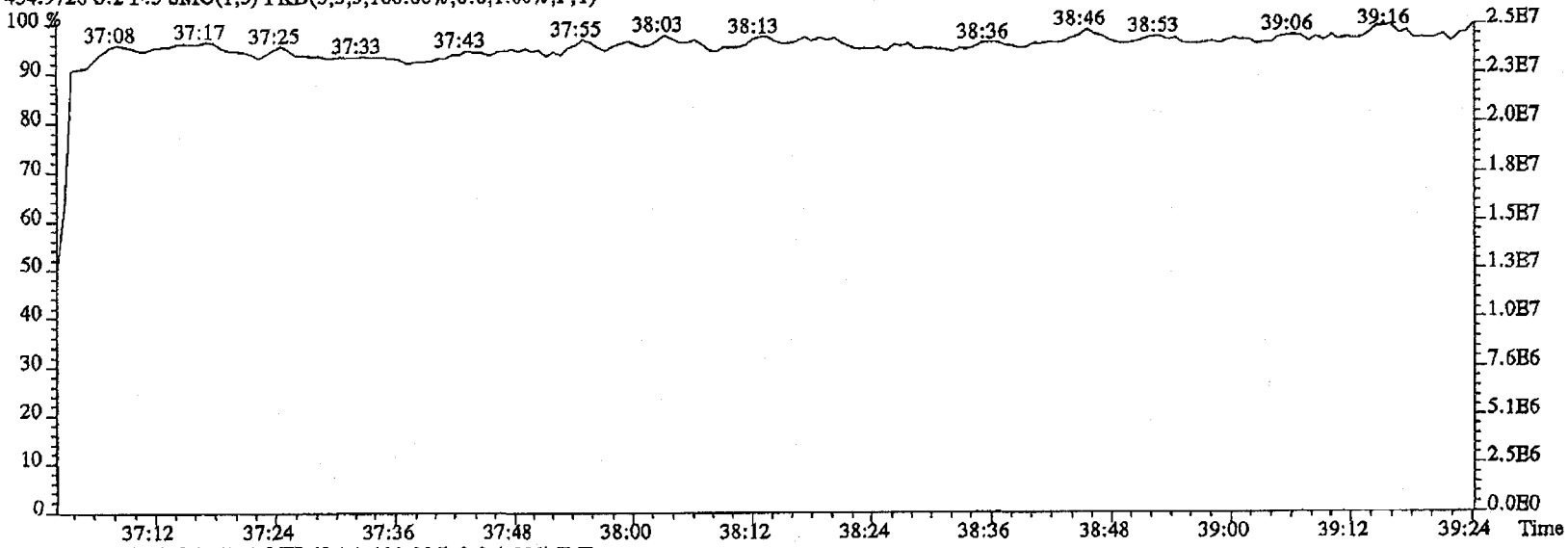
File:22FB11A4D5 #1-286 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES



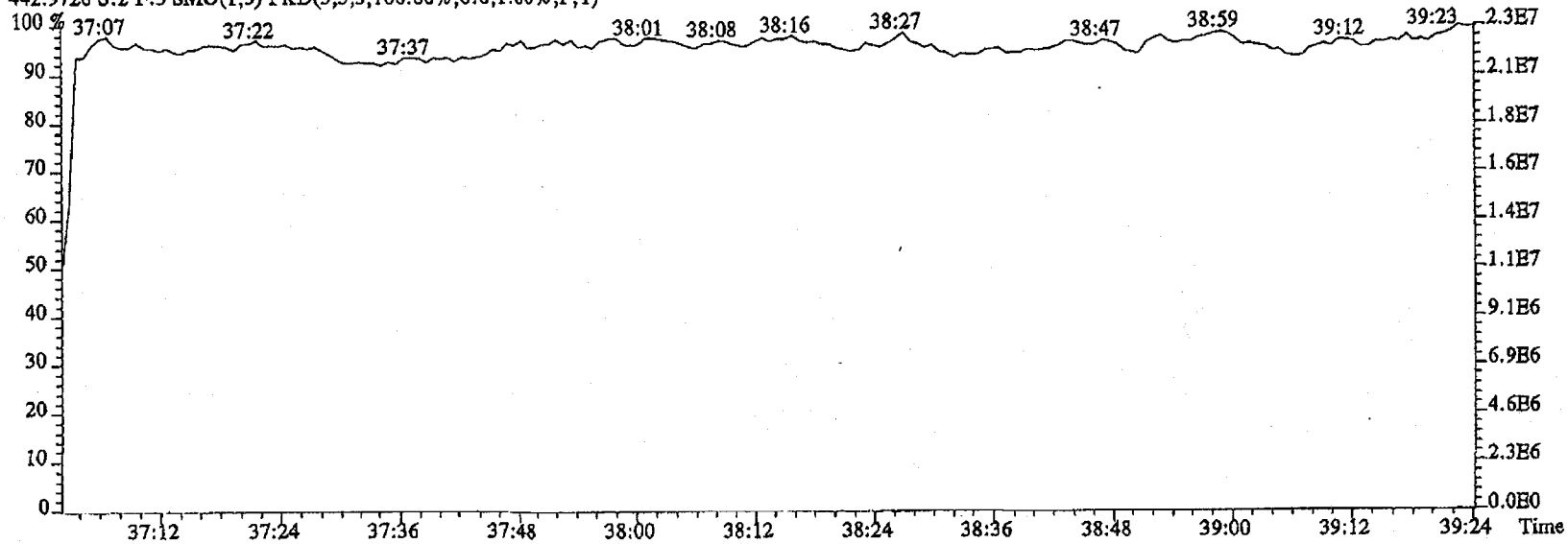
File:22FB11A4D5 #1-201 Acq:22-FBB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES



File:22FE11A4D5 #1-192 Acq:22-FEB-2011 13:37:42 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0222 :CS-0.2 11DXN025 AS Exp:DIOXINRES
454.9728 S:2 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:2 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

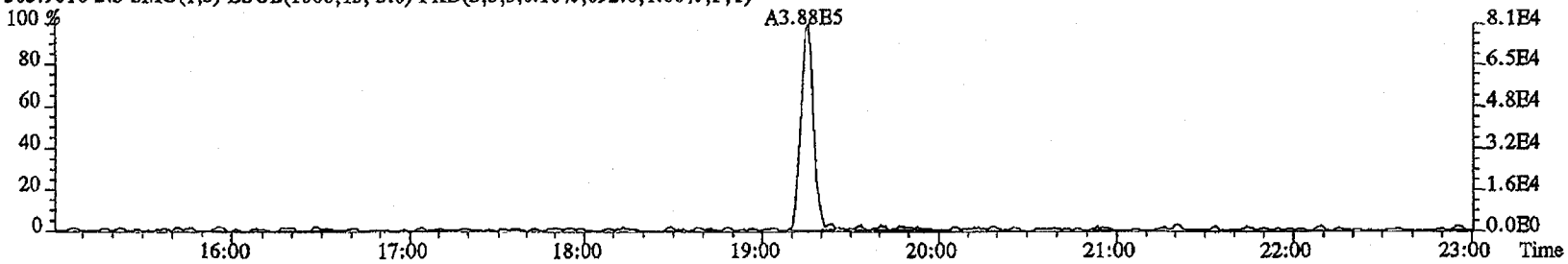


Run #2 Filename 22FE11A4D5 S: 3 I: 1
Acquired: 22-FEB-11 14:22:11 Processed: 23-FEB-11 09:25:09
Run: 15SE098D2 Analyte: 8290 Cal: 82900222114D5
Comments:
Sample text: ST0222A :CS-1 10DXN503 AS

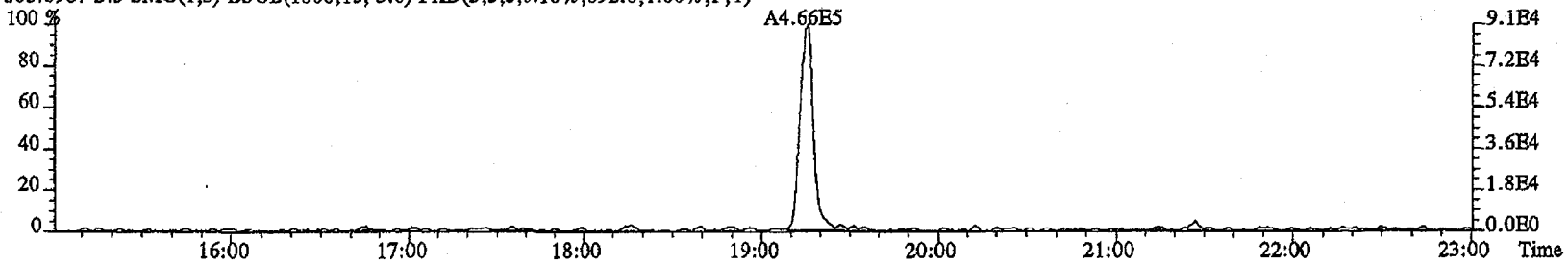
Name	Resp	RA		RT	RRF		Mod?
13C-1,2,3,4-TCDD	187394100	0.77	y	19:50	-	100.00	n
13C-2,3,7,8-TCDF	213833500	0.77	y	19:14	1.1411	100.00	n
2,3,7,8-TCDF	853997	0.83	y	19:16	0.7987	0.50	n
Total TCDF	-	-	n	-	0.7987	0.50	n
13C-2,3,7,8-TCDD	183081100	0.76	y	20:03	0.9770	100.00	n
2,3,7,8-TCDD	775144	0.82	y	20:04	0.8468	0.50	n
Total TCDD	-	-	n	-	0.8468	0.50	n
37Cl-2,3,7,8-TCDD	1348538	1.00	y	20:04	1.4393	0.50	n
13C-1,2,3,7,8-PeCDF	195876200	1.60	y	25:05	1.0453	100.00	n
1,2,3,7,8-PeCDF	4389470	1.62	y	25:07	0.8964	2.50	n
2,3,4,7,8-PeCDF	4233200	1.45	y	26:38	0.8645	2.50	n
Total F2 PeCDF	-	-	n	-	0.8804	5.00	n
Total F1 PeCDF	-	-	n	-	0.8804	5.00	n
13C-1,2,3,7,8-PeCDD	131784000	1.58	y	27:27	0.7032	100.00	n
1,2,3,7,8-PeCDD	3254700	1.39	y	27:30	0.9879	2.50	n
Total PeCDD	-	-	n	-	0.9879	2.50	n
13C-1,2,3,7,8,9-HxCDD	132324100	1.26	y	33:17	-	100.00	n
13C-1,2,3,4,7,8-HxCDF	108037400	0.49	y	32:10	0.8165	100.00	n
1,2,3,4,7,8-HxCDF	2941540	1.15	y	32:11	1.0891	2.50	n
1,2,3,6,7,8-HxCDF	4122100	1.13	y	32:17	1.5262	2.50	n
2,3,4,6,7,8-HxCDF	3606480	1.15	y	32:49	1.3353	2.50	n
1,2,3,7,8,9-HxCDF	2970510	1.25	y	33:27	1.0998	2.50	n
Total HxCDF	-	-	n	-	1.2626	10.00	n
13C-1,2,3,6,7,8-HxCDD	129785900	1.28	y	33:01	0.9808	100.00	n
1,2,3,4,7,8-HxCDD	2152042	1.23	y	32:57	0.6633	2.50	n
1,2,3,6,7,8-HxCDD	3275550	1.23	y	33:02	1.0095	2.50	n
1,2,3,7,8,9-HxCDD	3071710	1.27	y	33:17	0.9467	2.50	n
Total HxCDD	-	-	n	-	0.8732	7.50	n
13C-1,2,3,4,6,7,8-HpCDF	120215200	0.43	y	34:46	0.9085	100.00	n
1,2,3,4,6,7,8-HpCDF	3884660	1.08	y	34:47	1.2926	2.50	n
1,2,3,4,7,8,9-HpCDF	3152290	1.04	y	35:55	1.0489	2.50	n
Total HpCDF	-	-	n	-	1.1707	5.00	n
13C-1,2,3,4,6,7,8-HpCDD	119893700	1.05	y	35:35	0.9061	100.00	n
1,2,3,4,6,7,8-HpCDD	2742820	0.91	y	35:36	0.9151	2.50	n
Total HpCDD	-	-	n	-	0.9151	2.50	n
13C-OCDD	158471700	0.89	y	38:05	0.5988	200.00	n
OCDF	4627780	0.85	y	38:13	1.1681	5.00	n
OCDD	4143980	0.93	y	38:06	1.0460	5.00	n

File:22FB11A4D5 #1-530 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

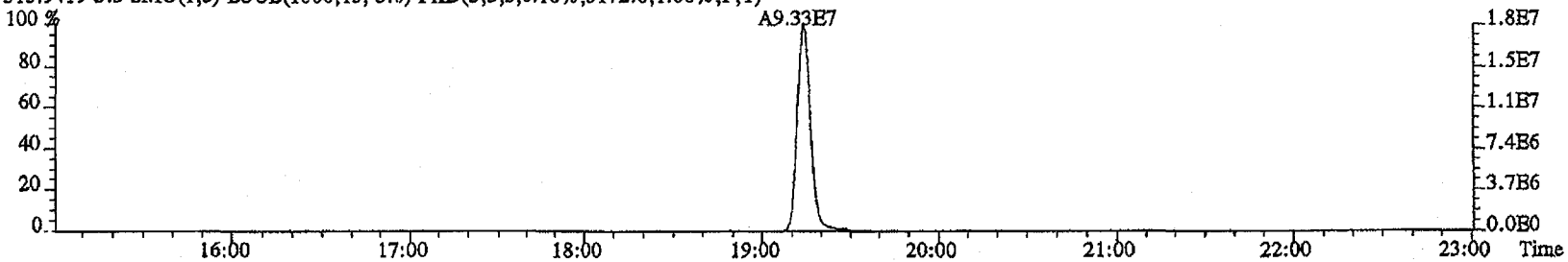
303.9016 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,892.0,1.00%,F,T)



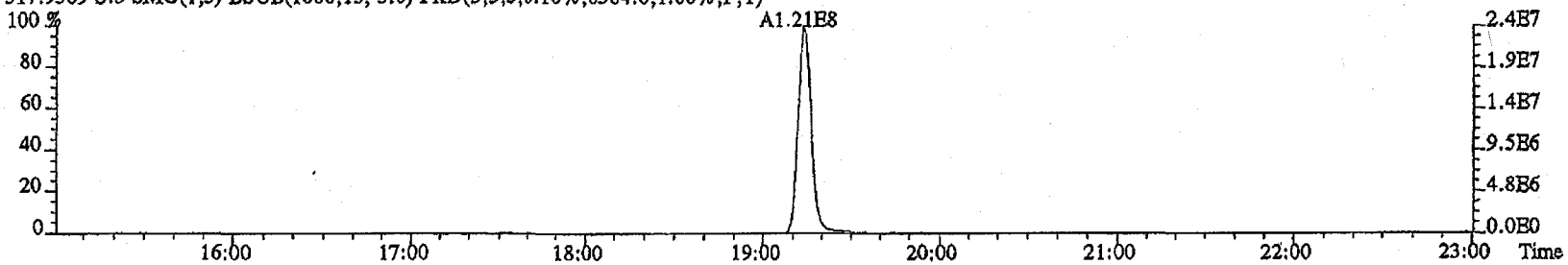
305.8987 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,892.0,1.00%,F,T)



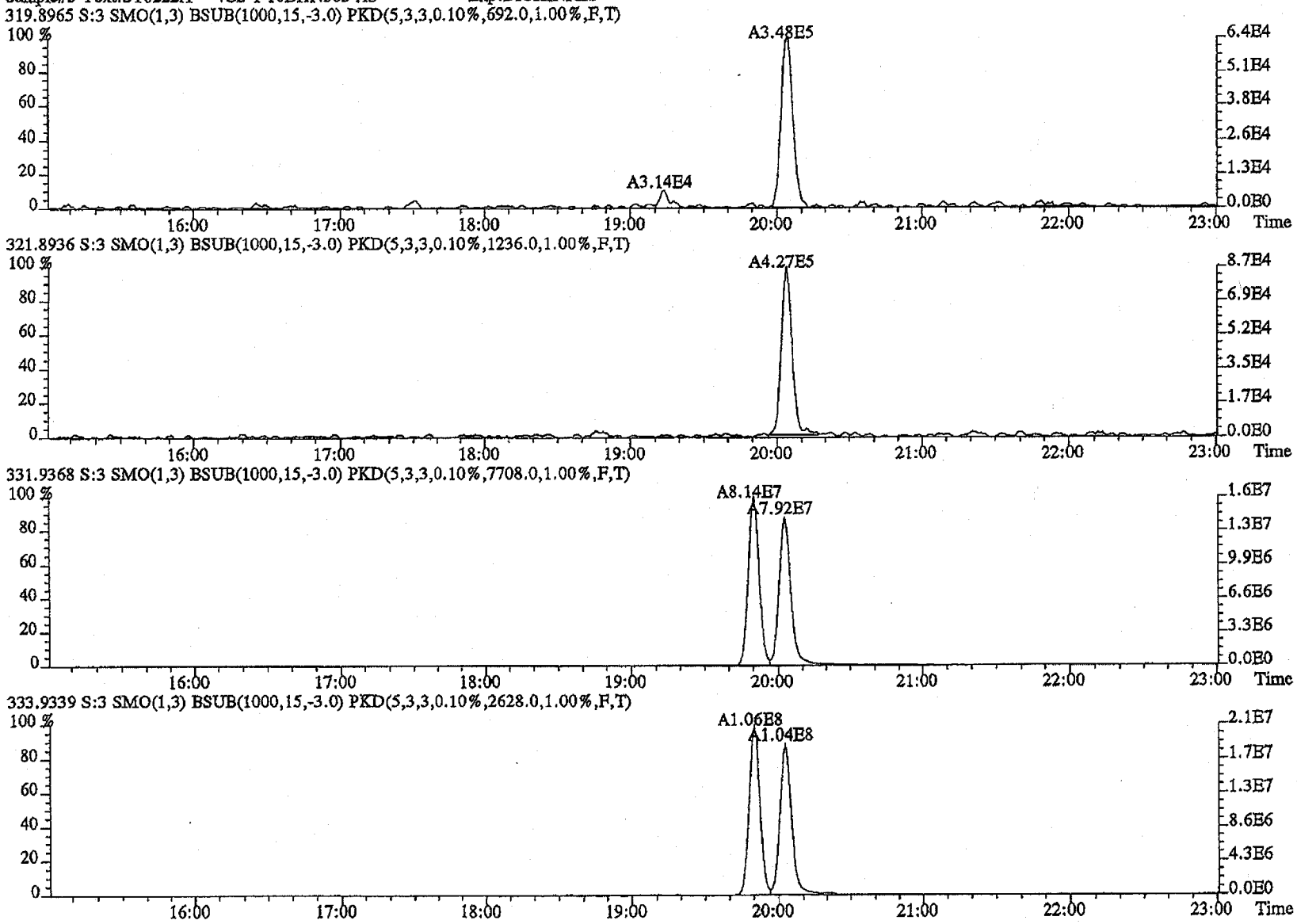
315.9419 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3172.0,1.00%,F,T)



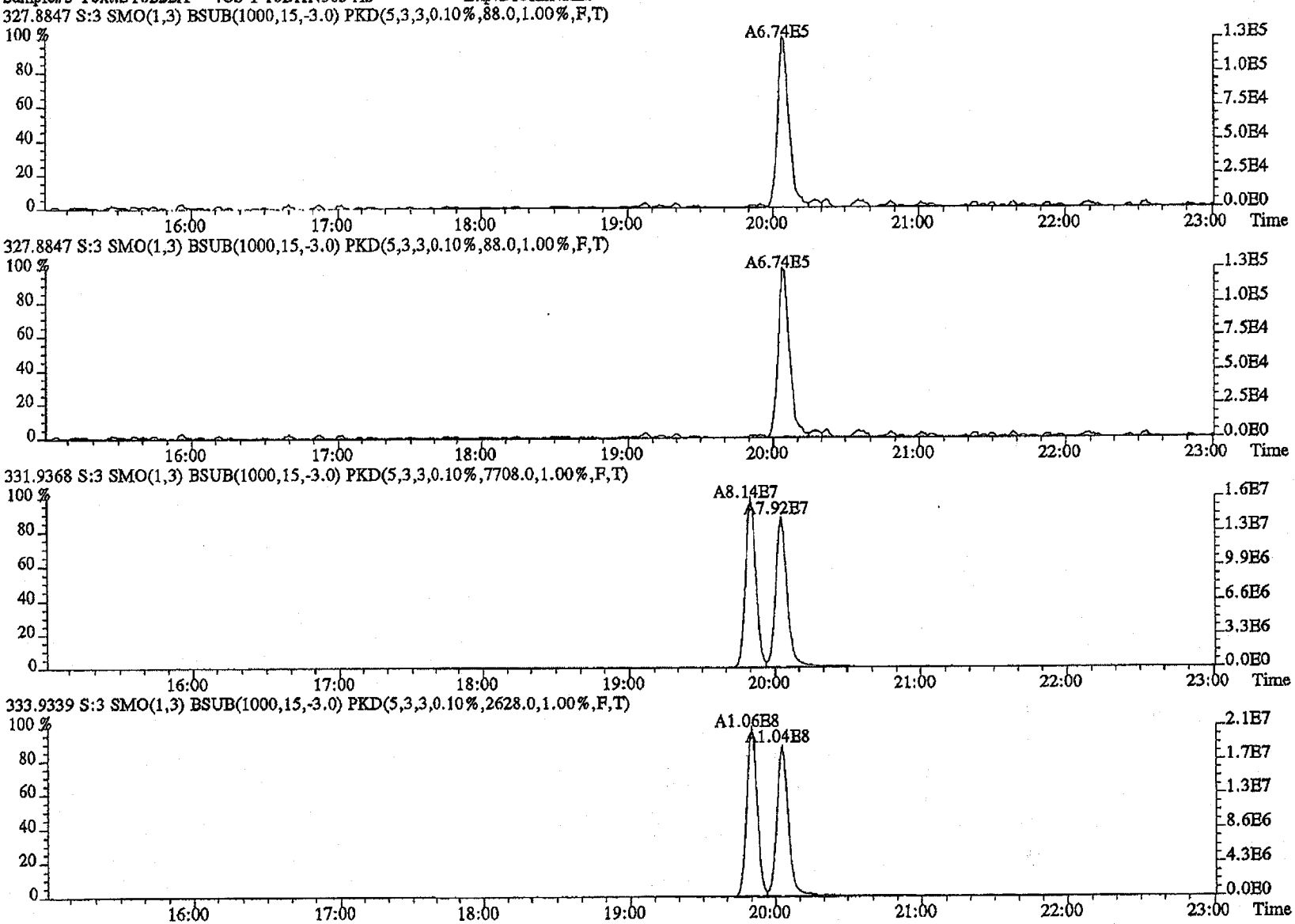
317.9389 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6384.0,1.00%,F,T)



File:22FE11A4D5 #1-530 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

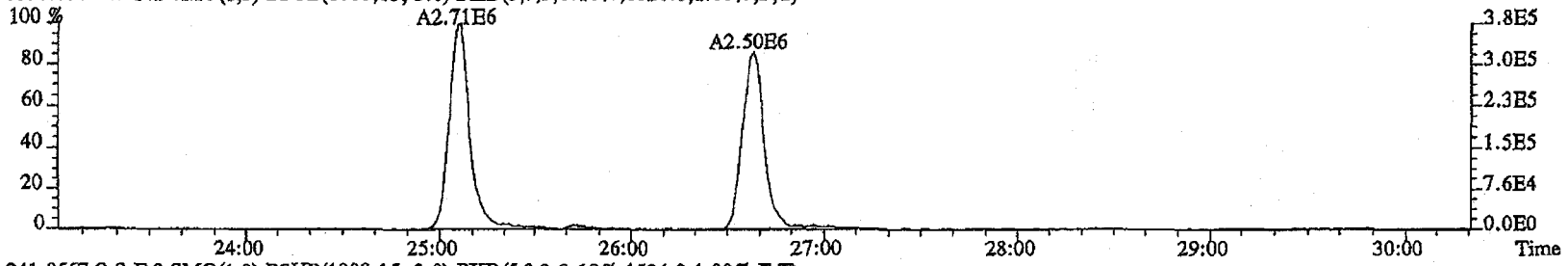


File:22FB11A4D5 #1-530 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

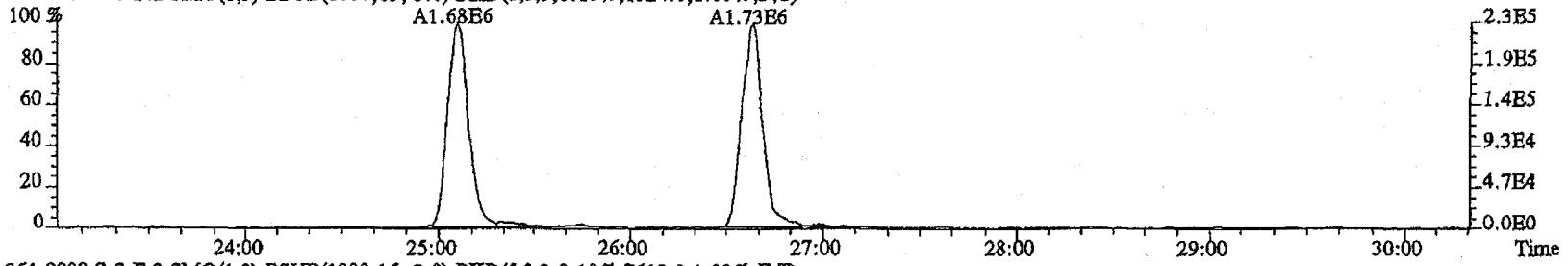


File:22FE11A4D5 #1-470 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

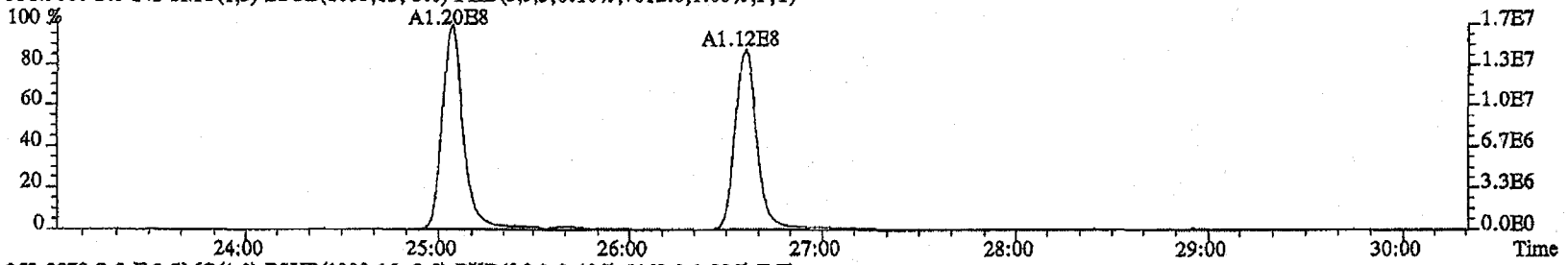
339.8597 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1020.0,1.00%,F,T)



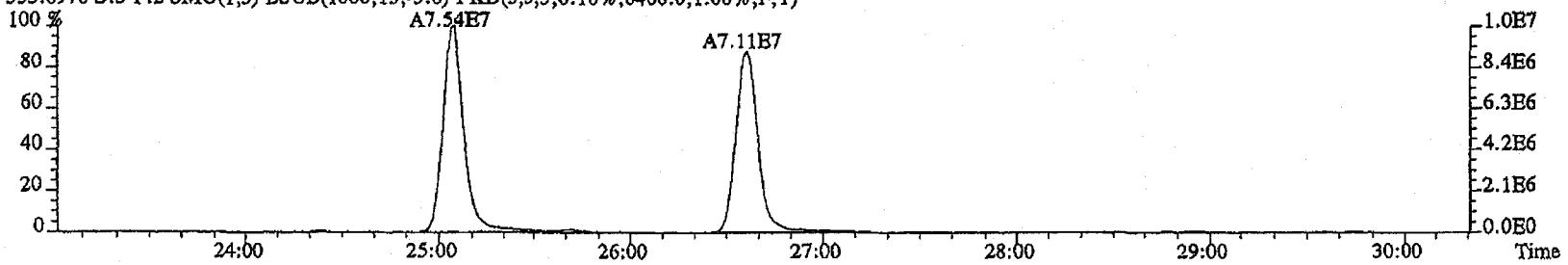
341.8567 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1524.0,1.00%,F,T)



351.9000 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,7612.0,1.00%,F,T)

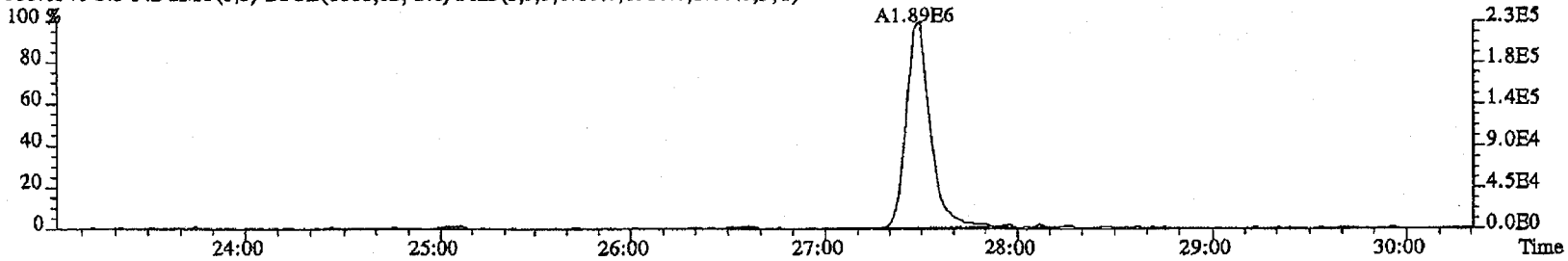


353.8970 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6468.0,1.00%,F,T)

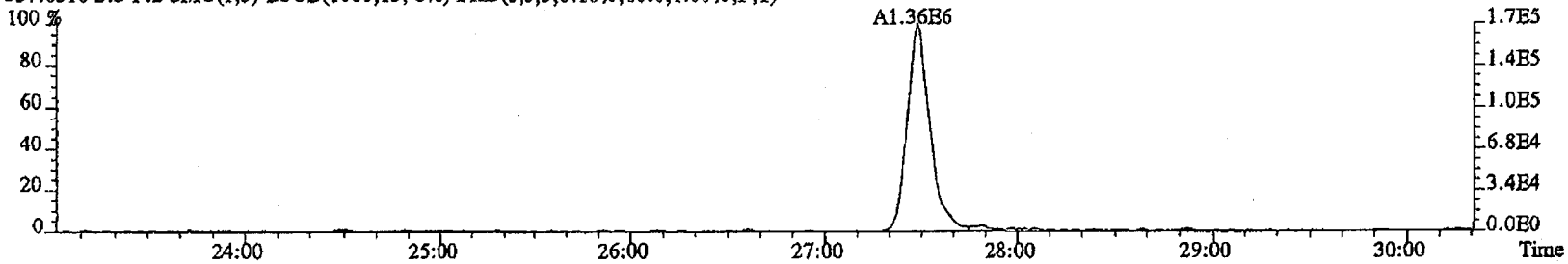


File:22FB11A4D5 #1-470 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaB
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

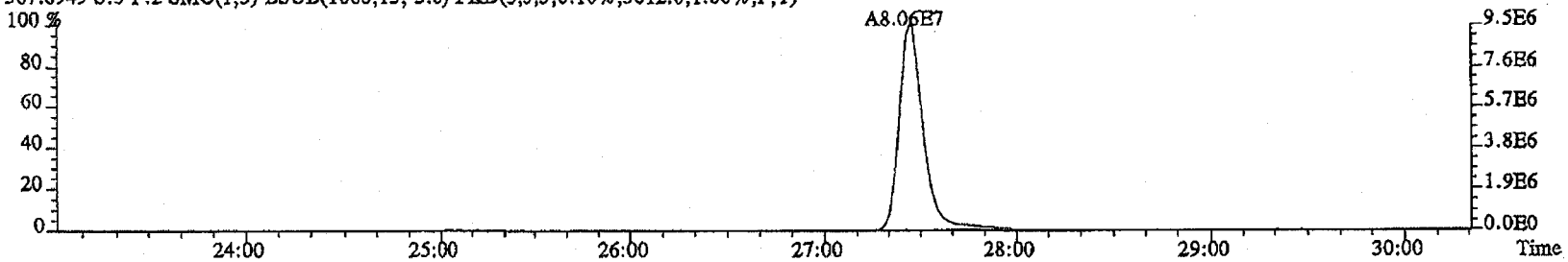
355.8546 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1316.0,1.00%,F,T)



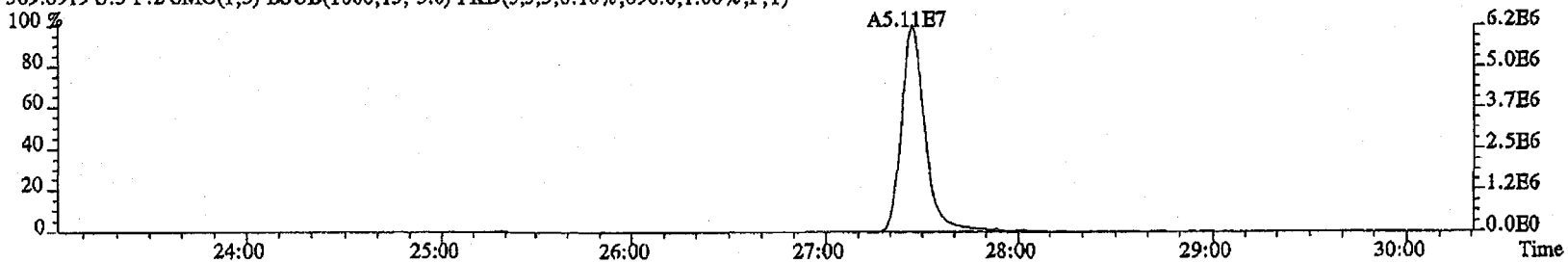
357.8516 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,60.0,1.00%,F,T)



367.8949 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3812.0,1.00%,F,T)

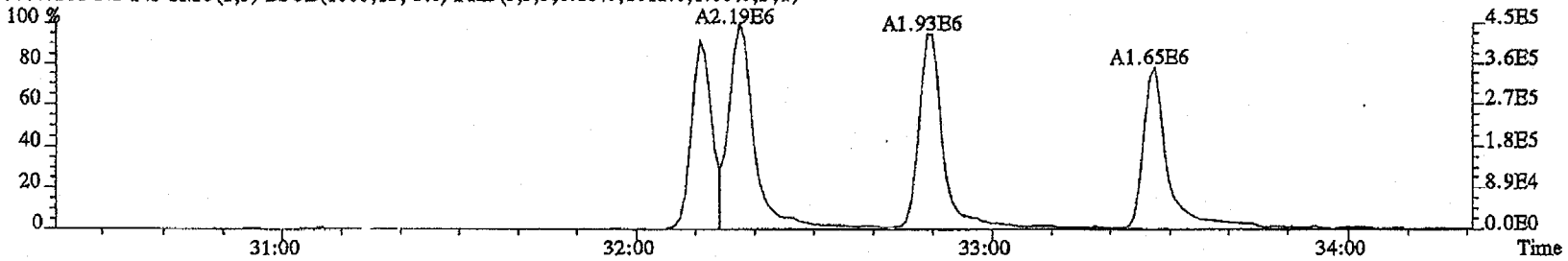


369.8919 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,896.0,1.00%,F,T)

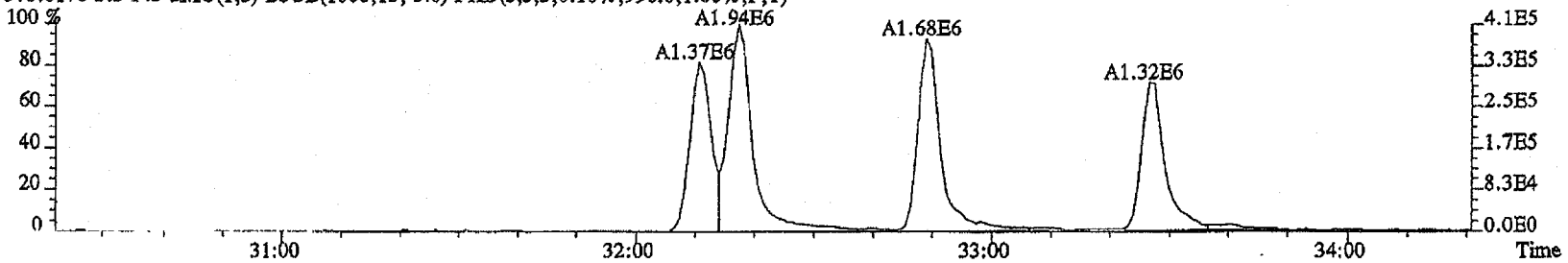


File:22FE11A4D5 #1-287 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

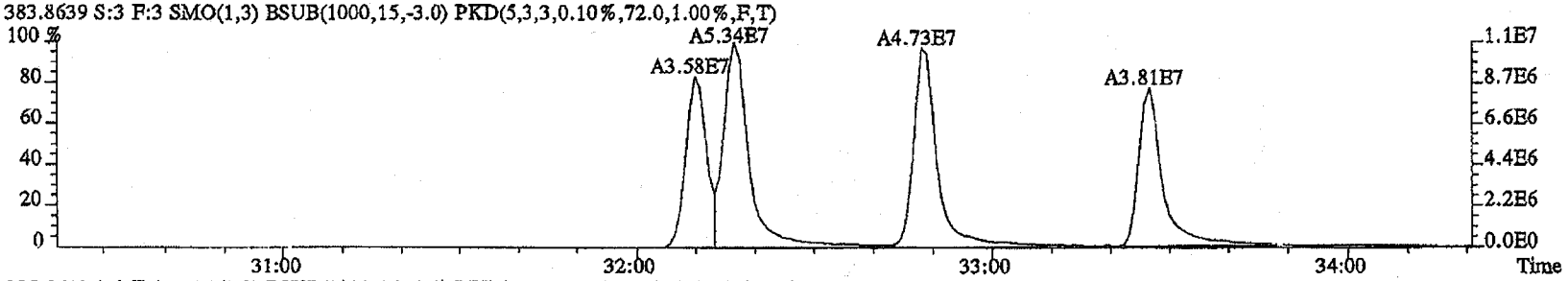
373.8208 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1012.0,1.00%,F,T)



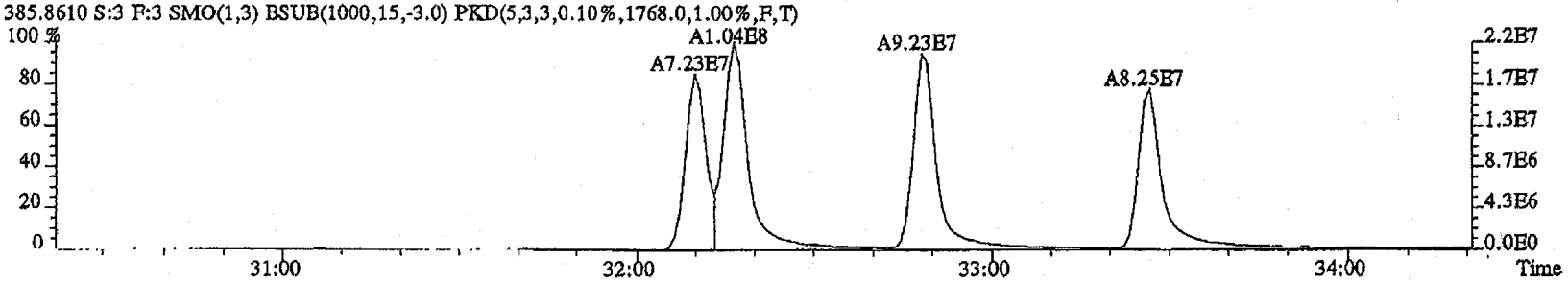
375.8178 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,996.0,1.00%,F,T)



383.8639 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,72.0,1.00%,F,T)

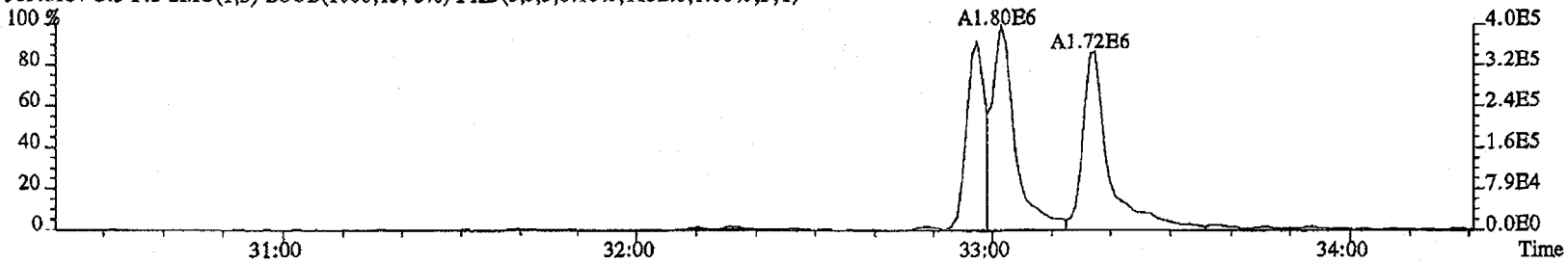


385.8610 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1768.0,1.00%,F,T)

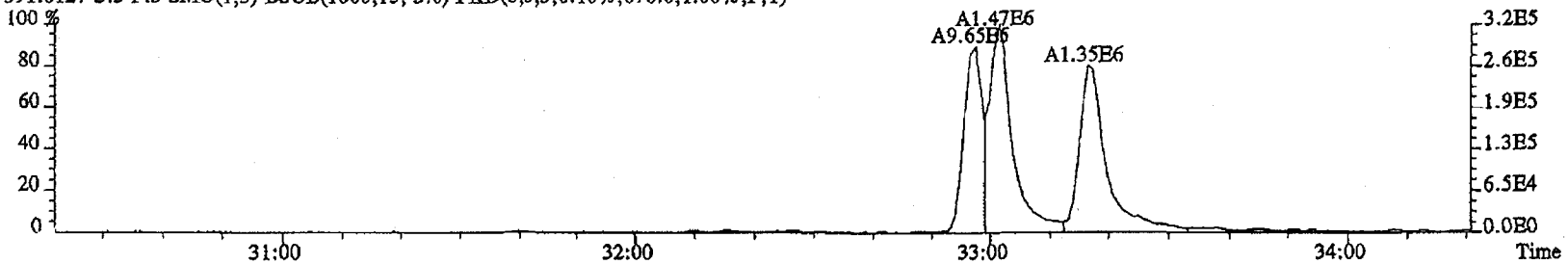


File:22FE11A4D5 #1-287 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

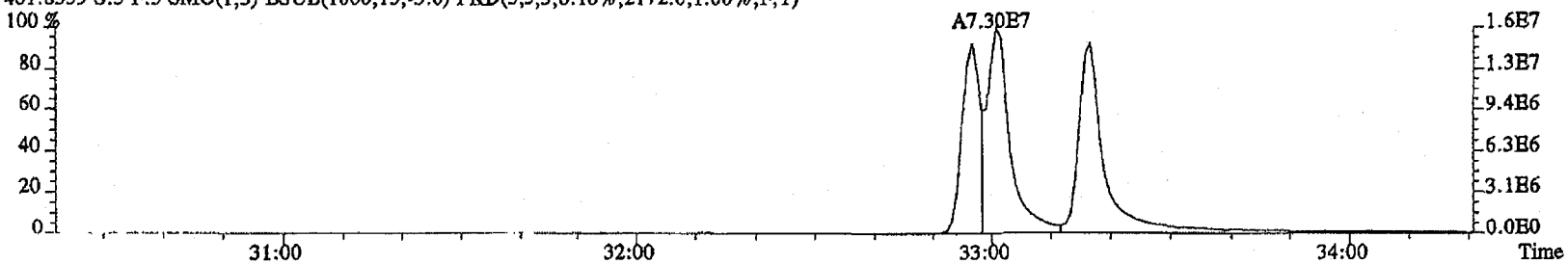
389.8157 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1152.0,1.00%,F,T)



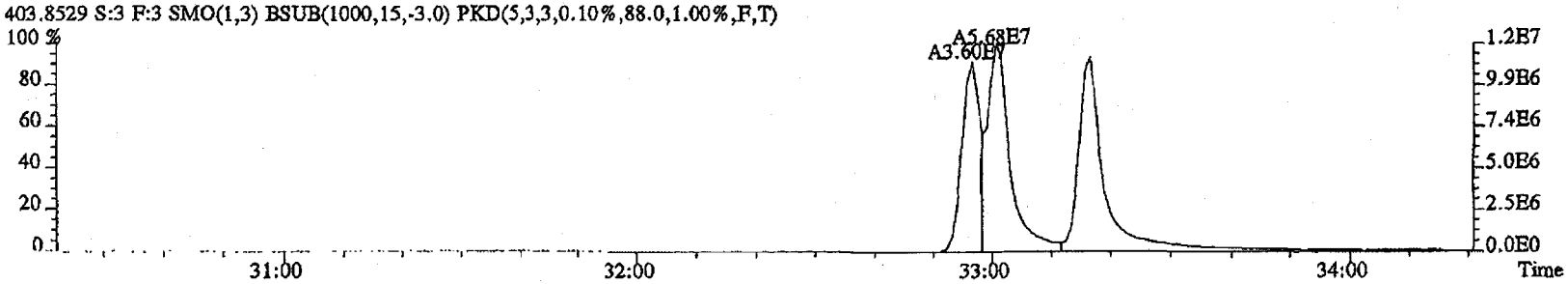
391.8127 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,676.0,1.00%,F,T)



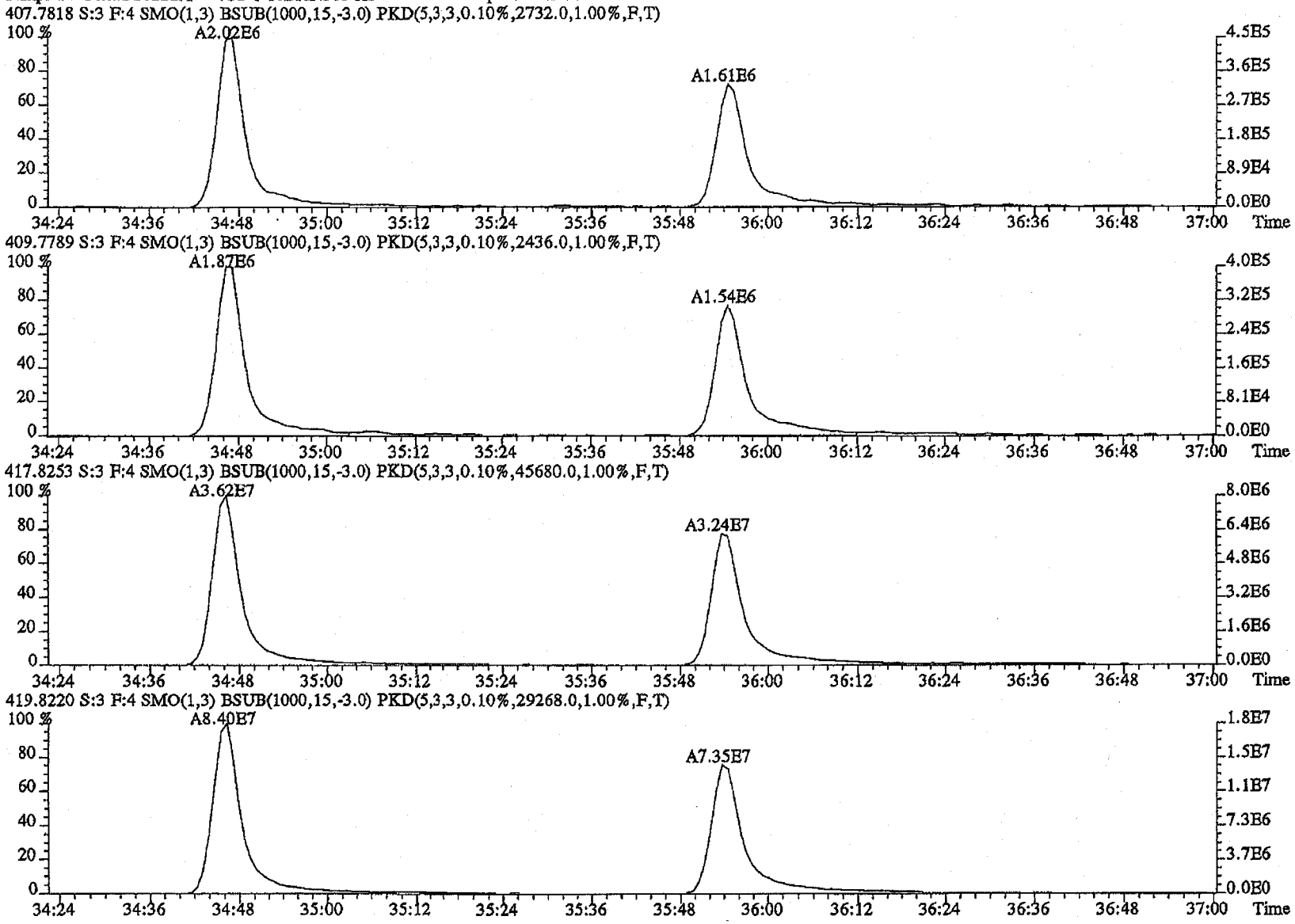
401.8559 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2172.0,1.00%,F,T)



403.8529 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,88.0,1.00%,F,T)

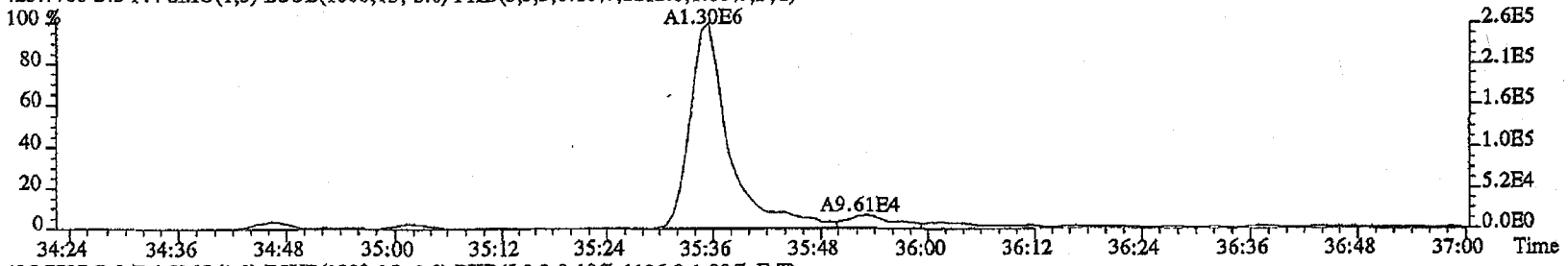


File:22FB11A4D5 #1-200 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaB
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

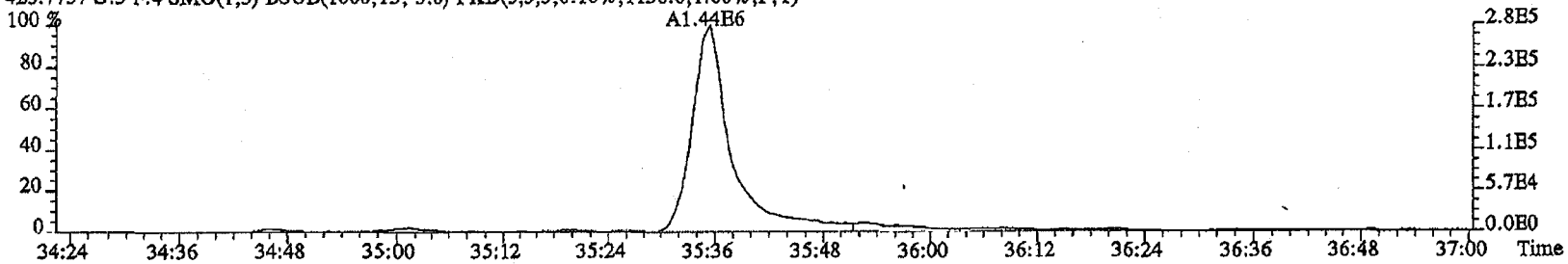


File:22FB11A4D5 #1-200 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

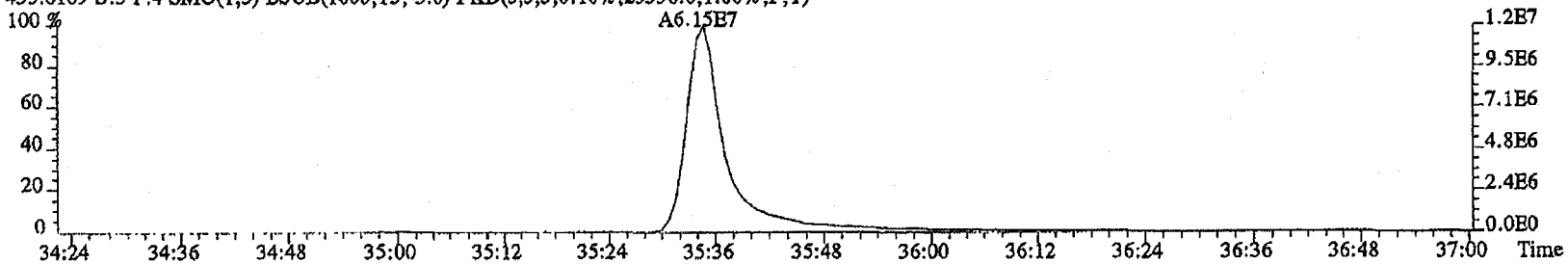
423.7766 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2212.0,1.00%,F,T)



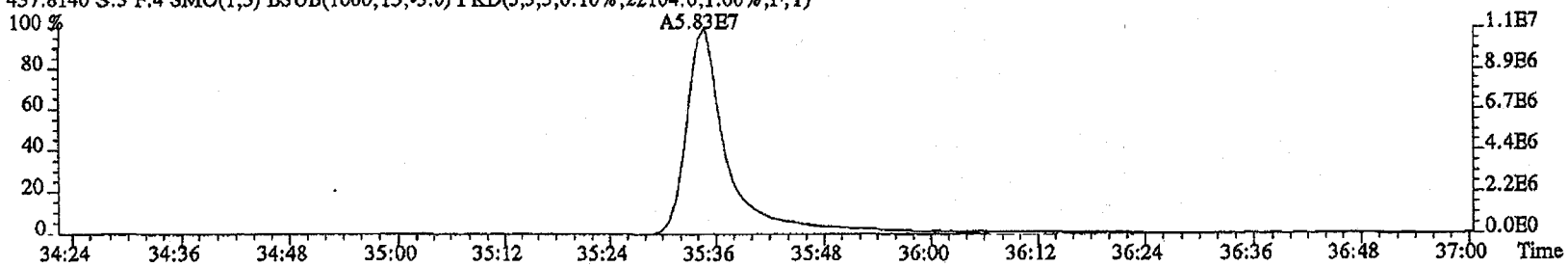
425.7737 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1136.0,1.00%,F,T)



435.8169 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,23336.0,1.00%,F,T)

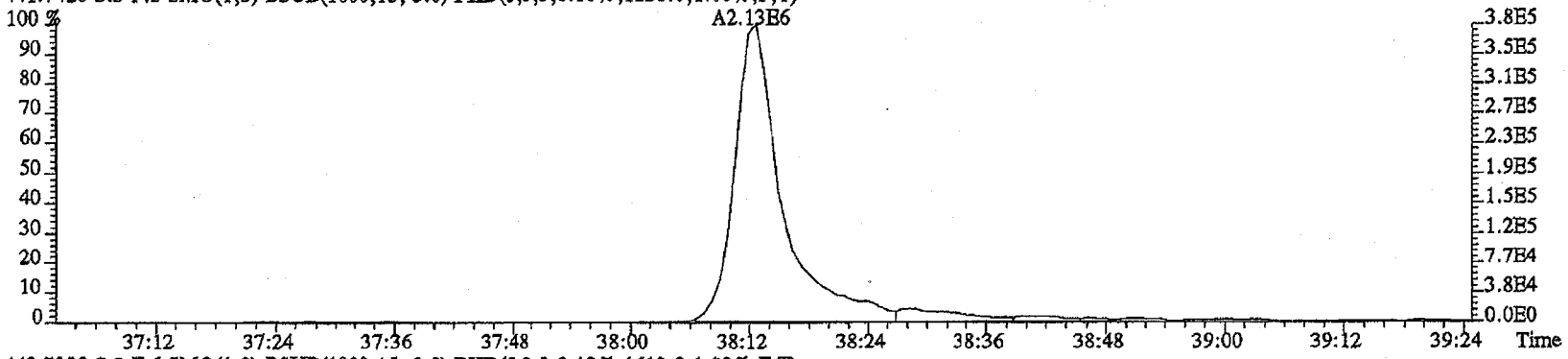


437.8140 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,22104.0,1.00%,F,T)

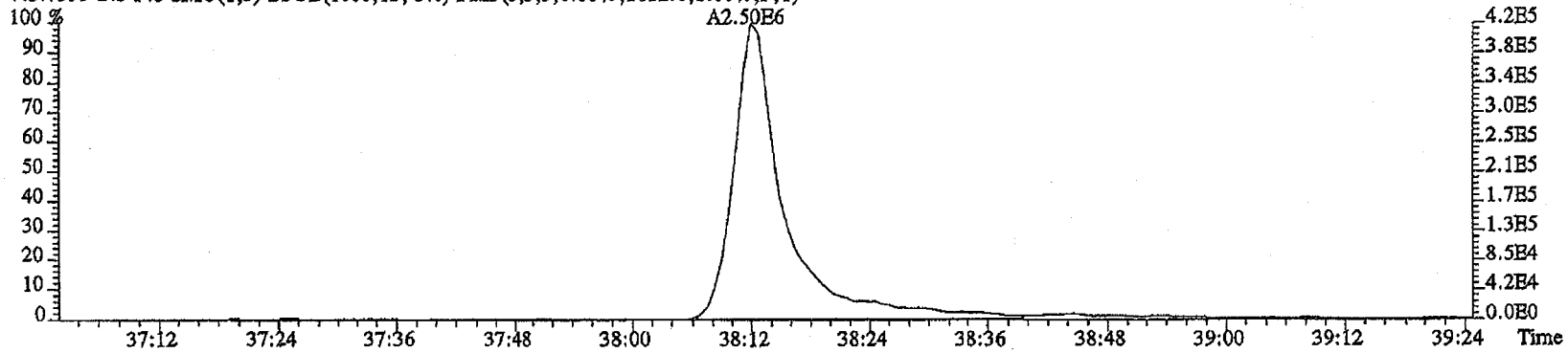


File:22FB11A4D5 #1-193 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

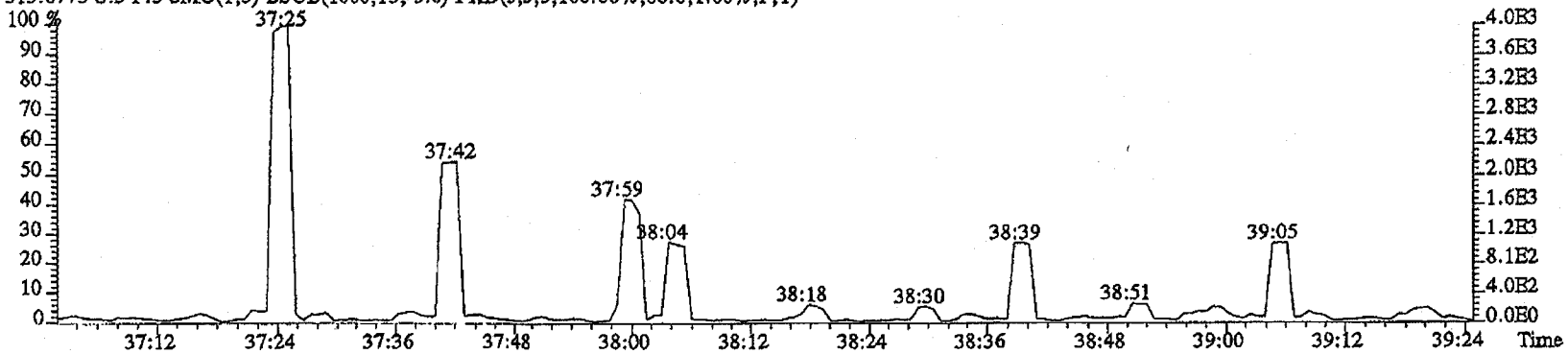
441.7428 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1228.0,1.00%,F,T)



443.7399 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1612.0,1.00%,F,T)

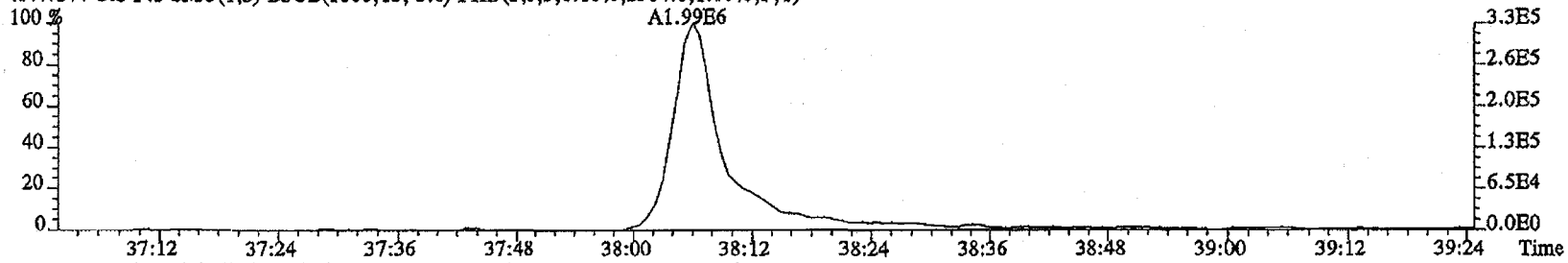


513.6775 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,68.0,1.00%,F,T)

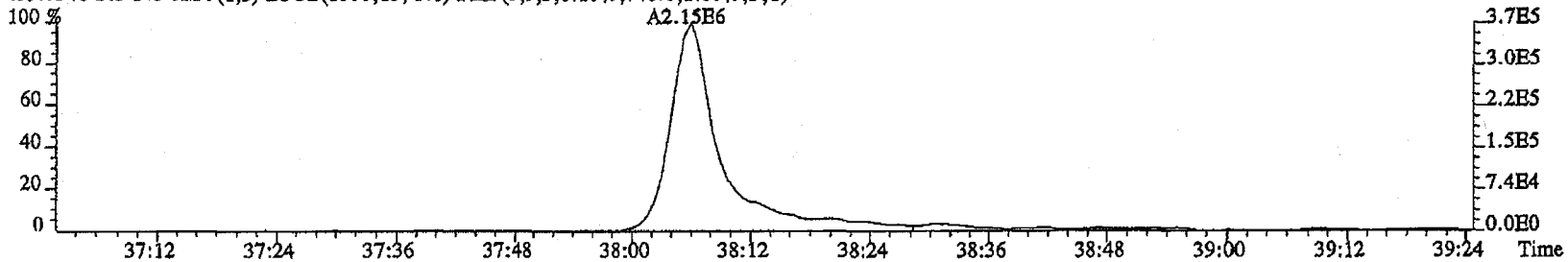


File:22FB11A4D5 #1-193 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

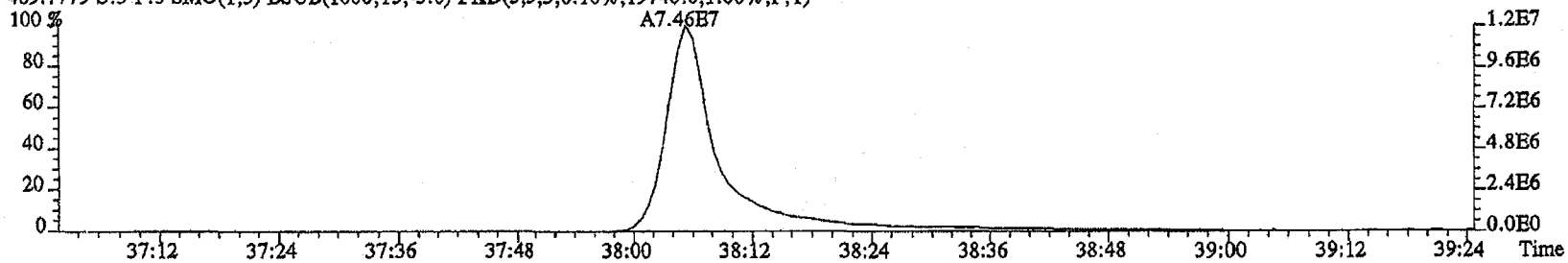
457.7377 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2384.0,1.00%,F,T)



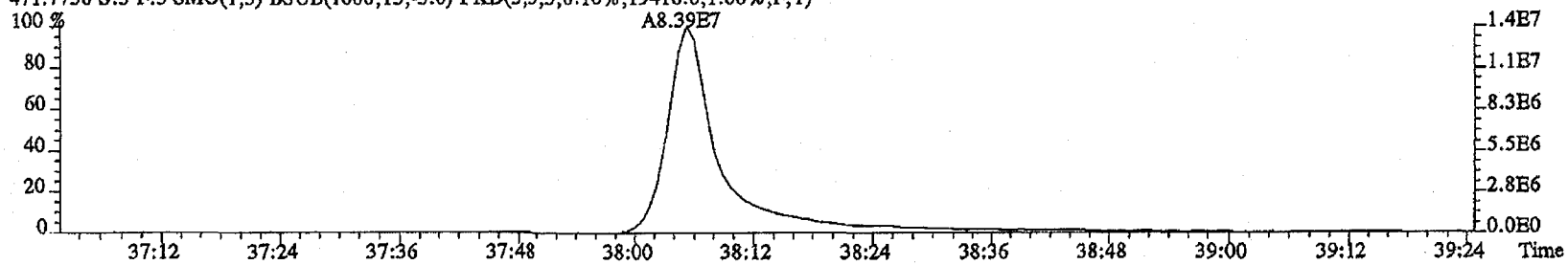
459.7348 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,740.0,1.00%,F,T)



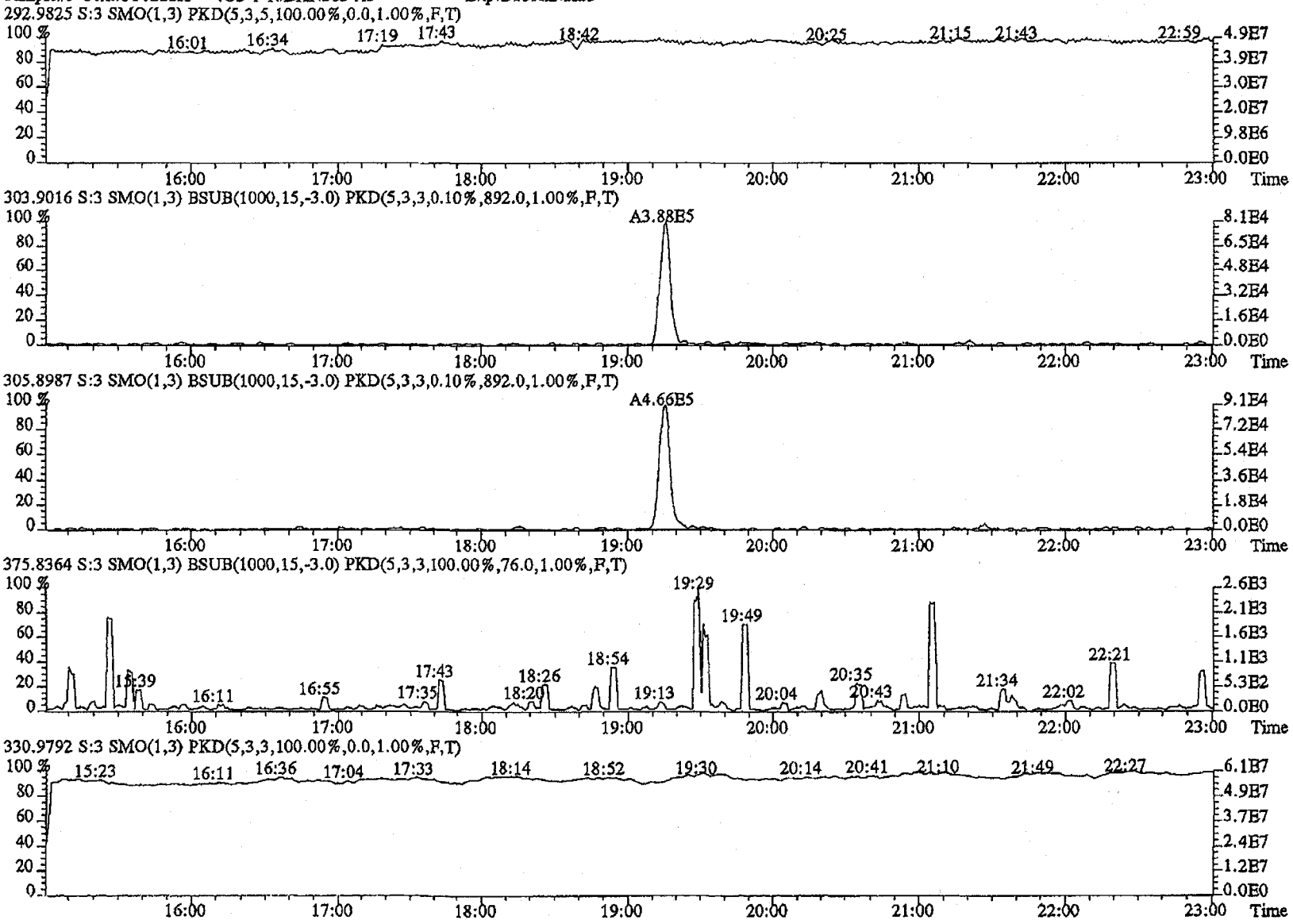
469.7779 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,19740.0,1.00%,F,T)



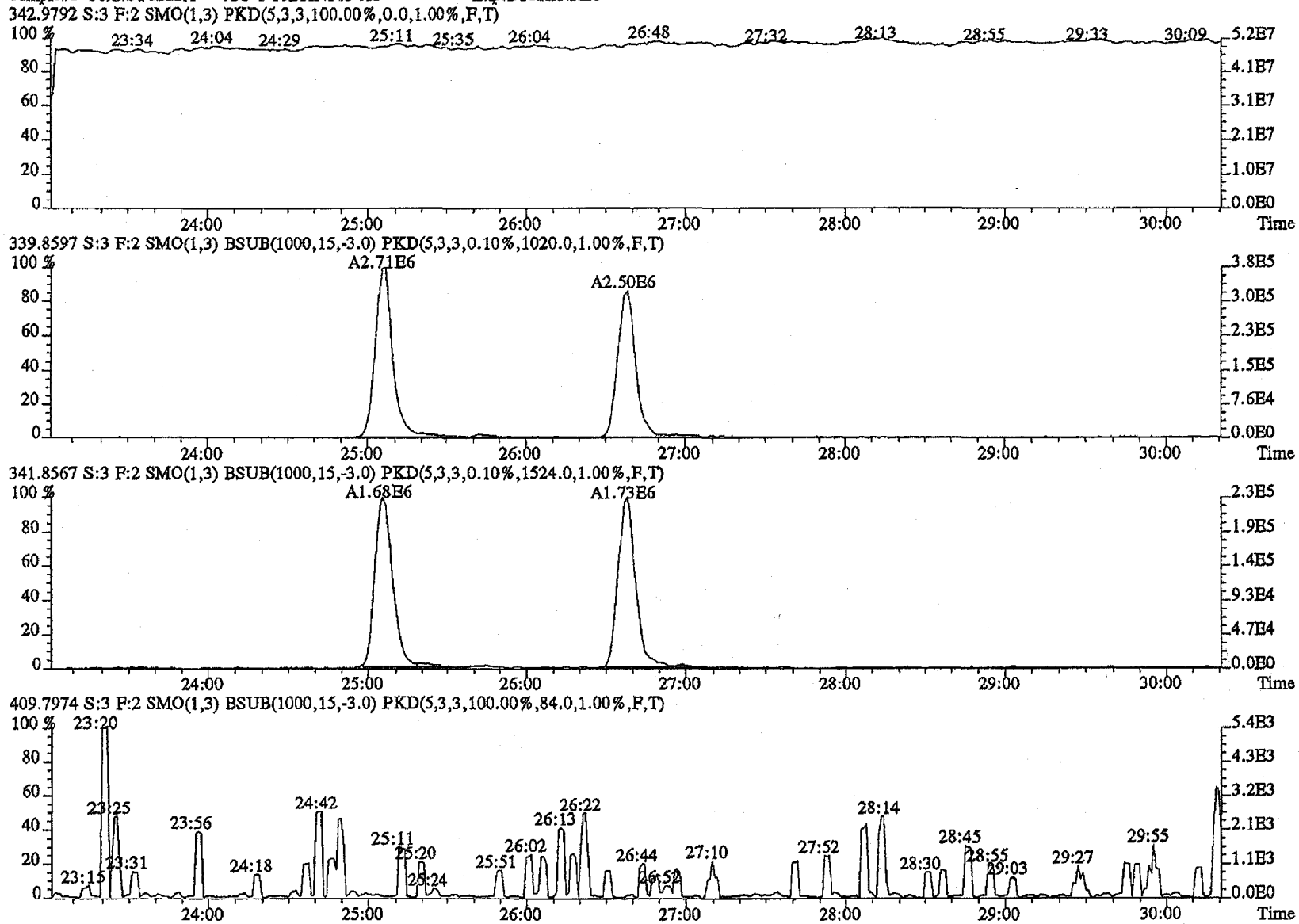
471.7750 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,19416.0,1.00%,F,T)



File:22FE11A4D5 #1-530 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

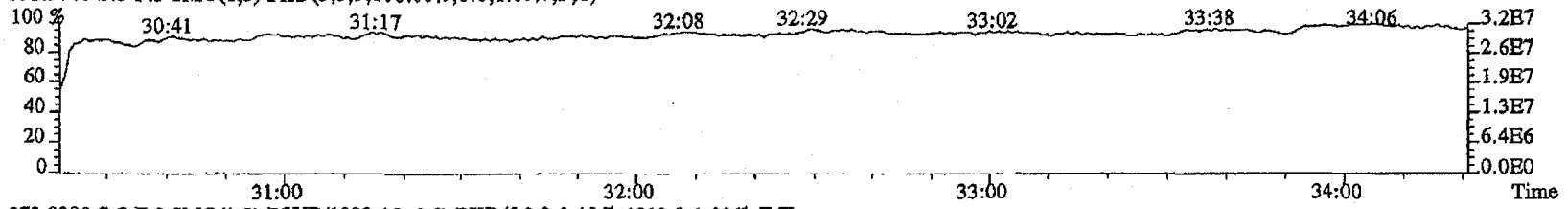


File:22FB11A4D5 #1-470 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

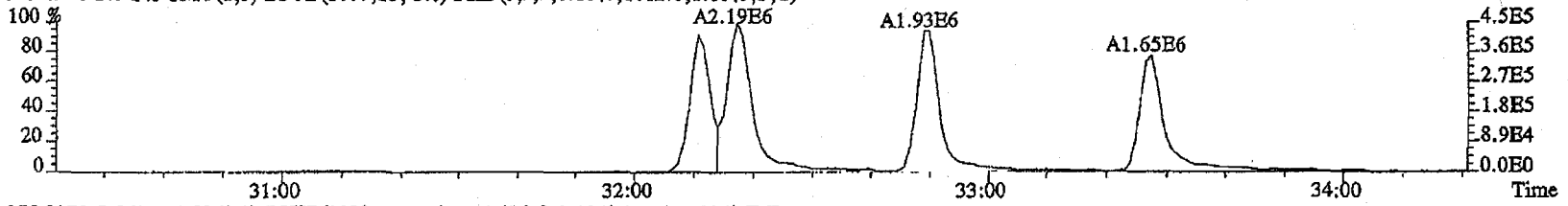


File:22FE11A4D5 #1-287 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES

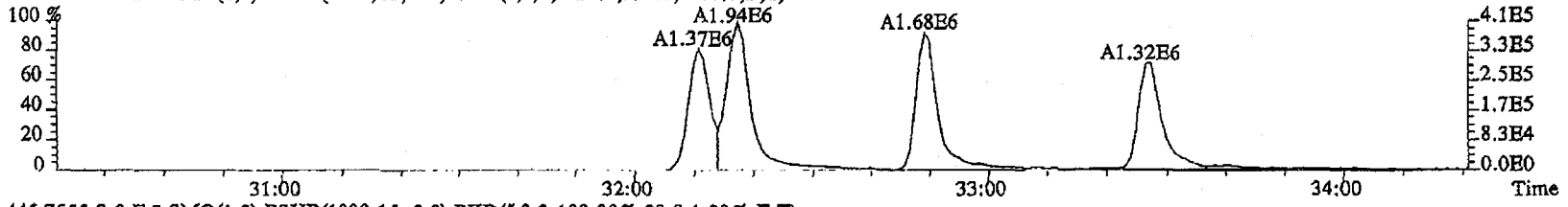
392.9760 S:3 F:3 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



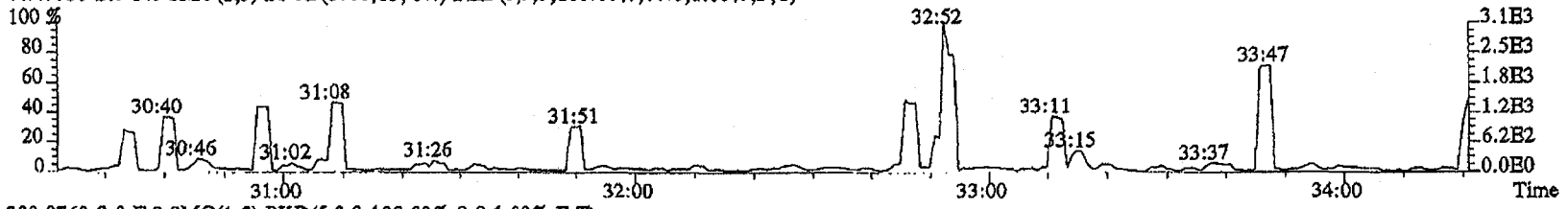
373.8208 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1012.0,1.00%,F,T)



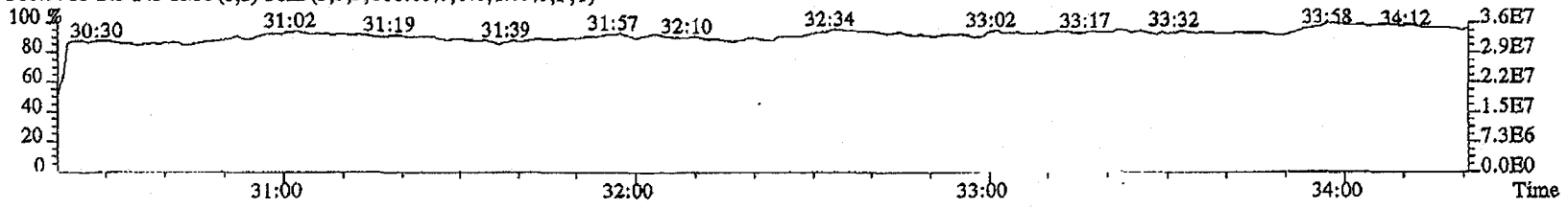
375.8178 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,996.0,1.00%,F,T)



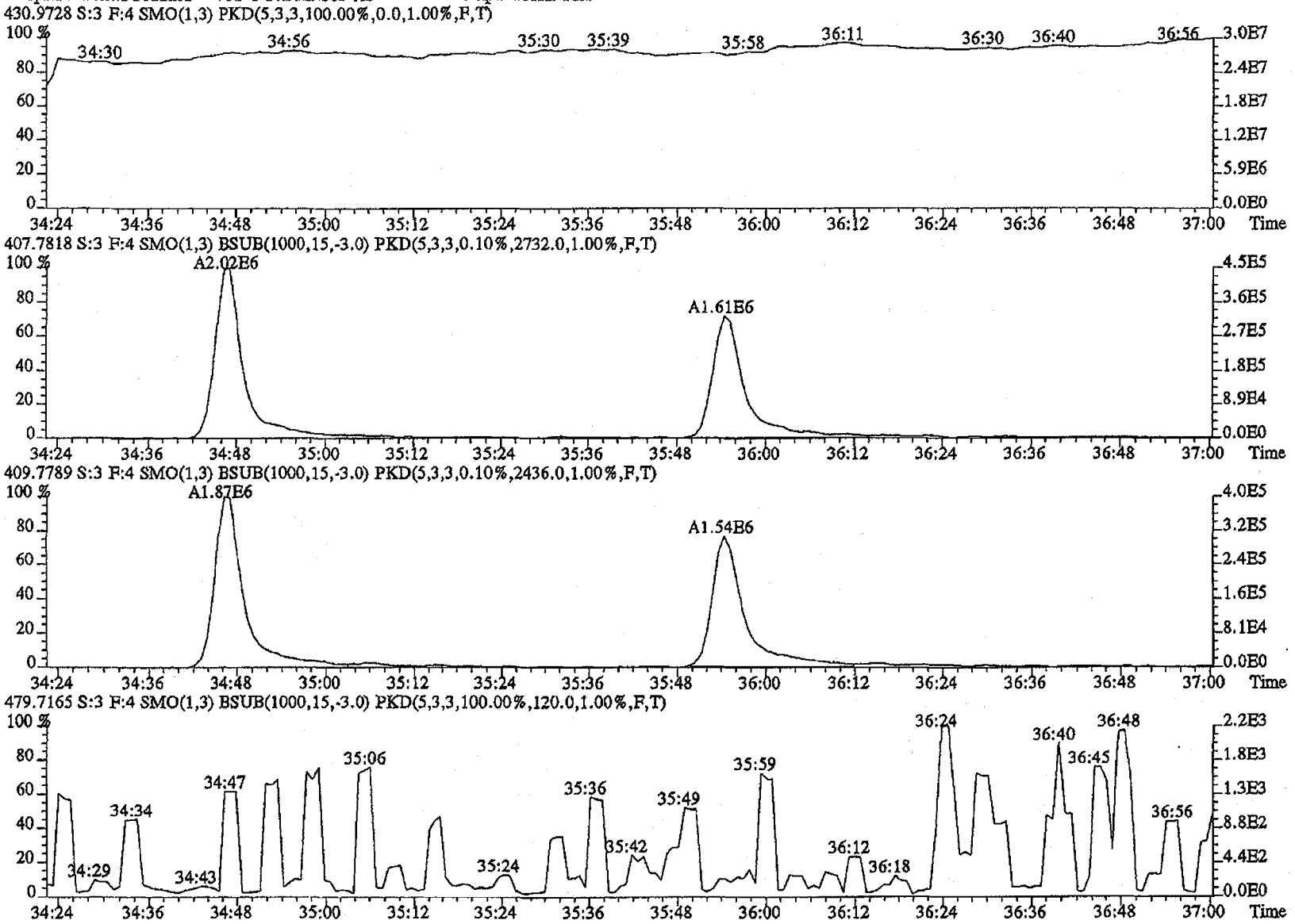
445.7555 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,80.0,1.00%,F,T)



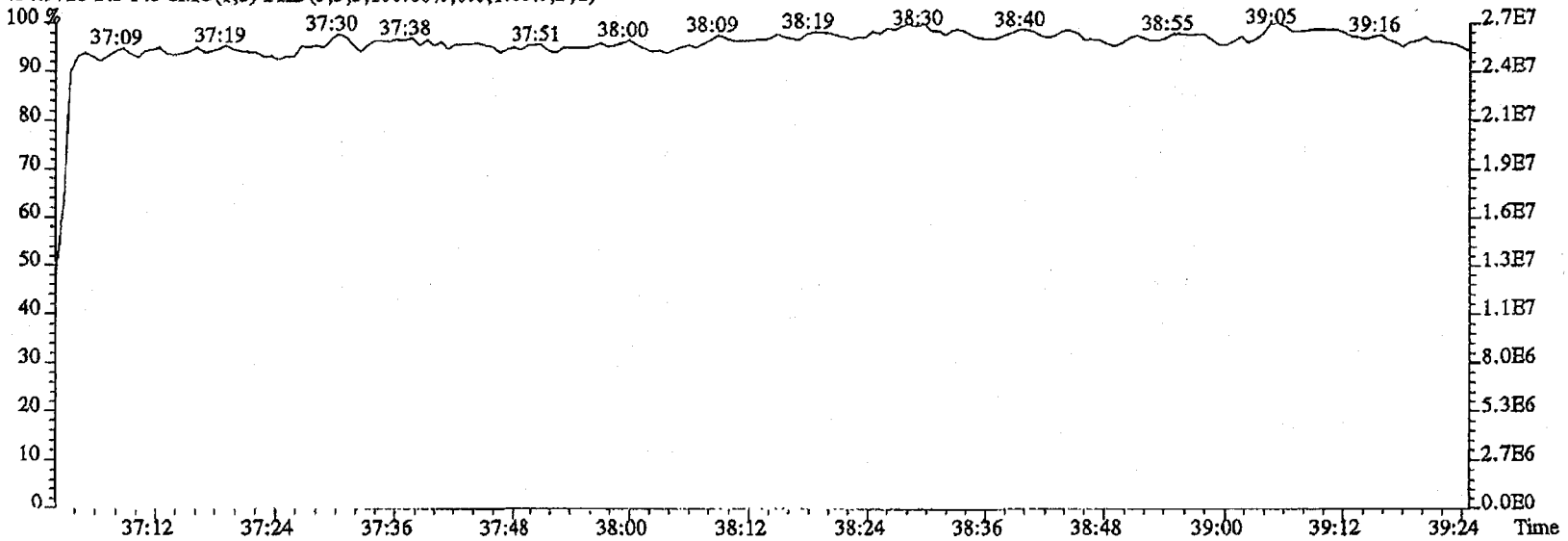
380.9760 S:3 F:3 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



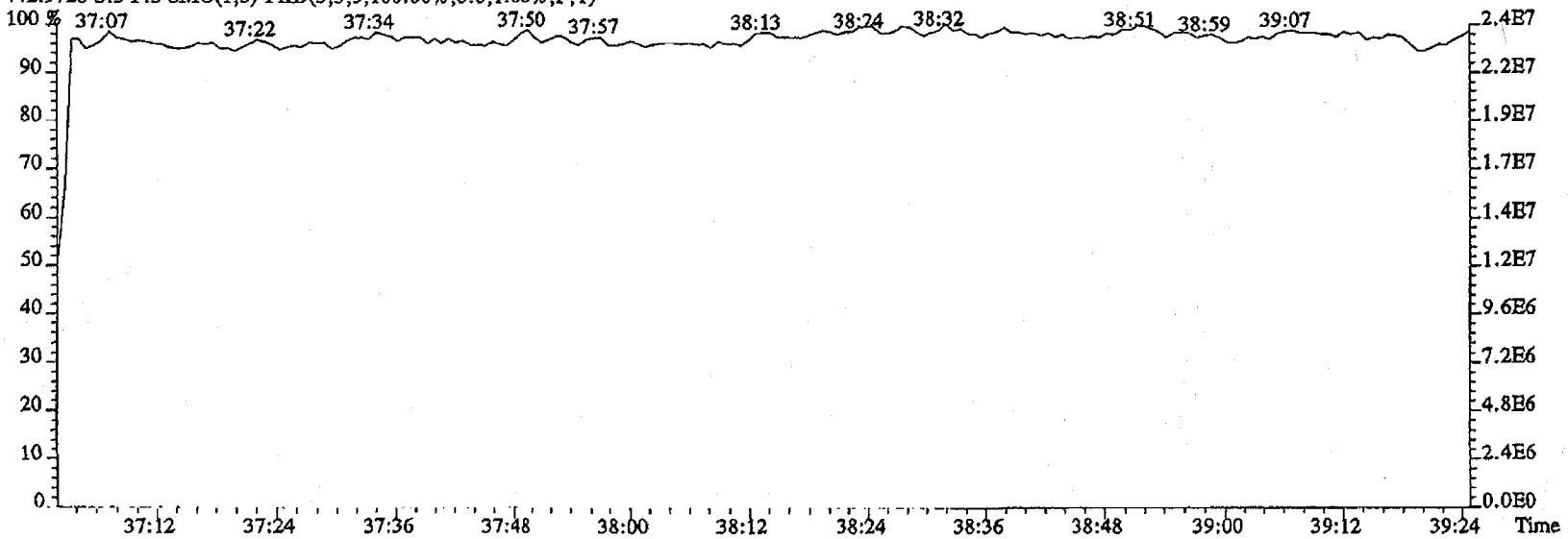
File:22FE11A4D5 #1-200 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES



File:22FE11A4D5 #1-193 Acq:22-FEB-2011 14:22:11 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:ST0222A :CS-1 10DXN503 AS Exp:DIOXINRES
454.9728 S:3 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:3 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

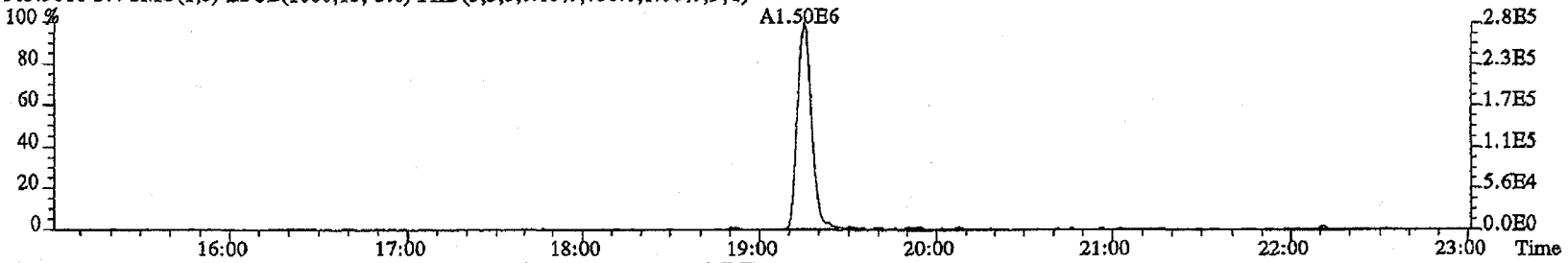


Run #3 Filename 22FE11A4D5 S: 4 I: 1
Acquired: 22-FEB-11 15:06:45 Processed: 23-FEB-11 09:25:09
Run: 15SE098D2 Analyte: 8290 Cal: 82900222114D5
Comments:
Sample text: ST0222B :CS-2 10DXN504 AS

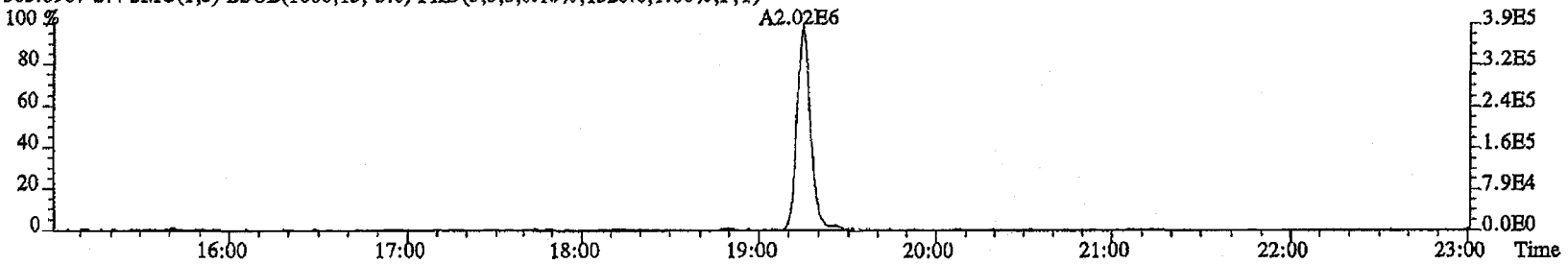
Name	Resp	RA		RT	RRF		Mod?
13C-1,2,3,4-TCDD	193759500	0.78	y	19:50	-	100.00	n
13C-2,3,7,8-TCDF	220070800	0.77	y	19:14	1.1358	100.00	n
2,3,7,8-TCDF	3520850	0.74	y	19:15	0.7999	2.00	n
Total TCDF	-	-	n	-	0.7999	2.00	n
13C-2,3,7,8-TCDD	191097700	0.78	y	20:03	0.9863	100.00	n
2,3,7,8-TCDD	3477940	0.73	y	20:04	0.9100	2.00	n
Total TCDD	-	-	n	-	0.9100	2.00	n
37Cl-2,3,7,8-TCDD	5348620	1.00	y	20:04	1.3802	2.00	n
13C-1,2,3,7,8-PeCDF	198094600	1.61	y	25:04	1.0224	100.00	n
1,2,3,7,8-PeCDF	19136150	1.54	y	25:06	0.9660	10.00	n
2,3,4,7,8-PeCDF	19221160	1.53	y	26:38	0.9703	10.00	n
Total F2 PeCDF	-	-	n	-	0.9682	20.00	n
Total F1 PeCDF	-	-	n	-	0.9682	20.00	n
13C-1,2,3,7,8-PeCDD	135428900	1.56	y	27:27	0.6990	100.00	n
1,2,3,7,8-PeCDD	14196020	1.43	y	27:29	1.0482	10.00	n
Total PeCDD	-	-	n	-	1.0482	10.00	n
13C-1,2,3,7,8,9-HxCDD	134074900	1.26	y	33:17	-	100.00	n
13C-1,2,3,4,7,8-HxCDF	116287100	0.51	y	32:10	0.8673	100.00	n
1,2,3,4,7,8-HxCDF	13689350	1.15	y	32:11	1.1772	10.00	n
1,2,3,6,7,8-HxCDF	17538560	1.12	y	32:18	1.5082	10.00	n
2,3,4,6,7,8-HxCDF	15841760	1.15	y	32:49	1.3623	10.00	n
1,2,3,7,8,9-HxCDF	13531690	1.12	y	33:27	1.1636	10.00	n
Total HxCDF	-	-	n	-	1.3028	40.00	n
13C-1,2,3,6,7,8-HxCDD	124932000	1.31	y	33:01	0.9318	100.00	n
1,2,3,4,7,8-HxCDD	9664210	1.22	y	32:57	0.7736	10.00	n
1,2,3,6,7,8-HxCDD	13104470	1.29	y	33:02	1.0489	10.00	n
1,2,3,7,8,9-HxCDD	13148610	1.28	y	33:17	1.0525	10.00	n
Total HxCDD	-	-	n	-	0.9583	30.00	n
13C-1,2,3,4,6,7,8-HpCDF	124132600	0.45	y	34:47	0.9258	100.00	n
1,2,3,4,6,7,8-HpCDF	16588770	1.09	y	34:47	1.3364	10.00	n
1,2,3,4,7,8,9-HpCDF	14037670	1.11	y	35:55	1.1309	10.00	n
Total HpCDF	-	-	n	-	1.2336	20.00	n
13C-1,2,3,4,6,7,8-HpCDD	122845800	1.06	y	35:35	0.9162	100.00	n
1,2,3,4,6,7,8-HpCDD	12185840	0.96	y	35:36	0.9920	10.00	n
Total HpCDD	-	-	n	-	0.9920	10.00	n
13C-OCDD	158033000	0.85	y	38:05	0.5893	200.00	n
OCDF	20718560	0.92	y	38:12	1.3110	20.00	n
OCDD	17935170	0.89	y	38:05	1.1349	20.00	n

File:22FE11A4D5 #1-530 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaB
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES

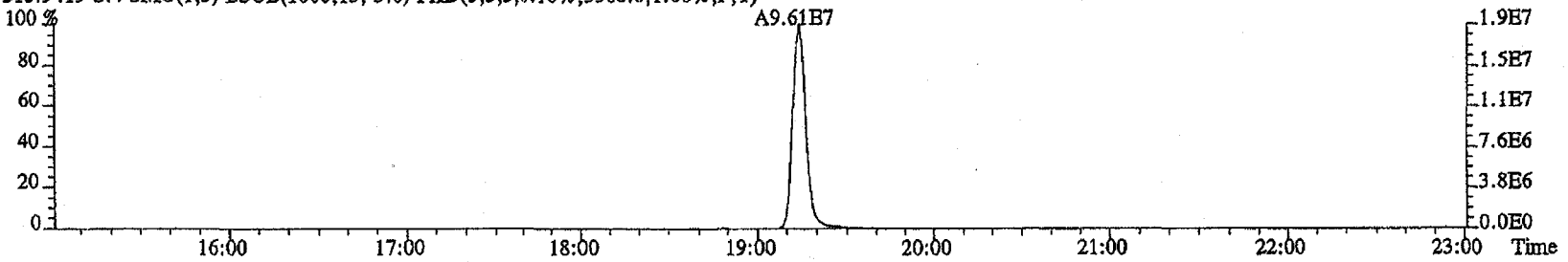
303.9016 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,736.0,1.00%,F,T)



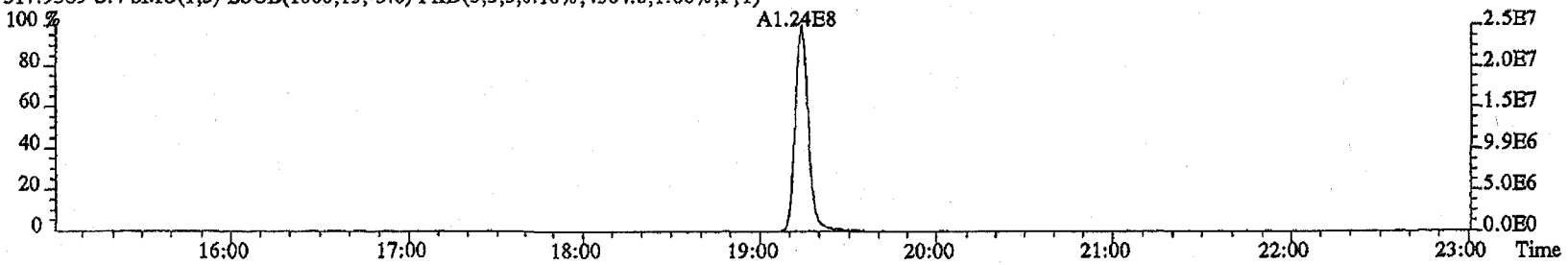
305.8987 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1320.0,1.00%,F,T)



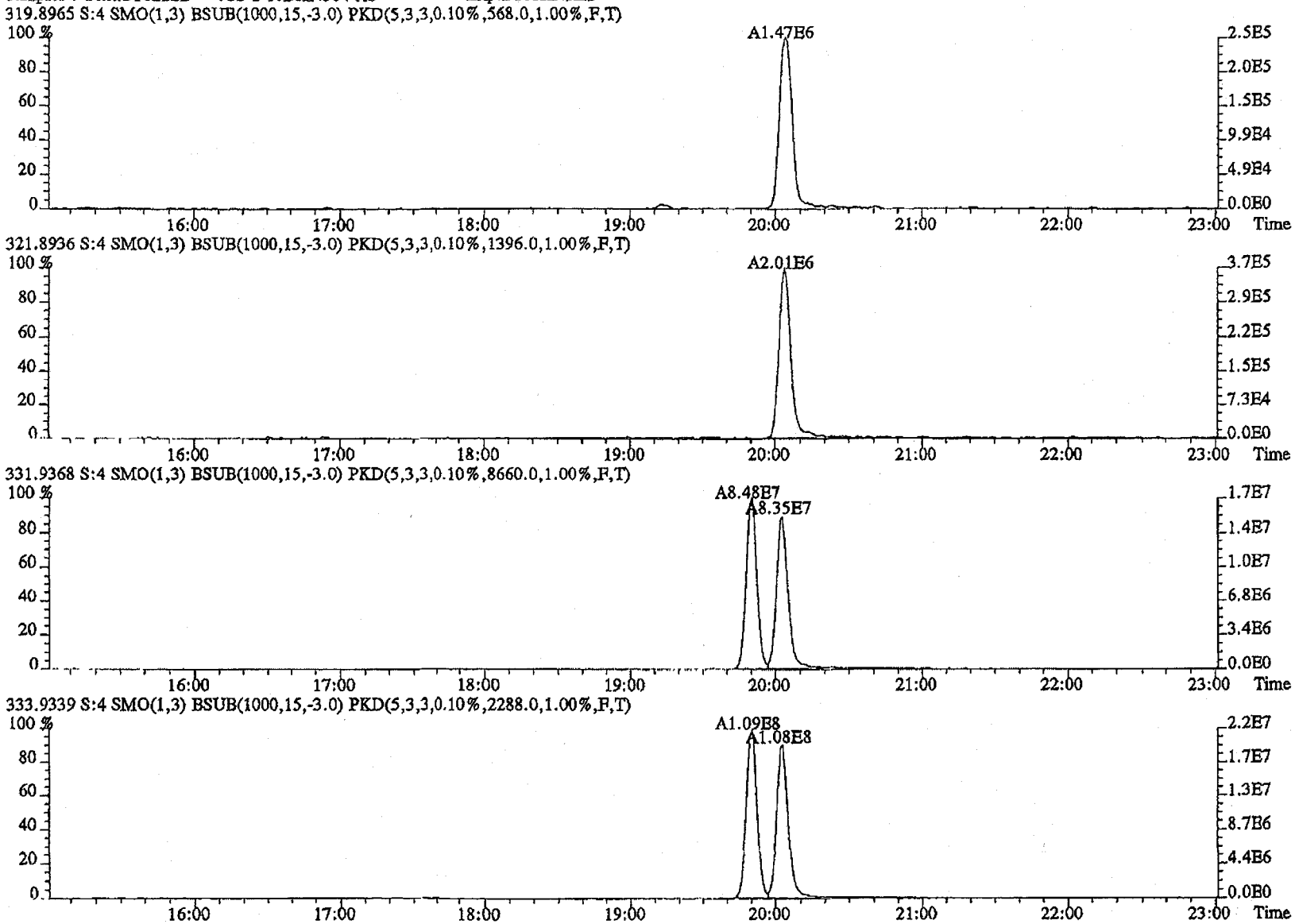
315.9419 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3568.0,1.00%,F,T)



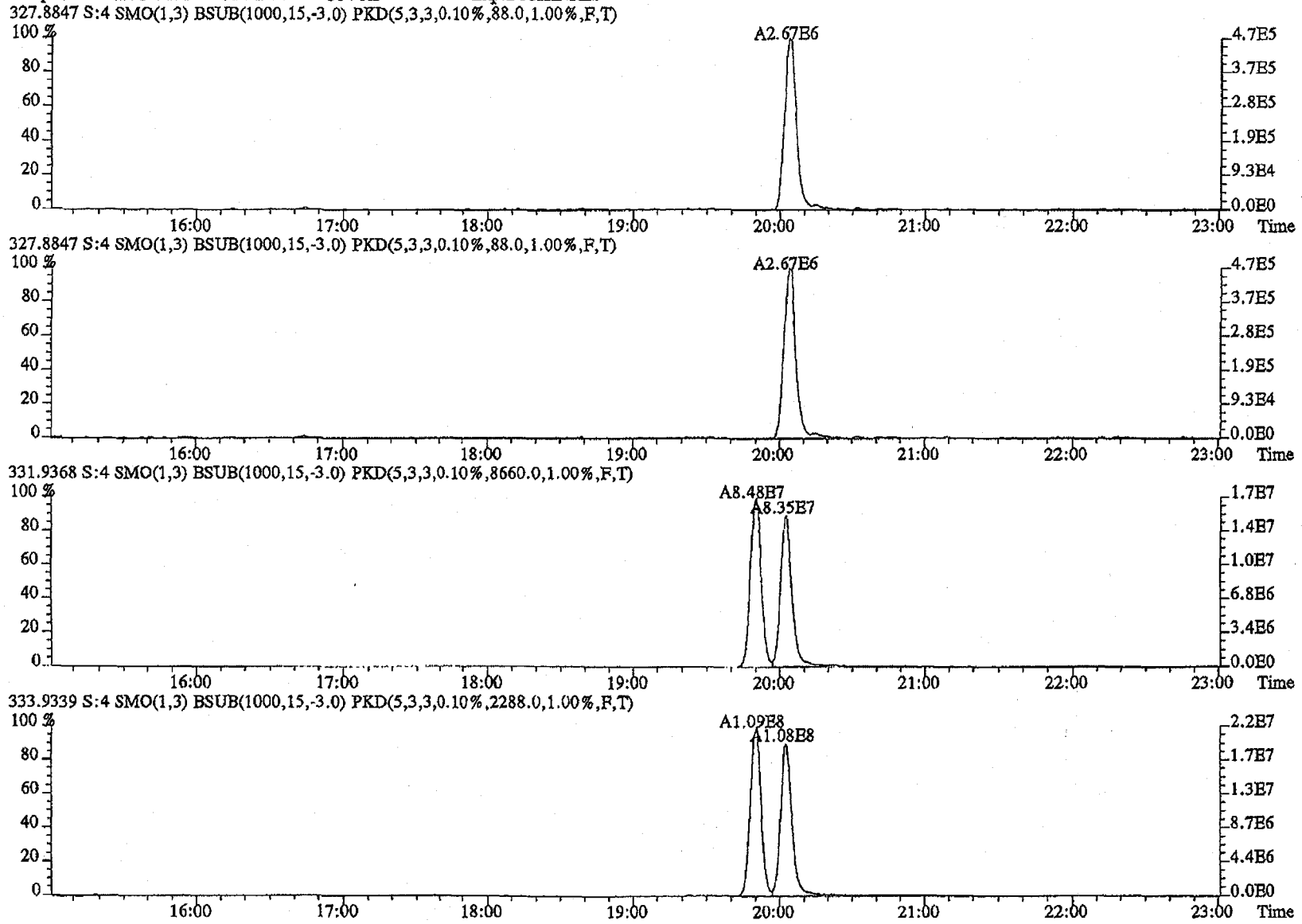
317.9389 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4564.0,1.00%,F,T)



File:22FE11A4D5 #1-530 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES

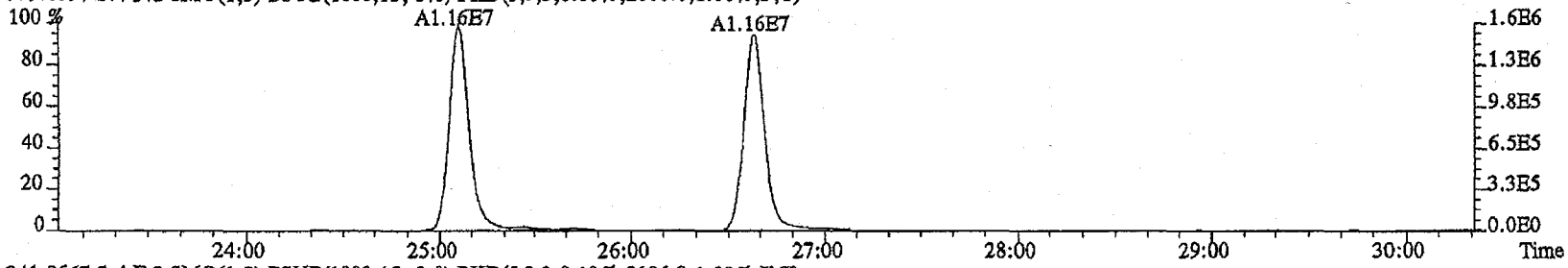


File:22FE11A4D5 #1-530 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES

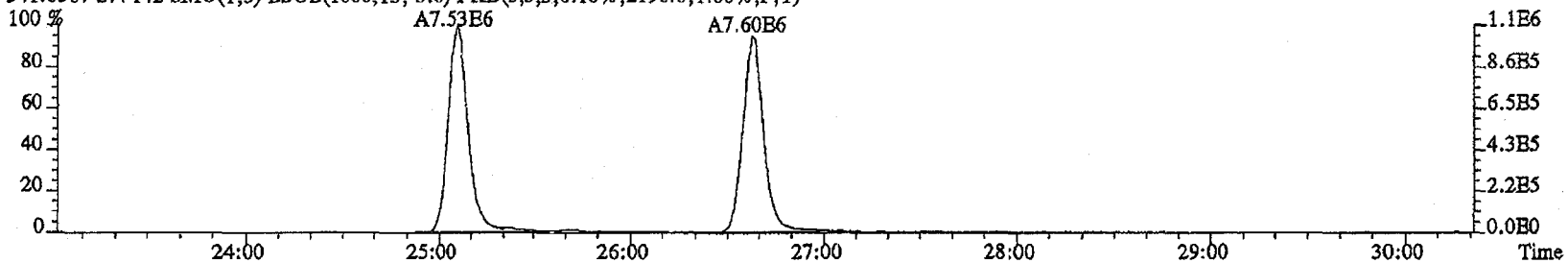


File:22FB11A4D5 #1-470 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES

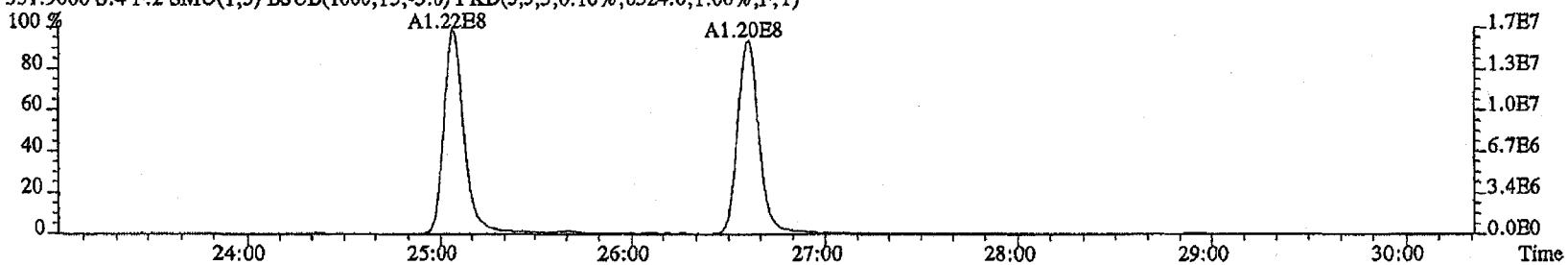
339.8597 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2000.0,1.00%,F,T)



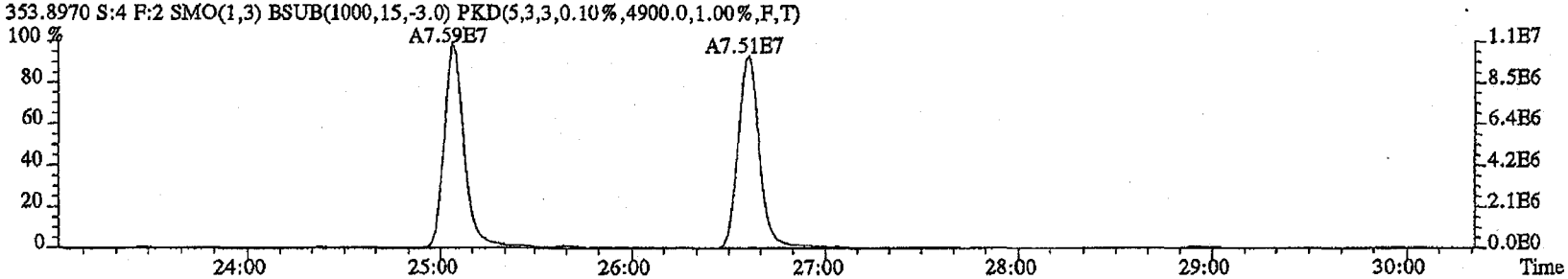
341.8567 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2196.0,1.00%,F,T)



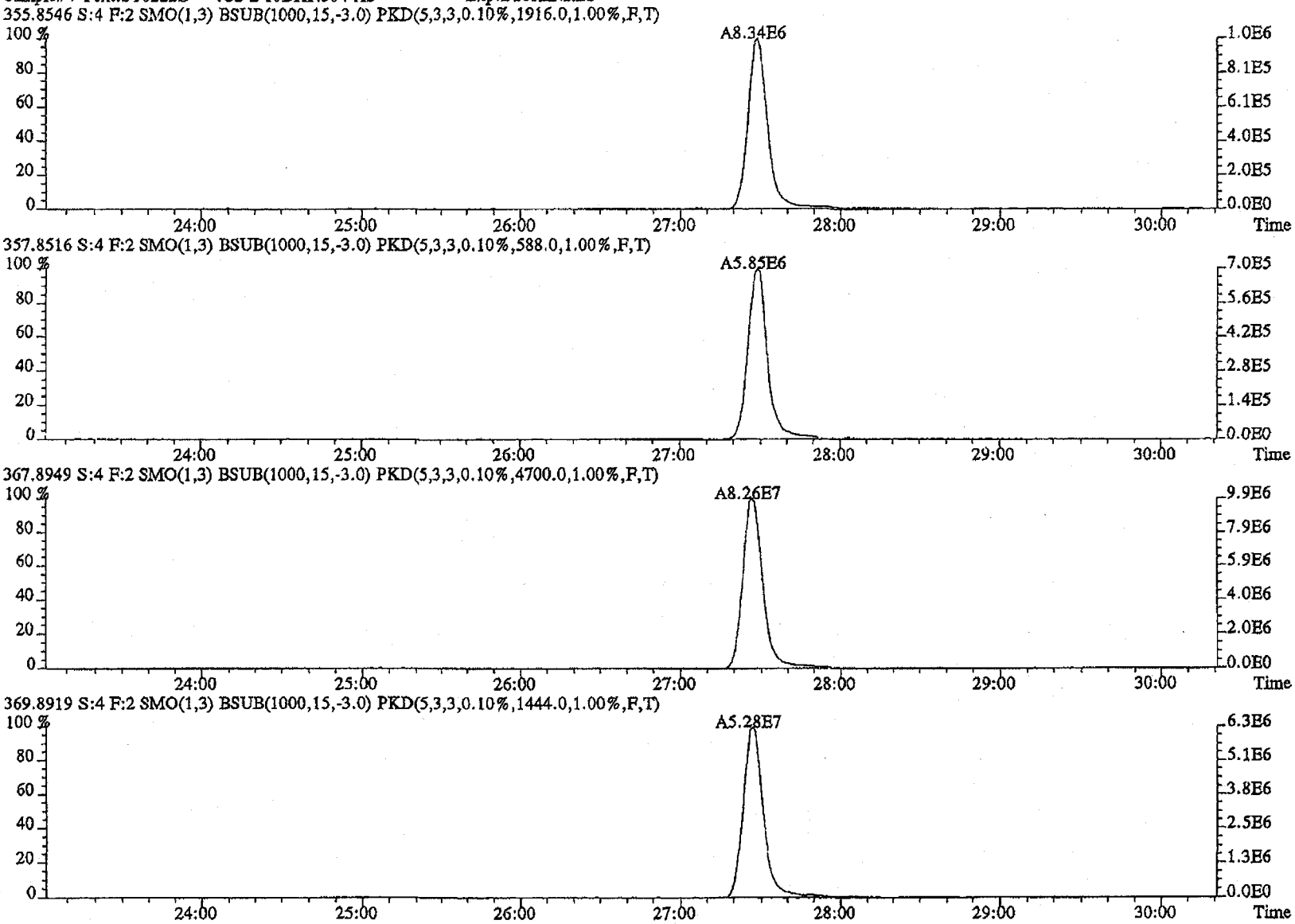
351.9000 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6324.0,1.00%,F,T)



353.8970 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4900.0,1.00%,F,T)

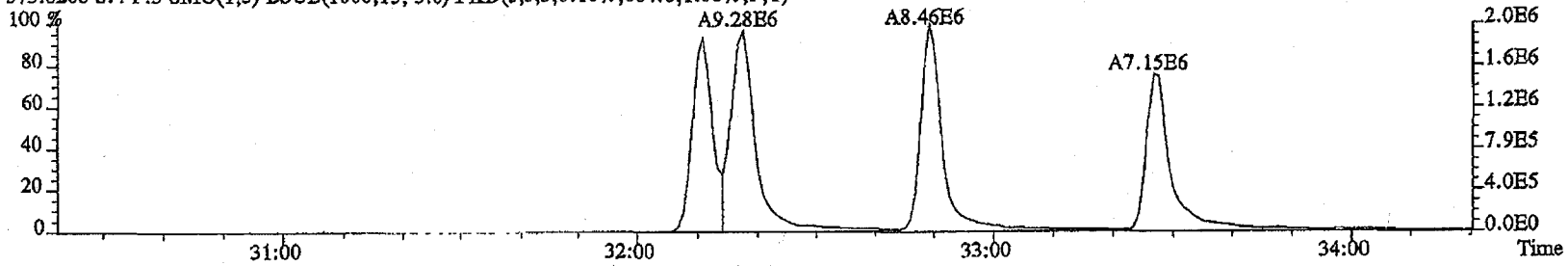


File:22FE11A4D5 #1-470 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES

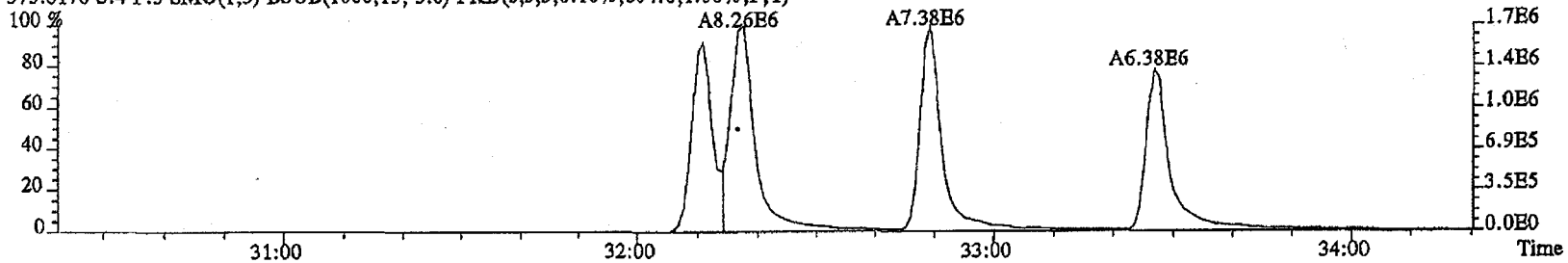


File:22FB11A4D5 #1-286 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES

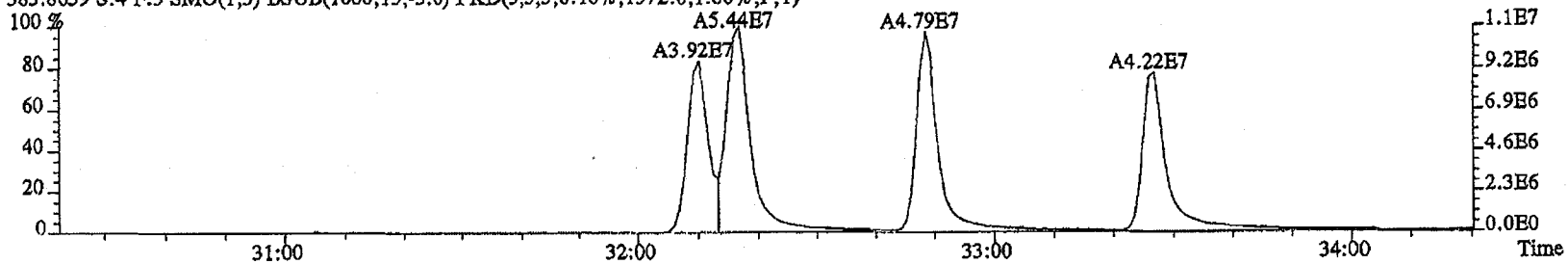
373.8208 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,884.0,1.00%,F,T)



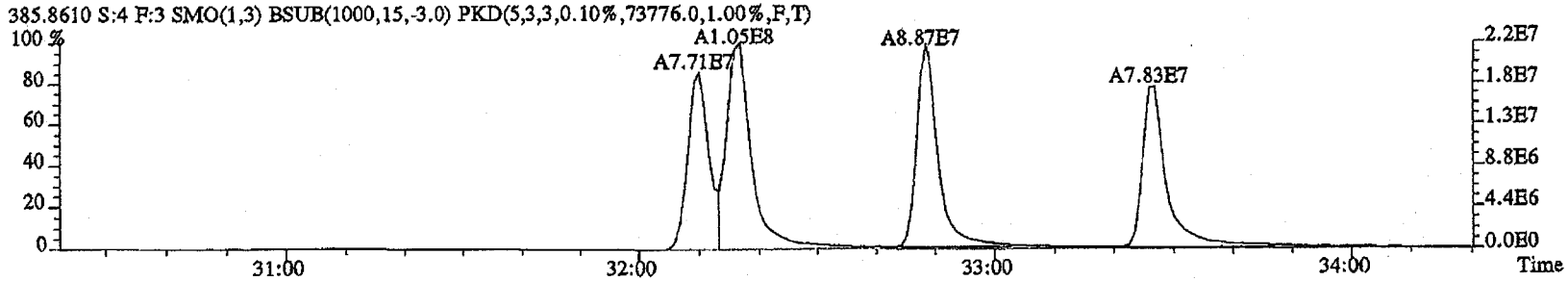
375.8178 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,604.0,1.00%,F,T)



383.8639 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1572.0,1.00%,F,T)

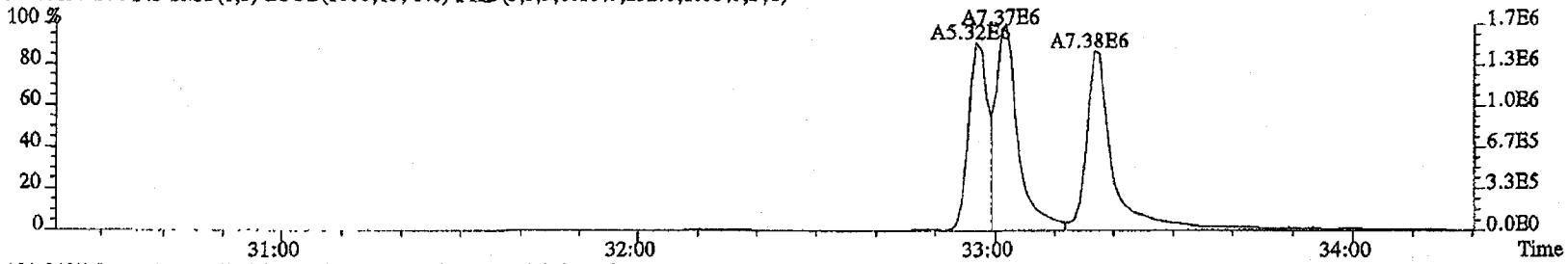


385.8610 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,73776.0,1.00%,F,T)

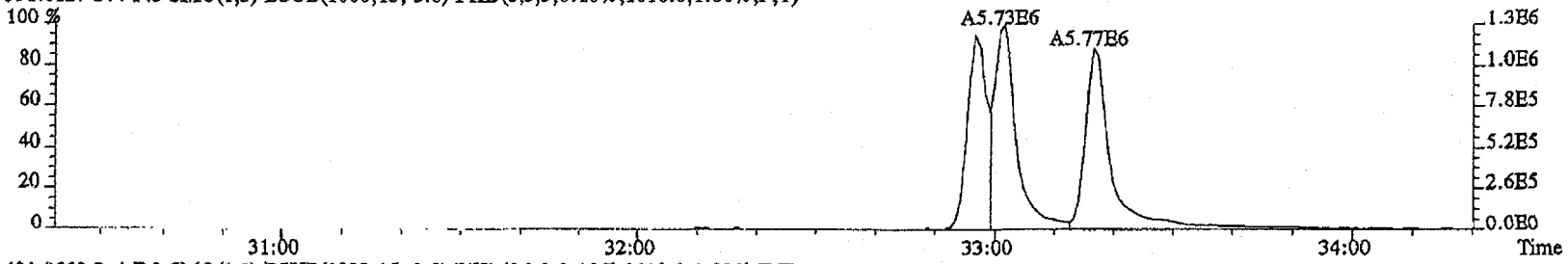


File:22FE11A4D5 #1-286 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES

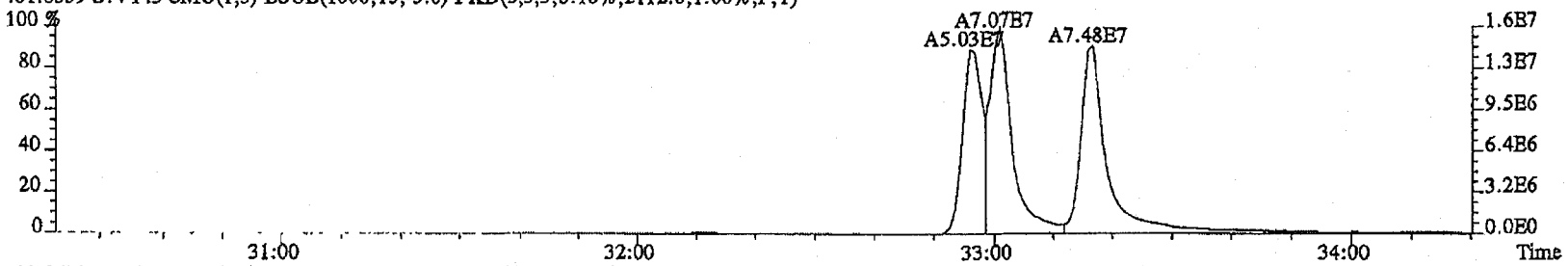
389.8157 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,232.0,1.00%,F,T)



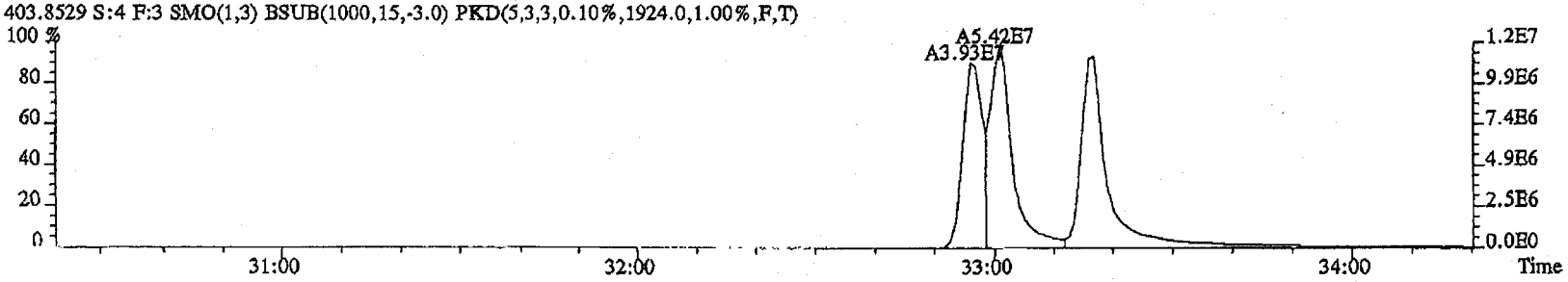
391.8127 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1016.0,1.00%,F,T)



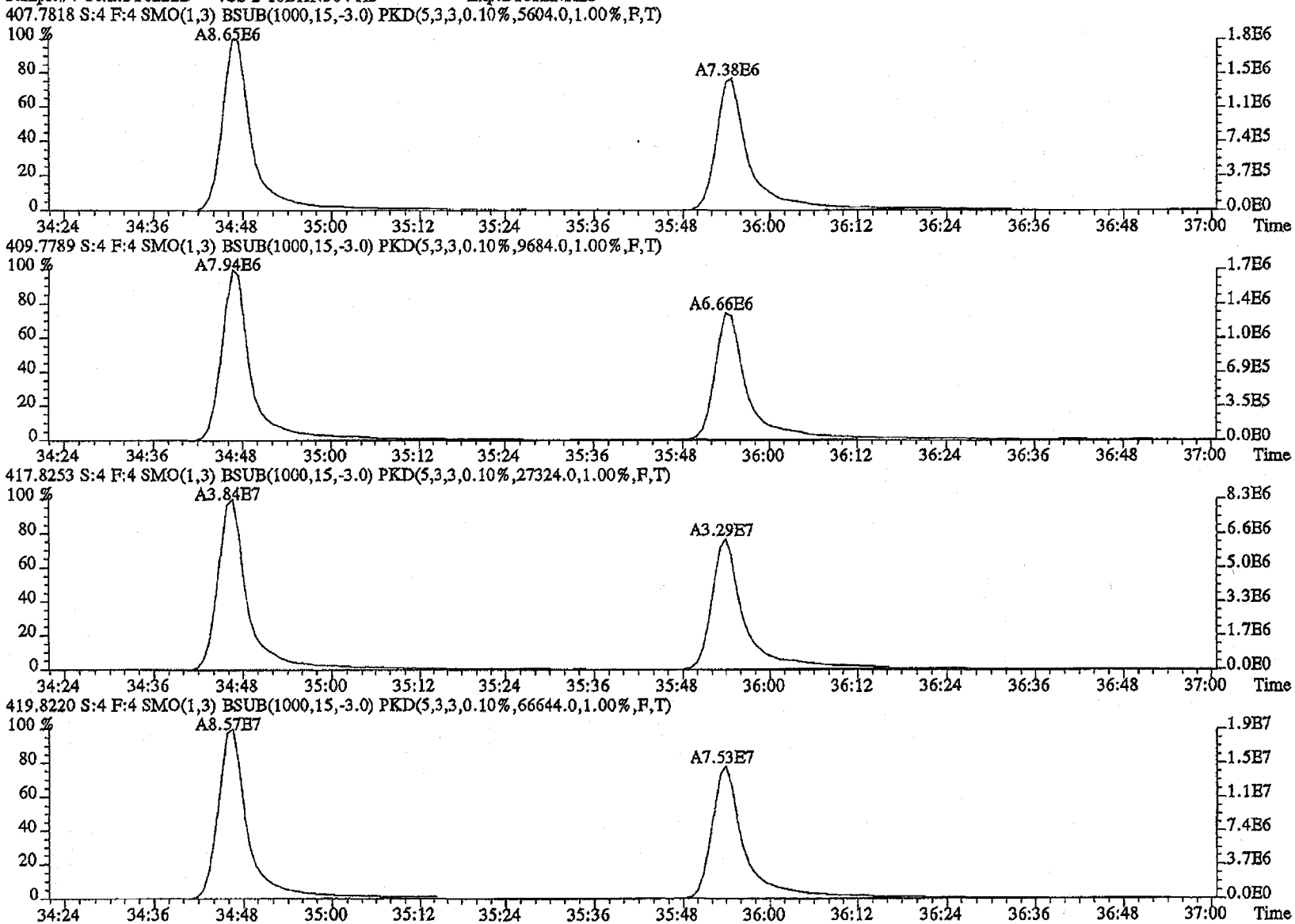
401.8559 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2112.0,1.00%,F,T)



403.8529 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1924.0,1.00%,F,T)

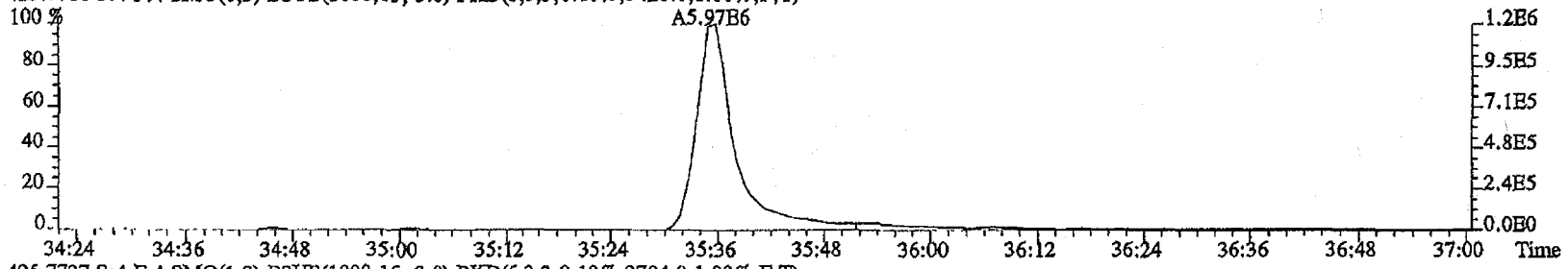


File:22FE11A4D5 #1-201 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES

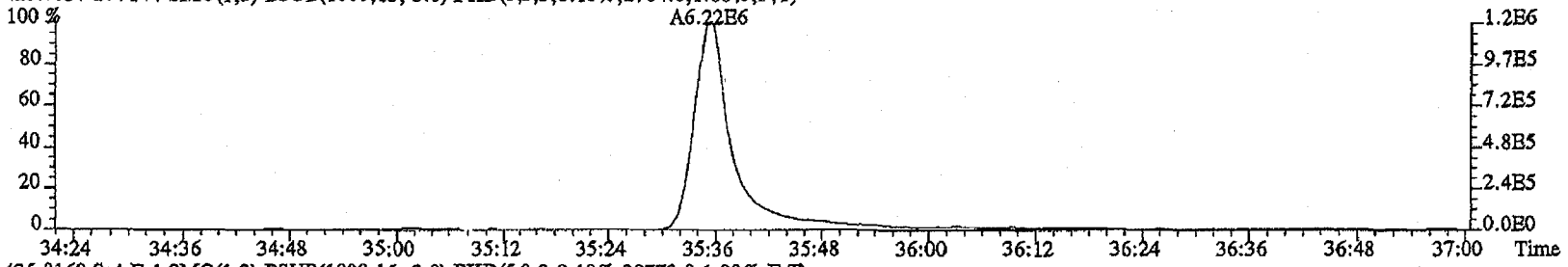


File:22FB11A4D5 #1-201 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRBS

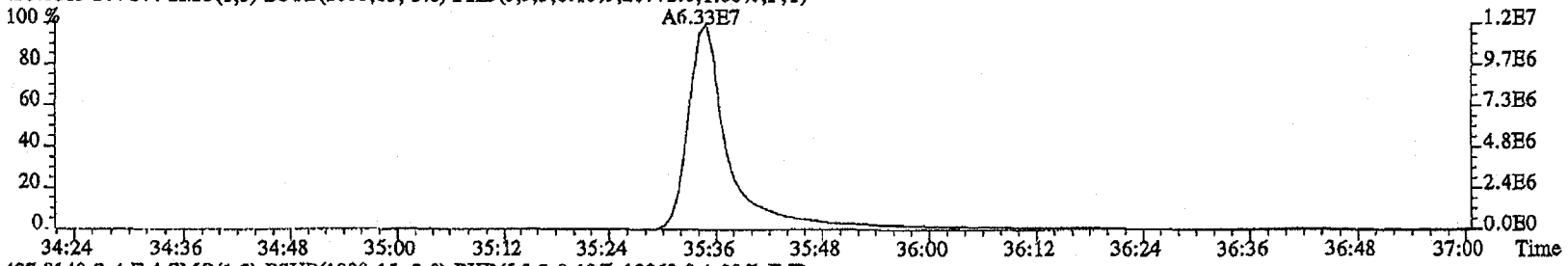
423.7766 S:4 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3420.0,1.00%,F,T)



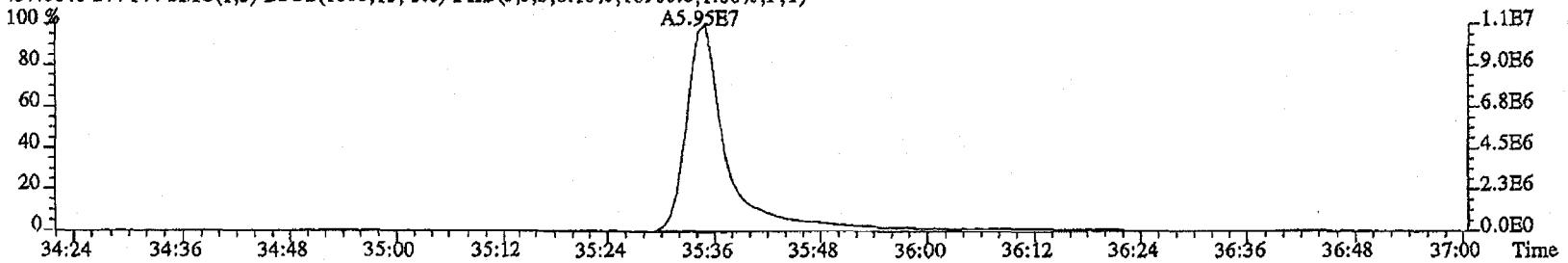
425.7737 S:4 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2704.0,1.00%,F,T)



435.8169 S:4 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,20772.0,1.00%,F,T)

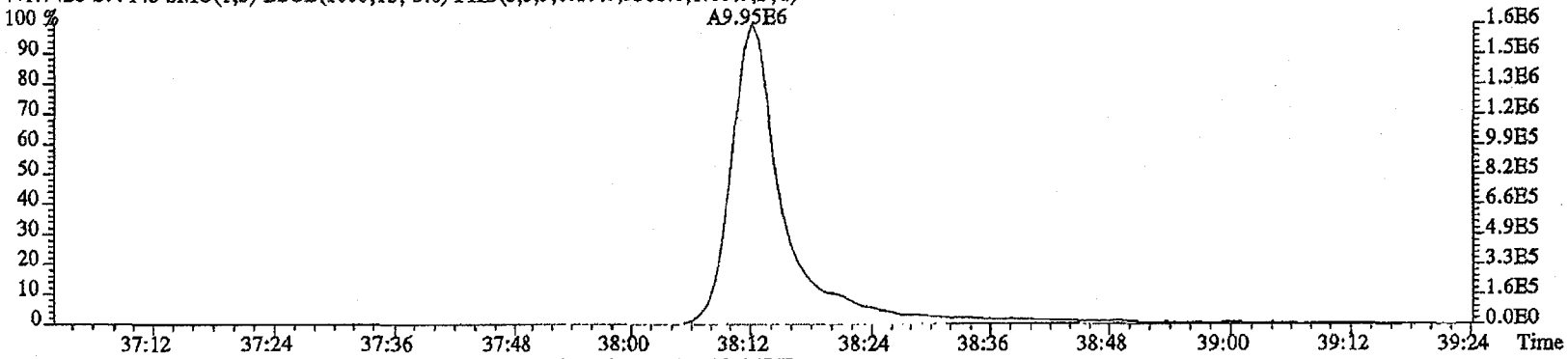


437.8140 S:4 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,18960.0,1.00%,F,T)

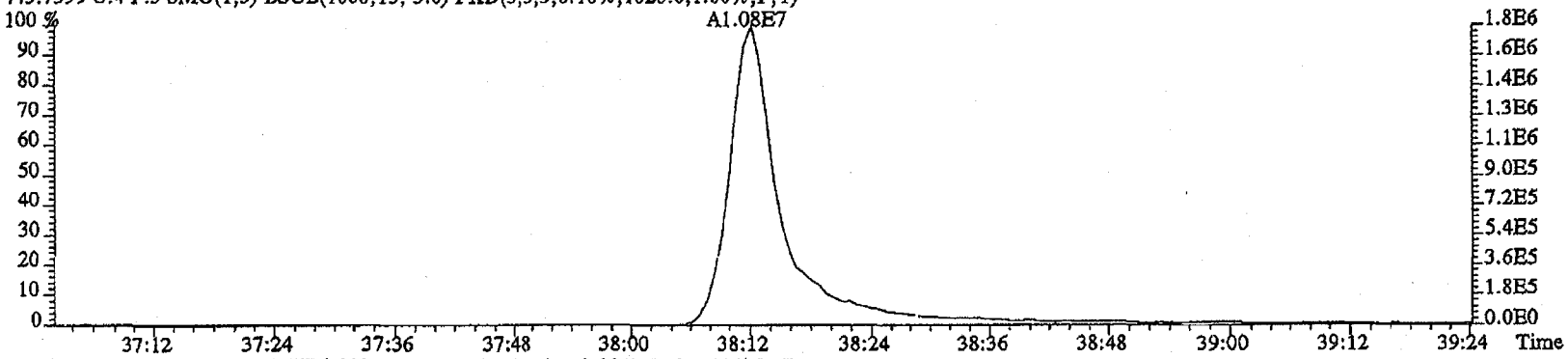


File:22FE11A4D5 #1-192 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES

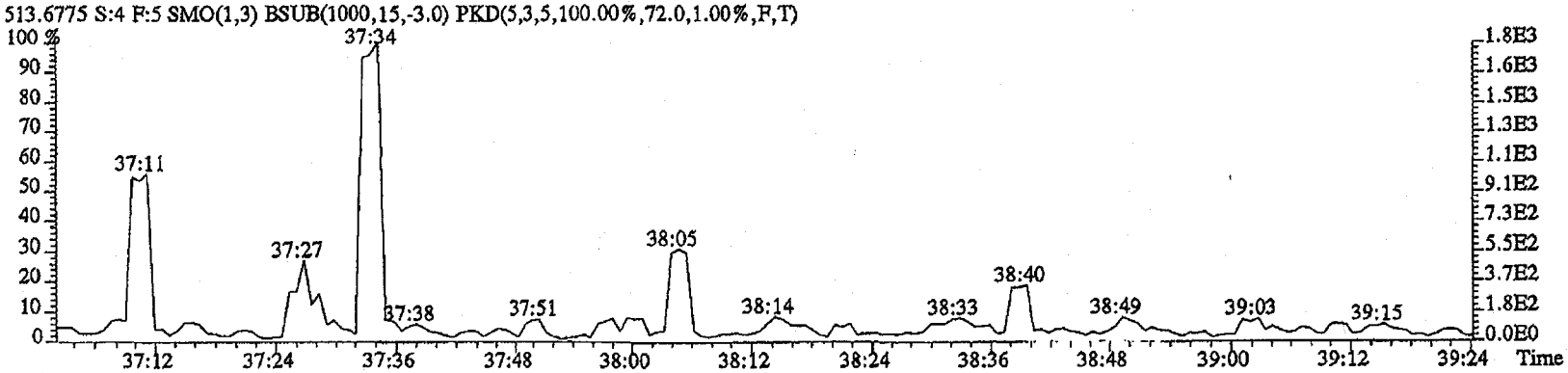
441.7428 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3588.0,1.00%,F,T)



443.7399 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1028.0,1.00%,F,T)

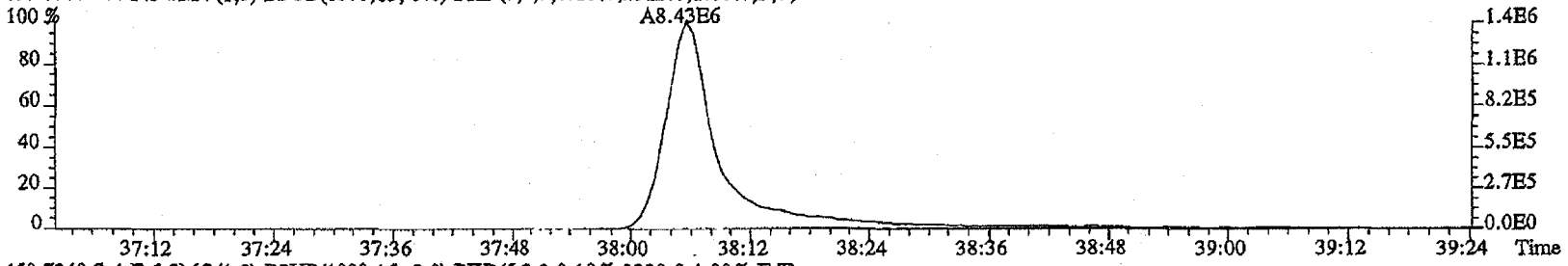


513.6775 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,72.0,1.00%,F,T)

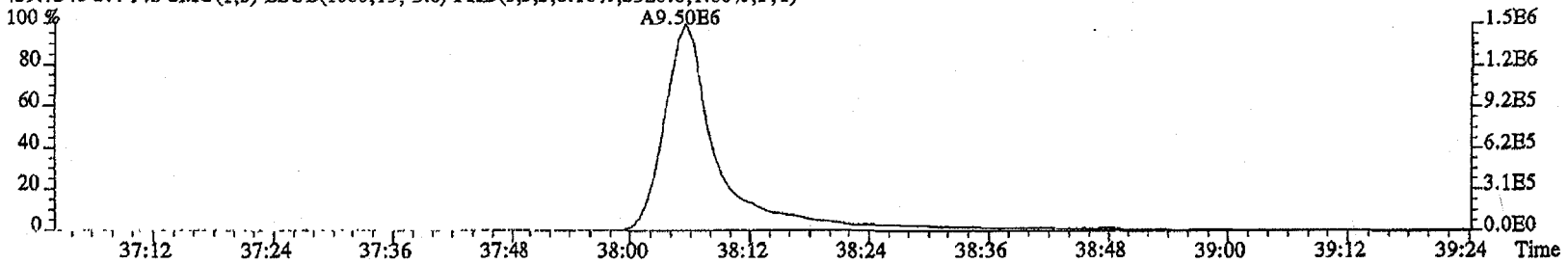


File:22FB11A4D5 #1-192 Acq:22-FBB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES

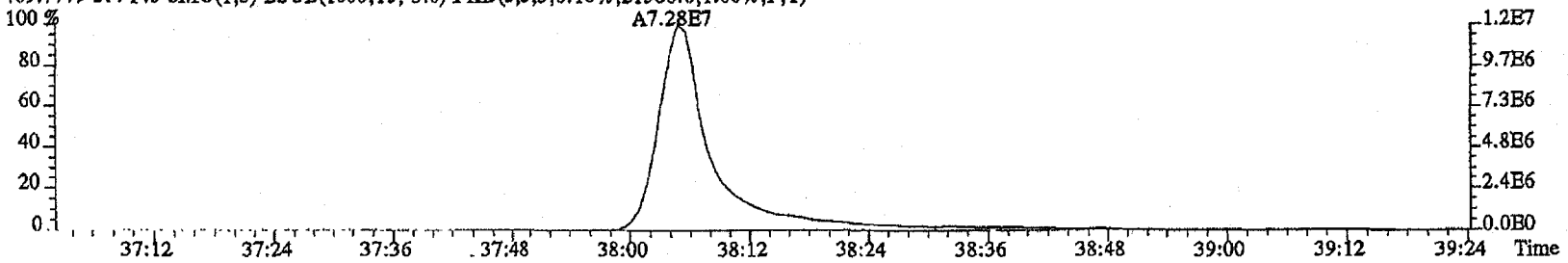
457.7377 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2312.0,1.00%,F,T)



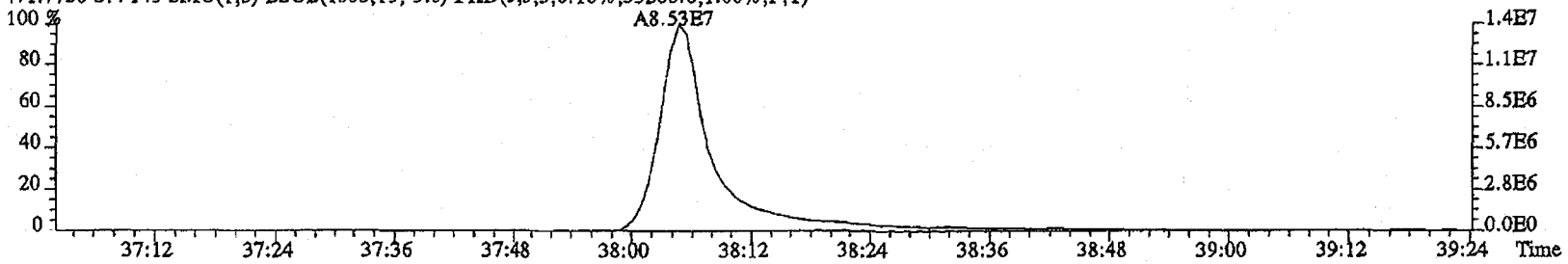
459.7348 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3320.0,1.00%,F,T)



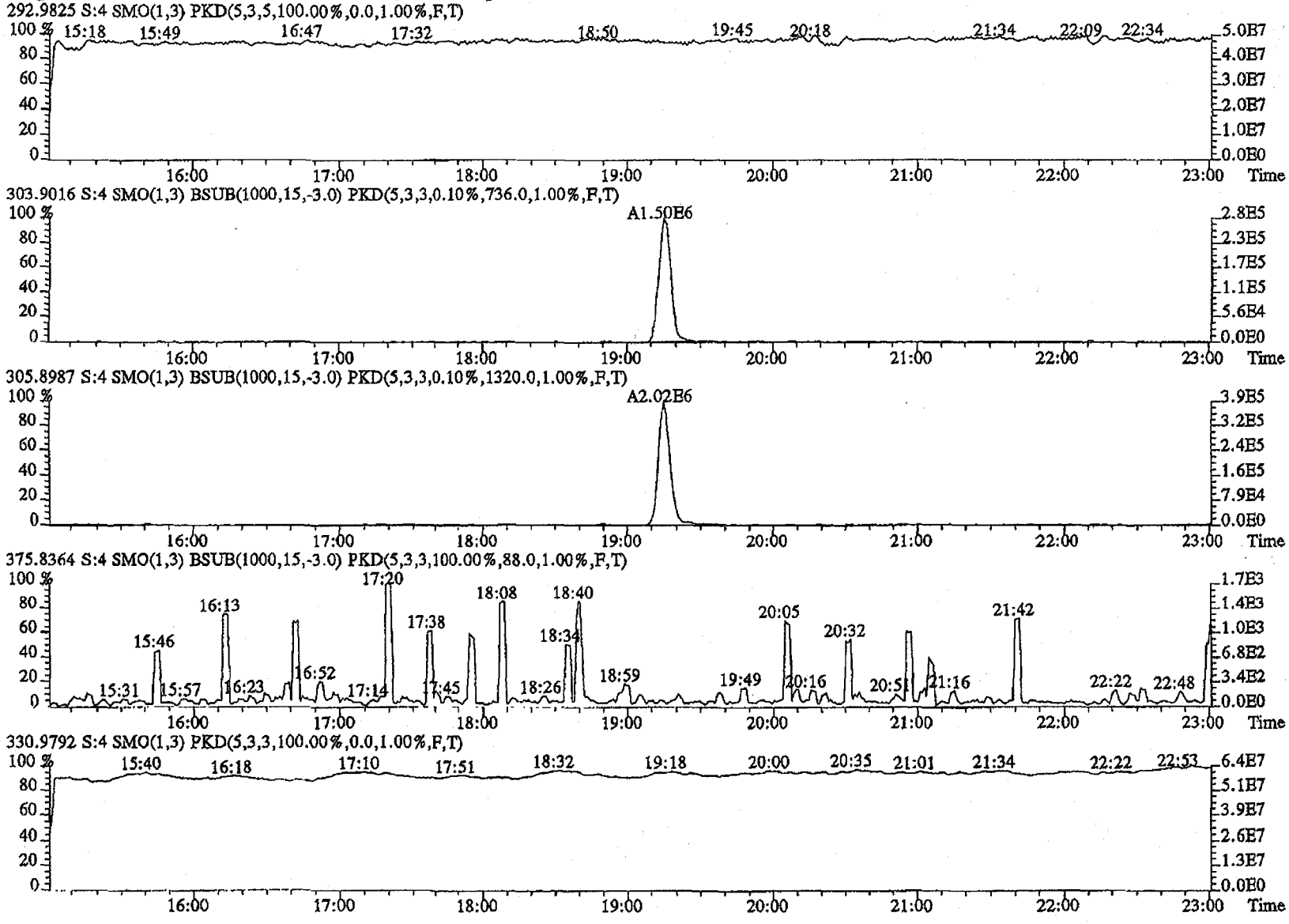
469.7779 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,21388.0,1.00%,F,T)



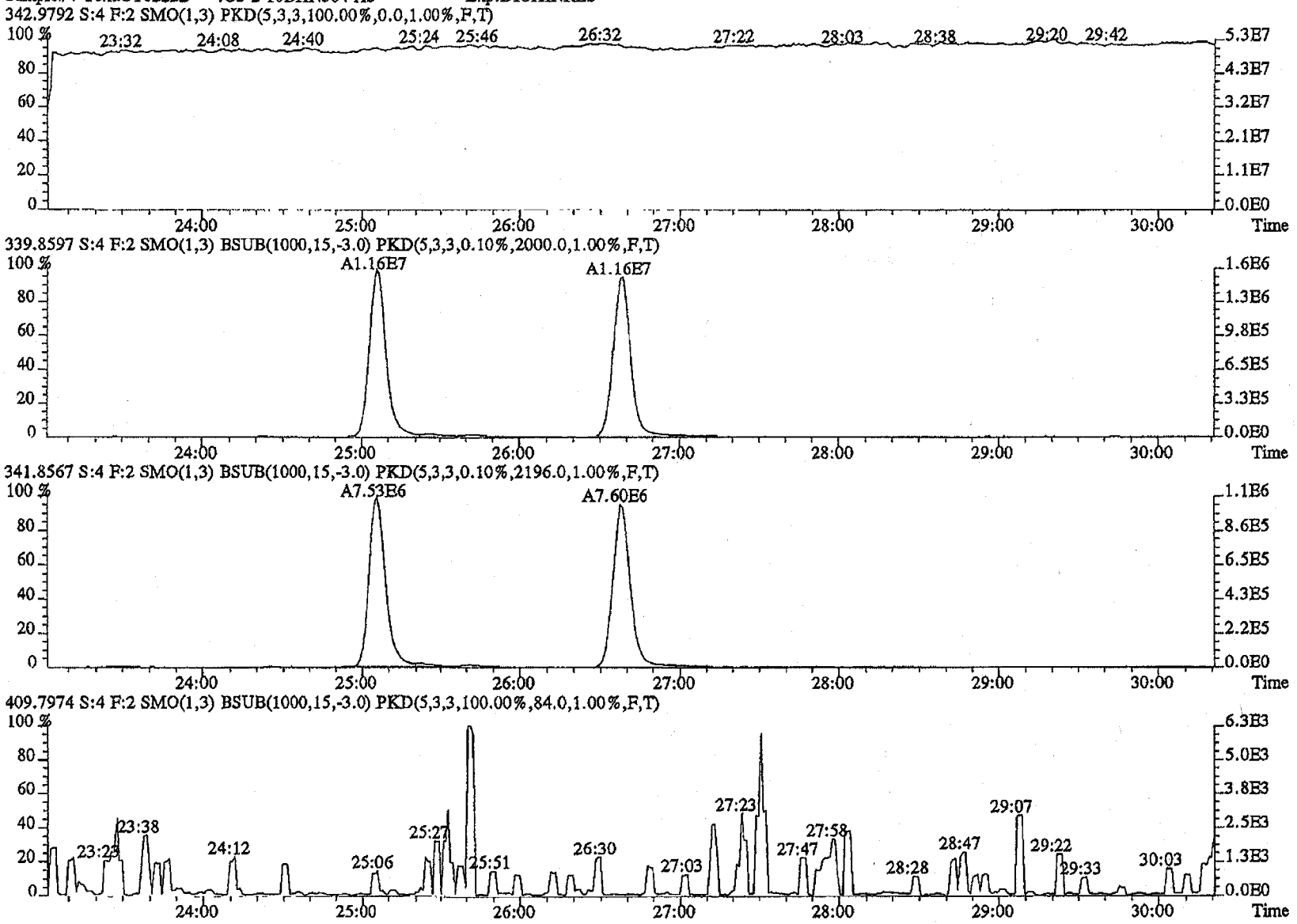
471.7750 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,35268.0,1.00%,F,T)



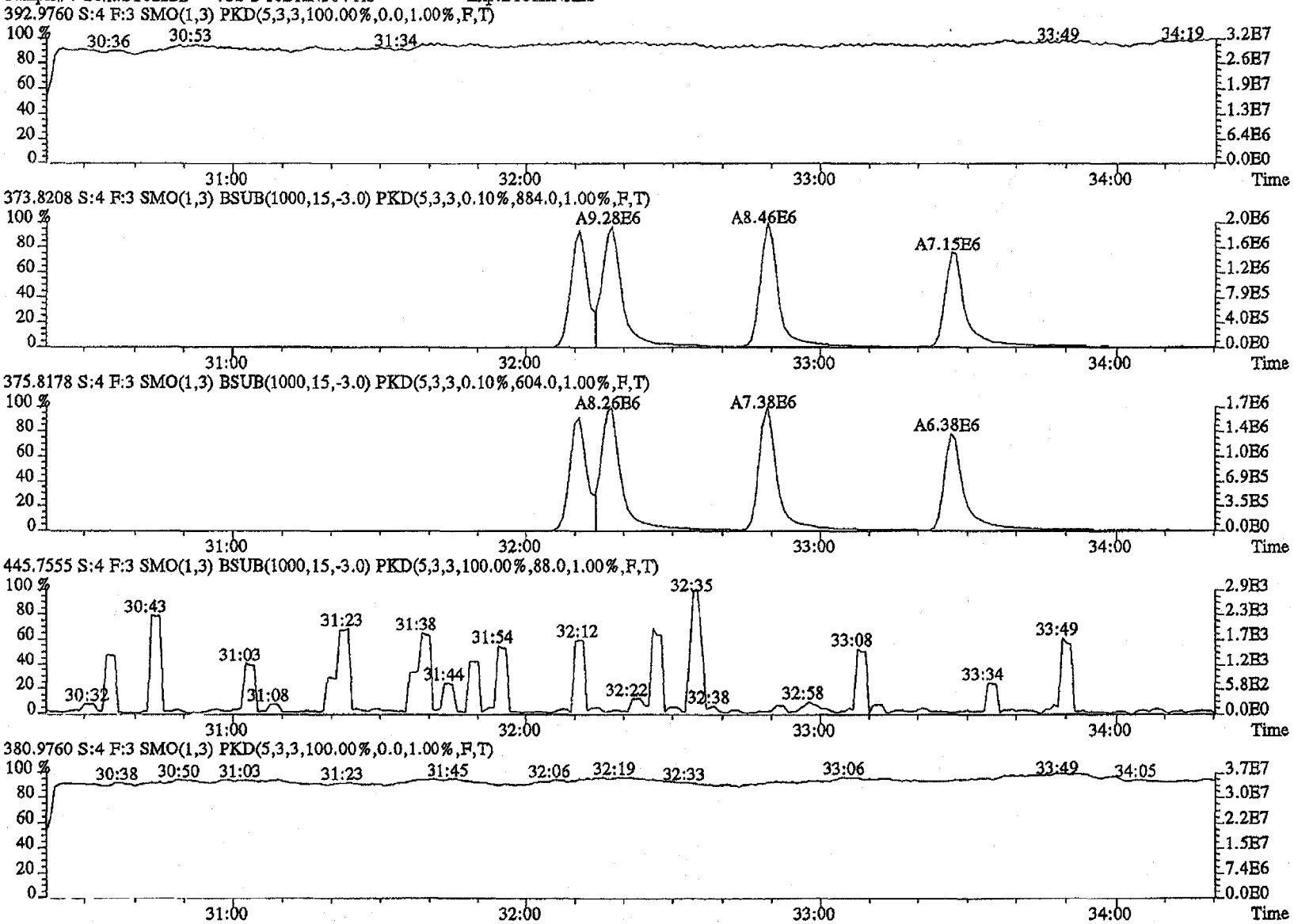
File:22FB11A4D5 #1-530 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES



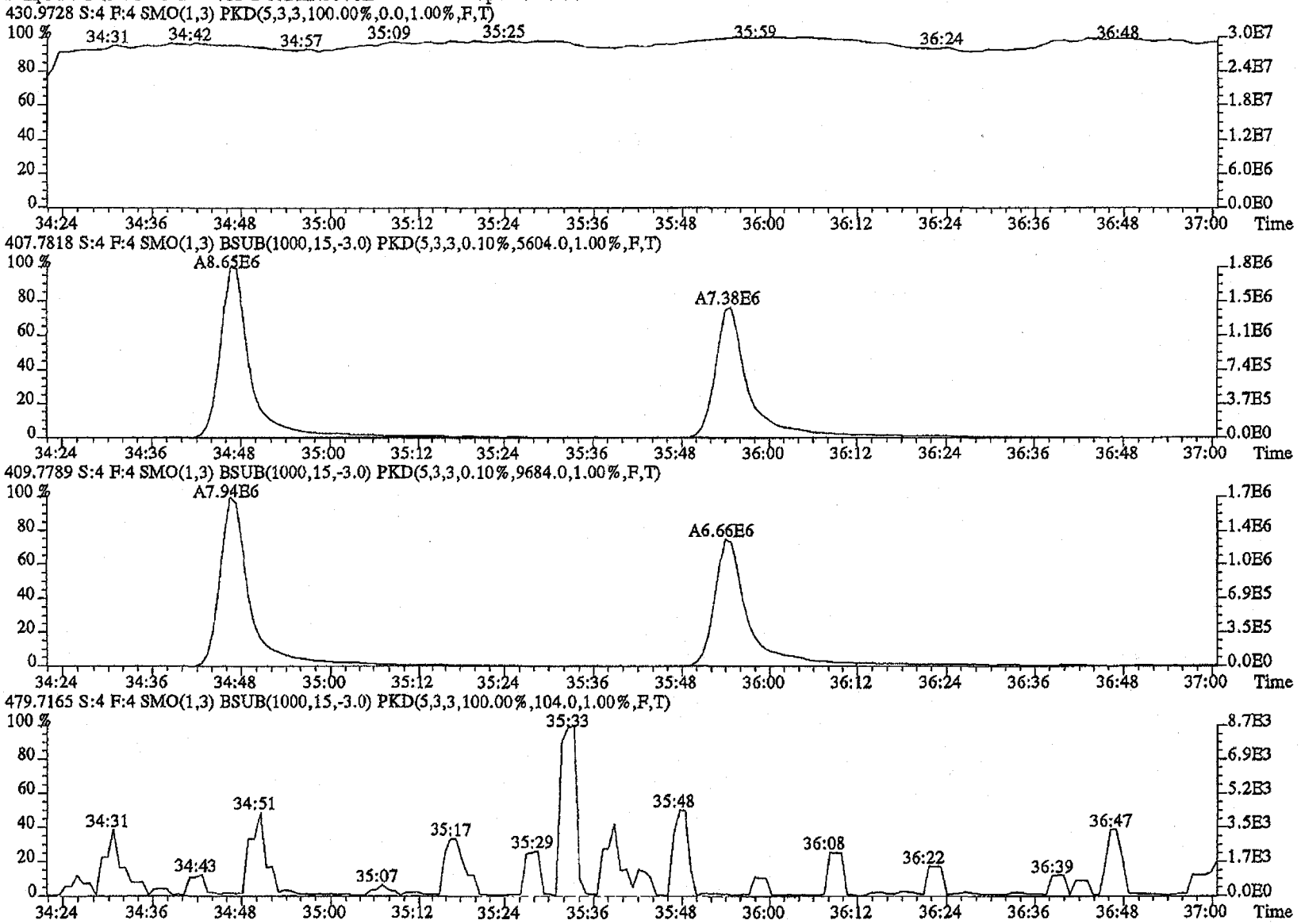
File:22FB11A4D5 #1-470 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES



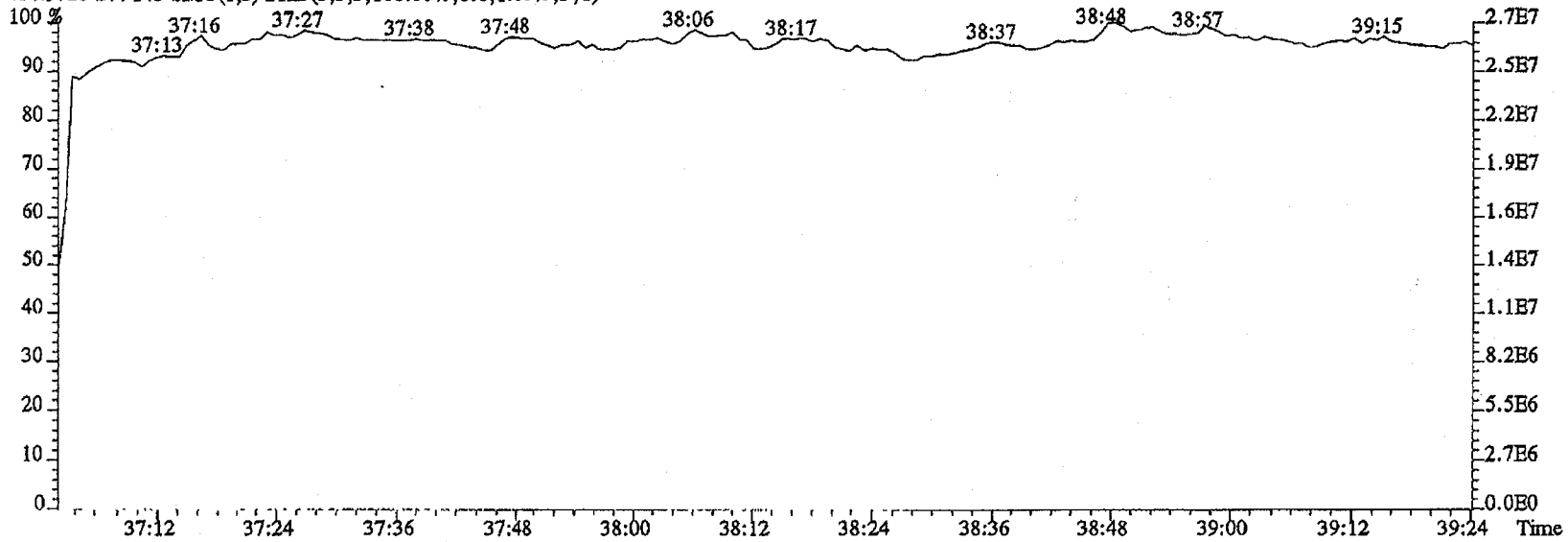
File:22FB11A4D5 #1-286 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES



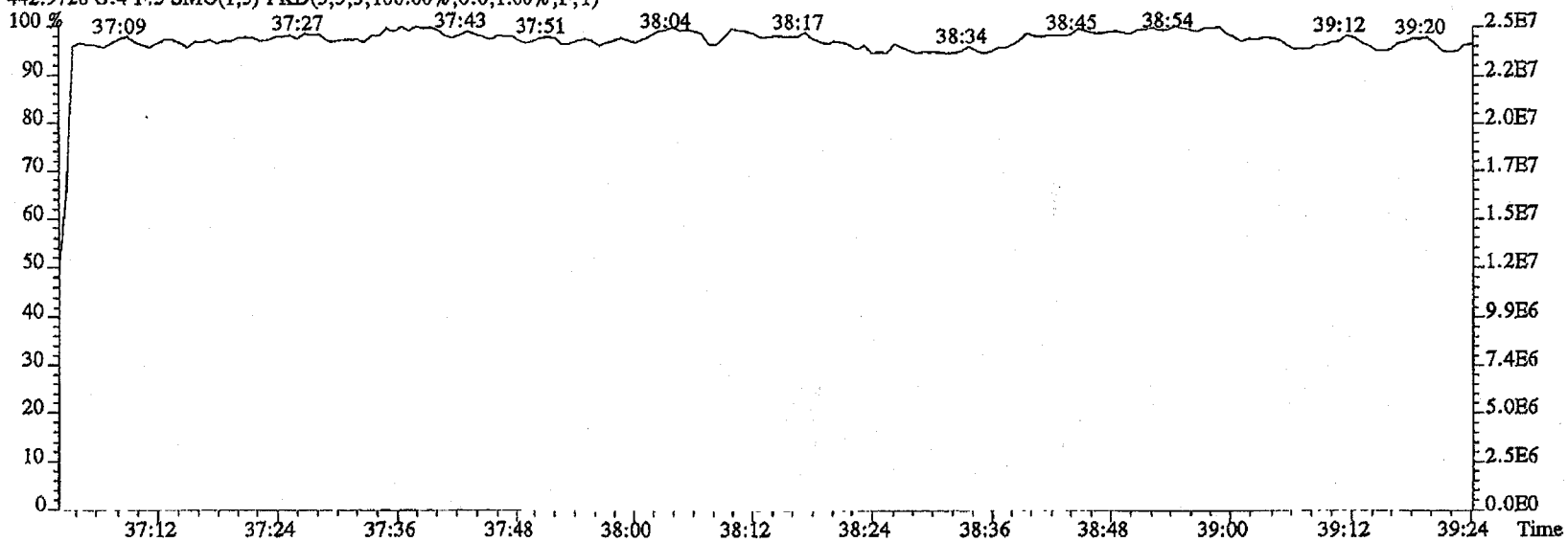
File:22FE11A4D5 #1-201 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES



File:22FE11A4D5 #1-192 Acq:22-FEB-2011 15:06:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:ST0222B :CS-2 10DXN504 AS Exp:DIOXINRES
454.9728 S:4 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:4 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

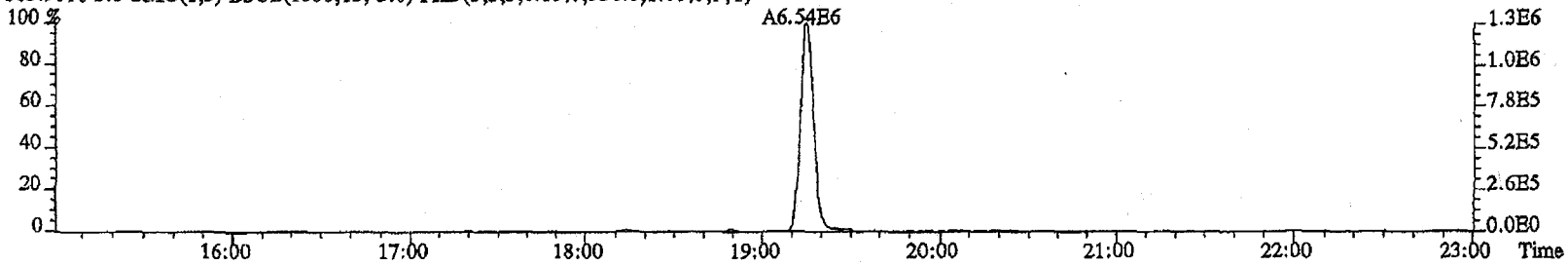


Run #4 Filename 22FE11A4D5 S: 5 I: 1
Acquired: 22-FEB-11 15:51:15 Processed: 23-FEB-11 09:25:10
Run: 15SE098D2 Analyte: 8290 Cal: 82900222114D5
Comments:
Sample text: ST0222C :CS-3 10DXN505 AS

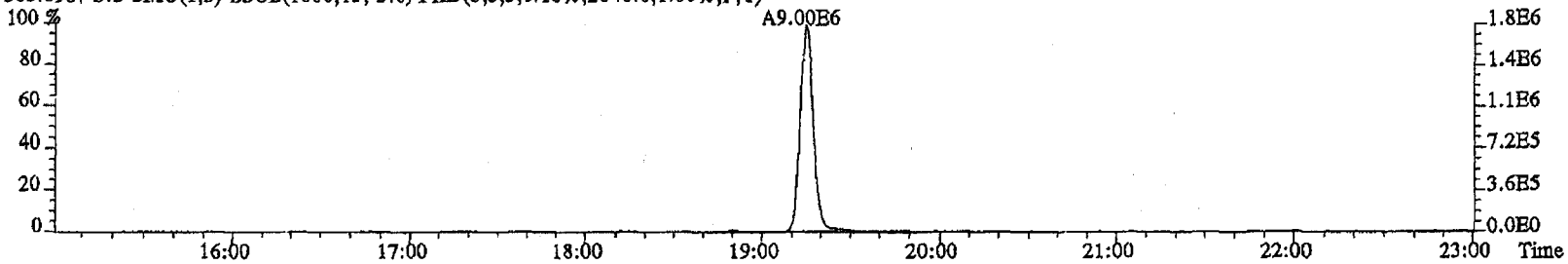
Name	Resp	RA		RT	RRF		Mod?
13C-1,2,3,4-TCDD	193315900	0.78	y	19:50	-	100.00	n
13C-2,3,7,8-TCDF	221010100	0.78	y	19:14	1.1433	100.00	n
2,3,7,8-TCDF	15547730	0.73	y	19:15	0.7035	10.00	n
Total TCDF	-	-	n	-	0.7035	10.00	n
13C-2,3,7,8-TCDD	193187600	0.76	y	20:03	0.9993	100.00	n
2,3,7,8-TCDD	15905110	0.72	y	20:05	0.8233	10.00	n
Total TCDD	-	-	n	-	0.8233	10.00	n
37Cl-2,3,7,8-TCDD	26528800	1.00	y	20:04	1.3723	10.00	n
13C-1,2,3,7,8-PeCDF	209849100	1.62	y	25:05	1.0855	100.00	n
1,2,3,7,8-PeCDF	97258500	1.52	y	25:06	0.9269	50.00	n
2,3,4,7,8-PeCDF	93910500	1.52	y	26:38	0.8950	50.00	n
Total F2 PeCDF	-	-	n	-	0.9110	100.00	n
Total F1 PeCDF	-	-	n	-	0.9110	100.00	n
13C-1,2,3,7,8-PeCDD	133727600	1.54	y	27:28	0.6918	100.00	n
1,2,3,7,8-PeCDD	67652600	1.46	y	27:29	1.0118	50.00	n
Total PeCDD	-	-	n	-	1.0118	50.00	n
13C-1,2,3,7,8,9-HxCDD	130045700	1.29	y	33:17	-	100.00	n
13C-1,2,3,4,7,8-HxCDF	127845400	0.50	y	32:10	0.9831	100.00	n
1,2,3,4,7,8-HxCDF	69675000	1.13	y	32:11	1.0900	50.00	n
1,2,3,6,7,8-HxCDF	85169200	1.15	y	32:17	1.3324	50.00	n
2,3,4,6,7,8-HxCDF	74251700	1.08	y	32:49	1.1616	50.00	n
1,2,3,7,8,9-HxCDF	63468800	1.15	y	33:27	0.9929	50.00	n
Total HxCDF	-	-	n	-	1.1442	200.00	n
13C-1,2,3,6,7,8-HxCDD	129986600	1.29	y	33:01	0.9995	100.00	n
1,2,3,4,7,8-HxCDD	47416100	1.24	y	32:57	0.7296	50.00	n
1,2,3,6,7,8-HxCDD	65996800	1.27	y	33:02	1.0154	50.00	n
1,2,3,7,8,9-HxCDD	64849900	1.27	y	33:17	0.9978	50.00	n
Total HxCDD	-	-	n	-	0.9143	150.00	n
13C-1,2,3,4,6,7,8-HpCDF	127251000	0.44	y	34:46	0.9785	100.00	n
1,2,3,4,6,7,8-HpCDF	82899500	1.04	y	34:46	1.3029	50.00	n
1,2,3,4,7,8,9-HpCDF	70344300	1.04	y	35:55	1.1056	50.00	n
Total HpCDF	-	-	n	-	1.2043	100.00	n
13C-1,2,3,4,6,7,8-HpCDD	129275400	1.03	y	35:35	0.9941	100.00	n
1,2,3,4,6,7,8-HpCDD	64455500	0.99	y	35:35	0.9972	50.00	n
Total HpCDD	-	-	n	-	0.9972	50.00	n
13C-OCDD	165541600	0.87	y	38:04	0.6365	200.00	n
OCDF	103348600	0.90	y	38:12	1.2486	100.00	n
OCDD	88734700	0.91	y	38:05	1.0721	100.00	n

File:22FE11A4D5 #1-530 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

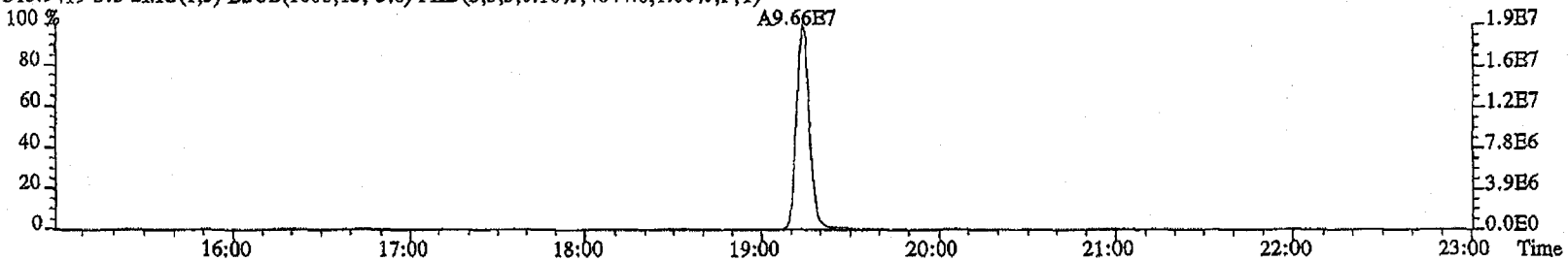
303.9016 S:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,936.0,1.00%,F,T)



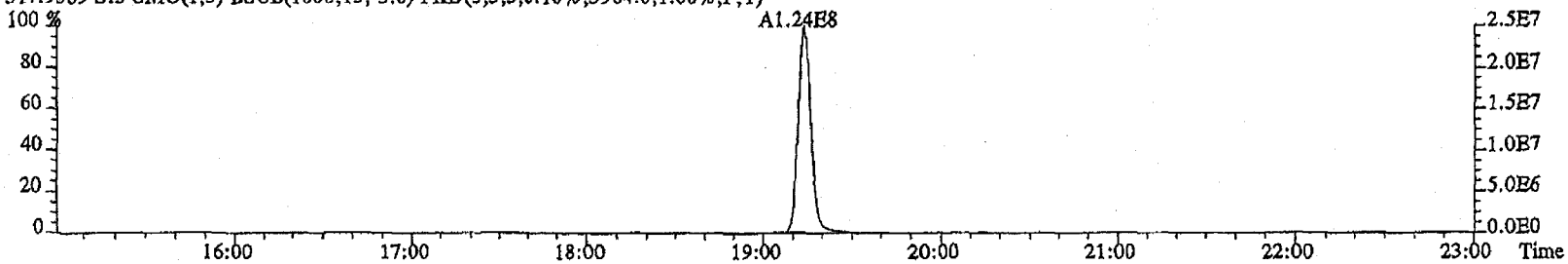
305.8987 S:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2040.0,1.00%,F,T)



315.9419 S:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4044.0,1.00%,F,T)

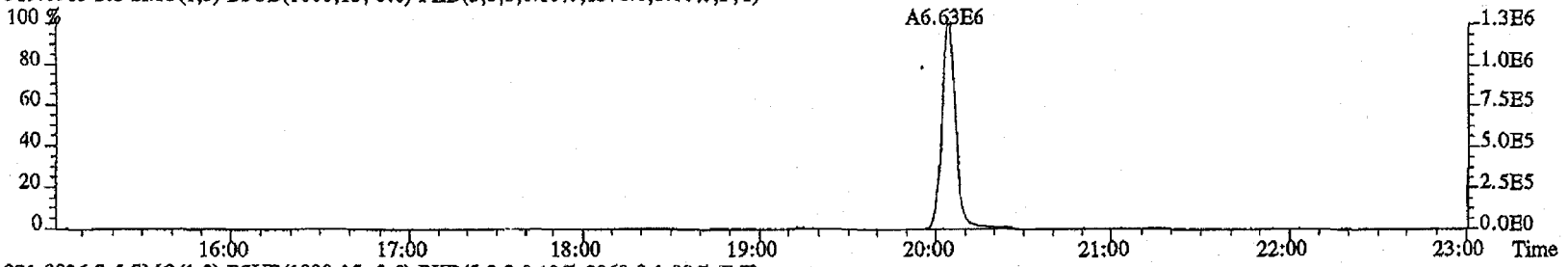


317.9389 S:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3964.0,1.00%,F,T)

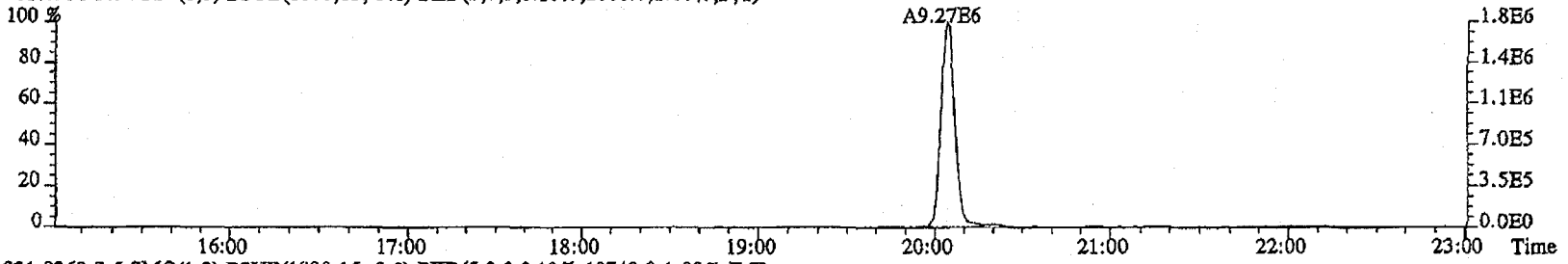


File:22FB11A4D5 #1-530 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

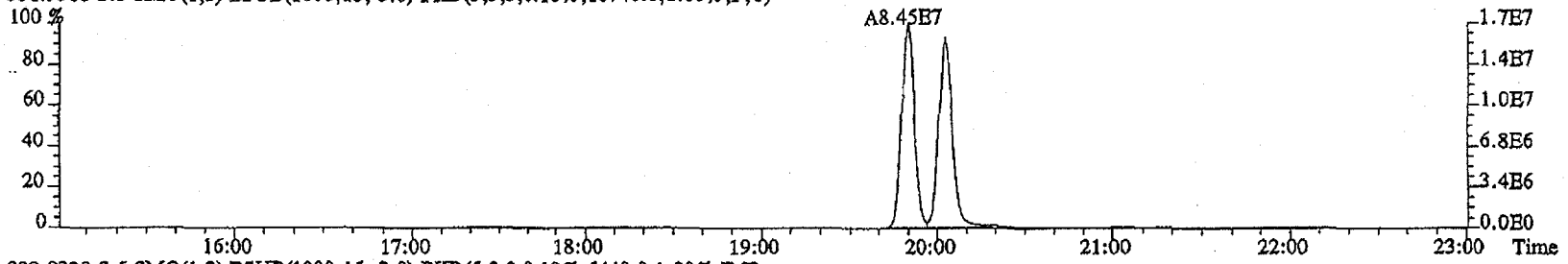
319.8965 S:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1576.0,1.00%,F,T)



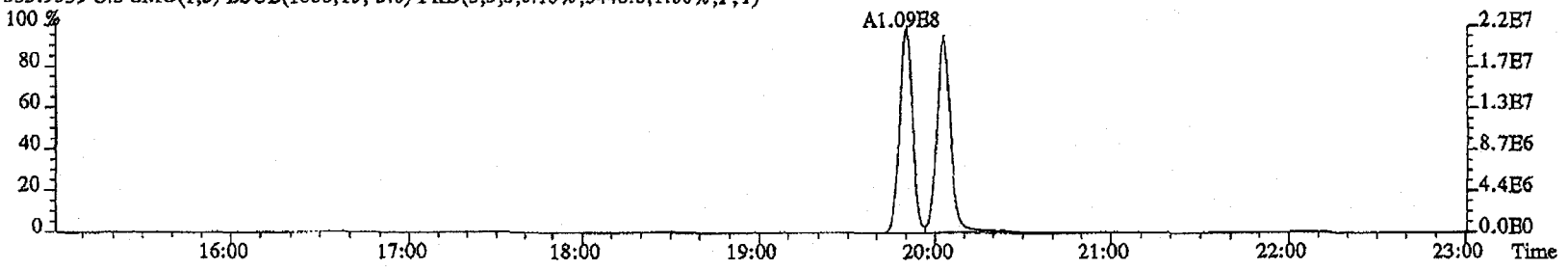
321.8936 S:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2068.0,1.00%,F,T)



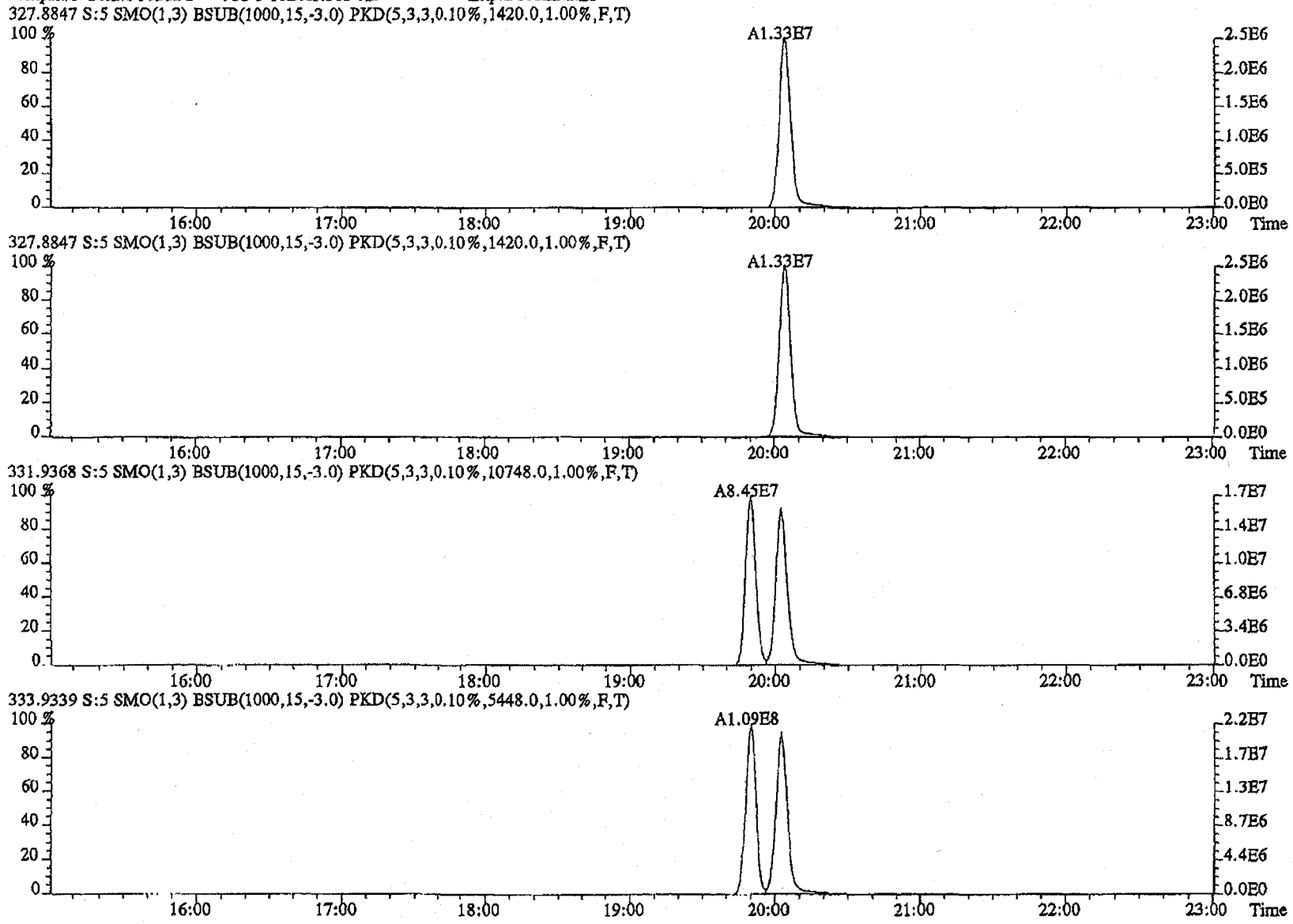
331.9368 S:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,10748.0,1.00%,F,T)



333.9339 S:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5448.0,1.00%,F,T)

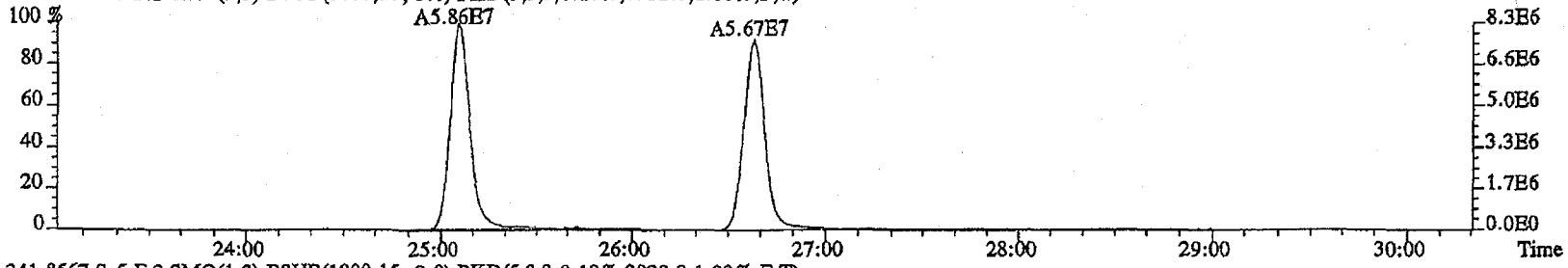


File:22FE11A4D5 #1-530 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaB
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

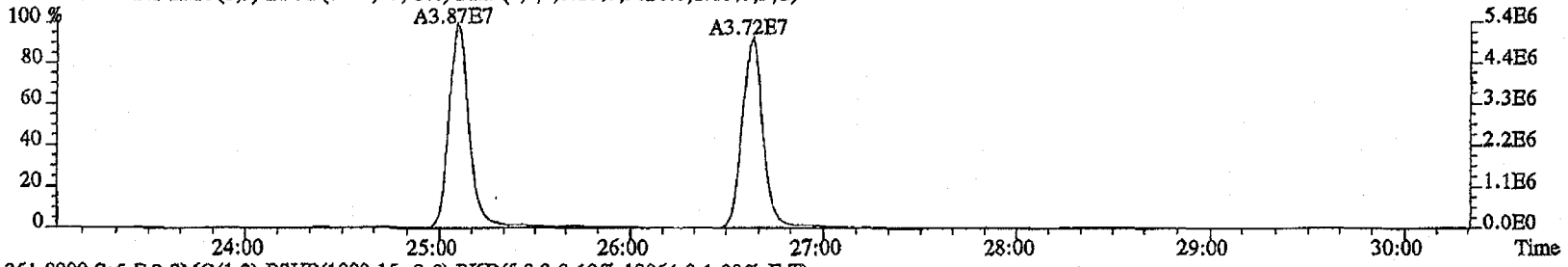


File:22FE11A4D5 #1-470 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

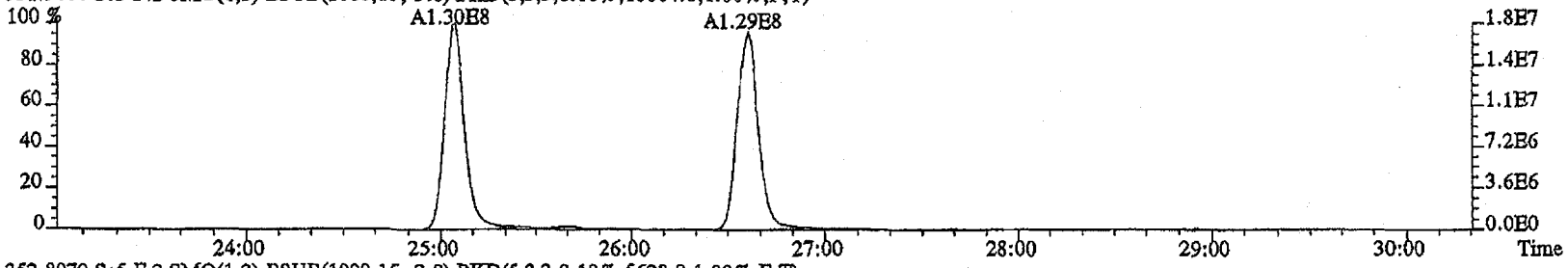
339.8597 S:5 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2952.0,1.00%,F,T)



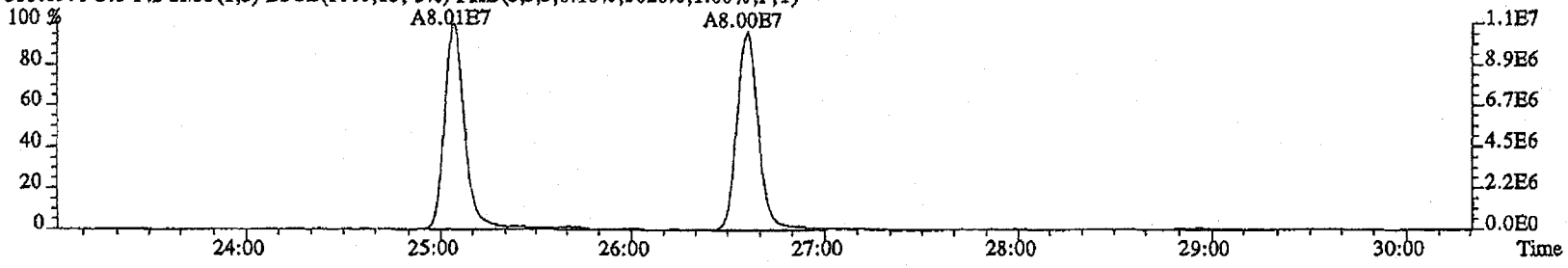
341.8567 S:5 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3828.0,1.00%,F,T)



351.9000 S:5 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,10064.0,1.00%,F,T)

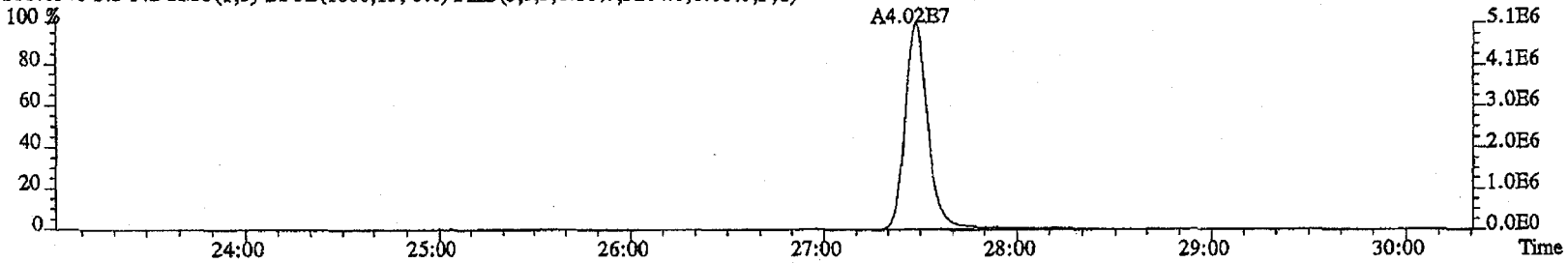


353.8970 S:5 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5628.0,1.00%,F,T)

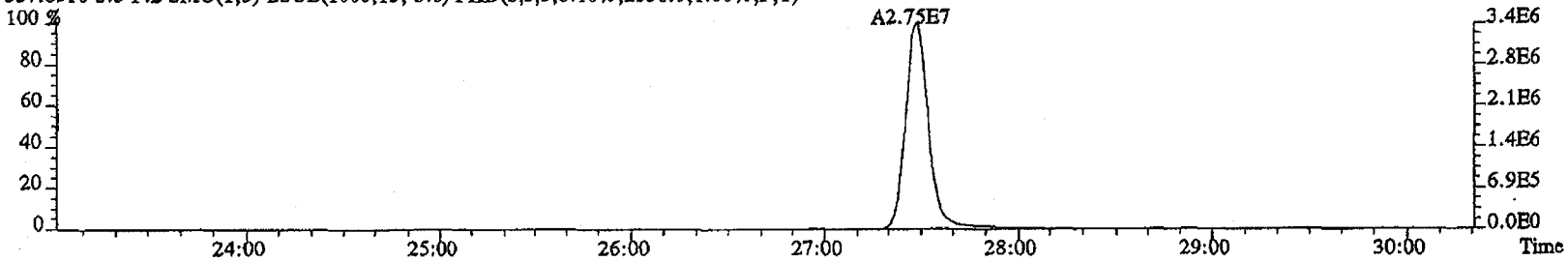


File:22FB11A4D5 #1-470 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

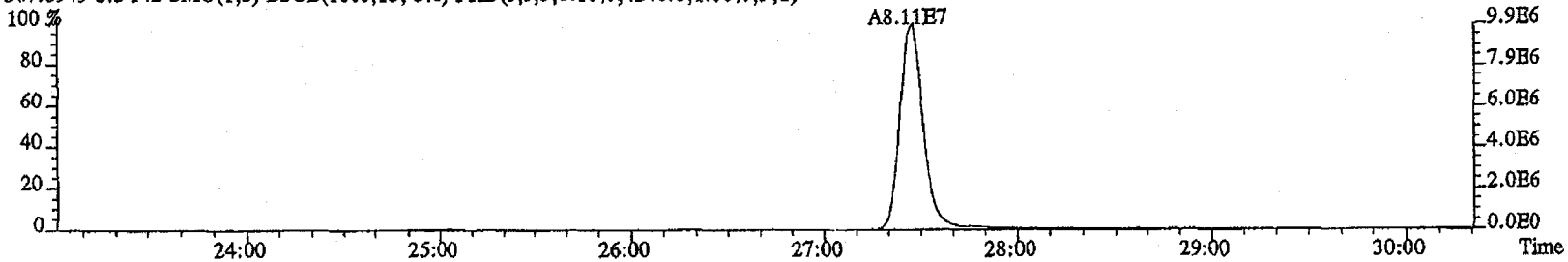
355.8546 S:5 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3204.0,1.00%,F,T)



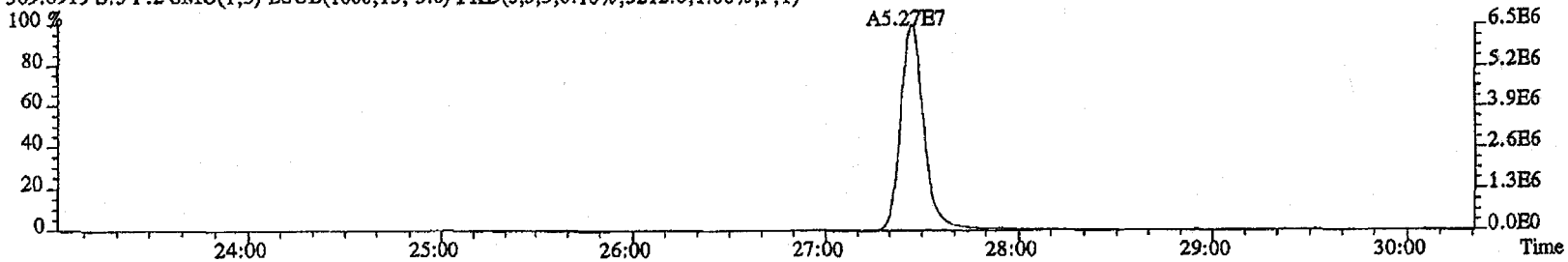
357.8516 S:5 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2536.0,1.00%,F,T)



367.8949 S:5 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4240.0,1.00%,F,T)

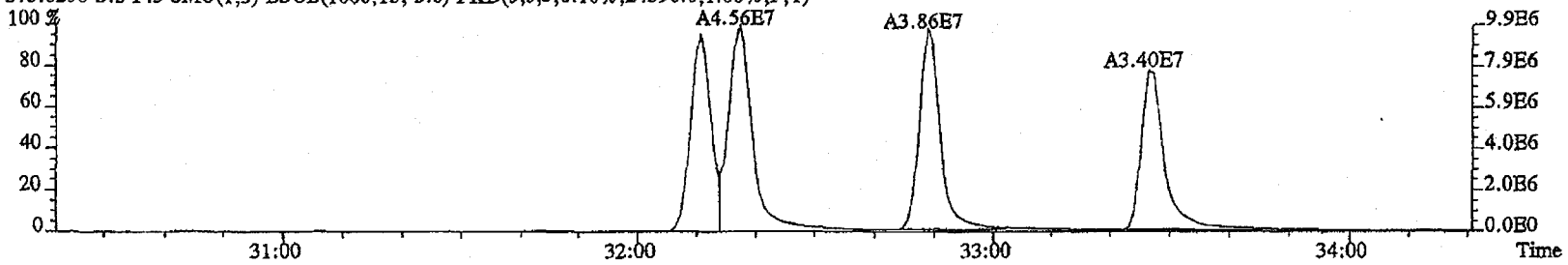


369.8919 S:5 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3212.0,1.00%,F,T)

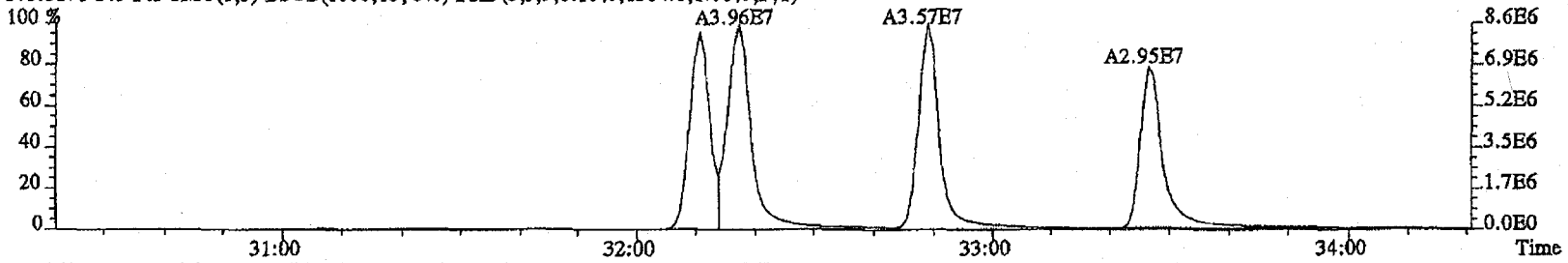


File:22FE11A4D5 #1-287 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

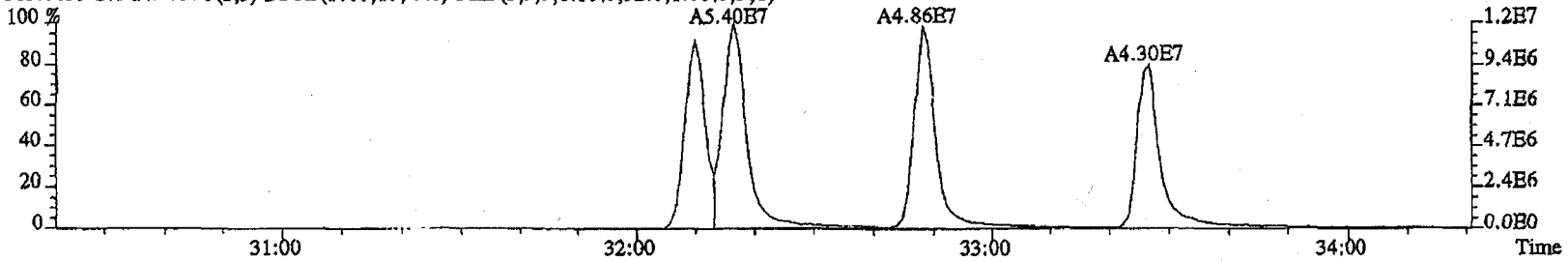
373.8208 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,24596.0,1.00%,F,T)



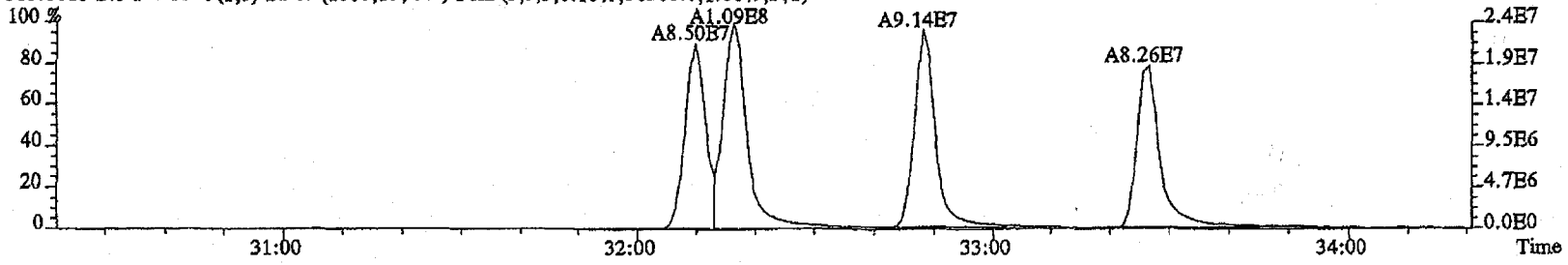
375.8178 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1504.0,1.00%,F,T)



383.8639 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,92.0,1.00%,F,T)

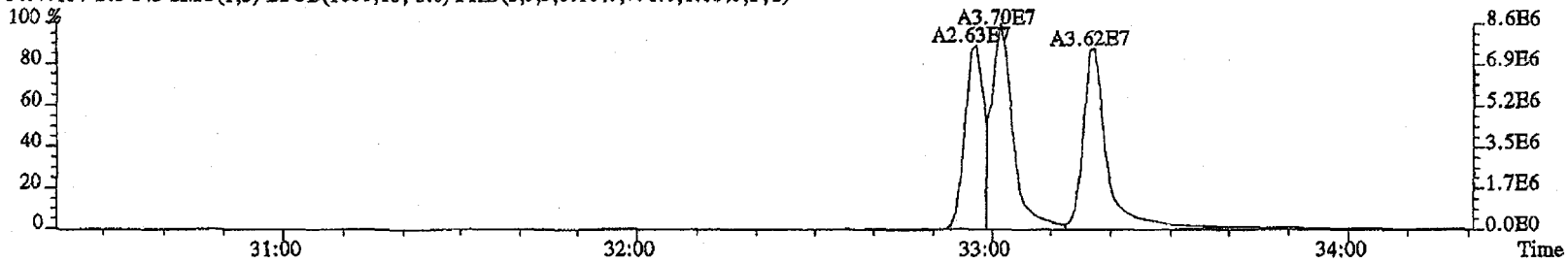


385.8610 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,56360.0,1.00%,F,T)

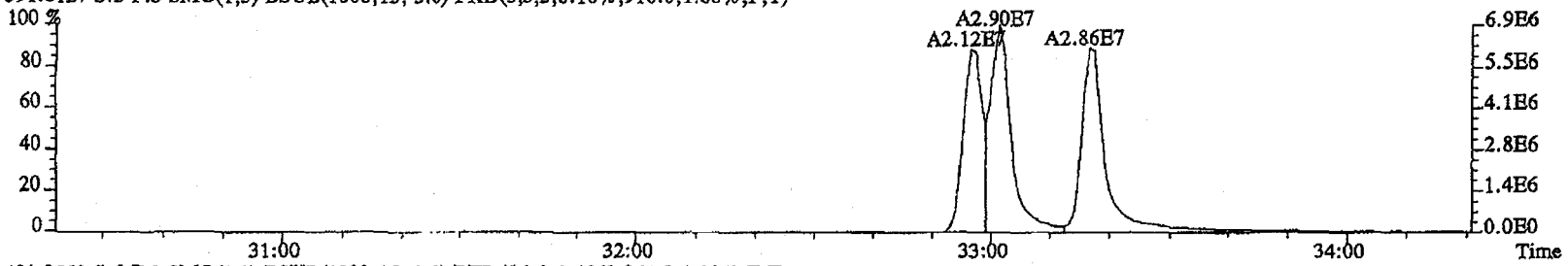


File:22FE11A4D5 #1-287 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

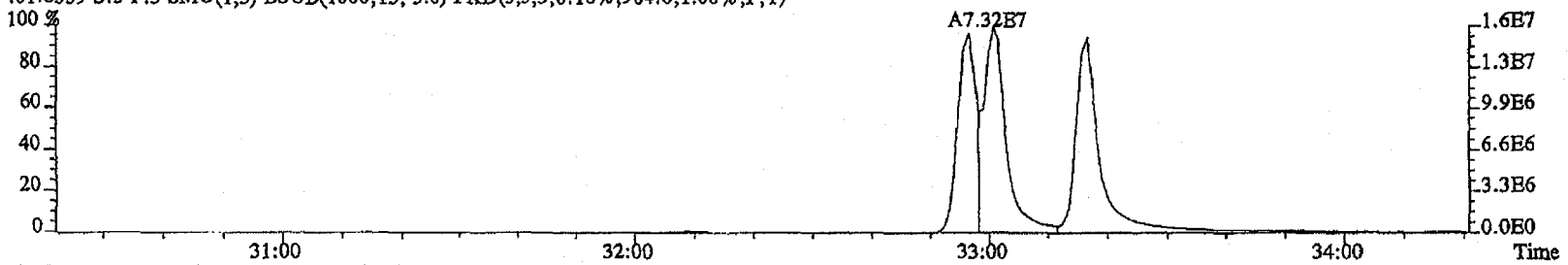
389.8157 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,796.0,1.00%,F,T)



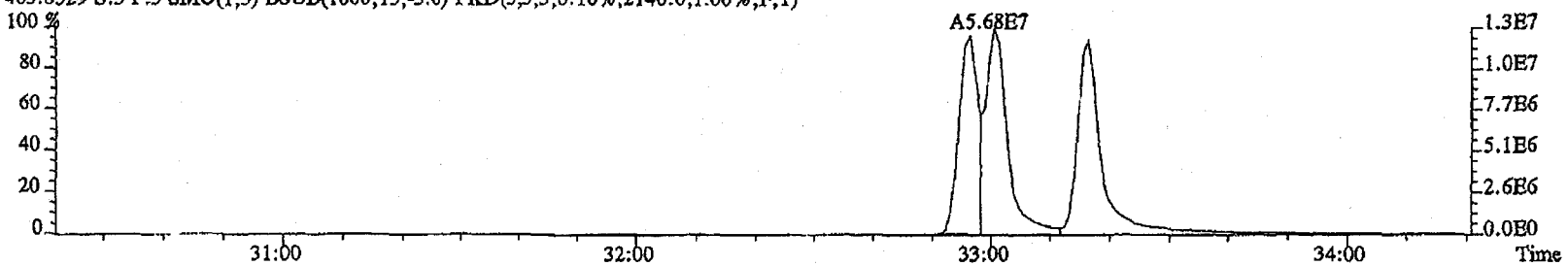
391.8127 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,916.0,1.00%,F,T)



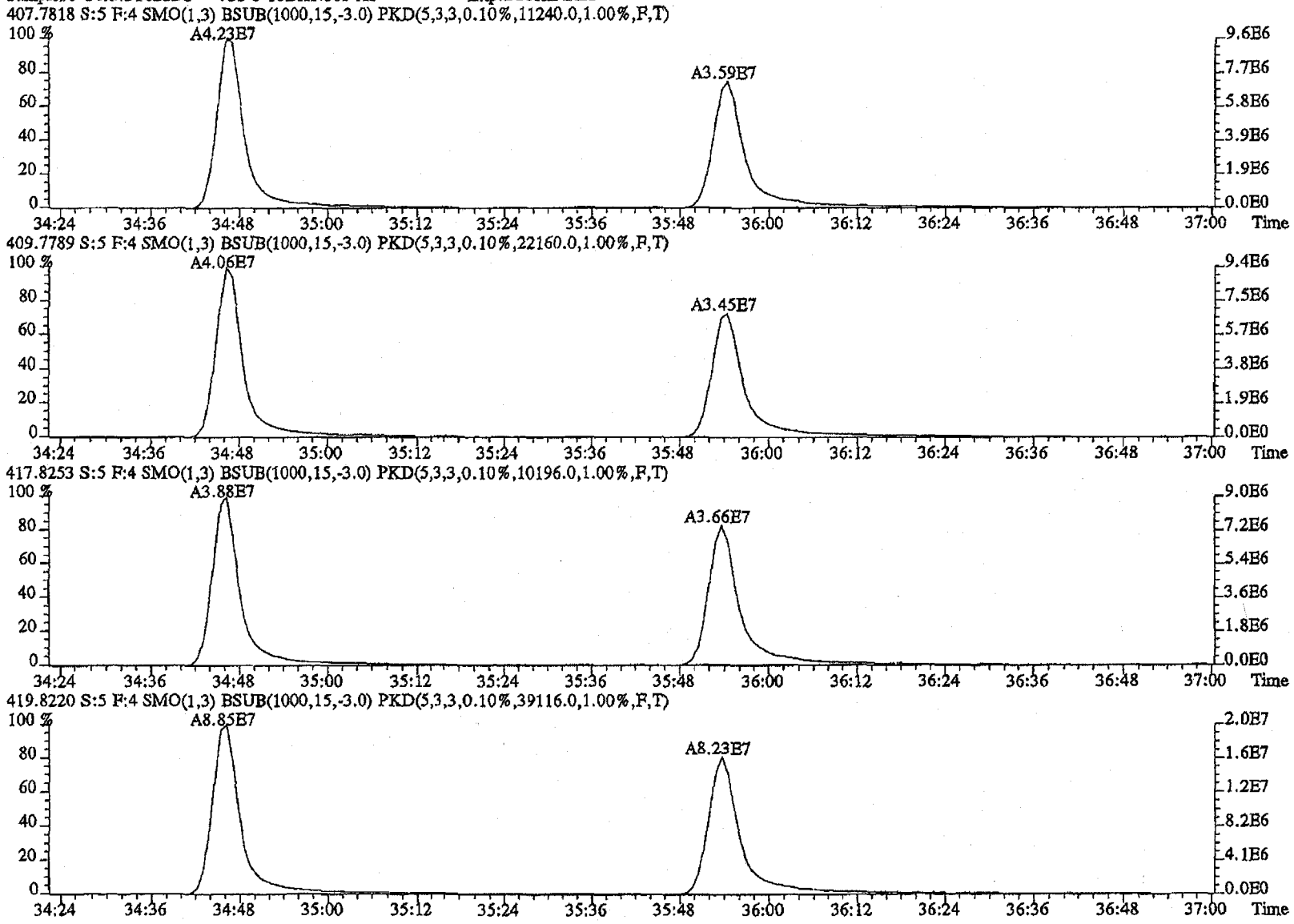
401.8559 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,964.0,1.00%,F,T)



403.8529 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2140.0,1.00%,F,T)

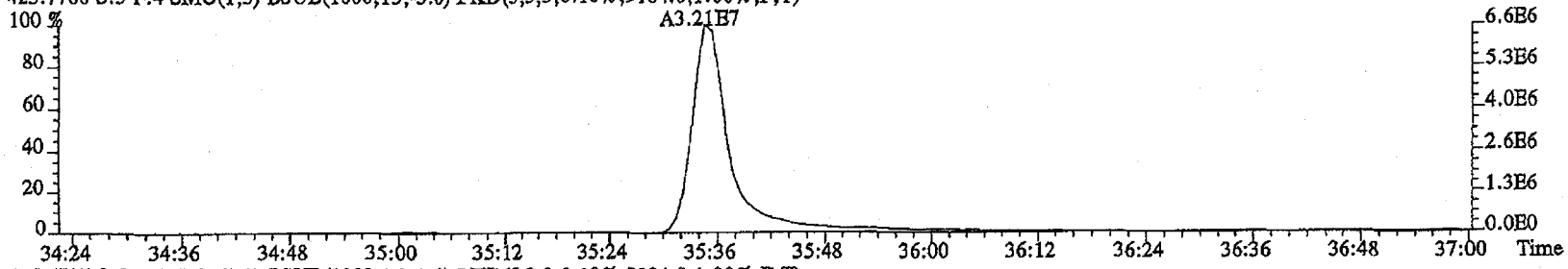


File:22FE11A4D5 #1-200 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

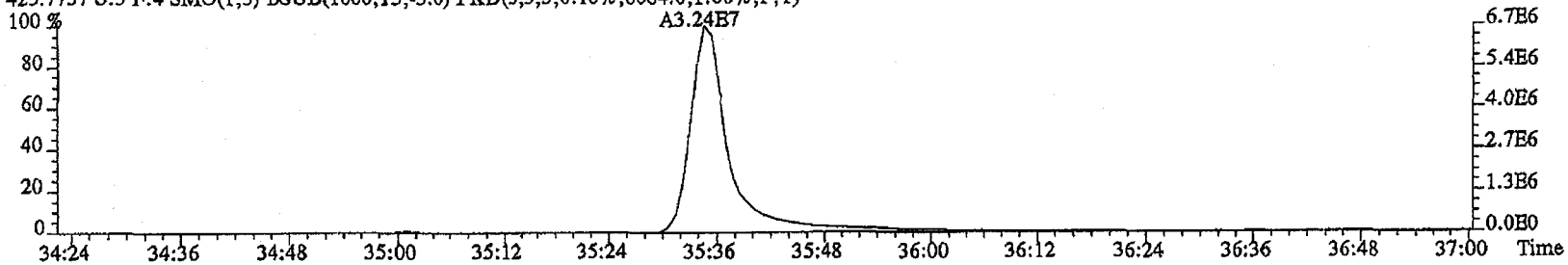


File:22FE11A4D5 #1-200 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

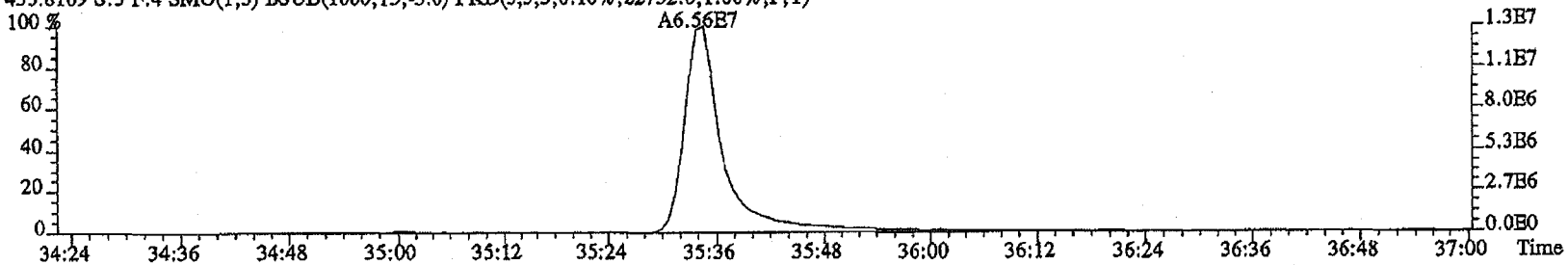
423.7766 S:5 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9184.0,1.00%,F,T)



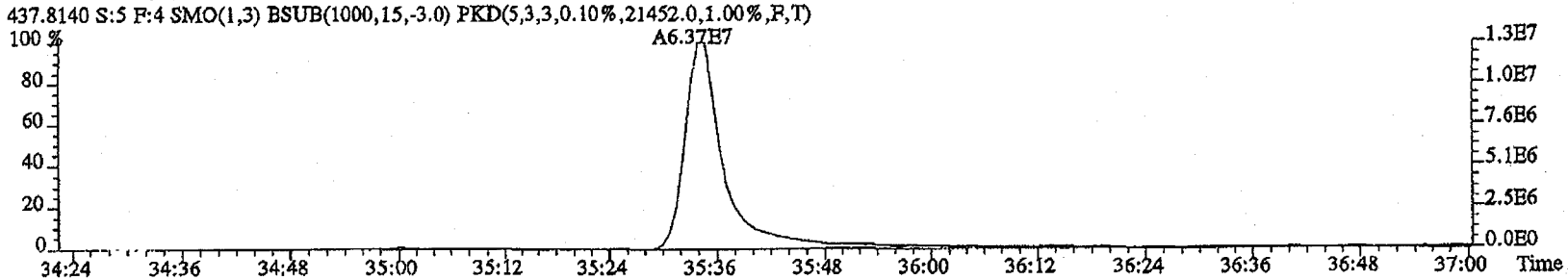
425.7737 S:5 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,8084.0,1.00%,F,T)



435.8169 S:5 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,22752.0,1.00%,F,T)

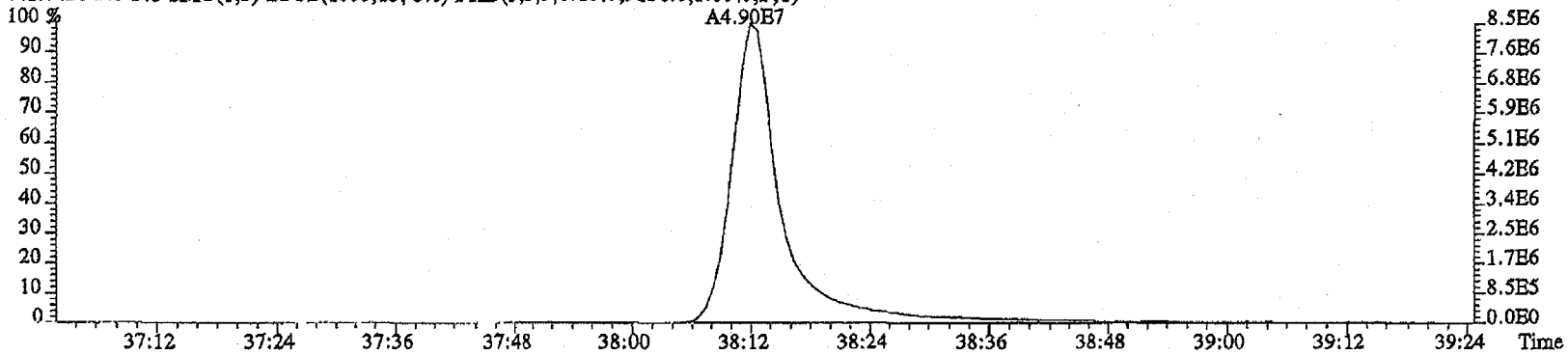


437.8140 S:5 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,21452.0,1.00%,F,T)

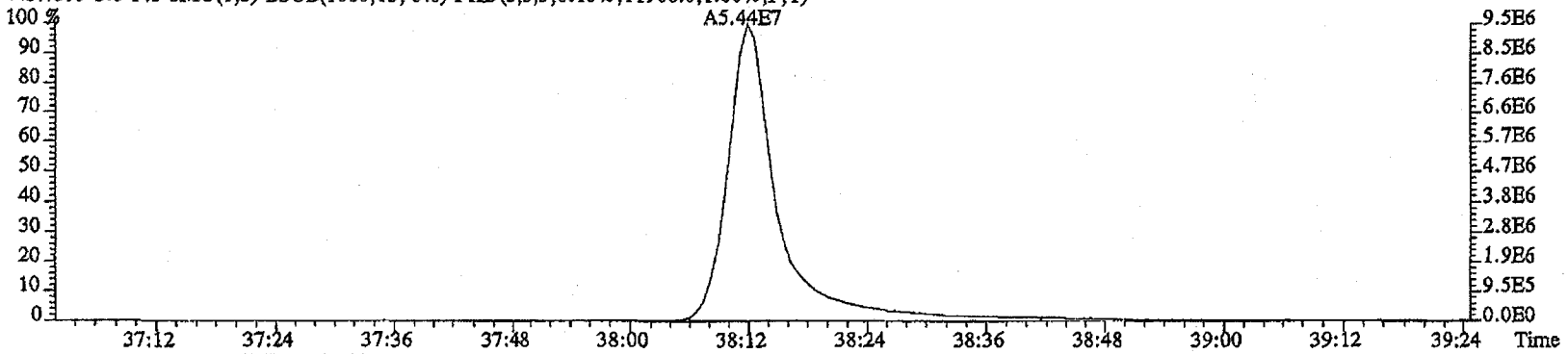


File:22FE11A4D5 #1-193 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

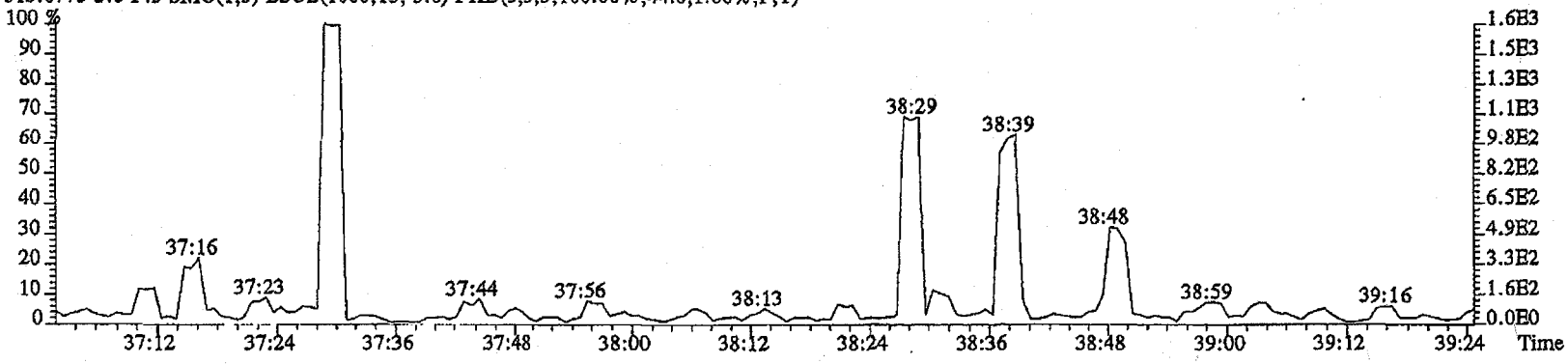
441.7428 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9136.0,1.00%,F,T)



443.7399 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,11908.0,1.00%,F,T)

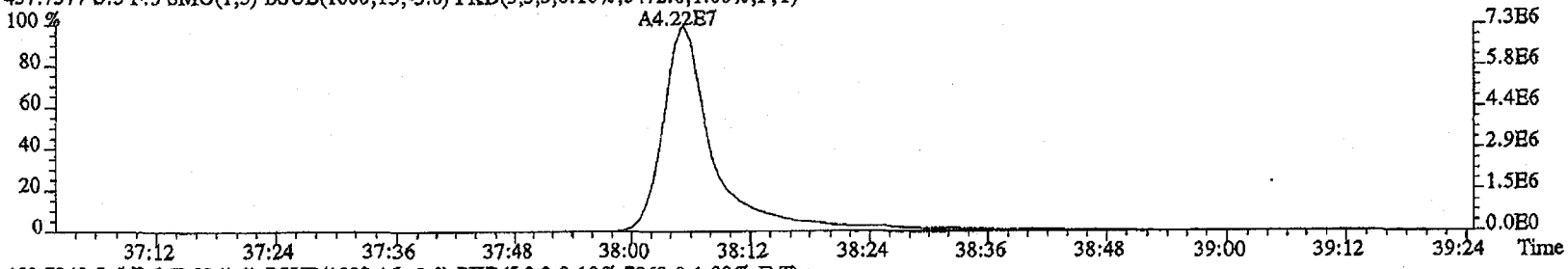


513.6775 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,44.0,1.00%,F,T)

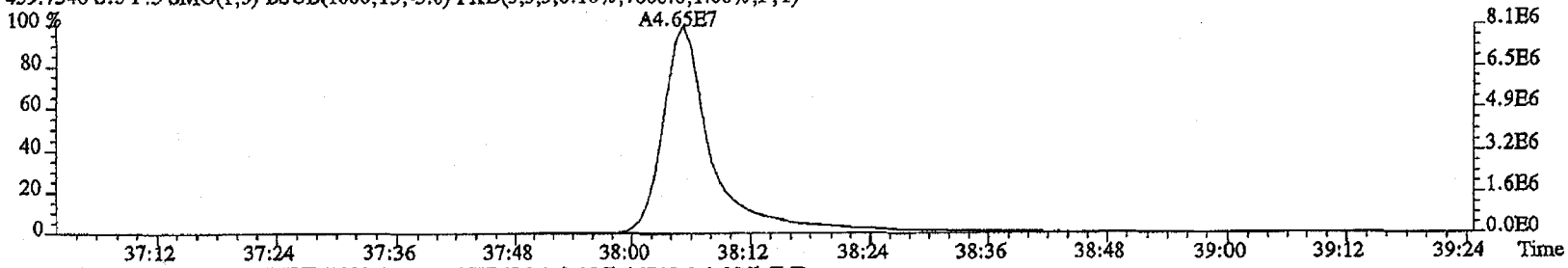


File:22FB11A4D5 #1-193 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaB
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

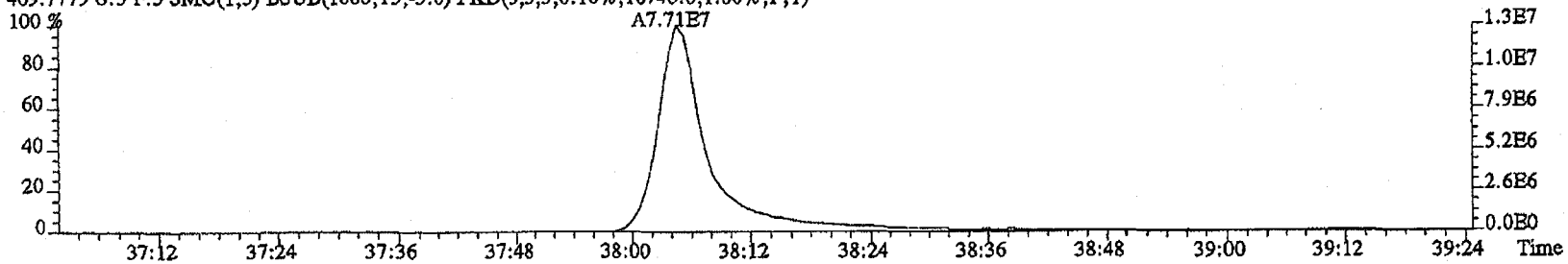
457.7377 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5472.0,1.00%,F,T)



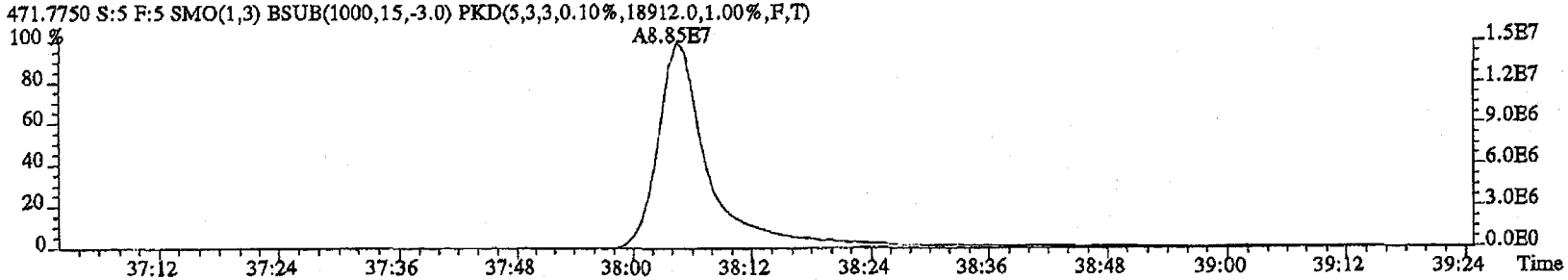
459.7348 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,7868.0,1.00%,F,T)



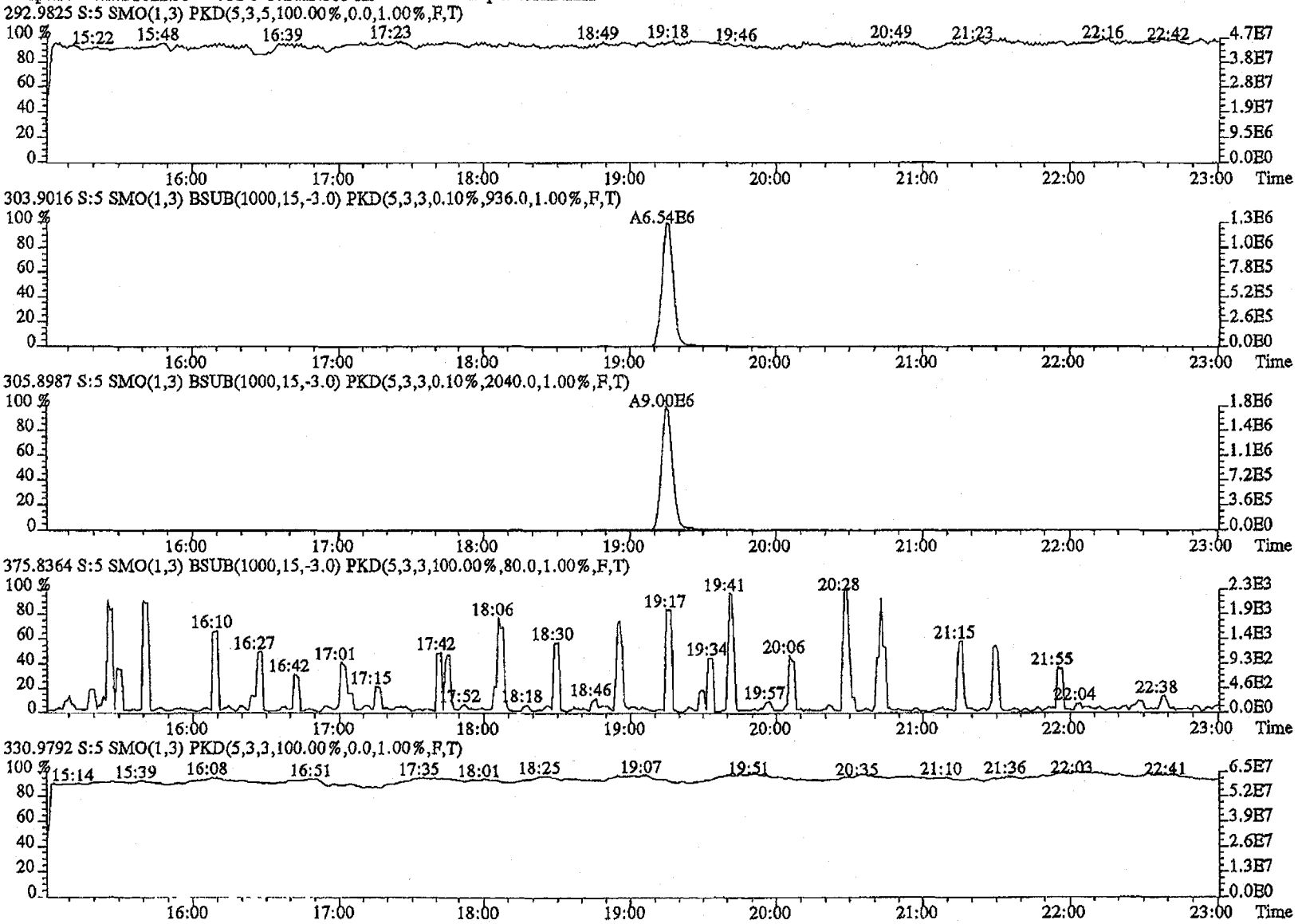
469.7779 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,16740.0,1.00%,F,T)



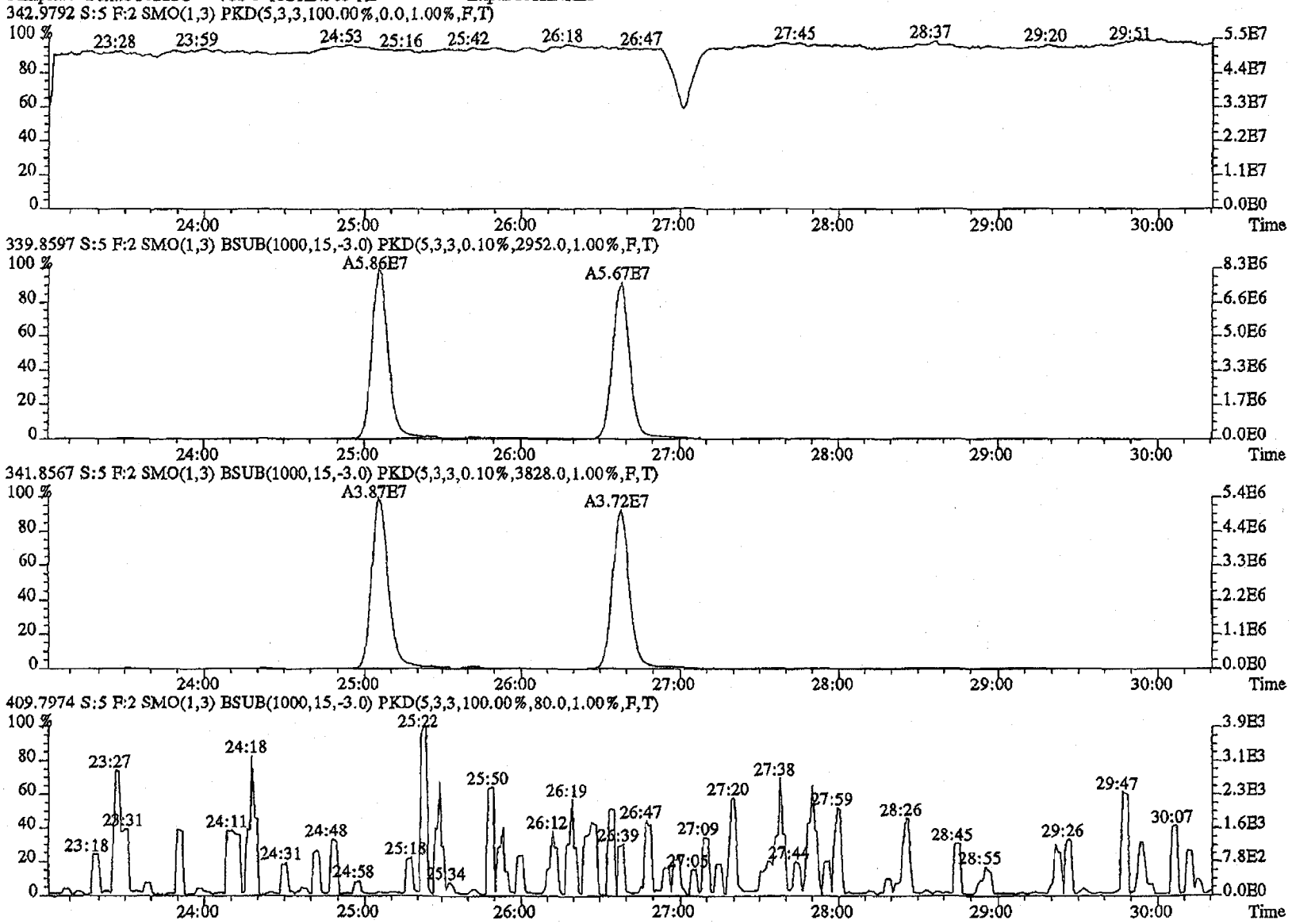
471.7750 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,18912.0,1.00%,F,T)



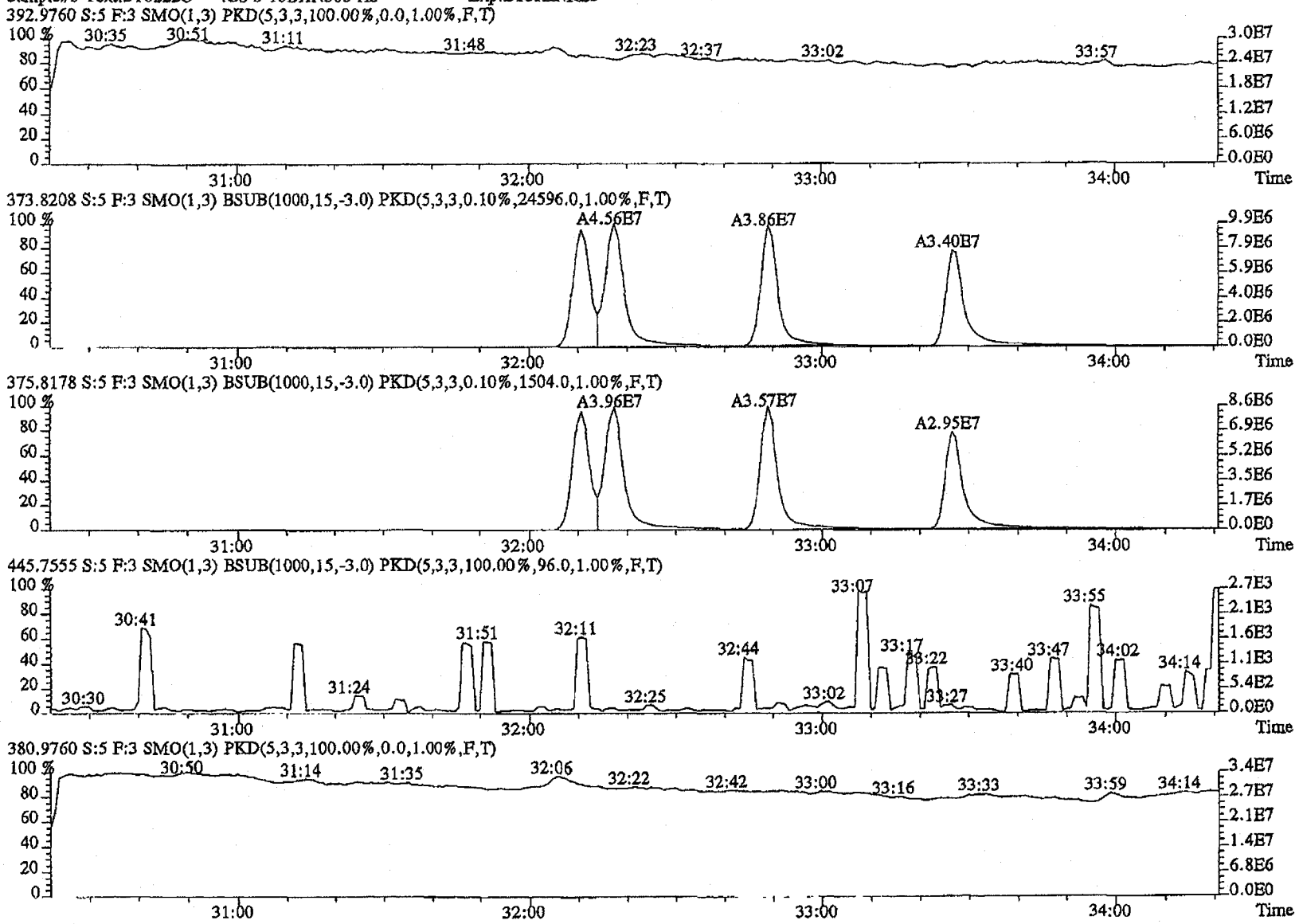
File:22FB11A4D5 #1-530 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES



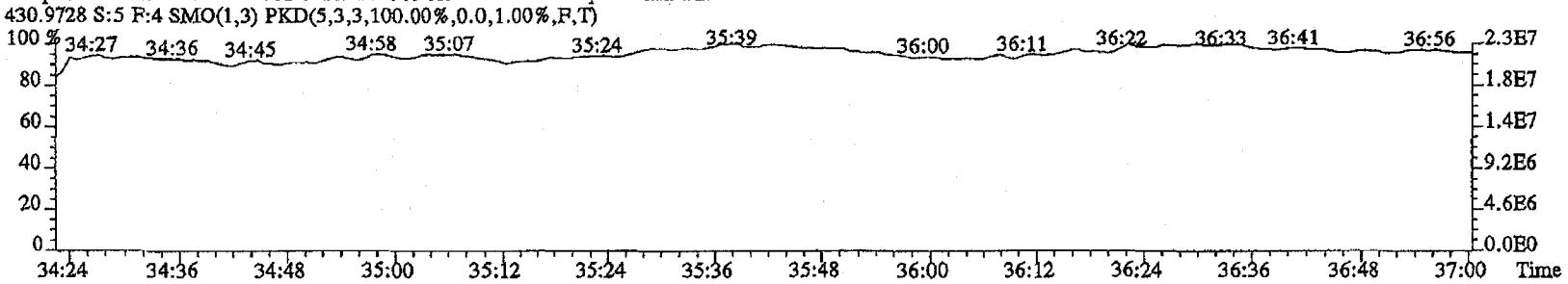
File:22FB11A4D5 #1-470 Acq:22-FBB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

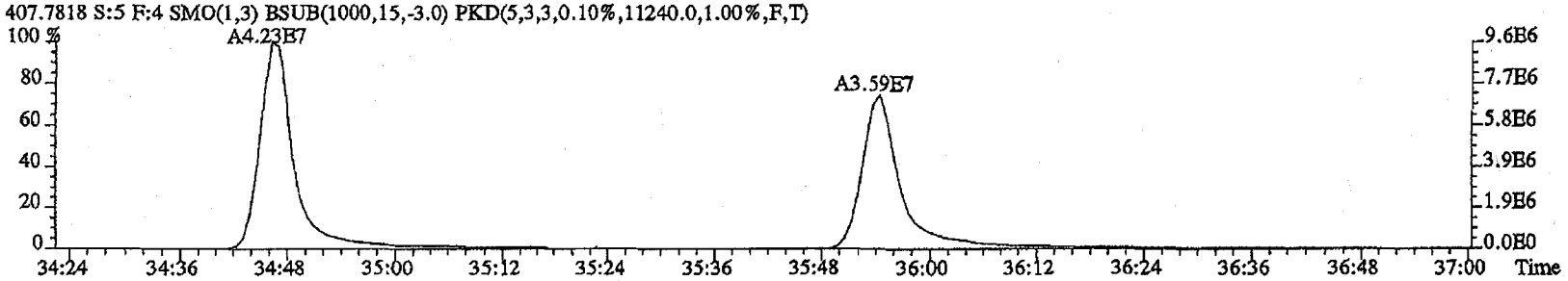


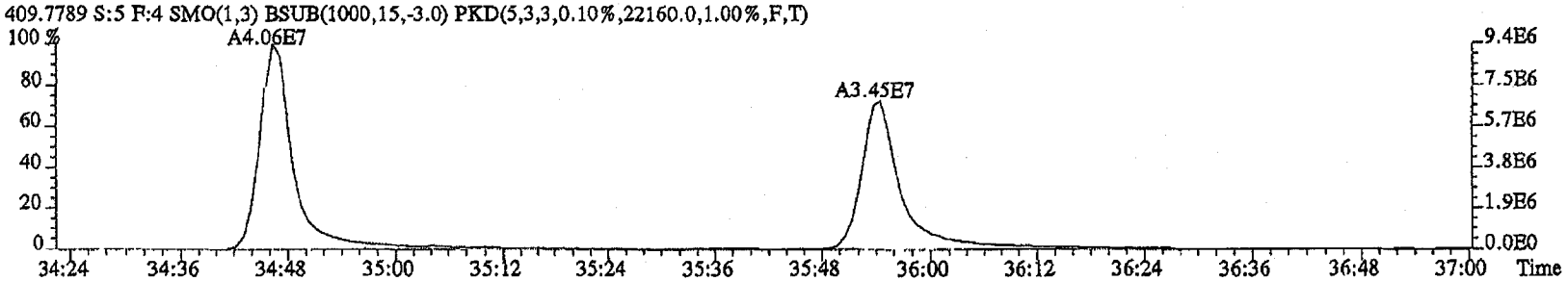
File:22FB11A4D5 #1-287 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaB
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

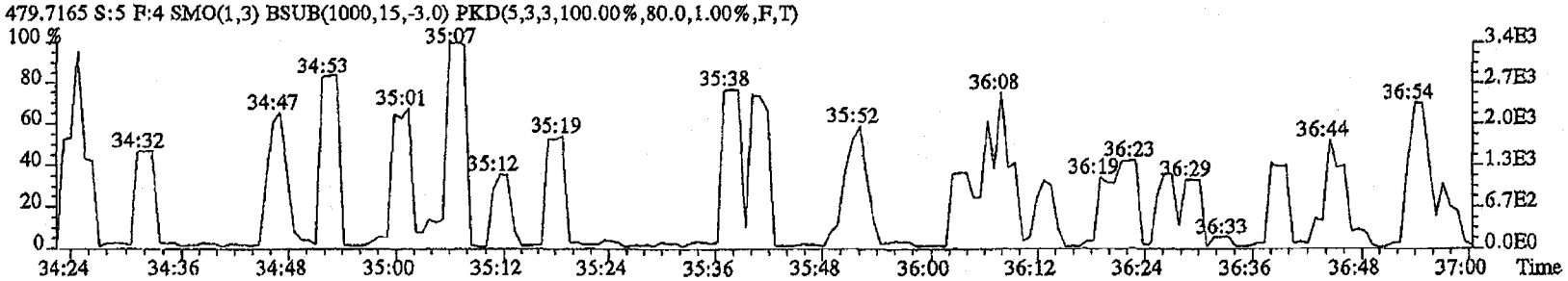


File:22FB11A4D5 #1-200 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES

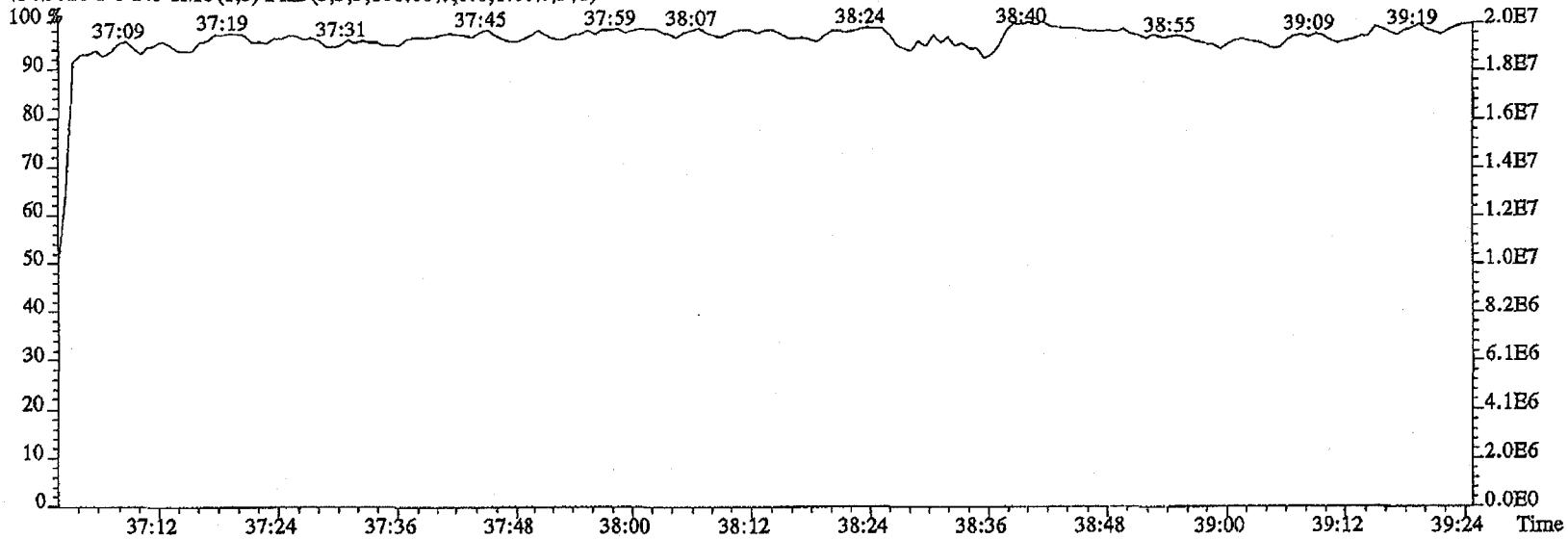




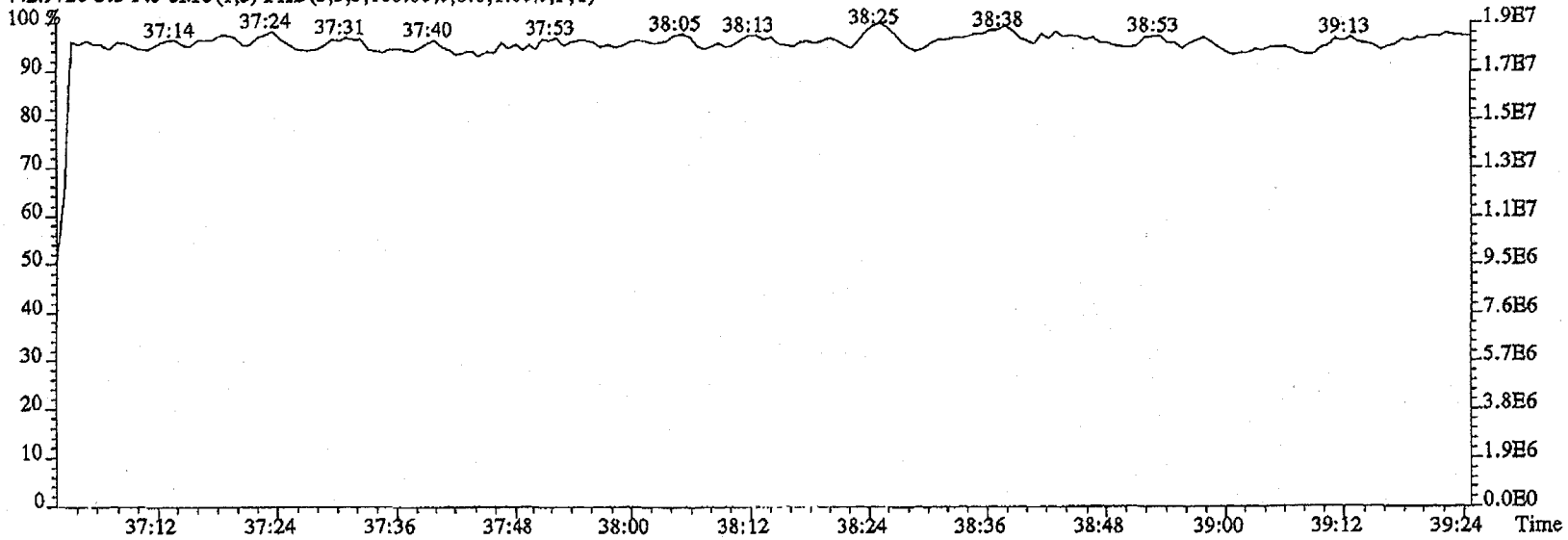




File:22FE11A4D5 #1-193 Acq:22-FEB-2011 15:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:ST0222C :CS-3 10DXN505 AS Exp:DIOXINRES
454.9728 S:5 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:5 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

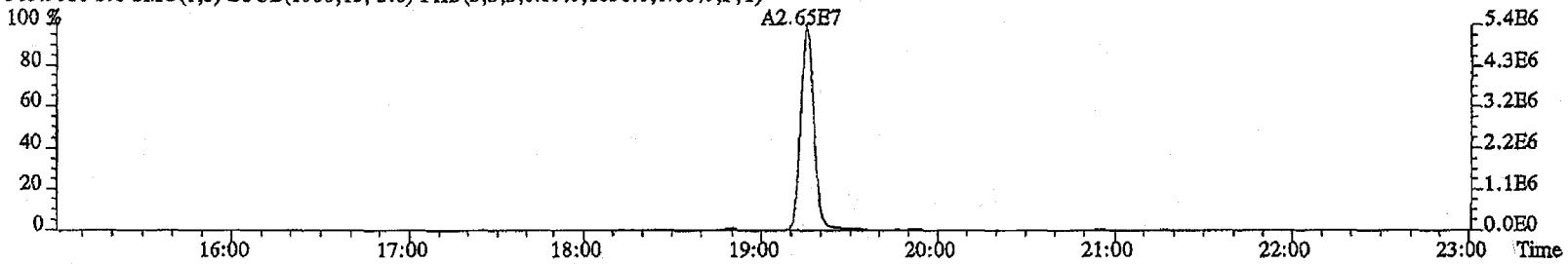


Run #5 Filename 22FE11A4D5 S: 6 I: 1
Acquired: 22-FEB-11 16:35:50 Processed: 23-FEB-11 09:25:10
Run: 15SE098D2 Analyte: 8290 Cal: 82900222114D5
Comments:
Sample text: ST0222D :CS-4 10DXN506 AS

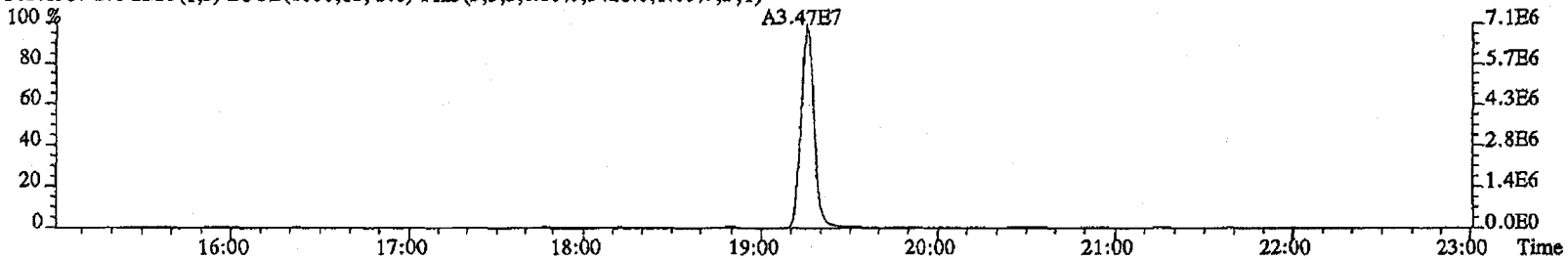
Name	Resp	RA		RT	RRF		Mod?
13C-1,2,3,4-TCDD	195502900	0.77	y	19:50	-	100.00	n
13C-2,3,7,8-TCDF	205421900	0.77	y	19:14	1.0507	100.00	n
2,3,7,8-TCDF	61152100	0.76	y	19:15	0.7442	40.00	n
Total TCDF	-	-	n	-	0.7442	40.00	n
13C-2,3,7,8-TCDD	183415500	0.77	y	20:03	0.9382	100.00	n
2,3,7,8-TCDD	63971900	0.74	y	20:04	0.8720	40.00	n
Total TCDD	-	-	n	-	0.8720	40.00	n
37Cl-2,3,7,8-TCDD	102008800	1.00	y	20:04	1.3044	40.00	n
13C-1,2,3,7,8-PeCDF	198027300	1.61	y	25:05	1.0129	100.00	n
1,2,3,7,8-PeCDF	394058000	1.51	y	25:06	0.9950	200.00	n
2,3,4,7,8-PeCDF	376011000	1.50	y	26:38	0.9494	200.00	n
Total F2 PeCDF	-	-	n	-	0.9722	400.00	n
Total F1 PeCDF	-	-	n	-	0.9722	400.00	n
13C-1,2,3,7,8-PeCDD	130409000	1.57	y	27:27	0.6670	100.00	n
1,2,3,7,8-PeCDD	279831000	1.47	y	27:29	1.0729	200.00	n
Total PeCDD	-	-	n	-	1.0729	200.00	n
13C-1,2,3,7,8,9-HxCDD	135186800	1.31	y	33:16	-	100.00	n
13C-1,2,3,4,7,8-HxCDF	119039400	0.50	y	32:10	0.8806	100.00	n
1,2,3,4,7,8-HxCDF	272560000	1.13	y	32:11	1.1448	200.00	n
1,2,3,6,7,8-HxCDF	346190000	1.15	y	32:18	1.4541	200.00	n
2,3,4,6,7,8-HxCDF	305269000	1.21	y	32:49	1.2822	200.00	n
1,2,3,7,8,9-HxCDF	258482000	1.16	y	33:27	1.0857	200.00	n
Total HxCDF	-	-	n	-	1.2417	800.00	n
13C-1,2,3,6,7,8-HxCDD	124473000	1.30	y	33:01	0.9207	100.00	n
1,2,3,4,7,8-HxCDD	194581000	1.25	y	32:57	0.7816	200.00	n
1,2,3,6,7,8-HxCDD	262970000	1.28	y	33:02	1.0563	200.00	n
1,2,3,7,8,9-HxCDD	262629000	1.27	y	33:17	1.0550	200.00	n
Total HxCDD	-	-	n	-	0.9643	600.00	n
13C-1,2,3,4,6,7,8-HpCDF	122133200	0.45	y	34:47	0.9034	100.00	n
1,2,3,4,6,7,8-HpCDF	325395000	1.05	y	34:47	1.3321	200.00	n
1,2,3,4,7,8,9-HpCDF	280724000	1.06	y	35:55	1.1493	200.00	n
Total HpCDF	-	-	n	-	1.2407	400.00	n
13C-1,2,3,4,6,7,8-HpCDD	120658700	1.05	y	35:35	0.8925	100.00	n
1,2,3,4,6,7,8-HpCDD	252590000	1.00	y	35:35	1.0467	200.00	n
Total HpCDD	-	-	n	-	1.0467	200.00	n
13C-OCDD	161007100	0.87	y	38:05	0.5955	200.00	n
OCDF	436022000	0.90	y	38:12	1.3540	400.00	n
OCDD	366825000	0.91	y	38:05	1.1392	400.00	n

File:22FB11A4D5 #1-530 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

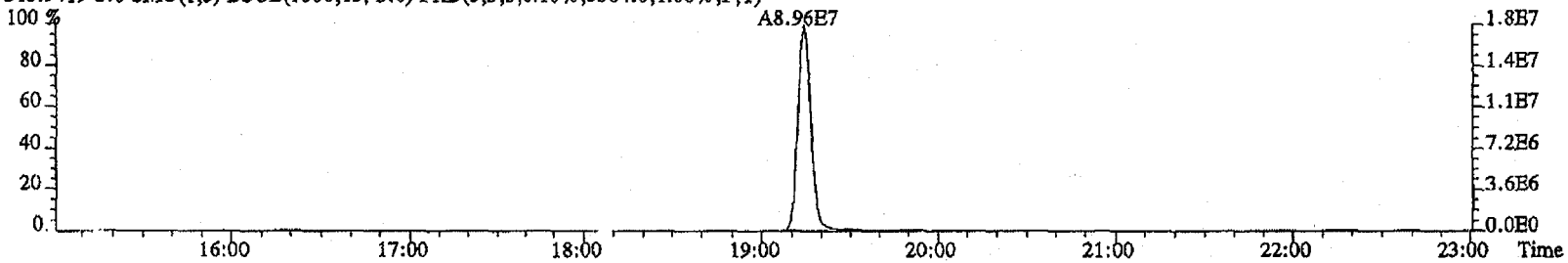
303.9016 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1636.0,1.00%,F,T)



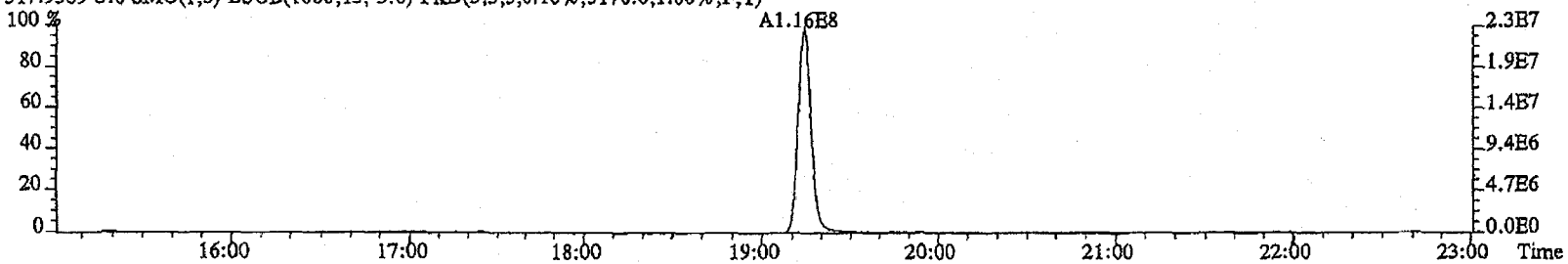
305.8987 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3428.0,1.00%,F,T)



315.9419 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3384.0,1.00%,F,T)

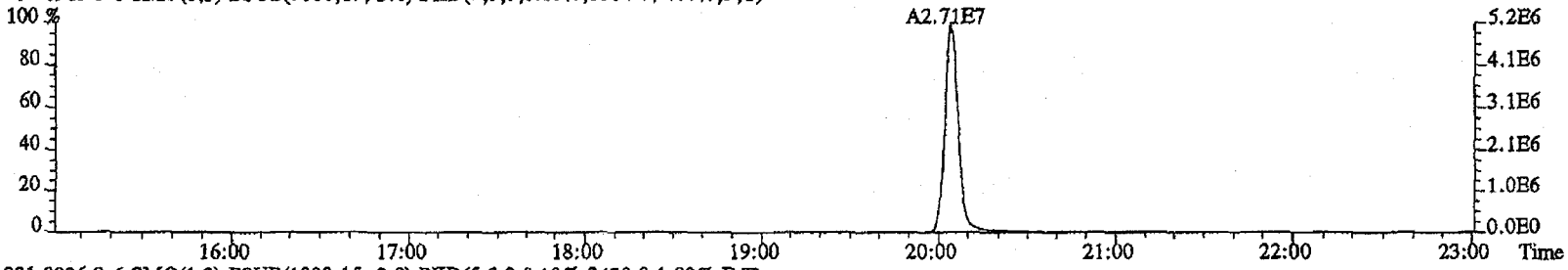


317.9389 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5176.0,1.00%,F,T)

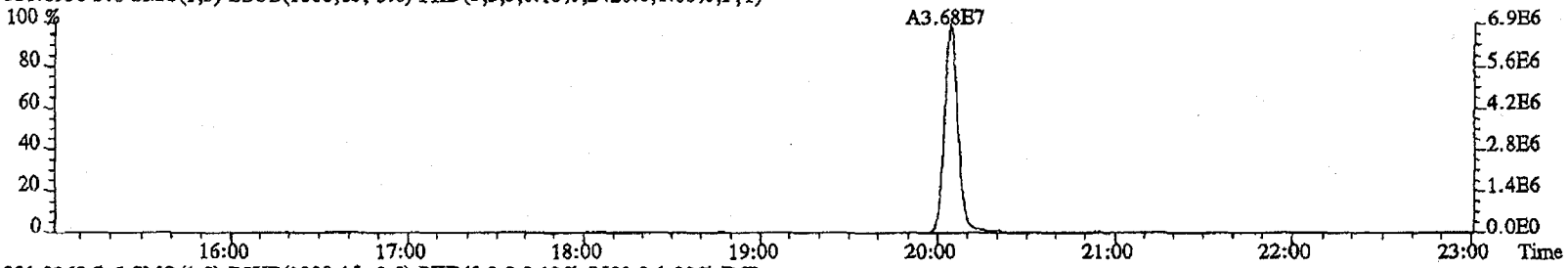


File:22FB11A4D5 #1-530 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

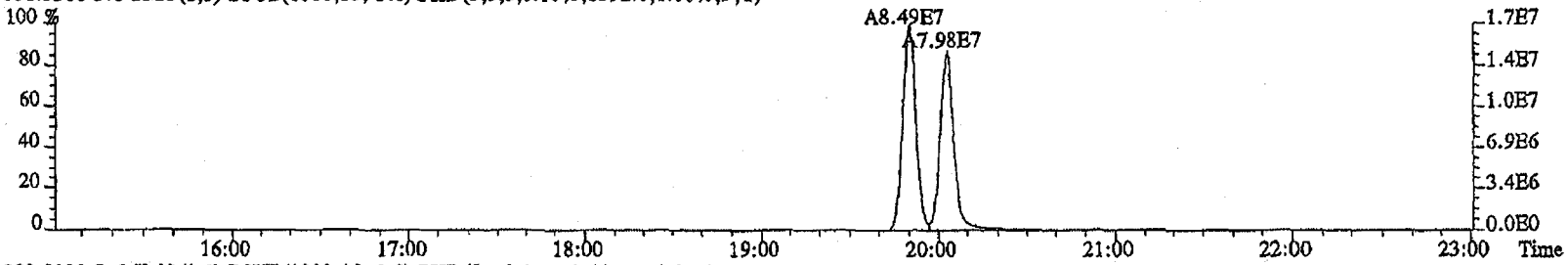
319.8965 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1284.0,1.00%,F,T)



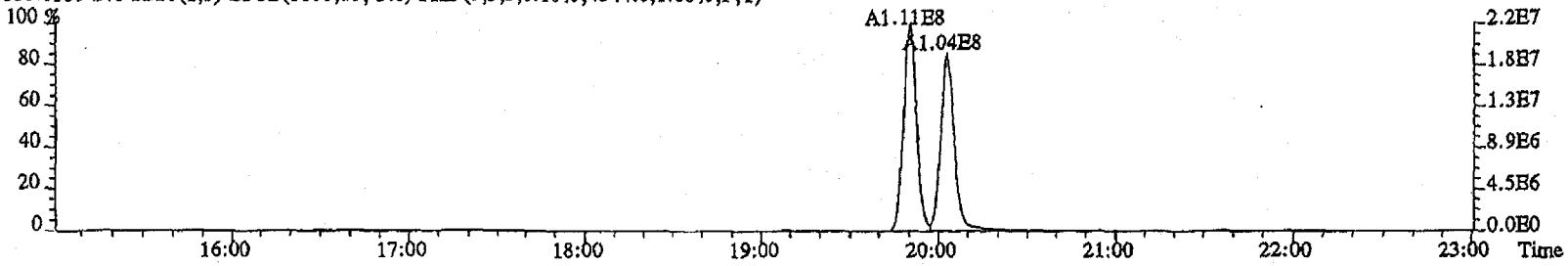
321.8936 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2420.0,1.00%,F,T)



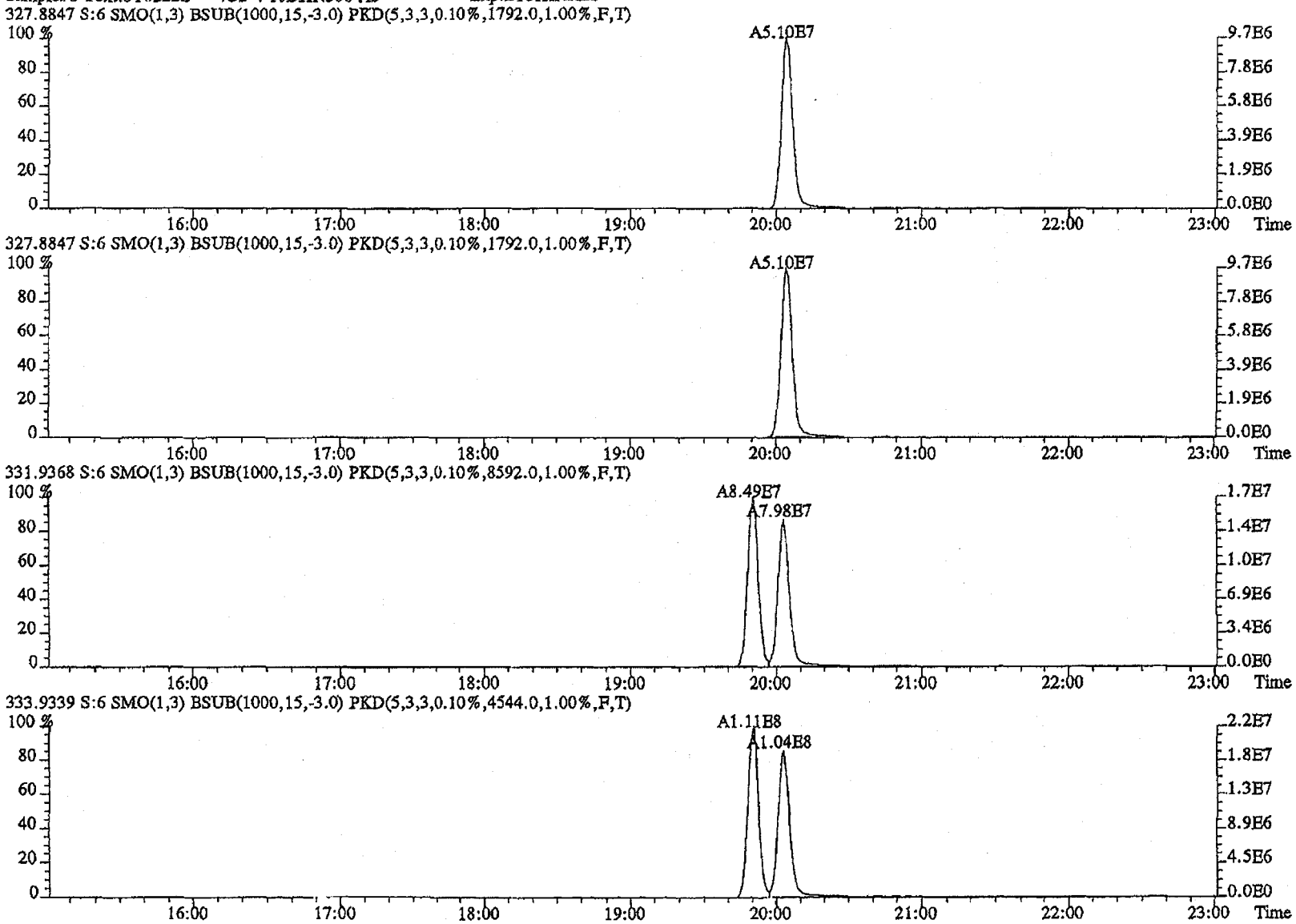
331.9368 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,8592.0,1.00%,F,T)



333.9339 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4544.0,1.00%,F,T)

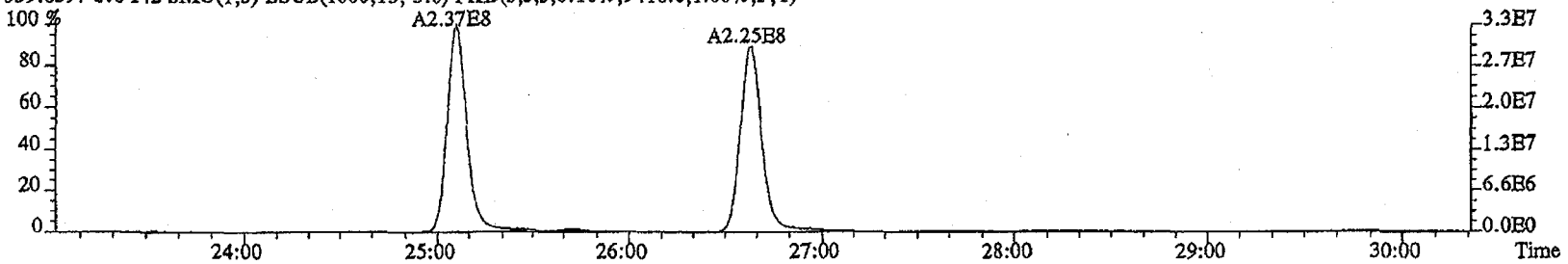


File:22FE11A4D5 #1-530 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

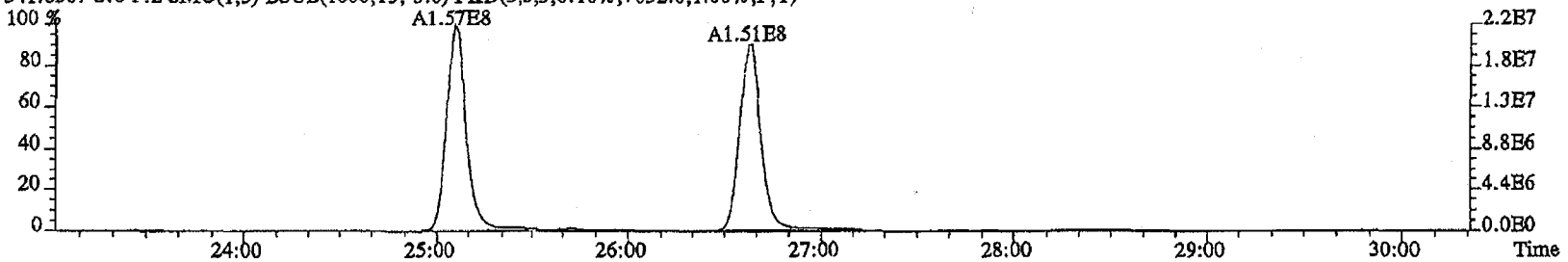


File:22FE11A4D5 #1-470 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

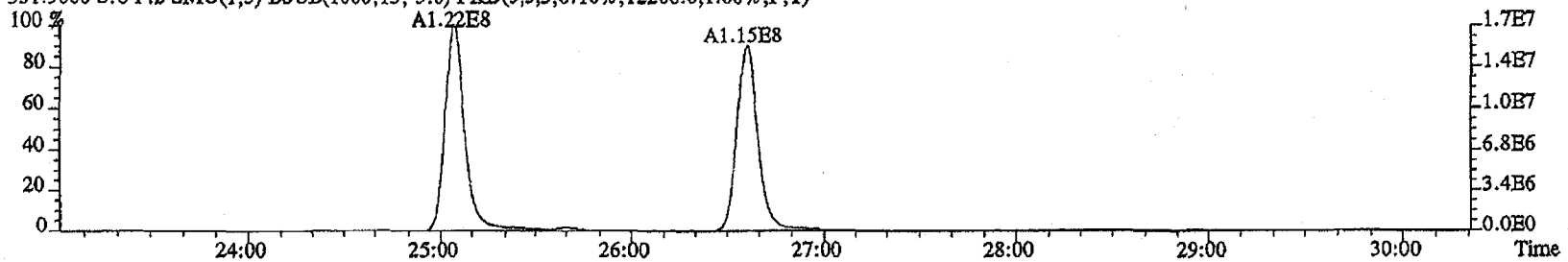
339.8597 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9416.0,1.00%,F,T)



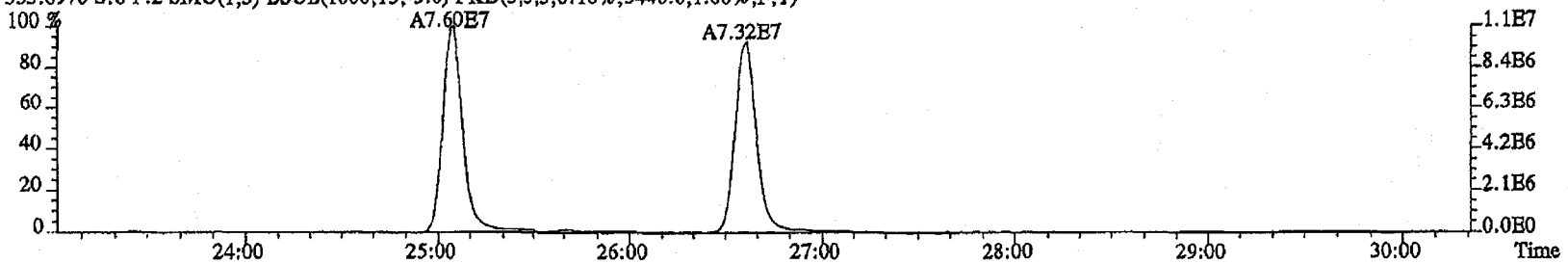
341.8567 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,7632.0,1.00%,F,T)



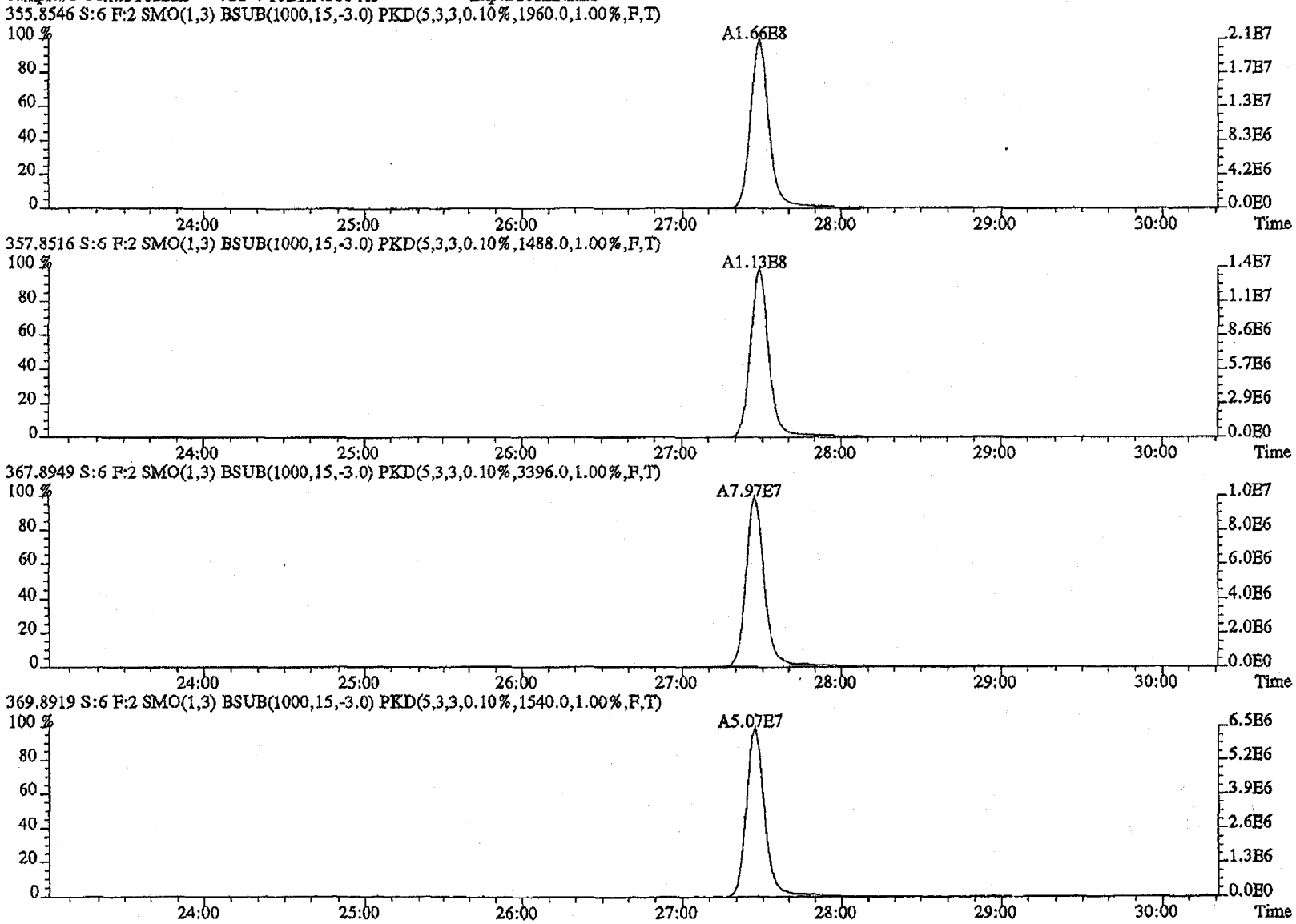
351.9000 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,12268.0,1.00%,F,T)



353.8970 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5440.0,1.00%,F,T)

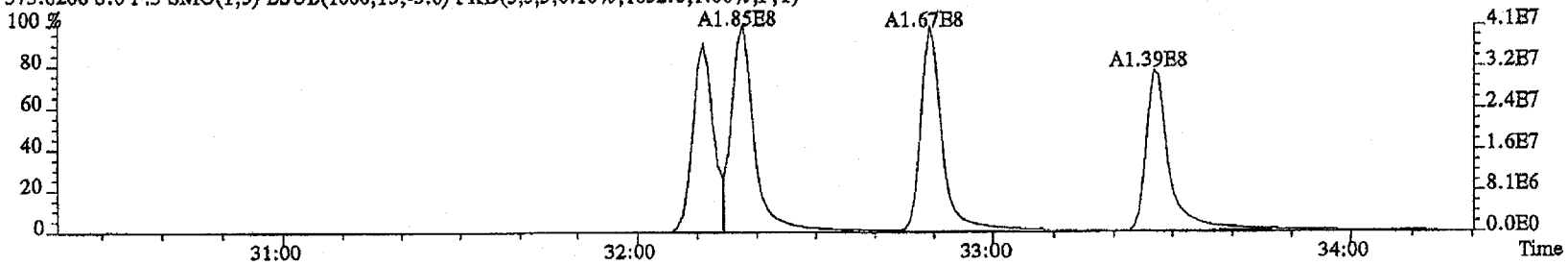


File:22FE11A4D5 #1-470 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaB
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

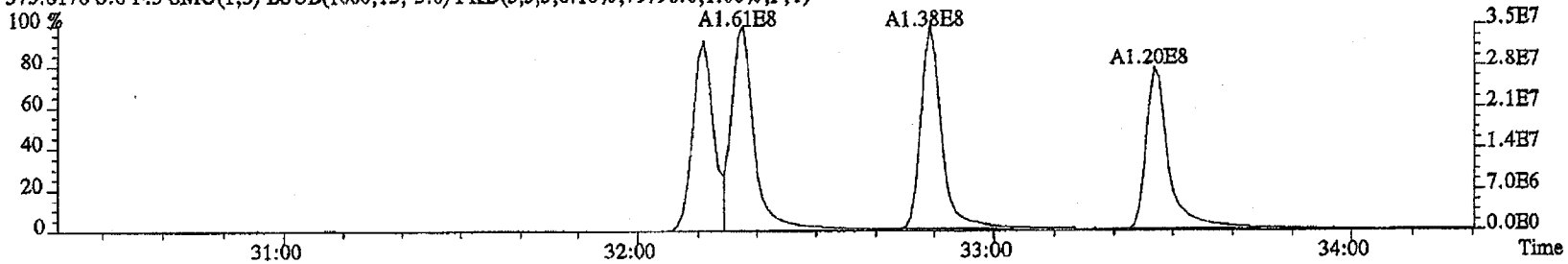


File:22FB11A4D5 #1-286 Acq:22-FEB-2011 16:35:50 GC BI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

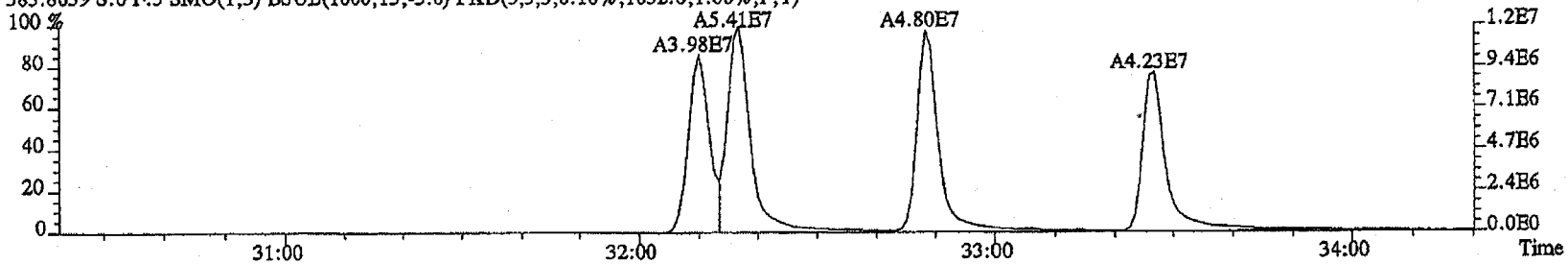
373.8208 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1832.0,1.00%,F,T)



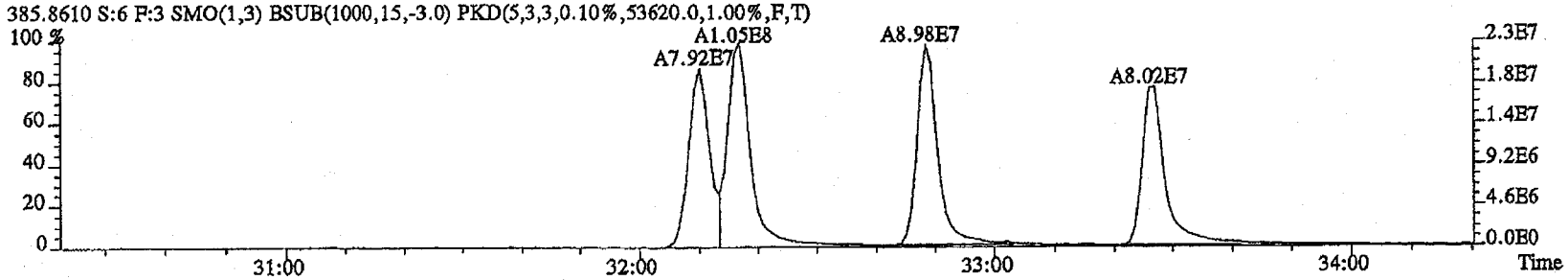
375.8178 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,79796.0,1.00%,F,T)



383.8639 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1032.0,1.00%,F,T)

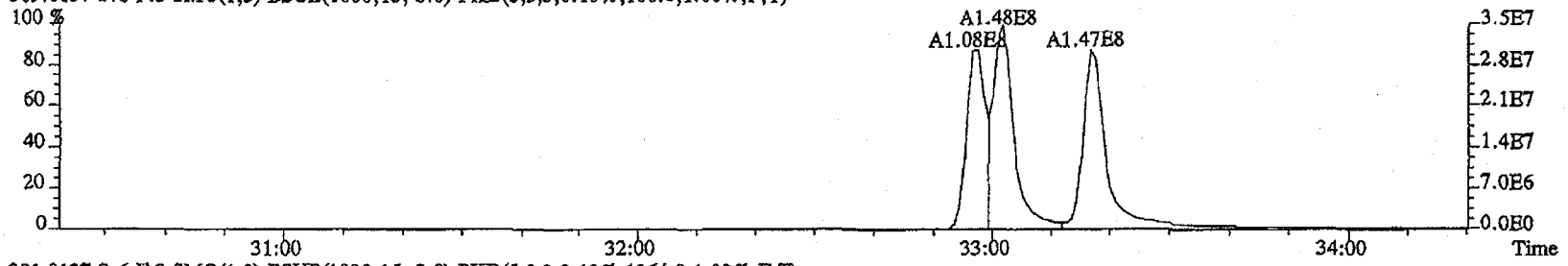


385.8610 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,53620.0,1.00%,F,T)

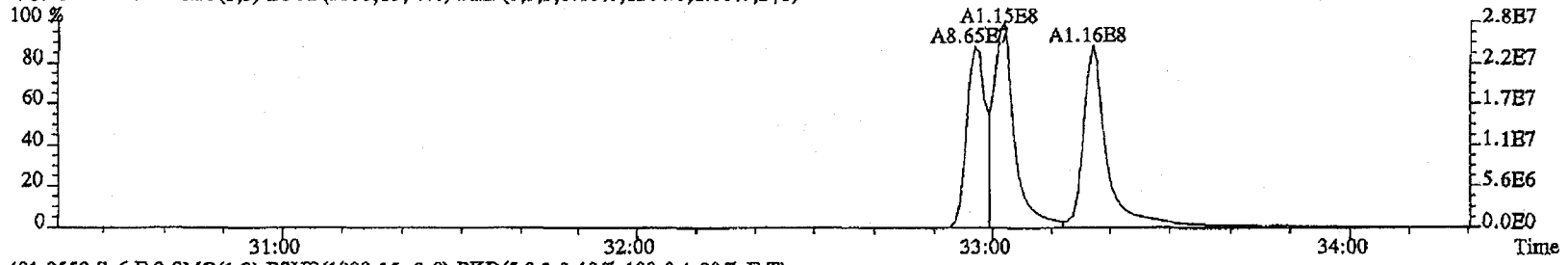


File:22FE11A4D5 #1-286 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

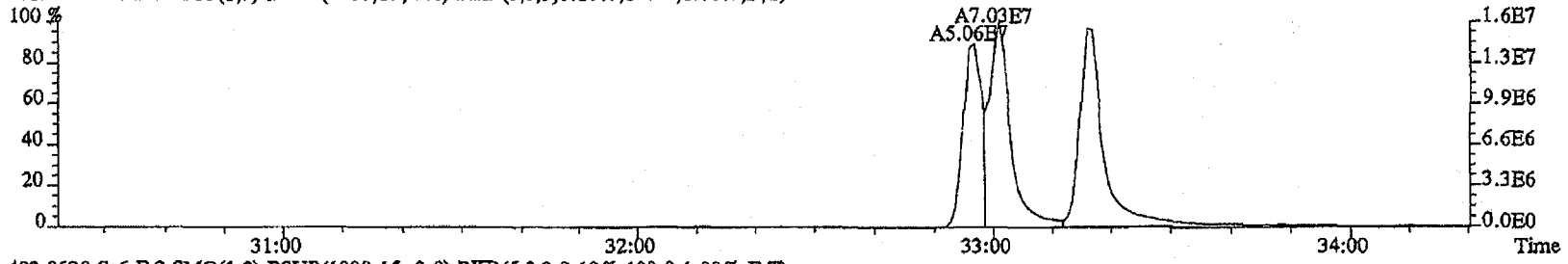
389.8157 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,100.0,1.00%,F,T)



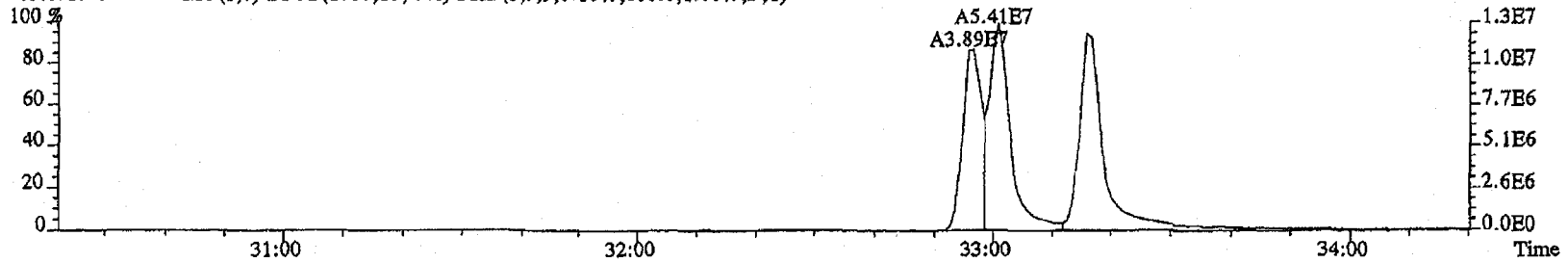
391.8127 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1264.0,1.00%,F,T)



401.8559 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,108.0,1.00%,F,T)

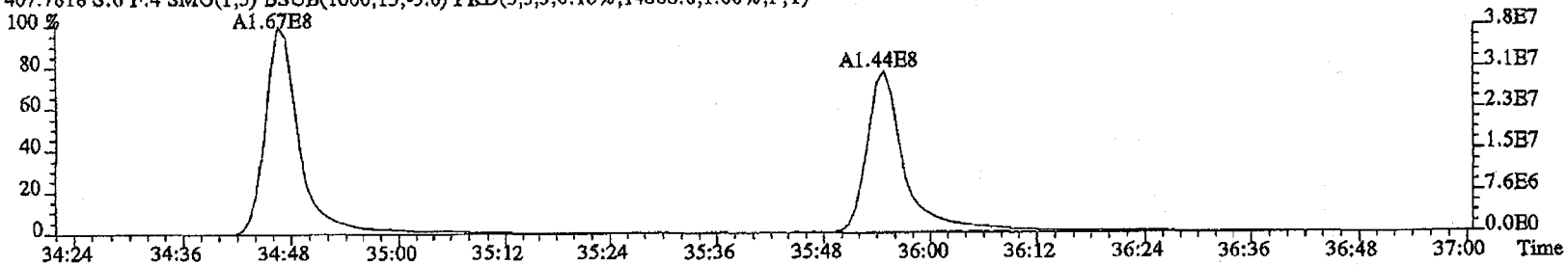


403.8529 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,108.0,1.00%,F,T)

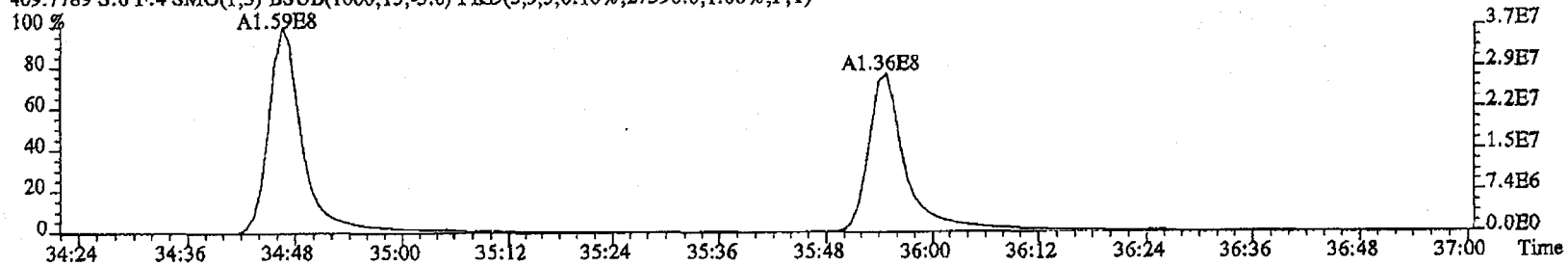


File:22FE11A4D5 #1-201 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaB
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

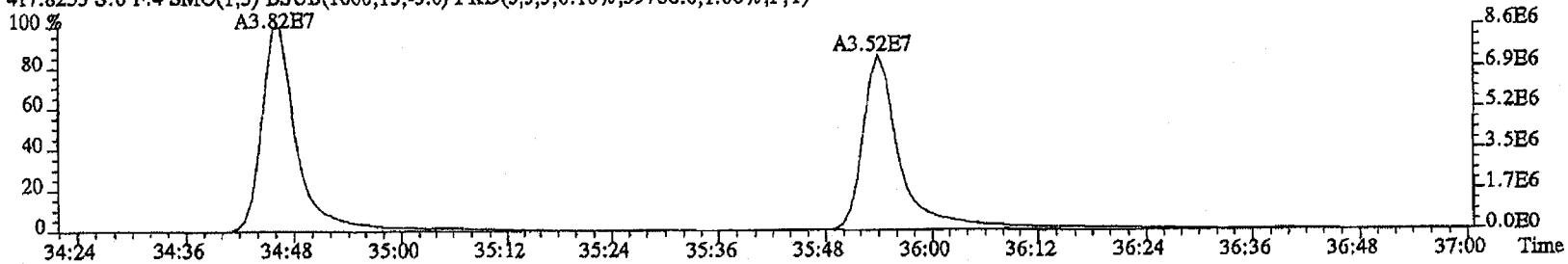
407.7818 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,14868.0,1.00%,F,T)



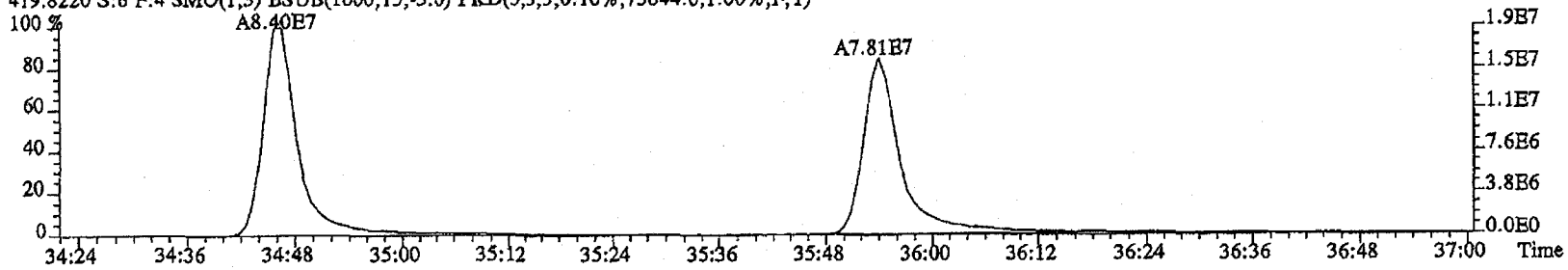
409.7789 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,27396.0,1.00%,F,T)



417.8253 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,39788.0,1.00%,F,T)

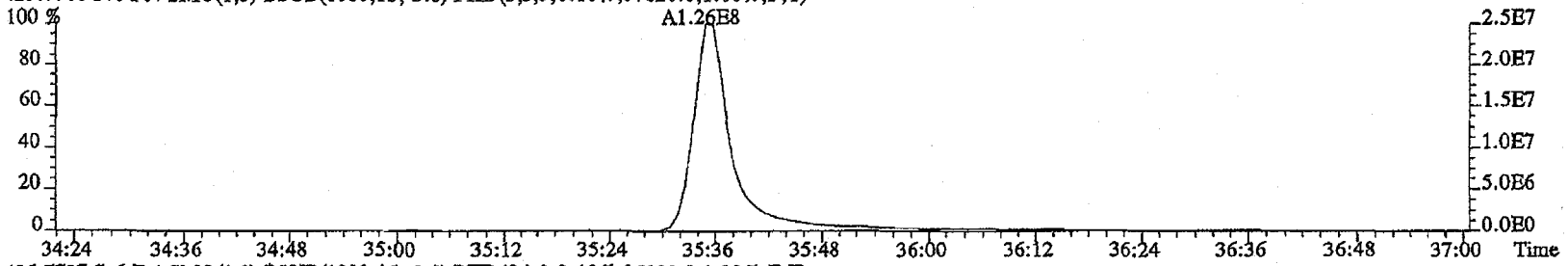


419.8220 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,75644.0,1.00%,F,T)

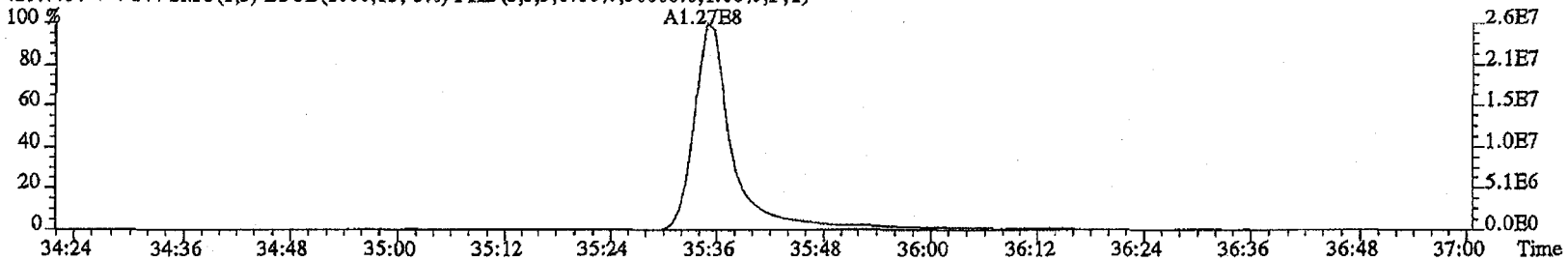


File:22FB11A4D5 #1-201 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

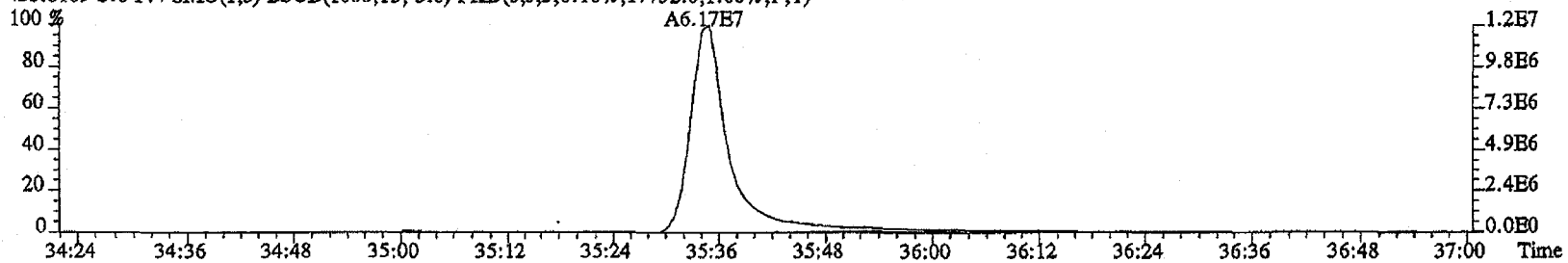
423.7766 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,37620.0,1.00%,F,T)



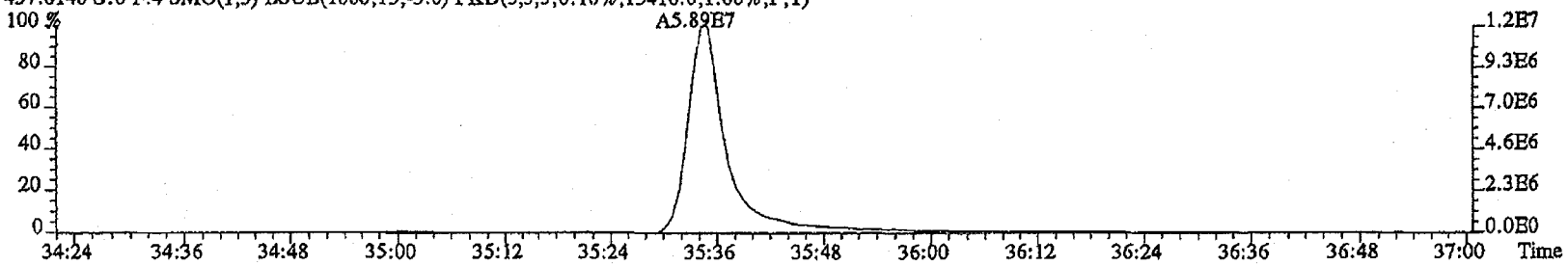
425.7737 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,36008.0,1.00%,F,T)



435.8169 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,17732.0,1.00%,F,T)

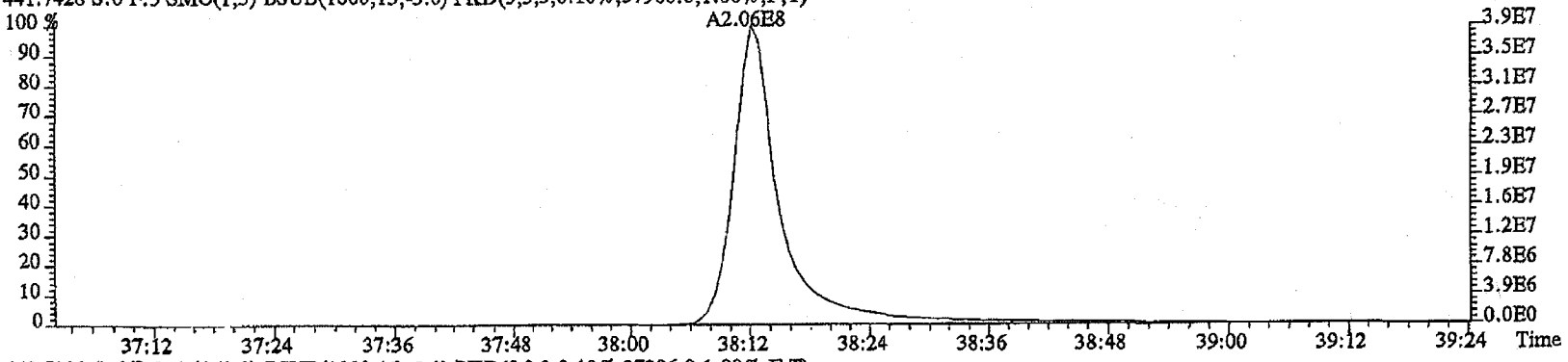


437.8140 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,15416.0,1.00%,F,T)

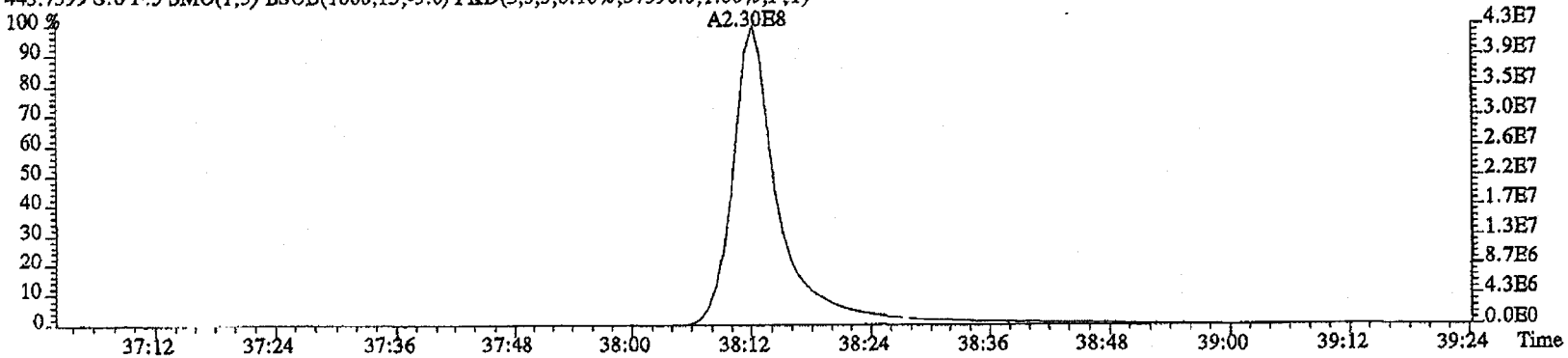


File:22FE11A4D5 #1-192 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

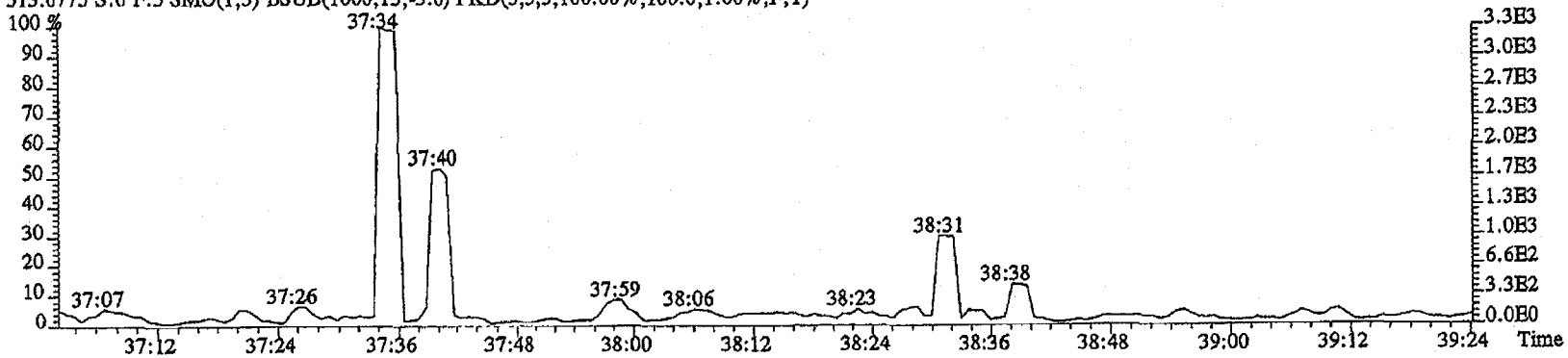
441.7428 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,37960.0,1.00%,F,T)



443.7399 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,37396.0,1.00%,F,T)

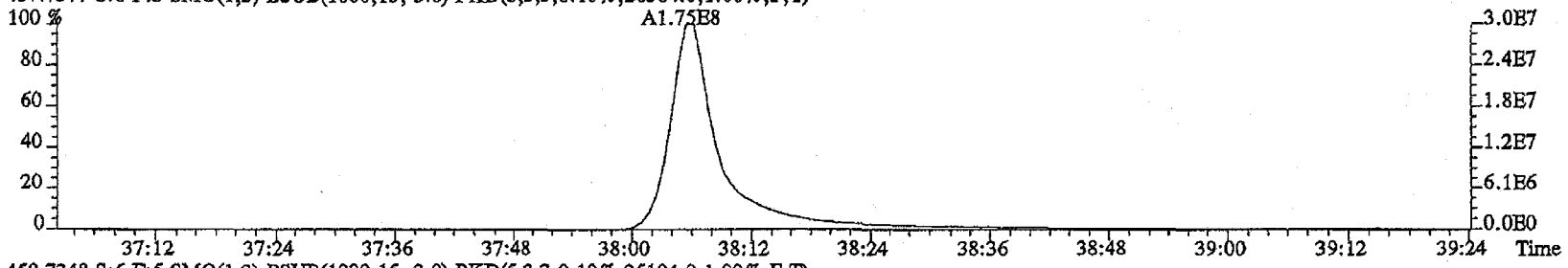


513.6775 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,100.0,1.00%,F,T)

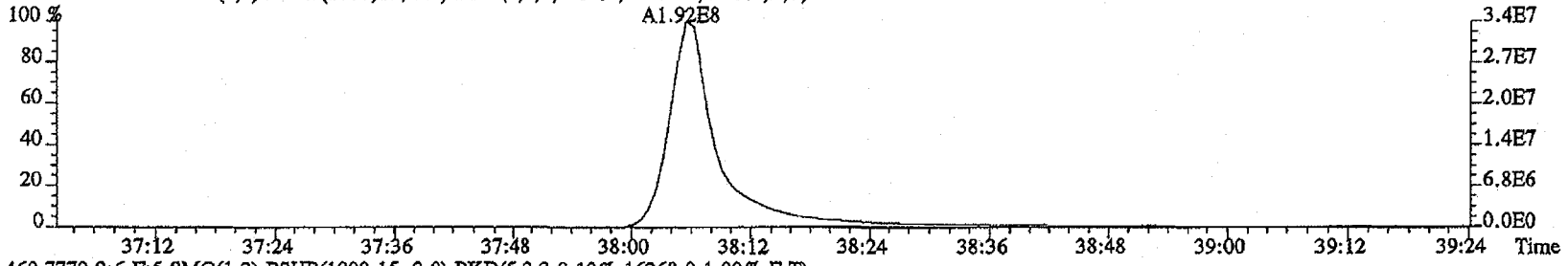


File:22FB11A4D5 #1-192 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

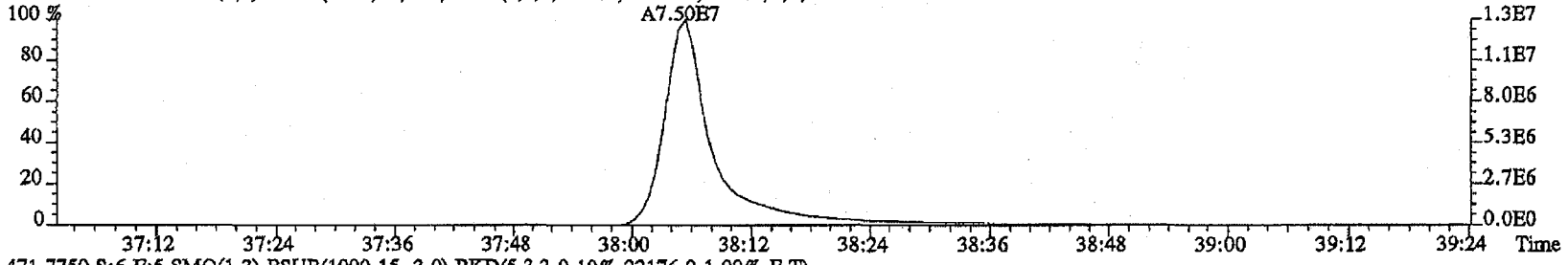
457.7377 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,26384.0,1.00%,F,T)



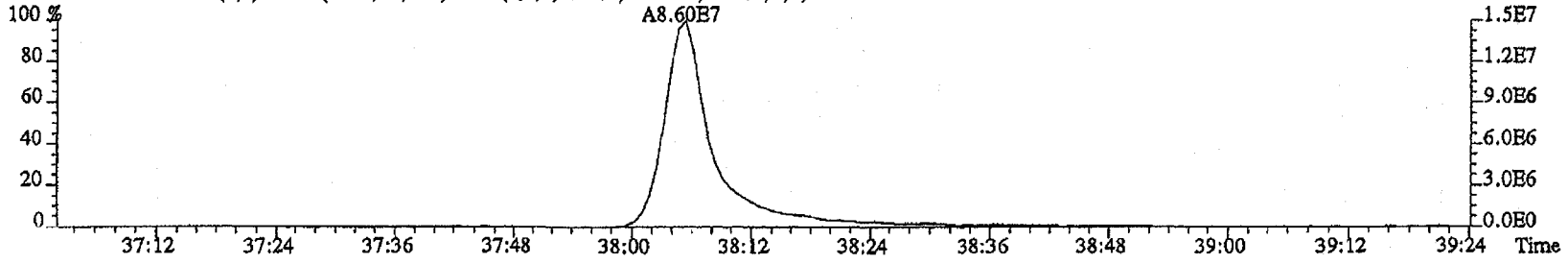
459.7348 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,25104.0,1.00%,F,T)



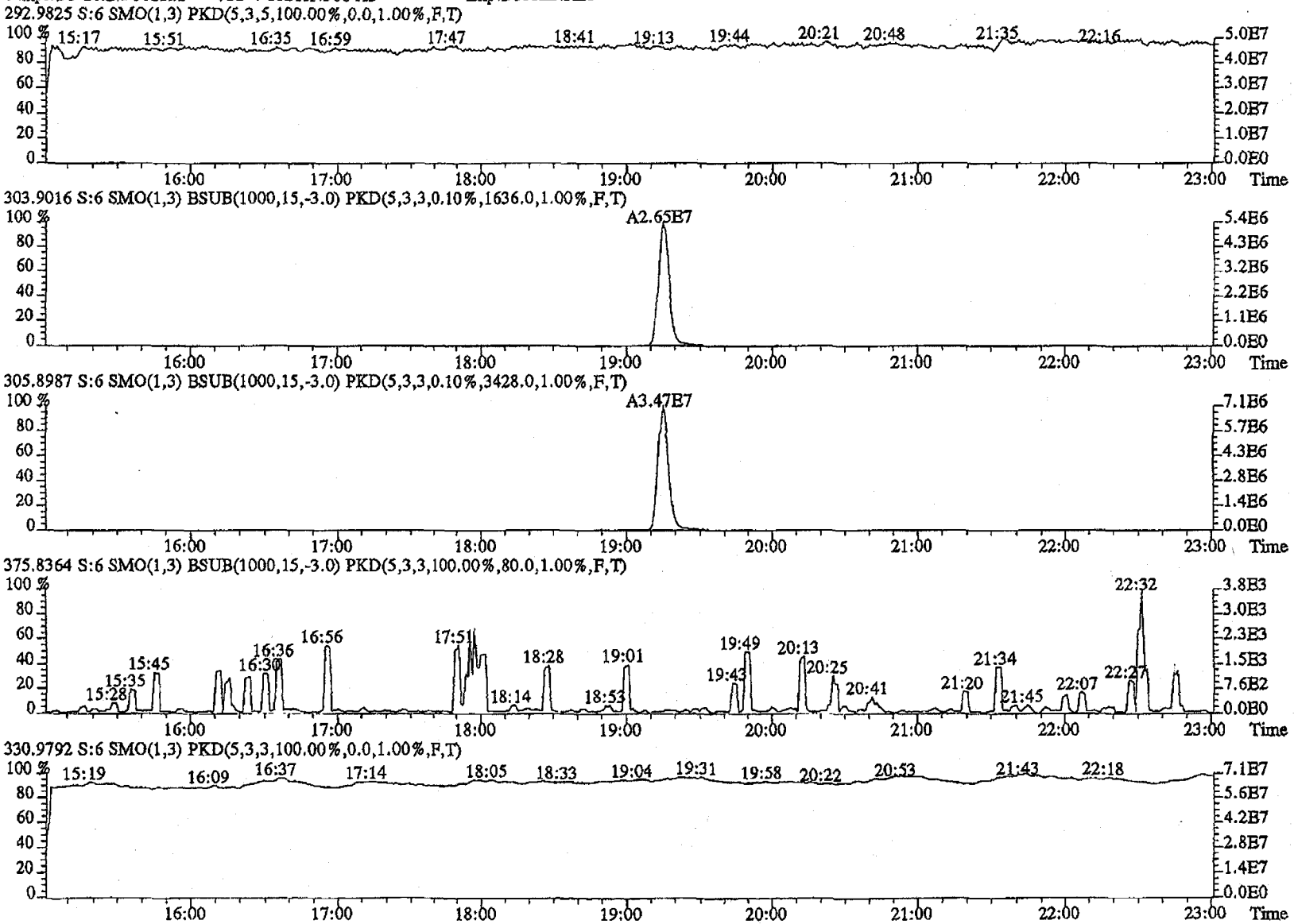
469.7779 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,16268.0,1.00%,F,T)



471.7750 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,22176.0,1.00%,F,T)

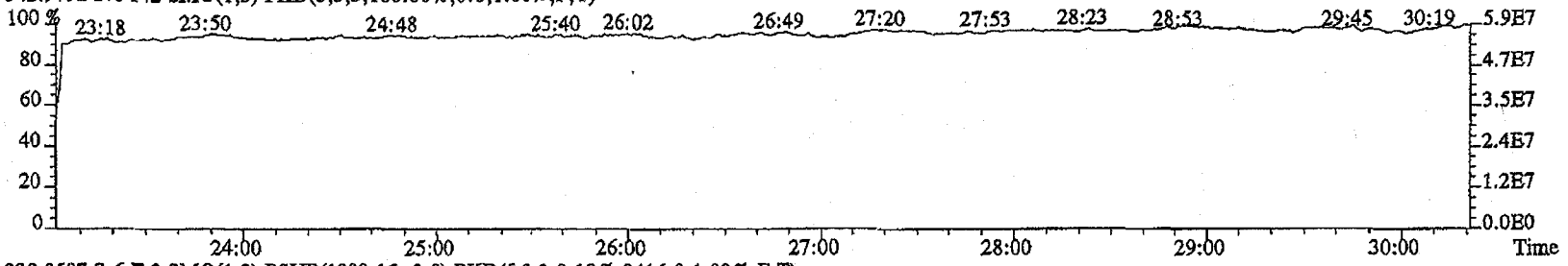


File:22FE11A4D5 #1-530 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

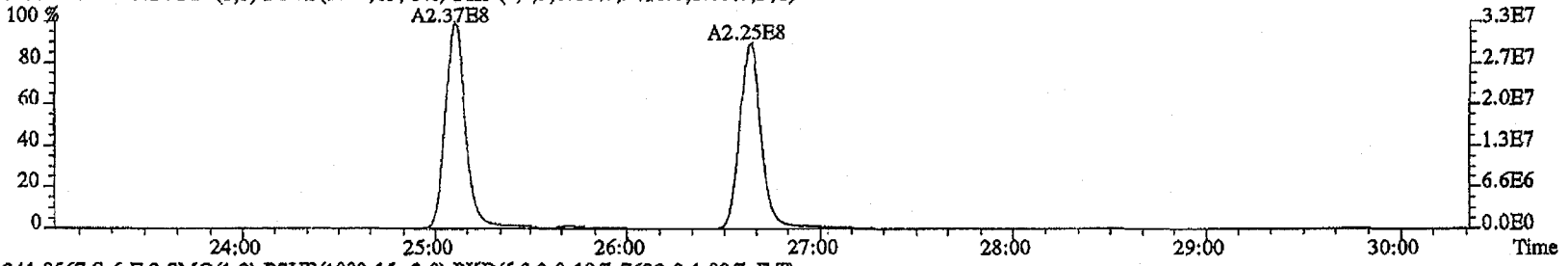


File:22FB11A4D5 #1-470 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES

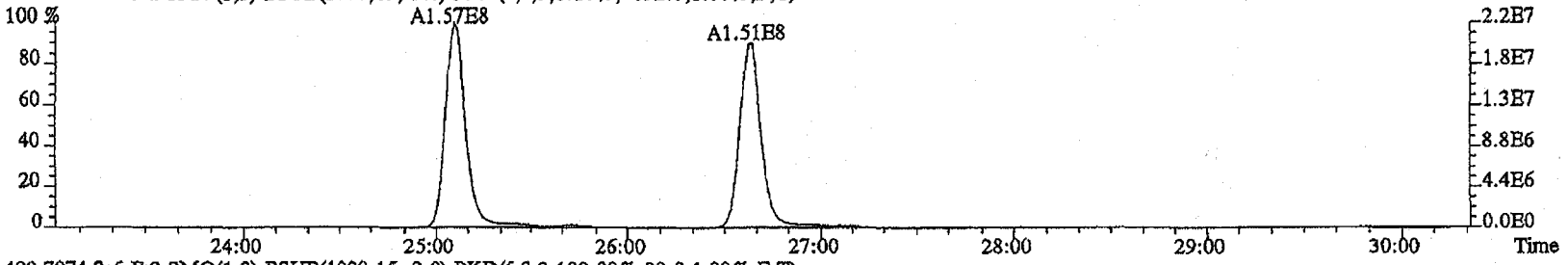
342.9792 S:6 F:2 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



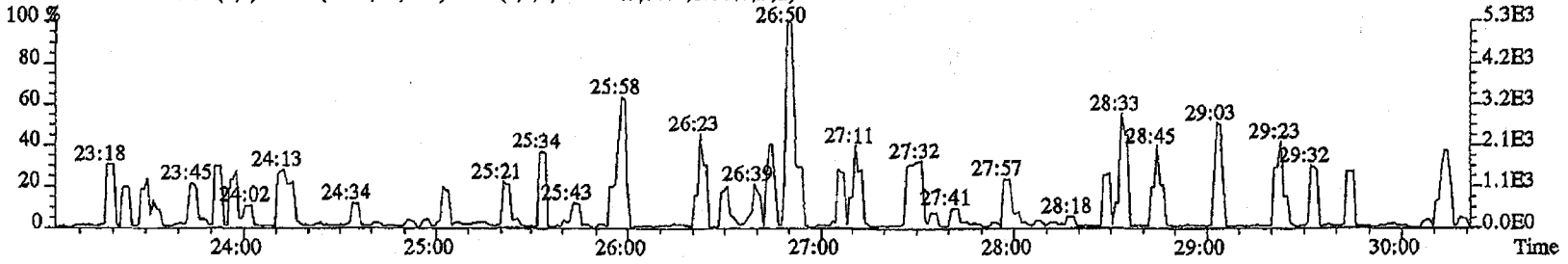
339.8597 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9416.0,1.00%,F,T)



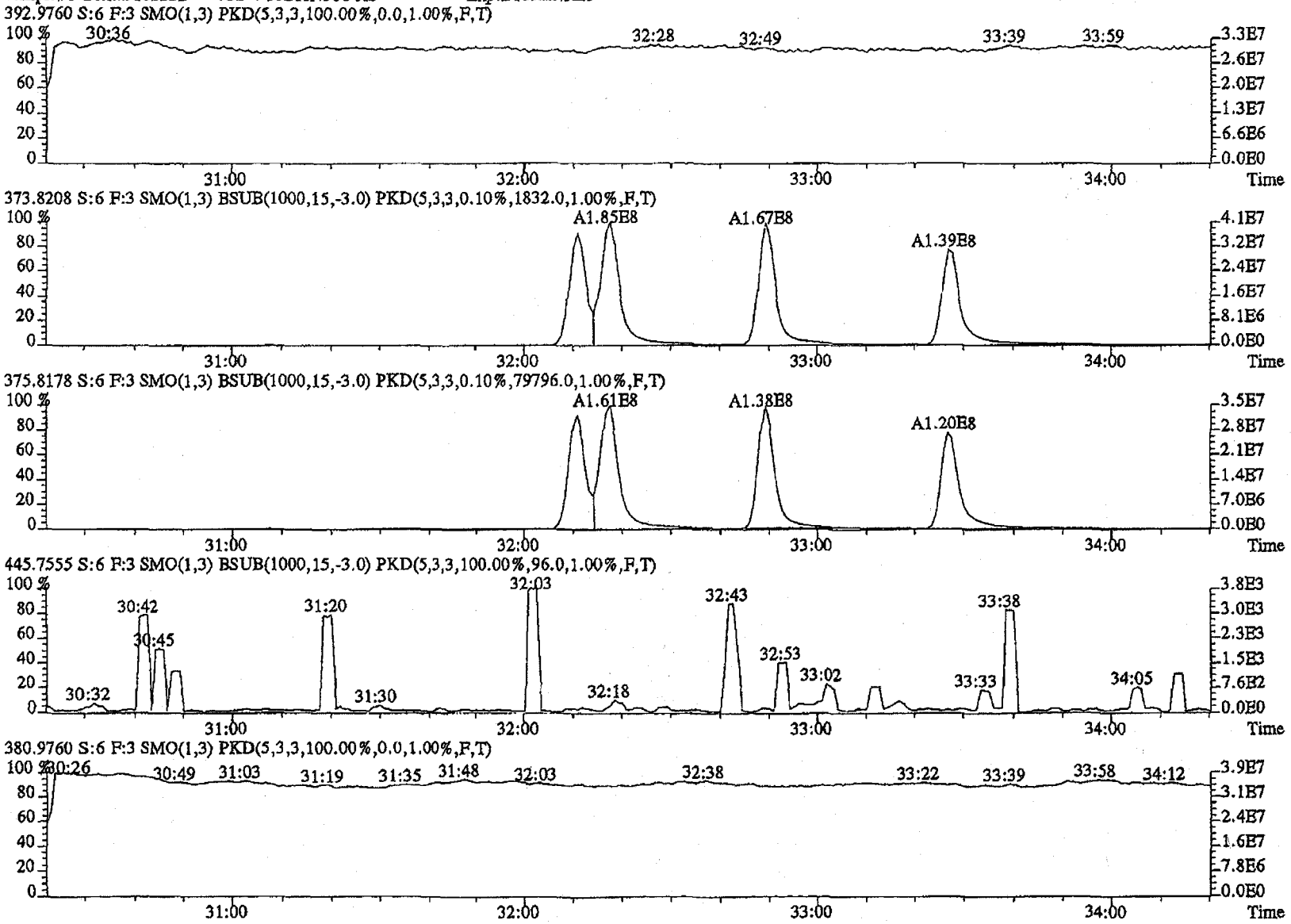
341.8567 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,7632.0,1.00%,F,T)



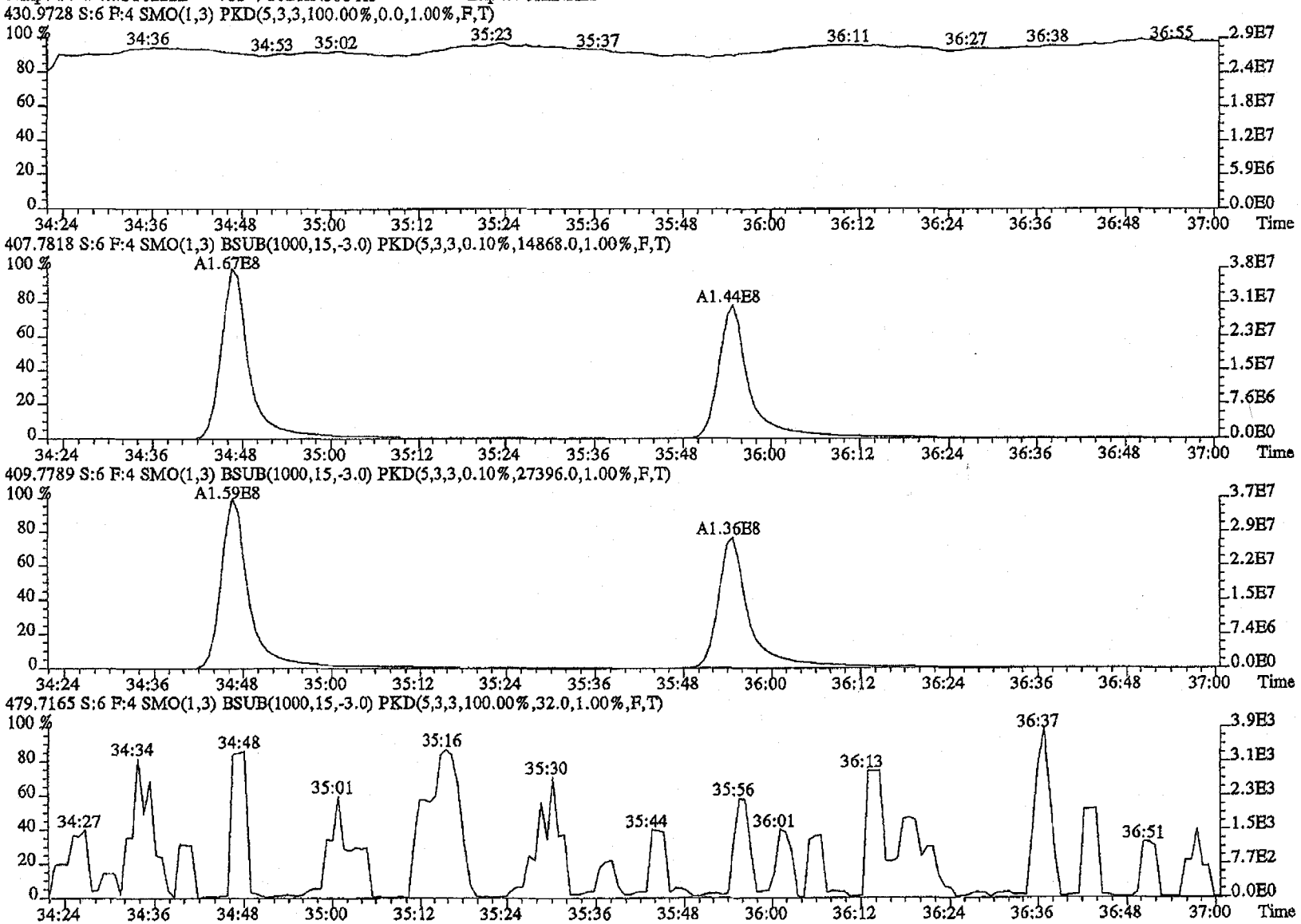
409.7974 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,80.0,1.00%,F,T)



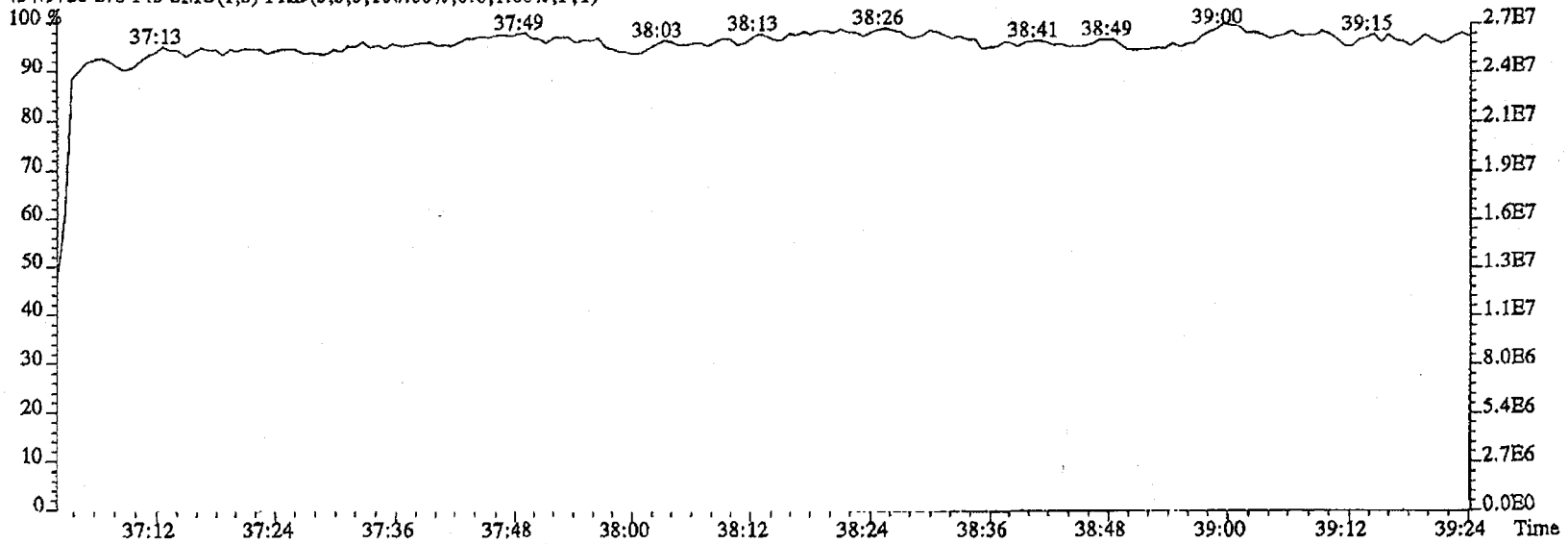
File:22FE11A4D5 #1-286 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES



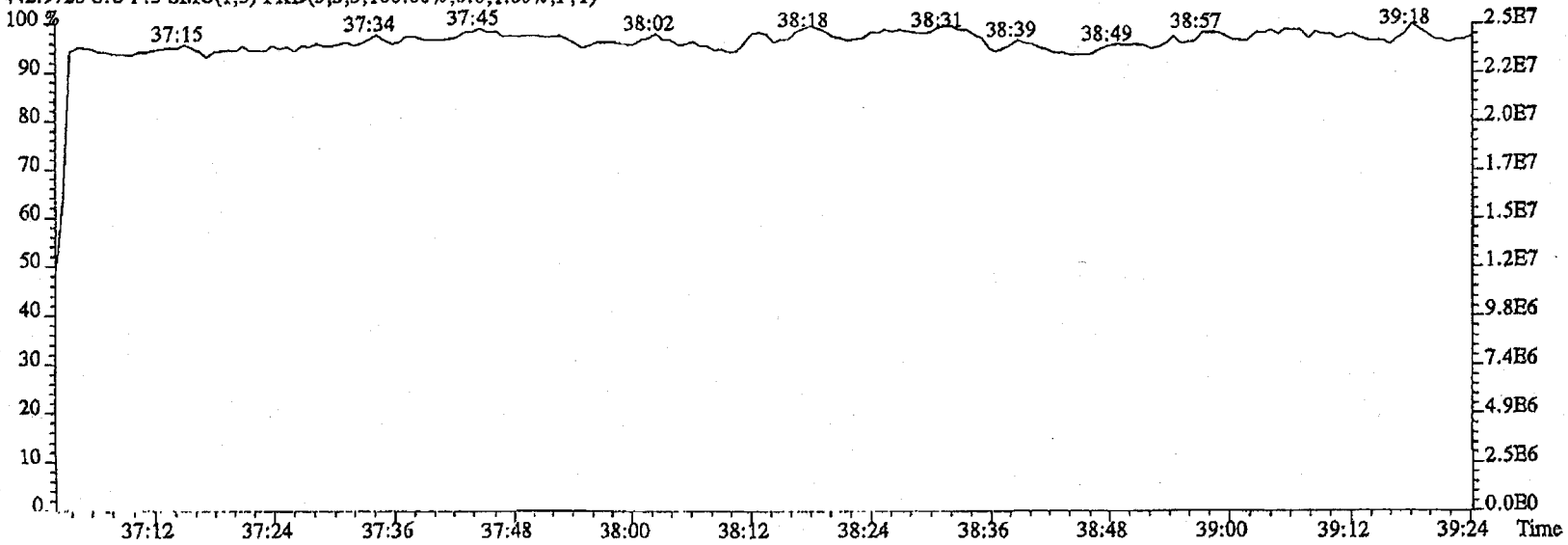
File:22FE11A4D5 #1-201 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES



File:22FE11A4D5 #1-192 Acq:22-FEB-2011 16:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:ST0222D :CS-4 10DXN506 AS Exp:DIOXINRES
454.9728 S:6 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:6 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

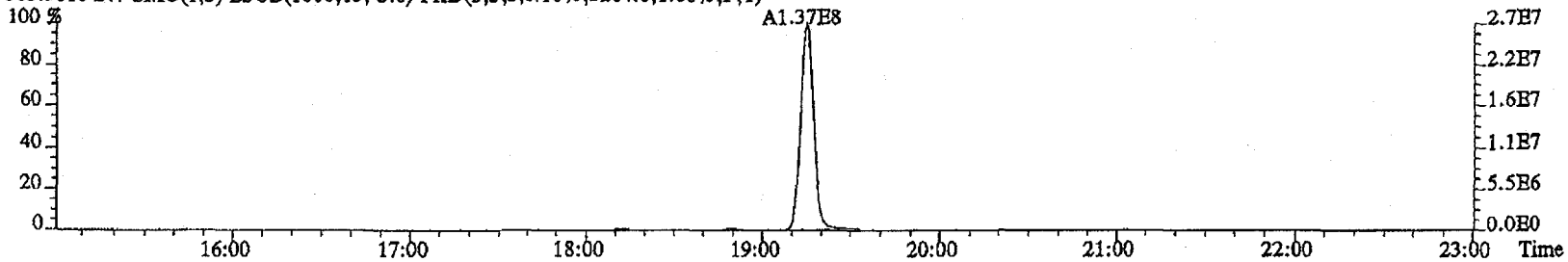


Run #6 Filename 22FE11A4D5 S: 7 I: 1
Acquired: 22-FEB-11 17:20:19 Processed: 23-FEB-11 09:25:11
Run: 15SE098D2 Analyte: 8290 Cal: 82900222114D5
Comments:
Sample text: ST0222E :CS-5 10DXN507 AS

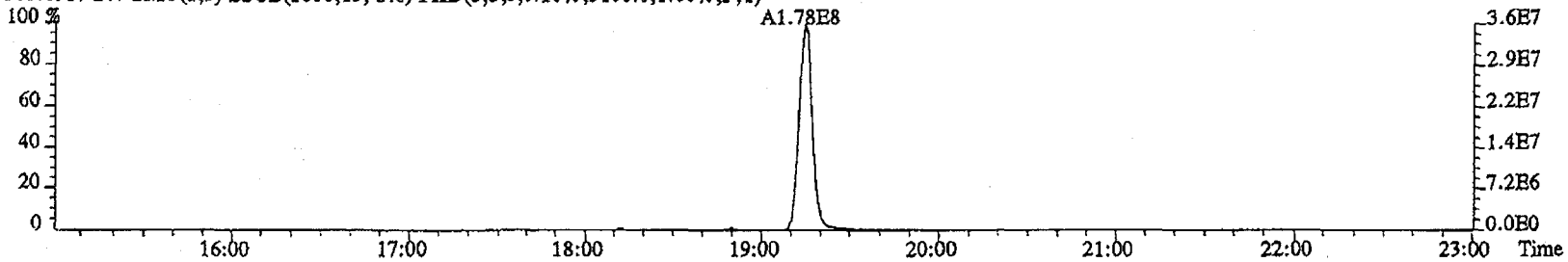
Name	Resp	RA		RT	RRF		Mod?
13C-1,2,3,4-TCDD	200834500	0.78	y	19:50	-	100.00	n
13C-2,3,7,8-TCDF	207454400	0.78	y	19:14	1.0330	100.00	n
2,3,7,8-TCDF	315090000	0.77	y	19:15	0.7594	200.00	n
Total TCDF	-	-	n	-	0.7594	200.00	n
13C-2,3,7,8-TCDD	191760700	0.77	y	20:03	0.9548	100.00	n
2,3,7,8-TCDD	335131000	0.73	y	20:04	0.8738	200.00	n
Total TCDD	-	-	n	-	0.8738	200.00	n
37Cl-2,3,7,8-TCDD	531280000	1.00	y	20:04	1.3227	200.00	n
13C-1,2,3,7,8-PeCDF	211630700	1.60	y	25:04	1.0538	100.00	n
1,2,3,7,8-PeCDF	2119259000	1.51	y	25:06	1.0014	1000.00	n
2,3,4,7,8-PeCDF	2041157000	1.50	y	26:38	0.9645	1000.00	n
Total F2 PeCDF	-	-	n	-	0.9829	2000.00	n
Total F1 PeCDF	-	-	n	-	0.9829	2000.00	n
13C-1,2,3,7,8-PeCDD	140840800	1.55	y	27:27	0.7013	100.00	n
1,2,3,7,8-PeCDD	1507203000	1.47	y	27:29	1.0701	1000.00	n
Total PeCDD	-	-	n	-	1.0701	1000.00	n
13C-1,2,3,7,8,9-HxCDD	149296700	1.28	y	33:17	-	100.00	n
13C-1,2,3,4,7,8-HxCDF	131913900	0.51	y	32:10	0.8836	100.00	n
1,2,3,4,7,8-HxCDF	1543409000	1.13	y	32:11	1.1700	1000.00	n
1,2,3,6,7,8-HxCDF	1877543000	1.15	y	32:17	1.4233	1000.00	n
2,3,4,6,7,8-HxCDF	1719683000	1.14	y	32:49	1.3036	1000.00	n
1,2,3,7,8,9-HxCDF	1462041000	1.15	y	33:27	1.1083	1000.00	n
Total HxCDF	-	-	n	-	1.2513	4000.00	n
13C-1,2,3,6,7,8-HxCDD	137223500	1.27	y	33:01	0.9191	100.00	n
1,2,3,4,7,8-HxCDD	1113359000	1.26	y	32:57	0.8113	1000.00	n
1,2,3,6,7,8-HxCDD	1466978000	1.29	y	33:02	1.0690	1000.00	n
1,2,3,7,8,9-HxCDD	1447308000	1.26	y	33:17	1.0547	1000.00	n
Total HxCDD	-	-	n	-	0.9784	3000.00	n
13C-1,2,3,4,6,7,8-HpCDF	136371600	0.45	y	34:46	0.9134	100.00	n
1,2,3,4,6,7,8-HpCDF	1827705000	1.05	y	34:46	1.3402	1000.00	n
1,2,3,4,7,8,9-HpCDF	1576273000	1.05	y	35:55	1.1559	1000.00	n
Total HpCDF	-	-	n	-	1.2481	2000.00	n
13C-1,2,3,4,6,7,8-HpCDD	138007500	1.08	y	35:34	0.9244	100.00	n
1,2,3,4,6,7,8-HpCDD	1436353000	1.00	y	35:35	1.0408	1000.00	n
Total HpCDD	-	-	n	-	1.0408	1000.00	n
13C-OCDD	191436700	0.87	y	38:05	0.6411	200.00	n
OCDF	2602560000	0.91	y	38:13	1.3595	2000.00	n
OCDD	2173440000	0.90	y	38:05	1.1353	2000.00	n

File:22FE11A4D5 #1-530 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES

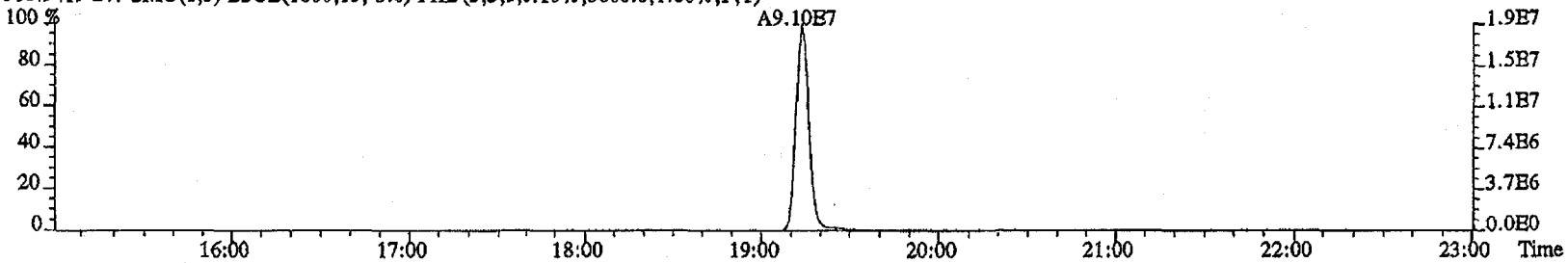
303.9016 S:7 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3264.0,1.00%,F,T)



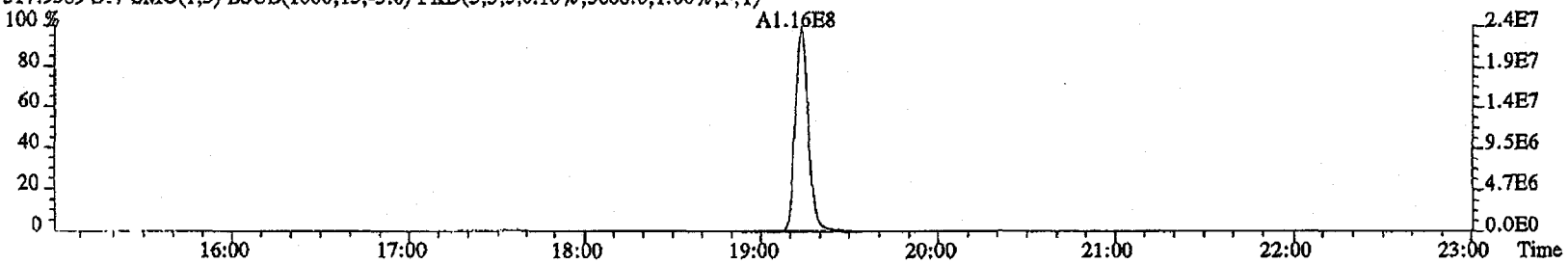
305.8987 S:7 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3188.0,1.00%,F,T)



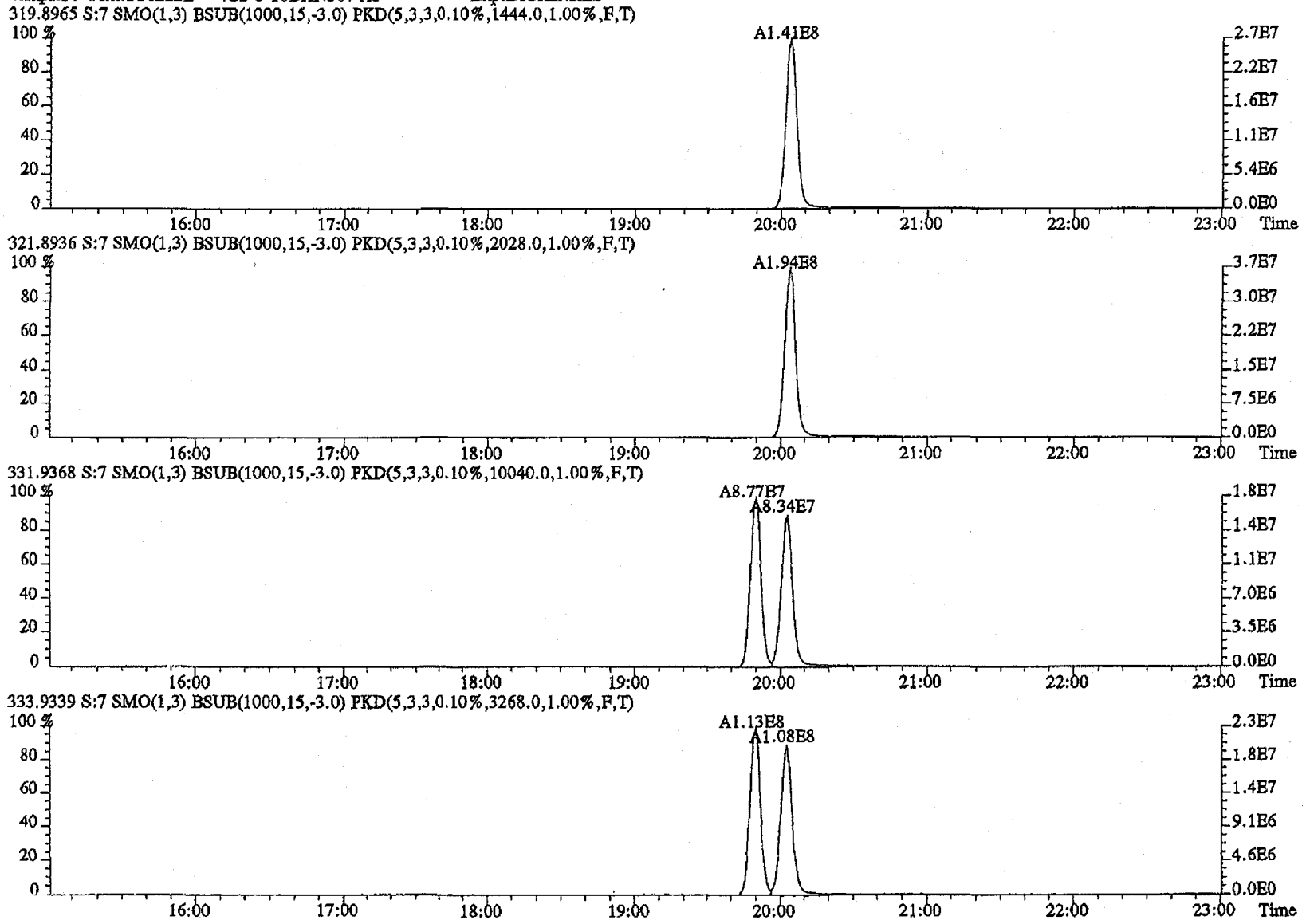
315.9419 S:7 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5660.0,1.00%,F,T)



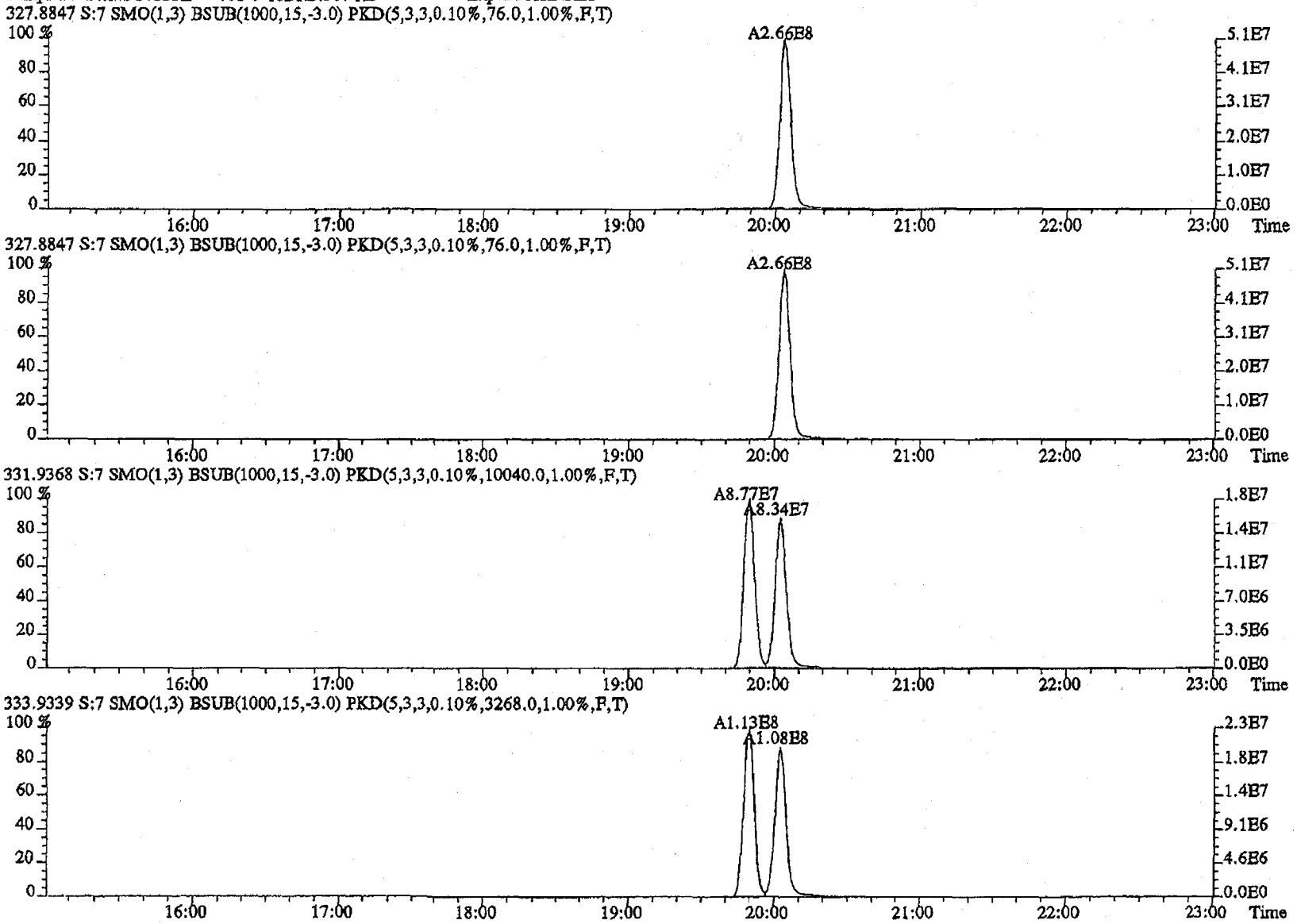
317.9389 S:7 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5688.0,1.00%,F,T)



File:22FB11A4D5 #1-530 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES

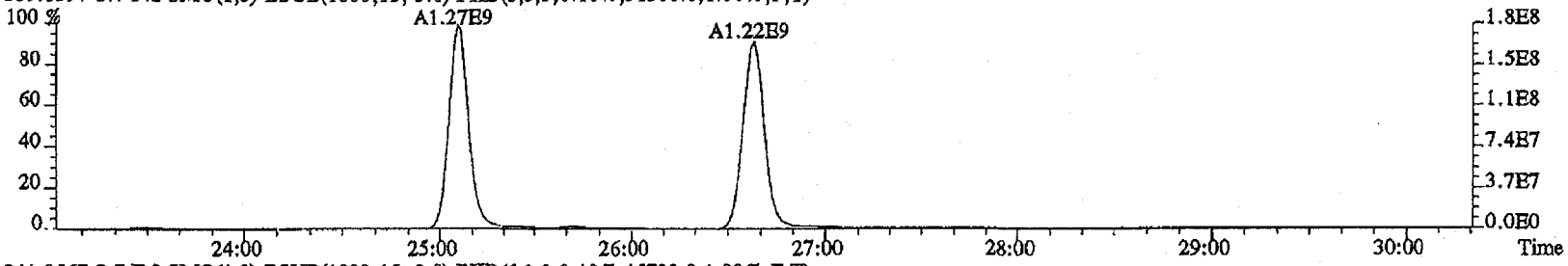


File:22FB11A4D5 #1-530 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES

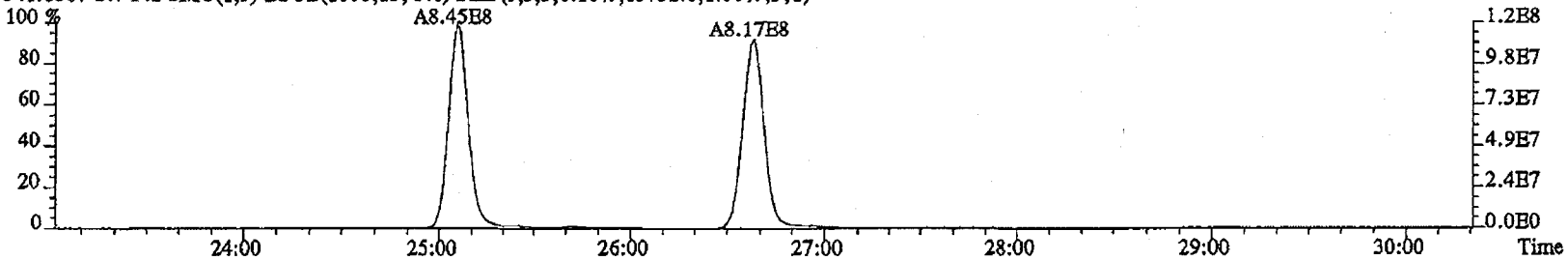


File:22FB11A4D5 #1-470 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES

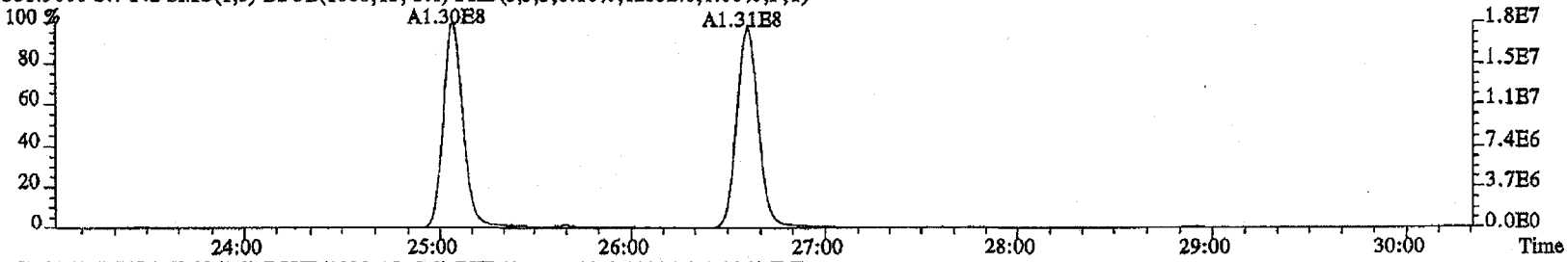
339.8597 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,31308.0,1.00%,F,T)



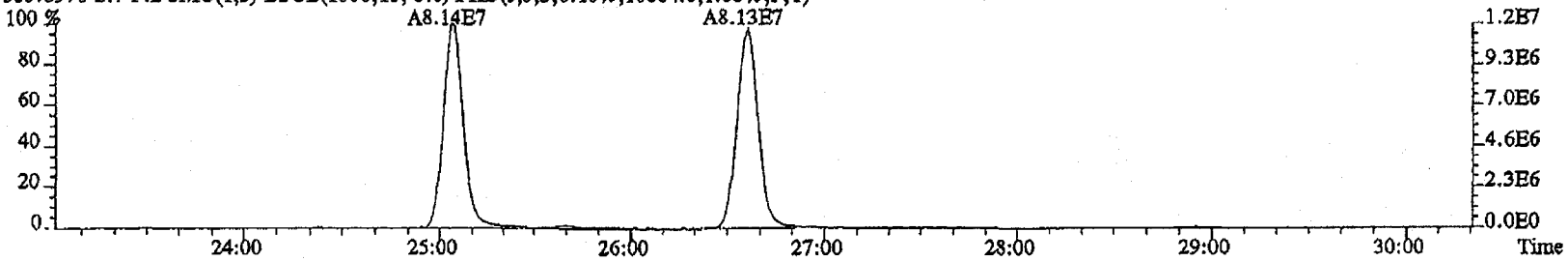
341.8567 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,15732.0,1.00%,F,T)



351.9000 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,12532.0,1.00%,F,T)

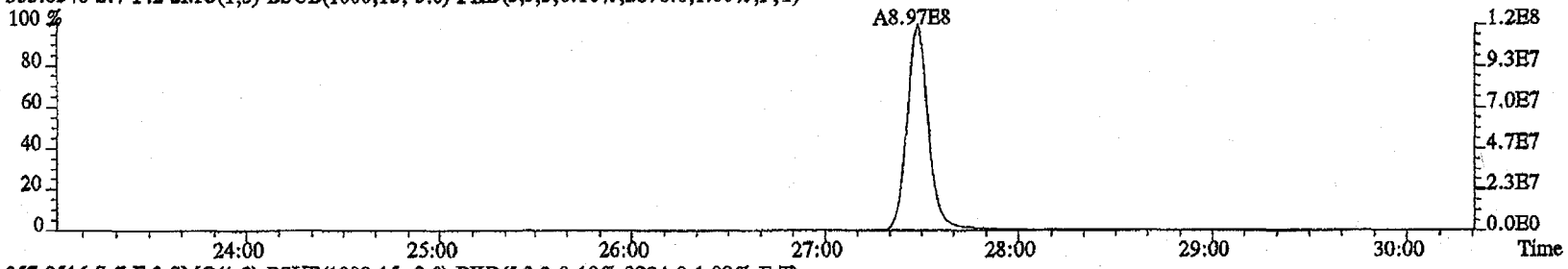


353.8970 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,10004.0,1.00%,F,T)

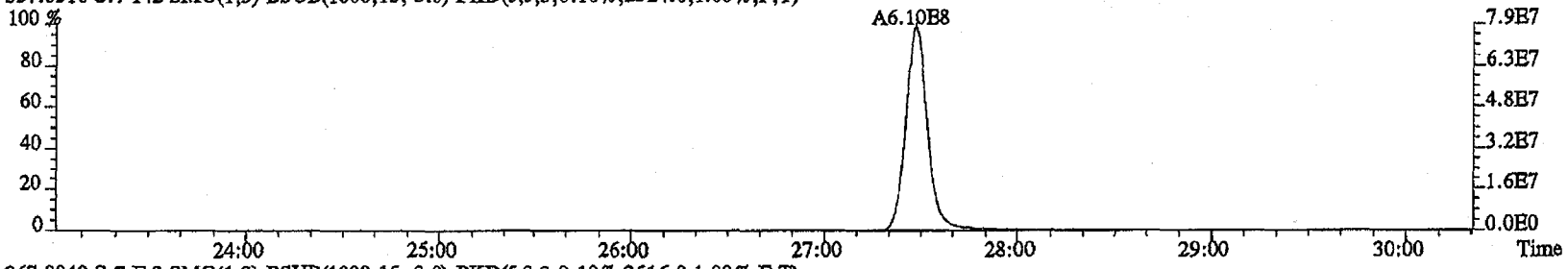


File:22FB11A4D5 #1-470 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES

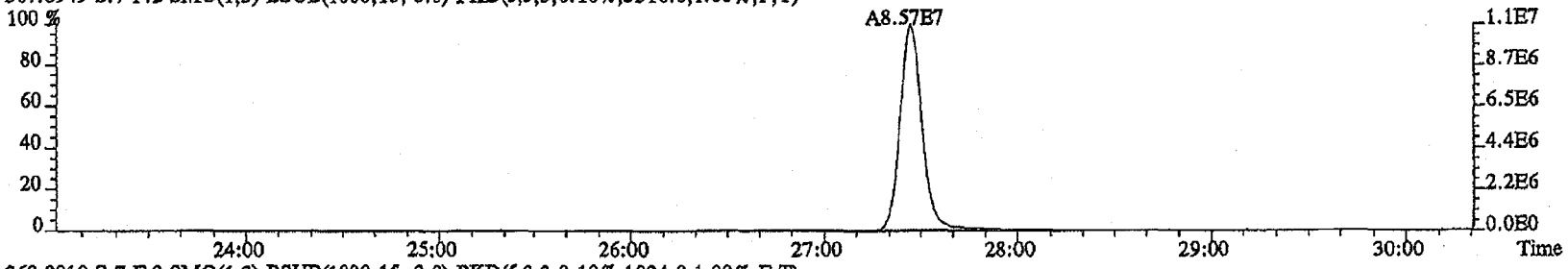
355.8546 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2876.0,1.00%,F,T)



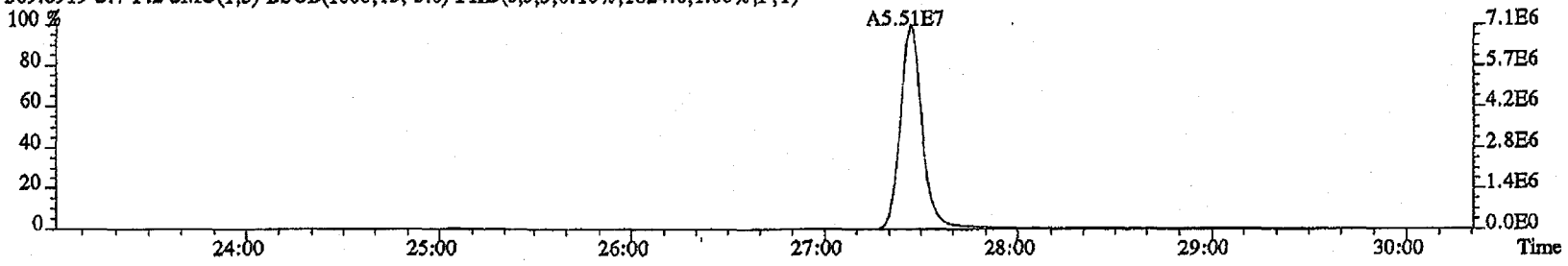
357.8516 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2324.0,1.00%,F,T)



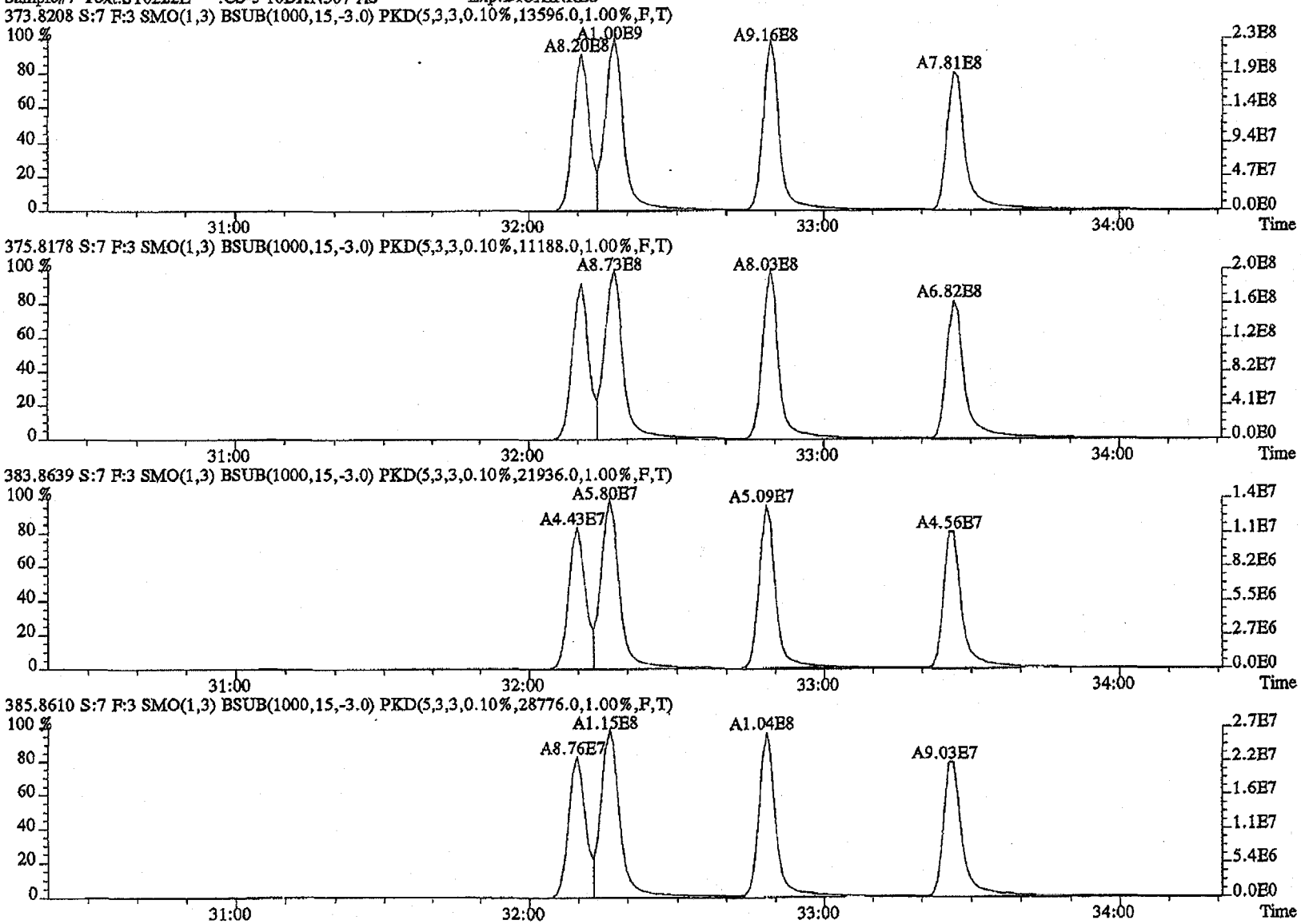
367.8949 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3516.0,1.00%,F,T)



369.8919 S:7 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1824.0,1.00%,F,T)

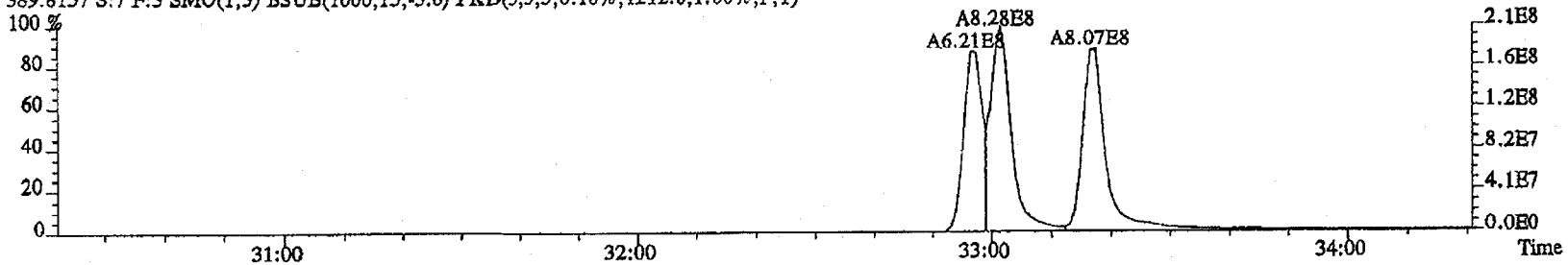


File:22FE11A4D5 #1-287 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES

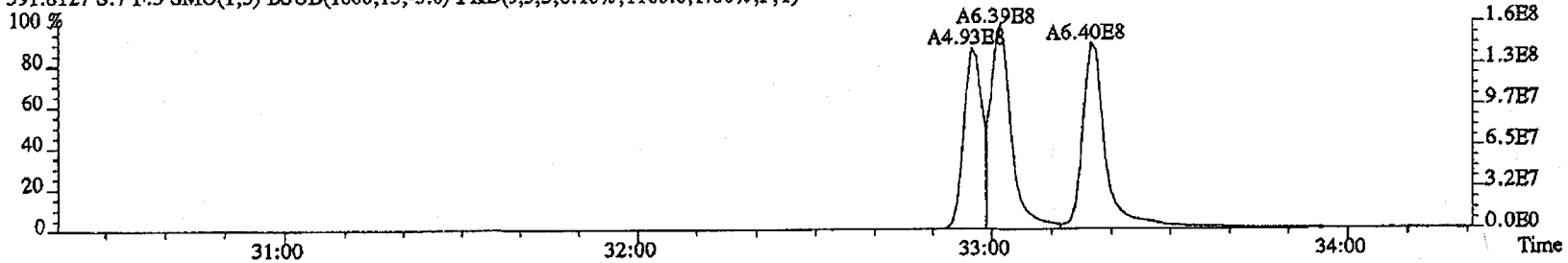


File:22FB11A4D5 #1-287 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES

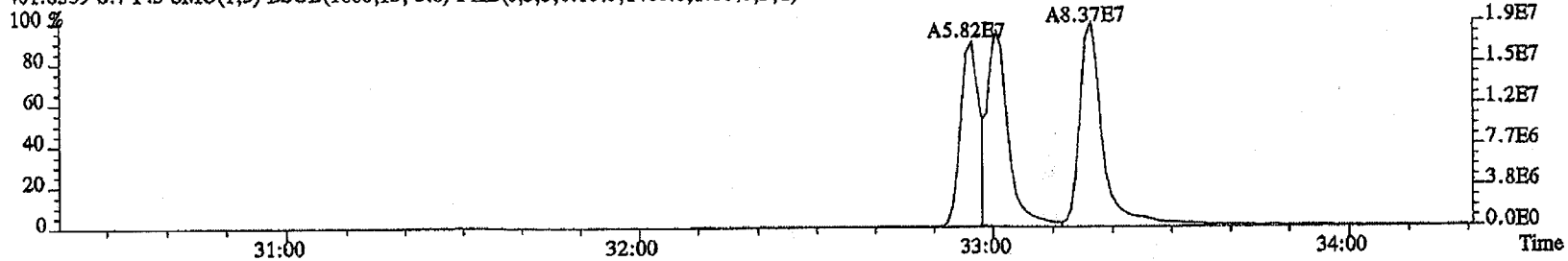
389.8157 S:7 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1212.0,1.00%,F,T)



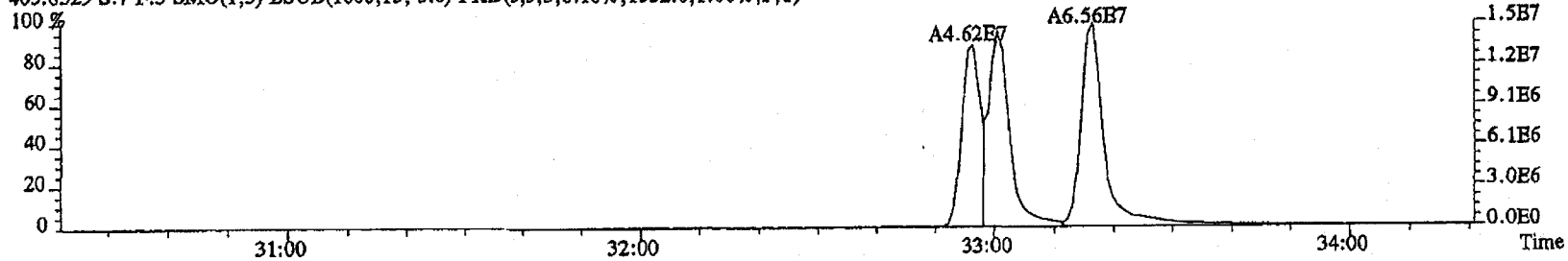
391.8127 S:7 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1160.0,1.00%,F,T)



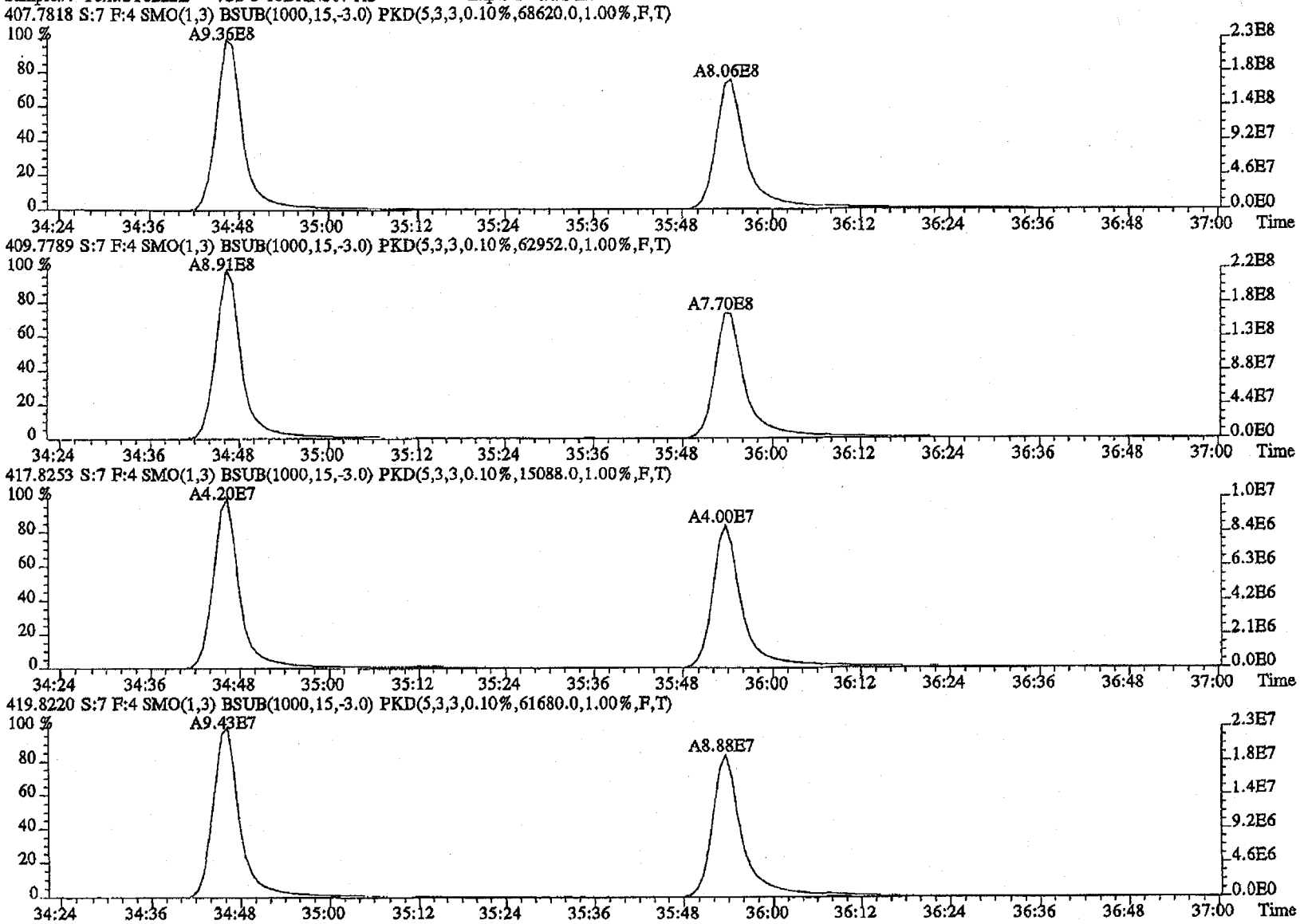
401.8559 S:7 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1400.0,1.00%,F,T)



403.8529 S:7 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1552.0,1.00%,F,T)

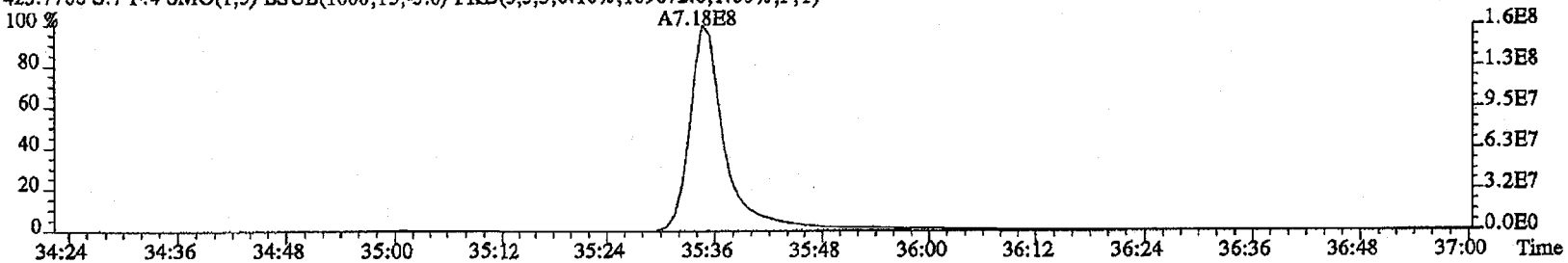


File:22FB11A4D5 #1-200 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES

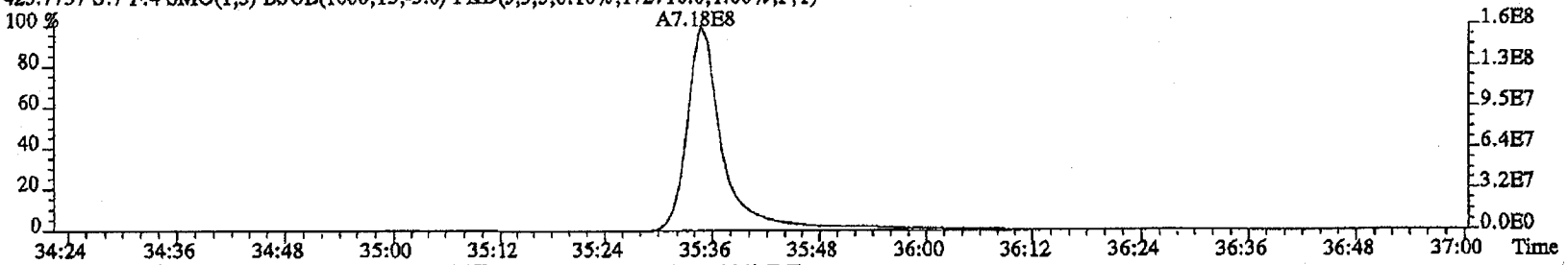


File:22FB11A4D5 #1-200 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES

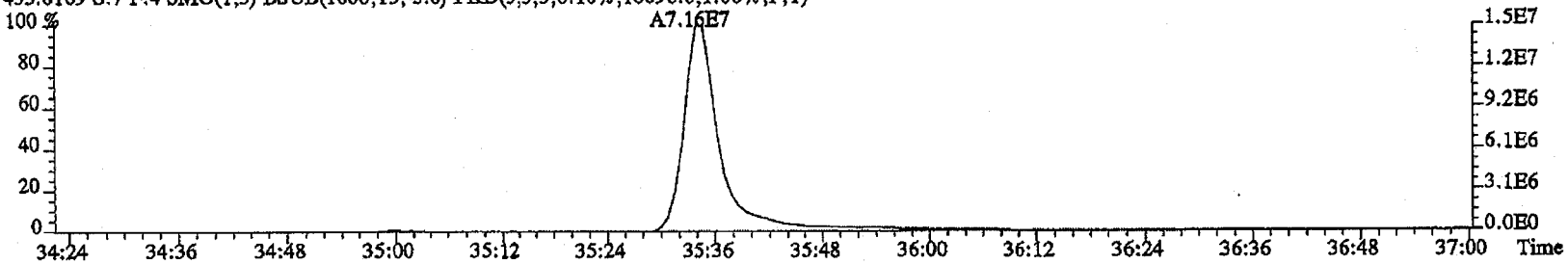
423.7766 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,169672.0,1.00%,F,T)



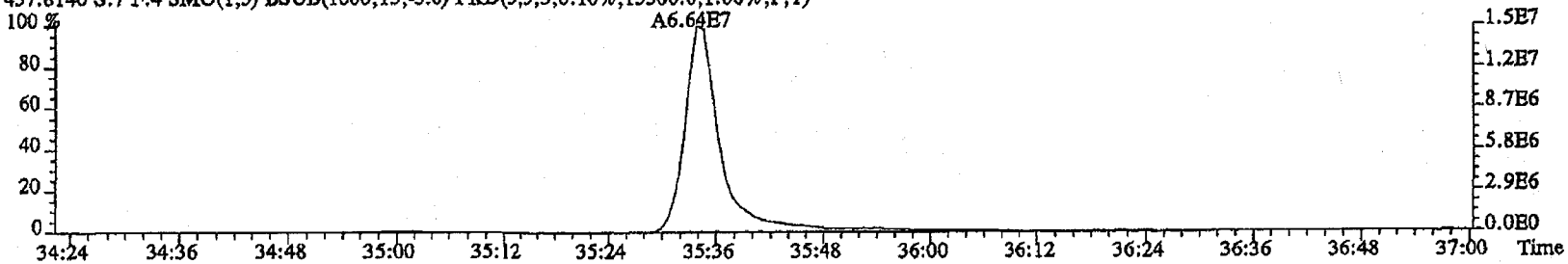
425.7737 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,172716.0,1.00%,F,T)



435.8169 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,18696.0,1.00%,F,T)

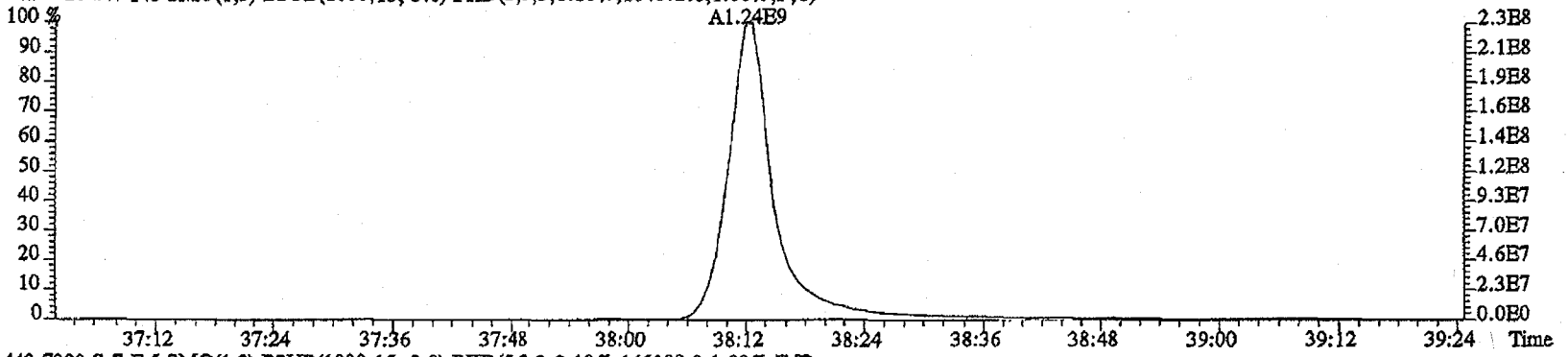


437.8140 S:7 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,15500.0,1.00%,F,T)

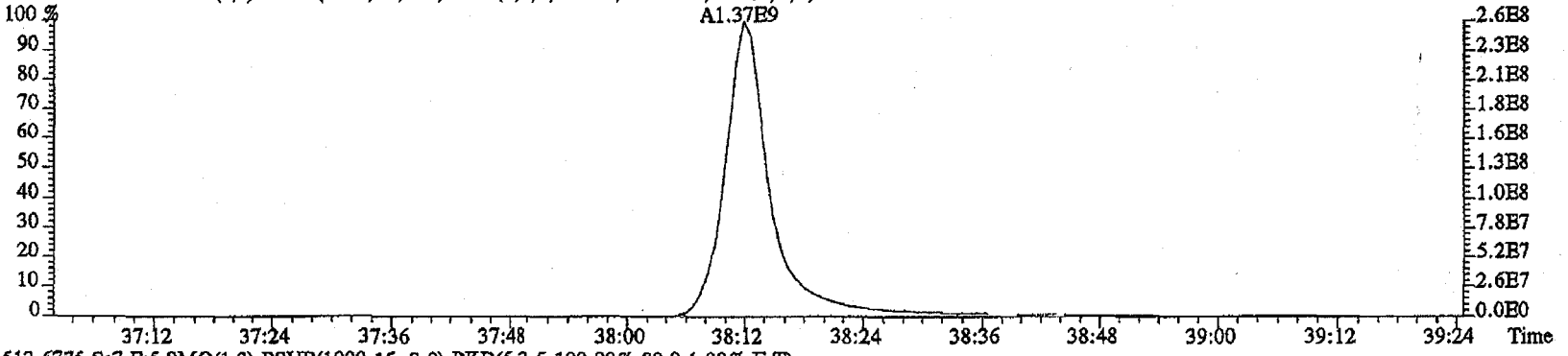


File:22FE11A4D5 #1-193 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222B :CS-5 10DXN507 AS Exp:DIOXINRES

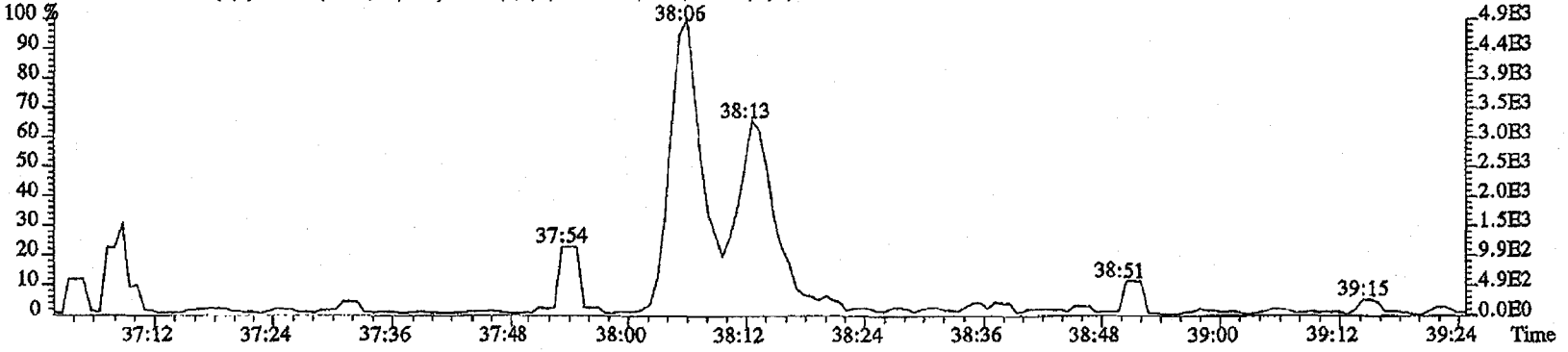
441.7428 S:7 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,164872.0,1.00%,F,T)



443.7399 S:7 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,145180.0,1.00%,F,T)

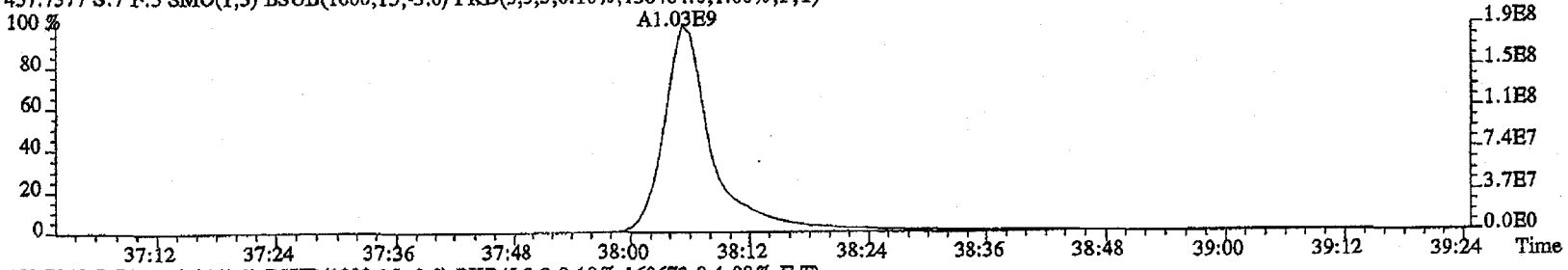


513.6775 S:7 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,80.0,1.00%,F,T)

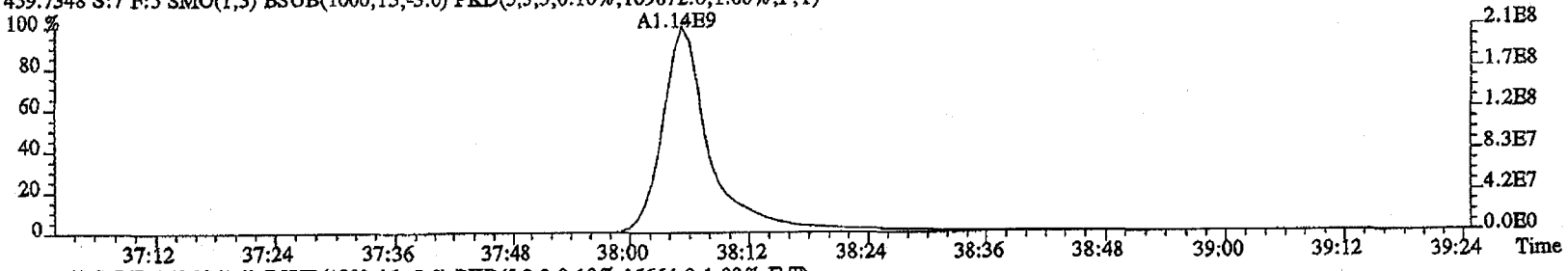


File:22FB11A4D5 #1-193 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES

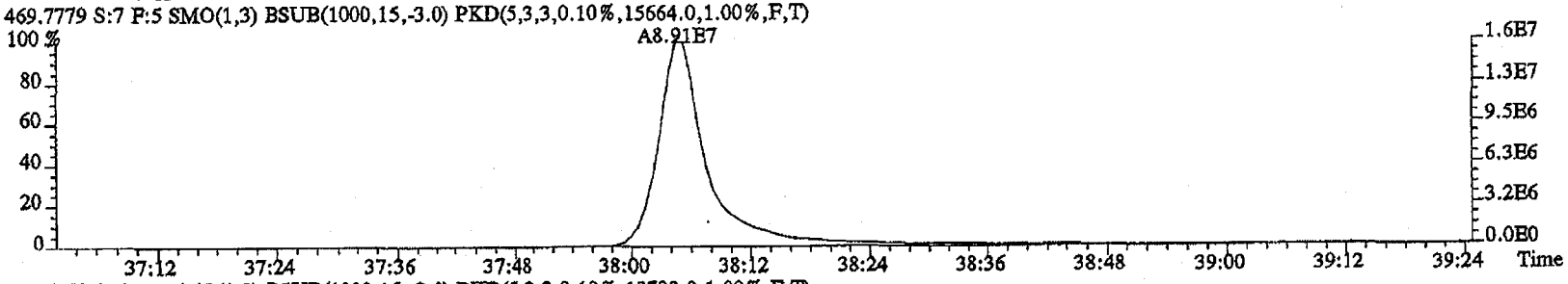
457.7377 S:7 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,138464.0,1.00%,F,T)



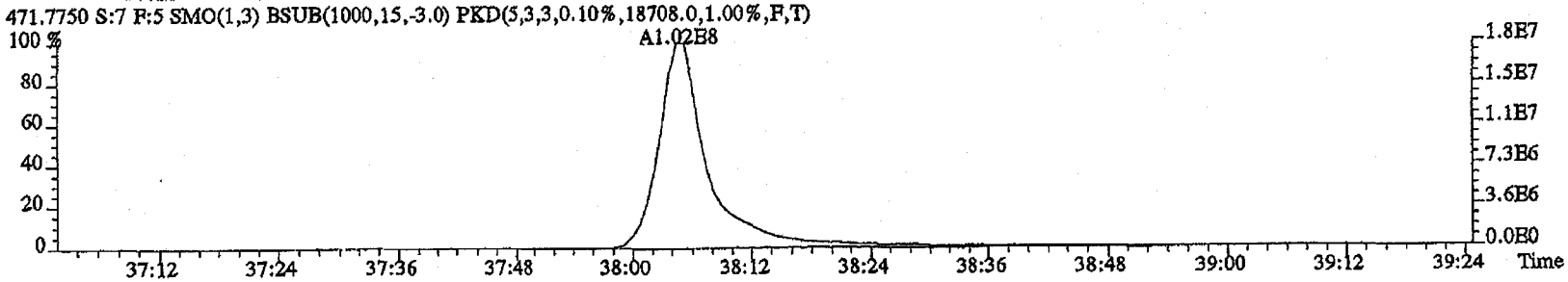
459.7348 S:7 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,169672.0,1.00%,F,T)



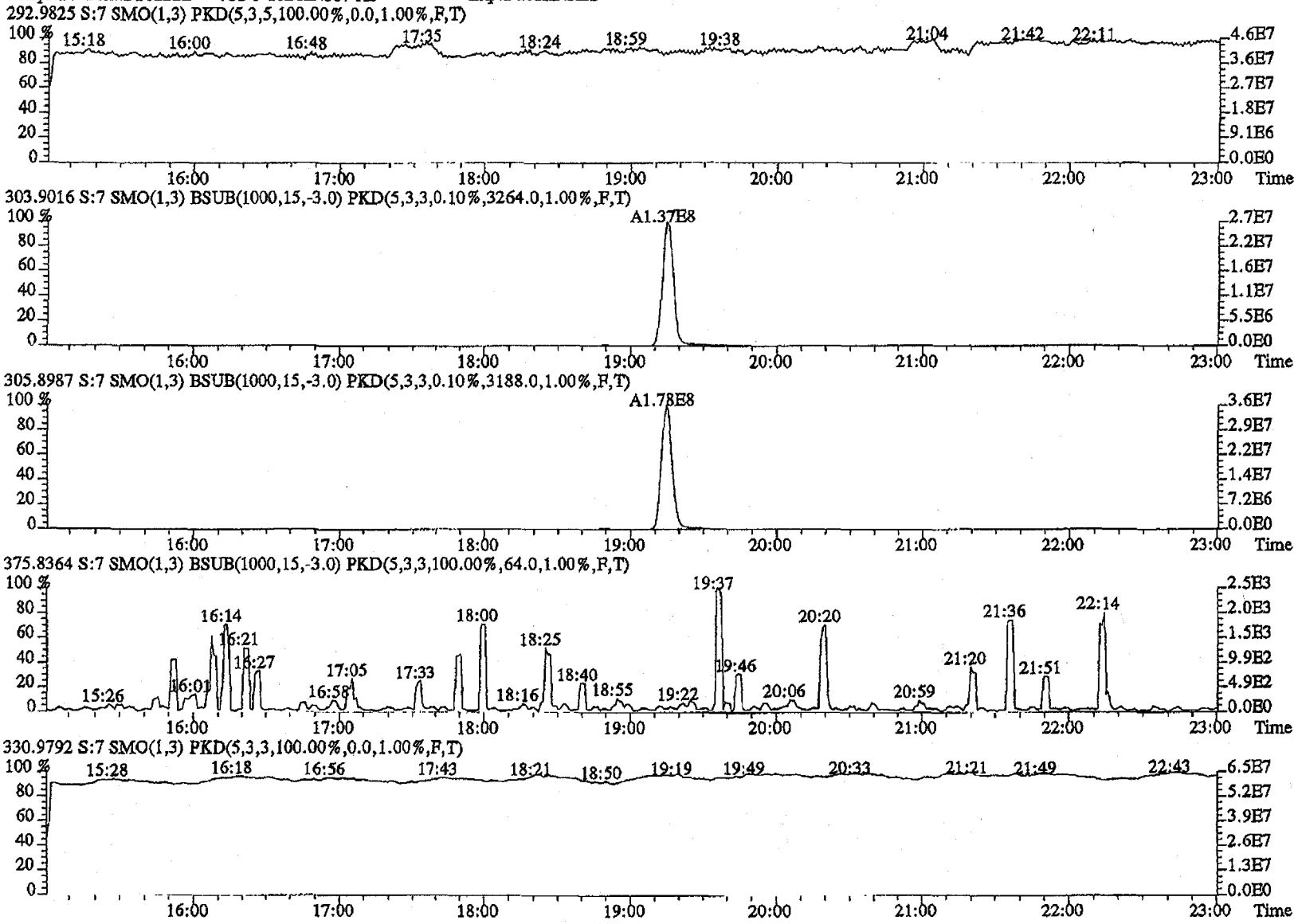
469.7779 S:7 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,15664.0,1.00%,F,T)



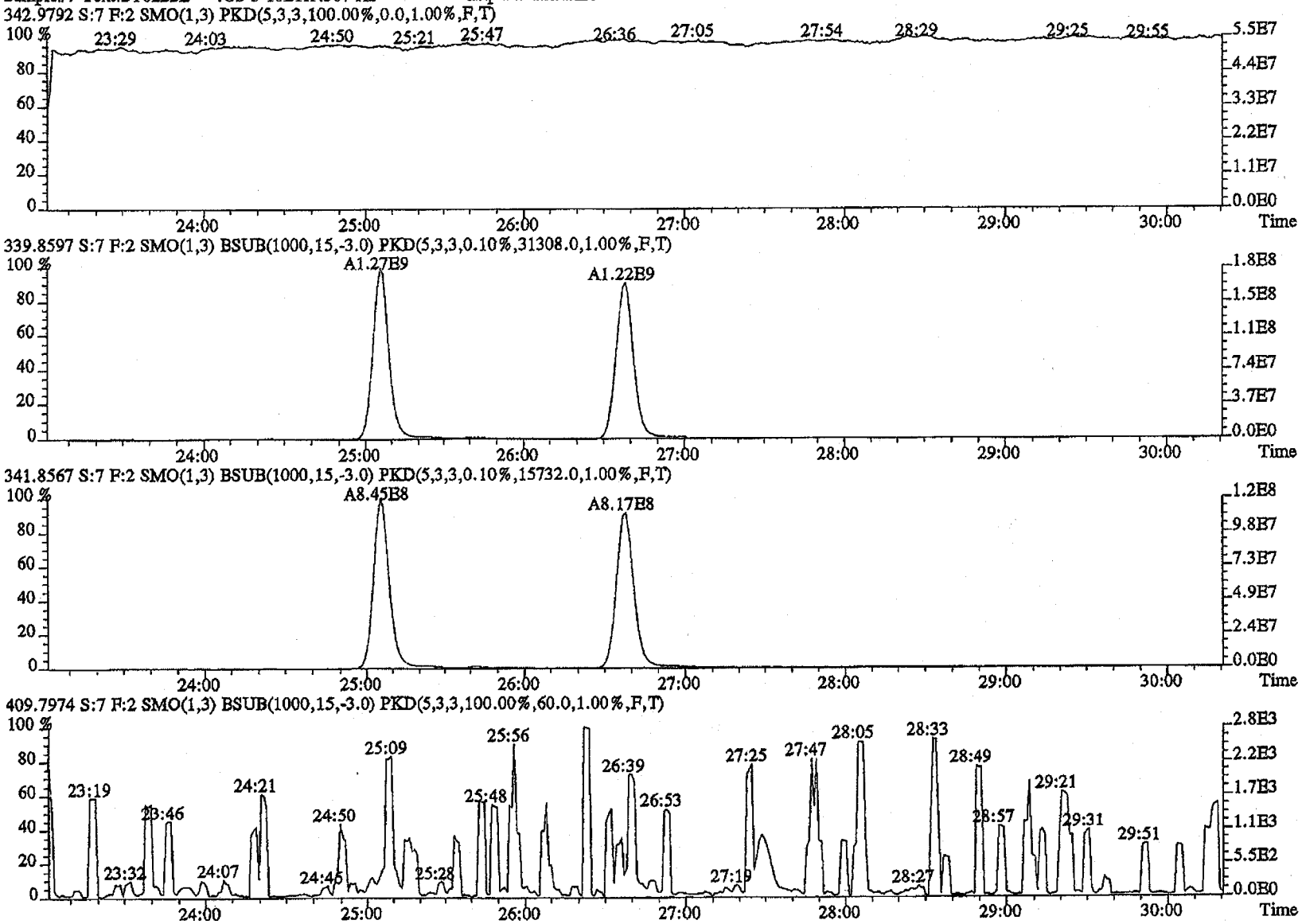
471.7750 S:7 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,18708.0,1.00%,F,T)



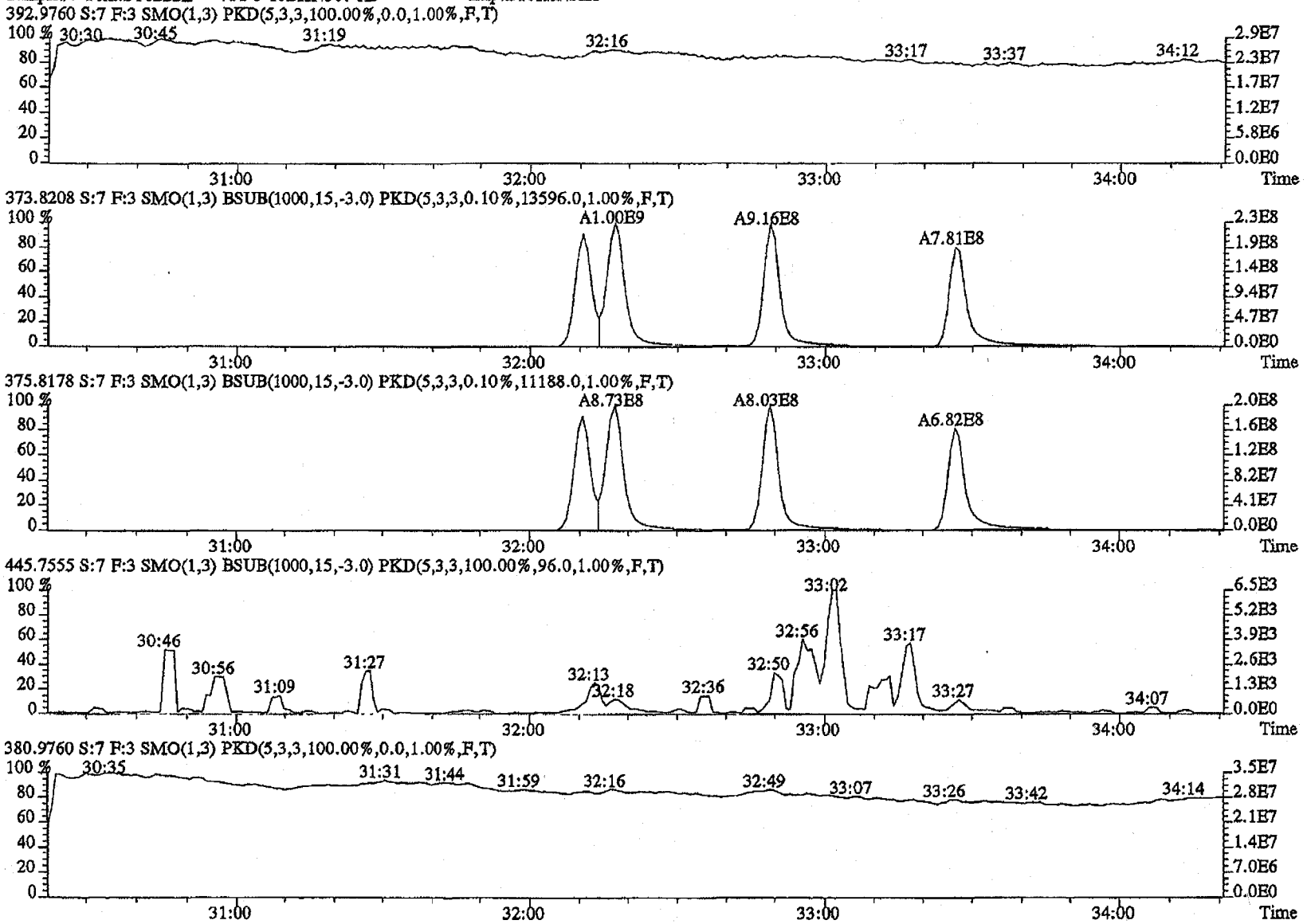
File:22FE11A4D5 #1-530 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES



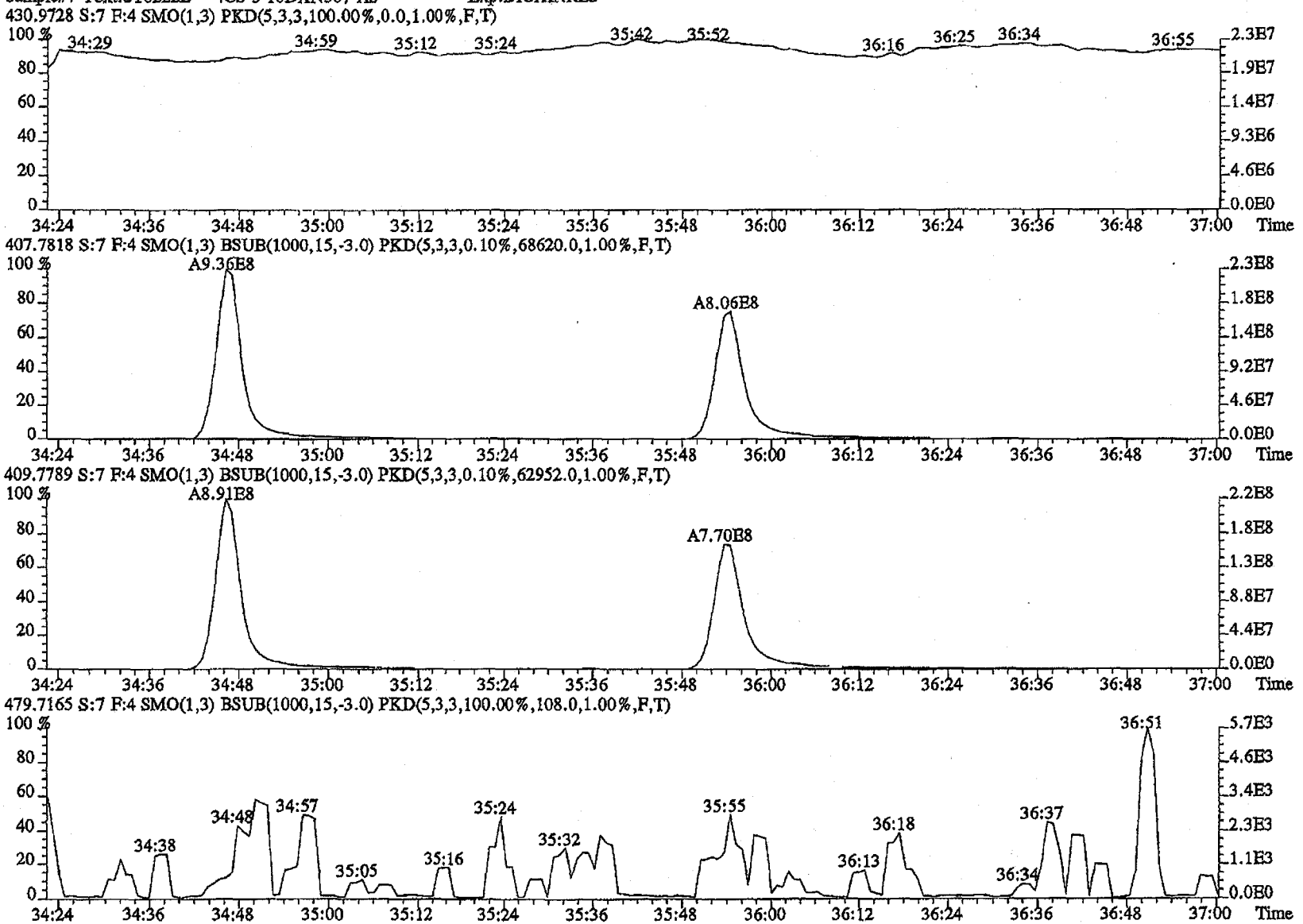
File:22FE11A4D5 #1-470 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES



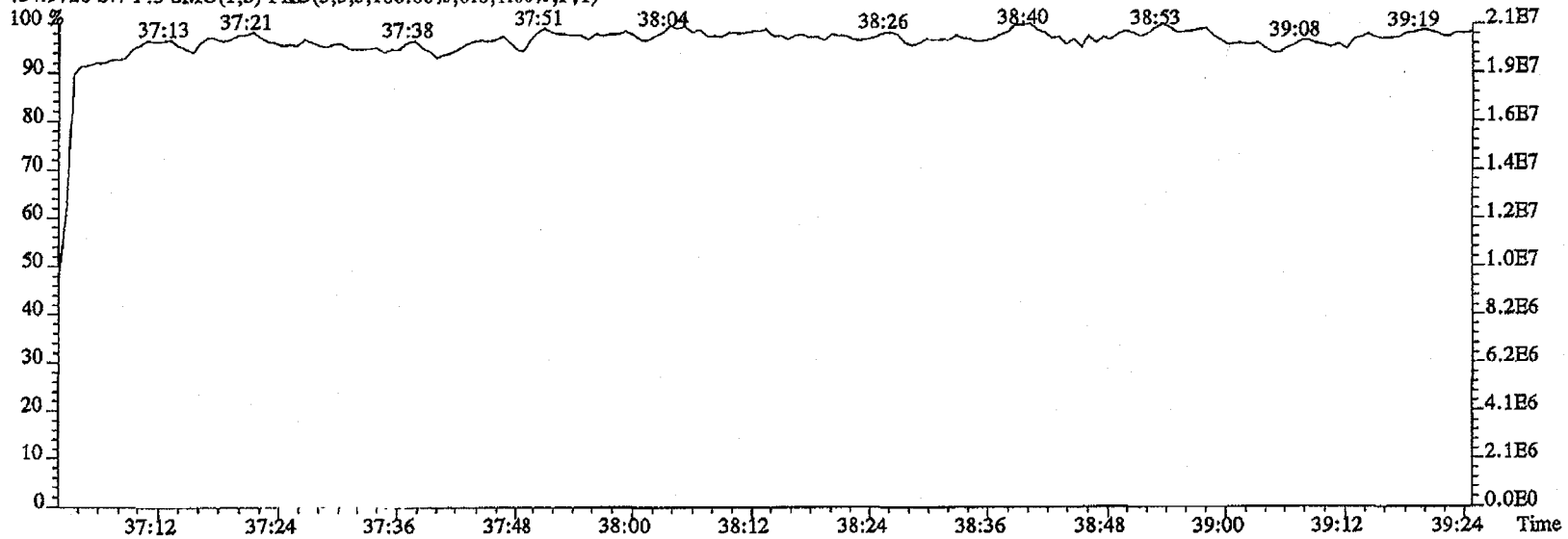
File:22FE11A4D5 #1-287 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES



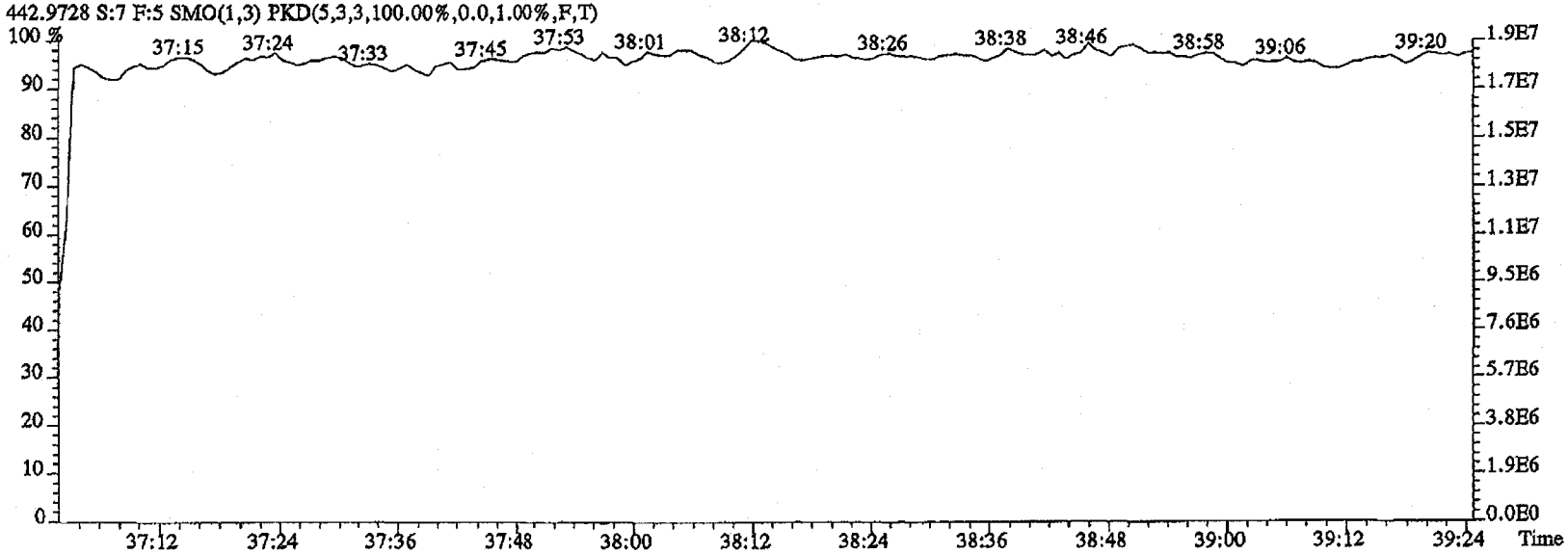
File:22FE11A4D5 #1-200 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES



File:22FE11A4D5 #1-193 Acq:22-FEB-2011 17:20:19 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 Text:ST0222E :CS-5 10DXN507 AS Exp:DIOXINRES
454.9728 S:7 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:7 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



Quantitation Summary TestAmerica West Sacramento Page 1 o

Run text: ST0222F Sample text: ST0222F :2nd Source 10DXN511 AS
Run #7 Filename: 22FE11A4D5 S: 9 I: 1 Results: 22FE11A4D51613
Acquired: 22-FEB-11 18:49:28 Processed: 22-FEB-11 19:33:15
Run: 22FE11A4D5 Analyte: 1613 Cal: 16130222114D5
Factor 1: 800.000 Factor 2: 20.000 Sample size: 1.000000

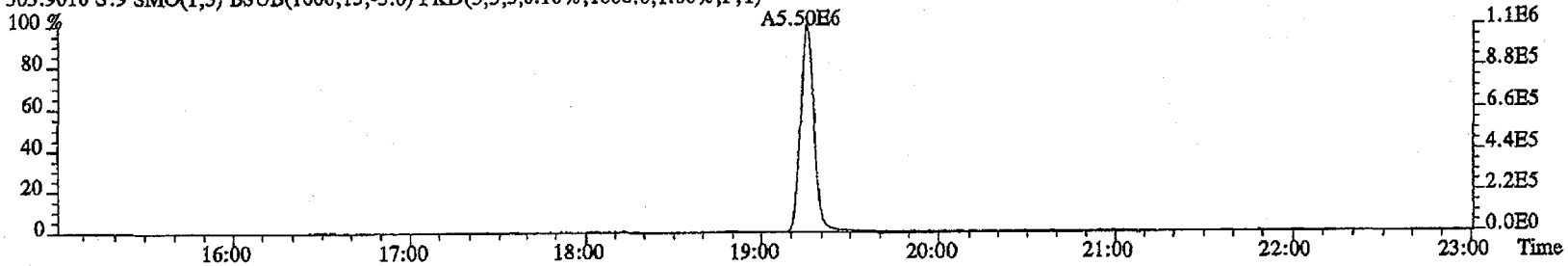
AS 02-23-11

Name	Resp	RA		RT	RRF	Conc		EDL	Rec	M
13C-1,2,3,4-TCDD	170075200	0.77	y	19:50	-	89.33		-	-	n
13C-2,3,7,8-TCDF	183568700	0.78	y	19:14	1.10	1954.08		1.47	97.7	n
2,3,7,8-TCDF	12704100	0.76	y	19:15	0.78	178.03	89%	0.95	-	n
Total TCDF	12872308	0.48	n	18:50	0.78	180.39		0.95	-	n
13C-2,3,7,8-TCDD	171106600	0.76	y	20:03	0.97	2077.00		2.30	103.8	n
2,3,7,8-TCDD	13937850	0.71	y	20:04	0.87	187.78	93.9%	0.68	-	n
Total TCDD	13959811	3.90	n	19:13	0.87	188.08		0.68	-	n
37Cl-2,3,7,8-TCDD	44991200	1.00	y	20:04	1.43	371.07		0.68	92.8	n
13C-1,2,3,7,8-PeCDF	179187800	1.61	y	25:05	1.04	2028.00		2.61	101.4	n
1,2,3,7,8-PeCDF	43868700	1.52	y	25:06	0.96	510.58	102%	1.53	-	n
13C-2,3,4,7,8-PeCDF	170043700	1.59	y	26:36	1.02	1960.45		2.65	98.0	n
2,3,4,7,8-PeCDF	41347600	1.51	y	26:38	0.96	508.81	101.76%	1.69	-	n
Total F2 PeCDF	86914429	1.72	y	23:30	0.96	1039.70		1.61	-	n
Total F1 PeCDF	105587	0.68	n	17:03	0.96	1.26		1.44	-	n
13C-1,2,3,7,8-PeCDD	112245100	1.53	y	27:27	0.70	1886.82		1.08	94.3	n
1,2,3,7,8-PeCDD	29294900	1.48	y	27:29	1.04	501.00	100%	2.65	-	n
Total PeCDD	29937806	0.77	n	24:59	1.04	512.00		2.65	-	n
13C-1,2,3,7,8,9-HxCDD	115422100	1.29	y	33:16	-	85.16		-	-	n
13C-1,2,3,4,7,8-HxCDF	113648100	0.51	y	32:10	0.87	2261.88		1.41	113.1	n
1,2,3,4,7,8-HxCDF	32994700	1.14	y	32:11	1.15	505.53	101%	2.27	-	n
13C-1,2,3,6,7,8-HxCDF	145812400	0.51	y	32:17	1.18	2137.41		1.04	106.9	n
1,2,3,6,7,8-HxCDF	39221200	1.13	y	32:18	1.07	501.34	100%	2.11	-	n
13C-2,3,4,6,7,8-HxCDF	130263000	0.50	y	32:48	1.03	2184.22		1.19	109.2	n
2,3,4,6,7,8-HxCDF	34561100	1.10	y	32:49	1.10	484.25	96.85%	2.09	-	n
13C-1,2,3,7,8,9-HxCDF	112519000	0.51	y	33:26	0.90	2154.83		1.36	107.7	n
1,2,3,7,8,9-HxCDF	30227000	1.12	y	33:27	1.08	498.24	99.65%	2.64	-	n
Total HxCDF	137301925	1.14	y	32:11	1.10	1993.69		2.26	-	n
13C-1,2,3,4,7,8-HxCDD	80964700	1.29	y	32:56	0.66	2112.56		2.29	105.6	n
1,2,3,4,7,8-HxCDD	21923230	1.26	y	32:57	1.06	508.70	101.74%	0.88	-	n
13C-1,2,3,6,7,8-HxCDD	108324300	1.30	y	33:01	0.95	1976.36		1.60	98.8	n
1,2,3,6,7,8-HxCDD	27923500	1.29	y	33:02	1.05	492.78	98.56%	0.81	-	n
1,2,3,7,8,9-HxCDD	28498800	1.28	y	33:17	1.20	501.47	100.3%	0.73	-	n
Total HxCDD	78373750	2.89	n	32:10	1.10	1503.49		0.80	-	n
13C-1,2,3,4,6,7,8-HpCDF	115424400	0.44	y	34:46	0.91	2188.51		24.39	109.4	n
1,2,3,4,6,7,8-HpCDF	37059500	1.04	y	34:47	1.32	484.86	97%	3.43	-	n
13C-1,2,3,4,7,8,9-HpCDF	104055100	0.44	y	35:54	0.83	2170.73		26.84	108.5	n
1,2,3,4,7,8,9-HpCDF	30775600	1.06	y	35:55	1.24	475.28	95%	4.69	-	n
Total HpCDF	67835100	1.04	y	34:47	1.29	960.14		4.01	-	n

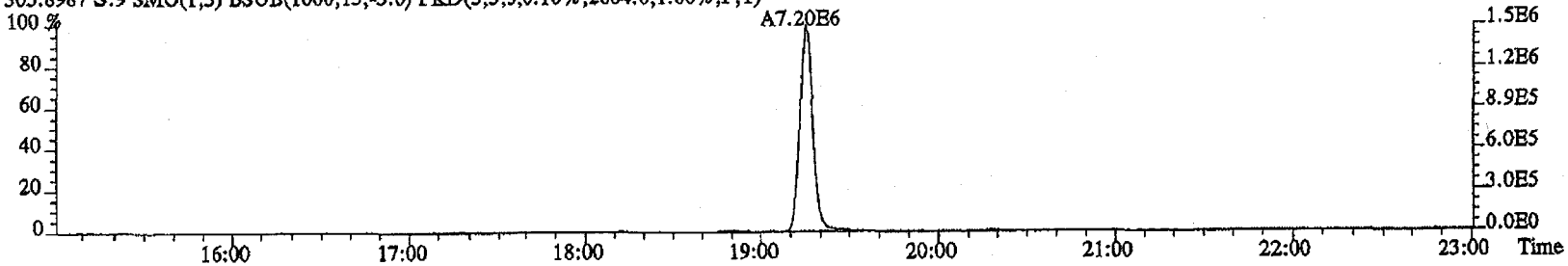
13C-1,2,3,4,6,7,8-HpCDD	115875200	1.05	y	35:34	0.91	2197.20		11.70	109.9	n
1,2,3,4,6,7,8-HpCDD	29936700	1.00	y	35:35	1.01	509.78	102 %	2.92	-	n
Total HpCDD	30076902	0.94	y	35:01	1.01	512.17		2.92	-	n
13C-OCDD	144436400	0.85	y	38:05	0.60	4161.85		4.54	104.0	n
OCDF	46404500	0.92	y	38:12	1.27	1009.09	100.9 %	3.68	-	n
OCDD	39832800	0.93	y	38:05	1.13	976.95	97.7 %	2.86	-	n

File:22FE11A4D5 #1-530 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaB
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

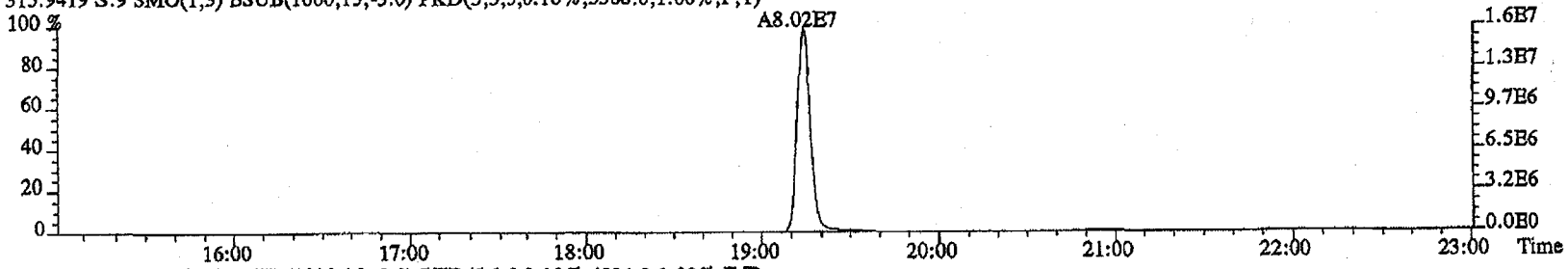
303.9016 S:9 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1888.0,1.00%,F,T)



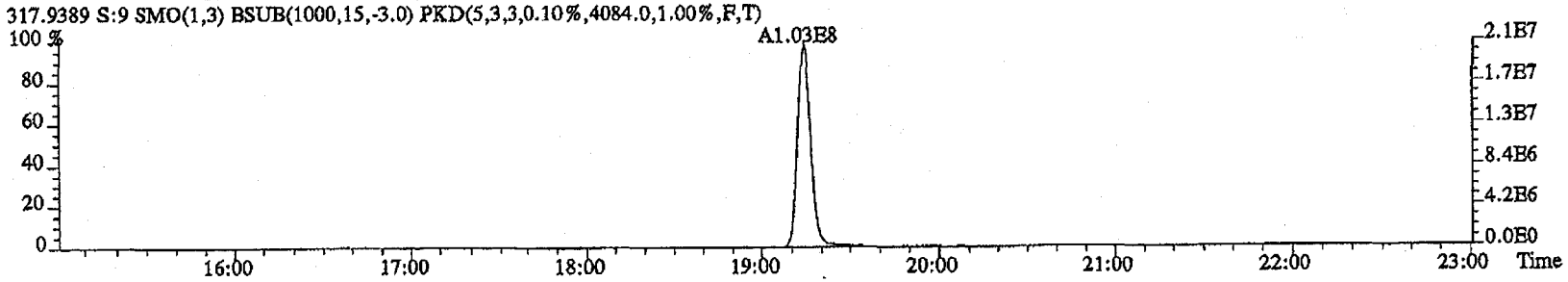
305.8987 S:9 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2684.0,1.00%,F,T)



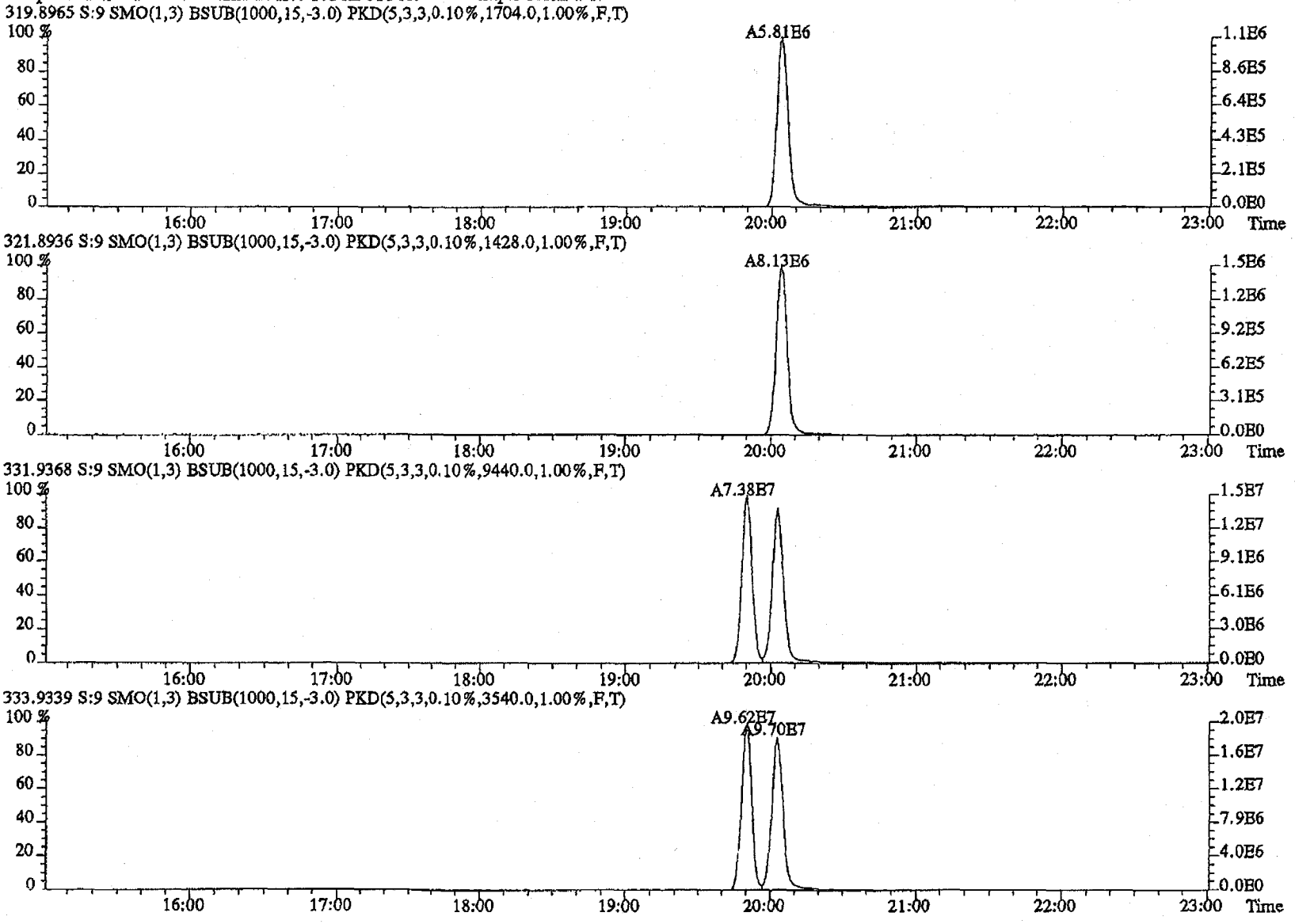
315.9419 S:9 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5368.0,1.00%,F,T)



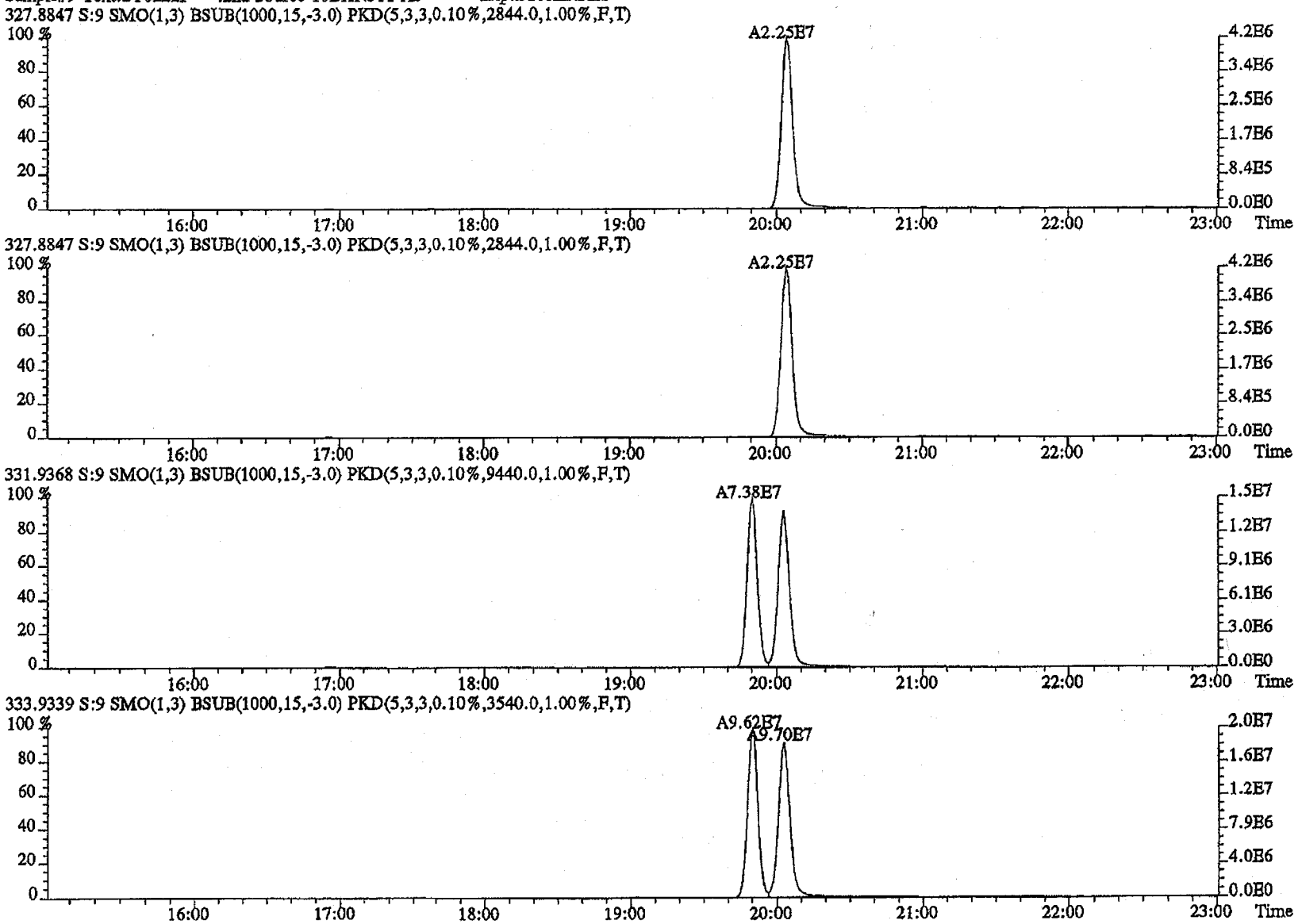
317.9389 S:9 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4084.0,1.00%,F,T)



File:22FE11A4D5 #1-530 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

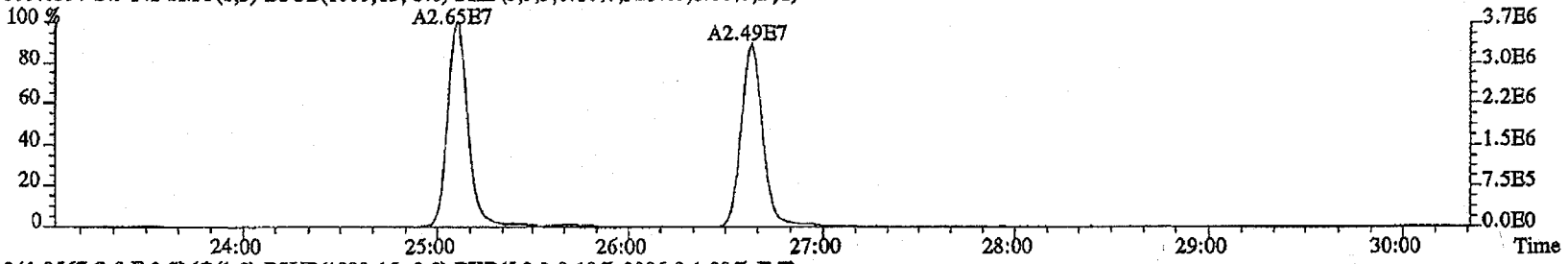


File:22FB11A4D5 #1-530 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

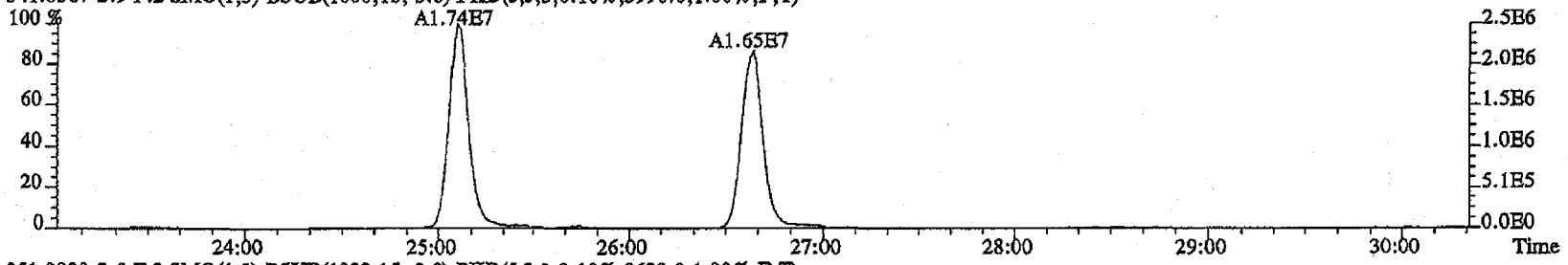


File:22FB11A4D5 #1-470 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

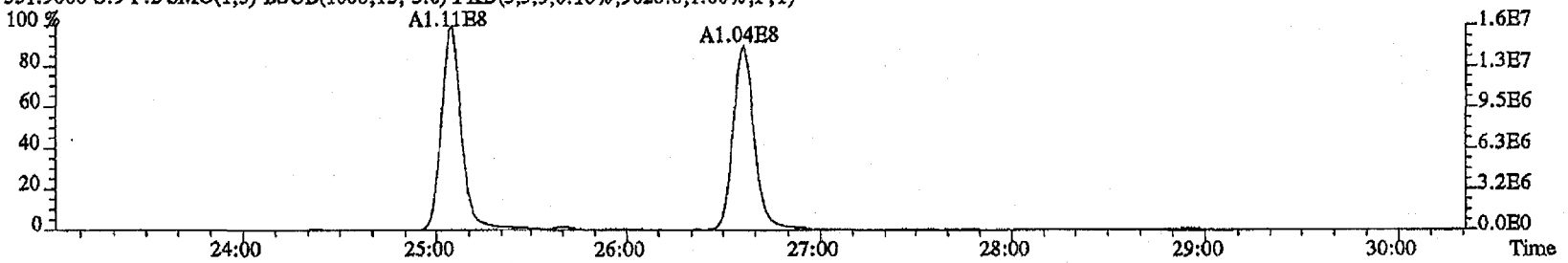
339.8597 S:9 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2216.0,1.00%,F,T)



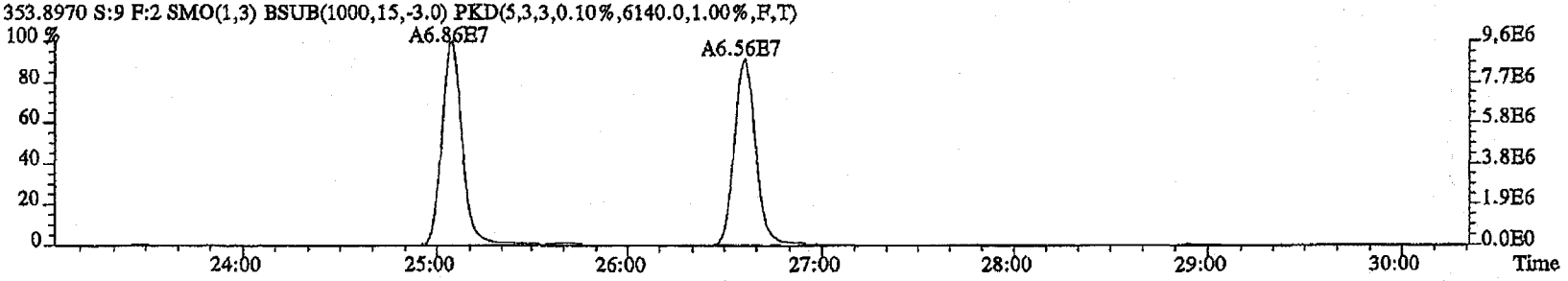
341.8567 S:9 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3996.0,1.00%,F,T)



351.9000 S:9 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9628.0,1.00%,F,T)

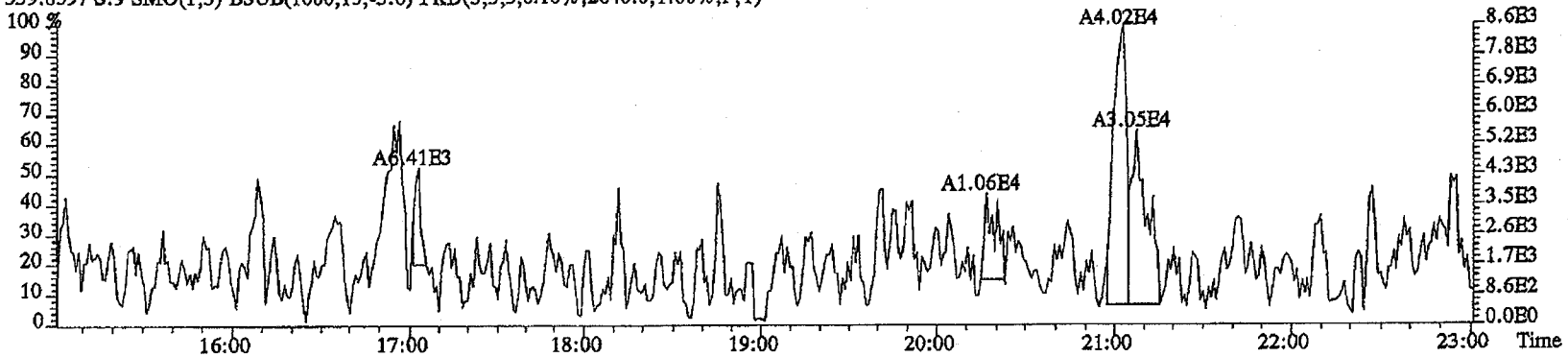


353.8970 S:9 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6140.0,1.00%,F,T)

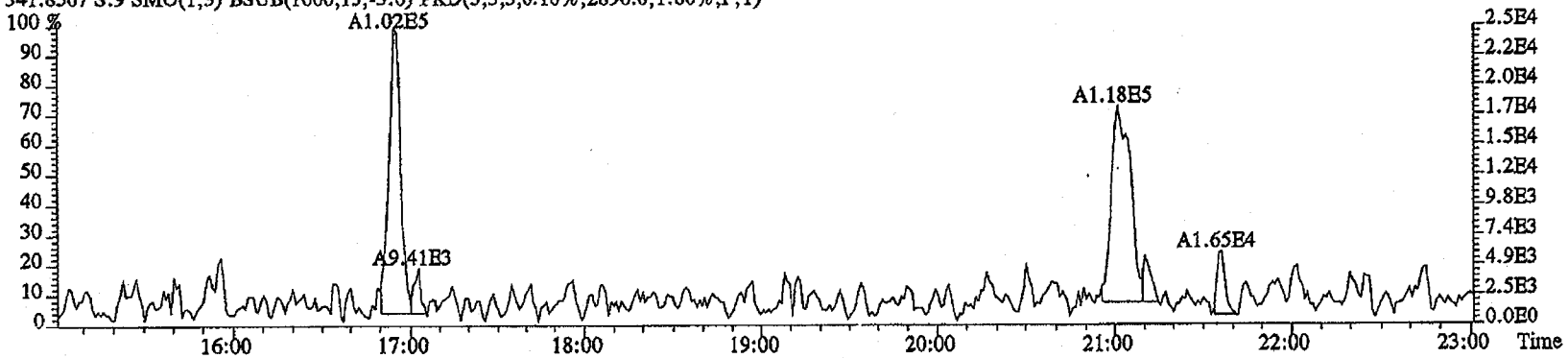


File:22FB11A4D5 #1-530 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaB
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

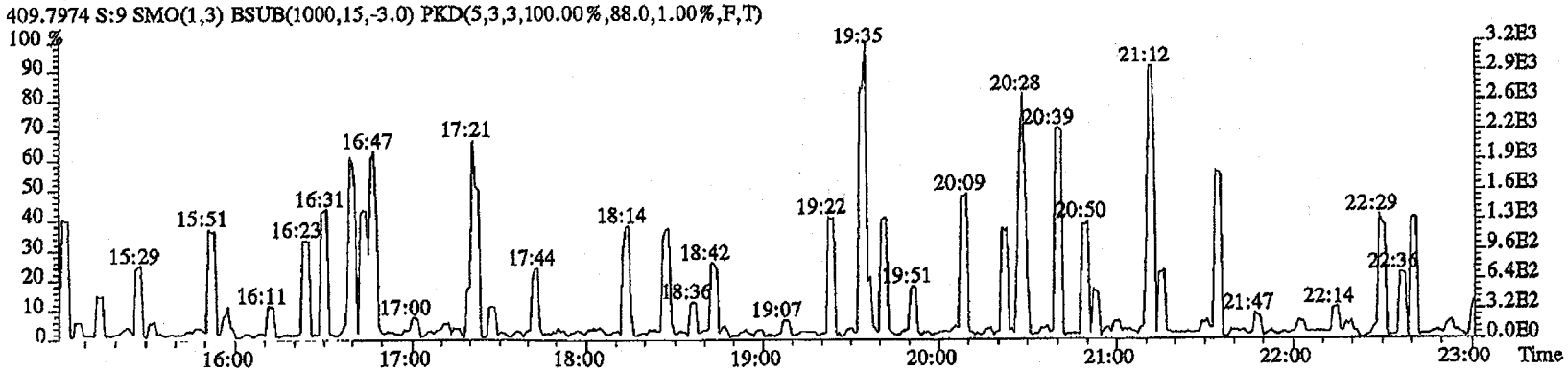
339.8597 S:9 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2640.0,1.00%,F,T)



341.8567 S:9 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2896.0,1.00%,F,T)

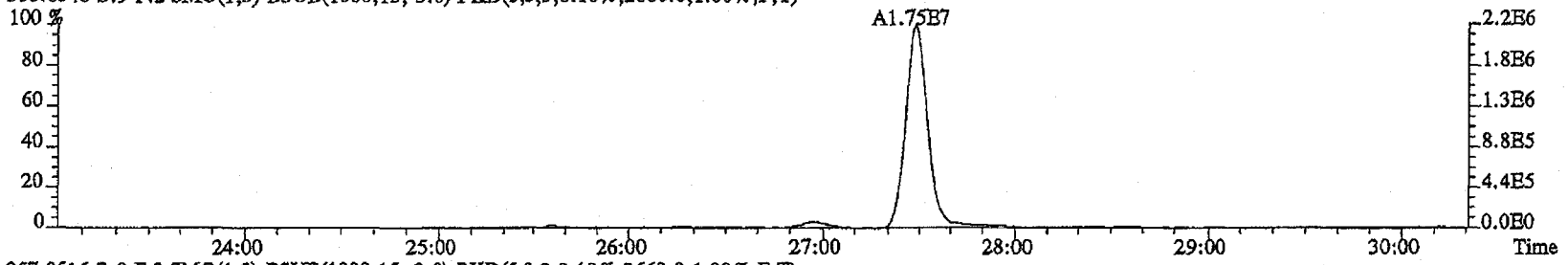


409.7974 S:9 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,88.0,1.00%,F,T)

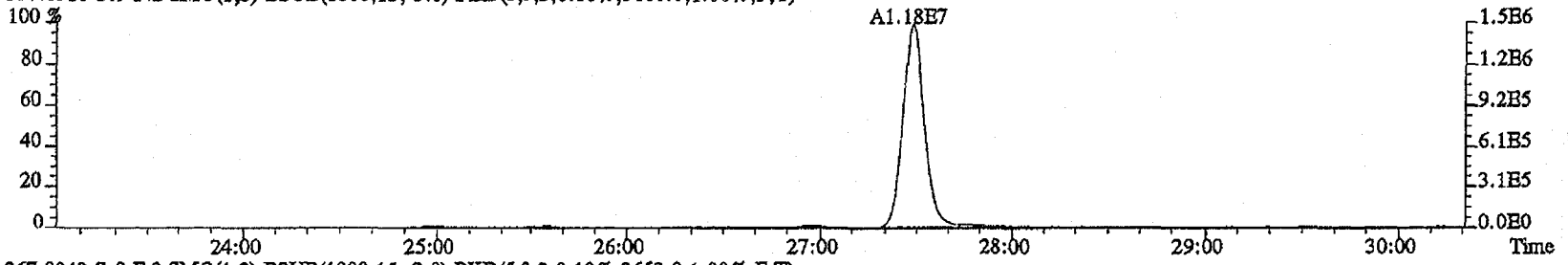


File:22FB11A4D5 #1-470 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

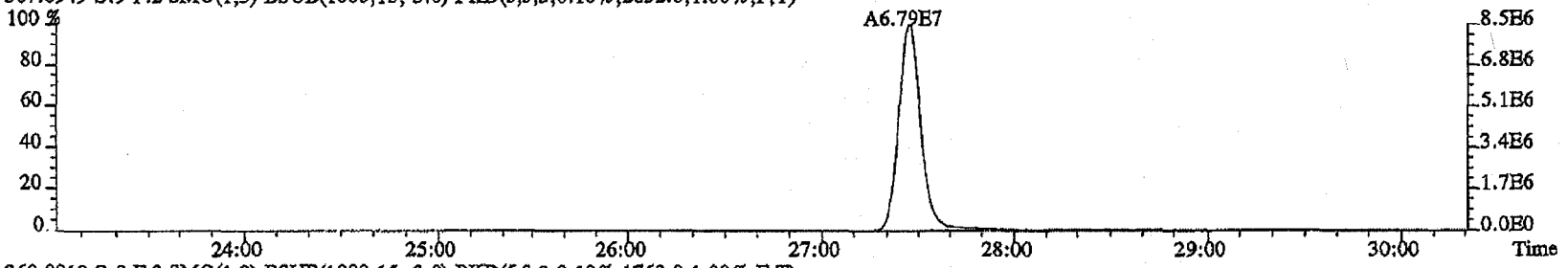
355.8546 S:9 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2880.0,1.00%,F,T)



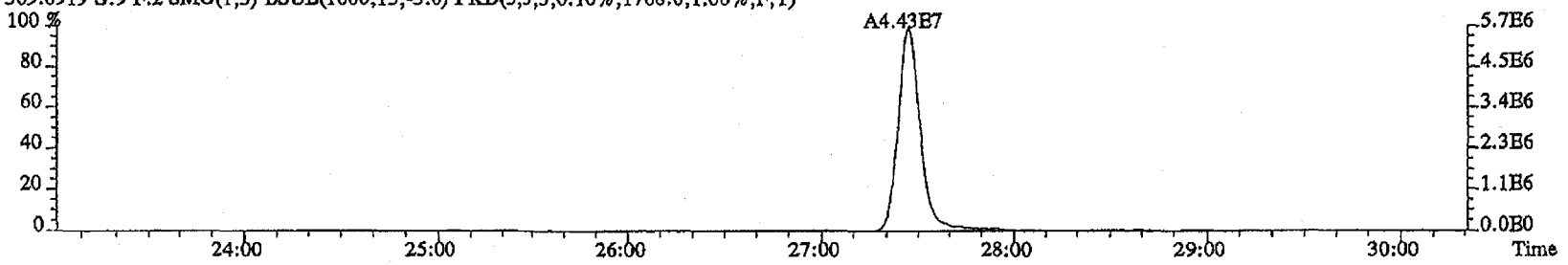
357.8516 S:9 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3660.0,1.00%,F,T)



367.8949 S:9 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2652.0,1.00%,F,T)

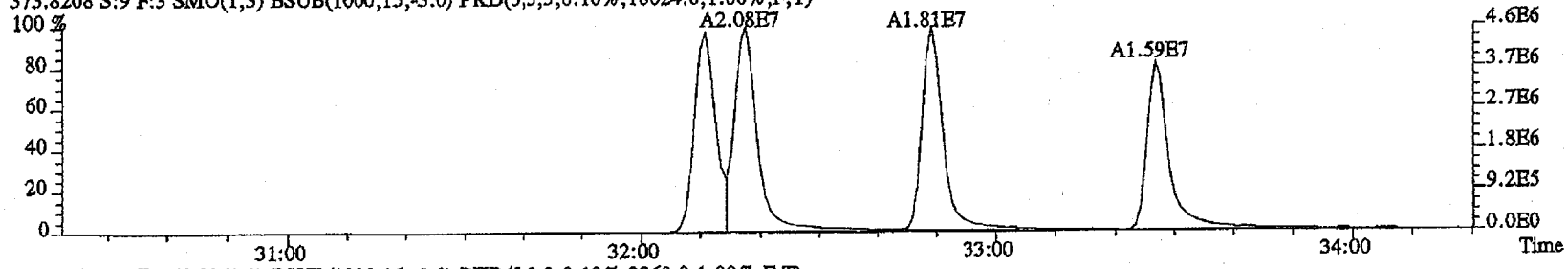


369.8919 S:9 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1768.0,1.00%,F,T)

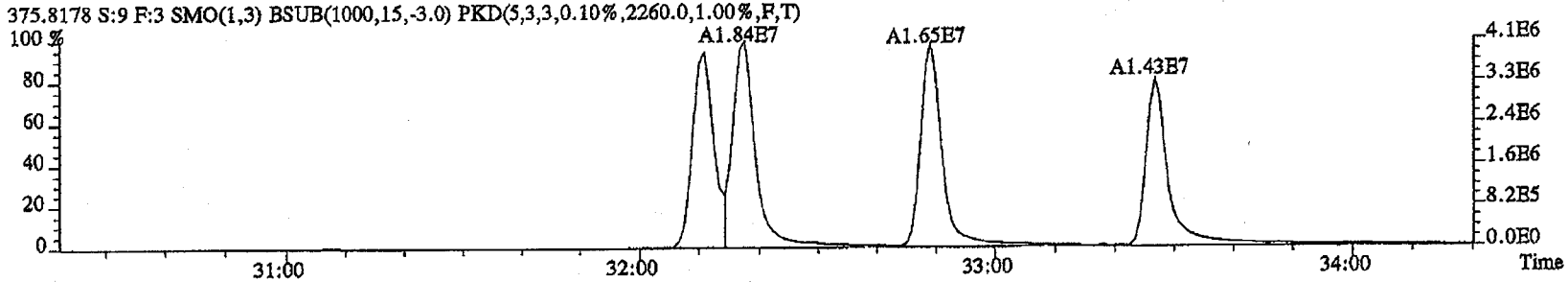


File:22FE11A4D5 #1-286 Acq:22-FEB-2011 18:49:28 GC BI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

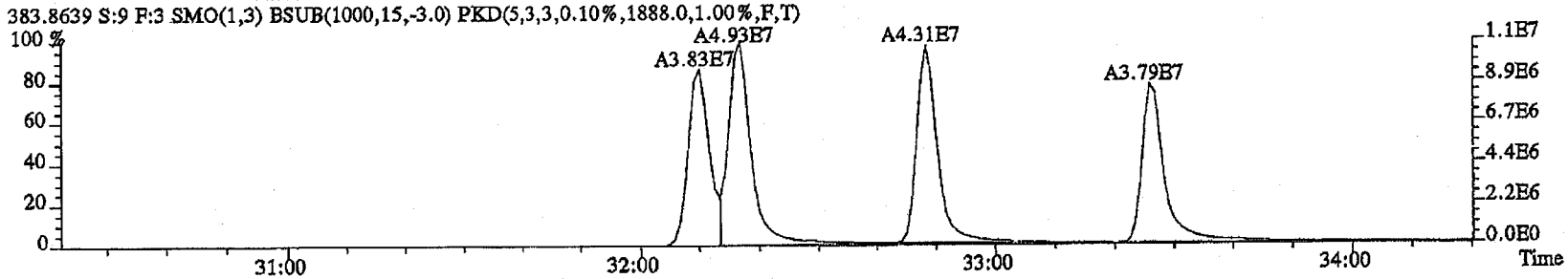
373.8208 S:9 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,10024.0,1.00%,F,T)



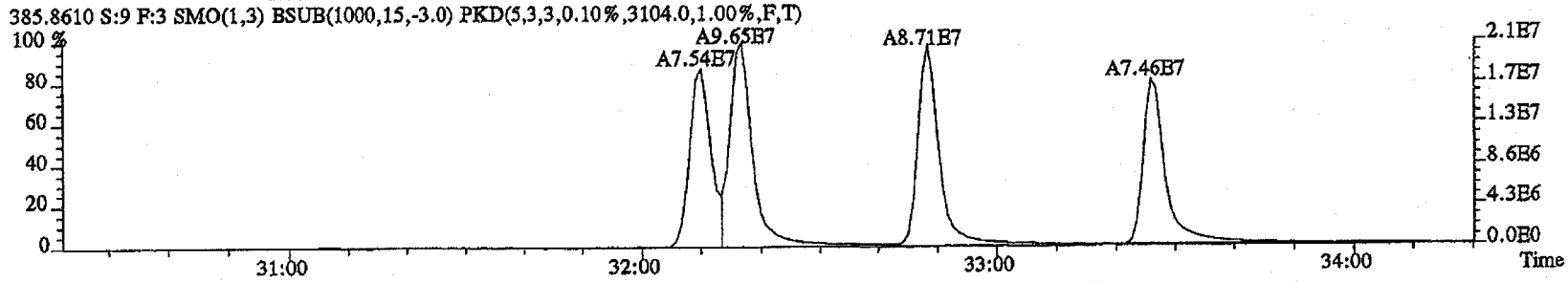
375.8178 S:9 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2260.0,1.00%,F,T)



383.8639 S:9 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1888.0,1.00%,F,T)

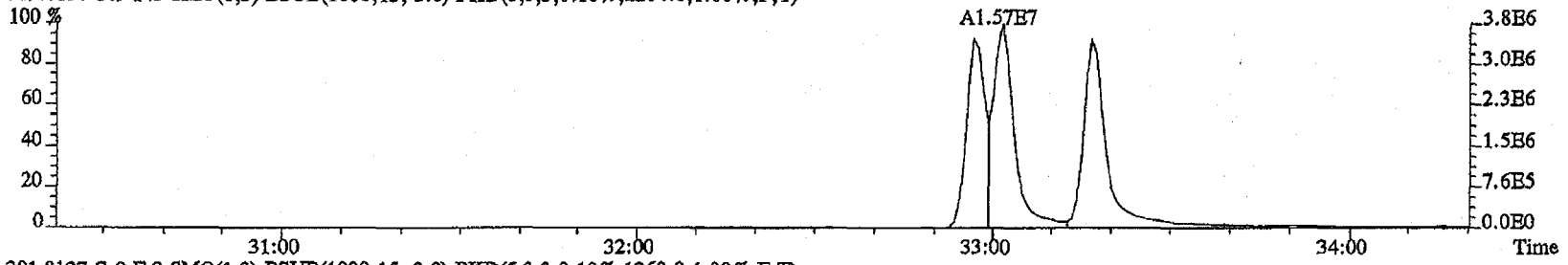


385.8610 S:9 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3104.0,1.00%,F,T)

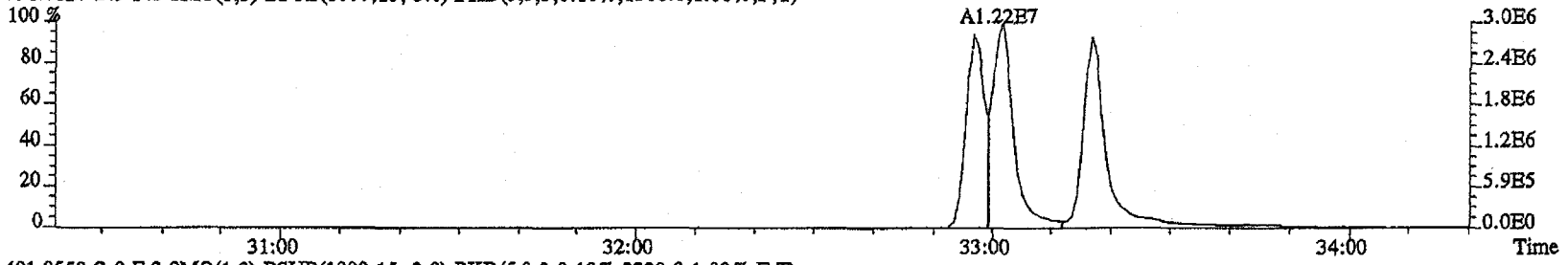


File:22FB11A4D5 #1-286 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

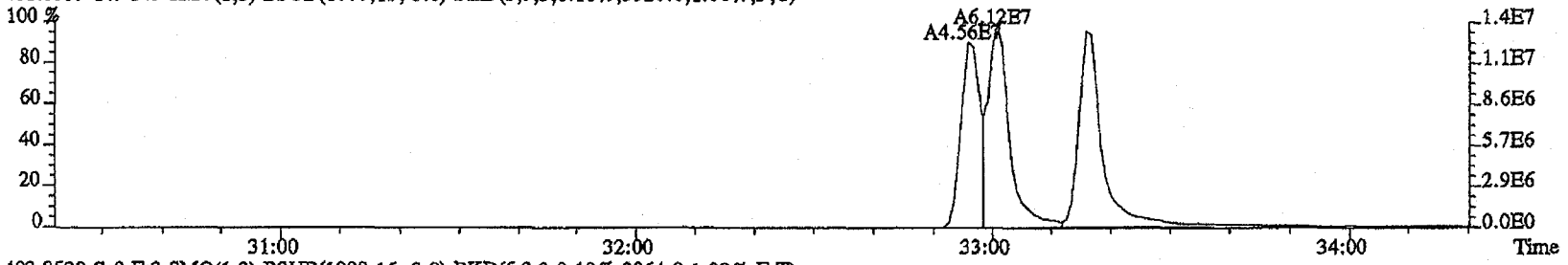
389.8157 S:9 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2204.0,1.00%,F,T)



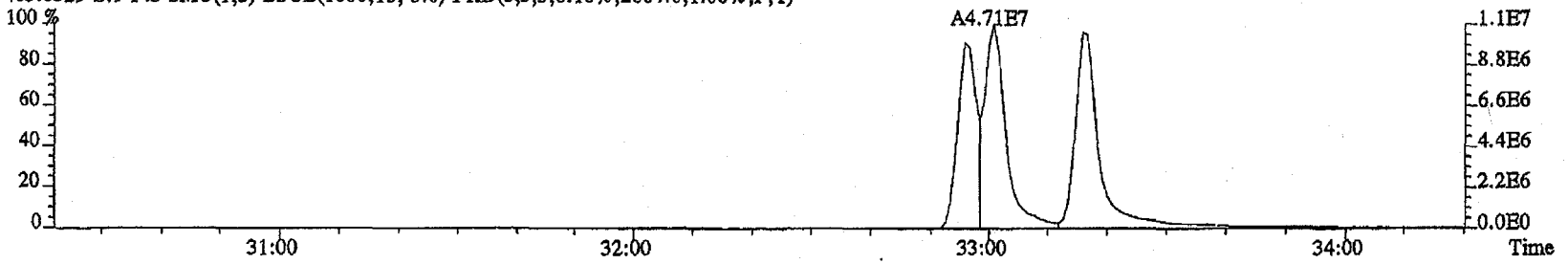
391.8127 S:9 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1368.0,1.00%,F,T)



401.8559 S:9 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3320.0,1.00%,F,T)

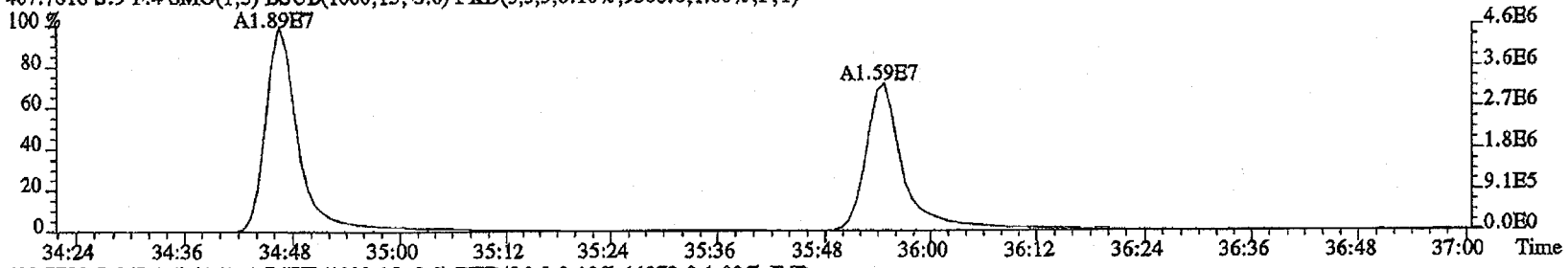


403.8529 S:9 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2864.0,1.00%,F,T)

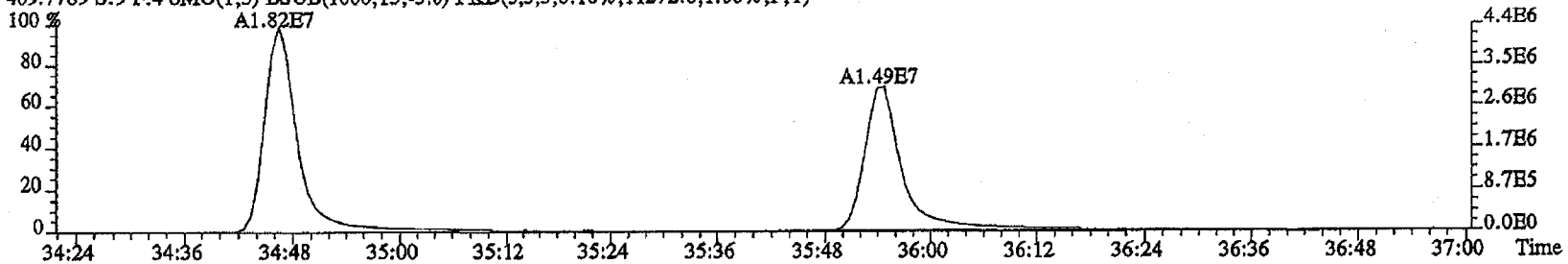


File:22FB11A4D5 #1-201 Acq:22-FEB-2011 18:49:28 GC BI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

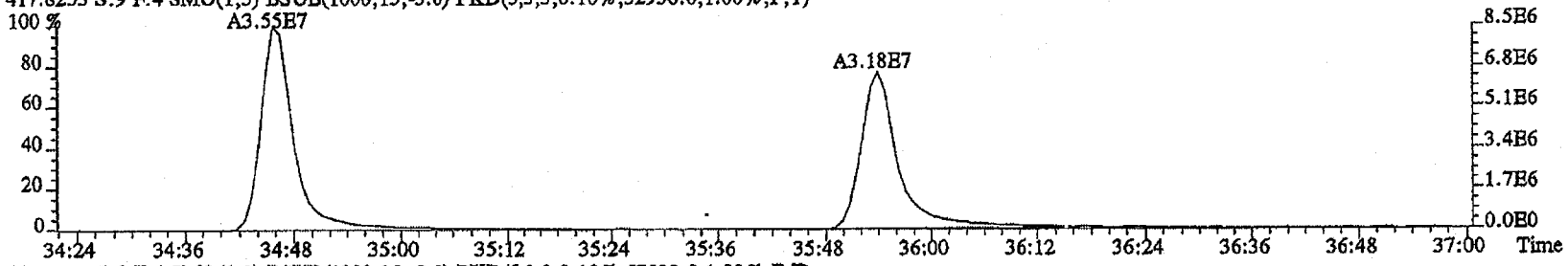
407.7818 S:9 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9308.0,1.00%,F,T)



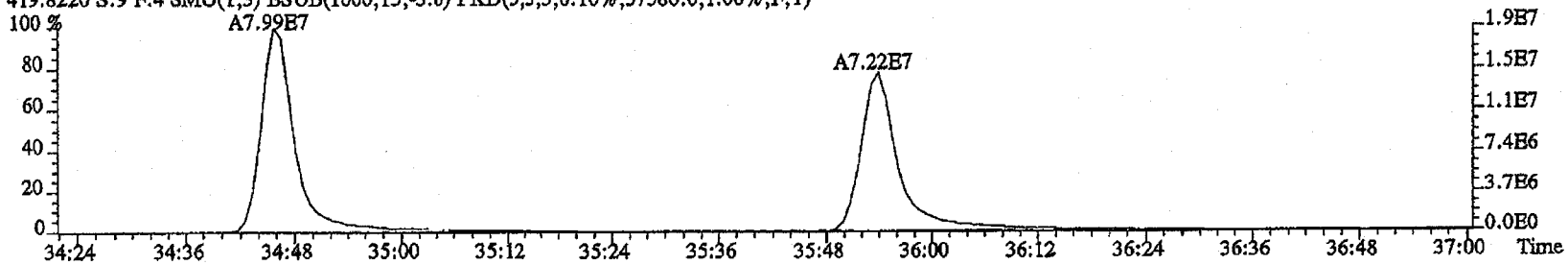
409.7789 S:9 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,11272.0,1.00%,F,T)



417.8253 S:9 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,32956.0,1.00%,F,T)

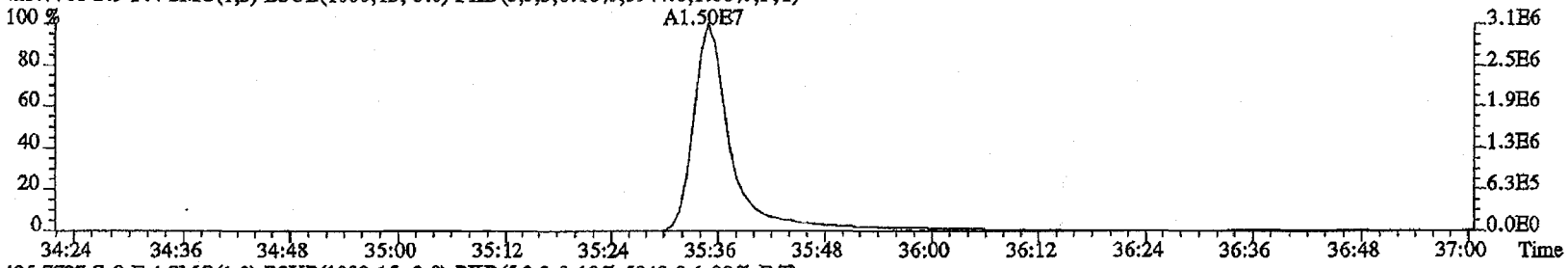


419.8220 S:9 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,57580.0,1.00%,F,T)

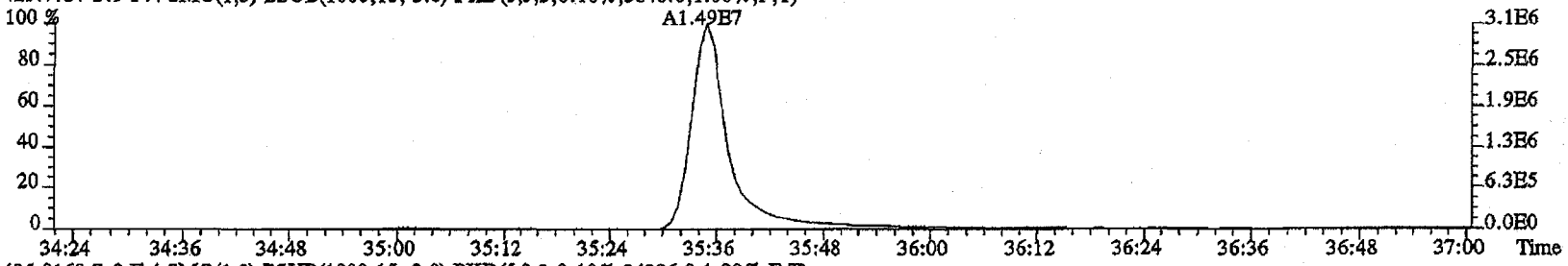


File:22FB11A4D5 #1-201 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

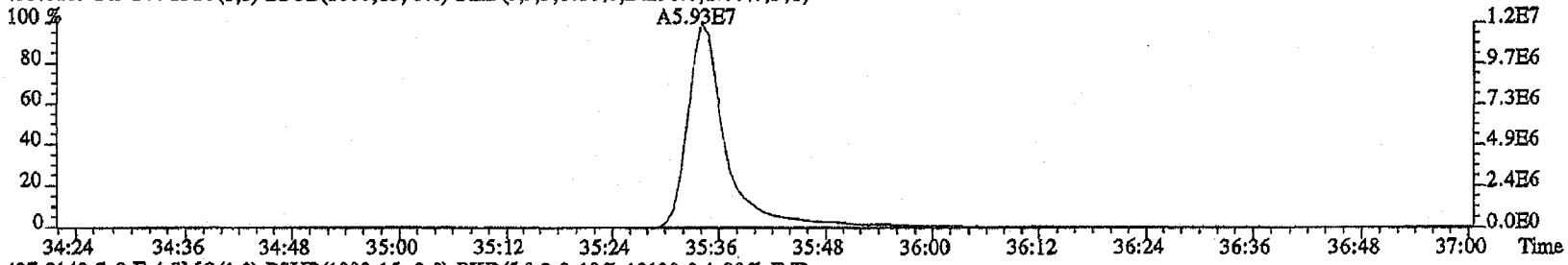
423.7766 S:9 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5944.0,1.00%,F,T)



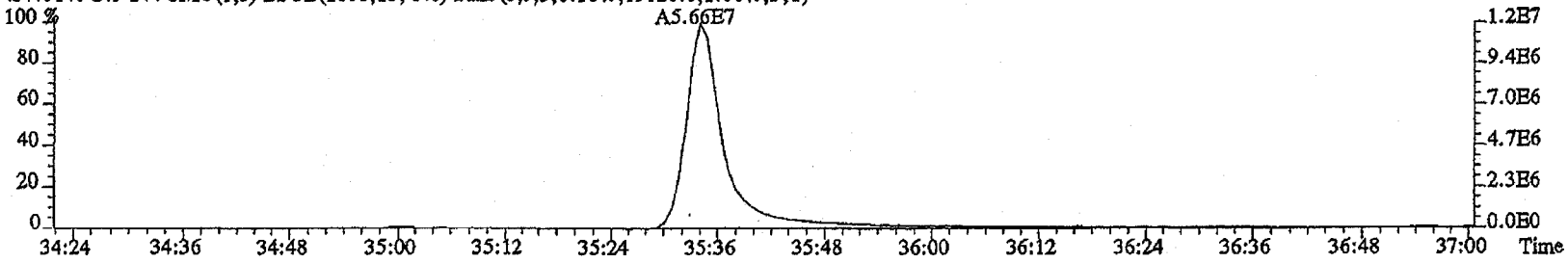
425.7737 S:9 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5840.0,1.00%,F,T)



435.8169 S:9 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,24296.0,1.00%,F,T)

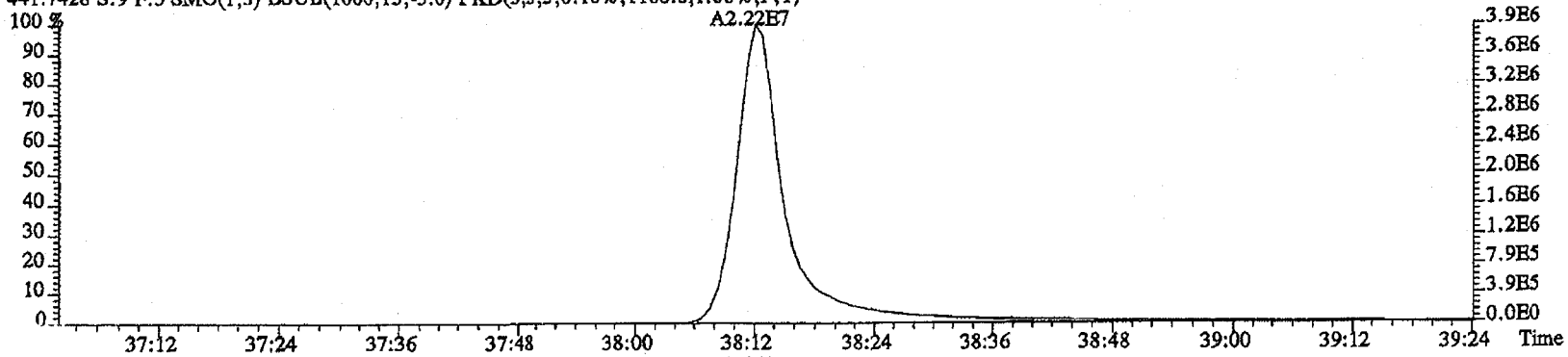


437.8140 S:9 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,19120.0,1.00%,F,T)

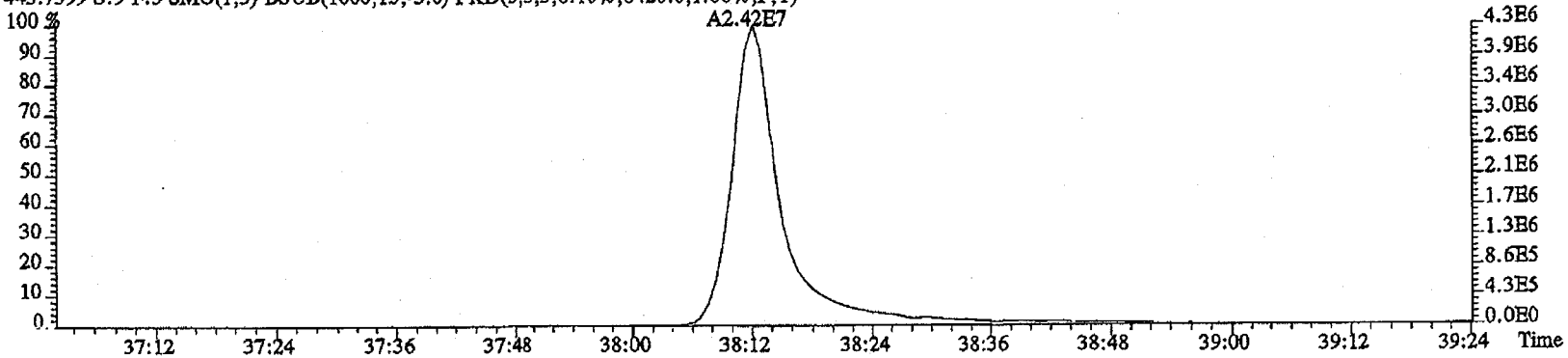


File:22FE11A4D5 #1-192 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

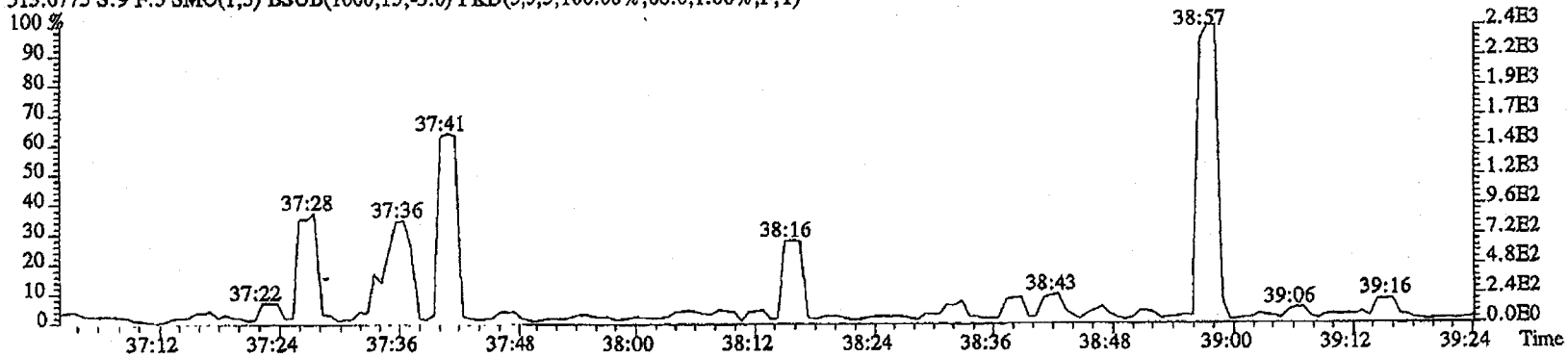
441.7428 S:9 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1168.0,1.00%,F,T)



443.7399 S:9 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,8420.0,1.00%,F,T)

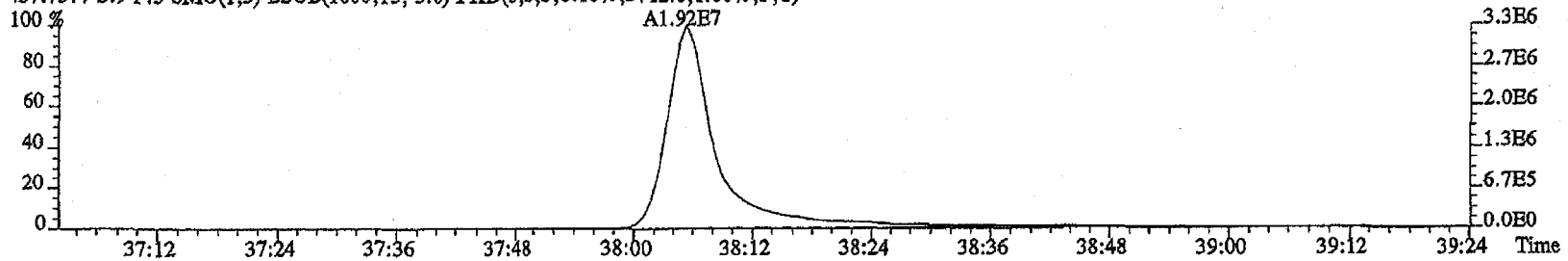


513.6775 S:9 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,68.0,1.00%,F,T)

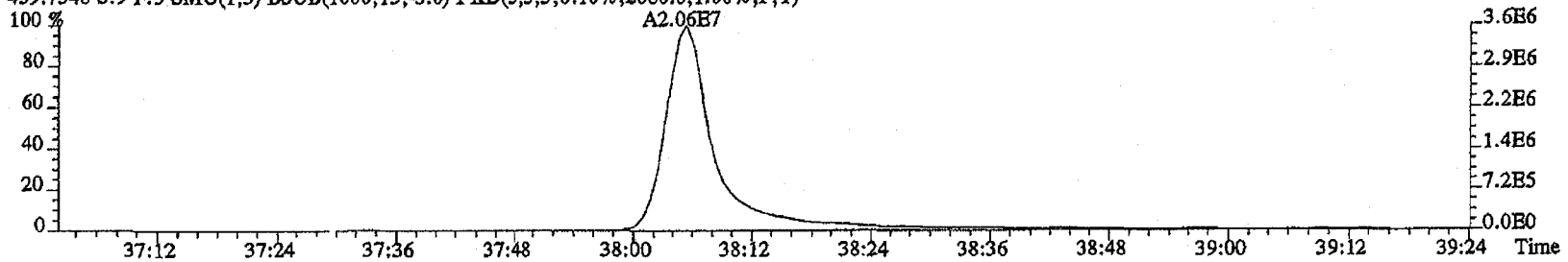


File:22FB11A4D5 #1-192 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES

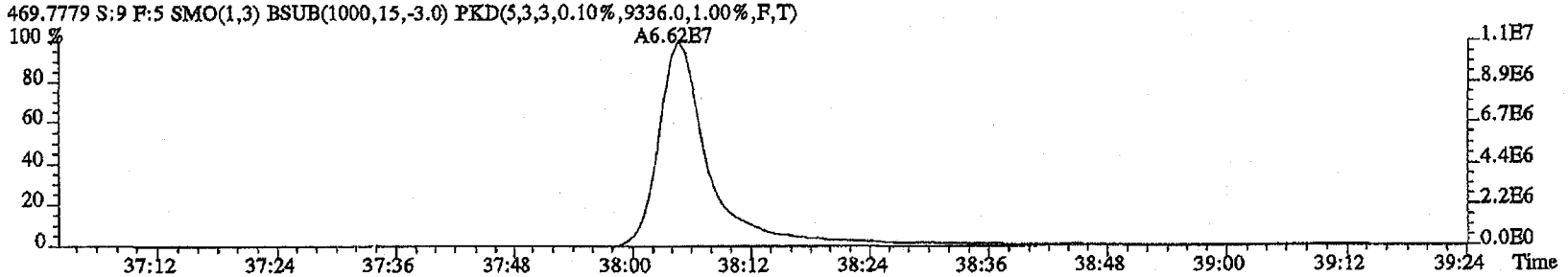
457.7377 S:9 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3712.0,1.00%,F,T)



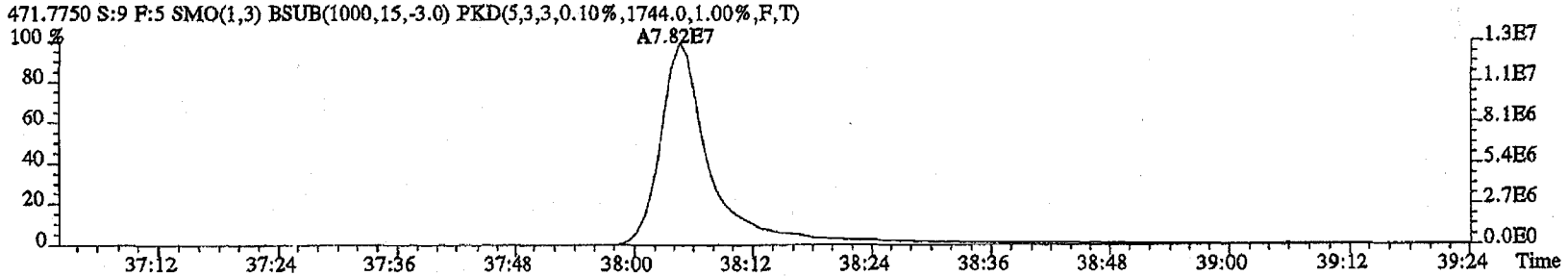
459.7348 S:9 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2880.0,1.00%,F,T)



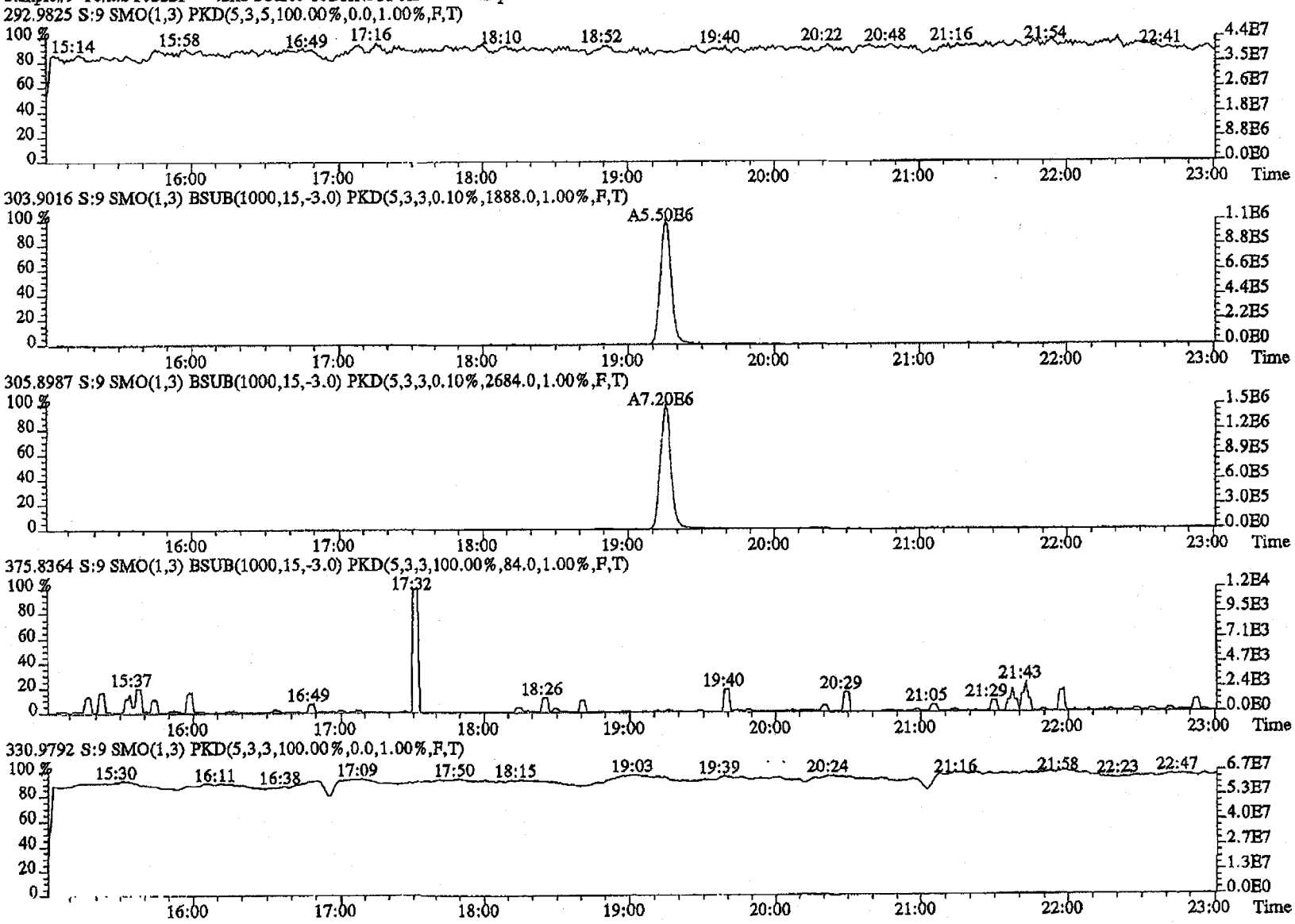
469.7779 S:9 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9336.0,1.00%,F,T)



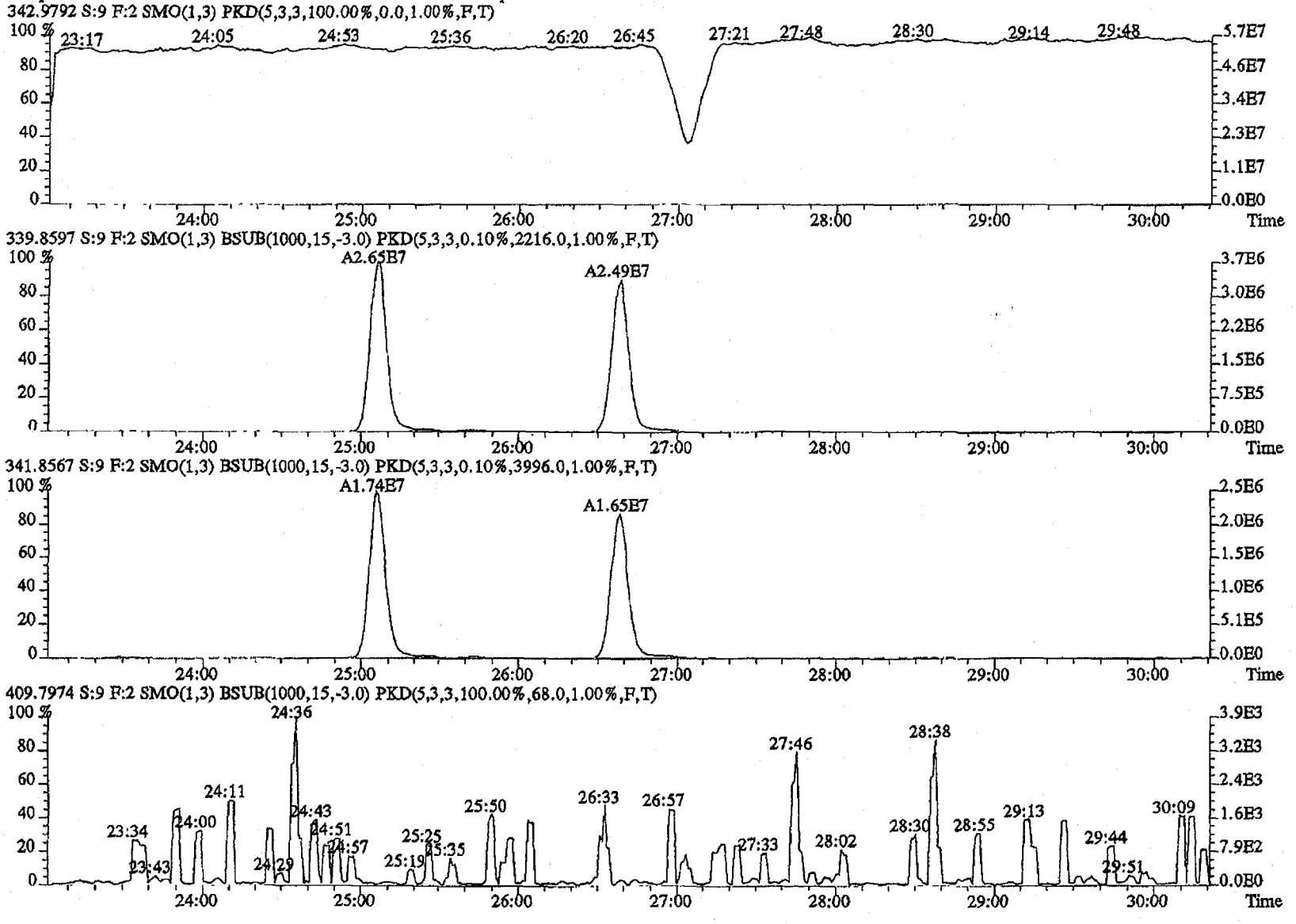
471.7750 S:9 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1744.0,1.00%,F,T)



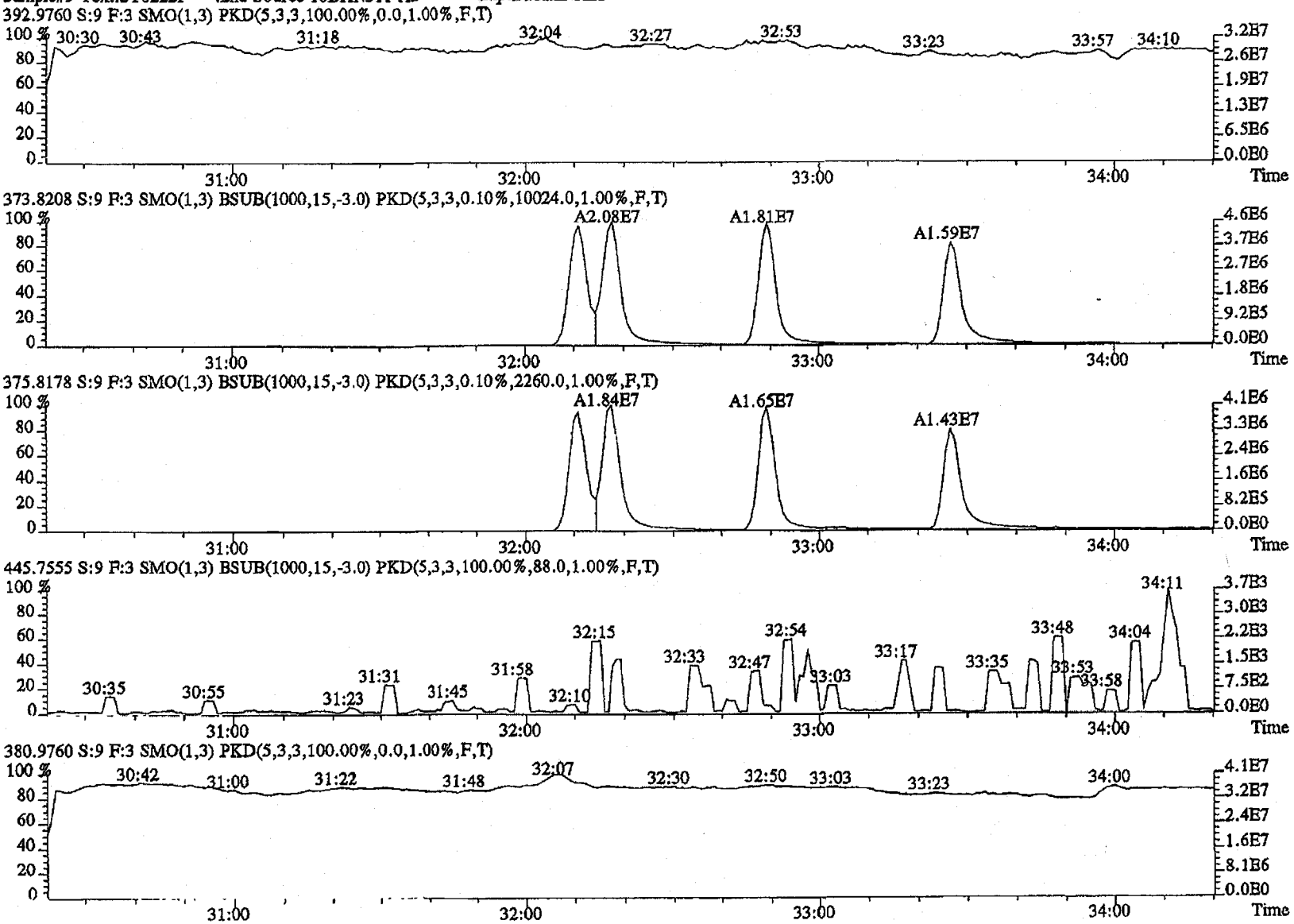
File:22FB11A4D5 #1-530 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES



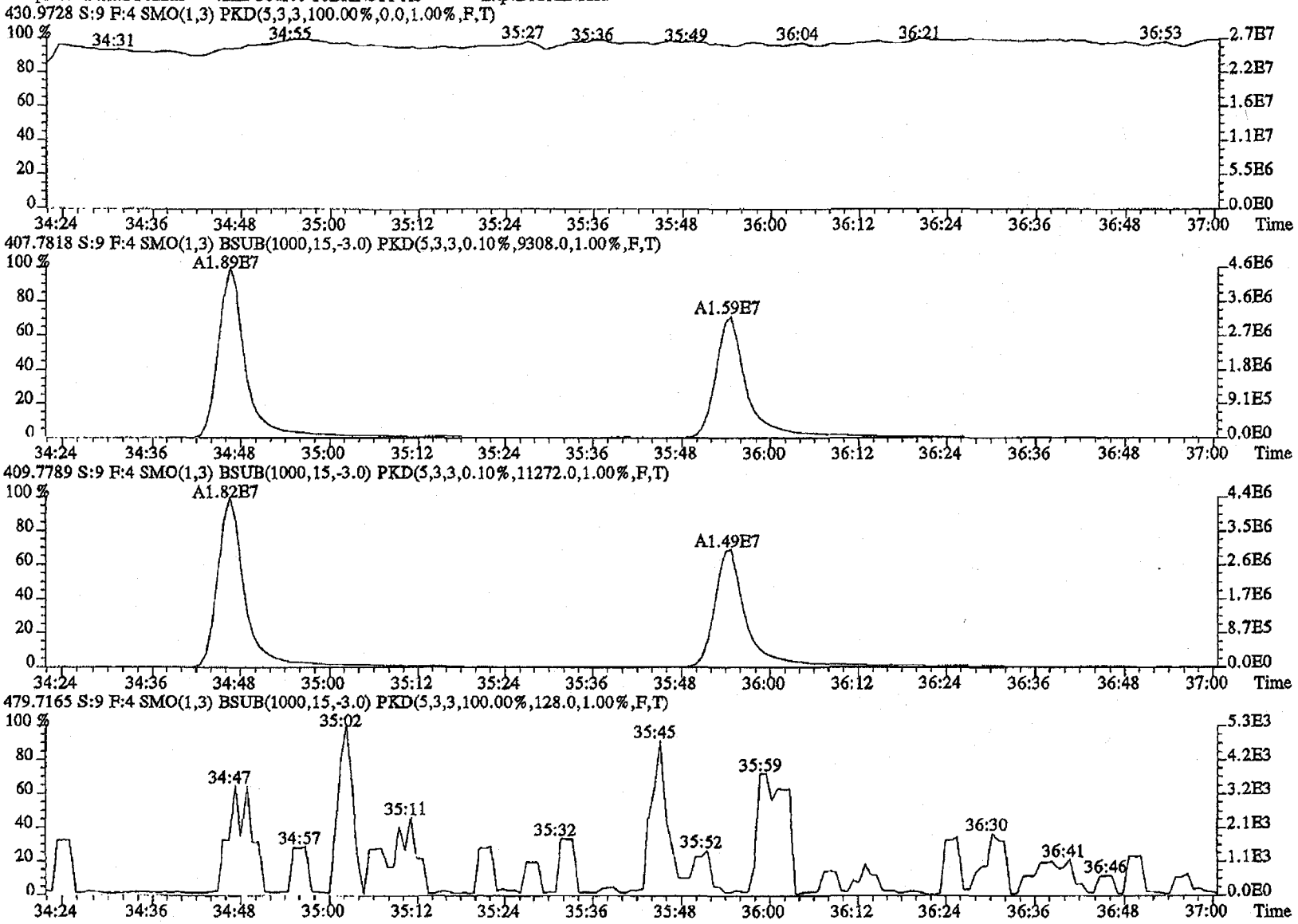
File:22FB11A4D5 #1-470 Acq:22-FBB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaB
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES



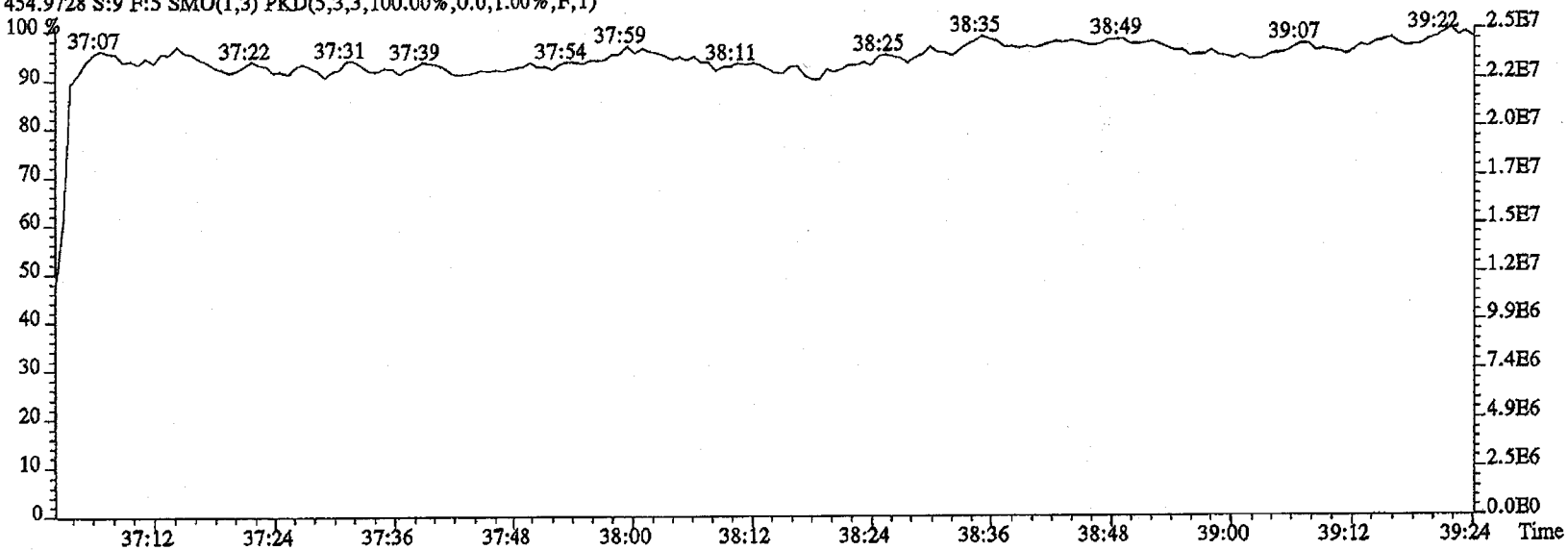
File:22FB11A4D5 #1-286 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES



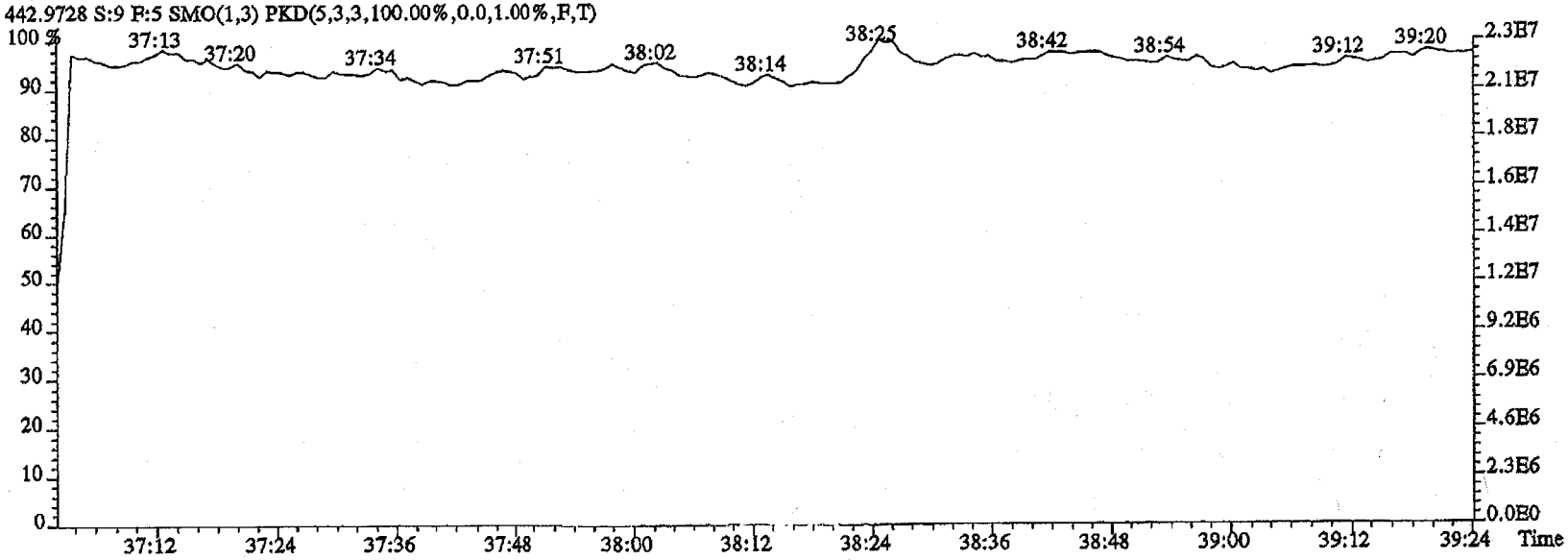
File:22FE11A4D5 #1-201 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES



File:22FB11A4D5 #1-192 Acq:22-FEB-2011 18:49:28 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 Text:ST0222F :2nd Source 10DXN511 AS Exp:DIOXINRES
454.9728 S:9 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:9 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



CCAL Data

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING	Test America – West Sacramento Daily Calibration Checklist Dioxin Methods

Method ID 8290 **Associated ICAL** 8290 022211 4D5

Column ID DB5 **Instrument ID** 4D5

STD ID ST0520, ST0520A **STD Solution** 11DXN109

Analyzed by AM **Date Analyzed** 05-20-11, 05-21-11

Std. Pkg. By AS **Date Std. Pkg. Assembled** 05-23-11

Std. Pkg. Reviewed By NK **Date Std. Pkg. Reviewed** 5-23-11.

DAILY STANDARD PACKAGE	INITIATED	REVIEWED
Standard, CPSM, and Solvent Blank present?	✓	✓
Copy of log-file and Beginning Static Resolution present?	✓	✓
CPSM blow up present?	✓	✓
Curve Summary present?	✓	✓
Summary of Method criteria present or documented below?	✓	✓
Daily standard within method specified limits?*	✓ (1)	(1) ✓
Analyte retention times correct?	✓	✓
Isotopic ratios within limits?	✓	✓
CPSM valley ≤ method specified limits?**	✓	✓
Are chromatographic windows correct?	✓	✓
Samples analyzed within 12 hrs of daily standard?	✓	✓
Manual reintegration's checked and hardcopies included?	NA	NA
Ending Standard present?	✓	✓
Ending Static Resolutions present	✓	✓
Absolute retention times for 13C12-1,2,3,4-TCDD and 13C12-1,2,3,7,8,9-HxCDD are within +/- 15 seconds of the retention times in the Initial Calibration? (required for **all** 1613B samples)	NA	NA

COMMENTS:

(1) Ending ccv > 20% D for 1,2,3,6,7,8-HxCDF < 25% D use Avg. RRF = 1.18
> 20% D for 1,2,3,4,7,8-HxCDD < 25% D use Avg. RRF = 0.84
See NCM # 07-0123387

* **Method 8290/TO9/M0023A: (beginning)** ≤ 20% from curve RRFs for native analytes, ≤ 30% from curve RRFs for labeled compounds.
Method 8290/TO9/M0023A: (ending) ≤ 25% from curve RRFs for native analytes, ≤ 35% from curve RRFs for labeled compounds.
Method 23: See Method 23 Daily Standard Criteria, Table 5.
Method 1613B: See, Method 1613B or Method 1613B Tetras Daily Standard Criteria,
** **Method 23/0023A CPSM Criteria:** 25% valley between 2378 TCDF (DB-225)/TCDD (DB-5) and its closest eluters normalized to the smallest peak of the triplet
Method 1613B/8290/TO9 CPSM Criteria: 25% valley between 2378 TCDF (DB-225)/TCDD (DB-5) and its closest eluters normalized to the 2378 peak.

Run text: ST0520 File text: CS-3 11DXN109
Run #7 Filename 20MY11D4D5 S: 1 I: 1
Acquired: 20-MAY-11 19:06:46 Processed: 20-MAY-11 19:47:21
Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5 Results: 20MY11D4D58290

Name	Resp	RA		RT	RRF	Amount	Dev'n	Mod?
13C-1,2,3,4-TCDD	170006100	0.78	y	19:44	-	100.00	-	n
13C-2,3,7,8-TCDF	220505400	0.80	y	19:08	1.30	100.00	17.4	n
2,3,7,8-TCDF	19000560	0.76	y	19:10	0.86	10.00	10.8	n
Total TCDF	19337350	0.78	y	17:17	0.86	10.00	10.8	n
13C-2,3,7,8-TCDD	165737400	0.77	y	19:57	0.97	100.00	0.6	n
2,3,7,8-TCDD	15316650	0.77	y	19:58	0.92	10.00	6.5	n
Total TCDD	15456613	0.44	n	18:42	0.92	10.00	6.5	n
37Cl-2,3,7,8-TCDD	22709800	1.00	y	19:58	1.34	10.00	-6.3	n
13C-1,2,3,7,8-PeCDF	187956300	1.59	y	24:55	1.11	100.00	6.4	n
1,2,3,7,8-PeCDF	86660400	1.53	y	24:57	0.92	50.00	-3.8	n
2,3,4,7,8-PeCDF	83292900	1.55	y	26:28	0.89	50.00	-5.5	n
Total F2 PeCDF	173198734	1.40	y	23:22	0.90	100.00	-4.7	n
Total F1 PeCDF	15885	0.64	n	18:44	0.90	100.00	-4.7	n
13C-1,2,3,7,8-PeCDD	137597700	1.60	y	27:16	0.81	100.00	15.7	n
1,2,3,7,8-PeCDD	63905700	1.48	y	27:18	0.93	50.00	-10.8	n
Total PeCDD	64283972	1.27	n	24:56	0.93	50.00	-10.8	n
13C-1,2,3,7,8,9-HxCDD	123145600	1.29	y	33:15	-	100.00	-	n
13C-1,2,3,4,7,8-HxCDF	120562000	0.51	y	32:07	0.98	100.00	12.4	n
1,2,3,4,7,8-HxCDF	63831800	1.20	y	32:08	1.06	50.00	-7.8	n
1,2,3,6,7,8-HxCDF	73608200	1.21	y	32:15	1.22	50.00	-16.4	n
2,3,4,6,7,8-HxCDF	67861300	1.20	y	32:47	1.13	50.00	-13.7	n
1,2,3,7,8,9-HxCDF	59049700	1.23	y	33:26	0.98	50.00	-12.8	n
Total HxCDF	264811987	1.32	y	30:51	1.10	200.00	-12.9	n
13C-1,2,3,6,7,8-HxCDD	119829900	1.28	y	32:59	0.97	100.00	2.5	n
1,2,3,4,7,8-HxCDD	46600100	1.23	y	32:56	0.78	50.00	4.4	n
1,2,3,6,7,8-HxCDD	58992600	1.28	y	33:00	0.98	50.00	-5.9	n
1,2,3,7,8,9-HxCDD	56879700	1.27	y	33:16	0.95	50.00	-7.0	n
Total HxCDD	162804564	1.27	y	32:09	0.90	150.00	-3.6	n
13C-1,2,3,4,6,7,8-HpCDF	105998600	0.43	y	34:46	0.86	100.00	-5.8	n
1,2,3,4,6,7,8-HpCDF	70061200	1.02	y	34:46	1.32	50.00	-0.2	n
1,2,3,4,7,8,9-HpCDF	61369000	1.02	y	35:54	1.16	50.00	2.5	n
Total HpCDF	134408887	1.02	y	34:46	1.24	100.00	1.0	n
13C-1,2,3,4,6,7,8-HpCDD	110361900	1.05	y	35:34	0.90	100.00	-1.9	n
1,2,3,4,6,7,8-HpCDD	53256500	0.98	y	35:35	0.97	50.00	-4.8	n
Total HpCDD	54459782	0.98	y	35:01	0.97	50.00	-4.8	n
13C-OCDD	157043500	0.88	y	38:04	0.64	200.00	6.0	n
OCDF	95566200	0.84	y	38:11	1.22	100.00	-4.3	n
OCDD	82418000	0.90	y	38:04	1.05	100.00	-6.9	n

Run text: ST0520A File text: ST0520A :CS3 11DXN109
Run #20 Filename 20MY11D4D5 S: 15 I: 1
Acquired: 21-MAY-11 05:30:49 Processed: 23-MAY-11 09:09:40
Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5 Results: 20MY11D4D58290

Name	Resp	RA	RT	RRF	Amount	Dev'n	Mod?
13C-1,2,3,4-TCDD	159790248	0.77 y	19:43	-	100.00	-	n
13C-2,3,7,8-TCDF	204422616	0.79 y	19:08	1.28	100.00	15.8	n
2,3,7,8-TCDF	17560296	0.76 y	19:10	0.86	10.00	10.5	n
Total TCDF	17919374	0.71 y	18:08	0.86	10.00	10.5	n
13C-2,3,7,8-TCDD	154284028	0.77 y	19:56	0.97	100.00	-0.3	n
2,3,7,8-TCDD	14259772	0.75 y	19:58	0.92	10.00	6.5	n
Total TCDD	14360033	0.25 n	18:42	0.92	10.00	6.5	n
37Cl-2,3,7,8-TCDD	21311802	1.00 y	19:58	1.33	10.00	-6.5	n
13C-1,2,3,7,8-PeCDF	169441044	1.59 y	24:55	1.06	100.00	2.1	n
1,2,3,7,8-PeCDF	78860150	1.53 y	24:57	0.93	50.00	-2.9	n
2,3,4,7,8-PeCDF	75791618	1.50 y	26:28	0.89	50.00	-4.7	n
Total F2 PeCDF	158171169	1.54 y	23:22	0.91	100.00	-3.8	n
Total F1 PeCDF	16638	0.73 n	16:48	0.91	100.00	-3.8	n
13C-1,2,3,7,8-PeCDD	126030436	1.56 y	27:16	0.79	100.00	12.7	n
1,2,3,7,8-PeCDD	58528922	1.46 y	27:18	0.93	50.00	-10.9	n
Total PeCDD	58841375	2.64 n	24:57	0.93	50.00	-10.9	n
13C-1,2,3,7,8,9-HxCDD	110491584	1.28 y	33:15	-	100.00	-	n
13C-1,2,3,4,7,8-HxCDF	113017264	0.51 y	32:07	1.02	100.00	17.5	n
1,2,3,4,7,8-HxCDF	59413086	1.21 y	32:08	1.05	50.00	-8.5	n
1,2,3,6,7,8-HxCDF	64201416	1.20 y	32:15	1.14	50.00	-22.2	n
2,3,4,6,7,8-HxCDF	60350934	1.18 y	32:47	1.07	50.00	-18.1	n
1,2,3,7,8,9-HxCDF	54897518	1.22 y	33:26	0.97	50.00	-13.5	n
Total HxCDF	239191238	1.39 y	31:04	1.06	200.00	-16.1	n
13C-1,2,3,6,7,8-HxCDD	100157380	1.28 y	32:59	0.91	100.00	-4.6	n
1,2,3,4,7,8-HxCDD	45202720	1.23 y	32:55	0.90	50.00	21.2	n
1,2,3,6,7,8-HxCDD	49433042	1.29 y	32:60	0.99	50.00	-5.6	n
1,2,3,7,8,9-HxCDD	51663368	1.25 y	33:16	1.03	50.00	1.1	n
Total HxCDD	146456334	0.99 n	32:23	0.97	150.00	3.9	n
13C-1,2,3,4,6,7,8-HpCDF	99646670	0.43 y	34:45	0.90	100.00	-1.3	n
1,2,3,4,6,7,8-HpCDF	65710152	1.03 y	34:45	1.32	50.00	-0.4	n
1,2,3,4,7,8,9-HpCDF	56428092	1.03 y	35:53	1.13	50.00	0.2	n
Total HpCDF	126560095	1.03 y	34:45	1.23	100.00	-0.1	n
13C-1,2,3,4,6,7,8-HpCDD	97168012	1.04 y	35:33	0.88	100.00	-3.8	n
1,2,3,4,6,7,8-HpCDD	48240818	1.00 y	35:34	0.99	50.00	-2.0	n
Total HpCDD	49476115	0.99 y	35:01	0.99	50.00	-2.0	n
13C-OCDD	133512564	0.86 y	38:04	0.60	200.00	0.4	n
OCDF	86553492	0.85 y	38:11	1.30	100.00	1.9	n
OCDD	71938876	0.89 y	38:04	1.08	100.00	-4.5	n

Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5

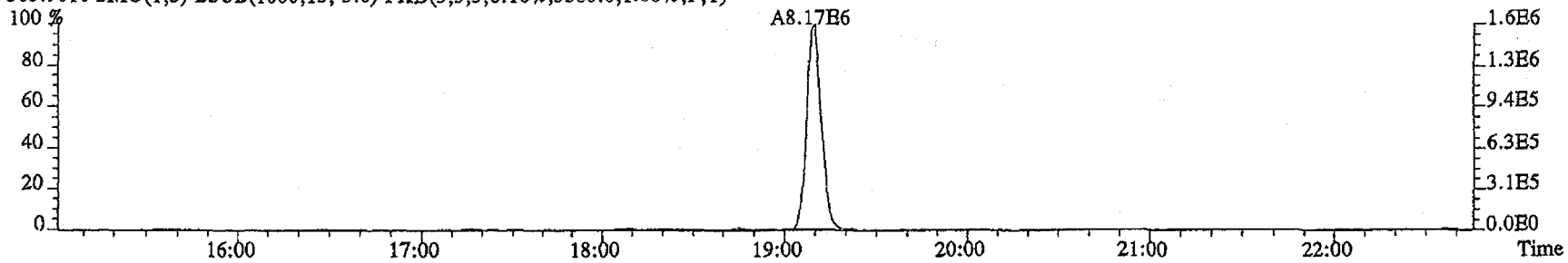
ST0222 :CS-0.2 11DXN025 AS ST0222A :CS-1 10DXN503 AS ST0222B :CS-2 10DXN504 AS
ST0222C :CS-3 10DXN505 AS ST0222D :CS-4 10DXN506 AS

				22FE11A4D5	22FE11A4D5	22FE11A4D5	22FE11A4D5	22FE11A4D5
				S2	S3	S4	S5	S6
Name	Mean	S. D.	%RSD	RRF1	RRF2	RRF3	RRF4	RRF5
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-
13C-2,3,7,8-TCDF	1.105	0.049	4.48 %	1.12	1.14	1.14	1.14	1.05
2,3,7,8-TCDF	0.777	0.054	6.93 %	0.86	0.80	0.80	0.70	0.74
Total TCDF	0.777	0.054	6.93 %	0.86	0.80	0.80	0.70	0.74
13C-2,3,7,8-TCDD	0.969	0.023	2.34 %	0.96	0.98	0.99	1.00	0.94
2,3,7,8-TCDD	0.868	0.030	3.42 %	0.88	0.85	0.91	0.82	0.87
Total TCDD	0.868	0.030	3.42 %	0.88	0.85	0.91	0.82	0.87
37Cl-2,3,7,8-TCDD	1.426	0.159	11.2 %	1.74	1.44	1.38	1.37	1.30
13C-1,2,3,7,8-PeCDF	1.039	0.028	2.72 %	1.01	1.05	1.02	1.09	1.01
1,2,3,7,8-PeCDF	0.959	0.040	4.22 %	0.97	0.90	0.97	0.93	0.99
2,3,4,7,8-PeCDF	0.938	0.048	5.09 %	0.99	0.86	0.97	0.90	0.95
Total F2 PeCDF	0.949	0.042	4.47 %	0.98	0.88	0.97	0.91	0.97
Total F1 PeCDF	0.949	0.042	4.47 %	0.98	0.88	0.97	0.91	0.97
13C-1,2,3,7,8-PeCDD	0.700	0.022	3.13 %	0.74	0.70	0.70	0.69	0.67
1,2,3,7,8-PeCDD	1.042	0.035	3.31 %	1.06	0.99	1.05	1.01	1.07
Total PeCDD	1.042	0.035	3.31 %	1.06	0.99	1.05	1.01	1.07
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-
13C-1,2,3,4,7,8-HxCDF	0.871	0.066	7.60 %	0.79	0.82	0.87	0.98	0.88
1,2,3,4,7,8-HxCDF	1.149	0.052	4.51 %	1.22	1.09	1.18	1.09	1.14
1,2,3,6,7,8-HxCDF	1.461	0.075	5.14 %	1.52	1.53	1.51	1.33	1.45
2,3,4,6,7,8-HxCDF	1.304	0.079	6.06 %	1.38	1.34	1.36	1.16	1.28
1,2,3,7,8,9-HxCDF	1.123	0.098	8.72 %	1.29	1.10	1.16	0.99	1.09
Total HxCDF	1.259	0.070	5.54 %	1.35	1.26	1.30	1.14	1.24
13C-1,2,3,6,7,8-HxCDD	0.950	0.033	3.51 %	0.95	0.98	0.93	1.00	0.92
1,2,3,4,7,8-HxCDD	0.745	0.054	7.27 %	0.71	0.66	0.77	0.73	0.78

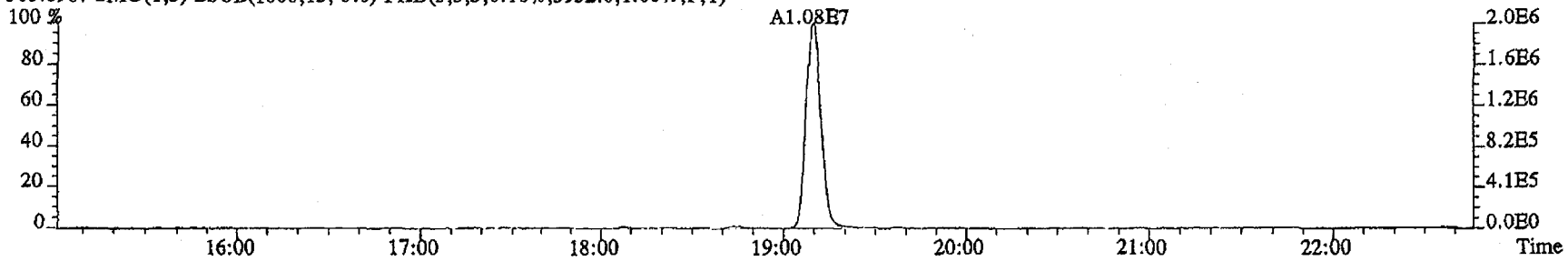
1,2,3,6,7,8-HxCDD	1.046	0.028	2.68 %	1.08	1.01	1.05	1.02	1.06
1,2,3,7,8,9-HxCDD	1.021	0.043	4.24 %	1.02	0.95	1.05	1.00	1.05
Total HxCDD	0.937	0.039	4.13 %	0.94	0.87	0.96	0.91	0.96
13C-1,2,3,4,6,7,8-HpCDF	0.914	0.040	4.40 %	0.85	0.91	0.93	0.98	0.90
1,2,3,4,6,7,8-HpCDF	1.324	0.021	1.60 %	1.34	1.29	1.34	1.30	1.33
1,2,3,4,7,8,9-HpCDF	1.130	0.048	4.29 %	1.19	1.05	1.13	1.11	1.15
Total HpCDF	1.227	0.034	2.79 %	1.27	1.17	1.23	1.20	1.24
13C-1,2,3,4,6,7,8-HpCDD	0.914	0.047	5.18 %	0.85	0.91	0.92	0.99	0.89
1,2,3,4,6,7,8-HpCDD	1.014	0.060	5.93 %	1.09	0.92	0.99	1.00	1.05
Total HpCDD	1.014	0.060	5.93 %	1.09	0.92	0.99	1.00	1.05
13C-OCDD	0.602	0.034	5.63 %	0.55	0.60	0.59	0.64	0.60
OCDF	1.272	0.082	6.46 %	1.19	1.17	1.31	1.25	1.35
OCDD	1.128	0.067	5.95 %	1.24	1.05	1.13	1.07	1.14

File:20MY11D4D5 #1-513 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES

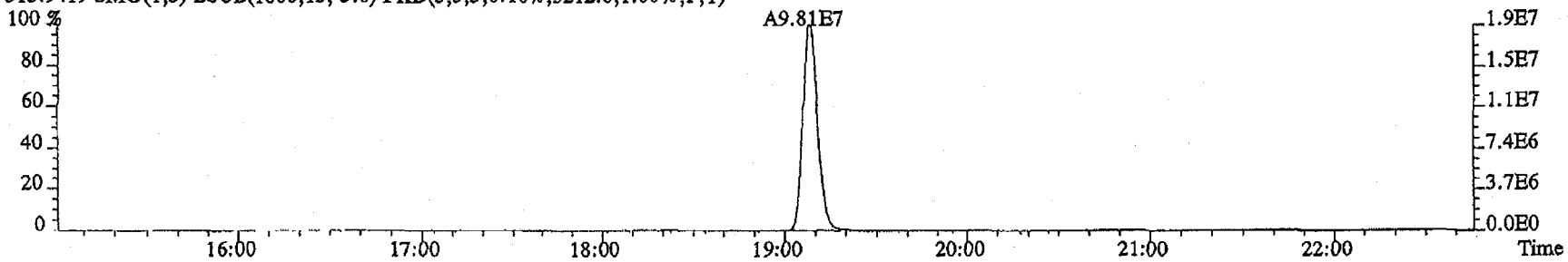
303.9016 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3580.0,1.00%,F,T)



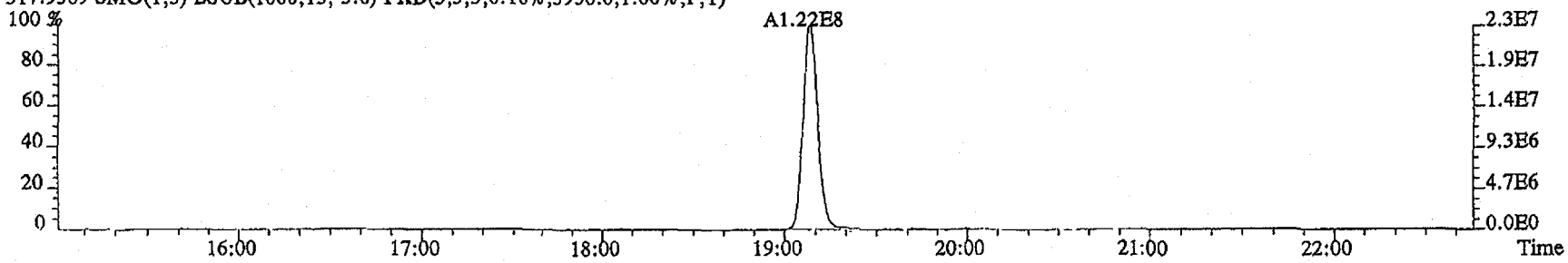
305.8987 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3932.0,1.00%,F,T)



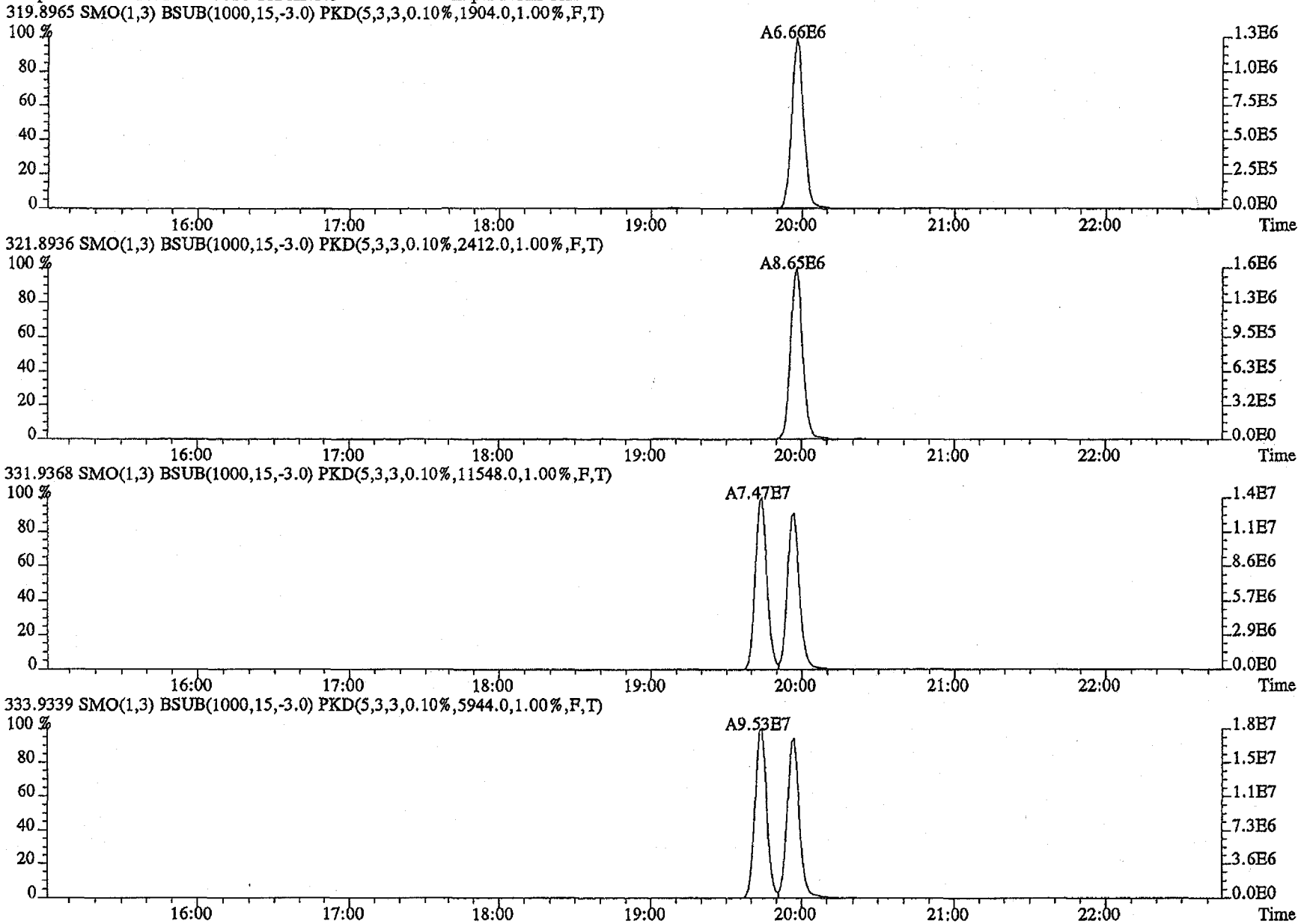
315.9419 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5212.0,1.00%,F,T)



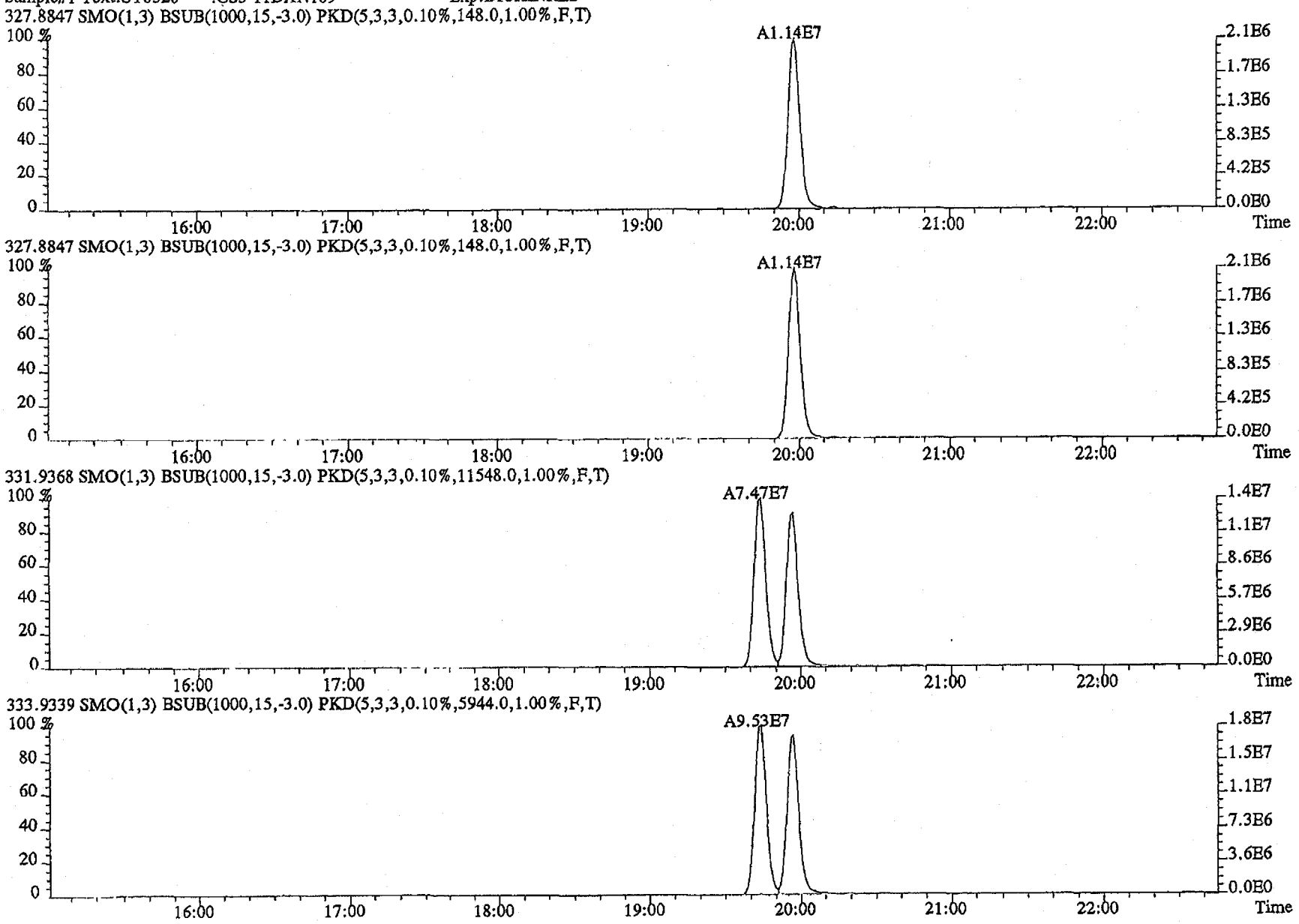
317.9389 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3956.0,1.00%,F,T)



File:20MY11D4D5 #1-513 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES

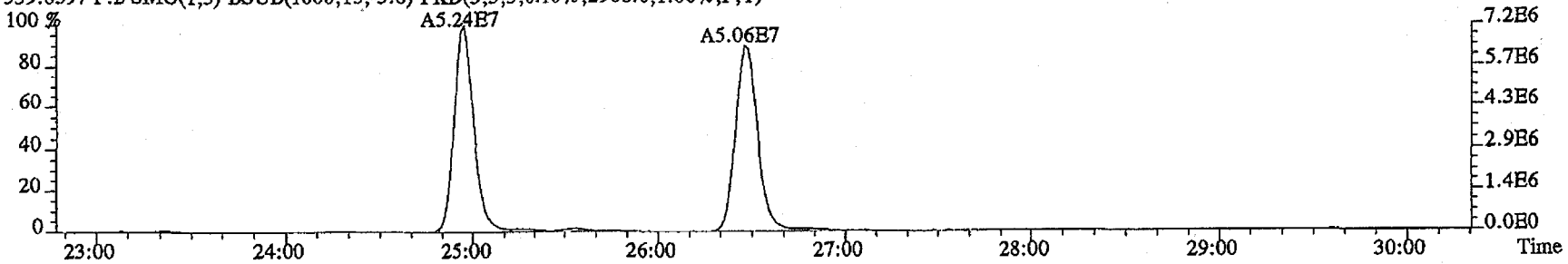


File:20MY11D4D5 #1-513 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES

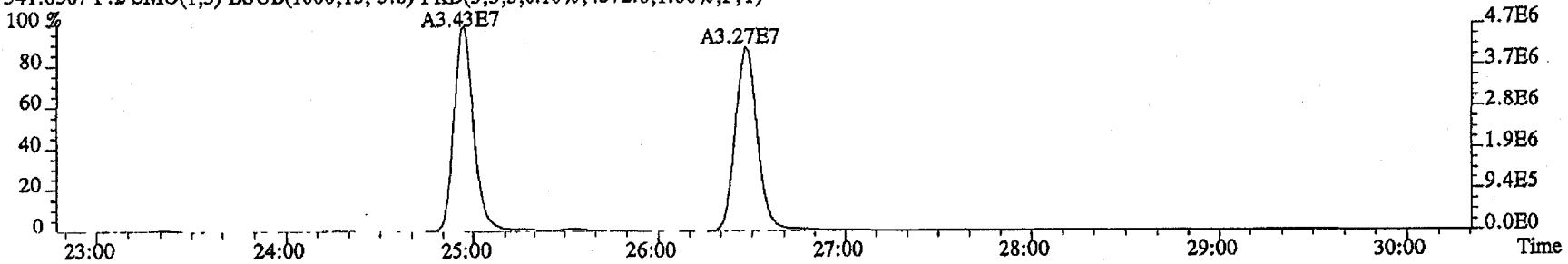


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES

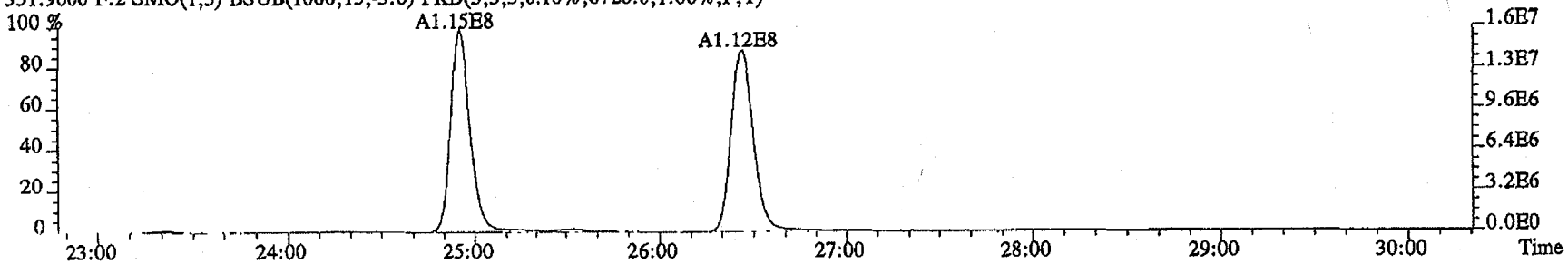
339.8597 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2968.0,1.00%,F,T)



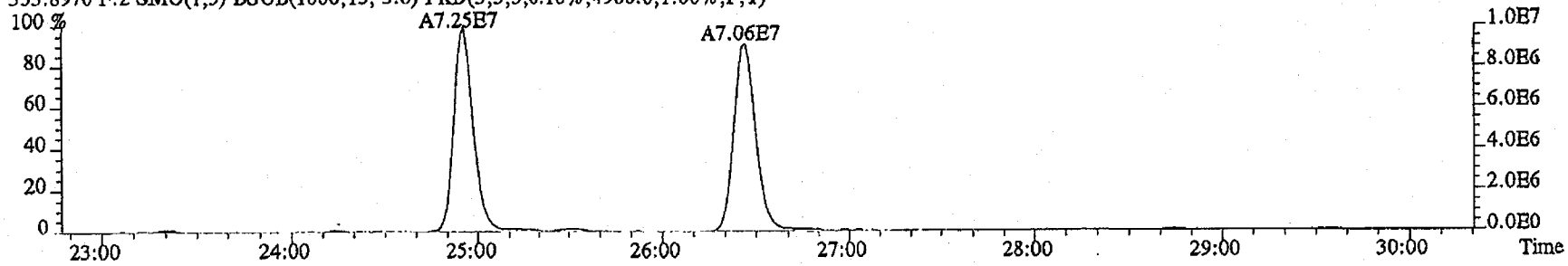
341.8567 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4372.0,1.00%,F,T)



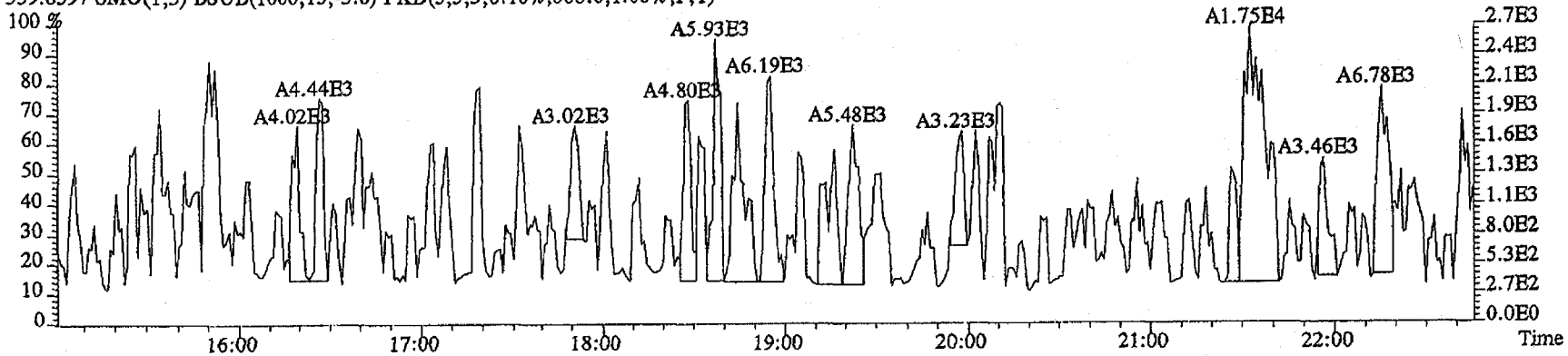
351.9000 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6720.0,1.00%,F,T)



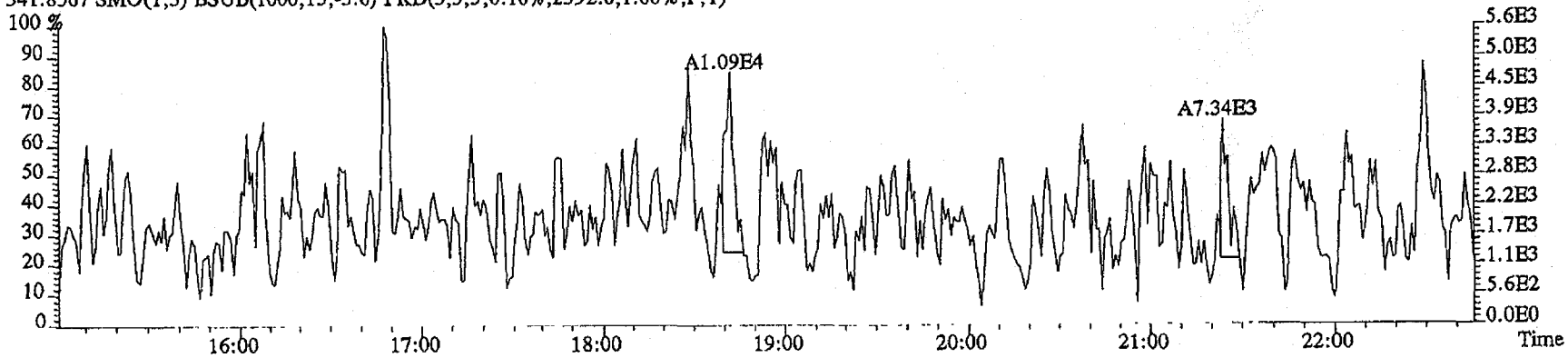
353.8970 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4900.0,1.00%,F,T)



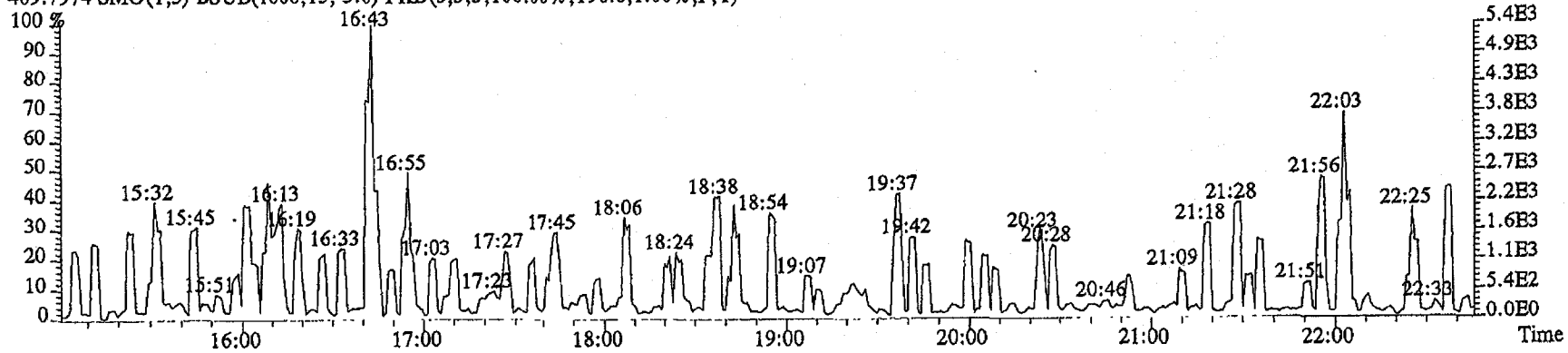
File:20MY11D4D5 #1-513 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES
339.8597 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,868.0,1.00%,F,T)



341.8567 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2592.0,1.00%,F,T)

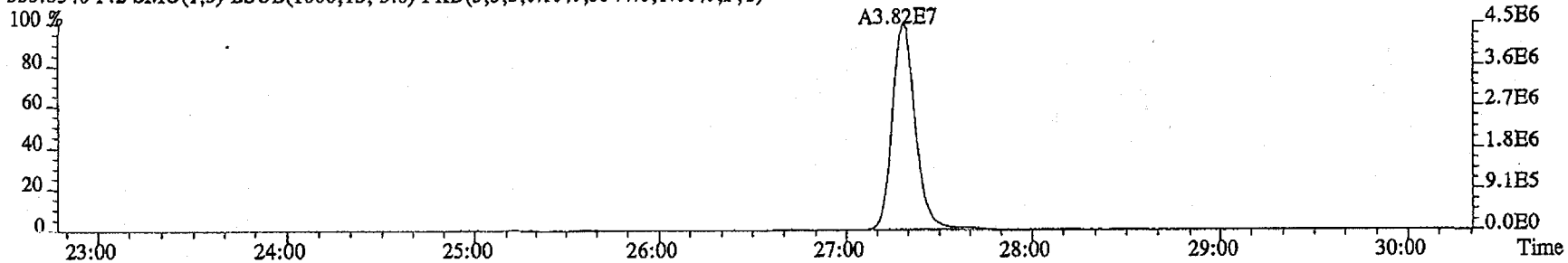


409.7974 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,196.0,1.00%,F,T)

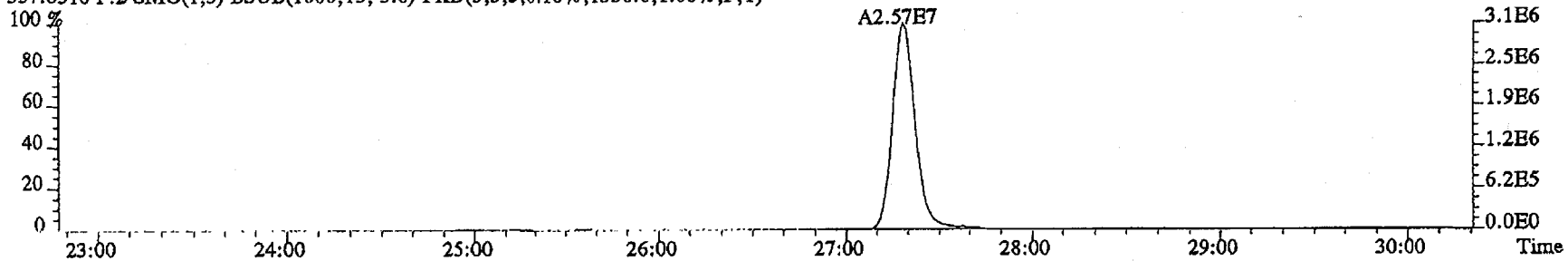


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES

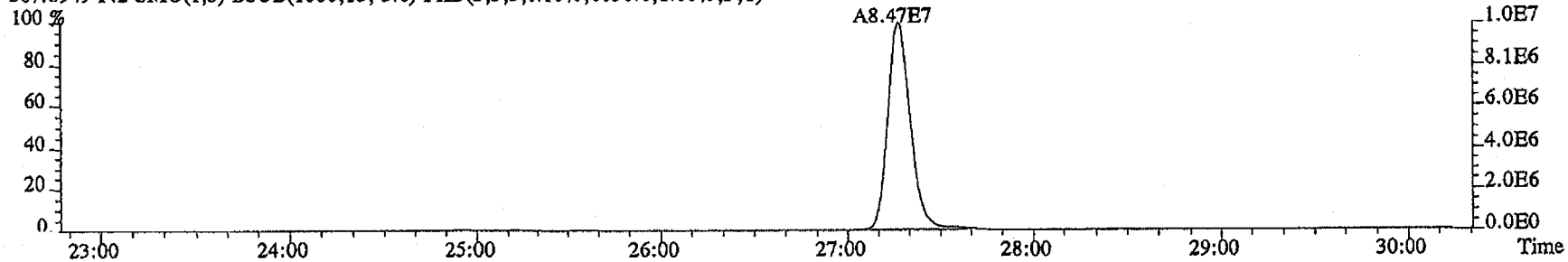
355.8546 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3544.0,1.00%,F,T)



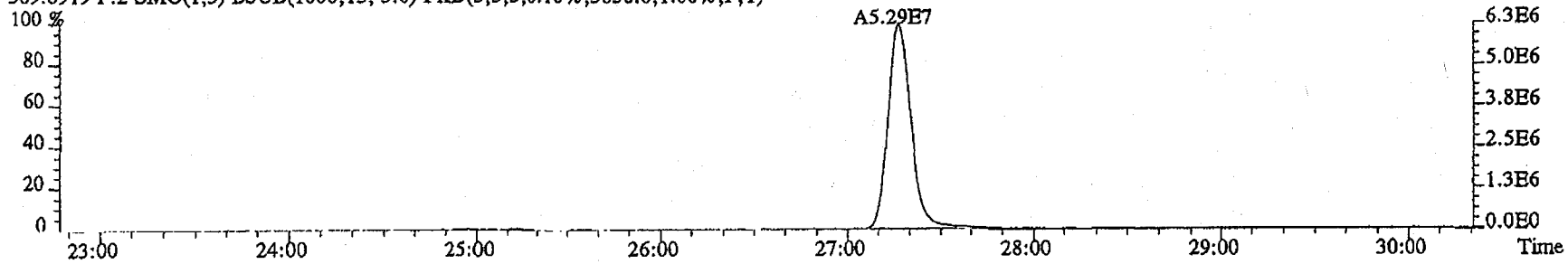
357.8516 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1356.0,1.00%,F,T)



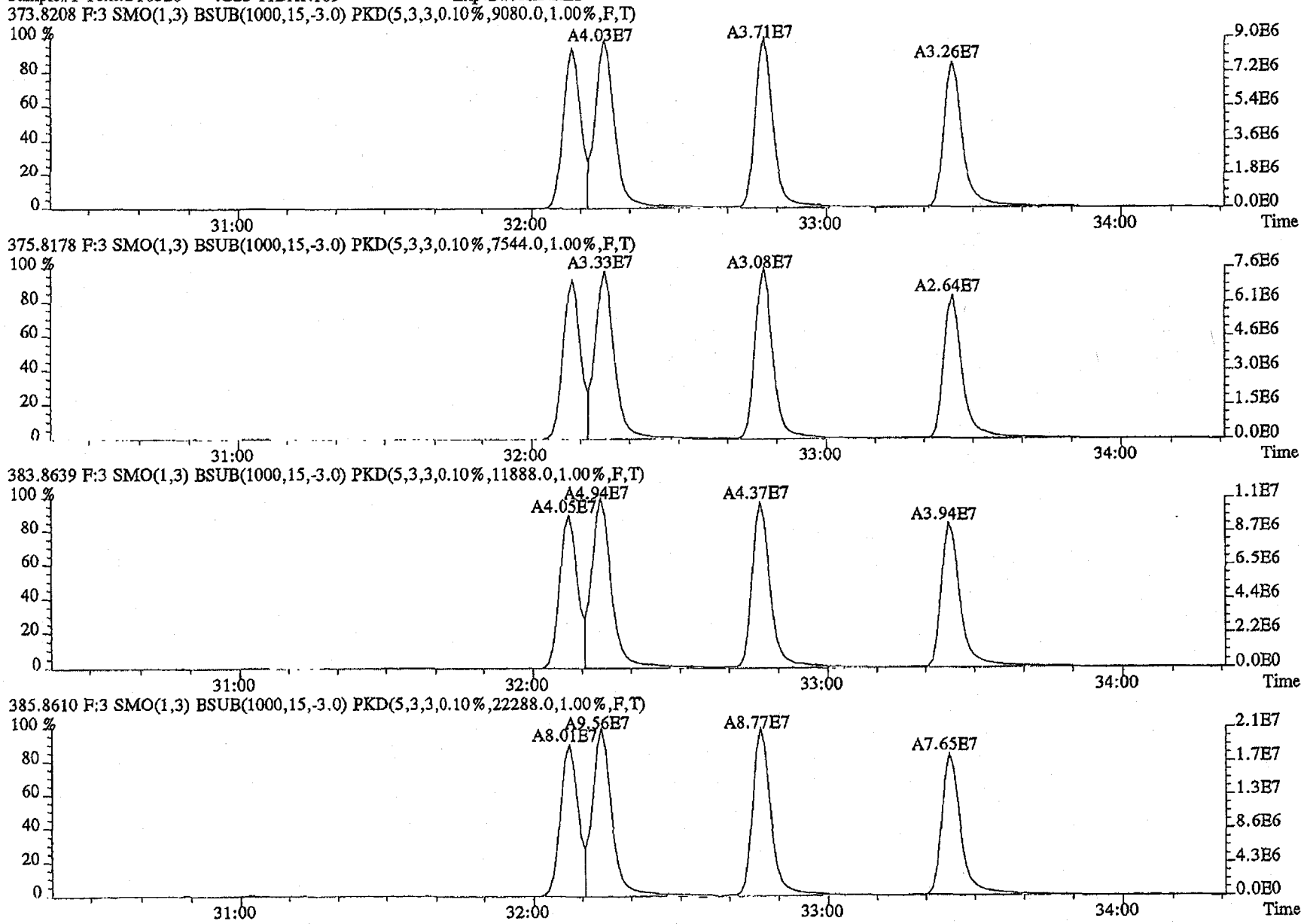
367.8949 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6036.0,1.00%,F,T)



369.8919 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3656.0,1.00%,F,T)

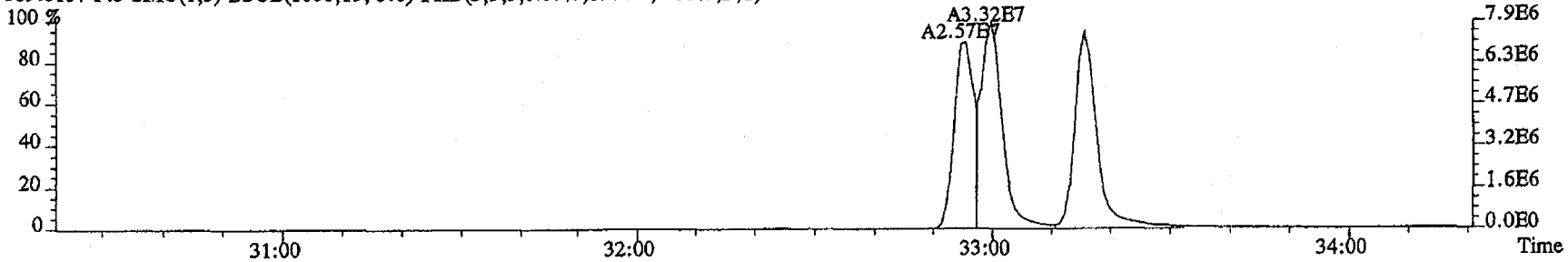


File:20MY11D4D5 #1-287 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES

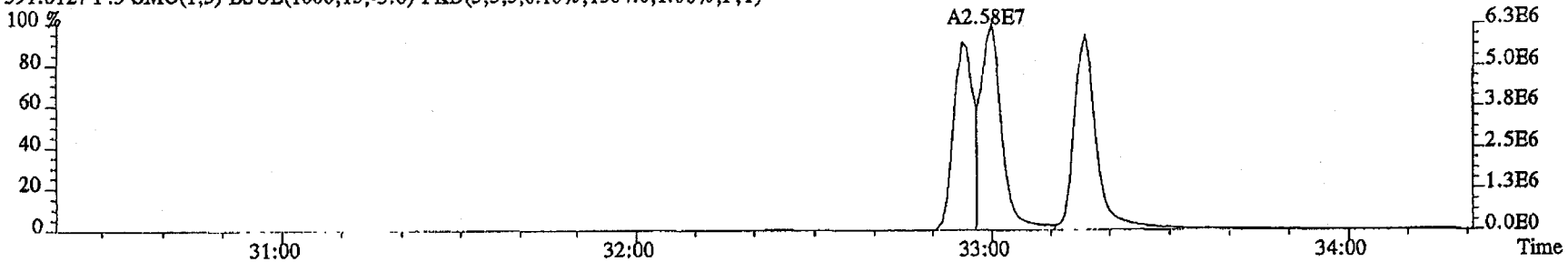


File:20MY11D4D5 #1-287 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES

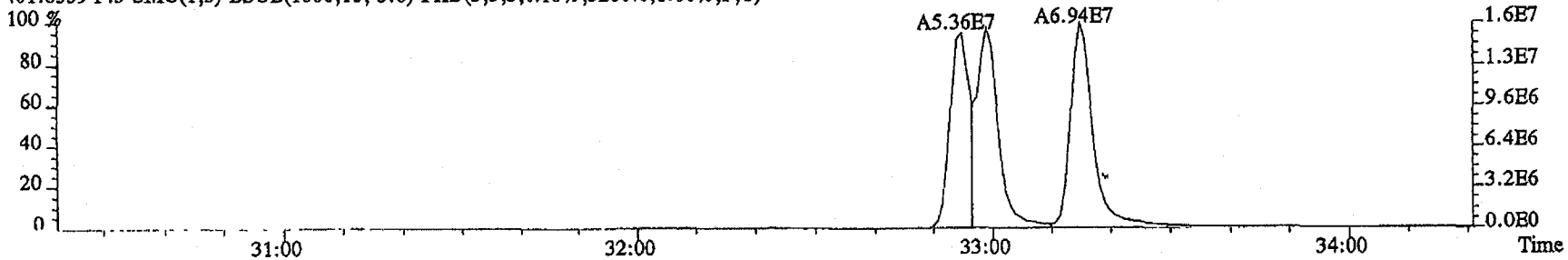
389.8157 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1304.0,1.00%,F,T)



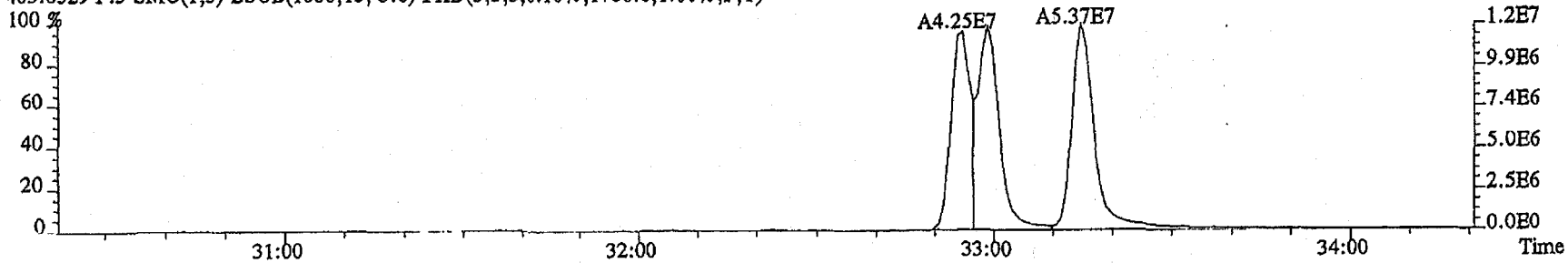
391.8127 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1504.0,1.00%,F,T)



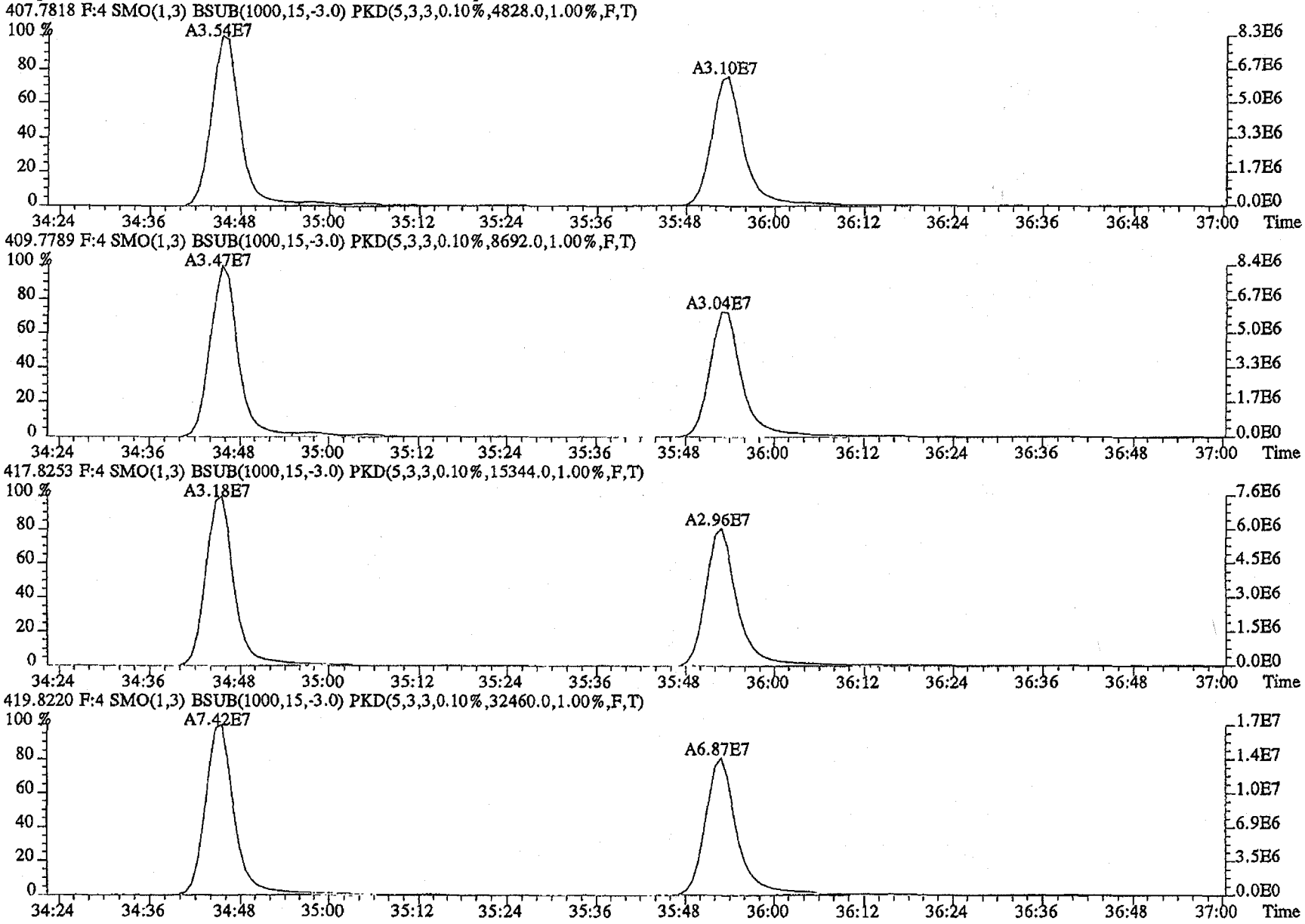
401.8559 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3280.0,1.00%,F,T)



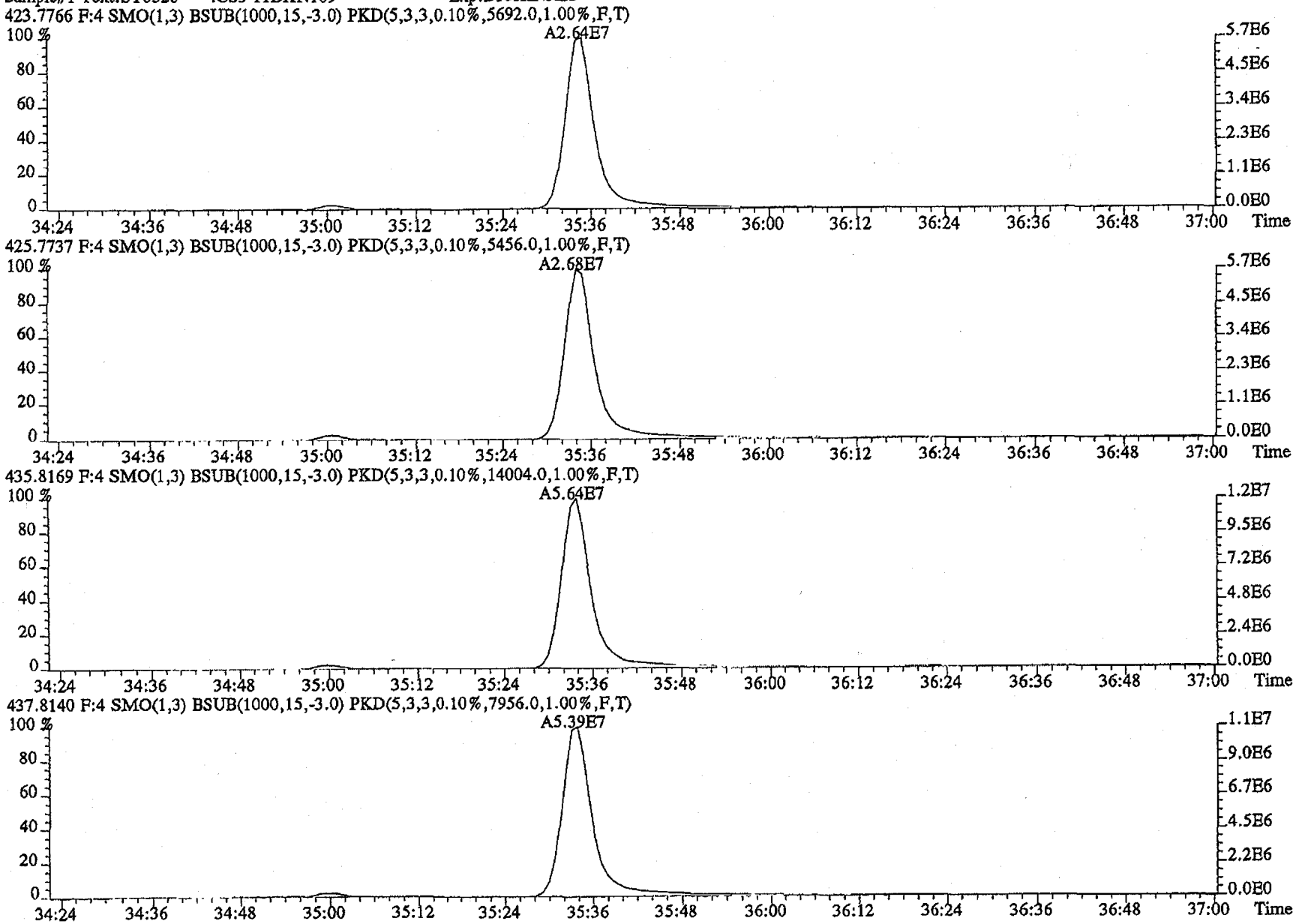
403.8529 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1780.0,1.00%,F,T)



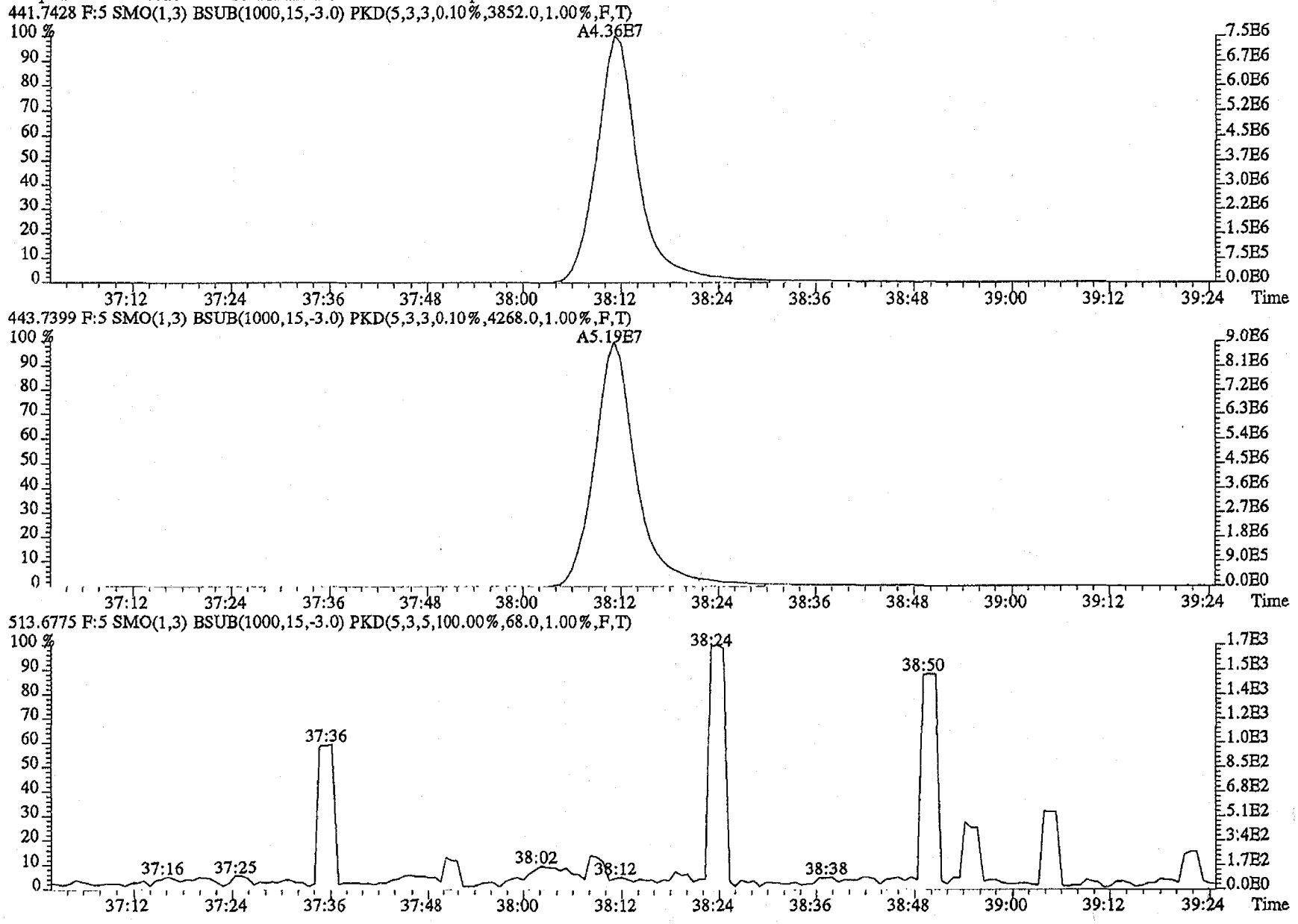
File:20MY11D4D5 #1-200 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES



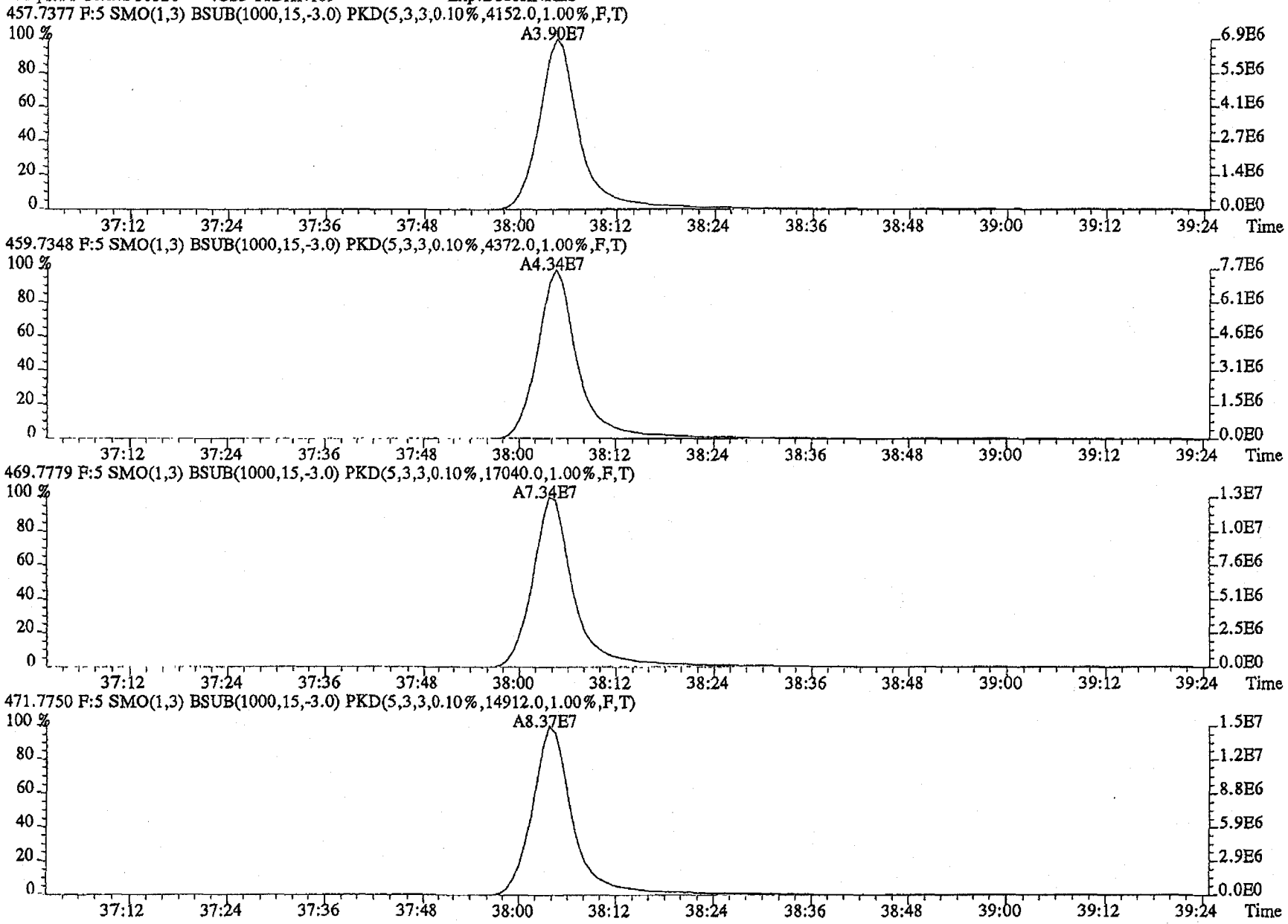
File:20MY11D4D5 #1-200 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES



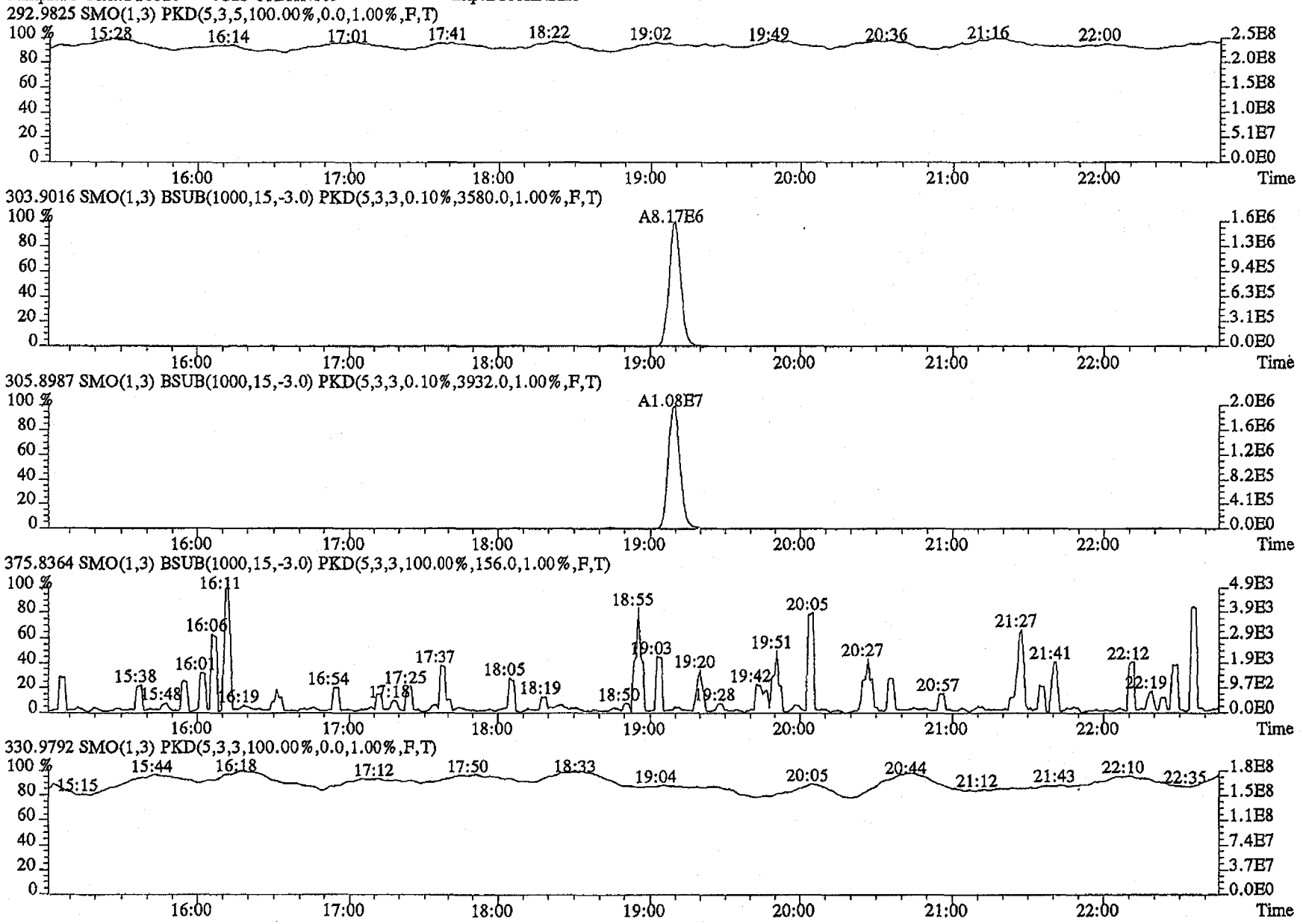
File:20MY11D4D5 #1-193 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES



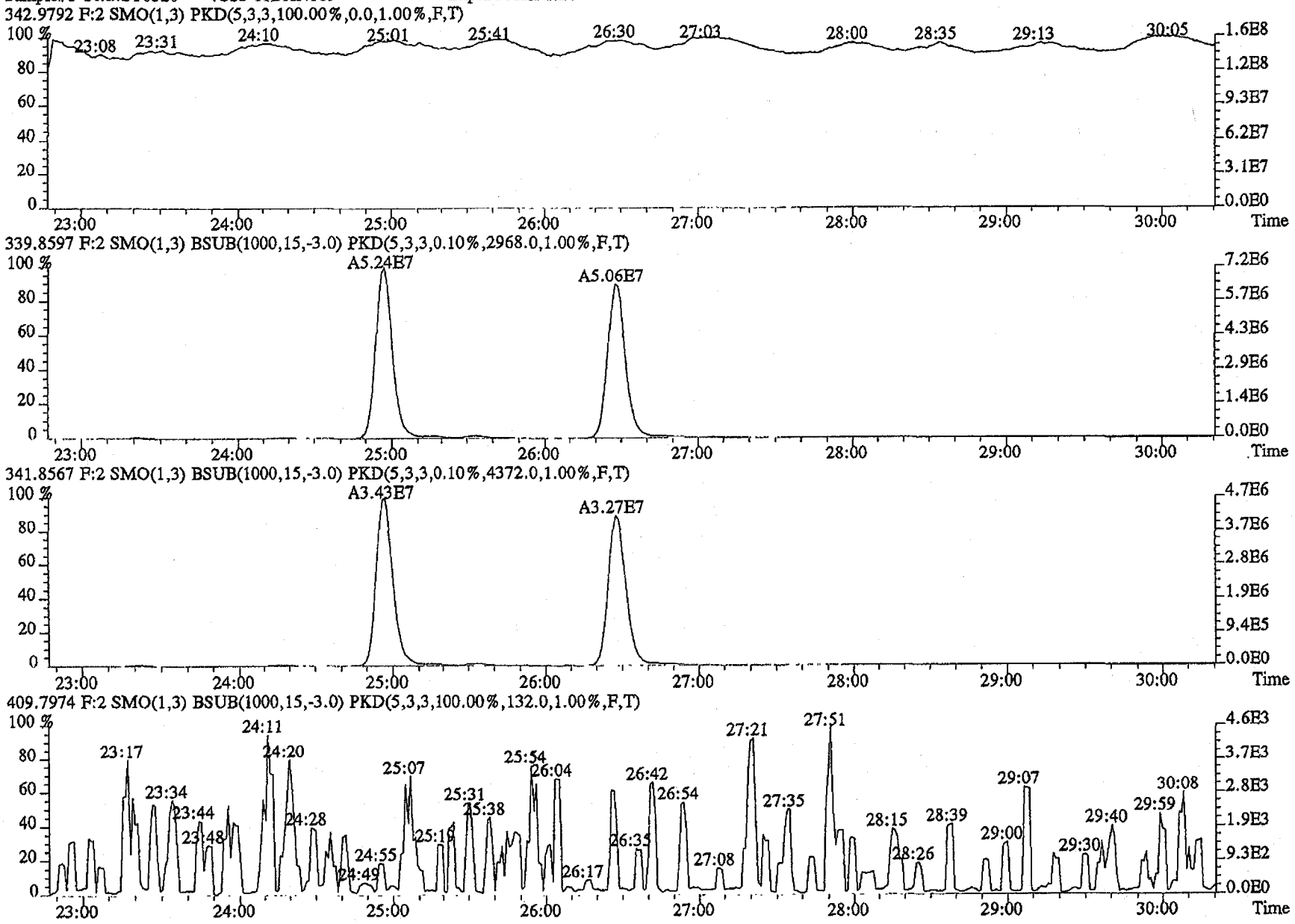
File:20MY11D4D5 #1-193 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES



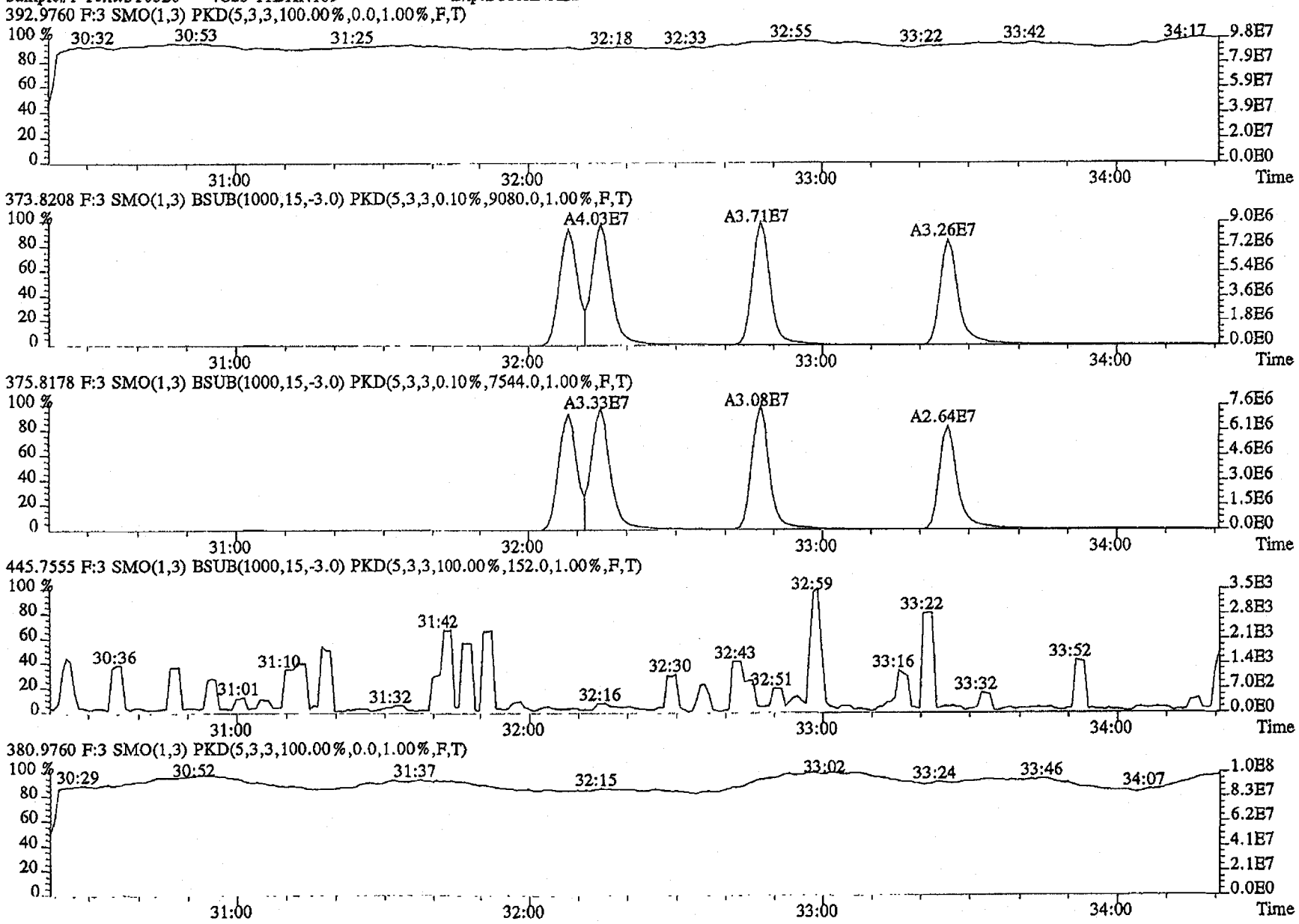
File:20MY11D4D5 #1-513 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES



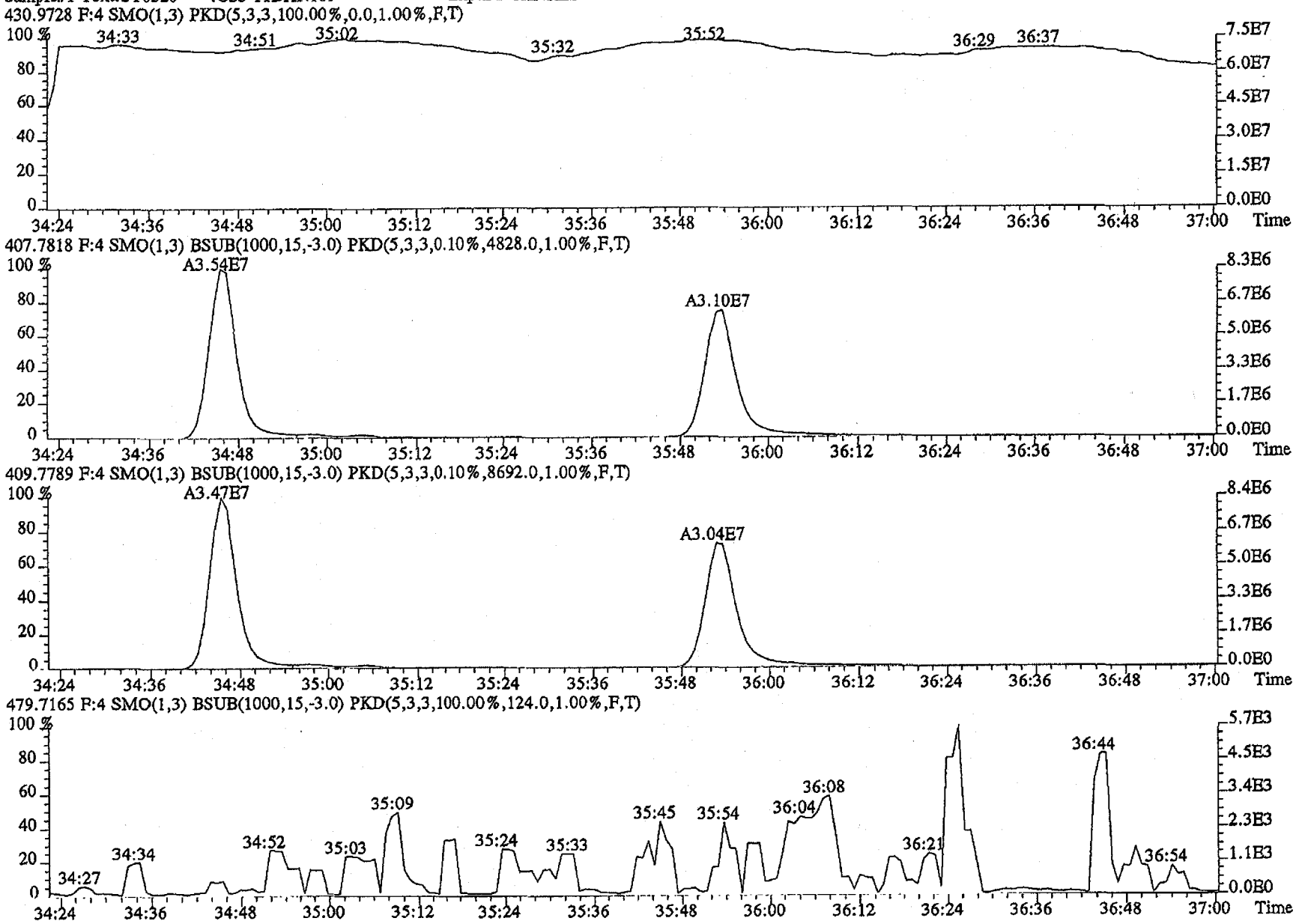
File:20MY11D4D5 #1-486 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES



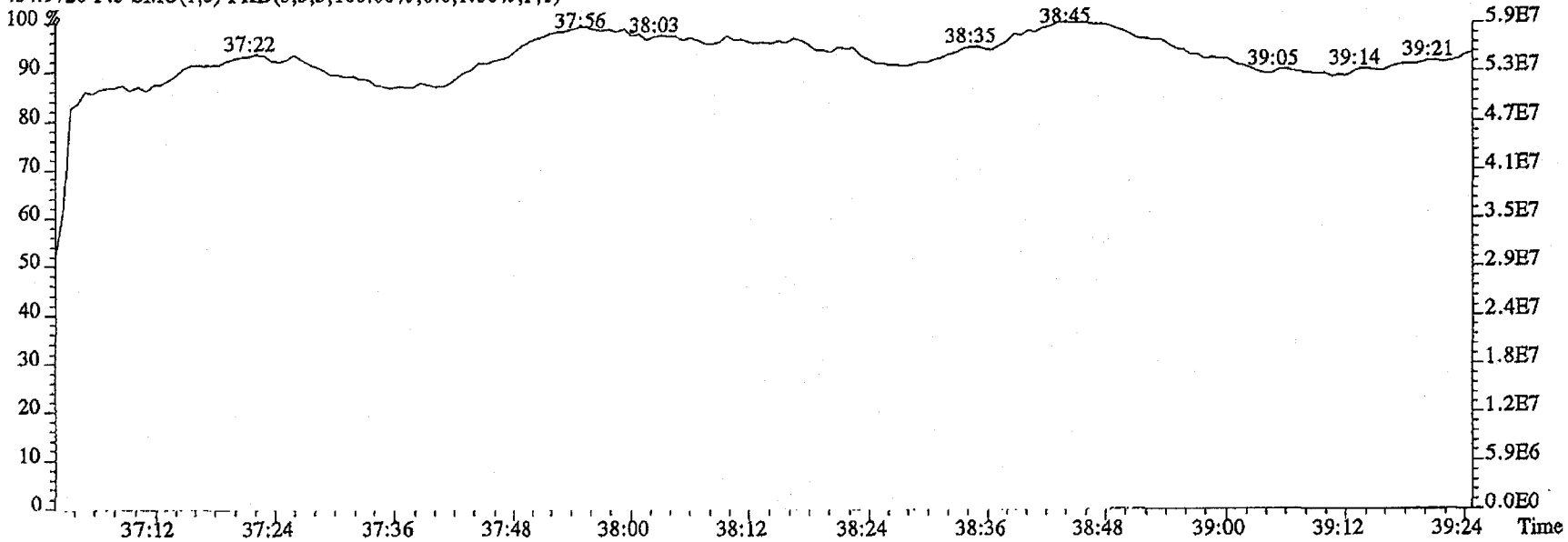
File:20MY11D4D5 #1-287 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES



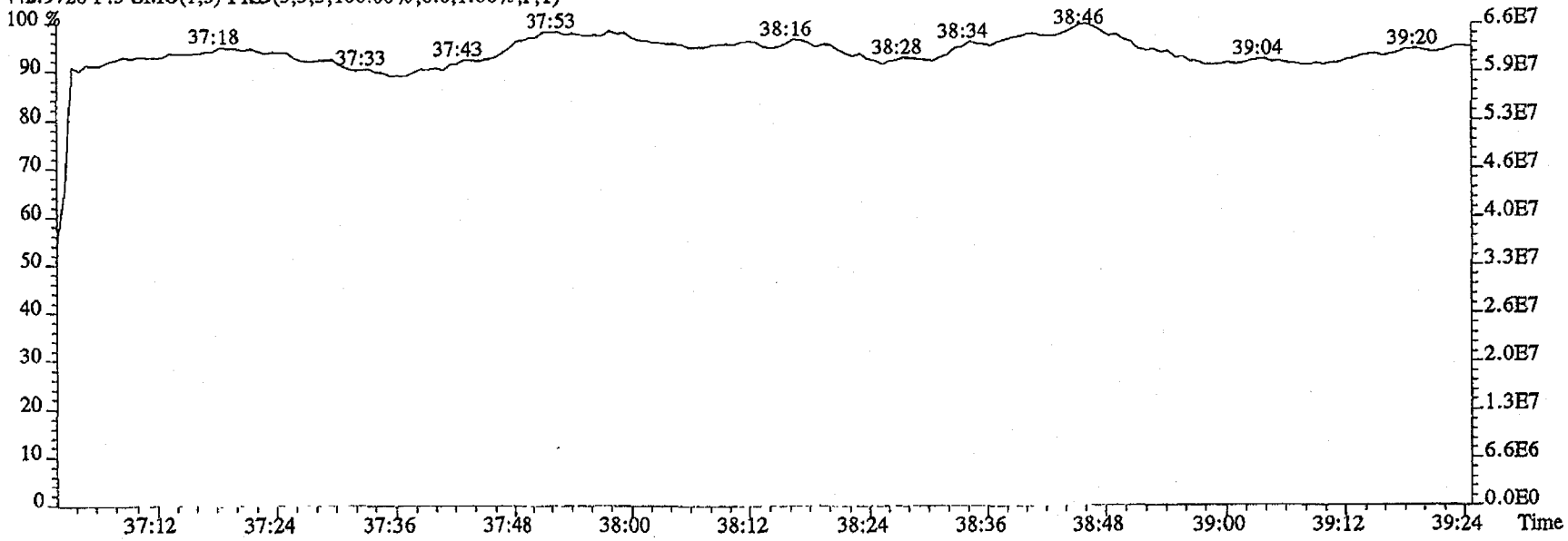
File:20MY11D4D5 #1-200 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES



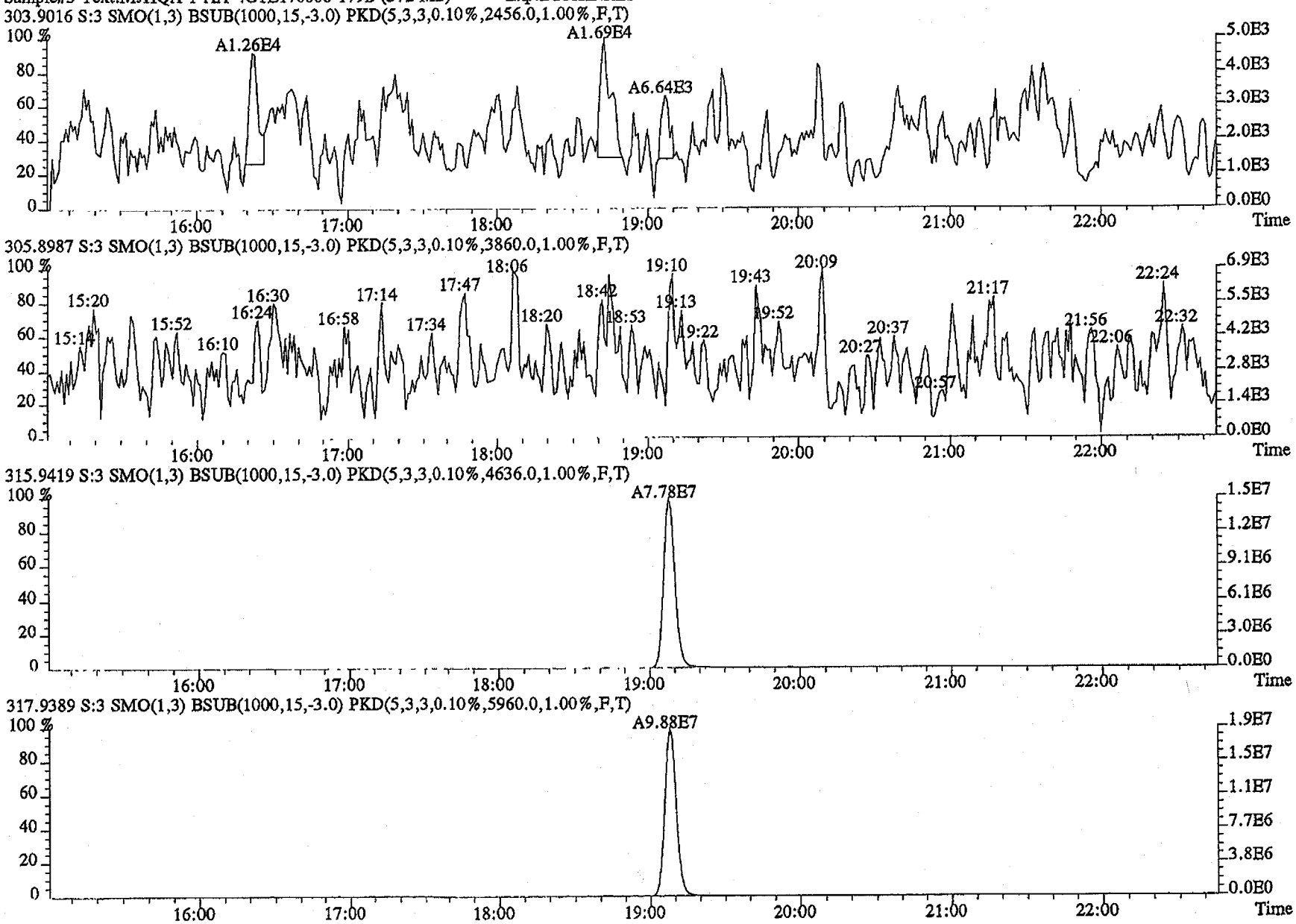
File:20MY11D4D5 #1-193 Acq:20-MAY-2011 19:06:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:ST0520 :CS3 11DXN109 Exp:DIOXINRES
454.9728 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

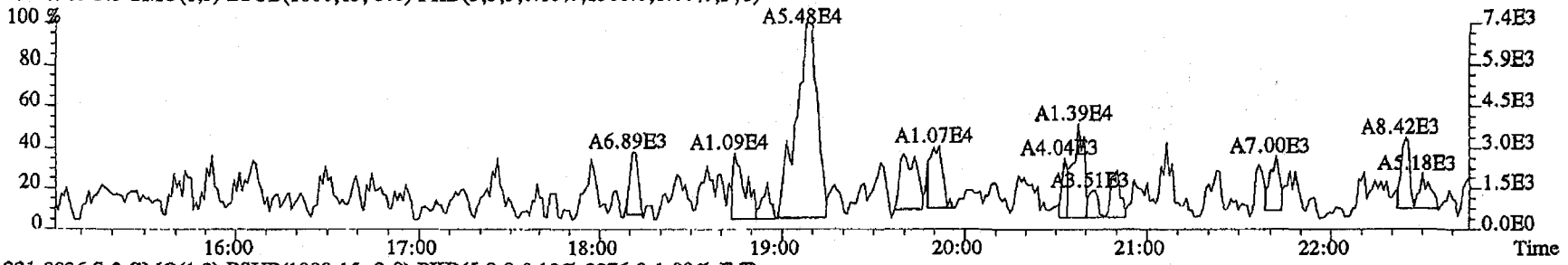


File:20MY11D4D5 #1-513 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES

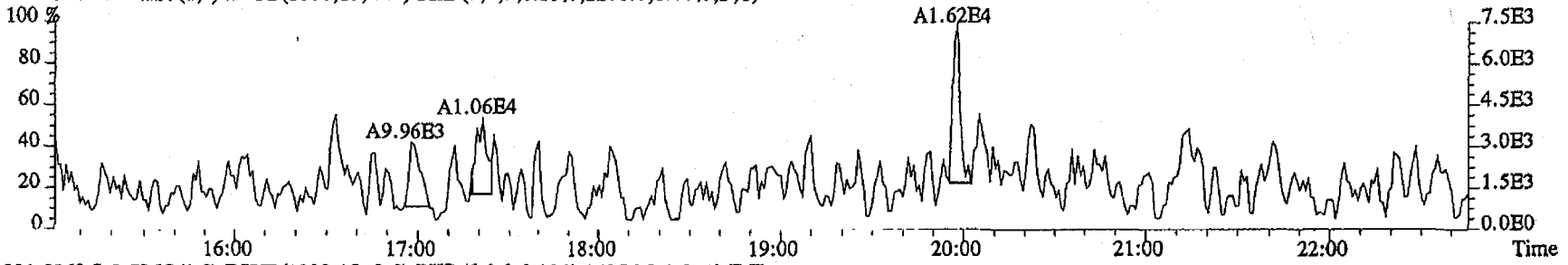


File:20MY11D4D5 #1-513 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES

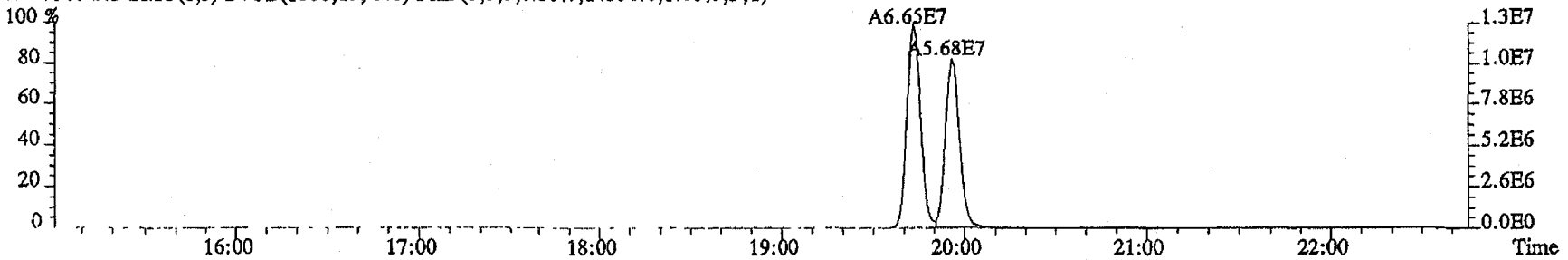
319.8965 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1368.0,1.00%,F,T)



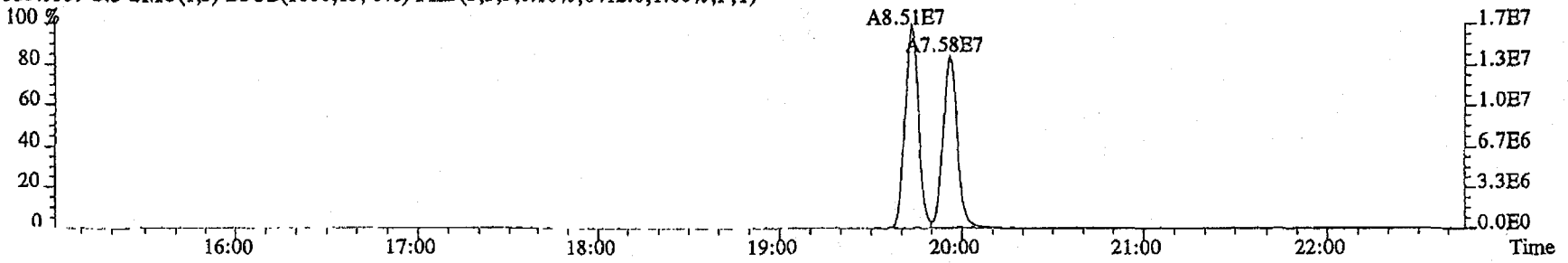
321.8936 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2276.0,1.00%,F,T)



331.9368 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,14356.0,1.00%,F,T)

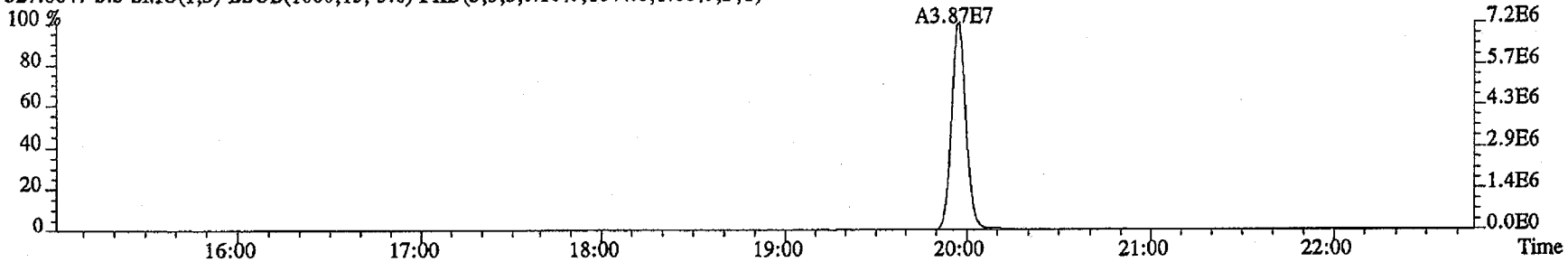


333.9339 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6412.0,1.00%,F,T)

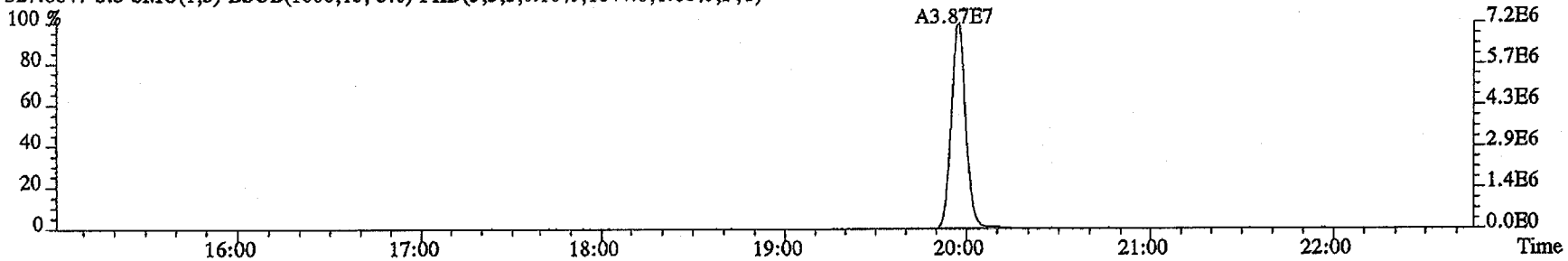


File:20MY11D4D5 #1-513 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES

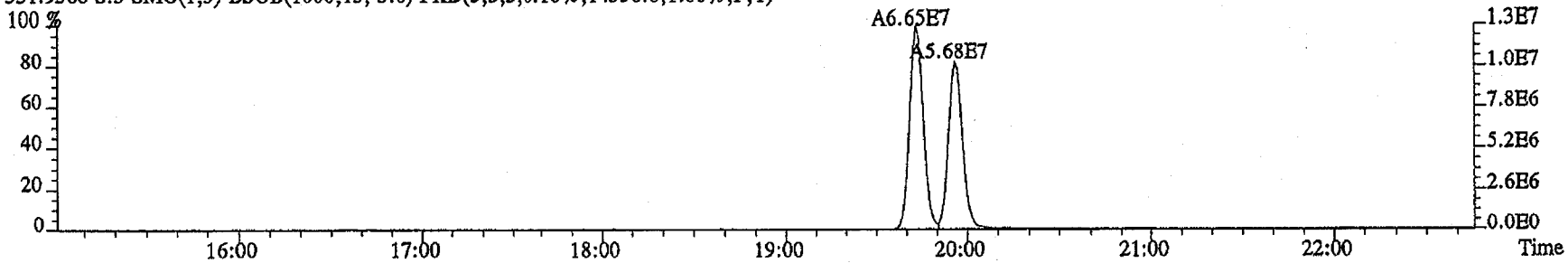
327.8847 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1844.0,1.00%,F,T)



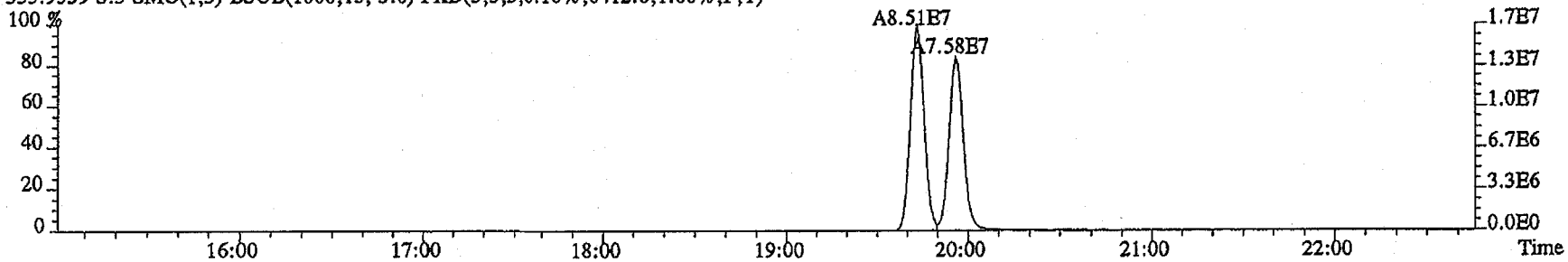
327.8847 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1844.0,1.00%,F,T)



331.9368 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,14356.0,1.00%,F,T)

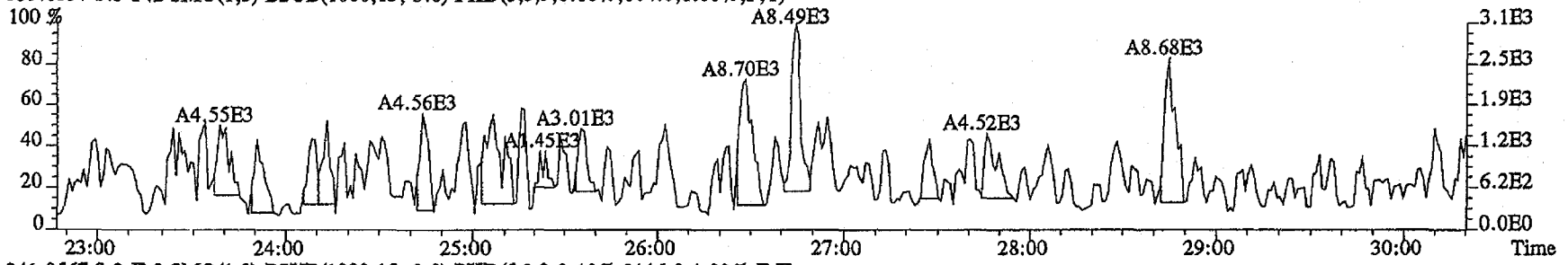


333.9339 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6412.0,1.00%,F,T)

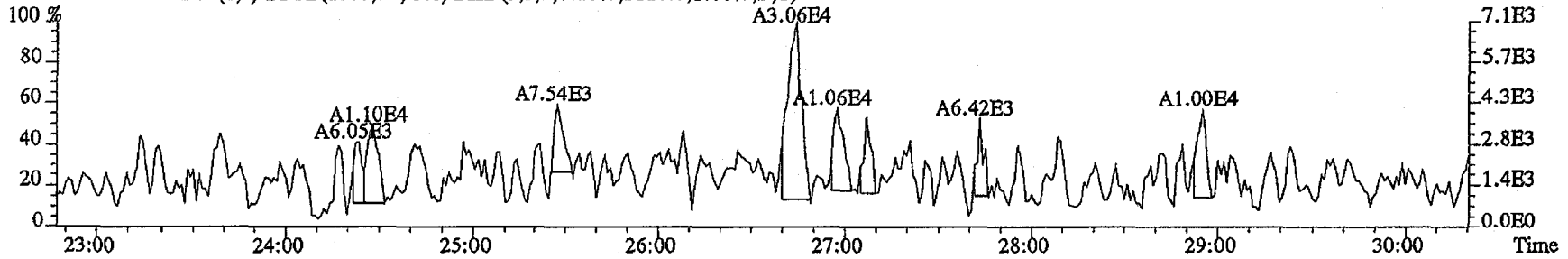


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES

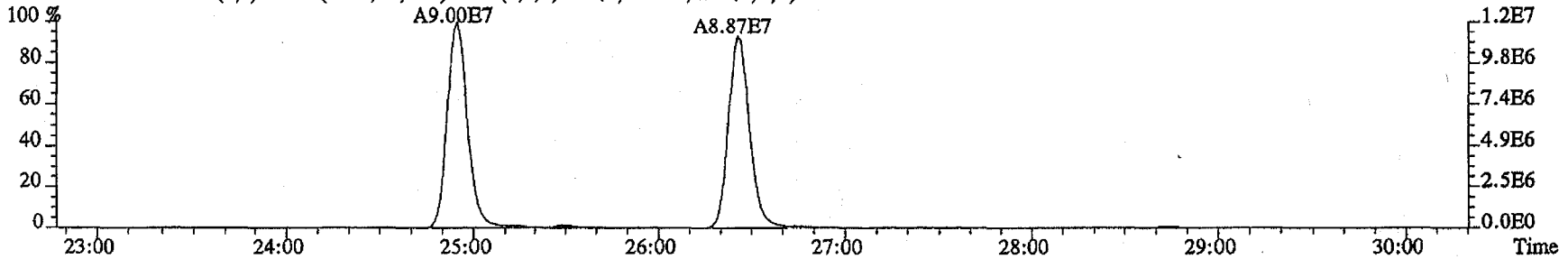
339.8597 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,804.0,1.00%,F,T)



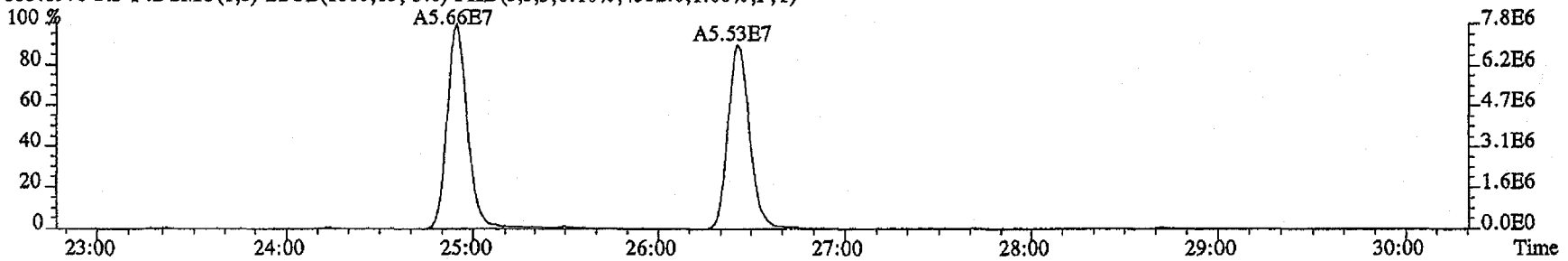
341.8567 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2116.0,1.00%,F,T)



351.9000 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5368.0,1.00%,F,T)

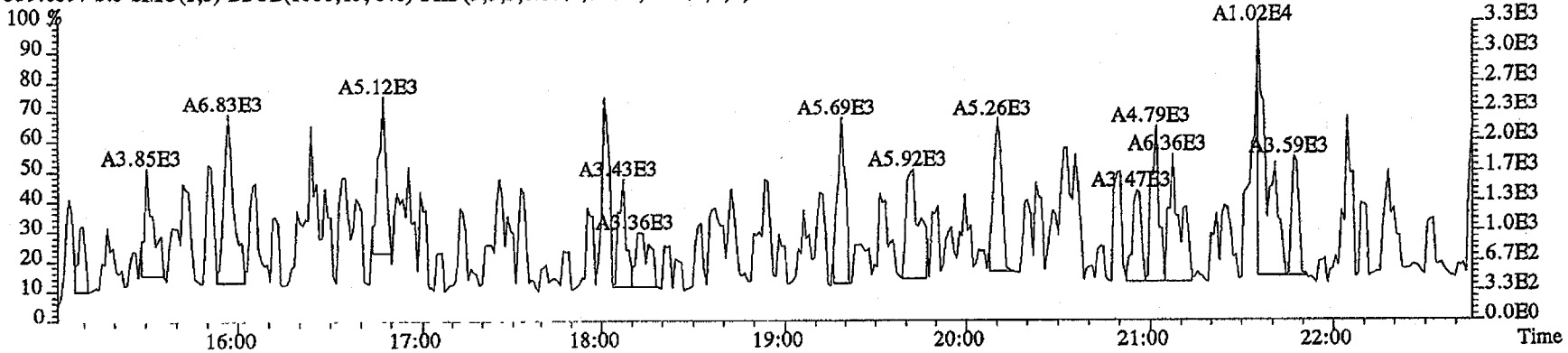


353.8970 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4352.0,1.00%,F,T)

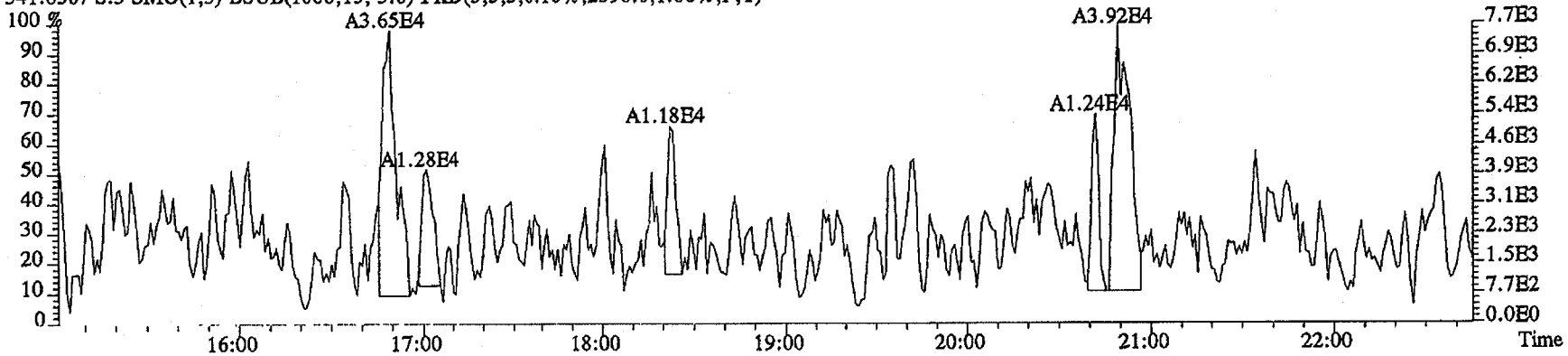


File:20MY11D4D5 #1-513 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES

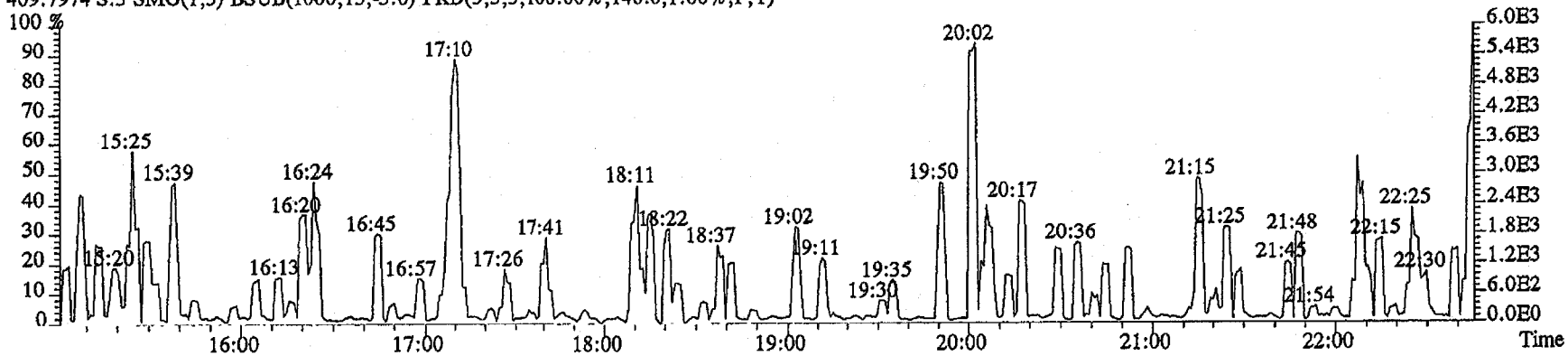
339.8597 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,884.0,1.00%,F,T)



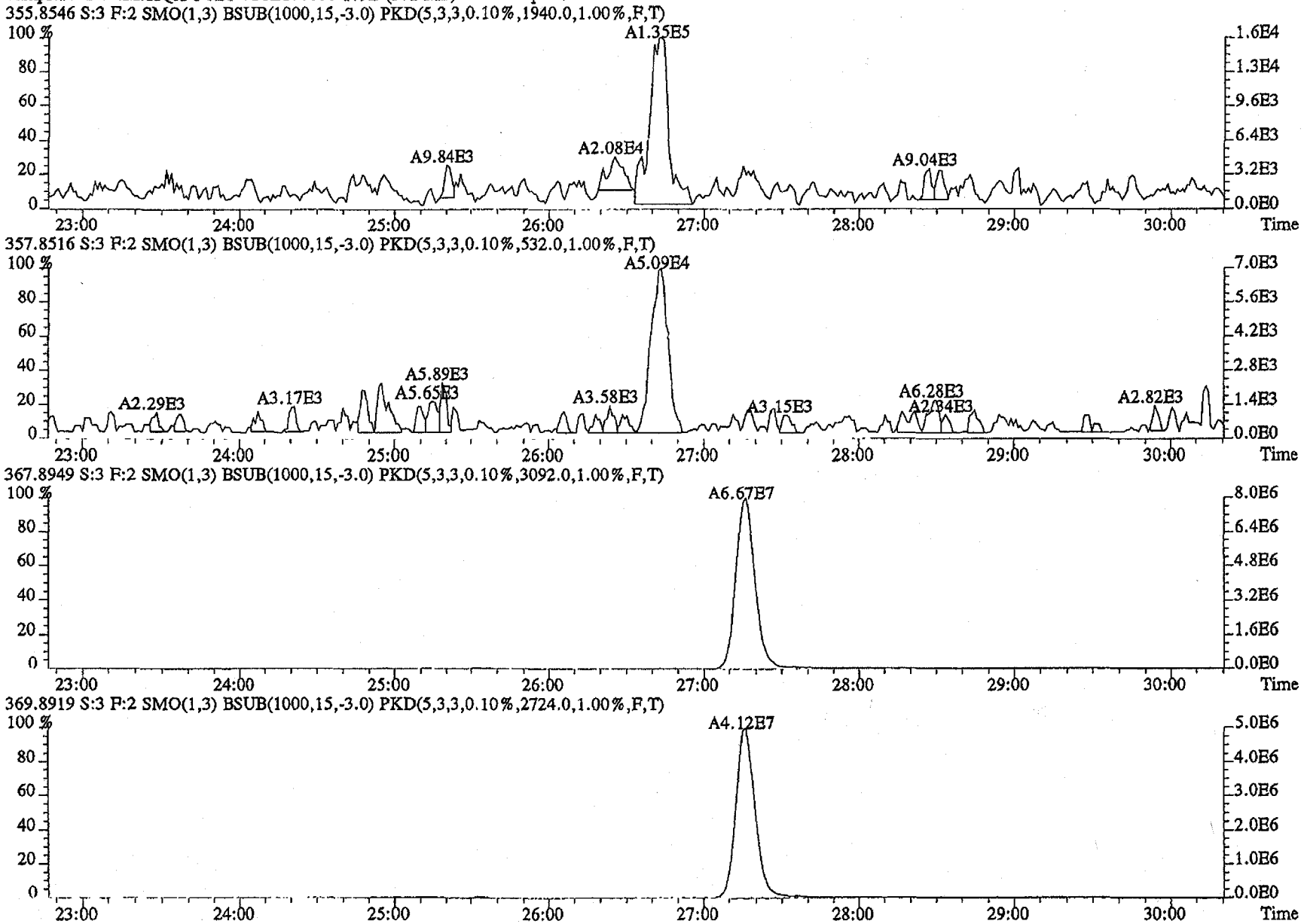
341.8567 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2596.0,1.00%,F,T)



409.7974 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,140.0,1.00%,F,T)

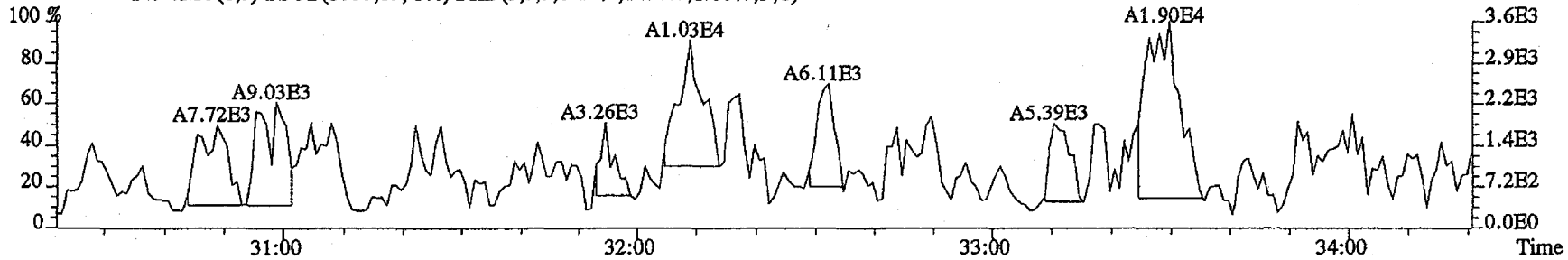


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES

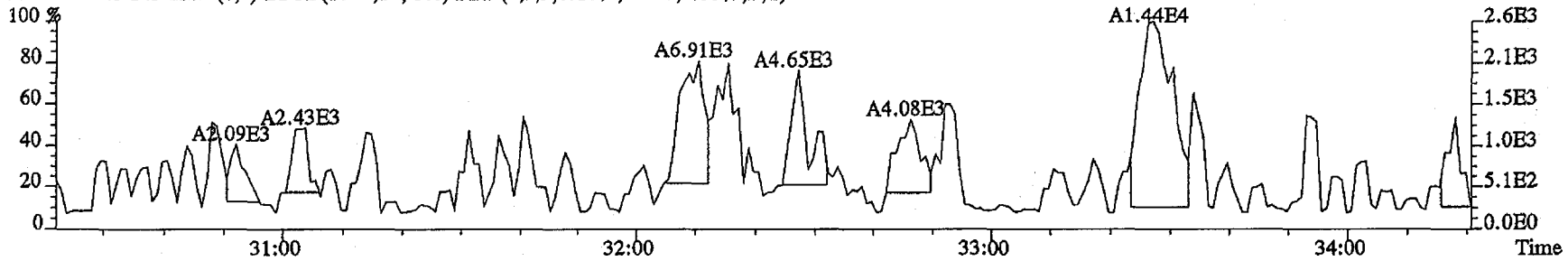


File:20MY11D4D5 #1-287 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES

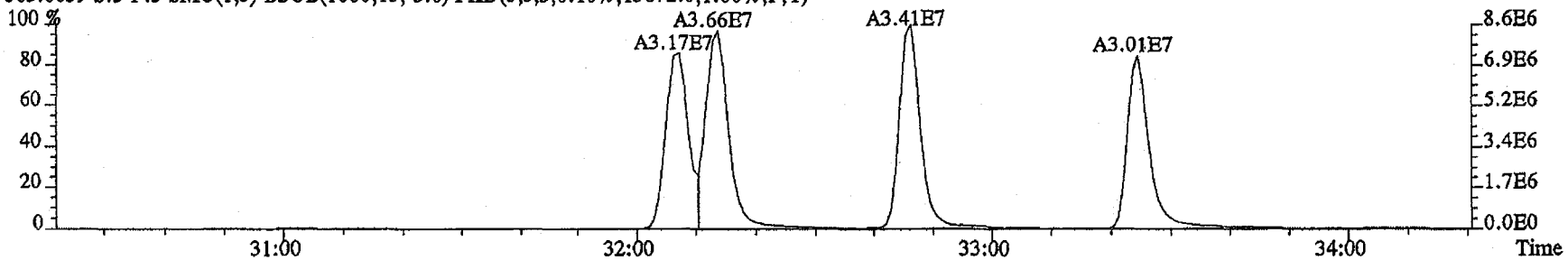
373.8208 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1156.0,1.00%,F,T)



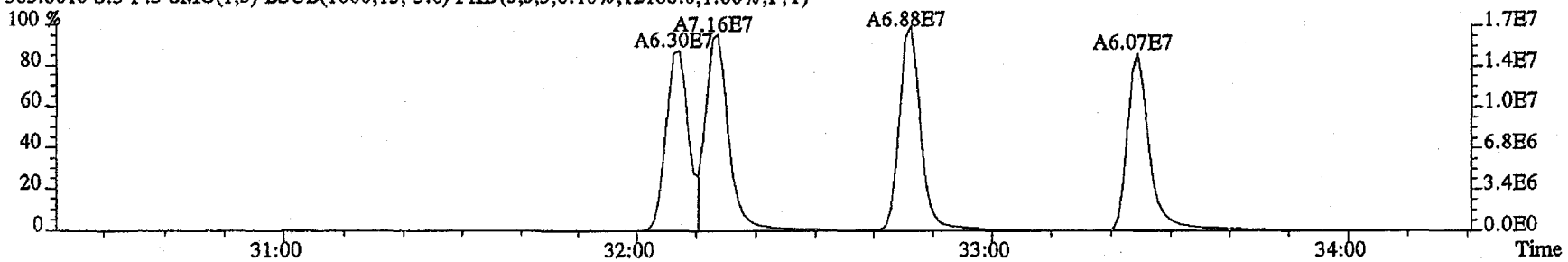
375.8178 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,700.0,1.00%,F,T)



383.8639 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,13672.0,1.00%,F,T)

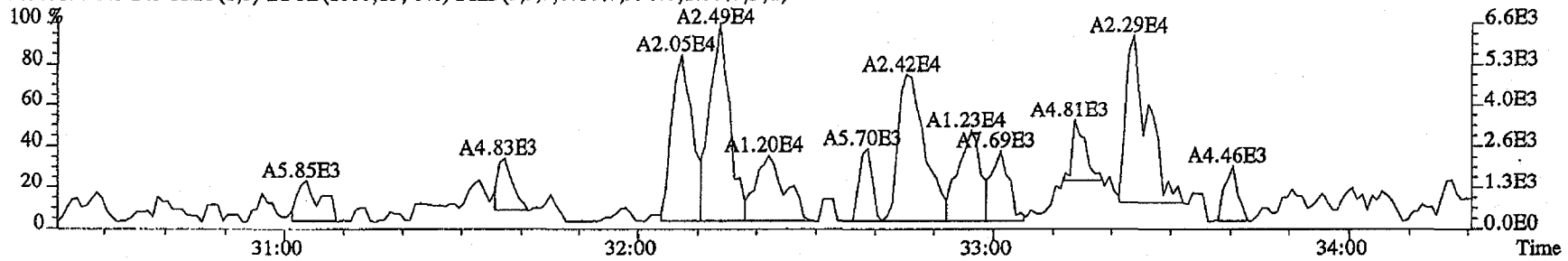


385.8610 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,12188.0,1.00%,F,T)

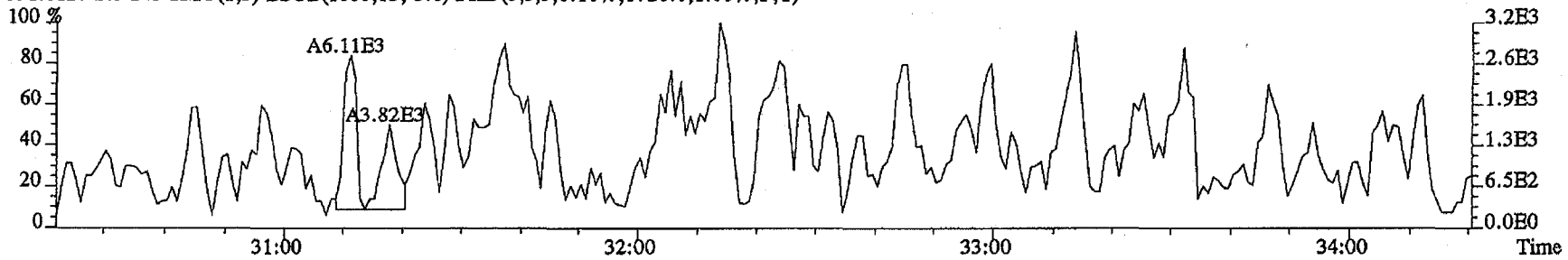


File:20MY11D4D5 #1-287 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES

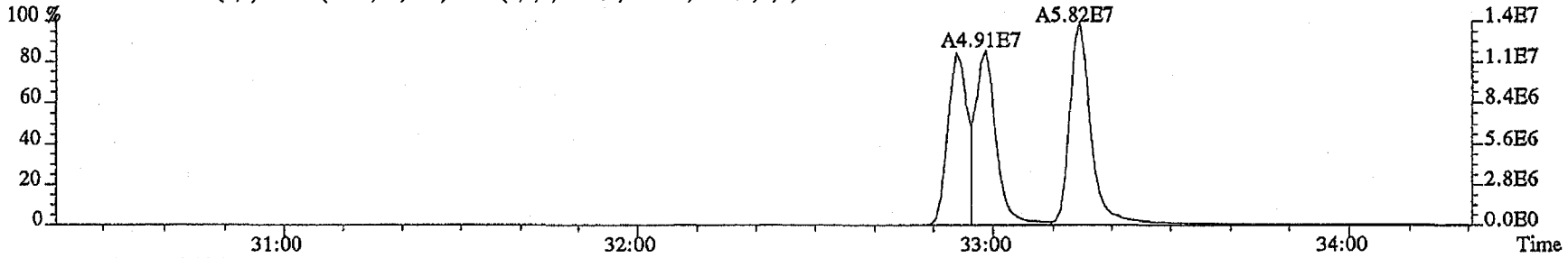
389.8157 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,996.0,1.00%,F,T)



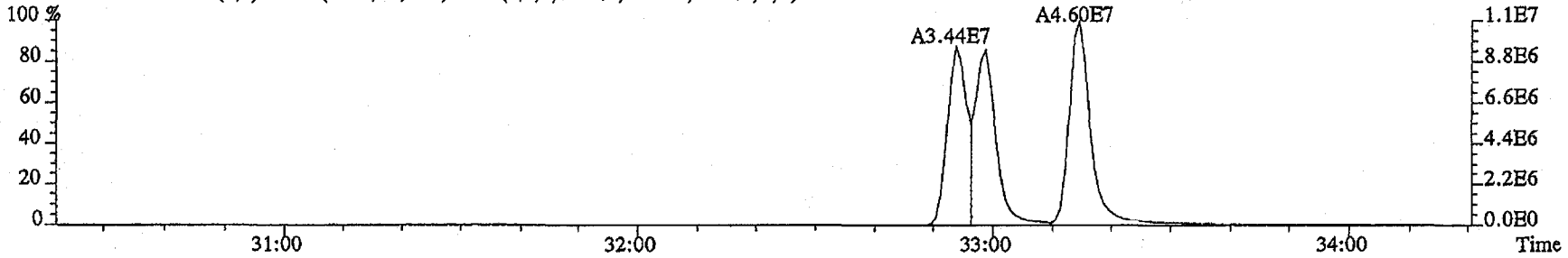
391.8127 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1720.0,1.00%,F,T)



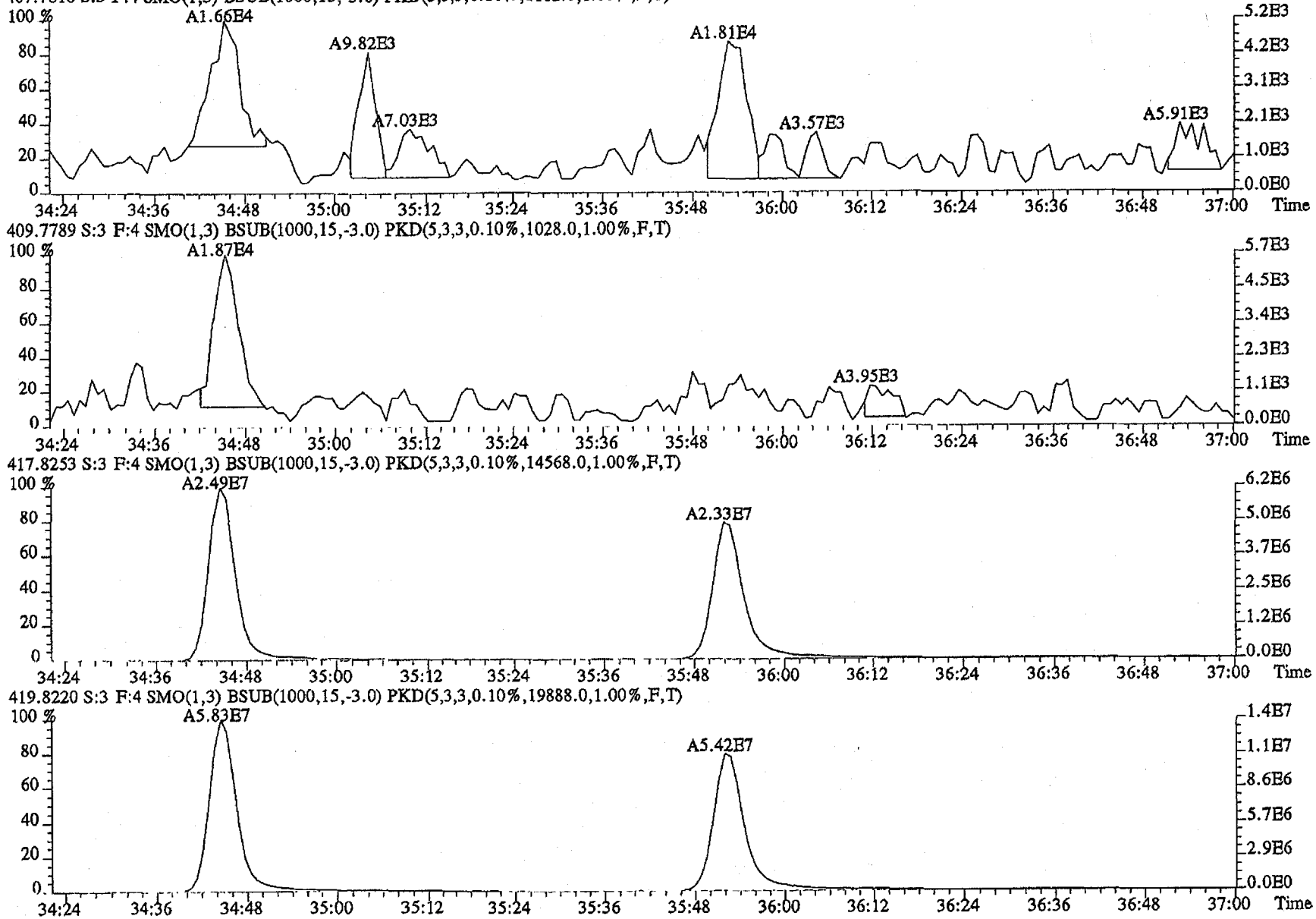
401.8559 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2700.0,1.00%,F,T)



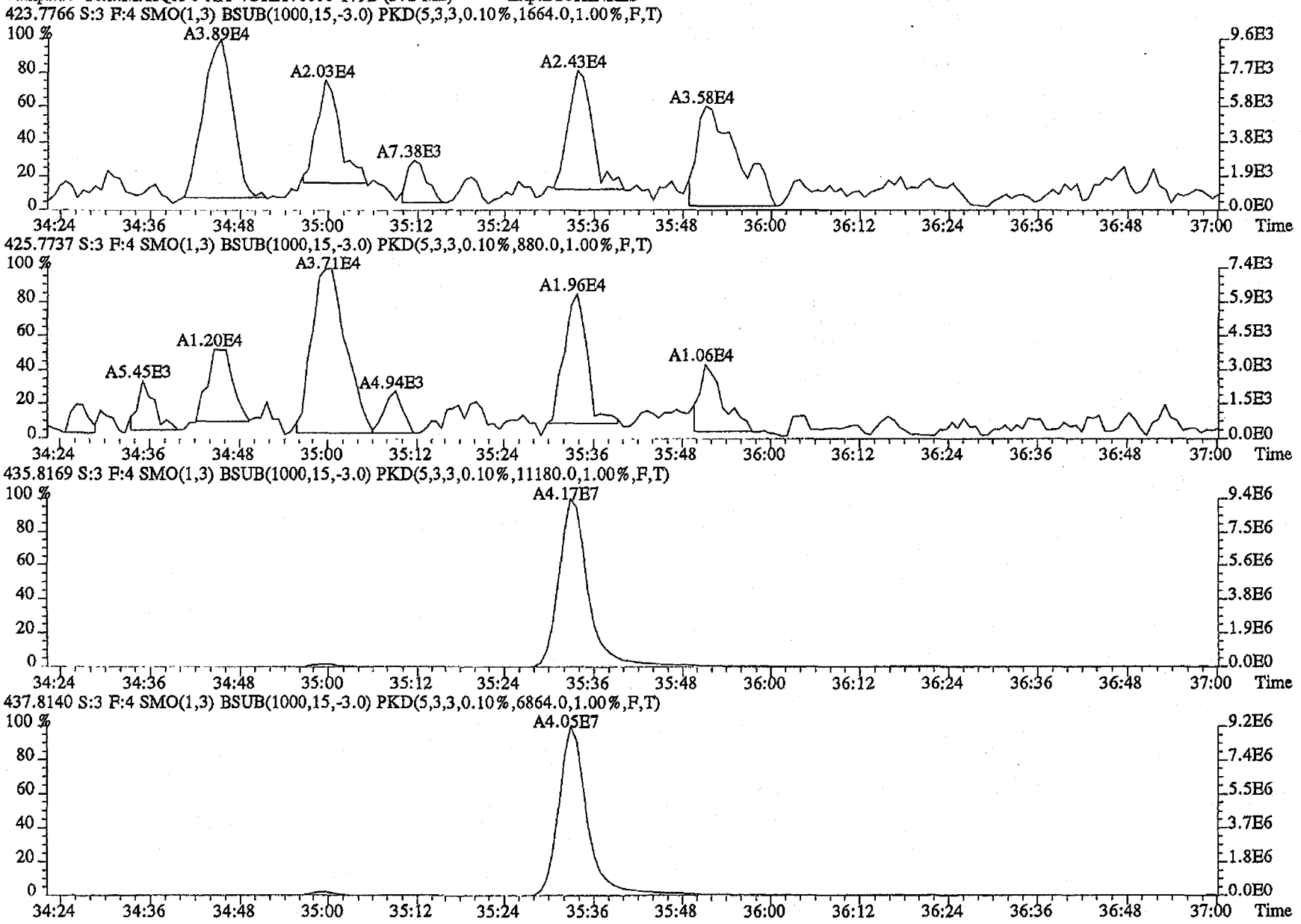
403.8529 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2864.0,1.00%,F,T)



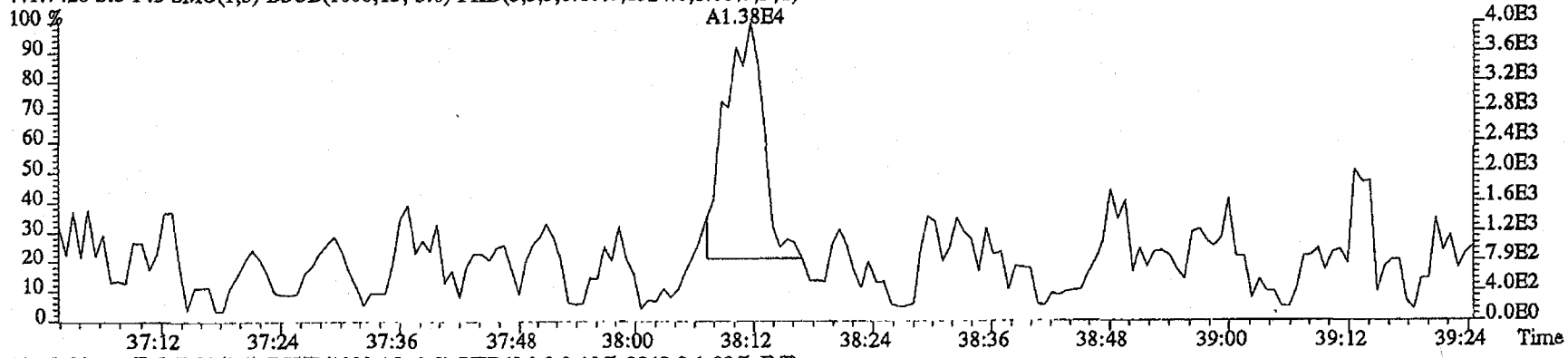
File:20MY11D4D5 #1-200 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES



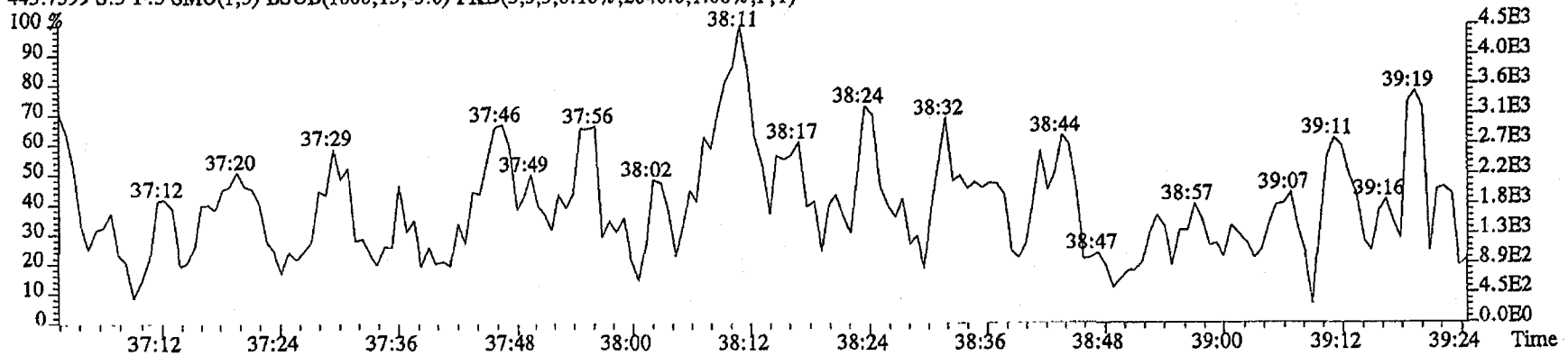
File:20MY11D4D5 #1-200 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES



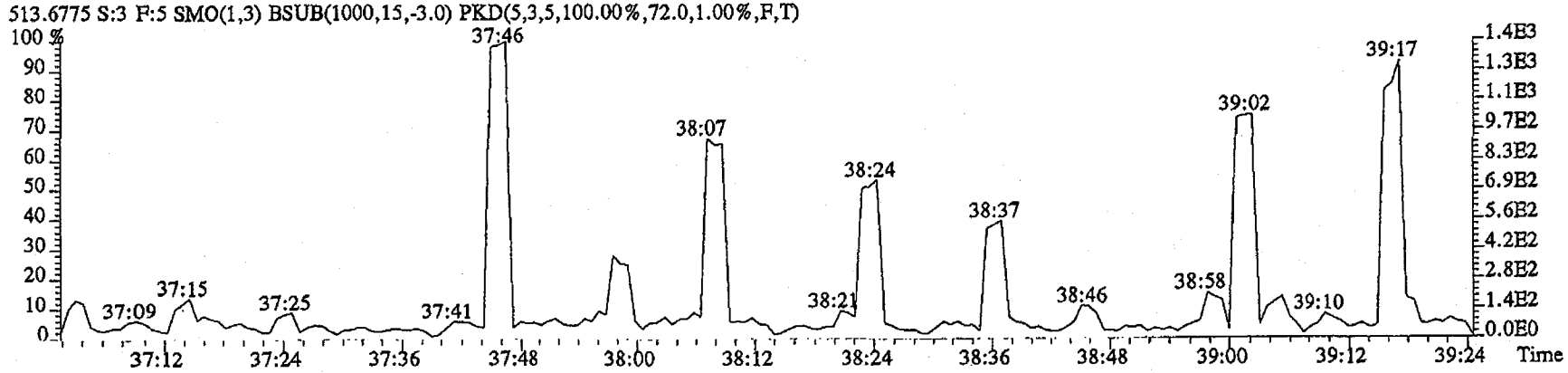
File:20MY11D4D5 #1-193 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES
441.7428 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1324.0,1.00%,F,T)



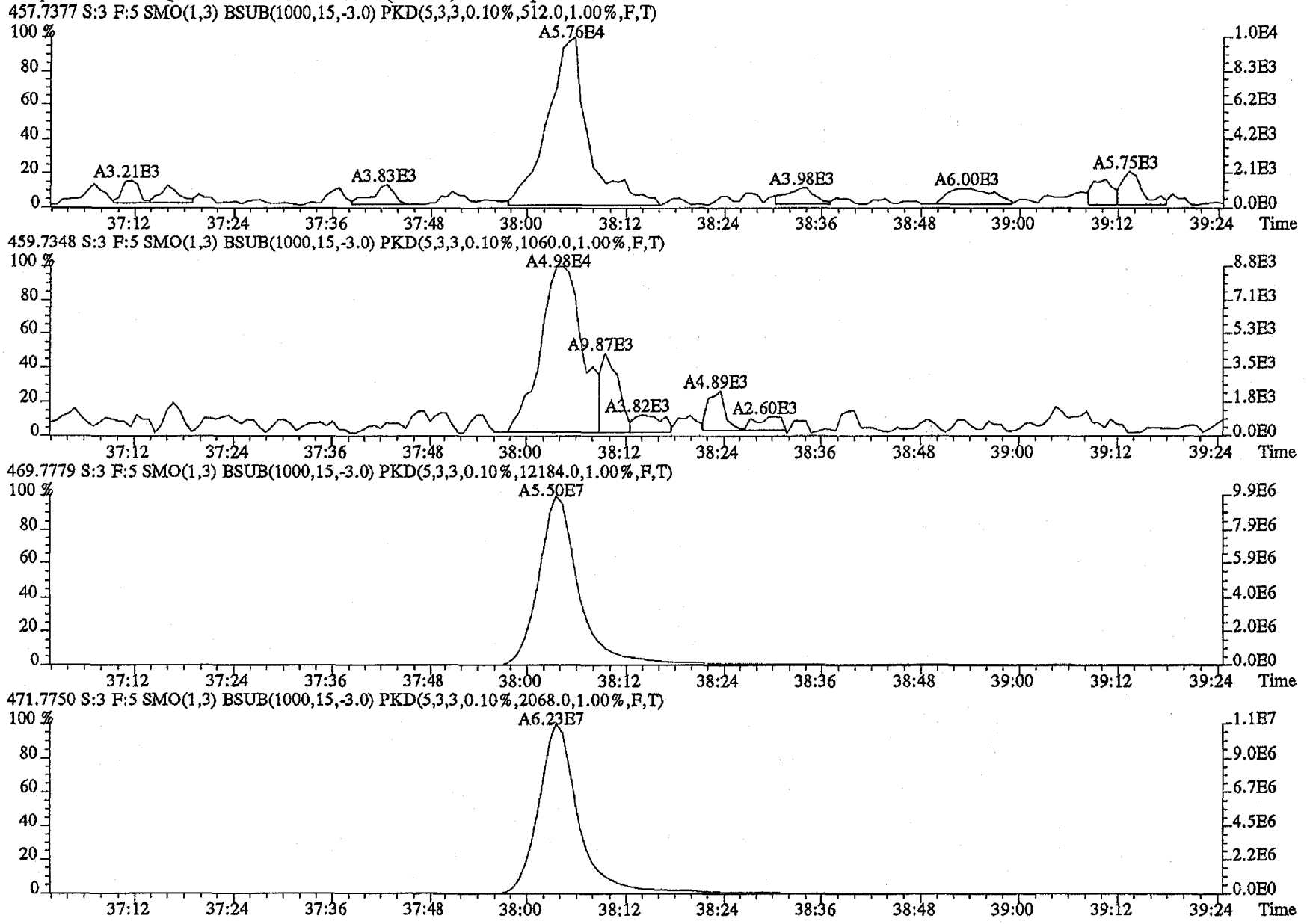
443.7399 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2040.0,1.00%,F,T)



513.6775 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,72.0,1.00%,F,T)

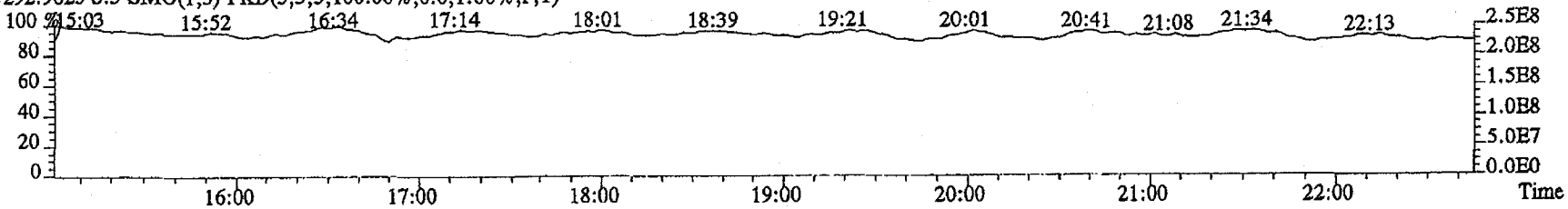


File:20MY11D4D5 #1-193 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES

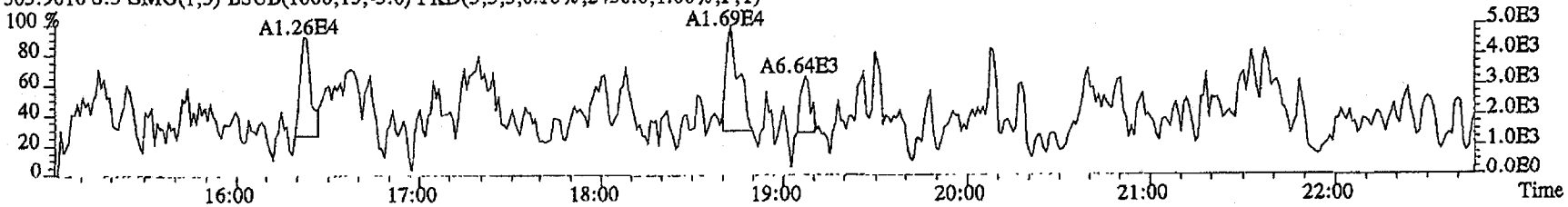


File:20MY11D4D5 #1-513 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES

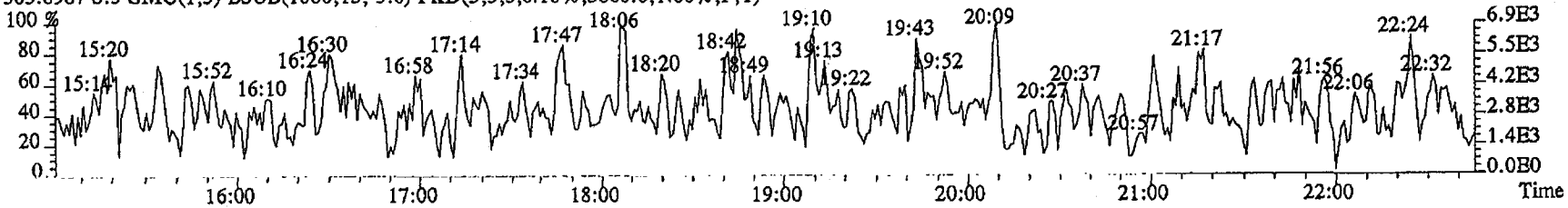
292.9825 S:3 SMO(1,3) PKD(5,3,5,100.00%,0.0,1.00%,F,T)



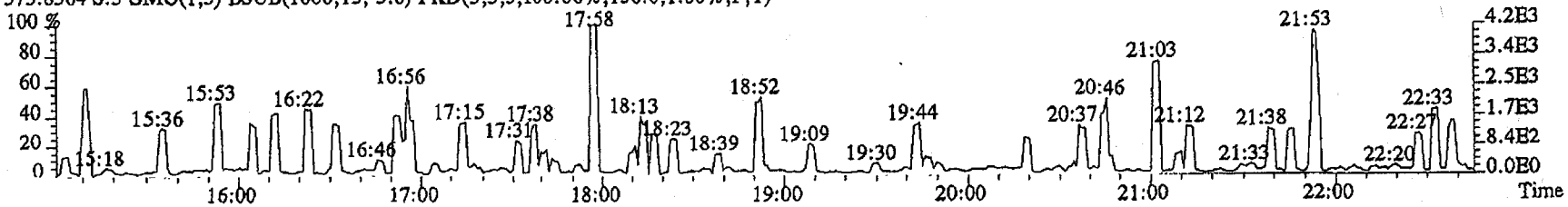
303.9016 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2456.0,1.00%,F,T)



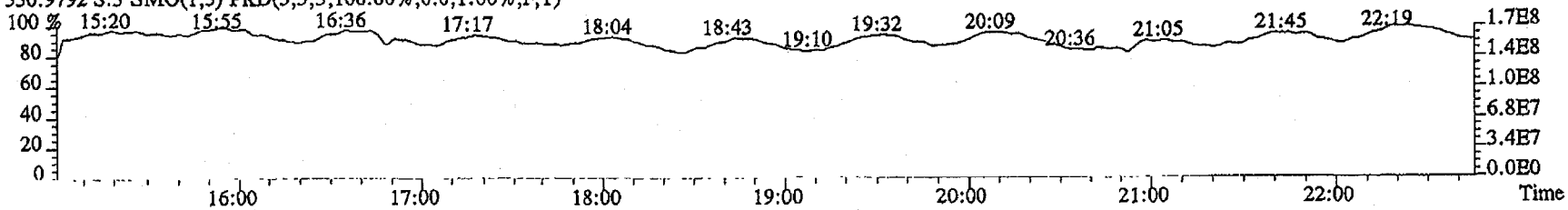
305.8987 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3860.0,1.00%,F,T)



375.8364 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,156.0,1.00%,F,T)

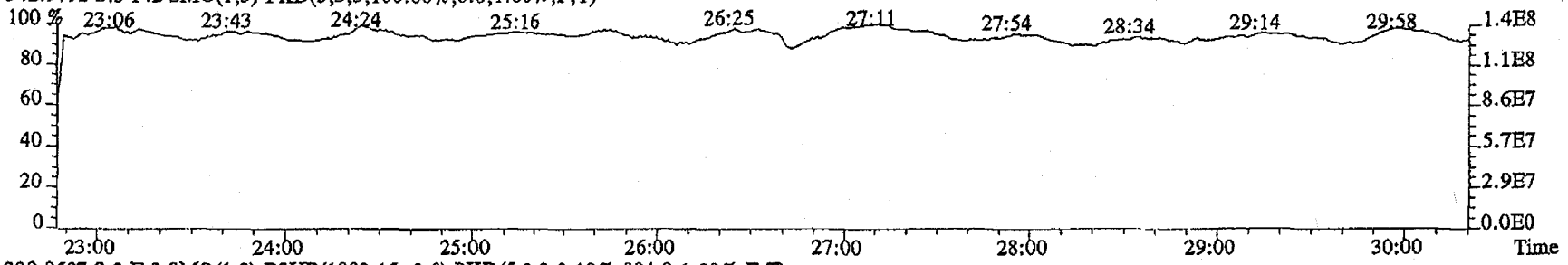


330.9792 S:3 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

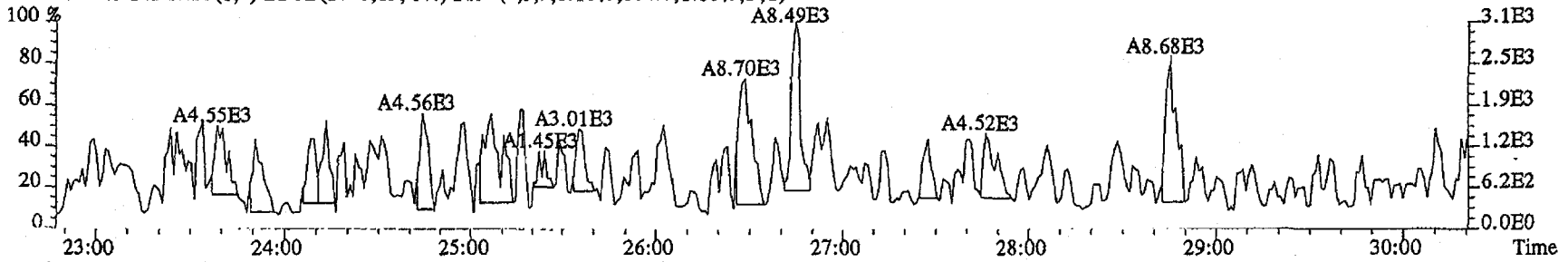


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES

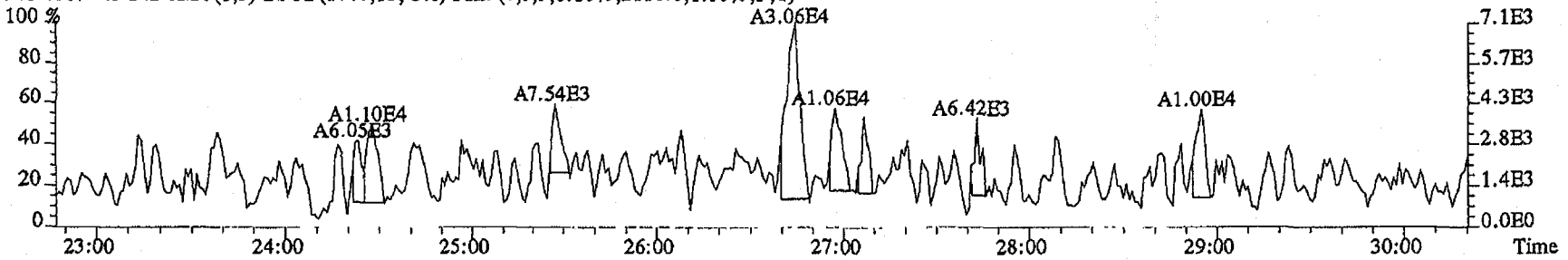
342.9792 S:3 F:2 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



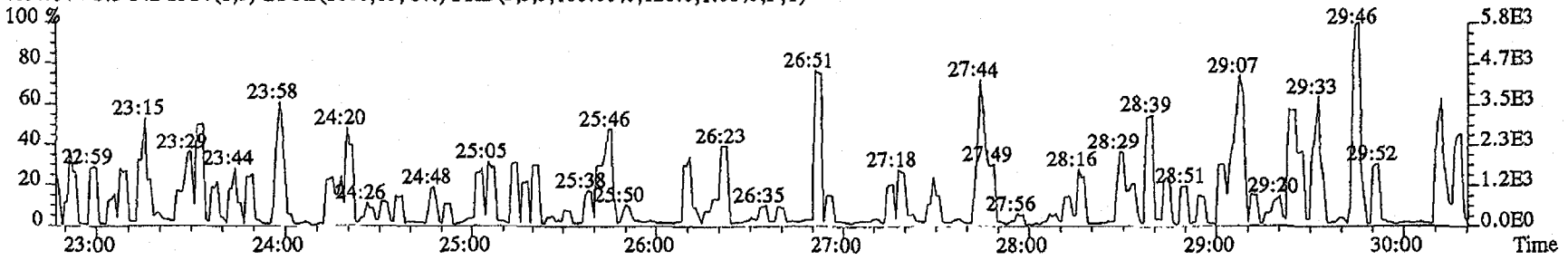
339.8597 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,804.0,1.00%,F,T)



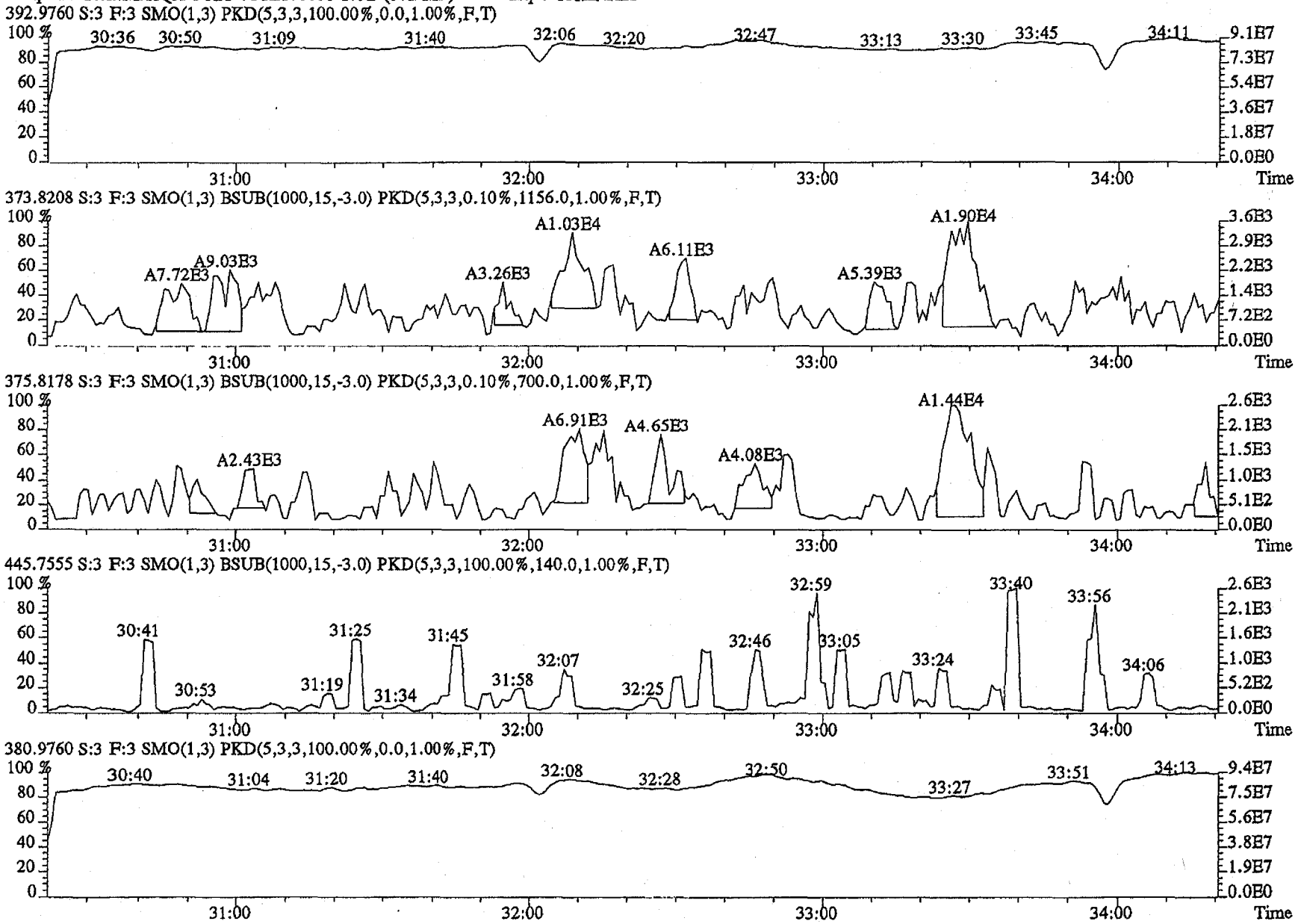
341.8567 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2116.0,1.00%,F,T)



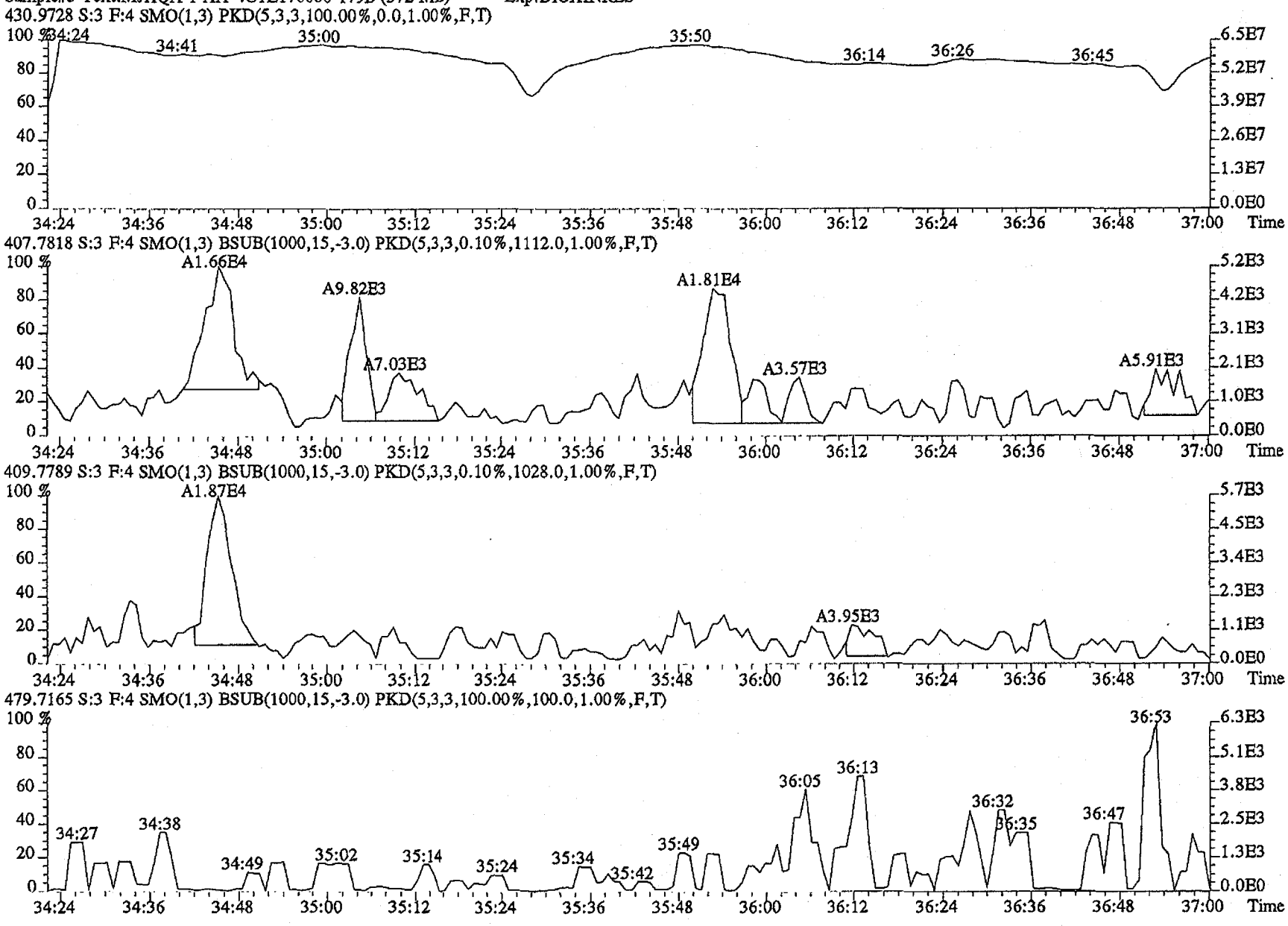
409.7974 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,128.0,1.00%,F,T)



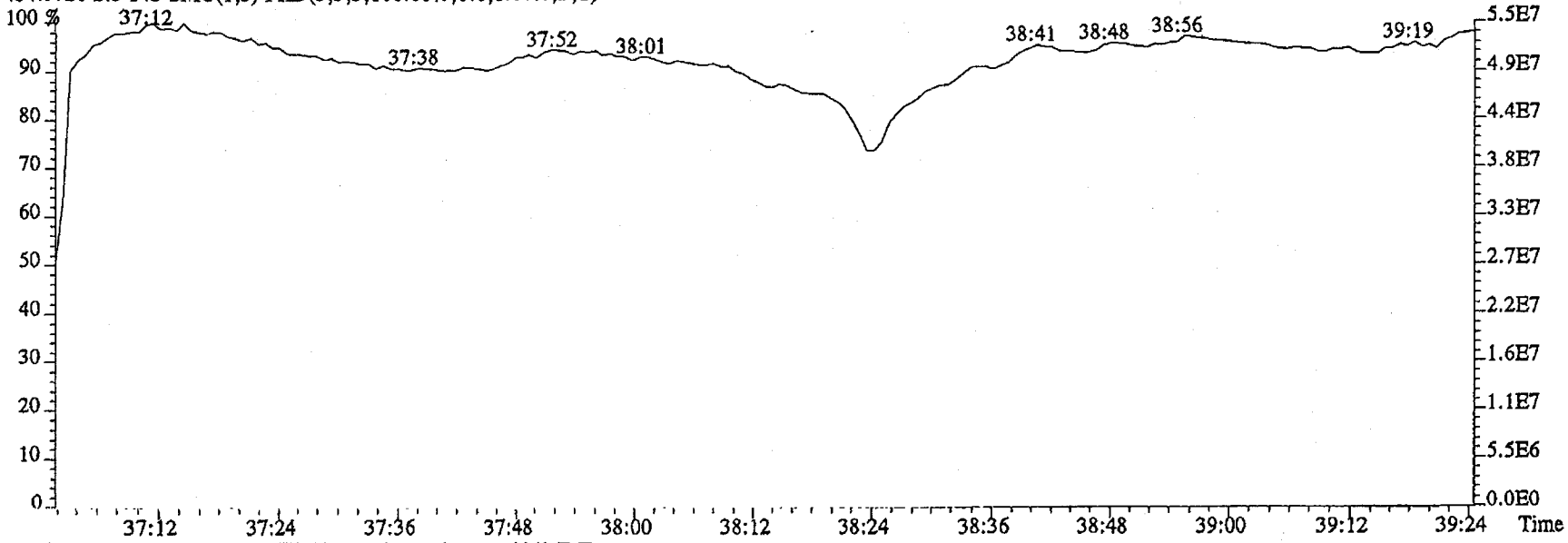
File:20MY11D4D5 #1-287 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES



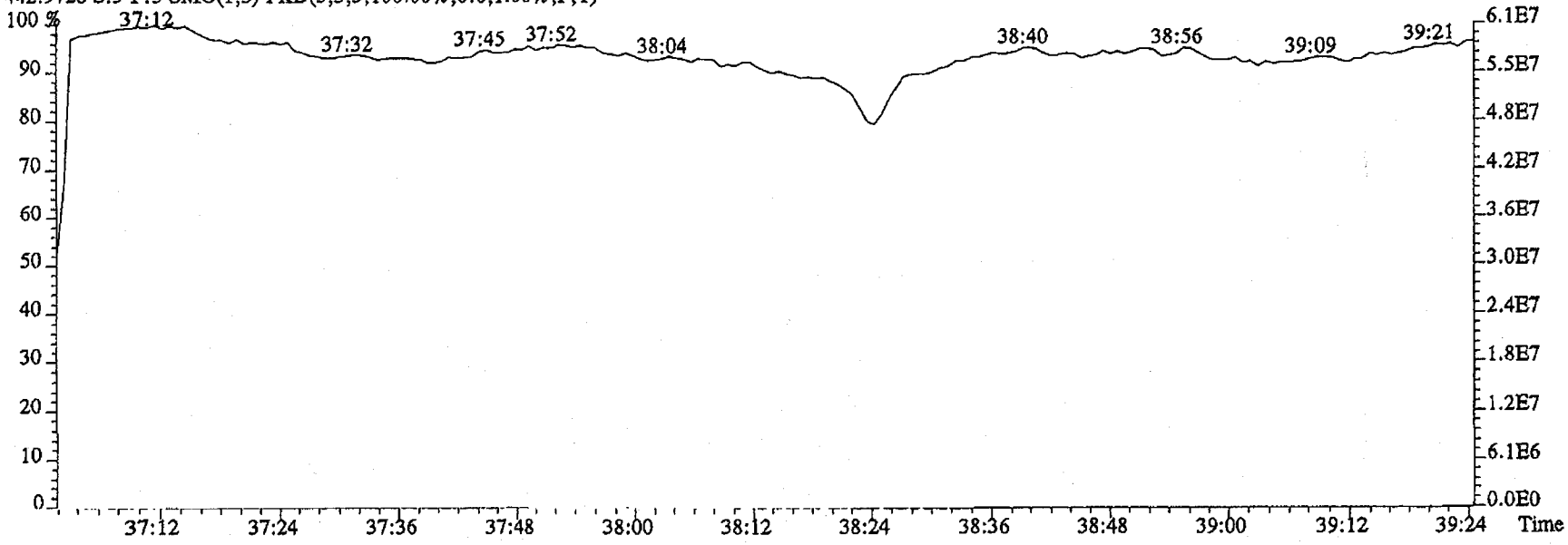
File:20MY11D4D5 #1-200 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES



File:20MY11D4D5 #1-193 Acq:20-MAY-2011 20:35:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:MJHQA-1-AA :G1E170000-179B (572-MB) Exp:DIOXINRES
454.9728 S:3 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

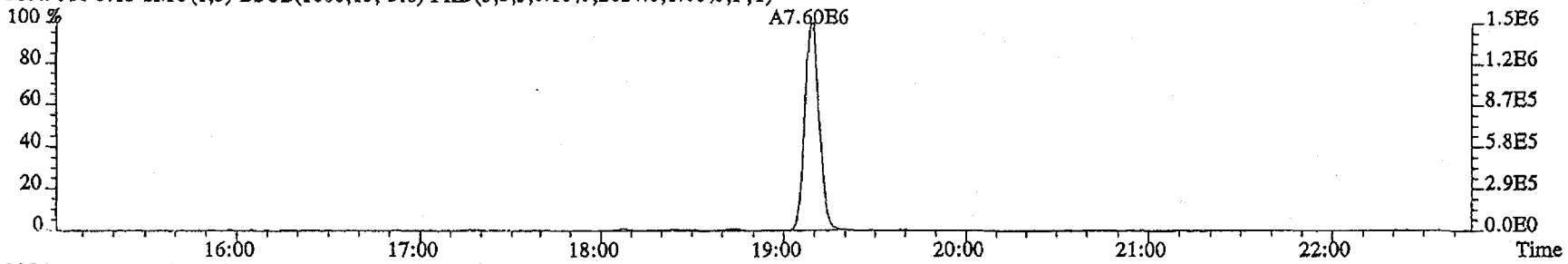


442.9728 S:3 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

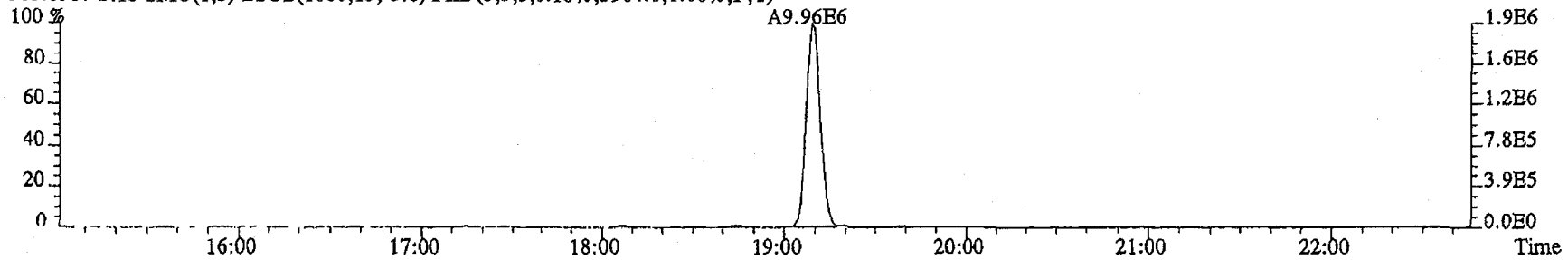


File:20MY11D4D5 #1-513 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES

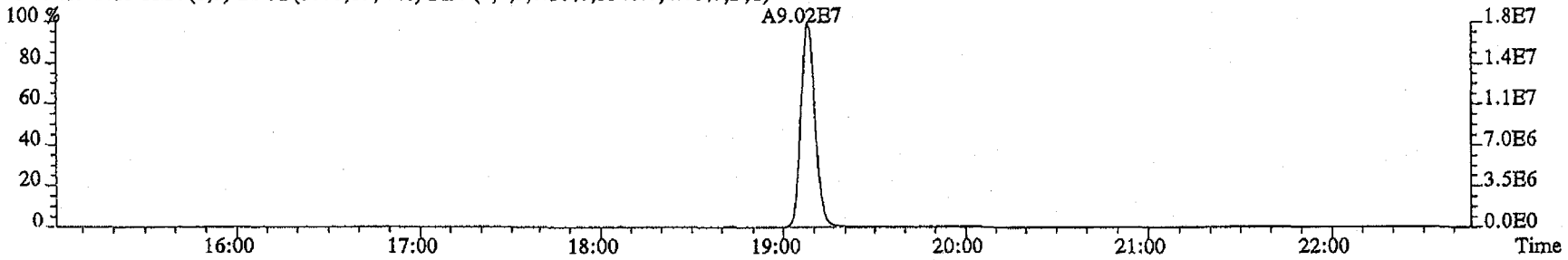
303.9016 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2624.0,1.00%,F,T)



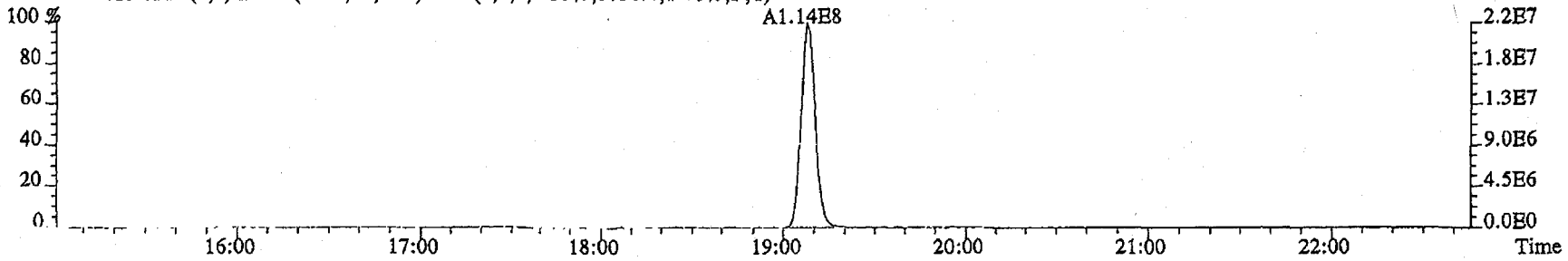
305.8987 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3964.0,1.00%,F,T)



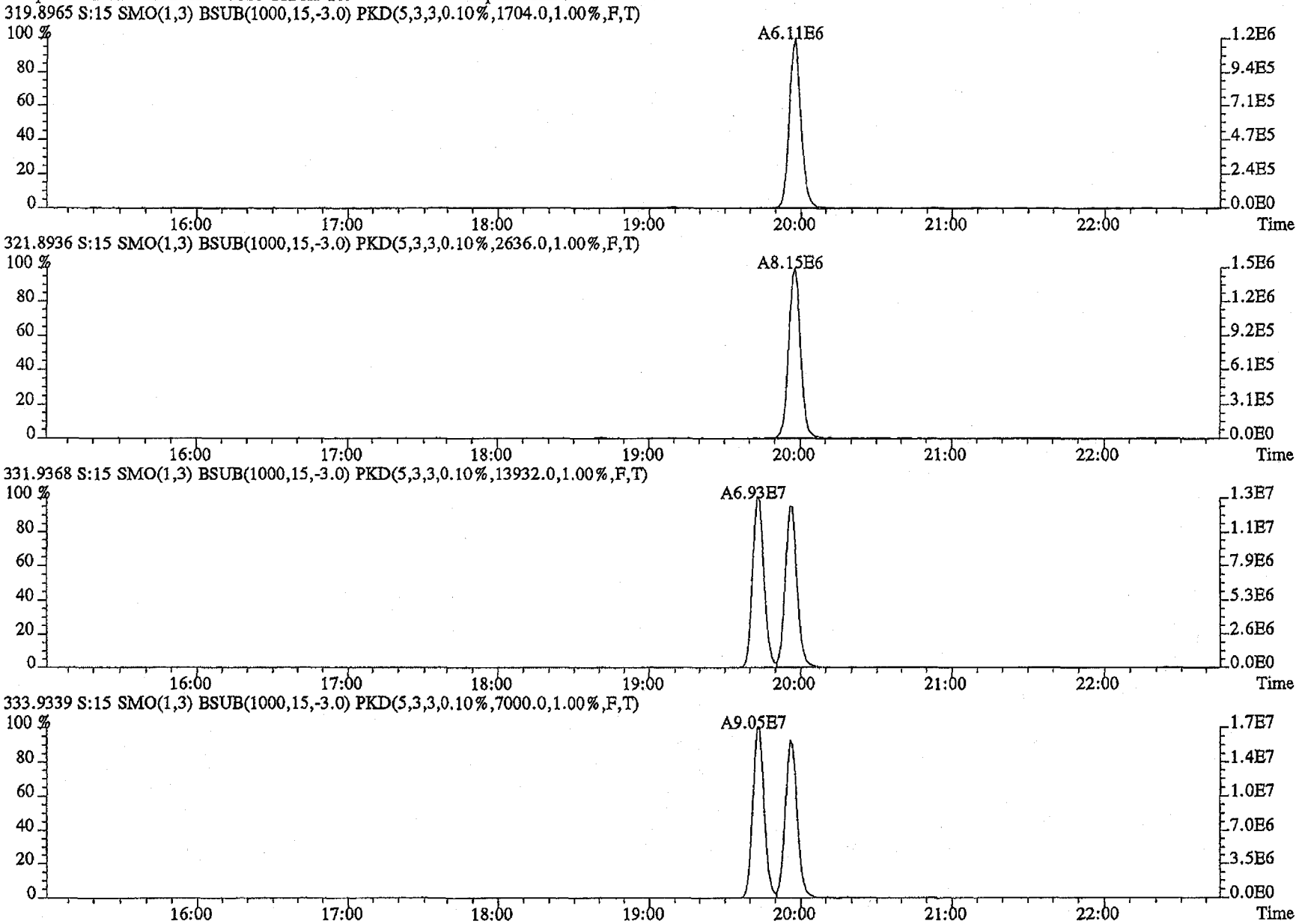
315.9419 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5348.0,1.00%,F,T)



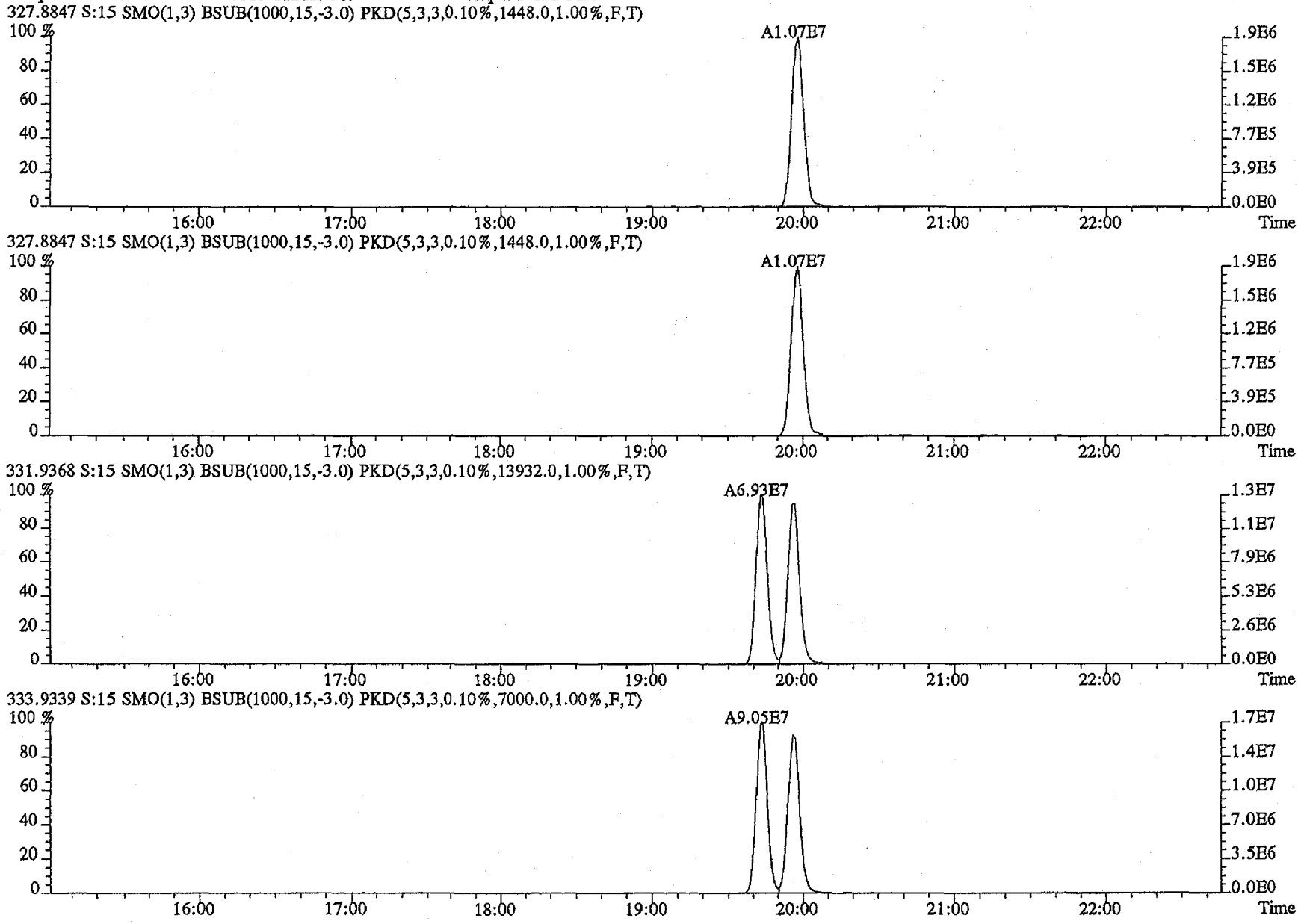
317.9389 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5756.0,1.00%,F,T)



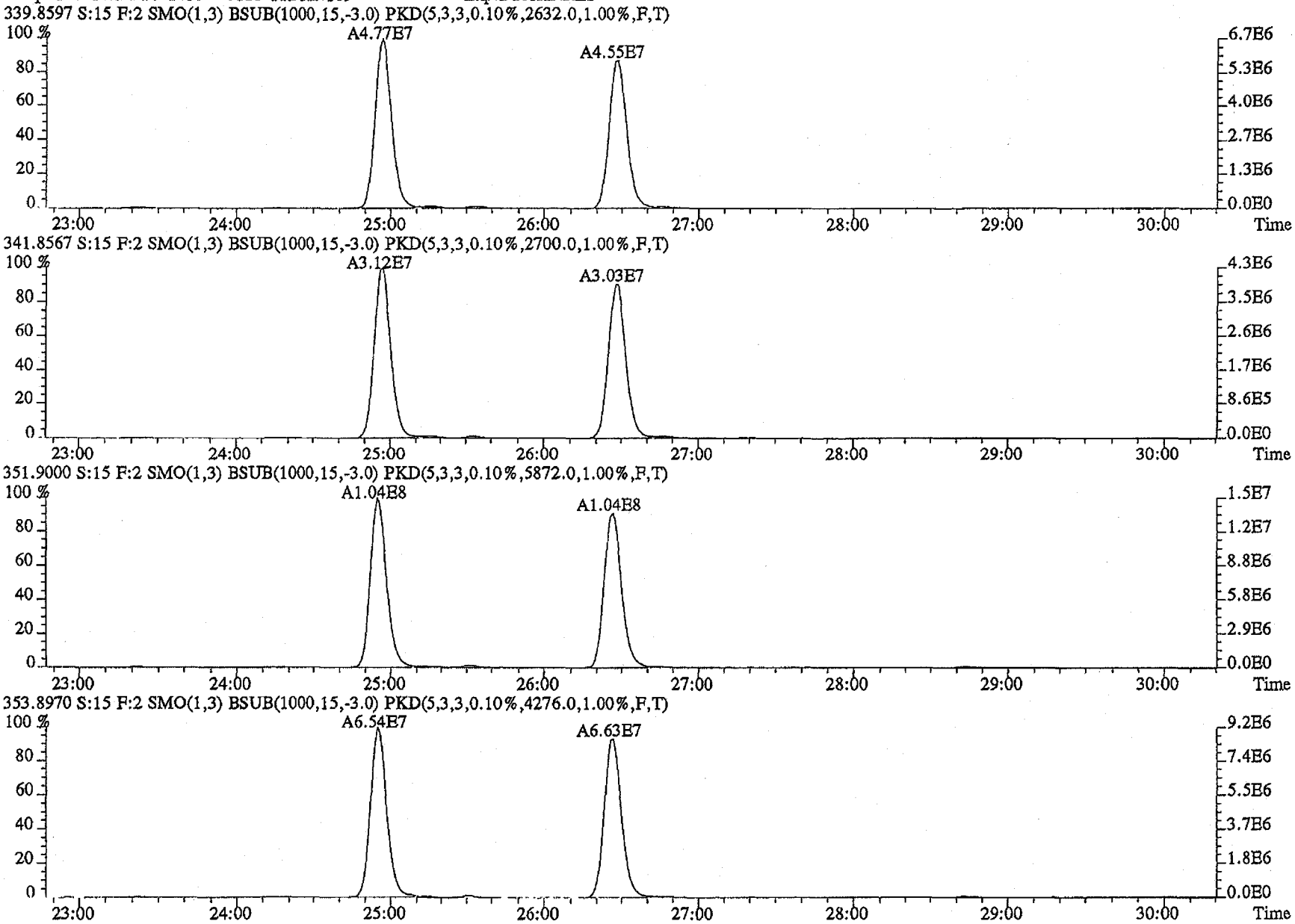
File:20MY11D4D5 #1-513 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES



File:20MY11D4D5 #1-513 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES

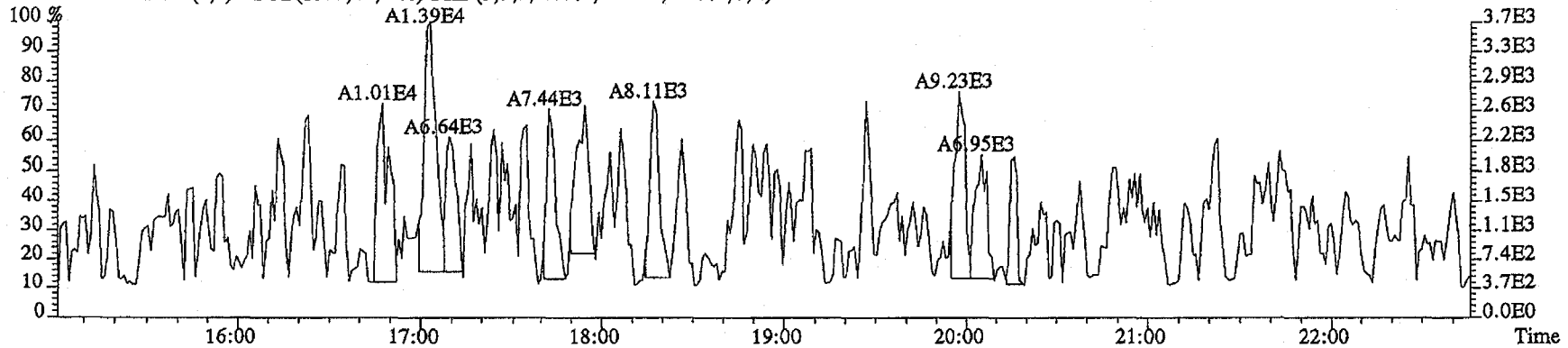


File:20MY11D4D5 #1-486 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES

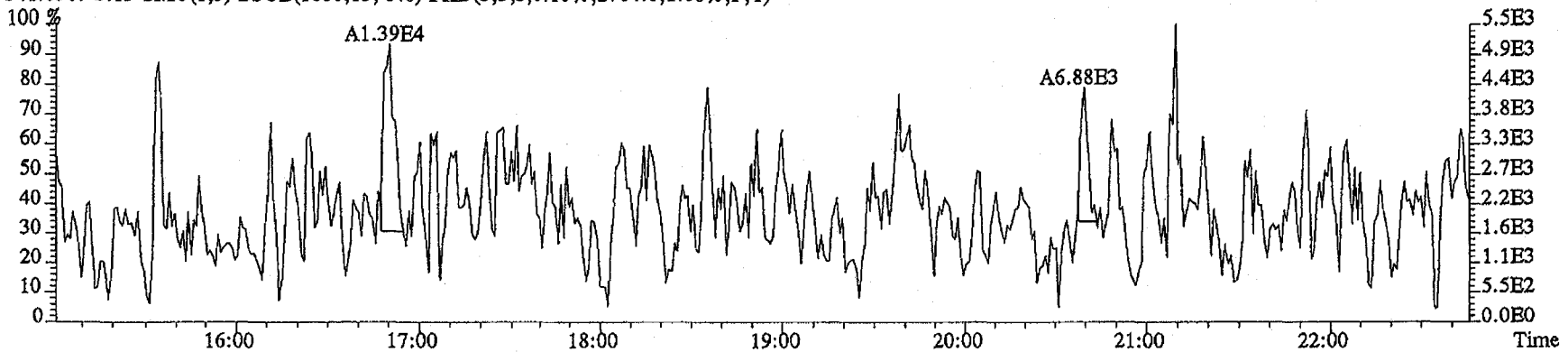


File:20MY11D4D5 #1-513 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES

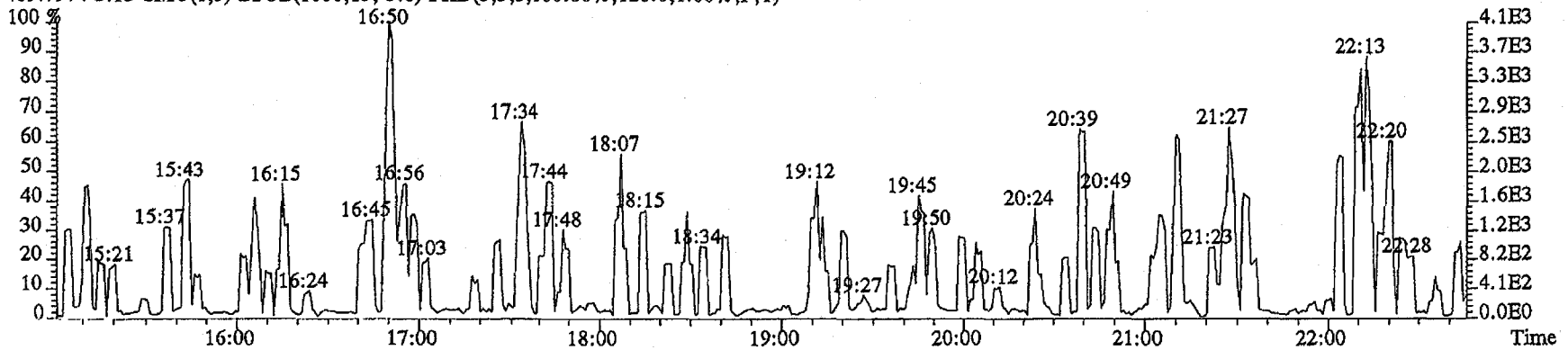
339.8597 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1188.0,1.00%,F,T)



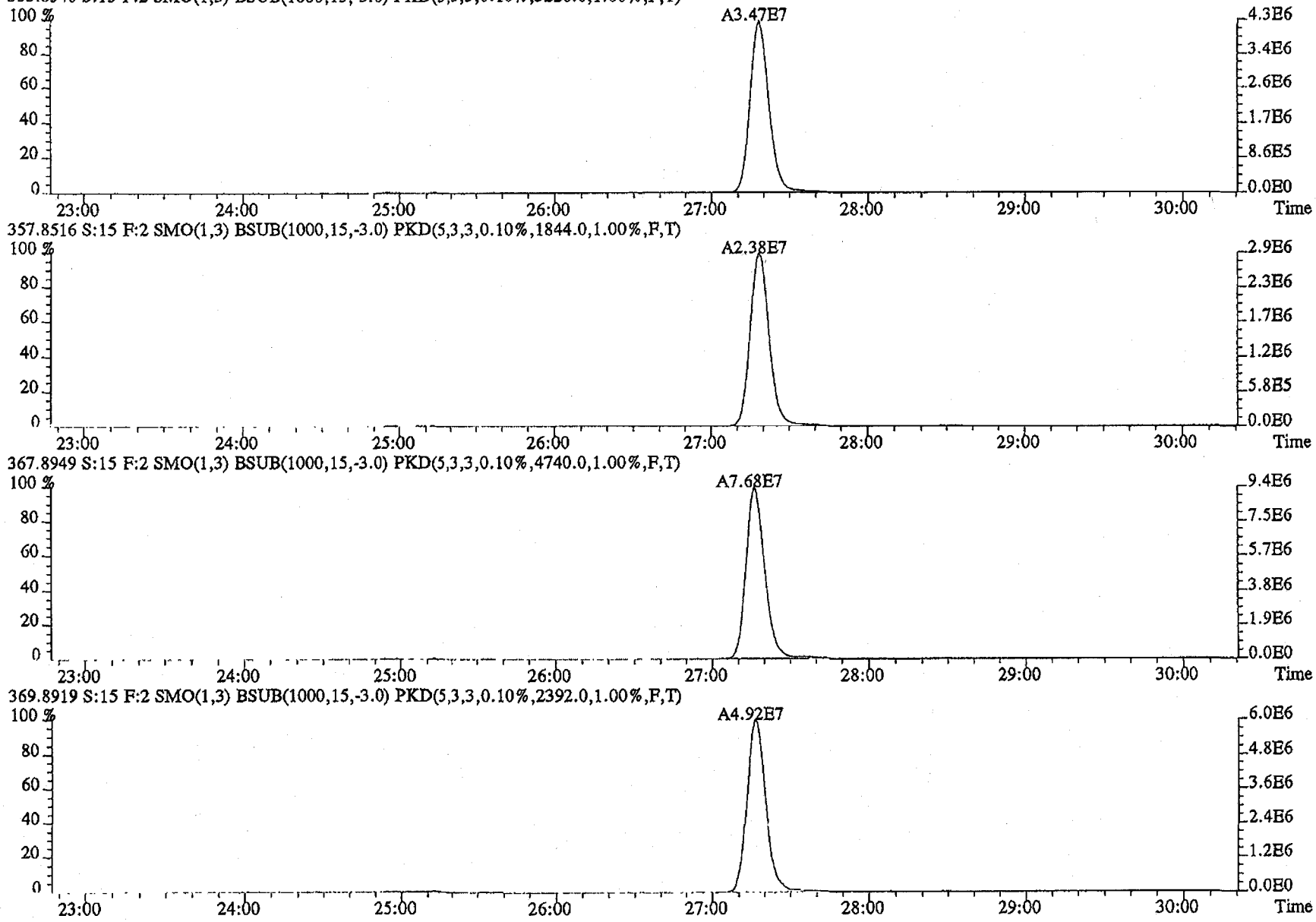
341.8567 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2764.0,1.00%,F,T)



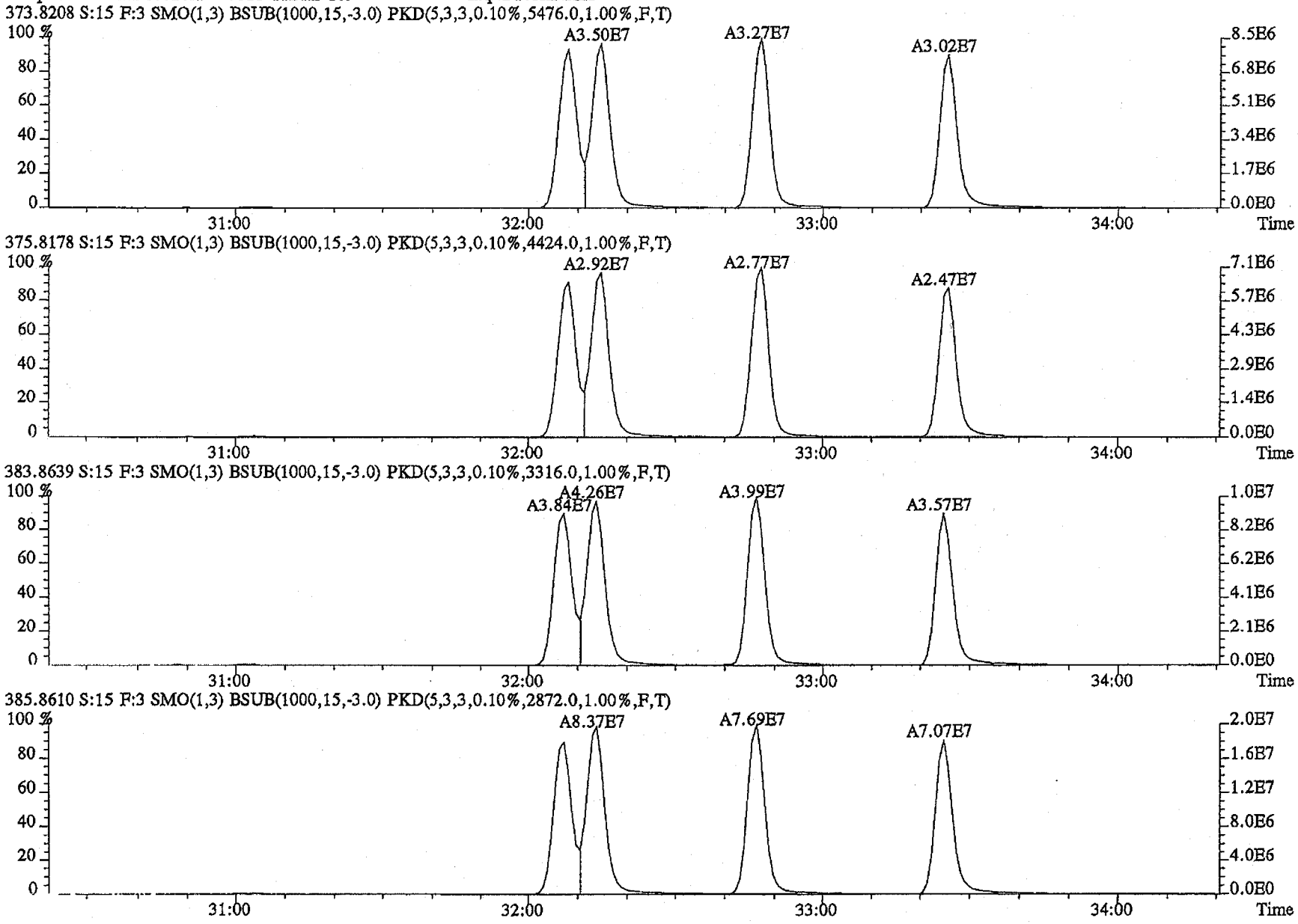
409.7974 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,128.0,1.00%,F,T)



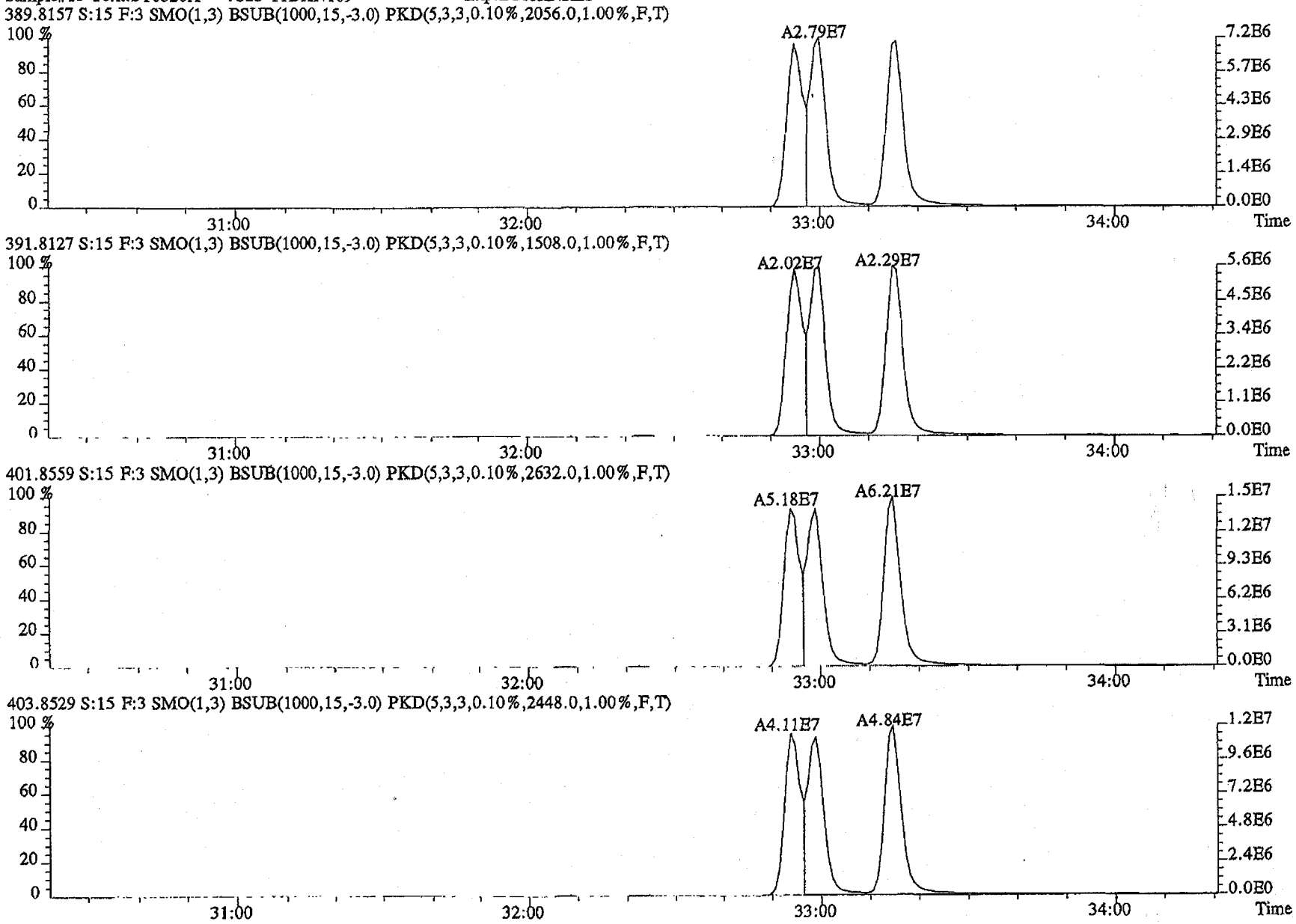
File:20MY11D4D5 #1-486 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaB
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES



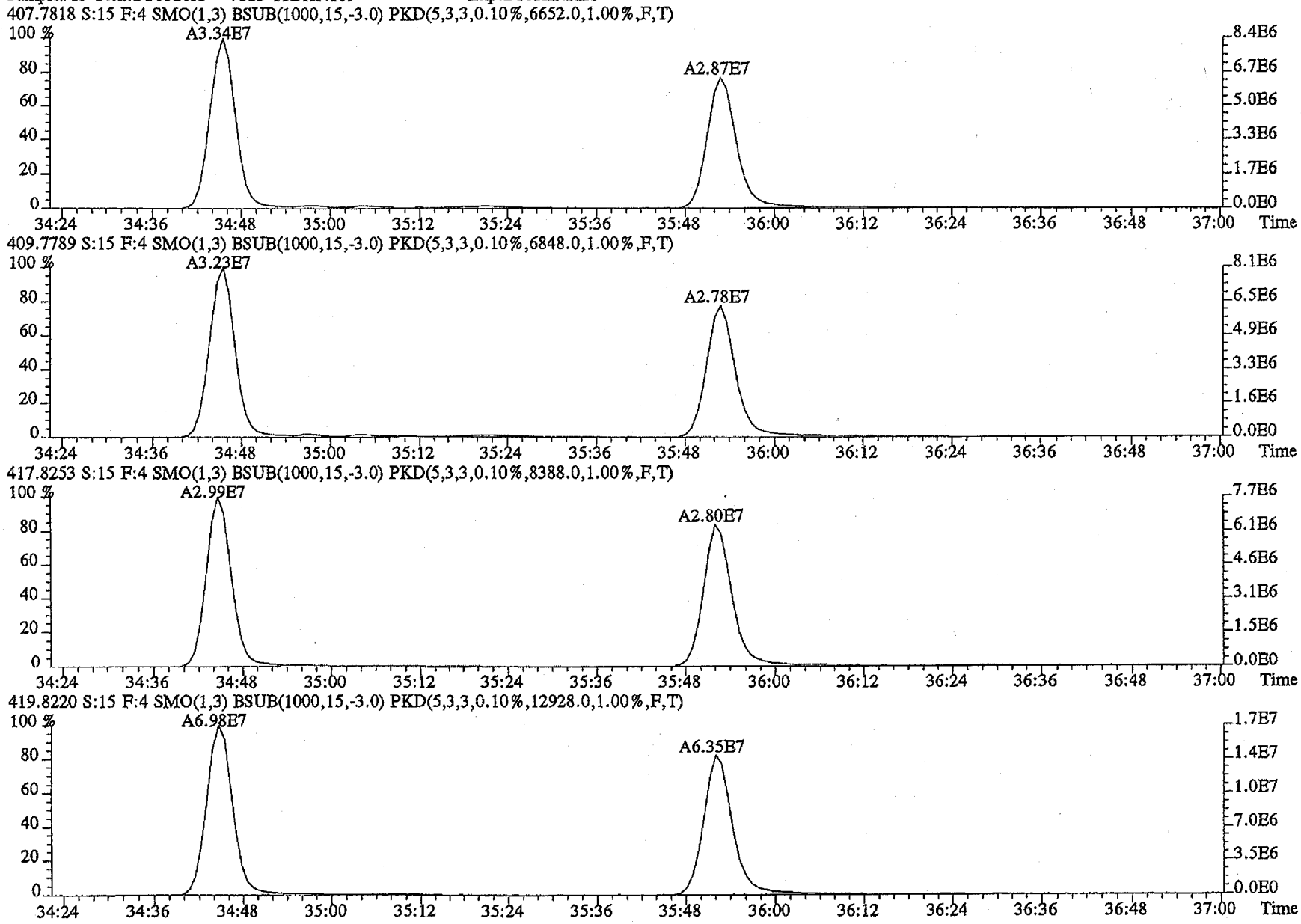
File:20MY11D4D5 #1-287 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES



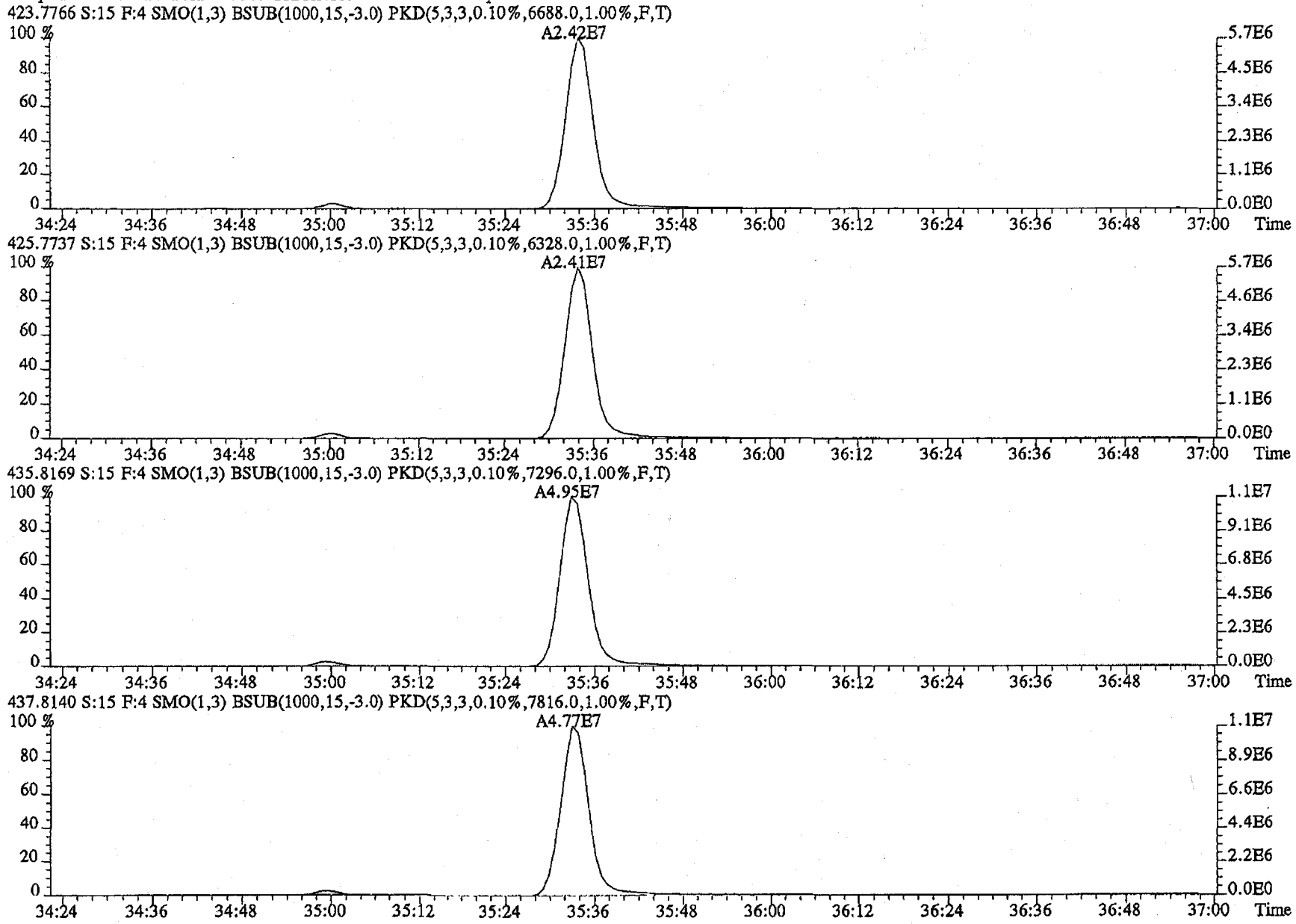
File:20MY11D4D5 #1-287 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES



File:20MY11D4D5 #1-200 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES

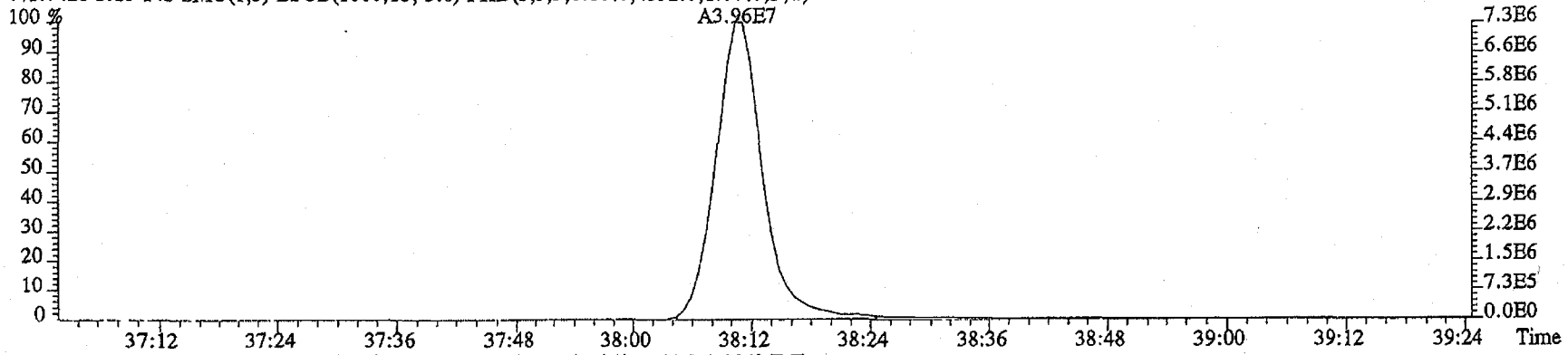


File:20MY11D4D5 #1-200 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES

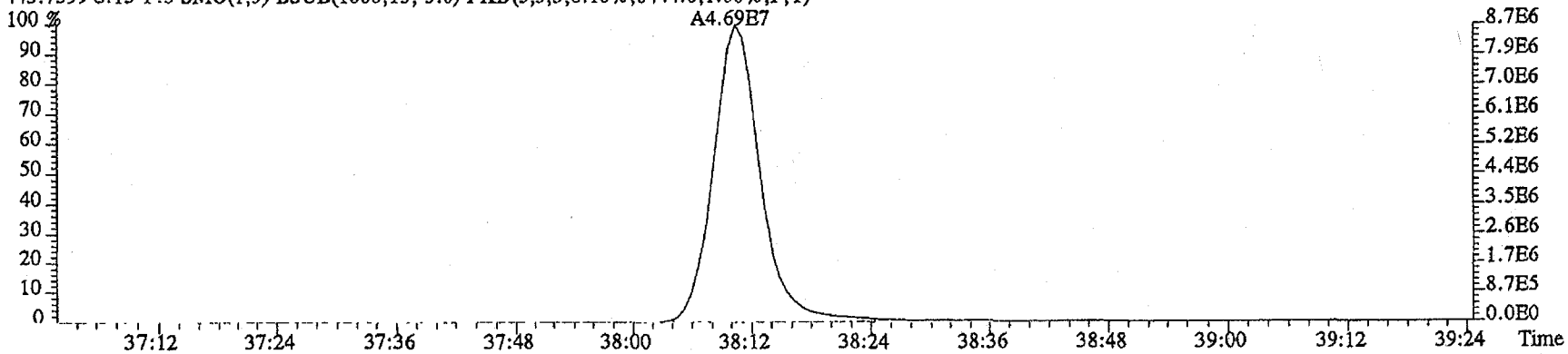


File:20MY11D4D5 #1-193 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES

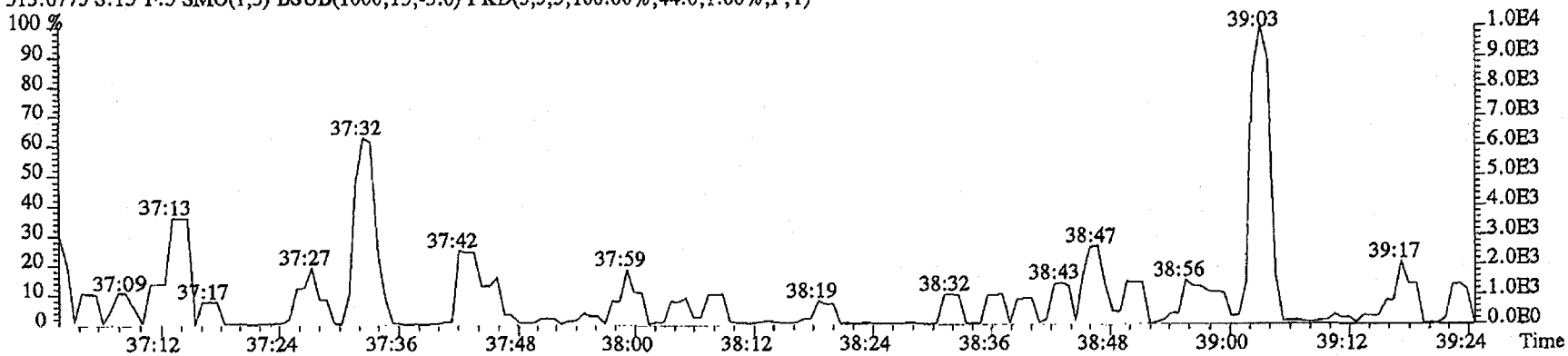
441.7428 S:15 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4592.0,1.00%,F,T)



443.7399 S:15 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6444.0,1.00%,F,T)

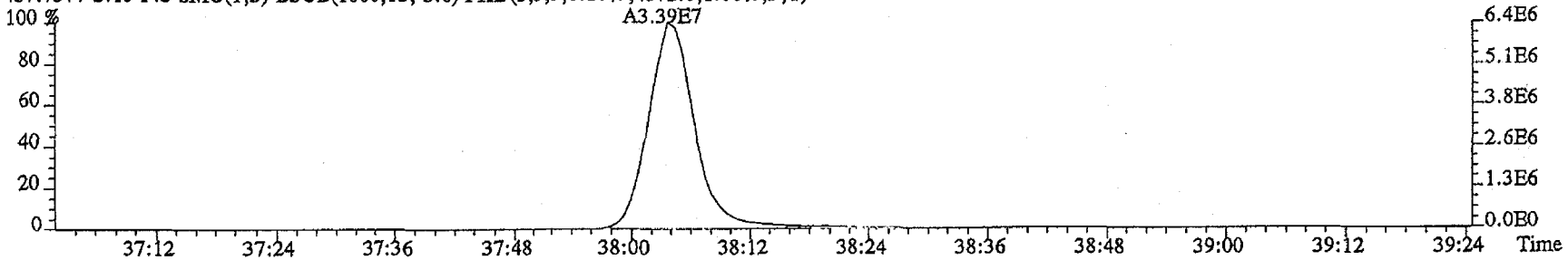


513.6775 S:15 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,44.0,1.00%,F,T)

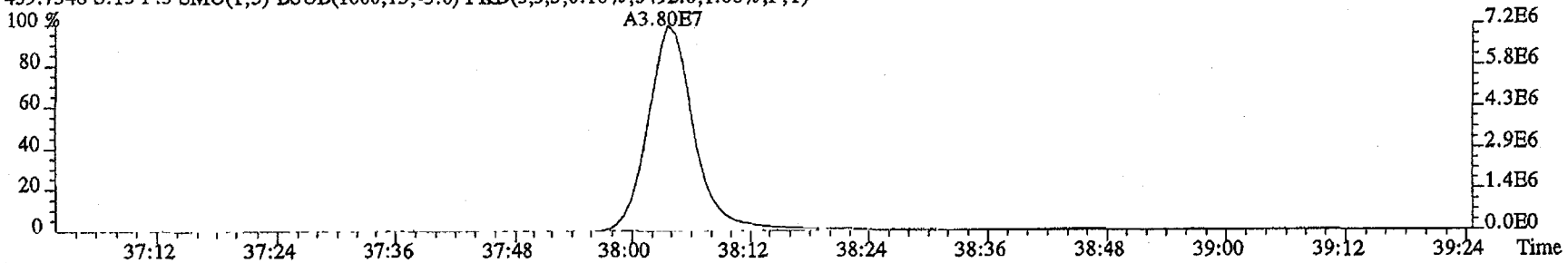


File:20MY11D4D5 #1-193 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES

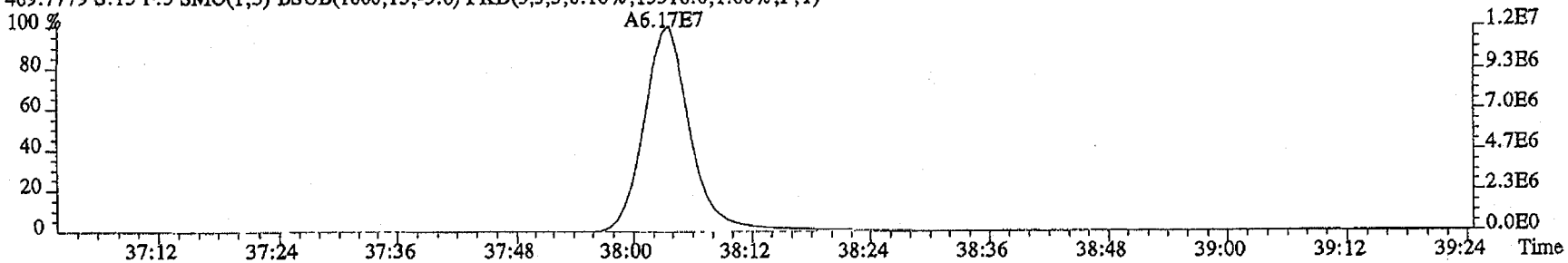
457.7377 S:15 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4372.0,1.00%,F,T)



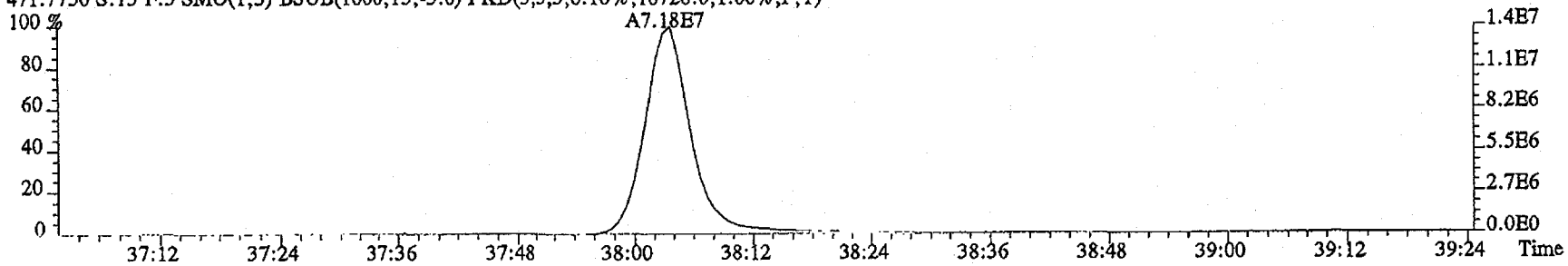
459.7348 S:15 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5492.0,1.00%,F,T)



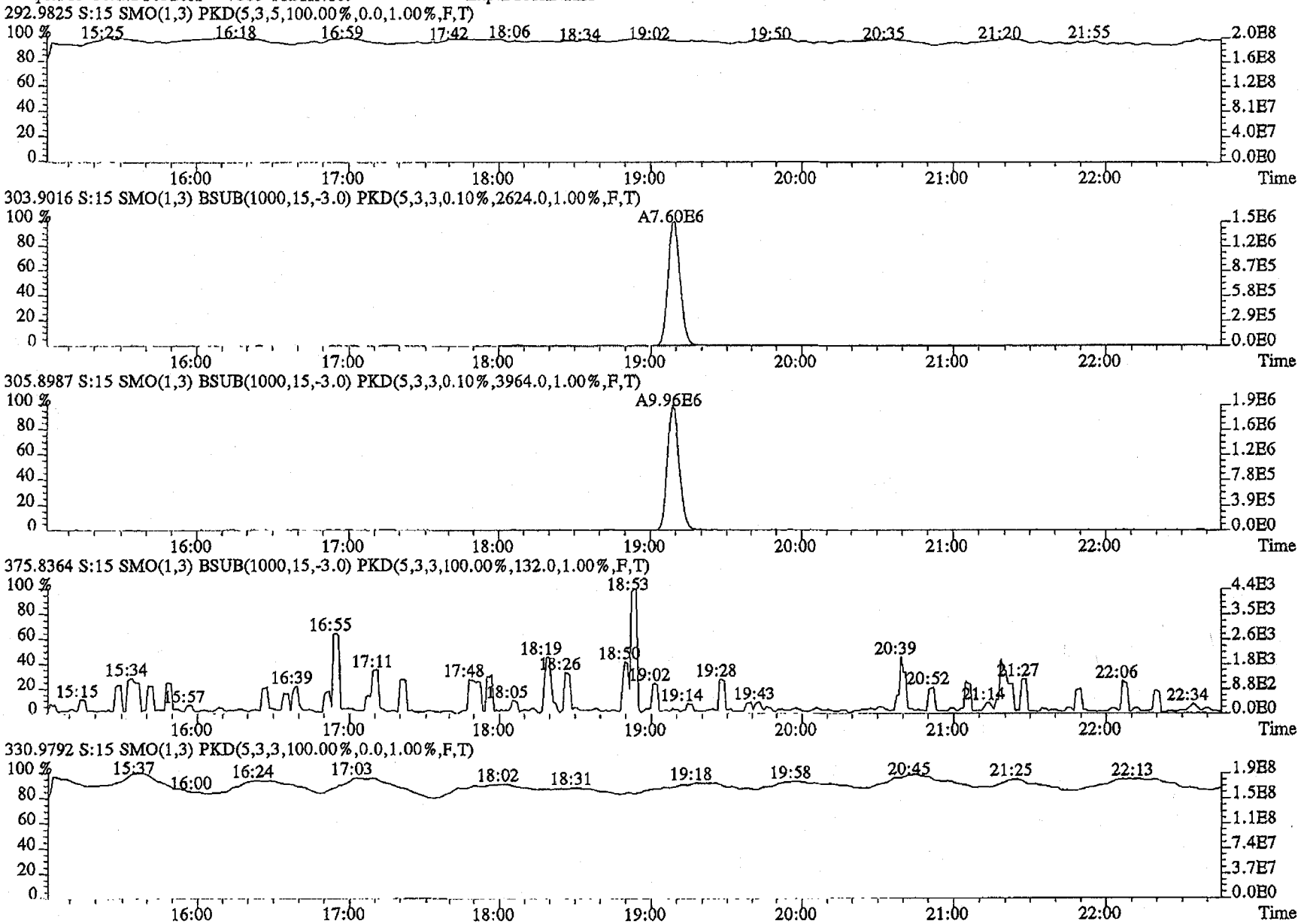
469.7779 S:15 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,13316.0,1.00%,F,T)



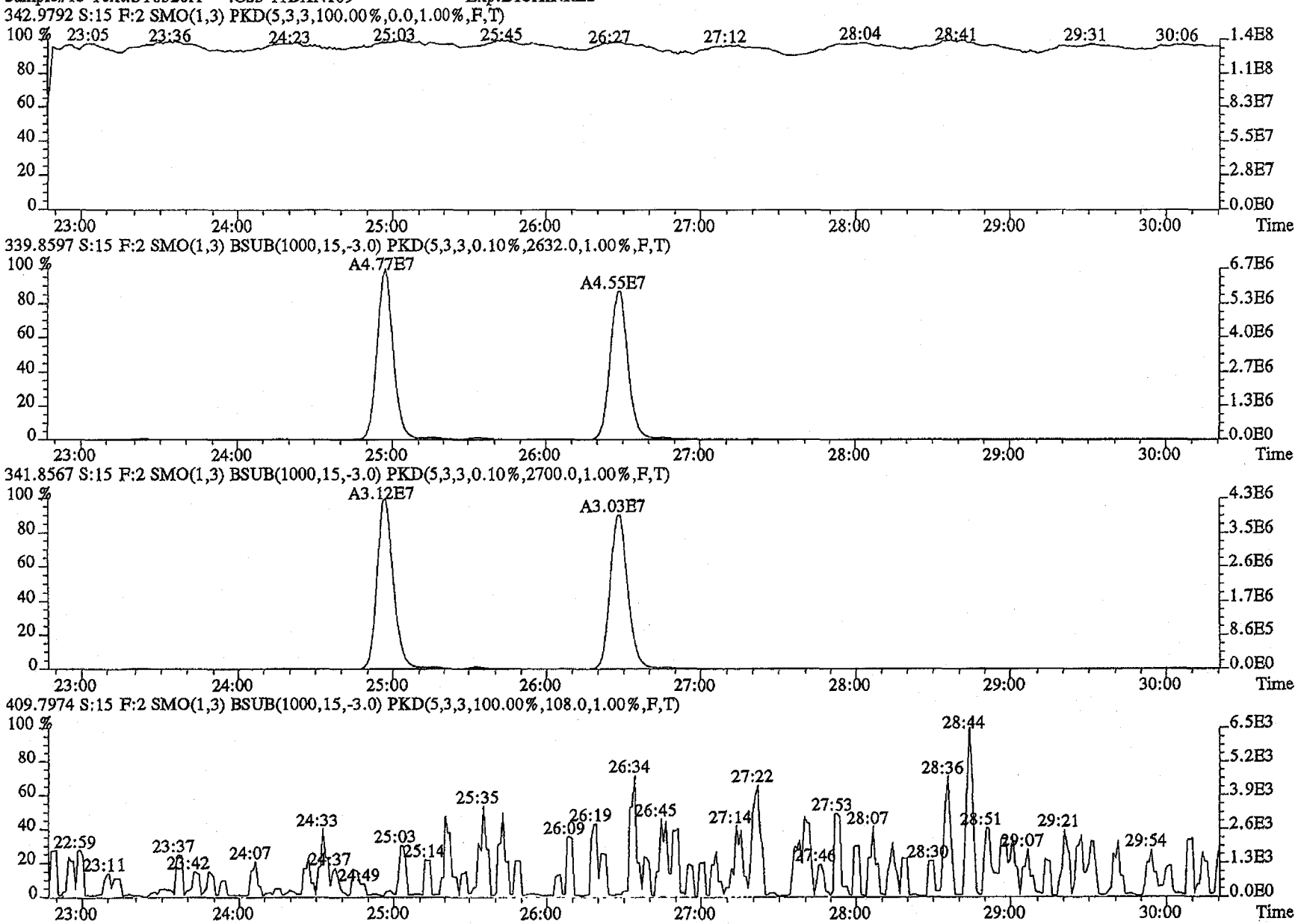
471.7750 S:15 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,18728.0,1.00%,F,T)



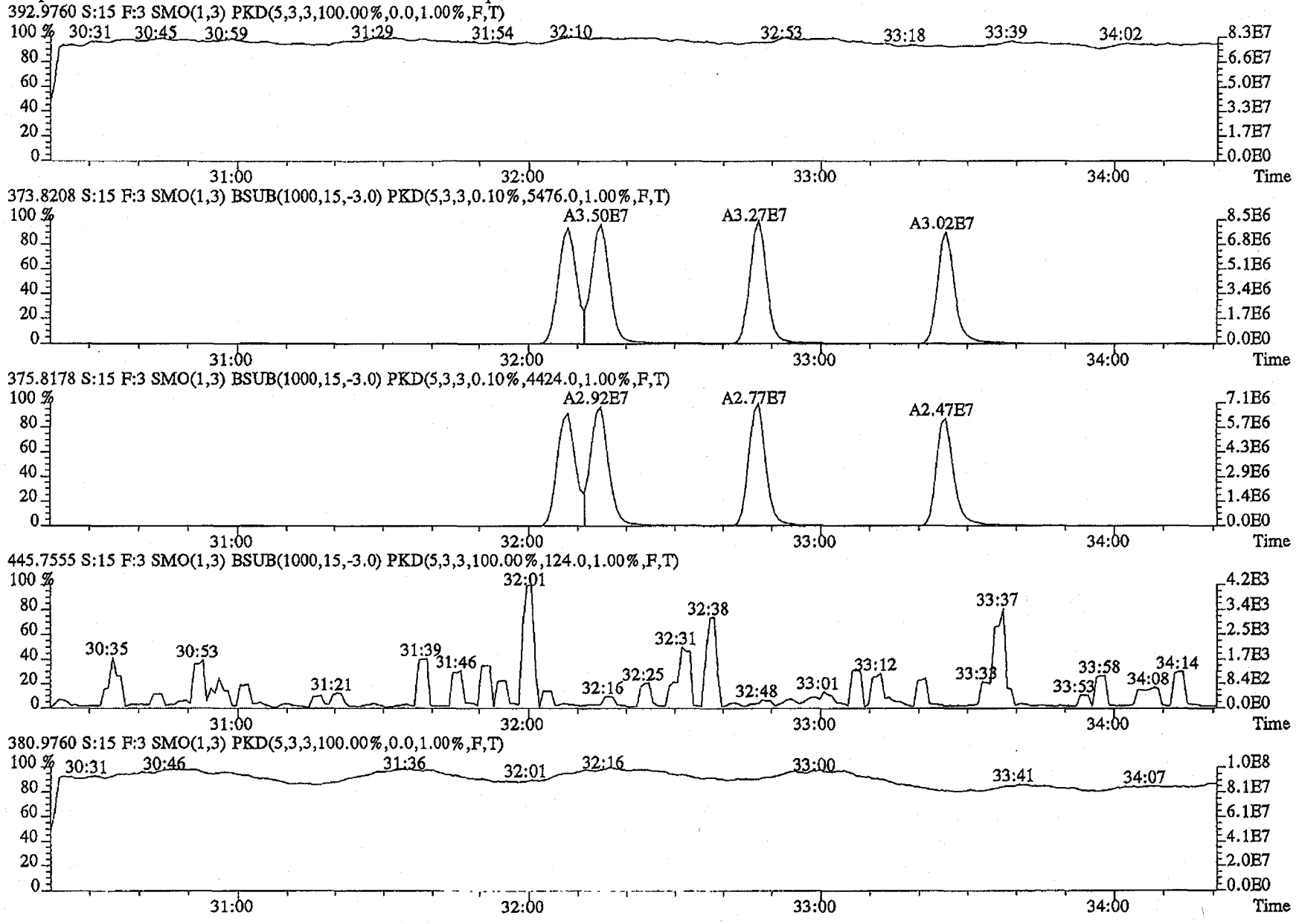
File:20MY11D4D5 #1-513 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES



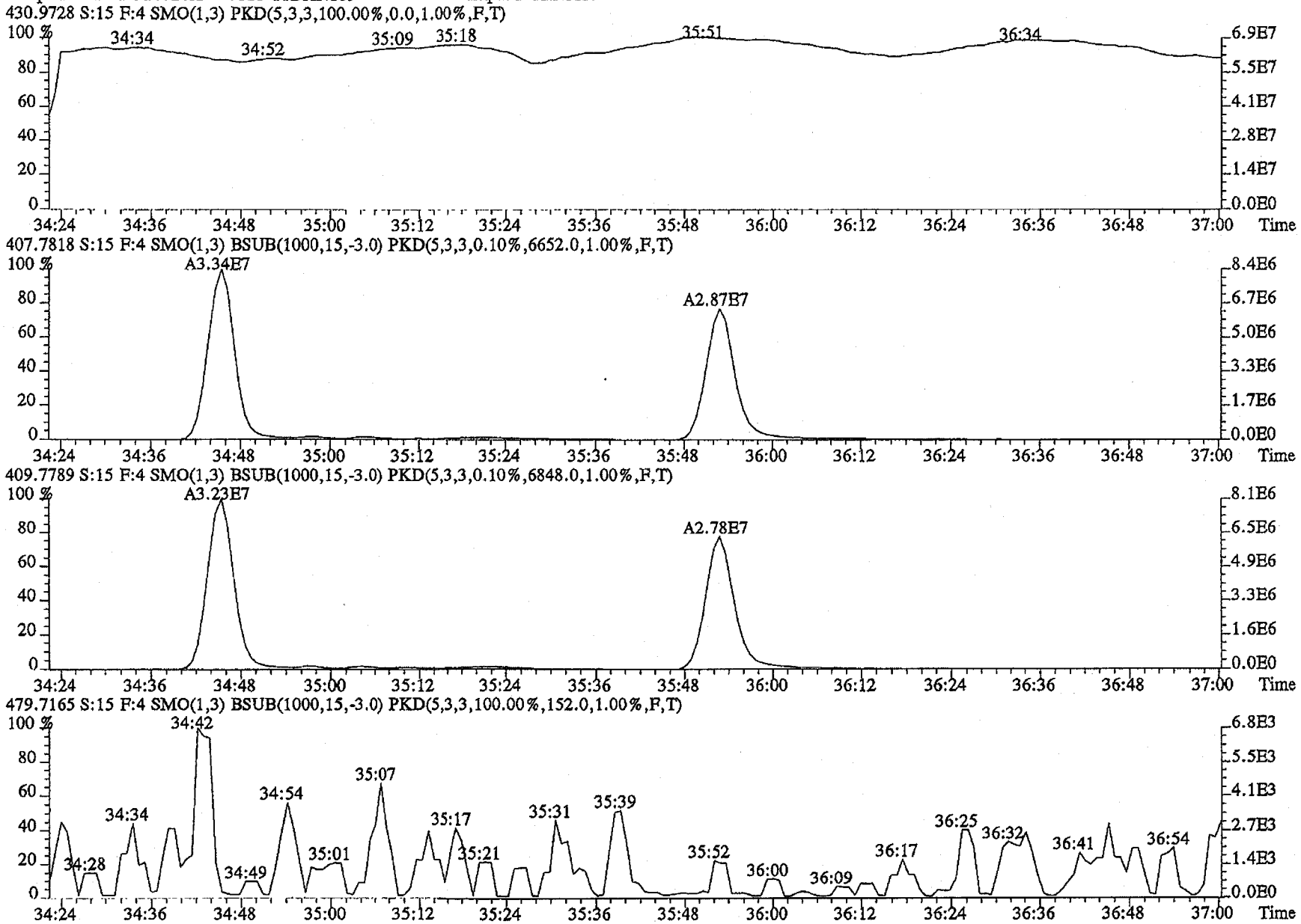
File:20MY11D4D5 #1-486 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES



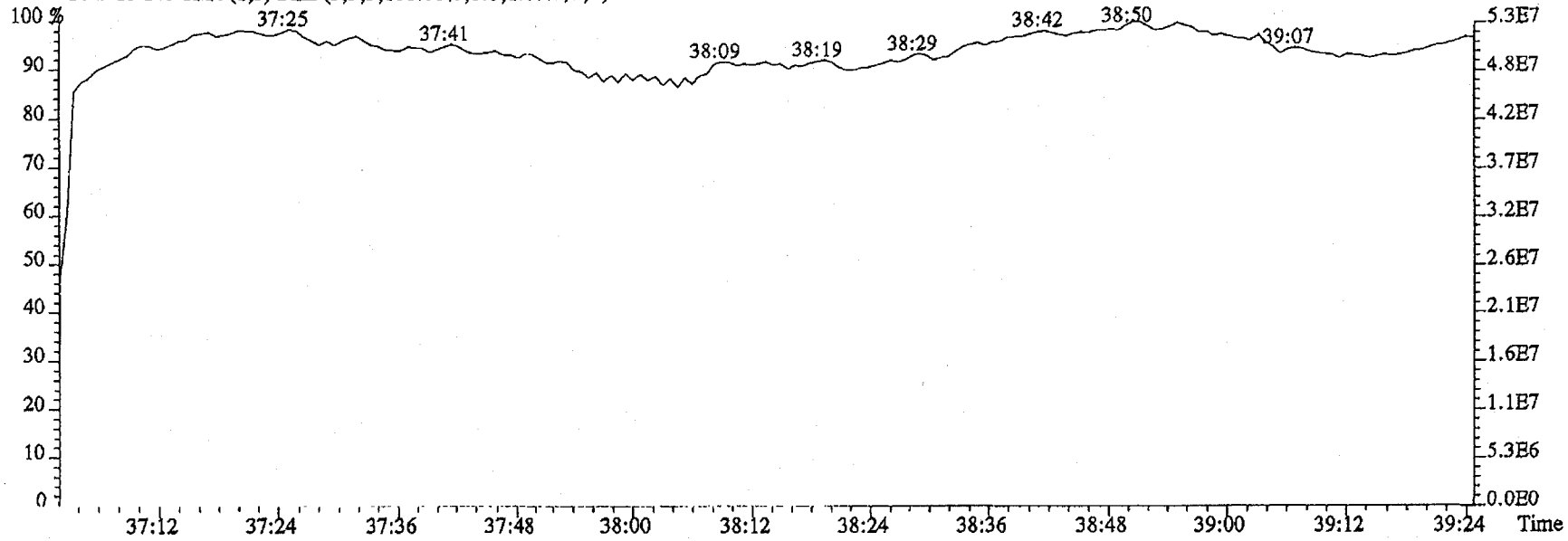
File:20MY11D4D5 #1-287 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES



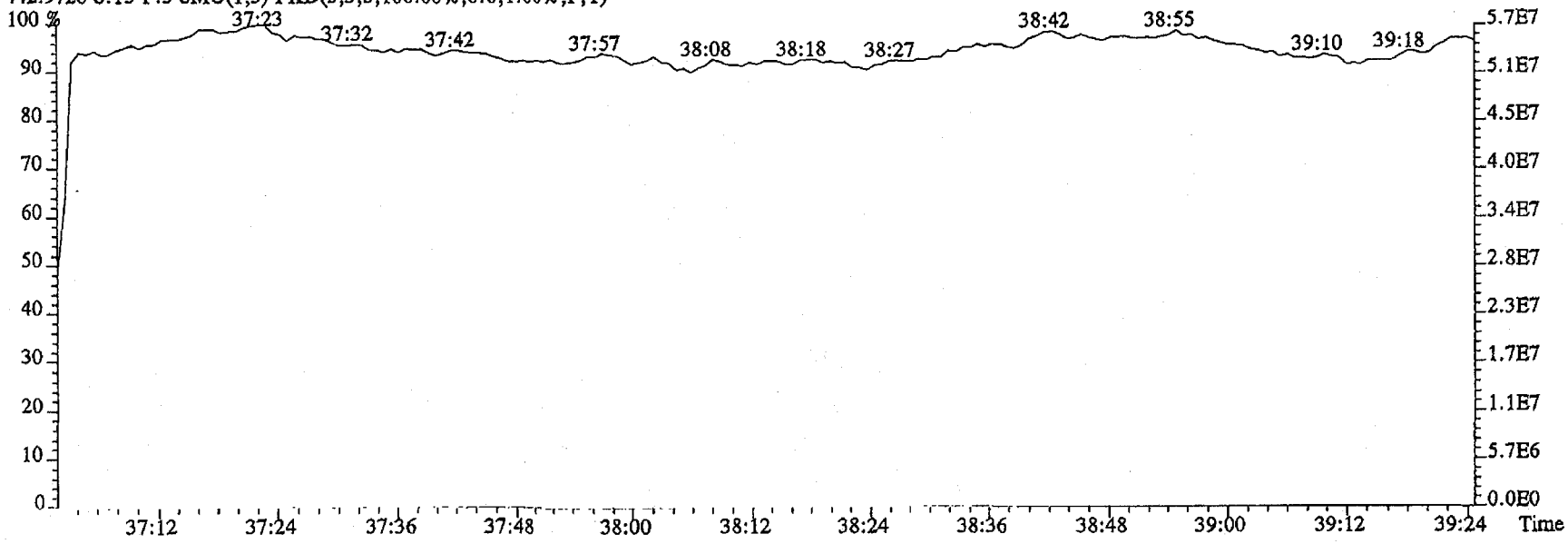
File:20MY11D4D5 #1-200 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES



File:20MY11D4D5 #1-193 Acq:21-MAY-2011 05:30:49 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0520A :CS3 11DXN109 Exp:DIOXINRES
454.9728 S:15 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:15 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Test America – West Sacramento

Daily Calibration Checklist
Dioxin Methods

Method ID 8290 **Associated ICAL** 8290 022211 4D 5

Column ID DB5 **Instrument ID** 4D5

STD ID STO523, STO523A **STD Solution** 11DXN109

Analyzed by AS **Date Analyzed** 05-23-11

Std. Pkg. By AS **Date Std. Pkg. Assembled** 05-24-11

Std. Pkg. Reviewed By M.G. **Date Std. Pkg. Reviewed** 5/24/11

DAILY STANDARD PACKAGE	INITIATED	REVIEWED
Standard, CPSM, and Solvent Blank present?	✓	✓
Copy of log-file and Beginning Static Resolution present?	✓	✓
CPSM blow up present?	✓	✓
Curve Summary present?	✓	✓
Summary of Method criteria present or documented below?	✓	✓
Daily standard within method specified limits?*	✓ (1)	✓
Analyte retention times correct?	✓	✓
Isotopic ratios within limits?	✓	✓
CPSM valley ≤ method specified limits?**	✓	✓
Are chromatographic windows correct?	✓	✓
Samples analyzed within 12 hrs of daily standard?	✓	✓
Manual reintegration's checked and hardcopies included?	NA	NA
Ending Standard present?	✓	✓
Ending Static Resolutions present	✓	✓
Absolute retention times for 13C12-1,2,3,4-TCDD and 13C12-1,2,3,7,8,9-HxCDD are within +/- 15 seconds of the retention times in the Initial Calibration? (required for **all** 1613B samples)	NA	NA

COMMENTS:

(1) End ccv > 30%D for 13C-1,2,3,4,7,8-HxCDF < 35%D use Avg RRF = 1.10
see NCM # 07-0123474

* **Method 8290/TO9/M0023A: (beginning)** ≤ 20% from curve RRFs for native analytes, ≤ 30% from curve RRFs for labeled compounds.
Method 8290/TO9/M0023A: (ending) ≤ 25% from curve RRFs for native analytes, ≤ 35% from curve RRFs for labeled compounds.
Method 23: See Method 23 Daily Standard Criteria, Table 5.
Method 1613B: See, Method 1613B or Method 1613B Tetras Daily Standard Criteria,

** **Method 23/0023A CPSM Criteria:** 25% valley between 2378 TCDF (DB-225)/TCDD (DB-5) and its closest eluters normalized to the smallest peak of the triplet
Method 1613B/8290/TO9 CPSM Criteria: 25% valley between 2378 TCDF (DB-225)/TCDD (DB-5) and its closest eluters normalized to the 2378 peak.

Run text: ST0523 File text: ST0523 :CS3 11DXN109
Run #7 Filename 23MY114D5 S: 2 I: 1
Acquired: 23-MAY-11 10:34:39 Processed: 23-MAY-11 13:04:18
Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D58290

Name	Resp	RA	RT	RRF	Amount	Dev'n	Mod?
13C-1,2,3,4-TCDD	113254400	0.75 y	19:44	-	100.00	-	n
13C-2,3,7,8-TCDF	152087700	0.82 y	19:08	1.34	100.00	21.6	n
2,3,7,8-TCDF	13217770	0.75 y	19:09	0.87	10.00	11.8	n
Total TCDF	13560702	0.55 n	17:15	0.87	10.00	11.8	n
13C-2,3,7,8-TCDD	106633800	0.77 y	19:56	0.94	100.00	-2.8	n
2,3,7,8-TCDD	10044220	0.80 y	19:57	0.94	10.00	8.6	n
Total TCDD	10181688	0.58 n	18:41	0.94	10.00	8.6	n
37Cl-2,3,7,8-TCDD	15150520	1.00 y	19:57	1.34	10.00	-6.2	n
13C-1,2,3,7,8-PeCDF	122061300	1.63 y	24:55	1.08	100.00	3.7	n
1,2,3,7,8-PeCDF	57278300	1.58 y	24:57	0.94	50.00	-2.1	n
2,3,4,7,8-PeCDF	53556200	1.55 y	26:28	0.88	50.00	-6.5	n
Total F2 PeCDF	112286644	2.52 n	23:22	0.91	100.00	-4.3	n
Total F1 PeCDF	53155	1.06 n	16:55	0.91	100.00	-4.3	n
13C-1,2,3,7,8-PeCDD	80544300	1.61 y	27:17	0.71	100.00	1.7	n
1,2,3,7,8-PeCDD	38547200	1.49 y	27:19	0.96	50.00	-8.1	n
Total PeCDD	38672701	2.32 n	24:56	0.96	50.00	-8.1	n
13C-1,2,3,7,8,9-HxCDD	70602500	1.29 y	33:15	-	100.00	-	n
13C-1,2,3,4,7,8-HxCDF	73951400	0.49 y	32:08	1.05	100.00	20.3	n
1,2,3,4,7,8-HxCDF	39030100	1.17 y	32:09	1.06	50.00	-8.1	n
1,2,3,6,7,8-HxCDF	48943200	1.19 y	32:15	1.32	50.00	-9.4	n
2,3,4,6,7,8-HxCDF	42197800	1.17 y	32:48	1.14	50.00	-12.5	n
1,2,3,7,8,9-HxCDF	34473500	1.14 y	33:26	0.93	50.00	-17.0	n
Total HxCDF	164797847	1.03 n	31:03	1.11	200.00	-11.6	n
13C-1,2,3,6,7,8-HxCDD	68023200	1.37 y	32:59	0.96	100.00	1.4	n
1,2,3,4,7,8-HxCDD	27430700	1.23 y	32:55	0.81	50.00	8.3	n
1,2,3,6,7,8-HxCDD	34972200	1.28 y	33:00	1.03	50.00	-1.7	n
1,2,3,7,8,9-HxCDD	34336000	1.27 y	33:15	1.01	50.00	-1.1	n
Total HxCDD	96863792	1.53 n	32:09	0.95	150.00	1.1	n
13C-1,2,3,4,6,7,8-HpCDF	56632700	0.41 y	34:45	0.80	100.00	-12.2	n
1,2,3,4,6,7,8-HpCDF	38270900	1.02 y	34:46	1.35	50.00	2.1	n
1,2,3,4,7,8,9-HpCDF	29220200	1.03 y	35:54	1.03	50.00	-8.7	n
Total HpCDF	67491100	1.02 y	34:46	1.19	100.00	-2.9	n
13C-1,2,3,4,6,7,8-HpCDD	53774700	1.06 y	35:33	0.76	100.00	-16.7	n
1,2,3,4,6,7,8-HpCDD	26312700	1.01 y	35:34	0.98	50.00	-3.4	n
Total HpCDD	26848613	0.98 y	35:00	0.98	50.00	-3.4	n
13C-OCDD	76703400	0.89 y	38:05	0.54	200.00	-9.7	n
OCDF	48604300	0.86 y	38:11	1.27	100.00	-0.4	n
OCDD	41021100	0.88 y	38:05	1.07	100.00	-5.2	n

Run text: ST0523A File text: ST0523A :CS3 11DXN109
Run #19 Filename 23MY114D5 S: 15 I: 1
Acquired: 23-MAY-11 20:14:17 Processed: 23-MAY-11 20:56:26
Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5 Results: 23MY114D58290

Name	Resp	RA	RT	RRF	Amount	Dev'n	Mod?
13C-1,2,3,4-TCDD	88458900	0.77 y	19:43	-	100.00	-	n
13C-2,3,7,8-TCDF	125319000	0.83 y	19:08	1.42	100.00	28.2	n
2,3,7,8-TCDF	11023620	0.75 y	19:10	0.88	10.00	13.1	n
Total TCDF	11481529	1.08 n	17:16	0.88	10.00	13.1	n
13C-2,3,7,8-TCDD	83403200	0.76 y	19:56	0.94	100.00	-2.7	n
2,3,7,8-TCDD	8067030	0.78 y	19:58	0.97	10.00	11.5	n
Total TCDD	8187896	0.66 y	18:41	0.97	10.00	11.5	n
37Cl-2,3,7,8-TCDD	11790140	1.00 y	19:58	1.33	10.00	-6.5	n
13C-1,2,3,7,8-PeCDF	95524500	1.65 y	24:55	1.08	100.00	3.9	n
1,2,3,7,8-PeCDF	45803400	1.56 y	24:57	0.96	50.00	0.0	n
2,3,4,7,8-PeCDF	42511300	1.58 y	26:29	0.89	50.00	-5.1	n
Total F2 PeCDF	89455585	1.73 y	23:24	0.92	100.00	-2.5	n
Total F1 PeCDF	33098	0.17 n	15:27	0.92	100.00	-2.5	n
13C-1,2,3,7,8-PeCDD	62782300	1.71 y	27:16	0.71	100.00	1.5	n
1,2,3,7,8-PeCDD	30571500	1.50 y	27:18	0.97	50.00	-6.5	n
Total PeCDD	30732350	1.28 n	24:57	0.97	50.00	-6.5	n
13C-1,2,3,7,8,9-HxCDD	51966200	1.35 y	33:15	-	100.00	-	n
13C-1,2,3,4,7,8-HxCDF	59562900	0.49 y	32:07	1.15	100.00	31.6	n
1,2,3,4,7,8-HxCDF	32178000	1.18 y	32:08	1.08	50.00	-5.9	n
1,2,3,6,7,8-HxCDF	38976400	1.21 y	32:15	1.31	50.00	-10.4	n
2,3,4,6,7,8-HxCDF	33654900	1.18 y	32:47	1.13	50.00	-13.4	n
1,2,3,7,8,9-HxCDF	27766900	1.17 y	33:25	0.93	50.00	-17.0	n
Total HxCDF	132751938	1.38 y	30:50	1.11	200.00	-11.6	n
13C-1,2,3,6,7,8-HxCDD	47951700	1.38 y	32:59	0.92	100.00	-2.8	n
1,2,3,4,7,8-HxCDD	21039170	1.23 y	32:55	0.88	50.00	17.8	n
1,2,3,6,7,8-HxCDD	28551300	1.28 y	33:00	1.19	50.00	13.8	n
1,2,3,7,8,9-HxCDD	26156900	1.27 y	33:15	1.09	50.00	6.9	n
Total HxCDD	75988429	1.19 y	32:23	1.05	150.00	12.4	n
13C-1,2,3,4,6,7,8-HpCDF	44893100	0.42 y	34:45	0.86	100.00	-5.5	n
1,2,3,4,6,7,8-HpCDF	30448500	1.02 y	34:45	1.36	50.00	2.4	n
1,2,3,4,7,8,9-HpCDF	26440200	1.04 y	35:53	1.18	50.00	4.2	n
Total HpCDF	58191959	1.02 y	34:45	1.27	100.00	3.3	n
13C-1,2,3,4,6,7,8-HpCDD	41925800	1.01 y	35:34	0.81	100.00	-11.7	n
1,2,3,4,6,7,8-HpCDD	21752700	1.00 y	35:34	1.04	50.00	2.4	n
Total HpCDD	22263151	1.05 y	35:00	1.04	50.00	2.4	n
13C-OCDD	64981600	0.91 y	38:04	0.63	200.00	3.9	n
OCDF	42376300	0.85 y	38:12	1.30	100.00	2.5	n
OCDD	34999600	0.89 y	38:05	1.08	100.00	-4.5	n

Run: 23MY114D5 Analyte: 8290 Cal: 82900222114D5

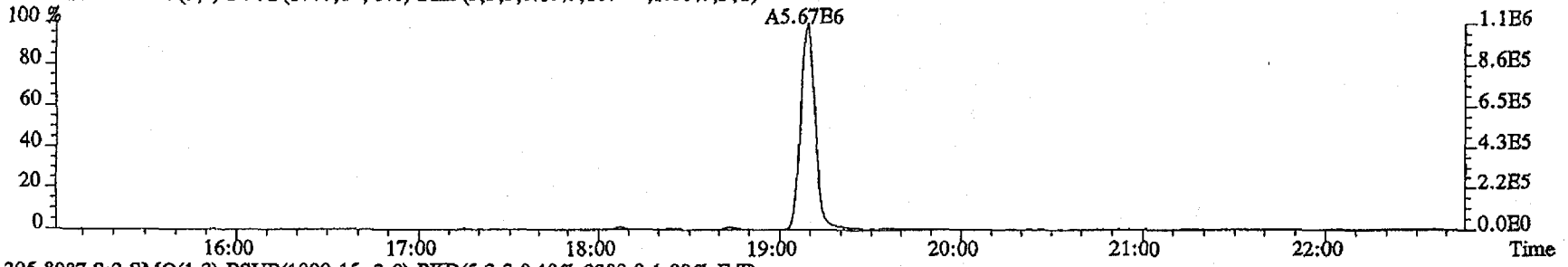
ST0222 :CS-0.2 11DXN025 AS ST0222A :CS-1 10DXN503 AS ST0222B :CS-2 10DXN504 AS
ST0222C :CS-3 10DXN505 AS ST0222D :CS-4 10DXN506 AS ST0222E :CS-5 10DXN507 AS

				22FE11A4D5	22FE11A4D5	22FE11A4D5	22FE11A4D5	22FE11A4D5	22FE11A4D5
				S2	S3	S4	S5	S6	S7
Name	Mean	S. D.	%RSD	RRF1	RRF2	RRF3	RRF4	RRF5	RRF6
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-
13C-2,3,7,8-TCDF	1.105	0.049	4.48 %	1.12	1.14	1.14	1.14	1.05	1.03
2,3,7,8-TCDF	0.777	0.054	6.93 %	0.86	0.80	0.80	0.70	0.74	0.76
Total TCDF	0.777	0.054	6.93 %	0.86	0.80	0.80	0.70	0.74	0.76
13C-2,3,7,8-TCDD	0.969	0.023	2.34 %	0.96	0.98	0.99	1.00	0.94	0.95
2,3,7,8-TCDD	0.868	0.030	3.42 %	0.88	0.85	0.91	0.82	0.87	0.87
Total TCDD	0.868	0.030	3.42 %	0.88	0.85	0.91	0.82	0.87	0.87
37Cl-2,3,7,8-TCDD	1.426	0.159	11.2 %	1.74	1.44	1.38	1.37	1.30	1.32
13C-1,2,3,7,8-PeCDF	1.039	0.028	2.72 %	1.01	1.05	1.02	1.09	1.01	1.05
1,2,3,7,8-PeCDF	0.959	0.040	4.22 %	0.97	0.90	0.97	0.93	0.99	1.00
2,3,4,7,8-PeCDF	0.938	0.048	5.09 %	0.99	0.86	0.97	0.90	0.95	0.96
Total F2 PeCDF	0.949	0.042	4.47 %	0.98	0.88	0.97	0.91	0.97	0.98
Total F1 PeCDF	0.949	0.042	4.47 %	0.98	0.88	0.97	0.91	0.97	0.98
13C-1,2,3,7,8-PeCDD	0.700	0.022	3.13 %	0.74	0.70	0.70	0.69	0.67	0.70
1,2,3,7,8-PeCDD	1.042	0.035	3.31 %	1.06	0.99	1.05	1.01	1.07	1.07
Total PeCDD	1.042	0.035	3.31 %	1.06	0.99	1.05	1.01	1.07	1.07
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-
13C-1,2,3,4,7,8-HxCDF	0.871	0.066	7.60 %	0.79	0.82	0.87	0.98	0.88	0.88
1,2,3,4,7,8-HxCDF	1.149	0.052	4.51 %	1.22	1.09	1.18	1.09	1.14	1.17
1,2,3,6,7,8-HxCDF	1.461	0.075	5.14 %	1.52	1.53	1.51	1.33	1.45	1.42
2,3,4,6,7,8-HxCDF	1.304	0.079	6.06 %	1.38	1.34	1.36	1.16	1.28	1.30
1,2,3,7,8,9-HxCDF	1.123	0.098	8.72 %	1.29	1.10	1.16	0.99	1.09	1.11
Total HxCDF	1.259	0.070	5.54 %	1.35	1.26	1.30	1.14	1.24	1.25
13C-1,2,3,6,7,8-HxCDD	0.950	0.033	3.51 %	0.95	0.98	0.93	1.00	0.92	0.92
1,2,3,4,7,8-HxCDD	0.745	0.054	7.27 %	0.71	0.66	0.77	0.73	0.78	0.81

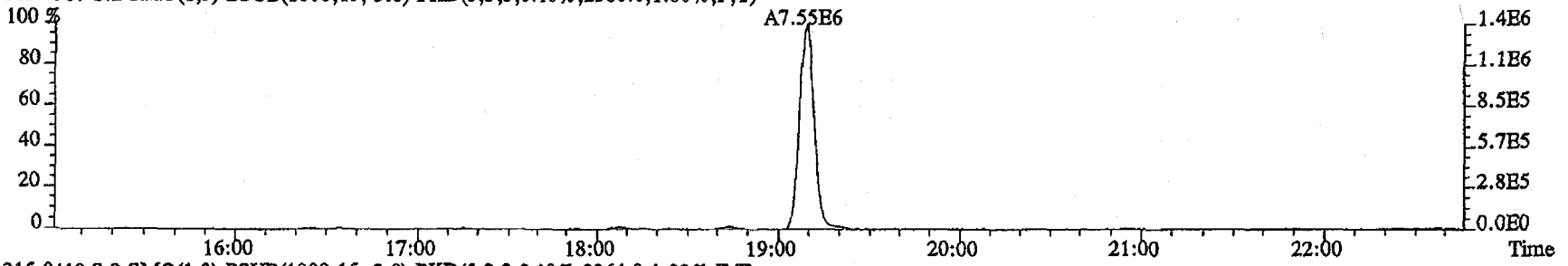
1,2,3,6,7,8-HxCDD	1.046	0.028	2.68 %	1.08	1.01	1.05	1.02	1.06	1.07
1,2,3,7,8,9-HxCDD	1.021	0.043	4.24 %	1.02	0.95	1.05	1.00	1.05	1.05
Total HxCDD	0.937	0.039	4.13 %	0.94	0.87	0.96	0.91	0.96	0.98
13C-1,2,3,4,6,7,8-HpCDF	0.914	0.040	4.40 %	0.85	0.91	0.93	0.98	0.90	0.91
1,2,3,4,6,7,8-HpCDF	1.324	0.021	1.60 %	1.34	1.29	1.34	1.30	1.33	1.34
1,2,3,4,7,8,9-HpCDF	1.130	0.048	4.29 %	1.19	1.05	1.13	1.11	1.15	1.16
Total HpCDF	1.227	0.034	2.79 %	1.27	1.17	1.23	1.20	1.24	1.25
13C-1,2,3,4,6,7,8-HpCDD	0.914	0.047	5.18 %	0.85	0.91	0.92	0.99	0.89	0.92
1,2,3,4,6,7,8-HpCDD	1.014	0.060	5.93 %	1.09	0.92	0.99	1.00	1.05	1.04
Total HpCDD	1.014	0.060	5.93 %	1.09	0.92	0.99	1.00	1.05	1.04
13C-OCDD	0.602	0.034	5.63 %	0.55	0.60	0.59	0.64	0.60	0.64
OCDF	1.272	0.082	6.46 %	1.19	1.17	1.31	1.25	1.35	1.36
OCDD	1.128	0.067	5.95 %	1.24	1.05	1.13	1.07	1.14	1.14

File:23MY114D5 #1-514 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

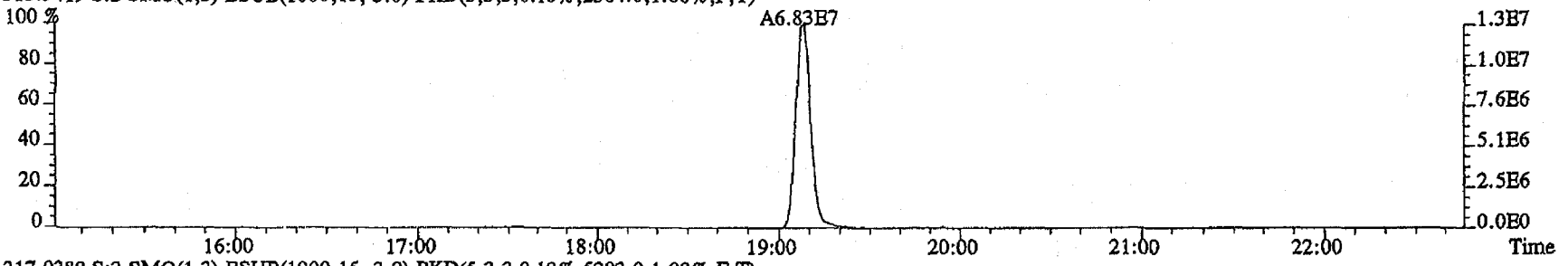
303.9016 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1076.0,1.00%,F,T)



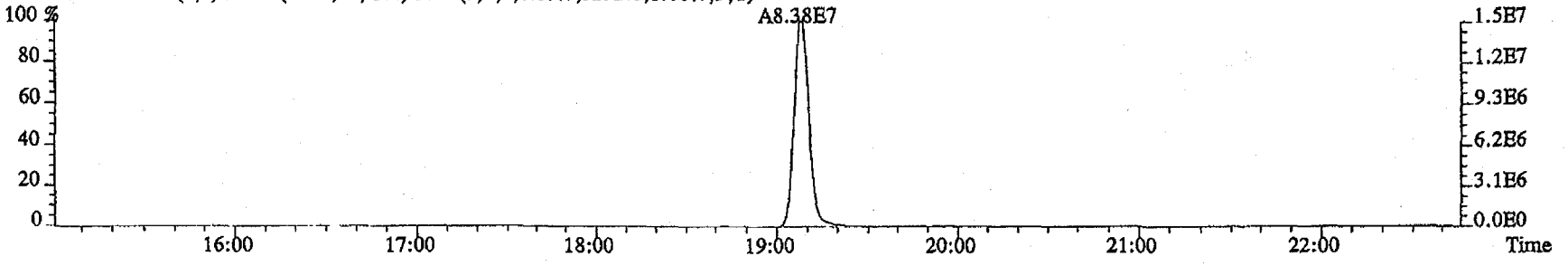
305.8987 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2380.0,1.00%,F,T)



315.9419 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2364.0,1.00%,F,T)

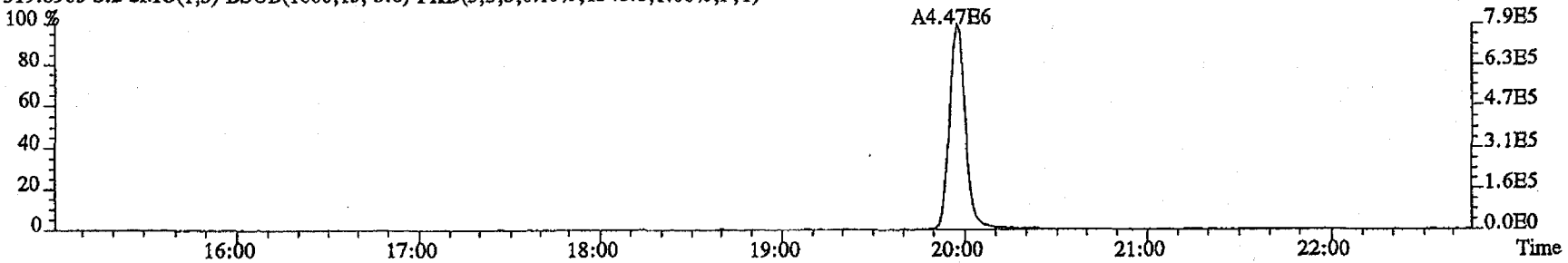


317.9389 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5292.0,1.00%,F,T)

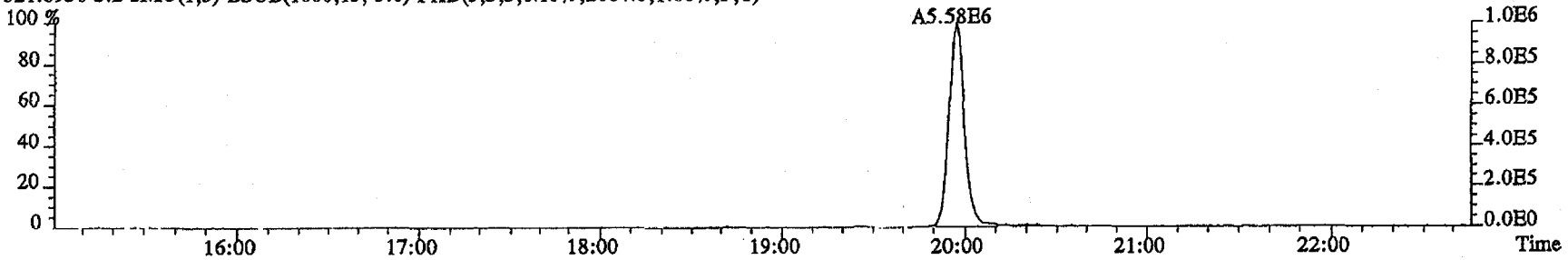


File:23MY114D5 #1-514 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

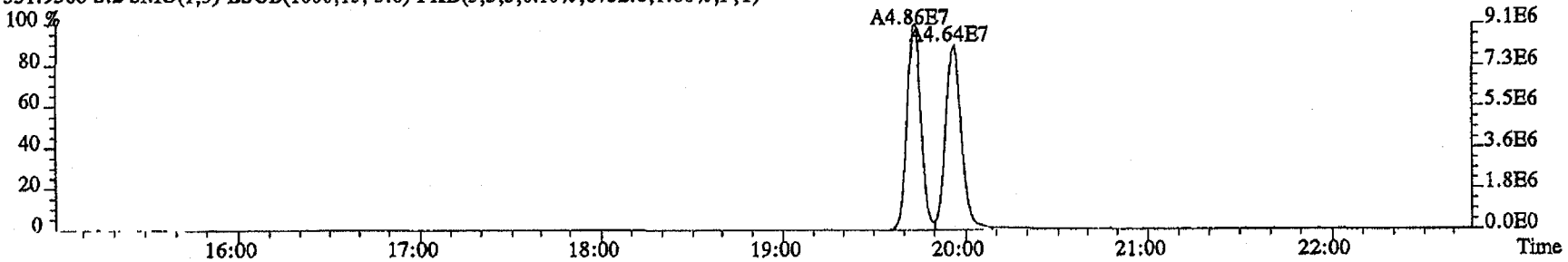
319.8965 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1348.0,1.00%,F,T)



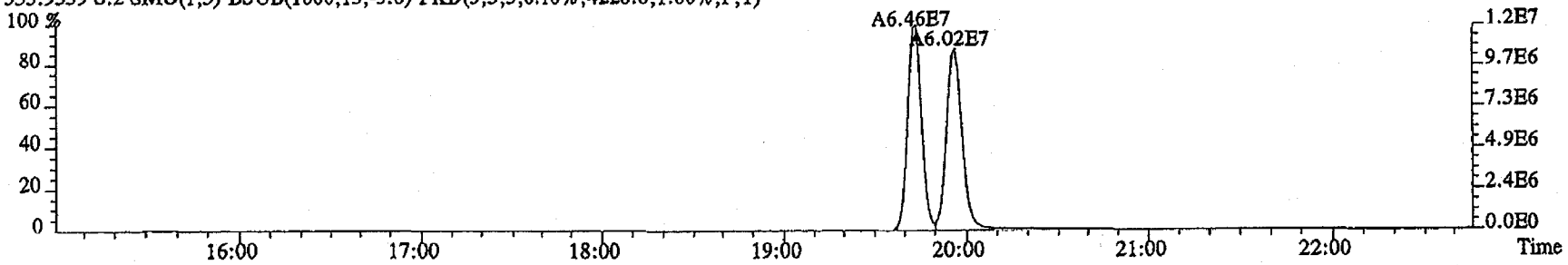
321.8936 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2064.0,1.00%,F,T)



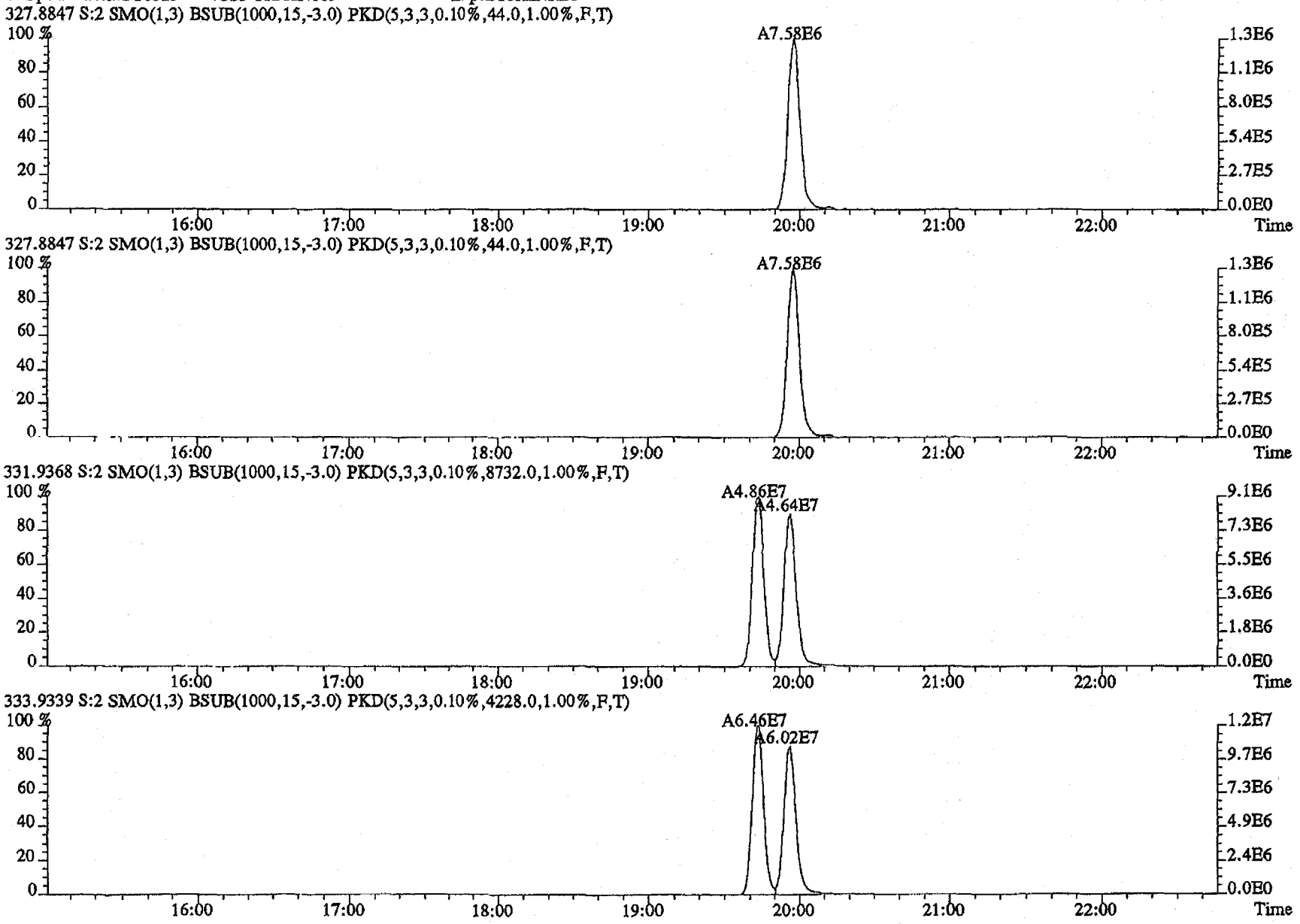
331.9368 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,8732.0,1.00%,F,T)



333.9339 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4228.0,1.00%,F,T)

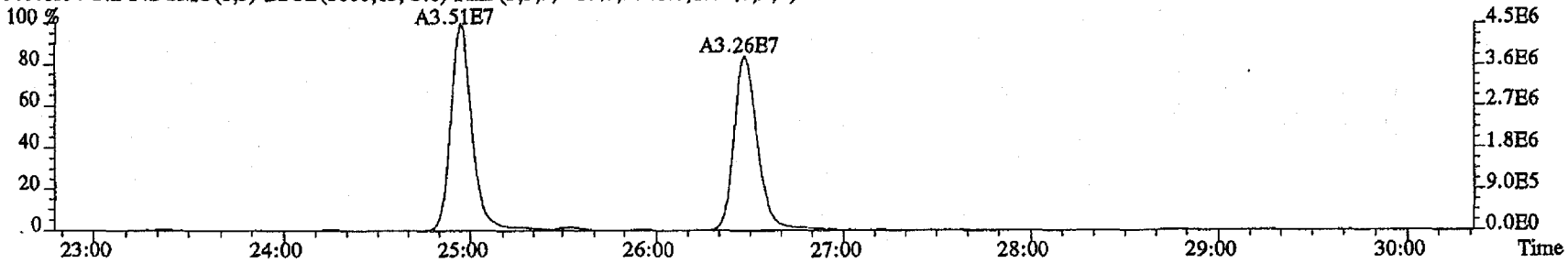


File:23MY114D5 #1-514 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

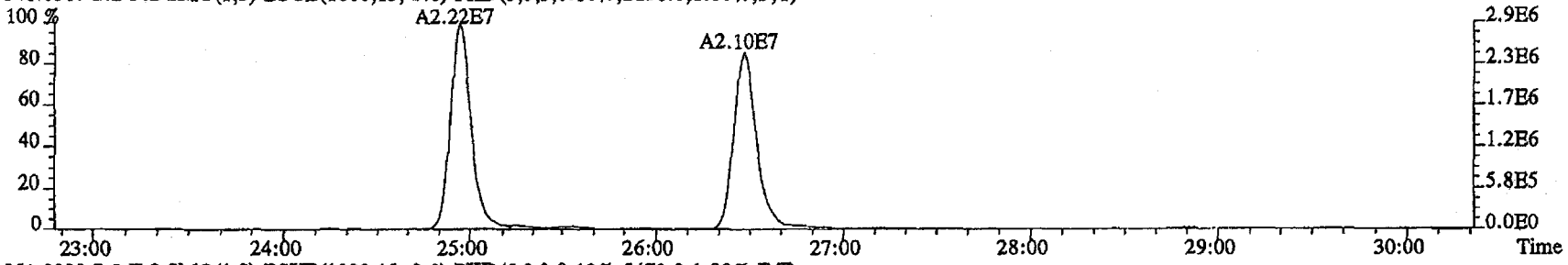


File:23MY114D5 #1-486 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

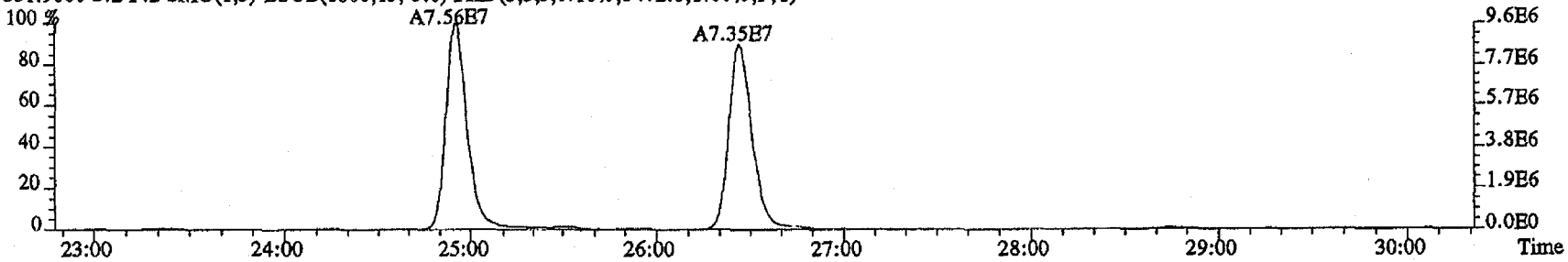
339.8597 S:2 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2768.0,1.00%,F,T)



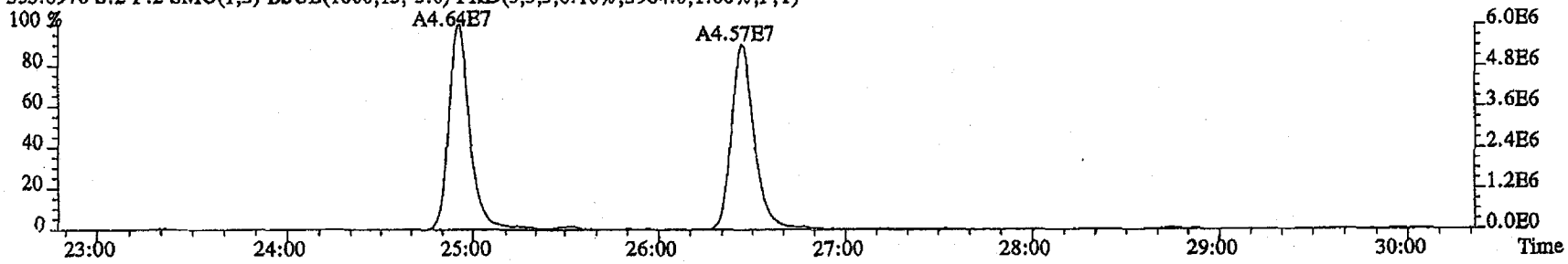
341.8567 S:2 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2136.0,1.00%,F,T)



351.9000 S:2 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5472.0,1.00%,F,T)

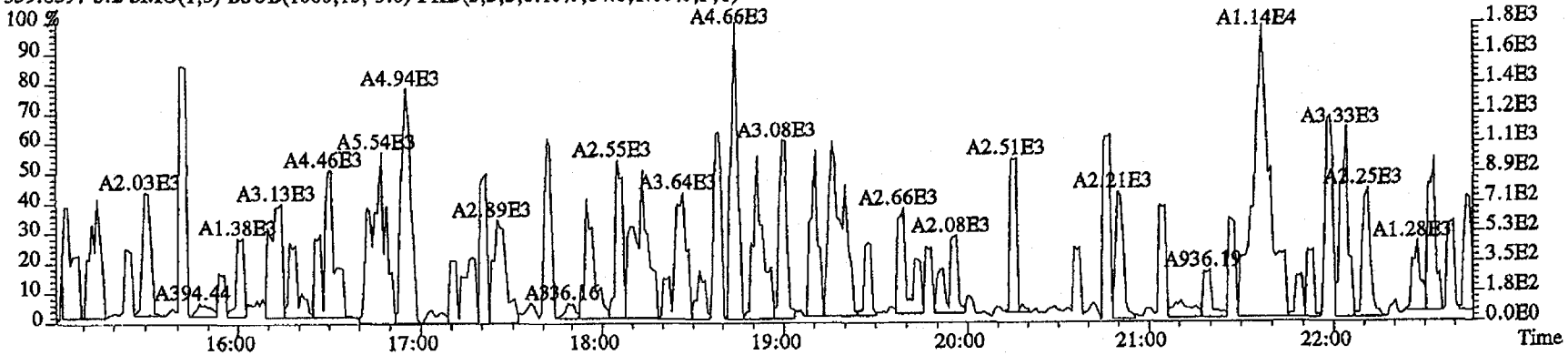


353.8970 S:2 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3984.0,1.00%,F,T)

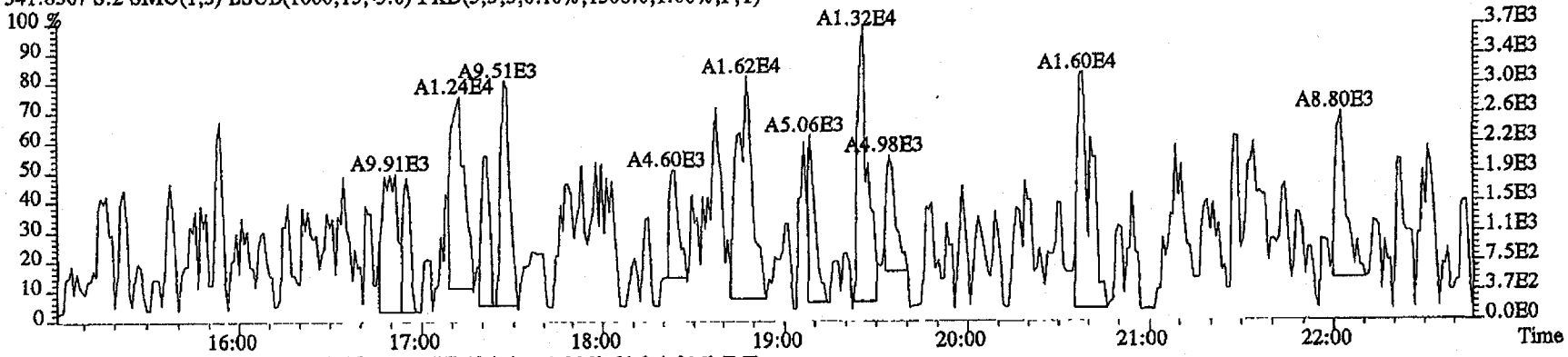


File:23MY114D5 #1-514 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

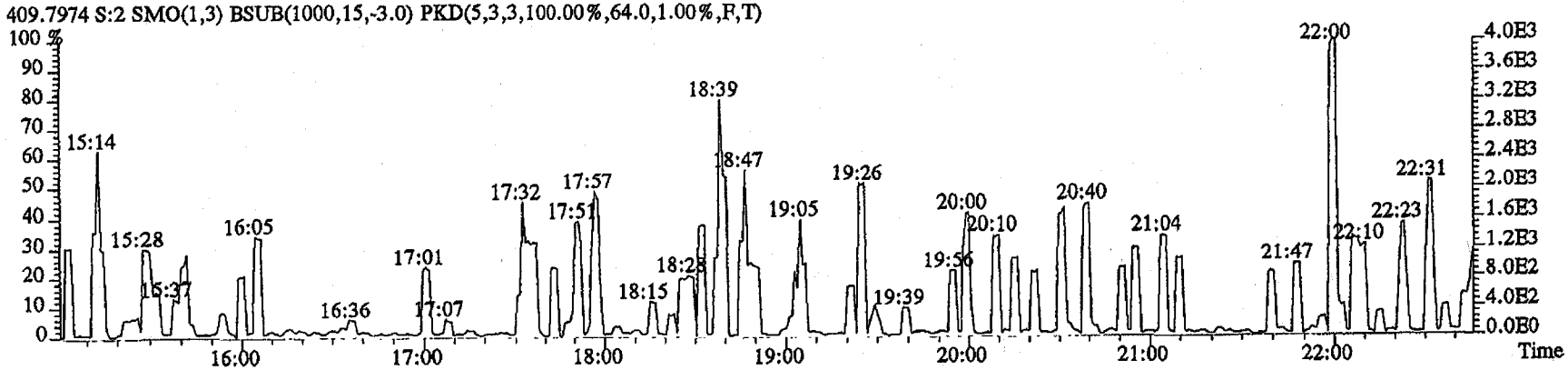
339.8597 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,84.0,1.00%,F,T)



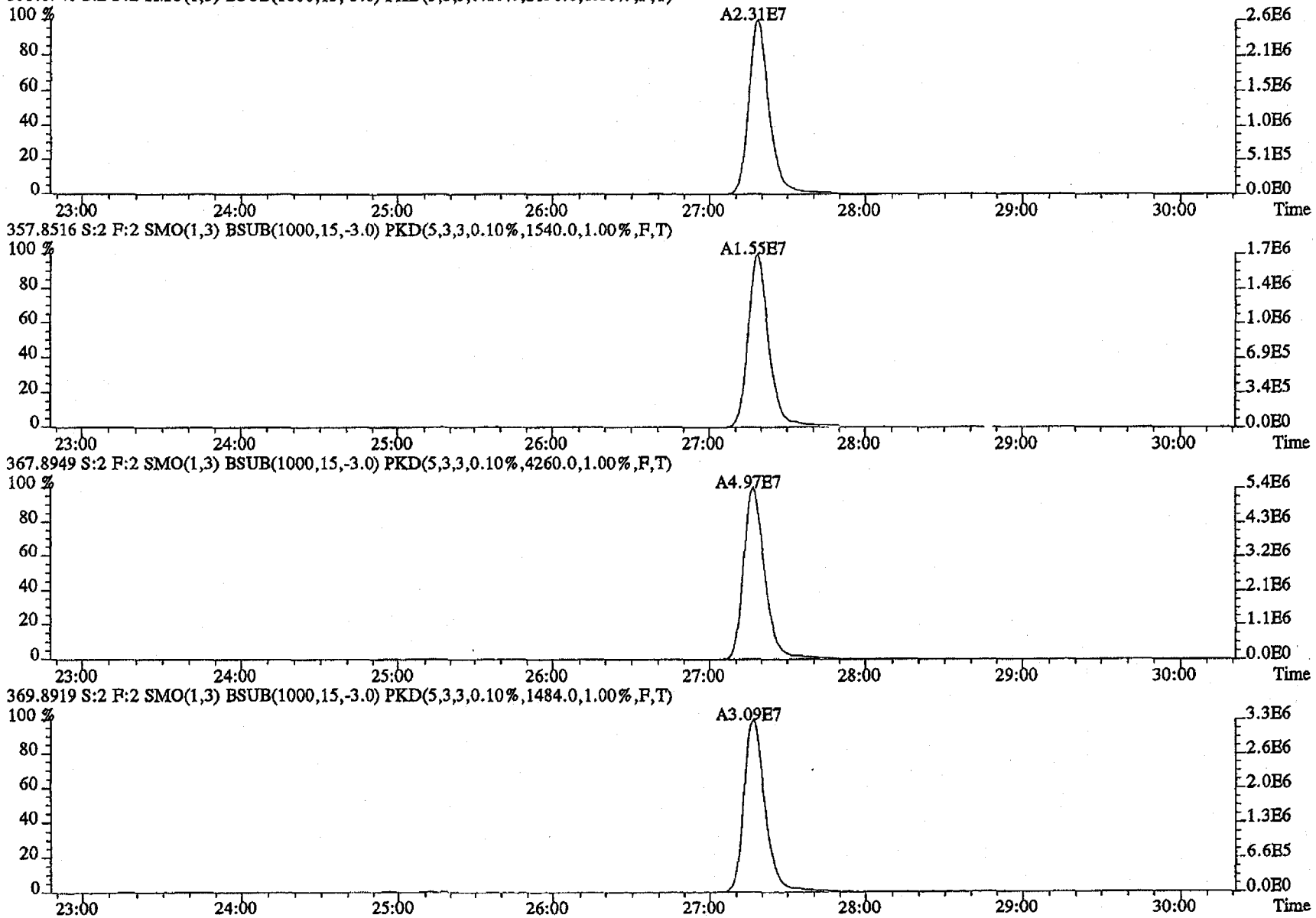
341.8567 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1308.0,1.00%,F,T)



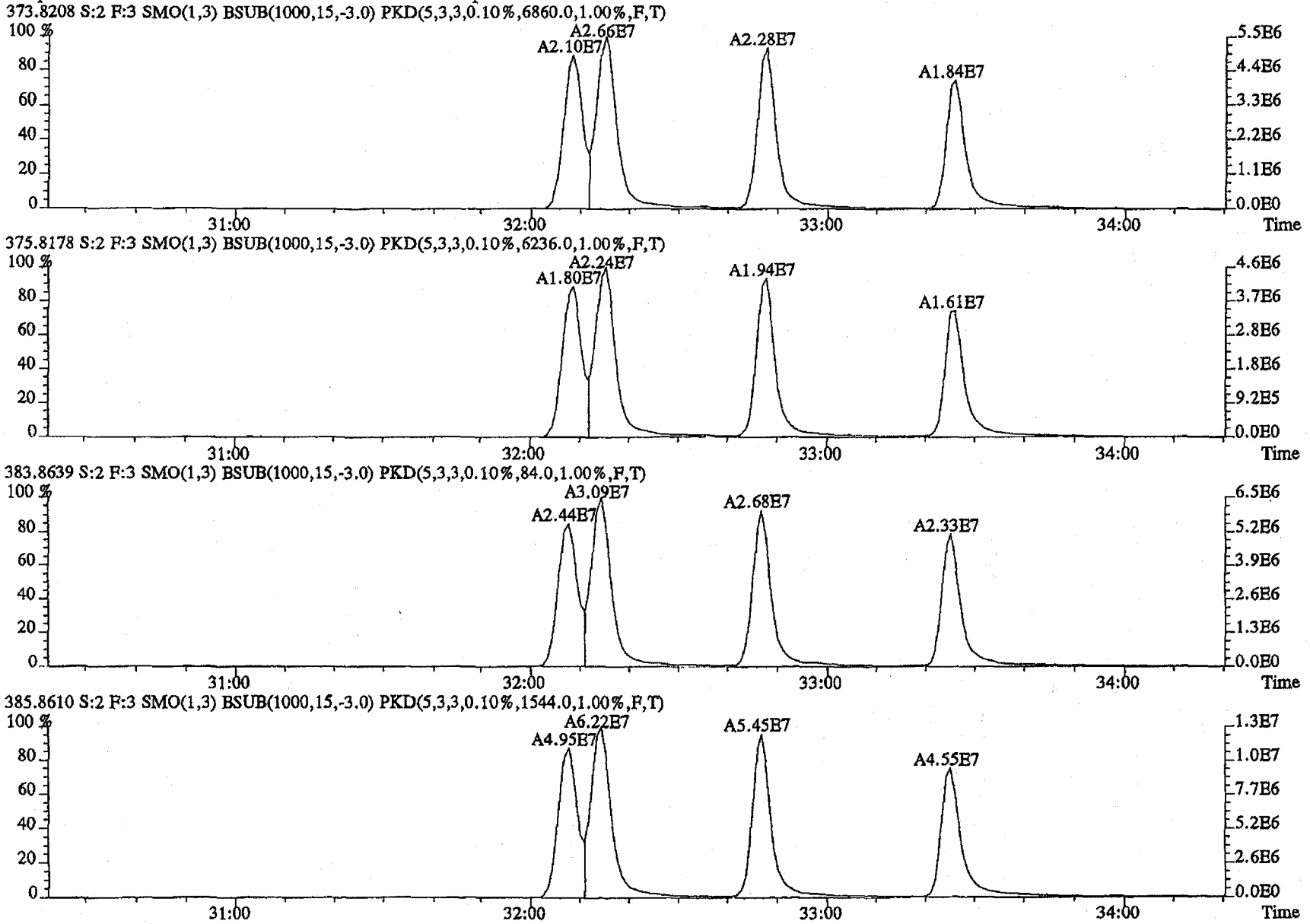
409.7974 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,64.0,1.00%,F,T)



File:23MY114D5 #1-486 Acq:23-MAY-2011 10:34:39 GC BI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

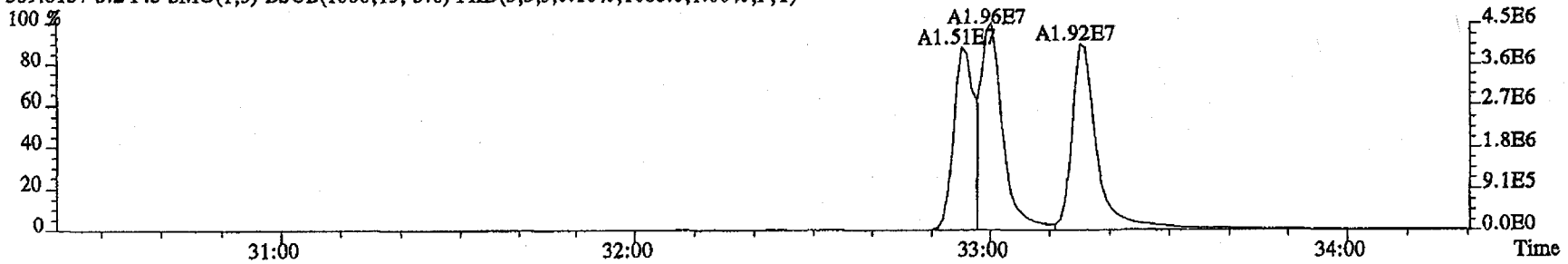


File:23MY114D5 #1-286 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

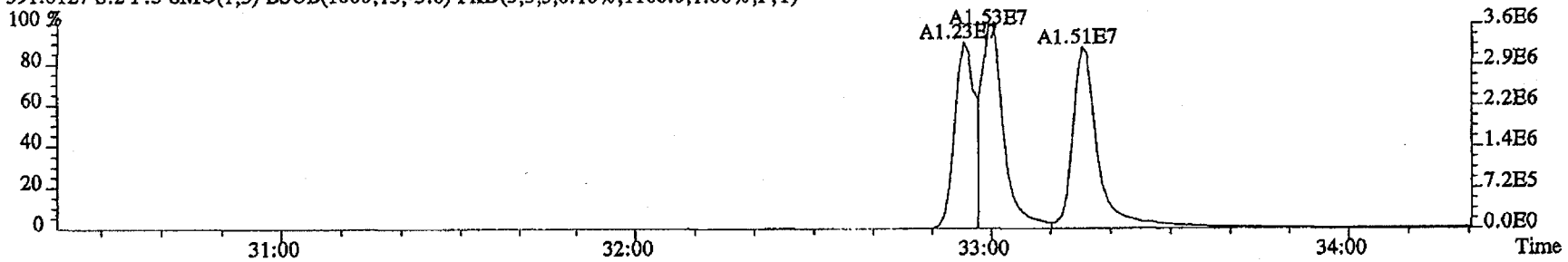


File:23MY114D5 #1-286 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

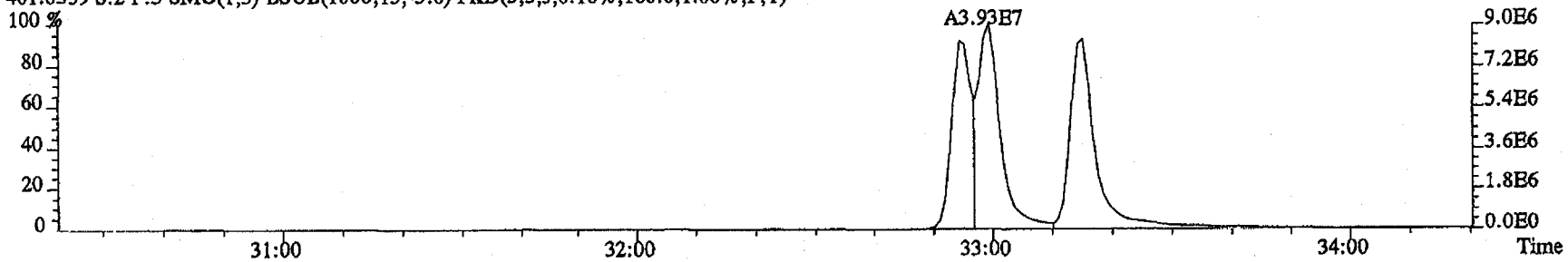
389.8157 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1688.0,1.00%,F,T)



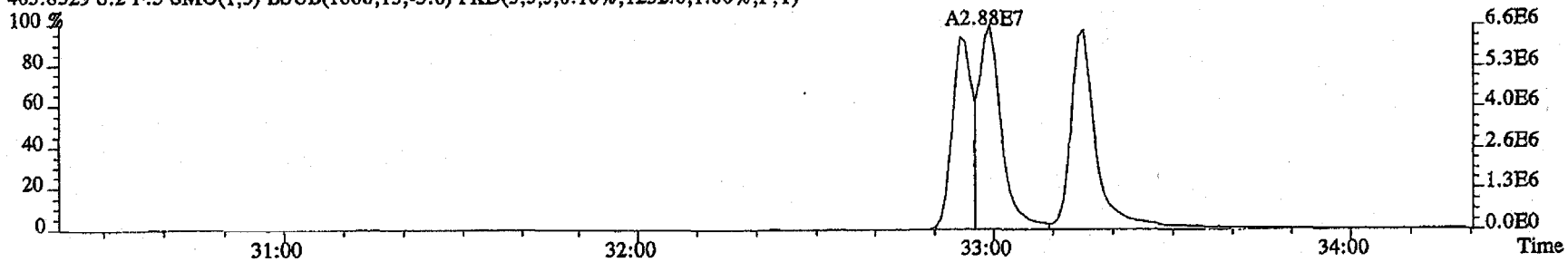
391.8127 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1168.0,1.00%,F,T)



401.8559 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,160.0,1.00%,F,T)

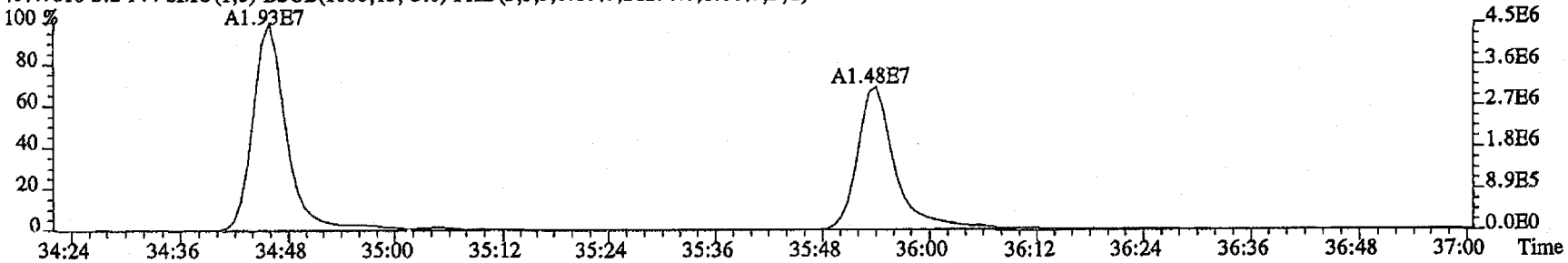


403.8529 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1232.0,1.00%,F,T)

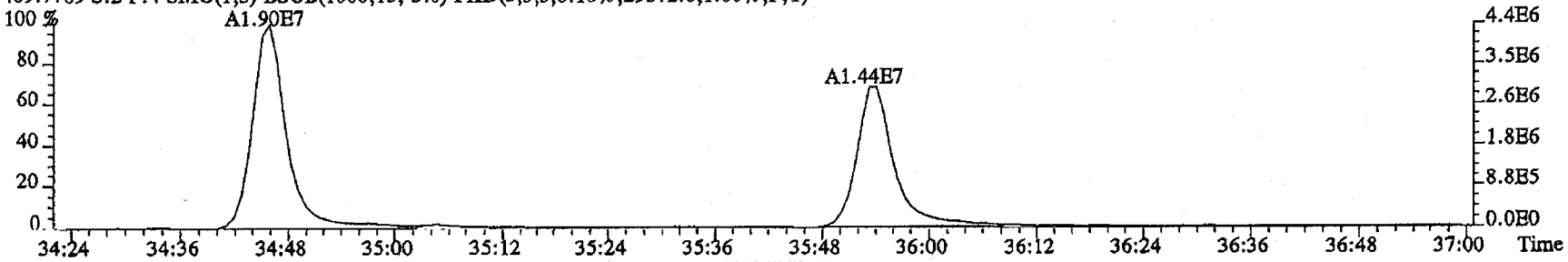


File:23MY114D5 #1-201 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

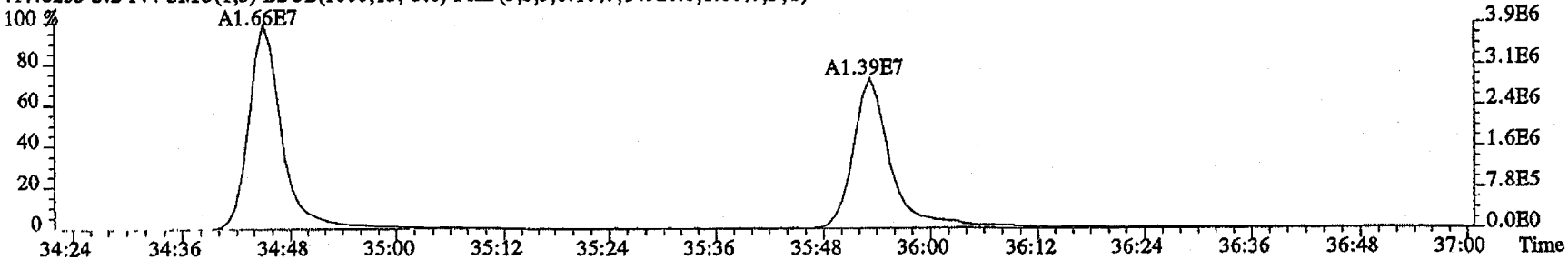
407.7818 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,21296.0,1.00%,F,T)



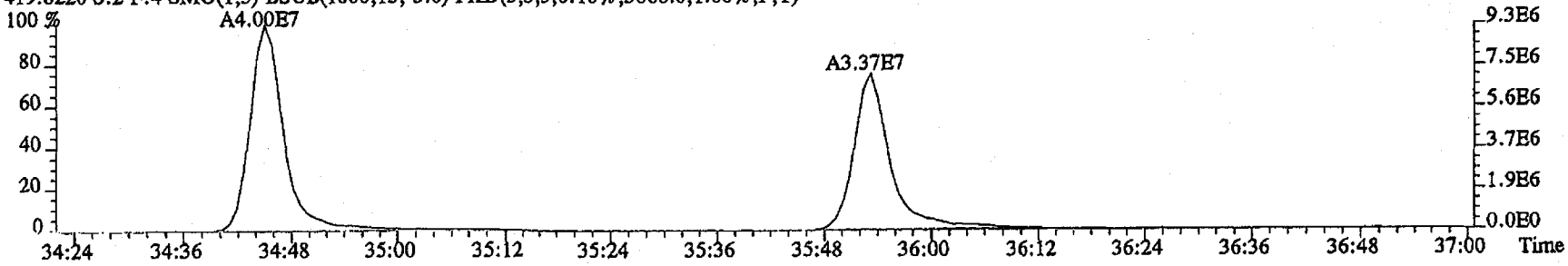
409.7789 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,29572.0,1.00%,F,T)



417.8253 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,14920.0,1.00%,F,T)

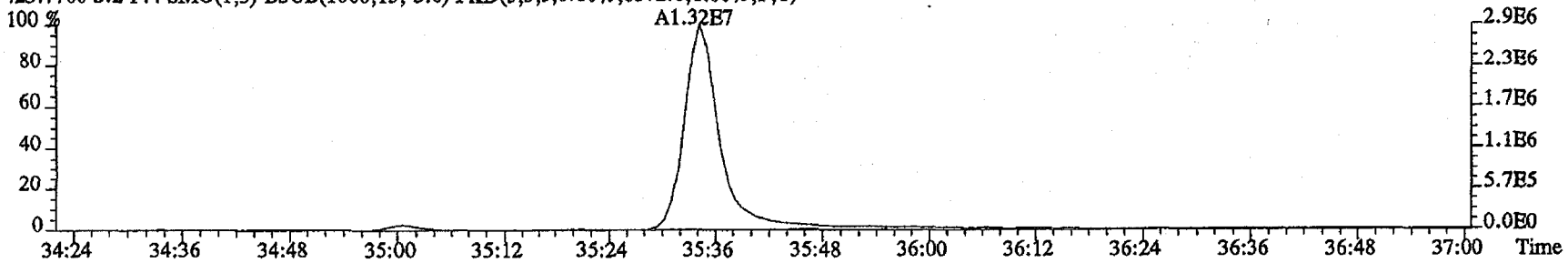


419.8220 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3868.0,1.00%,F,T)

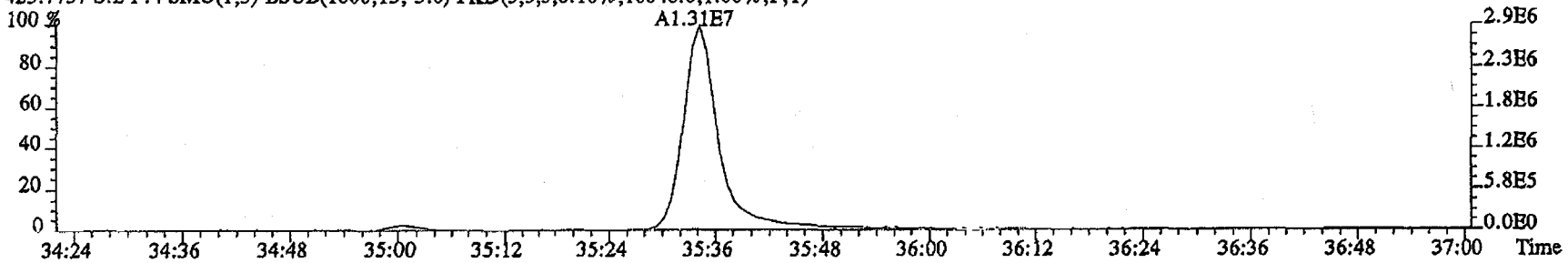


File:23MY114D5 #1-201 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

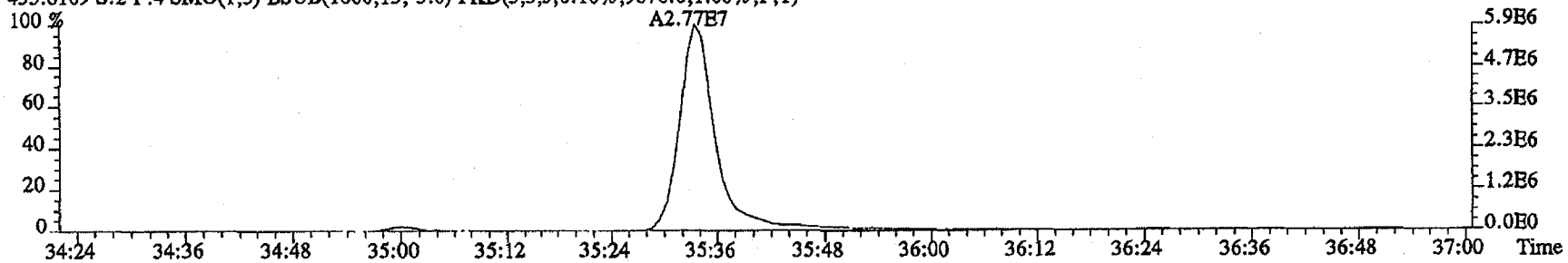
423.7766 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,8572.0,1.00%,F,T)



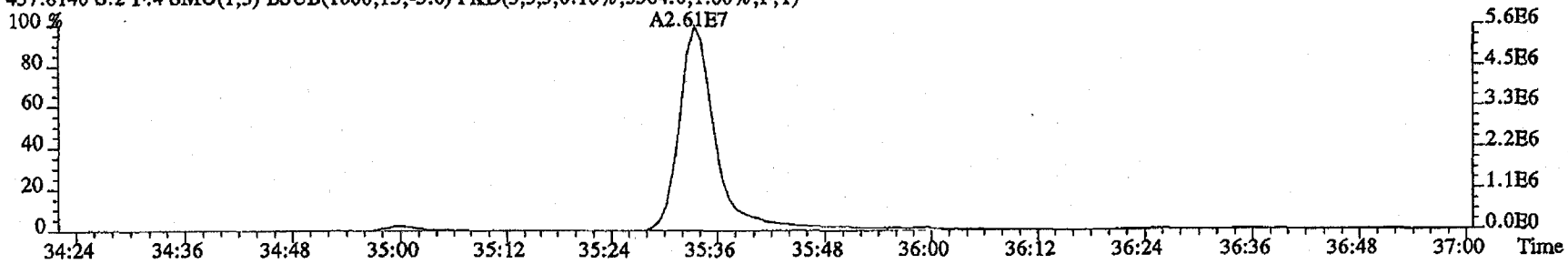
425.7737 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,10048.0,1.00%,F,T)



435.8169 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9876.0,1.00%,F,T)

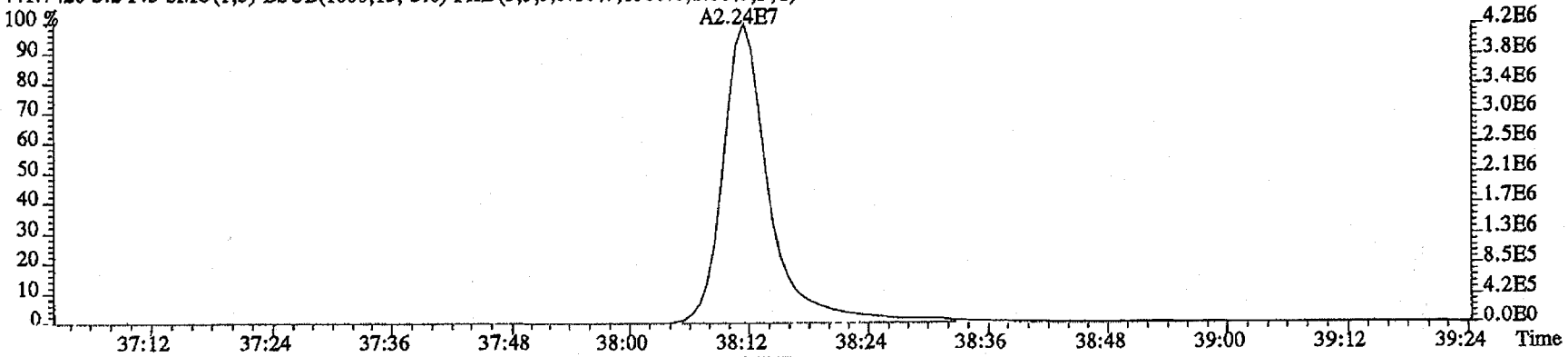


437.8140 S:2 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5364.0,1.00%,F,T)

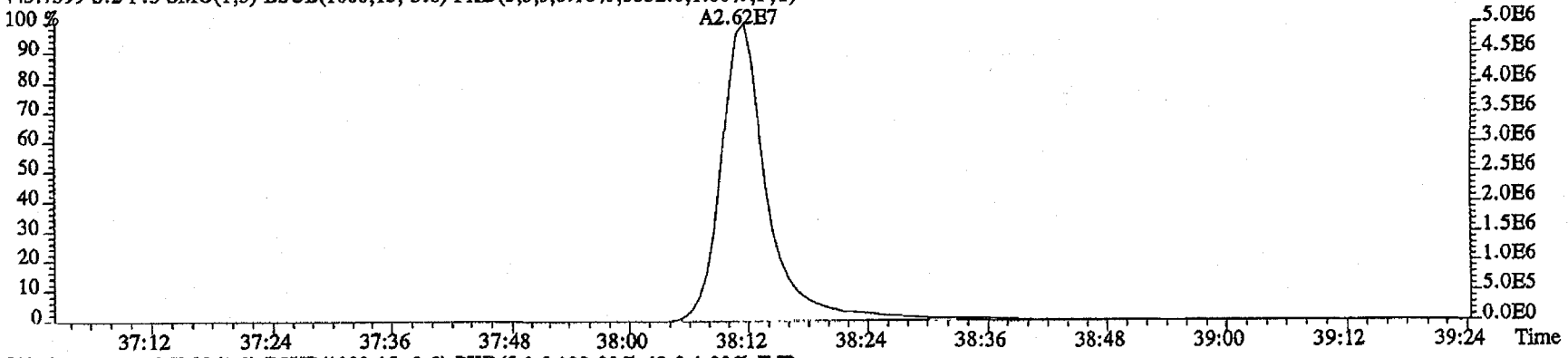


File:23MY114D5 #1-192 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

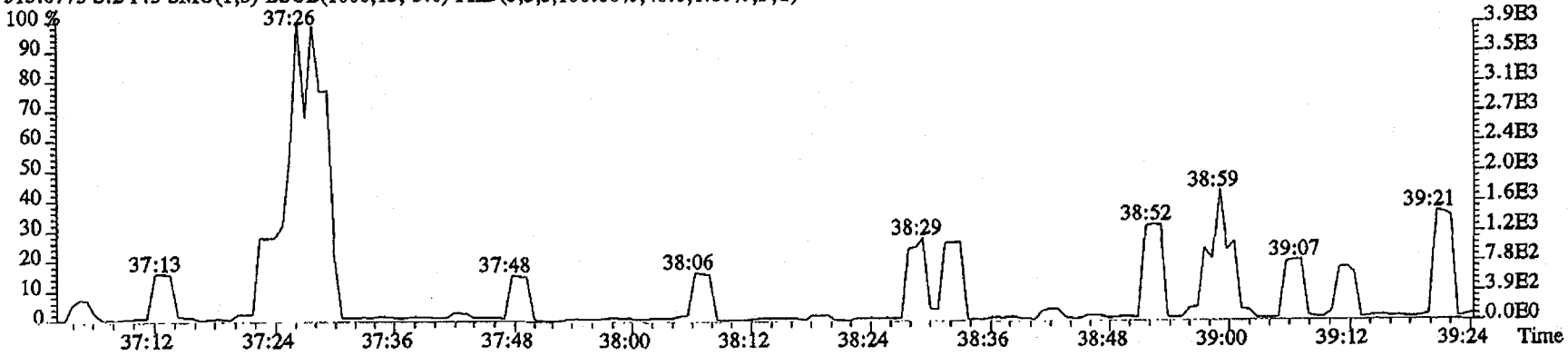
441.7428 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1580.0,1.00%,F,T)



443.7399 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5552.0,1.00%,F,T)

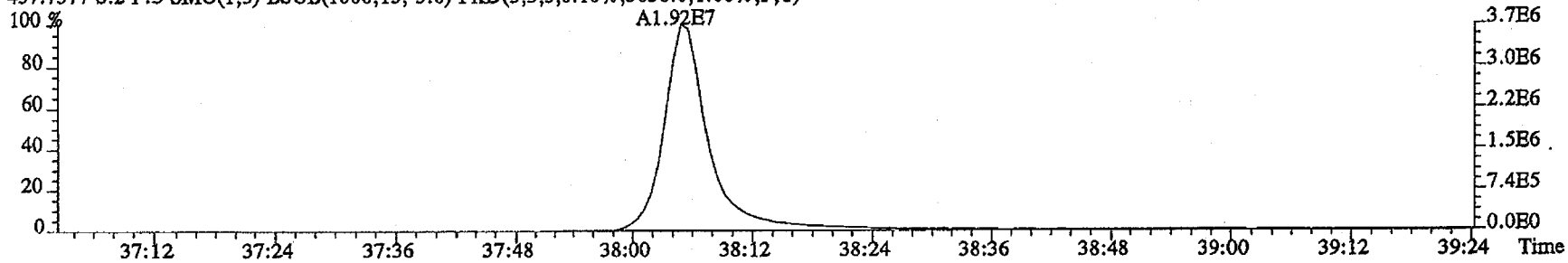


513.6775 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,48.0,1.00%,F,T)

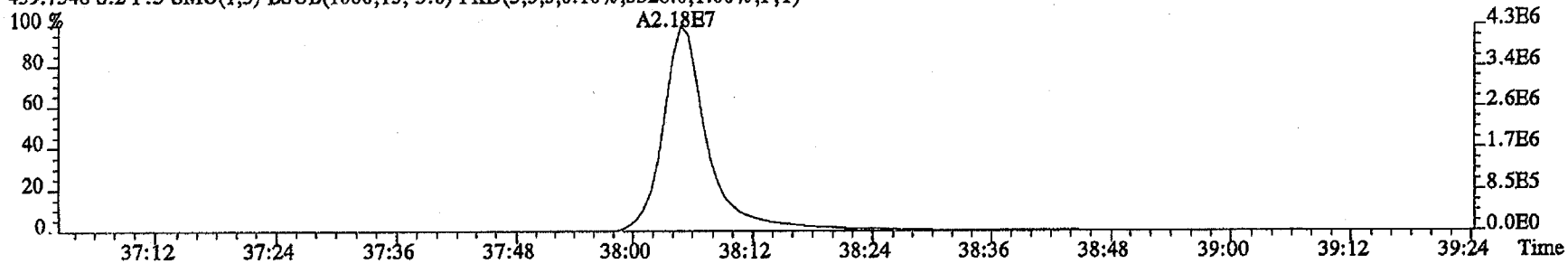


File:23MY114D5 #1-192 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES

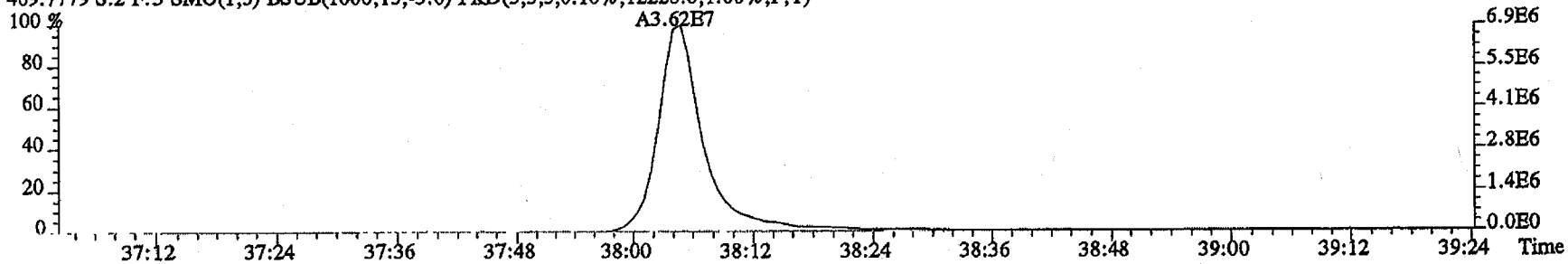
457.7377 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3656.0,1.00%,F,T)



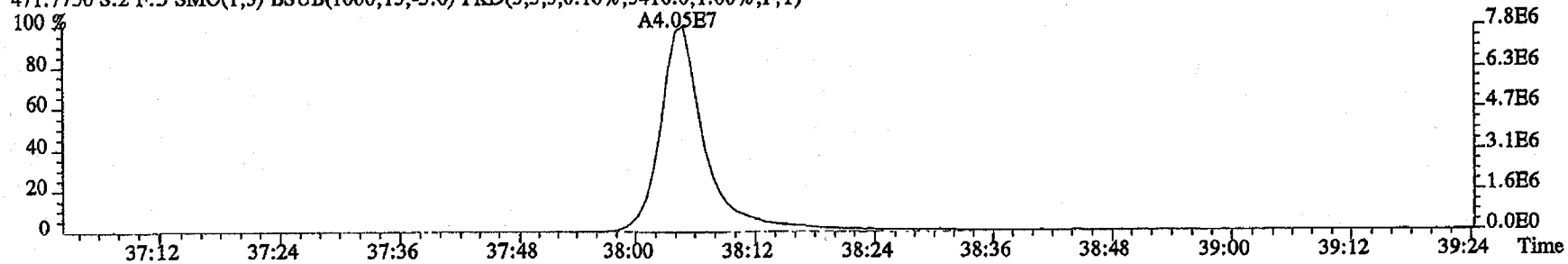
459.7348 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3328.0,1.00%,F,T)



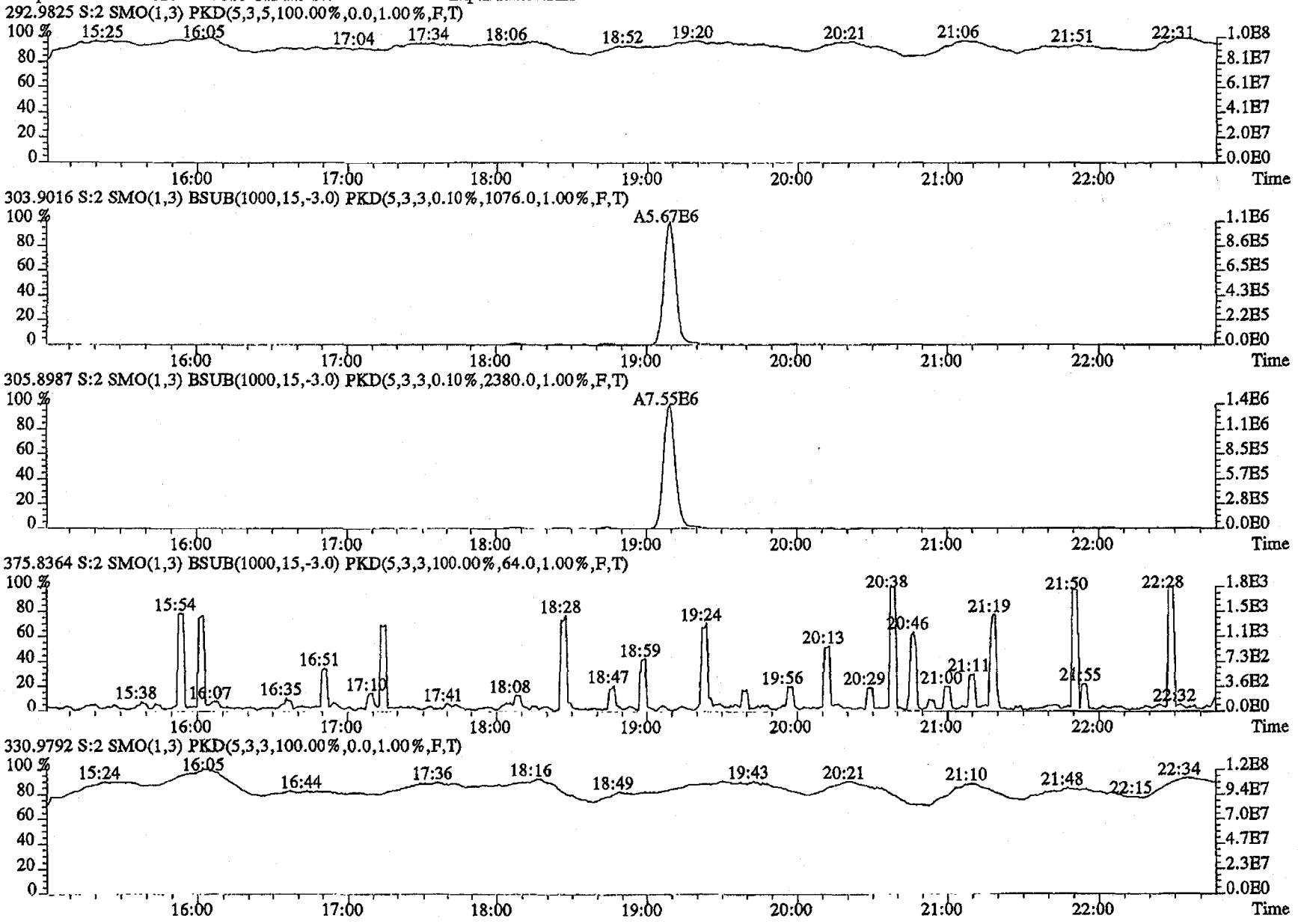
469.7779 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,12228.0,1.00%,F,T)



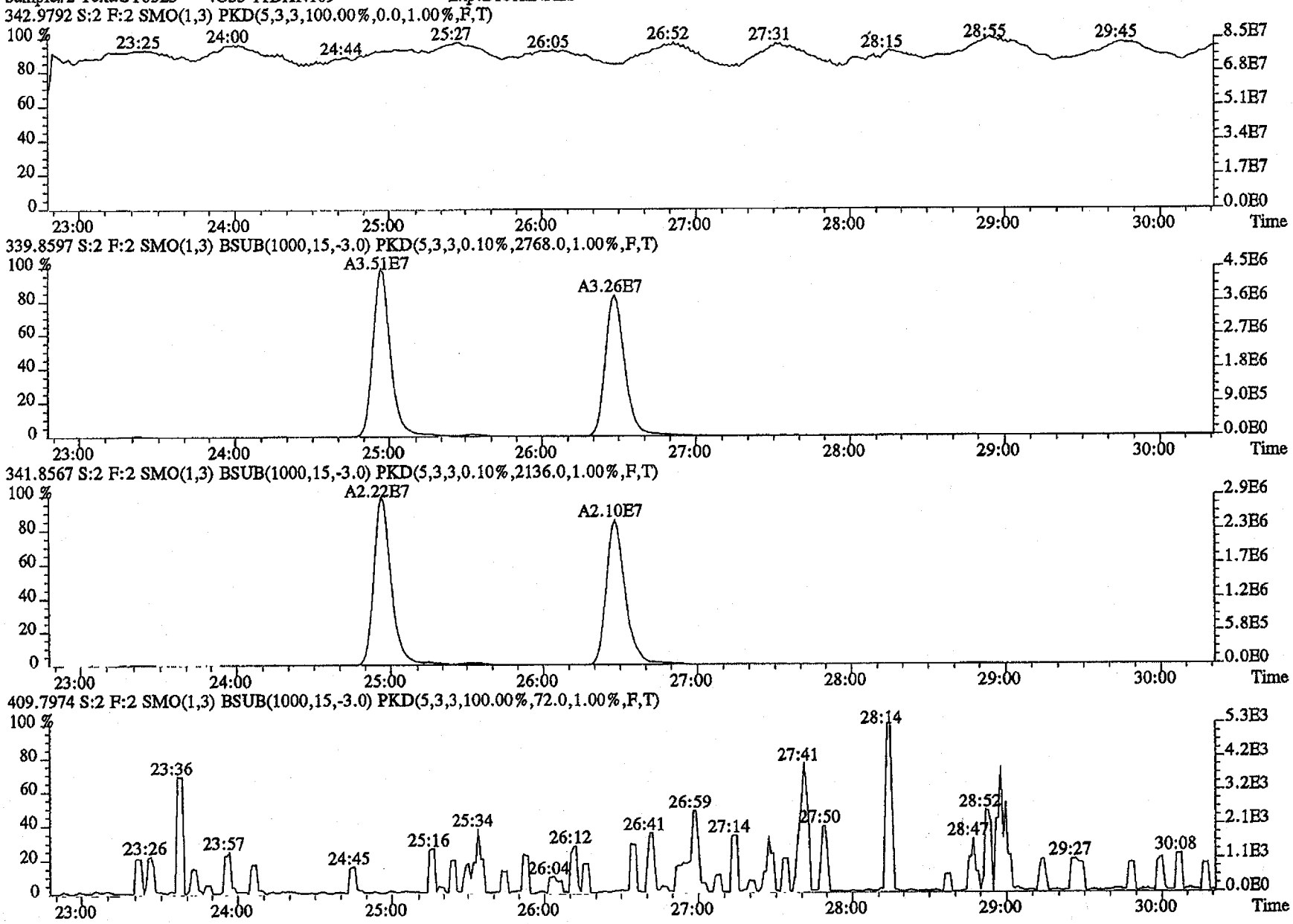
471.7750 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5416.0,1.00%,F,T)



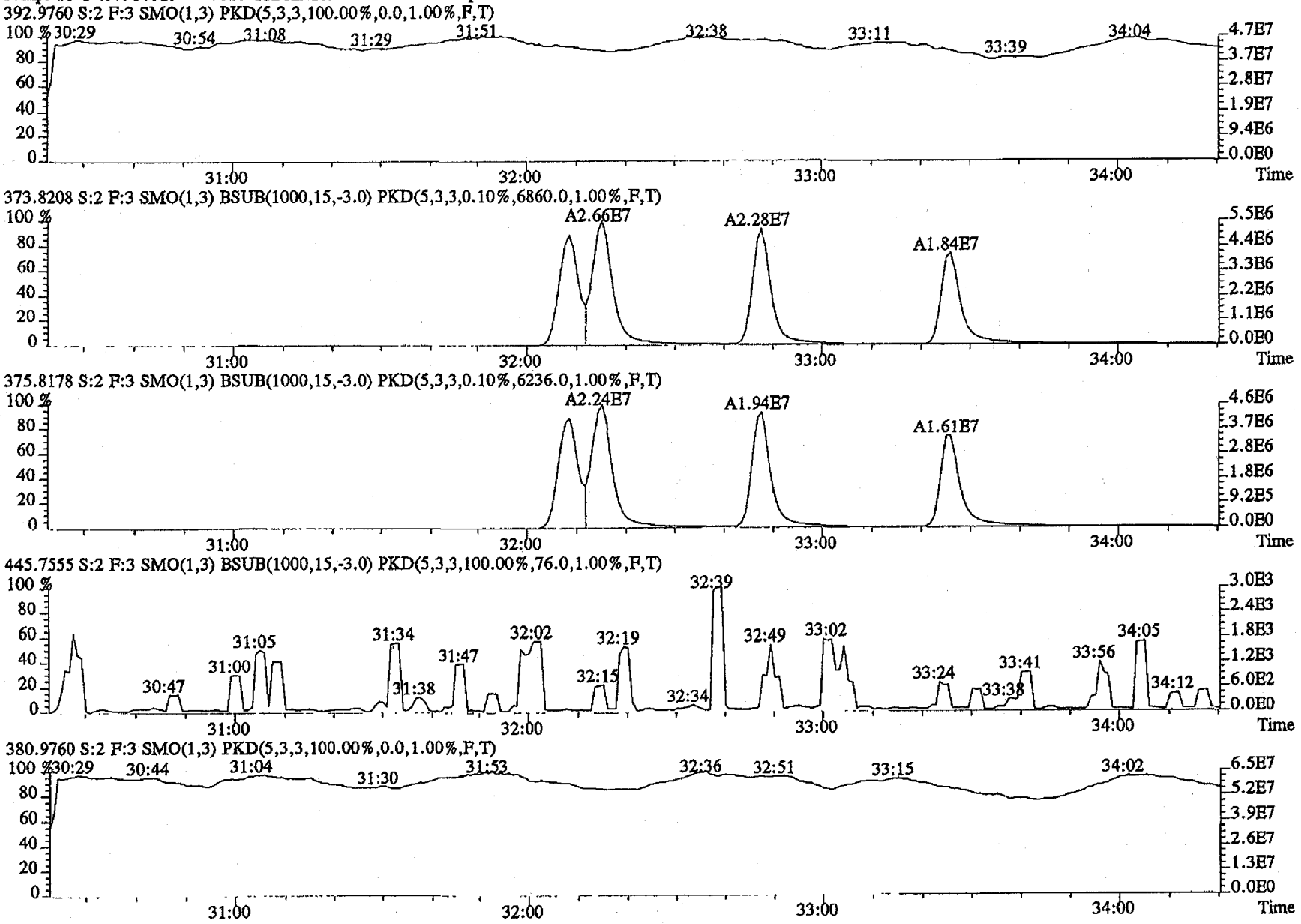
File:23MY114D5 #1-514 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES



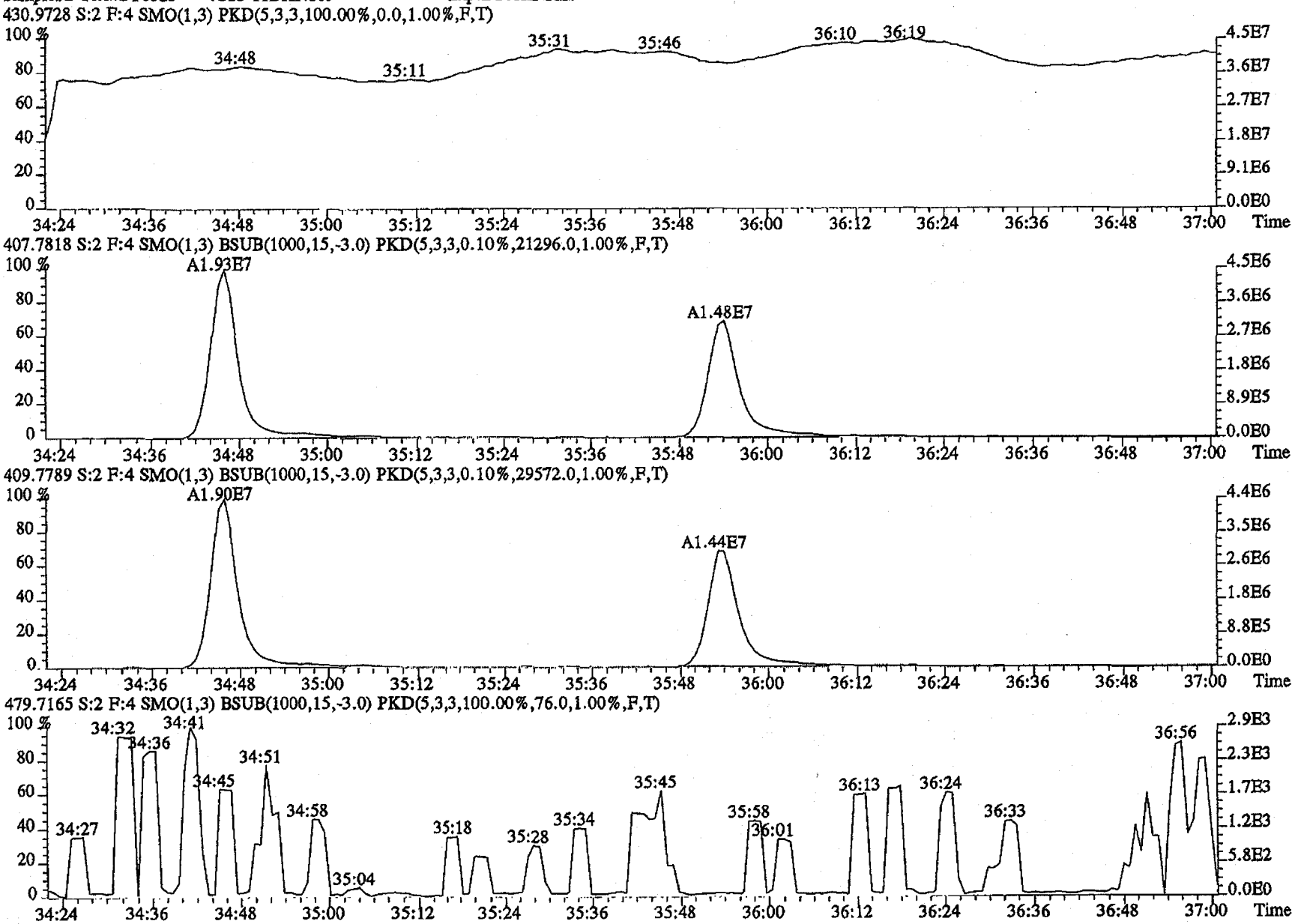
File:23MY114D5 #1-486 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES



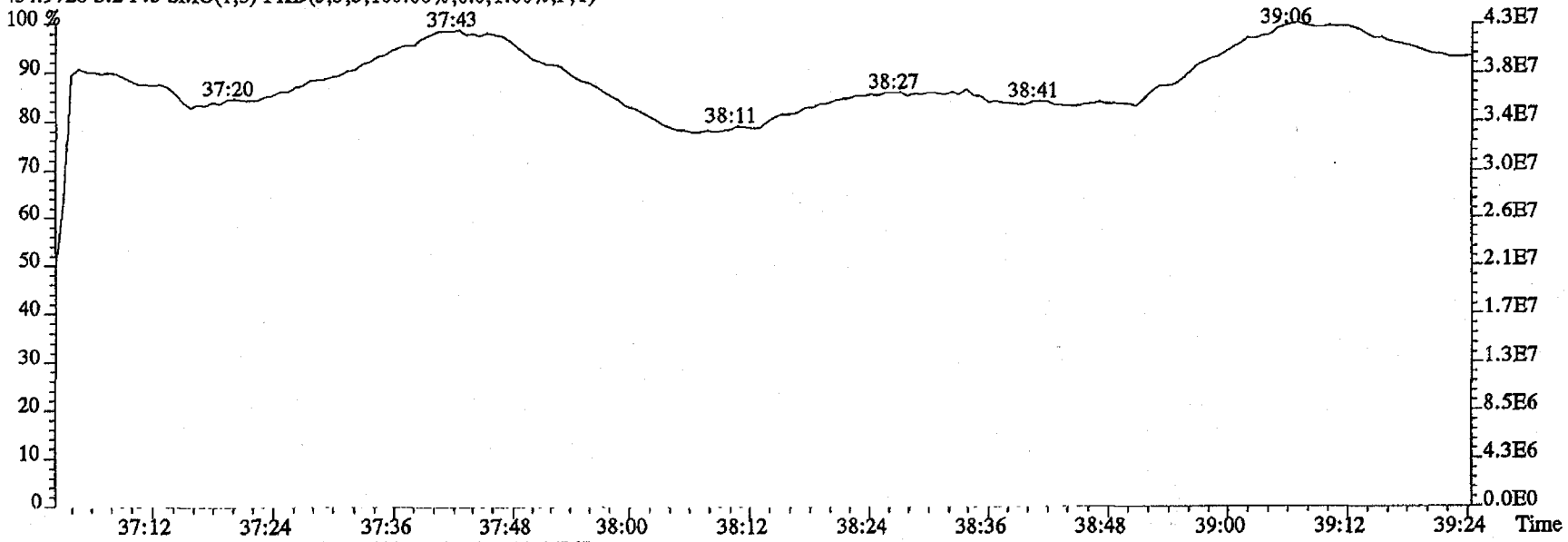
File:23MY114D5 #1-286 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES



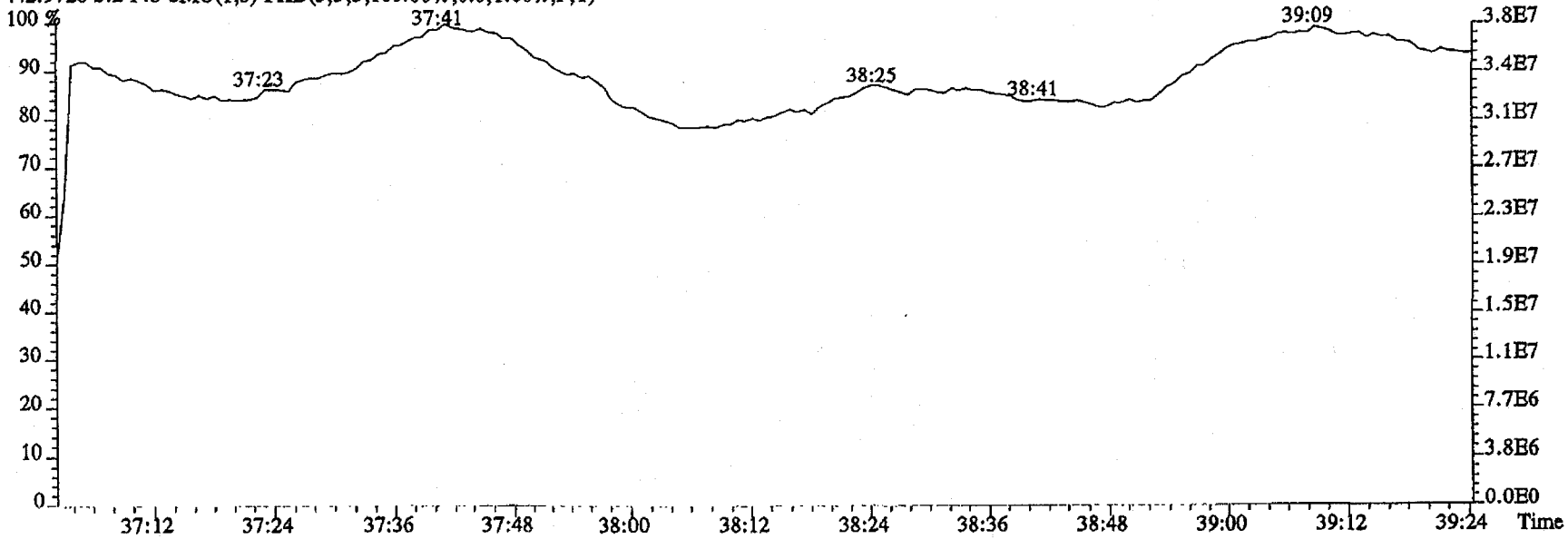
File:23MY114D5 #1-201 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES



File:23MY114D5 #1-192 Acq:23-MAY-2011 10:34:39 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:ST0523 :CS3 11DXN109 Exp:DIOXINRES
454.9728 S:2 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

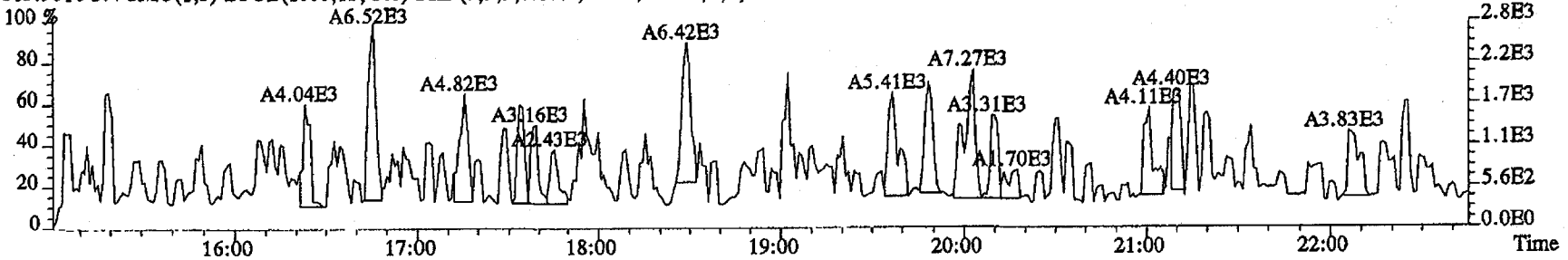


442.9728 S:2 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

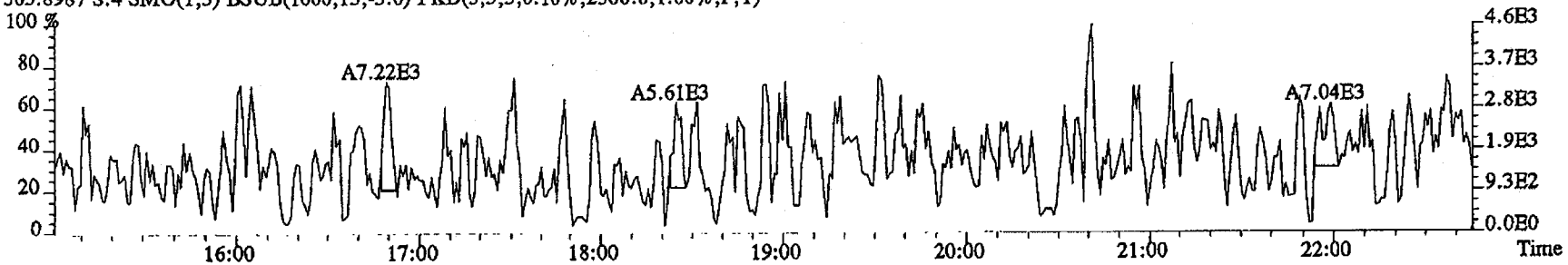


File:23MY114D5 #1-513 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

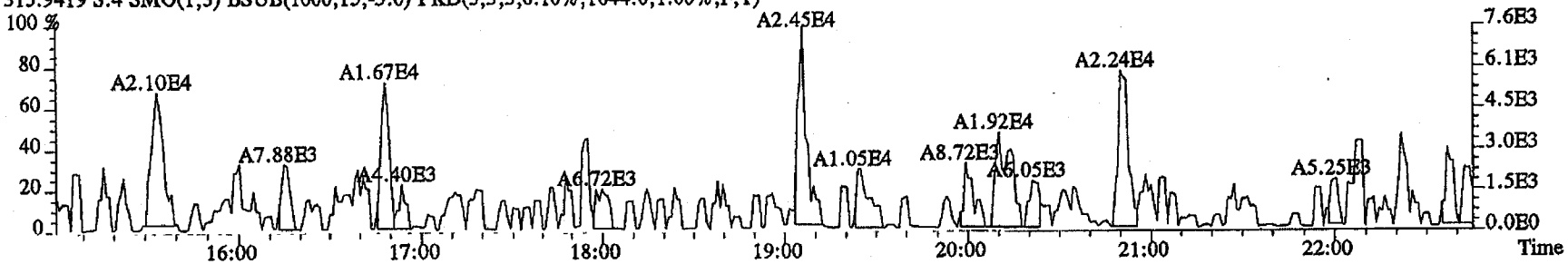
303.9016 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,796.0,1.00%,F,T)



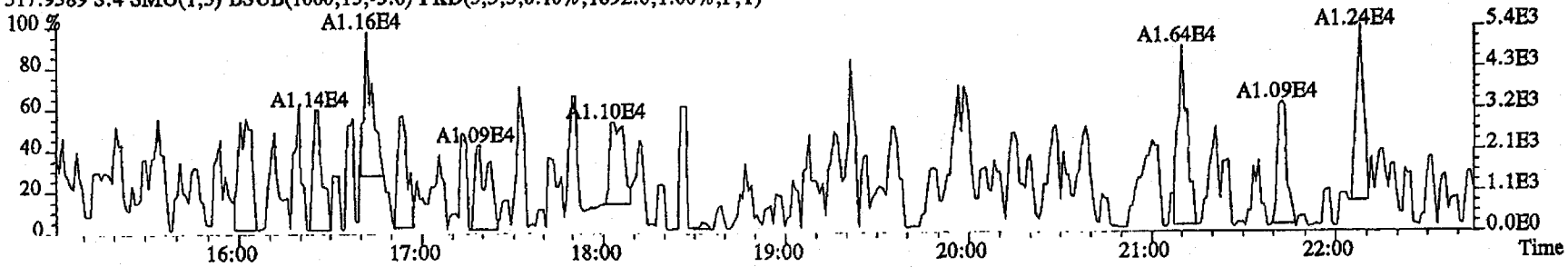
305.8987 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2500.0,1.00%,F,T)



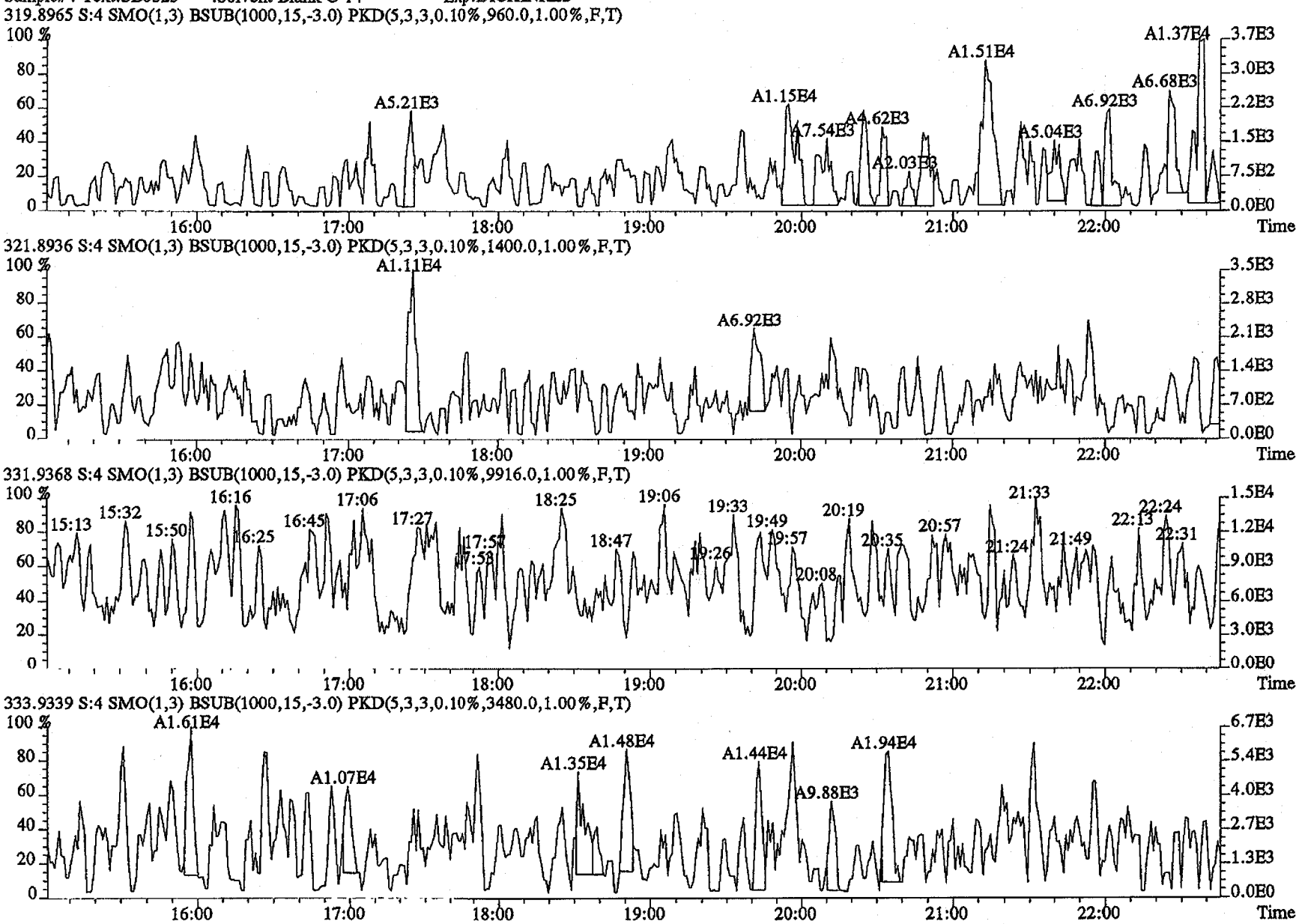
315.9419 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1644.0,1.00%,F,T)



317.9389 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1892.0,1.00%,F,T)

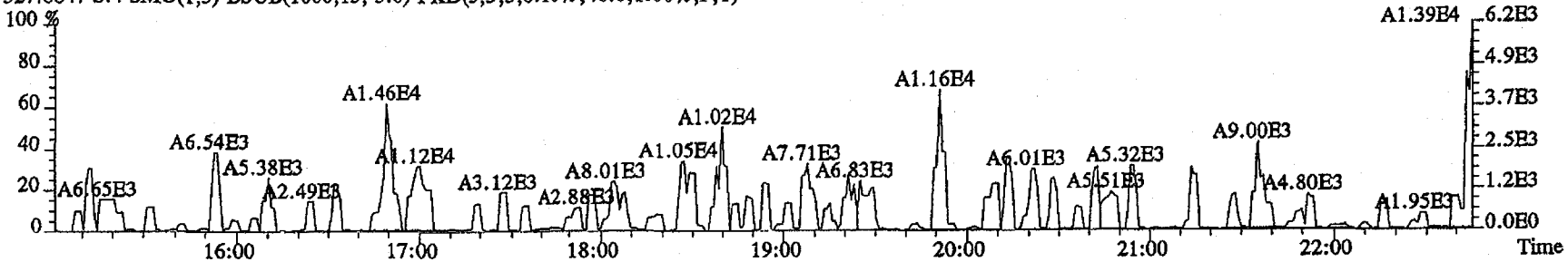


File:23MY114D5 #1-513 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

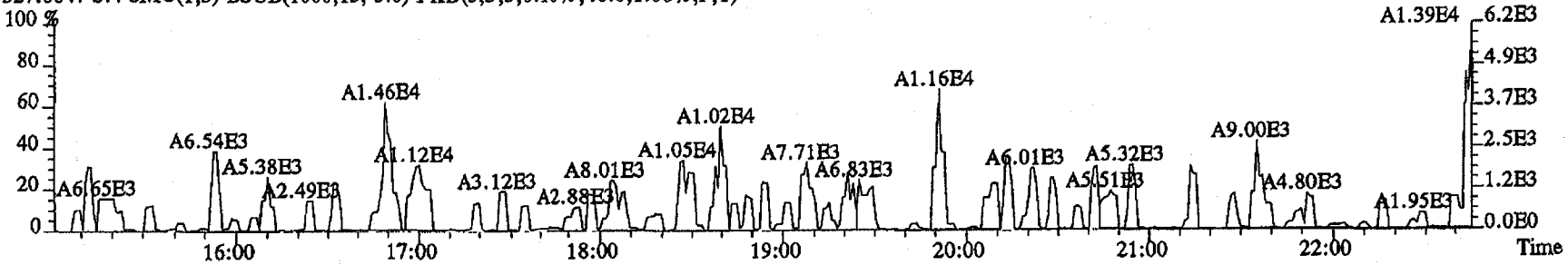


File:23MY114D5 #1-513 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

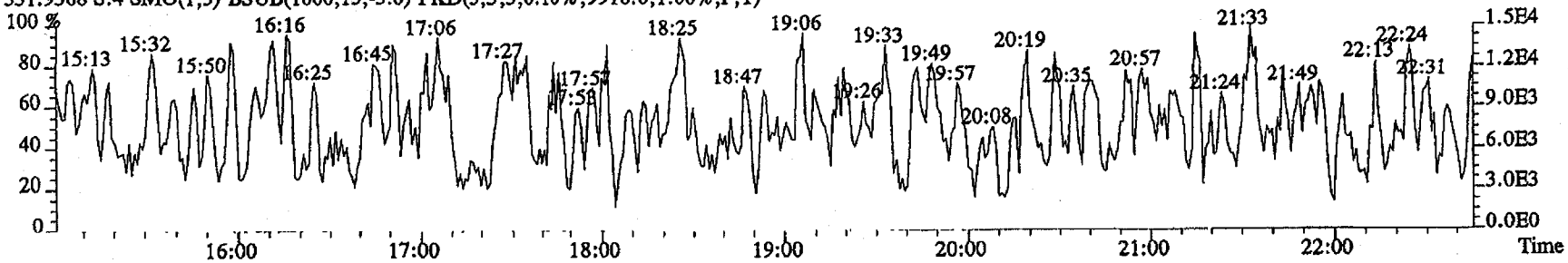
327.8847 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,48.0,1.00%,F,T)



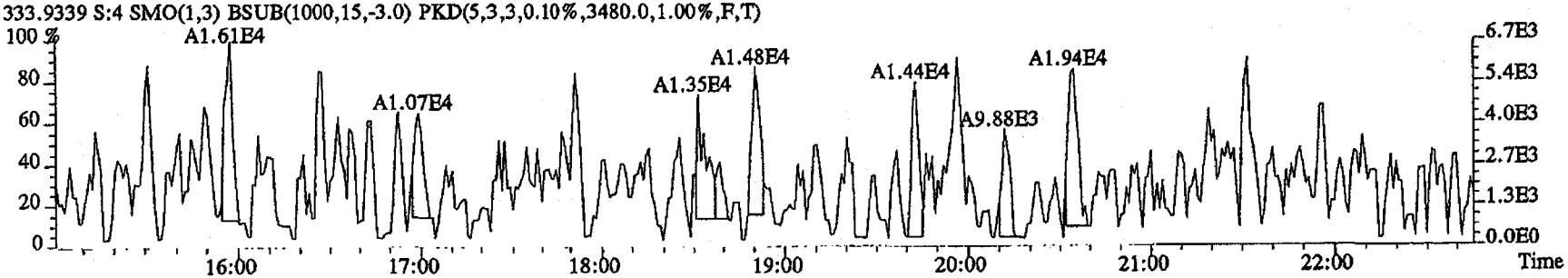
327.8847 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,48.0,1.00%,F,T)



331.9368 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9916.0,1.00%,F,T)

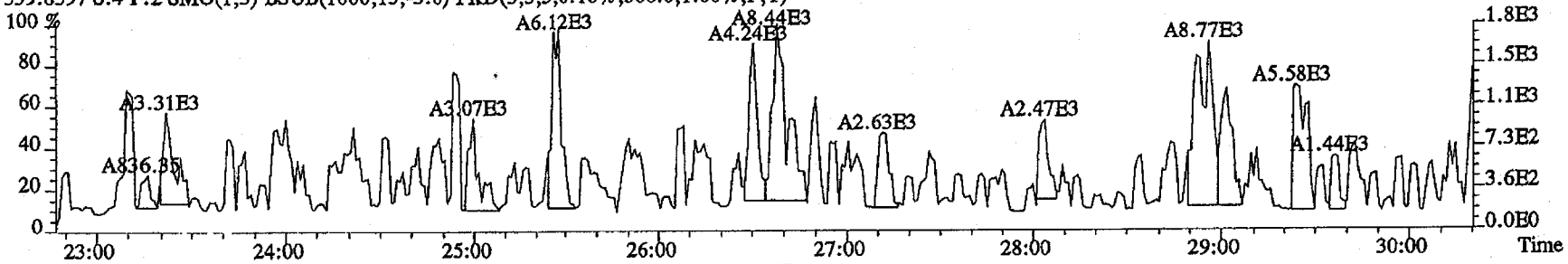


333.9339 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3480.0,1.00%,F,T)

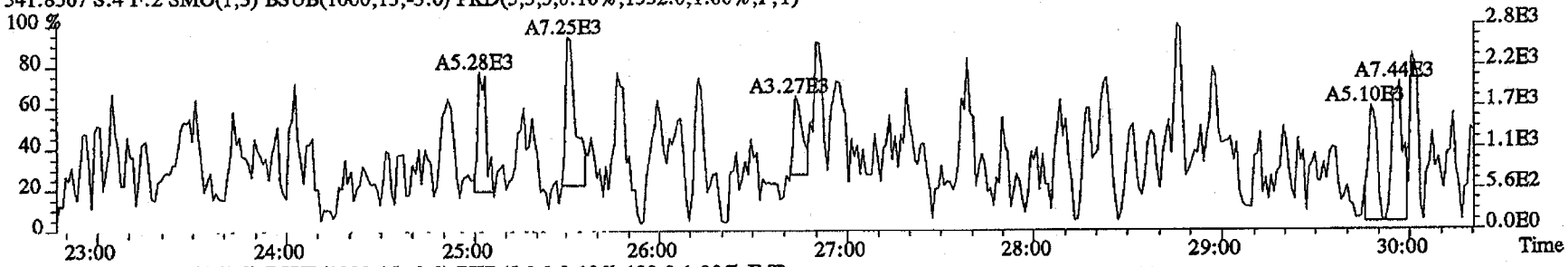


File:23MY114D5 #1-486 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

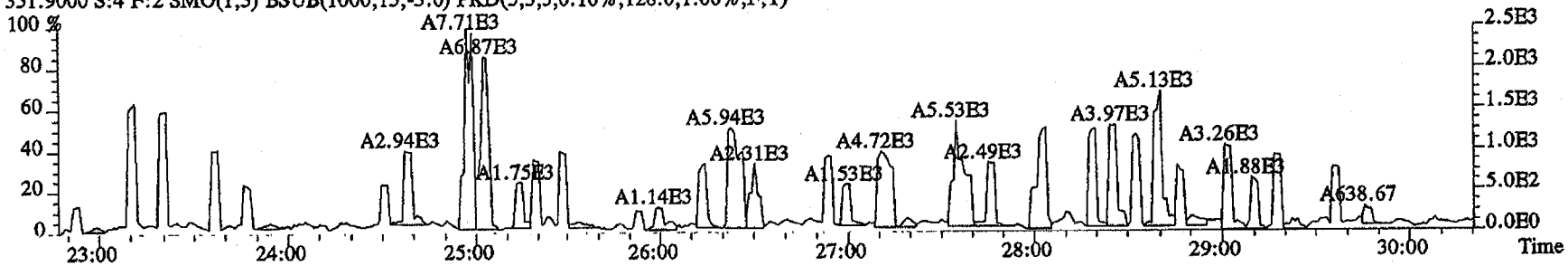
339.8597 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,508.0,1.00%,F,T)



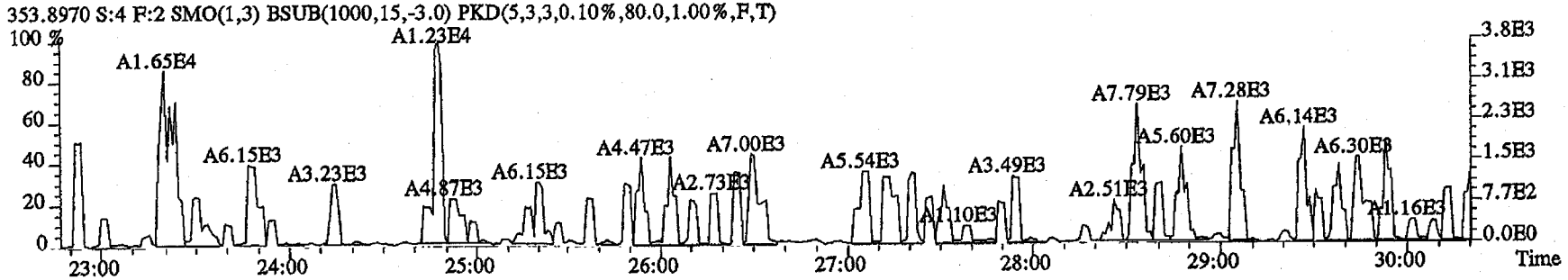
341.8567 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1352.0,1.00%,F,T)



351.9000 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,128.0,1.00%,F,T)

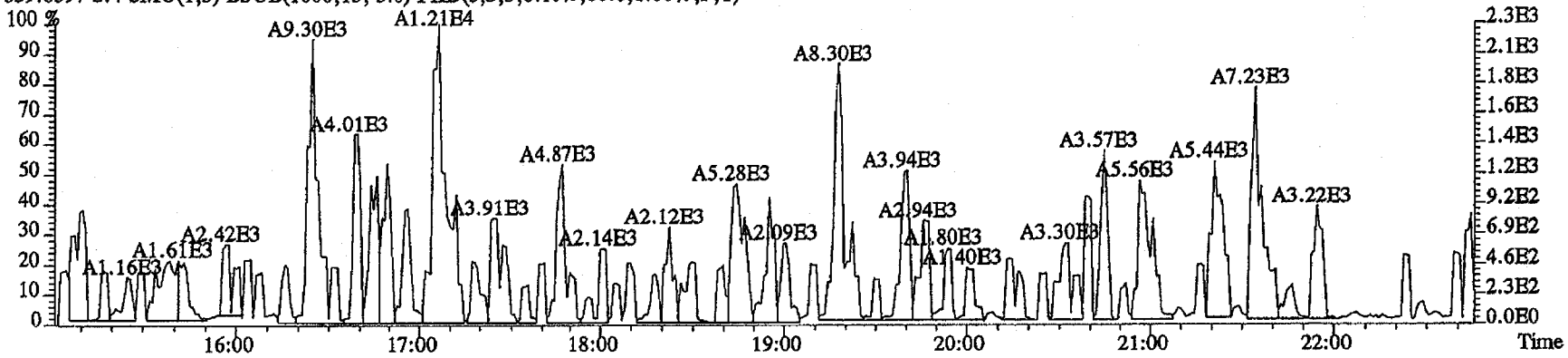


353.8970 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,80.0,1.00%,F,T)

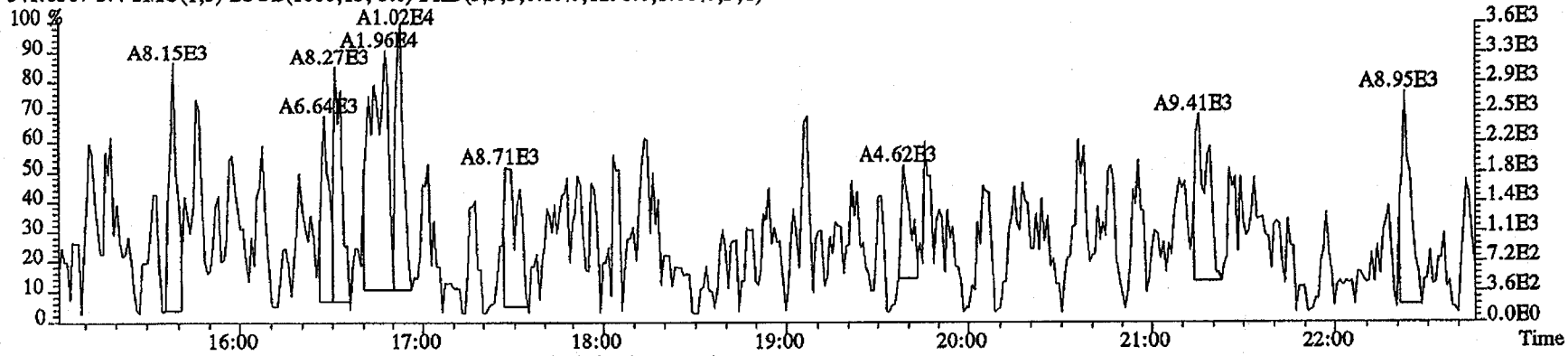


File:23MY114D5 #1-513 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

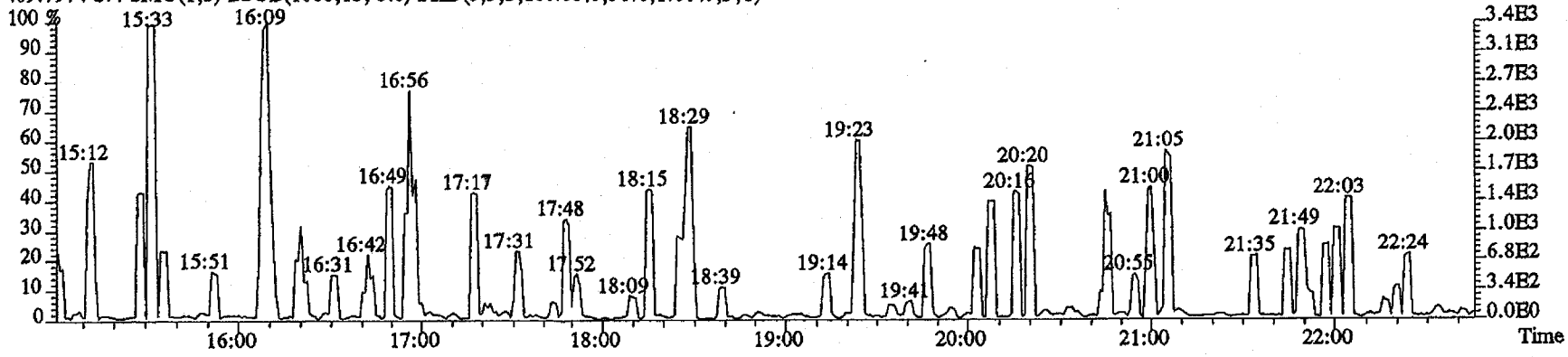
339.8597 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,80.0,1.00%,F,T)



341.8567 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1296.0,1.00%,F,T)

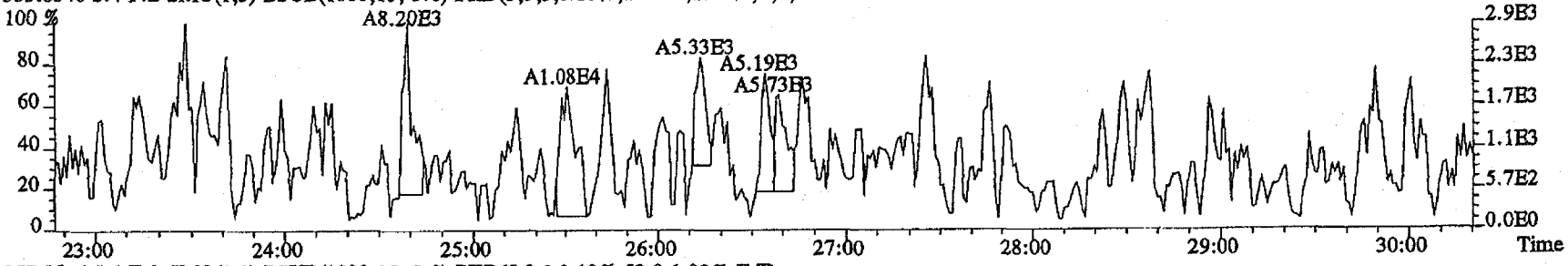


409.7974 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,56.0,1.00%,F,T)

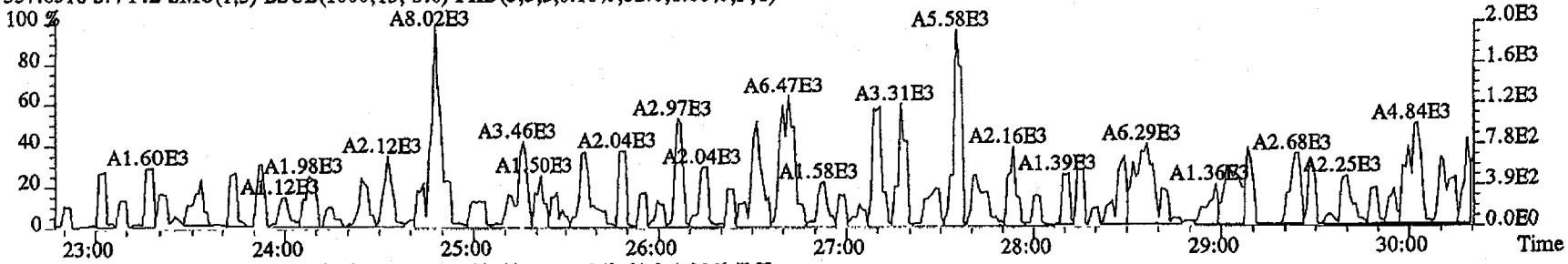


File:23MY114D5 #1-486 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

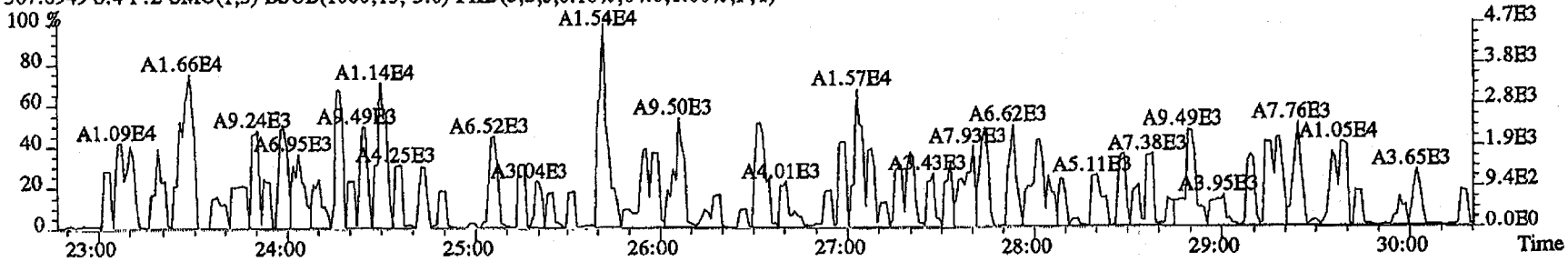
355.8546 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1436.0,1.00%,F,T)



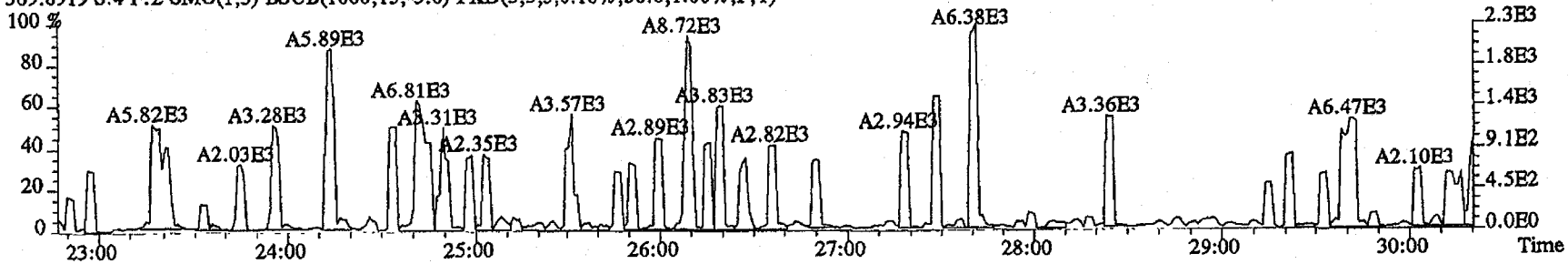
357.8516 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,52.0,1.00%,F,T)



367.8949 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,64.0,1.00%,F,T)

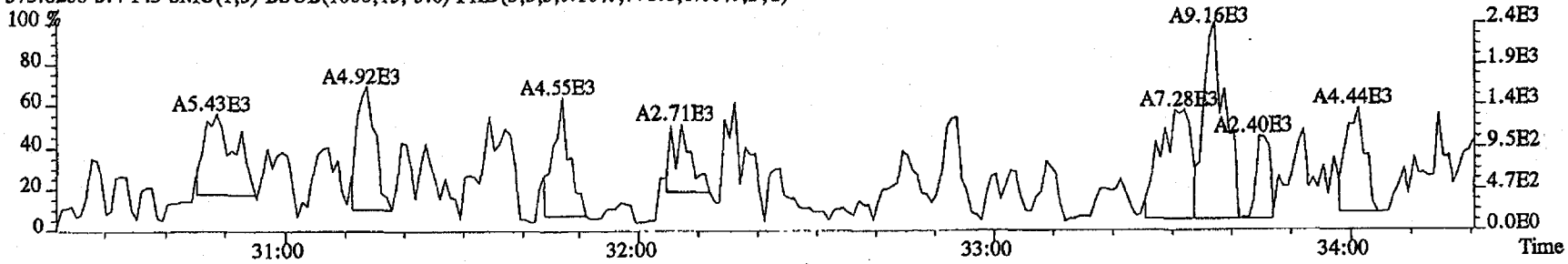


369.8919 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,56.0,1.00%,F,T)

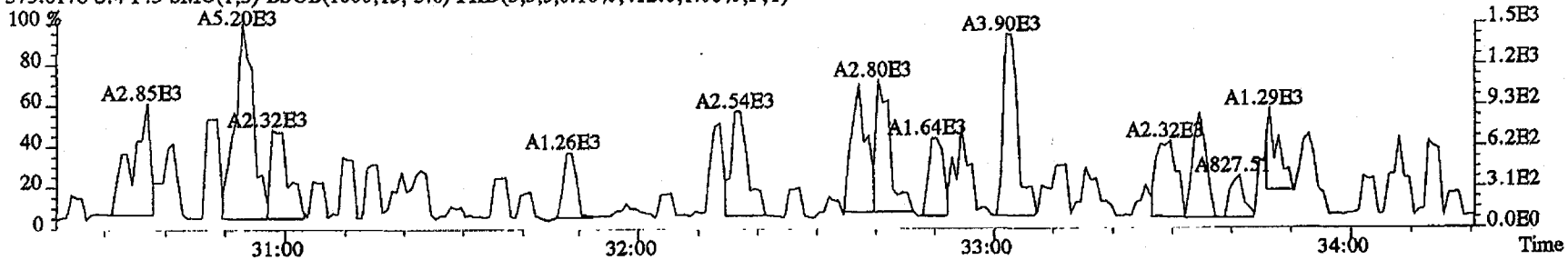


File:23MY114D5 #1-287 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaB
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

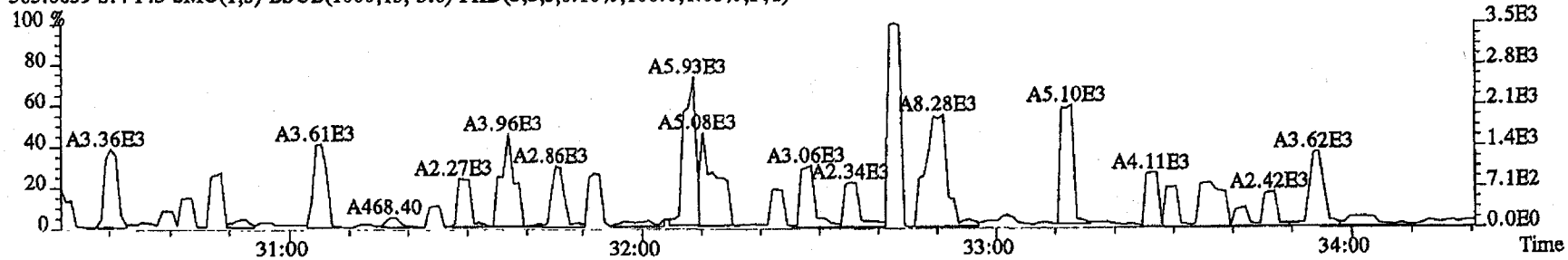
373.8208 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,776.0,1.00%,F,T)



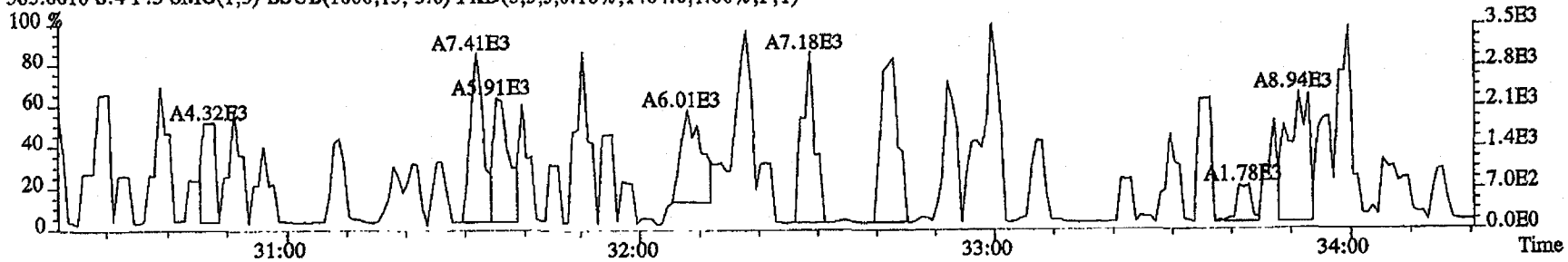
375.8178 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,412.0,1.00%,F,T)



383.8639 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,100.0,1.00%,F,T)

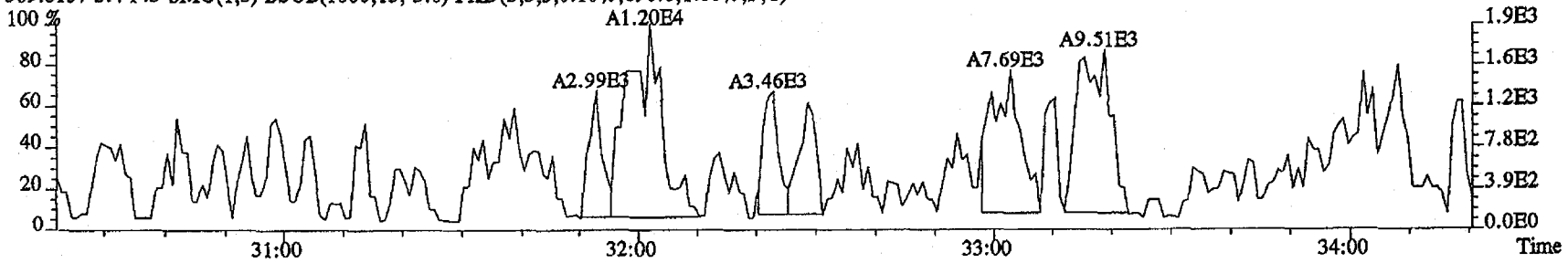


385.8610 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1404.0,1.00%,F,T)

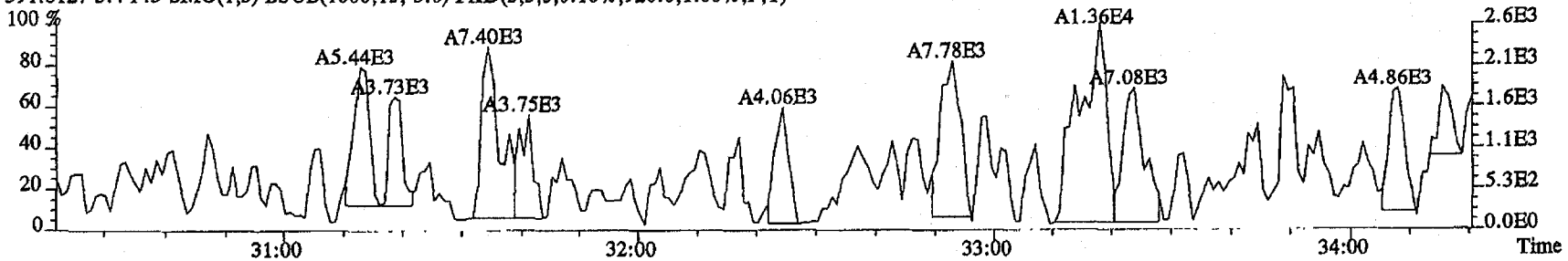


File:23MY114D5 #1-287 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

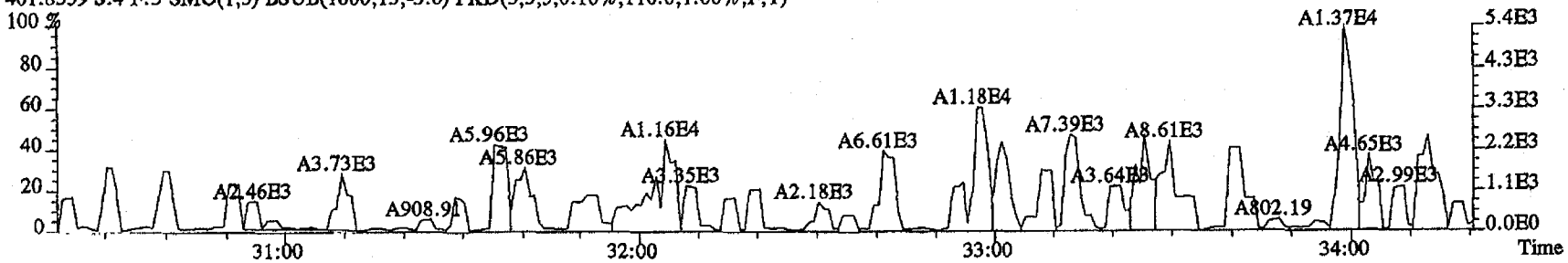
389.8157 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,696.0,1.00%,F,T)



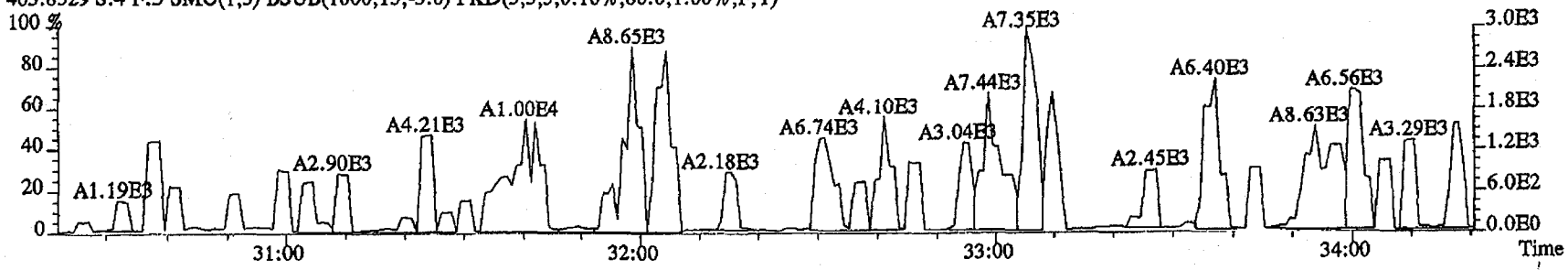
391.8127 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,928.0,1.00%,F,T)



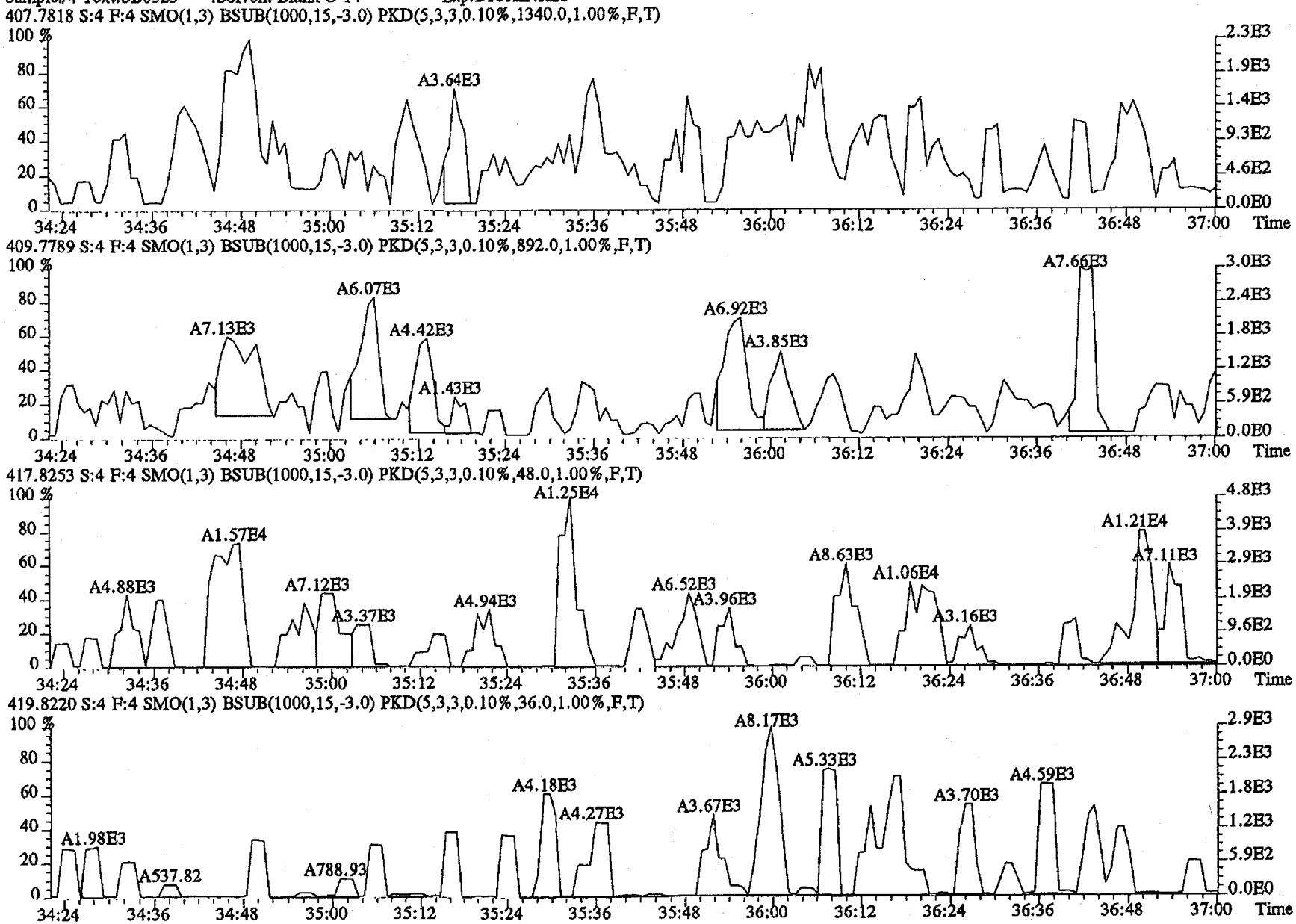
401.8559 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,116.0,1.00%,F,T)



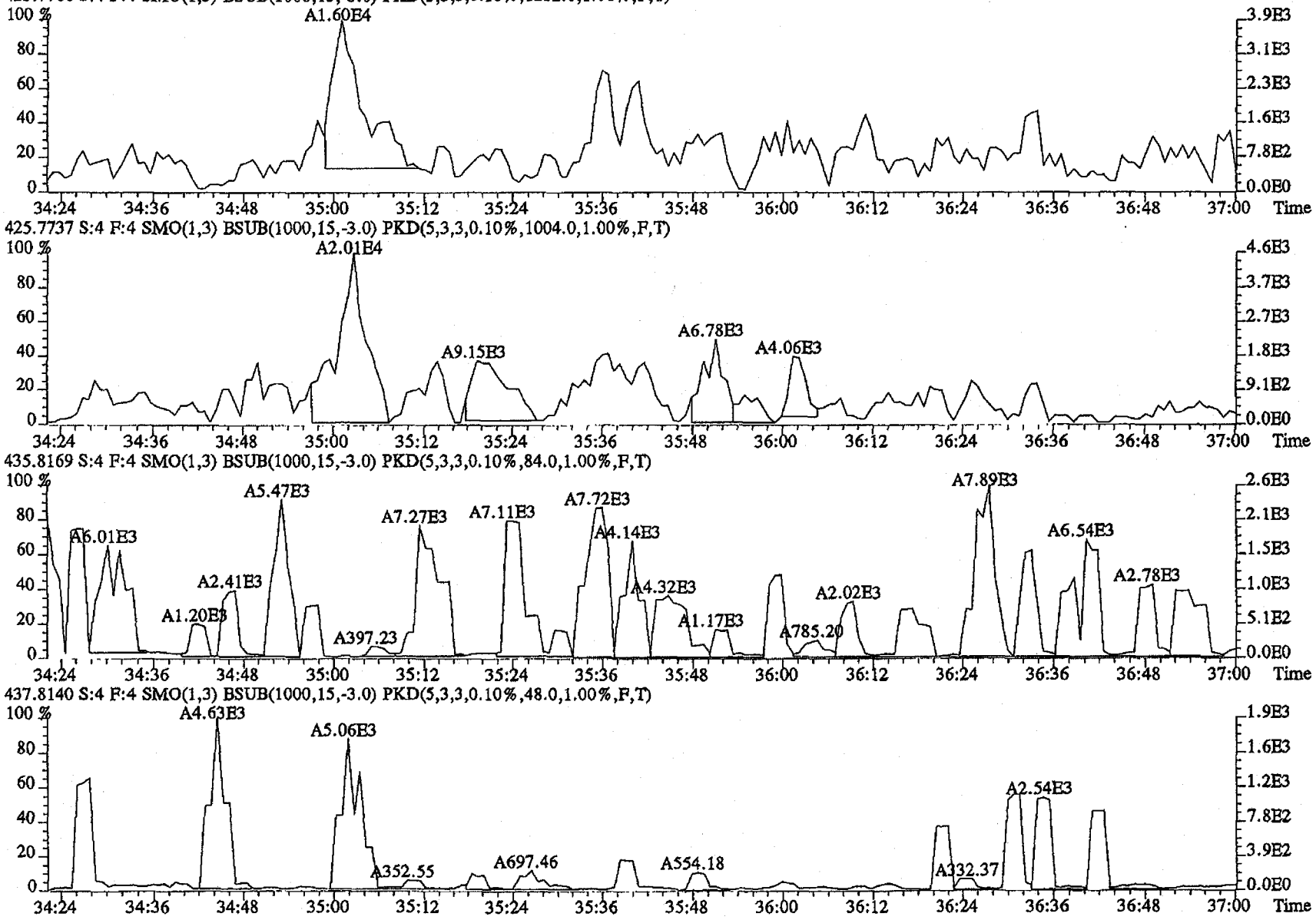
403.8529 S:4 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,80.0,1.00%,F,T)



File:23MY114D5 #1-200 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

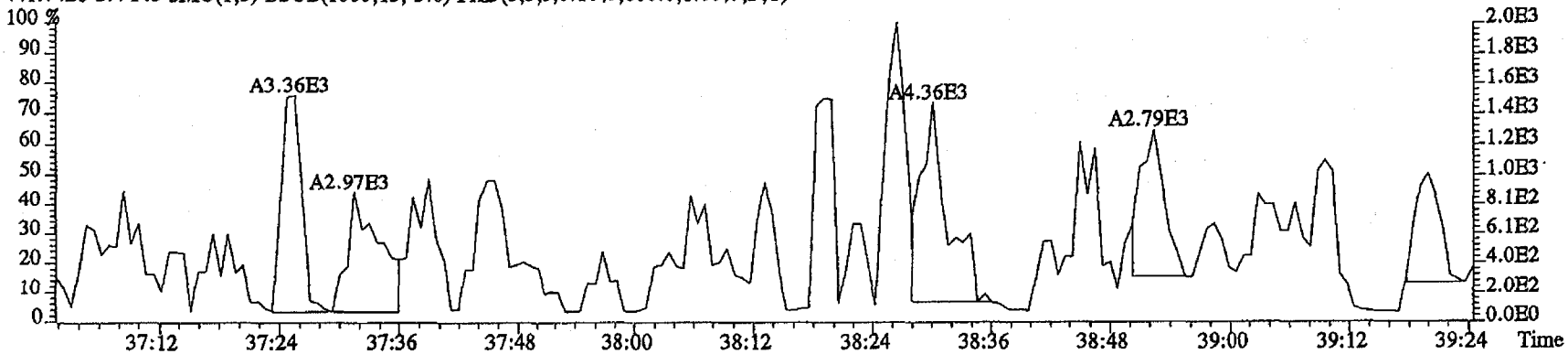


File:23MY114D5 #1-200 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

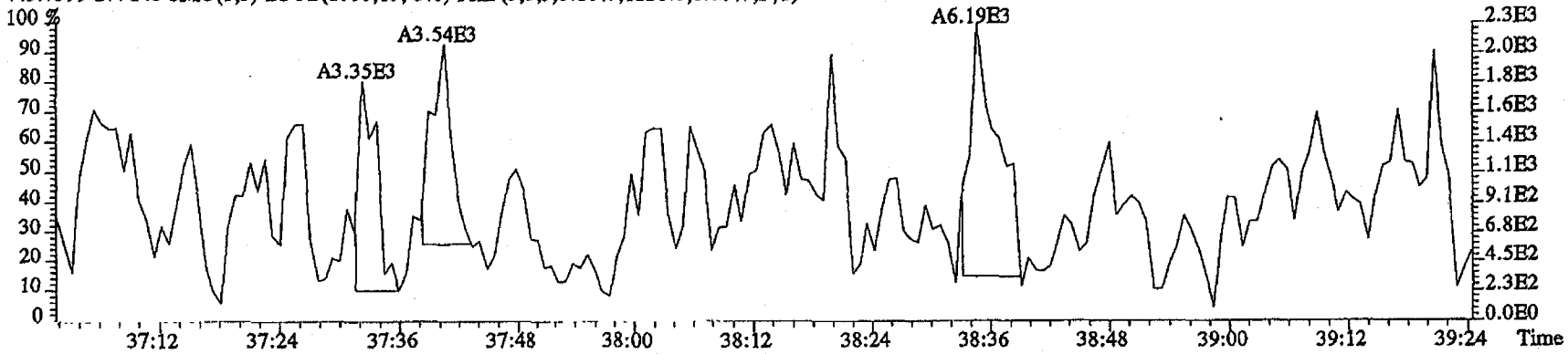


File:23MY114D5 #1-193 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

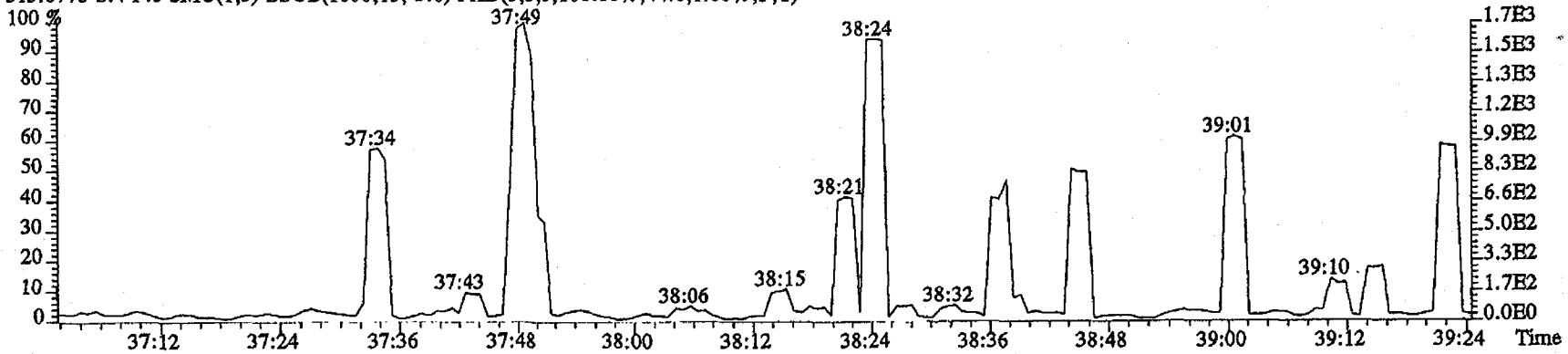
441.7428 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,688.0,1.00%,F,T)



443.7399 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1228.0,1.00%,F,T)

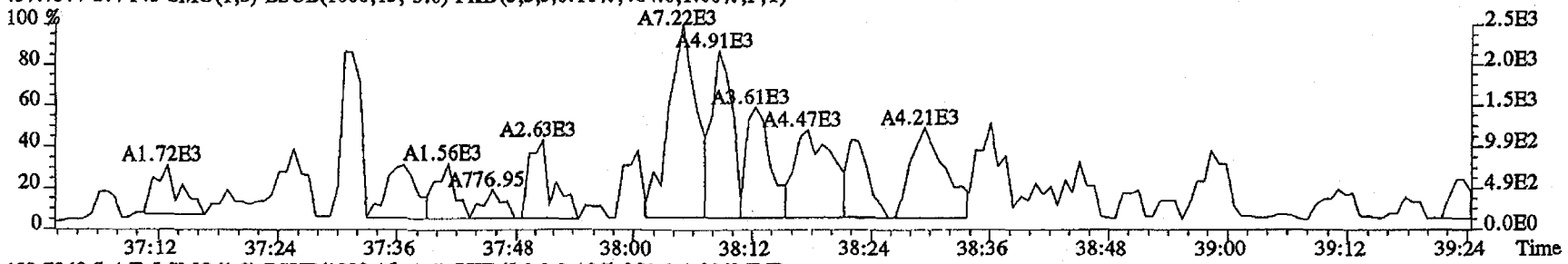


513.6775 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,44.0,1.00%,F,T)

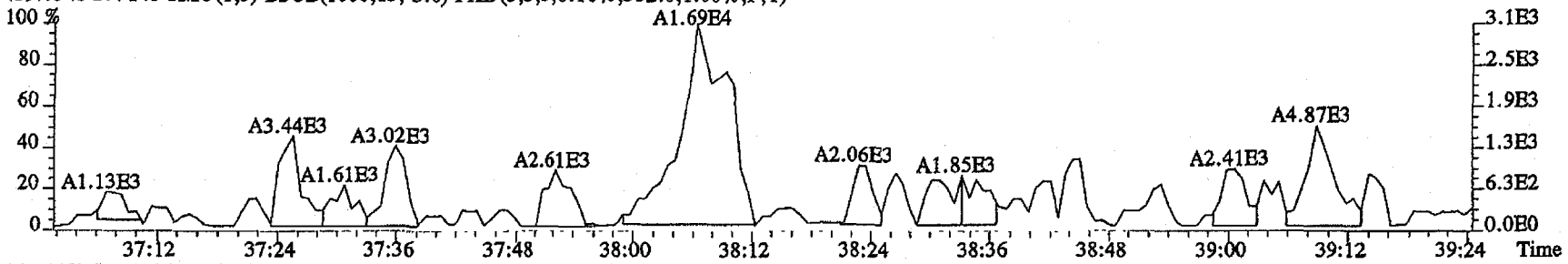


File:23MY114D5 #1-193 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

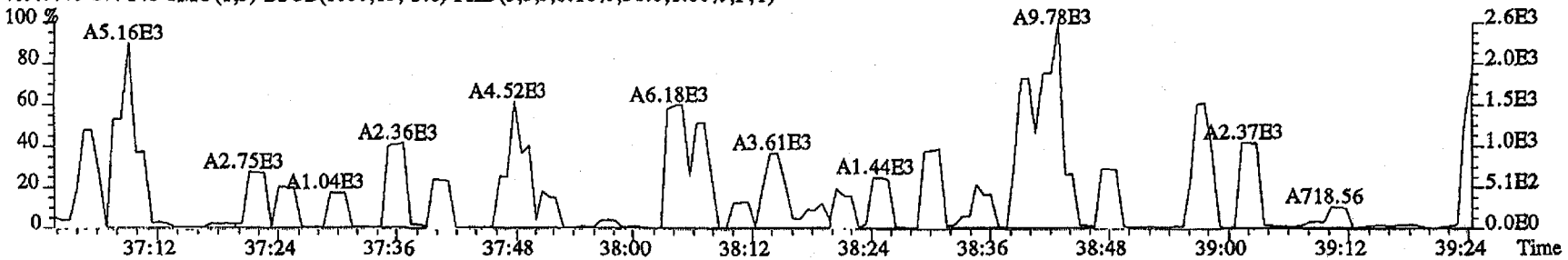
457.7377 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,464.0,1.00%,F,T)



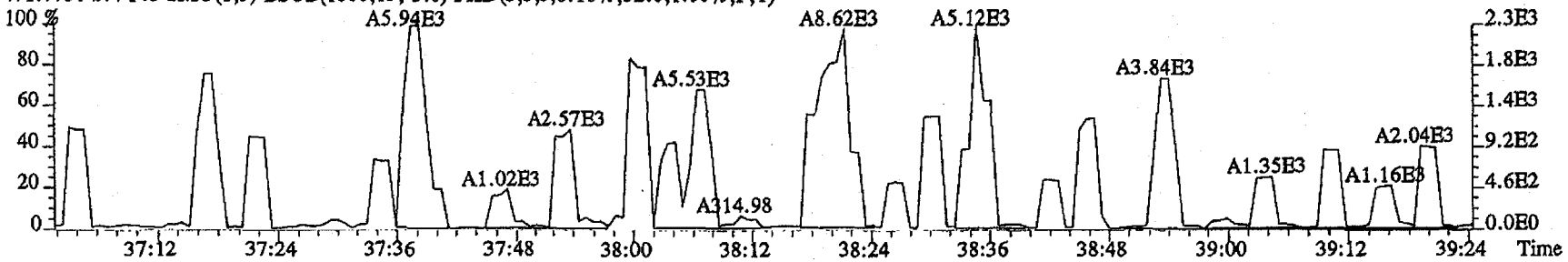
459.7348 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,352.0,1.00%,F,T)



469.7779 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,36.0,1.00%,F,T)

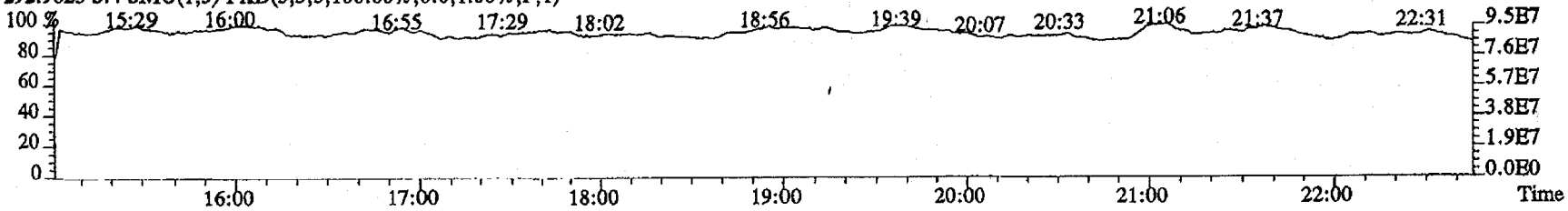


471.7750 S:4 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,52.0,1.00%,F,T)

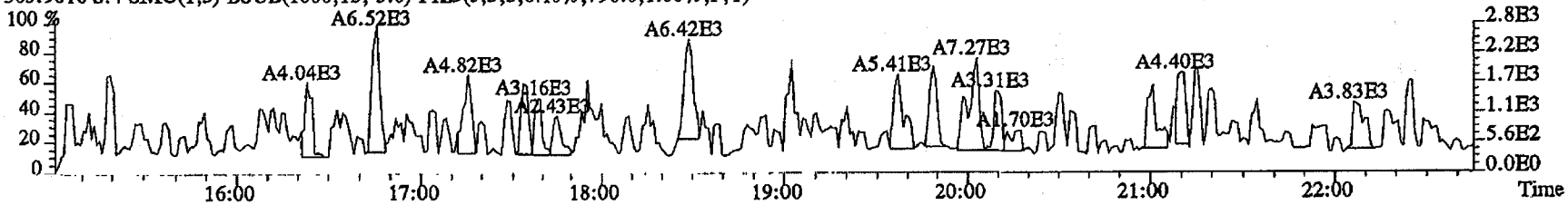


File:23MY114D5 #1-513 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

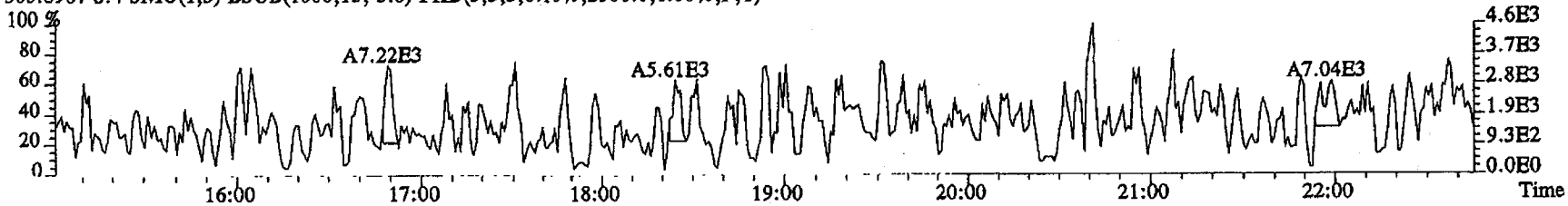
292.9825 S:4 SMO(1,3) PKD(5,3,5,100.00%,0.0,1.00%,F,T)



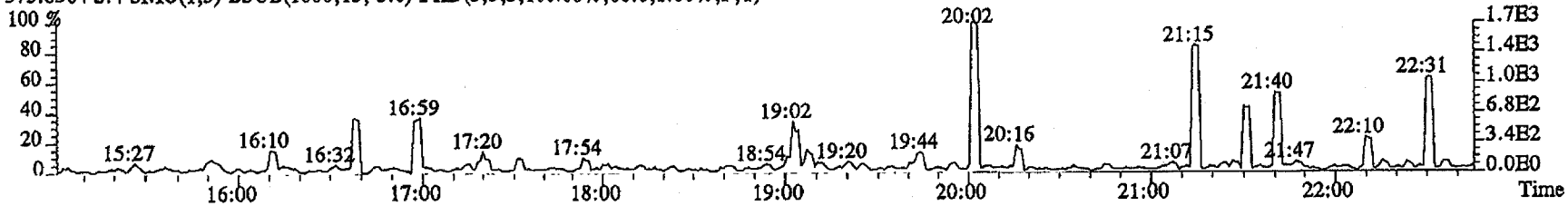
303.9016 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,796.0,1.00%,F,T)



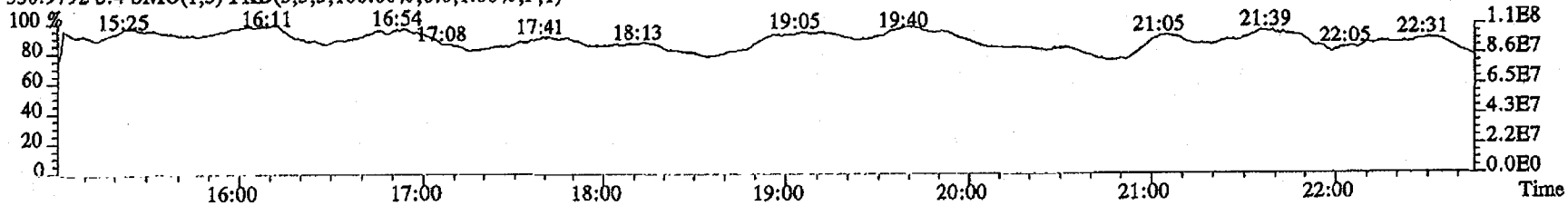
305.8987 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2500.0,1.00%,F,T)



375.8364 S:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,60.0,1.00%,F,T)

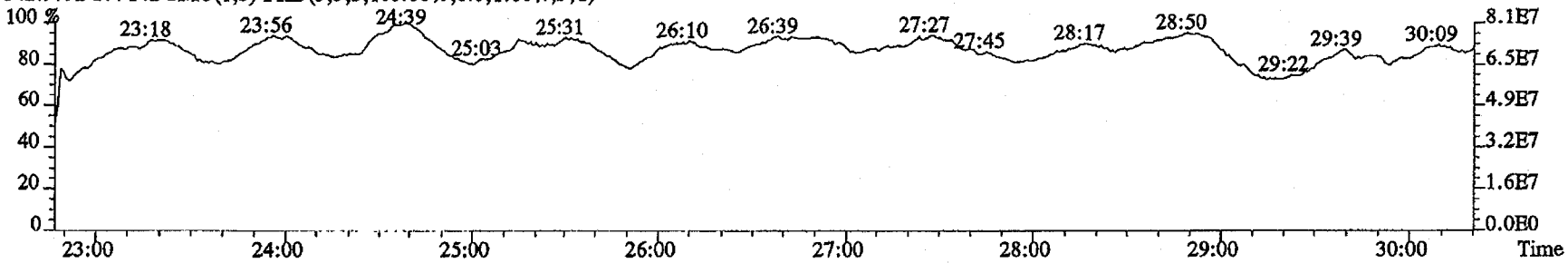


330.9792 S:4 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

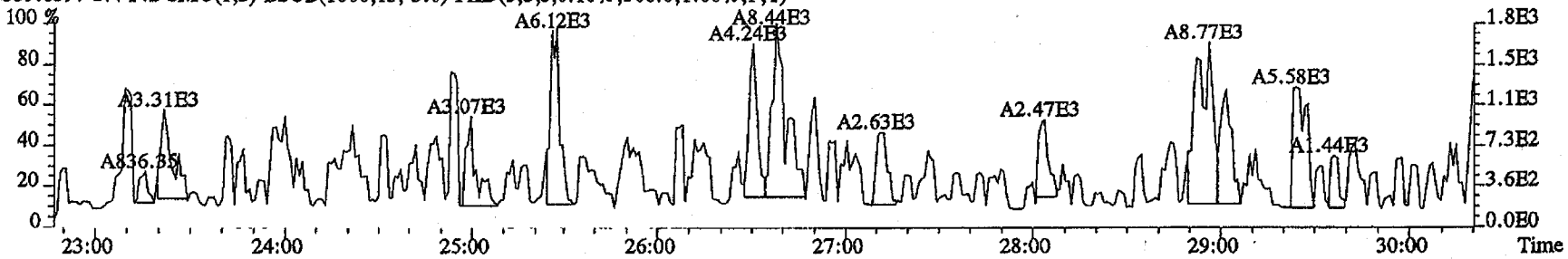


File:23MY114D5 #1-486 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES

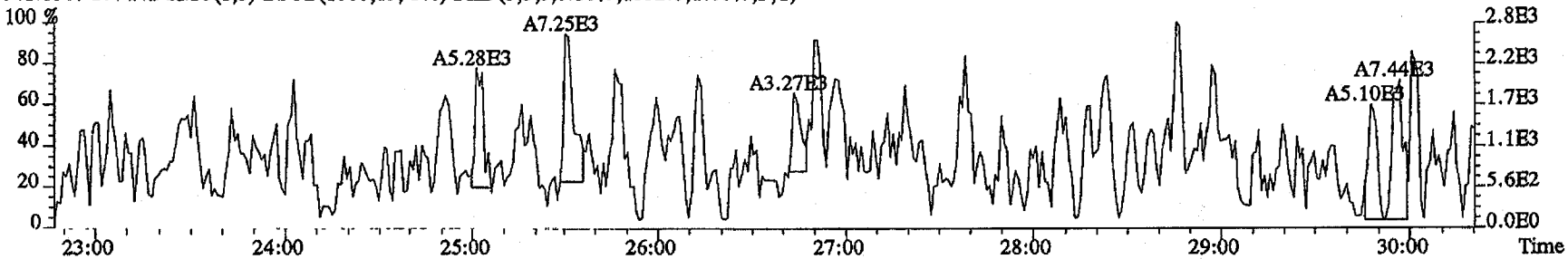
342.9792 S:4 F:2 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



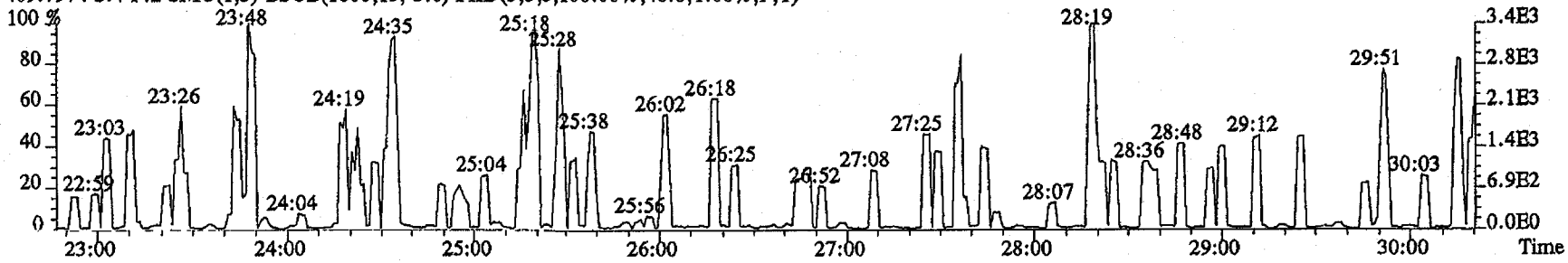
339.8597 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,508.0,1.00%,F,T)



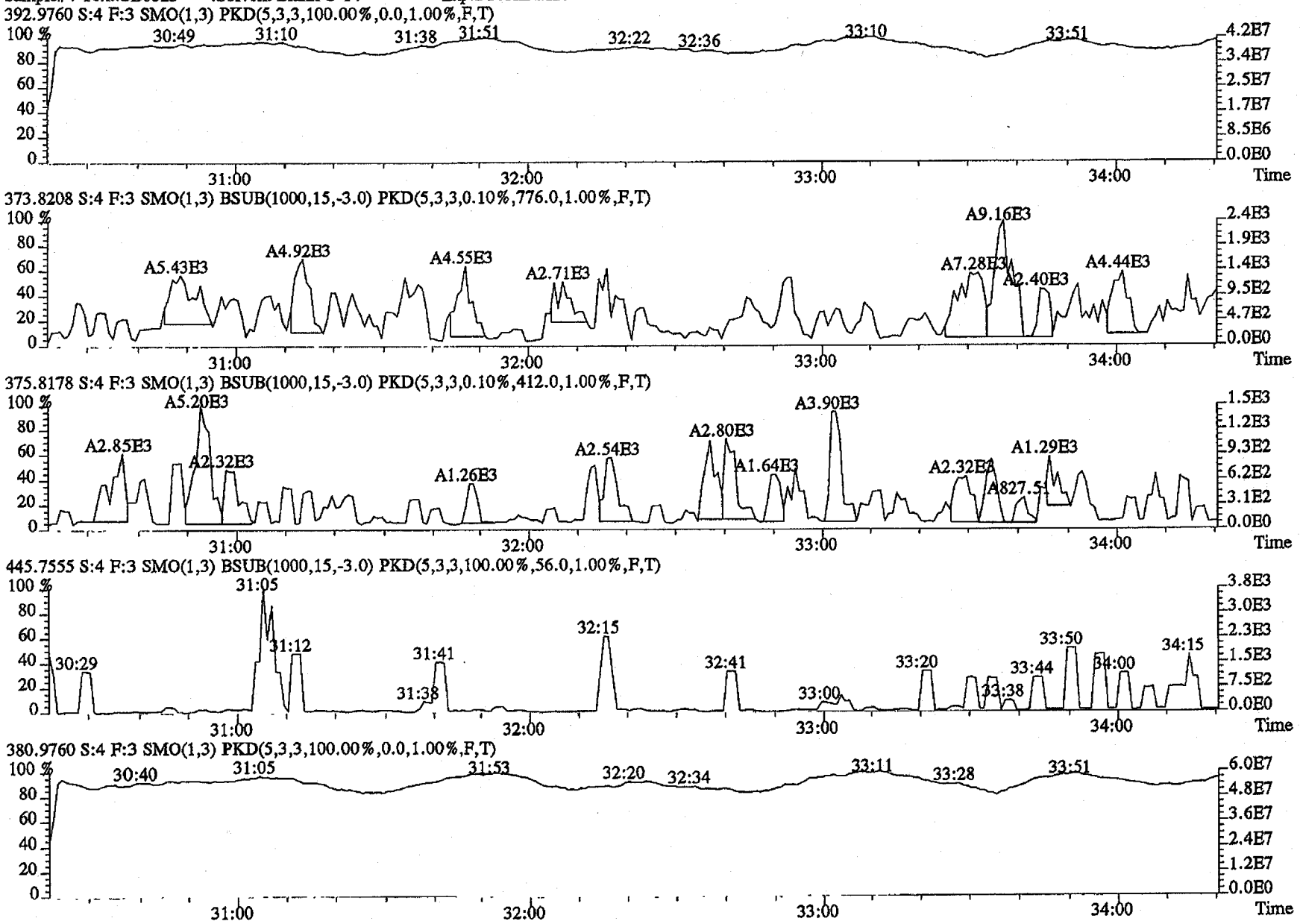
341.8567 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1352.0,1.00%,F,T)



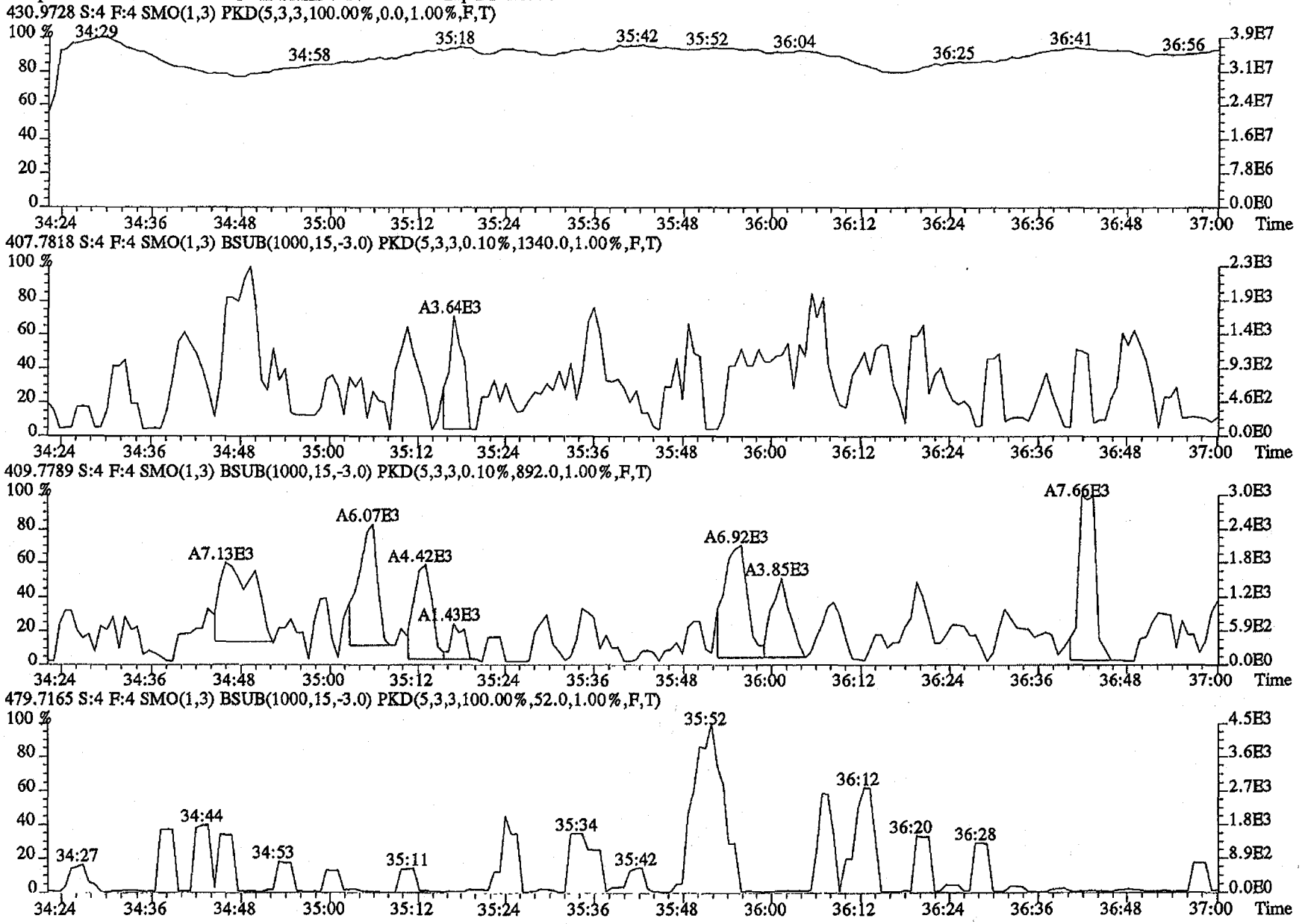
409.7974 S:4 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,48.0,1.00%,F,T)



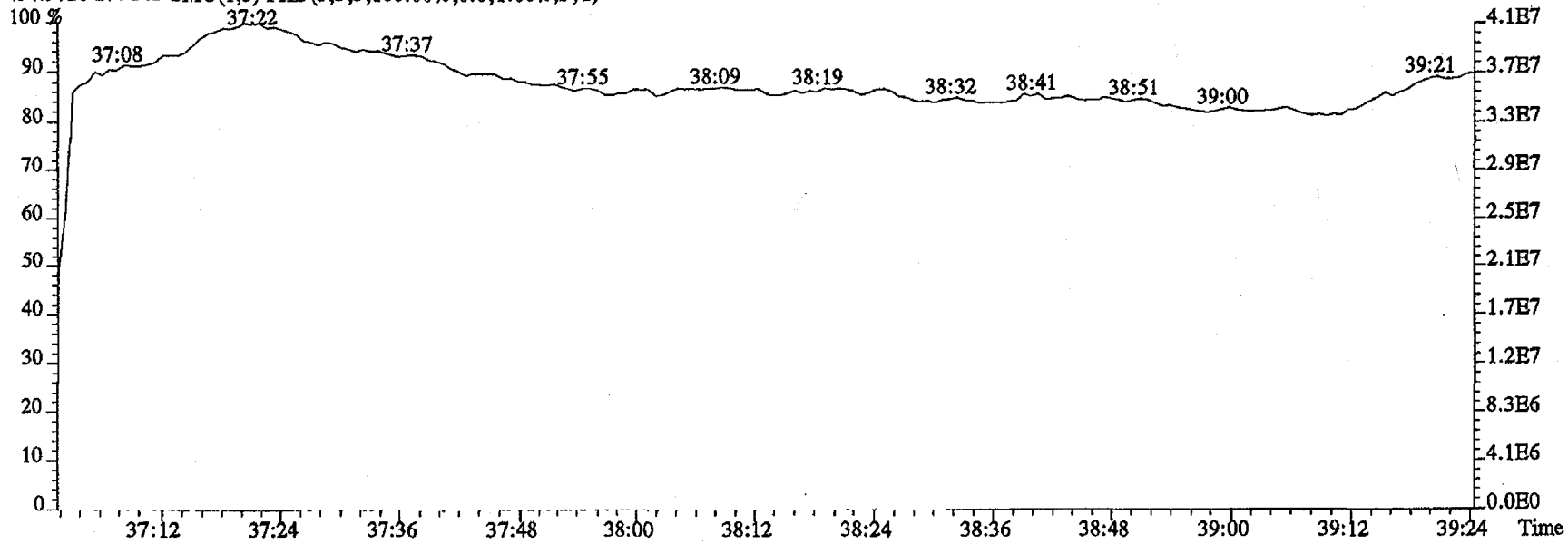
File:23MY114D5 #1-287 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES



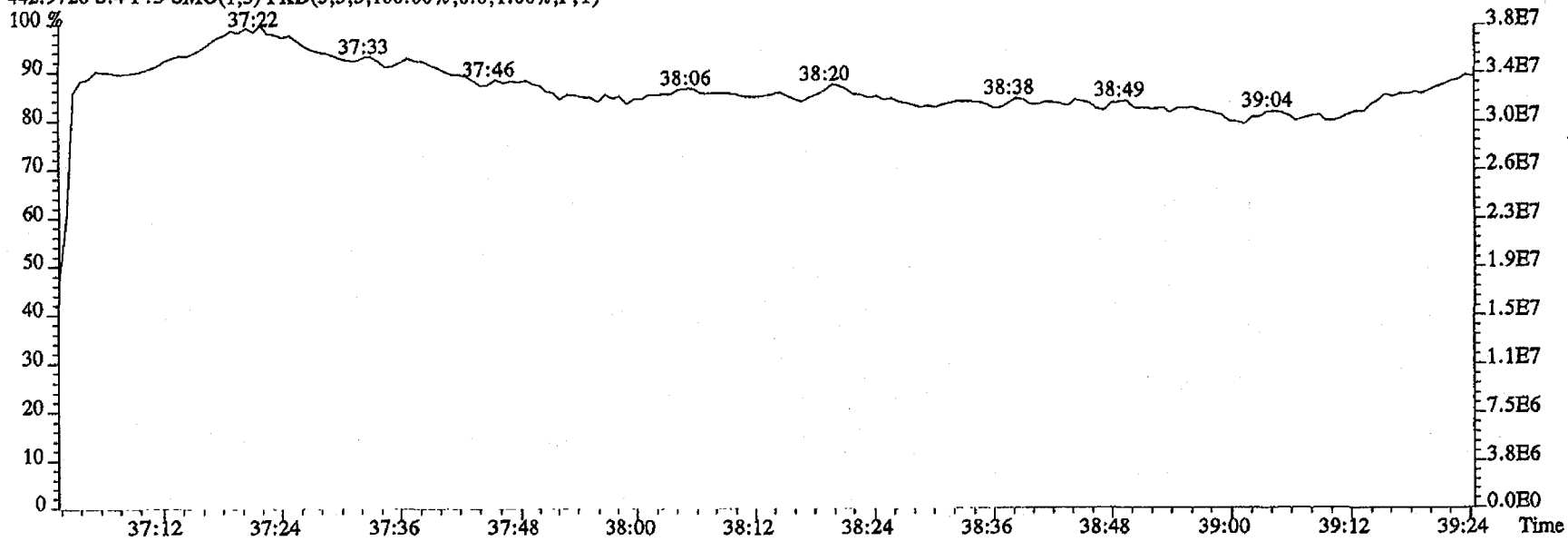
File:23MY114D5 #1-200 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES



File:23MY114D5 #1-193 Acq:23-MAY-2011 12:03:57 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 Text:SB0523 :Solvent Blank C-14 Exp:DIOXINRES
454.9728 S:4 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

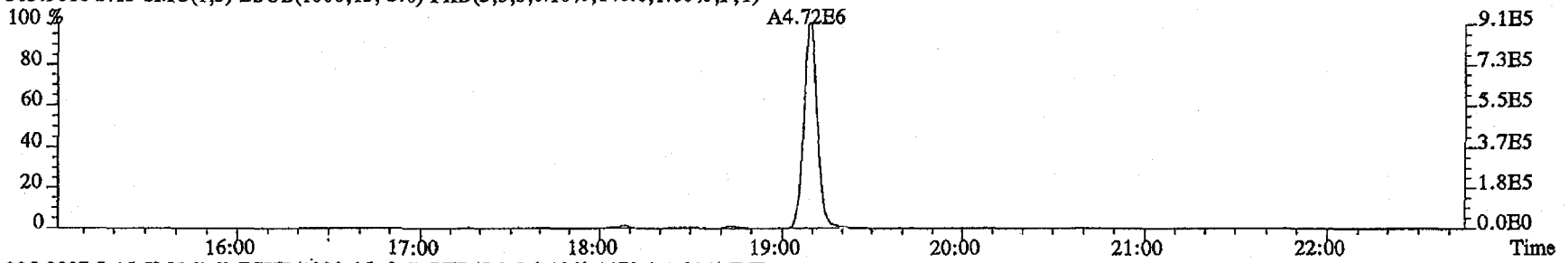


442.9728 S:4 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

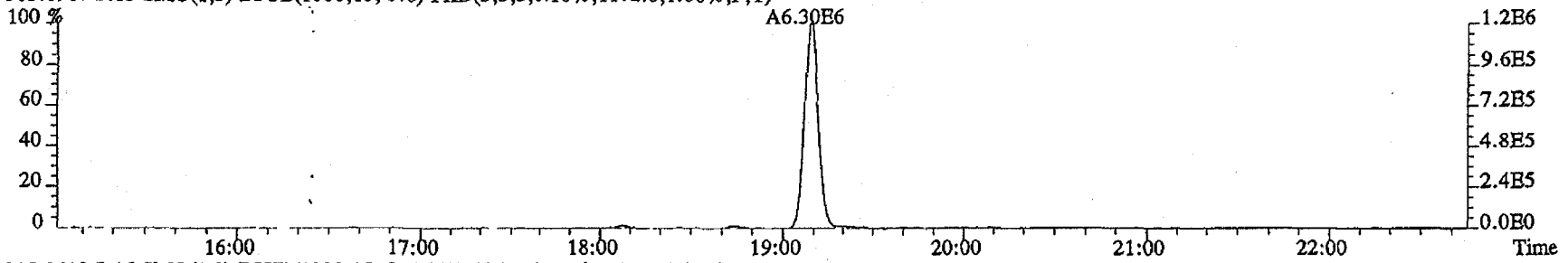


File:23MY114D5 #1-513 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

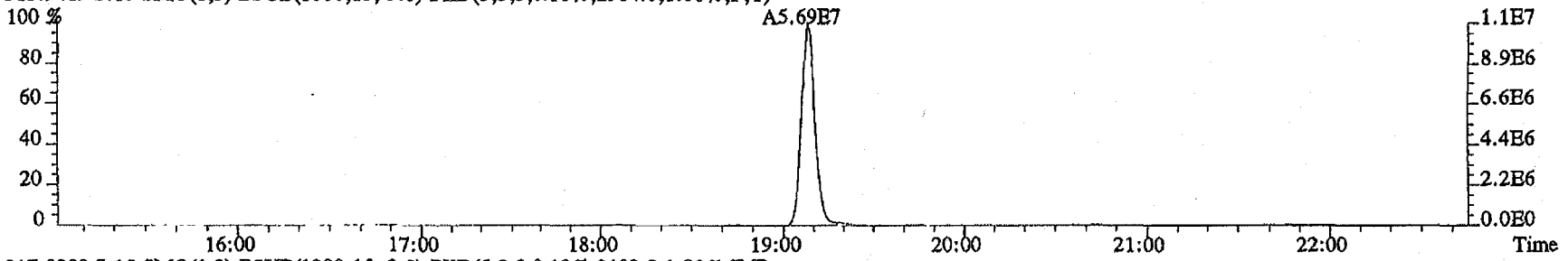
303.9016 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,140.0,1.00%,F,T)



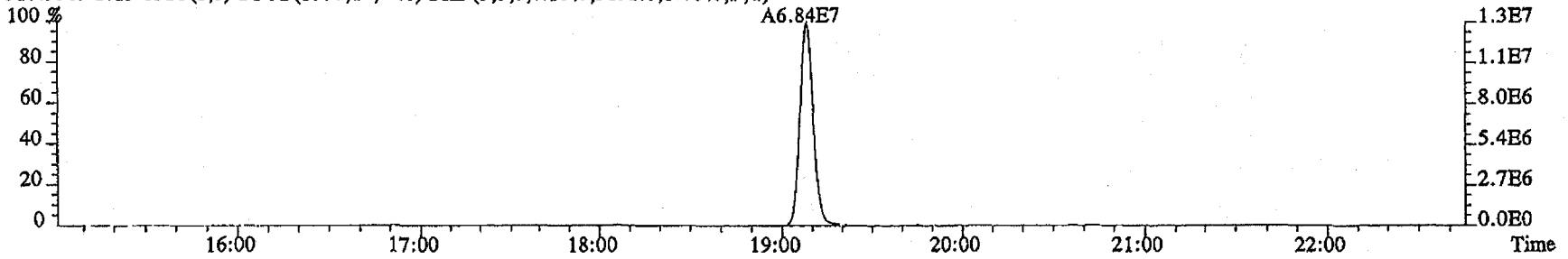
305.8987 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1172.0,1.00%,F,T)



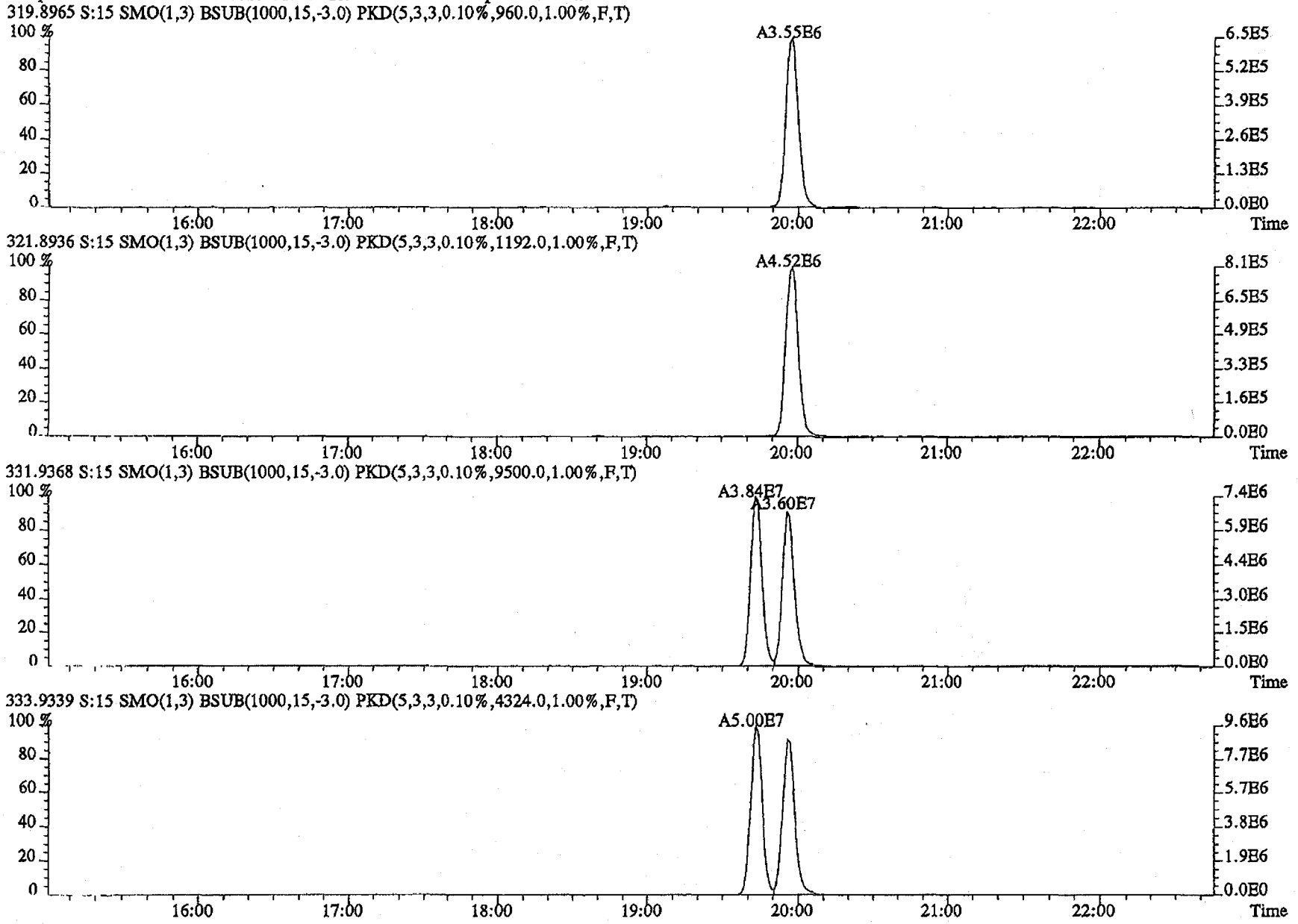
315.9419 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2984.0,1.00%,F,T)



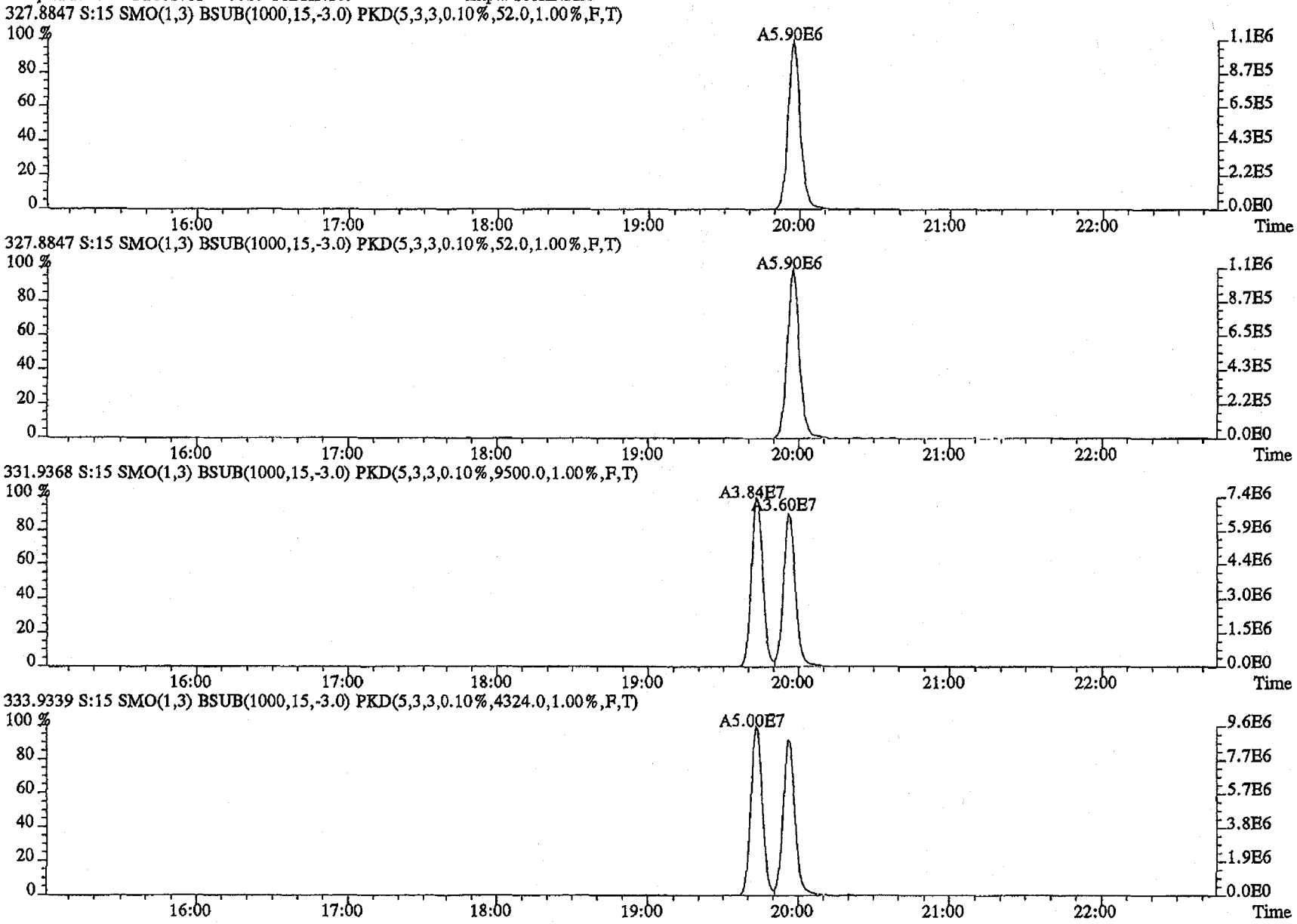
317.9389 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3192.0,1.00%,F,T)



File:23MY114D5 #1-513 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

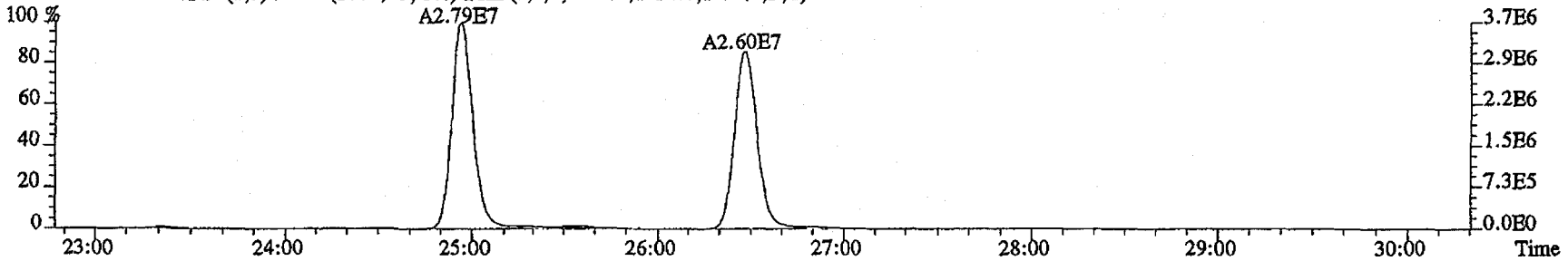


File:23MY114D5 #1-513 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

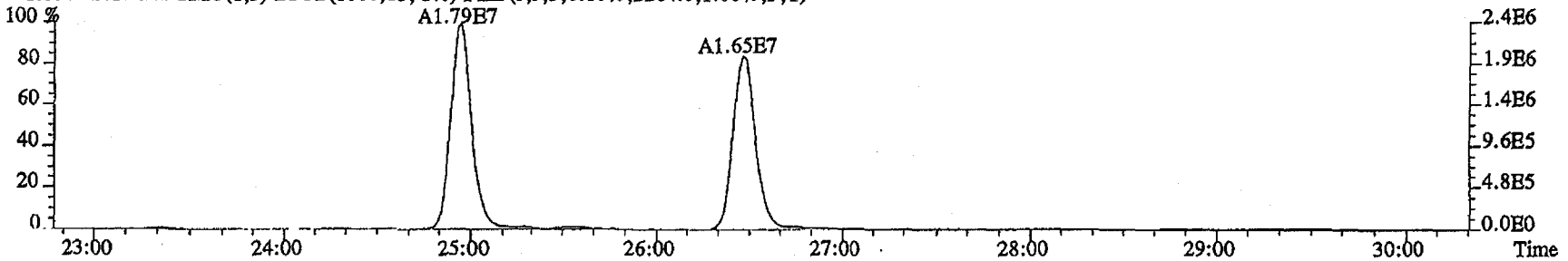


File:23MY114D5 #1-486 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

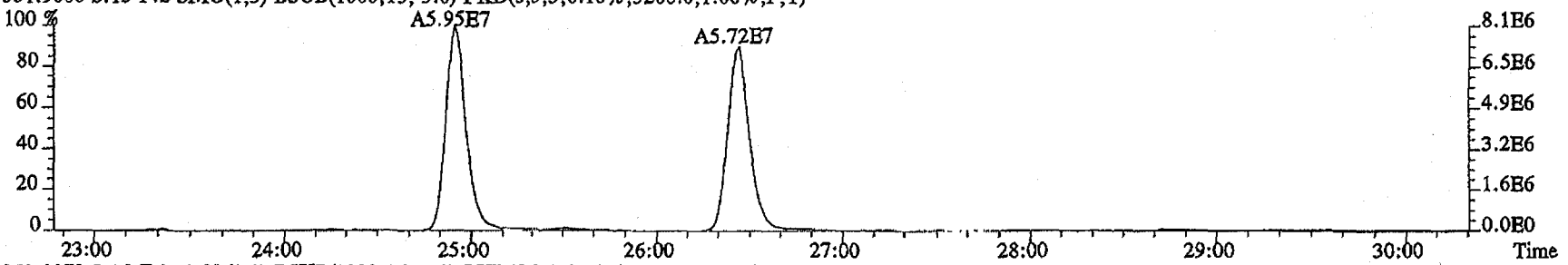
339.8597 S:15 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1524.0,1.00%,F,T)



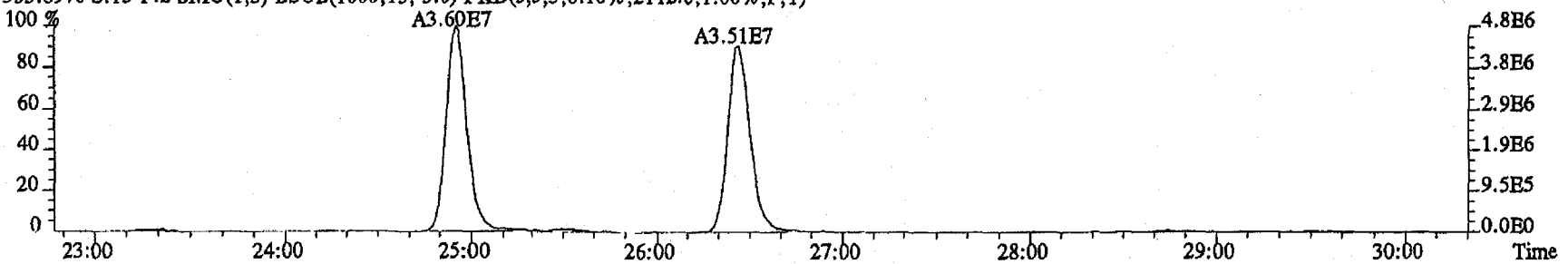
341.8567 S:15 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2264.0,1.00%,F,T)



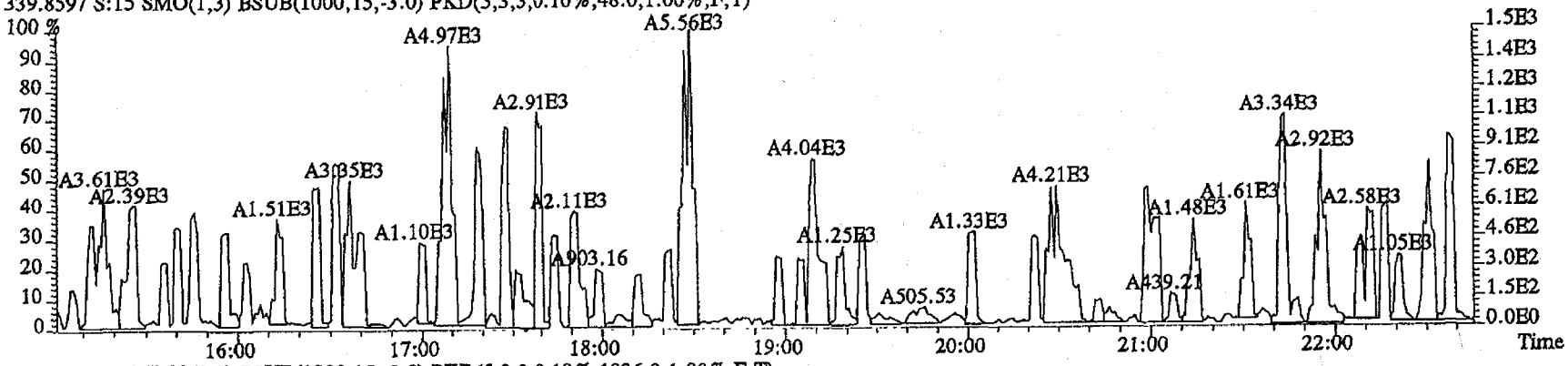
351.9000 S:15 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3268.0,1.00%,F,T)



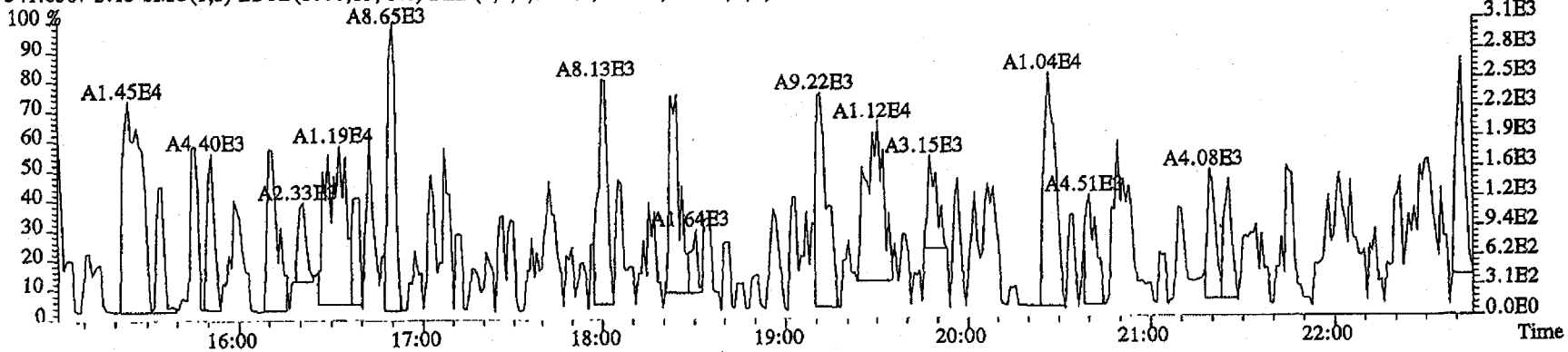
353.8970 S:15 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2112.0,1.00%,F,T)



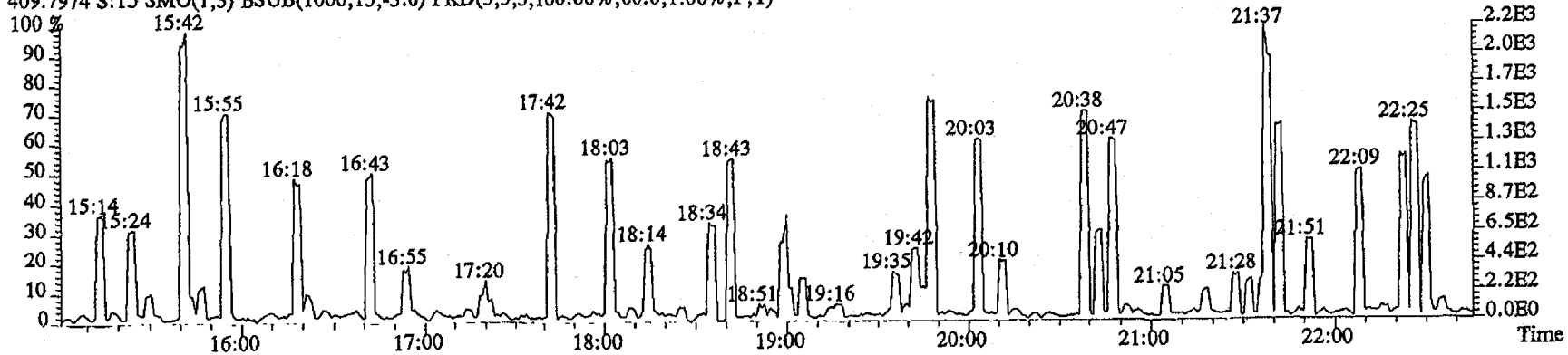
File:23MY114D5 #1-513 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES
339.8597 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,48.0,1.00%,F,T)



341.8567 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1036.0,1.00%,F,T)

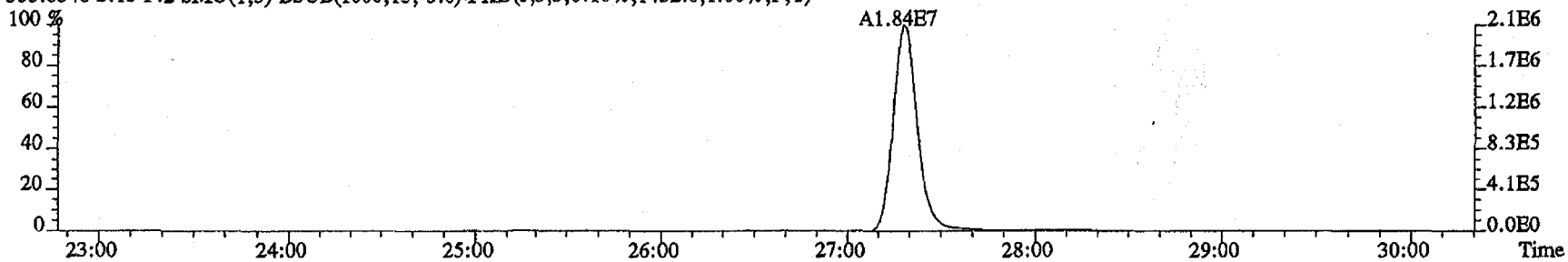


409.7974 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,60.0,1.00%,F,T)

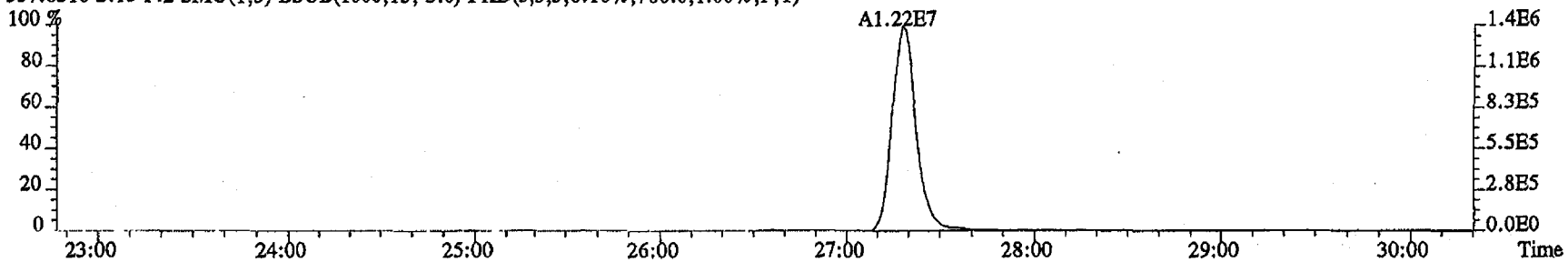


File:23MY114D5 #1-486 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

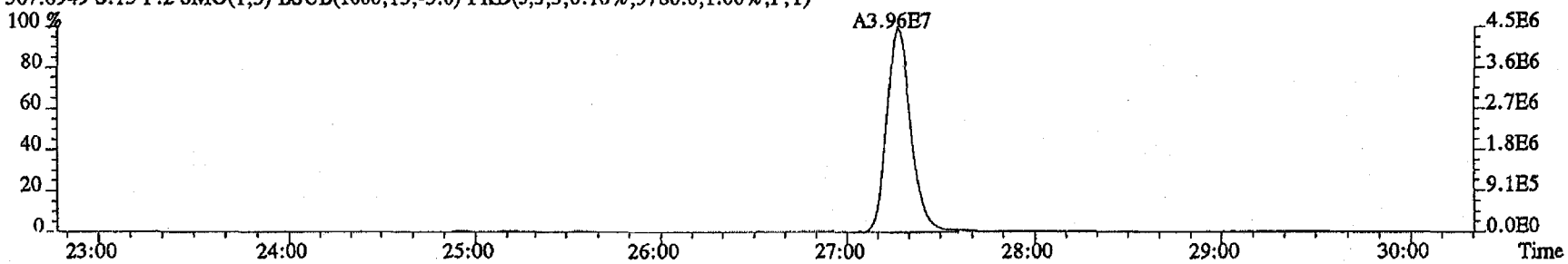
355.8546 S:15 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1452.0,1.00%,F,T)



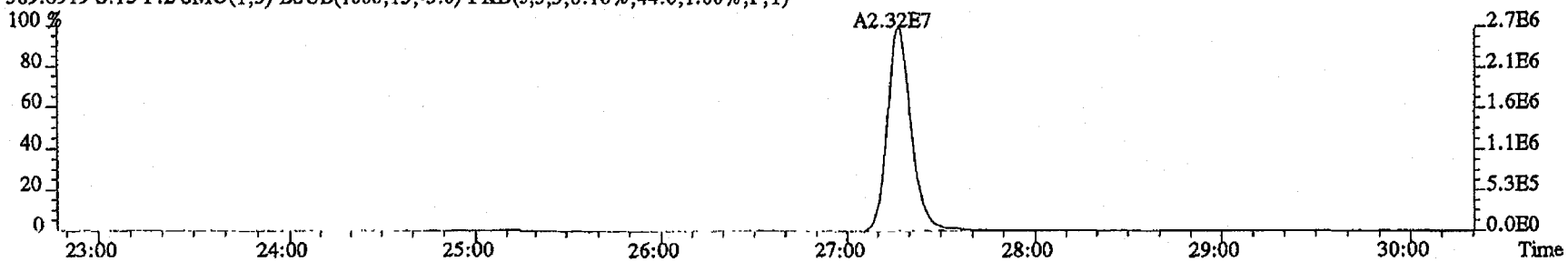
357.8516 S:15 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,760.0,1.00%,F,T)



367.8949 S:15 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3780.0,1.00%,F,T)

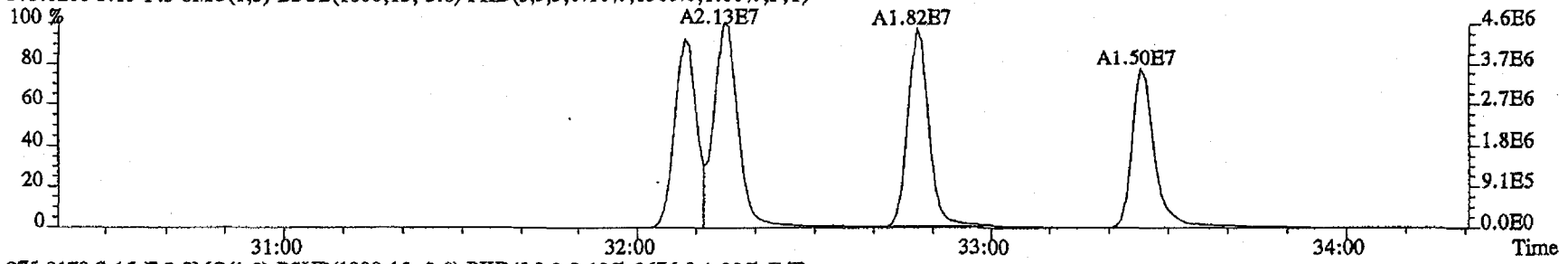


369.8919 S:15 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,44.0,1.00%,F,T)

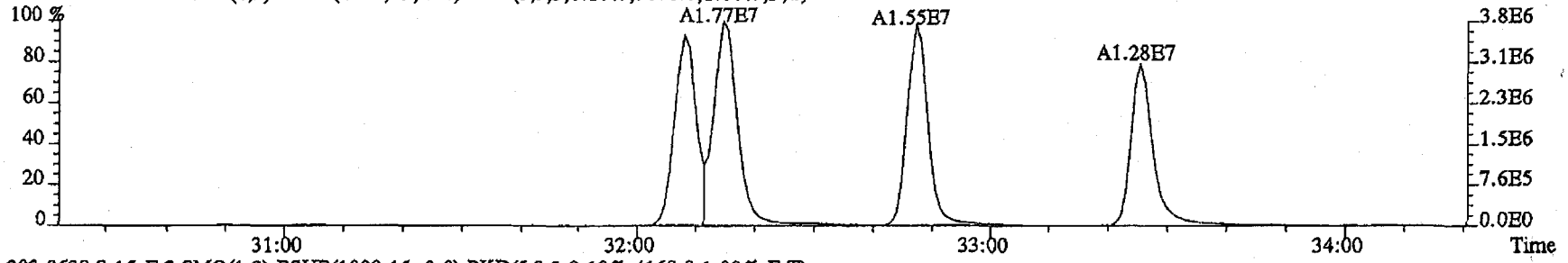


File:23MY114D5 #1-287 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

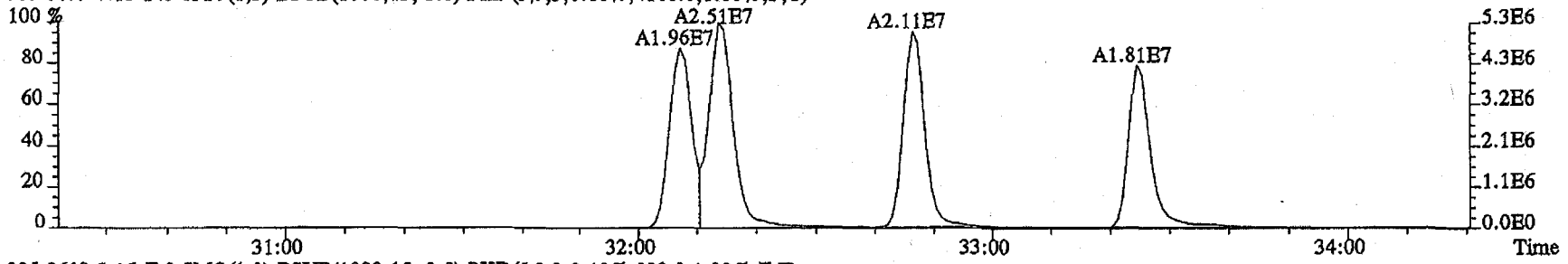
373.8208 S:15 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1368.0,1.00%,F,T)



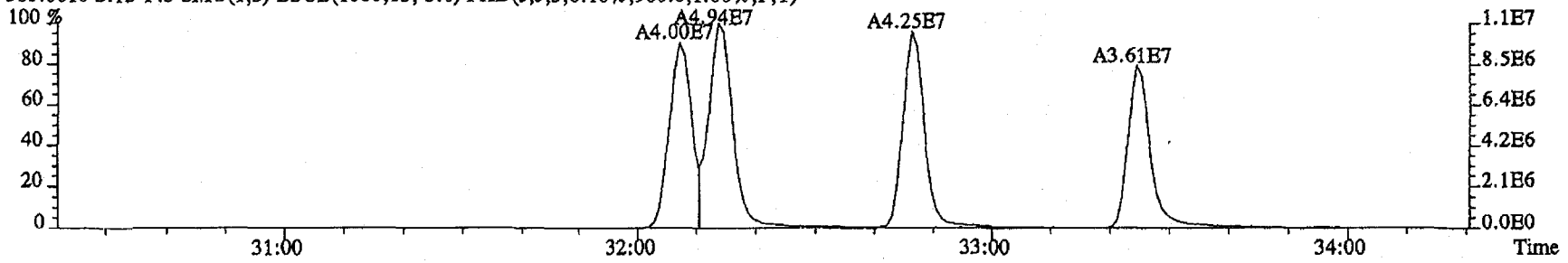
375.8178 S:15 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3676.0,1.00%,F,T)



383.8639 S:15 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4168.0,1.00%,F,T)

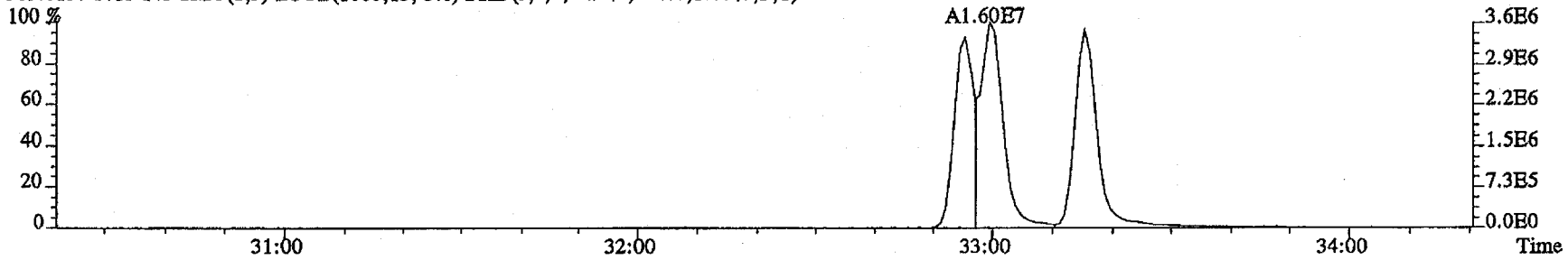


385.8610 S:15 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,980.0,1.00%,F,T)

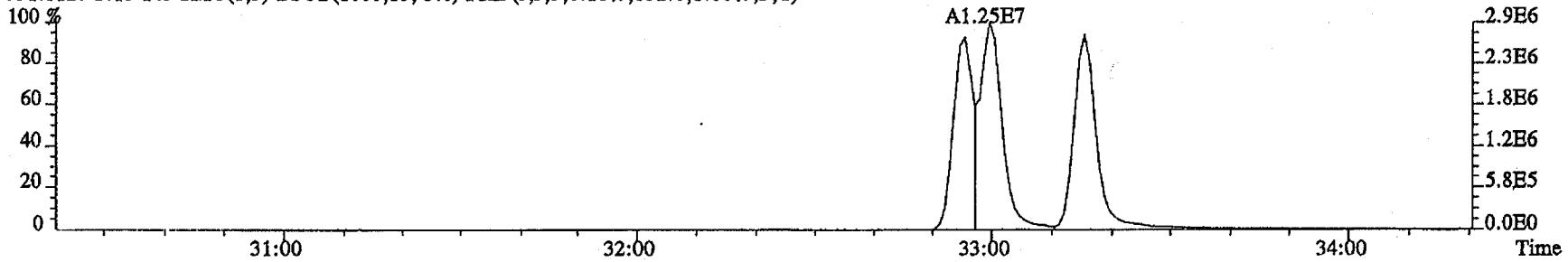


File:23MY114D5 #1-287 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

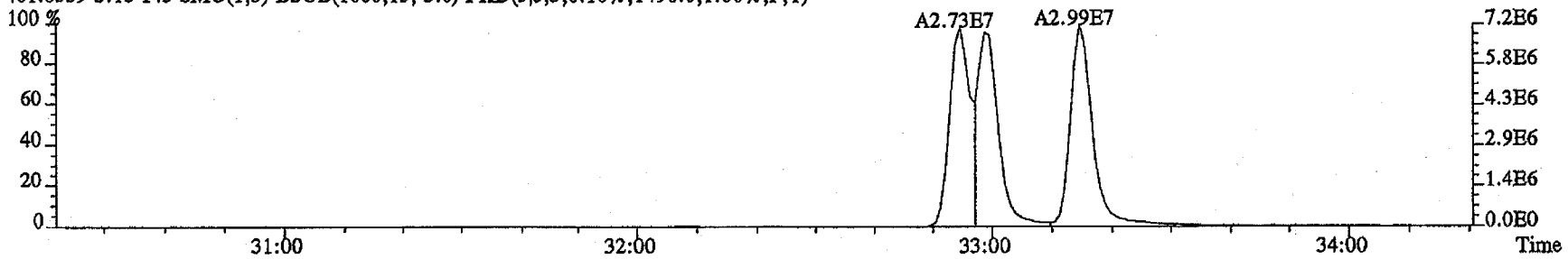
389.8157 S:15 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,468.0,1.00%,F,T)



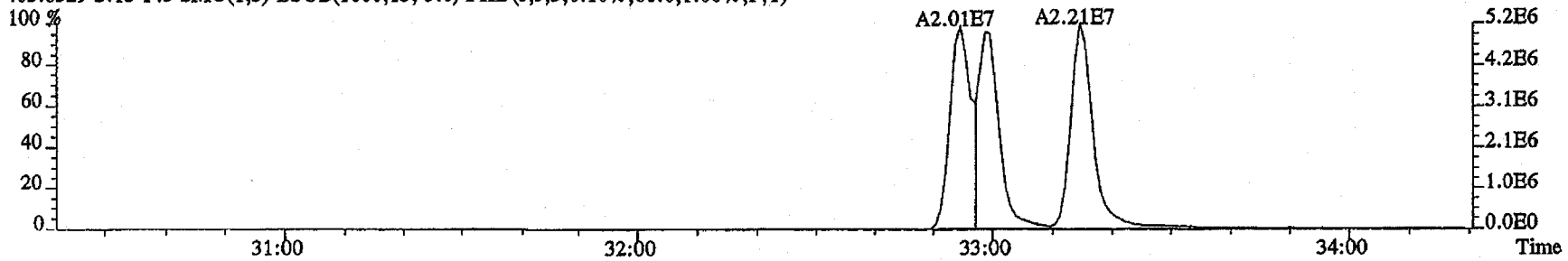
391.8127 S:15 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,832.0,1.00%,F,T)



401.8559 S:15 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1496.0,1.00%,F,T)

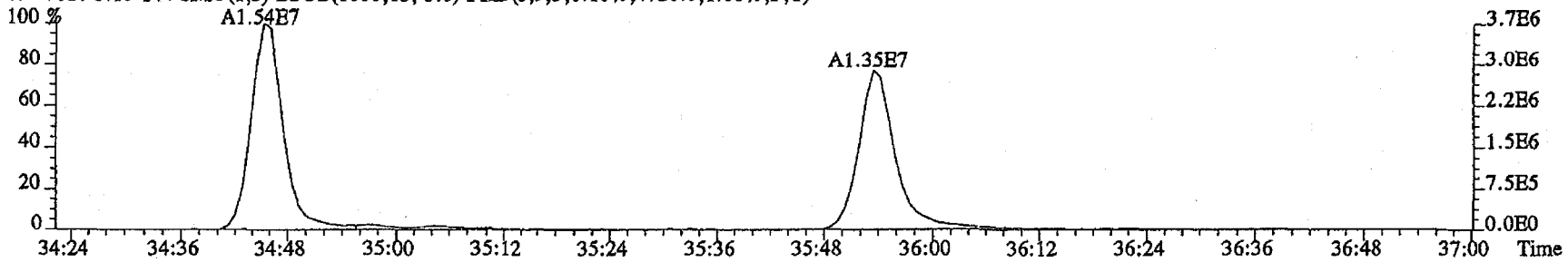


403.8529 S:15 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,68.0,1.00%,F,T)

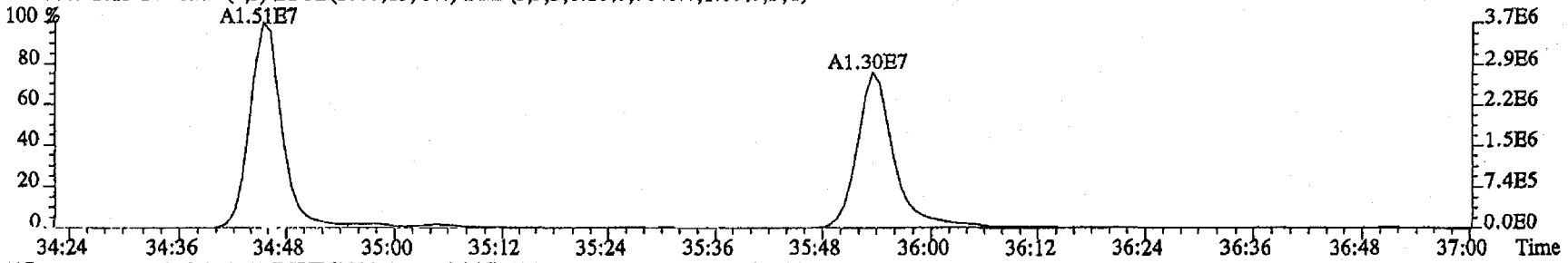


File:23MY114D5 #1-200 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

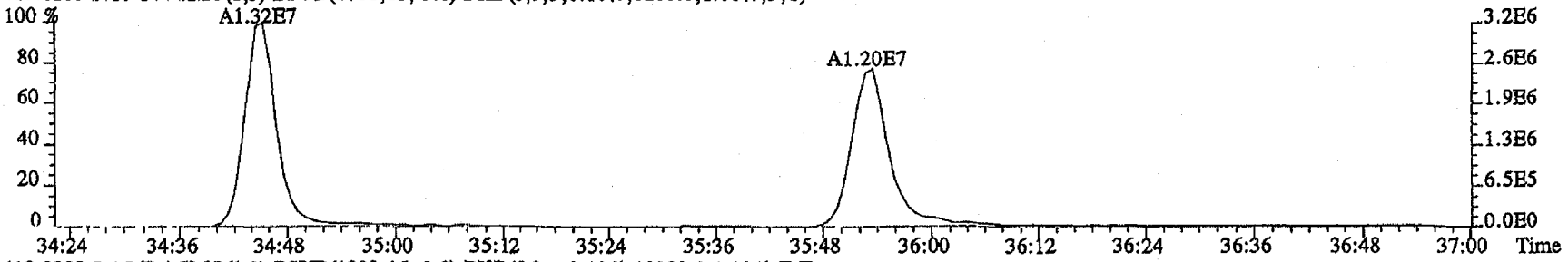
407.7818 S:15 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4720.0,1.00%,F,T)



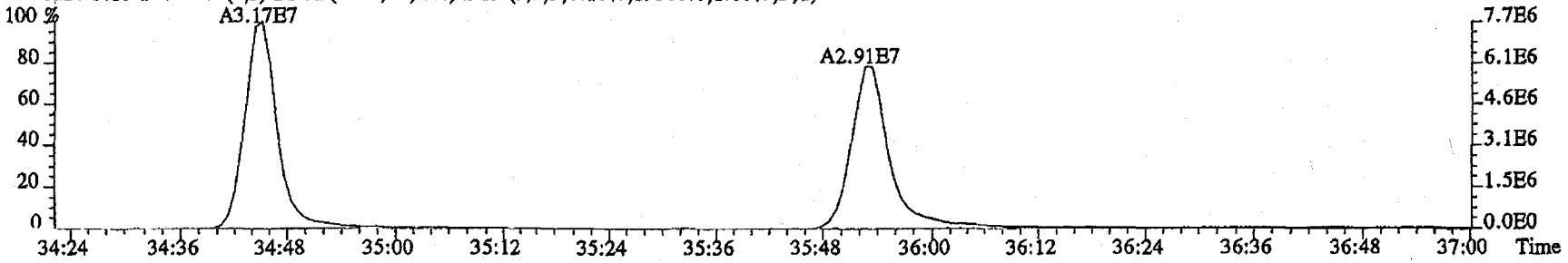
409.7789 S:15 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,7640.0,1.00%,F,T)



417.8253 S:15 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,8200.0,1.00%,F,T)

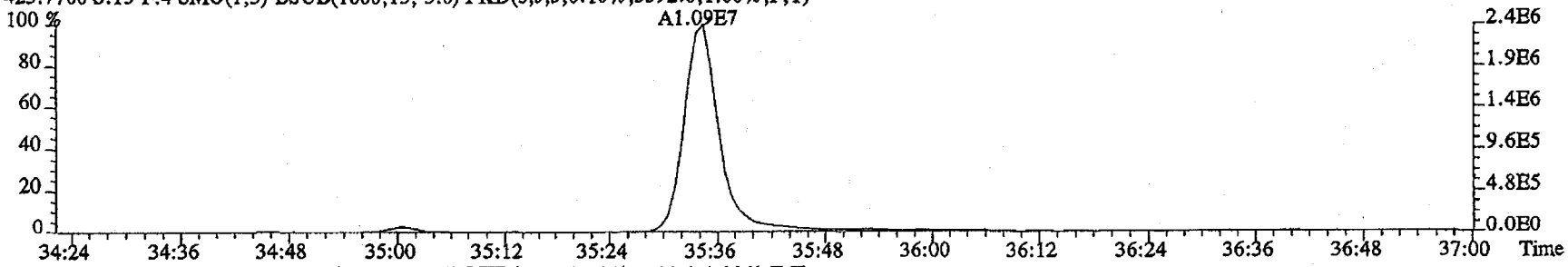


419.8220 S:15 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,19380.0,1.00%,F,T)

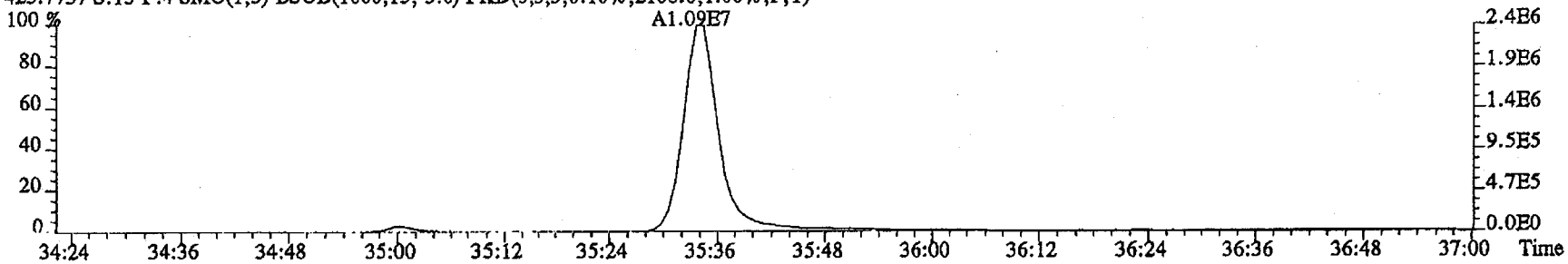


File:23MY114D5 #1-200 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaB
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

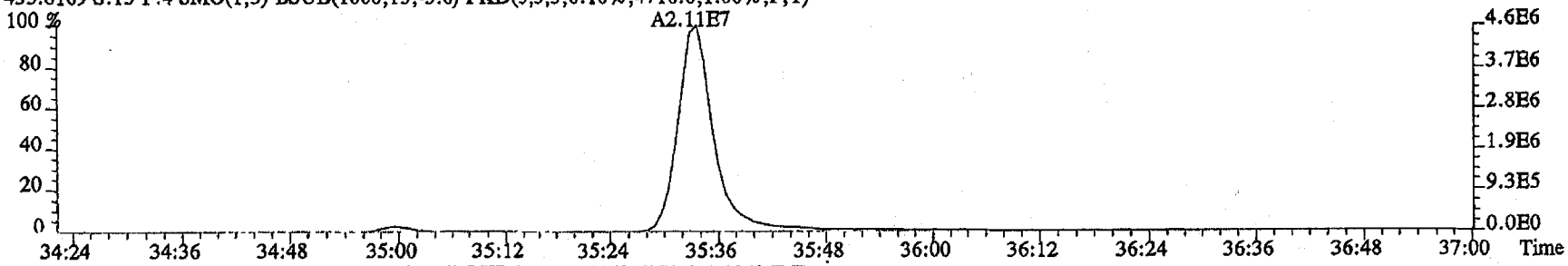
423.7766 S:15 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3392.0,1.00%,F,T)



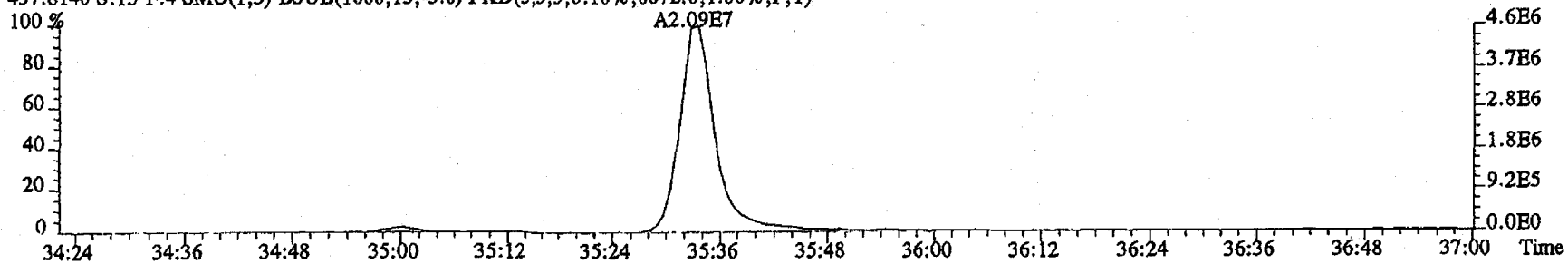
425.7737 S:15 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2108.0,1.00%,F,T)



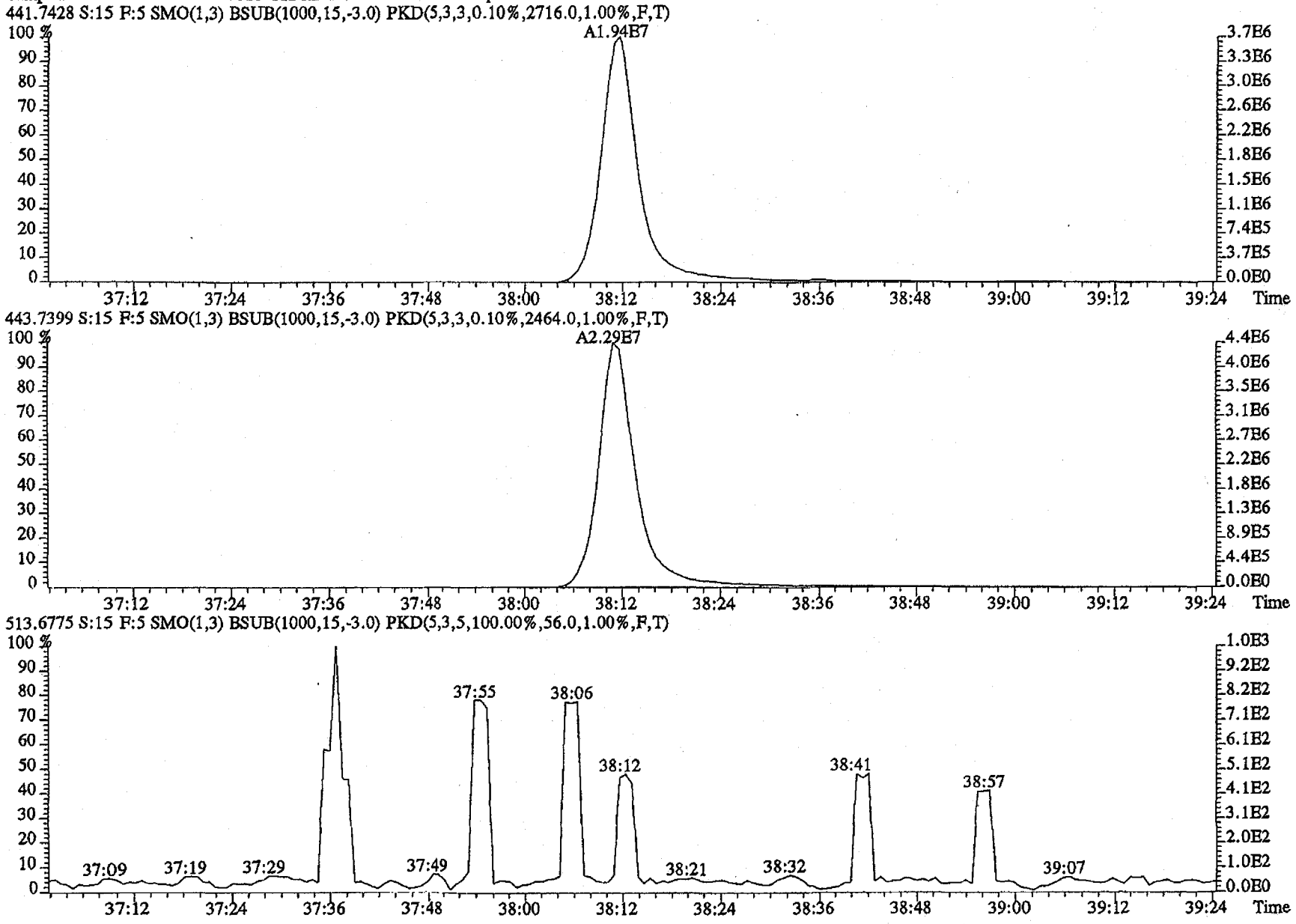
435.8169 S:15 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4716.0,1.00%,F,T)



437.8140 S:15 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6072.0,1.00%,F,T)

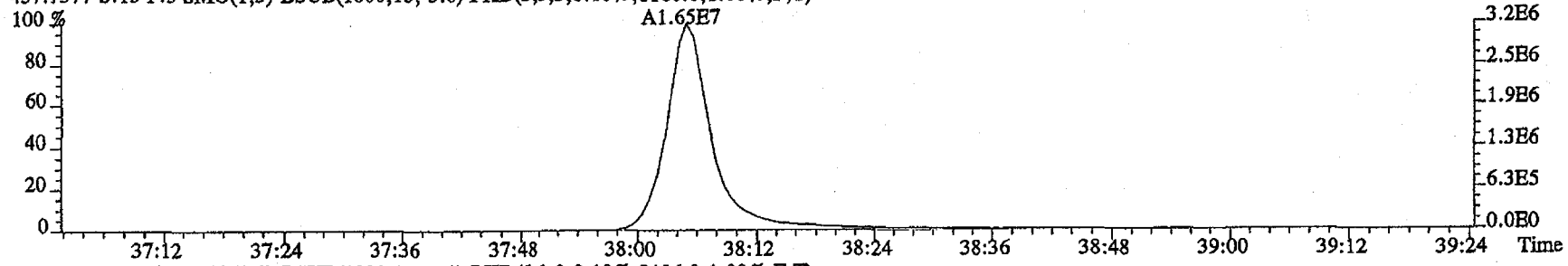


File:23MY114D5 #1-193 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

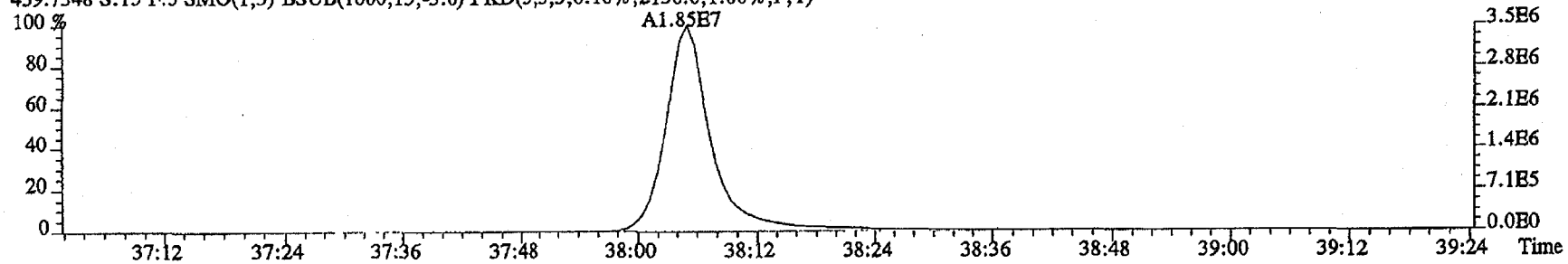


File:23MY114D5 #1-193 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

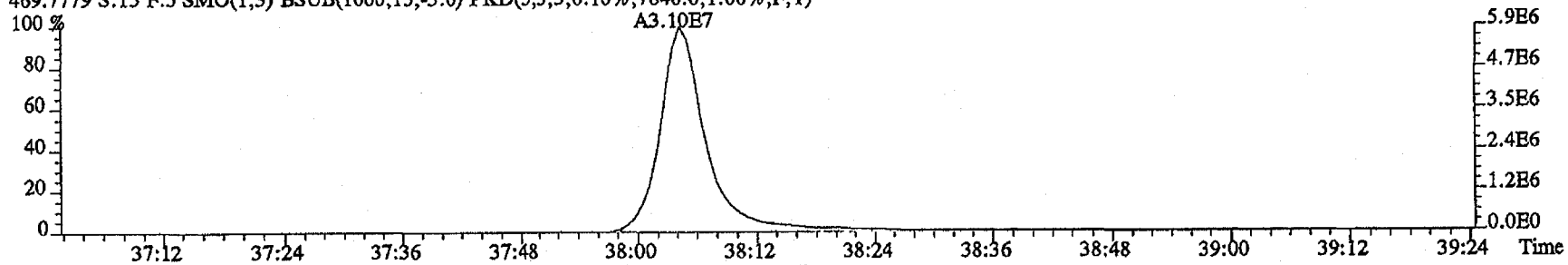
457.7377 S:15 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1160.0,1.00%,F,T)



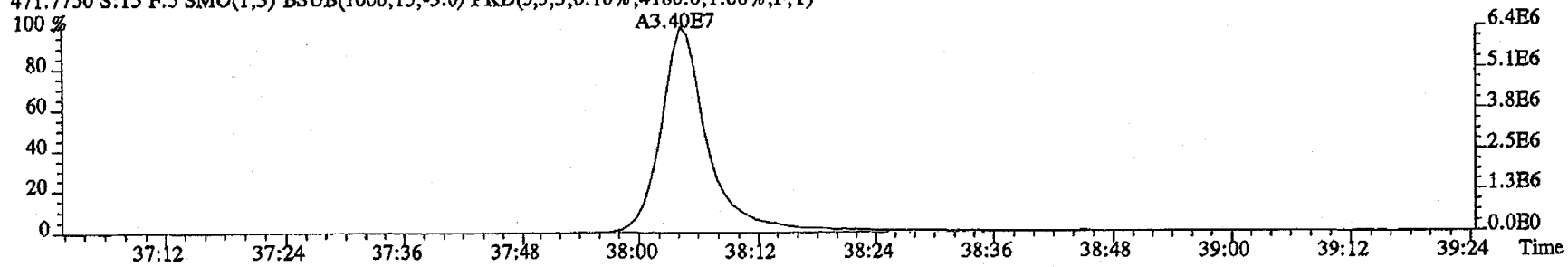
459.7348 S:15 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2136.0,1.00%,F,T)



469.7779 S:15 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,7840.0,1.00%,F,T)

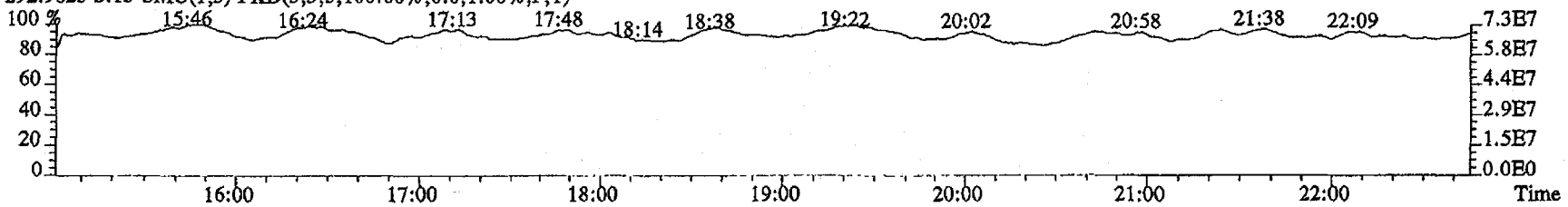


471.7750 S:15 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4180.0,1.00%,F,T)

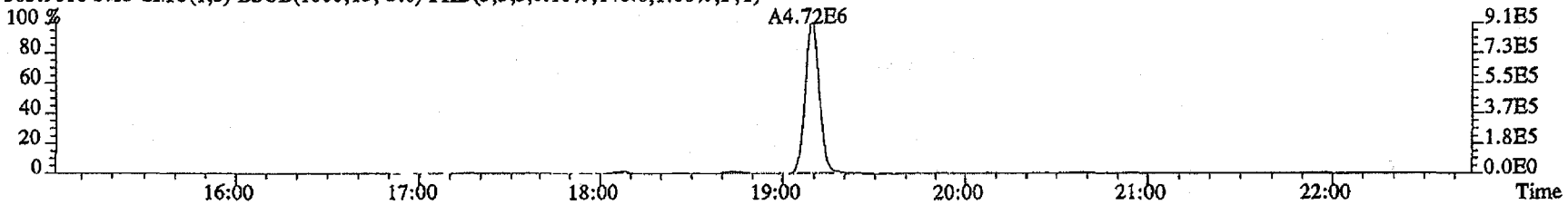


File:23MY114D5 #1-513 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

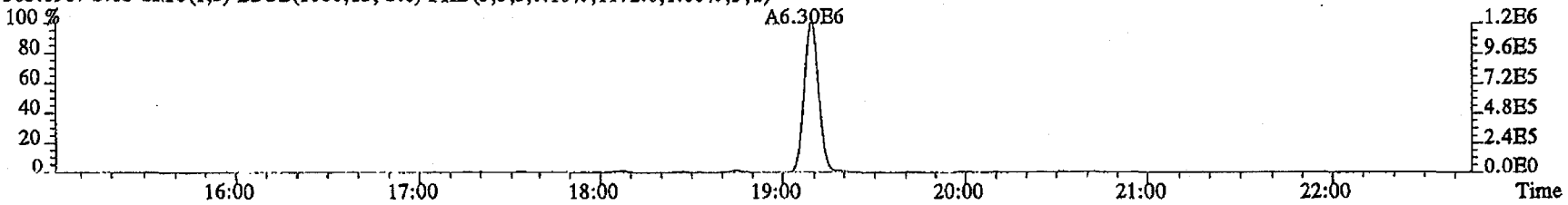
292.9825 S:15 SMO(1,3) PKD(5,3,5,100.00%,0.0,1.00%,F,T)



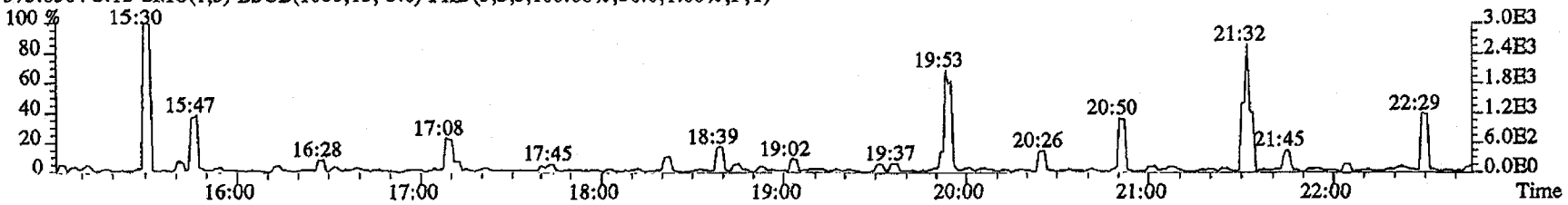
303.9016 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,140.0,1.00%,F,T)



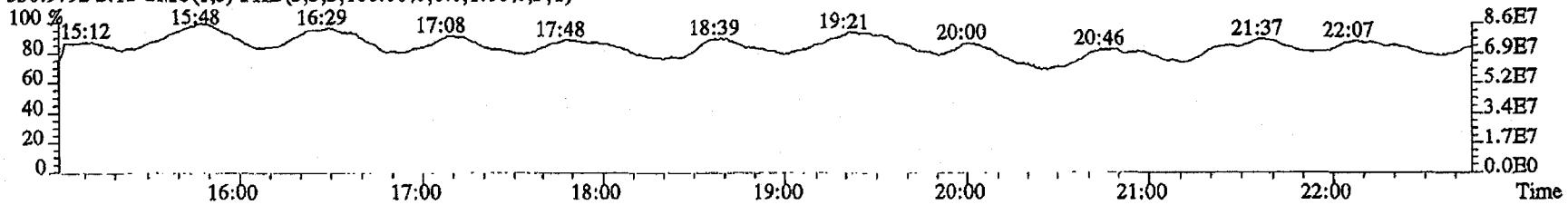
305.8987 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1172.0,1.00%,F,T)



375.8364 S:15 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,56.0,1.00%,F,T)

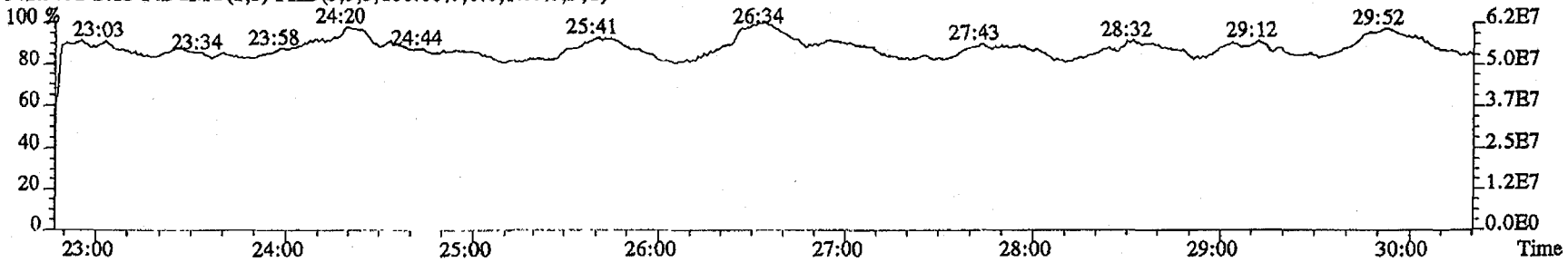


330.9792 S:15 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)

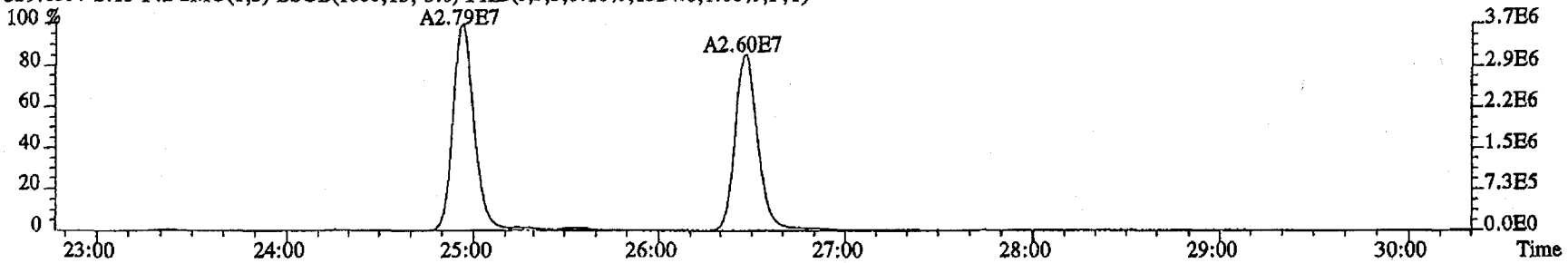


File:23MY114D5 #1-486 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES

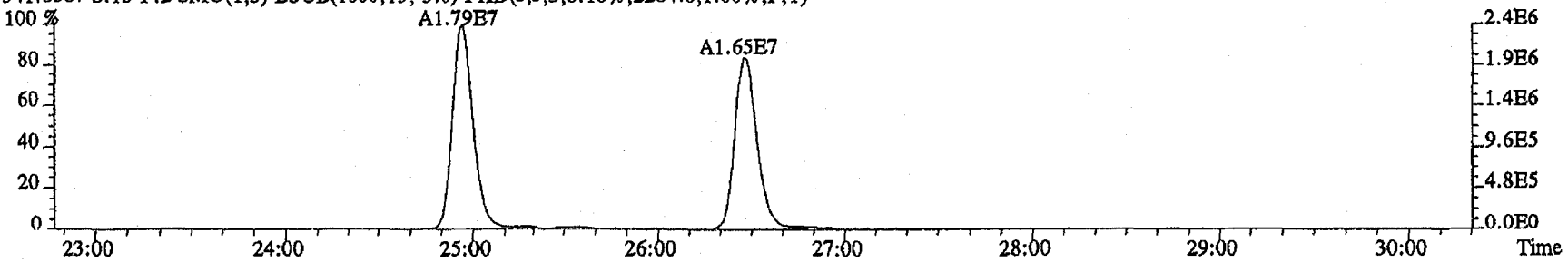
342.9792 S:15 F:2 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



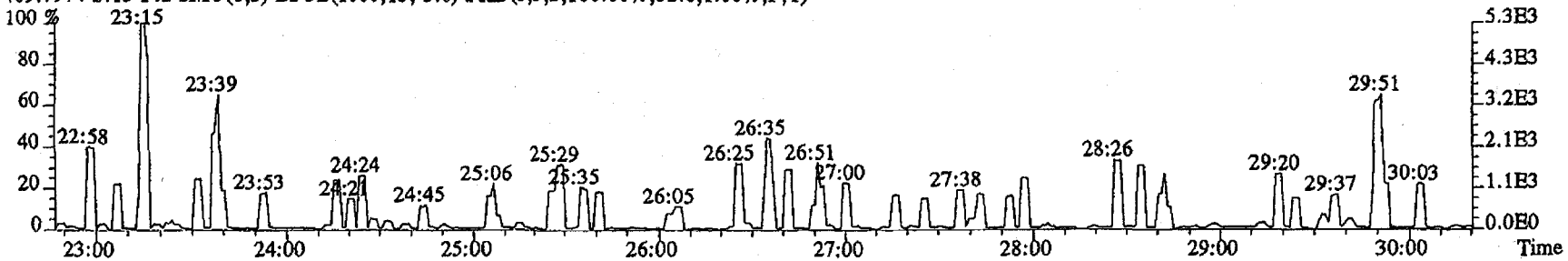
339.8597 S:15 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1524.0,1.00%,F,T)



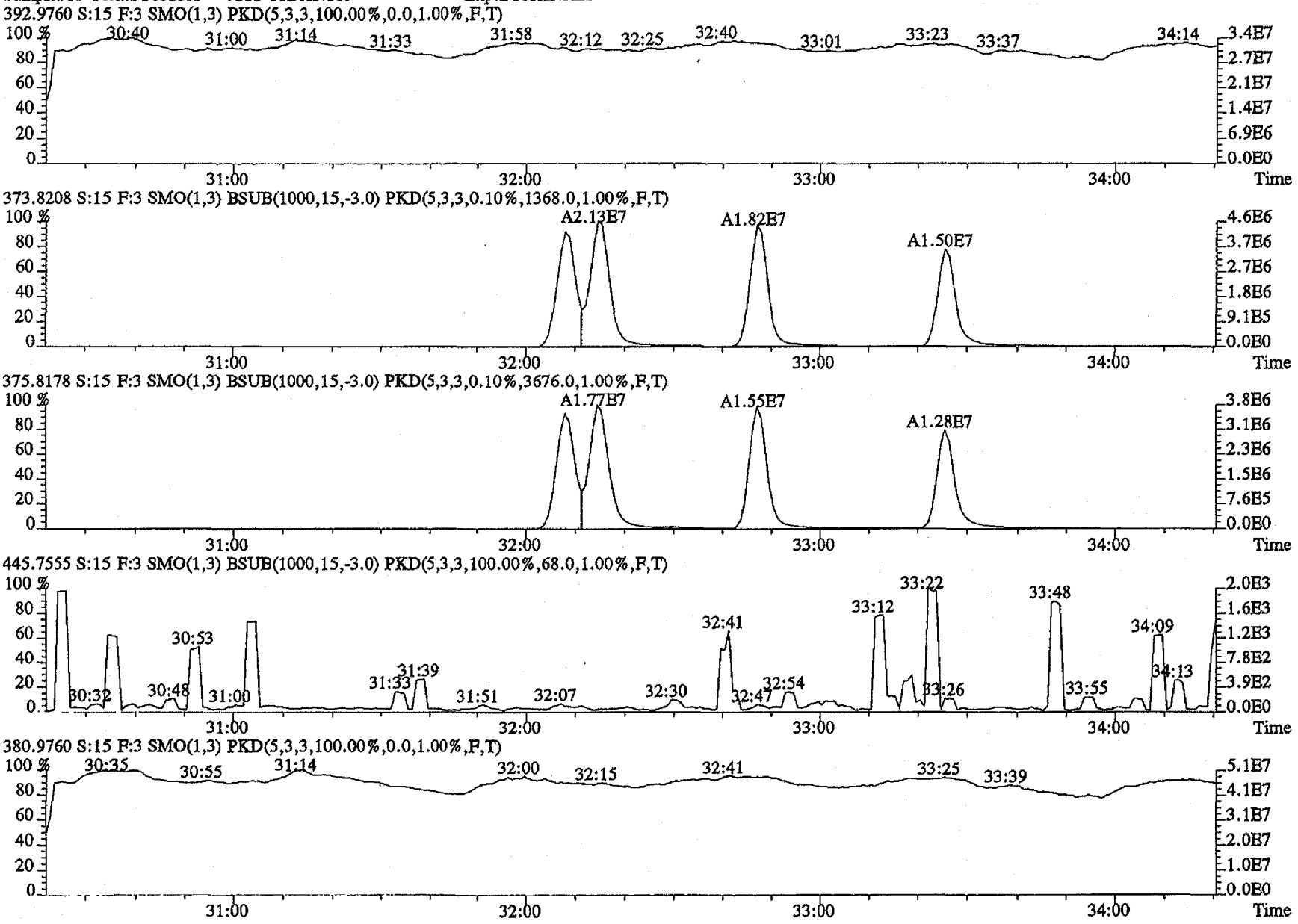
341.8567 S:15 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2264.0,1.00%,F,T)



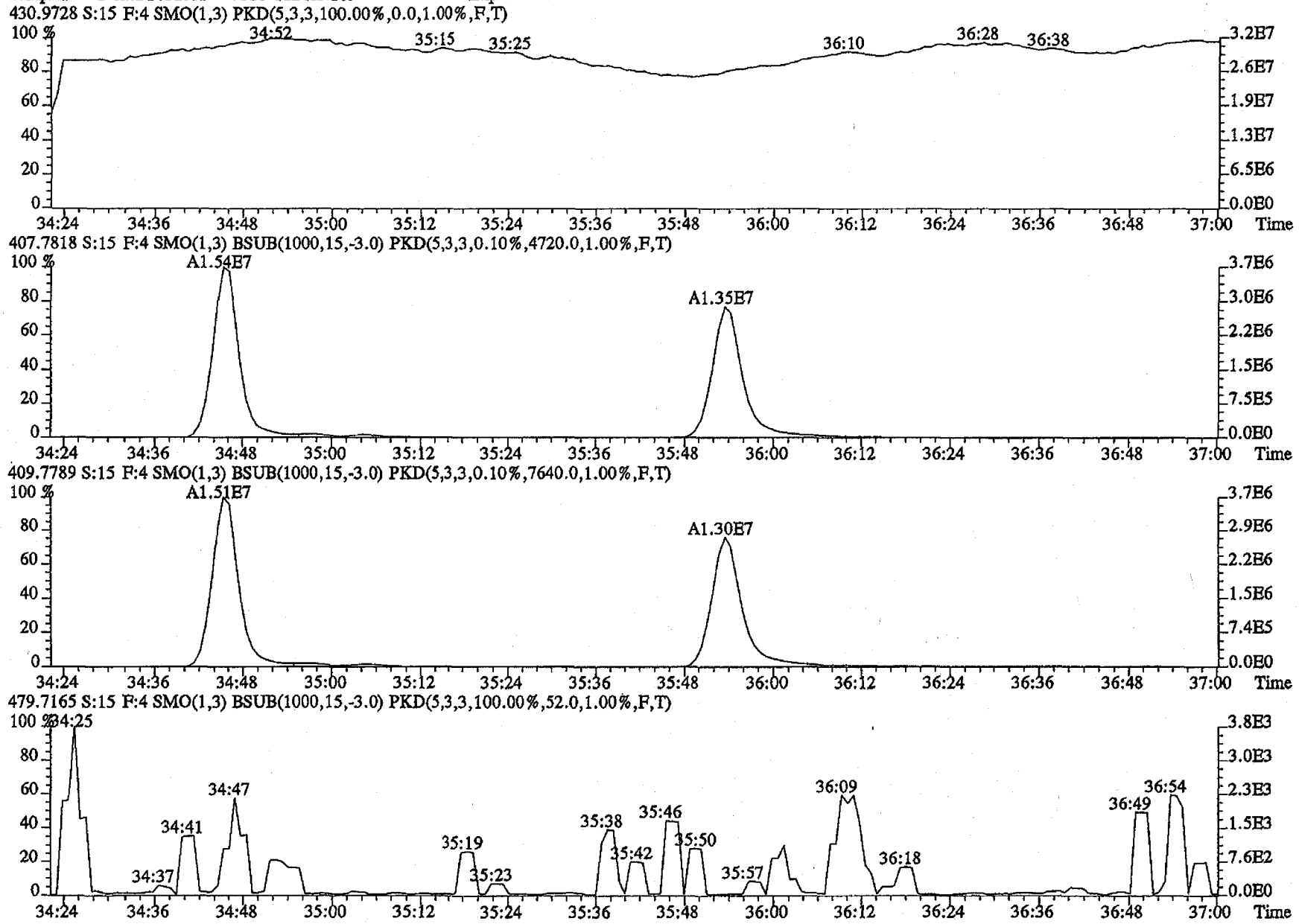
409.7974 S:15 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,52.0,1.00%,F,T)



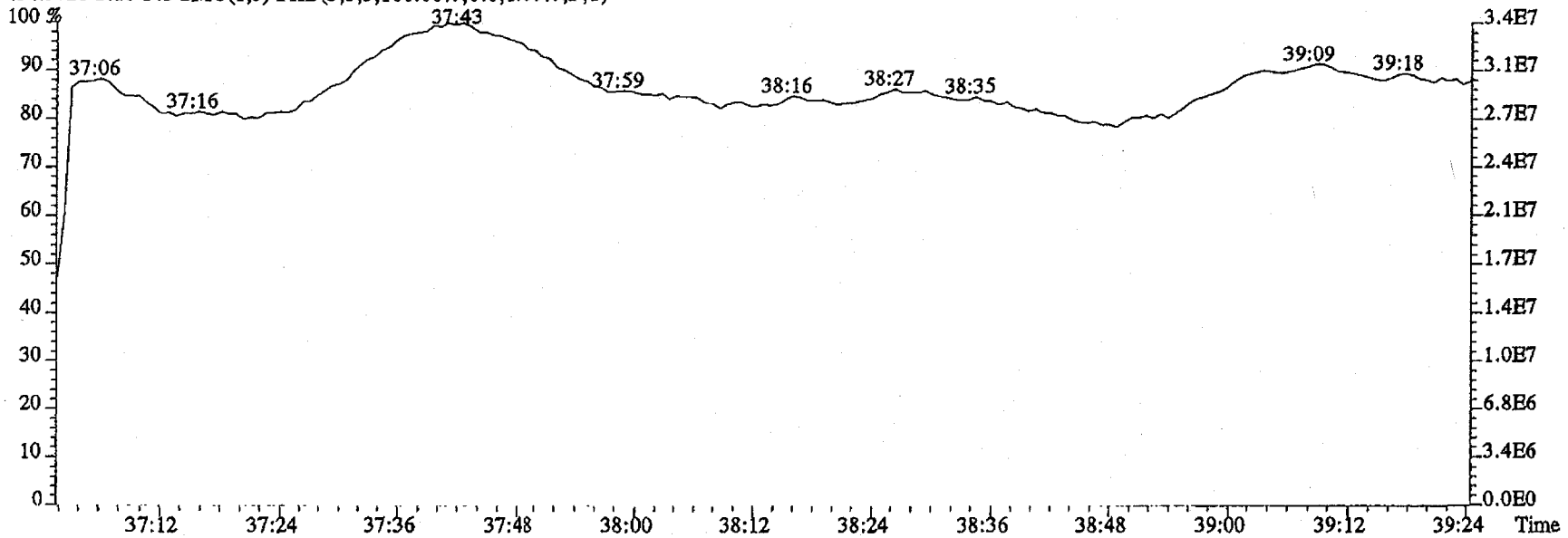
File:23MY114D5 #1-287 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES



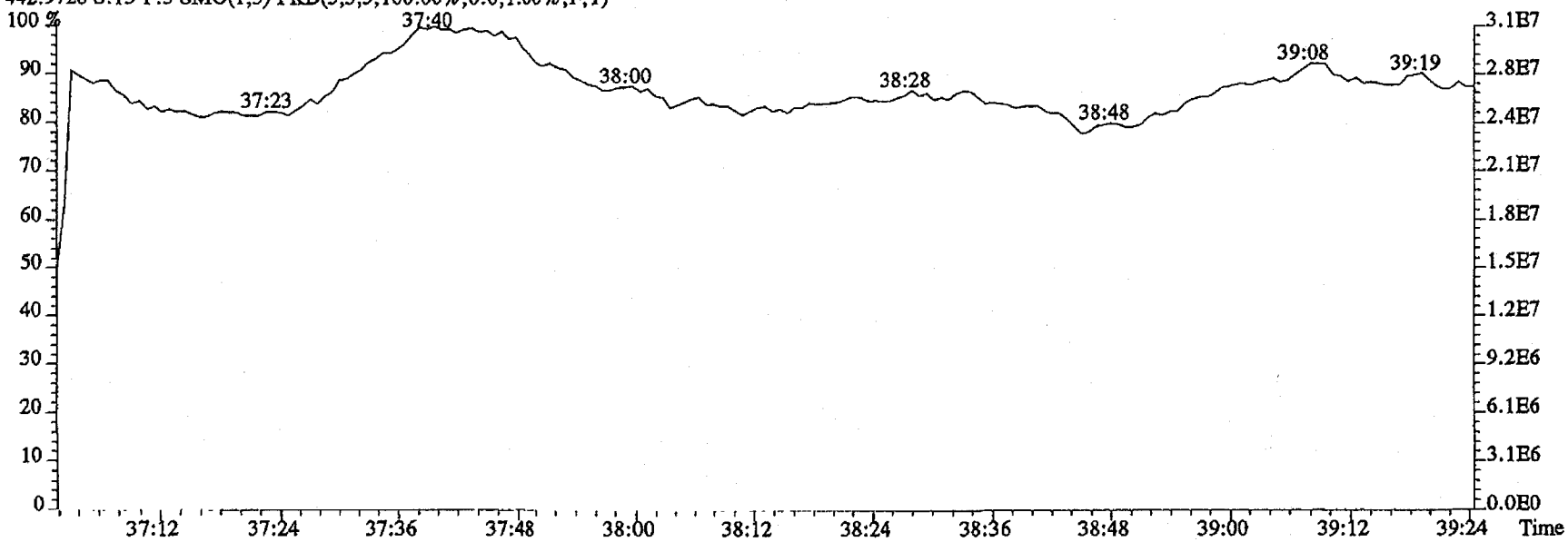
File:23MY114D5 #1-200 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES



File:23MY114D5 #1-193 Acq:23-MAY-2011 20:14:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 Text:ST0523A :CS3 11DXN109 Exp:DIOXINRES
454.9728 S:15 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



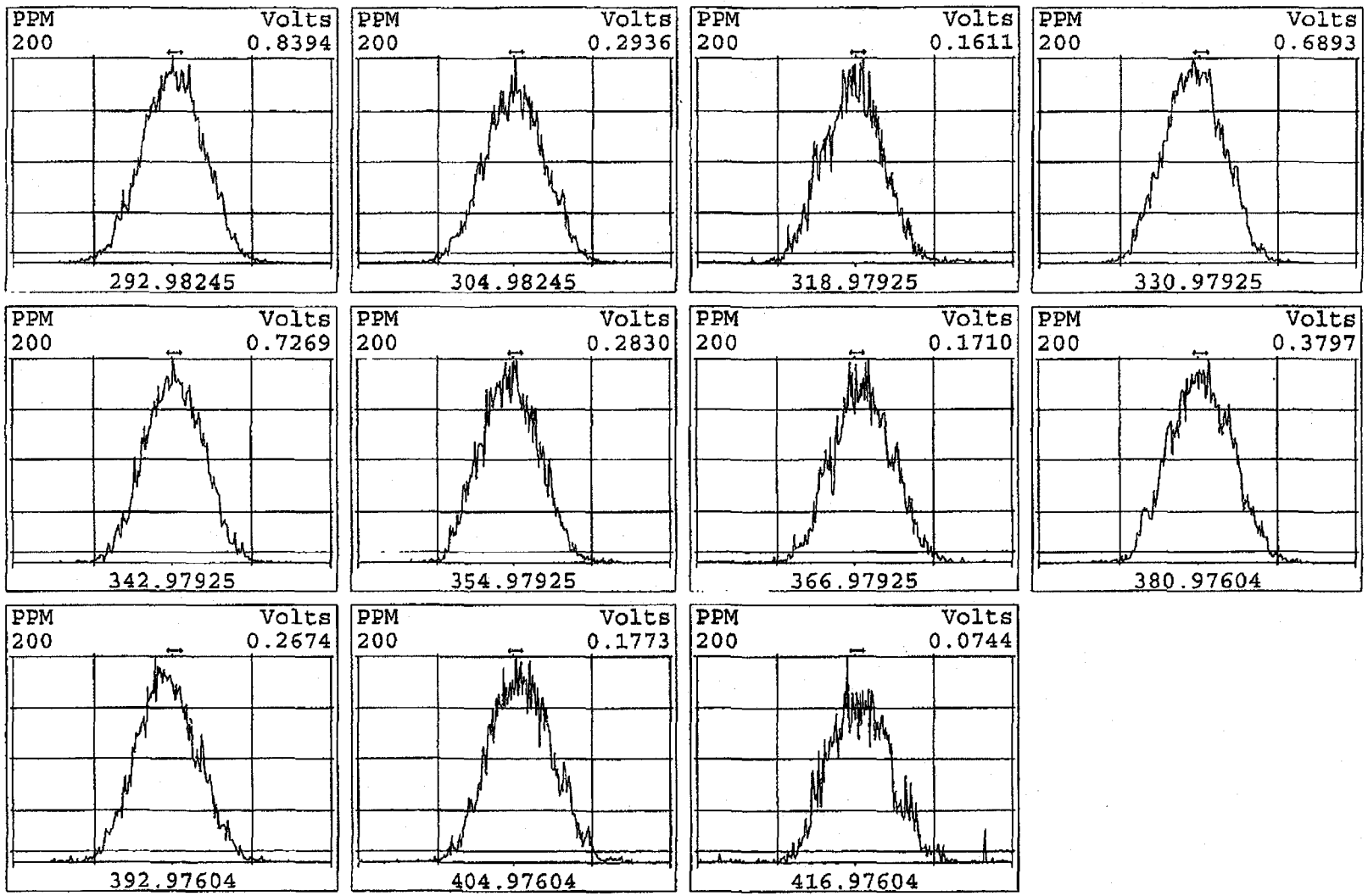
442.9728 S:15 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



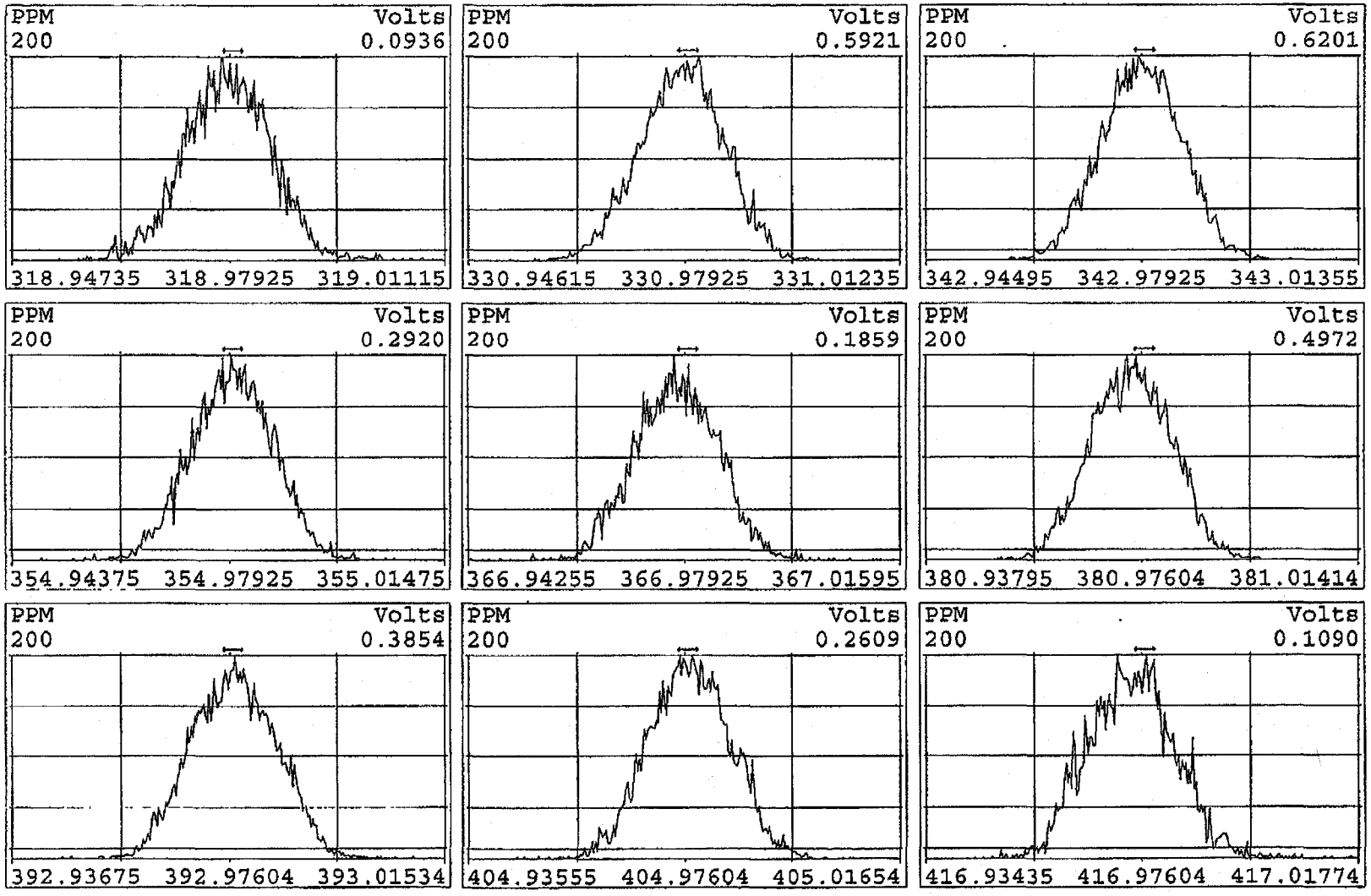
Raw QC Data

Tune Data

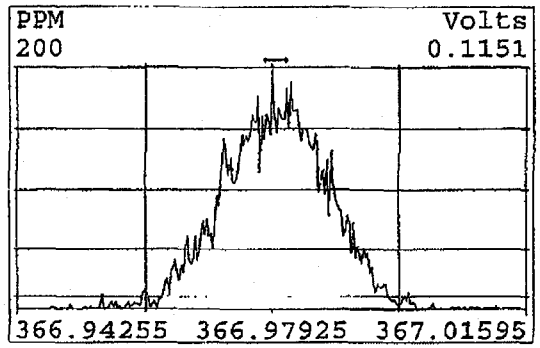
Peak Locate Examination:22-FEB-2011:12:50 File:22FE11A4D5
Experiment:DIOXINRES Function:1 Reference:PFK

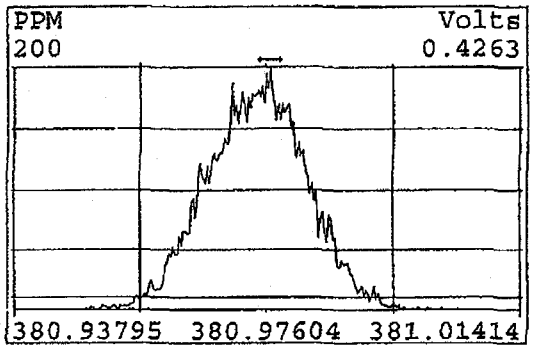


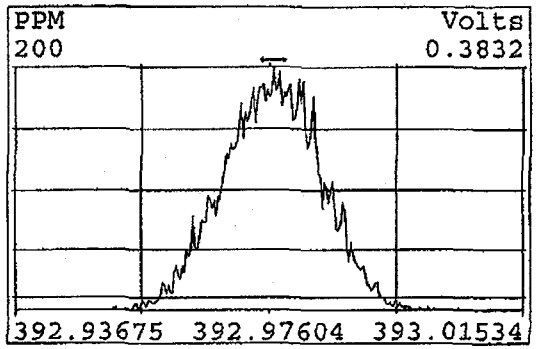
Peak Locate Examination:22-FEB-2011:12:50 File:22FE11A4D5
Experiment:DIOXINRES Function:2 Reference:PFK

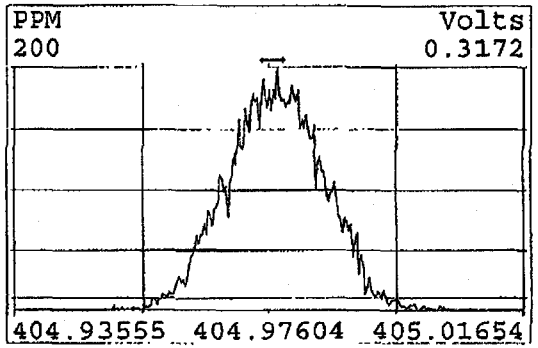


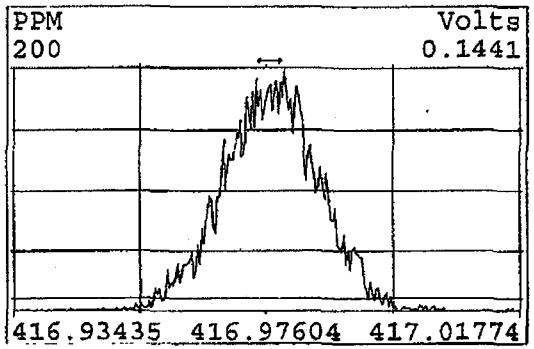
Peak Locate Examination:22-FEB-2011:12:51 File:22FE11A4D5
Experiment:DIOXINRES Function:3 Reference:PFK

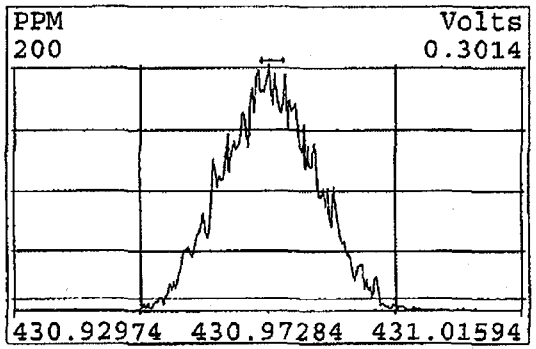


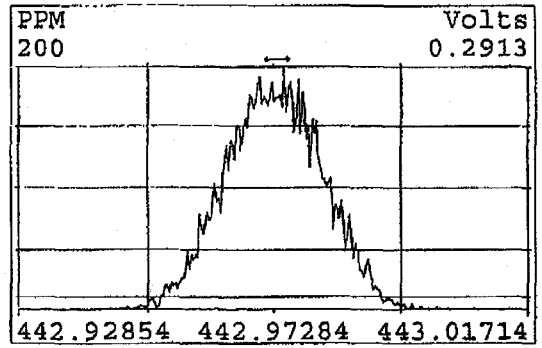


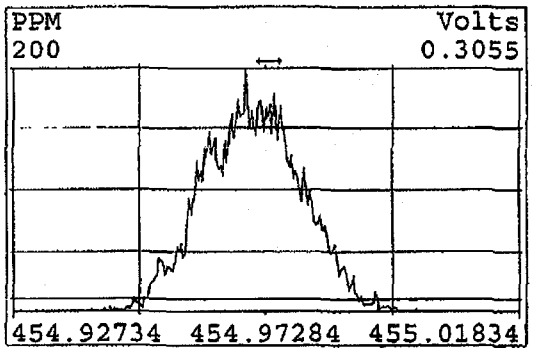




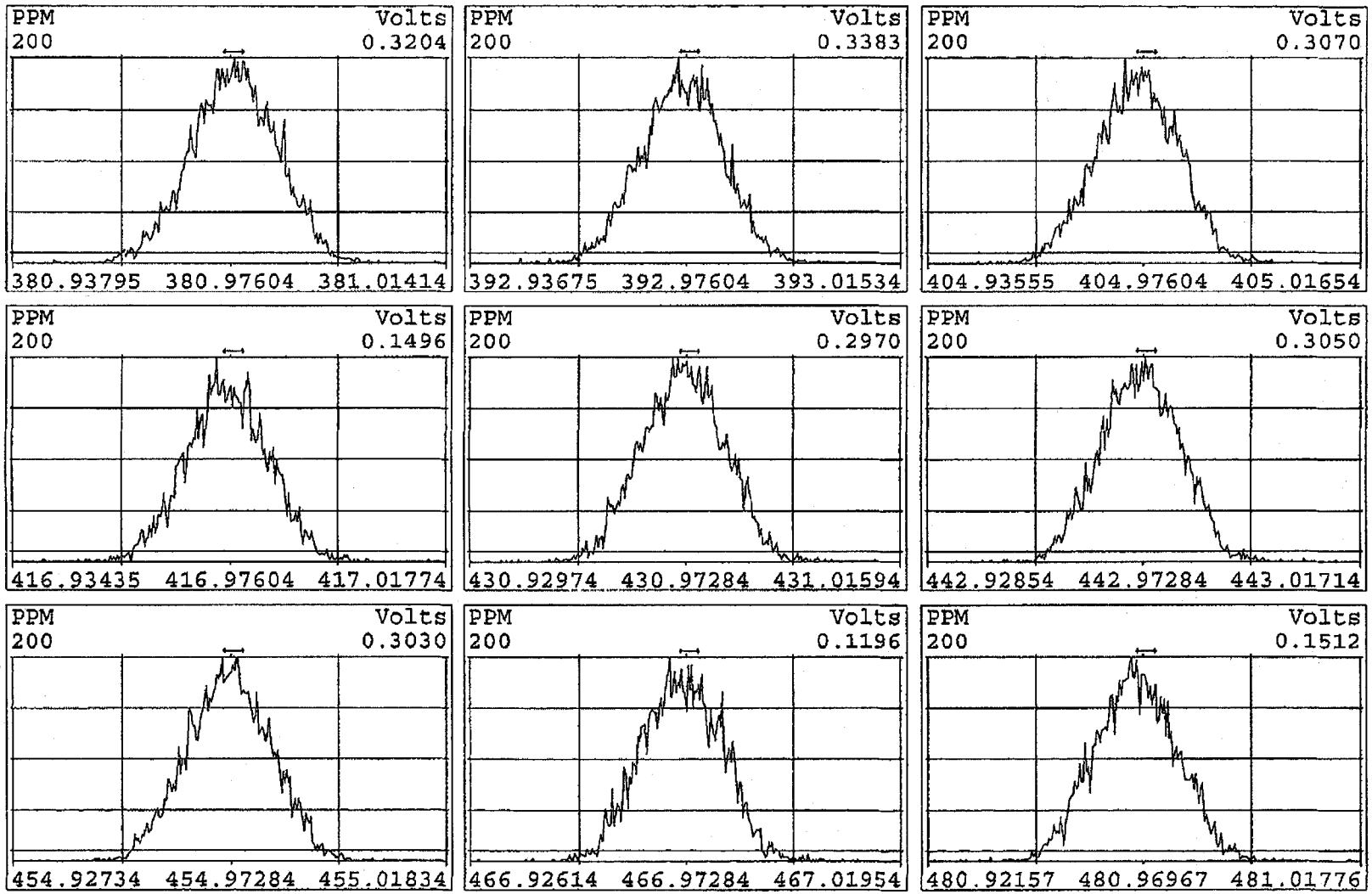




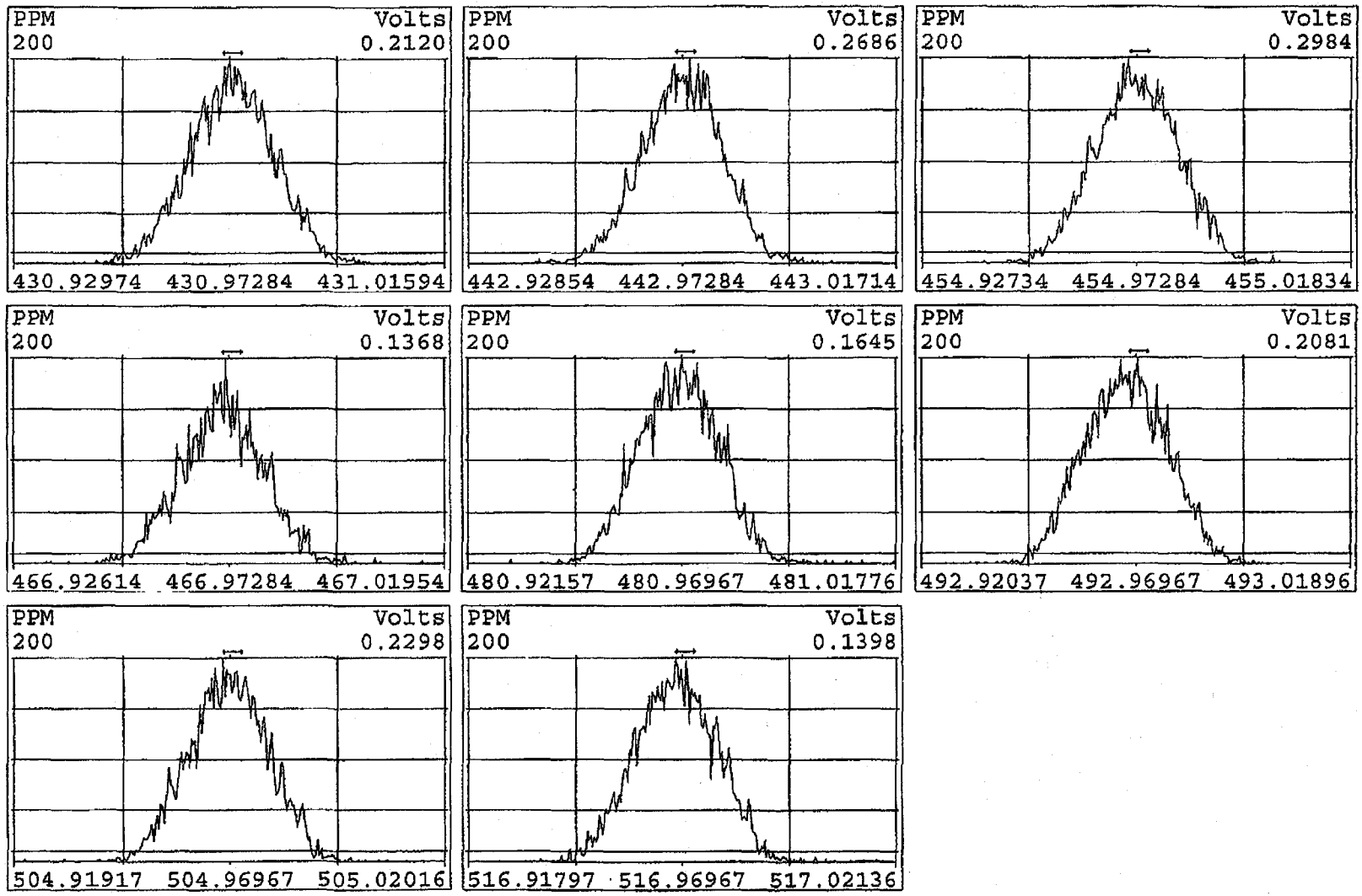




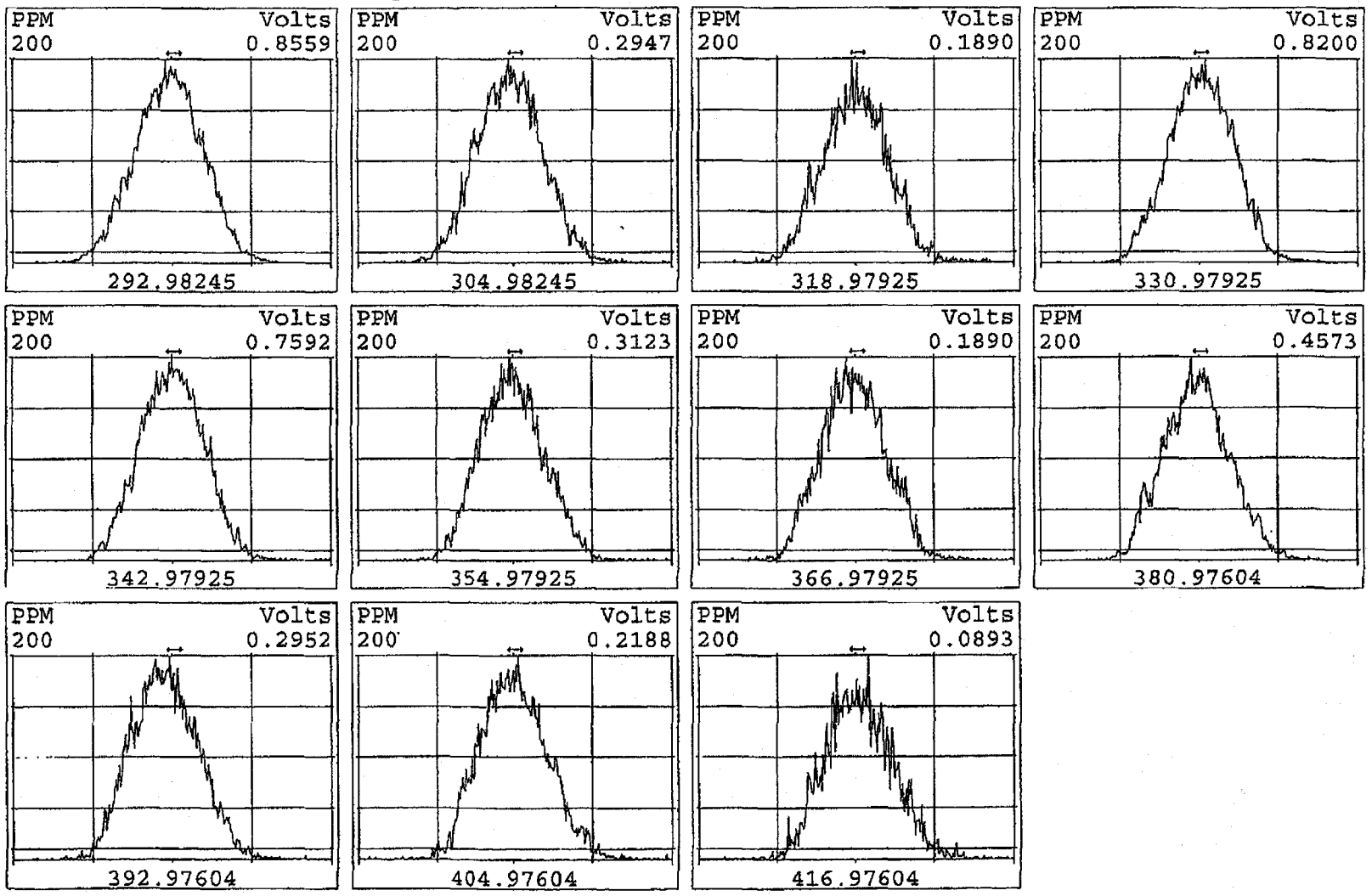
Peak Locate Examination:22-FEB-2011:12:51 File:22FE11A4D5
Experiment:DIOXINRES Function:4 Reference:PFK



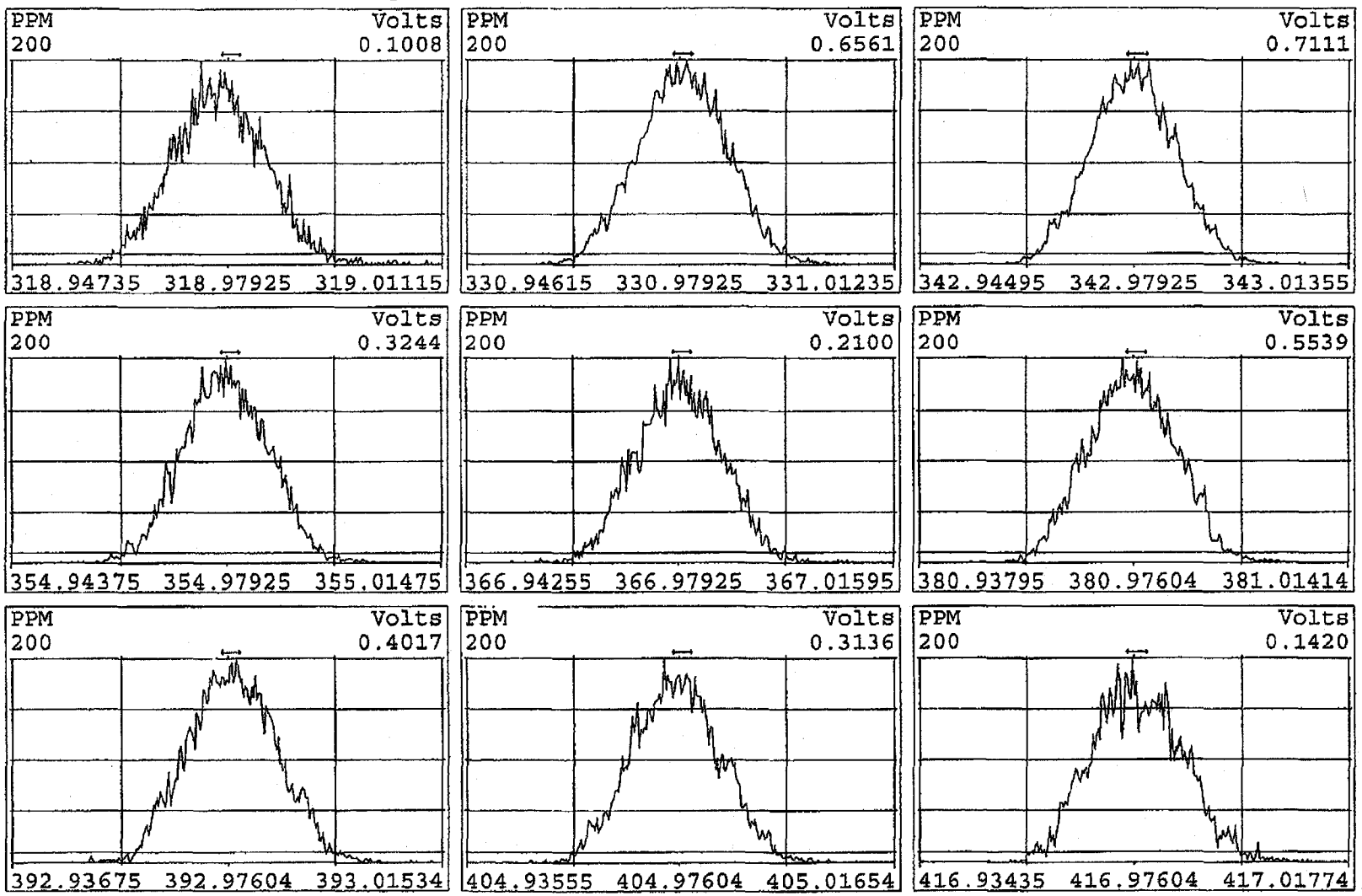
Peak Locate Examination:22-FEB-2011:12:52 File:22FE11A4D5
Experiment:DIOXINRES Function:5 Reference:PFK



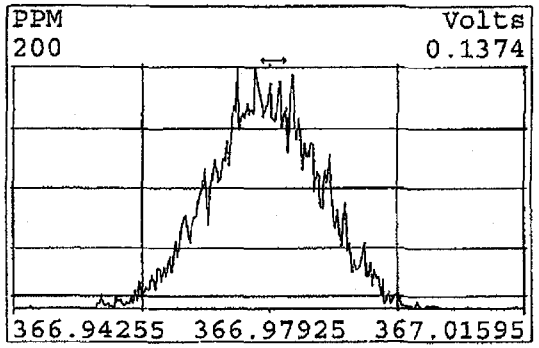
Peak Locate Examination:22-FEB-2011:19:47 File:RESCHK22FE11A4D5
Experiment:DIOXINRES Function:1 Reference:PFK

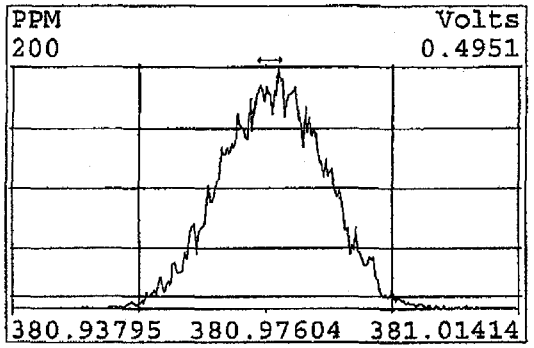


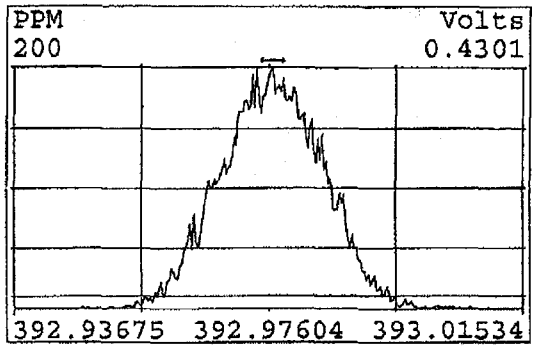
Peak Locate Examination:22-FEB-2011:19:49 File:RESCHK22FE11A4D5
Experiment:DIOXINRES Function:2 Reference:PFK

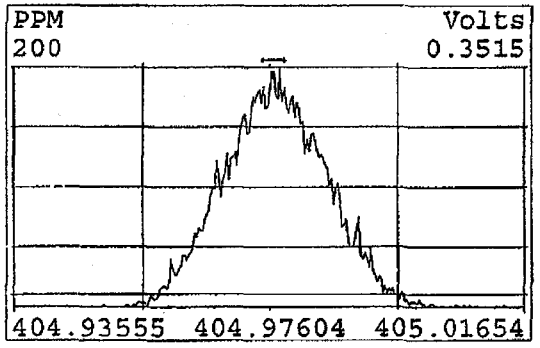


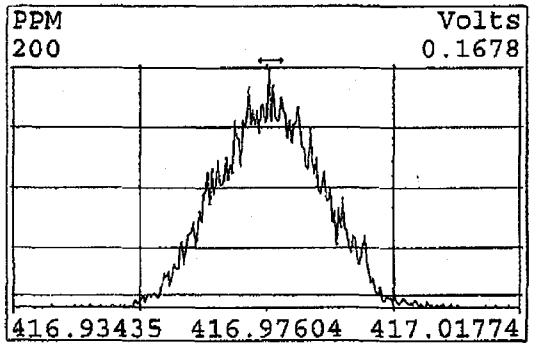
Peak Locate Examination:22-FEB-2011:19:50 File:RESCHK22FE11A4D5
Experiment:DIOXINRES Function:3 Reference:PFK

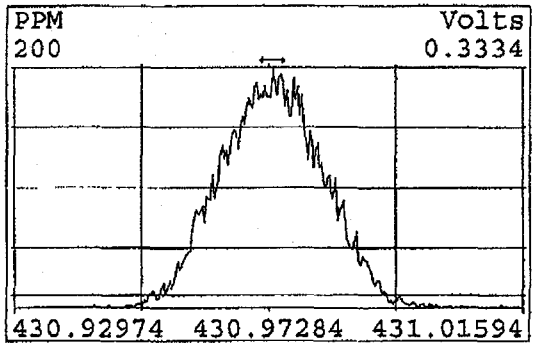


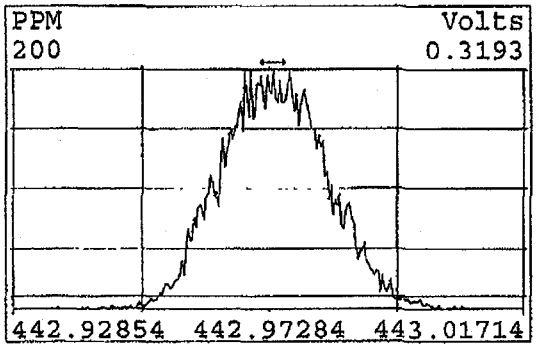


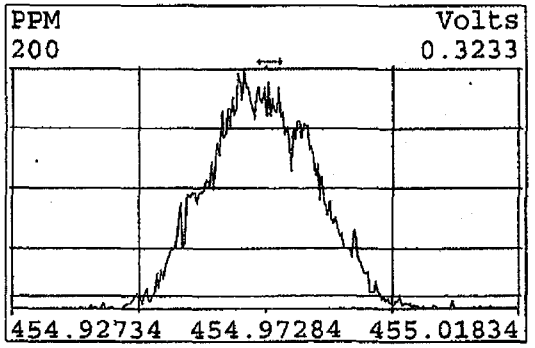




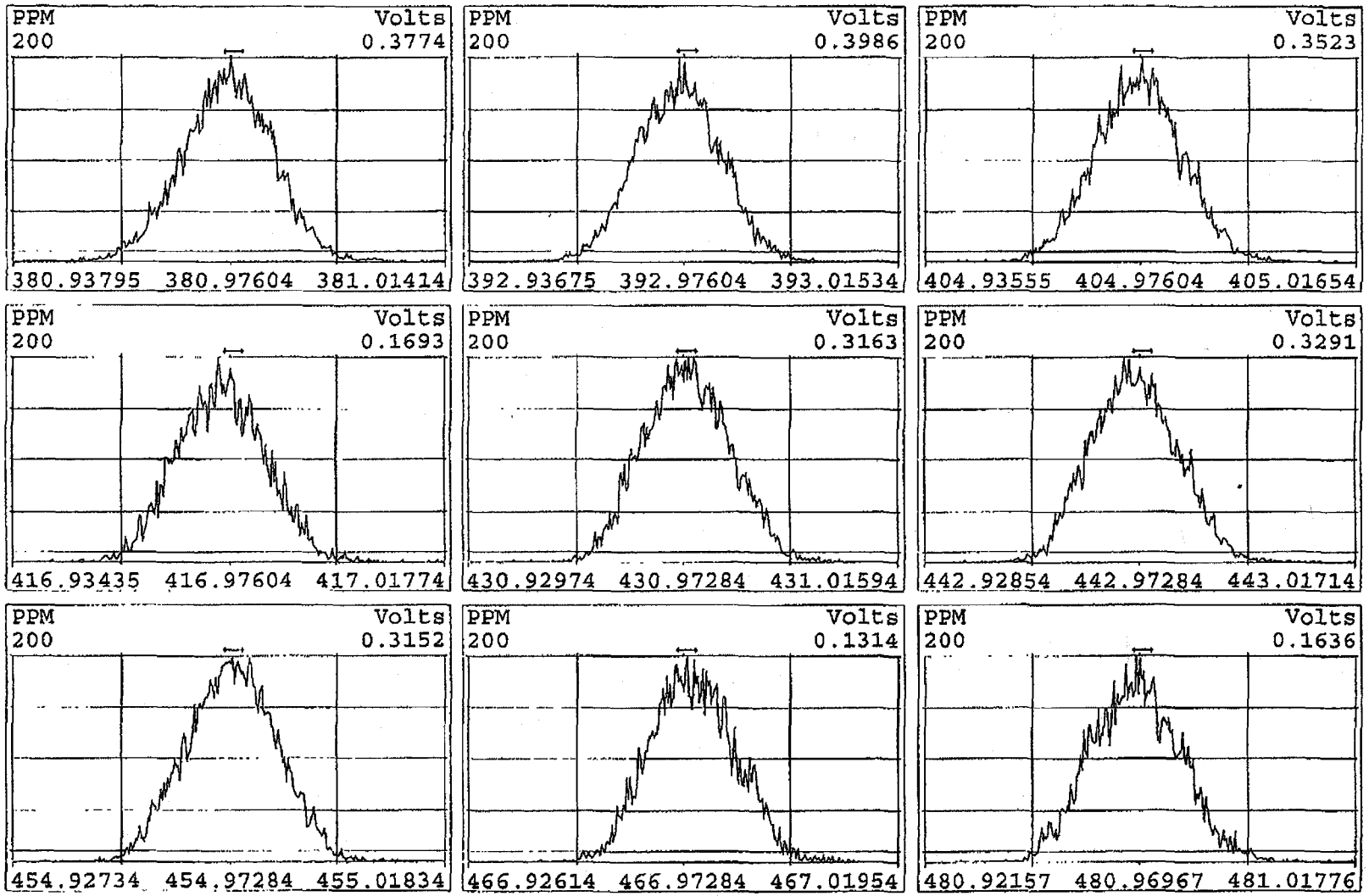




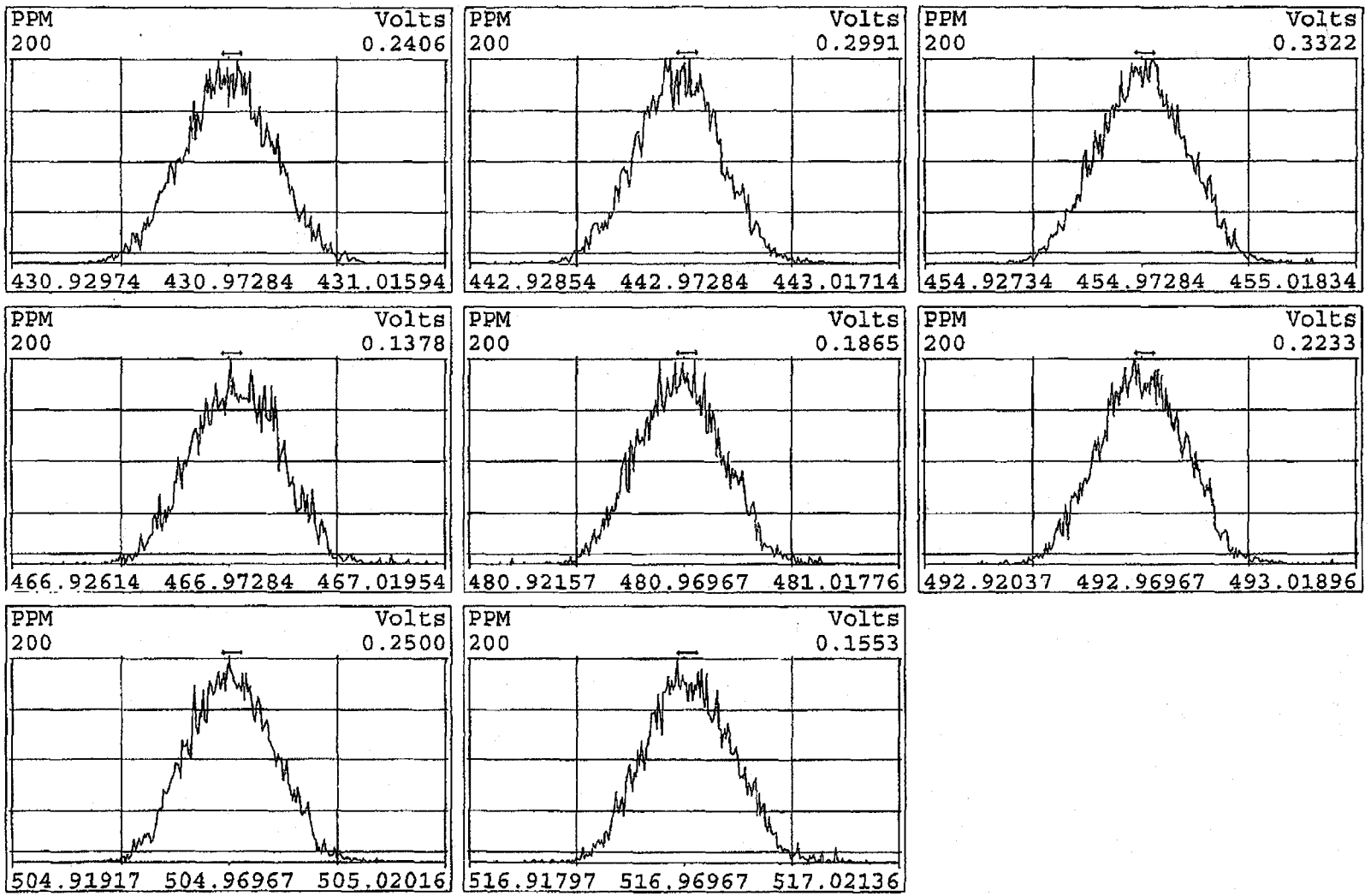




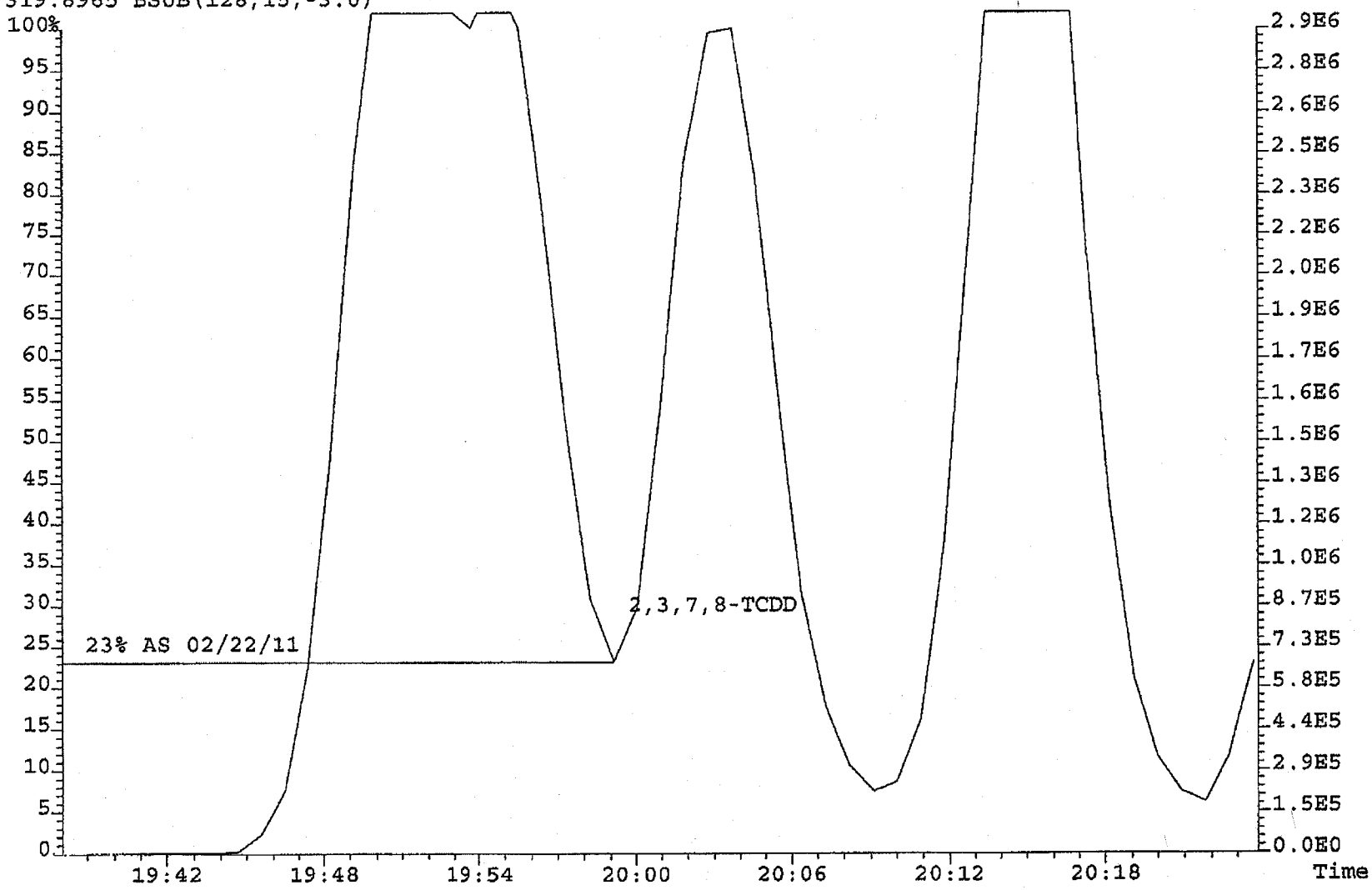
Peak Locate Examination:22-FEB-2011:19:51 File:RESCHK22FE11A4D5
Experiment:DIOXINRES Function:4 Reference:PFK



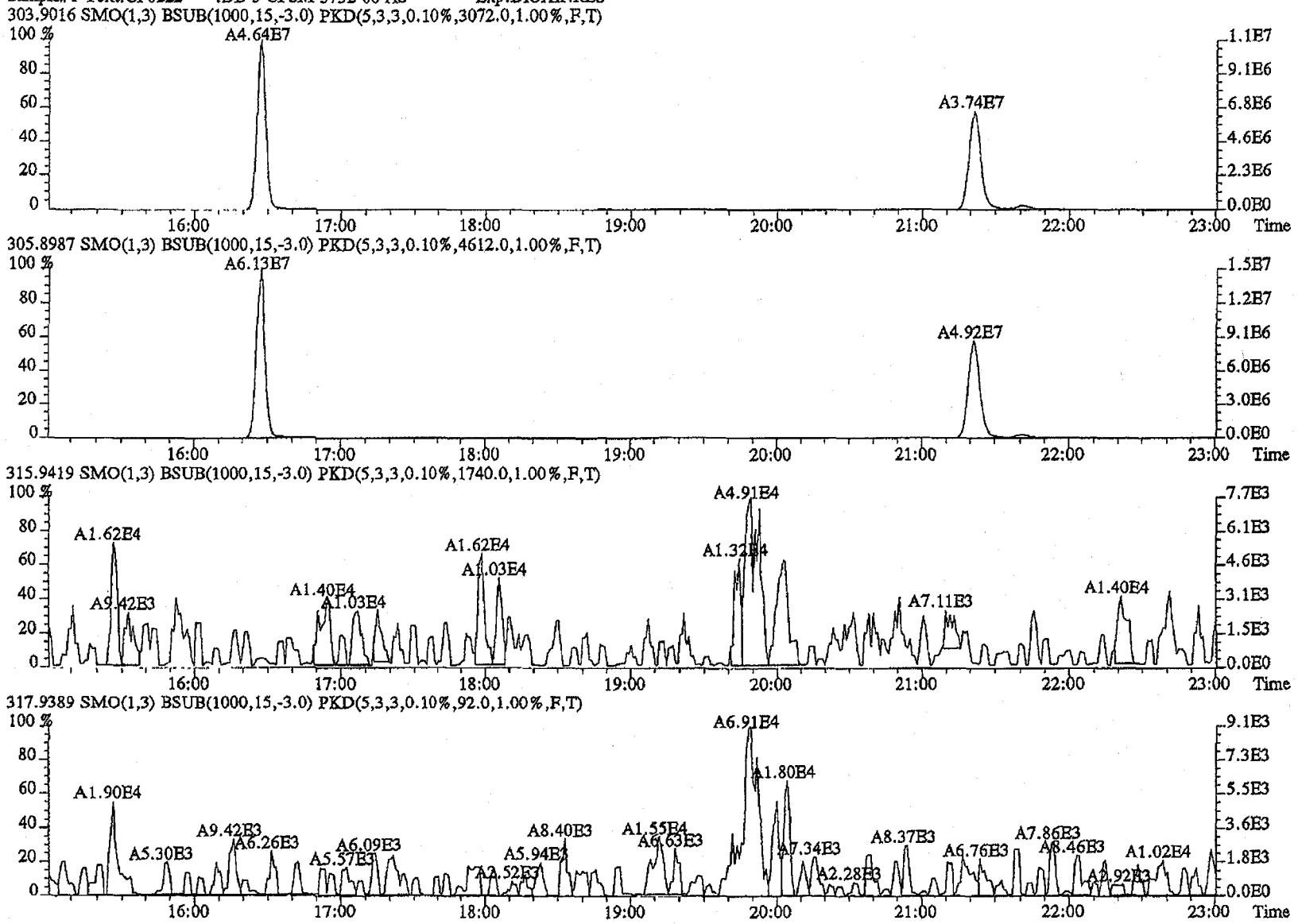
Peak Locate Examination:22-FEB-2011:19:52 File:RESCHK22FE11A4D5
Experiment:DIOXINRES Function:5 Reference:PFK



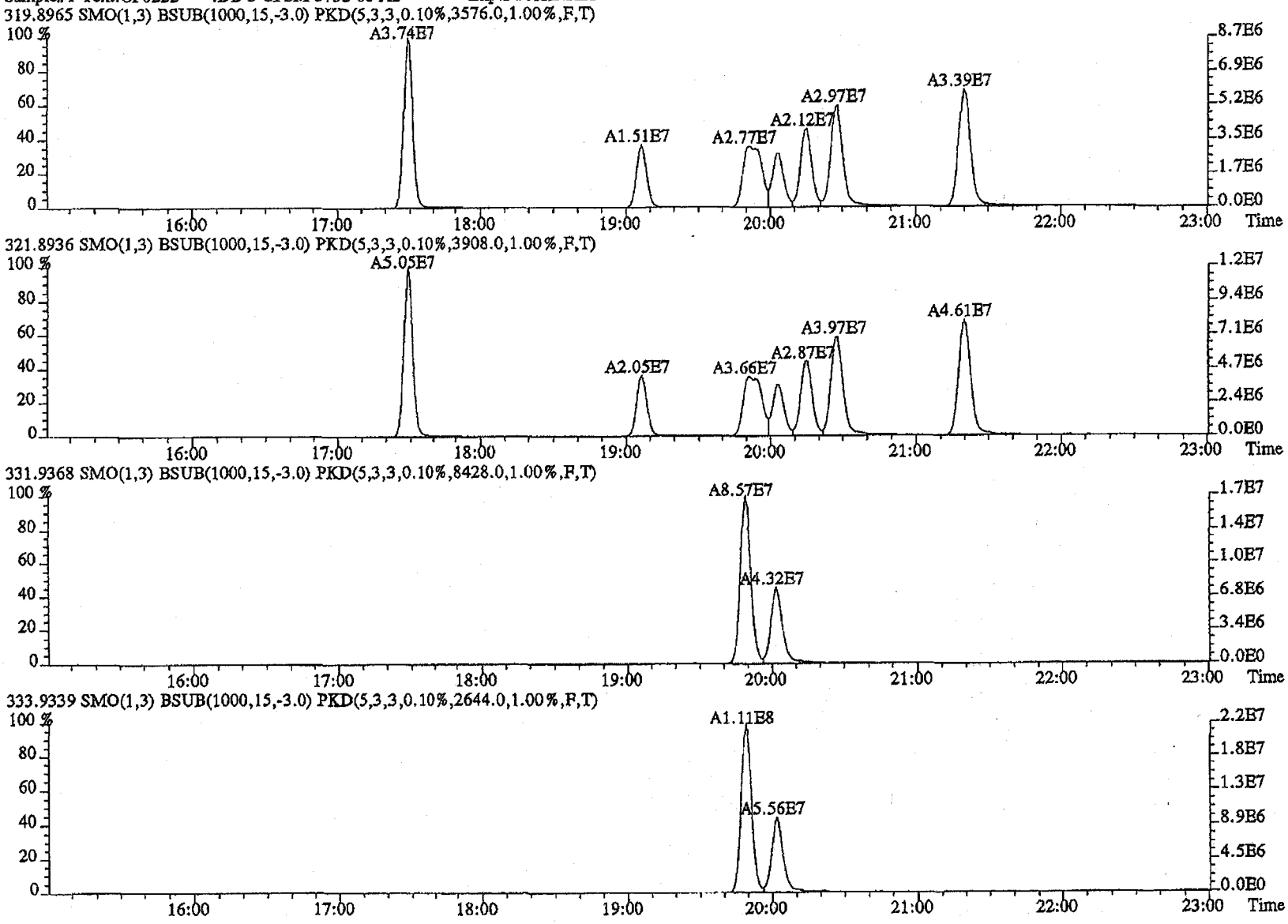
File:22FE11A4D5 #1-530 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES
319.8965 BSUB(128,15,-3.0)



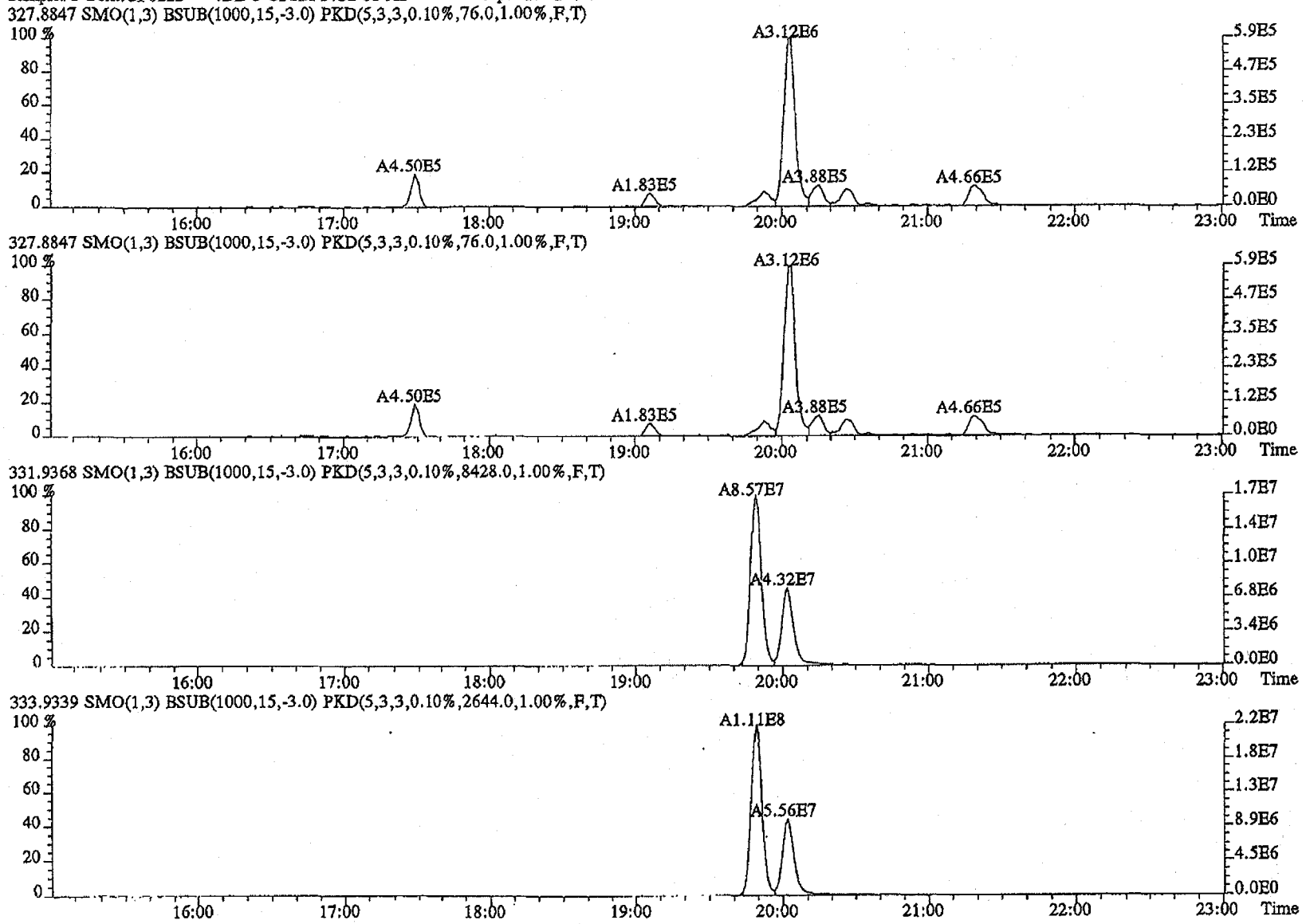
File:22FB11A4D5 #1-530 Acq:22-FBB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES



File:22FE11A4D5 #1-530 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaB
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES

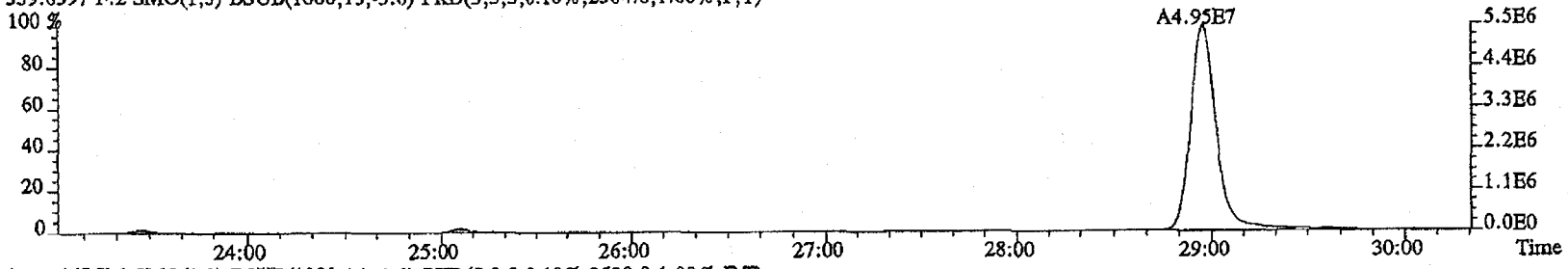


File:22FB11A4D5 #1-530 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES

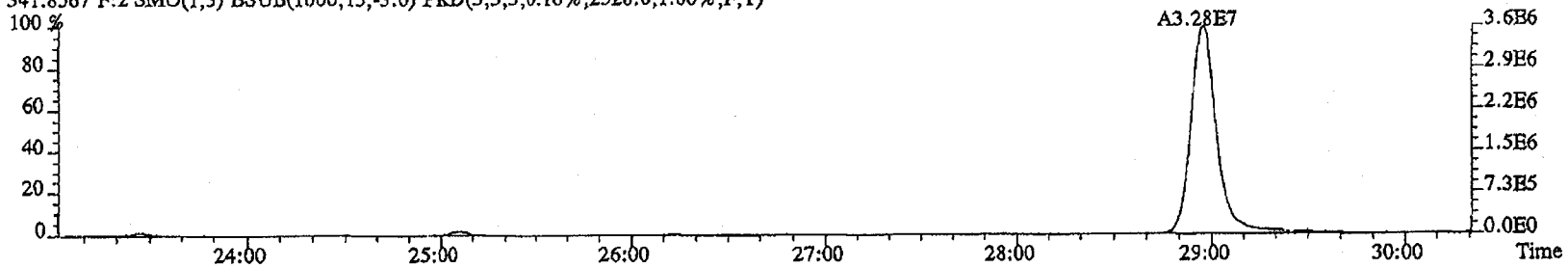


File:22FE11A4D5 #1-470 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES

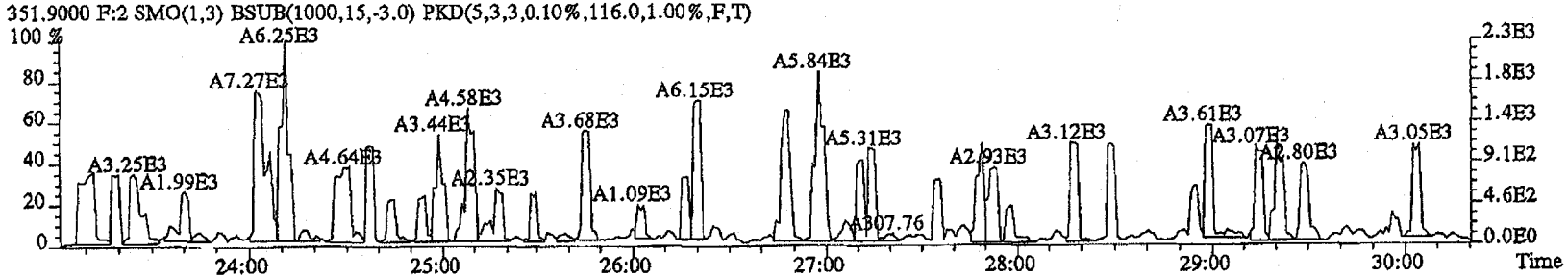
339.8597 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2304.0,1.00%,F,T)



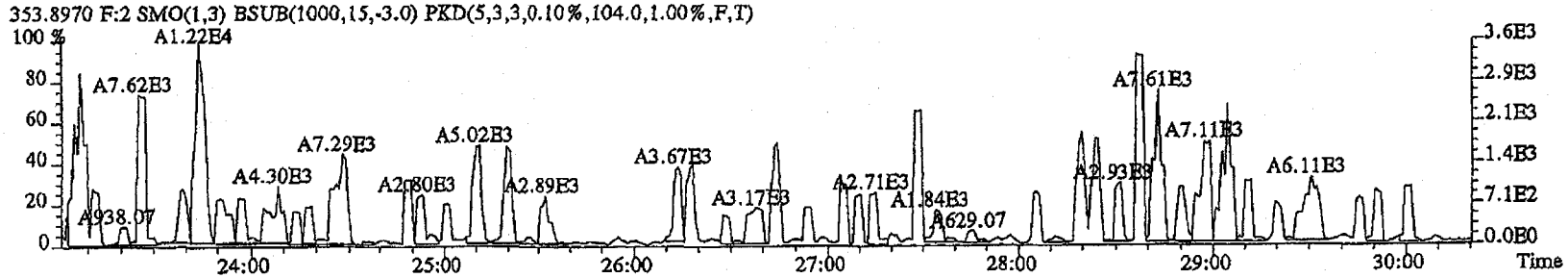
341.8567 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2520.0,1.00%,F,T)



351.9000 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,116.0,1.00%,F,T)

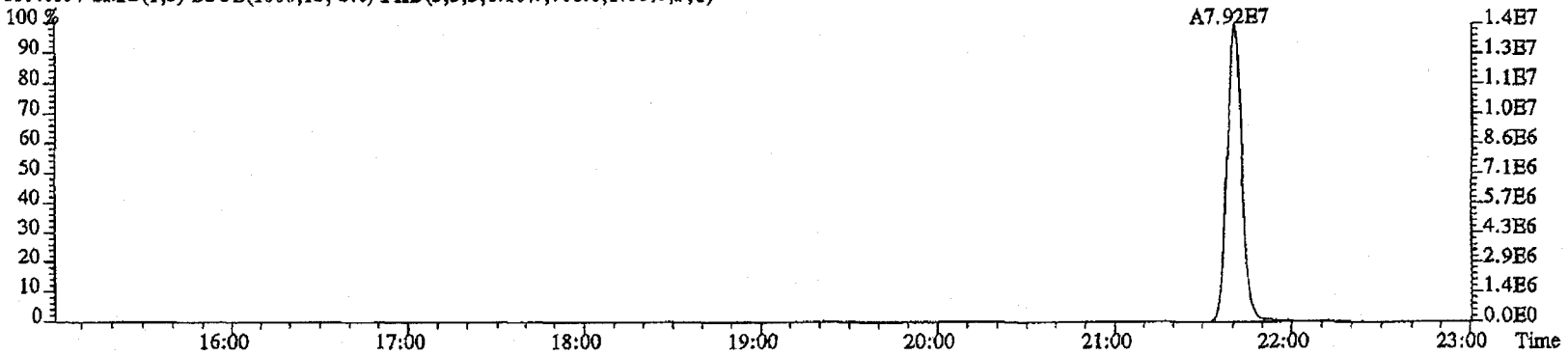


353.8970 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,104.0,1.00%,F,T)

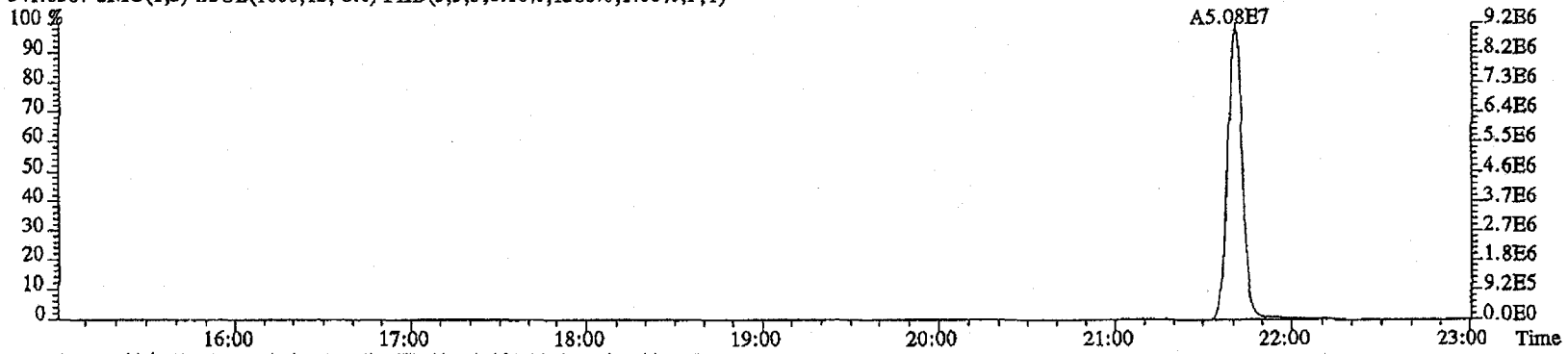


File:22FE11A4D5 #1-530 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES

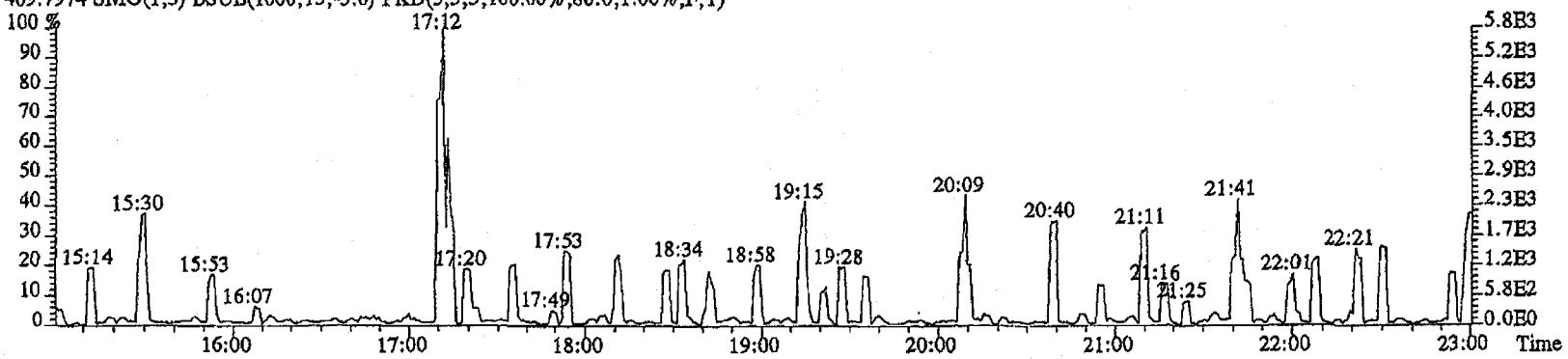
339.8597 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,708.0,1.00%,F,T)



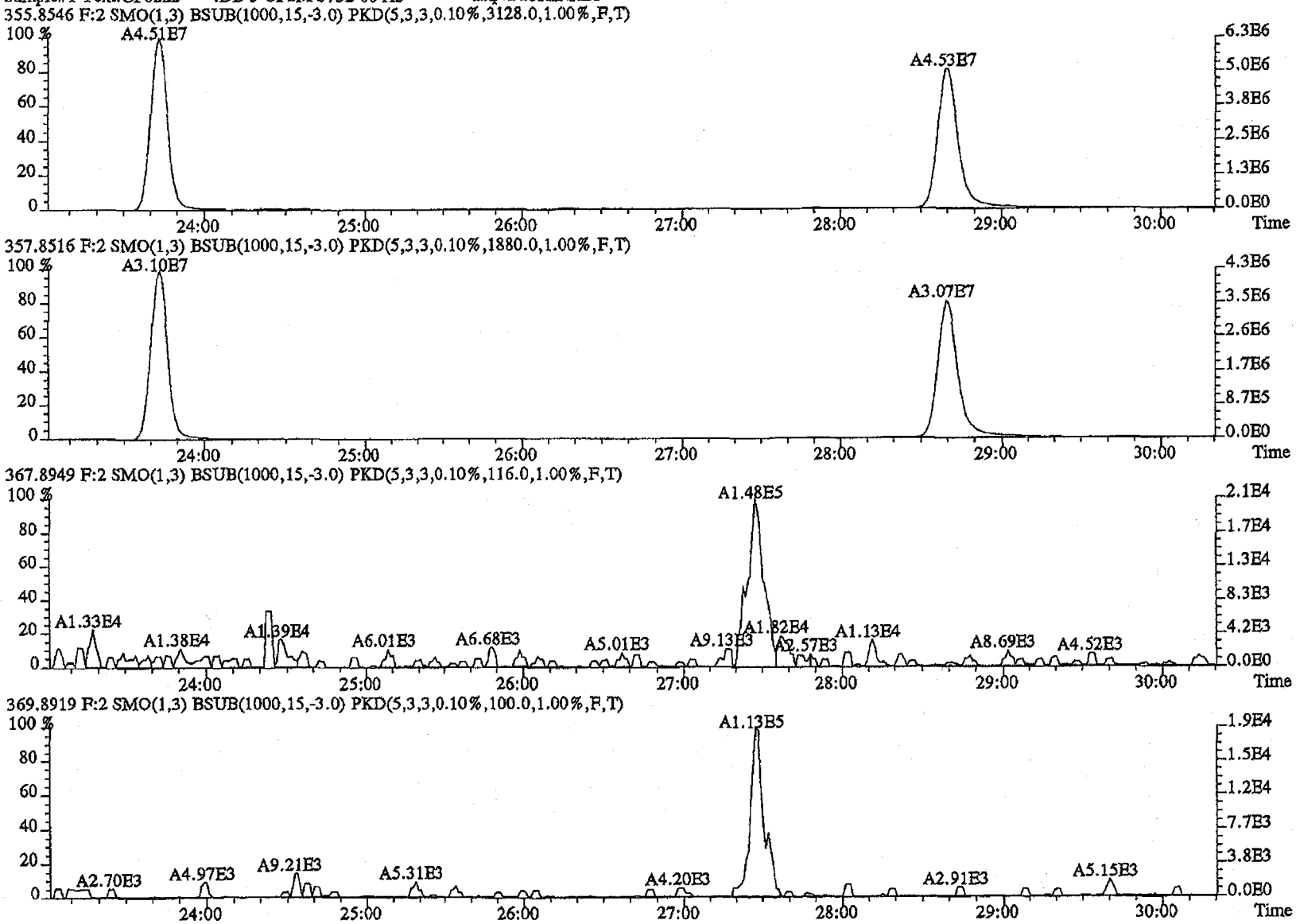
341.8567 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1380.0,1.00%,F,T)



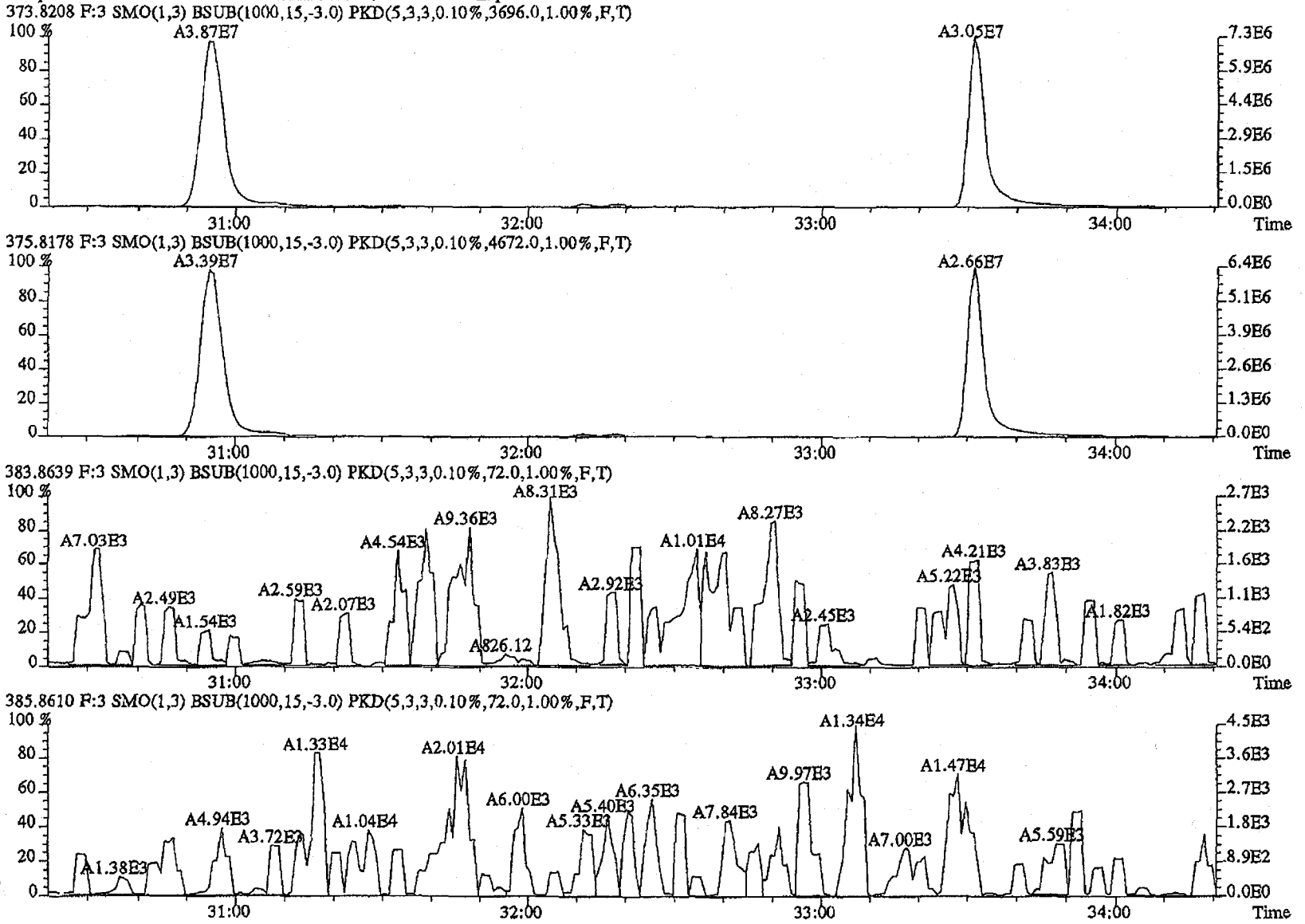
409.7974 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,80.0,1.00%,F,T)



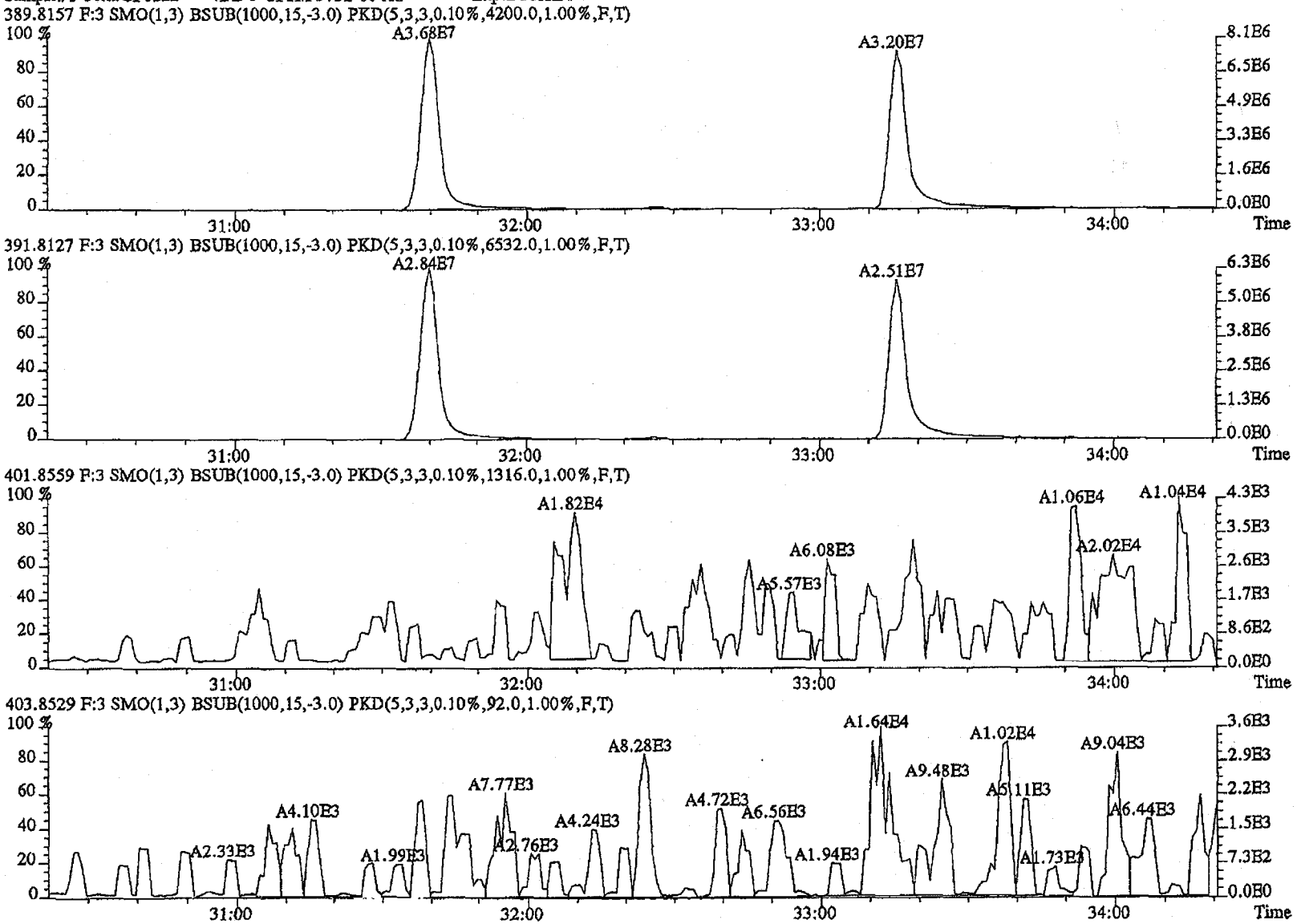
File:22FB11A4D5 #1-470 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES



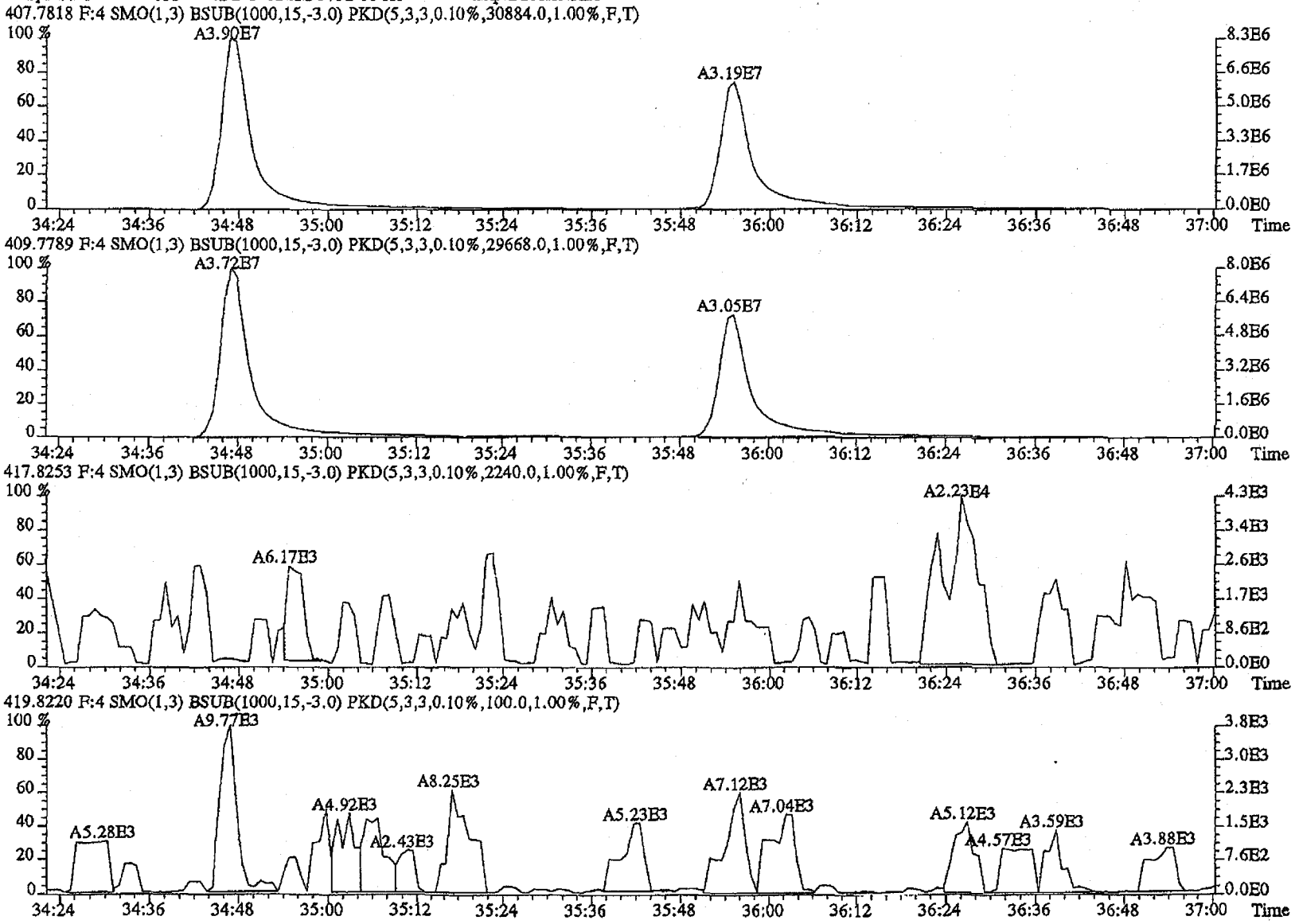
File:22FE11A4D5 #1-287 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaB
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES



File:22FE11A4D5 #1-287 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES

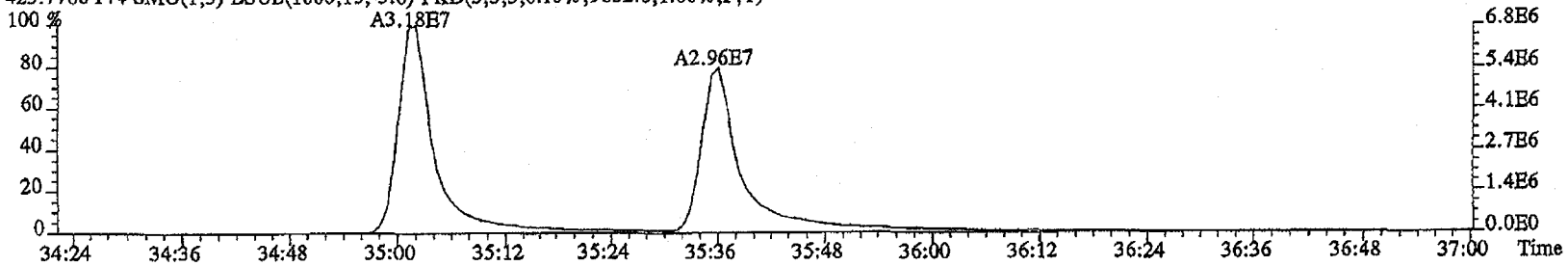


File:22FB11A4D5 #1-200 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES

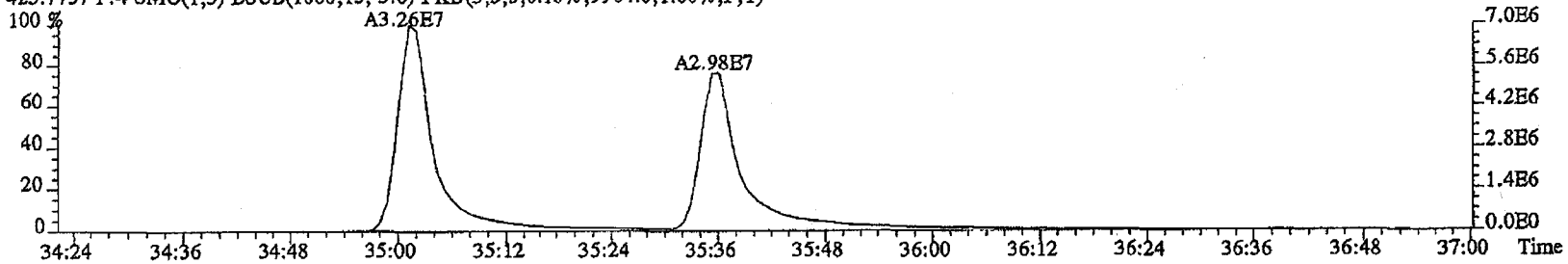


File:22FE11A4D5 #1-200 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES

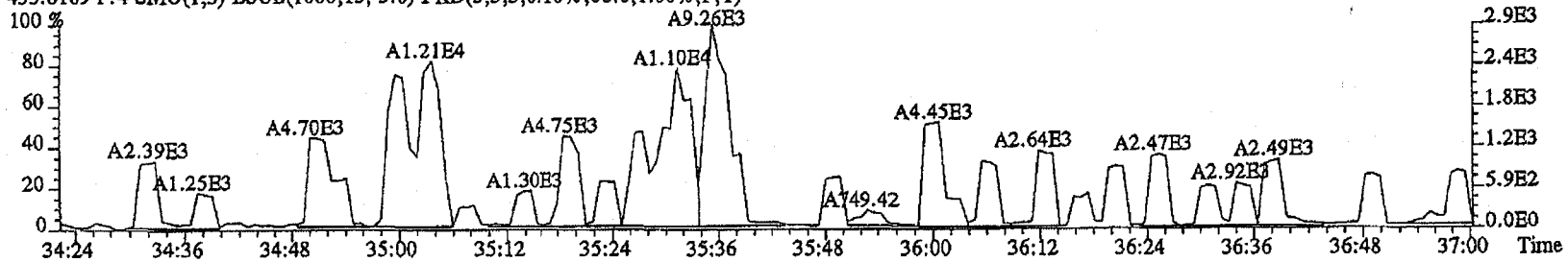
423.7766 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9652.0,1.00%,F,T)



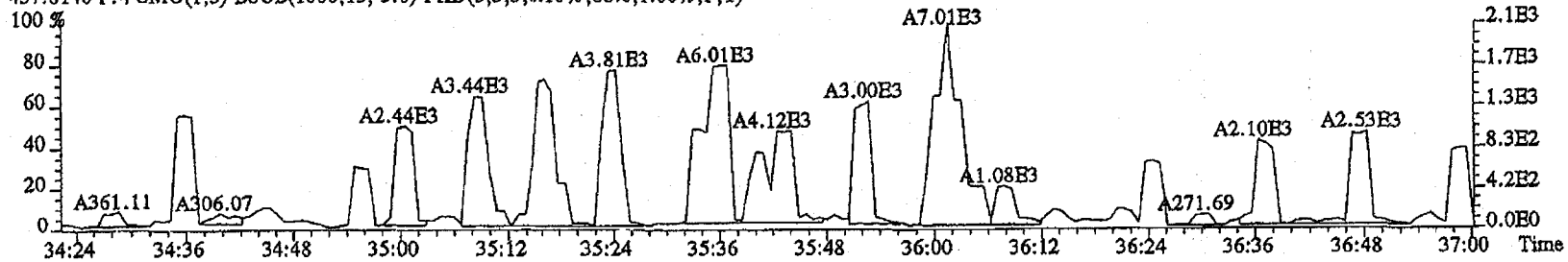
425.7737 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9964.0,1.00%,F,T)



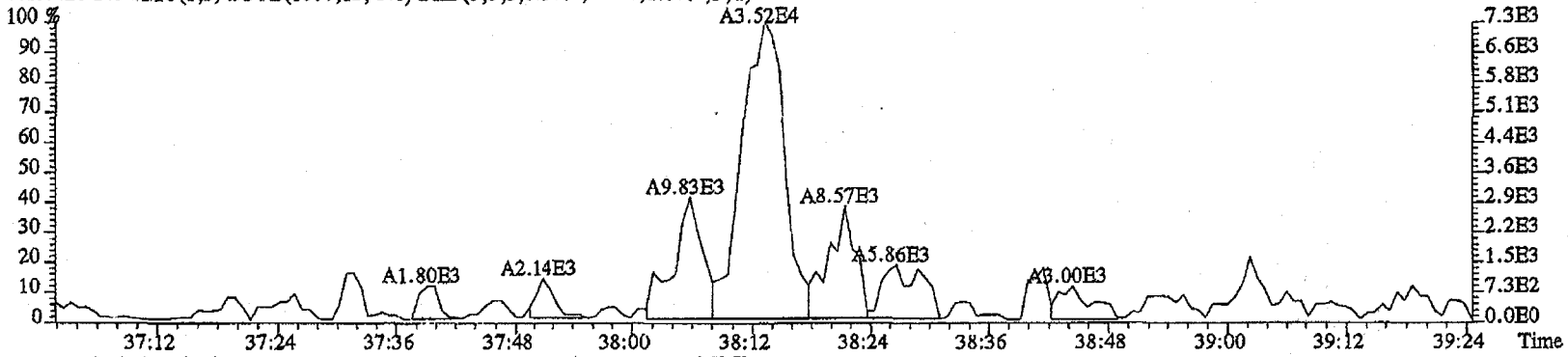
435.8169 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,88.0,1.00%,F,T)



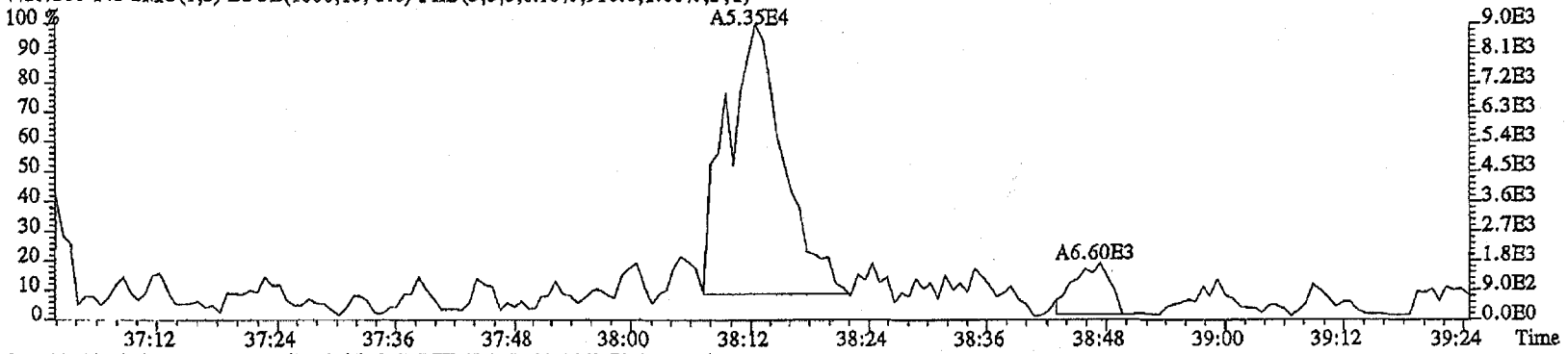
437.8140 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,88.0,1.00%,F,T)



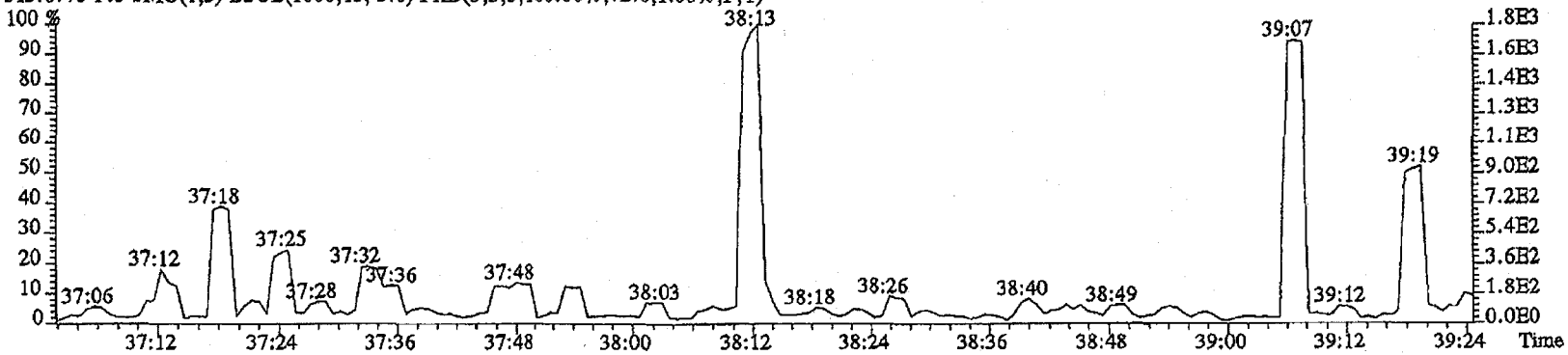
File:22FE11A4D5 #1-193 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES
441.7428 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,564.0,1.00%,F,T)



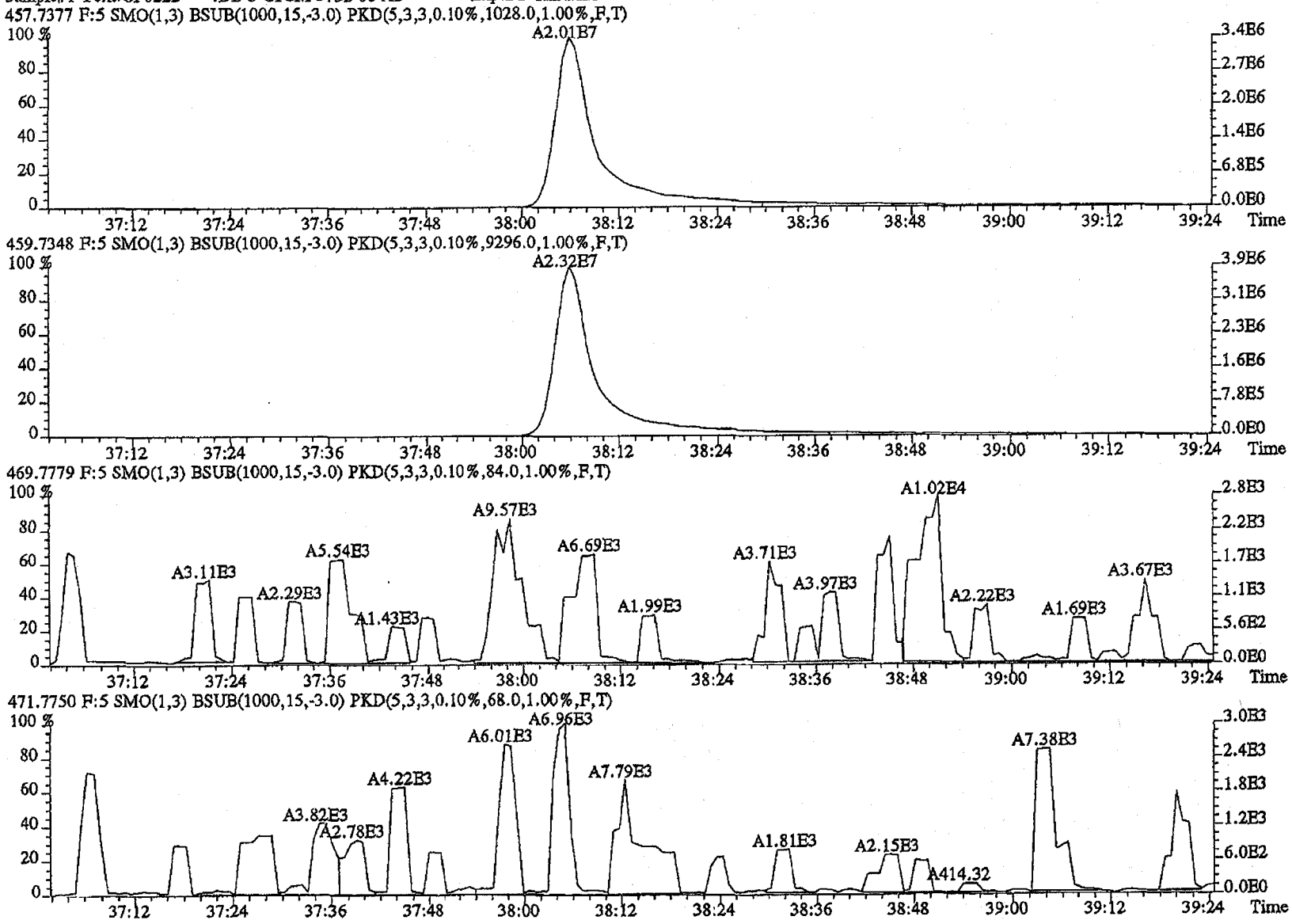
443.7399 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,916.0,1.00%,F,T)



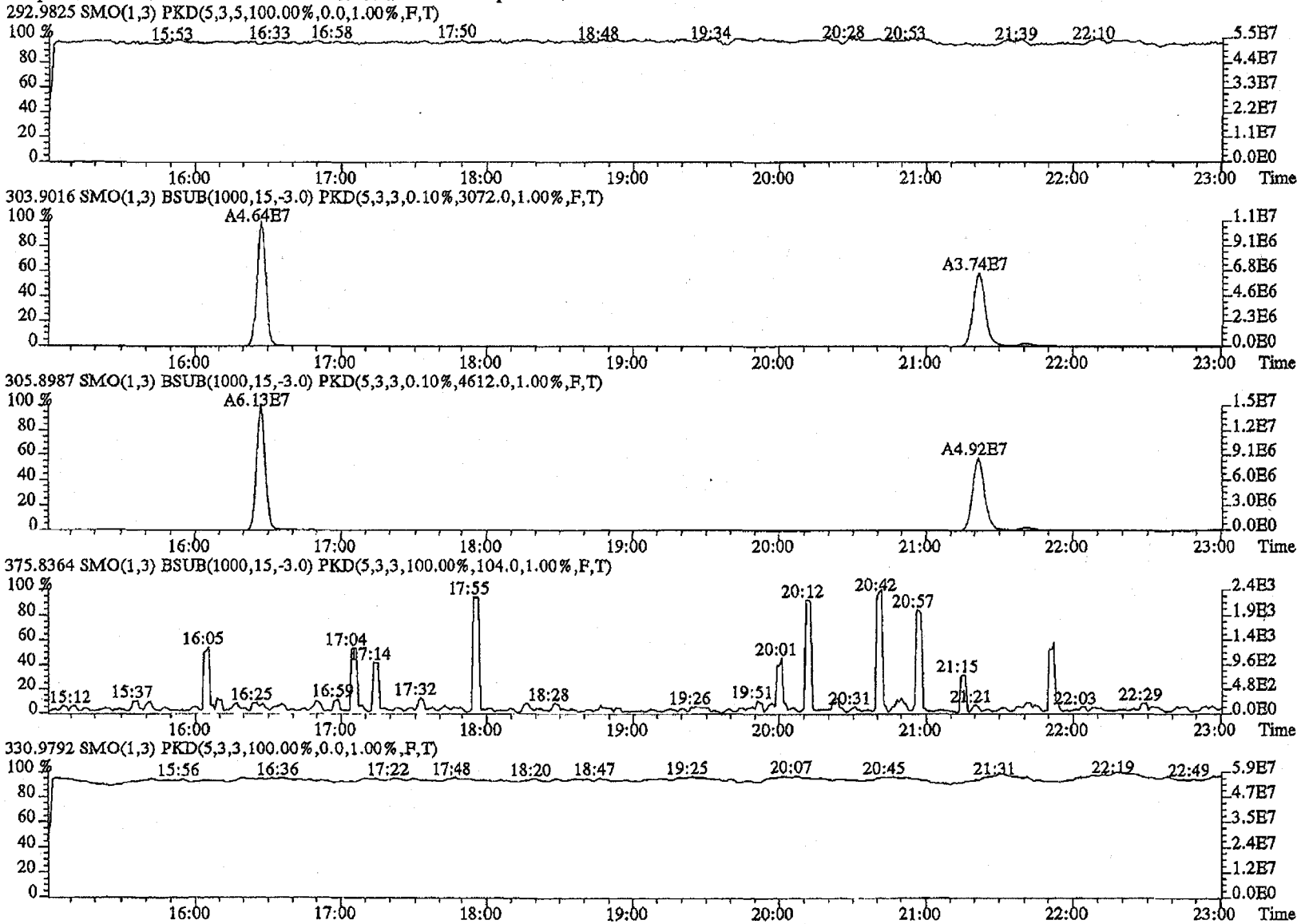
513.6775 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,72.0,1.00%,F,T)



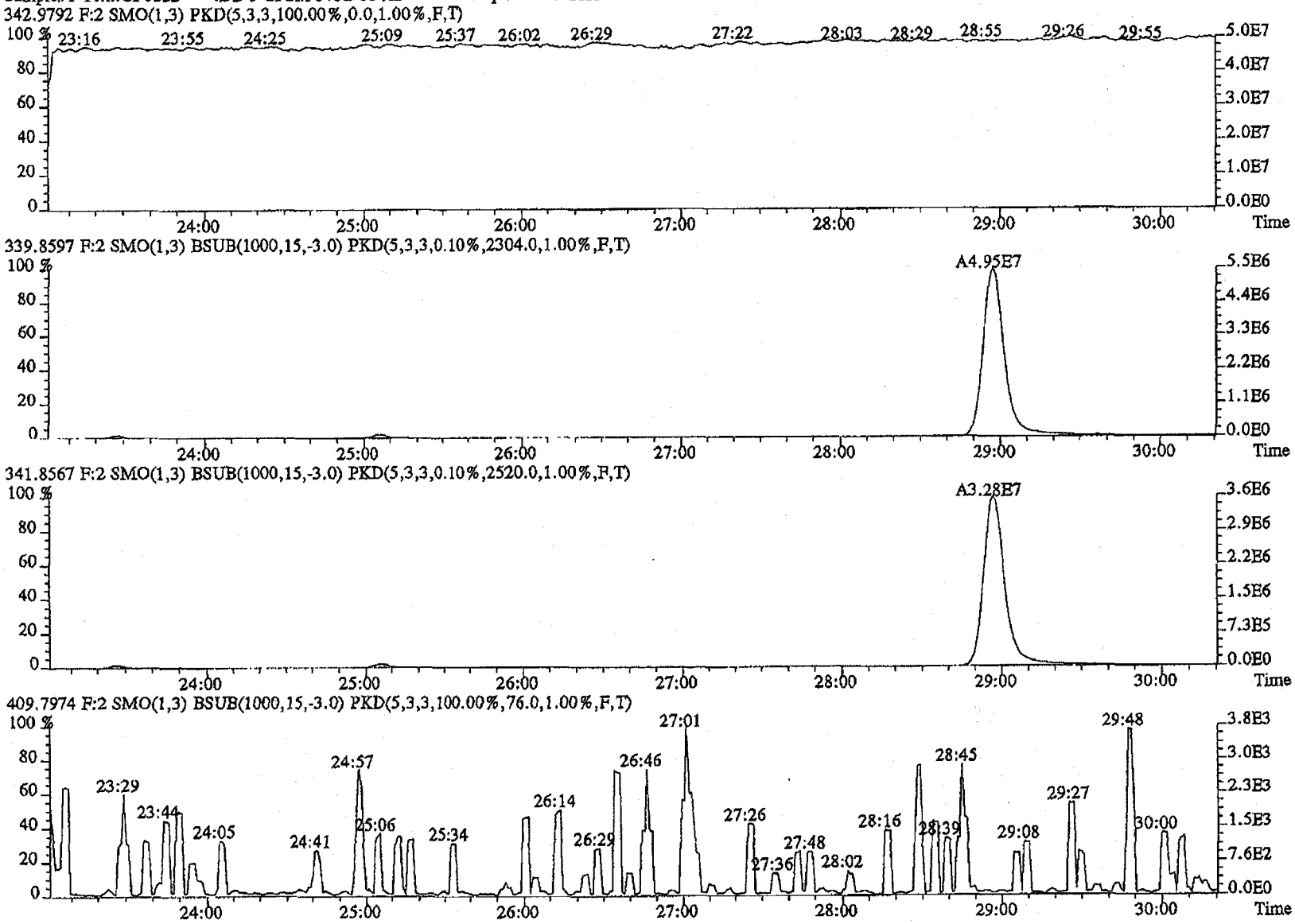
File:22FE11A4D5 #1-193 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES



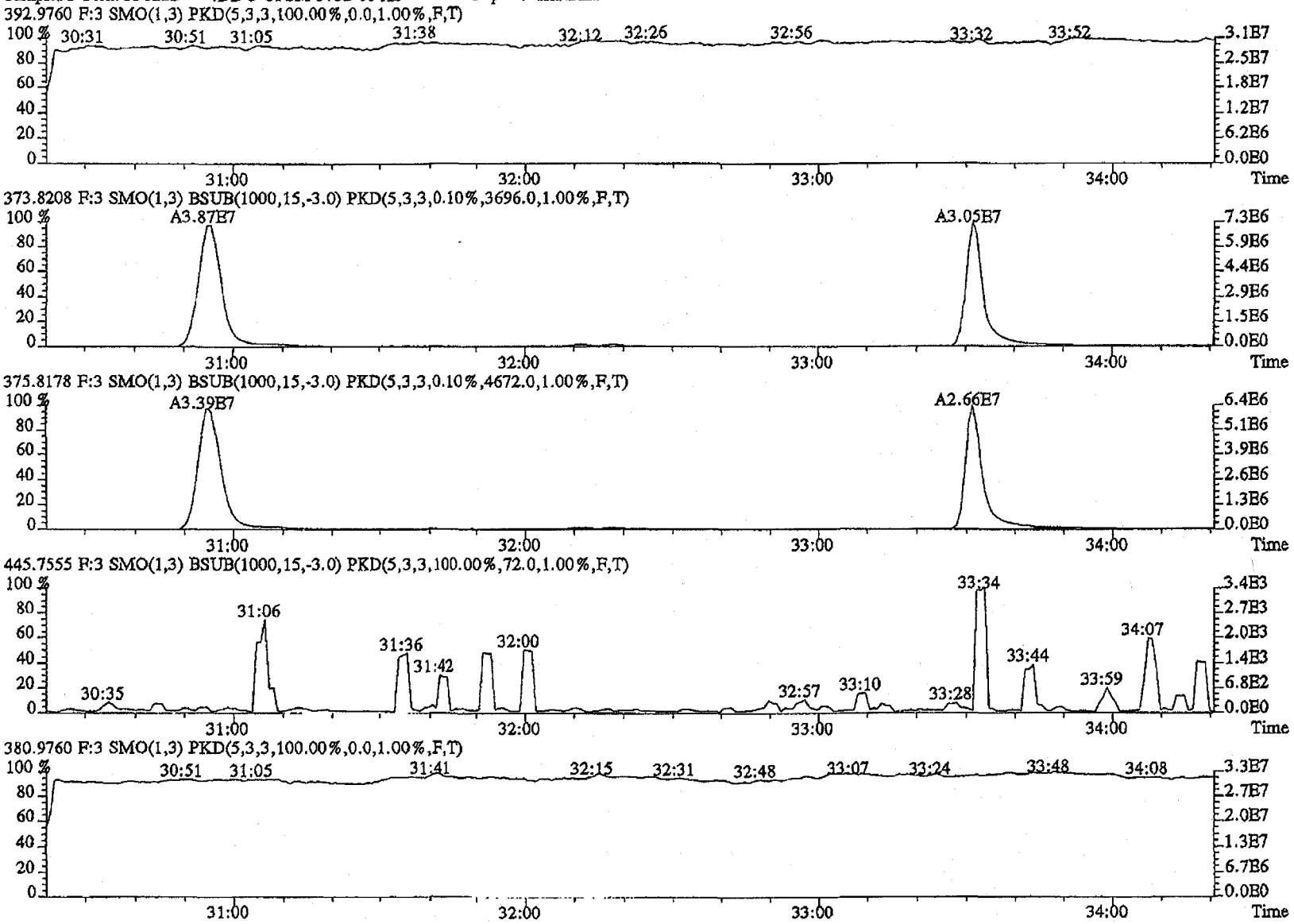
File:22FB11A4D5 #1-530 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES



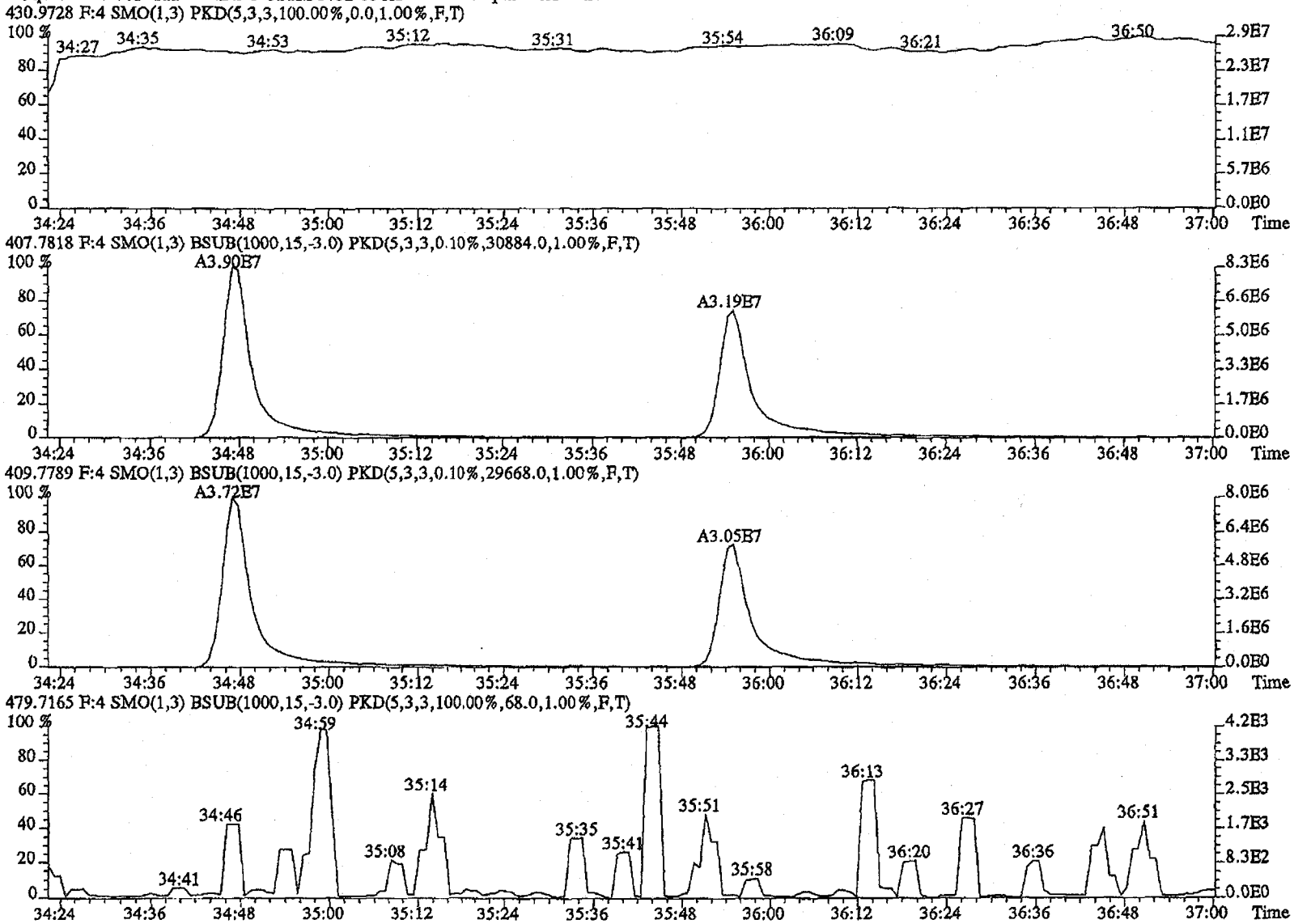
File:22FE11A4D5 #1-470 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaB
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES



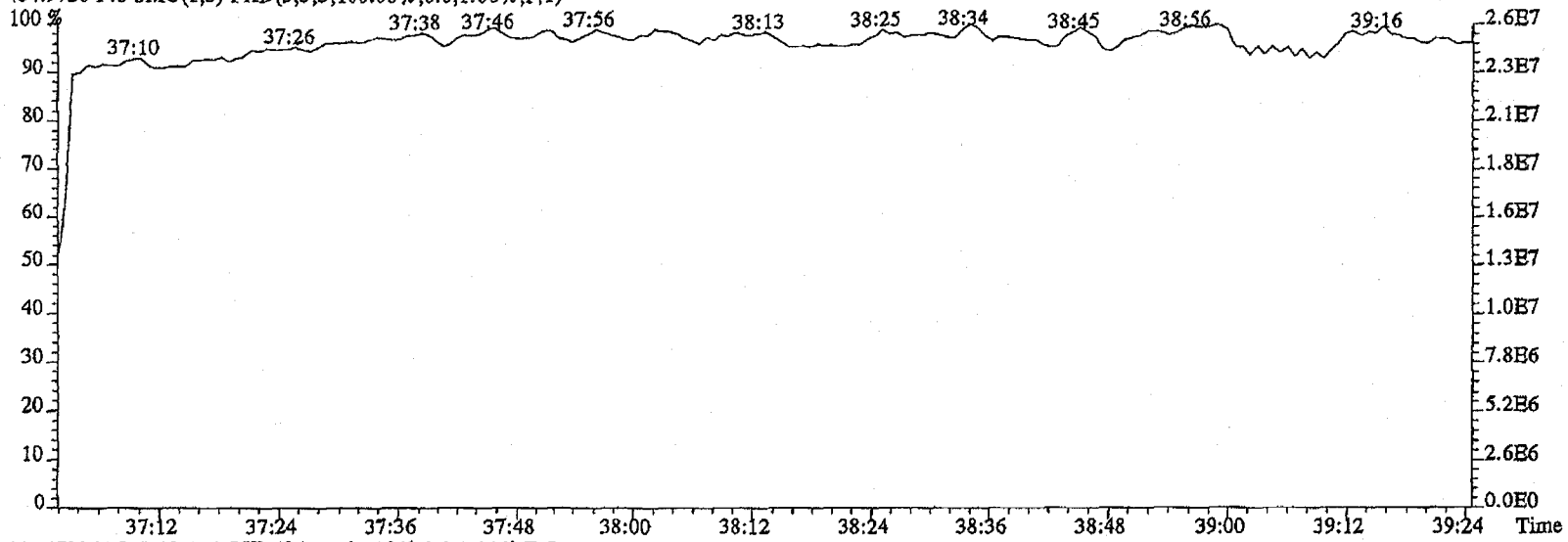
File:22FE11A4D5 #1-287 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES



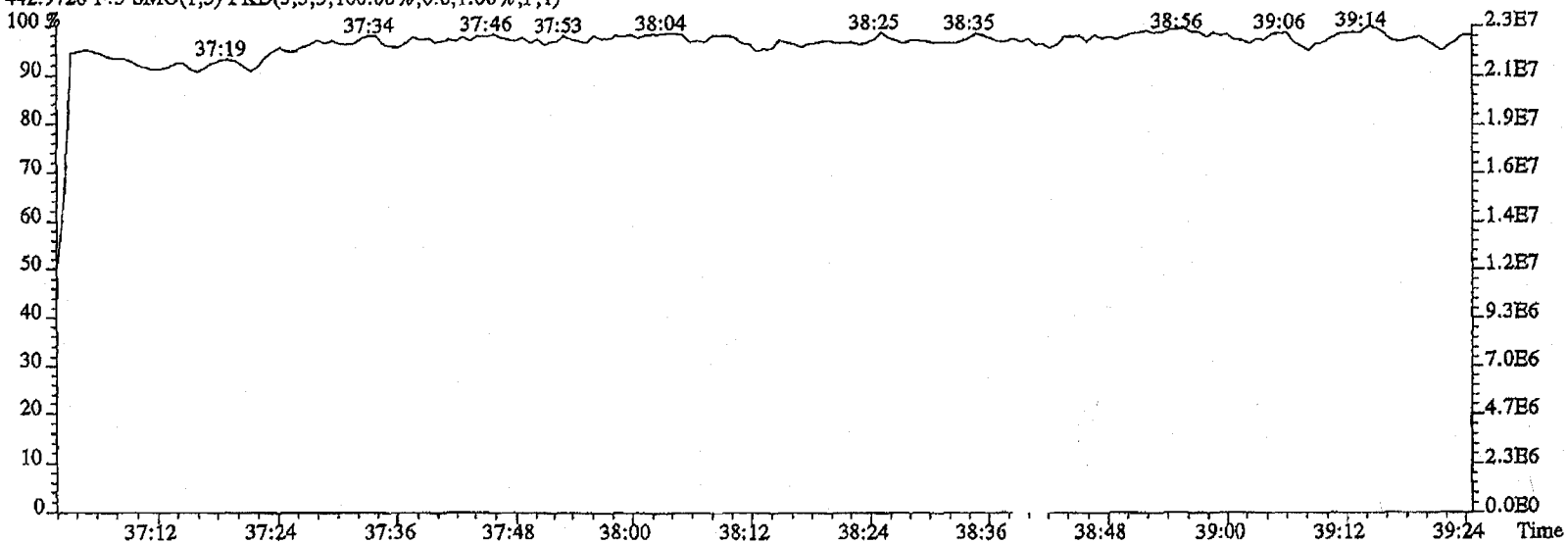
File:22FE11A4D5 #1-200 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES



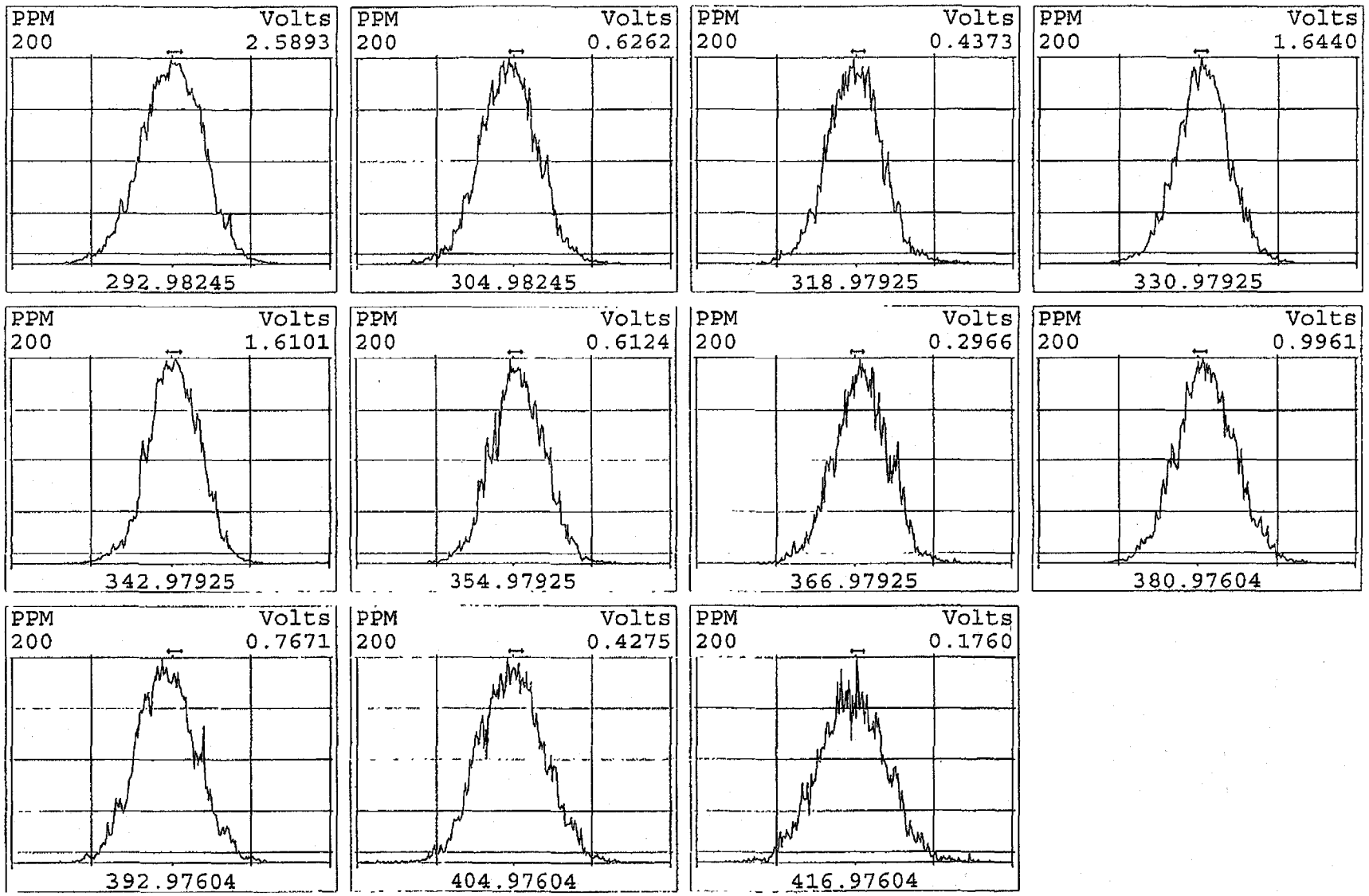
File:22FE11A4D5 #1-193 Acq:22-FEB-2011 12:53:08 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 Text:CP0222 :DB-5 CPSM 3732-08 AS Exp:DIOXINRES
454.9728 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



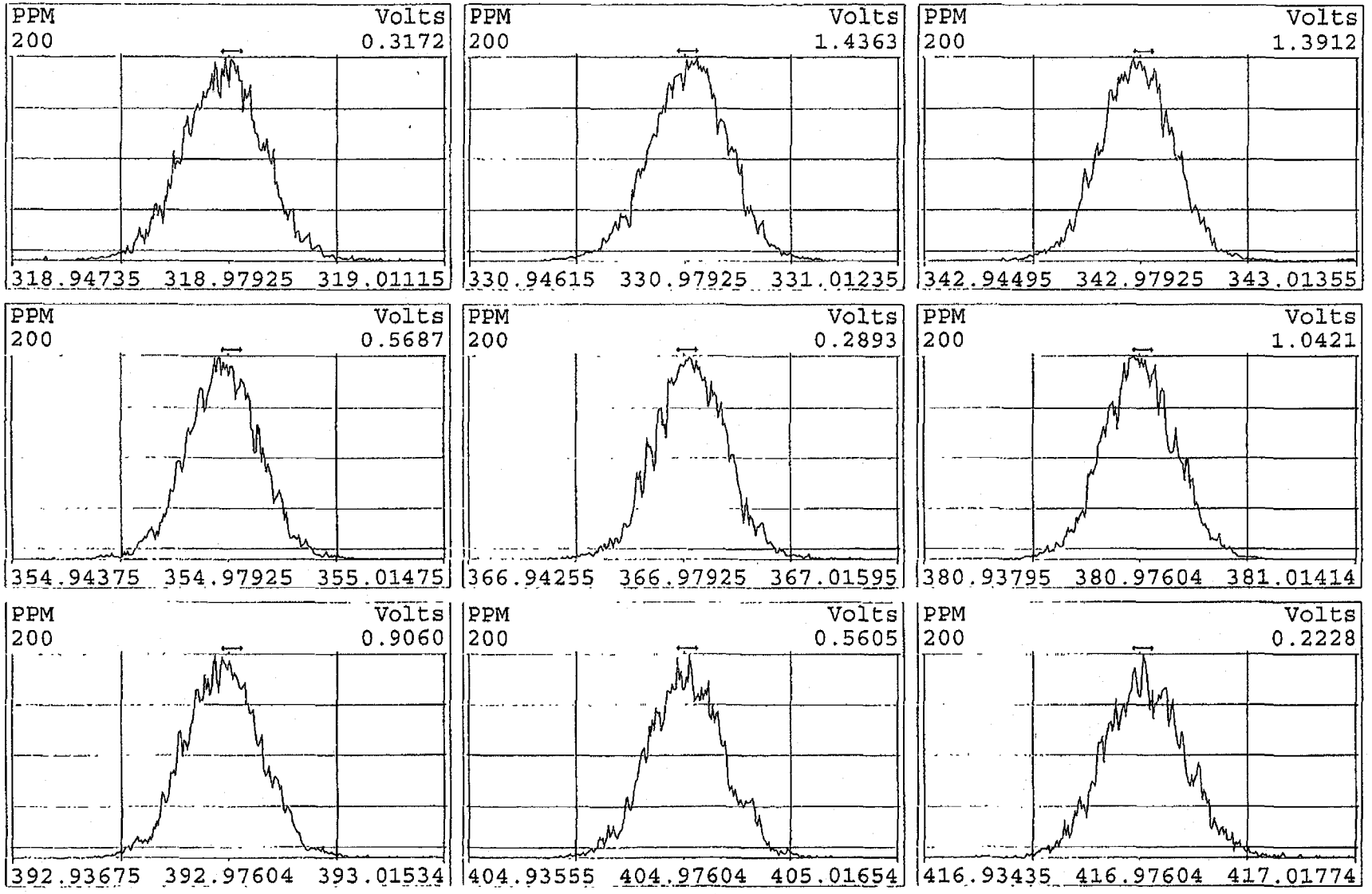
442.9728 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



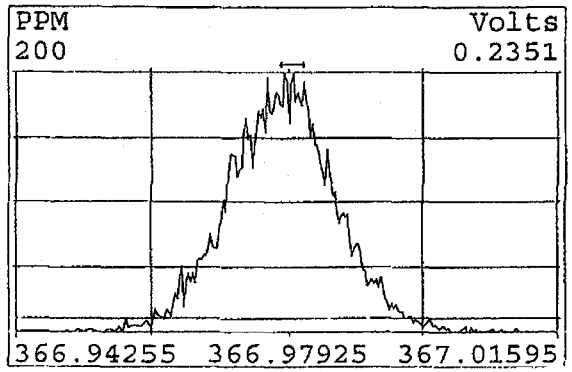
Peak Locate Examination:20-MAY-2011:19:00 File:20MY11D4D5
Experiment:DIOXINRES Function:1 Reference:PFK

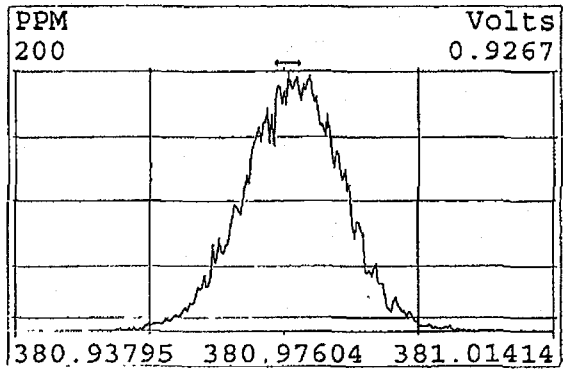


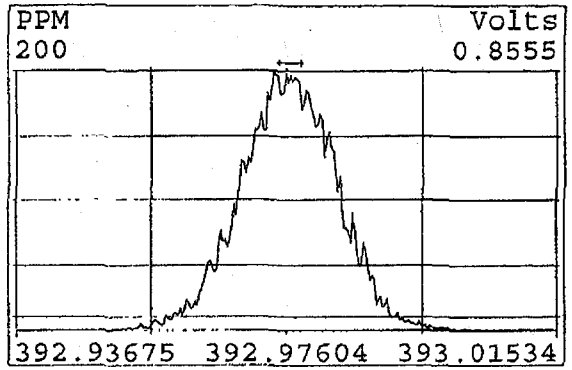
Peak Locate Examination:20-MAY-2011:19:01 File:20MY11D4D5
Experiment:DIOXINRES Function:2 Reference:PFK

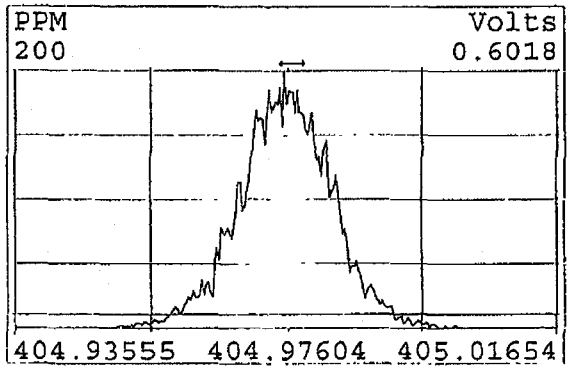


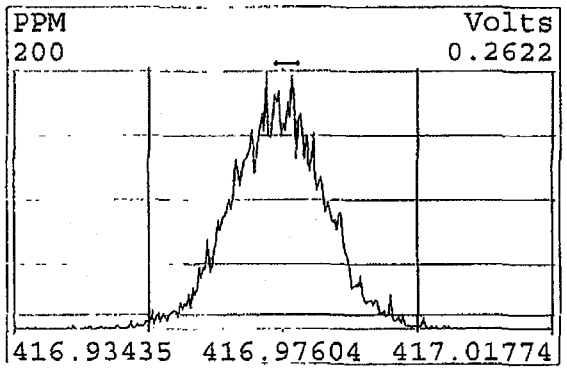
Peak Locate Examination:20-MAY-2011:19:02 File:20MY11D4D5
Experiment:DIOXINRES Function:3 Reference:PFK

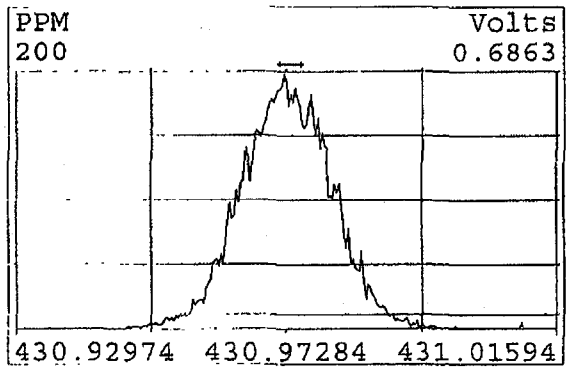


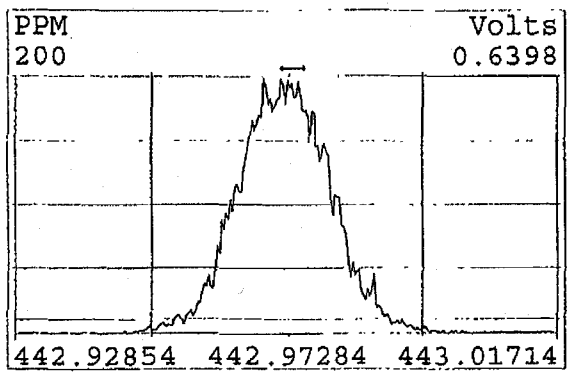


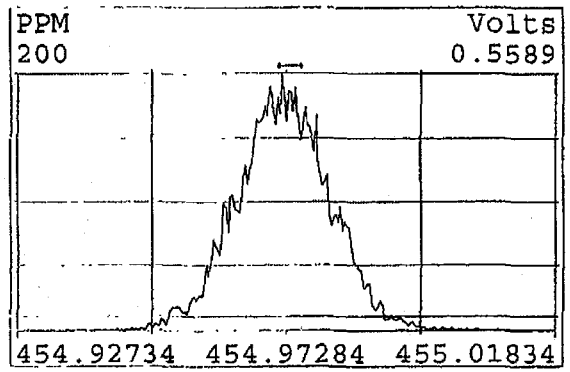




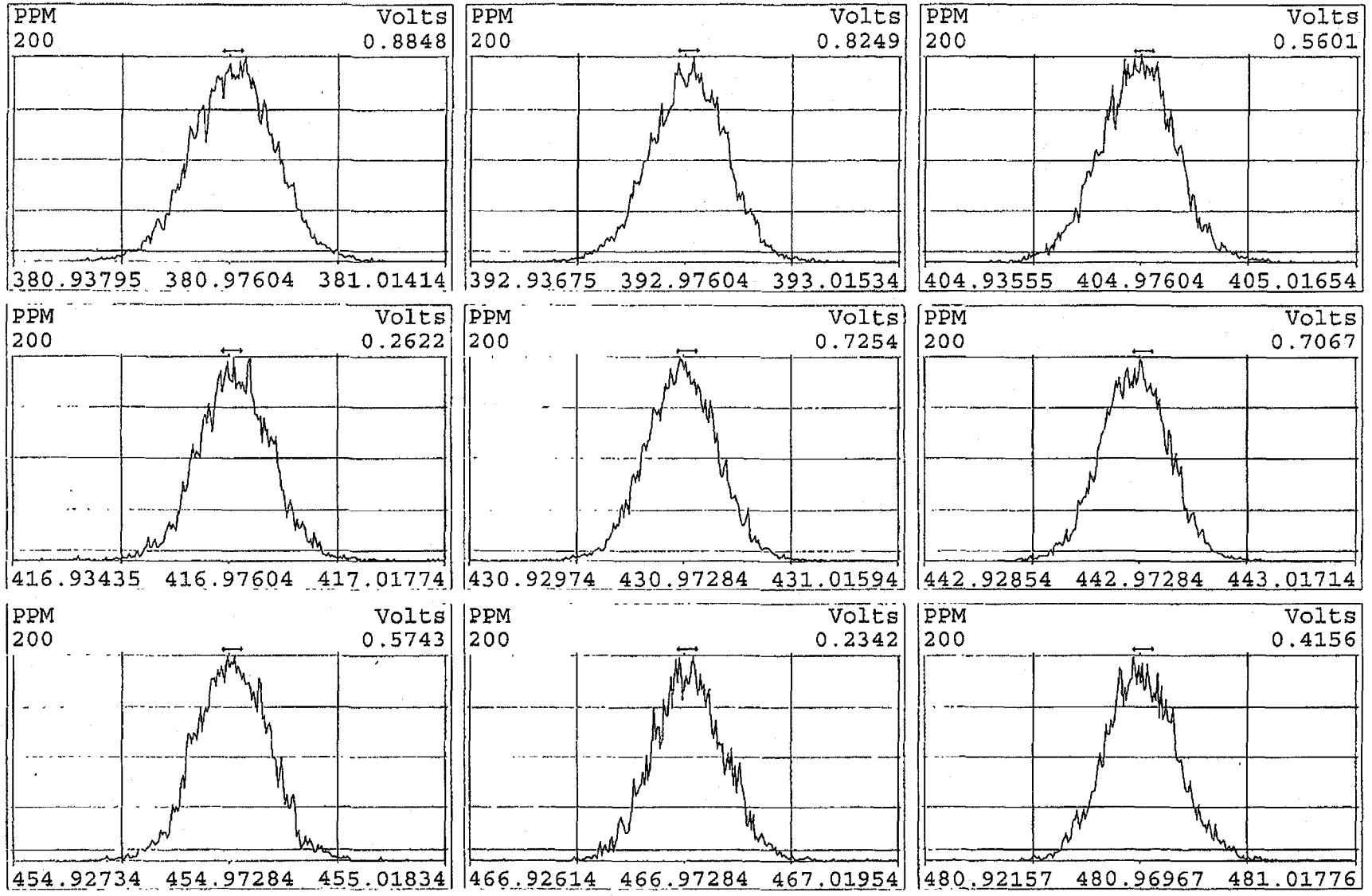




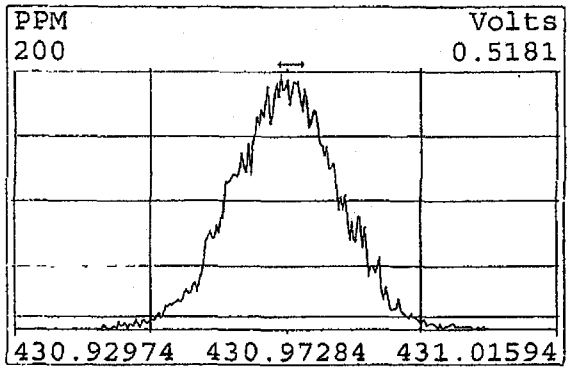


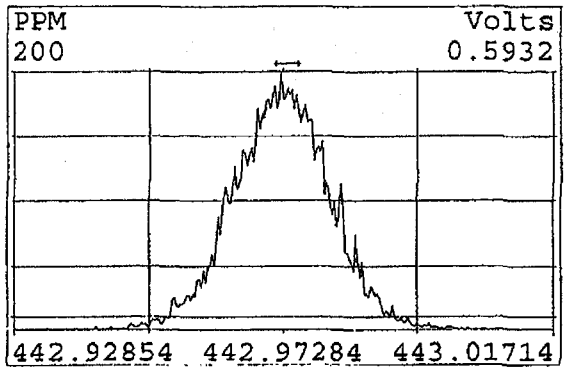


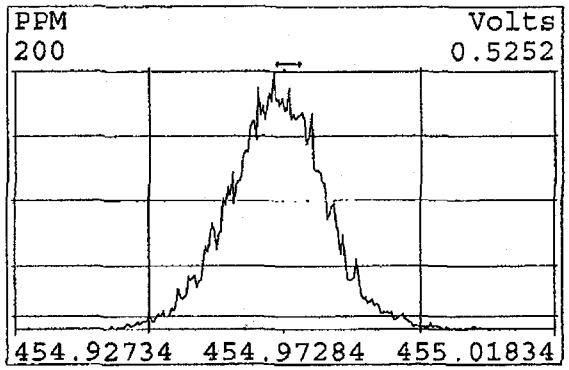
Peak Locate Examination:20-MAY-2011:19:03 File:20MY11D4D5
Experiment:DIOXINRES Function:4 Reference:PFK

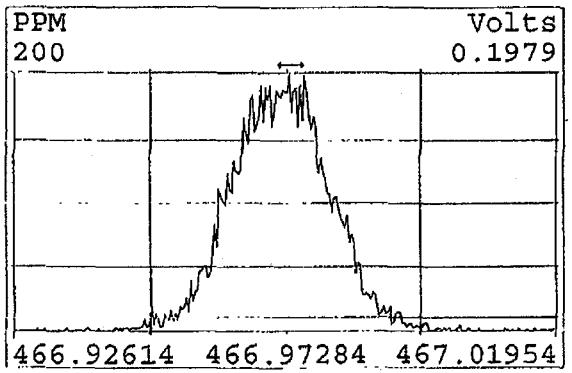


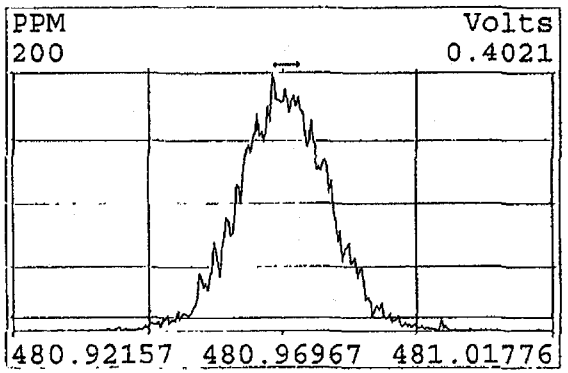
Peak Locate Examination:20-MAY-2011:19:04 File:20MY11D4D5
Experiment:DIOXINRES Function:5 Reference:PFK

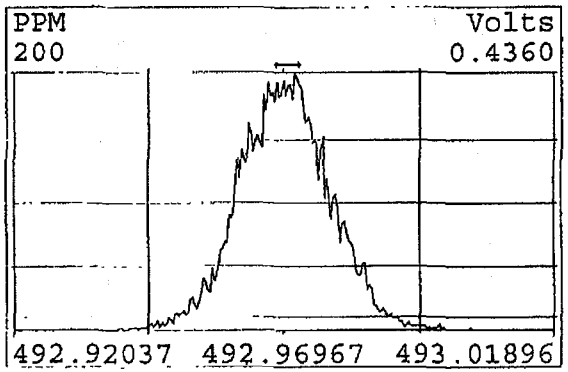


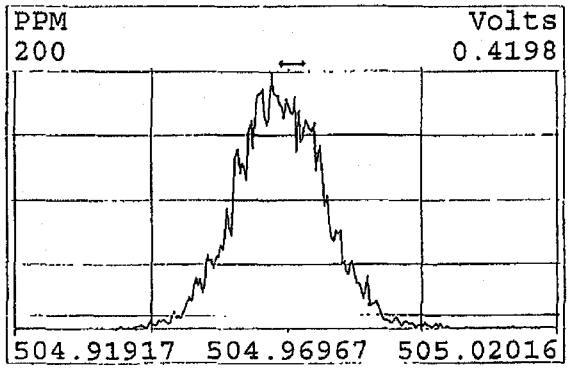


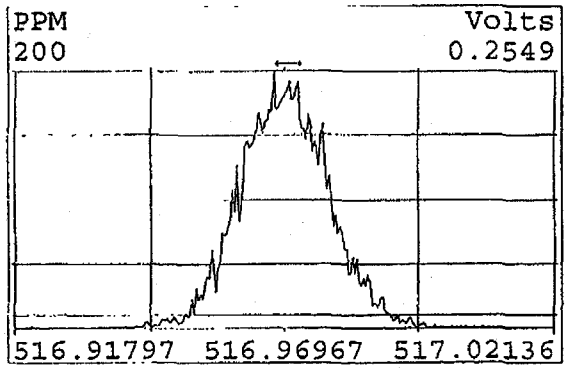




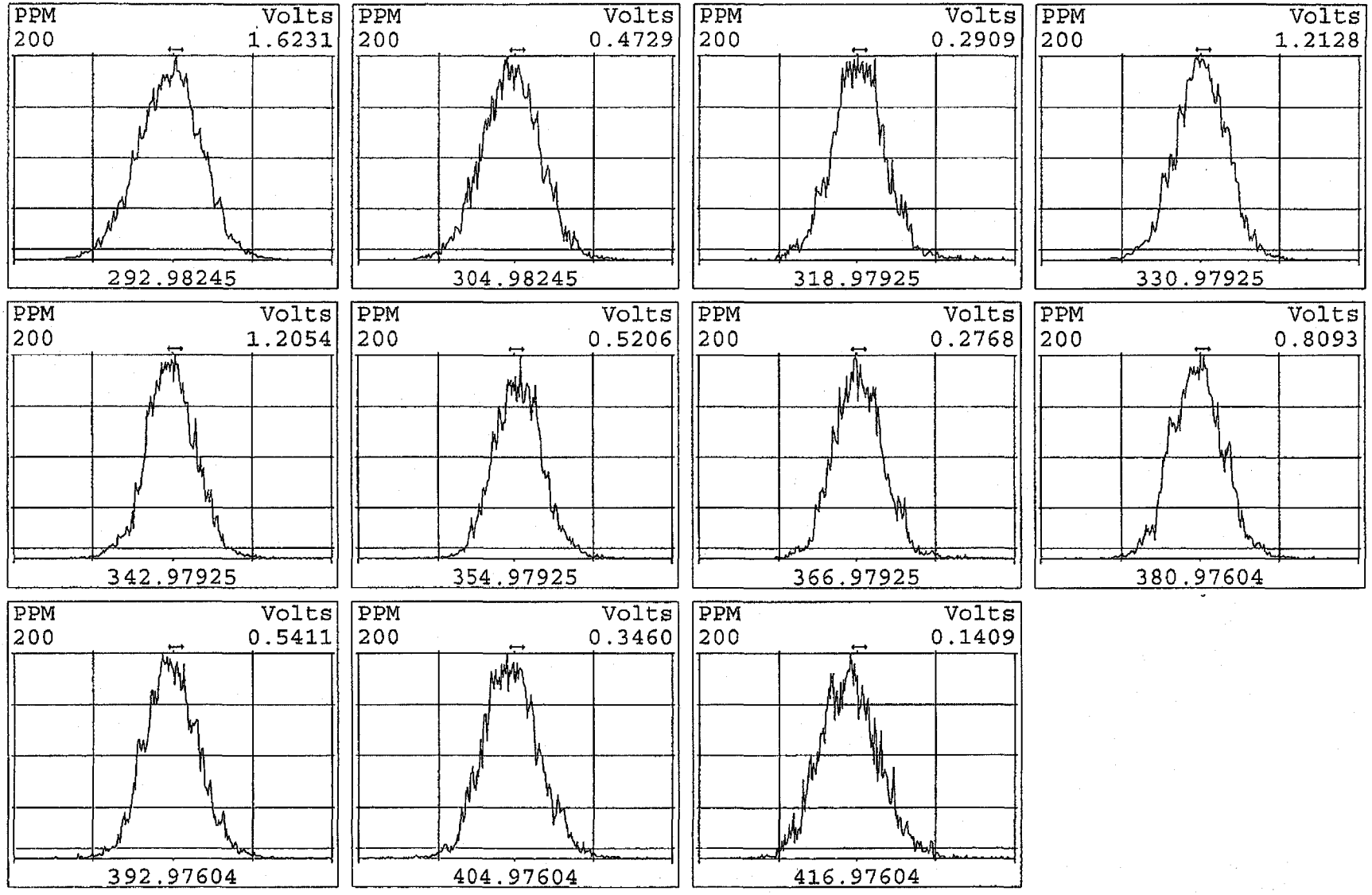




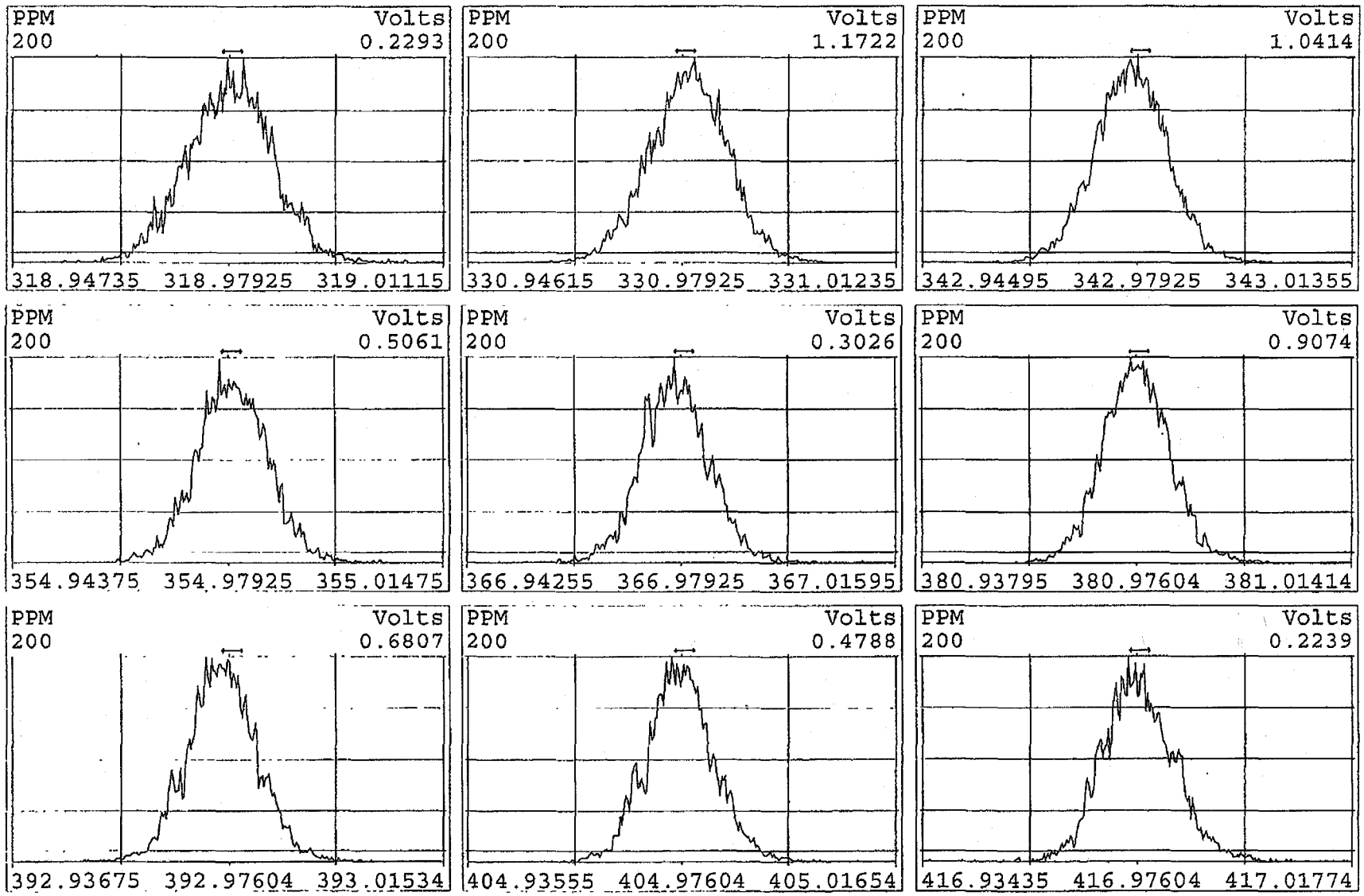




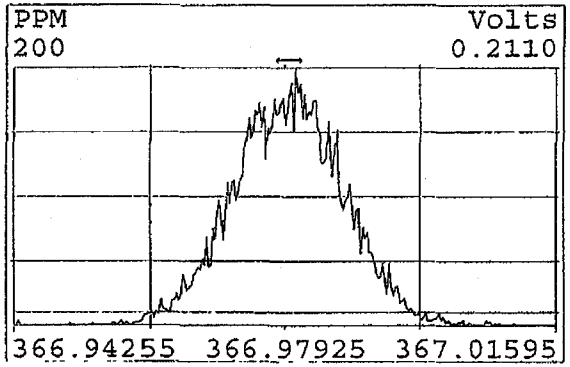
Peak Locate Examination:21-MAY-2011:06:47 File:RESCHECK4D5
Experiment:DIOXINRES Function:1 Reference:PFK

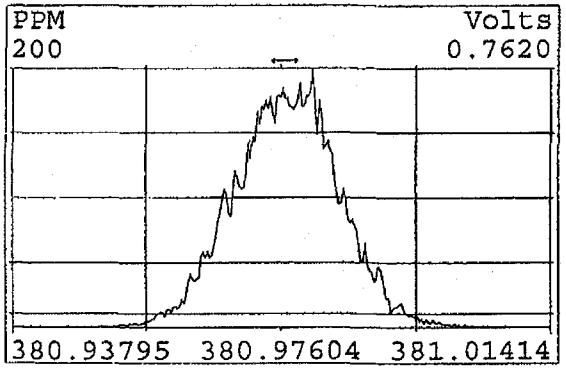


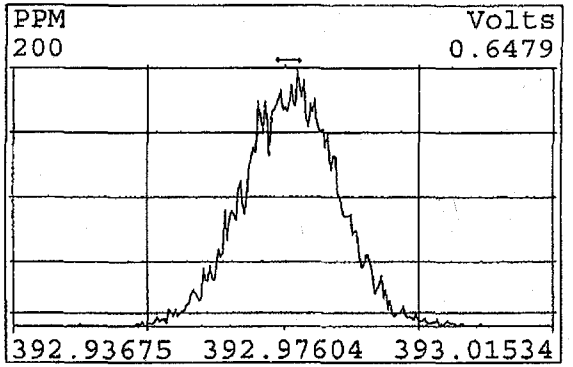
Peak Locate Examination:21-MAY-2011:06:48 File:RESCHECK4D5
Experiment:DIOXINRES Function:2 Reference:PFK

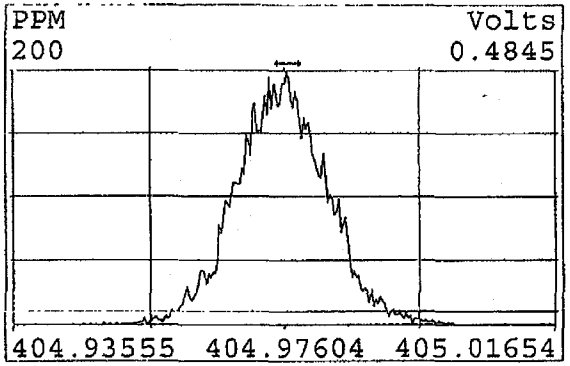


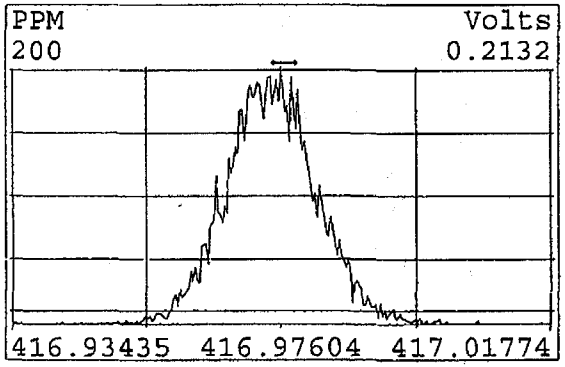
Peak Locate Examination:21-MAY-2011:06:49 File:RESCHECK4D5
Experiment:DIOXINRES Function:3 Reference:PFK

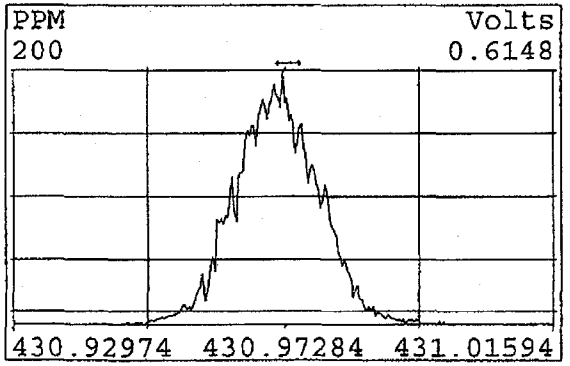


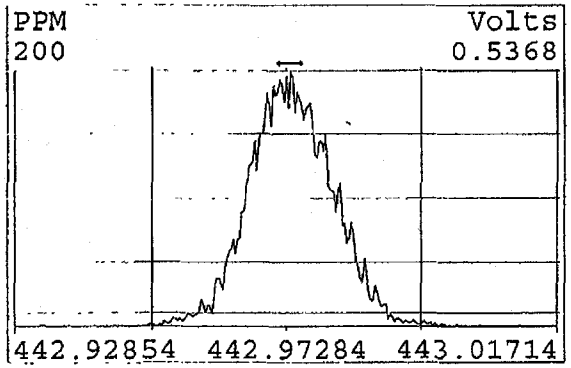


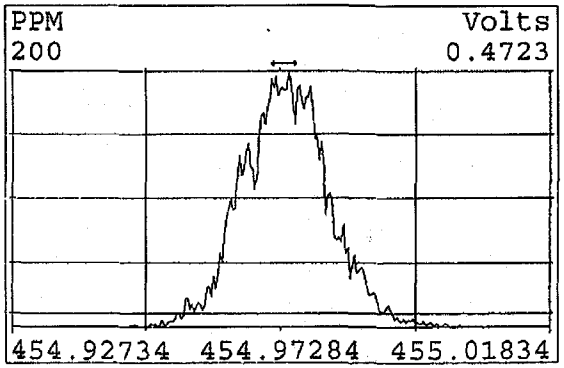




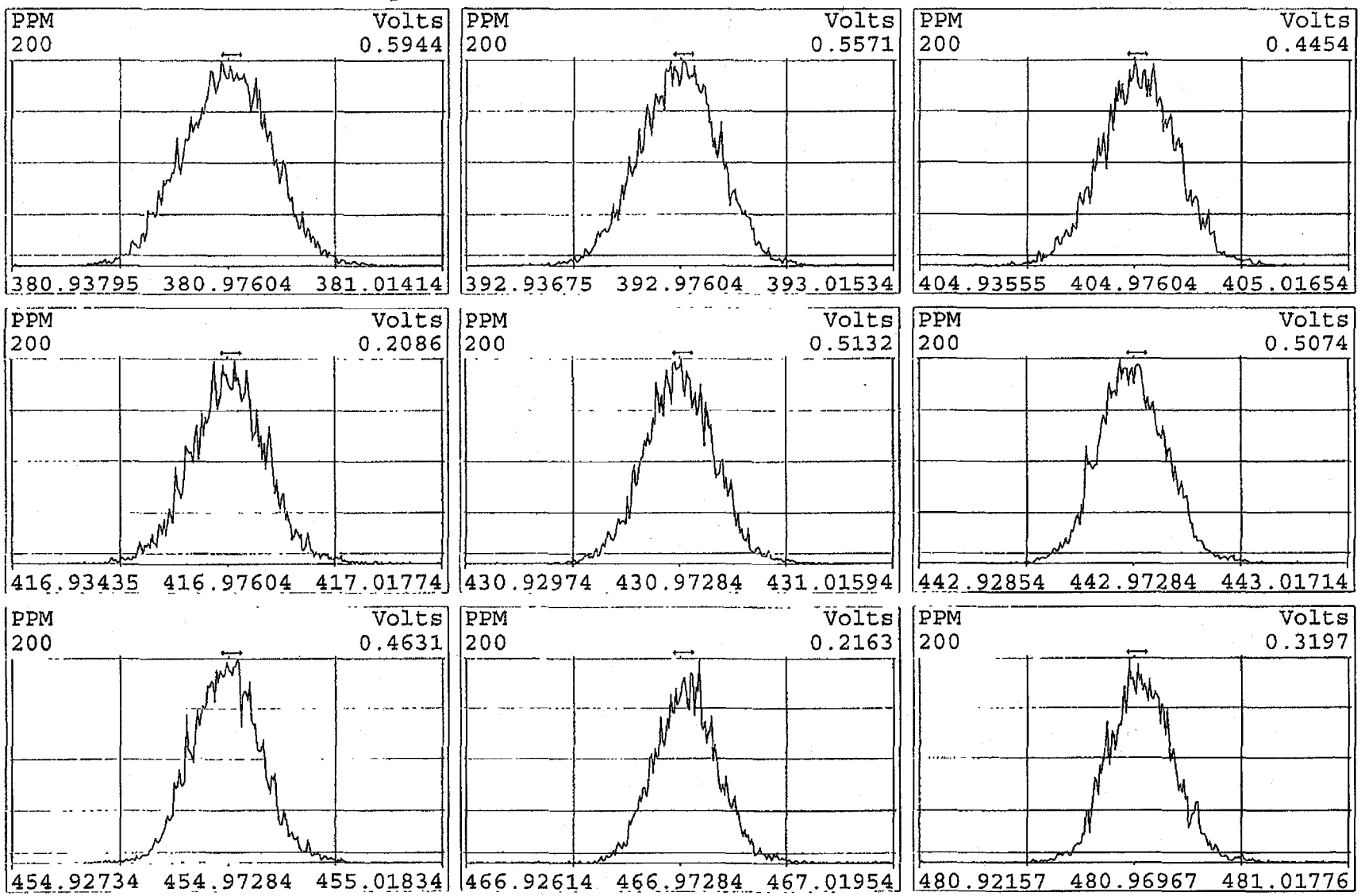




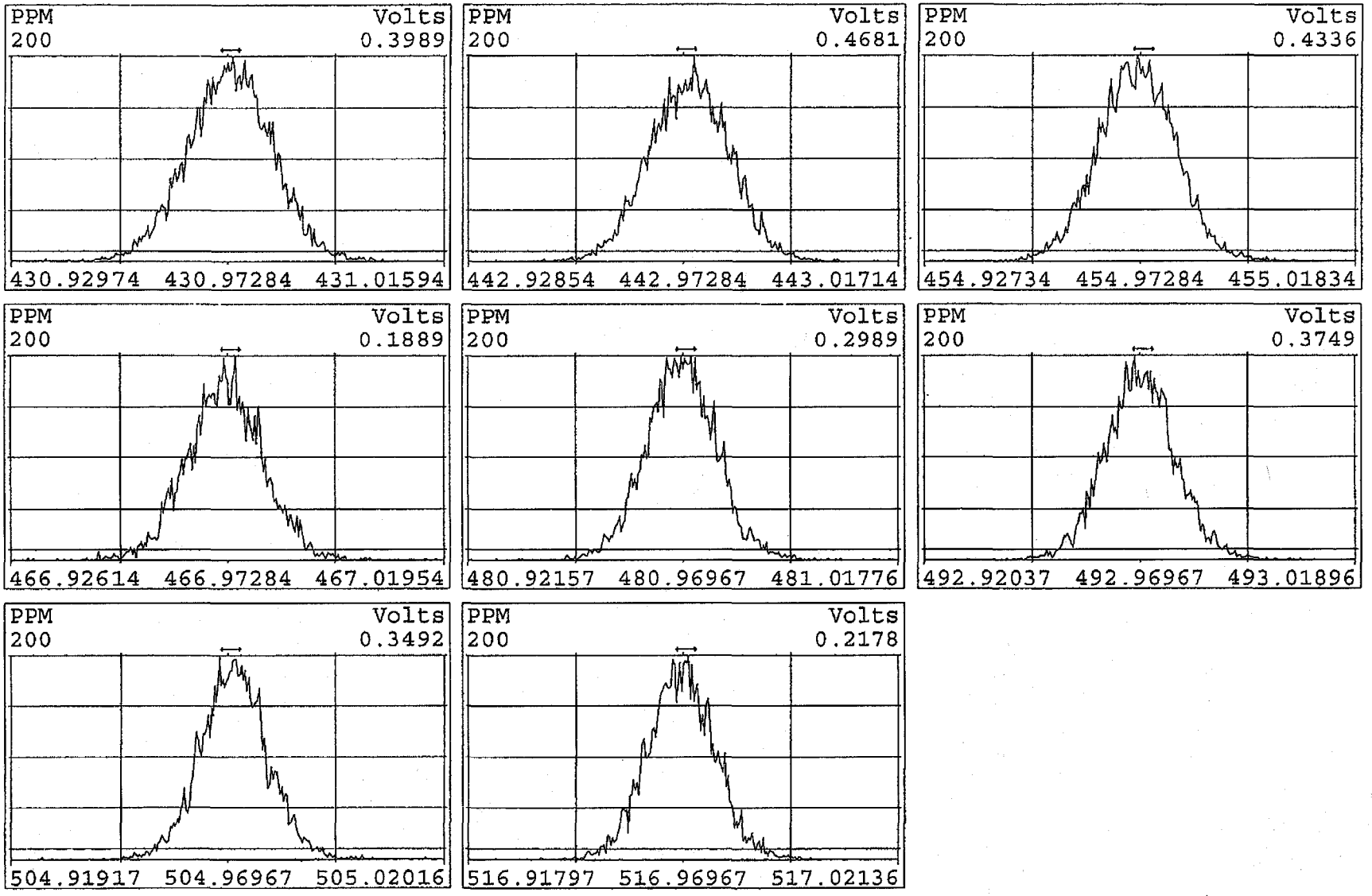




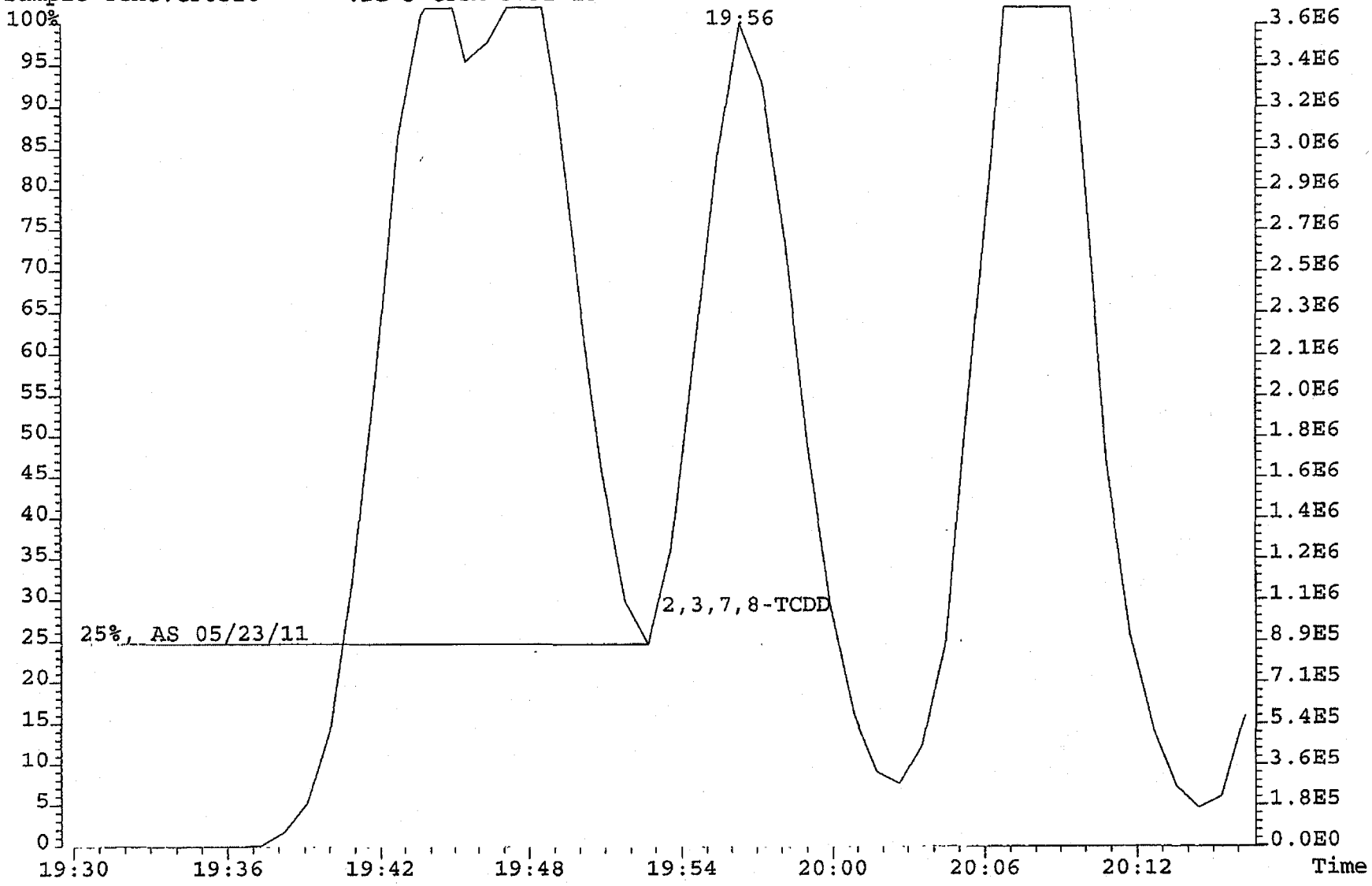
Peak Locate Examination:21-MAY-2011:06:50 File:RESCHECK4D5
Experiment:DIOXINRES Function:4 Reference:PFK



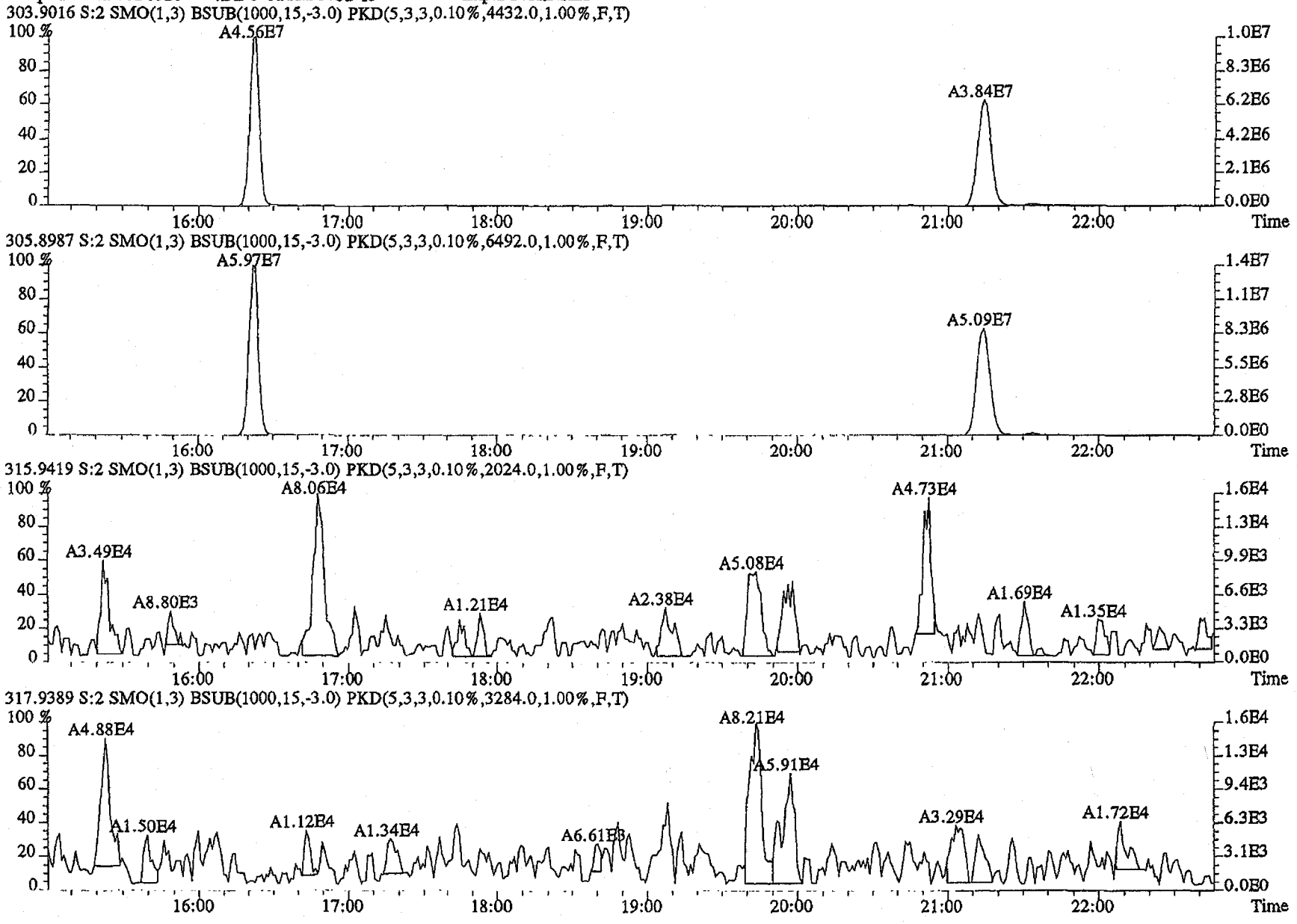
Peak Locate Examination:21-MAY-2011:06:51 File:RESCHECK4D5
Experiment:DIOXINRES Function:5 Reference:PFK



File:20MY11D4D5 #1-514 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
321.8936 S:2 BSUB(128,15,-3.0) Exp:DIOXINRES Noise:444
Sample Text:CP0520 :DB-5 CPSM 3732-13

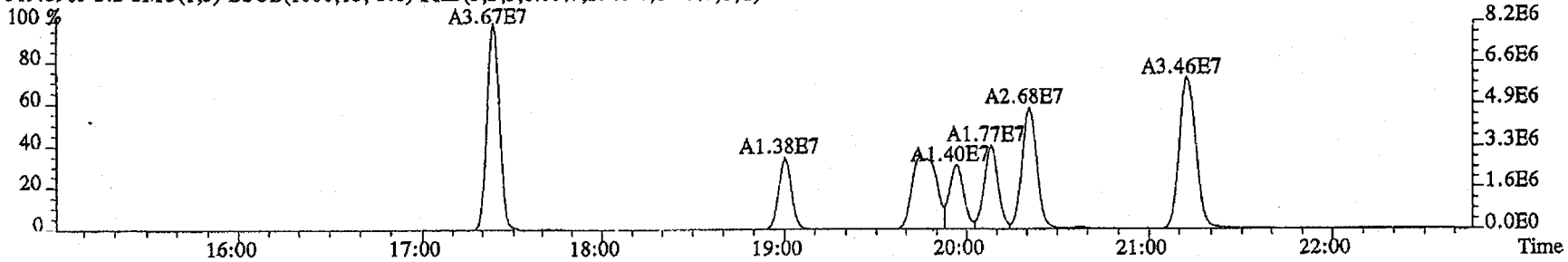


File:20MY11D4D5 #1-514 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES

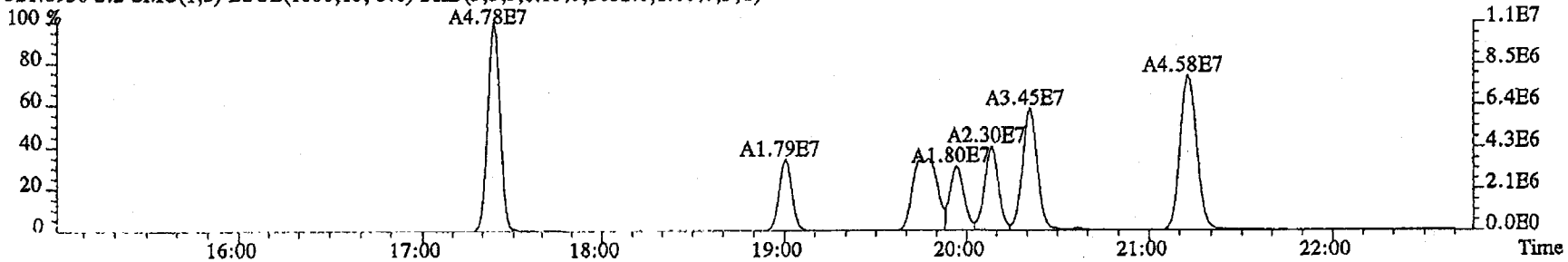


File:20MY11D4D5 #1-514 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES

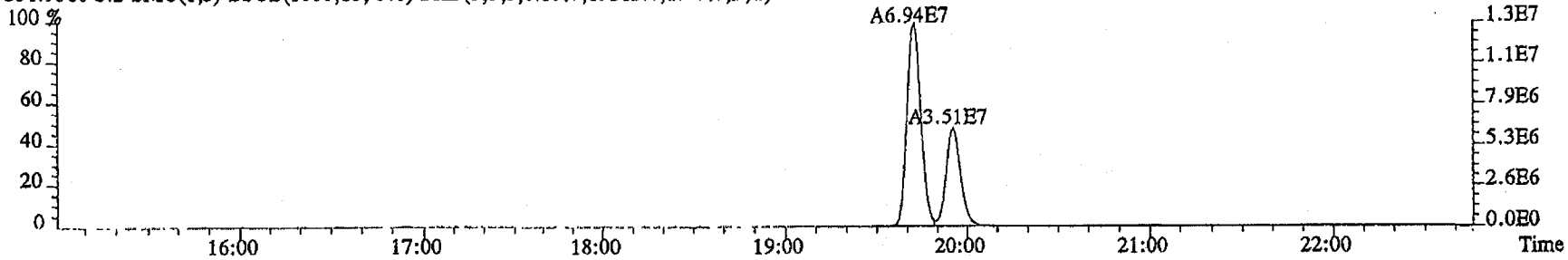
319.8965 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2948.0,1.00%,F,T)



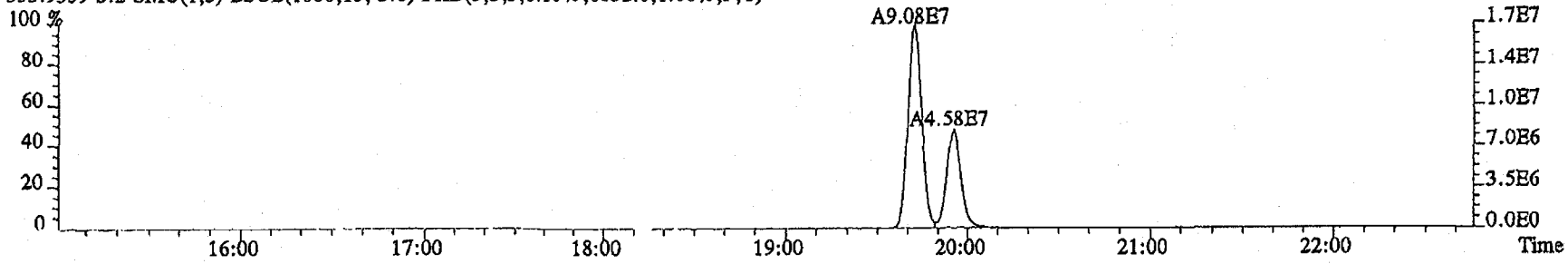
321.8936 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5052.0,1.00%,F,T)



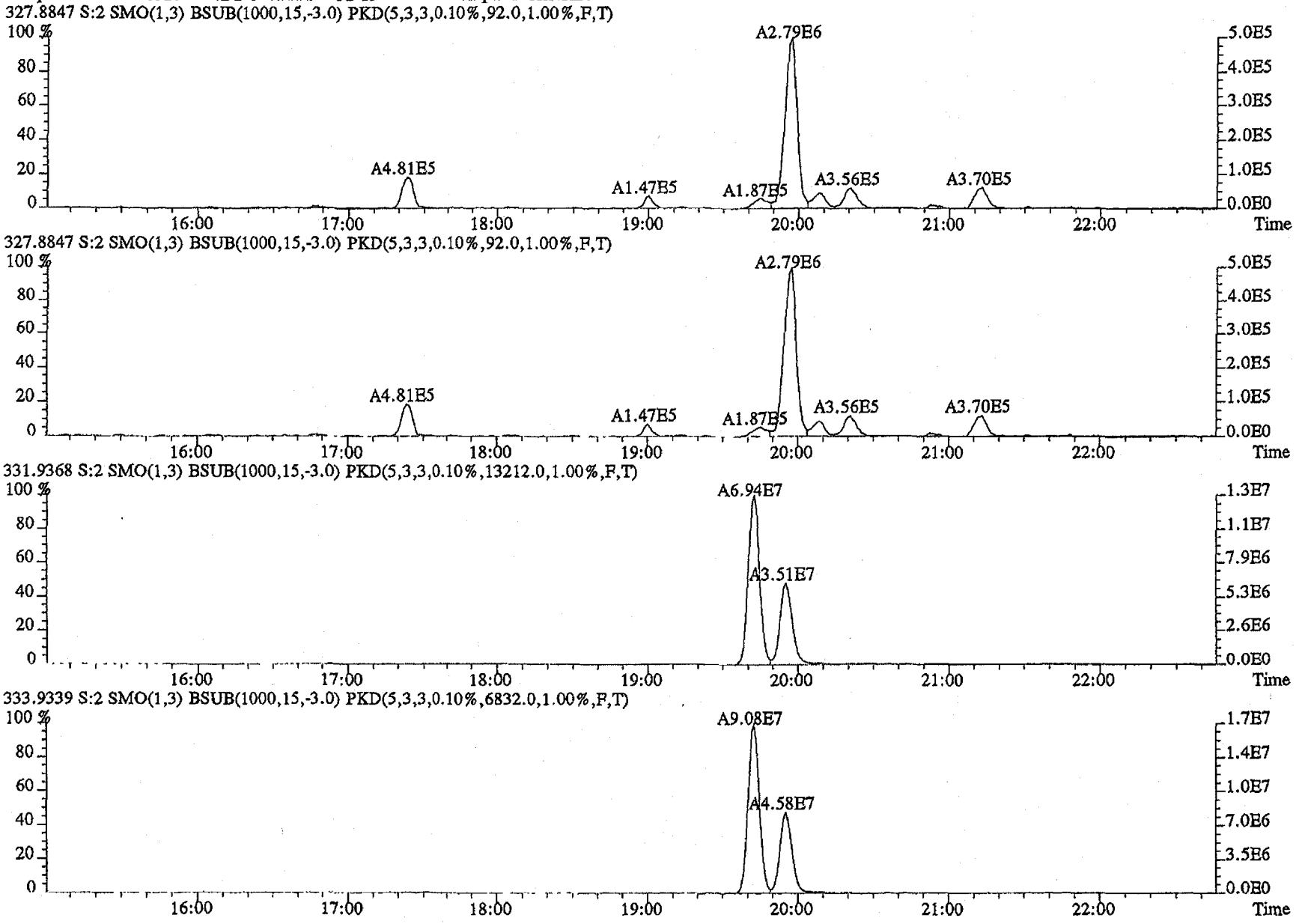
331.9368 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,13212.0,1.00%,F,T)



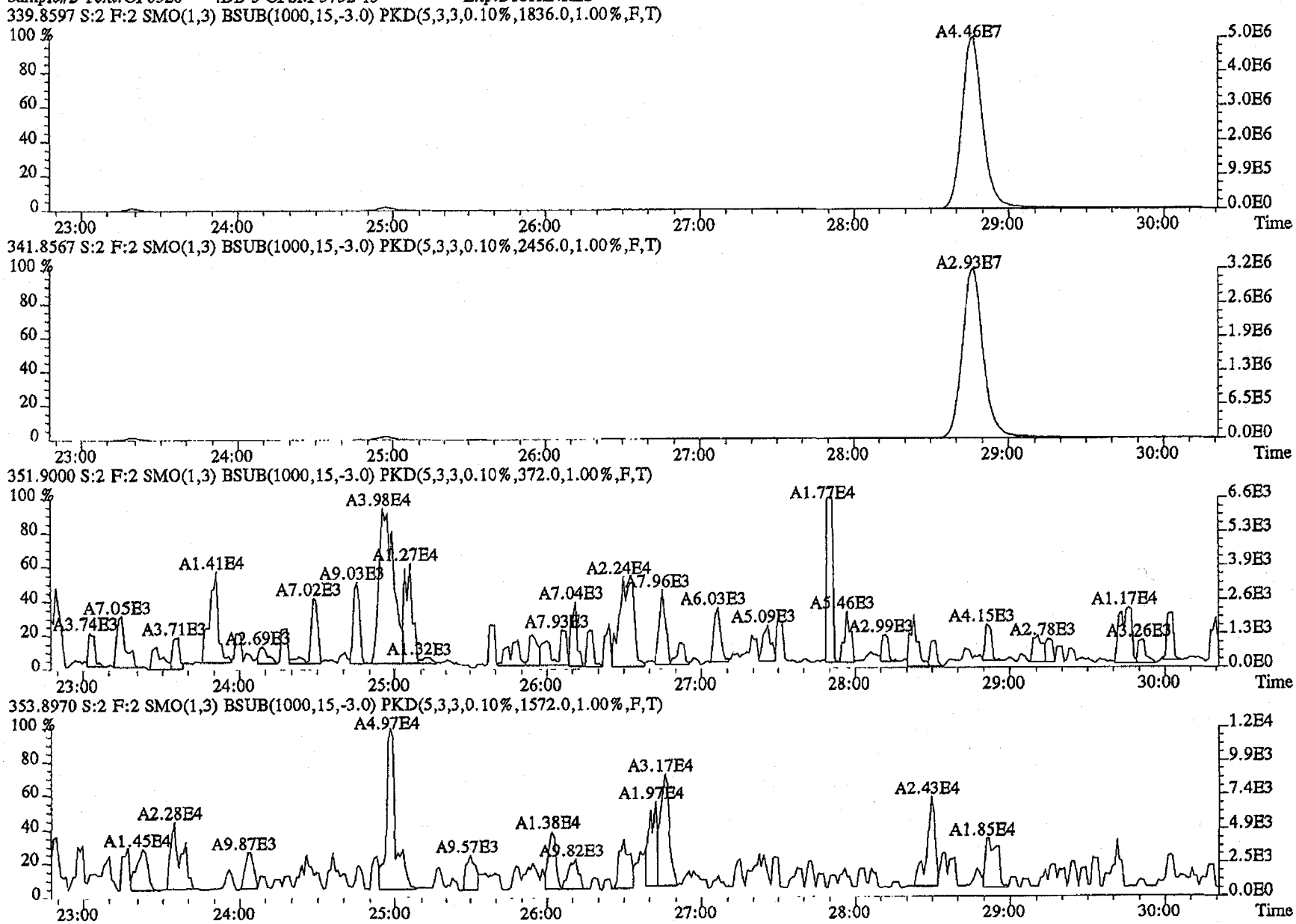
333.9339 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6832.0,1.00%,F,T)



File:20MY11D4D5 #1-514 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES

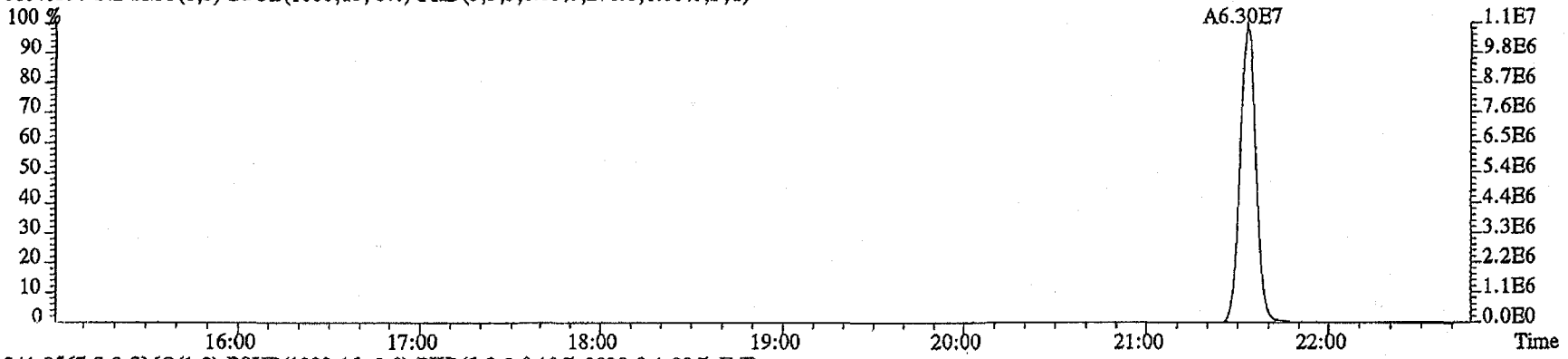


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES

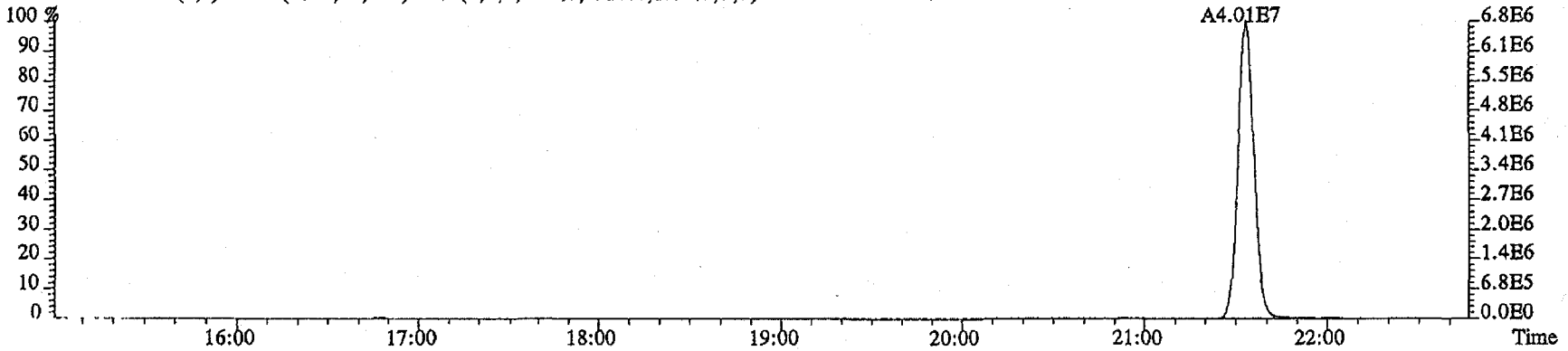


File:20MY11D4D5 #1-514 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES

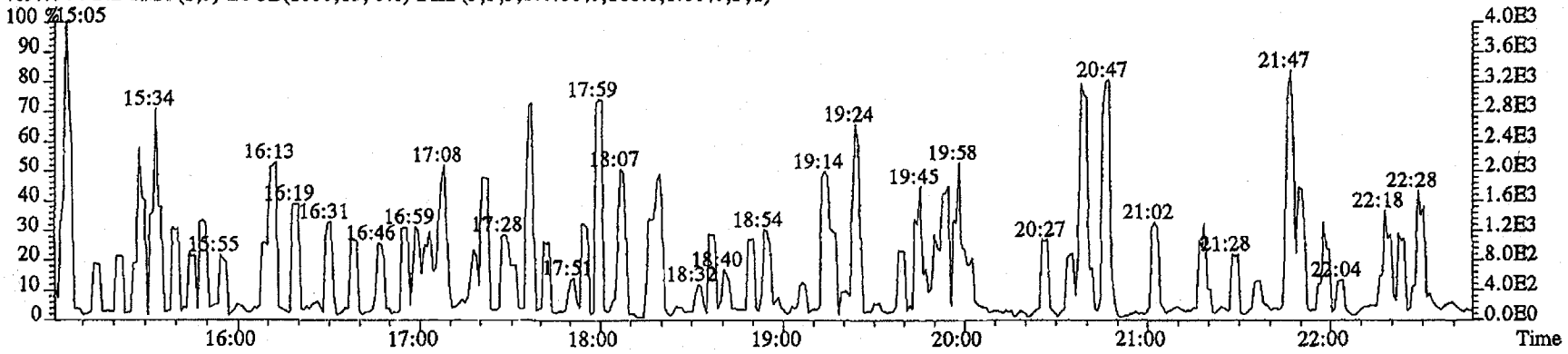
339.8597 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,276.0,1.00%,F,T)



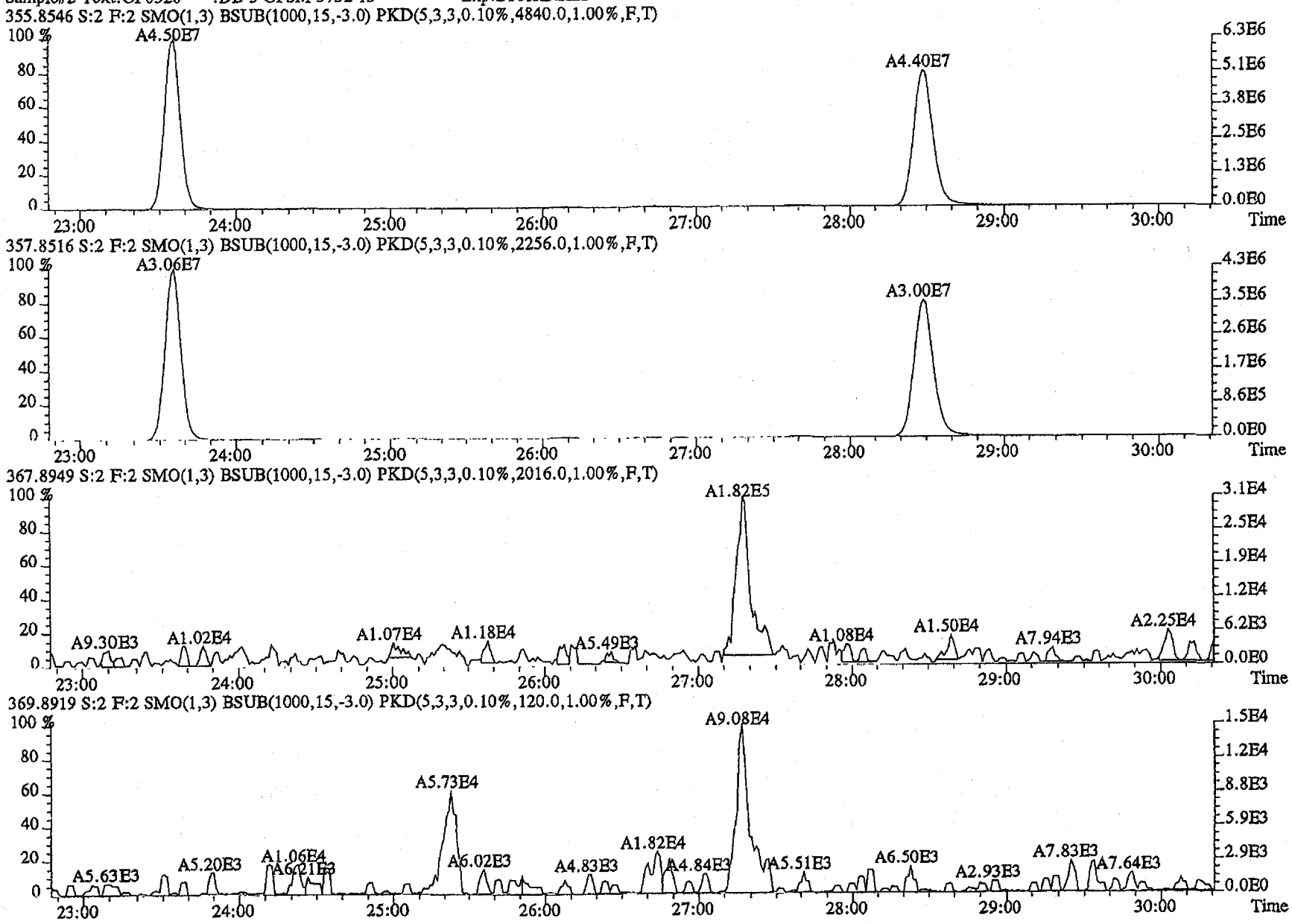
341.8567 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2920.0,1.00%,F,T)



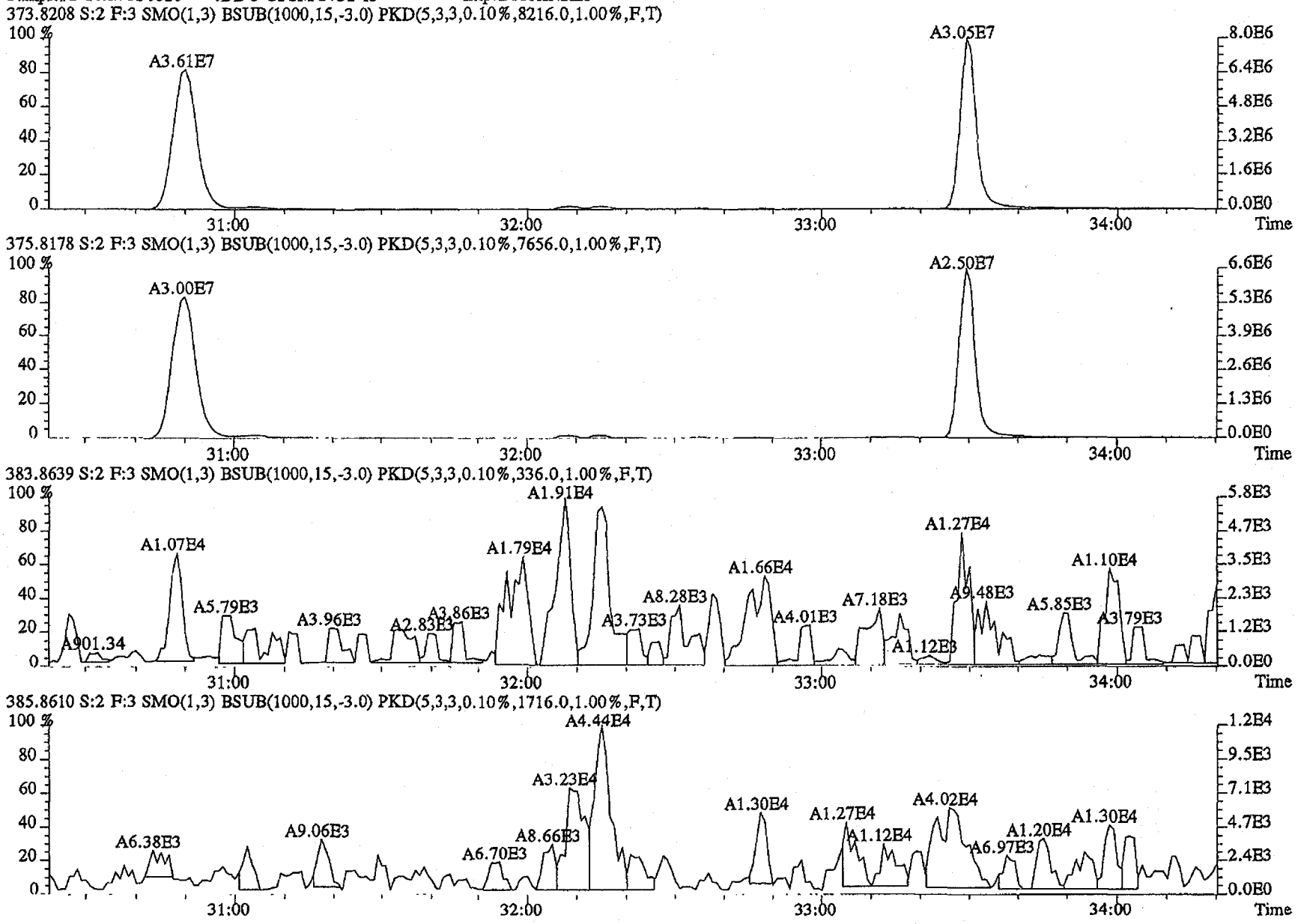
409.7974 S:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,168.0,1.00%,F,T)



File:20MY11D4D5 #1-486 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES

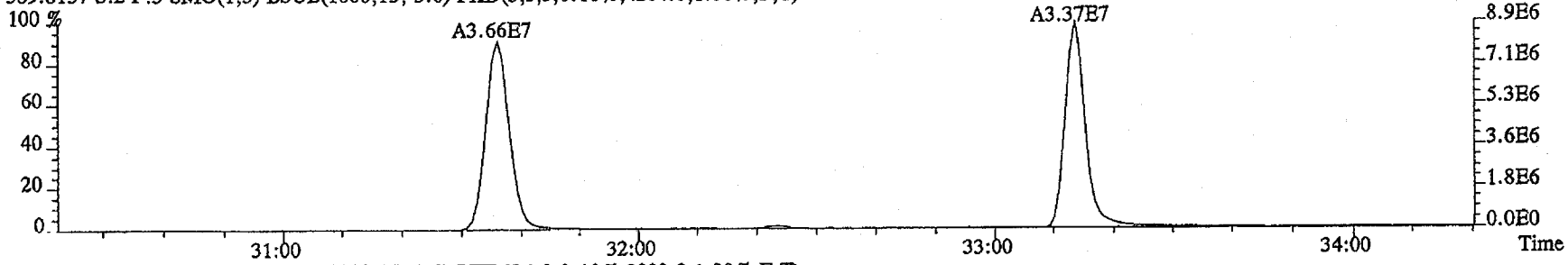


File:20MY11D4D5 #1-286 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES

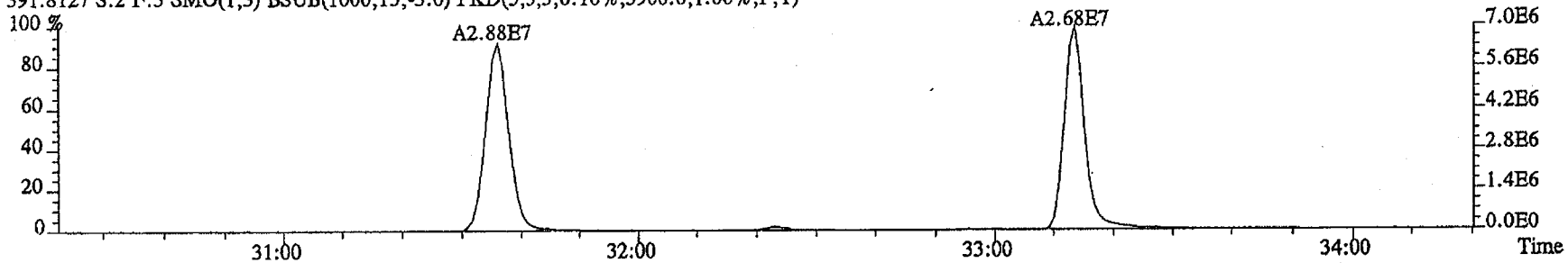


File:20MY11D4D5 #1-286 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES

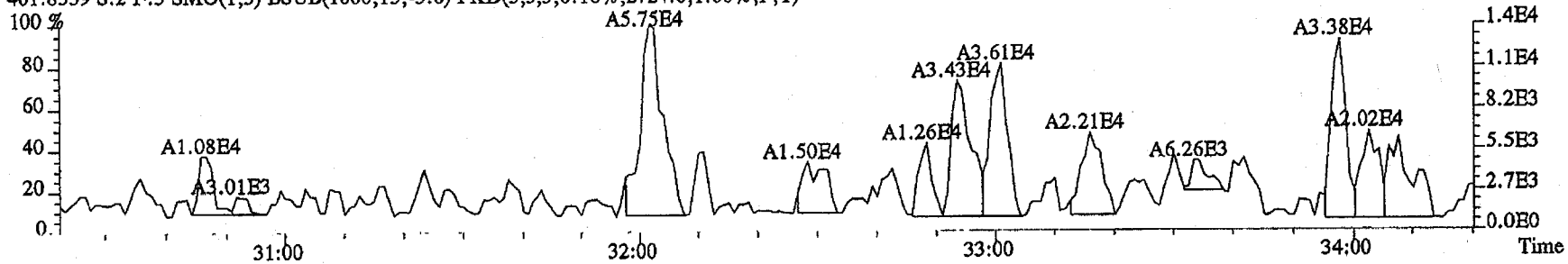
389.8157 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4204.0,1.00%,F,T)



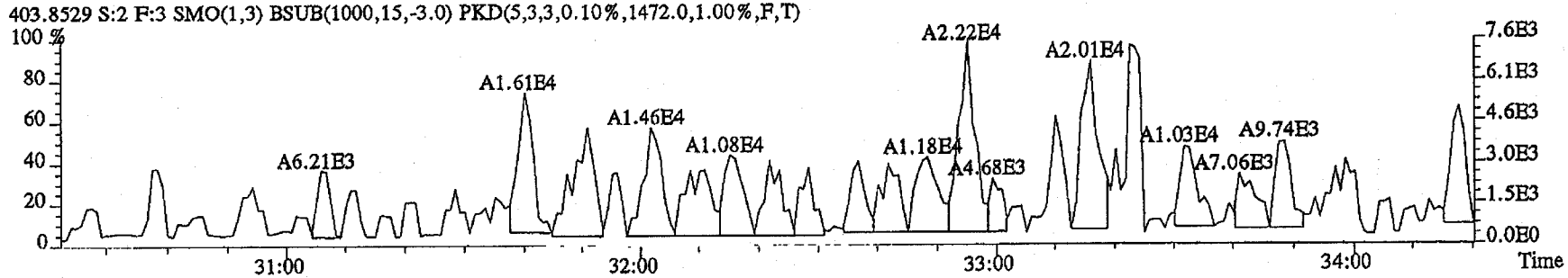
391.8127 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3900.0,1.00%,F,T)



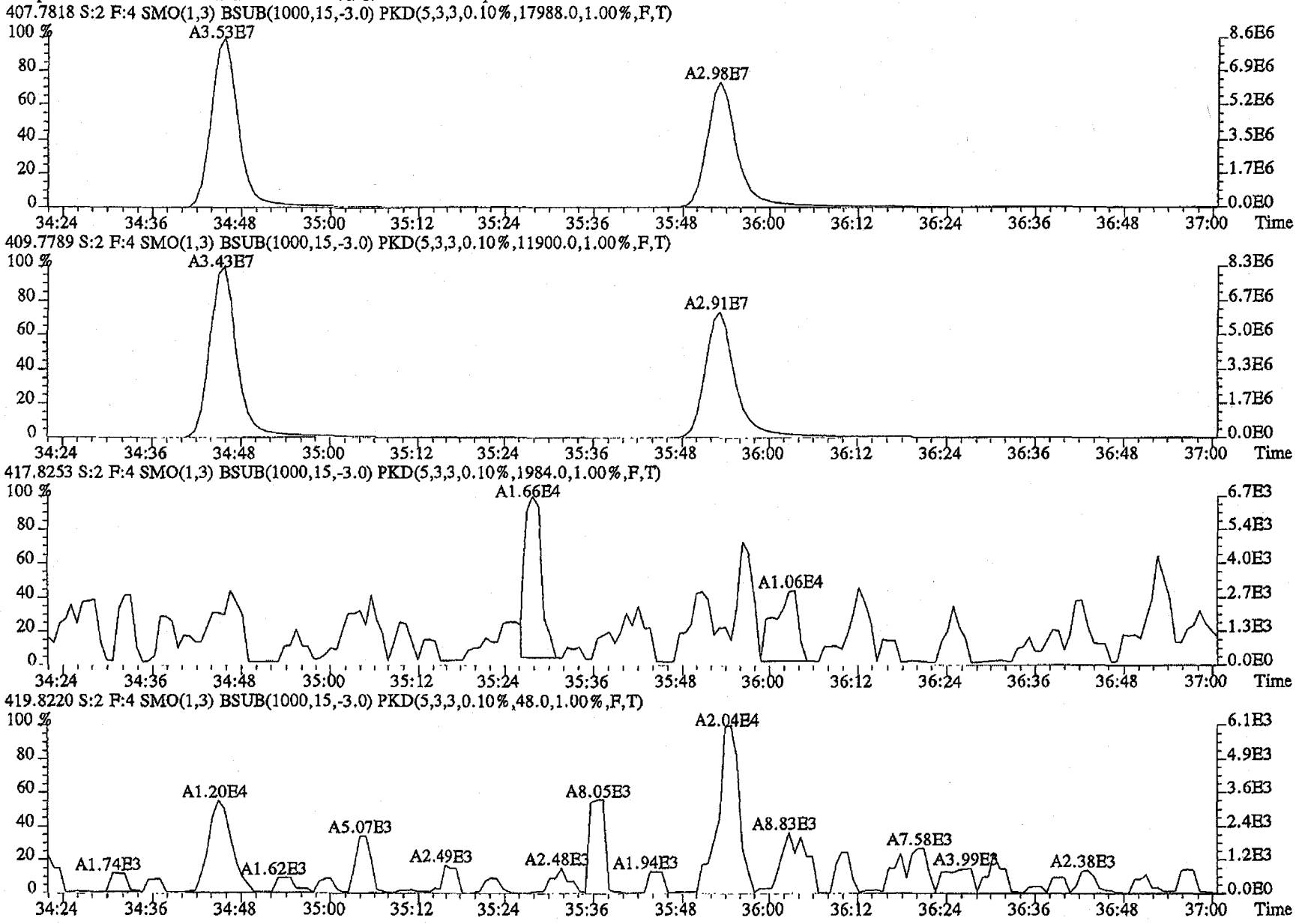
401.8559 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2724.0,1.00%,F,T)



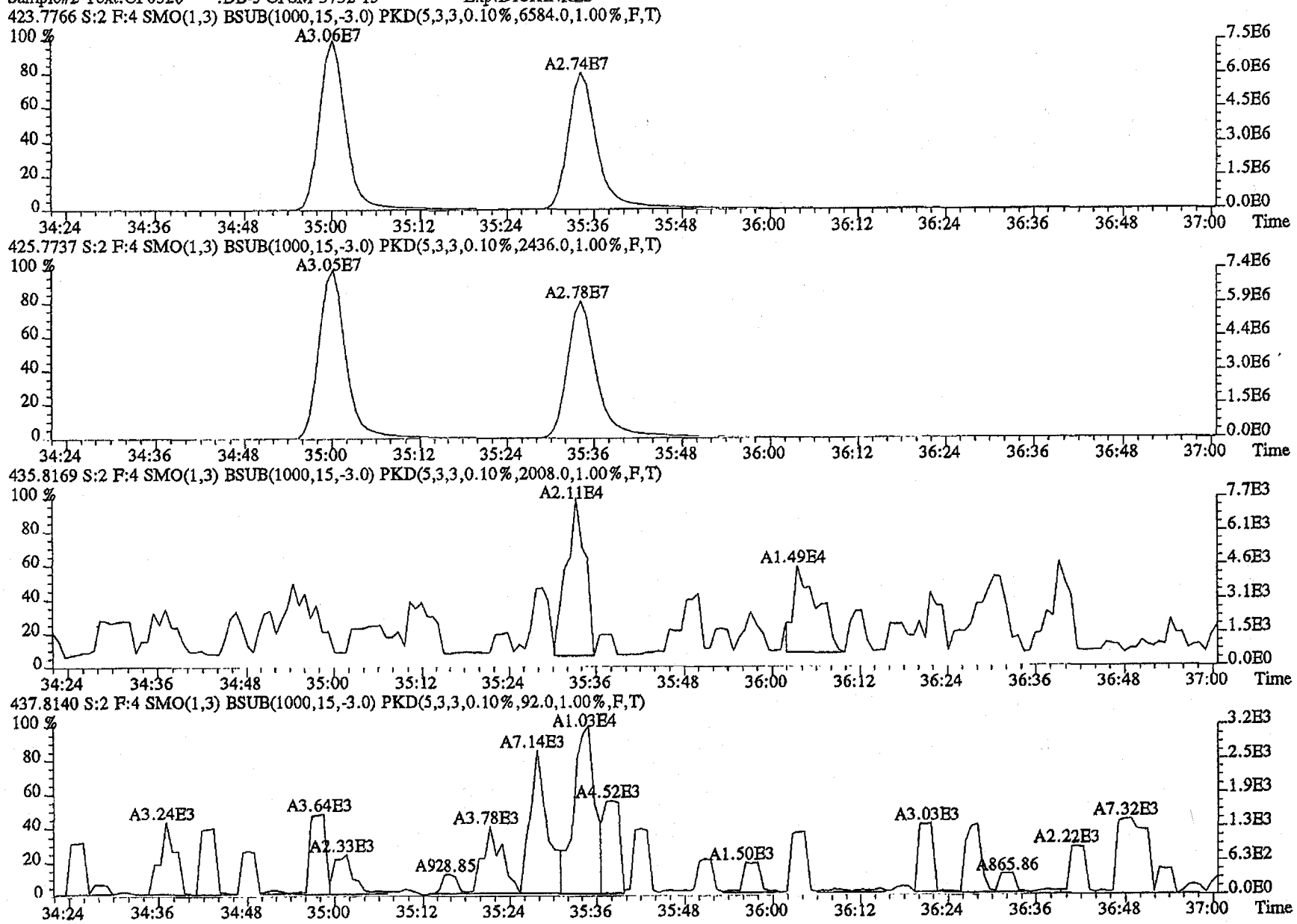
403.8529 S:2 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1472.0,1.00%,F,T)



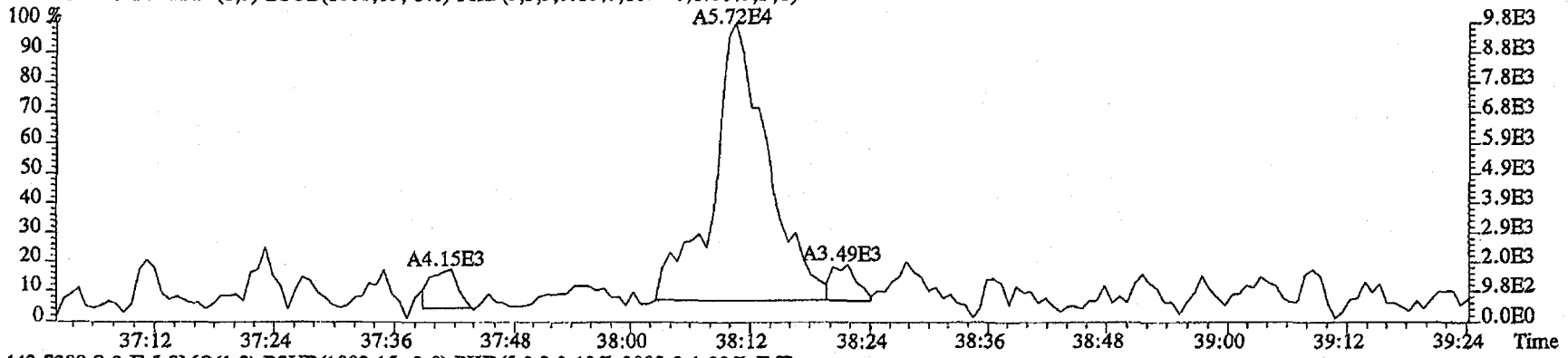
File:20MY11D4D5 #1-201 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES



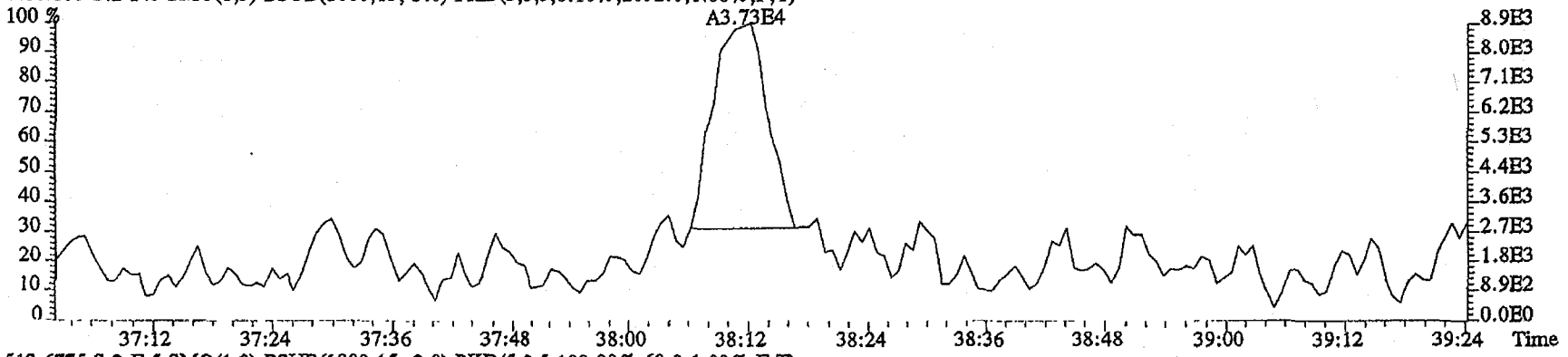
File:20MY11D4D5 #1-201 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES



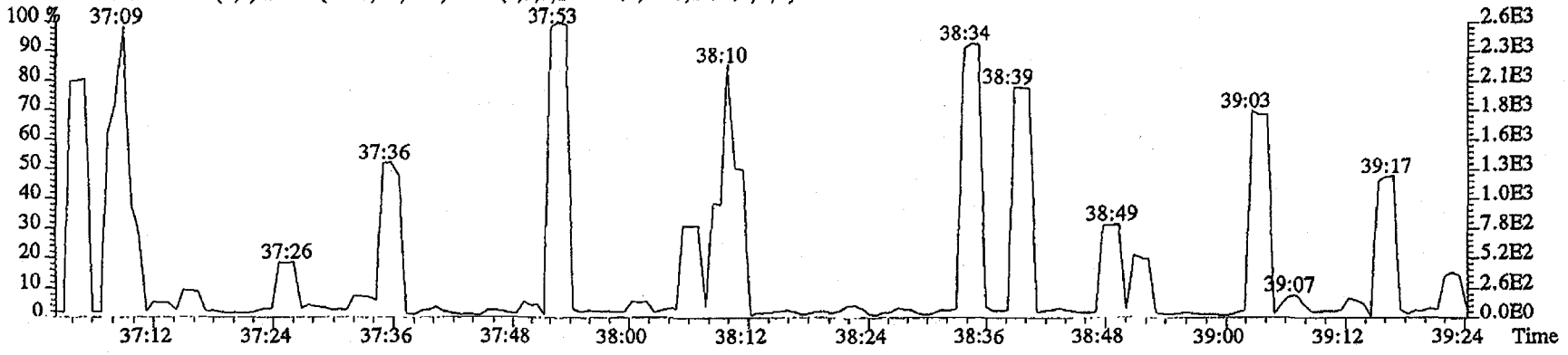
File:20MY11D4D5 #1-192 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES
441.7428 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1180.0,1.00%,F,T)



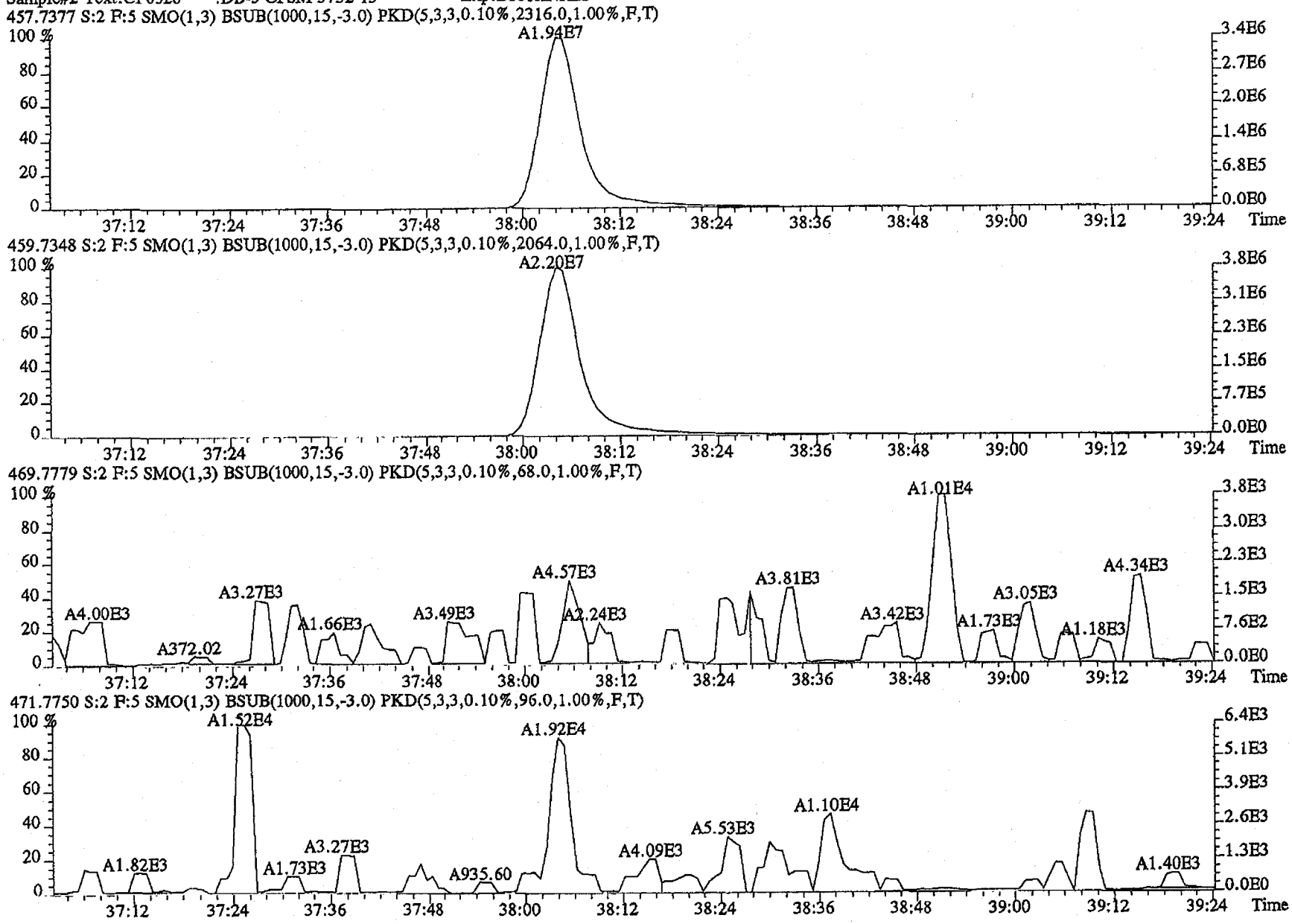
443.7399 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2092.0,1.00%,F,T)



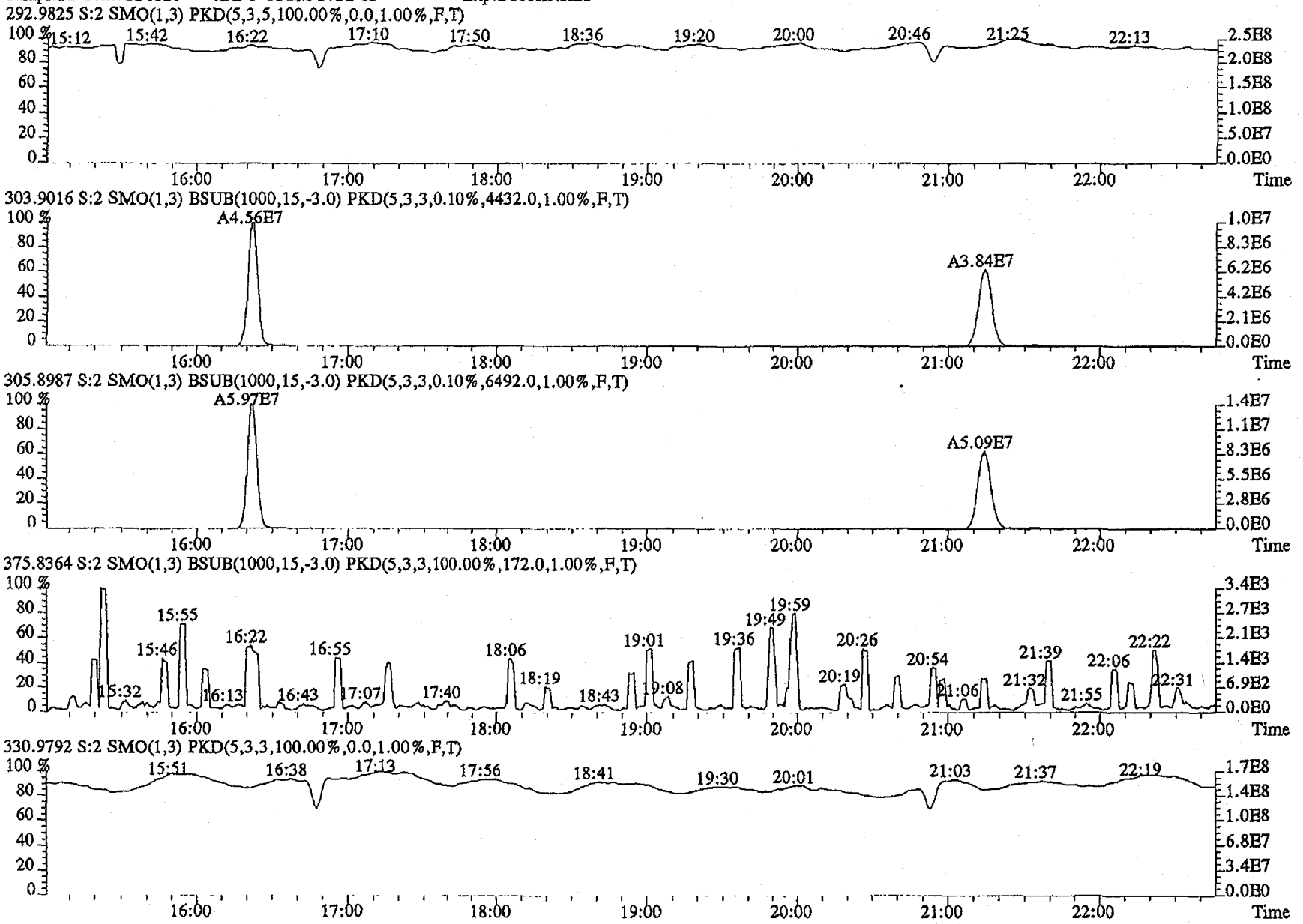
513.6775 S:2 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,68.0,1.00%,F,T)



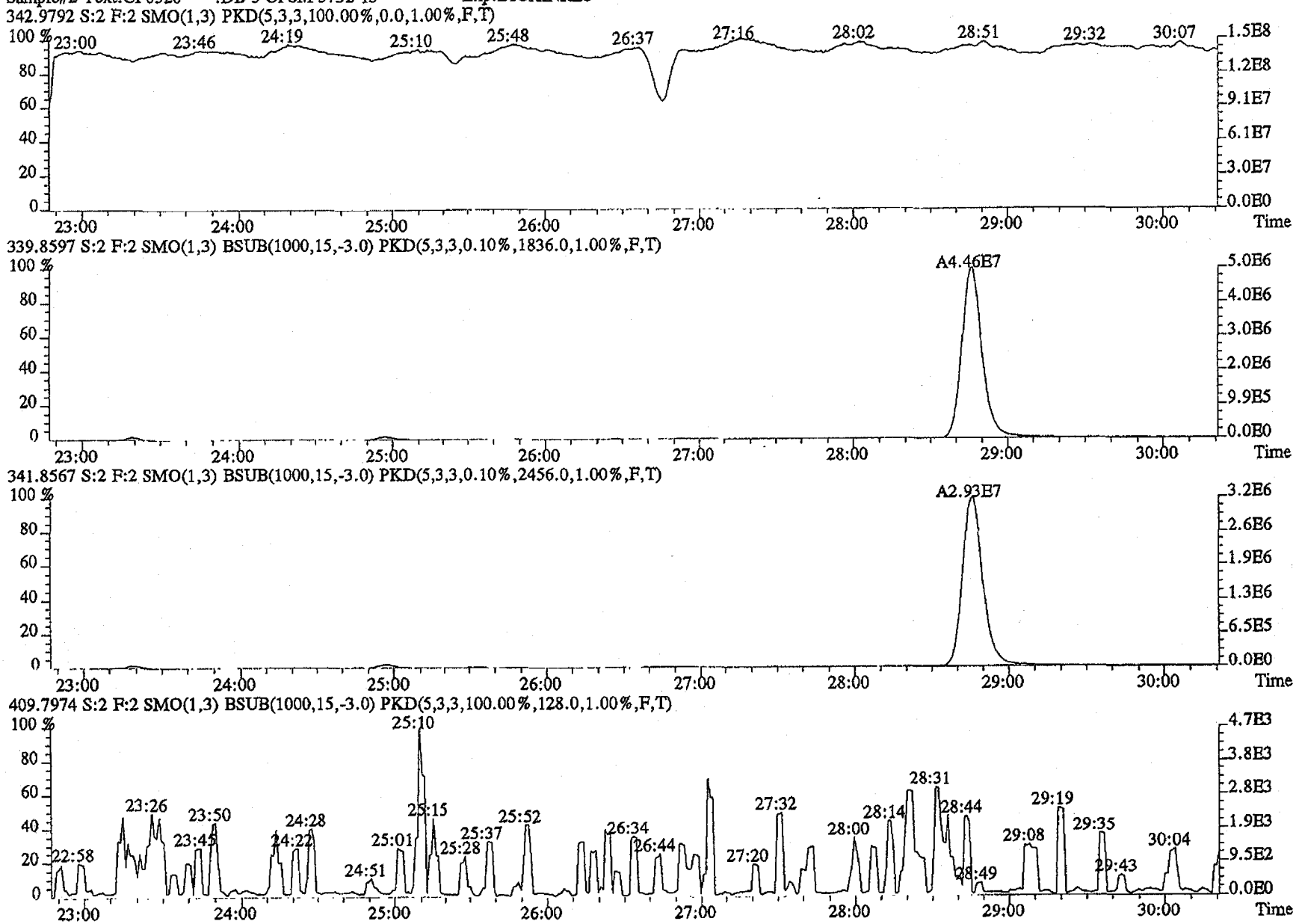
File:20MY11D4D5 #1-192 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES



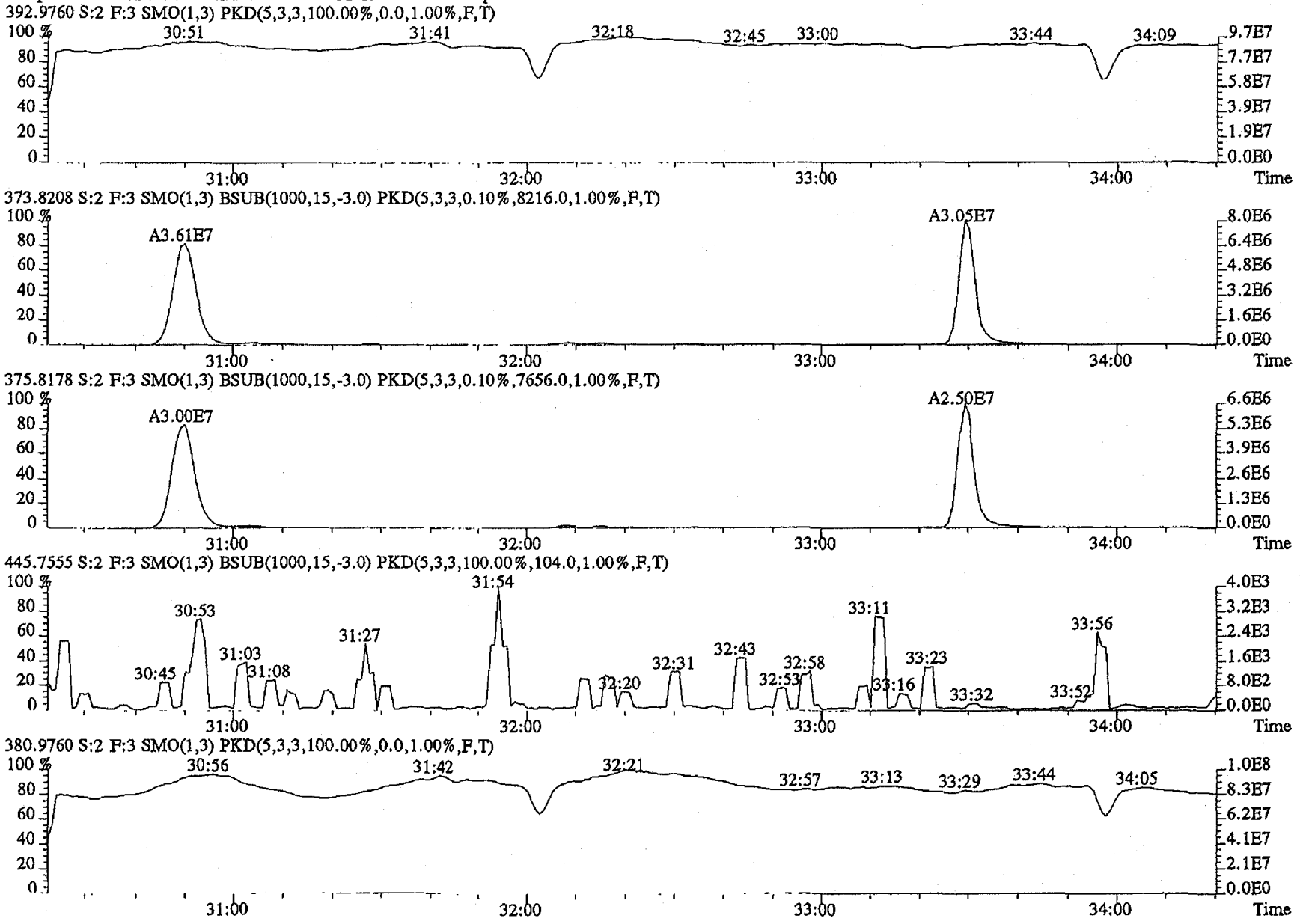
File:20MY11D4D5 #1-514 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES



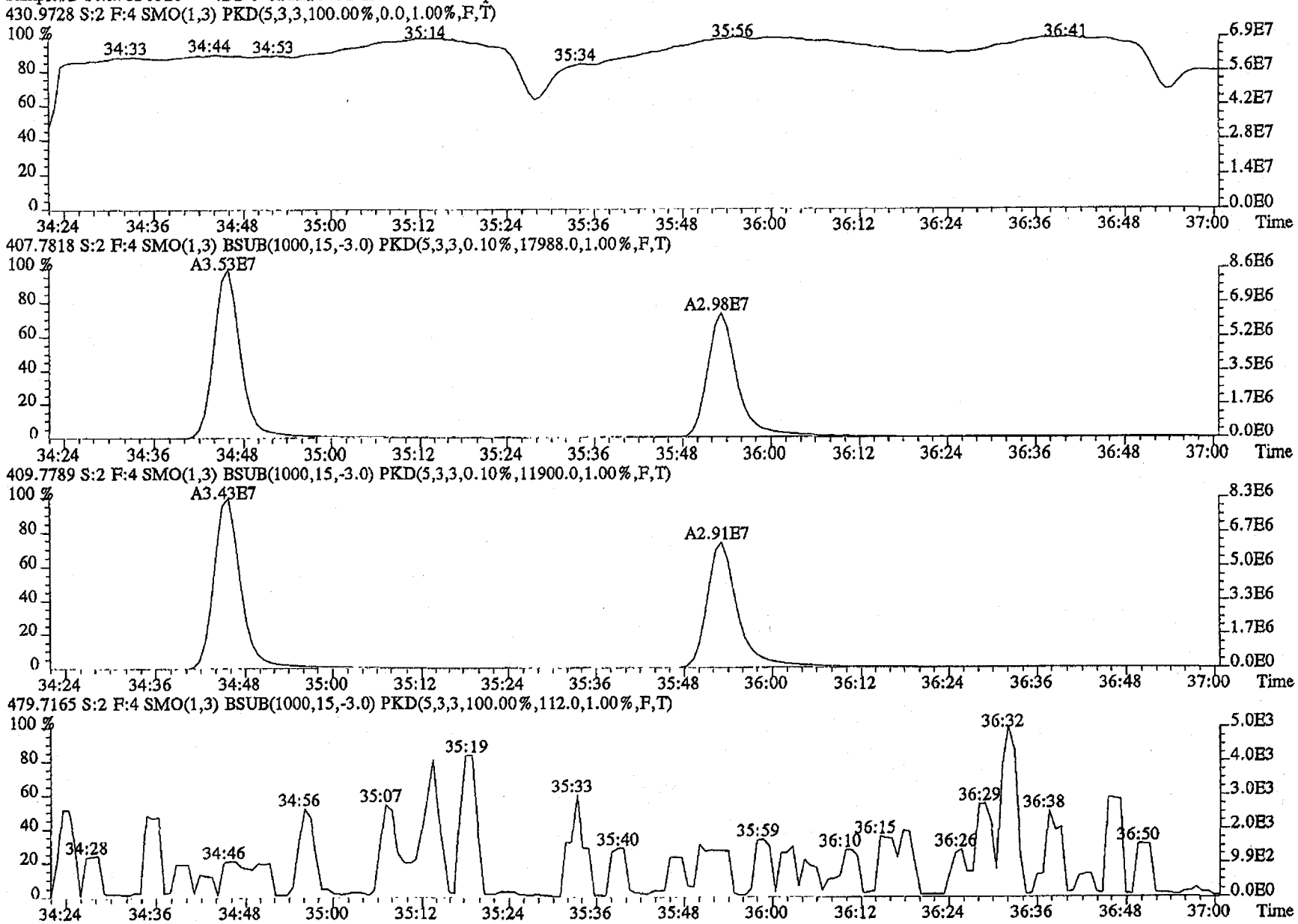
File:20MY11D4D5 #1-486 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES



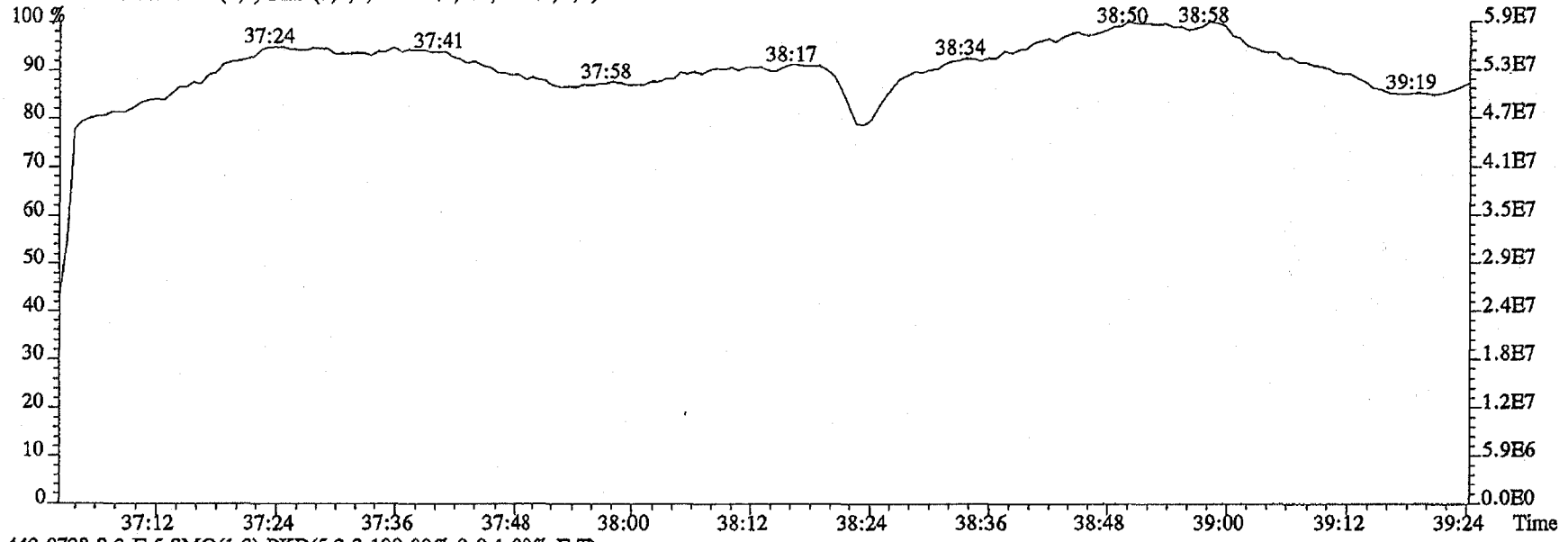
File:20MY11D4D5 #1-286 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES



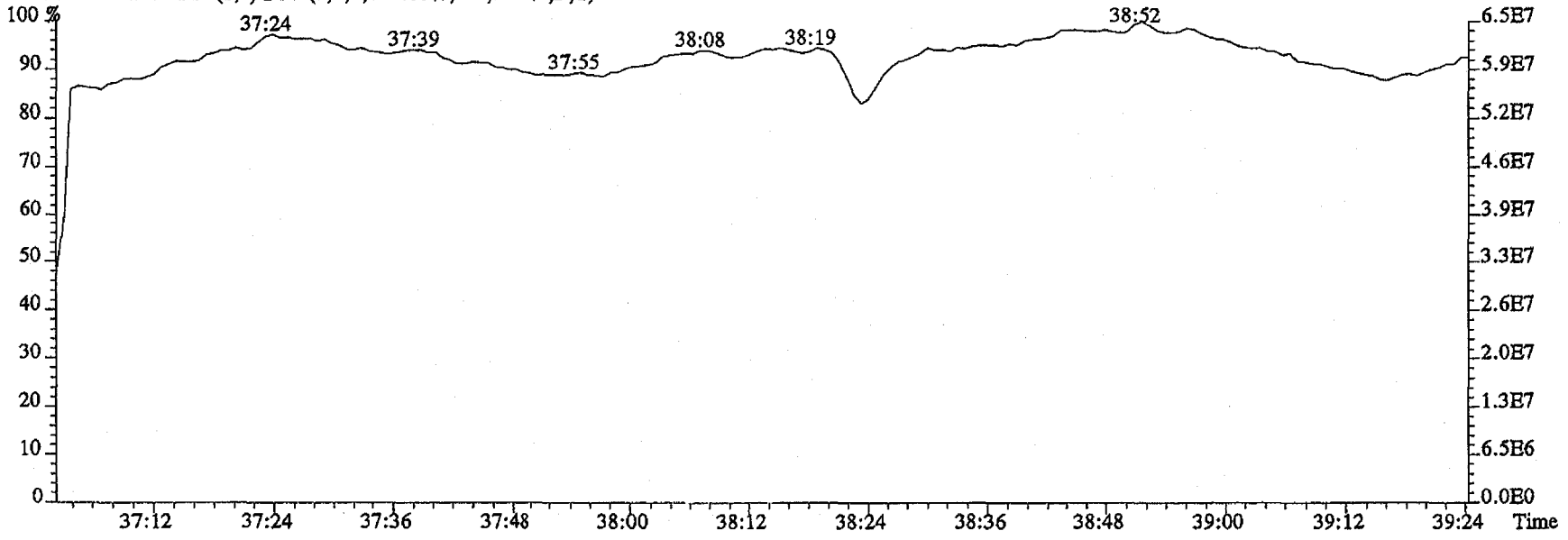
File:20MY11D4D5 #1-201 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES



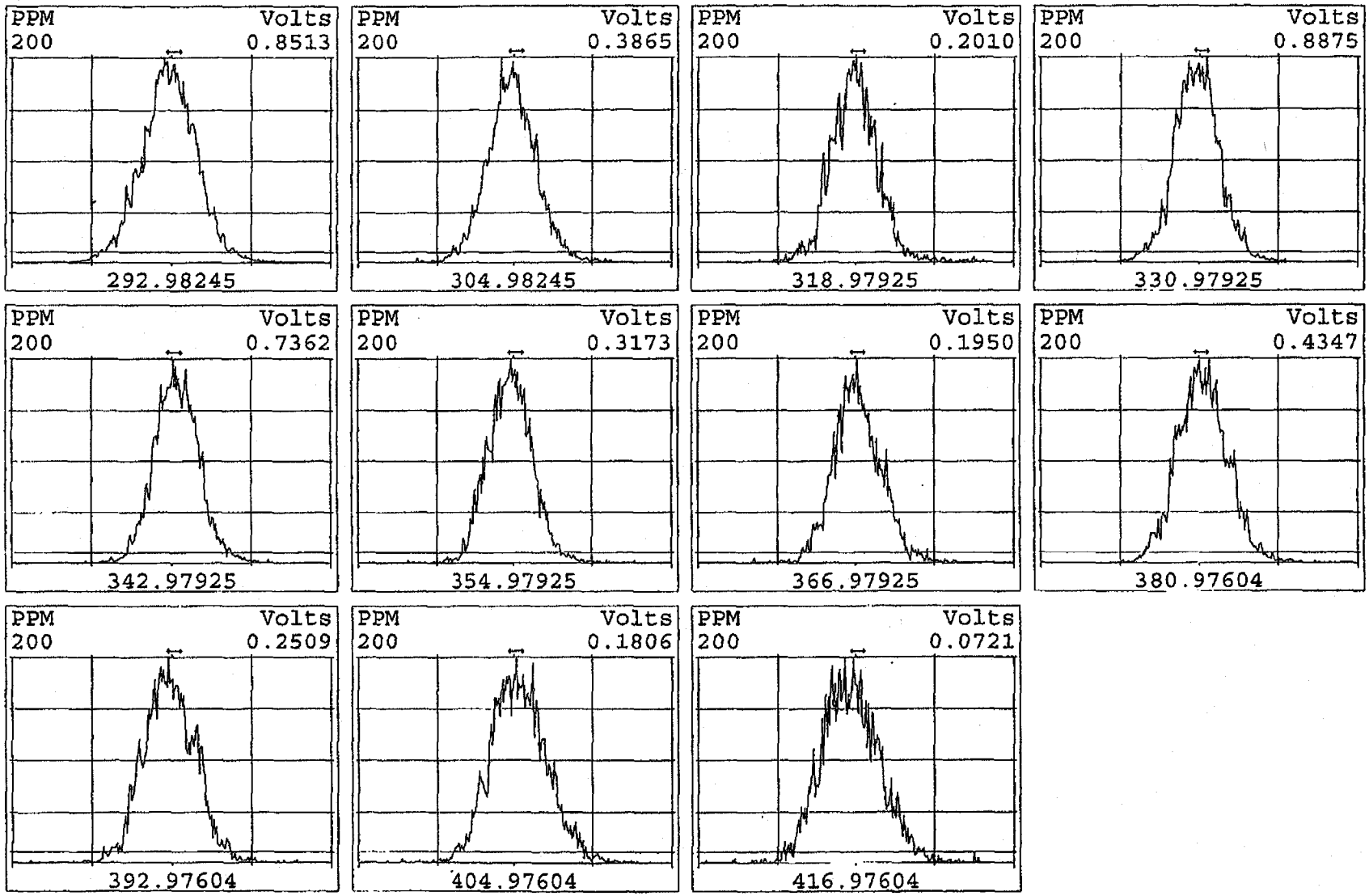
File:20MY11D4D5 #1-192 Acq:20-MAY-2011 19:51:15 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 Text:CP0520 :DB-5 CPSM 3732-13 Exp:DIOXINRES
454.9728 S:2 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



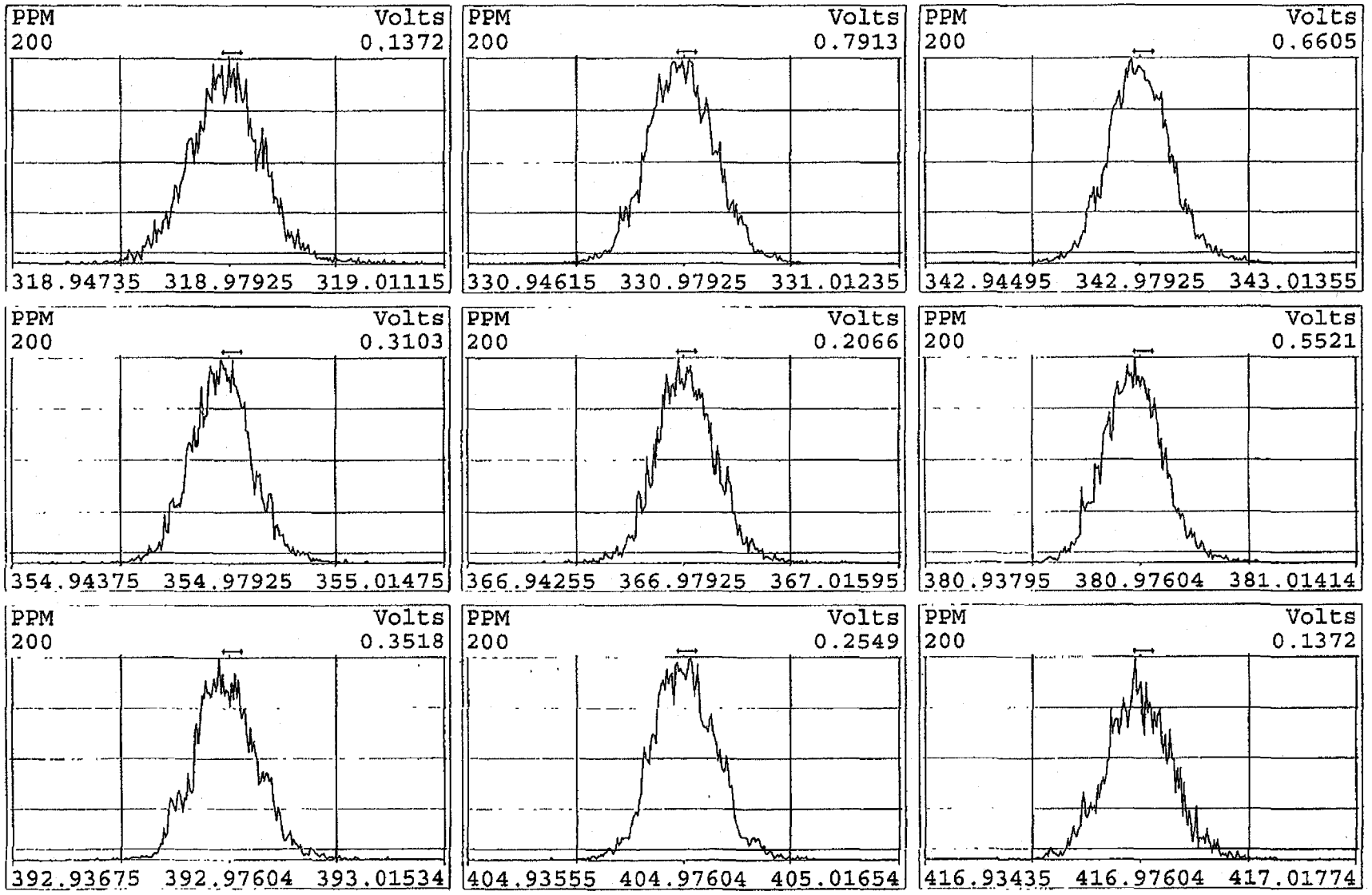
442.9728 S:2 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



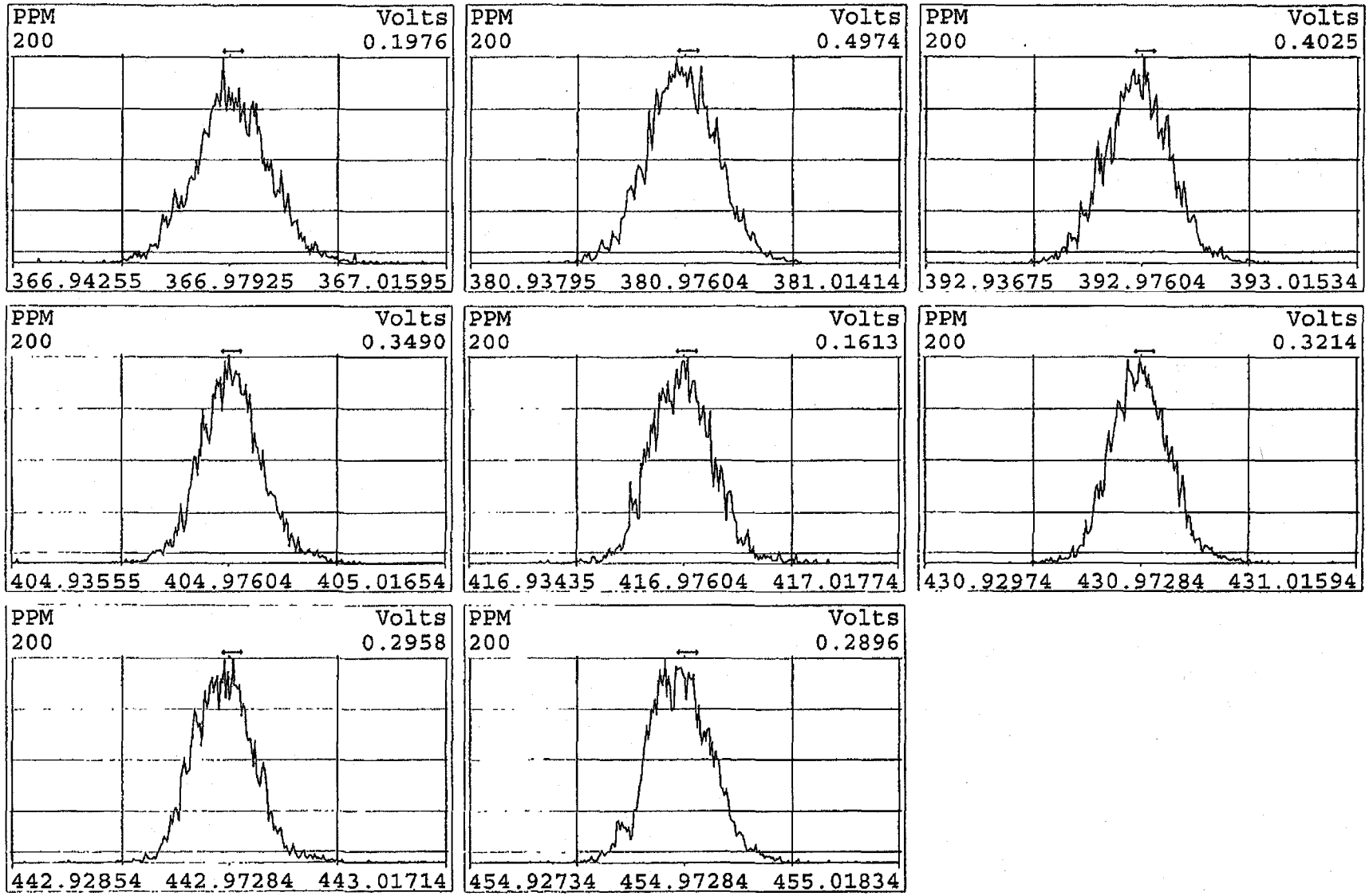
Peak Locate Examination:23-MAY-2011:09:47 File:23MY114D5
Experiment:DIOXINRES Function:1 Reference:PFK



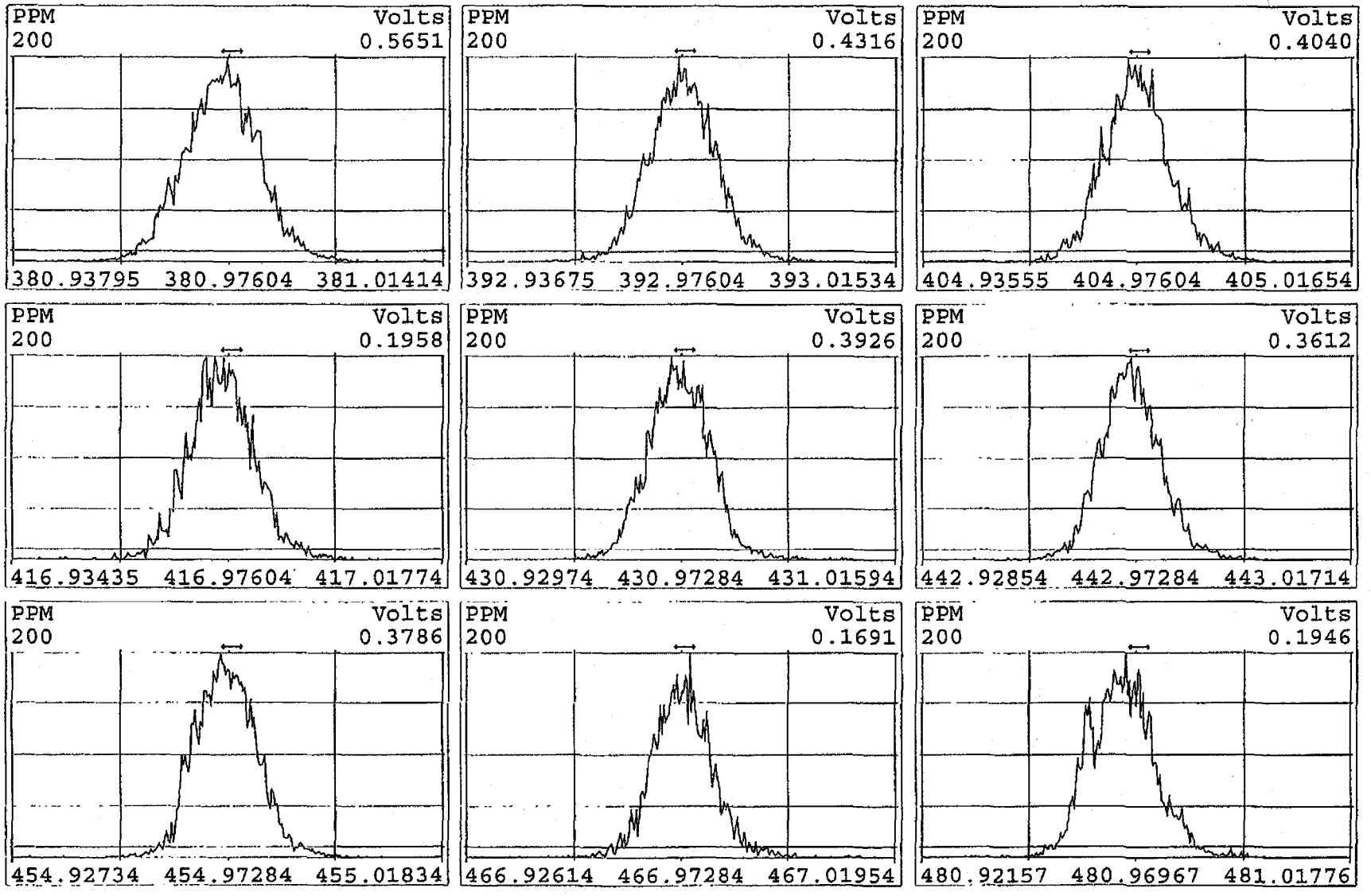
Peak Locate Examination:23-MAY-2011:09:48 File:23MY114D5
Experiment:DIOXINRES Function:2 Reference:PFK



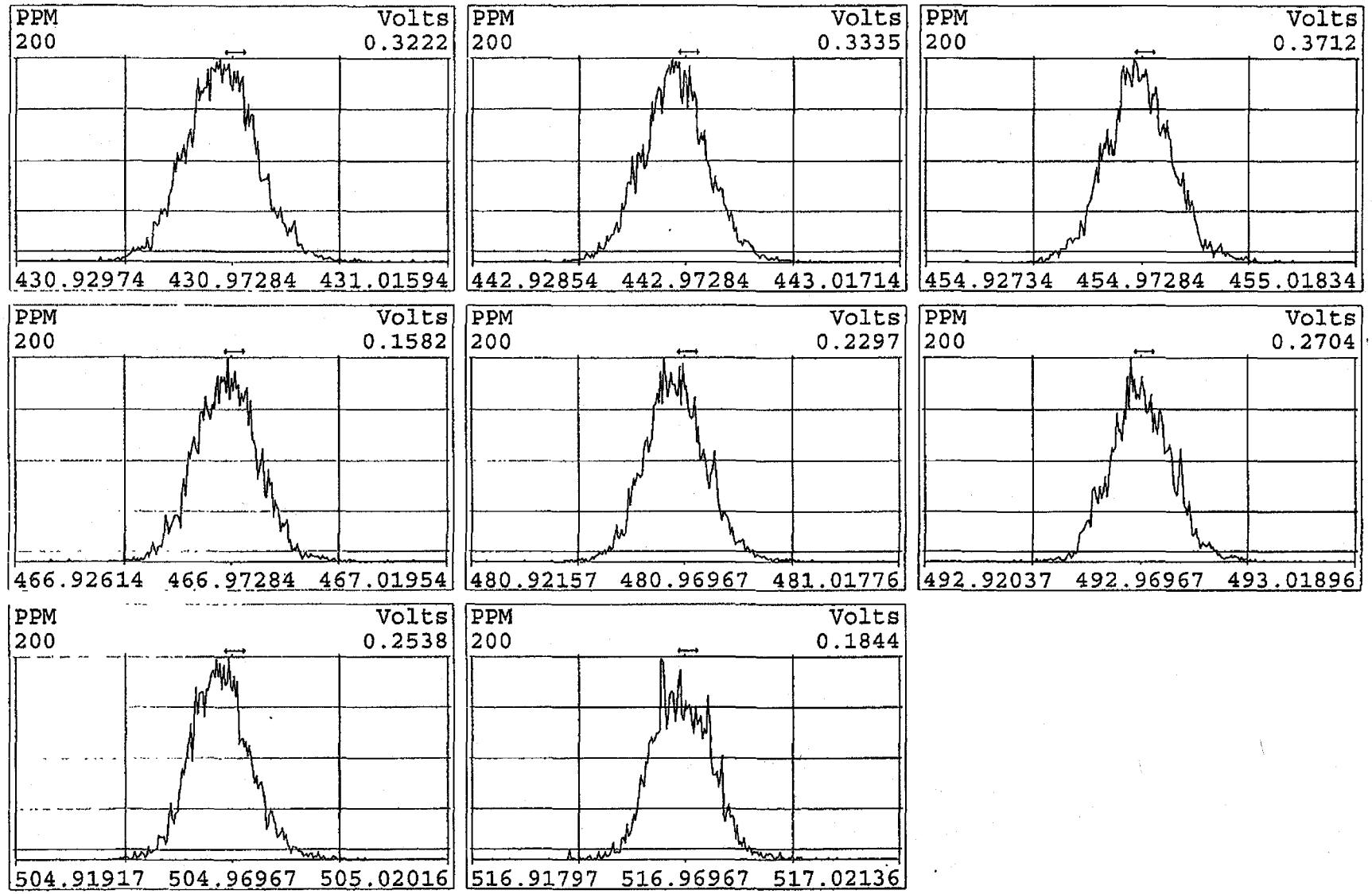
Peak Locate Examination:23-MAY-2011:09:48 File:23MY114D5
Experiment:DIOXINRES Function:3 Reference:PFK



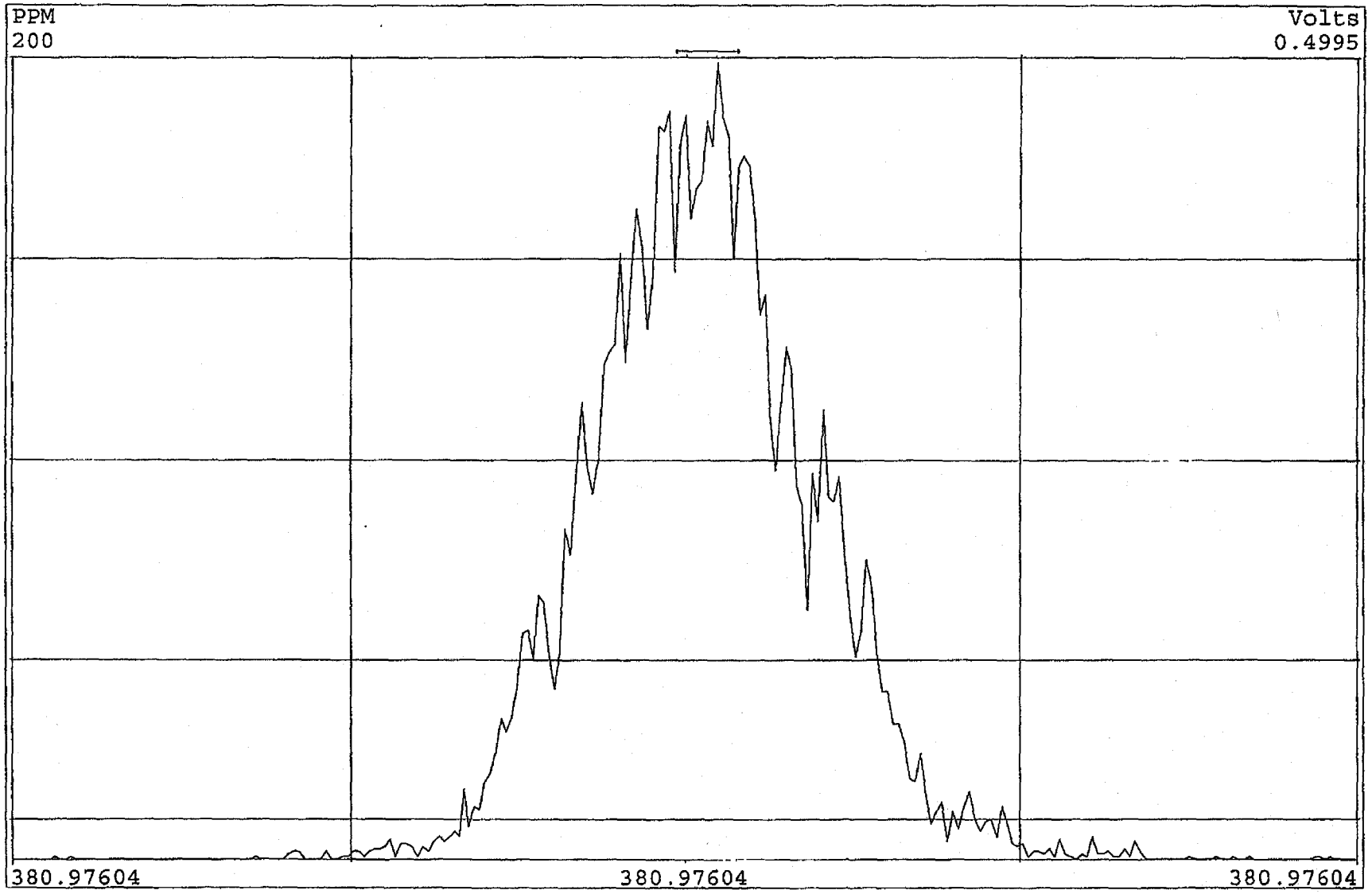
Peak Locate Examination:23-MAY-2011:09:48 File:23MY114D5
Experiment:DIOXINRES Function:4 Reference:PFK



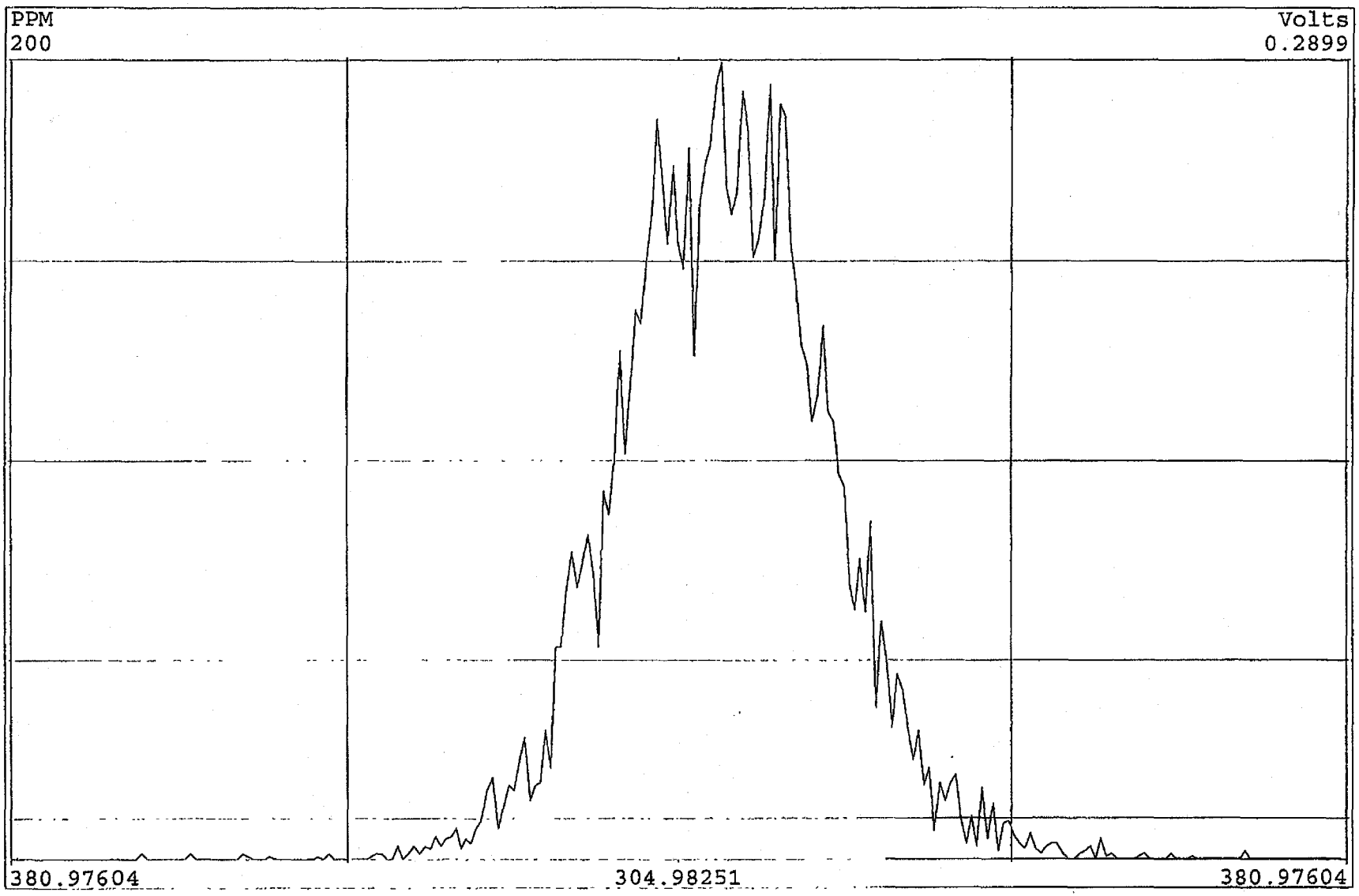
Peak Locate Examination:23-MAY-2011:09:49 File:23MY114D5
Experiment:DIOXINRES Function:5 Reference:PFK



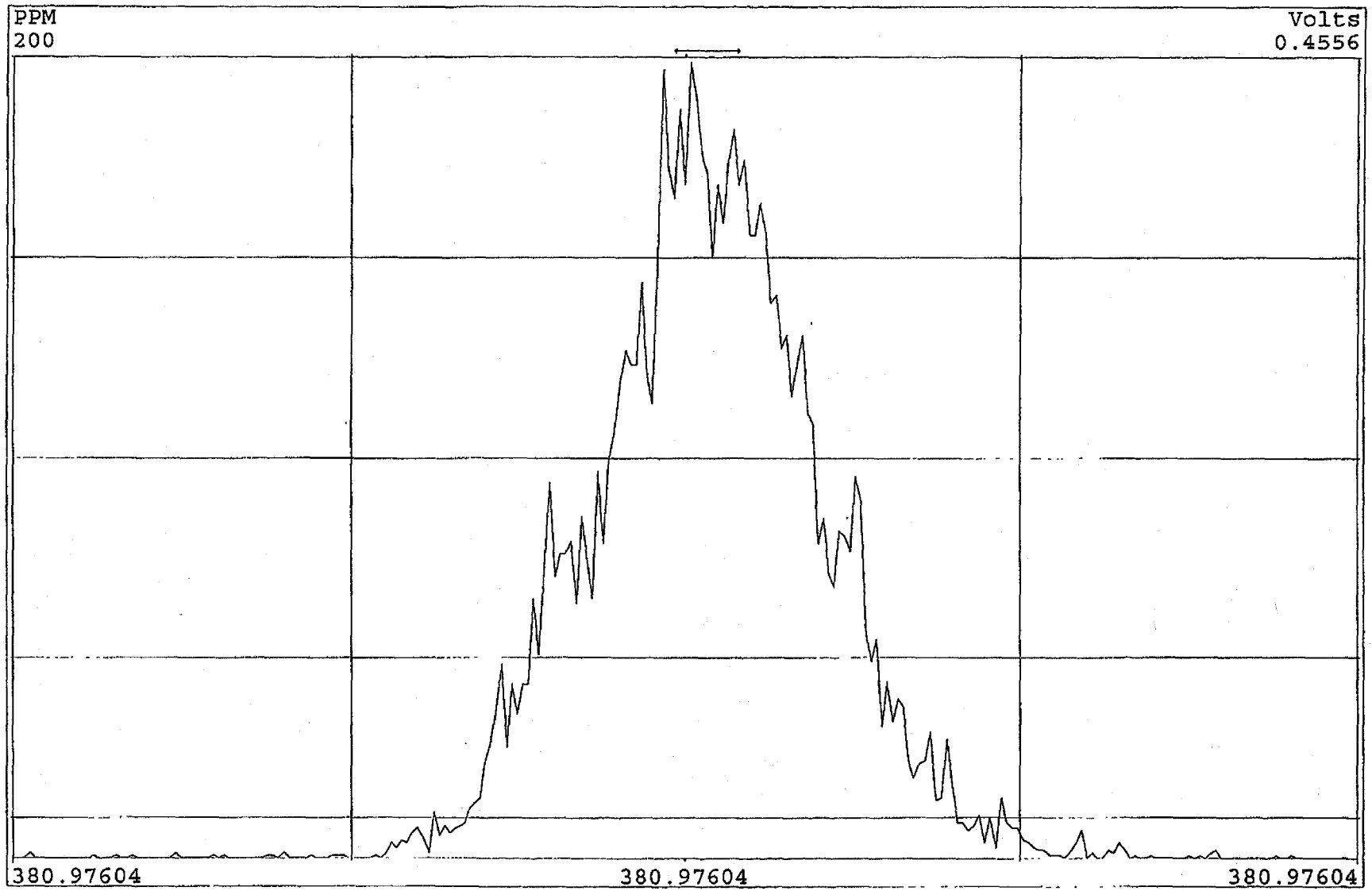
SIRLM Examination:23-MAY-2011:20:10 File:23MY114D5
Experiment:DIOXINRES Function:6



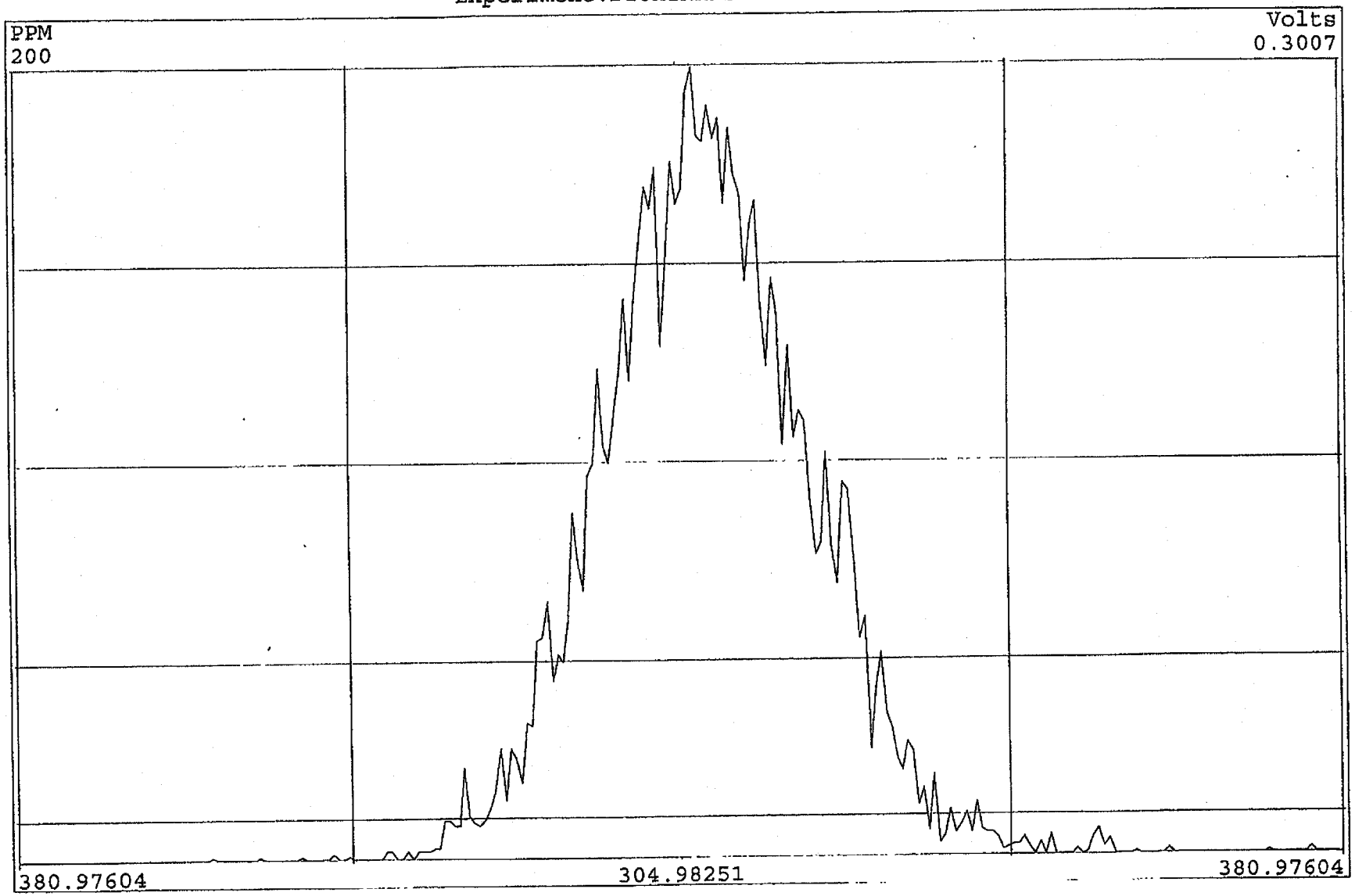
SIRLM Examination:23-MAY-2011:20:11 File:23MY114D5
Experiment:DIOXINRES Function:7



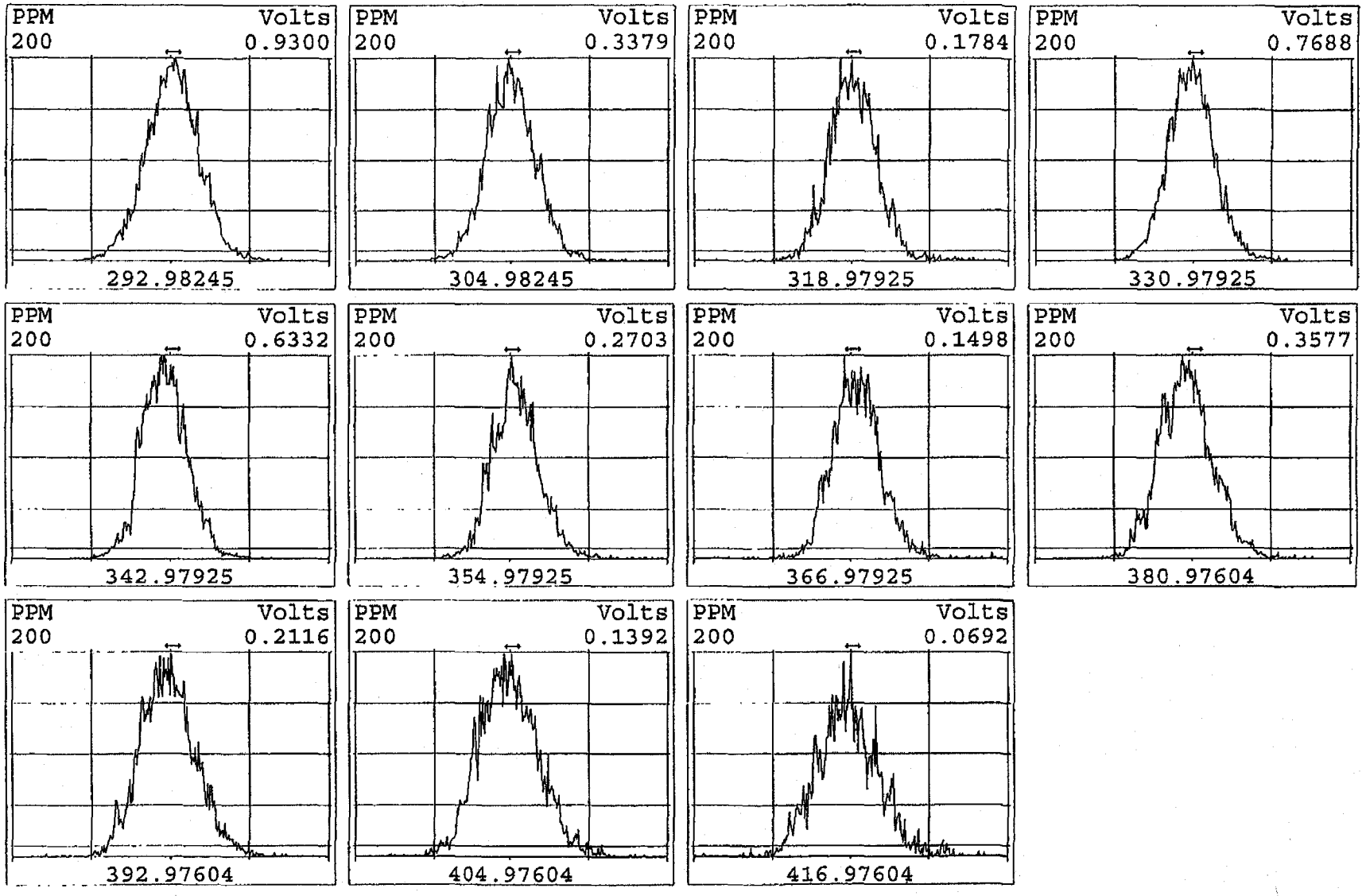
SIRLM Examination:23-MAY-2011:20:54 File:23MY114D5
Experiment:DIOXINRES Function:6



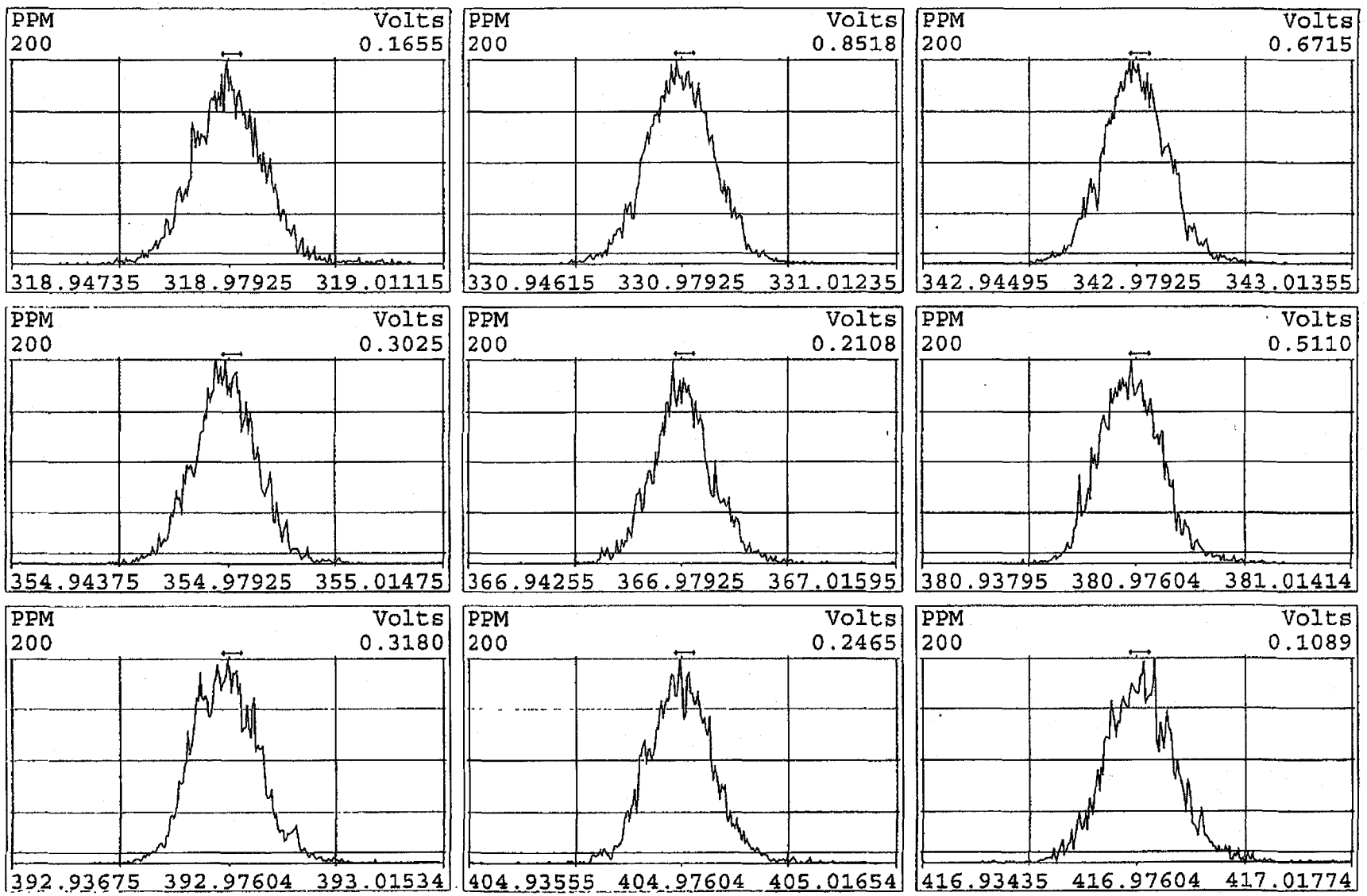
SIRLM Examination:23-MAY-2011:20:56 File:23MY114D5
Experiment:DIOXINRES Function:7



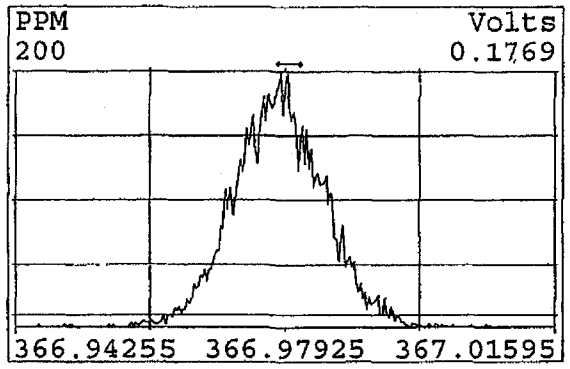
Peak Locate Examination:23-MAY-2011:21:45 File:RESCHK23MY114D5
Experiment:DIOXINRES Function:1 Reference:PFK

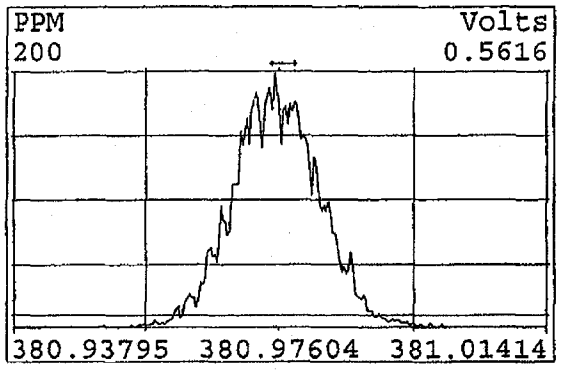


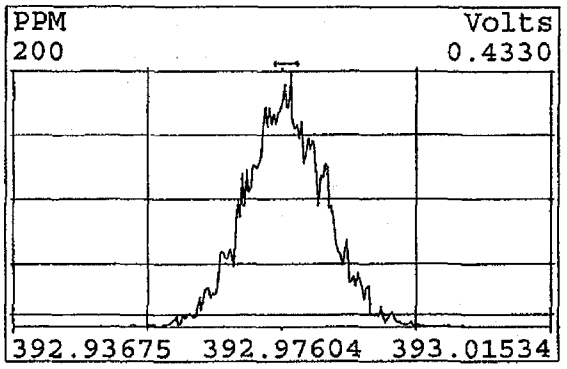
Peak Locate Examination:23-MAY-2011:21:46 File:RESCHK23MY114D5
Experiment:DIOXINRES Function:2 Reference:PFK

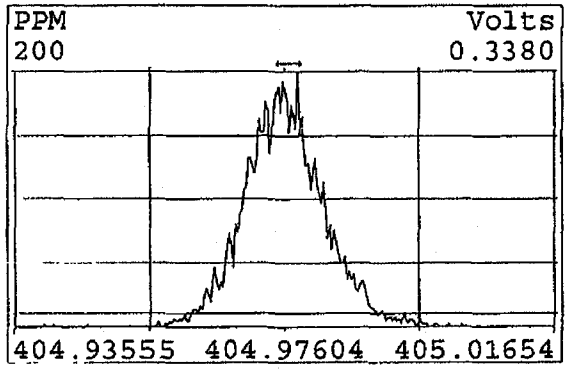


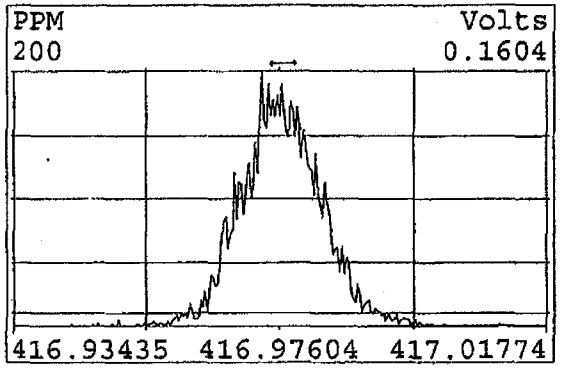
Peak Locate Examination:23-MAY-2011:21:46 File:RESCHK23MY114D5
Experiment:DIOXINRES Function:3 Reference:PFK

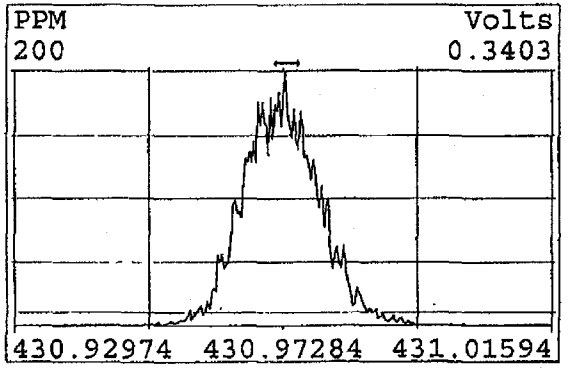


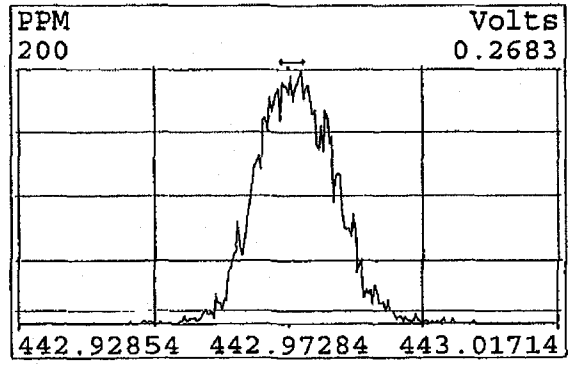


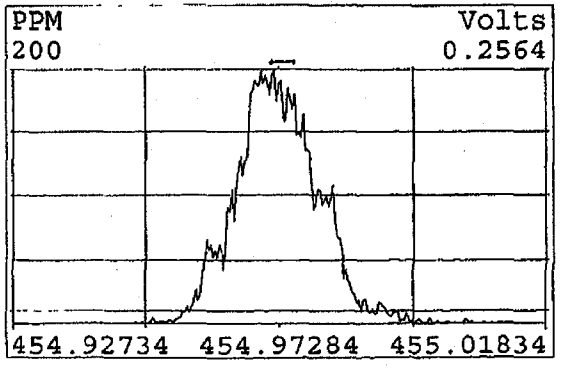




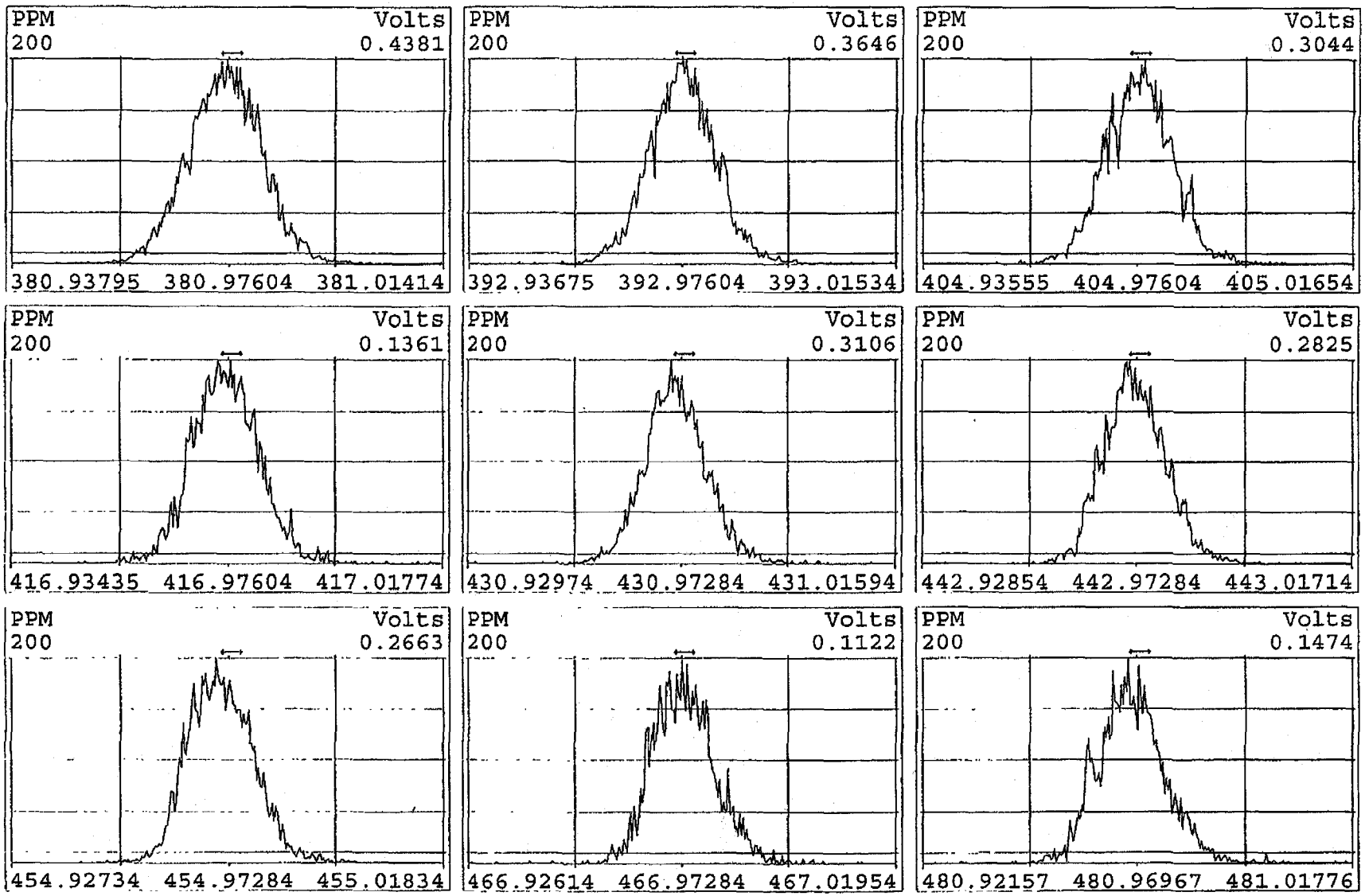




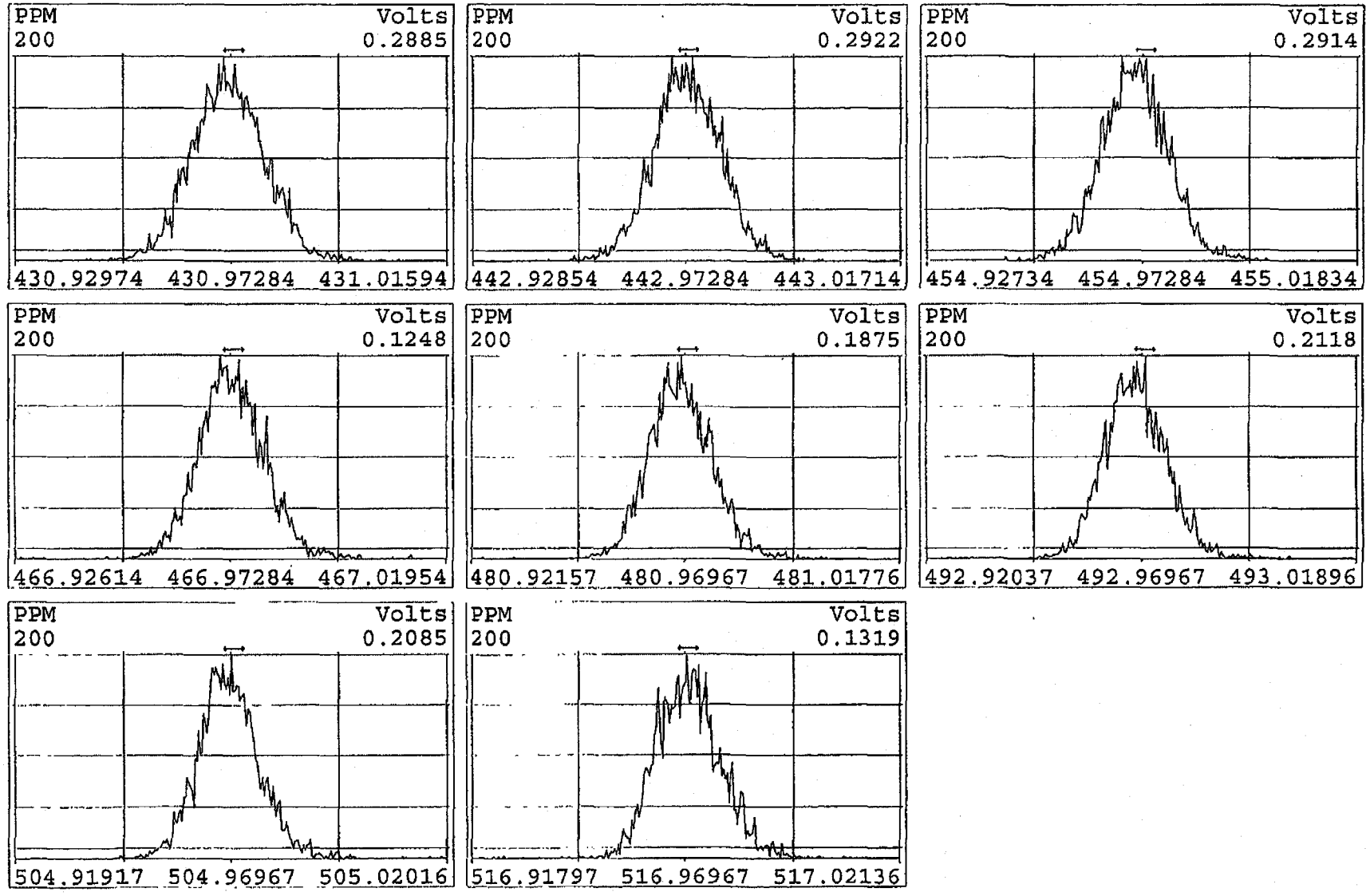




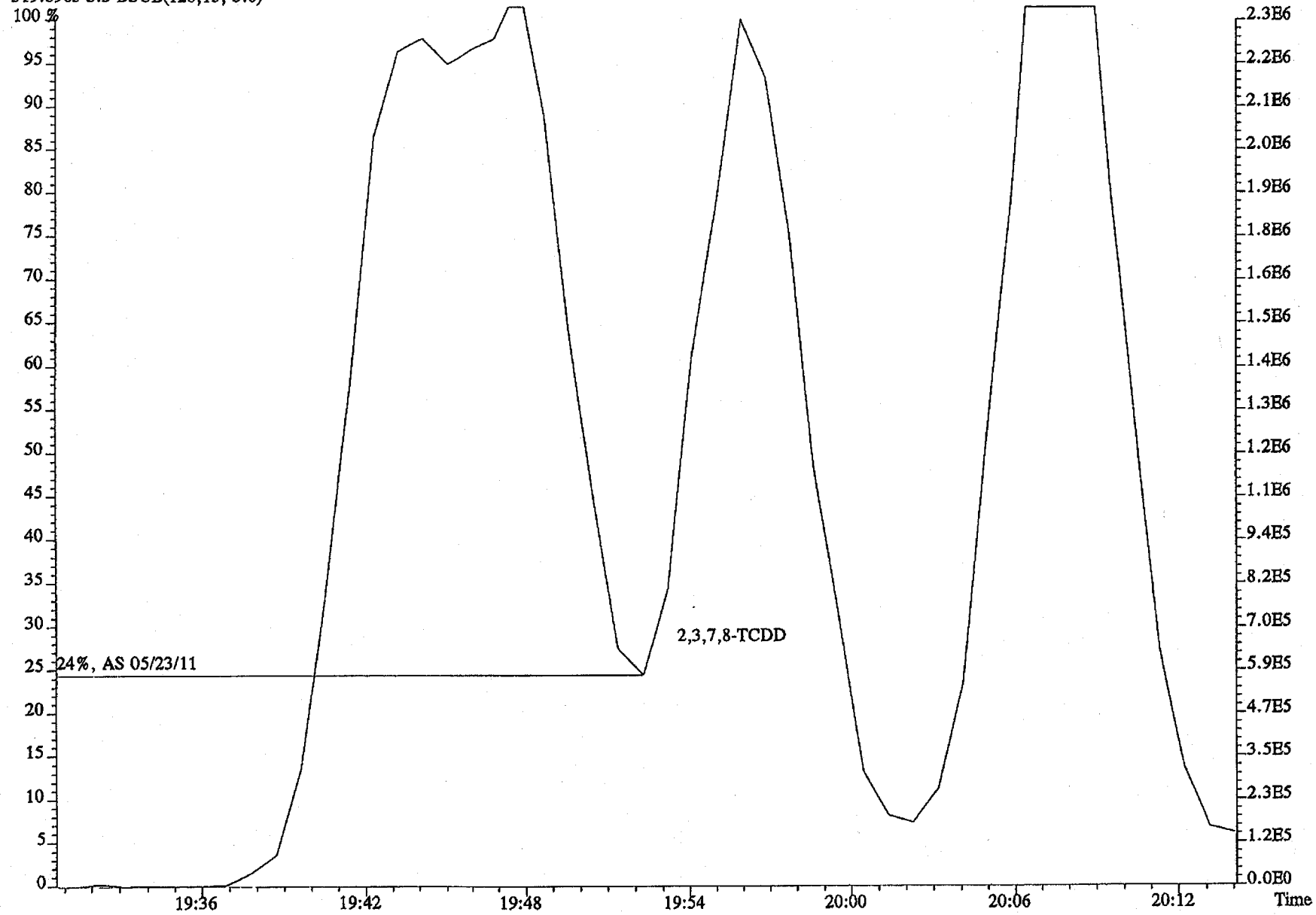
Peak Locate Examination:23-MAY-2011:21:47 File:RESCHK23MY114D5
Experiment:DIOXINRES Function:4 Reference:PFK



Peak Locate Examination:23-MAY-2011:21:47 File:RESCHK23MY114D5
Experiment:DIOXINRES Function:5 Reference:PFK

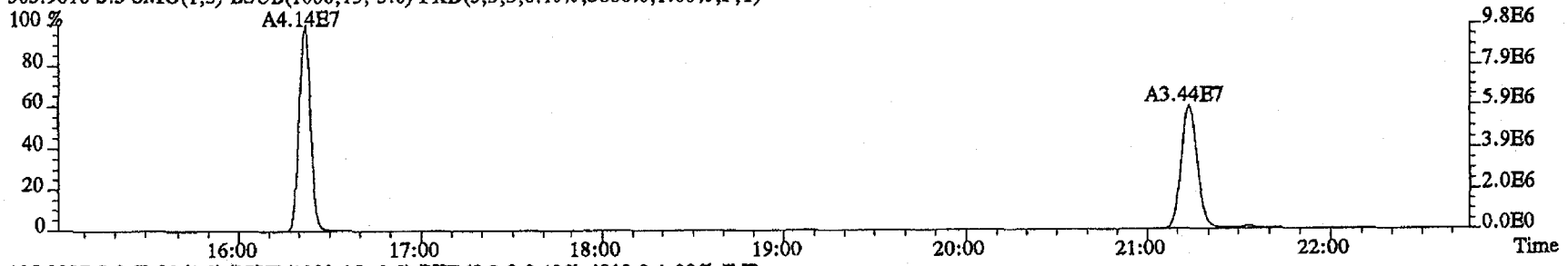


File:23MY114D5 #1-513 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES
319.8965 S:3 BSUB(128,15,-3.0)

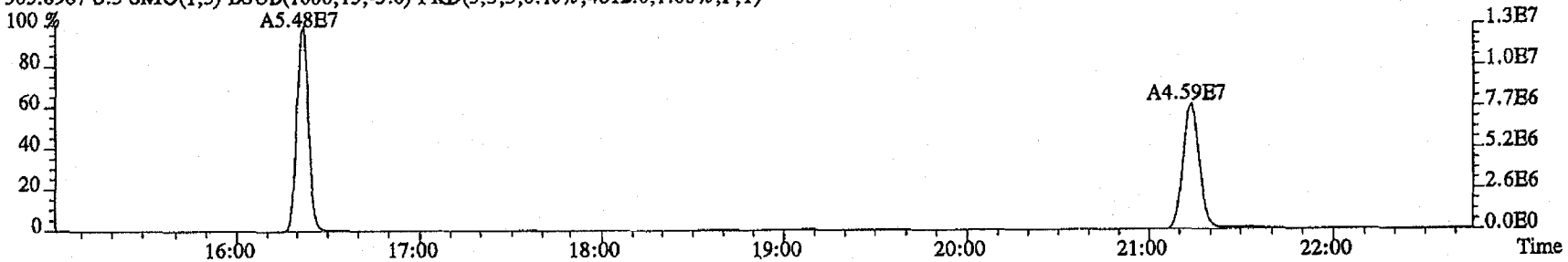


File:23MY114D5 #1-513 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

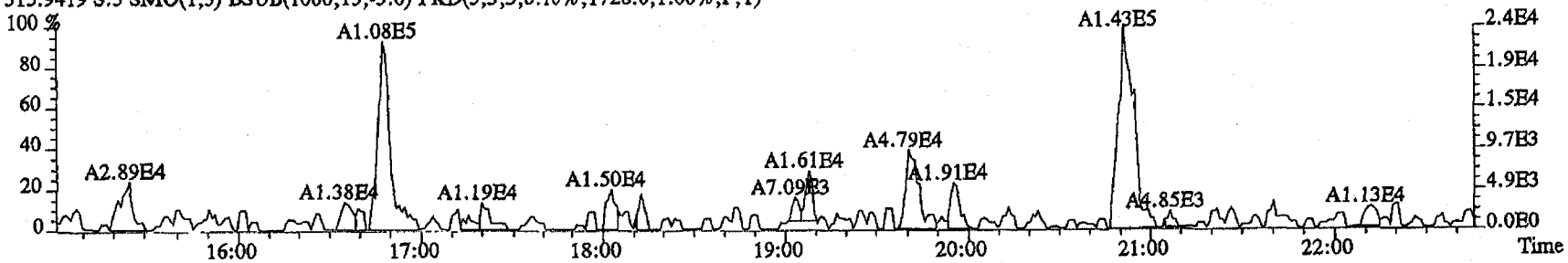
303.9016 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3880.0,1.00%,F,T)



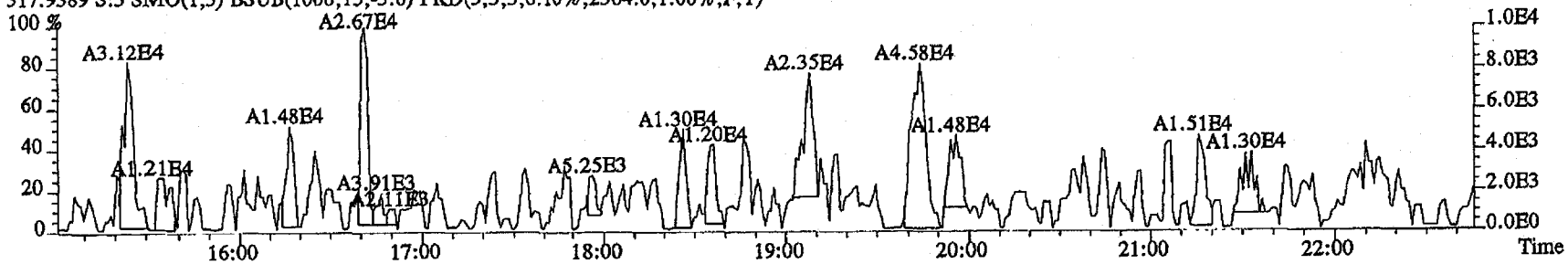
305.8987 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4812.0,1.00%,F,T)



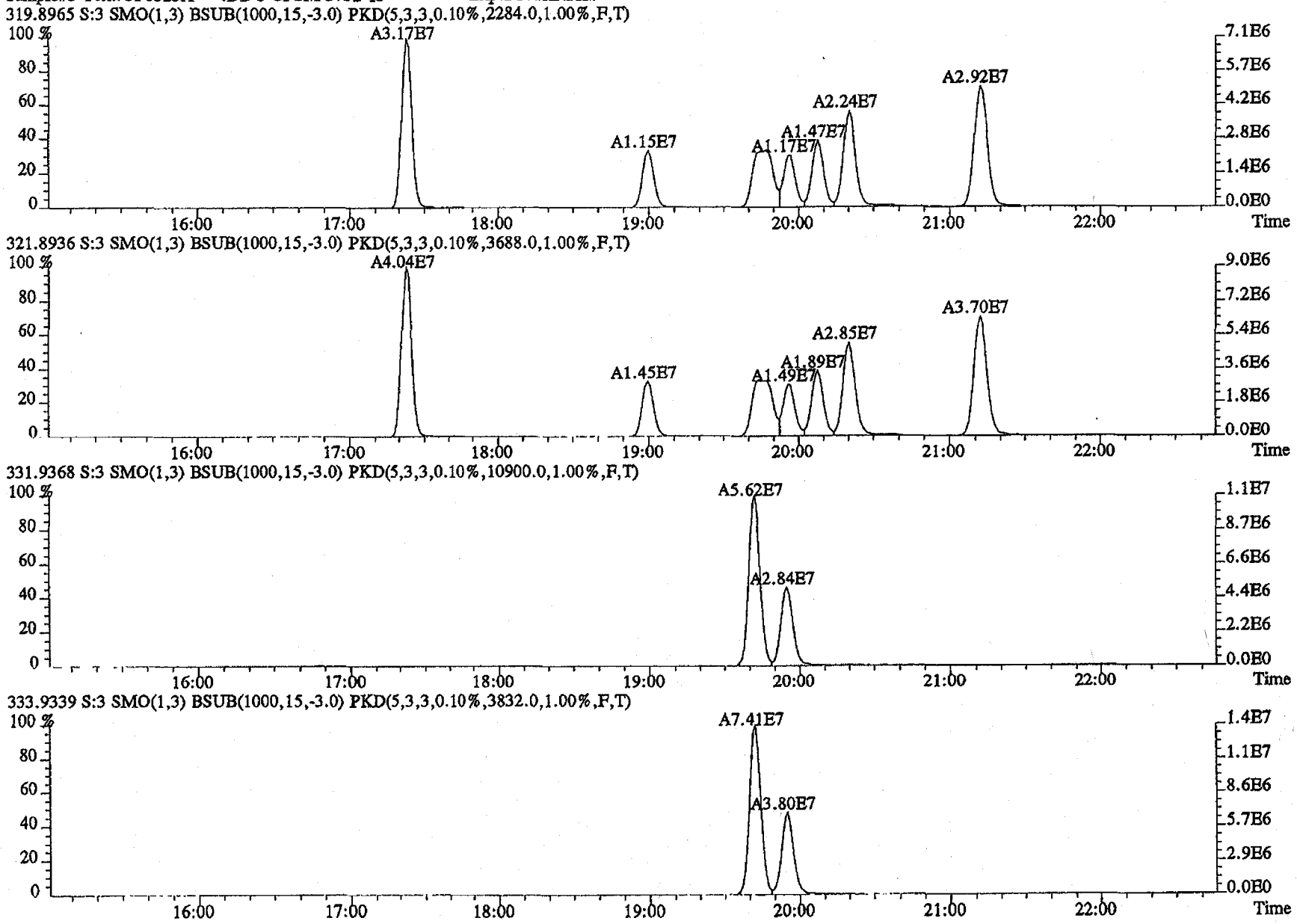
315.9419 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1728.0,1.00%,F,T)



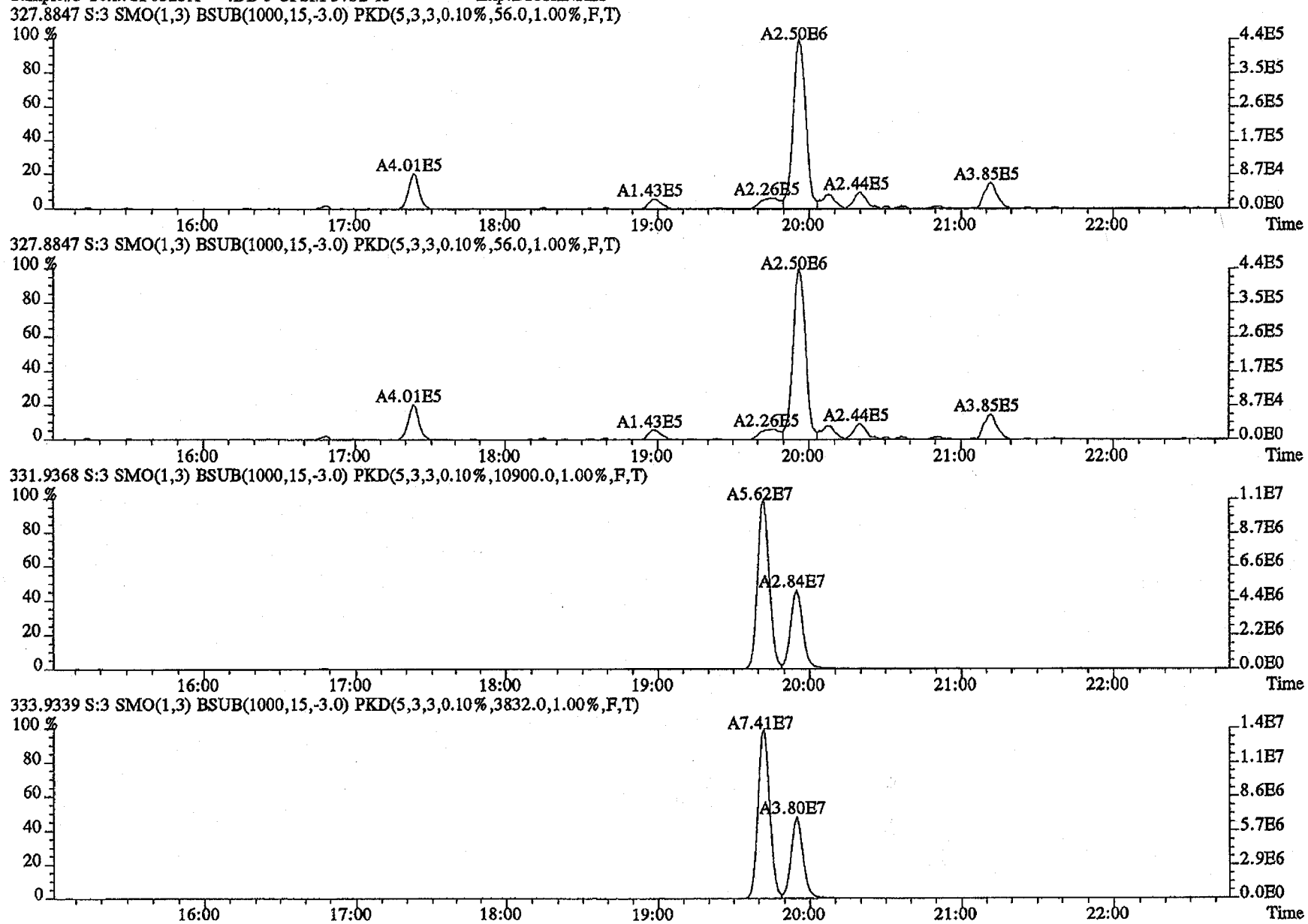
317.9389 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2364.0,1.00%,F,T)



File:23MY114D5 #1-513 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

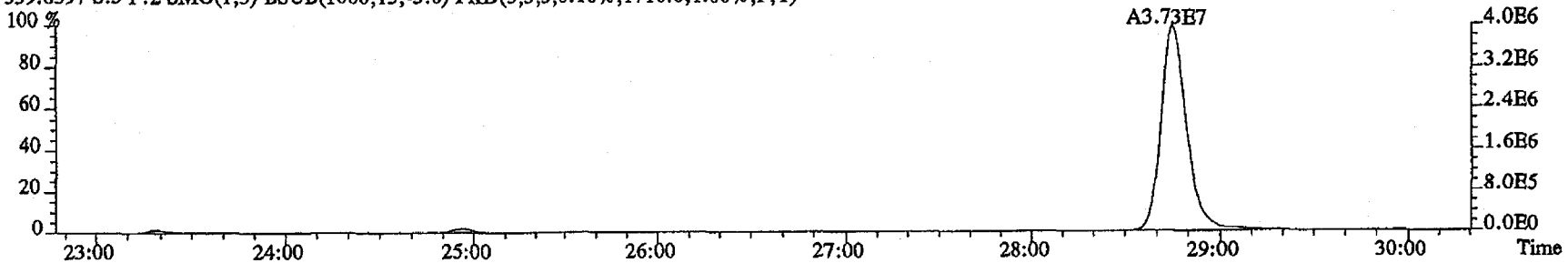


File:23MY114D5 #1-513 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

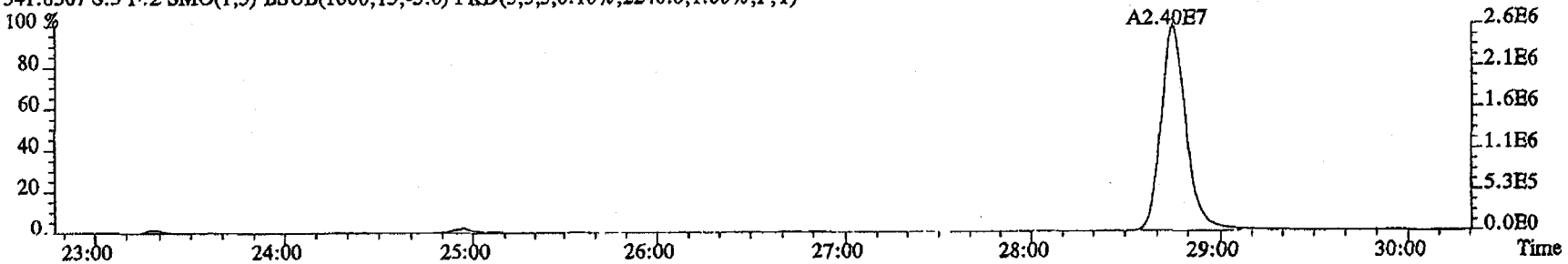


File:23MY114D5 #1-486 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

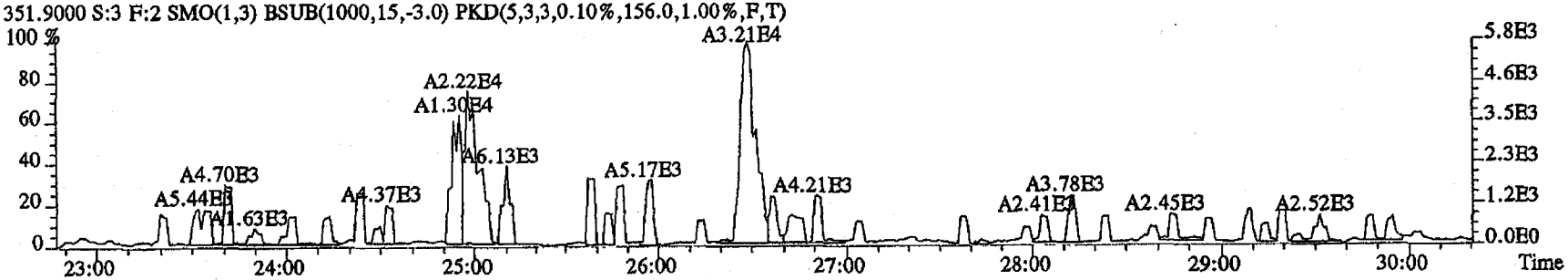
339.8597 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1716.0,1.00%,F,T)



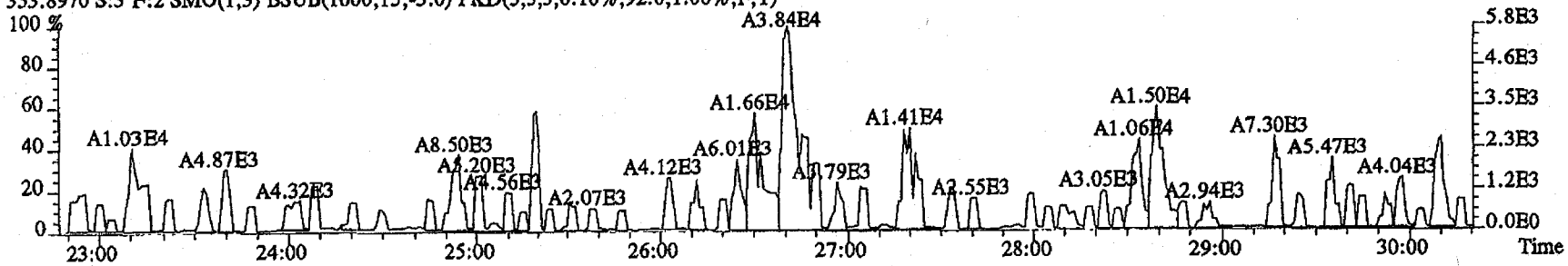
341.8567 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2240.0,1.00%,F,T)



351.9000 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,156.0,1.00%,F,T)

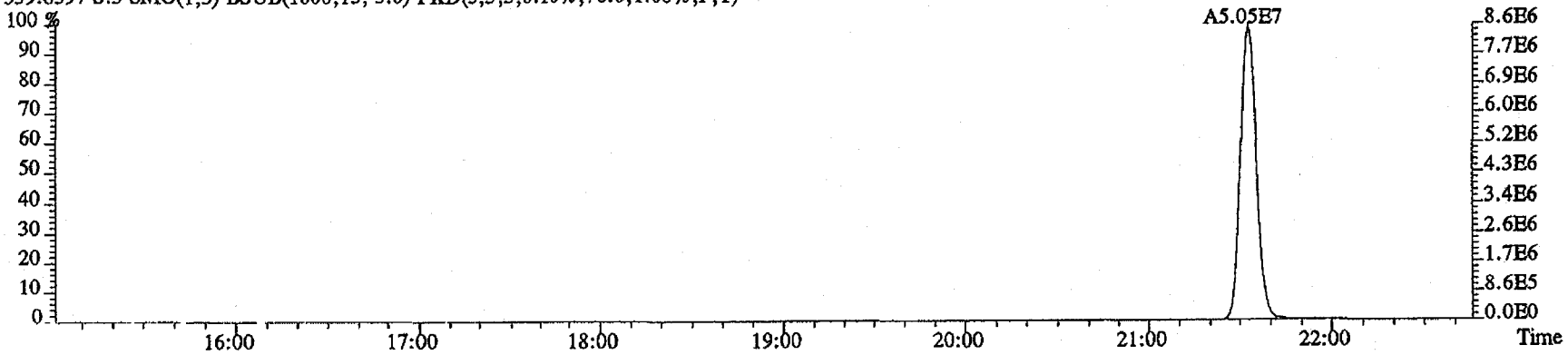


353.8970 S:3 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,92.0,1.00%,F,T)

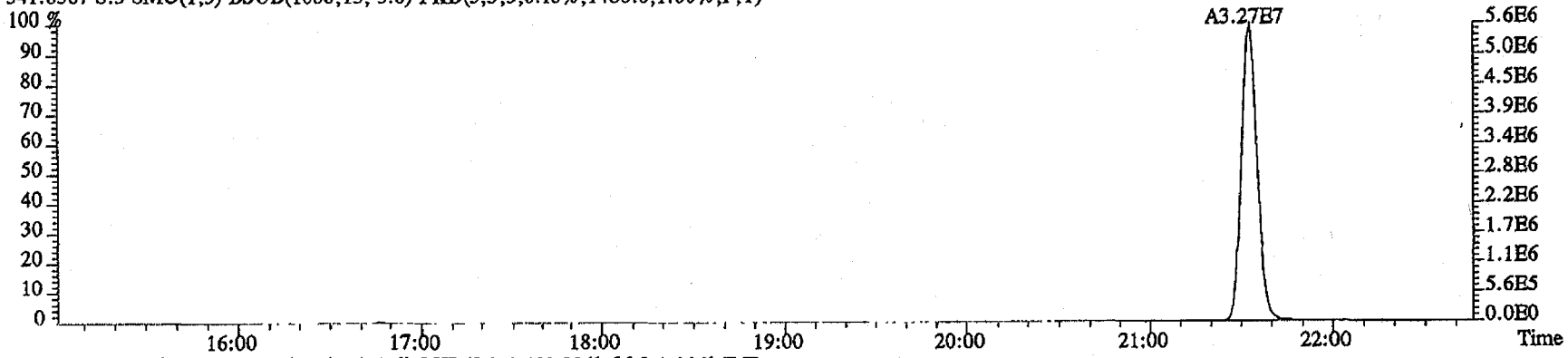


File:23MY114D5 #1-513 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

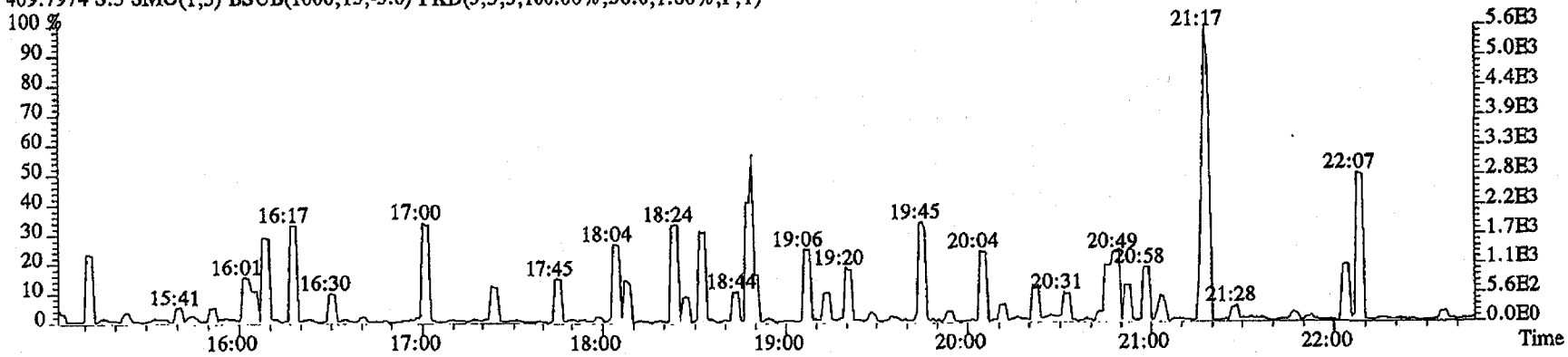
339.8597 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,76.0,1.00%,F,T)



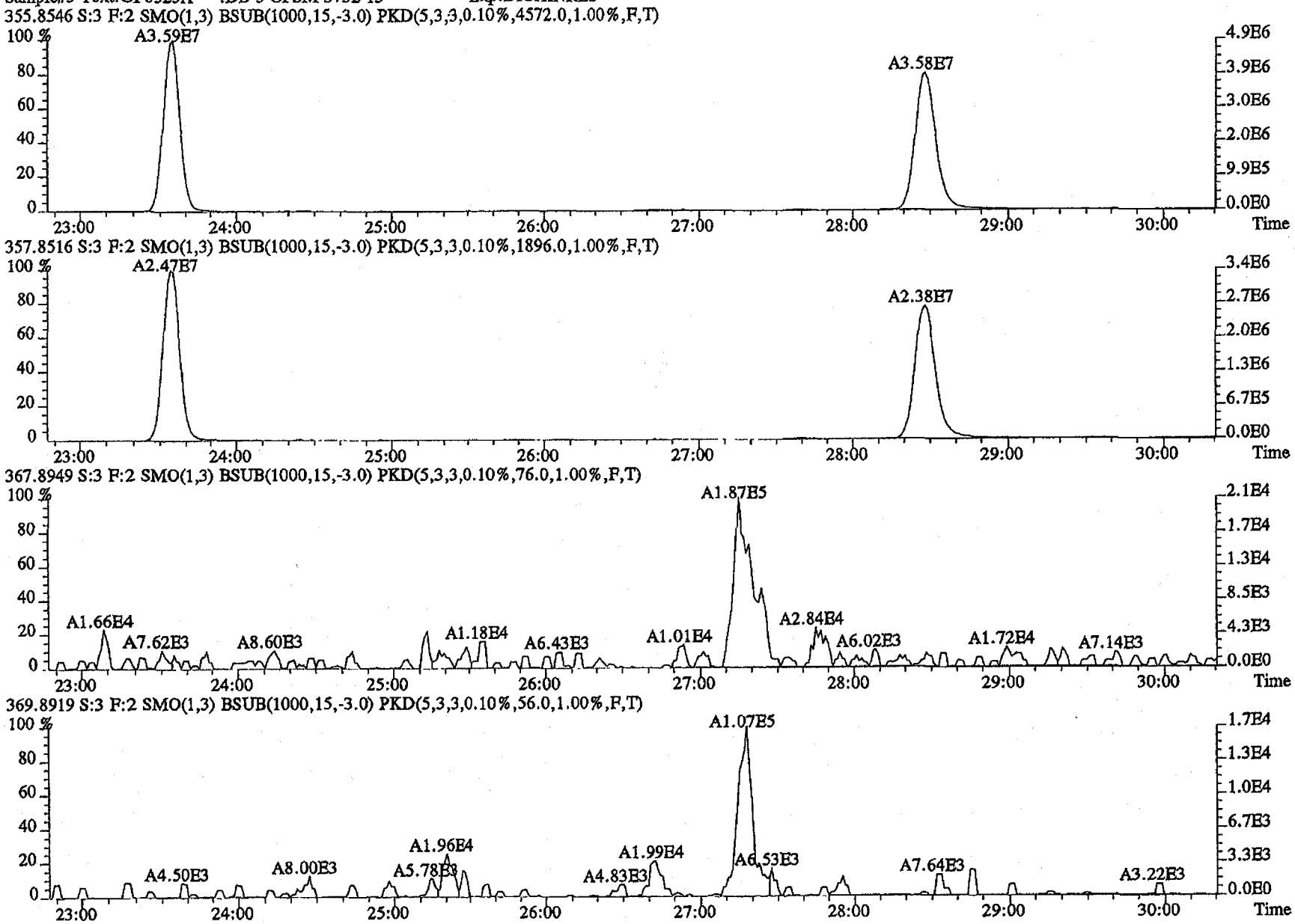
341.8567 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1480.0,1.00%,F,T)



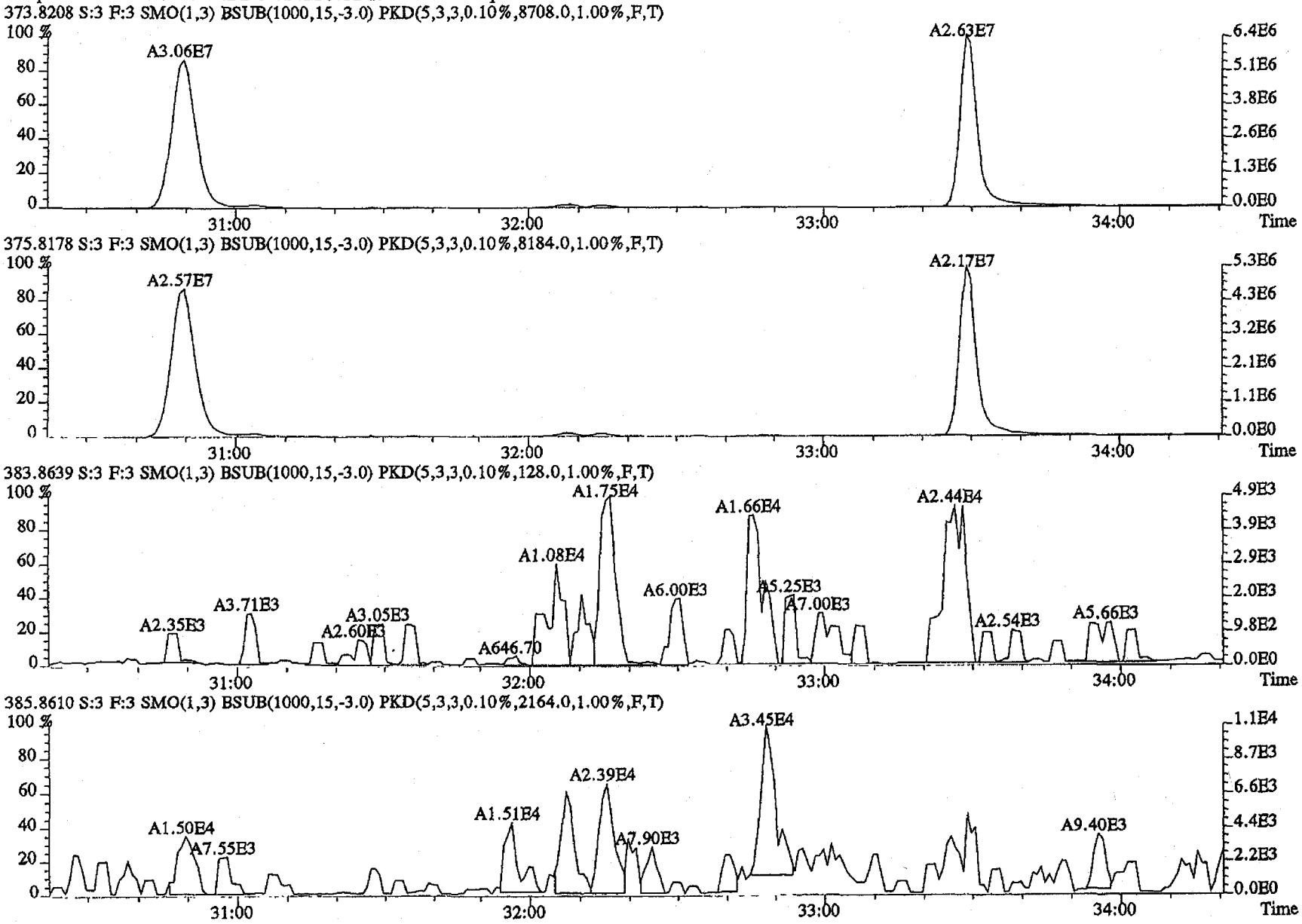
409.7974 S:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,56.0,1.00%,F,T)



File:23MY114D5 #1-486 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

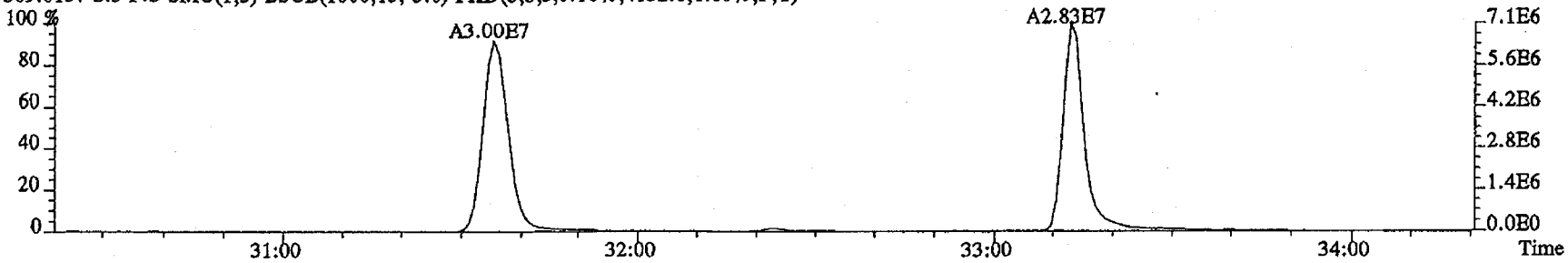


File:23MY114D5 #1-287 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

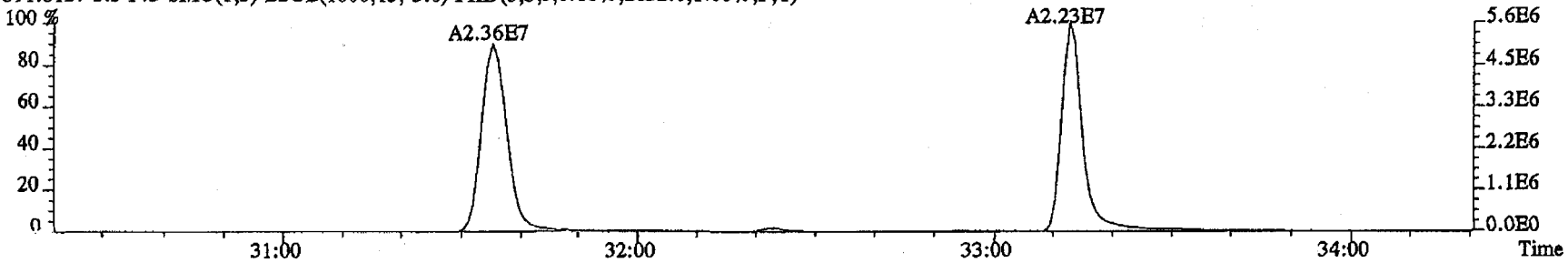


File:23MY114D5 #1-287 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

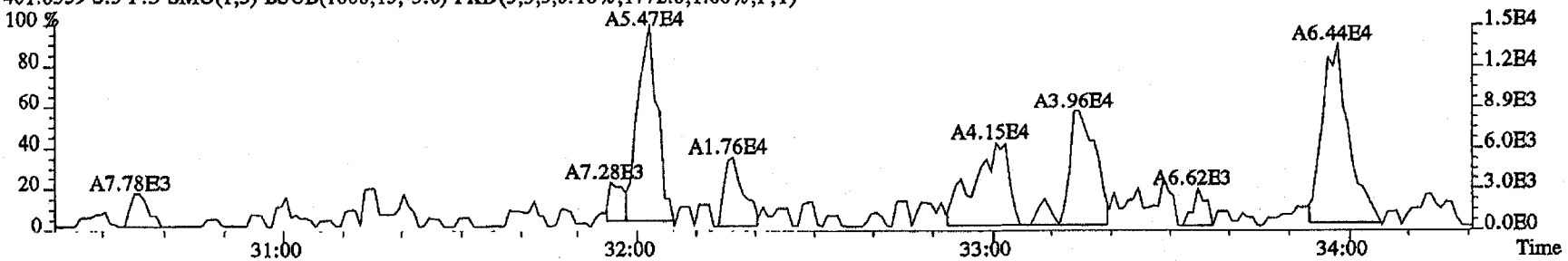
389.8157 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4152.0,1.00%,F,T)



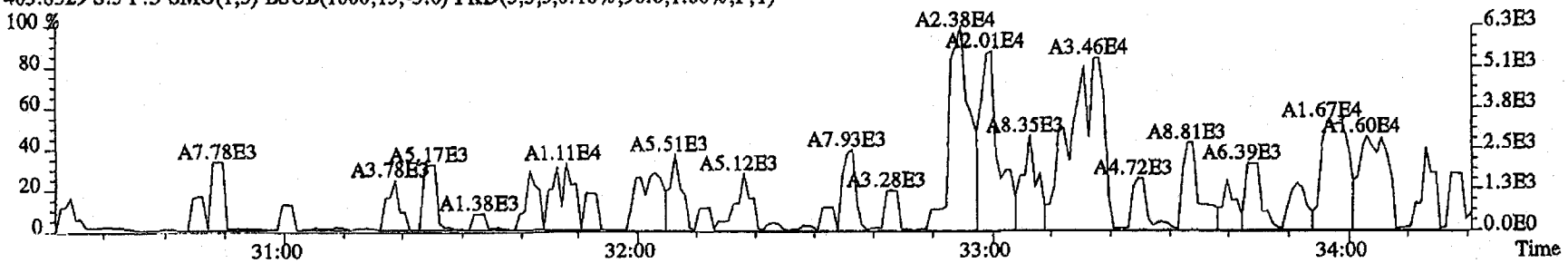
391.8127 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2632.0,1.00%,F,T)



401.8559 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1772.0,1.00%,F,T)

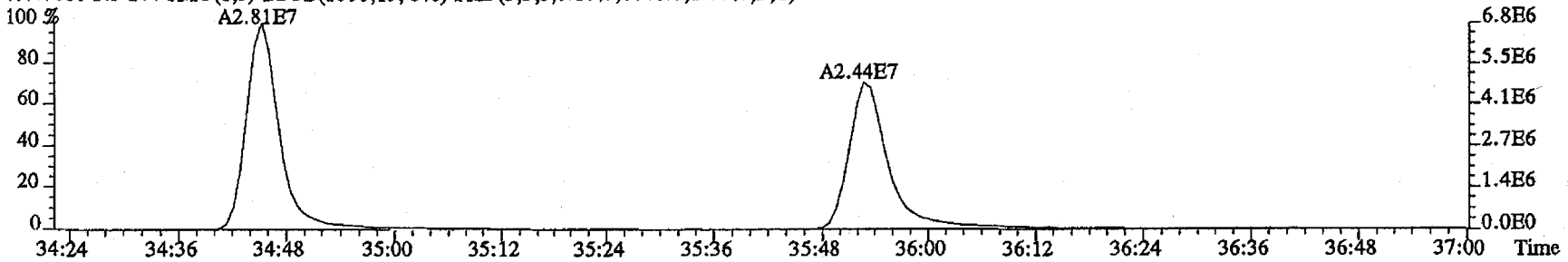


403.8529 S:3 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,96.0,1.00%,F,T)

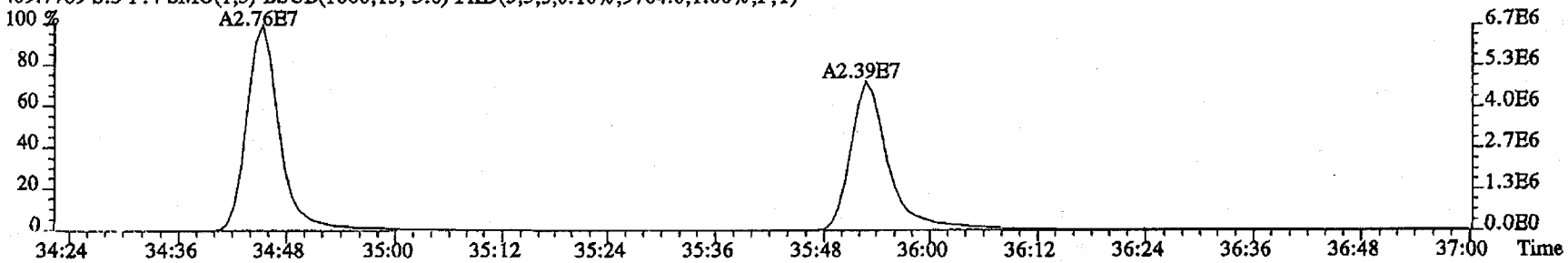


File:23MY114D5 #1-200 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

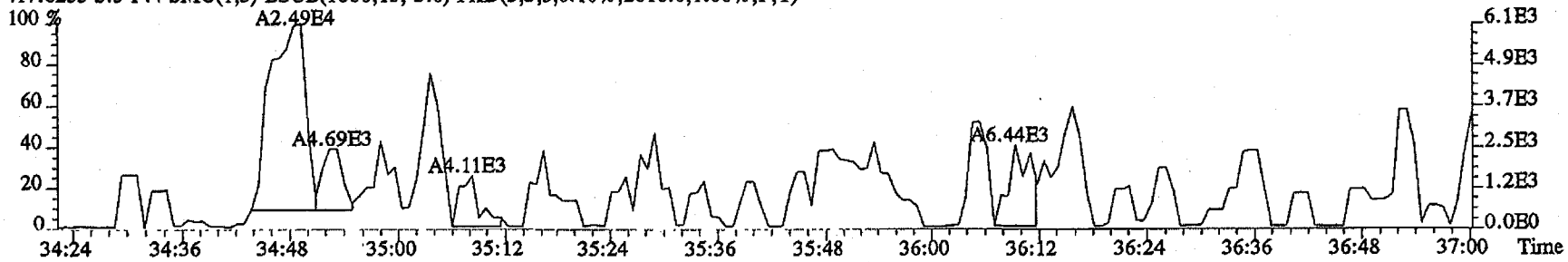
407.7818 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6048.0,1.00%,F,T)



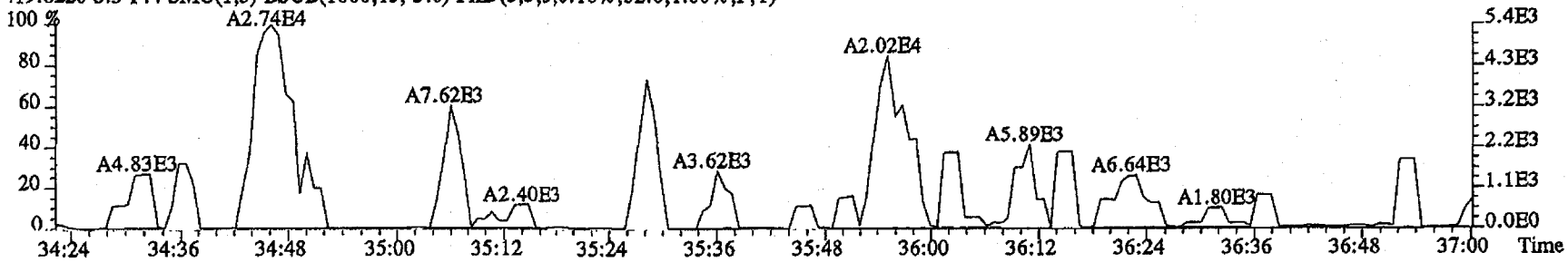
409.7789 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,9764.0,1.00%,F,T)



417.8253 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2016.0,1.00%,F,T)

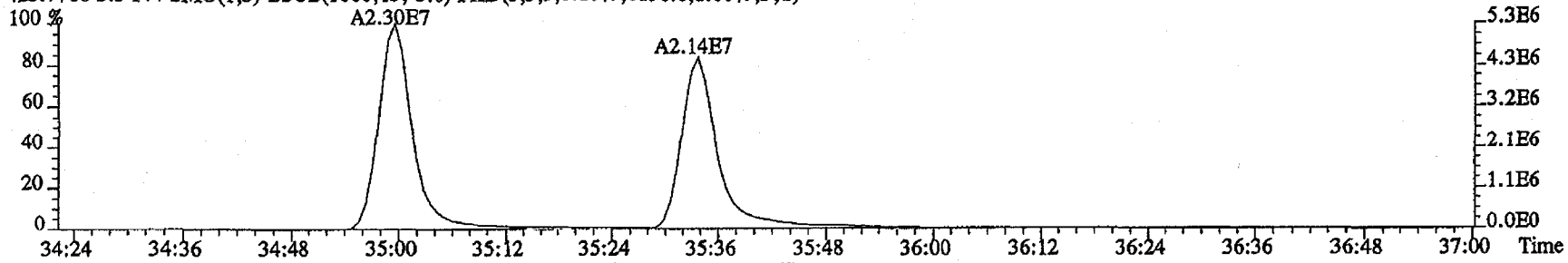


419.8220 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,52.0,1.00%,F,T)

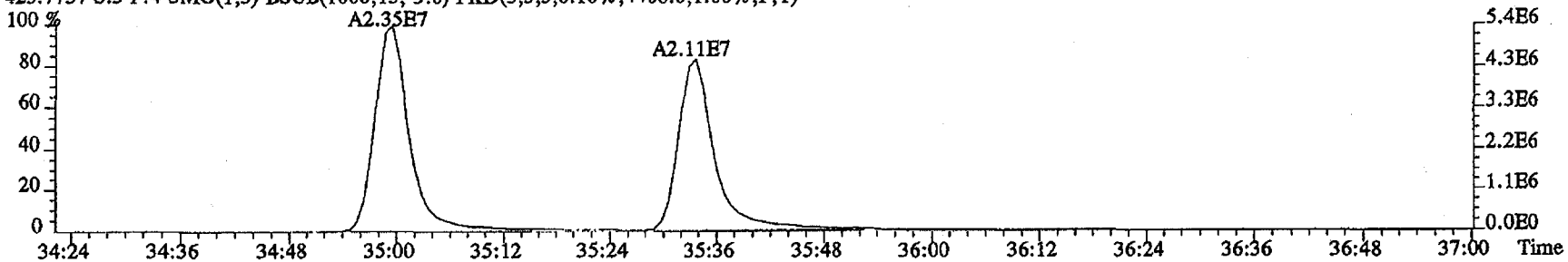


File:23MY114D5 #1-200 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

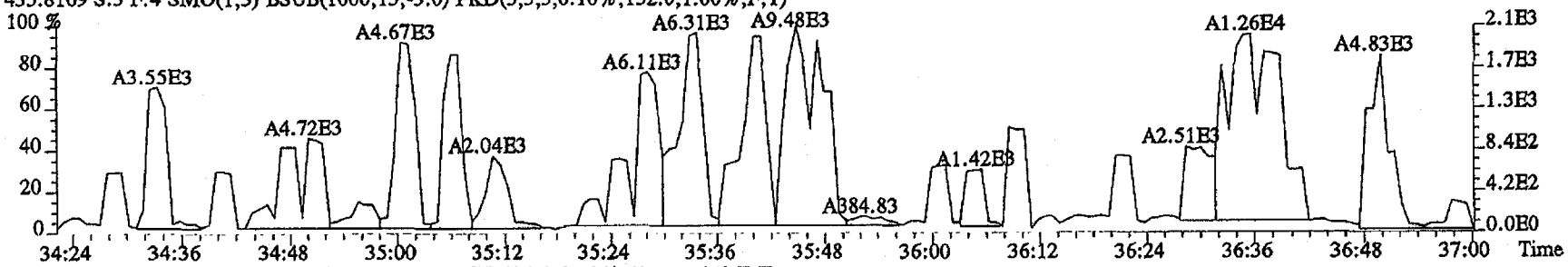
423.7766 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6196.0,1.00%,F,T)



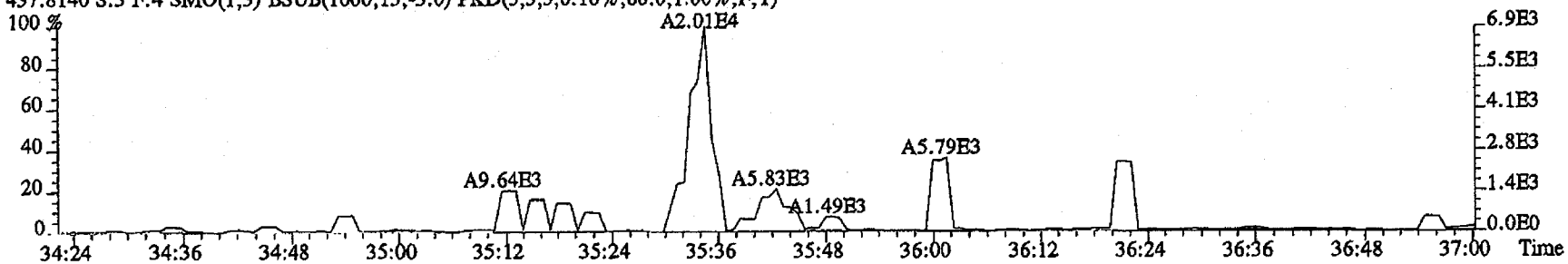
425.7737 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4468.0,1.00%,F,T)



435.8169 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,152.0,1.00%,F,T)

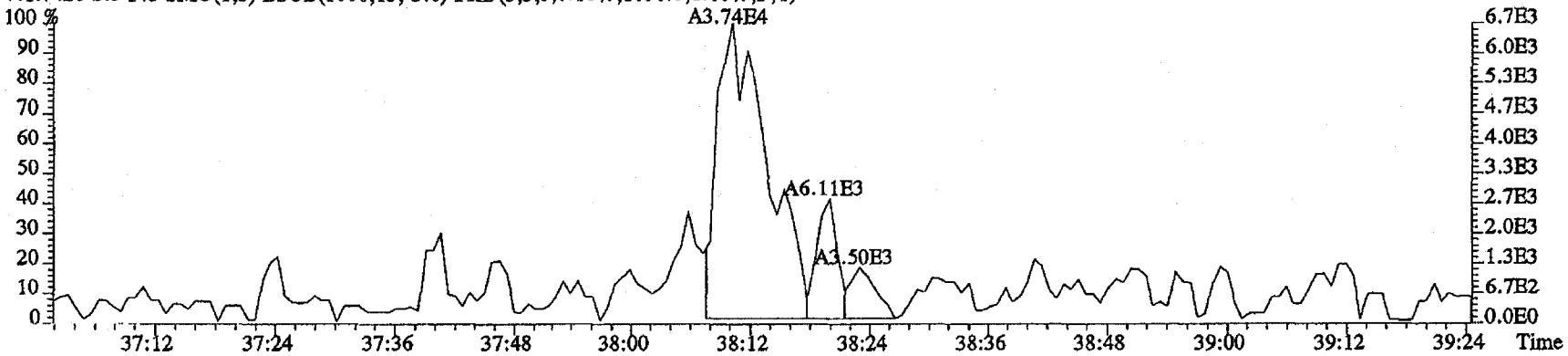


437.8140 S:3 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,60.0,1.00%,F,T)

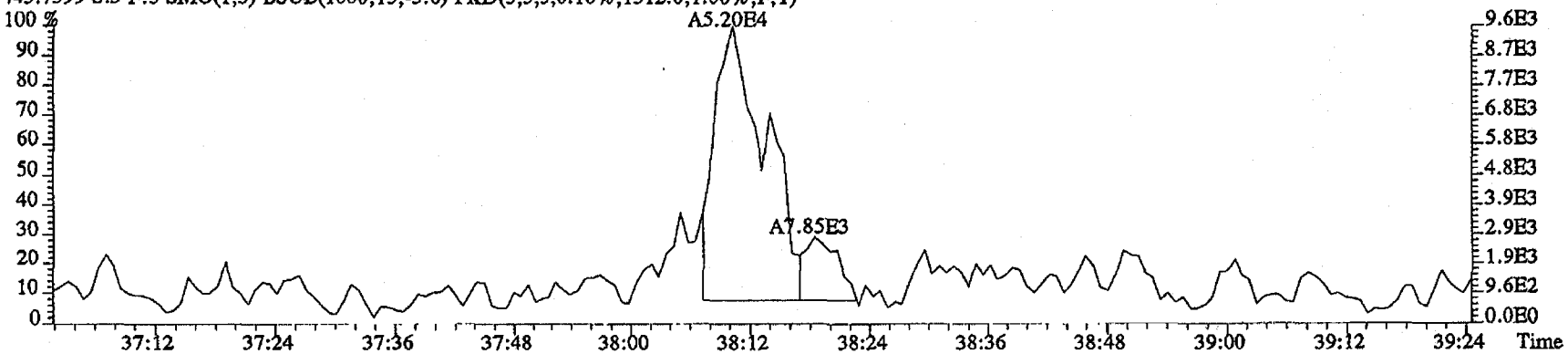


File:23MY114D5 #1-193 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

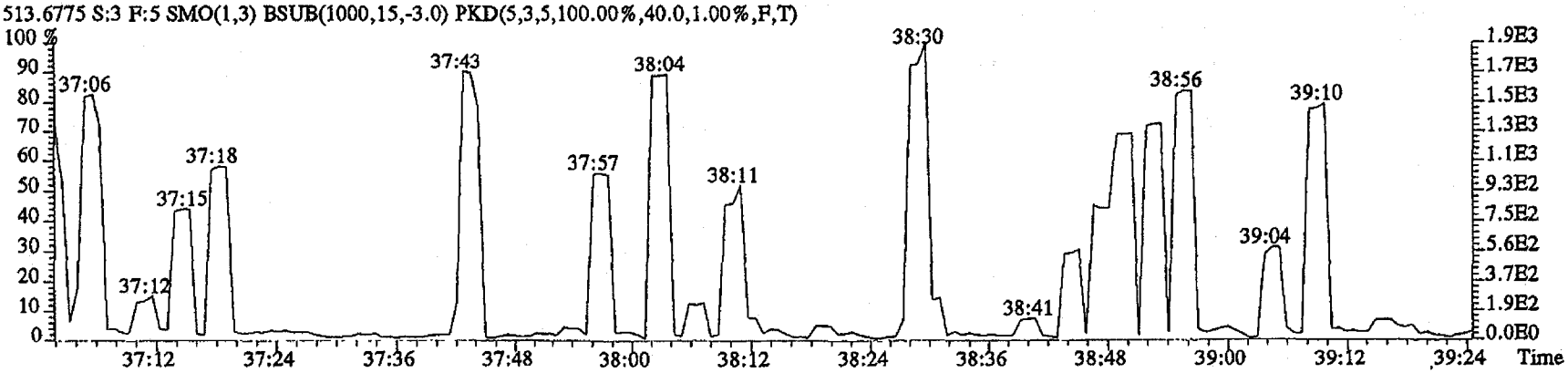
441.7428 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1056.0,1.00%,F,T)



443.7399 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1512.0,1.00%,F,T)

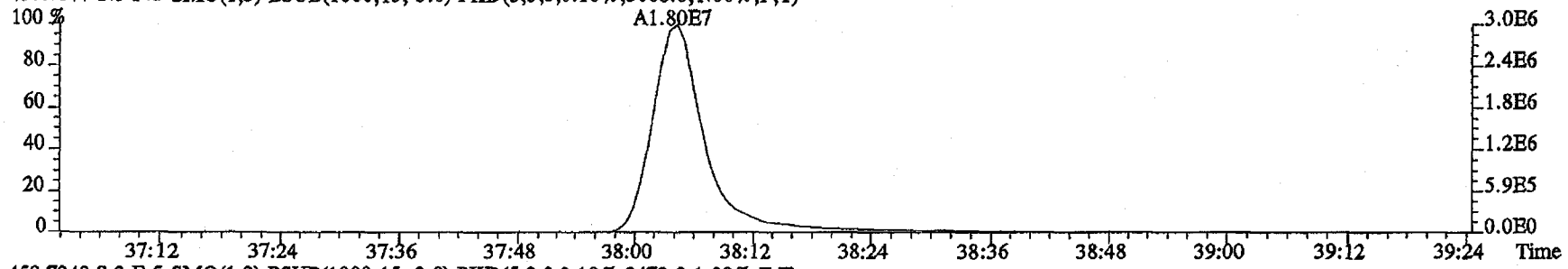


513.6775 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,40.0,1.00%,F,T)

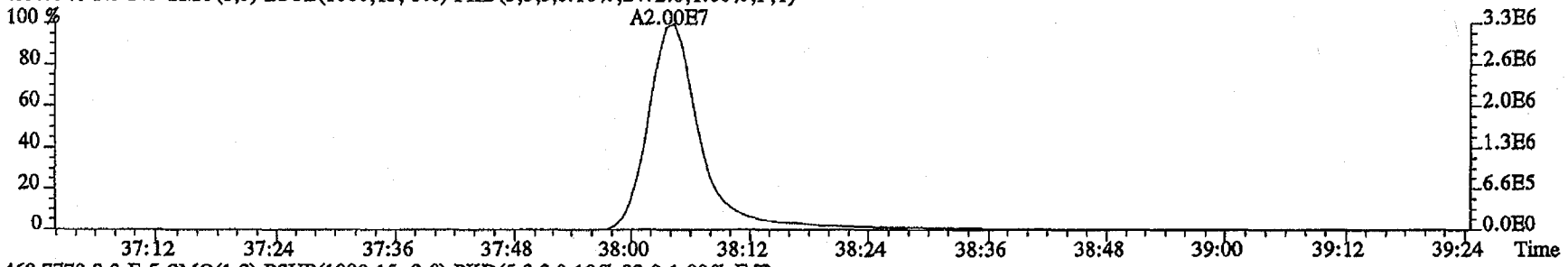


File:23MY114D5 #1-193 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES

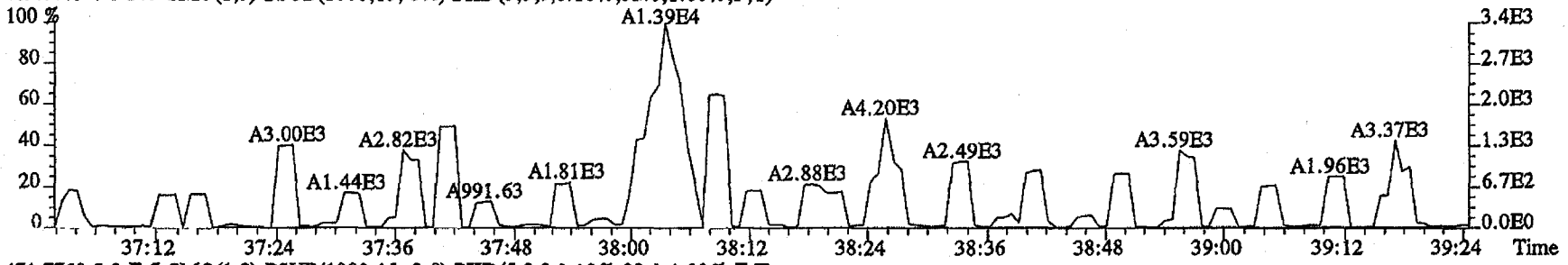
457.7377 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3068.0,1.00%,F,T)



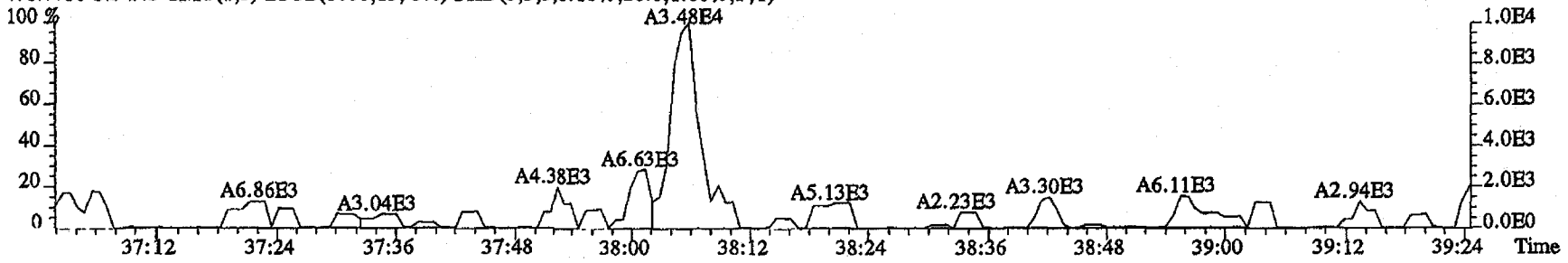
459.7348 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2472.0,1.00%,F,T)



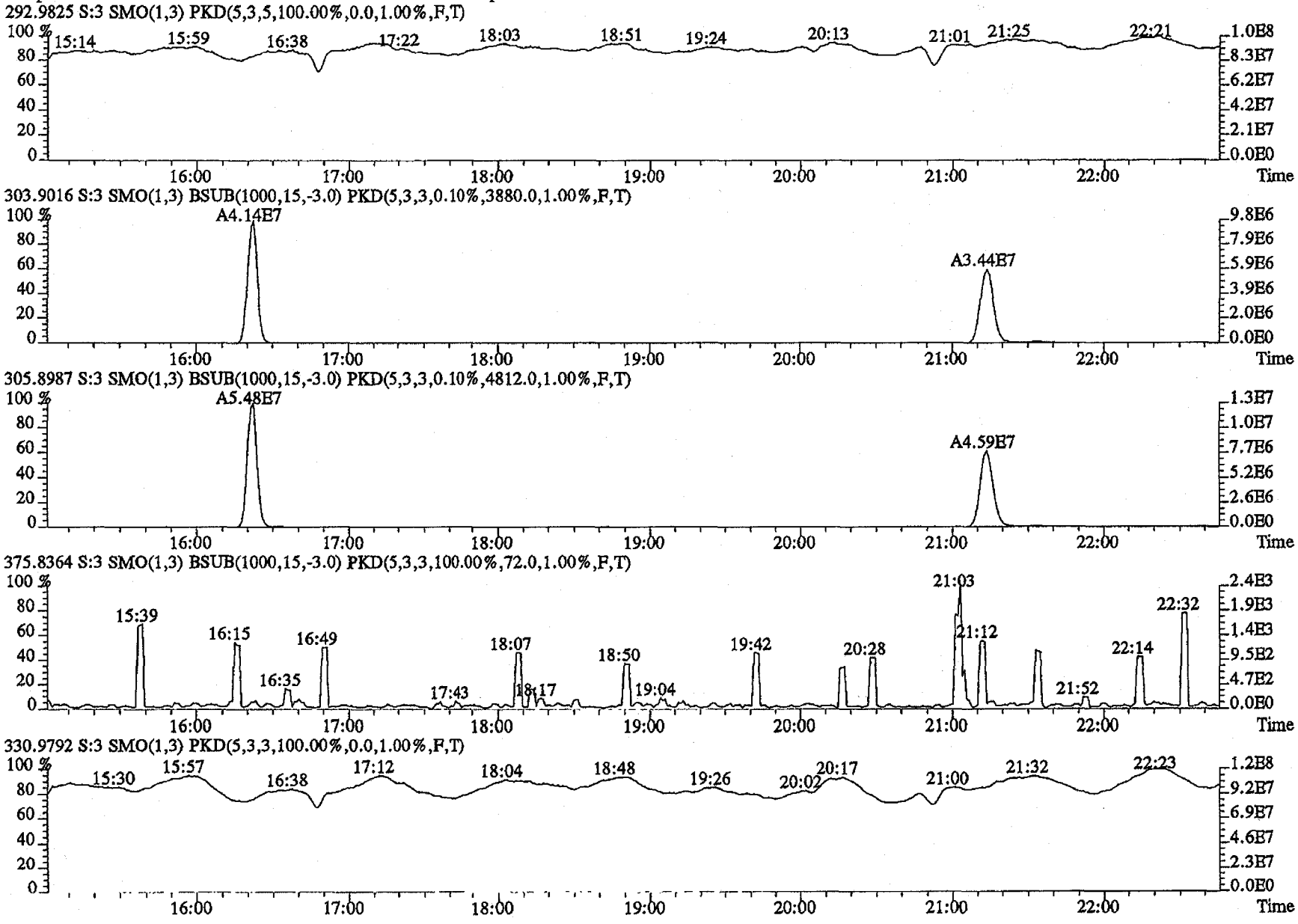
469.7779 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,32.0,1.00%,F,T)



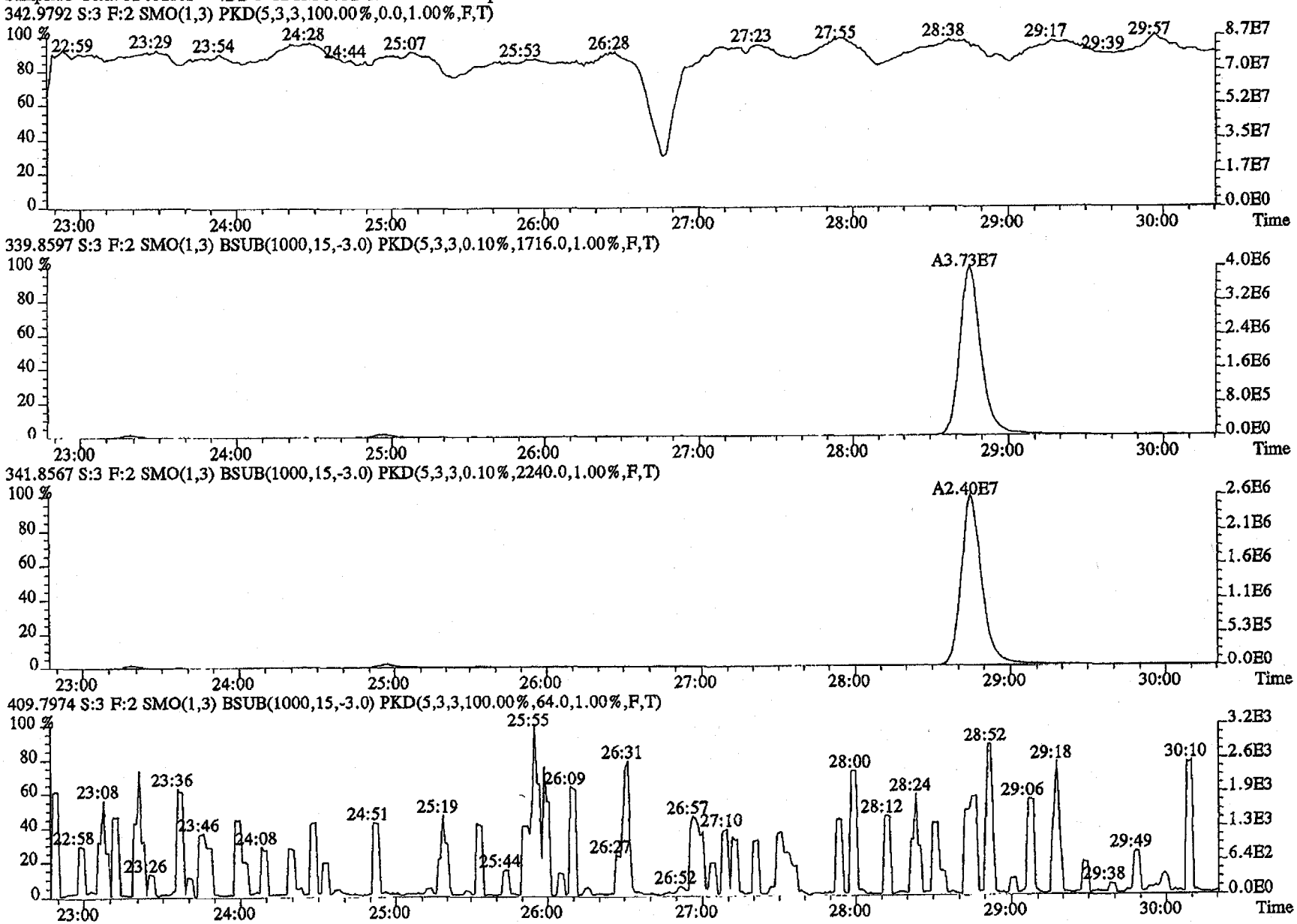
471.7750 S:3 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,28.0,1.00%,F,T)



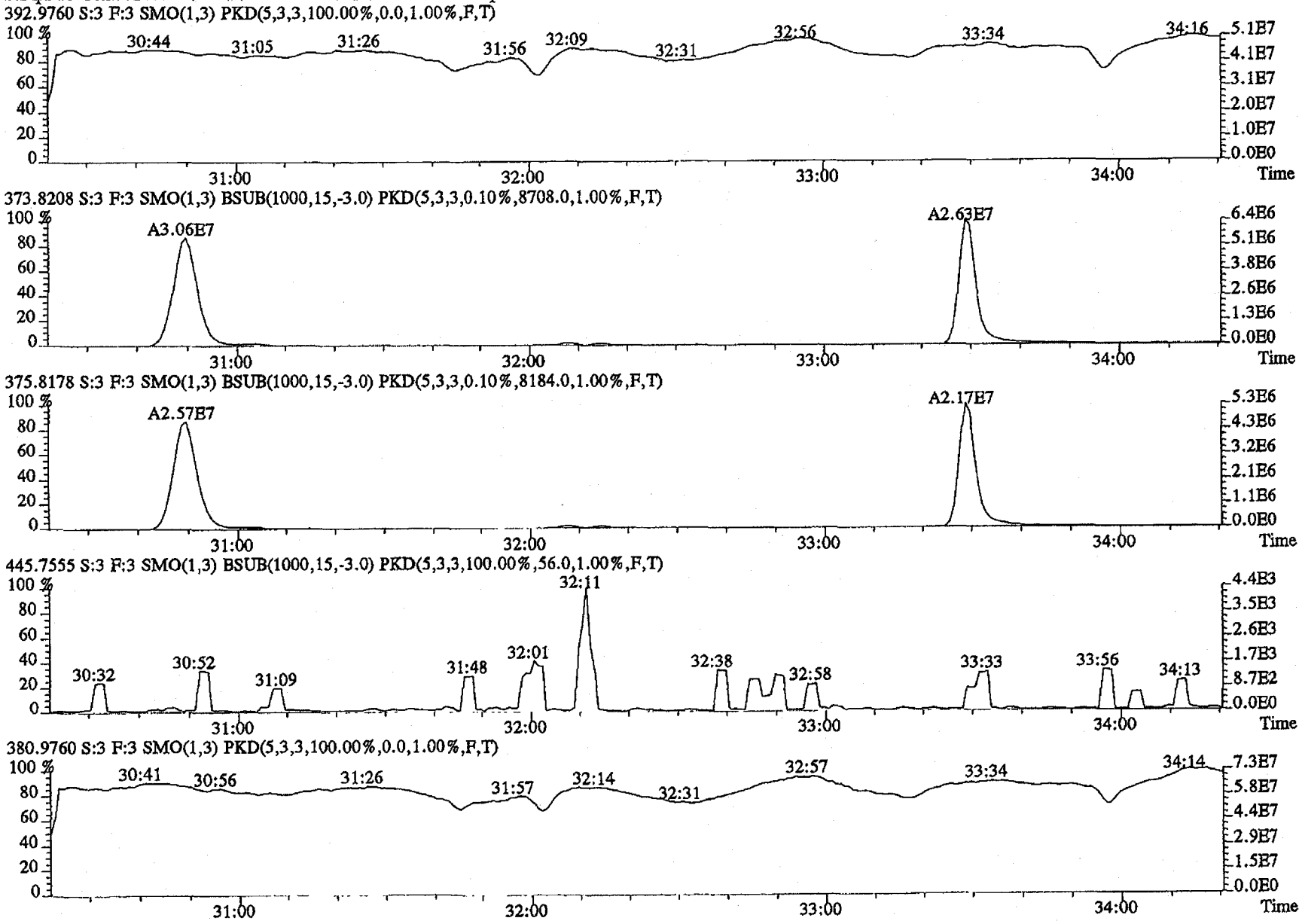
File:23MY114D5 #1-513 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES



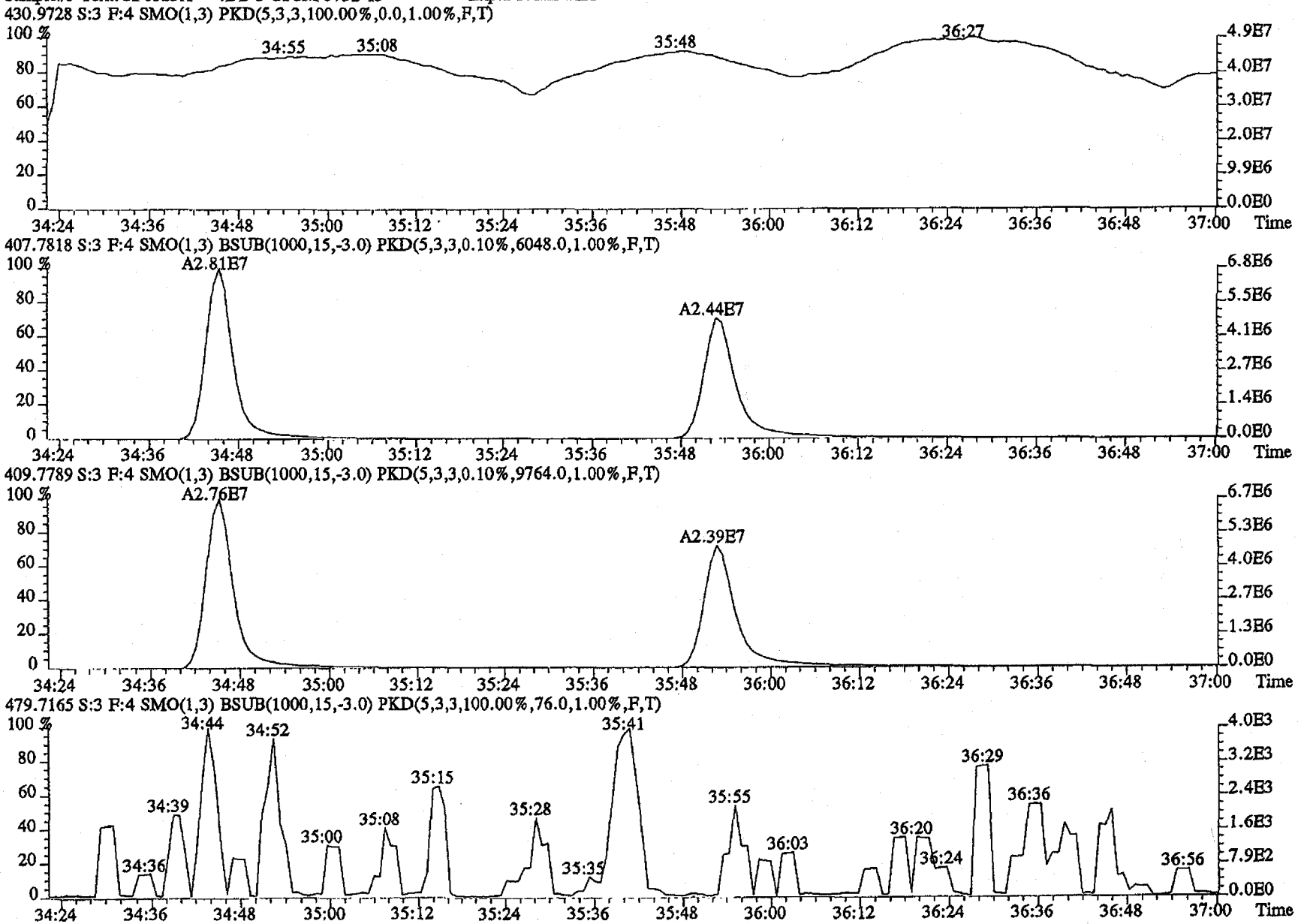
File:23MY114D5 #1-486 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES



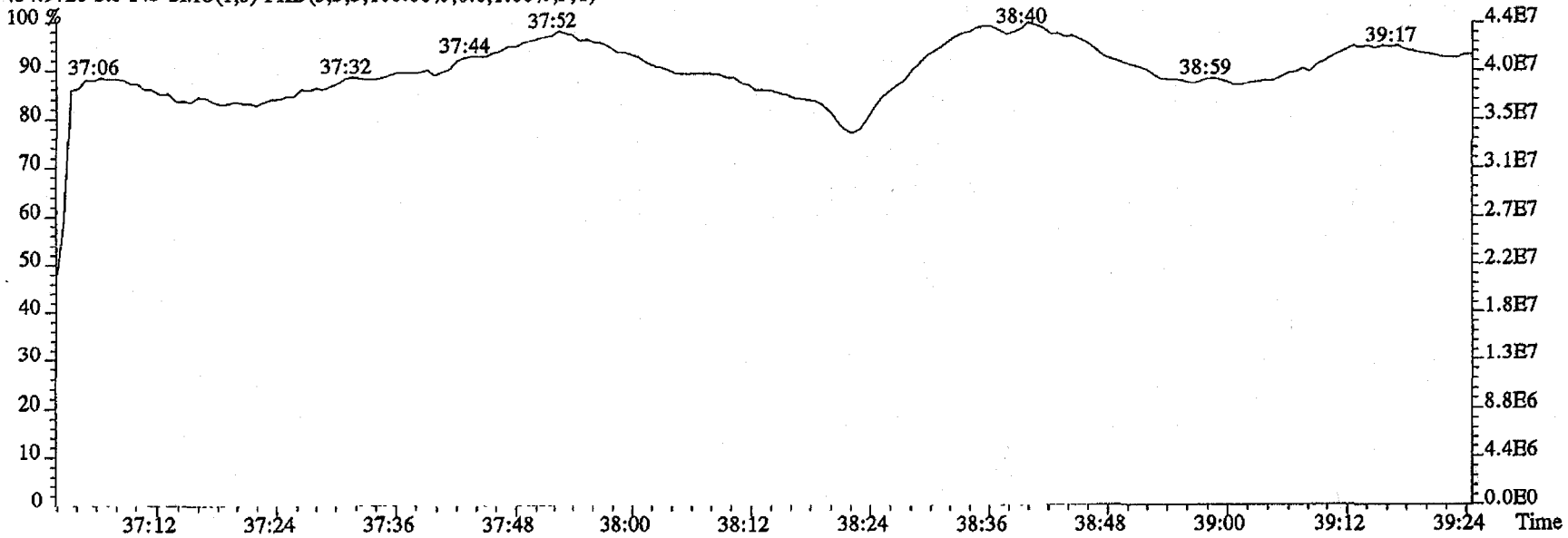
File:23MY114D5 #1-287 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES



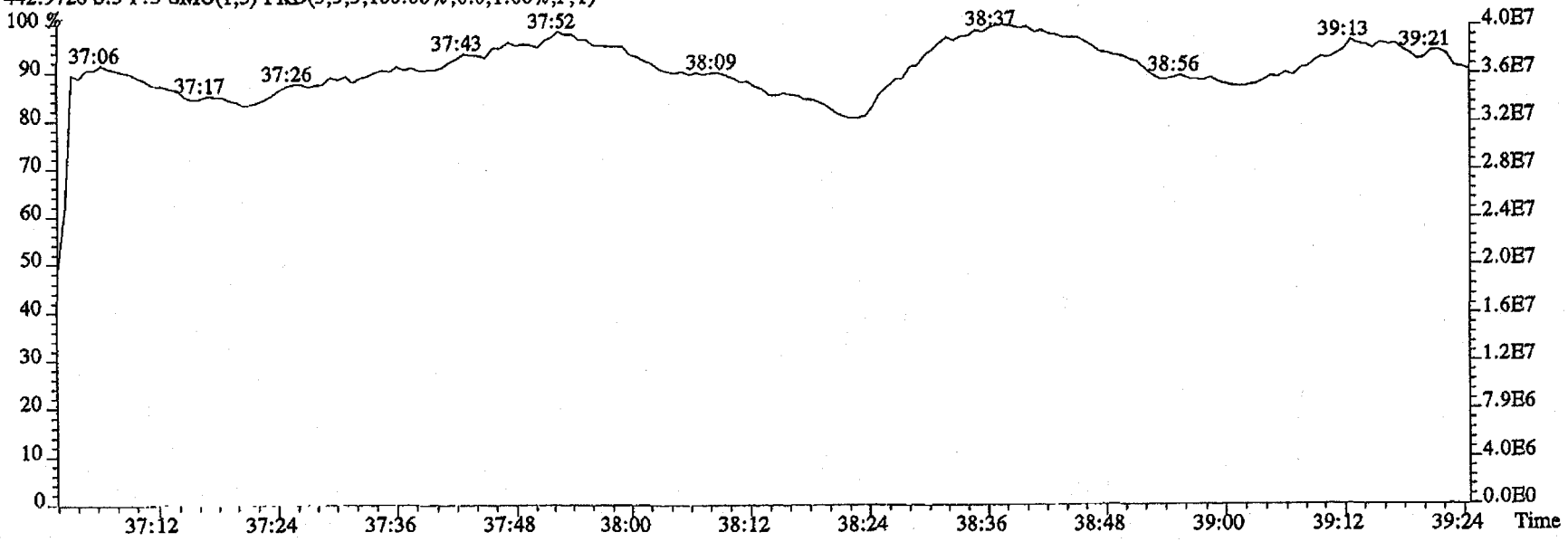
File:23MY114D5 #1-200 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES



File:23MY114D5 #1-193 Acq:23-MAY-2011 11:19:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 Text:CP0523A :DB-5 CPSM 3732-13 Exp:DIOXINRES
454.9728 S:3 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:3 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



Blank Data

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: G1E120651 **Work Order #...:** MJJM91AA **Matrix.....:** WATER
MB Lot-Sample #: G1E180000-127

Prep Date.....: 05/18/11
Analysis Date..: 05/20/11 **Prep Batch #...:** 1138127
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	10	pg/L	SW846 8290
Total TCDD	ND	10	pg/L	SW846 8290
1,2,3,7,8-PeCDD	ND	50	pg/L	SW846 8290
Total PeCDD	ND	50	pg/L	SW846 8290
1,2,3,4,7,8-HxCDD	ND	50	pg/L	SW846 8290
1,2,3,6,7,8-HxCDD	ND	50	pg/L	SW846 8290
1,2,3,7,8,9-HxCDD	ND	50	pg/L	SW846 8290
Total HxCDD	ND	50	pg/L	SW846 8290
1,2,3,4,6,7,8-HpCDD	ND	50	pg/L	SW846 8290
Total HpCDD	**1.1**	**50**	**pg/L**	**SW846 8290**
OCDD	**4.0 J**	**100**	**pg/L**	**SW846 8290**
2,3,7,8-TCDF	ND	10	pg/L	SW846 8290
Total TCDF	ND	10	pg/L	SW846 8290
1,2,3,7,8-PeCDF	ND	50	pg/L	SW846 8290
2,3,4,7,8-PeCDF	ND	50	pg/L	SW846 8290
Total PeCDF	ND	50	pg/L	SW846 8290
1,2,3,4,7,8-HxCDF	ND	50	pg/L	SW846 8290
1,2,3,6,7,8-HxCDF	ND	50	pg/L	SW846 8290
2,3,4,6,7,8-HxCDF	ND	50	pg/L	SW846 8290
1,2,3,7,8,9-HxCDF	ND	50	pg/L	SW846 8290
Total HxCDF	ND	50	pg/L	SW846 8290
1,2,3,4,6,7,8-HpCDF	**1.3 J**	**50**	**pg/L**	**SW846 8290**
1,2,3,4,7,8,9-HpCDF	ND	50	pg/L	SW846 8290
Total HpCDF	**1.3**	**50**	**pg/L**	**SW846 8290**
OCDF	ND	100	pg/L	SW846 8290

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	73	(40 - 135)
13C-1,2,3,7,8-PeCDD	83	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	73	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	69	(40 - 135)
13C-OCDD	75	(40 - 135)
13C-2,3,7,8-TCDF	86	(40 - 135)
13C-1,2,3,7,8-PeCDF	76	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	85	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	70	(40 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than the reporting limit.

(W) 5/25/11

Run text: MJJM9-1-AA Sample text: MJJM9-1-AA :G1E180000-127B(623-5MB)
Run #11 Filename: 20MY11D4D5 S: 5 I: 1 Results: 20MY11D4D58290
Acquired: 20-MAY-11 22:04:59 Processed: 21-MAY-11 00:16:36
Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5
Factor 1:1600.000 Factor 2:20.000 Sample size: 1.00 L

Name	Resp	RA		RT	RRF	Conc		EDL	Rec	M
13C-1,2,3,4-TCDD	145754400	0.77	y	19:43	-	76.556		-	-	n
13C-2,3,7,8-TCDF	139086900	0.80	y	19:08	1.10	1727.625		1.846	86.4	n
2,3,7,8-TCDF	34632	0.31	n	19:10	0.78	~~0.641~~		1.569	-	n
Total TCDF	98424	0.95	n	17:16	0.78	~~1.820~~		1.569	-	n
13C-2,3,7,8-TCDD	103456300	0.75	y	19:56	0.97	1465.366		4.898	73.3	n
2,3,7,8-TCDD	*	*	n	NotFnd	0.87	*		1.233	-	n
Total TCDD	21212	1.10	n	22:21	0.87	~~0.473~~		1.233	-	n
37Cl-2,3,7,8-TCDD	78261800	1.00	y	19:58	1.43	753.175		0.039	94.1	n
13C-1,2,3,7,8-PeCDF	114661900	1.59	y	24:55	1.04	1514.251		1.948	75.7	n
1,2,3,7,8-PeCDF	23393	3.31	n	24:55	0.96	~~0.425~~		1.243	-	n
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.94	*		1.270	-	n
Total F2 PeCDF	23393	3.31	n	24:55	0.95	~~0.425~~		~~1.256~~	-	n
Total F1 PeCDF	38995	0.43	n	16:48	0.95	~~0.717~~		1.446	-	n
13C-1,2,3,7,8-PeCDD	84935800	1.56	y	27:16	0.70	1665.997		1.257	83.3	
1,2,3,7,8-PeCDD	*	*	n	NotFnd	1.04	*	✓	1.391	-	n
Total PeCDD	127910	2.21	n	25:20	1.04	~~2.891~~	2.12 DL	~~1.391~~	-	n
13C-1,2,3,7,8,9-HxCDD	97497500	1.28	y	33:15	-	71.938		-	-	n
13C-1,2,3,4,7,8-HxCDF	71973700	0.50	y	32:07	0.87	1695.807		2.175	84.8	n
1,2,3,4,7,8-HxCDF	17725	0.42	n	32:08	1.15	~~0.429~~	✓	0.597	-	n
1,2,3,6,7,8-HxCDF	39196	0.66	n	32:16	~~1.46~~ 1.18	~~0.746~~	0.923 DL	~~0.469~~	-	n
2,3,4,6,7,8-HxCDF	15090	0.67	n	32:48	1.30	~~0.321~~		0.525	-	n
1,2,3,7,8,9-HxCDF	26784	0.75	n	33:26	1.12	0.663	DL	~~0.610~~	-	n
Total HxCDF	111436	1.73	n	31:01	1.26	~~2.437~~		~~0.544~~ 0.923	-	n
13C-1,2,3,6,7,8-HxCDD	67917900	1.30	y	32:59	0.95	1466.968		3.922	73.3	n
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	~~0.74~~ 0.84	*		1.246	-	n
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.05	*		0.887	-	n
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.02	*		0.909	-	n
Total HxCDD	8103	0.47	n	31:36	0.94	~~0.255~~		~~0.990~~ 1.246	-	n
13C-1,2,3,4,6,7,8-HpCDF	62262100	0.41	y	34:45	0.91	1397.560		7.964	69.9	n
1,2,3,4,6,7,8-HpCDF	53529	1.01	y	34:46	1.32	1.298	J	0.657	-	n
1,2,3,4,7,8,9-HpCDF	17761	1.88	n	35:54	1.13	~~0.505~~		0.770	-	n
Total HpCDF	80065	1.01	y	34:46	1.23	~~2.033~~ 1.298		0.709	-	n
13C-1,2,3,4,6,7,8-HpCDD	61661600	1.03	y	35:33	0.91	1384.170		3.690	69.2	n
1,2,3,4,6,7,8-HpCDD	28028	0.67	n	35:34	1.01	~~0.897~~		1.002	-	n
Total HpCDD	105458	3.91	n	34:45	1.01	~~3.375~~ 1.10		1.002	-	n
13C-OCDD	87631000	0.87	y	38:04	0.60	2987.425		5.333	74.7	
OCDF	*	*	n	NotFnd	1.27	*		2.036	-	n

(m) 5/25/11

Run text: MJJM9-1-AA Sample text: MJJM9-1-AA :G1E180000-127B(623-5MB)
Run #11 Filename: 20MY11D4D5 S: 5 I: 1 Results: 20MY11D4D58290
Acquired: 20-MAY-11 22:04:59 Processed: 21-MAY-11 00:16:36
Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5
Factor 1:1600.000 Factor 2:20.000 Sample size: 1.000 L

AO 05.23-11

Name	Resp	RA		RT	RRF	Conc	EDL	Rec	M
13C-1,2,3,4-TCDD	145754400	0.77	y	19:43	-	76.556	-	-	n
13C-2,3,7,8-TCDF	139086900	0.80	y	19:08	1.10	1727.625	1.846	86.4	n
2,3,7,8-TCDF	34632	0.31	n	19:10	0.78	~~0.641~~	1.569	-	n
Total TCDF	98424	0.95	n	17:16	0.78	~~2.820~~	1.569	-	n
13C-2,3,7,8-TCDD	103456300	0.75	y	19:56	0.97	1465.366	4.898	73.3	n
2,3,7,8-TCDD	*	*	n	NotFnd	0.87	*	1.233	-	n
Total TCDD	21212	1.10	n	22:21	0.87	~~0.473~~	1.233	-	n
37Cl-2,3,7,8-TCDD	78261800	1.00	y	19:58	1.43	753.175	0.039	94.1	n
13C-1,2,3,7,8-PeCDF	114661900	1.59	y	24:55	1.04	1514.251	1.948	75.7	n
1,2,3,7,8-PeCDF	23393	3.31	n	24:55	0.96	~~0.425~~	1.243	-	n
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.94	*	1.270	-	n
Total F2 PeCDF	23393	3.31	n	24:55	0.95	~~0.425~~	~~1.256~~	-	n
Total F1 PeCDF	38995	0.43	n	16:48	0.95	~~0.717~~	1.446	-	n
13C-1,2,3,7,8-PeCDD	84935800	1.56	y	27:16	0.70	1665.997	1.257	83.3	n
1,2,3,7,8-PeCDD	*	*	n	NotFnd	1.04	*	1.391	-	
Total PeCDD	127910	2.21	n	25:20	1.04	~~2.891~~ 2.12 DL	~~1.391~~ DL	-	
13C-1,2,3,7,8,9-HxCDD	97497500	1.28	y	33:15	-	71.938	-	-	n
13C-1,2,3,4,7,8-HxCDF	71973700	0.50	y	32:07	0.87	1695.807	2.175	84.8	n
1,2,3,4,7,8-HxCDF	17725	0.42	n	32:08	1.15	~~0.429~~	0.597	-	n
1,2,3,6,7,8-HxCDF	39196	0.66	n	32:16	~~1.46~~ 1.18	~~0.746~~ DL 0.923	~~0.469~~	-	n
2,3,4,6,7,8-HxCDF	15090	0.67	n	32:48	1.30	~~0.321~~	0.525	-	n
1,2,3,7,8,9-HxCDF	26784	0.75	n	33:26	1.12	0.663 DL	~~0.610~~	-	n
Total HxCDF	111436	1.73	n	31:01	1.26	~~2.437~~ ~~0.75~~ 0.923 DL	~~0.544~~	-	n
13C-1,2,3,6,7,8-HxCDD	67917900	1.30	y	32:59	0.95	1466.968	3.922	73.3	n
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	~~0.74~~ 0.84	*	1.246	-	n
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.05	*	0.887	-	n
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.02	*	0.909	-	n
Total HxCDD	8103	0.47	n	31:36	0.94	~~0.255~~	~~0.990~~ 1.246	-	n
13C-1,2,3,4,6,7,8-HpCDF	62262100	0.41	y	34:45	0.91	1397.560	7.964	69.9	n
1,2,3,4,6,7,8-HpCDF	53529	1.01	y	34:46	1.32	1.298 J	~~0.659~~ DL	-	n
1,2,3,4,7,8,9-HpCDF	17761	1.88	n	35:54	1.13	~~0.505~~	0.770	-	n
Total HpCDF	80065	1.01	y	34:46	1.23	~~2.033~~ ~~1.3~~ 1.298	~~0.709~~ DL	-	n
13C-1,2,3,4,6,7,8-HpCDD	61661600	1.03	y	35:33	0.91	1384.170	3.690	69.2	n
1,2,3,4,6,7,8-HpCDD	28028	0.67	n	35:34	1.01	~~0.897~~	1.002	-	n
Total HpCDD	105458	3.91	n	34:45	1.01	~~3.375~~ 1.10	1.002	-	n
13C-OCDD	87631000	0.87	y	38:04	0.60	2987.425	5.333	74.7	
OCDF	*	*	n	NotFnd	1.27	*	2.036	-	
OCDD	98877	0.90	y	38:04	1.13	4.002 J	~~1.071~~ DL	-	n

5/25/11 (m)

5/25/11 (m)

Totals Results TestAmerica West Sacramento Page 1 of 9

Run Text: MJJM9-1-AA Sample text: MJJM9-1-AA :G1E180000-127B(6

Name: Total TCDF F:1 Mass: 303.902 305.899 Mod? no #Hom:5
Run: 11 File: 20MY11D4D5 S:5 Acq:20-MAY-11 22:04:59
Tables: Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5 Results: 20MY11D4

Amount:	1.82 of which	0.64 named and	1.18 unnamed	
Conc:	1.82 of which	0.64 named and	1.18 unnamed	

Name	#	R.T.	Ratio		Conc.	Area	S/N	>?	Mod?
	1	17:16	0.95	n	~~0.37~~	10769	1.3	n	n
						11319	1.1	n	n
	2	18:33	0.34	n	~~0.33~~	7723	1.1	n	n
						22820	1.4	n	n
2,3,7,8-TCDF	3	19:10	0.31	n	~~0.64~~	15066	2.0	n	n
						48960	2.8	n	n
	4	19:16	0.96	n	~~0.24~~	7093	1.1	n	n
						7359	0.7	n	n
	5	19:21	0.76	y	~~0.24~~	5621	0.9	n	n
						7359	0.7	n	n

Totals Results TestAmerica West Sacramento Page 2 of 9

Run Text: MJJM9-1-AA Sample text: MJJM9-1-AA :G1E180000-127B(6

Name: Total TCDD F:1 Mass: 319.897 321.894 Mod? no #Hom:2
Run: 11 File: 20MY11D4D5 S:5 Acq:20-MAY-11 22:04:59
Tables: Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5 Results: 20MY11D4

Amount:	0.47 of which	* named and	0.47 unnamed	
Conc:	0.47 of which	* named and	0.47 unnamed	

Name	#	R.T.	Ratio		Conc.	Area	S/N	>?	Mod?
	1	22:21	1.10	n	~~0.27~~	7382	1.6	n	n
						6735	0.9	n	n
	2	22:24	0.60	n	~~0.21~~	4042	1.3	n	n
						6735	0.9	n	n

Totals Results TestAmerica West Sacramento Page 3 of 9

Run Text: MJJM9-1-AA Sample text: MJJM9-1-AA :G1E180000-127B(6

Name: Total F2 PeCDF F:2 Mass: 339.860 341.857 Mod? no #Hom:1
Run: 11 File: 20MY11D4D5 S:5 Acq:20-MAY-11 22:04:59
Tables: Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5 Results: 20MY11D4

Amount:	0.43 of which	0.43 named and	* unnamed
Conc:	0.43 of which	0.43 named and	* unnamed

Name	#	R.T.	Ratio		Conc.	Area	S/N	>?	Mod?
1,2,3,7,8-PeCDF	1	24:55	3.31	n	~~0.43~~	30374	3.3	y	n
						9174	0.9	n	n

Totals Results TestAmerica West Sacramento Page 4 of 9

Run Text: MJJM9-1-AA Sample text: MJJM9-1-AA :G1E180000-127B(6

Name: Total F1 PeCDF F:1 Mass: 339.860 341.857 Mod? no #Hom:3
Run: 11 File: 20MY11D4D5 S:5 Acq:20-MAY-11 22:04:59
Tables: Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5 Results: 20MY11D4

Amount:	0.72 of which	* named and	0.72 unnamed
Conc:	0.72 of which	* named and	0.72 unnamed

Name	#	R.T.	Ratio		Conc.	Area	S/N	>?	Mod?
	1	16:48	0.43	n	~~0.30~~	9973	1.4	n	n
						23319	2.4	n	n
	2	17:30	0.56	n	~~0.14~~	4582	1.4	n	n
						8150	1.3	n	n
	3	22:36	0.77	n	~~0.28~~	9147	1.9	n	n
						11847	1.3	n	n

Run Text: MJJM9-1-AA Sample text: MJJM9-1-AA :G1E180000-127B(6

Name: Total PeCDD F:2 Mass: 355.855 357.852 Mod? no #Hom:5
Run: 11 File: 20MY11D4D5 S:5 Acq:20-MAY-11 22:04:59
Tables: Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5 Results: 20MY11D4

Amount:	2.89 of which	* named and	2.89	unnamed
Conc:	2.89 of which	* named and	2.89	unnamed

Name	#	R.T.	Ratio		Conc.	Area	S/N	>?	Mod?
	1	25:20	2.21	n	~~0.28~~	10768	1.3	n	n
						4865	3.3	y	n
	2	25:39	3.69	n	~~0.15~~	9297	1.1	n	n
						2517	1.4	n	n
	3	26:11	2.87	n	~~0.16~~	8080	1.4	n	n
						2812	1.5	n	n
	4	26:42	3.02	n	2.12 DL	110950	7.2	y	n
						36716	10.1	y	n
	5	27:40	2.91	n	~~0.19~~	9458	1.6	n	n
						3251	2.3	n	n

Run Text: MJJM9-1-AA Sample text: MJJM9-1-AA :G1E180000-127B(6

Name: Total HxCDF F:3 Mass: 373.821 375.818 Mod? no #Hom:5
Run: 11 File: 20MY11D4D5 S:5 Acq:20-MAY-11 22:04:59
Tables: Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5 Results: 20MY11D4

Amount:	2.44 of which	2.16 named and	0.28	unnamed
Conc:	2.44 of which	2.16 named and	0.28	unnamed

Name	#	R.T.	Ratio		Conc.	Area	S/N	>?	Mod?	
	1	31:01	1.73	n	~~0.28~~	9739	1.4	n	n	
						5643	2.5	n	n	
1,2,3,4,7,8-HxCDF	2	32:08	0.42	n	~~0.43~~	9812	2.2	n	n	
						23361	14.5	y	n	
1,2,3,6,7,8-HxCDF	3	32:16	0.66	n	0.923 DL ~~0.75~~	21698	3.0	n	n	S/N < 2.5
						32664	12.9	y	n	
2,3,4,6,7,8-HxCDF	4	32:48	0.67	n	~~0.32~~	8354	1.9	n	n	
						12505	6.6	y	n	
1,2,3,7,8,9-HxCDF	5	33:26	0.75	n	~~0.66~~	14827	2.1	n	n	
						19895	9.0	y	n	

Run Text: MJJM9-1-AA Sample text: MJJM9-1-AA :G1E180000-127B(6

Name: Total HxCDD F:3 Mass: 389.816 391.813 Mod? no #Hom:1
Run: 11 File: 20MY11D4D5 S:5 Acq:20-MAY-11 22:04:59
Tables: Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5 Results: 20MY11D4

Amount:	0.25 of which	* named and	0.25	unnamed
Conc:	0.25 of which	* named and	0.25	unnamed

Name	#	R.T.	Ratio		Conc.	Area	S/N	>?	Mod?
	1	31:36	0.47	n	~~0.25~~	4486	1.7	n	n
						9519	1.1	n	n

Run Text: MJJM9-1-AA Sample text: MJJM9-1-AA :G1E180000-127B(6

Name: Total HpCDF F:4 Mass: 407.782 409.779 Mod? no #Hom:3
Run: 11 File: 20MY11D4D5 S:5 Acq:20-MAY-11 22:04:59
Tables: Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5 Results: 20MY11D4

Amount:	2.03 of which	1.80 named and	0.23	unnamed
Conc:	2.03 of which	1.80 named and	0.23	unnamed

Name	#	R.T.	Ratio		Conc.	Area	S/N	>?	Mod?
					(1.298)				
1,2,3,4,6,7,8-HpCDF	1	34:46	1.01	y	1.30	26964	4.8	y	n
						26566	7.8	y	n
1,2,3,4,7,8,9-HpCDF	2	35:54	1.88	n	~~0.50~~	16348	3.1	y	n
						8706	3.7	y	n
	3	35:58	0.46	n	~~0.23~~	4473	1.0	n	n
						9632	2.0	n	n

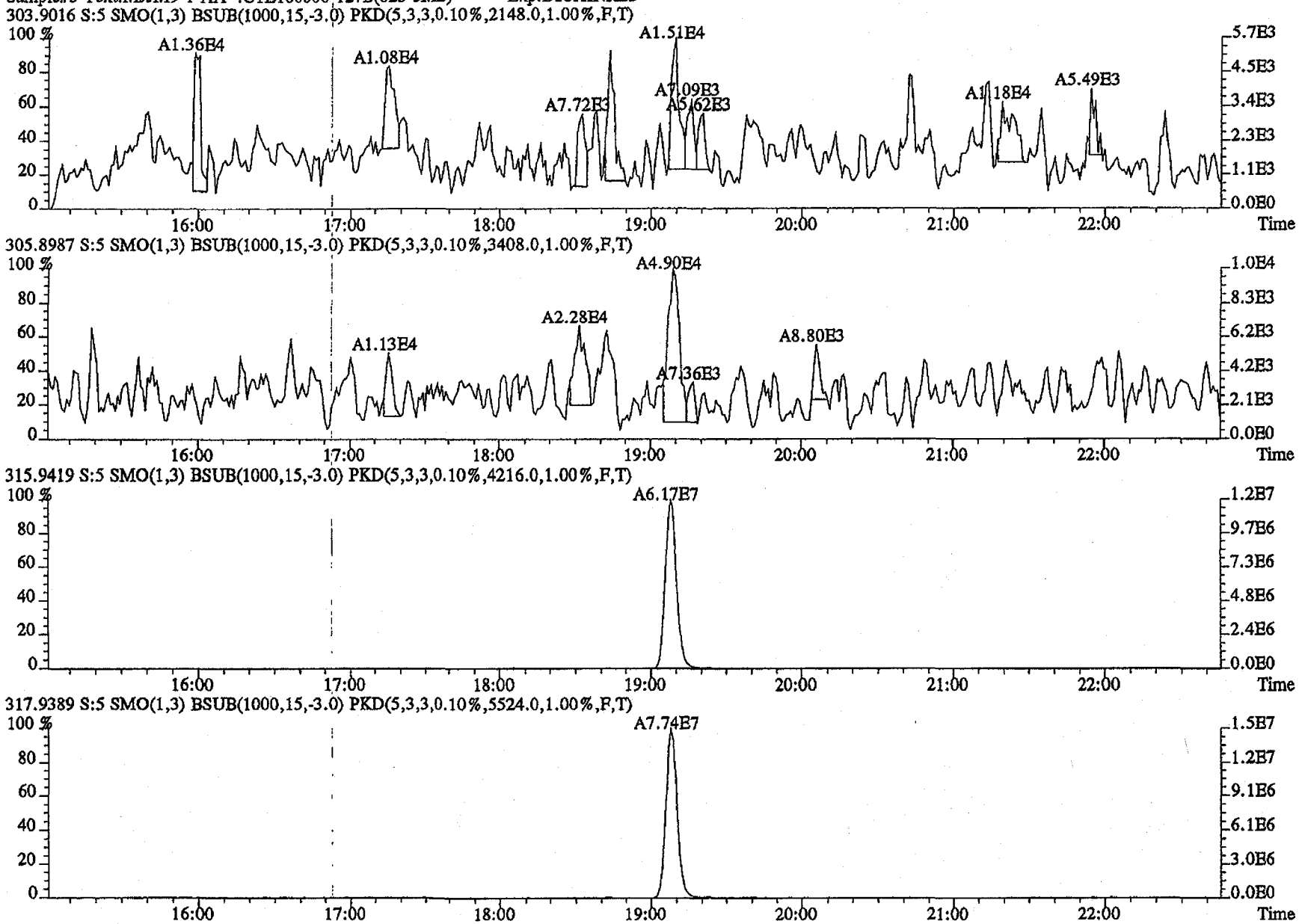
Run Text: MJJM9-1-AA Sample text: MJJM9-1-AA :G1E180000-127B(6

Name: Total HpCDD F:4 Mass: 423.777 425.774 Mod? no #Hom:5
Run: 11 File: 20MY11D4D5 S:5 Acq:20-MAY-11 22:04:59
Tables: Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5 Results: 20MY11D4

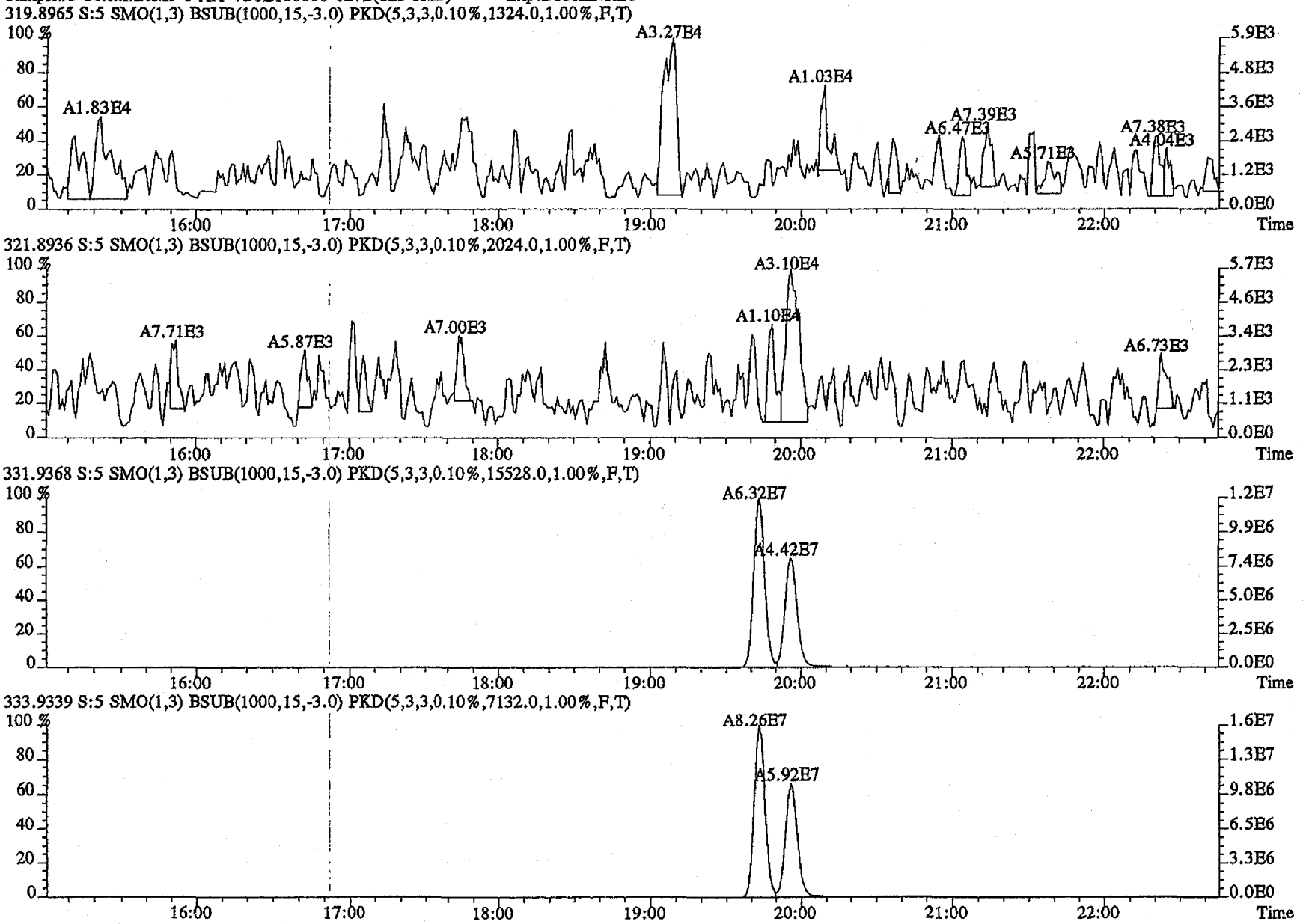
Amount:	3.37 of which	0.90 named and	2.48	unnamed
Conc:	3.37 of which	0.90 named and	2.48	unnamed

Name	#	R.T.	Ratio		Conc.	Area	S/N	>?	Mod?
	1	34:45	3.91	n	~~0.61~~	36431	5.1	y	n
						9319	4.3	y	n
	2	35:00	1.33	n	1.10	22455	3.4	y	n
						16831	4.6	y	n
1,2,3,4,6,7,8-HpCDD	3	35:34	0.67	n	~~0.90~~	14289	2.5	n	n
						21199	5.9	y	n
	4	35:51	1.75	n	~~0.59~~	15837	2.9	n	n
						9042	2.0	n	n
	5	35:57	0.32	n	~~0.18~~	2875	0.7	n	n
						9042	2.0	n	n

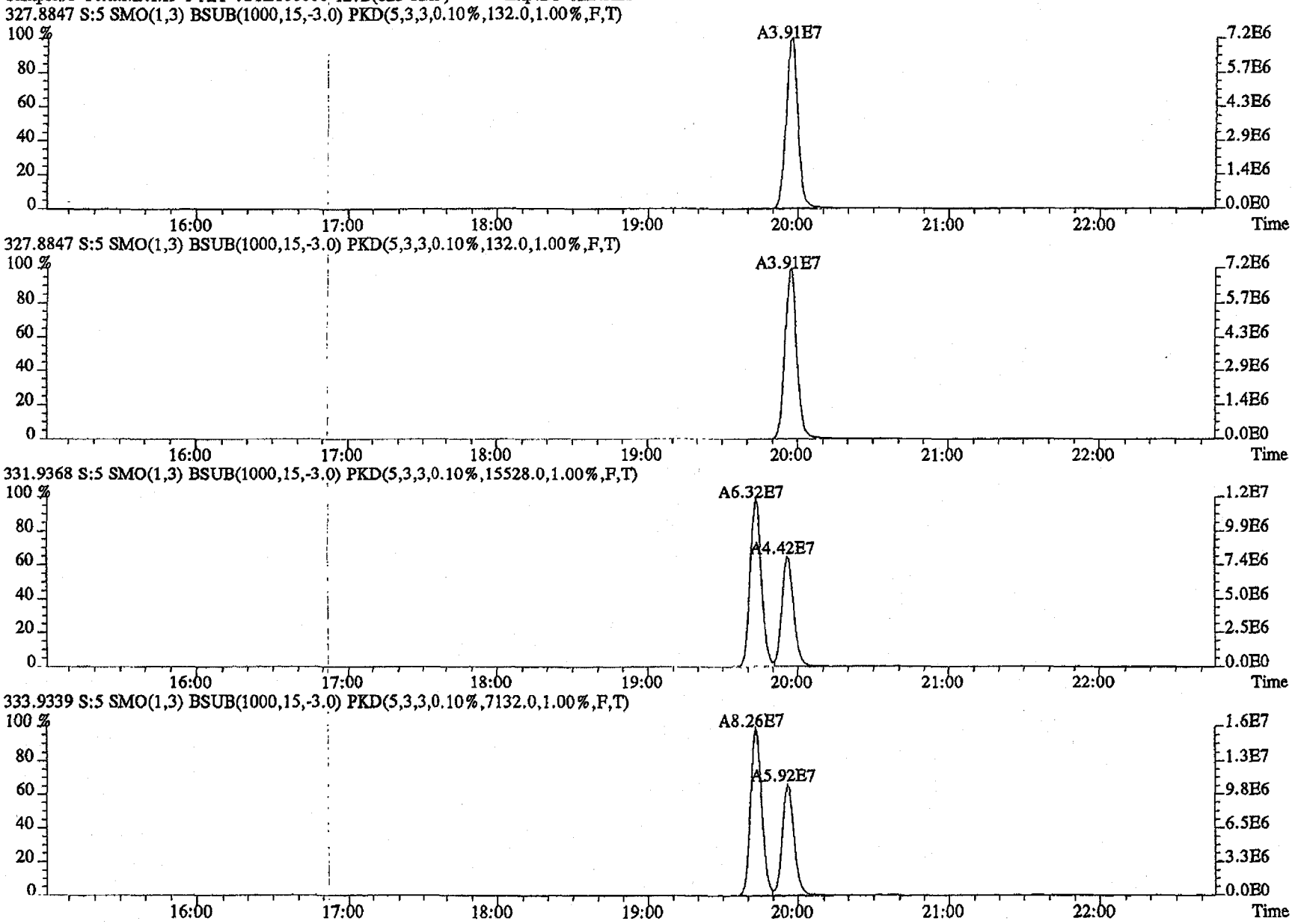
File:20MY11D4D5 #1-513 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES



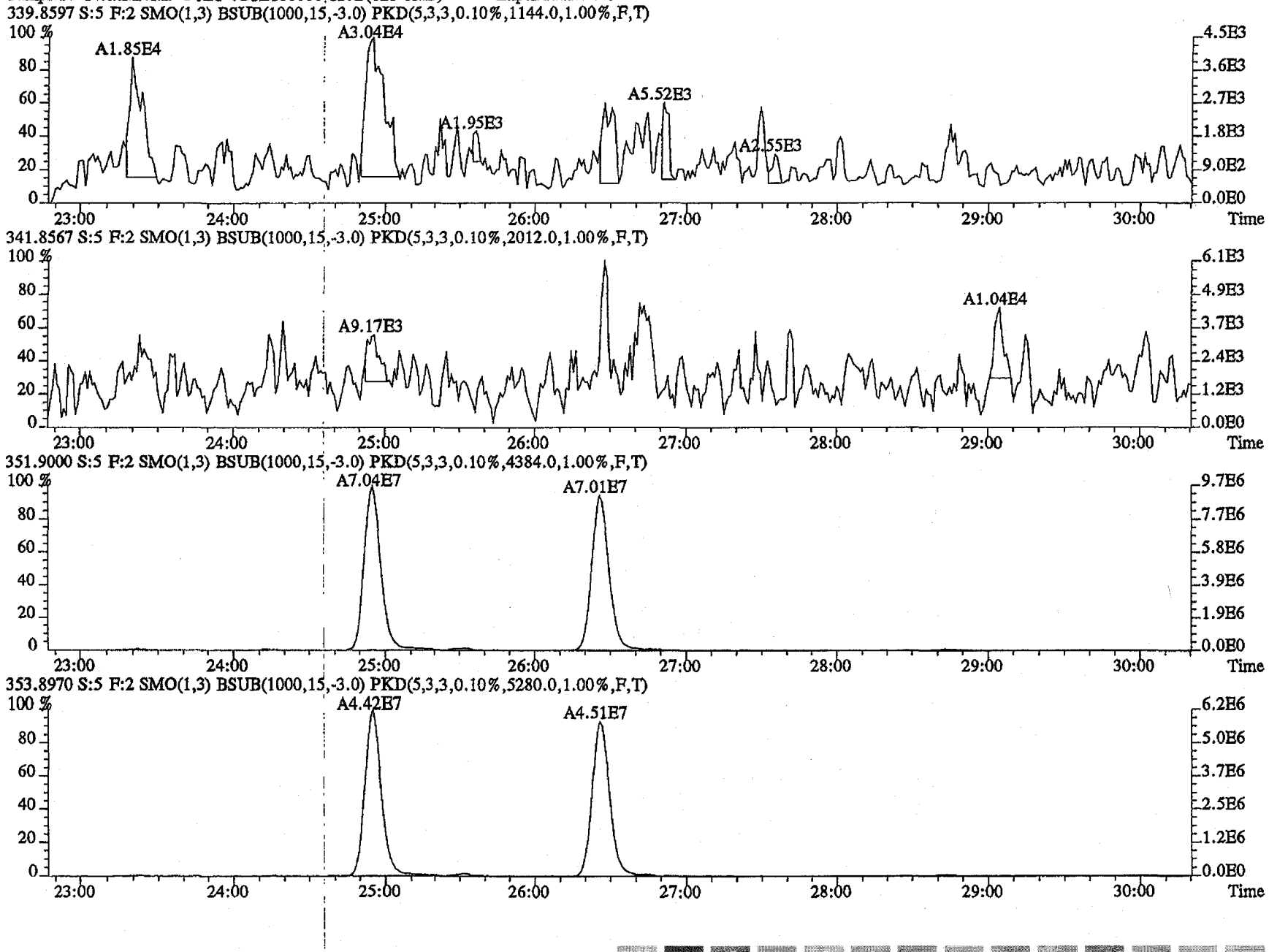
File:20MY11D4D5 #1-513 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES



File:20MY11D4D5 #1-513 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES

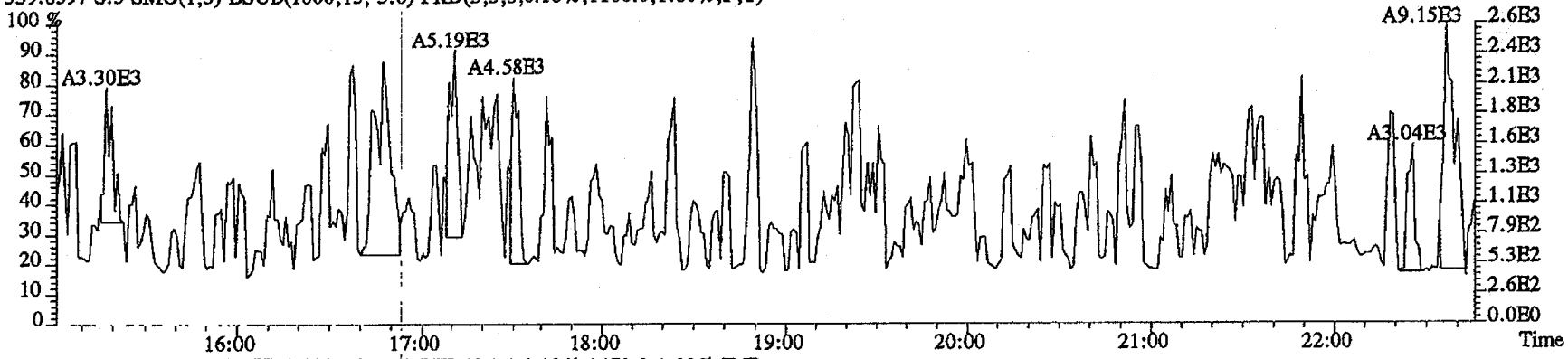


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES

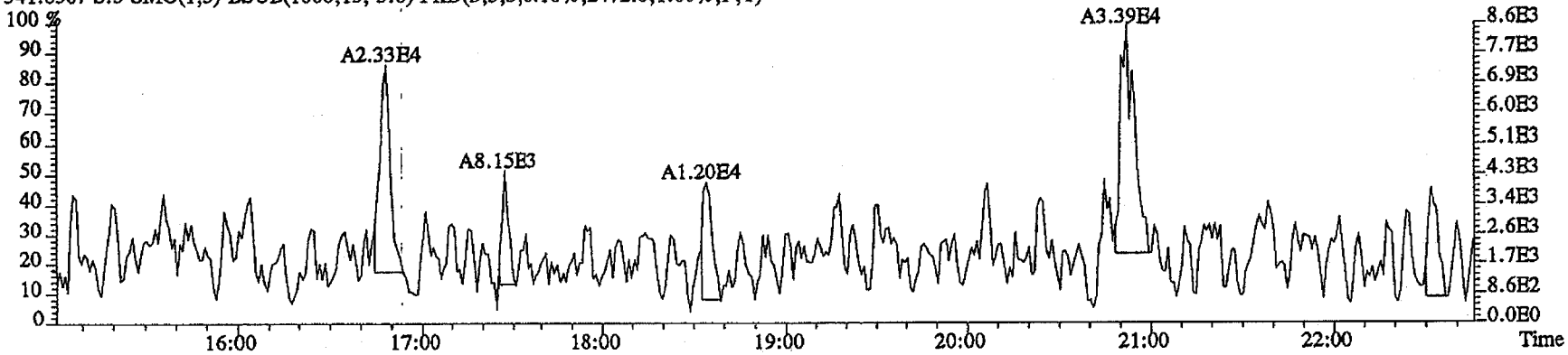


File:20MY11D4D5 #1-513 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES

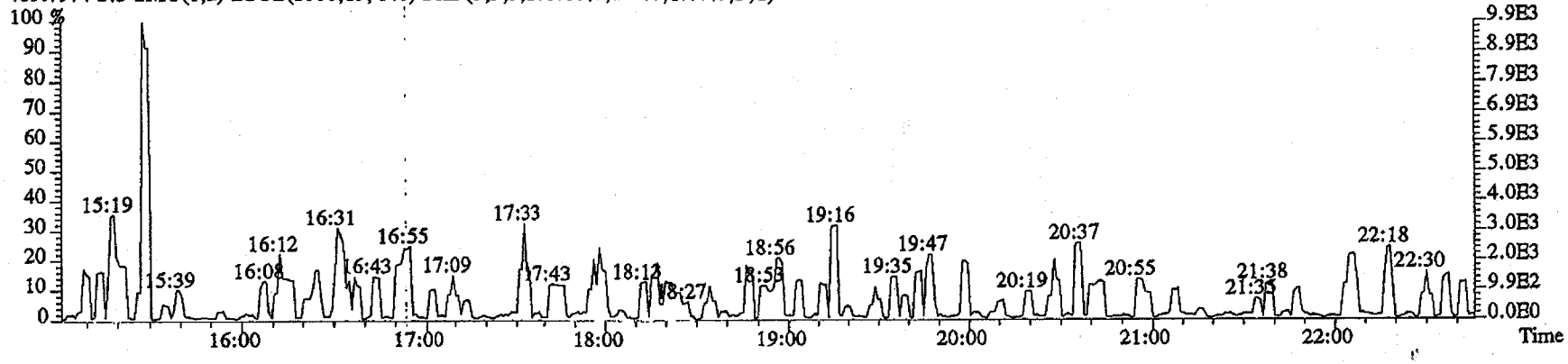
339.8597 S:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1160.0,1.00%,F,T)



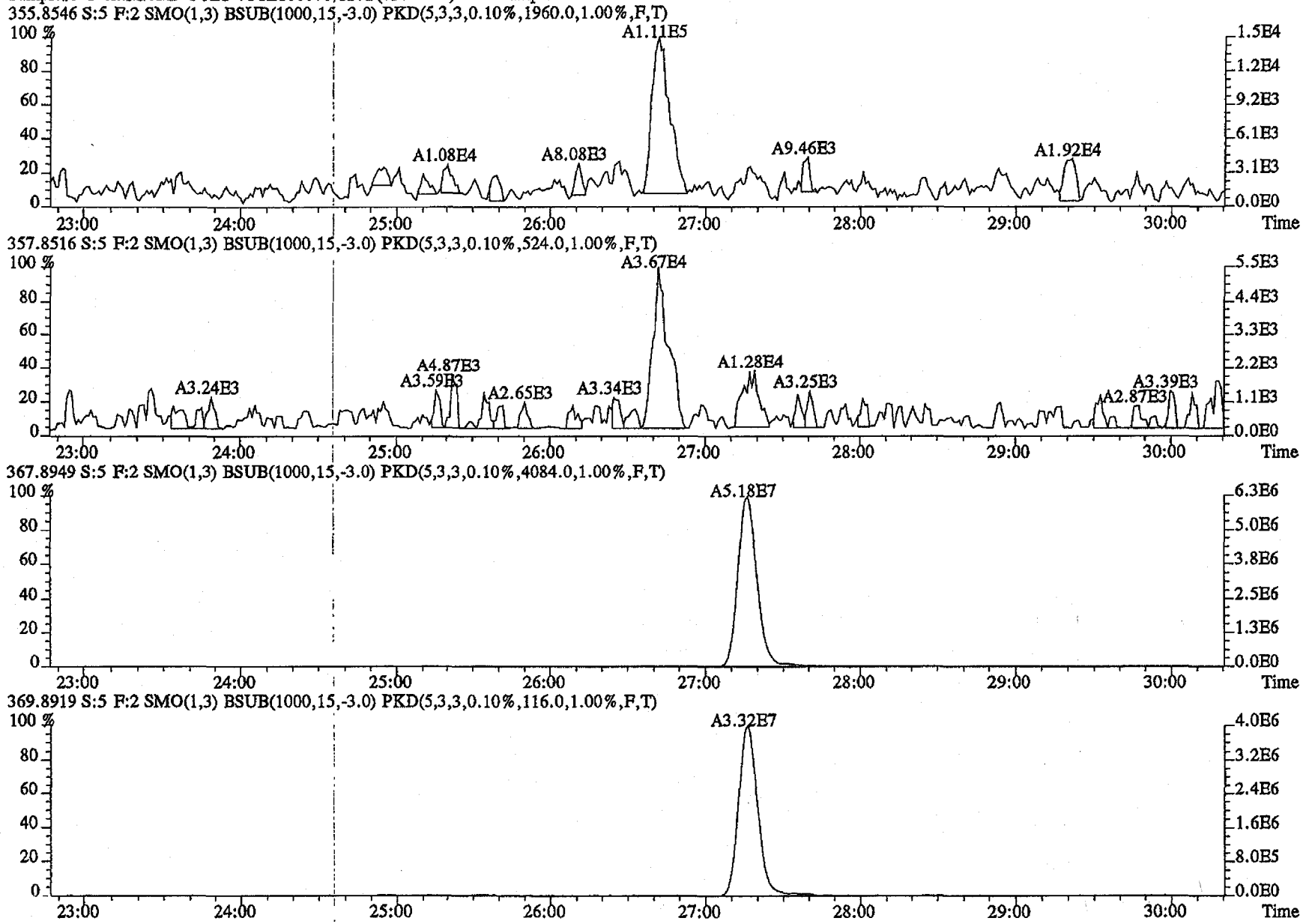
341.8567 S:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2472.0,1.00%,F,T)



409.7974 S:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,152.0,1.00%,F,T)

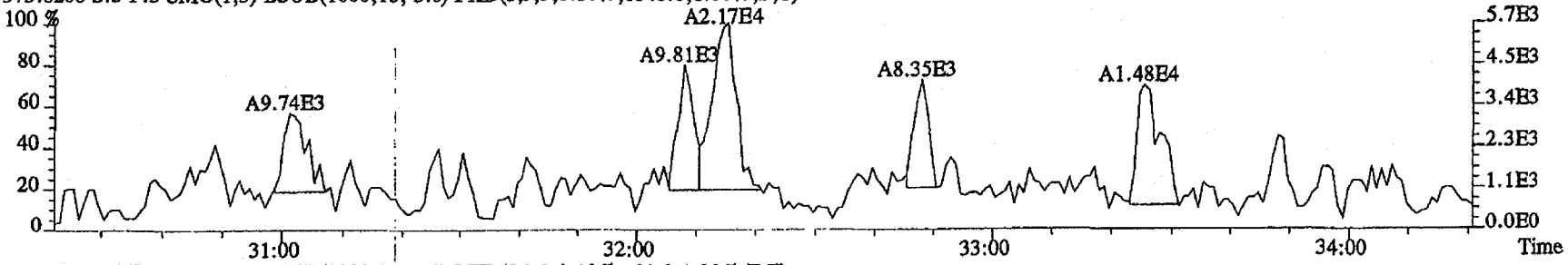


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES

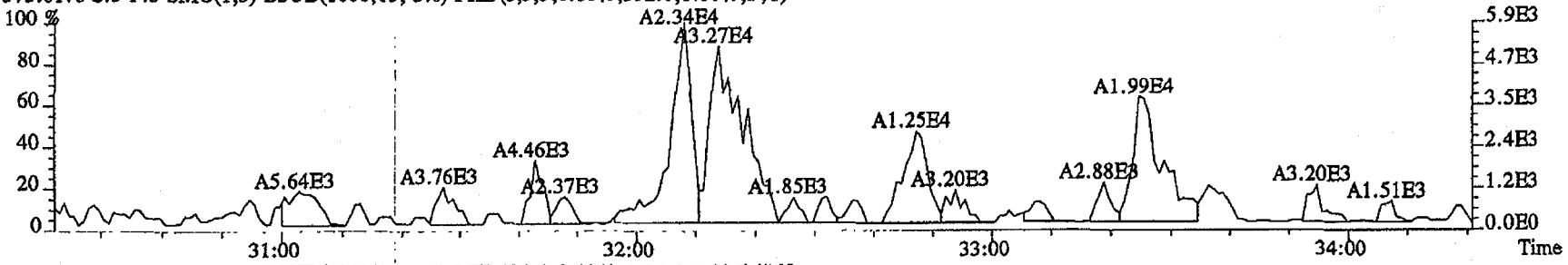


File:20MY11D4D5 #1-287 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES

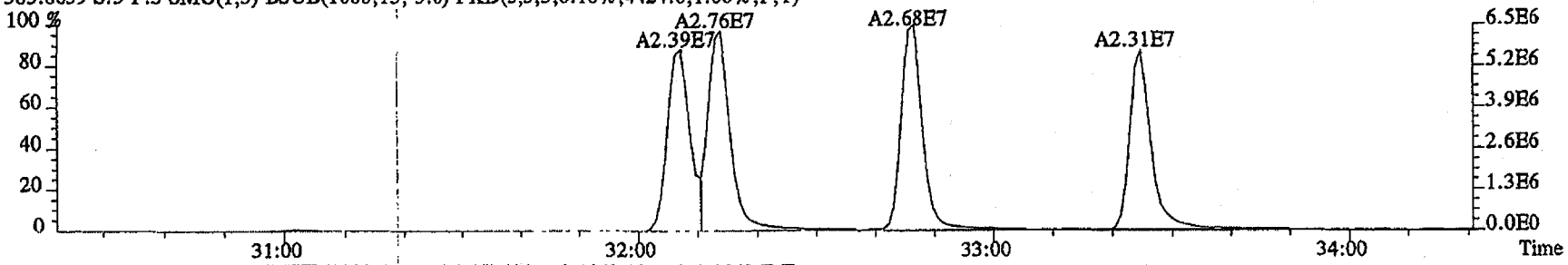
373.8208 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1548.0,1.00%,F,T)



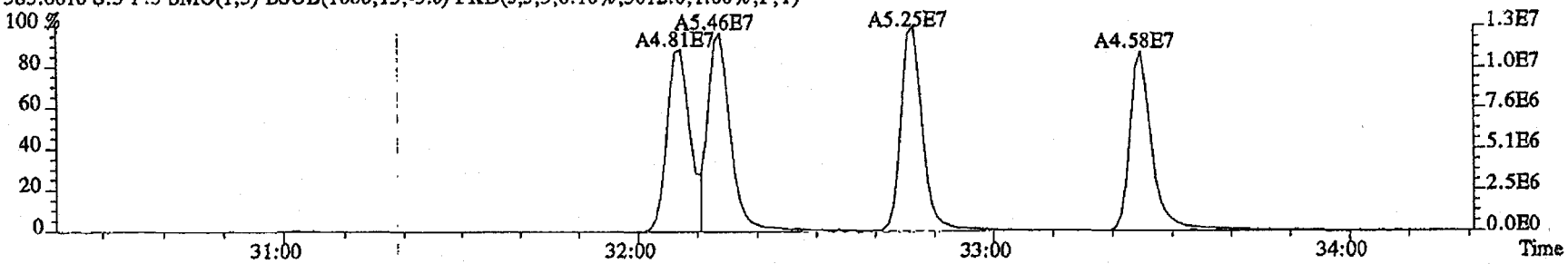
375.8178 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,392.0,1.00%,F,T)



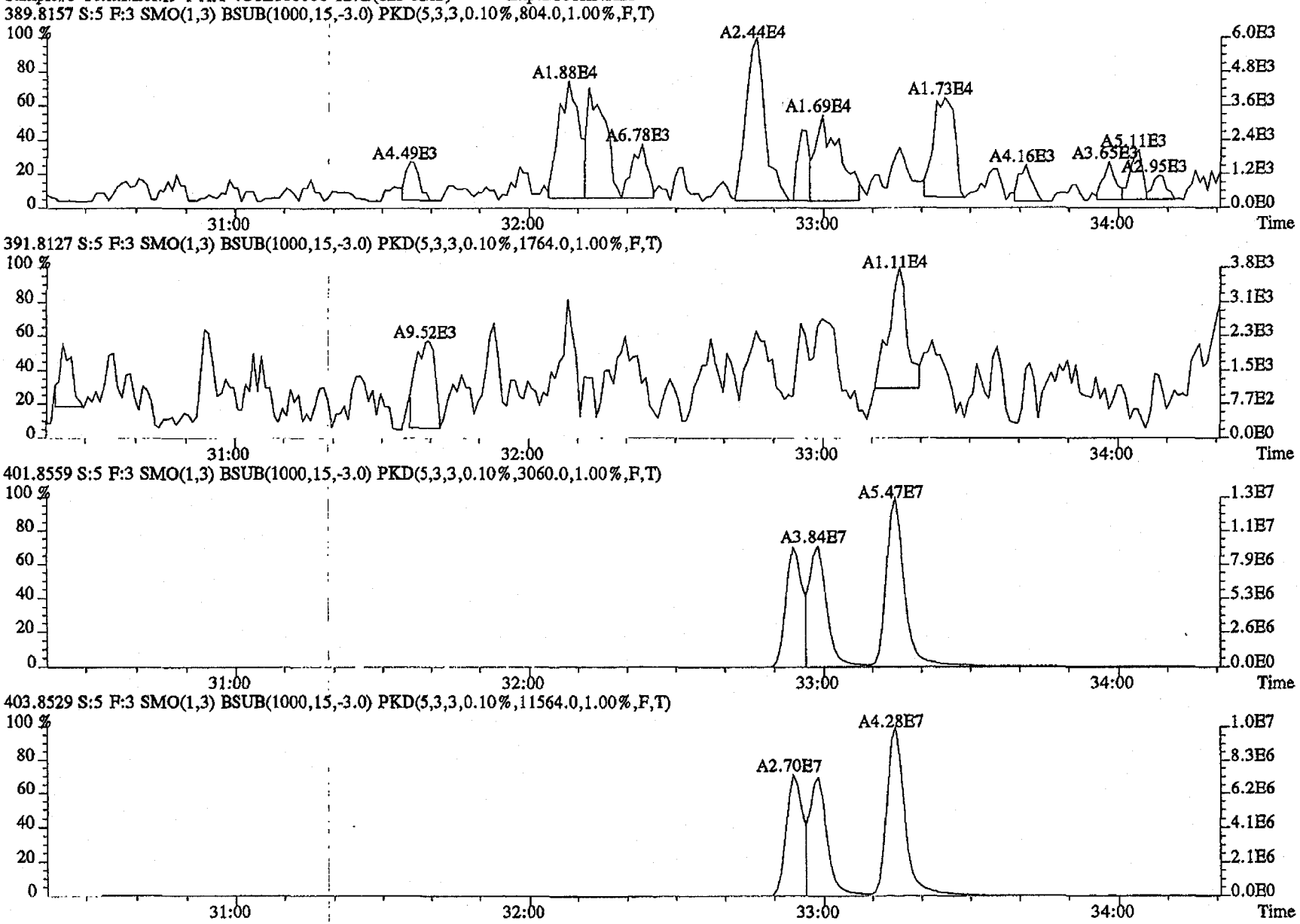
383.8639 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4424.0,1.00%,F,T)



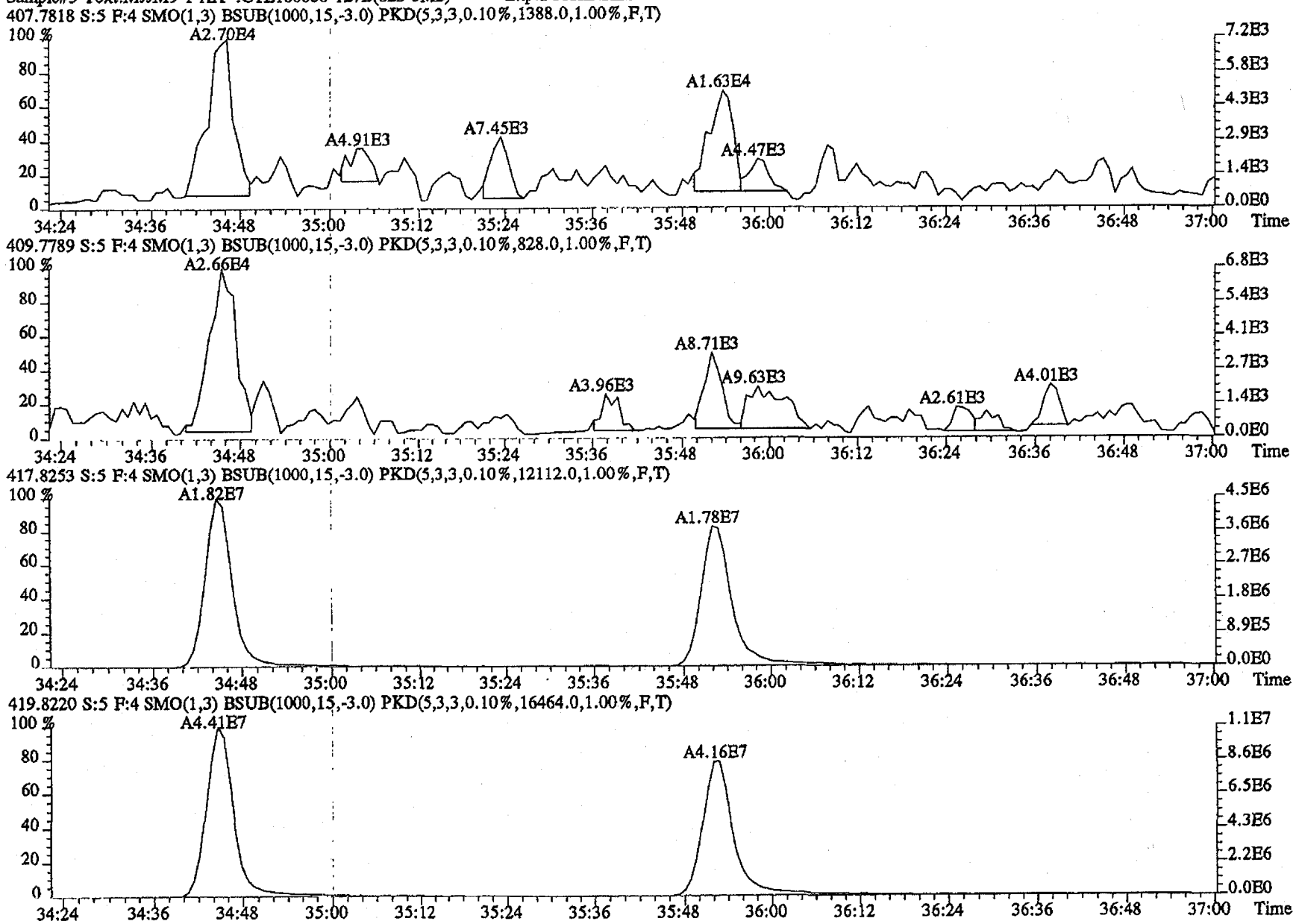
385.8610 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3012.0,1.00%,F,T)



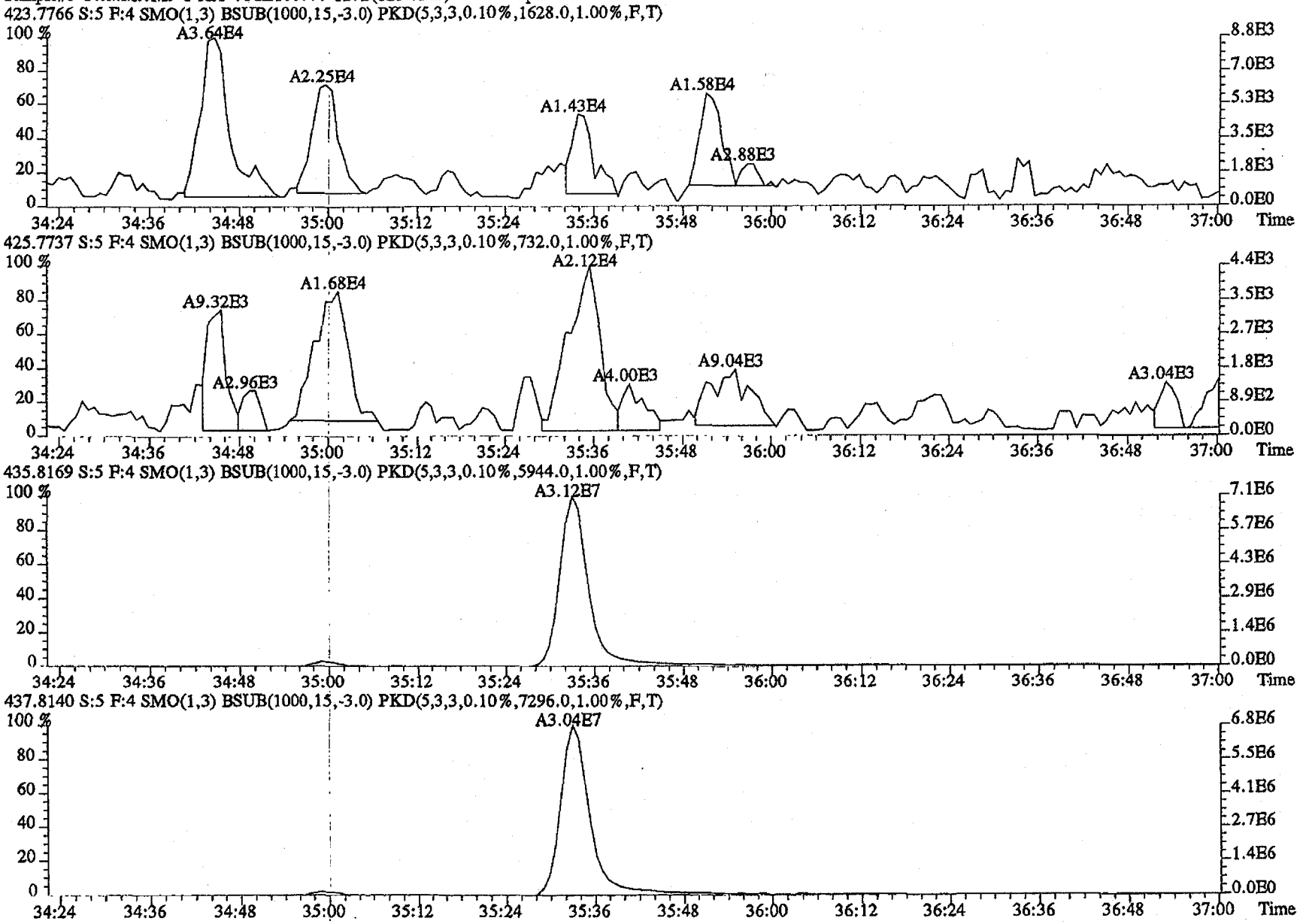
File:20MY11D4D5 #1-287 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES



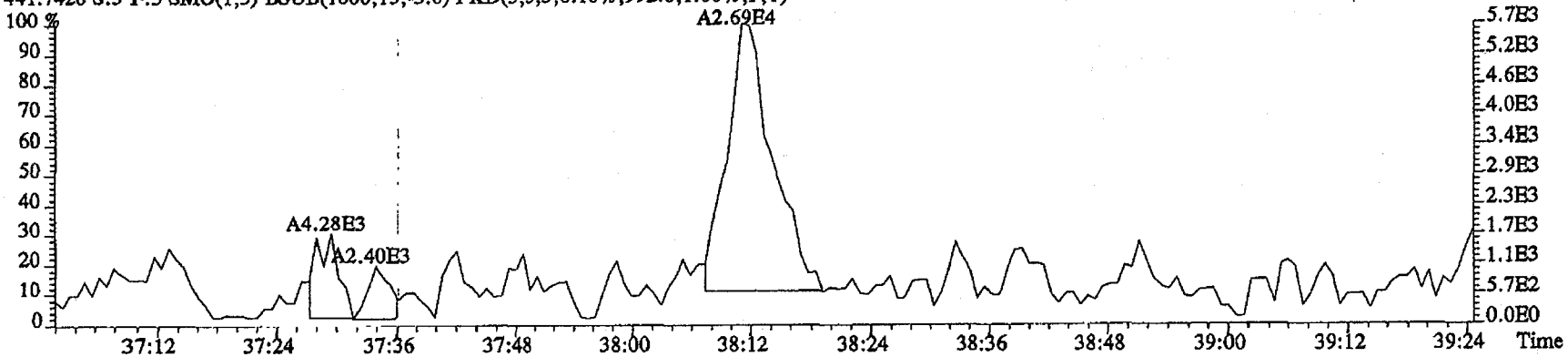
File:20MY11D4D5 #1-200 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES



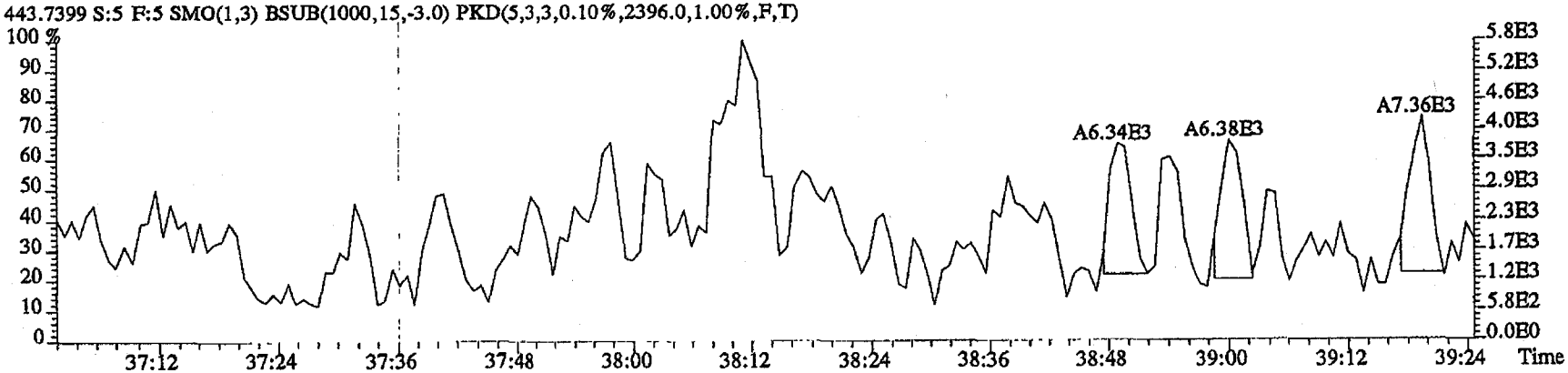
File:20MY11D4D5 #1-200 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES



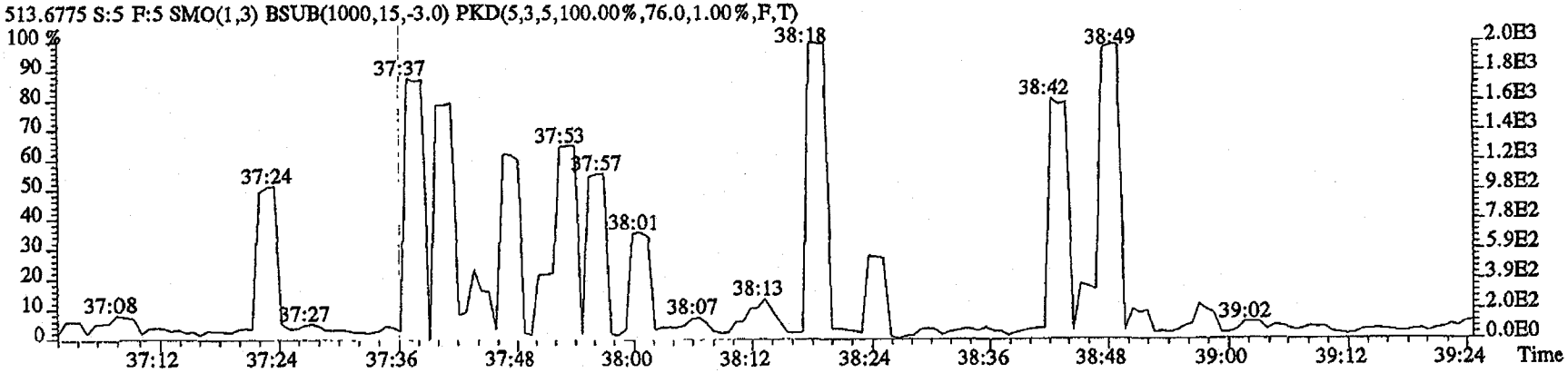
File:20MY11D4D5 #1-193 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES
441.7428 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,992.0,1.00%,F,T)



443.7399 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2396.0,1.00%,F,T)

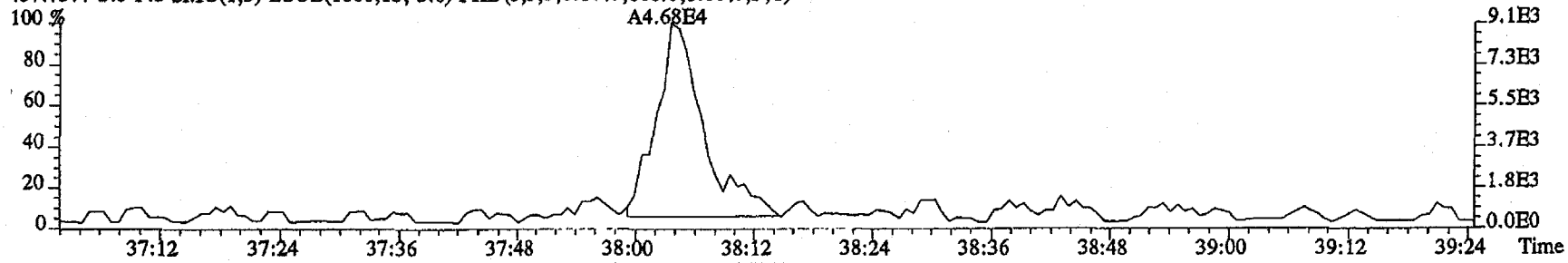


513.6775 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,76.0,1.00%,F,T)

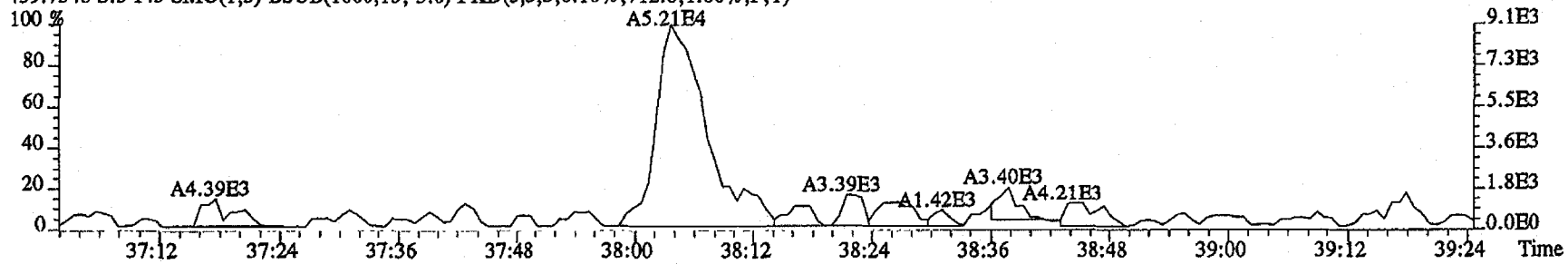


File:20MY11D4D5 #1-193 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1B180000-127B(623-5MB) Exp:DIOXINRES

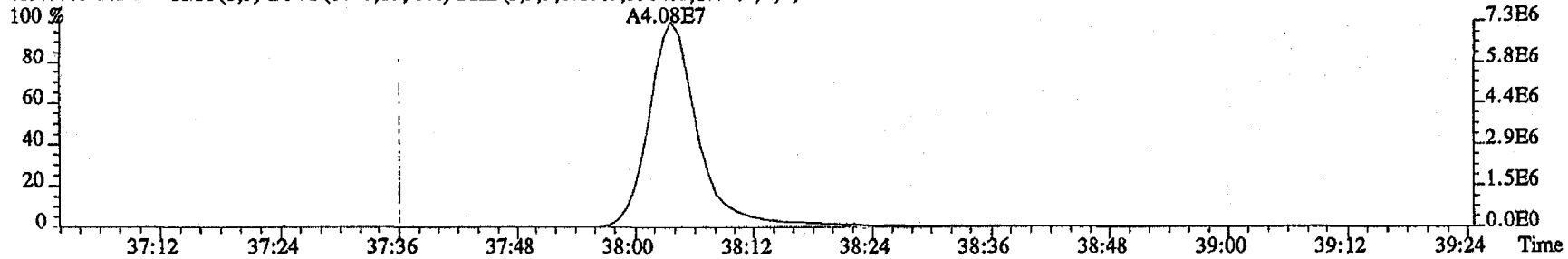
457.7377 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,868.0,1.00%,F,T)



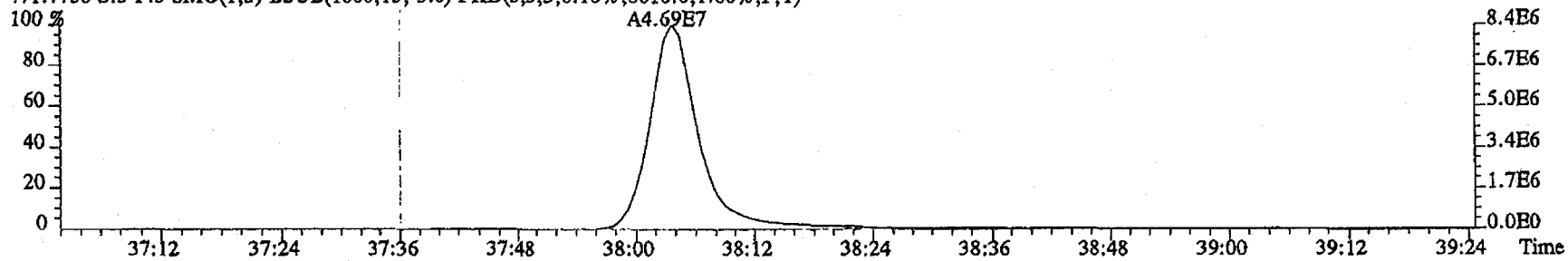
459.7348 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,712.0,1.00%,F,T)



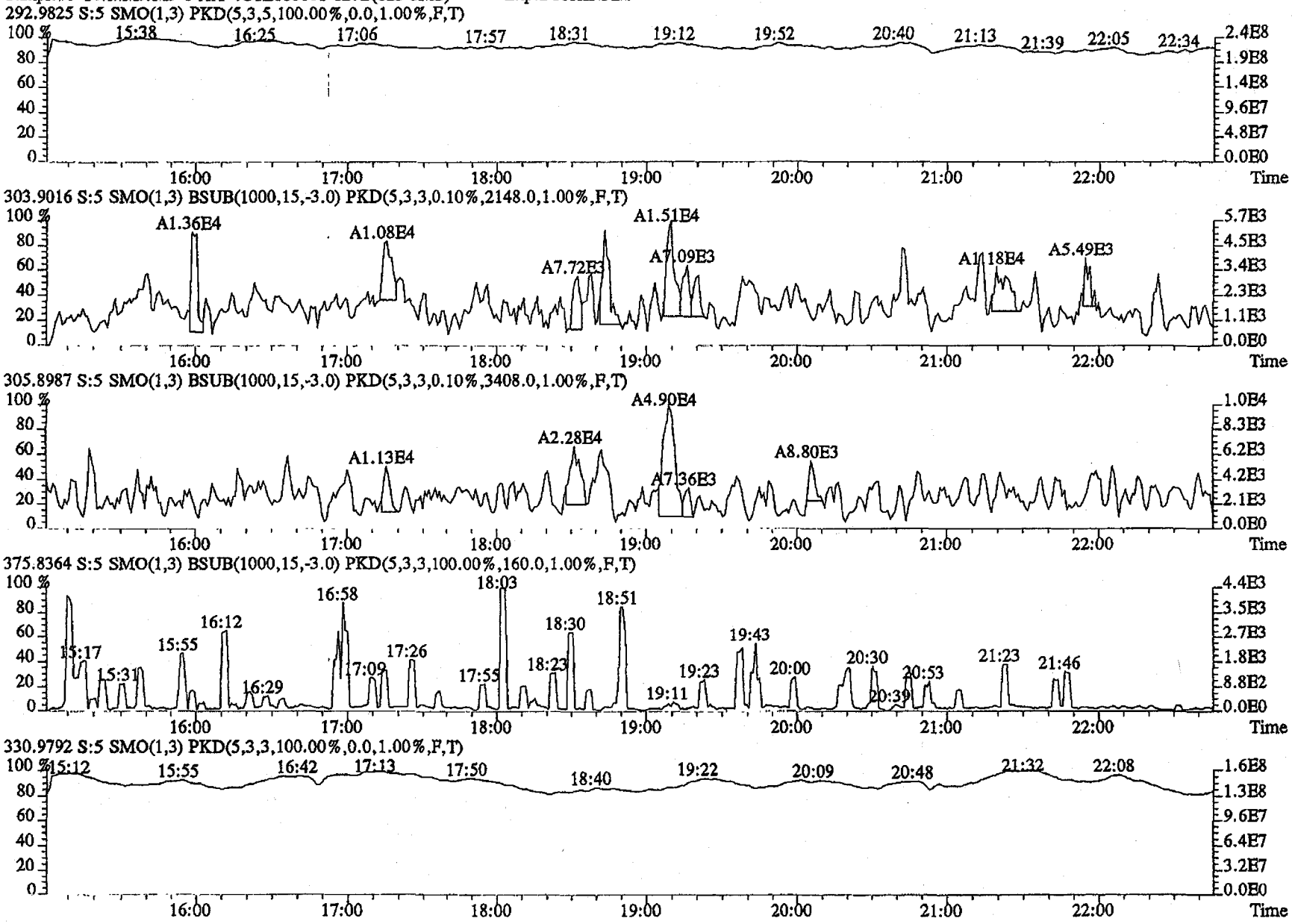
469.7779 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3984.0,1.00%,F,T)



471.7750 S:5 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,8616.0,1.00%,F,T)

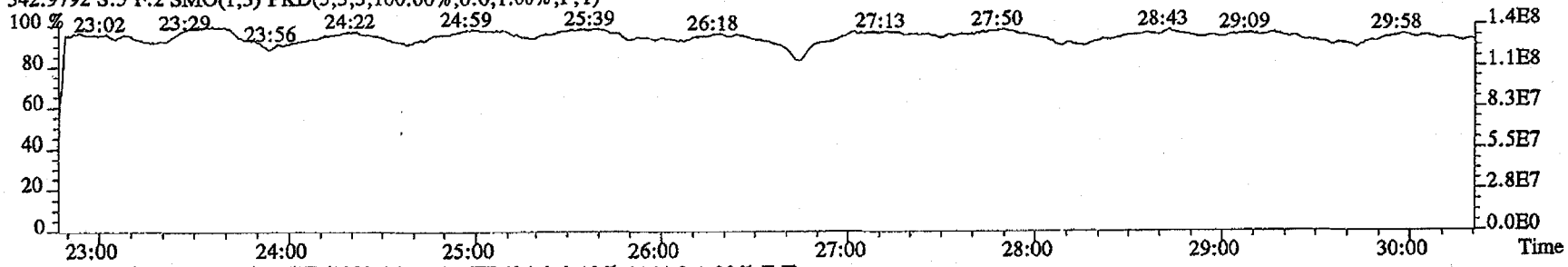


File:20MY11D4D5 #1-513 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES

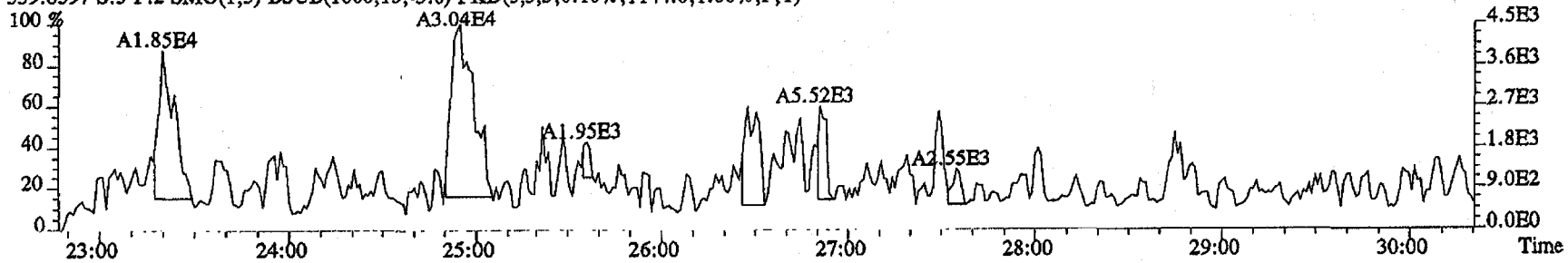


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES

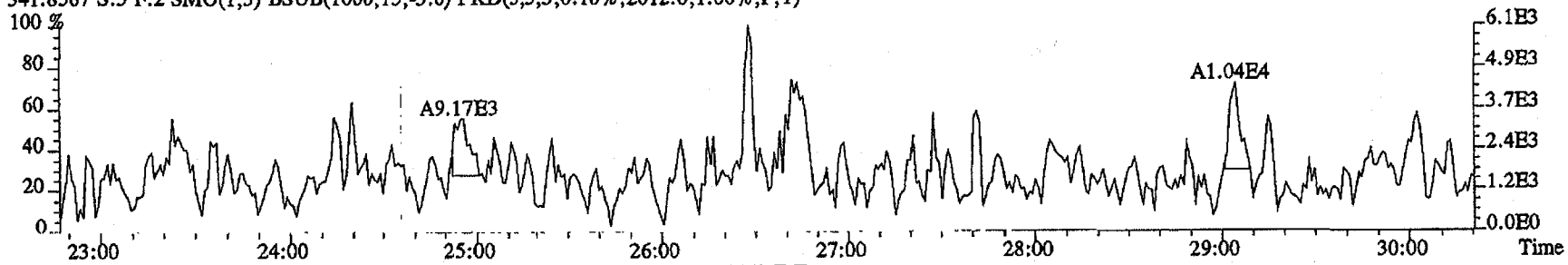
342.9792 S:5 F:2 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



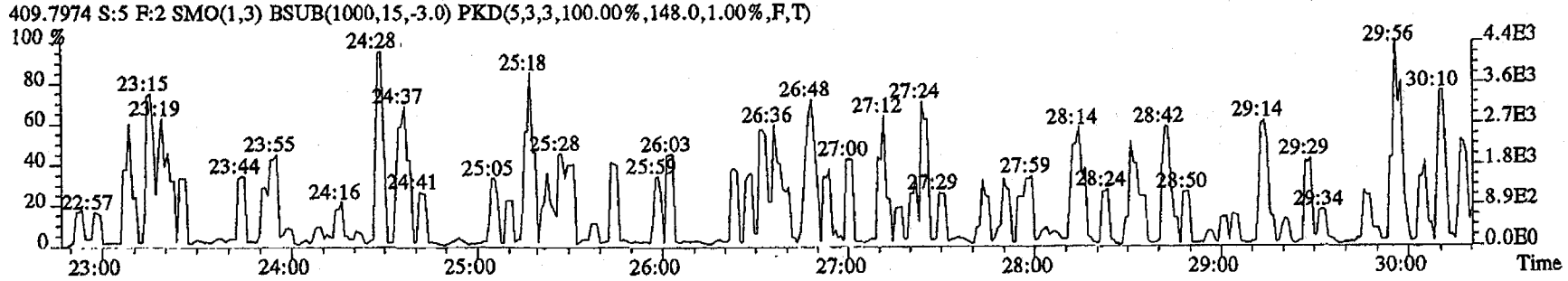
339.8597 S:5 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1144.0,1.00%,F,T)



341.8567 S:5 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2012.0,1.00%,F,T)

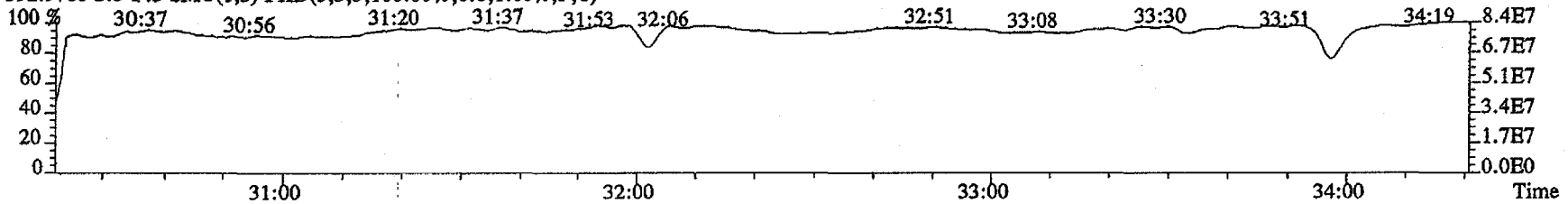


409.7974 S:5 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,148.0,1.00%,F,T)

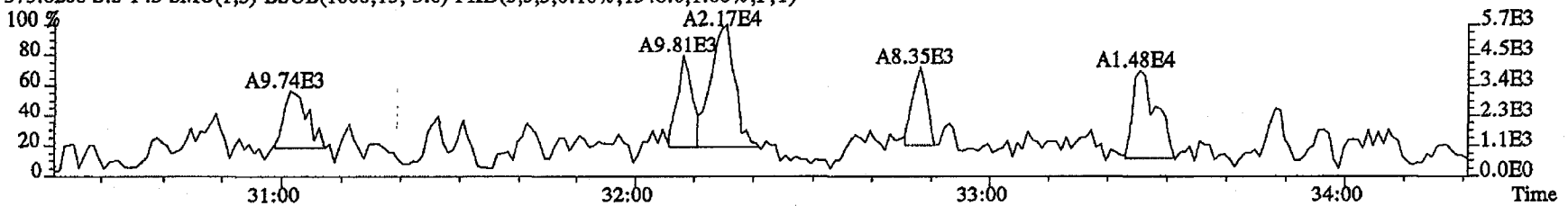


File:20MY11D4D5 #1-287 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES

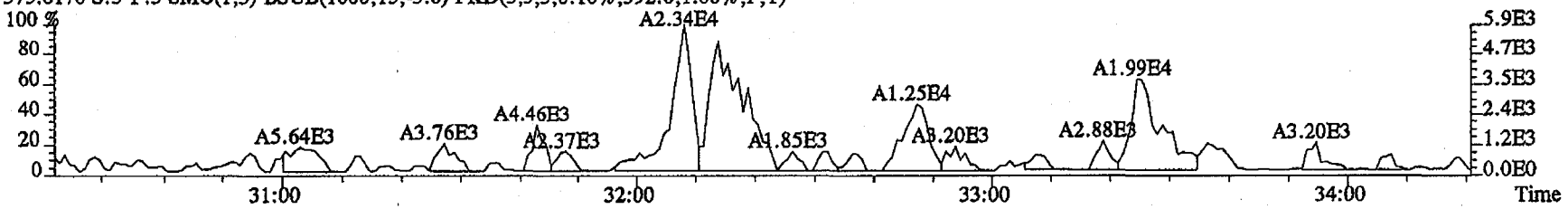
392.9760 S:5 F:3 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



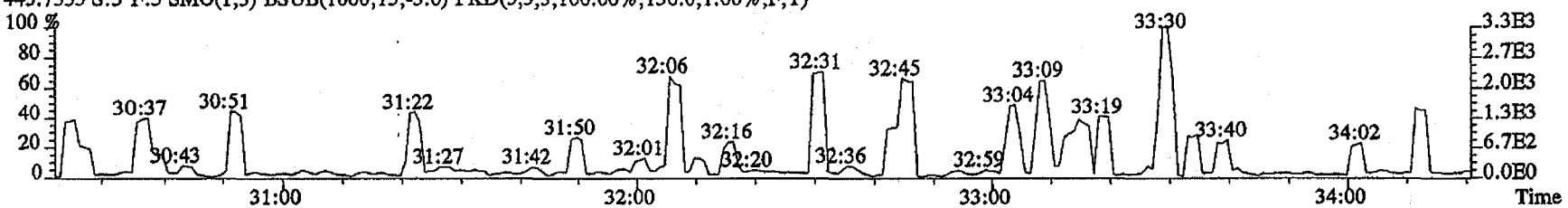
373.8208 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1548.0,1.00%,F,T)



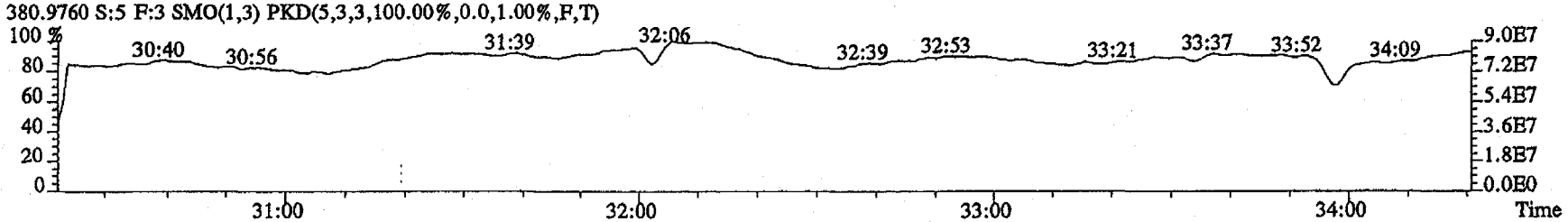
375.8178 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,392.0,1.00%,F,T)



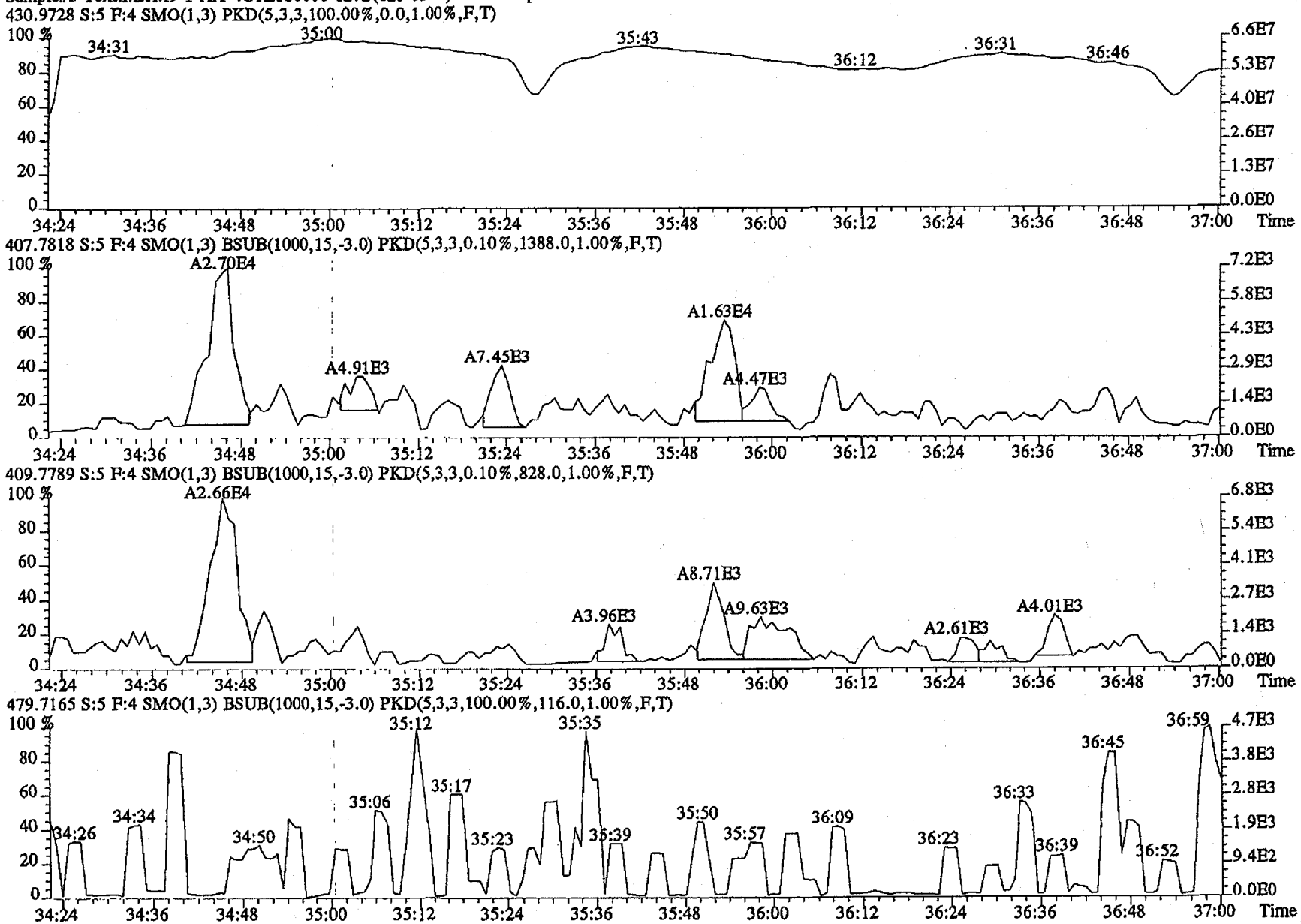
445.7555 S:5 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,136.0,1.00%,F,T)



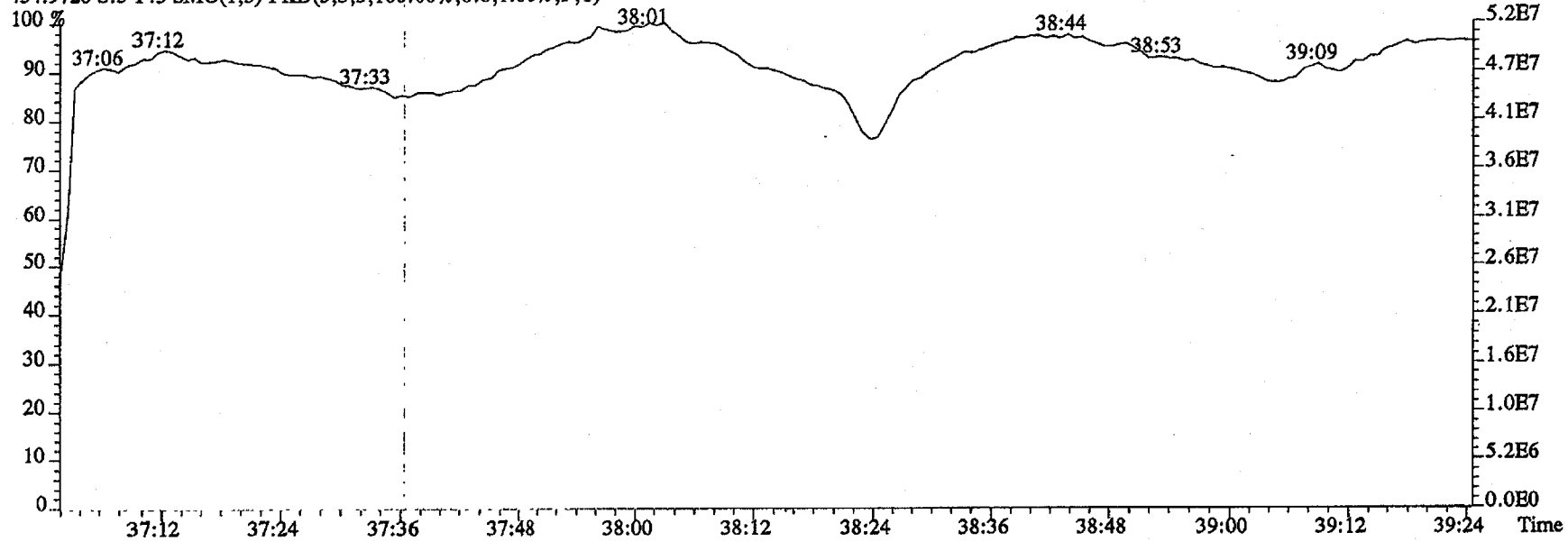
380.9760 S:5 F:3 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



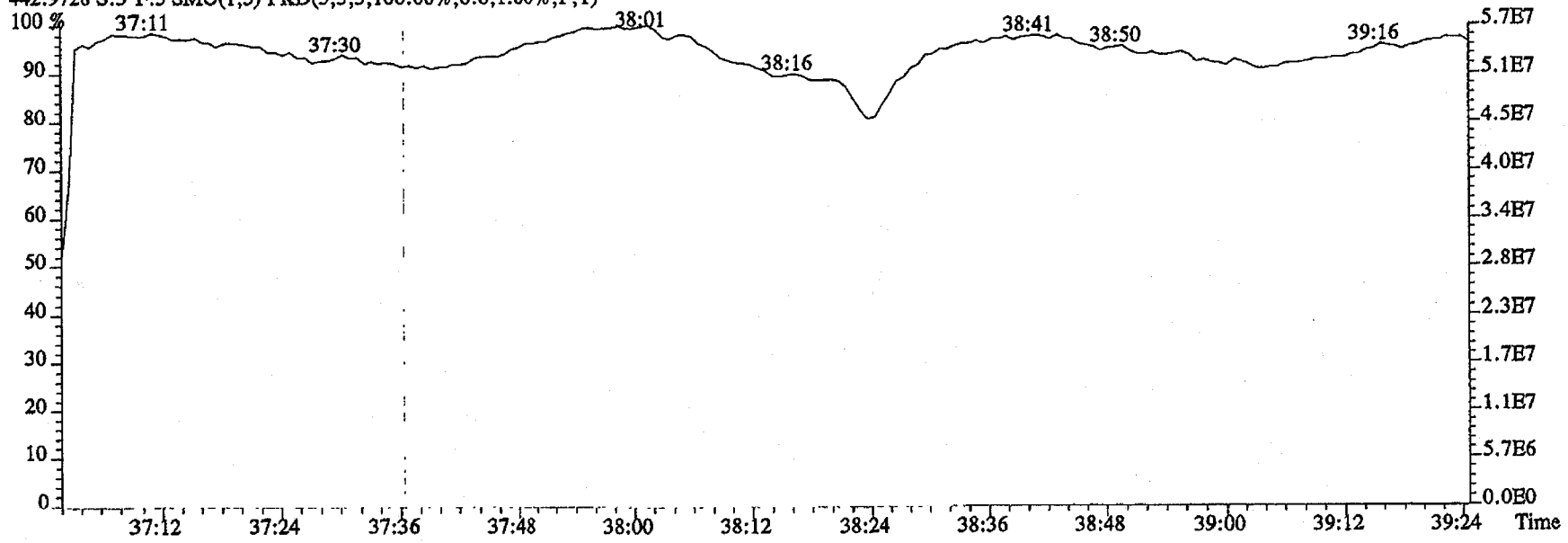
File:20MY11D4D5 #1-200 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MIJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES



File:20MY11D4D5 #1-193 Acq:20-MAY-2011 22:04:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 Text:MJJM9-1-AA :G1E180000-127B(623-5MB) Exp:DIOXINRES
454.9728 S:5 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:5 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



LCS/LCSD Data

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: G1E120651 **Work Order #...:** MJJM91AC **Matrix.....:** WATER
LCS Lot-Sample#: G1E180000-127
Prep Date.....: 05/18/11 **Analysis Date..:** 05/20/11
Prep Batch #...: 1138127
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,3,7,8-TCDD	**111**	**(64 - 142)**	**SW846 8290**
1,2,3,7,8-PeCDD	**94**	**(71 - 140)**	**SW846 8290**
1,2,3,4,7,8-HxCDD	**109**	**(56 - 146)**	**SW846 8290**
1,2,3,6,7,8-HxCDD	**100**	**(73 - 144)**	**SW846 8290**
1,2,3,7,8,9-HxCDD	**106**	**(71 - 151)**	**SW846 8290**
1,2,3,4,6,7,8-HpCDD	**103**	**(78 - 139)**	**SW846 8290**
OCDD	**97**	**(80 - 132)**	**SW846 8290**
2,3,7,8-TCDF	**115**	**(71 - 142)**	**SW846 8290**
1,2,3,7,8-PeCDF	**103**	**(76 - 135)**	**SW846 8290**
2,3,4,7,8-PeCDF	**101**	**(74 - 137)**	**SW846 8290**
1,2,3,4,7,8-HxCDF	**98**	**(75 - 131)**	**SW846 8290**
1,2,3,6,7,8-HxCDF	**104**	**(76 - 133)**	**SW846 8290**
2,3,4,6,7,8-HxCDF	**90**	**(80 - 137)**	**SW846 8290**
1,2,3,7,8,9-HxCDF	**92**	**(77 - 142)**	**SW846 8290**
1,2,3,4,6,7,8-HpCDF	**107**	**(79 - 133)**	**SW846 8290**
1,2,3,4,7,8,9-HpCDF	**108**	**(83 - 130)**	**SW846 8290**
OCDF	**99**	**(72 - 140)**	**SW846 8290**

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	78	(40 - 135)
13C-1,2,3,7,8-PeCDD	88	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	75	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	74	(40 - 135)
13C-OCDD	78	(40 - 135)
13C-2,3,7,8-TCDF	91	(40 - 135)
13C-1,2,3,7,8-PeCDF	78	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	88	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	72	(40 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

Trace Level Organic Compounds

Client Lot #...: G1E120651 Work Order #...: MJJM91AC Matrix.....: WATER
LCS Lot-Sample#: G1E180000-127
Prep Date.....: 05/18/11 Analysis Date..: 05/20/11
Prep Batch #...: 1138127
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2,3,7,8-TCDD	**200**	**223**	**pg/L**	**111**	**SW846 8290**
1,2,3,7,8-PeCDD	**1000**	**943**	**pg/L**	**94**	**SW846 8290**
1,2,3,4,7,8-HxCDD	**1000**	**1090**	**pg/L**	**109**	**SW846 8290**
1,2,3,6,7,8-HxCDD	**1000**	**1000**	**pg/L**	**100**	**SW846 8290**
1,2,3,7,8,9-HxCDD	**1000**	**1060**	**pg/L**	**106**	**SW846 8290**
1,2,3,4,6,7,8-HpCDD	**1000**	**1030**	**pg/L**	**103**	**SW846 8290**
OCDD	**2000**	**1950**	**pg/L**	**97**	**SW846 8290**
2,3,7,8-TCDF	**200**	**231**	**pg/L**	**115**	**SW846 8290**
1,2,3,7,8-PeCDF	**1000**	**1030**	**pg/L**	**103**	**SW846 8290**
2,3,4,7,8-PeCDF	**1000**	**1010**	**pg/L**	**101**	**SW846 8290**
1,2,3,4,7,8-HxCDF	**1000**	**975**	**pg/L**	**98**	**SW846 8290**
1,2,3,6,7,8-HxCDF	**1000**	**1040**	**pg/L**	**104**	**SW846 8290**
2,3,4,6,7,8-HxCDF	**1000**	**896**	**pg/L**	**90**	**SW846 8290**
1,2,3,7,8,9-HxCDF	**1000**	**917**	**pg/L**	**92**	**SW846 8290**
1,2,3,4,6,7,8-HpCDF	**1000**	**1070**	**pg/L**	**107**	**SW846 8290**
1,2,3,4,7,8,9-HpCDF	**1000**	**1080**	**pg/L**	**108**	**SW846 8290**
OCDF	**2000**	**1980**	**pg/L**	**99**	**SW846 8290**

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	78	(40 - 135)
13C-1,2,3,7,8-PeCDD	88	(40 - 135)
13C-1,2,3,6,7,8-HxCDD	75	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDD	74	(40 - 135)
13C-OCDD	78	(40 - 135)
13C-2,3,7,8-TCDF	91	(40 - 135)
13C-1,2,3,7,8-PeCDF	78	(40 - 135)
13C-1,2,3,4,7,8-HxCDF	88	(40 - 135)
13C-1,2,3,4,6,7,8-HpCDF	72	(40 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

(W) 5/25/11

Run text: MJJM9-1-AC Sample text: MJJM9-1-AC :G1E180000-127C(623-5LCS
Run #12 Filename: 20MY11D4D5 S: 6 I: 1 Results: 20MY11D4D58290
Acquired: 20-MAY-11 22:49:34 Processed: 21-MAY-11 00:16:37
Run: 20MY11D4D5 Analyte: 8290 Cal: 82900222114D5
Factor 1:1600.000 Factor 2:20.000 Sample size: 1.000 L

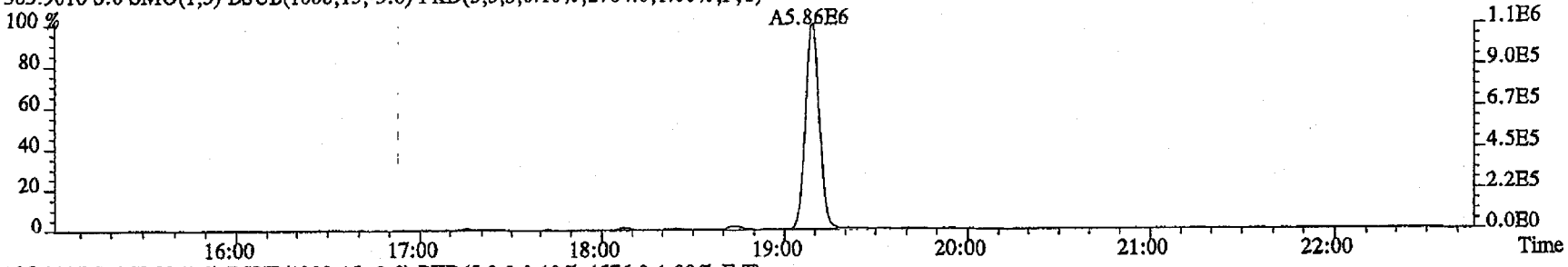
AS 05-23-11

Name	Resp	RA		RT	RRF	Conc	EDL	Rec	M
13C-1,2,3,4-TCDD	148975200	0.77	y	19:43	-	78.248	-	-	n
13C-2,3,7,8-TCDF	149209400	0.79	y	19:08	1.10	1813.289	1.735	90.7	n
2,3,7,8-TCDF	13393170	0.78	y	19:10	0.78	230.905	1.972	-	n
Total TCDF	13848768	0.53	n	17:16	0.78	~~238.760~~	~~1.972~~	-	n
13C-2,3,7,8-TCDD	111935400	0.76	y	19:56	0.97	1551.188	4.253	77.6	n
2,3,7,8-TCDD	10814440	0.75	y	19:58	0.87	222.719	1.415	-	n
Total TCDD	10910157	0.74	y	18:43	0.87	~~224.690~~	~~1.415~~	-	n
37Cl-2,3,7,8-TCDD	79753200	1.00	y	19:58	1.43	750.934	0.493	93.9	n
13C-1,2,3,7,8-PeCDF	120701600	1.56	y	24:55	1.04	1559.551	1.752	78.0	n
1,2,3,7,8-PeCDF	59859100	1.54	y	24:57	0.96	1034.265	2.339	-	n
2,3,4,7,8-PeCDF	57430000	1.54	y	26:29	0.94	1014.241	2.391	-	n
Total F2 PeCDF	119809191	1.35	y	23:22	0.95	~~2092.525~~	~~2.365~~	-	n
Total F1 PeCDF	59643	0.25	n	16:30	0.95	~~1.043~~	~~2.152~~	-	n
13C-1,2,3,7,8-PeCDD	91424000	1.60	y	27:16	0.70	1754.492	1.940	87.7	n
1,2,3,7,8-PeCDD	44932500	1.47	y	27:18	1.04	943.438	1.988	-	
Total PeCDD	45121453	2.86	n	24:55	1.04	~~947.406~~	~~1.988~~	-	n
13C-1,2,3,7,8,9-HxCDD	102646800	1.25	y	33:15	-	75.738	-	-	n
13C-1,2,3,4,7,8-HxCDF	78579900	0.50	y	32:07	0.87	1758.580	3.914	87.9	n
1,2,3,4,7,8-HxCDF	44005100	1.19	y	32:08	1.15	975.125	3.009	-	n
1,2,3,6,7,8-HxCDF	48128500	1.22	y	32:15	~~1.46~~ 1.18	~~838.468~~ (1037.427)	2.366	-	n
2,3,4,6,7,8-HxCDF	45927300	1.21	y	32:47	1.30	896.078	2.649	-	n
1,2,3,7,8,9-HxCDF	40439900	1.20	y	33:26	1.12	916.502	3.077	-	n
Total HxCDF	178798023	0.74	n	30:51	1.26	~~3632.180~~	~~2.744~~	-	n
13C-1,2,3,6,7,8-HxCDD	72766200	1.30	y	32:59	0.95	1492.843	1.276	74.6	n
1,2,3,4,7,8-HxCDD	33593200	1.23	y	32:55	~~0.74~~ 0.84	~~1239.414~~ (1091.865)	0.902	-	n
1,2,3,6,7,8-HxCDD	38219300	1.27	y	33:00	1.05	1004.071	0.642	-	n
1,2,3,7,8,9-HxCDD	39435600	1.25	y	33:16	1.02	1061.804	0.658	-	n
Total HxCDD	111573267	2.14	n	32:09	0.94	~~3314.823~~	~~0.717~~	-	n
13C-1,2,3,4,6,7,8-HpCDF	67756000	0.42	y	34:45	0.91	1444.583	3.877	72.2	n
1,2,3,4,6,7,8-HpCDF	47841900	1.02	y	34:45	1.32	1066.290	3.089	-	n
1,2,3,4,7,8,9-HpCDF	41333300	1.04	y	35:53	1.13	1079.730	3.621	-	n
Total HpCDF	91153502	1.02	y	34:45	1.23	~~2193.605~~	~~3.334~~	-	n
13C-1,2,3,4,6,7,8-HpCDD	69242800	1.04	y	35:33	0.91	1476.377	3.356	73.8	n
1,2,3,4,6,7,8-HpCDD	35987200	1.01	y	35:34	1.01	1025.523	2.997	-	n
Total HpCDD	36976680	1.06	y	35:00	1.01	~~1053.721~~	~~2.997~~	-	n
13C-OCDD	96075800	0.87	y	38:03	0.60	3111.009	4.916	77.8	
OCDF	60601600	0.86	y	38:11	1.27	1983.391	3.533	-	
OCDD	52792500	0.90	y	38:04	1.13	1948.842	3.485	-	n

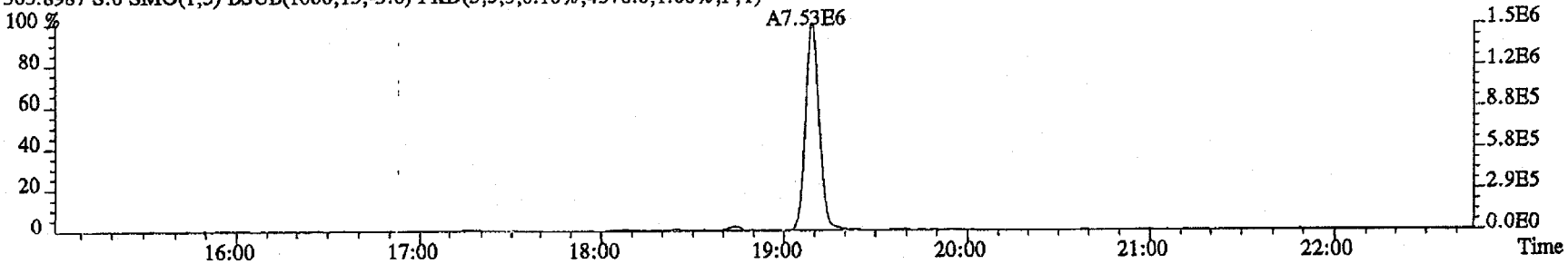
(W) 5/25/11

File:20MY11D4D5 #1-513 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

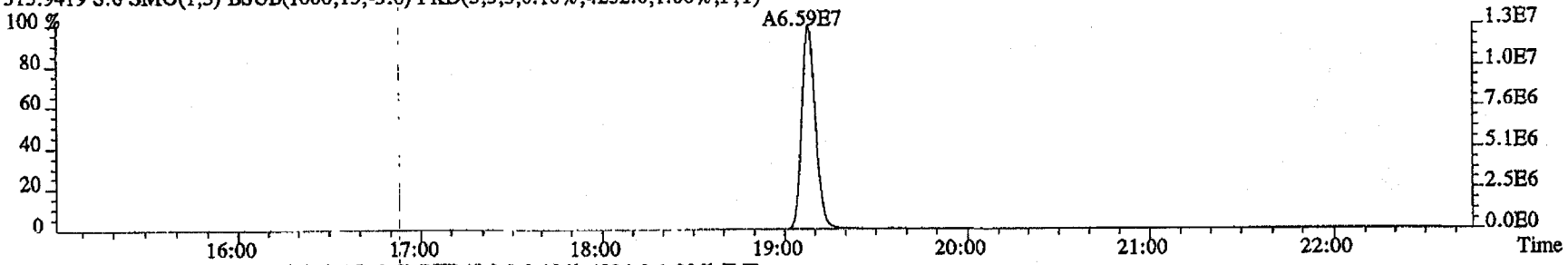
303.9016 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2784.0,1.00%,F,T)



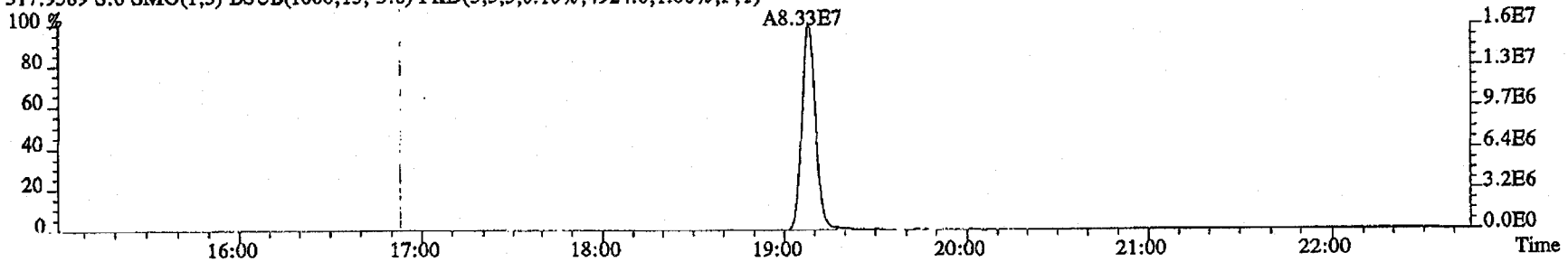
305.8987 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4576.0,1.00%,F,T)



315.9419 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4252.0,1.00%,F,T)

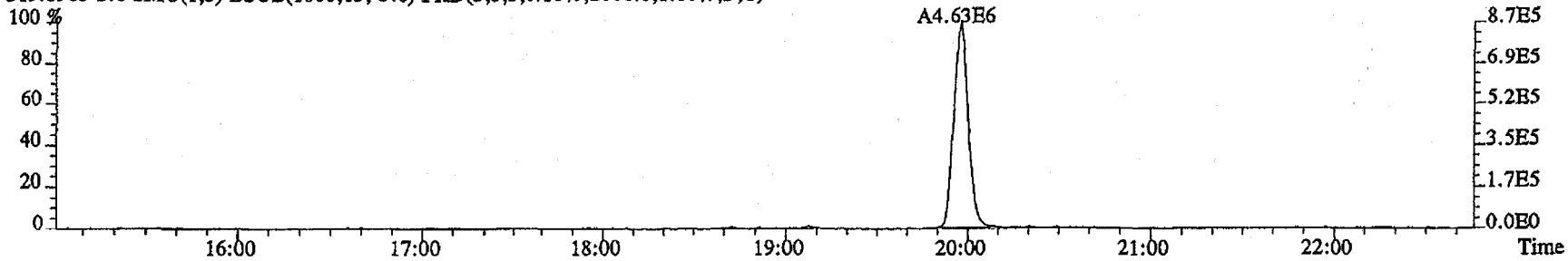


317.9389 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4924.0,1.00%,F,T)

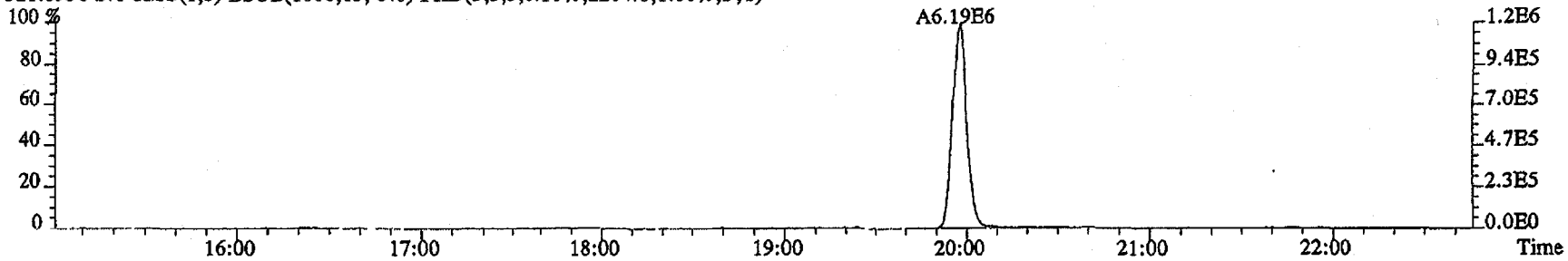


File:20MY11D4D5 #1-513 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

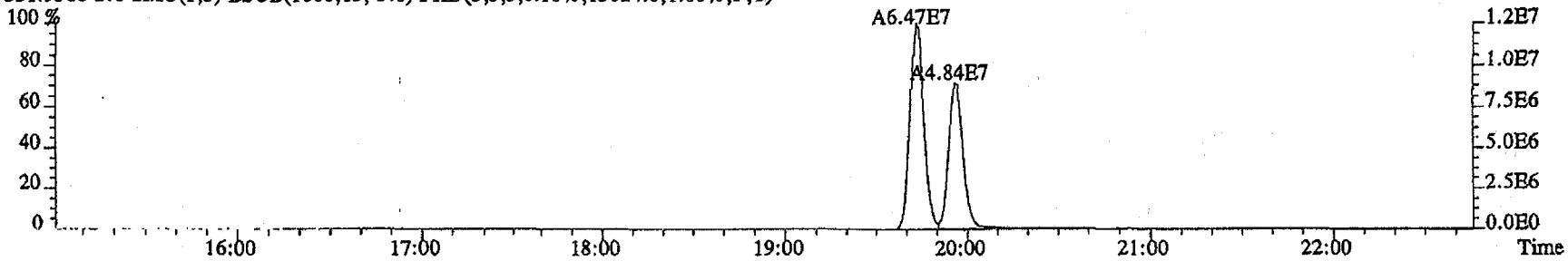
319.8965 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2000.0,1.00%,F,T)



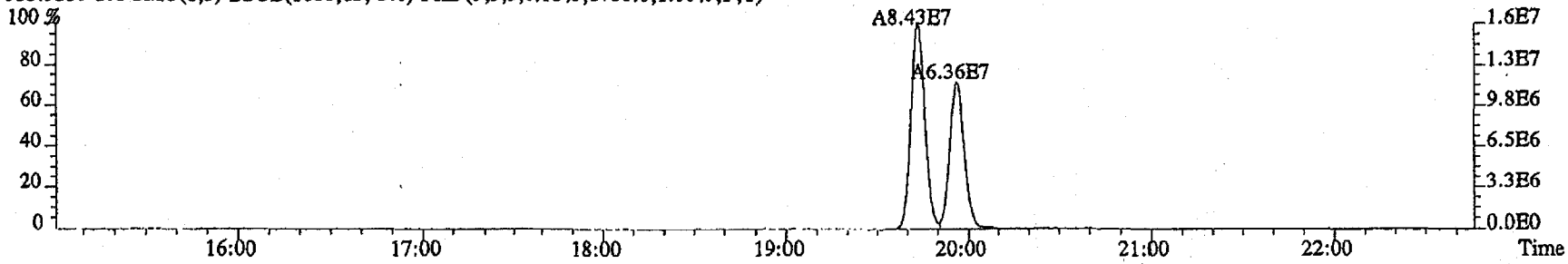
321.8936 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2204.0,1.00%,F,T)



331.9368 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,13024.0,1.00%,F,T)

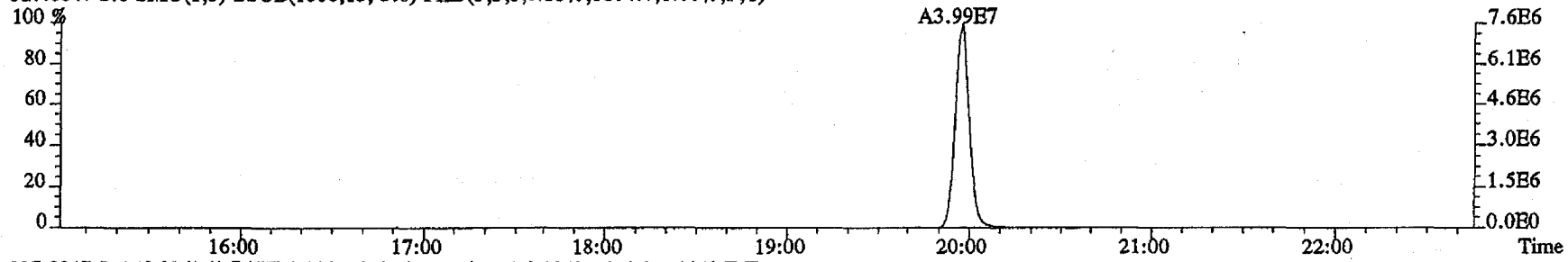


333.9339 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6700.0,1.00%,F,T)

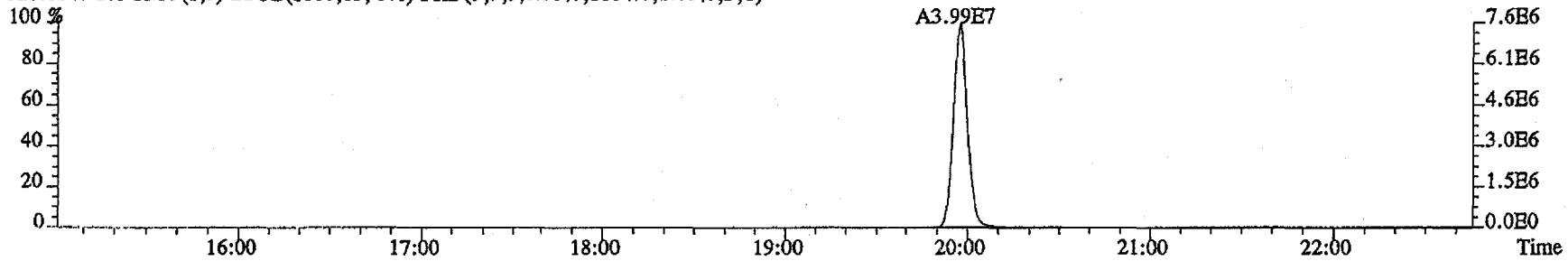


File:20MY11D4D5 #1-513 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

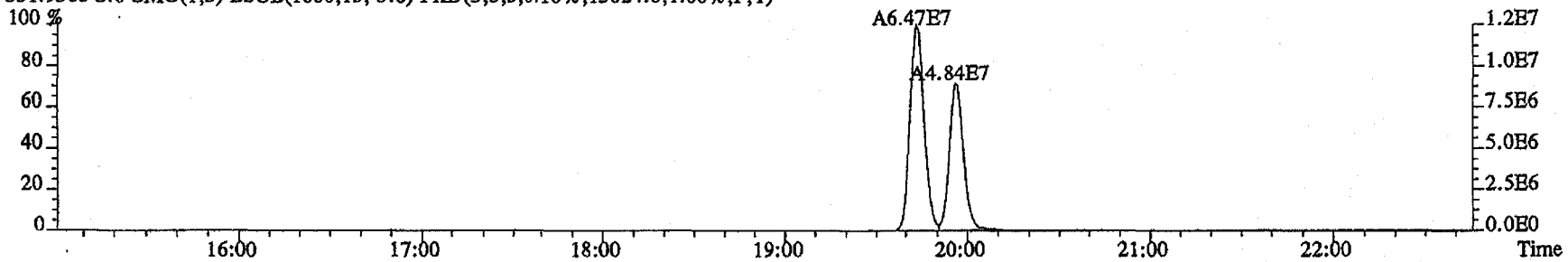
327.8847 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1684.0,1.00%,F,T)



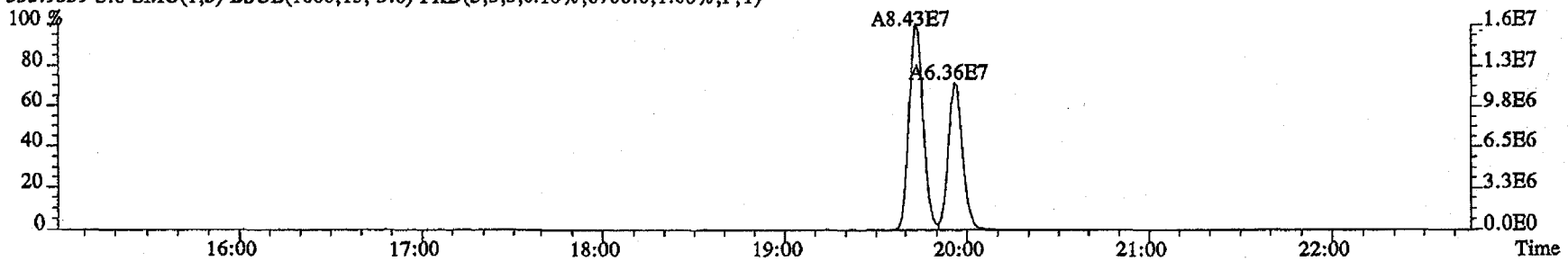
327.8847 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1684.0,1.00%,F,T)



331.9368 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,13024.0,1.00%,F,T)

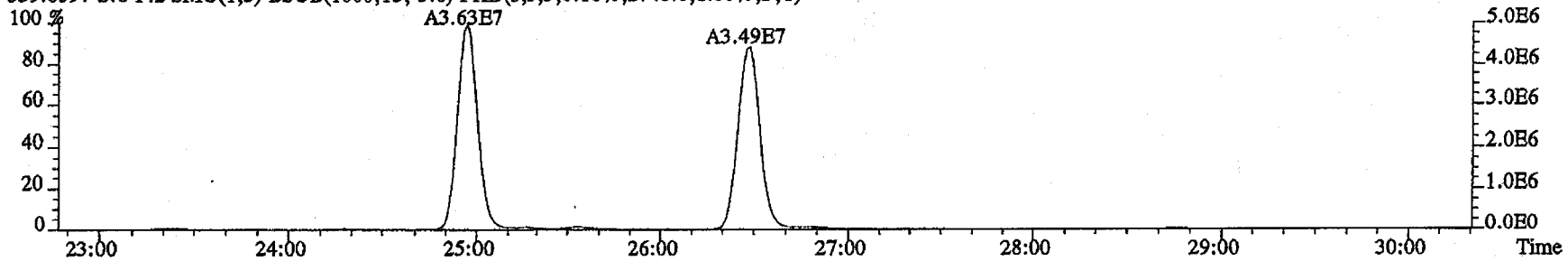


333.9339 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6700.0,1.00%,F,T)

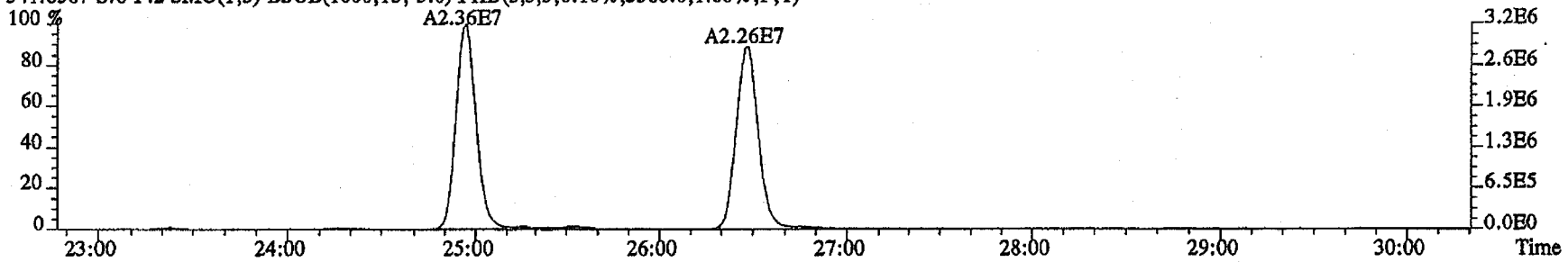


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

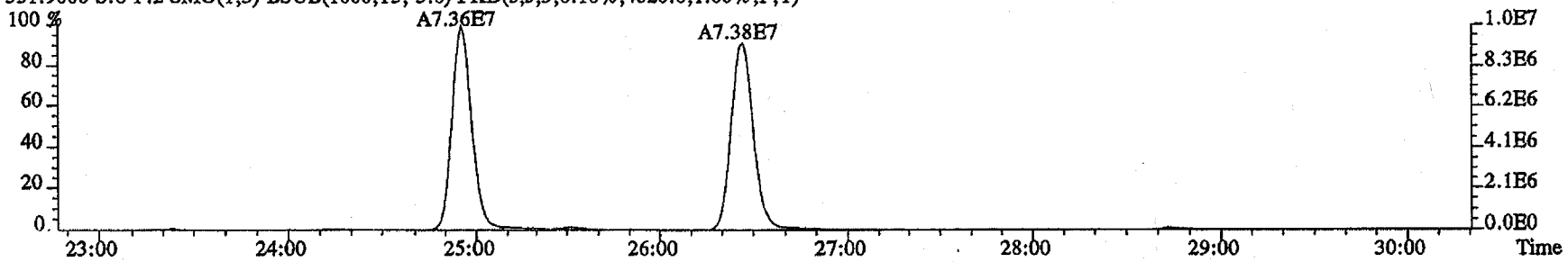
339.8597 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2748.0,1.00%,F,T)



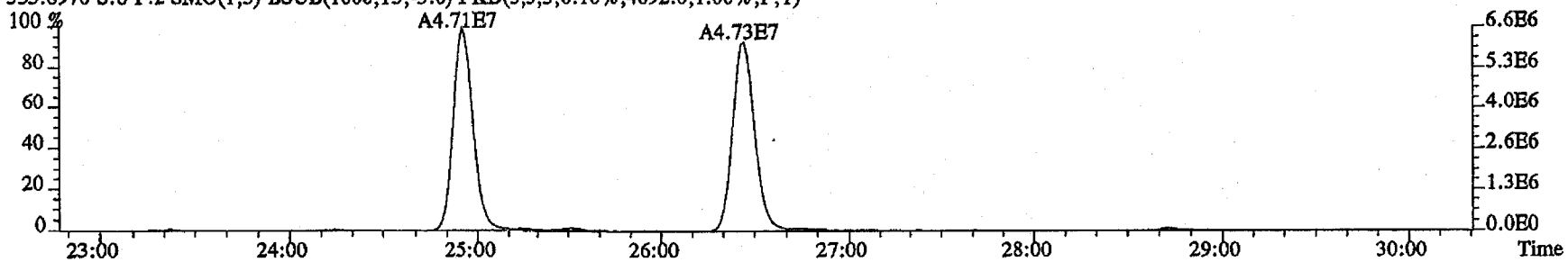
341.8567 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3568.0,1.00%,F,T)



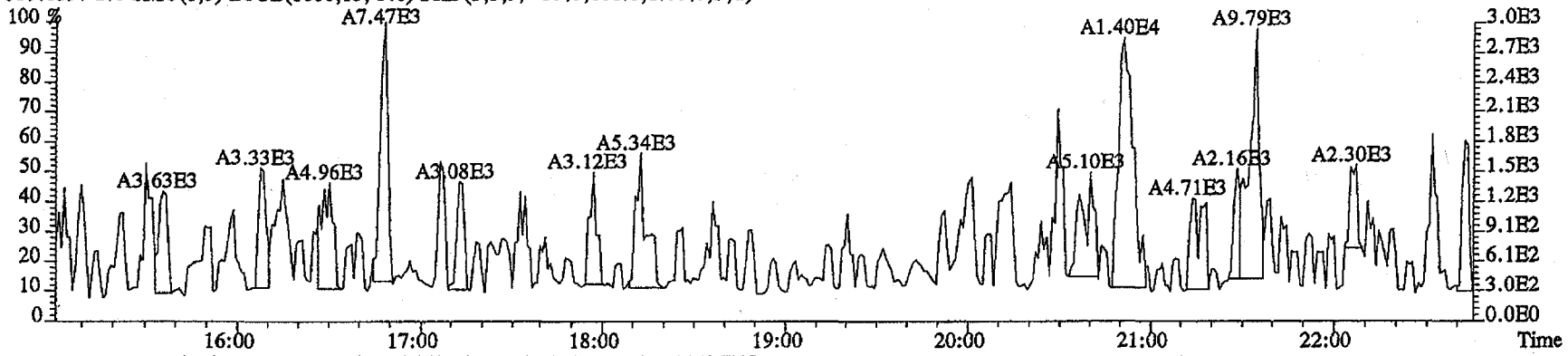
351.9000 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4020.0,1.00%,F,T)



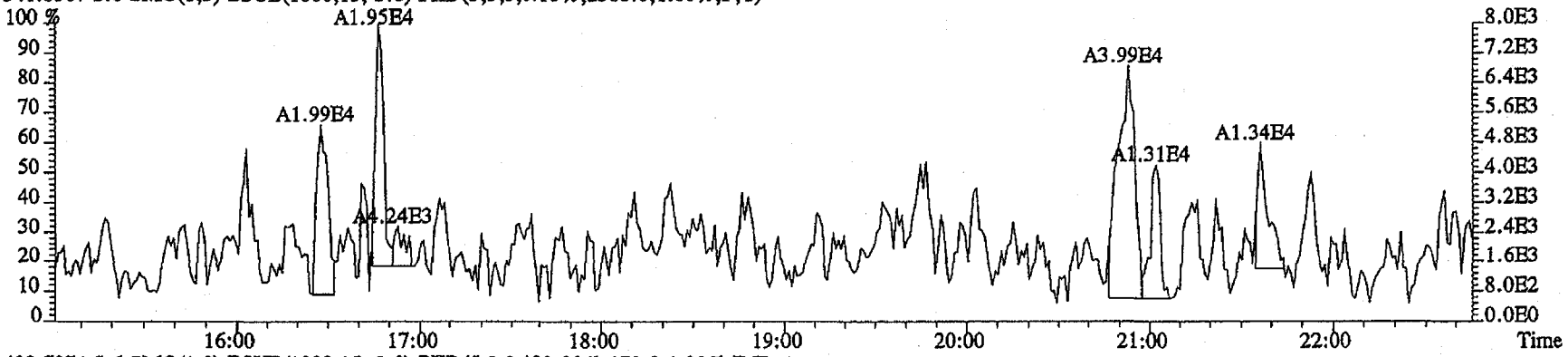
353.8970 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4692.0,1.00%,F,T)



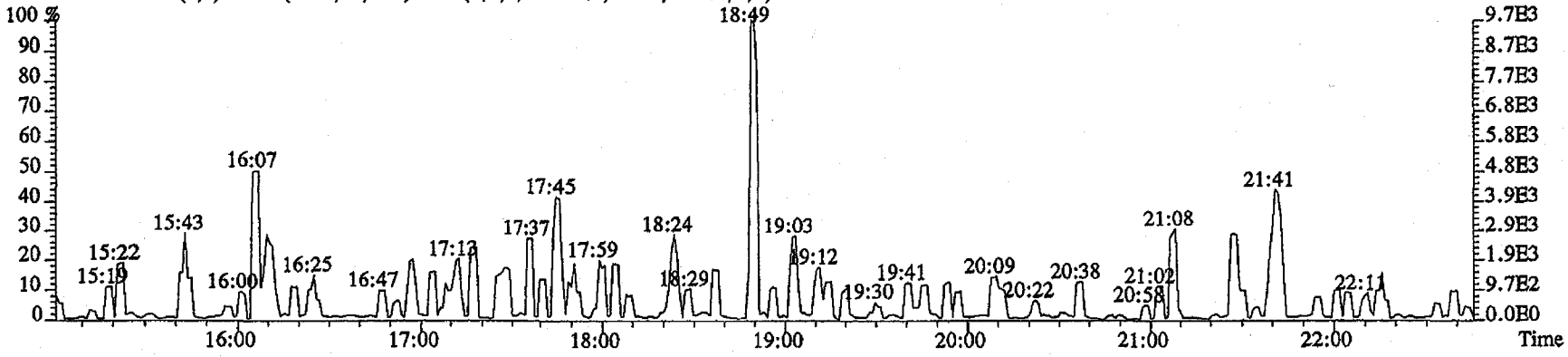
File:20MY11D4D5 #1-513 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES
339.8597 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,688.0,1.00%,F,T)



341.8567 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2388.0,1.00%,F,T)

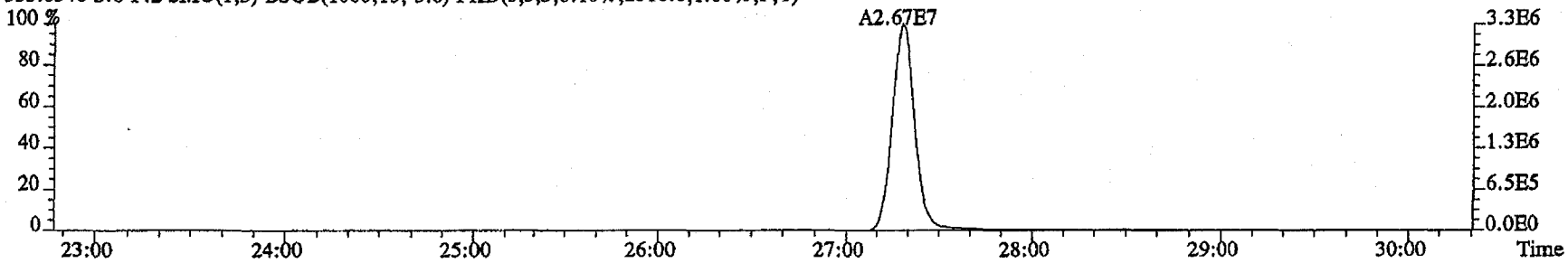


409.7974 S:6 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,172.0,1.00%,F,T)

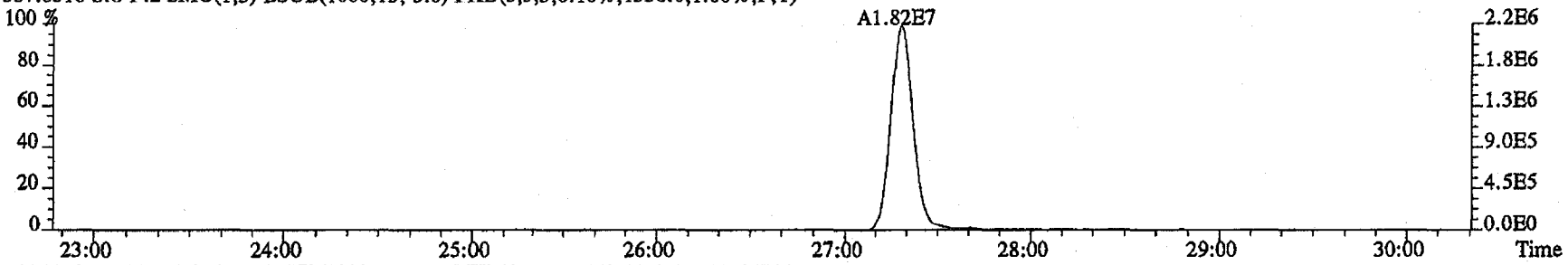


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

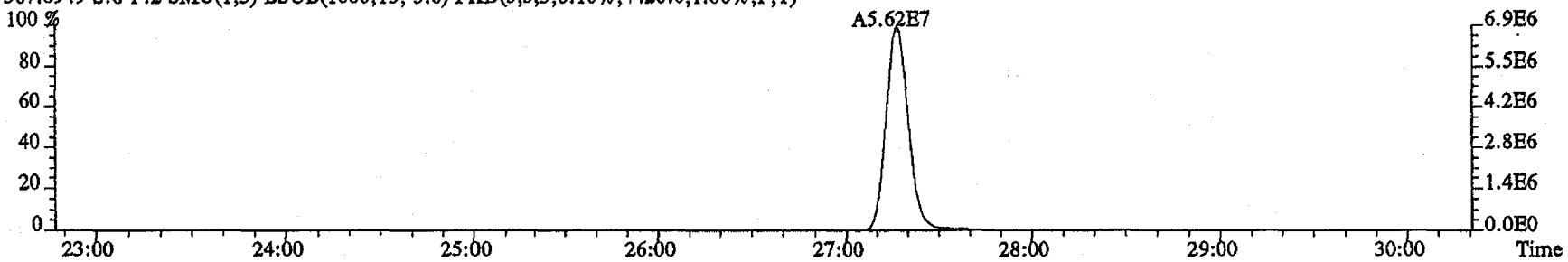
355.8546 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2516.0,1.00%,F,T)



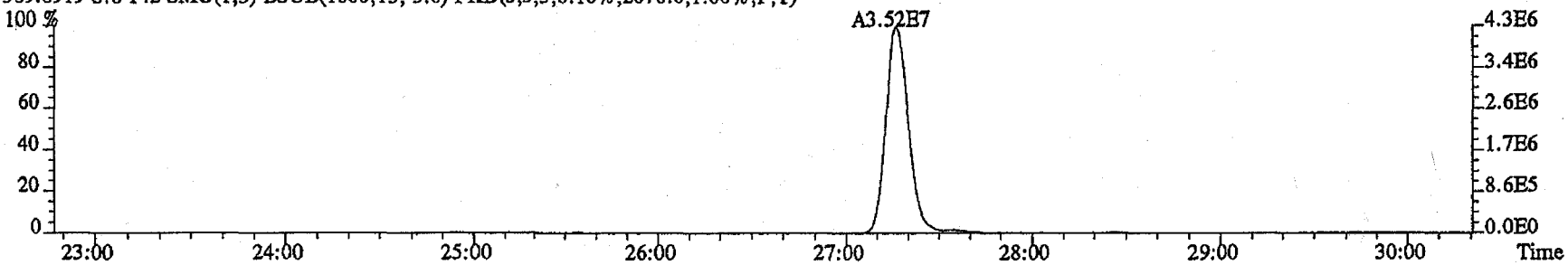
357.8516 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1356.0,1.00%,F,T)



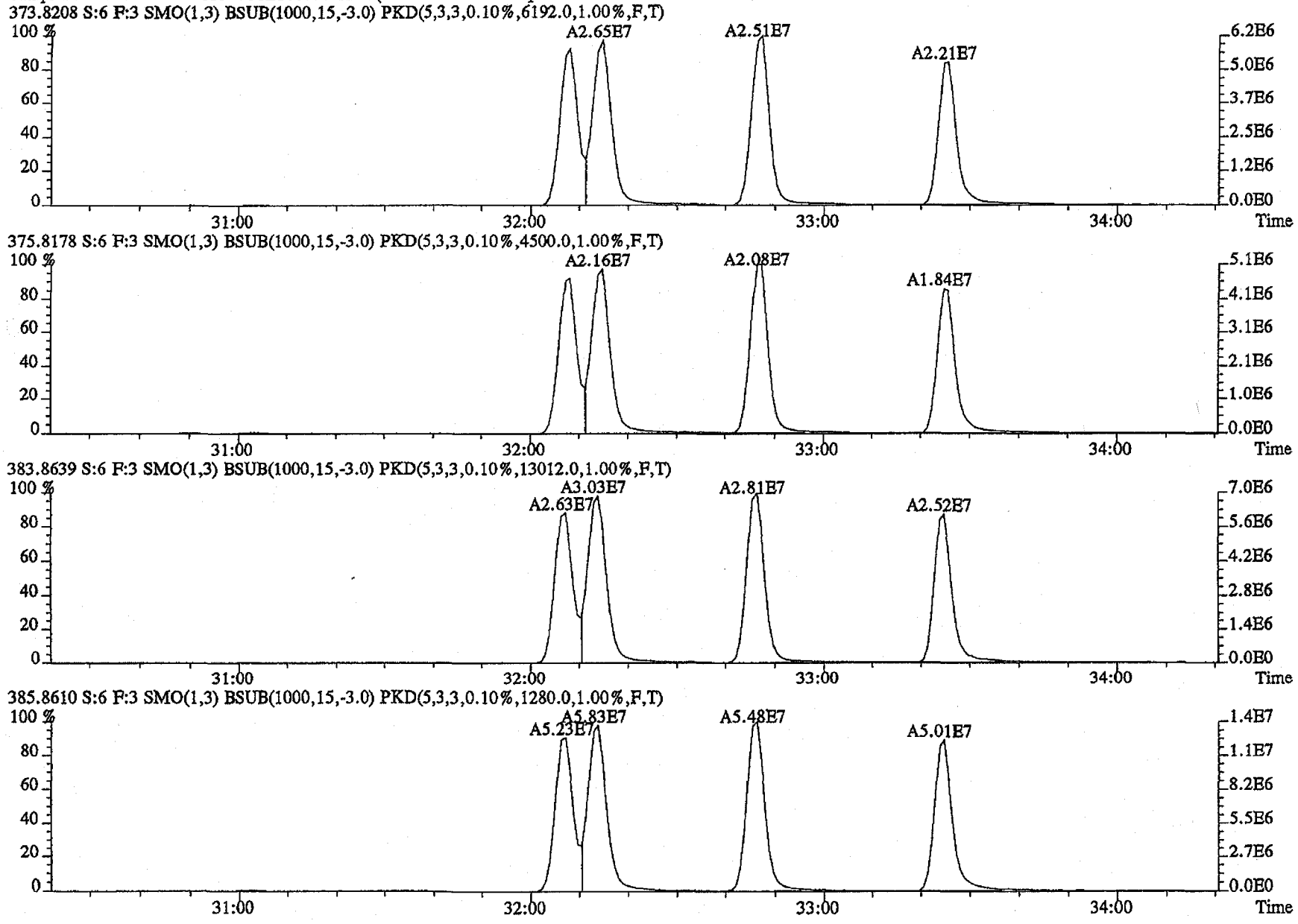
367.8949 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4420.0,1.00%,F,T)



369.8919 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2076.0,1.00%,F,T)

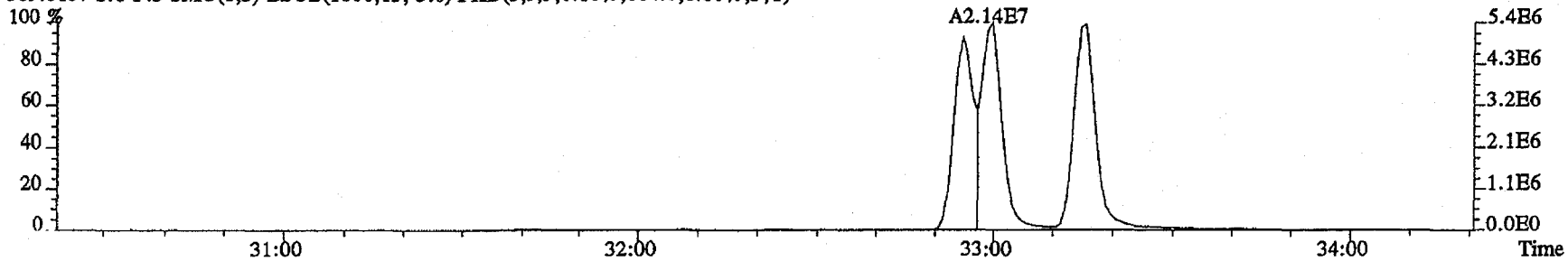


File:20MY11D4D5 #1-287 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

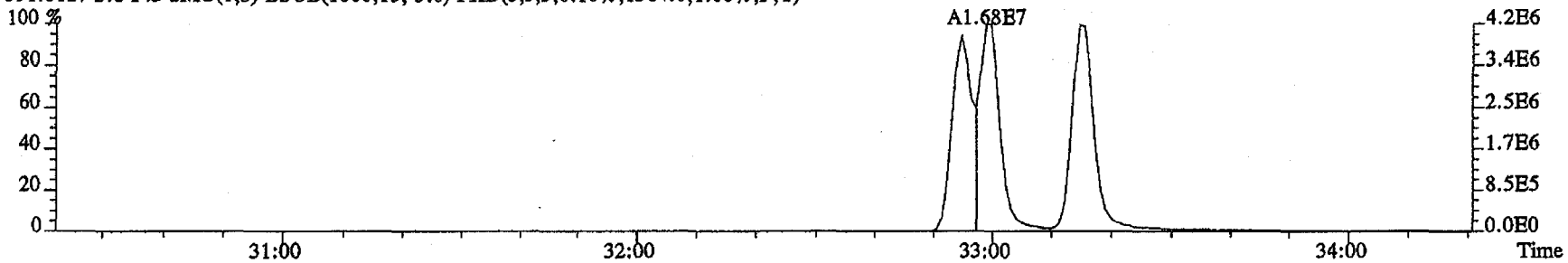


File:20MY11D4D5 #1-287 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

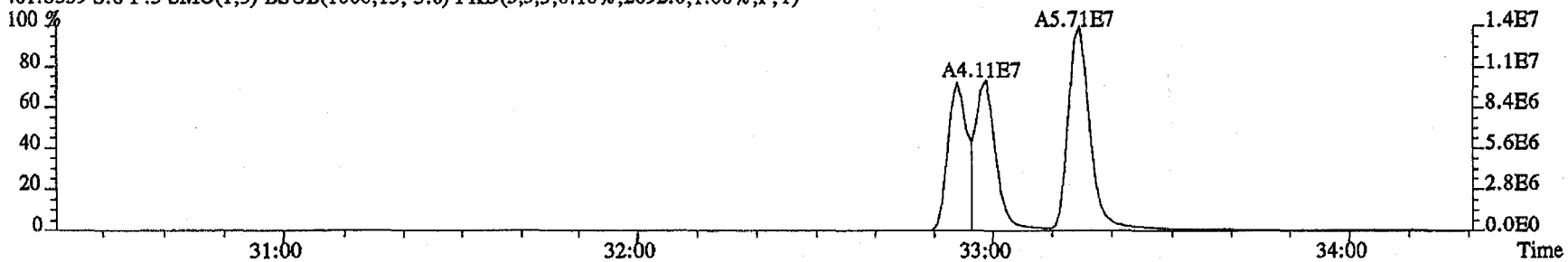
389.8157 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,664.0,1.00%,F,T)



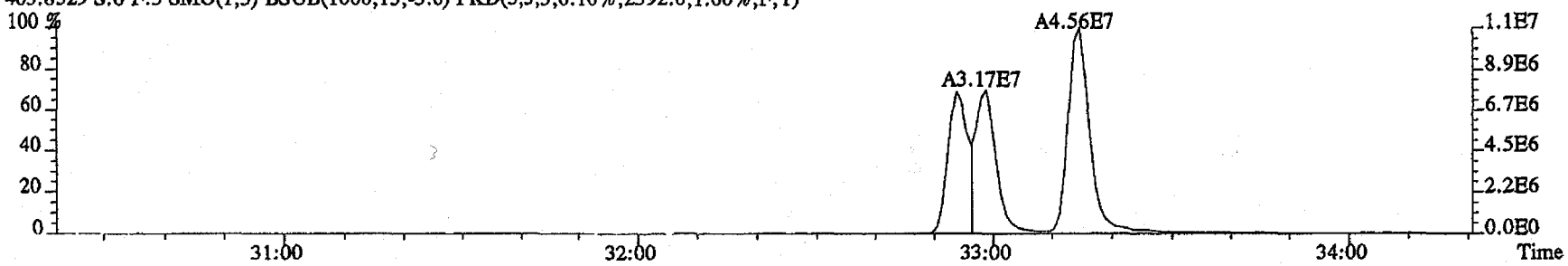
391.8127 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,1364.0,1.00%,F,T)



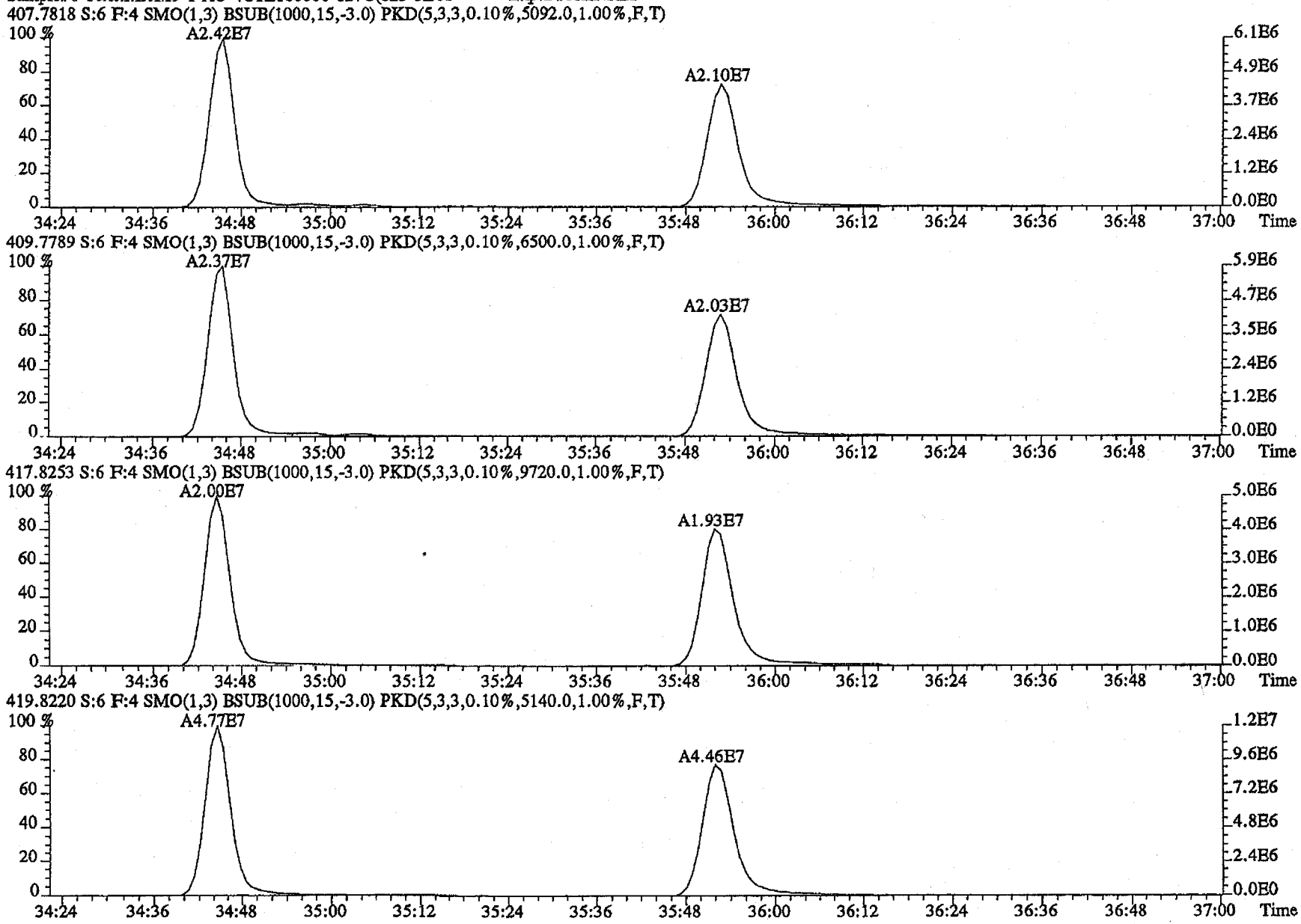
401.8559 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2692.0,1.00%,F,T)



403.8529 S:6 F:3 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2392.0,1.00%,F,T)

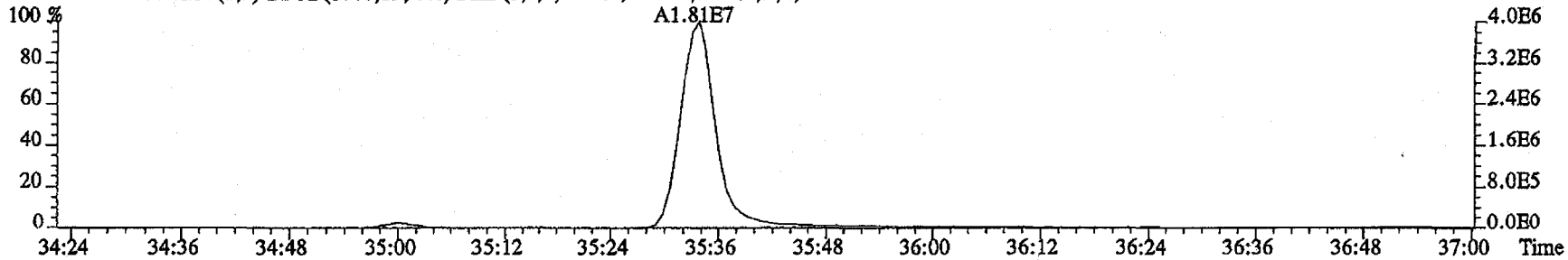


File:20MY11D4D5 #1-200 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

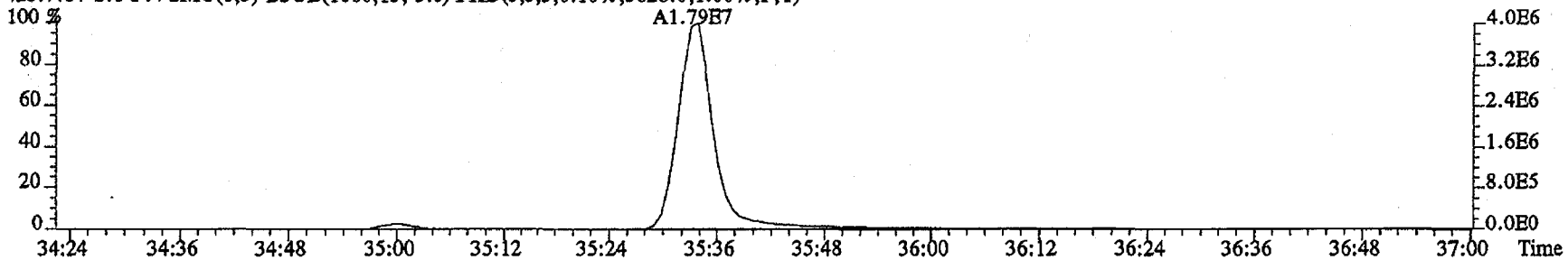


File:20MY11D4D5 #1-200 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

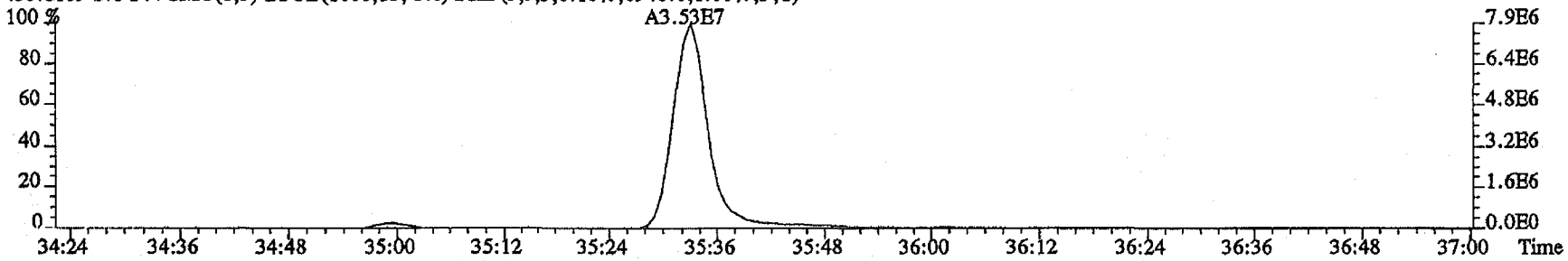
423.7766 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,4236.0,1.00%,F,T)



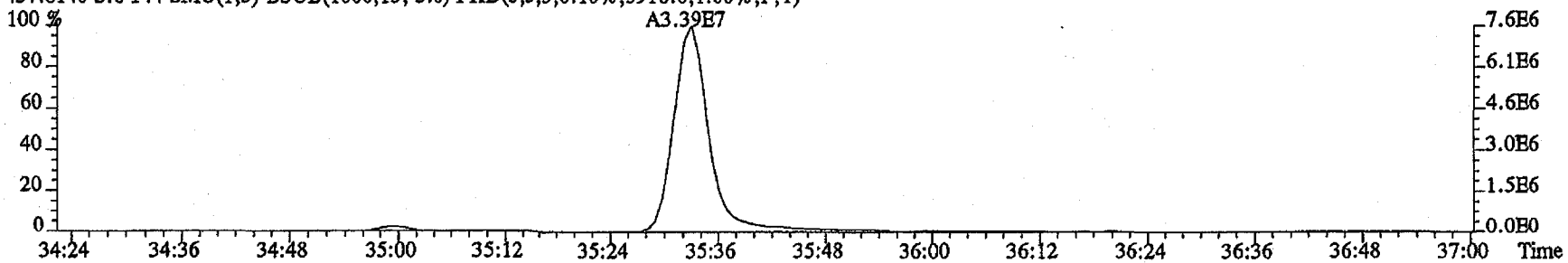
425.7737 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3628.0,1.00%,F,T)



435.8169 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6948.0,1.00%,F,T)

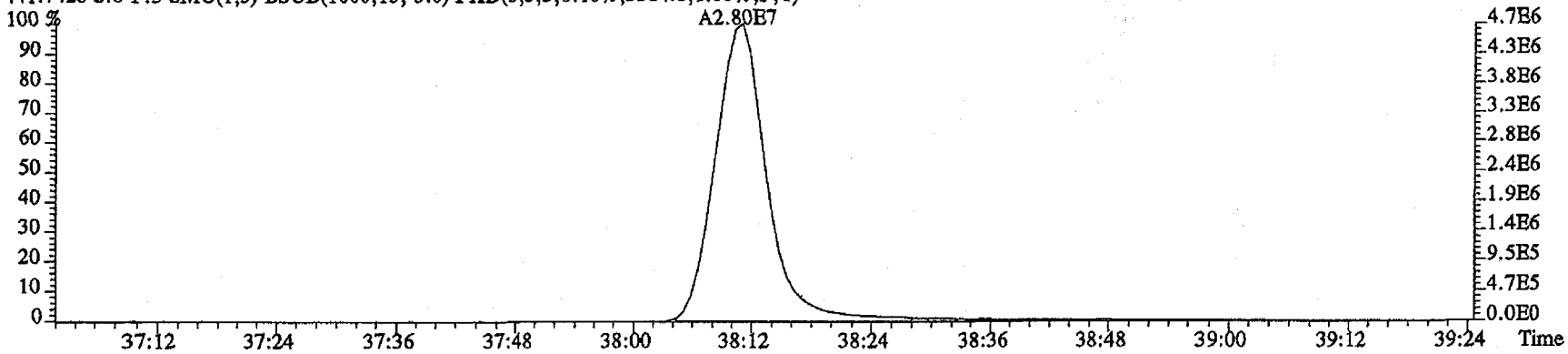


437.8140 S:6 F:4 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5916.0,1.00%,F,T)

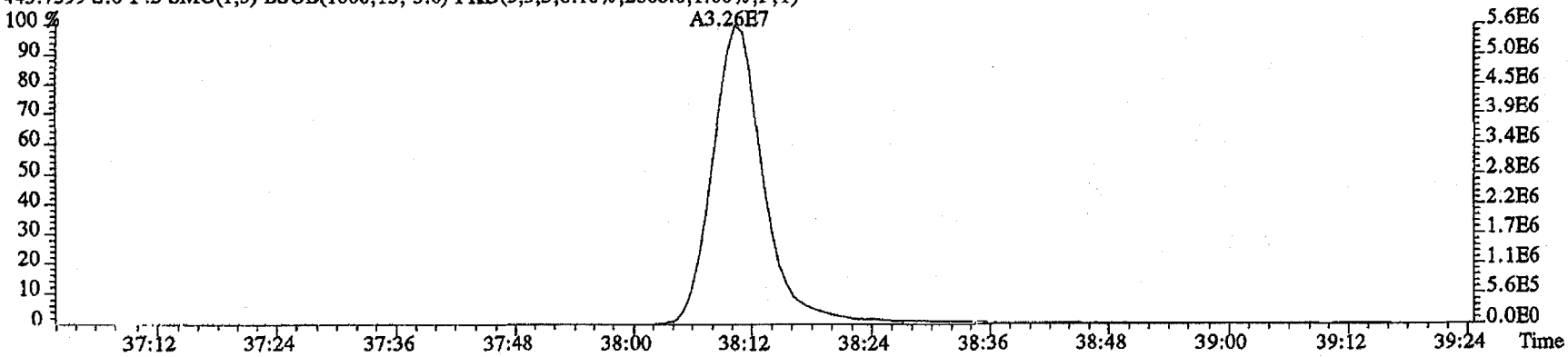


File:20MY11D4D5 #1-193 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MIJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

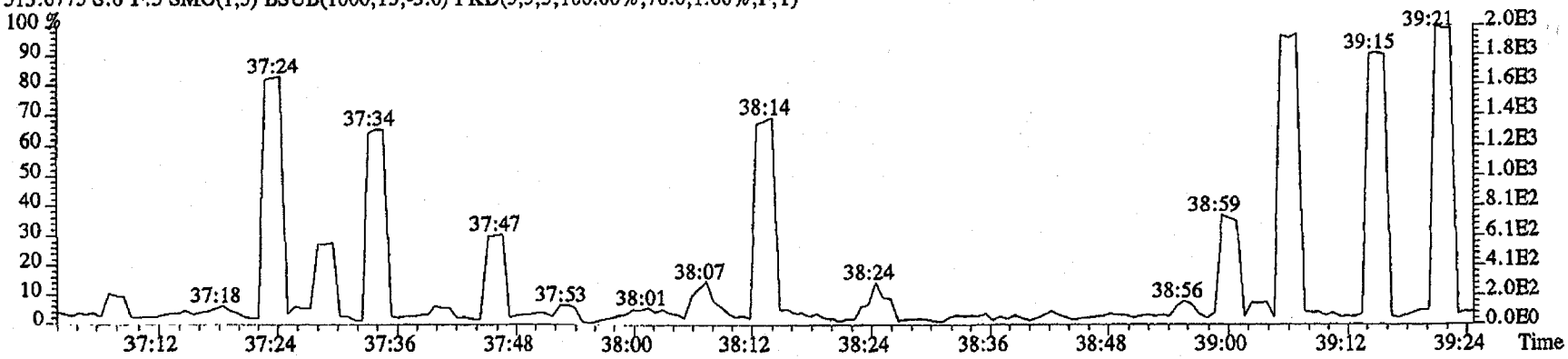
441.7428 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3384.0,1.00%,F,T)



443.7399 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2868.0,1.00%,F,T)

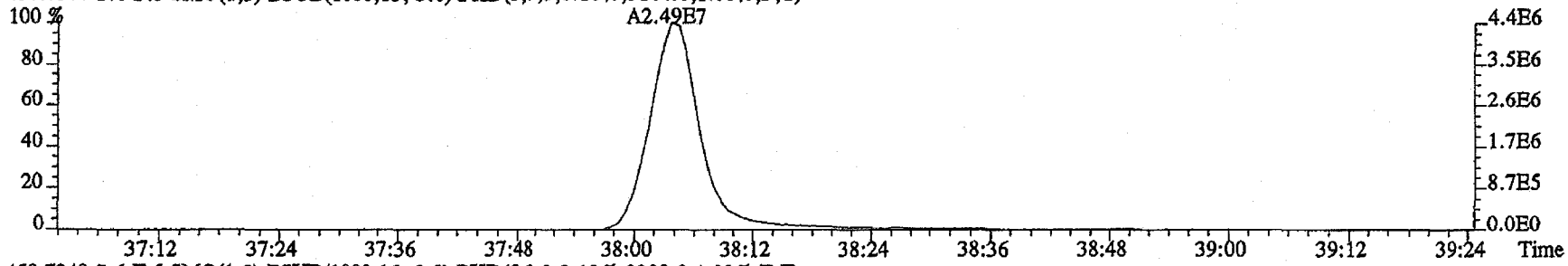


513.6775 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,5,100.00%,76.0,1.00%,F,T)

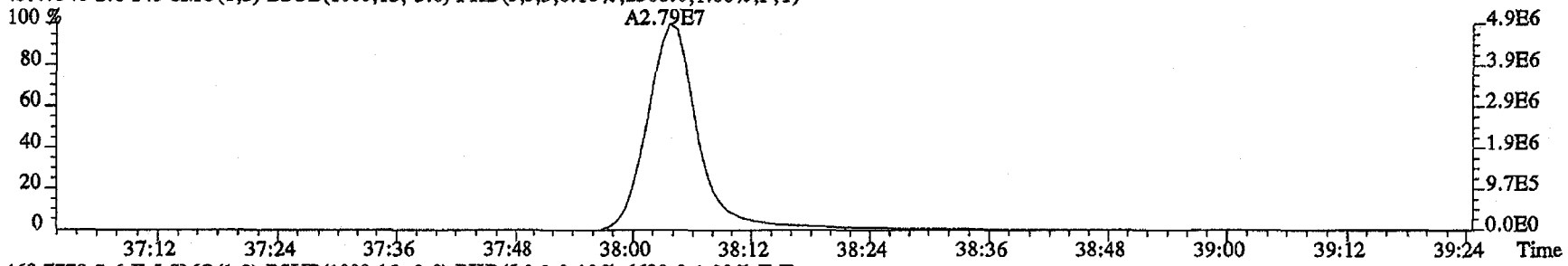


File:20MY11D4D5 #1-193 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MIJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

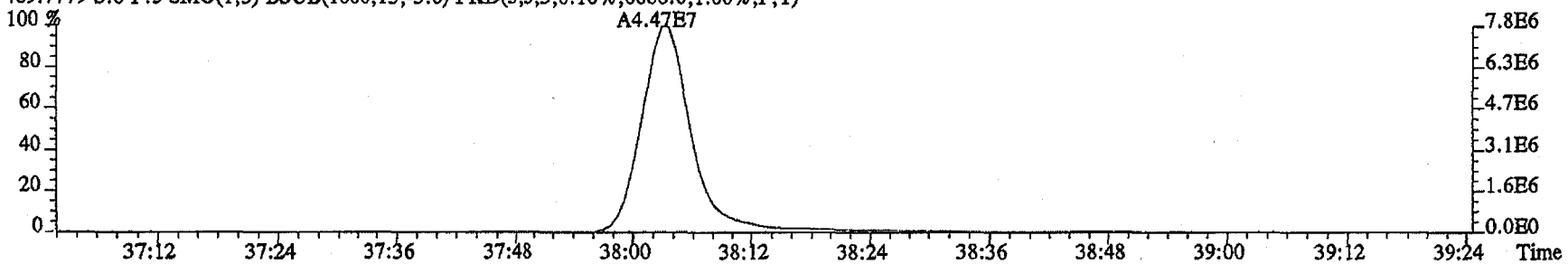
457.7377 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3164.0,1.00%,F,T)



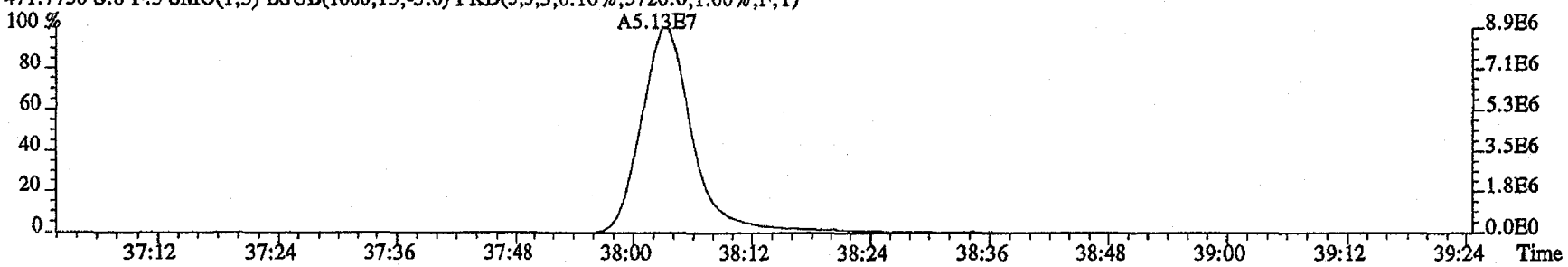
459.7348 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2308.0,1.00%,F,T)



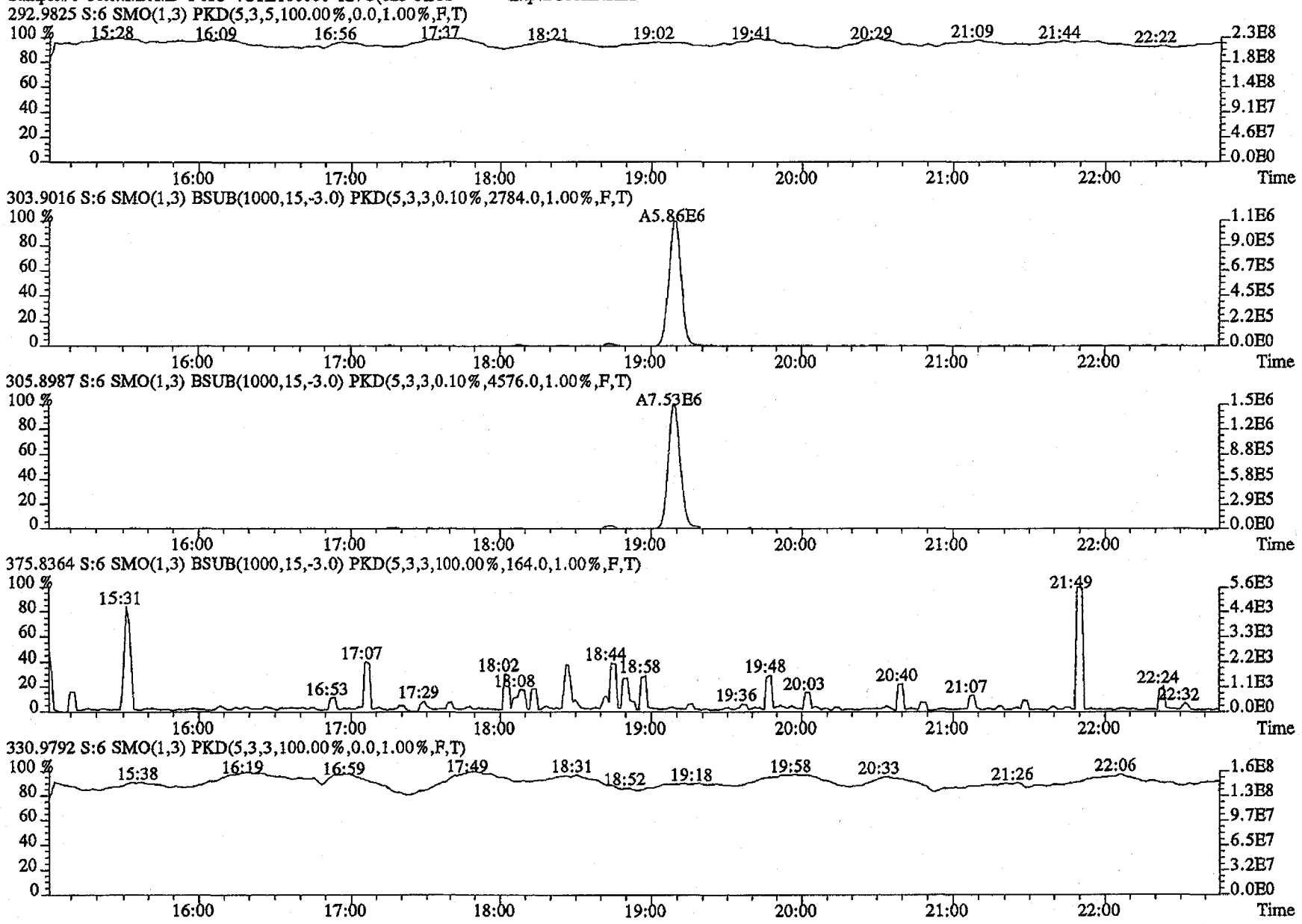
469.7779 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,6688.0,1.00%,F,T)



471.7750 S:6 F:5 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,5720.0,1.00%,F,T)

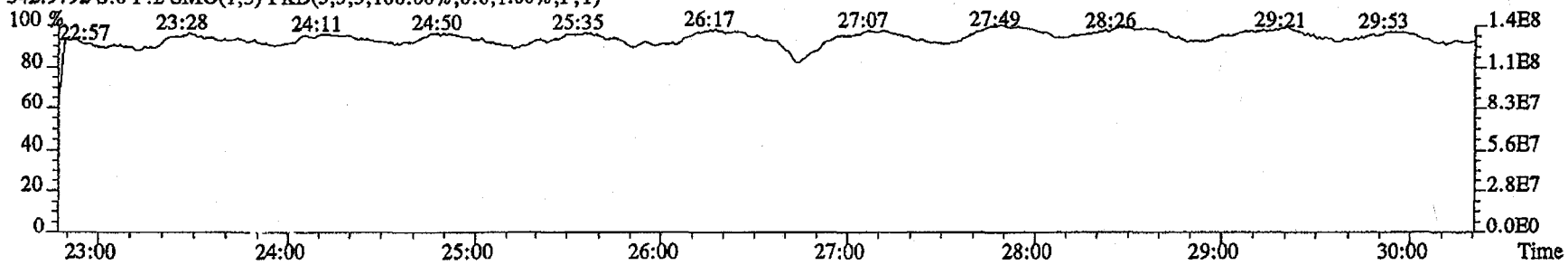


File:20MY11D4D5 #1-513 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

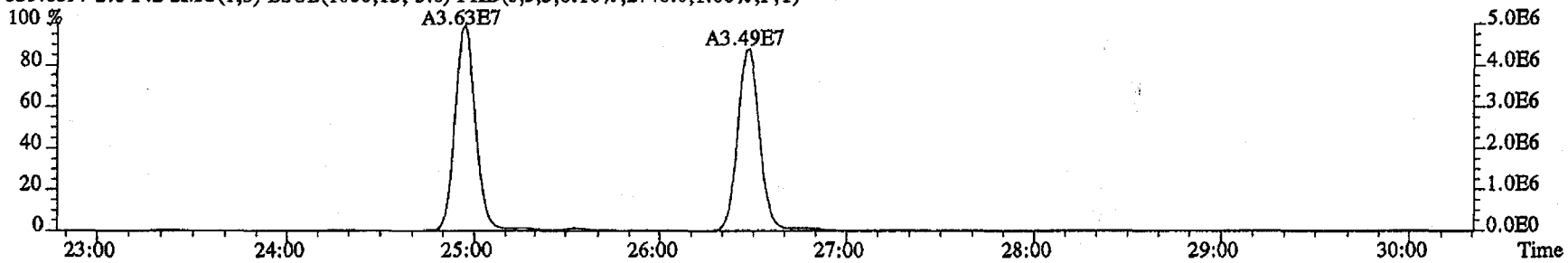


File:20MY11D4D5 #1-486 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES

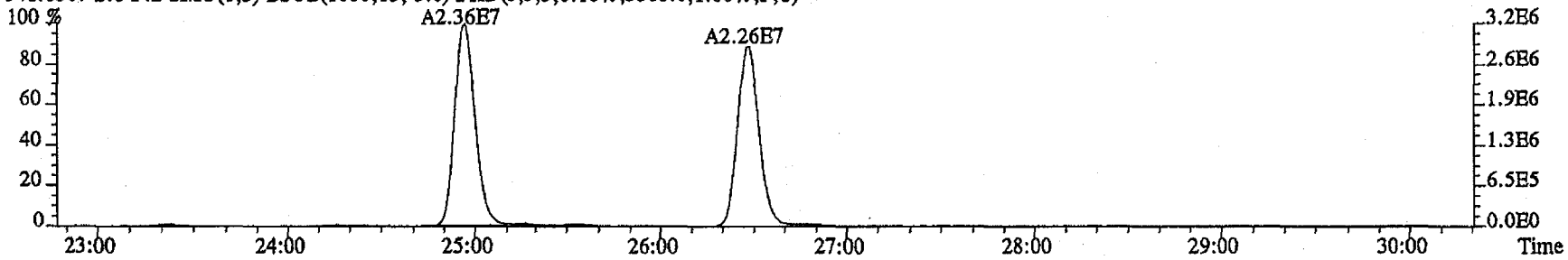
342.9792 S:6 F:2 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



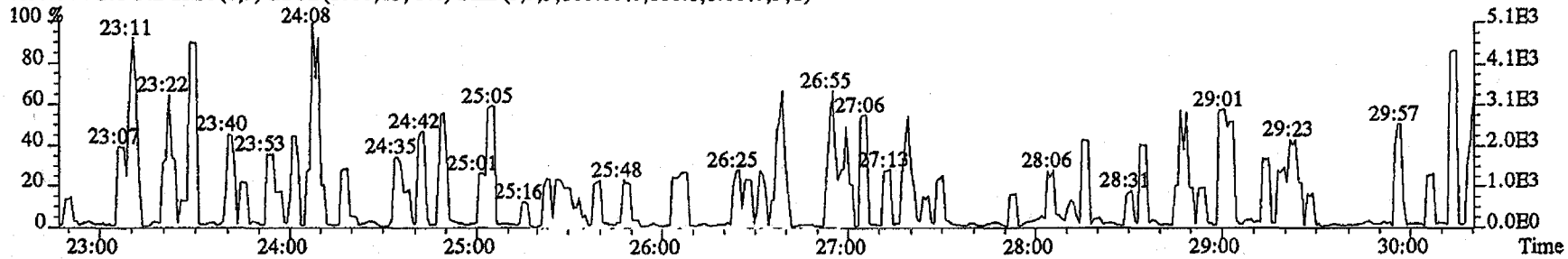
339.8597 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,2748.0,1.00%,F,T)



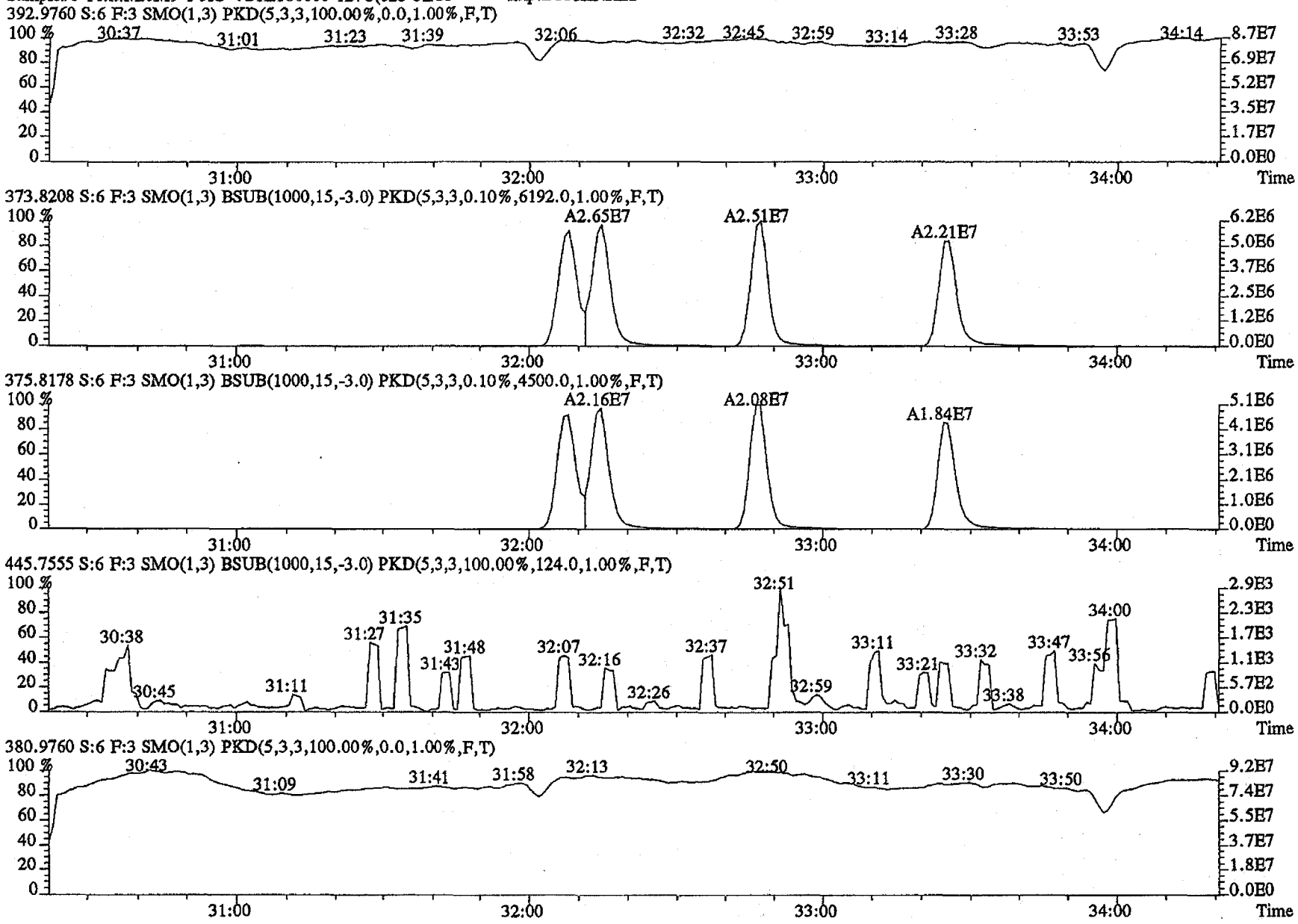
341.8567 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,0.10%,3568.0,1.00%,F,T)



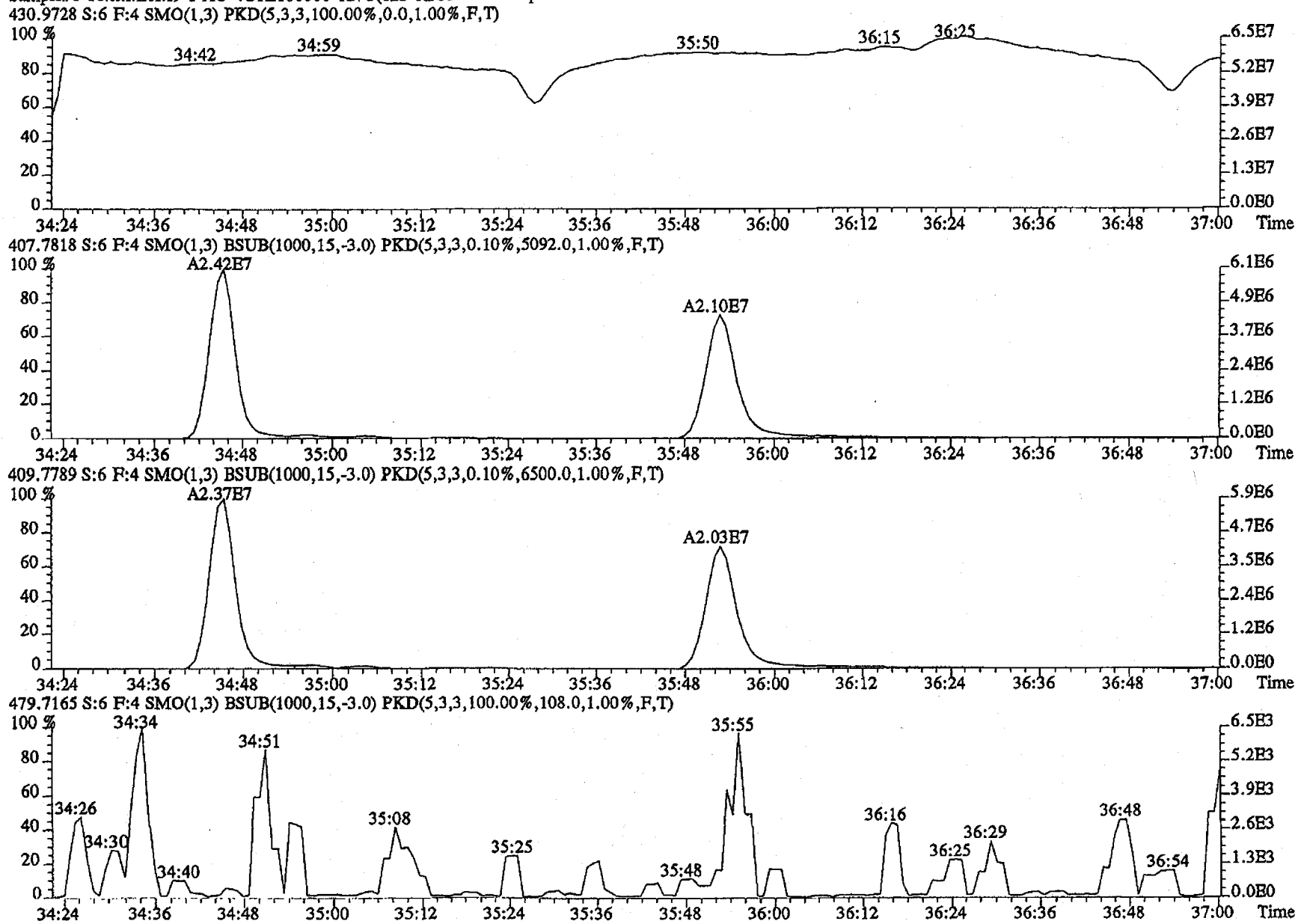
409.7974 S:6 F:2 SMO(1,3) BSUB(1000,15,-3.0) PKD(5,3,3,100.00%,116.0,1.00%,F,T)



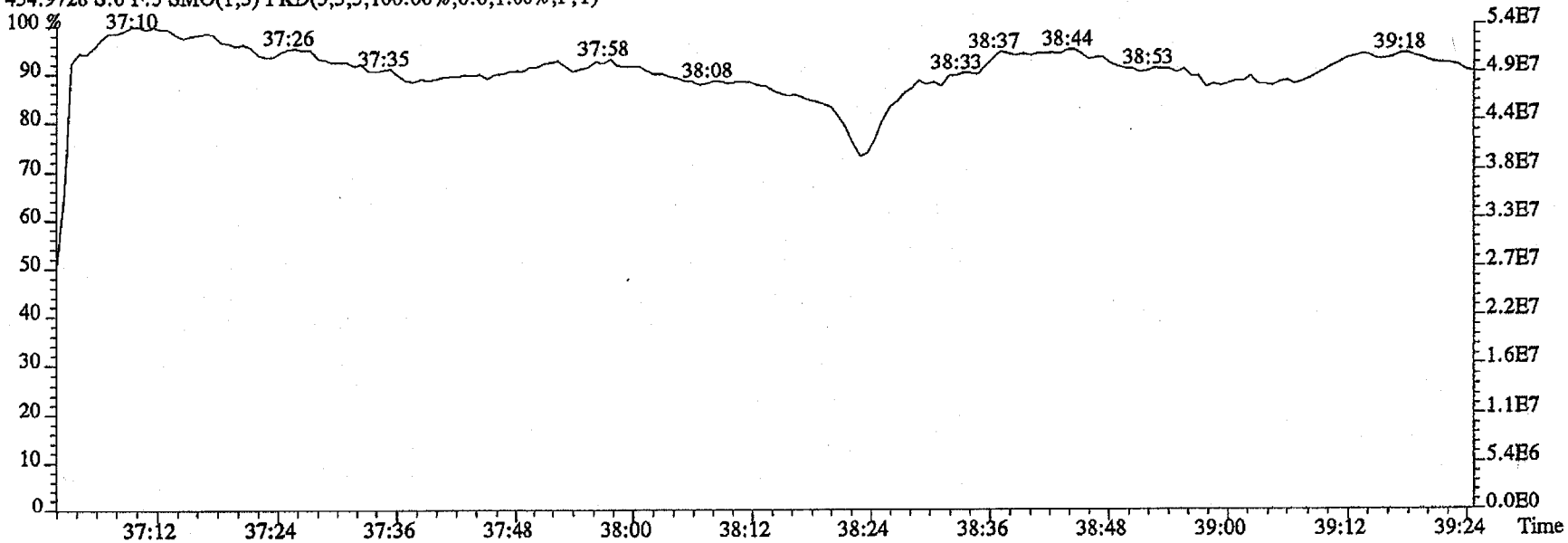
File:20MY11D4D5 #1-287 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES



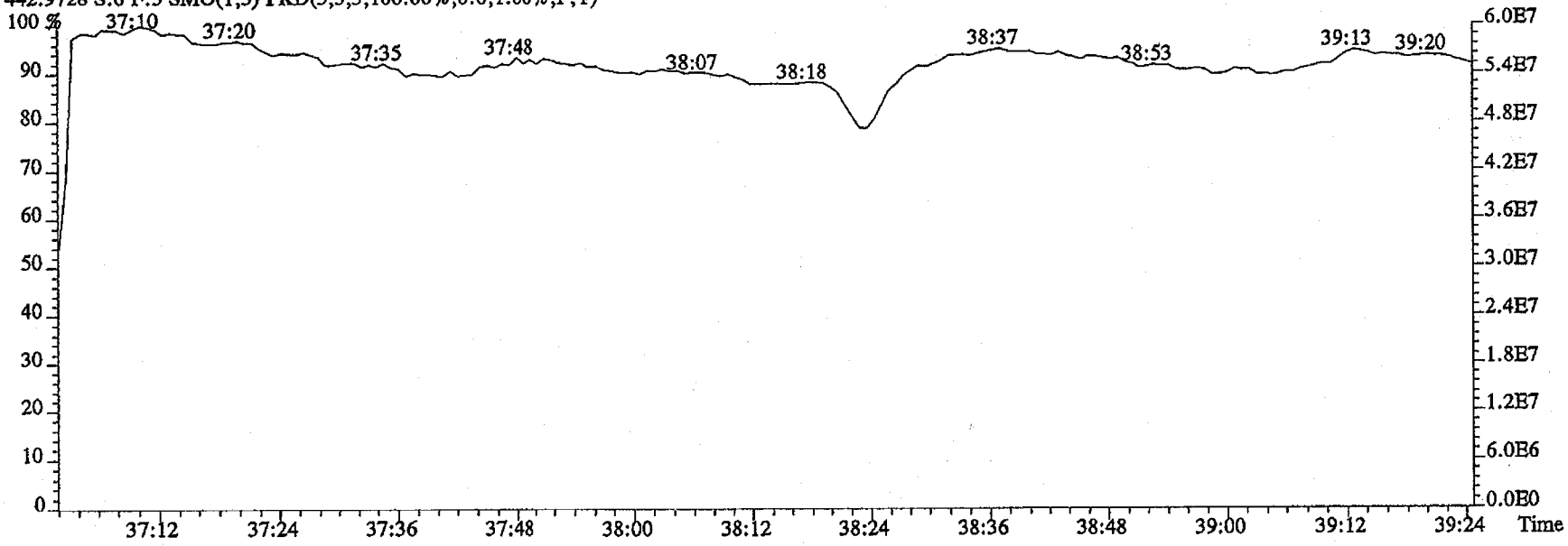
File:20MY11D4D5 #1-200 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC :G1E180000-127C(623-5LCS Exp:DIOXINRES



File:20MY11D4D5 #1-193 Acq:20-MAY-2011 22:49:34 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 Text:MJJM9-1-AC ;G1E180000-127C(623-5LCS Exp:DIOXINRES
454.9728 S:6 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



442.9728 S:6 F:5 SMO(1,3) PKD(5,3,3,100.00%,0.0,1.00%,F,T)



Run Log

Data file	Smp	Work Order	Sample ID	FV-uL	Method/Matrix	Box	Size	U
22FE11A4D5	1	CP0222	DB-5 CPSM 3732-08 AS				1.00000	
22FE11A4D5	2	ST0222	CS-0.2 11DXN025 AS				1.00000	
22FE11A4D5	3	ST0222A	CS-1 10DXN503 AS				1.00000	
22FE11A4D5	4	ST0222B	CS-2 10DXN504 AS				1.00000	
22FE11A4D5	5	ST0222C	CS-3 10DXN505 AS				1.00000	
22FE11A4D5	6	ST0222D	CS-4 10DXN506 AS				1.00000	
22FE11A4D5	7	ST0222E	CS-5 10DXN507 AS				1.00000	
22FE11A4D5	8	SB0222	Solvent Blank C-14 AS				1.00000	
22FE11A4D5	9	ST0222F	2nd Source 10DXN511 AS				1.00000	
22FE11A4D5	10						1.00000	
22FE11A4D5	11						1.00000	
22FE11A4D5	12						1.00000	
22FE11A4D5	13		AS 02/22/11				1.00000	

log file reviewed
2-22-11 am

Data file	Smp	Work Order	Sample ID	FV-uL	Method/Matrix	Box	Size	U
20MY11D4D5	1	ST0520	CS3 11DXN109				1.00000	
20MY11D4D5	2	CP0520	DB-5 CPSM 3732-13				1.00000	
20MY11D4D5	3	MJHQA-1-AA	G1E170000-179B (572-MB)	20	8290/SOLID	79	10.00000	g
20MY11D4D5	4	MJHQA-1-AC	G1E170000-179C (572-LCS	20	8290/SOLID		10.00000	g
20MY11D4D5	5	MJJM9-1-AA	G1E180000-127B(623-5MB)	20	8290/WATER	78	1.00000	L
20MY11D4D5	6	MJJM9-1-AC	G1E180000-127C(623-5LCS	20	8290/WATER		1.00000	L
20MY11D4D5	7	MH7K7-1-AA	G1E100623-5 (syringe re'd)	20	8290/WATER		0.91293	L
20MY11D4D5	8	MJJRQ-1-AD	G1E180430-6	20	8290/SOLID	77	10.17000	g
20MY11D4D5	9	MJJRT-1-AD	G1E180430-7	20	8290/SOLID		10.15000	g
20MY11D4D5	10	MH65T-1-AT	C1E100572-11	20	8290/SOLID	79	10.26000	g
20MY11D4D5	11	MH65V-1-AT	C1E100572-12	20	8290/SOLID		10.42000	g
20MY11D4D5	12	MH65W-1-AT	C1E100572-13	20	8290/SOLID		10.99000	g
20MY11D4D5	13	MH65X-1-AT	C1E100572-14	20	8290/SOLID		10.01000	g
20MY11D4D5	14	SB0520	Solvent Blank C-14				1.00000	
20MY11D4D5	15	ST0520A	CS3 11DXN109				1.00000	
20MY11D4D5	16						1.00000	
20MY11D4D5	17						1.00000	
20MY11D4D5	18						1.00000	
20MY11D4D5	19						1.00000	
20MY11D4D5	20						1.00000	
20MY11D4D5	21		AM 05-20-11				1.00000	
20MY11D4D5	22						1.00000	

log file reviewed
AS
05-23-2011

Data file	Smp	Work Order	Sample ID	FV-uL	Method/Matrix	Box	Size	U
23MY114D5	1	CP0523	DB-5 CPSM 3732-13				1.00000	
23MY114D5	2	ST0523	CS3 11DXN109				1.00000	
23MY114D5	3	CP0523A	DB-5 CPSM 3732-13				1.00000	
23MY114D5	4	SB0523	Solvent Blank C-14				1.00000	
23MY114D5	5	MJCT7-1-AA	G1E100623-6	20	8290/WATER	78	0.05000	L
23MY114D5	6	MJCVH-1-AG	G1E100623-7	20	8290/WATER		0.05000	L
23MY114D5	7	MJC0C-1-AA	G1E120651-1	20	8290/WATER		0.97145	L
23MY114D5	8	MJC0D-1-AA	G1E120651-2	20	8290/WATER		0.91633	L
23MY114D5	9	MJL7J-1-AD	G1E200446-1	20	8290/SOLID	80	10.14000	g
23MY114D5	10	MJL7L-1-AD	G1E200446-2	20	8290/SOLID		10.27000	g
23MY114D5	11	MJL7M-1-AD	G1E200446-3	20	8290/SOLID		10.96000	g
23MY114D5	12	MJL7N-1-AD	G1E200446-4	20	8290/SOLID		10.64000	g
23MY114D5	13	MJMRL-1-AC	G1E200446-1LCS	20	8290/SOLID		10.00000	g
23MY114D5	14	MJMRL-1-AA	G1E200446-1MB	20	8290/SOLID		10.00000	g
23MY114D5	15	ST0523A	CS3 11DXN109				1.00000	
23MY114D5	16	ST0523B	CS3 11DXN109 - Not used				1.00000	
23MY114D5	17						1.00000	
23MY114D5	18						1.00000	
23MY114D5	19						1.00000	
23MY114D5	20						1.00000	
23MY114D5	21		AS 05-23-11				1.00000	

log file checked
5-23-11 am

Prep Data

TestAmerica West Sacramento

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Checklist
HRGCMS/LRGCMS Analyses

Batch #: 1138127 Method ID: Dioxins/Furans, HRGC/HRMS (8290)

	DB-5	DB-225
Data Analyst:	MSN	NA
Date initiated:	5/25/11	
Reviewer:	MKW	
Date reviewed:	5/31/2011	

QA/QC verification:	Initiated DB-5	Reviewed DB-5	Initiated DB-225 (High Res Only)	Reviewed DB-225 (High Res Only)
-Daily standard package(s) present?	✓	✓	NA	
-Method Blank present?	✓	✓		
-LCS/DCS copy present and meets native recovery criteria?	✓	✓		
-Internal standard recoveries within limits?* 5/25/11	✓	✓		
-Ion ratios within + 15% of theoretical values? (MW)	~~✓~~ ①	①		
-Other QC (Dup,MS,SD) within specs?**	NA	MW		

Sample Analysis:	Initiated DB-5	Reviewed DB-5	Initiated DB-225 (High Res Only)	Reviewed DB-225 (High Res Only)
-Correct sample aliquot used?	✓	✓		
-All raw data present?	✓	✓		
-Standard target DL's used? If RL's are used specify:_____	✓	✓		
-DL's below TDL / LCL (please circle)?	✓	✓		
-All positives reported at levels greater than method blank DL's?	✓	✓		
-Correct RRF's used for method?	✓	✓		
-Internal standard amounts correct for method?	✓	✓		
-Target analytes are not saturated?	✓	✓		
-Dilution/splitting of extract taken into account?	NA	NA		
-Have dilution calculations been verified?	NA	NA		
-Has a manual calculation for the sequence(s) been verified?	✓	✓		
-Are retention times (RT) correct?	✓	✓		
-Manual integrations checked?	NA	MW		

Comments: (Use other side if necessary)

~~② Flags up. Never mind.~~ (MW) 5/25/11 (MW) 5/25/11

① Q-flag applied on -2. See NCM

* Recovery limits:		**RPD limits:
NCASI 551:	40-120%***	50%
Method 8290:	40-135%***	20%
Method 1613:	25-150%***	50%
Method 23:	40-130%***(Cl4-Cl6), 25-130%(Cl7-8), 70-130%(surr.)	50%
PCBs:	25-150%***	50%
Method 8280:	40-120%***	
DFLM01.0:	25-150%***	
Method 1614	25-150%***	

*** Lower recoveries are acceptable if I.S. S/N ≥10:1 and DL's are <LCL for target analytes.

QA-371 07/99 MAF

TestAmerica West Sacramento
High Resolution Prep Log
Dioxin/Furan AQ Extraction

Batch: 1138127
MS Run #:
Prep Date: 5/18/2011

Box # 78

Shared QC Batch: SAME

Shares QC With: NA

Internal COC:	
Delivered to Inst.:	05/20/11 T.L
Inst Receipt:	

Method: IN 8290
Matrix: I WATER
Extraction: 09 LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal
QC: 01 STANDARD TEST SET
SAC: IN - I - 09 - 01

Prep Reagents		
Reagent	Supplier	Lot #
DCM	Baker	K61510
Hexane	Baker	J41831
H2SO4	Baker	NA
20% DCM:Hexane	NA	3630-106A
65% DCM:Hexane	NA	3630-106B
1:1 DCM:Cyclohexane	NA	NA
75:20:5 DCM:Hexane:Benzene	NA	NA
Silica Gel	NA	4022-18E
Acid Alumina	MP-Bio	79
5% Carbon:Silica Gel	NA	NA

Extraction Table

Sample ID	Suff	Work Order	Extraction Hold Time Expires	Sample size *	Bottle + Sample Weight	Empty Bottle Weight	Final Volume 20uL	Final Volume Other	Analysis Hold Time Expires	Extraction ID	Round Bottom ID	Rotovap ID
G1E100623 - 5		MH7K71AA	6/5/2011	912.93	1298.1	385.17	✓		7/2/2011	NA	05	6
G1E100623 - 6		MJCT71AA	6/5/2011	50 mL	NA	NA	✓		7/2/2011		NA	2
G1E100623 - 7		MJCVH1AG	6/5/2011	50 mL	NA	NA	✓	T.L	7/2/2011		32	7
G1E120651 - 1		MJC0C1AA	6/9/2011	971.45	1447.18	476.35	✓	5/20/11	7/2/2011		06	6
G1E120651 - 2		MJC0D1AA	6/9/2011	916.33	1344.3	427.97	✓		7/2/2011		12	6
G1E180000 - 127	B	MJJM91AA	6/5/2011	1000.0	NA	NA	✓		7/2/2011		25	2
G1E180000 - 127	C	MJJM91AC	6/5/2011	1000.0			✓		7/2/2011		NA	7

* See attached sheet for sample volumes recorded from scale

Comments/NCMs: 50 mL taken from 623-6, 623-7, and RAised upto 1 liter w/ DI water.

	ID	Spike Exp Date:	Spiked By:	Witnessed By:	Date:
Internal Standard All Samples	1mL 10DXN134	5/4/12	BG	WS	5/18/11
Spike Mix LCS/LCSD/MS/MS	50uL 10DXN107	4/21/12	BG	WS	5/18/11
Cleanup Standard All Samples	1.0mL 10DXN134	5/2/12	ML	T.L	5/20/11
Recovery Standard All Samples	20.0 uL 10DXN508	09/02/2011	T.L		05/20/11
Liq Liq Extraction Analyst/Date	BG 5/18/11				

Split/Archive Analyst/Date	Option C Analyst/Date	IFB Analyst/Date	D2 Analyst/Date
—	—	ML 5/20/11	—

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 5/20/11
Time: 12:11:35

LEV 1	LEV 2		LEV 1	LEV 2	
Y	_	Blank	Y	_	Weights/Volumes
Y	_	Check	Y	_	Spike & Surrogate Worksheet
_	_	MS/MSD	Y	_	Vial contains correct volume
			Y	_	Labels, greenbars, worksheets
			_	_	computer batch: correct & all match
			_	_	Anomalies to Extraction Method

_ Expanded Deliverable
_ COC Completed
Y Bench Sheet Copied
_ Package Submitted to AnalyticalGroup
_ Bench Sheet Copied per COC

Extractionist: 403613 Brent Ginn

Concentrationist: 000047 Tatyana Lopuga

****
* QC BATCH: 1138127 *
****

PREP DATE: 5/18/11 9:00
COMP DATE: 5/20/11 15:00

Reviewer/Date: LOPUGAT / 5/20/11

Dioxins/Furans, HRGC/HRMS (8290)
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	PH"S INIT	PH"S ADJ1	PH"S ADJ2	SOLVENTS EXTRACTION	SOLVENTS VOL	SOLVENTS EXCHANGE	SOLVENTS VOL	SPIKE STANDARD/ SURROGATE ID
6/05/11	5/27/11	G1E100623-005 **MH7K7-1-AA**	D	09	IN	WATER	**912.93mL** 20.00uL	NA	NA	NA	DCM	300.0	C-14	100.0	1.0 ML 11DXN134 IS
COMMENTS:															
6/05/11	5/27/11	G1E100623-006 **MJCT7-1-AA**	D	09	IN	WATER	**50.0mL** 20.00uL	NA	NA	NA	DCM	300.0	C-14	100.0	1.0 ML 11DXN134 IS
COMMENTS:															
6/05/11	5/27/11	G1E100623-007 **MJCVH-1-AG**	D	09	IN	WATER	**50.0mL** 20.00uL	NA	NA	NA	DCM	300.0	C-14	100.0	1.0 ML 11DXN134 IS
COMMENTS:															
6/09/11	5/30/11	G1E120651-001 **MJC0C-1-AA**		09	IN	WATER	**971.45mL** 20.00uL	NA	NA	NA	DCM	300.0	C-14	100.0	1.0 ML 11DXN134 IS
COMMENTS:															
6/09/11	5/30/11	G1E120651-002 **MJC0D-1-AA**		09	IN	WATER	**916.33mL** 20.00uL	NA	NA	NA	DCM	300.0	C-14	100.0	1.0 ML 11DXN134 IS
COMMENTS:															
6/05/11	0/00/00	G1E180000-127 **MJJM9-1-AAB**		09	IN	WATER	**1000.00mL** 20.00uL	NA	NA	NA	DCM	300.0	C-14	100.0	1.0 ML 11DXN134 IS
COMMENTS:															
6/05/11	0/00/00	G1E180000-127 **MJJM9-1-ACC**		09	IN	WATER	**1000.00mL** 20.00uL	NA	NA	NA	DCM	300.0	C-14	100.0	50.0 UL 11DXN107 NS 1.0 ML 11DXN134 IS
COMMENTS:															

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)

NUMBER OF WORK ORDERS IN BATCH: 7

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

Preparation Data Review Checklist

Prep Batch(es) 1138127 **Test:** 8290

Prep Date: 5/18/11 **Holding Times:** 6/5/11 6/9/11 **NCM:** Y (N)

A. Spike Witness/Batch setup	Spike Witness	Reviewer
1. **Holding times checked?** NCMs filed as appropriate	✓	✓
2. QAS checked for QC instructions (LCS, LCSD, MS,MSD, etc)	✓	✓
3. Amount of samples in hood match amount of samples on bench sheet. Sample IDS match.	✓	NA
4. Worksheets have been checked for required spiking compounds	✓	✓
5. Spiking volumes are correctly documented	✓	✓
6. Std ID numbers on spike labels match numbers on bench sheet	✓	NA
7. Expiration dates have been checked	✓	✓
8. Calibration expiration dates on pipettors have been checked	✓	NA
9. Spiker and spike witness have signed and dated bench sheet	✓	✓
B. Weights and Volumes		
1. Recorded weights are in anticipated range	NA	✓
2. Balance upload or raw data for weights is included	NA	✓
3. Weights and volumes have been transcribed correctly to LIMS.	NA	✓
4. Weights are not targeted to meet exact weights.	NA	✓
5. Each weight or volume measurement is a unique record (no dittos or line downs)	NA	✓
C. Standards and Reagents		
1. Lot numbers for all reagents, including clean up stages, are recorded.	NA	✓
2. Are dates and analysts for cleanups recorded?	NA	✓
3. Are correct IDs used for standards? Are expiration dates to day/month/year, when listed?	NA	✓
D. Documentation		
1. Are all nonconformances documented appropriately?	NA	Standard mix ✓ NA
2. QuantIMs entry correct, including dates and times.	NA	✓
3. Are all fields completed?	NA	✓

Spike witness: WS Date: 5-18-11

2nd Level Reviewer: MWM Date: 5/20/2011

Comments:

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE # TO ENSURE PROPER BILLING: _____

Client Company Name: AECOM
Report To/Contact Name: ERIN STEWART
Reporting Address: 8540 COLONNADE DR. DR. RALEIGH, NC 27615
Phone: _____ Fax (Yes) (No): _____
Email (Yes) (No) Email Address _____
EDD Type: PDF___ Excel___ Other___
Site Location Name: ALCATEL-LUCENT WINSTON
Site Location Physical Address: 3370 OLD LEXINGTON RD, WINSTON-SALEM NC

Project Name: ALCATEL/LUCENT WINSTON SALEM
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: AECOM - RALEIGH, NC
Address: SAME

Purchase Order No./Billing Reference 60944417-2102
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES		N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp ____			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC____ USACE____ FL____ NC____ SC____ OTHER____ N/A____
Water Chlorinated: YES ___ NO X
Sample Iced Upon Collection: YES X NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260B						REMARKS CAS No.	PRISM LAB ID NO.
MW-2A	5-10-11	1600	WATER	AG	2	L	NONE	X						17446-01-6	
MW-2A DUP.	5-10-11	1600	WATER	AG	2	L	NONE	X						41903-57-5	
														36088-22-9	
														34466-46-8	
														37871-00-4	
														30402-14-3	
														30402-15-4	
														55684-94-1	
														38998-75-3	

Sampler's Signature [signature] Sampled By (Print Name) GREGORY M. STEPHENSON Affiliation AECOM

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature] TO FEDEX 5-11-11 1500	[signature]	5-12-11	1100
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☐ Prism Field Service ☐ Other _____
COC Group No.

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC
☐	☐	☐	☐	☐	☐	☐	☐	☐

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

06/03/2011

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

LOT RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT AECOM PM DA LOG # 70628

LOT# (QUANTIMS ID) G1B120651 QUOTE# 88852 LOCATION W11D

Checked (✓)

DATE RECEIVED 12 MAY 11 TIME RECEIVED 0905 ☑

DELIVERED BY ☑ FEDEX ☐ ON TRAC ☐ OTHER

☐ GOLDENSTATE ☐ UPS ☐ EZ PARCEL

☐ TAL COURIER ☐ TAL SF ☐ CLIENT ☑

SHIPPPING CONTAINER(S) ☐ TAL ☑ CLIENT ☐ N/A ☑

CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A ☑

CUSTODY SEAL #(S) n/a

COC #(S) n/a ☑

TEMPERATURE BLANK Observed: n/a Corrected: n/a

SAMPLE TEMPERATURE - (TEMPERATURES ARE IN °C)

Observed: 3, 3, 2 Average 3 Corrected Average 3

LABORATORY THERMOMETER ID:

IR UNIT: #4 ☑ #5 ☐ ☐ OTHER ☑

Initials gl Date 12 MAY 11

---

pH MEASURED ☐ YES ☐ ANOMALY ☑ N/A ☑

LABELED BY..... ☑

LABELS CHECKED BY..... ☑

PEER REVIEW ☑ NA

SHORT HOLD TEST NOTIFICATION

SAMPLE RECEIVING ☑

WETCHEM ☑ N/A ☑

VOA-ENCORES ☑ N/A ☑

☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL ☑ N/A ☑

☑ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES ☑ N/A ☑ gl 12 MAY 11

☑ CLOUSEAU ☐ TEMPERATURE EXCEEDED (2 °C – 6 °C)*1 ☑ N/A

☐ WET ICE ☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED ☑ PM NOTIFIED

Initials gl Date 12 MAY 11

Notes 1 OF 2 AGJ FOR SAMPLE ID MW26 DUP REC'D BROKEN gl 12 MAY 11

*1 Acceptable temperature range for State of Wisconsin samples is ≤4°C.

QA-185 10/09 RKE, Page 1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Bottle Lot Inventory

Lot ID: G16120651

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*																				
VOAh*																				
AGB	2																			
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
____AGJ		1																		
500AGJ																				
250AGJ																				
125AGJ																				
____CGJ																				
500CGJ																				
250CGJ																				
125CGJ																				
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
_____"CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

h = hydrochloric acid **s** = sulfuric acid **na** = sodium hydroxide **n** = nitric acid **zn** = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

QA-185 5/05 EM

Page 3

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica West Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

TestAmerica Job ID: G1E120651
Client Project Description: Alcatel-Lucent Womstpm

For:
AECOM, Inc
8540 Colonnade Center Drive
Suite 306
Raleigh, NC 27615

Attn: Erin Stewart

Authorized for release by:
05/27/2011 09:41:49 AM

David Alltucker
Project Manager
david.alltucker@testamericainc.com

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

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.testamericainc.com

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Internal Standard Summary 8
QC Sample Results 9
QC Association Summary 11
Lab Chronicle 12
Certification Summary 13
Method Summary 14
Sample Summary 15
Chain of Custody 16

Definitions/Glossary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Qualifiers

DIOXIN

Qualifier	Qualifier Description
B	Method blank contamination. The associated method blank contains the target analyte at a reportable level.
J	Estimated result. Result is less than the reporting limit.
Q	Estimated maximum possible concentration (EMPC).

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Case Narrative

TestAmerica West Sacramento Project Number G1E120651

WATER, 8290, Dioxins/Furans, HRGC/HRMS
Sample(s): 2
The analyte OCDD has been qualified with a "Q" flag due to the ion abundance ratios being outside of criteria. The analyte has been reported as an "estimated maximum possible concentration" (EMPC) because the quantitation is based on the theoretical ion abundance ratio for the analyte.

There were no other anomalies associated with this project.

Detection Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Client Sample ID: MW-2A — Lab Sample ID: G1E120651001

Analyte	Result	Qualifier	ML	EDL	Unit	Dil Fac	D	Method	Prep Type
Total HpCDD	1.7		52	1.2	pg/L	1.03		8290	Total
OCDD	10	J B	100	0.53	pg/L	1.03		8290	Total

Client Sample ID: MW-2A DUP — Lab Sample ID: G1E120651002

Analyte	Result	Qualifier	ML	EDL	Unit	Dil Fac	D	Method	Prep Type
Total HpCDD	2.7		54	1.4	pg/L	1.08		8290	Total
OCDD	19	J Q B	110	1.1	pg/L	1.08		8290	Total
1,2,3,4,6,7,8-HpCDF	1.1	J B	54	1.0	pg/L	1.08		8290	Total
Total HpCDF	1.1		54	1.1	pg/L	1.08		8290	Total

Client Sample Results

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Client Sample ID: MW-2A

Lab Sample ID: G1E120651001

Date Collected: 05/10/11 16:00

Matrix: Water

Date Received: 05/12/11 09:30

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290)

Analyte	Result	Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	0.92	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total TCDD	ND		10	0.92	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8-PeCDD	ND		52	0.75	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total PeCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,7,8-HxCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,6,7,8-HxCDD	ND		52	0.83	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8,9-HxCDD	ND		52	0.85	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HxCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,6,7,8-HpCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HpCDD	**1.7**		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
OCDD	**10**	**J B**	100	0.53	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
2,3,7,8-TCDF	ND		10	1.1	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total TCDF	ND		10	1.1	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8-PeCDF	ND		52	1.0	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
2,3,4,7,8-PeCDF	ND		52	1.0	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total PeCDF	ND		52	1.0	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,7,8-HxCDF	ND		52	0.27	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,6,7,8-HxCDF	ND		52	0.21	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
2,3,4,6,7,8-HxCDF	ND		52	0.24	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8,9-HxCDF	ND		52	0.28	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HxCDF	ND		52	0.28	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,6,7,8-HpCDF	ND		52	0.82	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,7,8,9-HpCDF	ND		52	0.72	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HpCDF	ND		52	0.82	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
OCDF	ND		100	1.5	pg/L		05/18/11 09:00	05/23/11 14:17	1.03

Internal Standard	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*90*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,7,8-PeCDD	*100*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,6,7,8-HxCDD	*88*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,4,6,7,8-HpCDD	*81*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-OCDD	*101*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-2,3,7,8-TCDF	*116*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,7,8-PeCDF	*97*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,4,7,8-HxCDF	*90*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,4,6,7,8-HpCDF	*81*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*

Client Sample ID: MW-2A DUP

Lab Sample ID: G1E120651002

Date Collected: 05/10/11 16:00

Matrix: Water

Date Received: 05/12/11 09:30

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290)

Analyte	Result	Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		11	0.78	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total TCDD	ND		11	0.78	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8-PeCDD	ND		54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total PeCDD	ND		54	1.8	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,7,8-HxCDD	ND		54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,6,7,8-HxCDD	ND		54	1.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8,9-HxCDD	ND		54	1.1	pg/L		05/18/11 09:00	05/23/11 15:02	1.08

Client Sample Results

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Client Sample ID: MW-2A DUP

Date Collected: 05/10/11 16:00
Date Received: 05/12/11 09:30

Lab Sample ID: G1E120651002

Matrix: Water

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290) (Continued)

Analyte	Result	Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
Total HxCDD	ND		54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,6,7,8-HpCDD	ND		54	2.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total HpCDD	**2.7**		54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
OCDD	**19**	**J Q B**	110	1.1	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
2,3,7,8-TCDF	ND		11	0.92	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total TCDF	ND		11	0.92	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8-PeCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
2,3,4,7,8-PeCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total PeCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,7,8-HxCDF	ND		54	0.81	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,6,7,8-HxCDF	ND		54	0.43	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
2,3,4,6,7,8-HxCDF	ND		54	0.27	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8,9-HxCDF	ND		54	0.35	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total HxCDF	ND		54	0.81	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,6,7,8-HpCDF	**1.1**	**J B**	54	1.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,7,8,9-HpCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total HpCDF	**1.1**		54	1.1	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
OCDF	ND		110	2.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08

Internal Standard	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*72*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,7,8-PeCDD	*73*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,6,7,8-HxCDD	*79*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,4,6,7,8-HpCDD	*65*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-OCDD	*72*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-2,3,7,8-TCDF	*93*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,7,8-PeCDF	*76*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,4,7,8-HxCDF	*83*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,4,6,7,8-HpCDF	*71*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*

Internal Standard Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290)

Matrix: Water

Prep Type: Total

		Percent Internal Standard Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	PeCDD (40-135)	HxCDD2 (40-135)	HpCDD (40-135)	OCDD (40-135)	TCDF (40-135)	PeCDF1 (40-135)	HxCDF1 (40-135)
G1E120651001	MW-2A	90	100	88	81	101	116	97	90
G1E120651002	MW-2A DUP	72	73	79	65	72	93	76	83
G1E180000127B	INTRA-LAB BLANK	73	83	73	69	75	86	76	85
G1E180000127C	CHECK SAMPLE	78	88	75	74	78	91	78	88

		Percent Internal Standard Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	HpCDF1 (40-135)
G1E120651001	MW-2A	81
G1E120651002	MW-2A DUP	71
G1E180000127B	INTRA-LAB BLANK	70
G1E180000127C	CHECK SAMPLE	72

Internal Standard Legend

TCDD = 13C-2,3,7,8-TCDD
PeCDD = 13C-1,2,3,7,8-PeCDD
HxCDD2 = 13C-1,2,3,6,7,8-HxCDD
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
OCDD = 13C-OCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDF1 = 13C-1,2,3,7,8-PeCDF
HxCDF1 = 13C-1,2,3,4,7,8-HxCDF
HpCDF1 = 13C-1,2,3,4,6,7,8-HpCDF

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290)

Lab Sample ID: G1E180000127B
Matrix: Water
Analysis Batch: 1138127

Client Sample ID: INTRA-LAB BLANK
Prep Type: Total
Prep Batch: 1138127_P

Analyte	MB Result	MB Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	1.2	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total TCDD	ND		10	1.2	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,7,8-PeCDD	ND		50	1.4	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total PeCDD	ND		50	2.1	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,4,7,8-HxCDD	ND		50	1.2	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,6,7,8-HxCDD	ND		50	0.89	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,7,8,9-HxCDD	ND		50	0.91	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total HxCDD	ND		50	1.2	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,4,6,7,8-HpCDD	ND		50	1.0	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total HpCDD	1.1		50	1.0	pg/L		05/18/11 09:00	05/20/11 22:04	1
OCDD	4.0	J	100	1.1	pg/L		05/18/11 09:00	05/20/11 22:04	1
2,3,7,8-TCDF	ND		10	1.6	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total TCDF	ND		10	1.6	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,7,8-PeCDF	ND		50	1.2	pg/L		05/18/11 09:00	05/20/11 22:04	1
2,3,4,7,8-PeCDF	ND		50	1.3	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total PeCDF	ND		50	1.4	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,4,7,8-HxCDF	ND		50	0.60	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,6,7,8-HxCDF	ND		50	0.92	pg/L		05/18/11 09:00	05/20/11 22:04	1
2,3,4,6,7,8-HxCDF	ND		50	0.53	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,7,8,9-HxCDF	ND		50	0.66	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total HxCDF	ND		50	0.92	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,4,6,7,8-HpCDF	1.3	J	50	0.66	pg/L		05/18/11 09:00	05/20/11 22:04	1
1,2,3,4,7,8,9-HpCDF	ND		50	0.77	pg/L		05/18/11 09:00	05/20/11 22:04	1
Total HpCDF	1.3		50	0.71	pg/L		05/18/11 09:00	05/20/11 22:04	1
OCDF	ND		100	2.0	pg/L		05/18/11 09:00	05/20/11 22:04	1

Internal Standard	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*73*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,7,8-PeCDD	*83*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,6,7,8-HxCDD	*73*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*69*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-OCDD	*75*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-2,3,7,8-TCDF	*86*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,7,8-PeCDF	*76*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,4,7,8-HxCDF	*85*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*70*		*40 - 135*	*05/18/11 09:00*	*05/20/11 22:04*	*1*

Lab Sample ID: G1E180000127C
Matrix: Water
Analysis Batch: 1138127

Client Sample ID: CHECK SAMPLE
Prep Type: Total
Prep Batch: 1138127_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
2,3,7,8-TCDD	200	223		pg/L		111	64 - 142
1,2,3,7,8-PeCDD	1000	943		pg/L		94	71 - 140
1,2,3,4,7,8-HxCDD	1000	1090		pg/L		109	56 - 146
1,2,3,6,7,8-HxCDD	1000	1000		pg/L		100	73 - 144
1,2,3,7,8,9-HxCDD	1000	1060		pg/L		106	71 - 151
1,2,3,4,6,7,8-HpCDD	1000	1030		pg/L		103	78 - 139
OCDD	2000	1950		pg/L		97	80 - 132
2,3,7,8-TCDF	200	231		pg/L		115	71 - 142

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290) (Continued)

Lab Sample ID: G1E180000127C
Matrix: Water
Analysis Batch: 1138127

Client Sample ID: CHECK SAMPLE
Prep Type: Total
Prep Batch: 1138127_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
1,2,3,7,8-PeCDF	1000	1030		pg/L		103	76 - 135
2,3,4,7,8-PeCDF	1000	1010		pg/L		101	74 - 137
1,2,3,4,7,8-HxCDF	1000	975		pg/L		98	75 - 131
1,2,3,6,7,8-HxCDF	1000	1040		pg/L		104	76 - 133
2,3,4,6,7,8-HxCDF	1000	896		pg/L		90	80 - 137
1,2,3,7,8,9-HxCDF	1000	917		pg/L		92	77 - 142
1,2,3,4,6,7,8-HpCDF	1000	1070		pg/L		107	79 - 133
1,2,3,4,7,8,9-HpCDF	1000	1080		pg/L		108	83 - 130
OCDF	2000	1980		pg/L		99	72 - 140

Internal Standard	*LCS % Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*78*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*88*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*75*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*74*		*40 - 135*
13C-OCDD	*78*		*40 - 135*
13C-2,3,7,8-TCDF	*91*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*78*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*88*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*72*		*40 - 135*

QC Association Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

DIOXIN

Analysis Batch: 1138127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
G1E180000127B	INTRA-LAB BLANK	Total	Water	8290	
G1E180000127C	CHECK SAMPLE	Total	Water	8290	
G1E120651001	MW-2A	Total	Water	8290	
G1E120651002	MW-2A DUP	Total	Water	8290	

Prep Batch: 1138127_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
G1E180000127B	INTRA-LAB BLANK	Total	Water	8290	
G1E180000127C	CHECK SAMPLE	Total	Water	8290	
G1E120651001	MW-2A	Total	Water	8290	
G1E120651002	MW-2A DUP	Total	Water	8290	

Lab Chronicle

Client Sample ID: MW-2A

Lab Sample ID: G1E120651001

Date Collected: 05/10/11 16:00

Matrix: Water

Date Received: 05/12/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	8290			1138127_P	05/18/11 09:00	TL	TAL WSC
Total	Analysis	8290		1.03	1138127	05/23/11 14:17	MN	TAL WSC

Client Sample ID: MW-2A DUP

Lab Sample ID: G1E120651002

Date Collected: 05/10/11 16:00

Matrix: Water

Date Received: 05/12/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	8290			1138127_P	05/18/11 09:00	TL	TAL WSC
Total	Analysis	8290		1.08	1138127	05/23/11 15:02	MN	TAL WSC

Laboratory References:

TAL WSC = TestAmerica West Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Certification Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica West Sacramento		US Fish & Wildlife		LE148388-0
TestAmerica West Sacramento		USDA		P330-09-00055
TestAmerica West Sacramento		USEPA UCMR		CA00044
TestAmerica West Sacramento	A2LA	DoD ELAP	0	2928-01
TestAmerica West Sacramento	Alaska	Alaska UST	10	UST-055
TestAmerica West Sacramento	Arizona	State Program	9	AZ0708
TestAmerica West Sacramento	Arkansas	State Program	6	88-0691
TestAmerica West Sacramento	California	NELAC	9	1119CA
TestAmerica West Sacramento	Colorado	State Program	8	N/A
TestAmerica West Sacramento	Connecticut	State Program	1	PH-0691
TestAmerica West Sacramento	Florida	NELAC	4	E87570
TestAmerica West Sacramento	Georgia	State Program	4	960
TestAmerica West Sacramento	Guam	State Program	9	N/A
TestAmerica West Sacramento	Hawaii	State Program	9	N/A
TestAmerica West Sacramento	Illinois	NELAC	5	200060
TestAmerica West Sacramento	Kansas	NELAC	7	E-10375
TestAmerica West Sacramento	Louisiana	NELAC	6	30612
TestAmerica West Sacramento	Michigan	State Program	5	9947
TestAmerica West Sacramento	Nevada	State Program	9	CA44
TestAmerica West Sacramento	New Jersey	NELAC	2	CA005
TestAmerica West Sacramento	New Mexico	State Program	6	N/A
TestAmerica West Sacramento	New York	NELAC	2	11666
TestAmerica West Sacramento	Oregon	NELAC	10	CA200005
TestAmerica West Sacramento	Pennsylvania	NELAC	3	68-01272
TestAmerica West Sacramento	South Carolina	State Program	4	87014
TestAmerica West Sacramento	Texas	NELAC	6	T104704399-08-TX
TestAmerica West Sacramento	Utah	NELAC	8	QUAN1
TestAmerica West Sacramento	Virginia	State Program	3	178
TestAmerica West Sacramento	Washington	State Program	10	C581
TestAmerica West Sacramento	West Virginia	West Virginia DEP	3	334
TestAmerica West Sacramento	West Virginia	West Virginia DHHR (DW)	3	9930C
TestAmerica West Sacramento	Wisconsin	State Program	5	998204680
TestAmerica West Sacramento	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Method	Method Description	Protocol	Laboratory
8290	Dioxins/Furans, HRGC/HRMS (8290)	SW846	TAL WSC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL WSC = TestAmerica West Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
G1E120651001	MW-2A	Water	05/10/11 16:00	05/12/11 09:30
G1E120651002	MW-2A DUP	Water	05/10/11 16:00	05/12/11 09:30

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE # TO ENSURE PROPER BILLING: _____

Client Company Name: AECOM
Report To/Contact Name: ERIN STEWART
Reporting Address: 8540 COMMERCE CTR. DR. RALEIGH, NC 27615
Phone: _____ Fax (Yes) (No): _____
Email (Yes) (No) Email Address _____
EDD Type: PDF____ Excel____ Other_____
Site Location Name: ALCATEL-LUCENT WINSTON
Site Location Physical Address: 3370 OLD LEXINGTON RD, WINSTON-SALEM NC

Project Name: ALCATEL/LUCENT WINSTON SALEM
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: AECOM - RALEIGH, NC
Address: SAME

Purchase Order No./Billing Reference 60944417-2102
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☐ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES		N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC____ USACE____ FL____ NC____ SC____ OTHER____ N/A____
Water Chlorinated: YES ___ NO X
Sample Iced Upon Collection: YES X NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260A						REMARKS CAS No.	PRISM LAB ID NO.
MW-2A	5-10-11	1600	WATER	AG	2	L	NONE	X						1746-01-6	
MW-2A DUP.	5-10-11	1600	WATER	AG	2	L	NONE	X						41903-57-5	
														36088-22-9	
														34465-46-8	
														37871-00-4	
														30402-14-3	
														30402-15-4	
														55684-94-1	
														38998-75-3	

Sampler's Signature [signature] Sampled By (Print Name) GREGORY M. STEPHENSON Affiliation AECOM

PRESS DOWN FIRMLY - 3 COPIES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature] TO FEDEX 5-11-11 1500	[signature]	5-12-11	1100
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☐ Prism Field Service ☐ Other _____

COC Group No.

Additional Comments:

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC	☐ NC ☐ SC
☐ _____	☐ _____	☐ _____	☐ _____	☐ _____	☐ _____	☐ _____	☐ _____	☐ _____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

05/27/2011

14 13 12 11 10 9 8 7 6 5 4 3 2 1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

LOT RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT AECOM PM DA LOG # 70628

LOT# (QUANTIMS ID) G1B120651 QUOTE# 88852 LOCATION WIID

Checked (✓)

DATE RECEIVED 12 MAY 11 TIME RECEIVED 0905 ☑

DELIVERED BY ☑ FEDEX ☐ ON TRAC ☐ OTHER

☐ GOLDENSTATE ☐ UPS ☐ EZ PARCEL

☐ TAL COURIER ☐ TAL SF ☐ CLIENT ☑

SHIPPPING CONTAINER(S) ☐ TAL ☑ CLIENT ☐ N/A ☑

CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A ☑

CUSTODY SEAL #(S) n/a

COC #(S) n/a ☑

TEMPERATURE BLANK Observed: n/a Corrected: n/a

SAMPLE TEMPERATURE - (TEMPERATURES ARE IN °C)

Observed: 3, 3, 2 Average 3 Corrected Average 3

LABORATORY THERMOMETER ID:

IR UNIT: #4 ☑ #5 ☐ ☐ OTHER ☑

Initials gl Date 12 MAY 11

==========

pH MEASURED ☐ YES ☐ ANOMALY ☑ N/A ☑

LABELED BY..... ☑

LABELS CHECKED BY..... ☑

PEER REVIEW ☑ NA

SHORT HOLD TEST NOTIFICATION

SAMPLE RECEIVING ☑

WETCHEM ☑ N/A ☑

VOA-ENCORES ☑ N/A ☑

☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL ☑ N/A ☑

gl 12 MAY 11

☑ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES ☑ N/A ☑

☑ CLOUSEAU ☐ TEMPERATURE EXCEEDED (2 °C – 6 °C)*1 ☑ N/A

☐ WET ICE ☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED ☑ PM NOTIFIED

Initials gl Date 12 MAY 11

Notes 1 OF 2 AG1 FOR SAMPLE ID MW2A DUP REC'D BROKEN gl 12 MAY 11

*1 Acceptable temperature range for State of Wisconsin samples is ≤4°C.

QA-185 10/09 RKE, Page 1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Bottle Lot Inventory

Lot ID: G1612065!

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*																				
VOAh*																				
AGB	2																			
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
____AGJ		1																		
500AGJ																				
250AGJ																				
125AGJ																				
____CGJ																				
500CGJ																				
250CGJ																				
125CGJ																				
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
_____"CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

h = hydrochloric acid **s** = sulfuric acid **na** = sodium hydroxide **n** = nitric acid **zn** = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

QA-185 5/05 EM

Page 3

Appendix C

Summary of Detected Appendix IX Parameters

AECOM

Appendix C
Summary of Polychlorinated Dibenzodioxin and Polychlorinated Dibenzofuran Results
Alcatel-Lucent USA Inc., Former North Carolin Works Facility
Winston-Salem, North Carolina

Compound	2L Standard	MW-2A 3/16/2011				MW-2A 5/10/2011				MW-2A DUP 5/10/2011			
		Result	Lab Qualifier	Data Validation Qualifier	Final Result	Result	Lab Qualifier	Data Validation Qualifier	Final Result	Result	Lab Qualifier	Data Validation Qualifier	Final Result
Volatile Organic compounds by SW846 Method 8260 (µg/L)													
Trichloroethene	3	5	U		5 U	NA			NA	NA			NA
Tetrachloroethene	0.7	110			110	NA			NA	NA			NA
Metals by SW846 Method 6010C (mg/L)													
Barium	0.7	0.28			0.28	NA			NA	NA			NA
Beryllium, total	0.004	0.0021			0.0021	NA			NA	NA			NA
Chromium	0.01	0.019			0.019	NA			NA	NA			NA
Copper	1	0.018			0.018	NA			NA	NA			NA
Lead	0.015	0.006			0.006	NA			NA	NA			NA
Nickel	0.1	0.011			0.011	NA			NA	NA			NA
Vanadium	NS	0.049			0.049	NA			NA	NA			NA
Zinc	1	0.049			0.049	NA			NA	NA			NA
Dioxins/Furans by SW846 Method 8290 (pg/L)													
2,3,7,8-TCDD	0.2	2.07	JK	J	2.07 J	0.92	U		0.92 U	0.78	U		0.78 U
Total HpCDD	NS	11.7	J	U	11.7 U	1.7		U	1.7 U	2.7		U	2.7 U
OCDD	NS	NA			NA	10	JB	U	10 U	19	JQB	U	19 U
1,2,3,4,6,7,8-HpCDF	NS	NA			NA	0.82	U		0.82 U	1.1	JB	U	1.1 U
Total HpCDF	NS	0.66	U		0.66 U	0.82	U		0.82 U	1.1		U	1.1 U

Notes:
mg/L - milligrams per liter
pg/L - picograms per liter
µg/L - mircograms per liter
Samples collected on 3/16/11 were analyzed by Cape Fear Analytical (Wilmington, NC)
Samples collected on 5/10/11 were analyzed by TestAmerica Laboratories (West Sacramento, CA)
B - Method blank contamination. The associated method blank contains the target analyte at a reportable level.
J - Value is estimated
K - Estimated maximum possible concentration (Cape Fear Analytical)
Q - Estimated maximum possible concentration (Test America)
U - Analyte was analyzed for, but not detected above the specified detection limit.

Abbreviations
NA - Not Analyzed
NS - No Standard
HpCDD - Heptachlorodibenzo-p-dioxin
HpCDF - Heptachlorodibenzofuran
OCDD - Octachlorodibenzo-p-dioxin
TCDD - Tetrachlorodibenzo-p-dioxin

Appendix D

Data Validation Reports

AECOM
One Midtown Plaza
1360 Peachtree St. N.E.
Suite 500
Atlanta, GA 30309

404.965.9600 tel
404.965.9605 fax

Memorandum

To	Erin Stewart – AECOM Raleigh	Page	1
CC			
Subject	Level 2 Data Validation for Alcatel-Lucent Winston-Salem Groundwater Samples		
From	Robert Davis – AECOM Atlanta		
Date	March 30, 2011		

Limited validation was performed on two data package from Prism Laboratories in Charlotte, North Carolina on groundwater samples. The appendix IX parameters for sample MW-2A where subbed out to Analytical Environmental Services (AES) in Atlanta, Georgia, Test America in Savannah, Georgia, and Access Analytical, Inc. in Irmo, South Carolina. The samples were collected at the Alcatel-Lucent USA, Inc. (ALU) site in Winston Salem, North Carolina between the time frame of March 1, 2011 and March 16, 2011.

The data were reviewed for conformance to method specifications and the validation criteria set forth in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Superfund Organic Methods Data Review*, USEPA-540-R-07-003, July 2008, with additional reference to *USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review*, EPA 540/R-99-008, May 1999 as they applied to the methodology used. Inorganic data were evaluated based on method specifications and the validation criteria set forth in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, EPA-540-R-04-004, October 2004, as they applied to the analytical methods employed. Field duplicate RPD control limits were taken from the *USEPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses,* February 1988, upheld in DRAFT 1993.

- Method 8260B - Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS);
- Method 8015 – Diesel Range Organics (DRO);
- Method 8141A – Organophosphorous Pesticides;
- Method 8151A – Chlorinated Herbicides;
- Method 8270D – Semi-volatile Organic Compounds by (GC/MS);
- Method 8081B – Organochlorine Pesticides by GC/ECD;
- Method 8082A – Polychlorinated Biphenlys (PCBs) by GC/ECD;
- Method 6010C – Metals by Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP-AES);

- Method 7470A – Mercury by Cold-Vapor Atomic Absorption;
- Method 9014 – Total Cyanide;
- Method SM4500-S-E – Sulfide; and
- EPA Method 1664A – Hexane Extractable Material - Oil and Grease.

Review Elements

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Method blanks/trip blanks
- Surrogate results
- Laboratory control sample (LCS) results
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field precision results

Samples

AECOM collected the following groundwater samples from the ALU site in Winston Salem, North Carolina as reported under the Prism job number.

1030099

Lab ID	Sample ID	Lab ID	Sample ID
1030099-01	Trip Blank 01	1030099-16	EW-21
1030099-02	DUP-01	1030099-17	EW-5
1030099-03	DUP-02	1030099-18	EW-22
1030099-04	DUP-03	1030099-19	EW-16
1030099-05	DUP-04	1030099-20	EW-19
1030099-06	DUP-05	1030099-21	EW-18
1030099-07	Bailer Blank 01	1030099-22	EW-17
1030099-08	Bailer Blank 02	1030099-23	EW-15
1030099-09	MW-2A	1030099-24	VOC-1
1030099-10	EW-4	1030099-25	MW-10A
1030099-11	EW-12	1030099-26	MW-27A
1030099-12	EW-14	1030099-27	MW-28A
1030099-13	TF-2	1030099-28	COMP-SYS-TPH
1030099-14	DT-1	1030099-29	COMP-SYS-A
1030099-15	EW-6	1030099-30	COMP-SYS-B
1030099-31	MW-26A	1030099-42	MW-32
1030099-32	C-7	1030099-43	MW-31A
1030099-33	MW-29B	1030099-44	MW-31B
1030099-34	MW-30B	1030099-45	TF-3
1030099-35	Trip Blank 02	1030099-46	MW-29A
1030099-36	PUMP Blank 01	1030099-47	MW-29

1030099 Continued

Lab ID	Sample ID	Lab ID	Sample ID
1030099-37	PUMP Blank 02	1030099-48	MW-18A
1030099-38	DUP-06	1030099-49	MW-6A
1030099-39	MW-7A	1030099-50	C-5
1030099-40	MW-12A	1030099-51	C-2
1030099-41	MW-8A		

1030440

Lab ID	Sample ID	Lab ID	Sample ID
1030440-01	MW-2A		

Analytical Results

In general, the data results are valid as reported and may be used for decision making purposes. Sample data were qualified with a either a "J" (estimated) or "UJ" (the analyte was not detected; however, the reported quantitation limit is approximated and may be inaccurate or imprecise.) See Table 1.

Positive results less than the reporting limit, but greater than the method detection limit (MDL) were qualified "J," as estimated concentrations, due to increased uncertainty near the detection limit. These "J" qualifiers were maintained in the data validation.

Method 8260B: Samples DUP-02, EW-22, EW-16, EW-19, EW-18, EW-17, EW-15, VOC-1, COMP-SYS-TPH, MW-6A, C-5, and C-2 were diluted in order to bring certain compounds into the calibration range resulting in elevated reporting limits.

Method 8260B: The acetone concentration in sample EW-6 exceeded the instrument calibration range. The acetone concentration in sample EW-6 was qualified. See Table 1.

Discussion

Agreement of Analyses Conducted with COC Requests

Laboratory sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times and Preservation

All samples were analyzed within the holding times required by the methods. The sample cooler temperature upon receipt was within the acceptable range of 4±2 °C. All samples that required chemical preservation were chemically preserved to the proper pH.

Method Blanks/Trip Blanks

No analytes were detected at concentrations exceeding the reporting limits for the method blanks, equipment blanks, or trip blanks.

Surrogate Results

The surrogate recoveries were acceptable for all organic analyses.

Laboratory Control Sample Results

Laboratory control standards (LCS) for all of the analyses were within the quality control limits with the following exceptions:

Method 8141A: The LCS recovery was outside of the quality control limits biased low for Merphos. The Merphos result for sample MW-2A was qualified. See Table 1.

Matrix Spike/Matrix Spike Duplicate Results

Matrix spike and matrix spike duplicates that were performed on non-project samples were not evaluated because matrix similarity to project samples could not be assumed.

The matrix spike/matrix spike duplicate (MS/MSD) recoveries and precision on client samples were all within the advisory limits with the following exceptions:

Method 8260B: The MS/MSD recoveries for MEK in sample MW-10A were outside of the quality control limits biased low. The MEK result for sample MW-10A was qualified. See Table 1.

Field Precision Results

Field duplicates were collected on samples EW-6, EW-16, EW-18, VOC-1, COMP SYS B, and MW-32. See Tables 2A, 2B, 2C, 2D, 2E, and 2F for the Relative Percent Differences (RPDs) for all compounds for which there were detections. The RPDs between the original and field duplicates that were outside of the acceptance criteria of 30% are in bold text in Tables 2A, 2C, and 2E and qualified in Table 1.

Table 1
Qualified Analytical Data

Sample ID	Method	Analyte	Lab Result	Lab Qual.	Validated Result	Validation Qualifier[1]	Units	Reason Codes[2]
DUP-01	8260B	Acetone	5.7	J	5.7	J	µg/L	FD
DUP-01	8260B	MEK	16		16	J	µg/L	FD
DUP-03	8260B	1,1-Dichloroethylene	51		51	J	µg/L	FD
DUP-03	8260B	Carbon Tetrachloride	540		540	J	µg/L	FD
DUP-05	8260B	Tetrachloroethylene	2900		2900	J	µg/L	FD
EW-6	8260B	Acetone	110	E	110	J	µg/L	FD ECR
EW-6	8260B	MEK	130		130	J	µg/L	FD
EW-18	8260B	1,1-Dichloroethylene	36		36	J	µg/L	FD
EW-18	8260B	Carbon Tetrachloride	360		360	J	µg/L	FD
MW-10A	8260B	MEK	ND		5.0	UJ	µg/L	MS
COMP-SYS-B	8260B	Tetrachloroethylene	1900		1900	J	µg/L	FD
MW-2A	8141A	Merphos	1.5	U	1.5	UJ	µg/L	LCS

[1]: USEPA-defined data validation qualifiers applied in this data evaluation:

J: The associated numerical value is the approximate concentration of the analyte in the sample.

UJ: The analyte was not detected; however, the reported quantitation limit is approximated and may be inaccurate or imprecise.

[2]: Reason Codes:

FD: The field duplicate RPD is outside of the advisory limits.

ECR: The reported concentration exceeded the instrument calibration range.

MS: The matrix spike recovery was outside of the advisory limits.

LCS: The laboratory control spike was outside of the quality control limits.

Table 2A
Field Precision

Method	Compound	EW-6	DUP-1	Units	% RPD
8260B	1,1-Dichloroethane	1.6	1.7	µg/L	6.1
8260B	1,1-Dichloroethylene	3.4	3.2	µg/L	6.1
8260B	**Acetone**	**110 J**	**5.7 J**	**µg/L**	**180**
8260B	Chloroform	2.5	2.5	µg/L	0
8260B	cis-1,2-Dichloroethylene	13	10	µg/L	26
8260B	**MEK**	**130**	**16**	**µg/L**	**156**
8260B	Tetrachloroethylene	110	100	µg/L	9.5
8260B	Trichloroethylene	32	31	µg/L	3.2

% RPD: Relative percent difference between the primary sample result and the sample duplicate result.

Table 2B
Field Precision

Method	Compound	EW-16	DUP-02	Units	% RPD
8260B	1,1-Dichloroethylene	11 J	11	µg/L	0
8260B	cis-1,2-Dichloroethylene	420	410	µg/L	2.4
8260B	Tetrachloroethylene	1200	1300	µg/L	8.0
8260B	Trichloroethylene	82	78	µg/L	5.0

% RPD: Relative percent difference between the primary sample result and the sample duplicate result.

Table 2C
Field Precision

Method	Compound	EW-18	DUP-03	Units	% RPD
8260B	1,1,1-Trichloroethane	160	210	µg/L	27
8260B	**1,1-Dichloroethylene**	**36**	**51**	**µg/L**	**34**
8260B	**Carbon tetrachloride**	**360**	**540**	**µg/L**	**40**
8260B	Tetrachloroethylene	810	960	µg/L	17
8260B	Trichloroethylene	3100	3600	µg/L	15
8260B	Chloroform	ND	9.8 J	µg/L	NC*

% RPD: Relative percent difference between the primary sample result and the sample duplicate result.

* - The difference between the primary and field duplicate results was less than the reporting limit for results less than five times the reporting limit. Variation of this magnitude is acceptable.

NC: Not calculated

ND: Not detected

Table 2D
Field Precision

Method	Compound	VOC-1	DUP-04	Units	% RPD
8260B	cis-1,2-Dichloroethylene	1200	1200	µg/L	0
8260B	Tetrachloroethylene	80000	80000	µg/L	0
8260B	Trichloroethylene	400 J	460 J	µg/L	14

% RPD: Relative percent difference between the primary sample result and the sample duplicate result.

Table 2E
Field Precision

Method	Compound	Comp Sys B	DUP-05	Units	% RPD
8260B	1,1-Dichloroethylene	26	32	µg/L	21
8260B	Carbon tetrachloride	37 J	37	µg/L	0
8260B	cis-1,2-Dichloroethylene	400	390	µg/L	2.5
8260B	**Tetrachloroethylene**	**1900**	**2900**	**µg/L**	**42**
8260B	Trichloroethylene	960	970	µg/L	1.0
8260B	Vinyl chloride	13 J	14 J	µg/L	7.4
8260B	Chloroform	ND	6.4 J	µg/L	NC*

% RPD: Relative percent difference between the primary sample result and the sample duplicate result.

* - The difference between the primary and field duplicate results was less than the reporting limit for results less than five times the reporting limit. Variation of this magnitude is acceptable.

NC: Not calculated

ND: Not detected

Table 2F

Field Precision

Method	Compound	MW-32	DUP-06	Units	% RPD
8260B	cis-1,2-Dichloroethylene	2.7	2.7	µg/L	0
8260B	Tetrachloroethylene	1.6	1.5	µg/L	6.5
8260B	Trichloroethylene	11	11	µg/L	0

% RPD: Relative percent difference between the primary sample result and the sample duplicate result.

AECOM
2 Technology Park Drive
Westford, MA 01886-3140

978.589.3000 tel
978.589.3100 fax

Data Validation Report

To	Erin Stewart, AECOM	Page 1
Project	Lucent Winston Salem Groundwater Sample	
Laboratory	Cape Fear Analytical	
Laboratory SDG	1030440	
Analyses/Method	Dioxins/SW-846 Method 8290	
Validation Level	Limited	
AECOM Project Number	60194417.3000	
Prepared by	Paula DiMattei/AECOM	Completed: July 7, 2011
Reviewed by	Robert Kennedy/AECOM	

SUMMARY

Limited validation was performed on the data for one groundwater sample analyzed for polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofurans (PCDF) by SW-846 Method 8290. The samples were collected at the Alcatel-Lucent USA, Inc. site in Winston-Salem, North Carolina on March 16, 2011 and were submitted to Prism Laboratories (Prism) in Charlotte, North Carolina for analysis. Prism subsequently subcontracted the analyses to Cape Fear Analytical in Wilmington, North Carolina. Cape Fear Analytical processed the sample and reported the results under laboratory sample delivery group (SDG) 1030440.

The sample results were assessed according to the "USEPA *Contract Lab Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Reviews" (September 2005*) and using the method and laboratory quality control (QC) criteria. The National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were qualified due to nonconformances of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below.

Sample ID
MW-2A

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/equipment blanks
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Ongoing precision and recovery (OPR) results
- Field duplicate results
- Labeled compound recoveries
- Sample results and quantitation/detection limits

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC.

Holding Times/Sample Preservation

The cooler temperatures upon sample receipt were within the QC acceptance criteria of 4± 2°C.

All samples were extracted and analyzed within the method specified holding times.

Laboratory Blanks/Equipment Blanks

There were no equipment blank samples submitted with this sample set. No validation actions were taken on this basis. Several target compounds were detected in the laboratory method blank associated with the sample in this data set. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. The following table summarizes the maximum level of blank contamination detected in the laboratory method blank associated with the groundwater sample, sample quantitation limit (SQL), and validation actions taken.

Compound	SQL (pg/L)	Maximum Concentration (pg/L)	Actions
Total HpCDD	50	1.3 J	The total HpCDD result in sample MW-2A was qualified as nondetect (U) at the reported concentration.
Total HxCDF	50	1.10 J	These homologues were not detected in sample MW-2A; therefore, no data validation actions were required on this basis.
Total HpCDF	50	1.66 J	

The method blank evaluation was based on the following actions:

Method Blank Result	Sample Result	Action
<RL	Not detected	No qualification
	<RL	Report the sample result with a U.
	≥ RL	For all compounds except OCDD/OCDF: If the result is ≤5x blank result, report the sample result with a U.* If the result is > 5x blank result, no qualification is required.*

Method Blank Result	Sample Result	Action
		For OCDD/OCDF: If the result is ≤10x blank result, report the sample result with a U.* If the result is > 10x blank result, no qualification is required.*
≥RL (>3x RL for OCDD/OCDF)	Not detected	UJ
	<RL	Report the sample result with a U.
	≥ RL and < blank result	Report as not detected (U) at the sample result or Qualify sample result as estimated (J).
	≥ RL and ≥ blank result	For all compounds except OCDD/OCDF: If the result is ≤5x blank result, report the sample result with a U.* If the result is > 5x blank result, no qualification is required.* For OCDD/OCDF: If the result is ≤10x blank result, report the sample result with a U.* If the result is > 10x blank result, no qualification is required.*
Gross contamination	Detected	R
* Based on AECOM professional judgment RL (Reporting Limit) is equivalent to the sample quantitation limit (SQL)		

MS/MSD Results

MS/MSD analyses were not performed on the sample in this data set. No data validation actions were taken on this basis.

OPR Results

2,3,7,8-TCDD was spiked for the OPR and OPR duplicate analyses. The percent recoveries (%Rs) and relative percent difference for 2,3,7,8-TCDD were within the QC acceptance criteria for these analyses.

Field Duplicate Results

A field duplicate pair was not submitted with this data set. No data validation actions were taken on this basis.

Labeled Compound Recoveries

The labeled compound %Rs were within the QC acceptance criteria in all sample analyses.

Sample Results and Quantitation/Detection Limits

The laboratory reported the 2,3,7,8-TCDD result in sample MW-2A as an Estimated Maximum Possible Concentration (EMPC) and qualified the result with a "K" qualifier since all identification criteria were not met. Consequently, this result was qualified as estimated (J) due to the uncertainty in the identification. Additionally, this compound was qualified as estimated (J) by the laboratory due to the uncertainty of the quantitation since the concentration detected was below the sample quantitation limit (SQL).

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	1030440	Client:	AAIS001	Project:	AAIS00110
Lab Sample ID:	2182001	Date Collected:	03/16/2011 11:30	Matrix:	WATER
Client Sample:	8290 TCDD Water	Date Received:	03/18/2011 09:40		
Client ID:	1030440-01			Prep Basis:	As Received
Batch ID:	18547	Method:	SW846 8290A		
Run Date:	03/26/2011 10:19	Analyst:	MJC	Instrument:	HRP791
Data File:	c25mar11a_2-9			Dilution:	1
Prep Batch:	18479	Prep Method:	SW846 3520C		
Prep Date:	24-MAR-11	Aliquot:	945.9 mL		

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	JK		2.07	pg/L	0.863	10.6
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	.863	3.95	pg/L	0.863	10.6
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	1.15		pg/L	1.15	52.9
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	.839	0.973	pg/L	0.839	52.9
37871-00-4	Total Heptachlorodibenzo-p-dioxin	J	11.7 U		pg/L	0.992	52.9
30402-14-3	Total Tetrachlorodibenzofuran	U	1.94	29.0	pg/L	1.94	10.6
30402-15-4	Total Pentachlorodibenzofuran	U	.966		pg/L	0.966	52.9
55684-94-1	Total Hexachlorodibenzofuran	U	.742		pg/L	0.742	52.9
38998-75-3	Total Heptachlorodibenzofuran	U	.66		pg/L	0.660	52.9

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1490	2110	pg/L	70.5	(40%-135%)
13C-1,2,3,7,8-PeCDD		1570	2110	pg/L	74.2	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1280	2110	pg/L	60.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1410	2110	pg/L	66.6	(40%-135%)
13C-OCDD		2780	4230	pg/L	65.8	(40%-135%)
13C-2,3,7,8-TCDF		1550	2110	pg/L	73.4	(40%-135%)
13C-1,2,3,7,8-PeCDF		1550	2110	pg/L	73.4	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1220	2110	pg/L	57.8	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1360	2110	pg/L	64.2	(40%-135%)

Comments:

J Value is estimated

K Estimated Maximum Possible Concentration

U Analyte was analyzed for , but not detected above the specified detection limit.

AECOM
2 Technology Park Drive
Westford, MA 01886-3140

978.589.3000 tel
978.589.3100 fax

Data Validation Report

To	Erin Stewart, AECOM	Page 1
Project	Lucent Winston Salem Groundwater Samples	
Laboratory	TestAmerica-West Sacramento	
Laboratory SDG	G1E120651	
Analyses/Method	Dioxins/SW-846 Method 8290A	
Validation Level	Full	
AECOM Project Number	60194417.3000	
Prepared by	Paula DiMattei/AECOM	Completed: June 20, 2011
Reviewed by	Robert Kennedy/AECOM	
CC	Lisa Krowitz/AECOM	

SUMMARY

Full validation was performed on the data for two groundwater samples analyzed for polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofurans (PCDF) by SW-846 Method 8290. The samples were collected at the Alcatel-Lucent USA, Inc. site in Winston-Salem, North Carolina on May 10, 2011 and were submitted to TestAmerica in West Sacramento for analysis. TestAmerica processed the samples and reported the results under laboratory sample delivery group (SDG) G1E120651.

The sample results were assessed according to the "USEPA *Contract Lab Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Reviews" (September 2005*) and using the method and laboratory quality control (QC) criteria. The National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were qualified due to nonconformances of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below.

Sample IDs
MW-2A
MW-2A DUP

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- GC/MS Performance Checks
- Calibrations
- Laboratory blanks/equipment blanks
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Ongoing precision and recovery (OPR) results
- Field duplicate results
- Labeled compound recoveries
- Compound Identification
- Sample results and quantitation/detection limits

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. The laboratory noted that one of the two sample containers received for MW-2A DUP was received broken. No other discrepancies were noted.

Holding Times/Sample Preservation

The cooler temperatures upon sample receipt were within the QC acceptance criteria of 4± 2°C.

All samples were extracted and analyzed within the method specified holding times.

GC/MS Performance Checks

GC/MS performance checks were performed at the proper frequency. The chromatographic resolution between 2,3,7,8-TCDD and other TCDD isomers was $\leq$ 25%.

Calibrations

All initial and continuing calibration criteria were met.

Laboratory Blanks/Equipment Blanks

There were no equipment blank samples submitted with this sample set. No validation actions were taken on this basis. Several target compounds were detected in the laboratory method blank associated with the samples in this data set. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. The following table summarizes the maximum level of blank contamination detected in the laboratory method blank associated with the groundwater samples, sample quantitation limit (SQL), and validation actions taken.

Compound	SQL (pg/L)	Maximum Concentration (pg/L)	Actions
Total HpCDD	50	1.1 J	The total HpCDD result s in samples MW-2A and MW-2A DUP were qualified as nondetect (U) at the reported concentration.
OCDD	100	4.0 J	The OCDD result in samples MW-2A and MW-2A DUP were qualified as nondetect (U) at the reported concentration.
1,2,3,4,6,7,8-HpCDF	50	1.3 J	The 1,2,3,4,6,7,8-HpCDF result in sample MW-2A DUP was qualified as nondetect (U) at the reported concentration.
Total HpCDF	50	1.3 J	The total HpCDF result in sample MW-2A DUP was qualified as nondetect (U) at the reported concentration.

The method blank evaluation was based on the following actions:

Method Blank Result	Sample Result	Action
<RL	Not detected	No qualification
	<RL	Report the sample result with a U.
	≥ RL	For all compounds except OCDD/OCDF: If the result is ≤5x blank result, report the sample result with a U.* If the result is > 5x blank result, no qualification is required.* For OCDD/OCDF: If the result is ≤10x blank result, report the sample result with a U.* If the result is > 10x blank result, no qualification is required.*
≥RL (>3x RL for OCDD/OCDF)	Not detected	UJ
	<RL	Report the sample result with a U.
	≥ RL and < blank result	Report as not detected (U) at the sample result or Qualify sample result as estimated (J).
	≥ RL and ≥ blank result	For all compounds except OCDD/OCDF: If the result is ≤5x blank result, report the sample result with a U.* If the result is > 5x blank result, no qualification is required.* For OCDD/OCDF: If the result is ≤10x blank result, report the sample result with a U.* If the result is > 10x blank result, no qualification is required.*
Gross contamination	Detected	R
* Based on AECOM professional judgment RL (Reporting Limit) is equivalent to the sample quantitation limit		

MS/MSD Results

MS/MSD analyses were not performed on samples in this data set. No data validation actions were taken on this basis.

OPR Results

All target compounds were spiked for the OPR analysis. The percent recoveries (%Rs) of all spiked compounds were within the QC acceptance criteria for the OPR analysis.

Field Duplicate Results

Samples MW-2A and MW-2A DUP were the field duplicate samples submitted in this data set. No target compounds were detected in either sample after blank actions were applied. Precision was deemed acceptable.

Labeled Compound Recoveries

The labeled compound %Rs were within the QC acceptance criteria in all sample analyses.

Compound Identification

The compound identification criteria were met for all sample results with the following exception.

Sample ID	Compound	Ion Ratio	QC Limits
MW-2A DUP	OCDD	0.73	0.76-1.02

The laboratory reported the OCDD result in sample MW-2A DUP as an Estimated Maximum Possible Concentration (EMPC) and qualified the result with a "Q" qualifier since the ion abundance ratio criteria were not met. The OCDD result in this sample was subsequently qualified as nondetect (U) due to blank contamination (See Laboratory Blanks/Equipment Blanks, above). Therefore, the overall qualification of this result is (U).

Sample Results and Quantitation/Detection Limits

Calculations were spot-checked. No discrepancies were noted.

Client Sample Results

Client: AECOM, Inc

TestAmerica Job ID: G1E120651

Client Sample ID: MW-2A

Lab Sample ID: G1E120651001

Date Collected: 05/10/11 16:00

Matrix: Water

Date Received: 05/12/11 09:30

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290)

Analyte	Result	Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10	0.92	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total TCDD	ND		10	0.92	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8-PeCDD	ND		52	0.75	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total PeCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,7,8-HxCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,6,7,8-HxCDD	ND		52	0.83	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8,9-HxCDD	ND		52	0.85	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HxCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,6,7,8-HpCDD	ND		52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HpCDD	1.7	UL	52	1.2	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
OCDD	10	~~J-B~~ UL	100	0.53	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
2,3,7,8-TCDF	ND		10	1.1	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total TCDF	ND		10	1.1	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8-PeCDF	ND		52	1.0	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
2,3,4,7,8-PeCDF	ND		52	1.0	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total PeCDF	ND		52	1.0	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,7,8-HxCDF	ND		52	0.27	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,6,7,8-HxCDF	ND		52	0.21	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
2,3,4,6,7,8-HxCDF	ND		52	0.24	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,7,8,9-HxCDF	ND		52	0.28	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HxCDF	ND		52	0.28	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,6,7,8-HpCDF	ND		52	0.82	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
1,2,3,4,7,8,9-HpCDF	ND		52	0.72	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
Total HpCDF	ND		52	0.82	pg/L		05/18/11 09:00	05/23/11 14:17	1.03
OCDF	ND		100	1.5	pg/L		05/18/11 09:00	05/23/11 14:17	1.03

Internal Standard	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*90*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,7,8-PeCDD	*100*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,6,7,8-HxCDD	*88*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,4,6,7,8-HpCDD	*81*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-OCDD	*101*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-2,3,7,8-TCDF	*116*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,7,8-PeCDF	*97*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,4,7,8-HxCDF	*90*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*
13C-1,2,3,4,6,7,8-HpCDF	*81*		*40 - 135*	*05/18/11 09:00*	*05/23/11 14:17*	*1.03*

Client Sample ID: MW-2A DUP

Lab Sample ID: G1E120651002

Date Collected: 05/10/11 16:00

Matrix: Water

Date Received: 05/12/11 09:30

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290)

Analyte	Result	Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		11	0.78	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total TCDD	ND		11	0.78	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8-PeCDD	ND		54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total PeCDD	ND		54	1.8	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,7,8-HxCDD	ND		54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,6,7,8-HxCDD	ND		54	1.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8,9-HxCDD	ND		54	1.1	pg/L		05/18/11 09:00	05/23/11 15:02	1.08

Client Sample ID: MW-2A DUP

Lab Sample ID: G1E120651002

Date Collected: 05/10/11 16:00

Matrix: Water

Date Received: 05/12/11 09:30

Method: 8290 - Dioxins/Furans, HRGC/HRMS (8290) (Continued)

Analyte	Result	Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
Total HxCDD	ND		54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,6,7,8-HpCDD	ND		54	2.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total HpCDD	2.7	UA	54	1.4	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
OCDD	19	~~J-B~~ UA	110	1.1	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
2,3,7,8-TCDF	ND		11	0.92	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total TCDF	ND		11	0.92	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8-PeCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
2,3,4,7,8-PeCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total PeCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,7,8-HxCDF	ND		54	0.81	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,6,7,8-HxCDF	ND		54	0.43	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
2,3,4,6,7,8-HxCDF	ND		54	0.27	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,7,8,9-HxCDF	ND		54	0.35	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total HxCDF	ND		54	0.81	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,6,7,8-HpCDF	1.1	~~J-B~~ UA	54	1.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
1,2,3,4,7,8,9-HpCDF	ND		54	1.2	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
Total HpCDF	1.1	UA	54	1.1	pg/L		05/18/11 09:00	05/23/11 15:02	1.08
OCDF	ND		110	2.0	pg/L		05/18/11 09:00	05/23/11 15:02	1.08

Internal Standard	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*72*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,7,8-PeCDD	*73*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,6,7,8-HxCDD	*79*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,4,6,7,8-HpCDD	*65*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-OCDD	*72*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-2,3,7,8-TCDF	*93*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,7,8-PeCDF	*76*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,4,7,8-HxCDF	*83*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*
13C-1,2,3,4,6,7,8-HpCDF	*71*		*40 - 135*	*05/18/11 09:00*	*05/23/11 15:02*	*1.08*