

December 15, 2010

**TestAmerica Project Number: G0L020446** 

PO/Contract: 2027.07

Ted Splitter Tronox LLC / AIU Henderson, NV PO Box 268859 Oklahoma City, OK 73126-8859

Dear Mr. Splitter,

This report contains the analytical results for the samples received under chain of custody by TestAmerica on December 2, 2010. These samples are associated with your Tronox Henderson Air Monitoring project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4383.

Sincerely,

DAVID R. ALLTUCKER

**Project Manager** 

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#### **Case Narrative**

#### **TestAmerica West Sacramento Project Number G0L020446**

#### AIR, TO-13, Semivolatile Organics

Sample(s): 2, 9

The surrogate recovery for 1,2-Dichlorobenzene-d4 is low and outside criteria. However, the surrogate recoveries in the associated method blank and laboratory control sample (LCS) were within established control limits. The results may be low. The surrogate recovery was confirmed by re-analysis.

#### AIR, TO-9, Dioxins/Furans

Sample(s): 1, 5, 8

Several analytes in each sample and the associated method blank have been qualified with a "Q" flag due to the ion abundance ratios being outside of criteria. The analytes have been reported as an "estimated maximum possible concentration" (EMPC) because the quantitation is based on the theoretical ion abundance ratio for these analytes.

There were no other anomalies associated with this project.





#### TestAmerica Laboratories West Sacramento Certifications/Accreditations

| <b>Certifying State</b> | Certificate # | Certifying State   | Certificate #    |
|-------------------------|---------------|--------------------|------------------|
| Alaska                  | UST-055       | New York*          | 11666            |
| Arizona                 | AZ0708        | Oregon*            | CA 200005        |
| Arkansas                | 88-0691       | Pennsylvania       | 68-1272          |
| California*             | 01119CA       | South Carolina     | 87014            |
| Colorado                | NA            | Texas              | T104704399-08-TX |
| Connecticut             | PH-0691       | Utah*              | QUAN1            |
| Florida*                | E87570        | Virginia           | 00178            |
| Georgia                 | 960           | Washington         | C1281            |
| Hawaii                  | NA            | West Virginia      | 9930C, 334       |
| Illinois                | 200060        | Wisconsin          | 998204680        |
| Kansas*                 | E-10375       | NFESC              | NA               |
| Louisiana*              | 30612         | USACE              | NA               |
| Michigan                | 9947          | USDA Foreign Plant | 37-82605         |
| Nevada                  | CA44          | USDA Foreign Soil  | P330-09-00055    |
| New Jersey*             | CA005         | US Fish & Wildlife | LE148388-0       |
| New Mexico              | NA            | Guam               | 09-014r          |

<sup>\*</sup>NELAP accredited. A more detailed parameter list is available upon request. Updated 3/25/2009

#### **QC Parameter Definitions**

**QC Batch**: The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

**Method Blank**: An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

**Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD):** An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

**Duplicate Sample (DU):** Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

**Surrogates:** Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

Matrix Spike and Matrix Spike Duplicate (MS/MSD): An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

**Isotope Dilution**: For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

**Control Limits:** The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

### **Sample Summary**

# TestAmerica West Sacramento Project Number G0L020446

| WO#   | Sample # | Client Sample ID | Sampling Date       | Received Date      |
|-------|----------|------------------|---------------------|--------------------|
| MAQQV | 1        | UW-11292010B     | 11/29/2010 07:22 PM | 12/2/2010 09:00 AM |
| MAQQW | 2        | UW-11292010B     | 11/29/2010 07:22 PM | 12/2/2010 09:00 AM |
| MAQQ1 | 3        | UW-11292010B     | 11/29/2010 07:22 PM | 12/2/2010 09:00 AM |
| MAQQ4 | 4        | DW-11292010B     | 11/29/2010 08:17 PM | 12/2/2010 09:00 AM |
| MAQQ6 | 5        | UW-11302010B     | 11/30/2010 05:27 PM | 12/2/2010 09:00 AM |
| MAQQ9 | 6        | UW-11302010B     | 11/30/2010 05:29 PM | 12/2/2010 09:00 AM |
| MAQRA | 7        | UW-11302010B     | 11/30/2010 05:26 PM | 12/2/2010 09:00 AM |
| MAQRD | 8        | DW-11302010B     | 11/30/2010 05:44 PM | 12/2/2010 09:00 AM |
| MAQRF | 9        | DW-11302010B     | 11/30/2010 05:45 PM | 12/2/2010 09:00 AM |
| MAQRH | 10       | DW-11302010B     | 11/30/2010 05:47 PM | 12/2/2010 09:00 AM |

#### Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

# CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Cushody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate.

Page: Cooler#

9 9

3-6 DAY TURN AROUND environmental management, Inc. 300 Frank H. Ogawa Plaza, Ste 510 Oakland, CA 94612 (510) 839-0688 Lab PM Additional Commente/Special instructions: ITEM# ab PM email | David\_Alitucker@testamericainc.com DW-113020108 DW-11292010B UW-11292010B UW-11292010B DW-11302010B W-11302010B JW-11302010B JSED MEDIA JW-11292010B JW-11302010B JW-11302010B 880 Riverside Parkway David Alltucker Test America Laboratories Inc. West Sacramento, CA 95605 (918) 373-5800 SAMPLE ID
Samples IDs MUST BE UNIQUE Site PM Name Phone/FaH (/ Project# Ş Site PM Email Site Address | 560 W Lake Mead Pkwy Brte ID #:102 Required Project Information: Henderson SAMPLE LOCATION (510) 435-4809 TRONOX LLC, HENDERSON 2027.07 Ted Splitter@ngem.com Ted Splitter State, Zip Ronda S. Bailey X MORPHIS INFO ≵ ≵ ₹ ξ ≵ 3 \$ ₹ ₹ ≵ ₹ MATRIX CODE NV, 89016 G=GRAB C=COMP SAMPLE TYPE Send EDD to Frank. Hagar@ngem.com
CC Hardcopy report to PDF Electronic Version Only - FTP Upload City/State Address Required Invoice Information:
Send Invoice to Susan Growley Tronox LLC. CC Hardcopy report to See Additional Comments Below o N 11/30/2010 11/29/2010 11/30/2010 11/30/2010 11/30/2010 11/30/2010 11/29/2010 11/30/2010 11/29/2010 11/29/2010 SAMPLE DATE PO Box 55 SIGNATURE OF BRUTANOIS Henderson, NV 89009 Frank.Hagar@ngem.com 5:26 PM 5.29 PM 8.17 PM 5-47 PM 5:44 PM 5:27 PM 7.22 PM 5:45 PM 7:22 PM 7 22 PM SAMPLE TIME 013/61 --L **#OF CONTAINERS** Phone #. Nexes (949) 260-9293 Comments/Lab Sample I.D. Volume (m³) PLEASE DISCARD 641.91 642.84 393.08 943.37 626 43 1107.98 1081 47 726 94 m.Jul Analysis Preservative Filtered COC# 2027.07.0018 Regular Total # of Samples: 4 TO-9A/DioHms, Furans Time TO-13A/8270C/HCB ×× TSP × ×  $\overline{\times}$ × 6020/As/Mn/ICPMS OPID SCYIN Sample Receipt Conditions Temp in 0C Samples on Ice? Υ'N Event Complete? Y/N 5 day XX Y/N Y/N Sample intact? Mark One Y/N ž Top Blank



#### LOT RECEIPT CHECKLIST TestAmerica West Sacramento

| CLIENT /                            | orthacte      |                | PM             | DA_         | _ LOG#                                 | 68359                 |
|-------------------------------------|---------------|----------------|----------------|-------------|--|-----------------------|
| LOT# (QUANTIMS ID)                  | 4010200       | 146            | _QUOTE#_       | 84087       | LO                                     | CATION NIYO AC        |
| DATE RECEIVED                       | 12/2/w        | _TIME RECEIV   | ED             | 900         |  | Checked (✓)           |
| DELIVERED BY GOLDENSTATE            |               | ☐ ON TRAC      |                | <del></del> | ,                                      |                       |
| ☐ TAL COURIER ☐ T                   | AL SF         | ☐ VALLEY LC    | GISTICS        |             |  | Ø                     |
| CUSTODY SEAL STATUS                 | MINTACT       | BROKEN         | □ N/A          |             |  |                       |
| CUSTODY SEAL #(S)                   | NA            |                |                | <u>.</u>    | <u>.</u>                               | ,                     |
| SHIPPPING CONTAINER(                | S) 🗌 TAL      | ☑ CLI          | ENT 🗌          | N/A         |  | Ø                     |
| COC #(S)                            |               |                |                |             |  |                       |
| TEMPERATURE BLANK                   | Observed:     | NA             | Corrected:     | ·           | ·· <del>····</del>                     |                       |
| SAMPLE TEMPERATURE                  |               |                |                |             |  | •                     |
| Observed: 3  LABORATORY THERMON     |               | <u>خ</u> Corre | ected Average  | e_3         |  |                       |
| IR UNIT: #4 🔽                       |               | OTHER          | <u> </u>       |             |  |                       |
|                                     |               |                |                |             | -<br>Init                              | W 12/2/w<br>ials Date |
| pH MEASURED<br>LABELED BY           | YES           | <del></del>    |                | ,           | :-:::::::::::::::::::::::::::::::::::: |                       |
| LABELS CHECKED BY PEER REVIEW       |               | ****           |                |             |  | Ħ                     |
| SHORT HOLD TEST NOT                 | IFICATION     |                | SAMPLE R       | A ZNA       |  |                       |
|                                     |               |                | VOA-ENCO       | DRES N/A    |  | otin                  |
| ☐ METALS NOTIFIED                   | OF FILTER/PRI | ESERVE VIA VI  | ERBAL & EM     | IAIL ØN/A   |  |                       |
| COMPLETE SHIPM<br>APPROPRIATE TEMPE |               |                |                |             |  | Ø                     |
| CLOUSEAU                            | ☐ TEMPERAT    | URE EXCEEDE    | ED (2 °C – 6 ° | °C)"        |  |                       |
| ☐ WET ICE                           | ☐ BLUE ICE    | ☐ GEL PACK     | □ ио со        | OLING AGE   | NTS USED                               | ☐ PM NOTIFIED         |
|                                     |               |                |                |             | <br>Initials                           |                       |
| Notes                               | ···           |                |                |             |  |                       |
|                                     | <u> </u>      |                |                |             |  |                       |

<sup>\*1</sup> Acceptable temperature range for State of Wisconsin samples is ≤4°C.



# **Bottle Lot Inventory**

Lot ID:\_\_\_

401020446

|               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11            | 12 | 13 | 14 | 15 | 16          | 17 | 18       | 19 | 20 |
|---------------|---|---|---|---|---|---|---|---|---|----|---------------|----|----|----|----|-------------|----|----------|----|----|
| VOA*          |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| VOAh*         |   |   |   |   |   |   |   |   |   |    | $\overline{}$ |    |    |    |    |             |    |          |    |    |
| AGB           |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| AGBs          |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 250AGB        |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 250AGBs       |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 250AGBn       |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 500AGB        |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| AGJ           |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 500AGJ        |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 250AGJ        |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             | 1  |          |    |    |
| 125AGJ        |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| CGJ           |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 500CGJ        |   | 1 |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 250CGJ        |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 125CGJ        |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| PJ            |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| PJn           |   |   |   |   |   |   |   |   |   |    |               |    |    |    | _  |             |    | }        |    |    |
| 500PJ         |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 500PJn        |   | _ |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 500PJna       |   |   |   |   |   |   |   |   |   |    |               |    |    |    | -  |             |    | Ī        |    |    |
| 500PJzn/na    |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    | ]           |    | ]        |    |    |
| 250PJ         |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 250PJn        |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 250PJna       |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| 250PJzn/na    |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| Acetate Tube  |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    | ļ        |    |    |
| "CT .         |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| Encore        |   |   | 3 |   |   |   |   |   |   |    |               |    |    |    |    |             |    |          |    |    |
| Folder/filter |   |   | 1 | 1 |   |   | / |   |   | /_ |               |    |    |    |    |             |    |          |    |    |
| PUF           |   | 1 |   |   | 1 | / |   | 1 | 1 |    |               |    |    | _  |    |             |    |          | ļ  |    |
| Petri/Filter  |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    | ļ. <u>.</u> |    |          |    |    |
| XAD Trap      |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    |             |    | <u> </u> |    |    |
| Ziploc        |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    | <u> </u>    |    | ļ        |    |    |
|               |   |   |   |   |   |   |   |   |   |    |               |    |    |    |    | <u> </u>    |    |          |    |    |
| <u> </u>      | 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 na = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

# AIR, TO-13, Semivolatile Organics

#### Sample ID: UW-11292010B

#### **Trace Level Compounds**

Work Order #....: MAQQW1AA Lot - Sample #....: G0L020446 - 002 Matrix....: AA Dilution Factor ....: ] Date Received ....: 12/02/10 Date Sampled ....: 11/29/10 Volume...: 726.94 Analysis Date....: 12/07/10 Prep Date ....: 12/02/10 Method....: EPA-2 TO-13 Prep Batch # ....: 0336447 Instrument ID....: 5MH

Initial Wgt/Vol....: 1 Sample Analyst ID....: Kenny Q. Truong

| PARAMETER              | RESULT | RI    | EPORTING LIMIT | DETECTION LIMIT UNITS |              |  |
|------------------------|--------|-------|----------------|-----------------------|--------------|--|
| Hexachlorobenzene      | ND     | 0.014 |                | 0.0018                | ug/m3        |  |
| SURROGATE              |        | PERCE | NT RECOVERY    | RECO                  | OVERY LIMITS |  |
| 1,2-Dichlorobenzene-d4 |        | 53    | *              | 60 - 1                | 20           |  |
| 2-Fluorobiphenyl       |        | 74    |                | 58 - 1                | 05           |  |
| 2-Fluorophenol         |        | 65    |                | 41 - 1                | 05           |  |
| Nitrobenzene-d5        |        | 74    |                | 46 - 1                | 18           |  |
| Phenol-d5              |        | 75    |                | 43 - 1                | 22           |  |
| Terphenyl-d14          |        | 95    |                | 69 - 1                | 10           |  |
| 2,4,6-Tribromophenol   |        | 103   |                | 61 - 1                | 18           |  |

Surrogate recovery is outside stated control limits.

Sample ID: UW-11302010B

#### **Trace Level Compounds**

| Lot - Sample #: | G0L020446 - 006 | Work Order #:  | MAQQ91AA | Matrix: AA          |
|-----------------|-----------------|----------------|----------|---------------------|
| Date Sampled;   | 11/30/10        | Date Received: | 12/02/10 | Dilution Factor: 1  |
| Prep Date:      | 12/02/10        | Analysis Date: | 12/07/10 | Volume: 641.91      |
| Prep Batch #:   | 0336447         | Instrument ID: | 5MH      | Method: EPA-2 TO-13 |

Initial Wgt/Vol....: 1 Sample Analyst ID....: Kenny Q. Truong

| PARAMETER              | RESULT | REPORTING LIMIT  | DETECTION LIMIT UNITS |            |  |
|------------------------|--------|------------------|-----------------------|------------|--|
| Hexachlorobenzene      | ND     | 0.016            | 0.0020                | ug/m3      |  |
| SURROGATE              |        | PERCENT RECOVERY | RECOVE                | CRY LIMITS |  |
| 1,2-Dichlorobenzene-d4 |        | 61               | 60 - 120              |            |  |
| 2-Fluorobiphenyl       |        | 81               | 58 - 105              |            |  |
| 2-Fluorophenol         |        | 69               | 41 - 105              |            |  |
| Nitrobenzene-d5        |        | 76               | 46 - 118              |            |  |
| Phenol-d5              |        | 80               | 43 - 122              |            |  |
| Terphenyl-d14          |        | 97               | 69 - 110              |            |  |
| 2,4,6-Tribromophenol   |        | 112              | 61 - 118              |            |  |

#### Sample ID: DW-11302010B

#### **Trace Level Compounds**

Lot - Sample #....: G0L020446 - 009 Work Order # ....: MAQRF1AA Matrix....: AADate Received ....: 12/02/10 Dilution Factor ....: ] Date Sampled ....: 11/30/10 Volume...: 642.84 Prep Date ....: 12/02/10 Analysis Date ....: 12/08/10 Method....: EPA-2 TO-13 Prep Batch # ....: Instrument ID....: 5MH 0336447

Initial Wgt/Vol...: 1 Sample Analyst ID....: Kenny Q. Truong

| PARAMETER              | RESULT | RI    | EPORTING LIMIT | DETECTION LIMIT UNITS |              |  |
|------------------------|--------|-------|----------------|-----------------------|--------------|--|
| Hexachlorobenzene      | ND     | 0.016 |                | 0.0020                | ug/m3        |  |
| SURROGATE              |        | PERCE | NT RECOVERY    | REC                   | OVERY LIMITS |  |
| 1,2-Dichlorobenzene-d4 |        | 59    | *              | 60 - 1                | 20           |  |
| 2-Fluorobiphenyl       |        | 85    |                | 58 - 1                | 05           |  |
| 2-Fluorophenol         |        | 69    |                | 41 - 1                | 05           |  |
| Nitrobenzene-d5        |        | 79    |                | 46 - 1                | 18           |  |
| Phenol-d5              |        | 78    |                | 43 - 1                | 22           |  |
| Terphenyl-d14          |        | 103   |                | 69 - 1                | 10           |  |
| 2,4,6-Tribromophenol   |        | 109   |                | 61 - 1                | 18           |  |

<sup>\*</sup> Surrogate recovery is outside stated control limits.

# QC DATA ASSOCIATION SUMMARY

#### G0L020446

Sample Preparation and Analysis Control Numbers

| SAMPLE# | MATRIX | ANALYTICAL<br>METHOD | LEACH<br>BATCH # | PREP<br>BATCH # | MS RUN# |
|---------|--------|----------------------|------------------|-----------------|---------|
| 002     | AA     | EPA-2 TO-13          |                  | 0336447         |         |
| 006     | AA     | EPA-2 TO-13          |                  | 0336447         |         |
| 009     | AA     | EPA-2 TO-13          |                  | 0336447         |         |

#### Method Blank Report

#### **Trace Level Compounds**

Work Order #....: MAR231AA Matrix....: AIR Lot - Sample #....: G0L020000 - 447B Dilution Factor ....: 1 Date Received ....: 12/02/10 Date Sampled ....: 11/29/10 Volume...: 0 Analysis Date....: 12/07/10 12/02/10 Prep Date ....: Method....: EPA-2 TO-13 5MH Prep Batch # ....: 0336447 Instrument ID ....:

Initial Wgt/Vol....: 1 Sample Analyst ID....: Kenny Q. Truong

| PARAMETER              | RESULT | REPORTING LIMIT  | DETECTION LIMIT UNITS |                 |  |  |
|------------------------|--------|------------------|-----------------------|-----------------|--|--|
| Hexachlorobenzene      | ND     | 10.0             | 1.3                   | ug              |  |  |
| SURROGATE              |        | PERCENT RECOVERY |                       | RECOVERY LIMITS |  |  |
| 1,2-Dichlorobenzene-d4 |        | 68               |                       | 60 - 120        |  |  |
| 2-Fluorobiphenyl       |        | 84               |                       | 58 - 105        |  |  |
| 2-Fluorophenol         |        | 72               |                       | 41 - 105        |  |  |
| Nitrobenzene-d5        |        | 79               |                       | 46 - 118        |  |  |
| Phenol-d5              |        | 81               |                       | 43 - 122        |  |  |
| Terphenyl-d14          |        | 95               |                       | 69 - 110        |  |  |
| 2,4,6-Tribromophenol   |        | 100              |                       | 61 - 118        |  |  |

#### LABORATORY CONTROL SAMPLE DATA REPORT

#### **Trace Level Compounds**

Client Lot # ...: Work Order # ...: MAR231AC-LCS G0L020446 Matrix .....: AIR

MAR231AD-LCSD G0L020000 - 447 LCS Lot-Sample#:

Prep Date .....: 12/02/10 Analysis Date ..: 12/07/10

Prep Batch # ...: 0336447

Dilution Factor:

Method....: EPA-2 Kenny Q. Truong Instrument ID..: 5MH TO-13 Analyst ID.....:

Initial Wgt/Vol: 1 Sample

| PARAMETER            | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS               | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS       | RPD | RPD LIMITS |
|----------------------|-----------------|--------------------|---------------------|---------------------|--------------------------|-----|------------|
| Hexachlorobenzene    | 100<br>100      | 96.8<br>99.1       | ug<br>ug            | 97<br>99            | (70 - 110)<br>(70 - 110) | 2.3 | (0 - 30)   |
| SURROGATE            |                 |                    | PERCENT<br>RECOVERY |                     | RECOVERY<br>LIMITS       |     |            |
| 2-Fluorobiphenyl     |                 |                    | 92<br>97            |                     | (58 - 105)<br>(58 - 105) |     |            |
| 2-Fluorophenol       |                 |                    | 77<br>81            |                     | (41 - 105)<br>(41 - 105) |     |            |
| Nitrobenzene-d5      |                 |                    | 90<br>93            |                     | (46 - 118)<br>(46 - 118) |     |            |
| Phenol-d5            |                 |                    | 83<br>84            |                     | (43 - 122)<br>(43 - 122) |     |            |
| Terphenyl-d14        |                 |                    | 96<br>94            |                     | (69 - 110)<br>(69 - 110) |     |            |
| 2,4,6-Tribromophenol |                 |                    | 110<br>109          |                     | (61 - 118)<br>(61 - 118) |     |            |

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

# AIR, TO-9, Dioxins/Furans

#### Sample ID: UW-11292010B

#### Trace Level Organic Compounds

#### **EPA-2 TO-9**

Lot - Sample #....: G0L020446 - 001 Date Sampled ....: 11/29/10 12/03/10 Prep Date ....: Prep Batch # ....: 0337382

Work Order #....: MAQQV1AA Date Received ....: 12/02/10 Analysis Date ....: 12/07/10

Matrix....: AA Instrument ID ....:

Volume ....: 348.34 Units....: pg/m3

4D5

Initial Wgt/Vol: 1 Sample Dilution Factor ....: Analyst ID ....:

Mark Onishi

TEF TEQ REPORTING RESULT CONCENTRATION **PARAMETER FACTOR** LIMIT 2,3,7,8-TCDD 20 0 ND 1.0 Total TCDD ND 20 0 100 0 1,2,3,7,8-PeCDD ND 1.0 ND 100 0 Total PeCDD 100 0.1 0 ND 1,2,3,4,7,8-HxCDD 0 1,2,3,6,7,8-HxCDD ND 100 0.1 1,2,3,7,8,9-HxCDD ND 100 0.1 0 100 0 Total HxCDD ND 100 0.01 0 1,2,3,4,6,7,8-HpCDD ND 100 ND Total HpCDD 0.0003 0.000016 OCDD 19 JQB 200 2,3,7,8-TCDF ND 20 0.1 0 Total TCDF ND 20 100 0.03 0 1,2,3,7,8-PeCDF ND 100 0.3 0 ND 2,3,4,7,8-PeCDF Total PeCDF ND 100 1,2,3,4,7,8-HxCDF 6.2 100 0.1 0.0018 JQ 0.00083 2.9 100 0.1 1,2,3,6,7,8-HxCDF ND 100 0.1 0 2,3,4,6,7,8-HxCDF 100 0.1 0 ND 1,2,3,7,8,9-HxCDF **Total HxCDF** 18 100 15 JQB 100 0.01 0.00043 1,2,3,4,6,7,8-HpCDF 0.00013 100 0.01 1,2,3,4,7,8,9-HpCDF 4.6 **Total HpCDF** 29 100 200 0.0003 0.000061 **OCDF** 71 J

**Total TEQ Concentration** 

0.0033

#### Sample ID: UW-11292010B

#### Trace Level Organic Compounds

#### **EPA-2 TO-9**

| Lot - Sample #:  | G0L020446 - 001 | Work Order #:    | MAQQV1AA    | Matrix: AA         |
|------------------|-----------------|------------------|-------------|--------------------|
| Date Sampled:    | 11/29/10        | Date Received:   | 12/02/10    | Instrument ID: 4D5 |
| Prep Date:       | 12/03/10        | Analysis Date:   | 12/07/10    | Volume: 348.34     |
| Prep Batch #:    | 0337382         | Dilution Factor: | _           | Units: pg/m3       |
| Initial Wgt/Vol: | 1 Sample        | Analyst ID:      | Mark Onishi |                    |

| INTERNAL STANDARDS      | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
|-------------------------|---------------------|--------------------|
| 13C-2,3,7,8-TCDD        | 99                  | 50 - 120           |
| 13C-1,2,3,7,8-PeCDD     | 86                  | 50 - 120           |
| 13C-1,2,3,6,7,8-HxCDD   | 96                  | 50 - 120           |
| 13C-1,2,3,4,6,7,8-HpCDD | 84                  | 40 - 120           |
| 13C-OCDD                | 82                  | 40 - 120           |
| 13C-2,3,7,8-TCDF        | 94                  | 50 - 120           |
| 13C-1,2,3,7,8-PeCDF     | 98                  | 50 - 120           |
| 13C-1,2,3,4,7,8-HxCDF   | 80                  | 50 - 120           |
| 13C-1,2,3,4,6,7,8-HpCDF | 82                  | 40 - 120           |
| SURROGATE               | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
| 37Cl4-2,3,7,8-TCDD      | 101                 | 50 - 120           |

#### **OUALIFIERS**

Results and reporting limits have been adjusted for dry weight.

#### Notes:

WHO TEFs for human risk assessment based on the conclusions of the World Health Organization meeting in Geneva, Switzerland, June 2005.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated Result.

Q Estimated maximum possible concentration (EMPC).

#### Sample ID: UW-11292010B

#### **Trace Level Compounds**

Lot - Sample #...: G0L020446 - 001

Date Sampled....: 11/29/10

Prep Date...: 12/03/10

Prep Batch # ....: 0337382
Initial Wgt/Vol....: 1 Sample

Work Order #...: MAQQV1AA

Date Received...: 12/02/10

Analysis Date...: 12/07/10
Instrument ID...: 4D5

Analyst ID....: Mark Onishi

Matrix...: AA
Dilution Factor...: 2
Volume...: 348.34

Method....: EPA-2 TO-9

| PARAMETER               | RESULT      |       | REPORTING LIMIT  | DETECTION LIMIT      | UNITS      |
|-------------------------|-------------|-------|------------------|----------------------|------------|
| 2,3,7,8-TCDD            | ND          |       | 0.057            | 0.0075               | pg/m3      |
| Total TCDD              | ND          |       | 0.057            | 0.0075               | pg/m3      |
| 1,2,3,7,8-PeCDD         | ND          |       | 0.29             | 0.017                | pg/m3      |
| Total PeCDD             | ND          |       | 0.29             | 0.017                | pg/m3      |
| 1,2,3,4,7,8-HxCDD       | ND          |       | 0.29             | 0.0078               | pg/m3      |
| 1,2,3,6,7,8-HxCDD       | ND          |       | 0.29             | 0.0069               | pg/m3      |
| 1,2,3,7,8,9-HxCDD       | ND          |       | 0.29             | 0.0069               | pg/m3      |
| Total HxCDD             | ND          |       | 0.29             | 0.0078               | pg/m3      |
| 1,2,3,4,6,7,8-HpCDD     | ND          |       | 0.29             | 0.015                | pg/m3      |
| Total HpCDD             | ND          |       | 0.29             | 0.015                | pg/m3      |
| OCDD                    | 0.054       | J Q B | 0.57             | 0.0098               | pg/m3      |
| 2,3,7,8-TCDF            | ND          |       | 0.057            | 0.011                | pg/m3      |
| Total TCDF              | ND          |       | 0.057            | 0.011                | pg/m3      |
| 1,2,3,7,8-PeCDF         | ND          |       | 0.29             | 0.012                | pg/m3      |
| 2,3,4,7,8-PeCDF         | ND          |       | 0.29             | 0.012                | pg/m3      |
| Total PeCDF             | ND          |       | 0.29             | 0.012                | pg/m3      |
| 1,2,3,4,7,8-HxCDF       | 0.018       | J     | 0.29             | 0.0052               | pg/m3      |
| 1,2,3,6,7,8-HxCDF       | 0.0084      | JQ    | 0.29             | 0.0049               | pg/m3      |
| 2,3,4,6,7,8-HxCDF       | ND          |       | 0.29             | 0.0052               | pg/m3      |
| 1,2,3,7,8,9-HxCDF       | ND          |       | 0.29             | 0.0057               | pg/m3      |
| Total HxCDF             | 0.050       |       | 0.29             | 0.0057               | pg/m3      |
| 1,2,3,4,6,7,8-HpCDF     | 0.042       | JQB   | 0.29             | 0.0055               | pg/m3      |
| 1,2,3,4,7,8,9-HpCDF     | 0.013       | J     | 0.29             | 0.0066               | pg/m3      |
| Total HpCDF             | 0.082       |       | 0.29             | 0.0060               | pg/m3      |
| OCDF                    | 0.20        | J     | 0.57             | 0.011                | pg/m3      |
| INTERNAL STANDARDS      |             |       | PERCENT RECOVERY | RECOVERY             | LIMITS     |
| 13C-2,3,7,8-TCDD        | <del></del> |       | 99               | 50 - 120             |            |
| 13C-1,2,3,7,8-PeCDD     |             |       | 86               | 50 - 120             |            |
| 13C-1,2,3,6,7,8-HxCDD   |             |       | 96               | 50 - 120             |            |
| 13C-1,2,3,4,6,7,8-HpCDD |             |       | 84               | 40 - 120             |            |
| 13C-OCDD                |             |       | 82               | 40 - 120             |            |
| 13C-2,3,7,8-TCDF        |             |       | 94               | 50 - 120             |            |
| 13C-1,2,3,7,8-PeCDF     |             |       | 98<br>80         | 50 - 120<br>50 - 120 |            |
| 13C-1,2,3,4,7,8-HxCDF   |             |       | 80<br>82         | 40 - 120             |            |
| 13C-1,2,3,4,6,7,8-HpCDF |             |       |                  |                      | / I IBAITO |
| SURROGATE               |             |       | PERCENT RECOVERY | RECOVERY             | LIMITS     |
| 37C14-2,3,7,8-TCDD      |             |       | 101              | 50 - 120             |            |

Sample ID: UW-11292010B

#### **Trace Level Compounds**

| Lot - Sample #:  | G0L020446 - 001 | Work Order #:  | MAQQV1AA    | Matrix: AA         |
|------------------|-----------------|----------------|-------------|--------------------|
| Date Sampled:    | 11/29/10        | Date Received: | 12/02/10    | Dilution Factor: 2 |
| Prep Date:       | 12/03/10        | Analysis Date: | 12/07/10    | Volume: 348.34     |
| Prep Batch #:    | 0337382         | Instrument ID: | 4D5         | Method: EPA-2 TO-9 |
| Initial Wgt/Vol; | 1 Sample        | Analyst ID:    | Mark Onishi |                    |

- B Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- J Estimated Result.
- Q Estimated maximum possible concentration (EMPC).

#### Sample ID: UW-11302010B

#### Trace Level Organic Compounds

#### EPA-2 TO-9

Lot - Sample #....: G0L020446 - 005 Date Sampled ....: 11/30/10 12/03/10 Prep Date ....: Prep Batch # ....: 0337382

1 Sample

Initial Wgt/Vol:

Work Order #....: MAQQ61AA Date Received....: 12/02/10 12/07/10 Analysis Date ....: Dilution Factor....: 2

Instrument ID ....: 626.43 Volume ....: Units....: pg/m3

Matrix...: AA

4D5

Mark Onishi Analyst ID ....:

| PARAMETER               | RESUL | Γ   | REPORTING<br>LIMIT | TEF<br>FACTOR | TEQ<br>CONCENTRATION |
|-------------------------|-------|-----|--------------------|---------------|----------------------|
| 2,3,7,8-TCDD            | ND    |     | 20                 | 1.0           | 0                    |
| Total TCDD              | ND    |     | 20                 |               | 0                    |
| 1,2,3,7,8-PeCDD         | ND    |     | 100                | 1.0           | 0                    |
| Total PeCDD             | ND    |     | 100                |               | 0                    |
| 1,2,3,4,7,8-HxCDD       | ND    |     | 100                | 0.1           | 0                    |
| 1,2,3,6,7,8-HxCDD       | ND    |     | 100                | 0.1           | 0                    |
| 1,2,3,7,8,9-HxCDD       | ND    |     | 100                | 0.1           | 0                    |
| Total HxCDD             | ND    |     | 100                |               | 0                    |
| 1,2,3,4,6,7,8-HpCDD     | 5.2   | JQ  | 100                | 0.01          | 0.000083             |
| Total HpCDD             | 12    |     | 100                |               |                      |
| OCDD                    | 28    | JВ  | 200                | 0.0003        | 0.000013             |
| 2,3,7,8-TCDF            | ND    |     | 20                 | 0.1           | 0                    |
| Total TCDF              | ND    |     | 20                 |               | 0                    |
| 1,2,3,7,8-PeCDF         | ND    |     | 100                | 0.03          | 0                    |
| 2,3,4,7,8-PeCDF         | ND    |     | 100                | 0.3           | 0                    |
| Total PeCDF             | ND    |     | 100                |               | 0                    |
| 1,2,3,4,7,8-HxCDF       | 9.7   | J   | 100                | 0.1           | 0.0015               |
| 1,2,3,6,7,8-HxCDF       | 6.0   | J   | 100                | 0.1           | 0.00096              |
| 2,3,4,6,7,8-HxCDF       | ND    |     | 100                | 0.1           | 0                    |
| 1,2,3,7,8,9-HxCDF       | ND    |     | 100                | 0.1           | 0                    |
| Total HxCDF             | 29    |     | 100                |               |                      |
| 1,2,3,4,6,7,8-HpCDF     | 25    | JQB | 100                | 0.01          | 0.00040              |
| 1,2,3,4,7,8,9-HpCDF     | 6.6   | JQ  | 100                | 0.01          | 0.00011              |
| Total HpCDF             | 45    |     | 100                |               |                      |
| OCDF                    | 61    | J   | 200                | 0.0003        | 0.000029             |
| Total TEO Concentration |       |     |                    |               | 0.0031               |

**Total TEQ Concentration** 

0.0031

#### Sample ID: UW-11302010B

#### Trace Level Organic Compounds

#### **EPA-2 TO-9**

| Lot - Sample #:  | G0L020446 - 005 | Work Order #:    | MAQQ61AA    | Matrix:      | AA     |
|------------------|-----------------|------------------|-------------|--------------|--------|
| Date Sampled:    | 11/30/10        | Date Received:   | 12/02/10    | Instrument I | D: 4D5 |
| Prep Date:       | 12/03/10        | Analysis Date:   | 12/07/10    | Volume:      | 626.43 |
| Prep Batch #:    | 0337382         | Dilution Factor: | 2           | Units:       | pg/m3  |
| Initial Wgt/Vol: | 1 Sample        | Analyst ID:      | Mark Onishi |              |        |

| INTERNAL STANDARDS      | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
|-------------------------|---------------------|--------------------|
| 13C-2,3,7,8-TCDD        | 98                  | 50 - 120           |
| 13C-1,2,3,7,8-PeCDD     | 106                 | 50 - 120           |
| 13C-1,2,3,6,7,8-HxCDD   | 102                 | 50 - 120           |
| 13C-1,2,3,4,6,7,8-HpCDD | 74                  | 40 - 120           |
| 13C-OCDD                | 76                  | 40 - 120           |
| 13C-2,3,7,8-TCDF        | 91                  | 50 - 120           |
| 13C-1,2,3,7,8-PeCDF     | 118                 | 50 - 120           |
| 13C-1,2,3,4,7,8-HxCDF   | 83                  | 50 - 120           |
| 13C-1,2,3,4,6,7,8-HpCDF | 75                  | 40 - 120           |
| SURROGATE               | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
| 37Cl4-2,3,7,8-TCDD      | 101                 | 50 - 120           |

#### **QUALIFIERS**

Results and reporting limits have been adjusted for dry weight.

#### Notes:

WHO TEFs for human risk assessment based on the conclusions of the World Health Organization meeting in Geneva, Switzerland, June 2005.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated Result.

Q Estimated maximum possible concentration (EMPC).

#### Sample ID: UW-11302010B

#### **Trace Level Compounds**

Lot - Sample #....: Date Sampled ....: Prep Date ....:

G0L020446 - 005 11/30/10 12/03/10 0337382

Work Order #....: MAQQ61AA Date Received ....:

12/02/10 12/07/10

Dilution Factor....: 2 Volume....: 626.43

Matrix...:

Analysis Date ....: Instrument ID ....:

4D5

Method....: EPA-2 TO-9

AA

Prep Batch # ....: Initial Wgt/Vol....:

1 Sample

Analyst ID ....:

Mark Onishi

| PARAMETER           | RESULT |     | REPORTING LIMIT  | DETECTION LIMIT | UNITS  |
|---------------------|--------|-----|------------------|-----------------|--------|
| 2,3,7,8-TCDD        | ND     |     | 0.032            | 0.0091          | pg/m3  |
| Total TCDD          | ND     |     | 0.032            | 0.0091          | pg/m3  |
| 1,2,3,7,8-PeCDD     | ND     |     | 0.16             | 0.022           | pg/m3  |
| Total PeCDD         | ND     |     | 0.16             | 0.022           | pg/m3  |
| 1,2,3,4,7,8-HxCDD   | ND     |     | 0.16             | 0.0067          | pg/m3  |
| 1,2,3,6,7,8-HxCDD   | ND     |     | 0.16             | 0.0059          | pg/m3  |
| 1,2,3,7,8,9-HxCDD   | ND     |     | 0.16             | 0.0059          | pg/m3  |
| Total HxCDD         | ND     |     | 0.16             | 0.0067          | pg/m3  |
| 1,2,3,4,6,7,8-HpCDD | 0.0084 | J Q | 0.16             | 0.0072          | pg/m3  |
| Total HpCDD         | 0.019  |     | 0.16             | 0.0072          | pg/m3  |
| OCDD                | 0.045  | J B | 0.32             | 0.0077          | pg/m3  |
| 2,3,7,8-TCDF        | ND     |     | 0.032            | 0.012           | pg/m3  |
| Total TCDF          | ND     |     | 0.032            | 0.012           | pg/m3  |
| 1,2,3,7,8-PeCDF     | ND     |     | 0.16             | 0.015           | pg/m3  |
| 2,3,4,7,8-PeCDF     | ND     |     | 0.16             | 0.015           | pg/m3  |
| Total PeCDF         | ND     |     | 0.16             | 0.015           | pg/m3  |
| 1,2,3,4,7,8-HxCDF   | 0.016  | J   | 0.16             | 0.0056          | pg/m3  |
| 1,2,3,6,7,8-HxCDF   | 0.0096 | J   | 0.16             | 0.0054          | pg/m3  |
| 2,3,4,6,7,8-HxCDF   | ND     |     | 0.16             | 0.0056          | pg/m3  |
| 1,2,3,7,8,9-HxCDF   | ND     |     | 0.16             | 0.0062          | pg/m3  |
| Total HxCDF         | 0.046  |     | 0.16             | 0.0062          | pg/m3  |
| 1,2,3,4,6,7,8-HpCDF | 0.040  | JQB | 0.16             | 0.0048          | pg/m3  |
| 1,2,3,4,7,8,9-HpCDF | 0.011  | JQ  | 0.16             | 0.0057          | pg/m3  |
| Total HpCDF         | 0.071  |     | 0.16             | 0.0057          | pg/m3  |
| OCDF                | 0.098  | J   | 0.32             | 0.0070          | pg/m3  |
| INTERNAL STANDARDS  |        | ]   | PERCENT RECOVERY | RECOVERY        | LIMITS |
| 13C-2 3 7 8-TCDD    |        | -   | 28               | 50 - 120        |        |

| INTERNAL STANDARDS      | PERCENT RECOVERY | RECOVERY LIMITS |
|-------------------------|------------------|-----------------|
| 13C-2,3,7,8-TCDD        | 98               | 50 - 120        |
| 13C-1,2,3,7,8-PeCDD     | 106              | 50 - 120        |
| 13C-1,2,3,6,7,8-HxCDD   | 102              | 50 - 120        |
| 13C-1,2,3,4,6,7,8-HpCDD | 74               | 40 - 120        |
| 13C-OCDD                | 76               | 40 - 120        |
| 13C-2,3,7,8-TCDF        | 91               | 50 - 120        |
| 13C-1,2,3,7,8-PeCDF     | 118              | 50 - 120        |
| 13C-1,2,3,4,7,8-HxCDF   | 83               | 50 - 120        |
| 13C-1,2,3,4,6,7,8-HpCDF | 75               | 40 - 120        |
| SURROGATE               | PERCENT RECOVERY | RECOVERY LIMITS |
| 37C14-2,3,7,8-TCDD      | 101              | 50 - 120        |

Sample ID: UW-11302010B

#### **Trace Level Compounds**

| Lot - Sample #:  | G0L020446 - 005 | Work Order #:  | MAQQ61AA    | Matrix: AA         |
|------------------|-----------------|----------------|-------------|--------------------|
| Date Sampled:    | 11/30/10        | Date Received: | 12/02/10    | Dilution Factor: 2 |
| Prep Date:       | 12/03/10        | Analysis Date: | 12/07/10    | Volume: 626.43     |
| Prep Batch #:    | 0337382         | Instrument ID: | 4D5         | Method: EPA-2 TO-9 |
| Initial Wgt/Vol: | 1 Sample        | Analyst ID:    | Mark Onishi |                    |

- B Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- J Estimated Result.
- Q Estimated maximum possible concentration (EMPC).

#### Sample ID: DW-11302010B

#### Trace Level Organic Compounds

#### EPA-2 TO-9

Lot - Sample #....: G0L020446 - 008

Date Sampled....: 11/30/10

Prep Date....: 12/03/10

Prep Batch # ....: 0337382

Work Order #...: MAQRD1AA

Date Received...: 12/02/10

Analysis Date...: 12/08/10

Dilution Factor...: 2

Matrix....: AA
Instrument ID....: 4D5
Volume....: 393.08
Units....: pg/m3

Initial Wgt/Vol: 1 Sample Analyst ID....: Mark Onishi

| PARAMETER                | RESULT | Γ  | REPORTING<br>LIMIT | TEF<br>FACTOR | TEQ<br>CONCENTRATION |
|--------------------------|--------|----|--------------------|---------------|----------------------|
| 2,3,7,8-TCDD             | ND     |    | 20                 | 1.0           | 0                    |
| Total TCDD               | ND     |    | 20                 |               | 0                    |
| 1,2,3,7,8-PeCDD          | ND     |    | 100                | 1.0           | 0                    |
| Total PeCDD              | ND     |    | 100                |               | 0                    |
| 1,2,3,4,7,8-HxCDD        | ND     |    | 100                | 0.1           | 0                    |
| 1,2,3,6,7,8-HxCDD        | ND     |    | 100                | 0.1           | 0                    |
| 1,2,3,7,8,9-HxCDD        | ND     |    | 100                | 0.1           | 0                    |
| Total HxCDD              | ND     |    | 100                |               | 0                    |
| 1,2,3,4,6,7,8-HpCDD      | 10     | J  | 100                | 0.01          | 0.00025              |
| Total HpCDD              | 17     |    | 100                |               |                      |
| OCDD                     | 25     | JВ | 200                | 0.0003        | 0.000019             |
| 2,3,7,8-TCDF             | 16     | J  | 20                 | 0.1           | 0.0041               |
| Total TCDF               | 39     |    | 20                 |               |                      |
| 1,2,3,7,8-PeCDF          | 16     | J  | 100                | 0.03          | 0.0012               |
| 2,3,4,7,8-PeCDF          | 9.6    | J  | 100                | 0.3           | 0.0073               |
| Total PeCDF              | 50     |    | 100                |               |                      |
| 1,2,3,4,7,8-HxCDF        | 42     | J  | 100                | 0.1           | 0.011                |
| 1,2,3,6,7,8-HxCDF        | 22     | JQ | 100                | 0.1           | 0.0056               |
| 2,3,4,6,7,8-HxCDF        | ND     |    | 100                | 0.1           | 0                    |
| 1,2,3,7,8,9-HxCDF        | ND     |    | 100                | 0.1           | 0                    |
| Total HxCDF              | 160    |    | 100                |               |                      |
| 1,2,3,4,6,7,8-HpCDF      | 100    | В  | 100                | 0.01          | 0.0025               |
| 1,2,3,4,7,8,9-HpCDF      | 32     | J  | 100                | 0.01          | 0.00081              |
| Total HpCDF              | 200    |    | 100                |               |                      |
| OCDF                     | 200    | J  | 200                | 0.0003        | 0.00015              |
| Total TEO Composituation |        |    |                    |               | 0.022                |

**Total TEQ Concentration** 

0.033

#### Sample ID: DW-11302010B

#### **Trace Level Organic Compounds**

#### EPA-2 TO-9

| Lot - Sample #:  | G0L020446 - 008 | Work Order #:    | MAQRD1AA    | Matrix:      | AA     |
|------------------|-----------------|------------------|-------------|--------------|--------|
| Date Sampled:    | 11/30/10        | Date Received:   | 12/02/10    | Instrument I | D: 4D5 |
| Prep Date:       | 12/03/10        | Analysis Date:   | 12/08/10    | Volume:      | 393.08 |
| Prep Batch #:    | 0337382         | Dilution Factor: | 2           | Units:       | pg/m3  |
| Initial Wgt/Vol: | 1 Sample        | Analyst ID:      | Mark Onishi |              |        |

| INTERNAL STANDARDS      | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
|-------------------------|---------------------|--------------------|
| 13C-2,3,7,8-TCDD        | 97                  | 50 - 120           |
| 13C-1,2,3,7,8-PeCDD     | 98                  | 50 - 120           |
| 13C-1,2,3,6,7,8-HxCDD   | 97                  | 50 - 120           |
| 13C-1,2,3,4,6,7,8-HpCDD | 84                  | 40 - 120           |
| 13C-OCDD                | 84                  | 40 - 120           |
| 13C-2,3,7,8-TCDF        | 94                  | 50 - 120           |
| 13C-1,2,3,7,8-PeCDF     | 105                 | 50 - 120           |
| 13C-1,2,3,4,7,8-HxCDF   | 87                  | 50 - 120           |
| 13C-1,2,3,4,6,7,8-HpCDF | 84                  | 40 - 120           |
| SURROGATE               | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |
| 37Cl4-2,3,7,8-TCDD      | 100                 | 50 - 120           |

**QUALIFIERS**Results and reporting limits have been adjusted for dry weight.

WHO TEFs for human risk assessment based on the conclusions of the World Health Organization meeting in Geneva, Switzerland, June 2005

В Method blank contamination. The associated method blank contains the target analyte at a reportable level

J Estimated Result

Q Estimated maximum possible concentration (EMPC).

#### Sample ID: DW-11302010B

#### **Trace Level Compounds**

 Lot - Sample #....:
 G0L020446 - 008

 Date Sampled....:
 11/30/10

 Prep Date....:
 12/03/10

 Prep Batch #....:
 0337382

37Cl4-2,3,7,8-TCDD

 Work Order #....:
 MAQRD1AA

 Date Received....:
 12/02/10

 Analysis Date....:
 12/08/10

 Instrument ID....:
 4D5

Matrix...: AA
Dilution Factor...: 2
Volume...: 393.08
Method...: EPA-2 TO-9

Initial Wgt/Vol....: 1 Sample Analyst ID....: Mark Onishi

| PARAMETER           | RESULT |     | REPORTING LIMIT | DETECTION LIMIT                        | UNITS |
|---------------------|--------|-----|-----------------|--|-------|
| 2,3,7,8-TCDD        | ND     |     | 0.051           | 0.017                                  | pg/m3 |
| Total TCDD          | ND     |     | 0.051           | 0.017                                  | pg/m3 |
| 1,2,3,7,8-PeCDD     | ND     |     | 0.25            | 0.031                                  | pg/m3 |
| Total PeCDD         | ND     |     | 0.25            | 0.031                                  | pg/m3 |
| 1,2,3,4,7,8-HxCDD   | ND     |     | 0.25            | 0.016                                  | pg/m3 |
| 1,2,3,6,7,8-HxCDD   | ND     |     | 0.25            | 0.014                                  | pg/m3 |
| 1,2,3,7,8,9-HxCDD   | ND     |     | 0.25            | 0.013                                  | pg/m3 |
| Total HxCDD         | ND     |     | 0.25            | 0.016                                  | pg/m3 |
| 1,2,3,4,6,7,8-HpCDD | 0.026  | J   | 0.25            | 0.011                                  | pg/m3 |
| Total HpCDD         | 0.042  |     | 0.25            | 0.011                                  | pg/m3 |
| OCDD                | 0.062  | JВ  | 0.51            | 0.010                                  | pg/m3 |
| 2,3,7,8-TCDF        | 0.040  | J   | 0.051           | 0.019                                  | pg/m3 |
| Total TCDF          | 0.098  |     | 0.051           | 0.019                                  | pg/m3 |
| 1,2,3,7,8-PeCDF     | 0.041  | J   | 0.25            | 0.019                                  | pg/m3 |
| 2,3,4,7,8-PeCDF     | 0.025  | J   | 0.25            | 0.019                                  | pg/m3 |
| Total PeCDF         | 0.13   |     | 0.25            | 0.019                                  | pg/m3 |
| 1,2,3,4,7,8-HxCDF   | 0.11   | J   | 0.25            | 0.015                                  | pg/m3 |
| 1,2,3,6,7,8-HxCDF   | 0.056  | J Q | 0.25            | 0.014                                  | pg/m3 |
| 2,3,4,6,7,8-HxCDF   | ND     |     | 0.25            | 0.015                                  | pg/m3 |
| 1,2,3,7,8,9-HxCDF   | ND     |     | 0.25            | 0.017                                  | pg/m3 |
| Total HxCDF         | 0.42   |     | 0.25            | 0.016                                  | pg/m3 |
| 1,2,3,4,6,7,8-HpCDF | 0.27   | В   | 0.25            | 0.0089                                 | pg/m3 |
| 1,2,3,4,7,8,9-HpCDF | 0.081  | J   | 0.25            | 0.011                                  | pg/m3 |
| Total HpCDF         | 0.50   |     | 0.25            | 0.011                                  | pg/m3 |
| OCDF                | 0.51   | J   | 0.51            | 0.016                                  | pg/m3 |
|                     |        |     |                 | ************************************** |       |

| INTERNAL STANDARDS      | PERCENT RECOVERY | RECOVERY LIMITS |  |
|-------------------------|------------------|-----------------|--|
| 13C-2,3,7,8-TCDD        | 97               | 50 - 120        |  |
| 13C-1,2,3,7,8-PeCDD     | 98               | 50 - 120        |  |
| 13C-1,2,3,6,7,8-HxCDD   | 97               | 50 - 120        |  |
| 13C-1,2,3,4,6,7,8-HpCDD | 84               | 40 - 120        |  |
| 13C-OCDD                | 84               | 40 - 120        |  |
| 13C-2,3,7,8-TCDF        | 94               | 50 - 120        |  |
| 13C-1,2,3,7,8-PeCDF     | 105              | 50 - 120        |  |
| 13C-1,2,3,4,7,8-HxCDF   | 87               | 50 - 120        |  |
| 13C-1,2,3,4,6,7,8-HpCDF | 84               | 40 - 120        |  |
| SURROGATE               | PERCENT RECOVERY | RECOVERY LIMITS |  |

100

50 - 120

Sample ID: DW-11302010B

#### **Trace Level Compounds**

| Lot - Sample #:  | G0L020446 - 008 | Work Order #:  | MAQRD1AA    | Matrix: AA         |
|------------------|-----------------|----------------|-------------|--------------------|
| Date Sampled:    | 11/30/10        | Date Received: | 12/02/10    | Dilution Factor: 2 |
| Prep Date:       | 12/03/10        | Analysis Date: | 12/08/10    | Volume: 393.08     |
| Prep Batch #:    | 0337382         | Instrument ID: | 4D5         | Method: EPA-2 TO-9 |
| Initial Wgt/Vol: | 1 Sample        | Analyst ID:    | Mark Onishi |                    |

- B Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- J Estimated Result.
- Q Estimated maximum possible concentration (EMPC).

# QC DATA ASSOCIATION SUMMARY

#### G0L020446

Sample Preparation and Analysis Control Numbers

| SAMPLE# | MATRIX   | ANALYTICAL<br>METHOD        | LEACH<br>BATCH # | PREP<br>BATCH #    | MS RUN# |
|---------|----------|-----------------------------|------------------|--------------------|---------|
| 001     | AA       | EPA-2 TO-9                  |                  | 0337382            |         |
| 002     | AA       | EPA-2 TO-13                 |                  | 0336447            |         |
| 003     | AA<br>AA | CFR50B APDX B<br>SW846 6020 |                  | 0341297<br>0341211 |         |
| 004     | AA<br>AA | CFR50B APDX B<br>SW846 6020 |                  | 0341297<br>0341211 |         |
| 005     | AA       | EPA-2 TO-9                  |                  | 0337382            |         |
| 006     | AA       | EPA-2 TO-13                 |                  | 0336447            |         |
| 007     | AA<br>AA | CFR50B APDX B<br>SW846 6020 |                  | 0341297<br>0341211 |         |
| 008     | AA       | EPA-2 TO-9                  |                  | 0337382            |         |
| 009     | AA       | EPA-2 TO-13                 |                  | 0336447            |         |
| 010     | AA<br>AA | CFR50B APDX B<br>SW846 6020 |                  | 0341297<br>0341211 |         |

#### Method Blank Report

#### **Trace Level Compounds**

Lot - Sample #....: G0L030000 - 382B Date Sampled ....: 11/29/10 12/03/10 Prep Date ....:

Prep Batch # ....: 0337382 Initial Wgt/Vol....: 1 Sample Work Order #....: MAVWM1AA Date Received ....:

12/02/10 Analysis Date ....: 12/07/10

Instrument ID....: 4D5

Analyst ID ....: Mark Onishi Matrix...: AIR Dilution Factor....: 2 Volume....: 0

Method....: EPA-2 TO-9

| PARAMETER           | RESULT |    | REPORTING LIMIT  | DETECTION LIMIT | UNITS  |
|---------------------|--------|----|------------------|-----------------|--------|
| 2,3,7,8-TCDD        | ND     |    | 20               | 1.9             | pg     |
| Total TCDD          | ND     |    | 20               | 1.9             | pg     |
| 1,2,3,7,8-PeCDD     | ND     |    | 100              | 3.6             | pg     |
| Total PeCDD         | ND     |    | 100              | 3.6             | pg     |
| 1,2,3,4,7,8-HxCDD   | ND     |    | 100              | 2.1             | pg     |
| 1,2,3,6,7,8-HxCDD   | ND     |    | 100              | 1.8             | pg     |
| 1,2,3,7,8,9-HxCDD   | ND     |    | 100              | 1.8             | pg     |
| Total HxCDD         | ND     |    | 100              | 2.1             | pg     |
| 1,2,3,4,6,7,8-HpCDD | ND     |    | 100              | 2.7             | pg     |
| Total HpCDD         | 2.8    |    | 100              | 2.7             | pg     |
| OCDD                | 20     | J  | 200              | 3.3             | pg     |
| 2,3,7,8-TCDF        | ND     |    | 20               | 5.2             | pg     |
| Total TCDF          | ND     |    | 20               | 5.2             | pg     |
| 1,2,3,7,8-PeCDF     | ND     |    | 100              | 2.0             | pg     |
| 2,3,4,7,8-PeCDF     | ND     |    | 100              | 2.1             | pg     |
| Total PeCDF         | ND     |    | 100              | 2.2             | pg     |
| 1,2,3,4,7,8-HxCDF   | ND     |    | 100              | 1.3             | pg     |
| 1,2,3,6,7,8-HxCDF   | ND     |    | 100              | 1.3             | pg     |
| 2,3,4,6,7,8-HxCDF   | ND     |    | 100              | 1.3             | pg     |
| 1,2,3,7,8,9-HxCDF   | ND     |    | 100              | 1.5             | pg     |
| Total HxCDF         | ND     |    | 100              | 1.5             | pg     |
| 1,2,3,4,6,7,8-HpCDF | 2.9    | JQ | 100              | 2.0             | pg     |
| 1,2,3,4,7,8,9-HpCDF | ND     |    | 100              | 2.4             | pg     |
| Total HpCDF         | 2.9    |    | 100              | 2.2             | pg     |
| OCDF                | ND     |    | 200              | 3.5             | pg     |
| INTERNAL STANDARDS  |        |    | PERCENT RECOVERY | PECOVERV        | TIMITS |

| INTERNAL STANDARDS      | PERCENT RECOVERY | RECOVERY LIMITS |
|-------------------------|------------------|-----------------|
| 13C-2,3,7,8-TCDD        | 95               | 50 - 120        |
| 13C-1,2,3,7,8-PeCDD     | 97               | 50 - 120        |
| 13C-1,2,3,6,7,8-HxCDD   | 99               | 50 - 120        |
| 13C-1,2,3,4,6,7,8-HpCDD | 82               | 40 - 120        |
| 13C-OCDD                | 77               | 40 - 120        |
| 13C-2,3,7,8-TCDF        | 92               | 50 - 120        |
| 13C-1,2,3,7,8-PeCDF     | 102              | 50 - 120        |
| 13C-1,2,3,4,7,8-HxCDF   | 87               | 50 - 120        |
| 13C-1,2,3,4,6,7,8-HpCDF | 81               | 40 - 120        |
| SURROGATE               | PERCENT RECOVERY | RECOVERY LIMITS |

#### Method Blank Report

#### Trace Level Compounds

Lot - Sample #....: Work Order # ....: MAVWMIAA Matrix...: AIR G0L030000 - 382B 12/02/10 Dilution Factor....: 2 Date Received ....: Date Sampled ....: 11/29/10 Volume...: 0 Analysis Date....: 12/07/10 12/03/10 Prep Date ....: Method....: EPA-2 TO-9 Prep Batch # ....: 0337382 Instrument ID ....: 4D5 Initial Wgt/Vol....: 1 Sample Analyst ID ....: Mark Onishi

#### **QUALIFIERS**

J Estimated Result.

Q Estimated maximum possible concentration (EMPC).

#### LABORATORY CONTROL SAMPLE DATA REPORT

#### **Trace Level Compounds**

Client Lot # ...: G0L020446

G0L030000 - 382

Work Order # ...: MAVWM1AC-LCS MAVWM1AD-LCSD

LCS Lot-Sample#: Prep Date .....:

12/03/10

Analysis Date ..: 12/07/10

Prep Batch # ...: **Dilution Factor:** 

2

0337382

Mark Onishi

Method....: EPA-2

Matrix .....: AIR

Analyst ID....: Initial Wgt/Vol:

1 Sample

Instrument ID ..: 4D5

TO-9

PERCENT SPIKE MEASURED RECOVERY **AMOUNT** AMOUNT RECOVERY LIMITS **PARAMETER** UNITS RPD **RPD LIMITS** 2,3,7,8-TCDD 400 433 108 (70 - 130)pg 400 426 107 (70 - 130)1.7 (0 - 30)pg 1,2,3,7,8-PeCDD 2000 2250 113 (70 - 130)pg 2000 2210 111 (70 - 130)1.7 (0 - 30)pg 2000 1,2,3,4,7,8-HxCDD 1890 94 (70 - 130)pg 2000 93 1860 pg (70 - 130)1.6 (0 - 30)1,2,3,6,7,8-HxCDD 2000 2240 112 (70 - 130)pg 2000 2130 107 pg (70 - 130)4.9 (0 - 30)1,2,3,7,8,9-HxCDD 2000 2130 107 pg (70 - 130)2000 1980 99 (70 - 130)7,2 (0 - 30)pg 1,2,3,4,6,7,8-HpCDD 2000 2050 103 (70 - 130)pg 2000 2040 102 (70 - 130)0.38 (0 - 30)pg OCDD 4000 4060 102 (70 - 130)pg 4000 4010 100 1.2 (70 - 130)(0 - 30)pg 2,3,7,8-TCDF 400 417 104 (70 - 130)pg 400 423 106 (70 - 130)1.3 (0 - 30)pg 1,2,3,7,8-PeCDF 2000 2080 104 (70 - 130)pg 2000 2050 103 (70 - 130)1.2 (0 - 30)pg 2,3,4,7,8-PeCDF 2000 2030 101 (70 - 130)pg 2000 1980 99 (70 - 130)2.1 (0 - 30)pg 1,2,3,4,7,8-HxCDF 2000 2190 109 (70 - 130)pg 2000 2120 рg 106 (70 - 130)3.2 (0 - 30)1,2,3,6,7,8-HxCDF 2000 98 1950 pg (70 - 130)2000 1970 98 pg (70 - 130)0.87(0 - 30)2000 2240 112 2,3,4,6,7,8-HxCDF (70 - 130)pg 2000 2230 112 (70 - 130)0.52 (0 - 30)pg 1,2,3,7,8,9-HxCDF 2000 2230 111 (70 - 130)pg 2000 2190 110 (70 - 130)1.6 (0 - 30)pg 1,2,3,4,6,7,8-HpCDF 2000 2240 112 (70 - 130)Pg 2200 2000 110 (70 - 130)1.6 (0 - 30)pg 1,2,3,4,7,8,9-HpCDF 2000 2380 119 (70 - 130)pg 2000 2300 115 (70 - 130)3.2 (0 - 30)pg **OCDF** 4000 4230 106 (70 - 130)pg 4000 4200 105 (70 - 130)0.78 (0 - 30)pg RECOVERY PERCENT RECOVERY LIMITS INTERNAL STANDARD

13C-2,3,7,8-TCDD 101 (50 - 120)100 (50 - 120)110 (50 - 120)13C-1,2,3,7,8-PeCDD 108 (50 - 120)99 13C-1,2,3,6,7,8-HxCDD (50 - 120)

#### LABORATORY CONTROL SAMPLE DATA REPORT

#### **Trace Level Compounds**

| Client Lot #:<br>LCS Lot-Sample# : | G0L020446<br>G0L030000 - 382 | Work Order #: N  | MAVWM1AC-LCS<br>MAVWM1AD-LCSD | Matrix:                                | AIR |
|------------------------------------|------------------------------|------------------|-------------------------------|--|-----|
| INTERNAL STANDA                    | ARD                          | PERCI<br>RECO    |                               | RECOVERY<br>LIMITS                     |     |
| 13C-1,2,3,4,6,7,8-H                | pCDD                         | 105<br>91<br>87  |                               | (50 - 120)<br>(40 - 120)               |     |
| 13C-OCDD                           |                              | 96<br>88         |                               | (40 - 120)<br>(40 - 120)<br>(40 - 120) |     |
| 13C-2,3,7,8-TCDF                   | .P                           | 98<br>97         |                               | (50 - 120)<br>(50 - 120)               |     |
| 13C-1,2,3,7,8-PeCD                 |                              | 117<br>113<br>89 |                               | (50 - 120)<br>(50 - 120)<br>(50 - 120) |     |
| 13C-1,2,3,4,6,7,8-H                |                              | 93<br>87         |                               | (50 - 120)<br>(40 - 120)               |     |
|                                    |                              | 86               |                               | (40 - 120)                             |     |

Notes:

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

# AIR, Metals by ICPMS (As and Mn)

#### Sample ID: UW-11292010B

#### **Trace Level Compounds**

Work Order #....: MAQQ11AC Lot - Sample #....: G0L020446 - 003 Matrix...: AA Date Received ....: 12/02/10 Dilution Factor ....: 1 Date Sampled ....: 11/29/10 Volume...: 1081.47 12/07/10 Analysis Date....: 12/07/10 Prep Date ....: Method....: SW846 6020 Prep Batch # ....: 0341211 Instrument ID ....: M02

Initial Wgt/Vol...: 0.08333 L Analyst ID....: Sabine Hargrave

| PARAMETER   | RESULT |    | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|-------------|--------|----|-----------------|-----------------|-------|
| Arsenic     | 0.0018 | ВJ | 0.0022          | 0.00045         | ug/m3 |
| Manganese . | 2.63   |    | 0.00111         | 0.000157        | ug/m3 |

B Estimated result Result is less than RL and greater than or equal to the IDL.

J Estimated Result.

#### Sample ID: DW-11292010B

#### **Trace Level Compounds**

Lot - Sample #....: G0L020446 - 004 Work Order #....: MAQQ41AC Matrix...: AADate Received ....: 12/02/10 Dilution Factor ....: 1 Date Sampled....: 11/29/10 Volume...: 1107.96 12/07/10 Analysis Date ....: 12/07/10 Prep Date ....: Method...: SW846 6020 Prep Batch # ....: Instrument ID....: M02 0341211

Initial Wgt/Vol...: 0.08333 L Analyst ID...: Sabine Hargrave

| PARAMETER | RESULT |    | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|-----------|--------|----|-----------------|-----------------|-------|
| Arsenic   | 0.0011 | ВЈ | 0.0022          | 0.00044         | ug/m3 |
| Manganese | 0.0581 |    | 0.00108         | 0.000153        | ug/m3 |

#### **QUALIFIERS**

B Estimated result Result is less than RL and greater than or equal to the IDL.

J Estimated Result.

### Sample ID: UW-11302010B

### Trace Level Compounds

Lot - Sample #....: G0L020446 - 007 Date Sampled ....: 11/30/10 12/07/10 Prep Date ....: Prep Batch # ....:

0341211

0.08333 L

Work Order # ....: MAQRAIAC Date Received ....:

Analyst ID ....:

12/02/10 12/07/10

Analysis Date ....: Instrument ID ....: M02

Sabine Hargrave

Matrix....: AA

Dilution Factor ....: 1 Volume...: 943.37

Method....: SW846 6020

| PARAMETER | RESULT |    | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|-----------|--------|----|-----------------|-----------------|-------|
| Arsenic   | 0.0013 | BJ | 0.0025          | 0.00052         | ug/m3 |
| Manganese | 0.812  |    | 0.00127         | 0.000180        | ug/m3 |

### **QUALIFIERS**

Initial Wgt/Vol....:

В Estimated result. Result is less than RL and greater than or equal to the IDL

J Estimated Result

### Sample ID: DW-11302010B

### **Trace Level Compounds**

| Lot - Sample #:  | G0L020446 - 010 | Work Order #:  | MAQRHIAC        | Matrix: AA         |
|------------------|-----------------|----------------|-----------------|--------------------|
| Date Sampled:    | 11/30/10        | Date Received: | 12/02/10        | Dilution Factor: 1 |
| Prep Date:       | 12/07/10        | Analysis Date: | 12/07/10        | Volume: 934.22     |
| Prep Batch #:    | 0341211         | Instrument ID: | M02             | Method: SW846 6020 |
| Initial Wgt/Vol: | 0.08333 L       | Analyst ID:    | Sabine Hargrave |                    |

| PARAMETER | RESULT |    | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|-----------|--------|----|-----------------|-----------------|-------|
| Arsenic   | 0.0012 | BJ | 0.0026          | 0.00052         | ug/m3 |
| Manganese | 0.134  |    | 0.00128         | 0.000182        | ug/m3 |

### **QUALIFIERS**

B Estimated result Result is less than RL and greater than or equal to the IDL.

J Estimated Result

# QC DATA ASSOCIATION SUMMARY

### G0L020446

Sample Preparation and Analysis Control Numbers

| SAMPLE# | MATRIX | ANALYTICAL<br>METHOD | LEACH<br>BATCH # | PREP<br>BATCH # | MS RUN# |
|---------|--------|----------------------|------------------|-----------------|---------|
| 003     | AA     | SW846 6020           |                  | 0341211         |         |
| 004     | AA     | SW846 6020           |                  | 0341211         |         |
| 007     | AA     | SW846 6020           |                  | 0341211         |         |
| 010     | AA     | SW846 6020           |                  | 0341211         |         |

### Method Blank Report

### **Trace Level Compounds**

Work Order #....: MA0J71AA Lot - Sample #....: G0L070000 - 211B Matrix...: AIR Dilution Factor ....: 1 Date Received ....: 12/02/10 Date Sampled ....: 11/29/10 Volume...: 0 Prep Date ....: 12/07/10 Analysis Date ....: 12/07/10

Method....: SW846 6020 Prep Batch # ....: M02 0341211 Instrument ID ....:

Analyst ID ....: Sabine Hargrave Initial Wgt/Vol....: 0.08333 L

| PARAMETER | RESULT |   | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|-----------|--------|---|-----------------|-----------------|-------|
| Arsenic   | 0.82   | В | 2.4             | 0.49            | ug    |
| Manganese | ND     |   | 1.2             | 0.17            | ug    |

### **QUALIFIERS**

Estimated result. Result is less than RL and greater than or equal to the IDL.

### LABORATORY CONTROL SAMPLE DATA REPORT

### **Trace Level Compounds**

Client Lot # ...: Work Order # ...: MA0J71AD-LCS Matrix ..... AIR G0L020446

G0L070000 - 211 MA0J71AE-LCSD LCS Lot-Sample#: 12/07/10

Prep Date .....: 12/07/10 Analysis Date ..:

Prep Batch # ...: 0341211 Dilution Factor: 1

Analyst ID ....: Sabine Hargrave Instrument ID..: M02 Method....: SW846 6020

Initial Wgt/Vol: 0.08333 L

| PARAMETER | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS | <u>RPD</u> | RPD LIMITS |
|-----------|-----------------|--------------------|-------|---------------------|--------------------|------------|------------|
| Arsenic   | 240             | 227                | ug    | 95                  | (86 - 110)         |            |            |
|           | 240             | 220                | ug    | 92                  | (86 - 110)         | 3.3        | (0 - 15)   |
| Manganese | 240             | 226                | ug    | 94                  | (88 - 110)         |            |            |
| _         | 240             | 219                | ug    | 91                  | (88 - 110)         | 2.9        | (0 - 15)   |

Notes:

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

# AIR, TSP-Total Suspended Particulates

Sample ID: UW-11292010B

### **Trace Level Compounds**

Lot - Sample #....: G0L020446 - 003 Date Sampled ....:

11/29/10 12/02/10

Prep Batch # ....: 0341297 0

Initial Wgt/Vol....:

Work Order #....: MAQQ11AA

Date Received ....: 12/02/10

Analysis Date ....: Instrument ID ....:

Analyst ID ....:

12/07/10

QA-045

Thep Phomsopha

Matrix....: AA

Dilution Factor ....: 1 Volume....: 1081.47

Method....: CFR50B APDX B

**PARAMETER** 

Prep Date ....:

RESULT

REPORTING LIMIT

**DETECTION LIMIT UNITS** 

**Total Suspended Particulates** 

0.0000402

0.000000462

g/m3

### Sample ID: DW-11292010B

### **Trace Level Compounds**

Work Order #....: MAQQ41AA Lot - Sample #....: G0L020446 - 004 Matrix....: AA Date Received ....: 12/02/10 Dilution Factor ....: 1 Date Sampled ....: 11/29/10 Volume....: 1107.96 Prep Date ....: 12/02/10 Analysis Date ....: 12/07/10 Method....: CFR50B APDX B

Prep Batch # ....: 0341297 QA-045 Instrument ID ...:

Thep Phomsopha Analyst ID ....: Initial Wgt/Vol ....:

**PARAMETER** RESULT REPORTING LIMIT **DETECTION LIMIT UNITS** 0.000000451 **Total Suspended Particulates** 0.0000243 g/m3

Sample ID: UW-11302010B

### Trace Level Compounds

 Lot - Sample #...:
 G0L020446 - 007
 Work Order #...:
 MAQRA1AA
 Matrix...:
 AA

 Date Sampled...:
 11/30/10
 Date Received...:
 12/02/10
 Dilution Factor....:
 1

 Prep Date...:
 12/02/10
 Analysis Date....:
 12/07/10
 Volume....:
 943.37

Prep Batch # ....: 0341297 Instrument ID....: QA-045 Method....: CFR50B APDX B

Initial Wgt/Vol...: Analyst ID....: Thep Phomsopha

PARAMETER RESULT REPORTING LIMIT DETECTION LIMIT UNITS

Total Suspended Particulates 0.0000392 0.000000530 -- g/m3

Sample ID: DW-11302010B

### **Trace Level Compounds**

Work Order #....: MAQRH1AA Lot - Sample #....: G0L020446 - 010 Matrix...: AA Dilution Factor ....: 1 Date Received ....: 12/02/10 Date Sampled ....: 11/30/10 Volume...: 934.22 Prep Date ....: 12/02/10 Analysis Date ....: 12/07/10

Prep Batch # ....: 0341297 Instrument ID....: QA-045 Method....: CFR50B APDX B

Initial Wgt/Vol...: Analyst ID....: Thep Phomsopha

PARAMETER RESULT REPORTING LIMIT DETECTION LIMIT UNITS

Total Suspended Particulates 0.0000337 0.000000535 -- g/m3

# QC DATA ASSOCIATION SUMMARY

### G0L020446

Sample Preparation and Analysis Control Numbers

| SAMPLE# | MATRIX | ANALYTICAL<br>METHOD | LEACH<br>BATCH # | PREP<br>BATCH # | MS RUN# |
|---------|--------|----------------------|------------------|-----------------|---------|
| 003     | AA     | CFR50B APDX B        |                  | 0341297         |         |
| 004     | AA     | CFR50B APDX B        |                  | 0341297         |         |
| 007     | AA     | CFR50B APDX B        |                  | 0341297         |         |
| 010     | AA     | CFR50B APDX B        |                  | 0341297         |         |

# AIR, TO-13, Semivolatile Organics

# Raw Data Package

# Run/Batch Data

Includes (as applicable):

runlogs

continuing calibration standards
interference/performance check standards
continuing calibration blanks
method blanks

lcs

ms/sd

sample raw data

ms tune data



## West Sacramento

## 8270C CCV Checklist

| Instrument: SV5  |   |  |   |                        |          |
|--|---|--|---|------------------------|----------|
| ICAL Date: 10/02/10  |   | [  | FTPP ID: DFT1207                                      |                        |          |
| Initiator/Date: KT-12  | /08/10  | S  | tandard ID: HSL1207                                   |                        |          |
| Reviewer/Date:   | 3y 12   | 18/20 N                                      | ICM #:  |                        | _        |
| I: 8270C Criteria  |   |  |   | Initiated              | Reviewed |
| Log Book page included. CCV compared to correct ICA Tune documentation is present Manual re-integrations are che Retention time correct for Isor CCV Internal Standards are with Samples analyzed within 12 he | t and meets crite<br>cked, initialed a<br>ners and all othe<br>ithin 50-200% or<br>ours of Tune tim | nd hardcopies<br>r analytes.<br>f ICAL mid-p |   |                        |          |
| Tailing and degradation criteri  | a are met.  |  |   |                        |          |
| Spot check manual integration  | s in Target. And  | alyte checked                                | ·   | . NA                   | EVA.     |
| Non-CCC ≤ 50% D  |   |  |   |                        | Ø        |
| II: 8270C SPCC Check N-nitroso-di-n-propylamine  | Initiated   | Review                                       | ed 2,4-Dinitrophenol                                  | Initiated              | Reviewed |
| Hexachlorocyclopentadiene  | $\boxtimes$   |  | 4-Nitrophenol   | <u> </u>               |          |
| Phenol 1,4-Dichlorobenzene 2-Nitrophenol   | CCC must be ≤ Initiated   | 20%D (If CO<br>Reviewed                      | Acenaphthene N-nitrosodiphenylamine Pentachlorophenol | ust be <20%I Initiated | Reviewed |
| 2,4-Dinitrophenol Hexachlorobutadiene 4-Chloro-3-methylphenol 2,4,6-Trichlorophenol  |   |  | Flouranthene Di-n-octyl phthalate Benzo(a)pyrene      |                        |          |
| IV: AFCEE 3.1 and 4.0  | OAPP Crite  |  |   | Initiated              | Reviewed |
| All analytes in CCV +/- 20%D<br>CCV and Sample Internal Stan<br>Are the compounds which requ<br>spreadsheet?   | compared to IC dards are within   | CAL.<br>150-200% of                          | •   | X <br> X <br> X        |          |



## West Sacramento

### 8270C CCV Checklist

| V: DOD QSM V3 Criteria   | Initiated   | Reviewed  |
|--|-------------|-----------|
| For 8270, CCCs must be <u>≤</u> 20% D.   | $\boxtimes$ | B         |
| RRFs for SPCCs must meet minimum response factor criteria                              | $\boxtimes$ |           |
| CCV and sample Internal Standards are within 50-200% of ICAL mid-point.                |             | $\square$ |
| SIM: All analytes must be ≤ 20%  | □NA         | NA        |
| Are the compounds which required manual integrations documented in the MI spreadsheet? | $\boxtimes$ |           |

### TestAmerica West Sacramento

### GC/MS INSTRUMENT LOG SEMI-VOLATILES

Method Key (MTH Column)
QL = EPA 8270C (WS-MS-0005)
JZ = EPA TO-13A (WS-MS-0005) Inst ID : sv5.i

Batch ID: 120710.B ICAL Date: See Calib Report VX = EPA 8270C-SIM (mod) CWM (WS-MS-0003) QI = EPA 8270C-SIM (WS-MS-0008) See raw data for standard IDs

FX = PAH-SIM Isotope Dilution (WS-MS-0006)

 $F9 = EPA 8270C-SIM \pmod{1,4-Dioxane}$  (WS-MS-0011)

| Date                                   | Time                | USER      | Sample ID                              | File ID        | Vol or     | Extract      | Diln     | MTH        | Comments                               |
|--|---------------------|-----------|--|----------------|------------|--------------|----------|------------|--|
|  | i                   | i         | I                                      |                | Wt         | Vol          | 1        |            | j                                      |
| ====================================== | ========<br>  18:30 |           | ====================================== | QC001.D        | na i       | NA<br>NA     | <br>( NA | =====<br>{ | ====================================== |
| 7-DEC-2010                             | 18:58               | KT        | {DFTPP 50ug/ml                         | DFT1207.D      | NA !       | NA.          | ,<br>NA  | i          | l                                      |
| 7-DEC-2010                             | 19:18               | KT        | AP9 050 ug/ml CS-4                     | <br> AP91207.D | NA I       | NA           | NA.      | i          | 1                                      |
| 7-DEC-2010                             | 19:43               | KT        | HSL 050 ug/ml CS-4                     | HSL1207.D      | NA         | NA.          | NA       |            |  |
| 7-DEC-2010                             | 20:07               | KT        | MAGSMLAC GOK230000-447C                | S120701.D      | 30 gr      | 1 mL         | 1        | QL         |  |
| 7-DEC-2010                             | 20:58               | ,<br>  KT | MAWSALAA GOLO60000-218B                | S120702.D      | 1000 mL    | 1 mL         | 1        | Or         | HAL SUM.                               |
| 7-DEC-2010                             | 21:23               | KT        | MAWSALAC GOLO60000-218C                | S120703.D      | 1000 mL )  | 1 mL         | jı       | QL         | 1                                      |
| 7-DEC-2010                             | 21:47               | KT        | L99LV2AF G0K180601-1RX                 | S120704.D      | 1042.37 mL | 1 mL         | 1        | QL         | low sull con                           |
| 7-DEC-2010                             | 22:12               | KT        | MAR231AA GOL020000-447B                | S120705.D      | 1000 Sa    | 1 mL         | 1        | JZ         | [                                      |
| 7-DEC-2010                             | 22:36               | KT        | MAR231AC GOL020000-447C                | S120706.D      | 1000 Sa    | 1 mL         | 1        | JZ         | <u> </u>                               |
| 07-DEC-2010                            | 23:01               | KT        | MAR231AD G0L020000-447L                | S120707.D      | 1000 Sa    | 1 mL         | 1        | JZ         | ]                                      |
| 07-DEC-2010                            | 23:25               | KT        | MAQQWIAA GOLO20446-2                   | \$120708.D     | 1000 Sa    | 1 mL         | ] 1      | JZ         | low Gurs.                              |
| 7-DEC-2010                             | 23:50               | KT        | MAQQ91AA G0L020446-6                   | 5120709.D      | 1000 Sa    | 1 mL         | 1        | JZ         | l                                      |
| 08-DEC-2010                            | 00:14               | j kt      | MAQRF1AA G0L020446-9                   | S120710.D      | 1000 Sa    | 1 mL         | 1        | J2         | 11m Smy                                |
| 08-DEC-2010                            | 00:38               | KT        | MAXH81AA G0L060000-307B                | S120711.D      | 30 g       | 1 mL         | ] 1      | QL         |  |
| 08-DEC-2010                            | 01:03               | KT        | MAXH81AC GOLO60000-307C                | S120712.D      | 30 g (     | l mL         | 1        | QL         | l                                      |
| 08-DEC-2010                            | 01:27               | KT        | MANSMIAA GOLO10485-1                   | S120713.D      | 30.18 g    | 1 m <u>L</u> | 1        | QL         | l                                      |
| 08-DEC-2010                            | 01:52               | KT        | MANSRIAF GOLD10485-3                   | S120714.D      | 29.8 g     | 1 mL         | ] 1      | QL         | l                                      |
| 08-DEC-2010                            | 02:16               | KT        | MAN3VLAF GOLD10485-5                   | S120715.D      | 29.8 g J   | 1 mL         | J i      | j QL       | l                                      |
| 08-DEC-2010                            | 02:41               | KT        | MAN3X1AF G0L010485-7                   | S120716.D      | 30.05 g    | 1 mL         | 1        | QL         | l                                      |
| 08-DEC-2010                            | 03:05               | KT        | MAN321AF G0L010485-9                   | S120717.D      | 29.57 g    | 1 mL         | 1        | ĺQL        | l                                      |
| 08-DEC-2010                            | 03:30               | [ KT      | MAN341AF G0L010485-11                  | S120718.D      | 29.94 g    | 1 mL         | 1        | [ QL       | l <u> </u>                             |
| 08-DEC-2010                            | 03:54               | KT        | MAN341CK GOL010485-11S                 | S120719.D      | 29.89 g    | 1 mL         | 1        | \ Or       | l                                      |
| 08-DEC-2010                            | 04:18               | KT        | MAN341CL GOL010485-11D                 | [S120720.D     | 30.03 g    | 1 mL         | 1        | QL         | l                                      |
| 08-DEC-2010                            | 04:43               | KT        | MAN371AF G0L010485-13                  | [\$120721.D]   | 29.9 g     | 1 mL         | l ı      | ) QL       | l                                      |
| 08-DEC-2010                            | 05:07               | KT        | MAN4D1AF G0L010485-15                  | S120722.D      | 29.92 g    | 1 mL         | 1        | QL         | l                                      |
| 08-DEC-2010                            | 05:32               | KT        | MAN4GLAF GOL010485-17                  | Sl20723.D      | 30.23 g    | 1 mL         | ] 1      | QL         | l                                      |
| 08-DEC-2010                            | 05:56               | KT        | MAN4MLAF GOL010485-19                  | S120724.D      | 30.16 g    | 1 mL         | 1        | QL         | 1                                      |
| 08-DEC-2010                            | 06:21               | KT        | L92K41AD G0K130493-3                   | \$120725.D     | 29.81 g    | 1 mL         | 1        | Or         | l                                      |
| 08-DEC-2010                            | 06:45               | KT ·      | L92K91AE G0K130493-8 1X                | S120726.D      | 29.96 g    | 1 mL         | 1        | ] QL       | <u></u>                                |

Report Date: 08-Dec-2010 09:16

### TestAmerica West Sacramento

#### CONTINUING CALIBRATION COMPOUNDS

Instrument ID: sv5.i Injection Date: 07-DEC-2010 19:43

Init. Cal. Date(s): 17-AUG-2010 02-OCT-2010 Lab File ID: HSL1207.D

17:32 15:00

Analysis Type: Init. Cal. Times: Lab Sample ID: HSL 050 ug/ml CS-4 Quant Type: Method: \\SV5\C\chem\sv5.i\120710.B\8270f.m ISTD

| 1  |              |             | CCAL MIN        | 1                 | 1 MAX     | }          |
|--|--------------|-------------|-----------------|-------------------|-----------|------------|
| COMPOUND   | RRF / AMOUNT | RF50        |                 | '<br> %D / %DRIFT |           | ` '        |
|  |              | <del></del> | •               |                   | •         |            |
| \$ 7 2-Fluorophenol  | 1.40992      | 1.38812     |                 |                   |           |            |
| \$ 8 Phenol-d5   | 1.77296      | 1.79386     | ·               |                   |           |            |
| \$ 9 2-Chlorophenol-d4   | 1 1.556981   | 1.58766     | •               | •                 | •         |            |
| \$ 10 1,2-Dichlorobenzene-d4   | 0.98513      | 0.98234     | •               | •                 |           |            |
| \$ 11 Nitrobenzene-d5  | 0.33879      | 0.35247     |                 |                   | -         |            |
| \$ 12 2-Fluorobiphenyl   | 1 1.288521   | 1.29519     | 1.29519 0.010   |                   | •         |            |
| \$ 13 2,4,6-Tribromophenol   | 0.17381      | 0.19209     |                 |                   |           |            |
| \$ 14 Terphenyl-d14  | 1 0.787891   | 0.83980     |                 |                   | •         |            |
| 15 N-Nitrosodimethylamine  | 0.92154      | 0.90338     | ·               | •                 | •         |            |
| 16 Pyridine  | 1.54111      | 1.38842     | •               |                   |           |            |
| 23 Anıline   | 2.25673      | 2.18985     |                 |                   | •         |            |
| 24 Phenol  | 2.03729      | 1.98285     | 1.98285 0.010   |                   | •         |            |
| 26 Bis(2-chloroethyl)ether   | 1.42859      | 1.44040     |                 |                   |           |            |
| 27 2-Chlorophenol  | 1.56381      | 1.55159     | 1.55159 0.010   | -0.78132          | 50.00000  |            |
| 28 1,3-Dichlorobenzene   | [ 1.70337]   | 1.71797     | 1.71797 0.010   | 0.85660           | 50.00000  | Averaged   |
| 129 1,4-Dichlorobenzene  | [ 1.78118]   | 1.79692     | 1.79692 0.010   | 0.88384           | 20.00000  | Averaged   |
| 30 Benzyl Alcohol  | 1.05101      | 1.07280     | 1.07280 0.010   | 2.07283           | 50.00000  | ] Averaged |
| 31 1,2-Dichlorobenzene   | 1.63746      | 1.66522     | 1.66522 0.010   | 1.69533           | 50.00000  | Averaged   |
| 32 2-Methylphenol  | 1.43012      | 1.43743     | 1.43743 0.010   | 0.51110           | 50.00000  | Averaged   |
| 33 2,2'-oxybis(1-Chloropropane   | [ 2.27365]   | 2.27930     | 2.27930 0.010   | 0.24858           | 50.00000  | Averaged   |
| 34 4-Methylphenol  | 1.51904      | 1.52269     | 1.52269 0.010   | 0.24021           | 50.00000  | Averaged   |
| 36 Hexachloroethane  | [ 0.60636]   | 0.62583     | 0.62583 0.010   | 3.21023           | 50.00000  | Averaged   |
| 137 N-Nitrosodinpropylamine  | 1.01180      | 1.04219     | 1.04219 0.050   | 3.00345           | 50.00000  | Averaged   |
| 42 Nitrobenzene  | 0.33116      | 0.33780     | 0.33780 0.010   | 2.00304           | 50.00000  | Averaged   |
| 44 Isophorone  | 0.63679      | 0.64378     | 0.64378 0.010   | 1.09855           | 50.00000  | Averaged   |
| 45 2-Nitrophenol   | 0.19648      | 0.20934     | 0.20934   0.010 | 6.54860           | 20.00000  | Averaged   |
| 46 2,4-Dimethyphenol   | 0.34911      | 0.35969     | 0.35969 0.010   | 3.02794           | 50.00000  | Averaged   |
| 47 Bis(2-chloroethoxy)methane  | ! 0.38908    | 0.38567     | 0.38567 0.010   | -0.87753          | 50.00000  | Averaged   |
| 49 2,4~Dichlorophenol  | 0.27010      | 0.28269     | 0.28269 0.010   | 4.66165           | 20.00000  | Averaged   |
| 50 Benzoic Acid  | 0.19324      | 0.17018     | 0.17018[0.010   | -11.93634         | 50.00000  | Averaged   |
| 51 1,2,4-Trichlorobenzene  | 0.29246      | 0.30642     | 0.30642 0.010   | 4.77577           | 50.00000  | Averaged   |
| 52 Naphthalene   | 1.10443      | 1.11664     | 1.11664   0.010 | 1.10556           | 50.00000  | Averaged!  |
| 54 4-Chloroaniline   | 0.43288      | 0.44296     | 0.44296[0.010   | 2.33006           | 50.00000  | Averaged   |
| 157 Hexachlorobutadiene  | 0.14313      | 0.15539     | 0.15539 0.010   | 8.56540           | 20.00000  | Averaged   |
| 60 4-Chloro-3-Methylphenol   | 0.30164      | 0.31622     | 0.31622 0.010   | 4.83582           | 20.00000  | Averaged   |
| 63 2-Methylnaphthalene   | 0.69378      | 0.72988     |                 |                   | 50.00000  | Averaged   |
| 66 Hexachlorocyclopentadiene   | 0.29846      | 0.31089     |                 |                   | •         |            |
| 169 2,4,6-Trichlorophenol  | 0.31913      | 0.33823     |                 | •                 | •         |            |
| 170 2,4,5-Trichlorphenol   | 0.34380      | 0.37223     |                 |                   | •         |            |
|  | 1.12571      | 1.12891     |                 |                   | •         | -          |
| 173 2-Nitroaniline   | 0.34119      | 0.37318     |                 | •                 | •         |            |
| 76 Dimethylphthalate   | 1 1.296061   | 1.37278     |                 | •                 | •         | •          |
| 1.0 princing the control of the cont | 1 1.2,20001  | 1.3/2/0     | 1.5/2/0 5.010   | 1 3.31320         | , 50.0000 | Averaged   |
|  |              |             |                 | 1                 | 1         | 11         |

Manual countition for 2-Chloropherol:

283629 × 40 = 1.55159 my 12/8/10

Page 5

Data File: \\SV5\C\chem\sv5.i\120710.B\HSL1207.D Report Date: 08-Dec-2010 09:16

### TestAmerica West Sacramento

### CONTINUING CALIBRATION COMPOUNDS

Instrument ID: sv5.i Injection Date: 07-DEC-2010 19:43
Lab File ID: HSL1207.D Init. Cal. Date(s): 17-AUG-2010 02-OCT-2010
Analysis Type: Init. Cal. Times: 17:32 15:00
Lab Sample ID: HSL 050 ug/ml CS-4 Quant Type: ISTD
Method: \\SV5\C\chem\sv5.i\120710.B\8270f.m

| 1                                 | [ !           | 1        | CCAL     | MIN    |             | l MAX       |                                      |
|-----------------------------------|---------------|----------|----------|--------|-------------|-------------|--------------------------------------|
| . COMPOUND                        | RRF / AMOUNT  | RF50 i   | RRF50    | RRF    | %D / %DRIFT | %D / %DRIFT | CURVE TYPE                           |
| 77 Acenaphthylene                 | <br>  1.96037 | 1.99034  | 1.99034  | 0.010  | •           | •           | <del></del>  <br>  Averag <b>e</b> d |
| 179 2,6-Dinitrotoluene            | 0.30197       | 0.323641 | 0.32364  |        | -           | •           |                                      |
| 180 3-Nitroaniline                | 0.37691       | 0.38357  | 0.38357  |        |             | •           |                                      |
| 181 Acenaphthene                  | 1 1.247871    | 1.28624  | 1.28624  |        |             | •           | •                                    |
| 182 2,4-Dinitrophenol             | 50.000001     | 51.34863 | 0.18256  |        |             | 0.000e+000  |                                      |
| 183 Dibenzofuran                  | 1 1.656121    | 1.694761 | 1.69476  |        |             |             |                                      |
| 184 4-Nitrophenol                 | 0.156341      | 0.17850  | 0.17850  | 0.050  | 14.17580    | 50.00000    | •                                    |
| 186 2,4-Dinitrotoluene            | 0.396331      | 0.42327  | 0.42327  | 0.010  | 6.79753     | 50.00000    |                                      |
| 191 Fluorene                      | 1.37139       | 1.37416  | 1.37416  |        |             |             | •                                    |
| 92 Diethylphthalate               | 1.326991      | 1.41218  | 1.41218  | 0.010  | 6.41958     | 50.00000    |                                      |
| [93 4-Chlorophenyl-phenylether    | 0.57019       | 0.59965  | 0.59965  | 0.010  |             |             | •                                    |
| 194 4-Nitroaniline                | 0.37361       | 0.416691 | 0.41669  | 0.010  | 11.52958    | 50.00000    | Averaged                             |
| 197 4,6-Dinitro-2-methylphenol    | [ 50.00000]   | 51.68523 | 0.14755  | 0.010  | 3.37046     | 0.000e+000  | Linear                               |
| 198 N-Nitrosodiphenylamine        | 0.60628       | 0.642861 | 0.64286  | 0.010  | 6.03273     | 20.00000    | Averaged                             |
| 100 Azobenzene                    | 0.78660       | 0.80950  | 0.80950  | 0.010  | 2.91115     | 50.00000    | Averaged                             |
| 101 4-Bromophenyl-phenylether     | 0.19527       | 0.21650  | 0.21650  | 0.010  | 10.87465    | 50.00000    | Averaged                             |
| 108 Hexachlorobenzene             | 0.21807       | 0.22971  | 0.22971  | 0.010  | 5.34174     | 50.00000    | Averaged                             |
| 110 Pentachlorophenol             | [ 50.00000]   | 48.06186 | 0.12466  | 0.010  | -3.87627    | 0.000e+000  | Linear                               |
| 114 Phenanthrene                  | 1.26074       | 1.29243  | 1.29243  | 0.010  | 2.51321     | 50.00000    | Averaged                             |
| 115 Anthracene                    | 1.25955       | 1.28271  | 1.28271  | 0.010  | 1.83948     | 50.00000    | Averaged                             |
| 118 Carbazole                     | 1.15061       | 1.20490  | 1.20490  | 0.010  | 4.71881     | 50.00000    | Averaged                             |
| 120 Di-n-Butylphthalate           | 1.38442       | 1.53717  | 1.53717  | 0.010  | 11.03401    | 50.00000    | Averaged                             |
| 126 Fluoranthene                  | 1.12969       | 1.20724  | 1.20724  | 0.010  | 6.86459     | 20.00000    | Averaged                             |
| 127 Benzidine                     | 0.81067       | 0.83275  | 0.83275  | 0.010  | 2.72386     | 50.00000    | Averaged                             |
| 128 Pyrene                        | 1 1.25025     | 1.294221 | 1.29422  | 0.010  | 3.51670     | 50.00000    | Averaged                             |
| 134 3,3'-dimethylbenzidine        | 0.715641      | 0.74478) | 0.74478) | 0.010  | 4.07166     | 50.00000    | Averaged                             |
| 136 Butylbenzylphthalate          | 1 0.626631    | 0.67197  | 0.67197  | 0.010  | 7.23566     | [ 50.00000] | Averaged                             |
| 138 Benzo(a)Anthracene            | 1.06548       | 1.12727  | 1.12727  | 0.010  | 5.79955     | 50.00000    | Averaged                             |
| 139 Chrysene                      | 1.08994       | 1.11232  | 1.11232  | 0.010  | 2.05366     | 50.00000    | Averaged                             |
| 140 3,3'-Dichlorobenzidine        | 0.40189       | 0.41343  | 0.41343  | 0.010  | 2.87057     | 50.00000    | Averaged                             |
| 141 bis(2-ethylhexyl)Phthalate    | 0.86316       | 0.92502  | 0.92502  | 0.010  | 7.16702     | 50.00000    | Averaged                             |
| 142 Di-n-octylphthalate           | 1.37975       | 1.57196  | 1.57196  | 0.010  | 13.93055    | 20.00000    | Averaged                             |
| 144 Benzo(b)fluoranthene          | 0.90549       | 1.05811  | 1.05811  | 0.010  | 16.85442    | 50.00000    | Averaged                             |
| 145 Benzo(k)fluoranthene          | 1.16236       | 1.11437  | 1.11437  | 0.010  | -4.12825    | 50.00000    | Averaged                             |
| 147 Benzo(e)pyrene                | 0.944251      | 0.996861 | 0.99686  | 0.010  | 5.57246     | [ 50.00000] | Averaged                             |
| 148 Benzo(a)pyrene                | 1.02655       | 1.046361 | 1.04636  | 0.010  | 1.93015     | 20.00000    | Averagedi                            |
| 151 Indeno(1,2,3-cd)pyrene        | 0.830291      | 0.91194{ | 0.91194  | 0.010  | 9.83363     | 50.00000    | Averaged                             |
| 152 Dibenzo(a,h)anthracene        | 0.92758       | 1.01587  | 1.01587  | 0.010  | 9.51876     | 10000001    | Averaged!                            |
| 153 Benzo(g,h,i)perylene          | 1.00427       | 1.06007  | 1.06007  | 0.010  | 5.55620     | [ 50.00000] | Averagedi                            |
| M 162 benzo b,k Fluoranthene Tota | 2.06785       | 2.17248  | 2.17248  | 0.0101 | 5.05995     | 50.00000    | Averaged                             |
|                                   | 1             | 1        |          |        |             | l1          | 1                                    |

Data File: \\SV5\C\chem\sv5.i\120710.B\HSL1207.D

Report Date: 08-Dec-2010 09:16

### TestAmerica West Sacramento

Method 8270C

Page 1

Data file : \\SV5\C\chem\sv5.i\120710.B\HSL1207.D

Lab Smp Id: HSL 050 ug/ml CS-4 Client Smp ID: 8270F.M

Inj Date : 07-DEC-2010 19:43

Inst ID: sv5.i Operator : KT

Smp Info : HSL\_050 ug/ml CS-4;2;;4;;;4

Misc Info:  $3; \overline{0}; 1$  8270STD.SUB; 10MSSV0310; 0; 8270F.M

Comment : SOP SAC-MS-0005

Method : \\SV5\C\chem\sv5.i\120710.B\8270f.m

Meth Date : 08-Dec-2010 09:16 semivoa Quant 7

Cal Date : 17-AUG-2010 21:19 Cal Fil

Als bottle: 97 Continu

Dil Factor: 1.00000

Integrator: Falcon Compour Quant Type: ISTD Cal File: AP90817D.D

Continuing Calibration Sample

Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

| _         | pounds                          | QUANT SIG<br>MASS |        |         |         |          | CAI | -AMT    | OM | -cor  |
|-----------|---------------------------------|-------------------|--------|---------|---------|----------|-----|---------|----|-------|
| _         |                                 | MASS              |        |         |         |          |     | 1-70-/I | OI |       |
| ≈==:<br>± |                                 |                   | RT     | EXP RT  | REL RT  | RESPONSE | (   | NG)     | (  | NG)   |
| *         |                                 | ====              | ====   | =0=0000 |         | 2252222  | ==: |         | == | ====  |
|           | 1 1,4-Dichlorobenzene-d4        | 152               | 3.532  | 3.532   | (1.000) | 146239   | 40. | 0000    |    |       |
| *         | 2 Naphthalene-d8                | 136               | 4.941  | 4.941   | (1.000) | 627132   | 40. | 0000    |    |       |
| *         | 3 Acenaphthene-d10              | 164               | 7.024  | 7.024   | (1.000) | 339490   | 40. | 0000    |    |       |
| *         | 4 Phenanthrene-dl0              | 188               | 8.879  | 8.879   | (1.000) | 541577   | 40. | 0000    |    |       |
| *         | 5 Chrysene-d12                  | 240               | 13.159 | 13.159  | (1.000) | 552156   | 40. | 0000    |    |       |
| *         | 6 Perylene-d12                  | 264               | 15.522 | 15.522  | (1.000) | 546812   | 40. | 0000    |    |       |
| \$        | 7 2-Fluorophenol                | 112               | 2.330  | 2.330   | (0.660) | 253747   | 50. | 0000    |    | 49.23 |
| \$        | 8 Phenol-d5                     | 99                | 3.221  | 3.221   | (0.912) | 327916   | 50. | 0000    |    | 50.59 |
| \$        | 9 2-Chlorophenol-d4             | 132               | 3.335  | 3.335   | (0.944) | 290223   | 50. | 0000    |    | 50.98 |
| \$ :      | 10 1,2-Dichlorobenzene-d4       | 152               | 3.729  | 3.729   | (1.056) | 179570   | 50. | 0000    |    | 49.86 |
| \$ 3      | 11 Nitrobenzene-d5              | 82                | 4.154  | 4.154   | (0.841) | 276306   | 50. | 0000    |    | 52.02 |
| \$ 1      | 12 2-Fluorobiphenyl             | 172               | 6.247  | 6.247   | (0.889) | 549632   | 50. | 0000    |    | 50.26 |
| \$ :      | 13 2,4,6-Tribromophenol         | 330               | 7.998  | 7.998   | (1.139) | 81516    | 50. | 0000    |    | 55.26 |
| \$ :      | 14 Terphenyl-d14                | 244               | 11.439 | 11.439  | (0.869) | 579626   | 50. | 0000    |    | 53.29 |
|           | 15 N-Nitrosodimethylamine       | 74                | 1.304  | 1.304   | (0.369) | 165136   | 50. | 0000    |    | 49.01 |
|           | 16 Pyridine                     | 79                | 1.314  | 1.314   | (0.372) | 253802   | 50. | 0000    |    | 45.05 |
| :         | 23 Aniline                      | 93                | 3.231  | 3.231   | (0.915) | 400302   | 50. | 0000    |    | 48.52 |
| ;         | 24 Phenol                       | 94                | 3.231  | 3.231   | (0.915) | 362462   | 50. | 0000    |    | 48.66 |
| 2         | 26 Bis(2-chloroethyl)ether      | 93                | 3.304  | 3.304   | (0.935) | 263303   | 50. | 0000    |    | 50.41 |
| :         | 27 2-Chlorophenol               | 128               | 3.345  | 3.345   | (0.947) | 283629   | 50. | 0000    |    | 49.61 |
| 2         | 28 1,3-Dichlorobenzene          | 146               | 3.491  | 3.491   | (0.988) | 314042   | 50. | 0000    |    | 50.43 |
| 2         | 29 1,4-Dichlorobenzene          | 146               | 3.542  | 3.542   | (1.003) | 328475   | 50. | 0000    |    | 50.44 |
| - 1       | 30 Benzyl Alcohol               | 108               | 3.708  | 3.708   | (1.050) | 196106   | 50. | 0000    |    | 51.04 |
| 1         | 31 1,2-Dichlorobenzene          | 146               | 3.739  | 3.739   | (1.059) | 304401   | 50. | 0000    |    | 50.85 |
|           | 32 2-Methylphenol               | 108               | 3.864  | 3.864   | (1.094) | 262761   | 50. | 0000    |    | 50.26 |
|           | 33 2,2'-oxybis(1-Chloropropane) | 45                | 3.874  | 3.874   | (1.097) | 416654   | 50. | 0000    |    | 50.12 |
| :         | 34 4-Methylphenol               | 108               | 4.029  | 4.029   | (1.141) | 278346   | 50. | 0000    |    | 50.12 |
| 3         | 36 Hexachloroethane             | 117               | 4.071  | 4.071   | (1.153) | 114401   | 50. | 0000    |    | 51.60 |
| 3         | 37 N-Nitrosodinpropylamine      | 70                | 4.029  | 4.029   | (1.141) | 190511   | 50. | 0000    |    | 51.50 |
| 4         | 42 Nitrobenzene                 | 77                | 4.175  | 4.175   | (0.845) | 264804   | 50. | 0000    |    | 51.00 |
|           | 44 Isophorone                   | 82                | 4.434  | 4.434   | (0.897) | 504672   | 50. | 0000    |    | 50.55 |
|           | 45 2-Nitrophenol                | 139               | 4.537  | 4.537   | (0.918) | 164108   | 50. | 0000    |    | 53.27 |
|           | 46 2,4-Dimethyphenol            | 107               | 4.620  | 4.620   | (0.935) | 281963   | 50. | 0000    |    | 51.51 |

|       |                              |           |        |        |         |          | AMOUN   | TS      |
|-------|------------------------------|-----------|--------|--------|---------|----------|---------|---------|
|       |                              | QUANT SIG |        |        |         |          | CAL-AMT | ON-COL  |
| Compo | unds                         | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ( NG)   | ( NG)   |
| ~     |                              | ====      | ====   | ~===== |         | ****     | ======  | ======= |
| 47    | Bis (2-chloroethoxy) methane | 93        | 4.713  | 4.713  | (0.954) | 302332   | 50.0000 | 49.56   |
| 49    | 2,4-Dichlorophenol           | 162       | 4.807  | 4.807  | (0.973) | 221606   | 50.0000 | 52.33   |
|       | Benzoic Acid                 | 122       | 4.744  | 4.744  | (0.960) | 133403   | 50.0000 | 44.03   |
| 51    | 1,2,4-Trichlorobenzene       | 180       | 4.900  | 4.900  | (0.992) | 240209   | 50.0000 | 52.39   |
|       | Naphthalene                  | 128       | 4.962  | 4.962  | (1.004) | 875348   | 50.0000 | 50.55   |
| 54    | 4-Chloroaniline              | 127       | 5.066  | 5.066  | (1.025) | 347244   | 50.0000 | 51.16   |
| 57    | Hexachlorobutadiene          | 225       | 5.190  | 5.190  | (1.050) | 121809   | 50.0000 | 54.28   |
| 60    | 4-Chloro-3-Methylphenol      | 107       | 5.677  | 5.677  | (1.149) | 247891   | 50.0000 | 52.42   |
|       | 2-Methylnaphthalene          | 142       | 5.895  | 5.895  | (1.193) | 572162   | 50.0000 | 52.60   |
| 66    | Hexachlorocyclopentadiene    | 237       | 6.050  | 6.050  | (0.861) | 131928   | 50.0000 | 52.08   |
|       | 2,4,6-Trichlorophenol        | 196       | 6.164  | 6,164  | (0.878) | 143533   | 50.0000 | 52.99   |
|       | 2,4,5-Trichlorphenol         | 196       | 6.206  | 6,206  | (0.883) | 157960   | 50.0000 | 54.13   |
|       | 2-Chloronaphthalene          | 162       | 6.340  | 6.340  | (0.903) | 479069   | 50.0000 | 50.14   |
|       | 2-Nitroaniline               | 65        | 6.527  | 6.527  | (0.929) | 158363   | 50.0000 | 54.69   |
|       | Dimethylphthalate            | 163       | 6,807  |        | (0.969) | 582556   | 50.0000 | 52.96   |
|       | Acenaphthylene               | 152       | 6.838  |        | (0.973) | 844624   | 50.0000 | 50.76   |
|       | 2.6-Dinitrotoluene           | 165       | 6.879  |        | (0.979) | 137342   | 50.0000 | 53.59   |
|       | 3-Nitroaniline               | 138       | 7.024  |        | (1.000) | 162773   | 50.0000 | 50.88   |
|       | Acenaphthene                 | 153       | 7.066  |        | (1.006) | 545831   | 50.0000 | 51.54   |
|       | 2,4-Dinitrophenol            | 184       | 7.149  | 7.149  | (1.018) | 77473    | 50.0000 | 51.35   |
|       | Dibenzofuran                 | 168       | 7.263  | 7.263  | (1.034) | 719192   | 50.0000 | 51.17   |
|       | 4-Nitrophenol                | 109       | 7.283  |        | (1.037) | 75750    | 50.0000 | 57.09   |
|       | 2,4-Dinitrotoluene           | 165       | 7.335  | 7,335  | (1.044) | 179621   | 50.0000 | 53.40   |
|       | Fluorene                     | 166       | 7.667  |        | (1.091) | 583141   | 50.0000 | 50.10   |
|       | Diethylphthalate             | 149       | 7.667  | 7.667  | (1.091) | 599276   | 50.0000 | 53.21   |
|       | 4-Chlorophenyl-phenylether   | 204       | 7.698  | 7.698  | (1.096) | 254471   | 50.0000 | 52.58   |
|       | 4-Nitroaniline               | 138       | 7.771  |        | (1.106) | 176827   | 50.0000 | 55.76   |
|       | 4,6-Dinitro-2-methylphenol   | 198       | 7.822  | 7.822  | (0.881) | 99886    | 50.0000 | 51.68   |
|       | N-Nitrosodiphenylamine       | 169       | 7.864  | 7.864  | (0.886) | 510051   | 58.6000 | 62.14   |
|       | Azobenzene                   | 77        | 7.884  |        | (0.888) | 548009   | 50.0000 | 51.46   |
|       | 4-Bromophenyl-phenylether    | 248       | 8.309  | 8.309  | (0.936) | 146565   | 50.0000 | 55.44   |
|       | Hexachlorobenzene            | 284       | 8.475  | 8.475  | (0.954) | 155510   | 50.0000 | 52.67   |
| 110   | Pentachlorophenol            | 266       | 8.745  | 8.745  | (0.985) | 84390    | 50.0000 | 48.06   |
|       | Phenanthrene                 | 178       | 8.910  | 8.910  | (1.004) | 874937   | 50.0000 | 51.26   |
| 115   | Anthracene                   | 178       | 8.973  | 8.973  | (1.011) | 868361   | 50.0000 | 50.92   |
| 118   | Carbazole                    | 167       | 9.242  | 9.242  | (1.041) | 815685   | 50.0000 | 52.36   |
| 120   | Di-n-Butylphthalate          | 149       | 9.936  | 9.936  | (1.119) | 1040623  | 50.0000 | 55.52   |
| 126   | Fluoranthene                 | 202       | 10.714 | 10.714 | (1.207) | 817265   | 50.0000 | 53.43   |
| 127   | Benzidine                    | 184       | 11.004 | 11.004 | (0.836) | 574763   | 50.0000 | 51.36   |
| 128   | Pyrene                       | 202       | 11.066 | 11.066 | (0.841) | 893266   | 50.0000 | 51.76   |
|       | 3,3'-dimethylbenzidine       | 212       | 12.278 | 12.278 | (0.933) | 514041   | 50.0000 | 52.04   |
| 136   | Butylbenzylphthalate         | 149       | 12.413 | 12.413 | (0.943) | 463793   | 50.0000 | 53.62   |
| 138   | Benzo (a) Anthracene         | 228       | 13.139 | 13.139 | (0.998) | 778036   | 50.0000 | 52.90   |
| 139   | Chrysene                     | 228       | 13.201 | 13.201 | (1.003) | 767718   | 50.0000 | 51.03   |
|       | 3,3'-Dichlorobenzidine       | 252       | 13.190 | 13.190 | (1.002) | 285346   | 50.0000 | 51.44   |
| 141   | bis(2-ethylhexyl)Phthalate   | 149       | 13.532 | 13.532 | (1.028) | 638447   | 50.0000 | 53.58   |
|       | Di-n-octylphthalate          | 149       | 14.579 | 14.579 | (1.108) | 1084956  | 50.0000 | 56.96   |
|       | Benzo (b) fluoranthene       | 252       | 14.942 | 14.942 | (0.963) | 723231   | 50.0000 | 58.43   |
|       | Benzo(k) fluoranthene        | 252       | 14.983 | 14.983 | (0.965) | 761691   | 50.0000 | 47.94   |
|       | Benzo(e)pyrene               | 252       | 15.356 | 15.356 | (0.989) | 681372   | 50.0000 | 52.79   |
|       | Benzo(a) pyrene              | 252       | 15.429 |        | (0.994) | 715205   | 50.0000 | 50.96   |
|       | Indeno(1,2,3-cd)pyrene       | 276       | 17.045 |        | (1.098) | 623322   | 50.0000 | 54.92   |
|       | Dibenzo (a, h) anthracene    | 278       | 17.087 |        | (1.101) | 694362   | 50.0000 | 54.76   |
|       | Benzo(g,h,i)perylene         | 276       | 17.408 | 17.408 |         | 724574   | 50.0000 | 52.78   |
|       |                              |           |        |        | - •     |          |         |         |

|   |           |      |        |         |          | AMOUN   | TS       |
|---|-----------|------|--------|---------|----------|---------|----------|
|   | QUANT SIG |      |        |         |          | CAL-AMT | ON-COL   |
| Compounds                               | MASS      | RT   | EXP RT | REL RT  | RESPONSE | ( NG)   | ( NG)    |
| *====================================== | ====      | -=== |        | ======: | *****    |         | *****    |
| M 162 benzo b,k Fluoranthene Totals     | 252       |      |        |         | 1484922  | 50.0000 | 52.53(A) |

### QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\SV5\C\chem\sv5.i\120710.B\HSL1207.D Page 4

Report Date: 08-Dec-2010 09:16

### TestAmerica West Sacramento

### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Calibration Date: 07-DEC-2010

Calibration Time: 18:30

Client Smp ID: 8270F.M

Level:

Sample Type:

Instrument ID: sv5.i Lab File ID: HSL1207.D

Lab Smp Id: HSL 050 ug/ml CS-4

Analysis Type: SV Quant Type: ISTD

Operator: KT
Method File: \\SV5\C\chem\sv5.i\120710.B\8270f.m Misc Info: 3;;0;1 8270STD.SUB;10MSSV0310;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

|                     |          | AREA     | LIMIT    |        |        |
|---------------------|----------|----------|----------|--------|--------|
| COMPOUND            | STANDARD | LOWER    | UPPER    | SAMPLE | %DIFF  |
|                     | =======  | ======== | ======== |        | ====== |
| 1 1,4-Dichlorobenze | 122625   | 61313    | 245250   | 146239 | 19.26  |
| 2 Naphthalene-d8    | 530514   | 265257   | 1061028  | 627132 | 18.21  |
| 3 Acenaphthene-d10  | 282538   | 141269   | 565076   | 339490 | 20.16  |
| 4 Phenanthrene-d10  | 462722   | 231361   | 925444   | 541577 | 17.04  |
| 5 Chrysene-d12      | 435850   | 217925   | 871700   | 552156 | 26.68  |
| 6 Perylene-d12      | 422284   | 211142   | 844568   | 546812 | 29.49  |
| <u>,</u>            |          |          |          |        |        |

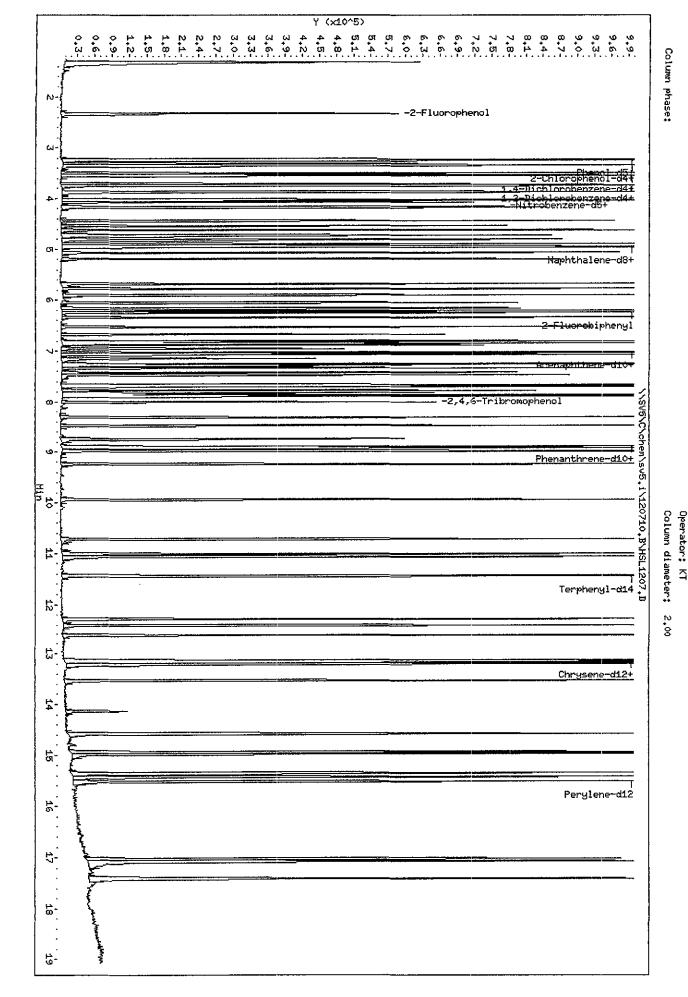
|   |          | RT I        | LIMIT    |          |        |
|---|----------|-------------|----------|----------|--------|
| COMPOUND                                | STANDARD | LOWER       | UPPER    | SAMPLE   | %DIFF  |
| ======================================= | =======  | =======     | ======== | ======== | ====== |
| 1 1,4-Dichlorobenze                     | 3.53     | 3.03        | 4.03     | 3.53     | 0.00   |
| 2 Naphthalene-d8                        | 4.94     | 4.44        | 5.44     | 4.94     | 0.00   |
| 3 Acenaphthene-d10                      | 7.02     | 6.52        | 7.52     | 7.02     | 0.00   |
| 4 Phenanthrene-d10                      | 8.88     | 8.38        | 9.38     | 8.88     | 0.00   |
| 5 Chrysene-d12                          | 13.16    | 12.66       | 13.66    | 13.16    | 0.00   |
| 6 Perylene-d12                          | 15.52    | 15.02       | 16.02    | 15.52    | 0.00   |
| ·                                       | <br>     | · <u></u> i |          |          |        |

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Sample Info; HSL\_050 ug/ml CS-4;2;;4;;;;4

Instrument: sv5.i



### TAILING FACTOR/DEGRADATION SUMMARY RESULTS

### TAILING ANALYSIS SUMMARY

| Compound          | Tail Factor | Max Allowed Test |
|-------------------|-------------|------------------|
| Pentachlorophenol | 1.1044380   | 5.000 PASS       |
| Benzidine         | 0.3282517   | 3.000 PASS       |

### DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

| +====================================== | i        |      | Mars Allewed Fort |
|---|----------|------|-------------------|
| Compound                                | Response |      | Max Allowed Test  |
| 4,4-DDD + DDE                           | 350133   | 10.5 | 20.5   PASS       |

Sample //SV5/C/chem/sv5.i/120710.B/DFT1207.D/DFT1207.D

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\* PASSED \*\*\*

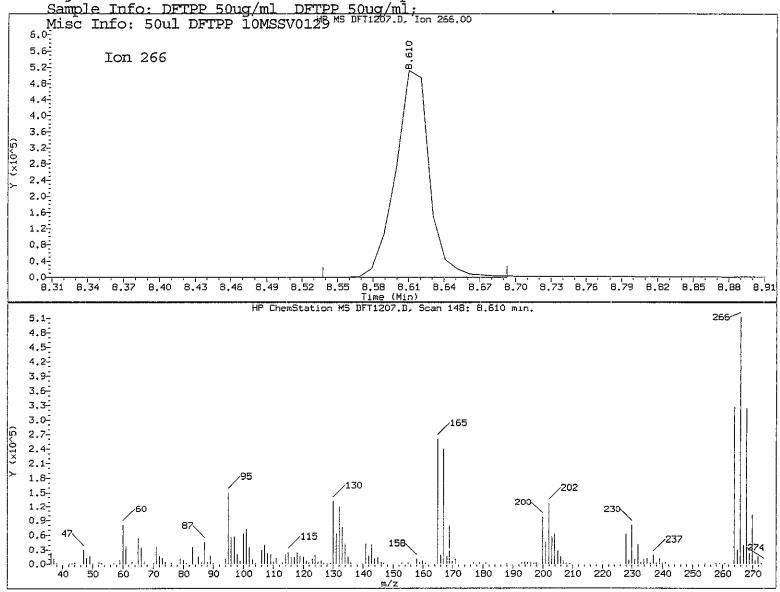
12/8/10

### TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 12/08/2010 09:15

Datafile Analyzed: //SV5/C/chem/sv5.i/120710.B/DFT1207.D/DFT1207.D Method Used: \\SV5\C\chem\sv5.i\120710.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 07-DEC-2010 18:58 Operator: KT



### Pentachlorophenol

Exp. RT = 8.631 Found RT = 8.610

Tailing factor for Pentachlorophenol OK

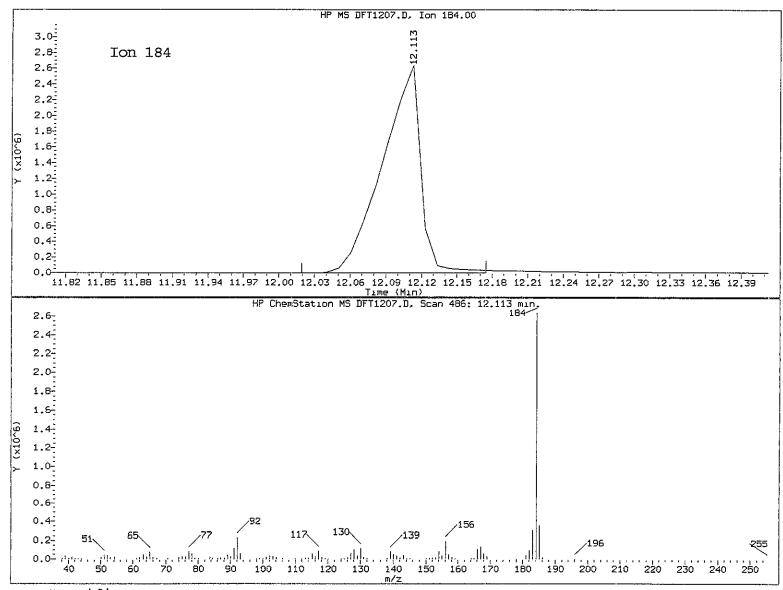
Tail Factor = 1.104 Maximum Allowed = 5.0

Datafile Analyzed: //SV5/C/chem/sv5.i/120710.B/DFT1207.D/DFT1207.D Method Used: \\SV5\C\chem\sv5.i\120710.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 07-DEC-2010 18:58 Operator: KT

Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml;

Misc Info: 50ul DFTPP 10MSSV0129



# Benzidine

Exp. RT = 12.113

Found RT = 12.113

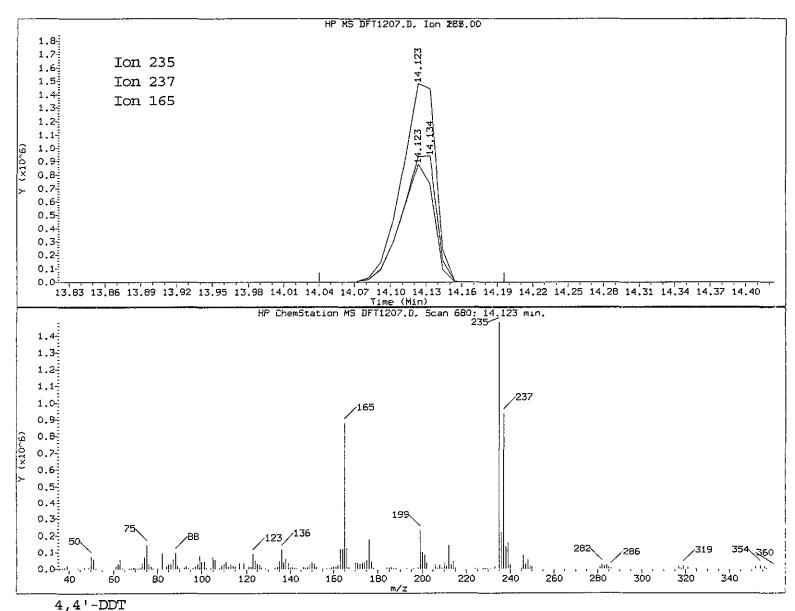
Tailing factor for Benzidine OK

Tail Factor = 0.328 Maximum Allowed = 3.0

Datafile Analyzed: //SV5/C/chem/sv5.i/120710.B/DFT1207.D/DFT1207.D Method Used: \\SV5\C\chem\sv5.i\120710.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 07-DEC-2010 18:58 Ope Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml; Operator: KT

Misc Info: 50ul DFTPP 10MSSV0129



Exp. RT =14.134 Found RT = 14.123

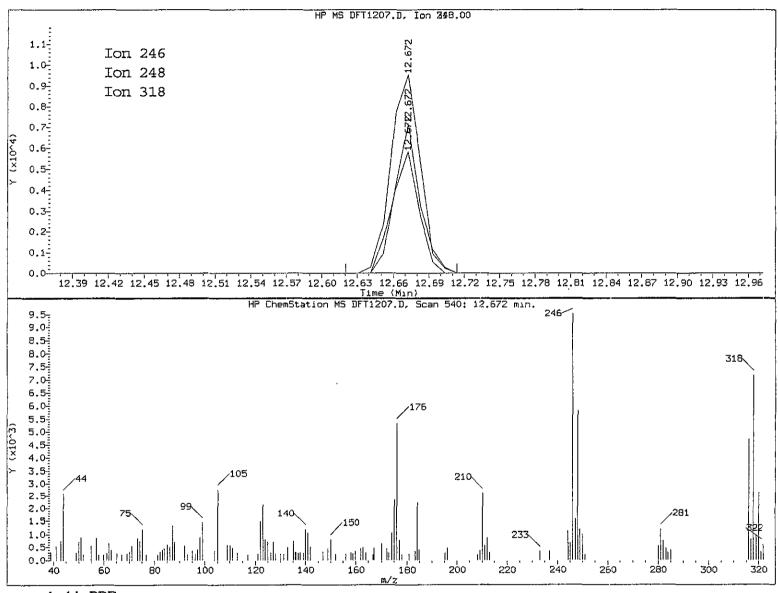
| Mass | Area       | Ratio    |
|------|------------|----------|
|      | <b>-</b> - | <b>-</b> |
| 235  | 2973238    | 100.00   |
| 237  | 1904311    | 64.05    |
| 165  | 1697556    | 57.09    |

Datafile Analyzed: //SV5/C/chem/sv5.i/120710.B/DFT1207.D/DFT1207.D Method Used: \\SV5\C\chem\sv5.i\120710.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 07-DEC-2010 18:58 Operator: KT

Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml;

Misc Info: 50ul DFTPP 10MSSV0129



4,4'-DDE

318

Exp. RT = 12.683Found RT = 12.672

10633

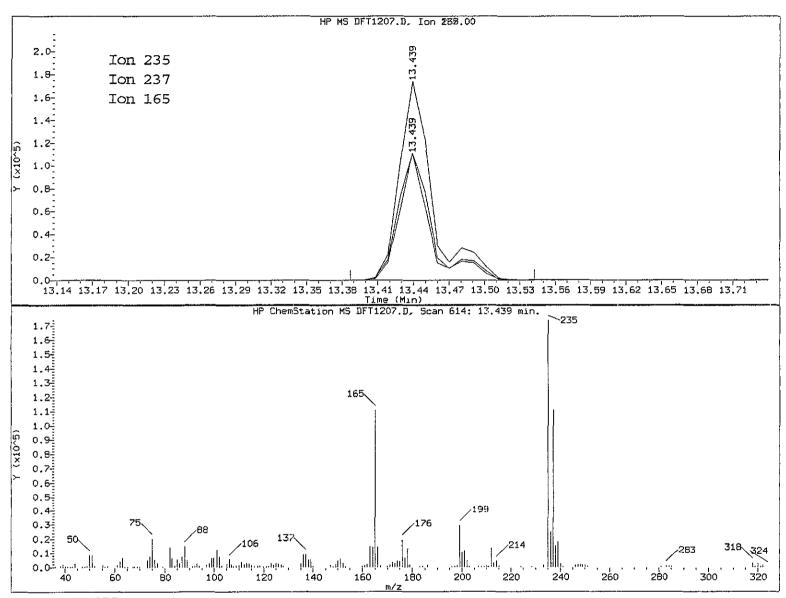
64.58

Datafile Analyzed: //SV5/C/chem/sv5.i/120710.B/DFT1207.D/DFT1207.D Method Used: \\SV5\C\chem\sv5.i\120710.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 07-DEC-2010 18:58 Operator: KT

Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml;

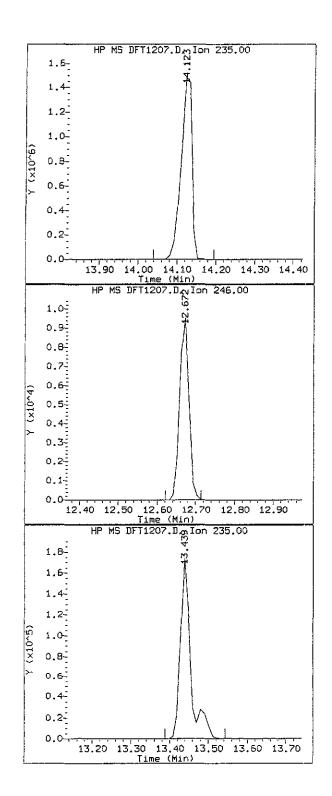
Misc Info: 50ul DFTPP 10MSSV0129



4,4'-DDD

Exp. RT = 13.450Found RT = 13.439

Mass Area Ratio
---- 333667 100.00
237 212211 63.60
165 207323 62.13



Compound: 4,4'-DDT Quant Mass: 235

RT: 14.123 Area: 2973238

Compound: 4,4'-DDE

Quant Mass: 246

RT: 12.672 Area: 16466

Compound: 4,4'-DDD

Quant Mass: 235 RT: 13.439

Area: 333667

### DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

| Compound      | Response | %Breakdown | Max Allowed Test |
|---------------|----------|------------|------------------|
| 4,4-DDD + DDE | 350133   | 10.5       | 20.5   PASS      |

Report Date: 08-Dec-2010 09:15

### TestAmerica West Sacramento

Page 1

Data file : \\SV5\C\chem\sv5.i\120710.B\DFT1207.D Lab Smp Id: DFTPP 50ug/ml

Inj Date : 07-DEC-2010 18:58

Inst ID: sv5.i Operator : KT

Smp Info : DFTPP 50ug/ml;

Misc Info: 50ul DFTPP 10MSSV0129

Comment

Method : \\SV5\C\chem\sv5.i\120710.B\DFTPP.m Meth Date : 08-Dec-2010 09:15 onishim Quant 1 Quant Type: ISTD Cal File:

Cal Date :

QC Sample: DFTPP

Als bottle: 96 Dil Factor: 1.00000 Integrator: HP RTE Compound Sublist: all.sub

Target Version: 4.14 Sample Matrix: None

Processing Host: SV5

### CONCENTRATIONS

|        |         |          |      |          | ON-COL  | FINAL   |        |         |        |
|--------|---------|----------|------|----------|---------|---------|--------|---------|--------|
| RT     | EXP RT  | REL RT   | MASS | RESPONSE | ( ug/L) | ( ug/L) | TARGE! | r range | RATIO  |
| ====   | 86===== | ======== | 2225 | a======  | 2222355 | ====±== | =====  |         | HESEC  |
|        |         |          |      |          |         |         |        |         |        |
| 1 (    | dftpp   |          |      |          |         | CAS #:  | 5074-7 | 1-5     |        |
| 10.091 | 10.092  | ( 0.000) | 198  | 941120   |         |         | 0.00-  | 100.00  | 89.89  |
| 10.091 | 10.092  | ( 0.000) | 51   | 358336   |         |         | 30.00- | 60.00   | 38.08  |
| 10.091 | 10.092  | ( 0.000) | 68   | 5496     |         |         | 0.00-  | 2.00    | 1.59   |
| 10.091 | 10.092  | ( 0.000) | 69   | 344832   |         |         | 0.00-  | 0.00    | 36.64  |
| 10.091 | 10.092  | ( 0.000) | 70   | 1548     |         |         | 0.00-  | 2.00    | 0.45   |
| 10.091 | 10.092  | ( 0.000) | 127  | 486592   |         |         | 40.00- | 60.00   | 51,70  |
| 10.091 | 10.092  | ( 0.000) | 197  | 0        | 0.0     | 0.0     | 0.00-  | 1.00    | 0.00   |
| 10.091 | 10.092  | ( 0.000) | 199  | 61496    |         |         | 5.00-  | 9.00    | 6.53   |
| 10.091 | 10.092  | ( 0,000) | 275  | 234944   |         |         | 10.00- | 30.00   | 24.96  |
| 10.091 | 10.092  | ( 0.000) | 365  | 30584    |         |         | 1.00-  | 0.00    | 3.25   |
| 10.091 | 10.092  | ( 0.000) | 441  | 153408   |         |         | 0.01-  | 99.99   | 76.36  |
| 10.091 | 10.092  | ( 0.000) | 442  | 1046912  |         |         | 40.00- | 0.00    | 111.24 |
| 10.091 | 10.092  | ( 0.000) | 443  | 200896   |         |         | 17.00- | 23.00   | 19.19  |
|        |         |          |      |          |         |         |        |         |        |

Date : 07-DEC-2010 18:58

Client ID:

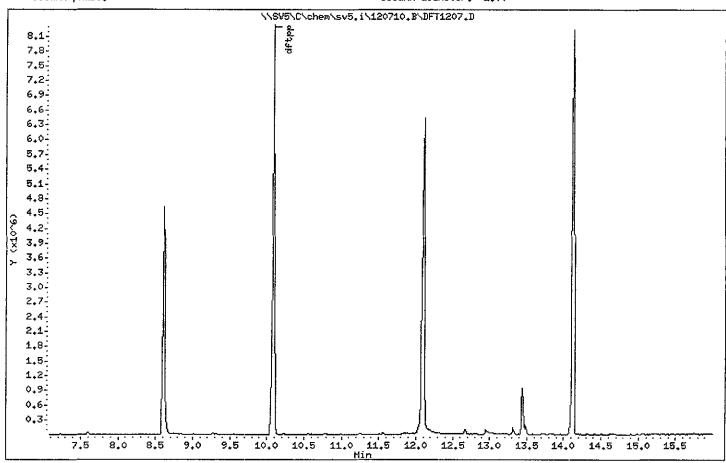
Instrument: sv5.i

Sample Info: DFTPP 50ug/m1;

Operator: KT

Column phase:

Column diameter: 2.00



Date : 07-DEC-2010 18:58

Client ID:

Instrument: sv5.i

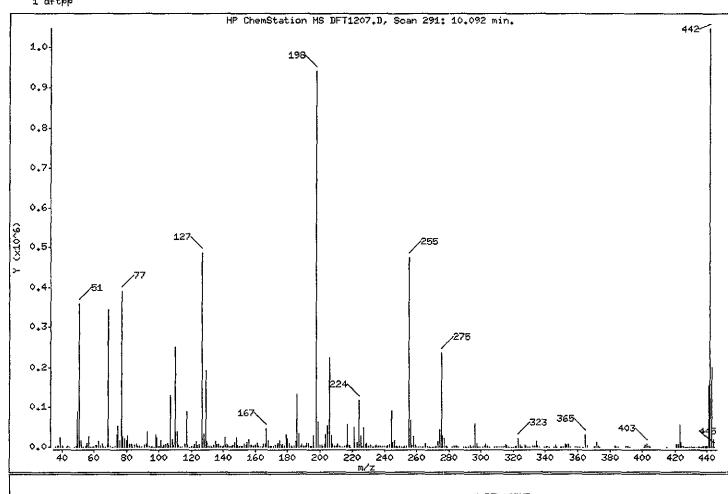
Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

1 dftpp



| m/e ION ABUNDANCE CRITERIA               | % RELATIVE<br>ABUNDANCE |        |
|--|-------------------------|--------|
|  | 1                       | +<br>! |
| 198   Base Peak, 100% relative abundance | 1 100.00                | 1      |
| ! 51 ! 30,00 - 60,00% of mass 198        | 38.08                   | I      |
| 68   Less than 2.00% of mass 69          | 1 0.58 ( 1.59)          | ļ      |
| 69   Mass 69 relative abundance          | l <b>36</b> ₊64         | ]      |
| 1 70   Less than 2.00% of mass 69        | 1 0.16 ( 0.45)          | ţ.     |
| 127   40,00 - 60,00% of mass 198         | l 51.,7¢                | I      |
| 197   Less than 1.00% of mass 198        | 1 0.00                  | 1.     |
| 199   5.00 - 9.00% of mass 198           | 1 6,53                  | i      |
| 275   10.00 - 30.00% of mass 198         | 1 24,96                 | I      |
| 365   Greater than 1.00% of mass 198     | 1 3,25                  | Ţ.     |
| 441   Present, but less than mass 443    | 1 16.30                 | I      |
| 442   Greater than 40.00% of mass 198    | l 111,24                | I      |
| 443   17.00 - 23.00% of mass 442         | 1 21,35 ( 19,19)        | i      |

Date : 07-DEC-2010 18:58

Client ID:

Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

Data File: DFT1207.D

Spectrum: HP ChemStation MS DFT1207.D, Scan 291: 10.092 min.

Location of Maximum: 442.00 Number of points: 351

|         | m/z            | Y              | m/z      | Y       | m/z    | Y             | m/z             | Υ      |
|---------|----------------|----------------|----------|---------|--------|---------------|-----------------|--------|
| i       | 35,90          | 444            | 1 130.00 | 15165   | 218,90 | 815           | 316.10          | 3790 I |
| ī       | 37,10          | 1237           | 131.00   | 3402 (  | 221,10 | <b>511</b> 76 | 317.10          | 707 1  |
| 1       | 38,10          | 3041           | 132.00   | 1928    | 223,00 | 11650         | 319,00          | 331 I  |
| 1       | 39,10          | 23944          | 133.00   | 627     | 224.10 | 118936        | 320,00          | 279 1  |
| 1       | 40,10          | 1333           | 134.00   | 5648    | 225,10 | 27912         | 321,00          | 2532   |
| 1       | 41.10          | 866            | 135.00   | 15521   | 226,00 | 3593          | 322,10          | 1307   |
| I       | 43,10          | 513            | 136.00   | 6475    | 227,00 | 48416         | 323,10          | 21416  |
| 1       | 44.00          | 1753           | 137,00   | 6838 (  | 228,00 | 6461.         | 324,10          | 4062 I |
| 1       | 45,00          | 753            | 138.00   | 2028    | 229,00 | 9533          | 324,80          | 278    |
| 1       | 48,20          | 270            | 139,10   | 1195    | 230,00 | 1316          | 325,30          | 375    |
| 1       | 49.00          | 2085           | 140.10   | 2579    | 231.00 | 5001.         | 327,00          | 4274   |
| ŀ       | 49,20          | 2117           | 141.00   | 23536 1 | 232,10 | 769           | 328.00          | 1617   |
| į       | 50.10          | 88856          | 142,00   | 7158 (  | 233,00 | 946           | 329,00          | 321 I  |
| ı       | 51,10          | <b>3</b> 58336 | 143.00   | 4808    | 234.00 | 3144          | 330,10          | 213 i  |
| 1       | 52,10          | 17656          | 144.10   | 1434    | 235,00 | 3698          | 332.00          | 1345 i |
| j       | 53,10          | <b>71</b> 6 1  | 145.00   | 1389    | 236,00 | 1943          | 333,00          | 1805 l |
| I       | 55 <b>,</b> 00 | 1866           | 146.10   | 4295 i  | 237,00 | 3607          | 334.10          | 13511  |
| 1       | 56,00          | 10467          | 147.10   | 11654   | 238,10 | 630           | 335,10          | 3336   |
| F       | 57,00          | 26216          | 148.00   | 23960   | 239,00 | 2294          | 336,10          | 533    |
| 1       | 58,00          | 1048           | 149.00   |         | 239,90 | 1581<br>      | 339 <b>,1</b> 0 | 518    |
| i       | 59,10          | 505            | 150.10   | 1321    | 241.00 | 2462          | 340.10          | 500 I  |
| 1       | 60.00          | 353 (          | 151,10   | 3266 (  | 242,10 | 5608          | 341,10          | 2417 I |
| 1       | 61,00          | 4125           | 152.10   | 2089 (  | 243,10 | 6797          | 342.00          | 954 I  |
| I       | 62.00          | 4408 1         | 1.53,00  |         | 244.10 |               | 345.10          | 210    |
| [<br>+- | 63,00          | 13262          | 154.00   | 5002    | 245,10 | 11742         | 346,00          | 4911   |
| J       | 64,10          | 2478           | 155.00   | 11983   | 246.00 | 17040         | 347.00          | 1016   |
| I       | 65,10          | 7180 (         | 1.56.10  | 18168 I | 247,00 | 3145          | 349,40          | 200    |
| 1       | 65,90          | 491 !          | 157,10   | 3848    | 248,10 | 993           | 350,10          | 241    |
| 1       | 67.10          | 443 !          | 1.58₊◊◊  | 4829 l  | 249,00 | 3497          | 351,00          | 379 I  |
| 1       | 68,10          | 5496           | 1.59.00  | 3216 I  | 250,10 | 775           | 352,00          | 7276   |
| 1       | 69.00          | 344832         | 160,00   | 5537 J  | 250.50 | 458           | 353,00          | 5018   |
| ŧ       | 70.00          | <b>1</b> 548 ( | 1.61.10  | 9714 1  | 251,20 | 739           | 354,10          | 6944 i |
| ı       | 71.00          | 373 I          | 1.62,00  | 3000    | 252,10 | 1652          | 355,10          | 1070 i |
| ı       | 72,00          | 238            | 1.63,00  | 880     | 253,10 | 3061          | 358,00          | 213    |
| I       | 73,00          | 2482           | 1.64.10  | 1172    | 255,00 | 475008        | 359,00          | 474    |

Data File: \\SV5\C\chem\sv5.i\120710.B\DFT1207.D

Date : 07-DEC-2010 18:58

Client ID:

Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

Data File: DFT1207.D

Spectrum: HP ChemStation MS DFT1207.D, Scan 291: 10.092 min.

Location of Maximum: 442.00 Number of points: 351

|    | m/z    | Y             | m/z      | Y             | m/z    | Y                | m/z           | Υ              |
|----|--------|---------------|----------|---------------|--------|------------------|---------------|----------------|
| 1  | 74,10  | 30400         | 165.00   | 7398          | 256,00 | 67736            | ,<br>1 359,90 | 283            |
| ı  | 75,00  | 52048         | 166.10   | 6991          | 257,00 | 505 <del>9</del> | 361.20        | 267            |
| 1  | 76,10  | 17480         | 1 167,00 | 44528         | 258,00 | 27248            | 363.00        | 244            |
| ſ  | 77,10  | 388992        | 1 168,00 | 17480         | 259,00 | 4318             | 363,60        | 314            |
| Į. | 78,10  | 25320         | 169.00   | 2761          | 260.00 | 1011             | 365.00        | 30584          |
| ;  | 79,00  | 22488         | 1 170.00 | 1429          | 261,10 |                  | 366.00        | 4285 I         |
| 1  | 80.00  | 17984         | 171.00   | 1677          | 261.90 | 331              | 370,00        | 573 I          |
| 1  | 81,00  | 28192         | 1 172,00 | 4461          | 263.10 | 452              | 371.00        | 1723           |
| t  | 82,00  | 7221          | 1 173,00 | 5125          | 264,00 | 1075             | 372.00        | 12369 l        |
| i  | 83,10  | 6312          | 1 174,00 | 9097          | 265,00 | 10046            | 373,00        | 3192           |
| 1  | 84.00  | 1064          | 1 175,00 | 17000         | 266,10 | 1795             | 373.80        | 383 i          |
| 1  | 85.00  | 4917          | 176,10   | <b>561</b> 6  | 267,30 | 242              | 383,00        | 2959           |
| ı  | 86,00  | 7509          | 177,00   | 8330          | 268,00 | 253              | 384,00        | 1011           |
| l  | 87.00  | 2762          | 178.00   | 2927          | 269,10 | 217              | I 384₊90      | 444            |
| 1  | 88.00  | 1236          | 1 179.00 | 32040         | 270.10 | 614              | 390,00        | 1487           |
| 1  | 89.00  | 726           | 1 180.00 | 20912         | 271.00 | 1060             | 391.00        | 1312           |
| l  | 91,00  | 5994          | 181,00   | 9435          | 272,00 | 1955             | 392,00        | 832            |
| ŀ  | 92,00  | 7280          | 182.00   | 1268          | 273,00 | 14825            | 1 400,90      | 776 (          |
| i  | 93,00  | 38064         | 183,00   | 776           | 274,00 | 42624            | 1 402,00      | 5145 I         |
| 1  | 94.00  | 3059          | 184.10   | 2485          | 275,00 | 234944           | 1 403,00      | 8365           |
| ļ  | 95,10  | 927           | 185.00   | 14710         | 276,00 | 29664            | 404.00        | 3051 1         |
| į  | 96,00  | 1962          | i 186,10 | 131200        | 277,00 | 20840            | 405,00        | 418 (          |
| ļ  | 97,00  | 1088          | 1 187.00 | <b>34</b> 592 | 278,00 | 3036             | 415,10        | 393 [          |
| 1  | 98,00  | 3065 <b>6</b> | 188.10   | 3303          | 279,10 | 718              | 421.00        | 7241           |
| 1  | 99.00  | 24168         | 1 189.00 | 6593          | 282,10 | 418              | 422,00        | 7821           |
| 1  | 100.00 | 2137          | 1 190,00 | 1691          | 283,00 | 2278             | 423,00        | 56392 ]        |
| 1  | 101.00 | 17112         | 191.00   | 3385          | 284.10 | 1316             | 1 424,00      | 124 <b>9</b> 5 |
| ı  | 102,10 | 707           | 192.00   | 8960          | 285,10 | 3296             | 425,10        | 1266           |
| 1  | 103,00 | 4533          | 1 193.00 | 9389          | 285,90 | 753              | 1 426.00      | 314            |
| l  | 104.00 | 8374          | 194.10   | 2520          | 288,90 | 1173             | 427.00        | 462 1          |
| 1  | 105.00 | 9548          | 1 194.90 | 1781          | 290.00 | 670              | 1 427.60      | 218 !          |
| 1  | 106.00 | 3865          | 196.10   | 28664         | 291,10 | 577              | 1 428,30      | 410 I          |
| I  | 107.00 | 129648        | 198.00   | 941120        | 292,00 | 912              | 1 428,90      | 223            |
| 1  | 108,00 | 20000         | 1 199,00 | 61496         | 293,00 | 4149             | 429,40        | 266 1          |
| 1  | 109,10 | 3956          | 1 200,00 | 4066          | 294,00 | 755              | 430,10        | 379            |

Data File: \\SV5\C\chem\sv5.i\120710.B\DFT1207.D

Date : 07-DEC-2010 18:58

Client ID:

Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

Data File: DFT1207.D

Spectrum: HP ChemStation MS DFT1207.D, Scan 291: 10.092 min.

Location of Maximum: 442.00 Number of points: 351

|    | m/z    | Y      |     | かくて     |    | Y    |    | m/z    | Y     |     | めぐて    | Y       | ,          |
|----|--------|--------|-----|---------|----|------|----|--------|-------|-----|--------|---------|------------|
| +- |        |        | +   |         |    |      | ŀ  |        | <br>  | -+- |        |         | +          |
| f  | 110.00 | 249792 | 1   | 201,50  | į  | 5425 | I  | 295,00 | 1487  | I   | 430.90 | 416     | ,          |
| ı  | 111.00 | 38184  | 1   | 202,00  | :  | L868 | ŀ  | 296,00 | 58960 | 1   | 431.30 | 450     | 1          |
| ı  | 112.00 | 4016   | 1   | 203,00  |    | 5341 | ĺ  | 297,10 | 9033  | ĺ   | 431.90 | 648     | 1          |
| 1  | 113.00 | 1059   | 1   | 204.00  | 33 | 2360 | ı  | 298,00 | 587   | Į   | 433,30 | 505     | 1          |
| i  | 114.10 | 459    | į   | 205.00  | 5  | 2464 | 1  | 298,90 | 288   | Į   | 434,30 | - 639   | 1          |
| +- |        |        | -+- |         |    |      | +- |        | <br>  | -+- |        |         | +          |
| 1  | 116,00 | 7217   | ſ   | 206.10  | 22 | 1128 | 1  | 301,00 | 790   | ı   | 434.80 | 729     | 1          |
| 1  | 117.00 | 88136  | į   | 207,10  | 28 | 3424 | 1  | 302,00 | 1321  | ı   | 435,30 | 936     | 1          |
| 1  | 118.00 | 5460   | ī   | 208,00  |    | 6671 | 1  | 303.00 | 7805  | i   | 436,50 | 1169    | 1          |
| 1  | 119.00 | 753    | ī   | 209.00  | 2  | 2153 | ı  | 304,00 | 2026  | ı   | 437.70 | 1425    | 5 1        |
| ı  | 120,10 | 1815   | 1   | 210.00  | ;  | 3375 | 1  | 305,10 | 340   | i   | 438,50 | 2401    | . 1        |
| +- |        |        | +   |         |    |      | +- |        | <br>  | -+- |        |         | -+         |
| 1  | 121.10 | 320    | 1   | 211,10  | 1  | 3023 | i  | 308.00 | 806   | I   | 439,30 | 2087    | <b>'</b> I |
| ı  | 122,00 | 8059   | 1   | 212,00  | :  | L700 | Į  | 309,00 | 451   | I   | 439,70 | 2173    | 1          |
| 1  | 123,00 | 13316  | į   | 212,90  |    | 685  | ı  | 310,10 | 976   | 1   | 441,00 | 153408  | 1          |
| 1  | 124.00 | 5505   | ł   | 214.00  |    | 240  | ı  | 311,00 | 287   | į   | 442,00 | 1046912 | 1          |
| 1  | 125.10 | 6360   | į   | 215,00  | 2  | 2484 | 1  | 312,10 | 251   | l   | 443,00 | 200896  | 1          |
| 4- |        |        | +   |         |    |      | +  |        | <br>  | -4- |        |         | +          |
| 1  | 127.00 | 486592 | i   | 216.10  | •  | 1575 | 1  | 313,00 | 923   | į   | 444,00 | 19040   | 1          |
| 1  | 128.00 | 34736  | 1   | 21.7.00 | 5  | 7208 | I  | 314,00 | 3152  | I   | 444.90 | 845     | 1 2        |
| í  | 129,00 | 192128 | 1   | 218.00  | į  | 5655 | ſ  | 315,00 | 7047  | 1   |        |         | t          |
| +- |        |        | +   |         |    |      | +- |        | <br>  | -+- |        |         | -+         |

Report Date: 08-Dec-2010 09:20

#### TestAmerica West Sacramento

Method 8270C

Data file : \\SV5\C\chem\sv5.i\120710.B\S120705.D

Lab Smp Id: MAR231AA G0L020000-Client Smp ID: 0336447

Inst ID: sv5.i Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0336447;8270F.M

Comment : SOP SAC-MS-0005

Method : \\SV5\C\chem\sv5.i\120710.B\8270F.m

Meth Date: 08-Dec-2010 09:16 semivoa Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 5
Dil Factor: 1.00000
Integrator: Falcon

Compound Sublist: S11JZHCB.SUB

Target Version: 4.14 Processing Host: SV5

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

| Name  | Value                         | Description   |
|---|-------------------------------|---|
| DF<br>Uf<br>Vt<br>Vo<br>Vi<br>Cpnd Variable | 1.000<br>1000.000<br>1000.000 | Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable |

|    |      |                        |           |        |           |   |          | CONCENTR  | ATIONS    |
|----|------|------------------------|-----------|--------|-----------|---|----------|-----------|-----------|
|    |      |                        | QUANT SIG |        |           |   |          | ON-COLUMN | FINAL     |
| C  | ompo | unds                   | MASS      | RT     | EXP RT    | REL RT                                  | RESPONSE | ( NG)     | ( ug/L)   |
| =  |      | ========               | ====      |        |           | ======================================= | ******   | ======    | ======    |
| *  | 1    | 1,4-Dichlorobenzene-d4 | 152       | 3.532  | 3.532     | (1.000)                                 | 103129   | 40.0000   | (q)       |
| *  | 2    | Naphthalene-d8         | 136       | 4.941  | 4.941     | (1.000)                                 | 453376   | 40.0000   |           |
| *  | 3    | Acenaphthene-d10       | 164       | 7.024  | 7.024     | (1.000)                                 | 242534   | 40.0000   |           |
| *  | 4    | Phenanthrene-d10       | 188       | 8.879  | 8.879     | (1.000)                                 | 404292   | 40.0000   |           |
| *  | 5    | Chrysene-d12           | 240       | 13.159 | 13.159    | (1.000)                                 | 393288   | 40.0000   |           |
| *  | 6    | Perylene-d12           | 264       | 15.512 | 15.522    | (1.000)                                 | 376254   | 40.0000   |           |
| \$ | 7    | 2-Fluorophenol         | 112       | 2.330  | 2.330     | (0.660)                                 | 260997   | 71.7993   | 71.80     |
| \$ | 8    | Phenol-d5              | 99        | 3.221  | 3.221     | (0.912)                                 | 368834   | 80.6884   | 80.69     |
| \$ | 10   | 1,2-Dichlorobenzene-d4 | 152       | 3.729  | 3.729     | (1.056)                                 | 85938    | 33.8355   | 33.84 (q) |
| \$ | 11   | Nitrobenzene-d5        | 82        | 4.154  | 4.154     | (0.841)                                 | 152047   | 39.5952   | 39.60     |
| \$ | 12   | 2-Fluorobiphenyl       | 172       | 6.247  | 6.247     | (0.889)                                 | 329259   | 42.1437   | 42.14     |
| \$ | 13   | 2,4,6-Tribromophenol   | 330       | 7.998  | 7.998     | (1.139)                                 | 105503   | 100.107   | 100.1     |
| \$ | 14   | Terphenyl-d14          | 244       | 11.439 | 11.439    | (0.869)                                 | 367384   | 47.4244   | 47.42     |
|    | 108  | Hexachlorobenzene      | 284       | Con    | npound No | t Detecte                               | đ.       |           |           |

QC Flag Legend

q - Qualifier signal exceeded ratio warning limit.



Data File: \\SV5\C\chem\sv5.i\120710.B\S120705.D Page 2

Report Date: 08-Dec-2010 09:20

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Calibration Date: 07-DEC-2010

Lab File ID: S120705.D Calibration Time: 19:43
Lab Smp Id: MAR231AA G0L020000- Client Smp ID: 0336447

Analysis Type: SV Level: LOW Quant Type: ISTD Sample Type: AIR

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120710.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0336447;8270F.M

Test Mode:

Use Initial Calibration Level 4.

|   |          | AREA     | LIMIT    |        |        |
|---|----------|----------|----------|--------|--------|
| COMPOUND                                | STANDARD | LOWER    | UPPER    | SAMPLE | %DIFF  |
| ======================================= | =======  | ======== | ======== |        | ====== |
| 1 1,4-Dichlorobenze                     | 122625   | 61313    | 245250   | 103129 | -15.90 |
| 2 Naphthalene-d8                        | 530514   | 265257   | 1061028  | 453376 | -14.54 |
| 3 Acenaphthene-d10                      | 282538   | 141269   | 565076   | 242534 | -14.16 |
| 4 Phenanthrene-d10                      | 462722   | 231361   | 925444   | 404292 | -12.63 |
| 5 Chrysene-d12                          | 435850   | 217925   | 871700   | 393288 | -9.77  |
| 6 Perylene-d12                          | 422284   | 211142   | 844568   | 376254 | -10.90 |
|   |          |          |          |        |        |

| COMPOUND   | STANDARD | RT I<br>LOWER | IMIT<br>UPPER | SAMPLE | %DIFF |
|--|----------|---------------|---------------|--------|-------|
| 1 1,4-Dichlorobenze 2 Naphthalene-d8 3 Acenaphthene-d10 4 Phenanthrene-d10 5 Chrysene-d12 6 Perylene-d12 | 3.53     | 3.03          | 4.03          | 3.53   | -0.00 |
|  | 4.94     | 4.44          | 5.44          | 4.94   | -0.00 |
|  | 7.02     | 6.52          | 7.52          | 7.02   | -0.00 |
|  | 8.88     | 8.38          | 9.38          | 8.88   | -0.00 |
|  | 13.16    | 12.66         | 13.66         | 13.16  | -0.00 |
|  | 15.52    | 15.02         | 16.02         | 15.51  | -0.00 |

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT. Report Date: 08-Dec-2010 09:20

#### TestAmerica West Sacramento

#### RECOVERY REPORT

Client Name:

Sample Matrix: GAS Lab Smp Id: MAR231AA G0L020000-

Level: LOW

Data Type: MS DATA

SampleType: SpikeList File: Quant Type: Sublist File: S11JZHCB.SUB

Method File: \\SV5\C\chem\sv5.i\120710.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0336447;8270F.M

Client SDG: 090498

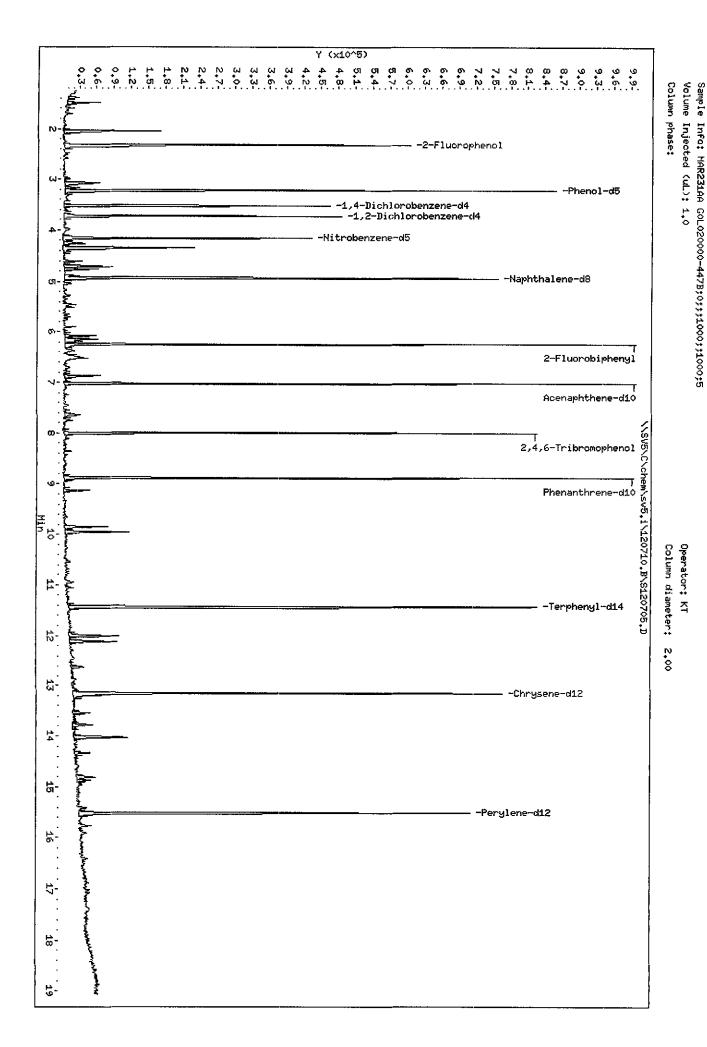
Fraction: SV

Client Smp ID: 0336447

Operator: KT

SampleType: SAMPLE Quant Type: ISTD

| SURROGATE COMPOUND       | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 7 2-Fluorophenol      | 100.0                 | 71.80                     | 71.80          | 41-105 |
| \$ 8 Phenol-d5           | 100.0                 | 80.69                     | 80.69          | 43-122 |
| \$ 10 1,2-Dichlorobenzen | 50.00                 | 33.84                     | 67.67          | 60-120 |
| \$ 11 Nitrobenzene-d5    | 50.00                 | 39.60                     | 79.19          | 46-118 |
| \$ 12 2-Fluorobiphenyl   | 50.00                 | 42.14                     | 84.29          | 58-105 |
| \$ 13 2,4,6-Tribromophen | 100.0                 | 100.1                     | 100.11         | 61-118 |
| \$ 14 Terphenyl-d14      | 50.00                 | 47.42                     | 94.85          | 69-110 |



rage 4

Instrument: sv5.i

Client ID: 0336447

07-DEC-2010 22:12

Data File: \\SV5\C\ohem\sv5.i\120710.B\S120705.D

Report Date: 08-Dec-2010 09:38

#### TestAmerica West Sacramento

Method 8270C

Data file : \\SV5\C\chem\sv5.i\120710.B\S120706.D Lab Smp Id: MAR231AC G0L020000-Inj Date : 07-DEC-2010 22:36

Operator : KT Inst ID: sv5.i Smp Info : MAR231AC G0L020000-447C;3;LCS;;1000;;1000;2 Misc Info: 0;AIR;0;S11JZHCB.SUB;S11JZHCB.SPK;1;;8270F.M

Comment : SOP SAC-MS-0005

Method : \\SV5\C\chem\sv5.i\120710.B\8270F.m

Meth Date: 08-Dec-2010 09:16 semivoa Quant Type: ISTD Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

QC Sample: LCS

Als bottle: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: S11JZHCB.SUB

Target Version: 4.14 Processing Host: SV5

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

| Name  | Value                         | Description   |
|---|-------------------------------|---|
| DF<br>Uf<br>Vt<br>Vo<br>Vi<br>Cpnd Variable | 1.000<br>1000.000<br>1000.000 | Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable |

|       |                          |           |        |           |            |          | CONCENTRA | ATIONS  |
|-------|--------------------------|-----------|--------|-----------|------------|----------|-----------|---------|
|       |                          | QUANT SIG |        |           |            |          | ON-COLUMN | FINAL   |
| Compo | ounds                    | MASS      | RT     | EXP RT    | REL RT     | RESPONSE | ( NG)     | ( ug/L) |
| ====  |                          | ====      | ====   |           |            | ******   |           |         |
| * :   | 1 1,4-Dichlorobenzene-d4 | 152       | 3.532  | 3.532     | (1.000)    | 110216   | 40.0000   | (p)     |
| *     | 2 Naphthalene-d8         | 136       | 4.941  | 4.941     | (1.000)    | 452013   | 40.0000   |         |
| *     | 3 Acenaphthene-dl0       | 164       | 7.024  | 7.024     | (1.000)    | 250253   | 40.0000   |         |
| *     | 4 Phenanthrene-d10       | 188       | 8.879  | 8.879     | (1.000)    | 402633   | 40.0000   |         |
| *     | 5 Chrysene-dl2           | 240       | 13.159 | 13.159    | (1.000)    | 401152   | 40.0000   |         |
| *     | 6 Perylene-d12           | 264       | 15.522 | 15.522    | (1.000)    | 398287   | 40.0000   |         |
| \$    | 7 2-Fluorophenol         | 112       | 2.330  | 2.330     | (0.660)    | 299882   | 77.1918   | 77.19   |
| \$    | 8 Phenol-d5              | 99        | 3.221  | 3.221     | (0.912)    | 406171   | 83.1429   | 83.14   |
| \$ 10 | 0 1,2-Dichlorobenzene-d4 | 152       | Con    | npound No | ot Detecte | eđ.      |           |         |
| \$ 1: | 1 Nitrobenzene-d5        | 82        | 4.154  | 4.154     | (0.841)    | 172361   | 45.0206   | 45.02   |
| \$ 1: | 2 2-Fluorobiphenyl       | 172       | 6.247  | 6.247     | (0.889)    | 369712   | 45.8619   | 45.86   |
| \$ 1: | 3 2,4,6-Tribromophenol   | 330       | 7.998  | 7.998     | (1.139)    | 119555   | 109.942   | 109.9   |
| \$ 14 | 4 Terphenyl-d14          | 244       | 11.439 | 11.439    | (0.869)    | 380177   | 48.1138   | 48.11   |
| 10    | 8 Hexachlorobenzene      | 284       | 8.475  | 8.475     | (0.954)    | 212588   | 96.8505   | 96.85   |

QC Flag Legend

q - Qualifier signal exceeded ratio warning limit.

Data File: \\SV5\C\chem\sv5.i\120710.B\S120706.D Page 2

Report Date: 08-Dec-2010 09:20

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Calibration Date: 07-DEC-2010

Lab File ID: S120706.D Calibration Time: 19:43

Lab Smp Id: MAR231AC G0L020000-

Analysis Type: SV Level: LOW Quant Type: ISTD Sample Type: AIR

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120710.B\8270F.m

Misc Info: 0; AIR; 0; S11JZHCB.SUB; S11JZHCB.SPK; 1; ; 8270F.M

Test Mode:

Use Initial Calibration Level 4.

|                     |          | AREA     | LIMIT    |          |        |
|---------------------|----------|----------|----------|----------|--------|
| COMPOUND            | STANDARD | LOWER    | UPPER    | SAMPLE   | %DIFF  |
|                     | =======  | ======== | ======== | ======== | ====== |
| 1 1,4-Dichlorobenze | 122625   | 61313    | 245250   | 110216   | -10.12 |
| 2 Naphthalene-d8    | 530514   | 265257   | 1061028  | 452013   | -14.80 |
| 3 Acenaphthene-d10  | 282538   | 141269   | 565076   | 250253   | -11.43 |
| 4 Phenanthrene-d10  | 462722   | 231361   | 925444   | 402633   | -12.99 |
| 5 Chrysene-d12      | 435850   | 217925   | 871700   | 401152   | -7.96  |
| 6 Perylene-d12      | 422284   | 211142   | 844568   | 398287   | -5.68  |
|                     |          |          |          |          |        |

|   |          | RT I     | IMIT     | -        |       |
|---|----------|----------|----------|----------|-------|
| COMPOUND                                | STANDARD | LOWER    | UPPER    | SAMPLE   | %DIFF |
| ======================================= | ======== | ======== | ======== | ======== |       |
| 1 1,4-Dichlorobenze                     | 3.53     | 3.03     | 4.03     | 3.53     | -0.01 |
| 2 Naphthalene-d8                        | 4.94     | 4.44     | 5.44     | 4.94     | -0.00 |
| 3 Acenaphthene-d10                      | 7.02     | 6.52     | 7.52     | 7.02     | -0.00 |
| 4 Phenanthrene-d10                      | 8.88     | 8.38     | 9.38     | 8.88     | -0.00 |
| 5 Chrysene-d12                          | 13.16    | 12.66    | 13.66    | 13,16    | -0.00 |
| 6 Perylene-d12                          | 15.52    | 15.02    | 16.02    | 15.52    | -0.00 |
| ·                                       |          |          |          |          |       |

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT. Data File: \\SV5\C\chem\sv5.i\120710.B\S120706.D

Report Date: 08-Dec-2010 09:38

#### TestAmerica West Sacramento

#### RECOVERY REPORT

Client Name: Client SDG: 090498

Sample Matrix: GAS Fraction: SV

Lab Smp Id: MAR231AC G0L020000-

Level: LOW Operator: KT
Data Type: MS DATA SampleType: LCS
SpikeList File: S11JZHCB.SPK Quant Type: ISTD

Sublist File: S11JZHCB.SUB

Method File: \\SV5\C\chem\sv5.i\120710.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;S11JZHCB.SPK;1;;8270F.M

CONC

| SPIKE COMPOUND        | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|-----------------------|-----------------------|---------------------------|----------------|--------|
| 108 Hexachlorobenzene | 100.0                 | 96.85                     | 96.85          | 70-100 |

| SURROGATE COMPOUND       | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 7 2-Fluorophenol      | 100.0                 | 77.19                     | 77.19          | 41-105 |
| \$ 8 Phenol-d5           | 100.0                 | 83.14                     | 83.14          | 43-122 |
| \$ 10 1,2-Dichlorobenze  | 50.00                 | 0.0000                    | *              | 60-120 |
| \$ 11 Nitrobenzene-d5    | 50.00                 | 45.02                     | 90.04          | 46-118 |
| \$ 12 2-Fluorobiphenyl   | 50.00                 | 45.86                     | 91.72          | 58-105 |
| \$ 13 2,4,6-Tribromophen | 100.0                 | 109.9                     | 109.94         | 61-118 |
| \$ 14 Terphenyl-d14      | 50.00                 | 48.11                     | 96.23          | 69-110 |

Data File: \\SV5\C\chem\sv5.i\120710.B\S120706.D Page 1

Report Date: 08-Dec-2010 09:20

#### TestAmerica West Sacramento

Method 8270C

QC Sample: LCS

Data file : \\SV5\C\chem\sv5.i\120710.B\S120706.D

Lab Smp Id: MAR231AC G0L020000-Inj Date : 07-DEC-2010 22:36

Operator : KT Inst ID: sv5.i Smp Info : MAR231AC G0L020000-447C;3;LCS;;1000;;1000;2 Misc Info: 0; AIR; 0; S11JZHCB.SUB; S11JZHCB.SPK; 1; ; 8270F.M

Comment : SOP SAC-MS-0005

Method : \\SV5\C\chem\sv5.i\120710.B\8270F.m

Meth Date : 08-Dec-2010 09:16 semivoa Quant Type: ISTD

Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 6

Dil Factor: 1.00000 Integrator: Falcon

Compound Sublist: S11JZHCB.SUB

Target Version: 4.14 Processing Host: SV5

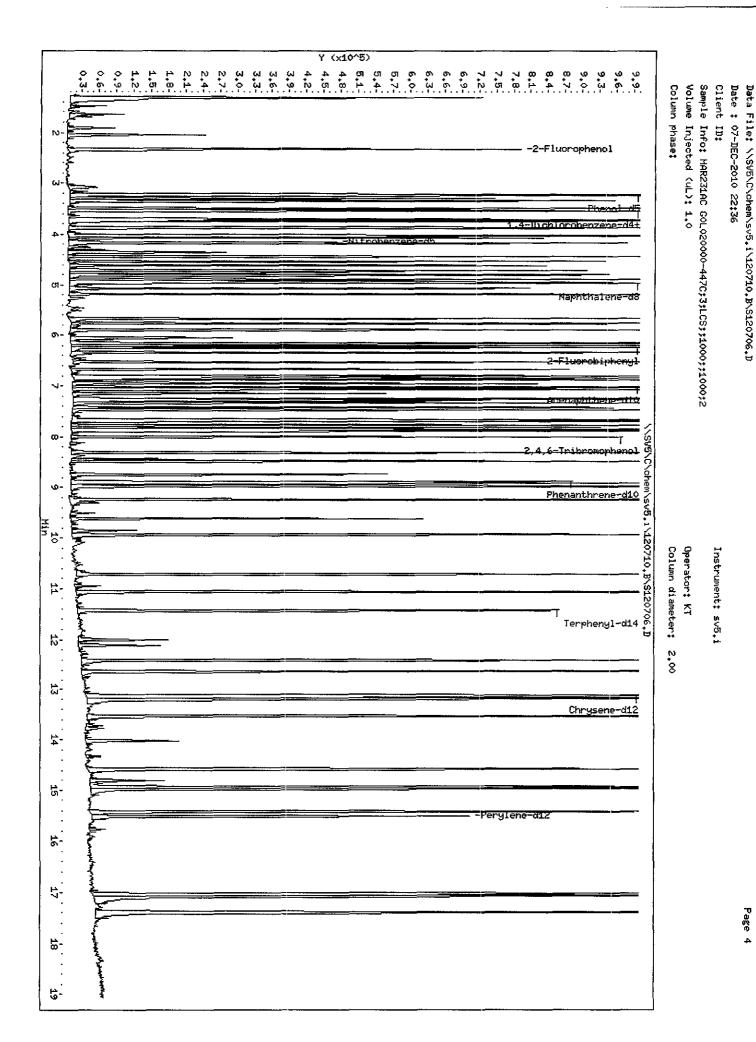
Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

| Name  | Value                         | Description   |
|---|-------------------------------|---|
| DF<br>Uf<br>Vt<br>Vo<br>Vi<br>Cpnd Variable | 1.000<br>1000.000<br>1000.000 | Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable |

|                |                          |           |        |         |         |          | CONCENTRA | ATIONS  |
|----------------|--------------------------|-----------|--------|---------|---------|----------|-----------|---------|
|                |                          | QUANT SIG |        |         |         |          | ON-COLUMN | FINAL   |
| Compo          | ounds                    | MASS      | RT     | EXP RT  | REL RT  | RESPONSE | ( NG)     | ( ug/L) |
| # <b>#</b> ### |                          | ====      | ====   | ======= | ======= | ==&=0=== | ======    | ======= |
| * 1            | . 1,4~Dichlorobenzene-d4 | 152       | 3.532  | 3,532   | (1.000) | 110216   | 40.0000   | (q)     |
| * 2            | Naphthalene-d8           | 136       | 4.941  | 4.941   | (1.000) | 452013   | 40.0000   |         |
| * 3            | Acenaphthene-dl0         | 164       | 7.024  | 7.024   | (1.000) | 250253   | 40.0000   |         |
| * 4            | Phenanthrene-d10         | 188       | 8.879  | 8.879   | (1.000) | 402633   | 40.0000   |         |
| * 5            | Chrysene-d12             | 240       | 13.159 | 13.159  | (1.000) | 401152   | 40.0000   |         |
| * 6            | Perylene-d12             | 264       | 15.522 | 15.522  | (1.000) | 398287   | 40.0000   |         |
| \$ 7           | 2-Fluorophenol           | 112       | 2.330  | 2.330   | (0.660) | 299882   | 77.1918   | 77.19   |
| \$ 8           | Phenol-d5                | 99        | 3.221  | 3.221   | (0.912) | 406171   | 83.1429   | 83.14   |
| \$ 10          | 1,2-Dichlorobenzene-d4   | 152       | 3.532  | 3.729   | (1.000) | 110218   | 40.6047   | 40.60   |
| \$ 11          | Nitrobenzene-d5          | 82        | 4.154  | 4.154   | (0.841) | 172361   | 45.0206   | 45.02   |
| \$ 12          | 2-Fluorobiphenyl         | 172       | 6.247  | 6.247   | (0.889) | 369712   | 45.8619   | 45.86   |
| \$ 13          | 2,4,6-Tribromophenol     | 330       | 7.998  | 7.998   | (1.139) | 119555   | 109.942   | 109.9   |
| \$ 14          | Terphenyl-dl4            | 244       | 11.439 | 11.439  | (0.869) | 380177   | 48.1138   | 48.11   |
| 108            | Hexachlorobenzene        | 284       | 8.475  | 8.475   | (0.954) | 212588   | 96.8505   | 96.85   |

#### QC Flag Legend

q - Qualifier signal exceeded ratio warning limit.



Date : 07-DEC-2010 22:36

Client ID:

Instrument: sv5.i

Sample Info: MAR231AC GOL020000-447C;3;LCS;;1000;;1000;2

Volume Injected (uL): 1.0

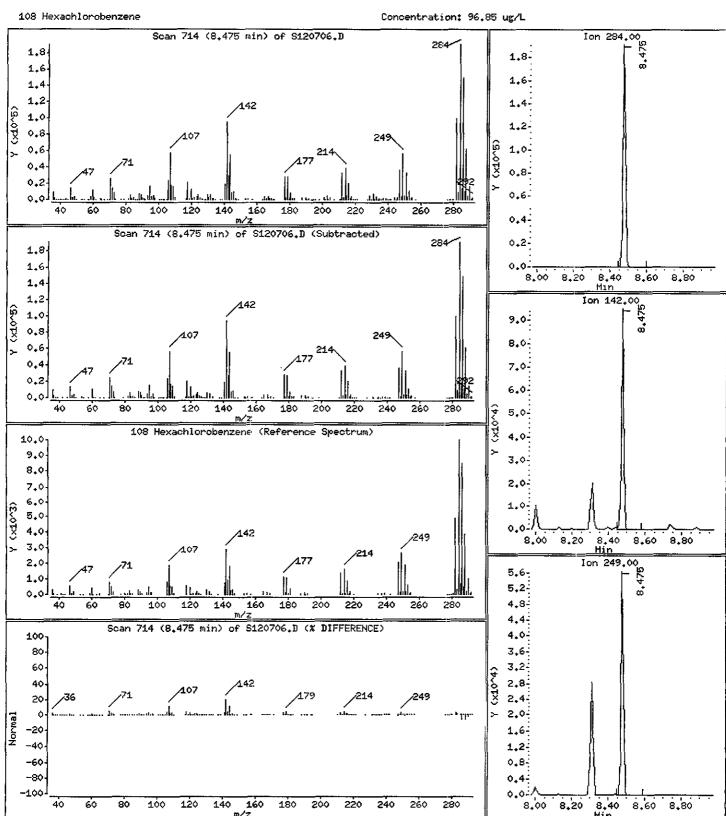
Operator: KT

Column phase:

Column diameter: 2.00

#### 108 Hexachlorobenzene

Concentration: 96.85 ug/L



Report Date: 08-Dec-2010 09:38

#### TestAmerica West Sacramento

Method 8270C

Data file : \\SV5\C\chem\sv5.i\120710.B\S120707.D

Lab Smp Id: MAR231AD G0L020000-Inj Date : 07-DEC-2010 23:01

Operator : KT Inst ID: sv5.i Smp Info : MAR231AD G0L020000-447L;3;LCSD;;1000;;1000;2 Misc Info: 0;AIR;0;S11JZHCB.SUB;S11JZHCB.SPK;1;;8270F.M

Comment : SOP SAC-MS-0005

Method : \\SV5\C\chem\sv5.i\120710.B\8270F.m

Meth Date : 08-Dec-2010 09:16 semivoa Quant 3 Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 7 QC Sample: LCSD

Dil Factor: 1.00000 Integrator: Falcon

Compound Sublist: S11JZHCB.SUB

Target Version: 4.14 Processing Host: SV5

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

| Name  | Value                         | Description   |
|---|-------------------------------|---|
| DF<br>Uf<br>Vt<br>Vo<br>Vi<br>Cpnd Variable | 1.000<br>1000.000<br>1000.000 | Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable |

|   |   |   |  |   |   | CONCENTRA  | RIONS   |
|---|---|---|--|---|---|--|---|
|   | QUANT SIG   |   |  |   |   | ON-COLUMN  | FINAL   |
| ounds                                   | MASS  | RT  | EXP RT   | REL RT  | RESPONSE  | ( NG)  | ( ug/L)   |
| ======================================= | 222C  | ====  | ======   |   | * ======  | ======   |   |
| . 1,4-Dichlorobenzene-d4                | 152   | 3.532   | 3.532  | (1.000)   | 67642   | 40.0000  | (q)   |
| Naphthalene-d8                          | 136   | 4.941   | 4.941  | (1.000)   | 273676  | 40.0000  |   |
| Acenaphthene-d10                        | 164   | 7.024   | 7.024  | (1.000)   | 146806  | 40.0000  |   |
| Phenanthrene-d10                        | 188   | 8.879   | 8.879  | (1.000)   | 236672  | 40.0000  |   |
| Chrysene-dl2                            | 240   | 13.159  | 13.159   | (1.000)   | 231078  | 40.0000  |   |
| Perylene-d12                            | 264   | 15.512  | 15.522   | (1.000)   | 228965  | 40.0000  |   |
| 2-Fluorophenol                          | 112   | 2.330   | 2.330  | (0.660)   | 194258  | 81.4756  | 81.48   |
| Phenol-d5                               | 99  | 3.221   | 3.221  | (0.912)   | 251713  | 83.9557  | 83.96   |
| 1,2-Dichlorobenzene-d4                  | 152   | Con   | npound No  | ot Detecte  | ed.   |  |   |
| Nitrobenzene-d5                         | 82  | 4.154   | 4.154  | (0.841)   | 107460  | 46.3590  | 46.36   |
| 2-Fluorobiphenyl                        | 172   | 6.247   | 6.247  | (0.889)   | 229000  | 48.4239  | 48.42   |
| 2,4,6-Tribromophenol                    | 330   | 7.999   | 7.998  | (1.139)   | 69364   | 108.734  | 108.7   |
| Terphenyl-d14                           | 244   | 11.429  | 11.439   | (0.868)   | 214041  | 47.0252  | 47.02   |
| Hexachlorobenzene                       | 284   | 8.475   | 8.475  | (0.954)   | 127882  | 99.1140  | 99.11   |
|   | ounds  1,4-Dichlorobenzene-d4  Naphthalene-d8  Acenaphthene-d10  Phenanthrene-d10  Chrysene-d12  Perylene-d12  2-Fluorophenol  Phenol-d5  1,2-Dichlorobenzene-d4  Nitrobenzene-d5  2-Fluorobiphenyl  2,4,6-Tribromophenol  Terphenyl-d14  Hexachlorobenzene | Dunds MASS  1.,4-Dichlorobenzene-d4 152 2. Naphthalene-d8 136 3. Acenaphthene-d10 164 4. Phenanthrene-d10 188 5. Chrysene-d12 240 5. Perylene-d12 264 7. 2-Fluorophenol 112 8. Phenol-d5 99 1.,2-Dichlorobenzene-d4 152 4. Nitrobenzene-d5 82 2.2-Fluorobiphenyl 172 3. 2,4,6-Tribromophenol 330 4. Terphenyl-d14 244 | Dounds         MASS         RT           1.4-Dichlorobenzene-d4         152         3.532           2.Naphthalene-d8         136         4.941           3.Acenaphthene-d10         164         7.024           4.Phenanthrene-d10         188         8.879           5.Chrysene-d12         240         13.159           5.Perylene-d12         264         15.512           7.2-Fluorophenol         112         2.330           8.Phenol-d5         99         3.221           9. Nitrobenzene-d5         82         4.154           2.2-Fluorobiphenyl         172         6.247           3.2,4,6-Tribromophenol         330         7.999           4. Terphenyl-d14         244         11.429 | Dounds         MASS         RT         EXP RT           1.4-Dichlorobenzene-d4         152         3.532         3.532           2. Naphthalene-d8         136         4.941         4.941           3. Acenaphthene-d10         164         7.024         7.024           4. Phenanthrene-d10         188         8.879         8.879           5. Chrysene-d12         240         13.159         13.159           5. Perylene-d12         264         15.512         15.522           7. 2-Fluorophenol         112         2.330         2.330           8. Phenol-d5         99         3.221         3.221           9. Nitrobenzene-d5         82         4.154         4.154           1. Nitrobenzene-d5         82         4.354         4.154           2. 2-Fluorobiphenyl         172         6.247         6.247           3. 2, 4, 6-Tribromophenol         330         7.999         7.998           4. Terphenyl-d14         244         11.429         11.439 | Dounds         MASS         RT         EXP RT         REL RT           1.4-Dichlorobenzene-d4         152         3.532         3.532         (1.000)           2. Naphthalene-d8         136         4.941         4.941         (1.000)           3. Acenaphthene-d10         164         7.024         7.024         (1.000)           4. Phenanthrene-d10         188         8.879         8.879         (1.000)           5. Chrysene-d12         240         13.159         13.159         (1.000)           6. Perylene-d12         264         15.512         15.522         (1.000)           7. 2-Fluorophenol         112         2.330         2.330         (0.660)           8 Phenol-d5         99         3.221         3.221         (0.912)           3. 1,2-Dichlorobenzene-d4         152         Compound Not Detected           4. Nitrobenzene-d5         82         4.154         4.154         (0.841)           2. 2-Fluorobiphenyl         172         6.247         6.247         (0.889)           3. 2,4,6-Tribromophenol         330         7.999         7.998         (1.139)           4. Terphenyl-d14         244         11.429         11.439         (0.868) | MASS RT EXP RT REL RT RESPONSE  1.,4-Dichlorobenzene-d4 152 3.532 3.532 (1.000) 67642 2. Naphthalene-d8 136 4.941 4.941 (1.000) 273676 3. Acenaphthene-d10 164 7.024 7.024 (1.000) 146806 4. Phenanthrene-d10 188 8.879 8.879 (1.000) 236672 5. Chrysene-d12 240 13.159 13.159 (1.000) 231078 5. Perylene-d12 264 15.512 15.522 (1.000) 228965 7. 2-Fluorophenol 112 2.330 2.330 (0.660) 194258 6. Phenol-d5 99 3.221 3.221 (0.912) 251713 6. 1,2-Dichlorobenzene-d4 152 Compound Not Detected. 6. Nitrobenzene-d5 82 4.154 4.154 (0.841) 107460 6. 2-Fluorobiphenyl 172 6.247 (6.247 (0.889) 229000 6. 2,4,6-Tribromophenol 330 7.999 7.998 (1.139) 69364 6. Terphenyl-d14 244 11.429 11.439 (0.868) 214041 | Dounds         MASS         RT         EXP RT         REL RT         RESPONSE         ( NG)           1.4-Dichlorobenzene-d4         152         3.532         3.532         (1.000)         67642         40.0000           2. Naphthalene-d8         136         4.941         4.941         (1.000)         273676         40.0000           3. Acenaphthene-d10         164         7.024         7.024         (1.000)         146806         40.0000           4. Phenanthrene-d10         188         8.879         8.879         (1.000)         236672         40.0000           5. Chrysene-d12         240         13.159         13.159         (1.000)         231078         40.0000           6. Perylene-d12         264         15.512         15.522         (1.000)         228965         40.0000           7. 2-Fluorophenol         112         2.330         2.330         (0.660)         194258         81.4756           8. Phenol-d5         99         3.221         3.221         (0.912)         251713         83.9557           9. 1,2-Dichlorobenzene-d4         152         Compound Not Detected         152         Compound Not Detected           1. Nitrobenzene-d5         82         4.154         4.154 |

QC Flag Legend

q - Qualifier signal exceeded ratio warning limit.

Data File: \\SV5\C\chem\sv5.i\120710.B\S120707.D

Report Date: 08-Dec-2010 09:21

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Calibration Date: 07-DEC-2010

Lab File ID: S120707.D Calibration Time: 19:43

Lab Smp Id: MAR231AD G0L020000-

Analysis Type: SV Level: LOW Quant Type: ISTD Sample Type: AIR

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120710.B\8270F.m

Misc Info: 0; AIR; 0; S11JZHCB.SUB; S11JZHCB.SPK; 1;; 8270F.M

Test Mode:

Use Initial Calibration Level 4.

|                     |          | AREA    | LIMIT   |         |        |
|---------------------|----------|---------|---------|---------|--------|
| COMPOUND            | STANDARD | LOWER   | UPPER   | SAMPLE  | %DIFF  |
|                     | =======  | ======= | ======= | ======= | ====== |
| 1 1,4-Dichlorobenze | 122625   | 61313   | 245250  | 67642   | -44.84 |
| 2 Naphthalene-d8    | 530514   | 265257  | 1061028 | 273676  | -48.41 |
| 3 Acenaphthene-d10  | 282538   | 141269  | 565076  | 146806  | -48.04 |
| 4 Phenanthrene-d10  | 462722   | 231361  | 925444  | 236672  | -48.85 |
| 5 Chrysene-d12      | 435850   | 217925  | 871700  | 231078  | -46.98 |
| 6 Perylene-d12      | 422284   | 211142  | 844568  | 228965  | -45.78 |
|                     |          |         |         |         |        |

|   |          | RT I     | JIMIT    |          |       |
|---|----------|----------|----------|----------|-------|
| COMPOUND                                | STANDARD | LOWER    | UPPER    | SAMPLE   | %DIFF |
| ======================================= | ======== | ======== | ======== | ======== | ===== |
| 1 1,4-Dichlorobenze                     | 3.53     | 3.03     | 4.03     | 3.53     | 0.00  |
| 2 Naphthalene-d8                        | 4.94     | 4.44     | 5.44     | 4.94     | 0.00  |
| 3 Acenaphthene-d10                      | 7.02     | 6.52     | 7.52     | 7.02     | 0.00  |
| 4 Phenanthrene-d10                      | 8.88     | 8.38     | 9.38     | 8.88     | 0.00  |
| 5 Chrysene-d12                          | 13.16    | 12.66    | 13.66    | 13.16    | 0.00  |
| 6 Perylene-d12                          | 15.52    | 15.02    | 16.02    | 15.51    | -0.07 |
|   |          |          |          |          |       |

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = -50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT. Page 2

Data File: \\SV5\C\chem\sv5.i\120710.B\S120707.D

Report Date: 08-Dec-2010 09:38

#### TestAmerica West Sacramento

#### RECOVERY REPORT

Client Name:

Client SDG: 090498

Sample Matrix: GAS

Lab Smp Id: MAR231AD G0L020000-

Fraction: SV

Level: LOW

Operator: KT

SampleType: LCSD Quant Type: ISTD

Data Type: MS DATA

SampleType SpikeList File: S11JZHCB.SPK

Sublist File: S11JZHCB.SUB

Method File: \\SV5\C\chem\sv5.i\\120710.B\\8270F.m

Misc Info: 0; AIR; 0; S11JZHCB. SUB; S11JZHCB. SPK; 1;; 8270F.M

| SPIKE COMPOUND        | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|-----------------------|-----------------------|---------------------------|----------------|--------|
| 108 Hexachlorobenzene | 100.0                 | 99.11                     | 99.11          | 70-100 |
|                       |                       |                           | ·              | ·      |

| SURROGATE COMPOUND       | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 7 2-Fluorophenol      | 100.0                 | 81.48                     | 81.48          | 41-105 |
| \$ 8 Phenol-d5           | 100.0                 | 83.96                     | 83.96          | 43-122 |
| \$ 10 1,2-Dichlorobenze  | 50.00                 | 0.0000                    | *              | 60-120 |
| \$ 11 Nitrobenzene-d5    | 50.00                 | 46.36                     | 92.72          | 46-118 |
| \$ 12 2-Fluorobiphenyl   | 50.00                 | 48.42                     | 96.85          | 58-105 |
| \$ 13 2,4,6-Tribromophen | 100.0                 | 108.7                     | 108.73         | 61-118 |
| \$ 14 Terphenyl-d14      | 50.00                 | 47.02                     | 94.05          | 69-110 |

Data File: \\SV5\C\chem\sv5.i\120710.B\S120707.D Page 1

Report Date: 08-Dec-2010 09:21

#### TestAmerica West Sacramento

Method 8270C

Data file : \\SV5\C\chem\sv5.i\120710.B\S120707.D

Lab Smp Id: MAR231AD G0L020000-

Misc Info: 0;AIR;0;S11JZHCB.SUB;S11JZHCB.SPK;1;;8270F.M

Comment: SOP SAC-MS-0005
Method: \\SV5\C\chem\sv5.i\120710.B\8270F.m
Meth Date: 08-Dec-2010 09:16 semivoa Quant Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 7 QC Sample: LCSD

Dil Factor: 1.00000 Integrator: Falcon

Compound Sublist: S11JZHCB.SUB

Target Version: 4.14 Processing Host: SV5

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

| Name  | Value                         | Description   |
|---|-------------------------------|---|
| DF<br>Uf<br>Vt<br>Vo<br>Vi<br>Cpnd Variable | 1.000<br>1000.000<br>1000.000 | Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable |

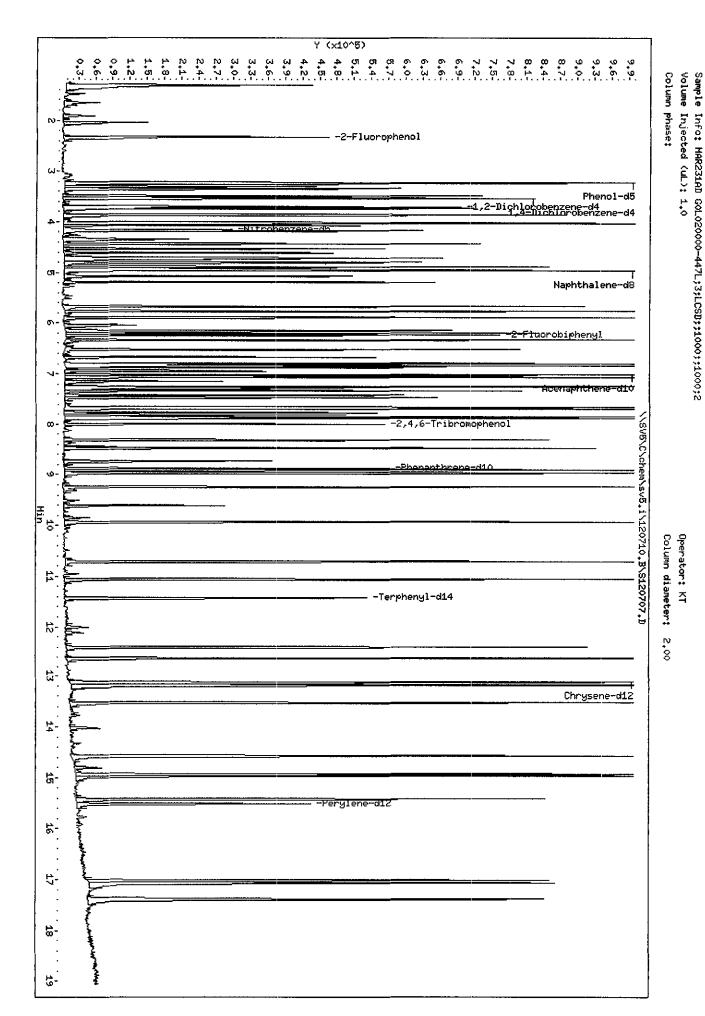
|     |     |                        |           |        |        |         |          | CONCENTR  | ATIONS      |
|-----|-----|------------------------|-----------|--------|--------|---------|----------|-----------|-------------|
|     |     |                        | QUANT SIG |        |        |         |          | ON-COLUMN | FINAL       |
| Com | poı | unds                   | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ( NG)     | ( ug/L)     |
| === | ==: |                        |           |        |        |         | =======  |           |             |
| *   | 1   | 1,4-Dichlorobenzene-d4 | 152       | 3.532  | 3.532  | (1.000) | 67642    | 40.0000   | (q)         |
| *   | 2   | Naphthalene-d8         | 136       | 4.941  | 4.941  | (1.000) | 273676   | 40.0000   |             |
| *   | 3   | Acenaphthene-d10       | 164       | 7.024  | 7.024  | (1.000) | 146806   | 40.0000   |             |
| *   | 4   | Phenanthrene-d10       | 188       | 8.879  | 8.879  | (1.000) | 236672   | 40.0000   |             |
| *   | 5   | Chrysene-d12           | 240       | 13.159 | 13.159 | (1.000) | 231078   | 40.0000   |             |
| *   | 6   | Perylene-d12           | 264       | 15.512 | 15.522 | (1.000) | 228965   | 40.0000   |             |
| \$  | 7   | 2-Fluorophenol         | 112       | 2.330  | 2.330  | (0.660) | 194258   | 81.4756   | 81.48       |
| \$  | 8   | Phenol-d5              | 99        | 3.221  | 3.221  | (0.912) | 251713   | 83.9557   | 83.96       |
| \$  | 10  | 1,2-Dichlorobenzene-d4 | 152       | 3.750  | 3.729  | (1.062) | 157      | 0.09424   | 0.09424(QR) |
| \$  | 11  | Nitrobenzene-d5        | 82        | 4.154  | 4.154  | (0.841) | 107460   | 46.3590   | 46.36       |
| \$  | 12  | 2-Fluorobiphenyl       | 172       | 6.247  | 6.247  | (0.889) | 229000   | 48.4239   | 48.42       |
| \$  | 13  | 2,4,6-Tribromophenol   | 330       | 7.999  | 7.998  | (1.139) | 69364    | 108.734   | 108.7       |
| \$  | 14  | Terphenyl-d14          | 244       | 11.429 | 11.439 | (0.868) | 214041   | 47.0252   | 47.02       |
| 1   | 80  | Hexachlorobenzene      | 284       | 8.475  | 8.475  | (0.954) | 127882   | 99.1140   | 99.11       |

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

R - Spike/Surrogate failed recovery limits.

q - Qualifier signal exceeded ratio warning limit.



Date : 07-DEC-2010 23:01 Data File: \\SV5\C\chem\sv5.i\120710.B\S120707.D

Instrument; sv5.i

Date : 07-DEC-2010 23:01

Client ID:

Instrument: sv5.i

Sample Info: MAR231AD GOL020000-447L;3;LCSD;;1000;;1000;2

Volume Injected (uL): 1.0

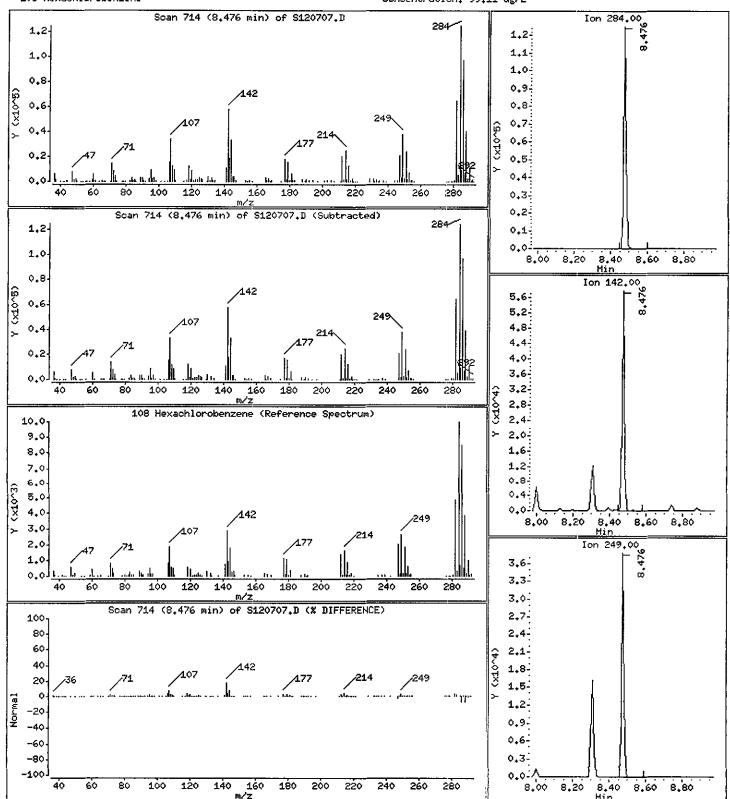
Operator: KT

Column phase:

Column diameter: 2.00

108 Hexachlorobenzene

Concentration: 99,11 ug/L



Data File: \\SV5\C\chem\sv5.i\120710.B\S120708.D Page 1

Report Date: 08-Dec-2010 09:21

#### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\120710.B\S120708.D Lab Smp Id: MAQQW1AA G0L020446- Client Sm

Client Smp ID: 0336447

Inj Date : 07-DEC-2010 23:25

Operator : KT Inst ID: sv5.i

Smp Info : MAQQW1AA G0L020446-2;0;;;1000;;1000;5 Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0336447;8270F.M

Misc Into: U;ALK;U,BITGLED...

Comment: SOP SAC-MS-0005

Method: \\SV5\C\chem\sv5.i\120710.B\8270F.m

Meth Date: 08-Dec-2010 09:16 semivoa Quant Type: ISTD

- 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 8
Dil Factor: 1.00000
Integrator: Falcon

Compound Sublist: S11JZHCB.SUB

Target Version: 4.14 Processing Host: SV5

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

| Name  | Value                         | Description   |
|---|-------------------------------|---|
| DF<br>Uf<br>Vt<br>Vo<br>Vi<br>Cpnd Variable | 1.000<br>1000.000<br>1000.000 | Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable |

|      |           |                        |           |        |   |          |          | CONC   | ENTRA | TIONS      |
|------|-----------|------------------------|-----------|--------|---|----------|----------|--------|-------|------------|
|      |           |                        | QUANT SIG |        |   |          |          | ON-COL | UMN   | FINAL      |
| Co   | ompo:     | unds                   | REAM      | RT     | EXP RT                                  | REL RT   | RESPONSE | ( N    | G)    | ( ug/L)    |
| ==== | = == == : |                        | ====      | ====   | ======================================= | *****    |          | =====  | ==    | =======    |
| *    | 1         | 1,4-Dichlorobenzene-d4 | 152       | 3.532  | 3.532 (                                 | 1.000)   | 86800    | 40.00  | 00    | (g)        |
| *    | 2         | Naphthalene-d8         | 136       | 4.941  | 4.941 (                                 | 1.000)   | 375915   | 40.00  | 00    |            |
| *    | 3         | Acenaphthene-d10       | 164       | 7.024  | 7.024 (                                 | 1.000)   | 207058   | 40.00  | 00    |            |
| *    | 4         | Phenanthrene-d10       | 188       | 8.879  | 8.879 (                                 | 1.000)   | 326779   | 40.00  | 00    |            |
| *    | 5         | Chrysene-d12           | 240       | 13.159 | 13.159 (                                | 1.000)   | 343258   | 40.00  | 00    |            |
| *    | 6         | Perylene-d12           | 264       | 15.512 | 15.522 (                                | 1.000)   | 329988   | 40.00  | 00    |            |
| Ş    | 7         | 2-Fluorophenol         | 112       | 2.330  | 2.330 (                                 | 0.660)   | 197455   | 64.53  | 77    | 64.54      |
| \$   | 8         | Phenol-d5              | 99        | 3.221  | 3.221 (                                 | 0.912)   | 289093   | 75.14  | 13    | 75.14      |
| \$   | 10        | 1,2-Dichlorobenzene-d4 | 152       | 3.729  | 3.729 (                                 | 1.056)   | 56555    | 26.45  | 57    | 26.46 (qR) |
| \$   | 11        | Nitrobenzene-d5        | 82        | 4.154  | 4.154 (                                 | 0.841)   | 117514   | 36.90  | 82    | 36.91      |
| \$   | 12        | 2-Fluorobiphenyl       | 172       | 6.247  | 6.247 (                                 | 0.889)   | 248223   | 37.21  | 50    | 37.21      |
| \$   | 13        | 2,4,6-Tribromophenol   | 330       | 7.998  | 7.998 (                                 | 1.139)   | 92937    | 103.2  | 93    | 103.3      |
| \$   | 14        | Terphenyl-d14          | 244       | 11.429 | 11.439 (                                | 0.868)   | 321471   | 47.54  | 59    | 47.54      |
|      | 108       | Hexachlorobenzene      | 284       | Con    | pound Not                               | Detected | 3.       |        |       |            |

#### QC Flag Legend

R - Spike/Surrogate failed recovery limits.

q - Qualifier signal exceeded ratio warning limit.

low sur.

Data File: \\SV5\C\chem\sv5.i\120710.B\S120708.D Page 2

Report Date: 08-Dec-2010 09:21

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Calibration Date: 07-DEC-2010

Lab File ID: S120708.D Calibration Time: 19:43
Lab Smp Id: MAQQW1AA G0L020446- Client Smp ID: 0336447

Analysis Type: SV Level: LOW Quant Type: ISTD Sample Type: AIR

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120710.B\8270F.m
Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0336447;8270F.M

#### Test Mode:

Use Initial Calibration Level 4.

|   |          | AREA     | LIMIT    |          |        |
|---|----------|----------|----------|----------|--------|
| COMPOUND                                | STANDARD | LOWER    | UPPER    | SAMPLE   | %DIFF  |
| ======================================= | ======== | ======== | ======== | ======== | ====== |
| 1 1,4-Dichlorobenze                     | 122625   | 61313    | 245250   | 86800    | -29.22 |
| 2 Naphthalene-d8                        | 530514   | 265257   | 1061028  | 375915   | -29.14 |
| 3 Acenaphthene-d10                      | 282538   | 141269   | 565076   | 207058   | -26.71 |
| 4 Phenanthrene-d10                      | 462722   | 231361   | 925444   | 326779   | -29.38 |
| 5 Chrysene-d12                          | 435850   | 217925   | 871700   | 343258   | -21.24 |
| 6 Perylene-d12                          | 422284   | 211142   | 844568   | 329988   | -21.86 |
|   |          |          |          | ·        | [      |

|   |          | RT I     | LIMIT   |          |        |
|---|----------|----------|---------|----------|--------|
| COMPOUND                                | STANDARD | LOWER    | UPPER   | SAMPLE   | %DIFF  |
| ======================================= | ======== | ======== | ======= | ======== | ====== |
| 1 1,4-Dichlorobenze                     | 3.53     | 3.03     | 4.03    | 3.53     | -0.00  |
| 2 Naphthalene-d8                        | 4.94     | 4.44     | 5.44    | 4.94     | -0.00  |
| 3 Acenaphthene-d10                      | 7.02     | 6.52     | 7.52    | 7.02     | -0.00  |
| 4 Phenanthrene-d10                      | 8.88     | 8.38     | 9.38    | 8.88     | -0.00  |
| 5 Chrysene-d12                          | 13.16    | 12.66    | 13.66   | 13.16    | -0.00  |
| 6 Perylene-d12                          | 15.52    | 15.02    | 16.02   | 15.51    | -0.07  |
|   |          |          |         |          |        |

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\SV5\C\chem\sv5.i\120710.B\S120708.D Page 3

Report Date: 08-Dec-2010 09:21

#### TestAmerica West Sacramento

#### RECOVERY REPORT

Client Name:

Sample Matrix: GAS

Lab Smp Id: MAQQW1AA G0L020446-Level: LOW

Data Type: MS DATA

SpikeList File:

Sublist File: S11JZHCB.SUB

Method File: \\SV5\C\chem\sv5.i\120710.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0336447;8270F.M

Client SDG: 090498

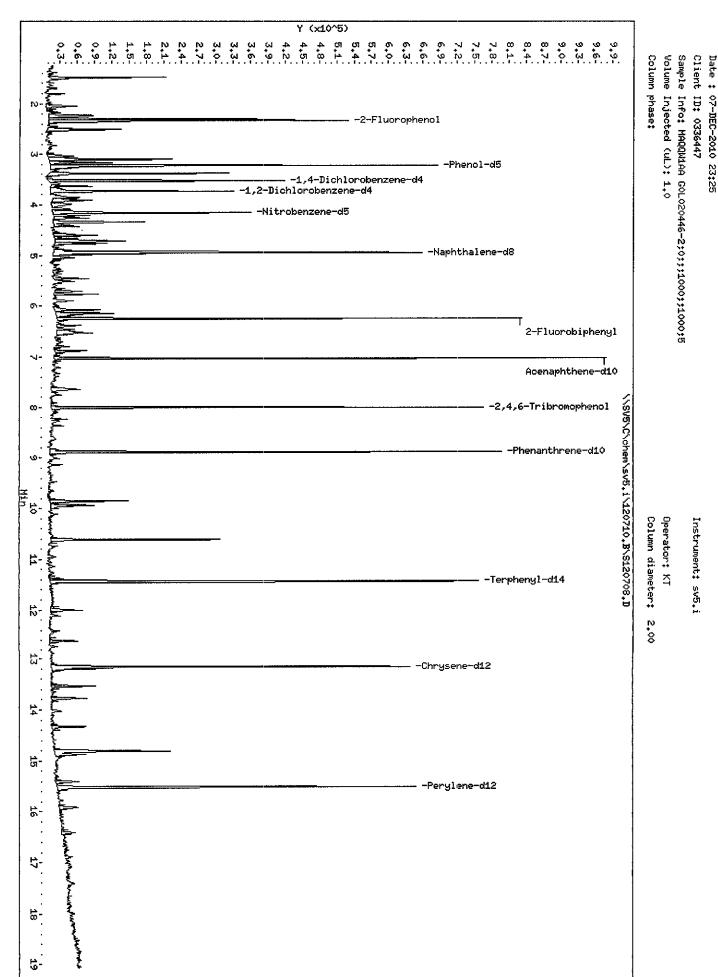
Fraction: SV

Client Smp ID: 0336447

Operator: KT

SampleType: SAMPLE Quant Type: ISTD

| SURROGATE COMPOUND       | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|-----------|--------|
| \$ 7 2-Fluorophenol      | 100.0                 | 64.54                     | 64.54     | 41-105 |
| \$ 8 Phenol-d5           | 100.0                 | 75.14                     | 75.14     | 43-122 |
| \$ 10 1,2-Dichlorobenzen | 50.00                 | 26.46                     | 52.91*    | 60-120 |
| \$ 11 Nitrobenzene-d5    | 50.00                 | 36.91                     | 73.82     | 46-118 |
| \$ 12 2-Fluorobiphenyl   | 50.00                 | 37.21                     | 74.43     | 58-105 |
| \$ 13 2,4,6-Tribromophen | 100.0                 | 103.3                     | 103.29    | 61-118 |
| \$ 14 Terphenyl-d14      | 50.00                 | 47.54                     | 95.09     | 69-110 |



Data File: \\SV5\C\chem\sv5.i\120710.B\S120708.D

Data File: \\SV5\C\chem\sv5.i\120710.B\S120709.D Page 1

Report Date: 08-Dec-2010 09:21

#### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\120710.B\S120709.D Lab Smp Id: MAQQ91AA G0L020446- Client Sm Client Smp ID: 0336447

Inj Date : 07-DEC-2010 23:50 Operator : KT Inst ID: sv5.i

Smp Info : MAQQ91AA G0L020446-6;0;;;1000;;1000;5 Misc Info: 0; AIR; 0; S11JZHCB. SUB; ; 0; 0336447; 8270F. M

Comment : SOP SAC-MS-0005
Method : \\SV5\C\chem\sv5.i\120710.B\8270F.m
Meth Date : 08-Dec-2010 09:16 semivoa Quant Type: ISTD Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 9 Dil Factor: 1.00000 Integrator: Falcon

Compound Sublist: S11JZHCB.SUB

Target Version: 4.14 Processing Host: SV5

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

| Name  | Value                         | Description   |  |  |  |
|---|-------------------------------|---|--|--|--|
| DF<br>Uf<br>Vt<br>Vo<br>Vi<br>Cpnd Variable | 1.000<br>1000.000<br>1000.000 | Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable |  |  |  |

|      |     |                        |           |        |           |            |          | CONCENTRA | ATIONS   |
|------|-----|------------------------|-----------|--------|-----------|------------|----------|-----------|----------|
|      |     |                        | QUANT SIG |        |           |            |          | ON-COLUMN | FINAL    |
| Comp | 201 | unds                   | MASS      | RT     | EXP RT    | REL RT     | RESPONSE | ( NG)     | ( ug/L)  |
| ==== | ==  | *****                  | ====      | ====   | ****      |            | ======   | ======    |          |
| *    | 1   | 1,4-Dichlorobenzene-d4 | 152       | 3.532  | 3.532     | (1.000)    | 76411    | 40.0000   | (p)      |
| *    | 2   | Naphthalene-d8         | 136       | 4.941  | 4.941     | (1.000)    | 333708   | 40.0000   |          |
| *    | 3   | Acenaphthene-d10       | 164       | 7.024  | 7.024     | (1.000)    | 179123   | 40.0000   |          |
| *    | 4   | Phenanthrene-d10       | 188       | 8.879  | 8.879     | (1.000)    | 288677   | 40.0000   |          |
| *    | 5   | Chrysene-dl2           | 240       | 13.159 | 13.159    | (1.000)    | 287422   | 40.0000   |          |
| *    | 6   | Perylene-dl2           | 264       | 15.512 | 15,522    | (1.000)    | 278686   | 40.0000   |          |
| \$   | 7   | 2-Fluorophenol         | 112       | 2.330  | 2.330     | (0.660)    | 185302   | 68.8002   | 68.80    |
| \$   | 8   | Phenol-d5              | 99        | 3.221  | 3.221     | (0.912)    | 269495   | 79.5712   | 79.57    |
| \$ 2 | 10  | 1,2-Dichlorobenzene-d4 | 152       | 3.729  | 3.729     | (1.056)    | 57818    | 30.7238   | 30.72(Q) |
| \$ 3 | 11  | Nitrobenzene-d5        | 82        | 4.154  | 4.154     | (0.841)    | 108081   | 38.2390   | 38.24    |
| \$ 1 | 12  | 2-Fluorobiphenyl       | 172       | 6.247  | 6.247     | (0.889)    | 233362   | 40.4433   | 40.44    |
| \$   | 13  | 2,4,6-Tribromophenol   | 330       | 7.998  | 7.998     | (1.139)    | 87430    | 112.327   | 112.3    |
| ş :  | 14  | Terphenyl-d14          | 244       | 11.439 | 11.439    | (0.869)    | 275695   | 48.6969   | 48.70    |
| 10   | 80  | Hexachlorobenzene      | 284       | Con    | npound No | ot Detecte | đ.       |           |          |

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

q - Qualifier signal exceeded ratio warning limit.



Data File: \\SV5\C\chem\sv5.i\120710.B\S120709.D Page 2

Report Date: 08-Dec-2010 09:21

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Calibration Date: 07-DEC-2010

Lab File ID: S120709.D Calibration Time: 19:43
Lab Smp Id: MAQQ91AA G0L020446- Client Smp ID: 0336447

Analysis Type: SV Level: LOW Quant Type: ISTD Sample Type: AIR

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120710.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0336447;8270F.M

#### Test Mode:

Use Initial Calibration Level 4.

|                     |          | AREA     | LIMIT    |          |        |
|---------------------|----------|----------|----------|----------|--------|
| COMPOUND            | STANDARD | LOWER    | UPPER    | SAMPLE   | %DIFF  |
|                     | =======  | ======== | ======== | ======== | ====== |
| 1 1,4-Dichlorobenze | 122625   | 61313    | 245250   | 76411    | -37.69 |
| 2 Naphthalene-d8    | 530514   | 265257   | 1061028  | 333708   | -37.10 |
| 3 Acenaphthene-d10  | 282538   | 141269   | 565076   | 179123   | -36.60 |
| 4 Phenanthrene-d10  | 462722   | 231361   | 925444   | 288677   | -37.61 |
| 5 Chrysene-d12      | 435850   | 217925   | 871700   | 287422   | -34.05 |
| 6 Perylene-d12      | 422284   | 211142   | 844568   | 278686   | -34.01 |
| 1                   |          |          |          |          |        |

|                     |          | RT I     | LIMIT   |         |        |
|---------------------|----------|----------|---------|---------|--------|
| COMPOUND            | STANDARD | LOWER    | UPPER   | SAMPLE  | %DIFF  |
|                     | =======  | ======== | ======= | ======= | ====== |
| 1 1,4-Dichlorobenze | 3.53     | 3.03     | 4.03    | 3.53    | -0.00  |
| 2 Naphthalene-d8    | 4.94     | 4.44     | 5.44    | 4.94    | -0.00  |
| 3 Acenaphthene-d10  | 7.02     | 6.52     | 7.52    | 7.02    | -0.00  |
| 4 Phenanthrene-d10  | 8.88     | 8.38     | 9.38    | 8.88    | -0.00  |
| 5 Chrysene-d12      | 13.16    | 12.66    | 13.66   | 13.16   | -0.00  |
| 6 Perylene-d12      | 15.52    | 15.02    | 16.02   | 15.51   | -0.07  |
|                     |          |          |         |         |        |

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\SV5\C\chem\sv5.i\120710.B\S120709.D Page 3

Report Date: 08-Dec-2010 09:21

#### TestAmerica West Sacramento

#### RECOVERY REPORT

Client Name:

Sample Matrix: GAS

Lab Smp Id: MAQQ91AA G0L020446-Level: LOW Data Type: MS DATA SpikeList File:

Sublist File: S11JZHCB.SUB

Client SDG: 090498

Fraction: SV

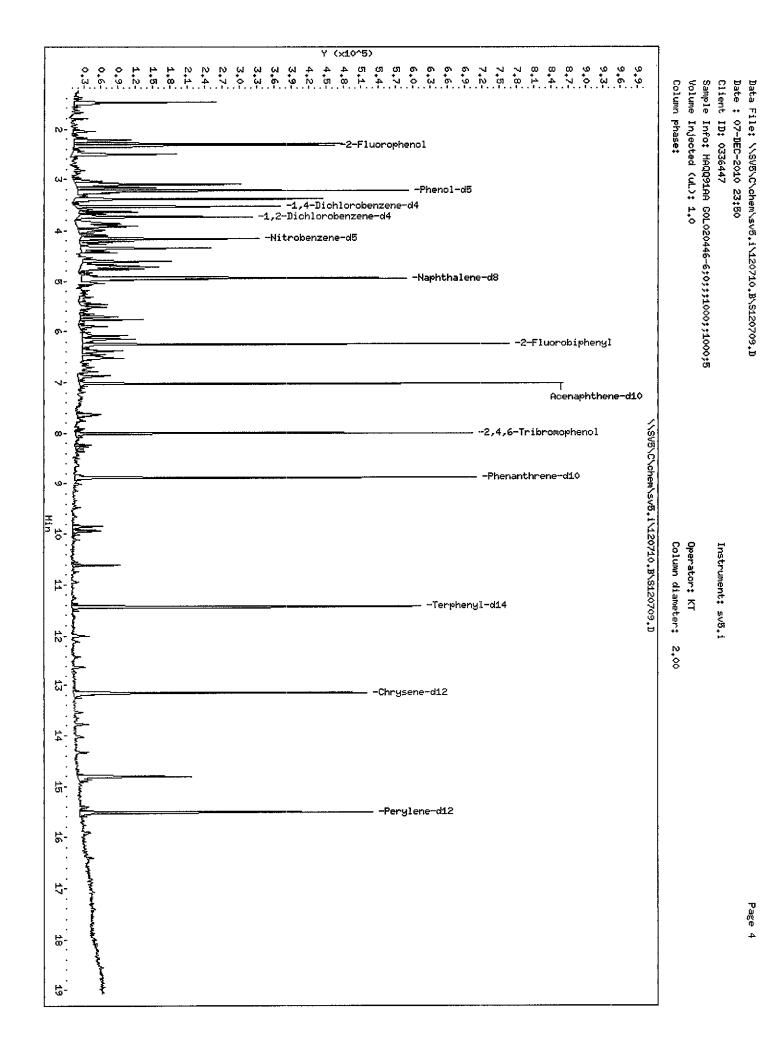
Client Smp ID: 0336447

Operator: KT

SampleType: SAMPLE Quant Type: ISTD

Method File: \\SV5\C\chem\sv5.i\120710.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0336447;8270F.M

| SURROGATE COMPOUND       | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 7 2-Fluorophenol      | 100.0                 | 68.80                     | 68.80          | 41-105 |
| \$ 8 Phenol-d5           | 100.0                 | 79.57                     | 79.57          | 43-122 |
| \$ 10 1,2-Dichlorobenzen | 50.00                 | 30.72                     | 61.45          | 60-120 |
| \$ 11 Nitrobenzene-d5    | 50.00                 | 38.24                     | 76.48          | 46-118 |
| \$ 12 2-Fluorobiphenyl   | 50.00                 | 40.44                     | 80.89          | 58-105 |
| \$ 13 2,4,6-Tribromophen | 100.0                 | 112.3                     | 112.33         | 61-118 |
| \$ 14 Terphenyl-d14      | 50.00                 | 48.70                     | 97.39          | 69-110 |



Data File: \\SV5\C\chem\sv5.i\120710.B\S120710.D Page 1

Report Date: 08-Dec-2010 09:21

#### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\120710.B\S120710.D Lab Smp Id: MAQRF1AA G0L020446- Client Sm Client Smp ID: 0336447

Inj Date : 08-DEC-2010 00:14

Opérator : KT Inst ID: sv5.i

Smp Info : MAQRF1AA G0L020446-9;0;;;1000;;1000;5 Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0336447;8270F.M

Misc Inio : 0;A1A,0,52122121 Comment : SOP SAC-MS-0005 Method : \\SV5\C\chem\sv5.i\120710.B\8270F.m Meth Date : 08-Dec-2010 09:16 semivoa Quant Type: ISTD 17-NIG-2010 21:19 Cal File: AP90817D.D Cal Date: 17-AUG-2010 03:16
Cal Date: 17-AUG-2010 21:19
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon

Compound Sublist: S11JZHCB.SUB

Target Version: 4.14 Processing Host: SV5

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

| Name  | Value   | Description   |  |  |  |
|---|---|---|--|--|--|
| DF<br>Uf<br>Vt<br>Vo<br>Vi<br>Cpnd Variable | 1.000<br>1.000<br>1000.000<br>1000.000<br>1.000 | Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable |  |  |  |

|    |      |                        |           |        |        |         |          | CONCENTR  | ations       |
|----|------|------------------------|-----------|--------|--------|---------|----------|-----------|--------------|
|    |      |                        | QUANT SIG |        |        |         |          | ON-COLUMN | FINAL        |
| C  | oqmo | unds                   | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ( NG)     | ( ug/L)      |
| =  | eees | *                      | ====      | ====   | ====== |         | ======   |           | ======       |
| *  | 1    | 1,4-Dichlorobenzene-d4 | 152       | 3.532  | 3.532  | (1.000) | 73876    | 40.0000   | ( <b>q</b> ) |
| *  | 2    | Naphthalene-d8         | 136       | 4.941  | 4.941  | (1.000) | 312312   | 40.0000   |              |
| *  | 3    | Acenaphthene-dl0       | 164       | 7.024  | 7.024  | (1.000) | 165572   | 40.0000   |              |
| *  | 4    | Phenanthrene-d10       | 188       | 8.879  | 8.879  | (1.000) | 266360   | 40.0000   |              |
| *  | 5    | Chrysene-d12           | 240       | 13.159 | 13.159 | (1.000) | 245918   | 40.0000   |              |
| *  | 6    | Perylene-d12           | 264       | 15.512 | 15.522 | (1.000) | 237228   | 40.0000   |              |
| \$ | 7    | 2-Fluorophenol         | 112       | 2.330  | 2.330  | (0.660) | 178671   | 68.6145   | 68.61        |
| \$ | 8    | Phenol-d5              | 99        | 3.221  | 3.221  | (0.912) | 256293   | 78.2698   | 78.27        |
| \$ | 10   | 1,2-Dichlorobenzene-d4 | 152       | 3.729  | 3.729  | (1.056) | 54103    | 29.7362   | 29.74 (QR)   |
| \$ | 11   | Nitrobenzene-d5        | 82        | 4.154  | 4.154  | (0.841) | 104646   | 39.5601   | 39.56        |
| \$ | 12   | 2-Fluorobiphenyl       | 172       | 6.247  | 6.247  | (0.889) | 226309   | 42.4309   | 42.43        |
| \$ | 13   | 2,4,6-Tribromophenol   | 330       | 7.998  | 7.998  | (1.139) | 78567    | 109.201   | 109.2        |
| \$ | 14   | Terphenyl-d14          | 244       | 11.439 | 11.439 | (0.869) | 250489   | 51.7119   | 51.71        |
|    | 108  | Hexachlorobenzene      | 284       | 8.475  | 8.475  | (0.954) | 1122     | 0.77267   | 0.7727(a)    |

#### QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation (BLOQ).

Q - Qualifier signal failed the ratio test.

Low surr.

Data File: \\SV5\C\chem\sv5.i\120710.B\S120710.D Report Date: 08-Dec-2010 09:21

#### QC Flag Legend

R - Spike/Surrogate failed recovery limits.
q - Qualifier signal exceeded ratio warning limit.

Page 2

Data File: \\SV5\C\chem\sv5.i\120710.B\S120710.D

Report Date: 08-Dec-2010 09:21

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Lab File ID: S120710.D

Lab Smp Id: MAQRF1AA G0L020446-

Analysis Type: SV

Quant Type: ISTD

Operator: KT
Method File: \\SV5\C\chem\sv5.i\120710.B\8270F.m
Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0336447;8270F.M

Test Mode:

Use Initial Calibration Level 4.

| COMPOUND                               | STANDARD         | AREA<br>LOWER    | LIMIT<br>UPPER    | SAMPLE           | %DIFF            |
|--|------------------|------------------|-------------------|------------------|------------------|
| 1 1,4-Dichlorobenze                    | 122625           | 61313            | 245250            | 73876            | -39.75           |
| 2 Naphthalene-d8<br>3 Acenaphthene-d10 | 530514<br>282538 | 265257<br>141269 | 1061028<br>565076 | 312312<br>165572 | -41.13<br>-41.40 |
| 4 Phenanthrene-d10<br>5 Chrysene-d12   | 462722<br>435850 | 231361<br>217925 | 925444<br>871700  | 266360<br>245918 | -42.44<br>-43.58 |
| 6 Perylene-d12                         | 422284           | 211142           | 844568            | 237228           | -43.82           |

|   |          | RT I     |           |          |        |
|---|----------|----------|-----------|----------|--------|
| COMPOUND                                | STANDARD | LOWER    | UPPER     | SAMPLE   | %DIFF  |
| ======================================= | ======== | ======== | ========= | ======== | ====== |
| 1 1,4-Dichlorobenze                     | 3.53     | 3.03     | 4.03      | 3.53     | -0.00  |
| 2 Naphthalene-d8                        | 4.94     | 4.44     | 5.44      | 4.94     | 0.00   |
| 3 Acenaphthene-d10                      | 7.02     | 6.52     | 7.52      | 7.02     | 0.00   |
| 4 Phenanthrene-d10                      | 8.88     | 8.38     | 9.38      | 8.88     | 0.00   |
| 5 Chrysene-d12                          | 13.16    | 12.66    | 13.66     | 13.16    | 0.00   |
| 6 Perylene-d12                          | 15.52    | 15.02    | 16.02     | 15.51    | -0.07  |
|   |          |          |           |          | l      |

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Page 3

Calibration Date: 07-DEC-2010

Calibration Time: 19:43

Client Smp ID: 0336447

Level: LOW

Sample Type: AIR

Data File: \\SV5\C\chem\sv5.i\120710.B\S120710.D

Report Date: 08-Dec-2010 09:21

#### TestAmerica West Sacramento

#### RECOVERY REPORT

Client Name: Client SDG: 090498

Sample Matrix: GAS Fraction: SV

Lab Smp Id: MAQRF1AA G0L020446- Client Smp ID: 0336447

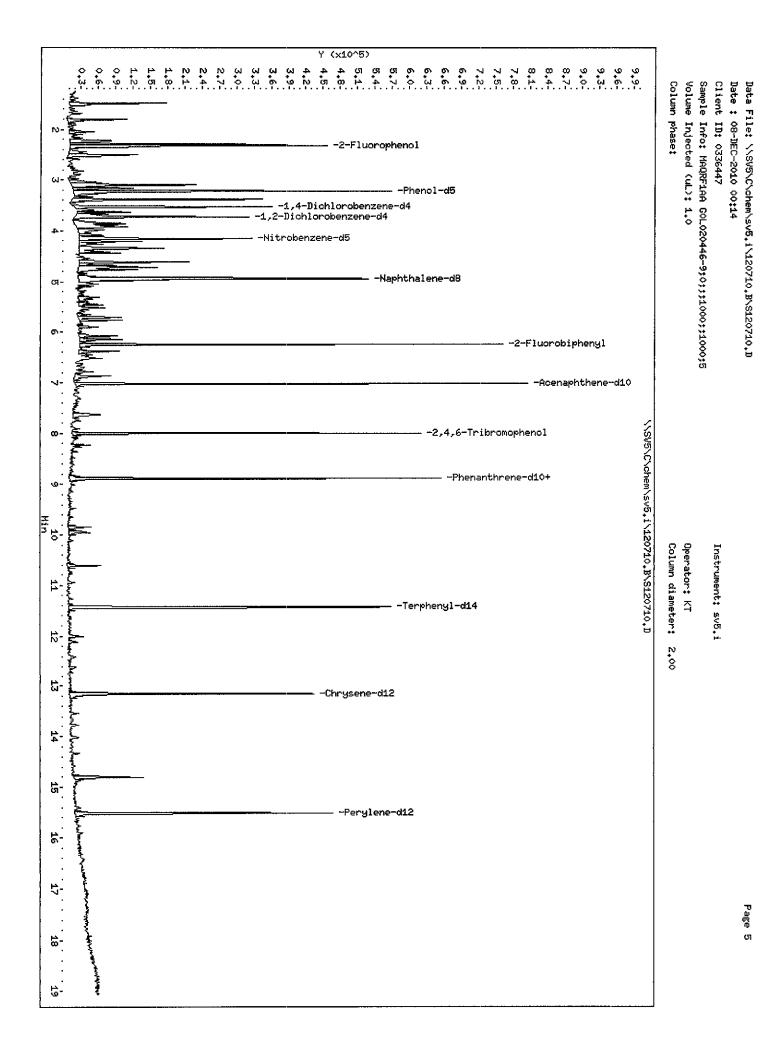
Level: LOW Operator: KT

Data Type: MS DATA SampleType: SAMPLE SpikeList File: Quant Type: ISTD

Sublist File: S11JZHCB.SUB

Method File: \\SV5\C\chem\sv5.i\120710.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0336447;8270F.M

| SURROGATE COMPOUND       | CONC<br>ADDED<br>ug/L | CONC<br>RECOVERED<br>ug/L | %<br>RECOVERED | LIMITS |
|--------------------------|-----------------------|---------------------------|----------------|--------|
| \$ 7 2-Fluorophenol      | 100.0                 | 68.61                     | 68.61          | 41-105 |
| \$ 8 Phenol-d5           | 100.0                 | 78.27                     | 78.27          | 43-122 |
| \$ 10 1,2-Dichlorobenzen | 50.00                 | 29.74                     | 59.47*         | 60-120 |
| \$ 11 Nitrobenzene-d5    | 50.00                 | 39.56                     | 79.12          | 46-118 |
| \$ 12 2-Fluorobiphenyl   | 50.00                 | 42.43                     | 84.86          | 58-105 |
| \$ 13 2,4,6-Tribromophen | 100.0                 | 109.2                     | 109.20         | 61-118 |
| \$ 14 Terphenyl-d14      | 50.00                 | 51.71                     | 103.42         | 69-110 |



Date : 08-DEC-2010 00:14

Client ID: 0336447

Sample Info: MAQRF1AA GOLO20446-9;0;;;1000;;1000;5

Volume Injected (uL): 1.0

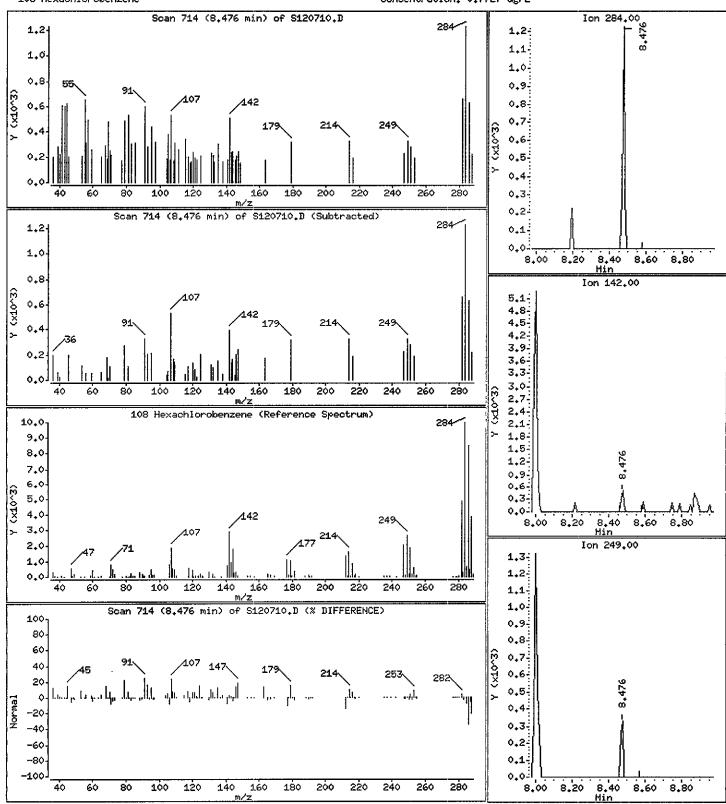
Column phase:

Instrument: sv5.i

Operator: KT

Column diameter: 2.00

108 Hexachlorobenzene Concentration: 0,7727 ug/L



### **Initial Calibration**

Includes (as applicable):

runlog

standard raw data

statistical summary

ms tune data



#### THE LEADER IN ENVIRONMENTAL TESTING

## TestAmerica West Sacramento MS SemiVOA ICAL Checklist Method 8270C

Instrument: SV5 DFTPP Mix ID: 10MSSV0129 Injection Date: 10/02/10 STD Mix IDs: 10MSSV0307-0313 2<sup>nd</sup> Source Mix ID: 10MSSV0314, 342 Initiator/Date: KT-10/03/10 Reviewer/Date: I: SPCCs The SPCC RRFs must be greater than 0.050. Initiated Reviewed Initiated Reviewed N-nitroso-di-n-propylamine X 2,4-Dinitrophenol  $\boxtimes$ Hexachlorocyclopentadiene 4-Nitrophenol II: CCCs The CCC % RSDs must be less than 30% Initiated Reviewed Initiated Reviewed Acenaphthene Phenol N-nitrosodiphenylamine 1,4-Dichlorobenzene Pentachlorophenol 2-Nitrophenol 2.4-Dichlorophenol Fluoranthene Hexachlorobutadiene Di-n-octyl phthalate Benzo(a)pyrene 4-chloro-3-methylphenol 2,4.6-Trichlorophenol Initiated Reviewed III: Other Criteria The custom.rp shows that the average of the average is less than 15% X on the CCV level standard. Avg of AVG:\_ Tailing and degradation criteria are met. The Tune Documentation is present and meets criteria All Internal Standards within 50-200% of ICAL mid-point. Calibration History Included. Manual re-integrations are checked/initialed and hardcopies included. Standards analyzed with within 12 hours of Tune time. Retention time correct for Isomers and all other analytes. Linear Regressions >0.990 and intercept < ± (1/2 RL / IS amount) The second source standard meets the SSCS criteria File Name: IV: Non-CCC Compounds Over 15% (Write compound and %D) None V: Second Source Compounds Over 25% (Write compound and %D) None

#### TestAmerica West Sacramento

#### GC/MS INSTRUMENT LOG SEMI-VOLATILES

Method Key (MTH Column)
QL = EPA 8270C (WS-MS-0005)
JZ = EPA TO-13A (WS-MS-0005)

Inst ID : sv5.i
Batch ID : 100210.B
ICAL Date: See Calib Report VX = EPA 8270C-SIM (mod) CWM (WS-MS-0003) QI = EPA 8270C-SIM (WS-MS-0008) FX = PAH-SIM Isotope Dilution (WS-MS-0006) See raw data for standard IDs

F9 = EPA 8270C-SIM (mod) 1,4-Dioxane (WS-MS-0011)

| Date        | Ti    | ne | USER  | Sample ID               | File ID                       | Vol or | Extra | ıct      | Daln | MTH | Comments                                |
|-------------|-------|----|-------|-------------------------|-------------------------------|--------|-------|----------|------|-----|---|
| l           | 1     |    |       | 1                       | 1 1                           | Wt     | Vol.  | Ļ        | l    |     |   |
|             | ===== |    | *==== | <b>===========</b>      | 22202012222122121212121222222 | *40*** |       |          | ***  | *** | ======================================= |
| 02-OCT-2010 | 11:   | 43 | KT    | Primer                  | QC001.D                       | NA     | N/    | ¥.       | NA   | 1   |   |
| 02-OCT-2010 | 12:   | 06 | KT    | DFTPP 50ug/ml `         | DFT1002.D                     | NA     | NA    |          | NA.  | 1   |   |
| 02-OCT-2010 | 12:   | 27 | KT    | HSL_005 ug/ml CS-1      | HSL1002A.                     | NA     | NA    | <b>A</b> | NA.  | 1   |   |
| 02-OCT-2010 | 12:   | 53 | KT    | HSL_010 ug/ml CS-2      | HSL1002B.                     | NA     | NZ    |          | N/A  | 1   |   |
| 02-OCT-2010 | 13:   | 18 | KT    | HSL_020 ug/ml C\$-3     | HSL1002C.                     | NA.    | N/    | 1        | NA.  | 1 i |   |
| 02-0CT-2010 | 13:   | 44 | KT    | HSL_050 ug/ml CS-4      | HSL1002D.                     | NA     | N2    | k.       | NA.  | 1   |   |
| 02-OCT-2010 | 14:   | 09 | K'T   | HSL_080 ug/ml CS-5      | HSL1002E.                     | NA     | NZ    | 1        | NA.  | 1   |   |
| 02-0CT-2010 | 14:   | 35 | KT    | HSL_120 ug/ml CS-6      | HSL1002F.                     | NA     | N2    | <b>.</b> | NA.  | 1   | ****                                    |
| 02-OCT-2010 | 15:   | 00 | KT    | HSL_160 ug/ml CS-7      | HSL1002G.                     | NA.    | NZ    | 4        | NA.  |     |   |
| 02-OCT-2010 | 16:   | 11 | KT    | HSL_050 ug/ml ICV       | HSL1002H.                     | NA     | N2    | 7        | NA.  | 1   |   |
| 02-OCT-2010 | 16:   | 36 | KT    | [Benzidines ICV 50ug/mL | HSL1002H1                     | NA     | N7    |          | NA.  | 1 . |   |
|             |       |    |       |                         |                               |        |       |          |      |     |   |

Report Date : 03-Oct-2010 11:10

315 HS

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

17-AUG-2010 17:32 02-OCT-2010 15:00 ISTD Start Cal Date End Cal Date Quant Method

Target Version

4.14 Falcon \\SV5\C\chem\sv5.i\100210.B\8270f.m 03.Oct-2010 11:09 onishim Integrator Method file Last Edit

Calibration Level Level Level

on File Names: \\SV5\C\chem\sv5.i\081710.B\AP90817A.D \\SV5\C\chem\sv5.i\081710.B\AP90817B.D \\SV5\C\chem\sv5.i\081710.B\AP90817B.D \\SV5\C\chem\sv5.i\081710.B\AP90817C.D \\SV5\C\chem\sv5.i\081710.B\AP90817D.D \\SV5\C\chem\sv5.i\081710.B\AP90817E.D \\SV5\C\chem\sv5.i\081710.B\AP90817F.D \\SV5\C\chem\sv5.i\081710.B\AP90817F.D 170m45007

Level

LevelLeve1

|  | 5.0000             | 10.0000 | 20.0000                                   | 50.0000 | 80.0000   | 120.0000      | _     |                            | Coefficients |                                       | *RSD    |
|--|--------------------|---------|---|---------|-----------|---------------|-------|----------------------------|--------------|---------------------------------------|---------|
| Compound   | Level 1            | Level 2 | Level 3                                   | Level 4 | Level 5   | Level 6       | Curve | a                          | Ţm           | щ2                                    | or R^2  |
|  | 160.0000   Tevel 7 |         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |         |           |               |       |                            |              |                                       |         |
| 15 N-Nitrosodimethylamine 0.93833 0.88268 0.91070 0.93146 0.9316 0.92154 0.92154 | 0.92899            | 0.88268 | 0.91048                                   | 0.91970 | 0.93146   | 0.93916       | AVRG  |                            | 0.92154      | II<br>V<br>II<br>II<br>II<br>II<br>II | 2.      |
| 16 Pyridine  | 1.52623            | 1.37423 | 1,59449                                   | 1.56610 | 1.52299   | 1.53256       | AVRG  | ;<br>;<br>;<br>;           | 1.54111      | 1<br>4<br>4<br>4<br>4<br>1<br>4       | 5.85560 |
| 23 Aniline   | 2.20796            | 2.15935 | 2.19988                                   | 2,26058 | 2.29749   | 2.33400       | AVEG  | ;<br>;<br>;<br>;<br>;<br>; | 2.25673      | ;<br>;<br>;<br>;                      | 3.09753 |
| 24 Phenol  | 2.04111            | 1.96212 | 2.02834                                   | 2.03430 | 2.06683   | 2.06089<br>AV | AVRG  |                            | 2,03729      | (                                     | 1.80250 |
| Memal country to   | 3                  | 1       | 3.4. 5-Trichlosphenck                     |         | 6 Lavel 3 | \$ 3.         |       |                            |              |                                       |         |

2.7. T-Tribilizations 96680 = るこうとう 8098€ 8 65555

Ŋ Page

TestAmerica West Sacramento

# INITIAL CALIBRATION DATA

17-AUG-2010 17:32 02-OCT-2010 15:00 ISTD 4.14 Falcon \\SV5\C\chem\sv5.1\100210.B\8270f.m Start Cal Date
End Cal Date
Quant Method
Target Version
Integrator
Method file
Last Edit

| ı |                             |  |
|---|-----------------------------|--|
|   |                             |  |
|   | : 03-Oct-2010 11:09 onishim |  |
| - |                             |  |
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|                                    | 5.0000   | 10.000                                  | 20.0000                                 | 50.0000  | 80.0000                                 | 120.0000   |             |   | Coefficients | - | &RSD    |
|------------------------------------|----------|---|---|----------|---|--|-------------|---|--------------|---|---------|
| Compound                           | Level 1  | Level 2                                 | Level 3                                 | Level 4  | revel 5                                 | Level 6  | Curve       | Q | m7           | 2 | or R'2  |
|                                    | 160.0000 | 1 | 1 |          | 1 | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | <del></del> |   |              |   |         |
|                                    | Level 7  |   |   |          |   |  |             | 1 |              |   |         |
| 26 Bis(2-chloroethyl)ether 1.47335 | 1.47335  | 1.38252                                 | 1,39491                                 | 1.43824  |   | -  | AVRG        |   | 1.42859      |   | 2.17028 |
| 27 2-Chlorophenol                  | 1.52099  | 1.55595                                 | 1.56903                                 | 1.583.68 | 1,56789                                 | 1.58074  | AVRG        |   | 1.56381      |   | 1.32805 |
| 28 l,3-Dichlorobenzene             | 1.72457  | 1.69173                                 | 1.67754                                 | 1.73135  | 1.68641                                 | 1.72299  | AVRG        |   | 1,70337      |   | 1.29370 |
| 29 1,4-Dichlorobenzene             | 1.77122  | 1.79861                                 | 2.74013                                 | 1,76898  | 1.78200                                 | 1.79288  | AVRG        |   | 1.78118      | 1 | 1.35229 |
| 30 Benzyl Alcohol                  | 1,01643  | 1.03654                                 | 0.99182                                 | 1.04980  | 1.07792                                 | 1.08952  | AVRG        |   | 1.05101      |   | 3.69696 |
| 31 1,2-Dichlorobenzene             | 1,64691  | 1.63185                                 | 1.60455                                 | 1,68061  | 1.63410                                 | 1.64415  | AVRG        |   | 1.63746      |   | 1,45884 |
| 32 2-Methylphenol                  | 1.47889  | 7.38930                                 | 1,39110                                 | 1.42620  | 1,45565                                 | 1.46154  | AVRG        |   | 1.43012      |   | 2.50558 |
|                                    |          |   |   |          |   |  |             |   |              |   |         |

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|                                 | 5.0000                        | 10.0000                               | 20.0000 | 50.0000 | 80.0000  | 120.0000                                |       | Ŏ  | Coefficients |   | \$RSD   |
|---------------------------------|-------------------------------|---------------------------------------|---------|---------|----------|---|-------|----|--------------|---|---------|
| Compound                        | Level 1                       | Level 2                               | Level 3 | Level 4 | Level 5  | Level 6                                 | Curve | .q | 뒽            | Ę | or R72  |
|                                 | 160.                          | * * * * * * * * * * * * * * * * * * * |         | 1       |          | 1 |       |    |              |   |         |
| 33 2,2'-oxybis(1-Chloxopropane) | 2,29602                       | 2.22080                               | 2.28329 | 2.27928 | 2.27018  | 2.27830                                 | AVRG  |    | 2.27365      |   | 1.08468 |
| 34 4-Methylphenol               | 1.58763                       | 1.48913                               | 1.46270 | 1,52239 | 1.52653  | 1.55886                                 | AVRG  |    | 1.51904      |   | 2.88378 |
| 36 Hexachloroethane             | 0.60925                       | 0.60836                               | 0.60573 | 0.61394 | 0.60427  | T8865.0                                 | AVRG  |    | 0.60636      |   | 1.04319 |
| 37 N-Nitrogodinpropylamine      | 0.94498<br>0.94498<br>1.04757 | 0.97005                               | 1.01302 | 1.02370 | μ. 04700 | 1.03627                                 | AVRG  |    | 1.01180      |   | 3.92615 |
| 42 Nitrobenzene                 | 0.33901                       | 0.32602                               | 0.32543 | 0.33083 | 0.33379  | 0.33450                                 | AVRG  |    | 0.33116      |   | 1.48904 |
| 44 Isophozone                   | 0.65411                       | 0.62291                               | 0.61160 | 0.63344 | 0.63648  | 0.66468                                 | AVRG  |    | 0.63679      |   | 3.81109 |
| 45 2-Mitrophenol                | 0.20508                       | 0.18833                               | 0.18840 | 0.20021 | 0.20022  | 0.20702                                 | AVRG  |    | 0.19648      |   | 4.42274 |
| \$ 1                            |                               | <br>1<br>1<br>1<br>1<br>1<br>1<br>1   |         |         |          |   |       |    |              |   | -       |

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|                                 | 5.0000   | 10.0000 | 20.0000 | 50.0000                                 | 80.0000 | 120.0000                                | _     |   | Coefficients | _ | *RSD     |
|---------------------------------|----------|---------|---------|---|---------|---|-------|---|--------------|---|----------|
| Compound                        | Level 1  | Level 2 | Level 3 | Level 4                                 | Level 5 | Level 6                                 | Curve | Д | m1           | 겉 | or R^2   |
|                                 | 160.0000 |         | -       | 1 |         | 1 |       |   |              |   |          |
|                                 |          |         |         |   |         |   |       |   |              |   |          |
| 46 2,4-Dimethyphenol            | 0.34459  | 0.34167 | 0.34307 | 0.34912                                 | 0.34788 | 0.35962<br>AVRG                         | AVRG  |   | 0.34911      |   | 2.02786  |
| 47 Bis (2-chloroethoxy) methane | 0.38545  | 0.37494 | 0.38565 | 0.38249                                 | 0.38500 | 0.39859                                 | AVRG  |   | 0,38908      |   | 3.10601  |
| 49 2,4-Dichlorophenol           | 0.25434  | 0.26318 | 0.27019 | 0.27037                                 | 0.27274 |   | AVRO  |   | 0.27010      |   | 3.39345  |
| 50 Benzoic Acid                 | 0.16747  | 0.16266 | 0.17423 | 0.19357                                 | 0.21024 | 0.22272                                 | AVRG  |   | 0.19324      |   | 13.25202 |
| 51 1,2,4-Trichlorobenzene       | 0.29430  | 0.28827 | 0.28475 | 0.29747                                 | 0.29189 | 0.29959                                 | AVRG  |   | 0.29246      |   | 1.75989  |
| 52 Naphthalene                  | 1.09939  | 1.12462 | 1.07435 | 1.09325                                 | 1.09870 | 1.13821                                 | AVRG  |   | 1.10443      |   | 1.89960  |
| 54 4-Chloroaniline              | 0.43867  | 0,42534 | 0.43264 | 0.43910                                 | 0.43761 | 0.44905                                 | AVRG  |   | 0.43288      | 1 | 3.06843  |
|                                 |          |         |         |   |         |   |       |   |              |   |          |

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| Compound                                | 5.0000<br>  Level 1 | 10.0000  <br>Level 2 } | 20.0000<br>Level 3 | 50.0000  <br>Level 4 | 80.0000<br>Level 5 | 120.0000<br>Level 6 | Curve | م    | Coefficients<br>ml | 25 | &RSD<br>or R^2  |
|---|---------------------|------------------------|--------------------|----------------------|--------------------|---------------------|-------|------|--------------------|----|-----------------|
|   |                     |                        |                    |                      |                    |                     |       | •    |                    |    |                 |
| 57 Hexachlorobutadiene                  | 0.14273             | 0.13812                | 0.14428            | 0.14415              | 0,14385            | 0.14379 AVRG        | AVRG  |      | 0.14313            |    | mmetacataba<br> |
| 60 4-Chloro-3-Methylphenol              | 0.29329             | 0.28866                | 0.29079            | 0.30972              | 0.30295            | 0.31766             | AVRG  | <br> | 0.30164            |    | 3.64422         |
| 63 2-Methylnaphthalene                  | 0.68483             | 0.68064                | 0.68080            | 0.70067              | 0,70560            | 0.71172             | aved  |      | 0.69378            |    | 1.79740         |
| 66 Hexachlorocyclopentadiene            | 0.33186             | 0.27757                | 0.28896            | 0.29704              | 0.30236            | 0.32262             | AVRG  |      | 0.29846            |    | 7.64489         |
| 69 2,4,6-Trichlorophenol                | 0.33638             | 0.29820                | 0.30223            | 0.31996              | 0.32305            | 0.34225             | AVRG  |      | 0.31913            |    | 3.15654         |
| 70 2,4,5-Trichlorphenol                 | 0.36135             | 0.32892                | 0.33796            | 0,36298              | 0.35236            | 0.35480             | AVRG  |      | 0.34380            |    | 5.80662         |
| 71 2 Chloronaphthalene                  | 1.15096             | 1.09431                | 1.10012            | 1.14181              | 1.1220             | 1.14447             | AVRG  |      | 1.12571            |    | 2.05054         |
| 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                     | *                      |                    |                      |                    |                     |       |      | — —                |    |                 |

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|                      | 5.0000             | 10.0000 | 20.0000                                 | 50.0000 | 80.0000 | 120.0000 |       | 3       | Coefficients | <del></del> | \$RSD     |
|----------------------|--------------------|---------|---|---------|---------|----------|-------|---------|--------------|-------------|-----------|
| Compound             | Level 1            | Level 2 | Level 3                                 | Level 4 | Level 5 | Level 6  | Curve | Ω       | T T          | m<br>Z      | or R^2    |
|                      | 160.0000   Level 7 | )       | t : ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; |         |         |          |       |         |              |             |           |
| 73 2-Nitzoaniline    |                    |         | 0.33397                                 | 0.35205 | 0.34821 | 0.35794  | AVRG  |         | 0.34119      |             | 5.57334   |
| 76 Dimethylphthalate | 1.23388            | 1.25191 | 1.29803                                 | 1.34568 | 1.31165 | 1.32891  | AVRG  |         | 1.29606      |             | 3.09317   |
|                      | 1.86531            | 1.91304 | 1 | 2.01646 | 1.98204 | 1.99786  | AVRG  |         | 1.96037      |             | 3.15026   |
|                      | 0.31106            | 0.27378 | 0.29890                                 | 0.31220 | 0.31294 | 0.32140  | AVRG  |         | 0.30197      |             | 5.78579   |
| 1 00                 | 0.35362            | 0.34622 | 0.35978                                 | 0.40036 | 0.38674 | 0.39559  | AVRG  |         | 0.37691      |             | 6.06861   |
| 81 Acenaphthene      | 1.25874            | 1.22468 | 1.26733                                 | 1.27046 | 1,21141 | 1.24781  | AVRG  |         | 1.24787      |             | 1.76776   |
| 82 2,4-Dinitrophenol | 4083               | 7537    | 23799                                   | 58864   | 110384  |          | Grano | 0.10620 | 5,32413      | -0.71963    | 1 21866.0 |
|                      |                    |         |   |         | _       | _        |       | _       |              |             |           |

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|                               | 5.0000             | 10.0000                                 | 20.0000         | 50.0000  | 80.0000 | 120.0000     | _     |              | Coefficients | _<br> - | &RSD     |
|-------------------------------|--------------------|---|-----------------|--|---------|--------------|-------|--------------|--------------|---------|----------|
| Compound                      | Level 1            | Level 2                                 | Level 3         | Level 4  | Level 5 | Level 6      | Curve | Q            | III          | E       | or R°2   |
|                               | , Å 1              | 1 |                 | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |         |              |       |              |              |         |          |
| 93 Dibenzofuran               | 1.57786<br>1.71077 |   | . 62124 1.65200 | 1.69530  | 1.65117 | 1.68450 AVRG |       |              | 1.65612      |         | 2.77923  |
| 84 4-Nitrophenol              | 0.12712            | 0.141                                   | 0.15316         | 0.16076  | 0.17130 | 0.16653      | AVRG  |              | 0.15634      |         | 10.90920 |
| 86 2,4~Dinitrotoluene         | 0.34360            | 0.359                                   | 0.38479         | 0.42154  | 0.41035 |              | AVRG  | <del> </del> | 0.39633      |         | 8.61592  |
| 91 Fluorene                   | 1.40640            | 1.33840                                 | 1.34292         | 1.39902  | 1.38899 | 1.37835      | AVRG  |              | 1.37139      |         | 2.08557  |
| 92 Diethylphthalate           | 1.38087            | 1,29889                                 | 1.31549         | 1.37912  | 1.31873 | 1.37345      | AVRG  |              | 1,32699      |         | 4.31889  |
| 93 4-Chlorophenyl-phenylether | 0.54964            | 0.55917                                 | 0.56887         | 0,59265  | 0.56708 | 0.57695      | AVRG  |              | 0.57019      |         | 2,42913  |
| 94 4-Nitroaniline             | 0.33346            | 0.33747                                 | 0.37329         | 0.38337  | 0.39216 | ZOT68:0      | AVRG  |              | 0.37361      |         | 7.42395  |
| 1                             |                    |   | - ~             |  |         |              | -     |              |              |         | _        |

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| Compound                      | 5.0000  <br>  Level 1 | 10.0000  <br>Level 2                    | 20.0000  <br>Level 3 | 50.0000  <br>Level 4 | 80.0000  <br>Level 5                  | 120.0000<br>Level 6 | Curve        | Į ą        | Coefficients<br>wl | ZE   | \$RSD or R^2 |
|-------------------------------|-----------------------|---|----------------------|----------------------|---------------------------------------|---------------------|--------------|------------|--------------------|--|--------------|
|                               | 160.0000   Level 7    | 1 | ·                    | 1                    | • • • • • • • • • • • • • • • • • • • |                     |              |            |                    |  | <b>-</b>     |
| 97 4,6-Dinitro-2-methylphenol |                       | 11282                                   | 32982 16137          | 76137                | 134784                                | 236477 LINR         | <del> </del> | 0.10840 0. | 0.15581            | 11 ± 11 | 0.99840      |
| 98 N-Nitrosodiphenylamine     | 0.57756               | 0.59736                                 | 0,60533              | 0.60433              | 0.62172                               | 0.61801             | AVRG         |            | 0.60628            |  | 2.57715      |
| 100 Azobenzene                | 0.77527               | 0.76965                                 | 0.77321              | 0.79522              | 0.80064                               | 0.81892             | AVRG         |            | 0.78660            |  | 2.37146      |
| 101 4-Bromophenyl-phenylether | 0.18964               | 0.18507                                 | 0.19281              | 0.19931              | 0.19607                               | 0.20581             | AVRG         |            | 0.19527            |  | 3.48752      |
| 108 Hexachloxobenzene         | 0.22958               | 0.22084                                 | 0.20740              | 0.21605              | 0.21731                               | 0.21704             | AVRG         |            | 0.21807            |  | 3.00928      |
| 110 Pentachlorophenol         | 5849                  | 10561                                   | 30451                | 67882                | 126397                                | 215360              | LINE         | 0.09816    | 0.14122            |  | 0.99845      |
| 114 Phenanthrene              | 1.30347               | 1.26007                                 | 1.25408              | 1.24163              | 1.24375                               | 1.25610             | AVRG         |            | 1.26074            |  | 1.64308      |
|                               |                       |   |                      | <br> <br>            |                                       |                     |              |            |                    |  |              |

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|                            | 5.0000             | 10.0000 | 20.0000         | 50.0000   | 80.0000 | 120.0000 |              |   | Coefficients | *RSD       |
|----------------------------|--------------------|---------|-----------------|-----------|---------|----------|--------------|---|--------------|------------|
| Compound                   | Level 1            | Level 2 | Level 3         | Level 4 [ | Level 5 | Level 6  | Curve        | đ | Ţw           | <br>or R^2 |
|                            | 160.0000   Level 7 | ~ — — - | ~ <del></del> - |           |         |          | <del>-</del> |   |              |            |
| 115 Anthracene             | 1.25034            | 1,21759 | 1.24206         | 1,25982   | 1.27529 | 1.30214  | AVRG         |   | 1.25955      | 2.12888    |
| 118 Carbazole              | 1.13211            | 1.12547 | 1.13694         | 1.14260   | 1.17067 | 1.18192  | AVRG         |   | 1.15061      | 1.87826    |
| 120 Di-n-Butylphthalate    | 1.28492            | 1,32287 | 1.36193         | 1.38164   | 1.41474 | 1.43847  | AVRG         |   | 1.38442      | 4.97257    |
| 126 Fluoranthene           | 1.03840            | 1.07611 | 1.17216         | 1.10520   | 1.15861 | 1.18294  | AVRG         |   | 1.12969      | 5.01774    |
| 127 Benzidine              | 0.86381            | 0.76431 | 0.75250         | 0.82658   | 0.82201 | 0.86375  | AVRG         |   | 0.81067      | 5.60614    |
| 128 Pyrene                 | 1,25794            | 1.23783 | 1.17078         | 1.28684   | 1.25586 | 1.28463  | AVRG         |   | 1.25025      | 3.12172    |
| 134 3,3'-dimethylbenzidine | 0.65472            | 0.64388 | 0.67361         | 0.70756   | 0.73630 | 0.79414  | AVRG         | , | 0.71564      | 8.88815    |
|                            |                    |         |                 |           |         |          |              |   |              | -          |

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|     | 5.0000                         | 10.0000 | 20.0000         | 50.0000 | 80.000  |         |                        |       | Coefficients |    | &RSD     |
|-----|--------------------------------|---------|-----------------|---------|---------|---------|------------------------|-------|--------------|----|----------|
| +   | Level 1<br>160.0000<br>Level 7 | Level 2 | Level 2 Level 3 | Level 4 | Level 5 | revel 6 | Curve                  | മ     | <b>9</b> 7   | 27 | or 8,2   |
| i i |                                | 0.60187 | 0.591,42        | 0.62586 | 0.61590 | 0.65233 | AVRG                   |       | 0.62663      |    | 3.95034  |
|     | 1.10169                        | 0.99731 | 1.03245         | 1.04489 | 1,06449 | 1.10831 | AVRG                   | - — — | 1.06548      |    | 4.05847  |
| i   | 1.12246                        | 1.10175 | 1.06320         | 1.09705 | 1.06985 | 1,12241 | AVRG                   |       | 1.08994      |    | 2.59426  |
| :   | 0.39148                        | 0.37695 | 0.39090         | 0.39306 | 0.40353 | 0.42717 | AVRG                   | -     | 0.40189      |    | 4.53885  |
|     | 0.91826                        | 0.80897 | 0.84032         | 0.85193 | 0.84371 | 0.89539 | AVRG                   | 1     | 0.86316      |    | 4.34816  |
|     | 1.34838                        | 1.23185 | 1.35627         | 1.34433 | 1,39356 | 1.47616 | AVRG                   |       | 1.37975      |    | 6.65055  |
| ; ; | 0.81012                        | 0.81077 | 0.82747         | 0.99930 | 0.95373 | 0.91132 | AVRG                   |       | 0,90549      |    | 10.05836 |
|     |                                |         |                 |         | -       |         | <u>'</u><br> <br> <br> |       |              |    |          |

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|                                     | 5.0000             | 10.0000 | 20.0000 | 50.0000                                 | 80.0000                                 | 120.0000                         | _     |      | Coefficients | -    | %RSD                                      |
|-------------------------------------|--------------------|---------|---------|---|---|----------------------------------|-------|------|--------------|------|---|
| Compound                            | Level 1            | Level 2 | Level 3 | Level 4                                 | Level 5                                 | Level 6                          | Curve | ρ    | m)           | <br> | or R'2                                    |
|                                     | 160.0000   Level 7 |         |         | 1<br>1<br>1<br>1                        | 1 | <br>   <br>   <br>   <br>   <br> |       |      |              |      |   |
| 145 Benzo (k) fluoranthene          | 1.22939            | 1.16528 | 1.20022 | 1.09895                                 | 1.14223                                 | 1.19597                          | AVRG  |      | 1.16236      |      | 4.27893                                   |
| 147 Benzo (e) pyrene                | 0.97185            | 0,92734 | 0.90757 | 0.95977                                 | 0.96997                                 | 0.96929                          | AVRG  | <br> | 0.94425      | f    | 3.22007                                   |
| 148 Benzo (a) pyrene                | 1.06523            | 0,97686 | 0.99402 | 1.02789                                 | 1.07610                                 | 1.06275                          | AVRG  |      | 1,02655      |      | 4.11137                                   |
| 151 Indeno (1,2,3-cd) pyrene        | 0.97995            | 0.73267 | 0,73671 | 9 | 0.84057                                 | 0.93730                          | AVRG  |      | 0.83029      |      | 12.15083                                  |
| 152 Dibenzo (a, h) anthracene       | 0.88099<br>1.00392 | 0.84384 | 0,87256 | 0.92240                                 | 0.95990                                 | 1.00944                          | AVRG  |      | 0.92758      |      | 16070,7                                   |
| 153 Benzo(g,h,i)perylene            | 0.96025            | 0 98457 | 0.97380 | 0.99974                                 | 1.01731                                 | 1.05397                          | AVRG  |      | 1,00427      |      | 3.45188                                   |
| M 162 benzo b,k Fluoranthene Totals | 2.03951            | 1.97605 | 2.02770 | 2.09825                                 | 2.09596                                 | 2.10729                          | AVRG  |      | 2,06785      |      | 2.64859                                   |
|                                     |                    | (       |         |   |   |                                  |       |      |              |      | 10 20 20 20 20 20 20 20 20 20 20 20 20 20 |

Report Date : 03-Oct-2010 11:10

TestAmerica West Sacramento

17-AUG-2010 17:32 02-OCT-2010 15:00 ISTD 4.14 Falcon \\SV5\C\chem\sv5.1\100210.B\8270f.m 03-Oct-2010 11:09 onishim

Start Cal Date
End Cal Date
Quant Method
Target Version
Integrator
Method file
Last Edit

| Compound                     | 5.0000  <br>Level 1   | 10.0000  <br>Level 2 | 20.0000  <br>Level 3                    | 50.0000  <br>Level 4                    | 80.0000 Level 5 | 120.0000  <br>Level 6 | Curve | ည်<br> | Coefficients | E                             | *RSD or R^2 |
|------------------------------|-----------------------|----------------------|---|---|-----------------|-----------------------|-------|--------|--------------|-------------------------------|-------------|
|                              | 160.0000  <br>Level 7 |                      |   | 1 |                 |                       |       |        |              |                               |             |
| \$ 7 2-Fluorophenol          | 1.43635               | 1.30436              | 1 . 3 . 3 . 3 . 3 . 3 . 3 . 3 . 3 . 3 . | 1.44170                                 | 1.43535         | 1.42292               | AVRG  |        | 1.40992      |                               | 3.61494     |
| \$ 8 Phenol-d5               | 1.83627               | 1.67335              | 1.74151                                 | 1.79006                                 | 1.80863         | 1.83864               | AVRG  |        | 1.77296      |                               | 3.52001     |
| \$ 9 2-Chlorophenol-d4       | 1.47770               | 1.55530              | 1.53916                                 | 1.59414                                 | 1.57486         | 1.57967               | AVRG  |        | 1.55698      |                               | 2.52388     |
| \$ 10 1,2-Dichloxobenzene-d4 | 0.95776               | 0.98111              | 0.99827                                 | 0.98914                                 | 0,99518         | 0.98547               | AVRG  |        | 0.98513      |                               | 1.35559     |
| \$ 11 Nitrobenzene-d5        | 0.33970               | 0.34256              | 0.33065                                 | 0,34105                                 | 0.33606         | 0.35127               | AVRG  |        | 0.33879      |                               | 2,16217     |
| \$ 12 2-Fluorobiphenyl       | 1.28499               | 1.26007              | 1.27668                                 | 1.34206                                 | 1,25854         | 1,29723               | AVRG  |        | 1.28852      |                               | 2.22622     |
| \$ 13 2,4,6-Tribromophenol   | 0.15034               | 0.16527              | 0.17466                                 | 0.17926                                 | 0.17825         | 0.18501               | AVRG  |        | 0.17381      | - , 1<br> <br> <br> <br> <br> | 7.05197     |
|                              |                       | ;                    | - <u>-</u>                              |   |                 |                       |       |        |              |                               |             |

TestAmerica West Sacramento

17-AUG-2010 17:32 02-OCT-2010 15:00 ISTD 4.14 Falcon \SV5\C\chem\sv5.i\l00210.B\8270f.m

Start Cal Date
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|   | 5.0000   | 30,0000                                 | 10,0000   20,0000 | 50.0000                             | 80.0000   120.0000 | 120.0000                                |       |   | Coefficients | 62 | RED     |
|---|----------|---|-------------------|-------------------------------------|--------------------|---|-------|---|--------------|----|---------|
| Compound                                | Level 1  | Level 2                                 | Level 3           | Level 4   Level 5   Level 6   Curve | Level 5            | Level 6                                 | Curve | Ω<br>_                                  | Ľ            | 겉  | or R^2  |
|   |          | 1 |                   |                                     |                    | 1 | _     |   |              |    |         |
|   | 160.0000 |   | _                 | •                                   | _                  |   | _     |   |              |    | _       |
|   | Level 7  |   | _                 |                                     | _                  |   | _     |   |              |    | _       |
|   |          |   |                   |                                     |                    |   |       |   |              |    |         |
| \$ 14 Terphenyl-d14                     | 0.78508  | 0.78616                                 | 0.73917           | 0.78616  0.73917  0.80441  0.78047  | 0.78047            | 0.81889                                 | _     |   | _            |    | _       |
|   | 0.80107  |   | _                 | _                                   | _                  |   | AVRG  |   | 0.78789      |    | 3.21384 |
| 1 | 1        | 1 1 1 1 1                               | - 1 4             |                                     |                    |   |       | 1 |              |    |         |
|   |          |   |                   |                                     |                    |   |       |   |              |    | _       |

# Report Date : 03-Oct-2010 11:10

## TestAmerica West Sacramento

### INITIAL CALIBRATION DATA

17-AUG-2010 17:32 02-OCT-2010 15:00 ISTD 4.14 Falcon \\SV5\C\chem\sv5.i\100210.B\8270f.m 03-Oct-2010 11:09 onishim

Start Cal Date End Cal Date Quant Method Target Version Integrator Method file Last Edit

Response Response Кевропва Units Ant = b + ml\*Rsp + m2\*Rsp^2 Amt = b + Rsp/ml Averaged | Amt = Rsp/ml Formula Linear Curve Quad Data File: \\SV5\C\chem\sv5.i\100210.B\8270f.m

Report Date: 04-Oct-2010 10:52

### Signal Calibration Report

Method : \\SV5\C\chem\sv5.i\l00210.B\8270f.m
Last Edit: 04-Oct-2010 09:00 onishim
Compound : 82 2,4-Dinitrophenol

Mass: 184.00

Istd Compound: \* 3 Acenaphthene-d10

Calibration Formulas

Calibration Mode: by Response

Curve Type: Averaged

Origin: None

Amt = Rsp/m1 m1 = 0.15933171100000

RSD: 26.349

### Initial Calibration Table

| [tv1]      | RT     | •          | Response | •     | Istd Amount | Istd Response | Response Factor  |
|------------|--------|------------|----------|-------|-------------|---------------|------------------|
| ] 2[       | 7.572  | 5.00000]   | 4063     | 7.468 |             |               | 0.10149173965865 |
| 2          | 7.572  | 10,00000   | 7537     | 7.468 | 40.000      | 272639        | 0.11057845722732 |
| ] 3]       | 7.572  | 20.00000   | 23799    | 7.468 | 40.000      | 328608        | 0.14484735612036 |
| [ 4        | 7.582  | 50.00000   | 58864    | 7.468 | 40.000      | 282538        | 0.16667209366528 |
| <b>5</b> J | 7.572  | 89.00000)  | 110384   | 7.468 | 40.000      | 300315        | 0.18378036395118 |
| 6          | 7.582] | 120.00000  | 199007   |       | 40.000      | 322596        | 0.20563077864160 |
|            | 7.582  | 160.00000) | 265655   | 7.478 | 40 000      | 328259        |                  |

| Lvl  Sublist | Calibration File                        |
|--------------|---|
| 1 1_8270STD  | \\SV5\C\chem\sv5.i\100210.B\HSL1002A    |
| 2 1 8270STD  | \\SV5\C\chem\sv5.i\100210.B\HSL1002B    |
| 3 1_8270STD  | [\\\$V\$\C\chem\sv5.i\100210.B\ESL1002C |
| 4 1_8270STD  | }\\\$V5\C\chem\sv5.i\100210.B\HSL1002D  |
| 5 1_8270STD  | \\SV5\C\chem\sv5.i\100210.B\HSL1002E    |
| 6 12 8270STD | \\SV5\C\chem\sv5.i\100210.B\HSL1002F    |
| 7 1_8270STD  | \\sv5\C\chem\sv5.i\100210.B\H\$L1002G   |

### Continuing Calibration Table

| +~~~+~ |    | +- |        | + | ~        | +- |    |  | + |
|--------|----|----|--------|---|----------|----|----|--|---|
| Ind    | RT | 1  | Amount | İ | Response | 1  | RT | Istd Amount  Istd Response   Response Factor | ļ |
| ++-    |    | +- |        | + |          | +- |    |  | + |

| 1     | 7.582  | 50.000  | 50142  | 7.468  | 40.000} | 236662 | 0.16949742670982 |
|-------|--------|---------|--------|--------|---------|--------|------------------|
| 2     | 7.572  | 50.000  | 58864  | 7.468  | 40.000  | 282538 | 0.16667209366528 |
| 3     | 7.582  | 50.000  | 56608  | 7.468  | 40.000  | 239304 | 0.18924213552636 |
| 4     | 7.589  | 50.000  | 98553] | 7.485[ | 40.000  | 440855 | 0.17883975456783 |
| ] 5]  | 7.599  | 50.000  | 81881  | 7.485  | 40.000  | 371846 | 0,17616109894957 |
| [ 6]  | 7.599  | 50.000  | 55069  | 7.495  | 40.000  | 283828 | 0.15521794889863 |
| 7     | 7.599  | 50.000  | 52896  | 7.496  | 40.000  | 256342 | 0.16507946415336 |
| 8     | 7.599  | 50.000  | 50586  | 7.495  | 40.000  | 224545 | 0.18022578993075 |
| 9     | 7.610  | 50.000  | 31559  | 7.506  | 40.000  | 165705 | 0.15236233064784 |
| 10    | 7.610  | 50.000  | 50181  | 7.506  | 40.000  | 226619 | 0.17714666466625 |
| 11    | 7.610  | 50.000  | 44092  | 7.506  | 40.000  | 201923 | 0.17468837130986 |
| 12    | 7.620  | 50.000  | 81056  | 7.516  | 40.000  | 329174 | 0.19699247206645 |
| 13    | 7.620  | 50.000  | 93793  | 7.516  | 40.000  | 378407 | 0.19829020076267 |
| 14    | 7.630  | 50.000  | 68549  | 7.516] | 40.000  | 271629 | 0.20189007801082 |
| 15    | 7.630) | 50.000  | 54835  | 7.516  | 40.000  | 219680 | 0.19969045884924 |
| 16}   | 7.630  | 50.000  | 67628  | 7.527  | 40.000  | 267569 | 0.20219980640508 |
| 17    | 7.630  | 50.000  | 94376  | 7.527  | 40.000} | 349016 | 0.21632475301992 |
| 18    | 7.635  | 50.000  | 51607  | 7.532  | 40.000  | 209252 | 0.19730086211840 |
| 19    | 7.635  | 50.000  | 62563] | 7.531  | 40.000  | 260404 | 0.19220288474831 |
| 201   | 7.646  | 50.000  | 80386  | 7.542  | 40.000  | 334425 | 0.19229662854153 |
| 21    | 7.645  | 50.000  | 25473  | 7.542  | 40.000  | 302573 | 0.06735035842590 |
| 22    | 7.645  | 50.000  |        | 7.542  | 40.000  |        | 0.06320030080034 |
| •     | 7.646  | 50.000  | 68382  | 7.542  | · ·     | 292758 | 0.18686286967393 |
|       | 7.656  | 50.000  | 97952  | 7.552  |         | 390143 | 0.20085353319168 |
| 25    | 7.656  | 50.000  | 63647  | 7.552  |         | 289221 | 0.17605084001507 |
| •     | 7.666  | 50.000  | 79703  | 7.563  |         | 331752 | 0.19219899201813 |
| 27    | 7.677  | 50.000] | 59624  | 7.573  |         | 245725 |                  |
|       | 7.687  | 50.000  | 60561  | 7.583  |         | 237909 | 0.20364425053277 |
| 29    |        | 50.000  | 42226  | 7.583  | 40.000  | 172923 | 0.19535168832370 |
| 30    | 7.687  | 50.000  | 51997  | 7.583  |         | 208221 | 0.19977619932668 |
|       | 7.697  | 50.000  | 51275  | 7.594  | 40.000  | 202822 | 0.20224630464151 |
|       | 7.697  | 50.000  | 65531  | 7.594] | 40.000  | 250339 | 0.20941523294413 |
| ] 33] |        | 50.000) |        |        |         |        | 0.17829817371214 |
| ++    |        |         | +      |        |         |        |                  |

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| 0.18132826748723 | 303207  | 40.000  | 7.656 | 68725 | 50.000  | 7.759  | 34     |
|------------------|---------|---------|-------|-------|---------|--------|--------|
| 0.17159397016162 | 308864  | 40.000  | 7.666 | 66249 | 50.000  | 7.770  | 35     |
| 0.17718730420274 | 288883  | 40.000  | 7.677 | 63983 | 50.000  | 7.780  | 36     |
| 0.16768825481542 | 292290  | 40.000] | 7.677 | 61267 | 50.000] | 7.780  | 37     |
| 0.18773993186061 | 238922  | 40.000  | 7.687 | 56069 | 50.000  | 7.791  | 38     |
| 0.16607652300986 | 243613  | 40.000  | 7.687 | 50573 | 50.000  | 7.791  | 39     |
| 0.17457598682799 | 256301  | 40.000  | 7.687 | 55930 | 50.000  | 7.791  | 40     |
| 0.17457598682799 | 256301  | 40.000  | 7.687 | 55930 | 50.000  | 7.791  | 41     |
| 0.16318468856928 | 215682  | 40.000  | 7.687 | 43995 | 50.000  | 7.791  | 42     |
| 0.16550299002828 | 269061  | 40.000  | 7.697 | 55663 | 50.000  | 7.801  | 43     |
| 0.17294425331452 | 242418  | 40.000  | 7.697 | 52406 | 50.000  | 7.801{ | 44     |
| 0.16110039392417 | 246748  | 40.000  | 7.697 | 49689 | 50.000  | 7.801  | 45     |
| 0.18511044601231 | 361851  | 40.000  | 7.697 | 83728 | 50.000  | 7.801  | 46     |
| 0.17539330629763 | 316865  | 40.000  | 7.697 | 69470 | 50.000  | 7.801  | 47     |
| 0.17636389204488 | 448001  | 40.000  | 7.708 | 98764 | 50.000  | 7.811  | 48     |
| 0.16347771579013 | 319060; | 40.000  | 7.708 | 65199 | 50.000  | 7.811  | 49     |
| 0.15659134894078 | 326041  | 40.000  | 7.708 | 63819 | 50.000  | 7.811  | 50     |
| 0.17059707131864 | 325539  | 40.000  | 7.708 | 69420 | 50.000  | 7.811  | 51     |
| 0.17990465564459 | 295770  | 40.000  | 7.718 | 66513 | 50.000  | 7.822  | 52     |
| 0.17148617616339 | 274779  | 40.000] | 7.718 | 58901 | 50.000] | 7.822  | 53     |
| 0.17622831933281 | 264752  | 40.000  | 7.718 | 58321 | 50.000  | 7.822  | 54     |
| 0.17526620532459 | 414154  | 40.000] | 7.713 | 90734 |         | 7.816  |        |
| 0.15195873285965 |         | 40.000  | 7.754 | 49564 | 50.000  |        |        |
| 0.15935129774969 |         | 40.000  | 7.754 | 63475 | 50.000  |        | 57     |
| 0.14792094504211 |         | 40.000  | 7.785 | 58884 | 50.000[ | 7.889  |        |
| 0.13775255302177 |         | 40.000  | 7.796 | 52456 | 50.000  | 7.889  | 59     |
| 0.12636546114026 |         | 40.000] | 7.796 | 44855 | 50.000  | 7.889  | 60     |
| 0.12322990014870 |         | 40.000  | 7.785 |       | 50.000  |        |        |
| ]                | l       | i       | 1     | +     | <br>    | <br>   |        |
| 0.17364233986573 | _       | 40.000  |       | _     |         | 7.719  | lAva l |

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| Ind    | Sublist | Calibration File                     | İ |
|--------|---------|--------------------------------------|---|
| 1 1_82 |         | \\sv5\c\chem\sv5.i\100210.B\HSL1002H | 1 |

| 2 1_8270STD    | \\SV5\C\chem\sv5.i\100210.B\HSL1002D  |
|----------------|---------------------------------------|
| 3]1_8270STD    | ]\\sv5\C\chem\sv5.1\l002l0.B\QC00l    |
| 4 1 8270STD    | \\SV5\C\chem\sv5.i\l00110.B\HSL1001   |
| 5 1_8270STD    | \\SV5\C\chem\sv5.i\093010.B\HSL0930   |
| 6 1_8270STD    | \\sv5\c\chem\sv5.i\092910A.B\HSL0929A |
| 7 11_8270STD   | \\SV5\C\chem\sv5.1\092910.B\HSL0929   |
| 8 1_8270STD    | \\SV5\C\chem\sv5.i\092910.B\QC001     |
| 9 1_8270STD    | \\SV5\C\chem\sv5.1\092810A.B\HSL0928  |
| 10 1_8270STD   | \\SV5\C\chem\sv5.i\092810.B\HSL0928   |
| 11 1_8270STD   | \\SV5\C\chem\sv5.i\092710.B\HSL0927   |
| 12 1_8270STD   | [\\SV5\C\chem\sv5.i\092510.B\QC001    |
| 13 1_8270STD   | \\sv5\c\chem\sv5.i\092510.B\HSL0925   |
| 14 1_8270\$TD  | \\SV5\C\chem\sv5.i\092410.B\QC001     |
| 15 1_8270STD   | \\SV5\C\chem\sv5.i\092410.B\HSL0924   |
| 16 1_8270STD   | \\sv5\C\chem\sv5.i\092310A.B\HSL0923A |
| 17 1_8270STD   | \\sV5\C\chem\sv5.i\092310A.B\QC001    |
| 18 1_8270STD   | \\SV5\C\chem\sv5.1\092310.B\QC001     |
| 19 1_8270STD   | \\SV5\C\chem\sv5.i\\092310.B\\HSL0923 |
| 20 1_8270STD   | \\sv5\C\chem\sv5.i\092210.B\H8L0922a  |
| 21 1_8270STD   | \\\$V5\C\chem\sv5.i\092210.B\HSL0922  |
| 22 1_8270STD   | \\SV5\C\chem\sv5.i\092210.B\QC001     |
| 23   1_8270STD | \\SV5\C\chem\sv5.1\092110.B\HSL0921   |
| 24 1_8270STD   | \\sV5\C\chem\sv5.i\0920l0.B\QC001     |
| 25 1_8270STD   | \\sv5\C\chem\sv5.i\092010.B\HSL0920   |
|                | \\SV5\C\chem\sv5.i\091910a.B\HSL0919a |
| 27 1_8270STD   | \\SV5\C\chem\sv5.i\091910.B\HSL0919   |
| 28 1_8270STD   | \\SV5\C\chem\sv5.i\091910.B\QC001     |
| 29 1_8270STD   | [\\SV5\C\chem\sv5.i\091710.B\BSL0917  |
| · · -          | \\SV5\C\chem\sv5.i\091710.B\QC001     |
| 31 1_8270STD   | \\SV5\C\chem\sv5.i\091510b.B\KSL0915b |
| 32 1_8270STD   | [\\SV5\C\chem\sv5.i\091510b.B\QC003   |
| 33 1_8270STD   | \\sv5\c\chem\sv5.i\091010.B\ESL0910   |
| 34 1_8270STD   | \\SV5\C\chem\sv5.i\091010.B\QC001     |
| ++             | -+                                    |

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| 35 1_8270sTD | \\sv5\c\chem\sv5.i\090910a.B\H5L0909a  |
|--------------|--|
| 36 1_8270STD | \\SV5\C\chem\sv5.i\090910.B\HSL0909    |
| 37 1_8270STD | \\SV5\C\chem\sv5.i\090910.B\QC001      |
| 38 1_8270STD | \\SV5\C\chem\sv5.i\090810.B\HSL0908    |
| 39 1_8270STD | [\\SV5\C\chem\sv5.i\090810.B\Primer    |
| 40 1_8270STD | \\sv5\@\chem\sv5.i\090710.B\HSL0907    |
| 41 1_8270STD | \\SV5\C\chem\sv5.i\090710.B\HSL0907    |
| 42 1_8270STD | \\sv5\c\chem\sv5.i\090110.B\HSL0901    |
| 43 1_8270STD | \\SV5\C\chem\sv5.i\083110.B\HSL0831    |
| 44 1_8270STD | \\sv5\c\chem\sv5.i\083010.B\QC001      |
| 45 1 8270STD | \\sv5\c\chem\sv5.i\083010.B\HSL0830    |
| 46 1_8270STD | \\SV5\C\chem\sv5.i\082710.E\QC001      |
| 47(1_8270STD | \\sv5\c\chem\sv5.1\082710.B\HSL0827    |
| 48 1_8270STD | \\SV5\C\chem\sv5.i\082610.B\HSL0826    |
| 49 1_8270STD | \\SV5\C\chem\sv5.i\082610.B\QC001      |
| 50 1_8270STD | \\SV5\C\chem\sv5.i\082510.B\QC001      |
| 53 1_8270STD | \\SV5\C\chem\sv5.i\082510.B\HSL0825    |
| 52 1_8270STD | \\sv5\c\chem\sv5 i\082310B.B\HSL0823   |
| 53 1_6270STD | {\\sv5\c\chem\sv5.i\082310B.B\HSL0823H |
| 54 1_8270STD | \\sv5\c\chem\sv5.i\082310B.B\HSL0823D  |
| 55 1_8270STD | \\SV5\C\chem\sv5.i\082310A.B\\HSL0823A |
| 56 1_8270STD | [\\SV5\C\chem\sv5.i\092010.B\HSL0820   |
| 57\1_8270STD | !\\sv5\c\chen\sv5.1\082010.B\QC001     |
| 58 1_8270STD | \\sv5\c\chem\sv5.i\061810A.B\HSL0618A  |
| 59 1_8270STD | \\sv5\c\chem\sv5.i\081810.B\HSL0818    |
| 60 1_8270STD | \\SV5\C\chem\sv5.i\081710.B\HSL0817D   |
| 61 1_8270STD | \\SV5\C\chem\sv5.1\081710.B\HSL0817H   |
| T            |  |

Data File: \\SV5\C\chem\sv5.i\100210.B\8270f.m

Report Date: 04-Oct-2010 10:52

### Signal Calibration Report

Method : \\SV5\C\chem\sv5.i\100210.B\8270f.m Last Edit: 04-Oct-2010 09:00 onishim

Compound: 110 Pentachlorophenol
Mass: 266.00
Istd Compound: \* 4 Phenanthrene-dl0

Calibration Formulas

Calibration Mode: by Response

Curve Type: Averaged Origin: None

Amt = Rsp/m1 m1 = 0.11930897400000

RSD: 15.221

### Initial Calibration Table

|    |            |       |           |          |       |           |         | _                |
|----|------------|-------|-----------|----------|-------|-----------|---------|------------------|
| •  | •          | RT    | Amount }  | Response |       | •         |         | Response Factor  |
| 1  | 1          | 9.240 | 5.00000   | 5849     | 9.406 | 40.000    | ,       | 0.09427104739340 |
|    | 2          | 9.240 | 10.00000  | 10551    | 9.406 |           | 428440  | 0.09850620857063 |
| 1  | 3          | 9.240 | 20,00000  | ·        | 9,406 | 40.000    | 525834  | 0.11581982146457 |
| -  | <b>4</b> [ | 9.240 | 50.00000  | -        | 9.406 | 40.000    | 462722  | 0.11736118014704 |
| İ. | 5          | 9.240 | 80.00000] | 126397   |       |           | 477777] | 0.13227614556582 |
| 1  | 6          | 9.240 | 120.00000 | 215360   |       | 40.000    | 515607  | 0.13922748656761 |
| :  | -+-<br>7   | •     | 160.00000 | 293184   |       | •         | -       | 0.13770092657303 |
| +  | -+-        | +     | +         | ~~+      |       | + <i></i> | +       |                  |

| 4+            | <u> </u>                             |
|---------------|--------------------------------------|
| Lvl  Sublist  | Calibration File                     |
| [ 1 1_8270STD | \\SV5\C\chem\sv5.i\100210.B\HSL1002A |
| 2 1_8270STD   | \\SV5\C\chem\sv5.i\100210.E\RSLi002B |
| 3 1_8270STD   | \\SV5\C\chem\sv5.i\100210.B\HSL1002C |
| 4 1_8270STD   | \\SV5\C\chem\sv5.i\100210.B\HSL1002D |
| 5 1_8270STD   | \\SV5\C\chem\sv5.i\100210.B\HSL1002E |
| 6 1 8270STD   | \\SV5\C\chem\sv5.i\100210.B\HSL1002F |
| 7 1_8270STD   | \\SV5\C\chem\sv5.i\100210.B\HSL1002G |

### Continuing Calibration Table

| ++-  |    | +- |        | + |          | +- |    | +  | • |
|------|----|----|--------|---|----------|----|----|--|---|
| [Ind | RT | ĺ  | Amount | ı | Response | 1  | RT | [Istd Amount   Istd Response   Response Factor |   |
|      |    | 4- |        | 4 |          | 4  |    |  |   |

| ١   | 1   | 9.240  | 50.000  | 62906          | 9.406] | 40.000] | 380734  | 0.13217837125132  |
|-----|-----|--------|---------|----------------|--------|---------|---------|-------------------|
|     | 2   | 9.240  | 50.000  | 67882          | 9.406  | 40.000  | 462722  | 0.11736118014704  |
| !   | 3   | 9.257  | 50.000  | 111129         | 9.423  | 40.000  | 692643  | 0.12835356742218] |
|     | 4   | 9.257  | 50.000  | 88353          | 9.423  | 40.000  | 569627  | 0.12408541027725  |
|     | 5   | 9.267  | 50.000  | 65176          | 9.433  | 40.000  | 444572  | 0.11728313973889  |
|     | 6]  | 9.268  | 50.000  | 60910          | 9.433  | 40.000  | 402268  | 0.12113317489833  |
|     | 7[  | 9.278  | 50.000  | 51724          | 9.433  | 40.000  | 342388  | 0.12085470285174  |
| j   | 8   | 9.278  | 50.000  | 37406          | 9.444  | 40.000[ | 257561  | 0.11618529202791  |
| 1   | 9   | 9.278] | 50.000  | 56153          | 9.444  | 40.000  | 367144  | 0.12235635064171  |
|     | 20  | 9.278  | 50.000  | 49979          | 9.444  | 40.000  | 316244  | 0.12643148960929  |
| .   | 11  | 9.299  | 50.000  | 89278          | 9.465  | 40.000  | 533339  | 0.13391557714699  |
|     | 12  | 9.288  | 50.000  | 102299         | 9 454  | 40.000  | 604130  | 0.13546620760432  |
| ] : | 13  | 9.299  | 50.000] | 74887          | 9,464  | 40.000  | 434948  | 0.13773968382427  |
| 1   | 14) | 9.299  | 50.000  | 61171          | 9.465  | 40.000  | 350214  | 0.13973399121680  |
|     | 15  | 9.309  | 50.000  | 72641          | 9.475  | 40.000  | 436116  | 0.13325078648800  |
|     | 16  | 9.309  | 50.000  | 99213          | 9.475  | 40.000  | 545533  | 0.14549147347640  |
| 1   | 17  | 9.314  | 50.000  | 56050          | 9.480  | 40.000  | 341600  | 0.13126463700234  |
| ]   | 18  | 9.314  | 50.000  | 67187]         | 9.480  | 40.000  | 410196  | 0.13103394474836  |
|     | 19  | 9.324  | 50.000  | 90596          | 9.490  | 40.000  | 530756] | 0.13655389670583  |
| 1   | 20  | 9.324  | 50.000  | 32043          | 9.490  | 40.000  | 484990  | 0.05285552279428  |
|     | 21  | 9.324  | 50.000  | 22238          | 9.490  | 40.000  | 346959  | 0.05127522272084  |
| 1   | -   | 9.324  |         | 81528          |        |         | •       | 0.14110744280837  |
|     | 23  | 9.335  | 50.000] | 103580         | 9.511  | 40.000  | 589949  | 0.14045959905009  |
|     | 24  | 9.335  | 50.000  | 72155          | 9.501  | 40.000  | 446339  | 0.12932770831140  |
|     | 25  | 9.355  | 50.000] | 91662          | 9.521  | 40.000] | 517550  | 0.14168602067433  |
| i   | 26  | 9.366  | 50.000  | 67431          | 9.532  | 40.000  | 396847  | 0.13593349578049  |
| 1   | 27] | 9.366  | 50.000  | 71407          | 9.542  | 40.000  | 407176  | 0.14029707055426  |
|     | 26  | 9.366  | 50.000  | 49946          | 9.532  | 40.000  | 298933  | 0.13366473423811  |
|     | 29  | 9.366  | 50.000  | 58621 <b> </b> | 9.542  | 40.000  | 335623  | 0.13973059057335  |
| Ì   | 30  | 9.386  | 50.000  | 53858          | 9.552] | 40.000  | 329730  | 0.13067176174446  |
| -   | 31  | 9.387  | 50.000  | 69993          | 9.552  | 40.000  | 399673  | 0.14010053218506  |
|     | 32  | 9.459  | 50.000  | 87217          | 9.625  | 40.000  | 539077  | 0.12943160253544  |
|     |     | 9.459  | 50.000  | 77540          | 9.625  | 40.000  | 458679  | 0.13524054949104  |
| +-  | +-  |        |         | ~~~~           |        | +       |         |                   |

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1

| 34[  | 9.470  | 50.000  | 79232   | 9 646  | 40.000  | 482971      | 0.13124100618878 |
|------|--------|---------|---------|--------|---------|-------------|------------------|
| 35   | 9.480  | 50.000) | 75075   | 9.656  | 40.000  | 465501      | 0.12902227922174 |
| 36   | 9.480  | 50.000  | 69872   | 9.656  | 40.000  | 435300      | 0.12841167011257 |
| 37   | 9.490] | 50.0001 | 60626   | 9.656  | 40.000  | 378611      | 0.12810193047746 |
| 38   | 9.490  | 50.000  | 60476   | 9.666  | 40.000  | 383533      | 0.12614507747704 |
| 39   | 9.490  | 50.000  | 68275   | 9.656  | 40.000  | 401081      | 0.13618196823086 |
| 40   | 9.490  | 50.000  | 68275]  | 9.656  | 40.000  | 401081      | 0.13618196823086 |
| 41   | 9.490  | 50.000  | 51783   | 9.666  | 40.000  | 337799      | 0.12263624226241 |
| • •  | 9.501  | 50.000  | 70205   | 9.677  | 40.000  | 425699      | 0,13193359627342 |
| •    | 9.511  | 50.000  | [02609  | 9.677  | 40.000  | 361025      | 0.12794751000591 |
| 444  | 9.501  | 50.000  | 61157   | 9.677  | 40.000  | 380328      | 0.12864054184809 |
| 45   | 9.500  | 50.000  | 98266   | 9.676  | 40.000  | 586969      | 0.13393007126441 |
| 46   | 9.500] | 50.000  | 82460   | 9.677  | 40.000  | 500580      | 0.13178313156738 |
| 1 47 | 9.511{ | 50.000  | 117721  | 9.687  | 40.000] | 687233      | 0.13703765680635 |
| 48   | 9.511  | 50.000  | 77582   | 9.687  | 40.000  | 485585      | 0.12781613929590 |
| 49   | 9.511  | 50.000  | 77449   | 9.687  | 40.000  | 498103      | 0.12439033693834 |
| 50   | 9.511  | 50.000  | 85917   | 9.687  | 40.000  | 500311      | 0.13738174855240 |
| 51   | 9.521  | 50.000  | 80098   | 9.697  | 40.000  | 460974      | 0.13900653832971 |
| 52   | 9.521  | 50.000  | 71155   | 9.697  | 40.000  | 428920      | 0.13271472535671 |
| 53   | 9.521  | 50.000  | 72603   | 9.697  | 40.000  | 415811      | 0.13968461632809 |
| 54   | 9.526  | 50.000  | 108254  | 9.702  | 40.000  | 650674      | 0.13309768025155 |
| 55   | 9.568  | 50.000  | 64139   |        |         |             | •                |
|      | 9.578  | -       | 85309   | 9.754  | 40.000  |             | 0.13336564203779 |
|      | 9.599  | 50,000  | 78595   | 9.785  | 40.000  | 486034      | 0.12936543533991 |
|      | 9.609  | 50.000  | 72755   | 9.785  | 40.000  | 467607      | 0.12447204597023 |
| 59   | 9.609[ | 50.000  | 67958   | 9.785] | 40.000  | 451801      | 0.12033262431911 |
|      | 9.609  | 50.000} | -       | 9.785  | 40.000  | 418038      | 0.12177840292031 |
|      | Ī      | ĺ       | <u></u> |        | İ       | <del></del> |                  |
|      | 9.411  | 50.000  | 72233   | 9.581  | 40.000  | 6967        | 0.12849428241810 |
| ++-  |        | ·+      |         |        | +       | +           |                  |

| [Ind]    | Sublist | Calibration File                      | ] |
|----------|---------|---------------------------------------|---|
| 1 111_82 | 776STD  | ///sv5/c/chem/sv5.i/100210.B/HSL1002H | ì |
| 2 1 82   | 270STD  | \\SV5\C\chem\sv5.i\100210.B\HSL1002D  | + |
| , ,      |         | •                                     | ′ |

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| 3 1_8270STD    | \\SV5\C\chem\sv5.i\100110.B\HSL1001     | 1                |
|----------------|---|------------------|
| 4 1_8270STD    | \\SV5\C\chem\sv5.i\093010.B\HSL0930     | !<br>!           |
| 5   1_8270STD  | \\sv5\c\chem\sv5.i\092910A.B\HSL0929A   |                  |
| 6 1_8270STD    | \\SV5\C\chem\sv5.i\092910.B\HSL0929     | !<br>!           |
| 7 1_8270STD    | \\SV5\C\chem\sv5.i\092910.B\QC001       | <br>             |
| 8 1_82705TD    | \\5V5\C\chem\sv5.1\092810A.B\HSL0928    |                  |
| 9 1_8270STD    | [\\SV5\C\chem\sv5.i\092810.B\HSL0928    | ļ                |
| 10 1_8270STD   | \\SV5\C\chem\sv5.i\092710.B\HSL0927     | <br> <br>        |
| 11 1_8270STD   | \\SV5\C\chem\sv5.i\092510.B\QC001       | İ                |
| 12 1_8270STD   | /\\sv5\c\chem\sv5.1\092510.B\HSL0925    | 1                |
| 13 1_8270STD   | \\SV5\C\chem\sv5.1\092410.B\QC001       | !                |
| 14 1_8270STD   | \\SV5\C\chem\sv5.i\092410.B\HSL0924     |                  |
| 15 1_8270STD   | \\SV5\C\chem\sv5.i\092310A.B\HSL0923A   | ]                |
| 16 1_8270STD   | [\\SV5\C\chem\sv5.i\092310A.B\QC001     |                  |
| 17 1_8270STD   | \\SV5\C\chem\sv5.i\092310.B\QC001       | ]                |
| 18 1_8270STD   | \\SV5\C\chem\sv5.i\092310.B\HSL0923     | <del>,</del><br> |
| 19 1_8270STD   | \\SV5\C\chem\sv5.i\092210.B\HSL0922a    | 1                |
| 20 1_8270STD   | \\SV5\C\chem\sv5.i\092210.B\HSL0922     |                  |
| 21 1_8270STD   | /\\SV5\C\chem\sv5.i\092210.B\QC001      |                  |
| 22 1_8270STD   | \\SV5\C\chem\sv5.i\092110.B\HSL0921     | 1                |
| 23 1_8270STD   | \\SV5\C\chem\sv5.i\092010.B\QC001       | 1                |
| 24 1_8270STD   | \\SV5\C\chem\sv5.i\092010.B\HSL0920     |                  |
| ) 25]1_8270STD | \\SV5\C\chem\sv5.i\091910a.B\\\\$L0919a | ]                |
| 26 1_8270STD   | \\SV5\C\chem\sv5.i\091910.B\HSL0919     |                  |
| 27 1_8270STO   | \\SV5\C\chem\sv5.i\091910.B\QC001       | l                |
| 28 1 8270STD   | \\SV5\C\chem\sv5.i\091710.B\H3L0917     |                  |
| 29 1_8270STD   | \\\SV5\C\chem\sv5.i\091710.B\QC001      |                  |
| 30 1_8270STD   | \\SV5\C\chem\sv5.i\091510b.B\HSL0915b   | <del>-</del>     |
| 31 1 8270STD   | \\SV5\C\chem\sv5.i\091510b.B\QC003      | <del> </del>     |
| 32 1 8270STD   | ]\\sv5\g\chem\sv5.i\091010.B\HSL0910    | !                |
| 33 1_8270STD   | \\SV5\C\chem\sv5.i\091010.B\QC001       | 1                |
| 34 1_8270STD   | \\sv5\c\chem\sv5.i\090910a.B\HSL0909a   | +                |
| 1 35 1 8270STD | /\\SV5\C\chem\sv5.1\090910 B\HSL0909    | <del>+</del>     |
| <del>++</del>  |   | +                |

| 36 1_8270STD    | \\SV5\C\chem\sv5.i\090910.B\QC001       |
|-----------------|---|
| 37 1_8270STD    | \\SV5\C\chem\sv5.i\090810.B\HSL0908     |
| 38 1_8270STD    | \\SV5\C\chem\sv5.1\090810.B\Primer      |
| 39 1_8270STD    | \\sv5\c\chem\sv5.i\090710.B\HSL0907     |
| 40 1_8270STD    | \\SV5\C\chem\sv5.1\090710.B\HSL0907     |
| 41 1_8270STD    | \\sv5\c\chem\sv5.i\090110.B\HSL0901     |
| 42 1_8270STD    | \\SV5\C\chem\sv5.i\083110.B\HSL0831     |
| 43 1_8270STD    | \\sv5\c\chem\sv5.i\083010.B\QC001       |
| 44 1_8270STD    | \\sv5\c\chem\sv5.i\083010.B\HSL0830     |
| 45[1_8270STD    | \\SV5\C\chem\sv5.i\082710.B\QC001       |
| 46 1_8270STD    | \\sv5\c\chem\sv5.i\082710.B\HSL0827     |
| 47 1_8270STD    | \\SV5\C\chem\sv5.i\082610.B\HSL0826     |
| 48 1_8270STD    | \\SV5\C\chem\sv5.i\082610.B\QC001       |
| 49 1_8270STD    | \\SV5\C\chem\sv5.i\082519.B\QC001       |
| j 50 j1_8270STD | \\SV5\C\chem\sv5.i\082510.B\HSL0825     |
| 51 1_8270STD    | \\sv5\c\chem\sv5.i\082310B.B\HSL0823    |
| 52 1_8270STD    | \\sv5\c\chem\sv5.i\082310B.B\HSL0823H   |
| 53 1_8270STD    | ]\\sv5\c\chem\sv5.i\082310B.B\HSL0823D  |
| 54 1_8270STD    | \\SV5\C\chem\sv5.i\082310A.B\HSL0823A   |
| 55 1_8270STD    | \\SV5\C\chem\sv5.i\082010.B\HSL0820     |
| 56 1_8270STD    | [\\sv5\c\chem\sv5.i\082010.B\QC001      |
| 57 1_8270STD    | \\sv5\c\chem\sv5.i\081810A.B\HSL0818A   |
| 58 1_6270STD    | \\sv5\c\chem\sv5.i\081810.B\HSL0818     |
| •               | \\SV5\C\chem\sv5.i\081710.B\HSL0817D    |
| 60 1_6270STD    | \\SV5\C\chem\sv5.1\081710.B\HSL0817H    |
| ++              | *************************************** |

### TAILING FACTOR/DEGRADATION SUMMARY RESULTS

### TAILING ANALYSIS SUMMARY

| Compound                       | Tail Factor            | Max Allowed Test |
|--------------------------------|------------------------|------------------|
| Pentachlorophenol<br>Benzidine | 0.6825896<br>0.6244503 | 1                |

### DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

| +===========  |          |            | ========+        |
|---------------|----------|------------|------------------|
| Compound      | Response | %Breakdown | Max Allowed Test |
| 4,4-DDD + DDE | 189907   | 8.9        | 20.5   PASS      |
|               | ·<br>    |            |                  |

Sample //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D

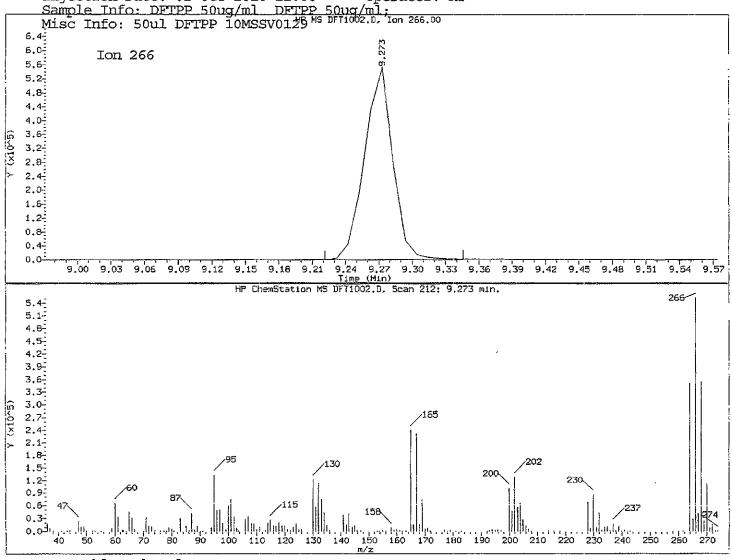
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\* PASSED \*\*\* \*\*\*\*\*\*

### TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 10/03/2010 11:04

Datafile Analyzed: //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D Method Used: \\SV5\C\chem\sv5.i\100210.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 02-OCT-2010 12:06 Operator: KT



### Pentachlorophenol

Exp. RT = 9.387Found RT = 9.273

Tailing factor for Pentachlorophenol OK

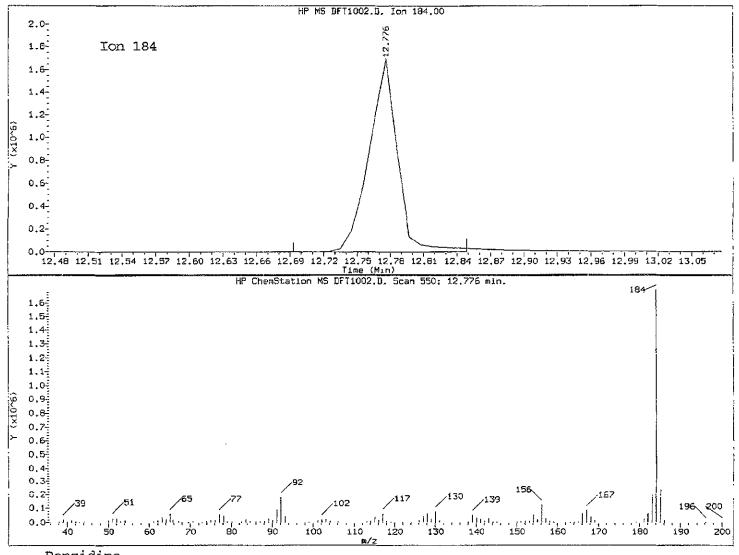
Tail Factor = 0.683 Maximum Allowed = 5.0

Datafile Analyzed: //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D Method Used: \\SV5\C\chem\sv5.i\100210.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 02-OCT-2010 12:06 Operator: KT

Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml;

Misc Info: 50ul DFTPP 10MSSV0129



### Benzidine

=======

Exp. RT = 12.911Found RT = 12.776

Time2 = 12.77603Timel = 12.74377Time3 = 12.79618Tailing Factor = (Time3 - Time2)/(Time2 - Time1)

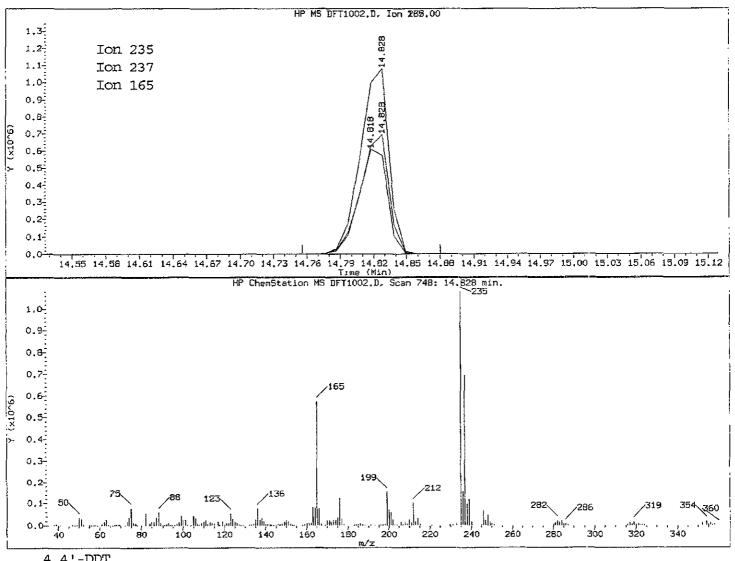
Tailing factor for Benzidine OK

Tail Factor = 0.624 Maximum Allowed = 3.0

Datafile Analyzed: //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D Method Used: \SV5\C\chem\sv5.i\100210.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 02-OCT-2010 12:06 Ope Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml; Operator: KT

Misc Info: 50ul DFTPP 10MSSV0129



| 4, | 4  | -DD.7 |   |
|----|----|-------|---|
| == | == | ====  | : |

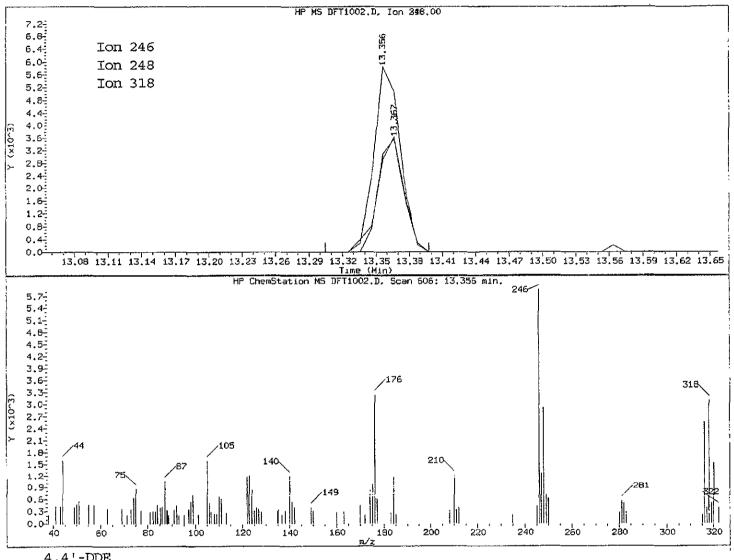
Exp. RT =14.942 Found RT = 14.828

| Mass | Area    | Ratio  |
|------|---------|--------|
|      |         |        |
| 235  | 1937042 | 100.00 |
| 237  | 1226081 | 63.30  |
| 165  | 1111108 | 57.36  |

Datafile Analyzed: //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D Method Used: \\SV5\C\chem\sv5.i\100210.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 02-OCT-2010 12:06 Ope Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml; Operator: KT

Misc Info: 50ul DFTPP 10MSSV0129



4,4'-DDE =======

Exp. RT = 13.470Found RT = 13.356

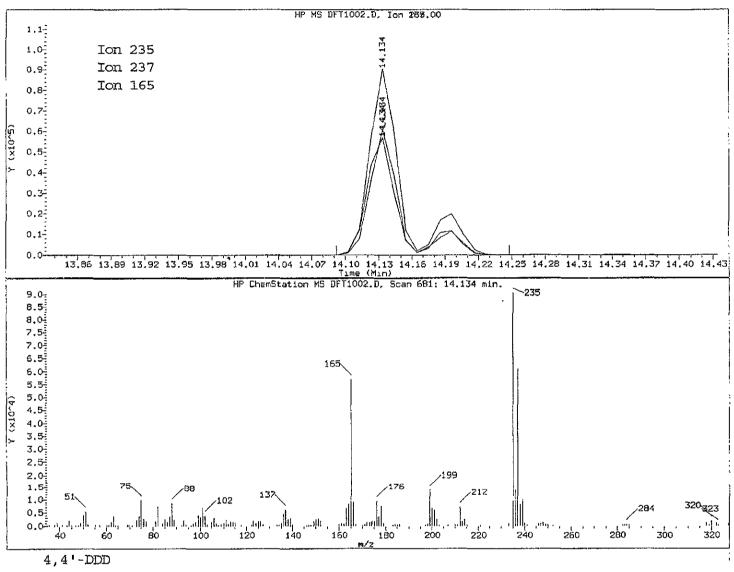
| Mass | Area | Ratio  |
|------|------|--------|
|      |      |        |
| 246  | 9630 | 100.00 |
| 248  | 5964 | 61.93  |
| 318  | 0    | 0.00   |

Datafile Analyzed: //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D Method Used: \SV5\C\chem\sv5.i\100210.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 02-OCT-2010 12:06 Operator: KT

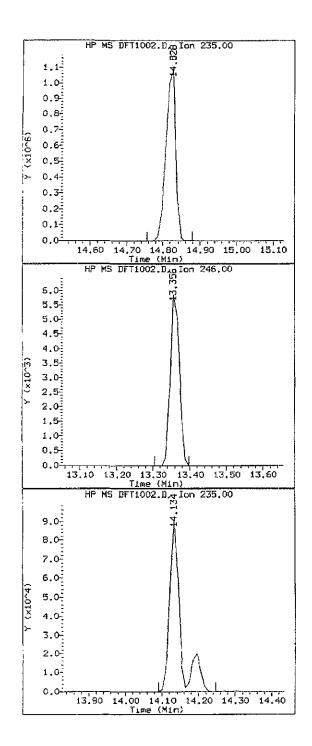
Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml;

Misc Info: 50ul DFTPP 10MSSV0129



| #'# _Y | مدرور |   |        |
|--------|-------|---|--------|
| ====== | ===   |   |        |
| Exp.   | RT    | = | 14.248 |
| Found  | RT    | = | 14.134 |
|        |       |   |        |

| Mass | Area   | Ratio  |
|------|--------|--------|
|      |        |        |
| 235  | 180277 | 100.00 |
| 237  | 115795 | 64.23  |
| 165  | 113090 | 62.73  |



Compound: 4,4'-DDT Quant Mass: 235 RT: 14.828

Area: 1937042

Compound: 4,4'-DDE Quant Mass: 246

RT: 13.356 Area: 9630

Compound: 4,4'-DDD Quant Mass: 235

RT: 14.134 Area: 180277

### DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

| Compound      | Response |     | Max Allowed Test | Ī |
|---------------|----------|-----|------------------|---|
| 4,4-DDD + DDE | 189907   | 8.9 | 20.5 PASS        | ĺ |

Data File: \\SV5\C\chem\sv5.i\100210.B\DFT1002.D

Report Date: 03-Oct-2010 11:04

### TestAmerica West Sacramento

Data file: \\SV5\C\chem\sv5.i\100210.B\DFT1002.D Lab Smp Id: DFTPP 50ug/ml Inj Date: 02-OCT-2010 12:06 Operator: KT Inst ID: Smp Info: DFTPP 50ug/ml; Inst ID: sv5.i

Misc Info: 50ul DFTPP 10MSSV0129

Comment

Method : \\SV5\C\chem\sv5.i\100210.B\DFTPP.m

Meth Date: 17-Aug-2010 14:10 scotts Quant Type: ISTD

Cal Date : Cal File:

Als bottle: 96 QC Sample: DFTPP

Dil Factor: 1.00000

Integrator: HP RTE Compound Sublist: all.sub

Target Version: 4.14 Sample Matrix: None

Processing Host: SV5

### CONCENTRATIONS

|       |         |          |      |          | ON-COL  | FINAL   |               |        |
|-------|---------|----------|------|----------|---------|---------|---------------|--------|
| RT    | EXP RT  | REL RT   | MASS | RESPONSE | ( ug/L) | ( ug/L) | TARGET RANGE  | RATIO  |
| ***   | ======= |          | ==== | =======  | *****   | 200293= |               | erosa  |
|       |         |          |      |          |         |         |               |        |
| 1     | dftpp   |          |      |          |         | CAS #:  | 5074-71-5     |        |
| 0.000 | 11.201  | ( 0.000) | 198  | 746688   |         |         | 0.00- 100.00  | 100.00 |
| 0.000 | 11,201  | { 0.000} | 51   | 320640   |         |         | 30.00- 80.00  | 42.94  |
| 0.000 | 11.201  | (0.000)  | 68   | 4826     |         |         | 0.00- 2.00    | 1.62   |
| 0.000 | 11.201  | (0.000)  | 69   | 298048   |         |         | 0.00- 0.00    | 39.92  |
| 0.000 | 11,201  | ( 0.000) | 70   | 1913     |         |         | 0.00- 2.00    | 0.64   |
| 0.000 | 11.201  | (0.000)  | 127  | 406528   |         |         | 25.00- 75,00  | 54.44  |
| 0.000 | 11,201  | ( 0.000) | 197  | 0        | 0.0     | 0.0     | 0.00- 1.00    | 0.00   |
| 0.000 | 11.201  | ( 0.000) | 199  | 49104    |         |         | 5.00- 9.00    | 6.58   |
| 0.000 | 11,201  | ( D.DOO) | 275  | 170816   |         |         | 10.00- 30.00  | 22.88  |
| 0.000 | 11,201  | ( D.DOD) | 365  | 20496    |         |         | 0.75- 0.00    | 2.74   |
| 0.000 | 11.201  | { 0.000} | 441  | 100984   |         |         | 0.01- 99.99   | 74.22  |
| 0.000 | 11,201  | ( 0.000) | 442  | 702528   |         |         | 40.00- 110.00 | 94.09  |
| 0.000 | 11.201  | ( 0.000) | 443  | 136064   |         |         | 15.00- 24.00  | 19.37  |
|       | <b></b> |          |      |          |         |         |               |        |

Date : 02-0CT-2010 12:06

Client ID:

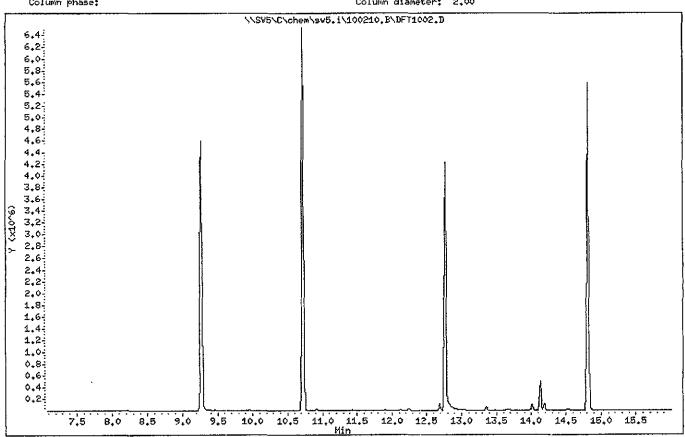
Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00



Page 2

Date : 02-00T-2010 12:06

Client ID:

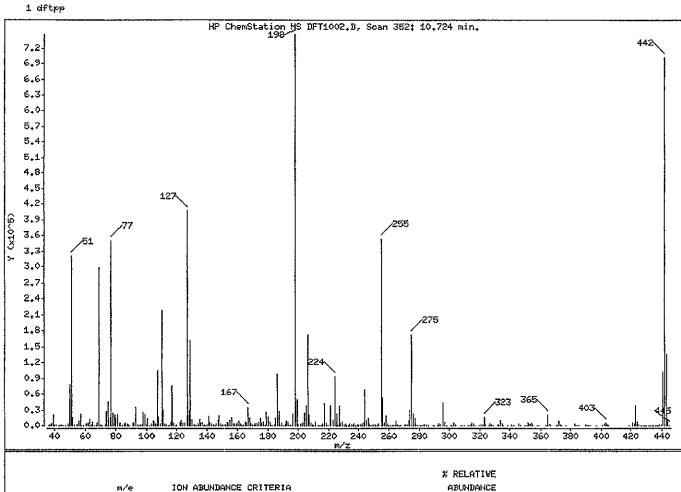
Instrument: sv5.i

Sample Info: DFTPP 50ug/al;

Operator: KT

Column phase:

Column diameter: 2.00



| m/e ION ABUNDANCE CRITERIA               | ABUNDANCE            |
|--|----------------------|
|  | l !                  |
| l 198   Base Peak, 100% relative abundan | ce l 100.00          |
| 1 51   30,00 - 80,00% of mass 198        | i 42,94              |
| 1 68   Less than 2.00% of mass 69        | 1 0,65 ( 1,62)       |
| 1 69   Mass 69 relative abundance        | I 39₊92              |
| ! 70   Less than 2,00% of mass 69        | 1 0,26 ( 0,64)       |
| 127   25,00 ~ 75,00% of mass 198         | l 54 <sub>+</sub> 44 |
| ! 197   Less than 1.00% of mass 198      | 1 0.00               |
| 199   5,00 9,00% of mass 198             | l 6,58               |
| 275   10.00 - 30.00% of mass 198         | l 22₊88              |
| 365   Greater than 0.75% of mass 198     | 1 2,74               |
| 441   Present, but less than mass 443    | 13 <sub>+</sub> 52   |
| 442   40.00 - 110.00% of mass 198        | 94,09                |
| 443   15.00 - 24.00% of mass 442         | 1 18,22 ( 19,37)     |

Date : 02-DCT-2010 12:06

Client ID:

Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

Data File: DFT1002.D Spectrum: HP ChemStation MS DFT10

Spectrum: HP ChemStation MS DFT1002.D, Scan 352: 10.724 min.

Location of Maximum: 198.00 Number of points: 340

|   | m/z   | ٧      |   | カノエ    | Y     | m/z      | Y      |   | m/z    | Υ       |
|---|-------|--------|---|--------|-------|----------|--------|---|--------|---------|
| l | 36.10 | 203    | 1 | 130,00 | 12809 | 1 219.20 | 447    | ı | 321.00 | 1763 I  |
| ! | 37,10 | 1216   | 1 | 131.00 | 2287  | 221.00   | 37608  | j | 322,10 | 913 I   |
| 1 | 38,10 | 3314   | 1 | 132,00 | 1225  | 223,10   | 9674   | ı | 323,10 | 16294   |
| F | 39,10 | 21392  | 1 | 133.00 | 620   | 224.10   | 93432  | ı | 324,10 | 2245 l  |
| 1 | 40,00 | 1076   | 1 | 134,00 | 3794  | 225,10   | 21544  | 1 | 324,80 | 382     |
| ļ | 41,10 | 949    | ŧ | 135,10 | 11378 | 226,10   | 1736   | 1 | 326,00 | 507 I   |
| 1 | 43,10 | 352    | 1 | 136,00 | 4886  | 227,00   | 37976  | 1 | 327,00 | 2789 I  |
| ŀ | 44,00 | 922    | 1 | 137,00 | 5203  | 228.00   | 4945   | l | 328,00 | 1262 I  |
| Į | 45,00 | 428    | 1 | 138.00 | 1265  | 229,00   | 7548   | Į | 329,10 | 343 1   |
| } | 47.00 | 204    | 1 | 139,00 | 791   | 230,00   | 1024   | ı | 331.90 | 894 I   |
| 1 | 49,10 | 2676   | 1 | 140.00 | 2233  | 231.10   | 2757   | 1 | 333,00 | 1455 I  |
| 1 | 50.10 | 77024  | 1 | 141,00 | 17480 | 232,00   | 528    | Į | 334,10 | 959¢ I  |
| 1 | 51.10 | 320640 | I | 142.00 | 7259  | 233.00   | 641    | ł | 335,00 | 2774    |
| 1 | 52,10 | 16189  | ı | 143.00 | 3921  | 234.00   | 2909   | ı | 336,00 | 291 I   |
| 1 | 53,10 | 963    | 1 | 144.00 | 1375  | 1 235,00 | 2419   | ١ | 339.00 | 369 1   |
| 1 | 55.00 | 1815   | , | 145,10 | 829   | 236,10   | 1608   | 1 | 340,00 | 399 1   |
| 1 | 56,00 | 8872   | ı | 146.00 | 3251  | 1 237.00 | 3192   | , | 341,00 | 2042 1  |
| ı | 57,00 | 22504  | 1 | 147.00 | 9463  | 1 238.00 | 581    | J | 342,10 | 852 (   |
| 1 | 58.00 | 755    | ı | 148,00 | 18744 | 239,00   | 1185   | ı | 343,20 | 220     |
| 1 | 59,10 | 372    | l | 149.00 | 4031  | 240,00   | 1065   | ı | 346.00 | 2819    |
| 1 | 61.00 | 3888   | 1 | 150,10 | 1094  | 1 241,00 | 1870   | ı | 346,90 | 608     |
| ŧ | 62.00 | 4800   | ł | 151,20 | 2277  | 1 242,00 | 3682   | í | 350,30 | 205 1   |
| 1 | 63,10 | 11199  | 1 | 152,10 | 1506  | 1 243,10 | 4924   | 1 | 351,00 | 283 (   |
| 1 | 64.10 | 1448   | 1 | 153,00 | 6113  | 244,10   | 66488  | ı | 352,00 | 5049 (  |
| 1 | 65,10 | 6509   | I | 154.00 | 5445  | 1 245.10 | 9865   | , | 353,10 | 3110 1  |
| 1 | 66.00 | 499    | Į | 155.00 | 10151 | 1 246.00 | 14573  | ļ | 354,00 | 5432 )  |
| 1 | 67,10 | 461    | ŧ | 156.10 | 14866 | 247,00   | 3022   | ı | 355.00 | 1087 I  |
| 1 | 68,00 | 4826   | ı | 157,10 | 3676  | 1 248,10 | 618    | ι | 358.00 | 241 I   |
| í | 69,00 | 298048 | I | 158,10 | 3734  | 249.00   | 2441   | ł | 359,00 | 574 1   |
| ! | 70.10 | 1913   | 1 | 159,00 | 2313  | I 250₊00 | 627    | 1 | 363.50 | 249 I   |
| 1 | 71.10 | 410    | 1 | 160.00 | 5246  | 1 250,90 | 1000   | 1 | 365,00 | 20496   |
| 1 | 73,10 | 2021   | f | 161,10 | 8666  | 1 252,00 | 756    | F | 366,00 | 3166 I  |
| i | 74.00 | 28000  | ı | 162.00 | 2863  | 1 253,10 | 2603   | ŧ | 367.00 | 225 1   |
| 1 | 75.00 | 45304  | ł | 163,10 | 562   | 255,00   | 353024 | ŀ | 370.10 | 477 1   |
| ŀ | 76,10 | 15795  | ı | 164,00 | 1067  | 1 256,00 | 51440  | ι | 370,90 | 1541, ( |
|   |       |        |   |        |       |          |        |   |        |         |

Date : 02-00T-2010 12:06

Client ID:

Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

Data File: DFT1002.D Spectrum: HP ChemStation MS DFT1002.D, Scan 352: 10,724 min. Location of Haximum: 198.00 Number of points: 340

|   | m/z    | Y       | m/z    | Y             | m/z    | Y             | m/z    |      |
|---|--------|---------|--------|---------------|--------|---------------|--------|------|
| 1 | 77,10  | 349952  | 165,00 | 6962          | 257.00 | 4474          | 372,10 | 848  |
| ì | 78,10  | 23464   | 166,00 | 5717          | 258,00 | 19504         | 373.10 | 181  |
| 1 | 79.00  | 20048 ( | 167.00 | <b>3</b> 3648 | 259,10 | 3695 (        | 373,80 | 34   |
| 1 | 80.00  | 14146   | 168,00 | 13682         | 260,00 | 645           | 377.10 | 26   |
| l | 81,00  | 22008   | 169.00 | 2802 !        | 261,10 | <b>7</b> 97 I | 383,00 | 262  |
| 1 | 82,00  | 5822    | 170.00 | 1014          | 262,20 | 249           | 383,90 | 59   |
| 1 | 83,00  | 5093 1  | 171.00 | 1339          | 263,00 | 269 (         | 385,00 | 28   |
| 1 | 84.00  | 814     | 172,00 | 3224          | 264,10 | 532 1         | 390,00 | 136  |
| ì | 85.00  | 3948 1  | 173.00 | 4109          | 265,00 | 7904          | 391.00 | 75   |
| 1 | 86,00  | 5985    | 174.00 | 7189          | 266.00 | <b>11</b> 81  | 392,10 | 66   |
| ı | 87,00  | 2652 (  | 175.10 | 13638         | 267,20 | 204 1         | 393.20 | 28   |
| ١ | 88.00  | 1,078   | 176.10 | 4293          | 267,60 | 232           | 397,00 | 23   |
| ١ | 89,00  | 472     | 177,00 | 6577          | 270,00 | 489           | 400,90 | 33   |
| 1 | 91,00  | 5074    | 178,10 | 1972          | 271.00 | 901 1         | 402,00 | 34€  |
| ļ | 92,00  | 5292    | 179.00 | 25912         | 272,10 | 1129          | 403,00 | 556  |
| 1 |        | 34848   | 180.00 | 16984         | 273.00 | 10963         | 404,10 | 177  |
| 1 | 94,00  | 2386    | 181.00 | 7182          | 274,00 | <b>30</b> 032 | 405,00 | 29   |
| 1 | 95.00  | 749     | 182.00 | 1363          | 275.00 | 170816        | 418,90 | 25   |
| E | 96.00  | 1660    | 183.00 | 559           | 276,10 | 22944         | 421.00 | 540  |
| 1 | 97,10  | 1007    | 184,10 | 2227          | 277,00 | 13493         | 422,00 | 418  |
| 1 | 98,00  | 25944   | 185,10 | 13301         | 278,10 | 2251          | 423.00 | 3759 |
| ı | 99,00  | 21688   | 186.00 | 97584         | 279.00 | 648           | 424.00 | 680  |
| ţ | 100.00 | 1844    | 187,10 | 27792         | 281,10 | 266           | 425,00 | 93   |
| ì | 101,00 | 13609   | 188,10 | 2556          | 282,00 | 217           | 426,50 | 25   |
| 1 | 102,10 | 646     | 189.00 | 5094          | 283.00 | 1957          | 427,30 | 33   |
| ï | 103.00 | 3748    | 189,90 | 756           | 284,00 | 1097          | 428,40 | 20   |
| ŧ | 104.00 | 8390    | 191.10 | 2995          | 285,10 | 2569          | 429,20 | 30   |
| 1 | 105,00 | 8359    | 192,00 | 7909          | 286,10 | 444           | 430,20 | 27   |
| ı | 106.10 | 3007    | 193.00 | 7605          | 289.00 | 691           | 431,10 | 40   |
| 1 | 107,00 | 104896  | 194,10 | <b>19</b> 98  | 290,10 | 589           | 431.50 | 32   |
| 1 | 108.00 | 17616   | 195.10 | 1331          | 292,10 | 763           | 432,20 | 29   |
| ı | 109.00 | 3545    | 196.00 | 22448         | 293.00 | 3141          | 432,50 | 32   |
| ı | 110,00 | 218112  | 198,00 | 746688        | 294,10 | 1275          | 433,30 | 31   |
| ì | 111.00 | 30736   | 199.00 | 49104         | 296,00 | 42616         | 433,70 | 34   |
| 1 | 112.00 | 4281    | 200,00 | 4038          | 297.00 | 6196          | 434.30 | 36   |

Date : 02-OCT-2010 12:06

Client ID:

Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

Data File: DFT1002.D

Spectrum: HP ChemStation MS DFT1002.D, Scan 352: 10.724 min.

Location of Maximum: 198.00 Number of points: 340

| _ | m/z               | Y      |     | m/z    | Y             |   | m/z    | Y    |   | かくて    | Υ      |              |
|---|-------------------|--------|-----|--------|---------------|---|--------|------|---|--------|--------|--------------|
| 1 | 113,00            |        |     | 201.60 |               | • | 298.00 |      |   | 434,90 | 650    |              |
| l | 114,40            | 467    | 1   | 203,00 | 4788          | ļ | 301.00 | 504  | 1 | 435,90 | 530    | ì            |
| 1 | 115.00            | 646    | 1   | 204.00 | 23416         | ŧ | 302.00 | 695  | 1 | 436,50 | 586    | ł            |
| I | 116.10            | 6327   | 1   | 205.00 | 38288         | į | 303,10 | 5810 | I | 436,90 | 846    | 1            |
| 1 | 117,00            | 75520  | 1   | 206,10 | 172352        | 1 | 304,00 | 2035 | I | 437,50 | 828    | 1            |
| + |                   |        | -+- |        |               | + |        |      | - |        |        | +            |
| 1 | 118,00            | 5507   | Į   | 207,10 | <b>21</b> 328 | I | 305,10 | 290  | 1 | 438,20 | 1136   | 1            |
| ı | 119,00            | 839    | 1   | 208,00 | 5487          | 1 | 308+00 | 764  | 1 | 439,30 | 1287   | I            |
| 1 | 120,10            | 1180   | ţ   | 209.00 | 2186          | ì | 309,10 | 446  | 1 | 441.00 | 100984 | ŀ            |
| Į | 121.00            | 807    | 1   | 210.00 | 2002          | ı | 310.00 | 839  | 1 | 442,00 | 702528 | 1            |
| 1 | 122,00            | 6408   | 1   | 211.10 | 7473          | ì | 312,20 | 271  | ı | 443,00 | 136064 | ļ            |
| + | ~~ <del>~~~</del> |        | +   |        | ••            | + |        |      | + |        |        | +            |
| 1 | 123.00            | 10302  | ı   | 213,00 | 410           | ļ | 312,90 | 292  | ι | 444,00 | 12344  | 1            |
| ı | 124,00            | 4600   | ļ   | 214,10 | 372           | ŀ | 314,00 | 2431 | ţ | 445,10 | 689    | Į            |
| ı | 125.00            | 4447   | 1   | 215,10 | 1837          | į | 315,00 | 5363 | Į |        |        | 1            |
| ı | 127,00            | 406528 | 1   | 216.00 | 3226          | į | 316.00 | 2900 | 1 |        |        | I            |
|   | 128,00            |        |     | 217,00 |               |   | 317,10 |      | - |        |        | ŧ            |
| - | 129,00            |        | -   | 218.00 | 5388          | - | 319,80 | 287  | - |        |        | +<br> <br> - |

AMOUNTS

Report Date: 03-Oct-2010 11:11

### TestAmerica West Sacramento

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002A.D Lab Smp Id: HSL\_005 ug/ml CS-1 Client Smp Client Smp ID: 8270F.M

Inst ID: sv5.i

Inj Date: 02-OCT-2010 12:27

Operator: KT

Smp Info: HSL 005 ug/ml CS-1;1;;1;;;4

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0307;0;8270F.M

Comment: SOP SAC-MS-0005

Method: \\sv5\c\chem.sv5.i\100210.B\8270f.m

Meth Date: 03-Oct-2010 11:09 onishim Quant Type: ISTD

Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 1 Calibration Sample, Level: 1

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14

Processing Host: SACP307UM

|   |  |            |        |         |   |          | 22.000  | 1.0         |
|---|--|------------|--------|---------|---|----------|---------|-------------|
|   |  | QUANT SIG  |        |         |   |          | CAL-AMT | ON-COL      |
| ( | Compounds                              | MASS       | RT     | EXP RT  | REL RT                                  | RESPONSE | (NG)    | ( NG)       |
|   | 2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2- | 11002      |        | ======= | ======================================= | ======== | EGESES: | <del></del> |
| , | * 1 1,4-Dichlorobenzene-de             | 152        | 3.955  | 3.955   | (1.000)                                 | 141539   | 40.0000 | (Q)         |
| , | * 2 Naphthalene-d8                     | 136        | 5.374  | 5.374   | (1.000)                                 | 605687   | 40.0000 |             |
| * | * 3 Acenaphthene-d10                   | 164        | 7.468  | 7.468   | (1.000)                                 | 321839   | 40,0000 |             |
| , | * 4 Phenanthrene-d10                   | 168        | 9.406  | 9.405   | (1.000)                                 | 496356   | 40.0000 |             |
| , | * 5 Chrysene-d12                       | 240        | 13.779 | 13.779  | (1.000)                                 | 453007   | 40.0000 |             |
| , | * 6 Perylene-d12                       | 264        | 16.162 | 16.162  | (1.000)                                 | 445119   | 40,0000 |             |
| 5 | \$ 7 2-Fluorophenol                    | 112        | 2.742  | 2.732   | (0.693)                                 | 25566    | 5.00000 | 5.124       |
| 5 | \$ 8 Phenol-d5                         | 99         | 3.613  | 3.613   | (0.914)                                 | 30471    | 5.00000 | 4.857       |
| 5 | \$ 9 2-Chlorophenol-d4                 | 132        | 3.758  | 3.758   | (0.950)                                 | 26144    | 5.00000 | 4.745       |
| : | \$ 10 1,2-Dichlorobenzene-de           | 152        | 4.162  | 4.162   | (1.052)                                 | 16945    | 5.00000 | 4.861       |
| : | \$ 11 Nitrobenzene-d5                  | 82         | 4.576  | 4.576   | (0.852)                                 | 25006    | 5.00000 | 4.874 (M)   |
| : | \$ 12 2~Fluorobiphenyl                 | 172        | 6.680  | 6.680   | (0.895)                                 | 51695    | 5.00000 | 4.986       |
| 5 | \$ 13 2,4,6-Tribromophenol             | 330        | 8.473  | 8.473   | (1.135)                                 | 6048     | 5.00000 | 4.325       |
| : | \$ 14 Terphenyl-d14 :                  | 244        | 12.017 | 12.017  | (0.872)                                 | 44456    | 5.00000 | 4.982       |
|   | 15 N-Nitrosodimethylamine              | 9 74       | 1.716  | 1.706   | (0.434)                                 | 16436    | 5.00000 | 5 040 (q)   |
|   | 16 Pyridine                            | 79         | 1.737  | 1.726   | (0.439)                                 | 29567    | 5.00000 | 5.422 (q)   |
|   | 23 Aniline                             | 93         | 3,654  | 3.654   | (0.924)                                 | 39064    | 5.00000 | 4.892(Q)    |
|   | 24 Phenol                              | 94         | 3.623  | 3.623   | (0.916)                                 | 36112    | 5.00000 | 5.009(Q)    |
|   | 26 Bis(2-chloroethyl)ethe              | er 93      | 3.716  | 3.716   | (0.940)                                 | 26067    | 5.00000 | 5.157       |
|   | 27 2-Chlorophenol                      | 128        | 3.768  | 3.768   | (0.953)                                 | 26910    | 5.00000 | 4.863       |
|   | 28 1,3-Dichlorobenzene                 | 146        | 3.923  | 3.923   | (0.992)                                 | 29883    | 5.00000 | 4.958       |
|   | 29 1,4-Dichlorobenzene                 | 146        | 3.975  | 3.975   | (1.005)                                 | 31337    | 5.00000 | 4.972       |
|   | 30 Benzyl Alcohol                      | 108        | 4.120  | 4.120   | (1.042)                                 | 17983    | 5.00000 | 4.835       |
|   | 31 1,2-Dichlorobenzene                 | 146        | 4.172  | 4.172   | (1.055)                                 | 28663    | 5.00000 | 4.947       |
|   | 32 2-Methylphenol                      | 108        | 4.255  | 4.255   | (1.076)                                 | 24914    | 5.00000 | 4.923       |
|   | 33 2,2'-oxybis(1-Chlorop:              | ropane) 45 | 4.297  | 4,297   | (1.086)                                 | 40622    | 5.00000 | 5.049       |
|   | 34 4-Methylphenol                      | 108        | 4.421  | 4.421   | (1.118)                                 | 26292    | 5.00000 | 4.891       |
|   | 36 Hexachloroethane                    | 117        | 4.504  | 4,504   | (1.139)                                 | 10779    | 5.00000 | 5.024       |
|   | 37 N-Nitrosodinpropylami               | ne 70      | 4,442  | 4.442   | (1.123)                                 | 16719    | 5.00000 | 4.670       |
|   | 42 Nitrobenzene                        | 77         | 4.597  | 4.597   | (0.855)                                 | 24875    | 5.00000 | 4.960       |
|   | 44 Isophorone                          | 82         | 4.856  | 4.856   | (0.904)                                 | 48024    | 5.00000 | 4.980       |
|   | 45 2-Nitrophenol                       | 139        | 4,960  | 4.960   | (0.923)                                 | 14088    | 5.00000 | 4.735       |
|   | 46 2,4-Dimethyphenol                   | 107        | 5.012  | 5.012   | (0.933)                                 | 26089    | 5.00000 | 4.935       |
|   |  |            |        |         |   |          |         |             |

10-7-10

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002A.D Report Date: 03-Oct-2010 11:11

|        |                            |           |            |        |            |          | AMOUNTS |       |       |            |
|--------|----------------------------|-----------|------------|--------|------------|----------|---------|-------|-------|------------|
|        |                            | QUANT SIG |            |        |            |          | CA      | L-AMT | O14-  | COL        |
| cogmoD | unds                       | Mass      | RT         | EXP RT | REL RT     | RESPONSE | (       | NG)   | (     | NG)        |
| =====  |                            | ====      | to est est | *****  | = BECDGET= |          | ==      | ====  | D11 M |            |
| 47     | Bis(2-chloroethoxy)methane | 93        | 5.126      | 5.126  | (0.954)    | 31152    | 5.      | 00000 | 5     | . 288      |
| 49     | 2,4-Dichlorophenol         | 162       | 5.229      | 5,229  | (0.973)    | 19256    | 5.      | 00000 | 4     | 708        |
| 50     | Benzoic Acid               | L22       | 5.084      | 5.115  | (0.946)    | 12679    | 5.00000 |       | 4     | .333       |
| 51     | 1,2,4-Trichlorobenzene     | L80       | 5,322      | 5,322  | (0.990)    | 22282    | 5.      | 00000 | 5     | .032       |
| 52     | Naphthalene                | 128       | 5.395      | 5.395  | (1.004)    | 83236    | 5.      | 00000 | 4     | .977       |
| 54     | 4-Chloroaniline            | 1.27      | 5.488      | 5.488  | (1.021)    | 30853    | 5.      | 00000 | 4     | .707       |
| 57     | Hexachlorobutadiene        | 225       | 5.613      | 5.613  | (1.044)    | 10823    | 5.      | 00000 | 4     | .994       |
| 60     | 4-Chloro-3-Methylphenol    | 107       | 6.069      | 6,069  | (1.129)    | 22205    | 5.      | 00000 | 4     | .862       |
| 63     | 2-Methylnaphthalene        | 142       | 6.203      | 6.203  | (1.154)    | 51849    | 5.      | 00000 | 4     | .936       |
| 66     | Hexachlorocyclopentadiene  | 237       | 6.483      | 6.483  | (0.868)    | 10813    | 5.      | 00000 | 4     | .503       |
| 59     | 2,4,6-Trichlorophenol      | 196       | 6.576      | 6.576  | (0.881)    | 12546    | 5.      | 00000 | 4     | .886       |
| 70     | 2,4,5-Trichlorphenol       | 196       | 6.628      | 6.628  | (888.0)    | 12400    | 5.      | 00000 | 4     | .483       |
| 71     | 2-Chloronaphthalene        | 162       | 6.784      | 6.784  | (0.908)    | 45713    | 5.      | 00000 | 5     | .047       |
| 73     | 2-Nitroaniline             | 65        | 6.949      | 6.949  | (0.931)    | 12703    | 5.      | 00000 | 4     | .627       |
| 76     | Dimethylphthalate          | 163       | 7,219      | 7.229  | (0.967)    | 49639    | 5.      | 00000 | 4     | .760       |
| 77     | Acenaphthylene             | 1.52      | 7.281      | 7.281  | (0.975)    | 75041    | 5.      | 00000 | 4     | .758       |
| 79     | 2,6-Dinitrotoluene         | 165       | 7,291      | 7.302  | (0.976)    | 11404    | 5.      | 00000 | 4     | .694 (QM)  |
| 80     | 3-Nitroaniline             | 138       | 7.447      | 7.447  | (0.997)    | 14226    | 5.      | 00000 | 4     | .691(Q)    |
| 81     | Acenaphthene               | 153       | 7.509      | 7.509  | (1.006)    | 50639    | 5.      | 00000 | 5     | .044       |
| 82     | 2,4-Dinitrophenol          | 184       | 7.571      | 7.572  | (1.014)    | 4083     | 5.      | 00000 | 6     | .945 (q)   |
| 83     | Dibenzofuran               | 168       | 7.696      | 7.706  | (1.031)    | 63477    | 5.      | 00000 | 4     | .764       |
| 84     | 4-Nitrophenol              | 109       | 7.675      | 7.675  | (1.028)    | 5114     | 5.      | 00000 | 4     | .065 (Q)   |
| 86     | 2,4-Dinitrotoluene         | 165       | 7.768      | 7.768  | (1.040)    | 13823    | 5.      | 00000 | 4     | . 335 (q)  |
| 91     | Fluorene                   | 166       | 8.131      | 8.131  | (1.089)    | 54136    | 5.      | 00000 | 4     | .906       |
| 92     | Diethylphthalate           | 149       | 8,100      | 8.100  | (1.085)    | 49177    | 5.      | 00000 | 4     | .606       |
| 93     | 4-Chlorophenyl-phenylether | 204       | 8,152      | 8.152  | (1.092)    | 22112    | 5.      | 00000 | 4     | .820       |
| 94     | 4-Nitroaniline             | 138       | 8.214      | 8.214  | (1.100)    | 13415    | 5.      | 00000 | 4     | .463       |
| 97     | 4,6-Dinitro-2-methylphenol | 198       | 8.276      | 8.276  | (0.880)    | 5780     | 5.      | 00000 | 7     | ', 325 (q) |
| 98     | N-Nitrosodiphenylamine     | 169       | 8.317      | 8.317  | (0.884)    | 41998    | 5.      | 86000 | 5     | .582       |
| 100    | Azobenzene                 | 77        | 8.348      | 8.348  | (0.888)    | 48101    | 5.      | 00000 | 4     | .928       |
| 101    | 4-Bromophenyl-phenylether  | 248       | 8.794      | 8.794  | (0.935)    | 11766    | 5.      | 00000 | 4     | .856       |
| 108    | Hexachlorobenzene          | 284       | 8.981      | 8.981  | (0.955)    | 14244    | 5.      | 00000 | 5     | .264       |
| 110    | Pentachlorophenol          | 266       | 9.240      | 9.240  | (0.982)    | 5849     | 5.      | 00000 | 7     | . 264      |
| 114    | Phenanthrene               | 178       | 9.437      | 9.437  | (1,003)    | 80873    | 5.      | 00000 | 5     | .169       |
| 115    | Anthracene                 | 178       | 9.499      | 9.499  | (1.010)    | 77577    | 5.      | 00000 | 4     | .963       |
| 118    | Carbazole                  | 167       | 9.768      | 9.768  | (1.039)    | 70241    | 5.      | 00000 | 4     | .920       |
| 120    | Di-n-Butylphtbalate        | 149       | 10.463     | 10.463 | (1.112)    | 79722    | 5.      | 00000 | 4     | .641       |
| 126    | Fluoranthene               | 202       | 11.302     | 11.302 | (1.202)    | 64427    | 5.      | 00000 | 4     | .596       |
| 127    | Benzidine                  | 184       | 11.571     |        | (0.840)    | 44267    |         | 00000 |       | .822       |
| 128    | Pyrene                     | 202       | 11.665     | 11.665 | (0.847)    | 71230    | 5.      | 00000 | 5     | .030       |
| 134    | 3,3'-dimethylbenzidine     | 212       | 12.867     | 12.867 | (0.934)    | 37074    | 5.      | 00000 | 4     | .574       |
| 136    | Butylbenzylphthalate       | 149       | 12.991     | 12,991 | (0.943)    | 36798    | 5.      | 00000 | 5     | .185       |
| 138    | Benzo (a) Anthracene       | 228       | 13.758     | 13.758 | (0.998)    | 62384    | 5.      | 00000 | 5     | .170       |
| 139    | Chrysene                   | 228       | 13.820     | 13.831 | (1.003)    | 59618    | 5.      | 00000 | 4     | .830       |
| 140    | 3,3'-Dichlorobenzidine     | 252       | 13.799     | 13.799 | (1.002)    | 22168    | 5.      | 00000 | 4     | .870       |
| 141    | bis(2-ethylhexyl)Phthalate | 149       | 14.110     |        | (1.024)    | 51997    | 5.      | 00000 | 5     | .319       |
| 142    | Di-n-octylphthalate        | 149       | 15.157     |        | (1.100)    | 76353    | 5.      | 00000 | 4     | .886       |
| 144    | Benzo(b) fluoranthene      | 252       | 15.572     | 15.582 |            | 45075    | 5.      | 00000 | 4     | . 473 (Q)  |
| 145    | Benzo(k) fluoranthene      | 252       | 15.613     | 15.623 | (0.966)    | 68403    | 5.      | 00000 | 5     | . 288 (q)  |
| 147    | Benzo(e)pyrene             | 252       | 15.996     | 16.007 | (0.990)    | 50295    | 5.      | 00000 | 4     | .786       |
| 148    | Benzo (a) pyrene           | 252       | 16.069     | 16.079 | (0.994)    | 54594    | 5.      | 00000 | 4     | .788       |
| 151    | Indeno(1,2,3-cd)pyrene     | 276       | 17.789     | 17.800 | (1.101)    | 41053    | 5       | 00000 | 4     | .443       |
| 152    | Dibenzo(a,h)anthracene     | 278       | 17.841     | 17.841 | (1.104)    | 49018    | 5.      | 00000 | 4     | .749       |
| 153    | Benzo(g,h,i)perylene       | 276       | 18.224     | 18.235 | (1.128)    | 53428    | 5.      | 00000 | 4     | .781       |
|        |                            |           |            |        |            |          |         |       |       |            |

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002A.D Report Date: 03-Oct-2010 11:11

|                                     |           |      |         |          |          | amounts |          |  |  |
|-------------------------------------|-----------|------|---------|----------|----------|---------|----------|--|--|
|                                     | QUANT SIG |      |         |          |          | CAL-AMT | ON-COL   |  |  |
| Compounds                           | Mass      | RT   | EXP RT  | REL RT   | RESPONSE | ( NG)   | ( NG)    |  |  |
|                                     | neen      | 2425 | ======= | RPESPPES | MARAGEE  | ======  | ****     |  |  |
| M 162 benzo b,k Fluoranthene Totals | 252       |      |         |          | 113478   | 5.00000 | 4.931(A) |  |  |

Page 3

## QC Flag Legend

- A Target compound detected but, quantitated amount exceeded maximum amount.
   Q Qualifier signal failed the ratio test.
   M Compound response manually integrated.
   q Qualifier signal exceeded ratio warning limit.

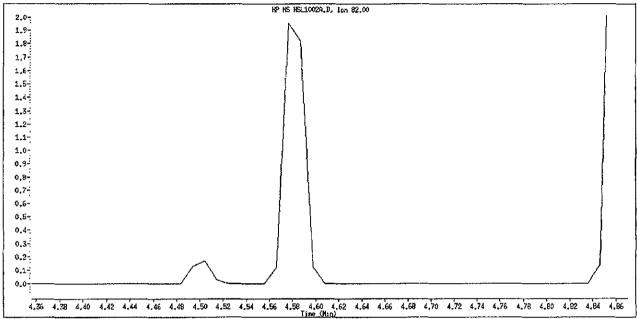
Data File Name: HSL1002A.D

Inj. Date and Time: 02-0CT-2010 12:27

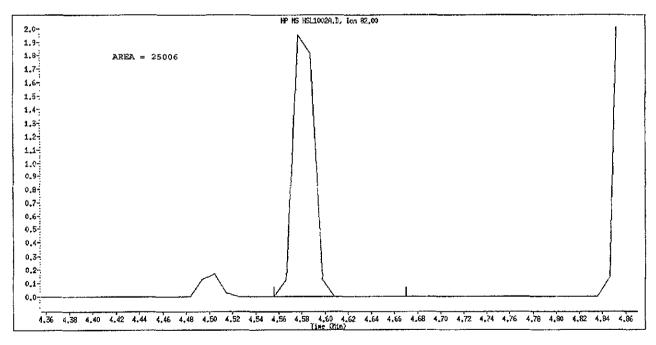
Instrument ID: sv5.i Client ID: 8270F.M

Compound Name: Nitrobenzene-d5

CAS #: 4165-60-0 Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk

Manual Integration Reason: Peak Not Found

Data File Name: HSL1002A.D

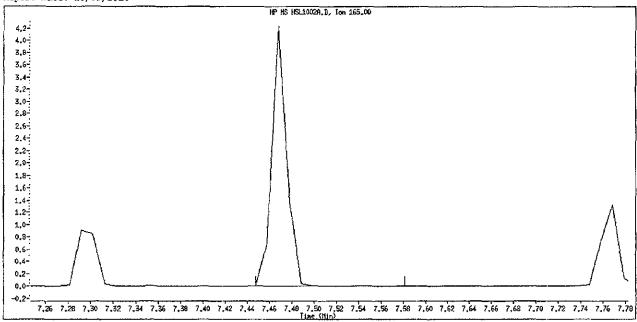
Inj. Date and Time: 02-00T-2010 12:27

Instrument ID: sv5.i Client ID: 8270F.M

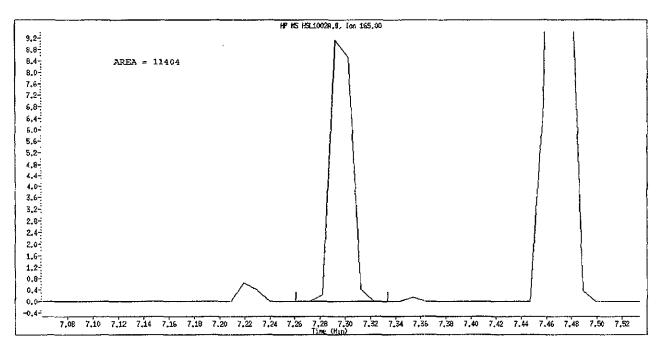
Compound Name: 2,6-Dinitrotoluene

CAS #: 606-20-2

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk
Manual Integration Reason: Wrong Peak

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002A.D Page 1

Report Date: 02-Oct-2010 16:57

#### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\100210.B\HSL1002A.D Lab Smp Id: HSL\_005 ug/ml CS-1 Client Smp Client Smp ID: 8270F.M

Inst ID: sv5.i

Quant Type: ISTD

Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 1 Calibration Sample, Level: 1

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

|    |      |   |           |         |           |           |          | AMOUNTS       |          |    |  |
|----|------|---|-----------|---------|-----------|-----------|----------|---------------|----------|----|--|
|    |      |   | QUANT SIG |         |           |           |          | CAL-AMT       | ON-COL   |    |  |
| Co | mpo  | ands  | MASS      | RT      | EXP RT    | REL RT    | RESPONSE | ( NG)         | ( NG)    |    |  |
|    | ==== | · 方面有限的 · · · · · · · · · · · · · · · · · · · | # DE 0:   | 2 K E E | •======   |           | F######  | 2500 <b>0</b> | F        |    |  |
| *  | 1    | 1,4~Dichlorobenzene-d4                        | 152       | 3.955   | 3.955     | (1.000)   | 141539   | 40.0000       | ()       | (( |  |
| *  | 2    | Naphthalene-d8                                | 236       | 5.374   | 5.374     | (1.000)   | 605687   | 40.0000       |          |    |  |
| *  | 3    | Acenaphthene-d10                              | 164       | 7.468   | 7.468     | (1.000)   | 321839   | 40.0000       |          |    |  |
| *  | 4    | Phenanthrene-d10                              | 188       | 9.406   | 9.405     | (1.000)   | 496356   | 40.0000       |          |    |  |
| *  | 5    | Chrysene-d12                                  | 240       | 13.779  | 13.779    | (1.000)   | 453007   | 40,0000       |          |    |  |
| *  | 6    | Perylene-d12                                  | 264       | 16,162  | 16.162    | (1.000)   | 445119   | 40.0000       |          |    |  |
| \$ | 7    | 2-Fluorophenol                                | 112       | 2.742   | 2,732     | (0.693)   | 25566    | 5.00000       | 4.894    |    |  |
| \$ | 8    | Phenol-d5                                     | 99        | 3,613   | 3.613     | (0.914)   | 30471    | 5.00000       | 4.587    |    |  |
| \$ | 9    | 2-Chlorophenol-d4                             | 132       | 3.758   | 3.758     | (0.950)   | 26144    | 5.00000       | 4.616    |    |  |
| \$ | 10   | 1,2-Dichlorobenzene-d4                        | 152       | 4.162   | 4,162     | (1.052)   | 16945    | 5.00000       | 4.793    |    |  |
| \$ | 1.1  | Nitrobenzene-d5                               | 82        | Cot     | npound No | t Detecte | ed.      |               |          |    |  |
| \$ | 12   | 2-Fluorobiphenyl                              | 172       | 6.680   | 6.680     | (0.895)   | 51695    | 5.00000       | 5.015    |    |  |
| \$ | 13   | 2,4,6-Tribromophenol                          | 330       | 8.473   | 8.473     | (1,135)   | 6048     | 5,00000       | 4.760    |    |  |
| \$ | 1.4  | Terphenyl-d14                                 | 244       | 12.017  | 12.017    | (0.872)   | 44456    | 5.00000       | 5.032    |    |  |
|    | 15   | N-Nitrosodimethylamine                        | 74        | 1.716   | 1.706     | (0.434)   | 16436    | 5.00000       | 4.767 (q |    |  |
|    | 16   | Pyridine                                      | 79        | 1.737   | 1.726     | (0.439)   | 29567    | 5.00000       | 5.146    |    |  |
|    | 23   | Aniline                                       | 93        | 3.654   | 3.654     | (0.924)   | 39064    | 5.00000       | 4.689(Ç  | 7) |  |
|    | 24   | Phenol  | 94        | 3.623   | 3.623     | (0.916)   | 36112    | 5.00000       | 5.111(0  | 2) |  |
|    | 26   | Bis(2-chloroethyl)ether                       | 93        | 3,716   | 3.716     | (0.940)   | 26067    | 5.00000       | 4.856    |    |  |
|    | 27   | 2-Chlorophenol                                | 128       | 3.768   | 3.768     | (0.953)   | 26910    | 5.00000       | 4.813    |    |  |
|    | 28   | 1,3-Dichlorobenzene                           | 146       | 3.923   | 3.923     | (0.992)   | 29883    | 5.00000       | 4.837    |    |  |
|    | 29   | 1,4-Dichlorobenzene                           | 146       | 3.975   | 3.975     | (1.005)   | 31337    | 5.00000       | 5.017    |    |  |
|    | 30   | Benzyl Alcohol                                | 108       | 4.120   | 4.120     | (1,042)   | 17983    | 5.00000       | 4.681    |    |  |
|    | 31   | 1,2-Dichlorobenzene                           | 146       | 4.172   | 4,172     | (1.055)   | 28663    | 5.00000       | 4.842    |    |  |
|    | 32   | 2-Methylphenol                                | 108       | 4.255   | 4.255     | (1.076)   | 24914    | 5.00000       | 4.770    |    |  |
|    | 33   | 2,2'-oxybis(1-Chloropropane)                  | 45        | 4.297   | 4.297     | (1.086)   | 40622    | 5.00000       | 4.077    |    |  |
|    | 34   | 4-Methylphenol                                | 106       | 4.421   | 4.421     | (1.118)   | 26292    | 5.00000       | 4.723    |    |  |
|    | 36   | Hexachloroethane                              | 117       | 4.504   | 4.504     | (1.139)   | 10779    | 5.00000       | 4.891    |    |  |
|    | 37   | N-Nitrosodinpropylamine                       | 70        | 4.442   | 4.442     | (1.123)   | 16719    | 5.00000       | 4.290    |    |  |
|    | 42   | Nitrobenzene                                  | 77        | 4.597   | 4.597     | (0.855)   | 24875    | 5.00000       | 4.659    |    |  |
|    | 44   | Isophorone                                    | 62        | 4.856   | 4.856     | (0.904)   | 48024    | 5.00000       | 4.744    |    |  |
|    | 45   | 2-Nitrophenol                                 | 139       | 4.960   | 4.960     | (0.923)   | 14088    | 5.00000       | 4.833    |    |  |
|    | 46   | 2,4-Dimethyphenol                             | 107       | 5.012   | 5.012     | (0.933)   | 26089    | 5.00000       | 4.820    |    |  |
|    |      |   |           |         |           |           |          |               |          |    |  |

# Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002A.D Report Date: 02-Oct-2010 16:57

|       |                            |           |        |         |             |                  | AMOUNTS |           |  |  |  |
|-------|----------------------------|-----------|--------|---------|-------------|------------------|---------|-----------|--|--|--|
|       |                            | QUANT SIG |        |         |             |                  | CAL-AMT | ON-COL    |  |  |  |
| Compo | nqa                        | MASS      | RT     | EXP RT  | REL RT      | RESPONSE         | ( NG)   | ( NG)     |  |  |  |
| B==== | ·<br>·                     | *****     |        | ======= | . =======   | <b>335355</b> 00 | FREERE  | KESEER    |  |  |  |
| 47    | Bis(2-chloroethoxy)methane | 93        | 5.126  | 5,126   | (0.954)     | 31152            | 5.00000 | 5.169     |  |  |  |
| 49    | 2,4-Dichlorophenol         | 162       | 5.229  | 5.229   | (0.973)     | 19256            | 5.00000 | 4.834     |  |  |  |
| 50    | Benzoic Acid               | 122       | 5.084  | 5,115   | (0.946)     | 12679            | 5.00000 | 4.202     |  |  |  |
| 51    | 1,2,4-Trichlorobenzene     | 180       | 5.322  | 5.322   | (0.990)     | 22282            | 5.00000 | 5.160     |  |  |  |
| 52    | Naphthalene                | 128       | 5.395  | 5.395   | (1.004)     | 83236            | 5.00000 | 4.937     |  |  |  |
| 54    | 4-Chloroaniline            | 127       | 5.488  | 5,488   | (1.021)     | 30853            | 5.00000 | 4.652     |  |  |  |
| 57    | Hexachlorobutadiene        | 225       | 5.613  | 5.613   | (1.044)     | 10823            | 5.00000 | 5.267     |  |  |  |
| 60    | 4-Chloro-3-Methylphenol    | 107       | 6.069  | 6.069   | (1.129)     | 22205            | 5.00000 | 4.844     |  |  |  |
| 63    | 2-Methylnaphthalene        | 142       | 6.203  | 6.203   | (1,154)     | 51849            | 5.00000 | 5.040     |  |  |  |
| 66    | Hexachlorocyclopentadiene  | 237       | 6.483  | 6.483   | (0.868)     | 10813            | 5.00000 | 4.405     |  |  |  |
| 69    | 2,4,6-Trichlorophenol      | 196       | 6.576  | 6.576   | (0.881)     | 12546            | 5.00000 | 5.149     |  |  |  |
| 70    | 2,4,5-Trichlorphenol       | 196       | 6.628  | 6.628   | (0.888)     | 12400            | 5.00000 | 4.633     |  |  |  |
| 71    | 2-Chloronaphthalene        | 162       | 6.784  | 6.784   | (0.908)     | 45713            | 5.00000 | 5.066     |  |  |  |
| 73    | 2-Nitroaniline             | 65        | 6.949  | 6.949   | (0.931)     | 12703            | 5.00000 | 4.204     |  |  |  |
| 76    | Dimethylphthalate          | 163       | 7.219  | 7.229   | (0.967)     | 49639            | 5.00000 | 4.763     |  |  |  |
| 77    | Acenaphthylene             | 152       | 7.281  | 7,281   | (0.975)     | 75041            | 5.00000 | 4.757     |  |  |  |
| 79    | 2,6-Dinitrotoluene         | 165       | 7.468  | 7.302   | (1.000)     | 39415            | 5.00000 | 16.89(Q)  |  |  |  |
| 80    | 3-Nitroaniline             | 138       | 7.447  | 7.447   | (0.997)     | 14226            | 5.00000 | 4.597 (Q) |  |  |  |
| 81    | Acenaphthene               | 153       | 7.509  | 7.509   | (1.006)     | 50639            | 5,00000 | 5.038     |  |  |  |
| 82    | 2,4-Dinitrophenol          | 184       | 7.571  | 7.571   | (1.014)     | 4083             | 5.00000 | 5.740 (q) |  |  |  |
| 63    | Dibenzofuran               | 168       | 7.696  | 7.706   | (1.031)     | 63477            | 5,00000 | 4.780     |  |  |  |
| 84    | 4-Nitrophenol              | 109       | 7.675  | 7.675   | (1,028)     | 5114             | 5.00000 | 3.785(Q)  |  |  |  |
| 86    | 2,4-Dinitrotoluene         | 165       | 7.768  | 7.768   | (1.040)     | 13823            | 5.00000 | 4.422(q)  |  |  |  |
| 91    | Fluorene                   | 166       | 8.131  | 8.131   | (1.089)     | 54136            | 5.00000 | 4.976     |  |  |  |
| 92    | Diethylphthalate           | 149       | 8.100  | 8.100   | (1.085)     | 49177            | 5.00000 | 4.514     |  |  |  |
| 93    | 4-Chlorophenyl-phenylether | 204       | 8.152  | 8,152   | (1.092)     | 22112            | 5.00000 | 4.930     |  |  |  |
| 94    | 4-Nitroaniline             | 138       | 8.214  | 8.214   | (1.100)     | 13415            | 5.00000 | 4.435     |  |  |  |
| 97    | 4,6-Dinitro-2-methylphenol | 198       | 8.276  | 8,276   | (0.880)     | 5780             | 5.00000 | 8.076 (g) |  |  |  |
| 98    | N-Nitrosodiphenylamine     | 169       | 8.317  | 8.317   | (0.884)     | 41998            | 5.86000 | 5.430     |  |  |  |
|       | Azobenzene                 | 77        | 8.348  | 8.348   | (0.888)     | 48101            | 5.00000 | 4.470     |  |  |  |
| 101   | 4-Bromophenyl-phenylether  | 248       | 8.794  | 8.794   | (0.935)     | 11766            | 5.00000 | 4.905     |  |  |  |
|       | Hexachlorobenzene          | 284       | 8.981  | 8.981   | (0.955)     | 14244            | 5.00000 | 5.498     |  |  |  |
| 110   | Pentachlorophenol          | 266       | 9.240  | 9.240   | (0.982)     | 5849             | 5.00000 | 3.762     |  |  |  |
|       | Phenanthrene               | 178       | 9.437  | 9.437   | (1.003)     | 80873            | 5.00000 | 5,224     |  |  |  |
| 115   | Anthracene                 | 178       | 9.499  |         | (1.010)     | 77577            | 5.00000 | 4.979     |  |  |  |
| 118   | Carbazole                  | 167       | 9.768  | 9.768   | (1.039)     | 70241            | 5.00000 | 4.847     |  |  |  |
| 120   | Di-n-Butylphthalate        | 149       | 10.463 | 10,463  | (1,112)     | 79722            | 5,00000 | 4.549     |  |  |  |
| 126   | Fluoranthene               | 202       | 11.302 | 11.302  | (1.202)     | 64427            | 5.00000 | 4.624     |  |  |  |
| 127   | Benzidine                  | 184       | 11.571 | 11.571  | (0.840)     | 44267            | 5.00000 | 4.759     |  |  |  |
|       | Pyrene                     | 202       | 11.665 |         | (0.847)     | 71230            | 5.00000 | 5,029     |  |  |  |
|       | 3,3'-dimethylbenzidine     | 212       | 12.867 | 12.867  | (0.934)     | 37074            | 5.00000 | 4.644     |  |  |  |
|       | Butylbenzylphthalate       | 149       | 12,991 | 12.991  | (0.943)     | 36798            | 5.00000 | 5.084     |  |  |  |
|       | Benzo (a) Anthracene       | 228       | 13.758 |         | (0.998)     | 62384            | 5.00000 | 5.220     |  |  |  |
|       | Chrysene                   | 228       | 13.820 |         | (1.003)     | 59618            | 5.00000 | 4.801     |  |  |  |
|       | 3,3'-Dichlorobenzidine     | 252       | 13.799 |         | (1.002)     | 22168            | 5.00000 | 5.069     |  |  |  |
|       | bis(2-ethylhexyl)Phthalate | 149       | 14.110 |         | (1.024)     | 51997            | 5.00000 | 5.218     |  |  |  |
|       | Di-n-octylphthalate        | 149       | 15.157 |         | (1.100)     | 76353            | 5.00000 | 4.792     |  |  |  |
|       | Benzo (b) fluoranthene     | 252       | 15.572 |         | (0.963)     | 45075            | 5.00000 | 4.270(Q)  |  |  |  |
|       | Benzo(k) fluoranthene      | 252       | 15.613 |         | (0.966)     | 68403            | 5.00000 | 5.546 (q) |  |  |  |
|       | Benzo(e)pyrene             | 252       | 15.996 |         | (0.990)     | 50295            | 5.00000 | 4.807     |  |  |  |
|       | Benzo (a) pyrene           | 252       | 16.069 |         | (0.994)     | 54694            | 5.00000 | 4.761     |  |  |  |
|       | Indeno(1,2,3-cd)pyrene     | 276       | 17.789 |         | (1.101)     | 41053            | 5.00000 | 4.039     |  |  |  |
|       | Dibenzo (a, h) anthracene  | 278       |        | 17.841  |             | 49018            | 5.00000 | 4.706     |  |  |  |
|       | Benzo(g,h,i)perylene       | 276       | 18.224 |         | (1.128)     | 53428            | 5.00000 | 4.784     |  |  |  |
| 153   | Delizo (8,11,1) per y tene | 2,0       | 10.224 | ******  | , 2 , 220 / | JJ720            | 5.0000  | 1.704     |  |  |  |

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002A.D

Report Date: 02-Oct-2010 16:57

AMOUNTS 
 QUANT SIG
 CAL-AMT
 CN-COL

 Compounds
 MASS
 RT
 EXP RT
 REL RT
 RESPONSE
 ( NG)
 ( NG)

 M 162 benzo b, k Fluoranthene Totals
 252
 113478
 5.0000
 4.958
 113478 5.00000 4.958(A)

### QC Flag Legend

- A Target compound detected but, quantitated amount exceeded maximum amount.

  Q - Qualifier signal failed the ratio test.

  q - Qualifier signal exceeded ratio warning limit.

Page 3

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002A.D

Report Date: 03-Oct-2010 11:11

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Calibration Date: 02-OCT-2010

Page 1

Lab File ID: HSL1002A.D Lab Smp Id: HSL\_005 ug/ml CS-1 Calibration Time: 13:44

Client Smp ID: 8270F.M

Analysis Type: SV

Level: Sample Type:

Quant Type: ISTD

Operator: KT

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0307;0;8270F.M

Test Mode:

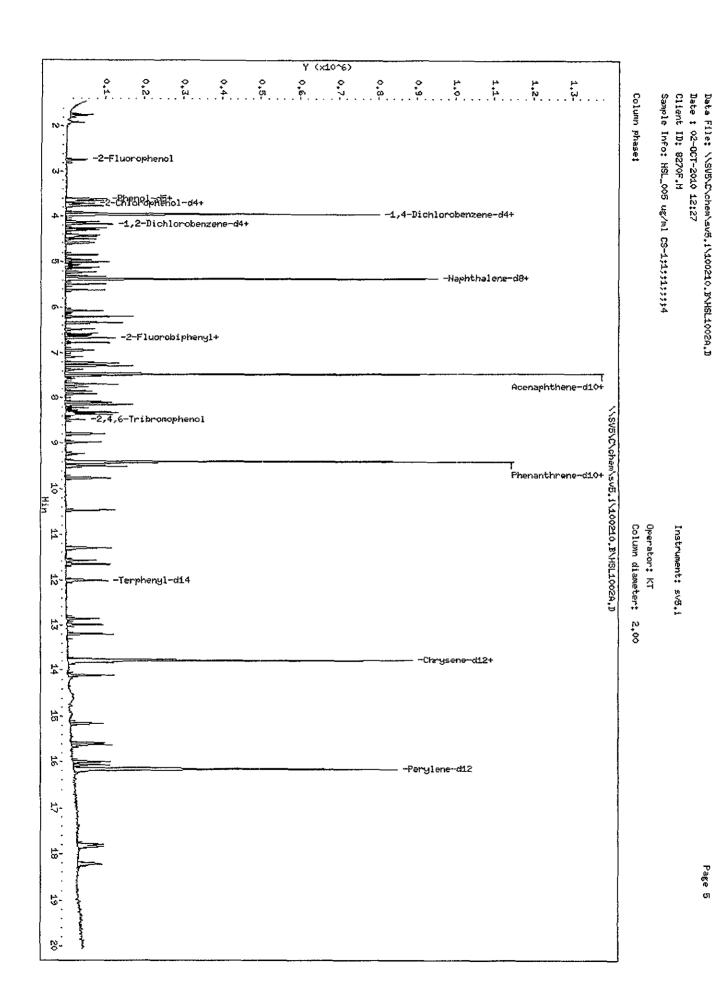
Use Initial Calibration Level 4.

|                     |          | AREA     | LIMIT    |        |        |
|---------------------|----------|----------|----------|--------|--------|
| COMPOUND            | STANDARD | LOWER    | UPPER    | SAMPLE | %DIFF  |
|                     | ======== | ======== | ======== |        | ====== |
| 1 1,4-Dichlorobenze | 122625   | 61313    | 245250   | 141539 | 15.42  |
| 2 Naphthalene-d8    | 530514   | 265257   | 1061028  | 605687 | 14.17  |
| 3 Acenaphthene-d10  | 282538   | 141269   | 565076   | 321839 | 13.91  |
| 4 Phenanthrene-d10  | 462722   | 231361   | 925444   | 496356 | 7.27   |
| 5 Chrysene-d12      | 435850   | 217925   | 871700   | 453007 | 3.94   |
| 6 Perylene-d12      | 422284   | 211142   | 844568   | 445119 | 5.41   |
|                     |          |          |          |        |        |

|   |          | RT I              | IMIT  |        |        |
|---|----------|-------------------|-------|--------|--------|
| COMPOUND                                | STANDARD | NDARD LOWER UPPER |       | SAMPLE | %DIFF  |
| ======================================= |          | =========         |       |        | ====== |
| 1 1,4-Dichlorobenze                     | 3.96     | 3.46              | 4.46  | 3.96   | 0.00   |
| 2 Naphthalene-d8                        | 5.37     | 4.87              | 5.87  | 5.37   | 0.00   |
| 3 Acenaphthene-d10                      | 7.47     | 6.97              | 7.97  | 7.47   | 0.00   |
| 4 Phenanthrene-d10                      | 9.41     | 8.91              | 9.91  | 9.41   | 0.00   |
| 5 Chrysene-d12                          | 13.78    | 13.28             | 14.28 | 13.78  | 0.00   |
| 6 Perylene-d12                          | 16.16    | 15.66             | 16.66 | 16.16  | 0.00   |
|   |          |                   |       |        |        |

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = -50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002B.D Page 1

Report Date: 03-Oct-2010 11:12

#### TestAmerica West Sacramento

Method 8270C

Client Smp ID: 8270F.M

Inst ID: sv5.i

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002B.D
Lab Smp Id: HSL 010 ug/ml CS-2 Client Smp
Inj Date: 02-\overline{\text{OCT}}-2010 12:53

Operator: KT Inst ID: sv
Smp Info: HSL 010 ug/ml CS-2;1;;2;;;4

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0308;0;8270F.M
Comment: SOP SAC-MS-0005

Method: \\sv5\c\chem\sv5.i\100210.B\8270f.m

Meth Date: 03-Oct-2010 11:09 onishim Quant Type:
Cal Date: 17-AUG-2010 21:19 Cal File: A Quant Type: ISTD Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 2 Calibration Sample, Level: 2

Dil Factor: 1.00000 Integrator: Falcon Compound Sublist: 1\_8270STD.SUB

PTMOMA

Target Version: 4.14

Processing Host: SACP307UM

|      |       |                              |           |        |         |           |          |     | AMOUN | ITS   |           |
|------|-------|------------------------------|-----------|--------|---------|-----------|----------|-----|-------|-------|-----------|
|      |       |                              | QUANT SIG |        |         |           |          | CAL | -AMT  | ON-   | -COL      |
| Co   | odin. | unds                         | Mass      | RT     | EXP RT  | REL RT    | RESPONSE | (   | NG)   | (     | NG)       |
| ==   | 444   | *************                | -====     | ***    | z====== | . ec===== | mm=====  | *== | ====  | 24 Se |           |
| *    | 1     | 1,4-Dichlorobenzene-d4       | 152       | 3.955  | 3.955   | (1.000)   | 116839   | 40. | 0000  |       | (Q)       |
| *    | 2     | Naphthalene-d8               | 136       | 5.364  | 5.374   | (1.000)   | 493196   | 40. | 0000  |       |           |
| *    | 3     | Acenaphthene-d10             | 164       | 7,468  | 7.468   | (1.000)   | 272639   | 40. | 0000  |       |           |
| *    | 4     | Phenanthrene-d10             | 188       | 9,406  | 9.405   | (1.000)   | 428440   | 40. | 0000  |       |           |
| *    | 5     | Chrysene-d12                 | 240       | 13.779 | 13.779  | (1.000)   | 412260   | 40. | 0000  |       |           |
| *    | 6     | Perylene-d12                 | 264       | 16.162 | 16.162  | (1.000)   | 419005   | 40. | 0000  |       |           |
| \$   | 7     | 2-Fluorophenol               | 112       | 2.732  | 2.732   | (0.691)   | 38100    | 10. | 0000  | 9     | 3.251     |
| \$   | 8     | Pheno1-d5                    | 99        | 3.613  | 3.613   | (0.914)   | 48878    | 10, | 0000  | 9     | .438      |
| \$   | 9     | 2-Chlorophenol-d4            | 132       | 3.747  | 3.758   | (0.948)   | 45430    | 10. | 0000  | 9     | 989       |
| \$   | 10    | 1,2-Dichlorobenzene-d4       | 152       | 4.151  | 4.162   | (1,050)   | 28658    | 10. | 0000  | 9     | 9.959     |
| \$   | 11    | Nitrobenzene-d5              | 82        | 4,576  | 4.576   | (0.853)   | 42237    | 10. | 0000  | ג     | 10.11(QM) |
| . \$ | 12    | 2-Fluorobiphenyl             | 172       | 6.680  | 6.680   | (0.895)   | 85886    | 10. | 0000  | 9     | 779       |
| \$   | 13    | 2,4,6-Tribromophenol         | 330       | 8.473  | 8.473   | (1.135)   | 11265    | 10. | 0000  | 9     | 9.508     |
| \$   | 14    | Terphenyl-d14                | 244       | 12.017 | 12.017  | (0.872)   | 81026    | 10. | 0000  | 9     | 9.978     |
|      | 1.5   | N-Nitrosodimethylamine       | 74        | 1.706  | 1.706   | (0.431)   | 25783    | 10. | 0000  | 9     | 9.578 (q) |
|      | 16    | Pyridine                     | 79        | 1,737  | 1.726   | (0.439)   | 40141    | 10. | 0000  | 8     | 3.917(Q)  |
|      | 23    | Aniline                      | 93        | 3.654  | 3.654   | (0.924)   | 63074    | 10. | 0000  | 9     | 9.568 (q) |
|      | 24    | Phenol                       | 94        | 3.623  | 3.623   | (0.916)   | 57313    | 10. | 0000  | 9     | 9.631(Q)  |
|      | 26    | Bis(2-chloroethyl)ether      | 93        | 3.716  | 3.716   | (0.940)   | 40383    | 10. | 0000  | 9     | 9.677     |
|      | 27    | 2-Chlorophenol               | 128       | 3.768  | 3.768   | (0.953)   | 45449    | 10. | 0000  | 9     | 9.950     |
|      | 28    | 1,3-Dichlorobenzene          | 146       | 3.913  | 3.923   | (0.990)   | 49415    | 10. | .0000 | 9     | 9.932     |
|      | 29    | 1,4-Dichlorobenzene          | 146       | 3.975  | 3.975   | (1.005)   | 52537    | 10. | 0000  | 1     | 10.10     |
|      | 30    | Benzyl Alcohol               | 108       | 4.120  | 4.120   | (1.042)   | 30277    | 10. | 0000  | 9     | 9.862     |
|      | 31    | 1,2-Dichlorobenzene          | 146       | 4.172  | 4.172   | (1.055)   | 47666    | 10. | .0000 | 2     | 9.966     |
|      | 32    | 2-Methylphenol               | 108       | 4.255  | 4.255   | (1.076)   | 40581    | 10. | 0000  | 9     | 9.714     |
|      | 33    | 2,2'-oxybis(l-Chloropropane) | 45        | 4.297  | 4.297   | (1.086)   | 64859    | 10. | 0000  | 9     | 9.768     |
|      | 34    | 4-Methylphenol               | 108       | 4.421  | 4.421   | (1.118)   | 43497    | 10. | 0000  | 9     | 9,803     |
|      | 36    | Hexachloroethane             | 117       | 4.504  | 4.504   | (1.139)   | 17770    | 10  | 0000  | 3     | 10.03     |
|      | 37    | N-Nitrosodinpropylamine      | 70        | 4.442  | 4.442   | (1.123)   | 28335    | 10. | .0000 | 5     | 9.587     |
|      | 42    | Nitrobenzene                 | 77        | 4.597  | 4.597   | (0.857)   | 40198    | 10  | 0000  | 9     | 9.845     |
|      | 44    | Isophorone                   | 82        | 4.856  | 4.856   | (0.905)   | 76804    | 10. | 0000  | 9     | 9.782     |
|      | 45    | 2-Nitrophenol                | 139       | 4.960  | 4.960   | (0.925)   | 23221    | 10. | .0000 | 9     | 9.585     |
|      | 46    | 2,4-Dimethyphenol            | 107       | 5.012  | 5.012   | (0.934)   | 42128    | 10. | .0000 | 5     | 9.787     |
|      |       |                              |           |        |         |           |          |     |       |       |           |

1

|       |                              |           |        |        |         |          | AMOUNTS |            |  |  |  |
|-------|------------------------------|-----------|--------|--------|---------|----------|---------|------------|--|--|--|
|       |                              | QUANT SIG |        |        |         |          | CAL~AMT | ON-COL     |  |  |  |
| Compo | unds                         | Mass      | RT     | EXP RT | REL RT  | RESPONSE | (NG)    | ( NG)      |  |  |  |
|       |                              | ::===     |        |        |         |          | 22222   | ********   |  |  |  |
|       | Bis (2-chloroethoxy) methane | 93        | 5.126  |        | (0.956) | 46230    | 10.0000 | 9.636      |  |  |  |
|       | 2,4-Dichlorophenol           | 162       | 5,229  |        | (0.975) | 32450    | 10.0000 | 9.744      |  |  |  |
|       | Benzoic Acid                 | 122       | 5.084  |        | (0.948) | 20056    | 10.0000 | 8.418      |  |  |  |
|       | 1,2,4-Trichlorobenzene       | 180       | 5.323  |        | (0.992) | 35544    | 10.0000 | 9.857      |  |  |  |
|       | Naphthalene                  | 128       | 5.395  |        | (1.006) | 138665   | 10.0000 | 10.18      |  |  |  |
|       | 4-Chloroaniline              | 127       | 5.488  |        | (1.023) | 52444    | 10,0000 | 9.826      |  |  |  |
| _     | Hexachlorobutadiene          | 225       | 5.613  |        | (1.046) | 17030    | 10.0000 | 9.650      |  |  |  |
| 60    | 4-Chloro-3-Methylphenol      | 107       | 6.069  |        | (1.131) | 35592    | 10.0000 | 9 570      |  |  |  |
| 63    |                              | 142       | 6.203  |        | (1.156) | 83922    | 10.0000 | 9.811      |  |  |  |
|       | Hexachlorocyclopentadiene    | 237       | 6.483  |        | (0.868) | 18919    | 10.0000 | 9,300      |  |  |  |
|       | 2,4,6-Trichlorophenol        | 196       | 6.576  |        | (0.881) | 20325    | 10.0000 | 9.344      |  |  |  |
|       | 2,4,5-Trichlorphenol         | 196       | 6.618  |        | (0.886) | 22419    | 10.0000 | 9.567      |  |  |  |
|       | 2-Chloronaphthalene          | 162       | 6.773  |        | (0.907) | 74574    | 18.0000 | 9.719      |  |  |  |
| 73    | 2-Nitroaniline               | 65        | 6.950  | 6.949  | (0.931) | 21647    | 10.0000 | 9.308      |  |  |  |
| 76    | Dimethylphthalate            | 163       | 7.219  |        | (0.967) | 85330    | 10.0000 | 9.659      |  |  |  |
| 77    | Acenaphthylene               | 152       | 7.281  | 7.281  | (0.975) | 130392   | 10.0000 | 9.758      |  |  |  |
| 79    | 2,6-Dinitrotoluene           | 165       | 7.291  | 7.302  | (0.976) | 18661    | 10.0000 | 9.067 (QM) |  |  |  |
| 80    | 3-Nitroaniline               | 138       | 7.447  | 7.447  | (0.997) | 23598    | 10.0000 | 9.186 (q)  |  |  |  |
| 81    | Acenaphthene                 | 153       | 7.509  | 7.509  | (1.006) | 83474    | 10.0000 | 9.814      |  |  |  |
| 82    | 2,4-Dimitrophenol            | 184       | 7.571  | 7.572  | (1.014) | 7537     | 10.0000 | 10.11 (q)  |  |  |  |
| 83    | Dibenzofuran                 | 168       | 7.696  | 7.706  | (1.031) | 110503   | 10.0000 | 9.789      |  |  |  |
| 84    | 4-Nitrophenol                | 109       | 7.675  | 7.675  | (1.028) | 9643     | 10.0000 | 9.049 (Q)  |  |  |  |
| 86    | 2,4-Dinitrotoluene           | 165       | 7.768  | 7.768  | (1.040) | 24530    | 10.0000 | 9.080      |  |  |  |
| 91    | Fluorene                     | 166       | 8.131  | 8.131  | (1.089) | 91.225   | 10.0000 | 9.759      |  |  |  |
| 92    | Diethylphthalate             | 149       | 8.100  | 8.100  | (1.085) | 88532    | 10.0000 | 9.788      |  |  |  |
| 93    | 4-Chlorophenyl-phenylether   | 204       | 8.152  | 8.152  | (1.092) | 38113    | 10.0000 | 9.807      |  |  |  |
| 94    | 4-Nitroaniline               | 138       | 8.214  | 8.214  | (1,100) | 23002    | 10.0000 | 9.033      |  |  |  |
| 97    | 4,6-Dinitro-2-methylphenol   | 198       | 8.276  | 8.276  | (0.880) | 11282    | 10.0000 | 11.10      |  |  |  |
| 98    | N-Nitrosodiphenylamine       | 169       | 8.317  | 8.317  | (0.884) | 74860    | 11.7000 | 11.53      |  |  |  |
| 100   | Azobenzene                   | 77        | 8.349  | 8.348  | (0.888) | 82437    | 10.0000 | 9.784      |  |  |  |
| 101   | 4-Bromophenyl-phenylether    | 248       | 8.794  | 8.794  | (0.935) | 19823    | 10.0000 | 9.478      |  |  |  |
| 108   | Hexachlorobenzene            | 284       | 8.981  | 8.981  | (0.955) | 23622    | 10.0000 | 10.11      |  |  |  |
| 110   | Pentachlorophenol            | 266       | 9.240  | 9.240  | (0.982) | 10551    | 10.0000 | 10.90      |  |  |  |
| 114   | Phenanthrene                 | 178       | 9.437  | 9.437  | (1.003) | 134966   | 10.0000 | 9.995      |  |  |  |
| 115   | Anthracene                   | 178       | 9.499  | 9.499  | (1.010) | 130416   | 10.0000 | 9.667      |  |  |  |
| 118   | Carbazole                    | 167       | 9.768  | 9.768  | (1.039) | 120549   | 10.0000 | 9.782      |  |  |  |
| 120   | Di-n-Butylphthalate          | 149       | 10.463 | 10.463 | (1.112) | 141693   | 10.0000 | 9.555      |  |  |  |
| 126   | Fluoranthene                 | 202       | 11.302 | 11.302 | (1.202) | 115262   | 10.0000 | 9.526      |  |  |  |
| 127   | Benzidine                    | 184       | 11.571 | 11.571 | (0.840) | 78774    | 10.9000 | 9.428      |  |  |  |
|       | Pyrene                       | 202       | 11.654 | 11.665 | (0.846) | 127577   | 10.0000 | 9.901      |  |  |  |
| 134   | 3,3'-dimethylbenzidine       | 212       | 12.867 | 12.867 | (0.934) | 66361    | 10.0000 | 8.997      |  |  |  |
| 136   | Butylbenzylphthalate         | 149       | 12.991 | 12.991 | (0.943) | 62032    | 10.0000 | 9.605      |  |  |  |
| 138   | Benzo (a) Anthracene         | 228       | 13.748 | 13.758 | (0.998) | 102788   | 10.9000 | 9.360      |  |  |  |
| 139   | Chrysene                     | 228       | 13.820 | 13.831 | (1.003) | 113552   | 10.0000 | 10.11      |  |  |  |
|       | 3,3'-Dichlorobenzidine       | 252       |        | 13.799 |         | 38850    | 10.0000 | 9.379      |  |  |  |
|       | bis(2-ethylhexyl)Phthalate   | 149       |        | 14.110 | (1.024) | 83377    | 10.0000 | 9.372      |  |  |  |
|       | Di-n-octylphthalate          | 149       |        | 15.167 |         | 126961   | 10.0000 | 8.928      |  |  |  |
|       | Benzo(b) fluoranthene        | 252       |        | 15.582 |         | 84929    | 10.0000 | 8.954(Q)   |  |  |  |
|       | Benzo(k) fluoranthene        | 252       |        | 15.623 |         | 122065   | 10.0000 | 10.02(q)   |  |  |  |
|       | Benzo (e) pyrene             | 252       |        | 16.007 |         | 97140    | 10.0000 | 9.821      |  |  |  |
|       | Benzo (a) pyrene             | 252       |        | 16.079 |         | 102327   | 10.0000 | 9.516      |  |  |  |
|       | Indeno(1,2,3-cd)pyrene       | 276       |        | 17.800 |         | 76748    | 10.0000 | 8.824      |  |  |  |
|       |                              |           |        |        |         | 88393    | 10.0000 | 9.097      |  |  |  |
|       | Dibenzo(a, h) anthracene     | 278       |        | 17.841 |         |          |         |            |  |  |  |
| 153   | Benzo(g,h,i)perylene         | 276       | 16.224 | 18.235 | (1.128) | 103135   | 10.0000 | 9.804      |  |  |  |

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002B.D Report Date: 03-Oct-2010 11:12

|                                     |           |      |        |        |          | amounts |              |        |           |   |  |
|-------------------------------------|-----------|------|--------|--------|----------|---------|--------------|--------|-----------|---|--|
|                                     | QUANT SIG |      |        |        |          | CAL     | ~AMT         | ON-COL |           |   |  |
| Compounds                           | MASS      | RT   | EXP RT | RBL RT | response | (       | NG)          | (      | NG)       |   |  |
| **************                      | 14 M M W  | **** |        |        |          | ===     | <b>==</b> =± |        |           |   |  |
| M 162 benzo b,k Fluoranthene Totals | 252       |      |        |        | 206994   | 10.     | 0000         | 9      | . 556 (A) | ) |  |

## QC Flag Legend

- A Target compound detected but, quantitated amount exceeded maximum amount.
   Q Qualifier signal failed the ratio test.
   M Compound response manually integrated.
   q Qualifier signal exceeded ratio warning limit.

Page 3

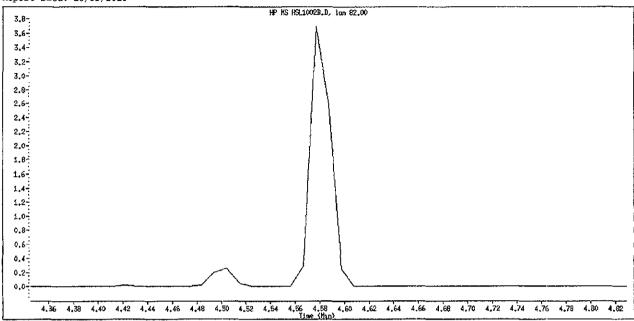
Data File Name: HSL1002B.D

Inj. Date and Time: 02-0CT-2010 12:53

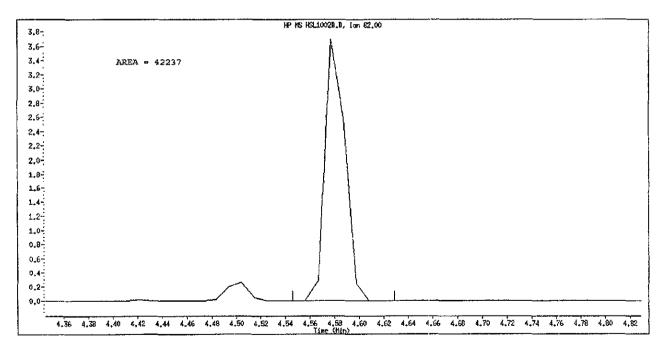
Instrument ID: sv5.i Client ID: 8270F.M

Compound Name: Nitrobenzene-d5

CAS #: 4165-60-0 Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk
Manual Integration Reason: Peak Not Found

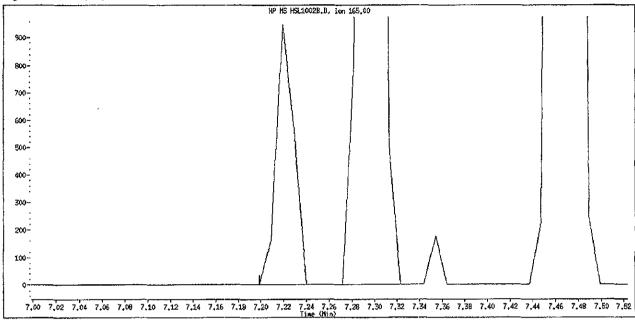
Data File Name: HSL1002B.D

Inj. Date and Time: 02-OCT-2010 12:53

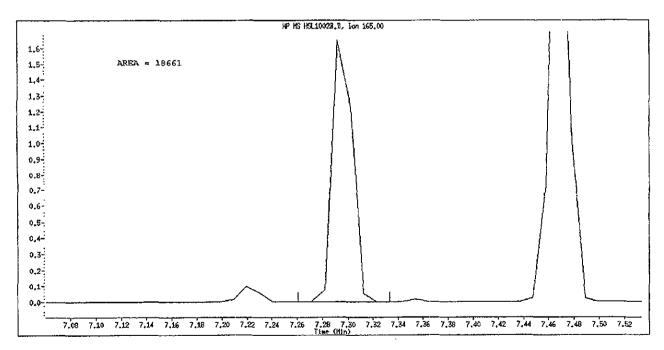
Instrument ID: sv5.i Client ID: 8270F.M

Compound Name: 2,6-Dinitrotoluene

CAS #: 606-20-2 Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk

Manual Integration Reason: Poor Chromatography

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002B.D

Report Date: 02-Oct-2010 16:57

#### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\100210.B\HSL1002B.D
Lab Smp Id: HSL\_010 ug/ml CS-2 Client Smp
Inj Date: 02-OCT-2010 12:53
Operator: KT Inst ID: s
Smp Info: HSL\_010 ug/ml CS-2;1;;2;;;4 Client Smp ID: 8270F.M

Inst ID: sv5.i

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0308;0;8270F.M

Comment : SOP SAC-MS-0005
Method : \\SV5\C\chem\sv5.i\100210.B\8270f.m Method

Meth Date: 02-Oct-2010 16:57 onishim Quant Type: ISTD

Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 2 Calibration Sample, Level: 2

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

|    |       |                              |           |                 |           |           |           | NUOMA   | TS   |
|----|-------|------------------------------|-----------|-----------------|-----------|-----------|-----------|---------|--|
|    |       |                              | QUANT SIG |                 |           |           |           | CAL-AMT | ON-COL   |
| Cc | uib¢: | unds                         | MASS      | RT              | BXP RT    | REL RT    | RESPONSE  | ( NG)   | ( NG)  |
| == | ===:  | *************                |           | 6 C M. M        | ***       |           | ********* |         | = = = = <del>=</del> = = = = = = = = = = = = = = |
| *  | 1     | 1,4-Dichlorobenzene-d4       | 152       | 3.955           | 3.955     | (1.000)   | 116839    | 40.0000 | (Q)  |
| *  | 2     | Naphthalene-d8               | 136       | 5.364           | 5.374     | (1.000)   | 493196    | 40.0000 |  |
| *  | 3     | Acenaphthene-d10             | 164       | 7.468           | 7.468     | (1.000)   | 272639    | 40.0000 |  |
| *  | 4     | Phenanthrene-d10             | 188       | 9.406           | 9.405     | (1,000)   | 428440    | 40.0000 |  |
| *  | 5     | Chrysene-d12                 | 240       | 13. <b>7</b> 79 | 13.779    | (1.000)   | 412260    | 40.0000 |  |
| *  | 6     | Perylene-d12                 | 264       | 16.162          | 16.162    | (1.000)   | 419005    | 40.0000 |  |
| \$ | 7     | 2-Fluorophenol               | 112       | 2,732           | 2.732     | (0.691)   | 38100     | 10.0000 | 8.835  |
| \$ | 8     | Phenol-d5                    | 99        | 3.613           | 3.613     | (0.914)   | 48878     | 10.0000 | 8.913  |
| \$ | 9     | 2-Chlorophenol-d4            | 132       | 3.747           | 3.758     | (0.948)   | 45430     | 10.0000 | 9.716  |
| \$ | 10    | 1,2-Dichlorobenzene-d4       | 152       | 4,151           | 4.162     | (1.050)   | 28658     | 10.0000 | 9.820  |
| \$ | 11    | Nitrobenzene-d5              | 83        | Con             | npound No | t Detecte | d.        |         |  |
| \$ | 12    | 2-Fluorobiphenyl             | 172       | 6.680           | 6.680     | (0.895)   | 85886     | 10.0000 | 9.835  |
| ş  | 13    | 2,4,6-Tribromophenol         | 330       | 8.473           | 8.473     | (1.135)   | 11265     | 10.0000 | 10.46  |
| \$ | 14    | Terphenyl-d14                | 244       | 12.017          | 12.017    | (0.872)   | 81026     | 10.0000 | 10.08  |
|    | 15    | N-Nitrosodimethylamine       | 74        | 1.706           | 1.706     | (0.431)   | 25783     | 10.0000 | 9.059  |
|    | 16    | Pyridine                     | 79        | 1.737           | 1.726     | (0.439)   | 40141     | 10.0000 | 8.464  |
|    | 23    | Aniline                      | 93        | 3.654           | 3.654     | (0.924)   | 63074     | 10.0000 | 9.172(q)   |
|    | 24    | Phenol                       | 94        | 3.623           | 3.523     | (0.916)   | 57313     | 10.0000 | 9.827 (Q)  |
|    | 26    | Bis(2-chloroethyl)ether      | 93        | 3.716           | 3.716     | (0.940)   | 40383     | 10.0000 | 9.114  |
|    | 27    | 2-Chlorophenol               | 128       | 3.768           | 3,768     | (0.953)   | 45449     | 10.0000 | 9.848  |
|    | 28    | 1,3-Dichlorobenzene          | 146       | 3.913           | 3.923     | (0.990)   | 49415     | 10.0000 | 9.689  |
|    | 29    | 1,4-Dichlorobenzene          | 146       | 3.975           | 3.975     | (1.005)   | 52537     | 10.0000 | 10.19  |
|    | 30    | Benzyl Alcohol               | 108       | 4.120           | 4.120     | (1.042)   | 30277     | 10.0000 | 9.547  |
|    | 31    | 1,2-Dichlorobenzene          | 146       | 4.172           | 4.172     | (1.055)   | 47666     | 10.0000 | 9.755  |
|    | 32    | 2-Methylphenol               | 108       | 4.255           | 4.255     | (1.076)   | 40581     | 10.0000 | 9.413  |
|    | 33    | 2,21-oxybis(1-Chloropropane) | 45        | 4.297           | 4.297     | (1.086)   | 64869     | 10.0000 | 7.886  |
|    | 34    | 4-Methylphenol               | 108       | 4.421           | 4,421     | (1.118)   | 43497     | 10.0000 | 9.466  |
|    | 36    | Hexachloroethane             | 117       | 4.504           | 4.504     | (1.139)   | 17770     | 10.0000 | 9.768  |
|    | 37    | N-Nitrosodinpropylamine      | 70        | 4.442           | 4.442     | (1.123)   | 28335     | 10.0000 | 8.809  |
|    | 42    | Nitrobenzene                 | 77        | 4.597           | 4.597     | (0.857)   | 40198     | 10.0000 | 9.246  |
|    | 44    | Isophorone                   | 82        | 4.856           | 4.856     | (0.905)   | 76804     | 10.0000 | 9.318  |
|    | 45    | 2-Nitrophenol                | 139       | 4.960           | 4.960     | (0.925)   | 23221     | 10.0000 | 9.784  |
|    | 46    | 2,4-Dimethyphenol            | 107       | 5.012           | 5.012     | (0.934)   | 42128     | 10.0000 | 9.559 10-3-10                                    |
|    |       |                              |           |                 |           |           |           |         |  |

AMOUNTS

9.811

| OTAUM GZG |  |            |                |        |                    |                 | AMOUN   |                    |
|-----------|--|------------|----------------|--------|--------------------|-----------------|---------|--------------------|
| _         | •  | QUANT SIG  |                |        |                    |                 | CAL-AMT | ON-COL             |
| Compo     |  | MASS       | RT             | exp rt |                    | response        | ( NG)   | ( NG)              |
|           | **************************************           | ====       |                |        | (0.056)            |                 |         | 0.403              |
|           | Bis (2-chloroethoxy) methane                     | 93<br>162  | 5.126<br>5.229 |        | (0.956)            | 46230           | 10.0000 | 9.421<br>10.00     |
|           | 2,4-Dichlorophenol Benzoic Acid                  | 102        | 5.084          |        | (0.975)<br>(0.948) | 32450           | 10.0000 | 8.164              |
|           | 1,2,4-Trichlorobenzene                           | 180        | 5.323          |        | (0.948)            | 20056<br>35544  | 10.0000 | 10.11              |
|           | Naphthalene                                      | 128        | 5.325          |        | (1.006)            | 138665          | 10.0000 | 10.12              |
|           | 4-Chloroaniline                                  | 127        | 5.488          |        | (1.008)            | 52444           | 10.0000 | 9.711              |
|           | Hexachlorobutadiene                              | 225        | 5.400          |        | (1.023)            | 17030           | 10.0000 | 10.18              |
|           | 4-Chloro-3-Methylphenol                          | 107        | 6.069          |        | (1.131)            | 35592           | 10.0000 | 9.536              |
|           |  | 142        | 6.203          |        | (1.151)            | 83922           | 10.0000 | 10.02              |
|           | 2-Methylnaphthalene<br>Hexachlorocyclopentadiene | 237        | 6.483          |        | (0.868)            | 18919           | 10.0000 | 9.098              |
|           | 2.4,6-Trichlorophenol                            | 196        | 6.576          |        | (0.881)            | 20325           | 10.0000 | 9.847              |
|           | 2.4.5-Trichlorphenol                             | 196        | 6.618          |        | (0.886)            | 20325           | 10.0000 | 9.889              |
|           | 2-Chloronaphthalene                              | 162        | 6.773          |        | (0.886)            | 74574           | 10.0000 | 9.756              |
|           | 2-Nitroaniline                                   | 65         | 6.950          |        | (0.931)            | 21647           | 10.0000 | 8.456              |
|           |  | 163        | 7.219          |        | (0.957)            | 85330           | 10.0000 | 9.665              |
|           | Dimethylphthalate                                | 152        | 7.219          |        | (0.957)            | 130392          | 10.0000 | 9.758              |
|           | Acenaphthylene                                   | 165        | 7.219          |        | (0.967)            | 19698           | 10.0000 | 9.963 (Q)          |
|           | 2,6-Dinitrotoluene 3-Nitroaniline                | 138        | 7.447          |        | (0.997)            | 23598           | 10.0000 | 9,002(q)           |
|           |  |            | 7.509          |        | • • • • • •        | 83474           | 10.0000 | 9.804              |
|           | Acenaphthene                                     | 153        | 7.571          |        | (1.006)<br>(1.014) |                 | 10.0000 |                    |
|           | 2,4-Dinitrophenol                                | 184        | 7.696          |        |                    | 7537            | 10.0000 | 9,147 (q)<br>9,824 |
|           | Dibenzofuran                                     | 168        |                |        | (1.031)            | 110503          |         | 9.824<br>8.425 (Q) |
|           | 4-Nitrophenol                                    | 109        | 7.675<br>7.768 |        | (1.028)            | 9643            | 10.0000 | 9.262              |
|           | 2,4-Dinitrotoluene<br>Fluorene                   | 165<br>166 | 8.131          |        | (1.040)<br>(1.089) | 24530<br>91225  | 10.0000 | 9.898              |
|           |  | 149        | 8.100          |        | (1.085)            | 88532           | 10.0000 | 9.594              |
|           | Diethylphthalate                                 | 204        | 8.152          |        | (1.085)            | 38113           | 10.0000 | 10.03              |
|           | 4-Chlorophenyl-phenylether 4-Nitroaniline        | 138        | 8.214          |        | (1.100)            | 23002           | 10.0000 | 8.977              |
|           | 4,6-Dinitro-2-methylphenol                       | 198        | 8.276          |        | (0.880)            | 11282           | 10.0000 | 11,76              |
|           | N-Nitrosodiphenylamine                           | 169        | 8.317          |        | (0.884)            | 74860           | 11.7000 | 11.70              |
|           | Azobenzene                                       | 77         | 8.349          |        | (0.888)            | 82437           | 10.0000 | 8.875              |
|           |  | 248        | 8.794          |        | (0.935)            | 19823           | 10.0000 | 9.575              |
|           | 4-Bromophenyl-phenylether Hexachlorobenzene      | 284        | 8.981          |        | (0.955)            | 23622           | 10.0000 | 10.56              |
|           | Pentachlorophenol                                | 266        | 9.240          |        | (0.982)            | 10551           | 10.0000 | 7.861              |
|           | Phenanthrene                                     |            | 9.437          |        | (1.003)            | 134966          | 10.0000 | 10.10              |
|           | Anthracene                                       | 178<br>178 | 9.499          |        | (1.003)            | 130415          | 10.0000 | 9.697              |
|           | Carbazole  | 178        | 9.768          |        | (1.010)            | 120549          | 10.0000 | 9.637              |
|           | Di-n-Butylphthalate                              | 149        | 10.463         |        | (1.112)            | 141693          | 10,0000 | 9.367              |
|           | Fluoranthene                                     | 202        | 11.302         |        | (1,202)            | 115262          | 10.0000 | 9,583              |
|           | Benzidine  | 184        | 11.571         |        | (0.840)            | 78774           | 10.0000 | 9.305              |
|           | Pyrene   | 202        |                | 11.665 |                    | 127577          | 10.0000 | 9.897              |
|           | 3,3'-dimethylbenzidine                           | 212        | 12.867         |        | (0.934)            | 66361           | 10.0000 | 9.134              |
|           | Butylbenzylphthalate                             | 149        | 12.991         |        | (0.943)            | 62032           | 10.0000 | 9.418              |
|           | Benzo (a) Anthracene                             | 228        | 13.748         |        | (0.998)            | 102788          | 10.0000 | 9.450              |
|           | Chrysene   | 228        | 13,820         |        | (1.003)            | 113552          | 10.0000 | 10.05              |
|           | 3,3'-Dichlorobenzidine                           | 252        | 13.799         |        | (1.003)            | 38850           | 10.0000 | 9.762              |
|           | bis(2-ethylhexyl)Phthalate                       | 149        | 14,110         |        | (1.002)            | 83377           | 10.0000 | 9.194              |
|           | Di-n-octylphthalate                              |            | 15.157         |        | (1.100)            | 126961          | 10.0000 | 8.756              |
|           | Benzo (b) fluoranthene                           | 149<br>252 | 15.572         |        | (0.963)            | 84929           | 10.0000 | 8.758<br>8.548 (Q) |
|           |  |            | 15.613         |        |                    |                 | 10.0000 |                    |
|           | Renzo (k) fluoranthene                           | 252        | 15.613         |        | (0.966)<br>(0.990) | 122065          | 10.0000 | 10.51(g)<br>9.863  |
|           | Benzo (e) pyrene                                 | 252        | 16.069         |        | (0.990)            | 97140           | 10.0000 | 9.863              |
|           | Benzo (a) pyrene                                 | 252        | 17.789         |        | (0.994)            | 102327<br>76748 | 10.0000 | 9.463<br>8.022     |
|           | Indeno (1,2,3-cd) pyrene                         | 276        |                |        |                    |                 |         |                    |
| 152       | Dibenso (a,h) anthracene                         | 278        | 17.841         | 17.841 | (1.104)            | 88393           | 10.0000 | 9.016              |

276 18.224 18.235 (1.128) 103135 10.0000

153 Benzo(g,h,i)perylene

|  |           |    |        |        |          | AMOUNTS |      |        |          |  |
|--|-----------|----|--------|--------|----------|---------|------|--------|----------|--|
|  | QUANT SIG |    |        |        |          | CAI     | -AMT | ON-COL |          |  |
| Compounds                              | MASS      | RT | EXP RT | REL RT | response | (       | NG)  | <      | NG)      |  |
| ###################################### | ====      | ** |        | ****** | =======  | ===     | ==== |        |          |  |
| M 162 benzo b,k Fluoranthene Totals    | 252       |    |        |        | 206994   | 10.     | 0000 | 9      | .607 (A) |  |

## QC Flag Legend

- A Target compound detected but, quantitated amount exceeded maximum amount.
   Q Qualifier signal failed the ratio test.
   q Qualifier signal exceeded ratio warning limit.

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002B.D Page 1

Report Date: 03-Oct-2010 11:12

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Calibration Date: 02-OCT-2010 Instrument ID: sv5.i

Calibration Time: 13:44 Lab File ID: HSL1002B.D Client Smp ID: 8270F.M Lab Smp Id: HSL 010 ug/ml CS-2

Analysis Type: SV Level: Quant Type: ISTD Sample Type:

Operator: KT

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1 8270STD.SUB;10MSSV0308;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

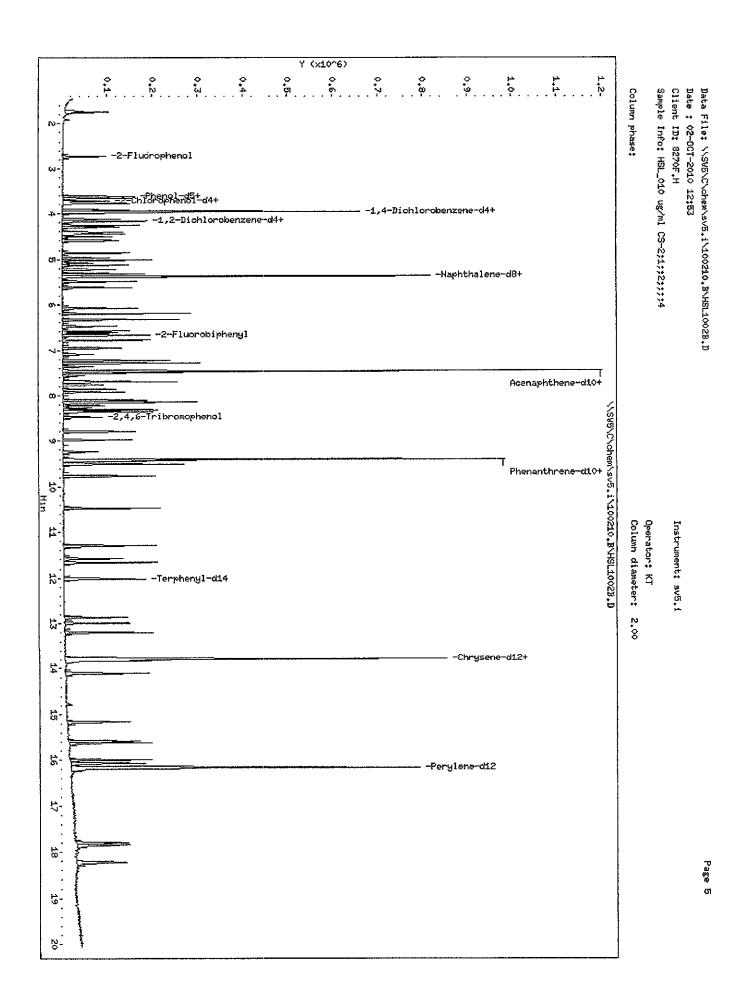
| COMPOUND            | STANDARD | AREA<br>LOWER | LIMIT<br>UPPER | SAMPLE           | %DIFF  |
|---------------------|----------|---------------|----------------|------------------|--------|
|                     | ======== | ========      | ========       | ===== <b>=</b> = | ====== |
| 1 1,4-Dichlorobenze | 122625   | 61313         | 245250         | 116839           | -4.72  |
| 2 Naphthalene-d8    | 530514   | 265257        | 1061028        | 493196           | -7.03  |
| 3 Acenaphthene-d10  | 282538   | 141269        | 565076         | 272639           | -3.50  |
| 4 Phenanthrene-d10  | 462722   | 231361        | 925444         | 428440           | -7.41  |
| 5 Chrysene-d12      | 435850   | 217925        | 871700         | 412260           | -5.41  |
| 6 Perylene-d12      | 422284   | 211142        | 844568         | 419005           | -0.78  |
|                     |          |               |                |                  |        |

|   |          | RT I    | TIMIT   |          |        |
|---|----------|---------|---------|----------|--------|
| COMPOUND .                              | STANDARD | LOWER   | UPPER   | SAMPLE   | %DIFF  |
| ======================================= | ======== | ======= | ======= | ======== | ====== |
| 1 1,4-Dichlorobenze                     | 3.96     | 3.46    | 4.46    | 3.96     | 0.00   |
| 2 Naphthalene-d8                        | 5.37     | 4.87    | 5.87    | 5.36     | -0.19  |
| 3 Acenaphthene-d10                      | 7.47     | 6.97    | 7.97    | 7.47     | 0.00   |
| 4 Phenanthrene-d10                      | 9.41     | 8.91    | 9.91    | 9.41     | 0.00   |
| 5 Chrysene-dl2                          | 13.78    | 13.28   | 14.28   | 13.78    | 0.00   |
| 6 Perylene-d12                          | 16.16    | 15.66   | 16.66   | 16.16    | 0.00   |
|   |          |         |         |          |        |

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



AMOUNTS

Report Date: 03-Oct-2010 11:13

#### TestAmerica West Sacramento

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002C.D Lab Smp Id: HSL\_020 ug/ml CS-3 Client Smp Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 13:18

Operator : KT Smp Info : HSL\_020 ug/ml CS-3;1;;3;;;4 Inst ID: sv5.i

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0309;0;8270F.M

: SOP SAC-MS-0005 Comment

: \\sv5\c\chem\sv5.i\100210.B\8270f.m Method

Meth Date : 03-Oct-2010 11:09 onishim Quant Type: ISTD

Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 3 Calibration Sample, Level: 3

Dil Factor: 1.00000

Compound Sublist: 1\_8270STD.SUB Integrator: Falcon

Target Version: 4.14

Processing Host: SACP307UM

|            |   |           |        |        |         |          | NUOMA   | TS                 |
|------------|---|-----------|--------|--------|---------|----------|---------|--------------------|
|            |   | QUANT SIG |        |        |         |          | CAL-AMT | OM-COL             |
| Co         | pmpounds                                | MASS      | RT     | EXP RT | REL RT  | RESPONSE | (NG)    | ( NG)              |
| <b>*</b> : | , = = = = = = = = = = = = = = = = = = = | :===      | ***    | E22222 |         | =======  | *****   | E: 2 14 14 2 14 14 |
| *          | 1 1,4-Dichlorobenzene-d4                | 152       | 3.954  | 3.955  | (1.000) | 145926   | 40.0000 | (Q)                |
| *          | 2 Naphthalene-d8                        | 136       | 5.364  | 5.374  | (1.000) | 625682   | 40.0000 |                    |
| *          | 3 Acenaphthene-d10                      | 164       | 7.467  | 7.468  | (1.000) | 328608   | 40.0000 |                    |
| *          | 4 Phenanthrene-d10                      | 188       | 9.405  | 9,405  | (1.000) | 525834   | 40.0000 |                    |
| *          | 5 Chrysene-d12                          | 240       | 13.779 | 13.779 | (1.000) | 590727   | 40.0000 |                    |
| *          | 6 Perylene-d12                          | 264       | 16.162 | 16.162 | (1.000) | 619266   | 40.0000 |                    |
| \$         | 7 2-Fluorophenol                        | 112       | 2.732  | 2.732  | (0.691) | 100961   | 20.0000 | 19.63              |
| \$         | 8 Phenol-d5                             | 99        | 3.612  | 3.613  | (0.914) | 127066   | 20,0000 | 19.64              |
| \$.        | 9 2-Chlorophenol-d4                     | 132       | 3.747  | 3.758  | (0.948) | 112302   | 20.0000 | 19.77              |
| \$         | 10 1,2-Dichlorobenzene-d4               | 152       | 4.162  | 4.162  | (1.052) | 72837    | 20.0000 | 20.27(q)           |
| \$         | 11 Nitrobenzene-d5                      | 82        | 4.576  | 4.576  | (0.853) | 103440   | 20.0000 | 19.52              |
| \$         | 12 2-Fluorobiphenyl                     | 172       | 6.680  | 6.680  | (0.895) | 209764   | 20.0000 | 19.82              |
| \$         | 13 2,4,6-Tribromophenol                 | 330       | 8.473  | 8.473  | (1.135) | 28698    | 20.0000 | 20.10              |
| \$         | 14 Terphenyl-d14                        | 244       | 12.017 | 12.017 | (0.872) | 218324   | 20.0000 | 18.76              |
|            | 15 N-Nitrosodimethylamine               | 74        | 1.706  | 1.706  | (0.431) | 66431    | 20.0000 | 19.76(q)           |
|            | 16 Pyridine                             | 79        | 1.726  | 1.726  | (0.437) | 116339   | 20,0000 | 20.69(Q)           |
|            | 23 Aniline                              | 93        | 3.654  | 3.654  | (0.924) | 160510   | 20.0000 | 19.50              |
|            | 24 Phenol                               | 94        | 3.623  | 3.623  | (0.916) | 147994   | 20.0000 | 19.91              |
|            | 26 Bis(2-chloroethyl)ether              | 93        | 3.716  | 3.716  | (0.940) | 101777   | 20.0000 | 19.53              |
|            | 27 2-Chlorophenol                       | 128       | 3.768  | 3.768  | (0.953) | 114481   | 20.0000 | 20.07              |
|            | 28 1,3-Dichlorobenzene                  | 146       | 3.913  | 3.923  | (0.990) | 122398   | 20,0000 | 19.70              |
|            | 29 1,4-Dichlorobenzene                  | 146       | 3.975  | 3.975  | (1.005) | 126965   | 20.0000 | 19.54              |
|            | 30 Benzyl Alcohol                       | 108       | 4.120  | 4.120  | (1.042) | 72366    | 20.0000 | 18.87              |
|            | 31 1,2-Dichlorobenzene                  | 146       | 4.172  | 4.172  | (1.055) | 117073   | 20.0000 | 19.60              |
|            | 32 2-Methylphenol                       | 108       | 4.255  | 4.255  | (1.076) | 101499   | 20.0000 | 19.45              |
|            | 33 2,2'-oxybis(1-Chloropropane)         | 45        | 4.296  | 4.297  | (1.086) | 166596   | 20.0000 | 20.08              |
|            | 34 4-Methylphenol                       | 108       | 4.421  | 4.421  | (1.118) | 106723   | 20.0000 | 19.26              |
|            | 36 Hexachloroethane                     | 117       | 4.504  | 4.504  | (1.139) | 44196    | 20.0000 | 19.98              |
|            | 37 N-Nitrosodinpropylamine              | 70        | 4.441  | 4.442  | (1.123) | 73913    | 20.0000 | 20.02              |
|            | 42 Nitrobenzene                         | 77        | 4.597  | 4.597  | (0.857) | 101809   | 20.0000 | 19.65              |
|            | 44 Isophorone                           | 82        | 4.856  | 4.856  | (0.905) | 191333   | 20.0000 | 19,21              |
|            | 45 2-Nitrophenol                        | 139       | 4.960  | 4.960  | (0.925) | 58938    | 20.0000 | 19.18              |
|            | 46 2,4-Dimethyphenol                    | 107       | 5.011  | 5.012  | (0.934) | 107325   | 20.0000 | 19.65              |
|            |   |           |        |        |         |          |         |                    |

|        |                            |  |        |        |         |          | AMOUN              | TS         |
|--------|----------------------------|--|--------|--------|---------|----------|--------------------|------------|
|        |                            | QUANT SIG                              |        |        |         |          | CAL-AMT            | ON-COL     |
| Compou | ınds                       | Mass                                   | RT     | EXP RT | REL RT  | response | ( NG)              | ( NG)      |
|        | ****************           | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |        | ====== |         | 正对称为证据日本 |                    | ======     |
|        | Bis(2-chloroethoxy)methane | 93                                     | 5.125  |        | (0.956) | 120646   | 20.0000            | 19.82      |
|        | 2,4-Dichlorophenol         | 162                                    | 5.229  |        | (0.975) | 84525    | 20.0000            | 20.01      |
|        | Benzoic Acid               | 122                                    | 5.094  |        | (0.950) | 54506    | 20.0000            | 18.03      |
| 51     | 1,2,4-Trichlorobenzene     | 180                                    | 5.322  |        | (0.992) | 89082    | 20.0000            | 19.47      |
| 52     | Naphthalene                | 128                                    | 5.395  |        | (1.006) | 336100   | 20.0000            | 19.46      |
|        | 4-Chloroaniline            | 127                                    | 5.488  |        | (1.023) | 135348   | 20.0000            | 19.99      |
|        | Hexachlorobutadiene        | 225                                    | 5.613  |        | (1.046) | 45138    | 20.0000            | 20.16      |
|        | 4-Chloro-3-Methylphenol    | 107                                    | 6.068  |        | (1.131) | 90970    | 20.0000            | 19.28      |
|        | 2-Methylnaphthalene        | 142                                    | 6.203  |        | (1.156) | 212981   | 20.0000            | 19.62      |
|        | Hexachlorocyclopentadiene  | 237                                    | б.483  |        | (0.868) | 47478    | 20,0000            | 19.36      |
|        | 2,4,6-Trichlorophenol      | 196                                    | 6.576  |        | (0.881) | 49658    | 20.0000            | 18.94(Q)   |
|        | 2,4,5-Trichlorphenol       | 196                                    | 6.628  |        | (0.888) | 55529    | 20.0000            | 19.66 (QM) |
|        | 2-Chloronaphthalene        | 162                                    | 6.784  |        | (0.908) | 180754   | 20.0000            | 19.54      |
|        | 2-Nitroaniline             | 65                                     | 6.949  |        | (0.931) | 54872    | 20.0000            | 19.58      |
|        | Dimethylphthalate          | 163                                    | 7.219  |        | (0.967) | 213272   | 20.0000            | 20.03      |
|        | Acenaphthylene             | 152                                    | 7.281  |        | (0.975) | 315165   | 20.0000            | 19.57      |
|        | 2,6-Dinitrotoluene         | 165                                    | 7.291  |        | (0.976) | 49111    | 20.0000            | 19.80 (QM) |
|        | 3-Nitroaniline             | 138                                    | 7.447  |        | (0.997) | 59114    | 20.0000            | 19.09      |
|        | Acenaphthene               | 153                                    | 7.509  |        | (1.006) | 208228   | 20.0000            | 20.31      |
|        | 2,4-Dinitrophenol          | 184                                    | 7.571  |        | (1.014) | 23799    | 20,0000            | 19.52      |
|        | Dibenzofuran               | 168                                    | 7.695  |        | (1.031) | 271431   | 20.0000            | 19.95      |
|        | 4-Nitrophenol              | 109                                    | 7.675  |        | (1.028) | 25164    | 20.0000            | 19.59(Q)   |
|        | 2,4-Dinitrotoluene         | 165                                    | 7.768  |        | (1.040) | 63223    | 20.0000            | 19.42      |
|        | Fluorene                   | 166                                    | 8.131  |        | (1.089) | 220647   | 20.0000            | 19.58      |
|        | Diethylphthalate           | 149                                    | 8.100  |        | (1.085) | 216140   | 20.0000            | 19.83      |
|        | 4-Chlorophenyl-phenylether | 204                                    | 8.151  |        | (1.092) | 93468    | 20.0000            | 19.95      |
|        | 4-Nitroaniline             | 138                                    | 8.214  |        | (1.100) | 61333    | 20.0000            | 19.98      |
|        | 4,6-Dinitro-2-methylphenol | 198                                    | 8.276  |        | (0.880) | 32982    | 20.0000            | 20.44      |
|        | N-Nitrosodiphenylamine     | 169                                    | 8.317  |        | (0.884) | 186206   | 23.4000            | 23.36      |
|        | Azobenzene                 | <b>7</b> 7                             | 8.348  |        | (0.888) | 203290   | 20.0000            | 19.66      |
|        | 4-Bromophenyl-phenylether  | 248                                    | 8.794  |        | (0 935) | 50693    | 20.0000            | 19.75      |
|        | Hexachlorobenzene          | 284                                    | 8.980  |        | (0.955) | 54528    | 20.0000            | 19.02      |
|        | Pentachlorophenol          | 266                                    | 9.240  |        | (0.982) | 30451    | 20.0000            | 20.33      |
|        | Phenanthrene               | 178                                    | 9.436  |        | (1.003) | 329718   | 20.0000            | 19.89      |
|        | Anthracene                 | 178                                    | 9.499  |        | (1.010) | 326558   | 20.0000            | 19.72      |
|        | Carbazole                  | 167                                    | 9.768  |        | (1.039) | 298921   | 20.0000            | 19.76      |
|        | Di-n-Butylphthalate        | 149                                    | 10.462 | 10.463 |         | 358075   | 20.0000            | 19.68      |
|        | Fluoranthene               | 202                                    | 11.302 | 11.302 |         | 308182   | 20.0000            | 20.75      |
|        | Benzidine                  | 184                                    | 11.571 | 11.571 |         | 222260   | 20.0000<br>20.0000 | 18.56      |
|        | Pyrene                     | 202                                    |        | 11.665 |         | 345805   |                    | 18.73      |
|        | 3,3'-dimethylbenzidine     | 212                                    | 12.867 |        | (0.934) | 198960   | 20.0000            | 18.82      |
|        | Butylbenzylphthalate       | 149                                    |        | 12.991 |         | 174685   | 20.0000            | 18.88      |
|        | Benzo (a) Anthracene       | 228                                    |        | 13.758 |         | 304948   | 20.0000            | 19.38      |
|        | Chrysene                   | 228                                    | 13.820 |        |         | 314030   | 20.0000            | 19.51      |
|        | 3,3'-Dichlorobenzidine     | 252                                    | 13.799 |        | (1.002) | 115458   | 20.0000            | 19.45      |
|        | bis(2-ethylhexyl)Phthalate | 149                                    | 14.110 |        | (1.024) | 248201   | 20.0000<br>20.0000 | 19.47      |
|        | Di-n-octylphthalate        | 149                                    | 15.157 |        | (1.100) | 400592   |                    | 19.66      |
|        | Benzo (b) fluoranthene     | 252                                    | 15.582 |        | (0.964) | 256213   | 20.0000            | 18.28(Q)   |
|        | Benzo(k) fluoranthene      | 252                                    |        | 15.623 |         | 371629   | 20.0000            | 20.65(g)   |
|        | Benzo(e)pyrene             | 252                                    | 15.996 |        | (0.990) | 281015   | 20.0000            | 19,22      |
|        | Benzo(a) pyrene            | 252                                    | 16.069 |        | (0.994) | 307781   | 20.0000            | 19.37      |
|        | Indeno(1,2,3-cd)pyrene     | 276                                    | 17.789 |        | (1.101) | 228110   | 20.0000            | 17.74      |
|        | Dibenzo(a,h)anthracene     | 278                                    |        | 17.841 |         | 270172   | 20.0000            | 18.81      |
| 153    | Benzo(g,h,i)perylene       | 276                                    | 18.224 | 18.235 | (1.128) | 301520   | 20.6000            | 19.39      |

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002C.D Report Date: 03-Oct-2010 11:13

|                                     |           |      |        |        |          |     | AMOUN | rs  |             |  |
|-------------------------------------|-----------|------|--------|--------|----------|-----|-------|-----|-------------|--|
|                                     | QUANT SIG |      |        |        |          | CAL | TMA-  | ON- | COL         |  |
| Compounds                           | MASS      | RT   | EXP RT | REL RT | response | (   | ng)   | ſ   | NG)         |  |
|                                     | ****      | ==== |        |        | ****     | === |       | 200 | <del></del> |  |
| M 162 benzo b,k Fluoranthene Totals | 252       |      |        |        | 627842   | 20. | 0000  | 1   | 9.61(A)     |  |

Page 3

## QC Flag Legend

- A Target compound detected but, quantitated amount exceeded maximum amount.

  Q Qualifier signal failed the ratio test.

  M Compound response manually integrated.

  q Qualifier signal exceeded ratio warning limit.

Data File Name: HSL1002C.D

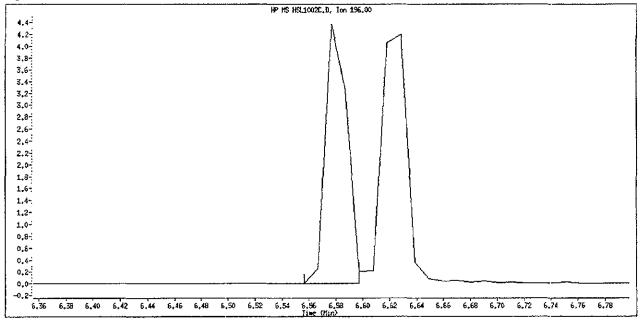
Inj. Date and Time: 02-OCT-2010 13:18

Instrument ID: sv5.i Client ID: 8270F.M

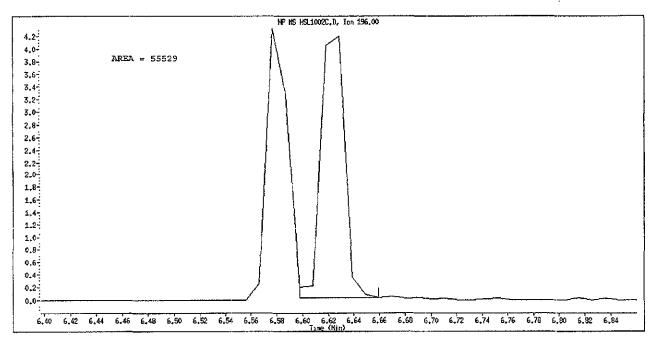
Compound Name: 2,4,5-Trichlorphenol

CAS #: 95-95-4

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk
Manual Integration Reason: Wrong Peak

Data File Name: HSL1002C.D

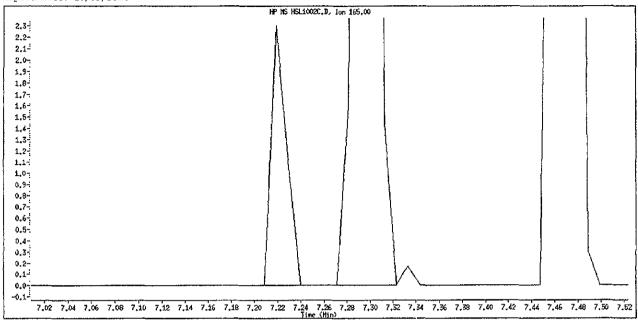
Inj. Date and Time: 02-00T-2010 13:18

Instrument ID: sv5.i Client ID: 8270F.M

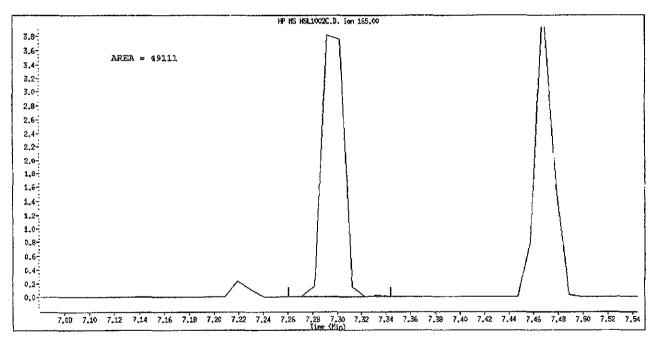
Compound Name: 2,6-Dinitrotoluene

CAS #: 606-20-2

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk

Manual Integration Reason: Poor Chromatography

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002C.D

Report Date: 02-Oct-2010 16:57

#### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\100210.B\HSL1002C.D
Lab Smp Id: HSL 020 ug/ml CS-3 Client Smp
Inj Date: 02-OCT-2010 13:18
Operator: KT Inst ID: 8
Smp Info: HSL 020 ug/ml CS-3;1;;3;;;4 Client Smp ID: 8270F.M

Inst ID: sv5.i

Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0309;0;8270F.M Comment: SOP SAC-MS-0005 Method: \\SV5\C\chem\sy5 i\100210 B\8270f m

Method : \\SV5\C\chem\sv5.i\100210.B\8270f.m Meth Date : 02-Oct-2010 16:57 onishim Quant 1 Quant Type: ISTD

Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 3 Calibration Sample, Level: 3

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

|    |     |                              |           |        |         |            |          | AMOUN   | TS     |                |
|----|-----|------------------------------|-----------|--------|---------|------------|----------|---------|--------|----------------|
|    |     |                              | QUANT SIG |        |         |            |          | CAL-AMT | ON-    | COL            |
| Co | oğm | unds                         | MASS      | RT     | EXP RT  | REL RT     | response | (NG)    | (      | NG)            |
| == |     | ¥==#60=00000                 | ====      |        | ======= | - ======== |          | 2022255 | 86.98E | k to; so 60 30 |
| *  | 1   | 1,4-Dichlorobenzene-d4       | 152       | 3.954  | 3.955   | (1.000)    | 145926   | 40.0000 |        | (Q)            |
| *  | 2   | Naphthalene-d8               | 136       | 5.364  | 5.374   | (1.000)    | 625682   | 40.0000 |        |                |
| *  | 3   | Acenaphthene-d10             | 164       | 7.467  | 7.468   | (1.000)    | 328608   | 40.0000 |        |                |
| *  | 4   | Phenanthrene-d10             | 188       | 9.405  | 9.405   | (1.000)    | 525834   | 40.0000 |        |                |
| *  | 5   | Chrysene-d12                 | 240       | 13.779 | 13.779  | (1.000)    | 590727   | 40.0000 |        |                |
| *  | 6   | Perylene-d12                 | 264       | 16.162 | 16.162  | (1.000)    | 619266   | 40.0000 |        |                |
| \$ | 7   | 2-Fluorophenol               | 112       | 2.732  | 2.732   | (0.691)    | 100961   | 20.0000 | 1      | 18.75          |
| \$ | 8   | Phenol-d5                    | 99        | 3.612  | 3.613   | (0.914)    | 127066   | 20.0000 | 1      | 18.55          |
| \$ | 9   | 2-Chlorophenol-d4            | 132       | 3.747  | 3.758   | (0.948)    | 112302   | 20.0000 | 1      | 19.23          |
| \$ | 10  | 1,2-Dichlorobenzene-d4       | 152       | 4.162  | 4.162   | (1.052)    | 72837    | 20.0000 | 1      | (g.98(q)       |
| \$ | 11  | Nitrobenzene-d5              | 82        | 4.576  | 4.576   | (0.853)    | 103440   | 20.0000 | ]      | L8.64          |
| \$ | 12  | 2-Fluorobiphenyl             | 172       | 6.680  | 6.680   | (0.895)    | 209764   | 20.0000 | 1      | 19.93          |
| \$ | 13  | 2,4,6-Tribromophenol         | 330       | 8.473  | 8.473   | (1.135)    | 28698    | 20.0000 | ;      | 22.12          |
| \$ | 14  | Terphenyl-d14                | 244       | 12.017 | 12.017  | (0.872)    | 218324   | 20.0000 | 1      | 18.95          |
|    | 1.5 | N-Nitrosodimethylamine       | 74        | 1.706  | 1.706   | (0.431)    | 66431    | 20,0000 | 3      | 18.69          |
|    | 16  | Pyridine                     | 79        | 1.726  | 1.726   | (0.437)    | 116339   | 20.0000 | 1      | 19.64          |
|    | 23  | Aniline                      | 93        | 3.654  | 3,654   | (0.924)    | 160510   | 20.0000 | 1      | 18.69          |
|    | 24  | Phenol                       | 94        | 3.623  | 3.623   | (0.916)    | 147994   | 20.0000 | 2      | 20.32          |
|    | 26  | Bis(2-chloroethyl)ether      | 93        | 3.716  | 3.716   | (0.940)    | 101777   | 20.0000 | 1      | 18.39          |
|    | 27  | 2-Chlorophenol               | 128       | 3.768  | 3.768   | (0.953)    | 114481   | 20.0000 | 1      | L9.86          |
|    | 28  | 1,3-Dichlorobenzene          | 146       | 3.913  | 3.923   | (0.990)    | 122398   | 20.0000 | 1      | L9.22          |
|    | 29  | 1,4-Dichlorobenzene          | 146       | 3.975  | 3.975   | (1.005)    | 126965   | 20.0000 | J      | L9.72          |
|    | 30  | Benzyl Alcohol               | 108       | 4.120  | 4.120   | (1.042)    | 72366    | 20.0000 | 1      | 18.27          |
|    | 31  | 1,2-Dichlorobehzene          | 146       | 4.172  | 4,172   | (1.055)    | 117073   | 20.0000 | 1      | L9.18          |
|    | 32  | 2-Methylphenol               | 108       | 4.255  | 4.255   | (1.076)    | 101499   | 20.0000 | 1      | 18.85          |
|    | 33  | 2,2'-oxybis(1-Chloropropane) | 45        | 4.296  | 4.297   | (1.086)    | 166596   | 20.0000 |        | 16.22          |
|    | 34  | 4-Methylphenol               | 108       | 4.421  | 4.421   | (1.118)    | 106723   | 20.0000 | 3      | L8.60          |
|    | 36  | Hexachloroethane             | 117       | 4.504  | 4.504   | (1,139)    | 44196    | 20.0000 | :      | 19.45          |
|    | 37  | N-Nitrosodinpropylamine      | 70        | 4.441  | 4.442   | (1.123)    | 73913    | 20.0000 | :      | 18.40          |
|    | 42  | Nitrobenzene                 | 77        | 4.597  | 4.597   | (D.857)    | 101809   | 20.0000 | :      | 18.46          |
|    | 44  | Isophorone                   | 82        | 4.856  | 4.856   | (0.905)    | 191333   | 20.0000 | :      | 18.30          |
|    | 45  | 2-Nitrophenol                | 139       | 4.960  | 4.950   | (0.925)    | 58938    | 20.0000 |        | 19.57          |
|    |     | 2.4-Dimethyphenol            | 107       | 5.011  |         | (0.934)    | 107325   | 20.0000 | ;      | 19.20          |
|    |     |                              |           |        |         |            |          |         |        |                |

## Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002C.D Report Date: 02-Oct-2010 16:57

|       |                              |              |        |        |            |          | AMOUN              | its       |
|-------|------------------------------|--------------|--------|--------|------------|----------|--------------------|-----------|
|       |                              | QUANT SIG    |        |        |            |          | CAL-AMT            | ON-COL    |
| Compo | ınds                         | REAM         | RT     | EXP RT | REL RT     | RESPONSE | (NG)               | ( NG)     |
| ***** | ************                 | 52 50 (24 24 | ====   |        | . ======== | ##886555 | *****              | ********  |
| 47    | Bis(2-chloroethoxy) methane  | 93           | 5.125  | 5.126  | (0.956)    | 120646   | 20.0000            | 19.38     |
| 49    | 2,4-Dichlorophenol           | 162          | 5.229  | 5.229  | (0.975)    | 84525    | 20.0000            | 20.54     |
| 50    | Benzoic Acid                 | 122          | 5.094  | 5.115  | (0.950)    | 54506    | 20.0000            | 17.49     |
| 51    | 1,2,4-Trichlorobenzene       | 180          | 5.322  | 5.322  | (0.992)    | 89082    | 20.0000            | 19.97     |
| 52    | Naphthalene                  | 128          | 5.395  | 5.395  | (1.006)    | 336100   | 20.0000            | 19.30     |
| 54    | 4-Chloroaniline              | 127          | 5.488  | 5.488  | (1.023)    | 135348   | 20.0000            | 19.76     |
| 57    | Hexachlorobutadiene          | 225          | 5.613  | 5.613  | (1.046)    | 45138    | 20.0000            | 21.26     |
| 60    | 4-Chloro-3-Methylphenol      | 107          | 6.068  | 6.069  | (1.131)    | 90970    | 20.0000            | 19.21     |
| 63    | 2-Methylnaphthalene          | 142          | 6,203  | 6.203  | (1.156)    | 212981   | 20.0000            | 20.04     |
| 66    | Hexachlorocyclopentadiene    | 237          | 6.483  | 6.483  | (0.868)    | 47478    | 20.0000            | 18.94     |
| 69    | 2,4,6-Trichlorophenol        | 196          | 6.576  | 6.576  | (0.881)    | 49658    | 20.0000            | 19.96 (Q) |
| 70    | 2,4,5-Trichlorphenol         | 196          | 6.576  | 6.628  | (0,881)    | 49658    | 20.0000            | 18.17(Q)  |
| 71    | 2-Chloronaphthalene          | 162          | 6.784  | 6.784  | (0.908)    | 180754   | 20.0000            | 19.62     |
| 73    | 2-Nitroaniline               | 65           | 6.949  | 6.949  | (0.931)    | 54872    | 20.0000            | 17.78     |
| 76    | Dimethylphthalate            | 163          | 7.219  | 7.229  | (0.967)    | 213272   | 20.0000            | 20.04     |
| 77    | Acenaphthylene               | 152          | 7.281  | 7,281  | (0.975)    | 315165   | 20.0000            | 19.57     |
| 79    | 2,6-Dinitrotoluene           | 165          | 7,219  | 7.302  | (0.967)    | 51125    | 20.0000            | 21.45(Q)  |
| 80    | 3-Nitroaniline               | 138          | 7.447  | 7.447  | (0.997)    | 59114    | 20.0000            | 18.71     |
| 81    | Acenaphthene                 | 153          | 7.509  | 7.509  | (1.006)    | 208228   | 20.0000            | 20.29     |
| 82    | 2,4-Dinitrophenol            | 184          | 7.571  | 7.571  | (1.014)    | 23799    | 20.0000            | 19.22     |
| 83    | Dibenzofuran                 | 168          | 7.695  | 7.706  | (1.031)    | 271431   | 20.0000            | 20.02     |
| 84    | 4-Nitrophenol                | 109          | 7.675  | 7.675  | (1.028)    | 25164    | 20.0000            | 18.24(Q)  |
| 86    | 2,4-Dinitrotoluene           | 165          | 7.768  | 7.768  | (1.040)    | 63223    | 20.0000            | 19.81     |
| 91    | Fluorene                     | 166          | 8.131  | 8.131  | (1.089)    | 220647   | 20.0000            | 19.86     |
| 92    | Diethylphthalate             | 149          | 8.100  | 8.100  | (1.085)    | 216140   | 20.0000            | 19.43     |
|       | 4-Chlorophenyl-phenylether   | 204          | 8.151  | 8,152  | (1.092)    | 93468    | 20.0000            | 20.41     |
|       | 4-Nitroaniline               | 138          | 8.214  |        | (1,100)    | 61333    | 20.0000            | 19.86     |
| 97    | 4,6-Dinitro-2-methylphenol   | 198          | 8.276  |        | (0.880)    | 32982    | 20.0000            | 20.90     |
|       | N-Nitrosodiphenylamine       | 169          | 8.317  |        | (0.884)    | 186206   | 23.4000            | 22.72     |
|       | Azobenzene                   | 77           | 8.348  |        | (0.888)    | 203290   | 20.0000            | 17.83     |
|       | 4-Bromophenyl-phenylether    | 248          | 8,794  |        | (0.935)    | 50693    | 20.0000            | 19.95     |
|       | Hexachlorobenzene            | 284          | 8.980  |        | (0.955)    | 54528    | 20.0000            | 19.87     |
|       | Pentachlorophenol            | 266          | 9.240  |        | (0.982)    | 30451    | 20.0000            | 18.48     |
|       | Phenanthrene                 | 178          | 9.436  |        | (1.003)    | 329718   | 20,0000            | 20.10     |
|       | Anthracene                   | 178          | 9.499  |        | (1.010)    | 326558   | 20,0000            | 19.78     |
|       | Carbazole                    | 167          | 9.768  |        | (1.039)    | 298921   | 20.0000            | 19.47     |
|       | Di-n-Butylphthalate          | 149          | 10.462 |        | (1.112)    | 358075   | 20.0000            | 19.29     |
|       | Fluoranthene                 | 202          | 11.302 | 11.302 |            | 308182   | 20.0000            | 20.88     |
|       | Benzidine                    | 184          | 11.571 |        | (0.840)    | 222260   | 20.0000            | 18.32     |
|       | Pyrene                       | 202          | 11.665 |        | (0.847)    | 345805   | 20.0000            | 18.72     |
|       | 3,3'-dimethylbenzidine       | 212          | 12.867 |        | (0.934)    | 198960   | 20.0000            | 19.11     |
|       | Butylbenzylphthalate         | 149          | 12.991 |        | (0.943)    | 174685   | 20.0000            | 18.51     |
|       | Benzo (a) Anthracene         | 228          | 13.758 |        | (0.998)    | 304948   | 20.0000            | 19.57     |
|       | Chrysene                     | 228          | 13.820 |        | (1.003)    | 314030   | 20.0000            | 19.39     |
|       | 3,3'-Dichlorobenzidine       | 252          | 13.799 |        | (1.002)    | 115458   | 20.0000            | 20.25     |
|       | •                            |              |        |        |            |          |                    |           |
|       | bis (2-ethylhexyl) Phthalate | 149          | 14.110 |        | (1.024)    | 248201   | 20.0000<br>20.0000 | 19.10     |
|       | Di-n-octylphthalate          | 149          | 15.157 |        | (1.100)    | 400592   |                    | 19,28     |
|       | Benzo (b) fluoranthene       | 252          | 15.582 |        | (0.964)    | 256213   | 20.0000            | 17.45 (Q) |
|       | Benzo(k) fluoranthene        | 252          | 15.613 |        | (0.966)    | 371629   | 20.0000            | 21.66(q)  |
|       | Benzo(e)pyrene               | 252          | 15.996 |        | (0.990)    | 281015   | 20.0000            | 19.30     |
|       | Benzo(a) pyrene              | 252          | 16.069 |        | (0.994)    | 307781   | 20.0000            | 19.26     |
|       | Indeno(1,2,3-cd)pyrene       | 276          | 17.789 |        | (1.101)    | 228110   | 20.0000            | 16.13     |
|       | Dibenzo(a,h)anthracene       | 278          | 17.841 |        | (1.104)    | 270172   | 20.0000            | 18.64     |
| 153   | Benzo(g,h,i)perylene         | 276          | 18.224 | 18.235 | (1.128)    | 301520   | 20.0000            | 19.41     |
|       |                              |              |        |        |            |          |                    |           |

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002C.D Report Date: 02-Oct-2010 16:57

|                                     |               |    |        |        |          | AMOUZ   | ITS      |    |
|-------------------------------------|---------------|----|--------|--------|----------|---------|----------|----|
|                                     | QUANT SIG     |    |        |        |          | CAL-AMT | ON-COL   |    |
| Compounds                           | MASS          | RT | exp rt | REL RT | RESPONSE | (NG)    | ( NG)    |    |
| <b>孙风飞双用度动写用部件被求报用报票数量重整型大型次数</b>   | # <b>==</b> = |    |        | ====== |          | ======  | *****    |    |
| M 162 benzo b,k Fluoranthene Totals | 252           |    |        |        | 627842   | 20.0000 | 19.72 (7 | 4) |

## QC Flag Legend

- A Target compound detected but, quantitated amount exceeded maximum amount.

  Q Qualifier signal failed the ratio test.

  q Qualifier signal exceeded ratio warning limit.

Page 3

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002C.D

Report Date: 03-Oct-2010 11:13

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002C.D

Lab Smp Id: HSL 020 ug/ml CS-3

Analysis Type: SV Quant Type: ISTD

Operator: KT
Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1 8270STD.SUB;10MSSV0309;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

| COMPOUND            | STANDARD | AREA<br>LOWER | LIMIT<br>UPPER | SAMPLE | %DIFF  |
|---------------------|----------|---------------|----------------|--------|--------|
|                     |          |               |                |        | ====== |
| l 1,4-Dichlorobenze | 122625   | 61313         | 245250         | 145926 | 19.00  |
| 2 Naphthalene-d8    | 530514   | 265257        | 1061028        | 625682 | 17.94  |
| 3 Acenaphthene-d10  | 282538   | 141269        | 565076         | 328608 | 16.31  |
| 4 Phenanthrene-dl0  | 462722   | 231361        | 925444         | 525834 | 13.64  |
| 5 Chrysene-d12      | 435850   | 217925        | 871700         | 590727 | 35.53  |
| 6 Perylene-d12      | 422284   | 211142        | 844568         | 619266 | 46.65  |
|                     |          |               |                |        |        |

|  |          | RT I   | TIMIT    |         |         |
|--|----------|--------|----------|---------|---------|
| COMPOUND                               | STANDARD | LOWER  | UPPER    | Sample  | %DIFF   |
| ====================================== | =======  | ====== | ======== | ======= | ======  |
| 1 1,4-Dichlorobenze                    | 3.96     | 3.46   | 4.46     | 3.95    | -0.00   |
| 2 Naphthalene-d8                       | 5.37     | 4.87   | 5,87     | 5.36    | -0.20   |
| 3 Acenaphthene-d10                     | 7.47     | 6.97   | 7.97     | 7.47    | -0.00   |
| 4 Phenanthrene-d10                     | 9.41     | 8.91   | 9.91     | 9.41    | -0.00   |
| 5 Chrysene-dl2                         | 13.78    | 13.28  | 14.28    | 13.78   | -0.00   |
| 6 Perylene-d12                         | 16.16    | 15.66  | 16.66    | 16.16   | -0.00   |
|  |          |        |          |         | <u></u> |

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Page 1

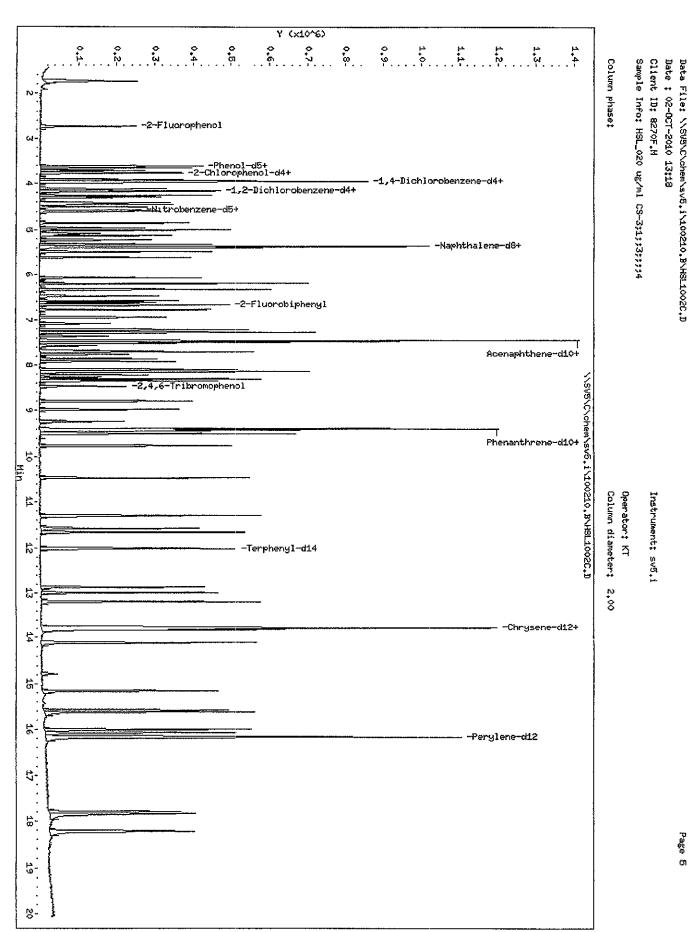
Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Smp ID: 8270F.M

Level:

Sample Type:



Report Date: 03-Oct-2010 11:14

#### TestAmerica West Sacramento

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002D.D Lab Smp Id: HSL\_050 ug/ml CS-4 Client Smp Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 13:44

Operator : KT Inst ID: sv5.i

Smp Info : HSL 050 ug/ml CS-4;1;;4;;;4

Misc Info:  $3;;\overline{0};1_8270STD.SUB;10MSSV0310;0;8270F.M$ 

Comment : SOP SAC-MS-0005 Method : \\sv5\c\chem\sv5.i\100210.B\8270f.m

Meth Date: 03-Oct-2010 11:09 onishim Quant Type: ISTD

Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 4 Calibration Sample, Level: 4

Dil Factor: 1.00000 Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14

Processing Host: SACP307UM

|          |  |                   |                |        |                    |                  | AMOUN              |                        |
|----------|--|-------------------|----------------|--------|--------------------|------------------|--------------------|------------------------|
| ٦.       |  | QUANT SIG<br>MASS | RT             | EXP RT | REL RT             | RESPONSE         | CAL-AMT<br>(NG)    | ON-COL                 |
|          | mpounds                                      | MASS              |                |        |                    | RESPONSE         | ( NG)              |                        |
| ==       | 1 1.4-Dichlorobenzene-d4                     | 152               | 3.955          |        | (1.000)            | 122625           | 40.0000            | ***                    |
| *        | 2 Naphthalene-d8                             | 136               | 5.374          |        | (1.000)            | 530514           | 40.0000            |                        |
| *        | 3 Acenaphthene-d10                           | 164               | 7.468          |        | (1.000)            | 282538           | 40.0000            |                        |
| *        | 4 Phenanthrene-d10                           | 188               | 9.405          |        | (1.000)            | 462722           | 40.0000            |                        |
| *        | 5 Chrysene-dl2                               | 240               | 13.779         |        | (1.000)            | 402722           | 40.0000            |                        |
| *        | 6 Perylene-dl2                               | 264               | 16.162         |        | (1.000)            | 435850           | 40.0000            |                        |
| s        | 7 2-Fluorophenol                             | 254<br>112        | 2.732          |        | (0.691)            | 220986           | 50.0000            | 51.13                  |
| ş<br>S   | 7 2-Fluorophenoi<br>8 Phenol-d5              | 99                | 3.613          |        |                    | 274382           | 50.0000            | 50.48                  |
| \$       |  | 132               | 3.513          |        | (0.914)            | 2/4382<br>244352 | 50.0000            | 50.48<br>51.19         |
| •        | 9 2-Chlorophenol-d4                          |                   |                |        | (0,950)            |                  |                    | -                      |
| \$<br>S  | 10 1,2-Dichlorobenzene-d4 11 Nitrobenzene-d5 | 152<br>82         | 4.162<br>4.576 |        | (1.052)<br>(0.852) | 151616<br>226162 | 50.0000<br>50.0000 | 50,20<br>50.33         |
| ⇒<br>\$  |  | 82<br>172         | 6.680          |        | (0.852)            | 473978           | 50.0000            | 50.33                  |
| \$<br>\$ | 12 2-Fluorobiphenyl 13 2,4,6-Tribromophenol  | 330               | 8.473          |        | (1.135)            | 473978<br>63311  | 50.0000            | 52.08<br>51.57         |
| ₽<br>\$  | •  | 330<br>244        | 12.017         |        | (0.872)            | 438253           | 50.0000            |                        |
| Ş        | 14 Terphenyl-d14 15 N-Nitrosodimethylamine   | 244<br>74         | 1.706          |        | (0.872)            | 140972           | 50.0000            | 51.05<br>49.90(M)      |
|          | 16 Pyridine                                  | 79                | 1.726          |        | (0.431)            | 240053           | 50.0000            | 49.90 (M)<br>50.81 (M) |
|          | 23 Aniline                                   | 93                | 3.654          |        | (0.924)            | 346504           | 50.0000            | 50.81 (M)              |
|          | 24 Phenol                                    | 94                | 3.623          |        | (0.916)            | 311820           | 50.0000            | 49.93                  |
|          | 26 Bis(2-chloroethyl)ether                   | 93                | 3.023          |        | (0.910)            | 220455           | 50.0000            | 50.34                  |
|          | 27 2-Chlorophenol                            | 128               | 3.768          |        | (0.953)            | 242442           | 50.0000            | 50.57                  |
|          | 28 1.3-Dichlorobenzene                       | 128               | 3.923          |        |                    | 265384           | 50.0000            | 50.57                  |
|          | *  | 146               | 3.943          |        | (0.992)<br>(1.005) | 265384           | 50.0000            | 49.66                  |
|          | 29 1,4-Dichlorobenzene                       | 108               | 4.120          |        | (1.042)            | 160914           | 50.0000            | 49.55                  |
|          | 30 Benzyl Alcohol 31 1,2-Dichlorobenzene     | 108               | 4.172          |        | (1.042)            | 257606           | 50.0000            | 49.94<br>51.32         |
|          |  | 146               | 4.172          |        | (1.055)            | 257606           | 50.0000            | 49.86                  |
|          | 32 2-Methylphenol                            | 108<br>45         | 4.255          |        | (1.0%)             | 349371           | 50.0000            | 49.86<br>50.12         |
|          | 33 2,2'-oxybis(1-Chloropropane)              | 108               | 4.421          |        |                    | 233354           |                    | 50.12<br>50.11         |
|          | 34 4-Methylphenol                            |                   |                | •      | (1.118)            |                  | 50.0000            |                        |
|          | 36 Hexachloroethane                          | 117               | 4.504          |        | (1.139)            | 94106            | 50.0000            | 50.62                  |
|          | 37 N-Nitrosodinpropylamine                   | 70                | 4.442          |        | (1.123)            | 156914           | 50.0000            | 50.59                  |
|          | 42 Nitrobenzene                              | 77                | 4.597          |        | (0.855)            | 219387           | 50,0000            | 49.95                  |
|          | 44 Isophorone                                | 82                | 4.856          |        | (0.904)            | 420061           | 50.0000            | 49,74                  |
|          | 45 2-Nitrophenol                             | 139               | 4.960          |        | (0.923)            | 132771           | 50.0000            | 50.95                  |
|          | 46 2,4-Dimethyphenol                         | 107               | 5.012          | 5.012  | (0.933)            | 231517           | 50,0000            | 50.00                  |

|  |            |                |        |                    |                 | AMOUNTS            |                |  |
|--|------------|----------------|--------|--------------------|-----------------|--------------------|----------------|--|
|  | QUANT SIG  |                |        |                    |                 | CAL-AMT            | ON-COL         |  |
| Compounds  | MASS       | RT             | EXP RT | REL RT             | RESPONSE        | ( NG)              | ( NG)          |  |
| · 李林可称最初的特殊之后还是不是是是是是是是是是                            | HEED       |                |        | · =======          |                 | ======             | #=====         |  |
| 47 Bis (2-chloroethoxy) methane                      | 93         | 5.126          |        | (0.954)            | 253648          | 50.0000            | 49.15          |  |
| 49 2,4-Dichlorophenol                                | 162        | 5,229          |        | (0.973)            | 179296          | 50.0000            | 50.05          |  |
| 50 Benzoic Acid                                      | 122        | 5.115          |        | (0.952)            | 128366          | 50.0000            | 50.08          |  |
| 51 1,2,4-Trichlorobenzene                            | 180        | 5.322          |        | (0.990)            | 197265          | 50.0000            | 50.86          |  |
| 52 Naphthalene                                       | 128        | 5.395          |        | (1.004)<br>(1.021) | 724980          | 50.0000            | 49.49          |  |
| 54 4-Chloroaniline                                   | 127        | 5.488          |        |                    | 291184          | 50.0000            | 50.72          |  |
| 57 Hexachlorobutadiene<br>60 4-Chloro-3-Methylphenol | 225<br>107 | 5.613<br>6.069 |        | (1.044)<br>(1.129) | 95592<br>205388 | 50.0000<br>50.0000 | 50.36<br>51.34 |  |
| 63 2-Methylnaphthalene                               | 142        | 6.203          |        | (1.154)            | 454646          | 50,0000            | 50.50          |  |
| 66 Hexachlorocyclopentadiene                         | 237        | 6.483          |        | (0.868)            | 104908          | 50.0000            | 49.76          |  |
| 69 2,4,6-Trichlorophenol                             | 196        | 6.576          |        | (0.881)            | 113001          | 50.0000            | 50.13          |  |
| 70 2,4,5-Trichlorphenol                              | 196        | 6.628          |        | (0.888)            | 128196          | 50.0000            | 52.79          |  |
| 71 2-Chloronaphthalene                               | 162        | 6.784          |        | (0.908)            | 403257          | 50.0000            | 50.72          |  |
| •  | 65         | 6.784          |        |                    | 124335          | 50.0000            | 51.59          |  |
| 73 2-Nitroaniline                                    |            |                |        | (0.931)            |                 |                    |                |  |
| 76 Dimethylphthalate                                 | 163        | 7,229          |        | (0.968)            | 475258          | 50.0000            | 51.91<br>51.43 |  |
| 77 Acenaphthylene                                    | 152        |                |        | (D.975)            | 712158          | 50.0000            |                |  |
| 79 2,6-Dinitrotoluene                                | 165        | 7.302          |        | (0.978)            | 110261          | 50.0000            | 51.69          |  |
| 80 3-Nitroaniline                                    | 138        | 7.447          |        | (0.997)            | 141396          | 50.0000            | 53.11          |  |
| 81 Acenaphthene                                      | 153        | 7.509          |        | (1.006)            | 448691          | 50.0000            | 50.90          |  |
| 82 2,4-Dinitrophenol                                 | 184        | 7.571          |        | (1.014)            | 58864           | 50.0000            | 47.37          |  |
| 83 Dibenzofuran                                      | 168        | 7.706          |        | (1.032)            | 598735          | 50.0000            | 51.18          |  |
| 84 4-Nitrophenol                                     | 109        | 7.675          |        | (1.028)            | 56777           | 50.0000            | 51.41          |  |
| 86 2,4-Dinitrotoluene                                | 165        | 7.768          |        | (1.040)            | 148875          | 50.0000            | 53.18          |  |
| 91 Fluorene  | 166        | 8.131          |        | (1.089)            | 494097          | 50.0000            | 51.01          |  |
| 92 Diethylphthalate                                  | 149        | 8.100          |        | (1.085)            | 487067          | 50,0000            | 51.96          |  |
| 93 4-Chlorophenyl-phenylether                        | 204        | 8,152          |        | (1.092)            | 209308          | 50.0000            | 51.97          |  |
| 94 4-Nitroaniline                                    | 138        | 8,214          |        | (1,100)            | 135397          | 50.0000            | 51.31          |  |
| 97 4,6-Dinitro-2-methylphenol                        | 198        | 8,276          |        | (0.880)            | 76137           | 50.0000            | 46.58          |  |
| 98 N-Nitrosodiphenylamine                            | 169        | 8.317          |        | (0.884)            | 409666          | 58.6000            | 58.41          |  |
| 100 Azobenzene                                       | 77         | 8.348          |        | (0.888)            | 459960          | 50.0000            | 50 55          |  |
| 101 4-Bromophenyl-phenylether                        | 248        | 8.794          |        | (0.935)            | 115283          | 50.0000            | 51.04          |  |
| 108 Hexachlorobenzene                                | 284        | 8.981          | 8.981  | (0.955)            | 124963          | 50.0000            | 49.54          |  |
| 110 Pentachlorophenol                                | 266        | 9.240          |        | (0.982)            | 67882           | 50.0000            | 45.48          |  |
| 114 Phenanthrene                                     | 178        | 9.437          | 9.437  | (1.003)            | 718164          | 50.0000            | 49.24          |  |
| 115 Anthracene                                       | 178        | 9.499          | 9.499  | (1.010)            | 728681          | 50.0000            | 50.03          |  |
| 118 Carbazole  | 167        | 9.768          | 9.768  | (1.039)            | 660885          | 50.0000            | 49.65          |  |
| 120 Di-n-Butylphthalate                              | 149        | 10.463         |        | (1.112)            | 799142          | 50.0000            | 49.90          |  |
| 126 Fluoranthene                                     | 202        |                | 11.302 |                    | 639252          | 50.0000            | 48.92          |  |
| 127 Benzidine  | 184        | 11.571         | 11.571 | (0.840)            | 450332          | 50.0000            | 50.98          |  |
| 128 Pyrene   | 202        | 11.665         | 11.665 | (0.847)            | 701084          | 50.0000            | 51.46          |  |
| 134 3,3'-dimethylbenzidine                           | 212        |                | 12.867 |                    | 385489          | 50.0000            | 49.44          |  |
| 136 Butylbenzylphthalate                             | 149        | 12.991         | 12.991 | (0.943)            | 340978          | 50.0000            | 49.94          |  |
| 138 Benzo (a) Anthracene                             | 228        | 13.758         | 13.758 | (0.998)            | 569271          | 50.0000            | 49.03          |  |
| 139 Chrysene   | 228        | 13.831         | 13.831 | (1.004)            | 597685          | 50.0000            | 50.33          |  |
| 140 3,3'-Dichlorobenzidine                           | 252        | 13.799         | 13.799 | (1.002)            | 217413          | 50.0000            | 49.65          |  |
| 141 bis(2-ethylhexyl)Phthalate                       | 149        | 14.110         | 14.110 | (1.024)            | 464144          | 50.0000            | 49.35          |  |
| 142 Di-n-octylphthalate                              | 149        | 15.167         | 15.167 | (1.101)            | 732406          | 50.0000            | 48.72          |  |
| 144 Benzo (b) fluoranthene                           | 252        | 15.582         | 15.582 | (0.964)            | 527487          | 50.0000            | 55.18          |  |
| 145 Benzo(k) fluoranthene                            | 252        |                | 15.623 |                    | 580084          | 50.0000            | 47.2           |  |
| 147 Benzo (e) pyrene                                 | 252        |                | 16.007 |                    | 506622          | 50.0000            | 50.82          |  |
| 148 Benzo (a) pyrene                                 | 252        |                | 16.079 |                    | 542578          | 50.0000            | 50.06          |  |
| 151 Indeno(1,2,3-cd)pyrene                           | 276        |                | 17.800 |                    | 447085          | 50.0000            | 51.00          |  |
| 152 Dibenzo (a, h) anthracene                        | 278        |                | 17.841 |                    | 486893          | 50.0000            | 49.72          |  |
| 153 Benzo(g,h,i)perylene                             | 276        |                | 18.235 |                    | 527720          | 50.0000            | 49.77          |  |

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002D.D

Report Date: 03-Oct-2010 11:14

AMOUNTS Compounds MASS RT EXP RT REL RT RESPONSE ( NG) ( NG)

M162 benzo b, k Fluoranthene Totals 252 1107571 1107571 50.0000 50.74(A)

## QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

M - Compound response manually integrated.

Page 3

Data File Name: HSL1002D.D

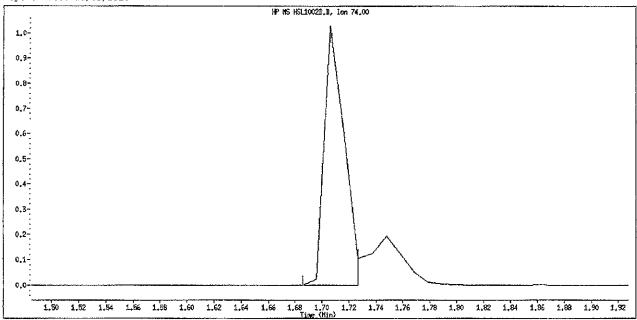
Inj. Date and Time: 02-OCT-2010 13:44

Instrument ID: sv5.i Client ID: 8270F.M

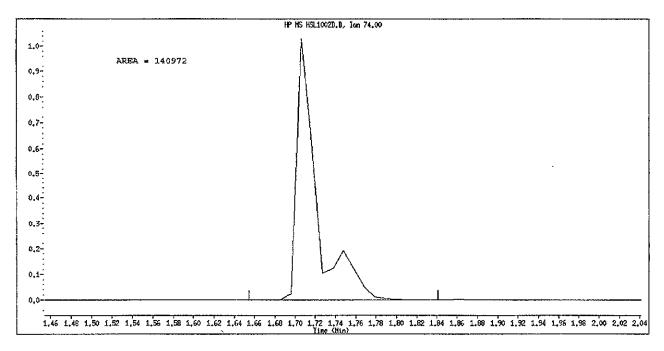
Compound Name: N-Nitrosodimethylamine

CAS #: 62-75-9

Report Date: 10/03/2010



Original Integration



Manual Integration

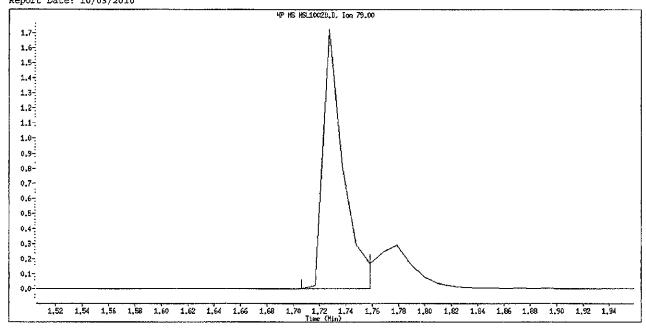
Manually Integrated By: truongk
Manual Integration Reason: Poor Chromatography

Data File Name: HSL1062D.D

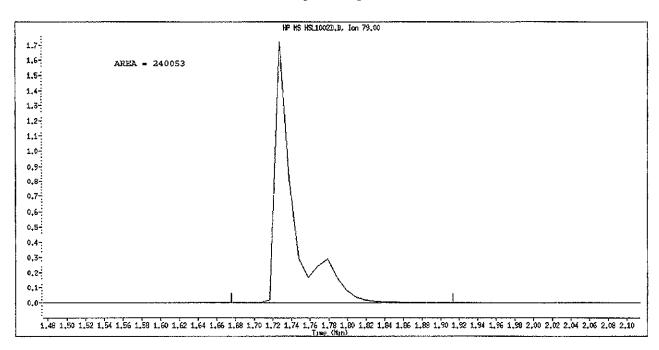
Inj. Date and Time: 02-OCT-2010 13:44

Instrument ID: sv5.i Client ID: 8270F.M Compound Name: Pyridine

CAS #: 110-86-1 Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk

Manual Integration Reason: Poor Chromatography

Data File Name: HSL1002D.D

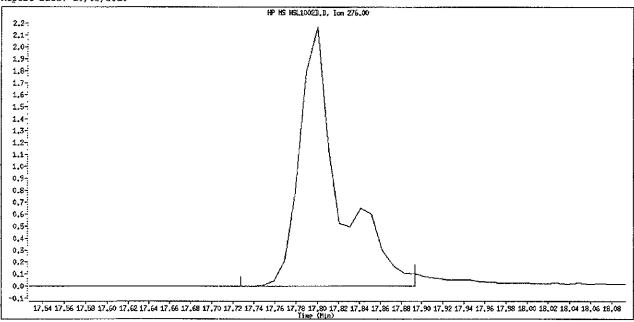
Inj. Date and Time: 02-OCT-2010 13:44

Instrument ID: sv5.i Client ID: 8270F.M

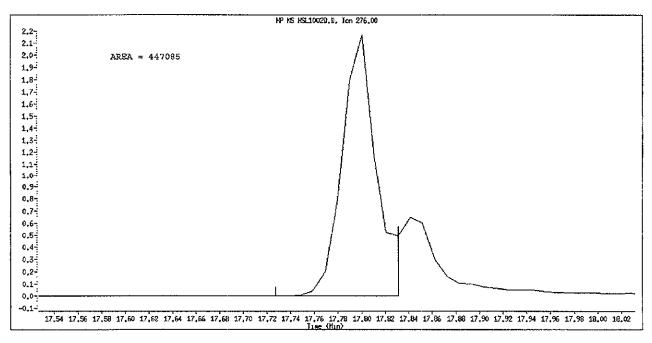
Compound Name: Indeno(1,2,3-cd)pyrene

CAS #: 193-39-5

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk

Manual Integration Reason: Poor Chromatography

Report Date: 02-Oct-2010 16:57

Page 1

#### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\100210.B\HSL1002D.D Lab Smp Id: HSL\_050 ug/ml CS-4 Client Smp Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 13:44

Operator : KT Inst ID: sv5.i

Smp Info : HSL\_050 ug/ml CS-4;1;;4;;;4

Misc Info:  $3; \overline{0}; 1_8270$ STD.SUB; 10MSSV0310; 0; 8270F.M

: SOP SAT-MS-0005

Method : \\SV5\C\chem\sv5.i\100210.B\8270f.m Meth Date : 02-Oct-2010 16:57 onishim Quant 1 Quant Type: ISTD

Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 4 Calibration Sample, Level: 4

Dil Factor: 1.00000 Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

|  |    |                              |           |        |        |         |  | AMOU                                   | NTS     |
|--|----|------------------------------|-----------|--------|--------|---------|--|--|---------|
|  |    |                              | QUANT SIG |        |        |         |  | CAL-AMT                                | ON-COL  |
| Compounds                                      |    |                              | Mass      | RT     | EXP RT | REL RT  | RESPONSE   | (NG)                                   | ( NG)   |
| <b>0160600</b> 0000000000000000000000000000000 |    |                              | ====      |        |        |         | EE. D. I. S. S. S. S. S. S. S. S. S. S. S. S. S. | ###################################### | 在对解解的原理 |
| *  | 1  | 1,4-Dichlorobenzene-d4       | 152       | 3.955  | 3.955  | (1.000) | 122625   | 40.0080                                |         |
| *  | 2  | Naphthalene-d8               | 136       | 5.374  | 5.374  | (1.000) | 530514   | 40.0000                                |         |
| *  | 3  | Acenaphthene-d10             | 164       | 7.468  | 7.468  | (1.000) | 282538   | 40,0000                                |         |
| *  | 4  | Phenanthrene-dl0             | 188       | 9,405  | 9.405  | (1.000) | 462722   | 40.0000                                |         |
| *  | 5  | Chrysene-d12                 | 240       | 13.779 | 13.779 | (1.000) | 435850   | 40.0000                                |         |
| *  | 6  | Perylene-d12                 | 264       | 16.162 | 16,162 | (1.000) | 422284   | 40.0000                                |         |
| \$   | 7  | 2-Fluorophenol               | 112       | 2.732  | 2.732  | (0.691) | 220986   | 50,0000                                | 48.83   |
| \$   | 8  | Phenol-d5                    | 99        | 3,613  | 3.613  | (0.914) | 274382   | 50.0000                                | 47.67   |
| \$   | 9  | 2-Chlorophenol-d4            | 132       | 3.758  | 3.758  | (0.950) | 244352   | 50.0000                                | 49.80   |
| \$   | 10 | 1,2-Dichlorobenzene-d4       | 152       | 4.162  | 4.162  | (1.052) | 151616   | 50.0000                                | 49.50   |
| \$   | 11 | Nitrobenzene-d5              | 82        | 4.576  | 4.576  | (0.852) | 226162   | 50.0000                                | 48.07   |
| \$   | 12 | 2-Fluorobiphenyl             | 172       | 6.680  | 6.680  | (0.895) | 473978   | 50.0000                                | 52.38   |
| \$   | 13 | 2,4,6-Tribromophenol         | 330       | 8.473  | 8.473  | (1.135) | 63311  | 50.0000                                | 56.75   |
| \$   | 14 | Terphenyl-d14                | 244       | 12.017 | 12.017 | (0.872) | 438253   | 50.0000                                | 51.56   |
|  | 15 | N-Nitrosodimethylamine       | 74        | 1.706  | 1.706  | (0.431) | 105836   | 50.0000                                | 35.43   |
|  | 16 | Pyridine                     | 79        | 1.726  | 1.726  | (0.437) | 182664   | 50.0000                                | 36,70   |
|  | 23 | Aniline                      | 93        | 3,654  | 3.654  | (0,924) | 346504   | 50.0000                                | 48.01   |
|  | 24 | Phenol                       | 94        | 3.623  | 3.623  | (0.916) | 311820   | 50.0000                                | 50.94   |
|  | 26 | Bis(2-chloroethyl)ether      | 93        | 3.716  | 3.716  | (0.940) | 220455   | 50.0000                                | 47.40   |
|  | 27 | 2-Chlorophenol               | 128       | 3.768  | 3.768  | (0.953) | 242442   | 50.0000                                | 50.05   |
|  | 28 | 1,3-Dichlorobenzene          | 146       | 3.923  | 3.923  | (0.992) | 265384   | 50.0000                                | 49.58   |
|  | 29 | 1,4-Dichlorobenzene          | 146       | 3,975  | 3.975  | (1.005) | 271151   | 50.0000                                | 50.11   |
|  | 30 | Benzyl Alcohol               | 108       | 4.120  | 4.120  | (1.042) | 160914   | 50.0000                                | 48.35   |
|  | 31 | 1,2-Dichlorobenzene          | 146       | 4.172  | 4.172  | (1.055) | 257606   | 50.0000                                | 50.23   |
|  | 32 | 2-Methylphenol               | 108       | 4.255  | 4.255  | (1.076) | 218610   | 50.0000                                | 48.31   |
|  | 33 | 2,2'-oxybis(1-Chloropropane) | 45        | 4.297  | 4.297  | (1.086) | 349371   | 50.0000                                | 40.48   |
|  | 34 | 4-Methylphenol               | 108       | 4.421  | 4.421  | (1.118) | 233354   | 50.0000                                | 48.39   |
|  | 36 | Hexachloroethane             | 117       | 4.504  | 4.504  | (1.139) | 94106  | 50.0000                                | 49.29   |
|  | 37 | N-Nitrosodinpropylamine      | 70        | 4.442  | 4.442  | (1,123) | 156914   | 50.0000                                | 46.48   |
|  | 42 | Nitrobenzene                 | 77        | 4.597  | 4.597  | (0.855) | 219387   | 50.0000                                | 46.91   |
|  | 44 | Isophorone                   | 82        | 4.856  | 4 856  | (0.904) | 420061   | 50.0000                                | 47.38   |
|  | 45 | 2-Nitrophenol                | 139       | 4.960  | 4.960  | (0.923) | 132771   | 50.0000                                | 52,00   |
|  | 46 | 2,4-Dimethyphenol            | 107       | 5.012  | 5 012  | (0.933) | 231517   | 50.0000                                | 48.84   |
|  |    |                              |           |        |        |         |  |  |         |

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002D.D Report Date: 02-Oct-2010 16:57

|        |                            |           |        |        |         |          | NUOMA   | ITS    |
|--------|----------------------------|-----------|--------|--------|---------|----------|---------|--------|
|        |                            | QUANT SIG |        |        |         |          | CAL-AMT | ON-COL |
| Compos | unds                       | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ( NG)   | ( NG)  |
| =====  | FE= 0E048E6E8E6E67=7773=   | ====      |        |        |         | RESERVE  | ======  | ====== |
| 47     | Bis(2-chloroethoxy)methane | 93        | 5.126  | 5.126  | (0.954) | 253648   | 50.0000 | 48.05  |
| 49     | 2,4-Dichlorophenol         | 162       | 5.229  | 5.229  | (0.973) | 179296   | 50.0000 | 51.39  |
| 50     | Benzoic Acid               | 122       | 5.115  | 5.115  | (0.952) | 128366   | 50.0000 | 48.58  |
| 51     | 1,2,4-Trichlorobenzene     | 180       | 5.322  | 5.322  | (0.990) | 197265   | 50.0000 | 52.15  |
| 52     | Naphthalene                | 128       | 5.395  | 5.395  | (1.004) | 724980   | 50.0000 | 49.10  |
| 54     | 4-Chloroaniline            | 127       | 5.488  | 5.488  | (1.021) | 291184   | 50.0000 | 50.12  |
| 57     | Hexachlorobutadiene        | 225       | 5.613  | 5.613  | (1.044) | 95592    | 50.0000 | 53.11  |
| 60     | 4-Chloro-3-Methylphenol    | 107       | 6.069  | 6.069  | (1.129) | 205388   | 50.0000 | 51.16  |
| 63     | 2-Methylnaphthalene        | 142       | 6.203  | 6.203  | (1.154) | 464646   | 50.0000 | 51.57  |
| 66     | Hexachlorocyclopentadiene  | 237       | 6.483  | 6.483  | (0.868) | 104908   | 50.0000 | 48.68  |
| 69     | 2,4,6-Trichlorophenol      | 196       | 6.576  | 6.576  | (0.881) | 113001   | 50.0000 | 52.83  |
| 70     | 2,4,5-Trichlorphenol       | 196       | 6.628  | 6.628  | (0.888) | 128196   | 50.0000 | 54.56  |
| 71     | 2-Chloronaphthalene        | 162       | 6.784  | 6.784  | (0.908) | 403257   | 50.0000 | 50.91  |
| 73     | 2-Nitroaniline             | 65        | 6.949  | 6.949  | (0.931) | 124335   | 50.0000 | 46.87  |
| 76     | Dimethylphthalate          | 163       | 7.229  | 7.229  | (0.968) | 475258   | 50.0000 | 51.95  |
| 77     | Acenaphthylene             | 152       | 7.281  | 7.281  | (0.975) | 712158   | 50.0000 | 51.43  |
| 79     | 2,6-Dinitrotoluene         | 165       | 7.302  | 7.302  | (0.978) | 110261   | 50.0000 | 53.92  |
| 80     | 3-Nitroaniline             | 138       | 7.447  | 7.447  | (0.997) | 141396   | 50.0000 | 52.05  |
| 81     | Acenaphthene               | 153       | 7.509  | 7.509  | (1,006) | 448691   | 50.0000 | 50.85  |
| 82     | 2,4-Dinitrophenol          | 184       | 7.571  | 7.571  | (1.014) | 58864    | 50.0000 | 48.70  |
| 83     | Dibenzofuran               | 168       | 7.706  | 7.706  | (1.032) | 598735   | 50.0000 | 51.36  |
| 84     | 4-Nitrophenol              | 109       | 7.675  | 7.675  | (1.028) | 56777    | 50.0000 | 47.87  |
| 86     | 2,4-Dinitrotoluene         | 165       | 7.768  | 7.768  | (1.040) | 148875   | 50.0000 | 54.24  |
| 91     | Fluorene                   | 166       | 8.131  | 8.131  | (1.089) | 494097   | 50,0000 | 51.73  |
| 92     | Diethylphthalate           | 149       | 8.100  | 8.100  | (1.085) | 487067   | 50.0000 | 50.93  |
| 93     | 4-Chlorophenyl-phenylether | 204       | 8.152  | 8.152  | (1.092) | 209308   | 50.0000 | 53.15  |
| 94     | 4-Nitroaniline             | 138       | 8.214  | 8.214  | (1.100) | 135397   | 50.0000 | 50.99  |
| 97     | 4,6-Dinitro-2-methylphenol | 198       | 8.276  | 8.276  | (0.880) | 76137    | 50.0000 | 46.45  |
| 98     | N-Nitrosodiphenylamine     | 169       | 8.317  | 8.317  | (0.884) | 409666   | 58.6000 | 56.82  |
| 100    | Azobenzene                 | 77        | 8.348  | 8.348  | (0.888) | 459960   | 50.0000 | 45.85  |
| 101    | 4-Bromophenyl-phenylether  | 248       | 8.794  | 8.794  | (0.935) | 115283   | 50.0000 | 51.56  |
| 108    | Hexachlorobenzene          | 284       | 8.981  | 8.981  | (0.955) | 124963   | 50.0000 | 51.74  |
| 110    | Pentachlorophenol          | 266       | 9.240  | 9.240  | (0.982) | 67882    | 50.0000 | 46.83  |
| 114    | Phenanthrene               | 178       | 9,437  | 9.437  | (1.003) | 718164   | 50.0000 | 49.76  |
| 115    | Anthracene                 | 178       | 9.499  | 9.499  | (1.010) | 728681   | 50.0000 | 50.17  |
| 118    | Carbazole                  | 167       | 9.768  | 9.758  | (1.039) | 660885   | 50.0000 | 48.92  |
| 120    | Di-n-Butylphthalate        | 149       | 10.463 | 10.463 | (1.112) | 799142   | 50.0000 | 48.91  |
| 126    | Fluoranthene               | 202       | 11.302 | 11.302 | (1.202) | 639252   | 50.0000 | 49,21  |
| 127    | Benzidine                  | 184       | 11.571 | 11.571 | (0.840) | 450332   | 50.0000 | 50.32  |
| 128    | Pyrene                     | 202       | 11.665 | 11.665 | (0.847) | 701084   | 50.0000 | 51.44  |
| 134    | 3,3'-dimethylbenzidine     | 212       | 12.867 | 12.867 | (0.934) | 385489   | 50.0000 | 50.19  |
| 136    | Butylbenzylphthalate       | 149       | 12.991 | 12.991 | (0.943) | 340978   | 50.0000 | 48.97  |
| 138    | Benzo (a) Anthracene       | 228       | 13.758 | 13.758 | (0.998) | 569271   | 50.0000 | 49.51  |
| 139    | Chrysene                   | 228       | 13.831 | 13.831 | (1.004) | 597685   | 50.0000 | 50.03  |
| 140    | 3,3'-Dichlorobenzidine     | 252       | 13.799 | 13.799 | (1.002) | 217413   | 50.0000 | 51.67  |
| 141    | bis(2-ethylhexyl)Phthalate | 149       | 14.110 | 14.110 | (1.024) | 464144   | 50.0000 | 48.41  |
| 142    | Di-n-octylphthalate        | 149       | 15.167 | 15.167 | (1.101) | 732406   | 50.0000 | 47.78  |
| 144    | Benzo(b) fluoranthene      | 252       | 15.582 | 15.582 | (0.964) | 527487   | 50.0000 | 52.68  |
| 145    | Benzo(k) fluoranthene      | 252       | 15.623 | 15.623 | (0.967) | 580084   | 50.0000 | 49.57  |
| 147    | Benzo(e)pyrene             | 252       | 16.007 | 16.007 | (0.990) | 506622   | 50.0000 | 51.04  |
| 148    | Benzo(a)pyrene             | 252       | 16.079 | 16.079 | (0.995) | 542578   | 50.0000 | 49.78  |
| 151    | Indeno(1,2,3-cd)pyrene     | 276       | 17.800 | 17.800 | (1.101) | 564014   | 50.0000 | 58.49  |
|        | Dibenzo(a,h)anthracene     | 278       | 17.841 | 17.841 | (1.104) | 486893   | 50.0000 | 49.27  |
|        | Benzo(g,h,i)perylene       | 276       | 18.235 | 18.235 | (1.128) | 527720   | 50.0000 | 49.81  |
|        |                            |           |        |        |         |          |         |        |

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002D.D Report Date: 02-Oct-2010 16:57

|                                     |             |      |        |        |          |     | AMOUN | rrs |         |   |
|-------------------------------------|-------------|------|--------|--------|----------|-----|-------|-----|---------|---|
|                                     | QUANT SIG   |      |        |        |          | CAL | -AMT  | ON- | COL     |   |
| Compounds                           | MASS        | RT   | EXP RT | REL RT | RESPONSE | ĺ   | NG)   | (   | NG)     |   |
|                                     | 21111111111 | ==== |        | *****  | FE332505 |     |       | 202 | ====    |   |
| M 162 benzo b,k Fluoranthene Totals | 252         |      |        |        | 1107571  | 50. | 0000  | 5   | 1.00 (A | ) |

# QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002D.D

Report Date: 03-Oct-2010 11:14

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002D.D

Lab Smp Id: HSL 050 ug/ml CS-4 Analysis Type: SV

Quant Type: ISTD

Operator: KT

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1 8270STD.SUB;10MSSV0310;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

|                                      |          | AREA     | LIMIT   |          |        |
|--------------------------------------|----------|----------|---------|----------|--------|
| COMPOUND                             | STANDARD | LOWER    | UPPER   | SAMPLE   | %DIFF  |
| ==================================== | ======== | ======== | ======= | ======== | ====== |
| 1 1,4-Dichlorobenze                  | 122625   | 61313    | 245250  | 122625   | 0.00   |
| 2 Naphthalene-d8                     | 530514   | 265257   | 1061028 | 530514   | 0.00   |
| 3 Acenaphthene-d10                   | 282538   | 141269   | 565076  | 282538   | 0.00   |
| 4 Phenanthrene-d10                   | 462722   | 231361   | 925444  | 462722   | 0.00   |
| 5 Chrysene-dl2                       | 435850   | 217925   | 871700  | 435850   | 0.00   |
| 6 Perylene-d12                       | 422284   | 211142   | 844568  | 422284   | 0.00   |
|                                      |          |          |         |          | l      |

|   |          | RT I  | LIMIT    | '        |        |
|---|----------|-------|----------|----------|--------|
| COMPOUND                                | STANDARD | LOWER | UPPER    | SAMPLE   | %DIFF  |
| ======================================= | =======  |       | ======== | ======== | ====== |
| 1 1,4-Dichlorobenze                     | 3.96     | 3.46  | 4.46     | 3.96     | 0.00   |
| 2 Naphthalene-d8                        | 5.37     | 4.87  | 5.87     | 5.37     | 0.00   |
| 3 Acenaphthene-d10                      | 7.47     | 6.97  | 7.97     | 7.47     | 0.00   |
| 4 Phenanthrene-d10                      | 9.41     | 8.91  | 9.91     | 9.41     | 0.00   |
| 5 Chrysene-d12                          | 13.78    | 13.28 | 14.28    | 13.78    | 0.00   |
| 6 Perylene-d12                          | 16.16    | 15.66 | 16.66    | 16.16    | 0.00   |
|   |          |       |          |          |        |

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = -50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

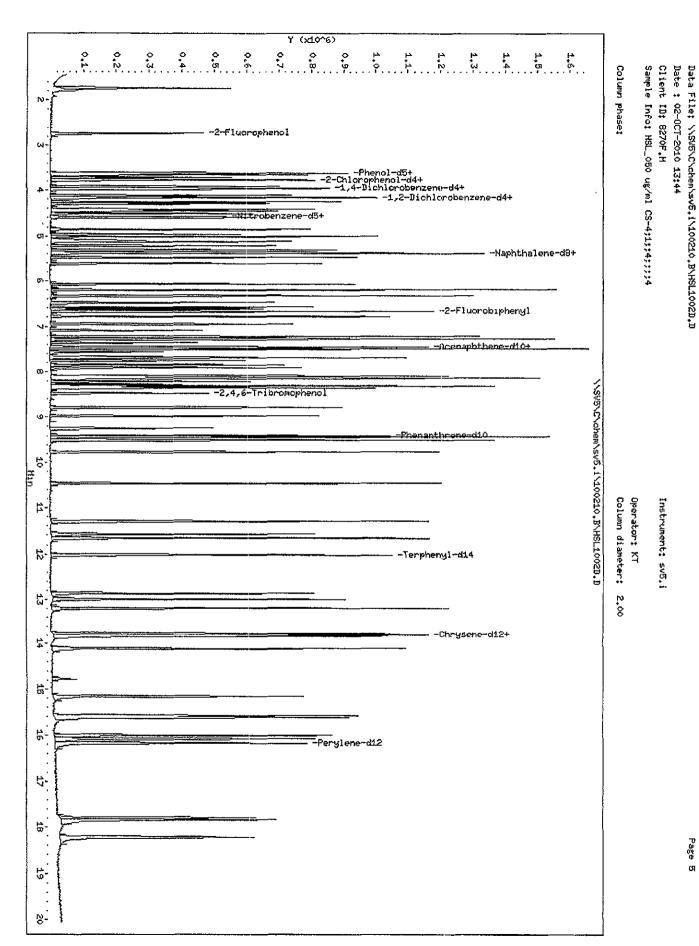
Page 1

Calibration Date: 02-OCT-2010 Calibration Time: 13:44

Client Smp ID: 8270F.M

Level:

Sample Type:



Report Date: 03-Oct-2010 11:15

# TestAmerica West Sacramento

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002E.D
Lab Smp Id: HSL 080 ug/ml CS-5 Client Smp
Inj Date: 02-OCT-2010 14:09 Client Smp ID: 8270F.M

Inst ID: sv5.i

: \\sv5\c\chem\sv5.i\100210.B\8270f.m Method

Meth Date: 03-Oct-2010 11:09 onishim Quant Type: ISTD

Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 5 Calibration Sample, Level: 5

Dil Factor: 1.00000 Integrator: Falcon

Compound Sublist: 1 8270STD.SUB

Target Version: 4.14

Processing Host: SACP307UM

|    |                                 |           |        |              |             | AMOUN   | TS            |
|----|---------------------------------|-----------|--------|--------------|-------------|---------|---------------|
|    |                                 | QUANT SIG |        |              |             | CAL-AMT | ON-COL        |
| Co | ompounds                        | Mass      | RT     | EXP RT REL   | RT RESPONSE | (NG)    | ( NG)         |
| == |                                 | warr      | ====   |              | *** ======  | 2662323 | 3665332       |
| *  | 1 1,4-Dichlorobenzene-d4        | 152       | 3.954  | 3.955 (1.00  | 0) 126989   | 40.0000 | (ਕ੍ਰ) .       |
| *  | 2 Naphthalene-d8                | 136       | 5.374  | 5.374 (1.00  | 0) 553454   | 40.0000 |               |
| *  | 3 Acenaphthene-dl0              | 164       | 7.468  | 7.468 (1.00  | 0) 300315   | 40.0000 |               |
| *  | 4 Phenanthrene-dl0              | 188       | 9.405  | 9.405 (1.00  | 0) 477777   | 40.0000 |               |
| *  | 5 Chrysene-dl2                  | 240       | 13.789 | 13.779 (1.00 | 0) 486126   | 40.0000 |               |
| *  | 6 Perylene-d12                  | 264       | 16.162 | 16.162 (1.00 | 0) 482782   | 40.0000 |               |
| \$ | 7 2-Fluorophenol                | 112       | 2.742  | 2.732 (0.69  | 3) 364547   | 80.0000 | 81,44         |
| \$ | 8 Phenol-d5                     | 99        | 3.612  | 3.613 (0.91  | 4) 459352   | 80.0000 | 81.61         |
| \$ | 9 2-Chlorophenol-d4             | 132       | 3.758  | 3.758 (0.95  | 0) 399981   | 80.0000 | 80.92         |
| \$ | 10 1,2-Dichlorobenzene-d4       | 152       | 4.162  | 4.162 (1.05  | 2) 252754   | 80.0000 | 80.82         |
| \$ | 11 Nitrobenzene-d5              | 82        | 4.587  | 4.576 (0.85  | 3) 371989   | 80.0000 | 79.35         |
| \$ | 12 2-Fluorobiphenyl             | 172       | 6.680  | 6.680 (0.89  | 5) 755916   | 80.0000 | 78.14         |
| \$ | 13 2,4,6-Tribromophenol         | 330       | 8.483  | 8.473 (1.13  | 6) 107063   | 80.0000 | 82.04         |
| \$ | 14 Terphenyl-d14                | 244       | 12.017 | 12.017 (0.87 | 1) 758812   | 80.0000 | 79.25         |
|    | 15 N-Nitrosodimethylamine       | 74        | 1.706  | 1.706 (0.43  |             | 80.0000 | 80.86 (q)     |
|    | 16 Pyridine                     | 79        | 1.726  | 1.726 (0.43  | 7) 386806   | 80,0000 | 79.06 (Q)     |
|    | 23 Aniline                      | 93        | 3.654  | 3.654 (0.92  | 4) 583513   | 80.0000 | 81.44 (Q)     |
|    | 24 Phenol                       | 94        | 3.623  | 3.623 (0.91  | 6) 524930   | 80.0000 | 81.16(Q)      |
|    | 26 Bis(2-chloroethyl)ether      | 93        | 3.716  | 3.716 (0.94  | 0) 362044   | 80.0000 | 79.83         |
|    | 27 2-Chlorophenol               | 128       | 3.768  | 3.768 (0.95  |             | 80.0000 | 80.21         |
|    | 28 1,3-Dichlorobenzene          | 146       | 3.923  | 3.923 (0.99  | 2) 428311   | 80.0000 | 79.20         |
|    | 29 1,4-Dichlorobenzene          | 146       | 3.975  | 3.975 (1.00  | 5) 452588   | 80.0000 | 80.04         |
|    | 30 Benzyl Alcohol               | 108       | 4.120  | 4.120 (1.04  | 2) 273768   | 80.0000 | 82.05         |
|    | 31 1,2-Dichlorobenzene          | 146       | 4.172  | 4.172 (1.05  | 5) 415025   | 80.0000 | 79.84         |
|    | 32 2-Methylphenol               | 108       | 4.255  | 4.255 (1.07  | 6) 369704   | 80.0000 | 81.43         |
|    | 33 2,2'-oxybis(1-Chloropropane) | 45        | 4.296  | 4,297 (1.08  | 6) 576575   | 80.0000 | 79.88         |
|    | 34 4-Methylphenol               | 108       | 4.421  | 4.421 (1.11  | 8) 387704   | 80.0000 | 80.39         |
|    | 36 Hexachloroethane             | 117       | 4.504  | 4.504 (1.13  | 9) 153472   | 80.0000 | 79.72         |
|    | 37 N-Nitrosodinpropylamine      | 70        | 4.442  | 4.442 (1.12  | 3) 265916   | 80.0000 | 82.78         |
|    | 42 Nitrobenzene                 | 77        | 4.597  | 4,597 (0.85  | 5) 369479   | 80.0000 | 80.64         |
|    | 44 Isophorone                   | 82        | 4.856  | 4.856 (0.90  | 4) 704520   | 80.0000 | 79.96         |
|    | 45 2-Nitrophenol                | 139       | 4.960  | 4.960 (0.92  | 3) 221628   | 80.0000 | 81.52         |
|    | 46 2,4-Dimethyphenol            | 107       | 5.011  | 5.012 (0.93  | 3) 385073   | 80.0000 | 79.72 10-3-10 |

|       |   |           |        |          |         |          | NUOMA   | TS .      |
|-------|---|-----------|--------|----------|---------|----------|---------|-----------|
|       |   | QUANT SIG |        |          |         |          | CAL-AMT | ON-COL    |
| Сотро | ands                                    | Mass      | RT     | EXP RT   | REL RT  | RESPONSE | (NG)    | ( NG)     |
| ===== | ===::================================== | ~===      | ====   | ======== | ======= | =====    | ****    | TRRRECA   |
| 47    | Bis(2-chloroethoxy)methane              | 93        | 5 125  | 5.126    | (0.954) | 426158   | 80.0000 | 79.16     |
| 49    | 2,4-Dichlorophenol                      | 162       | 5.229  | 5.229    | (0.973) | 301897   | 80.0000 | 80.78     |
| 50    | Benzoic Acid                            | 122       | 5.125  | 5.115    | (0.954) | 232711   | 80.0000 | 87.04     |
| 51    | 1,2,4-Trichlorobenzene                  | 180       | 5.322  | 5.322    | (0.990) | 323096   | 80.0000 | 79.84     |
| 52    | Naphthalene                             | 128       | 5.395  | 5.395    | (1.004) | 1216155  | 80.0000 | 79.58     |
| 54    | 4-Chloroaniline                         | 127       | 5.488  | 5.488    | (1.021) | 484619   | 80.0000 | 80.91     |
| 57    | Hexachlorobutadiene                     | 225       | 5.613  | 5.613    | (1,044) | 159233   | 80.0000 | 80.41     |
| 60    | 4-Chloro-3-Methylphenol                 | 107       | 6.069  | 6.069    | (1.129) | 335335   | 80.0000 | 80.35     |
| 63    | 2-Methylnaphthalene                     | 142       | 6.203  | 6.203    | (1.154) | 781029   | 80.0000 | 81.36     |
| 66    | Hexachlorocyclopentadiene               | 237       | 6.483  | 6.483    | (0.868) | 181608   | 80.0000 | 81.05     |
| 69    | 2,4,6-Trichlorophenol                   | 196       | 6.576  | 6.576    | (0881)  | 194036   | 80.0000 | 80.98     |
| 70    | 2,4,5-Trichlorphenol                    | 196       | 6.628  | 6.628    | (0.888) | 211635   | 80.0000 | 81.99     |
| 71    | 2-Chloronaphthalene                     | 162       | 6.784  | 6.784    | (0.908) | 668023   | 80.0000 | 79.04     |
| 73    | 2-Nitroaniline                          | 65        | 6.949  | 6.949    | (0.931) | 209144   | 80.0000 | 81.65     |
| 76    | Dimethylphthalate                       | 163       | 7.229  | 7.229    | (0.968) | 787815   | 80.0000 | 80.96     |
| 77    | Acenaphthylene                          | 152       | 7,281  | 7.281    | (0.975) | 1190475  | 80.0000 | 80.88     |
| 79    | 2,6-Dinitrotoluene                      | 165       | 7.302  | 7.302    | (0.978) | 187961   | 80.0000 | 82.91     |
| 80    | 3-Nitroaniline                          | 138       | 7.457  | 7.447    | (0.999) | 232287   | 80.0000 | 82.09     |
| 81    | Acenaphthene                            | 153       | 7.509  | 7.509    | (1.006) | 727612   | 80.0000 | 77.66     |
| 82    | 2,4-Dinitrophenol                       | 184       | 7,571  | 7.572    | (1.014) | 110384   | 80.0000 | 78.64     |
| 83    | Dibenzofuran                            | 168       | 7.705  | 7.706    | (1.032) | 991740   | 80.0000 | 79.76 (q) |
| 84    | 4-Nitrophenol                           | 109       | 7.675  | 7.675    | (1.028) | 102888   | 80.0000 | 87.65(Q)  |
| 86    | 2,4-Dinitrotoluene                      | 165       | 7.768  | 7.758    | (1.040) | 246471   | 80.0000 | 82.83     |
| 91    | Fluorene                                | 166       | 8.131  | 8,131    | (1.089) | 834271   | 80.0000 | 81.03     |
| 92    | Diethylphthalate                        | 149       | 8.100  | 8.100    | (1.085) | 792071   | 80.0000 | 79.50     |
| 93    | 4-Chlorophenyl-phenylether              | 204       | 8.151  | 8,152    | (1.092) | 340608   | 80.0000 | 79.56     |
| 94    | 4-Nitroaniline                          | 138       | 8,224  | 8.214    | (1.101) | 235541   | 80.0000 | 83.97     |
| 97    | 4,6-Dinitro-2-methylphenol              | 198       | 8.276  | 8.276    | (0.880) | 134784   | 80.0000 | 76.76     |
| 98    | N-Nitrosodiphenylamine                  | 169       | 8.317  | 8.317    | (0.884) | 695826   | 93.7000 | 96.08     |
| 100   | Azobenzene                              | 77        | 8.348  | 8.348    | (0.888) | 765053   | 80.0000 | 81.43     |
| 101   | 4-Bromophenyl-phenylether               | 248       | 8.794  | 8.794    | (0.935) | 187352   | 80.0000 | 80.33     |
| 108   | Hexachlorobenzene                       | 284       | 8.981  | 8.981    | (0.955) | 207655   | 80.0000 | 79,72     |
| 110   | Pentachlorophenol                       | 266       | 9.240  | 9.240    | (0.982) | 126397   | 80.0000 | 78.86     |
| 114   | Phenanthrene                            | 178       | 9,437  | 9.437    | (1.003) | 1188468  | 80.0000 | 78.92     |
| 115   | Anthracene                              | 178       | 9.509  | 9.499    | (1.011) | 1218608  | 80.0000 | 81.00     |
| 118   | Carbazole                               | 167       | 9.768  | 9.768    | (1.039) | 1118637  | 80.0000 | 81.39     |
| 120   | Di-n-Butylphthalate                     | 149       | 10.462 | 10.463   | (1.112) | 1351860  | 80.0000 | B1.75     |
| 126   | Fluoranthene                            | 202       | 11.302 | 11.302   | (1.202) | 1107116  | 80.0000 | 82.05     |
| 127   | Benzidine                               | 184       | 11.571 | 11.571   | (0.839) | 799205   | 80,0000 | 61.12     |
| 128   | Pyrene                                  | 202       | 11.665 | 11.665   | (0.846) | 1221015  | 80.0000 | 80.36     |
| 134   | 3,3'-dimethylbenzidine                  | 212       | 12.867 | 12.867   | (0.933) | 715866   | 80.0000 | 82.31     |
| 136   | Butylbenzylphthalate                    | 149       | 12.991 | 12.991   | (0.942) | 598812   | 80.0000 | 78.63     |
| 138   | Benzo(a) Anthracene                     | 228       | 13.758 |          | (0.998) | 1034950  | 80.0000 | 79.92     |
| 139   | Chrysene                                | 228       |        | 13.831   |         | 1040163  | 80.0000 | 78.52     |
|       | 3,3'-Dichlorobenzidine                  | 252       |        | 13.799   |         | 392335   | 80.0000 | 80.33     |
|       | bis(2-ethylhexyl)Phthalate              | 149       | 14.110 |          | (1.023) | 820296   | 80.0000 | 78.20     |
| 142   | Di-n-octylphthalate                     | 149       | 15.167 |          | (1.100) | 1354893  | 80.0000 | 80.80     |
| 144   | Benzo(b) fluoranthene                   | 252       | 15.582 | 15.582   |         | 920884   | 80.0000 | 84.26 (Q) |
| 145   | Benzo(k) fluoranthene                   | 252       | 15.623 |          |         | 1102899  | 80.0000 | 78.61(q)  |
|       | Велго(e)pyrene                          | 252       | 16.007 |          | (0.990) | 936566   | 80.0000 | 82.18     |
| 148   | Benzo(a)pyrene                          | 252       | 16.079 | 16.079   | (0.995) | 1039045  | 80.0000 | 83.86     |
| 151   | Indeno(1,2,3-cd)pyrene                  | 276       | 17.799 | 17.800   | (1.101) | 811625   | 80.0000 | 80.99     |
| 152   | Dibenzo(a,h)anthracene                  | 278       | 17.851 | 17.841   | (1.105) | 926841   | 80.0000 | 82.79     |
| 153   | Benzo(g,h,i)perylene                    | 276       | 18.235 | 18.235   | (1.128) | 982275   | 80.0000 | 81.04     |
|       |   |           |        |          |         |          |         |           |

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002E.D Report Date: 03-Oct-2010 11:15

|                                     |           |      |        |        |          | MUOMA   | TS .     |
|-------------------------------------|-----------|------|--------|--------|----------|---------|----------|
|                                     | QUANT SIG |      |        |        |          | CAL-AMT | ON~COL   |
| Compounds                           | MASS      | RT   | EXP RT | RKL RT | RESPONSE | ( NG)   | ( NG)    |
|                                     | 13=0=     | ==== | ====== |        | ======   | ****    | ASSESSE  |
| M 162 benzo b,k Fluoranthene Totals | 252       |      |        |        | 2023783  | 80.0000 | 81.09(A) |

Page 3

- A Target compound detected but, quantitated amount exceeded maximum amount.

  Q Qualifier signal failed the ratio test.

  q Qualifier signal exceeded ratio warning limit.

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002E.D Page 1

Report Date: 02-Oct-2010 16:57

#### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\100210.B\HSL1002E.D Lab Smp Id: HSL 080 ug/ml CS-5 Client Smp Inj Date: 02-OCT-2010 14:09

Client Smp ID: 8270F.M

Operator : KT Smp Info : HSL\_080 ug/ml CS-5;1;;5;;;4 Inst ID: sv5.i

Processing Host: SV5

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0311;0;8270F.M Comment: SOP SAC-MS-0005 Method: \SV5\C\chem\sv5.i\100210.B\8270f.m Meth Date: 02-Oct-2010 16:57 onishim Quant Type: Quant Type: ISTD

Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 5 Calibration Sample, Level: 5

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: 1 8270STD.SUB Target Version: 4.14

|       |              |  |           |        |        |         |          | AMOUN   |     |            |
|-------|--------------|--|-----------|--------|--------|---------|----------|---------|-----|------------|
|       |              |  | QUANT SIG |        |        |         |          | CAL-AMT | ON- | COL        |
| Co    | mpo          | unds   | MASS      | RT     | EXP RT | REL RT  | RESPONSE | ( NG)   | {   | NG)        |
| ra #4 | <b># #</b> p | . «> » « • » » » » » » » » » » » » » » » » » » | ====      | ====   | *****  |         | ======== | 4252=== | === | ====       |
| *     | 1            | 1,4-Dichlorobenzene-d4                         | 152       | 3.954  | 3.955  | (1.000) | 126989   | 40.0000 |     | (g)        |
| *     | 2            | Naphthalene-d8                                 | 136       | 5.374  | 5.374  | (1.000) | 553454   | 40.0000 |     |            |
| *     | 3            | Acenaphthene-dl0                               | 164       | 7.468  | 7.468  | (1.000) | 300315   | 40.0000 |     |            |
| *     | 4            | Phenanthrene-dl0                               | 188       | 9.405  | 9.405  | (1.000) | 477777   | 40.0000 |     |            |
| *     | 5            | Chrysene-d12                                   | 240       | 13.789 | 13.779 | (1.000) | 486126   | 40.0000 |     |            |
| *     | 6            | Perylene-d12                                   | 264       | 16.162 | 16.162 | (1.000) | 482782   | 40.0000 |     |            |
| \$    | 7            | 2-Fluorophenol                                 | 112       | 2.742  | 2.732  | (0.693) | 364547   | 80.0000 | 7   | 7.78       |
| \$    | 8            | Phenol-d5                                      | 99        | 3.612  | 3.613  | (0.914) | 459352   | 80.0000 | 7   | 7.07       |
| \$    | 9            | 2-Chlorophenol-d4                              | 132       | 3.758  | 3.758  | (0.950) | 399981   | 80.0000 | 7   | 8.71       |
| \$    | 10           | 1,2-Dichlorobenzene-d4                         | 152       | 4.162  | 4.162  | (1.052) | 252754   | 80.0000 | 7   | 9.68       |
| \$    | 11           | Nitrobenzene-d5                                | 82        | 4.587  | 4.576  | (0.853) | 371989   | 80.0000 | 7   | 5.79       |
| \$    | 1.2          | 2-Fluorobiphenyl                               | 172       | 6.680  | 6.680  | (0.895) | 755916   | 80.0000 | 7   | 8.58       |
| \$    | 1.3          | 2,4,6-Tribromophenol                           | 330       | 8.483  | 8.473  | (1.136) | 107063   | 80.0000 | 9   | 0,29       |
| \$    | 1.4          | Terphenyl-d14                                  | 244       | 12.017 | 12.017 | (0.871) | 758812   | 80.0000 | 8   | 0.04       |
|       | 15           | N-Nitrosodimethylamine                         | 74        | 1.706  | 1.706  | (0.431) | 236570   | 80.0000 | 7   | 6.48       |
|       | 16           | Pyridine                                       | 79        | 1.726  | 1.726  | (0.437) | 386806   | 80.0000 | 7   | 5.04       |
|       | 23           | Aniline  | 93        | 3.654  | 3.654  | (0.924) | 583513   | 80.0000 | 7   | B - 07 (Q) |
|       | 24           | Phenol   | 94        | 3.623  | 3.623  | (0.916) | 524930   | 80.0000 | 8   | 2.81(Q)    |
|       | 25           | Bis(2-chloroethyl)ether                        | 93        | 3.716  | 3.716  | (0.940) | 362044   | 80.0000 | 7   | 5.18       |
|       | 27           | 2-Chlorophenol                                 | 128       | 3.768  | 3.768  | (0.953) | 398210   | 80.0000 | 7   | 9.39       |
|       | 28           | 1,3-Dichlorobenzene                            | 146       | 3.923  | 3.923  | (0.992) | 428311   | 80.0000 | 7   | 7.27       |
|       | 29           | 1,4-Dichlorobenzene                            | 146       | 3 975  | 3.975  | (1.005) | 452588   | 80.0000 | 8   | 0.76       |
|       | 30           | Benzyl Alcohol                                 | 108       | 4.120  | 4.120  | (1.042) | 273768   | 80.0000 | 7   | 9.43       |
|       | 31           | 1,2-Dichlorobenzene                            | 146       | 4.172  | 4.172  | (1.055) | 415025   | 80.0000 | 7   | 8.14       |
|       | 32           | 2-Methylphenol                                 | 108       | 4.255  | 4.255  | (1.076) | 369704   | 80.0000 | 7   | 8.90       |
|       | 33           | 2,2'-oxybis(1-Chloropropane)                   | 45        | 4.296  | 4.297  | (1.086) | 576575   | 80.0000 | 6   | 4.50       |
|       | 34           | 4-Methylphenol                                 | 108       | 4.421  | 4.421  | (1.118) | 387704   | 80.0000 | 7   | 7.63       |
|       | 36           | Hexachloroethane                               | 117       | 4.504  | 4.504  | (1,139) | 153472   | 80.0000 | 7   | 7.62       |
|       | 37           | N-Nitrosodinpropylamine                        | 70        | 4.442  | 4.442  | (1.123) | 265916   | 80.0000 | 7   | 6.06       |
|       | 42           | Nitrobenzene                                   | 77        | 4.597  | 4.597  | (0.855) | 369479   | 80.0000 | 7   | 5.74       |
|       | 44           | Isophorone                                     | 82        | 4.856  | 4.856  | (0.904) | 704520   | 80.0000 | 7   | 6.17       |
|       | 45           | 2-Nitrophenol                                  | 139       | 4.960  | 4.960  | (0.923) | 221628   | 80.0000 | 8   | 3.21       |
|       | 46           | 2,4-Dimethyphenol                              | 107       | 5.011  | 5.012  | (0 933) | 385073   | 80.0000 | 7   | 7.86       |
|       |              | - <del>-</del>                                 |           |        |        |         |          |         |     |            |

|           |                                |           |        |              |             | AMOU               | NTS       |
|-----------|--------------------------------|-----------|--------|--------------|-------------|--------------------|-----------|
|           |                                | QUANT SIG |        |              |             | CAL-AMT            | ON-COL    |
| Compo     | unds                           | MASS      | RT     | EXP RT REI   | RT RESPONSE | ( NG)              | ( NG)     |
| E E # # # | ************                   |           | ====   |              |             | =======            | :=====    |
| 47        | Bis(2-chloroethoxy)methane     | 93        | 5,125  | 5.126 (0.95  | 426158      | 80.0000            | 77.39     |
| 49        | 2,4-Dichlorophenol             | 162       | 5.229  | 5.229 (0.97  | 73) 301897  | 80.0000            | 82.94     |
| 50        | Benzoic Acid                   | 122       | 5.125  | 5.115 (0.95  | 34) 232711  | 80.0000            | 84.41     |
| 51        | 1,2,4-Trichlorobenzene         | 180       | 5.322  | 5.322 (0.99  | 00) 323096  | 80.0000            | 81.88     |
| 52        | Naphthalene                    | 128       | 5.395  | 5.395 (1.00  | 1216155     | 80.0000            | 78.94     |
| 54        | 4-Chloroaniline                | 127       | 5.488  | 5.488 (1.02  | 1) 484619   | 80.0000            | 79.97     |
| 57        | Hexachlorobutadiene            | 225       | 5.613  | 5.613 (1.04  | 4) 159233   | 80.0000            | 84.81     |
| 60        | 4-Chloro-3-Methylphenol        | 107       | 6.069  | 6.069 (1.12  | 9) 335335   | 80.0000            | 80.06     |
| 63        | 2-Methylnaphthalene            | 142       | 6.203  | 6.203 (1.15  | 781029      | 80.0000            | 63.09     |
| 66        | Hexachlorocyclopentadiene      | 237       | 6.483  | 6.483 (0.86  | 8) 181608   | 80.0000            | 79.29     |
| 69        | 2,4,6-Trichlorophenol          | 196       | 6.576  | 6.576 (0.88  | 1) 194036   | 80.0000            | 85.34     |
|           | 2,4,5-Trichlorphenol           | 196       | 6 628  | 6.628 (0.88  |             | 80.0000            | 84.74     |
|           | 2-Chloronaphthalene            | 162       | 6.784  | 6.784 (0.90  | •           | 80.0000            | 79.34     |
|           | 2-Nitroaniline                 | 65        | 6.949  | 6.949 (0.93  | •           | 80.0000            | 74.17     |
| -         | Dimethylphthalate              | 163       | 7,229  | 7.229 (0.96  | -           | 80.0000            | 81.01     |
|           | Acenaphthylene                 | 152       | 7.281  | 7.281 (0.97  |             | 80.0000            | 80.88     |
|           | 2,6-Dinitrotoluene             | 165       | 7.302  | 7.302 (0.97  |             | 80.0000            | 86.31     |
|           | 3-Nitroaniline                 | 138       |        | 7.447 (0.99  |             |                    | 80.44     |
|           | Acenaphthene                   | 153       | 7.457  |              |             | 80.0000<br>80.0000 |           |
|           | •                              |           | 7.509  | 7.509 (1.00  | •           |                    | 77.58     |
|           | 2,4-Dinitrophenol Dibenzofuran | 184       | 7.571  | 7.571 (1.01  | ,           | 80.0000            | 81.10     |
|           |                                | 168       | 7.706  | 7.706 (1.03  |             | 80.0000            | 80.04(q)  |
|           | 4-Nitrophenol                  | 109       | 7.675  | 7.675 (1.02  |             | 80.0000            | 81.61(Q)  |
|           | 2,4-Dinitrotoluene             | 165       | 7.768  | 7.768 (1.04  |             | 80.0000            | 84.49     |
|           | Fluorene                       | 166       | 8.131  | 8.131 (1.08  |             | 80.0000            | 82.18     |
|           | Diethylphthalate               | 149       | 8.100  | 8.100 (1.08  |             | 80.0000            | 77.92     |
|           | 4-Chlorophenyl-phenylether     | 204       | 8.151  | 8.152 (1.09  | 2) 340608   | 80.0000            | 81.38     |
| 94        | 4-Nitroaniline                 | 138       | 8.224  | 8.214 (1.10  | 1) 235541   | 80.0000            | 83.45     |
| 97        | 4,6-Dinitro-2-methylphenol     | 198       | 8.276  | 8.276 (0.88  | 0) 134784   | 80.0000            | 75.96     |
| 98        | N-Nitrosodiphenylamine         | 169       | 8.317  | 8.317 (0.88  | 4) 695826   | 93.7000            | 93.46     |
| 100       | Azobenzene                     | 77        | 8.348  | 8.348 (0.88  | 8) 765053   | 80.0000            | 73.86     |
| 101       | 4-Bromophenyl-phenylether      | 248       | 8.794  | 8.794 (0.93  | 5) 187352   | 80.0000            | 81.15     |
| 108       | Hexachlorobenzene              | 284       | 8.981  | 8.981 (0.95  | 5) 207655   | 80.0000            | 83.28     |
| 110       | Pentachlorophenol              | 266       | 9.240  | 9.240 (0.98  | 2) 126397   | 80.0000            | 84.45     |
| 114       | Phenanthrene                   | 178       | 9.437  | 9.437 (1.00  | 3) 1188468  | 80.0000            | 79.75     |
| 115       | Anthracene                     | 178       | 9.509  | 9.499 (1.01  | 1) 1218608  | 80.0000            | 81.25     |
| 118       | Carbazole                      | 167       | 9.768  | 9.768 (1.03  | 9) 1118637  | 80.0000            | 80.19     |
| 120       | Di-n-Butylphthalate            | 149       | 10.462 | 10.463 (1.12 | 2) 1351860  | 80.0000            | 80.14     |
| 126       | Fluoranthene                   | 202       | 11.302 | 11.302 (1.20 | 2) 1107116  | 80.0000            | 82.54     |
| 127       | Benzidine                      | 184       | 11.571 | 11.571 (0.83 | 9) 799205   | 80.0000            | 80.06     |
| 128       | Pyrene                         | 202       | 11.665 | 11.665 (0.84 | 6) 1221015  | 80.0000            | 80.33     |
|           | 3,3'-dimethylbenzidine         | 212       | 12,867 | 12.867 (0.93 |             | 80.0000            | 83.56     |
|           | Butylbenzylphthalate           | 149       | 12.991 | 12.991 (0.94 |             | 80.0000            | 77.10     |
|           | Benzo (a) Anthracene           | 228       | 13.758 | 13.758 (0.99 |             | 80.0000            | 80.70     |
|           | Chrysene                       | 228       | 13.830 | 13.831 (1.00 |             | 80.0000            |           |
|           | 3.3'-Dichlorobenzidine         | 252       | 13.799 | 13.799 (1.00 |             | 80.0000            | 78.06     |
|           | bis (2-ethylhexyl) Phthalate   | 149       | 14.110 |              |             |                    | 83.60     |
|           | Di-n-octylphthalate            |           |        |              |             | 80.0000            | 76.71     |
|           |                                | 149       |        | 15.167 (1.10 |             | 80.0000            | 79.24     |
|           | Benzo (b) fluoranthene         | 252       |        | 15.582 (0.96 |             | 80.0000            | 80.44 (Q) |
|           | Benzo(k) fluoranthene          | 252       | 15.623 |              |             | 80.0000            | 82.44 (q) |
|           | Benzo(e) pyrene                | 252       | 16.007 |              |             | 80.0000            | 82.53     |
|           | Benzo(a) pyrene                | 252       | 16.079 | 16.079 (0.99 |             | 80.0000            | 83.39     |
|           | Indeno(1,2,3-cd)pyrene         | 276       | 17,799 | 17.800 (1.10 | •           | 80.0000            | 73.62     |
| 152       | Dibenzo(a,h)anthracene         | 278       | 17.851 | 17.841 (1.10 | 5) 926841   | 80.0000            | 82.04     |
| 153       | Benzo(g,h,i)perylene           | 276       | 18.235 | 18.235 (1.12 | 8) 982275   | 80.0000            | 81.10     |

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002E.D

Report Date: 02-Oct-2010 16:57

Page 3

- A Target compound detected but, quantitated amount exceeded maximum amount.
- Q Qualifier signal failed the ratio test.
- q Qualifier signal exceeded ratio warning limit.

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002E.D

Report Date: 03-Oct-2010 11:15

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002E.D

Lab Smp Id: HSL 080 ug/ml CS-5

Analysis Type: SV

Quant Type: ISTD

Operator: KT Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0311;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

| COMPOUND                                 | STANDARD         | AREA<br>LOWER   | LIMIT<br>UPPER    | SAMPLE           | %DIFF |
|--|------------------|-----------------|-------------------|------------------|-------|
| 1 1,4-Dichlorobenze<br>2 Naphthalene-d8  | 122625<br>530514 | 61313<br>265257 | 245250<br>1061028 | 126989<br>553454 |       |
| 3 Acenaphthene-d10<br>4 Phenanthrene-d10 | 282538<br>462722 | <b></b>         | 565076<br>925444  | 300315<br>477777 |       |
| 5 Chrysene-d12<br>6 Perylene-d12         | 435850<br>422284 |                 | 871700<br>844568  | 486126<br>482782 | 1     |
|  |                  |                 |                   |                  |       |

|   |          | RT I     | IMIT       |          |          |
|---|----------|----------|------------|----------|----------|
| COMPOUND                                | STANDARD | LOWER    | UPPER      | SAMPLE   | %DIFF    |
| ======================================= | =======  | ======== | ========== | ======== | \======{ |
| 1 1,4-Dichlorobenze                     | 3.96     | 3.46     | 4.46       | 3.95     | -0.00    |
| 2 Naphthalene-d8                        | 5.37     | 4.87     | 5.87       | 5.37     | -0.00    |
| 3 Acenaphthene-dl0                      | 7.47     | 6.97     | 7.97       | 7.47     | -0.00    |
| 4 Phenanthrene-d10                      | 9.41     | 8.91     | 9.91       | 9.41     | -0.00    |
| 5 Chrysene-dl2                          | 13.78    | 13.28    | 14.28      | 13.79    | 0.07     |
| 6 Perylene-d12                          | 16.16    | 15.66    | 16.66      | 16.16    | -0.00    |
|   | ····     | <u> </u> |            |          |          |

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = -50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT. Page 1

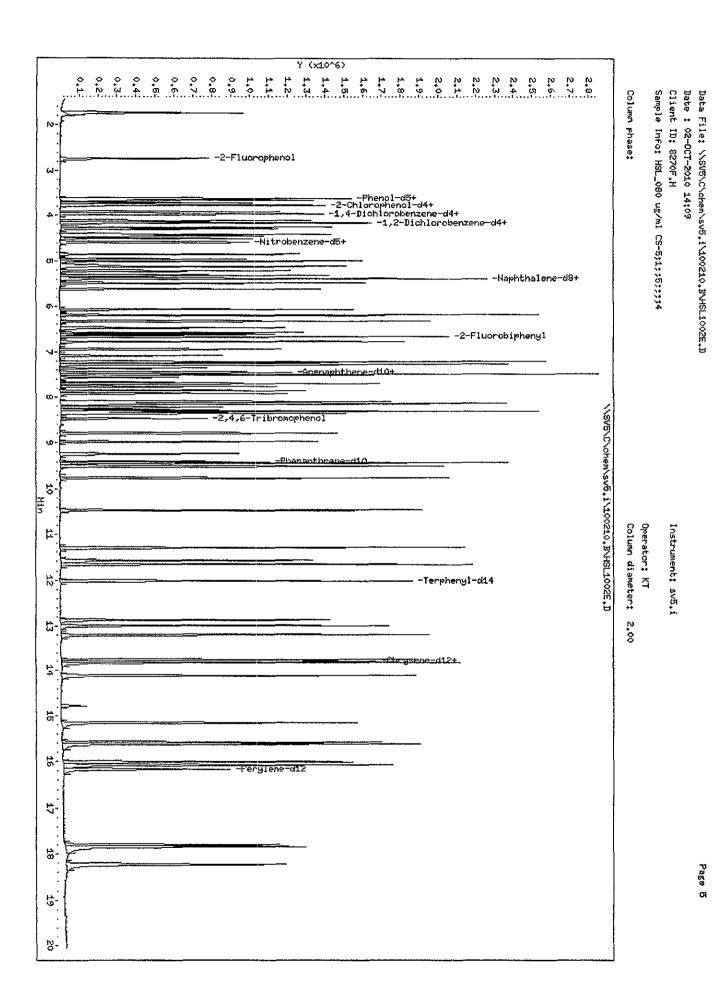
Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Smp ID: 8270F.M

Level:

Sample Type:



Report Date: 03-Oct-2010 11:15

#### TestAmerica West Sacramento

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002F.D Lab Smp Id: HSL 120 ug/ml CS-6 Client Smp

Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 14:35

Operator : KT Inst ID: sv5.i

Smp Info : HSL 120 ug/ml CS-6;1;;6;;;4

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0312;0;8270F.M

Comment : SOP SAC-MS-0005

Method : \\sv5\c\chem\sv5.i\100210.B\8270f.m

Meth Date : 03-Oct-2010 11:09 onishim Quant 1

Cal Date : 17-AUG-2010 21:19 Cal Fil Quant Type: ISTD

Cal File: AP90817D.D

Calibration Sample, Level: 6

Als bottle: 6
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.14 Compound Sublist: 1\_8270STD.SUB

Processing Host: SACP307UM

|                                 |             |        |             |                | JOMA    | JNTS      |          |
|---------------------------------|-------------|--------|-------------|----------------|---------|-----------|----------|
|                                 | QUANT SIG   |        |             |                | CAL-AMT | ON-COL    |          |
| Compounds                       | MASS        | RT     | exp rt ri   | el RT Response | ( NG)   | ( NG)     |          |
| *****                           | ====        | 2575   |             |                |         | *****     |          |
| * 1 1,4-Dichlorobenzene-d4      | 152         | 3.955  | 3.955 (1.6  | 000) 137751    | 40.0000 | (Q)       |          |
| * 2 Naphthalene-d8              | 136         | 5.374  | 5.374 (1.0  | 000) 591665    | 40.0000 |           |          |
| * 3 Acenaphthene-d10            | 164         | 7.468  | 7.468 (1.0  | 000) 322596    | 40.0000 |           |          |
| * 4 Phenanthrene-d10            | 188         | 9.406  | 9.405 (1.0  | 000) 515607    | 40.0000 |           |          |
| * 5 Chrysene-dl2                | 240         | 13.789 | 13.779 (1.0 | 000) 509570    | 40.0000 |           |          |
| * 6 Perylene-d12                | 264         | 16.173 | 16.162 (1.0 | 000) 539588    | 40.0000 |           |          |
| \$ 7 2-Fluorophenol             | 112         | 2.732  | 2.732 (0.6  | 588028         | 120.000 | 121.1     |          |
| \$ 8 Phenol-d5                  | 99          | 3.613  | 3.613 (0.9  | 914) 759824    | 120.000 | 124.4     |          |
| \$ 9 2-Chlorophenol-d4          | 132         | 3.758  | 3.758 (0.5  | 950) 652805    | 120.000 | 121.7     |          |
| \$ 10 1,2-Dichlorobenzene-d4    | 152         | 4.162  | 4.162 (1.4  | 052) 407247    | 120.000 | 120.0     |          |
| \$ 11 Nitrobenzene-d5           | 82          | 4.587  | 4.576 (0.8  | 853) 623501    | 120.000 | 124.4     |          |
| \$ 12 2-Fluorobiphenyl          | 172         | 6.680  | 6,680 (0.8  | 895) 1255441   | 120.000 | 120.3     |          |
| \$ 13 2,4,6-Tribromophenol      | 330         | 8.483  | 8.473 (1.3  | 136) 179055    | 120.000 | 127.7     |          |
| \$ 14 Terphenyl-d14             | 244         | 12.017 | 12.017 (0.8 | 871) 1251844   | 120.000 | 124.7     |          |
| 15 N-Nitrosodimethylamine       | 74          | 1.706  | 1.706 (0.4  | 431) 388111    | 120.000 | 122.3 (g) |          |
| 16 Pyridine                     | 79          | 1,727  | 1.726 (0.4  | 437) 633334    | 120.000 | 119.3(Q)  |          |
| 23 Aniline                      | 93          | 3.654  | 3.654 (0.5  | 924) 964533    | 120.000 | 124.1(Q)  |          |
| 24 Phenol                       | 94          | 3.623  | 3.623 (0.5  | 916) 851671    | 120.000 | 121.4(Q)  |          |
| 26 Bis(2~chloroethyl)ether      | 93          | 3.716  | 3.716 (0.9  | 940) 596323    | 120.000 | 121.2     |          |
| 27 2-Chlorophenol               | 128         | 3.768  | 3.768 (0.9  | 953) 653244    | 120.000 | 121.3     |          |
| 28 1,3-Dichlorobenzene          | 146         | 3.924  | 3.923 (0.9  | 992) 712032    | 120.000 | 121,4     |          |
| 29 1,4-Dichlorobenzene          | 146         | 3.975  | 3.975 (1.0  | 005) 740915    | 120.000 | 120.8     |          |
| 30 Benzyl Alcohol               | 108         | 4.120  | 4.120 (1.0  | 042) 450249    | 120.000 | 124,4     |          |
| 31 1,2-Dichlorobenzene          | 146         | 4.172  | 4.172 (1.0  | 055) 679448    | 120.000 | 120.5     |          |
| 32 2-Methylphenol               | 108         | 4.255  | 4.255 (1.0  | 076) 603987    | 120.000 | 122.6     |          |
| 33 2,2'-oxybis(1-Chloropropane) | 45          | 4.297  | 4.297 (1.0  | 086) 941514    | 120.000 | 120.2     |          |
| 34 4-Methylphenol               | 108         | 4.421  | 4.421 (1.   | 118) 644202    | 120.000 | 123.1     |          |
| 36 Hexachloroethane             | 117         | 4.504  | 4.504 (1.3  | 139) 245394    | 120.000 | 117.5     |          |
| 37 N-Nitrosodinpropylamine      | 70          | 4.452  | 4.442 (1.3  | 126) 428242    | 120.000 | 122.9     |          |
| 42 Nitrobenzene                 | 77          | 4,607  | 4.597 (0.8  | 857) 593736    | 120.000 | 121.2     |          |
| 44 Isophorone                   | <b>\$</b> 2 | 4.867  | 4.856 (0.   | 906) 1179801   | 120.000 | 125.2     | <u>.</u> |
| 45 2-Nitrophenol                | 139         | 4.960  | 4.960 (0.5  | 923) 367467    | 120.000 | 1.26 4    | 1        |
| 46 2,4-Dimethyphenol            | 107         | 5.012  | 5.012 (0.5  | 933) 638328    | 120.000 | 123.6     | W        |
| 46 2,4-Dimethyphenol            | 107         | 5.012  | 5.012 (0.9  | 933) 638328    | 120.000 | 123.6     | 10-3     |

|       |                            |           |                  |        |         |                   | AMOUN    | TS        |
|-------|----------------------------|-----------|------------------|--------|---------|-------------------|----------|-----------|
|       |                            | QUANT SIG |                  |        |         |                   | CAL-AMT  | ON-COL    |
| Compo | unds                       | MASS      | RT               | EXP RT | REL RT  | RESPONSE          | ( MG)    | ( NG)     |
| ===== |                            | ====      | ====             | ====== |         |                   | EE====   | 2040404   |
| 47    | Bis(2-chloroethoxy)methane | 93        | 5.126            | 5.126  | (0.954) | 707504            | 120.000  | 122.9     |
| 49    | 2,4-Dichlorophenol         | 162       | 5.229            | 5.229  | (0.973) | 500185            | 120.000  | 125.2     |
| 50    | Benzoic Acid               | 122       | 5.146            | 5.115  | (0.958) | 395333            | 120.000  | 138.3     |
| 51    | 1,2,4-Trichlorobenzene     | 180       | 5.333            | 5.322  | (0.992) | 531764            | 120.000  | 122.9     |
| 52    | Naphthalene                | 128       | 5.395            | 5.395  | (1.004) | 2020315           | 120.000  | 123.7     |
| 54    | 4-Chloroaniline            | 127       | 5.488            | 5.488  | (1.021) | 797064            | 120.000  | 124.5     |
| 57    | Hexachlorobutadiene        | 225       | 5.613            | 5.613  | (1.044) | 255231            | 120.000  | 120.5     |
| 60    | 4-Chloro-3-Methylphenol    | 107       | 6.069            | 6.069  | (1.129) | 563840            | 120.000  | 126.4     |
| 63    | 2-Methylnaphthalene        | 142       | 6.203            | 6.203  | (1.154) | 1263302           | 120.000  | 123.I     |
| 66    | Hexachlorocyclopentadiene  | 237       | 6.483            | 6.483  | (0.868) | 312226            | 120.000  | 129.7     |
| 69    | 2,4,6-Trichlorophenol      | 196       | 6.587            | 6.576  | (0.882) | 331223            | 1.20.000 | 128.7     |
| 70    | 2,4,5-Trichlorphenol       | 196       | 6.628            | 6.628  | (888.0) | 343374            | 120.000  | 123.3     |
| 71    | 2-Chloronaphthalene        | 162       | 6.784            | 6.784  | (806.0) | 1107604           | 120.000  | 122.0     |
| 73    | 2-Nitroaniline             | 65        | 6.950            | 6.949  | (0.931) | 346408            | 120.000  | 125.9     |
| 76    | Dimethylphthalate          | 163       | 7.229            | 7.229  | (0.968) | 1286101           | 120.000  | 123.0     |
| 77    | Acenaphthylene             | 152       | 7,281            | 7,281  | (0.975) | 1933504           | 120.000  | 122.3     |
| 79    | 2,6-Dinitrotoluene         | 165       | 7.302            | 7.302  | (0.978) | 311050            | 120.000  | 127.7     |
| 80    | 3-Nitroaniline             | 138       | 7.457            | 7.447  | (0.999) | 382649            | 120.000  | 125.9     |
| 81    | Acenaphthene               | 153       | 7.509            | 7.509  | (1.006) | 1207516           | 120,000  | 120.0     |
| 82    | 2,4-Dinitrophenol          | 184       | 7.582            | 7.572  | (1.015) | 199007            | 120.000  | 124.7     |
| 83    | Dibenzofuran               | 168       | 7.706            | 7.706  | (1.032) | 1630240           | 120.000  | 122.0(q)  |
| 84    | 4-Nitrophenol              | 109       | 7 675            | 7.675  | (1.028) | 161169            | 120.000  | 127.8(Q)  |
| 86    | 2,4-Dinitrotoluene         | 165       | 7.768            | 7.768  | (1.040) | 409418            | 120.000  | 128.1     |
| 91    | Fluorene                   | 166       | 8.131            | 8.131  | (1.089) | 1333949           | 120,000  | 120.6     |
| 92    | Diethylphthalate           | 149       | 8.110            | 8.100  | (1.086) | 1329206           | 120.000  | 124.2     |
|       | 4-Chlorophenyl-phenylether | 204       | 8,152            | 8.152  | (1.092) | 558370            | 120.000  | 121.4     |
|       | 4-Nitroaniline             | 138       | 8.224            |        | (1.101) | 378421            | 120.000  | 125.6     |
| 97    | 4,6-Dinitro-2-methylphenol | 198       | 8.286            |        | (0.881) | 236477            | 120.000  | 122.1     |
|       | N-Nitrosodiphenylamine     | 169       | 8.317            |        | (0.884) | 1123239           | 141.000  | 143.7     |
|       | Azobenzene                 | 77        | 8.359            |        | (0.889) | 1266722           | 120.000  | 124.9     |
|       | 4-Bromophenyl-phenylether  | 248       | 8,794            |        | (0.935) | 318358            | 120.000  | 126,5     |
|       | Hexachlorobenzene          | 284       | 8,981            |        | (0.955) | 335728            | 120.000  | 119.4     |
|       | Pentachlorophenol          | 266       | 9.240            |        | (0.982) | 215360            | 120.000  | 122.2     |
|       | Phenanthrene               | 178       | 9.437            |        | (1.003) | 1942962           | 120.000  | 119.6     |
|       | Antiracene                 | 178       | 9.509            |        | (1.003) | 2014183           | 120.000  | 124.0     |
|       | Carbatole                  | 167       | 9.768            |        | (1.031) | 1828217           | 120.000  | 123.3     |
|       | Di-n-Butylphthalate        | 149       | 10.463           |        | (1.112) | 2225048           | 120.000  | 124.7     |
|       | Fluoranthene               | 202       | 11.302           |        | (1.202) | 1829791           | 120.000  | 125.6     |
|       | Benzidine                  | 184       | 11.582           |        | (0.840) | 1320429           | 120.000  | 127.8     |
|       | Pyrene                     | 202       | 11.665           |        | (D.846) | 1963825           | 120.000  | 127.8     |
|       | 3,3'-dimethylbenzidine     | 212       | 12.877           |        | (D.934) | 1214012           | 120.000  | 133.2     |
|       | Butylbenzylphthalate       | 149       | 12.991           |        |         | 997218            | 120.000  | 133.2     |
|       | Benzo (a) Anthracene       | 228       |                  | 13.758 |         | 1694281           | 120.000  |           |
|       | Chrysene                   | 228       |                  |        | (1.003) |                   |          | 124.8     |
|       | 3,3'-Dichlorobenzidine     | 252       | 13.831<br>13.799 |        | (1.001) | 1715841<br>653016 | 120.000  | 123.6     |
|       | bis(2-ethylhexyl)Phthalate |           |                  |        |         |                   | 120.000  | 127.5     |
|       | Di-n-octylphthalate        | 149       | 14.110           | 15.167 | (1.023) | 1368794           | 120.000  | 124.5     |
|       | Benzo (b) fluoranthene     | 149       | 15.167           |        |         | 2256614           | 120.000  | 128.4     |
|       |                            | 252       | 15.592           |        |         | 1475217           | 120.000  | 120.8(Q)  |
|       | Benzo(k) fluoranthene      | 252       | 15.623           |        |         | 1935987           | 120.000  | 123.5(q)  |
|       | Benzo(e) pyrene            | 252       | 16.007           |        |         | 1569049           | 120.000  | 123.2     |
|       | Benzo(a) pyrene            | 252       | 16.079           |        |         | 1720343           | 120.000  | 124.2     |
|       | Indeno(1,2,3-cd)pyrene     | 276       | 17.810           |        |         | 1517263           | 120.000  | 135.5 (M) |
|       | Dibenzo(a,h)anthracene     | 278       | 17.851           |        |         | 1634040           | 120.000  | 130.6     |
| 153   | Benzo(g,h,i)perylene       | 276       | 18.245           | 18.235 | (1.128) | 1706123           | 120.000  | 125.9     |

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002F.D

Report Date: 03-Oct-2010 11:15

Compounds MASS RT EXP RT RESPONSE (NG) (NG)

M162 benzo b,k Fluoranthene Totals 252  $\frac{AMOUNTS}{CAL-AMT} ON-COL$ RESPONSE (NG) (NG)

122.3 (A)

Page 3

- A Target compound detected but, quantitated amount exceeded maximum amount.
- Q Qualifier signal failed the ratio test.
- M Compound response manually integrated.
- q Qualifier signal exceeded ratio warning limit.

Data File Name: HSL1002F.D

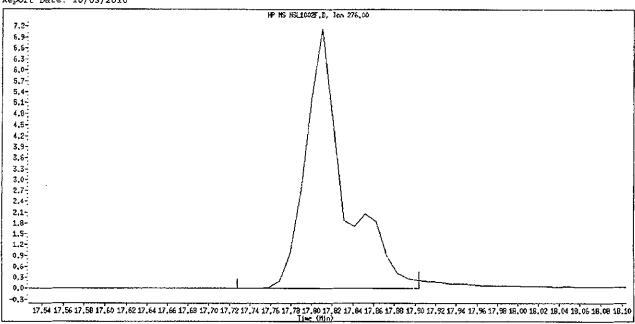
Ing. Date and Time: 02-OCT-2010 14:35

Instrument ID: sv5.1 Client ID: 8270F.M

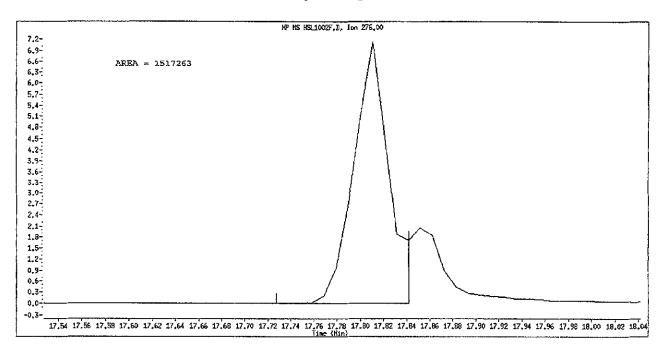
Compound Name: Indeno(1,2,3-cd)pyrene

CAS #: 193-39-5

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk

Manual Integration Reason: Poor Chromatography

#### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\100210.B\HSL1002F.D Lab Smp Id: HSL\_120 ug/ml CS-6 Client Smp Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 14:35 Operator : KT Smp Info : HSL\_120 ug/ml CS-6;1;;6;;;;4 Inst ID: sv5.i

Misc Info:  $3; \overline{0}; 1_8270$ STD.SUB; 10MSSV0312; 0; 8270F.M

Comment : SOP SAC-MS-0005

Method : \\SV5\C\chem\sv5.i\\100210.B\\8270f.m

Meth Date : 02-Oct-2010 16:57 onishim Quant 1
Cal Date : 17-AUG-2010 21:19 Cal Fil Quant Type: ISTD

Cal File: AP90817D.D

Als bottle: 6
Dil Factor: 1.00000
Integrator: Falcon Calibration Sample, Level: 6

Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

|    |              |                              |           |        |        |         |          | IUOMA   | rts    |     |
|----|--------------|------------------------------|-----------|--------|--------|---------|----------|---------|--------|-----|
|    |              |                              | QUANT SIG |        |        |         |          | CAL-AMT | ON-COL |     |
| Co | oqm          | unds                         | Mass      | RT     | EXP RT | REL RT  | RESPONSE | ( NG)   | ( NG)  |     |
| == | :## <b>=</b> |                              | 4===      | ====   |        |         | **=====  |         | COURSE |     |
| *  | 1.           | 1,4-Dichlorobenzene-d4       | 152       | 3.955  | 3.955  | (1.000) | 137751   | 40.0000 |        | (Q) |
| *  | 2            | Naphthalene-d8               | 136       | 5.374  | 5.374  | (1.000) | 591665   | 40.0000 |        |     |
| *  | 3            | Acenaphthene-d10             | 164       | 7.468  | 7.468  | (2.000) | 322596   | 40.0000 |        |     |
| *  | 4            | Phenanthrene-d10             | 188       | 9.406  | 9.405  | (1.000) | 515607   | 40.0000 |        |     |
| *  | 5            | Chrysene-d12                 | 240       | 13.789 | 13.779 | (1.000) | 509570   | 40.0000 |        |     |
| *  | 6            | Perylene-d12                 | 264       | 16.173 | 16.162 | (1.000) | 539588   | 40.0000 |        |     |
| \$ | 7            | 2-Fluorophenol               | 112       | 2.732  | 2.732  | (0.691) | 588028   | 120.000 | 115.7  |     |
| \$ | 8            | Phenol-d5                    | 99        | 3.613  | 3.613  | (0.914) | 759824   | 120.000 | 117.5  |     |
| \$ | 9            | 2-Chlorophenol-d4            | 132       | 3.758  | 3.758  | (0.950) | 652805   | 120.000 | 118.4  |     |
| \$ | 10           | 1,2-Dichlorobenzene-d4       | 152       | 4.162  | 4.162  | (1.052) | 407247   | 120.000 | 118.4  |     |
| \$ | 12           | Nitrobenzene-d5              | 82        | 4.587  | 4.576  | (0.853) | 623501   | 120.000 | 118.8  |     |
| \$ | 12           | 2-Fluorobiphenyl             | 172       | 6.680  | 6.680  | (0.895) | 1255441  | 120.000 | 121.5  |     |
| \$ | 13           | 2,4,6-Tribromophenol         | 330       | 8.483  | 8.473  | (1.136) | 179055   | 120.000 | 140.6  |     |
| \$ | 14           | Terphenyl-d14                | 244       | 12.017 | 12.017 | (0.871) | 1251844  | 120.000 | 126.0  |     |
|    | 15           | N-Nitrosodimethylamine       | 74        | 1.706  | 1.706  | (0.431) | 388111   | 120.000 | 115.7  |     |
|    | 16           | Pyridine                     | 79        | 1.727  | 1.726  | (0.437) | 633334   | 120.000 | 113.3  |     |
|    | 23           | Aníline                      | 93        | 3.654  | 3.654  | (0.924) | 964533   | 120.000 | 119.0  | (Q) |
|    | 24           | Phenol                       | 94        | 3.623  | 3.623  | (0.916) | 851671   | 120.000 | 123.8  | (Q) |
|    | 26           | Bis(2-chloroethyl)ether      | 93        | 3.716  | 3.716  | (0.940) | 596323   | 120.000 | 114,2  |     |
|    | 27           | 2-Chlorophenol               | 128       | 3.768  | 3.768  | (0.953) | 653244   | 120.000 | 120.0  |     |
|    | 28           | 1,3-Dichlorobenzene          | 146       | 3.924  | 3,923  | (0.992) | 712032   | 120.000 | 118.4  |     |
|    | 29           | 1,4-Dichlorobenzene          | 146       | 3.975  | 3.975  | (1.005) | 740915   | 120.000 | 121.9  |     |
|    | 30           | Benzyl Alcohol               | 108       | 4.120  | 4.120  | (1.042) | 450249   | 120.000 | 120.4  |     |
|    | 31.          | 1,2-Dichlorobenzene          | 146       | 4.172  | 4.172  | (1.055) | 679448   | 120.000 | 117.9  |     |
|    | 32           | 2-Methylphenol               | 108       | 4.255  | 4.255  | (1.076) | 603987   | 120.000 | 118.8  |     |
|    | 33           | 2,2'-oxybis(1-Chloropropane) | 45        | 4.297  | 4.297  | (1.086) | 941514   | 120.000 | 97.10  |     |
|    | 34           | 4-Methylphenol               | 108       | 4.421  | 4.421  | (1.118) | 644202   | 120.000 | 118.9  |     |
|    | 36           | Hexachloroethane             | 117       | 4.504  | 4.504  | (1.139) | 245394   | 120.000 | 114.4  |     |
|    | 37           | N-Nitrosodinpropylamine      | 70        | 4.452  | 4.442  | (1.126) | 428242   | 120.000 | 112.9  |     |
|    | 42           | Nitrobenzene                 | 77        | 4.607  | 4.597  | (0.857) | 593736   | 120.000 | 113.8  |     |
|    | 44           | Isophorone                   | 82        | 4.867  | 4.856  | (0.906) | 1179801  | 120.000 | 119.3  |     |
|    | 45           | 2-Nitrophenol                | 139       | 4.960  | 4.960  | (0.923) | 367467   | 120.000 | 129.0  |     |
|    | 46           | 2,4-Dimethyphenol            | 107       | 5.012  | 5.012  | (0.933) | 638328   | 120.000 | 120.7  |     |
|    |              |                              |           |        |        |         |          |         |        |     |

|        |  |           |        |         |         |           | AMOUN   | rs        |
|--------|--|-----------|--------|---------|---------|-----------|---------|-----------|
|        |  | QUANT SIG |        |         |         |           | CAL-AMT | ON-COL    |
| Compo  | nuga   | MASS      | RT     | EXP RT  | REL RT  | RESPONSE  | (NG)    | ( NG)     |
| ====== | ===在中华 10 2 === = = 中平 14 15 15 15 15 15 15 15 15 15 15 15 15 15 | ====      | ****   | ******* |         | =:=###### | ======= | ***       |
| 47     | Bis(2-chloroethoxy)methane                                       | 93        | 5.126  | 5.126   | (0.954) | 707504    | 120.000 | 120.2     |
| 49     | 2,4-Dichlorophenol   | 162       | 5.229  | 5.229   | (0.973) | 500185    | 120.000 | 128.5     |
| 50     | Benzoic Acid   | 122       | 5.146  | 5.115   | (0.958) | 395333    | 120.000 | 134.1     |
| 51     | 1,2,4-Trichlorobenzene   | 180       | 5.333  | 5.322   | (0.992) | 531764    | 120.000 | 126.0     |
| 52     | Naphthalene  | 128       | 5.395  | 5.395   | (1.004) | 2020315   | 120.000 | 122.7     |
| 54     | 4-Chloroaniline  | 127       | 5.488  | 5.488   | (1.021) | 797064    | 120.000 | 123.0     |
| 57     | Hexachlorobutadiene  | 225       | 5.613  | 5.613   | (1.044) | 255231    | 120.000 | 127.2     |
| 60     | 4-Chloro-3-Methylphenol  | 107       | 6.069  | 6.069   | (1.129) | 563840    | 120.000 | 125.9     |
| 63     | 2-Methylnaphthalene  | 142       | 6.203  | 6.203   | (1.154) | 1263302   | 120.000 | 125.7     |
| 66     | Hexachlorocyclopentadiene  | 237       | 6.483  | 6.483   | (0.868) | 312226    | 120.000 | 126.9     |
| 69     | 2,4,6-Trichlorophenol  | 196       | 6.587  | 6.576   | (0.882) | 331223    | 120.000 | 135.6     |
| 70     | 2,4,5-Trichlorphenol   | 196       | 6.628  | 6.628   | (0.888) | 343374    | 120.000 | 128.0     |
| 71     | 2-Chloronaphthalene  | 162       | 6.784  | 6.784   | (0.908) | 1107604   | 120.000 | 122.5     |
| 73     | 2-Nitroaniline   | 65        | 6.950  | 6.949   | (0.931) | 346408    | 120.000 | 114.4     |
| 76     | Dimethylphthalate  | 163       | 7.229  | 7.229   | (0.968) | 1286101   | 120.000 | 123.1     |
| 77     | Acenaphthylene   | 152       | 7.281  | 7.281   | (0.975) | 1933504   | 120.000 | 122.3     |
| 79     | 2,6-Dinitrotoluene   | 165       | 7.302  | 7.302   | (0.978) | 311050    | 120.000 | 133.0     |
| 80     | 3-Nitroaniline   | 138       | 7.457  | 7.447   | (0.999) | 382849    | 120.000 | 123.4     |
| 81     | Acenaphthene   | 153       | 7.509  | 7.509   | (1.006) | 1207616   | 120.000 | 119.9     |
| 82     | 2,4-Dinitrophenol  | 184       | 7.582  | 7.571   | (1.015) | 199007    | 120.000 | 127.2     |
| 83     | Dibenzofuran   | 168       | 7.706  | 7.706   | (1.032) | 1630240   | 120.000 | 122.5 (q) |
| 84     | 4-Nitrophenol  | 109       | 7.675  | 7.675   | (1.028) | 161169    | 120.000 | 119.0(Q)  |
| 6€     | 2,4-Dinitrotoluene   | 165       | 7.768  | 7.768   | (1.040) | 409418    | 120.000 | 130.6     |
| 91     | Fluorene   | 166       | 8.131  | 8.131   | (1.089) | 1333949   | 120.000 | 122.3     |
| 92     | Diethylphthalate   | 149       | 8.110  | 8.100   | (1.086) | 1329206   | 120.000 | 121.7     |
| 93     | 4-Chlorophenyl-phenylether                                       | 204       | 8.152  | 8.152   | (1.092) | 558370    | 120.000 | 124.2     |
| 94     | 4-Nitroaniline   | 138       | 8.224  | 8.214   | (1.101) | 378421    | 120.000 | 124.8     |
| 97     | 4,6-Dinitro-2-methylphenol                                       | 198       | 8.286  | 8.276   | (0.881) | 236477    | 120.000 | 120.3     |
| 98     | N-Nitrosodiphenylamine   | 169       | 8.317  | 8.317   | (0.884) | 1123239   | 141.000 | 139.8     |
| 100    | Azobenzene   | 77        | 8.359  | 8.348   | (0.889) | 1266722   | 120.000 | 113.3     |
| 101    | 4-Bromophenyl-phenylether  | 248       | 8.794  | 8.794   | (0.935) | 31,8358   | 120.000 | 127.8     |
| 108    | Hexachlorobenzene  | 284       | 8.981  | 8.981   | (0.955) | 335728    | 120.000 | 124.8     |
| 110    | Pentachlorophenol  | 266       | 9.240  | 9.240   | (0.982) | 215360    | 120.000 | 133.3     |
| 114    | Phenanthrene   | 178       | 9.437  | 9.437   | (1.003) | 1942962   | 120.000 | 120.8     |
| 115    | Anthracene   | 178       | 9.509  | 9.499   | (1.011) | 2014183   | 120.000 | 124,4     |
| 118    | Carbazole  | 167       | 9.768  | 9.768   | (1.039) | 1828217   | 120.000 | 121.4     |
| 120    | Di-n-Butylphthalate  | 149       | 10.463 | 10.463  | (1.112) | 2225048   | 120.000 | 122.2     |
| 126    | Pluoranthene   | 202       | 11.302 | 11.302  | (1.202) | 1829791   | 120.000 | 126.4     |
| 127    | Benzidine  | 184       | 11.582 | 11.571  | (0.840) | 1320429   | 120.000 | 126.2     |
| 128    | Pyrene   | 202       | 11.665 | 11.665  | (0.846) | 1963825   | 120.000 | 123.2     |
| 134    | 3,3'-dimethylbenzidine   | 212       | 12,877 | 12.867  | (0.934) | 1214012   | 120.000 | 135.2     |
| 136    | Butylbenzylphthalate   | 149       | 12.991 | 12.991  | (0.942) | 997218    | 120.000 | 122.5     |
| 138    | Benzo (a) Anthracene   | 228       | 13.758 | 13.758  | (0.998) | 1694281   | 120.000 | 126.0     |
| 139    | Chrysene   | 228       | 13.831 | 13.831  | (1.003) | 1715841   | 120.000 | 122.8     |
| 140    | 3,3'-Dichlorobenzidine   | 252       | 13.799 | 13.799  | (1.001) | 653016    | 120.000 | 132.7     |
| 141    | bis(2-ethylhexyl)Phthalate                                       | 149       | 14.110 |         | (1.023) | 1368794   | 120.000 | 122.1     |
|        | Di-n-octylphthalate  | 149       | 15.167 |         | (1.100) | 2256614   | 120.000 | 125.9     |
|        | Benzo (b) fluoranthene   | 252       | 15.592 | 15.582  |         | 1475217   | 120.000 | 115.3(Q)  |
|        | Benzo(k) fluoranthene  | 252       | 15.623 | 15.623  |         | 1935987   | 120.000 | 129.5(g)  |
|        | Benzo (e) pyrene   | 252       | 16.007 | 16.007  |         | 1569049   | 120.000 | 123.7     |
|        | Benzo(a) pyrene  | 252       | 16.079 | 16.079  |         | 1720343   | 120.000 | 123.5     |
|        | Indeno(1,2,3-cd)pyrene   | 276       | 17.810 | 17.800  |         | 1867193   | 120.000 | 151.5     |
|        | Dibenzo(a,h)anthracene   | 278       | 17.851 | 17.841  |         | 1634040   | 120.000 |           |
|        | Benzo (g, h, i) perylene   |           |        |         | -       |           |         | 129.4     |
| 103    | penzo (g, m, z) perytene   | 276       | 18.245 | 18.235  | (1.1∠8) | 1706123   | 120.000 | 126.0     |

# Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002F.D Report Date: 02-Oct-2010 16:57

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|                                     |           |    |        |        |          | AMOUNTS |      |     |         |    |
|-------------------------------------|-----------|----|--------|--------|----------|---------|------|-----|---------|----|
|                                     | QUANT SIG |    |        |        |          | CAL     | -AMT | ON- | COL     |    |
| Compounds                           | MASS      | RT | EXP RT | REL RT | response | (       | NG)  | (   | NG)     |    |
|                                     |           |    |        |        |          | ===     | ==== | === |         |    |
| M 162 benzo b,k Fluoranthene Totals | 252       |    |        |        | 3411204  | 120     | .000 | 1   | 22.9 (A | () |

- A Target compound detected but, quantitated amount exceeded maximum amount.
   Q Qualifier signal failed the ratio test.
   q Qualifier signal exceeded ratio warning limit.

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002F.D

Report Date: 03-Oct-2010 11:15

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002F.D

Lab Smp Id: HSL\_120 ug/ml CS-6 Analysis Type: SV

Quant Type: ISTD

Operator: KT

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0312;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

|   |          | AREA     | LIMIT    |          |        |
|---|----------|----------|----------|----------|--------|
| COMPOUND                                | STANDARD | LOWER    | UPPER    | SAMPLE   | %DIFF  |
| ======================================= | ======== | ======== | ======== | ======== | ====== |
| 1 1,4-Dichlorobenze                     | 122625   | 61313    | 245250   | 137751   | 12.34  |
| 2 Naphthalene-d8                        | 530514   | 265257   | 1061028  | 591665   | 11.53  |
| 3 Acenaphthene-d10                      | 282538   | 141269   | 565076   | 322596   | 14.18  |
| 4 Phenanthrene-dl0                      | 462722   | 231361   | 925444   | 515607   | 11.43  |
| 5 Chrysene-d12                          | 435850   | 217925   | 871700   | 509570   | 16.91  |
| 6 Perylene-d12                          | 422284   | 211142   | 844568   | 539588   | 27.78  |
|   |          |          |          |          |        |

| COMPOUND            | STANDARD | LOWER    | UPPER     | SAMPLE   | %DIFF  |
|---------------------|----------|----------|-----------|----------|--------|
|                     | ======== | ======== | ========= | ======== | ====== |
| 1 1,4-Dichlorobenze | 3.96     | 3.46     | 4.46      | 3.96     | 0.00   |
| 2 Naphthalene-d8    | 5.37     | 4.87     | 5.87      | 5.37     | 0.00   |
| 3 Acenaphthene-d10  | 7.47     | 6.97     | 7.97      | 7.47     | 0.00   |
| 4 Phenanthrene-d10  | 9.41     | 8.91     | 9.91      | 9.41     | 0.00   |
| 5 Chrysene-d12      | 13.78    | 13.28    | 14.28     | 13.79    | 0.08   |
| 6 Perylene-d12      | 16.16    | 15.66    | 16,66     | 16.17    | 0.06   |
| •                   |          |          |           |          |        |

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = -50% of internal standard area.

RT UPPER LIMIT =  $\div$  0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Page 1

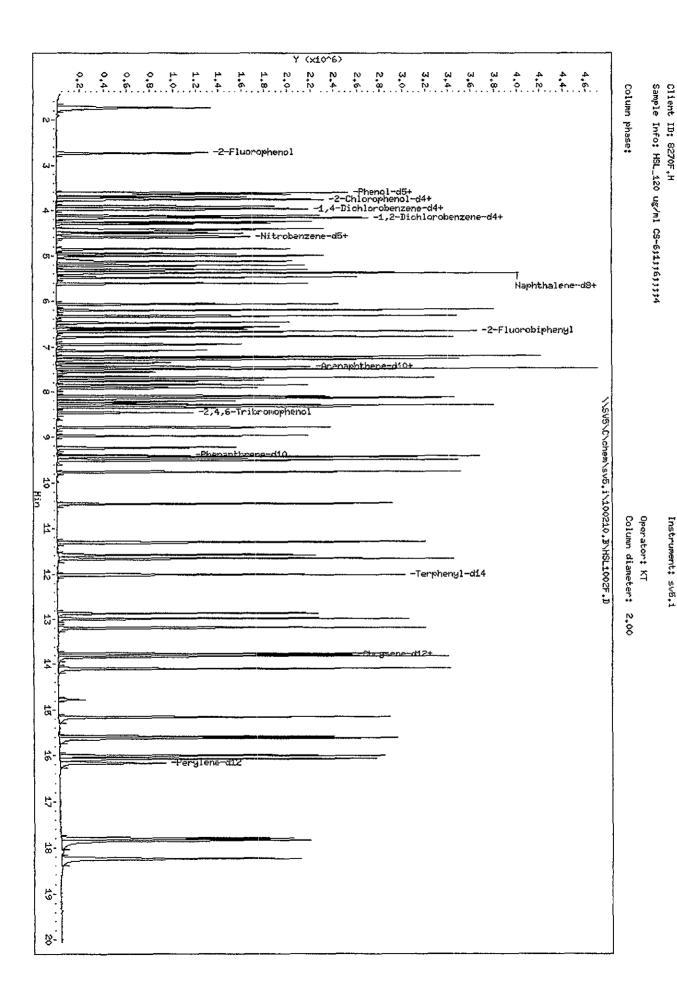
Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Smp ID: 8270F.M

Level:

Sample Type:



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Date : 02-00T-2010 14:35

Data File: \\SVS\C\ohem\sv5.i\100210.B\HSL1002F.D

AMOUNTS

Report Date: 03-Oct-2010 11:16

#### TestAmerica West Sacramento

Method 8270C

Client Smp ID: 8270F.M

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002G.D
Lab Smp Id: HSL 160 ug/ml CS-7 Client Smp
Inj Date: 02-OCT-2010 15:00
Operator: KT Inst ID: sv
Smp Info: HSL 160 ug/ml CS-7;1;;7;;;4
Misc Info: 3;;0;1 8270STD.SUB;10MSSV0313;0;8270F.M Inst ID: sv5.i

: SOP SAC-MS-0005 Comment

Method : \\sv5\c\chem\sv5.i\100210.B\8270f.m

Quant Type: ISTD Meth Date: 03-Oct-2010 11:09 onishim Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 7 Calibration Sample, Level: 7

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version:

Processing Host: SACP307UM

|     |        |                              |           |               |        |         |          |      | MUUMA | TS  |            |
|-----|--------|------------------------------|-----------|---------------|--------|---------|----------|------|-------|-----|------------|
|     |        |                              | QUANT SIG |               |        |         |          | CAL- | TMA   | OM- | -COT       |
| Co  | mpo    | unds                         | MASS      | RT            | EXP RT | REL RT  | RESPONSE | {    | NG)   | (   | NG)        |
| *** | 10 m m |                              |           | II to the say |        |         |          | EMER |       | === | ====       |
| *   | 1      | 1,4-Dichlorobenzene-d4       | 152       | 3.954         | 3.955  | (1.000) | 141009   | 40.0 | 000   |     | (Q)        |
| *   | 2      | Naphthalene-d8               | 136       | 5.374         | 5.374  | (1.000) | 622461   | 40.0 | 000   |     |            |
| *   | 3      | Acenaphthene-d10             | 164       | 7,478         | 7.468  | (1.000) | 328259   | 40.0 | 000   |     |            |
| *   | 4      | Phenanthrene-d10             | 188       | 9.405         | 9.405  | (1.000) | 532284   | 40.0 | 000   |     |            |
| *   | 5      | Chrysene-d12                 | 240       | 13,789        | 13.779 | (1.000) | 539557   | 40.0 | 000   |     |            |
| *   | 6      | Perylene-dl2                 | 264       | 16.172        | 16.162 | (1.000) | 560436   | 40.0 | 000   |     |            |
| \$  | 7      | 2-Fluorophenol               | 112       | 2.732         | 2.732  | (0.691) | 810154   | 160. | 000   | 3   | 163.0(A)   |
| \$  | 8      | Phenol-d5                    | 99        | 3.623         | 3,613  | (0.916) | 1035724  | 160. | 000   | 3   | l65.7(A)   |
| \$  | 9      | 2-Chlorophenol-d4            | 132       | 3.757         | 3.758  | (0.950) | 890073   | 160. | 000   | 3   | L62.2(A)   |
| \$  | 10     | 1,2-Dichlorobenzene-d4       | 152       | 4.162         | 4.162  | (1.052) | 557810   | 160. | 000   | 1   | L60.6(A)   |
| \$  | 11     | Nitrobenzene-d5              | 82        | 4.587         | 4.576  | (0.853) | 845796   | 160. | 000   | 1   | L60.4(A)   |
| \$  | 12     | 2-Fluorobiphenyl             | 172       | 6.680         | 6.680  | (0.893) | 1707074  | 160. | 000   | 3   | L61.4(A)   |
| \$  | 13     | 2,4,6-Tribromophenol         | 330       | 8.483         | 8.473  | (1.134) | 241468   | 160. | 000   | 3   | L69.3(A)   |
| \$  | 14     | Terphenyl-d14                | 244       | 12.017        | 12.017 | (0.871) | 1728892  | 160. | 000   | 3   | L62.7(A)   |
|     | 15     | N-Nitrosodimethylamine       | 74        | 1.706         | 1.706  | (0.431) | 529253   | 160. | 000   | 3   | L62.9 (Aq) |
|     | 16     | Pyridine                     | 79        | 1.726         | 1,726  | (0.437) | 860850   | 160. | 000   | 1   | 158.4 (Q)  |
|     | 23     | Aniline                      | 93        | 3.654         | 3.654  | (0.924) | 1318620  | 160  | 000   | 1   | L65.8 (AQ) |
|     | 24     | Phenol                       | 94        | 3.633         | 3.623  | (0.919) | 1166090  | 160  | 000   | 3   | L62.4 (AQ) |
|     | 26     | Bis(2-chloroethyl)ether      | 93        | 3.716         | 3.716  | (0.940) | 813702   | 160. | 000   | 1   | 161.6(A)   |
|     | 27     | 2-Chlorophenol               | 128       | 3.768         | 3.768  | (0.953) | 885754   | 160. | 000   | 1   | L60.7(A)   |
|     | 28     | 1,3-Dichlorobenzene          | 146       | 3,923         | 3,923  | (0.992) | 972719   | 160. | 000   | 2   | L62.0(A)   |
|     | 29     | 1,4-Dichlorobenzene          | 146       | 3.975         | 3.975  | (1.005) | 1023408  | 160. | 000   | 1   | 163.0(A)   |
|     | 30     | Benzyl Alcohol               | 108       | 4.120         | 4.120  | (1.042) | 617653   | 160  | 000   | 1   | L66.7(A)   |
|     | 31     | 1,2-Dichlorobenzene          | 146       | 4.172         | 4.172  | (1.055) | 928919   | 160  | 000   | 1   | 160.9(A)   |
|     | 32     | 2-Methylphenol               | 108       | 4.265         | 4.255  | (1.079) | 834149   | 160  | 000   | 7   | 165.4(A)   |
|     | 33     | 2,2'-oxybis(1-Chloropropane) | 45        | 4.296         | 4.297  | (1.086) | 1290345  | 160  | 000   | 1   | L61.0(A)   |
|     | 34     | 4-Methylphenol               | 108       | 4.421         | 4.421  | (1.118) | 895481   | 160. | 000   | 1   | L67.2(A)   |
|     | 36     | Hexachloroethane             | 117       | 4.504         | 4.504  | (1.139) | 343605   | 160  | 000   | 1   | L60.7(A)   |
|     | 37     | N-Nitrosodinpropylamine      | 70        | 4.452         | 4.442  | (1.126) | 590870   | 160  | 000   | 1   | 165.6 (A)  |
|     | 42     | Nitrobenzene                 | 77        | 4.607         | 4.597  | (0.857) | 844093   | 160  | 000   | 1   | 163.8(A)   |
|     | 44     | Isophorone                   | 82        | 4.866         | 4.856  | (0.906) | 1628636  | 160  | 000   | 1   | 164.4(A)   |
|     | 45     | 2-Nitrophenol                | 139       | 4.960         | 4.960  | (0.923) | 510613   | 160  | 000   | 1   | L67.0(A)   |
|     | 46     | 2,4-Dimethyphenol            | 107       | 5.022         | 5.012  | (0.934) | 890994   | 160. | 000   | 3   | 164.0(A)   |
|     |        | <del></del>                  |           |               |        |         |          |      |       |     |            |

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002G.D Report Date: 03-Oct-2010 11:16

|        |                            |             |        |               |         |          | amounts |            |  |
|--------|----------------------------|-------------|--------|---------------|---------|----------|---------|------------|--|
|        |                            | QUANT SIG   |        |               |         |          | CAL-AMI | ON-COL     |  |
| Compo  | unds                       | MASS        | RT     | EXP RT        | REL RT  | RESPONSE | (NG)    | (NG)       |  |
| B#==== |                            | <b>==</b> : | ====   | _======       |         | ######   | ======  | ******     |  |
| 47     | Bis(2-chloroethoxy)methane | 93          | 5.136  | 5.126         | (0.956) | 959710   | 160.000 | 158.5      |  |
| 49     | 2,4-Dichlorophenol         | 162         | 5.229  | 5.229         | (0.973) | 692405   | 160.000 | 164.7(A)   |  |
| 50     | Benzoic Acid               | 122         | 5.167  | 5.115         | (0.961) | 552251   | 160.000 | 183.6(A)   |  |
| 51     | 1,2,4-Trichlorobenzene     | 180         | 5.333  | 5.322         | (0.992) | 724320   | 160,000 | 159.2      |  |
| 52     | Naphthalene                | 128         | 5.395  | 5.395         | (1.004) | 2744968  | 160.000 | 159.7      |  |
| 54     | 4-Chloroaniline            | 127         | 5.488  | 5.488         | (1.021) | 1092223  | 160.000 | 162.1(A)   |  |
|        | Hexachlorobutadiene        | 225         | 5.612  | 5.613         | (1.044) | 360358   | 160.000 | 161.8(A)   |  |
| 60     | 4-Chloro-3-Methylphenol    | 107         | 6.068  | 6.069         | (1.129) | 767831   | 160.000 | 163.6(A)   |  |
| 63     | 2-Methylnaphthalene        | 142         | 6.203  | 6.203         | (1.154) | 1723402  | 160.000 | 159.6      |  |
| 66     | Hexachlorocyclopentadiene  | 237         | 6.483  | 6.483         | (0.867) | 435738   | 160.000 | 177.9(A)   |  |
| 69     | 2,4,6-Trichlorophenol      | 196         | 6.587  | 6.576         | (0.881) | 441685   | 160.000 | 168.6(A)   |  |
| 70     | 2,4,5-Trichlorphenol       | 196         | 6.628  | 6.628         | (0.886) | 474468   | 160.000 | 168.2(A)   |  |
| 71     | 2-Chloronaphthalene        | 162         | 6.783  | 6.784         | (0.907) | 1511253  | 160.000 | 163.6(A)   |  |
| 73     | 2-Nitroaniline             | 65          | 6.960  | 6.949         | (0.931) | 476342   | 160.000 | 170.1(A)   |  |
| 76     | Dimethylphthalate          | 163         | 7,229  | 7.229         | (0.967) | 1710061  | 160.000 | 160.8(A)   |  |
| 77     | Acenaphthylene             | 152         | 7 291  | 7.281         | (0.975) | 2665048  | 160.000 | 165.6(A)   |  |
|        | 2,6-Dinitrotoluene         | 165         | 7.302  | 7.302         | (0.976) | 408436   | 160.000 | 164.8(A)   |  |
|        | 3-Nitroaniline             | 138         | 7.457  | 7.447         | (0.997) | 520002   | 160.000 | 168.1(A)   |  |
|        | Acenaphthene               | 153         | 7.509  | 7.509         | (1.004) | 1647377  | 160.000 | 160.9(A)   |  |
|        | 2,4-Dinitrophenol          | 184         | 7.581  | 7.572         | (1.014) | 265655   | 160.000 | 157.7      |  |
| 83     | Dibenzofuran               | 168         | 7.706  | 7.706         | (1.030) | 2246304  | 160.000 | 165.3(A)   |  |
|        | 4-Nitrophenol              | 109         | 7.685  | 7.675         | (1.028) | 228516   | 160.000 | 178.1(Ag)  |  |
| 85     | 2,4~Dinitrotoluene         | 165         | 7.778  | <b>7</b> .768 | (1.040) | 566055   | 160.000 | 174.0(A)   |  |
| 91     | Fluorene                   | 166         | 8.141  | 8.131         | (1,089) | 1846653  | 160.000 | 164.1(A)   |  |
|        | Diethylphthalate           | 149         | 8.110  | 8.100         | (1.085) | 1813127  | 160.000 | 166.5(A)   |  |
|        | 4-Chlorophenyl-phenylether | 204         | 8.151  | 8.152         | (1.090) | 757562   | 160.000 | 161.9(A)   |  |
|        | 4-Nitroaniline             | 138         | 8.224  | 8.214         | (1.100) | 531151   | 160.000 | 173,2(A)   |  |
|        | 4,6-Dinitro-2-methylphenol | 198         | 8.286  | 8.276         | (0.881) | 324244   | 160.000 | 160.7(A)   |  |
|        | N-Nitrosodiphenylamine     | 169         | 8.328  | 8.317         | (0.885) | 1542041  | 187.000 | 191.1(A)   |  |
| 100    | Azobenzene                 | 77          | 8.359  | 8.348         | (0.889) | 1646477  | 160,000 | 157.3      |  |
| 101    | 4-Bromophenyl-phenylether  | 248         | 8.804  | 8.794         | (0.936) | 421894   | 160.000 | 162.4(A)   |  |
| 108    | Hexachlorobenzene          | 284         | 8.980  | 8.981         | (0.955) | 465305   | 160.000 | 160.3(A)   |  |
| 110    | Pentachlorophenol          | 266         | 9.250  | 9.240         | (0.983) | 293184   | 160.000 | 159.9      |  |
| 114    | Phenanthrene               | 178         | 9.447  | 9.437         | (1.004) | 2695719  | 160.000 | 160.7(A)   |  |
|        | Anthracene                 | 178         | 9.509  |               | (1.011) | 2703105  | 160.000 | 161.3(A)   |  |
|        | Carbazole                  | 167         | 9.768  |               | (1.039) | 2479487  | 160.000 | 161.9(A)   |  |
|        | Di-n-Butylphthalate        | 149         | 10.473 | 10.463        |         | 3164666  | 160.000 | 171.8(A)   |  |
|        | Fluoranthene               | 202         | 11.312 | 11.302        |         | 2500453  | 160.000 | 166.3(A)   |  |
|        | Benzidine                  | 184         | 11,582 | 11.571        |         | 1864289  | 160.000 | 170.5(A)   |  |
|        | Pyrene                     | 202         | 11.664 | 11.665        |         | 2714930  | 160.000 | 161.0(A)   |  |
|        | 3.3'-dimethylbenzidine     | 212         | 12.877 | 12.867        |         | 1724989  | 160.000 | 178.7(A)   |  |
|        | Butylbenzylphthalate       | 149         |        | 12,991        |         | 1401117  | 160.000 | 165.8(A)   |  |
|        | Benzo (a) Anthracene       | 228         |        | 13.758        |         | 2393908  | 160.000 | 166.5(A)   |  |
|        | Chrysene                   | 228         | 13.841 | 13.831        |         | 2422526  | 160.000 | 164.8(A)   |  |
|        | 3,3'-Dichlorobenzidine     | 252         | 13.810 | 13.799        |         | 915413   | 160.000 | 168.9(A)   |  |
|        | bis(2-ethylhexyl)Phthalate | 149         | 14.110 | 14.110        |         | 1906885  | 160.000 | 163.8(A)   |  |
|        | Di-n-octylphthalate        | 149         | 15.167 | 15.167        |         | 3253965  | 160.000 | 174.8(A)   |  |
|        | Benzo (b) fluoranthene     | 252         |        | 15.582        |         | 2299398  | 160.000 | 181.2 (AQ) |  |
|        | Benzo(k) fluoranthene      | 252         |        | 15.623        | •       | 2475935  | 160.000 | 152.0(q)   |  |
|        | Benzo(e)pyrene             | 252         | 16.017 | 16.007        |         | 2173628  | 160.000 | 164.7(A)   |  |
|        | Benzo(a)pyrene             | 252         | 16.089 | 16.079        |         | 2387962  | 160.000 | 166.0(A)   |  |
|        | Indeno(1,2,3-cd)pyrene     | 276         | 17.820 | 17.800        |         | 2196805  | 160.000 | 188.8 (AM) |  |
|        | Dibenzo(a, h) anthracene   | 278         |        | 17.841        |         | 2250528  | 160 000 | 173.2(A)   |  |
| 153    | Benzo(g,h,i)perylene       | 276         | 18.255 | 18.235        | (1.129) | 2332007  | 160.000 | 165.7(A)   |  |

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002G.D Report Date: 03-Oct-2010 11:16

|   |           |              |  |          |          | AMOUNTS |       |      |          |   |
|---|-----------|--------------|--|----------|----------|---------|-------|------|----------|---|
|   | QUANT SIG |              |  |          |          | CAI     | L-AMT | ON-  | COL      |   |
| Compounds                                   | MASS      | RT           | EXP RT                                 | REL RT   | RESPONSE | (       | NG)   | -{   | NG)      |   |
| 元 12 22 25 25 25 25 25 25 25 25 25 25 25 25 | ====      | <b>6</b> 222 | ###################################### | *======= |          | ===     |       | ==== | =====    |   |
| M 162 benzo b,k Fluoranthene Totals         | 252       |              |  |          | 4775333  | 160     | 0.000 | 2    | .64.8 (A | ) |

# QC Flag Legend

- A Target compound detected but, quantitated amount exceeded maximum amount.
   Q Qualifier signal failed the ratio test.
   M Compound response manually integrated.
   q Qualifier signal exceeded ratio warning limit.

Data File Name: HSL1002G.D

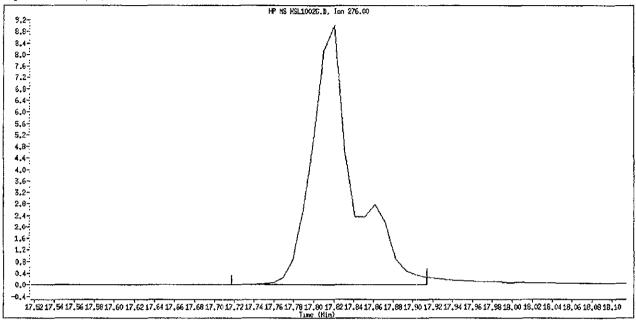
Inj. Date and Time: 02-OCT-2010 15:00

Instrument ID: sv5.i Client ID: 8270F.M

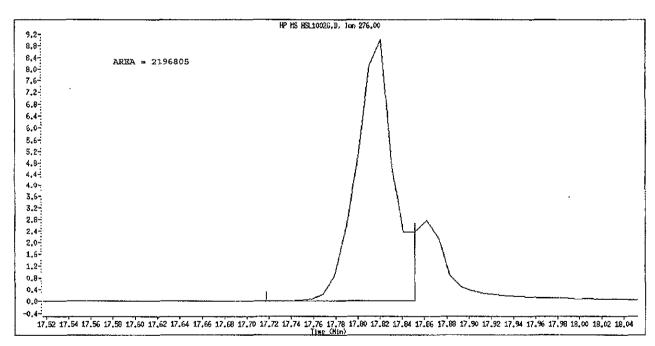
Compound Name: Indeno(1,2,3-cd)pyrene

CAS #: 193-39-5

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk

Manual Integration Reason: Poor Chromatography

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002G.D Page 1

Report Date: 02-Oct-2010 16:57

#### TestAmerica West Sacramento

Method 8270C

Data file : \\SV5\C\chem\sv5.i\100210.B\HSL1002G.D

Lab Smp Id: HSL 160 ug/ml CS-7 Client Smp ID: 8270F.M

Lab Smp Id: HSL 160 ug/ml CS-7 Client Smp ID: 82
Inj Date : 02-OCT-2010 15:00
Operator : KT Inst ID: sv5.i
Smp Info : HSL 160 ug/ml CS-7;1;;7;;;4
Misc Info : 3;;0;1 8270STD.SUB;10MSSV0313;0;8270F.M
Comment : SOP SAC-MS-0005
Method : \\SV5\C\chem\sv5.i\100210.B\8270f.m
Meth Date : 02-Oct-2010 16:57 onishim Quant Type: ISTD
Cal Date : 17-AUG-2010 21:19 Cal File: AP90817
Als bottle: 7 Calibration Sampl
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist:
Target Version: 4.14

Cal File: AP90817D.D

Calibration Sample, Level: 7

Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

|    |  |             |              |          |         |          | AMOUN                                   | TS                                      |
|----|--|-------------|--------------|----------|---------|----------|---|---|
|    |  | QUANT SIG   |              |          |         |          | CAL-AMT                                 | ON-COL                                  |
| Co | eparoame                                     | Mass        | RT           | EXP RT   | REL RT  | RESPONSE | (NG)                                    | ( NG)                                   |
| == | 20 过度 10 10 10 10 10 10 10 10 10 10 10 10 10 | 20-10-level | <b>神麻吸</b> 帽 | 6======= |         | ======== | 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 | 2.2.2.2.0.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2 |
| *  | 1 1,4-Dichlorobenzene-d4                     | 152         | 3.954        | 3.955    | (1.000) | 141009   | 40.0000                                 | (Q)                                     |
| *  | 2 Naphthalene-d3                             | 136         | 5.374        | 5.374    | (1.000) | 622461   | 40.0000                                 |   |
| *  | 3 Acenaphthene-d10                           | 164         | 7.478        | 7.468    | (1.000) | 328259   | 40.0000                                 |   |
| *  | 4 Phenanthrene-d10                           | 188         | 9.405        | 9.405    | (1.000) | 532284   | 40.0000                                 |   |
| *  | 5 Chrysene-d12                               | 240         | 13.789       | 13.779   | (1.000) | 539557   | 40.0000                                 |   |
| *  | 6 Perylene-d12                               | 264         | 16.172       | 16.162   | (1.000) | 560436   | 40.0000                                 |   |
| \$ | 7 2-Fluorophenol                             | 112         | 2,732        | 2.732    | (0.691) | 810154   | 160.000                                 | 155.7                                   |
| \$ | 8 Phenol-d5                                  | 99          | 3.623        | 3.613    | (0.916) | 1035724  | 160.000                                 | 156.5                                   |
| \$ | 9 2-Chlorophenol-d4                          | 132         | 3.757        | 3.758    | (0.950) | 890073   | 160.000                                 | 157.7                                   |
| \$ | 10 1,2-Dichlorobenzene-d4                    | 1.52        | 4.162        | 4.162    | (1.052) | 557810   | 160.000                                 | 158.4                                   |
| \$ | 11 Nitrobenzene-d5                           | 82          | 4.587        | 4.576    | (0.853) | 845796   | 160.000                                 | 153.2                                   |
| \$ | 12 2-Fluorobiphenyl                          | 172         | 6.680        | 6.680    | (0.893) | 1707074  | 160.000                                 | 162,4(A)                                |
| Ş  | 13 2,4,6-Tribromophenol                      | 330         | 8.483        | 8.473    | (1,134) | 241468   | 160.000                                 | 186.3 (A)                               |
| Ş  | 14 Terphenyl-d14                             | 244         | 12.017       | 12.017   | (0.871) | 1728892  | 160,000                                 | 164.3(A)                                |
|    | 15 N-Nitrosodimethylamine                    | 74          | 1.706        | 1.706    | (0.431) | 529253   | 160.000                                 | 154.1                                   |
|    | 16 Pyridine                                  | 79          | 1.726        | 1.726    | (0.437) | 860850   | 160.000                                 | 150.4                                   |
|    | 23 Aniline                                   | 93          | 3.654        | 3.654    | (0.924) | 1318620  | 160.000                                 | 158.9(Q)                                |
|    | 24 Phenol                                    | 94          | 3.633        | 3.623    | (0.919) | 1166090  | 160.000                                 | 165.7(AQ)                               |
|    | 26 Bis(2-chloroethyl)ether                   | 93          | 3,716        | 3.716    | (0 940) | 813702   | 160.000                                 | 152.2                                   |
|    | 27 2-Chlorophenol                            | 128         | 3.768        | 3.768    | (0.953) | 885754   | 160.000                                 | 159.0                                   |
|    | 28 1,3-Dichlorobenzene                       | 146         | 3.923        | 3.923    | (0.992) | 972719   | 160.000                                 | 158.0                                   |
|    | 29 1,4-Dichlorobenzene                       | 146         | 3.975        | 3.975    | (1.005) | 1023408  | 160.000                                 | 164.5(A)                                |
|    | 30 Benzyl Alcohol                            | 108         | 4.120        | 4.120    | (1.042) | 617653   | 160.000                                 | 161.4(A)                                |
|    | 31 1,2-Dichlorobenzene                       | 146         | 4.172        | 4,172    | (1.055) | 928919   | 160.000                                 | 157.5                                   |
|    | 32 2-Methylphenol                            | 108         | 4.265        | 4.255    | (1.079) | 834149   | 160.000                                 | 160.3(A)                                |
|    | 33 2,2'-oxybis(1-Chloropropane)              | 45          | 4.296        | 4.297    | (1.086) | 1290345  | 160.000                                 | 130.0                                   |
|    | 34 4-Methylphenol                            | 103         | 4,421        | 4.421    | (1.118) | 895481   | 160.000                                 | 161.5(A)                                |
|    | 36 Hexachloroethane                          | 117         | 4.504        | 4.504    | (1.139) | 343605   | 160.000                                 | 156.5                                   |
|    | 37 N-Nitrosodinpropylamine                   | 70          | 4.452        | 4.442    | (1.126) | 590870   | 160.000                                 | 152.2                                   |
|    | 42 Nitrobenzene                              | 77          | 4.607        | 4.597    | (0.857) | 844093   | 160.000                                 | 153.8                                   |
|    | 44 Isophorone                                | 82          | 4.866        | 4.856    | (0.906) | 1628636  | 160.000                                 | 156.6                                   |
|    | 45 2-Nitrophenol                             | 139         | 4.960        | 4.960    | (0.923) | 510613   | 160.000                                 | 170.5(A)                                |
|    | 46 2,4-Dimethyphenol                         | 107         | 5.022        | 5.012    | (0.934) | 890994   | 160.000                                 | 160.2(A)                                |

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|                |  |           |        |        |         |          | AMOUNTS         |   |  |  |
|----------------|--|-----------|--------|--------|---------|----------|-----------------|---|--|--|
|                |  | QUANT SIG |        |        |         |          | CAL-AMT         | ON-COL                                  |  |  |
| Compo          | unds                                   | EZAM      | RT     | exp rt | REL RT  | RESPONSE | (NG)            | ( NG)                                   |  |  |
| <b>==</b> ==== | ************************************** | :====     |        |        |         | #======  | <b>====</b> === | :=::::::::::::::::::::::::::::::::::::: |  |  |
| 47             | Bis(2-chloroethoxy)methane             | 93        | 5.136  | 5.126  | (0.956) | 959710   | 160.000         | 155.0                                   |  |  |
| 49             | 2,4-Dichlorophenol                     | 162       | 5.229  | 5.229  | (0.973) | 692405   | 160.000         | 169.1(A)                                |  |  |
| 50             | Benzoic Acid                           | 122       | 5.167  | 5.115  | (0.961) | 552251   | 160.000         | 178.1(A)                                |  |  |
| 51             | 1,2,4-Trichlorobenzene                 | 180       | 5.333  | 5.322  | (0.992) | 724320   | 160.000         | 163.2(A)                                |  |  |
| 52             | Naphthalene                            | 128       | 5.395  | 5.395  | (1.004) | 2744968  | 160.000         | 158.4                                   |  |  |
| 54             | 4-Chloroaniline                        | 127       | 5.488  | 5.488  | (1,021) | 1092223  | 160.000         | 160.2(A)                                |  |  |
| 57             | Hexachlorobutadiene                    | 225       | 5.612  | 5.613  | (1.044) | 360358   | 160.000         | 170.6(A)                                |  |  |
| 60             | 4-Chloro-3-Methylphenol                | 107       | 6.068  | 6.069  | (1.129) | 767831   | 160.000         | 163.0(A)                                |  |  |
| 63             | 2-Methylnaphthalene                    | 142       | 6.203  | 6.203  | (1.154) | 1723402  | 160.000         | 163.0(A)                                |  |  |
| 66             | Hexachlorocyclopentadiene              | 237       | 6.483  | 6.483  | (0.867) | 435738   | 160.000         | 174.0(A)                                |  |  |
| 69             | 2,4,6-Trichlorophenol                  | 196       | 6.587  | 6.576  | (0.881) | 441685   | 160.000         | 177.7(A)                                |  |  |
| 70             | 2,4,5-Trichlorphenol                   | 196       | 6.628  | 6.628  | (0.886) | 474468   | 160.000         | 173.8(A)                                |  |  |
| 71             | 2-Chloronaphthalenc                    | 162       | 6.783  | 6.784  | (0.907) | 1511253  | 160.000         | 164.2(A)                                |  |  |
| 73             | 2-Nitroaniline                         | 65        | 6.960  | 6 949  | (0.931) | 476342   | 160.000         | 154.5                                   |  |  |
| 76             | Dimethylphthalate                      | 163       | 7.229  | 7.229  | (0.967) | 1710061  | 160.000         | 160.9(A)                                |  |  |
| 77             | Acenaphthylene                         | 152       | 7.291  | 7.281  | (0,975) | 2665048  | 160.000         | 165.6(A)                                |  |  |
| 79             | 2,6-Dinitrotoluene                     | 165       | 7.302  | 7.302  | (0.976) | 408436   | 160.000         | 171.6(A)                                |  |  |
| 80             | 3-Nitroaniline                         | 138       | 7.457  | 7.447  | (0.997) | 520002   | 160.000         | 164.8(A)                                |  |  |
| 81             | Acenaphthene                           | 153       | 7.509  | 7.509  | (1.004) | 1647377  | 160.000         | 160.7(A)                                |  |  |
| 82             | 2,4-Dinitrophenol                      | 184       | 7.581  | 7.571  | (1.014) | 265655   | 160.000         | 158.9                                   |  |  |
| 83             | Dibenzofuran                           | 168       | 7.706  | 7.706  | (1.030) | 2246304  | 160.000         | 165.8(A)                                |  |  |
| 84             | 4-Nitrophenol                          | 109       | 7.685  | 7.675  | (1.028) | 228516   | 160.000         | 165.8 (Aq)                              |  |  |
| 86             | 2,4-Dinitrotoluene                     | 165       | 7.778  | 7.768  | (1.040) | 566055   | 160.000         | 177.5(A)                                |  |  |
| 91             | Fluorene                               | 166       | 8.141  | 8,131  | (1.089) | 1.846653 | 160 000         | 166.4(A)                                |  |  |
| 92             | Diethylphthalate                       | 149       | 8.110  | 8.100  | (1.085) | 1813127  | 160.000         | 163.2(A)                                |  |  |
| 93             | 4-Chlorophenyl-phenylether             | 204       | 8.151  | 8.152  | (1.090) | 757562   | 160.000         | 165.6(A)                                |  |  |
| 94             | 4-Nitroaniline                         | 138       | 8.224  | 8.214  | (1.100) | 531151   | 160.000         | 172.2(A)                                |  |  |
| 97             | 4,6-Dinitro-2-methylphenol             | 198       | 8.266  | 8.276  | (0.881) | 324244   | 160.000         | 158.0                                   |  |  |
| 98             | N-Nitrosodiphenylamine                 | 169       | 8.328  | 8.317  | (0.885) | 1542041  | 187.000         | 185.9(A)                                |  |  |
| 100            | Azobenzene                             | 77        | 8.359  | 8.348  | (0.889) | 1646477  | 160.000         | 142.7                                   |  |  |
| 101            | 4-Bromophenyl-phenylether              | 248       | 8.804  | 8.794  | (0.936) | 421894   | 160.000         | 164.0(A)                                |  |  |
| 1.08           | Hexachlorobenzene                      | 284       | 8.980  | 8.981  | (0.955) | 465305   | 160.000         | 167.5 (A)                               |  |  |
| 110            | Pentachlorophenol                      | 266       | 9.250  | 9.240  | (0.983) | 293184   | 160.000         | 175.8(A)                                |  |  |
| 114            | Phenanthrene                           | 178       | 9.447  | 9.437  | (1.004) | 2695719  | 160.000         | 162.4(A)                                |  |  |
| 115            | Anthracene                             | 178       | 9.509  | 9.499  | (1.011) | 2703105  | 160.000         | 161.8(A)                                |  |  |
|                | Carbazole                              | 167       | 9.768  | 9.763  | (1.039) | 2479487  | 160.000         | 159.5                                   |  |  |
|                | Di-n-Butylphthalate                    | 149       | 10.473 |        | (1.113) | 3164666  | 160.000         | 168.4(A)                                |  |  |
|                | Fluoranthene                           | 202       | 11.312 |        | (1,203) | 2500453  | 160.000         | 167.3(A)                                |  |  |
|                | Benzidine                              | 184       | 11.582 |        | (0.840) | 1864289  | 160.000         | 168.3(A)                                |  |  |
|                | Pyrene                                 | 202       | 11.664 |        | (0.846) | 2714930  | 160.000         | 160.9(A)                                |  |  |
|                | 3,3'-dimethylbenzidine                 | 212       | 12.877 |        | (0.934) | 1724989  | 160.000         | 181.4 (A)                               |  |  |
|                | Butylbenzylphthalate                   | 149       | 12.991 |        | (0.942) | 1401117  | 160.000         | 162.5(A)                                |  |  |
|                | Benzo(a) Anthracene                    | 228       | 13.768 |        | (0.998) | 2393908  | 160.000         | 168,2(A)                                |  |  |
|                | Chrysene                               | 228       | 13.841 |        | (1.004) | 2422526  | 160.000         | 163.8(A)                                |  |  |
|                | 3,3'-Dichlorobenzidine                 | 252       | 13.810 |        | (1.002) | 915413   | 160.000         | 175.7(A)                                |  |  |
|                | bis(2-ethylhexyl)Phthalate             | 149       | 14.110 | 14.110 | (1.023) | 1906885  | 160.000         | 160.7(A)                                |  |  |
|                | Di-n-octylphthalate                    | 149       | 15.167 |        | (1.100) | 3253965  | 160.000         | 171.5(A)                                |  |  |
|                | Benzo(b) fluoranthene                  | 252       | 15.592 |        | (0.964) | 2299398  | 160.000         | 173.0(AQ)                               |  |  |
|                | Benzo(k) fluoranthene                  | 252       | 15.634 | 15.623 |         | 2475935  | 160.000         | 159.4(q)                                |  |  |
|                | Benzo(e)pyrene                         | 252       | 16.017 |        | (0.990) | 2178628  | 160.000         | 165.4(A)                                |  |  |
|                | Benzo(a)pyrene                         | 252       | 16.089 |        | (0.995) | 2387962  | 160.000         | 165.1(A)                                |  |  |
| 1.51           | Indeno(1,2,3-cd)pyrene                 | 276       | 17.820 | 17.800 | (1.102) | 2617878  | 160.000         | 204.6(A)                                |  |  |
| 152            | Dibenzo(a,h) anthracene                | 278       | 17.862 | 17.841 | (1.104) | 2250528  | 160.000         | 171.6(A)                                |  |  |
| 153            | Benzo(g,h,i)perylene                   | 276       | 18.255 | 18.235 | (1.129) | 2332007  | 160.000         | 165.9(A)                                |  |  |
|                |  |           |        |        |         |          |                 |   |  |  |

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002G.D Report Date: 02-Oct-2010 16:57

|  |           |      |                 |        |          | AMOUN   | TS       |
|--|-----------|------|-----------------|--------|----------|---------|----------|
|  | QUANT SIG |      |                 |        |          | CAL-AMT | ON-COL   |
| Compounds                              | Mass      | RT   | exp rt          | REL RT | RESPONSE | ( NG)   | ( NG)    |
| ************************************** | ****      | ==== | E = + = + + + + | *****  |          |         | HEREKYE  |
| M 162 benzo b,k Fluoranthene Totals    | 252       |      |                 |        | 4775333  | 160.000 | 165.7(A) |

Page 3

- A Target compound detected but, quantitated amount exceeded maximum amount.

  Q Qualifier signal failed the ratio test.

  q Qualifier signal exceeded ratio warning limit.

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002G.D

Report Date: 03-Oct-2010 11:16

Page 1

Calibration Date: 02-OCT-2010 Calibration Time: 13:44

Client Smp ID: 8270F.M

Level:

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Lab File ID: HSL1002G.D

Lab Smp Id: HSL\_160 ug/ml CS-7

Analysis Type:  $\overline{SV}$ Quant Type: ISTD

Operator: KT

Sample Type:

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0313;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

|                     | AREA LIMIT |          |          |          |        |  |  |
|---------------------|------------|----------|----------|----------|--------|--|--|
| COMPOUND            | STANDARD   | LOWER    | UPPER    | SAMPLE   | %DIFF  |  |  |
|                     | =======    | ======== | ======== | ======== | ====== |  |  |
| 1 1,4-Dichlorobenze | 122625     | 61313    | 245250   | 141009   | 14.99  |  |  |
| 2 Naphthalene-d8    | 530514     | 265257   | 1061028  | 622461   | 17.33  |  |  |
| 3 Acenaphthene-d10  | 282538     | 141269   | 565076   | 328259   | 16.18  |  |  |
| 4 Phenanthrene-d10  | 462722     | 231361   | 925444   | 532284   | 15.03  |  |  |
| 5 Chrysene-d12      | 435850     | 217925   | 871700   | 539557   | 23.79  |  |  |
| 6 Perylene-d12      | 422284     | 211142   | 844568   | 560436   | 32.72  |  |  |
|                     |            |          |          |          |        |  |  |

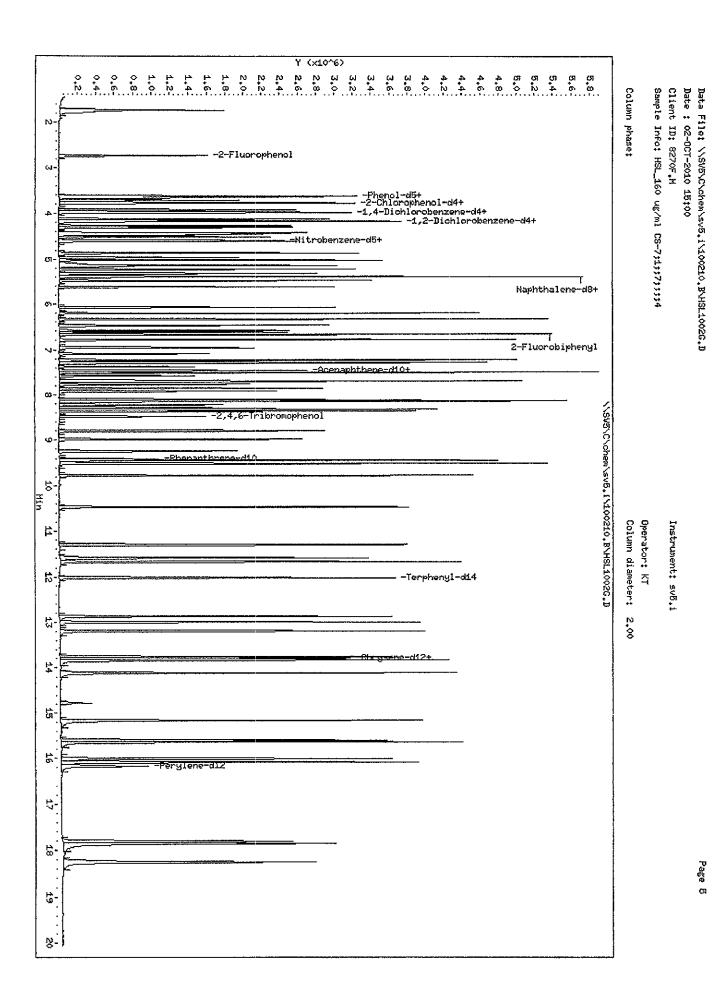
|   |          | RT I      | LIMIT    |         |        |
|---|----------|-----------|----------|---------|--------|
| COMPOUND                                | STANDARD | LOWER     | UPPER    | SAMPLE  | DIFF   |
| ======================================= | =======  | ========= | ======== | ======= | ====== |
| 1 1,4-Dichlorobenze                     | 3.96     | 3.46      | 4.46     | 3.95    | -0.00  |
| 2 Naphthalene-d8                        | 5.37     | 4,87      | 5.87     | 5.37    | -0.00  |
| 3 Acenaphthene-d10                      | 7.47     | 6.97      | 7.97     | 7.48    | 0.14   |
| 4 Phenanthrene-d10                      | 9.41     | 8.91      | 9.91     | 9.41    | -0.00  |
| 5 Chrysene-d12                          | 13.78    | 13.28     | 14.28    | 13.79   | 0.07   |
| 6 Perylene-d12                          | 16.16    | 15.66     | 16.66    | 16.17   | 0.06   |
|   |          | l         |          |         |        |

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



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Report Date: 03-Oct-2010 11:20

#### TestAmerica West Sacramento

#### CONTINUING CALIBRATION COMPOUNDS

| 5  | 1 +          |         |         |        | t          | 1           |                       |
|--|--------------|---------|---------|--------|------------|-------------|-----------------------|
| I covromm                                  |              | 2250    |         | MIN    | •          | MAX         | l community materials |
| COMPOUND                                   | RRF / AMOUNT | RF50    | RRF50   |        | •          | %D / %DRIFT |                       |
| [\$ 7 2-Fluorophenol                       | 1.40992      | 1.41047 | 1,41047 | •      | •          | •           |                       |
| \$ 8 Phenol-d5                             | 1.77296      | 1.74907 |         |        | :          |             | . ~ .                 |
| \$ 9 2-Chlorophenol-d4                     | 1.55698      | 1.55303 |         |        | 1          |             | , ,                   |
| \$ 10 1,2-Dichlorobenzene-d4               | 0.98513      | 0.98502 |         | •      | •          | •           |                       |
| \$ 11 Nitrobenzene-d5                      | 0.33879      | 0.32706 |         |        | •          | •           |                       |
| \$ 12 2-Fluorobiphenyl                     | 1.28852      | 1.25302 |         |        | •          | *           |                       |
| \$ 13 2,4,6-Tribromophenol                 | 0.17381      | 0.17822 |         |        | •          |             |                       |
| \$ 14 Terphenyl-d14                        | 0.78789      | 0.74054 |         | •      | •          | •           |                       |
| 15 N-Nitrosodimethylamine                  | 0.92154      | 0.74034 |         |        |            | •           |                       |
| 116 Pyridine                               | 1.54111      | 1,49084 |         |        | •          | •           |                       |
| 23 Aniline                                 | 2.25673      | 1.90520 |         |        | •          |             | - :                   |
| 24 Phenol                                  | 2.03729      | 2.01343 |         |        | •          | •           |                       |
| 26 Bis(2-chloroethyl)ether                 | 1.42859      | 1.41690 |         | •      | •          | •           |                       |
| 27 2-Chlorophenol                          | 1.56381      | 1 57626 |         | •      | •          | •           |                       |
| 28 1.3-Dichlorobenzene                     | 1.70337      | 1.74104 |         | •      | •          |             |                       |
| 29 1,4-Dichlorobenzene                     | 1.78118      | 1.77637 |         | •      | :          | •           |                       |
| 30 Benzyl Alcohol                          | 1.05101      | 1.07153 |         | •      | •          | •           |                       |
| 31 1,2-Dichlorobenzene                     | 1.63746      | 1.64144 |         |        | •          | -           |                       |
| 32 2-Methylphenol                          | 1.43012      | 1.41817 |         |        | •          | •           |                       |
| 33 2,2'-oxybis(1-Chloropropane             | 2.27365      | 2.14153 |         |        | •          |             |                       |
|  | 1.51904      | 1.42403 |         |        | •          | •           |                       |
| 34 4-Methylphenol<br> 36 Hexachloroethane  | 0.606361     | 0.62081 | · ·     |        | •          | •           | , .                   |
| 37 N-Nitrosodinpropylamine                 | 1.01180      | 0.99863 |         |        | •          | •           | : - :                 |
| 42 Nitrobenzene                            | 0.33116      | 0.32452 |         | •      | •          | •           |                       |
|  | 0.63679      | 0.62370 |         |        | •          | •           |                       |
| 44 Isophorone<br> 45 2-Nitrophenol         | 0.19648      | 0.82370 |         |        | ,          | '           |                       |
| 46 2,4-Dimethyphenol                       | 0.34911      | 0.33078 | •       |        | -          | •           |                       |
| 47 Bis(2-chloroethoxy)methane              | 0.38908      | 0.37434 |         |        | :          | •           |                       |
| 49 2,4-Dichlorophenol                      | 0.27010      | 0.26945 |         |        | •          | -           |                       |
| 50 Benzoic Acid                            | 0.19324      | 0.20284 |         | •      | •          | •           |                       |
| 51 1,2,4-Trichlorobenzene                  | 0.29246      | 0.28203 |         |        | •          |             |                       |
| 52 Naphthalene                             | 1.10443      | 1.07116 |         | ,      | -          | •           |                       |
| 54 4-Chloroaniline                         | 0.43288      | 0.40664 |         |        | -          | •           |                       |
| 57 Hexachlorobutadiene                     | 0.43288      | 0.14742 |         | ,      | •          | •           |                       |
| 60 4-Chloro-3-Methylphenol                 | 0.30164      | 0.29442 |         | ,      | •          | •           |                       |
| 63 2-Methylnaphthalene                     | 0.69378      | 0.71003 |         | •      | •          | •           |                       |
| 66 Hexachlorocyclopentadiene               | 0.09376      | 0.32228 |         |        | •          |             |                       |
| 69 2,4,6-Trichlorophenol                   | 0.23046      | 0.32462 |         | •      | =          |             |                       |
| 70 2,4,5-Trichlorphenol                    | 0.34380      | 0.34503 |         | •      | •          | •           |                       |
| 71 2-Chloronaphthalene                     | 1.12571      | 1.09768 |         | •      |            | •           |                       |
| •  | 0.34119      | 0.32550 |         | •      | •          | •           | , ,                   |
| 73 2-Nitroaniline<br> 76 Dimethylphthalate | 1.29606      | 1,28355 | 1.28355 | •      | •          |             |                       |
| 1 to presentable property                  | 1 1.23000    | 1,26335 | 1.20335 | 10.010 | 1 -0.30354 | 1 30.0000   | www.radeoi            |
| l  | .1           |         |         | ·      | 1          | l           | I                     |



Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002H.D

Report Date: 03-Oct-2010 11:20

#### TestAmerica West Sacramento

# CONTINUING CALIBRATION COMPOUNDS

Instrument ID: sv5.i Injection Date: 02-OCT-2010 16:11
Lab File ID: HSL1002H.D Init. Cal. Date(s): 17-AUG-2010 02-OCT-2010
Analysis Type: Init. Cal. Times: 17:32 15:00
Lab Sample ID: HSL\_050 ug/ml ICV Quant Type: ISTD
Method: \\sv5\c\chem\sv5.i\l00210.B\8270f.m

|                                   | I I          |          | CCAL    | MIN    |             | MAX        | J       |
|-----------------------------------|--------------|----------|---------|--------|-------------|------------|---------|
| COMPOUND                          | RRF / AMOUNT | RF50     | RRF50   |        | %D / %DRIFT |            |         |
| 77 Acenaphthylene                 | 1,96037      | 1.90194  | 1.90194 | •      | •           | •          | •       |
| 79 2,6-Dimitrotoluene             | 0.30197      | 0.30334  |         | •      | •           | •          |         |
| 80 3-Nitrozniline                 | 0.37691      | 0.37836  |         | •      | •           | •          |         |
| 81 Acenaphthene                   | 1,24787      | 1.19989  |         | •      | •           |            | •       |
| 82 2,4-Dinitrophenol              | 1 50.000001  | 48.07731 |         | •      | •           | 0.000e+000 |         |
| 83 Dibenzofuran                   | 1.65612      | 1.64309  |         | •      | •           | •          |         |
| 84 4-Nitrophenol                  | 0.15634      | 0.16205  |         | •      | •           |            |         |
| 86 2,4-Dinitrotoluene             | 0.39633      | 0.40639  |         | •      | •           | •          |         |
| 91 Fluorene                       | 1.37139      | 1.36209  |         | ,      | <u>.</u>    |            |         |
| 92 Diethylphthalate               | 1.32699      | 1.28445  |         | •      |             | '          |         |
| 93 4-Chlorophenyl-phenylether     | 0.57019      | 0.56986  |         | ,      | •           | •          |         |
| 94 4-Nitroaniline                 | 0.37361      | 0.40608  |         | •      | •           | •          |         |
| 97 4,6-Dinitro-2-methylphenol     | 50.00000     | 48.62001 |         | •      | •           | 0.000e+000 |         |
| 98 N-Nitrosodiphenylamine         | 0.60628      | 0.49086  |         | •      |             | •          | •       |
| 100 Azobenzene                    | 0.78660      | 0.77322  |         | -      | •           |            |         |
| 101 4-Bromophenyl-phenylether     | 0.19527      | 0.19536  |         | •      | •           | :          |         |
| 108 Hexachlorobenzene             | 0.21807      | 0.22026  |         | •      | •           | •          |         |
| 110 Pentachlorophenol             | 50.00000     | 50.72441 |         | •      | •           | 0.000e+000 |         |
| 114 Phenanthrene                  | 1.26074      | 1.20864  |         | •      | •           | •          | •       |
| 115 Anthracene                    | 1.25955      | 1.22825  | '       | •      | •           | 50.00000   |         |
| 118 Carbazole                     | 1.15061      | 1.15083  |         | •      | •           | •          |         |
| 120 Di-n-Butylphthalate           | 1.38442      | 1.39149  |         | -      | •           | •          | •       |
| 126 Fluoranthene                  | 1.12969      | 1.19302  |         |        | •           | :          | -       |
| 127 Benzidine                     | 0.81067      | 0.30175  |         | •      | •           | 50.00000   |         |
| 128 Pyrene                        | 1.25025      | 1.13023  |         |        | •           | 50.00000   | •       |
| 134 3,3'-dimethylbenzidine        | 0.71564      | 0.26880  |         | 1      | •           | •          |         |
| 136 Butylbenzylphthalate          | 0.62663      | 0.58836  |         | •      | •           | •          | •       |
| 138 Benzo(a)Anthracene            | 1.06548      | 0.99285  | 0.99285 | 0.010  | -6.81596    | 50.00000   | Average |
| 139 Chrysene                      | 1.08994      | 1.04703  | 1.04703 | 0.010  | -3.93621    | 50.00000   | Average |
| 140 3,31-Dichlorobenzidine        | 0.40189      | 0.37691  | 0.37691 | 0.010  | -6.21534    | 50.00000   | Average |
| 141 bis(2-ethylhexyl)Phthalate    | 0.86316      | 0.80149  | 0.80149 | 0.010  | -7.14468    | 50.00000   | Average |
| 142 Di-n-octylphthalate           | 1.37975      | 1.27404  | 1.27404 | 0.010  | -7.66156    | 20.00000   | Average |
| 144 Benzo(b) fluoranthene         | 0.90549      | 0.90498  | 0.90498 | 0.010  | -0.05663    | 50.00000   | Average |
| 145 Benzo(k) fluoranthene         | 1.16236      | 1.22175  | 1.22175 | 0.010  | 5.10982     | 50.00000   | Average |
| 147 Benzo(e)pyrene                | 0.94425      | 0.98421  | 0.98421 | 10.010 | 4.23177     | 50.00000   | Average |
| 148 Benzo(a) pyrene               | 1.02655      | 0.95393  | 0.95393 | 0.010  | -7.07365    | 20.00000   | Average |
| 151 Indeno(1,2,3-cd)pyrene        | 0.83029      | 0.81846  | 0.81846 | 0.010  | -1.42489    | 50.00000   | Average |
| 152 Dibenzo(a,h)anthracene        | 0.92758      | 0.99090  | 0.99090 | 0.010  | 6.82730     | 50.00000   | Average |
| 153 Benzo(g,h,i)perylene          | 1.00427      | 1.08674  | 1.08674 | 0.010  | 8.21177     | 50.00000   | Average |
| M 162 benzo b,k Fluoranthene Tota | 2.06785      | 2,12673  | 2.12673 | 0.010  | 2.84748     | 50.00000   | Average |
|                                   | j i          |          | i       | 1      | ı           | 1          | 1       |

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002H.D Page 1

Report Date: 03-Oct-2010 11:20

# TestAmerica West Sacramento

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002H.D

Lab Smp Id: HSL\_050 ug/ml ICV Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 16:11

Operator : KT Inst ID: sv5.i

Smp Info : HSL\_050 ug/ml ICV;2;;4;;;4

Misc Info: 3;,0;1 8270STD.SUB;10MSSV0314;0;8270F.M Comment: SOP SAC-MS-0005 Method: \\sv5\c\chem\sv5.i\100210.B\8270f.m

Meth Date: 03-Oct-2010 11:20 sv5.i Quant Type: ISTD

Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 8 Continuing Calibration Sample

Dil Factor: 1.00000 Integrator: Falcon

Compound Sublist: 1 8270STD.SUB

Target Version: 4.14

Processing Host: SACP307UM

|            |      |                              |           |                        |        |         |                | AMOUNTS          |           |  |
|------------|------|------------------------------|-----------|------------------------|--------|---------|----------------|------------------|-----------|--|
|            |      |                              | QUANT SIG |                        |        |         |                | CAL-AMT          | ON-COL    |  |
| Co         | ubo. | unds                         | MASS      | RT                     | EXP RT | REL RT  | RESPONSE       | ( NG)            | ( NG)     |  |
| <b>*</b> = | ===  | *****                        | 3CCC      | <b>No.</b> 2.5 2.5 400 | *****  |         | ===== <b>=</b> | □ 24 M ≥ 16 ≥ 16 | *****     |  |
| *          | 1    | 1,4-Dichlorobenzene-d4       | 152       | 3.954                  | 3.954  | (1.000) | 98364          | 40.0000          |           |  |
| *          | 2    | Naphthalene-d8               | 136       | 5.374                  | 5.374  | (1.000) | 431655         | 40.0000          |           |  |
| *          | 3    | Acenaphthene-d10             | 164       | 7.468                  | 7.468  | (1.000) | 236662         | 40.0000          |           |  |
| *          | 4    | Phenanthrene-dl0             | 188       | 9.405                  | 9.405  | (1.000) | 380734         | 40.0000          |           |  |
| *          | 5    | Chrysene-dl2                 | 240       | 13.789                 | 13.789 | (1.000) | 421719         | 40.0000          |           |  |
| *          | б    | Perylene-d12                 | 264       | 16.173                 | 16.173 | (1.000) | 419419         | 40.0000          |           |  |
| Ş          | 7    | 2-Fluorophenol               | 112       | 2.732                  | 2.732  | (0.691) | 173424         | 50.0000          | 50.02     |  |
| Ş          | 8    | Phenol-d5                    | 99        | 3.613                  | 3.613  | (0.914) | 215057         | 50.0000          | 49.33     |  |
| \$         | 9    | 2-Chlorophenol-d4            | 132       | 3.747                  | 3.747  | (0.948) | 190953         | 50.0000          | 49.87     |  |
| \$         | 10   | 1,2-Dichlorobenzene-d4       | 152       | 4.151                  | 4.151  | (1.050) | 121113         | 50.0000          | 49.99     |  |
| \$         | 11   | Nitrobenzene-d5              | 82        | 4.576                  | 4.576  | (0.852) | 176474         | 50.0000          | 48.27     |  |
| \$         | 12   | 2-Fluorobiphenyl             | 172       | 6.680                  | 6.680  | (0,895) | 370679         | 50.0000          | 48.62     |  |
| \$         | 13   | 2,4,6-Tribromophenol         | 330       | 8.483                  | 8.483  | (1.136) | 52721          | 50.0000          | 51.26     |  |
| \$         | 14   | Terphenyl-d14                | 244       | 12.017                 | 12.017 | (0.871) | 390377         | 50.0000          | 47.00     |  |
|            | 15   | N-Nitrosodimethylamine       | 74        | 1.706                  | 1.706  | (0.431) | 112682         | 50.0000          | 49.72(Q)  |  |
|            | 16   | Pyridine                     | 79        | 1.726                  | 1.726  | (0.437) | 183306         | 50.0000          | 48.37     |  |
|            | 23   | Aniline                      | 93        | 3.654                  | 3.654  | (0.924) | 234254         | 50.0000          | 42.21     |  |
|            | 24   | Phenol                       | 94        | 3.623                  | 3.623  | (0.916) | 247561         | 50.0000          | 49.41 (Q) |  |
|            | 26   | Bis(2-chloroethyl)ether      | 93        | 3.716                  | 3.716  | (0.940) | 174215         | 50.0000          | 49.59     |  |
|            | 27   | 2-Chlorophenol               | 123       | 3.768                  | 3.768  | (0.953) | 193809         | 50.0000          | 50.40     |  |
|            | 28   | 1,3-Dichlorobenzene          | 146       | 3.913                  | 3.913  | (0.990) | 214069         | 50.0000          | 51.10     |  |
|            | 29   | 1,4-Dichlorobenzene          | 146       | 3.975                  | 3.975  | (1.005) | 218414         | 50.0000          | 49.86     |  |
|            | 30   | Benzyl Alcohol               | 108       | 4.120                  | 4.120  | (1.042) | 131750         | 50,0000          | 50.98     |  |
|            | 31   | 1,2-Dichlorobenzene          | 146       | 4.172                  | 4.172  | (1.055) | 201823         | 50.0000          | 50.12     |  |
|            | 32   | 2-Methylphenol               | 108       | 4.255                  | 4.255  | (1.076) | 174371         | 50.0000          | 49.58     |  |
|            | 33   | 2,2'-oxybis(1-Chloropropane) | 45        | 4.296                  | 4.296  | (1.086) | 263312         | 50.0000          | 47.09     |  |
|            | 34   | 4-Methylphenol               | 108       | 4.410                  | 4.410  | (1.115) | 175092         | 50.0000          | 46.87     |  |
|            | 36   | Hexachloroethane             | 117       | 4.504                  | 4.504  | (1.139) | 76332          | 50.0000          | 51.19     |  |
|            | 37   | N-Nitrosodinpropylamine      | 70        | 4.442                  | 4.442  | (1.123) | 122786         | 50.0000          | 49.35     |  |
|            | 42   | Nitrobenzene                 | 77        | 4.597                  | 4.597  | (0.855) | 175102         | 50.0000          | 49.00     |  |
|            | 44   | Isophorone                   | 82        | 4.856                  | 4.856  | (0.904) | 336530         | 50.0000          | 48.97     |  |
|            | 45   | 2-Nitrophenol                | 139       | 4.960                  | 4.960  | (0.923) | 108399         | 50.0000          | 51.12     |  |
|            | 46   | 2,4-Dimethyphenol            | 107       | 5.012                  | 5.012  | (0.933) | 178479         | 50.0000          | 47.37     |  |
|            |      | ***                          |           |                        |        |         |                |                  |           |  |

|       |                              |            |        |        |         |          | amoun   | TS       |
|-------|------------------------------|------------|--------|--------|---------|----------|---------|----------|
|       |                              | QUANT SIG  |        |        |         |          | CAL-AMT | ON-COL   |
| Compo | unds                         | MASS       | RT     | EXP RT | REL RT  | RESPONSE | ( NG)   | (NG)     |
|       |                              | ***        | ====   |        |         | =======  |         | 722722   |
| 47    | Bis(2-chloroethoxy)methane   | 93         | 5,126  | 5.126  | (0.954) | 201982   | 50.0000 | 48.10    |
| 19    | Z,4-Dichlorophenol           | 162        | 5.229  | 5.229  | (0.973) | 145389   | 50.0000 | 49.88    |
| 50    | Benzoic Acid                 | 122        | 5.115  | 5.115  | (0.952) | 109446   | 50.0000 | 52.48    |
| 51    | 1,2,4-Trichlorobenzene       | 180        | 5.322  | 5.322  | (0.990) | 152177   | 50.0000 | 48.22    |
| 52    | Naphthalene                  | 128        | 5.395  | 5.395  | (1.004) | 577964   | 50.0000 | 48.49    |
| 54    | 4-Chloroaniline              | 127        | 5.488  | 5.488  | (1.021) | 219411   | 50.0000 | 46.97    |
| 57    | Hexachlorobutadiene          | 225        | 5.613  | 5,613  | (1.044) | 79543    | 50.0000 | 51.50    |
| 60    | 4-Chloro-3-Methylphenol      | 107        | 6.069  | 6.069  | (1.129) | 158858   | 50.0000 | 48.80    |
| 63    | 2-Methylnaphthalene          | 142        | 6.203  | 6.203  | (1,154) | 383110   | 50.0000 | 51.17    |
| 66    | Hexachlorocyclopentadiene    | 237        | 6.483  | 6.483  | (0.868) | 95339    | 50.0000 | 53.99    |
| 69    | 2,4,6-Trichlorophenol        | 196        | 6.587  | 6.587  | (0.882) | 96032    | 50.0000 | 50.86    |
| 70    | 2,4,5-Trichlorphenol         | 196        | 6.628  | 6.628  | (0.888) | 102070   | 50.0000 | 50.18    |
| 71    | 2-Chloronaphthalene          | 162        | 6.784  | 6.784  | (0.908) | 324725   | 50.0000 | 48.76    |
| 73    | 2-Nitroaniline               | 65         | 6.949  | 6.949  | (0.931) | 96293    | 50.0000 | 47.70    |
| 76    | Dimethylphthalate            | 163        | 7,229  | 7.229  | (0.968) | 379709   | 50.0000 | 49.52    |
| 77    | Acenaphthylene               | 152        | 7.281  | 7.281  | (0.975) | 562646   | 50.0000 | 48.51    |
| 79    | 2,6-Dinitrotoluene           | 165        | 7.302  | 7.302  | (0.978) | 89736    | 50.0000 | 50.23    |
| 80    | 3-Nitroaniline               | 138        | 7.457  | 7.457  | (0.999) | 111929   | 50.0000 | 50.19    |
| 81    | Acenaphthene                 | 153        | 7.509  | 7.509  | (1.006) | 354961   | 50.0000 | 48.08    |
| 82    | 2,4-Dinitrophenol            | 184        | 7.582  | 7.582  | (1.015) | 50142    | 50.0000 | 48.08    |
| 83    | Dibenzofuran                 | 168        | 7,706  | 7.706  | (1.032) | 486071   | 50.0000 | 49.61    |
| 94    | 4-Nitrophenol                | 109        | 7,675  | 7.675  | (1.028) | 47938    | 50.0000 | 51.82(Q) |
|       | 2,4-Dinitrotoluene           | 165        | 7.768  | 7.768  | (1.040) | 120220   | 50,0000 | 51.27    |
| 91    | Fluorene                     | 166        | 8.131  | 8.131  | (1.089) | 402944   | 50.0000 | 49.66    |
| 92    | Diethylphthalate             | 149        | 8.100  | 8,100  | (1.085) | 379976   | 50.0000 | 48.40    |
|       | 4-Chlorophenyl-phenylether   | 204        | 8.152  |        | (1.092) | 168579   | 50.0000 | 49.97    |
|       | 4-Nitroaniline               | 138        | 8.214  |        | (1.100) | 120129   | 50.0000 | 54.34    |
| -     | 4,6-Dinitro-2-methylphenol   | 198        | 8.276  |        | (0.880) | 65675    | 50.0000 | 48.62    |
|       | N-Nitrosodiphenylamine       | 169        | 8.317  |        | (0.884) | 273788   | 58.6000 | 47.44    |
|       | Azobenzene                   | 77         | 8.359  |        | (0.889) | 367990   | 50.0000 | 49.15    |
|       | 4-Eromophenyl-phenylether    | 248        | 8.804  |        | (0.936) | 92973    | 50.0000 | 50.02    |
|       | Hexachlorobenzene            | 284        | 8.981  |        | (0.955) | 104824   | 50.0000 | 50.50    |
|       | Pentachlorophenol            | 266        | 9.240  |        | (0.982) | 62906    | 50.0000 | 50.72    |
|       | Phenanthrene                 | 178        | 9.437  |        | (1.003) | 575211   | 50,0000 | 47.93    |
|       | Anthracene                   | 178        | 9.509  |        | (1.003) | 584548   | 50.0000 | 48.76    |
|       | Carbazole                    | 167        | 9.768  |        | (1.039) | 547701   | 50.0000 | 50.01    |
|       | Di-n-Butylphthalate          | 149        | 10.473 |        | (1.113) | 662234   | 50.0000 | 50.26    |
|       | Fluoranthene                 | 202        | 11.302 |        | (1.202) | 567781   | 50.0000 | 52.80    |
|       | Benzidine                    |            |        |        |         | 159069   | 50.0000 | 18.61    |
|       | Pyrene                       | 184<br>202 | 11.582 | 11.582 |         | 593801   | 50.0000 | 45.20    |
|       | 3,3'-dimethylbenzidine       | 212        |        | 12.877 |         | 141696   | 50.0000 | 18.78    |
|       | Butylbenzylphthalate         | 149        |        | 12.991 |         | 310154   | 50.0000 | 46.95    |
|       | Benzo (a) Anthracene         |            |        | 13.758 |         | 523382   | 50.0000 |          |
|       |                              | 228        |        | 13.758 |         |          | 50.0000 | 46.59    |
|       | Chrysene                     | 228        |        |        |         | 551943   | 50.0000 | 48.03    |
|       | 3,3'-Dichlorobenzidine       | 252        |        | 13.799 |         | 198689   |         | 46.89    |
|       | bis (2-ethylhexyl) Phthalate | 149        |        | 14.110 |         | 422505   | 50.0000 | 46.43    |
|       | Di-n-octylphthalate          | 149        |        | 15.167 |         | 671608   | 50.0000 | 46.17    |
|       | Benzo (b) fluoranthene       | 252        |        | 15.582 |         | 474456   | 50.0000 | 49.97(Q) |
|       | Benzo(k) fluoranthene        | 252        | 15.623 |        | (0.966) | 640533   | 50.0000 | 52.55    |
|       | Benzo (e) pyrene             | 252        |        | 16.007 |         | 515993   | 50.0000 | 52.12    |
|       | Benzo (a) pyrene             | 252        | 16.079 |        | (0.994) | 500123   | 50.0000 | 46.46    |
|       | Indeno(1,2,3-cd)pyrene       | 276        |        | 17.810 |         | 429096   | 50.0000 | 49.29    |
| 152   | Dibenzo(a,h)anthracene       | 278        | 17.851 | 17.851 |         | 519505   | 50.0000 | 53.41    |
| 153   | Benzo(g,h,i)perylene         | 276        | 18.235 | 18.235 | (1.127) | 569749   | 50.0000 | 54.10    |
|       |                              |            |        |        |         |          |         |          |

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002H.D Report Date: 03-Oct-2010 11:20

|                                     |           |    |         |          |  |      | AMOUN | TS    |     |
|-------------------------------------|-----------|----|---------|----------|--|------|-------|-------|-----|
|                                     | QUANT SIG |    |         |          |  | CAL  | -AMT  | ON-   | COP |
| Compounds                           | mass      | RT | EXP RT  | REL RT   | RESPONSE                               | (    | NG)   | (     | NG) |
|                                     | ====      |    | ======= | 20234#K# | ###################################### | ==== | ERRE  | -2 MI |     |
| M 162 benzo b,k Fluoranthene Totals | 252       |    |         |          | 1114989                                | 50.  | 0000  |       |     |

# QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002H.D

Report Date: 02-Oct-2010 17:02

TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Lab File ID: HSL1002H.D

Lab Smp Id: HSL\_050 ug/ml ICV

Analysis Type: SV

Quant Type: ISTD

Operator: KT

Calibration Date: 02-OCT-2010

Calibration Time: 13:44 Client Smp ID: 8270F.M

Level: Sample Type:

Method File: \\SV5\C\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1 8270STD.SUB;10MSSV0314;0;8270F.M

Test Mode:

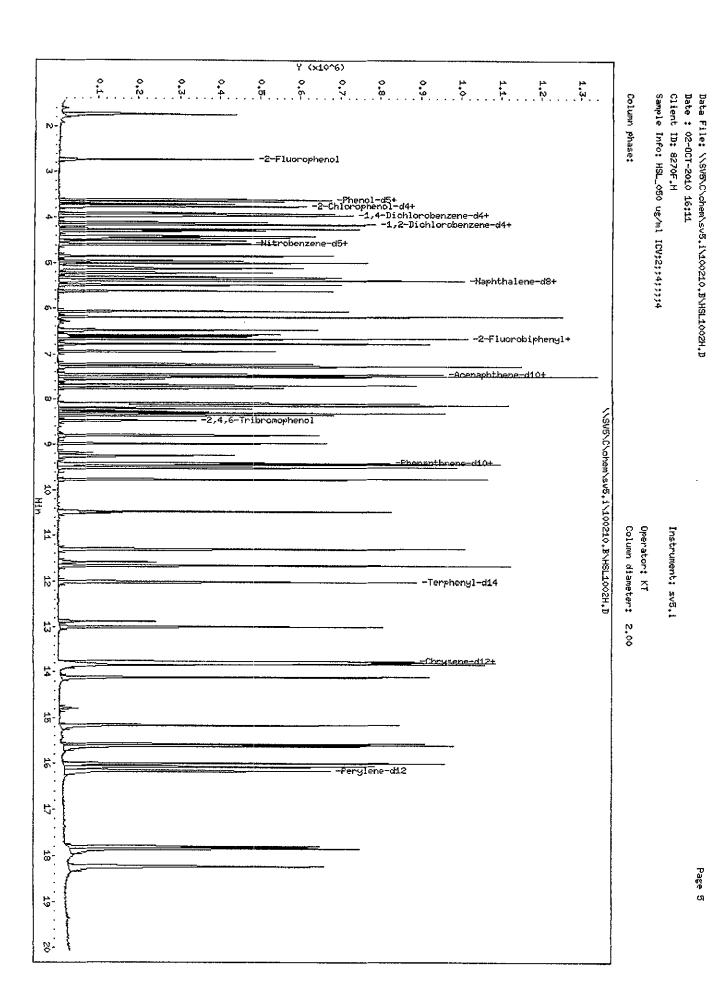
Use Initial Calibration Level 4.

|                     |          | AREA   | LIMIT   |        |        |
|---------------------|----------|--------|---------|--------|--------|
| COMPOUND            | STANDARD | LOWER  | UPPER   | SAMPLE | %DIFF  |
|                     | ======== |        |         | ====== | ====== |
| 1 1,4-Dichlorobenze | 122625   | 61313  | 245250  | 98364  | -19.78 |
| 2 Naphthalene-d8    | 530514   | 265257 | 1061028 | 431655 | -18.63 |
| 3 Acenaphthene-d10  | 282538   | 141269 | 565076  | 236662 | -16.24 |
| 4 Phenanthrene-d10  | 462722   | 231361 | 925444  | 380734 | -17.72 |
| 5 Chrysene-d12      | 435850   | 217925 | 871700  | 421719 | -3.24  |
| 6 Perylene-d12      | 422284   | 211142 | 844568  | 419419 | -0.68  |
|                     |          |        |         |        |        |

|   |          | RT I     |          |          |        |
|---|----------|----------|----------|----------|--------|
| COMPOUND                                | STANDARD | LOWER    | UPPER    | SAMPLE   | %DIFF  |
| ======================================= | ======== | ======== | ======== | ======== | ====== |
| 1 1,4-Dichlorobenze                     | 3.95     | 3.45     | 4.45     | 3.95     | 0.00   |
| 2 Naphthalene-d8                        | 5.37     | 4.87     | 5.87     | 5.37     | 0.00   |
| 3 Acenaphthene-d10                      | 7.47     | 6.97     | 7.97     | 7.47     | 0.00   |
| 4 Phenanthrene-d10                      | 9.41     | 8.91     | 9.91     | 9.41     | 0.00   |
| 5 Chrysene-d12                          | 13.79    | 13.29    | 14.29    | 13.79    | 0.00   |
| 6 Perylene-d12                          | 16.17    | 15.67    | 16.67    | 16.17    | 0.00   |
|   | l        |          | l i      | l        | l      |

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = -50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002H1.D Page 3

Report Date: 03-Oct-2010 11:13

#### TestAmerica West Sacramento

#### CONTINUING CALIBRATION COMPOUNDS

Instrument ID: sv5.i

Injection Date: 02-OCT-2010 16:36
Init. Cal. Date(s): 17-AUG-2010 02-OCT-2010
Init. Cal. Times: 17:32 15:00 Lab File ID: HSL1002H1.D

Analysis Type: Init. Cal. Times:
Lab Sample ID: Benzidines ICV 50ug Quant Type:
Method: \\sv5\c\chem\sv5.i\100210.B\8270f.m

| 1                          | 1   |           |         | CCAL      | MIN     | <u> </u>    | MAX         |            |
|----------------------------|-----|-----------|---------|-----------|---------|-------------|-------------|------------|
| [ COMPOUND                 | RRF | TRUUOMA \ | RF50    | RRF50     | RRF     | %D / %DRIFT | %D / %DRIFT | CURVE TYPE |
| 201222222222222222222222   |     |           |         | ********* |         | ========    |             | =======    |
| 127 Benzidine              | 1   | 0.81067   | 0.92336 | 0.92336   | 0.010   | 13.89989    | 50.00000    | Averaged   |
| 134 3,3'-dimethylbenzidine | 1   | 0.71564   | 0.78974 | 0.78974   | 0.010   | 10.35398    | 50.00000    | Averaged   |
| 140 3,3'-Dichlorobenzidine | 1   | 0.40189   | 0.42433 | 0.42433   | 0.010   | 5.58428     | 50.00000    | Averaged   |
| l                          |     |           |         |           | <b></b> | l           | 1           | l          |

10-3-10

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002H1.D

Report Date: 03-Oct-2010 11:13

#### TestAmerica West Sacramento

Page 1

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002H1.D Lab Smp Id: Benzidines ICV 50ug Client Smp Client Smp ID: 8270F.M

Inst ID: sv5.i

Comment: SOP SAC-MS-0005

Method: \\sv5\c\chem\sv5.i\\100210.B\\8270f.m

Meth Date: 03-Oct-2010 11:13 truongk Quant T

Cal Date: 17-AUG-2010 21:19 Cal Fil

Als bottle: 9 Continu Quant Type: ISTD Cal File: AP90817D.D

Continuing Calibration Sample

Dil Factor: 1.00000 Integrator: Falcon Compound Sublist: BenzICV.SUB

Target Version: 4.14

Processing Host: SACP307UM

|       |                        |           |        |        |          |          | AMOUN   | TS     |
|-------|------------------------|-----------|--------|--------|----------|----------|---------|--------|
|       |                        | QUANT SIG |        |        |          |          | CAL-AMT | OM-COF |
| Compo | unds                   | MASS      | RT     | EXP RT | REL RT   | response | (NG)    | ( NG)  |
| ===== |                        | 2222      | ====   |        | ******** | *****    |         | *****  |
| * 1   | 1,4-Dichlorobenzene-d4 | 152       | 3.954  | 3.954  | (1.000)  | 115503   | 40.0000 |        |
| * 2   | Naphthalene-d8         | 136       | 5.364  | 5.364  | (1.000)  | 480485   | 40.0000 |        |
| * 3   | Acenaphthene-d10       | 164       | 7,468  | 7.468  | (1.000)  | 254190   | 40.0000 |        |
| * 4   | Phenanthrene-d10       | 188       | 9.405  | 9.405  | (1.000)  | 405333   | 40.0000 |        |
| * 5   | Chrysene-dl2           | 240       | 13,779 | 13.779 | (1.000)  | 378068   | 40.0000 |        |
| * 6   | Perylene-dl2           | 264       | 16.162 | 16.162 | (1.000)  | 372382   | 40.0000 |        |
| 127   | Benzidine              | 184       | 11.571 | 11.571 | (0.840)  | 436364   | 50.0000 | 56.95  |
| 134   | 3,3'-dimethylbenzidine | 212       | 12.867 | 12.867 | (0.934)  | 373217   | 50.0000 | 55.18  |
| 140   | 3,3'-Dichlorobenzidine | 252       | 13.799 | 13.799 | (1.002)  | 200534   | 50.0000 | 52.79  |

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002H1.D

Report Date: 03-Oct-2010 11:13

Page 2

Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Smp ID: 8270F.M

Level:

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002H1.D

Lab Smp Id: Benzidines ICV 50ug

Analysis Type: SV Quant Type: ISTD

Operator: KT

Sample Type:

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;BenzICV.SUB;10MSSV0342;0;8270F.M

Test Mode:

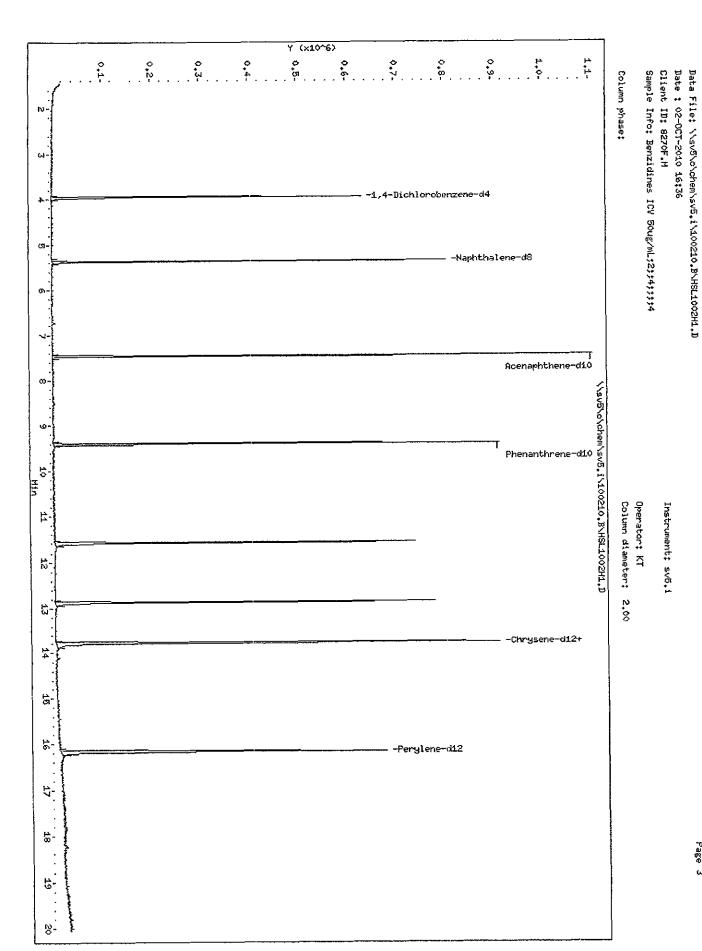
Use Initial Calibration Level 4.

|   |          | AREA    | LIMIT   | · · · ·  |        |
|---|----------|---------|---------|----------|--------|
| COMPOUND                                | STANDARD | LOWER   | UPPER   | SAMPLE   | %DIFF  |
| ======================================= | ======== | ======= | ======= | ======== |        |
| 1 1,4-Dichlorobenze                     | 122625   | 61313   | 245250  | 115503   | -5.81  |
| 2 Naphthalene-d8                        | 530514   | 265257  | 1061028 | 480485   | -9.43  |
| 3 Acenaphthene-d10                      | 282538   | 141269  | 565076  | 254190   | -10.03 |
| 4 Phenanthrene-d10                      | 462722   | 231361  | 925444  | 405333   | -12.40 |
| 5 Chrysene-d12                          | 435850   | 217925  | 871700  | 378068   | -13.26 |
| 6 Perylene-d12                          | 422284   | 211142  | 844568  | 372382   | -11.82 |
|   | ·        |         |         |          |        |

|                     |          | RT I   | LIMIT   |          |        |
|---------------------|----------|--------|---------|----------|--------|
| COMPOUND            | STANDARD | LOWER  | UPPER   | SAMPLE   | %DIFF  |
|                     | ======== | ====== | ======= | ======== | ====== |
| 1 1,4-Dichlorobenze | 3.95     | 3.45   | 4.45    | 3.95     | 0.00   |
| 2 Naphthalene-d8    | 5.36     | 4.86   | 5.86    | 5.36     | 0.00   |
| 3 Acenaphthene-dl0  | 7.47     | 6.97   | 7.97    | 7.47     | 0.00   |
| 4 Phenanthrene-d10  | 9.41     | 8.91   | 9.91    | 9.41     | 0.00   |
| 5 Chrysene-d12      | 13.78    | 13.28  | 14.28   | 13,78    | 0.00   |
| 6 Perylene-d12      | 16.16    | 15.66  | 16.66   | 16.16    | 0.00   |
|                     |          |        |         |          | !      |

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32 End Cal Date : 02-OCT-2010 15:00

Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon

Method file : \\SV5\C\chem\sv5.i\100210.B\8270f.m

Last Edit : 03-Oct-2010 11:07 sv5.i

Curve Type : Average

Calibration File Names:

Level 1: \\SV5\C\chem\sv5.i\081710.B\AP90817A.D Level 2: \\SV5\C\chem\sv5.i\081710.B\AP90817B.D Level 3: \\SV5\C\chem\sv5.i\081710.B\AP90817C.D Level 4: \\SV5\C\chem\sv5.i\081710.B\AP90817D.D Level 5: \\SV5\C\chem\sv5.i\081710.B\AP90817E.D Level 6: \\SV5\C\chem\sv5.i\081710.B\AP90817F.D Level 7: \\SV5\C\chem\sv5.i\081710.B\AP90817G.D

| !                          |          |         |          |             |         |               |                                       | <u> </u>     |
|----------------------------|----------|---------|----------|-------------|---------|---------------|---------------------------------------|--------------|
|                            | 160.000  |         | <u> </u> |             | 1       |               |                                       | j<br>L       |
| <u> </u>                   | Level 7  | }<br>!  | <br>     | l<br>1      | <br>    | }<br>         | <br> 1                                | <br>         |
| 15 N-Nitrosodimethylamine  | 0.92899  | 0.88268 | 0.91048  | 0.91970     | 0.93146 | 0.93916       | • • • • • • • • • • • • • • • • • • • |              |
|                            | 0.93833  | •       |          | }           | <br>    |               | 0.92154                               | 2.162        |
| le Pyridine                | 1.67117  | 1.37423 | 1.59449  | 1.56610     | 1.52299 | 1.53256       |                                       | <b> </b>     |
|                            | 1.52623  |         |          |             |         |               | 1.54111                               | 5.856        |
| 23 Aniline                 | 2,20796  | 2.15935 | 2.19988  | 2.26058     | 2,29749 | 2.33400       |                                       |              |
| 1                          | 2.33783  | •       | 1        | 1 2.20030   |         | 2,33400       | 2.25673                               | 3.098        |
| 24 Phenol                  | 2.04111  | 1.96212 | 2.02834  |             | 2.06683 |               |                                       | ~~ <b>~~</b> |
| 24 Phenoi                  | 2.04111  |         | 2.02834  | 2.03430<br> | 2.06683 | 2.06089 <br>  | 2.03729                               | 1.802        |
|                            |          |         |          |             |         |               |                                       |              |
| 26 Bis(2-chloroethyl)ether | 1.47335  | 1.38252 | 1.39491  | 1.43824     | 1.42549 | 1.44300       | i                                     | !            |
|                            | 1.44264  |         | !        | 1           |         |               | 1.42859                               | 2.170        |
| 27 2-Chlorophenol          | 1.52099  | 1.55595 | 1.56903  |             | 1.56789 | <br>  1.58074 | <br>                                  | , <br>       |
| i i                        | 1.57029  |         | ĺ        |             | i<br>İ  |               | 1.56381                               | 1.328        |
|                            | <b>-</b> |         |          |             |         |               |                                       |              |
| 28 1,3-Dichlorobenzene     | 1.68903  | •       | 1.67754  | 1.73135     | 1.68641 | 1.72299       |                                       | 1 204        |
|                            | 1.72457  | <br>    | <br>     | 1<br>       | <br>    | [<br>         | 1.70337 <br>                          | 1.294        |
| 29 1,4-Dichlorobenzene     | 1.77122  | 1.79861 | 1.74013  | 1.76898     | 1.78200 | 1.79288       |                                       | 1            |
| I                          | 1.81444  | 1       | 1        | i           | l       |               | 1.78118                               | 1.352        |
|                            |          |         |          |             |         |               |                                       |              |

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32
End Cal Date : 02-OCT-2010 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\SV5\C\chem\sv5.i\100210.B\8270f.m
Last Edit : 03-Oct-2010 11:07 sv5.i
Curve Type : Average

|                                 | 5.000   | 10.000  | 20.000  | 50.000          | 80.000          | 120.000       | <br>         |              |
|---------------------------------|---------|---------|---------|-----------------|-----------------|---------------|--------------|--------------|
| Compound                        | Level 1 | Level 2 | Level 3 | Level 4         | Level 5         | Level 6       | RRF          | % RSD        |
|                                 | ]       |         |         |                 |                 | ]             |              |              |
|                                 | 160.000 |         | <br> -  | ļ<br>i          | ļ               | <b>[</b><br>i | ļ            | ļ<br>,       |
|                                 | Level 7 | ***     | <br>    | !<br>! n======= | <br>            | <br>          | <br> ======= | }<br> ====== |
| 30 Benzyl Alcohol               | 1.01643 | ,       |         | 1               | 1               | 1             | ŧ            | 1            |
| •                               | 1.09506 | •       |         | ·<br>Į          | Į               | ·<br>[        | 1.05101      | 3.69         |
|                                 |         |         |         | ]               |                 |               |              |              |
| 31 1,2-Dichlorobenzene          | 1.62008 | •       | 1.60455 | 1.68061         | 1.63410         | 1.64415       |              |              |
|                                 | 1.64691 | [<br>[  | <br>    | }<br>!          | <br>! <b></b> - | <br>!         | 1.63746      | ]4:          |
| 32 2-Methylphenol               | 1.40818 | 1.38930 | 1.39110 | 1.42620         | 1.45565         | 1.46154       | <br>         | <br>         |
|                                 | 1.47889 |         | İ       | ,<br>J          |                 |               | 1.43012      | 2.5          |
|                                 | 1       |         |         |                 |                 |               |              |              |
| 33 2,2'-oxybis(1~Chloropropane) | 2.29602 | •       | 2.28329 | 2.27928         | 2.27018         | 2.27830       | ,            |              |
|                                 | 2.28770 | •       | <br>    | !<br>! <b></b>  | <br>            | <br>          | 2.27365      | 1.0          |
| 34 4-Methylphenol               | 1.48606 | !       | 1.46270 | 1.52239         | •               | 1.55886       |              | <br>         |
|                                 | 1.58763 | }       | }       |                 |                 | }             | 1.51904      | 2.8          |
|                                 |         |         |         | J               |                 |               |              |              |
| 36 Hexachloroethane             | 0.60925 | •       | 0.60573 | 0.61394         | 0.60427         | 0.59381       | •            |              |
|                                 | 0.60919 | <br>    | <br>    | }<br>!          | ]<br>[          | <br>          | 0.60636      | 1.0          |
| 37 N-Nitrosodinpropylamine      | 0.94498 | 0.97005 | 1.01302 | 1.02370         | <br>  1.04700   | 1.03627       | !<br>        | 1 -<br>1     |
| · ·                             | 1.04757 |         |         | Į               |                 | I             | 1.01180      | ] 3.9        |
|                                 |         | <b></b> |         |                 |                 |               |              |              |
| 42 Nitrobenzene                 | 0.32855 | •       | 0.32543 | 0.33083         | 0.33379         | 0.33450       | '            | \<br>        |
|                                 | 0.33901 | !<br>   | <br>    | <br>            | <br>            | 1<br>         | 0.33116      | ] 1.4        |
| 44 Isophorone                   | 0.63431 | 0.62291 | 0.61160 | 0.63344         | 0.63648         | 0.66468       |              | <br>         |
| _                               | 0.65411 | }       | )       | ,<br>}          | }               | ;<br>}        | 0.63679      | 2.8          |
|                                 |         |         |         |                 |                 | {             |              |              |
| 45 2-Nitrophenol                | 0.18608 |         | 0.18840 | 0.20021         | 0.20022         | 0.20702       | •            | ŀ            |
|                                 | 0.20508 | <br>    | <br>    | <br>            | <br>            | 1<br>}        | 0.19648      | 4.4          |
| 46 2,4-Dimethyphenol            | 0.34459 | 0.34167 | 0.34307 | 0.34912         | 0.34788         | 0.35962       | <b></b><br>  |              |
|                                 | 0.35785 | •       |         |                 |                 |               | 0.34911      | ,<br>  2.0   |
|                                 |         |         |         |                 | }               |               | - <b></b>    |              |
|                                 | l       | l       | Ì       | l               | ]               | l             | l <u></u> _  | l <u></u> _  |

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32

Start Cal Date : 17-AUG-2010 17:32
End Cal Date : 02-OCT-2010 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\SV5\C\chem\sv5.i\100210.B\8270f.m
Last Edit : 03-Oct-2010 11:07 sv5.i
Curve Type : Average

| Compound                        | •                    | 10.000<br>  Level 2 | 20.000<br>Level 3 | 50.000<br>Level 4 | 80.000<br>  Level 5 | 120.000<br>  Level 6 | <u>'</u>                  | % RSD                  |
|---------------------------------|----------------------|---------------------|-------------------|-------------------|---------------------|----------------------|---------------------------|------------------------|
|                                 | 160.000<br>  Level 7 | ļ                   |                   |                   | <b></b>  <br>       |                      |                           | <br>                   |
| 47 Bis (2-chloroethoxy) methane | 0.41146              | 0.37494             | 0.38565           |                   | 0.38500             |                      | 0.38908                   |                        |
| 49 2,4-Dichlorophenol           | 0.25434              | 0.26318             | [                 | 0.27037           | 0.27274             | 0.28180              | 0.27010                   | 3.39                   |
| 50 Benzoic Acid                 | 0.16747              | •                   | 0.17423           | 0.19357           | 0.21024             | 0.22272              | <br> <br>  0.19324        | 13.25                  |
| 51 1,2,4-Trichlorobenzene       | 0.29430              | İ                   | 0.28475           | <br>  0.29747<br> | 0.29189             | 0.29959              | 0.29246                   | <br> <br>  1.76        |
| 52 Naphthalene                  | 1.09939              | 1.12462             | 1.07435           | 1.09325           |                     | 1.13821              | 1.10443                   | <br> <br>  1.90        |
| 54 4-Chloroaniline              | 0.40751              | 0.42534             | 0.43264           | 0.43910           | 0.43781             | 0.44905              | 0.43288                   | 3.06                   |
| 57 Hexachlorobutadiene          | 0.14295              | •                   | <br>  0.14428<br> | 0.14415           | 0.14385             | 0.14379              | 0.14313                   | 1.58                   |
| 60 4-Chloro-3-Methylphenol      | 0.29329              | •                   | 0.29079           | 0.30972           | 0.30295             | 0.31766              | <br> <br>  0.30164        | 3.64                   |
| 63 2-Methylnaphthalene          | 0.68483              | •                   | <br>  0.68080<br> | 0.70067           | <br>  0.70560:<br>  | 0.71172              | 0.69378                   | 1.79                   |
| 66 Hexachlorocyclopentadiene    | 0.26878              | •                   | <br>  0.28896     | 0.29704           | 0.30236             | 0.32262              | <b></b><br> <br>  0.29846 | <b></b><br> <br>  7.64 |
| 69 2,4,6-Trichlorophenol        | 0.31186              | •                   | <br>  0.30223     | 0.31996           | 0.32305             | 0.34225              | <br> <br>  0.31913        | <br> <br>  5.15        |
|                                 | .                    | <br>                | <br>              |                   | <br>                |                      | <br>                      | <br>                   |

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32 End Cal Date : 02-OCT-2010 15:00

Quant Method : ISTD Origin : Disabled Target Version : 4.14 : Falcon Integrator

Method file : \\SV5\C\chem\sv5.i\100210.B\8270f.m Last Edit : 03-Oct-2010 11:07 sv5.i Curve Type : Average

| Compound                | 5.000  <br>  Level 1       | Level 2 | Level 3  | 50.000  <br>Level 4 | Level 5 | 120.000  <br>Level 6 | RRF       | % RSD   |
|-------------------------|----------------------------|---------|----------|---------------------|---------|----------------------|-----------|---------|
|                         | <br>  160.000<br>  Level 7 |         | ======== |                     | <u></u> |                      | <br> <br> | *5****  |
| 70 2,4,5-Trichlorphenol | 0.30823                    | 0.32892 |          | ,                   | 0.35236 | 0.35480              | 0.34380   | 5.80    |
| 71 2-Chloronaphthalene  | 1.13629                    |         | 1.10012  | 1.14181             | 1.11220 | 1.14447              | 1.12571   | 2.05    |
| 73 2-Nitroaniline       | 0.31576                    |         | 0.33397  | 0.35205             | 0.34821 | 0.35794              | 0.34119   | 5.5     |
| 76 Dimethylphthalate    | 1.23388                    | ļ       | 1.29803  | 1.34568             | 1.31165 | 1.32891              | 1.29606   | 3.0     |
| 77 Acenaphtbylene       | 1.86531                    | İ       | 1.91818  | 2.01646             | 1.98204 | 1.99786              | 1.96037   | 3.1     |
| 79 2,6-Dinitrotoluene   | 0.28347                    | •       | 0.29890  | 0.31220             | 0.31294 | 0.32140              | 0.30197   | 5.7     |
| 80 3-Nitroanıline       | 0.35362                    | ,       | 0.35978  | 0.40036             | 0.38674 | 0.39559              | 0.37691   | 6.0     |
| 81 Acenaphthene         | 1.25874                    | •       | 1.26733  | 1.27046             | 1,21141 | 1.24781              | 1.24787   | 1.7     |
| 82 2,4-Dinitrophenol    | 0.10149                    | •       | 0.14485  | 0.16667             | 0.18378 | 0.20563              | 0.15933   | 26.3    |
| 83 Dibenzofuran         | 1.57786                    | •       | 1.65200  | 1.69530             |         | 1.68450              | 1.65612   | 2.7     |
| 84 4-Nitrophenol        | 0.12712                    | •       | 0.15316  | 0.16076             | 0.17130 | 0.16653              | 0.15634   | 10.9    |
|                         | }                          |         |          |                     |         |                      |           | <b></b> |

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32 End Cal Date : 02-OCT-2010 15:00 Quant Method : ISTD Origin : Disabled

Target Version : 4.14
Integrator : Falcon
Method file : \\SV5\C\chem\sv5.i\100210.B\8270f.m
Last Edit : 03-Oct-2010 11:07 sv5.i
Curve Type : Average

|                               | 5.000     | 10.000    | 20.000       | 50.000                 | 80.000           | 120.000       |         |       |
|-------------------------------|-----------|-----------|--------------|------------------------|------------------|---------------|---------|-------|
| Compound                      | Level 1   | Level 2   | Level 3      | Level 4                | Level 5          | Level 6       | rrf     | % RSD |
|                               |           |           | <i></i>      |                        |                  |               | ļ       |       |
|                               | 160.000   |           |              |                        |                  |               |         |       |
|                               | Level 7   | M&BE3#=== | <br>         | <br>                   |                  |               |         |       |
| 86 2,4-Dinitrotoluene         | 1 0.34360 | 1         | •            | '                      | '                | •             | ,       |       |
| •                             | 0.43110   | •         |              | )                      |                  |               | 0.39633 | 8.6   |
|                               |           |           |              |                        |                  | [             |         |       |
| 91 Fluorene                   | 1.34567   |           | 1.34292      | 1.39902                | 1.38899          | 1.37835       | J       |       |
|                               | 1.40640   | <br>      |              | ļ <u>l</u>             | <br>             | ·             | 1.37139 | 2.0   |
| 92 Diethylphthalate           | 1,22240   | !         | 1.31549      | <br>  1,379 <b>1</b> 2 |                  | 1.37345       | !       |       |
| Ja Dacon, spinensance         | 1.38087   |           | 1 2.32345    | 1 2.37312              | 1.52075          | 1.5.545       | 1.32699 | 4.3   |
|                               | ·         |           |              | <i></i> -              |                  | <br>  <b></b> |         |       |
| 93 4-Chlorophenyl-phenylether | 0.54964   | 0.55917   | 0.56887      | 0.59265                | 0.56708          | 0.57695       | ĺ       |       |
|                               | 0.57695   | 1         | 1            | 1                      |                  | 1             | 0.57019 | 2.4   |
|                               |           |           |              |                        |                  |               |         |       |
| 94 4-Nitroaniline             | 0.33346   | •         | 0.37329      | 0.38337                | 0.39216          | 0.39102       | 0.37361 | 7.4   |
|                               | .         | <br>      | <br>         | <br>                   | <br>             | :<br>:        |         | 7.3   |
| 97 4,6-Dinitro-2-methylphenol | 0.09316   | 0.10533   | 0.12545      | 0.13163                | 0.14105          | 0.15288       | ļ       |       |
|                               | 0.15229   | ľ         |              | l j                    |                  | ļ <u></u>     | 0.12883 | 17.7  |
|                               |           |           |              |                        |                  |               |         | •     |
| 98 N-Nitrosodiphenylamine     | 0.57756   | <u>'</u>  | 0.60533      | 0.60433                | 0.62172          | 0.61801       |         |       |
|                               | 0.61968   | <br>!     | <br>         | <br>                   | <br> - <b></b> - | <br>          | 0.60628 | 2.5   |
| 100 Azobenzene                | 0.77527   | 0.76965   | 0.77321      | 0.79522                | 0.80064          | 0.81892       |         |       |
|                               | 0.77331   |           |              | i<br>I                 |                  |               | 0.78660 | 2.3   |
|                               | .         |           |              |                        |                  |               |         |       |
| 101 4-Bromophenyl-phenylether | 0.18964   | •         | 0.19281      | 0.19931                | 0.19607          | 0.20581       | •       |       |
|                               | 0.19815   |           | <u>.</u>     | 1                      |                  | İ             | 0.19527 | 3.4   |
| 108 Hexachlorobenzene         | 0.22958   | 0.22054   | 0.20740      | <br>  0.21605          | 0.21731          | 0.21704       |         |       |
| 100 MENGCHIOLODEHSEHG         | 0.21854   | •         | 0.20740 <br> | 0.21605 <br>           | 0.21/31          | 0.21/04       | 0.21807 | 3.0   |
|                               |           |           |              | <br>                   |                  | <br>          |         | ~     |
| 110 Pentachlorophenol         | 0.09427   | 0.09851   | 0.11582      | 0.11736                | 0.13228          | 0.13923       | j       |       |
|                               | 0.13770   | j         | <b>i</b>     | ! !                    |                  | ]             | 0.11931 | 15.2  |
|                               | -         |           |              |                        |                  |               |         |       |
| <del></del>                   | .         |           | li           | l                      |                  |               |         |       |

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32

End Cal Date : 17-A0G-2010 17:32
End Cal Date : 02-OCT-2010 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\SV5\C\chem\sv5.i\100210.B\8270f.m
Last Edit : 03-Oct-2010 11:07 sv5.i
Curve Type : Average

|                            | 5.000                | 10.000        | 20.000             | 50.000  | 80.000            | 120.000   |           |       |
|----------------------------|----------------------|---------------|--------------------|---------|-------------------|-----------|-----------|-------|
| Compound                   | Level 1              | Level 2       | Level 3            | Level 4 | Level 5           | Level 6   | PRF       | % RSD |
|                            | 160.000<br>  Level 7 | z=uwag===     |                    |         | <b>35658</b> ##== | <br> <br> | <br> <br> |       |
| 114 Phenanthrene           | 1.30347              | 1.26007       | '                  |         | '                 | ,         | •         | 1,643 |
| 115 Anthracene             | 1.25034              | 1.21759       | 1.24206            | 1.25982 | 1.27529           |           | 1.25955   | 2,129 |
| 118 Carbazole              | 1.13211              |               | 1.13694            | 1.14260 | 1.17067           | 1.18192   | 1.15061   | 1,878 |
| 120 Di-n-Butylphthalate    | 1.28492              |               |                    | 1.38164 | 1.41474           | j         | 1.38442)  |       |
| 126 Fluoranthene           | 1.03840              |               | 1.17216            | 1.10520 | 1.15861           | 1.18294   | 1.12969   | 5.018 |
| 127 Benzidine              | 0.78175              |               | 0.75250            | 0.82658 | 0.82201           | 0.86375   | 0.81067   | 5.606 |
| 128 Pyrene                 | 1.25791              |               | 1.17078            | 1,28684 | 1.25586           | 1.28463   | 1.25025   | 3.122 |
| 134 3,3'-dimethylbenzidine | 0.65472              |               | 0.67361            | 0.70756 | 0.73630           | 0.79414   | 0.71564   | 8,688 |
| 136 Butylbenzylphthalate   | 0.64984              | ,             | 0.59142            | 0.62586 | 0.61590           | 0.65233   | D.62663   | 3.950 |
| 138 Benzo(a)Anthracene     | 1.10169              | 0.99731       | 1.03245            | 1.04489 | 1.06449           | 1.10831   | 1.06548   | 4.058 |
| 139 Chrysene               | 1.05284              |               | <br>  1.06320 <br> | 1.09705 | 1.06985           | 1.12241   | 1.08994   | 2.594 |
|                            | ·-                   | <b></b>  <br> |                    |         | ********          | <br>      |           |       |

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32
End Cal Date : 02-OCT-2010 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\SV5\C\chem\sv5.i\100210.B\8270f.m
Last Edit : 03-Oct-2010 11:07 sv5.i
Curve Type : Average

| Compound                          | 5.000<br>Level 1     | 10.000      | 20.000        | 50.000       | 80.000                                 | 120.000        | RRF       | * RSD              |
|-----------------------------------|----------------------|-------------|---------------|--------------|--|----------------|-----------|--------------------|
| Compound                          |                      |             |               |              |  | <br>           | ARF       | * 1.30             |
|                                   | 160.000              |             | ĺ             |              |  | {              | ا         |                    |
|                                   | Level 7              |             | <br>  <b></b> |              |  |                |           |                    |
| 140 3,3'-Dichlorobenzidine        | 0.39148              |             | 0.39090       | 0.39906      | 0.40353                                |                |           |                    |
|                                   | 0.42415              |             | ļ :           | !            | 1                                      |                | 0.40189   | 4.53               |
| 141 bis(2-ethylhexyl)Phthalate    | 0.91826              | 0.80897     | 0.84032       | 0.85193      | 0.84371                                | 0.89539        |           |                    |
| <b>"</b>                          | 0.88354              |             | ĺ             |              |  | 1              | 0.86316   | 4.34               |
| 142 Di-n-octylphthalate           | 1.34838              | 1.23185     | 1.35627       | 1.34433      | 1.39356                                | i<br>  1.47616 |           | <br>               |
|                                   | 1.50770              | •           |               |              |  |                | 1.37975   | 6.65               |
| 144 Benzo(b) fluoranthene         |                      | 0.81077     | 0.82747       | 0.99930      | <br>  0.95373                          | 0.91132        | <br>      |                    |
| 144 Benzo (B) LI doranthene       | 1.02572              |             | 0.82141       | 0.99930      | . 0.95313                              | 0.91132        | 0.90549   | 10.05              |
|                                   |                      |             |               |              |  |                |           |                    |
| 145 Benzo(k) fluoranthene         | 1.22939<br>  1.10447 | •           | 1.20022<br>   | 1.09895      | 1.14223 <br>                           | 1.19597 <br>   | 1.16235   | 4.27               |
|                                   |                      | ,<br>       | ,<br>         | ,<br>        | ,<br>                                  | ,<br>          |           |                    |
| 147 Benzo(e)pyrene                | 0.90394              | •           | 0.90757       | 0.95977      | 0.96997                                | 0.96929        | 0.94425   | <br>  3.22         |
|                                   |                      |             | <br>          |              | ;<br> !                                | <br>           |           |                    |
| 148 Benzo(a)pyrene                | 0.98300              |             | 0.99402       | 1.02789      | 1.07610                                | 1.06275        | •         | 4.13               |
|                                   | 1.06523              | * <b></b>   | [<br>{        | <br>         | !<br>                                  |                | 1.02655   | 4.11               |
| 151 Indeno(1,2,3-cd)pyrene        | 9.73783              | •           | 0.73671       | 0.84698      | 0.84057                                | 0.93730        |           |                    |
|                                   | 0.97995              |             |               |              | <br>                                   | <br>           | 0.83029   | 12.15              |
| 152 Dibenzo(a,h)anthracene        | 0.88099              | 0.84384     | 0.87256       | 0.92240      | 0.95990                                | 1.00944        |           |                    |
|                                   | 1.00392              | 1           | }             | <b>j</b>     | }<br>!                                 | 1              | 0.92758   | 7.07               |
| 153 Benzo(g,h,i)perylene          | 0.96025              | 0.98457     | 0.97380       | 0.99974      | 1.01731                                | 1.05397        | ***       | + - <b></b><br>    |
|                                   | 1.04026              |             | -             |              |  | İ              | 1.00427   | 3.45               |
| 162 benzo b,k Fluoranthene Totals | 2.03951              | 1.97605     | <br>  2.02770 | 2.09825      | 2.09596                                | 2.10729        |           |                    |
| TOE SOLD SYN THOUSANDER TO CALL   | 2.13019              |             |               |              |  |                | 2.06785   | 2.64               |
|                                   |                      |             |               |              |  |                |           |                    |
|                                   | =========<br>        | <del></del> | <b></b>       | 22462622<br> | ************************************** |                | ********* | ==== <b>==</b><br> |

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32

End Cal Date : 02-OCT-2010 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14

Integrator : Falcon
Method file : \\SV5\C\chem\sv5.i\100210.B\8270f.m
Last Edit : 03-Oct-2010 11:07 sv5.i
Curve Type : Average

| Compound                  | 5.000<br>Level 1   | 10.000<br>Level 2 | 20.000<br>Level 3 |         |         | 120.000<br>Level 6 |         | % RSD |
|---------------------------|--------------------|-------------------|-------------------|---------|---------|--------------------|---------|-------|
|                           | 160.000<br>Level 7 |                   |                   |         |         |                    |         |       |
| 7 2-Fluorophenol          | 1.44503            | 1.30436           | <br>  1.38373<br> |         |         |                    |         |       |
| 8 Phenol-d5               | 1.72227            | 1.67335           | 1.74151           | 1.79006 | 1.80863 | 1.83864            | 1.77296 | 3.52  |
| 9 2-Chlorophenol-d4       | 1.47770            |                   | 1.53916           | 1.59414 | 1.57486 | 1.57967            | 1.55698 | 2.52  |
| 10 1,2-Dichlorobenzene-d4 | 0.95776            |                   | 0.99827           | 0.98914 | 0.99518 | 0.98547            | 0.98513 | 1.35  |
| ll Nitrobenzene-d5        | 0.33028            |                   | 0.33065           | 0.34105 | 0.33606 | 0 35127            | 0.33879 | 2.16  |
| 22 2-Fluorobiphenyl       | 1.28499            |                   | 1.27668           | 1.34206 | 1.25854 | 1,29723            | 1.28852 | 2.22  |
| 13 2,4,6-Tribromophenol   | 0.15034            |                   | 0.17466           | 0.17926 | 0.17825 | 0.18501            | 0.17381 | 7.05  |
| 14 Terphenyl-dl4          | 0.78508            |                   | 0.73917           | 0.80441 | 0.78047 | 0.81889            | 0.78789 | 3,21  |
|                           |                    |                   | <br>              |         |         |                    |         |       |

# Sample Extraction/Preparation Log Copies and Checklists

# TestAmerica West Sacramento Organic Prep Log 8270 Air

| UZ.                       | ., o Ali |         |
|---------------------------|----------|---------|
| Interna                   | al COC:  | ¬ s     |
| Delivered to Inst.:       | 12/7/10  |         |
| Inst Receipt:             |          |         |
| Batch: 03364<br>MS Run #: | 147      |         |
| Prep Date: 12/2/20        | 010      | 1111011 |
| Method: JZ TC             | )-13     | KNOH*   |
| Matrix: S All             | R        |         |

| Box#                | Air Tox # 291 | Toct            | N m       | MA'N         | A Principal |
|---------------------|---------------|-----------------|-----------|--------------|-------------|
| Shared<br>QC Batch: | 1/1/4         | 16211           |           |              | _           |
| Shares              | VA /A         | THELEADED       | N ENVIRON | VMENTAL TEST | 166         |
| QC With:            | 1)/4          |                 | rep Reag  | ents         | 164         |
|                     |               | Reagent         | Supplier  | Lot #        |             |
|                     |               | 1:1 DCM:Acetone | NA        | N/A          |             |
|                     |               | DCM             | Baker     | J38503       |             |
| K                   |               | Na2SO4          | Baker     | N/A          |             |
| •                   |               |                 |           |              |             |
|                     |               |                 |           |              |             |

Extraction: 11 SOXHLET (NONE,Na2SO4)
QC: 3W AMBIENT AIR TESTING

SAC: JZ - S - 11 - 3W

WS-OP-0006

| Soxhlet time on: |             | 0 soxhle   | et time off: 9:1                | 05<br>[3/10] |         |          |               |
|------------------|-------------|------------|---------------------------------|--------------|---------|----------|---------------|
|                  | <del></del> |            | Extraction T                    | <del></del>  |         |          |               |
| Sample ID        | Suff        | Work Order | Extraction Hold<br>Time Expires | Sample size  | Final \ | /olume   | Analysis Hold |
| ļ                | <u> </u>    |            |                                 |              | tmL     | Other    | Time Expires  |
| G0L020000 - 447  | В           | MAR231AA   | 12/6/2010                       | 1.0          | V       |          | 1/8/2011      |
| G0L020000 - 447  | С           | MAR231AC   | 12/6/2010                       | 1.0          |         |          | 1/8/2011      |
| G0L020000 - 447  | L           | MAR231AD   | 12/6/2010                       | 1.0          | 1       |          | 1/8/2011      |
| G0L020446 - 2    |             | MAQQW1AA   | 12/6/2010                       | 1.0          | V       |          | 1/8/2011      |
| G0L020446 - 6    |             | MAQQ91AA   | 12/7/2010                       | 1.0          | V       |          | 1/9/2011      |
| G01 020446 - 9   | 1           | MAORF1AA   | 12/7/2010                       | 1.0          |         | <u> </u> | 1/9/2011      |

Impinger

XAD / PUF / PUF-XAD

Comments/NCMs: QC Media: sup Zsv 19056/P101910

|  | ID .                | Spike Exp Date:               | Spiked By:  | Witnessed By:          | Date:       |
|--|---------------------|-------------------------------|-------------|------------------------|-------------|
| Surrogate Spike<br>All Samples                         | 500ml/10A1ROPE/ABN  | 4/4/11                        | ECF         | TP.                    | 12/2/10     |
| Spike Mix<br>LCS/LCSD <del>/MS/MS</del><br>ECF 17/2/10 | 1.0ml/10080309/csm  | 5/23/11                       | 1CF         | 10                     | 12/2/10     |
| Pre-Spike Standard  MB only All Samples  AC 4 (2/2/10) | 250M/10AI 10128/1,2 | 4 4/19/11                     | ECF         | TP                     | 12/2/10     |
| Internal Standard<br>All Samples                       | 20m/ 10m/2500138    | 1-19-11                       | 4           | UMN                    | 12-7-10     |
| Soxhlet Extraction<br>Analyst/Date                     | EC \$ 12/2/10       | Concentration<br>Analyst/Date | ECT 11/1/10 | KD<br>Analyst/Date     | Ect 12/6/10 |
| Liq Liq Extraction<br>Analyst/Date                     | N/A                 | KD Temp _ \$                  | 5°C         | Review<br>Analyst/Date | ellerifo    |

\* RUSH\*

# TestAmerica Laboratories, Inc. EXTRACTION BENCH WORKSHEET

Run Date: Time: 12/07/10 12:39:27

12/06/10 COMMENTS: 12/06/10 COMMENTS: 12/06/10 COMMENTS: 12/07/10 COMMENTS: G0L020446-002 12/06/10 12/09/10 MAQQW-1-AA COMMENTS: I AKHA 12/07/10 COMMENTS: Reviewer/Date: Concentrationist: Extractionist: EXTR MEDIA: 12/09/10 Blank Check MS/MSD 12/09/10 SUP2SV19056/P101910 0/00/00 0/00/00 0/00/00 DUE LARSONE 403162 LOT#, MSRUN#/ WORK ORDER NAMKH TEV G0L020000-447 MAR23-1-ACC G0L020000-447 MAR23-1-AAB G0L020446-009 MAQRF-1-AA G0L020446-006 MAQQ9-1-AA G0L020000-447 MAR23-1-ADL 403162 erica I + I + Ierica X. Weights/Volumes
Spike & Surrogate Worksheet
Vial contains correct volume
Labels, greenbars, worksheets
computer batch: correct & all r
Anomalies to Extraction Method 12/07/10 × FLGS larson Ŋ Ø Ħ Ħ larson EXT 14 11 11 11 11 1 HIM JZJΖ  $Z_{\Gamma}$ JZ $Z_{\Gamma}$ JΖ MATRIX AIR AIR AIR AIR AIR AIR 1.0Sample 1.00mL 1.0Sample 1.00mL 1.0Sample 1.00mL 1.0Sample 1.00mL 1.0Sample 1.00mL 1.0Sample 1.00mL WT/VOL match Semivolatile Organics SOXHLET (NONE, Na2SO4) TINI NA X X X X Z PH"S ADJI QC BATCH: N X Z Z NΑ NA ADJ2 N NA Z X NA NA DCM MOM DCM SOLVENTS EXTRACTION VOL EXCHANGE DOM DCM M D D 0336447 by GCMS in Air 700.0 700.0 700.0 700.0 700.0 700.0 11111 PREP Expanded Deliverable
COC Completed
Bench Sheet Copied
Package Submitted to AnalyticalGroup
Bench Sheet Copied per COC (TO-13A) DATE: 먑 12/02/10 12/03/10 0 o . o 0 1.0ML/100P0309/8270 500UL/10AIR0125/ABN 250UL/10AIR0128/1,2-DCB 500UL/10AIR0125/ABN SURR 500UL/10AIR0125/ABN 500UL/10AIR0125/ABN SURR SURROGATE ID 1.0ML/100P0309/8270 500UL/10AIR0125/ABN 500UL/10AIR0125/ABN SURR 17:00 17:00 SURR MIX SURR MIX SURR

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11 11 11

RUSH C EPA 600 D CLIENT REQ

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C = CLP D = EXP.DEL) MS/MSD

NUMBER OF WORK ORDERS

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#### West Sacramento

### Preparation Data Review Checklist

| .7               |  | _   |
|------------------|--|---|
| /6/10~ NCI       | M: Y (N)                                 | )   |
| 12/1/10          |  | -   |
| Spike<br>Witness | Reviewer                                 |   |
|                  |  |   |
|                  |  |   |
|                  | NA                                       |   |
|                  |  |   |
|                  |  |   |
|                  | NA                                       |   |
|                  |  |   |
|                  | NA                                       |   |
|                  |  |   |
|                  |  |   |
| NA               |  | •   |
| NA               | V  | air   |
| NA               |  | soy   |
| NA               |  | ,   |
| NA               |  |   |
| <del></del>      |  |   |
| NA               |  |   |
| NA               |  |   |
| NA               |  |   |
|                  |  |   |
| NA               |  |   |
| 17/72            | 1,5                                      |   |
|                  | 4 —                                      |   |
|                  |  |   |
| <u></u>          |  |   |
|                  |  |   |
| ···.             |  |   |
|                  | NA NA NA NA NA NA NA NA NA NA NA NA NA N | /6/10 NCM: Y N 12/7/10 Spike Witness Reviewer  NA NA NA NA NA NA NA NA NA NA NA NA NA |

Batch: 0336447 Method ID: Semivolatile Organics by GCMS in Air (TO-13A)

| NCM: Y N   |   |          |  |
|--|---|----------|--|
| A. Calibration/Instrument Run QC                                 | Analyst                                 | Reviewer | N/A  |
| 1. ICAL or ICAL Summary and CCV included.                        |   |          |  |
| 2. ICAL, CCV Criteria met.                                       |   |          | <del>                                     </del> |
| 3. Peaks correctly ID'd by data system.                          | 7                                       |          | <del>                                     </del> |
| 4. Copy of logbook for ICAL included                             |   |          |  |
| 5. Tune criteria (including tailing factor and breakdown) met    |   |          |  |
| and copy included.   |   |          |  |
| 6. Method Number is identified on data.                          |   |          |  |
| B. QA/QC   | AND RESIDENCE OF THE                    |          |  |
| 1. Method blank, LCS/LCSD and MS/SD frequencies met.             |   | ./       |  |
| 2. LCS/LCSD and MB data is included.                             |   | /        |  |
| 3. LCS/LCSD and MB data are within control limits. If not,       |   |          |  |
| NCM is present in Clouseau.                                      |   |          |  |
| 4. MS/MSD data complete.   |   |          |  |
| 5. Holding Times were met.                                       |   | /        |  |
| 6. All samples within tune time.                                 |   | /        |  |
| C. Sample Analysis   | 0.0000000000000000000000000000000000000 |          |  |
| 1. Logbook copies for all injections made, including ICV         | _                                       |          |  |
| standards and ICAL.  |   |          |  |
| 2. Logbooks/prep sheets properly filled out.                     |   |          |  |
| 3. Manual Integrations reviewed and appropriate.                 |   | /        |  |
| 4. All raw data for samples is included (applies to unused data  |   | /        |  |
| as well)   |   |          |  |
| 5. All analytes correctly reported.                              |   |          |  |
| 6. Correct reporting limits used. (based on client request, prep |   |          |  |
| factors, and dilutions)  |   |          |  |
| 7. Spectra present for all positives.                            |   |          | <u></u>  |
| D. Documentation   |   |          | general y  |
| 1. Are all nonconformances documented appropriately?             |   |          |  |
| 2. Quantims entry correct, including dates and times.            |   | _/       |  |
| 3. Appropriate footnotes used.                                   |   |          |  |
| Analyst: _ \( \frac{1}{2} \) Date:                               | 12/8/0                                  |          |  |
| 2 <sup>nd</sup> Level Reviewer:                                  | 12/9/1                                  | ,<br>,   |  |
| Comments:  | 7                                       |          |  |
|  |   |          |  |
|  |   |          |  |
|  |   |          |  |

## AIR, TO-9, Dioxins/Furans

## Raw Data Package

## Run/Batch Data

Includes (as applicable):

runlogs

continuing calibration standards
interference/performance check standards
continuing calibration blanks
method blanks

lcs

ms/sd

sample raw data

ms tune data

Rec

92.2

n

n

n

n

n

n

n

n

n

n

n

n

77.3

Quantitation Summary TestAmerica West Sacramento Run text: MAVWM-1-AA Sample text: MAVWM-1-AA :G0L020446-1MB Run #8 Filename: 07DE104D5 S: 3 I: 1 Results: 07DE104D5T09 Acquired: 7-DEC-10 12:09:14 Processed: 7-DEC-10 Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Factor 1:1600.000 Factor 2:20.000 Sample size: 0.50 SAMP 12/8/10 RTName Resp RA RRF EDL Conc 13C-1,2,3,4-TCDD 142776800 0.79 y 19:55 85.497 13C-2,3,7,8-TCDF 161760600 0.79 y 19:19 1.23 3686.396 2.787 2,3,7,8-TCDF \* n NotFnd 0.99 5.235 Total TCDF \* n NotFnd 0.99 5.235 13C-2,3,7,8-TCDD 122835300 0.81 y 20:07 0.91 3802.334 6:836 2,3,7,8-TCDD \* n NotFnd 0.98 1.915 Total TCDD \* n NotFnd 0.98 1.915 37C1-2,3,7,8-TCDD 66322400 1.00 y 20:09 1.33 1628.661 1.532

95.1 n n 101.8 13C-1,2,3,7,8-PeCDF 128187600 1.58 y 25:11 0.88 4099.393 6.374102.5 n 1,2,3,7,8-PeCDF \* n NotFnd 1.08 2.022 n 2,3,4,7,8-PeCDF \* n NotFnd 1.05 2.082 n Total F2 PeCDF \* n NotFnd 1.06 2.052 Total F1 PeCDF 14633 0.47 n 19:31 1.06 2.196 0.43013C-1,2,3,7,8-PeCDD 91607500 1.61 y 27:35 0.66 3883.713 3.040 97.1 n 1,2,3,7,8-PeCDD 11309 0.63 n 27:40 0.93 0.5343.552 Total PeCDD 48001 2.01 n 25:09 0.93 2-265 3.552 13C-1,2,3,7,8,9-HxCDD 88518000 1.26 y 33:22 74.762 n 13C-1,2,3,4,7,8-HxCDF 80451300 0.49 y 32:15 1.04 3479.637 1-947 87.0 n 1,2,3,4,7,8-HxCDF 16078 0.42 n 32:17 1.22 0.6571.332 n 8358 0.23 n 32:22 1.28 1,2,3,6,7,8-HxCDF 0.3241.265 n 30629 0.91 n 32:56 1.23 2,3,4,6,7,8-HxCDF 1\_235 1.314 n 1,2,3,7,8,9-HxCDF 16606 0.61 n 33:33 1.10 0.7521.476 1-342 Total HxCDF 71671 0.42 n 32:17 1.21 2,967 1.476

13C-1,2,3,6,7,8-HxCDD 72559600 1.16 y 33:06 0.83 3946.676 1.304 98.7 1,2,3,4,7,8-HxCDD 22202 1.43 n 33:03 1.04 1.1802.056 1,2,3,6,7,8-HxCDD 19092 1.14 y 33:07 1.16 0<del>.90</del>5 1.834 30866 0.94 n 33:23 1.18 1,2,3,7,8,9-HxCDD 1.440 1.804 Total HxCDD 126951 1.35 y 32:54 1.13 6.2051-892 2.056 7 3230.475 80.8 13C-1,2,3,4,6,7,8-HpCDF 65056400 0.44 y 34:52 0.91 14.885 64360 1.52 n 34:51 1.35 2.940 J.Q 1,2,3,4,6,7,8-HpCDF 1.986 \* n NotFnd 1.09 1,2,3,4,7,8,9-HpCDF 2.445

13C-1,2,3,4,6,7,8-HpCDD 59684300 1.05 y 35:41 0.83 3262.797 11.326 81.6 1,2,3,4,6,7,8-HpCDD 38593 0.98 y 35:42 1.07 2:413 2.670 Total HpCDD 111489 3.25 n 34:52 1.07 6-972 27661 2.670 6180.709

2.940

2.192

7.330

64360 1.52 n 34:51 1,22

84787200 0.89 y 38:14 0.62

Total HpCDF

13C-OCDD

Run Text: MAVWM-1-AA Sample text: MAVWM-1-AA :G0L020446-1MB

Name: Total TCDF F:1 Mass: 303.902 305.89 Run: 8 File: 07DE104D5 S:3 Acq:7-DEC-10 12:09:14 F:1 Mass: 303.902 305.899 Mod? no #Hom:0

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

mount: \* of which \* named and \* unnamed Conc: \* of which \* named and \* unnamed Amount:

# R.T. Ratio Conc. Area S/N >? Mod? Name

> 1 NotF<sub>1</sub> \* n \* \* n n \* n n

Totals Results TestAmerica West Sacramento Page 2 of 9

Run Text: MAVWM-1-AA Sample text: MAVWM-1-AA :G0L020446-1MB

Name: Total TCDD F:1 Mass: 319.897 321.894 Mod? no #Hom:0

Run: 8 File: 07DE104D5 S:3 Acq:7-DEC-10 12:09:14

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: Conc: \* of which \* named and \* unnamed \* of which \* named and \* unnamed

Name # R.T. Ratio Conc. Area S/N >? Mod?

> 1 NotF<sub>1</sub> \* n \* \* n n

Totals Results TestAmerica West Sacramento Page 3 of 9

Run Text: MAVWM-1-AA Sample text: MAVWM-1-AA :G0L020446-1MB

Name: Total F2 PeCDF F:2 Mass: 339.860 341.857 Mod? no #Hom:0 Run: 8 File: 07DE104D5 S:3 Acq:7-DEC-10 12:09:14

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: \* of which \* named and Conc: \* of which \* named and \* unnamed\* unnamed

# R.T. Ratio Conc. Area S/N >? Mod? Name

> 1 NotFi \* n \* \* n n

\* n n

Totals Results TestAmerica West Sacramento Page 4 of 9

Run Text: MAVWM-1-AA Sample text: MAVWM-1-AA :G0L020446-1MB Name: Total F1 PeCDF F:1 Mass: 339.860 341.857 Mod? no #Hom:1 Run: 8 File: 07DE104D5 S:3 Acq:7-DEC-10 12:09:14

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: 0.215 of which \* named and 0.215 unnamed Conc: 0.430 of which \* named and 0.430 unnamed

# R.T. Ratio Conc. Area Name S/N >? Mod?

1 19:31 0.475 n 0.430 8895 1.597 n n 18736 2.485 n n

Totals Results TestAmerica West Sacramento Page 5 of 9

Run Text: MAVWM-1-AA Sample text: MAVWM-1-AA :G0L020446-1MB

Name: Total PeCDD F:2 Mass: 355.855 357.852 Mod? no #Hom:4

Run: 8 File: 07DE104D5 S:3 Acq:7-DEC-10 12:09:14

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: 1.132 of which 0.267 named and 0.866 unnamed Conc: 2.265 of which 0.534 named and 1.731 unnamed

# R.T. Ratio Conc. Area S/N >? Mod? Name 1 25:09 2.009 n 0.573 9569 1.219 n n 4763 1.287 n n 2 25:28 1.605 y 0.654 8537 1.385 n n 5318 1.654 n n 1,2,3,7,8-PeCDD 3 27:40 0.631 n 0.534 6874 0.969 n n 10892 3.598 y n 4 28:01 1.695 y 0.504 6723 1.083 n n 3967 1.091 n n Run Text: MAVWM-1-AA Sample text: MAVWM-1-AA :G0L020446-1MB

Name: Total HxCDF F:3 Mass: 373.821 375.818 Mod? no #Hom:4 Run: 8 File: 07DE104D5 S:3 Acq:7-DEC-10 12:09:14

Tables: Run: 07DE104D5 Analyte: TO9 Cal: T090721104D5 Results: 07DE104Dn

Amount: 1.484 of which 1.484 named and \* unnamed Conc: 2.967 of which 2.967 named and \* unnamed

| Name              | # | R.T.  | Ratio   | Conc. | Area           | S/N >3         | P Mo   | đ?     |
|-------------------|---|-------|---------|-------|----------------|----------------|--------|--------|
| 1,2,3,4,7,8-HxCDF | 1 | 32:17 | 0.415 n | 0.657 | 8900<br>21446  | 1.352<br>3.479 | n<br>Y | n<br>n |
| 1,2,3,6,7,8-HxCDF | 2 | 32:22 | 0.233 n | 0.324 | 4627<br>19890  | 0.796<br>4.840 | n<br>Y | n<br>n |
| 2,3,4,6,7,8-HxCDF | 3 | 32:56 | 0.911 n | 1,235 | 16955<br>18611 | 2.037<br>5.412 | n<br>Y | n<br>n |
| 1,2,3,7,8,9-HxCDF | 4 | 33:33 | 0.613 n | 0.752 | 9193<br>14991  | 1.422<br>4.298 | n<br>Y | n<br>n |

Totals Results TestAmerica West Sacramento Page 7 of 9

Run Text: MAVWM-1-AA Sample text: MAVWM-1-AA :G0L020446-1MB

Name: Total HxCDD F:3 Mass: 389.816 391.813 Mod? no #Hom:5

Run: 8 File: 07DE104D5 S:3 Acq:7-DEC-10 12:09:14

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: 3.102 of which 1.763 named and 1.340 unnamed Conc: 6.205 of which 3.525 named and 2.680 unnamed 2.680 unnamed

| Name              | # | R.T.  | Ratio   | Conc  | Area           | S/N >3         |        |        |                                       |
|-------------------|---|-------|---------|-------|----------------|----------------|--------|--------|---------------------------------------|
|                   | 1 | 32:54 | 1.349 y | 2.210 | 25950<br>19238 | 5.794<br>1.145 | y<br>n | n<br>n | 2 peaks < ED<br>each · 12/8/10<br>hrs |
| 1,2,3,4,7,8-HxCDD | 2 | 33:03 | 1.432 n | 1.180 | 14195<br>9912  | 4.526<br>1.338 | -      | n<br>n | , .                                   |
| 1,2,3,6,7,8-HxCDD | 3 | 33:07 | 1.139 y | 0.905 | 10165<br>8927  | 3.449<br>1.266 | -      | n<br>n |                                       |
|                   | 4 | 33:12 | 0.596 n | 0.470 | 5316<br>8927   | 1.622<br>1.266 |        | n<br>n |                                       |
| 1,2,3,7,8,9-HxCDD | 5 | 33:23 | 0.942 n | 1.440 | 17086<br>18132 | 3.282<br>2.785 | -      | n<br>n |                                       |

Totals Results TestAmerica West Sacramento Page 8 of 9

Run Text: MAVWM-1-AA Sample text: MAVWM-1-AA :G0L020446-1MB Name: Total HpCDF F:4 Mass: 407.782 409.779 Mod? no #Hom:1 Run: 8 File: 07DE104D5 S:3 Acq:7-DEC-10 12:09:14

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

nount: 1.470 of which 1.470 named and \* unnamed Conc: 2.940 of which 2.940 named and \* unnamed

# R.T. Ratio Conc. Area S/N >? Mod? Name 1,2,3,4,6,7,8-HpCDF 1 34:51 1.524 n 2.940 48084 5.423 y n 31549 5.485 y n

Totals Results TestAmerica West Sacramento Page 9 of 9

Run Text: MAVWM-1-AA Sample text: MAVWM-1-AA :G0L020446-1MB

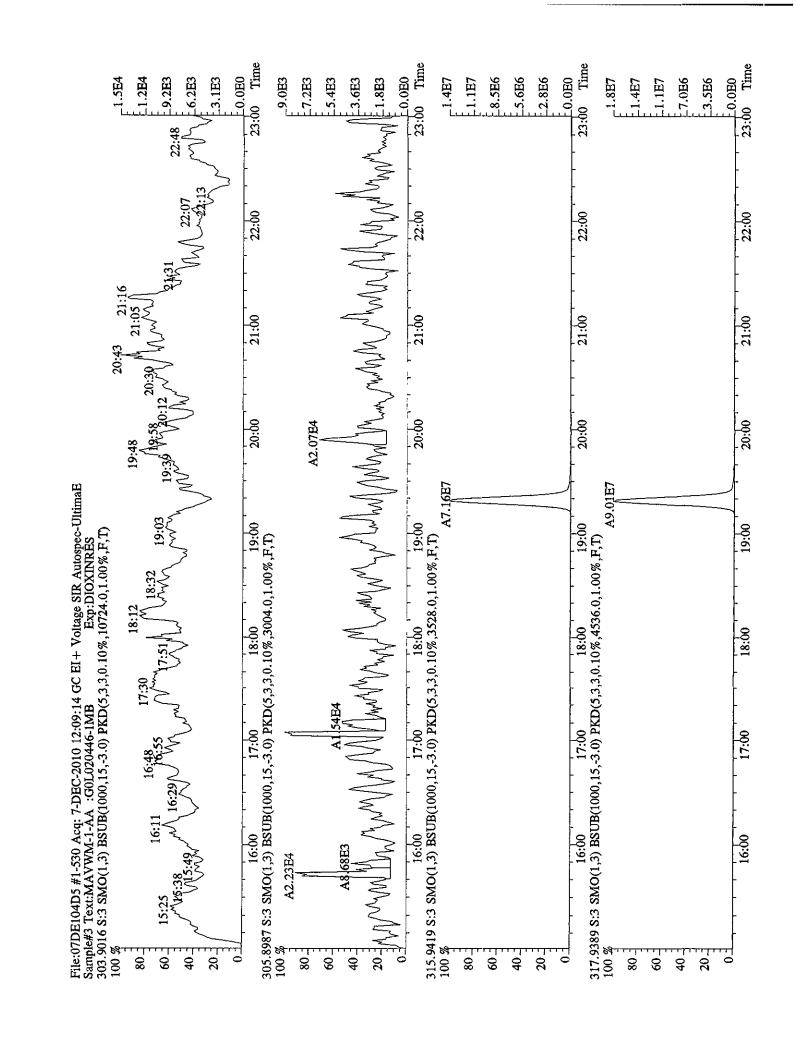
Amount: 3.486 of which 1.207 named and 2.279 unnamed

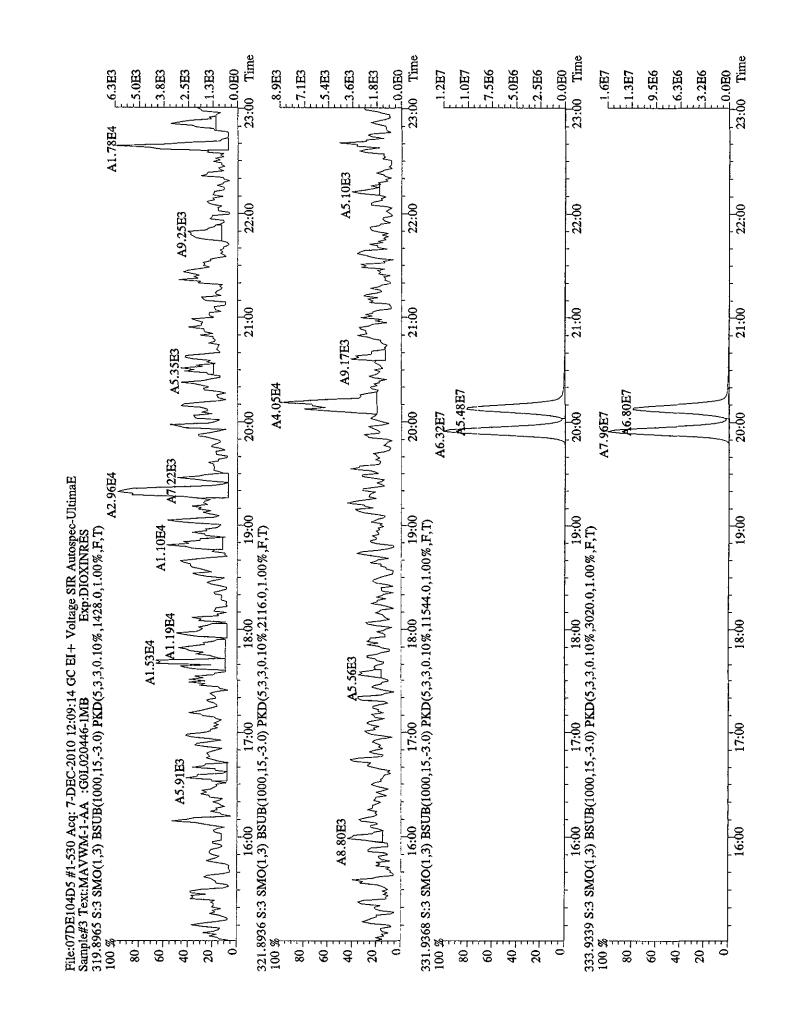
Name: Total HpCDD F:4 Mass: 423.777 425.774 Mod? no #Hom:4 Run: 8 File: 07DE104D5 S:3 Acq:7-DEC-10 12:09:14

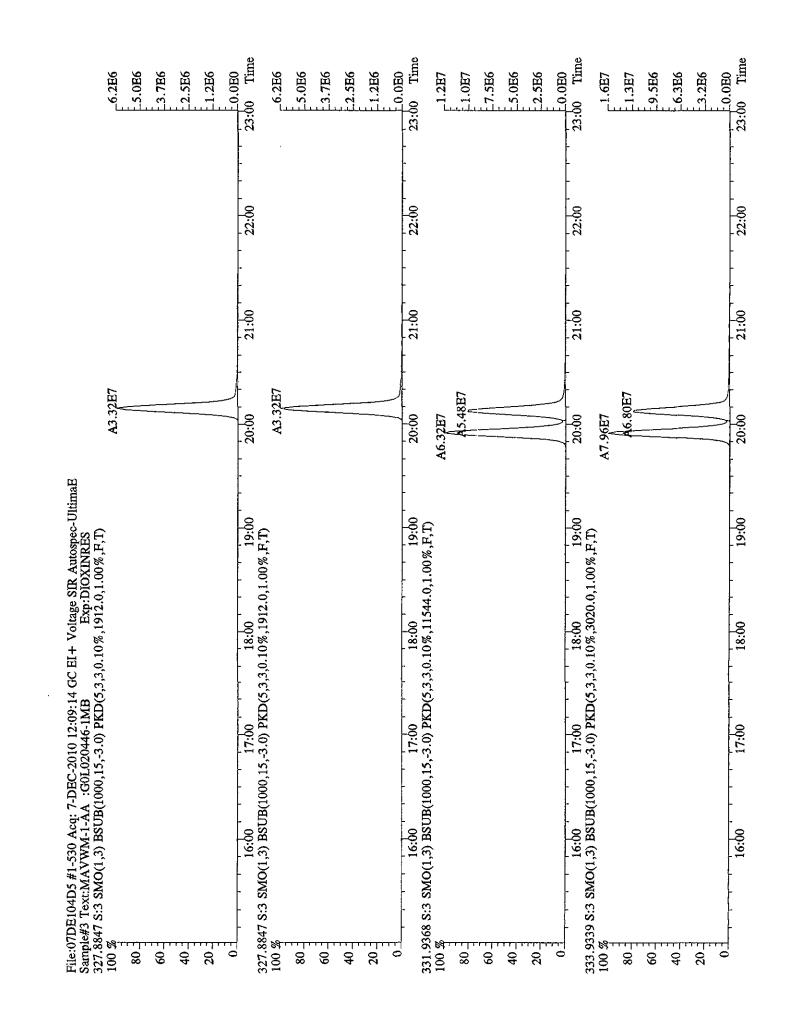
Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

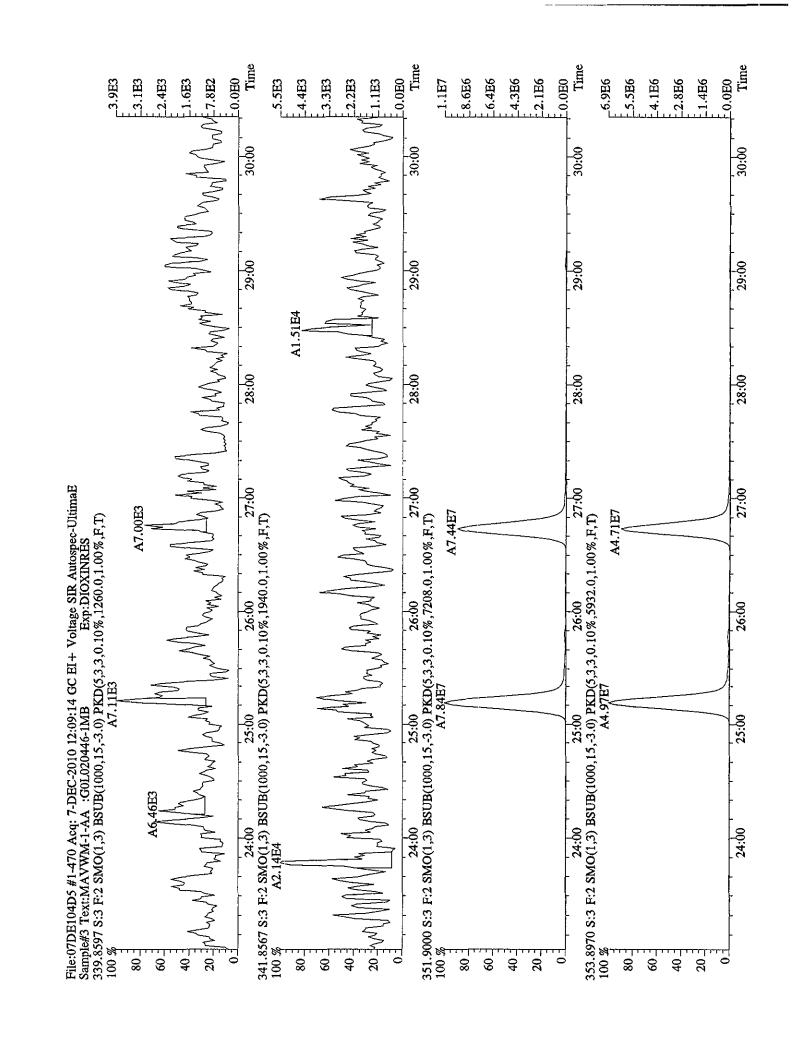
| Conc:           | 6.972 of v | which | 2.413 n   | amed and | 4.559 | unnamed |    |    |                   |
|-----------------|------------|-------|-----------|----------|-------|---------|----|----|-------------------|
| Name            | #          | R.T.  | Ratio     | Concy    | Area  | S/N >?  | Мс | d? |                   |
|                 | 1          | 34:52 | 3.248 n   | 1.043    | 26556 | 4.388   | У  | n  |                   |
|                 |            |       |           |          | 8177  | 2.349   | n  | n  |                   |
|                 | 2          | 35:07 | 1.339(n)( | 2.766    | 29041 | 4.093   | У  | n  |                   |
|                 |            |       |           |          | 21683 | 3.916   | Y  | n  |                   |
| 1,2,3,4,6,7,8-H | ipCDD 3    | 35:42 | 0.981 y   | 2.413    | 19110 | 2.331   | n  | n  | 126               |
|                 |            |       |           | /        | 19483 | 4.404   | У  |    | <em< td=""></em<> |
|                 | 4          | 36:00 | 4.824 n   | 0 /749   | 28329 | 2.372   | n  | n  |                   |

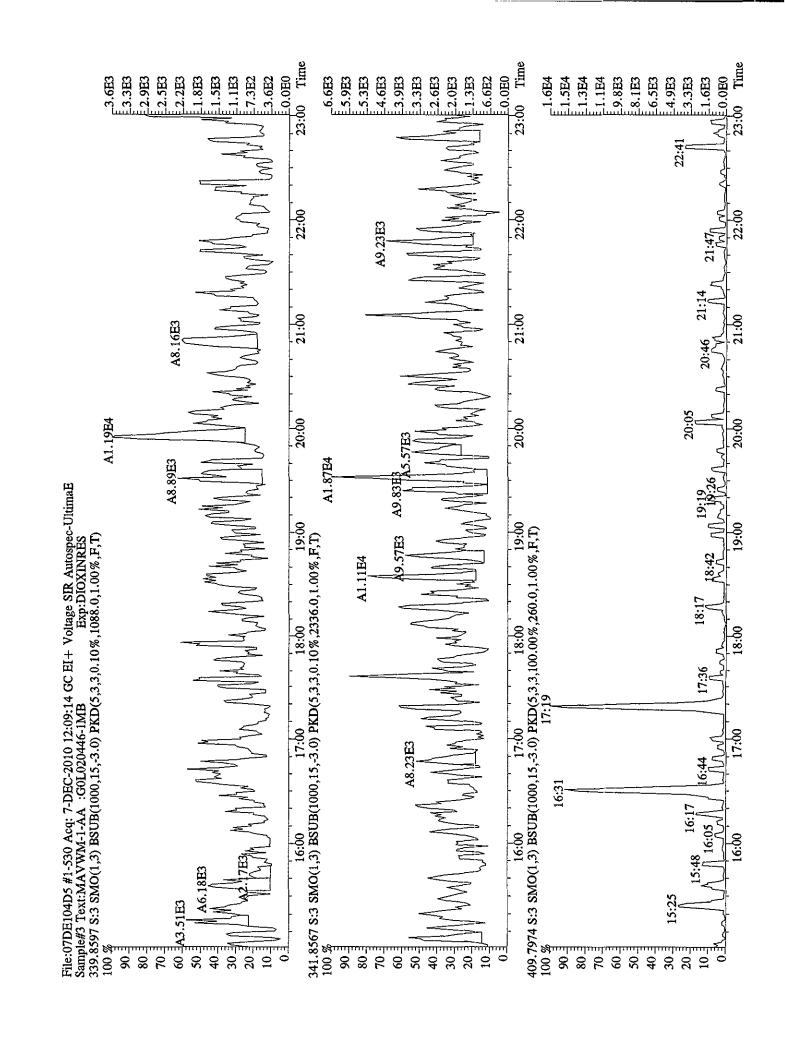
5873 1.083 n n

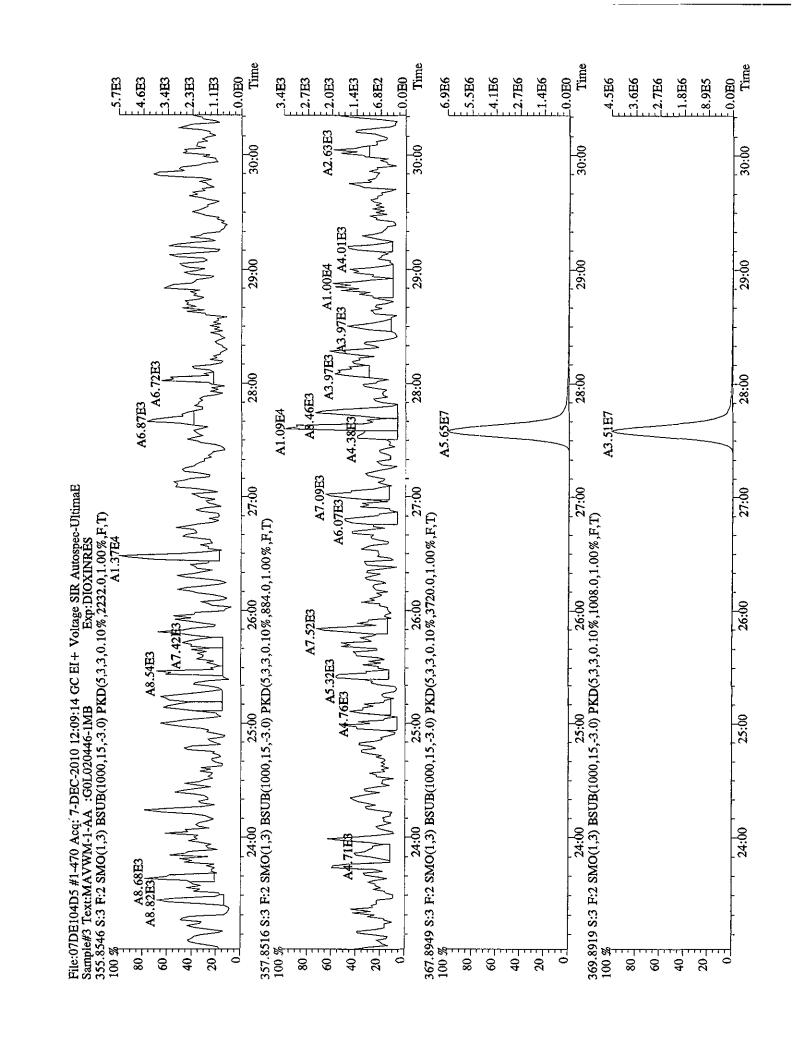


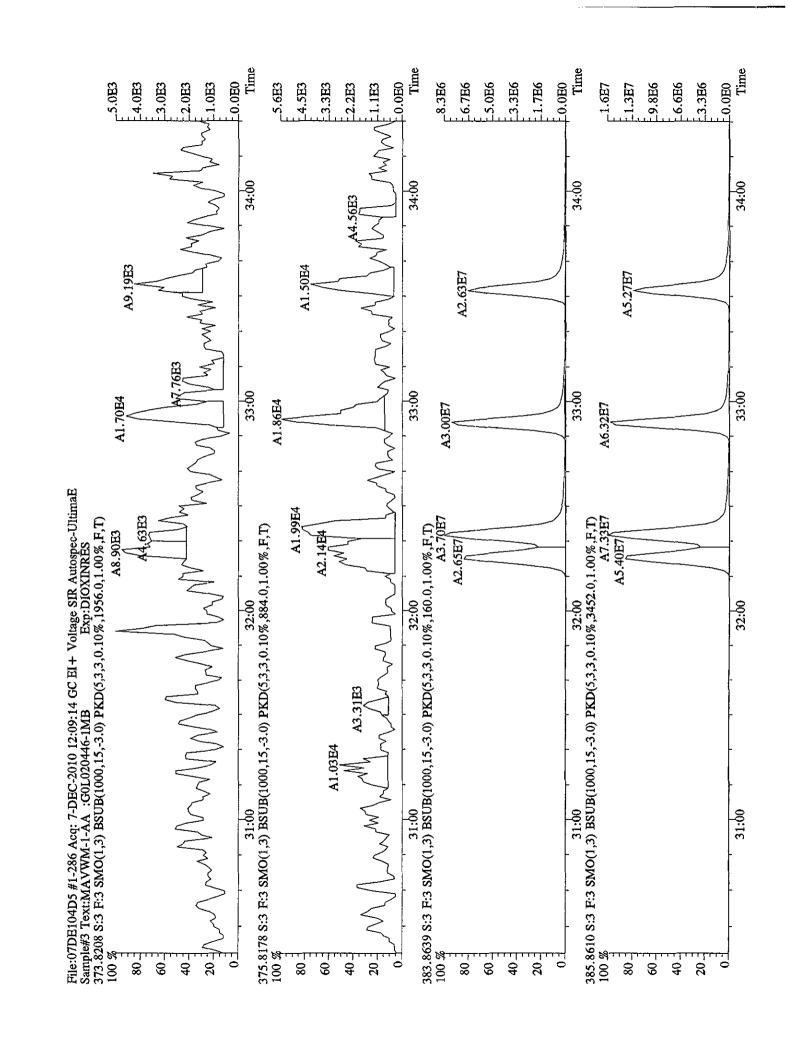


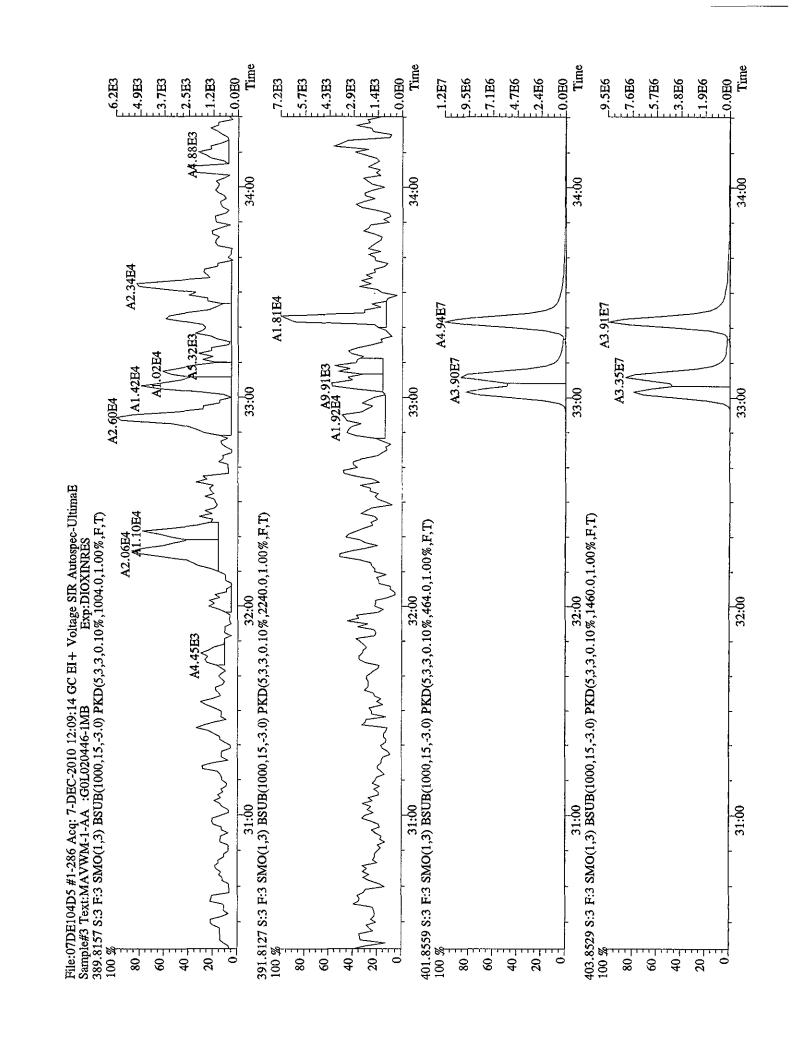


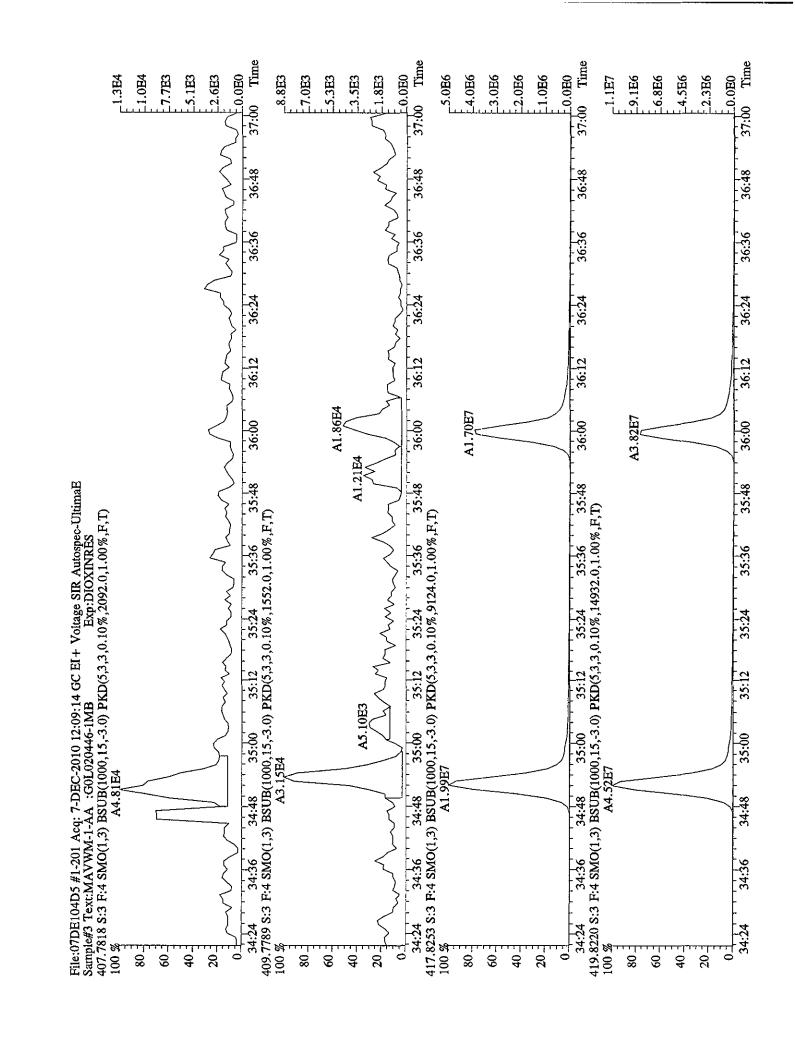


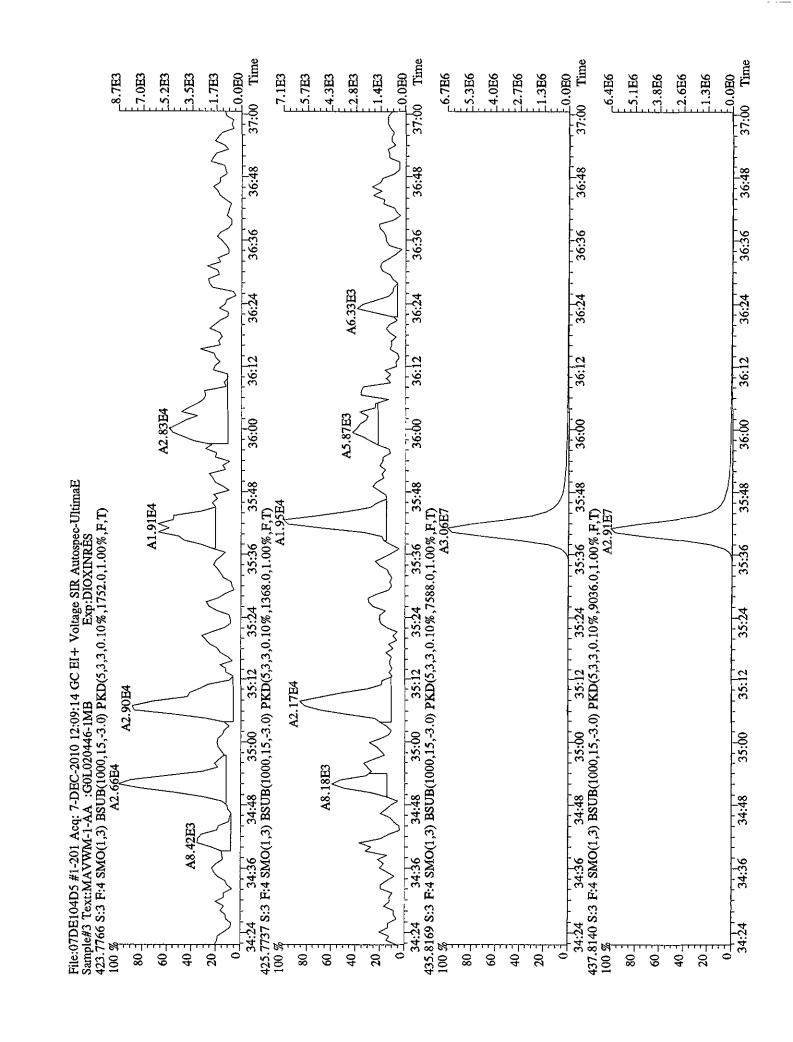


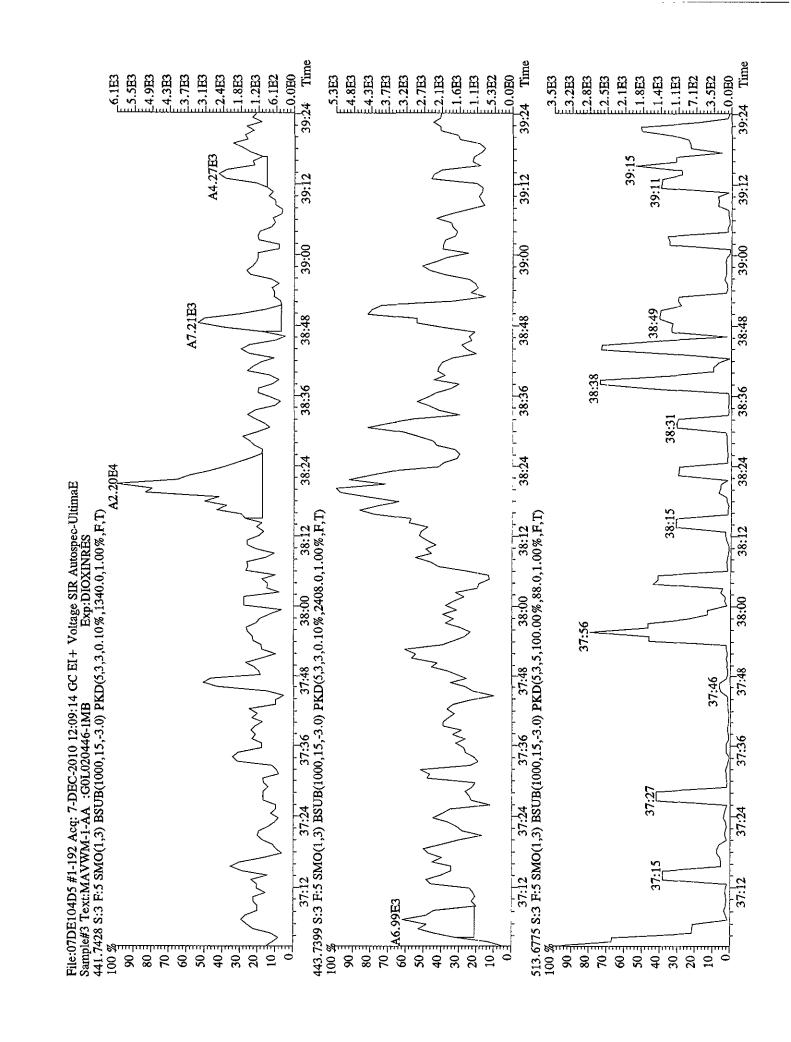


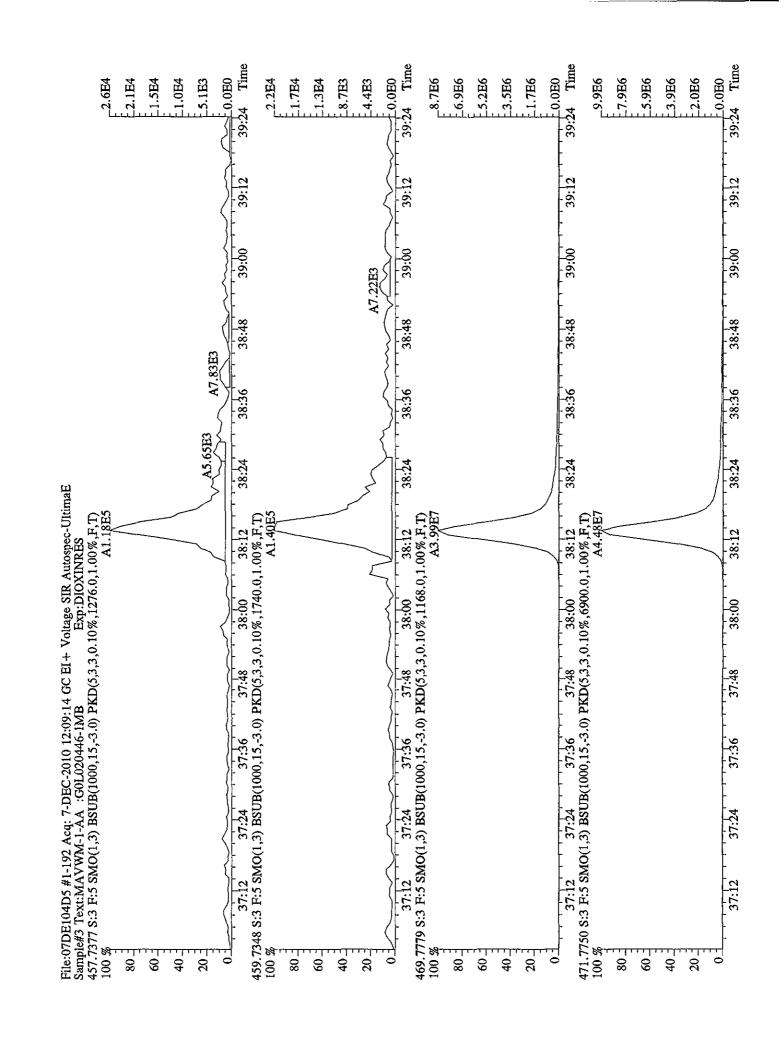


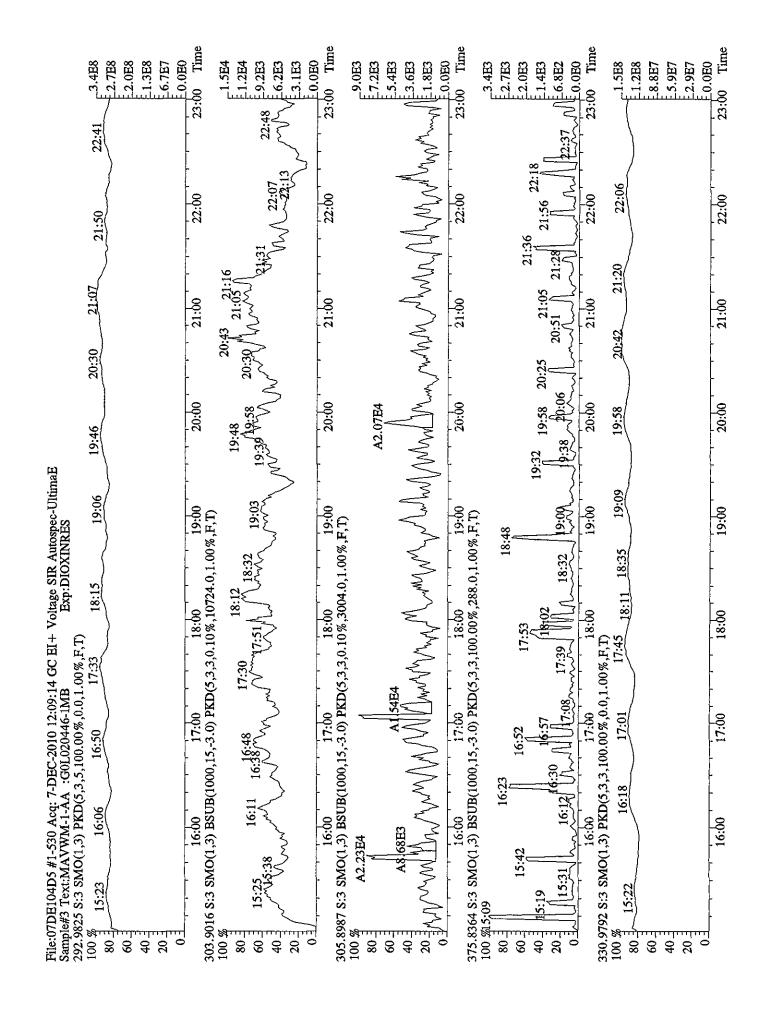


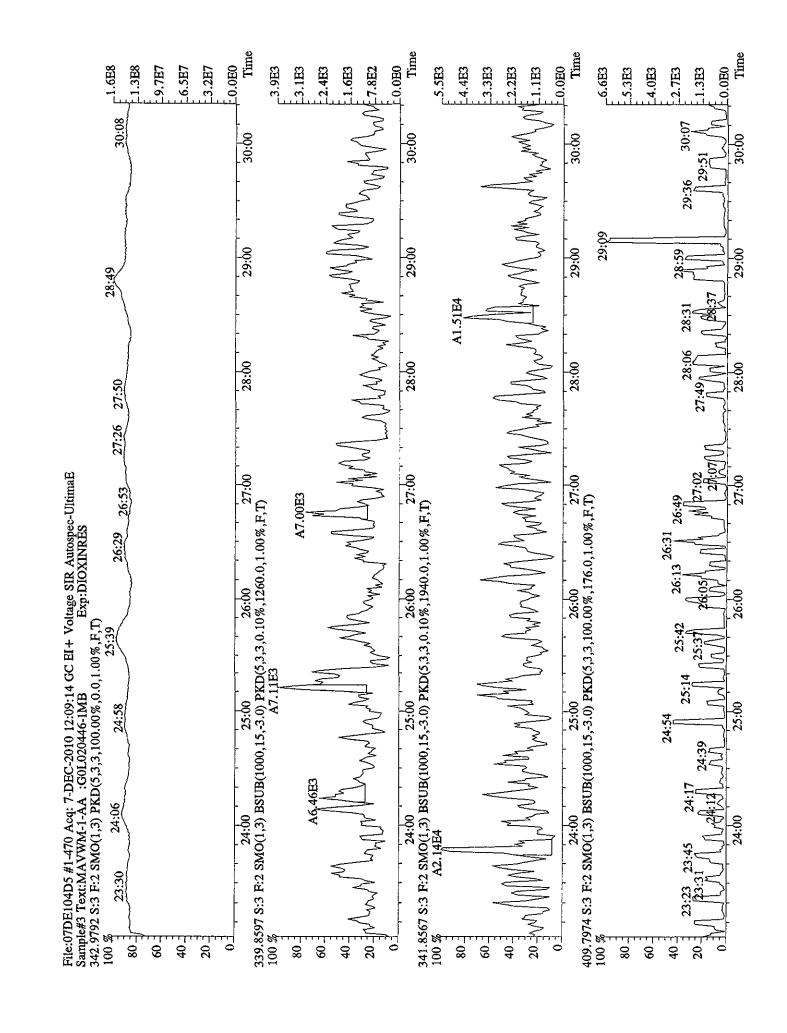


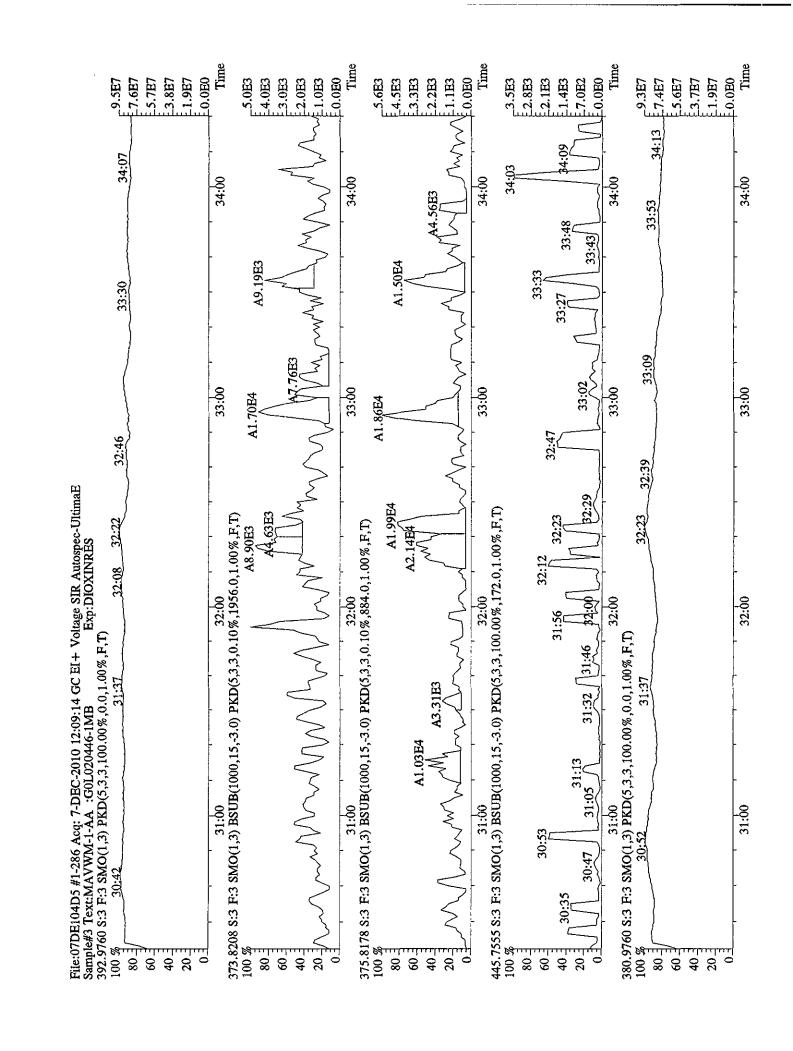


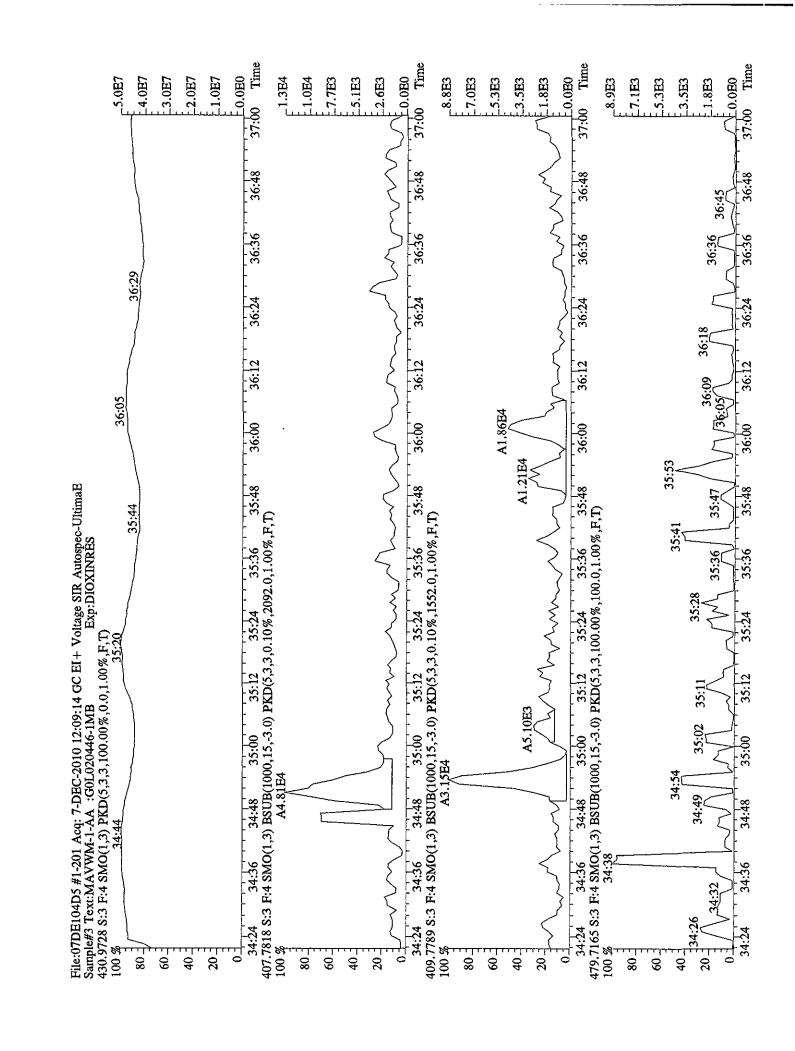


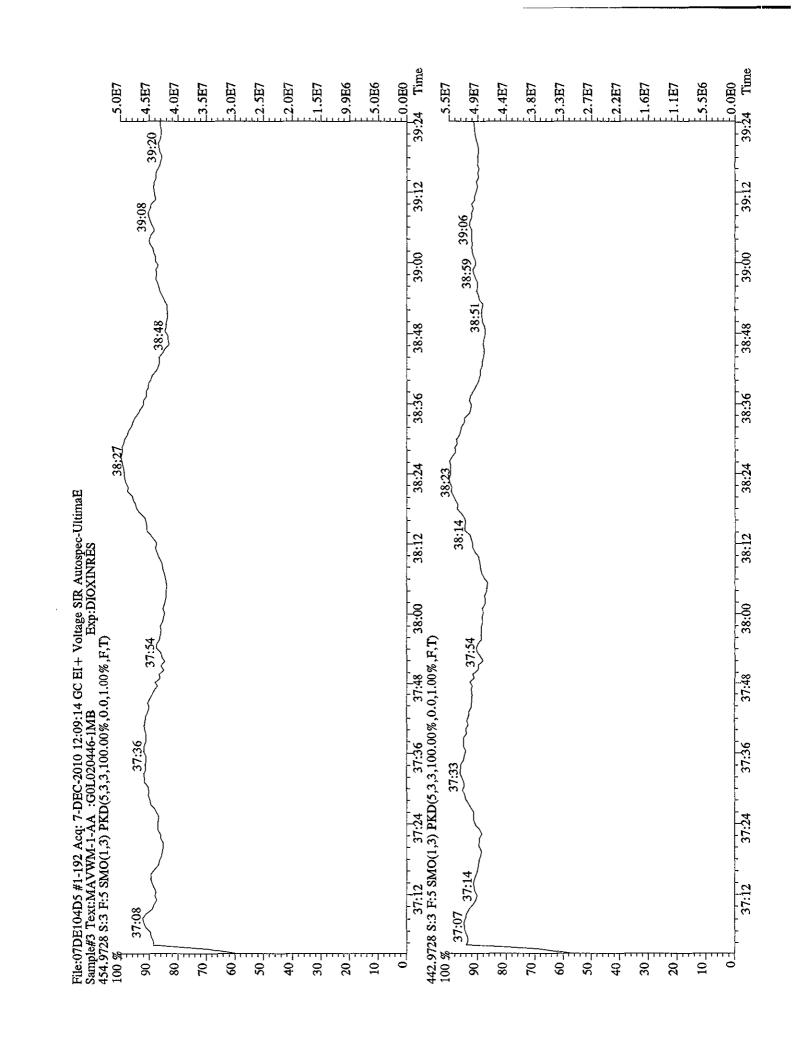






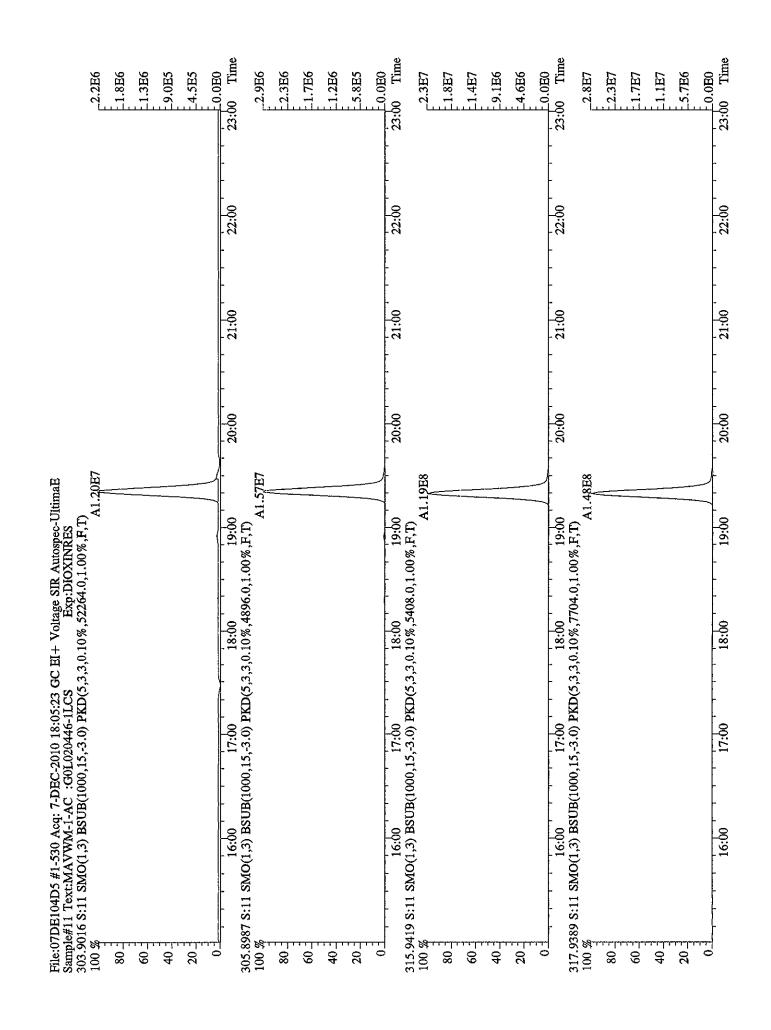


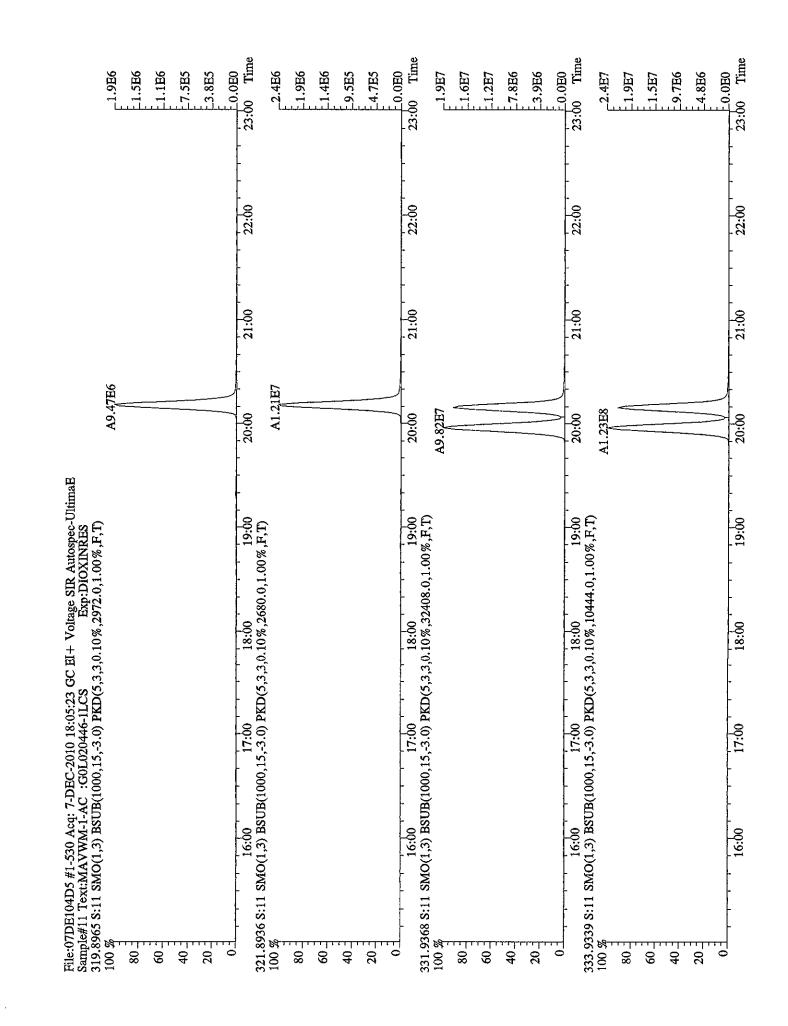


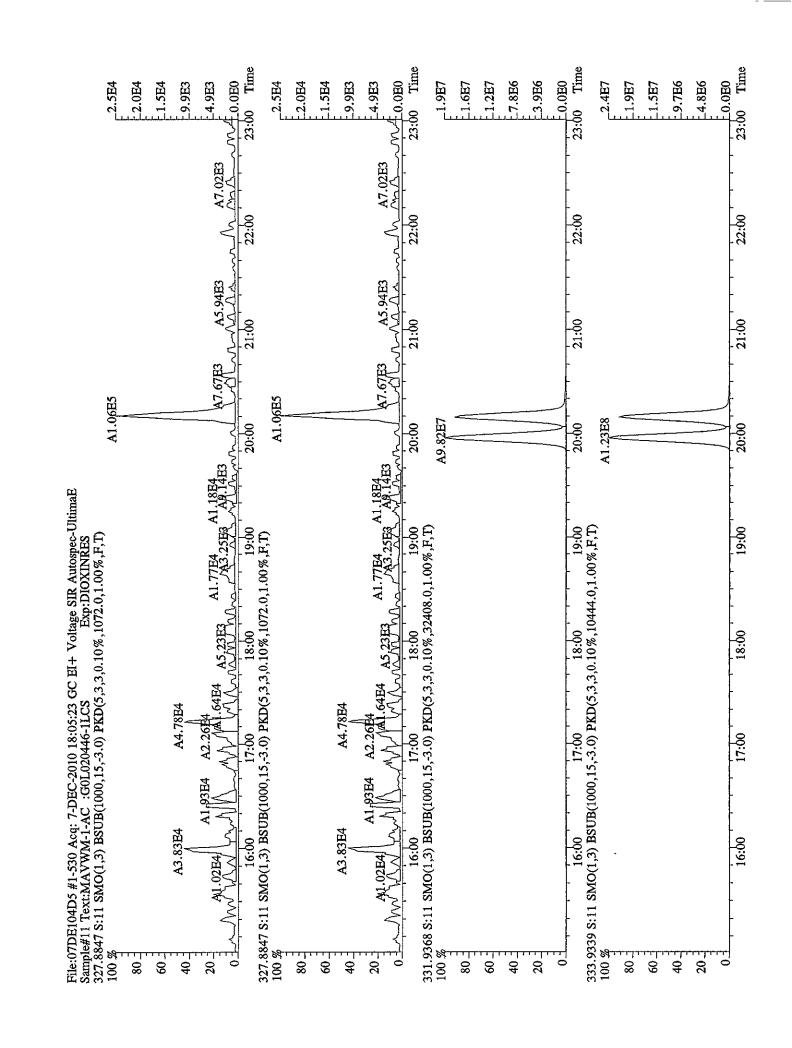


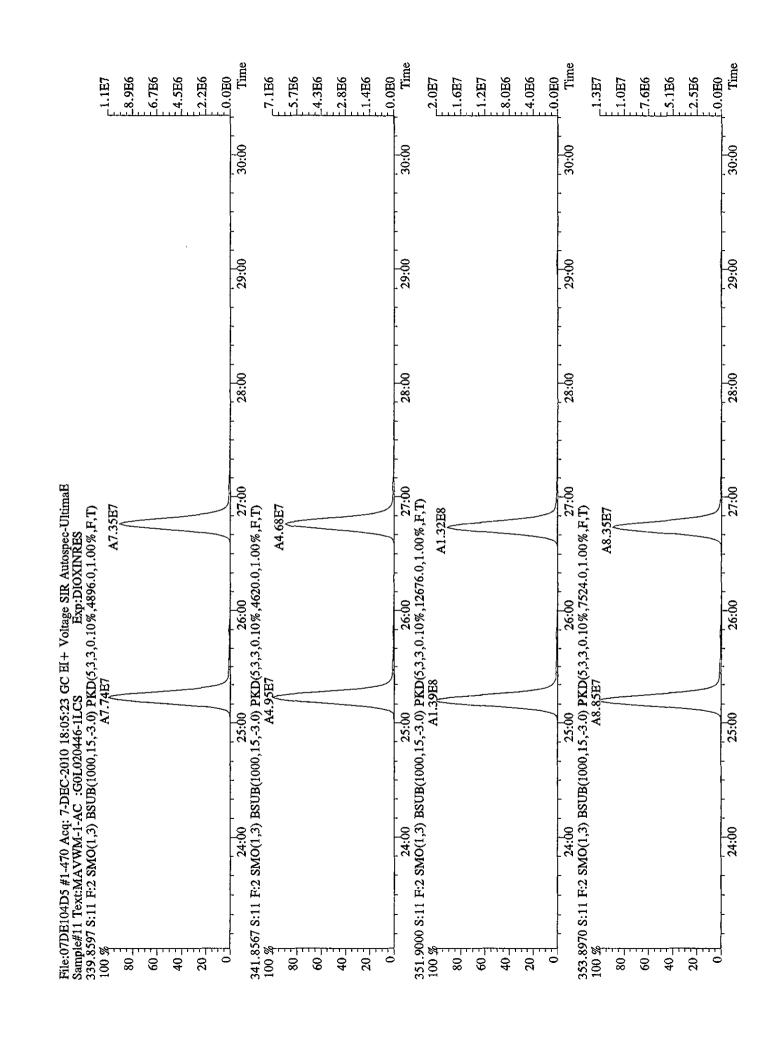
Run text: MAVWM-1-AC Sample text: MAVWM-1-AC :GOLO20446-1LCS Run #9 Filename: 07DE104D5 S: 11 I: 1 Results: 07DE104D5TO9 Acquired: 7-DEC-10 18:05:23 Processed: 8-DEC-10 07:53:18 Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5

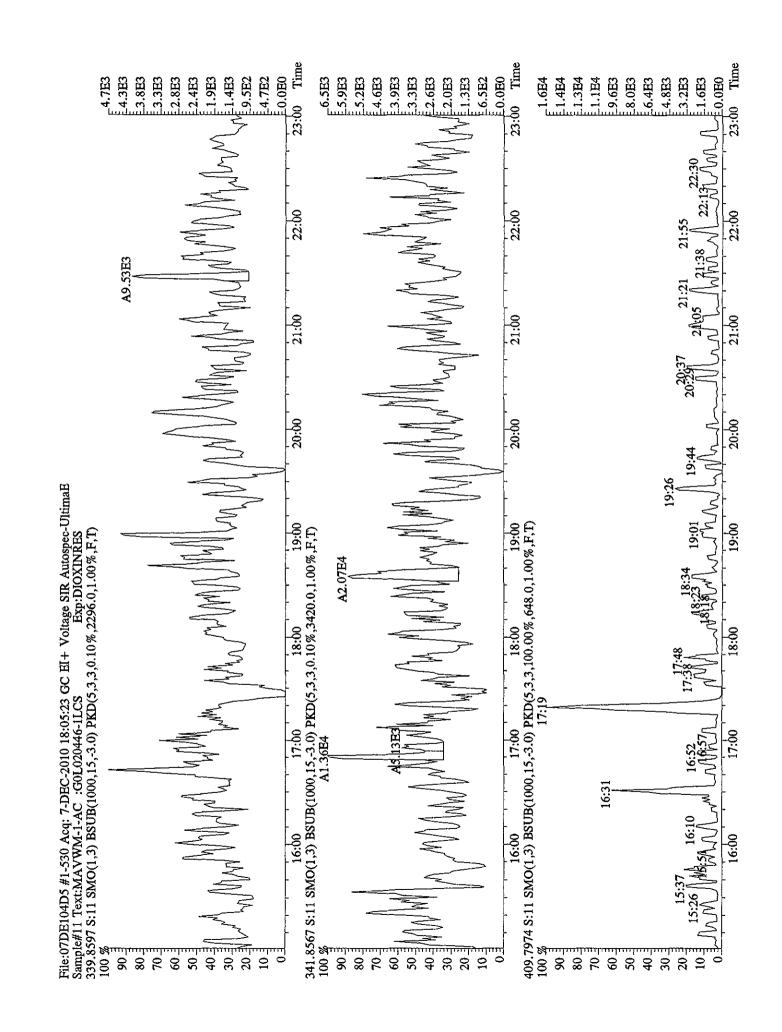
| Run: 07DE104D5          | Analyte: To | J9      |        | Cal   | : TO90721104D5     |                |           |    |
|-------------------------|-------------|---------|--------|-------|--------------------|----------------|-----------|----|
| Factor 1: 1600.000      | Factor 2:   | 20.000  | S      | ample | size: 0.500000SAMP | 12/8/12<br>Was |           |    |
| Name                    | Resp        | RA      | RT     | RRF   | Conc               | EDL            | Rec       | М  |
| 13C-1,2,3,4-TCDD        | 220776888   | 0.80 y  | 19:58  | -     | 132.21             | -              | _         | n  |
| 13C-2,3,7,8-TCDF        | 266905008   | 0.80 y  | 19:20  | 1.23  | 3933.60            | 2.94           | 98.3      | n  |
| 2,3,7,8-TCDF            |             | _       |        |       |                    | 13.49          |           | n  |
| Total TCDF              |             | _       |        |       |                    | 13.49          | _         | n  |
|                         |             |         |        |       |                    |                |           |    |
| 13C-2,3,7,8-TCDD        | 202024984   | 0.81 y  | 20:09  | 0.91  | 4044.23            | 13.03          | 101.1     | n  |
| 2,3,7,8-TCDD            | 21524076    | 0.79 y  | 20:11  | 0.98  | 433.33             | 1.73           | _         | n  |
| Total TCDD              | 21567886    | 4.34 n  | 19:20  | 0.98  | 434,21             | 1.73           | _         | n  |
| _                       |             |         |        |       |                    |                |           |    |
| 37C1-2,3,7,8-TCDD       | 212326      | 1.00 y  | 20:10  | 1.33  | 3.17               | 0.49           | 0.2       | n  |
| 13C-1,2,3,7,8-PeCDF     | 227246136   | 1.57 y  | 25:12  | 0.88  | 4699.74            | 6.34           | 117.5     | n  |
| 1,2,3,7,8-PeCDF         | 126940572   | 1.56 y  | 25:13  | 1.08  | 2075.37            | 3.25           | -         | n  |
| 2,3,4,7,8-PeCDF         | 120299288   | 1.57 y  | 26:46  | 1.05  | 2025.19            | 3.34           | _         | n  |
| Total F2 PeCDF          | 249811710   | 1.95 n  | 23:36  | 1.06  | 4143.22            | 3.29           | _         | n  |
| Total F1 PeCDF          | *           | * n     | NotFnd | 1.06  | *                  | 1.98           | -         | n  |
| 120 1 2 2 5 0 5-055     | 160410006   | 1 63    | 00.00  | 0.66  | 4200 10            | 2.02           | 4400      |    |
| 13C-1,2,3,7,8-PeCDD     |             | -       |        |       |                    | 3.93           | 110.0     | n  |
| 1,2,3,7,8-PeCDD         |             | _       |        |       |                    | 4.32           | -         | n  |
| Total PeCDD             | 83511182    | 1.53 у  | 27:37  | 0.93  | 2250.05            | 4.32           | -         | n  |
| 13C-1,2,3,7,8,9-HxCDD   | 171502496   | 1.27 y  | 33:22  | -     | 144.85             | -              | -         | n  |
| 13C-1,2,3,4,7,8-HxCDF   | 159555412   | D E1 7  | 22.15  |       |                    | 1.22           | 89.0      | ~  |
| 1,2,3,4,7,8-HxCDF       |             | _       |        |       |                    | 0.77           |           | n  |
|                         |             |         |        |       |                    |                |           | n  |
| 1,2,3,6,7,8-HxCDF       |             |         |        |       |                    |                | -         | n  |
| 2,3,4,6,7,8-HxCDF       |             |         |        |       |                    | 0.76           | -         | n  |
| 1,2,3,7,8,9-HxCDF       |             | _       |        |       |                    | 0.85           | -         | n  |
| Total HxCDF             | 435216821   | 0.88 n  | 31:13  | 1.21  | 9026.68            | 0.77           | -         | n  |
| 13C-1,2,3,6,7,8-HxCDD   | 141045740   | 1.28 y  | 33:07  | 0.83  | 3959.66            | 1.60           | 99.0      | n  |
| 1,2,3,4,7,8-HxCDD       | 68963676    | 1.23 y  | 33:03  | 1.04  | 1885.66            | 1.30           | _         | n  |
| 1,2,3,6,7,8-HxCDD       | 91762548    | 1.29 y  | 33:07  | 1.16  | 2238.02            | 1.16           | _         | n  |
| 1,2,3,7,8,9-HxCDD       | 88801804    | 1.25 y  | 33:22  | 1.18  | 2131.12            | 1.14           | -         | n  |
| Total HxCDD             | 249528028   | 1.23 y  | 33:03  | 1.13  | 6254.80            | 1.20           | -         | n  |
| 13C-1,2,3,4,6,7,8-HpCDF | 135358240   | 0.45 v  | 34:51  | 0.91  | 3469.14            | 13.93          | 86.7      | n  |
| 1,2,3,4,6,7,8-HpCDF     | 101879392   | _       |        |       | 2237.12            | 5.22           | -         | n  |
| 1,2,3,4,7,8,9-HpCDF     |             | _       |        |       | 2380.02            | 6.42           | _         | n  |
| Total HpCDF             |             | _       |        |       | 4617.14            | 5.76           | _         | n  |
| TOCAL TIPODI            | 107743044   | 1.07 y  | 34.32  | 1.22  | 4017.11            | 5.70           | _         | 11 |
| 13C-1,2,3,4,6,7,8-HpCDD |             | _       |        |       | 3633.60            | 6.91           | 90.8      | n  |
| 1,2,3,4,6,7,8-HpCDD     | 70757112    | _       |        |       | 2050.75            | 5.04           | -         | n  |
| Total HpCDD             | 70997471    | 0.89 у  | 35:07  | 1.07  | 2057.71            | 5.04           | -         | n  |
| 13C-OCDD                | 204124856   | 0.91 17 | 38.13  | 0.62  | 7680.07            | 13.70          | 96.0      | n  |
| OCDF                    |             |         |        |       | 4230.45            | 9.09           | J0.0<br>- | n  |
| OCDD                    |             | _       |        |       | 4061.15            | 13.90          | _         |    |
| OCDD                    | 1242/0032   | 0.50 y  | 20:13  | 1.∠∪  | 4001.10            | 13.50          | _         | n  |

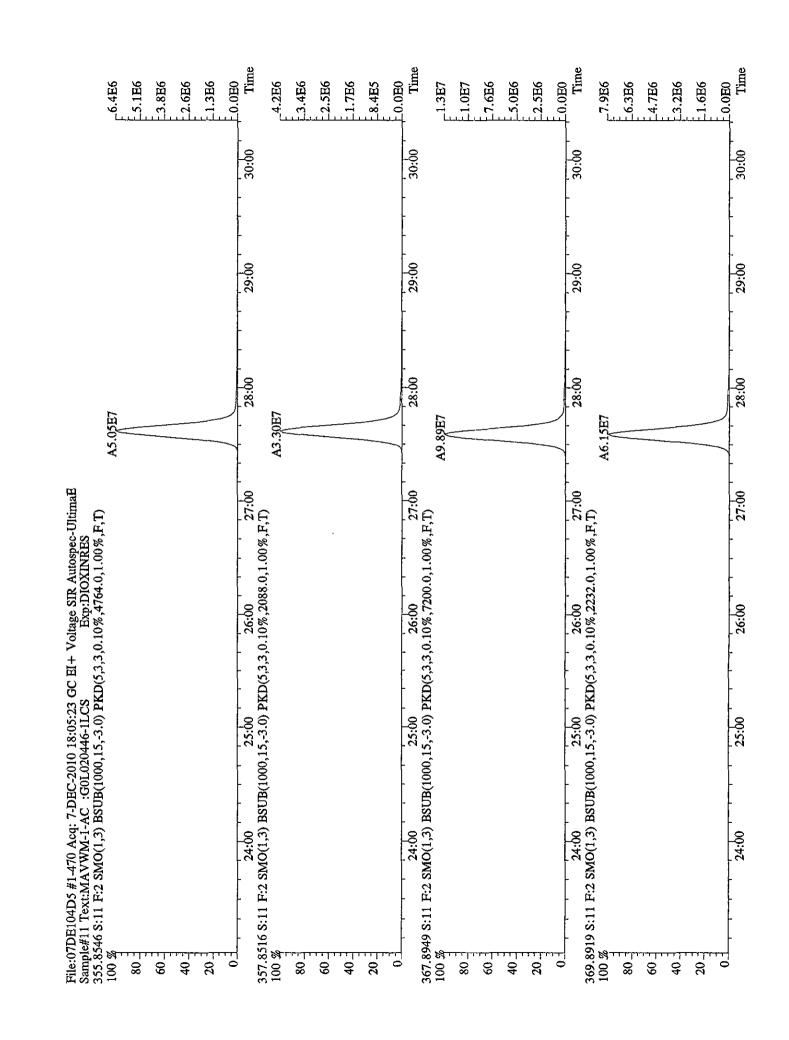


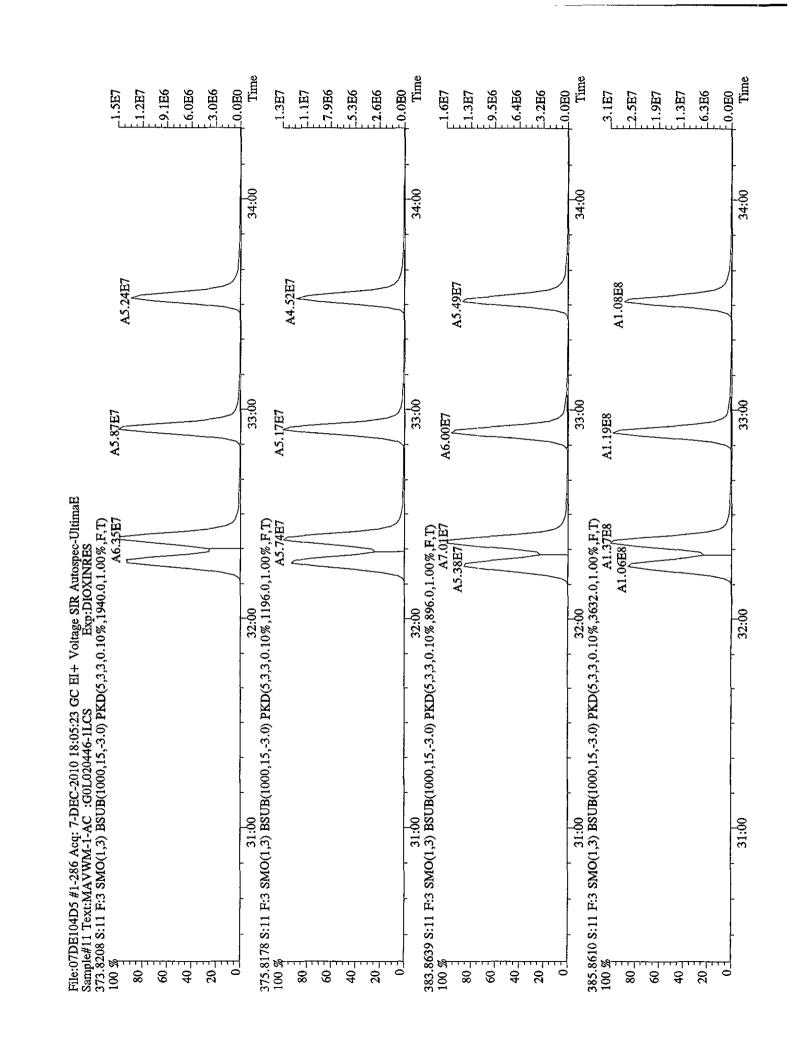


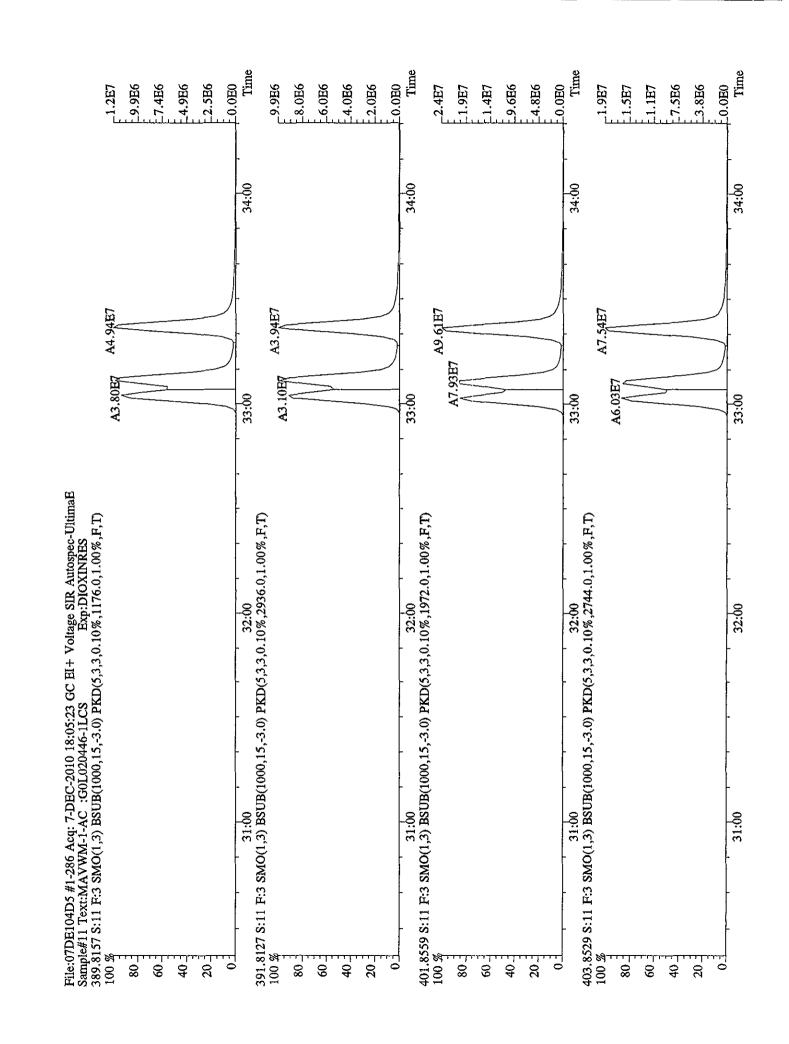


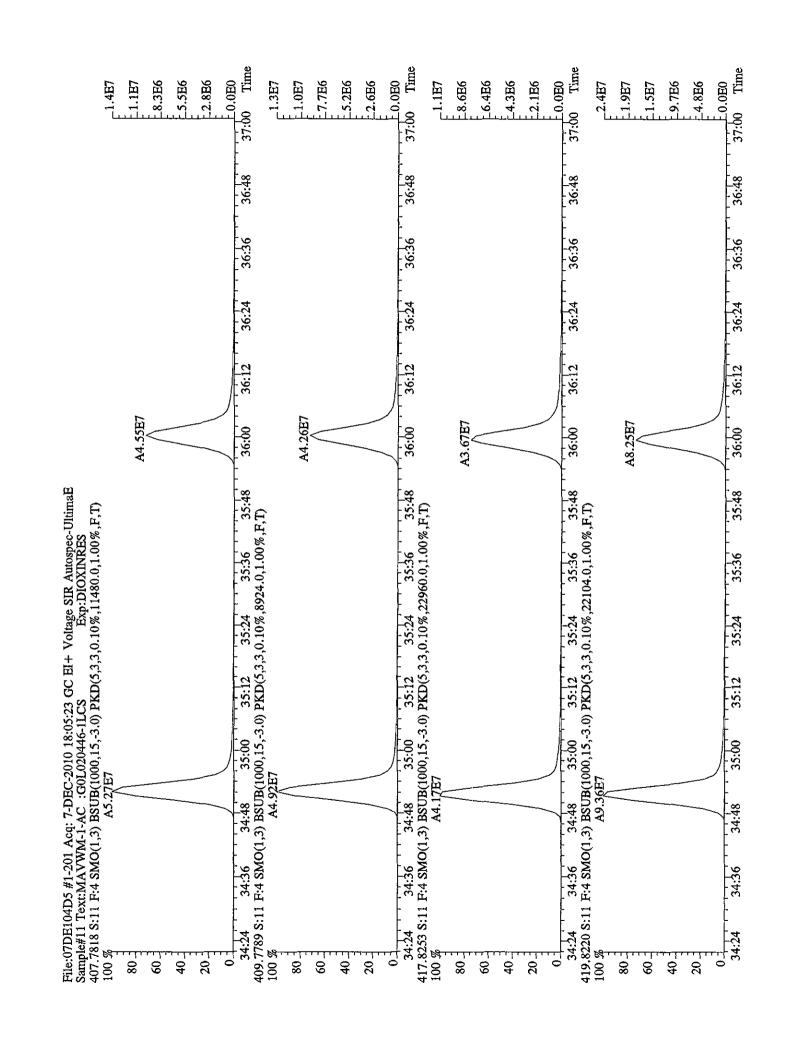


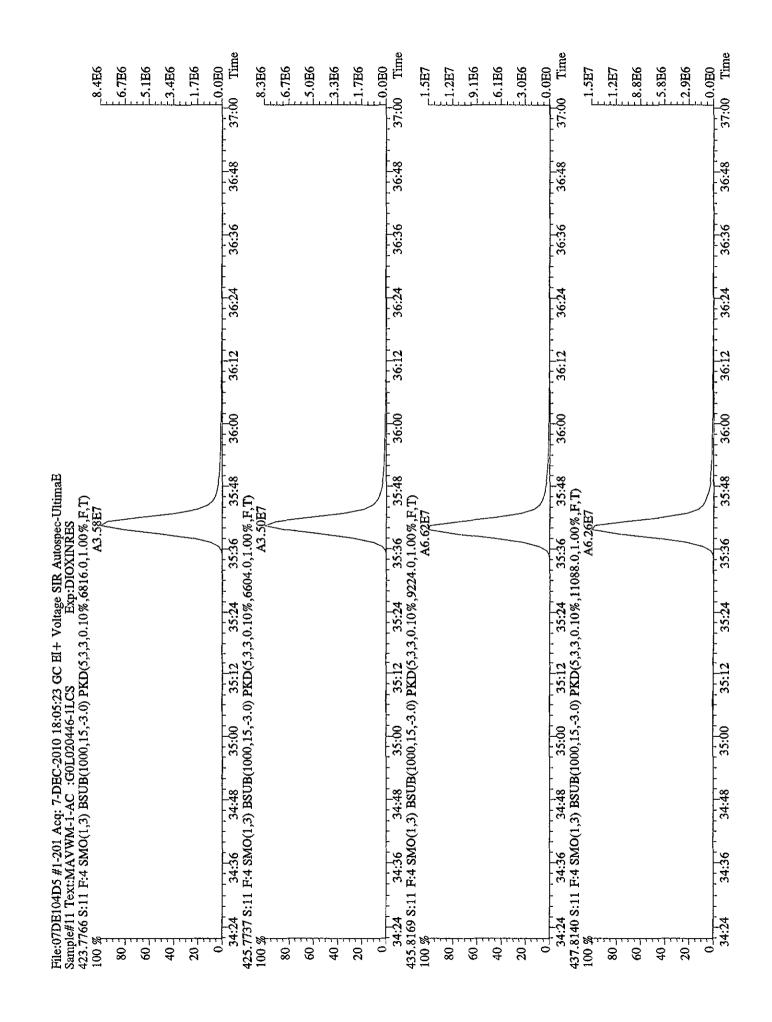


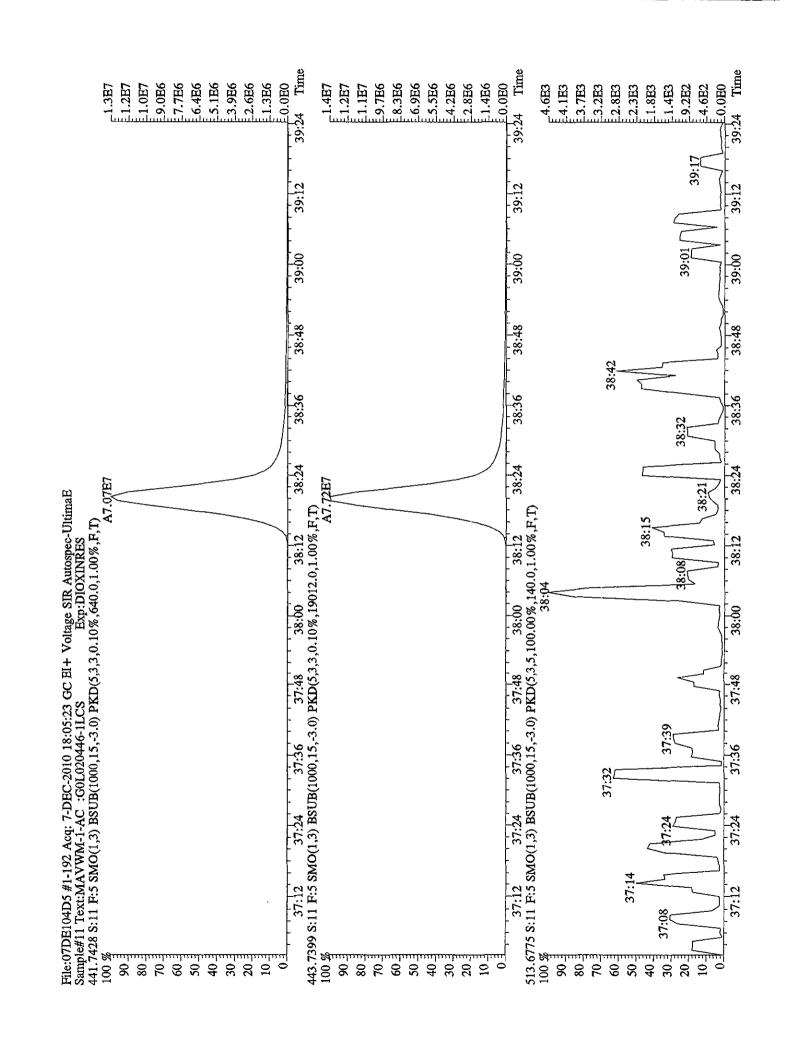


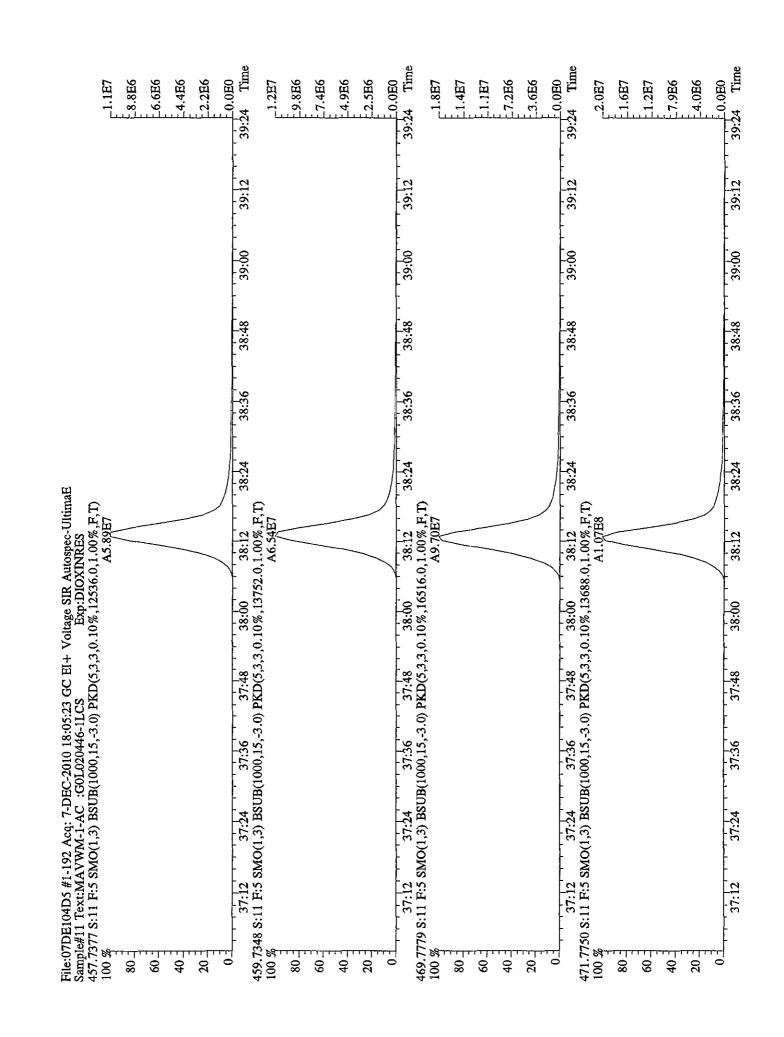


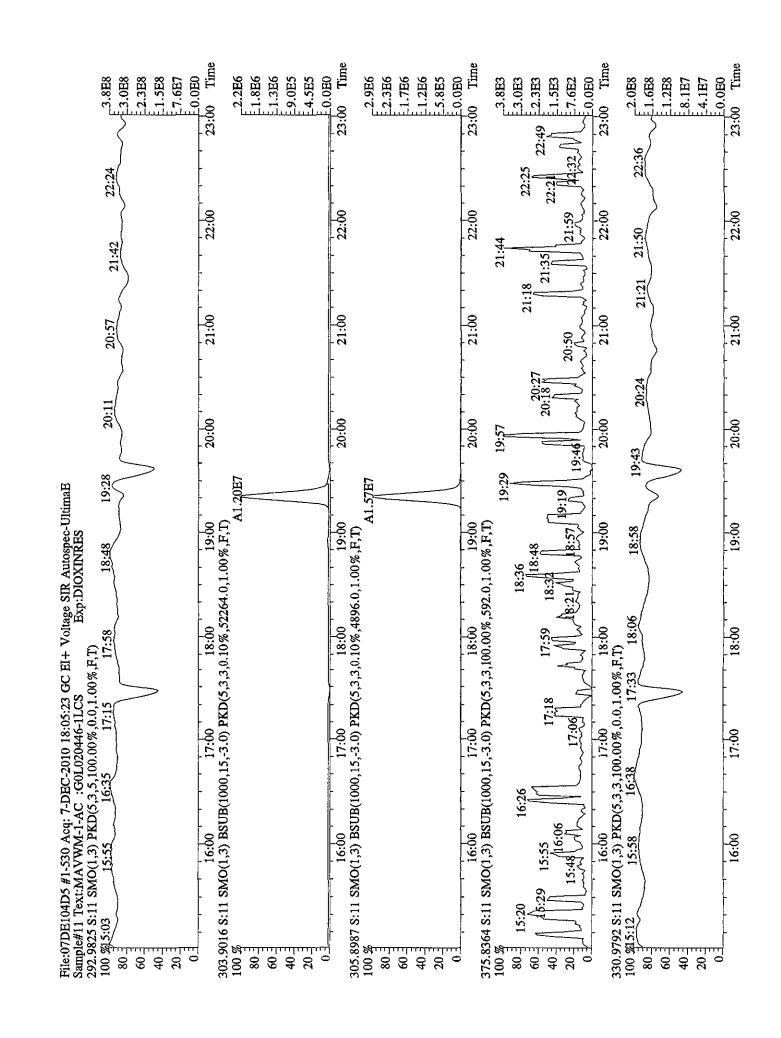


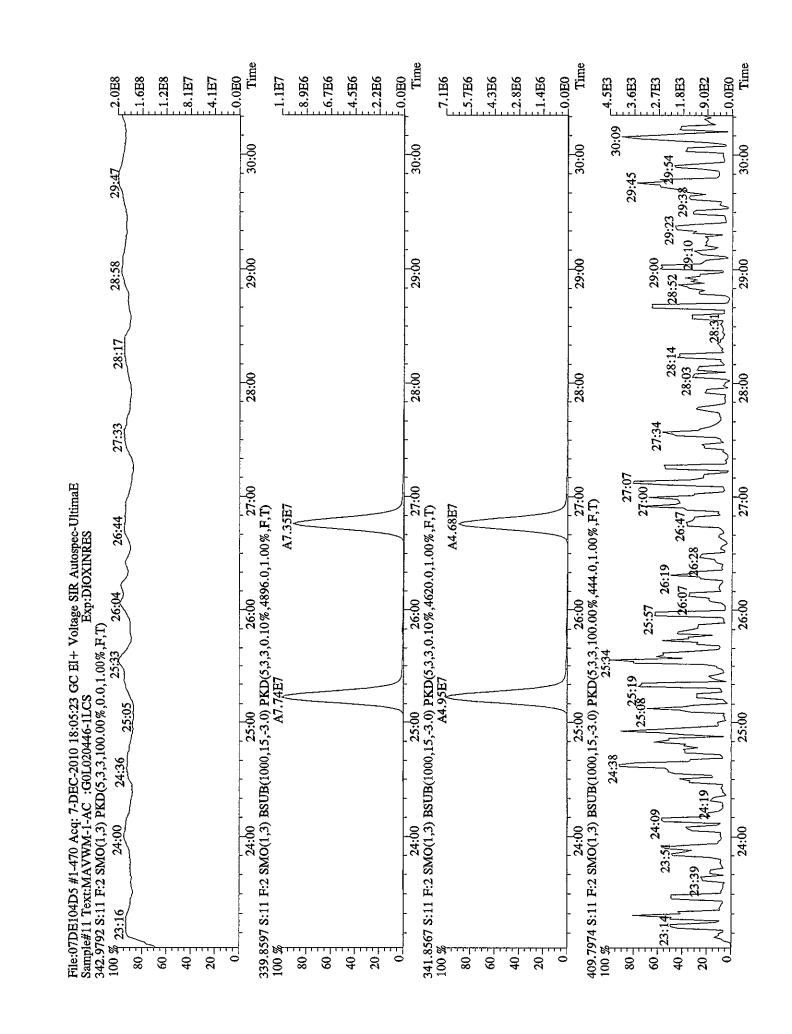


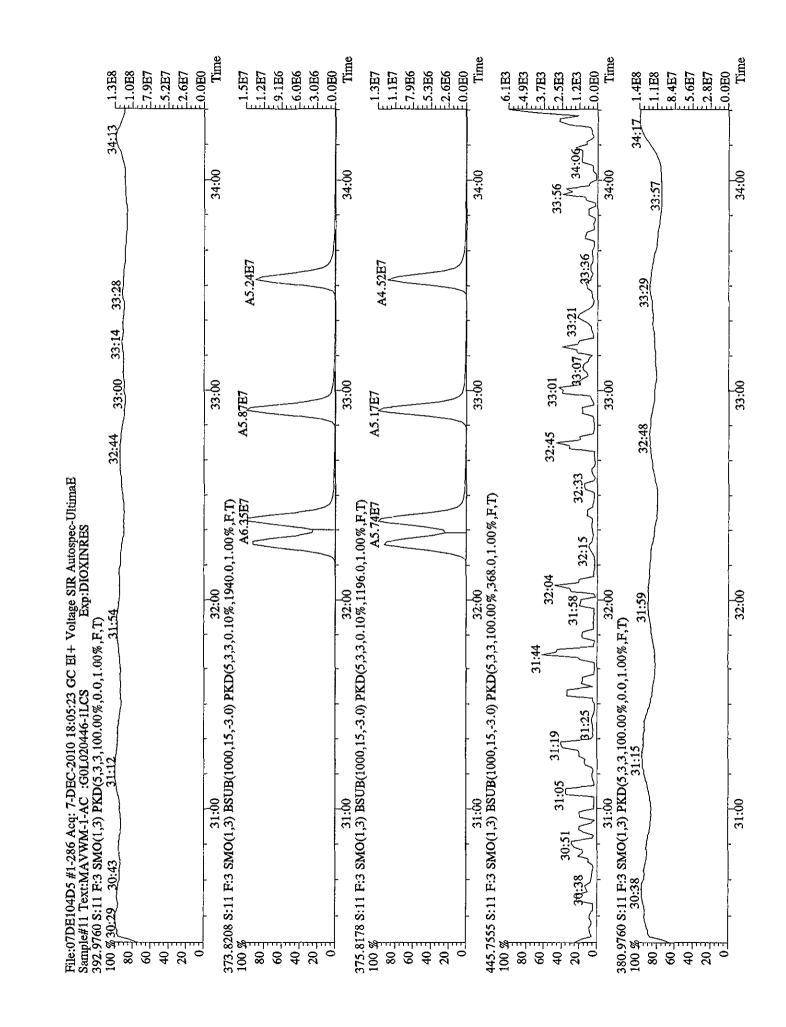


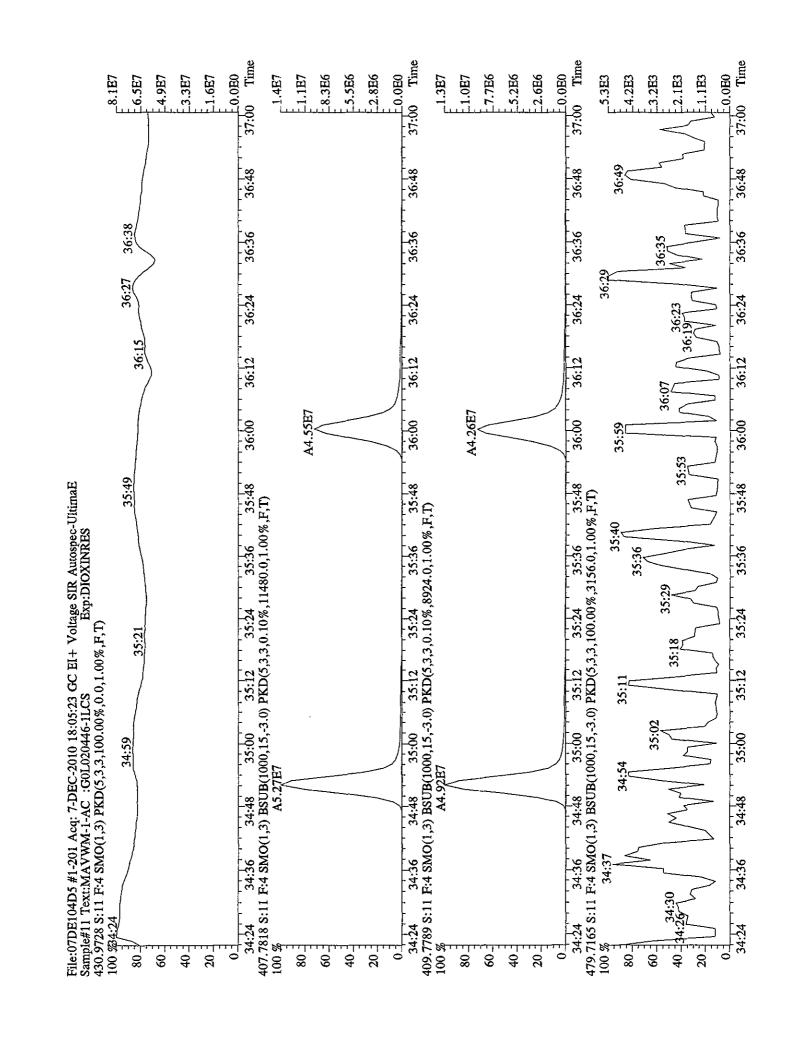


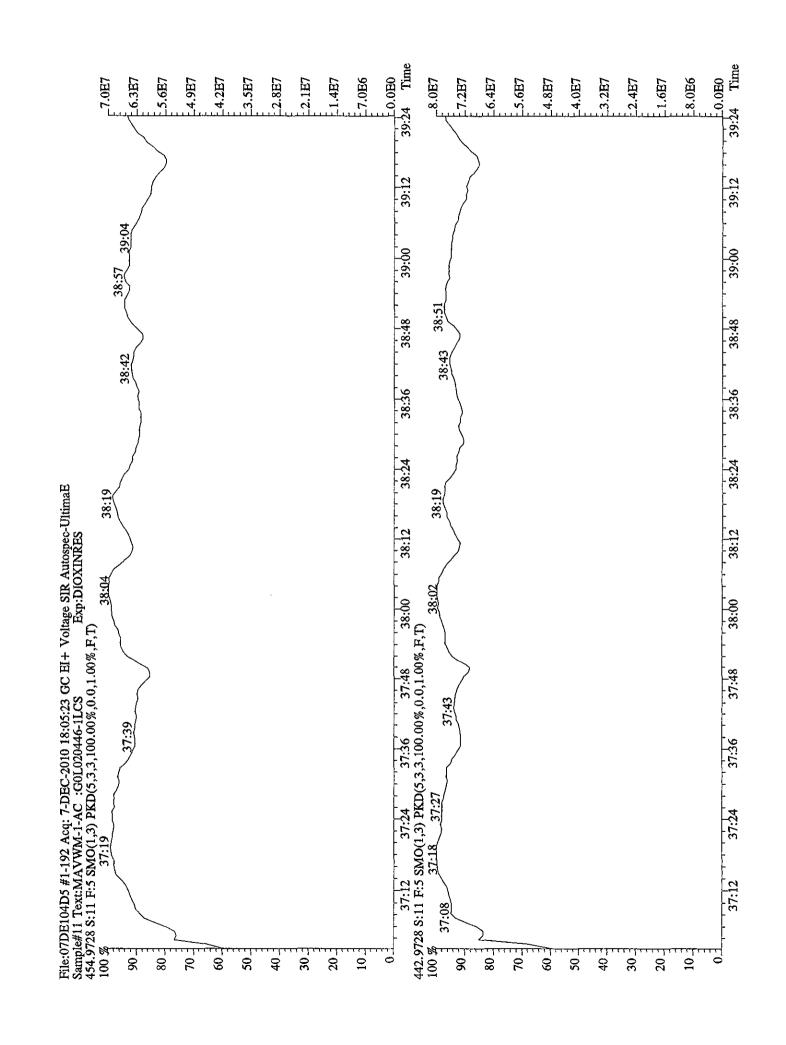








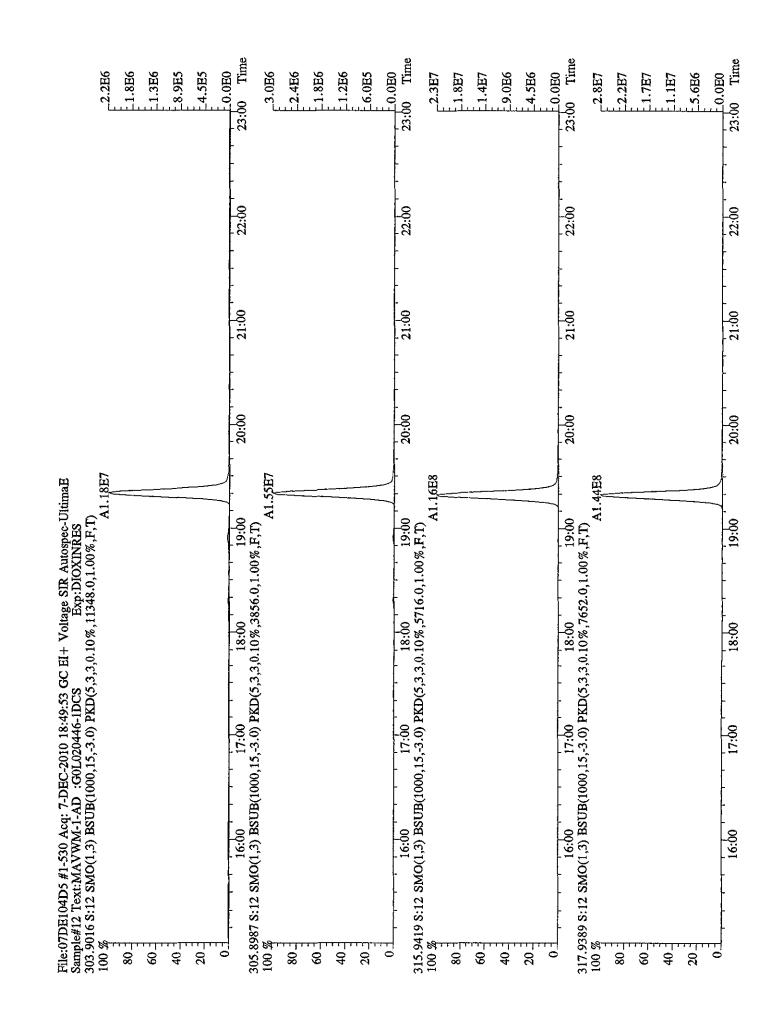


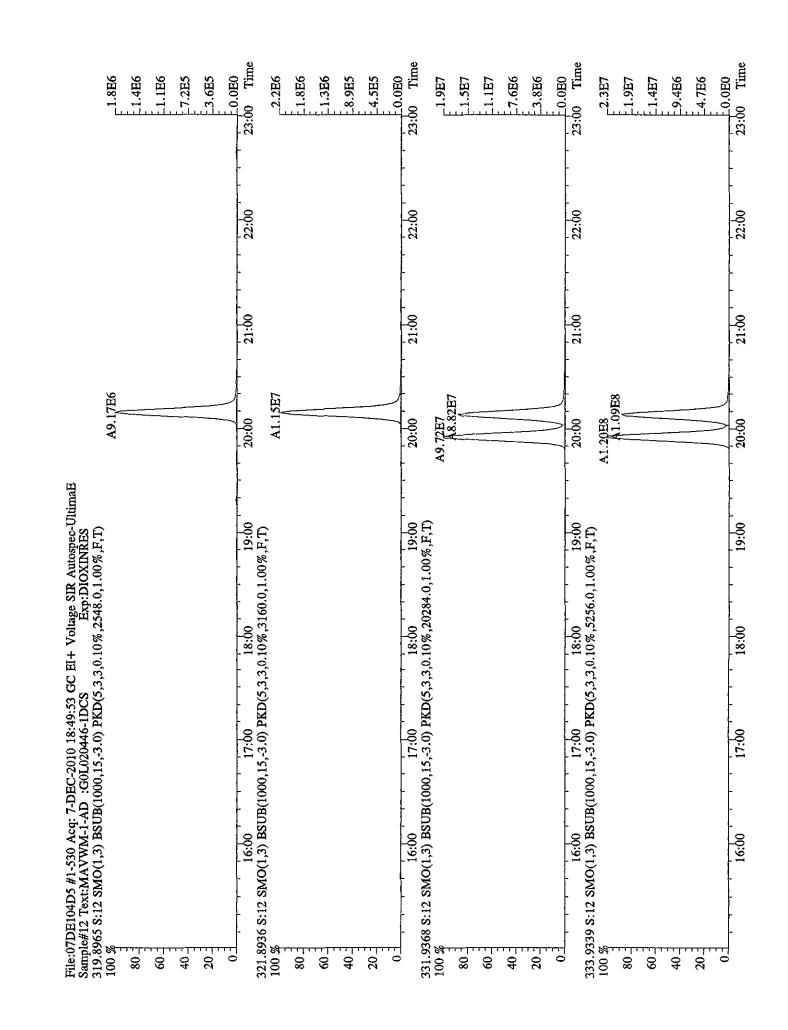


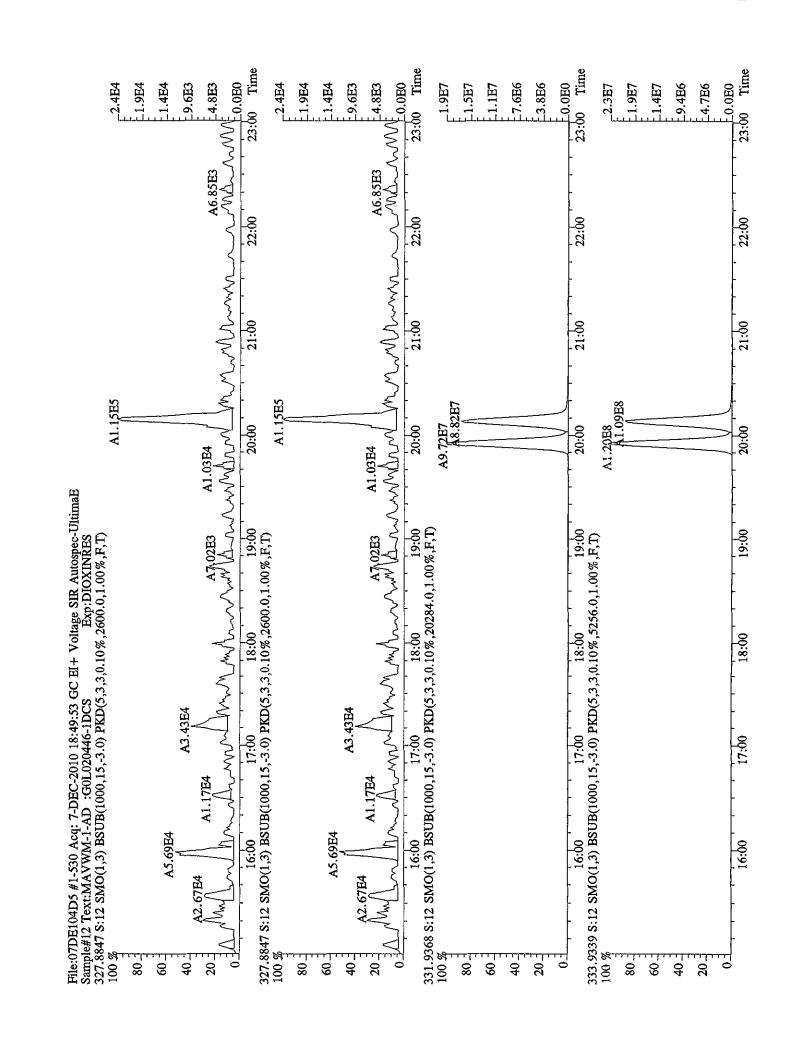
Run text: MAVWM-1-AD Sample text: MAVWM-1-AD :GOL020446-1DCS Run #10 Filename: 07DE104D5 S: 12 I: 1 Results: 07DE104D5T09

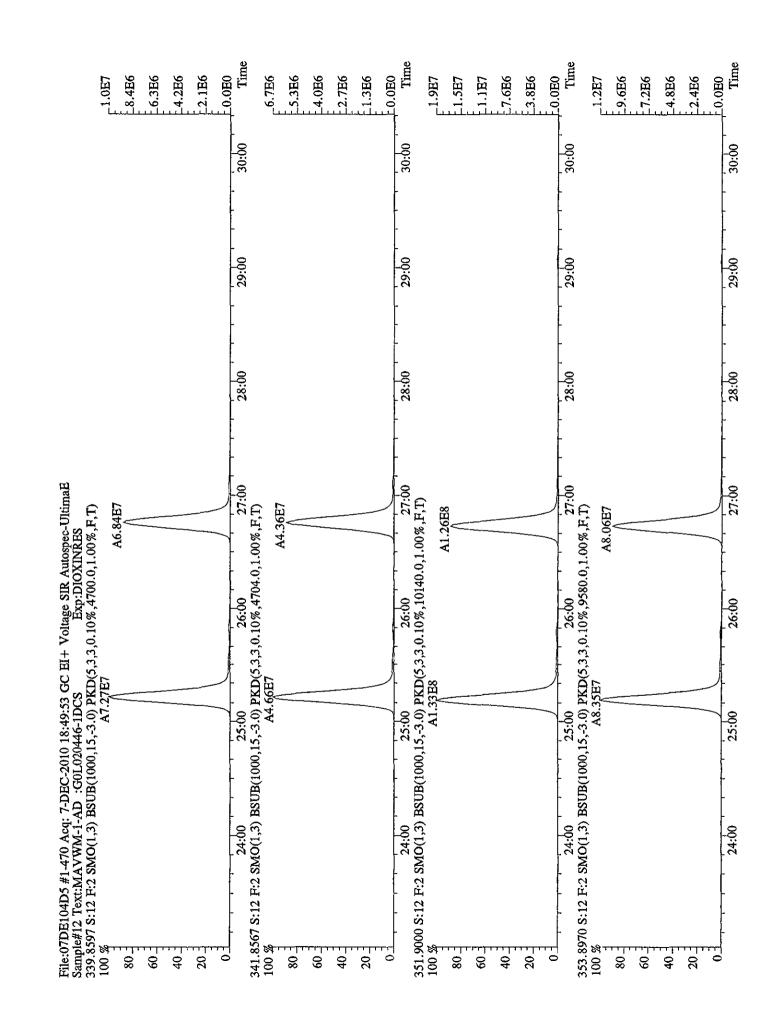
Acquired: 7-DEC-10 18:49:53 Processed: 8-DEC-10 07:53:19
Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5
Factor 1: 1600.000 Factor 2: 20.000 Sample size: 0.500000SAMP

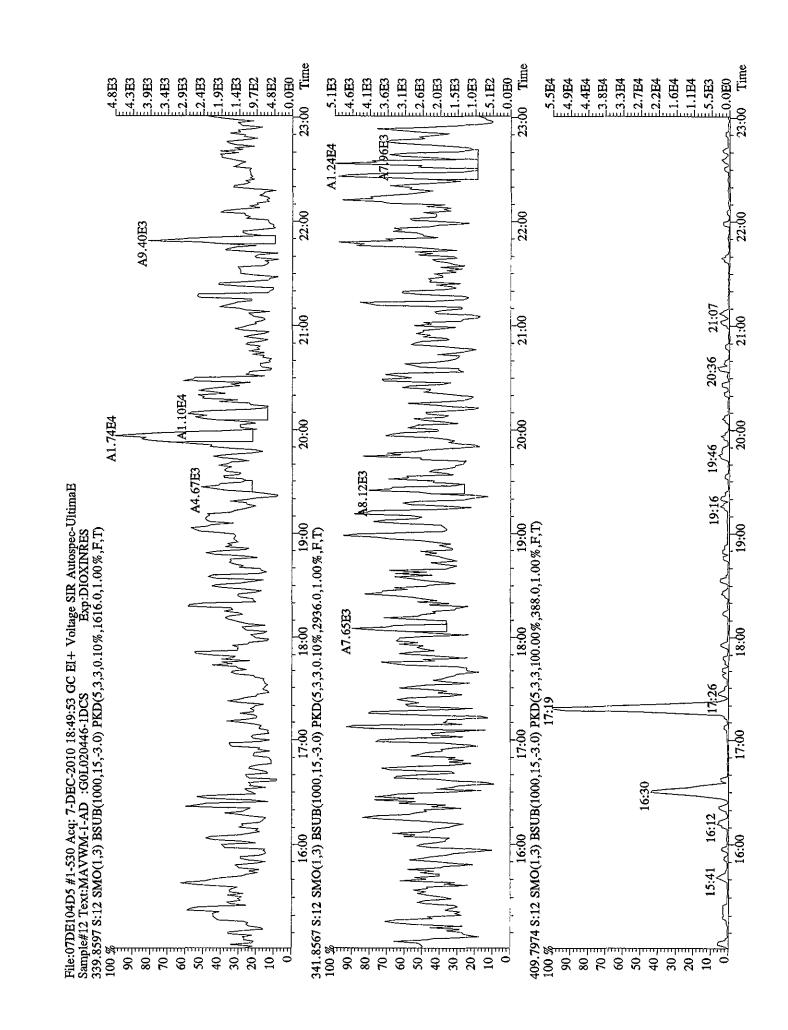
| Factor 1: 1600.000      | Factor 2: 20.000 |      | Sample Size: 0.500000S |      |                    | AMP Y~        |       |   |
|-------------------------|------------------|------|------------------------|------|--------------------|---------------|-------|---|
| Name                    | Resp F           | AS   | RT                     | RRF  | Conc               | EDL           | Rec   | М |
| 13C-1,2,3,4-TCDD        | 217646008 0.8    | 31 y | 19:56                  | -    | 130.33             | -             | -     | n |
| 13C-2,3,7,8-TCDF        | 259869712 0.8    | 31 y | 19:19                  | 1.23 |                    | 3.09          | 97.1  | n |
| 2,3,7,8-TCDF            | 27306931 0.7     | '6 y | 19:20                  | 0.99 | 422.64             | 3.63          | -     | n |
| Total TCDF              | 27680068 0.3     | 8 n  | 18:18                  | 0.99 | 428.41             | 3.63          | -     | n |
| 13C-2,3,7,8-TCDD        |                  |      |                        |      |                    | 8.01          | 100.2 | n |
| 2,3,7,8-TCDD            | 20672333 0.8     | 0 у  | 20:09                  | 0.98 | 426.15             | 1.87          | -     | n |
| Total TCDD              | 20806521 0.8     | 6 у  | 18:51                  | 0.98 | 428.91             | 1.87          | -     | n |
| 37C1-2,3,7,8-TCDD       | 229456 1.0       | 00 У | 20:09                  | 1.33 | 3.51               | 1.26          | 0.2   | n |
| 13C-1,2,3,7,8-PeCDF     | 216153656 1.5    | 9 y  | 25:11                  | 0.88 | 4534.64            | 6.39          | 113.4 | n |
| 1,2,3,7,8-PeCDF         | 119293228 1.5    | 66 y | 25:13                  | 1.08 | 2050.43            | 3.38          | _     | n |
| 2,3,4,7,8-PeCDF         | 111996160 1.5    | 57 y | 26:46                  | 1.05 | 1982.17            | 3,48          | _     | n |
| Total F2 PeCDF          | 233499175 1.6    | 8 y  | 23:36                  | 1.06 | 4071.13            | 3.43          | -     | n |
| Total F1 PeCDF          | 7682 0.5         | 8 n  | 19:27                  | 1.06 | 0.13               | 1.66          | -     | n |
| 13C-1,2,3,7,8-PeCDD     | 154850632 1.6    | 32 y | 27:35                  | 0.66 | 4306.61            | 3.31          | 107.7 | n |
| 1,2,3,7,8-PeCDD         | 79269660 1.5     | 3 y  | 27:37                  | 0.93 | 2212.56            | 3.86          | _     | n |
| Total PeCDD             | 79269660 1.5     | 3 y  | 27:37                  | 0.93 | 2212.56            | 3.86          | -     | n |
| 13C-1,2,3,7,8,9-HxCDD   | 143413824 1.2    | 8 y  | 33:22                  | -    | 12/8/10 Mes 121.13 | -             | -     | n |
| 13C-1,2,3,4,7,8-HxCDF   | 138545424 0.5    | 0 v  | 32:15                  |      |                    | 2.26          | 92.5  | n |
| 1,2,3,4,7,8-HxCDF       | 89331488 1.1     |      |                        |      |                    | 0.86          | -     | n |
| 1,2,3,6,7,8-HxCDF       | 105856768 1.1    | _    |                        |      |                    | 1464.251 0.81 | _     |   |
| 2,3,4,6,7,8-HxCDF       | 95360580 1.1     | _    |                        |      |                    | 0.85          | _     |   |
| 1,2,3,7,8,9-HxCDF       |                  |      |                        |      |                    |               |       | n |
| Total HxCDF             | 374165457 1.1    | _    |                        |      |                    |               | _     | n |
| 120 1 2 2 6 7 6 4.000   | 104700040 1 1    | A    | 22-06                  | 0.00 | 47.06.46           | 1 02          | 104 7 |   |
| 13C-1,2,3,6,7,8-HxCDD   | 124700948 1.1    | _    |                        |      |                    |               |       | n |
| 1,2,3,4,7,8-HxCDD       | 59993930 1.2     | -    |                        |      | 1855.41            | 1.48          | -     | n |
| 1,2,3,6,7,8-HxCDD       | 77214388 1.2     |      |                        |      | 2130.03            | 1.32          | -     | n |
| 1,2,3,7,8,9-HxCDD       | 73045130 1.2     | -    |                        |      | 1982.75            | 1.30          | -     | n |
| Total HxCDD             | 210253448 1.2    | 3 y  | 33:03                  | 1.13 | 5968.19            | 1.36          | -     | n |
| 13C-1,2,3,4,6,7,8-HpCDF | 111685080 0.4    | _    |                        |      | 3423.04            | 14.72         | 85.6  | n |
| 1,2,3,4,6,7,8-HpCDF     | 82718964 1.0     | _    |                        |      | 2201.39            | 7.73          | _     | n |
| 1,2,3,4,7,8,9-HpCDF     | 70336460 1.0     | _    |                        |      | 2303.83            | 9.51          | -     | n |
| Total HpCDF             | 153055424 1.0    | 7 y  | 34:53                  | 1.22 | 4505.22            | 8.52          | -     | n |
| 13C-1,2,3,4,6,7,8-HpCDD | 103533768 1.0    | 5 у  | 35:41                  | 0.83 | 3493.43            | 7.46          | 87.3  | n |
| 1,2,3,4,6,7,8-HpCDD     | 56669096 1.0     | 4 y  | 35:42                  | 1.07 | 2042.93            | 7.40          | -     | n |
| Total HpCDD             | 56994577 1.0     | 7 y  | 35:07                  | 1.07 | 2054.66            | 7.40          | -     | n |
| 13C-OCDD                | 155882152 0.9    | 1 y  | 38:14                  | 0.62 | 7013.66            | 6.15          | 87.7  | n |
| OCDF                    | 112077828 0.9    | _    |                        |      | 4197.58            | 8.25          | -     | n |
| OCDD                    | 93724116 0.9     |      |                        |      | 4010.61            | 1.56          | _     | n |
|                         |                  | -    |                        |      |                    | · - •         |       |   |

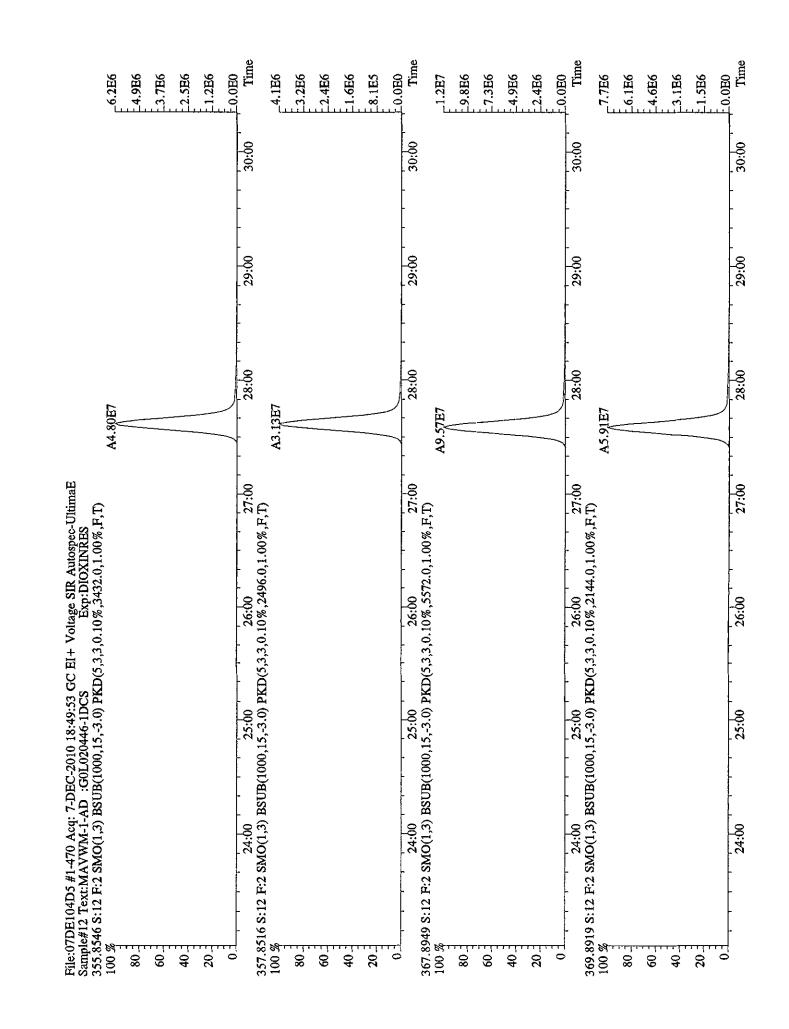


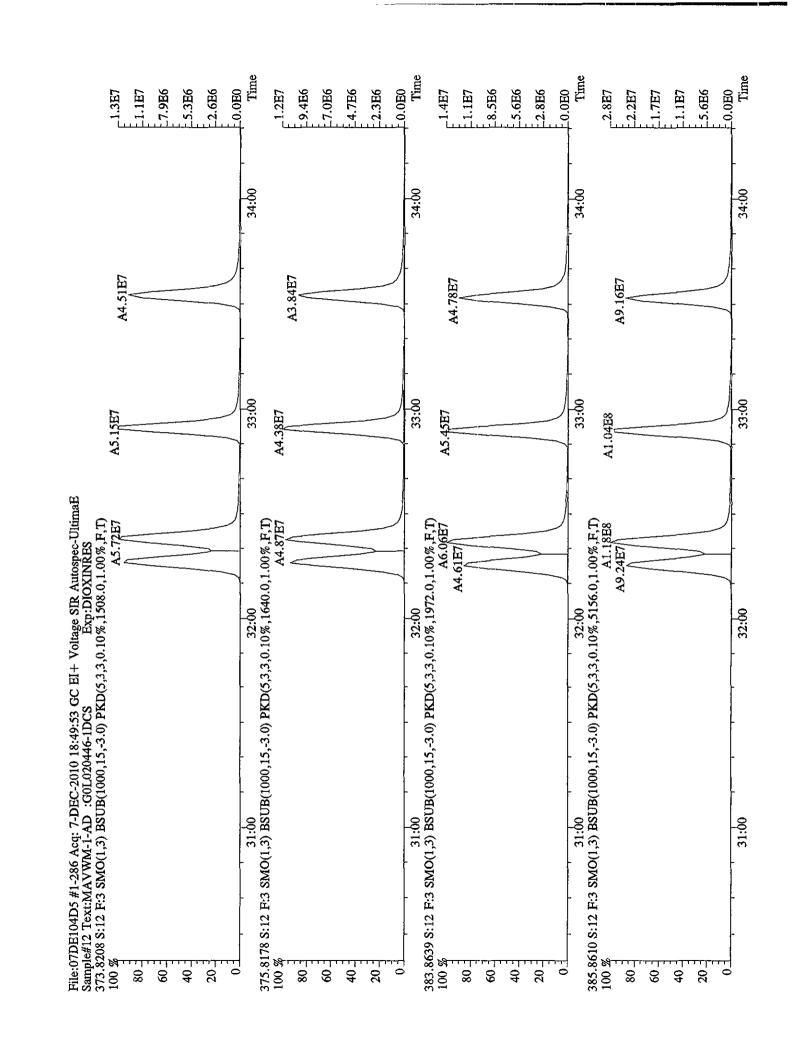


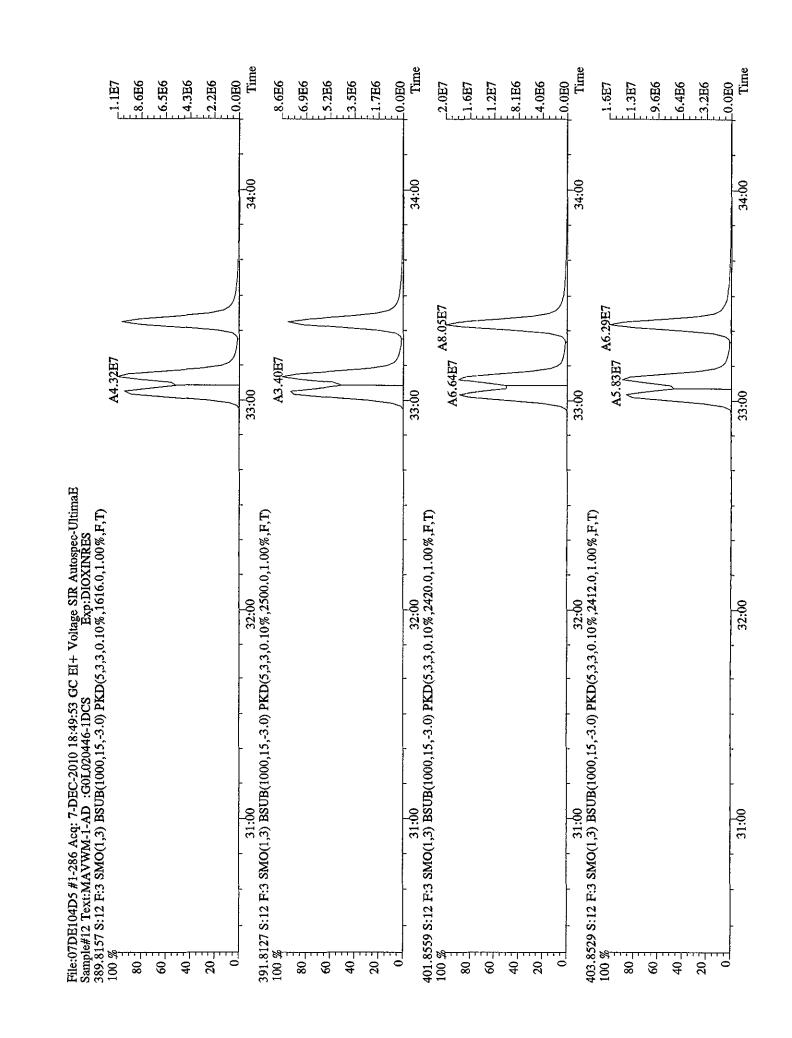


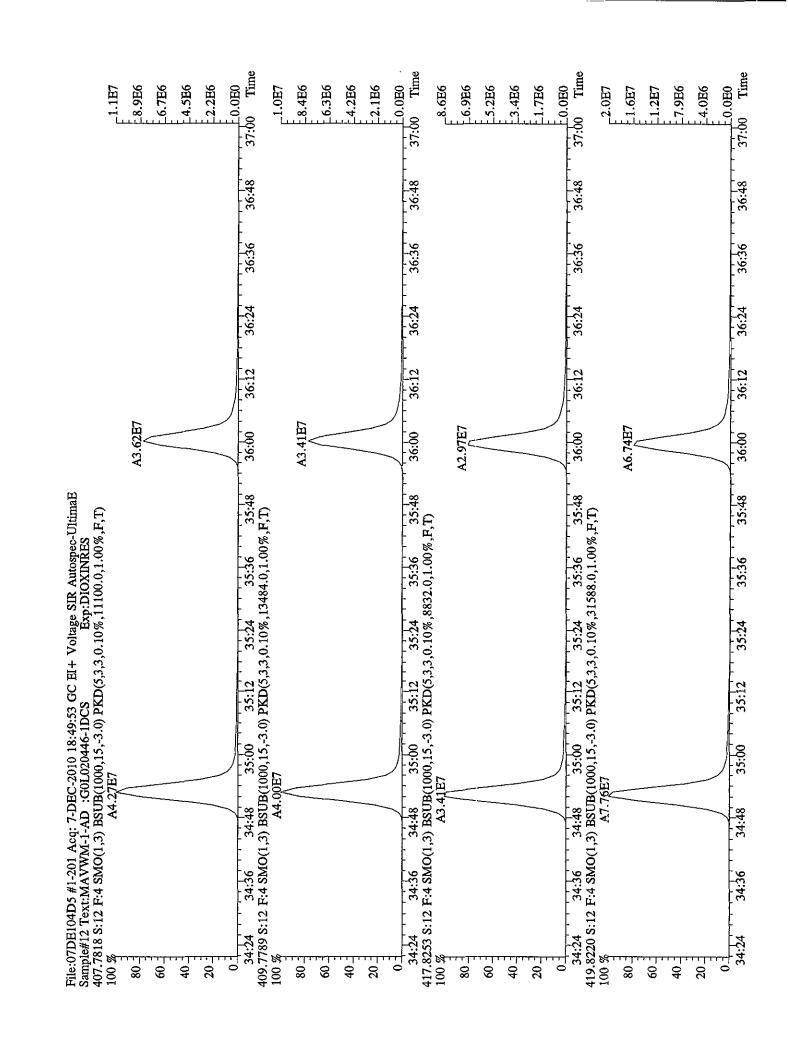


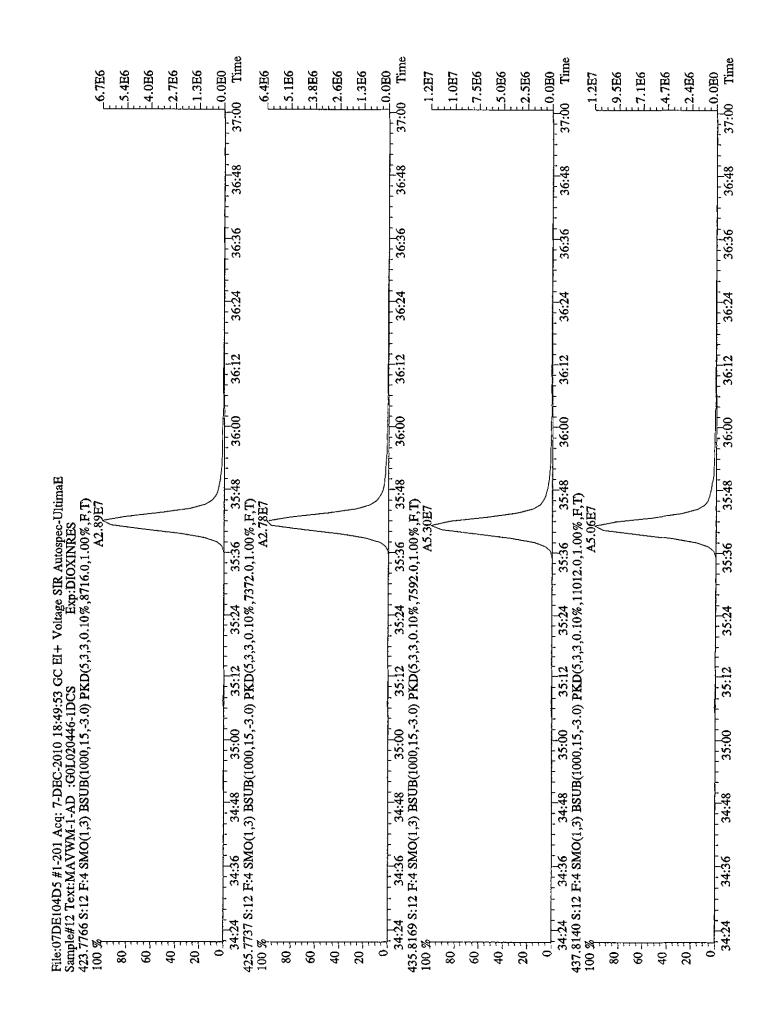


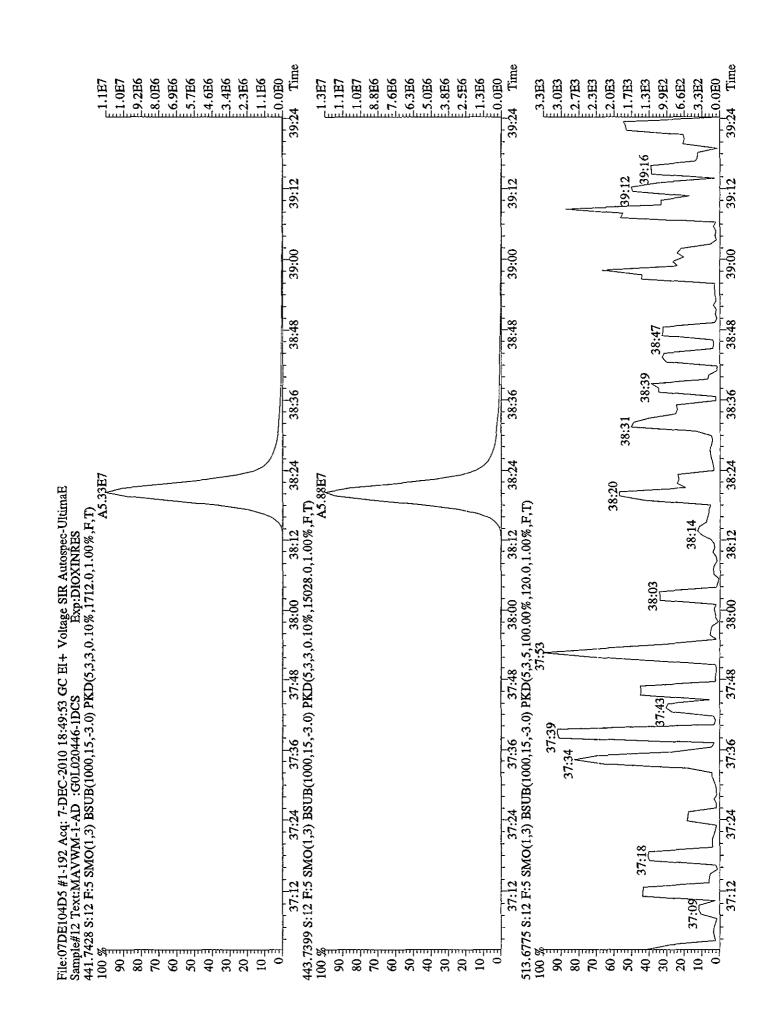


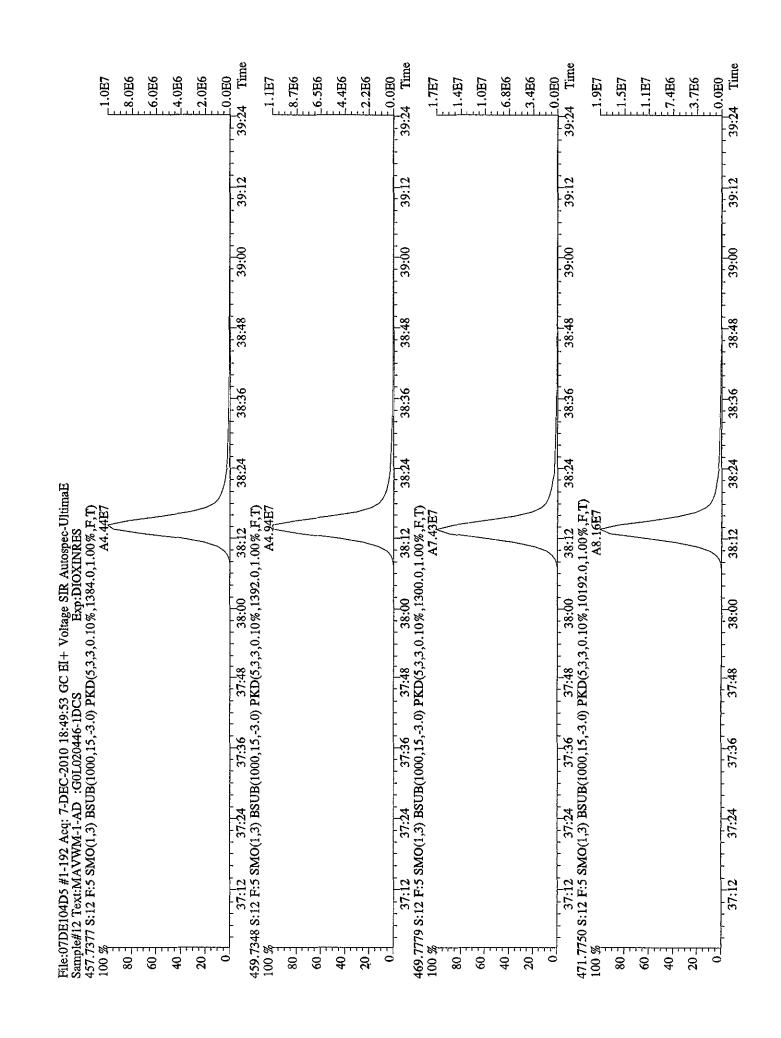


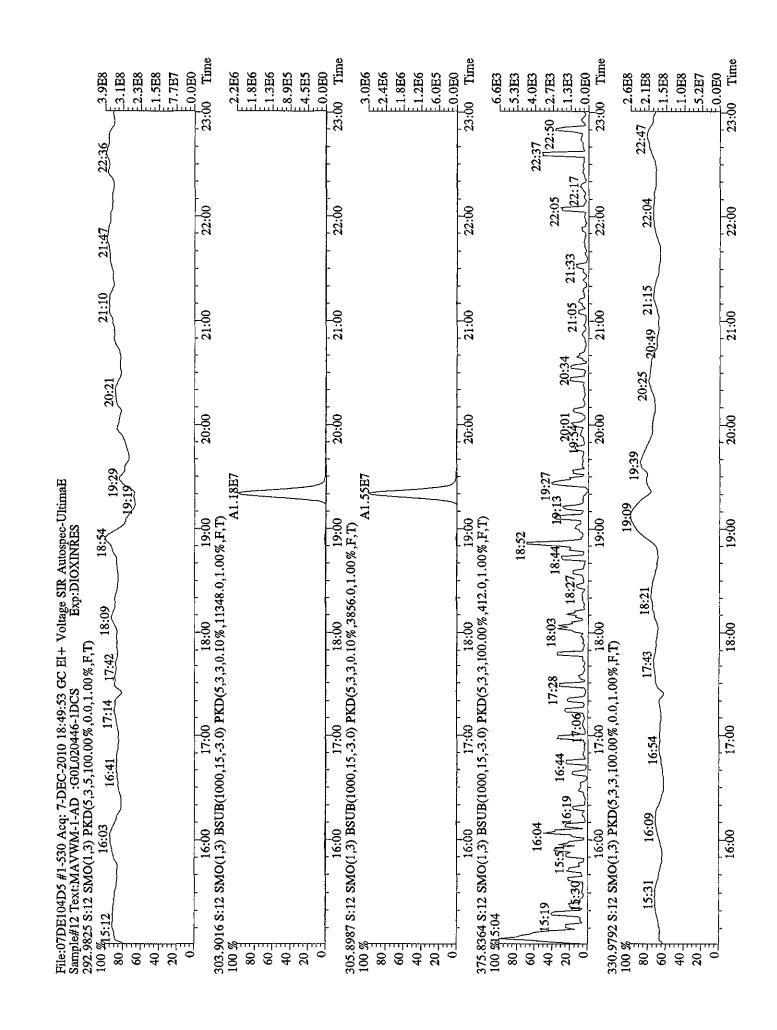


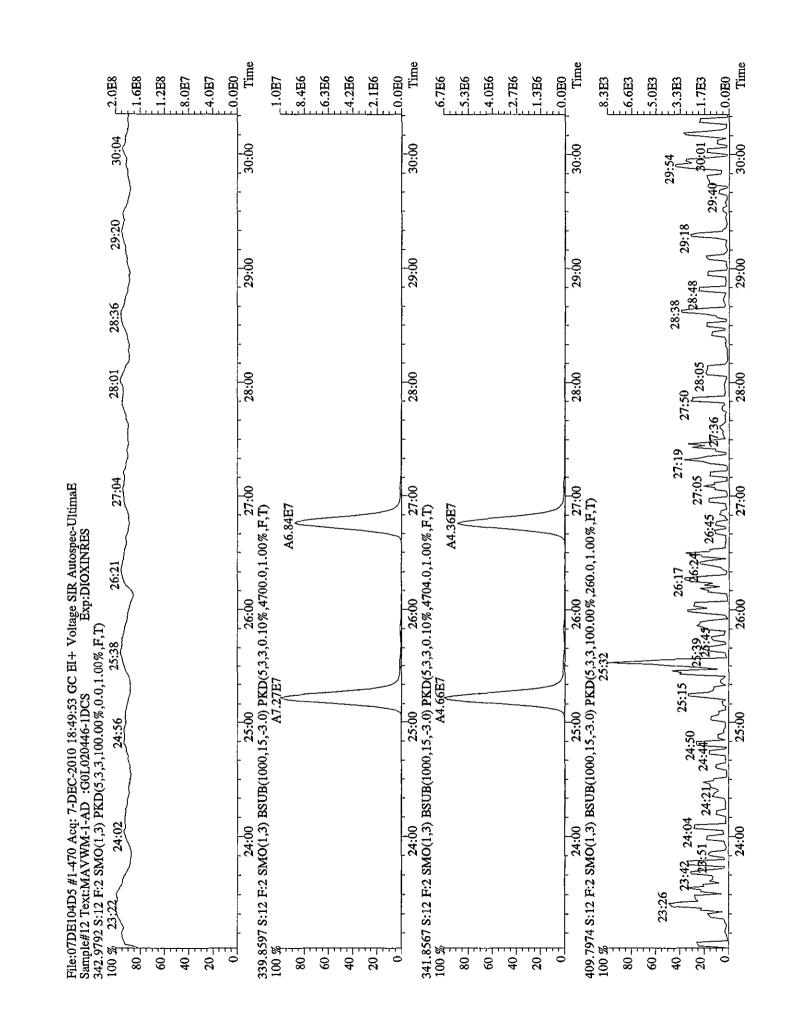


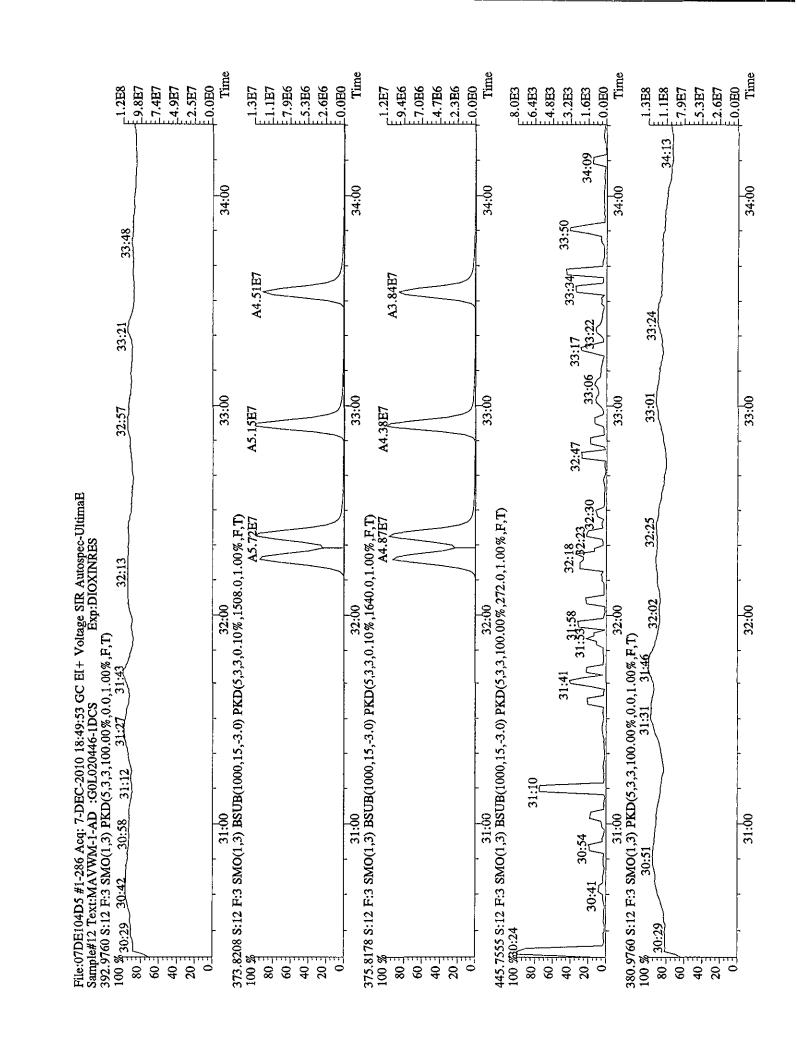


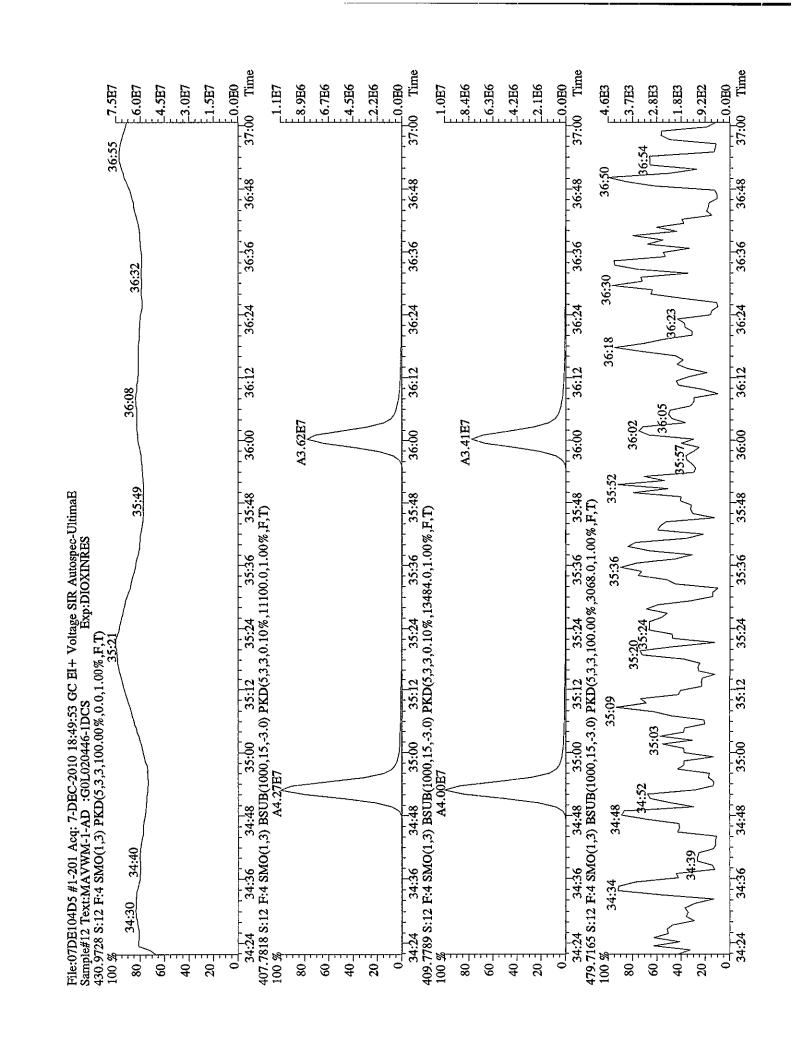


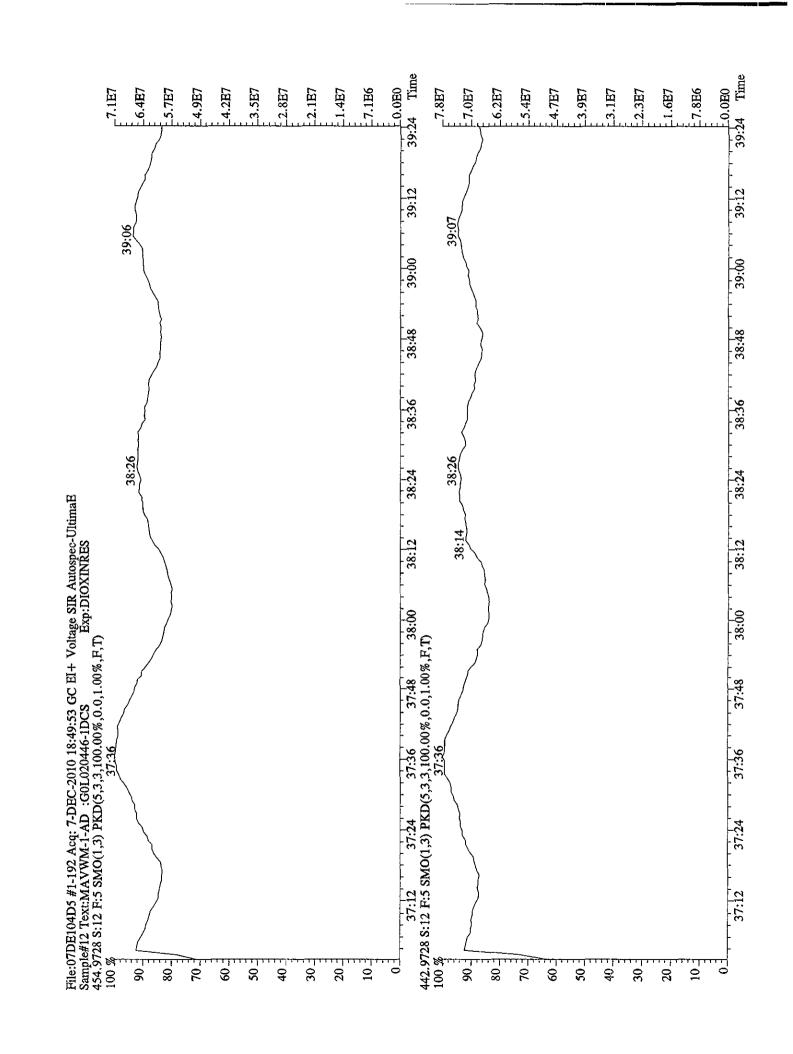












Sample text: MAQQV-1-AA :G0L020446-1 Run text: MAQQV-1-AA

Run #14 Filename: 07DE104D5 S: 17 I: 1 Results: 07DE104D5T09 Acquired: 7-DEC-10 22:32:36 Processed: 8-DEC-10 07:53:23

Run: 07DE104D5 Cal: T090721104D5

Analyte: TO9 12/8/10 Factor 1:1600.000 Factor 2:20.000 Sample size: 0.50 SAMP Me Name Resp RA RT RRF EDL Conc Rec М 13C-1,2,3,4-TCDD 234024000 0.80 y 19:55 140.138 n 93.9 13C-2,3,7,8-TCDF 270061000 0.80 y 19:19 1.23 3754.814 3.252n 2,3,7,8-TCDF 246414 0.90 n 19:21 0.99 3 <del>- 6.7</del>0 3.930 Total TCDF 529309 0.69 y 17:26 0.99 7.883 3.930 n 13C-2,3,7,8-TCDD 210367500 0.80 y 20:08 0.91 3972.858 8.204 99.3 n 2.572 2,3,7,8-TCDD \* n NotFnd 0.98 Total TCDD \* n NotFnd 0.98 2.572 37Cl-2,3,7,8-TCDD 112756600 1.00 y 20:09 1.33 1616.802 2.315 101.1 5.741 13C-1,2,3,7,8-PeCDF 200921200 1.57 y 25:11 0.88 3920.095 98.0 n \* \* n NotFnd 1.08 4.085 1,2,3,7,8-PeCDF n \* \* n NotFnd 1.05 2,3,4,7,8-PeCDF 4.206 n 199204 1.28 n 23:36 1.06 3.737 Total F2 PeCDF 4.145 49258 0.60 n 21:47 1.06 2.610 Total F1 PeCDF 0.924 4,206 13C-1,2,3,7,8-PeCDD 133653100 1.64 y 27:35 0.66 3456.944 4.642 86.4 n 1,2,3,7,8-PeCDD \* \* n NotFnd 0.93 5.853 Total PeCDD \* n NotFnd 0.93 5.853 13C-1,2,3,7,8,9-HxCDD 127143600 1.29 y 33:21 -107.385 n 13C-1,2,3,4,7,8-HxCDF 105737200 0.51 y 32:15 1.04 3183.947 12.817 79.6 n 1,2,3,4,7,8-HxCDF 198459 1.15 y 32:15 1.22 6.168 **3** 1.797 120100 1.56 n 32:23 1-28 1.54 1,2,3,6,7,8-HxCDF 3.545 360 2.92 1.706 2,3,4,6,7,8-HxCDF \* \* n NotFnd 1.23 1.773 33797 1.52 n 33:35 1.10 1.991 1,2,3,7,8,9-HxCDF 1 - 16423...756 Total HxCDF 763495 1.10 y 30:59 1.21 1.811 12/8/10 Mas 17.5641 13C-1,2,3,6,7,8-HxCDD 101805500 1.29 y 33:06 0.83 3855.183 3:749 96.4 \* n NotFnd 1.04 2.707 1,2,3,4,7,8-HxCDD \* n 1,2,3,6,7,8-HxCDD \* \* n NotFnd 1.16 2.415 n 1,2,3,7,8,9-HxCDD \* n NotFnd 1.18 2.376 n \* n NotFnd 1.13 2.491 Total HxCDD 2.707 13C-1,2,3,4,6,7,8-HpCDF 94933900 0.45 y 34:51 0.91 3281.971 20.621 82.0 n 14.556 JQB 464924 1.40 n 34:51 1.35 1.904 1,2,3,4,6,7,8-HpCDF n 1,2,3,4,7,8,9-HpCDF 120428 0.95 y 36:00 1.09 4.641 **5** 2.343 Total HpCDF 857400 1.40 n 34:51 1.22 28.595 2.101 3357,008 12,905 83.9 88203400 1.06 y 35:40 0.83 13C-1,2,3,4,6,7,8-HpCDD n 5.155 1,2,3,4,6,7,8-HpCDD 60859 0.68 n 35:40 1.07 2:575 Total HpCDD 189784 0.73 n 35:06 1.07 8.031 5.155 13C-OCDD 129466700 0.91 y 38:12 0.62 6570.572 7.377 82.1 n OCDF 1578861 0.90 y 38:21 1.37 71.197 🍸 3.735

OCDD 364594 1.07 n 38:13 1.20 18.785 **TQB** 3.409 - n

Run Text: MAQQV-1-AA Sample text: MAQQV-1-AA :G0L020446-1

Name: Total F1 PeCDF F:1 Mass: 339.860 341.857 Mod? no #Hom:1

Run: 14 File: 07DE104D5 S:17 Acq: 7-DEC-10 22:32:36

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: 0.462 of which \* named and 0.462 unnamed Conc: 0.924 of which \* named and 0.924 unnamed

# R.T. Ratio Conc. Area S/N >? Mod? Name

1 21:47 0.598 n 0.924 29941 1.760 n n

50052 2.435 n n

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Run Text: MAQQV-1-AA Sample text: MAQQV-1-AA :G0L020446-1

Name: Total PeCDD F:2 Mass: 355.855 357.855 Run: 14 File: 07DE104D5 S:17 Acq: 7-DEC-10 22:32:36 F:2 Mass: 355.855 357.852 Mod? no #Hom:0

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

mount: \* of which \* named and \* unnamed Conc: \* of which \* named and \* unnamed Amount:

Name # R.T. Ratio Conc. Area S/N >? Mod?

> 1 NotFa \* n \* \* n n

Run Text: MAQQV-1-AA Sample text: MAQQV-1-AA :G0L020446-1

Name: Total HxCDF F:3 Mass: 373.821 375.818 Mod? no #Hom:9 Run: 14 File: 07DE104D5 S:17 Acq: 7-DEC-10 22:32:36

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

|                   | which which |         | named and | 6.440<br>12.879           | unnamed<br>unnamed |        |        | ( | 123678 HC |
|-------------------|-------------|---------|-----------|---------------------------|--------------------|--------|--------|---|-----------|
| Name              | # R.T.      | Ratio   | Conc.     | Area                      | S/N >?             | Мо     | d?     |   | PKG.      |
|                   | 1 30:59     | 1.100 y | 3.025     | 50595<br>45980            | 3.581<br>5.155     | y<br>y |        |   |           |
|                   | 2 31:14     | 0.889 n | 5.444     | 96207<br>1082 <b>4</b> 1  | 7.109<br>10.502    | у<br>У |        |   |           |
|                   | 3 31:50     | 1.070 y | 1.691     | 27903<br>26076            | 2.292<br>2.040     | n<br>n |        |   |           |
| 1,2,3,4,7,8-HxCDF | 4 32:15     | 1.153 y | 6.168     | 1062 <b>74</b><br>92185   | 7.793<br>10.229    | у<br>У |        |   | . حود فا  |
| 1,2,3,6,7,8-HxCDF | 5 32:23     | 1.555 n | 3.545     | * 2.927<br>83374<br>53616 | 7.416<br>6.742     | У      |        | 7 | 12.564    |
|                   | 6 32:39     | 1.461 n | 1.201     | 25019<br>17122            | 1.983<br>2.737     | n<br>n |        |   | ·         |
|                   | 7 32:50     | 1.633 n | 0.791     | 18404<br>11272            | 1.810<br>1.361     | n<br>n |        |   |           |
|                   | 8 33:31     | 0.851 n | 0.126     | 12835<br>15088            | 1.553<br>1.551     |        | n<br>n |   |           |
| 1,2,3,7,8,9-HxCDF | 9 33:35     | 1.516 n | 1.164     | 22868<br>15088            | 2.159<br>1.551     | n<br>n | n<br>n |   |           |

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Run Text: MAQQV-1-AA Sample text: MAQQV-1-AA :G0L020446-1

Name: Total HxCDD F:3 Mass: 389.816 391.813 Mod? no #Hom:0

Run: 14 File: 07DE104D5 S:17 Acq: 7-DEC-10 22:32:36

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

| Amount: | * of which | * named and | * unnamed |
|---------|------------|-------------|-----------|
| Conc:   | * of which | * named and | * unnamed |
|         |            |             |           |

# R.T. Ratio Conc. Area S/N >? Mod? Name 1 NotF<sub>1</sub> \* n \* \* n n

Run Text: MAQQV-1-AA Sample text: MAQQV-1-AA :G0L020446-1

Name: Total HpCDF F:4 Mass: 407.782 409.779 Run: 14 File: 07DE104D5 S:17 Acq: 7-DEC-10 22:32:36 F:4 Mass: 407.782 409.779 Mod? no #Hom:4

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: 14.298 of which 9.598 named and 4.699 unnamed Conc: 28.595 of which 19.197 named and 9.399 unnamed

| Name                | # | R.T.  | Ratio   | Conc.  | Area             | S/N >            | ? Mo   | d?     |
|---------------------|---|-------|---------|--------|------------------|------------------|--------|--------|
| 1,2,3,4,6,7,8-HpCDF | 1 | 34:51 | 1.395 n | 14.556 | 318003<br>227904 | 26.442<br>27.041 | У<br>У | n<br>n |
|                     | 2 | 35:04 | 1.191 y | 4.366  | 68692<br>57671   | 5.102<br>6.052   | y<br>Y | n<br>n |
|                     | 3 | 35:11 | 1.461 n | 5.033  | 104347<br>71414  | 7.543<br>8.759   | у<br>У | n<br>n |
| 1,2,3,4,7,8,9-HpCDF | 4 | 36:00 | 0.946 y | 4.641  | 58553<br>61875   | 3.962<br>7.709   | У<br>У | n<br>n |

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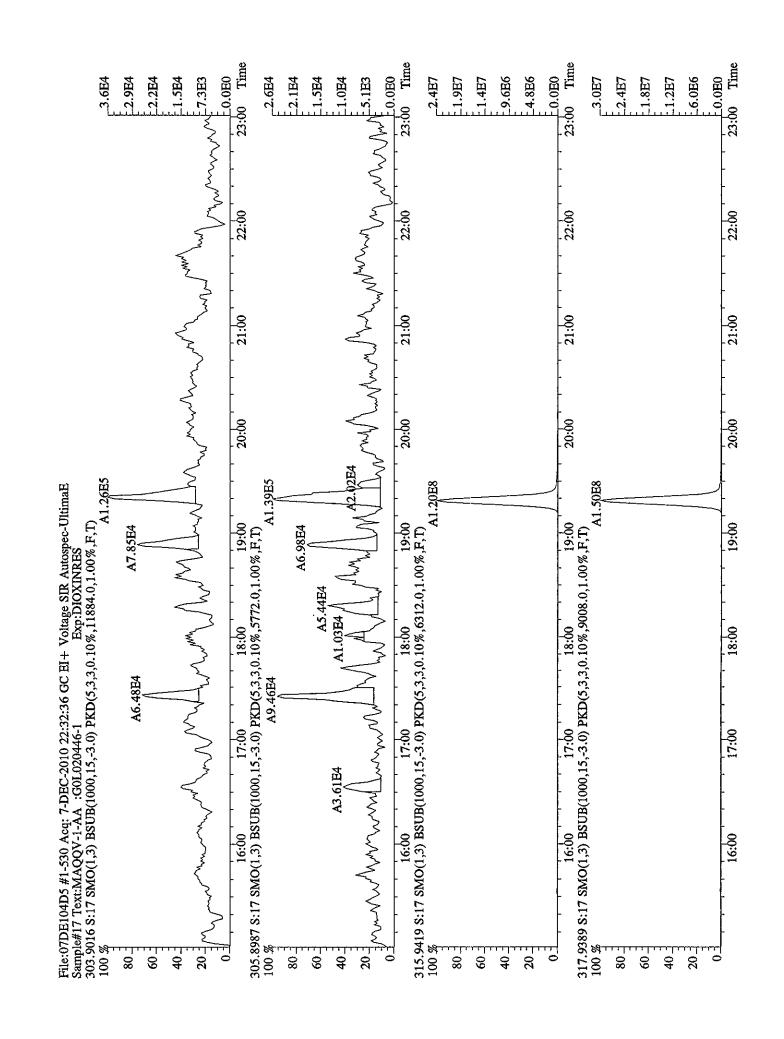
Run Text: MAQQV-1-AA Sample text: MAQQV-1-AA :G0L020446-1

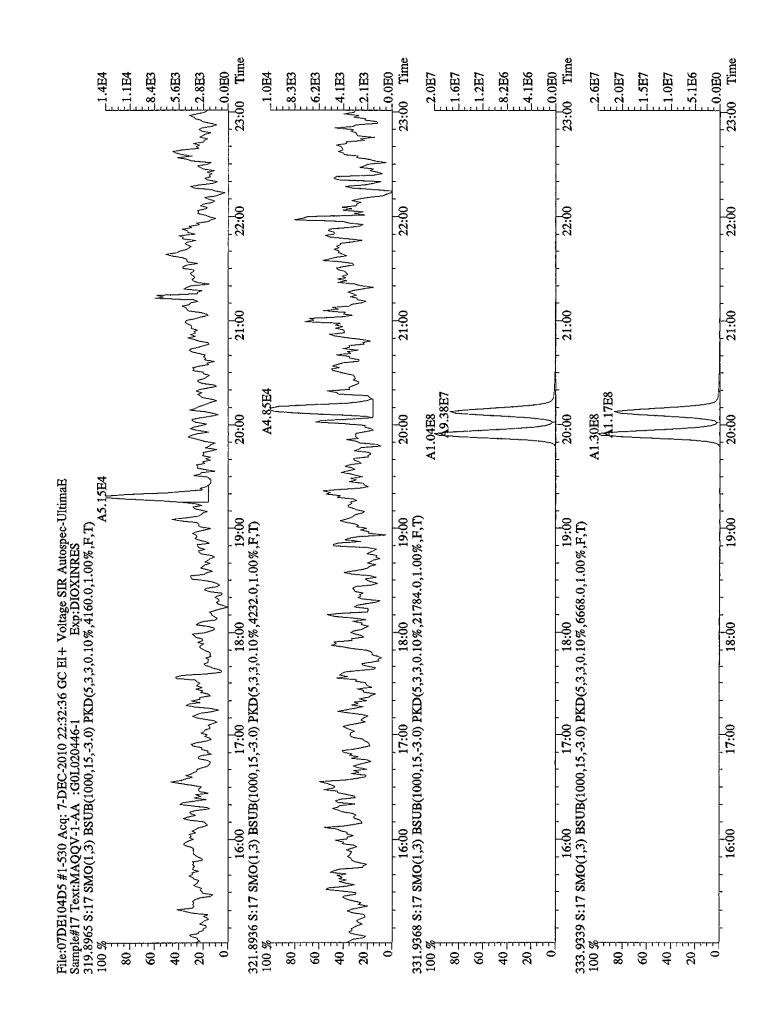
Name: Total HpCDD F:4 Mass: 423.777 425.774 Mod? no #Hom:3 Run: 14 File: 07DE104D5 S:17 Acq: 7-DEC-10 22:32:36

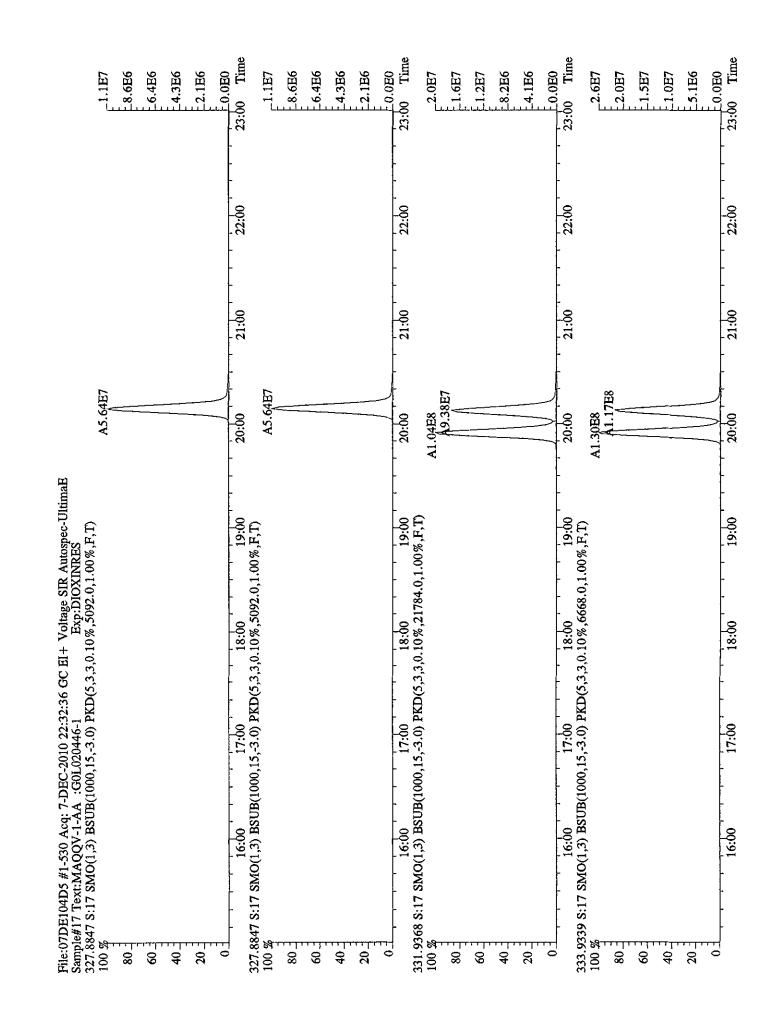
Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

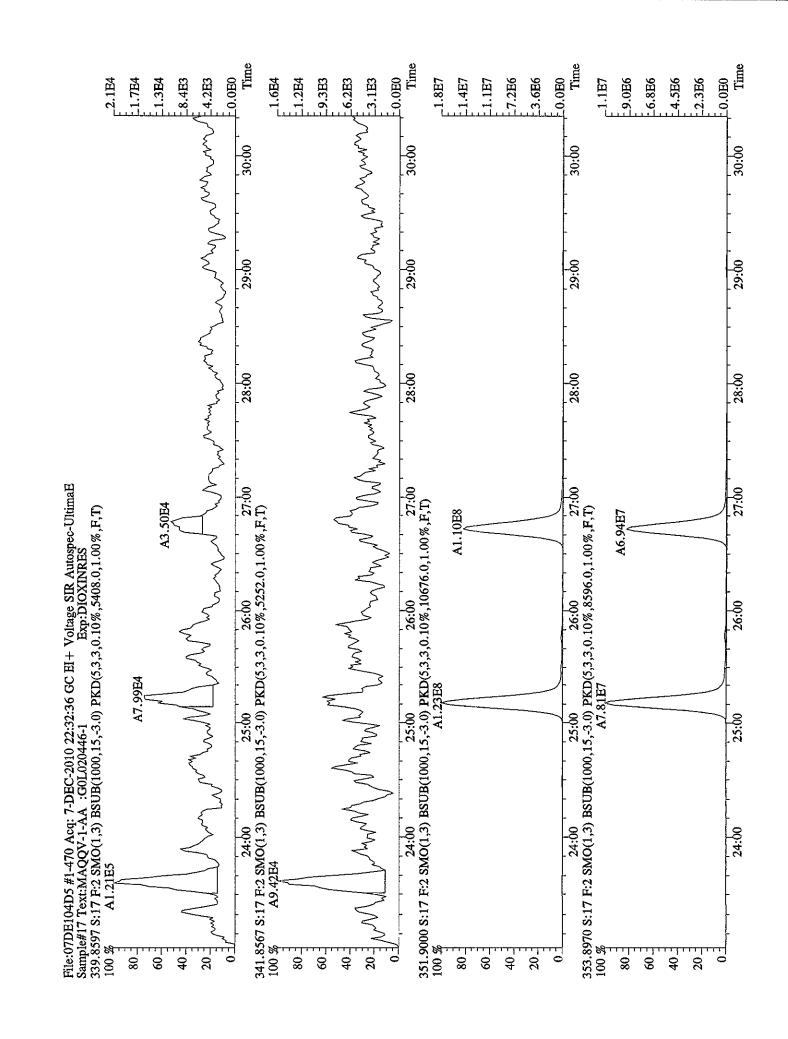
Amount: 4.015 of which 1.288 named and 2.728 unnamed Conc: 8.031 of which 2.575 named and 5.456 unnamed

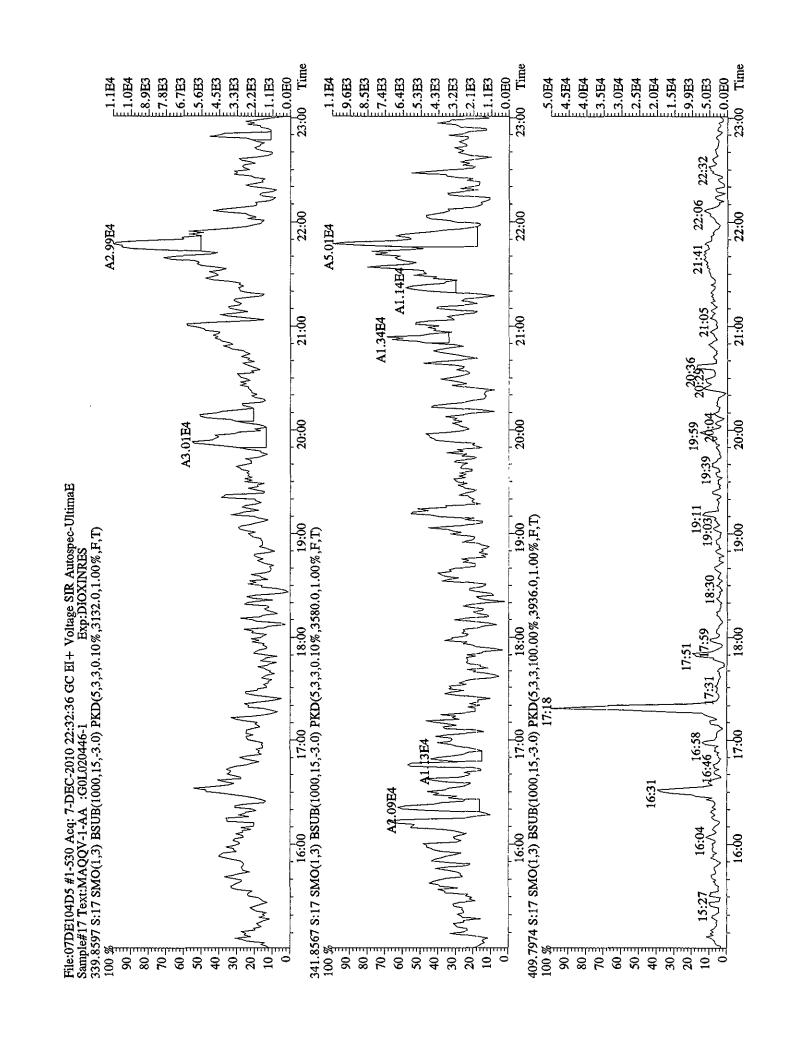
| Name                | # | R.T.  | Ratio   | Conc.  | Area                    | S/N >?         | Мо     | đ?     |
|---------------------|---|-------|---------|--------|-------------------------|----------------|--------|--------|
|                     | 1 | 35:06 | 0.726 n | 4.155  | 50056<br>68906          | 2.122<br>4.371 | n<br>Y | n<br>n |
| 1,2,3,4,6,7,8-HpCDD | 2 | 35:40 | 0.682 n | 2.5/15 | 31026<br>454 <b>7</b> 5 | 1.557<br>2.460 | n<br>n |        |
|                     | 3 | 36:00 | 2.960 n | 1.301  | 44594<br>15068          | 2.558<br>1.304 |        | n<br>n |

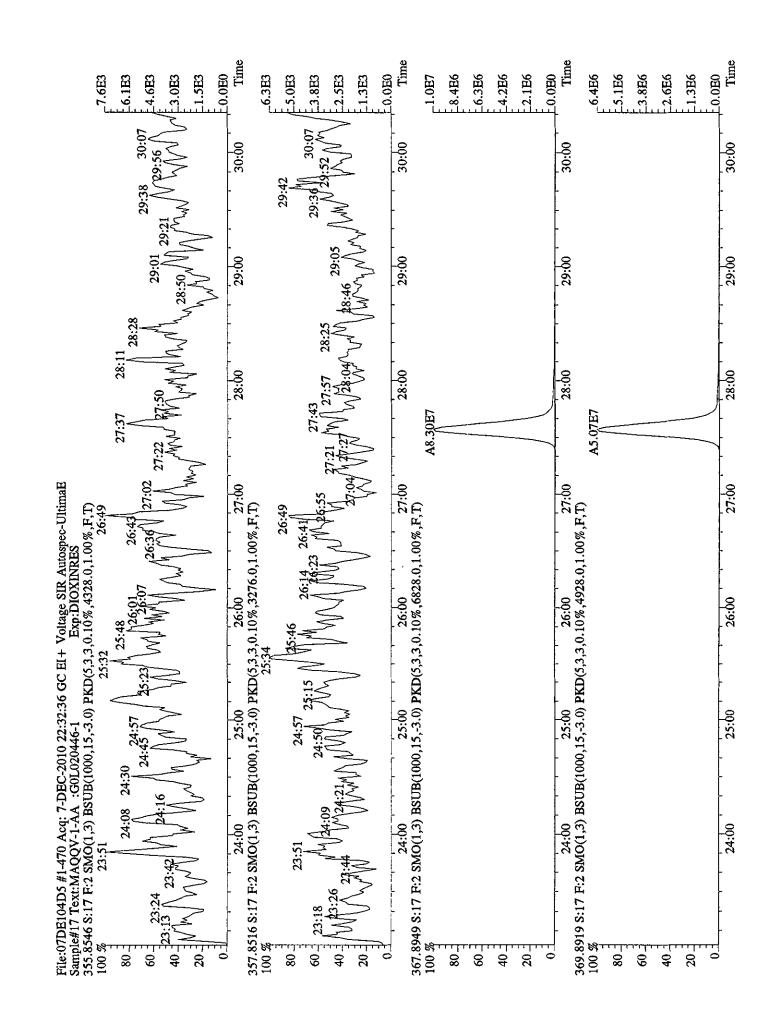


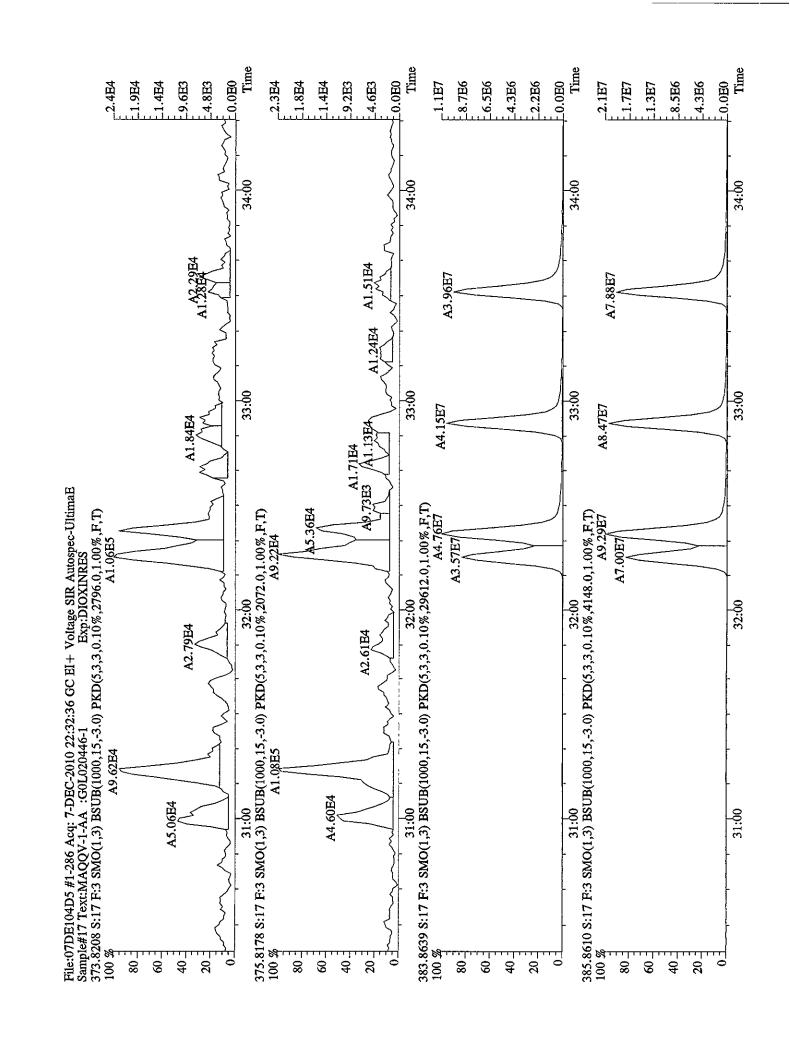


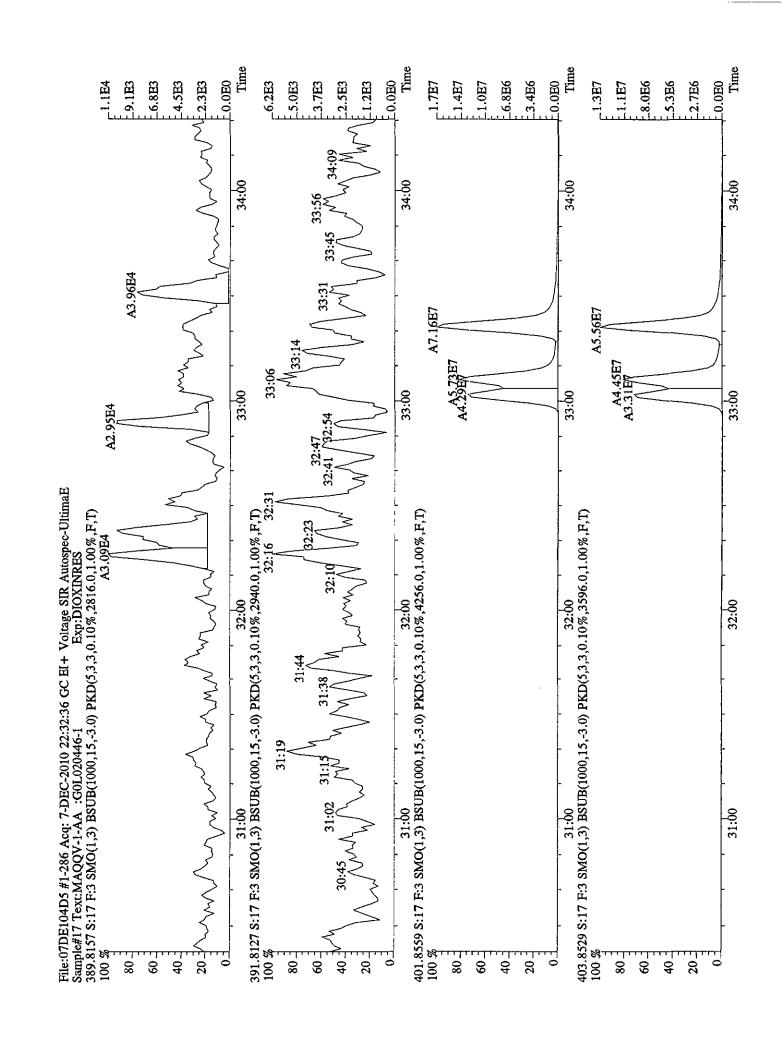


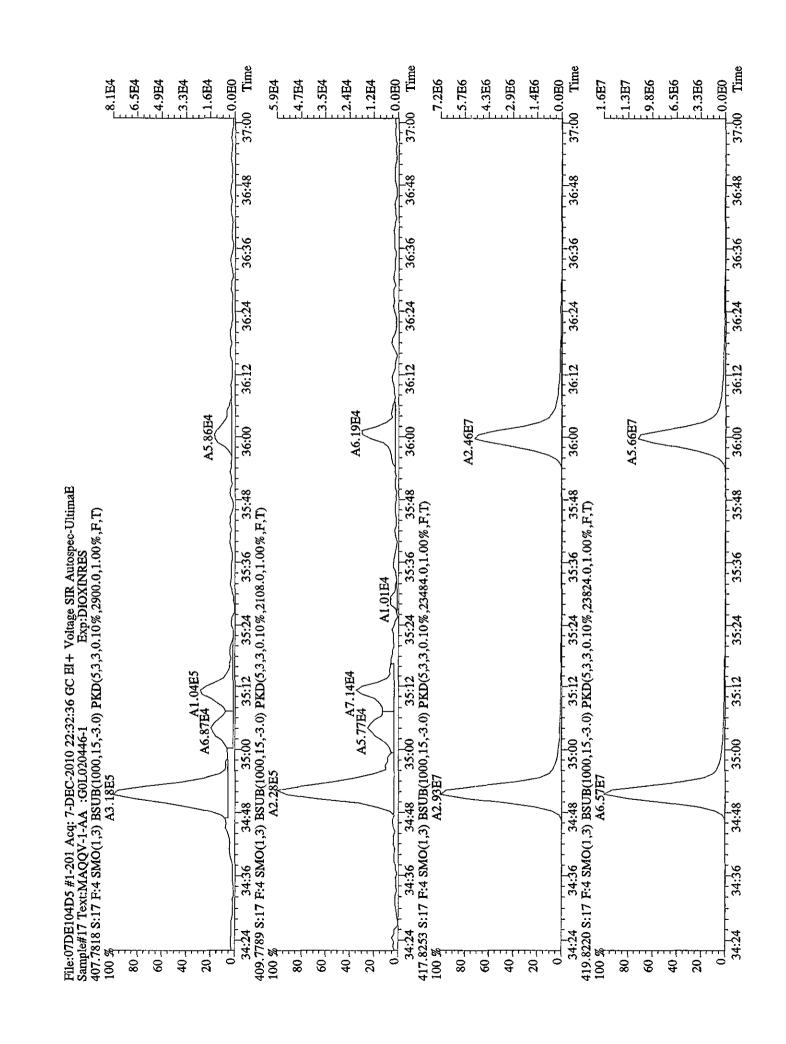


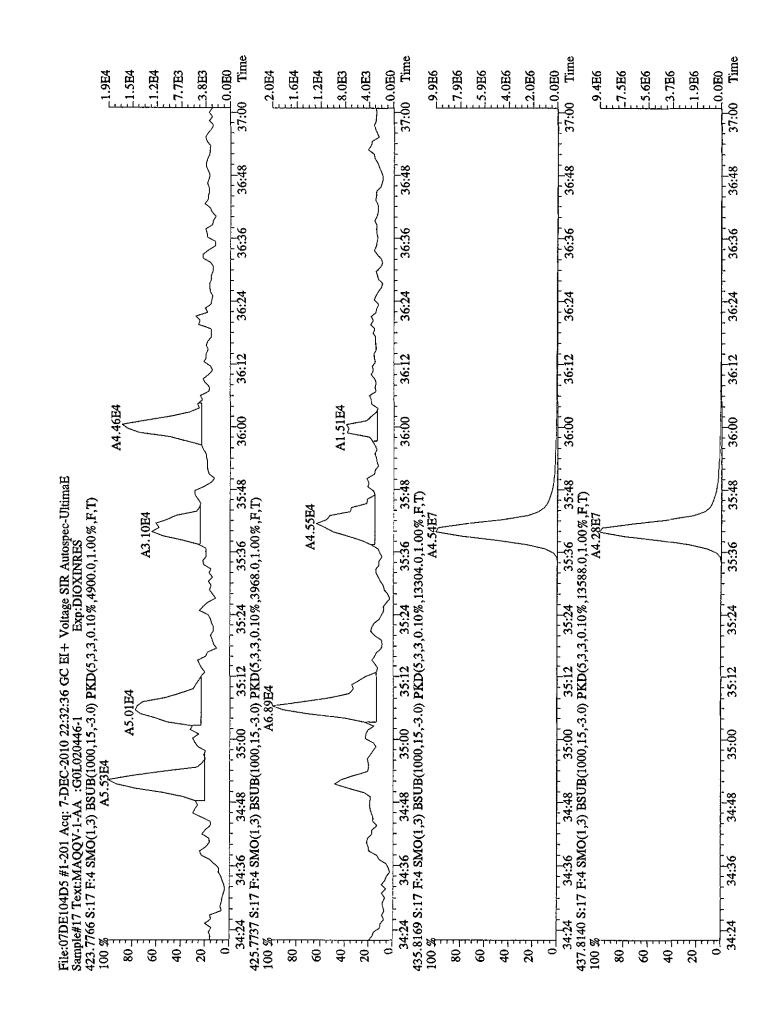


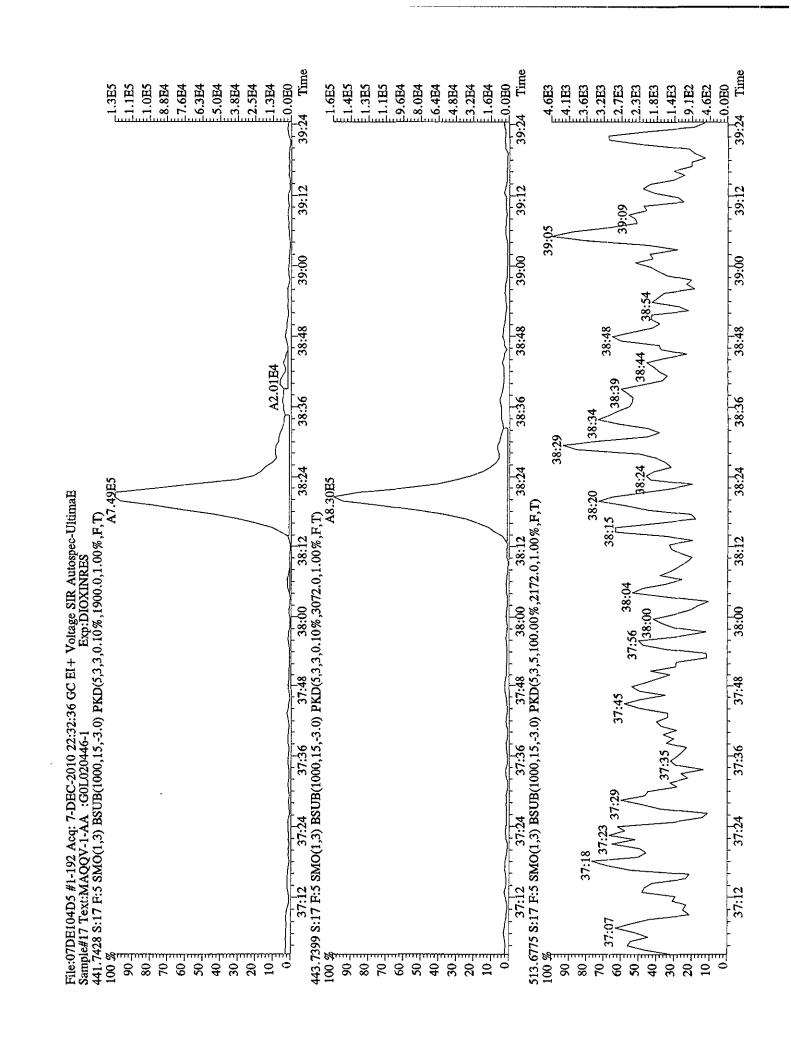


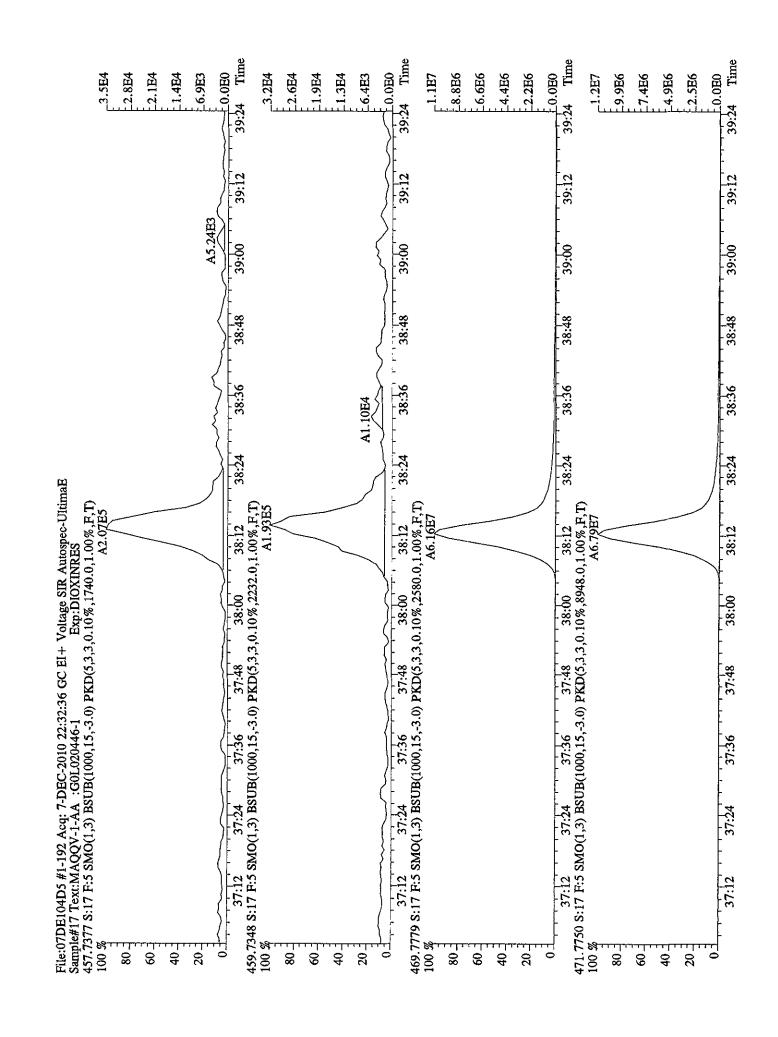


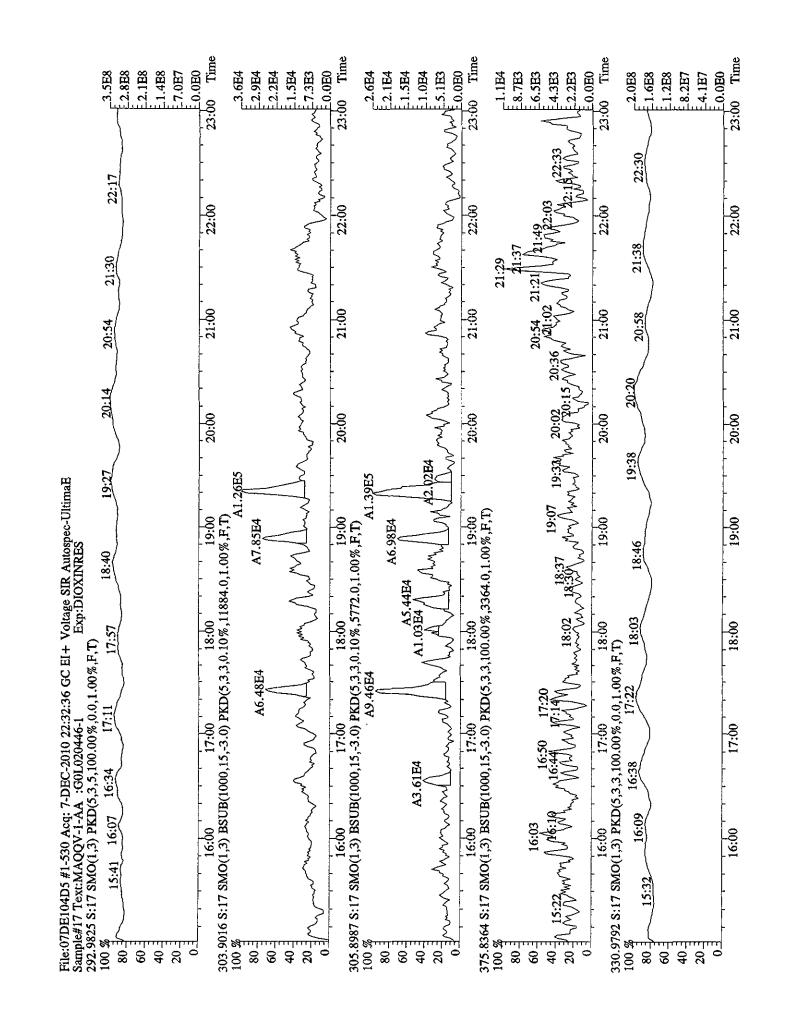


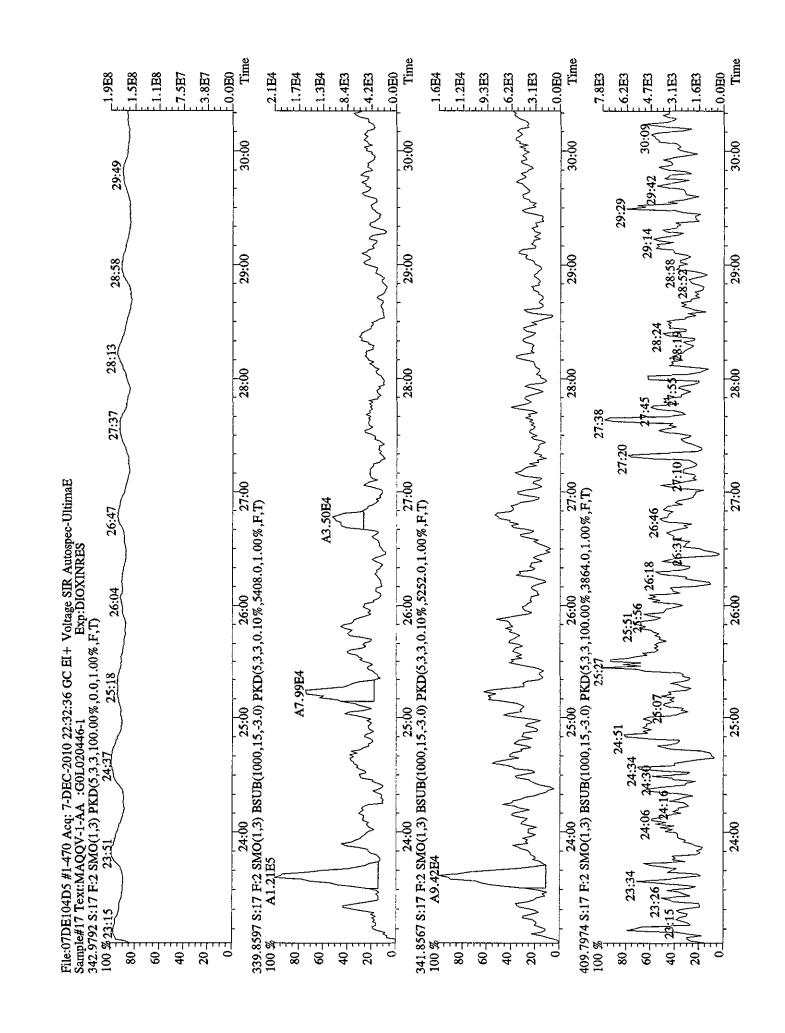


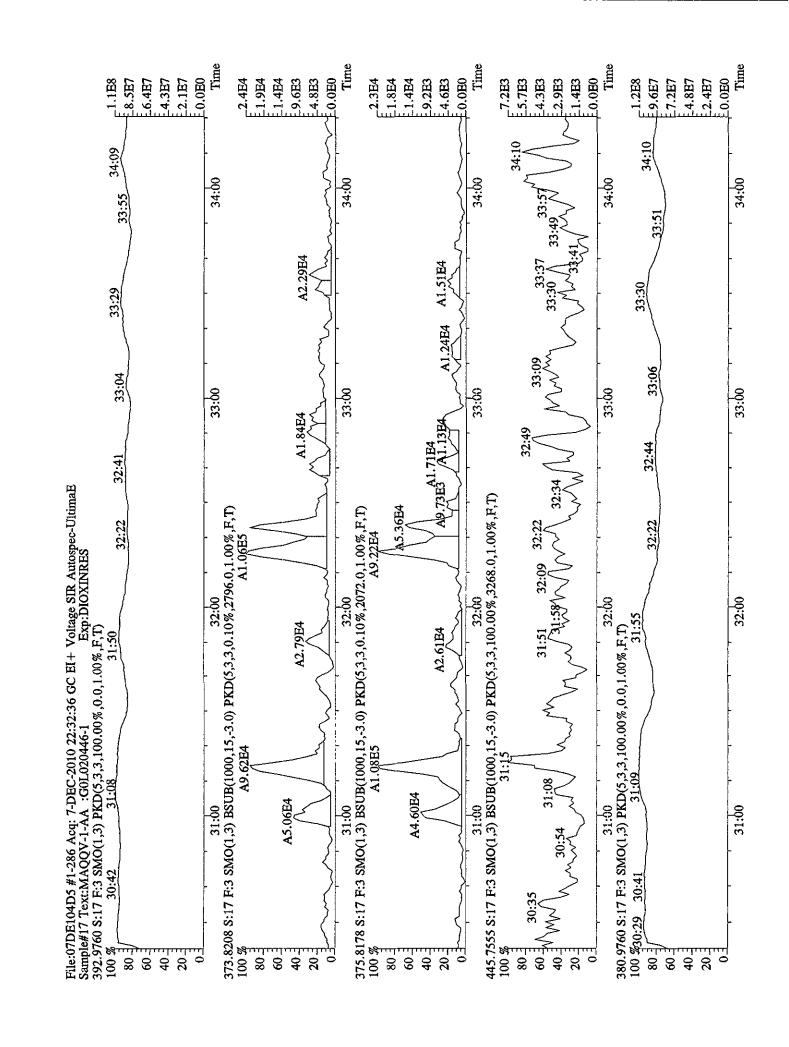


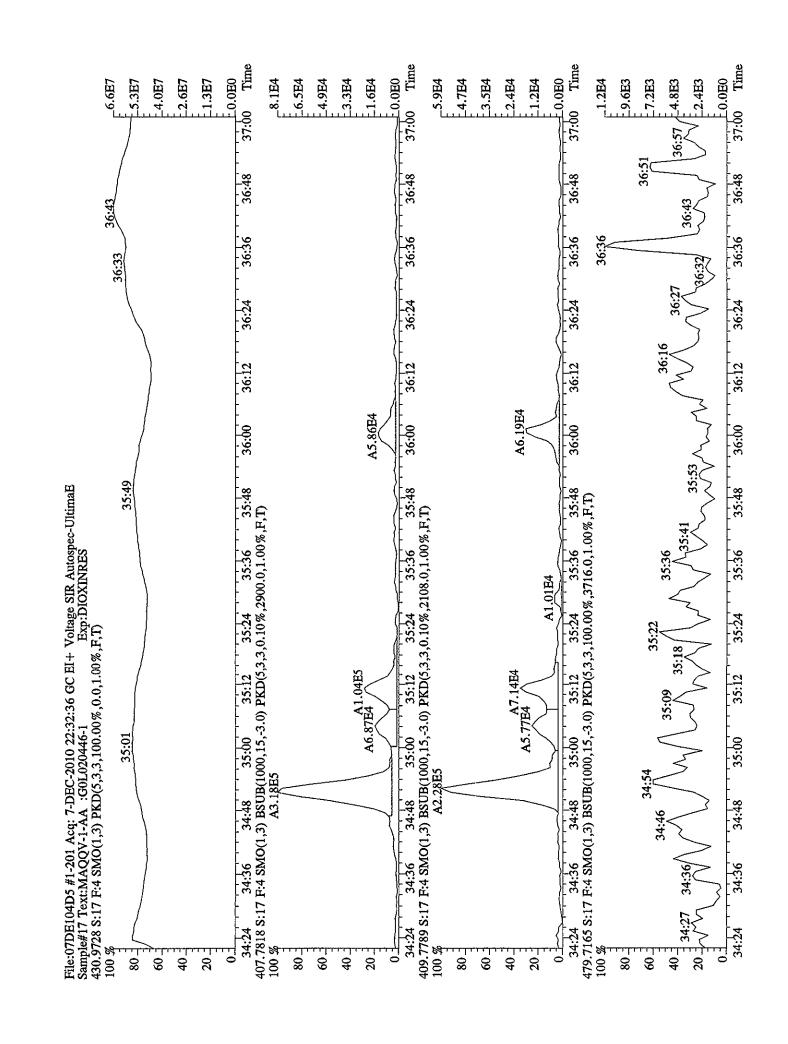


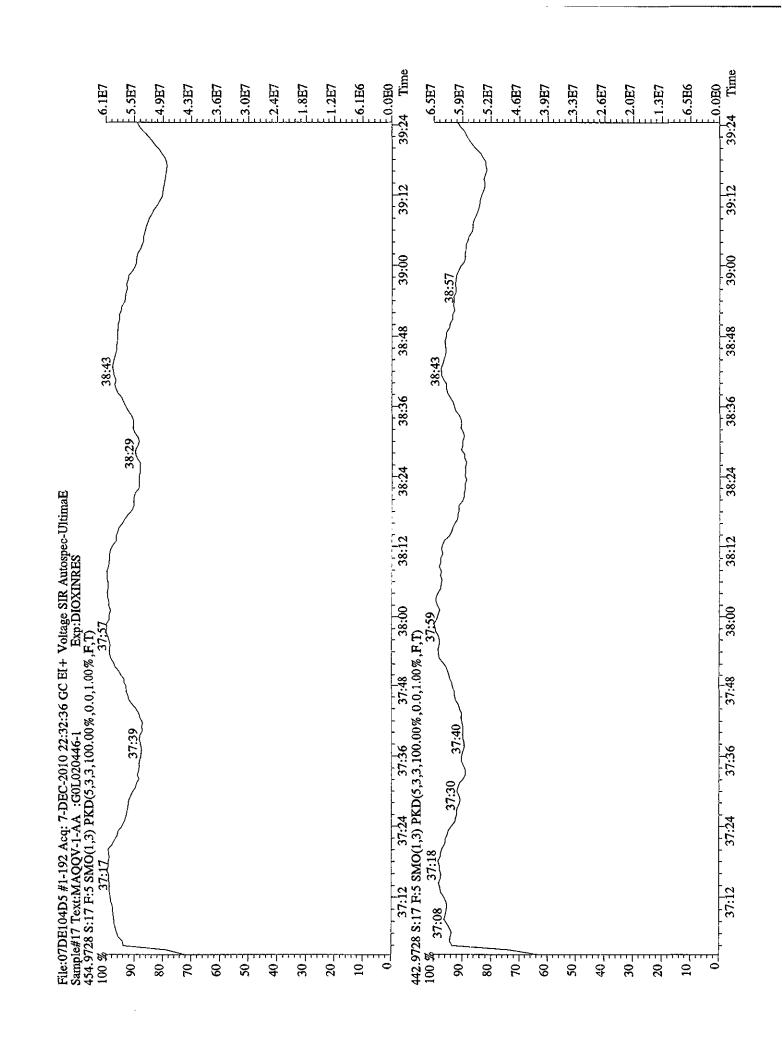












Run text: MAQQ6-1-AA Sample text: MAQQ6-1-AA :G0L020446-5

Run #15 Filename: 07DE104D5 S: 18 I: 1 Results: 07DE104D5T09 Acquired: 7-DEC-10 23:17:05 Processed: 8-DEC-10 07:53:24 Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5

12/8/10 Mg Factor 1:1600.000 Factor 2:20.000 Sample size: 0.50 SAMP

| 140001 1.1000.000                          | ruccor z  | . 20.00 |          | ump±c | 5126. 0.50         |                                     | 18110 1.59 |   |
|--|-----------|---------|----------|-------|--------------------|-------------------------------------|------------|---|
| Name                                       | Resp      | RA      | RT       | RRF   | Conc               | EDL                                 | Rec        | M |
| 13C-1,2,3,4-TCDD                           | 209684700 | 0.82    | y 19:56  | -     | 125.563            | -                                   | _          | n |
| 13C-2,3,7,8-TCDF                           | 234409000 | 0.81    | 7 19:18  | 1.23  | 3637.429           | 5 <del>.475</del>                   | 90.9       | n |
| 2,3,7,8-TCDF                               | *         | * 1     | n NotFnd | 0.99  | *                  | 7.502                               | _          | n |
| Total TCDF                                 | 176370    | 0.68    | y 18:55  | 0.99  | 3.0 <del>26</del>  | 7.502                               | -          | n |
| 13C-2,3,7,8-TCDD                           | 186141200 | 0.80    | y 20:08  | 0.91  | 3923.381           |                                     | 98.1       | n |
| 2,3,7,8-TCDD                               | *         | * 1     | n NotFnd | 0.98  | *                  | 5.665                               | -          | n |
| Total TCDD                                 | 65695     | 0.46 1  | 17:54    | 0.98  | 1 <del>43</del> 5  | 5.665                               | -          | n |
| 37Cl-2,3,7,8-TCDD                          | 100185200 | 1.00    | y 20:09  | 1.33  | 1623.509           | 4.320                               | 101.5      | n |
| 13C-1,2,3,7,8-PeCDF                        |           | -       | -        |       | 4725.113           |                                     | 118.1      | n |
| 1,2,3,7,8-PeCDF                            | *         |         | n NotFnd |       | *                  |                                     | -          | n |
| 2,3,4,7,8-PeCDF                            |           |         | n NotFnd |       | *                  | 3.000                               | -          |   |
| Total F2 PeCDF                             |           |         | n 23:38  |       | 4 <u>.464</u>      |                                     | -          | n |
| Total F1 PeCDF                             | *         | * 1     | n NotFnd | 1.06  | *                  | 6 <del>,-33</del> 5<br><b>9,680</b> | · -        | n |
| 13C-1,2,3,7,8-PeCDD                        | 146589400 | 1.61    | y 27:34  | 0.66  | 4231.648           |                                     |            | n |
| 1,2,3,7,8-PeCDD                            | *         | * ]     | n NotFnd | 0.93  | *                  | 13.926                              | _          | n |
| Total PeCDD                                | *         | * 1     | n NotFnd | 0.93  | *                  | 13.926                              | -          | n |
| 13C-1,2,3,7,8,9-HxCDD                      | 150089300 | 1.25    | y 33:22  | -     | 126.765            | -                                   | -          | n |
| 13C-1,2,3,4,7,8-HxCDF                      | 130205800 | 0.51    | y 32:15  | 1.04  | 3321.338           | 3.665                               | 83.0       | n |
| 1,2,3,4,7,8-HxCDF                          |           |         | y 32:16  |       | 9.746              | <b>ゴ</b> ノ 3.545                    | _          | n |
| 1,2,3,6,7,8-HxCDF                          |           |         | y 32:22  |       |                    | 6.042 J 3.367                       | _          | n |
| 2,3,4,6,7,8-HxCDF                          |           |         | 32:55    |       | 3 523              | 3.498                               | -          | n |
| 1,2,3,7,8,9-HxCDF                          | *         | * 1     | n NotFnd | 1.10  | *                  | 3.929                               | -          | n |
| Total HxCDF                                | 1403893   | 1.49    | n 31:01  | 1.21  |                    | 3.573                               | _          | n |
| 13C-1,2,3,6,7,8-HxCDD                      | 127325100 | 1.26    | v 33:06  | 0.83  |                    |                                     | 102.1      | n |
| 1,2,3,4,7,8-HxCDD                          |           |         | n NotFnd |       |                    |                                     |            |   |
| 1,2,3,6,7,8-HxCDD                          |           |         | n NotFnd |       | *                  |                                     | _          | n |
| 1,2,3,7,8,9-HxCDD                          | *         |         | n NotFnd |       | *                  |                                     | _          | n |
| Total HxCDD                                | 99843     |         | n 31:45  |       | 2 <del>.78</del> 3 |                                     | .J         | n |
| 120 1 2 2 4 6 7 9 UnCDE                    | 102077700 | 0 45 -  | 24.50    | 0 01  | 2989.434           | · ·                                 | 74.7       | n |
| 1.3C-1,2,3,4,6,7,8-HpCDF                   |           |         | n 34:52  |       |                    |                                     | /4./       | n |
| 1,2,3,4,6,7,8-HpCDF<br>1,2,3,4,7,8,9-HpCDF | 183968    |         |          |       |                    | <b>3</b> .643                       | _          | n |
| Total HpCDF                                | 1453256   |         |          |       | 44.768             |                                     | _          | n |
| Total hpcbr                                | 1433230   | 1.20    | 1 34.33  | 1.22  | 44.700             | 3.200                               |            |   |
| 13C-1,2,3,4,6,7,8-HpCDD                    | 91738300  |         |          |       | 2957.757           |                                     | 73.9       | n |
| 1,2,3,4,6,7,8-HpCDD                        |           |         | n 35:42  |       |                    |                                     | -          | n |
| Total HpCDD                                | 291898    | 1.20    | n 35:07  | 1.07  | 11.876             | <b>✓</b> 4.489                      | -          | n |
| 13C-OCDD                                   | 142102700 | 0.92    | y 38:14  | 0.62  | 6109.310           | 10.024                              | 76.4       | n |
| OCDF                                       |           |         | y 38:20  |       |                    |                                     | -          | n |

Run Text: MAQQ6-1-AA Sample text: MAQQ6-1-AA :G0L020446-5

Name: Total TCDF F:1 Mass: 303.902 305.899 Mod? no #Hom:1

Run: 15 File: 07DE104D5 S:18 Acq: 7-DEC-10 23:17:05

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: 1.513 of which \* named and 1.513 unnamed Conc: 3.026 of which \* named and 3.026 unnamed

Name # R.T. Ratio Conc. Area S/N >? Mod?

1 18:55 0.676 y 3.026 71109 1.149 n n 105261 2.223 n n

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Run Text: MAQQ6-1-AA Sample text: MAQQ6-1-AA :G0L020446-5

Name: Total TCDD F:1 Mass: 319.897 321.894 Mod? no #Hom:1

Run: 15 File: 07DE104D5 S:18 Acq: 7-DEC-10 23:17:05

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D $_{\overline{1}}$ 

Amount: 0.718 of which \* named and 0.718 unnamed Conc: 1.435 of which \* named and 1.435 unnamed

Name # R.T. Ratio Conc. Area S/N >? Mod?

1 17:54 0.463 n 1.435 28579 1.141 n n 61707 1.678 n n

Totals Results TestAmerica West Sacramento Page 3 of 9

Run Text: MAQQ6-1-AA :GOL020446-5

Name: Total F2 PeCDF F:2 Mass: 339.860 341.857 Mod? no #Hom:1

Run: 15 File: 07DE104D5 S:18 Acq: 7-DEC-10 23:17:05

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: 2.232 of which \* named and 2.232 unnamed Conc: 4.464 of which \* named and 4.464 unnamed

Name # R.T. Ratio Conc. Area S/N >? Mod?

1 23:38 2.602 n 4.464 262243 2.638 n n

100770 1.491 n n

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Run Text: MAQQ6-1-AA Sample text: MAQQ6-1-AA :GOL020446-5

Name: Total F1 PeCDF F:1 Mass: 339.860 341.857 Mod? no #Hom:0 Run: 15 File: 07DE104D5 S:18 Acq: 7-DEC-10 23:17:05

Tables: Run: 07DE104D5 Analyte: TO9 Cal: T090721104D5 Results: 07DE104D7

Amount: \* of which \* named and \* unnamed Conc: \* of which \* named and \* unnamed Amount:

# R.T. Ratio Conc. Area S/N >? Mod? Name

1 NotF<sub>1</sub> \* n \* \* \* n n

\* n n

Totals Results TestAmerica West Sacramento Page 5 of 9

Run Text: MAQQ6-1-AA Sample text: MAQQ6-1-AA :G0L020446-5

Name: Total PeCDD F:2 Mass: 355.855 357.852 Run: 15 File: 07DE104D5 S:18 Acq: 7-DEC-10 23:17:05 F:2 Mass: 355.855 357.852 Mod? no #Hom:0

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: Conc:

# R.T. Ratio Conc. Area S/N >? Mod? Name

> 1 NotF<sub>1</sub> \* n \* \* \* n n \* \* n n

28,985

Run Text: MAQQ6-1-AA Sample text: MAQQ6-1-AA :G0L020446-5

Name: Total HxCDF F:3 Mass: 373.821 375.818 Mod? no #Hom:6

Run: 15 File: 07DE104D5 S:18 Acq: 7-DEC-10 23:17:05

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: 17.568 of which 9.769 named and 7.800 unnamed Conc: 35.137 of which 19.537 named and 15.600 unnamed

| Name              | # | R.T.  | Ratio   | Conc.            | Area             | S/N >?         | Mo     | d?     |
|-------------------|---|-------|---------|------------------|------------------|----------------|--------|--------|
|                   | 1 | 31:01 | 1.491 n | 4.456            | 116618<br>78192  | 4.132<br>3.096 | У<br>У | n<br>n |
|                   | 2 | 31:13 | 1.212 y | 8.741            | 188264<br>155338 | 5.512<br>5.819 | У      | n      |
| 1,2,3,4,7,8-HxCDF | 3 | 32:16 | 1.191 y | 9.746            | 209931           | 7.591          | У      | n<br>n |
|                   |   |       |         | 6.042            | 176234           | 7.919          | У      | n      |
| 1,2,3,6,7,8-HxCDF | 4 | 32:22 | 1.245 y | 7 <del>269</del> | 168185<br>135052 | 5.920<br>6.286 | y<br>Y | n<br>n |
|                   | 5 | 32:42 | 0.984 n | 2,403            | 52291<br>53130   | 1.911<br>1.662 | n<br>n | n<br>n |
| 2,3,4,6,7,8-HxCDF | 6 | 32:55 | 0.793 n | 2 /523           | 56064            | 1.456          | n      | n      |
| -,-,-,-,-         | • | 32.00 |         | = · • - •        | 70680            | 1.913          | n      | n      |

Totals Results TestAmerica West Sacramento Page 7 of 9

Run Text: MAQQ6-1-AA Sample text: MAQQ6-1-AA :G0L020446-5

Name: Total HxCDD Name: Total HxCDD F:3 Mass: 389.816 391.813 Mod? no #Hom:2 Run: 15 File: 07DE104D5 S:18 Acq: 7-DEC-10 23:17:05

Tables: Run: 07DE104D5 Analyte: TO9 Cal: T090721104D5 Results: 07DE104D7

Amount: 1.391 of which \* named and 1.391 unnamed Conc: 2.783 of which \* named and 2.783 unnamed

| Name | # | R.T.  | Ratio   | Conc. | Area           | S/N >?         | , Wo | d? |
|------|---|-------|---------|-------|----------------|----------------|------|----|
|      | 1 | 31:45 | 1.599 n | 1.233 | 31590<br>19750 | 1.264<br>0.966 |      |    |
|      | 2 | 32:31 | 1.566 n | 1.550 | 38883<br>24823 | 1.597<br>1.638 |      |    |

Totals Results TestAmerica West Sacramento Page 8 of 9

Sample text: MAQQ6-1-AA :G0L020446-5 Run Text: MAQQ6-1-AA

Name: Total HpCDF F:4 Mass: 407.782 409.779 Mod? no #Hom:4 Run: 15 File: 07DE104D5 S:18 Acq: 7-DEC-10 23:17:05

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: 22.384 of which 15.897 named and 6.487 unnamed Conc: 44.768 of which 31.794 named and 12.974 unnamed

| Name                | # | R.T.  | Ratio   | Conc.  | Area                    | s/N >?           | Мо     | d?     |
|---------------------|---|-------|---------|--------|-------------------------|------------------|--------|--------|
| 1,2,3,4,6,7,8-HpCDF | 1 | 34:53 | 1.262 n | 25.201 | 535424<br>424258        | 24.638<br>27.047 | y<br>Y | n<br>n |
|                     | 2 | 35:05 | 1.219 n | 4.141  | 77023<br>631 <b>7</b> 3 | 4.694<br>4.544   | У      | n<br>n |
|                     | 3 | 35:11 | 1.036 y | 8.833  | 139873<br>135056        | 7.346<br>8.416   | Y<br>Y | n<br>n |
| 1,2,3,4,7,8,9-HpCDF | 4 | 36:00 | 1.273 n | 6.593  | 114785<br>90180         | 6.272<br>5.857   | У      | n<br>n |

Totals Results TestAmerica West Sacramento Page 9 of 9

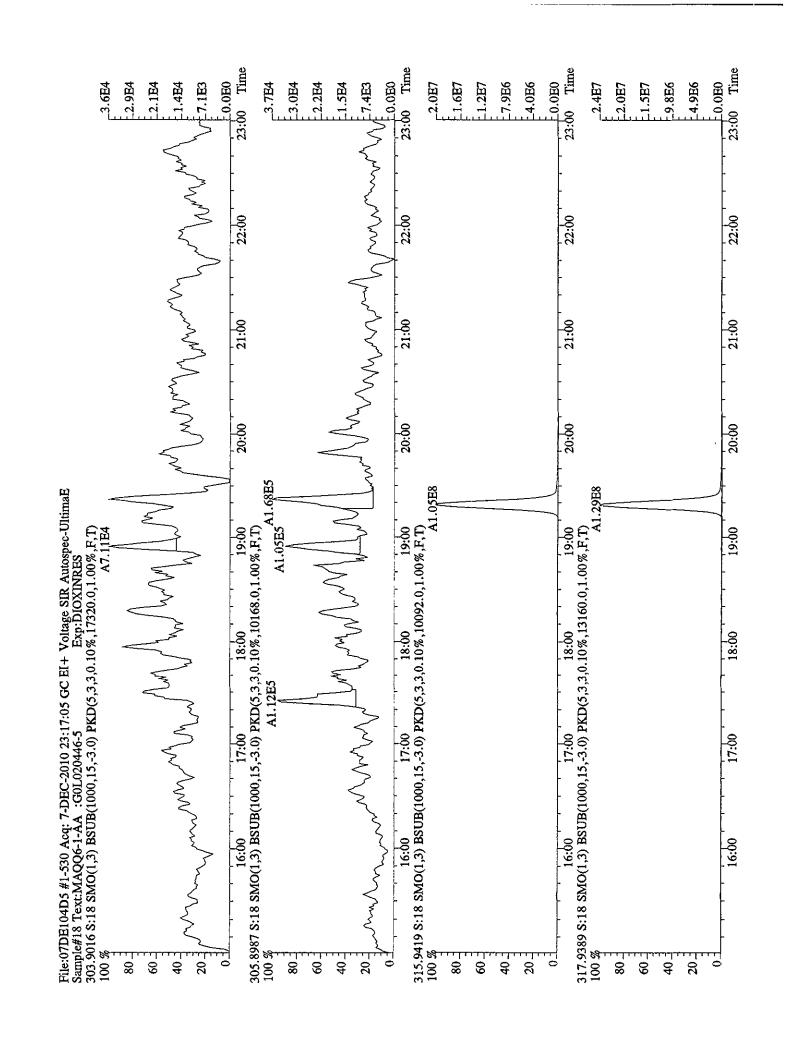
Run Text: MAQQ6-1-AA Sample text: MAQQ6-1-AA :G0L020446-5

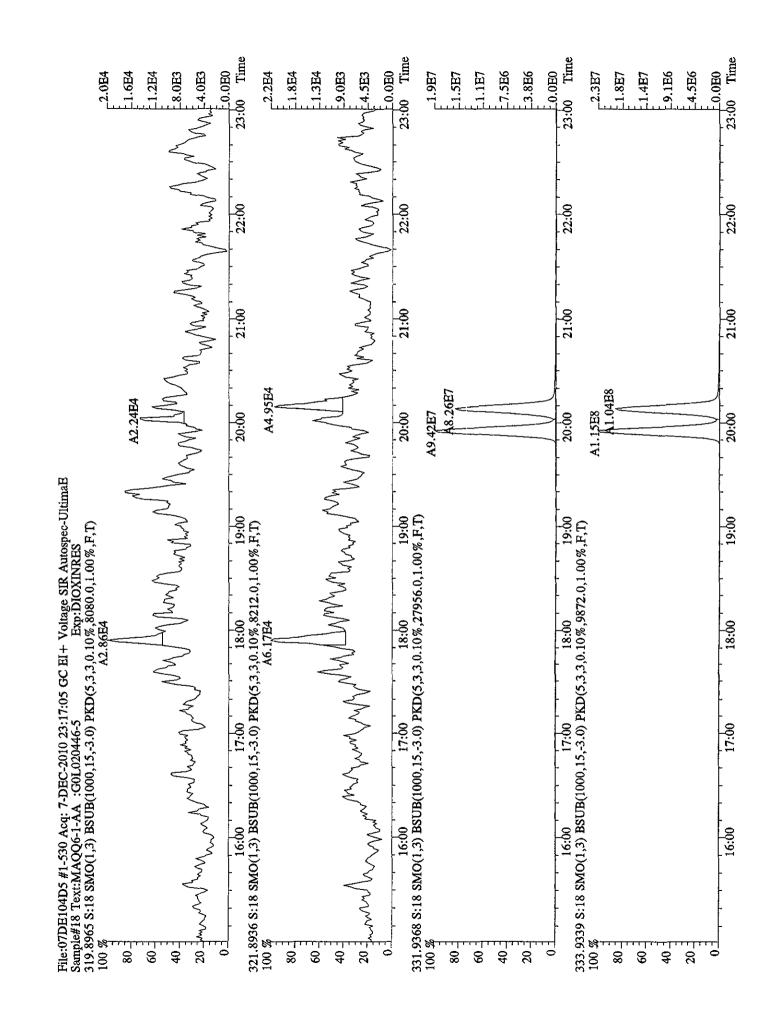
Name: Total HpCDD F:4 Mass: 423.777 425.774 Mod? no #Hom:2 Run: 15 File: 07DE104D5 S:18 Acq: 7-DEC-10 23:17:05

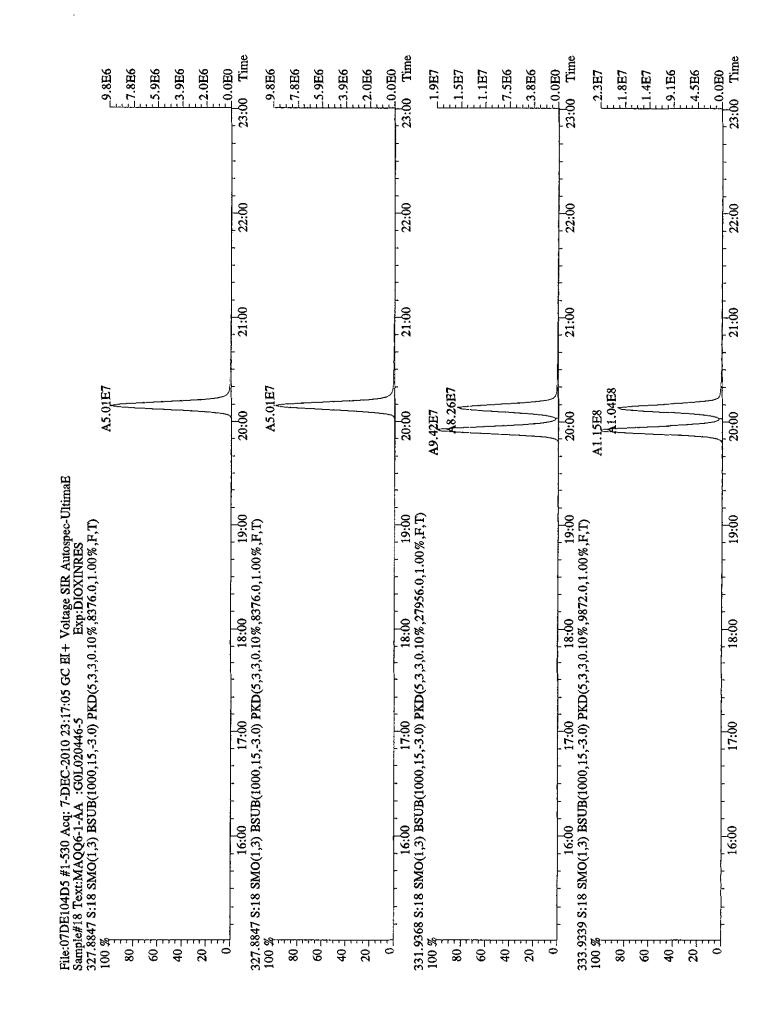
Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D $\overline{\eta}$ 

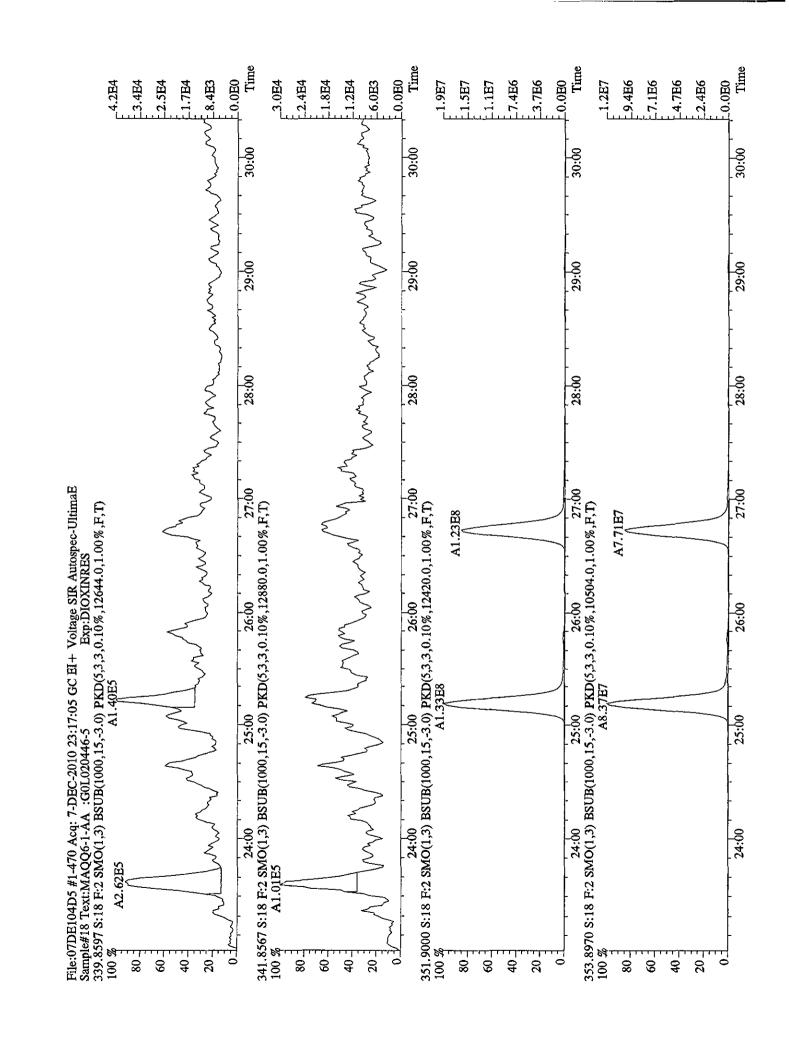
Amount: 5.938 of which 2.622 named and 3.316 unnamed Conc: 11.876 of which 5.245 named and 6.631 unnamed

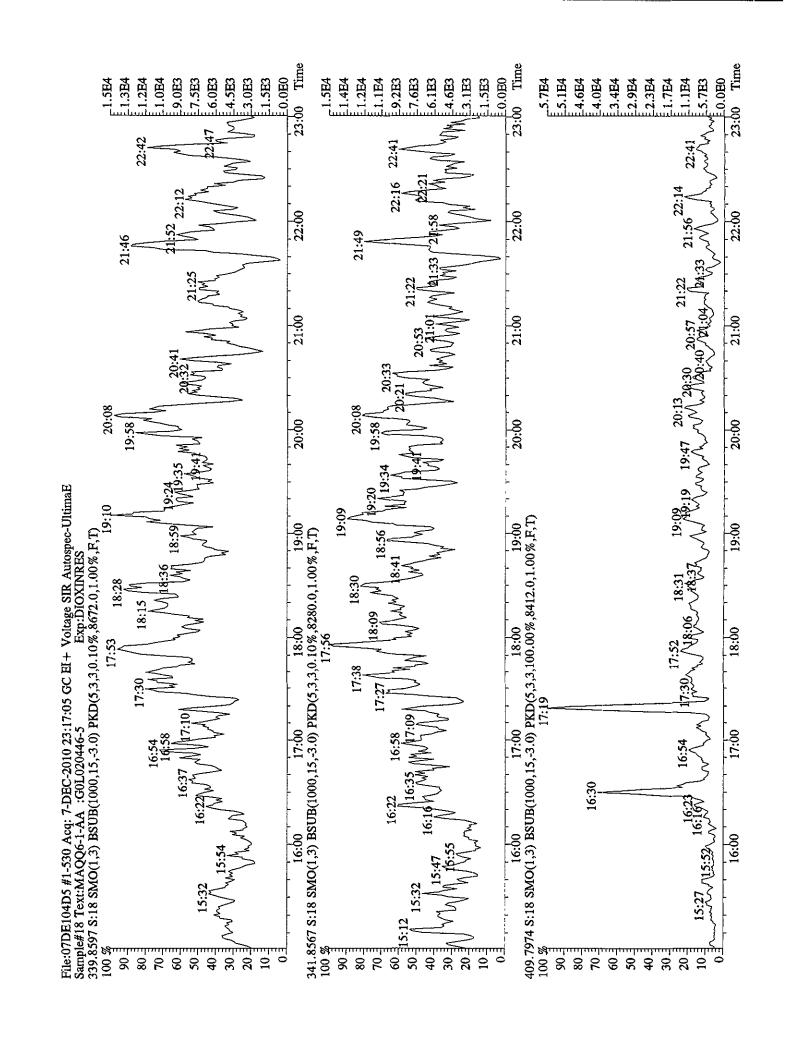
| Name                | # | R.T.  | Ratio   | Conc. | Area           | S/N >          | ? Mo | d? |
|---------------------|---|-------|---------|-------|----------------|----------------|------|----|
|                     | 1 | 35:07 | 1.204 n | 6.631 | 96167<br>79898 | 6.434<br>5.672 | -    |    |
| 1,2,3,4,6,7,8-HpCDD | 2 | 35:42 | 0.750 n | 5.245 | 65717<br>87570 | 5.227<br>5.585 | _    |    |

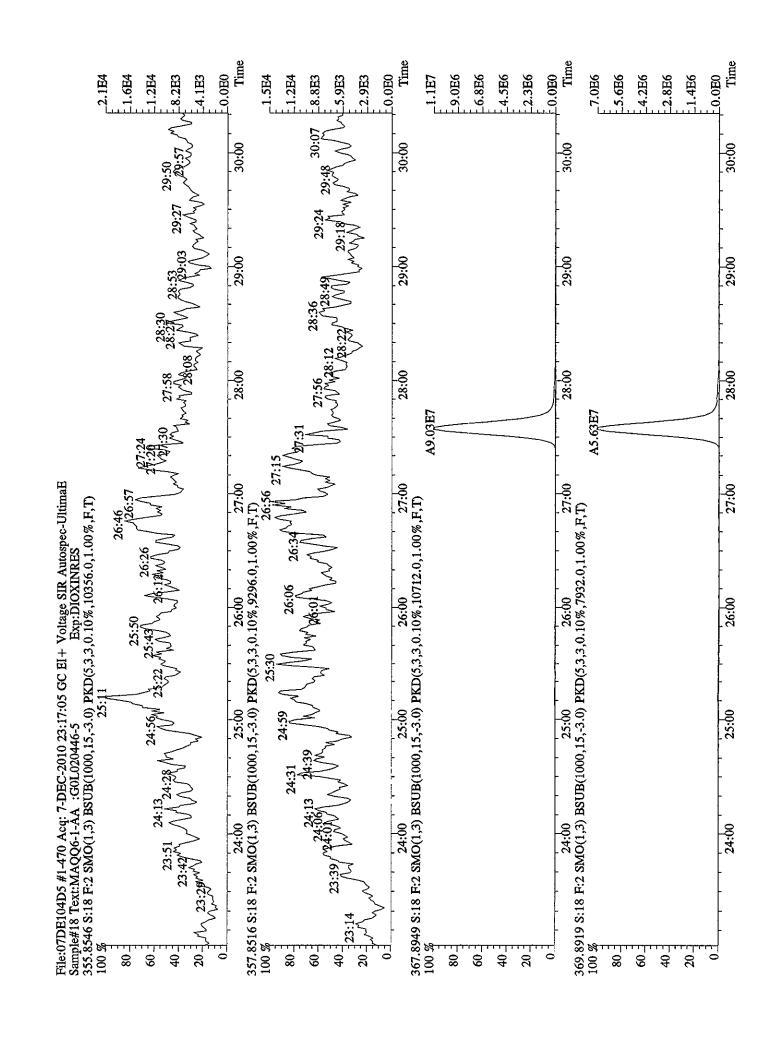


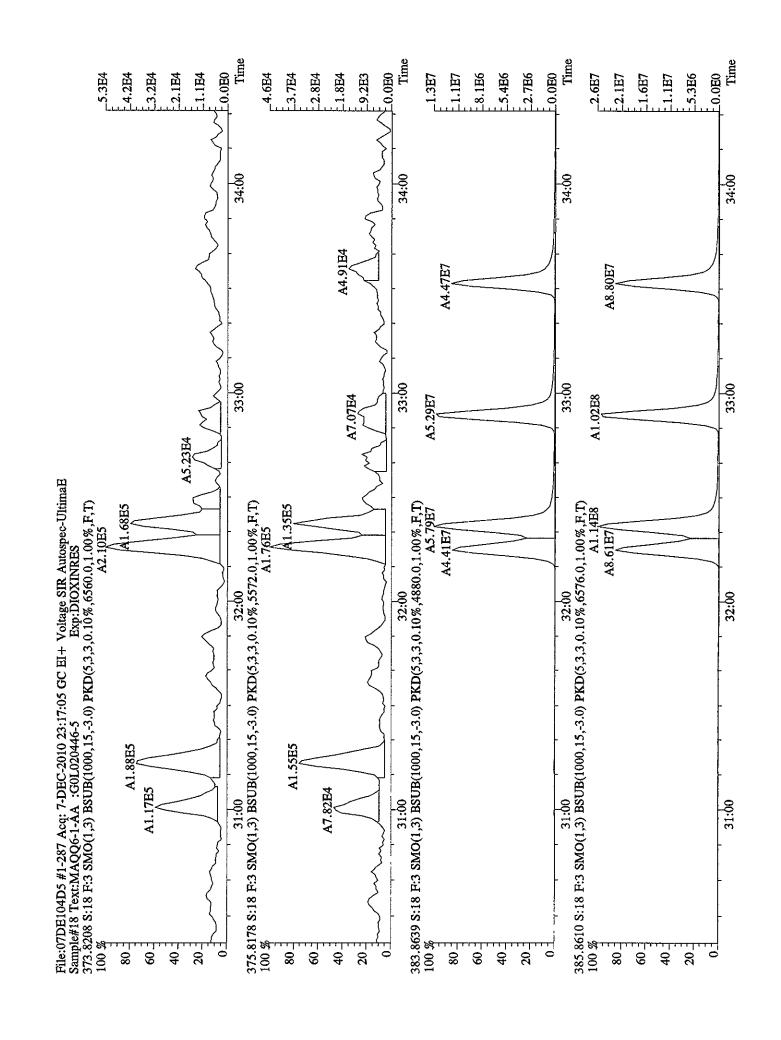


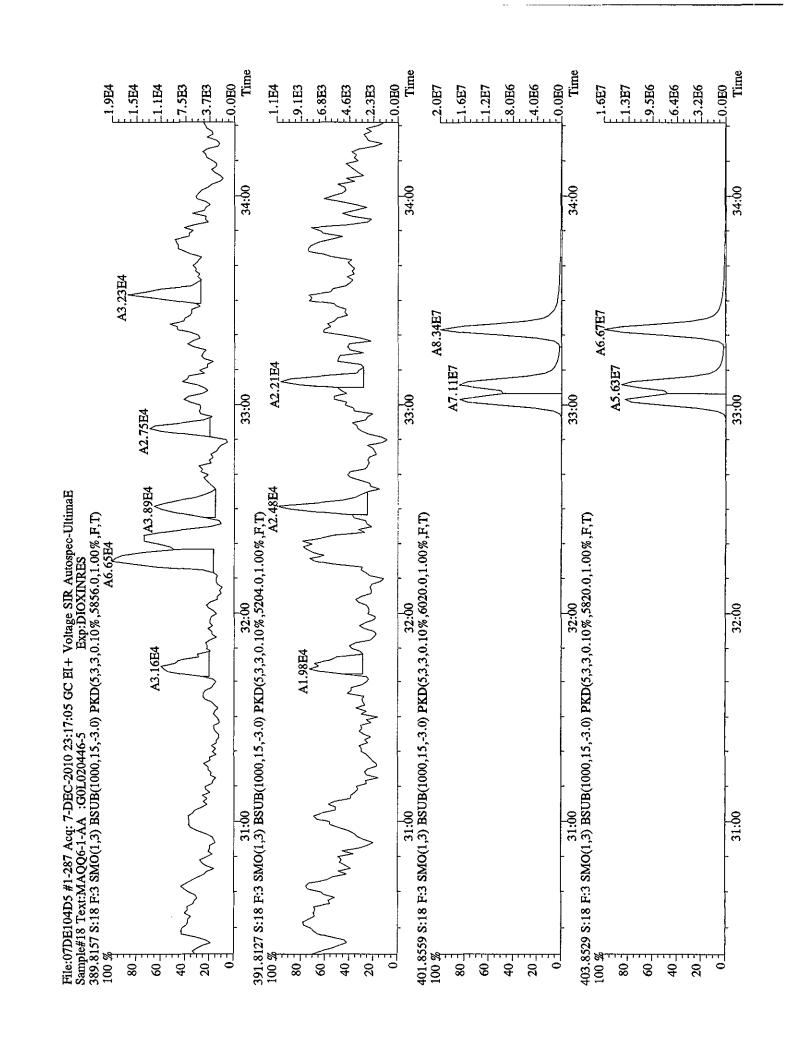


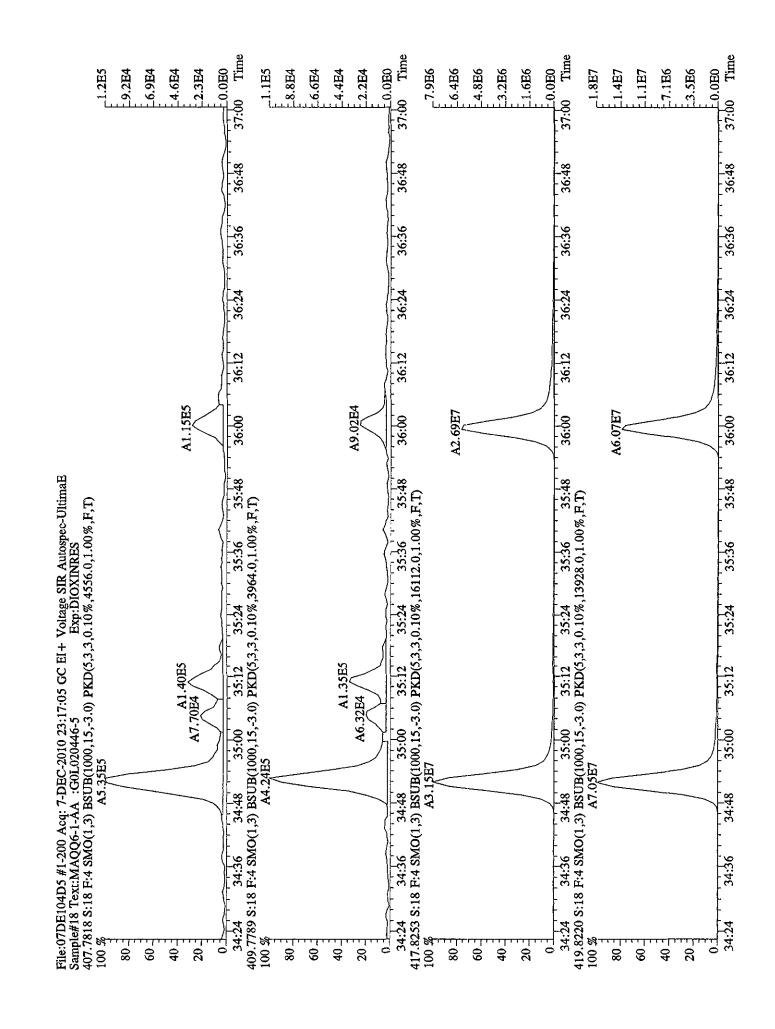


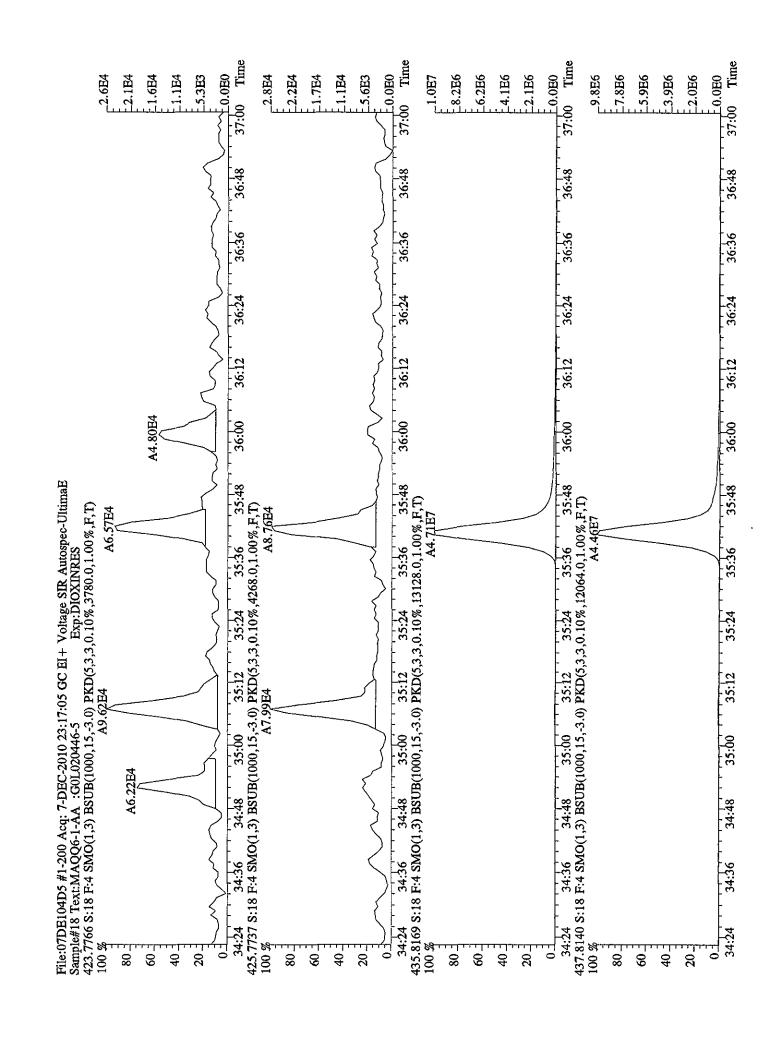


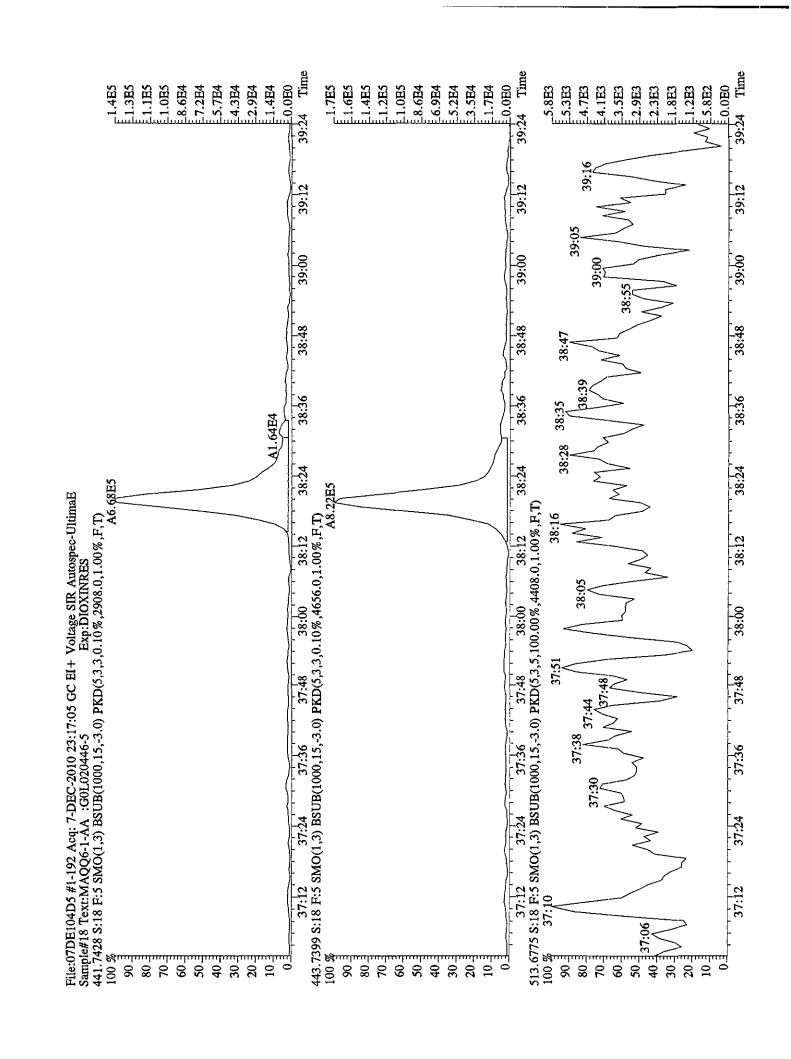


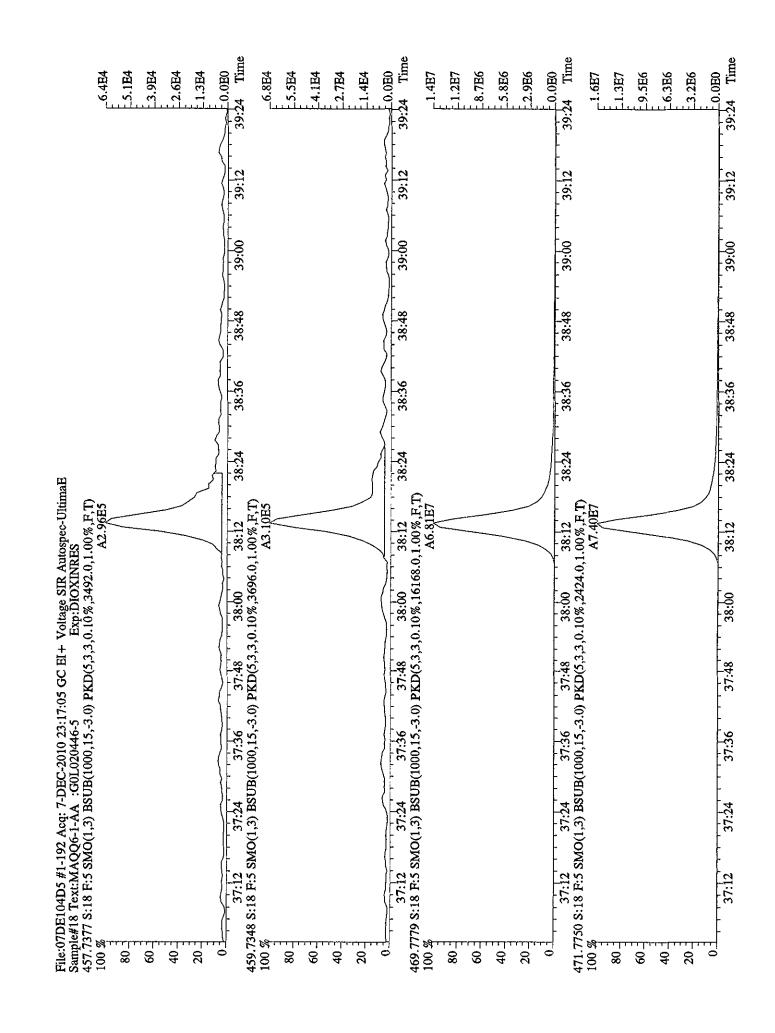


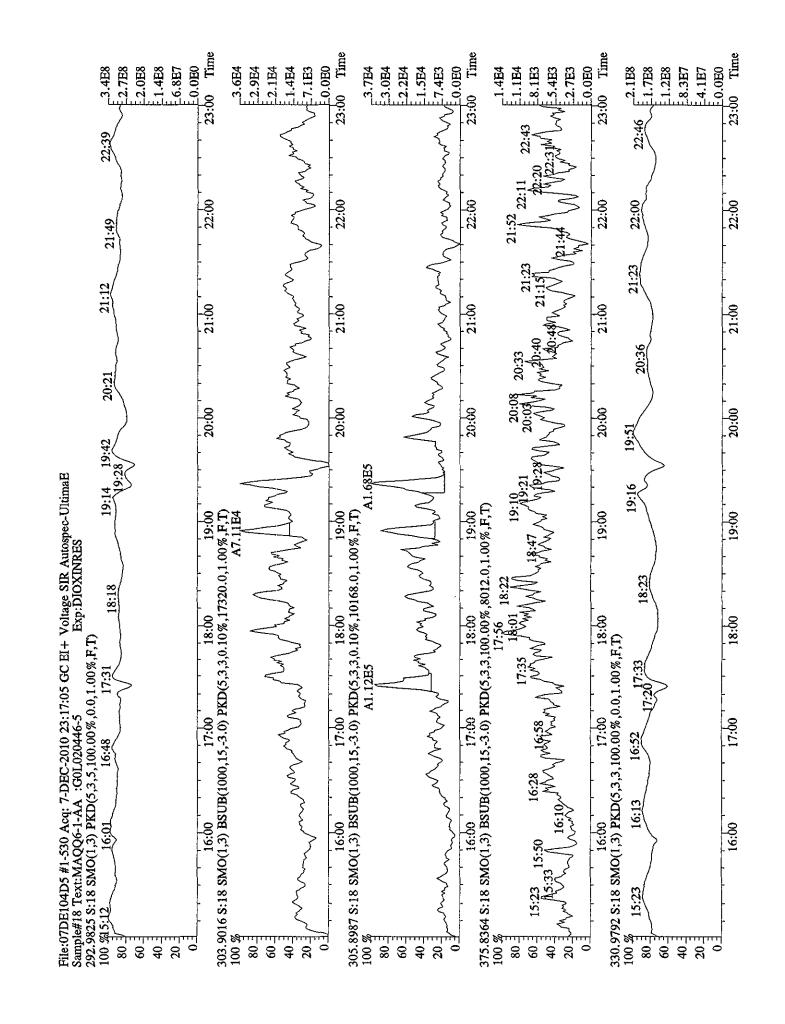


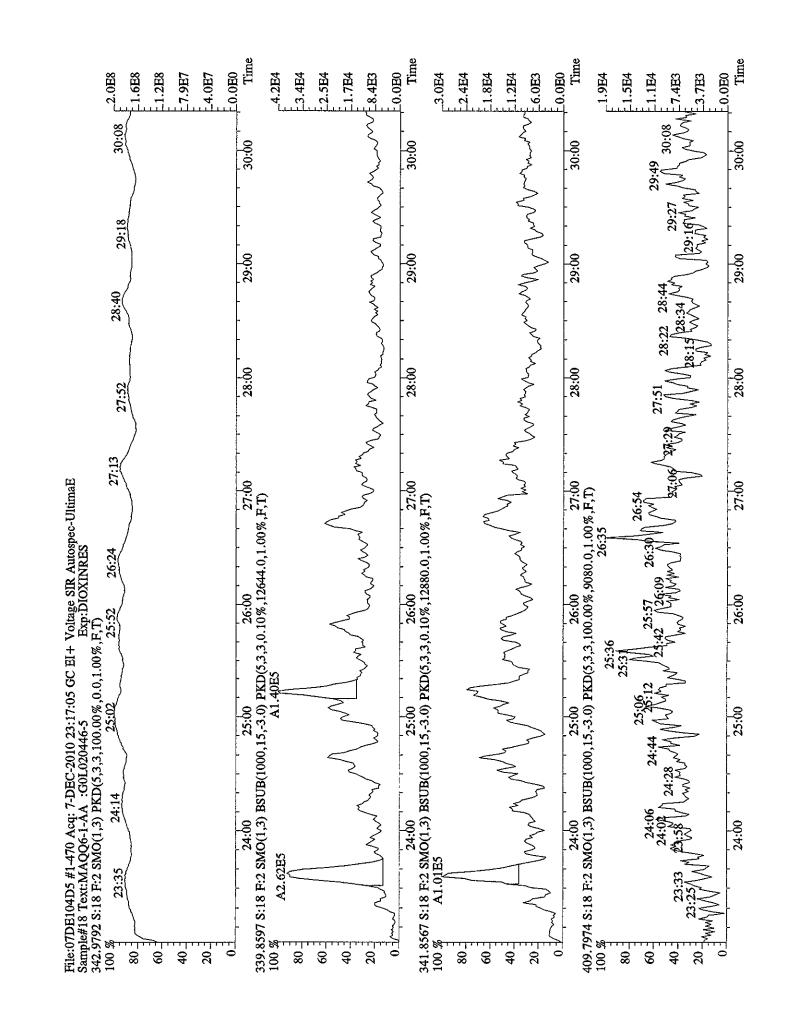


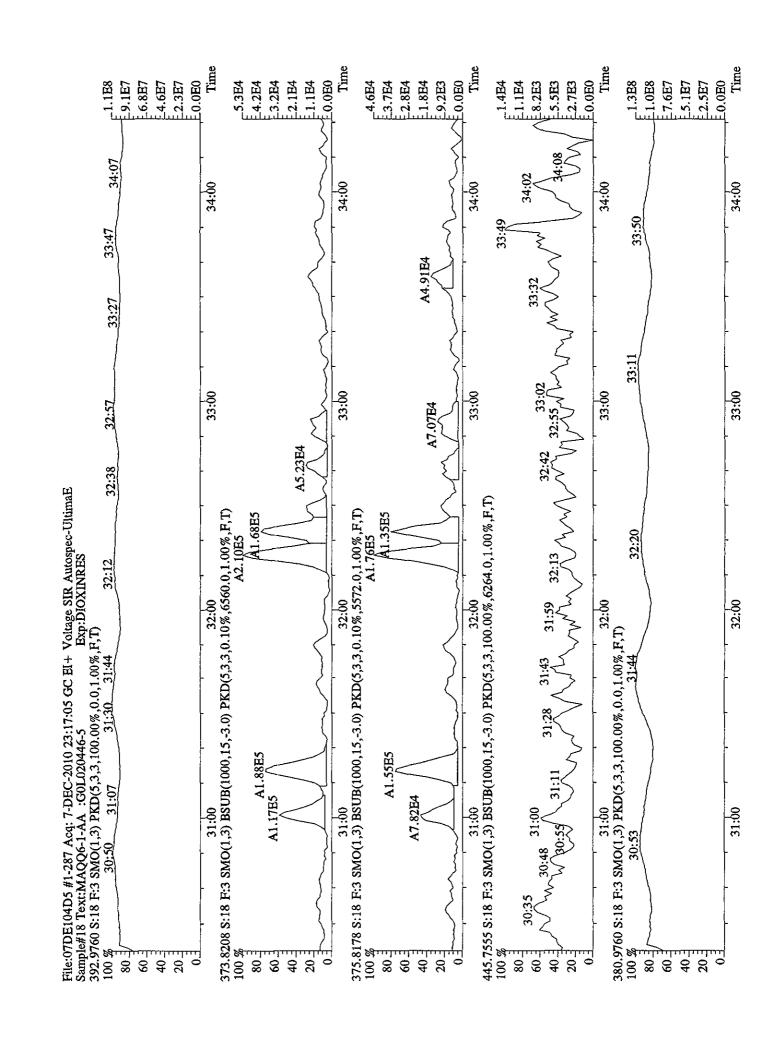


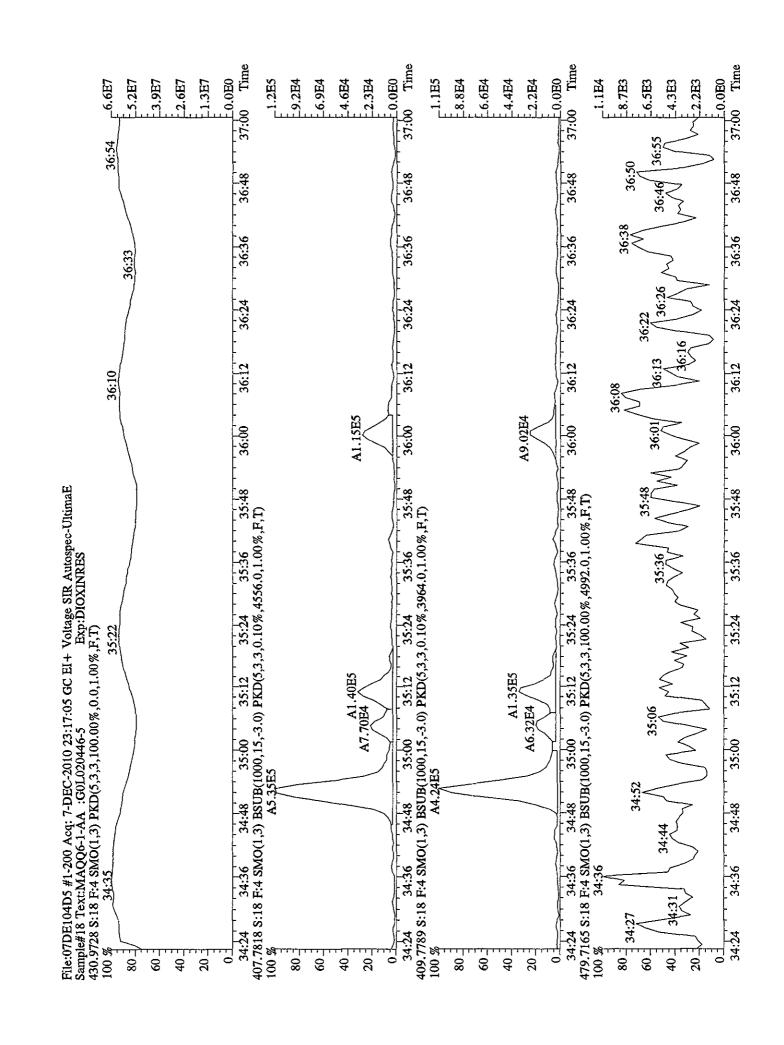


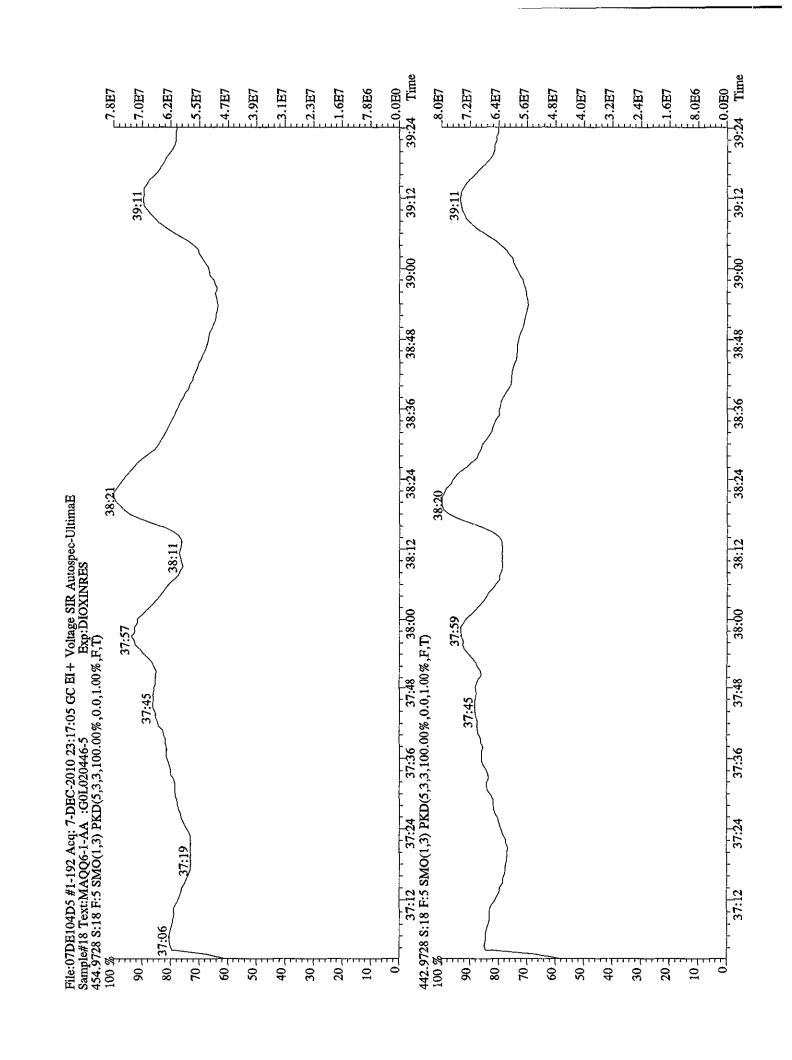












Run text: MAQRD-1-AA Sample text: MAQRD-1-AA :G0L020446-8

Run #16 Filename: 07DE104D5 S: 19 I: 1 Results: 07DE104D5T09

Acquired: 8-DEC-10 00:01:34 Processed: 8-DEC-10 07:53:25 Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5

Factor 1:1600.000 Factor 2:20.000 Sample size: 0.50 SAMP

18/10 Mes

|                          |                  |      |          |                  |                                       | <i>F</i>            | بحى   |   |
|--------------------------|------------------|------|----------|------------------|---------------------------------------|---------------------|-------|---|
|                          |                  |      |          |                  |                                       |                     |       |   |
| Name                     | Resp             | RA   | RT       | RRF              | Conc                                  | EDL                 | Rec   | М |
| 13C-1,2,3,4-TCDD         | 217132900        | 0.81 | y 19:55  | -                | 130.023                               | -                   | -     | n |
| 13C-2,3,7,8-TCDF         | 251640000        | 0.80 | y 19:19  | 1.23             | 3770.865                              | 5 <del>932</del>    | 94.3  | n |
| 2,3,7,8-TCDF             |                  |      | _        |                  |                                       | _                   |       | n |
| Total TCDF               |                  |      | y 17:24  |                  |                                       | 38.584 7.617        | -     | n |
| 13C-2,3,7,8-TCDD         | 190470900        | 0.81 | y 20:07  | 0.91             | 3876.928                              | 1 <del>4.27</del> 0 | 96.9  | n |
| 2,3,7,8-TCDD             |                  |      | n NotFnd |                  |                                       | 6.465               | -     | n |
| Total TCDD               | *                |      | n NotFnd |                  |                                       | 6.465               | _     | n |
| 10001                    |                  |      |          | 0.50             |                                       | 0.100               |       |   |
| 37Cl-2,3,7,8-TCDD        | 100861400        | 1.00 | y 20:09  | 1.33             | 1597.313                              | 5.495               | 99.8  | n |
| 13C-1,2,3,7,8-PeCDF      |                  |      | -        |                  |                                       |                     | 105.1 | n |
| 1,2,3,7,8-PeCDF          |                  |      | y 25:12  |                  |                                       |                     | -     | n |
| 2,3,4,7,8-PeCDF          |                  |      |          |                  |                                       | カレ 7.591            | -     | n |
| Total F2 PeCDF           |                  |      | -        |                  |                                       | 7.480               | -     | n |
| Total F1 PeCDF           | 234980           | 2.03 | n 21:47  | 1.06             | 4 -432                                | 50.439 6.790        | -     | n |
| 13C-1,2,3,7,8-PeCDD      | 140450600        | 1.60 | y 27:34  | 0.66             | 3915.360                              | 9. <del>514</del>   | 97.9  | n |
| 1,2,3,7,8-PeCDD          |                  |      | n NotFnd |                  |                                       | 11.682              | _     | n |
| Total PeCDD              | 140614           | 1.35 | y 25:51  | 0.93             | 4.3 <del>27</del>                     | 11.682              | -     | n |
| 13C-1,2,3,7,8,9-HxCDD    | 126742400        | 1.27 | y 33:22  | -                | 107.046                               | _                   | -     | n |
| 13C-1,2,3,4,7,8-HxCDF    | 115083000        | 0.56 | y 32:16  | 1.04             | 3476.336                              | 7.097               | 86.9  | n |
| 1,2,3,4,7,8-HxCDF        | 1461160          |      | 22 4 5   | 1 00             | 41 703                                |                     | -     |   |
| 1,2,3,6,7,8-HxCDF        | 971383<br>181989 | 1.04 | n 32:23  | 1 <del>-28</del> | 1.54 26.344                           | JQ 3Q 5 517         | -     | y |
| 2,3,4,6,7,8-HxCDF        | 181989           | 1.55 | n 32:53  | 1.23             | 5 <del>. 12</del> 8                   | al.846 5.733        | -     | Ÿ |
| 1,2,3,7,8,9-HxCDF        | 204259           | 1.30 | y 33:36  | 1.10             | 6.465                                 | D- 6.439            | _     | У |
| Total HxCDF              | 6450908          | 1.12 | y 31:01  | 1.21             | 148 1 184-199                         |                     | -     | У |
|                          |                  |      |          |                  |                                       | 184 164-5810        |       |   |
| 13C-1,2,3,6,7,8-HxCDD    |                  |      | _        |                  |                                       | 7.654               | 97.4  | n |
| 1,2,3,4,7,8-HxCDD        |                  |      | n NotFnd |                  |                                       | 6.056               | -     | n |
| 1,2,3,6,7,8-HxCDD        |                  |      | n NotFnd |                  | * .                                   | 5.402               | _     | n |
| 1,2,3,7,8,9-HxCDD        | *                |      | n NotFnd |                  | *                                     | 5.315               | -     | n |
| Total HxCDD              | 222091           | 0.93 | n 32:16  | 1.13             | 7. <del>684</del>                     | 5.572               | -     | n |
| 13C-1,2,3,4,6,7,8-HpCDF  | 97516000         | 0.45 | y 34:52  | 0.91             | 3381.908                              | 16.048              | 84.5  | n |
| 1,2,3,4,6,7,8-HpCDF      | 3444470          | 1.18 | y 34:52  | 1.35             | 104.987                               | <b>为</b> 3.525      | _     | n |
| 1,2,3,4,7,8,9-HpCDF      | 847545           | 1.12 | y 36:01  | 1.09             | 31.795                                | <b>J</b> 4.338      | -     | n |
| Total HpCDF              | 6063005          | 1.18 | y 34:52  | 1.22             |                                       | ~ .                 | -     | n |
| 120 1 0 2 4 C 7 0 TW CDD | 0050000          | . 05 | - 25 40  | 0 00             | 2222 222                              |                     | 24 5  |   |
| 13C-1,2,3,4,6,7,8-HpCDD  | 88533300         |      | _        |                  |                                       |                     | 84.5  | n |
| 1,2,3,4,6,7,8-HpCDD      |                  |      | y 35:41  |                  |                                       | -                   | _     | n |
| Total HpCDD              | 453441           | 3.66 | n 34:52  | 1.07             | 1 <del>9.116</del><br>1 <b>6.6</b> 52 | 4.493               | -     | n |
| 13C-OCDD                 | 131675000        | 0.89 | y 38:13  | 0.62             | 6703.799                              | 12.794              | 83.8  | n |
| OCDF                     | 4498740          | 0.90 | y 38:21  | 1.37             | 199.463                               |                     | -     | n |

OCDD 484918 0.90 y 38:13 1.20 24.565 JB 4.110 - n

Run text: MAQRD-1-AA Sample text: MAQRD-1-AA :G0L020446-8

Run #16 Filename: 07DE104D5 S: 19 I: 1 Results: 07DE104D5TO9

Acquired: 8-DEC-10 00:01:34 Processed: 8-DEC-10 07:53:25
Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5
Factor 1:1600.000 Factor 2:20.000 Sample size: 0.50 SAMP

| Name                    | Resp      | RA   |    | RT     | RRF              |     | Conc                | EDL                  | Rec         | M |
|-------------------------|-----------|------|----|--------|------------------|-----|---------------------|----------------------|-------------|---|
| 13C-1,2,3,4-TCDD        | 217132900 | 0.81 | У  | 19:55  | -                |     | 130.023             | -                    | -           | n |
| 13C-2,3,7,8-TCDF        | 251640000 | 0.80 | У  | 19:19  | 1.23             |     | 3770.865            | 5.932                | 94.3        | n |
| 2,3,7,8-TCDF            | 992444    | 0.79 | У  | 19:20  | 0.99             |     | 15.863              | 7.617                | _           | n |
| Total TCDF              | 3022600   | 0.86 | У  | 17:24  | 0.99             |     | 4 <del>9.31</del> 1 | <b>38.589</b> √7.617 | -           | n |
| 13C-2,3,7,8-TCDD        | 190470900 | 0.81 | У  | 20:07  | 0.91             |     | 3876.928            | 14 <del>.27</del> 9  | 96.9        | n |
| 2,3,7,8-TCDD            | *         | *    | n  | NotFnd | 0.98             |     | *                   | 6.465                | _           | n |
| Total TCDD              | *         | *    | n  | NotFnd | 0.98             |     | *                   | 6.465                | -           | n |
| 37Cl-2,3,7,8-TCDD       | 100861400 | 1.00 | У  | 20:09  | 1.33             |     | 1597.313            | 5.495                | 99.8        | n |
| 13C-1,2,3,7,8-PeCDF     | 199877200 | 1.56 | У  | 25:11  | 0.88             |     | 4203.092            | 12.575               | 105.1       | n |
| 1,2,3,7,8-PeCDF         | 865178    | 1.48 | У  | 25:12  | 1.08             |     | 16.082              | J 7.372              | _           | n |
| 2,3,4,7,8-PeCDF         | 503904    | 1.64 | У  | 26:44  | 1.05             |     | 9.645               | Dr 7.591             | _           | n |
| Total F2 PeCDF          |           |      |    |        |                  |     | 7 <del>4.03</del> 3 | , 7.480              | -           | n |
| Total F1 PeCDF          | 234980    | 2.03 | n  | 21:47  | 1.06             |     | 4 _432              | <b>50.434</b> 6.790  | -           | n |
| 13C-1,2,3,7,8-PeCDD     | 140450600 | 1.60 | У  | 27:34  | 0.66             |     | 3915.360            | 9 <del>.51</del> 4   | 97.9        | n |
| 1,2,3,7,8-PeCDD         | *         | *    | n  | NotFnd | 0.93             |     | *                   | 11.682               | -           | n |
| Total PeCDD             | 140614    | 1.35 | Y  | 25:51  | 0.93             |     | 4 <del>.32</del> 7  | 11.682               | -           | n |
| 13C-1,2,3,7,8,9-HxCDD   | 126742400 | 1.27 | У  | 33:22  | -                |     | 107.046             | -                    | -           | n |
| 13C-1,2,3,4,7,8-HxCDF   | 115083000 | 0.56 | У  | 32:16  | 1.04             |     | 3476.336            | 7.097                | 86.9        | n |
| 1,2,3,4,7,8-HxCDF       | 1389092   | 1.12 | У  | 32:17  | 1.22             |     | 39.665              | 5.809                | _           | n |
| 1,2,3,6,7,8-HxCDF       | 889833    | 1.01 | n  | 32:23  | 1 <del>:28</del> | L≾4 | 24.132              | 5.517                | _           | n |
| 2,3,4,6,7,8-HxCDF       | 449976    | 1.23 | У  | 32:52  | 1.23             |     | 12.680              | 5.733                | -           | n |
| 1,2,3,7,8,9-HxCDF       | 300119    | 1.38 | У  | 33:36  | 1,10             |     | 9.499               | 6.439                | -           | n |
| Total HxCDF             | 6068683   | 1.12 | У  | 31:01  | 1.21             |     | 173.464             | 5.855                | -           | n |
|                         | 102557600 | 1.30 | У  | 33:07  | 0.83             |     | 3895.957            | 7.654                | 97.4        | n |
| 1,2,3,4,7,8-HxCDD       |           |      | n  | NotFnd | 1.04             |     | *                   | 6.056                | -           | n |
| 1,2,3,6,7,8-HxCDD       |           |      | n  | NotFnd | 1.16             |     | *                   | 5.402                | -           | n |
| 1,2,3,7,8,9-HxCDD       |           |      |    | NotFnd |                  |     | *                   | 5.315                | -           | n |
| Total HxCDD             | 222091    | 0.93 | n  | 32:16  | 1.13             |     | 7.684               | 5.572                | -           | n |
| 13C-1,2,3,4,6,7,8-HpCDF | 97516000  |      | _  |        |                  |     | 3381.908            | 16.048               | 84.5        | n |
| 1,2,3,4,6,7,8-HpCDF     | 3444470   |      | -  |        |                  |     | 104.987             |                      | _           | n |
| 1,2,3,4,7,8,9-HpCDF     | 847545    |      | _  |        |                  |     | 31.795              | J 4.338              | -           | n |
| Total HpCDF             | 6063005   | 1.18 | У  | 34:52  | 1.22             |     | 196.345             | 3.889                | -           | n |
| 13C-1,2,3,4,6,7,8-HpCDD | 88533300  | 1.07 | У  | 35:40  | 0.83             |     | 3380.230            | 8.870                | 84.5        | n |
| 1,2,3,4,6,7,8-HpCDD     | 239554    | 1.16 | У  | 35:41  | 1.07             |     | 10.099              | J 4.493              | -           | n |
| Total HpCDD             | 453441    | 3.66 | n  | 34:52  | 1.07             |     | 1 <del>9.11</del> 6 | lio.652 4.493        | -           | n |
| 13C-OCDD                | 131675000 | U 80 | ٧, | 38.12  | 0.62             |     | 6703. <b>7</b> 99   | 12.794               | <b>02</b> 0 | * |
| OCDF                    | 4498740   |      | _  |        |                  |     | 199.463             | √ 6.213              | 83.8        | n |
| OCDI                    | 1170/40   | 0.50 | 1  | JU. 21 | ر د              |     | *>>.403             | ₩ U.ZIS              | _           | n |

OCDD 484918 0.90 y 38:13 1.20 24.565 JB 4.110 - n

Run Text: MAQRD-1-AA Sample text: MAQRD-1-AA :G0L020446-8

Name: Total TCDF F:1 Mass: 303.902 305.899 Mod? no #Hom:5

Run: 16 File: 07DE104D5 S:19 Acq: 8-DEC-10 00:01:34

Tables: Run: 07DE104D5 Analyte: TO9 Cal: T090721104D5 Results: 07DE104D7

24.156 of which 7.931 named and 48.311 of which 15.863 named and Amount: 16.224 unnamed Conc: 32.449 unnamed

Name R.T. Ratio Conc. Area S/N >? Mod? 17:24 0.863 y ( 397696 4.063 460638 6.488 18:17 0.700 y 172677 2.145 246588 3.860 0.338 n 82236 1.441 n n 243007 3.454 253993 3.084 y n 309528 5.181 0.793 2,3,7,8-TCDF 15.863 439018 4.384 y n 6.938 y n 553426

Totals Results TestAmerica West Sacramento Page 2 of 9

Run Text: MAQRD-1-AA Sample text: MAQRD-1-AA :G0L020446-8

Name: Total TCDD F:1 Mass: 319.897 321.894 Mod? no #Hom:0

Name: Total TCDD F:1 Mass: 319.89/ 321.8 Run: 16 File: 07DE104D5 S:19 Acq: 8-DEC-10 00:01:34

Tables: Run: 07DE104D5 Analyte: TO9 Cal: T090721104D5 Results: 07DE104D7

\* of which named and Amount: \* unnamed Conc: \* of which named and \* unnamed

Name R.T. Ratio Conc. Area S/N >? Mod?NotFa n

Totals Results TestAmerica West Sacramento Page 3 of 9

Run Text: MAQRD-1-AA Sample text: MAQRD-1-AA :G0L020446-8

Name: Total F2 PeCDF F:2 Mass: 339.860 341.857 Mod? no #Hom:6

Run: 16 File: 07DE104D5 S:19 Acq: 8-DEC-10 00:01:34

Tables: Run: 07DE104D5 Analyte: TO9 Cal: T090721104D5 Results: 07DE104D7

Amount: 37.017 of which 12.863 named and 24.153 unnamed 25.726 named and Conc: 74.033 of which 48.307 unnamed

| Name   | #   | R.T.    | Ratio  | Conc.                              | Area             | s/n >?                  | Мс     |        | ,        |
|--|-----|---------|--------|------------------------------------|------------------|-------------------------|--------|--------|----------|
|  | 1   | 23:22   | 1.552  | у 6.183                            | 199357<br>128464 | 3.592<br>2.755          | У      | n<br>n | KET LS:N |
|  | 2   | 23:37   | 1.523  | y 34.358                           | 1099772          | 14.851                  | У      | n      |          |
| 1,2,3,7,8-PeCDF                                | 3   | 25:12   | 1.480  | y 16.082                           | 721977<br>516307 | 9.974<br>7.394          | У      | n<br>n |          |
| 1,2,5,7,6 2002                                 | J   |         | 2.100  | 7 20.002                           | 348871           | 5.630                   | Y      |        |          |
|  | 4   | 25:50   | 1.653  | y 6.622                            | 218770<br>132352 | 3.138<br>1. <u>9</u> 81 | y<br>n | n<br>n |          |
| 2,3,4,7,8-PeCDF                                | 5   | 26:44   | 1.639  | 9.645                              | 312981           | 3.848                   | У      | n      | PV       |
|  |     |         |        |                                    | 190923           | 2.265                   | n      | n      |          |
|  | 6   | 27:02   | 0.849  | n 1.144                            | 36879<br>43422   | 1.085<br>0.932          | n<br>n | n<br>n | 50.439   |
| Totals Results                                 | Tes | tAmeric | a West | Sacramento                         |                  | Page                    | 4      | of :   |          |
| Run Text: MAQRD-1-AA                           |     |         | Sam    | mple text: MAQI                    | RD-1-AA :(       | 30L020446-              | 8      |        |          |
| Name: Total F1 PeCDF<br>Run: 16 File: 07DE104I | )5  |         |        | ass: 339.860 34<br>8-DEC-10 00:01: |                  | od? no                  | #HC    | m:1    |          |
| Tables: Run: 07DE104D                          |     |         |        |                                    |                  | sults: 07               | DE1    | .04D   | ī        |
| Amount: 2.216 c                                |     |         |        | * named and<br>* named and         |                  | unnamed<br>unnamed      |        |        |          |
| Name   | #   | R.T.    | Ratio  | Conc.                              | Area             | S/N >?                  | Мо     | d?     |          |
|  | 1   | 21:47   | 2.032  | n 4432                             | 187288<br>92149  | 3.433<br>2. <u>25</u> 7 | y<br>n | n<br>n |          |

Totals Results TestAmerica West Sacramento Page 5 of 9

Sample text: MAQRD-1-AA :G0L020446-8 Run Text: MAQRD-1-AA

Name: Total PeCDD F:2 Mass: 355.855 357.8 Run: 16 File: 07DE104D5 S:19 Acq: 8-DEC-10 00:01:34 F:2 Mass: 355.855 357.852 Mod? no #Hom:1

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

nount: 2.164 of which Conc: 4.327 of which Amount: \* named and 2.164 unnamed \* named and 4.327 unnamed

Name # R.T. Ratio Conc. Area S/N >? Mod? 1 25:51 1.351 y 4.327 80804 2.090 n n 59809 1.537 n n Totals Results TestAmerica West Sacramento Page 6 of 9

# R.T. Ratio Conc. Area S/N >? Mod?

Run Text: MAQRD-1-AA Sample text: MAQRD-1-AA :G0L020446-8

Name: Total HxCDF F:3 Mass: 373.821 375.818 Run: 16 File: 07DE104D5 S:19 Acq: 8-DEC-10 00:01:34 F:3 Mass: 373.821 375.818 Mod? no #Hom:10

Name

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

| Amount: | 86.732 of which  | 42.988 named and | 43.744 | unnamed |
|---------|------------------|------------------|--------|---------|
| Conc:   | 173.464 of which | 85.976 named and | 87.488 | unnamed |

| 2100              |    |       |         | 001101 |                           | -, -             |        |           |
|-------------------|----|-------|---------|--------|---------------------------|------------------|--------|-----------|
|                   | 1  | 31:01 | 1.124 y | 21.576 |                           | 9.824<br>8.734   | -      |           |
|                   | 2  | 31:13 | 1.114 y | 40.743 | 745935<br>669631          | 17.544<br>16.176 | у<br>У |           |
|                   | 3  | 31:37 | 0.804 n | 4.518  | 86893<br>108059           |                  | n<br>n |           |
|                   | 4  | 31:50 | 1.007 n | 6.063  |                           | 3.334<br>3.445   | y<br>y | n<br>n (i |
| 1,2,3,4,7,8-HxCDF | 5  | 32:17 | 1.118 y | 39.665 | 733367<br>655725          | 18.656<br>16.754 | у<br>У |           |
| 1,2,3,6,7,8-HxCDF | 6  | 32:23 | 1.013 n | 24.132 | 492586<br>486412          | 14.901<br>14.678 | y<br>y |           |
|                   | 7  | 32:29 | 1.491 n | 7.200  | 166568<br>111683          | 4.839<br>3.778   | y<br>Y |           |
|                   | 8  | 32:42 | 1.146 y | 7.387  | 137050<br>119605          | 3.149<br>2.572   | y<br>n |           |
| 2,3,4,6,7,8-HxCDF | 9  | 32:52 | 1.230 y | 12.680 | 248209<br>201767          | 4.788<br>3.816   | y<br>Y |           |
| 1,2,3,7,8,9-HxCDF | 10 | 33:36 | 1.383 y | 9.499  | 1 <b>74</b> 162<br>125957 | 3.189<br>2.537   | y<br>n |           |
|                   |    |       |         |        |                           |                  |        |           |

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Sample text: MAQRD-1-AA :G0L020446-8 Run Text: MAQRD-1-AA

Name: Total HxCDD F:3 Mass: 389.816 391.8 Run: 16 File: 07DE104D5 S:19 Acq: 8-DEC-10 00:01:34 F:3 Mass: 389.816 391.813 Mod? no #Hom:2

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

| Amount: | 3.842 of which | <pre>* named and</pre> | 3.842 | unnamed |
|---------|----------------|------------------------|-------|---------|
| Conc:   | 7.684 of which | * named and            | 7.684 | unnamed |

| Name | # | R.T.  | Ratio   | Conc. | Area  | S/N >? | Mod? |
|------|---|-------|---------|-------|-------|--------|------|
|      | 7 | 32.16 | 0 929 n | 4 439 | 71014 | 2 222  | n n  |

Run Text: MAQRD-1-AA Sample text: MAQRD-1-AA :G0L020446-8

Name: Total HxCDF F:3 Mass: 373.821 375.818 Mod? yes #Hom:12 Run: 16 File: 07DE104D5 S:19 Acq:8-DEC-10 00:01:34

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D $_{\overline{1}}$ 

| Amount:<br>Conc: | 92.100<br>184.199 |    |       |         | named and<br>named and | 52.270<br>104.539 | unnamed<br>unnamed |        |        |                |
|------------------|-------------------|----|-------|---------|------------------------|-------------------|--------------------|--------|--------|----------------|
| Name             |                   | #  | R.T.  | Ratio   | Conc.                  | Area              | s/N >?             | Мо     | d?     |                |
|                  |                   | 1. | 31:01 | 1.124 y | 21.576                 | 396665<br>352984  |                    | _      | n<br>n | (1-2)          |
|                  |                   | 2  | 31:13 | 1.114 y | 40.743                 | 745935<br>669631  | 17.544<br>16.176   | -      | n<br>n | (ON)           |
|                  |                   | 3  | 31:37 | 1.144 y | 6.670                  | 123668<br>108059  |                    |        | У<br>n |                |
|                  |                   | 4  | 31:50 | 1.258 y | 7.527                  | 145704<br>115815  |                    | -      | y<br>n |                |
| 1,2,3,4,7,8-H    | xCDF              | 5  | 32:17 | 1.116 y |                        | 770597<br>690571  | 19.059<br>17.182   | ~      | У      |                |
| 1,2,3,6,7,8-H    | xCDF              | 6  | 32:23 | 1.038 n | 21.696<br>26.344       | 537730<br>518241  | 15.304<br>15.105   | _      | У      |                |
|                  |                   | 7  | 32:29 | 1.264 y | 9.172                  | 177924<br>140734  |                    |        | у<br>У |                |
|                  |                   | 8  | 32:42 | 1.091 y | 8.551                  | 155020<br>142090  |                    | _      | У      |                |
|                  |                   | 9  | 32:52 | 0.975 n | 6.928                  | 133250<br>136697  | 4.891<br>4.048     | -      | У      |                |
| 2,3,4,6,7,8-H    | xCDF              | 10 | 32:53 | 1.549 n | 5/128                  |                   | 4.215<br>3.229     | У      | У      | KEM            |
|                  |                   | 11 | 33:32 | 1.266 y | 3.272                  | 65474<br>51697    | 2.365<br>1.865     |        | У      |                |
| 1,2,3,7,8,9-н    | xCDF              | 12 | 33:36 | 1.300 y | 6.465                  | 115432<br>88827   | 3.235<br>2.679     | y<br>n | У      | DV<br>Ser <5:N |
|                  |                   |    |       |         | •                      | .1                |                    |        |        | the <5:N       |

|   |       |         |       | 76402 | 2.472          | n | n |
|---|-------|---------|-------|-------|----------------|---|---|
| 2 | 32:31 | 1.470 n | 3.246 |       | 2.102<br>1.773 |   |   |

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Run Text: MAQRD-1-AA :GOL020446-8

Name: Total HpCDF F:4 Mass: 407.782 409.779 Mod? no #Hom:4

Run: 16 File: 07DE104D5 S:19 Acq: 8-DEC-10 00:01:34

Tables: Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D7

Amount: 98.172 of which 68.390 named and 29.782 unnamed Conc: 196.344 of which 136.781 named and 59.563 unnamed

Name R.T. Ratio Conc. Area S/N >? Mod?1,2,3,4,6,7,8-HpCDF 1 34:52 1.181 y 104.986 1864878 100.088 y n 1579588 76.308 y n 2 35:04 1.177 y 23.114 371502 20.485 y n 315750 14.411 y n 35:11 1.288 n 36.449 684088 32.241 y n 531244 23.941 1,2,3,4,7,8,9-HpCDF 4 36:01 1.115 y 31.794 446859 22.987 y n 400686 17.870 y n

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Run Text: MAQRD-1-AA :GOL020446-8

Name: Total HpCDD F:4 Mass: 423.777 425.774 Mod? no #Hom:4

Run: 16 File: 07DE104D5 S:19 Acq: 8-DEC-10 00:01:34

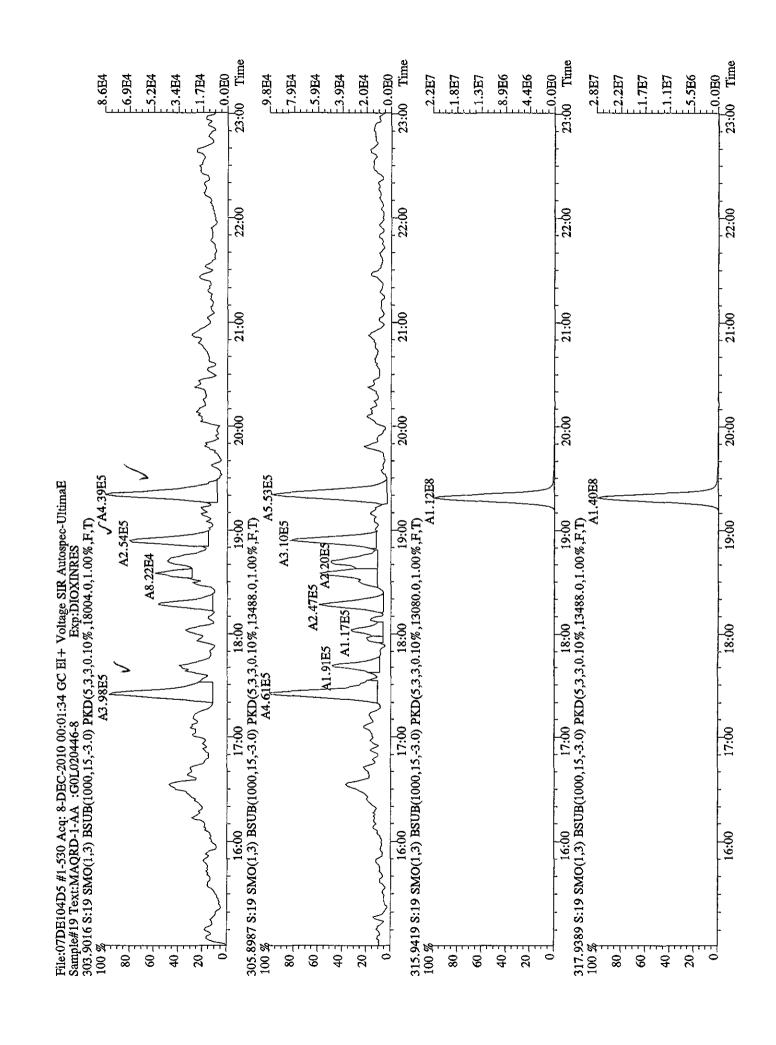
Tables: Run: 07DE104D5 Analyte: TO9 Cal: T090721104D5 Results: 07DE104D7

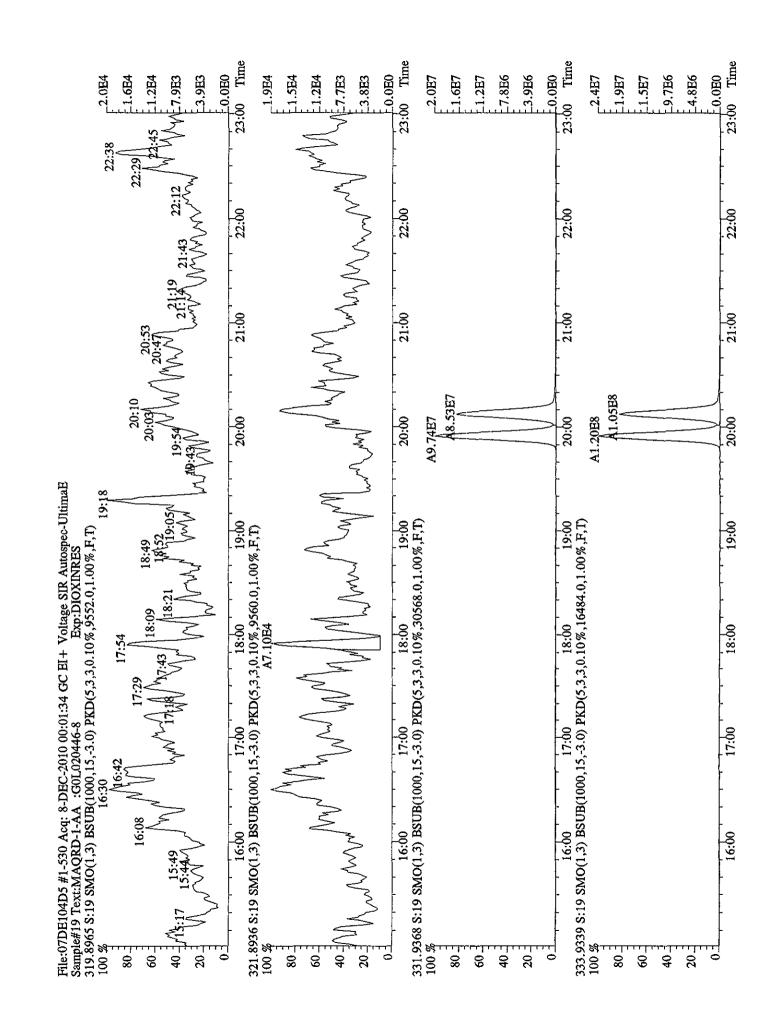
9.558 of which 5.050 named and Amount: 4.509 unnamed 19.116 of which 10.099 named and Conc: 9.017 unnamed Name R.T. Ratio Conc. Area S/N >? Mod?3.631 34:52 3.665 n 54673 y n 14919 1.393 2 35:07 1.279 n 6.553 97493 6.044 y n 76201 5.459 1,2,3,4,6,7,8-HpCDD 3 35:41 1.157 y 6.152 10.099 128504 y n

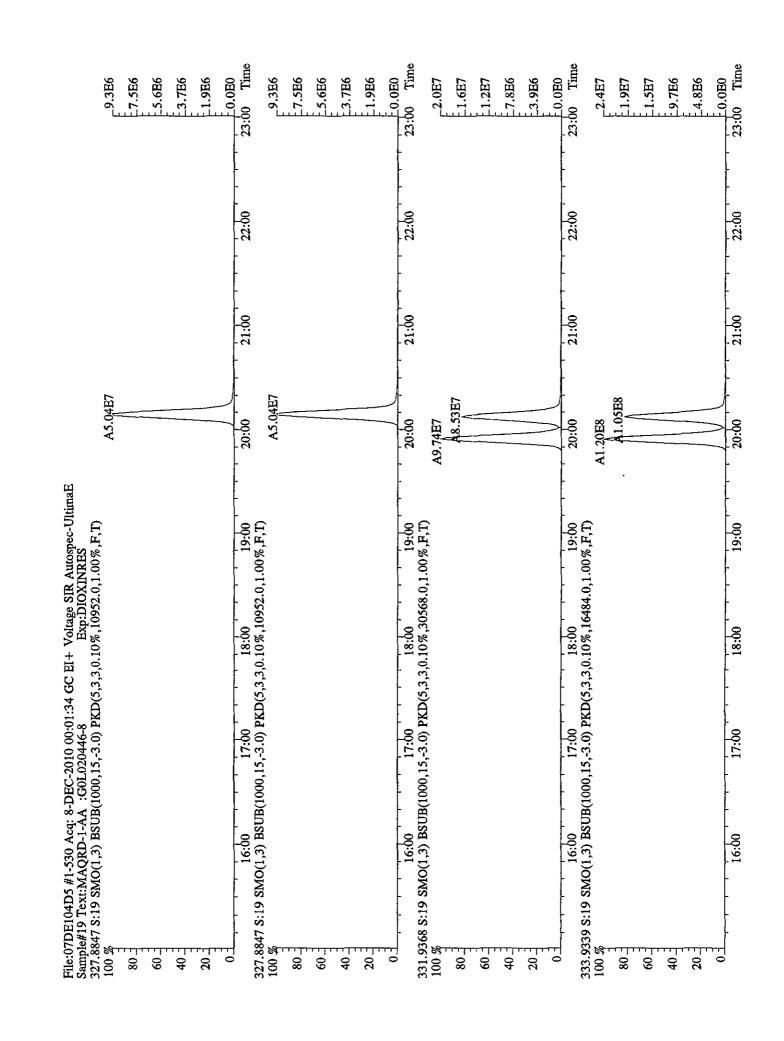
111050 6.386 y n

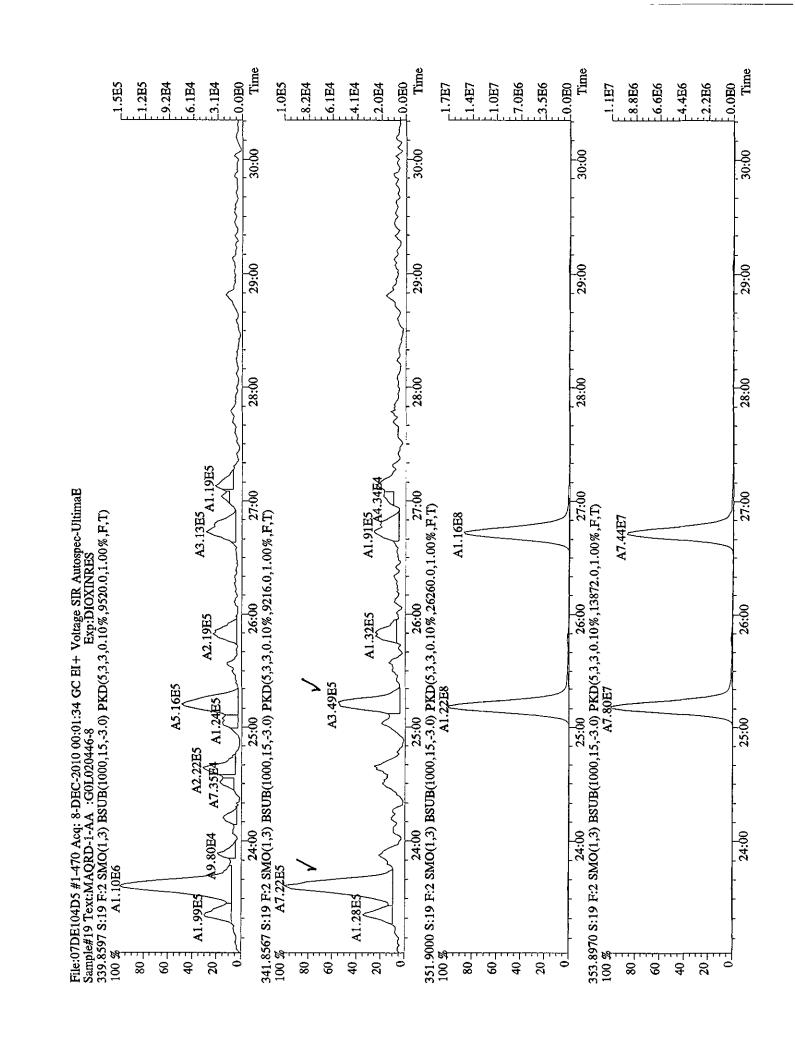
4 36:00 3.522 n 1.181 48346 3.511 y n 13727 1.249 n n

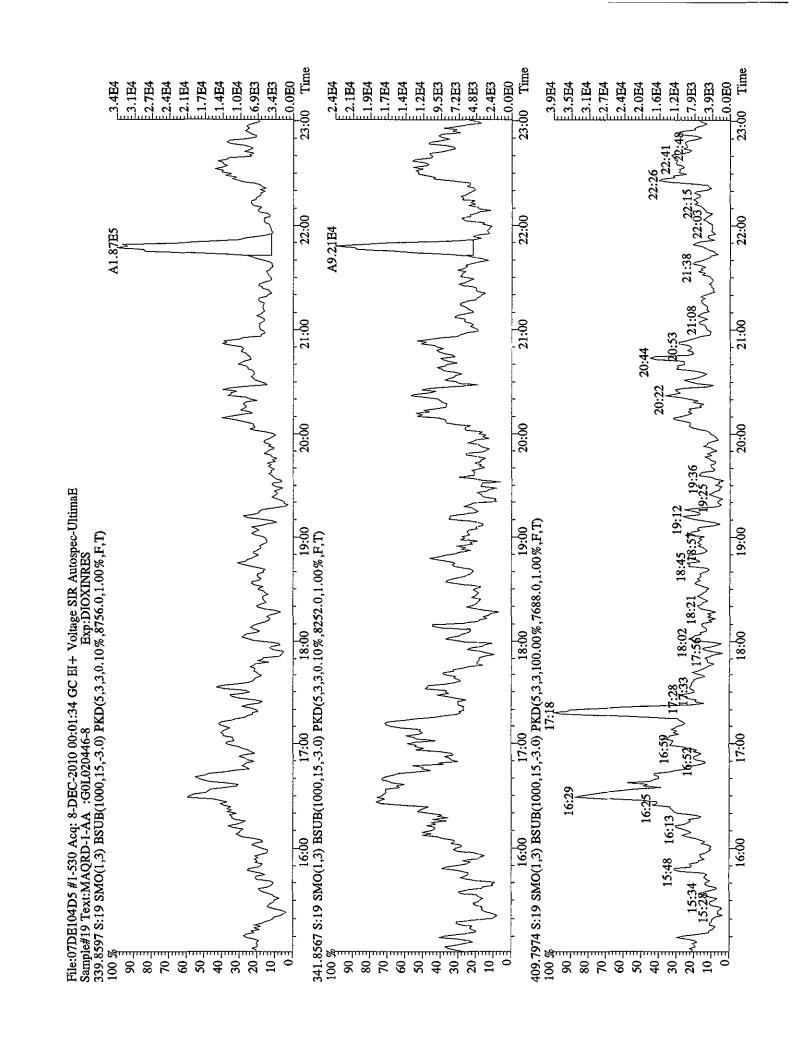
(W.652)

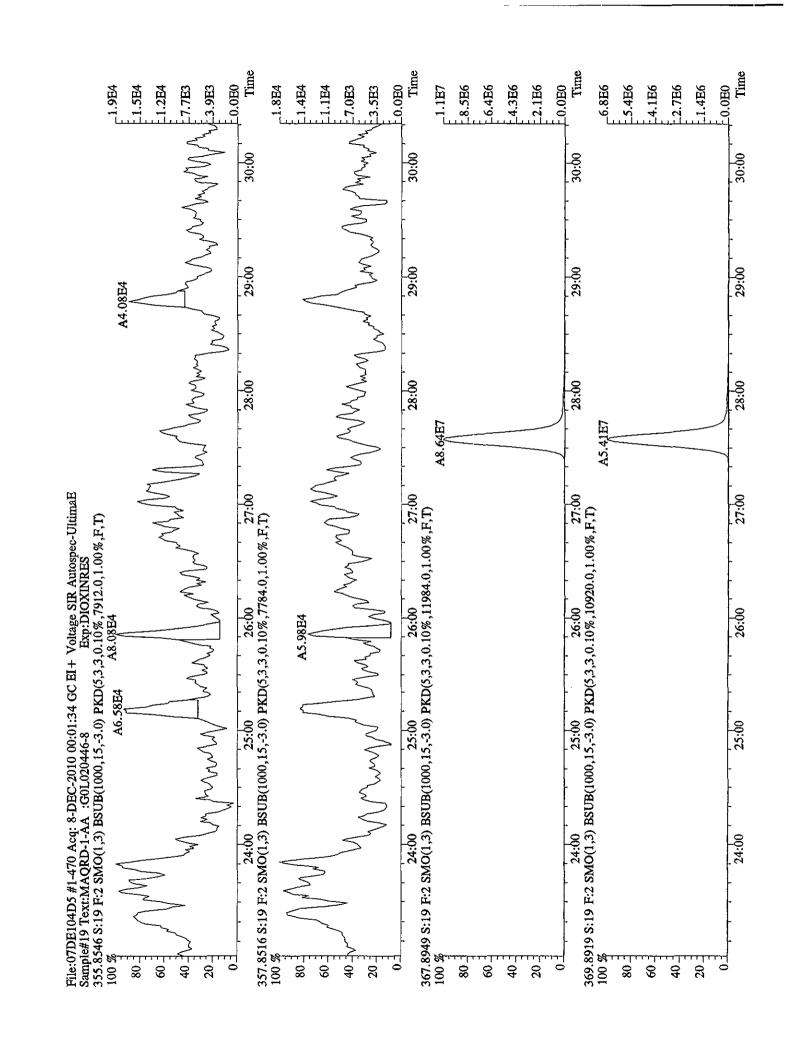


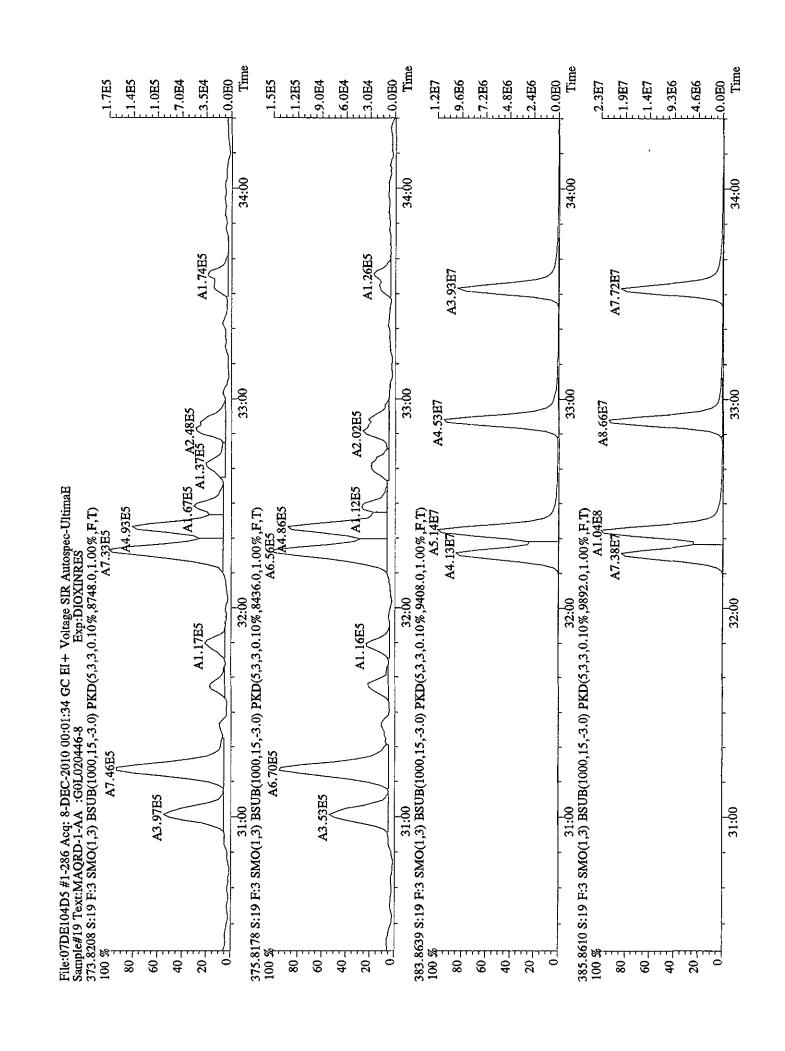


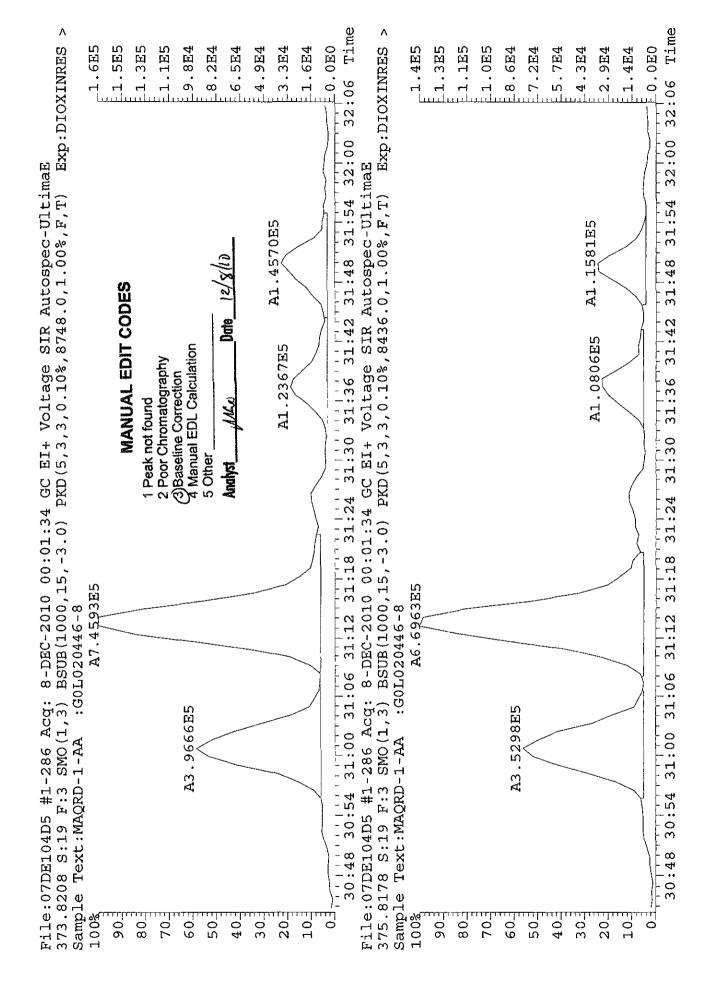


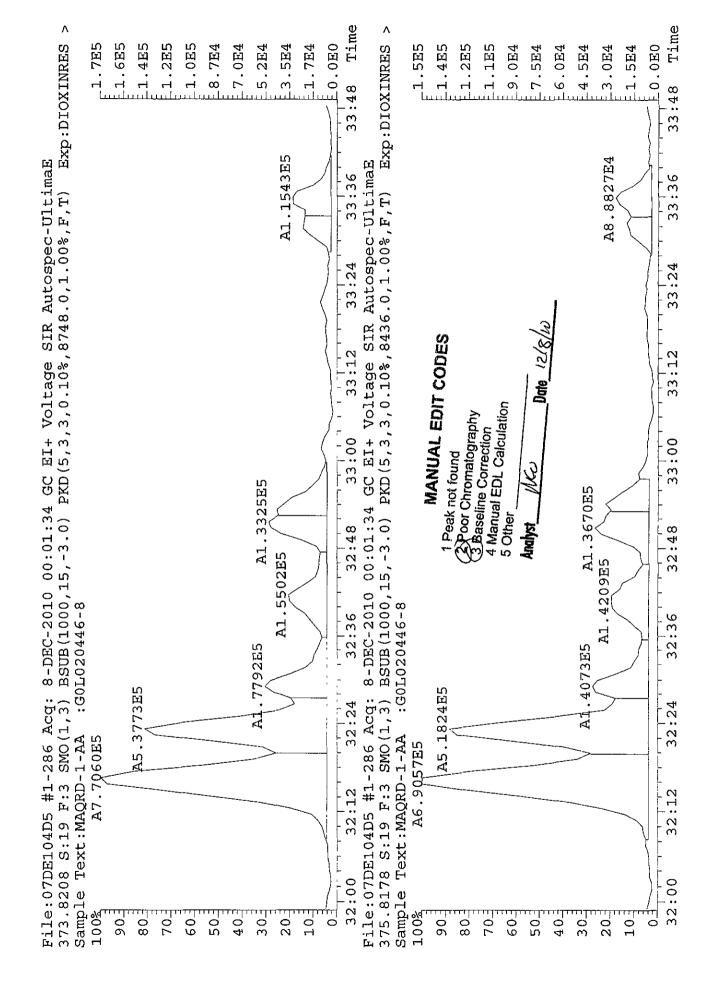


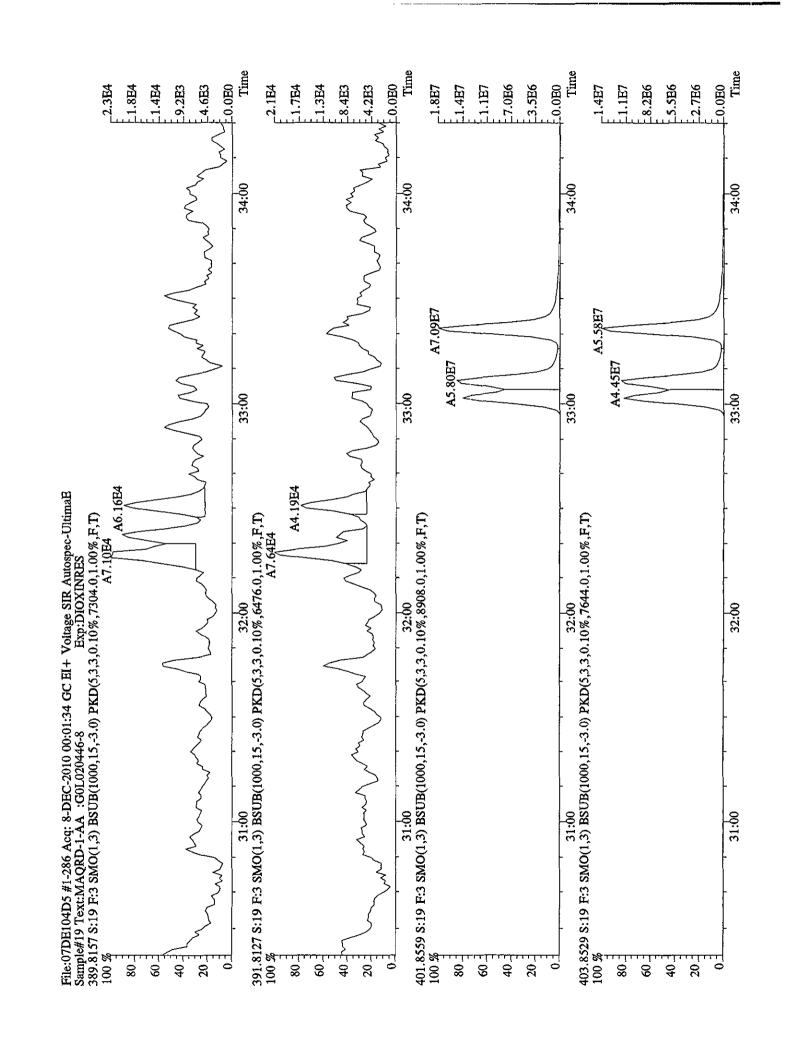


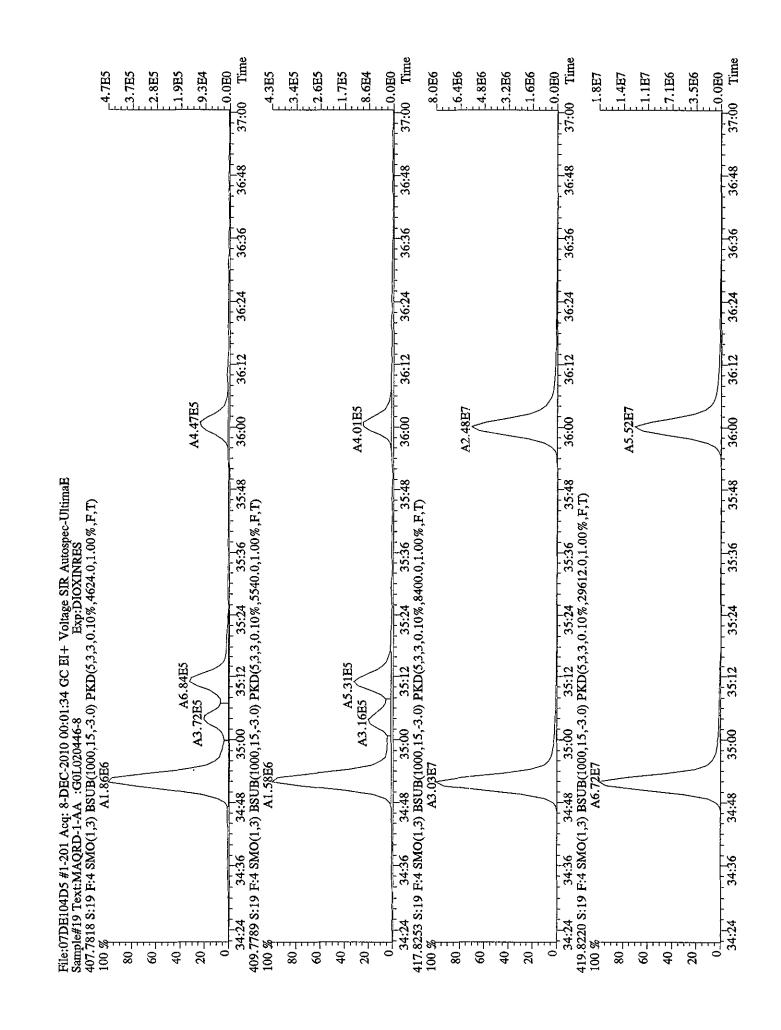


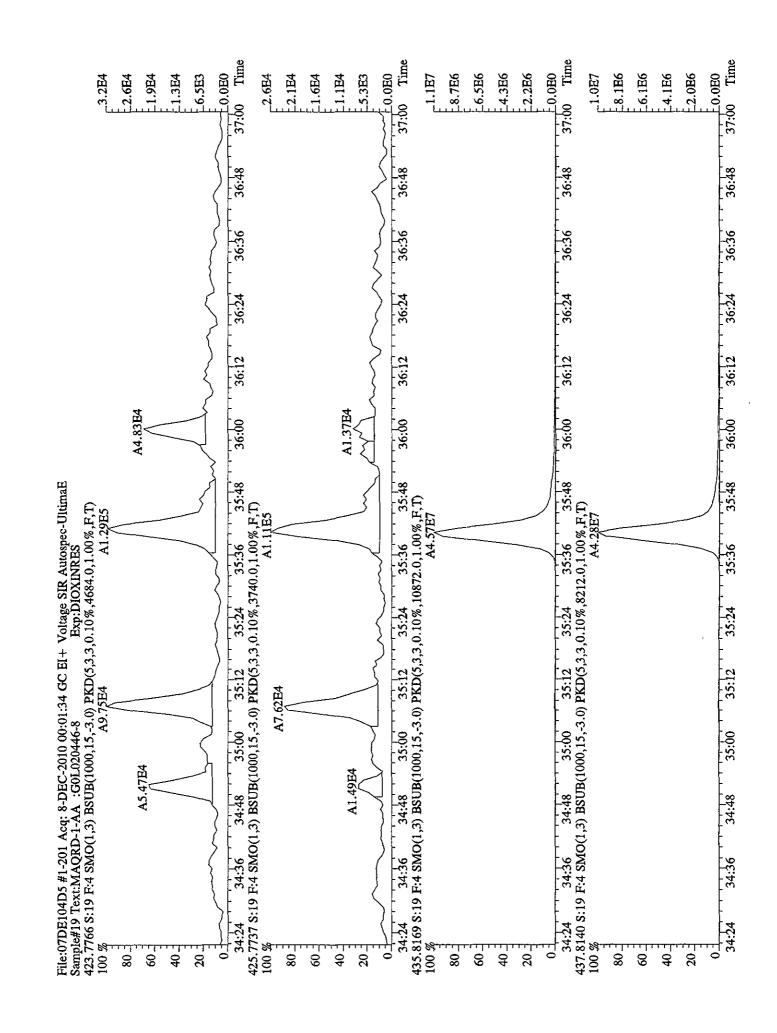


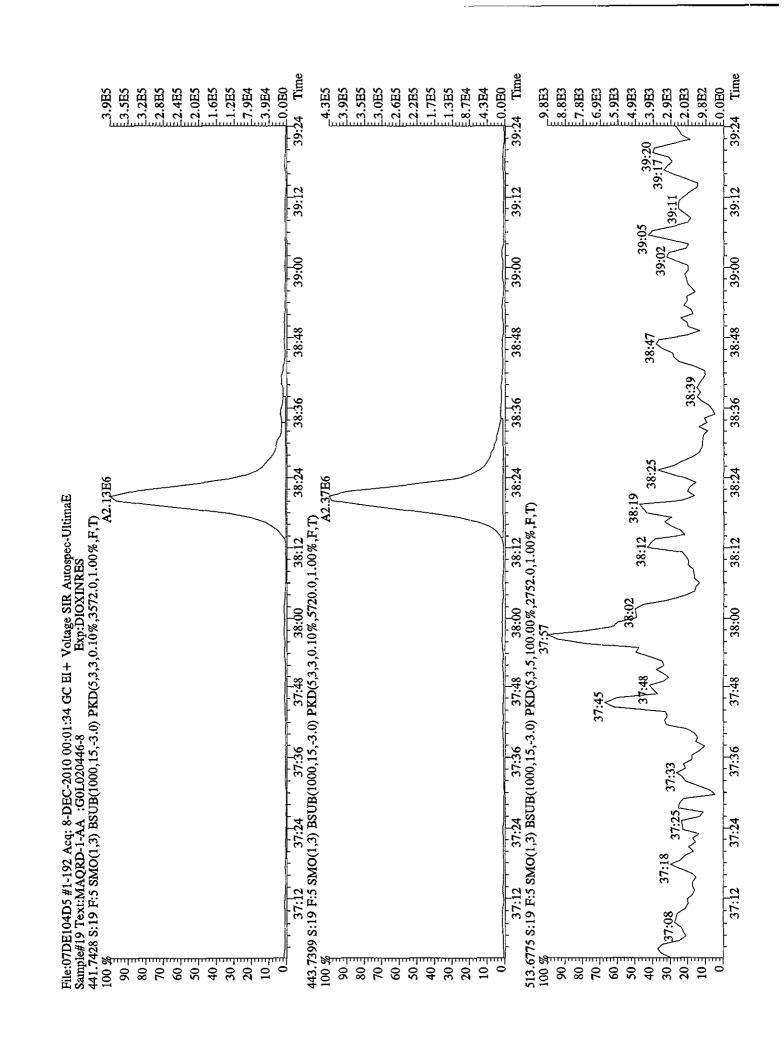


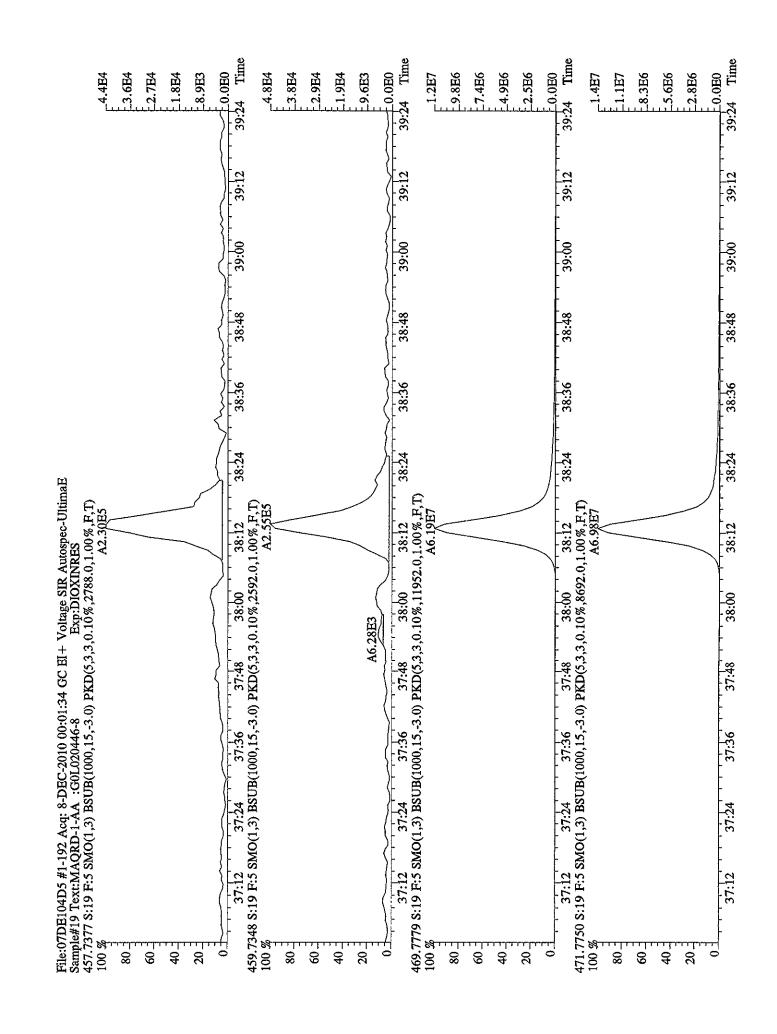


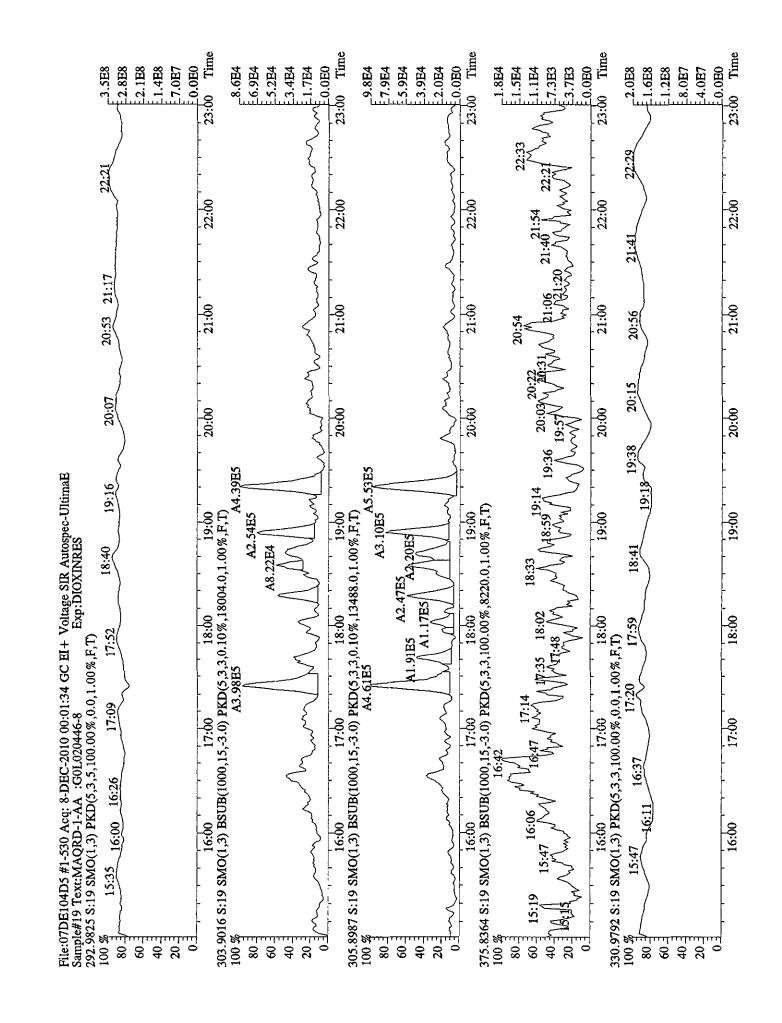


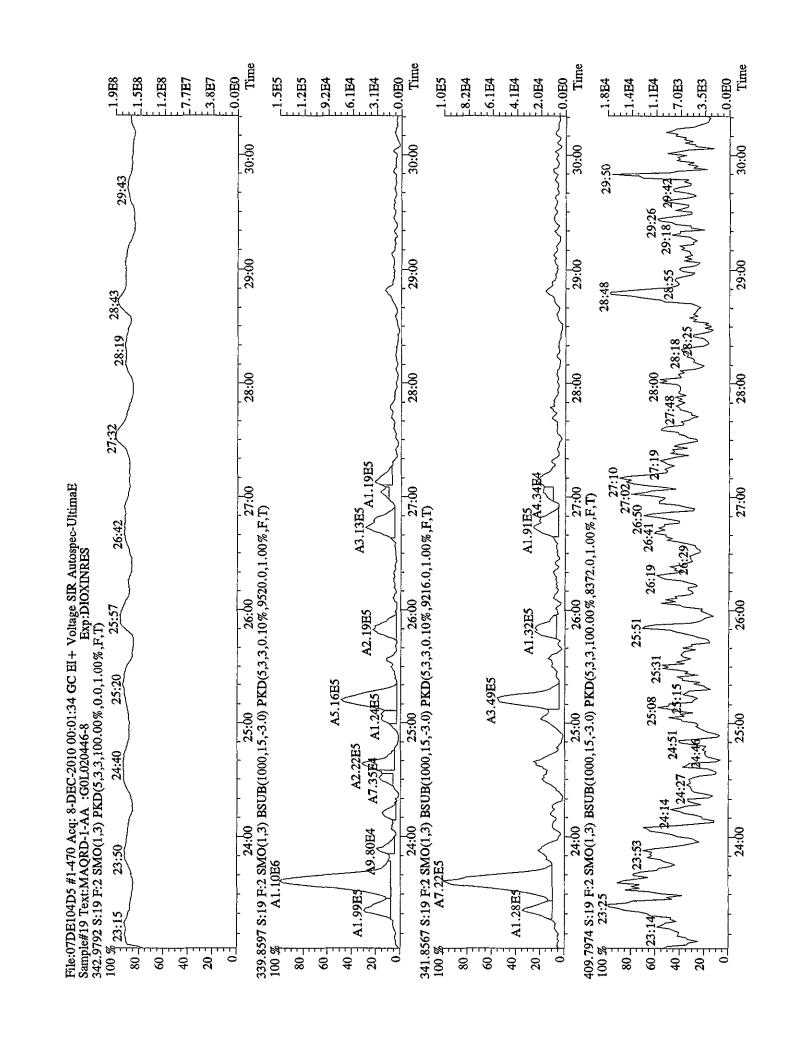


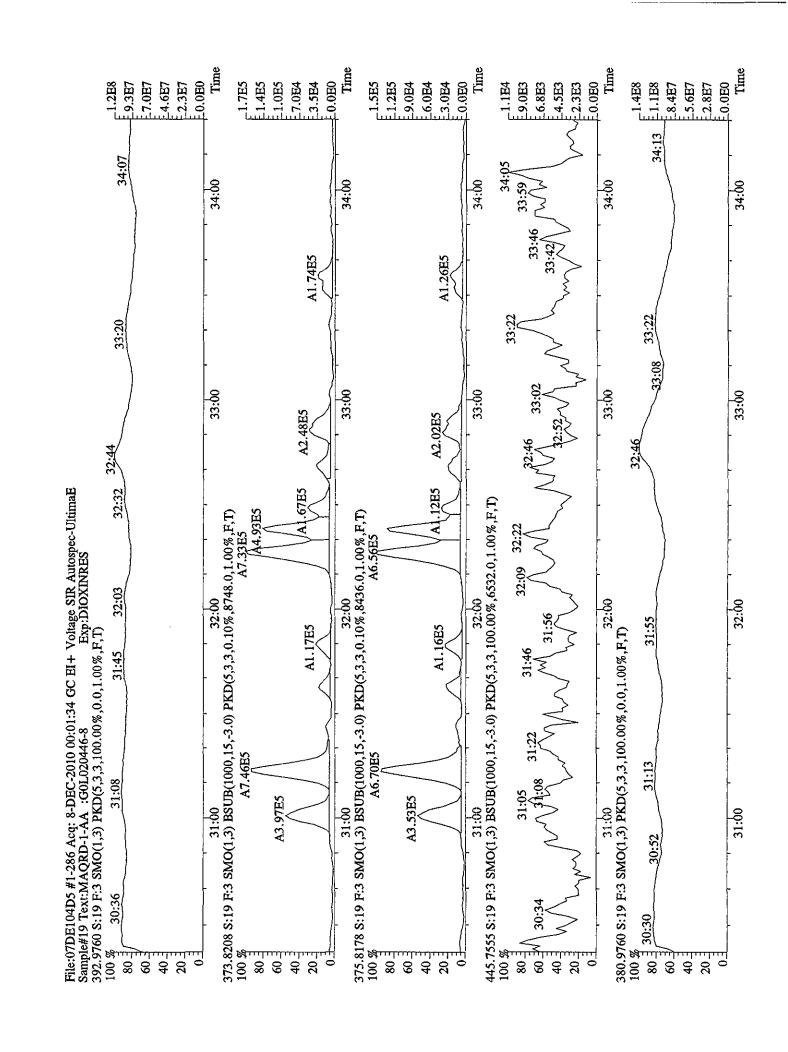


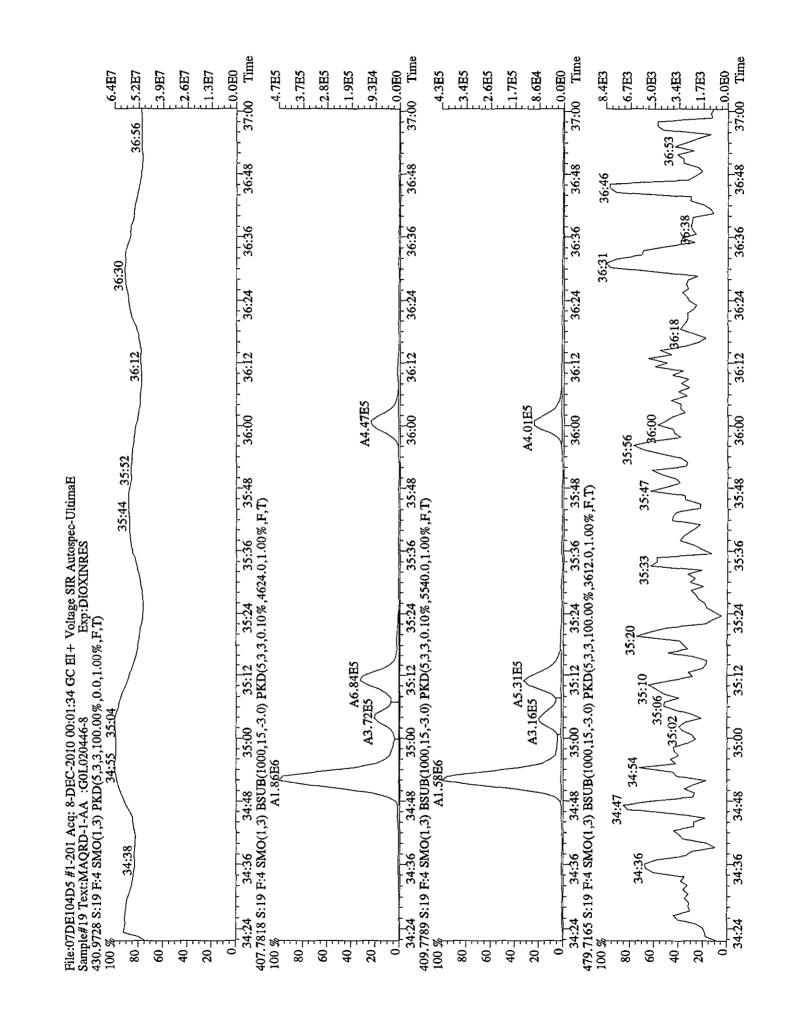


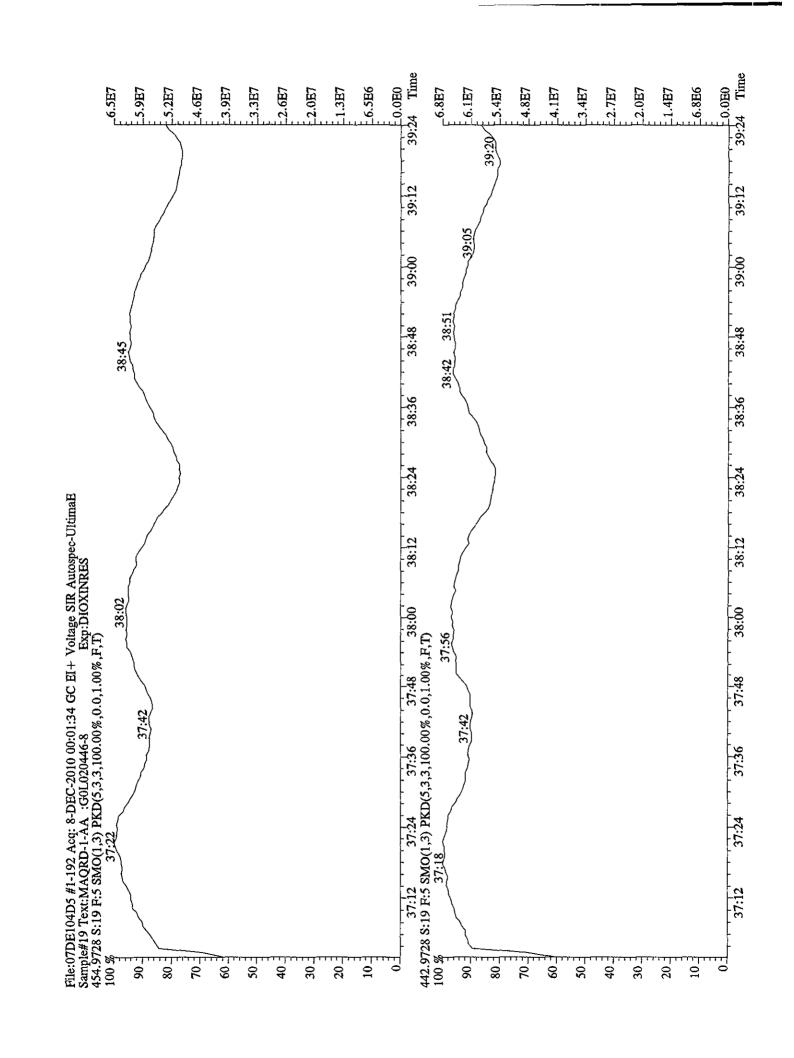














## Test America – West Sacramento

## Daily Calibration Checklist Dioxin Methods

| Method ID 109   | Associated ICAL TO9       | 272104D5                              |
|---|---------------------------|---------------------------------------|
| Column ID DB5   | Instrument ID             | 4-D5                                  |
| STD ID STIZOT, STIZOTA  | STD Solution 10 to        | XNY61                                 |
| Analyzed by As  | Date Analyzed 12-0        | 07~10                                 |
| Std. Pkg. By As   | Date Std. Pkg. Assembled_ | 12-08-10                              |
| Std. Pkg. Reviewed By NF-   | Date Std. Pkg. Reviewed_  | 12-08-10                              |
| DAILY STANDARD PACKAGE  | INITIATED                 | REVIEWED                              |
| Standard, CPSM, and Solvent Blank present?                        | <b>✓</b>                  | V                                     |
| Copy of log-file and Beginning Static Resolution present?         | <i></i>                   | · /                                   |
| CPSM blow up present?   | <b>✓</b>                  | · V                                   |
| Curve Summary present?  |                           | /                                     |
| Summary of Method criteria present or documented below?           | ~                         | V                                     |
| Daily standard within method specified limits?*                   | ~ (D)                     | () V                                  |
| Analyte retention times correct?                                  |                           | /                                     |
| Isotopic ratios within limits?                                    | J                         | . /                                   |
| CPSM valley ≤ method specified limits?**                          | <i>'</i>                  | <b>V</b>                              |
| Are chromatographic windows correct?                              | V                         | V                                     |
| Samples analyzed within 12 hrs of daily standard?                 | V                         | . 🗸                                   |
| Manual reintegration's checked and hardcopies included?           | NA .                      | MA-                                   |
| Ending Standard present?  | V                         | V .                                   |
| Ending Static Resolutions present                                 | <i></i>                   | V                                     |
| Absolute retention times for 13C12-1,2,3,4-TCDD and 13C12-        | AM                        |                                       |
| 1,2,3,7,8,9-HxCDD are within +/- 15 seconds of the retention      | i I                       | . IA                                  |
| times in the Initial Calibration? (required for all 1613B samples | )                         |                                       |
| COMMENTS:   |                           | · · · · · · · · · · · · · · · · · · · |
| ① Ending std > 20 1/ D for  | 1,2,3,6,7,8-HXCDF         | < 25 / D                              |
| 1126 Ava. RRF = 1.55  | Dec NCM # 07-0            | 0117736                               |

Method 23: See Method 23 Daily Standard Criteria, Table 5.

Method 1613B: See, Method 1613B or Method 1613B Tetras Daily Standard Criteria,

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.

<sup>\*</sup> Method 8290/TO9/M0023A: (beginning) ≤ 20% from curve RRFs for native analytes, ≤ 30% from curve RRFs for labeled compounds.

Method 8290/TO9/M0023A: (ending)  $\leq$  25% from curve RRFs for native analytes,  $\leq$  35% from curve RRFs for labeled compounds.

<sup>\*\*</sup> 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

Run text: ST1207 File text: ST1207 :CS3 10DXN461

Run #6 Filename 07DE104D5 S: 2 I: 1

Acquired: 7-DEC-10 11:24:44 Processed: 7-DEC-10 14:06:03 Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results Results: 07DE104D58290

| Name                      | Resp      | RA                    | RT     | RRF  | Amount | Dev'n        | Mod? |
|---------------------------|-----------|-----------------------|--------|------|--------|--------------|------|
| 13C-1,2,3,4-TCDD          | 123978300 | 0.80 y                | 19:55  | -    | 100.00 | -            | n    |
|                           |           |                       |        |      |        |              |      |
| 13C-2,3,7,8-TCDF          | 176013000 | 0.81 y                | 19:19  | 1.42 | 100.00 | 15.5         | n    |
| 2,3,7,8-TCDF              | 17940790  | 0.79 y                | 19:21  | 1.02 | 10.00  | 2.5          | n    |
| Total TCDF                | 18088949  | 0.99 n                | 18:18  | 1.02 | 10.00  | 2.5          | n    |
|                           |           |                       |        |      |        |              |      |
| 13C-2,3,7,8-TCDD          | 121635500 | 0.81 y                | 20:08  | 0.98 | 100.00 | 8.4          | n    |
| 2,3,7,8-TCDD              | 12608320  | 0.77 y                | 20:09  | 1.04 | 10.00  | 5.4          | n    |
| Total TCDD                | 12744050  | 2.73 n                | 16:57  | 1.04 | 10.00  | 5.4          | n    |
|                           |           |                       |        |      |        |              |      |
| 37Cl-2,3,7,8-TCDD         | 15712060  | 1.00 y                | 20:09  | 1.29 | 10.00  | -2.6         | n    |
|                           |           |                       |        |      |        |              |      |
| 13C-1,2,3,7,8-PeCDF       | 133059600 | _                     | 25:11  | 1.07 | 100.00 | 22.5         | n    |
| 1,2,3,7,8-PeCDF           | 74513300  | _                     | 25:13  |      | 50.00  | 4.0          | n    |
| 2,3,4,7,8-PeCDF           |           |                       | 26:46  |      | 50.00  | -1.2         | n    |
| Total F2 PeCDF            | 144330112 |                       | 23:37  |      | 100.00 | 1.5          | n    |
| Total F1 PeCDF            | *         | * n                   | NotFnd | 1.08 | 100.00 | 1.5          | n    |
|                           |           |                       |        |      |        |              |      |
| 13C-1,2,3,7,8-PeCDD       | 92480800  | _                     | 27:35  |      | 100.00 | 12.9         | n    |
| 1,2,3,7,8-PeCDD           | 48245400  |                       | 27:37  |      | 50.00  | 12.7         | n    |
| Total PeCDD               | 48420345  | 1.59 y                | 27:37  | 1.04 | 50.00  | 12.7         | n    |
| 120 1 2 2 2 2 2 3 7 7-000 | 50020000  | 1 07                  | 22.22  |      | 100.00 |              | _    |
| 13C-1,2,3,7,8,9-HxCDD     | 78038800  | 1.27 y                | 33;42  | _    | 100.00 | <del>-</del> | n    |
| 13C-1,2,3,4,7,8-HxCDF     | 83357100  | 0.50 v                | 32:15  | 1.07 | 100.00 | 2.2          | n    |
| 1,2,3,4,7,8-HxCDF         | 52834700  | 1.14 y                |        | 1.27 | 50.00  | 4.1          | n    |
| 1,2,3,4,7,8-HXCDF         | 64329600  | _                     | 32:23  |      | 50.00  | 20.4         | n    |
| 2,3,4,6,7,8-HxCDF         | 54027100  | _                     | 32:54  |      | 50.00  | 5.1          | n    |
| 1,2,3,7,8,9-HxCDF         | 46506000  | _                     | 33:33  |      | 50.00  | 1.6          | n    |
| Total HxCDF               | 217800052 |                       | 31:15  | 1.31 | 200.00 | 8.1          | n    |
| TOTAL TIMEDI              | 21/000052 | 1.13 Y                | 34.13  | 1.51 | 200.00 | 0.1          | **   |
| 13C-1,2,3,6,7,8-HxCDD     | 75602700  | 1.29 y                | 33:06  | 0.97 | 100.00 | 16.6         | n    |
| 1,2,3,4,7,8-HxCDD         | 32693000  |                       | 33:03  |      | 50.00  | -16.6        | n    |
| 1,2,3,6,7,8-HxCDD         | 43259700  | _                     | 33:07  | 1.14 | 50.00  | -1.6         | n    |
| 1,2,3,7,8,9-HxCDD         | 40812100  | 1.23 y                |        | 1.08 | 50.00  | -8.6         | n    |
| Total HxCDD               | 116764800 | 1.18 y                | _      | 1.03 | 150.00 | -8.7         |      |
| 10001 Insupp              | 110,01000 | <b>1,1</b> 0 <i>j</i> | 33.03  | 2.03 | 230.00 | •            |      |
| 13C-1,2,3,4,6,7,8-HpCDF   | 62057700  | 0.43 y                | 34:52  | 0.80 | 100.00 | -12.6        | n    |
| 1,2,3,4,6,7,8-HpCDF       | 46538000  | 1.07 y                |        | 1.50 | 50.00  | 11.4         | n    |
| 1,2,3,4,7,8,9-HpCDF       | 39187800  | -                     | 36:00  | 1.26 | 50.00  | 15.5         | n    |
| Total HpCDF               | 86167690  | 1.07 y                |        | 1.38 | 100.00 | 13.3         | n    |
| Total lipedi              | 00107030  | #. 0 / J              | 31133  | 2.50 | 100.00 | 25.5         |      |
| 13C-1,2,3,4,6,7,8-HpCDD   | 57827100  | 1.07 y                | 35:41  | 0.74 | 100.00 | -10.4        | n    |
| 1,2,3,4,6,7,8-HpCDD       | 32078900  | 1.04 y                |        | 1.11 | 50.00  | 3.5          | n    |
| Total HpCDD               | 32264754  | 1.00 y                |        | 1.11 | 50.00  | 3.5          | n    |
| 100a1 1.pobb              | 02201,01  | y                     | 20.00  | _,   | 20.00  | 3.3          |      |
| 13C-OCDD                  | 79772600  | 0.89 y                | 38:13  | 0.51 | 200.00 | -17.5        | n    |
| OCDF                      | 58710400  | 0.94 y                |        | 1.47 | 100.00 | 7.4          | n    |
| OCDD                      | 48140100  | 0.91 y                |        | 1.21 | 100.00 | 0.6          | n    |
| V CDB                     |           | I                     | ,      |      |        |              |      |

Run text: ST1207A File text: ST1207A :CS3 10DXN461

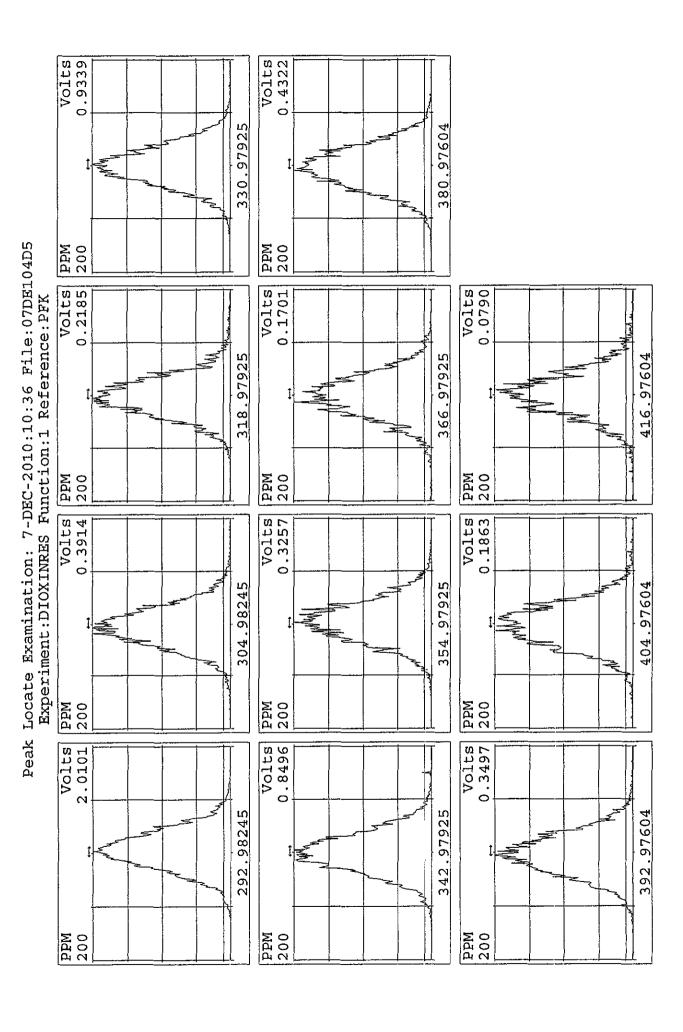
Run #11 Filename 07DE104D5 S: 13 I: 1

Acquired: 7-DEC-10 19:34:22 Processed: 8-DEC-10 07:53:20 Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D5TO9

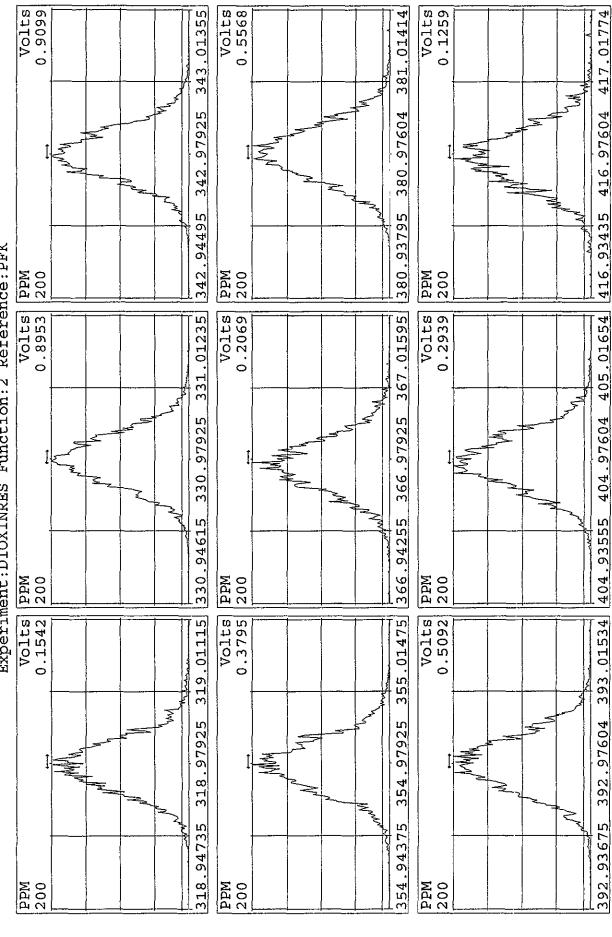
| Name                    | Resp      | RA     | RT     | RRF  | Amount | Dev'n | Mod? |
|-------------------------|-----------|--------|--------|------|--------|-------|------|
| 13C-1,2,3,4-TCDD        | 249289184 | 0.80 y | 19:55  | -    | 100.00 | -     | n    |
|                         |           |        |        |      |        |       |      |
| 13C-2,3,7,8-TCDF        | 321371584 | 0.80 y | 19:19  | 1.29 | 100.00 | 4.9   | n    |
| 2,3,7,8-TCDF            | 33798574  | 0.76 y | 19:19  | 1.05 | 10.00  | 5.8   | n    |
| Total TCDF              | 34245287  | 0.64 n | 18:17  | 1.05 | 10.00  | 5.8   | n    |
|                         |           |        |        |      |        |       |      |
| 13C-2,3,7,8-TCDD        | 230944520 | 0.80 y | 20:07  | 0.93 | 100.00 | 2.4   | n    |
| 2,3,7,8-TCDD            | 24056850  | 0.78 y | 20:09  | 1.04 | 10.00  | 5.9   | n    |
| Total TCDD              | 24218671  | 1.57 n | 16:56  | 1.04 | 10.00  | 5.9   | n    |
|                         |           |        |        |      |        |       |      |
| 37Cl-2,3,7,8-TCDD       | 28904410  | 1.00 y | 20:09  | 1.25 | 10.00  | -5.6  | n    |
|                         |           |        |        |      |        |       |      |
| 13C-1,2,3,7,8-PeCDF     | 237248744 | 1.57 y | 25:11  | 0.95 | 100.00 | 8.6   | n    |
| 1,2,3,7,8-PeCDF         | 133809932 | 1.59 y | 25:13  | 1.13 | 50.00  | 4.8   | n    |
| 2,3,4,7,8-PeCDF         | 123414344 | 1.56 y | 26:46  | 1.04 | 50.00  | -0.5  | n    |
| Total F2 PeCDF          | 259552935 | 1.10 n | 23:37  | 1.08 | 100.00 | 2.2   | n    |
| Total F1 PeCDF          | *         | * n    | NotFnd | 1.08 | 100.00 | 2.2   | n    |
|                         |           |        |        |      |        |       |      |
| 13C-1,2,3,7,8-PeCDD     | 162820396 | 1.60 y | 27:35  | 0.65 | 100.00 | -1.2  | n    |
| 1,2,3,7,8-PeCDD         | 85649256  | 1.54 y | 27:37  | 1.05 | 50.00  | 13.7  | n    |
| Total PeCDD             | 85649256  | 1.54 y | 27:37  | 1.05 | 50.00  | 13.7  | n    |
|                         |           |        |        |      |        |       |      |
| 13C-1,2,3,7,8,9-HxCDD   | 138467840 | 1.29 y | 33:22  | _    | 100.00 | -     | n    |
|                         |           |        |        |      |        |       |      |
| 13C-1,2,3,4,7,8-HxCDF   | 145460228 | 0.51 y | 32:16  | 1.05 | 100.00 | 0.5   | n    |
| 1,2,3,4,7,8-HxCDF       | 97072752  | 1.22 y | 32:17  | 1.33 | 50.00  | 9.6   | n    |
| 1,2,3,6,7,8-HxCDF       | 113191368 | 1.09 y | 32:22  | 1.56 | 50.00  | 21.4  | n 🛧  |
| 2,3,4,6,7,8-HxCDF       | 92166940  | 1.18 y | 32:55  | 1.27 | 50.00  | 2.7   | n    |
| 1,2,3,7,8,9-HxCDF       | 81483412  | 1.16 y | 33:33  | 1.12 | 50.00  | 2.0   | n    |
| Total HxCDF             | 384092320 | 1.48 n | 31:13  | 1.32 | 200.00 | 9.3   | n    |
|                         |           |        |        |      |        |       |      |
| 13C-1,2,3,6,7,8-HxCDD   | 119134728 | _      | 33:06  | 0.86 | 100.00 | 3.6   | n    |
| 1,2,3,4,7,8-HxCDD       | 59134082  | _      | 33:03  | 0.99 | 50.00  | -4.3  | n    |
| 1,2,3,6,7,8-HxCDD       | 72612384  | _      | 33:07  | 1.22 | 50.00  | 4.8   | n    |
| 1,2,3,7,8,9-HxCDD       | 74198934  | _      | 33:23  | 1.25 | 50.00  | 5.4   | n    |
| Total HxCDD             | 205945400 | 1.41 y | 33:03  | 1.15 | 150.00 | 2.2   | n    |
|                         |           |        |        |      |        |       |      |
| 13C-1,2,3,4,6,7,8-HpCDF | 114558776 |        |        |      |        | -9.1  | n    |
|                         | 86160904  | _      |        |      | 50.00  | 11.8  | n    |
| 1,2,3,4,7,8,9-HpCDF     | 70581288  | _      |        |      | 50.00  | 12.7  | n    |
| Total HpCDF             | 157688853 | 1.06 y | 34:52  | 1.37 | 100.00 | 12.2  | n    |
|                         |           |        |        |      |        |       |      |
| 13C-1,2,3,4,6,7,8-HpCDD | 104599816 | _      | 35:40  |      | 100.00 | -8.6  | n    |
| 1,2,3,4,6,7,8-HpCDD     | 58171288  | _      | 35:41  |      | 50.00  | 3.8   | n    |
| Total HpCDD             | 58502073  | 0.90 y | 35:08  | 1.11 | 50.00  | 3.8   | n    |
|                         |           |        |        |      |        |       |      |
| 13C-OCDD                | 151995728 | _      | 38:14  |      | 200.00 | -11.5 | n    |
| OCDF                    | 111081248 | -      | 38:22  |      | 100.00 | 6.7   | n    |
| OCDD                    | 91575692  | 0.91 y | 38:14  | 1.20 | 100.00 | 0.5   | n    |

| Data file | Smp | Work Order | Sample ID           | FV-uL | Method/Matrix | Box | Size     | υ          |
|-----------|-----|------------|---------------------|-------|---------------|-----|----------|------------|
| 07DE104D5 | 1   | CP1207     | DB-5 CPSM 10LRES076 |       |               |     | 1.00000  |            |
| 07DE104D5 | 2   | ST1207     | CS3 10DXN461        |       |               |     | 1.00000  |            |
| 07DE104D5 | 3   | MAVWM-1-AA | G0L020446-1MB       | 20    | TO9/AIR       | 30  | 0.50000  | SAM        |
| 07DE104D5 | 4   | MAV34-1-AA | G0L040422-2         | 20    | 8290/SOLID    |     | 15.04000 | g.         |
| 07DE104D5 | 5   | MAV35-1-AA | G0L040422-3         | 20    | 8290/SOLID    |     | 15.06000 | g          |
| 07DE104D5 | 6   | MAV36-1-AA | G0L040422-4         | 20    | 8290/SOLID    |     | 15.05000 | g.         |
| 07DE104D5 | 7   | MAV37-1-AA | G0L040422-5         | 20    | 8290/SOLID    |     | 15.03000 | 9          |
| 07DE104D5 | 8   | MATLN-1-AA | G0L030456-1         | 20    | 8290/SOLID    |     | 15.08000 | <b>9</b> . |
| 07DE104D5 | 9   | MATLN-1-AD | G0L030456-1MS       | 20    | 8290/SOLID    |     | 15.01000 | 9          |
| 07DE104D5 | 10  | MATLN-1-AE | G0L030456-1MSD      | 20    | 8290/SOLID    |     | 15.04000 | 9          |
| 07DE104D5 | 11  | MAVWM-1-AC | G0L020446-1LCS      | 20    | TO9/AIR       | 30  | 0.50000  | SAM        |
| 07DE104D5 | 12  | MAVWM-1-AD | G0L020446-1DCS      | 20    | TO9/AIR       |     | 0.50000  | SAM        |
| 07DE104D5 | 13  | ST1207A    | CS3 10DXN461        |       | •             |     | 1.00000  |            |
| 07DE104D5 | 14  | CP1207A    | DB-5 CPSM 10LRES076 |       |               |     | 1.00000  |            |
| 07DE104D5 | 15  | ST1207B    | CS3 10DXN461        |       |               |     | 1.00000  | •          |
| 07DE104D5 | 16  | MAXGD-1-AA | G0L030524-1MB       | 20    | 8290/SOLID    | 31  | 10.00000 | <b>3</b> . |
| 07DE104D5 | 17  | MAQQV-1-AA | G0L020446-1         | 20    | TO9/AIR       | 30  | 0.50000  | SAM        |
| 07DE104D5 | 18  | MAQQ6-1-AA | G0L020446-5         | 20    | TO9/AIR       |     | 0.50000  | SAM        |
| 07DE104D5 | 19  | MAQRD-1-AA | G0L020446-8         | 20    | TO9/AIR       |     | 0.50000  | SAM        |
| 07DE104D5 | 20  | MAT63-1-AD | G0L030524-1         | 20    | 8290/SOLID    | 31  | 10.98000 | <u>C</u> r |
| 07DE104D5 | 21  | MAFFX-1-AA | G0K220529-10 (25X)  | 20    | 8290/WASTE    | 25  | 0.10000  | g          |
| 07DE104D5 | 22  | MAT9E-1-AF | F0L030530-1         | 20    | 8290/SOLID    | 31  | 10.03500 | Ġ          |
| 'DE104D5  | 23  | MAT9K-1-AM | F0L030530-2         | 20    | 8290/SOLID    |     | 10.48500 | Ĉi         |
| J/DE104D5 | 24  | MAT9K-1-AN | F0L030530-2MS       | 20    | 8290/SOLID    |     | 10.21500 | Ç!         |
| 07DE104D5 | 25  | MAT9K-1-AP | F0L030530-2MSD      | 20    | 8290/SOLID    |     | 10.00500 | 덜          |
| 07DE104D5 | 26  | MAT9M-1-AF | F0L030530-3         | 20    | 8290/SOLID    |     | 10.49500 | 덜          |
| 07DE104D5 | 27  | MAT9Q-1-AF | F0L030530-4         | 20    | 8290/SOLID    |     | 10.37500 | ζί         |
| 07DE104D5 | 28  | MAXGD-1-AC | G0L030524-1LCS      | 20    | 8290/SOLID    | 31  | 10.00000 | Ĉl.        |
| 07DE104D5 | 29  | ST1207C    | CS3 10DXN461        |       |               |     | 1.00000  |            |
| 07DE104D5 | 30  |            |                     |       |               |     | 1.00000  |            |
| 07DE104D5 | 31  |            |                     |       |               |     | 1.00000  |            |
| 07DE104D5 | 32  |            |                     |       |               |     | 1.00000  |            |
| 07DE104D5 | 33  |            | AS 12-07-10         |       |               |     | 1.00000  |            |

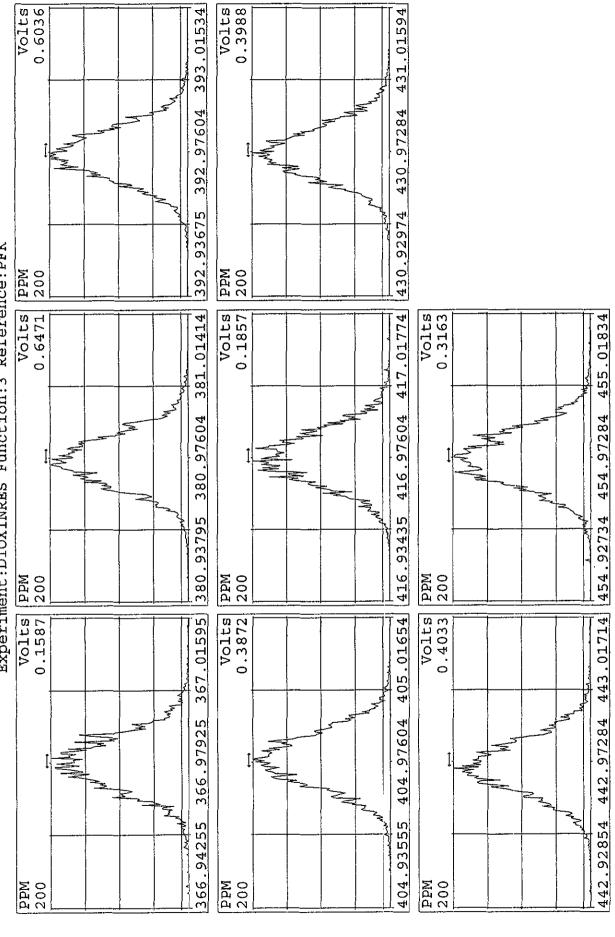
Loghe 1/18/10



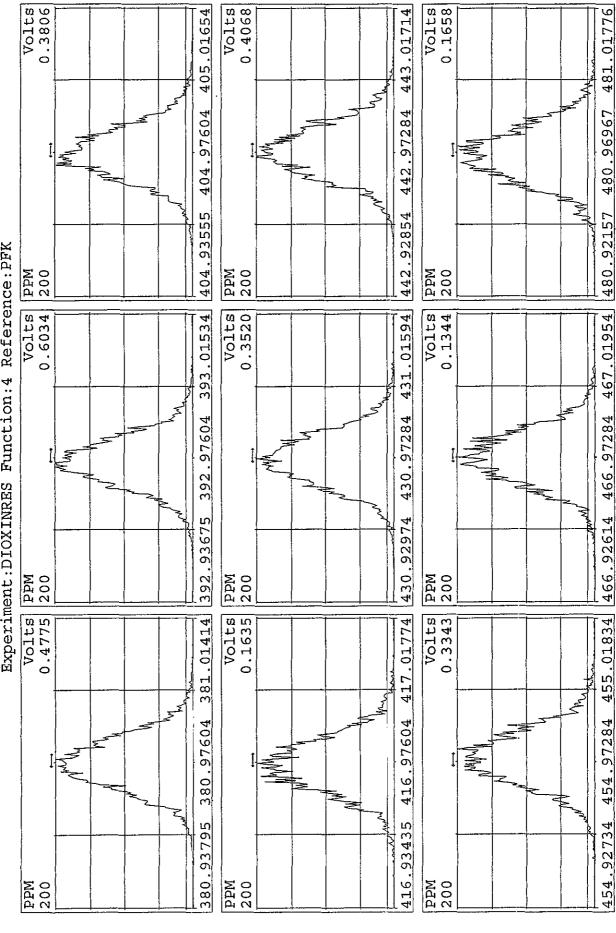
Peak Locate Examination: 7-DEC-2010:10:37 File:07DE104D5 Experiment:DIOXINRES Function:2 Reference:PFK



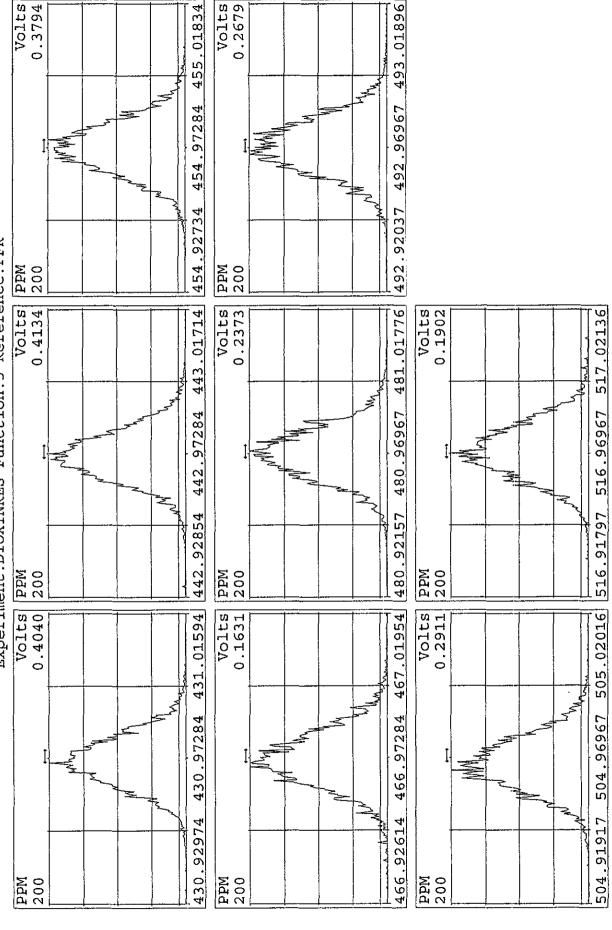
Peak Locate Examination: 7-DEC-2010:10:37 File:07DE104D5 Experiment:DIOXINRES Function:3 Reference:PFK



Peak Locate Examination: 7-DEC-2010:10:37 File:07DE104D5 Experiment:DIOXINRES Function:4 Reference:PFK



Peak Locate Examination: 7-DEC-2010:10:37 File:07DE104D5 Experiment:DIOXINRES Function:5 Reference:PFK



Volts 380.97604 380.97604 380.97604 PPM 200

SIRLM Examination: 7-DEC-2010:19:30 File:07DE104D5 Experiment:DIOXINRES Function:6

Volts 0.6282 304.98251 304.98251 304.98251 PPM 200

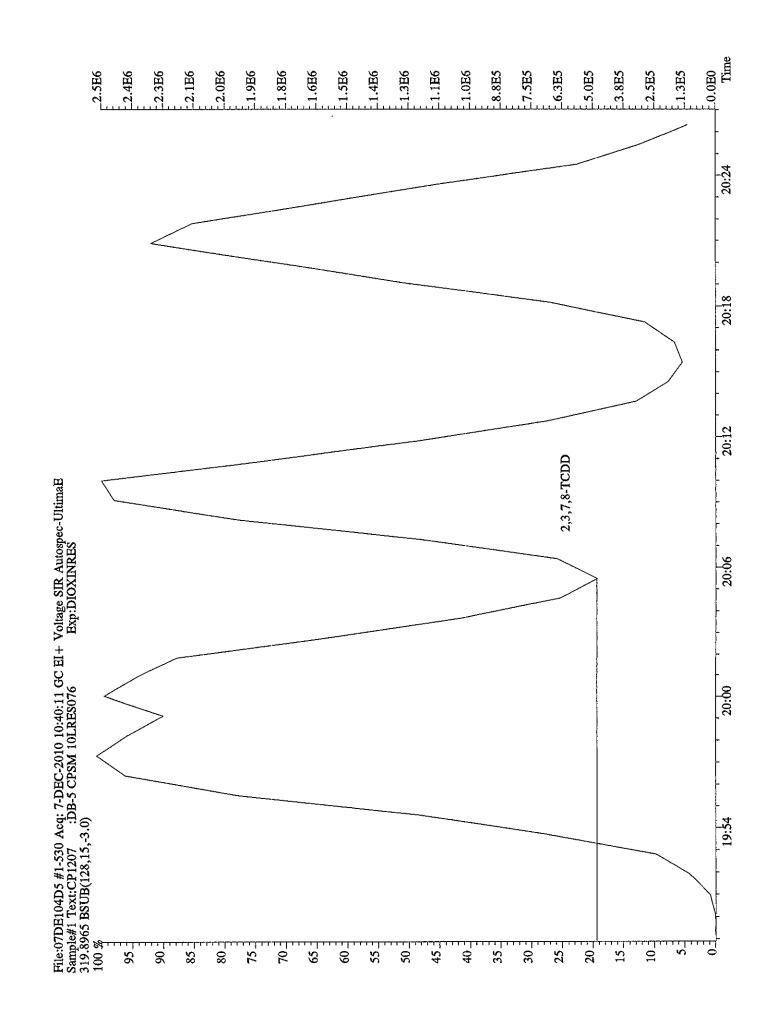
SIRLM Examination: 7-DEC-2010:19:31 File:07DE104D5 Experiment:DIOXINRES Function:7

Volts 380.97604 380.97604 380.97604 PPM 200

SIRLM Examination: 7-DEC-2010:20:14 File:07DE104D5 Experiment:DIOXINRES Function:6

Volts 0.5777 380.97604 304.98251 380.97604 PPM 200

SIRLM Examination: 7-DEC-2010:20:16 File:07DE104D5 Experiment:DIOXINRES Function:7



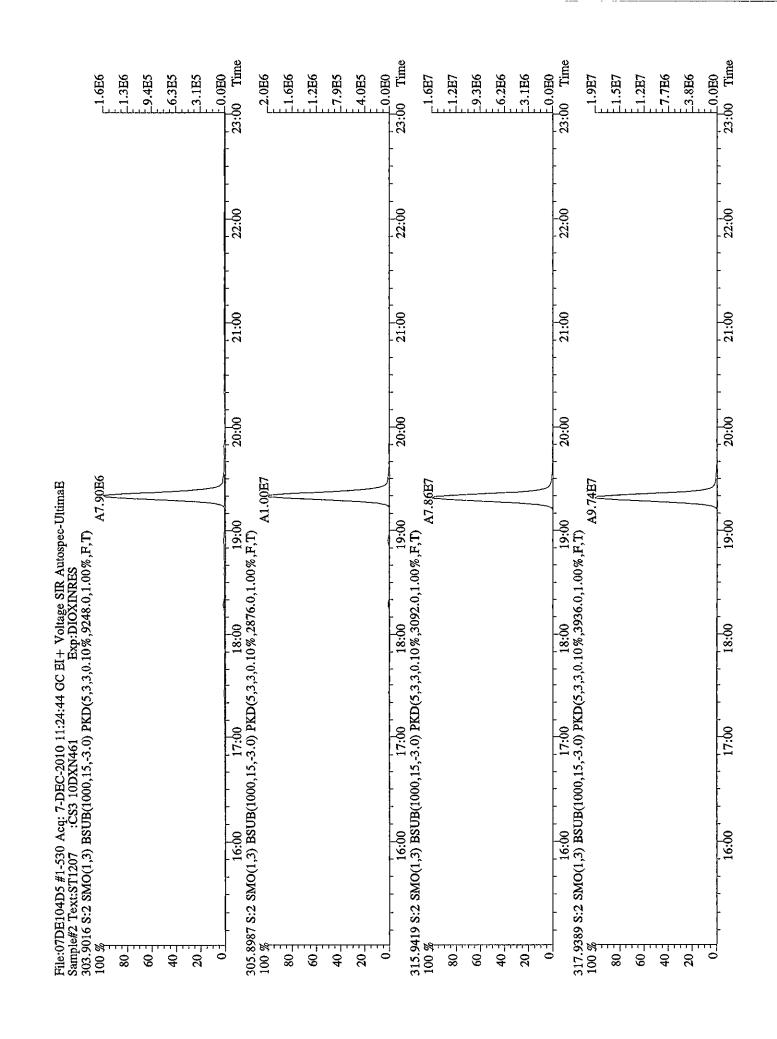
Cal: T090721104D5 Analyte: T09 Run: 07DE104D5

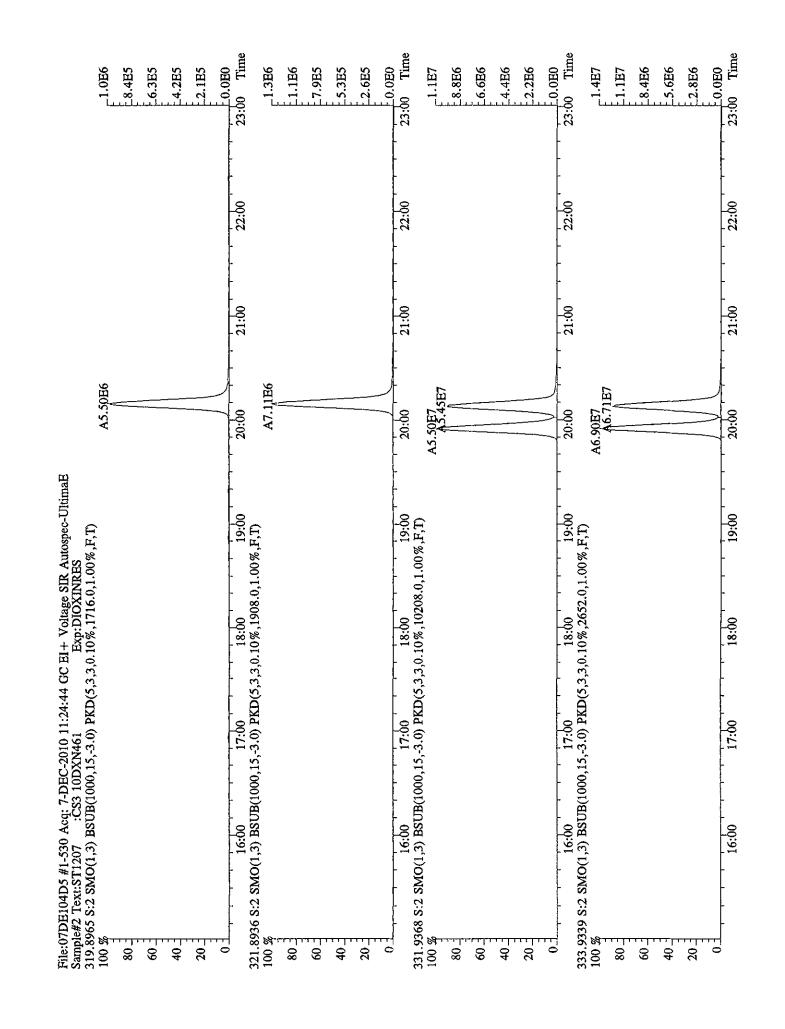
ST0721C :CS-3 10DXN336

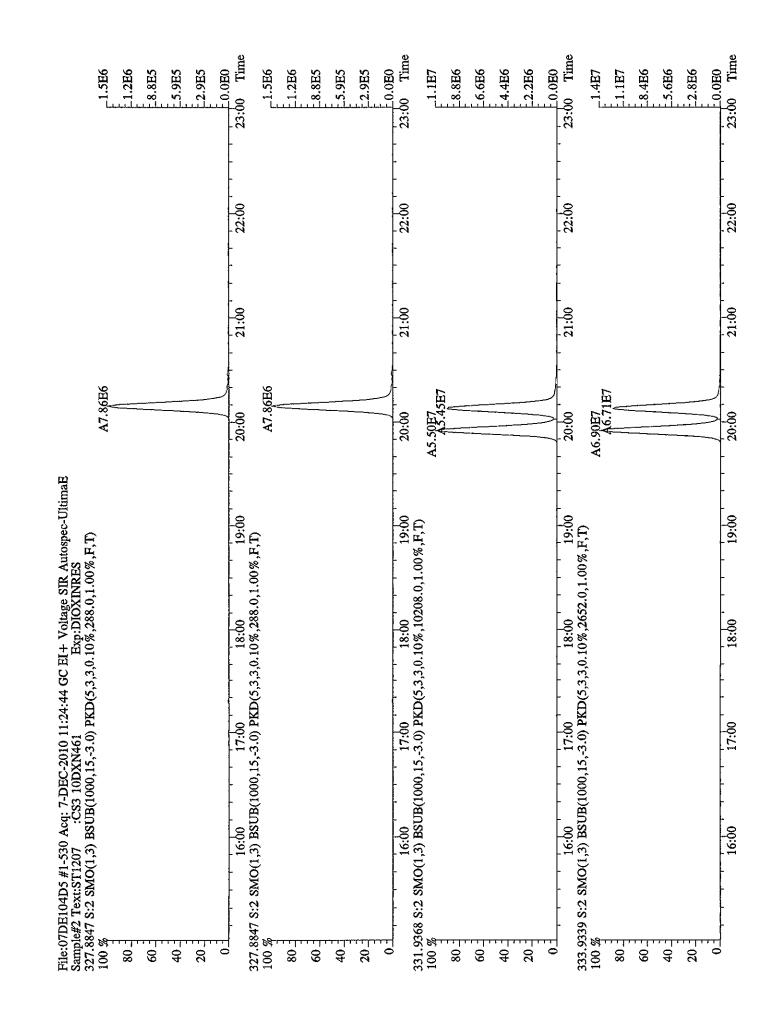
ST0721B :CS-2 10DXN334 ST0721E :CS-4 10DXN337 ST0721A :CS-1 10DXN342 ST0721D :CS-5 10DXN339

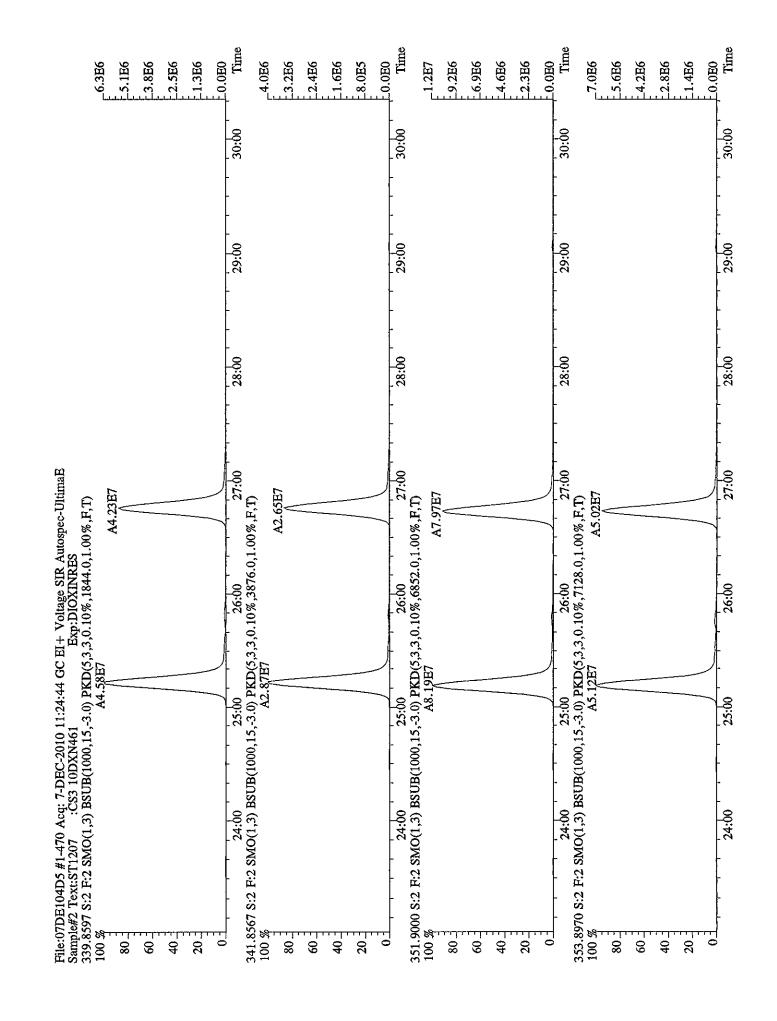
|                       |       |       |               | 21JL10A4D5<br>S4 | 21JL10A4D5<br>S5 | 21JL10A4D5<br>S6 | 21JI10A4D521JI10A4D521JI10A4D521JI10A4D521JI10A4D5<br>S4 S5 S6 S7 S8 | 21JL10A4D5<br>S8 |
|-----------------------|-------|-------|---------------|------------------|------------------|------------------|--|------------------|
| Name                  | Mean  | S. D. | %RSD          | RRF1             | RRF2             | RRF3             | RRF4   | RRF5             |
| 13C-1,2,3,4-TCDD      | 1     | 1     | o%<br>I       | ı                | 1                | I                | •  |                  |
| 13C-2,3,7,8-TCDF      | 1.229 | 0.154 | 12<br>.0<br>% | 1.30             | 1.31             | 1.39             | 1.03   | 1.11             |
| 2,3,7,8-TCDF          | 0.995 | 0.037 | 3.68 %        | 1.03             | 96.0             | 0.98             | 0.97   | 1.03             |
| Total TCDF            | 0.995 | 0.037 | 3.68 %        | 1.03             | 96.0             | 0.98             | 0.97   | 1.03             |
| 13C-2,3,7,8-TCDD      | 0.905 | 0.029 | ທ<br>ເນ<br>ໝ  | 0.92             | 0.92             | 0.94             | 0.88   | 0.87             |
| 2,3,7,8-TCDD          | 0.983 | 0.032 | 3.24 %        | 0.98             | 0.94             | 0.97             | 1.01   | 1.02             |
| Total TCDD            | 0.983 | 0.032 | 3.24 %        | 0.98             | 0.94             | 0.97             | 1.01   | 1.02             |
| 37Cl-2,3,7,8-TCDD     | 1.326 | 0.015 | 1.12 %        | 1.33             | 1.31             | 1.32             | 1.35   | 1.32             |
| 13C-1,2,3,7,8-PeCDF   | 0.876 | 0.018 | 2.08          | 0.86             | 06.0             | 0.86             | 0.89   | 0.87             |
| 1,2,3,7,8-PeCDF       | 1.077 | 0.042 | 3.92 %        | 1.03             | 1.04             | 1.08             | 1.11   | 1.12             |
| 2,3,4,7,8-PeCDF       | 1.046 | 0.040 | 3.80 %        | 1.00             | 1.02             | 1.08             | 1.04   | 1.09             |
| Total F2 PeCDF        | 1.061 | 0.039 | 3.67 %        | 1.01             | 1.03             | 1.08             | 1.08   | 1.10             |
| Total F1 PeCDF        | 1.061 | 0.039 | 3.67 %        | 1.01             | 1.03             | 1.08             | 1.08   | 1.10             |
| 13C-1,2,3,7,8-PeCDD   | 0.661 | 0.010 | 1.45 %        | 0.65             | 99.0             | 0.67             | 0.67   | 0.65             |
| 1,2,3,7,8-PeCDD       | 0.925 | 0.038 | 4.09 %        | 0.89             | 0.88             | 0.94             | 0.95   | 0.97             |
| Total PeCDD           | 0.925 | 0.038 | 4.09 %        | 0.89             | 0.88             | 0.94             | 0.95   | 0.97             |
| 13C-1,2,3,7,8,9-HxCDD | ı     | 1     | o <b>/</b> e  | 1                | i                | ı                | į  | ı                |
| 13C-1,2,3,4,7,8-HxCDF | 1.045 | 0.067 | 6.44 %        | 1.03             | 1.15             | 0.98             | 1.00   | 1.07             |
| 1,2,3,4,7,8-HXCDF     | 1.217 | 0.012 | 1.02 %        | 1.21             | 1.20             | 1.22             | 1.22   | 1.23             |
| 1,2,3,6,7,8-HXCDF     | 1.282 | 0.089 | 6.95 %        | 1.19             | 1.22             | 1.41             | 1.33   | 1.26             |
| 2,3,4,6,7,8-HXCDF     | 1.233 | 0.080 | 6.49 %        | 1.19             | 1.15             | 1.35             | 1.27   | 1.21             |
| 1,2,3,7,8,9-HxCDF     | 1.098 | 0.096 | 8.73 %        | 1.08             | 0.99             | 1.25             | 1.10   | 1.06             |
| Total HXCDF           | 1.208 | 0.066 | 5.43          | 1.17             | 1.14             | 1.31             | 1.23   | 1.19             |
| 13C-1,2,3,6,7,8-HxCDD | 0.831 | 0.055 | %<br>89<br>%  | 0.84             | 0.83             | 0.92             | 0.77   | 0.79             |
| 1,2,3,4,7,8-HxCDD     | 1.037 | 0.122 | H .8          | 06.0             | 0.99             | 0.97             | 1.17   | 1.16             |
|                       |       |       |               |                  |                  |                  |  |                  |

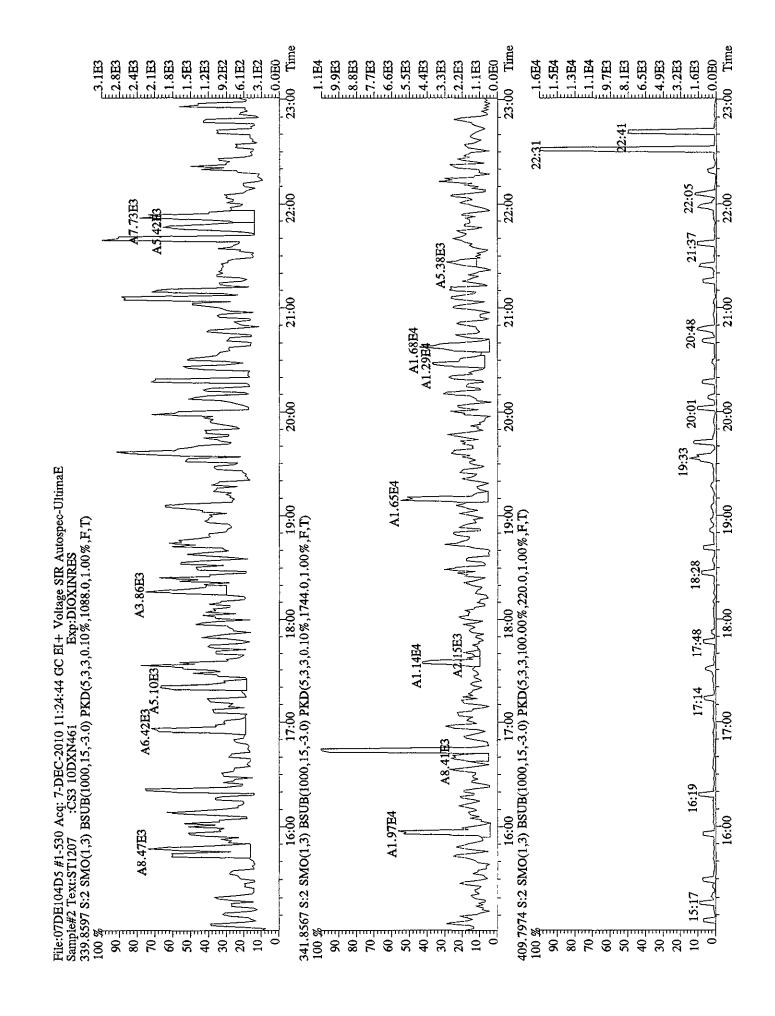
| 1.21              | 0.86<br>1.38                          | 1.13   | 1.26   | 0.79   | 1.10  | 1.10   | 0.59   | 1.41   | 1.19  |
|-------------------|---------------------------------------|--|--|--|---|--|--|--|---|
| т .<br>Ф [        | 1.35                                  | 1.13   | 1.24   | 0.76   | 1.09  | 1.09   | 09.0   | 1.39   | 1.17  |
| 1.06              | 1.35                                  | 1.11   | 1.23   | 0.83   | 1.07  | 1.07   | 0.63   | 1.35   | 1.16  |
| 1.12              | 1.34                                  | 1.09   | 1.21   | 0.85   | 1.03  | 1.03   | 0.63   | 1.35   | 1.17  |
| 1.06              | 1.31                                  | 1.01   | 1.16   | 0.89   | 1.07  | 1.07   | 0.66   | 1.36   | 1.31  |
| υ ι<br>ω ι<br>ω ι | 1.99 %                                | 4.49 %   | 3.05 %   | 5.98 %   | 2.61%   | 2.61 %   | 4.60 %   | 1.98 %   | 4 8 8 4 %   |
|                   | 0.051                                 | 0.049  | 0.037  | 0.049  | 0.028   | 0.028  |  |  | 0.066   |
| 1.127             | 0.910<br>1.346                        | 1.093  | 1.220  | 0.827  | 1.072   | 1.072  | 0.620  | 1.370  | 1,199   |
| Total HxCDD       | 13C-1,2,3,4,6,7,8-HpCDF               | 1,2,3,4,7,8,9-HpCDF  | Total HpCDF  | 13C-1,2,3,4,6,7,8-HpCDD  | 1,2,3,4,6,7,8-HpCDD   | Total HpCDD  | 13C-0CDD   | OCDF   | OCDO  |
|                   | 1.127 0.067 5.93% 1.06 1.12 1.06 1.18 | 1.127 0.067 5.93 % 1.06 1.12 1.06 1.18<br>0.910 0.051 5.65 % 0.99 0.91 0.92 0.87<br>1.346 0.027 1.99 % 1.31 1.34 1.35 1.35 | 1.127 0.067 5.93% 1.06 1.12 1.06 1.18<br>0.910 0.051 5.65% 0.99 0.91 0.92 0.87<br>1.346 0.027 1.99% 1.31 1.34 1.35 1.35<br>1.093 0.049 4.49% 1.01 1.09 1.11 1.13 | 1.127 0.067 5.93 % 1.06 1.12 1.06 1.18 0.910 0.051 5.65 % 0.99 0.91 0.92 0.87 1.346 0.027 1.99 % 1.31 1.34 1.35 1.35 1.093 0.049 4.49 % 1.01 1.09 1.11 1.13 1.220 0.037 3.05 % 1.16 1.21 1.23 1.24 | 0.910 0.051 5.65 % 0.99 0.91 0.92 0.87 1.346 0.027 1.99 % 1.01 1.34 1.35 1.35 1.35 1.220 0.037 3.05 % 1.16 1.21 1.21 1.23 1.24 0.85 0.89 0.85 0.89 0.76 | 0.910 0.051 5.65 % 0.99 0.91 0.92 0.87 1.346 0.027 1.99 % 1.31 1.34 1.35 1.35 1.093 0.049 4.49 % 1.01 1.09 1.11 1.13 1.13 1.220 0.037 3.05 % 1.16 1.21 1.23 1.24 0.827 0.049 5.98 % 0.89 0.85 0.83 0.76 1.072 0.028 2.61 % 1.07 1.03 1.07 1.09 | 0.910 0.051 5.65 % 0.99 0.91 0.92 0.87 1.34 0.027 1.99 % 1.01 1.03 1.35 1.35 1.35 1.35 1.220 0.037 3.05 % 1.16 1.21 1.21 1.23 1.24 0.827 0.049 5.98 % 0.89 0.85 0.83 0.76 1.072 0.028 2.61 % 1.07 1.03 1.07 1.09 1.07 1.09 | 0.910       0.067       5.93 %       1.06       1.12       1.06       1.18         0.910       0.051       5.65 %       0.99       0.91       0.92       0.87         1.346       0.027       1.99 %       1.31       1.34       1.35       1.35         1.093       0.049       4.49 %       1.01       1.09       1.11       1.13         1.220       0.037       3.05 %       1.16       1.21       1.23       1.24         0.827       0.049       5.98 %       0.89       0.85       0.83       0.76         1.072       0.028       2.61 %       1.07       1.03       1.07       1.09         1.072       0.028       2.61 %       1.07       1.03       1.07       1.09         0.620       0.029       4.60 %       0.66       0.63       0.63       0.60 | 0.910       0.067       5.93 %       1.06       1.12       1.06       1.18         0.910       0.051       5.65 %       0.99       0.91       0.92       0.87         1.346       0.027       1.99 %       1.31       1.34       1.35       1.35         1.093       0.049       4.49 %       1.01       1.09       1.11       1.13         1.220       0.037       3.05 %       1.16       1.21       1.23       1.24         0.827       0.049       5.98 %       0.89       0.85       0.83       0.76         1.072       0.028       2.61 %       1.07       1.03       1.07       1.09         1.072       0.028       2.61 %       1.07       1.03       1.07       1.09         0.620       0.029       4.60 %       0.66       0.63       0.63       0.60         1.370       0.027       1.98 %       1.36       1.35       1.35       1.35 |

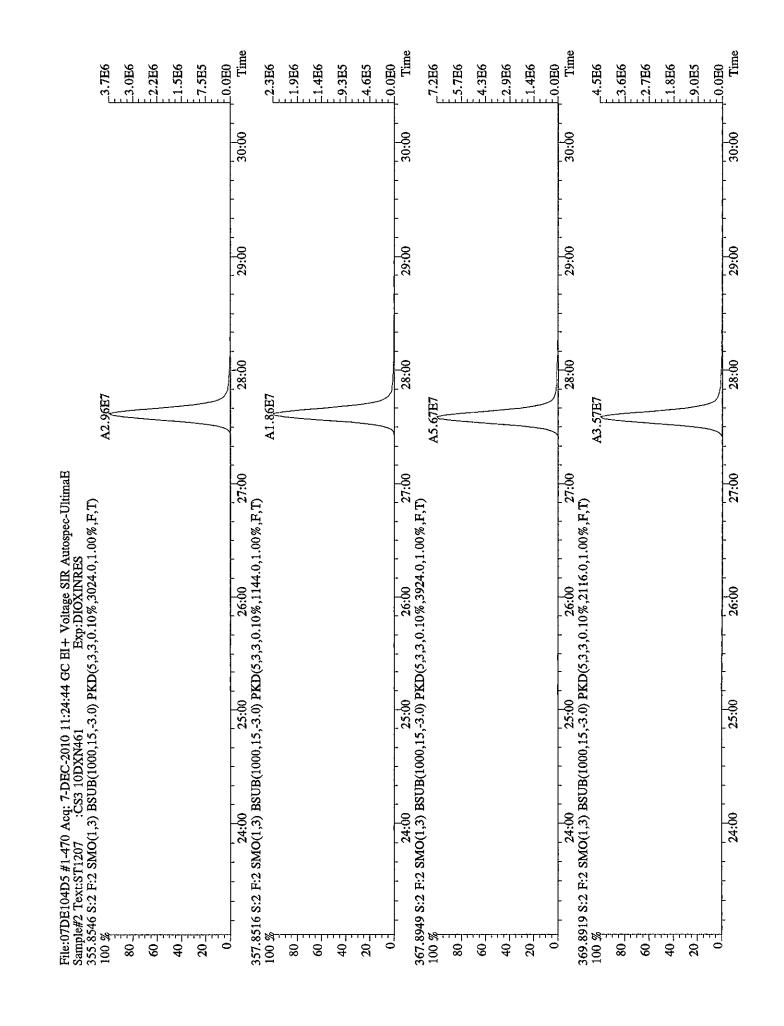


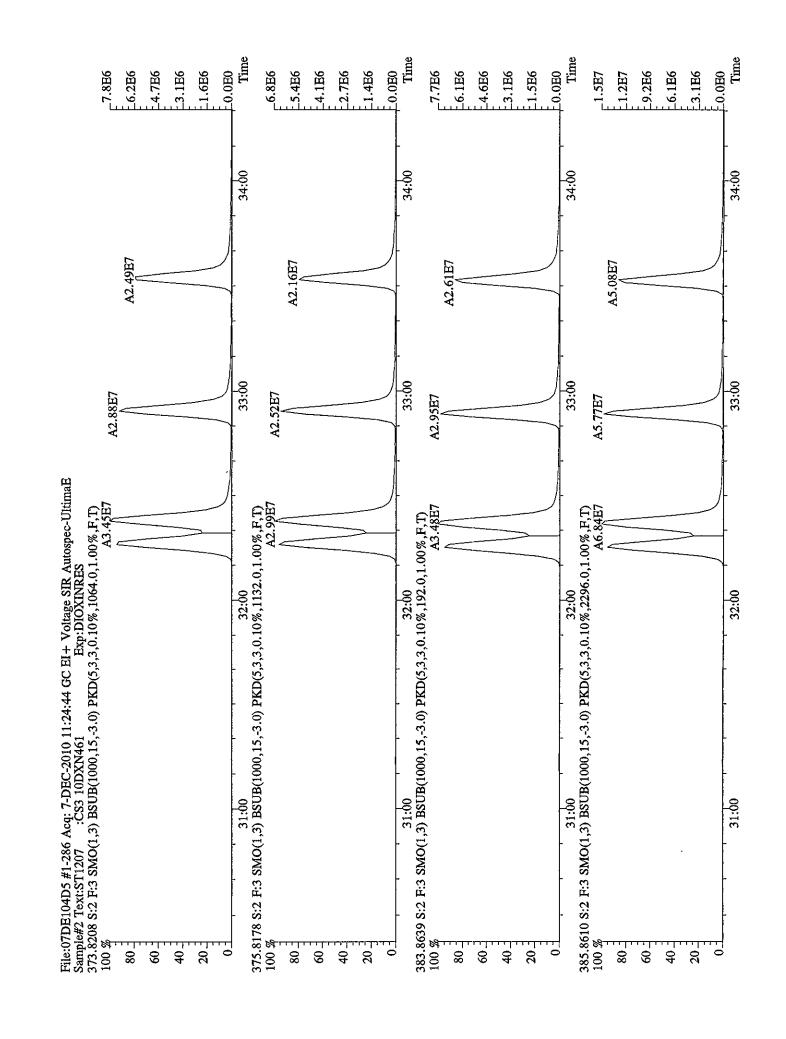


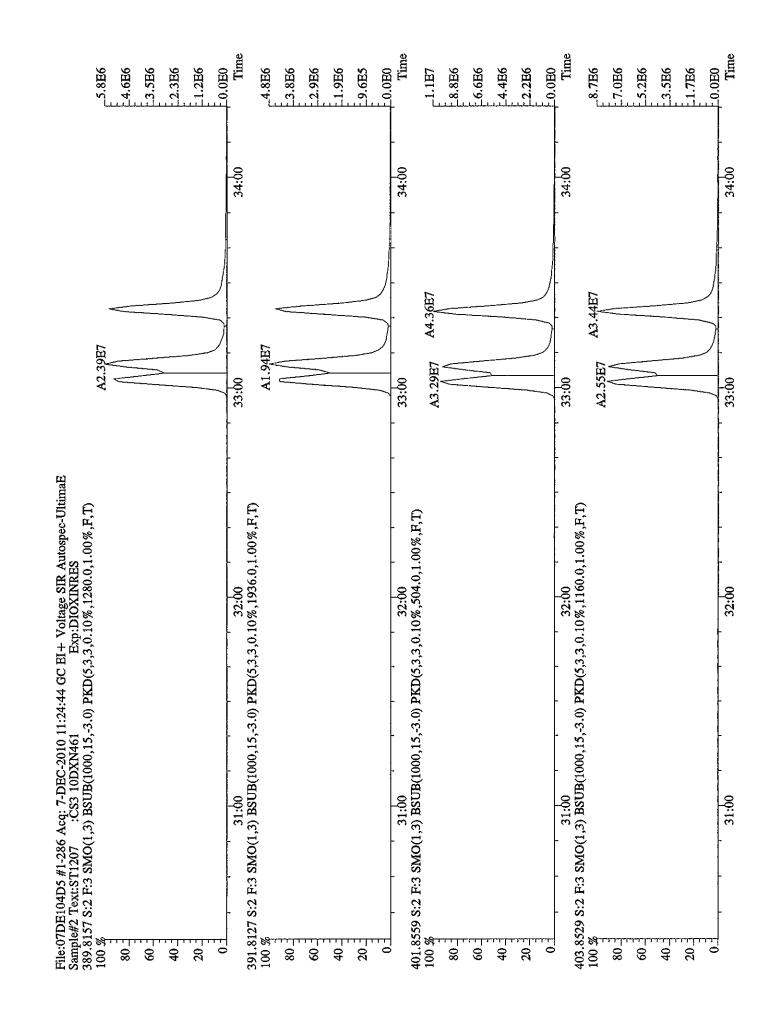


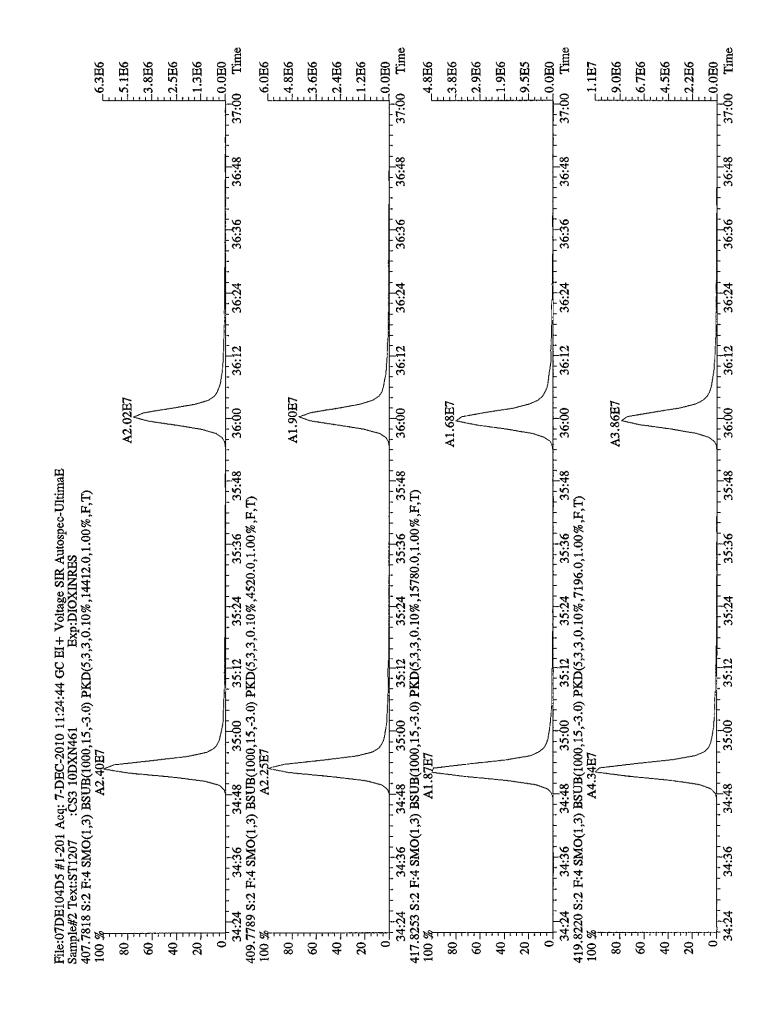


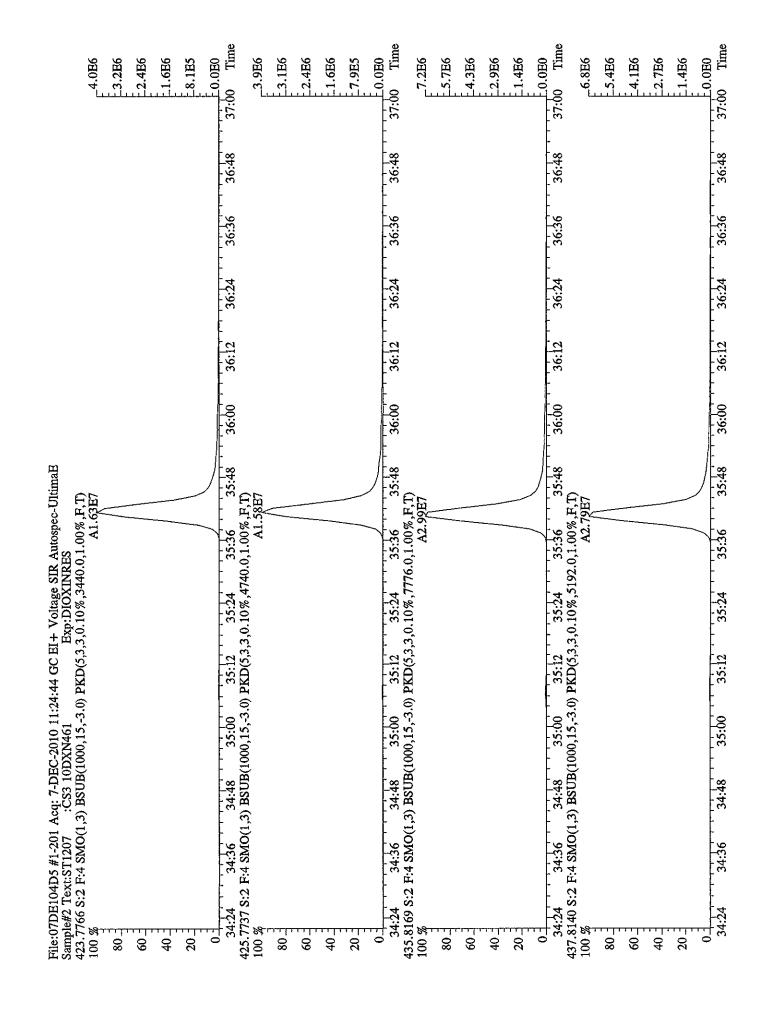


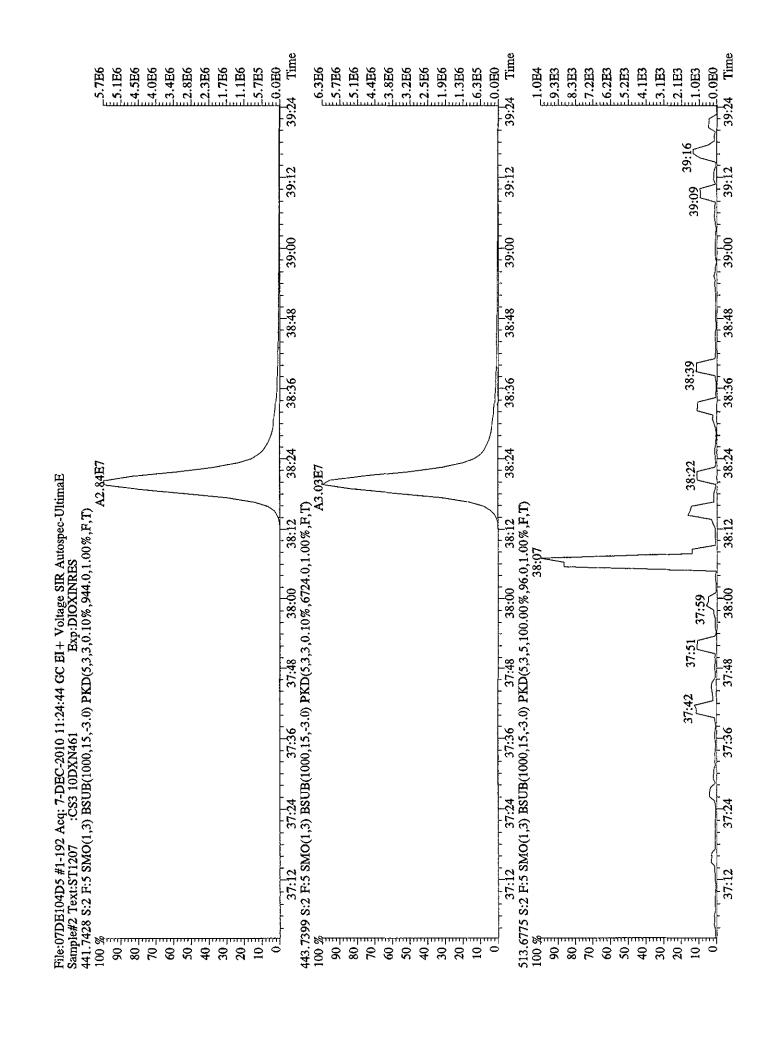


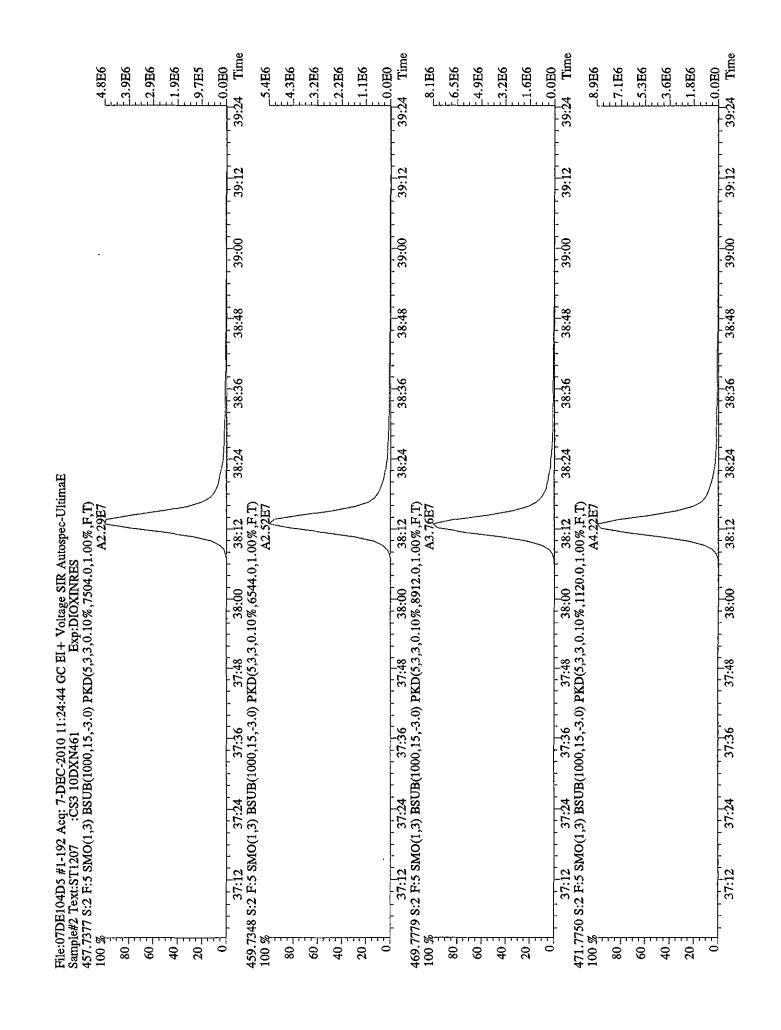


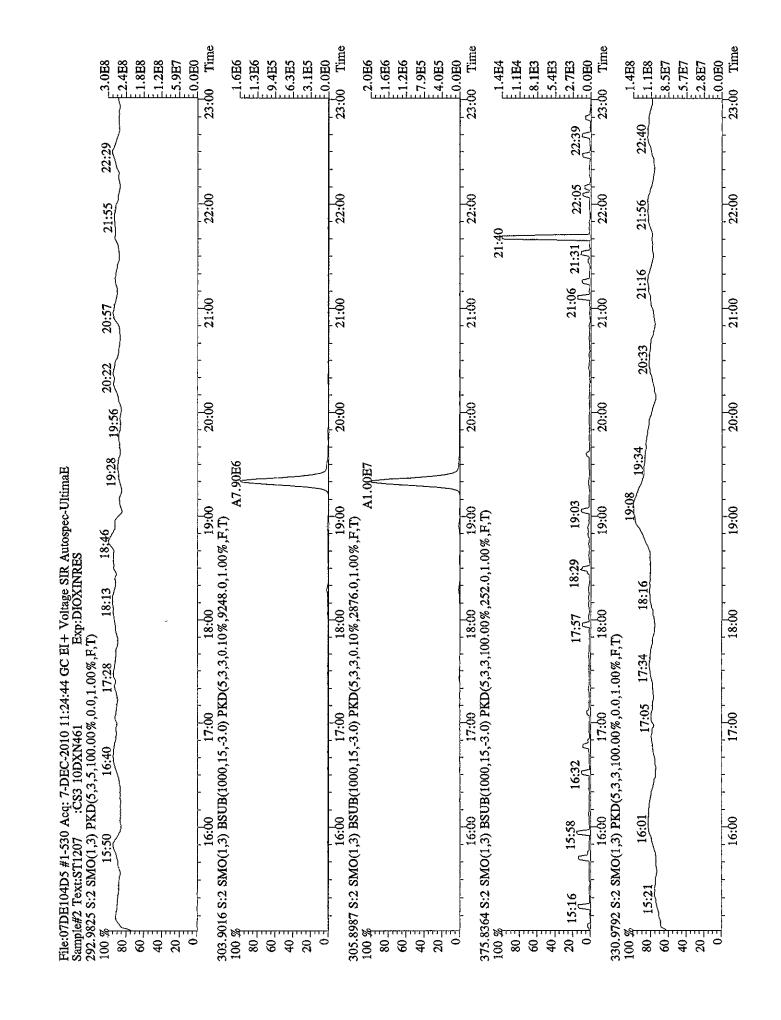


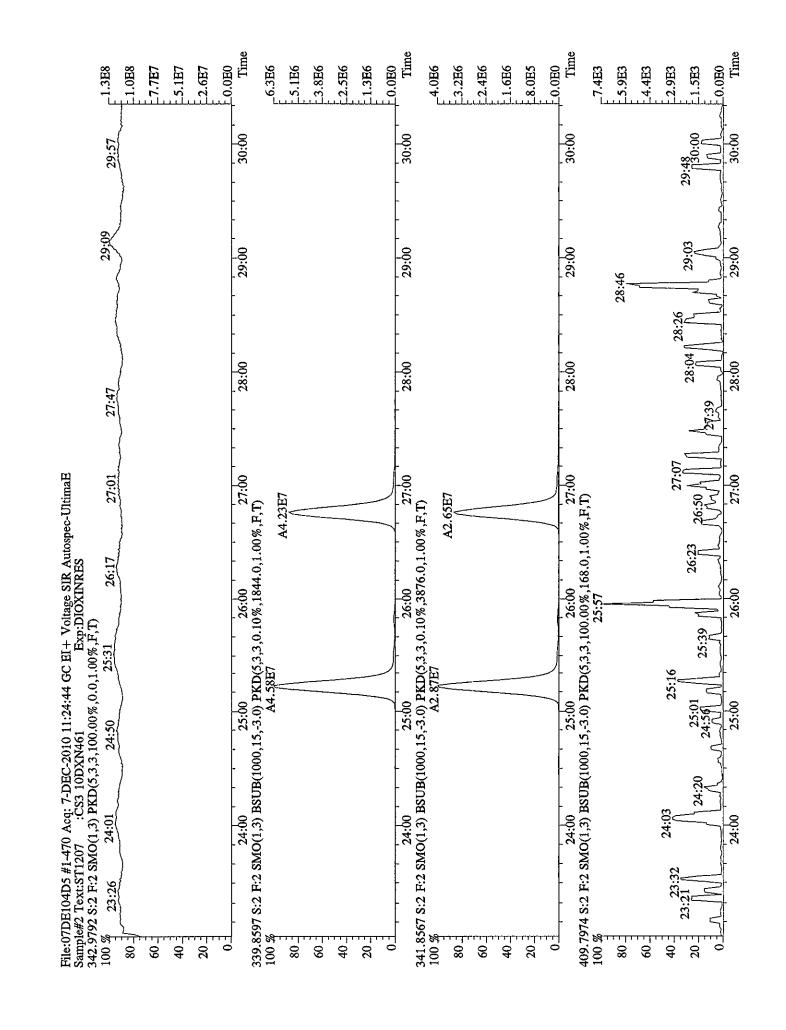


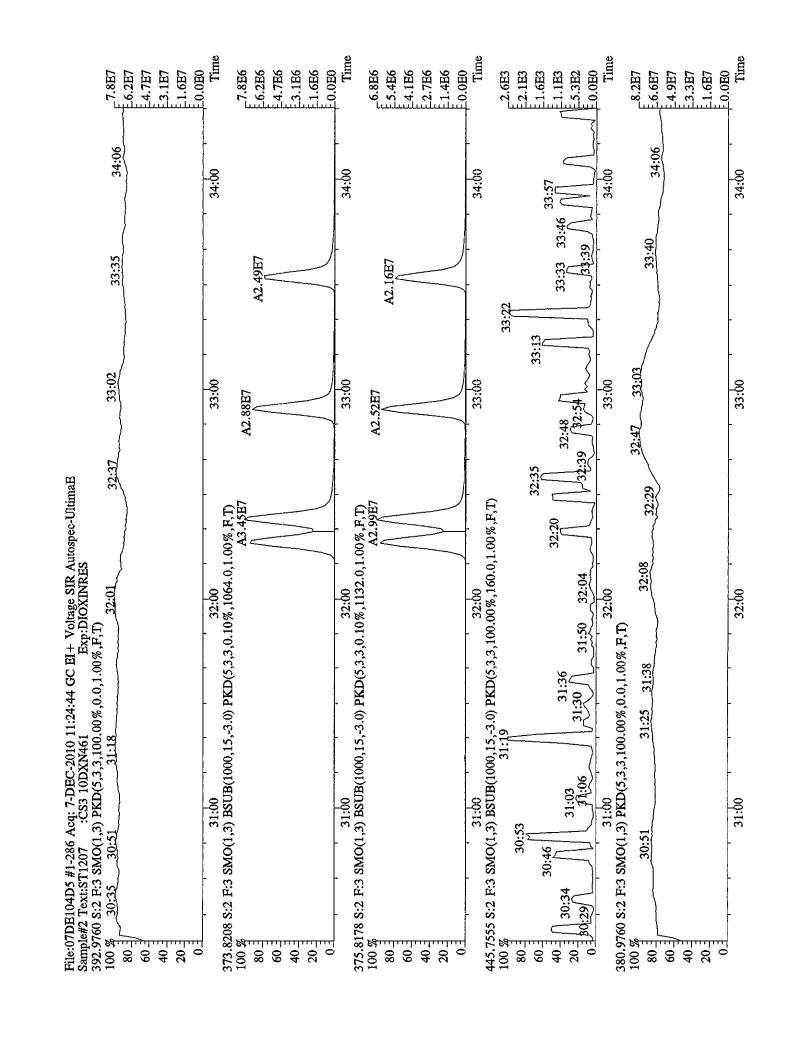


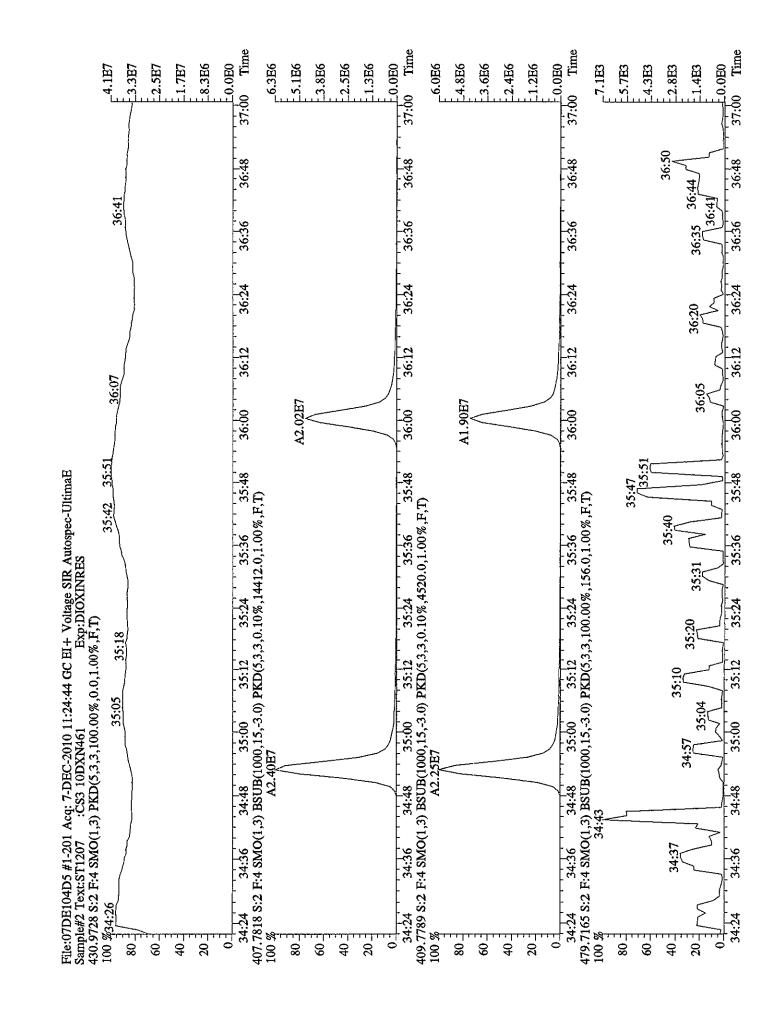


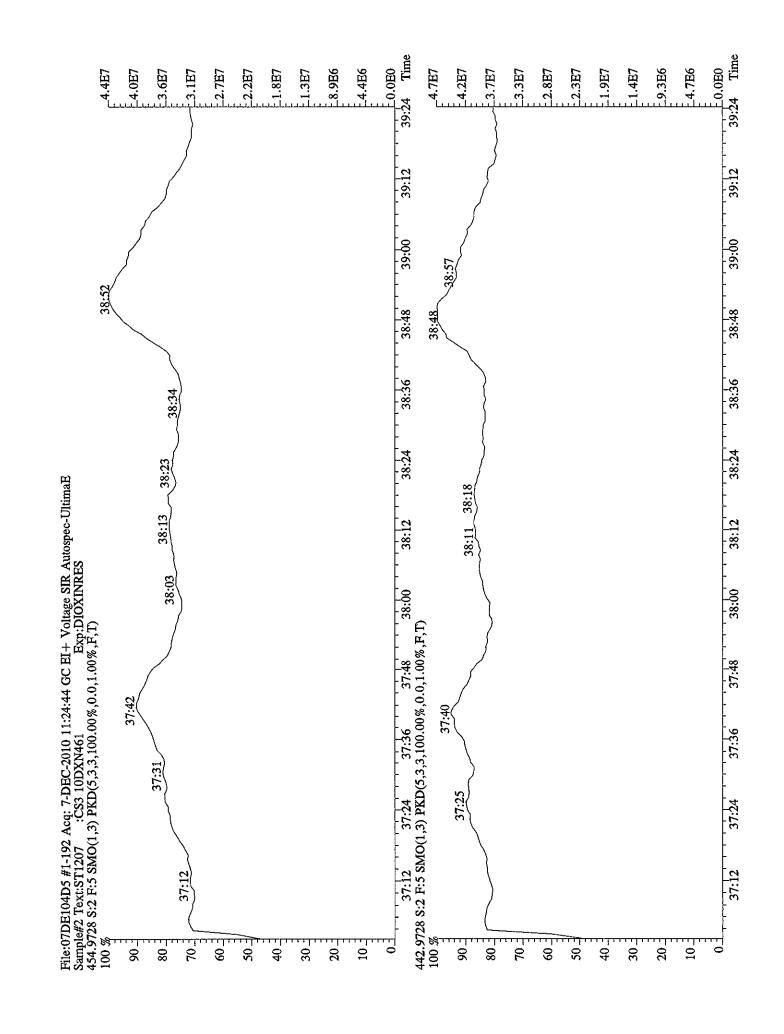


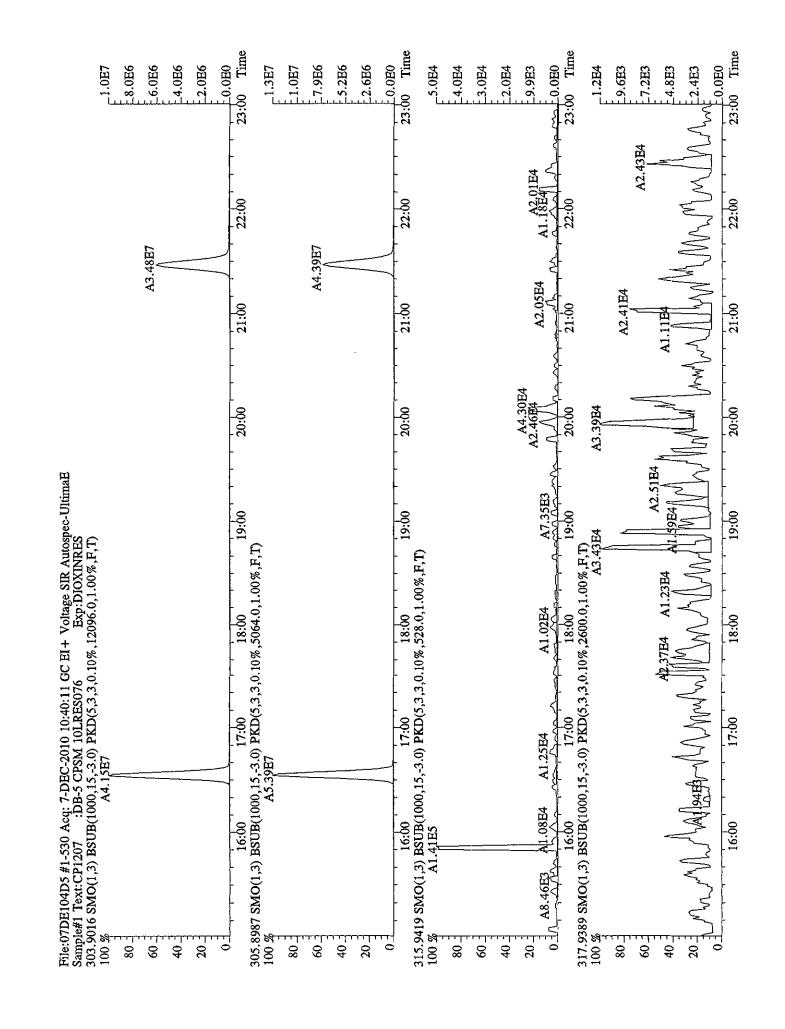


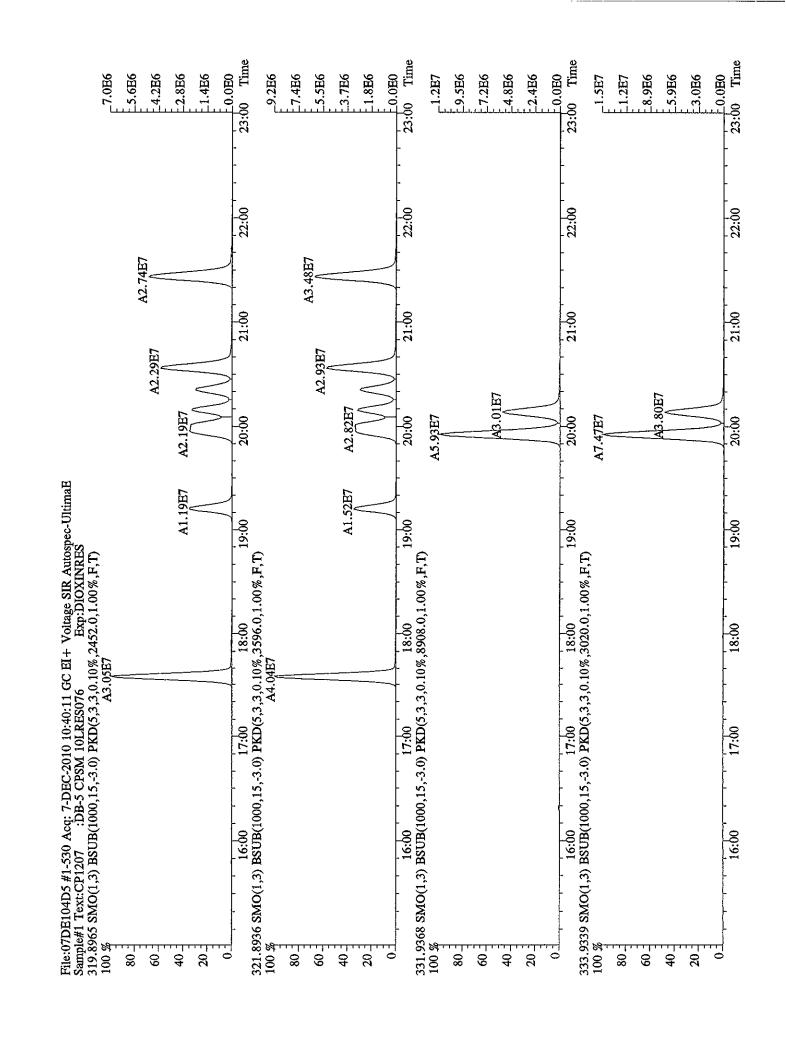


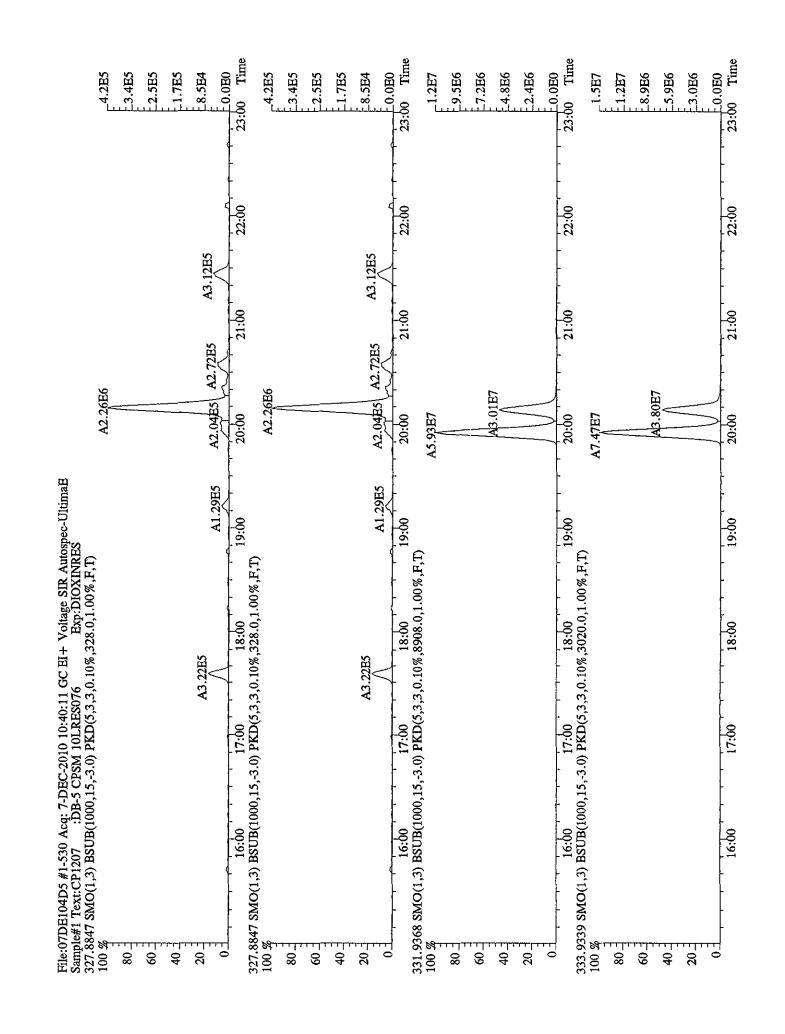


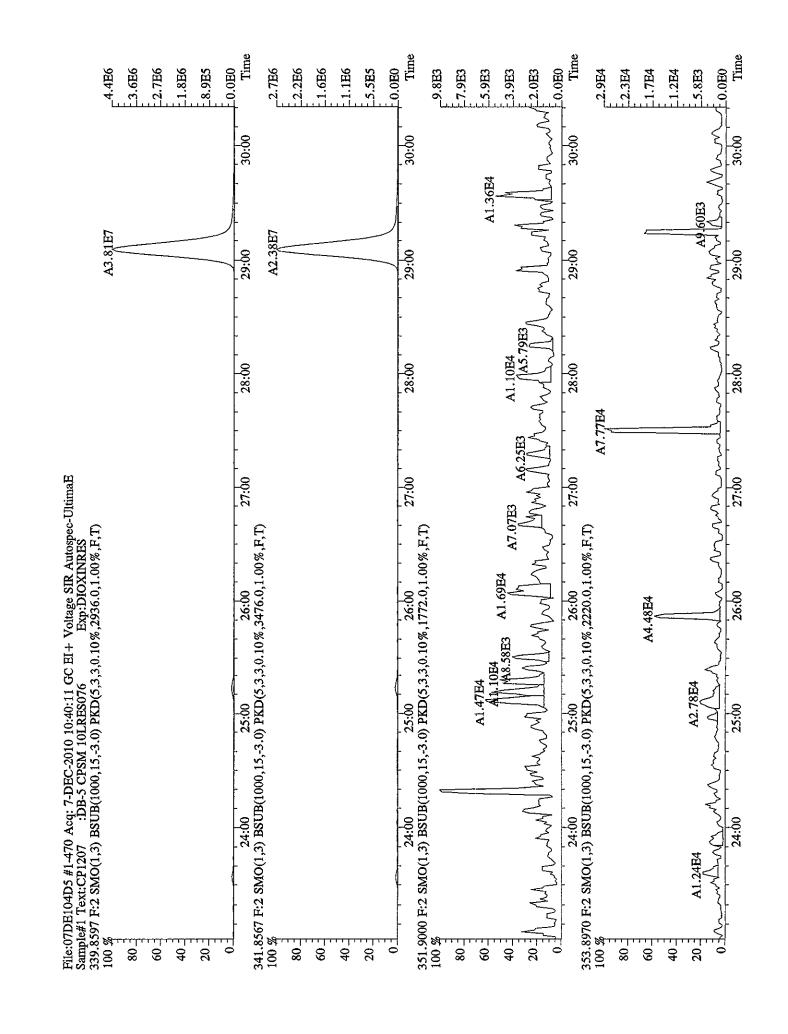


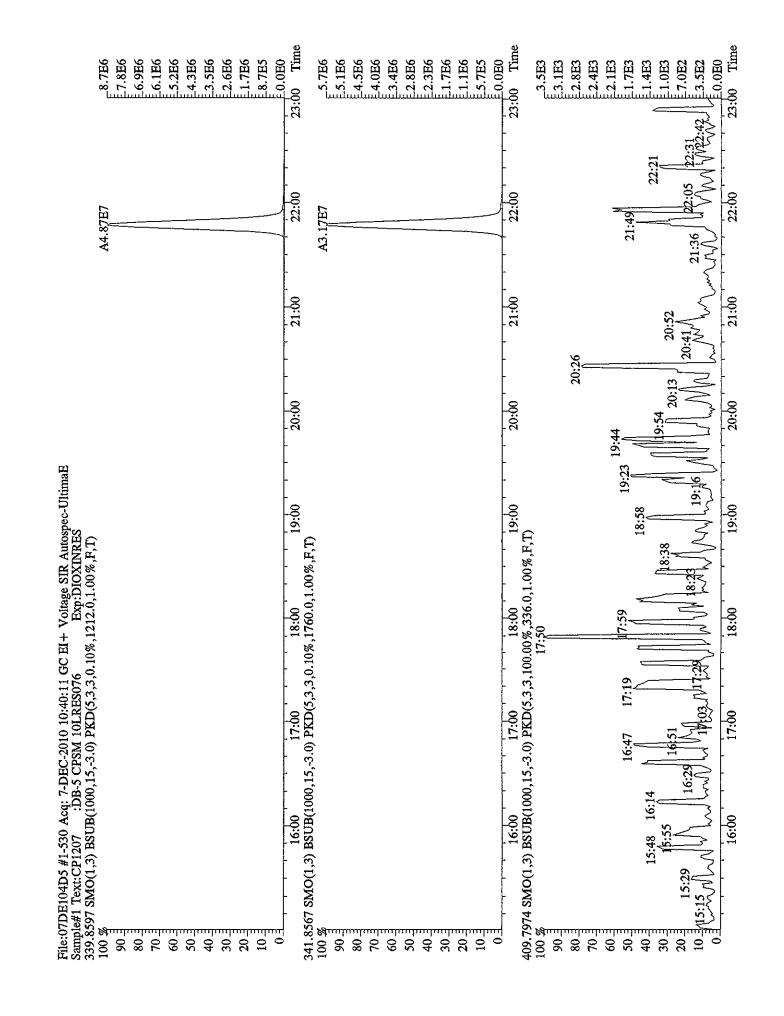


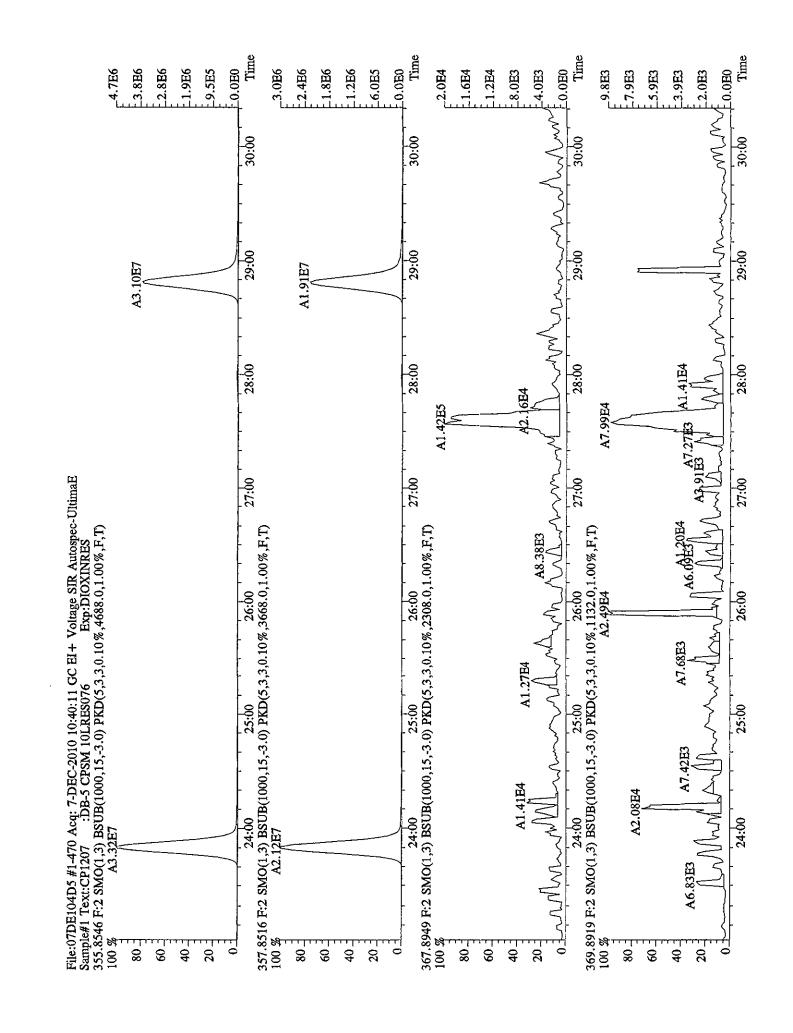


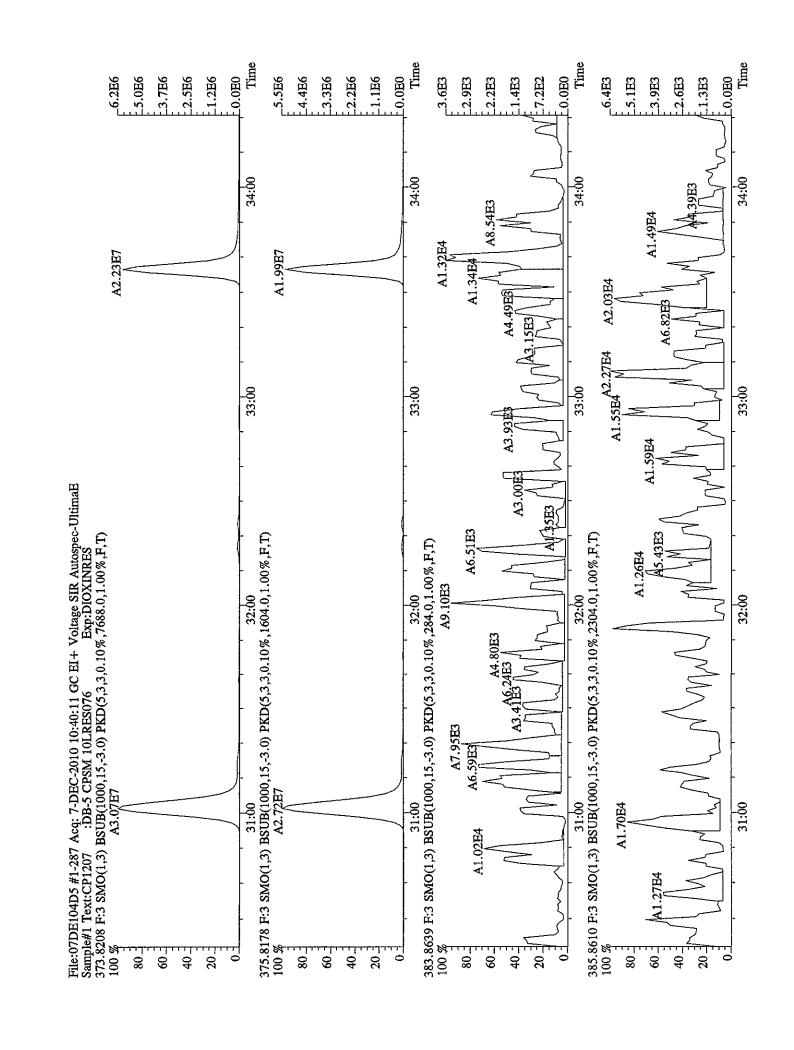


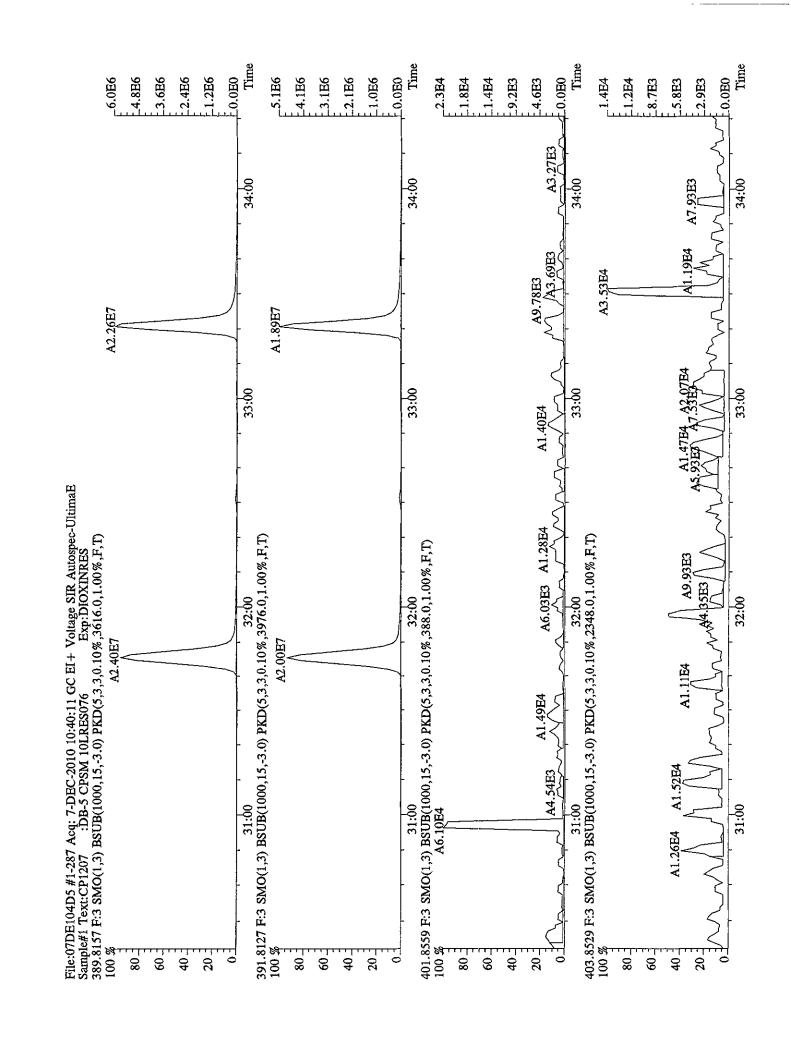


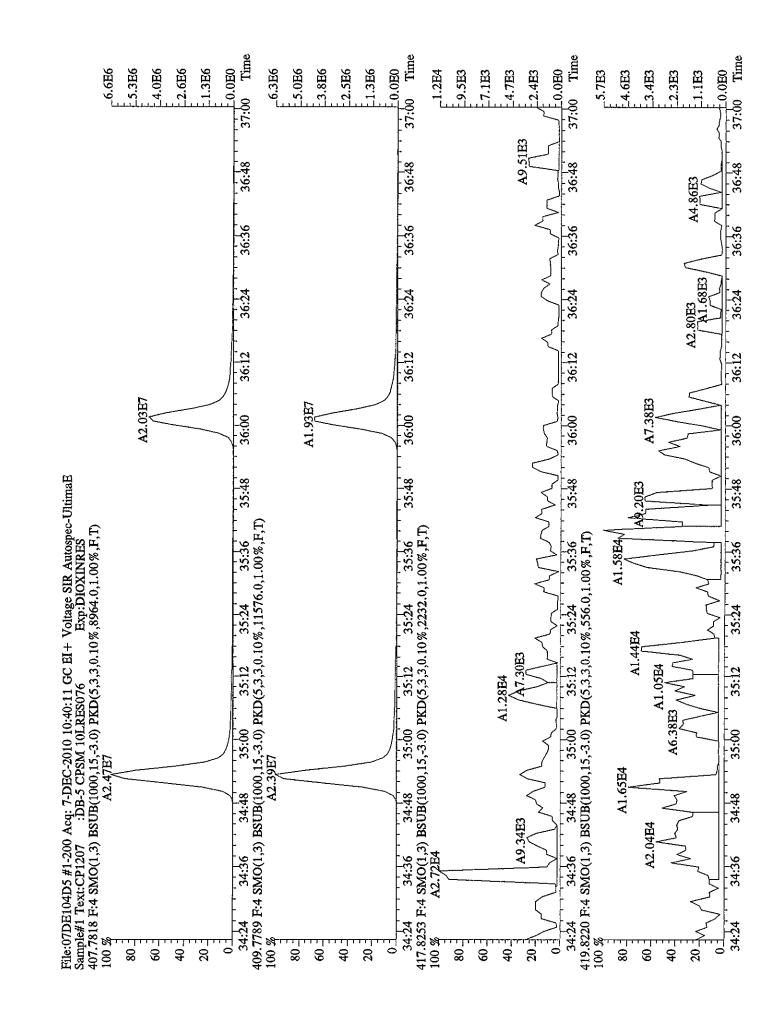


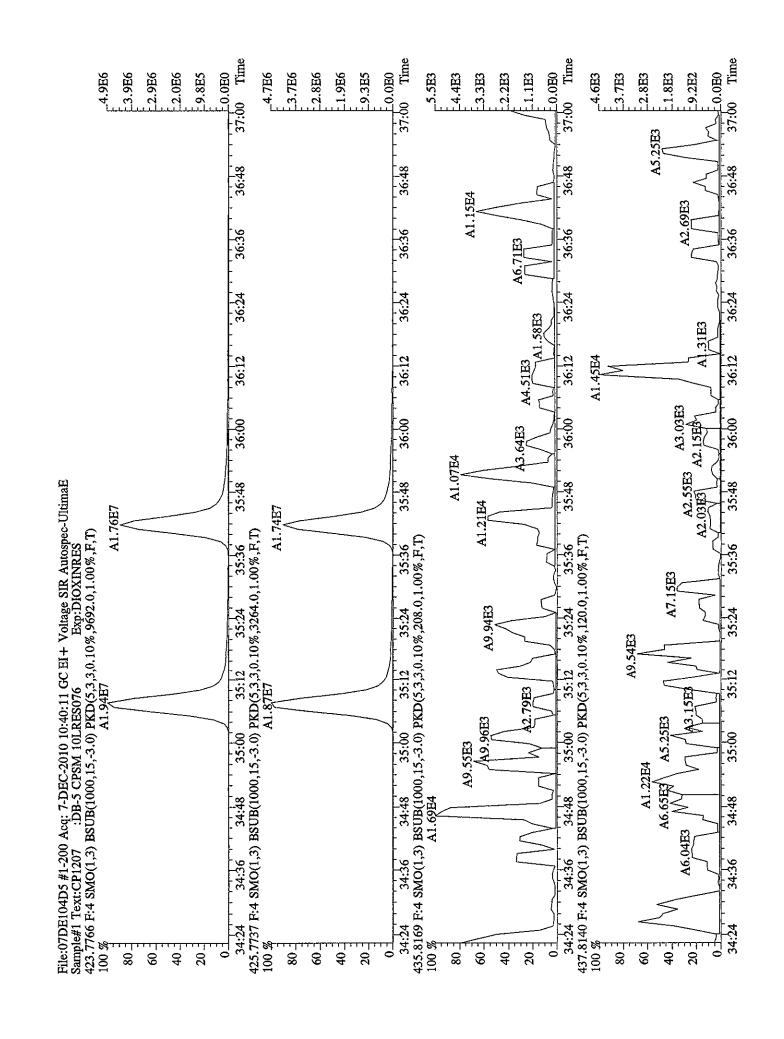


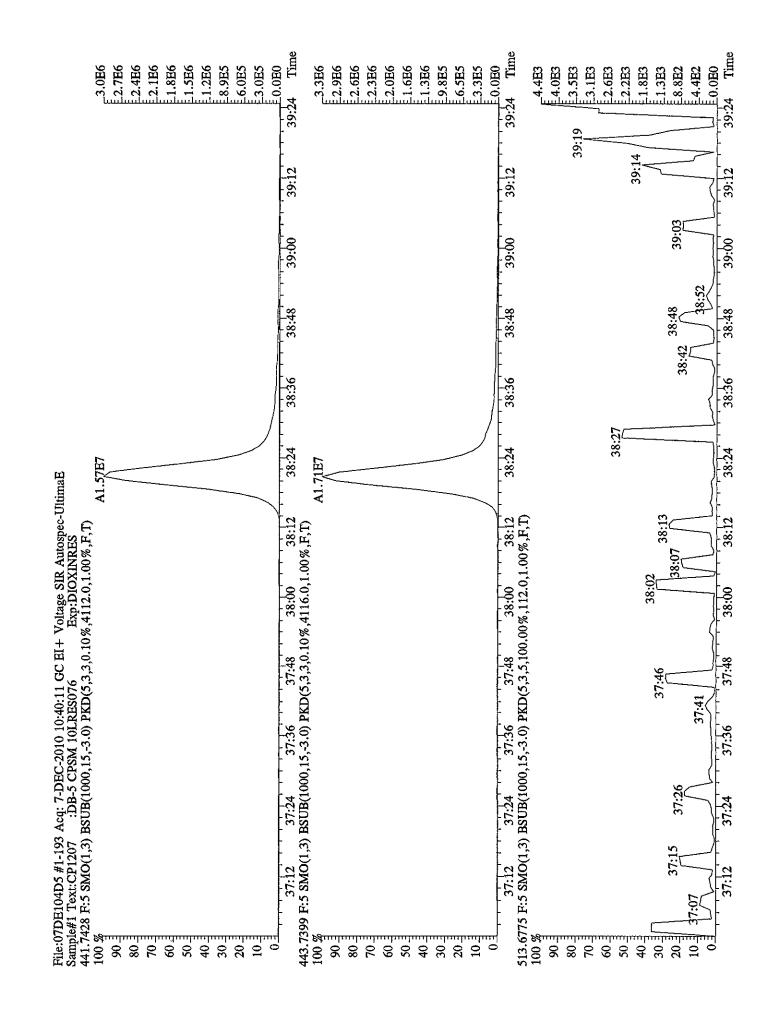


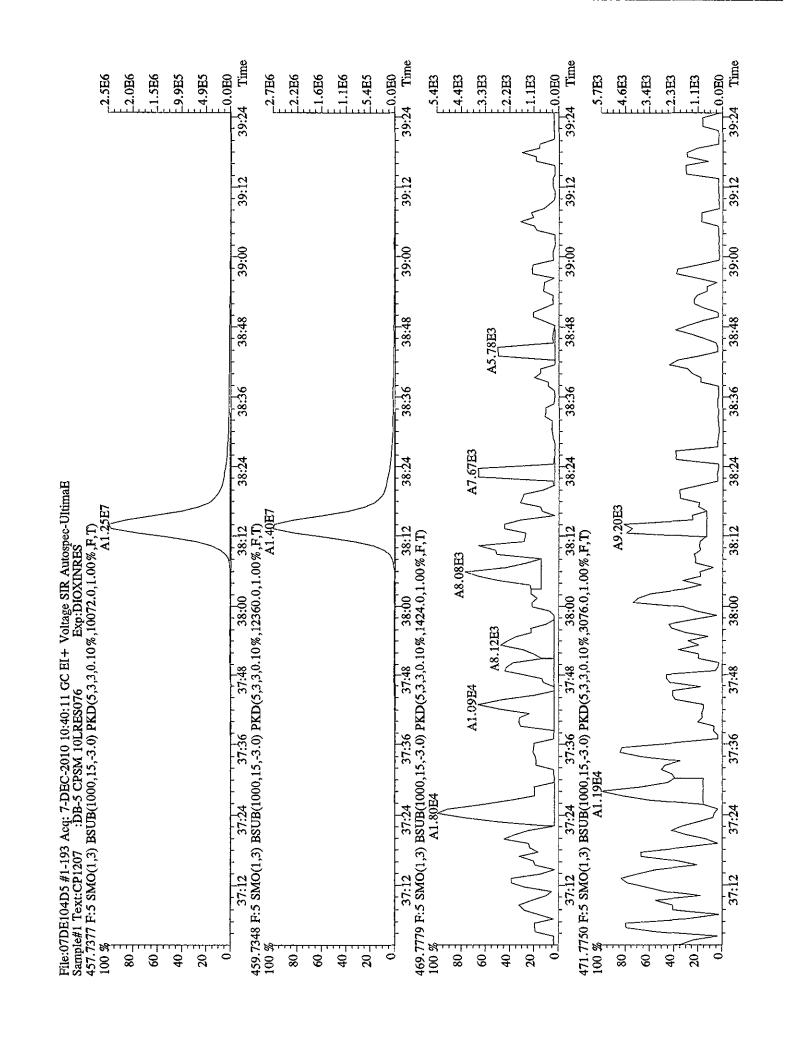


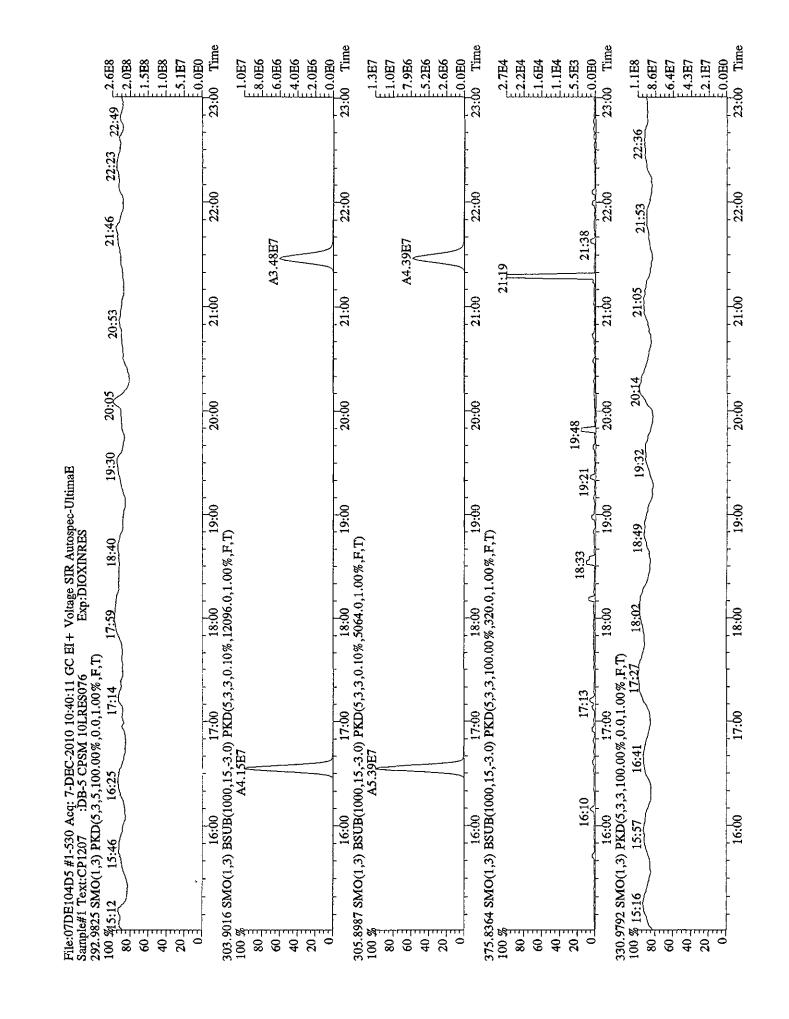


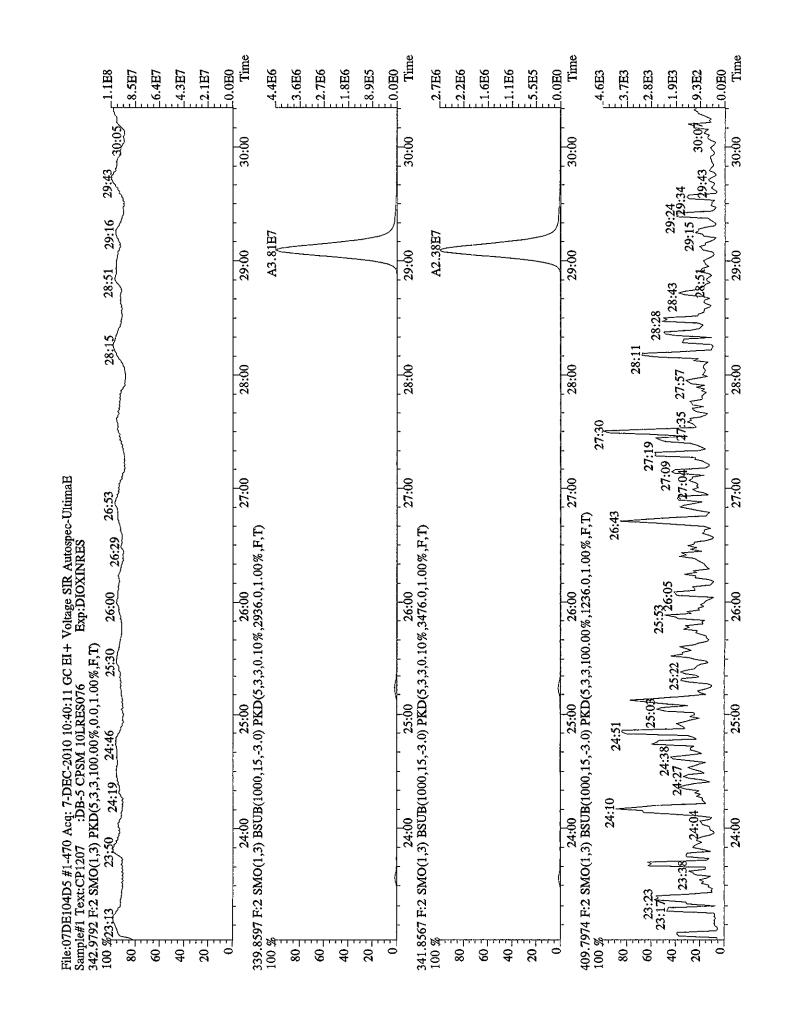


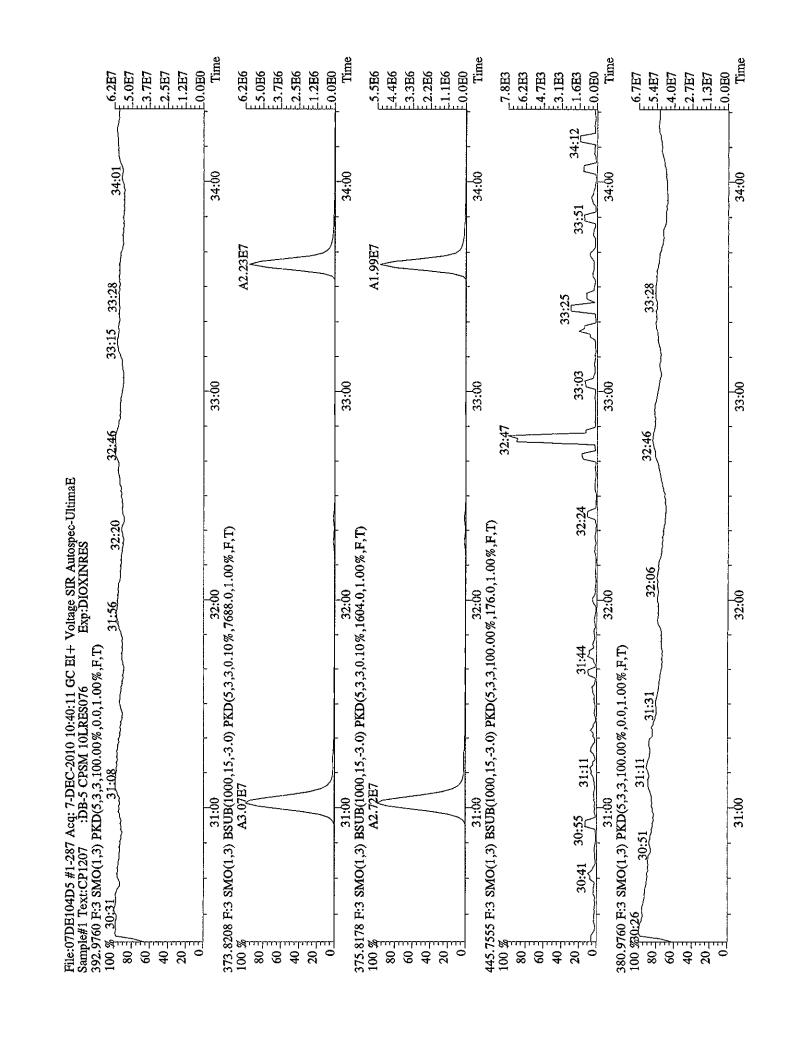


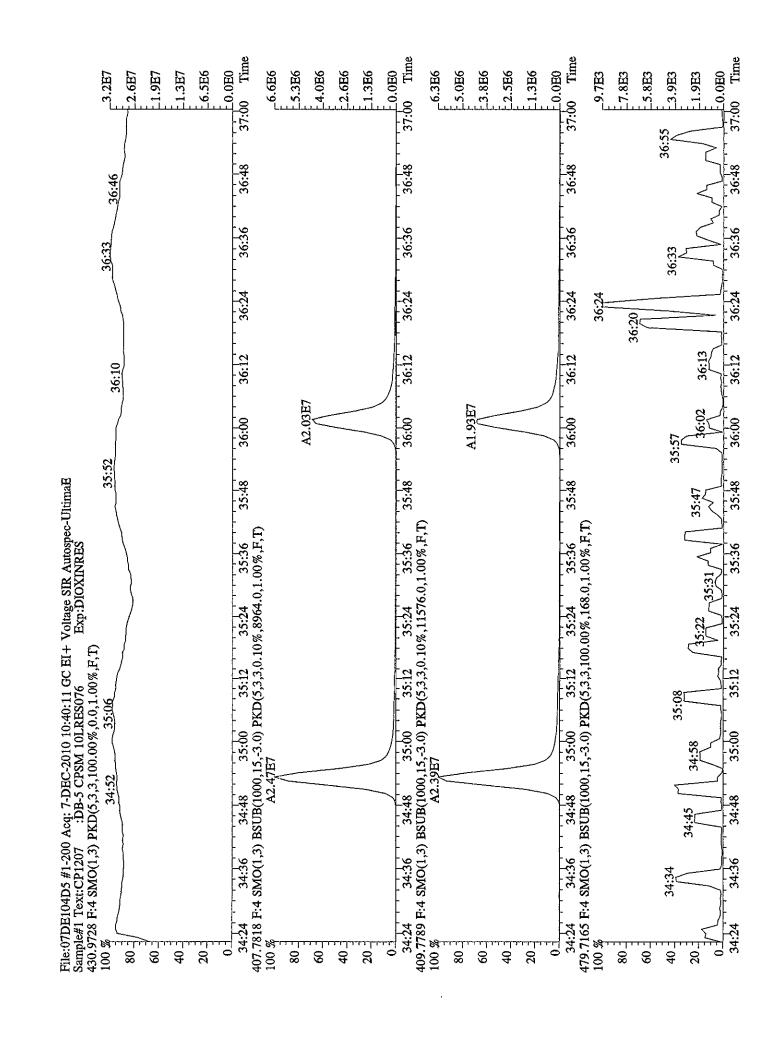


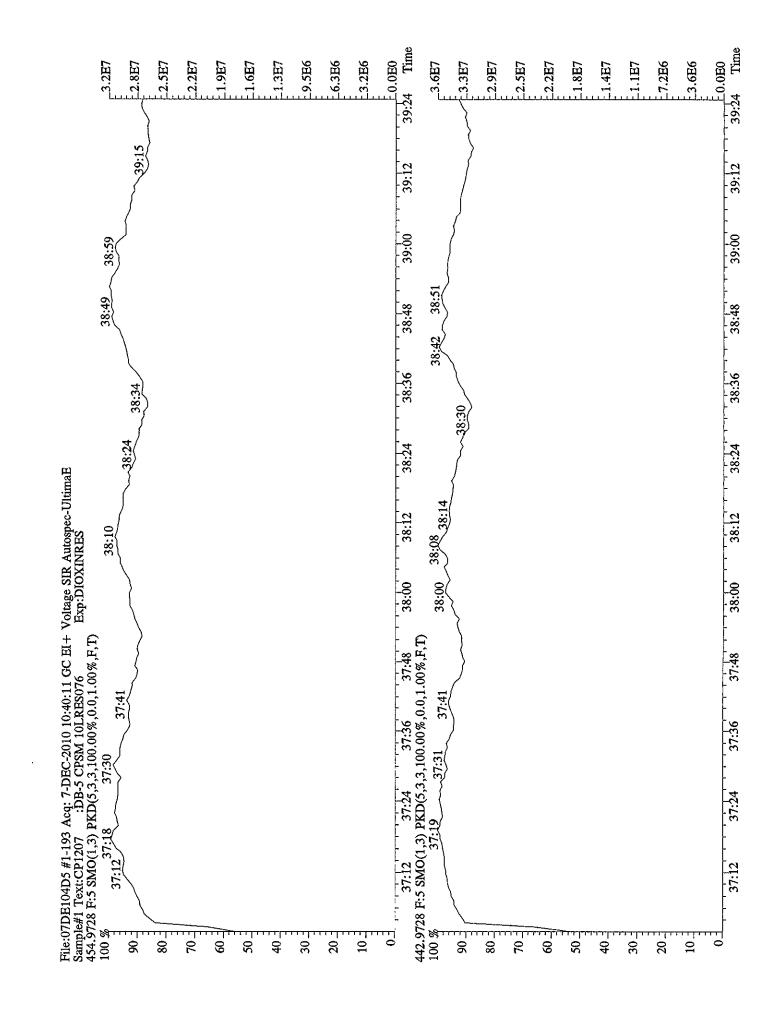


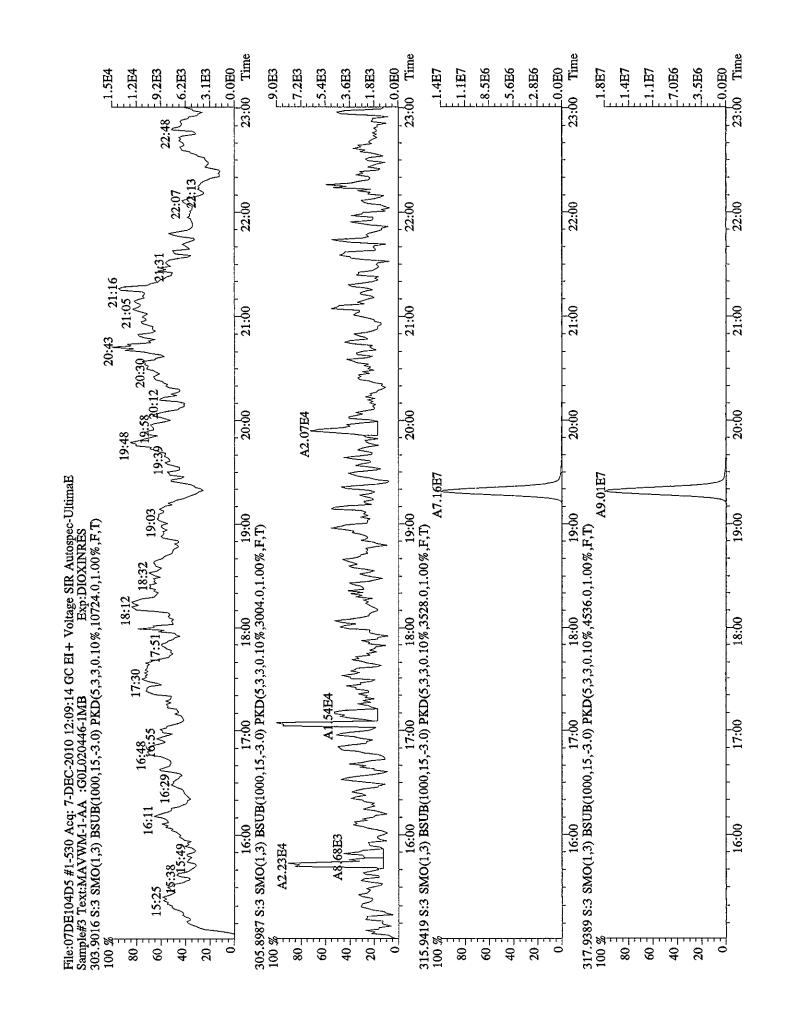


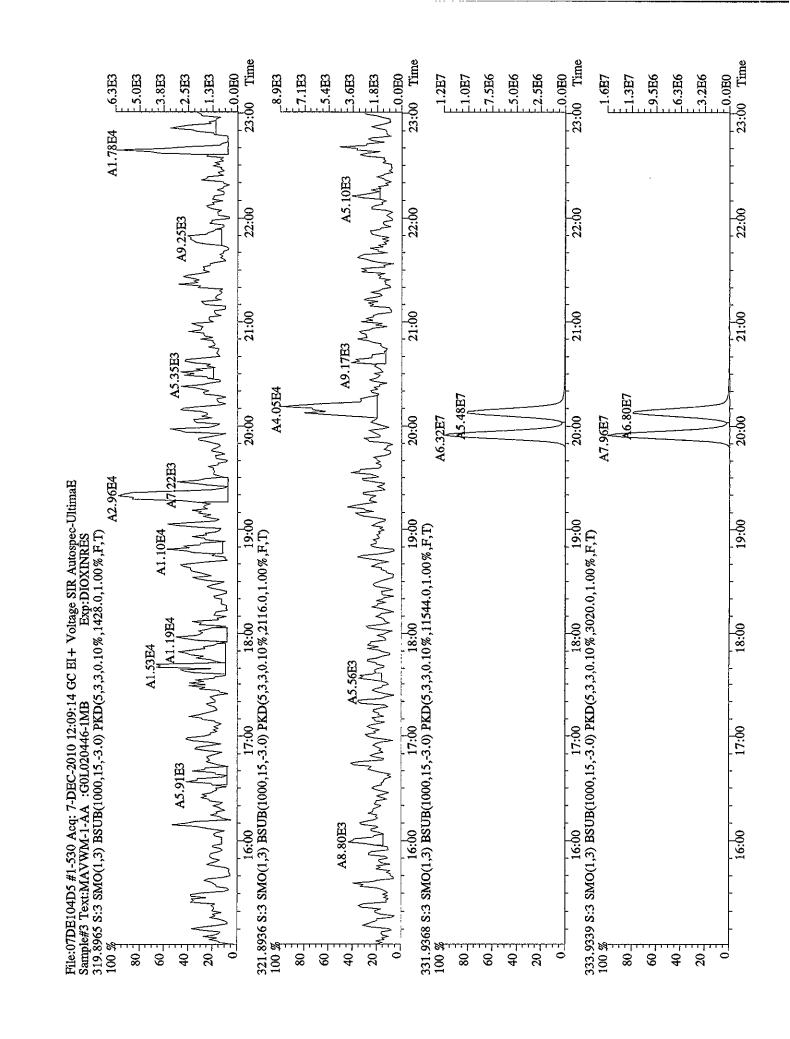


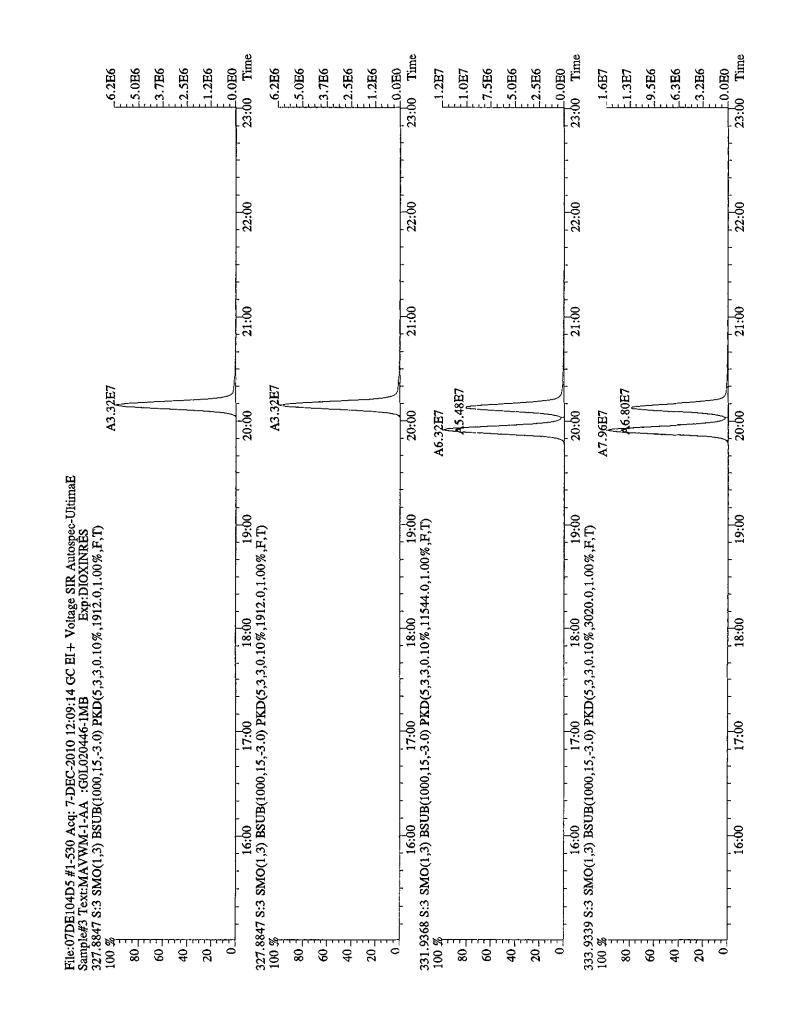


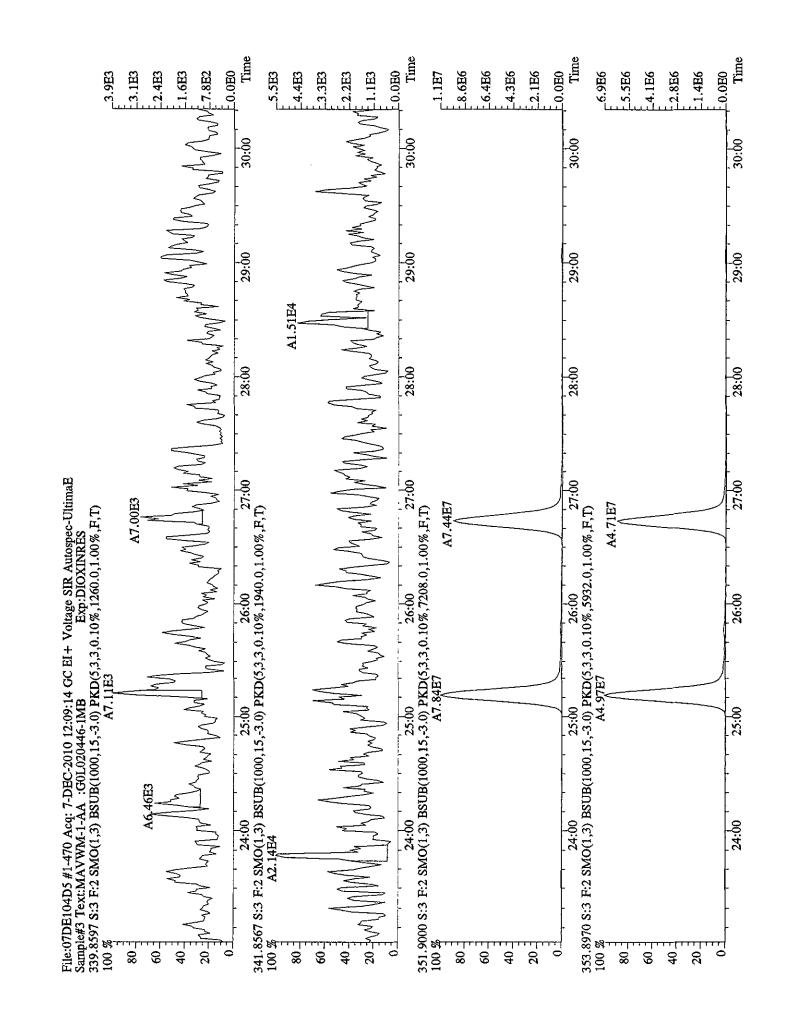


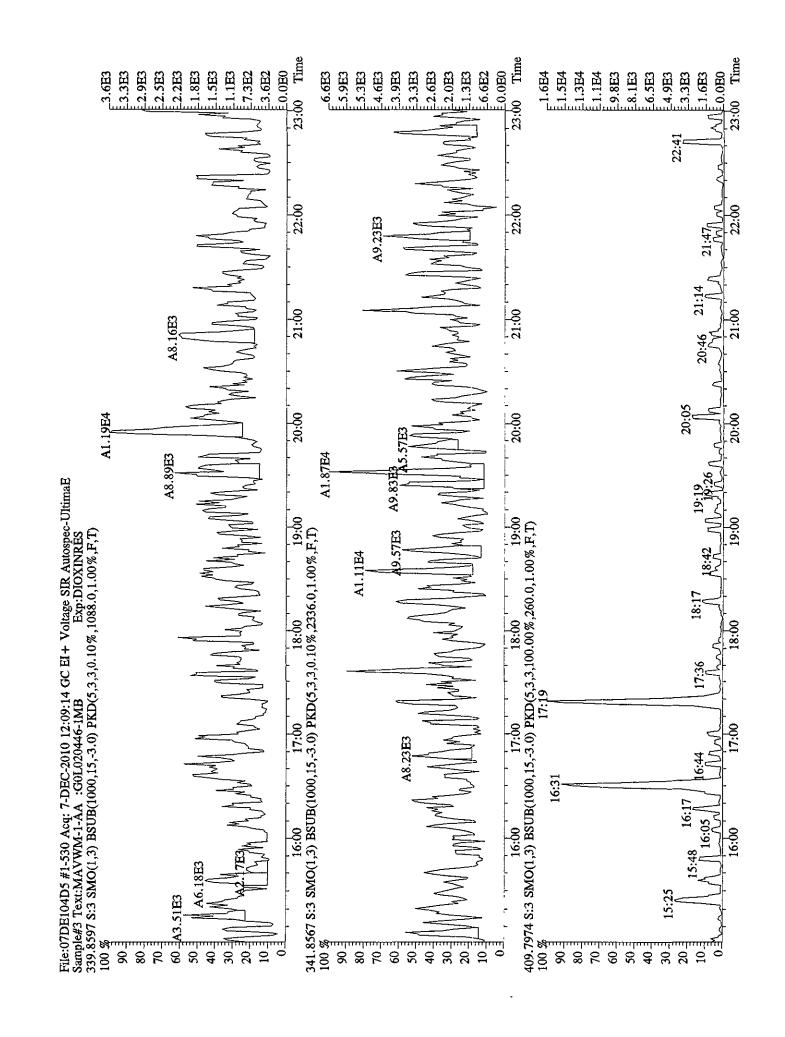


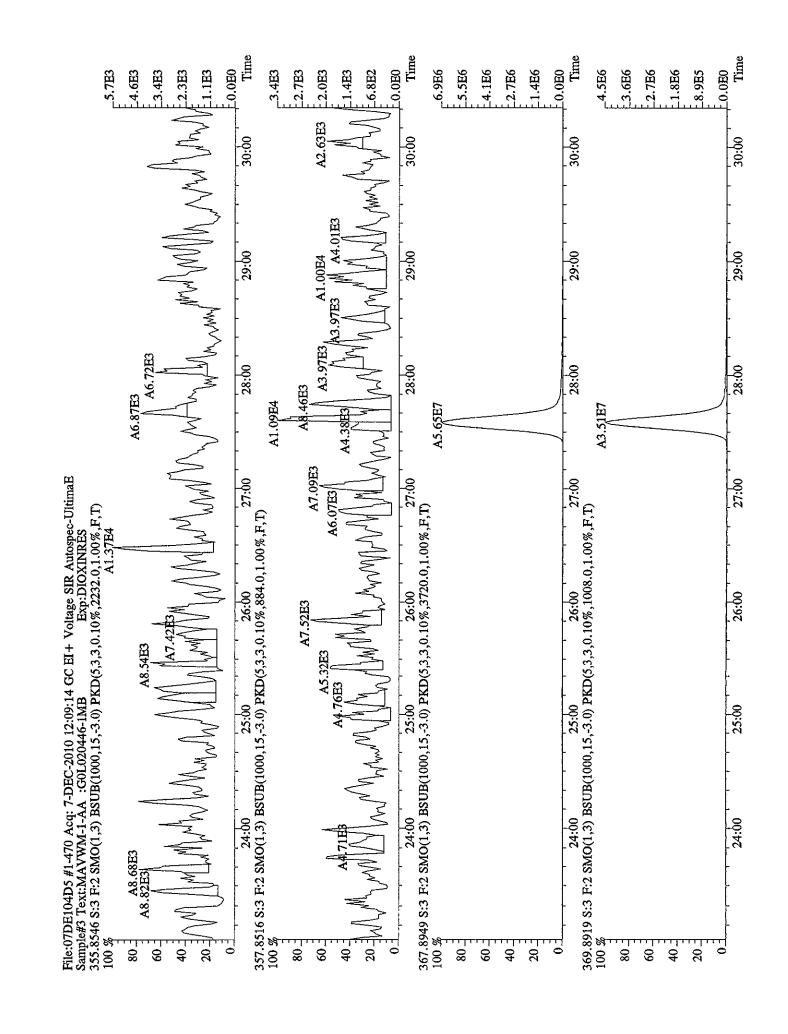


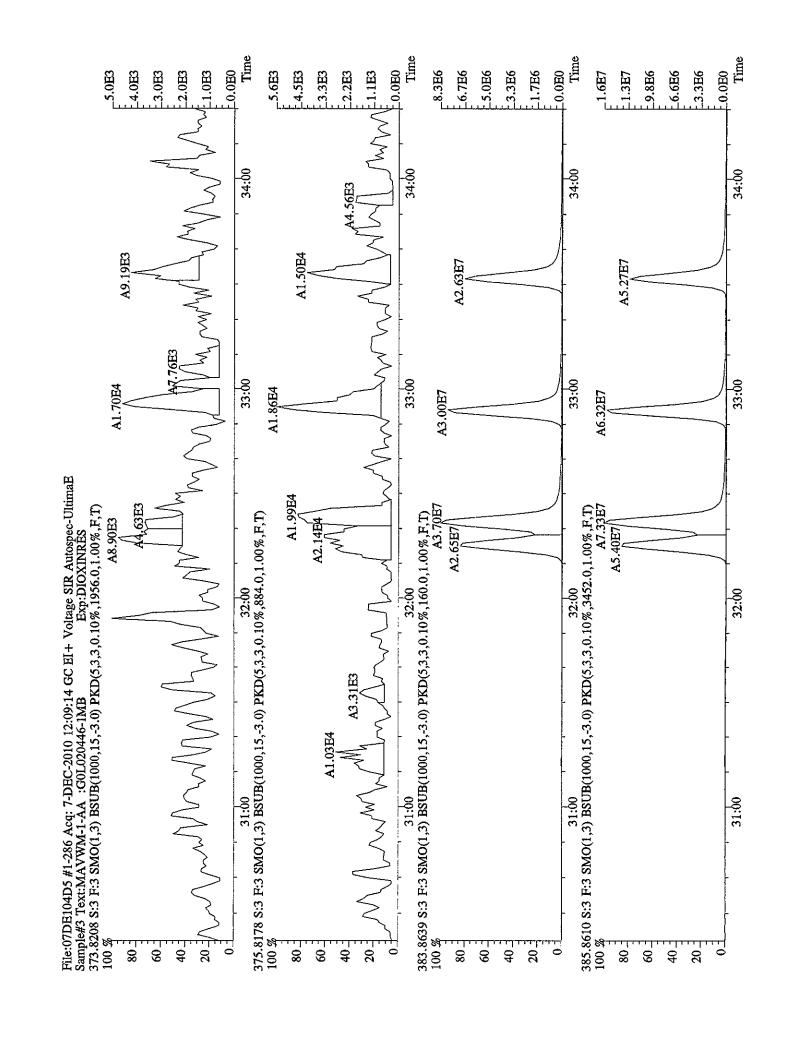


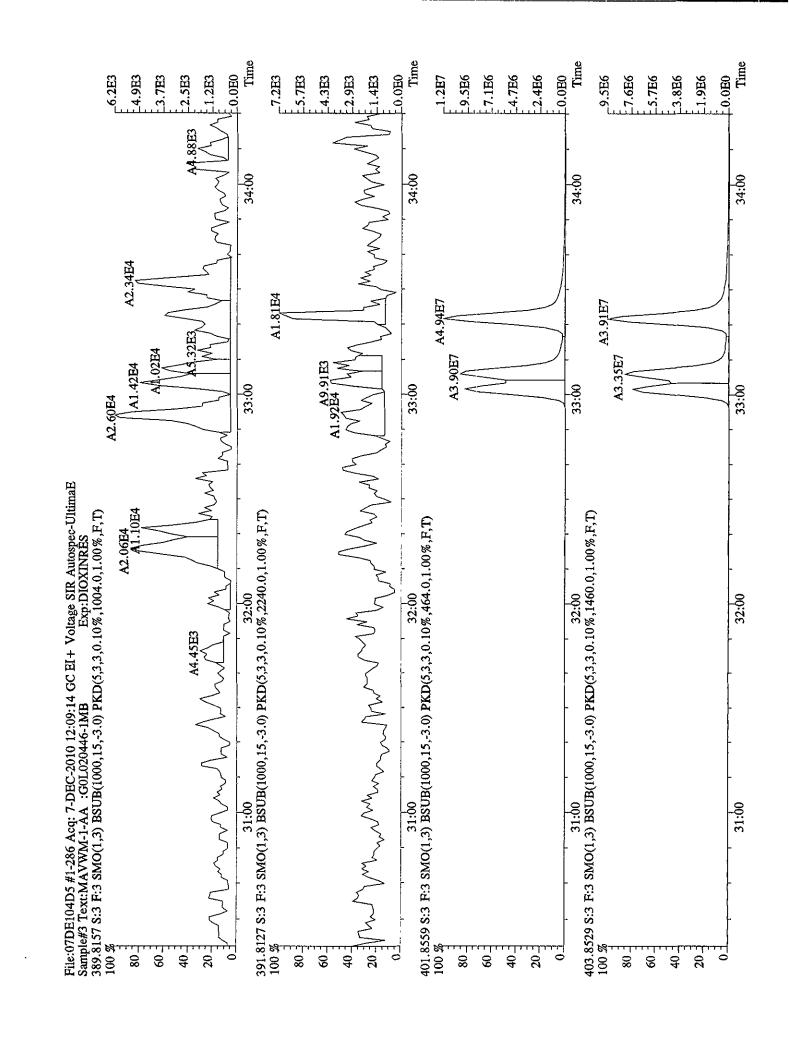


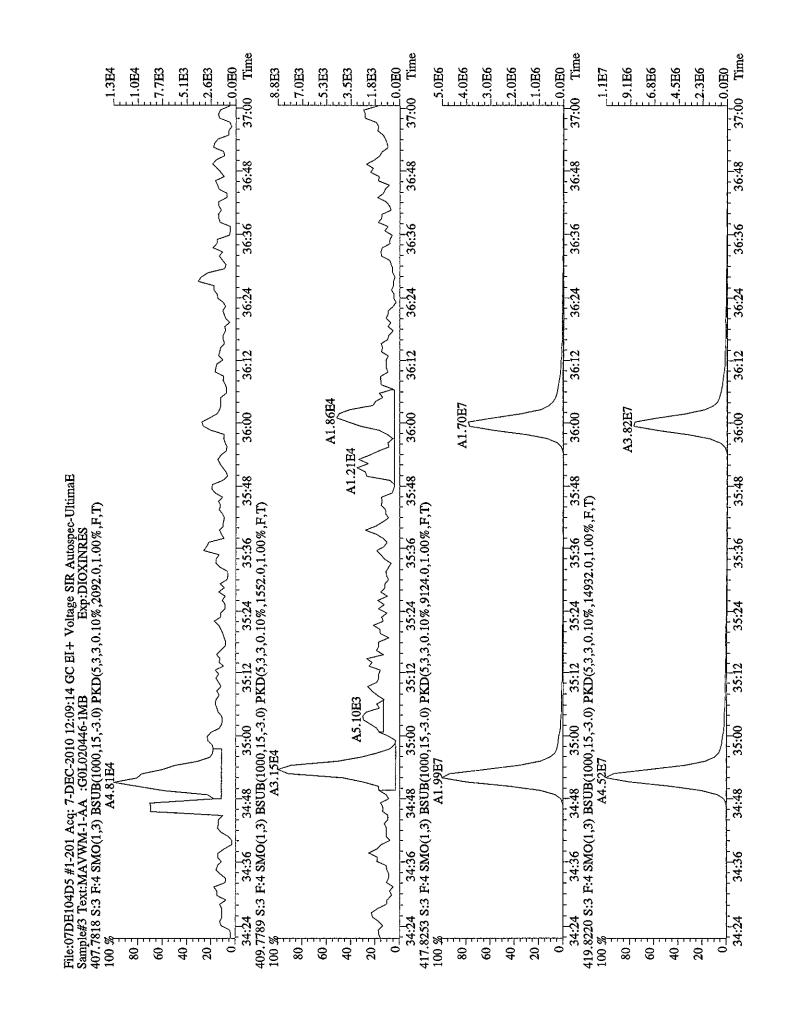


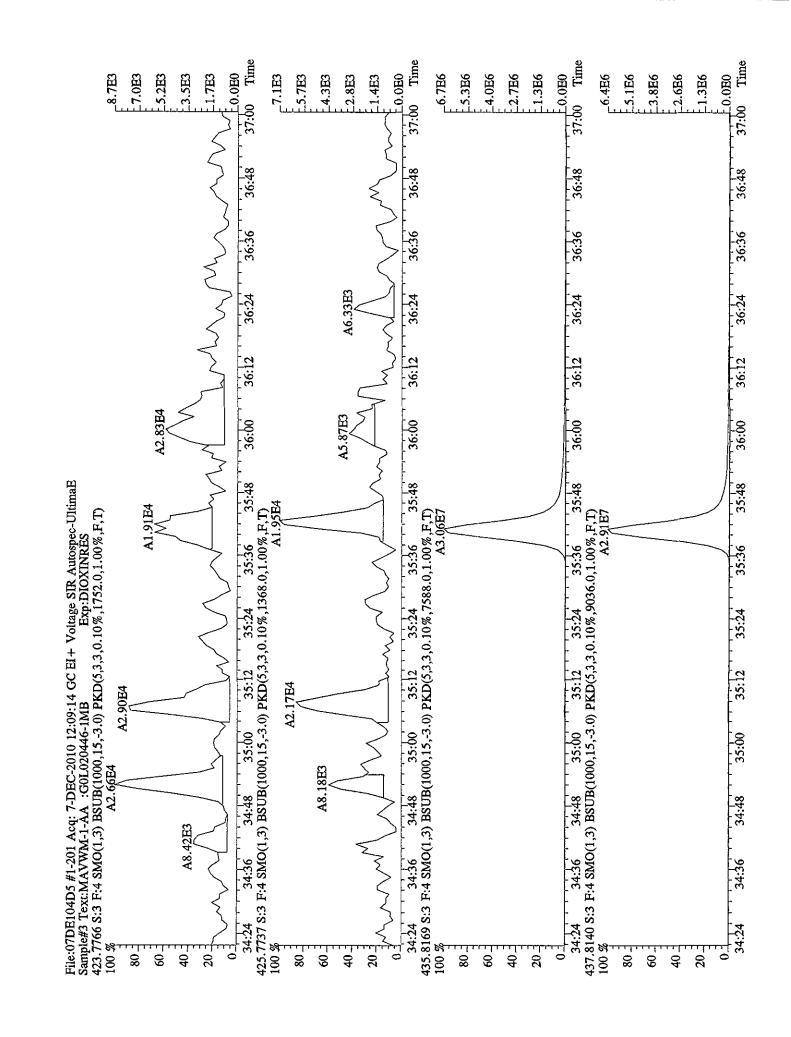


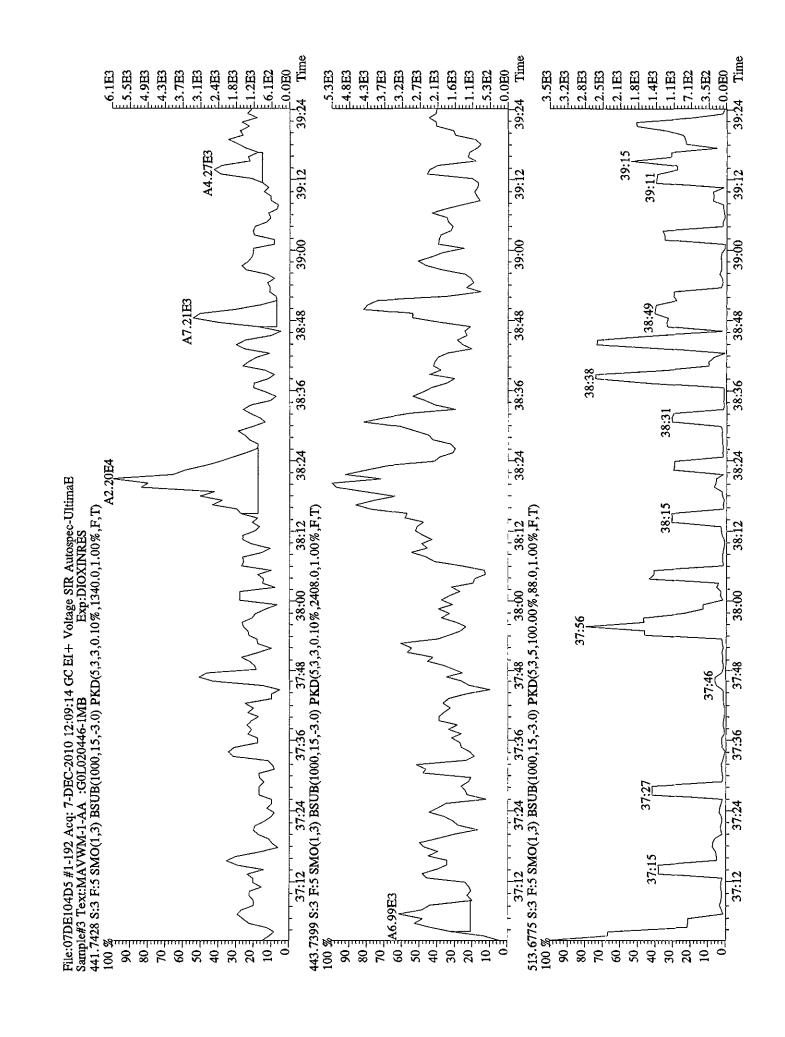


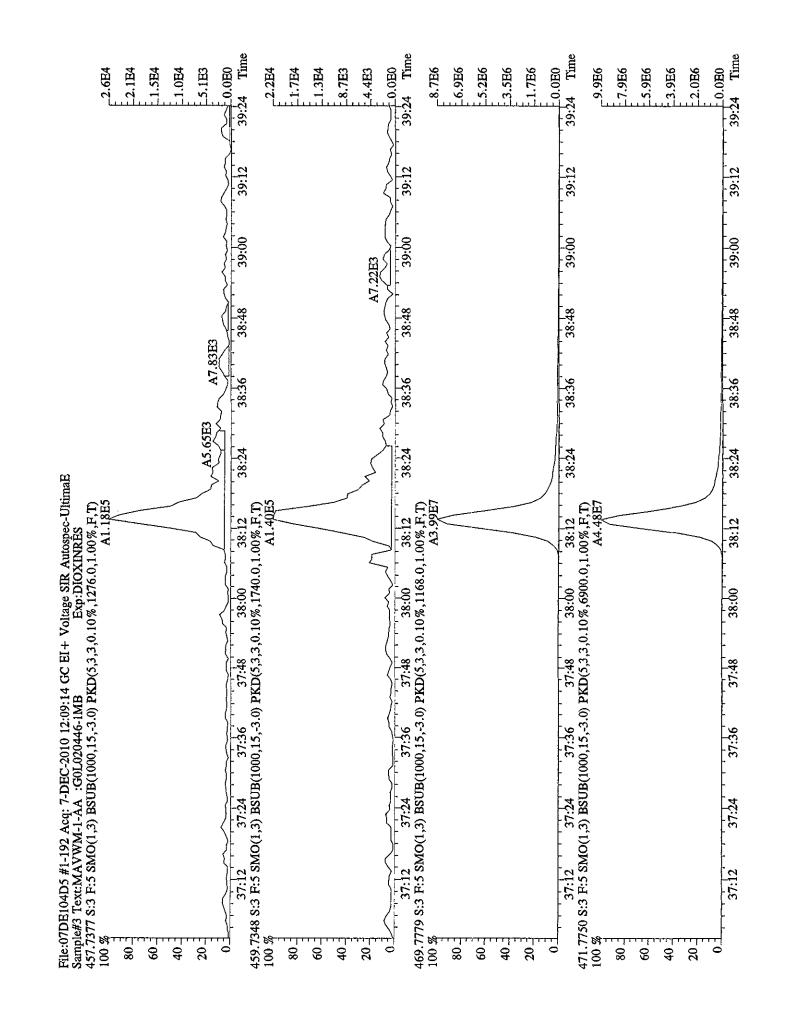


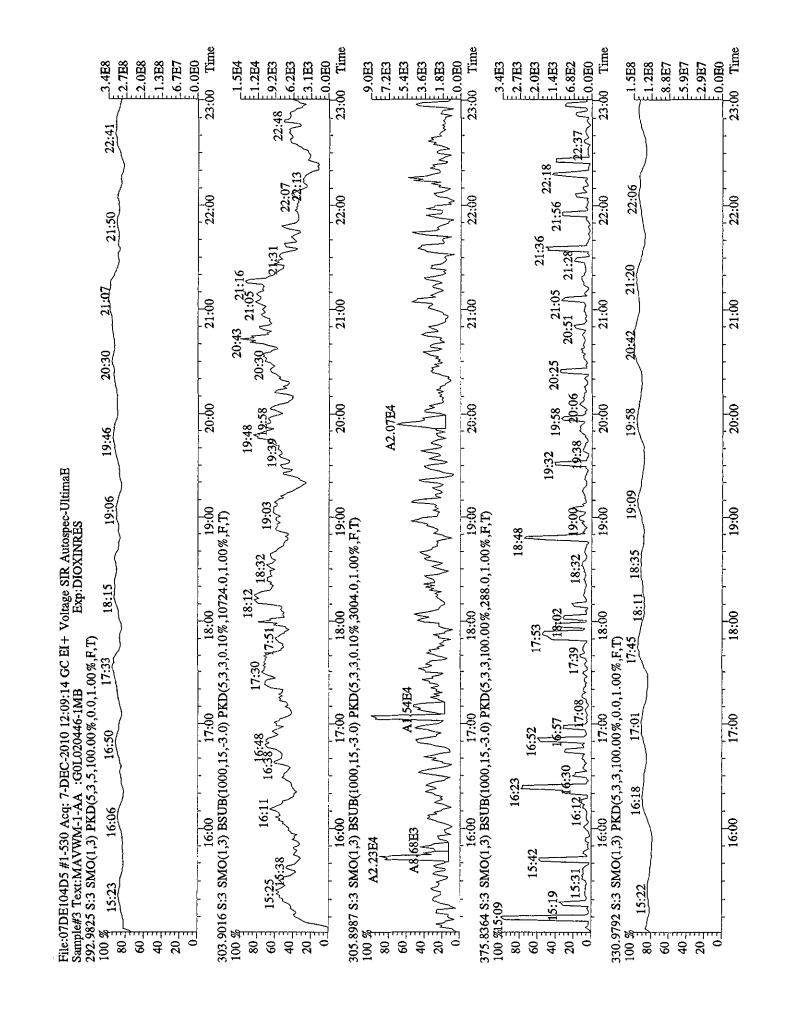


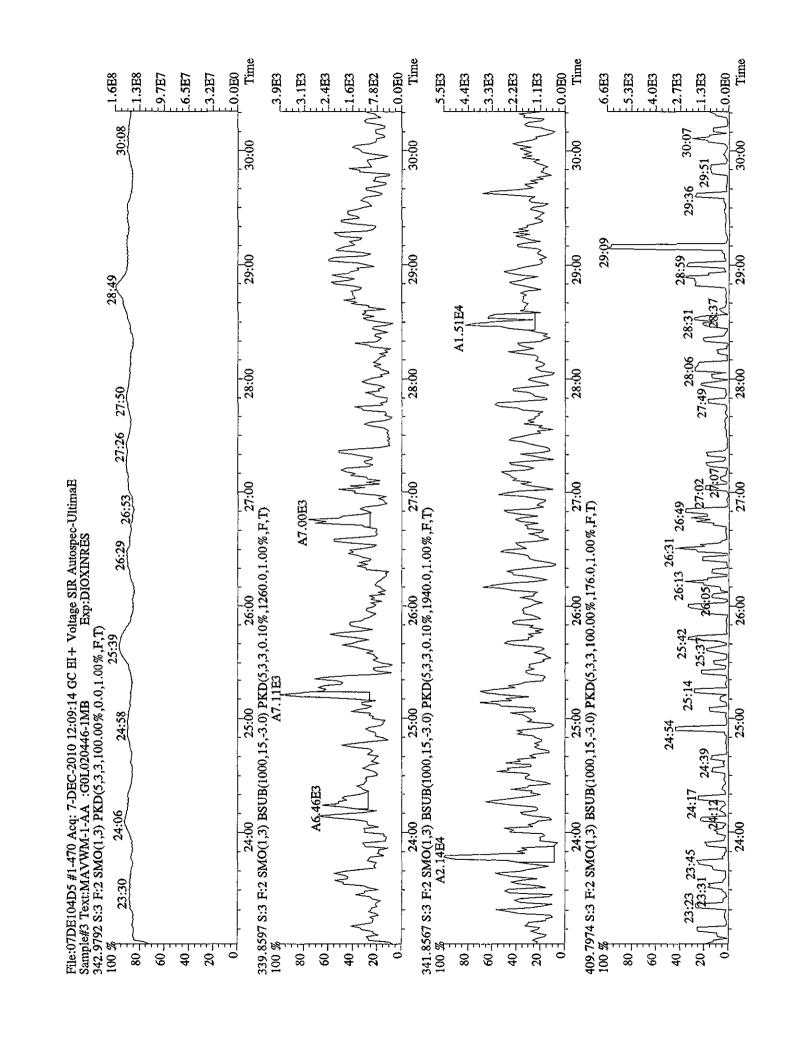


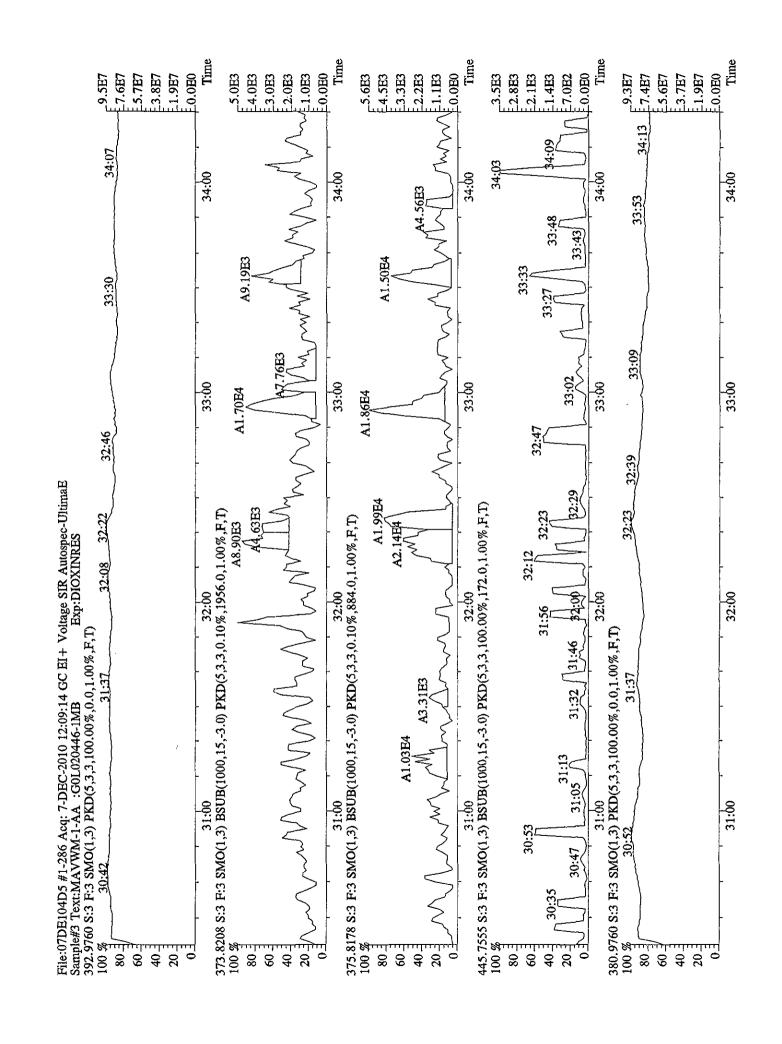


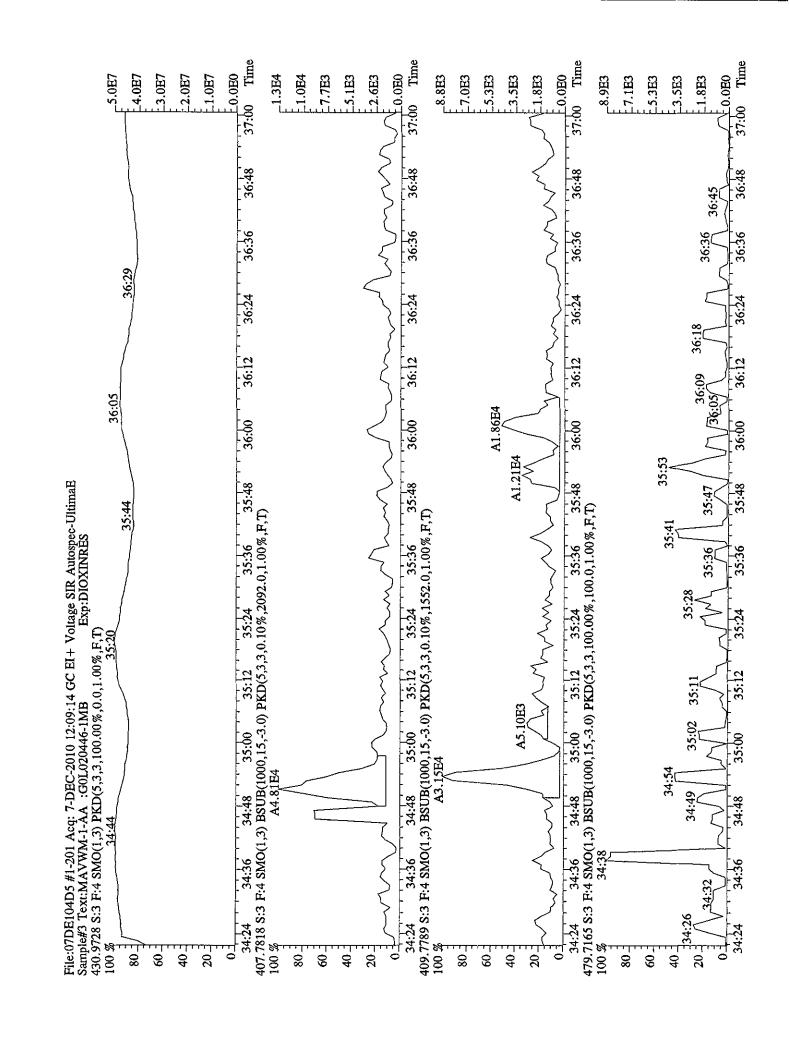


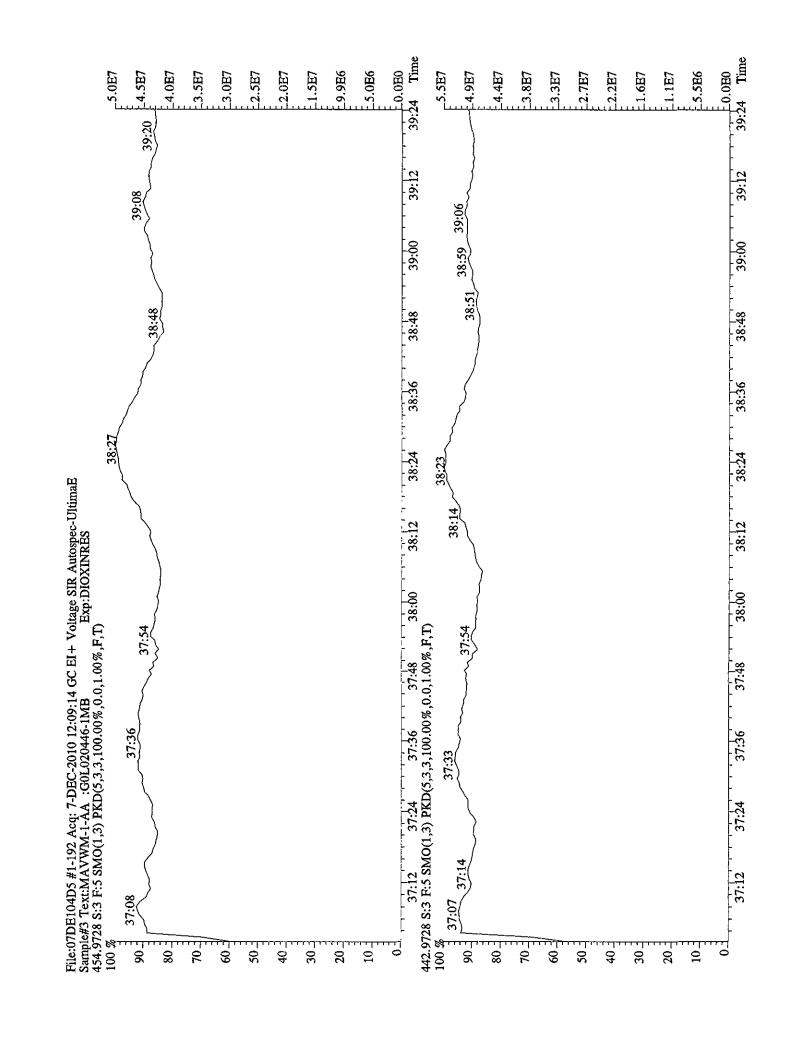


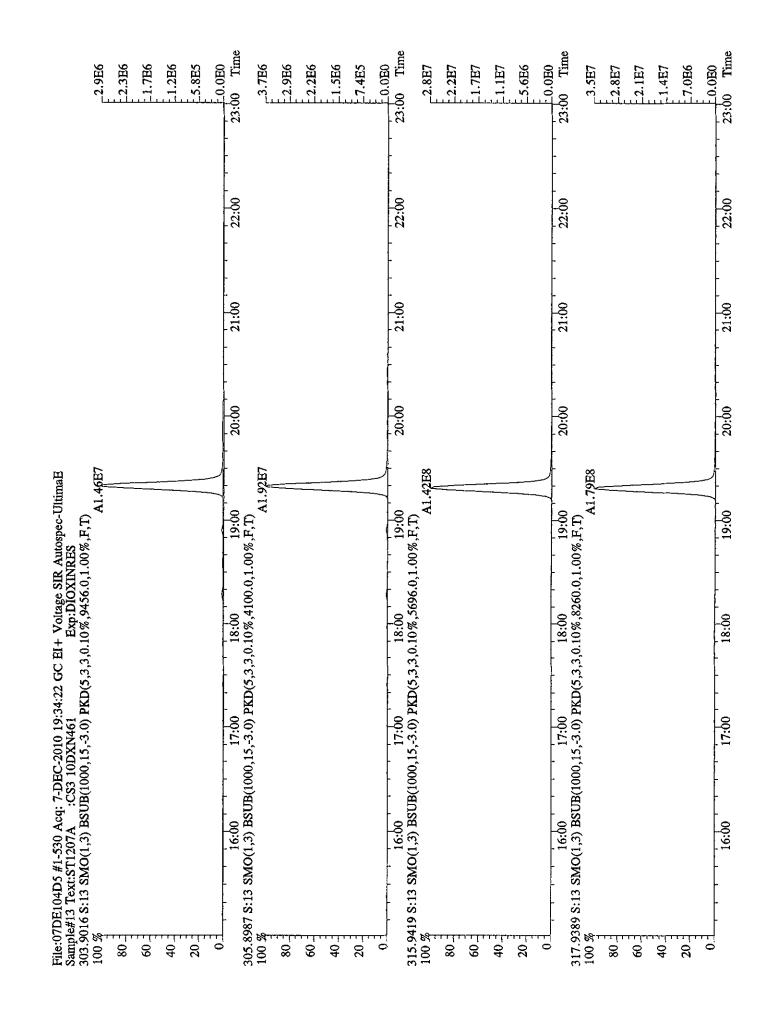


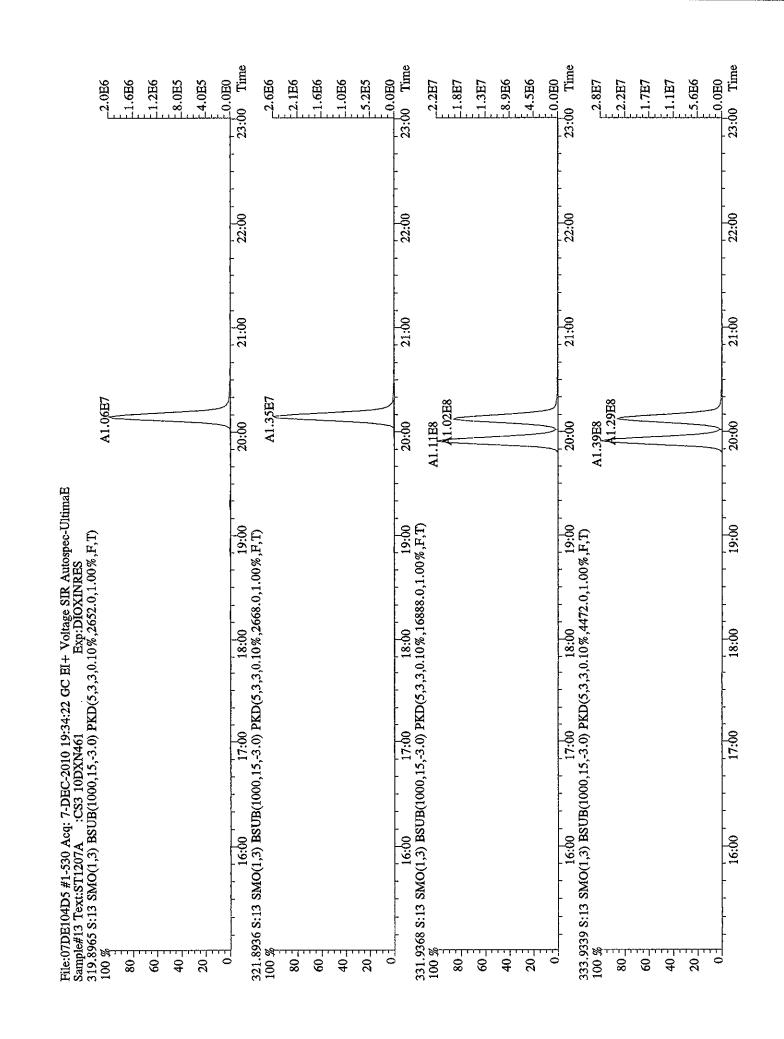


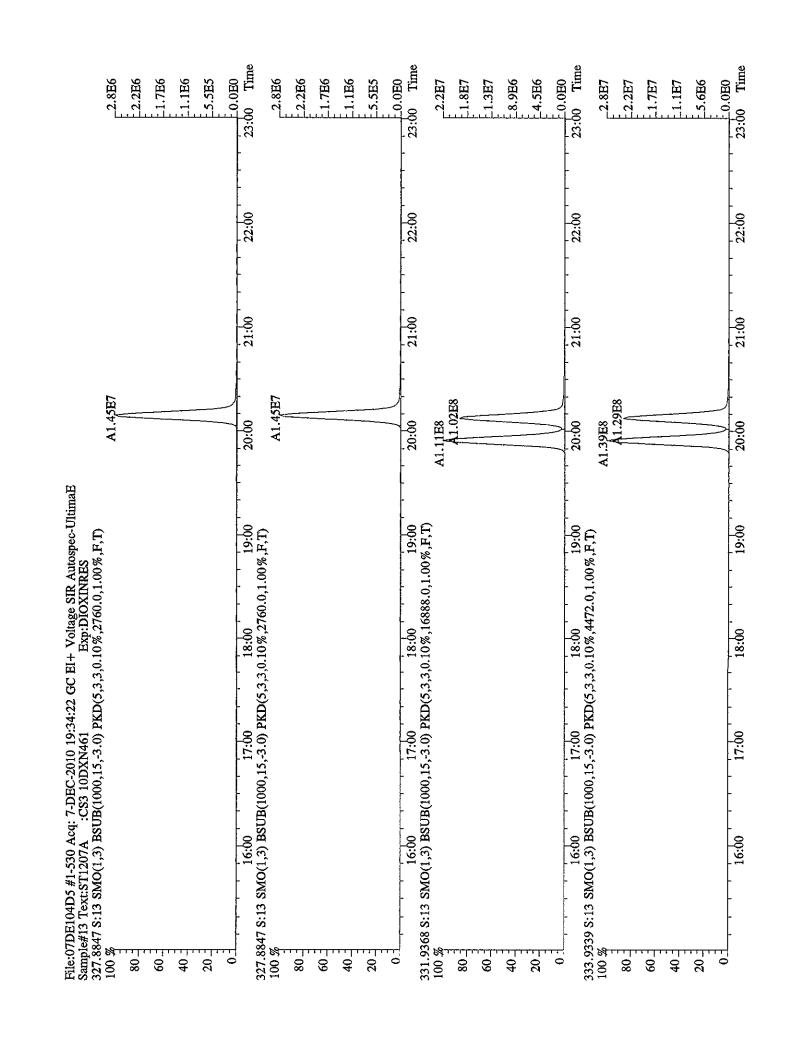


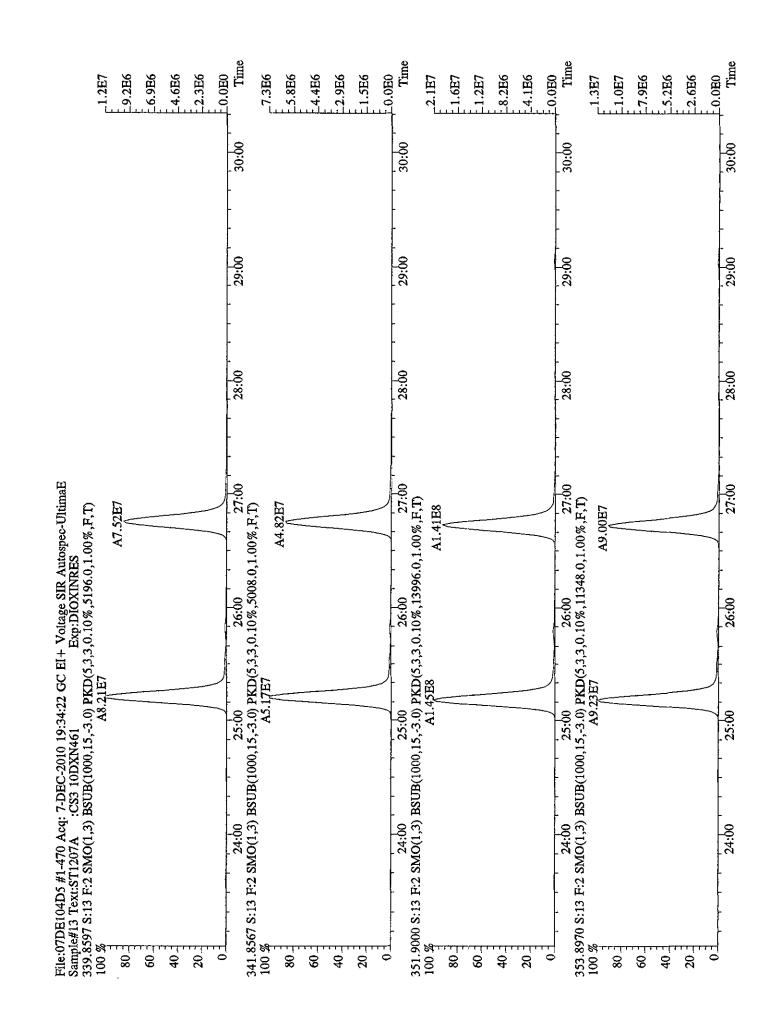


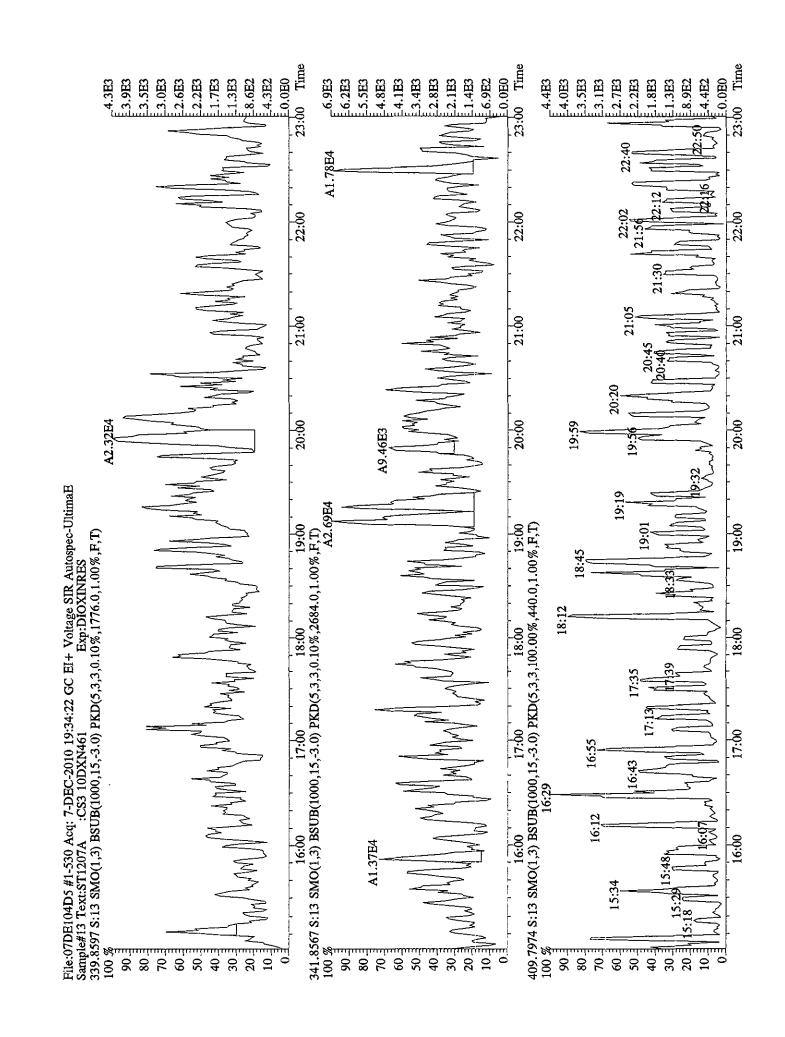


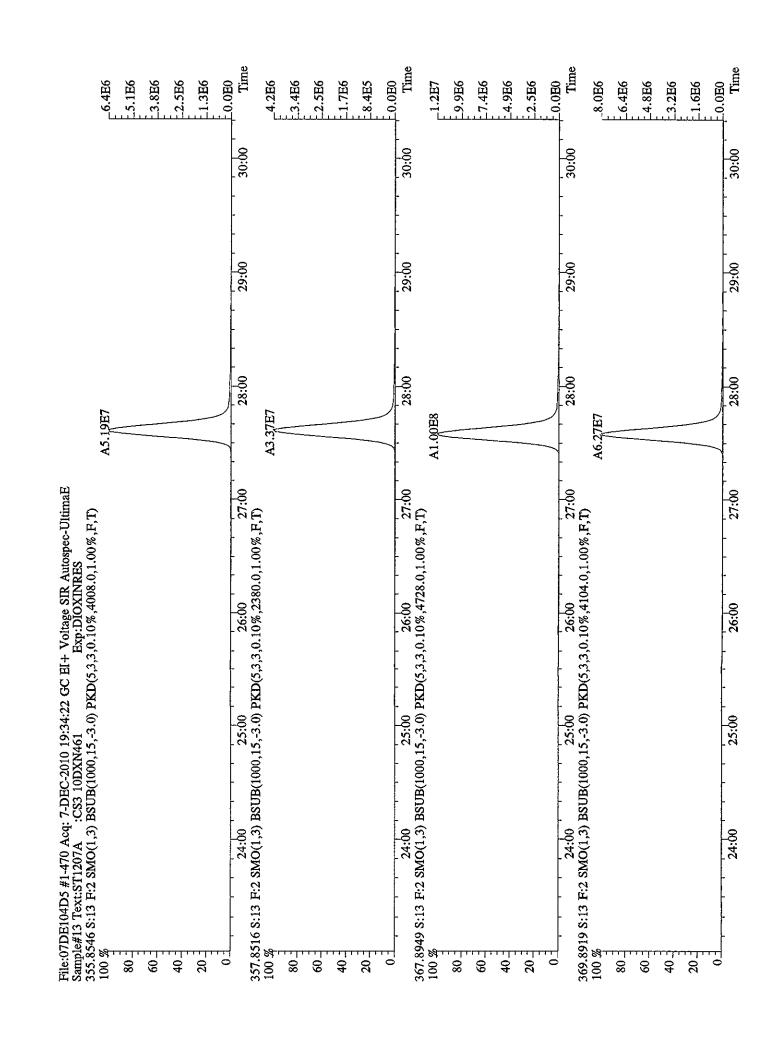


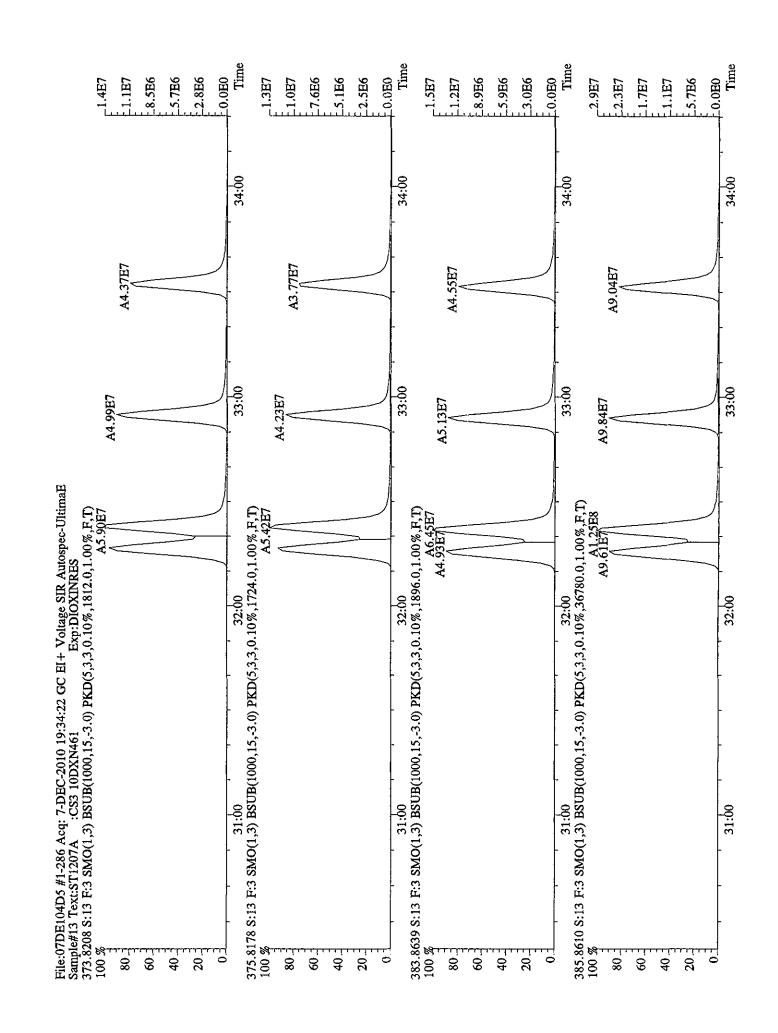


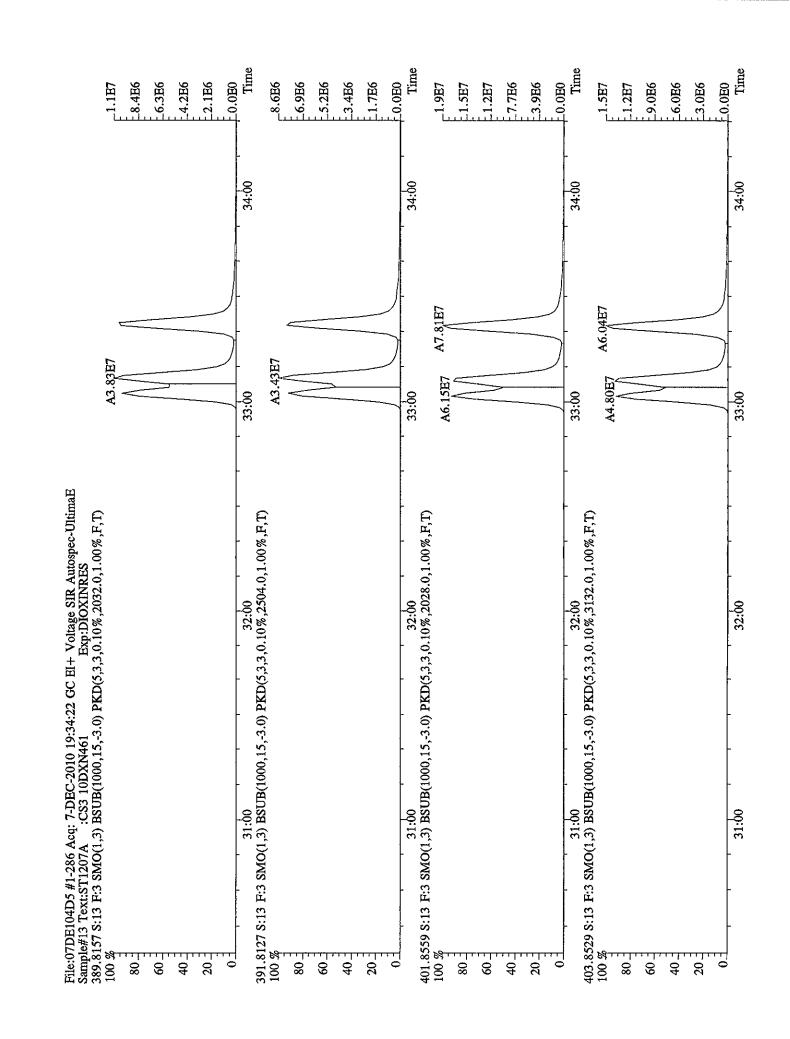


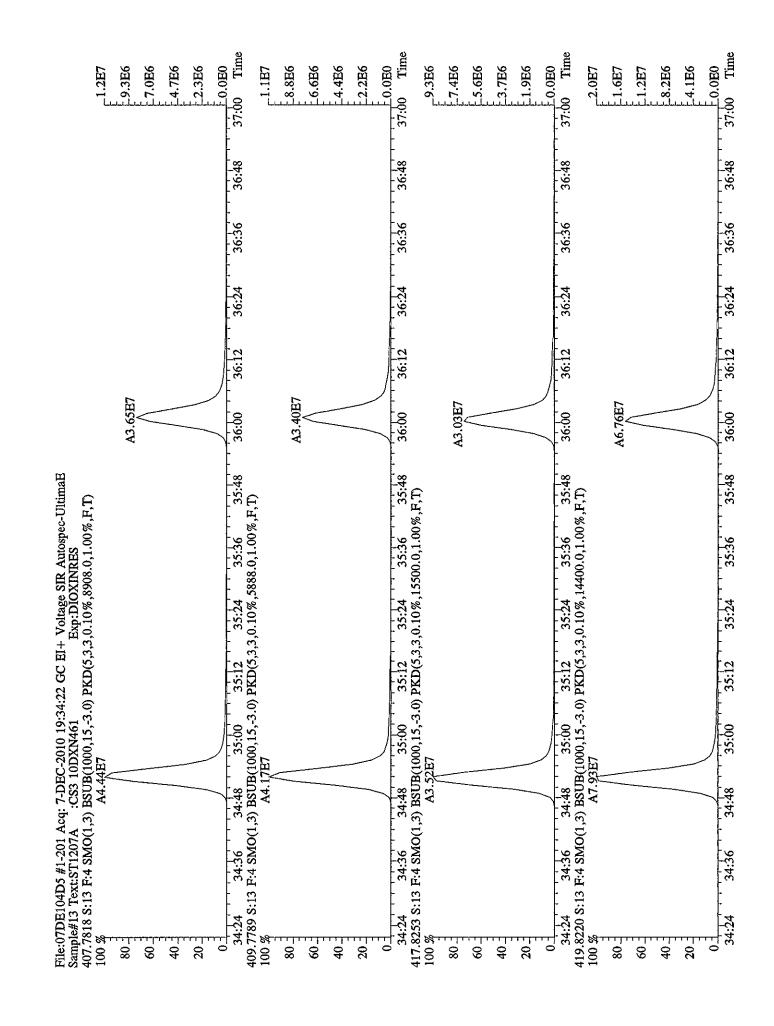


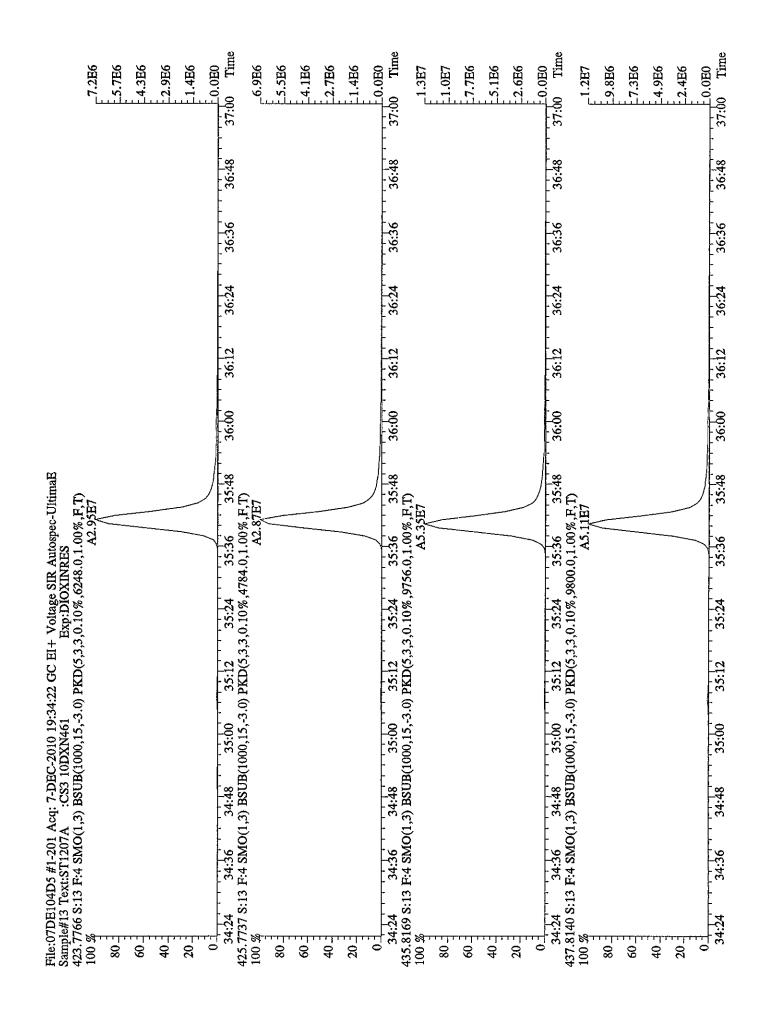


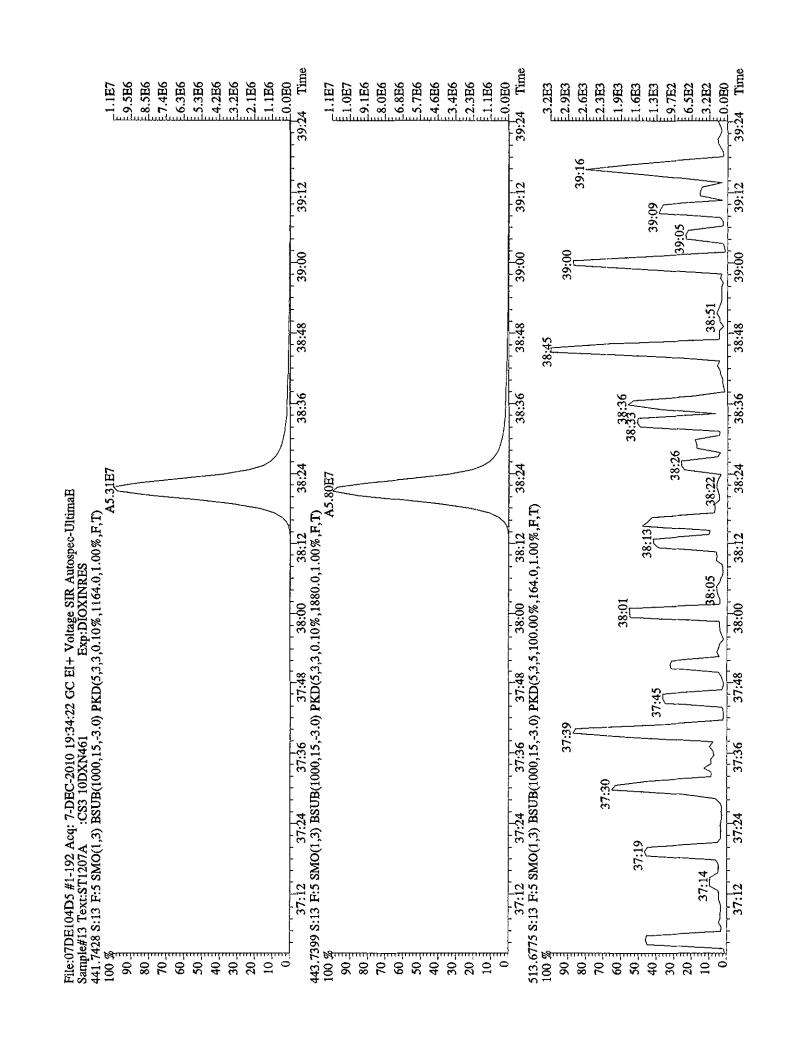


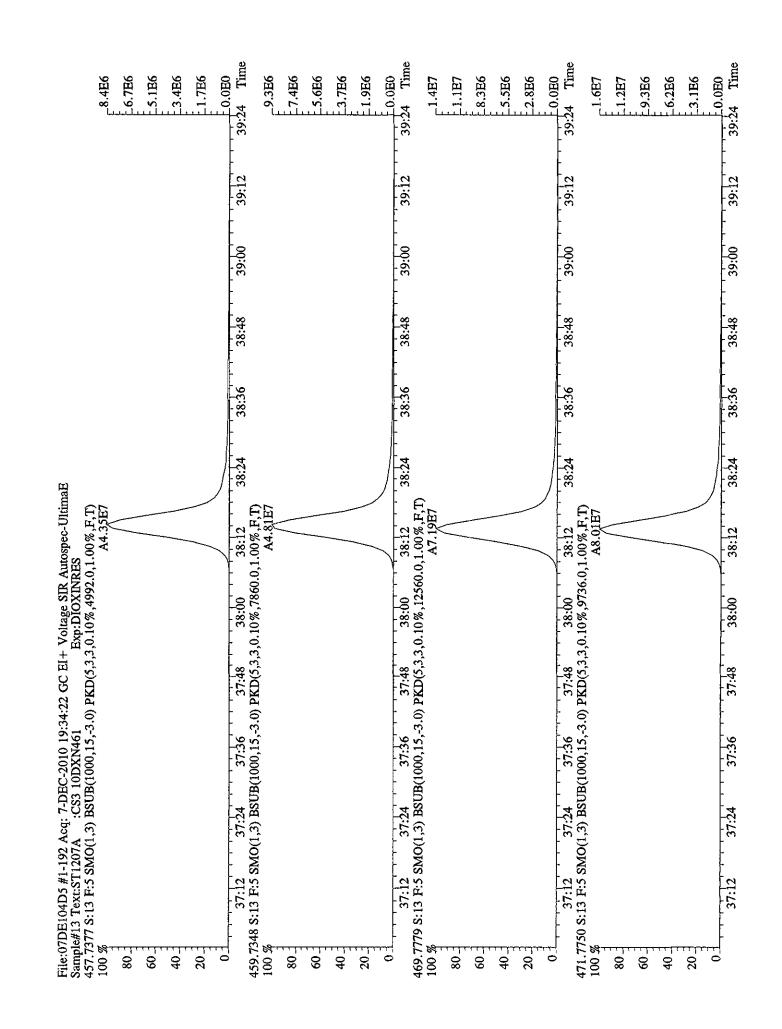


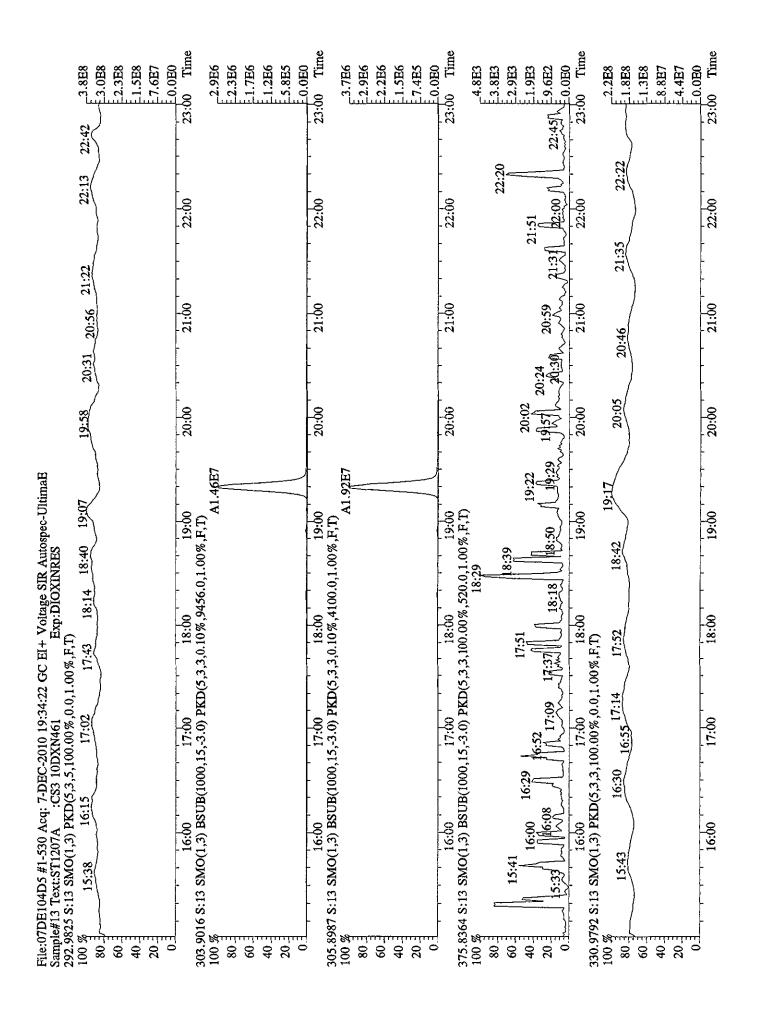


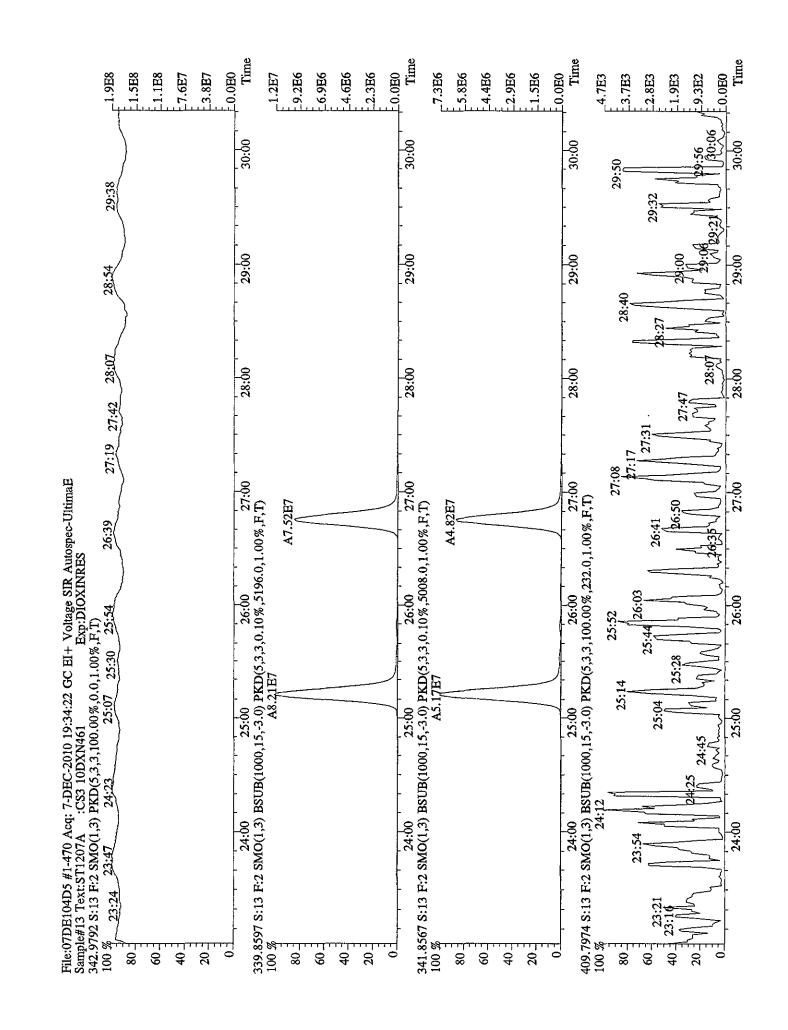


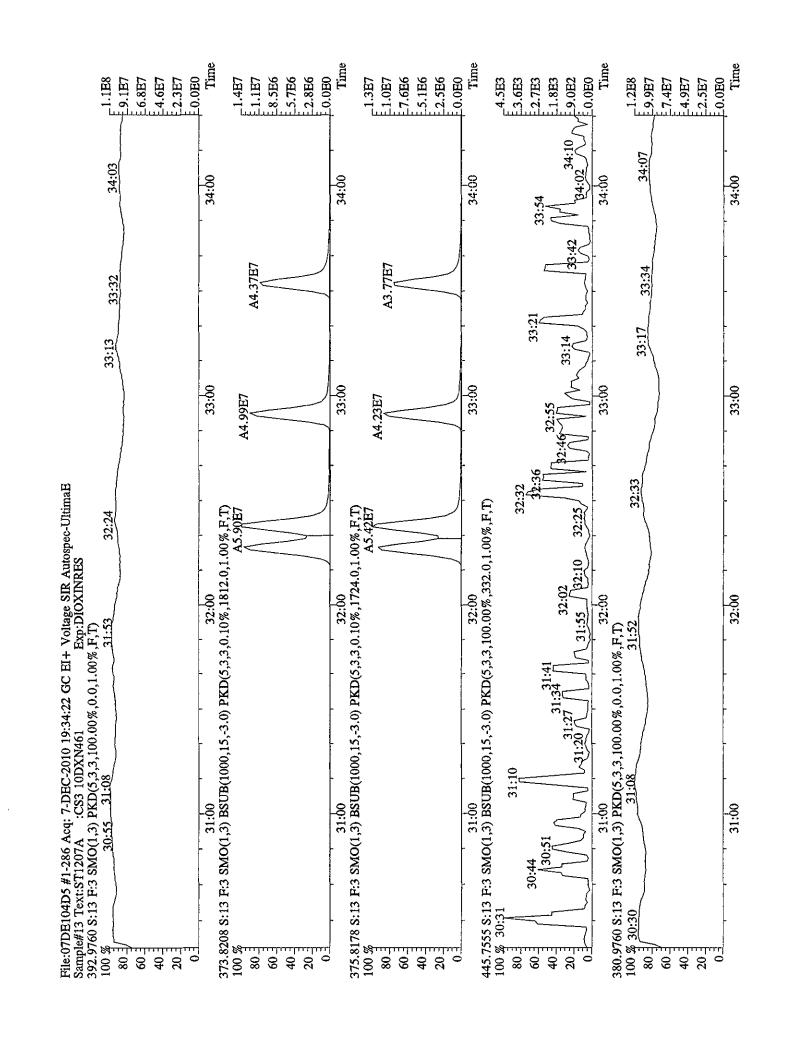


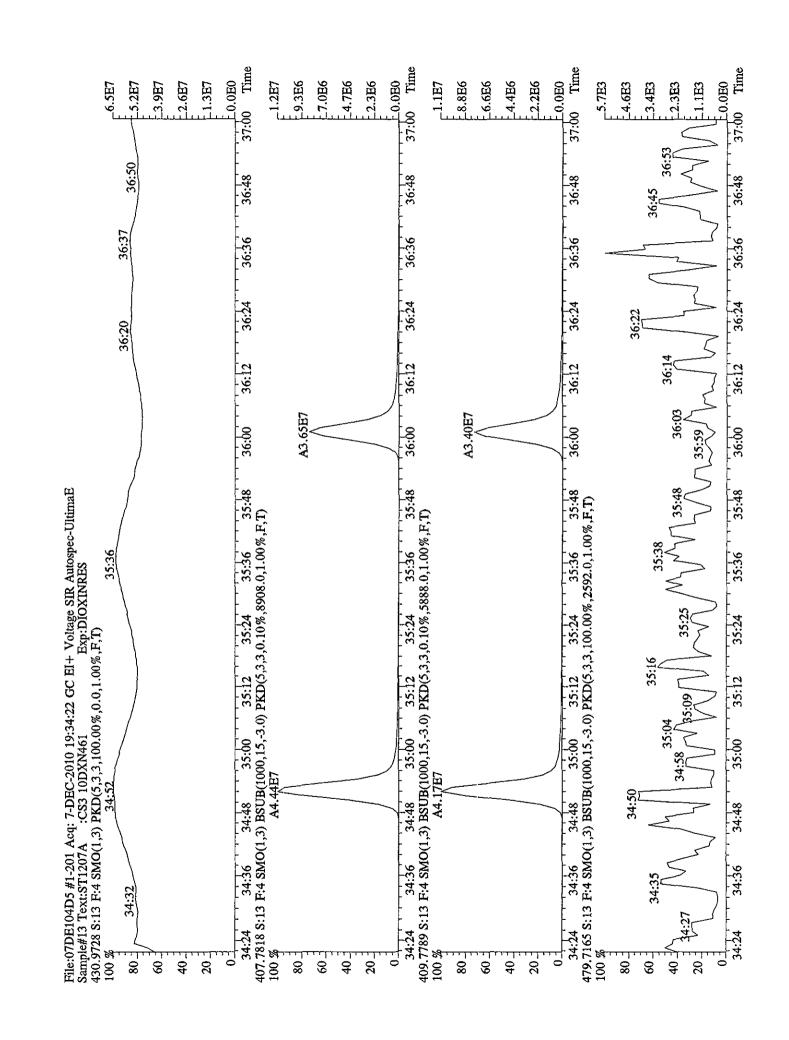


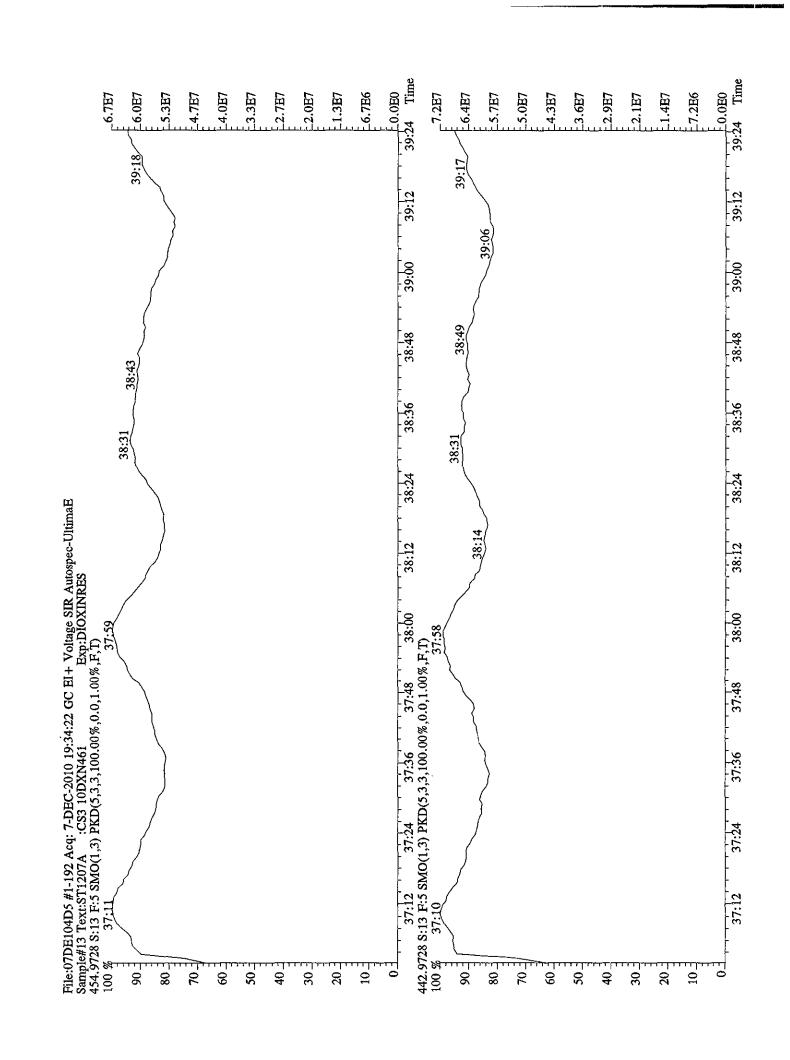














## Test America - West Sacramento

## Daily Calibration Checklist Dioxin Methods

| Method m 109   | Associated ICAL, 109 C           | 772110 405     |  |  |  |
|--|----------------------------------|----------------|--|--|--|
| Column ID DB5  | nstrument ID AD5                 |                |  |  |  |
| STD ID ST1207 B ST1207C  | STD Solution 10 D×1              | N461           |  |  |  |
| Analyzed by Az   | Date Analyzed 12-07-             | -10 오 12-08-10 |  |  |  |
| Std. Pkg. By   | Date Std. Pkg. Assembled_        | 12-08-10       |  |  |  |
| Std. Pkg. Reviewed By NK-  | Date Std. Pkg. Reviewed 12-08-10 |                |  |  |  |
| DAILY STANDARD PACKAGE   | INITIATED                        | REVIEWED       |  |  |  |
| Standard, CPSM, and Solvent Blank present?   | J                                | V              |  |  |  |
| Copy of log-file and Beginning Static Resolution present?  | /                                | . /            |  |  |  |
| CPSM blow up present?  |                                  | · v            |  |  |  |
| Curve Summary present?   | . /                              | <b>✓</b>       |  |  |  |
| Summary of Method criteria present or documented below?  |                                  | <b>V</b>       |  |  |  |
| Daily standard within method specified limits?*  | 1 (1)                            | <b>O V</b>     |  |  |  |
| Analyte retention times correct?   | /                                | <b>√</b>       |  |  |  |
| Isotopic ratios within limits?   | ✓ ·                              | √ .            |  |  |  |
| CPSM valley ≤ method specified limits?**   | /                                | V              |  |  |  |
| Are chromatographic windows correct?   | ✓ /                              | <b>V</b>       |  |  |  |
| Samples analyzed within 12 hrs of daily standard?  | /                                | . 1            |  |  |  |
| Manual reintegration's checked and hardcopies included?  |                                  | · /            |  |  |  |
| Ending Standard present?   | /                                | V              |  |  |  |
| Ending Static Resolutions present  | <b>✓</b>                         | V.             |  |  |  |
| 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<br>E)                         | M              |  |  |  |
| COMMENTS:  |                                  |                |  |  |  |

Method 23: See Method 23 Daily Standard Criteria, Table 5.

Method 1613B: See, Method 1613B or Method 1613B Tetras Daily Standard Criteria,

Method 1613B/8290/TO9 CPSM Criteria: 25% valley between 2378 TCDF (DB-225)/TCDD (DB-5) and its closest cluters normalized to the 2378 peak.

<sup>\*</sup> 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.

<sup>\*\*</sup> 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

Run text: ST1207B File text: ST1207B :CS3 10DXN461

Run #13 Filename 07DE104D5 S: 15 I: 1

Acquired: 7-DEC-10 21:03:21 Processed: 8-DEC-10 07:53:22 Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D5TO9

| Name                    | Resp             | RA     | RT      | RRF  | Amount | Dev'n | Mod? |
|-------------------------|------------------|--------|---------|------|--------|-------|------|
| 13C-1,2,3,4-TCDD        | 222813352        | 0.80 y | 19:55   | -    | 100.00 | ••    | n    |
|                         |                  |        |         |      |        |       |      |
| 13C-2,3,7,8-TCDF        | 314538272        | -      | 19:19   | 1.41 | 100.00 | 14.8  | n    |
| 2,3,7,8-TCDF            | 32931696         | 0.79 y | 19:19   | 1.05 | 10.00  | 5.3   | n    |
| Total TCDF              | 3341482 <b>7</b> | 0.95 n | 18:17   | 1.05 | 10.00  | 5.3   | n    |
|                         |                  |        |         |      |        |       |      |
| 13C-2,3,7,8-TCDD        | 215938592        | -      | 20:07   | 0.97 | 100.00 | 7.1   | n    |
| 2,3,7,8-TCDD            | 22726580         | _      | 20:09   | 1.05 | 10.00  | 7.0   | n    |
| Total TCDD              | 23073246         | 2.72 n | 16:57   | 1.05 | 10.00  | 7.0   | n    |
|                         |                  |        |         |      |        |       |      |
| 37C1-2,3,7,8-TCDD       | 27974458         | 1.00 у | 20:09   | 1.30 | 10.00  | -2.3  | n    |
|                         |                  |        |         |      |        |       |      |
| 13C-1,2,3,7,8-PeCDF     | 222146680        | 1.56 y | 25:11   | 1.00 | 100.00 | 13.8  | n    |
| 1,2,3,7,8-PeCDF         | 125461396        | _      | 25:12   | 1.13 | 50.00  | 4.9   | n    |
| 2,3,4,7,8-PeCDF         | 114999028        | 1.56 y | 26:46   | 1.04 | 50.00  | -1.0  | n    |
| Total F2 PeCDF          | 244988586        | 1.35 y | 23:37   | 1.08 | 100.00 | 2.0   | n    |
| Total F1 PeCDF          | *                | * n    | Not Fnd | 1.08 | 100.00 | 2.0   | n    |
|                         |                  |        |         |      |        |       |      |
| 13C-1,2,3,7,8-PeCDD     | 147739076        | _      | 27:35   | 0.66 | 100.00 | 0.3   | n    |
| 1,2,3,7,8-PeCDD         | 79040572         | 1.54 y | 27:37   | 1.07 | 50.00  | 15.6  | n    |
| Total PeCDD             | 79114248         | 1.30 n | 25:31   | 1.07 | 50.00  | 15.6  | n    |
|                         |                  |        |         |      |        |       |      |
| 13C-1,2,3,7,8,9-HxCDD   | 122475976        | 1.28 y | 33:22   | -    | 100.00 | -     | n    |
|                         |                  |        |         |      |        |       |      |
| 13C-1,2,3,4,7,8-HxCDF   | 124413440        | _      | 32:16   | 1.02 | 100.00 | -2.8  | n    |
| 1,2,3,4,7,8-HxCDF       | 81165036         | _      | 32:17   | 1.30 | 50.00  | 7.2   | n    |
| 1,2,3,6,7,8-HxCDF       | 95426936         | _      | 32:22   | 1.53 | 50.00  | 19.7  | n    |
| 2,3,4,6,7,8-HxCDF       | 80268920         | _      | 32:55   | 1.29 | 50.00  | 4.6   | n    |
| 1,2,3,7,8,9-HxCDF       | 71363172         | _      | 33:33   | 1.15 | 50.00  | 4.5   | n    |
| Total HxCDF             | 328448576        | 1.18 y | 31:14   | 1.32 | 200.00 | 9.2   | n    |
|                         |                  |        |         |      |        |       |      |
| 13C-1,2,3,6,7,8-HxCDD   | 106880300        | _      | 33:06   | 0.87 | 100.00 | 5.0   | n    |
| 1,2,3,4,7,8-HxCDD       | 48862404         |        | 33:02   | 0.91 | 50.00  | -11.8 | n    |
| 1,2,3,6,7,8-HxCDD       | 69052934         | _      | 33:07   | 1.29 | 50.00  | 11.1  | n    |
| 1,2,3,7,8,9-HxCDD       | 66200664         | _      | 33:23   | 1.24 | 50.00  | 4.8   | n    |
| Total HxCDD             | 184116002        | 1.21 y | 33:02   | 1.15 | 150.00 | 1.9   | n    |
|                         |                  |        |         |      |        |       |      |
| 13C-1,2,3,4,6,7,8-HpCDF | 101045982        | _      |         |      | 100.00 |       | n    |
|                         | 75200028         |        |         |      | 50.00  | 10.6  | n    |
| 1,2,3,4,7,8,9-HpCDF     |                  | -      |         |      | 50.00  | 12.0  | n    |
| Total HpCDF             | 137972790        | 1.08 Y | 34:53   | 1.36 | 100.00 | 11.2  | n    |
|                         |                  |        |         |      |        |       |      |
| 13C-1,2,3,4,6,7,8-HpCDD |                  | _      | 35:40   |      | 100.00 | -10.7 | n    |
| 1,2,3,4,6,7,8-HpCDD     | 50075074         | _      |         |      | 50.00  | 3.4   | n    |
| Total HpCDD             | 50371855         | 0.85 n | 35:08   | 1.11 | 50.00  | 3.4   | n    |
|                         |                  |        |         |      |        |       |      |
| 13C-OCDD                | 127514060        | 0.91 y | 38:15   | 0.52 | 200.00 | -16.0 | n    |
| OCDF                    | 96263948         | 0.91 y | 38:22   | 1.51 | 100.00 | 10.2  | n    |
| OCDD                    | 77970416         | 0.91 y | 38:15   | 1.22 | 100.00 | 2.0   | n    |

Run text: ST1207C File text: ST1207C :CS3 10DXN461

Run #17 Filename 07DE104D5 S: 29 I: 1
Acquired: 8-DEC-10 07:26:46 Processed: 8-DEC-10 09:00:36
Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D5TO9

|                            | _                    |                  |        |      | _               |       | _        |
|----------------------------|----------------------|------------------|--------|------|-----------------|-------|----------|
| Name                       | Resp                 | RA               | RT     | RRF  | Amount          | Dev'n | Mod?     |
| 13C-1,2,3,4-TCDD           | 213215496            | 0.81 y           | 19:55  |      | 100.00          |       | n        |
| 13C-2,3,7,8-TCDF           | 287925320            | 0.81 y           | 19:19  | 1.35 | 100.00          | 9.8   | <b>.</b> |
| 2,3,7,8-TCDF               | 30076573             | 0.78 y           |        | 1.04 | 10.00           | 5.0   | n        |
| Total TCDF                 | 30671972             | 0.76 y           |        | 1.04 | 10.00           |       | n        |
| TOCAL TODA                 | 306/19/2             | U.76 y           | TO:T\  | 1.04 | 10.00           | 5.0   | n        |
| 13C-2,3,7,8-TCDD           | 208175384            | 0.81 y           | 20:07  | 0.98 | 100.00          | 7.9   | n        |
| 2,3,7,8-TCDD               | 21961753             | 0.77 y           |        | 1.05 | 10.00           | 7.3   | n        |
| Total TCDD                 | 22094651             | 0.73 y           |        | 1.05 | 10.00           | 7.3   | n        |
|                            |                      |                  |        |      |                 | , , , |          |
| 37C1-2,3,7,8-TCDD          | 27137796             | 1.00 y           | 20:09  | 1.30 | 10.00           | -1.7  | n        |
|                            |                      | -                |        |      |                 |       |          |
| 13C-1,2,3,7,8-PeCDF        | 207097944            | 1.58 y           | 25:11  | 0.97 | 100.00          | 10.9  | n        |
| 1,2,3,7,8-PeCDF            | 117000700            | 1.59 y           | 25:13  | 1.13 | 50.00           | 4.9   | n        |
| 2,3,4,7,8-PeCDF            | 108287168            | 1.57 y           | 26:46  | 1.05 | 50.00           | 0.0   | n        |
| Total F2 PeCDF             | 227153762            | 1.96 n           | 23:36  | 1.09 | 100.00          | 2.5   | n        |
| Total F1 PeCDF             | *                    | * n              | NotFnd | 1.09 | 100.00          | 2.5   | n        |
|                            |                      |                  |        |      |                 |       |          |
| 13C-1,2,3,7,8-PeCDD        | 135549800            | 1.67 y           | 27:34  | 0.64 | 100.00          | -3.8  | n        |
| 1,2,3,7,8-PeCDD            | 73941266             | 1.53 y           | 27:37  | 1.09 | 50.00           | 17.9  | n        |
| Total PeCDD                | 73941266             | 1.53 y           | 27:37  | 1.09 | 50.00           | 17.9  | n        |
|                            |                      |                  |        |      |                 |       |          |
| 13C-1,2,3,7,8,9-HxCDD      | 113121160            | 1.26 y           | 33:22  | -    | 100.00          | -     | n        |
|                            |                      |                  |        |      |                 |       |          |
| 13C-1,2,3,4,7,8-HxCDF      | 110690792            | 0.50 y           |        | 0.98 | 100.00          | -6.3  | n        |
| 1,2,3,4,7,8-HxCDF          | 71835186             | 1.21 y           |        | 1.30 | 50.00           | 6.6   | n        |
| 1,2,3,6,7,8-HxCDF          | 85814208             | 1.10 y           | 32:22  | 1.55 | 50.00           | 21.0  | n T      |
| 2,3,4,6,7,8-H <b>x</b> CDF | 76426872             | 1.14 y           | 32:55  | 1.38 | 50.00           | 12.0  | n        |
| 1,2,3,7,8,9-HxCDF          | 65754280             | 1.15 y           | 33:32  | 1.19 | 50.00           | 8.2   | n        |
| Total HxCDF                | 299974778            | 0.85 n           | 31:13  | 1.35 | 200.00          | 12.2  | n        |
| 120 1 2 2 6 7 0 11-000     | 07242148             | 1 20             | 22.06  | 0.86 | 100 00          | 2 5   | -        |
| 13C-1,2,3,6,7,8-HxCDD      | 97243148<br>47560400 | 1.28 y           |        | 0.88 | 100.00<br>50.00 | 3.5   | n        |
| 1,2,3,4,7,8-HxCDD          |                      | 1.24 y           |        | 1.26 |                 | -5.7  | Y        |
| 1,2,3,6,7,8-HxCDD          | 61071800             | 1.27 y           |        |      | 50.00           | 8.0   | У        |
| 1,2,3,7,8,9-HxCDD          | 61073100             | 1,27 y           |        | 1.26 | 50.00           | 6.3   | n        |
| Total HxCDD                | 169705300            | 1.24 Y           | 33:02  | 1.16 | 150.00          | 3.2   | У        |
| 13C-1,2,3,4,6,7,8-HpCDF    | 92573958             | 0.43 y           | 34:52  | 0.82 | 100.00          | -10.1 | n        |
| 1,2,3,4,6,7,8-HpCDF        | 69849984             | 1.07 y           |        | 1.51 | 50.00           | 12.1  | n        |
| 1,2,3,4,0,7,8-HpCDF        | 57425612             | _                | 36:01  |      | 50.00           | 13.5  | n        |
| Total HpCDF                | 127275596            | 1.00 y<br>1.07 y |        | 1.37 | 100.00          | 12.7  | n        |
| TOCAL HPCDF                | 12/2/5596            | 1.07 y           | 34:33  | 1.37 | 100.00          | 12.7  | 11       |
| 13C-1,2,3,4,6,7,8-HpCDD    | 82815052             | 1.07 y           | 35:40  | 0.73 | 100.00          | -11.4 | n        |
| 1,2,3,4,6,7,8-HpCDD        | 46457622             | 1.01 y           |        | 1.12 | 50.00           | 4.7   | n        |
| Total HpCDD                | 46717767             | 1.11 y           |        | 1.12 | 50.00           | 4.7   | n        |
| rocar inpobb               | 20,2,,0,             | ~ · ~ * y        | JJ.00  | 2    | 50.00           | ± • · | ••       |
| 13C-OCDD                   | 120042476            | 0.91 y           | 38:14  | 0.53 | 200.00          | -14.4 | n        |
| OCDF                       | 90032364             | 0.92 y           |        | 1.50 | 100.00          | 9.5   | n        |
| OCDD                       | 73397864             | 0.90 y           |        | 1.22 | 100.00          | 2.0   | n        |
|                            | · -                  | - 4              |        |      |                 |       |          |

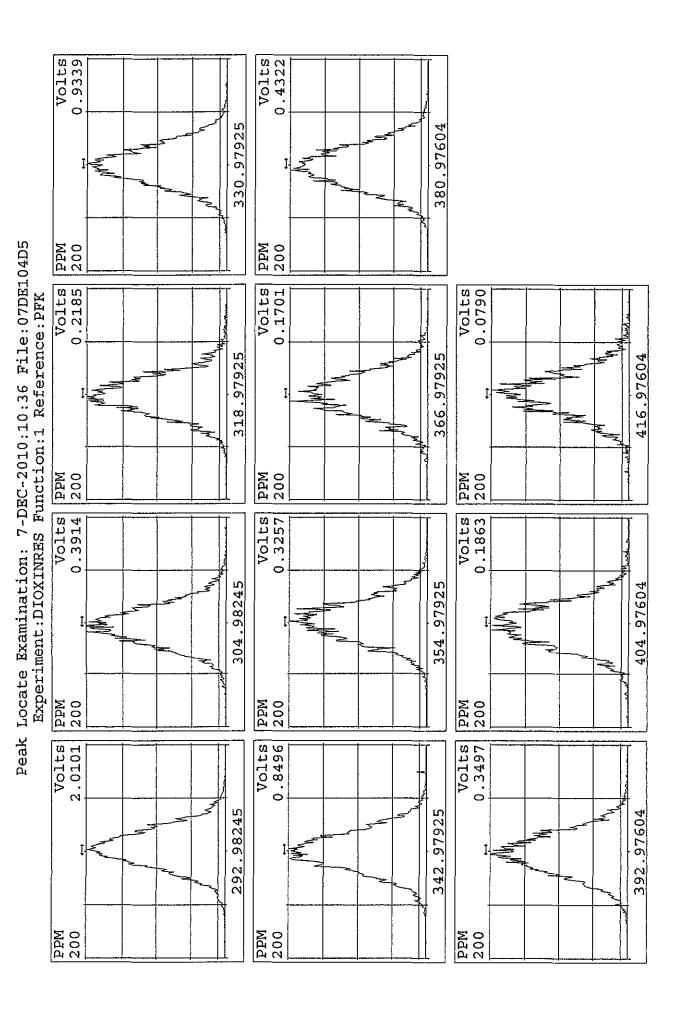
Kun text: ST1207C File text: ST1207C :CS3 10DXN461
Run #17 Filename 07DE104D5 S: 29 I: 1

Acquired: 8-DEC-10 07:26:46 Processed: 8-DEC-10 09:00:36 Run: 07DE104D5 Analyte: TO9 Cal: TO90721104D5 Results: 07DE104D5TO9

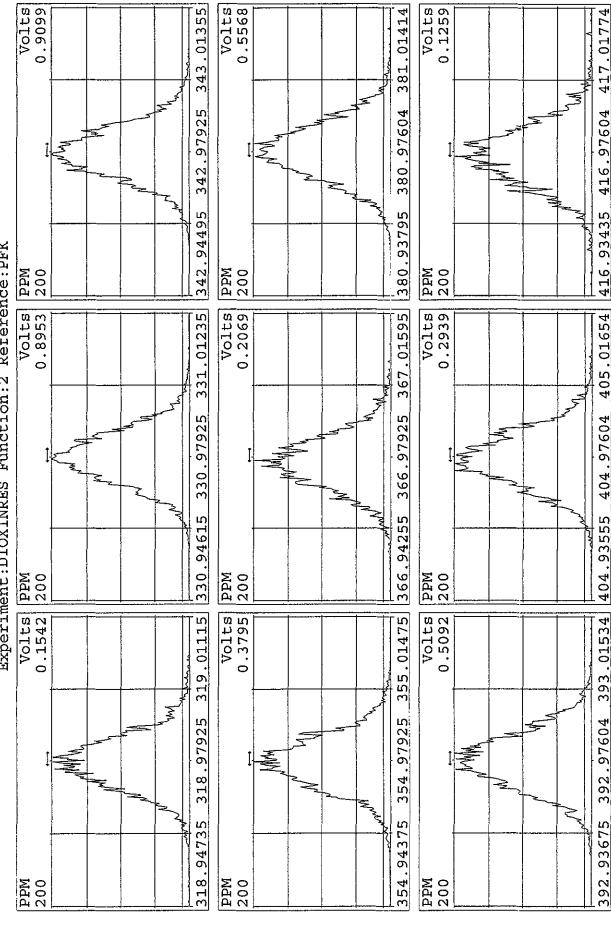
| Name                                    | Resp      | RA                | RT      | RRF     | Amount | Dev'n        | Mod?     |
|---|-----------|-------------------|---------|---------|--------|--------------|----------|
| 13C-1,2,3,4-TCDD                        | 213215496 | 0.81 y            | 19:55   | -       | 100.00 | _            | n        |
|   |           |                   |         |         |        |              |          |
| 13C-2,3,7,8-TCDF                        | 287925320 | _                 | 19:19   |         | 100.00 | 9.8          | n        |
| 2,3,7,8-TCDF                            | 30076573  | 0.78 y            |         | 1.04    | 10.00  | 5.0          | n        |
| Total TCDF                              | 30671972  | 0.76 y            | 18:17   | 1.04    | 10.00  | 5.0          | n        |
|   |           |                   |         |         |        |              |          |
| 13C-2,3,7,8-TCDD                        | 208175384 | 0.81 y            |         |         | 100.00 | 7.9          | n        |
| 2,3,7,8-TCDD                            | 21961753  | 0.77 y            |         | 1.05    | 10.00  | 7.3          | n        |
| Total TCDD                              | 22094651  | 0.73 y            | 18:51   | 1.05    | 10.00  | 7.3          | n        |
| 2701-2 2 7 0 mann                       | 27127706  | 1 00 **           | 20.00   | 1 20    | 10.00  | 1 17         |          |
| 37C1-2,3,7,8-TCDD                       | 27137796  | 1.00 y            | 20:09   | 1.30    | 10.00  | -1.7         | n        |
| 13C-1,2,3,7,8-PeCDF                     | 207097944 | 1.58 y            | 25 - 11 | 0.97    | 100.00 | 10.9         | n        |
| 1,2,3,7,8-PeCDF                         | 117000700 | 1.59 y            |         | 1.13    | 50.00  | 4.9          | n        |
| 2,3,4,7,8-PeCDF                         | 108287168 | 1.57 y            |         | 1.05    | 50.00  | 0.0          | n        |
| Total F2 PeCDF                          | 227153762 | 1.96 n            |         | 1.09    | 100.00 | 2.5          | n        |
| Total F1 PeCDF                          | *         |                   | NotFnd  | 1.09    | 100.00 | 2.5          | n        |
| # - P - P - P - P - P - P - P - P - P - |           | •                 |         |         |        | 5            | ••       |
| 13C-1,2,3,7,8-PeCDD                     | 135549800 | 1.67 y            | 27:34   | 0.64    | 100.00 | -3.8         | n        |
| 1,2,3,7,8-PeCDD                         | 73941266  | 1.53 y            |         |         | 50.00  | 17.9         | n        |
| Total PeCDD                             | 73941266  | 1.53 y            | 27:37   | 1.09    | 50.00  | 17.9         | n        |
|   |           | -                 |         |         |        |              |          |
| 13C-1,2,3,7,8,9-HxCDD                   | 113121160 | 1.26 y            | 33:22   | -       | 100.00 | ~            | n        |
|   |           |                   |         |         |        |              |          |
| 13C-1,2,3,4,7,8-HxCDF                   | 110690792 | _                 | 32:16   |         | 100.00 | -6.3         | n        |
| 1,2,3,4,7,8-HxCDF                       | 71835186  | 1.21 y            | 32:17   | 1.30    | 50.00  | 6.6          | n        |
| 1,2,3,6,7,8-HxCDF                       | 85814208  | -                 | 32:22   | 1.55    | 50.00  | 21.0         | n        |
|   | 76426872  | -                 | 32:55   | 1.38    | 50.00  | 12.0         | n        |
| 1,2,3,7,8,9-HxCDF                       | 65754280  | -                 | 33:32   | 1.19    | 50.00  | 8.2          | n        |
| Total HxCDF                             | 299974778 | 0.85 n            | 31:13   | 1.35    | 200.00 | 12.2         | n        |
| 13C-1,2,3,6,7,8-HxCDD                   | 97243148  | 1.28 y            | 22.06   | 0.86    | 100.00 | 2 5          | <b>~</b> |
| 1,2,3,4,7,8-HxCDD                       | 44285208  | $1.44(\tilde{n})$ |         | 0.86    | 50.00  | 3.5<br>-12.2 | n<br>n   |
| 1,2,3,4,7,8-HxCDD                       | 60389242  | 1.13 y            | 33:07   | 1.24    | 50.00  | 6.8          | n        |
| 1,2,3,6,7,8-HXCDD                       | 61073050  | 1.13 y<br>1.27 y  | 33:07   | 1.24    | 50.00  | 6.3          | n        |
| Total HxCDD                             | 165747500 | 1.27 y<br>1.44 n  | 33:22   | 1.14    | 150.00 | 0.8          | n        |
| Total Incoo                             | 103/4/500 | T.11              | 55.02   | T • T # | 150.00 | 0.0          | 11       |
| 13C-1,2,3,4,6,7,8-HpCDF                 | 92573958  | 0.43 y            | 34:52   | 0.82    | 100.00 | -10.1        | n        |
| 1,2,3,4,6,7,8-HpCDF                     | 69849984  | _                 | 34:53   | 1.51    | 50.00  | 12.1         | n        |
| 1,2,3,4,7,8,9-HpCDF                     | 57425612  | _                 | 36:01   | 1.24    | 50.00  | 13.5         | n        |
| Total HpCDF                             | 127275596 | _                 | 34:53   | 1.37    | 100.00 | 12.7         | n        |
|   |           |                   |         |         |        |              |          |
| 13C-1,2,3,4,6,7,8-HpCDD                 | 82815052  | 1.07 y            | 35:40   | 0.73    | 100.00 | -11.4        | n        |
| 1,2,3,4,6,7,8-HpCDD                     | 46457622  | 1.01 y            | 35:41   | 1.12    | 50.00  | 4.7          | n        |
| Total HpCDD                             | 46717767  |                   | 35:08   | 1.12    | 50.00  | 4.7          | n        |
| -                                       |           | *                 |         |         |        |              |          |
| 13C-OCDD                                | 120042476 | 0.91 y            | 38:14   | 0.53    | 200.00 | -14.4        | n        |
| OCDF                                    | 90032364  |                   | 38:21   | 1.50    | 100.00 | 9.5          | n        |
| OCDD                                    | 73397864  | 0.90 y            | 38:14   | 1.22    | 100.00 | 2.0          | n        |
|   |           |                   |         |         |        |              |          |

| Data file | Smp | Work Order | Sample ID           | FV-uL | Method/Matrix | Box | Size     | Ü        |
|-----------|-----|------------|---------------------|-------|---------------|-----|----------|----------|
| 07DE104D5 | 1   | CP1207     | DB-5 CPSM 10LRES076 |       |               |     | 1.00000  |          |
| 07DE104D5 | 2   | ST1207     | CS3 10DXN461        |       |               |     | 1.00000  |          |
| 07DE104D5 | 3   | MAVWM-1-AA | G0L020446-1MB       | 20    | TO9/AIR       | 30  | 0.50000  | SAM      |
| 07DE104D5 | 4   | MAV34-1-AA | G0L040422-2         | 20    | 8290/SOLID    |     | 15.04000 | ā.       |
| 07DE104D5 | 5   | MAV35-1-AA | G0L040422-3         | 20    | 8290/SOLID    |     | 15.06000 | Ġ.       |
| 07DE104D5 | 6   | MAV36-1-AA | G0L040422-4         | 20    | 8290/SOLID    |     | 15.05000 | g        |
| 07DE104D5 | 7   | MAV37-1-AA | G0L040422-5         | 20    | 8290/SOLID    |     | 15.03000 | Ċ.       |
| 07DE104D5 | 8   | MATLN-1-AA | G0L030456-1         | 20    | 8290/SOLID    |     | 15.08000 | <u>ā</u> |
| 07DE104D5 | 9   | MATLN-1-AD | G0L030456-1MS       | 20    | 8290/SOLID    |     | 15.01000 | Ĝ        |
| 07DE104D5 | 10  | MATLN-1-AE | G0L030456-1MSD      | 20    | 8290/SOLID    |     | 15.04000 | Çi       |
| 07DE104D5 | 11  | MAVWM-1-AC | G0L020446-1LCS      | 20    | TO9/AIR       | 30  | 0.50000  | SAM      |
| 07DE104D5 | 12  | MAVWM-1-AD | G0L020446-1DCS      | 20    | TO9/AIR       |     | 0.50000  | SAM      |
| 07DE104D5 | 13  | ST1207A    | CS3 10DXN461        |       |               |     | 1.00000  |          |
| 07DE104D5 | 14  | CP1207A    | DB-5 CPSM 10LRES076 |       |               |     | 1.00000  |          |
| 07DE104D5 | 15  | ST1207B    | CS3 10DXN461        |       |               |     | 1.00000  |          |
| 07DE104D5 | 16  | MAXGD-1-AA | G0L030524-1MB       | 20    | 8290/SOLID    | 31  | 10.00000 | Ĝ        |
| 07DE104D5 | 17  | MAQQV-1-AA | G0L020446-1         | 20    | TO9/AIR       | 30  | 0.50000  | SAM      |
| 07DE104D5 | 18  | MAQQ6-1-AA | G0L020446-5         | 20    | TO9/AIR       |     | 0.50000  | SAM      |
| 07DE104D5 | 19  | MAQRD-1-AA | G0L020446-8         | 20    | TO9/AIR       |     | 0.50000  | SAM      |
| 07DE104D5 | 20  | MAT63-1-AD | G0L030524-1         | 20    | 8290/SOLID    | 31  | 10.98000 | Ġ.       |
| 07DE104D5 | 21  | MAFFX-1-AA | G0K220529-10 (25X)  | 20    | 8290/WASTE    | 25  | 0.10000  | Ĝ        |
| 07DE104D5 | 22  | MAT9E-1-AF | F0L030530-1         | 20    | 8290/SOLID    | 31  | 10.03500 | _        |
| 'DE104D5  | 23  | MAT9K-1-AM | F0L030530-2         | 20    | 8290/SOLID    |     | 10.48500 | g        |
| _/DE104D5 | 24  | MAT9K-1-AN | F0L030530-2MS       | 20    | 8290/SOLID    |     | 10.21500 | ~        |
| 07DE104D5 | 25  | MAT9K-1-AP | F0L030530-2MSD      | 20    | 8290/SOLID    |     | 10.00500 | -        |
| 07DE104D5 | 26  | MAT9M-1-AF | F0L030530-3         | 20    | 8290/SOLID    |     | 10.49500 | ~        |
| 07DE104D5 | 27  | MAT9Q-1-AF | F0L030530-4         | 20    | 8290/SOLID    |     | 10.37500 | _        |
| 07DE104D5 | 28  | MAXGD-1-AC | G0L030524-1LCS      | 20    | 8290/SOLID    | 31  | 10.00000 | Ĝ.       |
| 07DE104D5 | 29  | ST1207C    | CS3 10DXN461        |       |               |     | 1.00000  |          |
| 07DE104D5 | 30  |            |                     |       |               |     | 1.00000  |          |
| 07DE104D5 | 31  |            |                     |       |               |     | 1.00000  |          |
| 07DE104D5 | 32  |            |                     |       |               |     | 1.00000  |          |
| 07DE104D5 | 33  |            | AS 12-07-10         |       |               |     | 1.00000  |          |

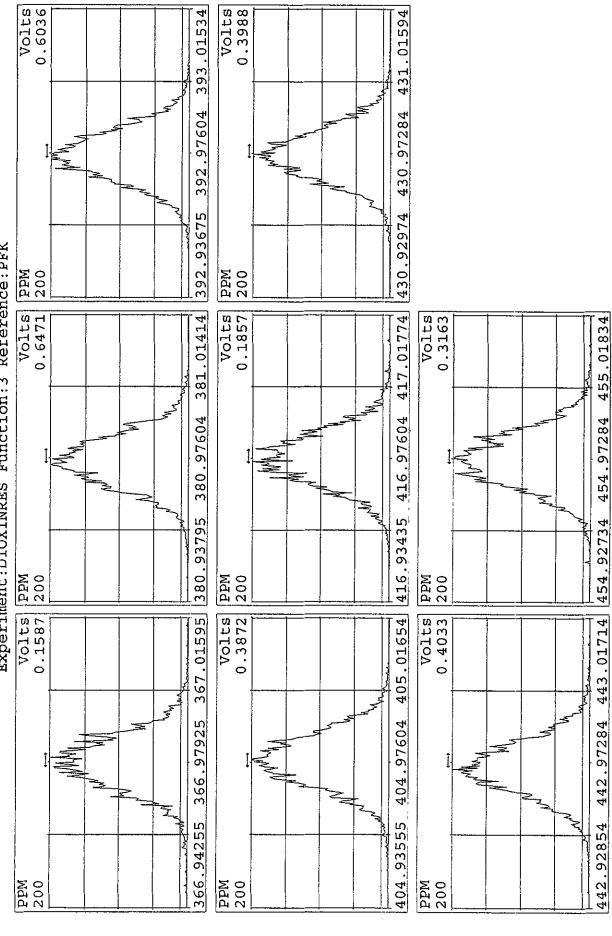
Logfile 116



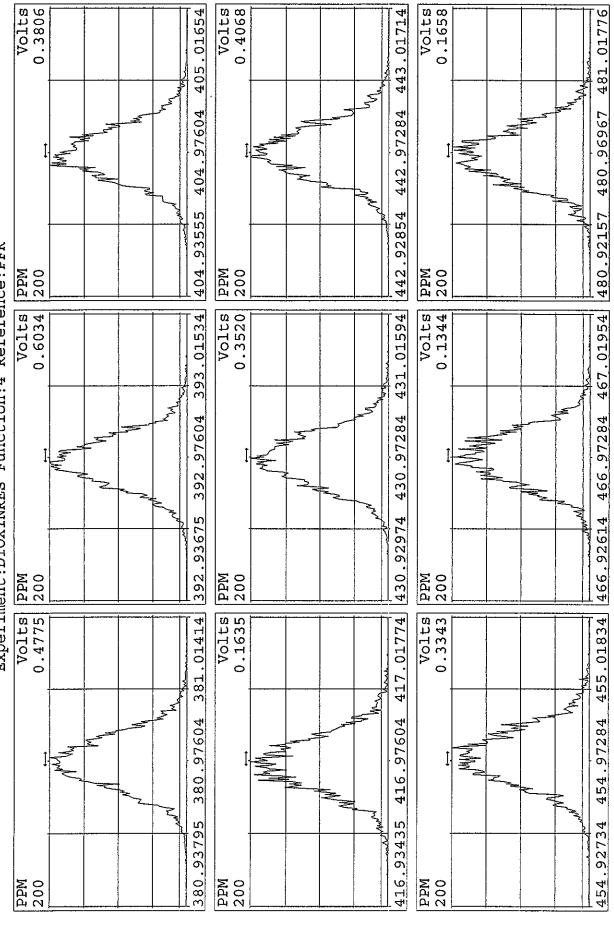
Peak Locate Examination: 7-DEC-2010:10:37 File:07DE104D5 Experiment:DIOXINRES Function: 2 Reference:PFK



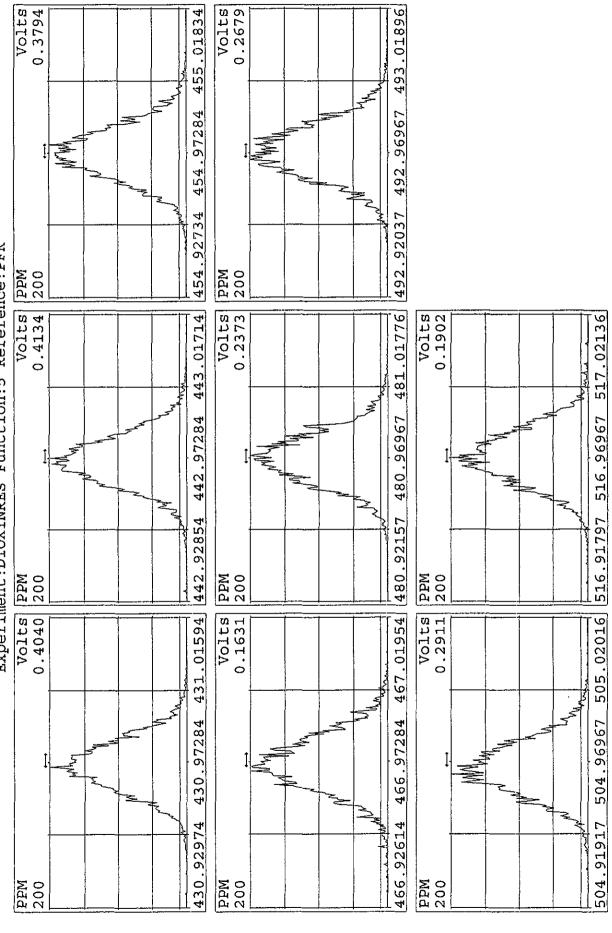
Peak Locate Examination: 7-DEC-2010:10:37 File:07DE104D5 Experiment:DIOXINRES Function: 3 Reference:PFK



Peak Locate Examination: 7-DEC-2010:10:37 File:07DE104D5 Experiment:DIOXINRES Function:4 Reference:PFK



Peak Locate Examination: 7-DEC-2010:10:37 File:07DE104D5 Experiment:DIOXINRES Function:5 Reference:PFK



Volts 1.0323 380.97604 380.97604 380.97604 PPM 200

SIRLM Examination: 7-DEC-2010:19:30 File:07DE104D5 Experiment:DIOXINRES Function:6

Volts 0.6282 304.98251 304.98251 304.98251 PPM 200

SIRLM Examination: 7-DEC-2010:19:31 File:07DE104D5 Experiment:DIOXINRES Function:7

Volts 0.9015 380.97604 380.97604 380.97604 PPM 200

SIRLM Examination: 7-DEC-2010:20:14 File:07DE104D5 Experiment:DIOXINRES Function:6

Volts 0.5777 380.97604 SIRLM Examination: 7-DEC-2010:20:16 File:07DE104D5 Experiment:DIOXINRES Function:7 304.98251 380.97604 PPM 200

Volts 0.9074 380.97604 380.97604 380.97604 PPM 200

SIRLM Examination: 7-DEC-2010:20:59 File:07DE104D5 Experiment:DIOXINRES Function:6

Volts 0.6793 380.97604 304.98251 380.97604 PPM 200

SIRLM Examination: 7-DEC-2010:21:00 File:07DE104D5 Experiment:DIOXINRES Function:7

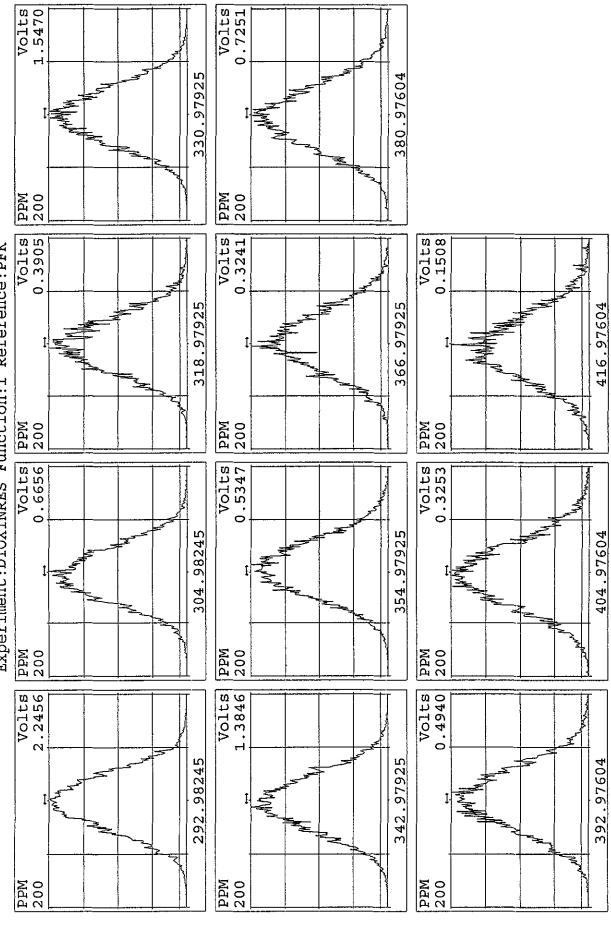
Volts 0.8942 380.97604 380.97604 380.97604 PPM 200

SIRLM Examination: 7-DEC-2010:21:43 File:07DE104D5 Experiment:DIOXINRES Function:6

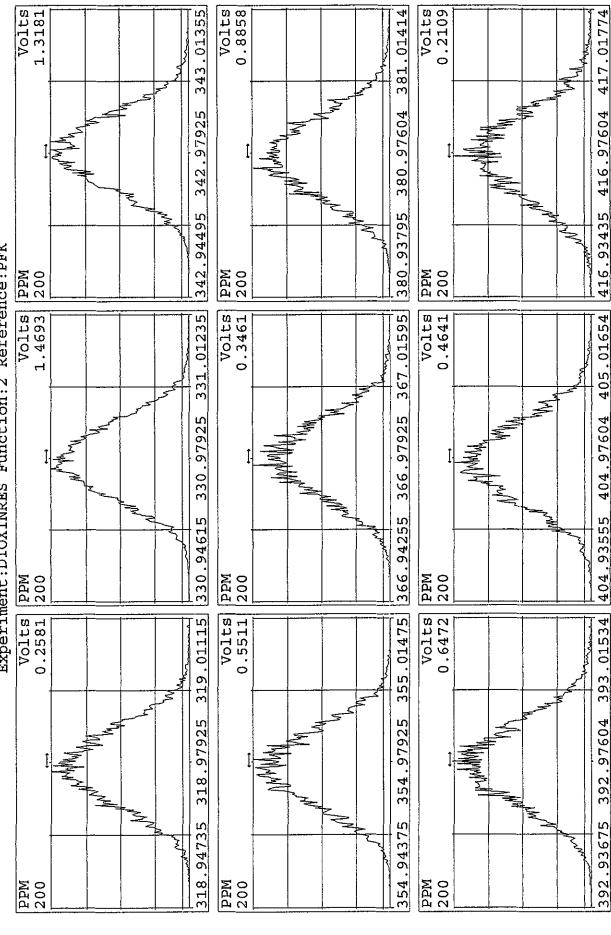
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SIRLM Examination: 7-DEC-2010:21:45 File:07DE104D5 Experiment:DIOXINRES Function:7

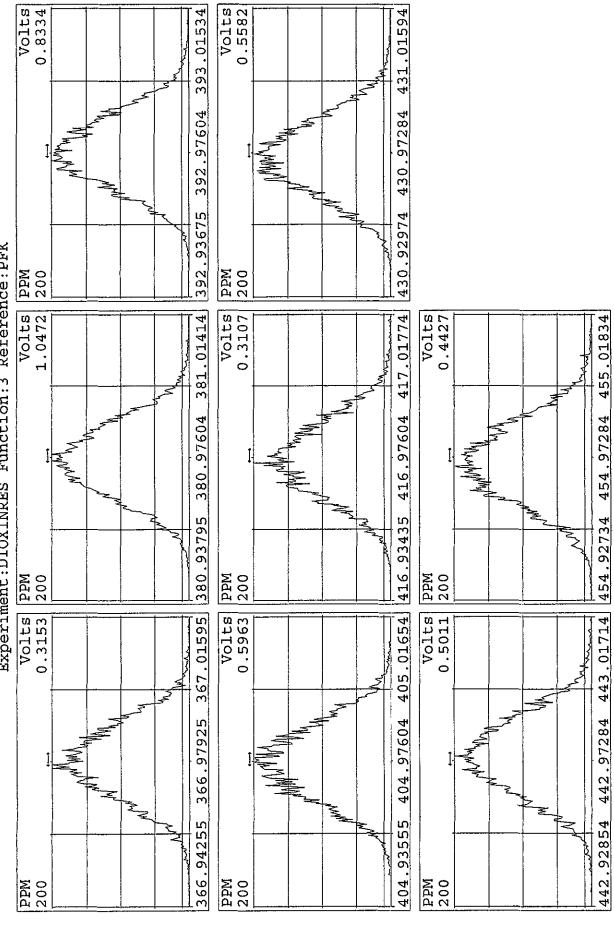
Peak Locate Examination: 8-DEC-2010:08:16 File:07DE104D5ENDRES Experiment:DIOXINRES Function:1 Reference:PFK



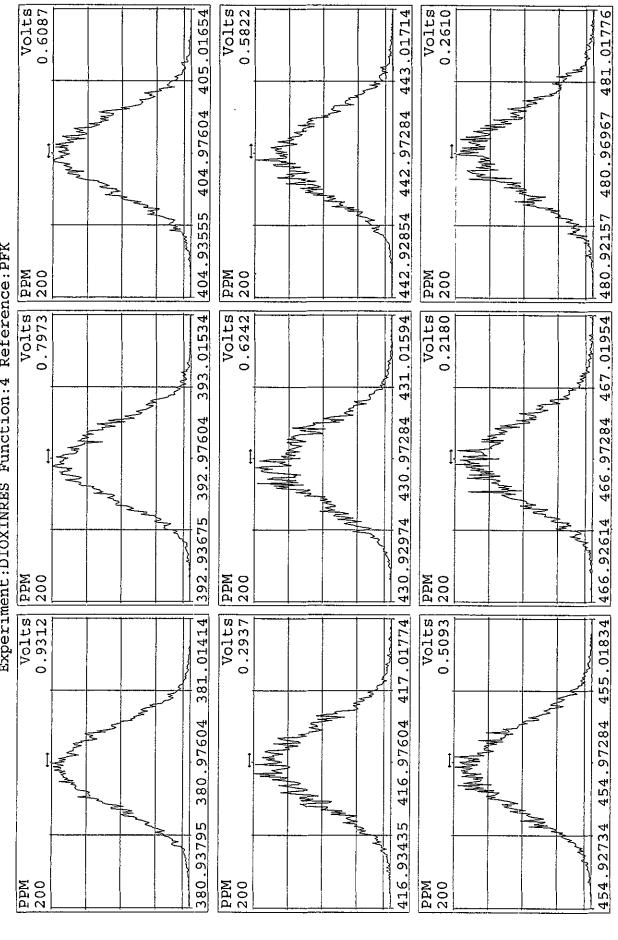
Peak Locate Examination: 8-DEC-2010:08:16 File:07DE104D5ENDRES Experiment:DIOXINRES Function:2 Reference:PFK



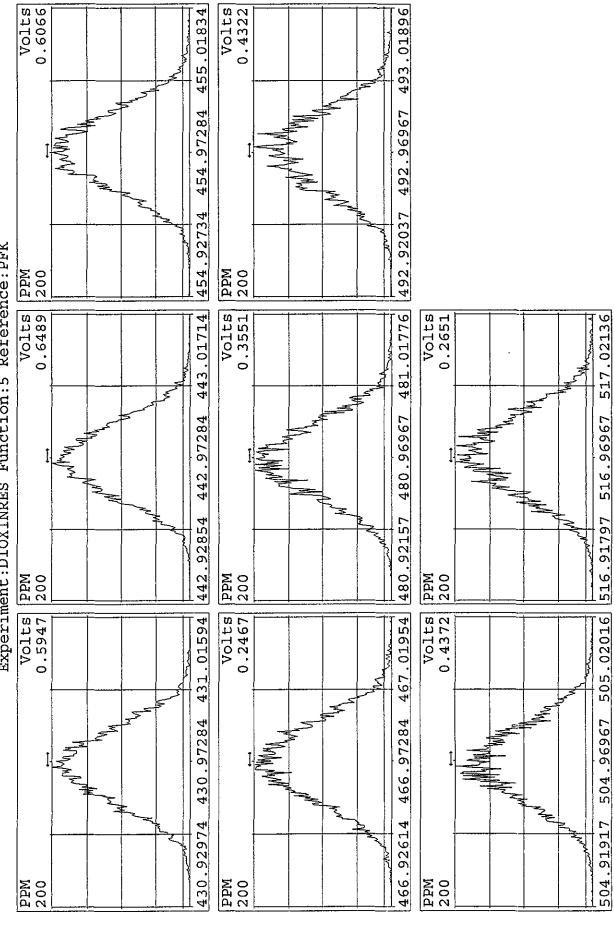
Peak Locate Examination: 8-DEC-2010:08:16 File:07DE104D5ENDRES Experiment:DIOXINRES Function:3 Reference:PFK

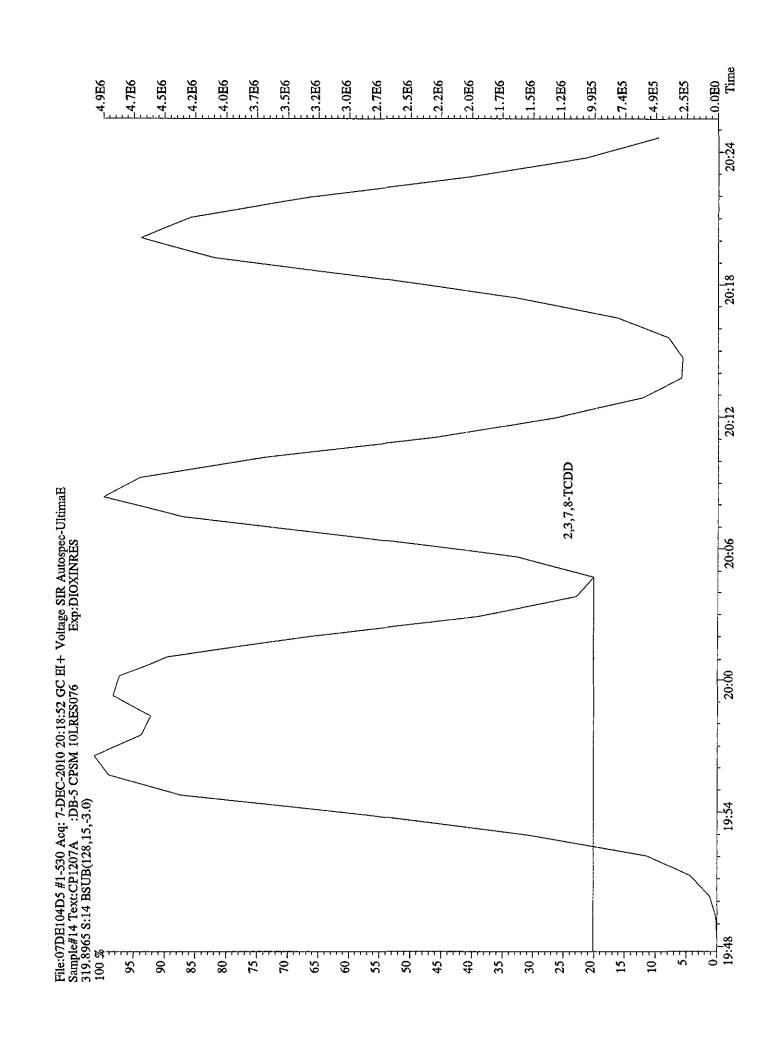


Peak Locate Examination: 8-DEC-2010:08:17 File:07DE104D5ENDRES Experiment:DIOXINRES Function:4 Reference:PFK



Peak Locate Examination: 8-DEC-2010:08:17 File:07DE104D5ENDRES Experiment:DIOXINRES Function:5 Reference:PFK

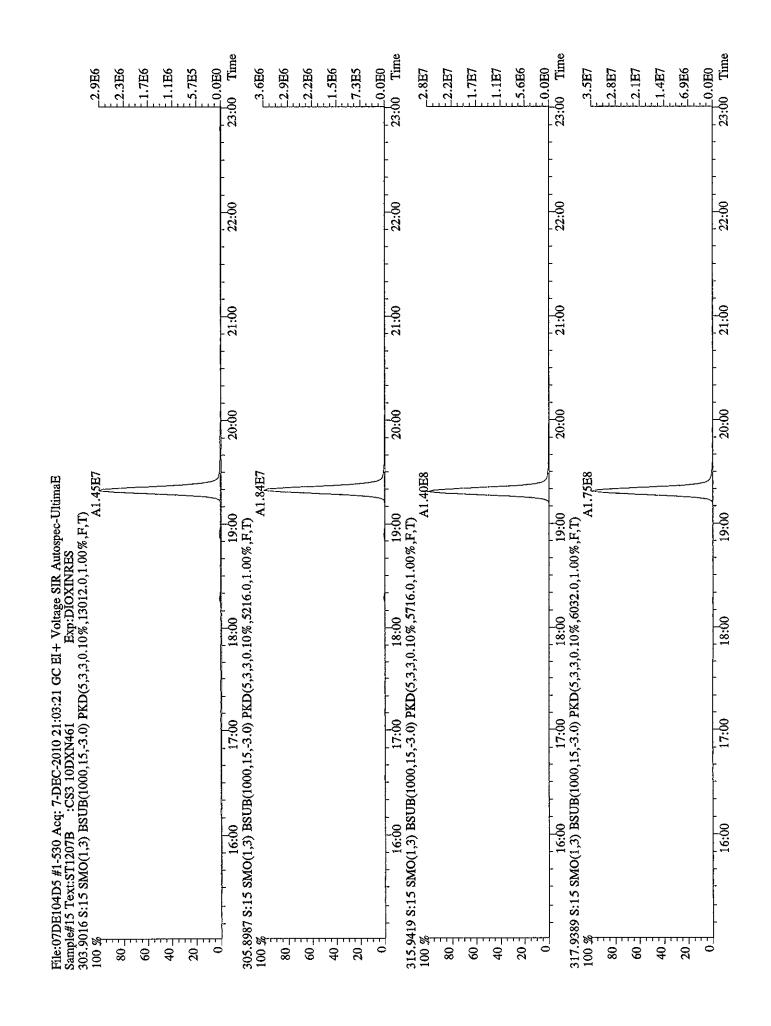


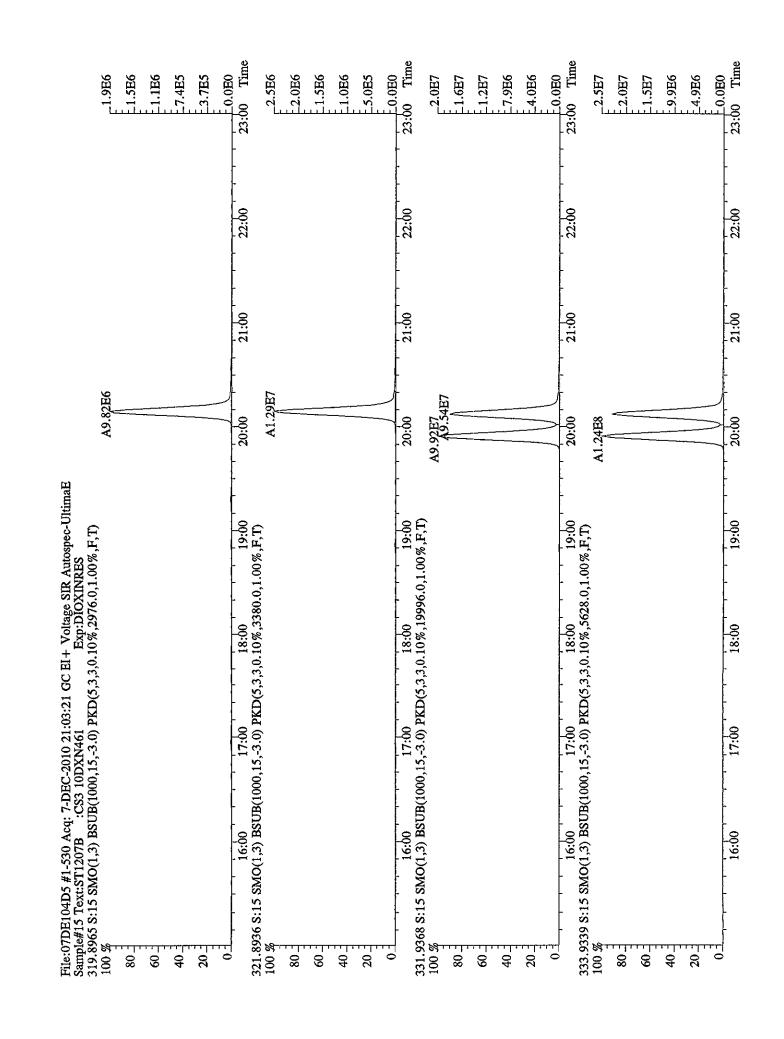


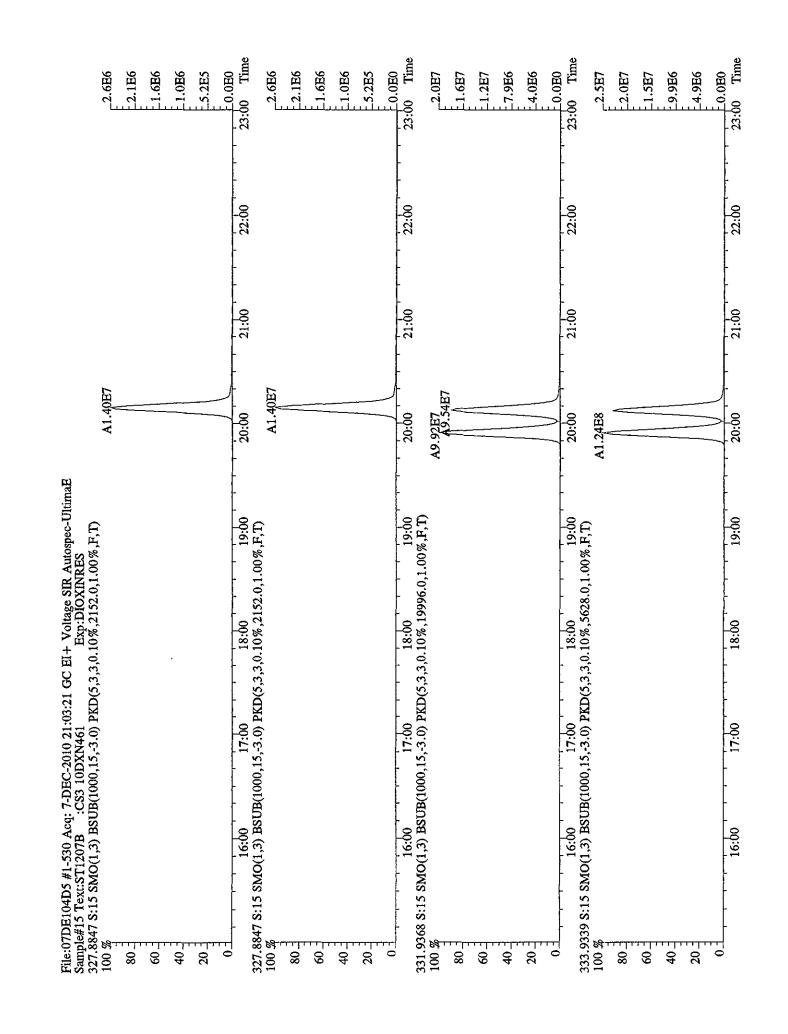
Cal: T090721104D5 Run: 07DE104D5 Analyte: TO9

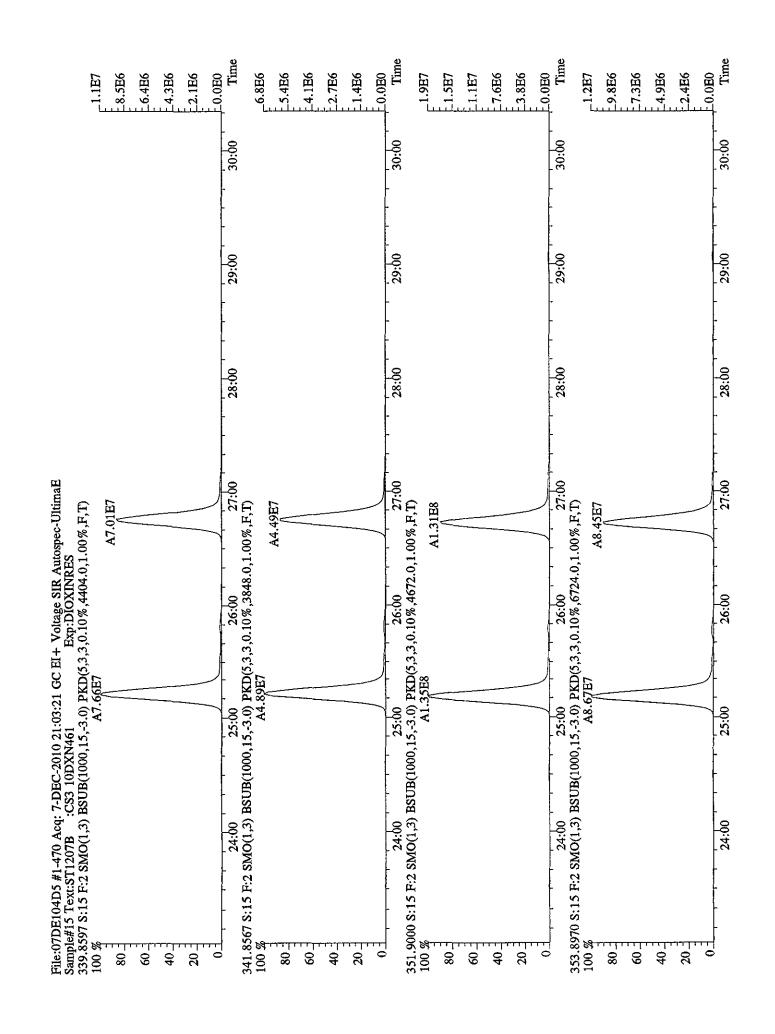
ST0721C : CS-3 10DXN336 ST0721B :CS-2 10DXN334 ST0721A :CS-1 10DXN342

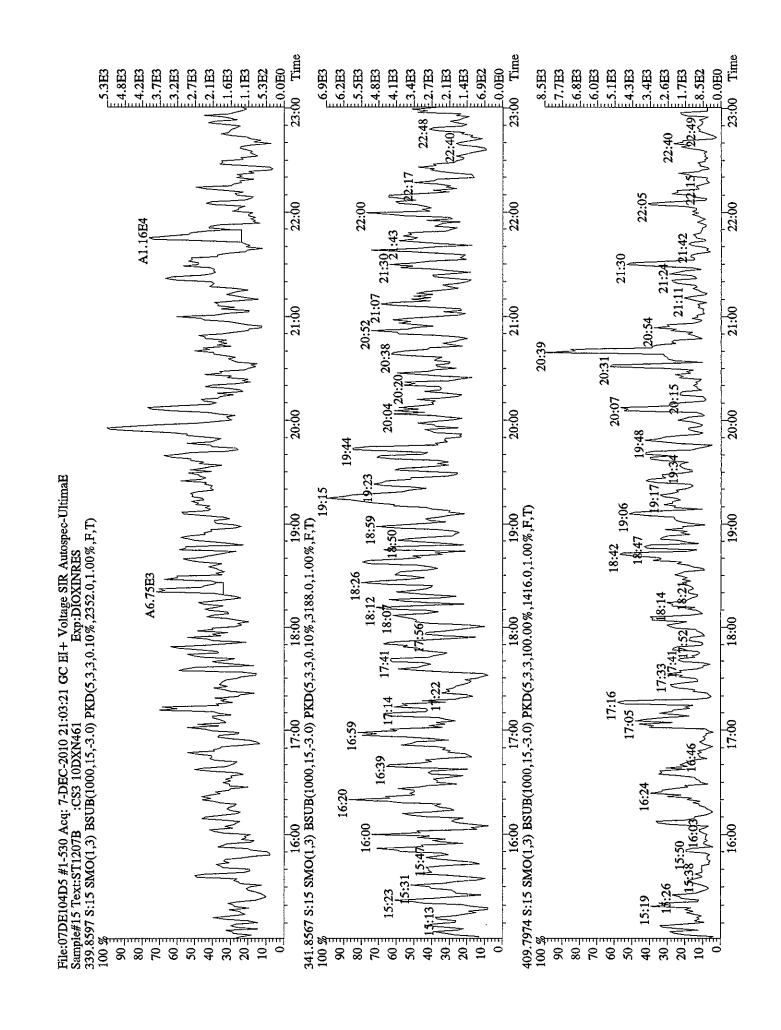
| 1.23              | 1.24              | 1.21        | 0.86                    | 1.38                | 1.13                | 1.26        | 0.79                    | 1.10                | 1.10        | 0.59     | 1.41   | 1.19  |
|-------------------|-------------------|-------------|-------------------------|---------------------|---------------------|-------------|-------------------------|---------------------|-------------|----------|--------|-------|
| 1.12              | 1.25              | 1.18        | 0.87                    | 1.35                | 1.13                | 1.24        | 0.76                    | 1.09                | 1.09        | 09.0     | 1.39   | 1.17  |
| 1.10              | 1.12              | 1.06        | 0.92                    | 1.35                | 1.11                | 1.23        | 0.83                    | 1.07                | 1.07        | 0.63     | 1.35   | 1.16  |
| 1.23              | 1.16              | 1.12        | 0.91                    | 1.34                | 1.09                | 1.21        | 0.85                    | 1.03                | 1.03        | 0.63     | 1.35   | 1.17  |
| 1.14              | 1.15              | 1.06        | 66.0                    | 1.31                | 1.01                | 1.16        | 0.89                    | 1.07                | 1.07        | 99.0     | 1.36   | 1.31  |
| 5.18 %            | 4.86 %            | 5.93<br>%   |                         | 1.99 %              |                     | 3.05 %      |                         | 2.61 %              | 2.61 %      |          | 1.98 % |       |
| 0.060             | 0.057             | 0.067       | 0.051                   | 0.027               | 0.049               | 0.037       | 0.049                   | 0.028               | 0.028       | 0.029    | 0.027  | 0.066 |
| 1.163             | 1.182             | 1.127       | 0.910                   | 1.346               | 1.093               | 1.220       | 0.827                   | 1.072               | 1.072       | 0.620    | 1.370  | 1.199 |
| 1,2,3,6,7,8-HxCDD | 1,2,3,7,8,9-HxCDD | Total HxCDD | 13C-1,2,3,4,6,7,8-HpCDF | 1,2,3,4,6,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF | Total HpCDF | 13C-1,2,3,4,6,7,8-HpCDD | 1,2,3,4,6,7,8-HpCDD | Total HpCDD | 13C-OCDD | OCDF   | OCDD  |

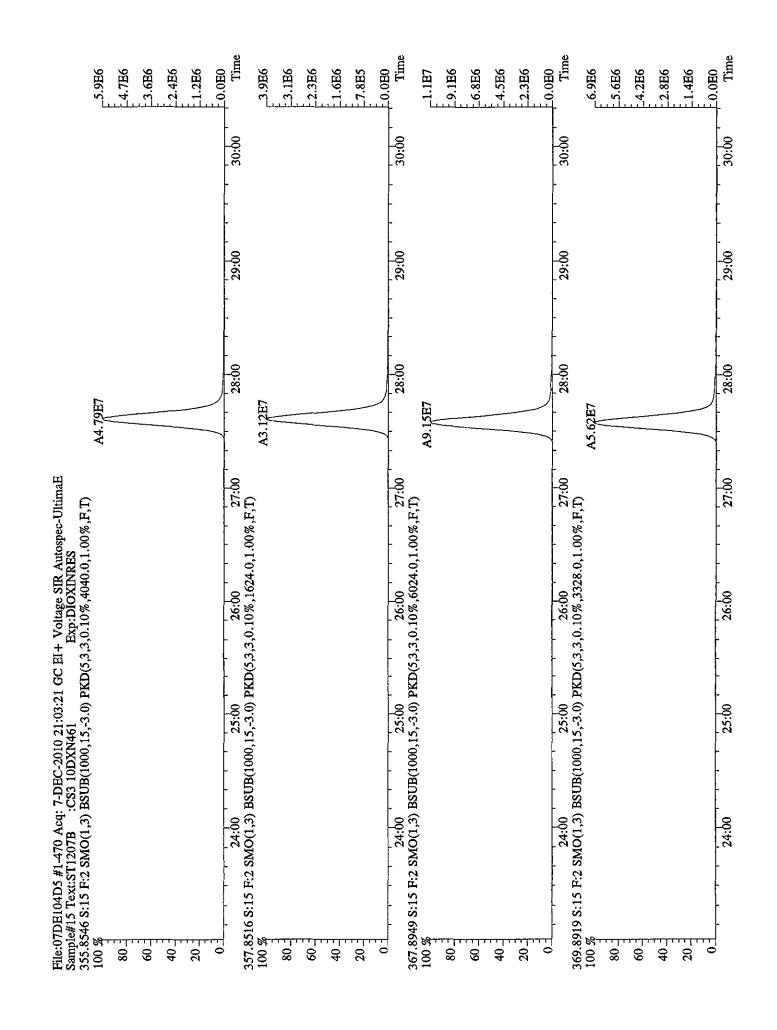


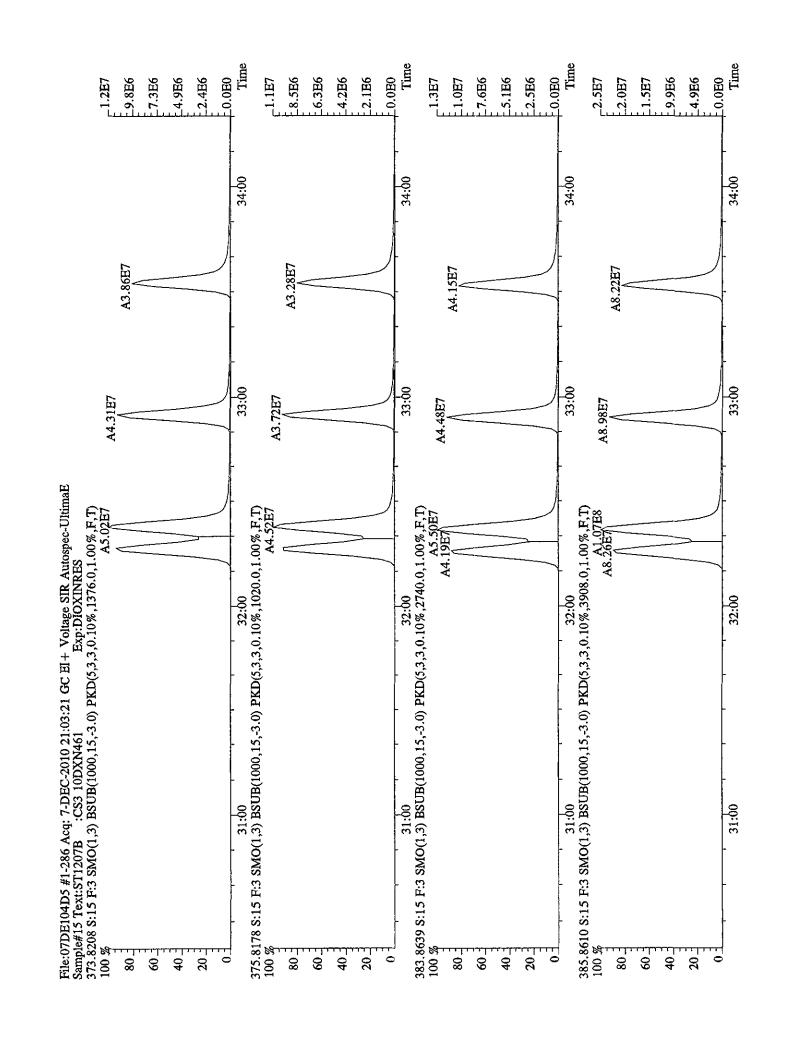


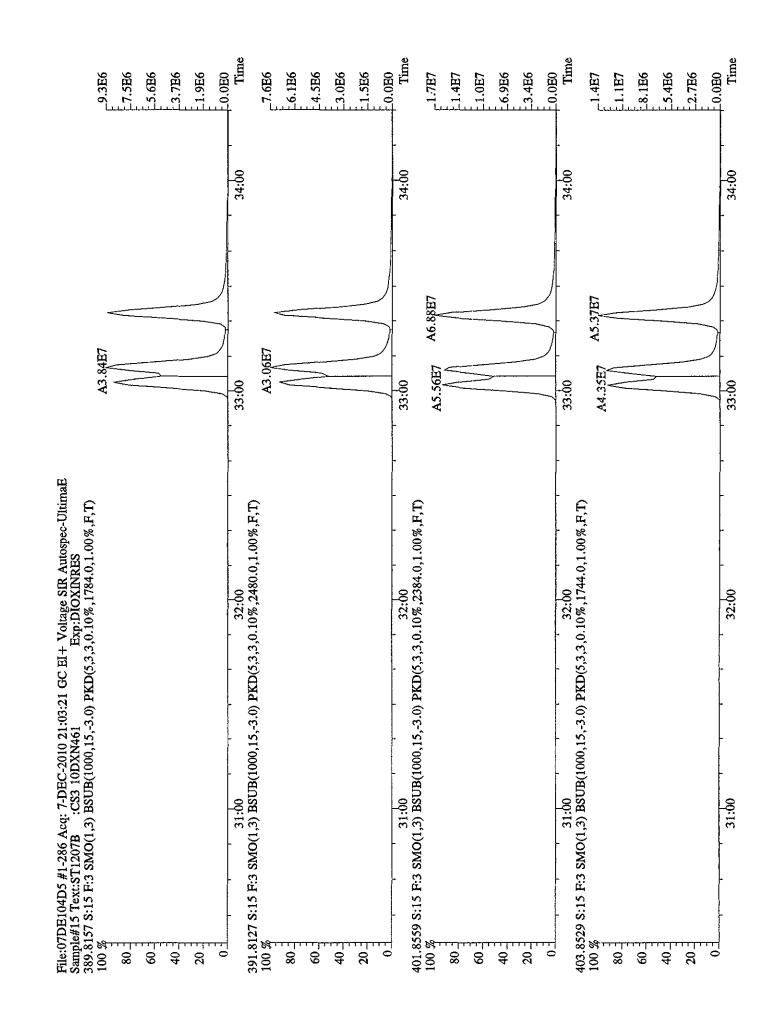


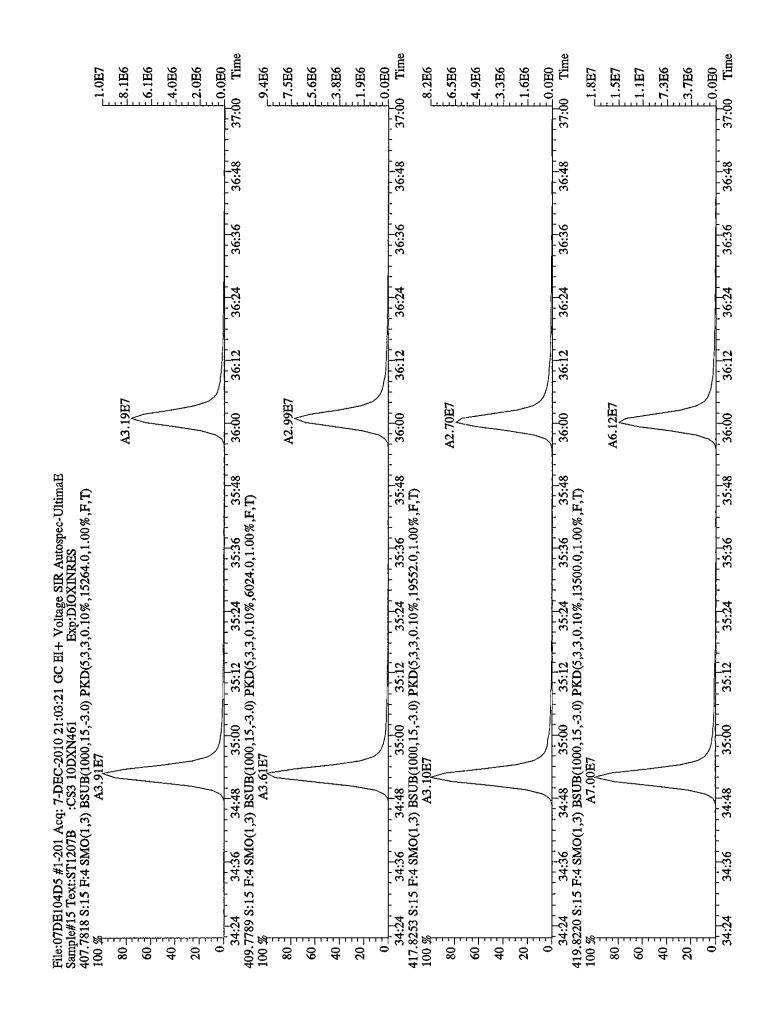


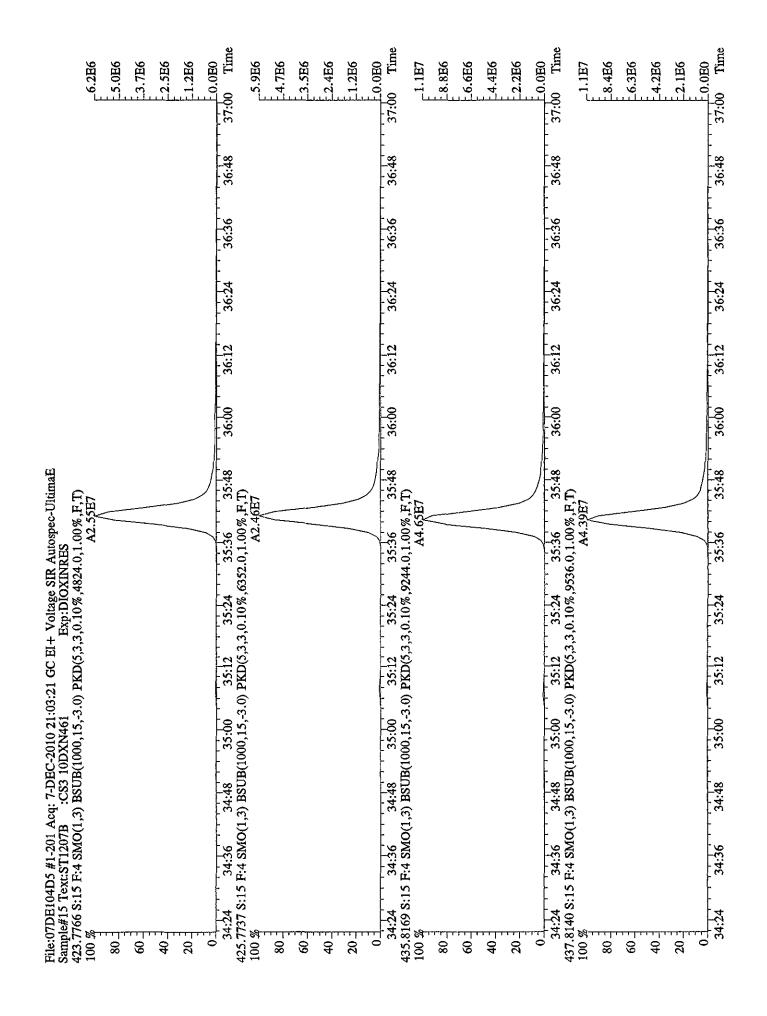


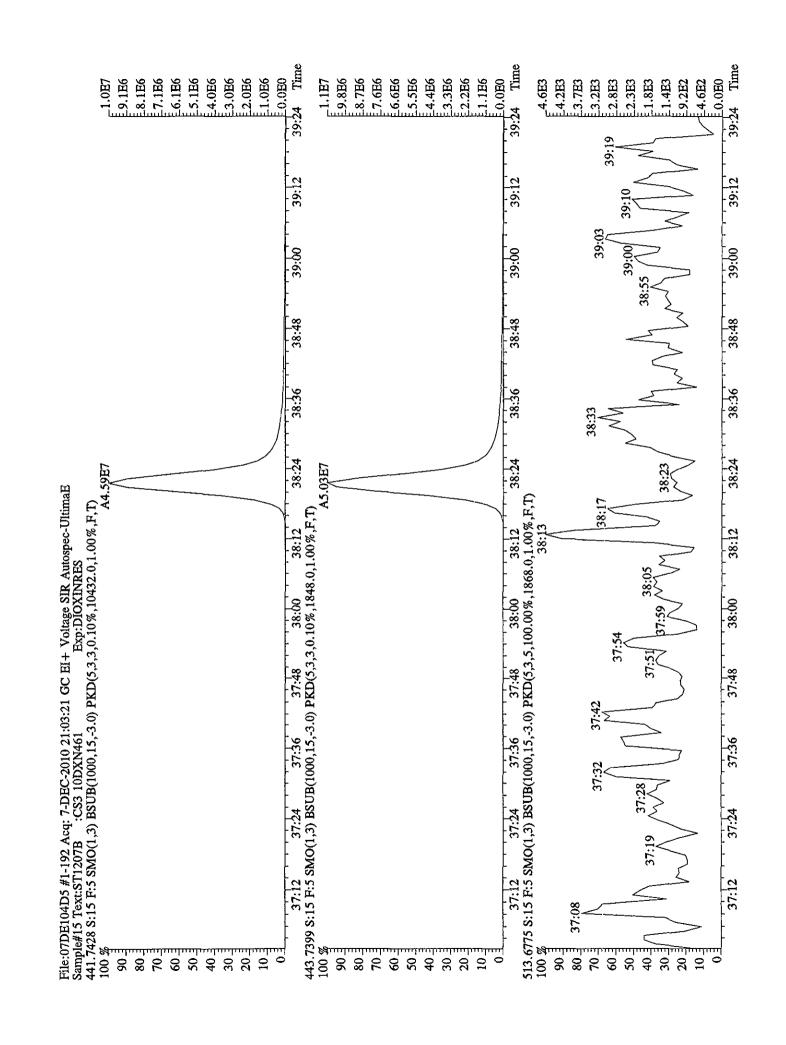


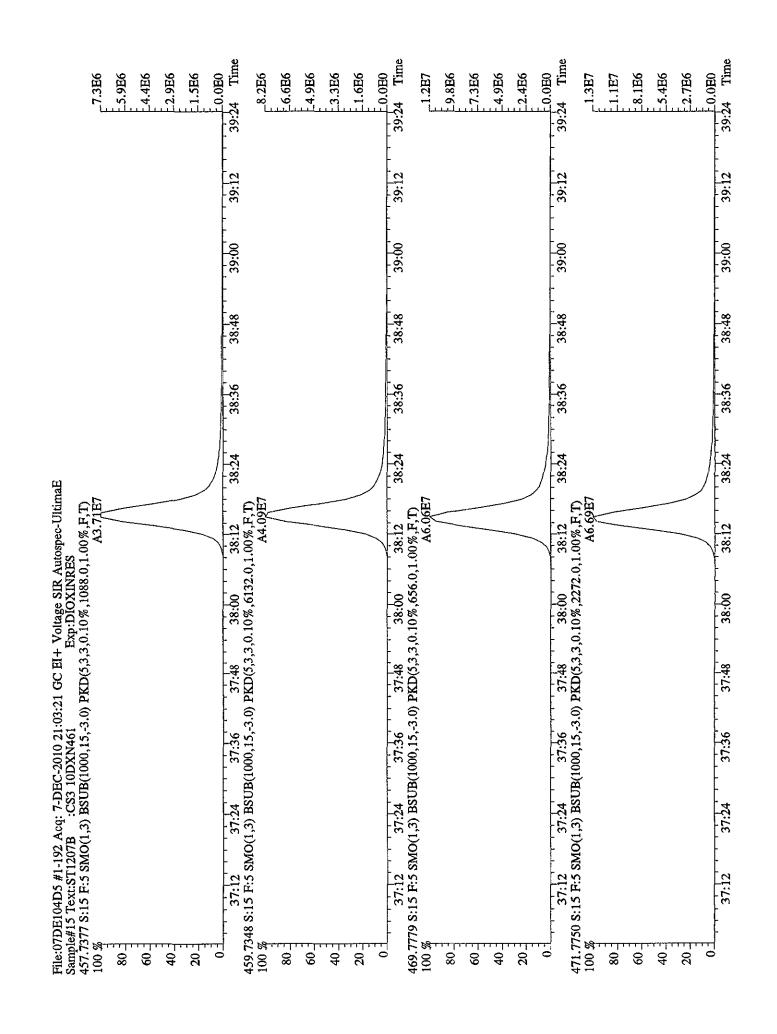


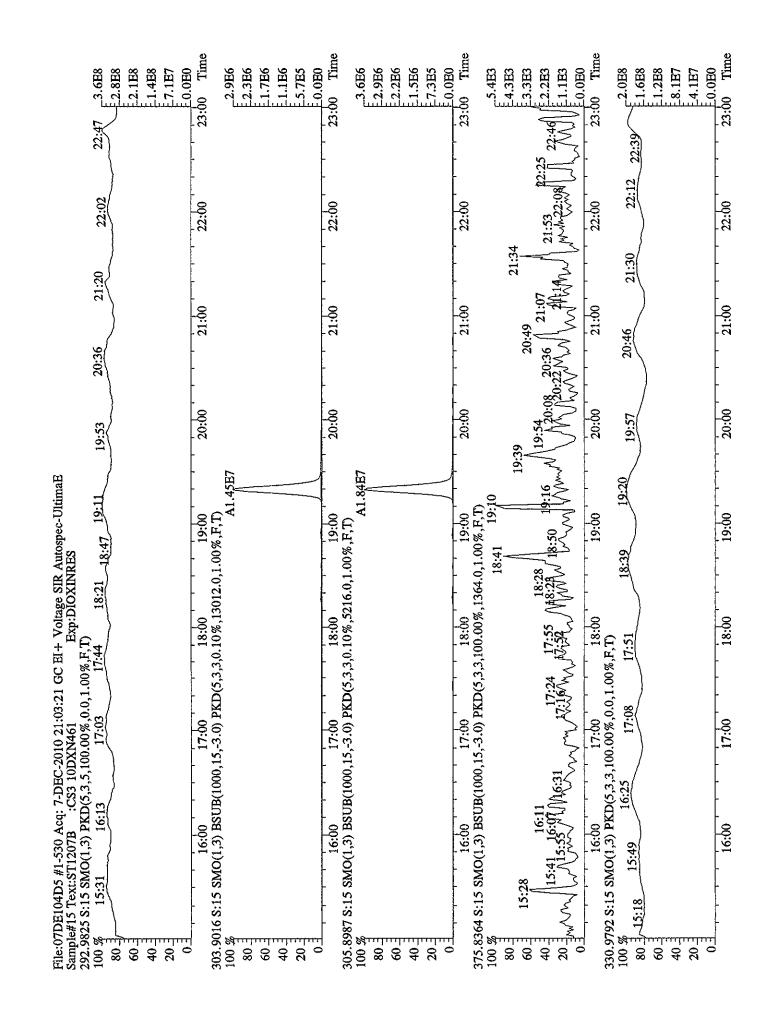


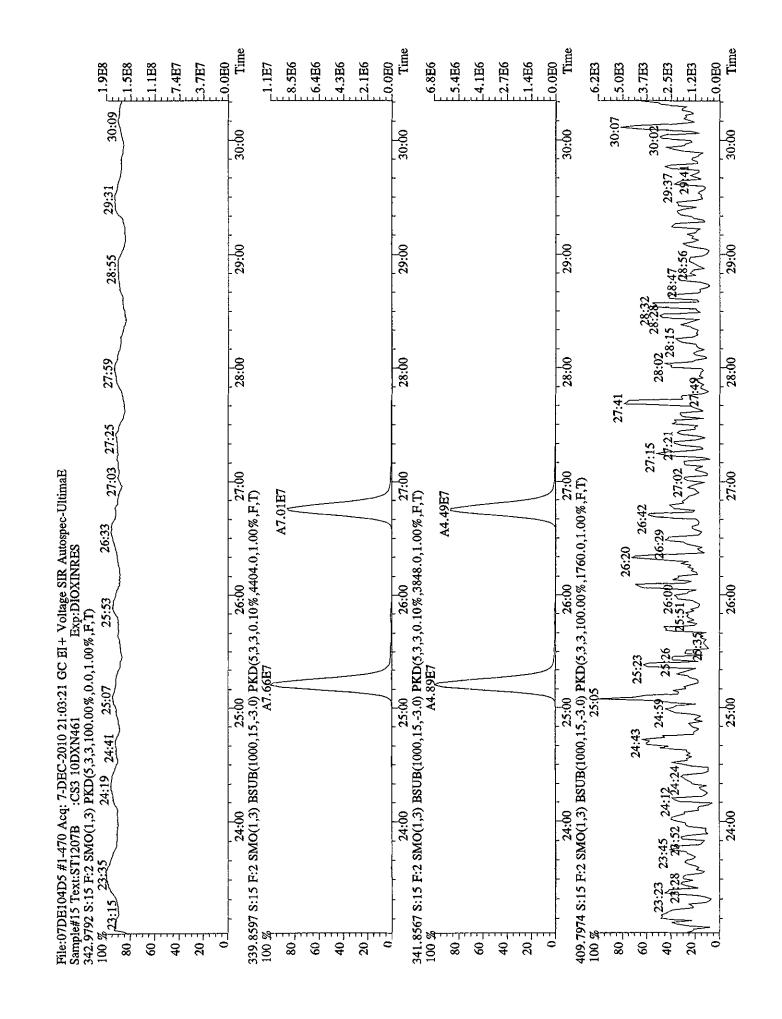


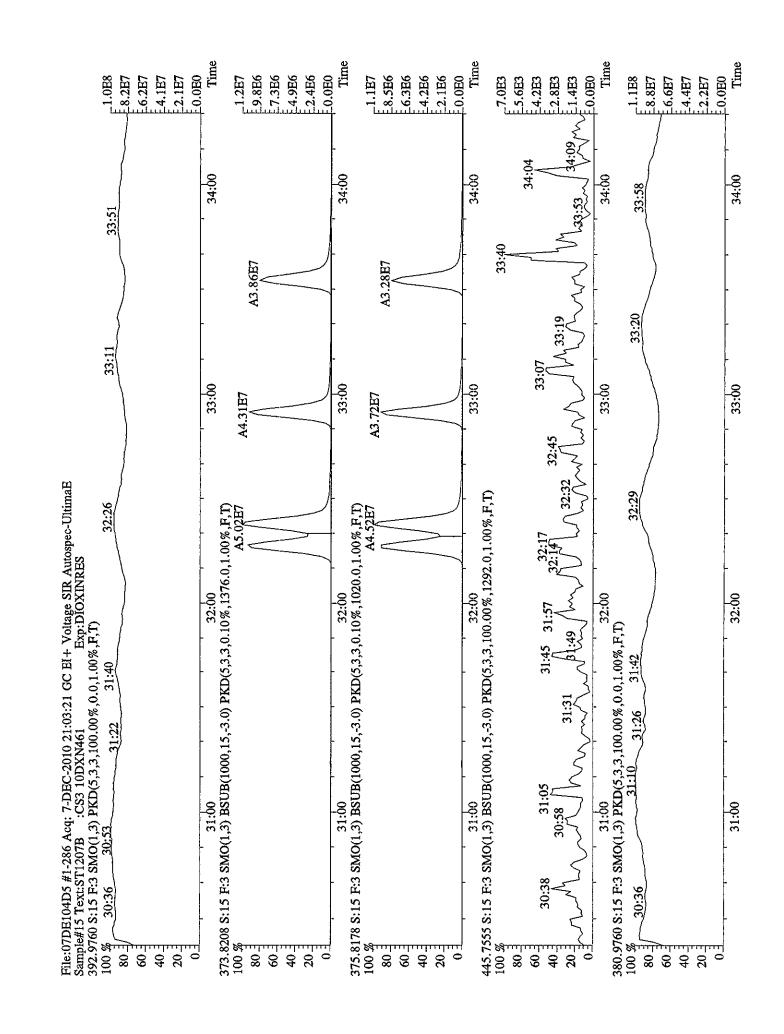


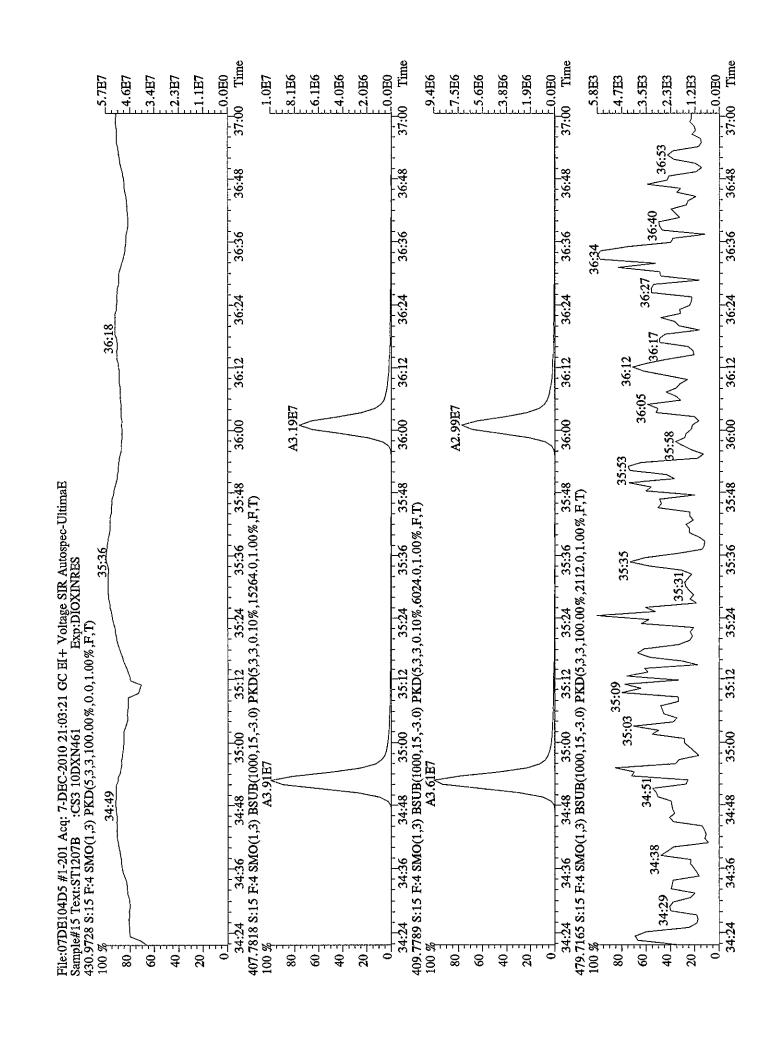


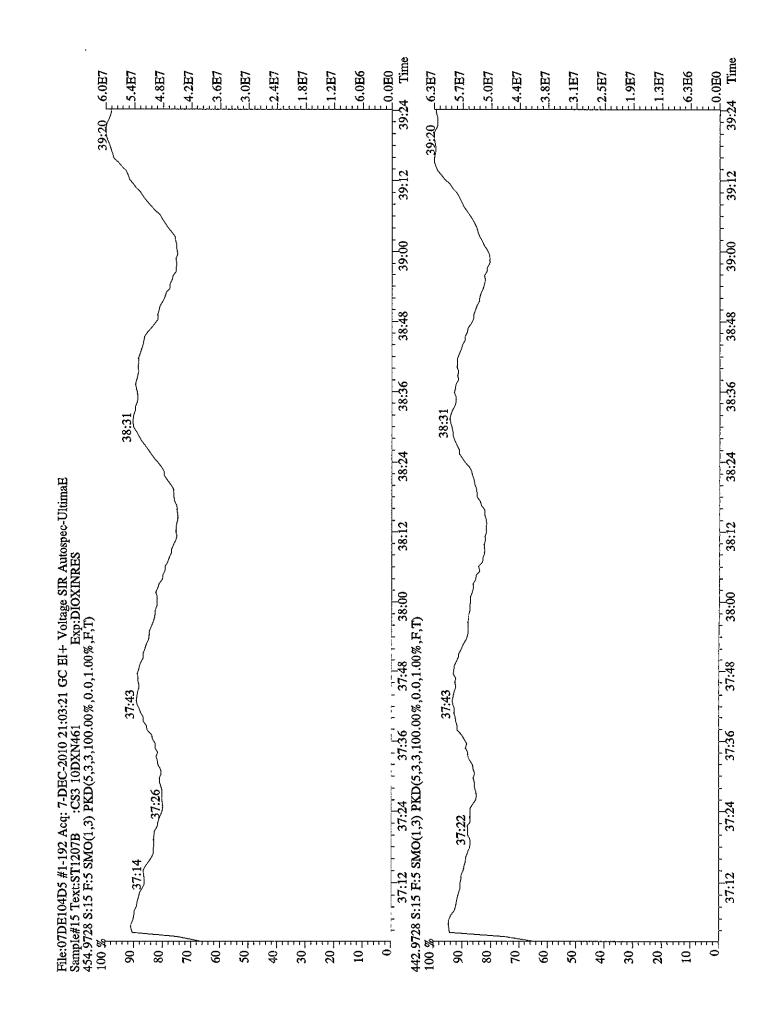


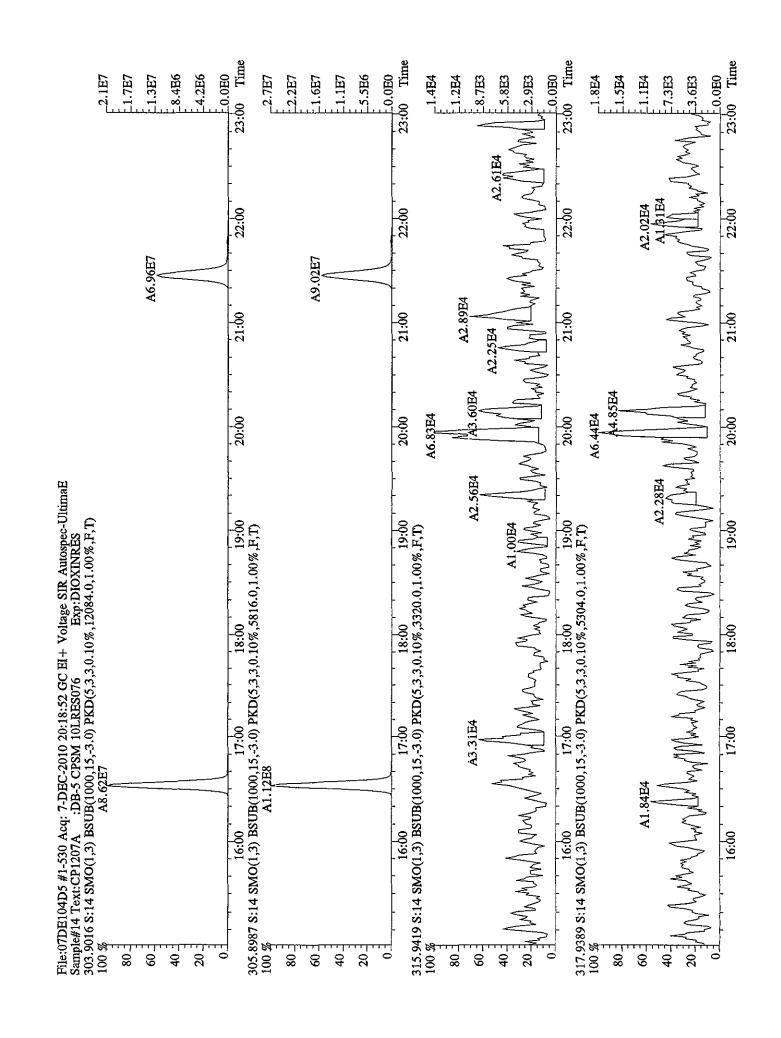


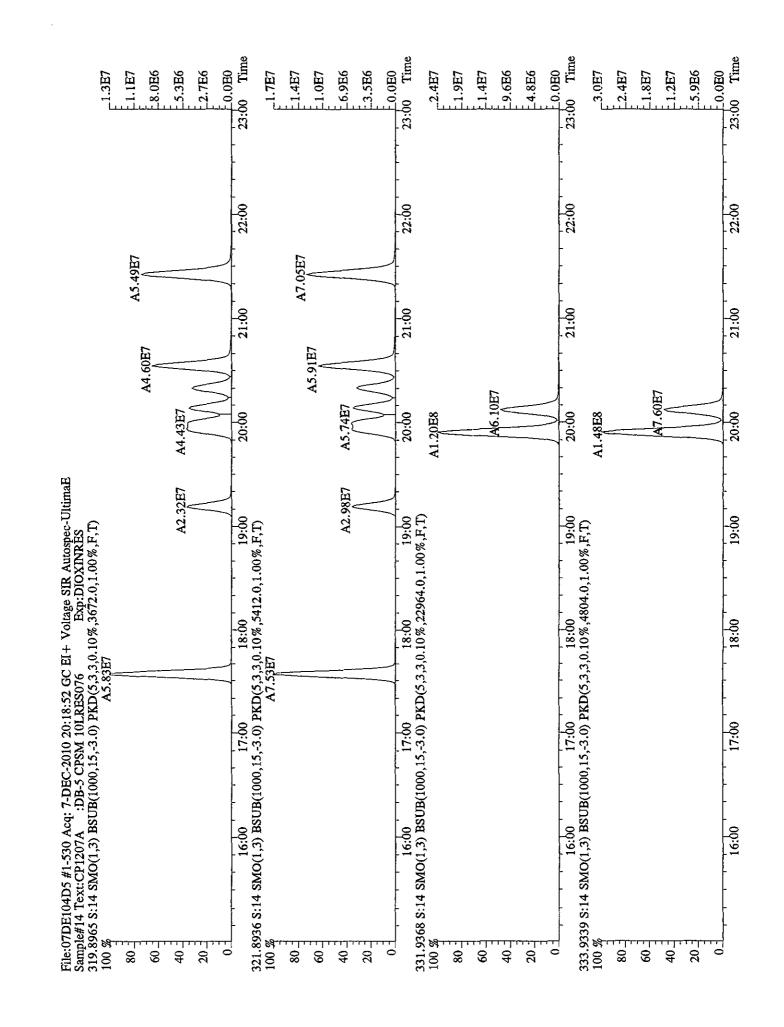


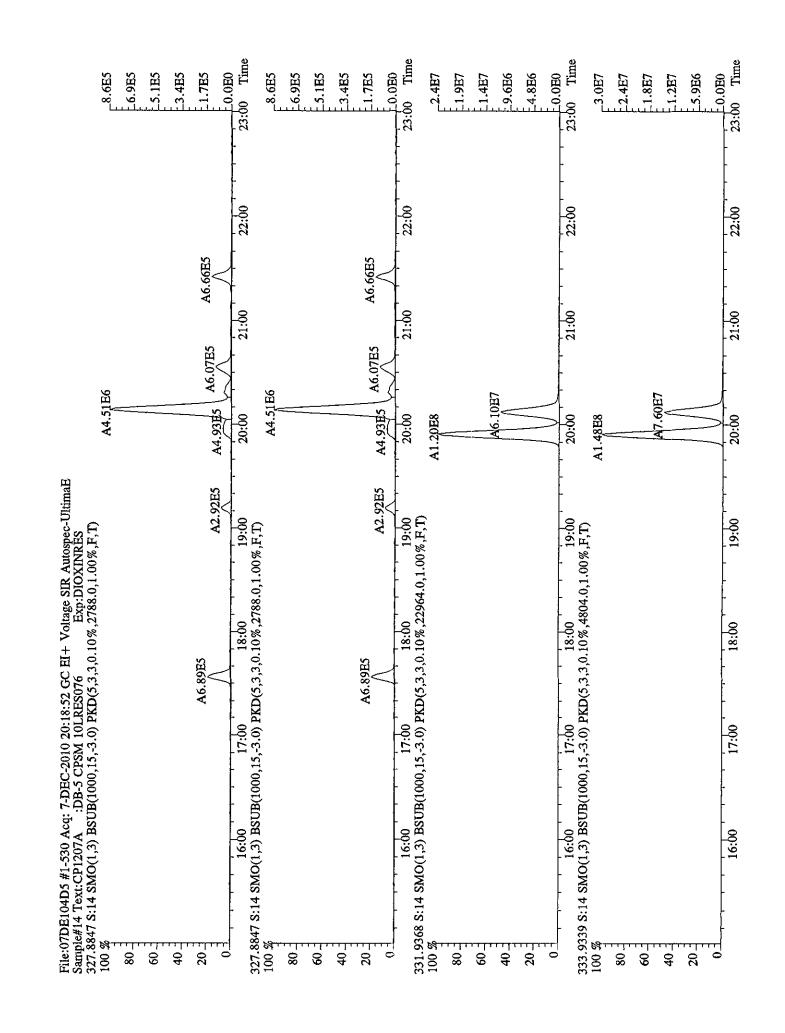


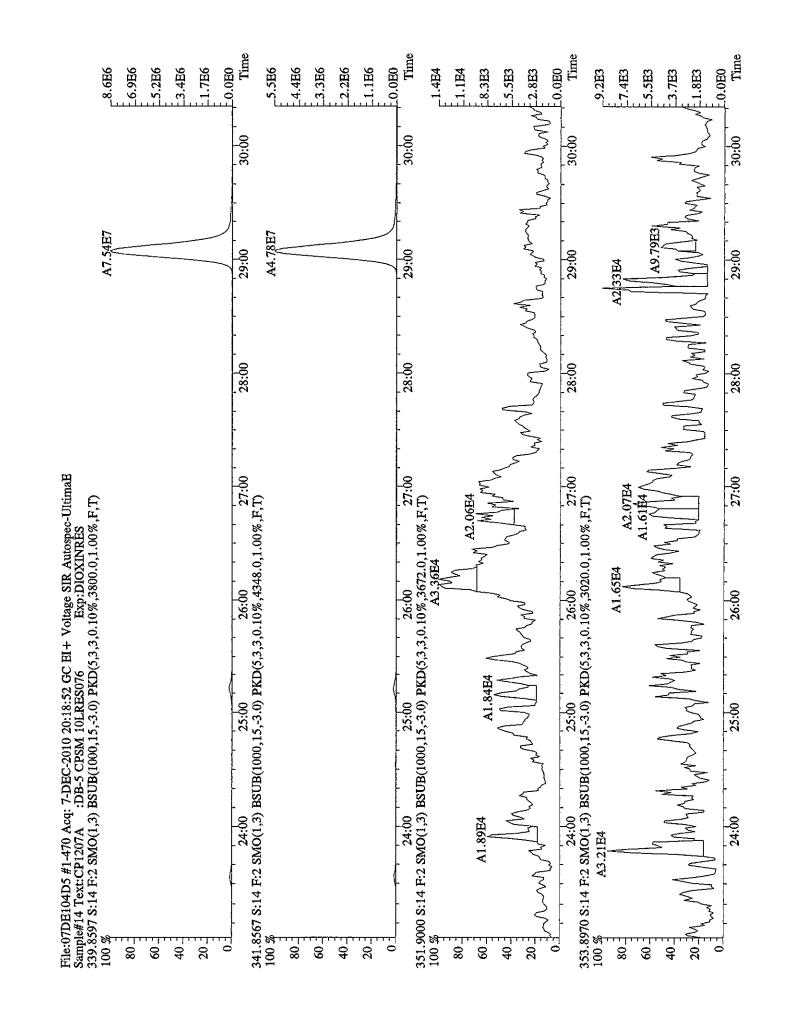


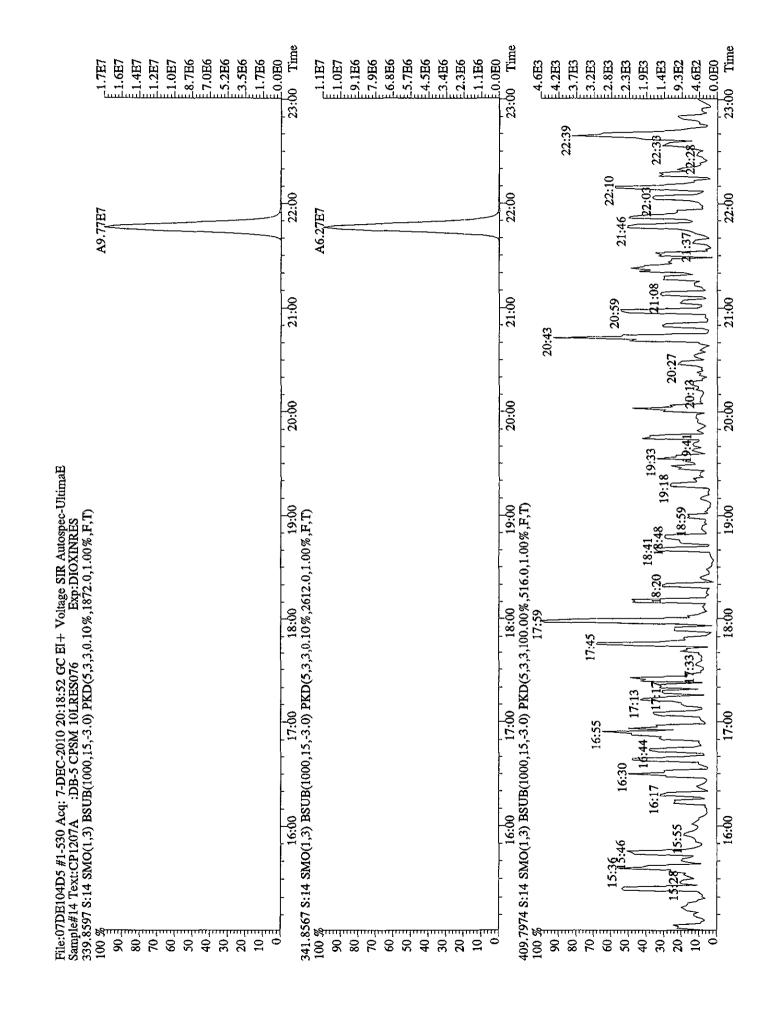


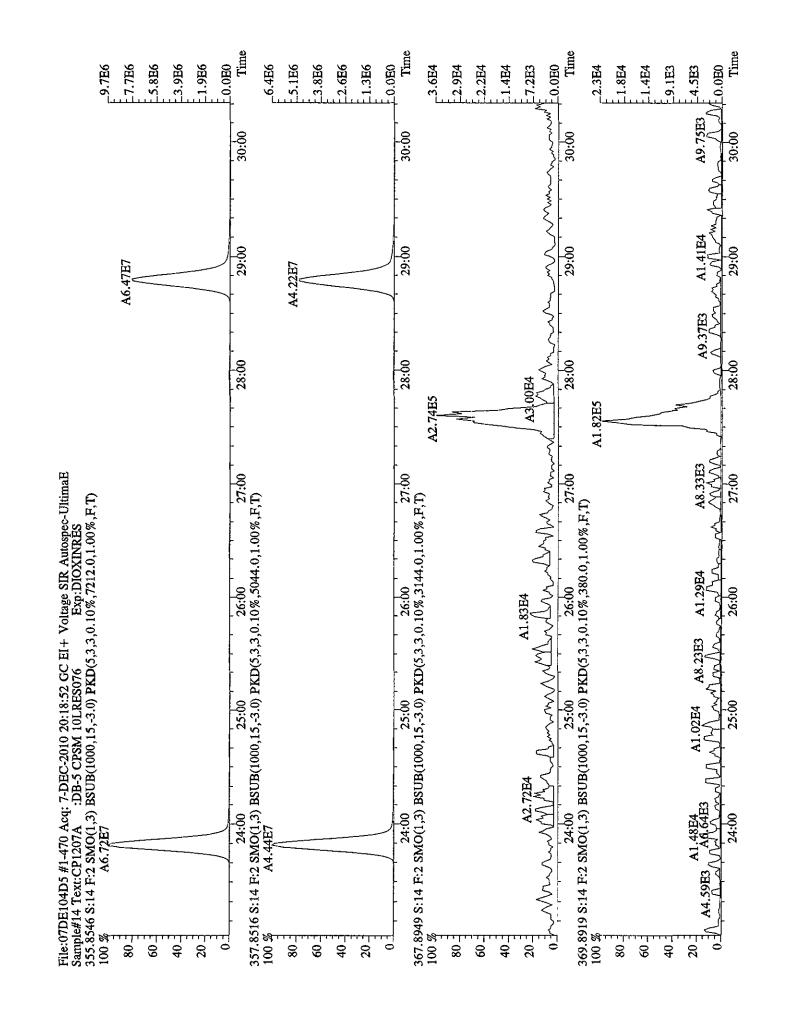


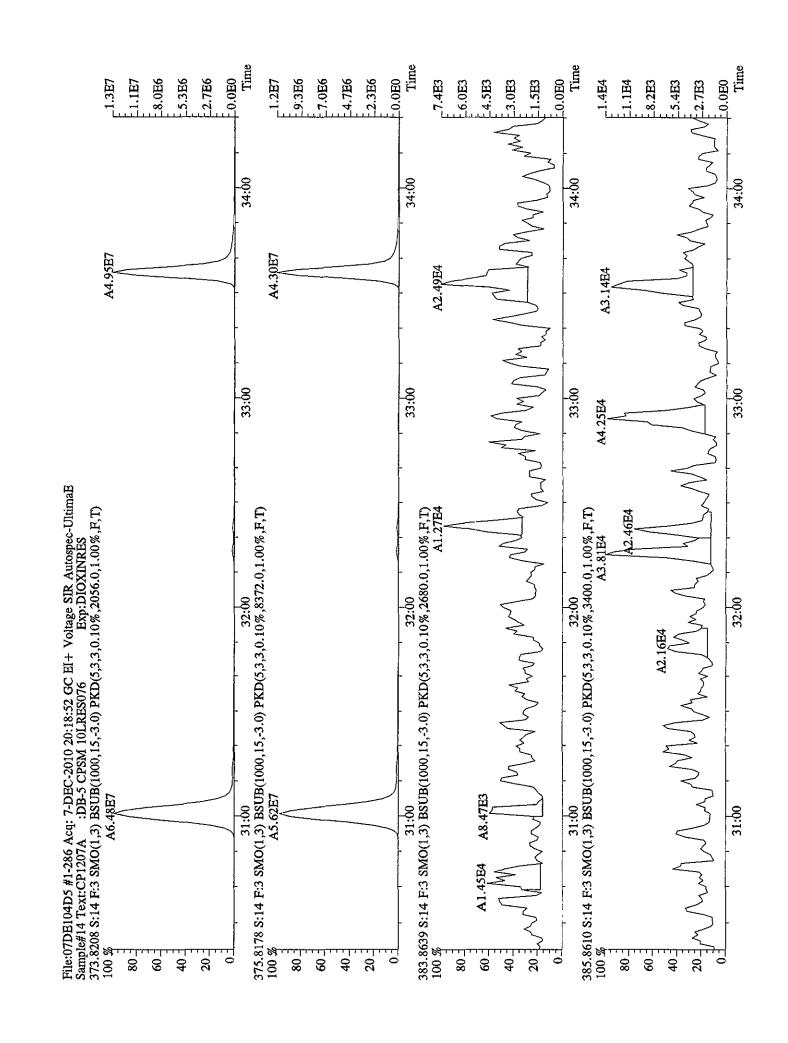


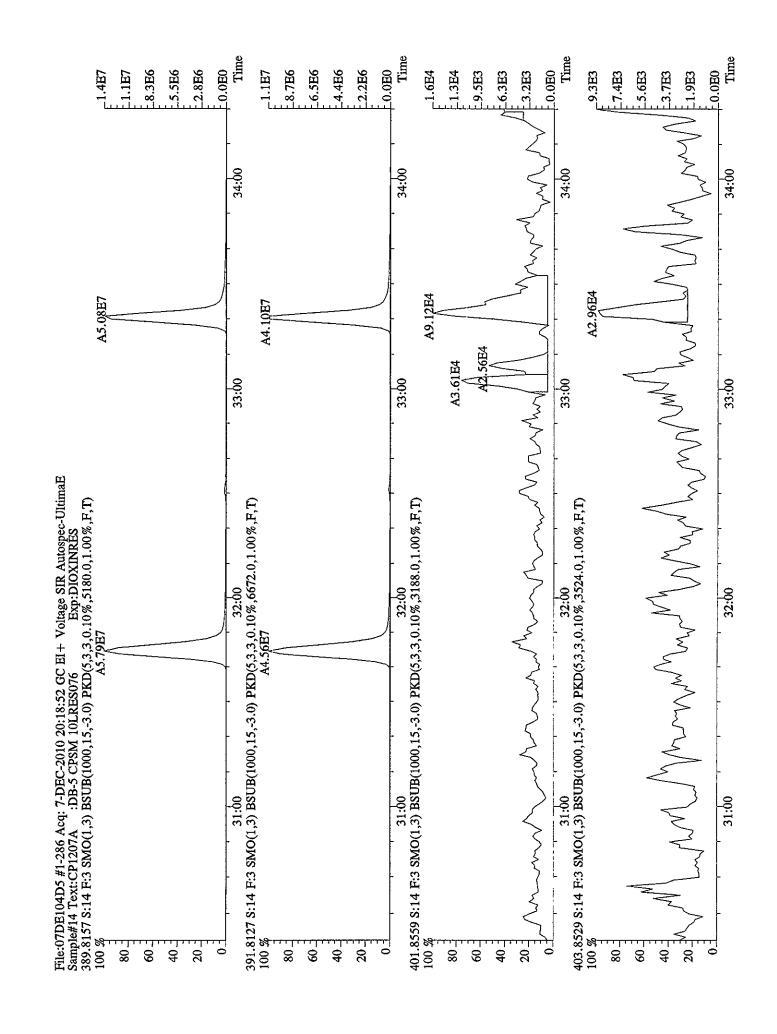


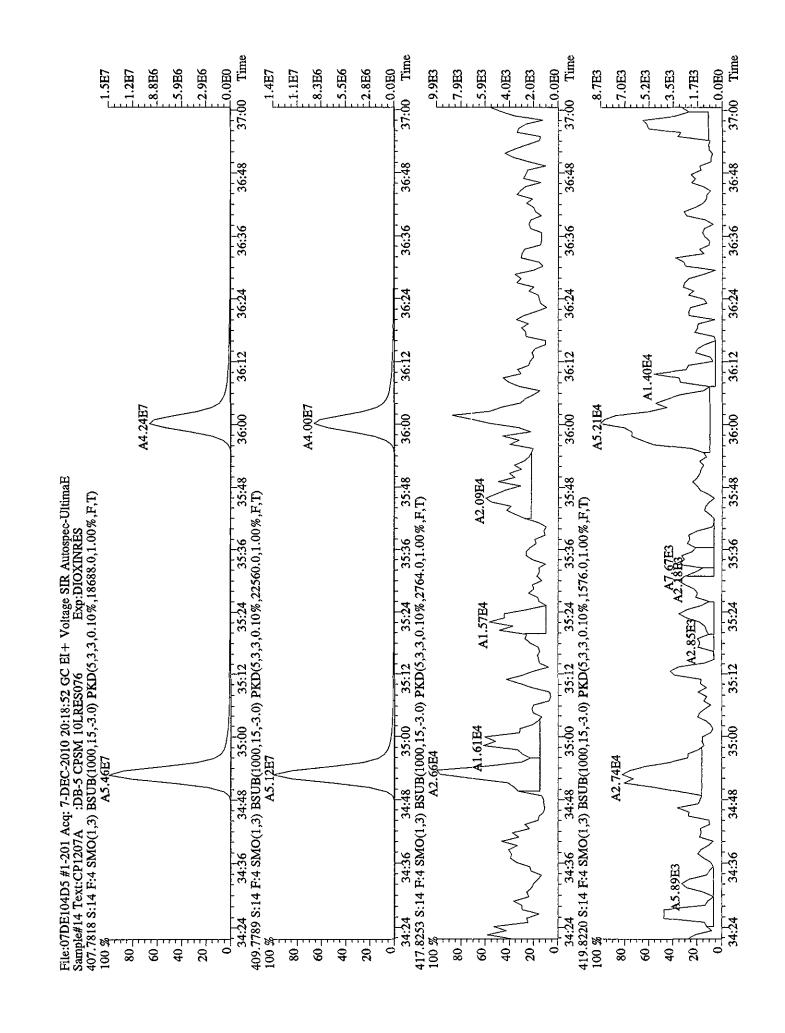


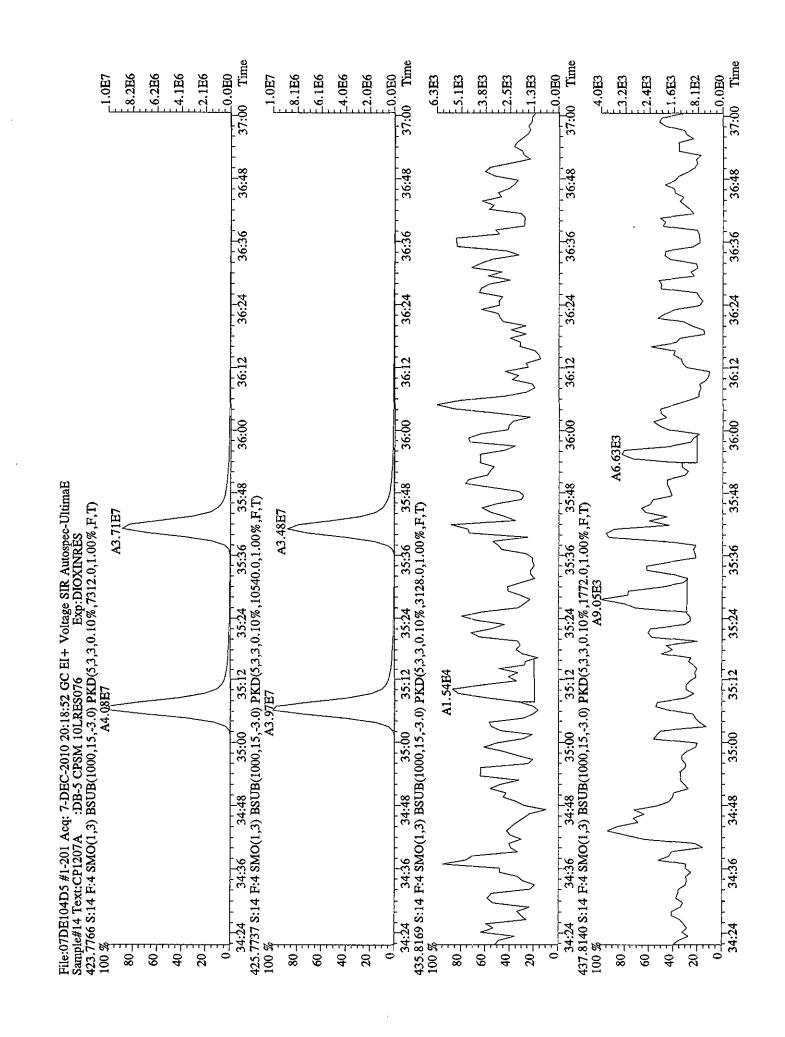


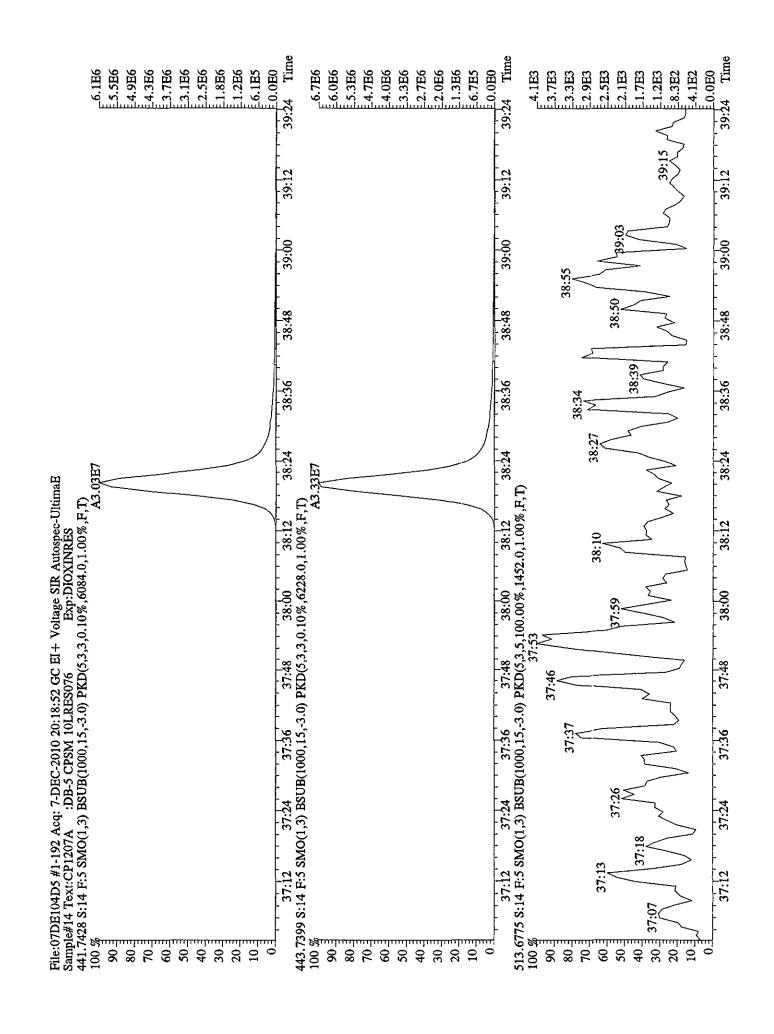


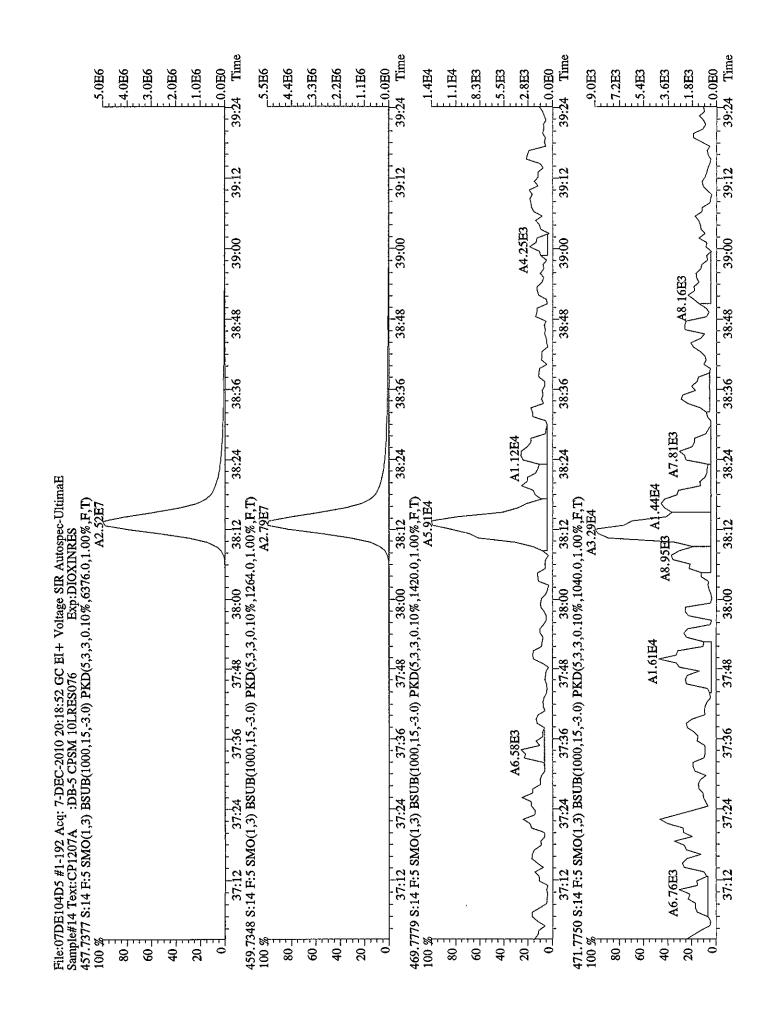


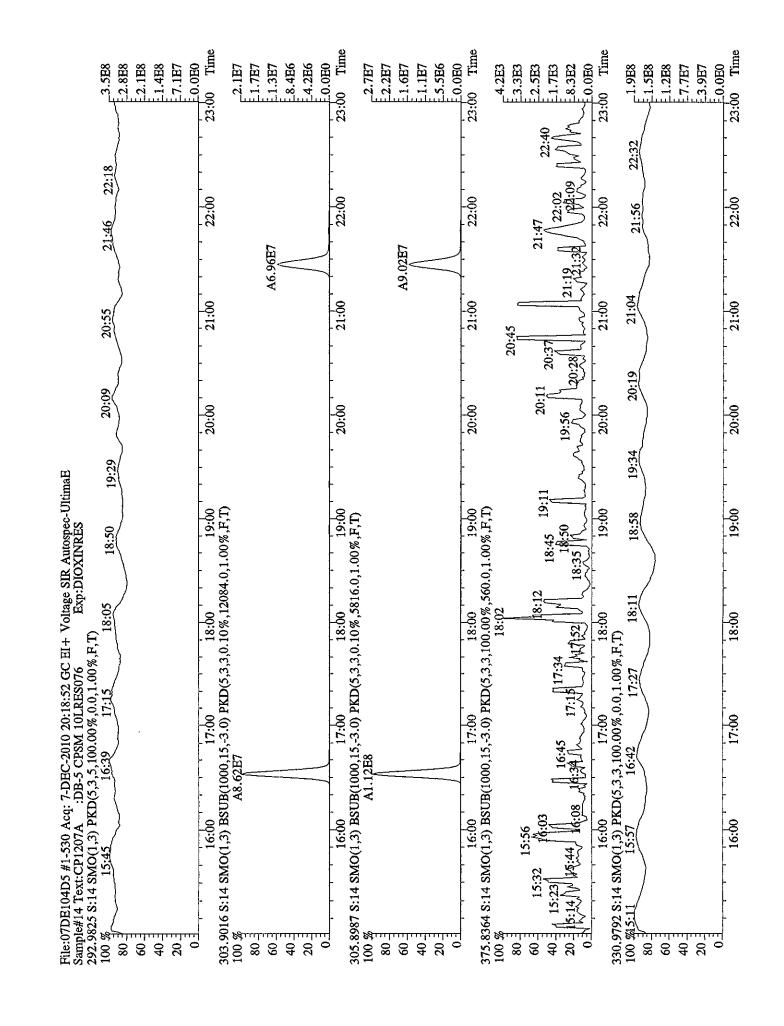


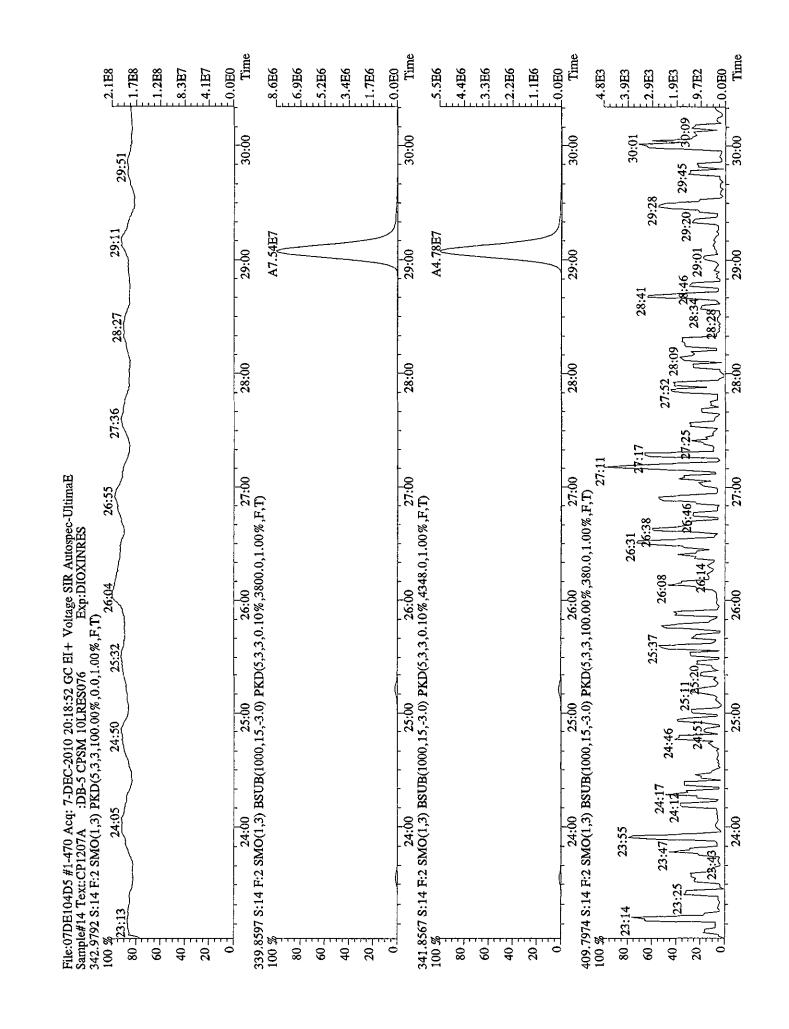


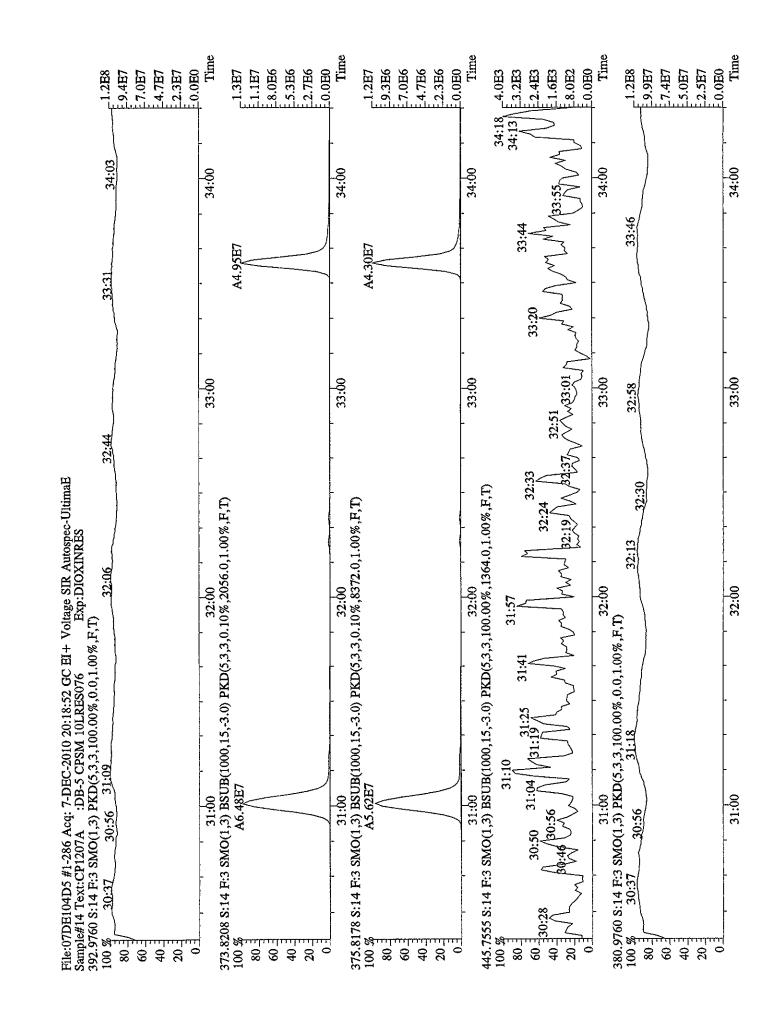


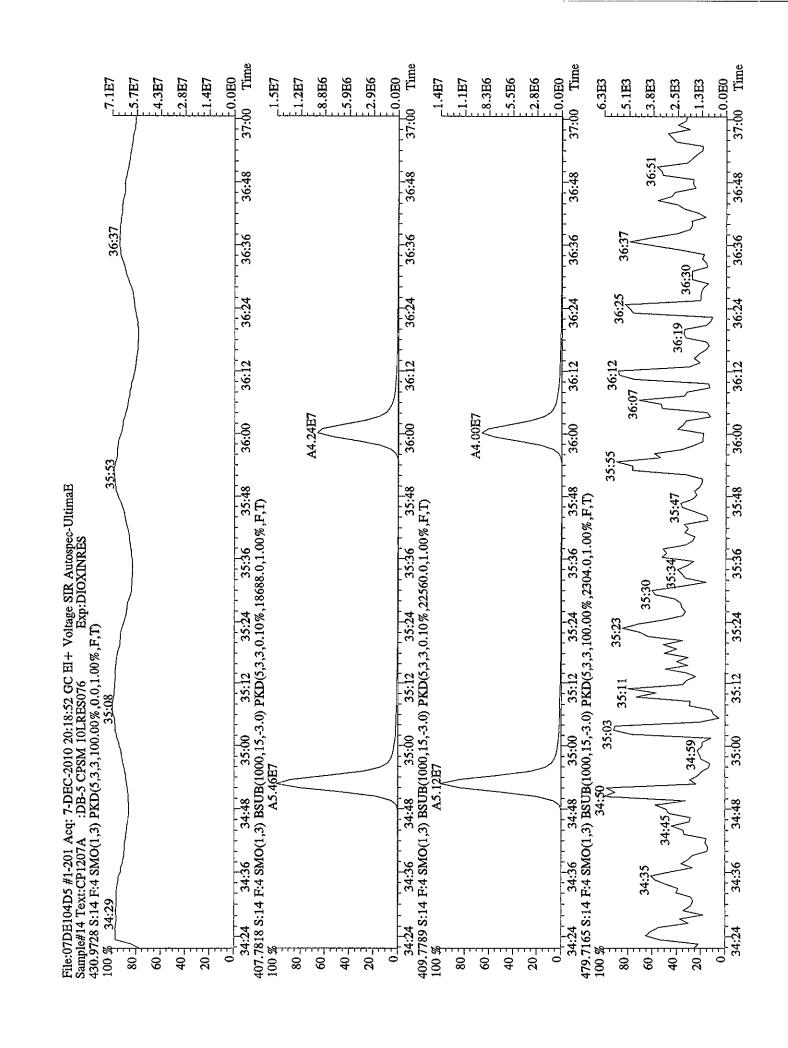


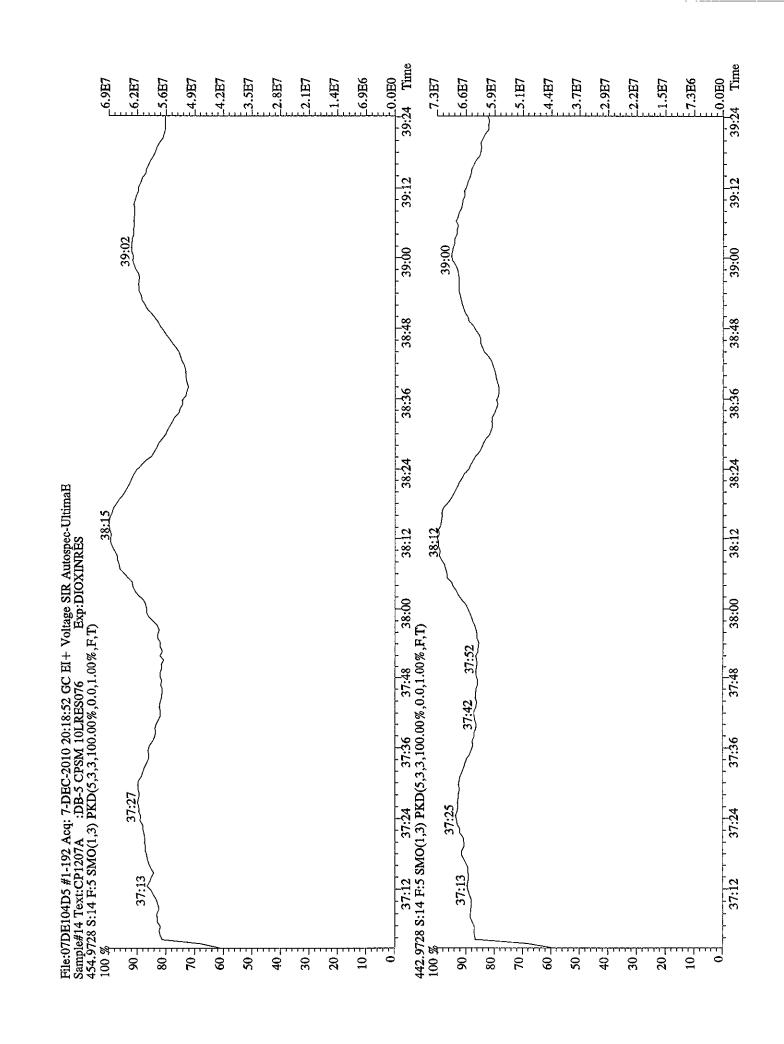


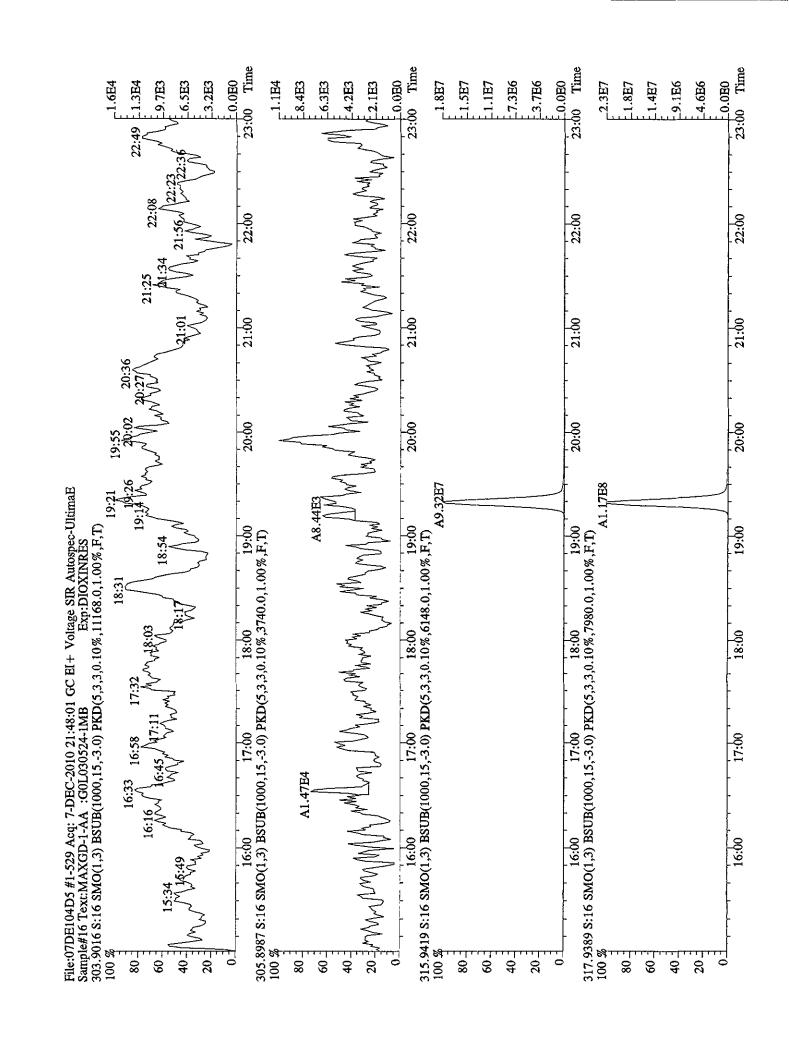


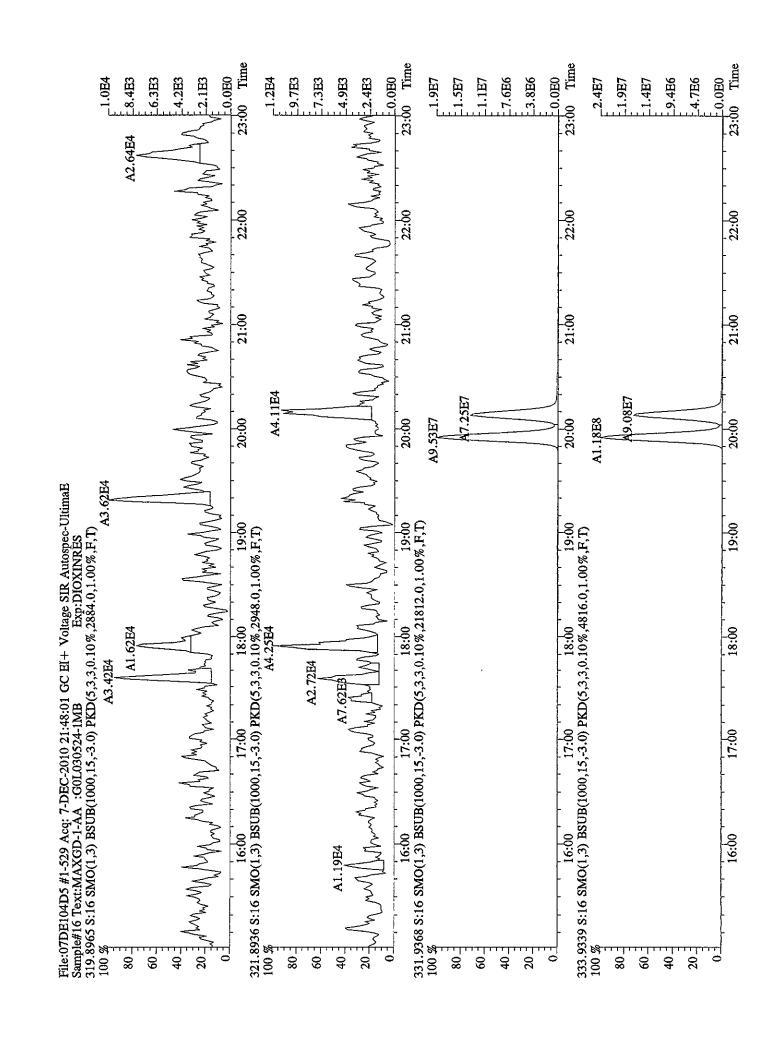


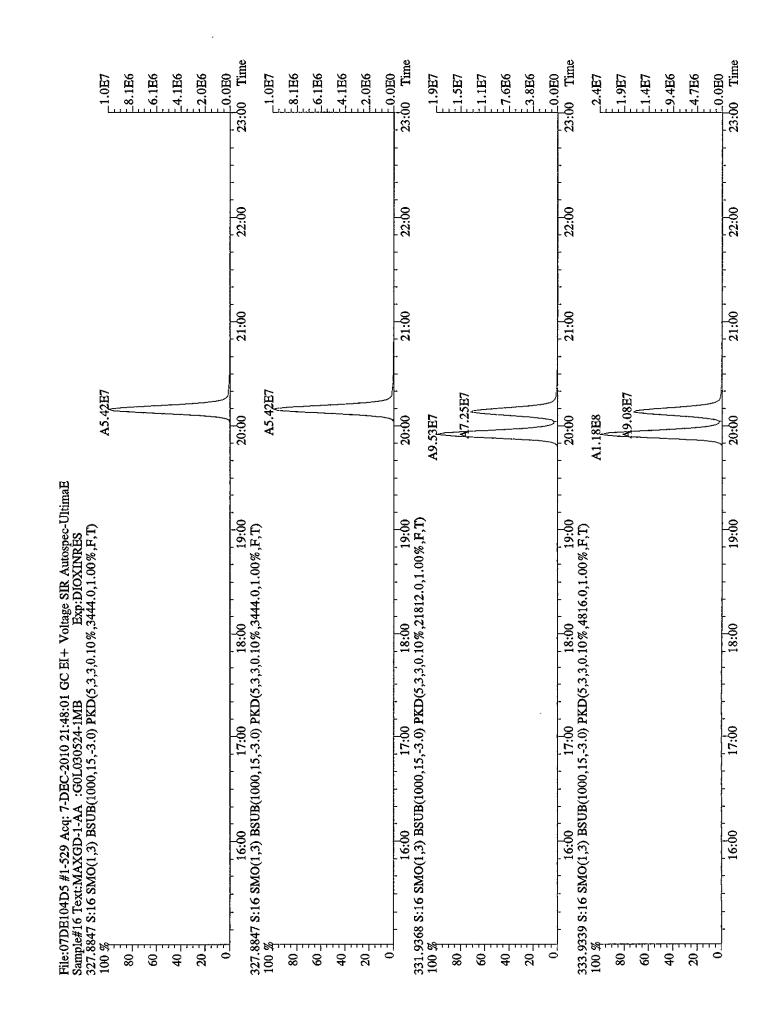


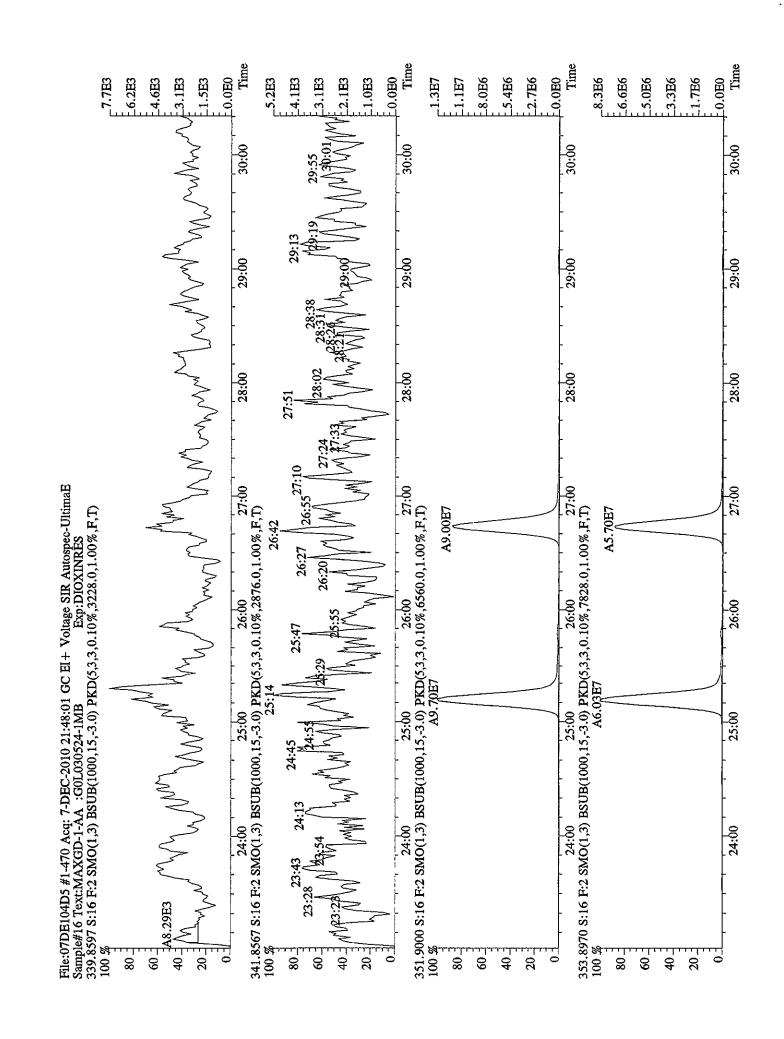


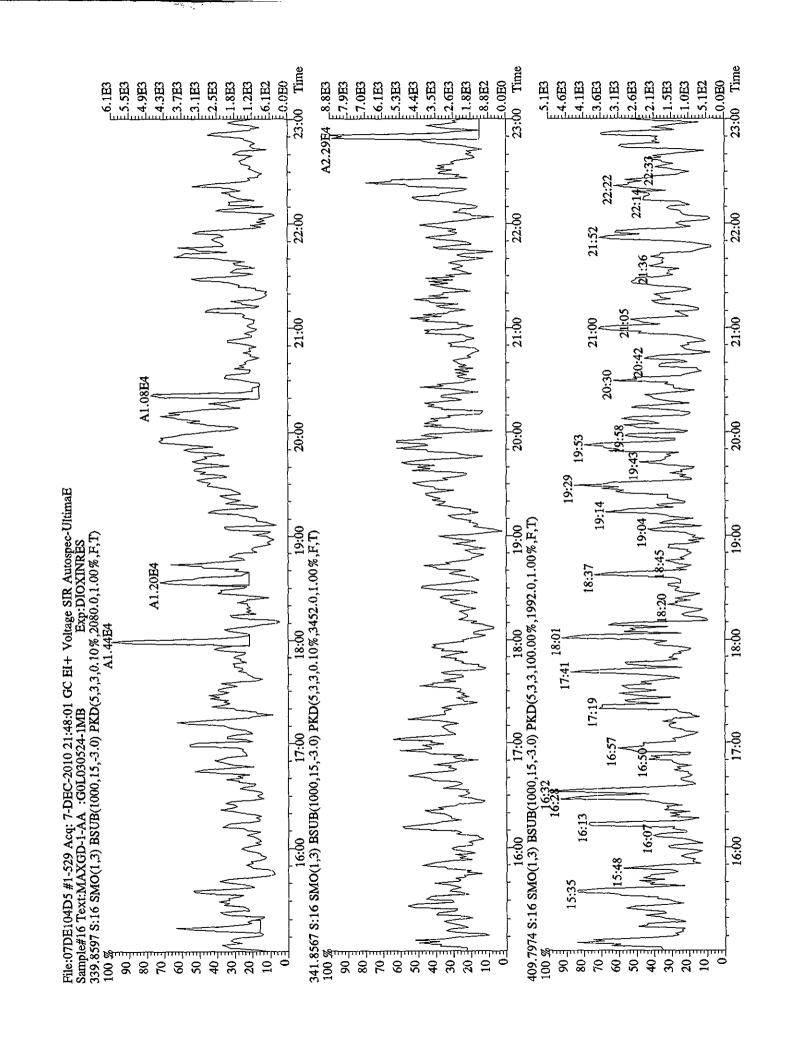


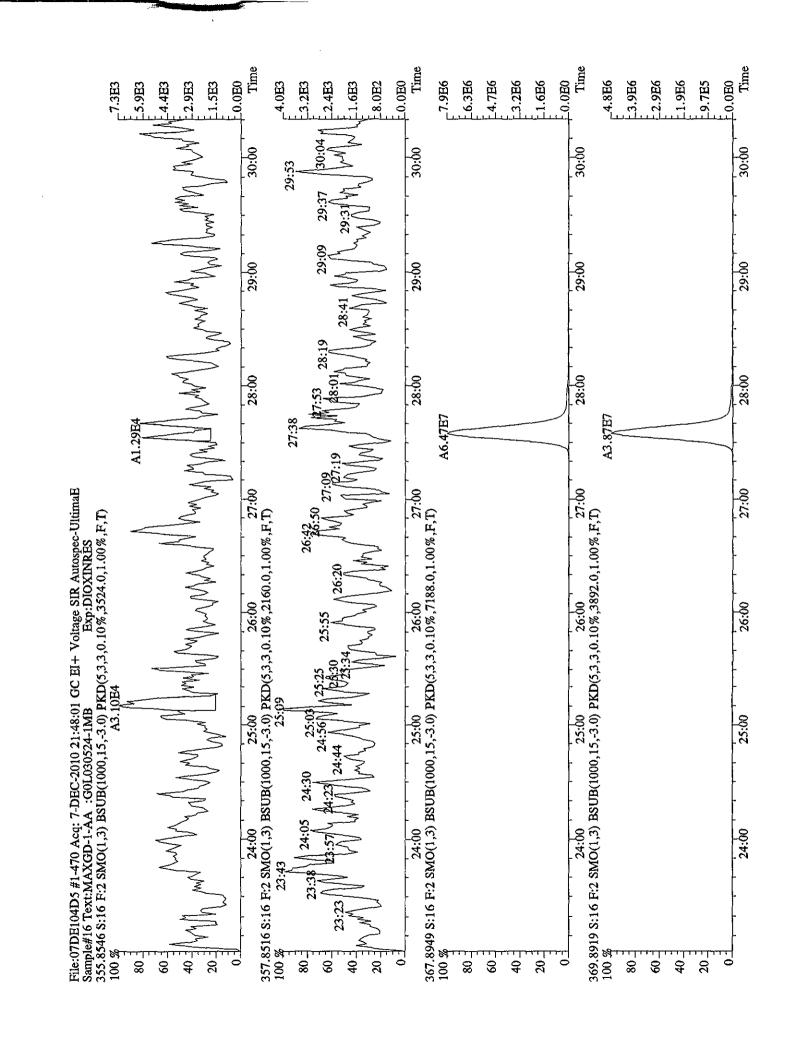


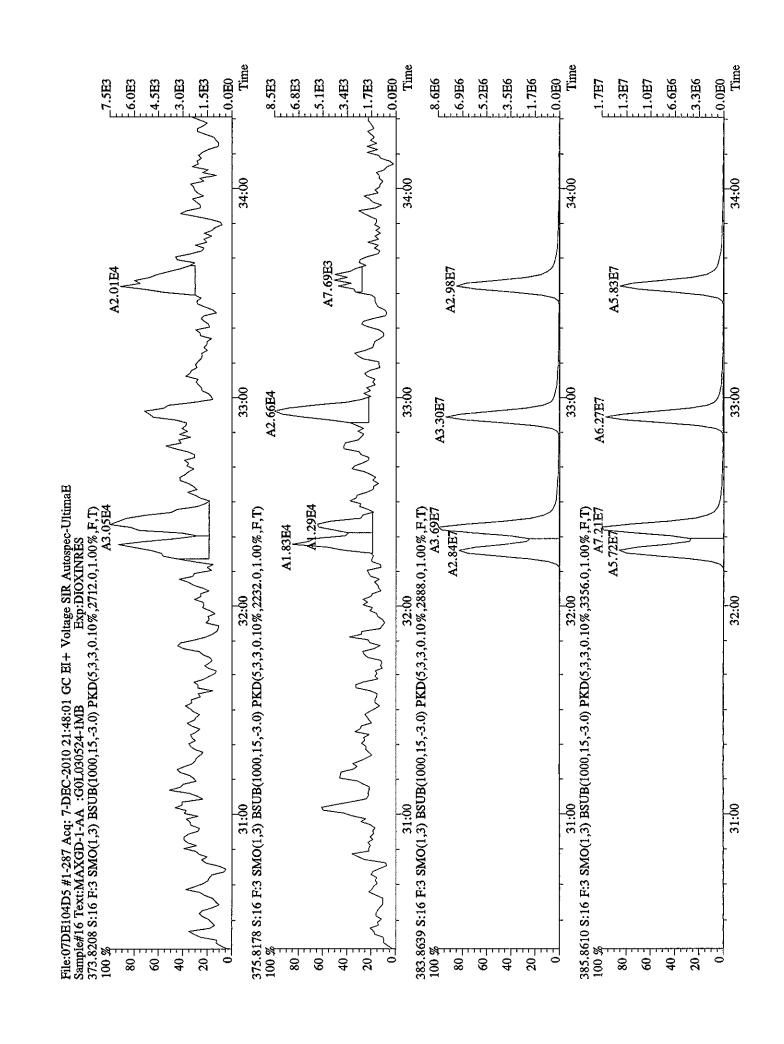


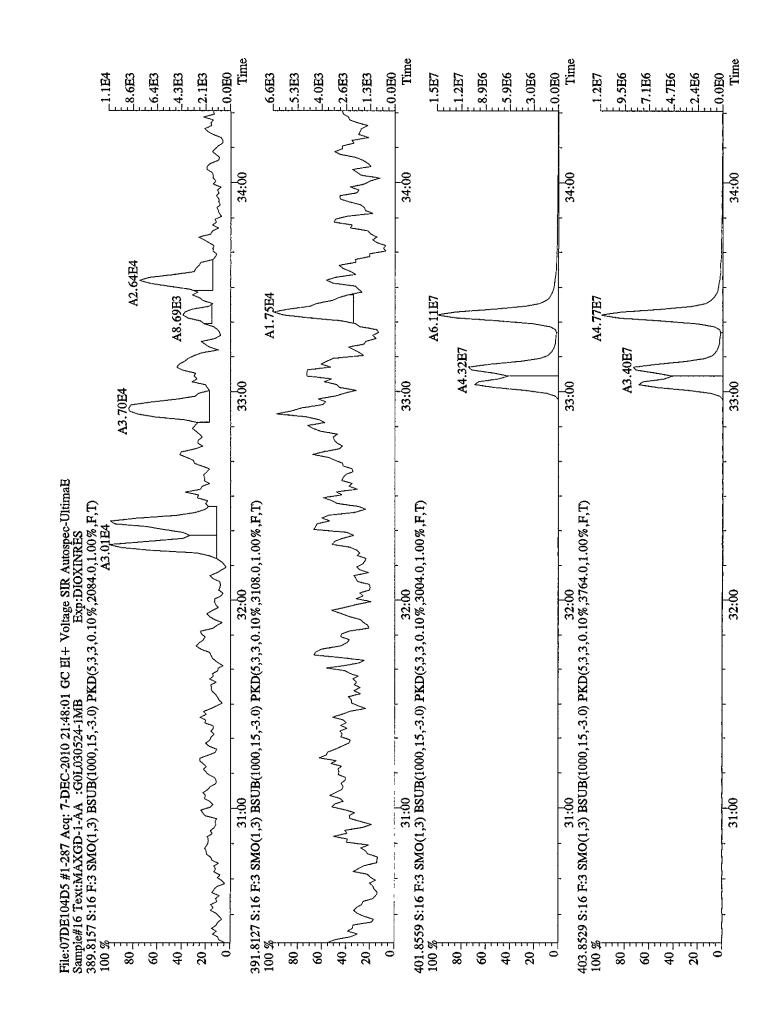


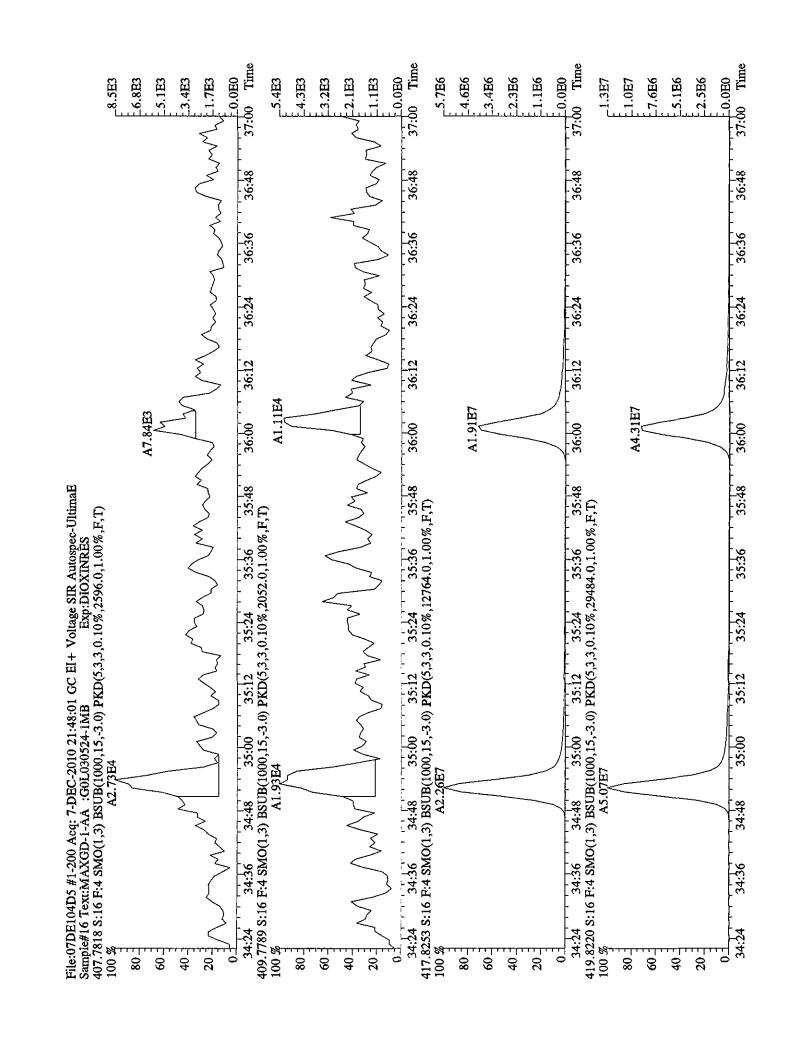


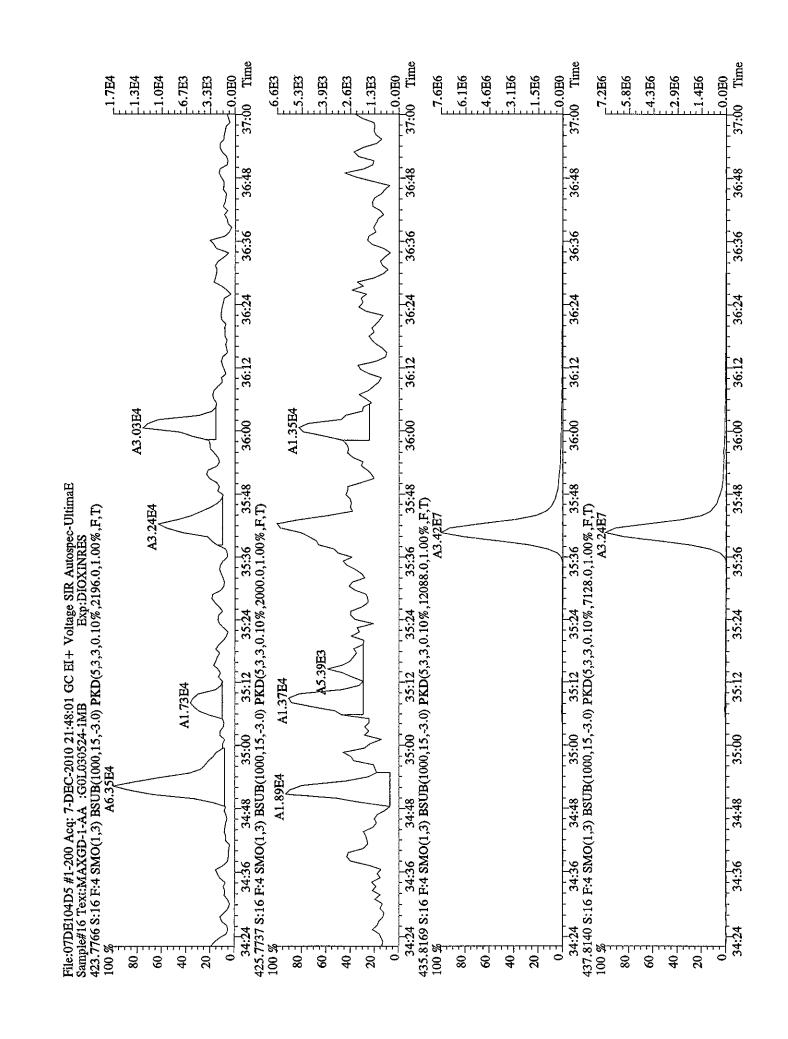


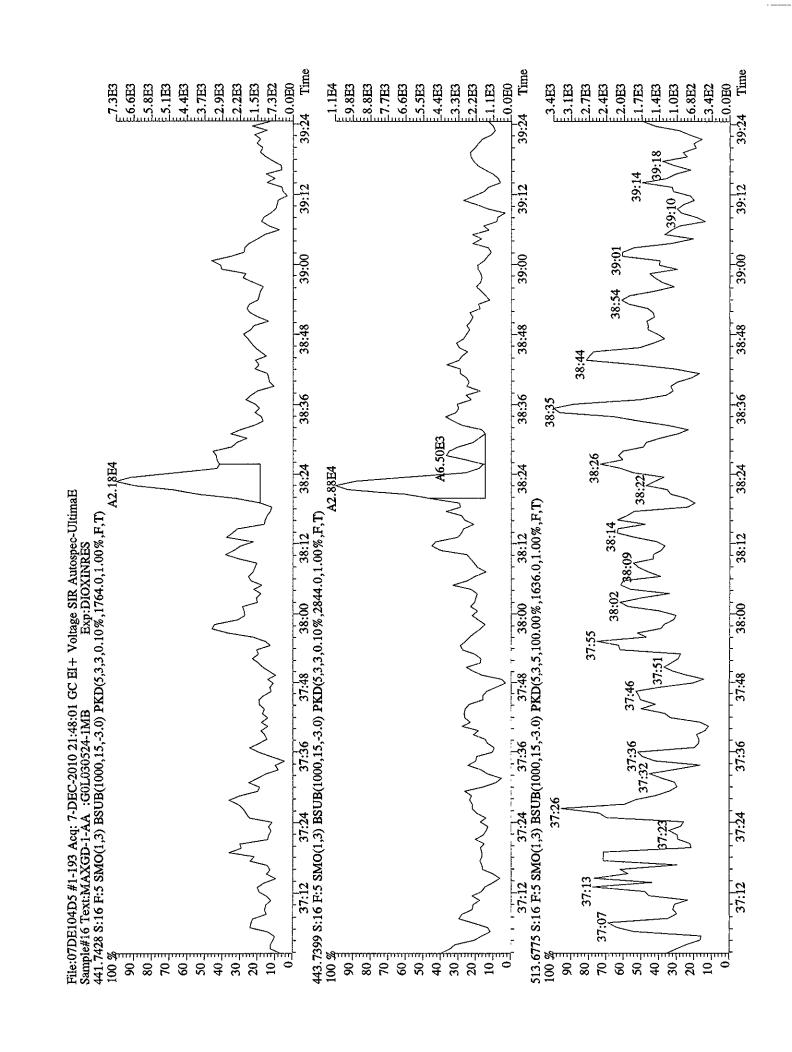


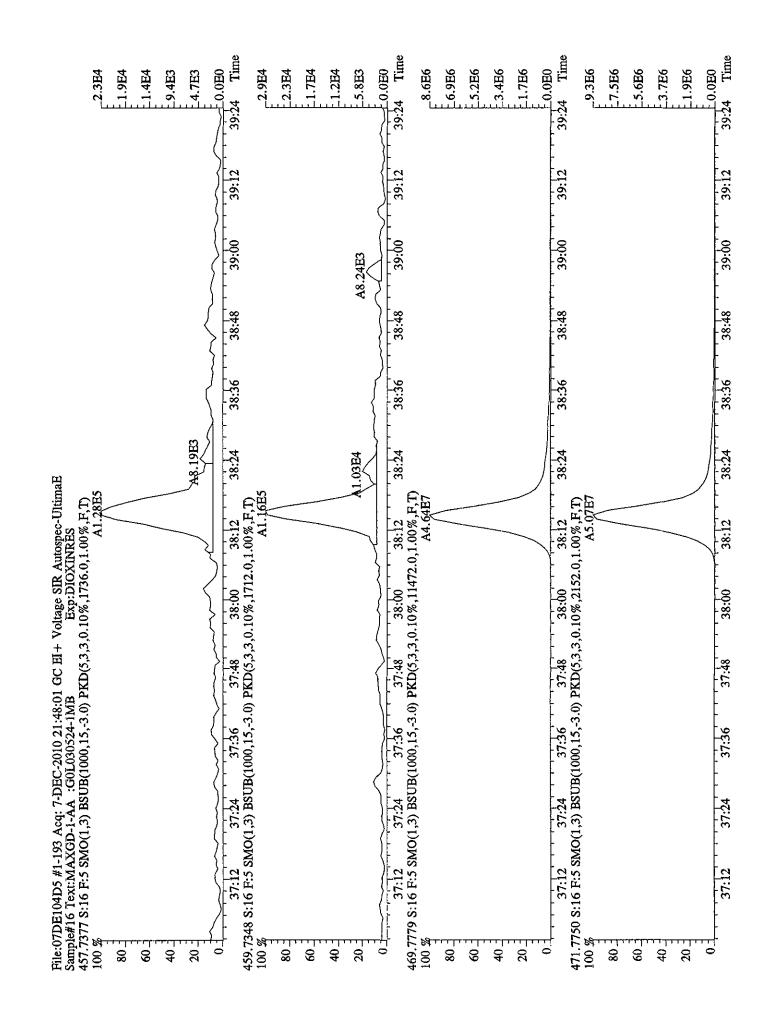


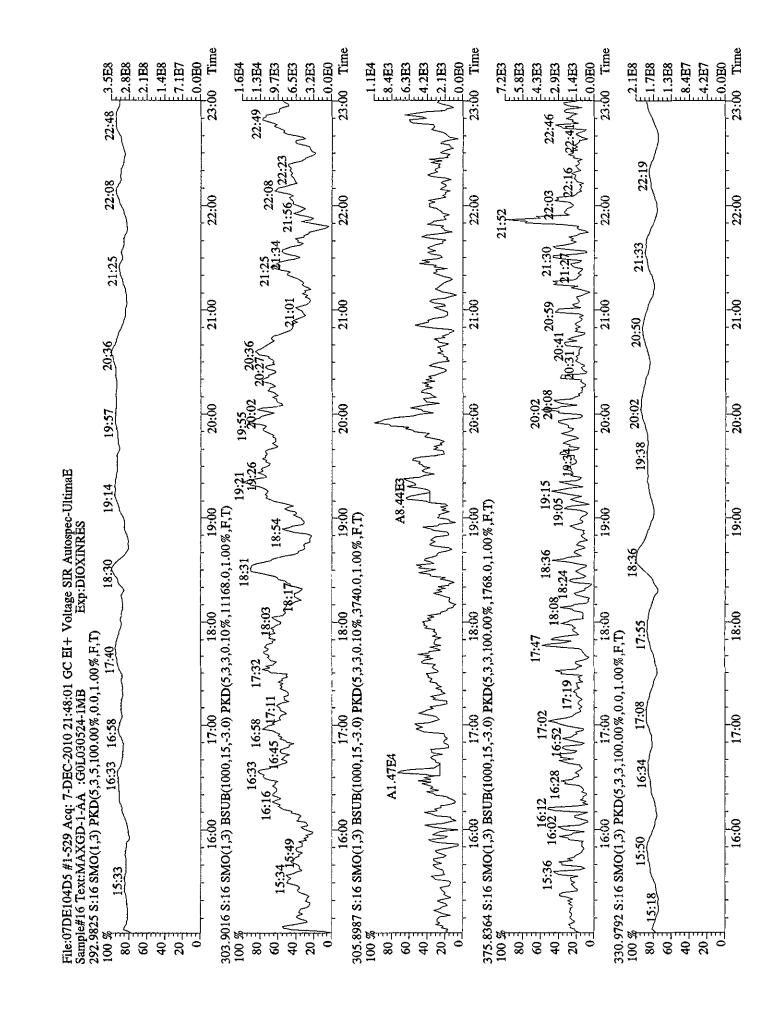


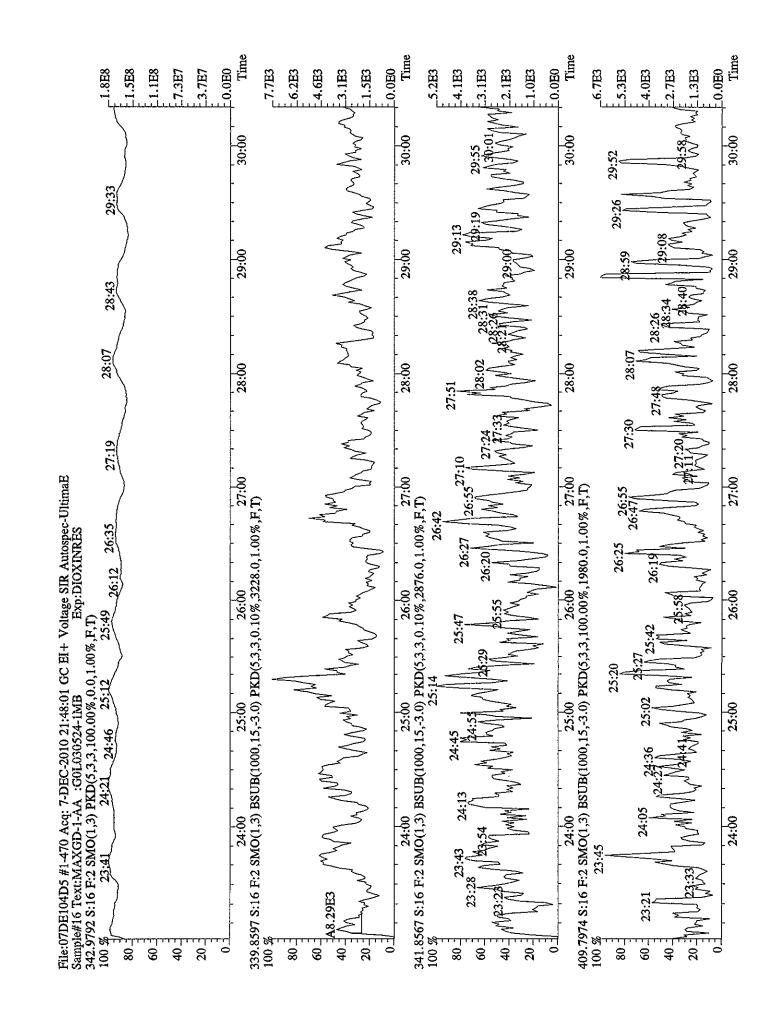


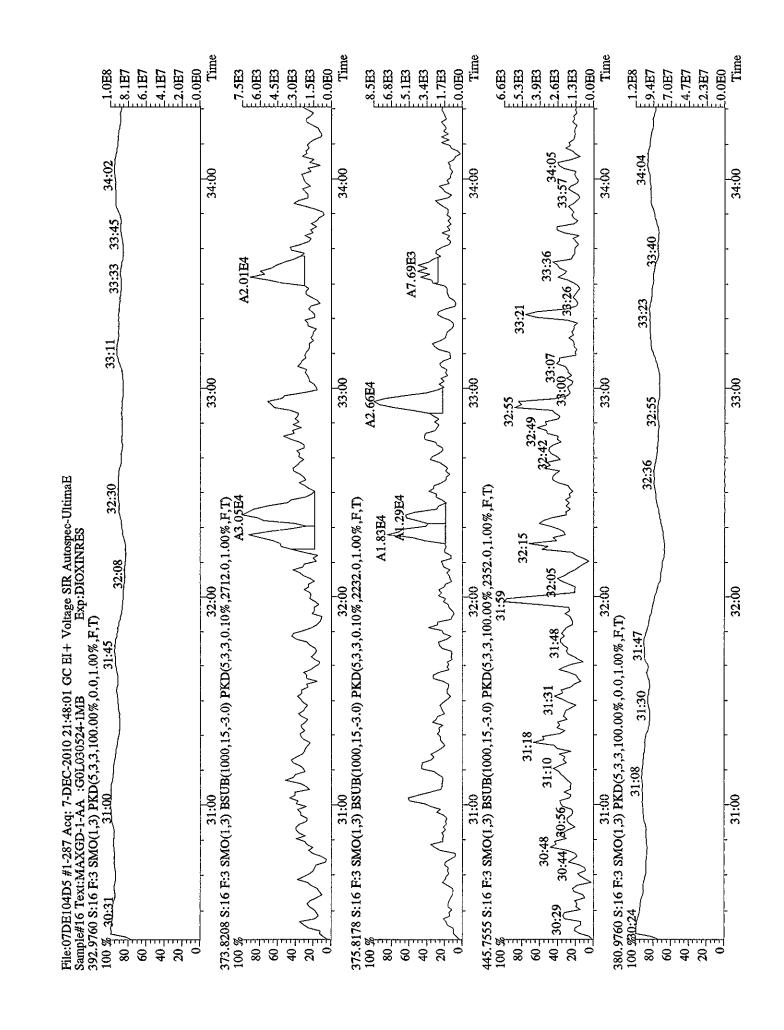


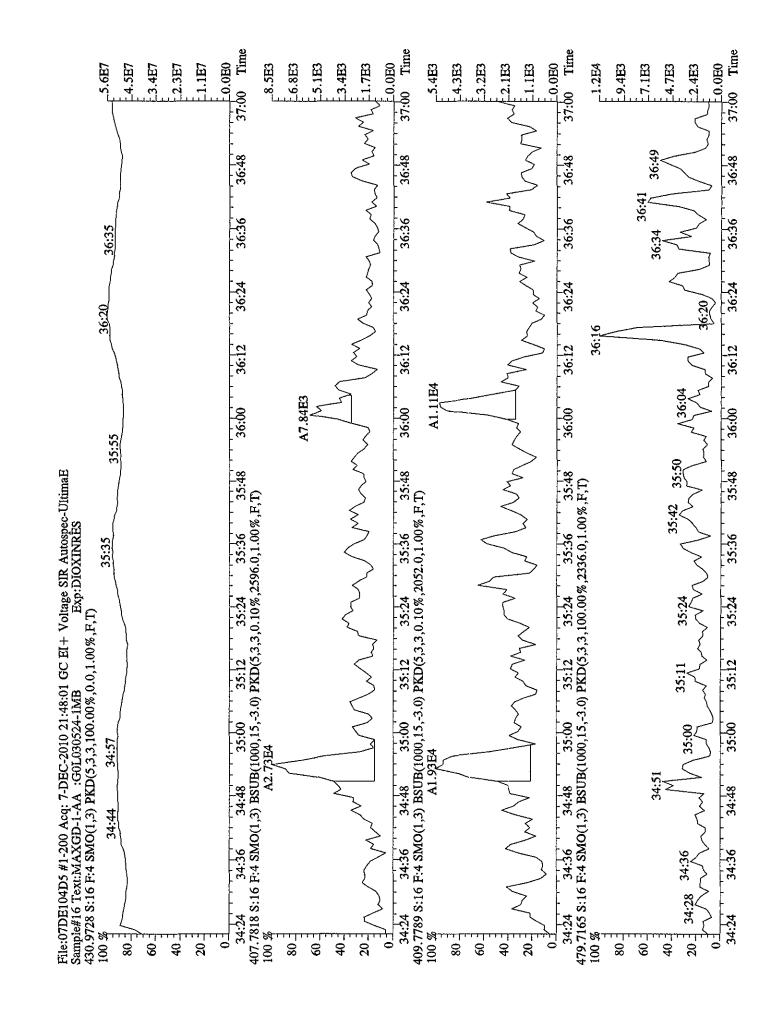


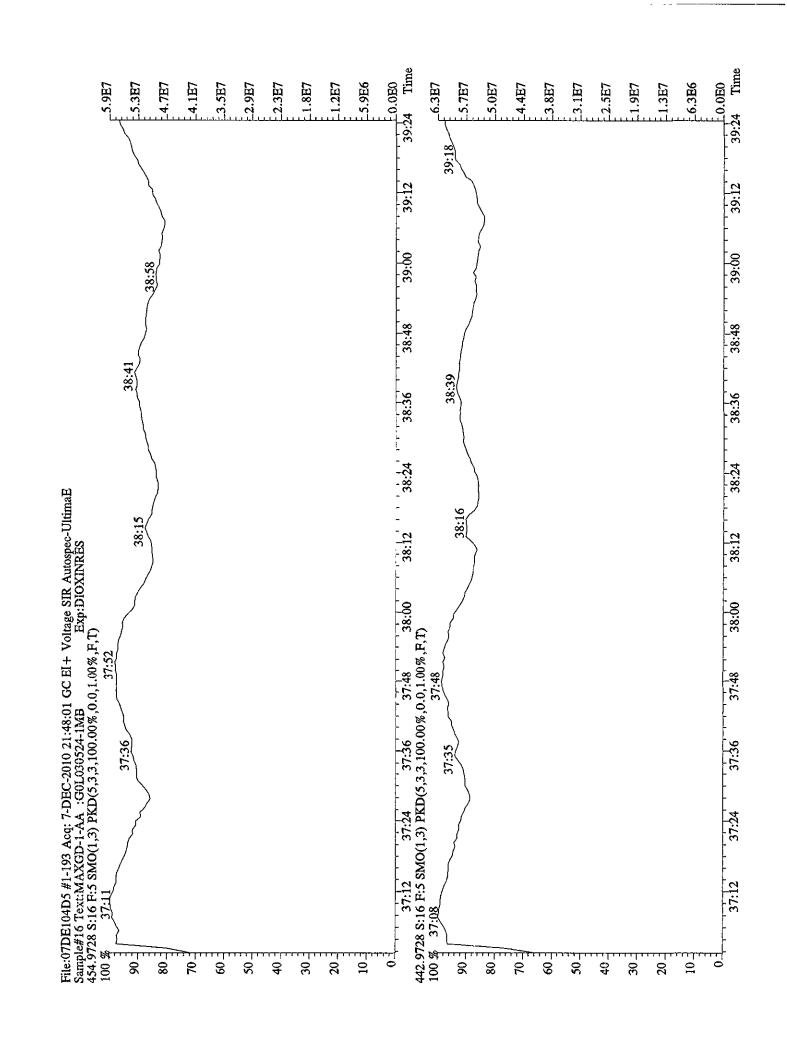


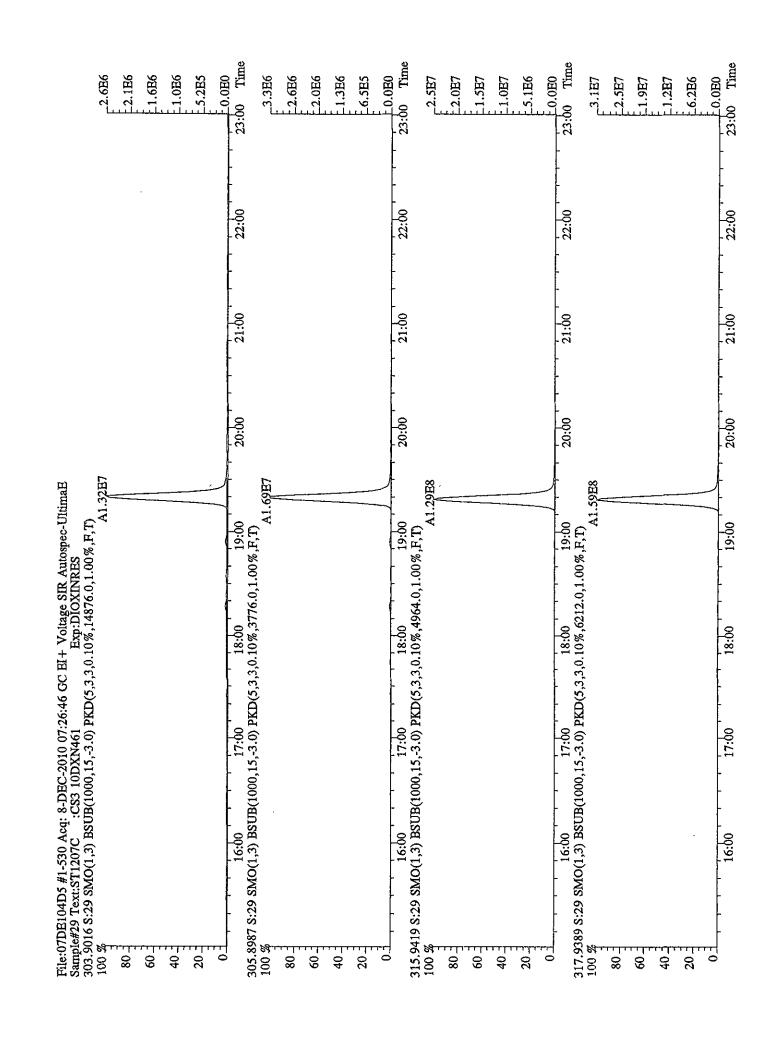


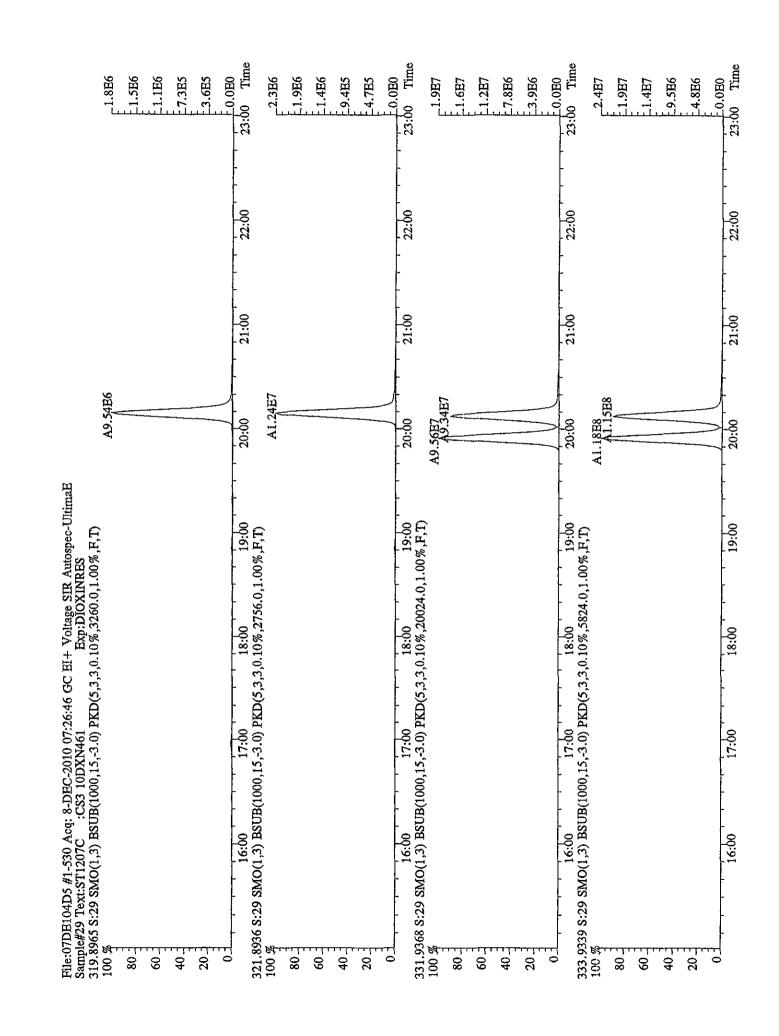


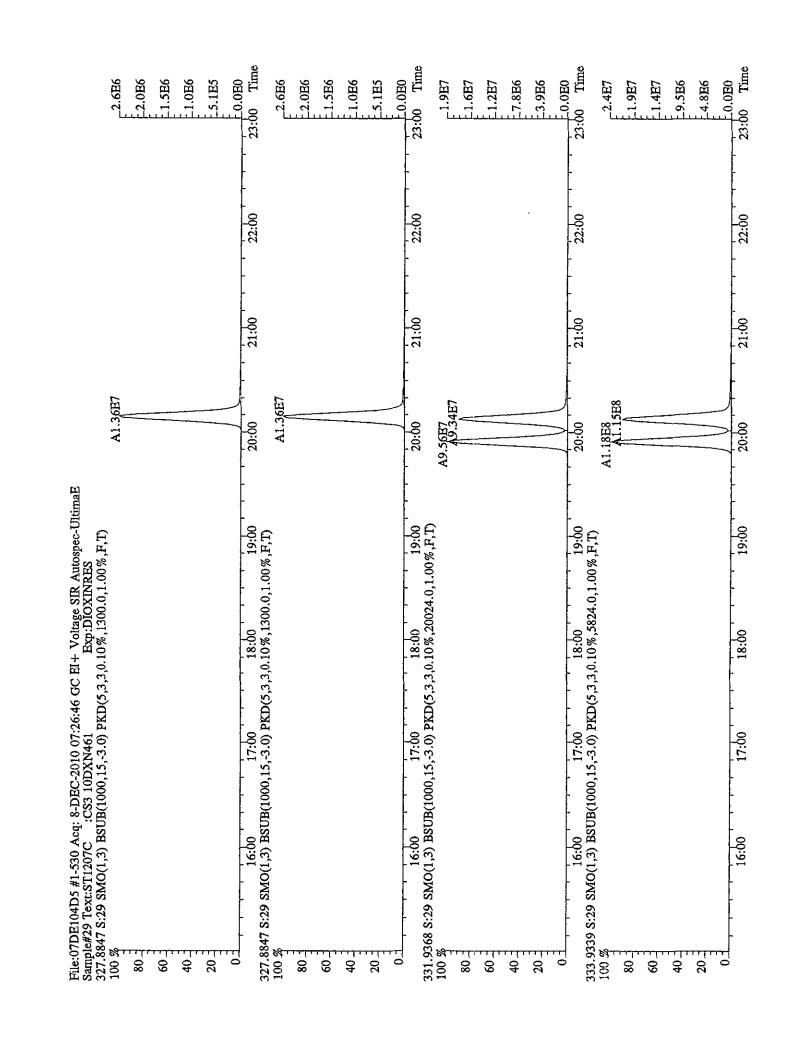


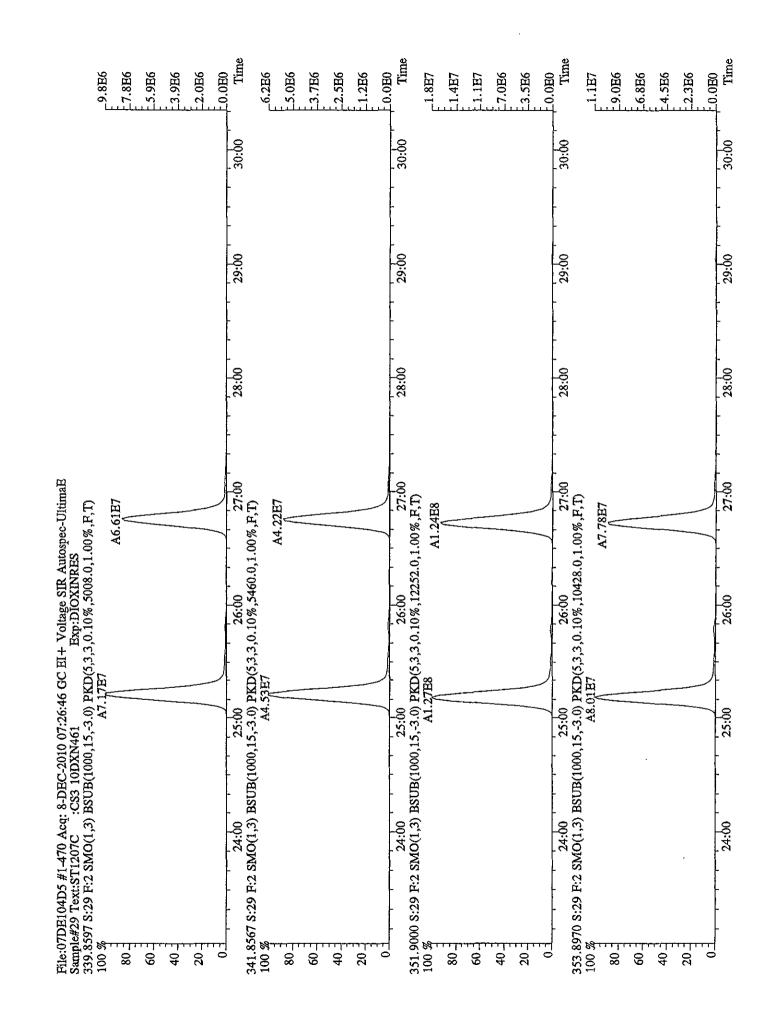


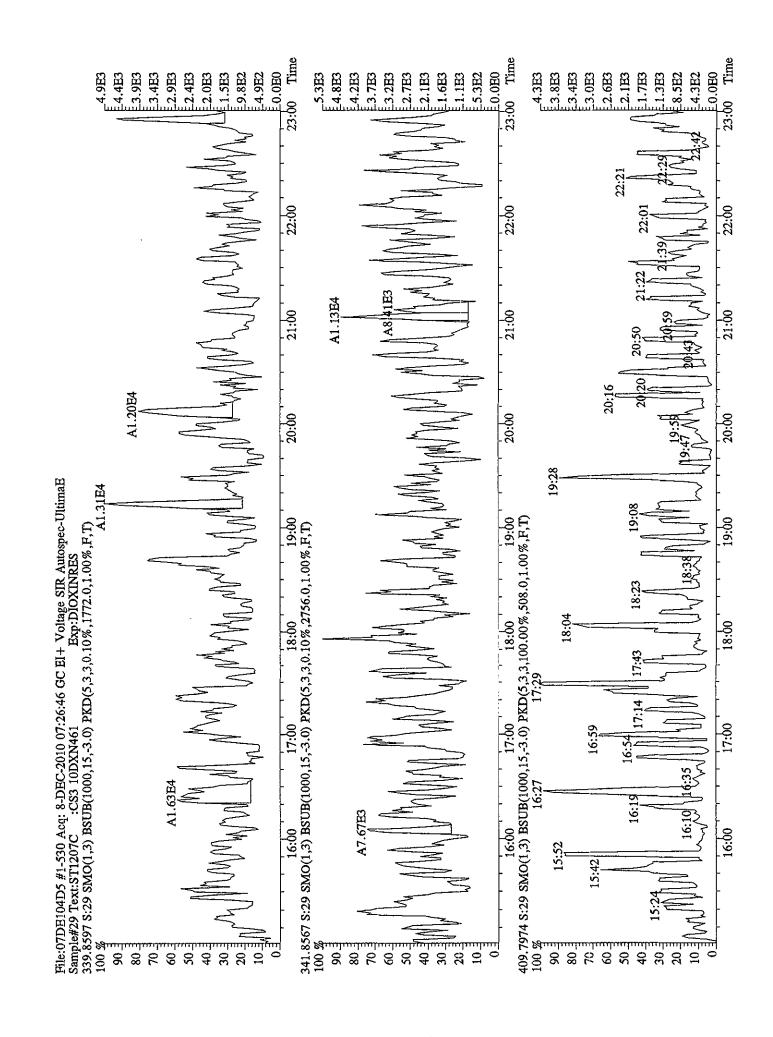


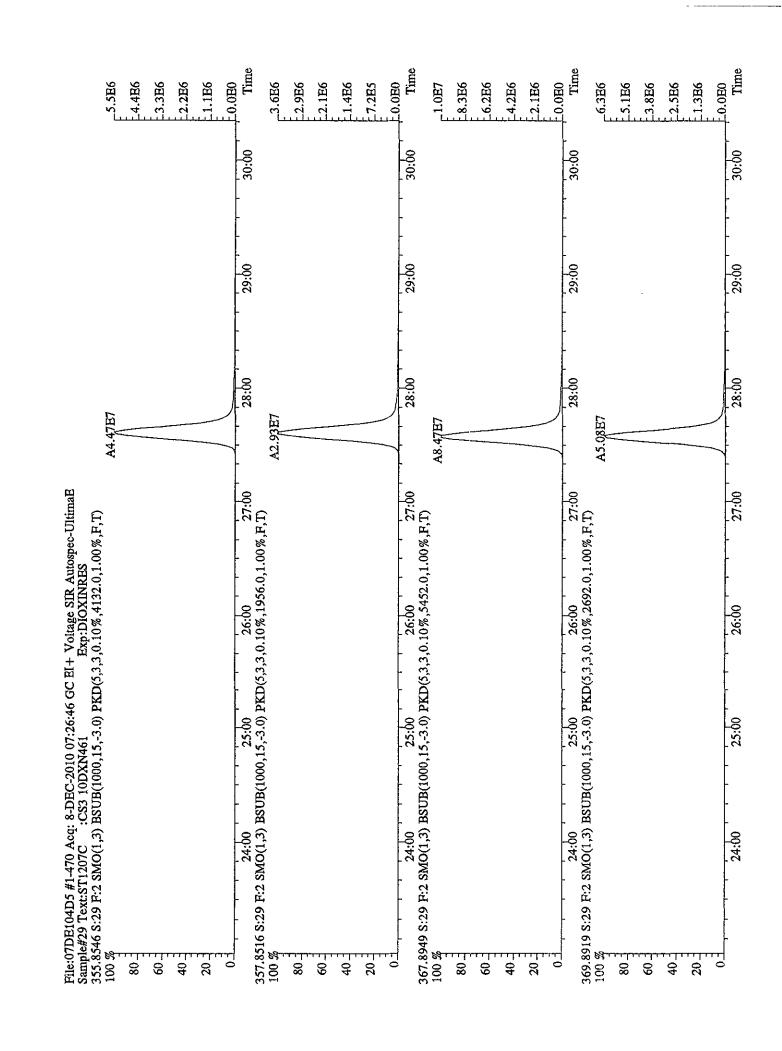


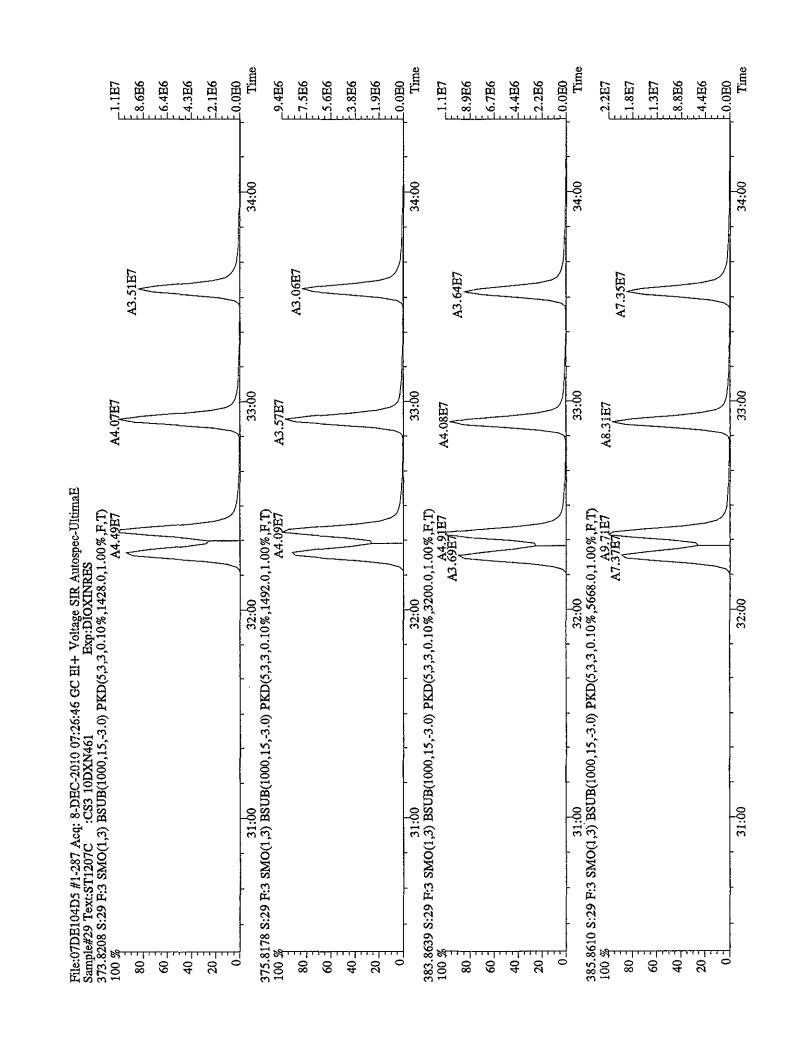


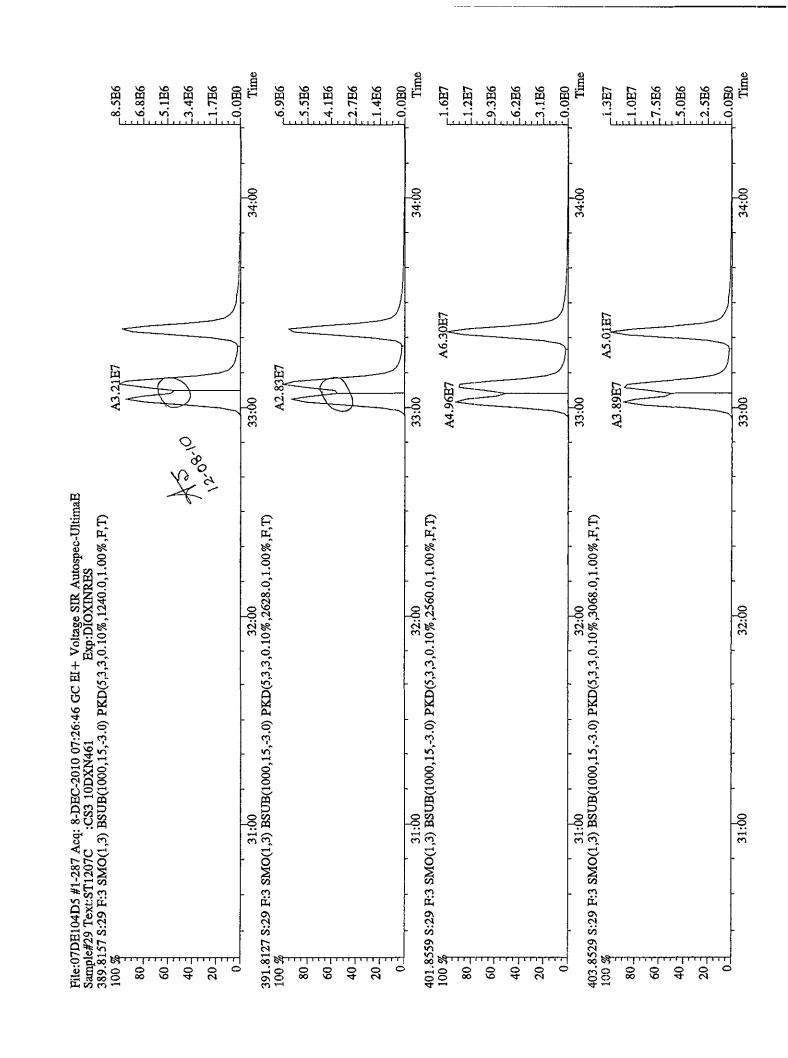


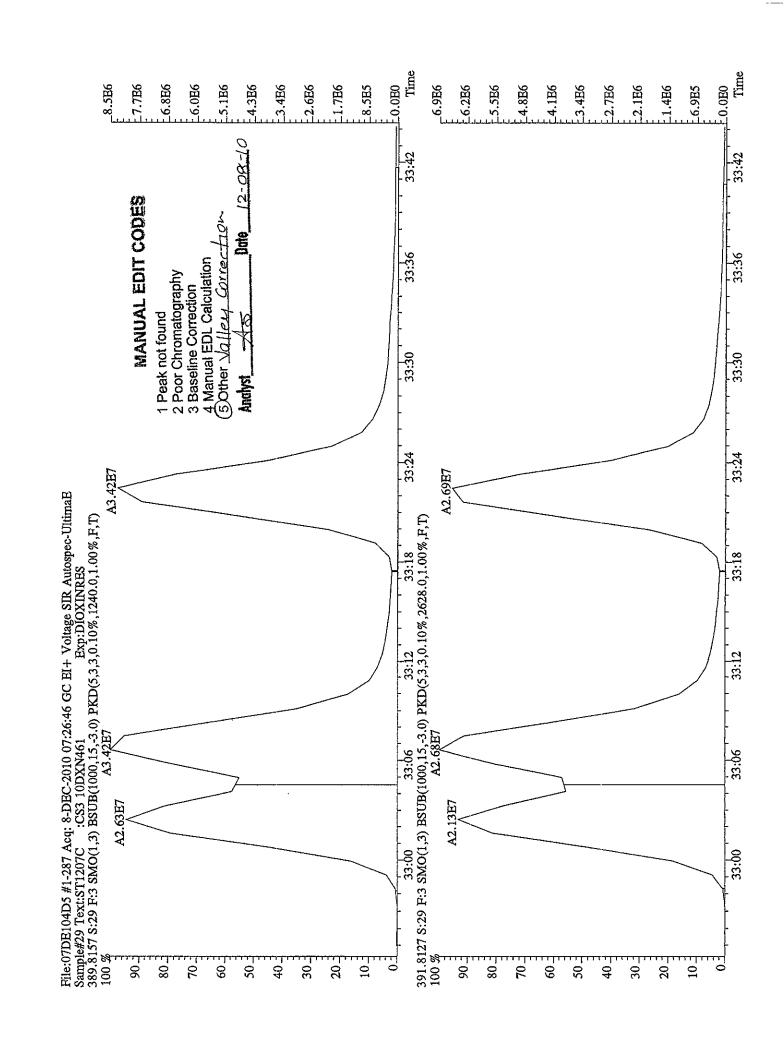


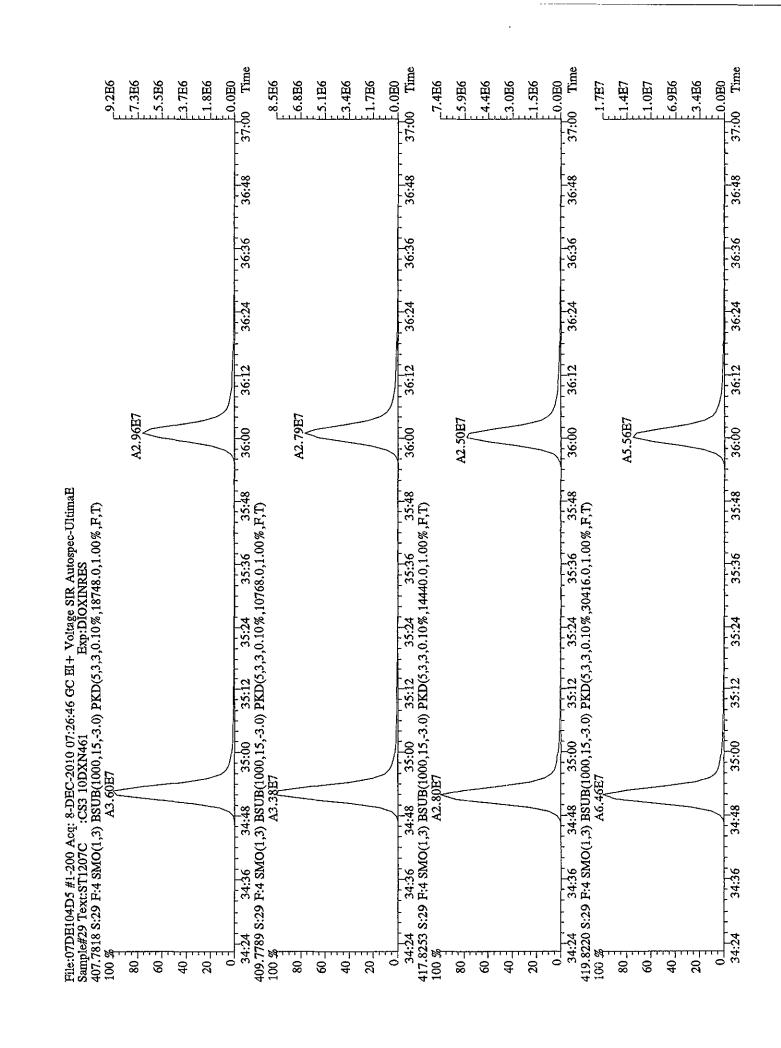


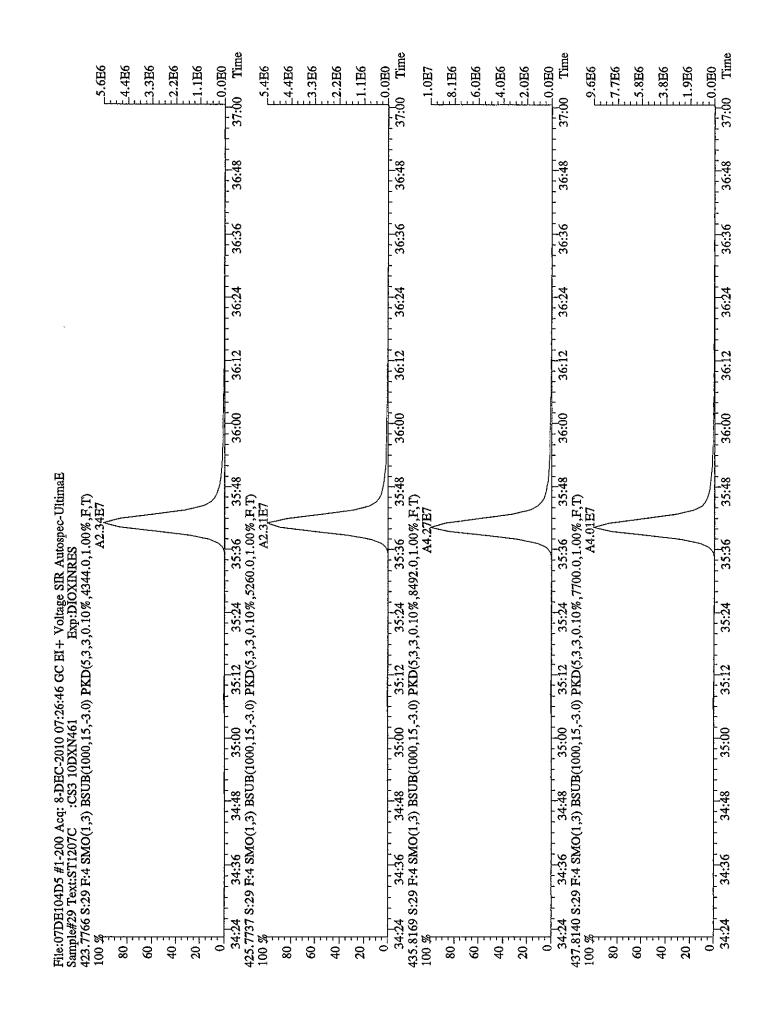


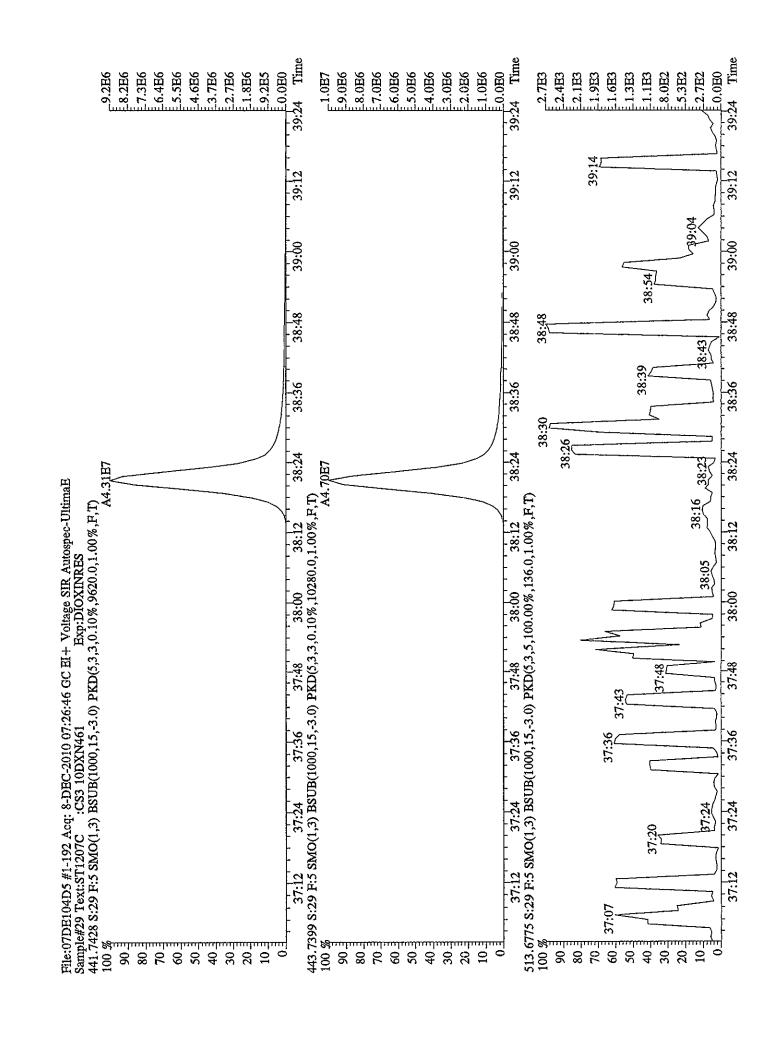


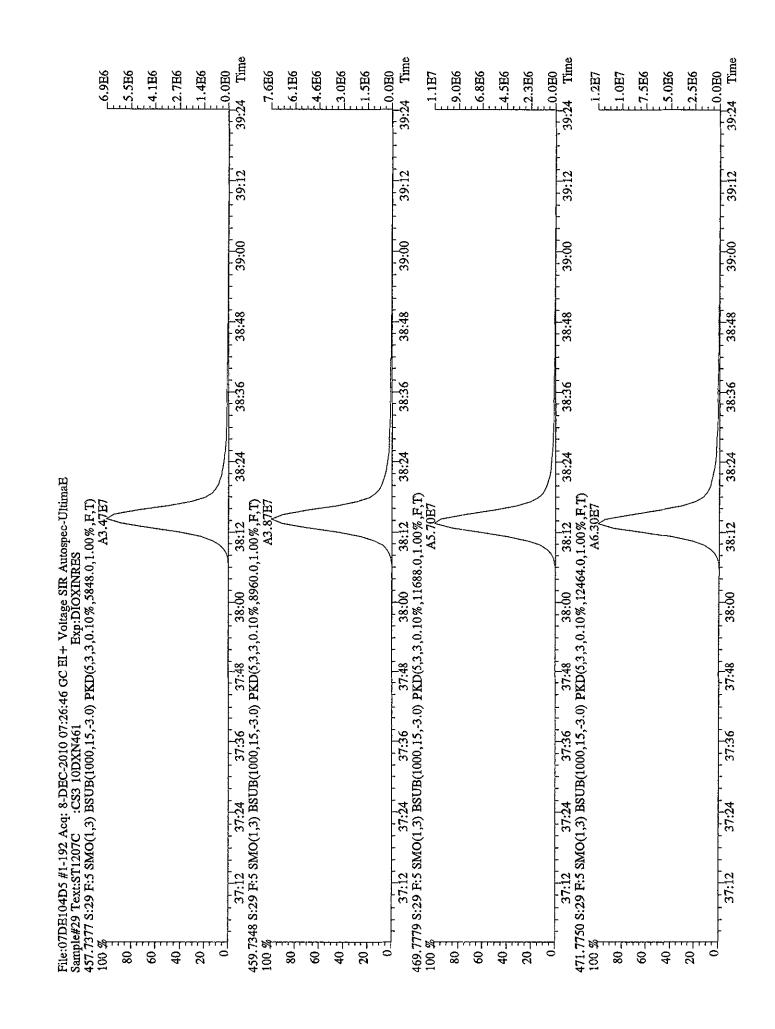


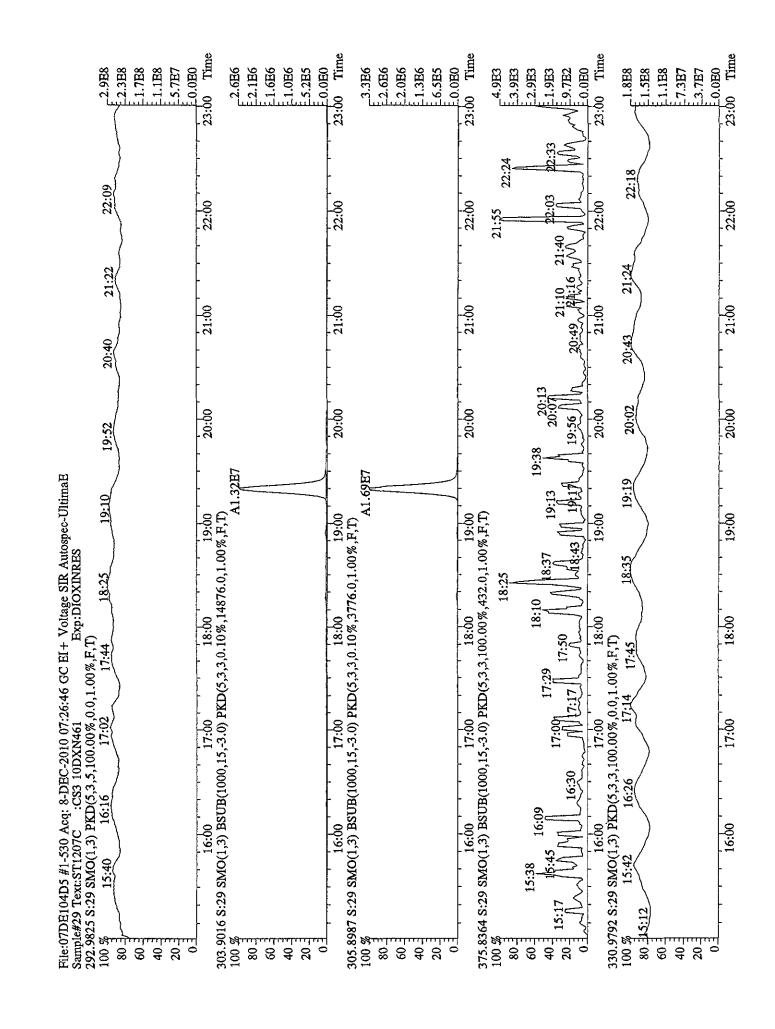


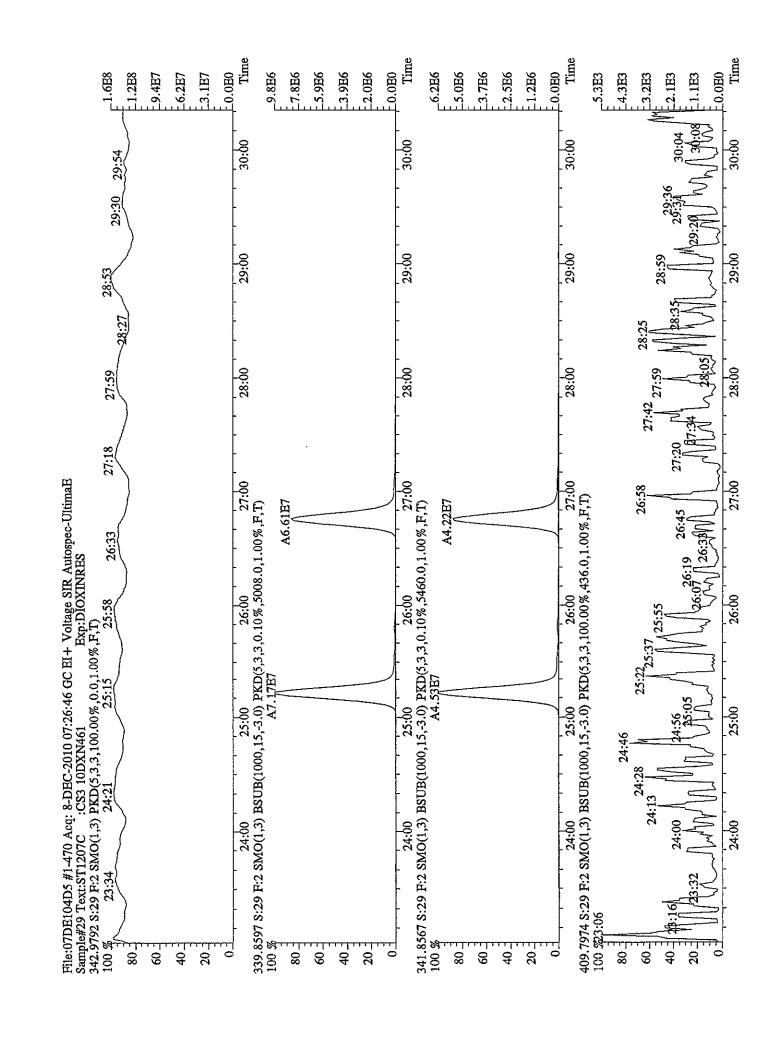


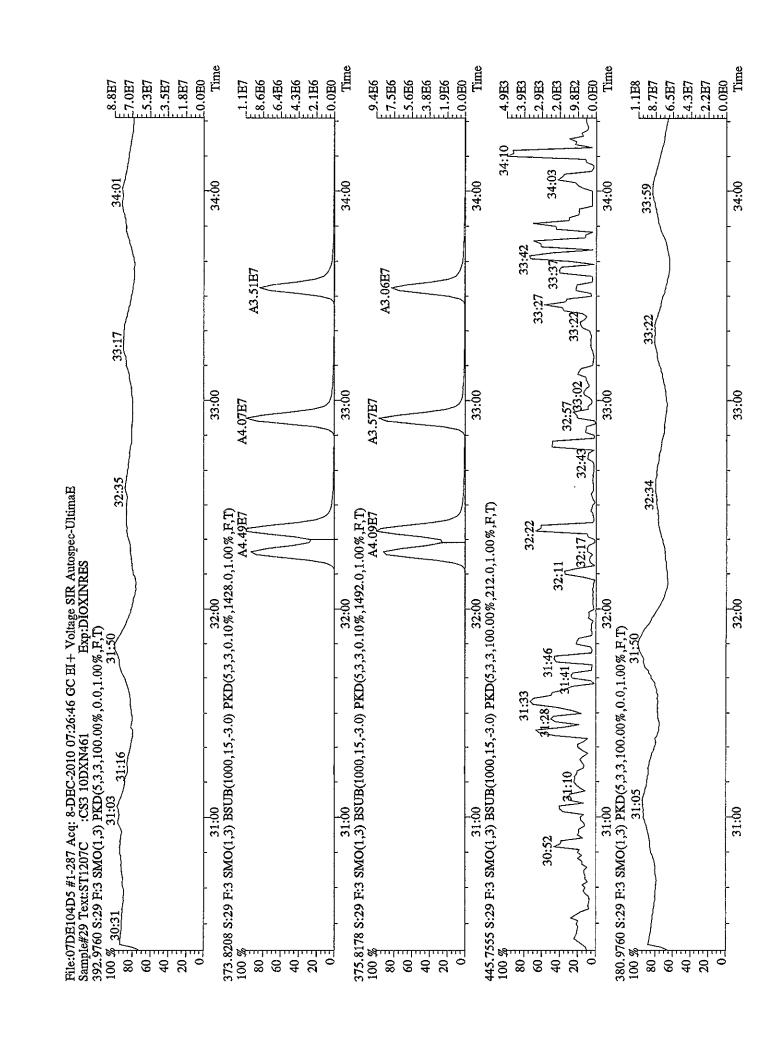


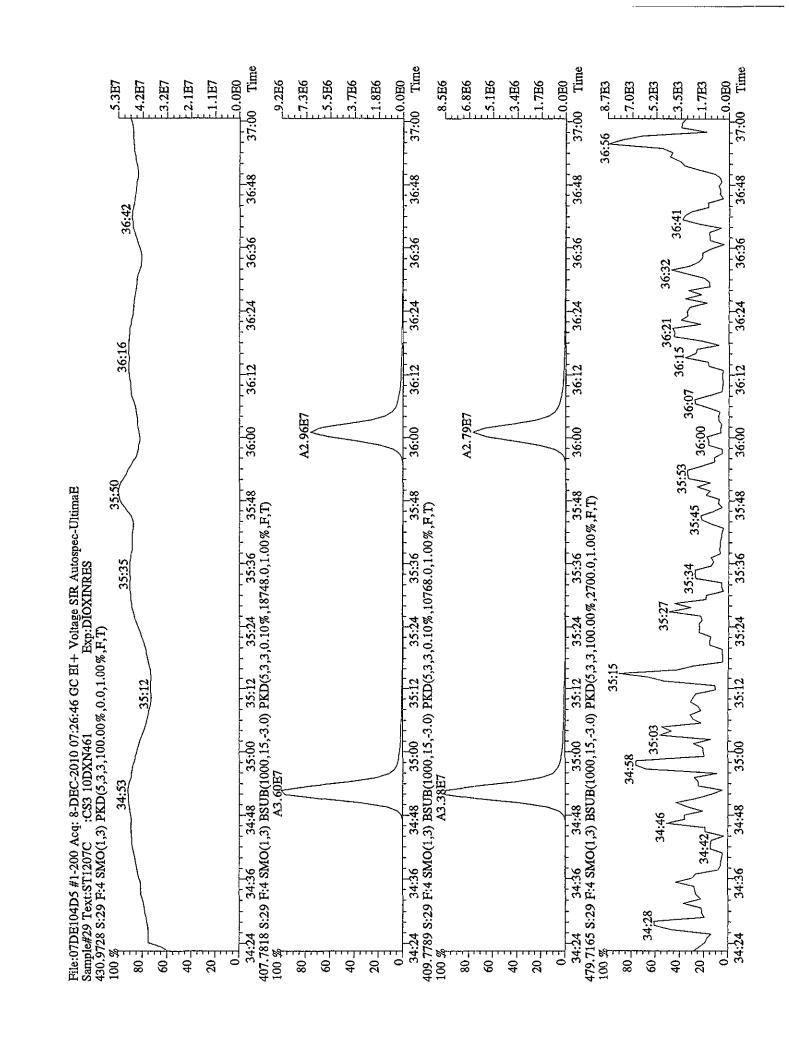


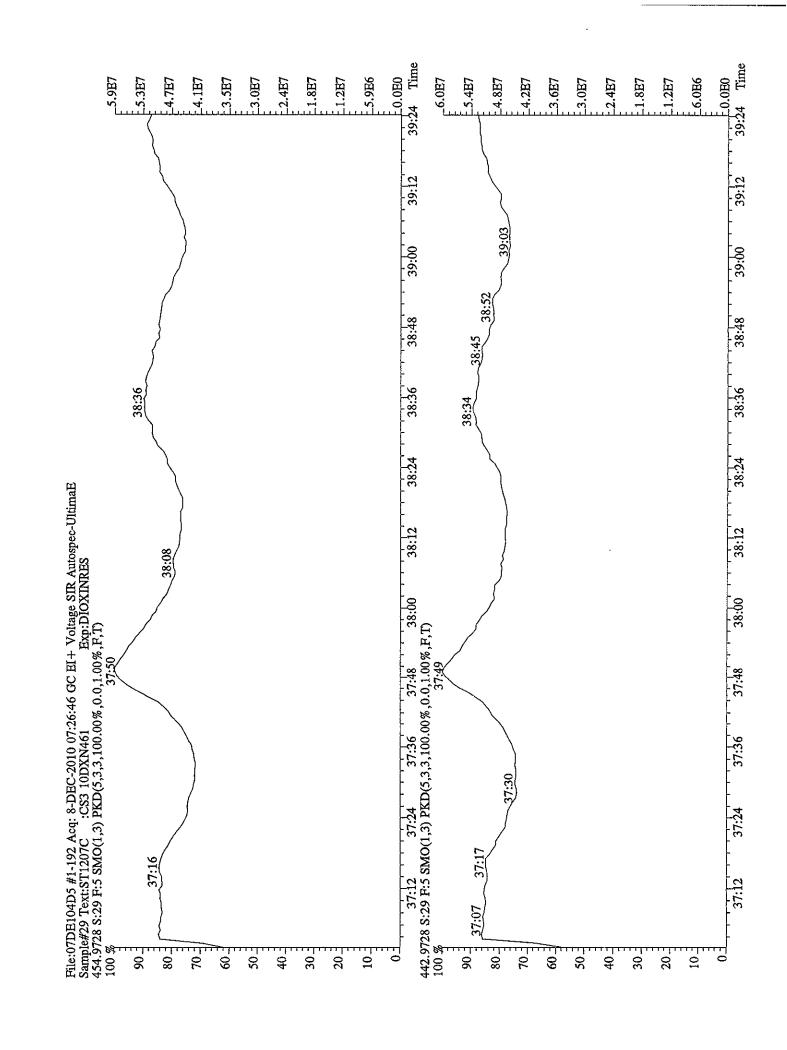












## **Initial Calibration**

Includes (as applicable):
runlog
standard raw data
statistical summary

ms tune data

## Test America - West Sacramento





| ICAL ID 8290, 1613, 0023A, 23,  | T09, Tetras 0721104.05   |
|---|--|
| Method ID 8290,1613,0023A,23,T09,Te-  | trao Date Scanned  |
| Column ID DB5   | Instrument ID 405  |
| STD ID's STO721A-> STO721E  | STD Solution (10.0xN) 334,336,337,339,342  |
| GC Program OCDD   | Multiplier Setting 4-10 KV   |
| Analyzed By Kss   | Date Analyzed 07-21-10   |
| Prepared By kss   | Date Prepared 07-22-10   |
| Reviewed By JRB   | Date Reviewed 7/22/10  |
| MEANING SILENDER (MINISTER)   | A STRUCTURE STRU |
| Curve summary present?  | V V  |
| Hardcopies of chromatograms for CS1-CS5 present?  | <u> </u>   |
| Copy of log-file present?   |  |
| Static resolution check present?  | <u> </u>   |
| Target file RT's correct?   | V V  |
| %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:   |  |
| Method 8290/TO9/M0023A: %RSD ≤20% for natives, ≤30% for labe Method 1613B: %RSD≤ 20% natives, ≤30% labeled compounds; S/N Method 23: %RSD ≤ values specified in Table 5, Method 23; S/N ≥ 20% natives, ≤30% labeled compounds; S/N ≥ 20% natives specified in Table 5, Method 23; S/N ≥ 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% natives specified in Table 5, Method 20% nat | N≥10   |

Run: 1555098D2 Analyte: TO9

Cal: T090721104D5

ST0721A :CS-1 10DXN342 ST0721B :CS-2 10DXN334 ST0721D :CS-5 10DXN339 ST0721E :CS-4 10DXN337

CS-2 10DXN334 ST0721C :CS-3 10DXN336

|                       |       |        |         | 54   | 35   | 36   | 87   | 88   |
|-----------------------|-------|--------|---------|------|------|------|------|------|
| Name                  | Mean  | .B. D. | \$RSD   | RRF1 | RRF2 | RRF3 | RRF4 | RRF5 |
| 13C-1,2,3,4-TCDD      | 1     | ı      | o/r-    | 1    | 1    | t    | ı    | ſ    |
| 13C-2,3,7,8-TCDF      | 1.229 | 0.154  | 12.5 %  | 1.30 | 1.31 | 1.39 | 1.03 | 1,11 |
| 2,3,7,8-TCDF          | 0,995 | 0.037  | 3,68 %  | 1.03 | 96.0 | 0.98 | 0.97 | 1.03 |
| Total TCDF            | 0.995 | 0.037  | 3.68 %  | 1.03 | 96.0 | 0.98 | 0.97 | 1.03 |
| 13C-2,3,7,8-TCDD      | 0.905 | 0.029  | 3.72    | 0.92 | 0.92 | 0.94 | 0.88 | 0.87 |
| 2,3,7,8-TCDD          | 0.983 | 0.032  | 3.24 %  | 0.98 | 0.94 | 0.97 | 1,01 | 1.02 |
| Total TCDD            | 0.983 | 0.032  | 3.24 %  | 86.0 | 0.94 | 0.97 | 1.01 | 1.02 |
| 37C1-2,3,7,8-TCDD     | 1,326 | 0.015  | 1.12 %  | 1.33 | 1,31 | 1.32 | 35   | 1.32 |
| 13C-1,2,3,7,8-PeCDF   | 0.876 | 0.018  | 7,08    | 0.86 | 06.0 | 0.86 | 0.89 | 0.87 |
| 1,2,3,7,8-PeCDF       | 1.077 | 0.042  | 3.92 %  | 1.03 | 1.04 | 1.08 | 1.11 | 1.12 |
| 2,3,4,7,8-PeCDF       | 1,046 | 0.040  | 3.80 %  | 1.00 | 1.02 | 1.08 | 1.04 | 1.09 |
| Total F2 PecDF        | 1.061 | 0.039  | 3.67 %  | 1.01 | 1.03 | 1.08 | 1,08 | 1.10 |
| Total F1 PeCDF        | 1.061 | 0.039  | 3.67 %  | 1.01 | 1.03 | 1.08 | . O. | 1.10 |
| 13C-1,2,3,7,8-PeCDD   | 0,661 | 0.010  | ы<br>Д  | 0.65 | 0.66 | 0.67 | 0,67 | 0.65 |
| 1,2,3,7,8-PeCDD       | 0.925 | 0.038  | 4.09 %  | 0.89 | 0.88 | 0.94 | 0.95 | 0.97 |
| Total PecDD           | 0.925 | 0.038  | 4.09 %  | 0.89 | 0.88 | 0.94 | 0.95 | 0.97 |
| 13C-1,2,3,7,8,9-HxCDD | •     | 4      | ò¢<br>I | ı    | •    | •    | ŧ    | ,    |
| 13C-1,2,3,4,7,8-HxCDF | 1.045 | 0.067  | &<br>4, | 1.03 | 1,15 | 0.98 | 1.00 | 1.07 |
| 1,2,3,4,7,8-HXCDF     | 1.217 | 0.012  | 1.02 %  | 1.21 | 1.20 | 1.22 | 1.22 | 1.23 |
| 1,2,3,6,7,8-HXCDF     | 1.282 | 0.089  | 6.95 %  | 1.19 | 1.22 | 1.41 | 1.33 | 1.26 |
| 2,3,4,6,7,8-HXCDF     | 1.233 | 0.080  | 6.49 %  | 1.19 | 1.15 | 1.35 | 1.27 | 1.21 |
| 1,2,3,7,8,9-HXCDF     | 1.098 | 960.0  | 8.73 %  | 1.08 | 66.0 | 1.25 | 1.10 | 1.06 |
| Total HxCDF           | 1,208 | 0.066  | 5.43 %  | 1.17 | 1.14 | 1.31 | 1.23 | 1.19 |
| 13C-1,2,3,6,7,8-HXCDD | 0.831 | 0,055  | 6.68    | 0.84 | 0.83 | 0.92 | 0.77 | 0.79 |
|                       | 1     | •      | 6       | •    | 0    | 0    | ì    | 1    |

| 1.23              | 1.24              | 1.21        | 0.86                    | 1.38                | 1.13                | 1.26        | 0.79                    | 1.10                | 1.10        | 0.59     | 1.41   | 1.19   |
|-------------------|-------------------|-------------|-------------------------|---------------------|---------------------|-------------|-------------------------|---------------------|-------------|----------|--------|--------|
| 1.12              | 1.25              | <br>8       | 0.87                    | 1.35                | 1.13                | 1.24        | 0.76                    | 1.09                | 1.09        | 09.0     | 1.39   | 1.17   |
| 1.10              | 1.12              | 1.06        | 0.92                    | 1.35                | 1.11                | 1.23        | 0.83                    | 1.07                | 1.07        | 0.63     | 1,35   | 1.16   |
| 1.23              | 1.16              | 1.12        | 0.91                    | 1.34                | 1.09                | 1.21        | 0.85                    | 1.03                | 1.03        | 0.63     | 1.35   | 1.17   |
| 1.14              | 1.15              | 1.06        | 0.99                    | 1.31                | 1.01                | 1.16        | 0.89                    | 1.07                | 1.07        | 0,66     | 1.36   | 1.31   |
| 5,18 %            | 4.86 %            | 5.93 %      | 5,65 %                  | 7.99 %              | 4.49 %              | 3.05 %      | 5,98                    | 2.61 %              | 2.61        | 4.60 %   | 1,98 % | 5.48 % |
| 0.060             | 0.057             | 0.067       | 0.051                   | 0.027               | 0.049               | 0.037       | 0.049                   | 0.028               | 0.028       | 0.029    | 0.027  | 0.066  |
| 1,163             | 1.182             | 1.127       | 0.910                   | 1.346               | 1.093               | 1.220       | 0.827                   | 1.072               | 1.072       | 0.620    | 1.370  | 1.199  |
| 1,2,3,6,7,8-HXCDD | 1,2,3,7,8,9-HxCDD | Total HxCDD | 13C-1,2,3,4,6,7,8-HpCDF | 1,2,3,4,6,7,8-HpCDF | 1,2,3,4,7,8,9-HpCDF | Total MpCDF | 13C-1,2,3,4,6,7,8-HpCDD | 1,2,3,4,6,7,8-HpCDD | Total HpCDD | 13C-OCDD | OCDE   | ocdd   |

Run #1 Filename 21JL10A4D5 S: 4 I: 1

Acquired: 21-JUL-10 16:48:00 Processed: 22-JUL-10 12:01:10 Run: 15SE098D2 Analyte: TO9 Cal: TO90721104D5

Comments:

Sample text: ST0721A :CS-1 10DXN342

| Name                     | Resp      | RA     | RT        | RRF    |        | Mod?     |
|--------------------------|-----------|--------|-----------|--------|--------|----------|
| 13C-1,2,3,4-TCDD         | 311991000 | 0.79 y | 20:01     | -      | 100.00 | n        |
| 13C-2,3,7,8-TCDF         | 406871000 | 0.79 v | 19:24     | 1,3041 | 100.00 | n        |
| 2,3,7,8-TCDF             | 2100786   | -      |           | 1.0327 | 0.50   | n        |
| Total TCDF               | ~         | - n    |           | 1,0327 | 0.50   | n        |
| 13C-2,3,7,8-TCDD         | 286692000 | 0.78 y | 20:13     | 0.9189 | 100.00 | n        |
| 2,3,7,8-TCDD             | 1410323   | -      |           | 0.9839 | 0.50   | n        |
| Total TCDD               |           | - n    |           | 0.9839 | 0.50   | n        |
| 37C1-2,3,7,8-TCDD        | 1900202   | 1.00 y | 20:14     | 1.3256 | 0.50   | n        |
| 13C-1,2,3,7,8-PeCDF      | 267161000 | 1.54 y | 25:17     | 0.8563 | 100.00 | n        |
| 1,2,3,7,8-PeCDF          | 6866350   | 1.58 y | 25:19     | 1.0280 | 2.50   | 'n       |
| 2,3,4,7,8-PeCDF          | 6654750   | 1.57 y | 26:51     | 0.9964 | 2.50   | n        |
| Total F2 PeCDF           | -         | - n    | =         | 1.0122 | 5.00   | n        |
| Total F1 PeCDF           | -         | - n    | -         | 1.0122 | 5.00   | n        |
| 13C-1,2,3,7,8-PeCDD      | 202489300 | 1.56 y | 27:41     | 0.6490 | 100.00 | n        |
| 1,2,3,7,8-PeCDD          | 4490250   | _      |           | 0.8870 | 2.50   | n        |
| Total PeCDD              | _         | - n    |           | 0.8870 | 2.50   | n        |
| 13C-1,2,3,7,8,9-HxCDD    | 216693700 | 1.31 у | 33:22     | -      | 100.00 | n        |
| 13C-1,2,3,4,7,8-HxCDF    | 223118900 | 0.51 y | 32:16     | 1.0297 | 100.00 | n        |
| 1,2,3,4,7,8-HxCDF        | 6768610   | _      |           | 1.2135 | 2.50   | n        |
| 1,2,3,6,7,8-HxCDF        | 6624500   | _      |           | 1.1876 | 2.50   | n        |
| 2,3,4,6,7,8-HxCDF        | 6618550   | 1.19 y | 32:54     | 1.1866 | 2.50   | n        |
| 1,2,3,7,8,9-HxCDF        | 6028420   | 1.13 y | 33:32     | 1.0808 | 2.50   | n        |
| Total HxCDF              | -         | - n    | _         | 1.1671 | 10.00  | n        |
| 13C-1,2,3,6,7,8-HxCDD    | 182168900 | 1.32 y | 33:06     | 0.8407 | 100.00 | Y 🗸      |
| 1,2,3,4,7,8-HxCDD        | 4087150   |        |           | 0.8974 | 2.50   | n        |
| 1,2,3,6,7,8-HxCDD        | 51.84140  | 1,31 y | 33:07     | 1.1383 | 2.50   | n        |
| 1,2,3,7,8,9-HxCDD        | 5222820   | 1,27 y | 33:22     | 1.1468 | 2.50   | n        |
| Total HxCDD              | -         | - n    |           | 1.0609 | . 7.50 | n        |
| 13C-1,2,3,4,6,7,8-HpCDF  | 214578400 | 0.43 v | 34:53     | 0.9902 | 100.00 | n        |
| 1,2,3,4,6,7,8-HpCDF      | 7009400   |        |           | 1.3066 | 2.50   | n        |
| 1,2,3,4,7,8,9-HpCDF      | 5421290   |        |           | 1.0106 | 2.50   | n        |
| Total HpCDF              | -         | - n    |           | 1.1586 | 5.00   | n        |
| 120 1 2 2 4 6 7 0 15-000 | 100017460 | 1 02   | 2 E . 4 D | 0 0019 | 100 00 | <b>~</b> |
| 13C-1,2,3,4,6,7,8-HpCDD  | 193217400 |        |           | 0.8917 | 100.00 | n ·      |
| 1,2,3,4,6,7,8-HpCDD      | 5159640   | _      |           | 1.0682 | 2.50   | n        |
| Total HpCDD              | -         | - n    | _         | 1.0682 | 2.50   | n        |
| 13C-OCDD                 | 284075000 | 0.88 y | 38:16     | 0.6555 | 200.00 | n        |
| OCDF                     | 9640820   | 0.93 y | 38:23     | 1.3575 | 5.00   | n        |

Run #1 Filename 21JL10A4D5 S: 4 I: 1

Acquired: 21-JUL-10 16:48:00 Processed: 22-JUL-10 12:01:10

Run: 15SE098D2 Analyte: TO9 Cal: T090721104D5

Comments:

Sample text: ST0721A :CS-1 10DXN342

| Sample text: S10/21A :t | .5-1 10DAN342 |         |       |        |         |      |
|-------------------------|---------------|---------|-------|--------|---------|------|
| ,<br>Name               | Resp          | RA      | RT    | RRF    |         | Mod? |
| 13C-1,2,3,4-TCDD        | 311991000     | 0.79 y  | 20:01 | -      | 100.00  | n    |
| 13C-2,3,7,8-TCDF        | 406871000     | 0.79 y  | 19:24 | 1.3041 | 100.00  | Ω    |
| 2,3,7,8-TCDF            | 2100786       | 0.70 y  | 19:25 | 1.0327 | 0.50    | n    |
| Total TCDF              | ~             | - n     | -     | 1.0327 | 0.50    | n    |
| 13C-2,3,7,8-TCDD        | 286692000     | 0.78 y  | 20:13 | 0.9189 | 100.00  | n    |
| 2,3,7,8-TCDD            | 1410323       | 0.86 y  | 20:14 | 0.9839 | 0.50    | n    |
| Total TCDD              | ~             | - n     | _     | 0.9839 | 0.50    | n    |
| 37C1-2,3,7,8-TCDD       | 1900202       | 1.00 y  | 20:14 | 1.3256 | 0.50    | n    |
| 13C-1,2,3,7,8-PeCDF     | 267161000     | 1.54 y  | 25:17 | 0.8563 | 100.00  | n    |
| 1,2,3,7,8-PeCDF         | 6866350       | _       |       | 1.0280 | 2.50    | n    |
| 2,3,4,7,8-PeCDF         | 6654750       | 1.57 y  | 26:51 | 0.9964 | 2.50    | n    |
| Total F2 PeCDF          | _             | - n     | -     | 1.0122 | 5.00    | n    |
| Total F1 PeCDF          | -             | - n     | -     | 1.0122 | 5.00    | n    |
| 13C-1,2,3,7,8-PeCDD     | 202489300     | -       |       | 0.6490 | 100.00  | n    |
| 1,2,3,7,8-PeCDD         | 4490250       | 1.47 y  | 27:43 | 0.8870 | 2.50    | n    |
| Total PeCDD             | -             | - n     | -     | 0.8870 | 2.50    | n    |
| 13C-1,2,3,7,8,9-HxCDD   | 216693700     | 1.31 y  | 33:22 | -      | 100.00  | n    |
| 13C-1,2,3,4,7,8-HxCDF   | 223118900     | _       |       | 1.0297 | 100.00  | n    |
| 1,2,3,4,7,8-HxCDF       | 6768610       | _       |       | 1.2135 | 2.50    | n    |
| 1,2,3,6,7,8~HxCDF       | 6624500       | _       |       | 1.1876 | 2.50    | n    |
| 2,3,4,6,7,8-HxCDF       | 6618550       | _       |       | 1.1866 | 2.50    | n    |
| 1,2,3,7,8,9-HxCDF       | 6028420       | 1.13 y  | 33:32 | 1.0808 | 2.50    | n    |
| Total HxCDF             | -             | - n     | -     | 1.1671 | 10.00   | n    |
| 13C-1,2,3,6,7,8-HxCDD   | 183007300     |         |       | 0.8445 | 100.00  | n    |
| 1,2,3,4,7,8-HxCDD       | 4087150       | _       |       | 0.8933 | 2.50    | n    |
| 1,2,3,6,7,8-HxCDD       | 5184140       | -       |       | 1.1331 | 2.50    | n    |
| 1,2,3,7,8,9-HxCDD       | 5222820       | _       |       | 1.1416 | 2.50    | n    |
| Total HxCDD             | -             | - n     | -     | 1.0560 | 7.50    | n    |
| 13C-1,2,3,4,6,7,8-HpCDF | 214578400     | _       | 34:53 | 0.9902 | 100.00  | n    |
| 1,2,3,4,6,7,8-HpCDF     | 7009400       | _       | 34:54 | 1.3066 | 2.50    | n    |
| 1,2,3,4,7,8,9-HpCDF     | 5421290       | 1.00 y  | 36:03 | 1.0106 | 2.50    | n    |
| Total HpCDF             | -             | - n     | -     | 1.1586 | 5.00    | n    |
| 13C-1,2,3,4,6,7,8-HpCDD | 193217400     | _       | 35:42 | 0.8917 | 100.00  | n    |
| 1,2,3,4,6,7,8-HpCDD     | 5159640       | 1.03 y  | 35:43 | 10682  | 2.50    | n    |
| Total HpCDD             | -             | - n     | -     | 1.0682 | 2.50    | n    |
| 13C-OCDD                | 284075000     | 0.88 v  | 38:16 | 0.6555 | 200.00  | n    |
| OCDF                    | 9640820       | <b></b> |       | 1.3575 | 5.00    | n    |
|                         |               | - 4     |       |        | - · · · |      |

Run #2 Filename 21JL10A4D5 S: 5 I: 1

Acquired: 21-JUL-10 17:33:53 Processed: 22-JUL-10 12:01:11

Run: 15SE098D2 Analyte: TO9 Cal: TO90721104D5

Comments:

Sample text: ST0721B :CS-2 10DXN334

| Name                    | Resp      | RA     |          | RT      | RRF    |        | Mod?   |
|-------------------------|-----------|--------|----------|---------|--------|--------|--------|
| 13C-1,2,3,4-TCDD        | 346133000 | 0.79   | У        | 20:01   | -      | 100.00 | n      |
| 13C-2,3,7,8-TCDF        | 454963000 | 0.79   | v        | 19:25   | 1.3144 | 100.00 | n      |
| 2,3,7,8-TCDF            | 8692490   |        | -        |         | 0.9553 | 2.00   | n      |
| Total TCDF              | 0050150   | -      | -        |         | 0.9553 | 2.00   | n      |
|                         |           |        |          |         | 0.3000 | 2.00   | **     |
| 13C-2,3,7,8-TCDD        | 317456000 | 0.78   | У        | 20:14   | 0.9172 | 100.00 | n      |
| 2,3,7,8-TCDD            | 5958260   | 0.78   | У        | 20:15   | 0.9384 | 2.00   | n      |
| Total TCDD              | -         | -      | n        | -       | 0.9384 | 2.00   | n .    |
| 37C1-2,3,7,8-TCDD       | 8349040   | 1.00   | Y        | 20:15   | 1.3150 | 2.00   | n      |
| 13C-1,2,3,7,8-PeCDF     | 311858000 | 1.53   | У        | 25:17   | 0.9010 | 100.00 | n      |
| 1,2,3,7,8-PeCDF         | 32375300  | 1.57   | y        | 25:19   | 1.0381 | 10.00  | n      |
| 2,3,4,7,8-PeCDF         | 31788800  | 1.54   | У        | 26:52   | 1.0193 | 10.00  | n      |
| Total F2 PeCDF          | -         | -      | n        |         | 1.0287 | 20.00  | n      |
| Total F1 PeCDF          | -         | -      | n        | -       | 1.0287 | 20.00  | n      |
| 13C-1,2,3,7,8-PeÇDD     | 228833100 | 1 55   | v        | 27 - 41 | 0.6611 | 100.00 | n      |
| 1,2,3,7,8-PeCDD         | 20211030  |        |          |         | 0.8832 | 10.00  | n      |
| Total PeCDD             |           |        | -        |         | 0.8832 | 10.00  | n      |
|                         |           |        |          |         |        |        |        |
| 13C-1,2,3,7,8,9-HxCDD   | 250231000 | 1.31   | У        | 33:22   | -      | 100.00 | n      |
| 13C-1,2,3,4,7,8-HxCDF   | 286839800 | 0.51   | У        | 32:16   | 1.1463 | 100.00 | n      |
| 1,2,3,4,7,8-HxCDF       | 34391700  | 1.17   | У        | 32:17   | 1.1990 | 10.00  | n      |
| 1,2,3,6,7,8-HxCDF       | 34994300  | 1.19   | <u>-</u> | 32:24   | 1.2200 | 10.00  | n      |
| 2,3,4,6,7,8-HxCDF       | 32979800  | 1.17   | y        | 32:55   | 1.1498 | 10.00  | n      |
| 1,2,3,7,8,9-HxCDF       | 28460200  | 1.20   | У        | 33:33   | 0.9922 | 10.00  | n      |
| Total HxCDF             | _         | -      | n        | -       | 1.1402 | 40.00  | n      |
| 13C-1,2,3,6,7,8-HxCDD   | 207728500 | 1.31   | v        | 33:06   | 0.8301 | 100.00 | n      |
| 1,2,3,4,7,8-HxCDD       | 20528920  |        |          | 33:03   | 0.9883 | 10.00  | n      |
| 1,2,3,6,7,8-HxCDD       | 25476800  |        | _        | 33:07   | 1.2264 | 10.00  | n      |
| 1,2,3,7,8,9-HxCDD       | 24026200  | 1.28   | _        |         | 1.1566 | 10.00  | n      |
| Total HxCDD             | -         | -      | -        | -       | 1.1238 | 30.00  | n      |
| 13C-1,2,3,4,6,7,8-HpCDF | 227576800 | Λ 42   | 4 P      | 34:53   | 0.9095 | 100.00 | ~      |
| 1,2,3,4,6,7,8-HpCDF     | 30499500  |        |          | 34:54   | 1.3402 | 10.00  | n      |
| 1,2,3,4,7,8,9-HpCDF     | 24758800  |        | _        | 36:03   | 1.0879 | 10.00  | n      |
| Total HpCDF             | 24/30000  | T. U.L | -        | 50:05   | 1.2141 | 20.00  | n<br>D |
| TOTAL APEDI             | _         |        | 11       |         | T-21-4 | 20.00  | n      |
| 13C-1,2,3,4,6,7,8-HpCDD | 212760000 |        |          | 35:42   | 0.8503 | 100.00 | n      |
| 1,2,3,4,6,7,8-HpCDD     | 21862400  | 1.02   | У        | 35:43   | 1.0276 | 10.00  | n      |
| Total HpCDD             | -         | -      | n        | _       | 1.0276 | 10.00  | n      |
| 13C-OCDD                | 316775000 | 0.88   | v        | 38:16   | 0.6330 | 200.00 | r.     |
| OCDF                    | 42624800  |        | _        | 38:23   | 1.3456 | 20.00  | n      |
| OCDD                    | 37017600  |        | -        | 38:17   | 1.1686 | 20.00  | n      |
| 0000                    | 5,02,000  | 2.02   | ı        | 20.11   | 1      | m0,00  | 4.4    |

Run #3 Filename 21JL10A4D5 S: 6 I: 1

Acquired: 21-JUL-10 18:18:56 Processed: 22-JUL-10 12:01:11

Run: 15SE098D2 Analyte: TO9 Cal: TO90721104D5

Comments:

Sample text: ST0721C :CS-3 10DXN336

| Name                    | Resp      | RA      | RT    | RRF    |        | Mod?   |
|-------------------------|-----------|---------|-------|--------|--------|--------|
| 13C-1,2,3,4-TCDD        | 297616000 | 0.80 y  | 20:00 | -      | 100.00 | n      |
| 13C-2,3,7,8-TCDF        | 414416000 | 0.80 V  | 19:23 | 1.3925 | 100.00 | n      |
| 2,3,7,8-TCDF            | 40815800  | _       |       | 0.9849 | 10.00  | n      |
| Total TCDF              | -         | - n     |       | 0.9849 | 10.00  | n      |
| 13C-2,3,7,8-TCDD        | 279542000 | 0.79 y  | 20:13 | 0.9393 | 100.00 | n      |
| 2,3,7,8-TCDD            | 27062400  | 0.80 y  | 20:15 | 0.9681 | 10.00  | n      |
| Total TCDD              |           | - n     |       | 0.9681 | 10.00  | n      |
| 37Cl-2,3,7,8-TCDD       | 36762200  | 1.00 y  | 20:14 | 1.3151 | 10.00  | n      |
| 13C-1,2,3,7,8-PeCDF     | 256521000 | 1.55 y  | 25:18 | 0.8619 | 100.00 | n      |
| 1,2,3,7,8-PeCDF         | 138997400 | 1.55 y  | 25:20 | 1.0837 | 50.00  | n      |
| 2,3,4,7,8-PeCDF         | 138743000 | 1.55 y  | 26:53 | 1.0817 | 50.00  | n      |
| Total F2 PeCDF          | _         | - n     | -     | 1.0827 | 100.00 | n      |
| Total F1 PeCDF          | -         | - n     | -     | 1.0827 | 100.00 | n      |
| 13C-1,2,3,7,8-PeCDD     | 199400100 | 1.58 y  | 27:43 | 0.6700 | 100.00 | n      |
| 1,2,3,7,8-PeCDD         | 93821800  | 1.53 y  | 27:44 | 0.9410 | 50.00  | n      |
| Total PeCDD             | -         | - n     | -     | 0.9410 | 50.00  | n      |
| 13C-1,2,3,7,8,9-HxCDD   | 211830200 | 1.30 y  | 33:22 | -      | 100.00 | n      |
| 13C-1,2,3,4,7,8~HxCDF   | 206662600 | 0.51 y  | 32:17 | 0.9756 | 100.00 | n      |
| 1,2,3,4,7,8-HxCDF       | 125916200 | _       |       | 1.2186 | 50.00  | n      |
| 1,2,3,6,7,8-HxCDF       | 145591100 | -       |       | 1.4090 | 50.00  | n      |
| 2,3,4,6,7,8~HxCDF       | 139989400 | 1.18 y  | 32:55 | 1,3548 | 50.00  | n      |
| 1,2,3,7,8,9~HxCDF       | 129462400 | 1.18 y  | 33:33 | 1.2529 | 50.00  | n      |
| Total HxCDF             |           | - n     | -     | 1.3088 | 200.00 | n      |
| 13C-1,2,3,6,7,8~HxCDD   | 194269900 | 1.31 y  | 33:07 | 0.9171 | 100.00 | n      |
| 1,2,3,4,7,8~HxCDD       | 94117900  | 1.23 y  | 33:03 | 0.9689 | 50.00  | n      |
| 1,2,3,6,7,8-HxCDD       | 106981800 | 1.27 y  | 33:08 | 1.1014 | 50.00  | n      |
| 1,2,3,7,8,9~HxCDD       | 108772200 | 1.25 y  | 33:23 | 1.1198 | 50.00  | n      |
| Total HxCDD             | -         | - n     | -     | 1.0634 | 150.00 | n      |
| 13C-1,2,3,4,6,7,8-HpCDF | 194898500 | 0.43 y  | 34:53 | 0.9201 | 100.00 | n      |
| 1,2,3,4,6,7,8-HpCDF     | 131367000 | 1.01 y  | 34:54 | 1.3481 | 50.00  | n      |
| 1,2,3,4,7,8,9-HpCDF     | 108439900 |         |       | 1.1128 | 50.00  | n      |
| Total HpCDF             | -         | - n     | -     | 1.2304 | 100.00 | n      |
| 13C-1,2,3,4,6,7,8-HpCDD | 176478000 | 1.04 v  | 35:43 | 0.8331 | 100.00 | n      |
| 1,2,3,4,6,7,8-HpCDD     | 94723500  |         |       | 1.0735 | 50.00  | n      |
| Total HpCDD             | -         | - n     |       | 1.0735 | 50.00  | n      |
| 13C-OCDD                | 266609000 | n 89 ·· | 38:16 | 0.6293 | 200.00 | n      |
| OCDF                    | 179957800 |         | 38:16 | 1.3500 | 100.00 | n<br>n |
| OCDP                    | 154054800 | -       |       | 1.1557 | 100.00 |        |
| OCDD                    | 124024000 | 0.90 Y  | 20:10 | 1.1337 | 100.00 | n      |

Run #5 Filename 21JL10A4D5 S: 8 I: 1

Acquired: 21-JUL-10 19:49:00 Processed: 22-JUL-10 12:01:13

Run: 15SE098D2 Analyte: TO9 Cal: TO90721104D5

Comments:

Sample text: ST0721E :CS-4 10DXN337

| bumpie coxe. Givibio .e  | D 1 102411327 |         |       |           |                  |               |
|--------------------------|---------------|---------|-------|-----------|------------------|---------------|
| Name                     | Resp          | R.A.    | ŔŦ    | RRF       |                  | Mod?          |
|                          |               |         |       |           |                  |               |
| 13C-1,2,3,4-TCDD         | 363554000     | 0.80 y  | 20:01 | -         | 100.00           | n             |
|                          |               |         |       |           |                  |               |
| 13C-2,3,7,8-TCDF         | 402416000     | -       | 19:24 | 1.1069    | 100.00           | n             |
| 2,3,7,8-TCDF             | 166293900     | 0.77 y  | 19:25 | 1.0331    | 40.00            | n             |
| Total TCDF               |               | - n     | -     | 1.0331    | 40.00            | n             |
|                          |               |         |       |           |                  |               |
| 13C-2,3,7,8-TCDD         | 314971000     | _       | 20:13 | 0.8664    | 100.00           | n             |
| 2,3,7,8~TCDD             | 127934900     | -       | 20:15 | 1.0154    | 40.00            | n             |
| Total TCDD               | -             | - n     | -     | 1.0154    | 40.00            | n             |
| 7701 <b>3</b> 7 7 9 7700 | 166729600     | 1 00 ** | 20:15 | 1.3234    | 40.00            | n             |
| 37C1-2,3,7,8-TCDD        | 100/23000     | 1.00 y  | 20:15 | 1.3234    | 40.00            | 11            |
| 13C-1,2,3,7,8-PeCDF      | 317818000     | 1.53 v  | 25:17 | 0.8742    | 100.00           | n             |
| 1,2,3,7,8-PeCDF          | 712080000     | _       |       | 1.1203    | 200.00           | n             |
| 2,3,4,7,8-PeCDF          | 692103000     | _       | 26:51 | 1.0888    | 200.00           | n             |
| Total F2 PeCDF           |               | - n     |       | 1.1045    | 400.00           | n             |
| Total F1 PeCDF           |               | - n     | _     | _         | 400.00           | n             |
| 10002 12 1001            |               |         |       | _,_,      |                  | <del></del> - |
| 13C-1,2,3,7,8-PeCDD      | 237598000     | 1.55 y  | 27:40 | 0.6535    | 100.00           | n             |
| 1,2,3,7,8-PeCDD          | 458679000     |         | 27:43 | 0.9652    | 200.00           | n             |
| Total PeCDD              | · -           | - n     | _     | 0.9652    | 200.00           | n             |
|                          |               |         |       |           |                  |               |
| 13C-1,2,3,7,8,9-HxCDD    | 248923000     | 1.30 y  | 33:22 |           | 100.00           | n             |
|                          |               |         |       |           |                  |               |
| 13C-1,2,3,4,7,8-HxCDF    | 267009400     | _       | 32:16 | 1.0727    | 100.00           | n             |
| 1,2,3,4,7,8-HxCDF        | 658410000     | -       | 32:17 | 1.2329    | 200.00           | n             |
| 1,2,3,6,7,8-HxCDF        | 673142000     |         | 32:24 | 1.2605    | 200.00           | n             |
| 2,3,4,6,7,8-HxCDF        | 645815000     |         |       | 1.2093    | 200.00           | n             |
| 1,2,3,7,8,9-HxCDF        | 567208000     | 1.17 y  | 33:33 | 1.0621    | 200.00           | n             |
| Total HxCDF              | -             | - n     | -     | 1.1912    | 800.00           | n             |
|                          |               |         | 22.00 | A 5000    | 7.00.00          |               |
| 13C-1,2,3,6,7,8-HxCDD    | 197349200     | -       |       | 0.7928    | 100.00           | n             |
| 1,2,3,4,7,8-HxCDD        | 458143000     | -       | 33:03 | 1.1607    | 200.00           | УУ            |
| 1,2,3,6,7,8-HxCDD        | 484675000     |         | 33:07 | 1.2280    | 200.00           | Y 🗸           |
| 1,2,3,7,8,9-HxCDD        | 488147000     | _       | 33:23 | 1.2368    | 200.00           | n             |
| Total HxCDD              | -             | - n     | -     | 1.2085    | 600.00           | n             |
| 120 1 2 2 4 6 7 0 11-022 | 214761200     | 0 42    | 24.52 | 0.8628    | 100 00           | <u>~</u>      |
| 13C-1,2,3,4,6,7,8-HpCDF  | 214761200     |         |       |           | 100.00           | n             |
| 1,2,3,4,6,7,8-HpCDF      | 593215000     |         | 34:54 | 1.3811    | 200.00<br>200.00 | n             |
| 1,2,3,4,7,8,9-HpCDF      | 485366000     |         |       | 1.1300    |                  | n             |
| Total HpCDF              | **            | - n     | -     | 1.2556    | 400.00           | n             |
| 13C-1,2,3,4,6,7,8-HpCDD  | 197451500     | 1 05 12 | 35:42 | 0.7932    | 100.00           | n             |
| 1,2,3,4,6,7,8-HpCDD      | 435214000     | -       | 35:43 | 1.1021    | 200.00           | n             |
| Total HpCDD              | - OOOFTGOOF   | - n     |       | 1.1021    | 200.00           | n             |
| total inperb             | _             | 11      |       | 2.1021    | 200.00           | **            |
| 13C-OCDD                 | 291770000     | 0.90 v  | 38:16 | 0.5861    | 200.00           | n             |
| OCDF                     | 820312000     | -       |       | 1.4058    | 400.00           | n             |
|                          |               | 1       |       | - · · · · |                  |               |

Run #5 Filename 21JL10A4D5 S: 8

Acquired: 21-JUL-10 19:49:00 Processed: 22-JUL-10 12:01:13

I: 1

Run: 15SE098D2 Analyte: TO9 Cal: T090721104D5

Comments:

Sample text: ST0721E :CS-4 10DXN337

| bumpre cexet broverb .c | 5 <del>1</del> 100111357 |         |       |        |        |              |
|-------------------------|--------------------------|---------|-------|--------|--------|--------------|
| Name                    | Resp                     | RA      | RT    | RRF    |        | Mod?         |
| 13C-1,2,3,4-TCDD        | 363554000                | 0.80 y  | 20:01 | -      | 100.00 | n            |
| 13C-2,3,7,8-TCDF        | 402416000                | 0.79 y  | 19:24 | 1.1069 | 100.00 | n            |
| 2,3,7,8-TCDF            | 166293900                | 0.77 y  | 19:25 | 1.0331 | 40.00  | n            |
| Total TCDF              | -                        | - n     |       | 1.0331 | 40.00  | n            |
| 13C-2,3,7,8-TCDD        | 314971000                | 0.80 y  | 20:13 | 0.8664 | 100.00 | n            |
| 2,3,7,8-TCDD            | 127934900                | 0.78 y  | 20:15 | 1.0154 | 40.00  | n            |
| Total TCDD              | -                        | - n     | -     | 1.0154 | 40.00  | n            |
| 37C1-2,3,7,8-TCDD       | 166729600                | 1.00 y  | 20:15 | 1.3234 | 40.00  | n            |
| 13C-1,2,3,7,8-PeCDF     | 317818000                |         |       | 0.8742 | 100.00 | n            |
| 1,2,3,7,8-PeCDF         | 712080000                | -       |       | 1.1203 | 200.00 | n            |
| 2,3,4,7,8-PeCDF         | 692103000                | 1.53 y  | 26:51 | 1.0888 | 200.00 | n            |
| Total F2 PeCDF          | -                        | - n     | _     | 1.1045 | 400.00 | n            |
| Total F1 PeCDF          | ~                        | - n     | -     | 1.1045 | 400.00 | n            |
| 13C-1,2,3,7,8-PeCDD     | 237598000                | 1.55 y  | 27:40 | 0.6535 | 100.00 | n            |
| 1,2,3,7,8-PeCDD         | 458679000                | 1.50 y  | 27:43 | 0.9652 | 200.00 | n            |
| Total PeCDD             | <u>.</u> .               | - n     | -     | 0.9652 | 200.00 | n            |
| 13C-1,2,3,7,8,9-HxCDD   | 248923000                | 1.30 y  | 33:22 | _      | 100.00 | n            |
| 13C-1,2,3,4,7,8-HxCDF   | 267009400                | 0.51 y  | 32:16 | 1.0727 | 100.00 | n            |
| 1,2,3,4,7,8-HxCDF       | 658410000                | 1.16 y  | 32:17 | 1.2329 | 200.00 | n            |
| 1,2,3,6,7,8-HxCDF       | 673142000                | 1.18 y  | 32:24 | 1.2605 | 200.00 | n            |
| 2,3,4,6,7,8-HxCDF       | 645815000                | 1.17 y  | 32:54 | 1.2093 | 200.00 | n            |
| 1,2,3,7,8,9-HxCDF       | 567208000                | 1.17 y  | 33:33 | 1.0621 | 200.00 | $\mathbf{n}$ |
| Total HxCDF             | ~                        | - n     | -     | 1.1912 | 800.00 | n            |
| 13C-1,2,3,6,7,8-HxCDD   | 197349200                | 1.31 y  | 33:06 | 0.7928 | 100.00 | n            |
| 1,2,3,4,7,8-HxCDD       | 422231040                | 1.45(n) | 33:03 | 1.0698 | 200.00 | n            |
| 1,2,3,6,7,8-HxCDD       | 481044000                | 1.12 y  | 33:07 | 1.2188 | 200.00 | n            |
| 1,2,3,7,8,9-HxCDD       | 488146000                | 1.26 y  | 33:23 | 1.2368 | 200.00 | n            |
| Total HxCDD             | ~                        | - n     | _     | 1.1751 | 600.00 | n            |
| 13C-1,2,3,4,6,7,8-HpCDF | 214761200                | 0.43 v  | 34:53 | 0.8628 | 100.00 | n            |
| 1,2,3,4,6,7,8-HpCDF     | 593215000                |         | 34;54 | 1.3811 | 200.00 | n            |
| 1,2,3,4,7,8,9-HpCDF     | 485366000                |         | 36:03 | 1.1300 | 200.00 | n            |
| Total HpCDF             | •                        | - n     | -     | 1.2556 | 400.00 | n            |
| 13C-1,2,3,4,6,7,8-HpCDD | 197451500                | 1.05 W  | 35:42 | 0.7932 | 100.00 | n            |
| 1,2,3,4,6,7,8-HpCDD     | 435214000                | _       | 35:43 | 1.1021 | 200.00 | n            |
| Total HpCDD             | -                        | - n     | -     | 1.1021 | 200.00 | n            |
| ·                       |                          |         |       |        |        |              |
| 13C-OCDD                | 291770000                | _       | 38:16 | 0.5861 | 200.00 | n            |
| OCDF                    | 820312000                | _       | 38:23 | 1.4058 | 400.00 | n            |
| OCDD                    | 694943000                | 0.90 y  | 38:16 | 1.1909 | 400.00 | n            |

Run #4 Filename 21JL10A4D5 S: 7 I: 1

Acquired: 21-JUL-10 19:03:58 Processed: 22-JUL-10 12:01:12

Run: 15SE098D2 Analyte: TO9 Cal: TO90721104D5

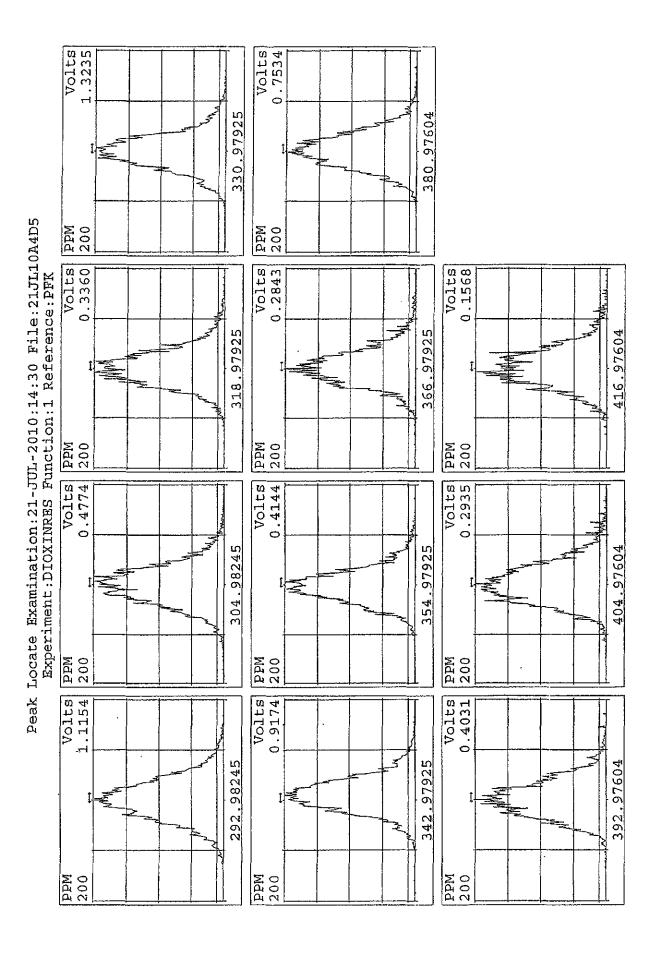
Comments:

Sample text: ST0721D :CS-5 10DXN339

|                         | 0 0 101111007 |        |                |        |         |              |
|-------------------------|---------------|--------|----------------|--------|---------|--------------|
| Name                    | Resp          | RA     | RT             | RRF    |         | Mod?         |
| 13C-1,2,3,4-TCDD        | 350659000     | 0.80 y | 20:02          | -      | 100.00  | n            |
| 13C-2,3,7,8-TCDF        | 360772000     | 0.79 y | 19:24          | 1.0288 | 100.00  | n            |
| 2,3,7,8-TCDF            | 697458000     |        |                | 0.9666 | 200.00  | n            |
| Total TCDF              | -             | - n    |                | 0.9666 | 200.00  | n            |
|                         |               |        |                |        |         |              |
| 13C-2,3,7,8-TCDD        | 309835000     | 0.78 y | 20:14          | 0.8836 | 100.00  | n            |
| 2,3,7,8-TCDD            | 626791000     | 0.79 y | 20:16          | 1.0115 | 200.00  | n            |
| Total TCDD              | -             | - n    | <u> </u>       | 1.0115 | 200.00  | n            |
| 37C1-2,3,7,8-TCDD       | 837356000     | 1.00 y | 20:15          | 1.3513 | 200.00  | n            |
|                         |               |        |                |        |         |              |
| 13C-1,2,3,7,8~PeCDF     | 310980000     | _      |                | 0.8868 | 100.00  | n            |
| 1,2,3,7,8~PeCDF         | 3461250000    |        |                | 1.1130 | 1000.00 | n            |
| 2,3,4,7,8-PeCDF         | 3239400000    | 1.52 y | 26:52          | 1.0417 | 1000.00 | n            |
| Total F2 PeCDF          | -             | - D    | <b></b>        | 1.0773 | 2000.00 | n            |
| Total F1 PeCDF          | -             | - n    | . <del>-</del> | 1.0773 | 2000.00 | n,           |
| 127-1 2 2 7 0 DoCDD     | 235100700     | 1 66 1 | 27.42          | 0.6705 | 100.00  | n            |
| 1.3C-1,2,3,7,8-PeCDD    | 2235314000    |        |                | 0.9508 | 1000.00 | n            |
| 1,2,3,7,8-PeCDD         | 2235314000    | -      |                | 0.9508 | 1000.00 |              |
| Total PeCDD             | -             | - n    |                | 0.9500 | 1000.00 | n            |
| 13C-1,2,3,7,8,9-HxCDD   | 256316000     | 1.29 y | 33:22          | ~      | 100.00  | n            |
| 13C-1,2,3,4,7,8-HxCDF   | 256243600     | 0.51 y | 32:16          | 0.9997 | 100.00  | n            |
| 1,2,3,4,7,8-HxCDF       | 3131920000    | 1.15 y | 32:17          | 1.2222 | 1000.00 | n            |
| 1,2,3,6,7,8-HxCDF       | 3410730000    | 1.19 y | 32:24          | 1.3311 | 1000.00 | $\mathbf{n}$ |
| 2,3,4,6,7,8-HxCDF       | 3245730000    | 1.18 y | 32:55          | 1.2667 | 1000.00 | n            |
| 1,2,3,7,8,9-HxCDF       | 2825950000    | 1.18 y | 33:33          | 1.1028 | 1000.00 | n            |
| Total HxCDF             | -             | - n    |                | 1.2307 | 4000.00 | n            |
|                         |               |        |                |        |         |              |
| 13C-1,2,3,6,7,8-HxCDD   | 198188400     | -      |                | 0.7732 | 100.00  | n            |
| 1,2,3,4,7,8-HxCDD       | 2319900000    | -      |                |        | 1000.00 | n            |
| 1,2,3,6,7,8-HxCDD       | 2219442000    |        |                | 1.1199 | 1000.00 | n            |
| 1,2,3,7,8,9-HxCDD       | 2474590000    | 1.26 y | 33:23          | 1.2486 | 1000.00 | n            |
| Total HxCDD             | •             | - n    | -              | 1.1797 | 3000.00 | n            |
| 13C-1,2,3,4,6,7,8-HpCDF | 222373600     | 0.44 v | 34:54          | 0.8676 | 100.00  | n            |
| 1,2,3,4,6,7,8-HpCDF     | 3008480000    |        |                | 1.3529 | 1000.00 | n            |
| 1,2,3,4,7,8,9-HpCDF     | 2503650000    |        |                | 1.1259 | 1000.00 | n.           |
| Total HpCDF             | 2303030000    | - n    |                | 1.2394 | 2000.00 |              |
| Total Apent             | ~             | - 11   | , –            | 1.2333 | 2000.00 | n            |
| 13C-1,2,3,4,6,7,8-HpCDD | 196025300     | 1.04 y | 35:42          | 0.7648 | 100.00  | rı           |
| 1,2,3,4,6,7,8-HpCDD     | 2131190000    | 1.02 y | 35:43          | 1.0872 | 1000.00 | n            |
| Total HpCDD             |               | - n    | _              | 1.0872 | 1000.00 | rı           |
|                         |               |        |                |        |         |              |
| 13C-OCDD                | 305368000     |        |                | 0.5957 | 200.00  | $\mathbf{n}$ |
| OCDF                    | 4252770000    | _      |                | 1.3927 | 2000.00 | n            |
| OCDD                    | 3562830000    | 0.90 y | 38:16          | 1.1667 | 2000.00 | n            |
|                         |               |        |                |        |         |              |

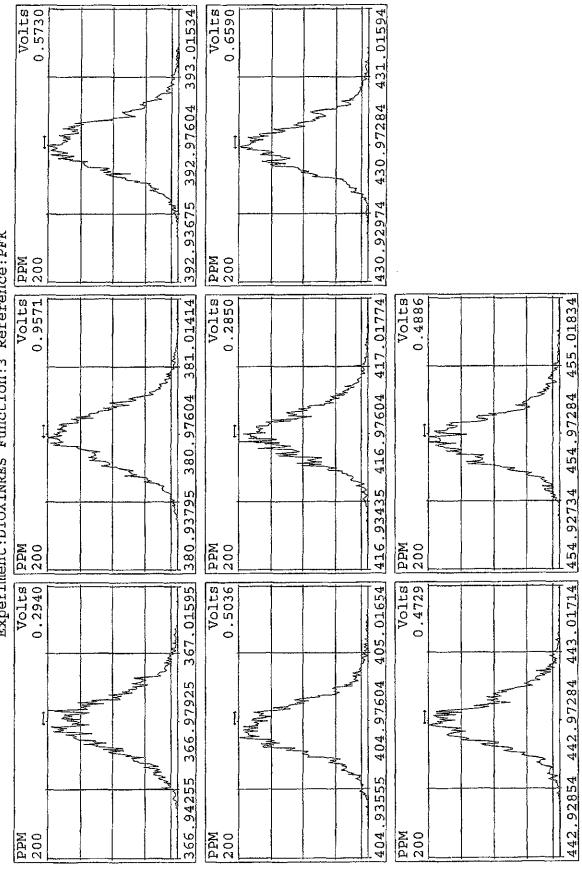
| ata file   | Smp | Work Order | Sample ID                 | FV-uL        | Method/Matrix | Box | Size    | ט |
|------------|-----|------------|---------------------------|--------------|---------------|-----|---------|---|
| 21JL10A4D5 | 1   | CP0721     | DB-5 CPSM 3732-08         |              |               |     | 1.00000 |   |
| 21JL10A4D5 | 2   | SB0721     | Solvent Blank C-14        |              |               |     | 1.00000 |   |
| 21JL10A4D5 | 3   | ST0721     | CS-0.2 10DXN333 (Notused) | sensite esty | w only        |     | 1.00000 |   |
| 21JL10A4D5 | 4   | ST0721A    | CS-1 10DXN342             |              |               |     | 1.00000 |   |
| 21JL10A4D5 | 5   | ST0721B    | CS-2 10DXN334             |              |               |     | 1.00000 |   |
| 21JL10A4D5 | 6   | ST0721C    | CS-3 10DXN336             |              |               |     | 1.00000 |   |
| 21JL10A4D5 | 7   | ST0721D    | CS-5 10DXN339             |              |               |     | 1.00000 |   |
| 21JL10A4D5 | 8   | ST0721E    | CS-4 10DXN337             |              |               |     | 1.00000 |   |
| 21JL10A4D5 | 9   | ST0721F    | 2nd Source 10DXN340       |              |               |     | 1.00000 |   |
| 21JL10A4D5 | 10  |            |                           |              |               |     | 1.00000 |   |
| 21JL10A4D5 | 11  |            |                           |              |               |     | 1.00000 |   |
| 21JL10A4D5 | 1.2 |            |                           |              |               |     | 1.00000 |   |
| 21JL10A4D5 | 13  |            | KSS 07-21-10              |              |               |     | 1.00000 |   |

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NE 7/22/10



Volts 0.2217 Volts 0.9800 Volts 0.9829 343.01355 381.01414 417.01774 416.97604 342.97925 380.97604 Peak Locate Examination:21-JUL-2010:14:31 File:21JL10A4D5 Experiment:DIOXINRES Function:2 Reference:PFK 416.93435 342 94495 380.93795 PPM 200 PPM 200 PPM 200 Volts Volts Volts 405.01654 331.01235 367.01595 404.97604 330.97925 366.97925 1 3 330.94615 366.94255 404.93555 PPM 200 PPM 200 PPM 200 Volts 0.2768 Volts Volts 0.5296 393.01534 319.01115 355.01475 392.97604 318.97925 354.97925 .94735 54.94375 392,93675 318. PPM 200 200 PPM 200 PPM

Peak Locate Examination:21-JUL-2010:14:31 File:21JL10A4D5 Experiment:DIOXINRES Function:3 Reference:PFK

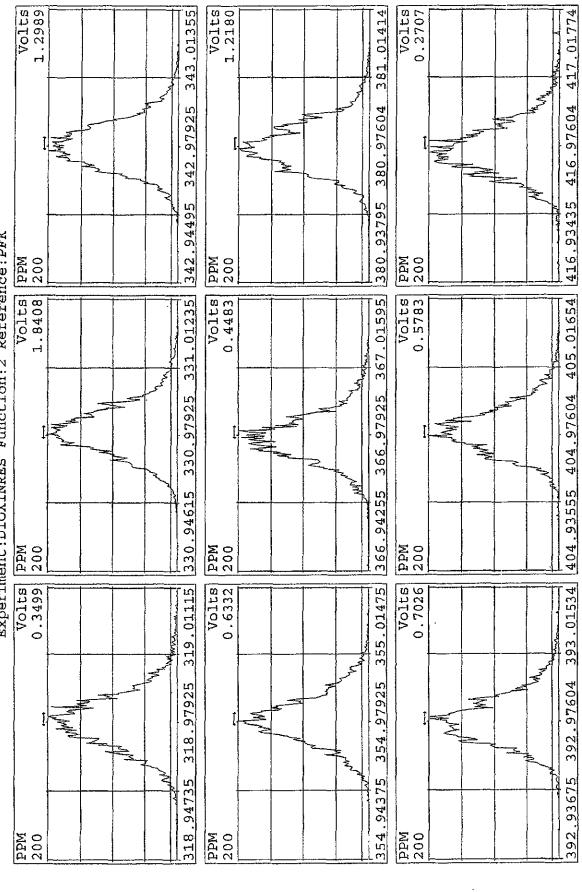


Volts 0.5384 Volts 481.01776 405.01654 Volts 0.5464 443.01714 480.96967 404.97604 442.97284 Peak Locate Examination:21-JUL-2010:14:31 File:21JL10A4D5 Experiment:DIOXINRES Function:4 Reference:PFK 404.93555 442.92854 480.92157 PPM 200 PPM 200 PPM 200 Volts 0.5965 Volts 0.2409 467.01954 Volts 0.6526 393.01534 431.01594 3 466.97284 392.97604 430.97284 ₹ 392,93675 430.92974 466.92614 PPM 200 PPM 200 PPM 200 Volts 0.9083 Volts 0.5177 Volts 0.2801 455.01834 417.01774 381,01414 416.97604 454.97284 380.97604 416.93435 454.92734 380,93795 PPM 200 PPM PPM 200 200

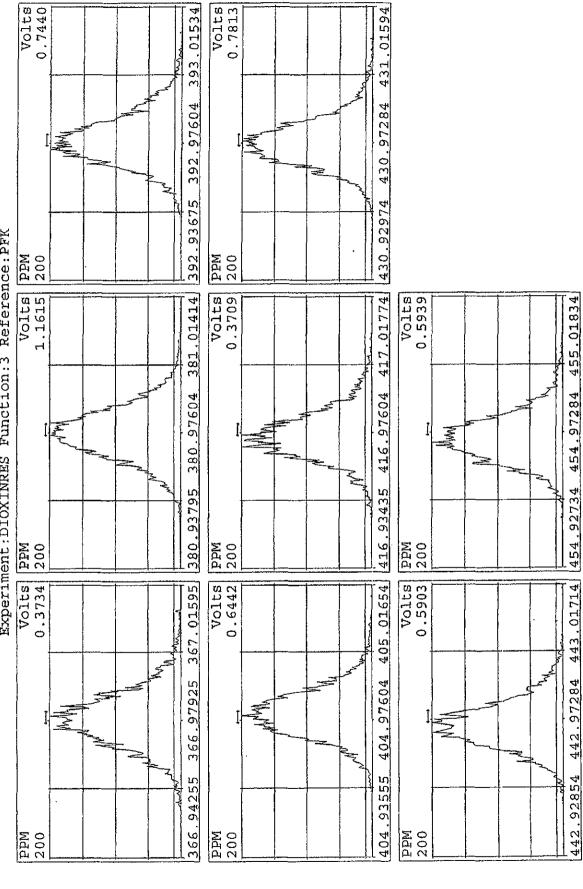
Volts 0.5053 Volts 0.3834 493.01896 455.01834 .97284 492,96967 454. Peak Locate Examination:21-JUL-2010:14:31 File:21JL10A4D5 Experiment:DIOXINRES Function:5 Reference:PFK 454.92734 492.92037 PPM 200 PPM 200 Volts 0.5222 Volts 0.4211 Volts 0.2897 443.01714 481.01776 517.02136 516,96967 442.97284 480.96967 516.91797 442.92854 480.92157 PPM 200 PPM 200 PPM 200 Volts 0.2591 Volts Volts 0.4094 505.02016 431,01594 467.01954 504.96967 466.97284 430.97284 430.92974 466,92614 504.91917 Mad 200 PPM 200 PPM 200

Volts Volts 0.9921 380.97604 330.97925 INE\_ Peak Locate Examination:21-JUL-2010:21:39 File:RESCHK21JL10A4D5 Experiment:DIOXINRES Function:1 Reference:PFK PPM 200 PPM 200 Volts 0.3600 Volts 0.4618 Volts 0.1892 416.97604 318.97925 366.97925 PPM 200 PPM 200 PPM 200 Volts 0.6756 Volts 0.5701 Volts 0.3787 MANA 404.97604 354.97925 304.98245 1 PPM 200 PPM 200 PPM 200 Volts Volts Volts 1.3133 392.97604 292.98245 342.97925 PPM 200 PPM 200 PPM 200

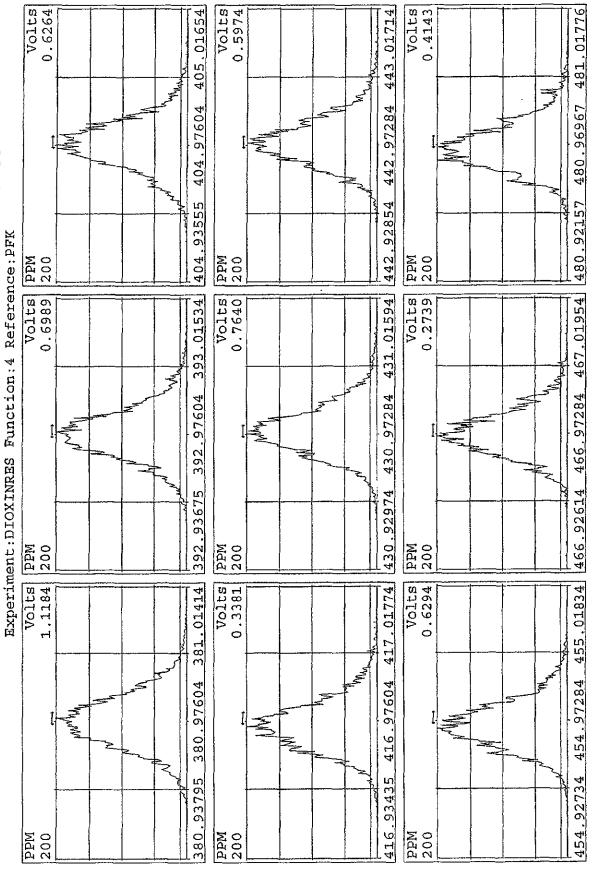
Peak Locate Examination:21-JUL-2010:21:40 File:RESCHK21JL10A4D5 Experiment:DIOXINRES Function:2 Reference:PFK



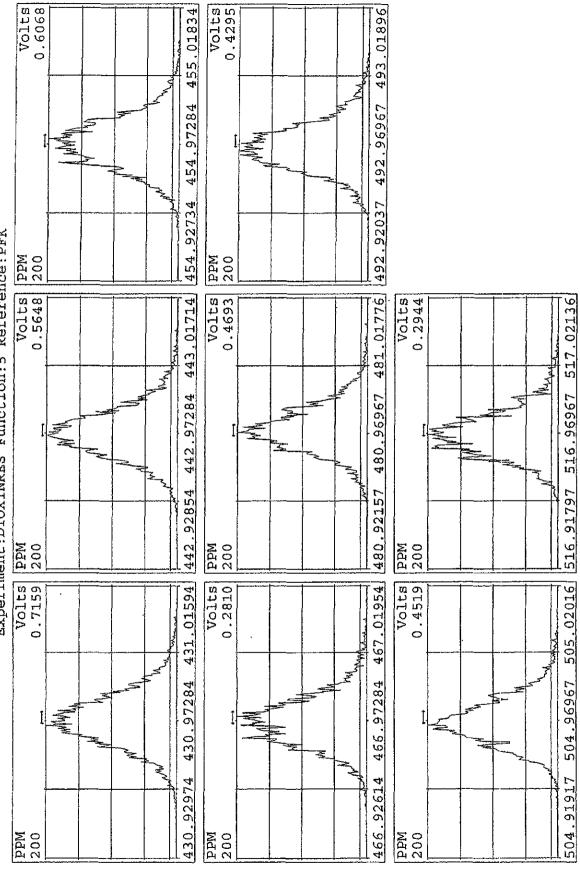
Peak Locate Examination:21-JUL-2010:21:40 File:RESCHK21JL10A4D5 Experiment:DIOXINRES Function:3 Reference:PFK

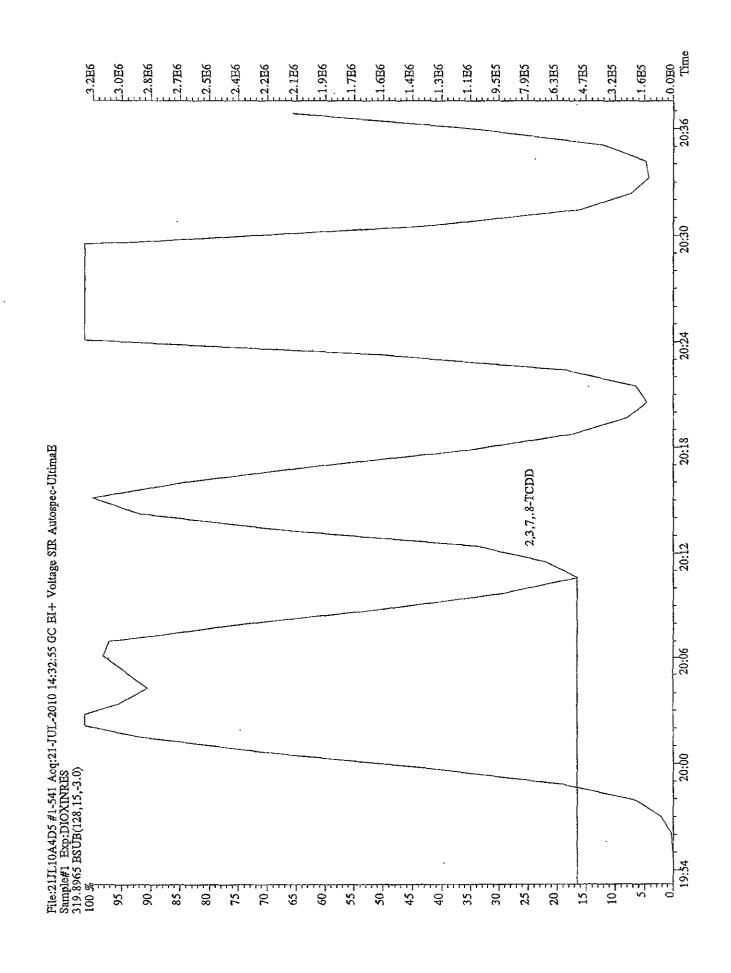


Peak Locate Examination: 21-JUL-2010: 21:41 File: RESCHK21JL10A4D5



Peak Locate Examination:21-JUL-2010:21:44 File:RESCHK21JL10A4D5 Experiment:DIOXINRES Function:5 Reference:PFK





1,2,3,4,7,8,9-HpCDF

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n

483.90 96.37

973.82

2.38

2.02

Sample text: ST0721F :2nd Source 10DXN340 Run text: ST0721F Run #6 Filename: 21JL10A4D5 S: 9 I: 1 Results: 21JL10A4D51613SS 20:34:02 Processed: 22-JUL-10 10:21:57 Acquired: 21-JUL-10

Analyte: 1613 Cal: 16130721104D5 Run: 21JL10A4D5 souled & 200/500/1000

Factor 2: 20.000 Sample size: 1.000000 Factor 1: 800.000 1/23/10,000 Name RA RT RRF Conc EDL Resp Rec М 13C-1,2,3,4-TCDD 307629000 0.78 y 20:01 92.11 n 413901000 0.78 y 19:24 1.23 2188.90 0.92 109.4 13C-2,3,7,8-TCDF n 188.67 94.37 38830800 0.76 y 19:25 0.99 2,3,7,8-TCDF 0.48 n Total TCDF 39472107 1.33 n 17:31 0.99 191.78 0.48 n 13C-2,3,7,8-TCDD 294375000 0.78 y 20:13 0.91 2114.60 2.32 105.7 n 190.1395% 27522700 0.81 y 20:14 0.98 2,3,7,8-TCDD 0.52 n Total TCDD 27522700 0.81 y 20:14 0.98 190.13 0.52 n 37C1~2,3,7,8-TCDD 76164600 1.00 y 20:14 1.20 412.65 0.41 103.2 2244.44 13C-1,2,3,7,8-PeCDF 302436000 1.54 y 25:17 0.88 1.40 n 476.31 45.37 1,2,3,7,8-PeCDF 77546500 1.54 y 25:19 1.08 1.04 n 271363000 1.54 y 26:49 0.88 2003.66 13C-2,3,4,7,8-PeCDF 1.40 100.2 n 68923500 1.55 y 26:51 1.04 488.17 97.6% 2,3,4,7,8-PeCDF 1.32 n 149591746 1.40 y 23:44 1.06 Total F2 PeCDF 985.04 1.17 n Total F1 PeCDF \* n NotFnd 1.06 1.08 n 1840.17 0.85 92.0 13C-1,2,3,7,8-PeCDD 187042900 1.56 y 27:41 0.66 n 475.77 95% 1,2,3,7,8-PeCDD 41178400 1.55 y 27:43 0.93 1.23 n Total PeCDD 41347624 2.76 n 25:18 0.93 477.73 1.23 13C-1,2,3,7,8,9-HxCDD 186030000 1.31 y 33:22 78.56 У 13C-1,2,3,4,7,8-HxCDF 197163100 0.50 y 32:16 1.04 2028.83 4.92 101.4 n 523.47 10477 62815000 1.17 y 32:17 1.22 1,2,3,4,7,8-HxCDF 1.49 249545100 0.52 y 32:22 1.19 2251.50 13C-1,2,3,6,7,8-HxCDF 4.31 112.6 IJ 458.58 917 / 1,2,3,6,7,8-HxCDF 64154700 1.18 y 32:24 1.12 1.45 n 13C-2,3,4,6,7,8-HxCDF 228157700 0.51 y 32:54 1.12 2184.24 4.58 109.2 n 469.19 93.8% 1.35 2,3,4,6,7,8-HxCDF 61275400 1.15 y 32:54 1.14 r. 13C-1,2,3,7,8,9-HxCDF 202978100 0.52 y 33:31 1.02 2140.44 5.04107.0 482.01 96.4% 1,2,3,7,8,9-HxCDF 54870000 1.19 y 33:32 1.12 1.58 Total HxCDF 243548785 1.21 y 31:03 1.15 1936.68 1.46 103.4 168448700 1.31 y 33:02 0.88 2067.53 1.23 13C-1,2,3,4,7,8-HxCDD  $\mathbf{y}^{r}$ 479.5795.9% 39583500 1.24 y 33:03 0.98 1.14 1,2,3,4,7,8-HxCDD 11 13C-1,2,3,6,7,8-HxCDD 171613300 1.31 y 33:06 0.83 2221.03 1.29 111.1 У 454.27 90.8% 45328400 1.28 y 33:07 1.16 0.97 1,2,3,6,7,8-HxCDD ۲٦ 465.05 93 % 0.97 45402600 1.24 y 33:22 1.15 1,2,3,7,8,9-HxCDD 11 Total HxCDD 130450140 4.93 n 32:18 1.09 1400.35 1.02 107.7 182370400 0.43 y 34:53 0.91 2154.51 6.23 13C-1,2,3,4,6,7,8-HpCDF 13 473.20 94.6 % 58068900 1.00 y 34:54 1.35 1.73 'n 1,2,3,4,6,7,8-HpCDF 13C-1,2,3,4,7,8,9-HpCDF 150417500 0.43 y 36:02 0.76 2122.83 7.45 106.1

47489800 1.02 y 36:03 1.30

Total HpCDF 107404819 1.00 y 34:54 1.33

| 161779300 0.96 y | 35:42 0.83  |   |   | 5.07   | 105.2   | n  |
|------------------|---|---|---|--|---|--|
| 42052300 1.04 y  | 35:43 1.07  | 485.09  | 977   | 1.80   | ~   | $\mathbf{n}$   |
| 43164489 1.03 y  | 35:09 1.07  | 497.92  |   | 1.80   | ~   | n  |
| 265623000 0.89 y | 38:16 0.62  | 4606.72   | art   | 4.74   | 115.2   | n  |
| 85350600 0.91 y  | 38:23 1.37  | 937.96  | 93.87.  | 1.38   | -   | n  |
| 74923500 0.91 y  | 38:16 1.20  | 940.76  | 94 %,   | 1.58   | ~   | n  |
|                  | 42052300 1.04 y<br>43164489 1.03 y<br>265623000 0.89 y<br>85350600 0.91 y | 42052300 1.04 y 35:43 1.07<br>43164489 1.03 y 35:09 1.07<br>265623000 0.89 y 38:16 0.62<br>85350600 0.91 y 38:23 1.37 | 42052300       1.04 y       35:43       1.07       485.09         43164489       1.03 y       35:09       1.07       497.92         265623000       0.89 y       38:16       0.62       4606.72         85350600       0.91 y       38:23       1.37       937.96 | 43164489 1.03 y 35:09 1.07 497.92<br>265623000 0.89 y 38:16 0.62 4606.72<br>85350600 0.91 y 38:23 1.37 937.96 93.8%. | 42052300 1.04 Y 35:43 1.07 485.09 977 1.80<br>43164489 1.03 Y 35:09 1.07 497.92 1.80<br>265623000 0.89 Y 38:16 0.62 4606.72<br>85350600 0.91 Y 38:23 1.37 937.96 93.87 1.38 | 42052300 1.04 y 35:43 1.07 485.09 977 1.80 -<br>43164489 1.03 y 35:09 1.07 497.92 1.80 -<br>265623000 0.89 y 38:16 0.62 4606.72 4.74 115.2<br>85350600 0.91 y 38:23 1.37 937.96 93.87 1.38 - |

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Run text: ST0721F Sample text: ST0721F :2nd Source 10DXN340

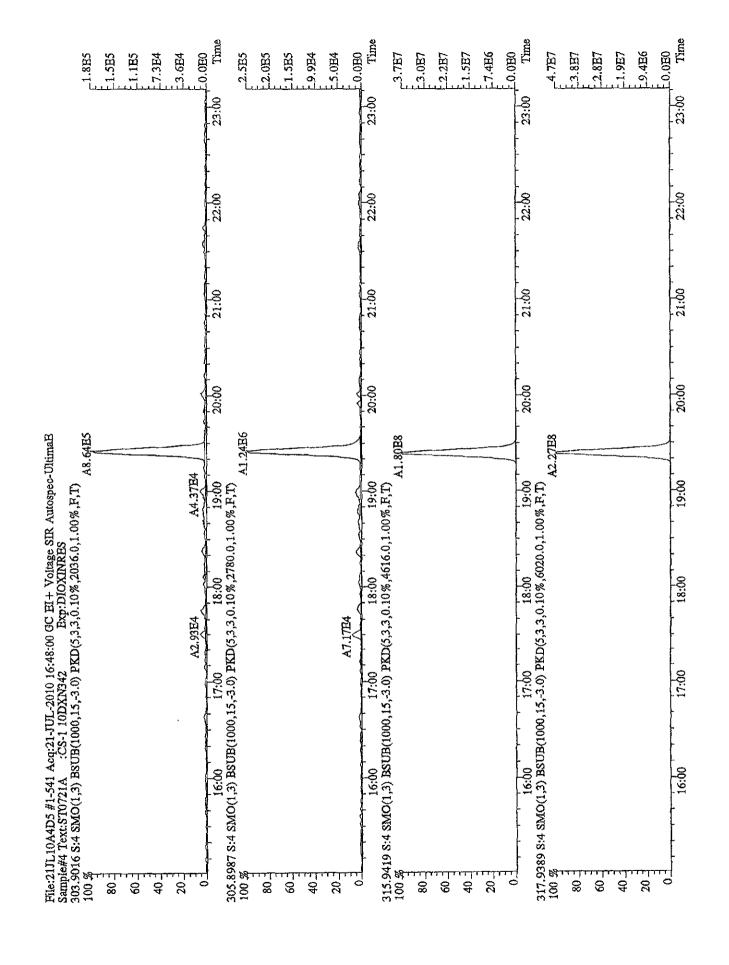
Run #6 Filename: 21JL10A4D5 S: 9 I: 1 Results: 21JL10A4D51613SS

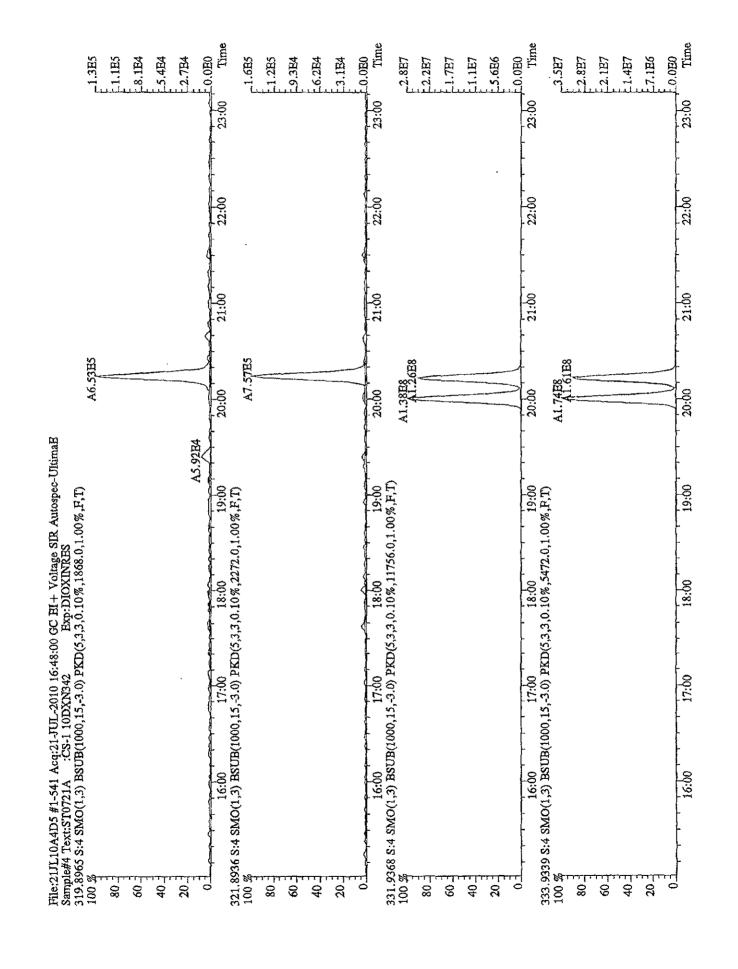
Acquired: 21-JUL-10 20:34:02 Processed: 22-JUL-10 10:21:57
Run: 21JL10A4D5 Analyte: 1613 Cal: 16130721104D5
Factor 1: 800.000 Factor 2: 20.000 Sample size: 1.000000

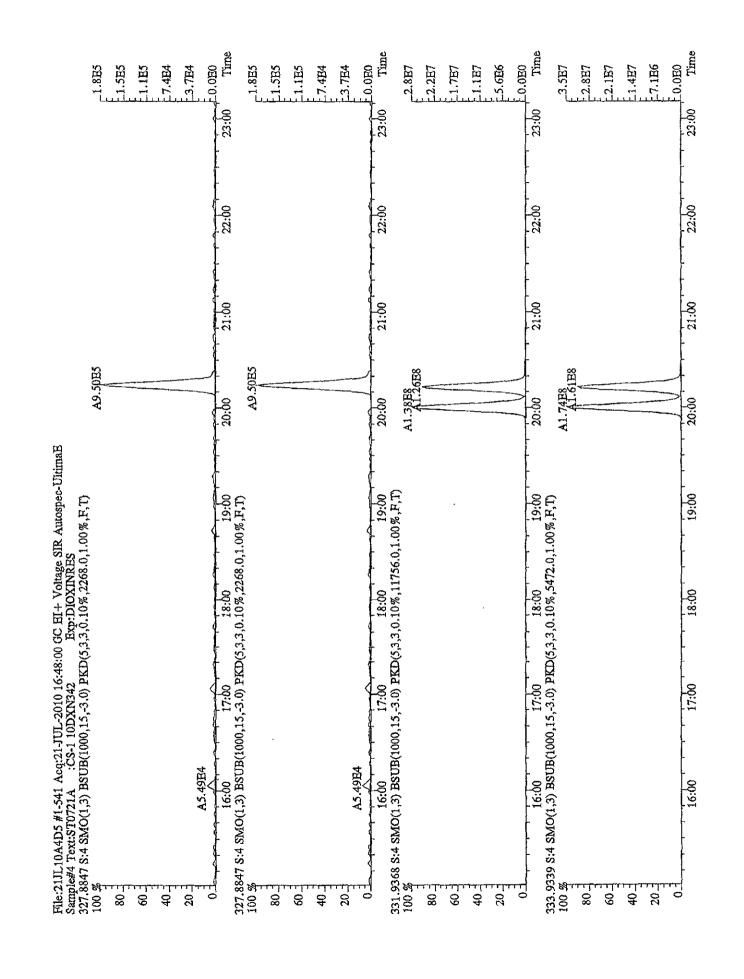
| Name                    | Resp      | RA   |    | RT     | RRF  | Conc    | EDL    | Rec   | M   |
|-------------------------|-----------|------|----|--------|------|---------|--------|-------|-----|
| 13C-1,2,3,4-TCDD        | 307629000 | 0.78 | У  | 20:01  | -    | 92.11   | -      | ~     | n   |
| 13C-2,3,7,8-TCDF        | 413901000 | 0.78 | v  | 19:24  | 1.23 | 2188.90 | 0.92   | 109.4 | n   |
| 2,3,7,8-TCDF            |           |      |    |        |      | 188.67  | 0.48   |       | n   |
| Total TCDF              |           |      |    |        |      | 191.78  | 0.48   | ~     | n   |
|                         |           |      |    |        |      |         |        |       |     |
| 13C-2,3,7,8-TCDD        | 294375000 | 0.78 | У  | 20:13  | 0.91 | 2114.60 | 2.32   | 105.7 | n   |
| 2,3,7,8-TCDD            | 27522700  | 0.81 | y  | 20:14  | 0.98 | 190.13  | . 0.52 | ~     | n   |
| Total TCDD              | 27522700  | 0.81 | y  | 20:14  | 0.98 | 190.13  | 0.52   | ~     | n   |
|                         |           |      | _  |        |      |         |        |       |     |
| 37C1-2,3,7,8-TCDD       | 76164600  | 1.00 | У  | 20:14  | 1.20 | 412.65  | 0.41   | 103.2 | n   |
| 13C-1,2,3,7,8-PeCDF     | 302436000 | 1.54 | v  | 25:17  | 0.88 | 2244.44 | 1.40   | 112.2 | n   |
| 1,2,3,7,8-PeCDF         | 77546500  |      |    |        |      |         | 1.04   |       | n   |
| 13C-2,3,4,7,8-PeCDF     | 271363000 |      |    |        |      |         | 1.40   | 100.2 | n   |
| 2,3,4,7,8-PeCDF         | 68923500  |      |    |        |      |         | 1.32   | -     | n   |
| Total F2 PeCDF          | 149591746 |      |    |        |      |         | 1.17   | _     | n   |
| Total F1 PeCDF          | *         | *    | n  | NotFnd | 1.06 | *       | 1.08   | _     | n   |
|                         |           |      |    |        |      |         |        |       |     |
| 13C-1,2,3,7,8-PeCDD     | 187042900 | 1.56 | Y  | 27:41  | 0.66 | 1840.17 | 0.85   | 92.0  | n   |
| 1,2,3,7,8-PeCDD         | 41178400  | 1.55 | У  | 27:43  | 0.93 | 475.77  | 1.23   | _     | n   |
| Total PeCDD             | 41347624  | 2.76 | n  | 25:18  | 0.93 | 477.73  | 1.23   | _     | n   |
|                         |           | _    |    |        |      |         |        |       |     |
| 13C-1,2,3,7,8,9-HxCDD   | 186073000 | 1.31 | У  | 33;22  | -    | 78.58   | -      | -     | n   |
| 13C-1,2,3,4,7,8-HxCDF   | 197163100 | 0.50 | У  | 32:16  | 1.04 | 2028.36 | 4.92   | 101.4 | п   |
| 1,2,3,4,7,8-HxCDF       | 62815000  | 1.17 | У  | 32:17  | 1.22 | 523.47  | 1.49   | _     | n   |
| 13C-1,2,3,6,7,8-HxCDF   | 249545100 | 0.52 | У  | 32:22  | 1.19 | 2250.98 | 4.31   | 112.5 | n   |
| 1,2,3,6,7,8-HxCDF       | 64154700  |      |    |        |      | 458.58  | 1.45   | -     | n   |
| 13C-2,3,4,6,7,8-HxCDF   | 228157700 |      | -  |        |      | 2183.74 | 4.58   | 109.2 | n   |
| 2,3,4,6,7,8-HxCDF       | 61275400  | 1.15 | Y  | 32:54  | 1.14 | 469.19  | 1.35   | -     | n   |
| 13C-1,2,3,7,8,9-HxCDF   | 202978100 |      | _  |        |      | 2139,94 | 5.04   | 107.0 | n   |
| 1,2,3,7,8,9-HxCDF       | 54870000  |      |    |        |      |         | 1.58   | -     | n   |
| Total HxCDF             | 243548785 | 1.21 | Y  | 31:03  | 1.15 | 1936.68 | 1.46   | -     | n   |
| 130 1 3 3 1 B A W ODD   | 152040000 | 1 60 |    | 22 02  | 0.00 |         | 7 22   | 03.0  | _   |
| 13C-1,2,3,4,7,8-HxCDD   | 151949728 |      |    |        |      | 1864.59 | 1.23   | 93.2  | n   |
| 1,2,3,4,7,8-HxCDD       | 39583500  |      | -4 | 33:03  |      | 531.65  | 1.26   | -     | n   |
| 13C-1,2,3,6,7,8-HxCDD   | 170186500 |      |    | 33:06  |      | 2202.05 | 1.29   | 110.1 | n   |
| 1,2,3,6,7,8-HxCDD       | 45328400  |      |    | 33:07  |      | 458.08  | 0.97   | -     | rı  |
| 1,2,3,7,8,9-HxCDD       | 45402600  |      | ~  |        |      | 490.93  | 1.03   | -     | Γl  |
| Total HxCDD             | 130450140 | 4.93 | n  | 32:18  | 1.09 | 1482.19 | 1.08   | -     | ŗι  |
| 13C-1,2,3,4,6,7,8-HpCDF | 182370400 | 0.43 | У  | 34:53  | 0.91 | 2154.02 | 6.23   | 107.7 | L)  |
| 1,2,3,4,6,7,8-HpCDF     | 58068900  | 1.00 | У  | 34:54  | 1.35 | 473.20  | 1.73   | -     | m   |
| 13C-1,2,3,4,7,8,9-HpCDF | 150417500 | 0.43 | Y  | 36:02  |      | 2122.34 | 7.45   | 106.1 | Υì  |
| 1,2,3,4,7,8,9-HpCDF     | 47489800  | 1.02 | У  | 36:03  | 1.30 | 483.90  | 2.38   | -     | n   |
| Total HpCDF             | 107404819 | 1.00 | У  | 34:54  | 1.33 | 973.82  | 2.02   | -     | 1.7 |

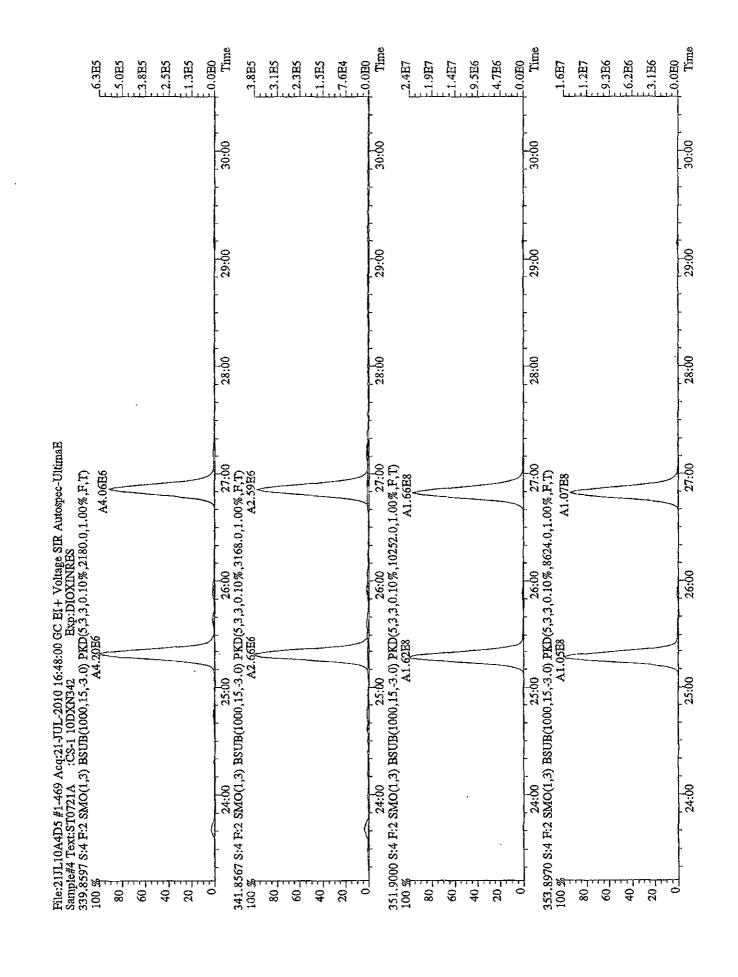
| 13C-1,2,3,4,6,7,8-HpCDD | 161779300 0.96 y | 35:42 0.83 | 2103.64 | 5.07 | 105.2 | n |
|-------------------------|------------------|------------|---------|------|-------|---|
| 1,2,3,4,6,7,8-HpCDD     | 42052300 1.04 y  | 35:43 1.07 | 485.09  | 1.80 | _     | n |
| Total HpCDD             | 43164489 1.03 y  | 35:09 1.07 | 497.92  | 1.80 | -     | n |
| 13C-OCDD                | 265623000 0.89 y | 38:16 0.62 | 4605.66 | 4.74 | 115.1 | n |
| OCDF                    | 85350600 0.91 y  | 38:23 1.37 | 937.95  | 1.38 | -     | n |
| OCDD                    | 74923500 0.91 y  | 38:16 1.20 | 940.76  | 1.58 | -     | n |
|                         |                  |            |         |      |       |   |
|                         |                  |            |         |      |       |   |

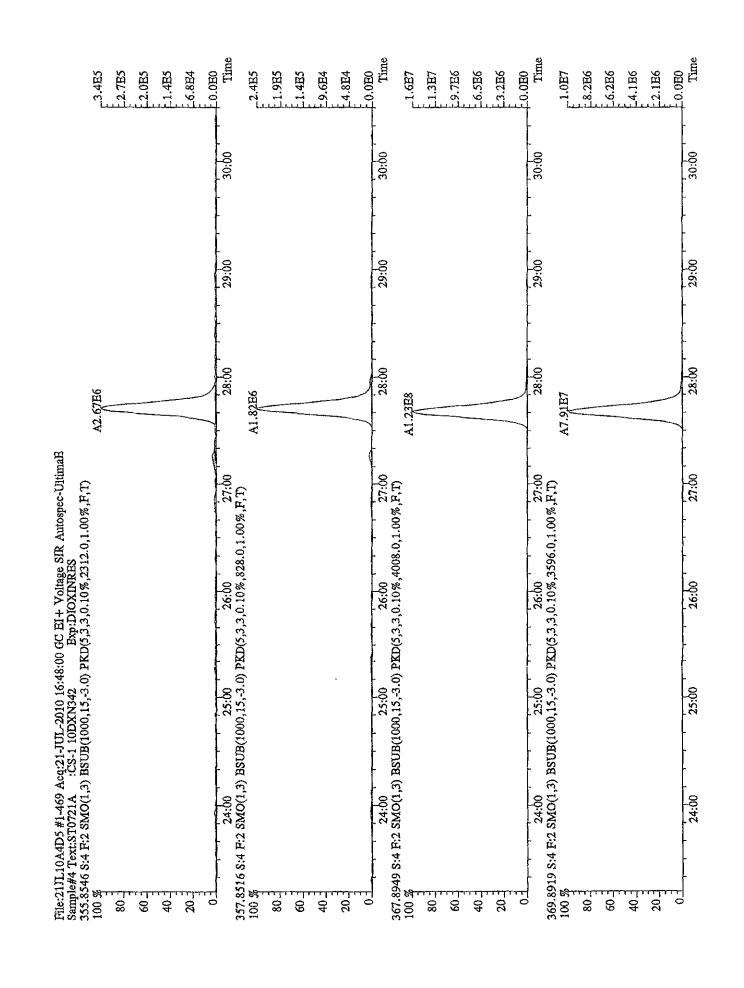
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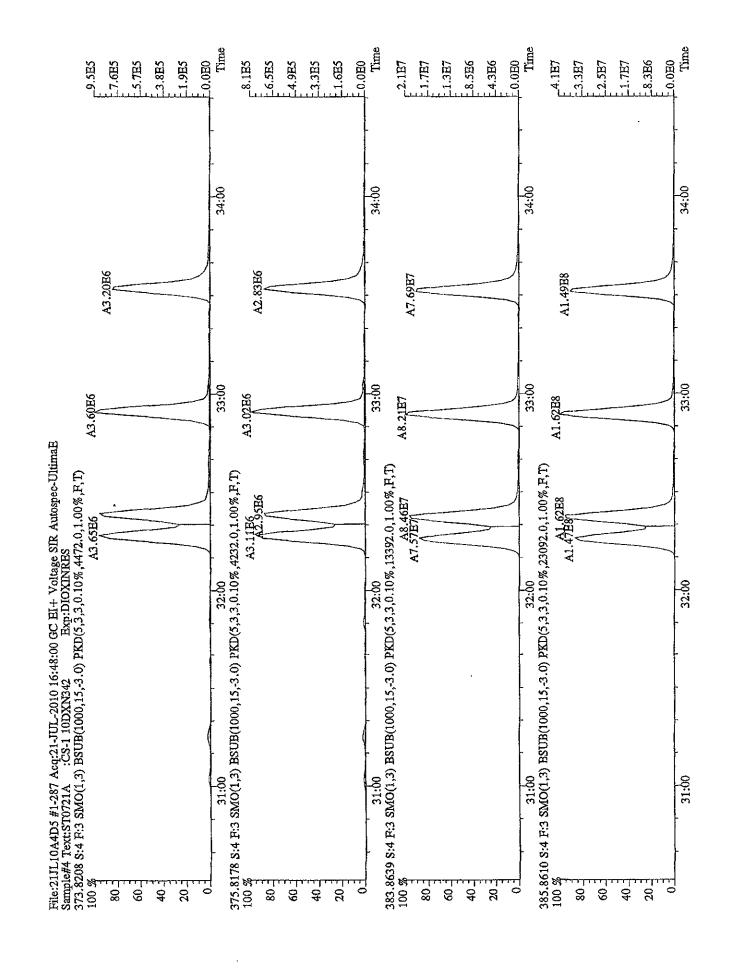


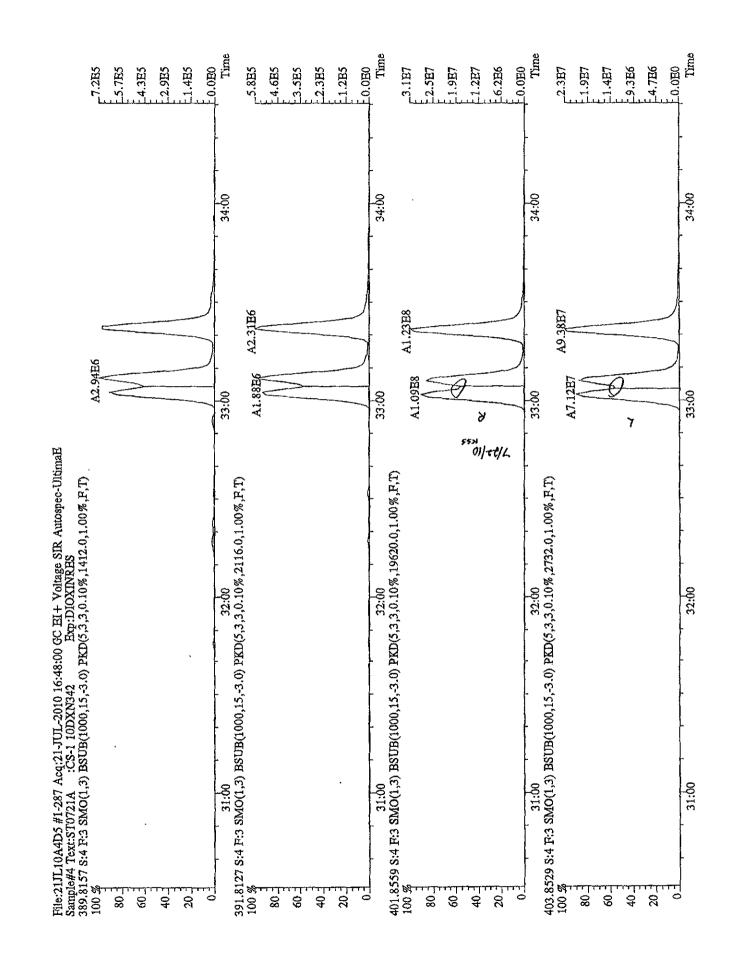


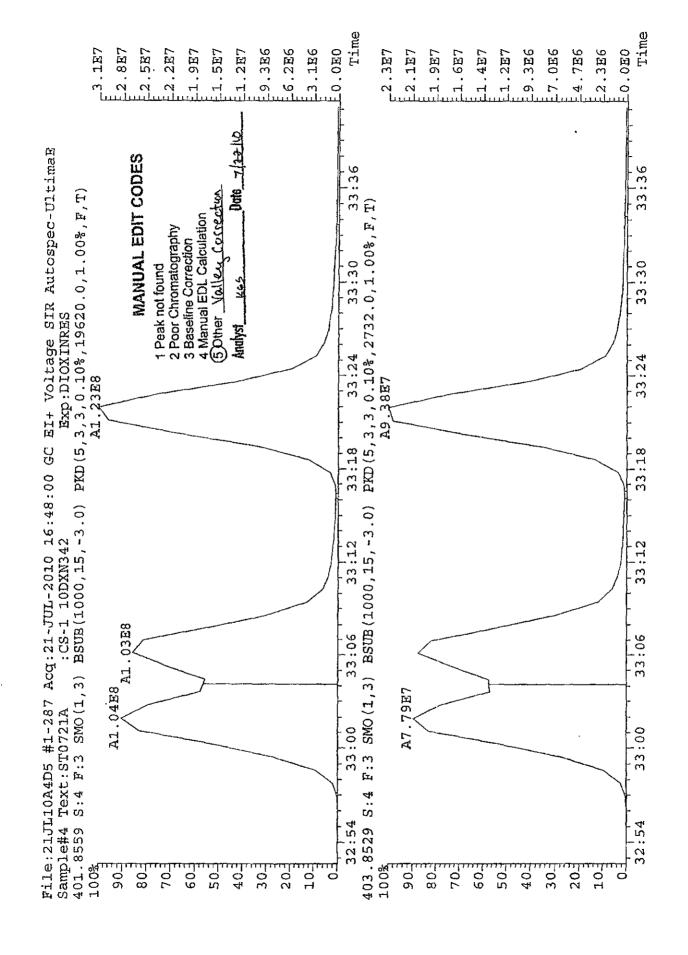


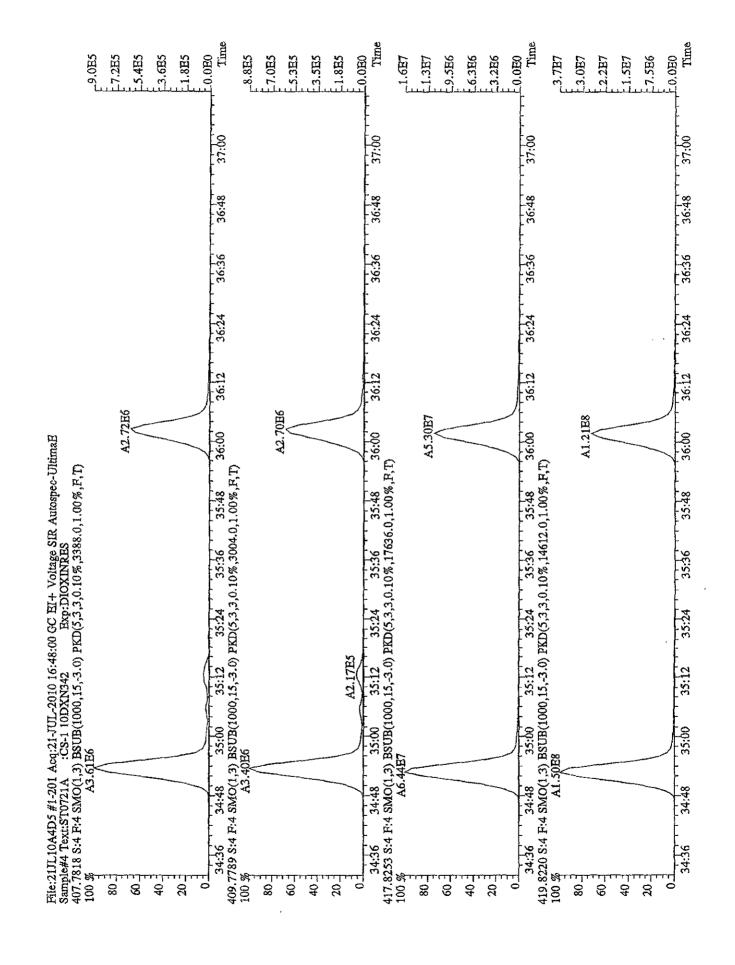


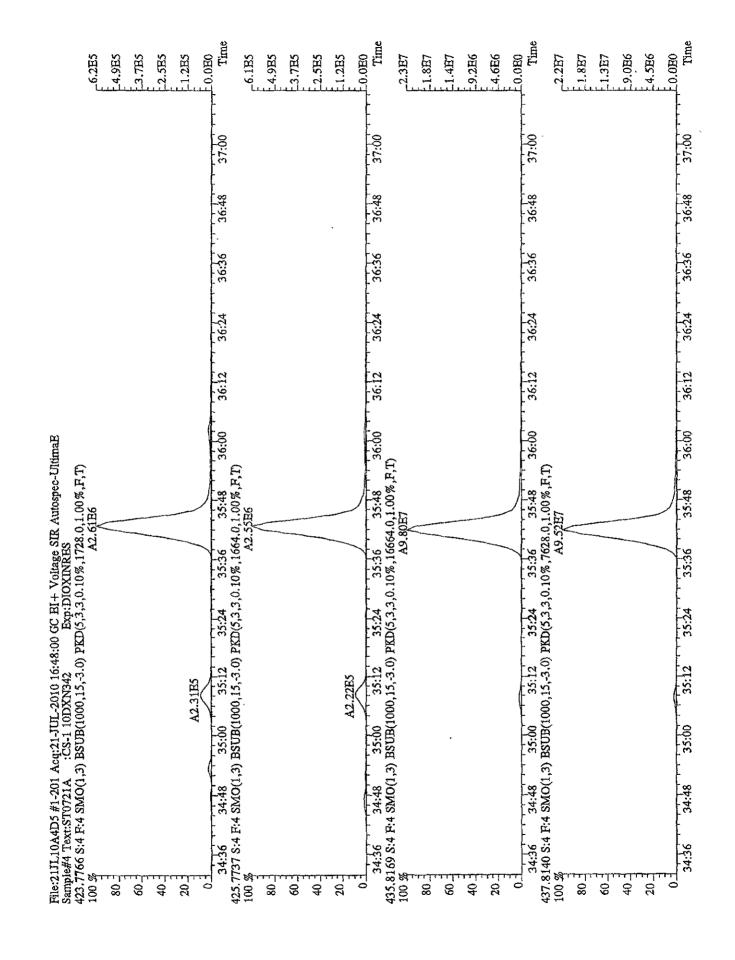


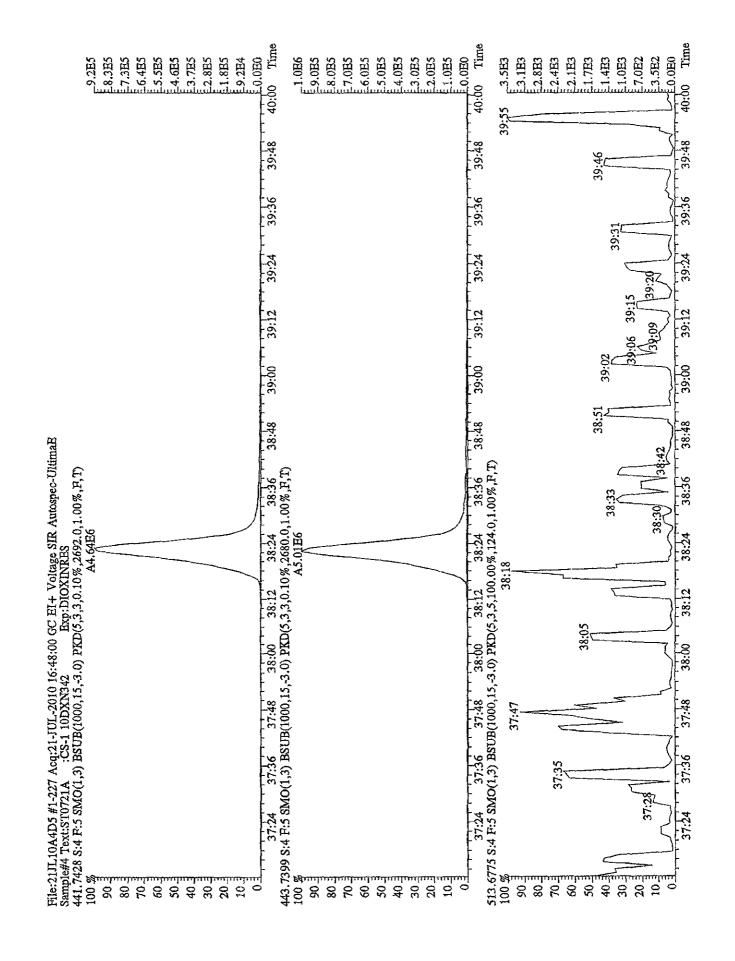


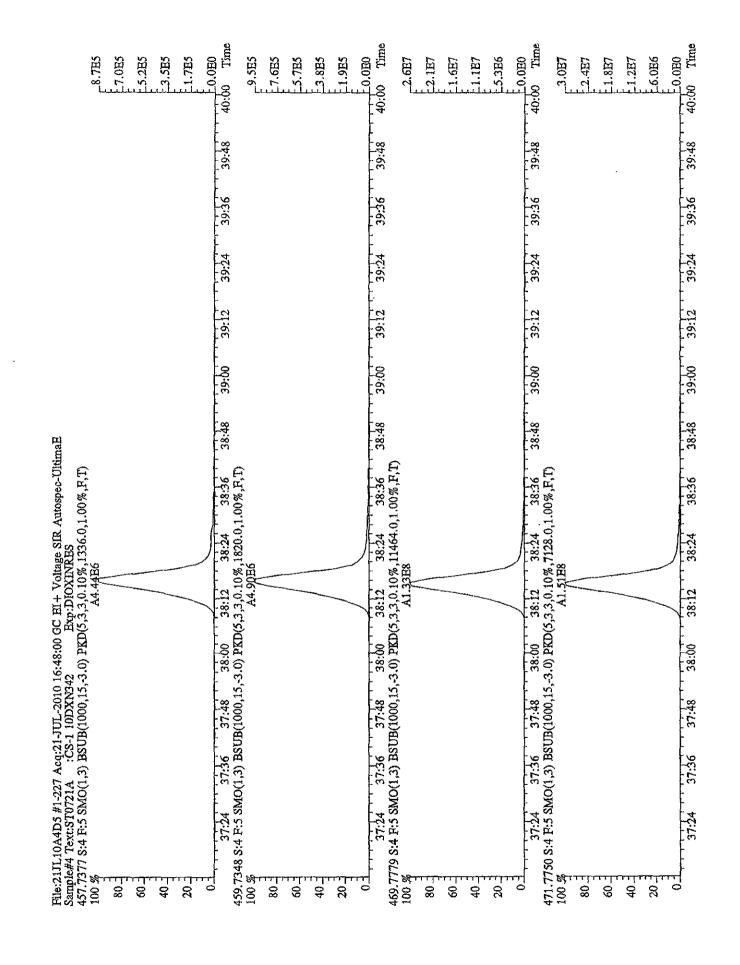


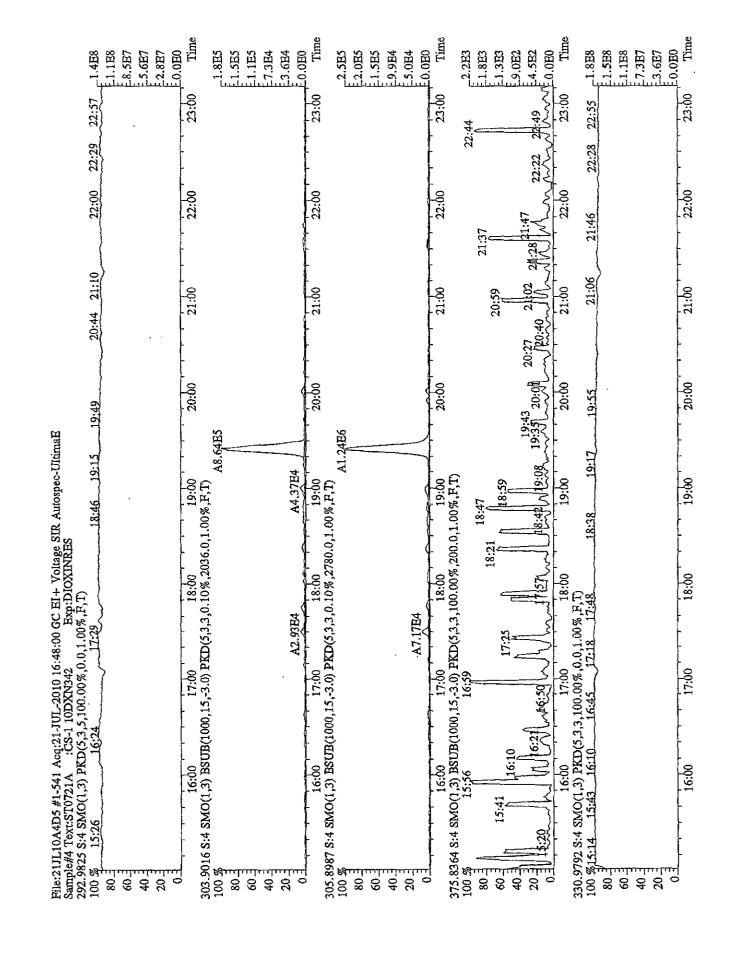


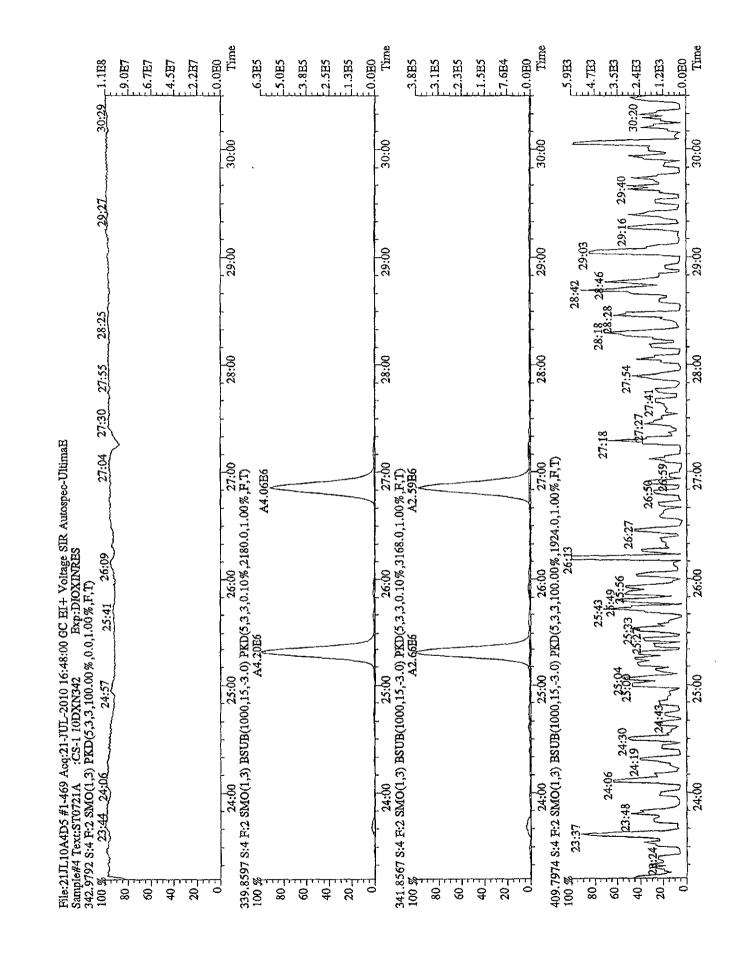


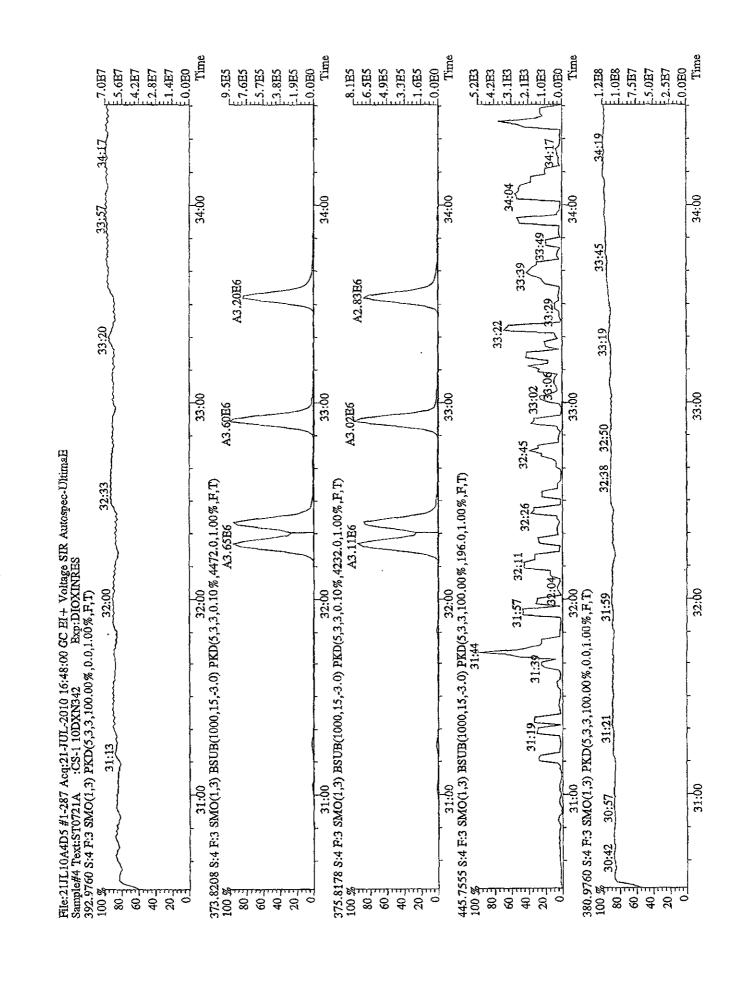


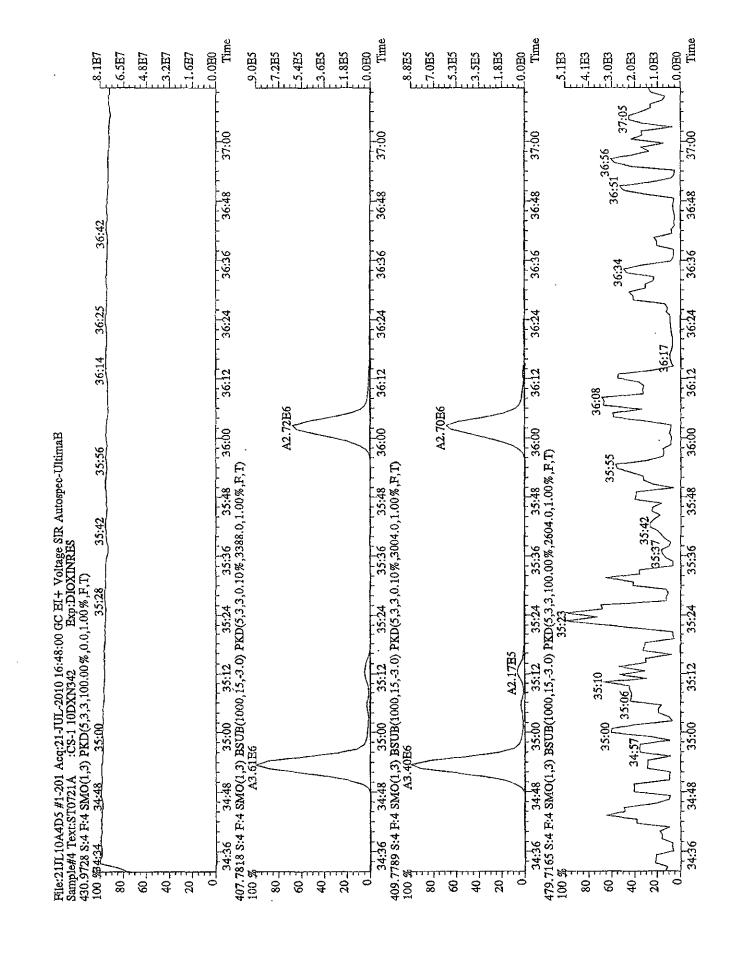


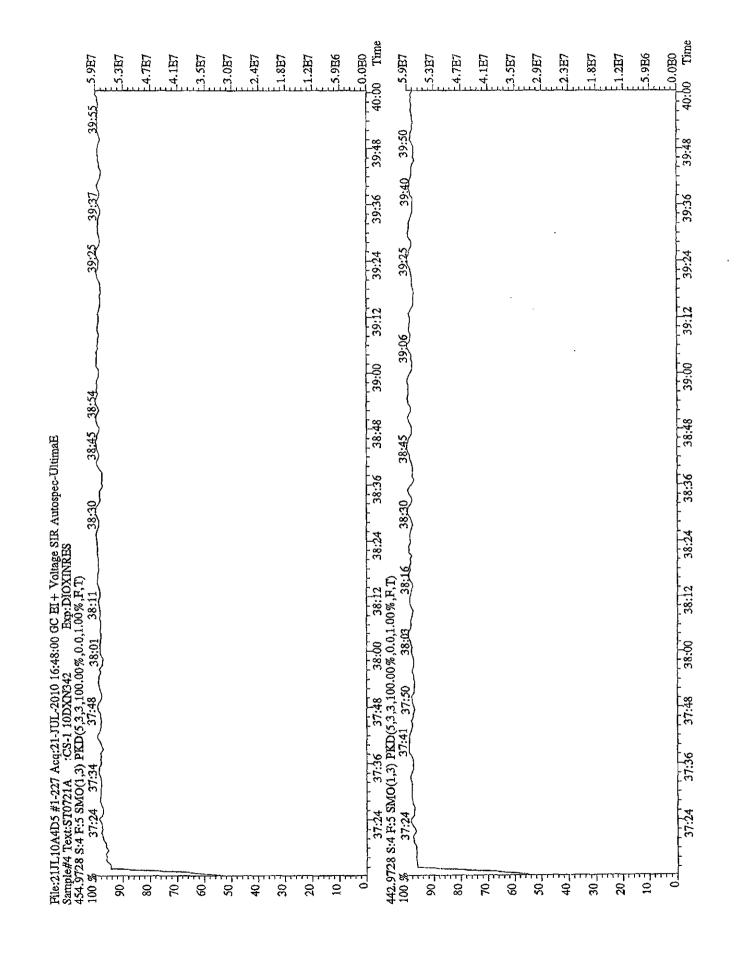


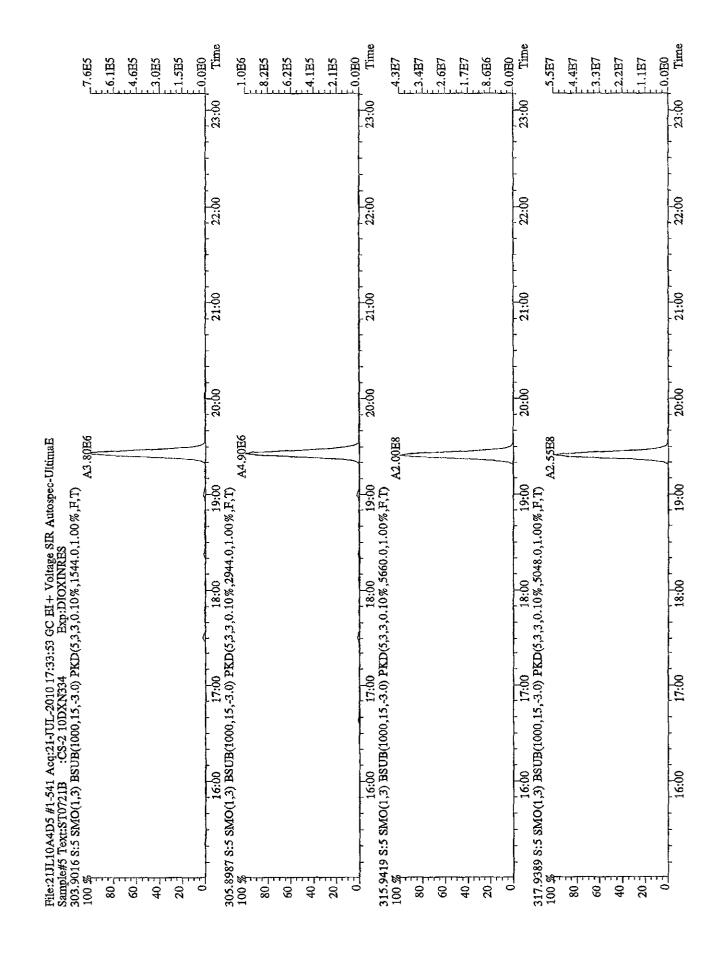


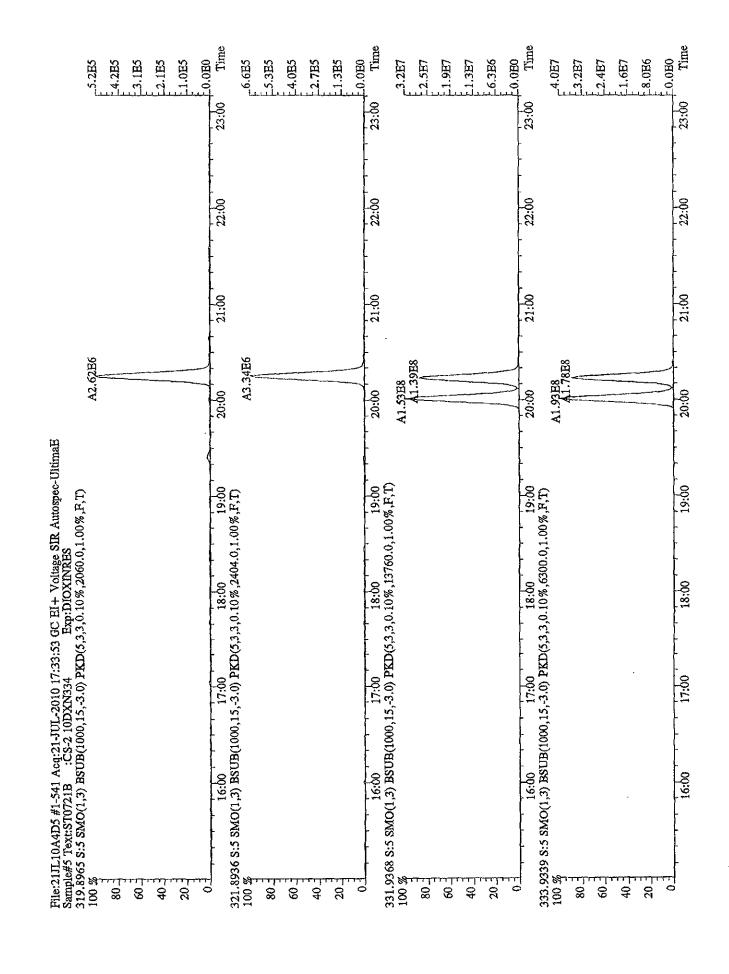


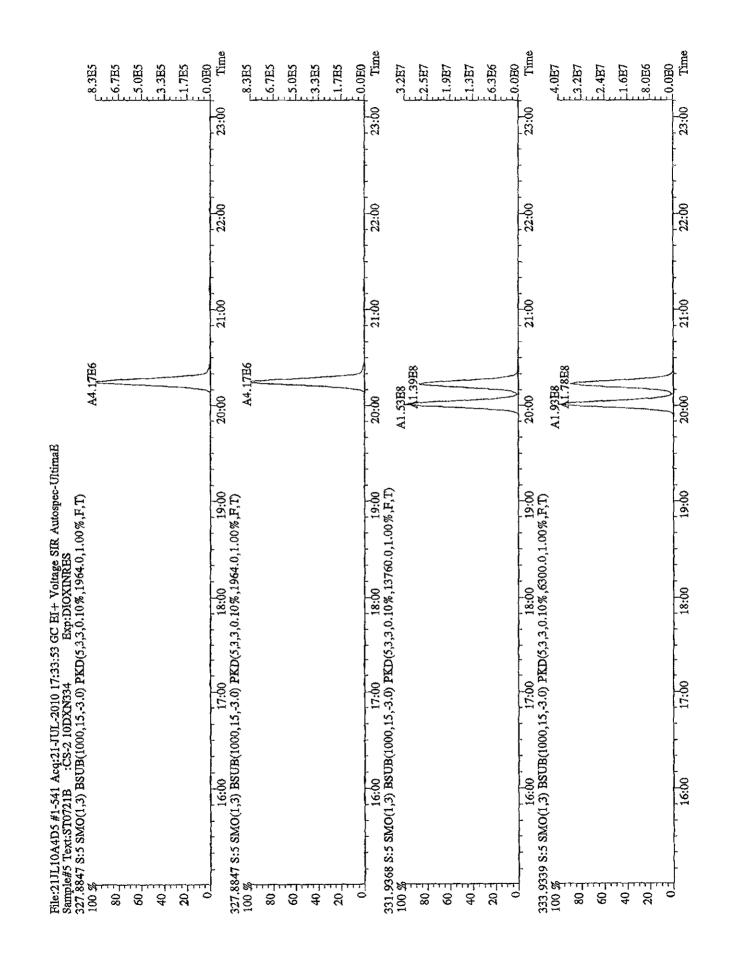


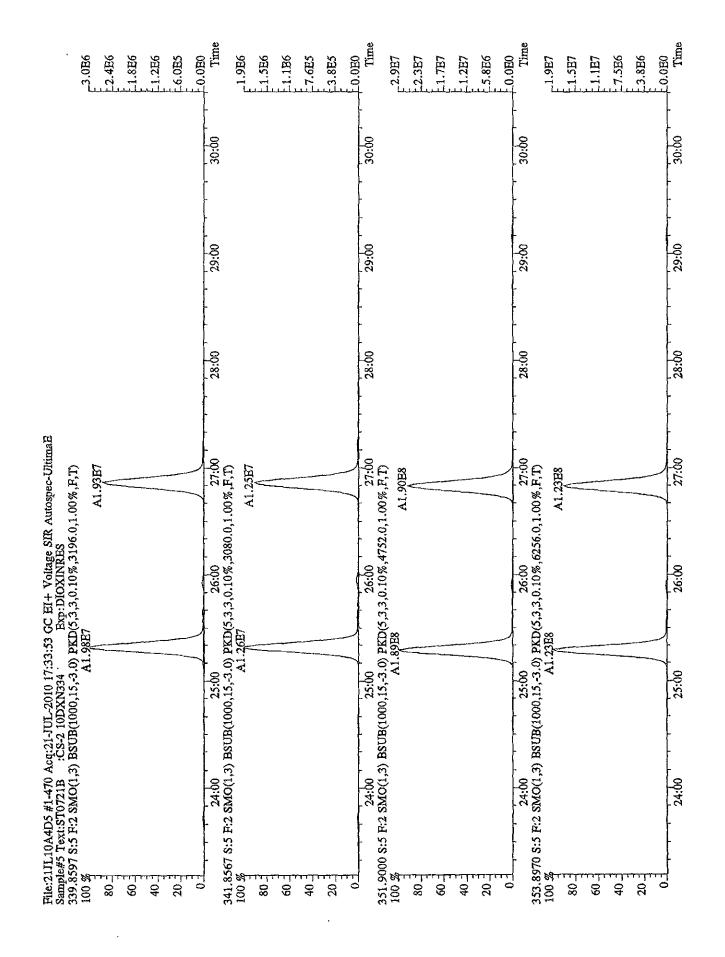


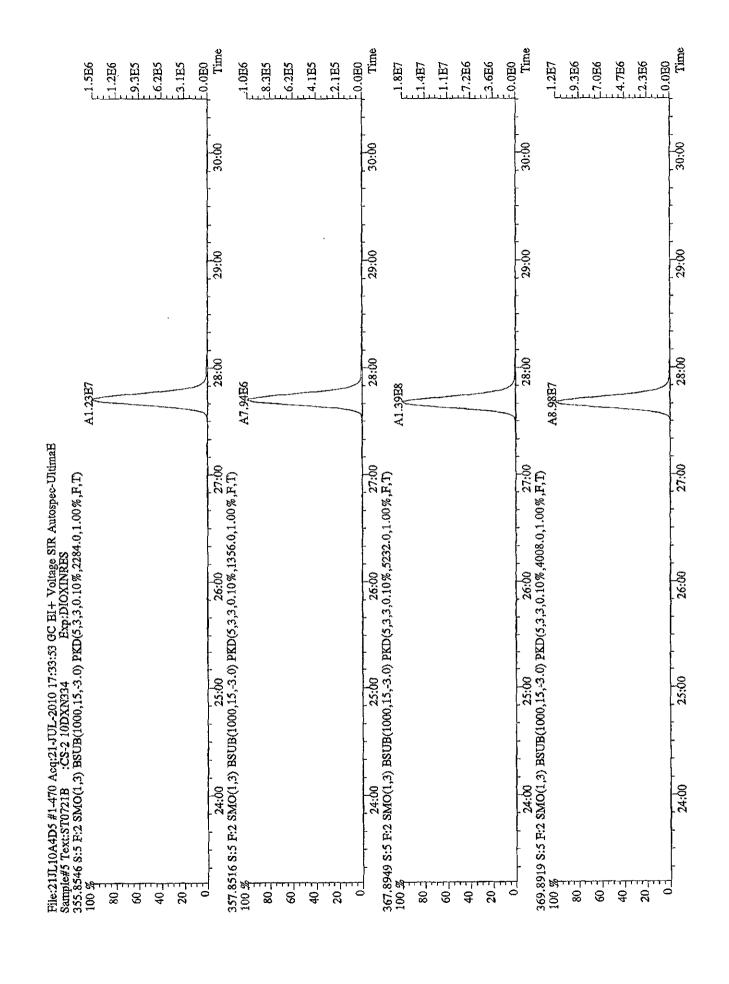


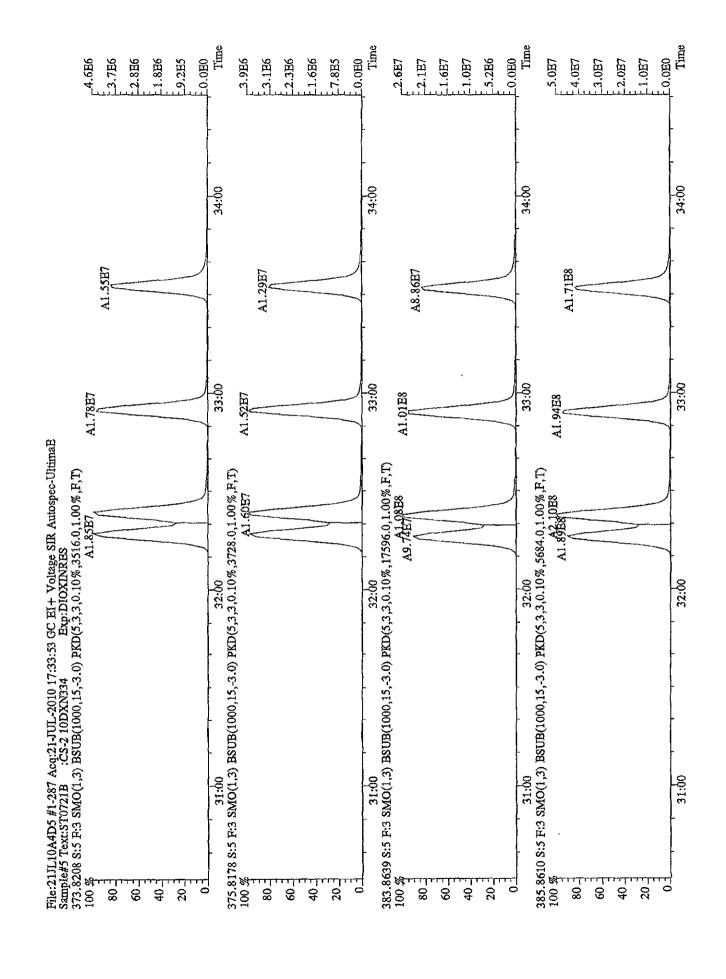


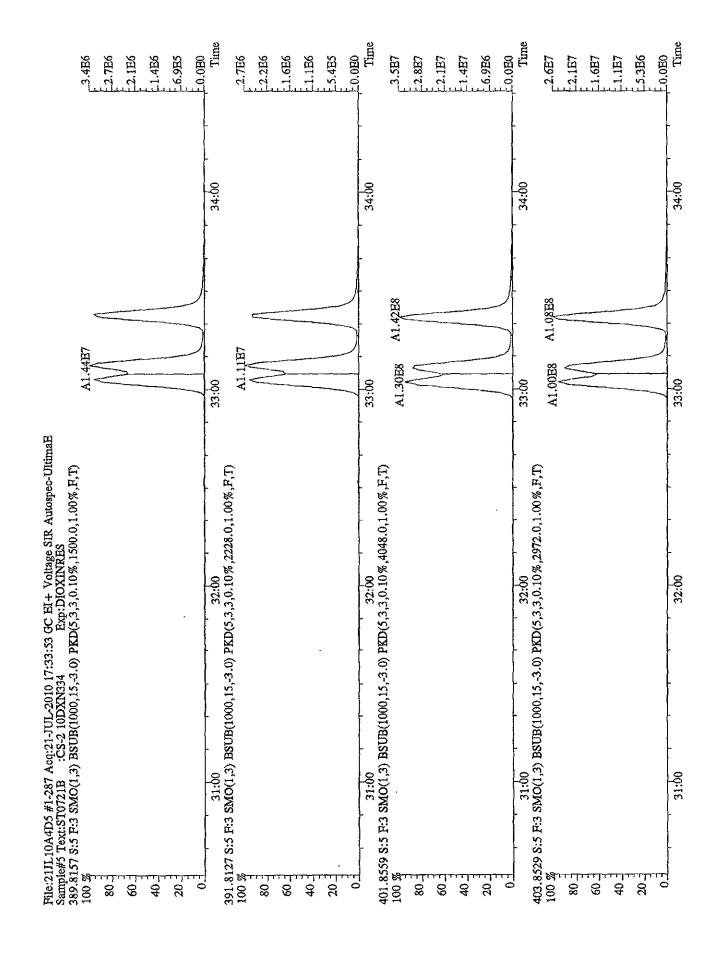


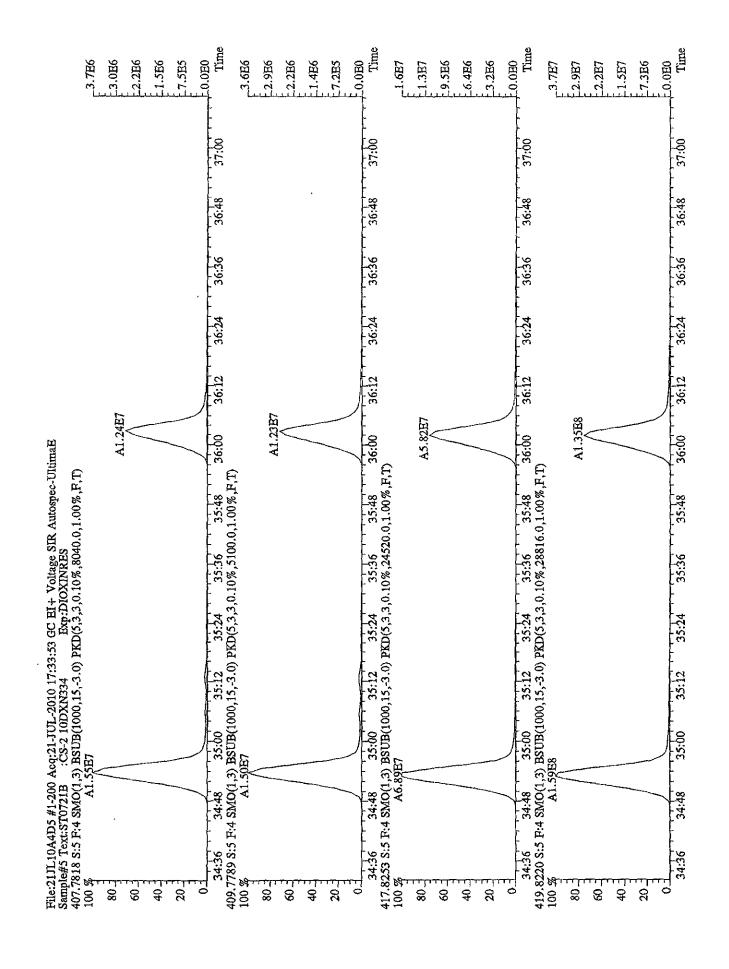


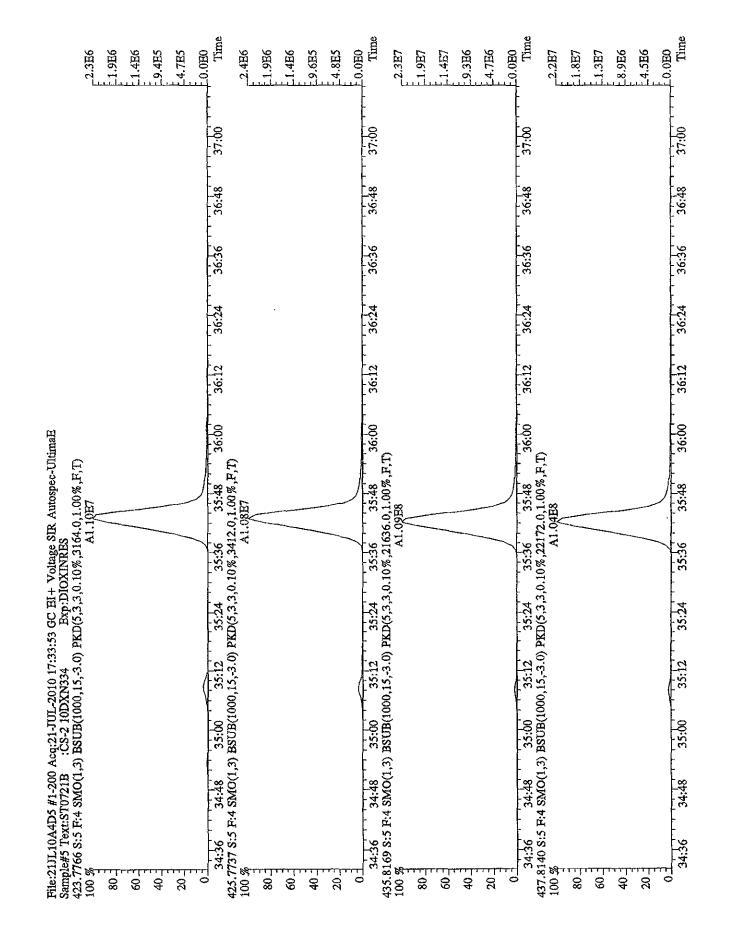


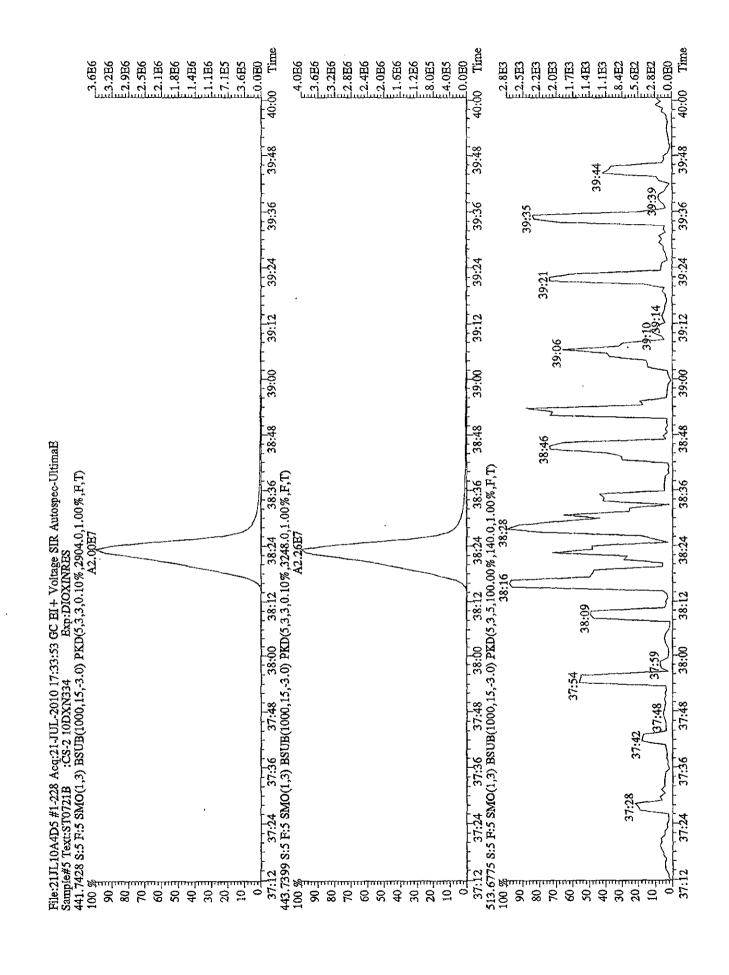


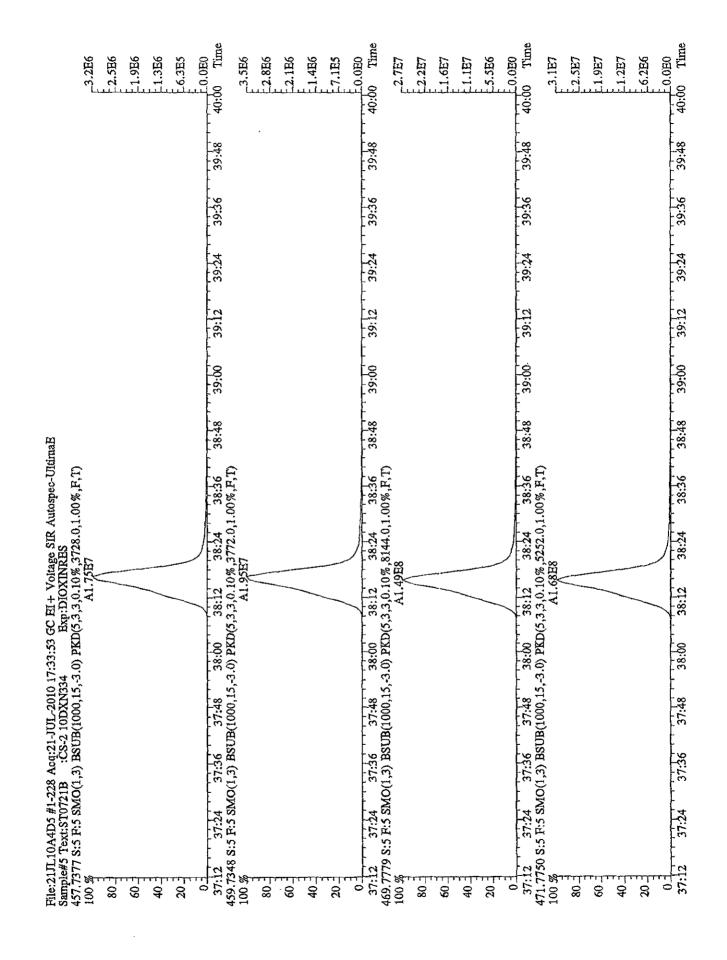


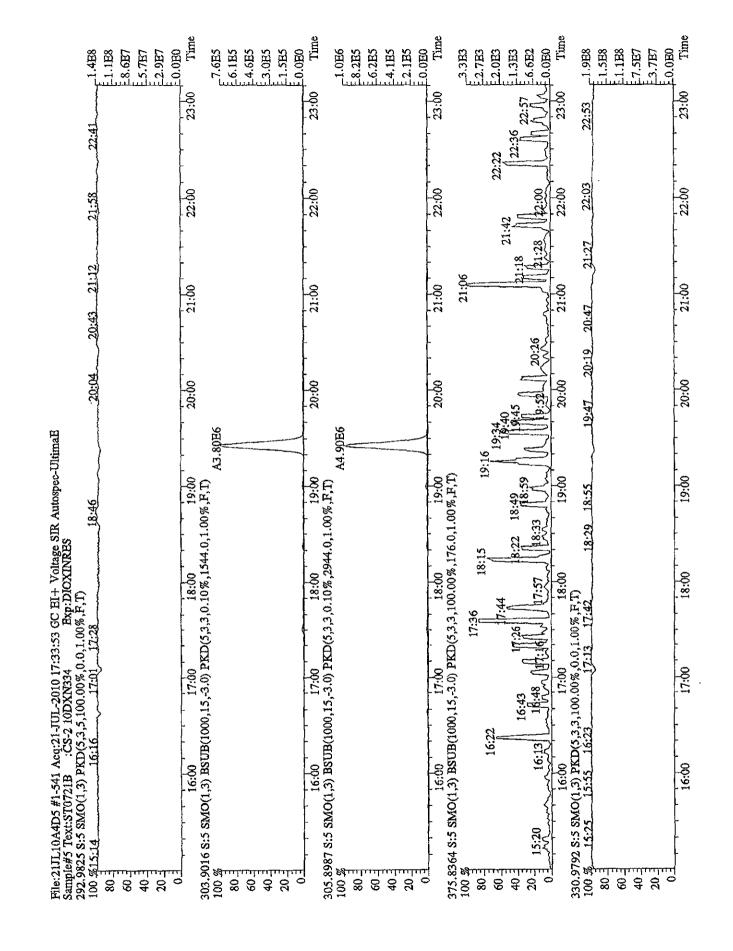


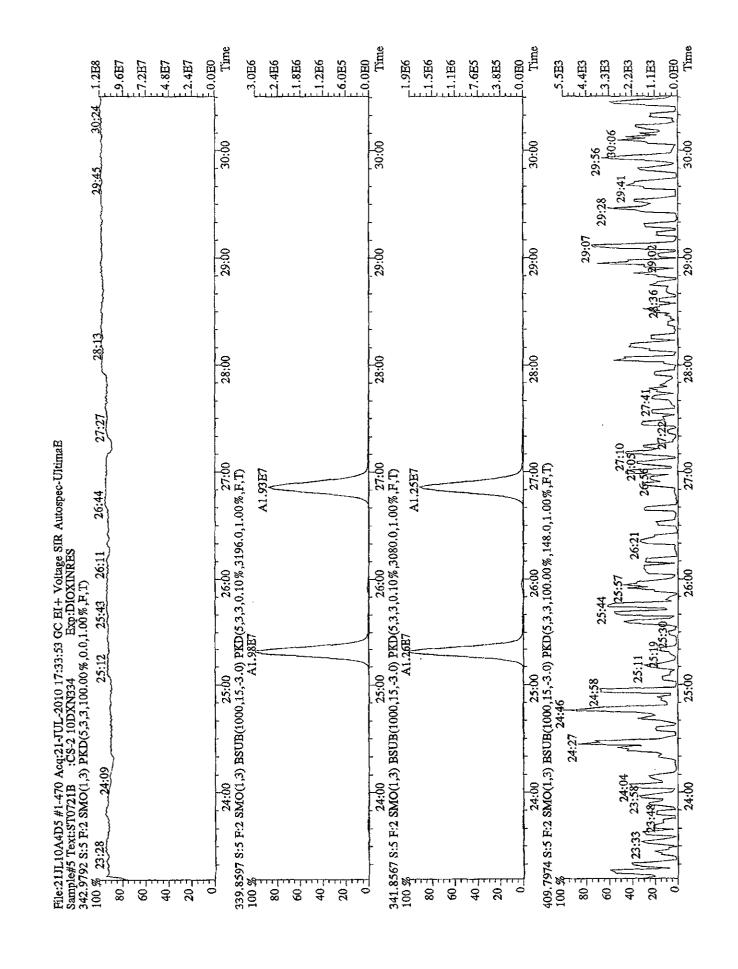


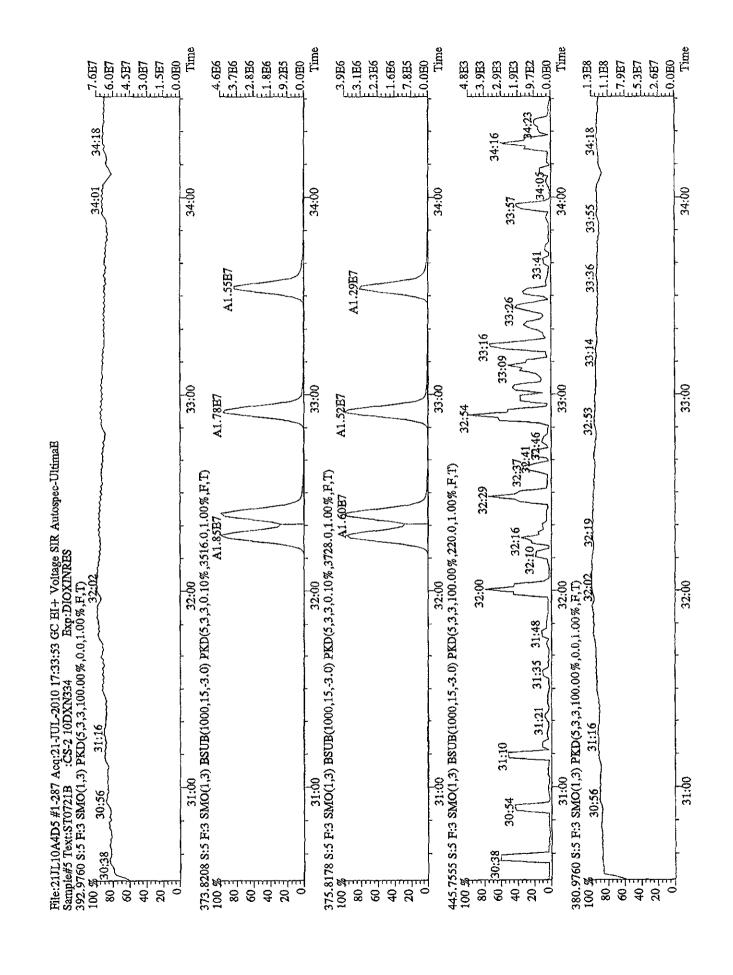


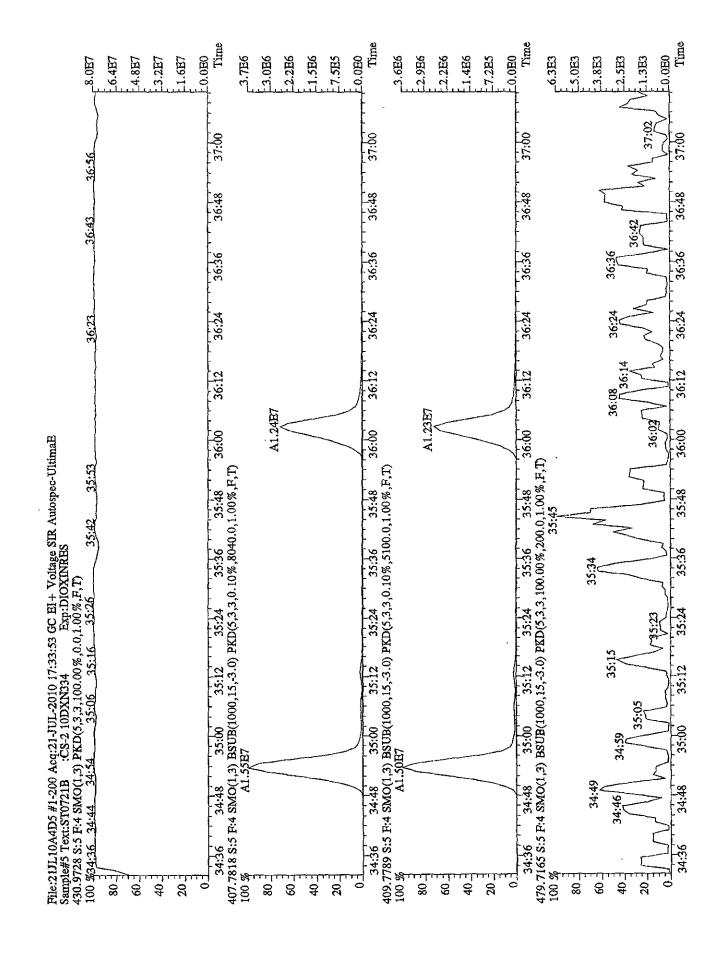


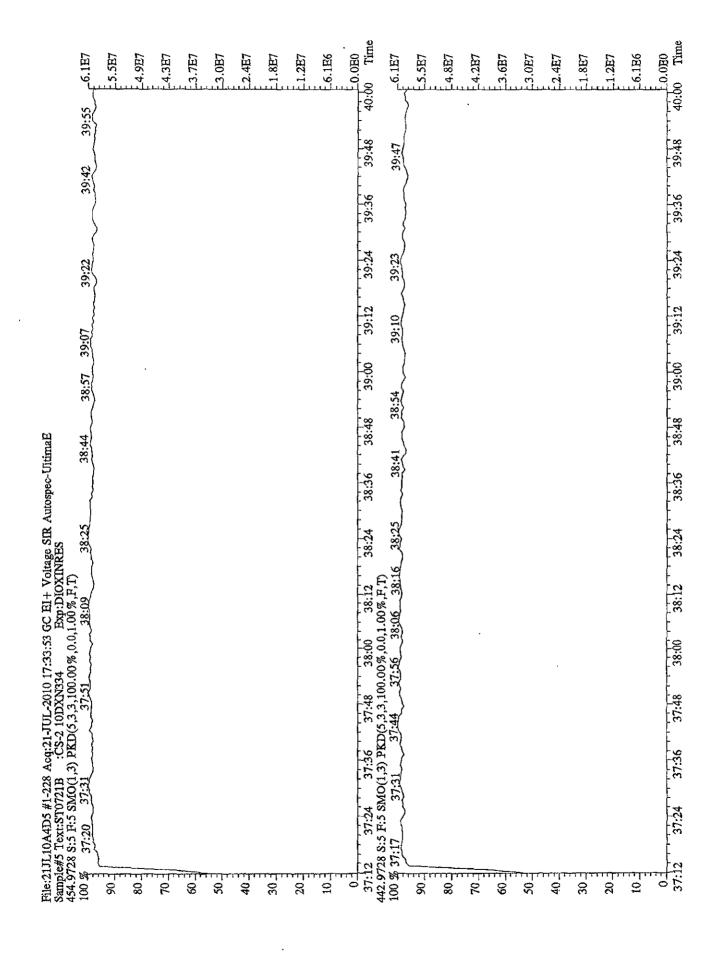


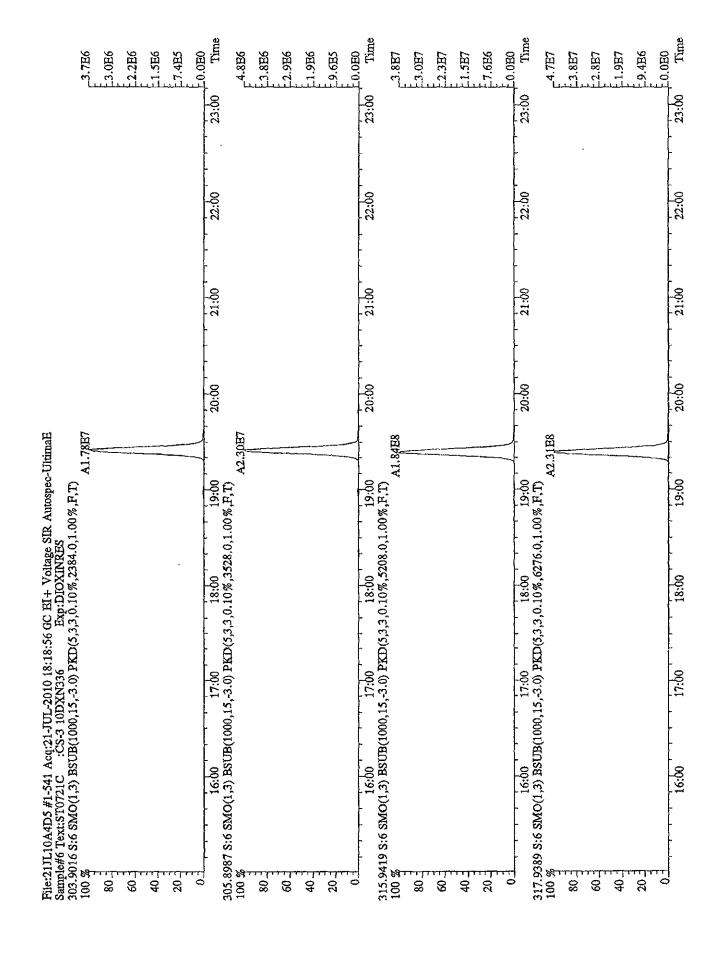


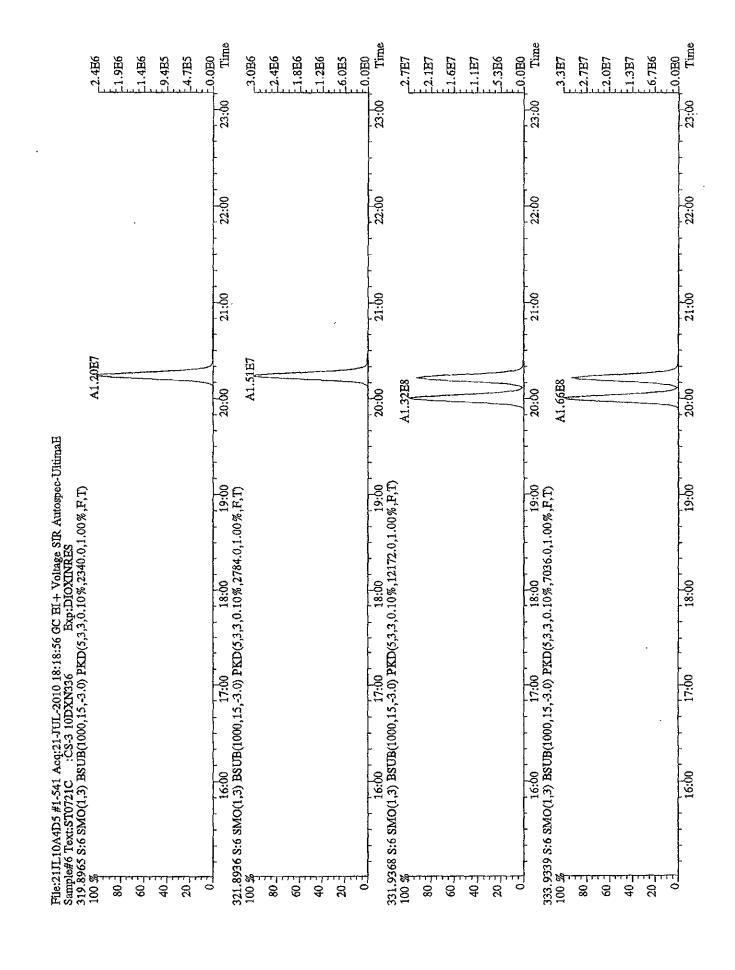


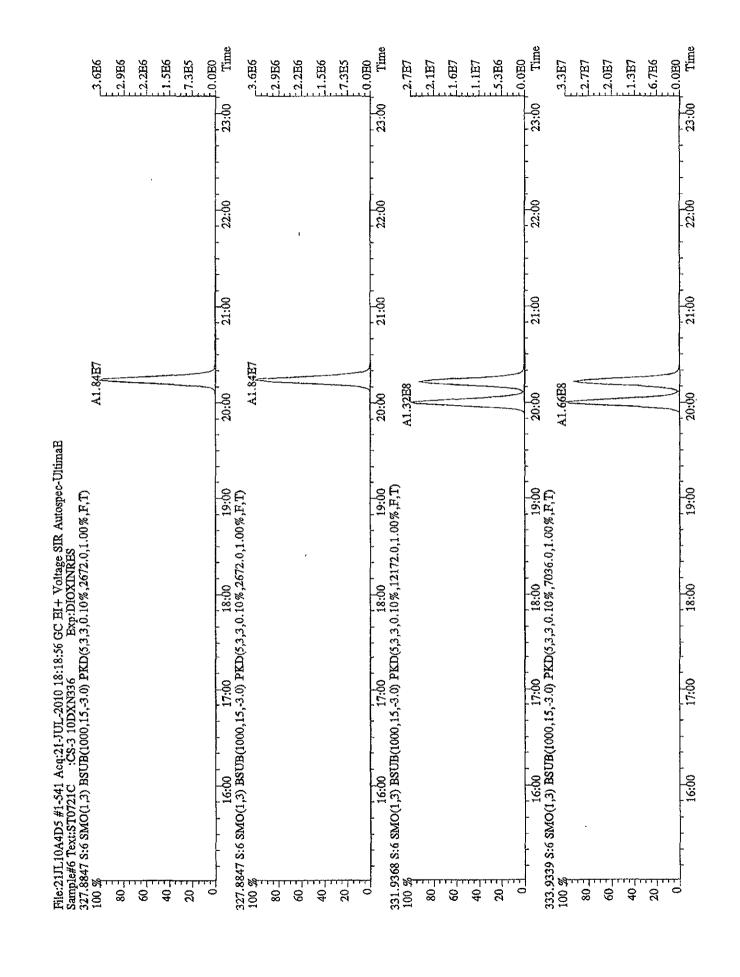


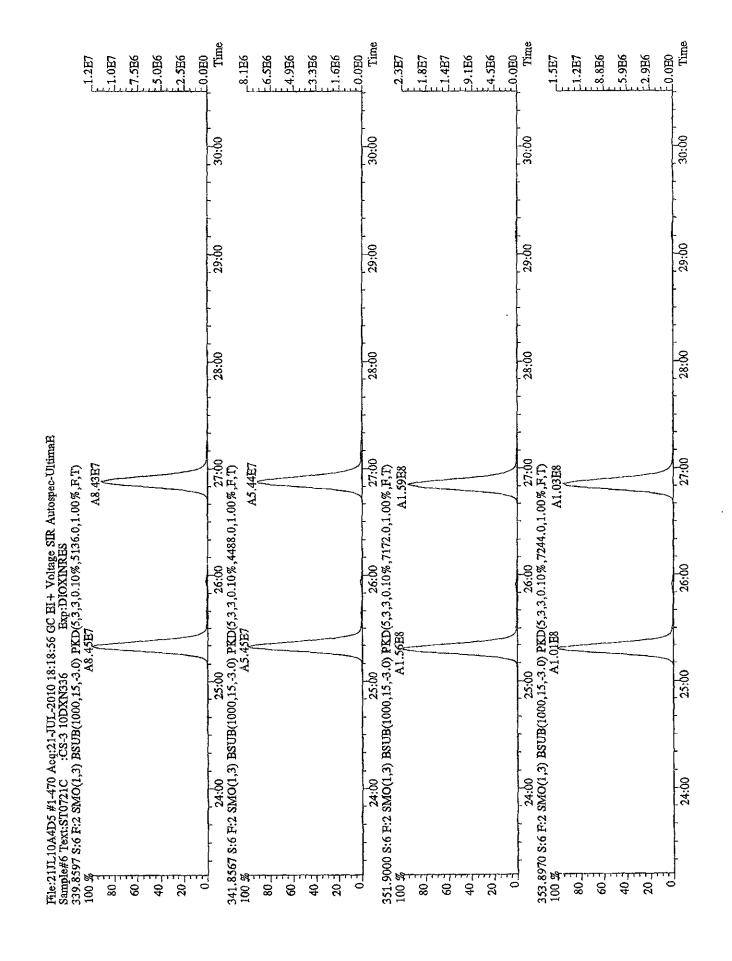


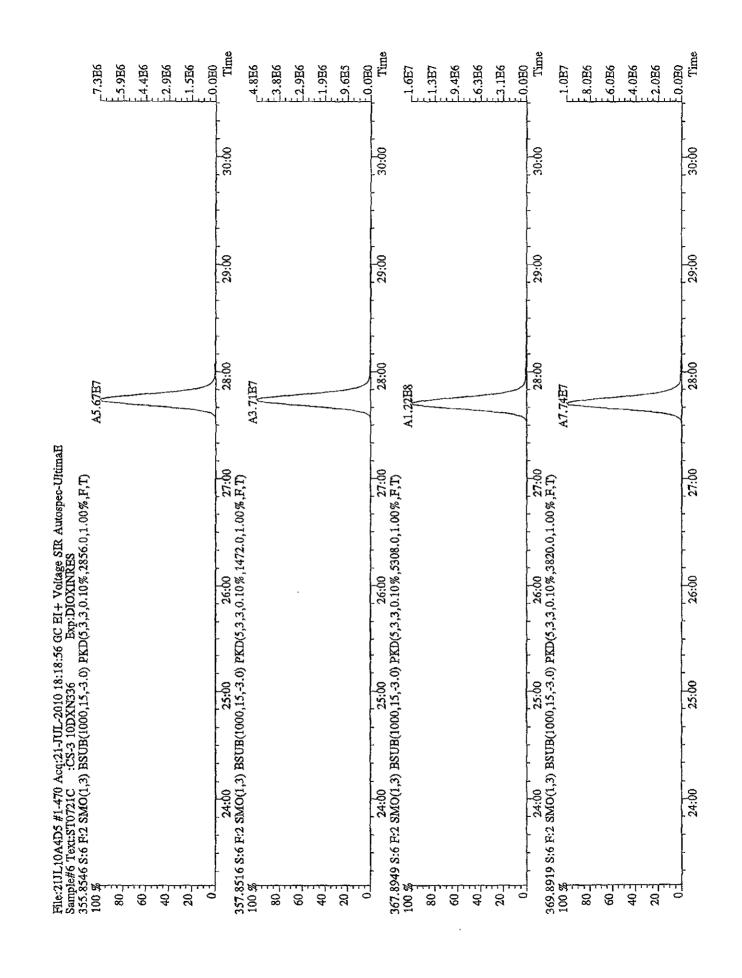


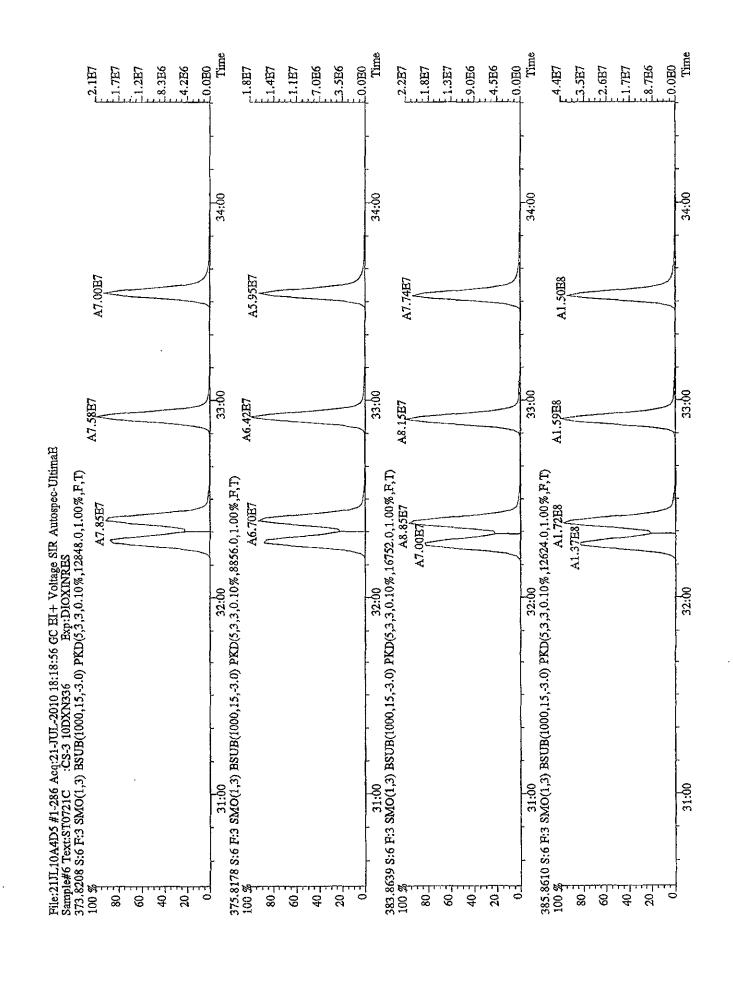


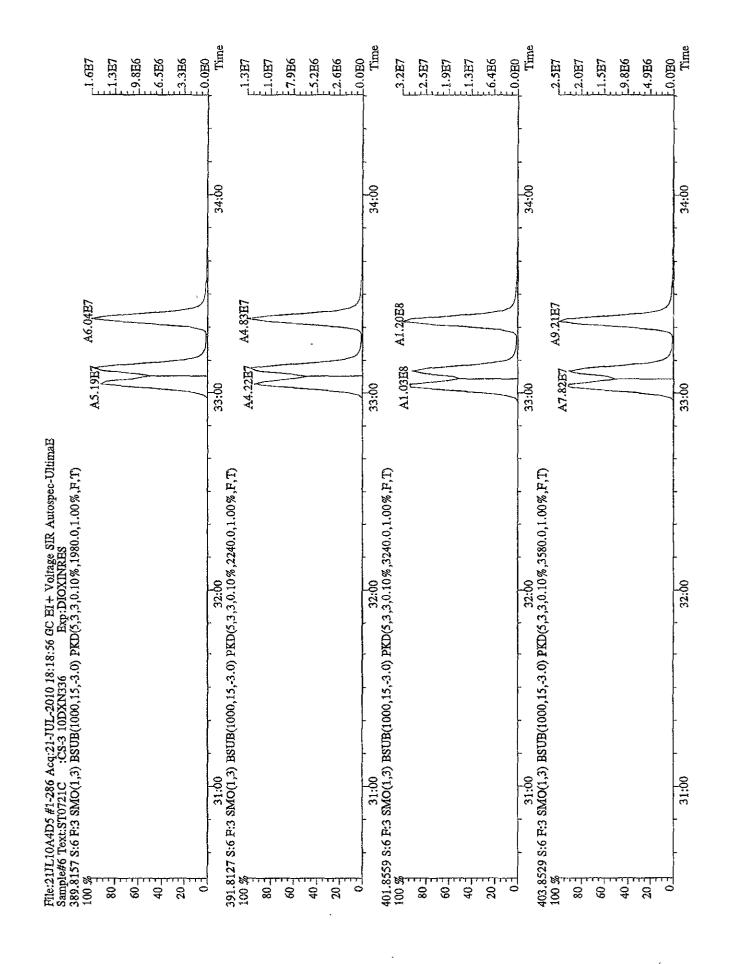


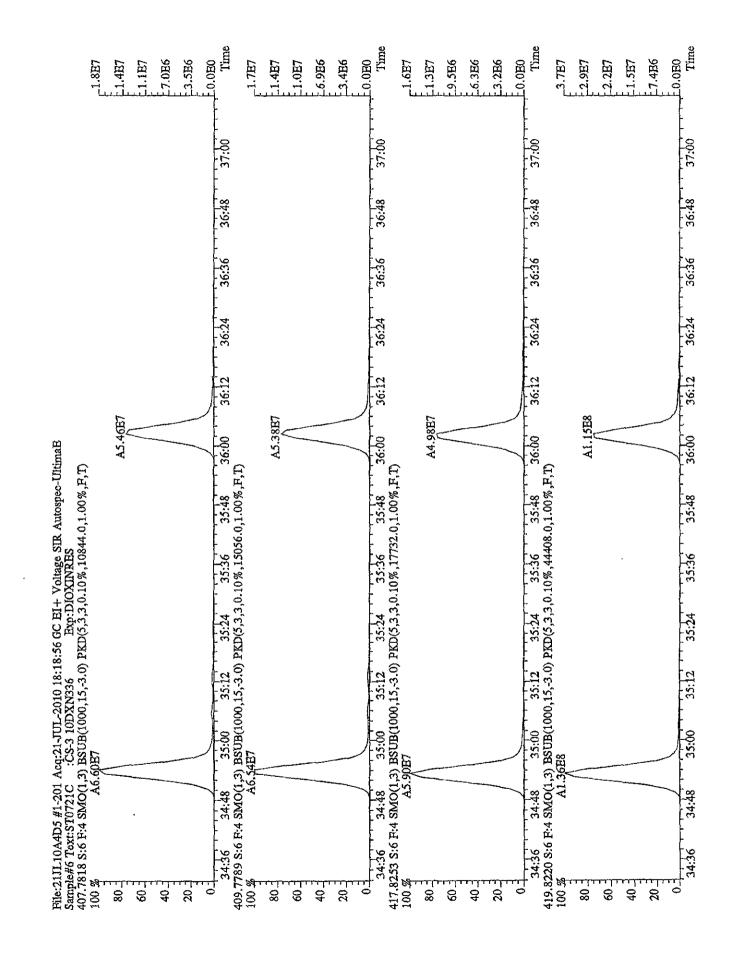


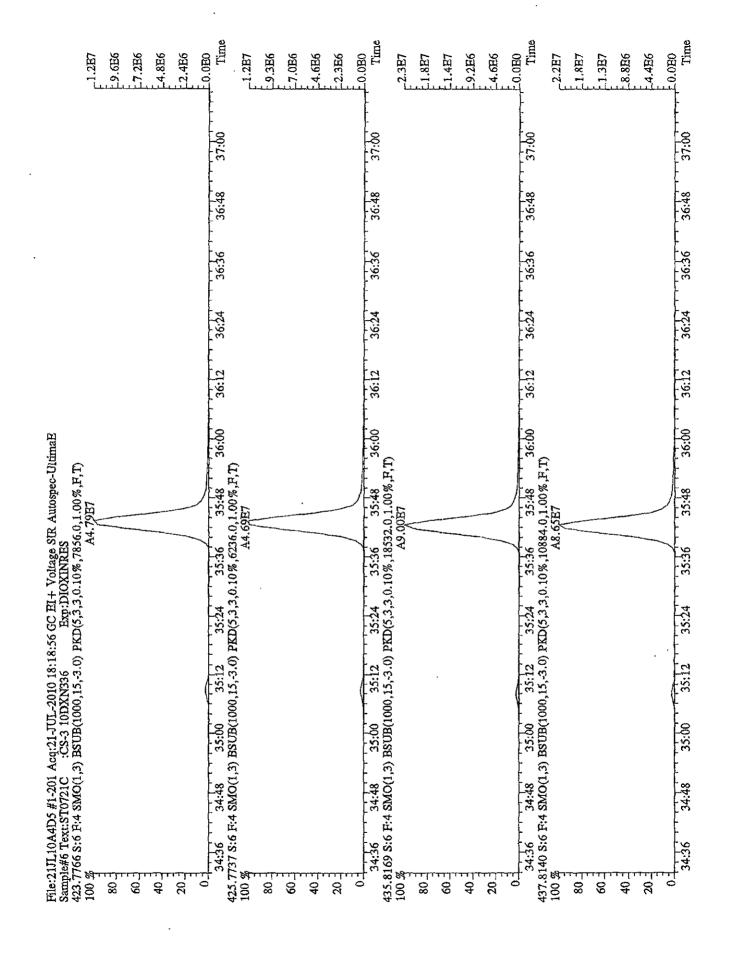


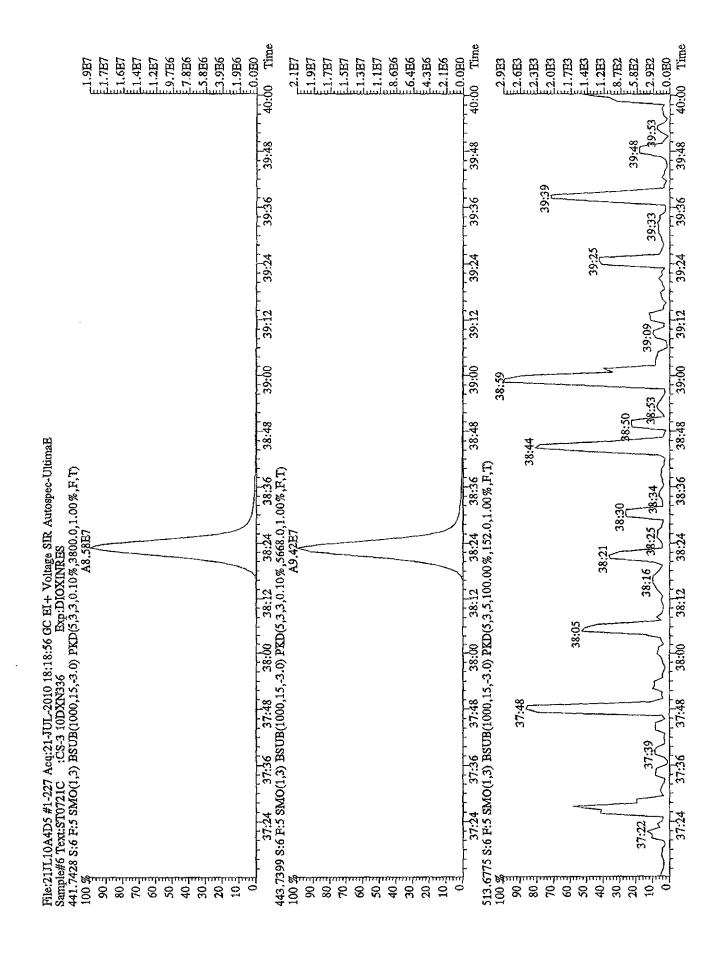


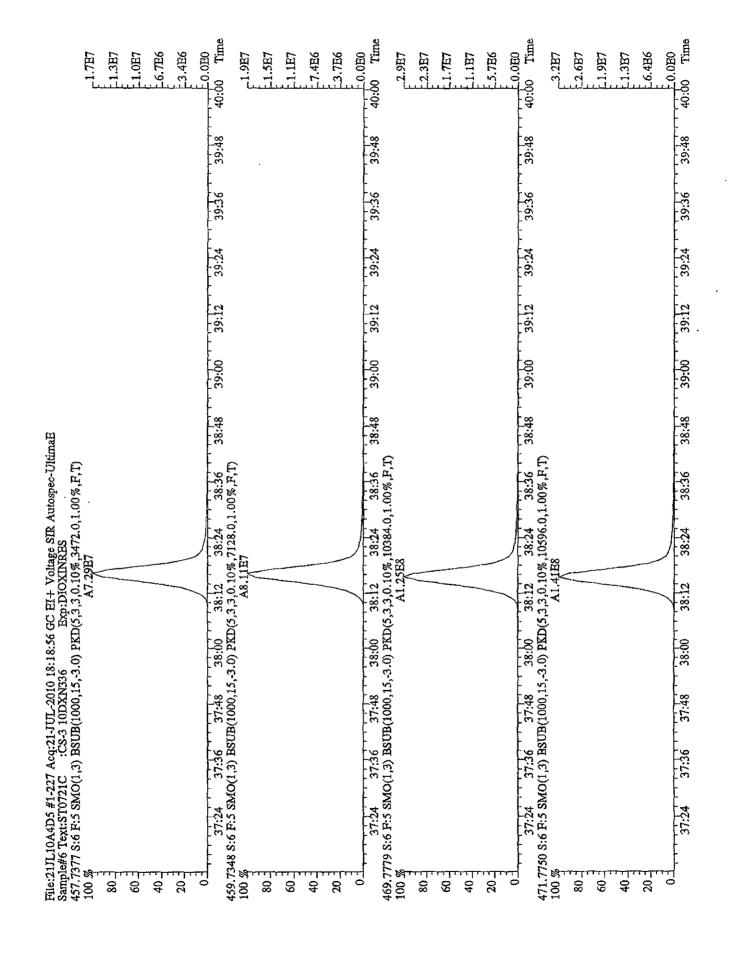


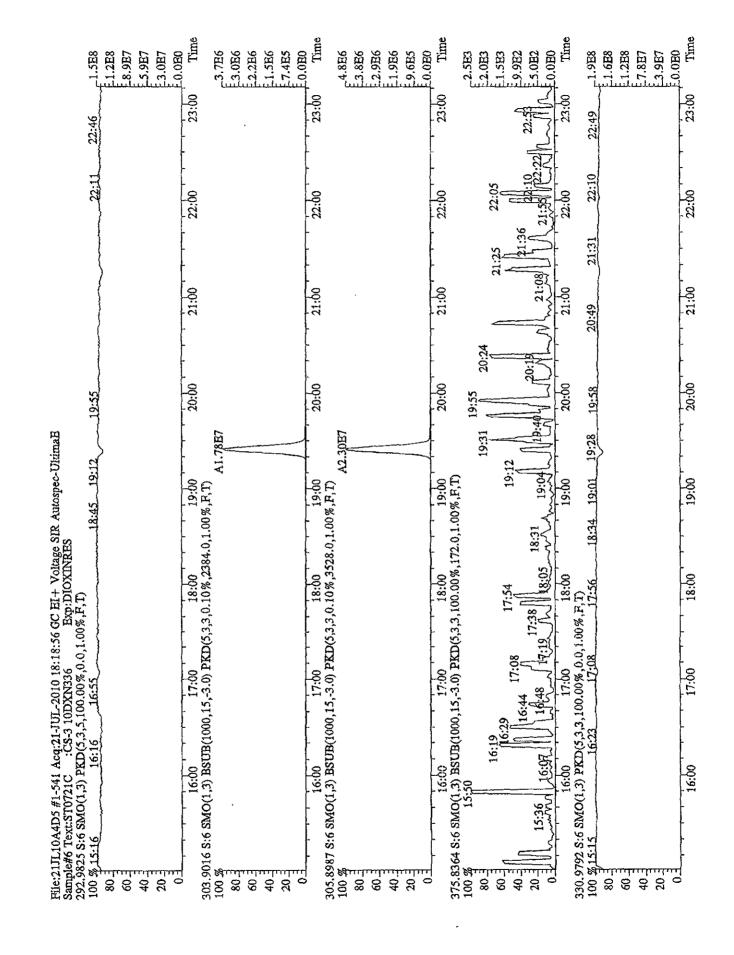


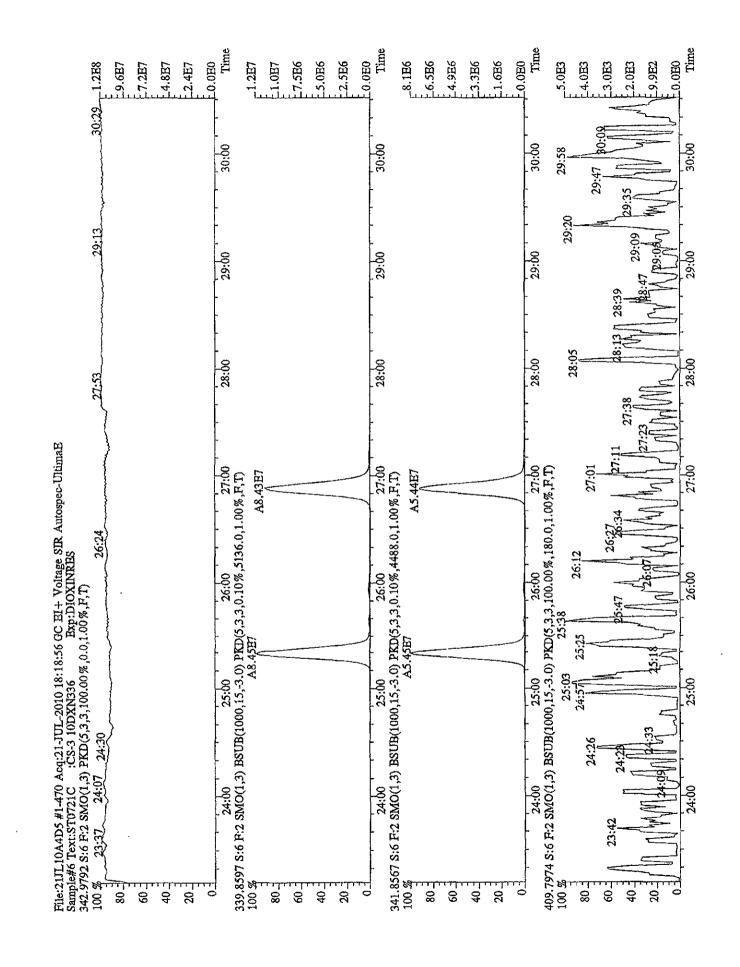


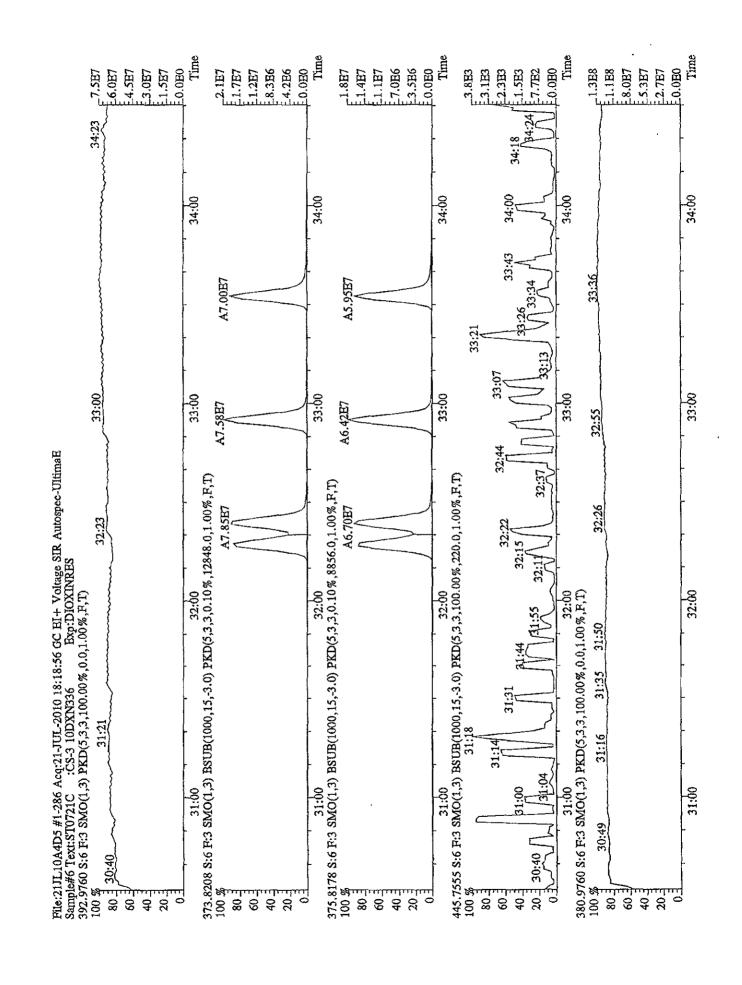


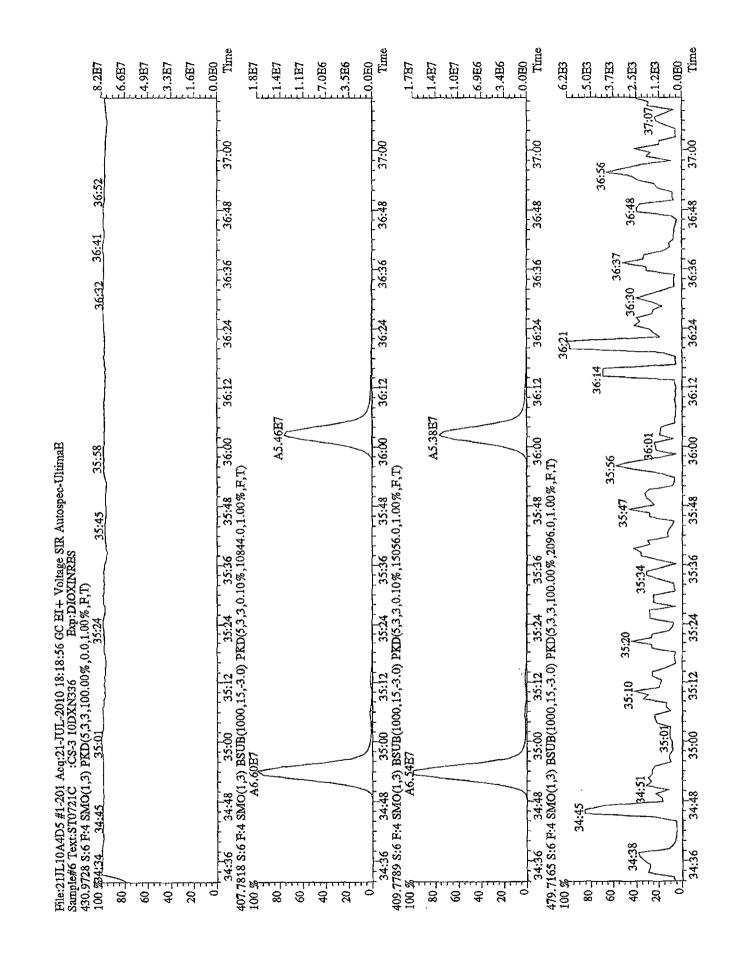


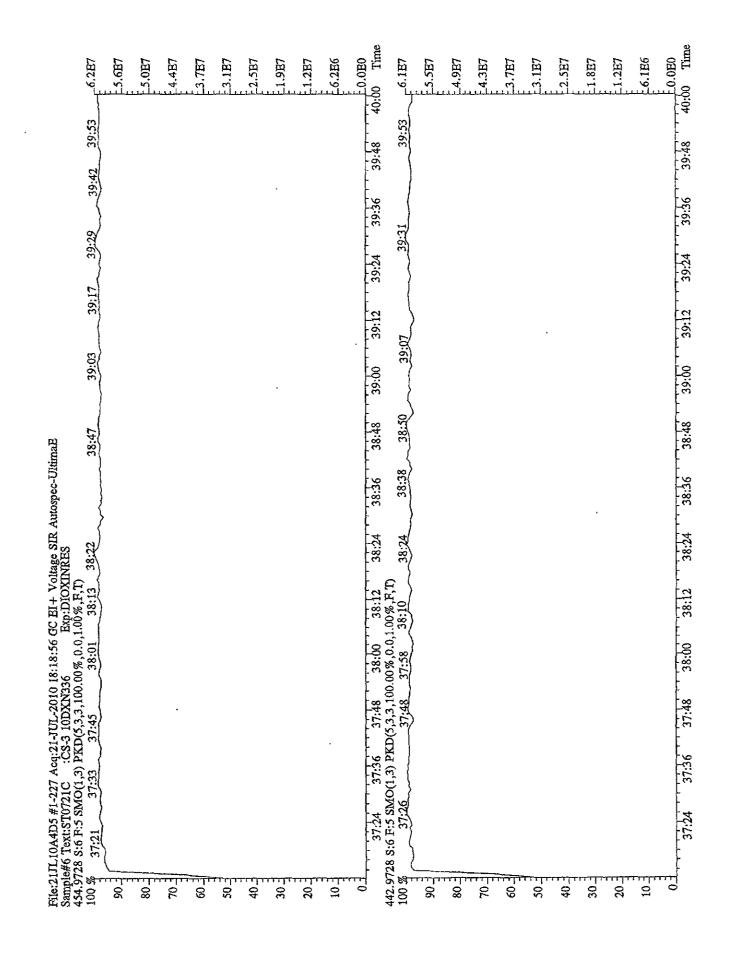


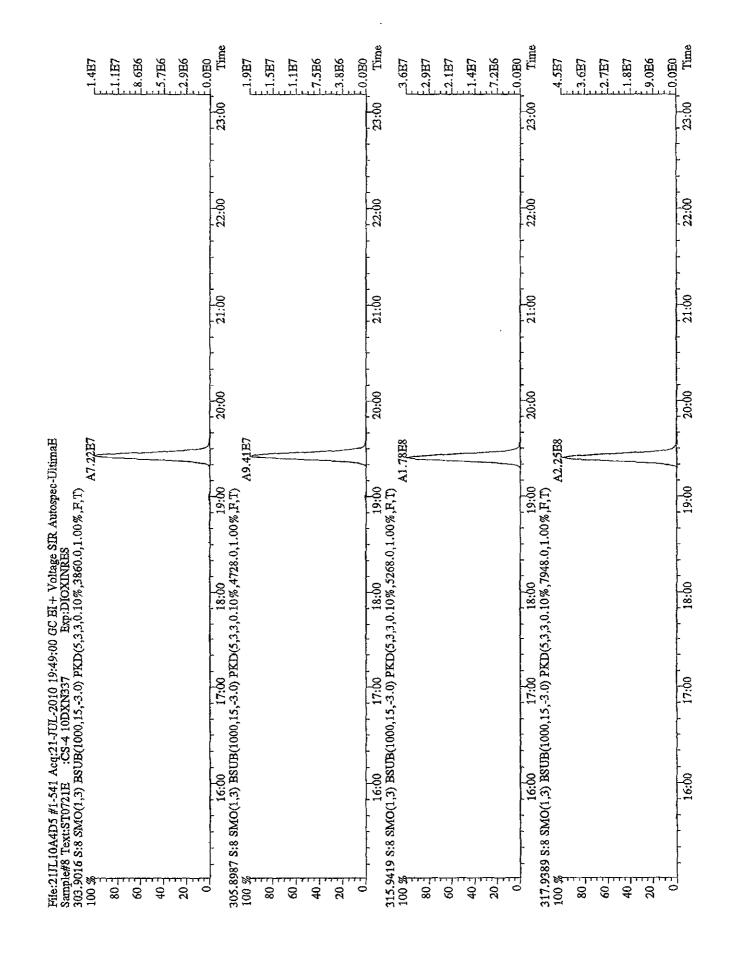


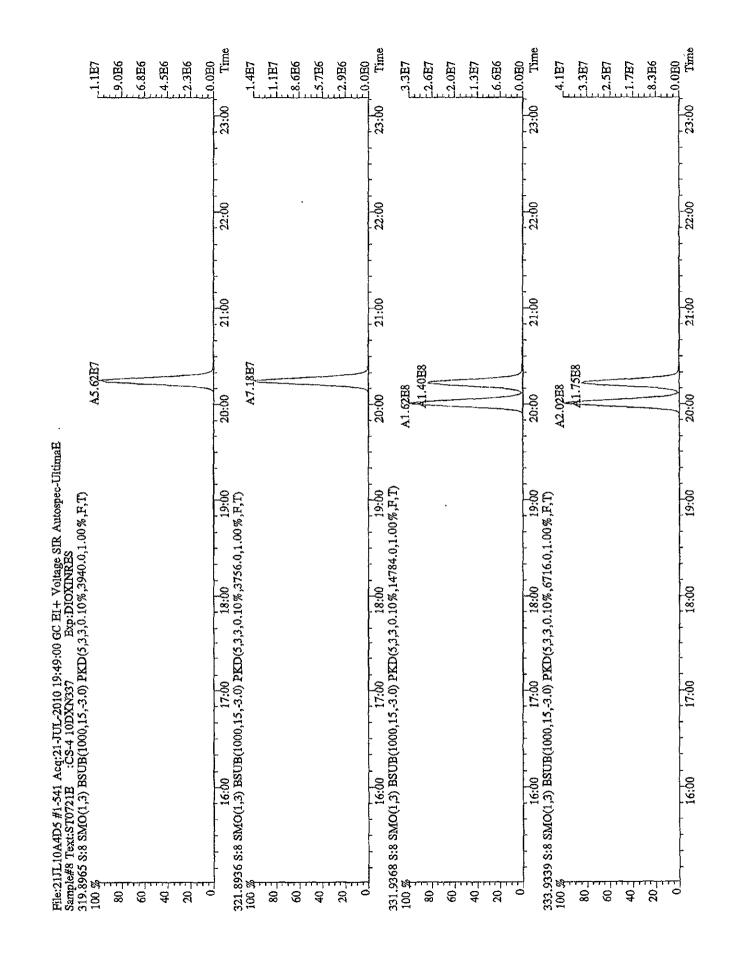


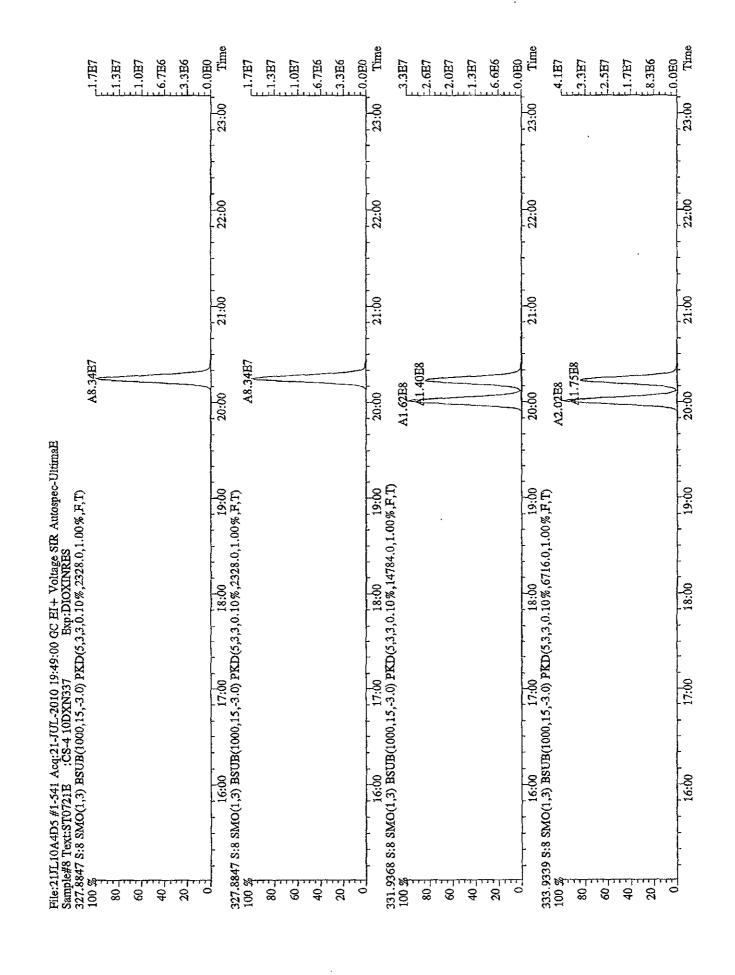


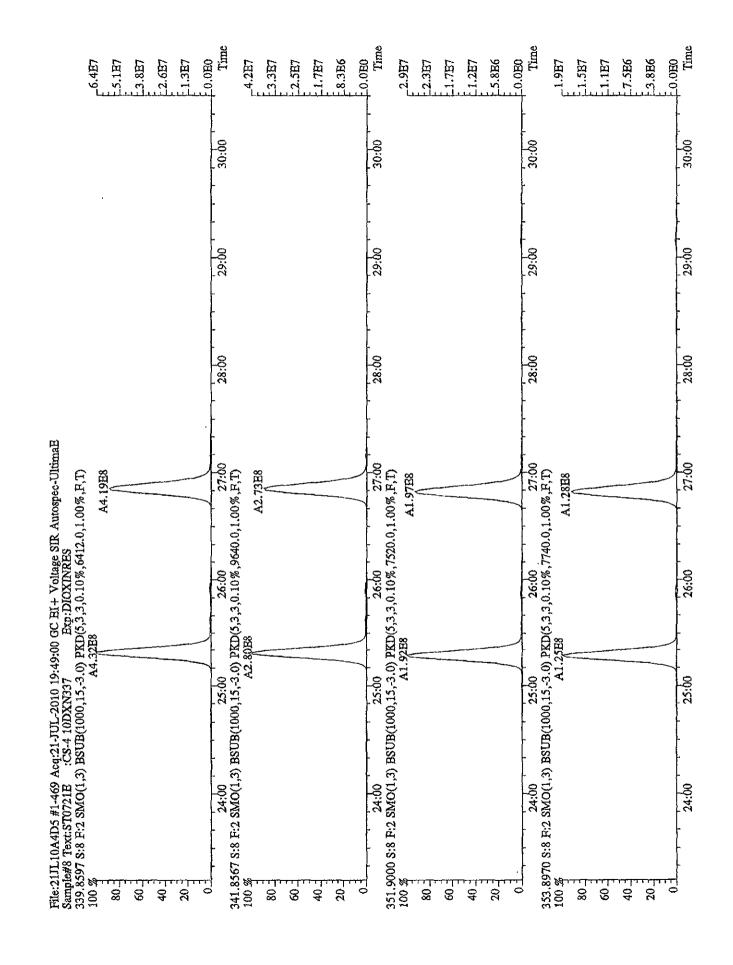


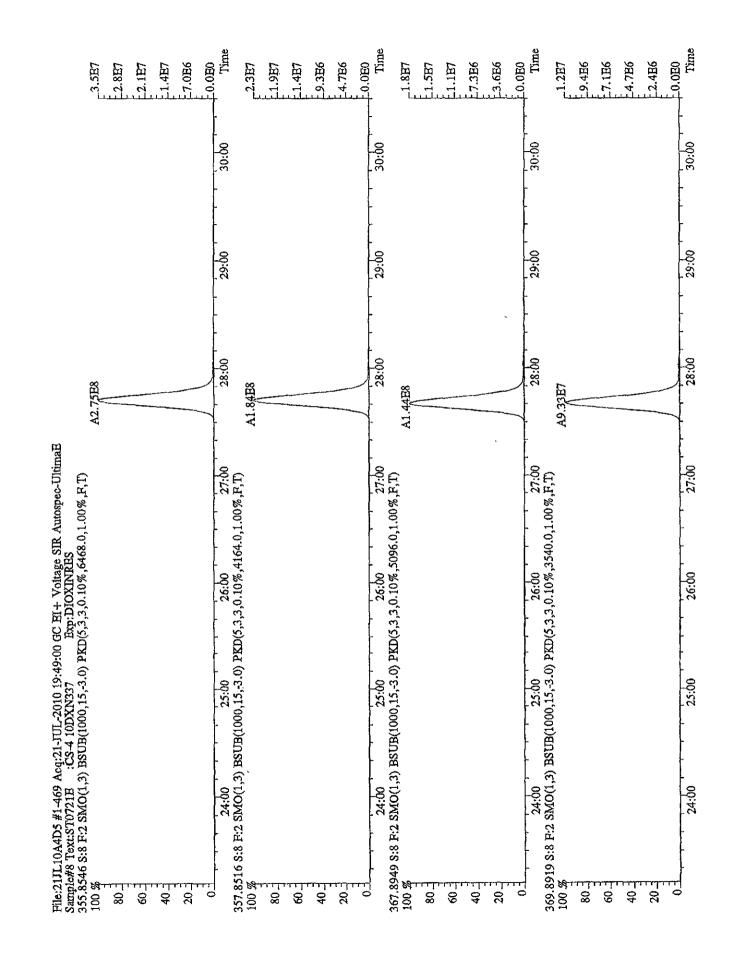


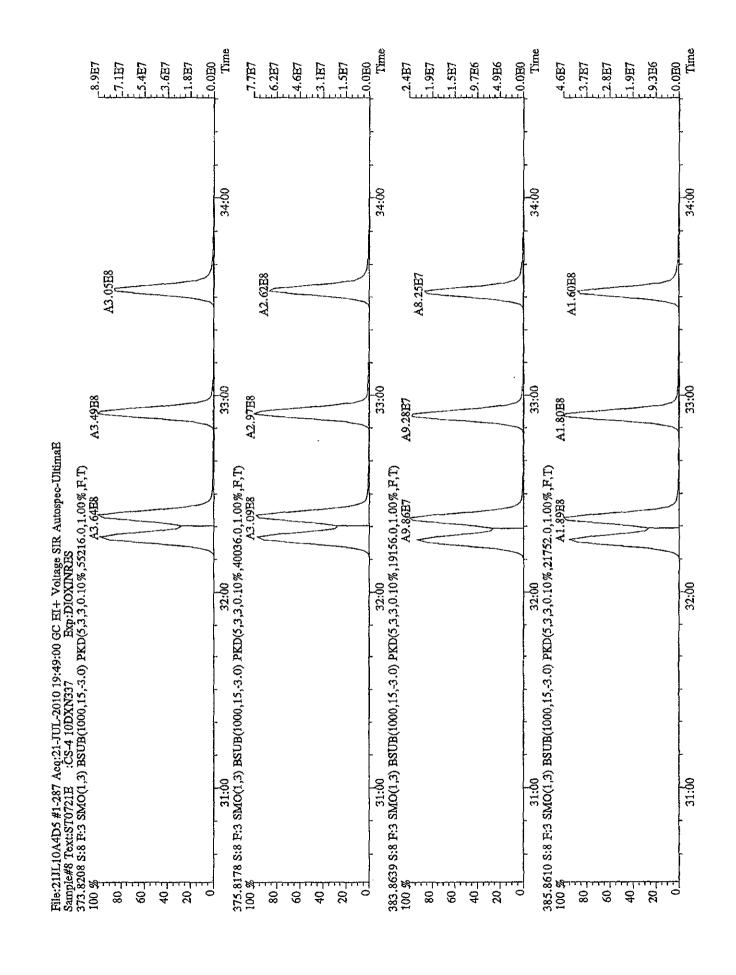


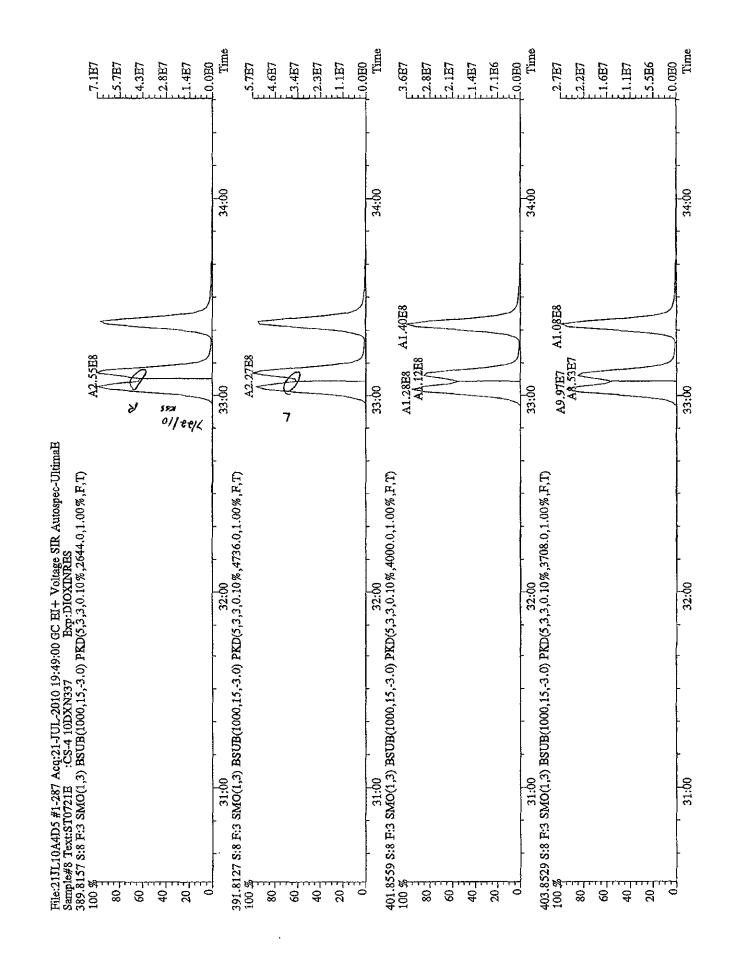


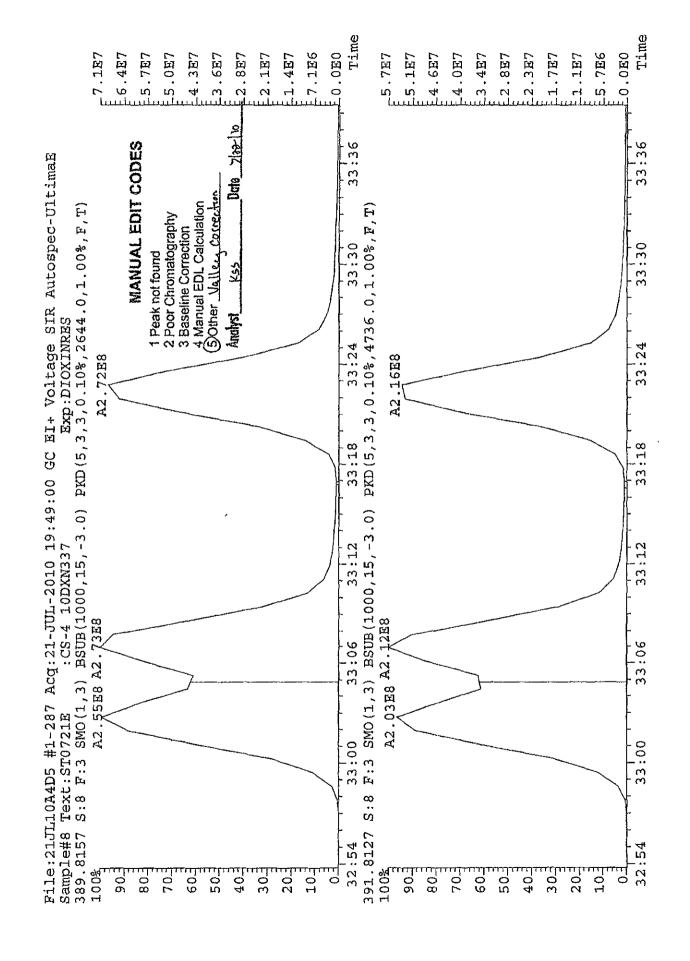


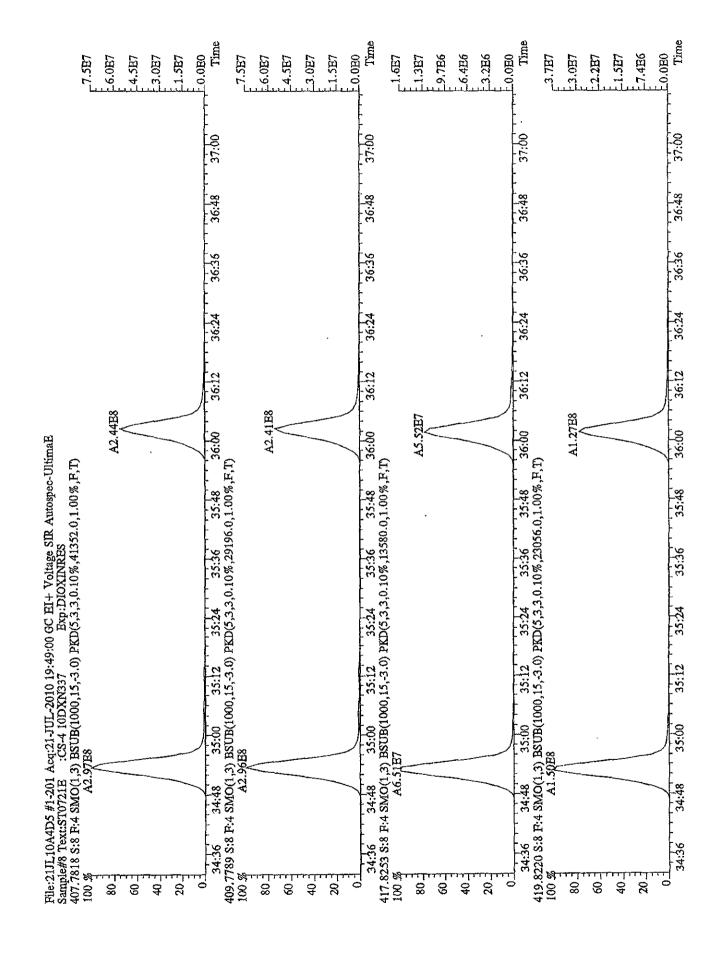


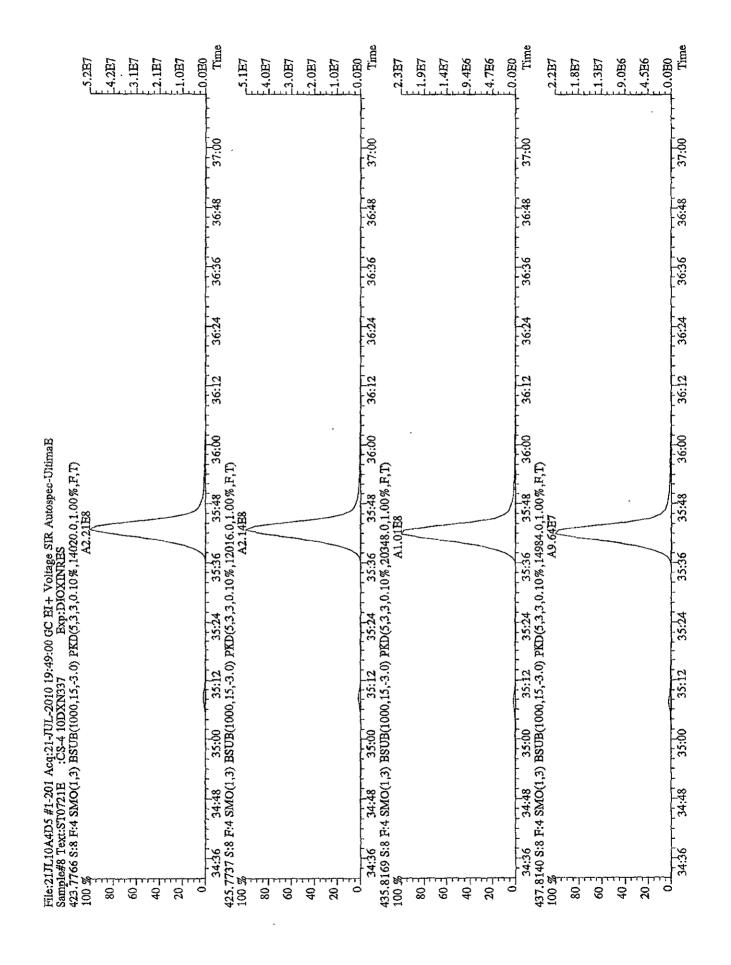


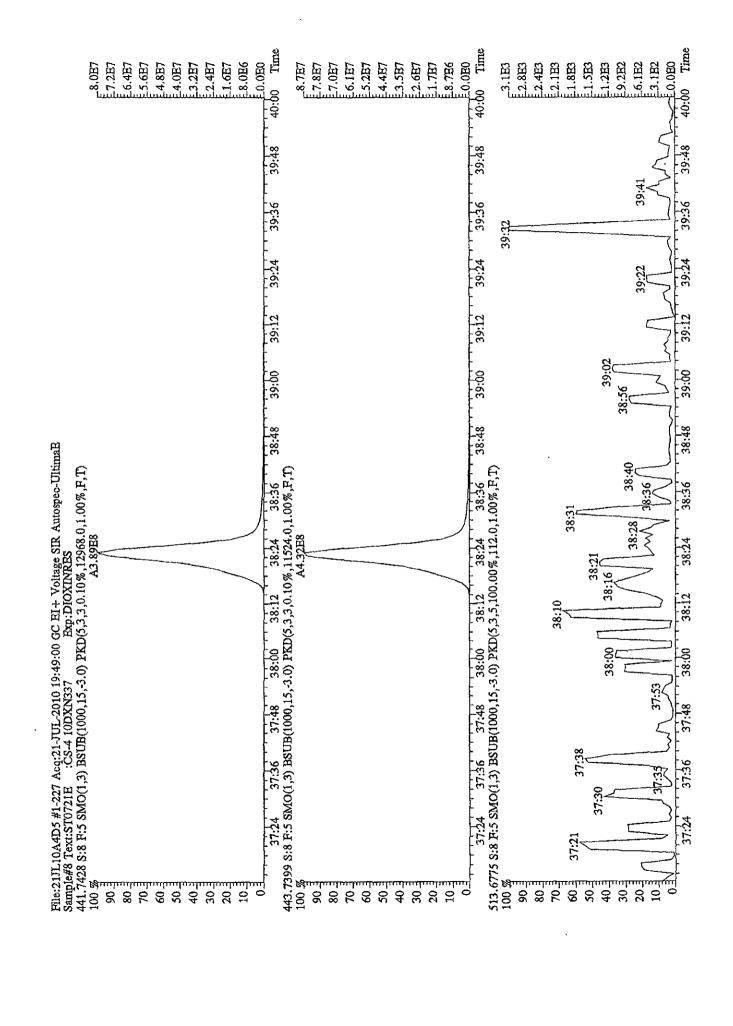


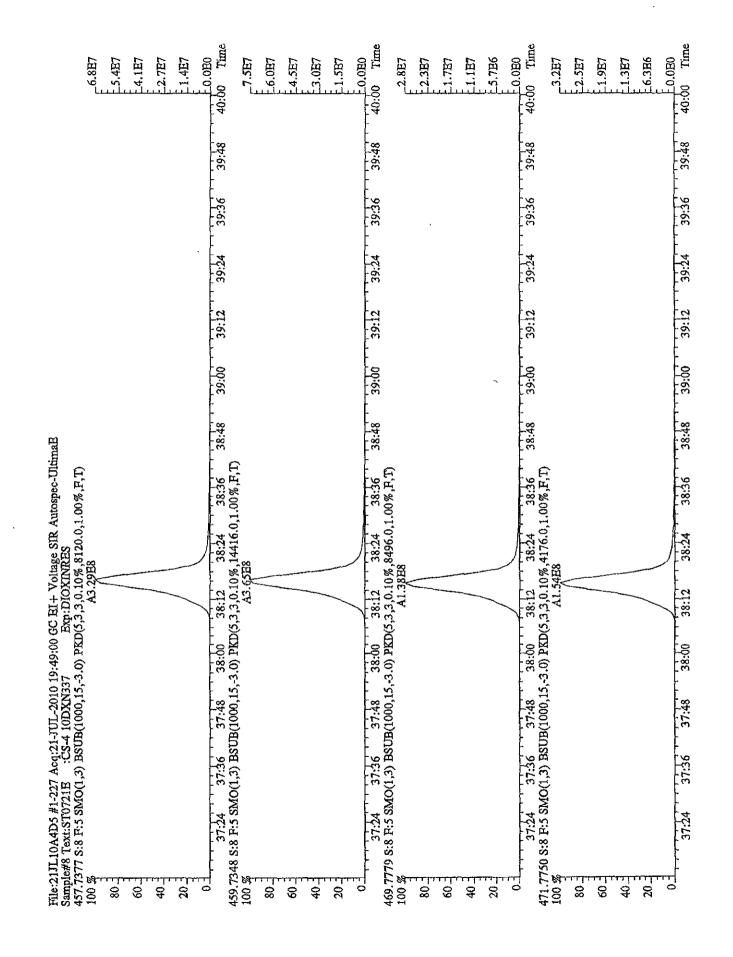


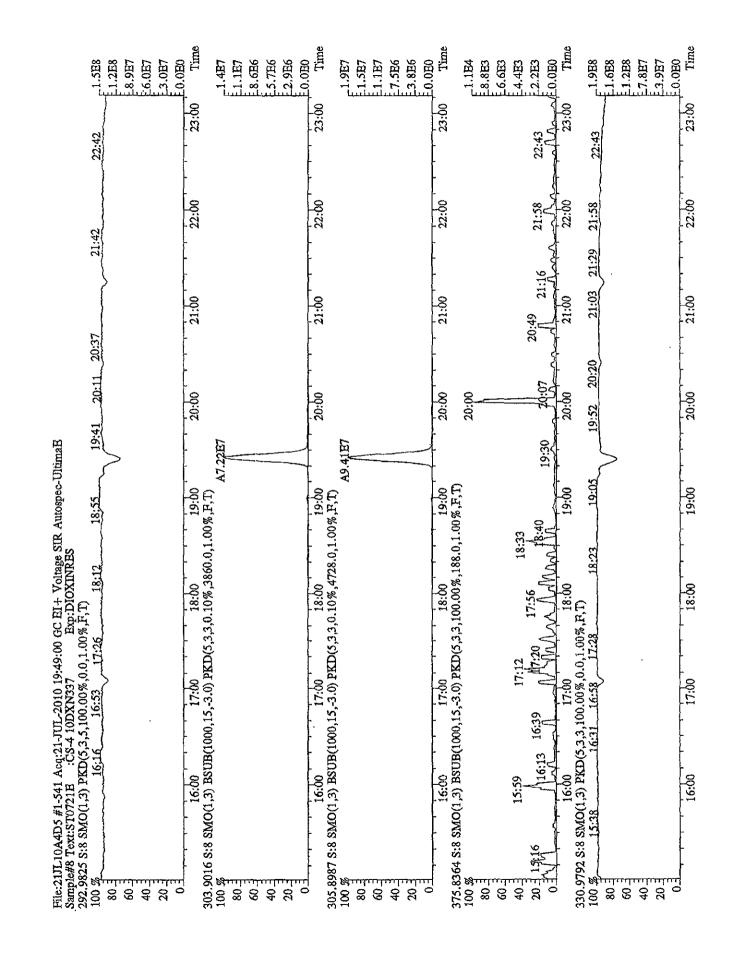


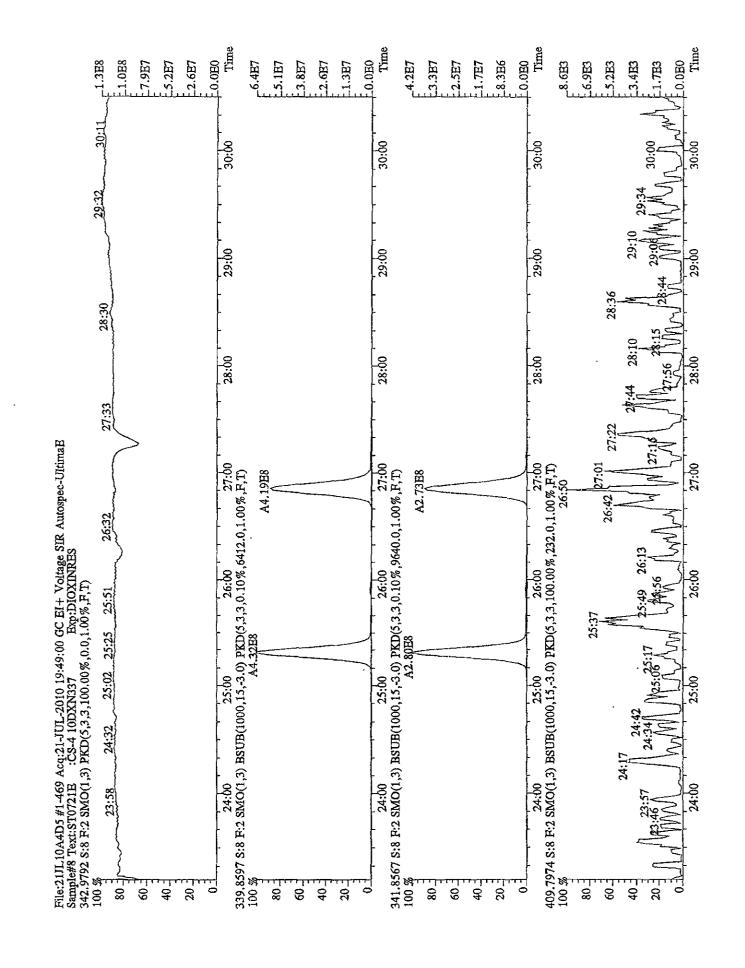


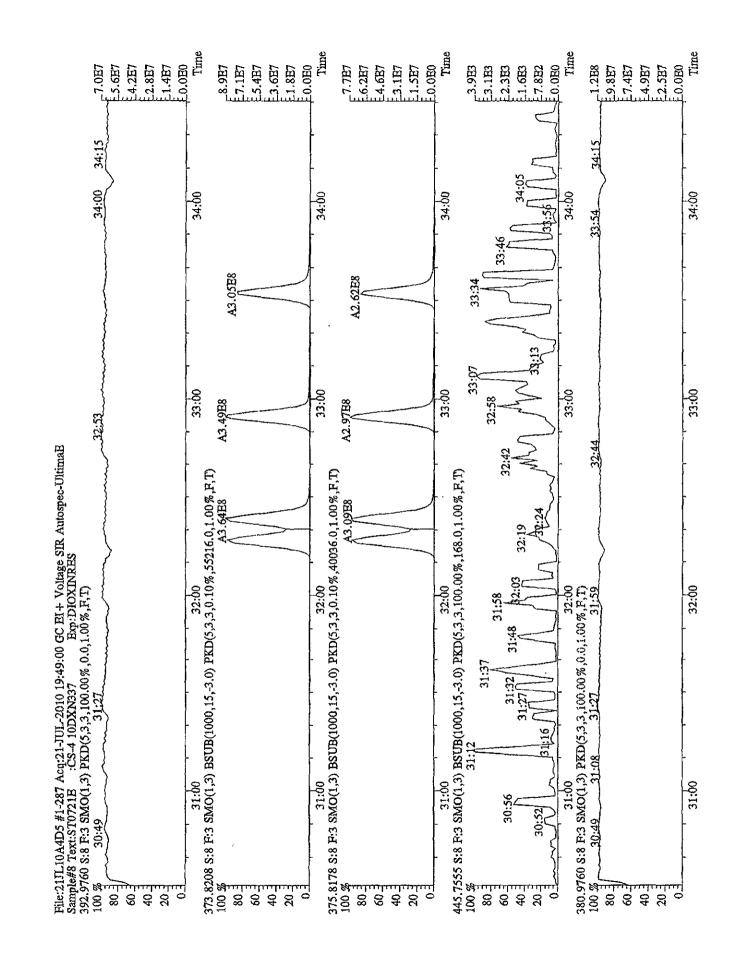


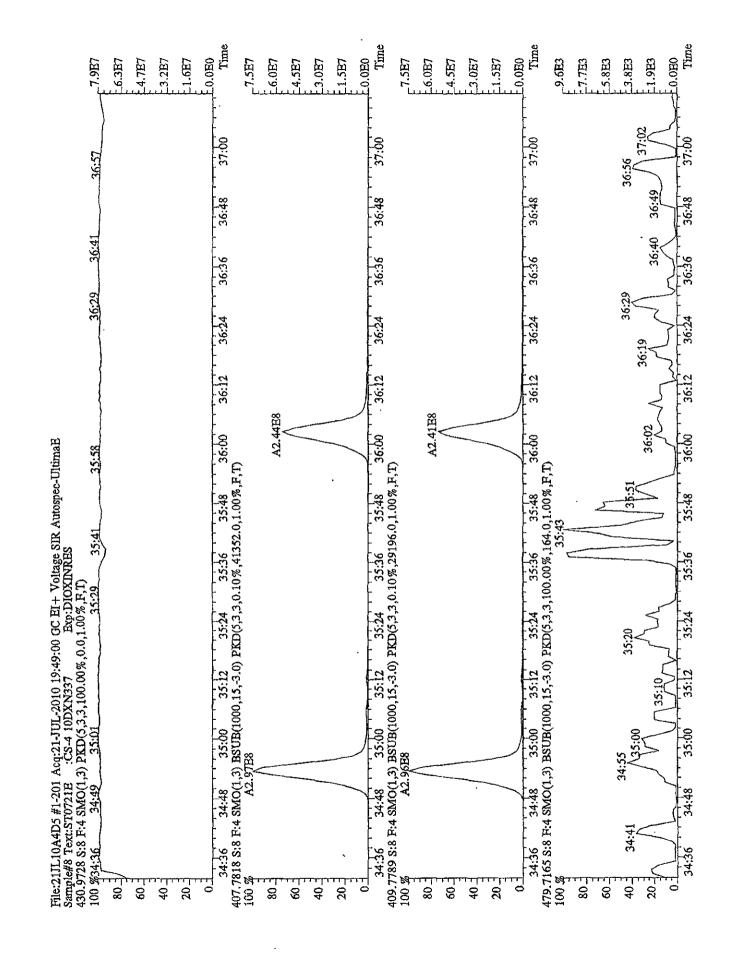


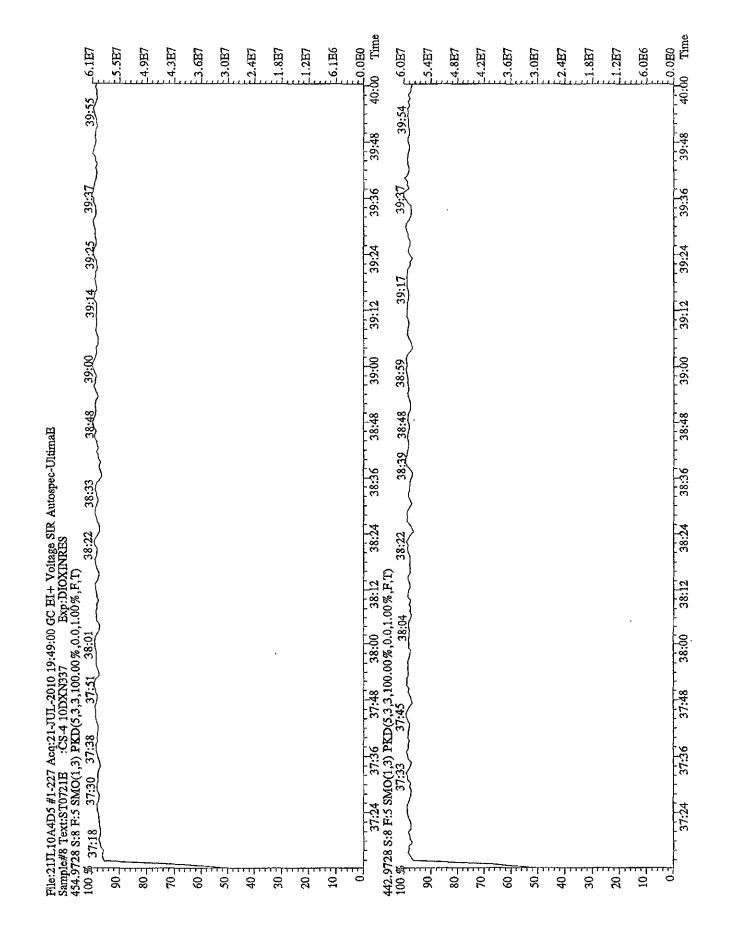


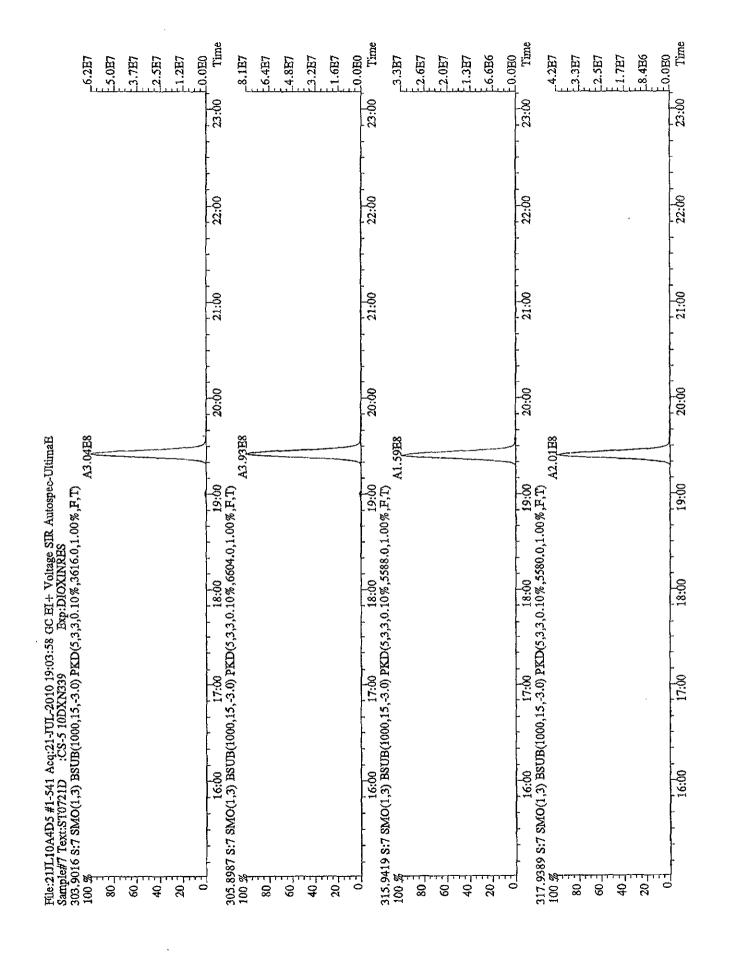


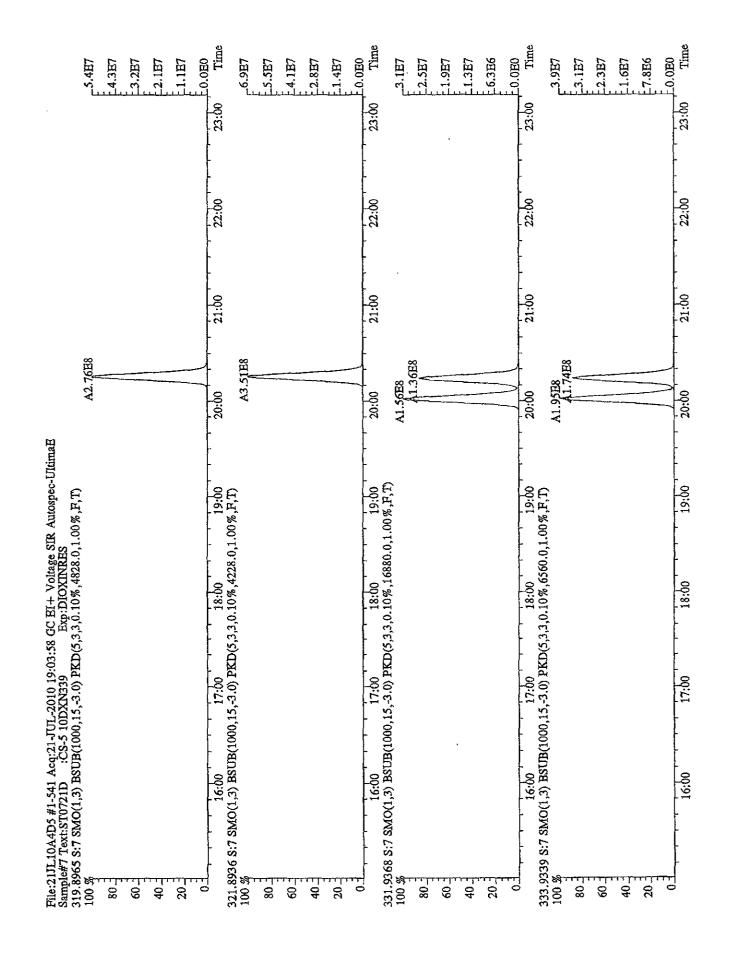


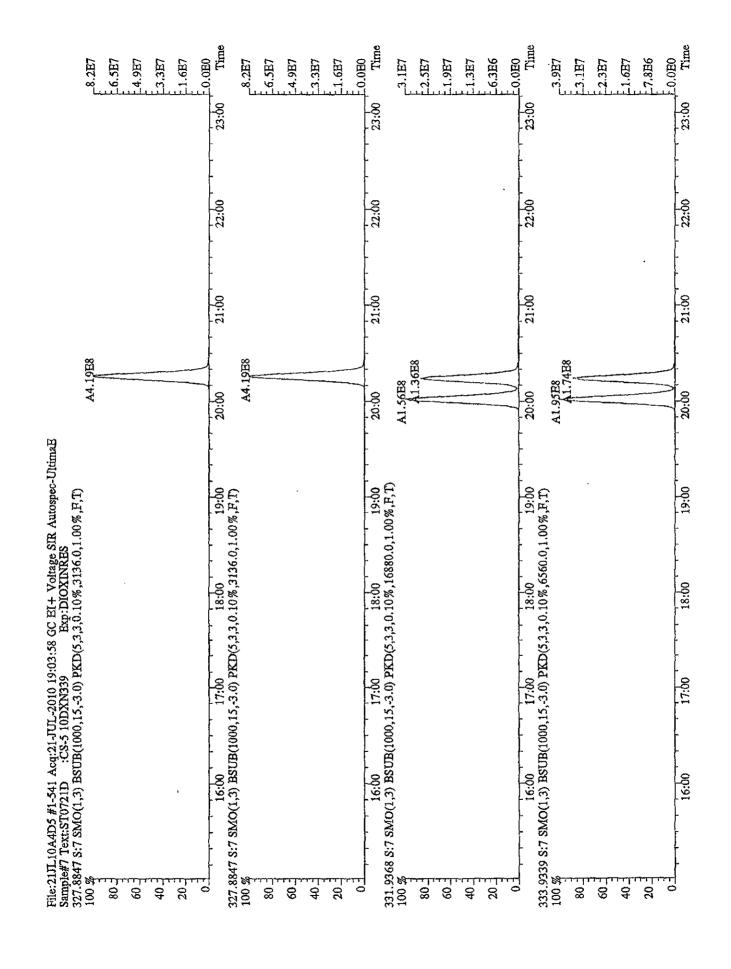


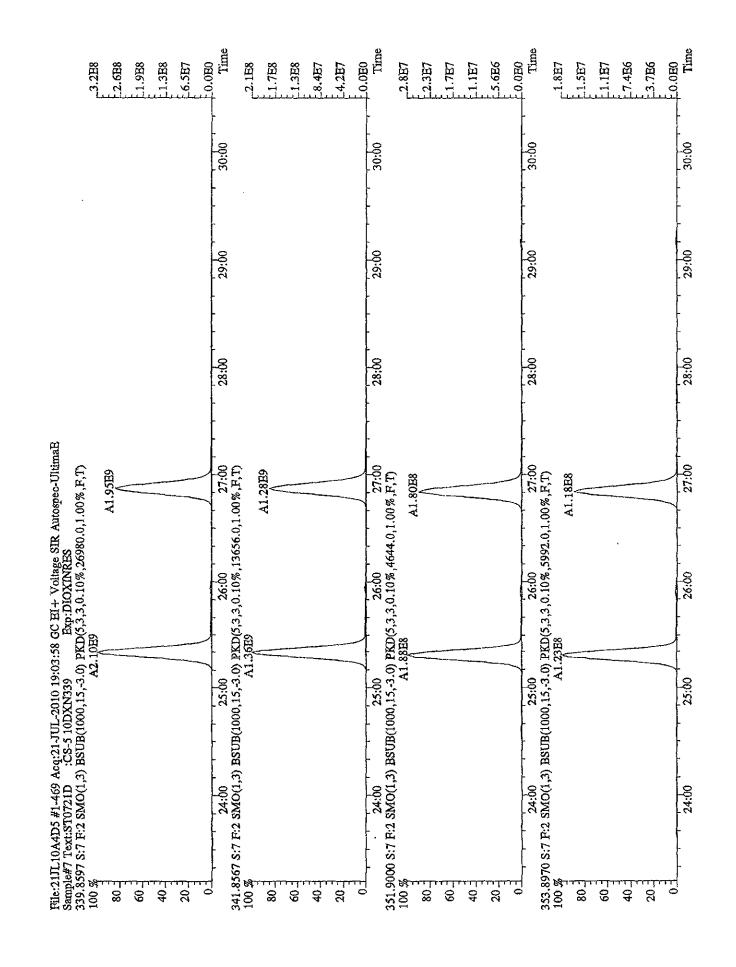


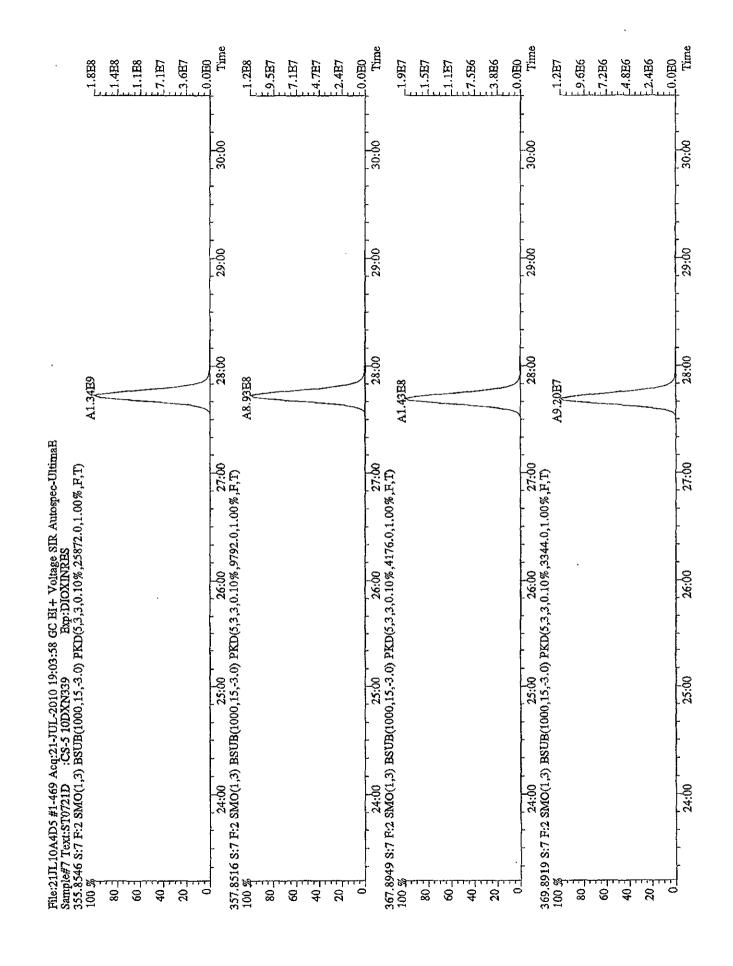


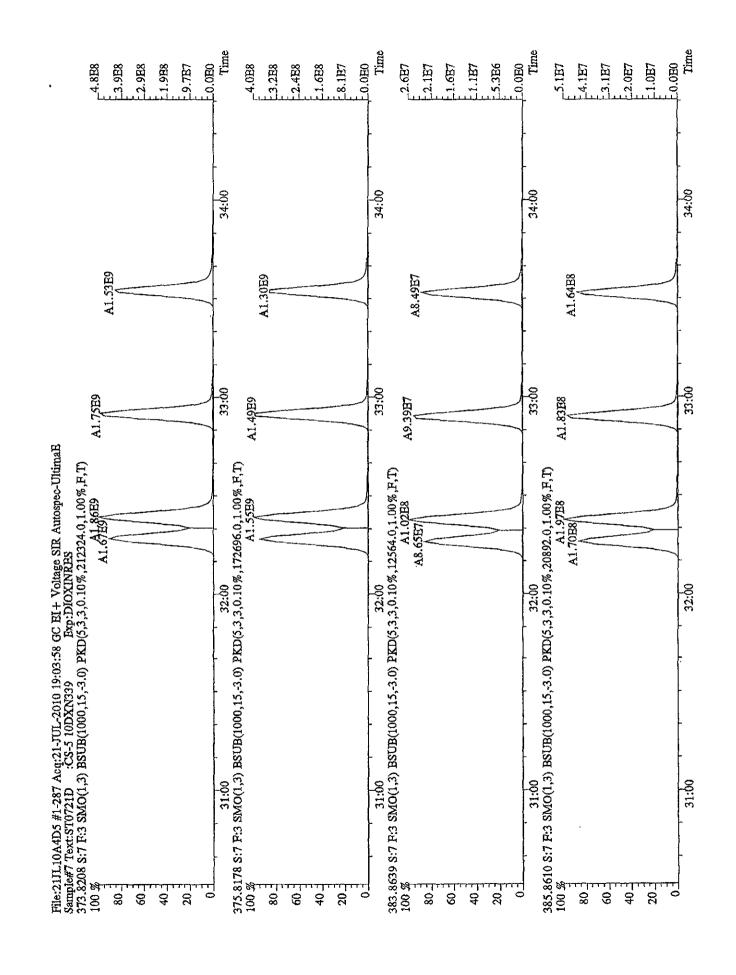


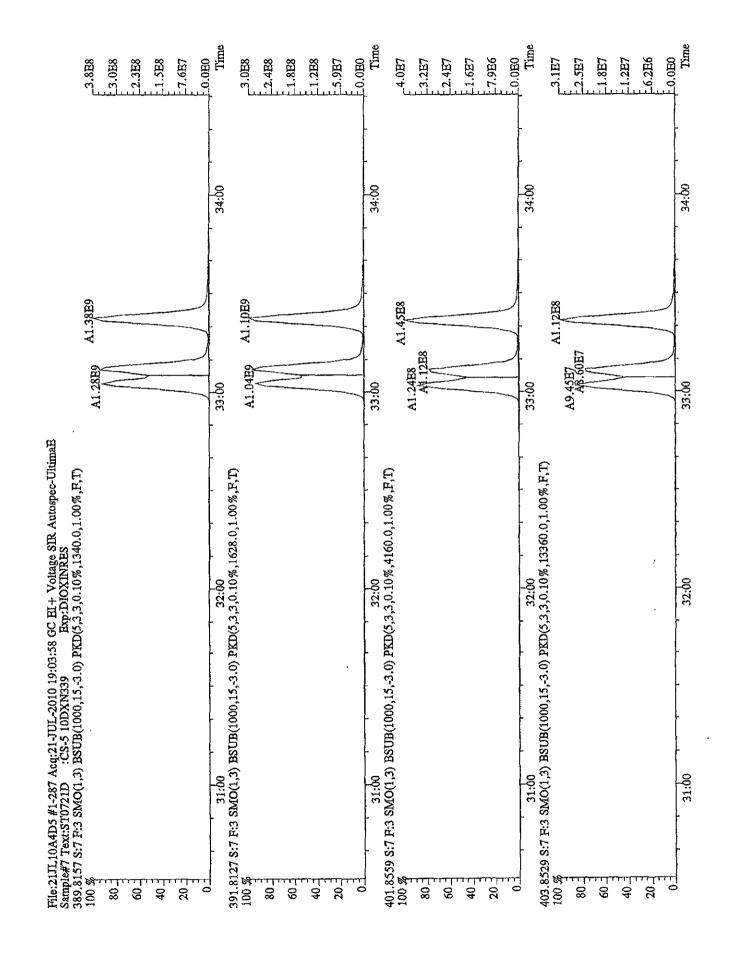


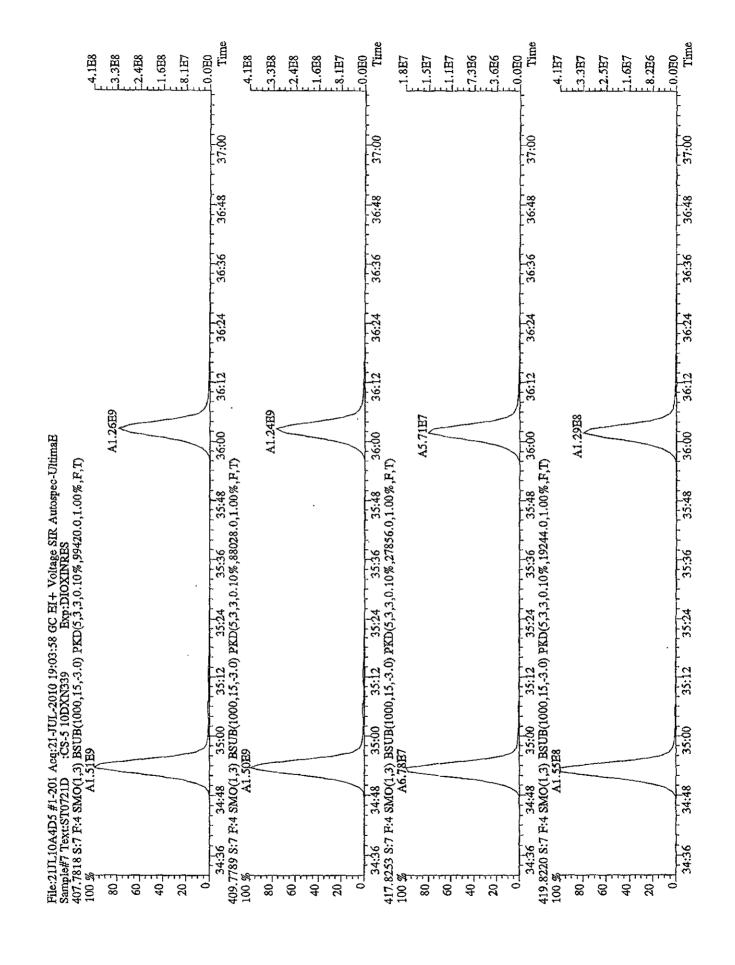


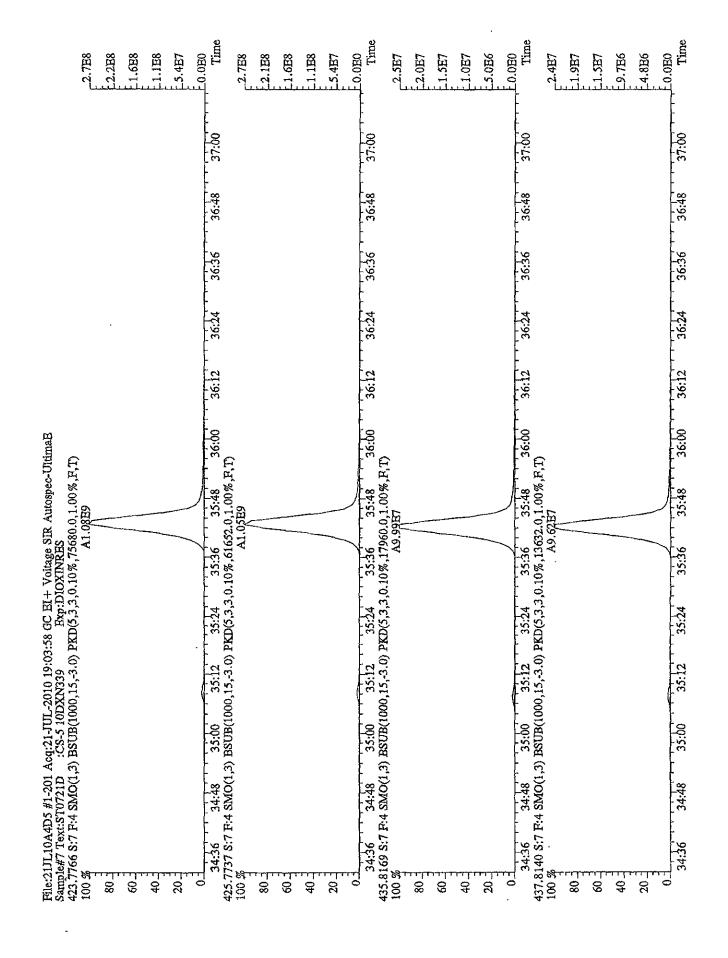


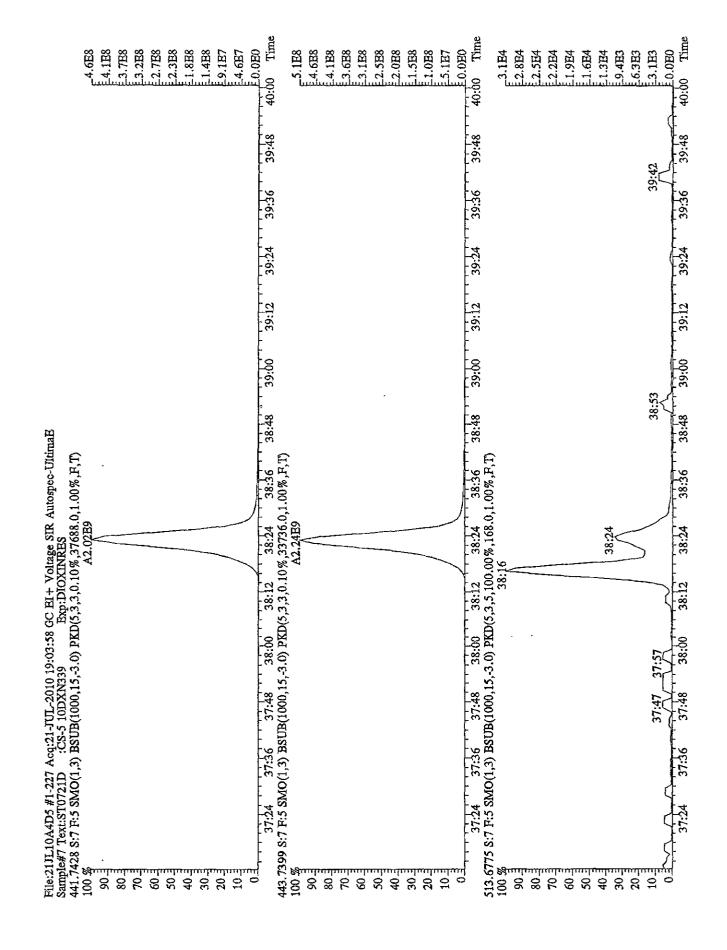


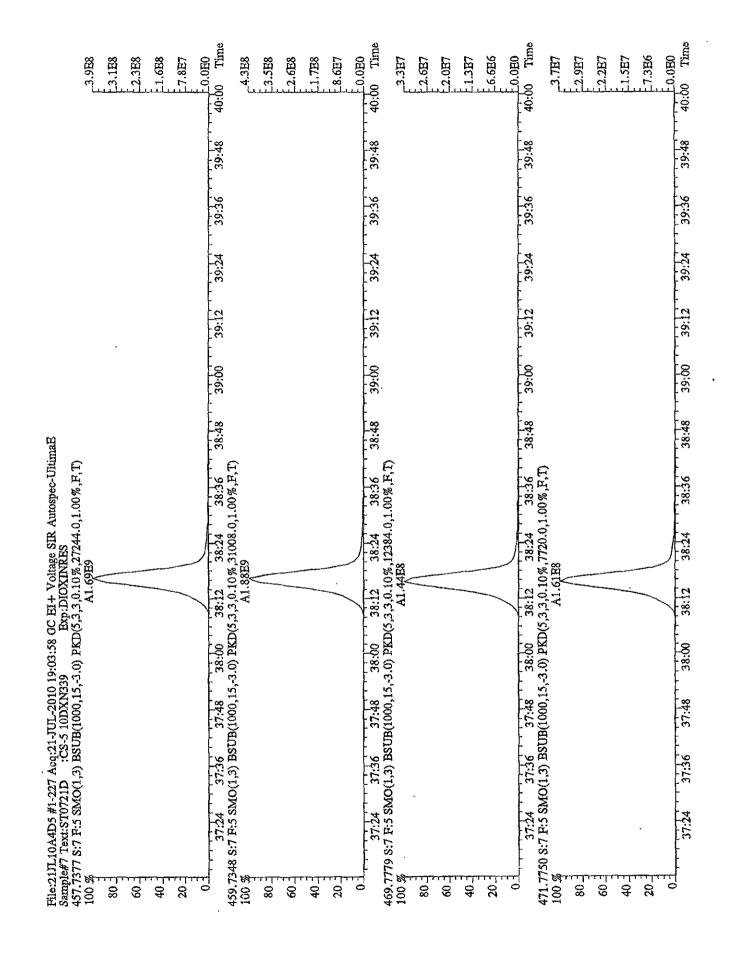


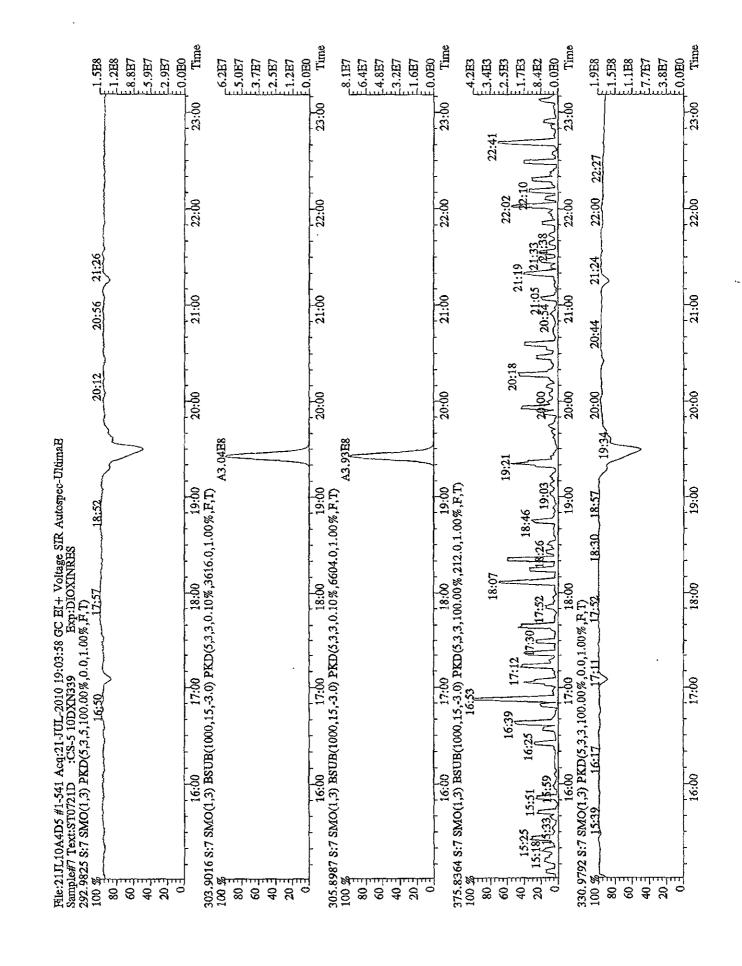


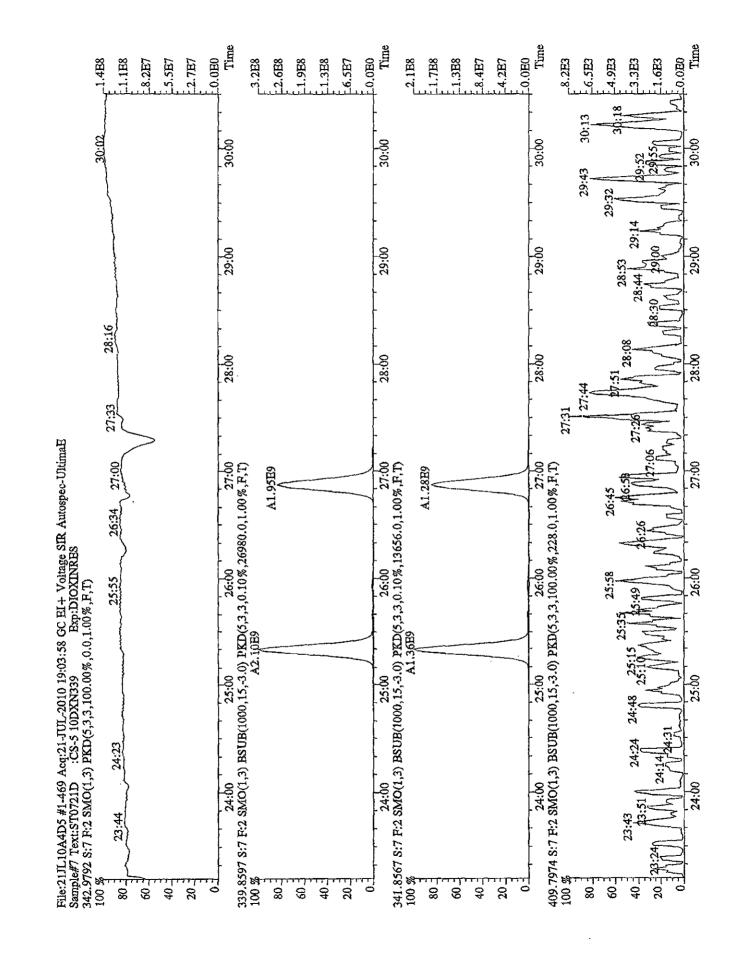


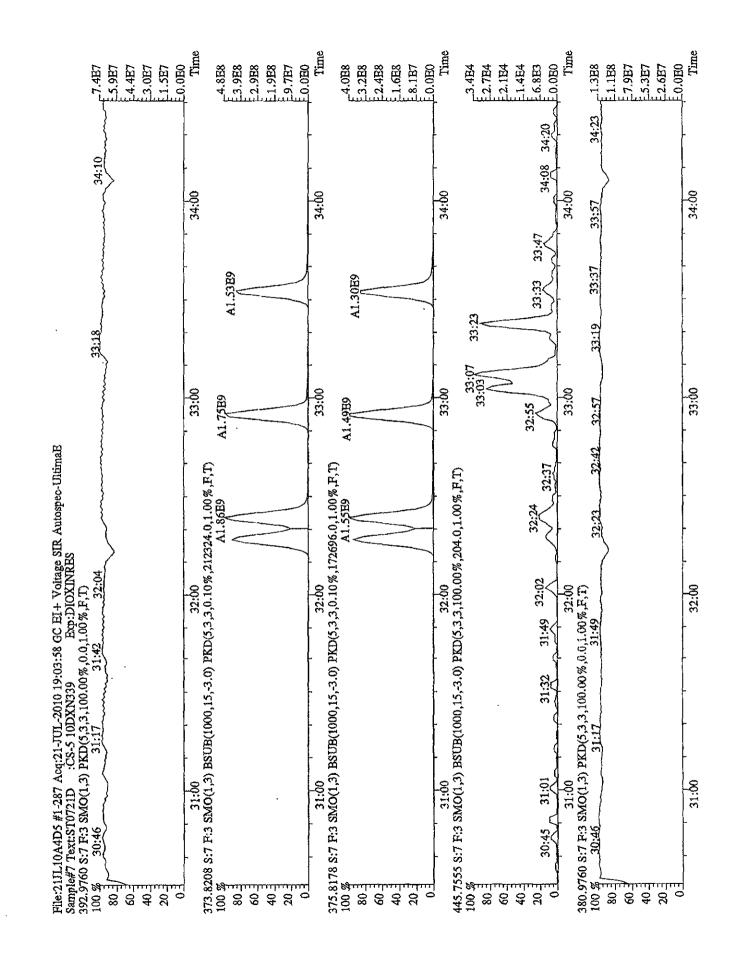


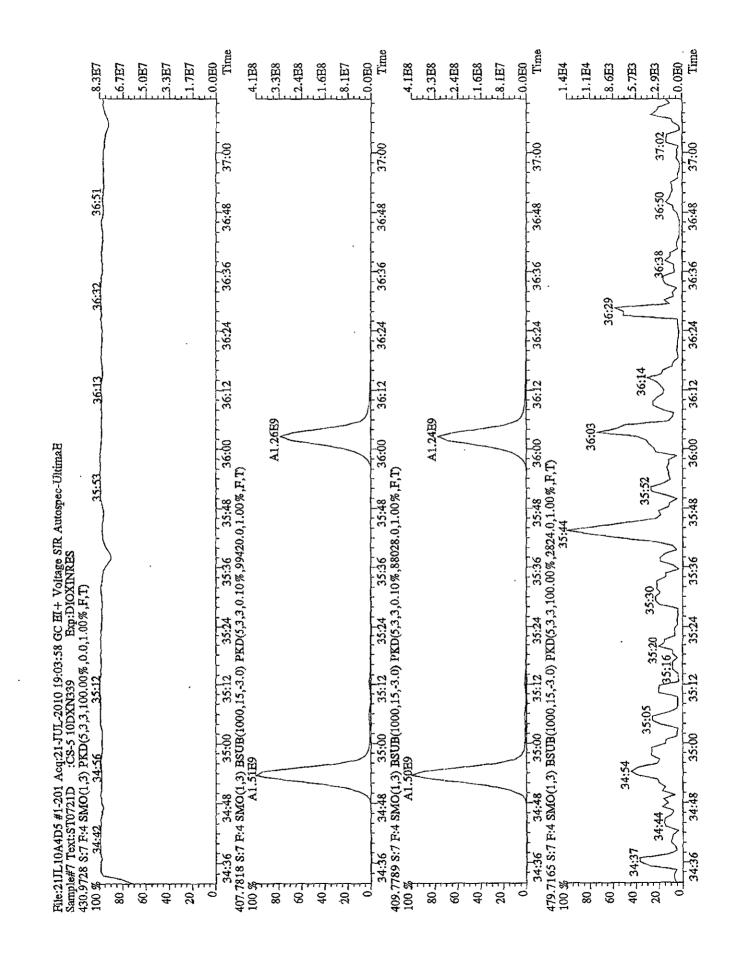


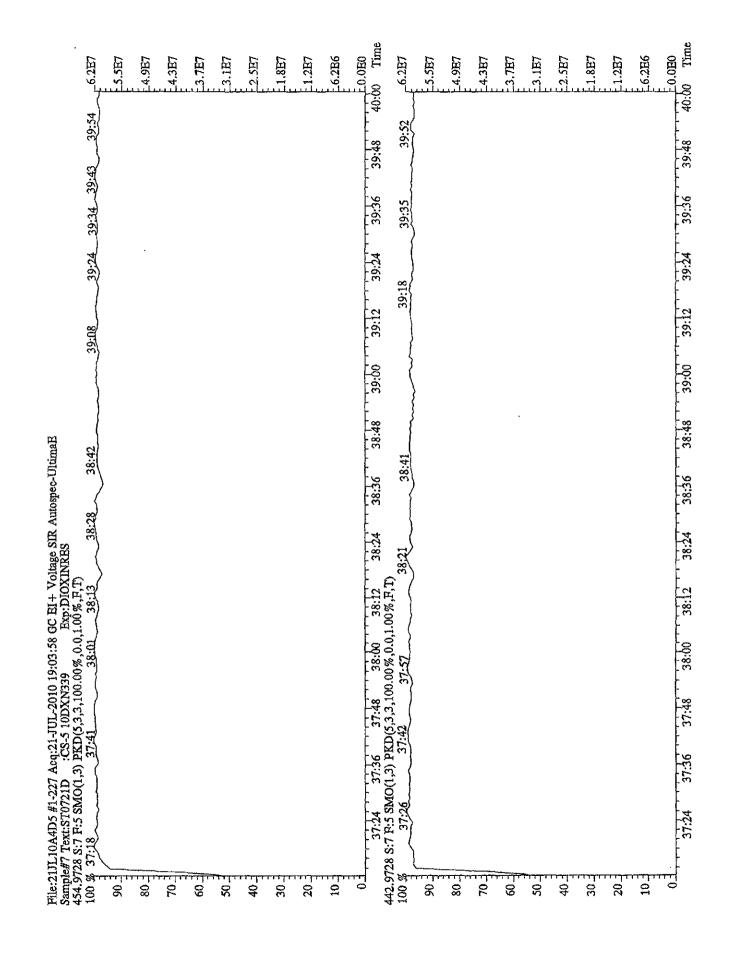


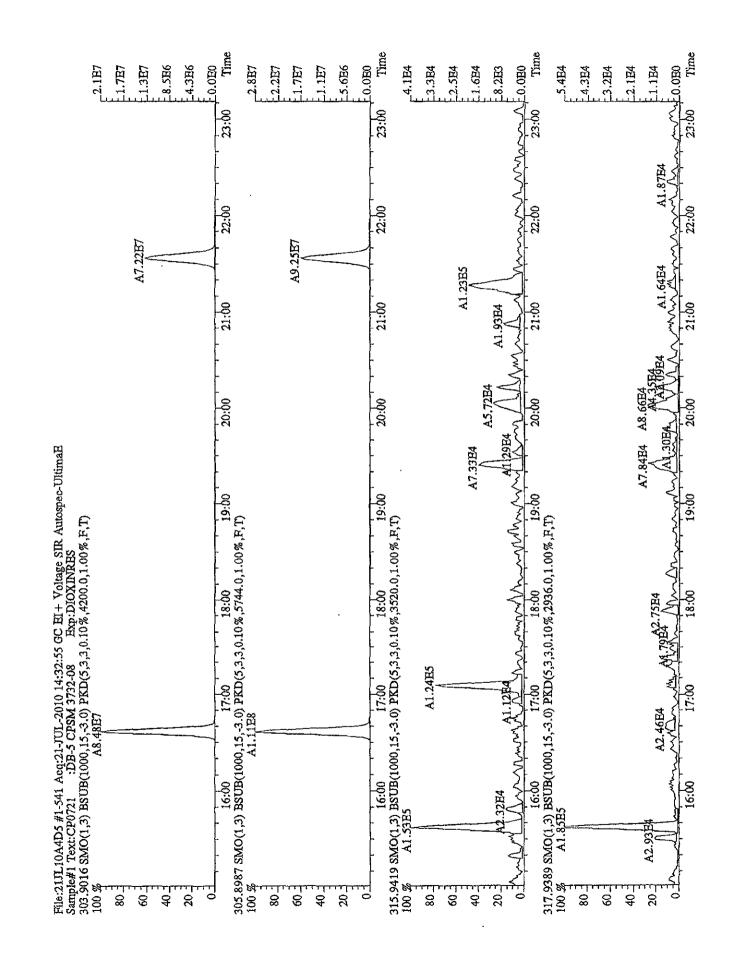


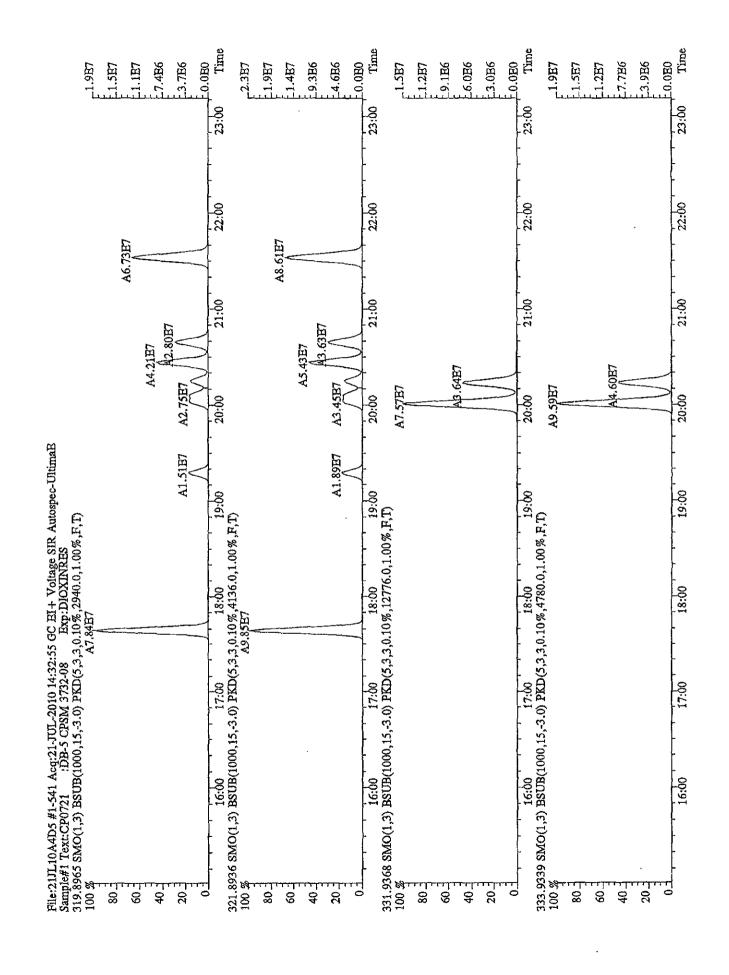


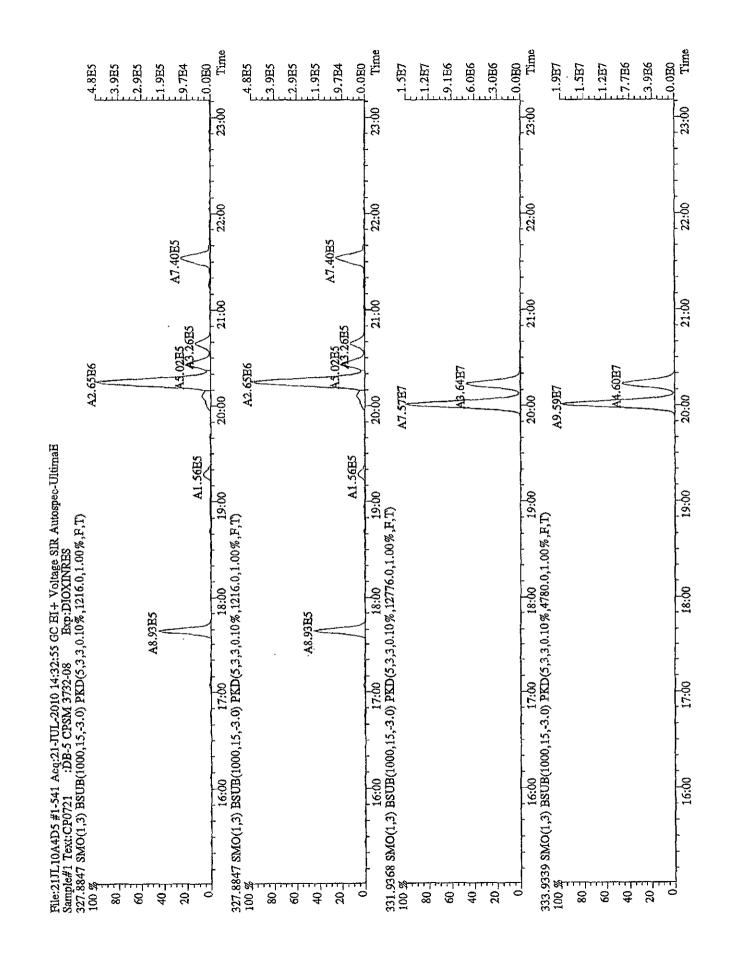


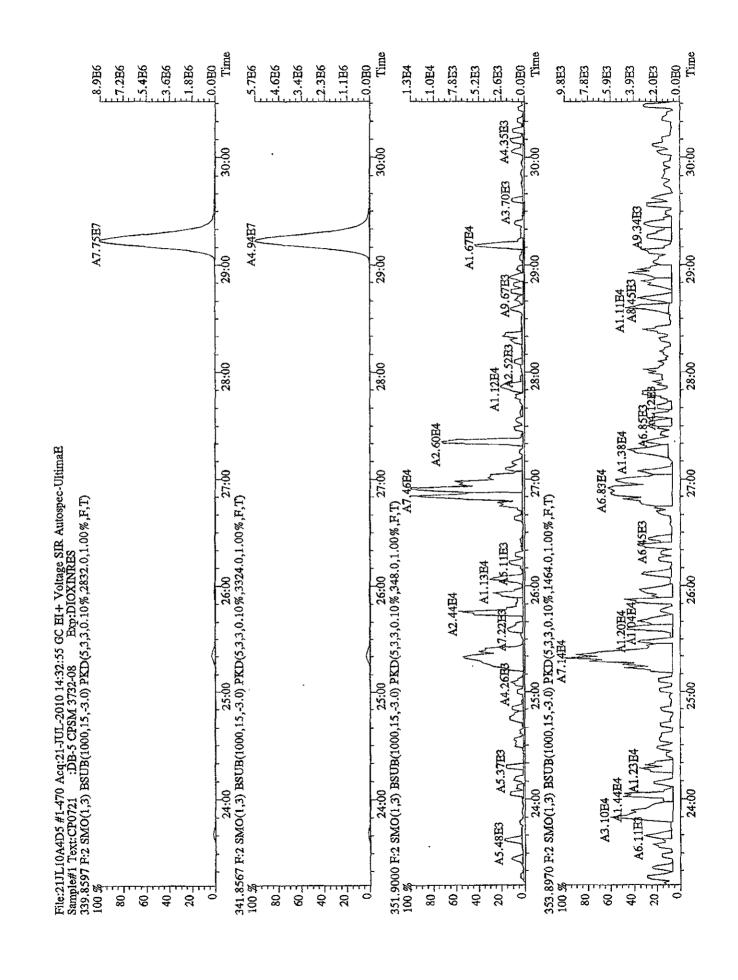


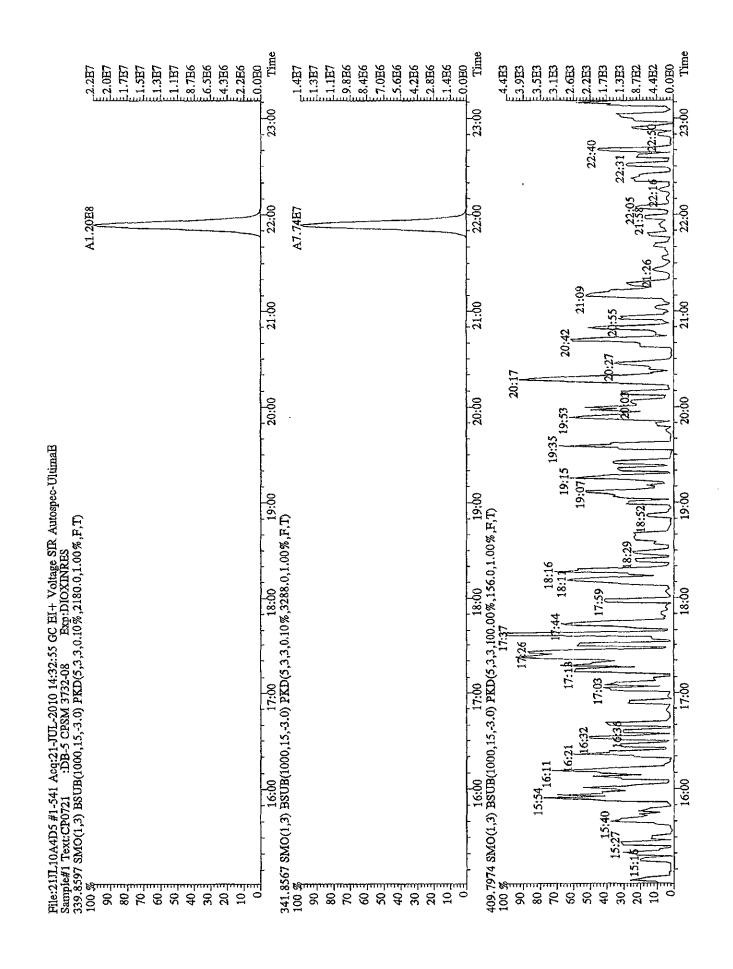


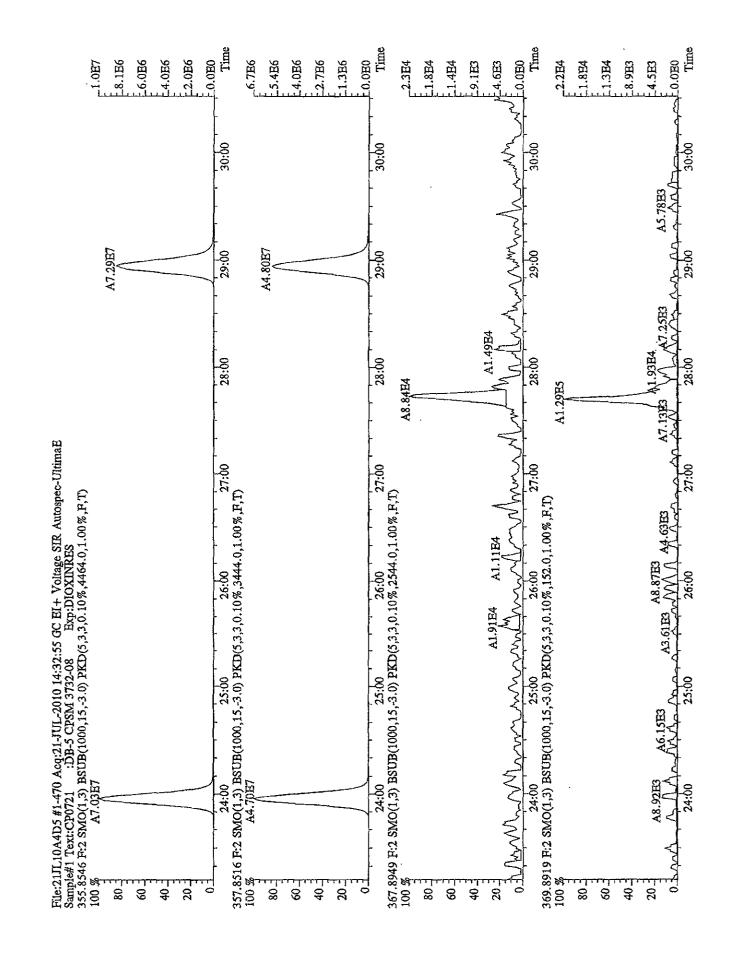




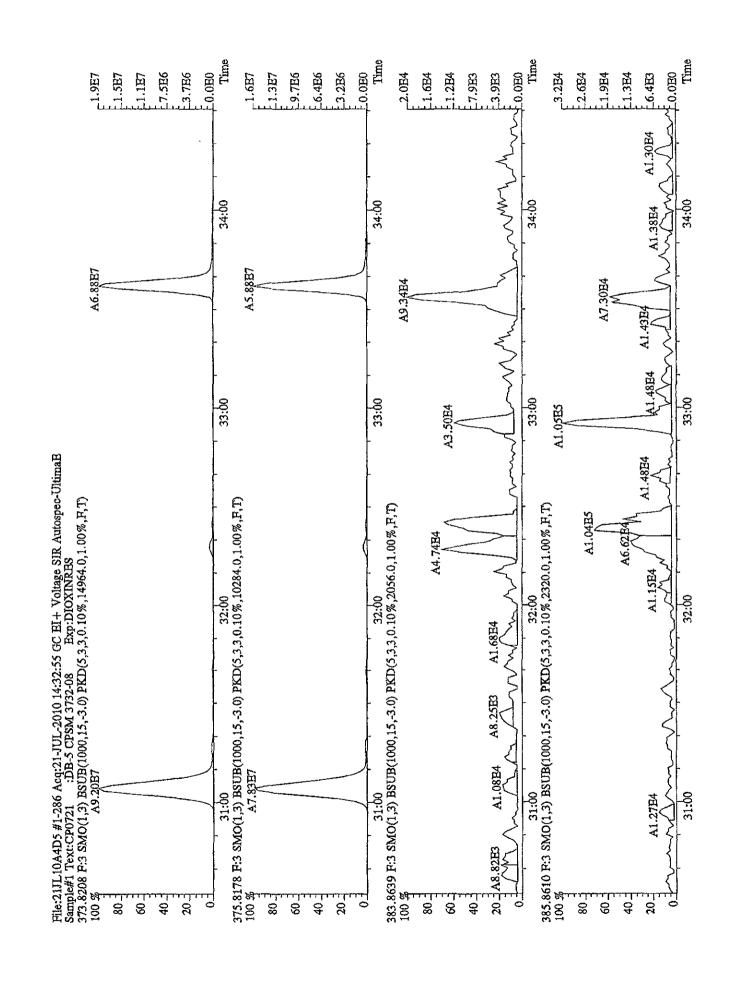


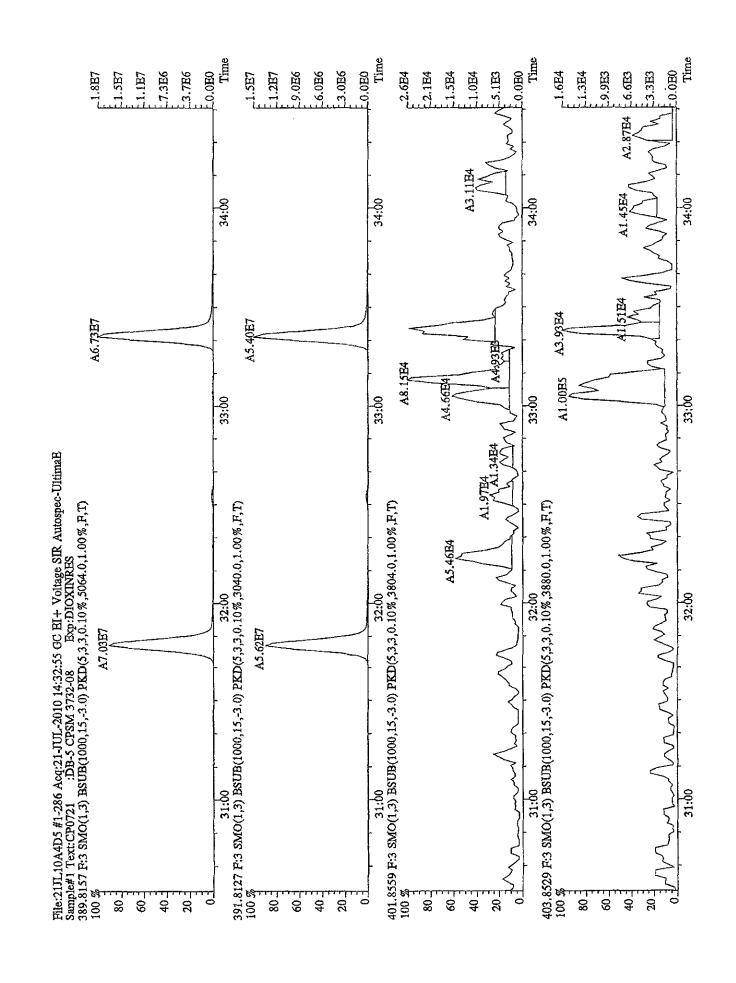


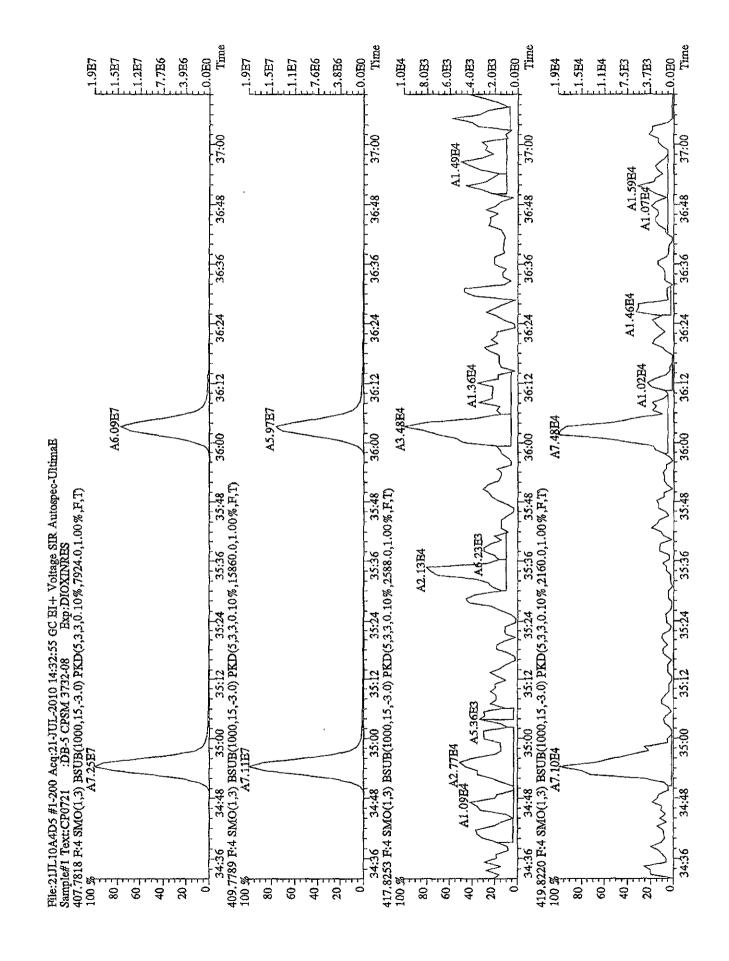


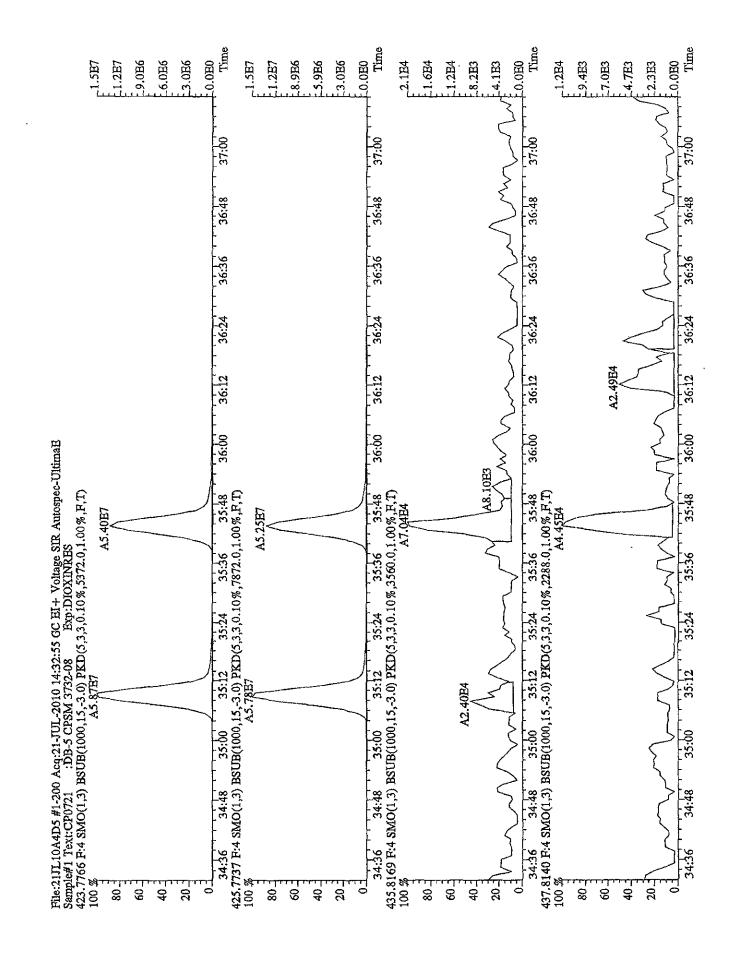


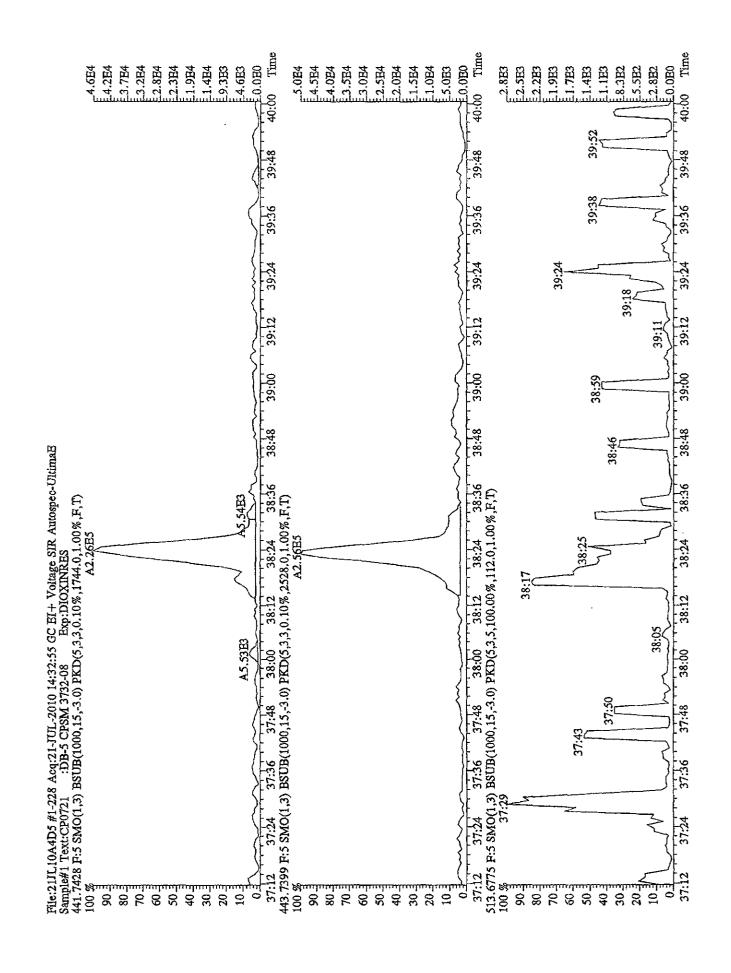
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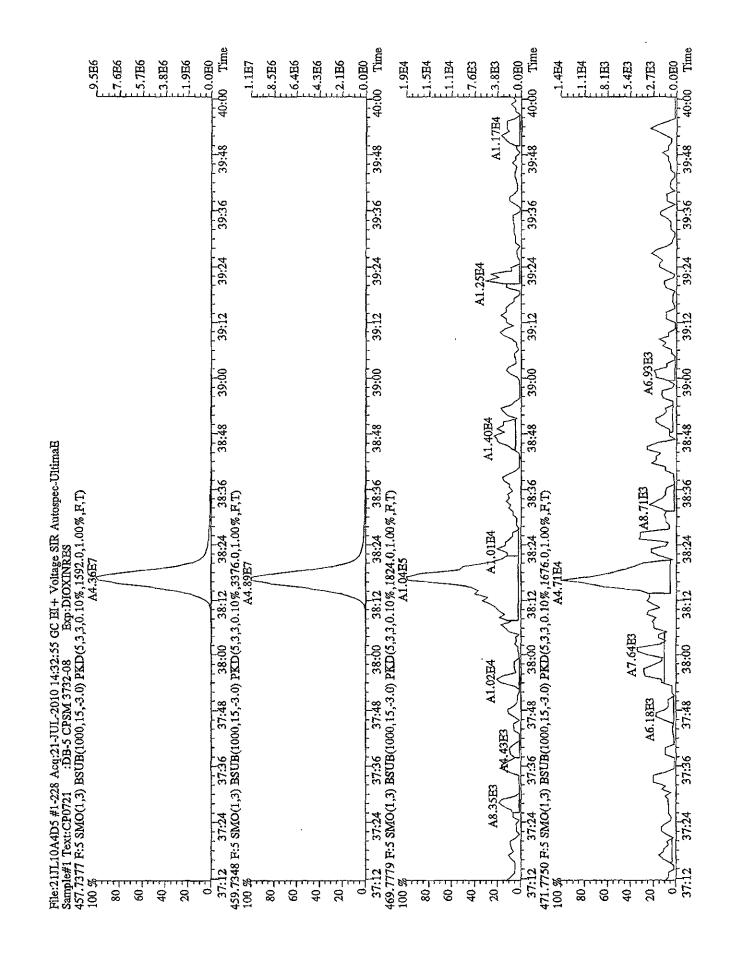


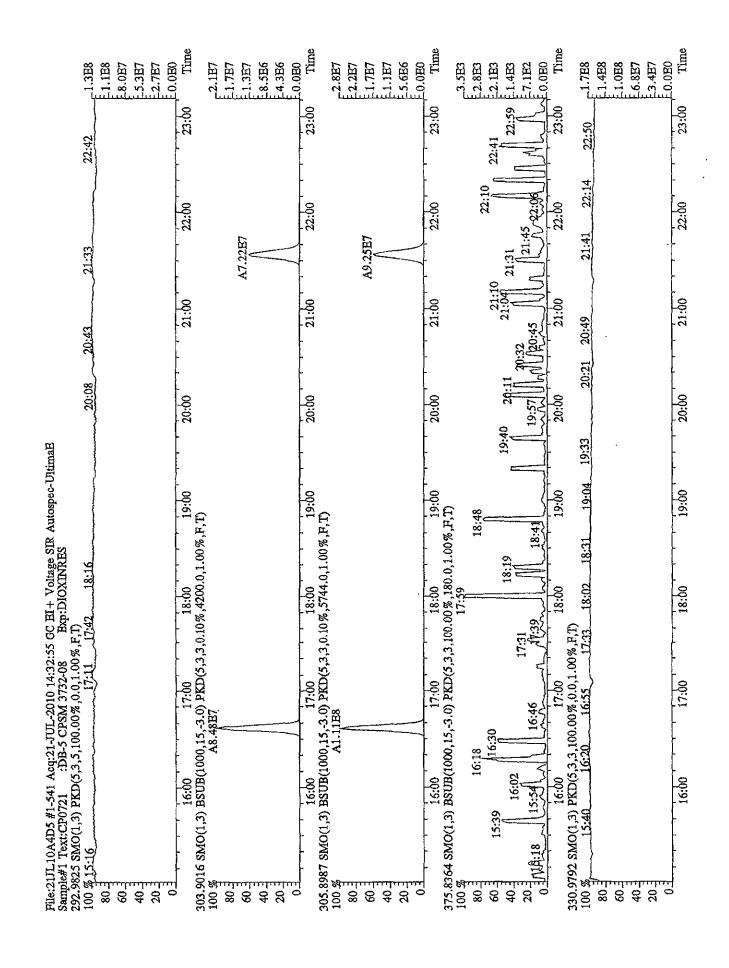


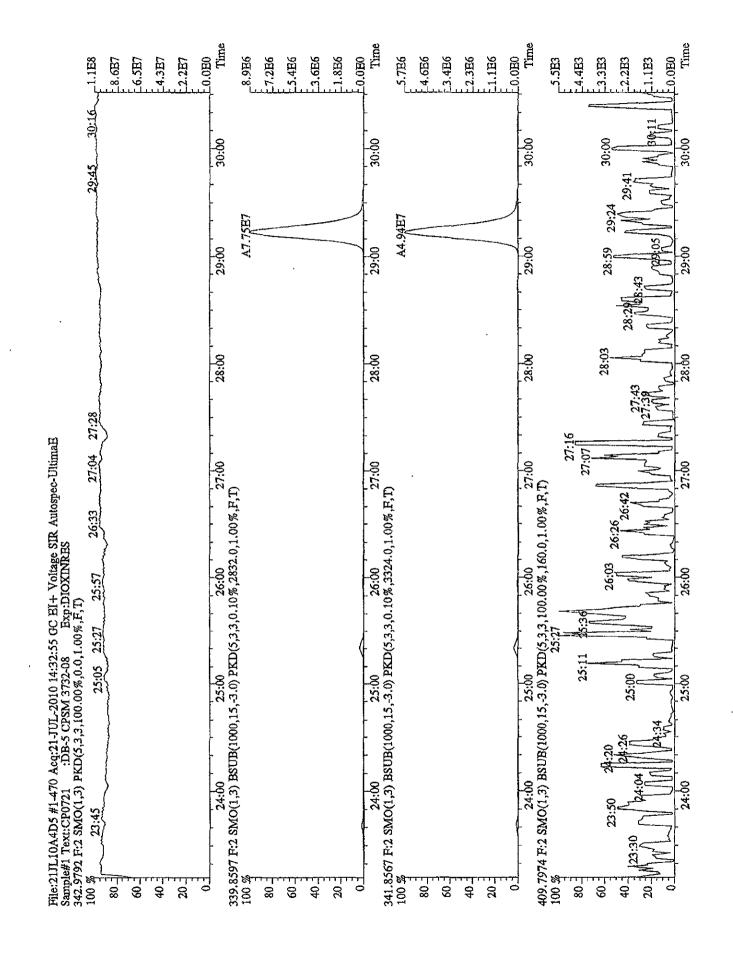


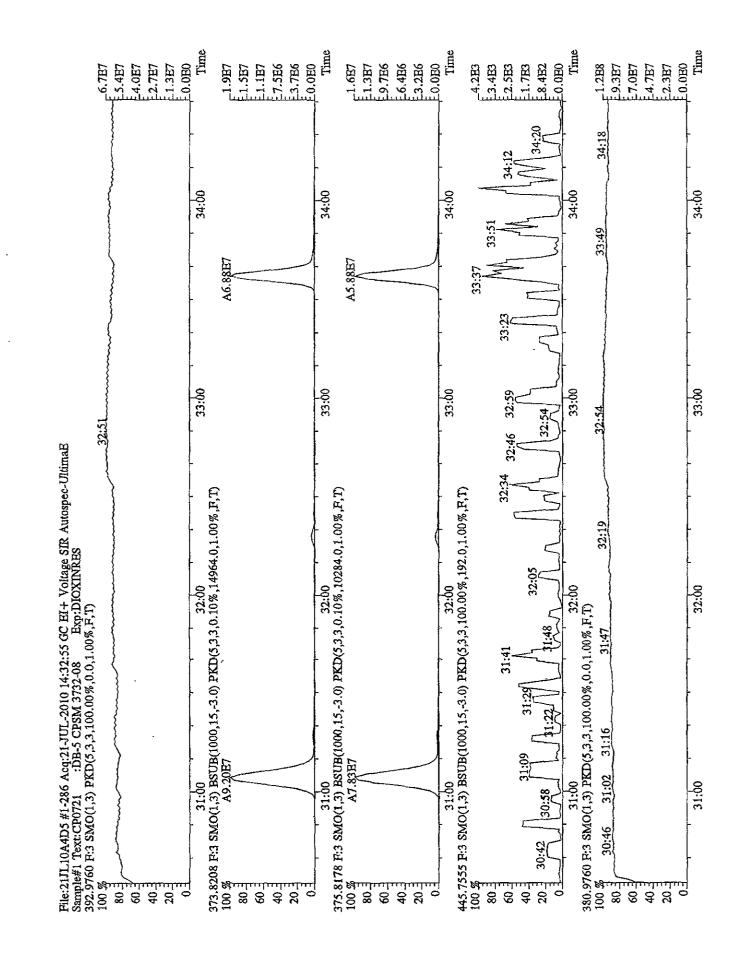


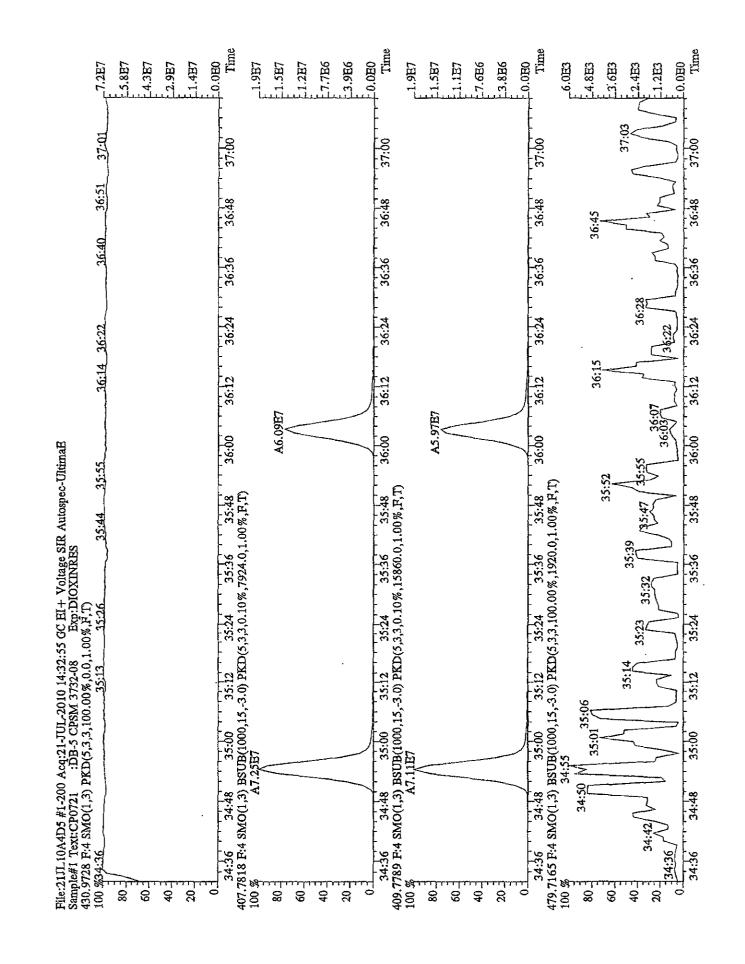


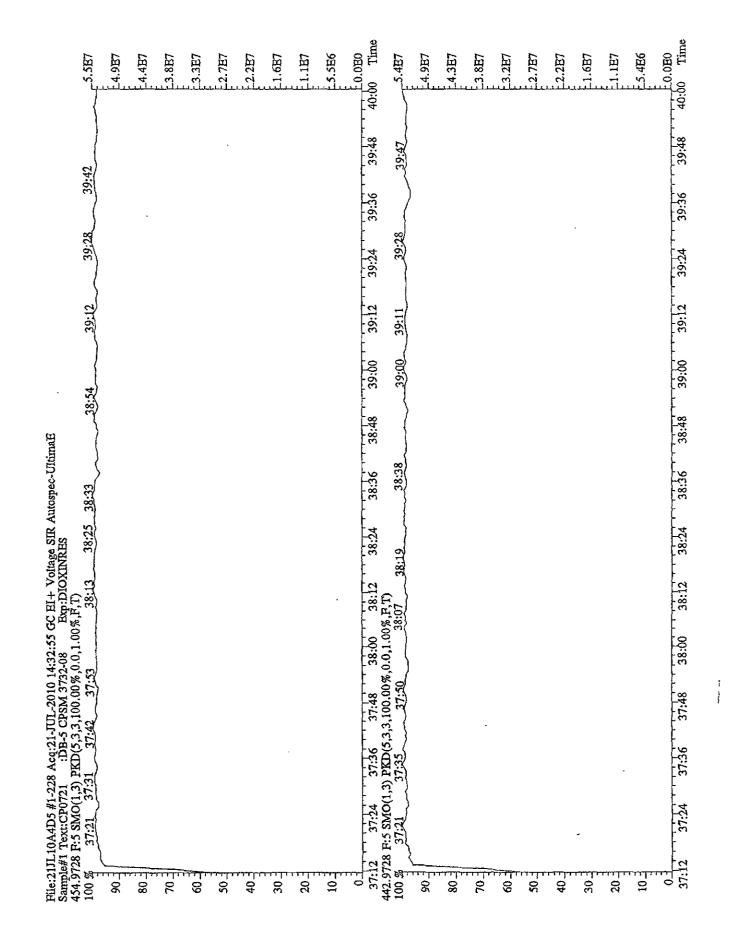


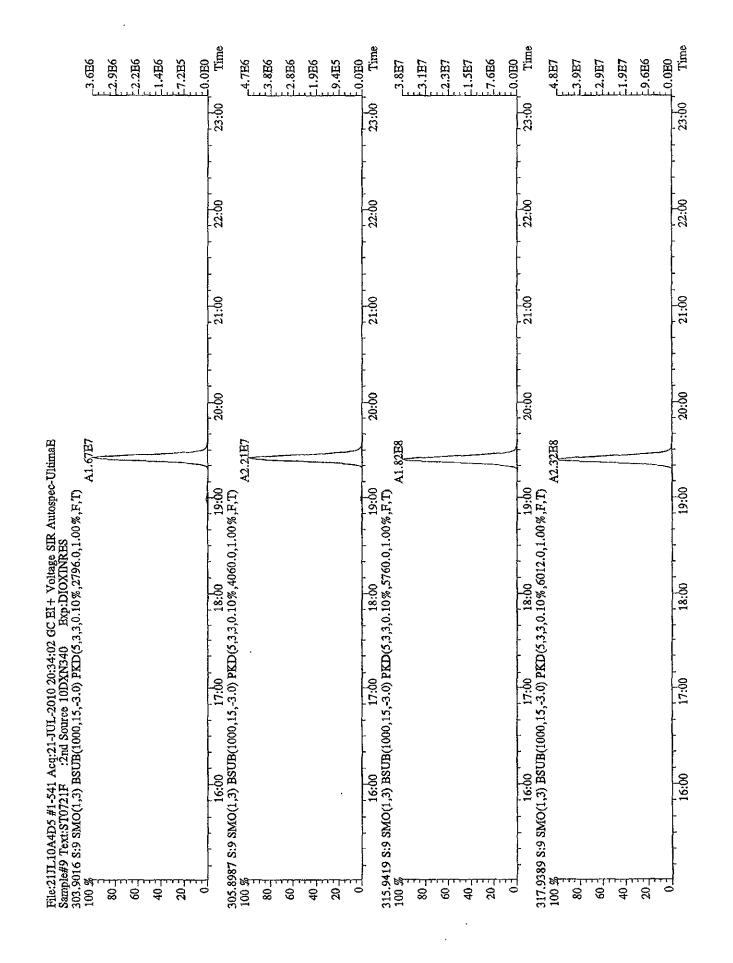


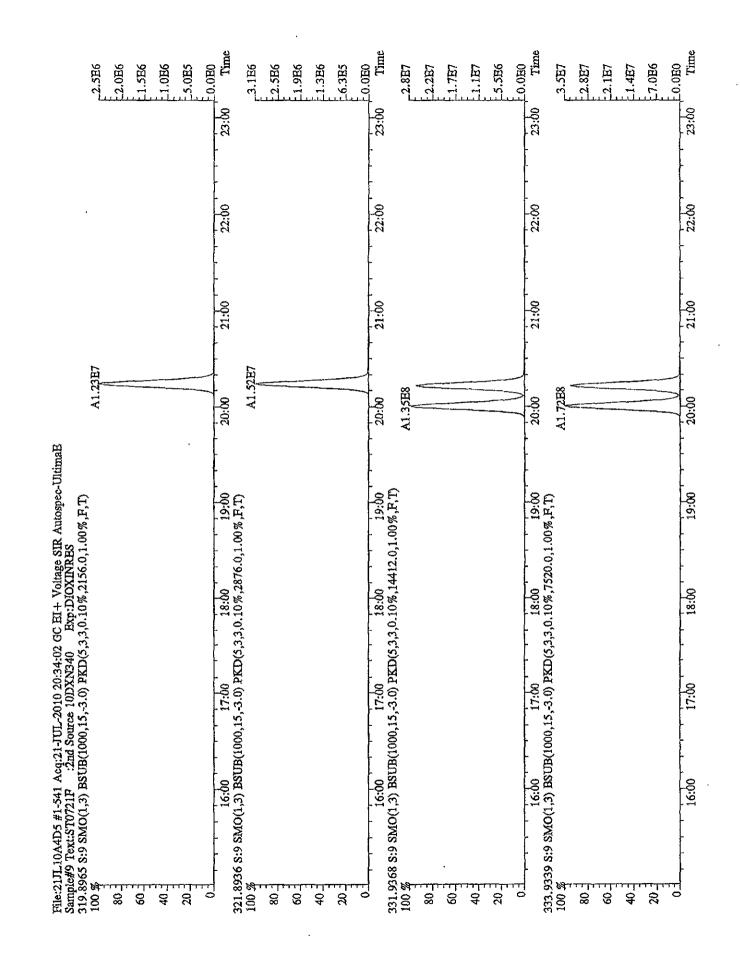


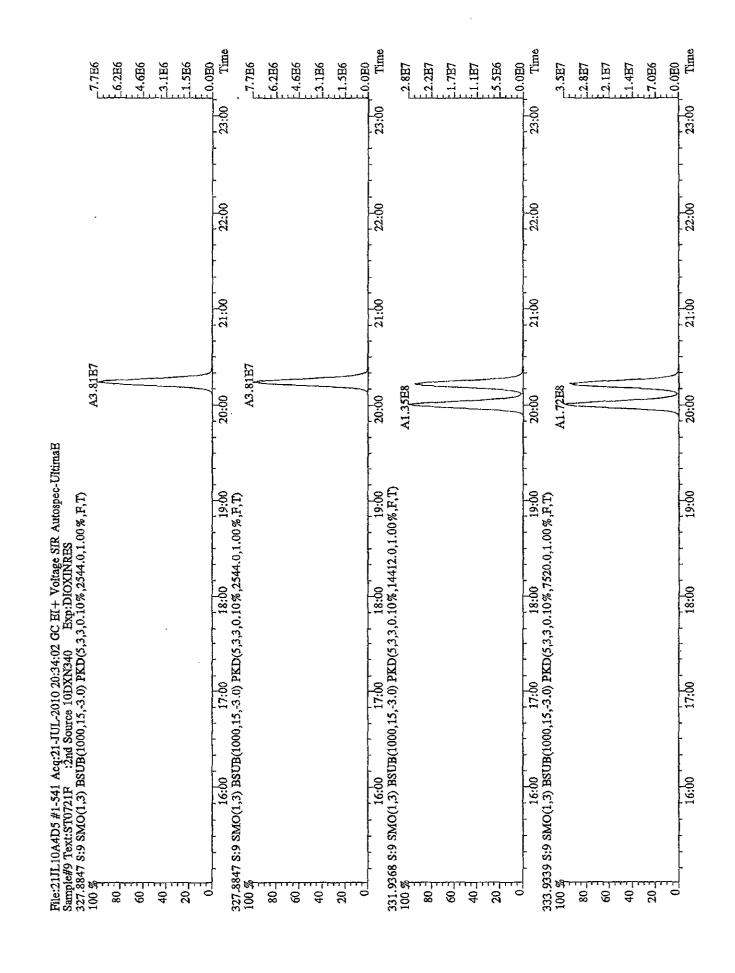


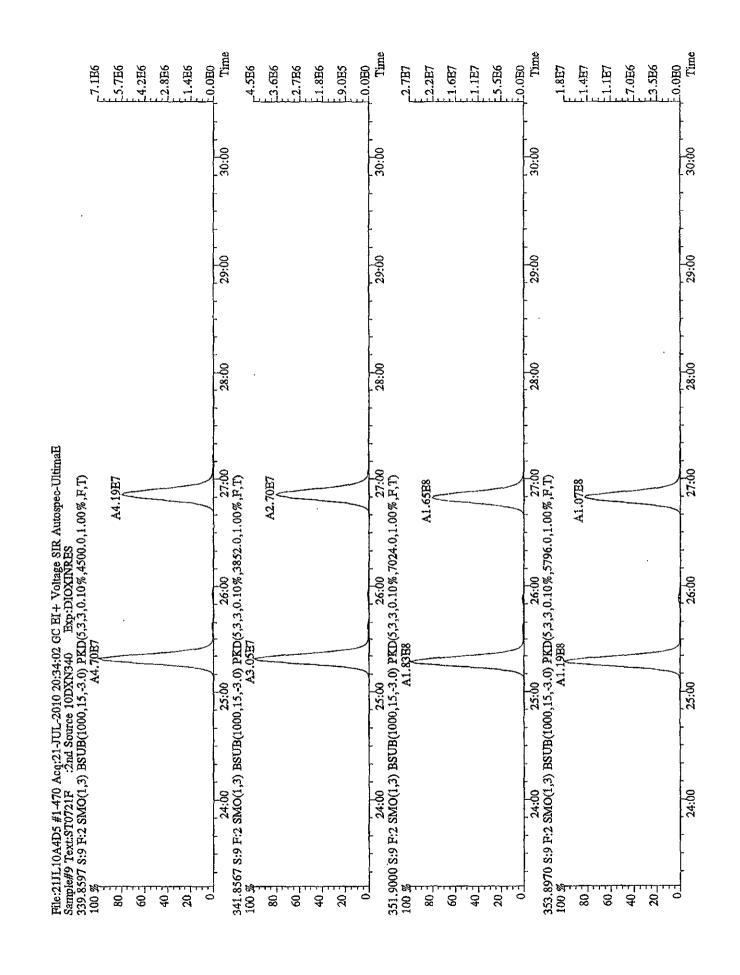


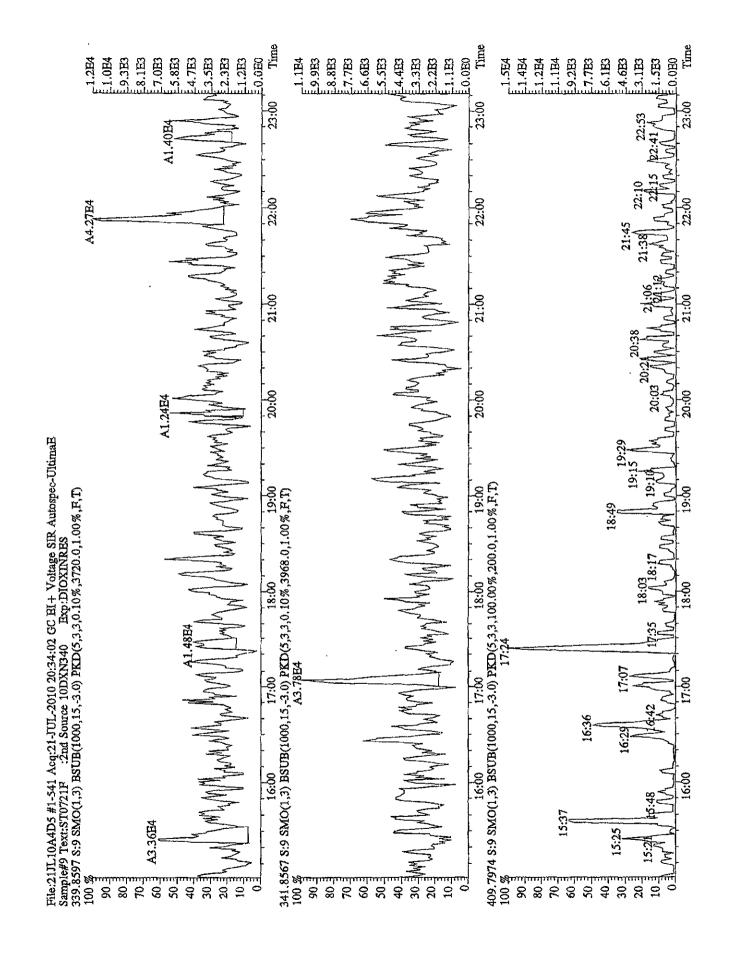


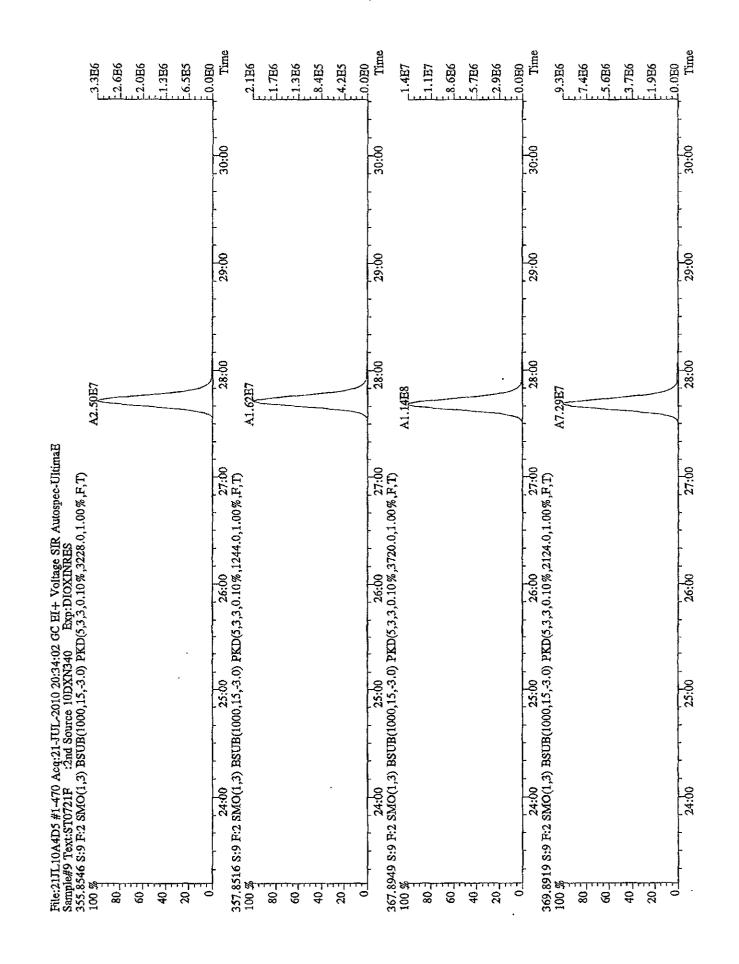


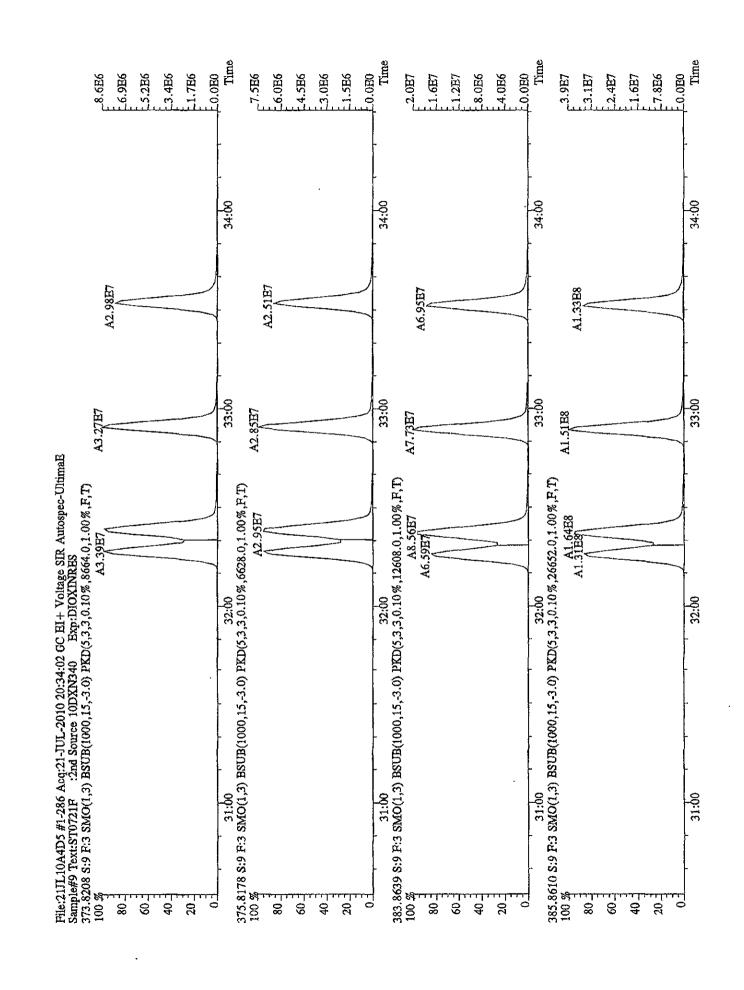


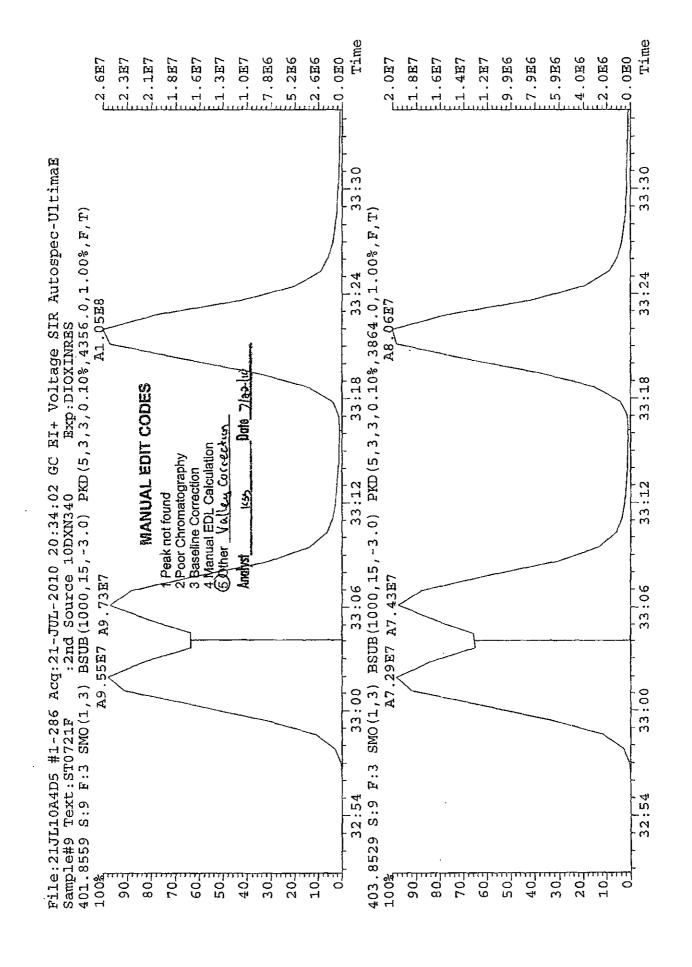


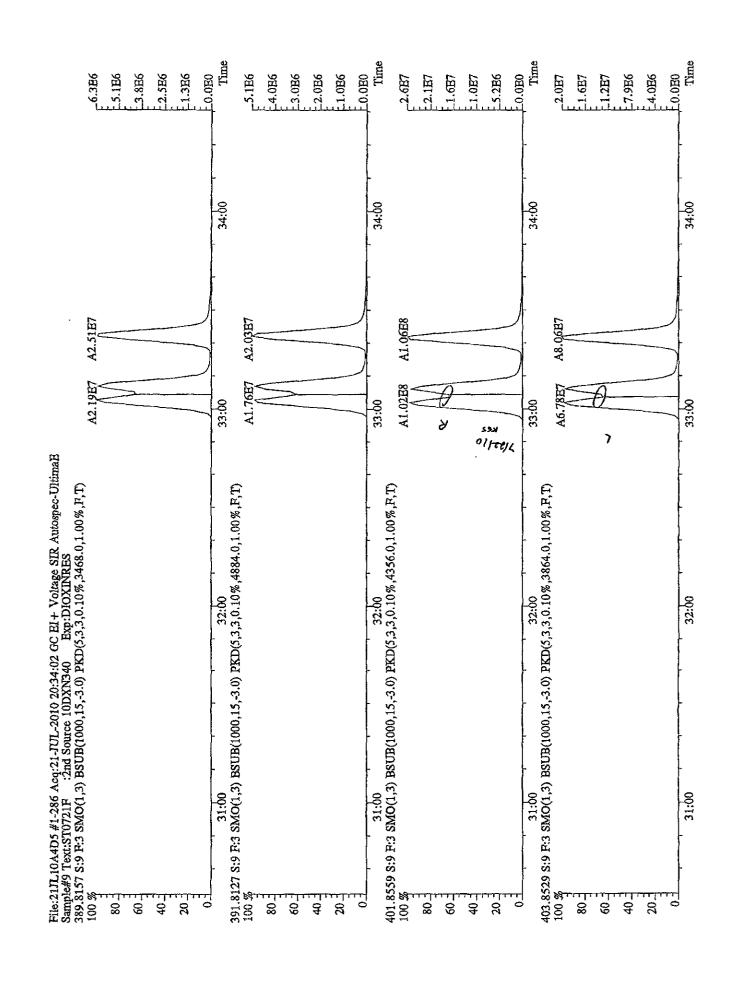


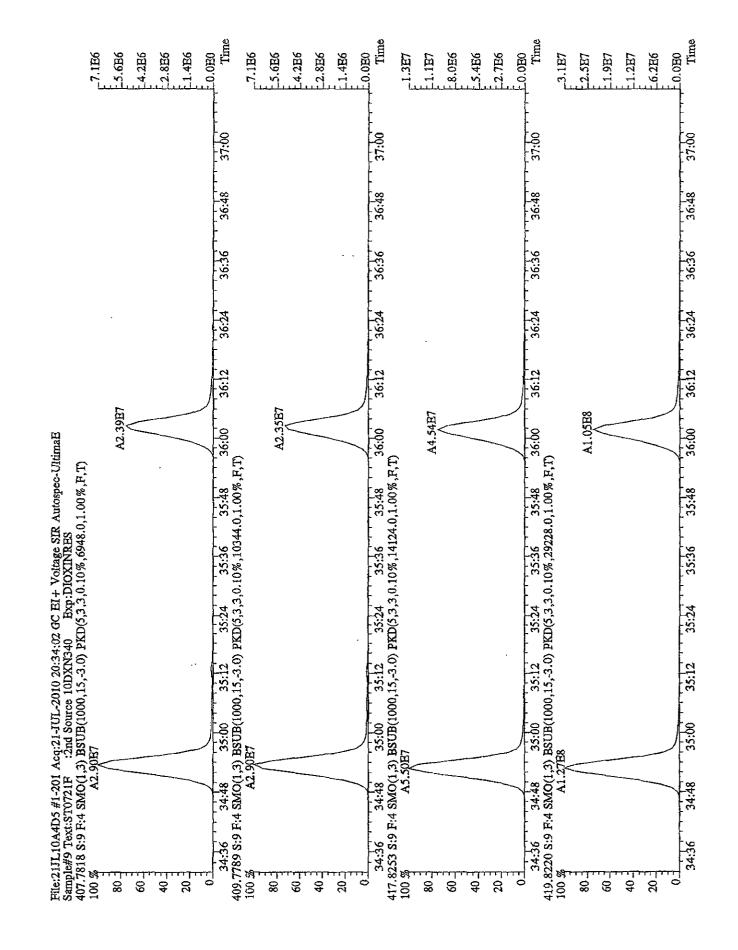


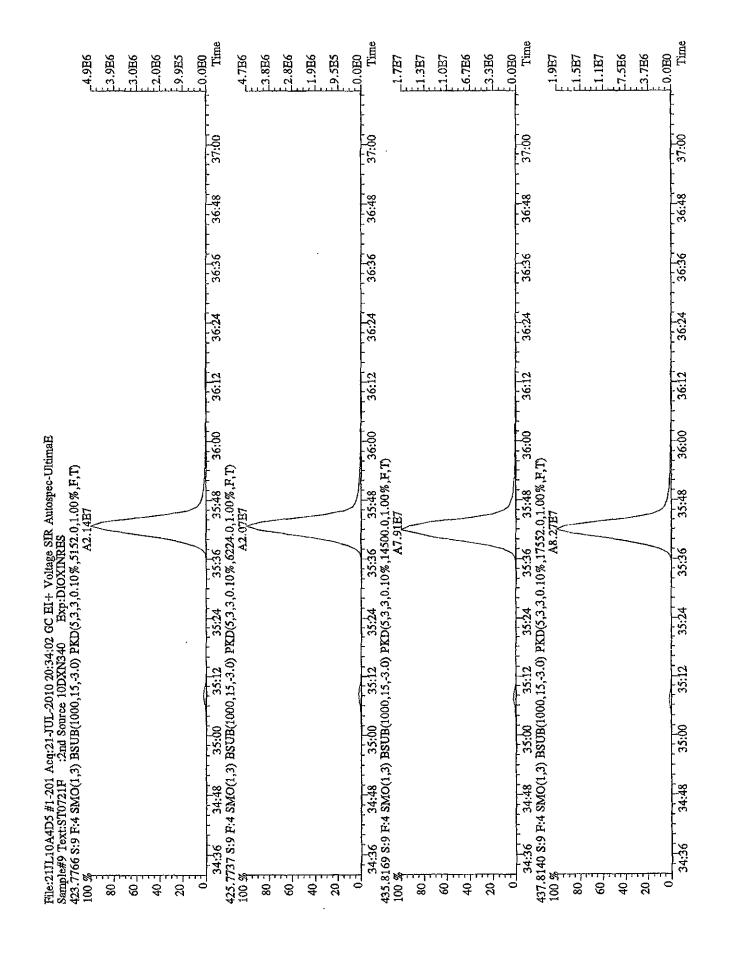


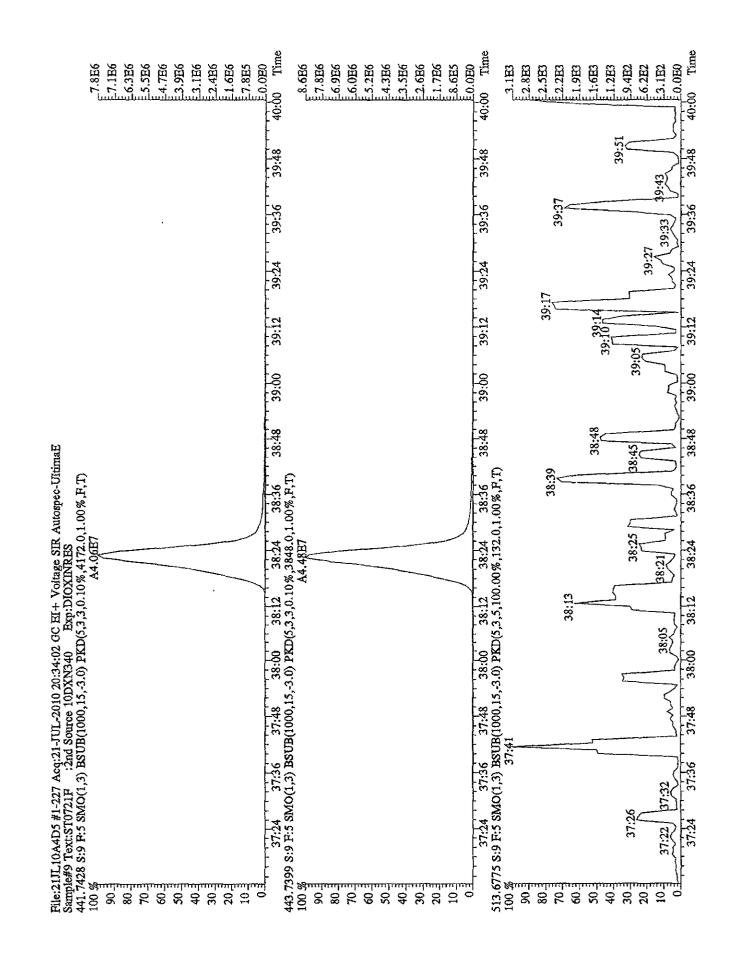


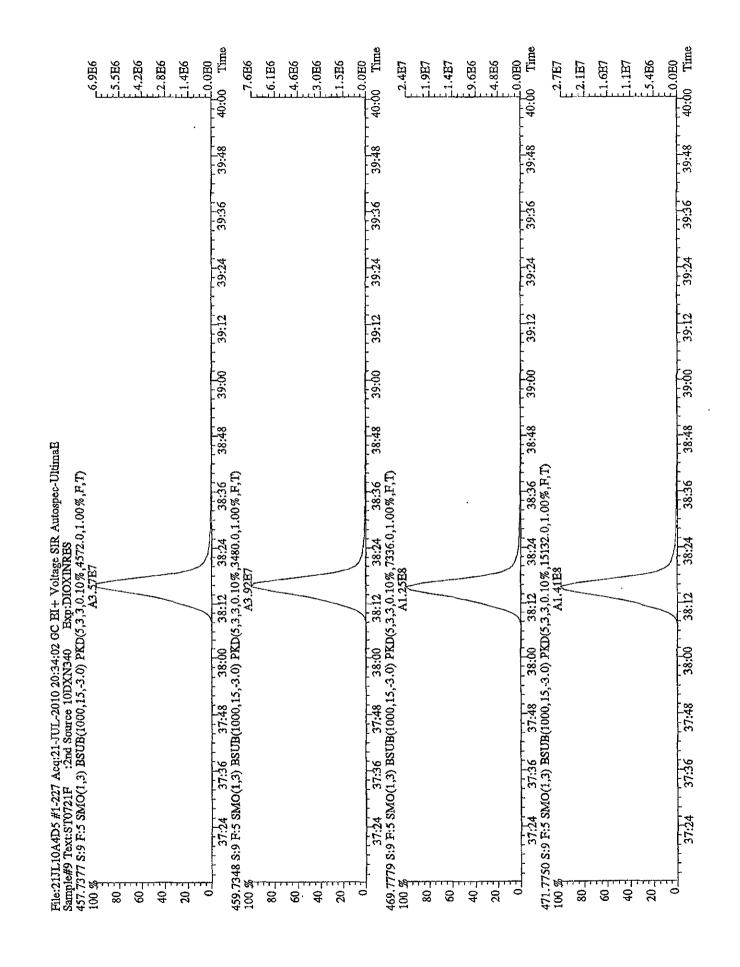


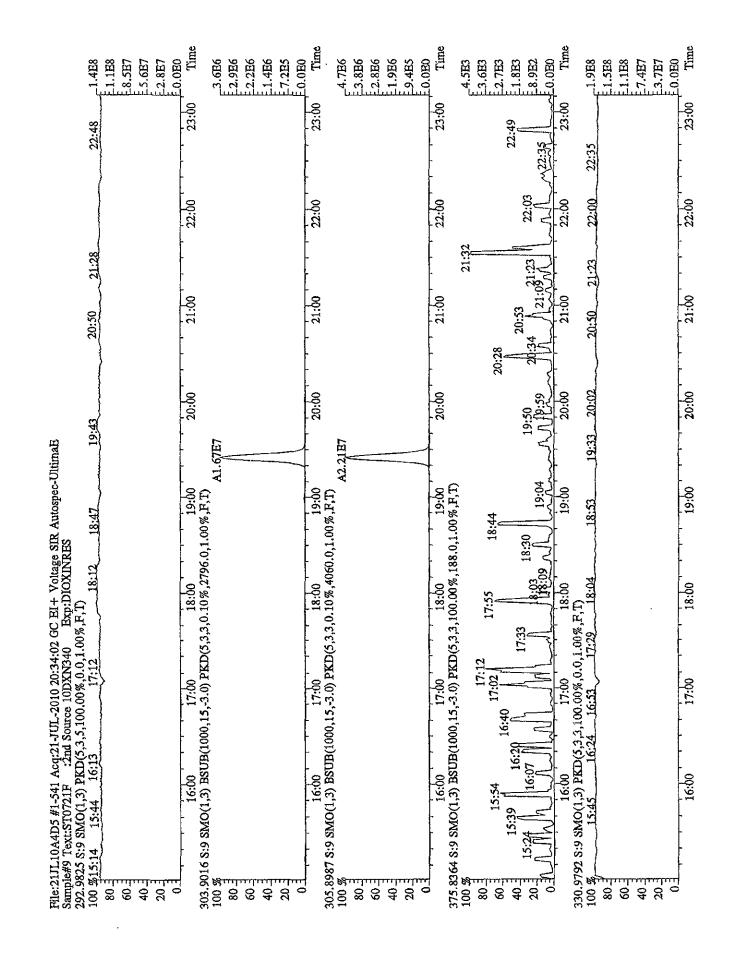


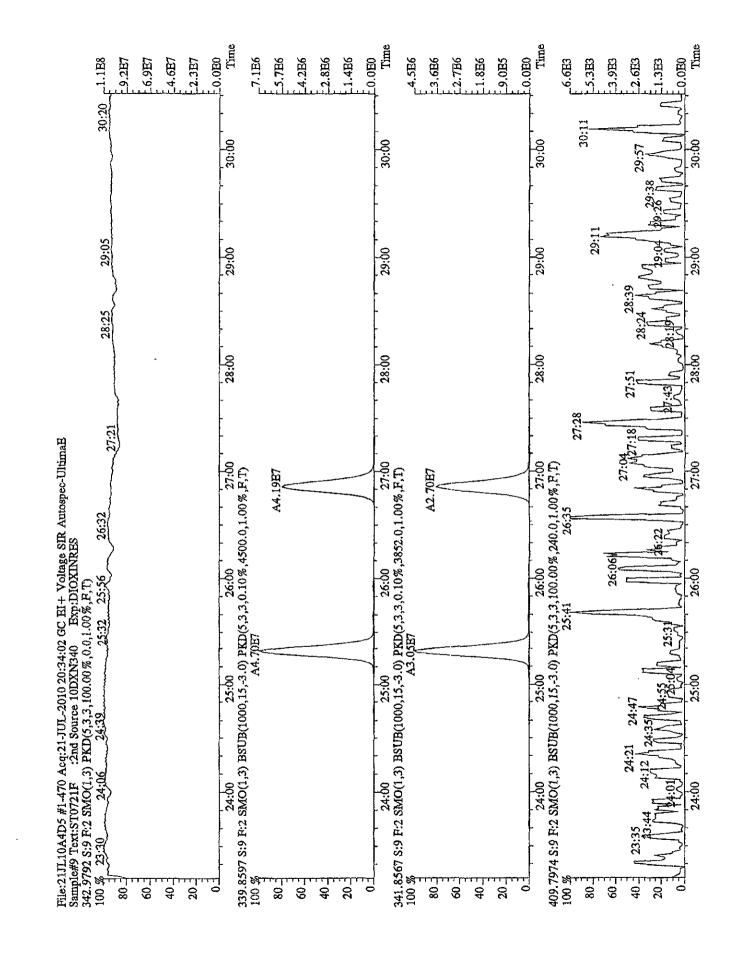


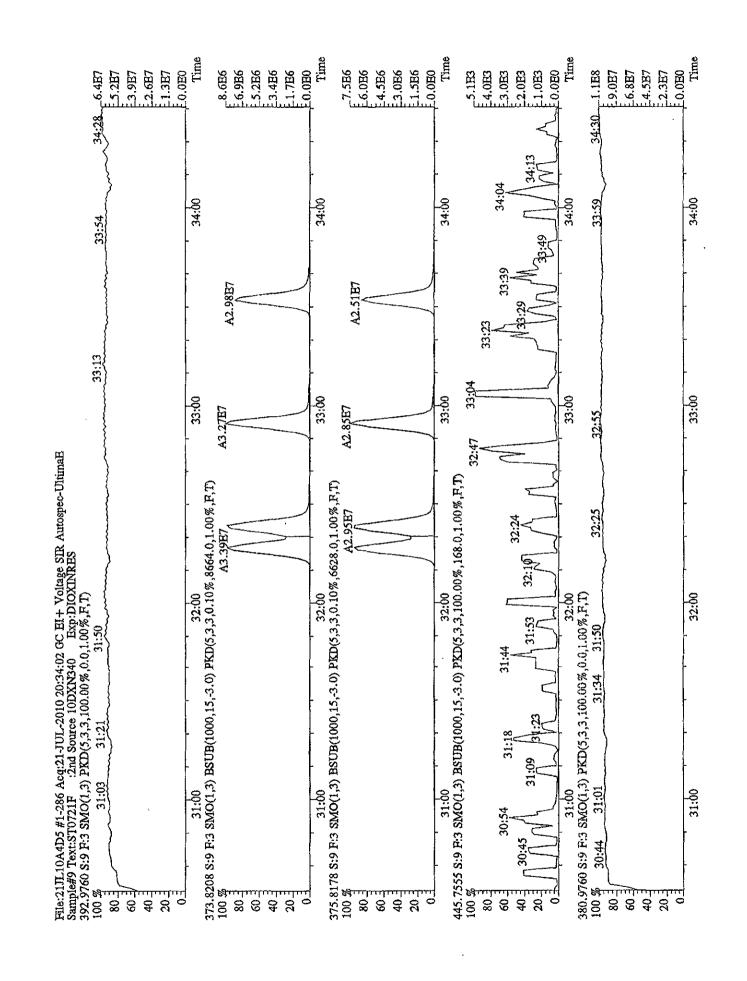


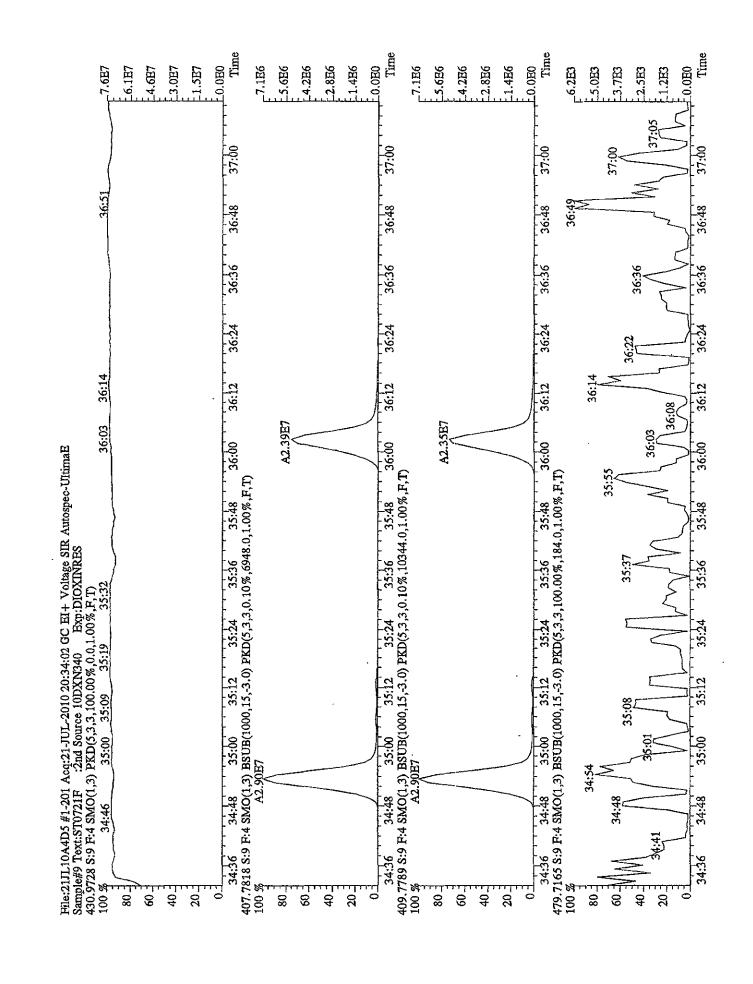


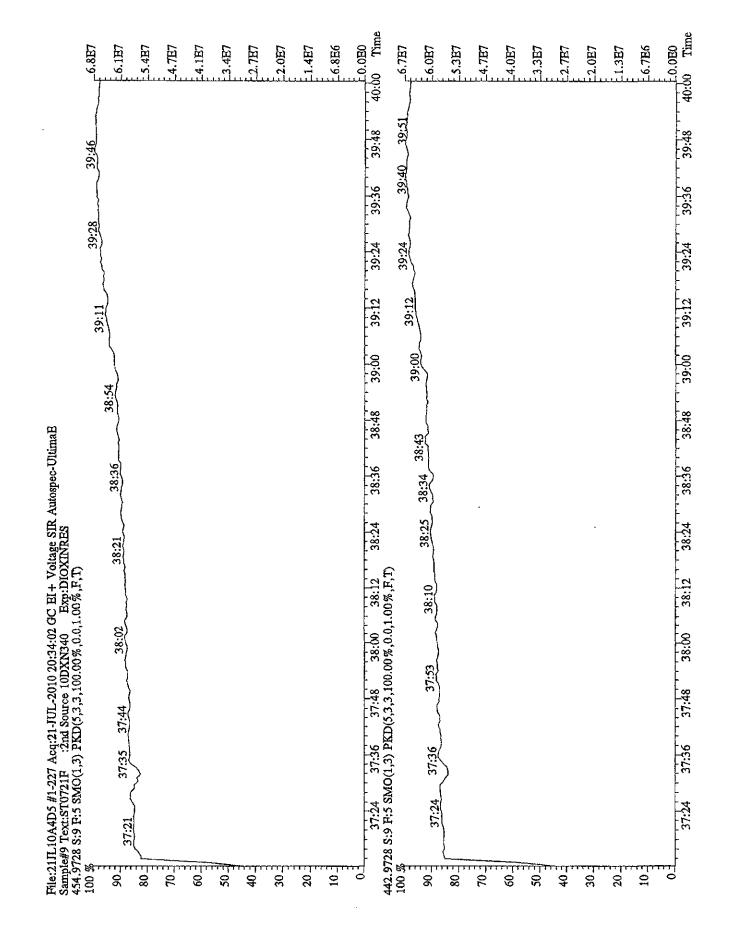












# <u>Sample Extraction/Preparation Log</u> <u>Copies and Checklists</u>

**TestAmerica West Sacramento** High Resolution Prep Log

01 N 20 Lot #

> Baker Baker Baker

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20% DCM:Hexane 65% DCM:Hexane l≨ l≸

1:1 DCM:Cyclohexane

DCM:Hexane:Benzene

Prep Reagents Supplier

> Reagent Toluene Hexane H2S04

Shared QC Batch:\_\_

Batch: 0337382

MS Run #:

Prep Date: 12/3/2010

3

Box#

Shares QC With:

4022-101 3

Whatman

5% Carbon:Silica Gel

Acid Alumina

Silica Gel

Rotovap ₽

Round Bottom ID

O 141 O

Dioxin/Furan Air Extraction 1216 W Internal COC: Delivered to Inst.: Inst Receipt:

Method: IK TO-9

Matrix: S AIR

Extraction: 11 SOXHLET (NONE, Na2SO4)

QC: 3W AMBIENT AIR TESTING

SAC: IK - S - 11 - 3W

Soxhlet time off: 12:00 Soxhlet time on: 17:15

Extraction ID Analysis Hold Time Expires 1/12/2011 1/12/2011 1/12/2011 1/12/2011 1/12/2011 1/12/2011 Other Final Volume 0 20uL Extraction Hold Sample size Time Expires 1.0 0. <del>.</del> 9 1.0 1.0 **Extraction Table** 12/6/2010 12/7/2010 12/7/2010 12/6/2010 12/6/2010 12/6/2010 MAVWM1AC MAVWM1AD MAVWM1AA MAQQV1AA MAQQ61AA **MAQRD1AA** Work Order Suff ω G0L030000 - 382 GOL030000 - 382 G0L030000 - 382 G0L020446 - 1 GOL020446 - 5 G01.020446 - 8 Sample ID

Comments/NCMs: .

| Date:           | 12/3/10                          | 12/3/10                       | 01/2/20                      | 12[6]10                       | D2<br>Analyst/Date                 |              |
|-----------------|----------------------------------|-------------------------------|------------------------------|-------------------------------|------------------------------------|--------------|
| Witnessed By:   | d                                | 1/1                           | 4                            | \$                            | IFB<br>Analyst/Date                | 1) 12/10/10  |
| Spiked By:      | £2,4                             | 101                           | 405                          | <b>O</b>                      | Option C<br>Analyst/Date           |              |
| Spike Exp Date: | 12/16/10                         | 9/2/11                        | 1/14/11                      | 11/82/01                      | Split/Archive //z_Analyst/Date     | T.L 12/06/10 |
| Qi              | 2,0ml/10DXN463/paily 15          | 100ml/100XN431/ 5240/1613     | 200 M/100XN429/70-9          | 20,00 100KN JAS               | ECT 148/10                         |              |
|                 | Internal Standard<br>All Samples | Spike Mix<br>LCS/LCS/PARO/MS> | Pre-Spike Standard MB4c94c5p | Recovery Standard All Samples | Soxhlet Extraction<br>Analyst/Date |              |

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See attached sheet for sample volumes recorded from scale

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| C |         |
| õ | 4       |

| Run Date: 12/06/10<br>Time: 14:59:13                       | Expanded Deliverable COC Completed X Bench Sheet Copied Package Submitted to AnalyticalGroup Bench Sheet Copied Bench Sheet Copied | PREP DATE: 12/03/10 17:00<br>COMP DATE: 12/06/10 17:00                          |  | S<br>XCHANGE VOL SURROGATE ID                                 | C14 20.0<br>2.0ML IS10DXN463 | C14 20.0 2.0ML IS10DXN463  | C14 20.0<br>2.0ML IS10DXN463 | C14 20.0 200.0UL 10DXN429<br>2.0ML IS10DXN463 | C14 20.0 100.0UL 10DXN431<br>2.0ML IS10DXN463 | C14 20.0 100.0UL 10DXN431<br>2.0ML IS10DXN463 |  |
|--|--|---|--|---|------------------------------|----------------------------|------------------------------|---|---|---|--|
| stAmerica Laboratories, Inc.<br>EXTRACTION BENCH WORKSHEET |  | * * * *   | Dioxins/Furans, HRGC/HRMS (TO-9)<br>SOXHLET (NONE, Na2SO4) | PH"S SOLVENTS TADJI ADJ2 EXTRACTION VOL EXCHANGE              | NA NA TOL 750.0              | NA NA TOL 750.0            | NA NA TOL 750.0              | NA NA TOL 750.0                               | NA NA TOL 750.0                               | NA NA TOL 750.0                               |  |
| TestAmerica La<br>EXTRACTIO                                | natch  |   | Dioxii<br>SOXHII   | MATRIX WI/VOL INIT  | AIR 1 20.00uL                | AIR 1<br>20.00uL           | AIR 1 20.00uL                | AIR 1 . NA 20.00uL                            | AIR 1<br>20.00uL                              | AIR 1 20.00uL                                 |  |
| RQC058   | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$   | Extractionist: 403162 erica X. larson Concentrationist: 006625 Elizabeth Nguyen | Reviewer/Date: NGUYENE / 12/06/10                          | EXTR ANL LOT#, MSRUN#/ TEST  EXPR DUE WORK ORDER FLGS EXT MTH | GOLO20446-001<br>GOMMENTS:   | GOLO20446-005<br>COMMENTS: | GOLO20446-008<br>COMMENTS:   | GOLO30000-382<br>COMMENTS: 11 IK              | GOL030000-382<br>COMMENTS:                    | GOL030000-382<br>COMMENTS:                    |  |

R = RUSH C = CLP E = EPA 600 D = EXP.DEL) M = CLIENT REQ MS/MSD



# West Sacramento

# Preparation Data Review Checklist

| rep Date: 12 03 10 Holding Times: 12   | 06/10 NC         | M: Y        |
|--|------------------|-------------|
| A. Spike Witness/Batch setup   | Spike<br>Witness | Reviewe     |
| Holding times checked? NCMs filed as appropriate   | /                | -           |
| 2. QAS checked for QC instructions (LCS, LCSD, MS,MSD, etc)  |                  |             |
| <ol><li>Amount of samples in hood match amount of samples on bench<br/>sheet. Sample IDS match.</li></ol>  |                  | NA          |
| 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   | /                | <b>∖</b> 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   |                  | \           |
| 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               |             |
| <ol><li>Each weight or volume measurement is a unique record (no<br/>dittos or line downs)</li></ol>   | NA               |             |
| C. Standards and Reagents  |                  | `           |
| Lot numbers for all reagents, including clean up stages, are recorded.   | NA               |             |
| 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   |                  |             |
| Are all nonconformances documented appropriately?  | NA               |             |
| QuantIMs entry correct, including dates and times.   | NA               |             |
| 3. Are all fields completed?   | NA               |             |
| Spike witness: Date: | 2/03/10          |             |

# **TestAmerica West Sacramento**

# Data Checklist HRGCMS/LRGCMS Analyses



THE LEADER IN ENVIRONMENTAL TESTING

| Batch #: 033   | 7382 Method  | d ID: <u>Dioxins/</u>                 | Furans, HRGC/l                        | HRMS (TO-9)                                   |                    |
|--|--|---------------------------------------|---------------------------------------|---|--------------------|
| Data Analyst:<br>Date initiated:<br>Reviewer:<br>Date reviewed:  | DB-5<br> MG2<br> 2/8/40<br> MW-6/6<br> 2/8/2010  |                                       | <u>DB-2</u> 2                         | 25<br>NA                                      |                    |
| QA/QC verification   | on:  | Initiated<br>DB-5                     | Reviewed<br>DB-5                      | Initiated DB-225                              | Reviewed<br>DB-225 |
| recovery criteria? -Internal standard re -lon ratios within +  |  | /<br>/<br>/<br>O<br>NA                | T T T T T T T T T T T T T T T T T T T | (High Res Only)                               | (High Res Only     |
| Sample Analysis  | :  | Initiated<br>DB-5                     | Reviewed DB-5                         | Initiated DB-225 (High Res Only)              | Reviewed DB-225    |
| specify:  -DL's below TDL / Leta -All positives reported greater than method -Correct RRF's used -Internal standard all for method?  -Target analytes are -Dilution/splitting of -Have dilution calculates a manual calculates a manual calculates a manual calculates -Are retention times -Manual integrations | s used? If RL's are used  CL (please circle)?  d at levels od blank DL's? If for method? mounts correct  not saturated? extract taken into account? ations been verified? ulation for the sequence(s)  (RT) correct? | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |                                       | (riigh Res Only)                              | (High Res Only     |
| * Recovery limits: NCASI 551: Method 8290: Method 1613: Method 23: PCBs: Method 8280: DFLM01.0: Method 1614 *** Lower recoveries are   | 40-120%*** 40-135%*** 25-150%*** 40-130%***(Cl4-Cl6), 25-130% 25-150%*** 40-120%*** 25-150%*** 25-150%*** acceptable if I.S. S/N ≥10:1 and DL²   | , ,,                                  | . ,                                   | **RPD limi<br>50%<br>20%<br>50%<br>50%<br>50% | ts:                |

O 1 D= 1 D= 100 1111

# AIR, Metals by ICPMS (As and Mn)

# Raw Data Package

# <u>ICPMS</u>



# ICP-MS Data Review Checklist Level I and Level II

THE LEADER IN ENVIRONMENTAL TESTING

| Instrument ID (           | (Circle one): M01 (M02)  |                                       | nod 60      |      |    |  |  |  |
|---------------------------|--|---------------------------------------|-------------|------|----|--|--|--|
|                           |  | SOP SA                                | AC-MT-      | 0001 |    |  |  |  |
| File Number               | Batch Numbers  | Date                                  | Analyst     |      |    |  |  |  |
| 101207A2                  | 101207AZ 336286, 12-07-10  |                                       |             |      |    |  |  |  |
| Lot Numbers<br>らのに<br>んのに | :190601,   | 402020446                             | YES         | NO   | NA |  |  |  |
| Copy of analysis prof     | tocol used included?   |                                       |             |      |    |  |  |  |
| 2. ICVs & CCVs within     | 10% of true value or recal and rerun   | ?                                     |             |      |    |  |  |  |
| 3. ICB & CCBs < repor     | ting limit or recal and rerun?   |                                       |             |      |    |  |  |  |
| 4. 10 samples or less a   | _  |                                       |             |      |    |  |  |  |
| 5. All parameters within  |  |                                       |             |      |    |  |  |  |
| 6. LCS/LCSD within lim    | _  |                                       |             |      |    |  |  |  |
| 7. Prep blank value < 1   | _  |                                       |             |      |    |  |  |  |
|                           | tensities for samples (unless followed<br>6 of the Calibration Blank intensities | · · · · · · · · · · · · · · · · · · · | /           |      |    |  |  |  |
| 9. Appropriate dilution   | factors applied to data?   |                                       | _           |      |    |  |  |  |
| 10. Matrix spike and spil | ke dup within customer defined limits  | 5?                                    |             |      | /  |  |  |  |
| 11. Each batch checked    | for presence of internal standard in   | samples?                              |             |      |    |  |  |  |
| 12. Anomalies entered L   | ising Clouseau?  | ·                                     |             |      |    |  |  |  |
| COMMENTS:                 |  |                                       |             |      |    |  |  |  |
|                           |  | 1                                     |             |      |    |  |  |  |
| REVIEWED BY:<br>DATE:     | MTZ D  | ATA ENTERED BY:<br>DATE:              | S4<br>12-7- | 10   |    |  |  |  |

# **Dataset Report**

Perkin Elmer M02 SOP No. SAC-MT-0001 Method: 6020,200.8

User Name: metal

Computer Name: SACP1223

Dataset File Path: e:\elandata\dataset\101207a2\

Report Date/Time: Tuesday, December 07, 2010 14:13:29

# The Dataset

|           |                        | ine Dat                   | aset        |  |
|-----------|------------------------|---------------------------|-------------|--|
| Batch ID  | Sample ID              | Date and Time             | Read Type   | Description                                      |
|           | •                      | E 06:49:13 Tue 07-Dec-10  | Sample      |  |
|           | AUTOLENS SHAR          | GF06:53:04 Tue 07-Dec-10  | Sample      |  |
|           | DAILY SHARGRAV         | /E 07:34:13 Tue 07-Dec-10 | Sample      |  |
|           | Rinse 2X               | 09:12:39 Tue 07-Dec-10    | Sample      |  |
|           | Blank                  | 09:15:34 Tue 07-Dec-10    | Blank       |  |
|           | Standard 1             | 09:18:24 Tue 07-Dec-10    | Standard #1 |  |
|           | ICV                    | 09:20:59 Tue 07-Dec-10    | Sample      |  |
|           | ICV                    | 09:25:16 Tue 07-Dec-10    | Sample      |  |
|           | ICB                    | 10:24:20 Tue 07-Dec-10    | Sample      |  |
|           | LLSTD1                 | 10:26:59 Tue 07-Dec-10    | Sample      | LLSTD@10X o o + Al                               |
|           | LLSTD2                 | 10:29:38 Tue 07-Dec-10    | Sample      | LLSTD@5X   |
|           | ICSA                   | 10:32:16 Tue 07-Dec-10    | Sample      |  |
|           | ICSAB                  | 10:34:53 Tue 07-Dec-10    | Sample      |  |
|           | Rinse                  | 11:11:19 Tue 07-Dec-10    | Sample      |  |
| 336286    | MARD8B                 | 11:17:36 Tue 07-Dec-10    | Sample      | G0L020000-286 BLK 7                              |
| 336286    | MARD8C                 | 11:20:11 Tue 07-Dec-10    | Sample      | GOL.020000-286 LCS 4 don't use                   |
| 336286    | MARD8L                 | 11:22;45 Tue 07-Dec-10    | Sample      | G0L020000-286 LCSD                               |
| 000200    |                        | 11:25:24 Tue 07-Dec-10    | Sample      | <b>V</b>   |
|           | CCV 1<br>CCB 1 >Rescal | 11:50:24 Tue 07-Dec-10    | Sample >    | 1 IS   |
|           | CCV 2                  | 12:03:37 Tue 07-Dec-10    | Sample      |  |
|           | CCB 2                  | 12:06:16 Tue 07-Dec-10    | Sample      | •  |
|           | LLSTD1                 | 12:08:56 Tue 07-Dec-10    | Sample      | LLSTD@10X  |
| 335251    | MAPEVB                 | 12:23:45 Tue 07-Dec-10    | Sample      | GOL010000-251 BLK )                              |
| 335251/53 | MAPEVO                 | 12:26:21 Tue 07-Dec-10    | Sample      | G0L010000-251 LCS                                |
|           |                        | 12:28:56 Tue 07-Dec-10    | Sample      | G0L010000-251 LCSD                               |
| 335253/51 | MAPE7L                 |                           | •           | G0K190601-3                                      |
| 335251    | MAA80                  | 12:31:29 Tue 07-Dec-10    | Sample      | 1 0 - 4 1  |
| 335251    | MAA80P5                | 12:34:01 Tue 07-Dec-10    | Sample      | G0K190601-3 5X                                   |
| 335251    | MAA80Z                 | 12:36:33 Tue 07-Dec-10    | Sample      | G0K190601-3 PS                                   |
| 335251    | MAA81                  | 12:39:06 Tue 07-Dec-10    | Sample      | G0K190601-4                                      |
| 335251    | MAKDV                  | 12:41:39 Tue 07-Dec-10    | Sample      | G0K240587-1                                      |
| 335251    | MAKD2                  | 12:44:12 Tue 07-Dec-10    | Sample      | G0K240587-2                                      |
|           | CCV 3                  | 12:46:51 Tue 07-Dec-10    | Sample      |  |
|           | CCB 3                  | 12:49:31 Tue 07-Dec-10    | Sample      |  |
|           | CCV 4                  | 12:55:08 Tue 07-Dec-10    | Sample      |  |
|           | CCB 4                  | 12:57:47 Tue 07-Dec-10    | Sample      | 001 000000 000 0116                              |
| 336286    | MARD8B                 | 13:00:24 Tue 07-Dec-10    | Sample      | GOL.020000-286 BLK } GOL.020000-286 LCS   rp~ As |
| 336286    | MARD8C                 | 13:02:59 Tue 07-Dec-10    | Sample      | 001 000000 000 1 000                             |
| 336286    | MARD8L                 | 13:05:33 Tue 07-Dec-10    | Sample      | G0L020000-286 LCSD J                             |
| 340010    | MAWLKB                 | 13:08:09 Tue 07-Dec-10    | Sample      | G0L060000-10 BLK                                 |
| 340010    | MAWLKC                 | 13:10:44 Tue 07-Dec-10    | Sample      | G0L060000-10 LCS                                 |
| 340010    | MAWLKL                 | 13:13:20 Tue 07-Dec-10    | Sample      | GOLOGODO-10 LCSD } report As, Mn                 |
| 340010    | MAML1                  | 13:15:54 Tue 07-Dec-10    | Sample      | G0K300434-2                                      |
| 340010    | MAML1P5                | 13:18:28 Tue 07-Dec-10    | Sample      | G0K300434-2 5X                                   |
| 340010    | MAML1Z                 | 13:21:03 Tue 07-Dec-10    | Sample      | G0K300434-2 PS                                   |
| 340010    | MAML6                  | 13:23:37 Tue 07-Dec-10    | Sample      | G0K300434-3                                      |
|           | CCV 5                  | 13:26:17 Tue 07-Dec-10    | Sample      |  |
|           | CCB 5                  | 13:28:56 Tue 07-Dec-10    | Sample      |  |
|           |                        |                           |             |  |

| 341211<br>341211<br>341211<br>341211<br>341211<br>341211<br>341211<br>341211 | MA0J7B MA0J7C MA0J7L MAQQ1 MAQQ1P5 MAQQ1Z MAQQ4 MAQRA MAQRA CCV 6 CCB 6 | 13:39:35 Tue 07-Dec-10<br>13:42:11 Tue 07-Dec-10<br>13:44:47 Tue 07-Dec-10<br>13:47:22 Tue 07-Dec-10<br>13:49:58 Tue 07-Dec-10<br>13:52:33 Tue 07-Dec-10<br>13:55:09 Tue 07-Dec-10<br>13:57:44 Tue 07-Dec-10<br>14:00:19 Tue 07-Dec-10<br>14:02:57 Tue 07-Dec-10 | Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample | G0L070000-211 BLK<br>G0L070000-211 LCS<br>G0L070000-211 LCSD<br>G0L020446-3<br>G0L020446-3 5X<br>G0L020446-3 PS<br>G0L020446-4<br>G0L020446-7<br>G0L020446-10 |  | mp~ 4 | As, Mo | ^ |
|--|---|--|--|---|--|-------|--------|---|
|--|---|--|--|---|--|-------|--------|---|

41 MAML1

42 MAML1P5

43 MAML1Z

44 MAML6

45 CCV 5

46 CCB 5

47 MA0J7B

48 MA0J7C

G0K300434-2

G0K300434-2

G0K300434-3

G0L070000

G0L070000

G0K300434

0340010

0340010

0340010

0340010

0341211

0341211

2A

2A

2A

2A

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 12/07/10 14:26:16

| 2 3 4 5 6 7 8              | Sample ID Rinse 2X Blank Standard1 ICV ICV ICB LLSTD1 LLSTD2 ICSA ICSAB | Lot No.     | Batch   |     | 2.0<br>1.0<br>1.0<br>1.0 | 12/07/10 09:15<br>12/07/10 09:18<br>12/07/10 09:20 | Comment                                | Q |
|----------------------------|---|-------------|---------|-----|--------------------------|--|--|---|
| 2 3 4 5 6 7 8              | Blank Standard1 ICV ICV ICB LLSTD1 LLSTD2 ICSA                          |             |         |     | 1.0<br>1.0<br>1.0        | 12/07/10 09:15<br>12/07/10 09:18<br>12/07/10 09:20 |  |   |
| 3<br>4<br>5<br>6<br>7<br>8 | Standard1 ICV ICV ICB LLSTD1 LLSTD2 ICSA                                |             |         |     | 1.0                      | 12/07/10 09:18<br>12/07/10 09:20                   |  |   |
| 4<br>5<br>6<br>7<br>8      | ICV ICV ICB LLSTD1 LLSTD2 ICSA  |             |         |     | 1.0                      | 12/07/10 09:20                                     |  |   |
| 5<br>6<br>7<br>8           | ICV ICB LLSTD1 LLSTD2 ICSA  |             |         |     |                          |  | ······································ |   |
| 6<br>7<br>8                | ICB<br>LLSTD1<br>LLSTD2<br>ICSA   |             |         |     | 1.0                      |  |  |   |
| 7 8                        | LLSTD1<br>LLSTD2<br>ICSA  |             |         |     |                          | 12/07/10 09:25                                     |  |   |
| 8                          | LLSTD2<br>ICSA  |             |         | 1 1 | 1.0                      | 12/07/10 10:24                                     |  |   |
| _ [                        | ICSA  |             |         |     | 1.0                      | 12/07/10 10:26                                     |  |   |
| -                          |   |             | 1       |     | 1.0                      | 12/07/10 10:29                                     |  |   |
| 9                          | ICSAB   | 1           |         |     | 1.0                      | 12/07/10 10:32                                     |  |   |
| 10                         |   | ·           |         |     | 1.0                      | 12/07/10 10:34                                     |  |   |
| 11                         | Rinse   |             |         |     | 1.0                      | 12/07/10 11:11                                     |  |   |
| 12                         | MARD8B  | G0L020000   | 0336286 | 2A  | 1.0                      | 12/07/10 11:17                                     | · · · · · · · · · · · · · · · · · · ·  |   |
| 13                         | MARD8C  | G0L020000   | 0336286 | 2A  | 1.0                      | 12/07/10 11:20                                     |  |   |
| 14                         | MARD8L  | G0L020000   | 0336286 | 2A  | 1.0                      | 12/07/10 11:22                                     |  | E |
| 15                         | CCV 1   |             |         |     | 1.0                      | 12/07/10 11:25                                     |  |   |
| 16                         | CCB 1   |             |         |     | 1.0                      | 12/07/10 11:50                                     |  |   |
| 19                         | CCV 2   |             |         |     | 1.0                      | 12/07/10 12:03                                     |  |   |
| 20 (                       | CCB 2   |             |         |     | 1.0                      | 12/07/10 12:06                                     |  |   |
| 21                         | LLSTD1  |             |         |     | 1.0                      | 12/07/10 12:08                                     |  |   |
| 22   1                     | MAPEVB  | G0L010000   | 0335251 | 2A  | 1.0                      | 12/07/10 12:23                                     |  |   |
| 23  ī                      | MAPEVC  | G0L010000   | 0335251 | 2A  | 1.0                      | 12/07/10 12:26                                     |  |   |
| 24                         | MAPE7L  | G0L010000   | 0335253 | 2A  | 1.0                      | 12/07/10 12:28                                     |  |   |
| 25 T                       | MAA80   | G0K190601-3 | 0335251 | 2A  | 1.0                      | 12/07/10 12:31                                     |  |   |
| 26 T                       | MAA80P5   | G0K190601   | 0335251 |     | 5.0                      | 12/07/10 12:34                                     | <del></del>                            |   |
| 27 T                       | MAA80Z  | G0K190601-3 | 0335251 |     | 1.0                      | 12/07/10 12:36                                     |  |   |
| 28   Î                     | MAA81   | G0K190601-4 | 0335251 | 2A  | 1.0                      | 12/07/10 12:39                                     | · · · · · · · · · · · · · · · · · · ·  |   |
| 29 T                       | MAKDV   | G0K240587-1 | 0335251 | 2A  | 1.0                      | 12/07/10 12:41                                     |  |   |
| 30  ī                      | MAKD2   | G0K240587-2 | 0335251 | 2A  | 1.0                      | 12/07/10 12:44                                     |  |   |
| 31 🛭                       | CCV 3   |             |         |     | 1.0                      | 12/07/10 12:46                                     |  |   |
| 32 🛚                       | CCB 3   |             |         |     | 1.0                      | 12/07/10 12:49                                     |  |   |
| 33 (                       | CCV 4   |             |         |     | 1.0                      | 12/07/10 12:55                                     |  |   |
| 34 🛚                       | CCB 4   |             |         |     | 1.0                      | 12/07/10 12:57                                     |  |   |
| 35 <u>I</u>                | MARD8B  | G0L020000   | 0336286 | 2A  | 1.0                      | 12/07/10 13:00                                     |  |   |
| 36 [i                      | MARD8C  | G0L020000   | 0336286 | 2A  | 1.0                      | 12/07/10 13:02                                     |  |   |
| 37 [I                      | MARD8L  | G0L020000   | 0336286 | 2A  | 1.0                      | 12/07/10 13:05                                     |  |   |
| 38 🗓                       | MAWLKB  | G0L060000   | 0340010 | 2A  | 1.0                      | 12/07/10 13:08                                     |  |   |
|                            | MAWLKC  | G0L060000   | 0340010 | 2A  | 1.0                      | 12/07/10 13:10                                     |  |   |
| 40 [                       | MAWLKL  | G0L060000   | 0340010 | 2A  | 1.0                      | 12/07/10 13:13                                     |  |   |

1.0

5.0

1.0

1.0

1.0

1.0

1.0

1.0

12/07/10 13:15

12/07/10 13:18

12/07/10 13:21

12/07/10 13:23

12/07/10 13:26

12/07/10 13:28

12/07/10 13:39

12/07/10 13:42

# **TAL West Sac**

# **RUN SUMMARY**

| Met               | hod: 6020 (SC | OP: SAC-MT-001 | )       | , Ì | nstrume | ent. M02       | Reported: 12/07/10 14:26:16             |   |  |
|-------------------|---------------|----------------|---------|-----|---------|----------------|---|---|--|
| File ID: 101207A2 |               |                |         |     |         | Analys         | t; hargraves                            |   |  |
| #                 | Sample ID     | Lot No.        | Batch   |     | DF      | Analyzed Date  | Comment                                 | Q |  |
| 49                | MA0J7L        | G0L070000      | 0341211 | 2A  | 1.0     | 12/07/10 13:44 |   |   |  |
| 50                | MAQQ1         | G0L020446-3    | 0341211 | 2A  | 1.0     | 12/07/10 13:47 |   |   |  |
| 51                | MAQQ1P5       | G0L020446      | 0341211 |     | 5.0     | 12/07/10 13:49 | · · · · · · · · · · · · · · · · · · ·   |   |  |
| 52                | MAQQ1Z        | G0L020446-3    | 0341211 |     | 1.0     | 12/07/10 13:52 |   |   |  |
| 53                | MAQQ4         | G0L020446-4    | 0341211 | 2A  | 1.0     | 12/07/10 13:55 | -                                       |   |  |
| 54                | MAQRA         | G0L020446-7    | 0341211 | 2A  | 1.0     | 12/07/10 13:57 |   |   |  |
| 55                | MAQRH         | G0L020446-10   | 0341211 | 2A  | 1.0     | 12/07/10 14:00 | , |   |  |
| 56                | CCV 6         |                |         |     | 1.0     | 12/07/10 14:02 | · · · · · · · · · · · · · · · · · · ·   | E |  |
| 57                | CCR 6         |                | 1       | 1 1 | 1.0     | 12/07/10 14:05 |   |   |  |

# INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 12/07/10 14:26:16

File ID: 101207A2 Analyst: hargraves

### Germanium

|    |           |                | Germanium |                             |
|----|-----------|----------------|-----------|-----------------------------|
| #  | Sample ID | Analyzed Date  |           | Q                           |
| 1  | Rinse 2X  | 12/07/10 09:12 | 95.6      |                             |
| 2  | Blank     | 12/07/10 09:15 | 100.0     | ✓                           |
| 3  | Standard1 | 12/07/10 09:18 | 99.6      | Ø                           |
| 4  | ICV       | 12/07/10 09:20 | 99.1      | V                           |
| 5  | ICV       | 12/07/10 09:25 | 99.9      | <b>7</b>                    |
| 6  | ICB       | 12/07/10 10:24 | 103.4     | Ø                           |
| 7  | LLSTD1    | 12/07/10 10:26 | 105.9     | V                           |
| 8  | LLSTD2    | 12/07/10 10:29 | 106.7     | V                           |
| 9  | ICSA      | 12/07/10 10:32 | 91.2      | V                           |
| 10 | ICSAB     | 12/07/10 10:34 | 97.1      | $\checkmark$                |
| 11 | Rinse     | 12/07/10 11:11 | 126.2     | abla                        |
| 12 | MARD8B    | 12/07/10 11:17 | 122.5     | V                           |
| 13 | MARD8C    | 12/07/10 11:20 | 114.4     | abla                        |
| 14 | MARD8L    | 12/07/10 11:22 | 103.9     | $ \mathbf{V} $              |
| 15 | CCV 1     | 12/07/10 11:25 | 119.3     | abla                        |
| 16 | CCB 1     | 12/07/10 11:50 | 133.6     |                             |
| 19 | CCV 2     | 12/07/10 12:03 | 102.5     | $\checkmark$                |
| 20 | CCB 2     | 12/07/10 12:06 | 100.8     | V                           |
| 21 | LLSTD1    | 12/07/10 12:08 | 103.8     |                             |
| 22 | MAPEVB    | 12/07/10 12:23 | 94.3      | $\checkmark$                |
| 23 | MAPEVC    | 12/07/10 12:26 | 87.2      | abla                        |
| 24 | MAPE7L    | 12/07/10 12:28 | 81.7      | $\mathbf{\Lambda}$          |
| 25 | MAA80     | 12/07/10 12:31 | 79.5      | $   \overline{\mathbf{A}} $ |
| 26 | MAA80P5   | 12/07/10 12:34 | 96.1      |                             |
| 27 | MAA80Z    | 12/07/10 12:36 | 82.6      | $\checkmark$                |
| 28 | MAA81     | 12/07/10 12:39 | 80.7      |                             |
| 29 | MAKDV     | 12/07/10 12:41 | 85.3      | V                           |
| 30 | MAKD2     | 12/07/10 12:44 | 86.8      | <b>V</b>                    |
| 31 | CCV 3     | 12/07/10 12:46 | 94.8      |                             |
| 32 | CCB 3     | 12/07/10 12:49 | 99.0      |                             |
| 33 | CCV 4     | 12/07/10 12:55 | 96.7      |                             |
| 34 | CCB 4     | 12/07/10 12:57 | 103.2     |                             |
| 35 | MARD8B    | 12/07/10 13:00 | 97.4      |                             |
| 36 | MARD8C    | 12/07/10 13:02 | 86.2      |                             |
| 37 | MARD8L    | 12/07/10 13:05 | 81.1      |                             |
| 38 | MAWLKB    | 12/07/10 13:08 | 79.0      |                             |
| 39 | MAWLKC    | 12/07/10 13:10 | 80.8      |                             |
| 40 | MAWLKL    | 12/07/10 13:13 | 79.6      |                             |
|    | MAML1     | 12/07/10 13:15 | 80.0      |                             |
| 42 | MAML1P5   | 12/07/10 13:18 | 90.0      |                             |
| 43 | MAML1Z    | 12/07/10 13:21 | 77.6      |                             |
| 44 | MAML6     | 12/07/10 13:23 | 78.6      |                             |
| 45 | CCV 5     | 12/07/10 13:26 | 91.9      |                             |
| 46 | CCB 5     | 12/07/10 13:28 | 95.0      |                             |
| 47 | MA0J7B    | 12/07/10 13:39 | 91.8      |                             |
| 48 | MA0J7C    | 12/07/10 13:42 | 82.1      | ✓                           |

# TAL West Sac

# INTERNAL STANDARD SUMMARY

| Met   | hod: 6020 (SC | OP: SAC-MT-001) | M02 (M02) | Reported: 12/07/10 14:26:16 |
|-------|---------------|-----------------|-----------|-----------------------------|
| ile l | D: 101207     | 7A2             |           | unalyst: hargraves          |
|       |               |                 | Germa     | anium                       |
| #     | Sample ID     | Analyzed Date   |           | Q                           |
| 49    | MA0J7L        | 12/07/10 13:44  |           | 80.6 ☑                      |
| 50    | MAQQ1         | 12/07/10 13:47  |           | 79.0 ☑                      |
| 51    | MAQQ1P5       | 12/07/10 13:49  |           | 86.1                        |
| 52    | MAQQ1Z        | 12/07/10 13:52  |           | 79.3 ☑                      |
| 53    | MAQQ4         | 12/07/10 13:55  |           | 77.4                        |
| 54    | MAQRA         | 12/07/10 13:57  |           | 80.6                        |
| 55    | MAQRH         | 12/07/10 14:00  |           | 85.8 ☑                      |
| 56    | CCV 6         | 12/07/10 14:02  |           | 93.4                        |
| 57    | CCB 6         | 12/07/10 14:05  |           | 97.2 ☑                      |

#### TAL-W.Sacramento Elan 6000 ICPMS M02

#### **Quantitative Method Report**

File Name:

0006020-SH.mth

File Path:

E:\elandata\Method\0006020-SH.mth

#### **Timing Parameters**

Sweeps/Reading:

50

Readings/Replicate: Number of Replicates: 1 3

Tuning File:

default.tun

Optimization File:

default.dac

QC Enabled:

Yes

Settling Time:

Normal

| Analyte | Mass   | Scan Mode    | MCA Channels | Dwell Time | Integration Time |
|---------|--------|--------------|--------------|------------|------------------|
| Al      | 26.982 | Peak Hopping | j 1          | 14.0 ms    | 700 ms           |
| Ca      | 43.956 | Peak Hopping | 1            | 14.0 ms    | 700 ms           |
| Mn      | 54.938 | Peak Hopping | j 1          | 14.0 ms    | 700 ms           |
| As      | 74.922 | Peak Hopping | 1            | 20.0 ms    | 1000 ms          |
| Ge-1    | 71.922 | Peak Hopping | 1            | 14.0 ms    | 700 ms           |

## **Signal Processing**

Detector Mode:

Dual

Measurement Units:

Counts

AutoLens: Spectral Peak Processing: On

Signal Profile Processing:

Average Average

Blank Subtraction:

After Internal Standard

Baseline Readings:

0

Smoothing:

Yes, Factor 5

### **Equations**

Analyte

Mass

Corrections

As 74.922 -3.1278 \* Se 77 + 1.0177 \* Se 78

#### **Calibration Information**

| Analyte | Mass   | Curve Type       | Sample Units | Std Units | Std 1    | Std 2 | Std 3 | Std 4 |
|---------|--------|------------------|--------------|-----------|----------|-------|-------|-------|
| Αl      | 26.982 | Linear Thru Zero | ug/L         | ug/L      | 5.1e+003 |       |       |       |
| Ca      | 43.956 | Linear Thru Zero | ug/L         | ug/L      | 5.1e+003 |       |       |       |
| Mn      | 54.938 | Linear Thru Zero | ug/L         | ug/L      | 100      |       |       |       |
| As      | 74.922 | Linear Thru Zero | ug/L         | ug/L      | 100      |       |       |       |
| Ge-1    | 71.922 | Linear Thru Zero | ug/L         | ug/L      |          |       |       |       |

Report Date/Time: Tuesday, December 07, 2010 14:09:40

Page 1

# TAL-W. SACRMENTO – Perkin Elmer Elan 6000 ICPMS, M02 – Methods 6020, 200.8

# AIR TOX Standards - 4 % HNO3, 0.5 % HCl

# Standards for run:

Tuning standard: 4075-25B

Internal standard: 4075-22C

Blank, CCBs: <u>3185-42D</u>

Standard 1, CCVs: 4075-21E

ICV: 4075-20D

ICSA: 4075-27B

ICSAB: <u>4075-27C</u>

File Number: \_\_\_\_\_\_101207A2 \_\_\_\_\_

# **Instrument Tuning Report**

File Name:

default.tun

# **Sample Information**

Sample Date/Time: Tuesday, December 07, 2010 06:49:13

Sample ID: TUNE SHARGRAVE

| Analyte | Exact Mass | Meas. Mass | Mass DAC | Meas. Pk. Width | Res. DAC | Custom Res. |
|---------|------------|------------|----------|-----------------|----------|-------------|
| Li      | 7.016      | 7.027      | 1580     | 0.738           | 2040     |             |
| Be      | 9.012      | 9.029      | 2080     | 0.700           | 2035     |             |
| Mg      | 23.985     | 23.979     | 5728     | 0.726           | 2003     |             |
| Co      | 58.933     | 58.878     | 14249    | 0.724           | 1958     |             |
| In      | 114.904    | 114.829    | 27899    | 0.733           | 1937     |             |
| Ce      | 139.905    | 139.929    | 33978    | 0.729           | 1985     |             |
| TI      | 204.975    | 204.979    | 49692    | 0.727           | 2189     |             |
| Pb      | 207.977    | 207.979    | 50425    | 0.723           | 2210     |             |
| U       | 238.050    | 238.028    | 57638    | 0.740           | 2360     |             |

Report Date/Time:

Tuesday, December 07, 2010 06:51:07

# **Elan 6000 Instrument Optomization Report**

Path e:\elandata\Optimize

File Name e:\elandata\Optimize\default.dac

#### Sample Information

Sample Date/Time: Tuesday, December 07, 2010 07:34:13

Sample ID: DAILY SHARGRAVE

#### **Parameter Settings**

| Nebulizer Gas Flow      | 0.92     |
|-------------------------|----------|
| Lens Voltage            | 9.00     |
| ICP RF Power            | 1100.00  |
| Analog Stage Voltage    | -2000.00 |
| Pulse Stage Voltage     | 1350.00  |
| Discriminator Threshold | 70.00    |
| AC Rod Offset           | -7.00    |
| Service DAC 1           | 60.00    |
| Quadrupole Rod Offset   | 0.00     |
|                         |          |

#### **AutoLens Calibration**

Date: 06:53:04 Tue 07-Dec-10

Sample Filename: AUTOLENS SHARGRAVE.003
Dataset Pathname: e:\elandata\Dataset\101207a2\

Lens Voltage Start: 5.50 Lens Voltage End: 10.00 Lens Voltage Step: 0.25

Slope: 0.02126968 Intercept: 6.53696030

| Analyte | e Mass  | Optimum Voltage | Maximum Intensity | # Points |
|---------|---------|-----------------|-------------------|----------|
| Be      | 9.010   | 6.8             | 3281.1            | 19       |
| Co      | 58.935  | 7.8             | 86613.6           | 19       |
| In      | 114.903 | 9.0             | 328775.0          | 19       |

#### **Dual Detector Calibration**

Date: 08:01:56 Tue 07-Dec-10
Sample Filename: DAILY SHARGRAVE.1097

Dataset Pathname: dual detector calibration\

Points Acquired: 37
Lens Vol Start: -3.00
Lens Vol End: 15.00
Lens Vol Step: 0.50

| Analyte | Mass   | Gain     | N(max)         |
|---------|--------|----------|----------------|
| Li      | 6.015  | 10129.15 | 1235998078.193 |
| Li      | 7.016  | 9449.89  | 1324842000.392 |
| Be      | 9.012  | 8857.80  | 1413399228.860 |
| В       | 11.009 | 9146.06  | 1368852249.810 |

Report Date/Time: Tuesday, December 07, 2010 08:08:10

TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS, M02 - Methods 6020, 200.8

| Na | 22.990  | 9118.55 | 1372981536.992 |
|----|---------|---------|----------------|
| Mg | 23.985  | 8534.23 | 1466986957.713 |
| Mg | 24.986  | 8369.25 | 1495905758.665 |
| Al | 26.982  | 7911.93 | 1582369824.835 |
| Si | 27.977  | 8973.22 | 1395219571.285 |
| Р  | 30.994  | 7287.08 | 1718055165.115 |
| K  | 38.964  | 7100.33 | 1763243847.627 |
| Ca | 42.959  |         |                |
| Ca | 43.956  | 6971.61 | 1795798956.472 |
| Sc | 44.956  | 7080.85 | 1768093466.146 |
| ٧  | 50.944  | 6876.33 | 1820682362.555 |
| Cr | 51.941  | 6628.40 | 1888781365.139 |
| Fe | 53.940  | 6525.67 | 1918515148.090 |
| Mn | 54.938  | 6554.76 | 1910002204.770 |
| Fe | 56.935  | 6424.60 | 1948697279.431 |
| Co | 58.933  | 6269.19 | 1997004380.979 |
| Ni | 59.933  | 6081.55 | 2058620450.330 |
| Cu | 62.930  | 5973.72 | 2095780633.374 |
| Сш | 64.928  | 5888.17 | 2126231105.985 |
| Zn | 67.925  | 5952.75 | 2103161748.568 |
| Ge | 71.922  | 6127.47 | 2043191900.987 |
| As | 74.922  | 6124.98 | 2044023708.276 |
| Se | 77.917  | 6122.66 | 2044797442.453 |
| Br | 78.918  |         |                |
| Se | 81.917  | 6050.71 | 2069114669.712 |
| Sr | 87.906  |         |                |
| Мо | 96.906  | 6128.33 | 2042906515.828 |
| Ag | 106.905 | 5534.60 | 2262061270.648 |
| Ag | 108.905 | 5536.88 | 2261130679.220 |
| Cd | 110.904 | 5626.11 | 2225268192.020 |
| Cd | 113.904 | 5627.50 | 2224719836.750 |
| in | 114.904 | 5658.70 | 2212451551.812 |
| Sn | 117.902 | 5649.45 | 2216076556.491 |
| Sb | 120.904 | 5651.19 | 2215394633.559 |
| Ba | 134.906 | 5526.61 | 2265330490.437 |
| Нο | 164.930 |         |                |
| Tm | 168.934 | 5351.68 | 2339377359.067 |
| TI | 204.975 | 5104.08 | 2452862601.143 |
| Pb | 207.977 | 5100.71 | 2454483234.194 |
| U  | 238.050 | 5062.74 | 2472892833.787 |

# **Daily Performance Report**

Sample ID: DAILY SHARGRAVE

Sample Date/Time: Tuesday, December 07, 2010 07:34:13

Sample Description:

Sample File:

Method File: E:\elandata\Method\000daily.mth

Dataset File: e:\elandata\dataset\101207a2\DAILY SHARGRAVE.006

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: e:\elandata\Optimize\default.dac

Number of Replicates: 5 Dual Detector Mode: Dual

# **Summary**

|    | Analyte | MassNet | t Intens. Mean | Net Intens. RSD |
|----|---------|---------|----------------|-----------------|
|    | Mg      | 24      | 39582.557      | 0.225           |
|    | Rh      | 103     | 227757.567     | 0.697           |
|    | Pb      | 208     | 271660.442     | 0.525           |
| [> | Ba      | 138     | 316167.621     | 0.392           |
| L  | Ba++    | 69      | 0.014          | 2.345           |
| Γ> | Ce      | 140     | 407072.164     | 0.396           |
| L  | CeO     | 156     | 0.033          | 4.799           |
|    | Bkgd    | 220     | 2.286          | 34.233          |
|    | Li      | 7       | 13654.536      | 2.149           |
|    | Be      | 9       | 3772.211       | 2.677           |
|    | Co      | 59      | 98556.798      | 0.485           |
|    | ln      | 115     | 356144.422     | 0.429           |
|    | TI      | 205     | 411132 717     | 1.234           |

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: Rinse 2X

Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 09:12:39

Method File: E:\elandata\Method\0006020-SH.mth

Dataset File: e:\elandata\dataset\101207a2\Rinse 2X.007

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 6 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

### Sample Result Summary

|            | Mass Analyte | Conc. Mean Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|------------|--------------|----------------------|--------------------|-------------|-----------------|
| Γ          | 27 Al        |                      | 378104.740         | ug/L        | 0.000           |
|            | 44 Ca        |                      | 3039.059           | ug/L        | 0.000           |
| 1          | 55 Mn        |                      | 6805.315           | ug/L        | 0.000           |
| 1          | 75 As        |                      | 5300.785           | ug/L        | 0.000           |
| <u> </u> > | 72 Ge-1      |                      | 755369.417         | ug/L        | 0.000           |

#### **Internal Standard Recoveries**

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Al      | 27   |                    |
| ł | Ca      | 44   |                    |
| 1 | Mn      | 55   |                    |
| 1 | As      | 75   |                    |
| > | Ge-1    | 72   |                    |

Report Date/Time: Tuesday, December 07, 2010 09:13:06

Page 1

Sample ID: Rinse 2X

SOP No. SAC-MT-0001 Analyst: SHargrave

# Sample ID: Blank

Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 09:15:34

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\Blank.008

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 5 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

# Sample Result Summary

|    | Mass Analyte | Conc. Mean Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|----------------------|--------------------|-------------|-----------------|
| Γ  | 27 AI        |                      | 91619.527          | ug/L        |                 |
| ł  | 44 Ca        |                      | 3216.147           | ug/L        |                 |
|    | 55 Mn        |                      | 2860.643           | ug/L        |                 |
| ł  | 75 As        |                      | 5747.158           | ug/L        |                 |
| _> | 72 Ge-1      |                      | 790209.635         | ug/L        |                 |

#### **Internal Standard Recoveries**

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| ſ  | A!      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
|    | As      | 75   |                    |
| _> | Ge-1    | 72   |                    |

Report Date/Time: Tuesday, December 07, 2010 09:16:01

Page 1

Sample ID: Blank

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: Standard 1
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 09:18:24

Method File: E:\elandata\Method\0006020-SH.mth

Dataset File: e:\elandata\dataset\101207a2\Standard 1.009

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 4 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

# Sample Result Summary

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| [  | 27 AI        | 5100.000000 | 1.545     | 14503124.094       | ug/L        | 91619.527       |
|    | 44 Ca        | 5100.000000 | 1.114     | 655965.802         | ug/L        | 3216.147        |
| 1  | 55 Mn        | 100.000000  | 0.927     | 704528.576         | ug/L        | 2860.643        |
| 1  | 75 As        | 100.000000  | 0.939     | 96528.759          | ug/L        | 5747.158        |
| L> | 72 Ge-1      |             |           | 787378.408         | ug/L        | 790209.635      |

#### Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
| 1  | Mn      | 55   |                    |
| 1  | As      | 75   |                    |
| Ĺ> | Ge-1    | 72   |                    |

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: ICV
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 09:25:16

Method File: E:\elandata\Method\0006020-SH.mth Dataset File: e:\elandata\dataset\101207a2\ICV .011

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 3 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

# Sample Result Summary

|            | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|------------|--------------|------------|-----------|--------------------|-------------|-----------------|
| Ţ          | 27 AI        | 743.588271 | 0.760     | 2197458.404        | ug/L        | 91619.527       |
| 1          | 44 Ca        | 761.281671 | 0.856     | 100857.325         | ug/L        | 3216.147        |
| 1          | 55 Mn        | 77.635827  | 1.570     | 548743.825         | ug/L        | 2860.643        |
| 1          | 75 As        | 81.596677  | 0.174     | 79997.895          | ug/L        | 5747.158        |
| <b>L</b> > | 72 Ge-1      |            |           | 789143.453         | ug/L        | 790209.635      |

#### Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | A!      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
| 1  | As      | 75   |                    |
| L> | Ge-1    | 72   | 99.865             |

Report Date/Time: Tuesday, December 07, 2010 09:25:41

Page 1 Sample ID: ICV

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: ICB Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 10:24:20

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\ICB.012

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 5 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|            | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|------------|--------------|------------|-----------|--------------------|-------------|-----------------|
| Γ          | 27 AI        | -4.317916  | 10.910    | 82056.718          | ug/L        | 91619.527       |
|            | 44 Ca        | 9.068673   | 2.906     | 4530.947           | ug/L        | 3216.147        |
|            | 55 Mn        | -0.011123  | 73.964    | 2876.317           | ug/L        | 2860.643        |
|            | 75 As        | 0.410560   | 66.541    | 6334.551           | ug/L        | 5747.158        |
| <u>_</u> > | 72 Ge-1      |            |           | 817166.369         | ug/L        | 790209.635      |

#### Internal Standard Recoveries

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Al      | 27   |                    |
| 1 | Ca      | 44   |                    |
|   | Mn      | 55   |                    |
|   | As      | 75   |                    |
| > | Ge-1    | 72   | 103.411            |

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: LLSTD1

Sample Description: LLSTD@10X

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 10:26:59

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\LLSTD1.013

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 71 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## **Sample Result Summary**

|   | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|--------------|------------|-----------|--------------------|-------------|-----------------|
| Γ | 27 Al        | 17.091767  | 5.323     | 148354.452         | ug/L        | 91619.527       |
| 1 | 44 Ca        | 52.030498  | 3.923     | 10481.959          | ug/L        | 3216.147        |
| 1 | 55 Mn        | 0.715607   | 3.326     | 8365.495           | ug/L        | 2860.643        |
| 1 | 75 As        | 1.106023   | 1.564     | 7155.287           | ug/L        | 5747.158        |
| > | 72 Ge-1      |            |           | 837042.468         | ug/L        | 790209.635      |

#### Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
|    | As      | 75   |                    |
| L> | Ge-1    | 72   | 105.927            |

Report Date/Time: Tuesday, December 07, 2010 10:27:25

Page 1

Sample ID: LLSTD1

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: LLSTD2

Sample Description: LLSTD@5X

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 10:29:38

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\LLSTD2.014

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 72 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 AI        | 66.838139  | 0.888     | 300021.708         | ug/L        | 91619.527       |
| 1  | 44 Ca        | 99.835983  | 2.159     | 17112.980          | ug/L        | 3216.147        |
| 1  | 55 Mn        | 1.705385   | 2.700     | 15863.749          | ug/L        | 2860.643        |
| 1  | 75 As        | 2.237674   | 8.661     | 8307.267           | ug/L        | 5747.158        |
| Ĺ> | 72 Ge-1      |            |           | 843216.075         | ug/L        | 790209.635      |

#### **Internal Standard Recoveries**

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
| İ  | Ca      | 44   |                    |
| 1  | Mn      | 55   |                    |
|    | As      | 75   |                    |
| 1> | Ge-1    | 72   | 106.708            |

Report Date/Time: Tuesday, December 07, 2010 10:30:03

Page 1

Sample ID: LLSTD2

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: ICSA Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 10:32:16

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\ICSA .015

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 2 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|              | Mass Analy | te Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|--------------|------------|---------------|-----------|--------------------|-------------|-----------------|
| Γ            | 27 AI      | 97070.591213  | 4.249     | 250931943.094      | ug/L        | 91619.527       |
|              | 44 Ca      | 101021.709241 | 3.318     | 11829049.317       | ug/L        | 3216.147        |
| j            | 55 Mn      | 6.220860      | 3.749     | 42529.990          | ug/L        | 2860.643        |
| j            | 75 As      | 1.129956      | 58.484    | 6176.103           | ug/L        | 5747.158        |
| <b>L&gt;</b> | 72 Ge-1    |               |           | 720572.478         | ug/L        | 790209.635      |

#### Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
|    | As      | 75   |                    |
| _> | Ge-1    | 72   | 91.188             |

Report Date/Time: Tuesday, December 07, 2010 10:32:41

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Sample ID: ICSA

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: ICSAB
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 10:34:53

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\ICSAB.016

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 1 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyt | e Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|-------------|--------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 AI       | 92107.819166 | 0.457     | 253685266.589      | ug/L        | 91619.527       |
|    | 44 Ca       | 98661.893241 | 0.553     | 12306507.364       | ug/L        | 3216.147        |
| ł  | 55 Mn       | 100.843584   | 1.172     | 692172.885         | ug/L        | 2860.643        |
|    | 75 As       | 105.260552   | 1.795     | 98693.864          | ug/L        | 5747.158        |
| L> | 72 Ge-1     |              |           | 767178.960         | ug/L        | 790209.635      |

#### Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
|    | As      | 75   |                    |
| L> | Ge-1    | 72   | 97.085             |

Report Date/Time: Tuesday, December 07, 2010 10:35:18

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Sample ID: ICSAB

SOP No. SAC-MT-0001 Analyst: SHargrave

## Sample ID: Rinse

Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 11:11:19

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\Rinse.017

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 6 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 AI        | 71.514890  | 1.236     | 371606.938         | ug/L        | 91619.527       |
|    | 44 Ca        | 7.342333   | 15.114    | 5250.167           | ug/L        | 3216.147        |
| ļ  | 55 Mn        | 0.454851   | 3.967     | 7653.936           | ug/L        | 2860.643        |
| -  | 75 As        | 0.511864   | 22.020    | 7842.901           | ug/L        | 5747.158        |
| L> | 72 Ge-1      |            |           | 997449.908         | ug/L        | 790209.635      |

## Internal Standard Recoveries

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Al      | 27   | ·                  |
|   | Ca      | 44   |                    |
| 1 | Mn      | 55   |                    |
| 1 | As      | 75   |                    |
| > | Ge-1    | 72   | 126.226            |

Report Date/Time: Tuesday, December 07, 2010 11:11:46

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Sample ID: Rinse

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MARD8B

Sample Description: G0L020000-286 BLK

Batch ID: 336286

Sample Date/Time: Tuesday, December 07, 2010 11:17:36

Method File: E:\elandata\Method\0006020-SH.mth

Dataset File: e:\elandata\dataset\101207a2\MARD8B.018

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 100 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## **Sample Result Summary**

|   | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|--------------|------------|-----------|--------------------|-------------|-----------------|
| Γ | 27 AI        | -24.567215 | 0.566     | 26882.704          | ug/L        | 91619.527       |
|   | 44 Ca        | 190.055925 | 2.965     | 33829.384          | ug/L        | 3216,147        |
| 1 | 55 Mn        | -0.012615  | 67.446    | 3393.571           | ug/L        | 2860.643        |
| 1 | 75 As        | 1.390648   | 5.953     | 8590.648           | ug/L        | 5747.158        |
|   | 72 Ge-1      |            |           | 967882.665         | ug/L        | 790209.635      |

#### Internal Standard Recoveries

|            | Analyte | Mass | Int Std % Recovery |
|------------|---------|------|--------------------|
| Γ          | Al      | 27   |                    |
|            | Ca      | 44   |                    |
|            | Mn      | 55   |                    |
|            | As      | 75   |                    |
| <u> </u> > | Ge-1    | 72   | 122.484            |

Report Date/Time: Tuesday, December 07, 2010 11:18:03

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Sample ID: MARD8B

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MARD8C

Sample Description: G0L020000-286 LCS

Batch ID: 336286

Sample Date/Time: Tuesday, December 07, 2010 11:20:11

Method File: E:\elandata\Method\0006020-SH.mth

Dataset File: e:\elandata\dataset\101207a2\MARD8C.019

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 86 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 AI        | 803.970332  | 1.435     | 2711679.148        | ug/L        | 91619.527       |
| l  | 44 Ca        | 1005.777932 | 1.782     | 151384.609         | ug/L        | 3216.147        |
|    | 55 Mn        | 178.656276  | 2.761     | 1441454.789        | ug/L        | 2860.643        |
|    | 75 As        | 183.788282  | 1.809     | 198059.339         | ug/L        | 5747.158        |
| L> | 72 Ge-1      |             |           | 903751.385         | ug/Ł        | 790209.635      |

#### **Internal Standard Recoveries**

|            | Analyte | Mass | Int Std % Recovery |
|------------|---------|------|--------------------|
| Γ          | Al      | 27   |                    |
|            | Ca      | 44   |                    |
|            | Mn      | 55   |                    |
|            | As      | 75   |                    |
| <u>_</u> > | Ge-1    | 72   | 114.369            |

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Sample ID: MARD8C

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MARD8L

Sample Description: G0L020000-286 LCSD

Batch ID: 336286

Sample Date/Time: Tuesday, December 07, 2010 11:22:45

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\MARD8L.020

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 87 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 AI        | 819.309454  | 2.328     | 2508958.618        | ug/L        | 91619.527       |
|    | 44 Ca        | 1005.629929 | 1.870     | 137539.916         | ug/L        | 3216.147        |
| 1  | 55 Mn        | 182.871238  | 1.956     | 1340841.602        | ug/L        | 2860.643        |
|    | 75 As        | 187.705790  | 1.723     | 183676.615         | ug/L        | 5747.158        |
| L> | 72 Ge-1      |             |           | 821051.065         | ug/L        | 790209.635      |

#### **Internal Standard Recoveries**

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Al      | 27   |                    |
|   | Ca      | 44   |                    |
|   | Mn      | 55   |                    |
| ĺ | As      | 75   |                    |
| > | Ge-1    | 72   | 103.903            |

Report Date/Time: Tuesday, December 07, 2010 11:23:11

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Sample ID: MARD8L

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 1
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 11:25:24

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 1.021

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 4 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 Al        | 4704.520412 | 0.952     | 16030226.356       | ug/L        | 91619.527       |
|    | 44 Ca        | 4894.713792 | 1.889     | 754014.074         | ug/L        | 3216.147        |
|    | 55 Mn        | 97.820745   | 1.895     | 825341.729         | ug/L        | 2860.643        |
| 1  | 75 As        | 101.283227  | 2.860     | 116971.805         | ug/L        | 5747.158        |
| Ĺ> | 72 Ge-1      |             |           | 943099.344         | ug/L        | 790209.635      |

## **Internal Standard Recoveries**

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Al      | 27   |                    |
|   | Ca      | 44   |                    |
|   | Mn      | 55   |                    |
|   | As      | 75   |                    |
| > | Ge-1    | 72   | 119.348            |

Report Date/Time: Tuesday, December 07, 2010 11:25:50

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Sample ID: CCV 1

SOP No. SAC-MT-0001 Analyst: SHargrave

# Sample ID: CCB 1 Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 11:50:24

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 1.025

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 5 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## **Sample Result Summary**

|   | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|--------------|------------|-----------|--------------------|-------------|-----------------|
| F | 27 Al        | -29.747050 | 0.051     | 9698.052           | ug/L        | 91619.527       |
|   | 44 Ca        | -0.348102  | 144.847   | 4237.078           | ug/L        | 3216.147        |
|   | 55 Mn        | -0.278783  | 1.724     | 1199.113           | ug/L        | 2860.643        |
| 1 | 75 As        | 0.713673   | 50.514    | 8548.720           | ug/L        | 5747.158        |
| > | 72 Ge-1      |            |           | 1055614.610        | ug/L        | 790209.635      |

## Internal Standard Recoveries

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Al      | 27   |                    |
| 1 | Ca      | 44   |                    |
| 1 | Mn      | 55   |                    |
| 1 | As      | 75   |                    |
| > | Ge-1    | 72   | 133.587            |

Report Date/Time: Tuesday, December 07, 2010 11:50:50

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SOP No. SAC-MT-0001 Analyst: SHargrave

## Sample ID: BLK RECAL

Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 11:50:24

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 1.025

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 5 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## **Sample Result Summary**

|    | Mass Analyte | Conc. Mean Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|----------------------|--------------------|-------------|-----------------|
| Γ  | 27 AI        |                      | 9698.052           | ug/L        | ·               |
| -  | 44 Ca        |                      | 4237.078           | ug/L        |                 |
|    | 55 Mn        |                      | 1199.113           | ug/L        |                 |
|    | 75 As        |                      | 8548.720           | ug/L        |                 |
| _> | 72 Ge-1      |                      | 1055614.610        | ug/L        |                 |

## Internal Standard Recoveries

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Al      | 27   |                    |
|   | Ca      | 44   |                    |
|   | Mn      | 55   |                    |
|   | As      | 75   |                    |
| > | Ge-1    | 72   |                    |

SOP No. SAC-MT-0001 Analyst: SHargrave

## Sample ID: STD1 RECAL

Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 11:25:24

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 1.021

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 4 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas, Intens, Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| ſ  | 27 AI        | 5100.000000 | 0.946     | 16030226.356       | ug/L        | 9698.052        |
| ļ  | 44 Ca        | 5100.000000 | 1.889     | 754014.074         | ug/L        | 4237.078        |
|    | 55 Mn        | 100.000000  | 1.890     | 825341.729         | ug/L        | 1199.113        |
|    | 75 As        | 100.000000  | 2.880     | 116971.805         | ug/L        | 8548.720        |
| _> | 72 Ge-1      |             |           | 943099.344         | ug/L        | 1055614.610     |

## **Internal Standard Recoveries**

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Al      | 27   |                    |
|   | Ca      | 44   |                    |
| - | Mn      | 55   |                    |
|   | As      | 75   |                    |
| > | Ge-1    | 72   |                    |

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Sample ID: STD1 RECAL

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 2
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:03:37

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 2.026

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 4 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|            | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|------------|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ          | 27 Al        | 5073.274368 | 1.561     | 18282350.692       | ug/L        | 9698.052        |
| -          | 44 Ca        | 5042.541562 | 2.834     | 854598.565         | ug/L        | 4237.078        |
|            | 55 Mn        | 97.044717   | 2.854     | 918128.007         | ug/L        | 1199.113        |
| J          | 75 As        | 98.848480   | 2.433     | 132670.491         | ug/L        | 8548.720        |
| <b>L</b> > | 72 Ge-1      |             |           | 1081582.543        | ug/L        | 1055614.610     |

## Internal Standard Recoveries

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Al      | 27   |                    |
|   | Ca      | 44   |                    |
|   | Mn      | 55   |                    |
|   | As      | 75   |                    |
| > | Ge-1    | 72   | 102.460            |

Analyst: SHargrave
Sample ID: CCB 2
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:06:16

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 2.027

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 5 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## **Sample Result Summary**

|    | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 Al        | 4.491008   | 1.942     | 25689.767          | ug/L        | 9698.052        |
| {  | 44 Ca        | 3.731183   | 19.687    | 4891.549           | ug/L        | 4237.078        |
|    | 55 Mn        | 0.048524   | 10.375    | 1660,550           | ug/L        | 1199.113        |
|    | 75 As        | -0.051471  | 507.244   | 8549.255           | ug/L        | 8548.720        |
| L> | 72 Ge-1      |            |           | 1063915.140        | ug/L        | 1055614.610     |

## Internal Standard Recoveries

|         | Analyte | Mass | Int Std % Recovery |
|---------|---------|------|--------------------|
| Γ       | Al      | 27   | ·                  |
| ]       | Ca      | 44   |                    |
| 1       | Mn      | 55   |                    |
|         | As      | 75   |                    |
| <u></u> | Ge-1    | 72   | 100.786            |

Report Date/Time: Tuesday, December 07, 2010 12:21:57

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Sample ID: CCB 2

SOP No. SAC-MT-0001 Analyst: SHargrave Sample ID: LLSTD1

Sample Description: LLSTD@10X

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:08:56

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\LLSTD1.028

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 71 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## **Sample Result Summary**

|     | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|-----|--------------|------------|-----------|--------------------|-------------|-----------------|
| ſ   | 27 AI        | 50.195283  | 1.026     | 193274.699         | ug/L        | 9698.052        |
|     | 44 Ca        | 52.996870  | 1.288     | 13456.548          | ug/L        | 4237.078        |
|     | 55 Mn        | 1.054725   | 1.337     | 11346.776          | ug/L        | 1199.113        |
| }   | 75 As        | 0.488712   | 44.280    | 9493.869           | ug/L        | 8548.720        |
| را_ | 72 Ge-1      |            |           | 1095550.560        | ug/L        | 1055614.610     |

## Internal Standard Recoveries

|            | Analyte | Mass | Int Std % Recovery |
|------------|---------|------|--------------------|
| Γ          | Al      | 27   |                    |
|            | Ca      | 44   |                    |
| 1          | Mn      | 55   |                    |
| 1          | As      | 75   |                    |
| <b>i</b> > | Ge-1    | 72   | 103.783            |

Report Date/Time: Tuesday, December 07, 2010 12:21:59

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Sample ID: LLSTD1

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 3
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:46:51

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 3.038

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 4 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 Al        | 4973.962003 | 0.360     | 16599974.270       | ug/L        | 9698.052        |
|    | 44 Ca        | 5032.375064 | 0.442     | 790139.601         | ug/L        | 4237.078        |
| )  | 55 Mn        | 98.698521   | 0.025     | 865037.932         | ug/L        | 1199.113        |
|    | 75 As        | 101.410857  | 0.718     | 125857.110         | ug/L        | 8548.720        |
| L> | 72 Ge-1      |             |           | 1001215.977        | ug/L        | 1055614.610     |

## Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
| 1  | Mn      | 55   |                    |
| 1  | As      | 75   |                    |
| [> | Ge-1    | 72   | 94.847             |

Report Date/Time: Tuesday, December 07, 2010 12:47:17

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Sample ID: CCV 3

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 3
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:49:31

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 3.039

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 5 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean ( | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|--------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 Al        | 5.332247     | 1.164     | 28157.830          | ug/L        | 9698.052        |
|    | 44 Ca        | 4.915177     | 17.786    | 4994.293           | ug/L        | 4237.078        |
|    | 55 Mn        | 0.044176     | 6.731     | 1590.199           | ug/L        | 1199.113        |
|    | 75 As        | 0.080988     | 605.092   | 8556.678           | ug/L        | 8548.720        |
| 1> | 72 Ge-1      |              |           | 1044768.752        | ug/L        | 1055614.610     |

#### Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
|    | As      | 75   |                    |
| حا | Ge-1    | 72   | 98.973             |

Report Date/Time: Tuesday, December 07, 2010 12:49:58

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Sample ID: CCB 3

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 4
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:55:08

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 4.041

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 4 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 Al        | 5079.885051 | 0.820     | 17282350.653       | ug/L        | 9698.052        |
| +  | 44 Ca        | 5068.248774 | 0.360     | 811193.077         | ug/L        | 4237.078        |
| 1  | 55 Mn        | 99.129489   | 0.557     | 885693.990         | ug/L        | 1199.113        |
|    | 75 As        | 101,122438  | 0.560     | 127965.915         | ug/L        | 8548.720        |
| L> | 72 Ge-1      |             |           | 1020660.828        | ug/L        | 1055614.610     |

#### Internal Standard Recoveries

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Al      | 27   |                    |
|   | Ca      | 44   |                    |
|   | Mn      | 55   |                    |
|   | As      | 75   |                    |
| 5 | Ge-1    | 72   | 96.689             |

Report Date/Time: Tuesday, December 07, 2010 12:55:33

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Sample ID: CCV 4

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 4
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:57:47

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 4.042

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 5 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 Al        | 5.359257   | 4.783     | 29449.997          | ug/L        | 9698.052        |
|    | 44 Ca        | 3.894593   | 15.595    | 5033.990           | ug/L        | 4237.078        |
| 1  | 55 Mn        | 0.047765   | 24.296    | 1690.558           | ug/L        | 1199.113        |
| į  | 75 As        | -0.296235  | 173.161   | 8439.853           | ug/L        | 8548.720        |
| L> | 72 Ge-1      |            |           | 1089732.021        | ug/L        | 1055614.610     |

#### Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
| 1  | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
| 1  | As      | 75   |                    |
| L> | Ge-1    | 72   | 103.232            |

Report Date/Time: Tuesday, December 07, 2010 12:58:14

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Sample ID: CCB 4

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 5
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 13:26:17

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 5.053

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 4 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas, Intens, Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 AI        | 5026.028379 | 0.533     | 16256534.086       | ug/L        | 9698.052        |
|    | 44 Ca        | 5028.073322 | 0.481     | 765124.403         | ug/L        | 4237.078        |
| 1  | 55 Mn        | 98.019486   | 0.224     | 832600.681         | ug/L        | 1199.113        |
| 1  | 75 As        | 99.424763   | 1.224     | 119746.827         | ug/L        | 8548.720        |
| Ĺ> | 72 Ge-1      |             |           | 970352.462         | ug/L        | 1055614.610     |

#### Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
| 1  | Ca      | 44   |                    |
| 1  | Mn      | 55   |                    |
|    | As      | 75   |                    |
| [> | Ge-1    | 72   | 91.923             |

Report Date/Time: Tuesday, December 07, 2010 13:26:43

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Sample ID: CCV 5

SOP No. SAC-MT-0001 Analyst: SHargrave

# Sample ID: CCB 5 Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 13:28:56

Method File: E:\elandata\Method\0006020-SH.mth Dataset File: e:\elandata\dataset\101207a2\CCB 5.054

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 5 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 AI        | 5.007182   | 3.738     | 25941.101          | ug/L        | 9698.052        |
|    | 44 Ca        | 6.003347   | 9.073     | 4964.936           | ug/L        | 4237.078        |
|    | 55 Mn        | 0.057063   | 11.714    | 1640.212           | ug/L        | 1199.113        |
| Į  | 75 As        | -0.270393  | 85.379    | 7805.398           | ug/L        | 8548.720        |
| L> | 72 Ge-1      |            |           | 1003171.648        | ug/L        | 1055614.610     |

#### Internal Standard Recoveries

|            | Analyte | Mass | Int Std % Recovery |
|------------|---------|------|--------------------|
| Γ          | Al      | 27   |                    |
| 1          | Ca      | 44   |                    |
|            | Mn      | 55   |                    |
|            | As      | 75   |                    |
| <u> </u> > | Ge-1    | 72   | 95.032             |

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Sample ID: CCB 5

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MA0J7B

Sample Description: G0L070000-211 BLK

Batch ID: 341211

Sample Date/Time: Tuesday, December 07, 2010 13:39:35

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\MA0J7B.055

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 97 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## **Sample Result Summary**

|   | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|--------------|------------|-----------|--------------------|-------------|-----------------|
| Γ | 27 AI        | -1.674885  | 2.255     | 3493,959           | ug/L        | 9698.052        |
| 1 | 44 Ca        | 110.990191 | 4.927     | 20657.479          | ug/L        | 4237.078        |
|   | 55 Mn        | 0.083276   | 9.675     | 1805.256           | ug/L        | 1199.113        |
|   | 75 As        | 0.687294   | 74.291    | 8610.453           | ug/L        | 8548.720        |
| > | 72 Ge-1      |            |           | 969194.669         | ug/L        | 1055614.610     |

## Internal Standard Recoveries

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Ai      | 27   |                    |
|   | Ca      | 44   |                    |
|   | Mn      | 55   |                    |
|   | As      | 75   |                    |
| > | Ge-1    | 72   | 91.813             |

Report Date/Time: Tuesday, December 07, 2010 13:40:02

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Sample ID: MA0J7B

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MA0J7C

Sample Description: G0L070000-211 LCS

Batch ID: 341211

Sample Date/Time: Tuesday, December 07, 2010 13:42:11

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\MA0J7C.056

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 92 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 Al        | 926.407101  | 0.821     | 2683748.672        | ug/L.       | 9698.052        |
|    | 44 Ca        | 1077.161811 | 0.516     | 149178.317         | ug/L        | 4237.078        |
| 1  | 55 Mn        | 188.209408  | 0.600     | 1427443.132        | ug/L        | 1199.113        |
|    | 75 As        | 189.419141  | 0.583     | 197480.009         | ug/L        | 8548.720        |
| حا | 72 Ge-1      |             |           | 866981.565         | ug/L        | 1055614.610     |

#### **Internal Standard Recoveries**

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| ſ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
|    | As      | 75   |                    |
| _> | Ge-1    | 72   | 82.131             |

Report Date/Time: Tuesday, December 07, 2010 13:42:38

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Sample ID: MA0J7C

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MA0J7L

Sample Description: G0L070000-211 LCSD

Batch ID: 341211

Sample Date/Time: Tuesday, December 07, 2010 13:44:47

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\MA0J7L..057

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 93 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| F  | 27 AI        | 898.171425  | 0.698     | 2553363.871        | ug/L        | 9698.052        |
|    | 44 Ca        | 1044.999717 | 1.223     | 142109.429         | ug/L        | 4237.078        |
|    | 55 Mn        | 182.846582  | 1.591     | 1360658.917        | ug/L        | 1199.113        |
|    | 75 As        | 183.219349  | 2.366     | 187616.841         | ug/L        | 8548.720        |
| L> | 72 Ge-1      |             |           | 850778.441         | ug/L        | 1055614.610     |

## Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
|    | As      | 75   |                    |
| _> | Ge-1    | 72   | 80.596             |

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Sample ID: MA0J7L

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MAQQ1

Sample Description: G0L020446-3

Batch ID: 341211

Sample Date/Time: Tuesday, December 07, 2010 13:47:22

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\MAQQ1.058

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 21 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|          | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----------|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ        | 27 AI        | 431.865128  | 4.633     | 1206548.619        | ug/L        | 9698.052        |
|          | 44 Ca        | 3079.629883 | 3.856     | 403760.491         | ug/L        | 4237.078        |
| )        | 55 Mn        | 2366.193740 | 4.090     | 17239376.488       | ug/L        | 1199.113        |
| 1        | 75 As        | 1.659924    | 35.271    | 8349.686           | ug/L        | 8548.720        |
| <u> </u> | 72 Ge-1      |             |           | 834032.616         | ug/L        | 1055614.610     |

#### Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
| 1  | As      | 75   |                    |
| 1> | Ge-1    | 72   | 79.009             |

Report Date/Time: Tuesday, December 07, 2010 13:47:49

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Sample ID: MAQQ1

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MAQQ1P5

Sample Description: G0L020446-3 5X

Batch ID: 341211

Sample Date/Time: Tuesday, December 07, 2010 13:49:58

Method File: E:\elandata\Method\0006020-SH.mth

Dataset File: e:\elandata\dataset\101207a2\MAQQ1P5.059

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 22 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|   | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|--------------|------------|-----------|--------------------|-------------|-----------------|
| Γ | 27 AI        | 99.580922  | 3.382     | 309637.385         | ug/L        | 9698.052        |
|   | 44 Ca        | 667.884495 | 2.605     | 98290.667          | ug/L        | 4237.078        |
|   | 55 Mn        | 495.266384 | 1.950     | 3933833.577        | ug/L        | 1199.113        |
|   | 75 As        | 0.279839   | 12.389    | 7651.759           | ug/L        | 8548.720        |
| > | 72 Ge-1      |            |           | 908486.992         | ug/L        | 1055614.610     |

## Internal Standard Recoveries

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
| 1  | Mn      | 55   |                    |
|    | As      | 75   |                    |
| _> | Ge-1    | 72   | 86.062             |

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Sample ID: MAQQ1P5

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MAQQ1Z

Sample Description: G0L020446-3 PS

Batch ID: 341211

Sample Date/Time: Tuesday, December 07, 2010 13:52:33

Method File: E:\elandata\Method\0006020-SH.mth

Dataset File: e:\elandata\dataset\101207a2\MAQQ1Z.060

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 23 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## **Sample Result Summary**

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| ſ  | 27 Al        | 1332.603957 | 0.629     | 3725075.760        | ug/L        | 9698.052        |
| 1  | 44 Ca        | 3896.572711 | 0.915     | 512442.241         | ug/L        | 4237.078        |
| 1  | 55 Mn        | 2446.656842 | 0.203     | 17911155.102       | ug/L        | 1199.113        |
| 1  | 75 As        | 193.244141  | 1.123     | 194433.605         | ug/L        | 8548.720        |
| L> | 72 Ge-1      |             |           | 837354.485         | ug/L        | 1055614.610     |

## **Internal Standard Recoveries**

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
| 1  | Mn      | 55   |                    |
|    | As      | 75   |                    |
| حا | Ge-1    | 72   | 79.324             |

Report Date/Time: Tuesday, December 07, 2010 13:53:00

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Sample ID: MAQQ1Z

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MAQQ4

Sample Description: G0L020446-4

Batch ID: 341211

Sample Date/Time: Tuesday, December 07, 2010 13:55:09

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\MAQQ4.061

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 24 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|            | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|------------|--------------|-------------|-----------|--------------------|-------------|-----------------|
| F          | 27 AI        | 315.807342  | 1.809     | 867419.502         | ug/L        | 9698.052        |
|            | 44 Ca        | 2424.184050 | 1.658     | 312413.433         | ug/L        | 4237.078        |
| )          | 55 Mn        | 53.669916   | 2.189     | 384405.713         | ug/L        | 1199.113        |
|            | 75 As        | 0.976692    | 22.182    | 7544.391           | ug/L        | 8548.720        |
| <u> </u> > | 72 Ge-1      |             |           | 817445.987         | ug/L        | 1055614.610     |

#### Internal Standard Recoveries

|          | Analyte | Mass | Int Std % Recovery |
|----------|---------|------|--------------------|
| Γ        | Al      | 27   |                    |
| 1        | Ca      | 44   |                    |
| 1        | Mn      | 55   |                    |
|          | As      | 75   |                    |
| <u> </u> | Ge-1    | 72   | 77.438             |

Report Date/Time: Tuesday, December 07, 2010 13:55:35

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Sample ID: MAQQ4

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MAQRA

Sample Description: G0L020446-7

Batch ID: 341211

Sample Date/Time: Tuesday, December 07, 2010 13:57:44

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\MAQRA.062

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 25 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|    | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ  | 27 Al        | 289.345973  | 2.178     | 827626.466         | ug/L        | 9698.052        |
| 1  | 44 Ca        | 2266.541213 | 1.181     | 304184.501         | ug/L        | 4237.078        |
| 1  | 55 Mn        | 637.932498  | 1.780     | 4743992.846        | ug/L        | 1199.113        |
|    | 75 As        | 1.018331    | 10.808    | 7893.062           | ug/L        | 8548.720        |
| .> | 72 Ge-1      |             |           | 850632.375         | ug/L        | 1055614.610     |

## **Internal Standard Recoveries**

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
|    | As      | 75   |                    |
| [> | Ge-1    | 72   | 80.582             |

Report Date/Time: Tuesday, December 07, 2010 13:58:11

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Sample ID: MAQRA

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MAQRH

Sample Description: G0L020446-10

Batch ID: 341211

Sample Date/Time: Tuesday, December 07, 2010 14:00:19

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\MAQRH.063

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 26 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|            | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|------------|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ          | 27 AI        | 277.212526  | 3.651     | 844100.611         | ug/L        | 9698.052        |
|            | 44 Ca        | 2907.604665 | 3.548     | 414183.930         | ug/L        | 4237.078        |
| 1          | 55 Mn        | 104.181445  | 4.047     | 825218.805         | ug/L        | 1199.113        |
| 1          | 75 As        | 0.943288    | 35.316    | 8318.125           | ug/L        | 8548.720        |
| <b>!</b> > | 72 Ge-1      |             |           | 905564.390         | ug/L        | 1055614.610     |

#### **Internal Standard Recoveries**

|   | Analyte | Mass | Int Std % Recovery |
|---|---------|------|--------------------|
| Γ | Al      | 27   |                    |
|   | Ca      | 44   |                    |
| 1 | Mn      | 55   |                    |
| 1 | As      | 75   |                    |
| > | Ge-1    | 72   | 85.786             |

Report Date/Time: Tuesday, December 07, 2010 14:00:44

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Sample ID: MAQRH

SOP No. SAC-MT-0001 Analyst: SHargrave

## Sample ID: CCV 6

Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 14:02:57

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 6.064

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 4 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

|   | Mass Analyte | Conc. Mean  | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|--------------|-------------|-----------|--------------------|-------------|-----------------|
| Γ | 27 AI        | 5007.314494 | 1.361     | 16448305.771       | ug/L        | 9698.052        |
|   | 44 Ca        | 5059.087468 | 1.600     | 781781.047         | ug/L        | 4237.078        |
|   | 55 Mn        | 98.706963   | 1.953     | 851439.090         | ug/L        | 1199.113        |
| Ì | 75 As        | 100.323121  | 1.732     | 122639.342         | ug/L        | 8548.720        |
| > | 72 Ge-1      |             |           | 985652.394         | ug/L        | 1055614.610     |

#### **Internal Standard Recoveries**

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
| 1  | As      | 75   |                    |
| _> | Ge-1    | 72   | 93.372             |

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 6
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 14:05:37

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 6.065

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 5 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

# Sample Result Summary

|    | Mass Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|----|--------------|------------|-----------|--------------------|-------------|-----------------|
| F  | 27 AI        | 4.996164   | 4.862     | 26476,632          | ug/L        | 9698.052        |
| Ì  | 44 Ca        | 4.589086   | 23.484    | 4847.512           | ug/L        | 4237.078        |
| 1  | 55 Mn        | 0.046032   | 16.648    | 1576.529           | ug/L        | 1199.113        |
| }  | 75 As        | -0.292716  | 80.800    | 7954.606           | ug/L        | 8548.720        |
| [> | 72 Ge-1      |            |           | 1025671,799        | ug/L        | 1055614.610     |

## **Internal Standard Recoveries**

|    | Analyte | Mass | Int Std % Recovery |
|----|---------|------|--------------------|
| Γ  | Al      | 27   |                    |
|    | Ca      | 44   |                    |
|    | Mn      | 55   |                    |
|    | As      | 75   |                    |
| L> | Ge-1    | 72   | 97.163             |

Report Date/Time: Tuesday, December 07, 2010 14:06:04

Page 1

Sample ID: CCB 6

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 12/07/10 14:26:16

File ID: 101207A2 Analyst: hargraves # Sample ID Lot No. Batch DF Analyzed Date Comment Q 1 Rinse 2X 12/07/10 09:12 П 2.0 Blank 12/07/10 09:15 2 1.0 3 Standard1 1.0 12/07/10 09:18 **ICV** 12/07/10 09:20 4 1.0 5 ICV 1.0 12/07/10 09:25 П ICB 12/07/10 10:24 6 1.0 LLSTD1 12/07/10 10:26 7 1.0 LLSTD2 12/07/10 10:29 8 1.0 **ICSA** 9 1.0 12/07/10 10:32 **ICSAB** 12/07/10 10:34 10 1.0 Rinse 12/07/10 11:11 11 1.0 MARD8B G0L020000 0336286 12/07/10 11:17 12 2A 1.0 13 MARD8C G0L020000 0336286 2A 1.0 12/07/10 11:20 MARD8L G0L020000 0336286 2A 12/07/10 11:22 14 1.0 15 CCV 1 1.0 12/07/10 11:25 16 CCB 1 12/07/10 11:50 1.0 CCV 2 12/07/10 12:03 19 1.0 20 CCB<sub>2</sub> 1.0 12/07/10 12:06 21 LLSTD1 12/07/10 12:08 1.0 22 MAPEVB G0L010000 0335251 2A 1.0 12/07/10 12:23 MAPEVC G0L010000 0335251 2A 12/07/10 12:26 23 1.0 G0L010000 MAPE7L 0335253 12/07/10 12:28 24 2A 1.0 **MAA80** 12/07/10 12:31 25 G0K190601-3 0335251 2A 1.0 26 MAA80P5 G0K190601 0335251 5.0 12/07/10 12:34  $\Box$ 27 MAA80Z 0335251 12/07/10 12:36 G0K190601-3 1.0 12/07/10 12:39 28 MAA81 G0K190601-4 0335251 2A 1.0 MAKDV G0K240587-1 0335251 2A 12/07/10 12:41 29 1.0 MAKD2 0335251 2A 12/07/10 12:44 30 G0K240587-2 1.0 CCV 3 12/07/10 12:46 31 1.0 32 CCB 3 1.0 12/07/10 12:49 12/07/10 12:55 33 CCV 4 1.0 CCB 4 12/07/10 12:57 34 1.0 35 MARD8B G0L020000 0336286 2A 1.0 12/07/10 13:00 MARD8C G0L020000 0336286 2A 1.0 12/07/10 13:02 П MARD8L 37 G0L020000 0336286 2A 12/07/10 13:05 1.0 G0L060000 MAWLKB 0340010 2A 12/07/10 13:08 38 1.0 MAWLKC G0L060000 0340010 12/07/10 13:10 39 2A 1.0 MAWLKL 12/07/10 13:13 40 G0L060000 0340010 2A 1.0 41 MAML1 G0K300434-2 0340010 2A 1.0 12/07/10 13:15 42 MAML1P5 G0K300434 0340010 5.0 12/07/10 13:18 MAML1Z G0K300434-2 0340010 12/07/10 13:21 43 1.0 44 MAML6 G0K300434-3 0340010 2A 1.0 12/07/10 13:23 CCV 5 1.0 12/07/10 13:26 45 CCB 5 12/07/10 13:28 46 1.0 47 MA0J7B G0L070000 0341211 2A 1.0 12/07/10 13:39 12/07/10 13:42 MA0J7C G0L070000 0341211 2A 

# TAL West Sac

## **RUN SUMMARY**

| ·                              | 3               |                             |
|--------------------------------|-----------------|-----------------------------|
| Method: 6020 (SOP: SAC-MT-001) | Instrument: M02 | Reported: 12/07/10 14:26:16 |
|                                | <br>            |                             |

| ile I | D: 10120  | 7A2          |         |    |     | Analyst: I     | nargraves |             |
|-------|-----------|--------------|---------|----|-----|----------------|-----------|-------------|
| #     | Sample ID | Lot No.      | Batch   |    | DF  | Analyzed Date  | Comment   | Q           |
| 49    | MA0J7L    | G0L070000    | 0341211 | 2A | 1.0 | 12/07/10 13:44 |           |             |
| 50    | MAQQ1     | G0L020446-3  | 0341211 | 2A | 1.0 | 12/07/10 13:47 |           | $\neg \neg$ |
| 51    | MAQQ1P5   | G0L020446    | 0341211 |    | 5.0 | 12/07/10 13:49 |           |             |
| 52    | MAQQ1Z    | G0L020446-3  | 0341211 |    | 1.0 | 12/07/10 13:52 |           |             |
| 53    | MAQQ4     | G0L020446-4  | 0341211 | 2A | 1.0 | 12/07/10 13:55 | -         |             |
| 54    | MAQRA     | G0L020446-7  | 0341211 | 2A | 1.0 | 12/07/10 13:57 |           |             |
| 55    | MAQRH     | G0L020446-10 | 0341211 | 2A | 1.0 | 12/07/10 14:00 |           |             |
| 56    | CCV 6     |              |         |    | 1.0 | 12/07/10 14:02 |           |             |
| 57    | CCB 6     |              |         |    | 1.0 | 12/07/10 14:05 |           |             |

# INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 12/07/10 14:26:16

## File ID: 101207A2

## Analyst: hargraves

#### Germanium

|    |             |                | Germanium |           |
|----|-------------|----------------|-----------|-----------|
| #  | Sample ID   | Analyzed Date  |           | Q         |
| 1  | Rinse 2X    | 12/07/10 09:12 | 95.6      |           |
| 2  | Blank       | 12/07/10 09:15 | 100.0     |           |
| 3  | Standard1   | 12/07/10 09:18 | 99.6      | Ø         |
| 4  | ICV         | 12/07/10 09:20 | 99.1      | Ø         |
| 5  | ICV         | 12/07/10 09:25 | 99.9      | Ø         |
| 6  | ICB         | 12/07/10 10:24 | 103.4     | Ø         |
| 7  | LLSTD1      | 12/07/10 10:26 | 105.9     | M         |
| 8  | LLSTD2      | 12/07/10 10:29 | 106.7     |           |
| 9  | ICSA        | 12/07/10 10:32 | 91.2      |           |
| 10 | ICSAB       | 12/07/10 10:34 | 97.1      |           |
| 11 | Rinse       | 12/07/10 11:11 | 126.2     | Ø         |
| 12 | MARD8B      | 12/07/10 11:17 | 122.5     | ⊻         |
| 13 | MARD8C      | 12/07/10 11:20 | 114.4     |           |
| 14 | MARD8L      | 12/07/10 11:22 | 103.9     |           |
| 15 | CCV 1       | 12/07/10 11:25 | 119.3     |           |
| 16 | CCB 1       | 12/07/10 11:50 | 133.6     |           |
| 19 | CCV 2       | 12/07/10 12:03 | 102.5     | $\square$ |
| 20 | CCB 2       | 12/07/10 12:06 | 100.8     | $\square$ |
| 21 | LLSTD1      | 12/07/10 12:08 | 103.8     |           |
| 22 | MAPEVB      | 12/07/10 12:23 | 94.3      |           |
| 23 | MAPEVC      | 12/07/10 12:26 | 87.2      |           |
| 24 | MAPE7L      | 12/07/10 12:28 | 81.7      |           |
| 25 | MAA80       | 12/07/10 12:31 | 79.5      |           |
| 26 | MAA80P5     | 12/07/10 12:34 | L         |           |
| 27 | MAA80Z      | 12/07/10 12:36 | 82.6      |           |
| 28 | MAA81       | 12/07/10 12:39 | 80.7      |           |
| 29 | MAKDV       | 12/07/10 12:41 | 85.3      |           |
| 30 | MAKD2       | 12/07/10 12:44 | 86.8      |           |
| 31 | CCV 3       | 12/07/10 12:46 | 94.8      |           |
| 32 | CCB 3       | 12/07/10 12:49 | 99.0      |           |
| 33 | CCV 4       | 12/07/10 12:55 | 96.7      |           |
| 34 | CCB 4       | 12/07/10 12:57 | 103.2     |           |
| 35 | MARD8B      | 12/07/10 13:00 | 97.4      |           |
| 36 |             | 12/07/10 13:02 | 86.2      |           |
| 37 |             | 12/07/10 13:05 | 81.1      |           |
| 38 | MAWLKB      | 12/07/10 13:08 | 79.0      |           |
| 39 | MAWLKC      | 12/07/10 13:10 | 80.8      |           |
| 40 | MAWLKL      | 12/07/10 13:13 | 79.6      |           |
| 41 |             | 12/07/10 13:15 | 80.0      |           |
| 42 |             | 12/07/10 13:18 | 90.0      |           |
| 43 | MAML1Z      | 12/07/10 13:21 | 77.6      |           |
| 44 | <del></del> | 12/07/10 13:23 | 78.6      |           |
| 45 |             | 12/07/10 13:26 | 91.9      |           |
| 46 |             | 12/07/10 13:28 | 95.0      |           |
| 47 |             | 12/07/10 13:39 | 91.8      |           |
| 48 | MA0J7C      | 12/07/10 13:42 | 82.1      | M         |

### INTERNAL STANDARD SUMMARY

| / 11   | . **********  |                | 114117171717 | TYTHIND COMMENT             |
|--------|---------------|----------------|--------------|-----------------------------|
| Met    | nod: 6020 (SC | P: SAC-MT-001) | M02 (M02)    | Reported: 12/07/10 14:26:16 |
| ile II | D: 101207     | 7A2            | An           | alyst: hargraves            |
|        |               |                | German       | nium                        |
| #      | Sample ID     | Analyzed Date  |              | C                           |
| 49     | MA0J7L        | 12/07/10 13:44 |              | 80.6                        |
| 50     | MAQQ1         | 12/07/10 13:47 |              | 79.0                        |
| 51     | MAQQ1P5       | 12/07/10 13:49 |              | 86.1                        |
| 52     | MAQQ1Z        | 12/07/10 13:52 |              | 79.3                        |
| 53     | MAQQ4         | 12/07/10 13:55 |              | 77.4                        |
| 54     | MAQRA         | 12/07/10 13:57 |              | 80.6                        |
| 55     | MAQRH         | 12/07/10 14:00 |              | 85.8                        |
| 56     | CCV 6         | 12/07/10 14:02 |              | 93.4                        |
| 57     | CCB 6         | 12/07/10 14:05 |              | 97.2                        |

### CALIBRATION CHECK SUMMARY

| Method: 6020 (SOP | : SAC-MT-001)   | M02 | Rep           | orted: 12/07/10 14:26: | :55 |
|-------------------|-----------------|-----|---------------|------------------------|-----|
| Method: 6020      | Instrument: M02 | Bat | ch: 101207A2  |                        |     |
| Sample ID         | Туре            | Fil | le - Sequence | Analyzed Date          | Q   |
| ICV               | ICV             |     | 101207A2, 4   | 12/07/2010 09:20:59    |     |
| ICV               | ICV             |     | 101207A2, 5   | 12/07/2010 09:25:16    |     |
| ICB               | ICB             |     | 101207A2, 6   | 12/07/2010 10:24:20    |     |
| ICSA              | ICSA            |     | 101207A2, 9   | 12/07/2010 10:32:16    |     |
| ICSAB             | ICSAB           |     | 101207A2, 10  | 12/07/2010 10:34:53    |     |
| CCV 1             | CCV             |     | 101207A2, 15  | 12/07/2010 11:25:24    |     |
| CCB 1             | CCB             |     | 101207A2, 16  | 12/07/2010 11:50:24    |     |
| CCV 2             | CCV             |     | 101207A2, 19  | 12/07/2010 12:03:37    |     |
| CCB 2             | ССВ             |     | 101207A2, 20  | 12/07/2010 12:06:16    |     |
| CCV 3             | ccv             |     | 101207A2, 31  | 12/07/2010 12:46:51    |     |
| CCB 3             | ССВ             |     | 101207A2, 32  | 12/07/2010 12:49:31    |     |
| CCV 4             | ccv             |     | 101207A2, 33  | 12/07/2010 12:55:08    |     |
| CCB 4             | ССВ             |     | 101207A2, 34  | 12/07/2010 12:57:47    |     |
| CCV 5             | ccv             |     | 101207A2, 45  | 12/07/2010 13:26:17    |     |
| CCB 5             | CCB .           |     | 101207A2, 46  | 12/07/2010 13:28:56    |     |
| CCV 6             | ccv             |     | 101207A2, 56  | 12/07/2010 14:02:57    |     |
| CCB 6             | CCB             |     | 101207A2, 57  | 12/07/2010 14:05:37    |     |

### **CALIBRATION REPORT**

| TAL West Sac                    |          |         |          |       | LIDICA  | 11014      |          | <u> </u> |
|---------------------------------|----------|---------|----------|-------|---------|------------|----------|----------|
| Method: 6020 (SOP: SAC-MT-001)  | <b>)</b> | 1       | M02      |       | Reporte | ed: 12/07/ | 10 14:2  | 6:55     |
| Department: 120 (Metals)        |          |         |          |       |         | So         | ource: M | etEdit   |
| Sample: ICV (ICV)               |          | Mu      | it: 1.00 | Dilf: | 1.00    | Divs:      | 1.0      | 00_      |
| Instrument: ICPMS M02           | Chann    | nel 262 |          |       |         |            |          |          |
| File: 101207A2 #4               |          | Method  | 16020_   |       |         |            |          |          |
| Acquired: 12/07/2010 09:20:59   |          | M       | 02       |       |         |            |          |          |
| Calibrated: 12/07/2010 09:15:34 |          |         |          |       | 1       | Units: ug/ | Ľ        |          |
| CASN Analyte Name               | M/S      | Area    | Found    |       | Т       | rue        | %R       | Q        |
| 7429-90-5 Aluminum              | 27       | 2727202 | 938.26   |       | 800     | .00        | 117      |          |
| 7439-96-5 Manganese             | 55       | 564887  | 80.568   |       | 80.0    | 000        | 101      |          |
| 7440-38-2 Arsenic               | 75       | 79894   | 82.186   |       | 80.6    | 000        | 103      |          |
| CASN ISTD Name                  | M/S      | Area    | Amount   |       |         |            |          | Q        |
| 7440-56-4 Germanium             | 72       | 783241  |          |       |         |            |          | Ø        |

Reviewed by: Date:

### **CALIBRATION REPORT**

| Method: 6020 (SOP: SAC-MT-001)  | `        | M02     |          |       | Reported: 12/07/10 14:26:55 |            |          |       |  |
|---------------------------------|----------|---------|----------|-------|-----------------------------|------------|----------|-------|--|
| Department: 120 (Metals)        | <u> </u> |         |          |       | ··                          |            | ource: M | etEdi |  |
| Sample: ICV (ICV)               |          | Mu      | it: 1.00 | Diff: | 1.00                        | Divs:      | 1.0      | 00    |  |
| Instrument: ICPMS M02           |          |         | el 262   |       |                             |            |          |       |  |
| File: 101207A2 # 5              |          |         | 6020_    |       |                             |            |          |       |  |
| Acquired: 12/07/2010 09:25:16   |          | M       | 02       |       |                             |            |          |       |  |
| Calibrated: 12/07/2010 09:15:34 |          |         |          |       |                             | Units: ug/ | L        |       |  |
| CASN Analyte Name               | M/S      | Area    | Found    |       | T                           | rue        | %R       | Q     |  |
| 7429-90-5 Aluminum              | 27       | 2197458 | 743.59   |       | 800                         | .00        | 92.9     |       |  |
| 7439-96-5 Manganese             | 55       | 548744  | 77.636   |       | 80.0                        | 000        | 97.0     |       |  |
| 7440-38-2 Arsenic               | 75       | 79998   | 81.597   |       | 80.0                        | 000        | 102      |       |  |
| CASN ISTD Name                  | M/S      | Area    | Amount   |       |                             |            |          | Q     |  |
| 7440-56-4 Germanium             | 72       | 789143  |          |       | ~ ~~                        |            |          | V     |  |

Reviewed by: Date: TestAmerica, Inc.

**BLANK REPORT** 

| Method: 6020 (SOP: SAC-MT-001)  |     | M02    |             |       |     | Reported: 12/07/10 14:26:55 |        |          |  |  |  |
|---------------------------------|-----|--------|-------------|-------|-----|-----------------------------|--------|----------|--|--|--|
| Department: 120 (Metals)        |     |        | <del></del> |       |     |                             | Source | e: MetEd |  |  |  |
| Sample: ICB                     |     | Mu     | lt: 1.00    | Dilf: | 1.0 | 0 [                         | ivs:   | 1.000    |  |  |  |
| Instrument: ICPMS M02           |     | Chann  | el 262      |       |     |                             |        |          |  |  |  |
| File: 101207A2 #6               |     | Method | 6020_       |       |     |                             |        |          |  |  |  |
| Acquired: 12/07/2010 10:24:20   |     | MC     | )2          |       |     |                             |        |          |  |  |  |
| Calibrated: 12/07/2010 09:15:34 |     |        |             |       |     | Units                       | : ug/L |          |  |  |  |
| CASN Analyte Name               | M/S | Area   | Amount      |       | RL  | MDL                         | %RSD   | ) G      |  |  |  |

| CASN_     | Analyte Name | M/S | Area   | Amount   | RL   | MDL   | %RSD | Q |
|-----------|--------------|-----|--------|----------|------|-------|------|---|
| 7429-90-5 | Aluminum     | 27  | 82057  | -4.3179  | 50.0 | 2.1   | 0.0  |   |
| 7439-96-5 | Manganese    | 55  | 2876   | -0.01112 | 1.0  | 0.083 | 0.0  |   |
| 7440-38-2 | Arsenic      | 75  | 6335   | 0.41056  | 2.0  | 0.50  | 0.0  |   |
| CASN      | ISTD Name    | M/S | Area   | Amount   |      |       |      | Q |
| 7440-56-4 | Germanium    | 72  | 817166 |          |      |       |      | Ø |

Reviewed by: Date:

CASN ISTD Name

7440-56-4 Germanium

IDB Reports

### **CALIBRATION REPORT**

Q Ø

Version: 6.02,068

| Method: 6020 (SOP: SAC-MT-001   | )   | M02      |        |      | Reported: 12/07/10 14:26:55 |            |          |   |  |
|---------------------------------|-----|----------|--------|------|-----------------------------|------------|----------|---|--|
| Department: 120 (Metals)        |     |          |        |      | So                          | ource: Mo  | etEdi    |   |  |
| Sample: ICSA                    | Mul | t: 1.00  | Dilf:  | 1.00 | Divs:                       | 1.00       | 00       |   |  |
| Instrument: ICPMS M02           |     | Chann    | el 262 |      |                             |            |          |   |  |
| File: 101207A2 #9               |     | Method   | 6020_  |      |                             |            |          |   |  |
| Acquired: 12/07/2010 10:32:16   |     | MC       | 2      |      |                             |            |          |   |  |
| Calibrated: 12/07/2010 10:26:59 |     |          |        |      | ι                           | Jnits: ug/ | <b>L</b> |   |  |
| CASN Analyte Name               | M/S | Area     | Found  |      | Tr                          | ue         | %R       | Q |  |
| 7429-90-5 Aluminum              | 27  | 50931943 | 97071  |      | 1000                        | 000        | 97.1     |   |  |
| 7439-96-5 Manganese             | 55  | 42530    | 6.2209 |      |                             |            | *        |   |  |
| 7440-38-2 Arsenic               | 75  | 6176     | 1.1300 |      |                             |            | *        |   |  |

Area

720572

Amount

M/S

Reviewed by: Date: TestAmerica, Inc.

7440-56-4 Germanium

### **CALIBRATION REPORT**

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|                                 |     |          |           |         | (LIDIO (1)                  |            | <u> </u> |           |
|---------------------------------|-----|----------|-----------|---------|-----------------------------|------------|----------|-----------|
| Method: 6020 (SOP: SAC-MT-001)  | )   | M02      |           |         | Reported: 12/07/10 14:26:55 |            |          |           |
| Department: 120 (Metals)        |     |          |           | <u></u> |                             | Soul       | rce: Me  | etEdi     |
| Sample: ICSAB                   |     | Mı       | ılt: 1.00 | Dilf:   | 1.00                        | Divs:      | 1.00     | 00        |
| Instrument: ICPMS M02           |     | Chanr    | nel 262   |         |                             |            |          |           |
| File: 101207A2 # 10             |     | Method   | 6020_     |         |                             |            |          |           |
| Acquired: 12/07/2010 10:34:53   |     | M        | 02        |         |                             |            |          |           |
| Calibrated: 12/07/2010 10:26:59 |     |          |           |         | Ur                          | nits: ug/L |          |           |
| CASN Analyte Name               | M/S | Area     | Found     |         | Tru                         | e '        | %R       | Q         |
| 7429-90-5 Aluminum              | 27  | 53685267 | 92108     |         | 10010                       | 0 !        | 92.0     | Ø         |
| 7439-96-5 Manganese             | 55  | 692173   | 100.84    |         | 100.0                       | 0          | 101      |           |
| 7440-38-2 Arsenic               | 75  | 98694    | 105.26    |         | 100.0                       | 0          | 105      | $\square$ |
| CASN ISTD Name                  | M/S | Area     | Amount    |         |                             |            |          | Q         |

767179

72

Reviewed by: Date:

IDB Reports TestAmerica, Inc. Version: 6.02.068

7440-56-4 Germanium

### **CALIBRATION REPORT**

| Method: 6020 (SOP: SAC-MT-001)  | •   | M02      |          |                                       |       | Reported: 12/07/10 14:26:55 |          |        |  |  |
|---------------------------------|-----|----------|----------|---------------------------------------|-------|-----------------------------|----------|--------|--|--|
| Department: 120 (Metals)        |     |          |          | · · · · · · · · · · · · · · · · · · · |       | Soi                         | ırce: Me | etEdit |  |  |
| Sample: CCV1 (CCV)              |     | Mu       | it: 1.00 | Dilf:                                 | 1.00  | Divs:                       | 1.00     | 00     |  |  |
| Instrument: ICPMS M02           | ,   | Chann    | el 262   |                                       |       |                             |          |        |  |  |
| File: 101207A2 # 15             |     | Method   | 6020_    |                                       |       |                             |          |        |  |  |
| Acquired: 12/07/2010 11:25:24   |     | M        | 02       |                                       |       |                             |          |        |  |  |
| Calibrated: 12/07/2010 10:26:59 |     |          |          |                                       | U     | nits: ug/L                  |          |        |  |  |
| CASN Analyte Name               | M/S | Area     | Found    |                                       | Tro   | ue                          | %R       | Q      |  |  |
| 7429-90-5 Aluminum              | 27  | 16030226 | 4704.5   |                                       | 5100  | 0.0                         | 92.2     |        |  |  |
| 7439-96-5 Manganese             | 55  | 825342   | 97.821   |                                       | 100.6 | 30                          | 97.8     |        |  |  |
| 7440-38-2 Arsenic               | 75  | 116972   | 101.28   |                                       | 100.0 | 00                          | 101      |        |  |  |
| CASN ISTD Name                  | M/S | Area     | Amount   |                                       |       |                             |          | Q      |  |  |

943099

72

Reviewed by: Date:

TestAmerica, Inc.

CASN

7440-56-4 Germanium

ISTD Name

### **BLANK REPORT**

Q

Method: 6020 (SOP: SAC-MT-001) Reported: 12/07/10 14:26:55 M02 Department: 120 (Metals) Source: MetEdit Sample: CCB 1 Mult: 1.00 Dilf: 1.00 1.000 Divs: Instrument: ICPMS M02 Channel 262 File: 101207A2 # 16 Method 6020\_ M02 Acquired: 12/07/2010 11:50:24 Calibrated: 12/07/2010 11:25:24 Units: ug/L M/S RL Q CASN Analyte Name MDL %RSD Area Amount 7429-90-5 Aluminum 27 9698 -29.747 50.0 2.1 0.0 7439-96-5 Manganese 55 1199 -0.27878 1.0 0.083 0.0 75 7440-38-2 Arsenic 8549 0.71367 2.0 0.50 0.0

Area

1055615

Amount

M/S

7440-56-4 Germanium

### **CALIBRATION REPORT**

| Method: 6020 (SOP: SAC-MT-001)  | ·   | ` I      | M02                      |       | Reported: 12/07/10 14:26:5 |            |         |       |  |
|---|-----|----------|--------------------------|-------|----------------------------|------------|---------|-------|--|
| Department: 120 (Metals)  |     |          |                          |       | <u></u>                    |            | urce: M | etEdi |  |
| Sample: CCV 2 (CCV)   |     | Mu       | ılt: 1.00                | Dilf: | 1.00                       | Divs:      | 1.0     | 00    |  |
| Instrument: ICPMS M02 File: 101207A2 # 19 Acquired: 12/07/2010 12:03:37 Calibrated: 12/07/2010 11:50:24 |     | Method   | nel 262<br>1 6020_<br>02 |       | ţ                          | Jnits: ug/ | L       |       |  |
| CASN Analyte Name   | M/S | Area     | Found                    |       | Tı                         | rue        | %R      | Q     |  |
| 7429-90-5 Aluminum  | 27  | 18282351 | 5073.3                   |       | 510                        | 0.0        | 99.5    |       |  |
| 7439-96-5 Manganese   | 55  | 918128   | 97.045                   |       | 100                        | .00        | 97.0    |       |  |
| 7440-38-2 Arsenic   | 75  | 132670   | 98.848                   |       | 100                        | .00        | 98.8    |       |  |
| CASN ISTD Name  | M/S | Area     | Amount                   |       |                            |            |         | Q     |  |

1081583

CASN ISTD Name

7440-56-4 Germanium

### **BLANK REPORT**

Q Q

| Method: 6020 (SOP: SAC-MT-001)  | )   | M02          |           |       | Reported: 12/07/10 14:26:55 |       |        |          |  |
|---------------------------------|-----|--------------|-----------|-------|-----------------------------|-------|--------|----------|--|
| Department: 120 (Metals)        |     |              |           |       |                             |       | Source | : MetEdi |  |
| Sample: CCB 2                   |     | Mι           | ılt: 1.00 | Dilf: | 1.0                         | 00 [  | Divs:  | 1.000    |  |
| Instrument: ICPMS M02           |     | Chanr        | nel 262   |       |                             |       | ·      |          |  |
| File: 101207A2 #20              |     | Method 6020_ |           |       |                             |       |        |          |  |
| Acquired: 12/07/2010 12:06:16   |     | М            | 02        |       |                             |       |        |          |  |
| Calibrated: 12/07/2010 11:50:24 |     |              |           |       |                             | Units | : ug/L |          |  |
| CASN Analyte Name               | M/S | Area         | Amount    |       | RL                          | MDL   | %RSD   | Q        |  |
| 7429-90-5 Aluminum              | 27  | 25690        | 4.4910    |       | 50.0                        | 2.1   | 0.0    |          |  |
| 7439-96-5 Manganese             | 55  | 1661         | 0.04852   |       | 1.0                         | 0.083 | 0.0    |          |  |
| 7440-38-2 Arsenic               | 75  | 8549         | -0.05147  |       | 2.0                         | 0.50  | 0.0    |          |  |

Area

1063915

**Amount** 

M/S

72

Reviewed by: Date: TestAmerica, Inc.

### **CALIBRATION REPORT**

| Method: 6020 (SOP: SAC-MT-001)  | M        | M02    |            |      | Reported: 12/07/10 14:26:5 |          |           |  |  |  |
|---------------------------------|----------|--------|------------|------|----------------------------|----------|-----------|--|--|--|
| Department: 120 (Metals)        |          | w1.    | . <u> </u> |      | So                         | urce: Me | -<br>tEdi |  |  |  |
| Sample: CCV 3 (CCV)             | Mult     | : 1.00 | Dilf:      | 1.00 | Divs:                      | 1.00     | 0         |  |  |  |
| Instrument: ICPMS M02           | Channe   | l 262  |            |      |                            |          |           |  |  |  |
| File: 101207A2 #31              | Method ( | 6020_  |            |      |                            |          |           |  |  |  |
| Acquired: 12/07/2010 12:46:51   | MO       | 2      |            |      |                            |          |           |  |  |  |
| Calibrated: 12/07/2010 11:50:24 |          |        |            | I    | Units: ug/l                | -        |           |  |  |  |
| CASN Analyte Name M/            | S Area   | Found  |            | Т    | rue                        | %R       | Q         |  |  |  |

| CASN      | Analyte Name | M/S | Area     | Found  | True   | %R   | Q         |
|-----------|--------------|-----|----------|--------|--------|------|-----------|
| 7429-90-5 | Aluminum     | 27  | 16599974 | 4974.0 | 5100.0 | 97.5 |           |
| 7439-96-5 | Manganese    | 55  | 865038   | 98.699 | 100.00 | 98.7 |           |
| 7440-38-2 | Arsenic      | 75  | 125857   | 101.41 | 100.00 | 101  |           |
| CASN      | ISTD Name    | M/S | Area     | Amount |        |      | Q         |
| 7440-56-4 | Germanium    | 72  | 1001216  |        |        |      | $\square$ |

Reviewed by: Date:

### **BLANK REPORT**

| 7712 77031 000  |                                |         |                          |       |             |                           |         | <u> </u> |  |
|---|--------------------------------|---------|--------------------------|-------|-------------|---------------------------|---------|----------|--|
| Method: 6020 (SOP: SAC-MT-001)  | Method: 6020 (SOP: SAC-MT-001) |         |                          |       |             | Reported: 12/07/10 14:26: |         |          |  |
| Department: 120 (Metals)  |                                |         |                          |       |             |                           | Source: | MetEdi   |  |
| Sample: CCB 3   | ample: CCB 3                   |         |                          | Dilf: | 1.0         | <b>0</b> D                | ivs: '  | 1.000    |  |
| Instrument: ICPMS M02 File: 101207A2 # 32 Acquired: 12/07/2010 12:49:31 |                                | Method  | iel 262<br>1 6020_<br>02 |       |             |                           |         |          |  |
| Calibrated: 12/07/2010 11:50:24   |                                |         |                          |       | Units: ug/L |                           |         |          |  |
| CASN Analyte Name   | M/S                            | Area    | Amount                   |       | RL          | MDL                       | %RSD    | Q        |  |
| 7429-90-5 Aluminum  | 27                             | 28158   | 5.3322                   | ·     | 50.0        | 2.1                       | 0.0     |          |  |
| 7439-96-5 Manganese   | 55                             | 1590    | 0.04418                  |       | 1.0         | 0.083                     | 0.0     |          |  |
| 7440-38-2 Arsenic   | 75                             | 8557    | 0.08099                  |       | 2.0         | 0.50                      | 0.0     |          |  |
| CASN ISTD Name  | M/S                            | Area    | Amount                   |       |             |                           |         | Q        |  |
| 7440-56-4 Germanium   | 72                             | 1044769 |                          |       |             |                           |         | Ø        |  |
|   |                                |         |                          |       |             |                           |         |          |  |

### **CALIBRATION REPORT**

| CHI TTGGE GGG                   |                     |          |              |  | TEIDIO ( | 11014                       |          | <u> </u> |  |
|---------------------------------|---------------------|----------|--------------|--|----------|-----------------------------|----------|----------|--|
| Method: 6020 (SOP: SAC-MT-001)  |                     | 1        | M02          |  | Reporte  | Reported: 12/07/10 14:26:55 |          |          |  |
| Department: 120 (Metals)        |                     | 17.7.    | <del>-</del> |  |          | s                           | ource: M | etEdi    |  |
| Sample: CCV 4 (CCV)             | Sample: CCV 4 (CCV) |          |              |  | 1.00     | Divs:                       | 1.0      | 00       |  |
| Instrument: ICPMS M02           |                     | Chanr    | el 262       |  | 7,134,0  |                             |          |          |  |
| File: 101207A2 #33              |                     | Method   | 6020_        |  |          |                             |          |          |  |
| Acquired: 12/07/2010 12:55:08   | M                   | 02       |              |  |          |                             |          |          |  |
| Calibrated: 12/07/2010 11:50:24 |                     |          |              |  | I        |                             |          |          |  |
| CASN Analyte Name               | M/S                 | Area ·   | Found        |  | Т        | rue                         | %R       | Q        |  |
| 7429-90-5 Aluminum              | 27                  | 17282351 | 5079.9       |  | 510      | 0.0                         | 99.6     |          |  |
| 7439-96-5 Manganese             | 55                  | 885694   | 99.129       |  | 100      | .00                         | 99.1     |          |  |
| 7440-38-2 Arsenic               | 75                  | 127966   | 101,12       |  | 100      | .00                         | 101      |          |  |
| CASN ISTD Name                  | M/S                 | Area     | Amount       |  |          |                             |          | Q        |  |
| 7440-56-4 Germanium             | 72                  | 1020661  |              |  |          |                             |          | $\Box$   |  |
|                                 |                     |          |              |  |          |                             |          |          |  |

### **BLANK REPORT**

| TAL West Sac                    |     |         |                  |       |             | BLAN      | IK KEI     | PORI     |
|---------------------------------|-----|---------|------------------|-------|-------------|-----------|------------|----------|
| Method: 6020 (SOP: SAC-MT-001)  | · . |         | M02              |       | Rep         | orted: 12 | 2/07/10, 1 | 4:26:55  |
| Department: 120 (Metals)        |     |         |                  |       |             |           | Source     | : MetEdi |
| Sample: CCB 4                   |     | Mι      | ılt: <b>1.00</b> | Dilf: | 1.00        | ) D       | ivs:       | 1.000    |
| Instrument: ICPMS M02           |     | Chanr   | nel 262          |       |             |           |            |          |
| File: 101207A2 # 34             |     | Method  | 1 6020_          |       |             |           |            |          |
| Acquired: 12/07/2010 12:57:47   | M   | 02      |                  |       |             |           |            |          |
| Calibrated: 12/07/2010 11:50:24 |     |         |                  |       | Units: ug/L |           |            |          |
| CASN Analyte Name               | M/S | Area    | Amount           |       | RL          | MDL       | %RSD       | Q        |
| 7429-90-5 Aluminum              | 27  | 29450   | 5.3593           |       | 50.0        | 2.1       | 0.0        | _        |
| 7439-96-5 Manganese             | 55  | 1691    | 0.04777          |       | 1.0         | 0.083     | 0.0        |          |
| 7440-38-2 Arsenic               | 75  | 8440    | -0.29624         |       | 2.0         | 0.50      | 0.0        |          |
| CASN ISTD Name                  | M/S | _Area   | Amount           |       |             |           |            | Q        |
| 7440-56-4 Germanium             | 72  | 1089732 |                  |       |             |           |            | Ø        |
|                                 |     |         |                  |       |             |           |            |          |

7440-56-4 Germanium

### **CALIBRATION REPORT**

Ø

|                                 |          | ····      |        |      |                             |            |          |       |  |
|---------------------------------|----------|-----------|--------|------|-----------------------------|------------|----------|-------|--|
| Method: 6020 (SOP: SAC-MT-001)  | <b>,</b> |           | M02    |      | Reported: 12/07/10 14:26:58 |            |          |       |  |
| Department: 120 (Metals)        |          |           |        |      |                             | Sc         | ource: M | etEdi |  |
| Sample: CCV 5 (CCV)             | Mi       | ılt: 1.00 | Dilf:  | 1.00 | Divs:                       | 1.0        | 00       |       |  |
| Instrument: ICPMS M02           | Chanr    | nel 262   |        |      |                             |            |          |       |  |
| File: 101207A2 # 45             | Method   | 6020_     |        |      |                             |            |          |       |  |
| Acquired: 12/07/2010 13:26:17   | М        | 02        |        |      |                             |            |          |       |  |
| Calibrated: 12/07/2010 11:50:24 |          |           |        |      |                             | Jnits: ug/ | L        |       |  |
| CASN Analyte Name               | M/S      | Area      | Found  |      | T                           | rue        | %R       | Q     |  |
| 7429-90-5 Aluminum              | 27       | 16256534  | 5026.0 |      | 510                         | 0.0        | 98.5     |       |  |
| 7439-96-5 Manganese             | 55       | 832601    | 98.019 |      | 100                         | .00        | 98.0     |       |  |
| 7440-38-2 Arsenic               | 75       | 119747    | 99.425 |      | 100                         | .00        | 99.4     |       |  |
| CASN ISTD Name                  | M/S      | Area      | Amount |      |                             |            |          | Q     |  |

970352

CASN ISTD Name

7440-56-4 Germanium

### **BLANK REPORT**

| Method: 6020 (SOP: SAC-MT-001   | )      | :         | M02    | ·   | Reported: 12/07/10 14:2 |       |                 |   |  |
|---------------------------------|--------|-----------|--------|-----|-------------------------|-------|-----------------|---|--|
| Department: 120 (Metals)        |        |           |        |     |                         |       | Source: MetEdit |   |  |
| Sample: CCB 5                   | Mu     | ilt: 1.00 | Dilf:  | 1.0 | 00 E                    | ivs:  | 1.000           |   |  |
| Instrument: ICPMS M02           |        | Chanr     | el 262 |     |                         |       |                 |   |  |
| File: 101207A2 #46              | Method | 16020_    |        |     |                         |       |                 |   |  |
| Acquired: 12/07/2010 13:28:56   |        | М         | 02     |     |                         |       |                 |   |  |
| Calibrated: 12/07/2010 11:50:24 |        |           |        |     |                         | Units | : ug/L          |   |  |
| CASN Analyte Name               | M/S    | Area      | Amount |     | RL                      | MDL   | %RSD            | Q |  |
| 7429-90-5 Aluminum              | 27     | 25941     | 5.0072 |     | 50.0                    | 2,1   | 0.0             | , |  |
| 7439-96-5 Manganese             | 1640   | 0.05706   |        | 1.0 | 0.083                   | 0.0   |                 |   |  |
| 7440-38-2 Arsenic               | 7805   | -0.27039  |        | 2.0 | 0.50                    | 0.0   |                 |   |  |

Area

1003172

Amount

M/S

CASN ISTD Name

7440-56-4 Germanium

### **CALIBRATION REPORT**

Q Ø

| Method: 6020 (SOP: SAC-MT-001)  | N      | 102      |        | Reported: 12/07/10 14: |       |            | 6.55     |       |
|---------------------------------|--------|----------|--------|------------------------|-------|------------|----------|-------|
| Department: 120 (Metals)        | •      |          |        |                        |       | Sc         | ource: M | etEdi |
| Sample: CCV 6 (CCV)             | Mul    | t: 1.00  | Dilf:  | 1.00                   | Divs: | 1.0        | 00       |       |
| Instrument: ICPMS M02           |        | Channe   | el 262 |                        |       |            |          |       |
| File: 101207A2 #56              | Method | 6020_    |        |                        |       |            |          |       |
| Acquired: 12/07/2010 14:02:57   |        | MC       | 2      |                        |       |            |          |       |
| Calibrated: 12/07/2010 11:50:24 |        |          |        |                        |       | Units: ug/ | L.       |       |
| CASN Analyte Name               | M/S    | Area     | Found  |                        | Τ     | rue        | %R       | Q     |
| 7429-90-5 Aluminum              | 27     | 16448306 | 5007.3 |                        | 510   | 0.0        | 98.2     |       |
| 7439-96-5 Manganese             | 55     | 851439   | 98.707 |                        | 100   | .00        | 98.7     |       |
| 7440-38-2 Arsenic               | 122639 | 100.32   |        | 100                    | .00   | 100        |          |       |

Area

985652

Amount

M/S

### **BLANK REPORT**

|                                 |     |                  | <del></del> |     |      |                           |        |           |  |
|---------------------------------|-----|------------------|-------------|-----|------|---------------------------|--------|-----------|--|
| Method: 6020 (SOP: SAC-MT-001   | )   | ı                | M02         |     | Rep  | Reported: 12/07/10 14:26: |        |           |  |
| Department: 120 (Metals)        |     |                  |             |     |      |                           | Source | : MetEdit |  |
| Sample: CCB 6                   | Mu  | ılt: <b>1.00</b> | Dilf:       | 1.0 | 0 D  | ivs:                      | 1.000  |           |  |
| Instrument: ICPMS M02           |     | Chanr            | nel 262     |     |      |                           |        |           |  |
| File: 101207A2 # 57             |     | Method           | 6020_       |     |      |                           |        |           |  |
| Acquired: 12/07/2010 14:05:37   |     | М                | 02          |     |      |                           |        |           |  |
| Calibrated: 12/07/2010 11:50:24 |     |                  |             |     |      | Units                     | : ug/L |           |  |
| CASN Analyte Name               | M/S | Агеа             | Amount      |     | RL   | MDL                       | %RSD   | Q         |  |
| 7429-90-5 Aluminum              | 27  | 26477            | 4.9962      |     | 50.0 | 2.1                       | 0.0    |           |  |
| 7439-96-5 Manganese             | 55  | 1577             | 0.04603     |     | 1.0  | 0.083                     | 0.0    |           |  |
| 7440-38-2 Arsenic               | 75  | 7955             | -0.29272    |     | 2.0  | 0.50                      | 0.0    |           |  |
| CASN ISTD Name                  | M/S | Area             | Amount      |     |      |                           |        | Q         |  |
| 7440-56-4 Germanium             | 72  |                  |             |     |      |                           |        | $\square$ |  |

Date: Reviewed by: TestAmerica, Inc.

### SERIAL DILUTION

| Department: 120 (Metals)   Source: MetEx   | TAL West Sac  |     |                |          |          | SERI                        | ML DI | LUII     |            |
|--|---|-----|----------------|----------|----------|-----------------------------|-------|----------|------------|
| Sample:         MAQQ1P5         Serial Dilution:         5.00         Sample Dilution:         1.00           Instrument:         ICPMS M02         Channel 262           File:         101207A2 # 51         Method 6020_           Acquired:         12/07/2010 13:49:58         M02         Matrix: AIR           Calibrated:         12/07/2010 11:50:24         Units: ug/L           CASN Analyte Name         M/S         Area Dilution         Sample %Diff. MDL Flag           7429-90-5 Aluminum         27         309637 497.90         431.87 15.3         *           7439-96-5 Manganese         55         3933834 2476.3         2366.2         4.65 0.14 4.7           7440-38-2 Arsenic         75         7652 1.3992 1.6599 15.7 0.41 NC           CASN ISTD Name         M/S         Area Amount | Method: 6020 (SOP: SAC-MT-001)  | )   |                |          |          | Reported: 12/07/10 14:27:55 |       |          |            |
| Instrument: ICPMS M02  | Department: 120 (Metals)  |     |                |          |          |                             | Soi   | urce: Me | <br>etEdit |
| File: 101207A2 # 51  | Sample: MAQQ1P5   | Se  | rial Dilution: | 5.00     | Sample I | Dilution:                   | 1.00  |          |            |
| 7429-90-5         Aluminum         27         309637         497.90         431.87         15.3         *           7439-96-5         Manganese         55         3933834         2476.3         2366.2         4.65         0.14         4.7           7440-38-2         Arsenic         75         7652         1.3992         1.6599         15.7         0.41         NC           CASN         ISTD Name         M/S         Area         Amount   | File: 101207A2 # 51 Method 6020_<br>Acquired: 12/07/2010 13:49:58 M02 |     |                |          |          |                             |       | -        |            |
| 7439-96-5 Manganese       55       3933834       2476.3       2366.2       4.65       0.14       4.7         7440-38-2 Arsenic       75       7652       1.3992       1.6599       15.7       0.41       NC         CASN ISTD Name       M/S       Area Amount       Amount       4.65       0.14       4.7  | CASN Analyte Name   | M/S | Area           | Dilution | Sample   | %Diff.                      | MDL   | Flag     | Q          |
| 7440-38-2 Arsenic 75 7652 1.3992 1.6599 15.7 0.41 NC  CASN ISTD Name M/S Area Amount   | 7429-90-5 Aluminum  | 27  | 309637         | 497.90   | 431.87   | 15.3                        |       | *        |            |
| CASN ISTD Name M/S Area Amount   | 7439-96-5 Manganese   | 55  | 3933834        | 2476.3   | 2366.2   | 4.65                        | 0.14  | 4.7      | $\square$  |
|  | 7440-38-2 Arsenic   | 75  | 7652           | 1.3992   | 1.6599   | 15.7                        | 0.41  | NC       | $\square$  |
| 7440-56-4 Germanium 72 908487  | CASN ISTD Name  | M/S | Area           | Amount   |          |                             |       |          | Q          |
|  | 7440-56-4 Germanium   | 72  | 908487         |          |          |                             |       |          |            |

<sup>\*</sup> Analyte not requested for this batch, no MDL.

NC : Serial dilution concentration < 100 X MDL.

E : Difference greater than Limit (10%)

### SAMPLE SPIKE

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 14:28:03

Department: 120 (Metals) Source: MetEdit

Sample: MAQQ1Z Spike Dilution: 1.00 Sample Dilution: 1.00

 Instrument:
 ICPMS M02
 Channel 262

 File:
 101207A2 # 52
 Method 6020\_

Acquired: 12/07/2010 13:52:33 M02 Matrix: AIR Calibrated: 12/07/2010 11:50:24 Units: ug/L

| CASN      | Analyte Name | M/S | Area     | Amount | Sample | %Rec. | Spike | _Flag_ | Q_ |
|-----------|--------------|-----|----------|--------|--------|-------|-------|--------|----|
| 7429-90-5 | Aluminum     | 27  | 3725076  | 1332.6 | 431.87 | 90.1  | 1000  |        | Ø  |
| 7439-96-5 | Manganese    | 55  | 17911155 | 2446.7 | 2366.2 | 40.2  | 200   | *      |    |
| 7440-38-2 | Arsenic      | 75  | 194434   | 193.24 | 1.6599 | 95.8  | 200   |        |    |
| CASN      | ISTD Name    | M/S | Area     | Amount |        |       |       |        | Q  |
| 7440-56-4 | Germanium    | 72  | 837354   |        |        |       |       |        | Ø  |

### Sample Preparation Log

### TestAmerica - West Sacramento Metals - Air Toxics - Preparation Log

Date: 7-Dec-10 Analyst: JZ Matrix: AIR

Fraction: Filter SOP: WS-IP-0010 Method: ICPMS

| LOT ID    |     | Workorder |    | Volume<br>Received | Volume<br>Removed | Initial Prep<br>Volume | Final Prep<br>Volume | Batch  | Prep<br>Factor |  |
|-----------|-----|-----------|----|--------------------|-------------------|------------------------|----------------------|--------|----------------|--|
| G0L070000 | 211 | маој7в    | 2A | NA                 | NA                | NA                     | 100 mL               | 341211 | 1.2            |  |
| G0L070000 | 211 | MA0J7C    | 2A | NA                 | NA                | NA                     | 100 mL               | 341211 | 1.2            |  |
| G0L070000 | 211 | MA0J7L    | 2A | NA                 | NA                | NA                     | 100 mL               | 341211 | 1.2            |  |
| G0L020446 | 3   | MAQQ1     | 2A | 9 inches           | 0.75 inches       | 0.75 inches            | 100 mL               | 341211 | 1.2            |  |
| G0L020446 | 4   | MAQQ4     | 2A | 9 inches           | 0.75 inches       | 0.75 inches            | 100 mL               | 341211 | 1.2            |  |
| G0L020446 | 7   | MAQRA     | 2A | 9 inches           | 0.75 inches       | 0.75 inches            | 100 mL               | 341211 | 1.2            |  |
| G0L020446 | 10  | MAQRH     | 2A | 9 inches           | 0.75 inches       | 0.75 inches            | 100 mL               | 341211 | 1.2            |  |



### West Sacramento Metals Spiking Documentation Form

| Lot #(s):                  | 606020446   |   |                   |                                    |                              |
|----------------------------|-------------|---|-------------------|------------------------------------|------------------------------|
| Batch Number:              | 034/211     | EPA Analytical<br>Method ID:              | 6020              | Spiked Date:                       | 12/7/10                      |
| MS Sample(s):              | NA          | EPA Prep<br>Method ID:                    | W3-Il-00i0        | Hot Plate<br>Microwave ID:         | Net I                        |
| Analyst<br>Initial/Date:   | 12 12/67/10 | Witness<br>Initial/Date:                  | TP 12/2/10        | Hot Plate Temp                     | Initial: 930c<br>Final: 930c |
| Correct Folder ID Witness: | NA          | Digestion Cup Lot #<br>Filter Paper Lot # | 1008257<br>390428 | Thermometer ID:<br>Fin Vol Cup Lot | 100811                       |

| Check<br>If<br>Used | Bottle<br>Name                    | Elements  | Stock<br>Concentration<br>(mg/L) | Tracking<br>Number   | LCS/LCSD<br>Volume<br>Spiked        | MS/SD<br>Volume<br>Spiked | Expiration<br>Date |
|---------------------|-----------------------------------|---|----------------------------------|--|-------------------------------------|---------------------------|--------------------|
|                     |                                   | Ca, Mg<br>Al, As, Ba, Se, Sn, Tl                  | 5,000<br>200                     |  |                                     |                           |                    |
|                     | ICP Part 1<br>5% HNO <sub>3</sub> | Fe,Mo,Ti Sb,Co,Pb,Mn,Ni,V,Zn Cu Cr ,Be,Cd Aq      | 100<br>50<br>25<br>20<br>5       |  | ment the desired that the second of |                           |                    |
|                     | ICP Part 2<br>2% HN0 <sub>3</sub> | K,Na<br>P,S<br>B,LI,Sr                            | 5,000<br>1,000<br>100            |  |                                     |                           |                    |
|                     |                                   | B,LI,O)   | 100                              |  | <del></del> -                       |                           |                    |
|                     | Si H20/Tr HF                      | Si  | 1,800                            | and the same of th |                                     |                           | J2 12/7/10         |
|                     |                                   | AI,K,Mg,Ca,Na,Fe,P,B                              | 500                              |  |                                     |                           |                    |
|                     | TACA-1<br>5% HN0₃                 | As,Be,Cd,Cr,Co,Cu,Pb,<br>Mn,Ni,Se,U,V,Zn,Ba,Li Sr | 100                              | 3184-6-5   | 200.41                              | NA                        | 8/31/11            |
|                     |                                   | Ag,Tl   | 25                               |  |                                     |                           |                    |
|                     | TACA-2<br>5% HN0 <sub>3</sub>     | Mo, Sb, Sn, Tī                                    | 100                              | 3189-4-4   | 200 UI                              | NA                        | 8/31/11            |
|                     | Misc.<br>Elements                 |   |                                  |  |                                     |                           | 12 8/11/16         |

Prep Reagents:

| Check<br>If Used | Reagent              | Supplier     | Lot Number | Check<br>If Used | Reagent                 | Supplier     | Lot Number |
|------------------|----------------------|--------------|------------|------------------|-------------------------|--------------|------------|
|                  | 70% HNO <sub>3</sub> | Mallinckrodt |            |                  | 30% H <sub>2</sub> O₂ · | Mallinckrodt |            |
| <                | 37% HCI              | Mallinckrodt |            |                  | 49% HF                  | Fisher       |            |
| /                | 3M HNO <sub>3</sub>  | ln-House     | 4028-32-1  |                  | 1:1 HCI                 | In-House     | 12/1/10    |

ICP matrix spike and LCS: For final volumes of 100ml, add 1mL from bottles ICP Part 1, ICP Part 2. Add 1ml of Silica (Si) when requested. ICPMS matrix spike and LCS: For final volumes of 100ml, add 0.2 mL each of TACA-1 and TACA-2.

Amount to spike is as listed above for final volumes of 100ml. If a different final volume is used, increase or decrease the amount you spike proportionally.



### West Sacramento

### Preparation Data Review Checklist

| Prep Batch(es) 634 (21)  | Test: 6020                             |  |   |
|--|--|--|---|
| Prep Date: 12/7/10   | Holding Times:                         | 5/29/11<br>5/30/11 NCI                 | VI: Y 🕪                                 |
|  |  | 1 2                                    | <del></del>                             |
| A. Spike Witness/Batch setup   |  | Spike<br>Witness                       | Reviewer                                |
| 1. Holding times checked? NCMs filed as                              | s appropriate                          |  |   |
| 2. QAS checked for QC instructions (LCS, I                           | _CSD, MS,MSD, etc)                     | <b>—</b> .                             |   |
| Amount of samples in hood match amount sheet. Sample IDS match.      | nt of samples on bench                 | -                                      | NA                                      |
| Worksheets have been checked for required compounds                  | ired spiking                           | _                                      | 1                                       |
| 5. Spiking volumes are correctly documented                          | ed .                                   |  |   |
| 6. Std ID numbers on spike labels match nu                           |  | -                                      | NA                                      |
| 7. Expiration dates have been checked                                |  |  |   |
| 8. Calibration expiration dates on pipettors                         | have been checked                      |  | NA                                      |
| 9. Spiker and spike witness have signed an                           |  |  |   |
| B. Weights and Volumes   |  | ·· <del>'</del>                        |   |
| Recorded weights are in anticipated range                            | 16                                     | NA                                     | NA                                      |
| 2. Balance upload or raw data for weights is                         | <del> </del>                           | NA                                     | NA                                      |
| 3. Weights and volumes have been transcri                            |  | NA                                     |   |
| 4. Weights are not targeted to meet exact w                          |  | NA                                     | NA                                      |
| Each weight or volume measurement is a dittos or line downs)         | ······································ | NA                                     | 1                                       |
| C. Standards and Reagents  |  |  |   |
| Lot numbers for all reagents, including cl<br>recorded.              | ean up stages, are                     | NA                                     | /                                       |
| 2. Are dates and analysts for cleanups reco                          | rded?                                  | NA                                     | Na                                      |
| Are correct IDs used for standards? Are day/month/year, when listed? |  | NA                                     | 1                                       |
| D. Documentation   |  |  |   |
| Are all nonconformances documented a                                 |  | NA NA                                  | NA                                      |
| 2. QuantiMs entry correct, including dates                           | and times.                             | NA NA                                  |   |
| Are all fields completed?  |  | NA NA                                  |   |
| Spike witness:   |  | 12/7/10                                |   |
| 2 <sup>nd</sup> Level Reviewer: SH                                   | Date:                                  | 12/9/                                  | 10                                      |
| Comments:  |  |  |   |
|  |  |  |   |
|  |  | ······································ | *************************************** |
|  |  |  |   |

### AIR, TSP-Total Suspended Particulates

### Raw Data Package



### **TestAmerica West Sacramento**

### Air Toxics Laboratory

### **PARTICULATE ANALYSIS**

LEVEL 1 & 2 REVIEW CHECKLIST

| LAB NUMBERS: 60/020446 (3,4,7,10) Batch #: 034  | 11297  |    |
|---|--------|----|
| ANALYSIS: (circle) TSP/PM10 or METHOD 5   | •      |    |
| DATE: 12/67/10 ANALYST: 12  |        |    |
| LEVEL 1 ANALYSIS REVIEW  1. Samples are in good condition. 2. Sample filter number matches the folder or petri ID number. 3. Desiccator temperature and % humidity criteria in control. 4. Balance calibration criteria met. 5. Beginning and ending calibration sample bracket weights are in calibration. 6. Samples reached stable weight. 7. Samples exceeded 5 consecutive final weighings.  LEVEL 1 DATA REVIEW  1. Benchsheet is complete. | YES NO | NA |
| <ol> <li>QAS or QAPP consulted and followed for client specifics.</li> <li>Data entered in properly.</li> <li>Copy of spreadsheet or logbook raw data entry attached to data package.</li> <li>Analyst observations, HTV's, Anomalies properly documented and attached to data package.</li> <li>Completed By &amp; Date: 12/07/</li> </ol>   |        |    |
| LEVEL 2 REVIEW:  1. Level 1 checklist complete and verified.  2. Deviations, Anomalies, Holding times checked and approved.  3. Reanalysis documented and chemist notified.  4. Client specific criteria met.  5. Data entry checked and released in Quantims.  6. Indication on benchsheet or spreadsheet on review and released (dated & signed).  Completed By & Date:  Comments: Pesicake 2 A   |        |    |
|   |        |    |
|   |        |    |

RQC050

### TestAmerica Laboratories, Inc. Run Date: 12/07/10 WET CHEM BATCHSHEET

Time: 14:26:46

TestAmerica West Sacramen

### PRODUCTION FIGURES - WET CHEM

|                                | MPLE<br>IMBER QC                    | RE-RUN<br>MATRIX | RE-RUN<br>OTHER | MISC<br>NUMBER                       | TOTAL<br>HOURS  | EXPANDED<br>DELIVERABLE |
|--------------------------------|-------------------------------------|------------------|-----------------|--------------------------------------|-----------------|-------------------------|
| METHOD: QC BATCH #: PREP DATE: | 12/02/10 11:15                      |                  | INITIALS:       |                                      | (APP B) DATA EN | ALS JZ                  |
| COMP DATE: USER: Work Order    | 12/06/10 18:20 PHOMSOPT  Lab Number | Struc            |                 | p. Analys                            |                 |                         |
| MAQQ1-1-AA                     | G-0L020446-003                      | XX S 88          | <del></del>     | M 12/67/                             |                 | 292010B                 |
| MAQQ4-1-AA<br>MAORA-1-AA       | G-0L020446-004<br>G-0L020446-007    | XX S 88          |                 | м <u>12/67/1</u><br>м <u>12/07/1</u> |                 | 292010B<br>302010B      |
| MAQRH-1-AA                     | G-0L020446-010                      | XX S 88          |                 | M 12/07/10                           |                 | 302010B                 |
|                                |                                     | Control          | Limits          | ,                                    |                 |                         |

WEST SACRAMENTO

TestAmerica
AIR TOXICS GRAVIMETRIC ANALYSES

|  |                        |              |               |        | 112910jz1010  | MAK08       |               |             | 112910jz1010  | MAK09       | 113010jz1230  | MAML1       | 113010jz1230  | MAML6       | 120210jz1115  | MAQQ4       | 120210jz1115  | MAQRA       | 120210jz1115  | MAQRH       | 120210jz1115  | MAQQ1       | 112910jz1010  | MAK04       |               |        | Lab ID             |                         |
|--|------------------------|--------------|---------------|--------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|--------|--------------------|-------------------------|
| wt<br>5g                                     | * 3                    | 5.           | ≨             | 50     | 75            | tron111010- | 74            | tron111010- | 73            | tron111010- | 72            | tron111010- | 71            | tron111010- | 70            | tron111010- | 69            | tron111010- | 68            | tron111010- | 67            | tron111010- | 66            | tron111010- | ×             | 5g     | Filter ID          |                         |
| 5.0001<br>110110skv1128                      | 1128                   | £ 0001       | 110110skv1128 | 5,0001 | 110110skv1128 | 4.4545      | 110110skv1127 | 4.5735      | 110110skv1127 | 4.5577      | 110110skv1126 | 4.5504      | 110110skv1126 | 4.5539      | 110110skv1125 | 4.5572      | 110110skv1125 | 4.5467      | 110110skv1124 | 4.5551      | 110110skv1124 | 4.5565      | 110110skv1123 | 4.5511      | 110110skv1123 | 4.9999 | date/time initials | Initial Weight (g)      |
| 5.0001 5.0000<br>110110skv1128 110110skv1923 | 110110skv1923          | 5 0000 P     | 110110sky1923 | 5 0000 | 110110skv1922 | 4.4543      | 110110skv1922 | 4.5730      | 110110skv1922 | 4.5572      | 110110skv1921 | 4.5500      | 110110skv1921 | 4.5539      | 110110skv1920 | 4.5571      | 110110skv1920 | 4.5464      | 110110skv1919 | 4.5546      | 110110skv1919 | 4.5564      | 110110skv1919 | 4.5507      | 110110skv1918 | 4.9998 | date/time initials | Initial Weight (g)      |
| 4.9998<br>120610jz1048                       | 4.9996<br>120210jz1039 | 10000        | 113010iz1245  | 4 0005 | 113010jz1243  | 4.5166      | !             |             | 113010jz1242  | 4.6235      | 120210jz1037  | 4.5713      | 120210jz1036  | 4.6496      | 120610jz1047  | 4.5841      | 120610jz1045  | 4.5832      | 120610jz1042  | 4.5859      | 120610jz1040  | 4.5996      | 113010jz1240  | 4.5630      | 120610jz1038  | 4.9998 | date/time initials | Final Weight (g)        |
| 4.9998<br>120610jz1820                       | 4.9998<br>120210jz1735 | 12011021     | 120110171100  | 4 0006 | 120110jz1058  | 4.5163      |               |             | 120110jz1057  | 4.6227      | 120210jz1733  | 4.5714      | 120210jz1732  | 4.6498      | 120610jz1819  | 4.5840      | 120610jz1812  | 4.5834      | 120610jz1817  | 4.5861      | 120610jz1808  | 4.5999      | 120110jz1056  | 4.5629      | 120610jz1802  | 5.0000 | date/time initials | Final Weight (g)        |
|  |                        | 120210121031 | 120210171031  | A 0006 |               |             |               |             | 120210jz1023  | 4.6222      |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |        | date/time initials | Final Weight (g)        |
|  |                        |              |               |        |               |             |               |             | ****          |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |        | date/time initials | Final Weight (g)        |
|  |                        |              |               |        |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |        | date/time initials | Final Weight (g)        |
|  |                        |              |               |        |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |        | date/time initials | Final Weight (g)        |
| -0.0002                                      | -0.0002                |              | -0.0004       | 2004   | (             | 0.0620      |               | Z<br>O      |               | 0.0650      |               | 0.0214      |               | 0.0959      |               | 0.0269      |               | 0.0370      |               | 0.0315      |               | 0.0435      |               | 0.0122      |               |        |                    | Wt of<br>Particulate    |
|  |                        |              |               |        |               |             |               |             |               |             |               |             |               |             | 7             | \           |               | 7           | ,             | 7           | •             | 7           |               |             |               |        | Check              | Initial Wts<br>Stablity |

TestAmerica Laboratories, Inc. Inorganics Batch Review QC Batch 0341297

Date 12/07/2010 Time 13:28:19

Method Code:AO Particulates in Air, Suspended "TSP HiVol" (APP B) Analyst:Thep Phomsopha

| endosmons decreases       | Josmons de | ын    |          |                |                           |       |           |            |          |
|---------------------------|------------|-------|----------|----------------|---------------------------|-------|-----------|------------|----------|
| Work Order Result Units   | Result     | Units | ויםר/ביו | Prep Anal.     | Total PSRL<br>Solids Flac | R/R   | Rounded C | led Output | <u>.</u> |
| WW-T-TAN                  | 0.0435     | g     | 0.0005   | 12/02-12/07/10 | . 00 N                    | 14/14 | 0.0435    | 0.0005     | 1.00     |
| MAQQ4-1-AA 0.0269 g       | 0.0269     | φ     | 0.0005   | 12/02-12/07/10 | .00 N                     |       | 0.0269    | 0 0005     | 1 00     |
| MACABATA                  | 0 0 0 0    | ľ     | )        |                |                           |       | 0.00      | 0.0000     | 1.00     |
| Fundada - 1 = 44 0.03/0 0 | 0.03/0     | ıΩ    | 0.0005   | 12/02-12/07/10 | .00 N                     | _     | 0.0370    | 0.0005     | 1.00     |
| MAQRH-1-AA 0.0315         | 0.0315     | g     | 0.0005   | 12/02-12/07/10 | .00 N                     |       | 0_0315    | 0 000л     | 1 .      |
| Notes:                    |            |       |          |                |                           |       |           |            | H .      |

TOTAL # SAMPLE # QC # MATRIX # OTHER # MISC # HOURS . 0

TEST

THE LEADER IN ENVIRONMENTAL TESTING

### Balance Calibration Check Log TestAmerica West Sacramento

| T   | т                   |                    | _                  | <del></del>         | T.                   | <u></u>                   | T                          | T_           | ·                        |                 | т-             | <b>-</b>            | <del></del>        | т                                 |            |           |
|---|---------------------|--------------------|--------------------|---------------------|----------------------|---------------------------|----------------------------|--------------|--------------------------|-----------------|----------------|---------------------|--------------------|-----------------------------------|------------|-----------|
| 0, 1000<br>P=Pass, F= Fail  | 0.7000              | 0, 2000            | 0.7000             | 0,2000              | 0.2000               | 6,7600                    | 0.2000                     | 0,2000       | 0. 2000                  | 0.39            | 0.2ve          | 0,2000              | 0,2000             | Denomination (g)                  | Working WT |           |
| O. 1499<br>The observed weigh   | 0.1999              | 0, 2000            | 0,700              | 0.1996              | 0.1996               | 0,1999                    | 0.1998                     | 0,2001       | 0,200                    | 0 2002          | 0.2001         | 0.2003              | 0.1996             | WEIGHT (9)                        | OBSERVED   | SEI3      |
| 0,399.5   | 0.1995              | 0,1995             | 0,1995             | 0.1995              | 0,1995               | 0, 1995                   | 0.1995                     | 0,1995       | 0.1995                   | S.32. O         | 0.1955         | 0,1995              | 0.1995             | Lower (g)                         | -          | WEIGHT #1 |
| P=Pass, F= Fail. The observed weight must be with in the listed tolerances in order to pass. If railbration check values fall outside accountant in the hadron is considered to be set of colorances. | 0,2005              | 0, 2005            | 0. 2005            | 0.7005              | 0.2005               | 0.7005                    | 6.7005                     | 0.2005       | 0.7005                   | 0.2005          | 0.1015         | 0.2005              | 0,2005             | (g) Upper (g)                     | 7          |           |
| IO . O  | 10.0                | 10.0               | 10.0               | 100                 | 10.0                 | 10,0                      | 10.0                       | 10,0         | 10.00                    | 0,09            | 0.0            | 10.000              | 10,000             | Denomination (g)                  | Marking MT |           |
| 10.0000   | 40000.01            | 10.0004            | 10.0004            | 9,9999              | 9,9983               | <i>a. 9999</i>            | 10,0000                    | 9,9997       | 10.0004                  | 10.001          | 10,0005        | 10.0001             | 10.0002            | WEIGHT (g)                        | VVEIGH     | (# 上口の日/W |
| 9,9000  | 9,9000              | 9.9000             | 9,9000             | 9.9000              | 9.9000               | 9,9000                    | 9.9000                     | 9,9000       | 9,9000                   | a cas 1000 माडी | 0.900          | 9,9000              | 10-1 a 4000        | Acceptance limits * Lower (g) Upp | 1          | ±5        |
| 10.0100   | 10.0100 11/5/10 904 | 0010,01            | 10,0100            | 10.0100             | 10,0100 11/1/10 80st | 10,0100                   | 10,0100                    | 10.0100      | 10.0100                  | 15,0100         | 10.0100 1010 W | 10,100              | _ [                | Upper (g)                         | 3          |           |
| 10/18/10  | 11/5/10             | 11/4/10            | 11/3/10            |                     | 11/1/10              | ropolo                    | 10/28/co                   | 10/27/10 8CH | 10/resta                 | ध्रिश्च         | 10/12/10       | 10/24/10            | 10/2/10            |                                   | DATE       |           |
| 20%   | 427                 | 203                | ESL                | 433                 |                      | 504                       | 804                        | F235         | 202                      | 2               | 2              | 200                 | CH                 |                                   | Z<br>T     |           |
| 110-40 203 01/8/11  | 110-10              | 11/4/10 804 QA-011 | 11/3/10 802 04-011 | 110- FO FOS 01/2/11 | 110-70               | 10,0100 ropolo 504 QA-011 | 10.0100 10/28/6 854 QA-011 | QA-01        | 10.0100 10/16/20 2010/01 | のカノラ            | 11 ~ AV        | 10/24/10 SCA QA-011 | 10/2/10 ECH QA-011 |                                   | WEIGHT ID  |           |
| P   | Ø                   | 0                  | ð                  | Ó                   | σ                    | Ÿ                         | ď                          | Ð            | P                        | Ø               | +              | ъ                   | or                 | ٤                                 | p/F        |           |

| Denomination | Range           | Denomination | Range             |
|--------------|-----------------|--------------|-------------------|
| 0.2000       | 0.1995 - 0 2005 | 10           | 9.9000 - 10.100   |
| 0.5000       | 1               | 20           | 19.8000 - 20.200  |
| 1            | 0.9900 - 1.0100 | 50           | 49.5000 - 50.500  |
| 2            | 1.9800 - 2.0200 | 100          | 99.0000 - 101.000 |
| 51           | 4.9500 - 5.0500 |              |                   |

\*3 When performing Method 1664A, the following Class 1 weights and tolerances must be used (in grams).

| Calibration range is (±) 10% for 2 mg weight and (±) 0.5% for 1 g weight. The above | Denomination<br>0.9020                       | Range<br>0.0018 - 0.0022               |
|---|--|--|
| Calibration range is (±) 10% for 2 mg weight and (±) 0.5% for 1 g weight. The above | 0.0020                                       | 0.0018 - 0.0022                        |
| Calibration range is (±) 10% for 2 mg weight and (±) 0.5% for 1 g weight. The above |  | 0.9950 - 1.0050                        |
|   | Calibration range is (±) 10% for 2 mg weight | and (±) 0.5% for 1 g weight. The above |

Calibration range is (+/-) 1% for top loading balances. The above tolerances have been rounded to meet balance read out capability.

5/7/2008 ERS QA-140T4

Balance # ID QA-045

b) Attach a sign instructing others not to use the balance (see front of logbook).
 c) Notify the QA department.
 2 Balance Tolerances (grams);

## <u> Test</u>America

THE LEADER IN ENVIRONMENTAL TESTING

### Balance Calibration Check Log TestAmerica West Sacramento

|   | ···· | <br><del></del> | _, | · · · · | <del></del> | <del>_,</del> | · ,                    | <u>, `</u>              | <del></del>          |                   |          |  |           |
|---|------|-----------------|----|---------|-------------|---------------|------------------------|-------------------------|----------------------|-------------------|----------|--|-----------|
|   |      |                 |    |         |             |               | 0. 2000                | 0.2wo                   | 0.2000               | 0,2000            | 0,2000   | Working WT<br>Denomination (g)               |           |
|   |      |                 |    |         |             |               | 0.2002                 | 0.200                   | 8. 2000              | 0,2002            | 0,2001   | OBSERVED<br>WEIGHT (g)                       | WEIG      |
|   |      |                 |    |         |             |               | 0,1995                 | <u>ः  </u> २२८/         | 0.1995               | 0.1995            | 0:1995   | Acceptar<br>Lower (g)                        | WEIGHT #1 |
|   |      |                 |    |         |             |               | 0.2005                 | 0.2cm5                  | 0.2005               | 0.2005            | 0.2005   | Acceptance limits <sup>2</sup> (g) Upper {g} |           |
|   |      | ,               |    |         |             |               | 10.0000 10.0003 9.9000 | 10.000U                 | 10.000               | 16.0000 9,9995    | 10.0000  | Working WT<br>Denomination (g)               |           |
|   |      |                 |    |         |             |               | 10.0003                | 6.900) + FRAP. P        | 10.000 9.999 4 9.900 | 2 6666            | 9,9994   | OBSERVED<br>WEIGHT (g)                       | WEIGHT #2 |
|   |      |                 |    |         |             |               | <u> </u>               |                         | 1                    | 9.9000            | 9.4000   | Acceptance limits <sup>2</sup> Lower (g) Upp | T #2      |
| , |      |                 |    |         |             |               | 10.1000 12/1/10 32     | ति राष्ट्रिता विक्या का | 10.100 1210 8        | 16.1000 121/16 12 | 10.1000  | e limits <sup>"2</sup><br>Upper (g)          |           |
|   |      |                 |    |         |             | 1             | 12/11/10               | 12/3/2                  | 12/2/12              | 12/1/10           | 11/30/10 | DATE   |           |
|   |      |                 |    |         |             |               |                        |                         | Z                    | J2                | 22       | NI.  |           |
|   |      |                 |    |         |             |               | QA 0/1                 | 08-N                    | \$-1                 | Q# 011            | 110 AD   | WEIGHT ID                                    |           |
|   |      |                 |    |         |             |               | P                      | 6                       | ð                    | P                 | P        | <b>.</b> *:                                  | D/IC      |

P=Pass, F= Fail. The observed weight must be with in the listed tolerances in order to pass. If calibration check values fall outside acceptance limits, the balance is considered to be out of calibration.

a) Do not move or use the balance

b) Attach a sign instructing others not to use the balance (see front of logbook).

c) Notify the QA department.

2 Balance Tolerances (grams):

| Denomination | Range           | Denomination | Range             |
|--------------|-----------------|--------------|-------------------|
| 0,2000       | 0.1995 - 0.2005 | 10           | 9,9000 - 10,100   |
| 0.5000       | 0.4995 - 0.5005 | 20           | 19.8000 - 20.200  |
|              | 0 9900 - 1 0100 | 50           | 49 5000 - 50 500  |
| 2            | 1.9800 - 2 0200 | 100          | 99.0000 - 101.000 |
| 5            | 4.9500 - 5.0500 |              |                   |
|              |                 |              |                   |

\*3 When performing Method 1664A, the following Class 1 weights and tolerances must be used (in grams).

|   | 4   |
|---|---|
| Denomination  | Range                                     |
| 0.0020  | 0.0018 - 0.0022                           |
|   | 0.9950 - 1.0050                           |
| Calibration range is (±) 10% for 2 mg weight and (±) 0.5% for 1 g weight. The above | it and (±) 0.5% for 1 g weight. The above |
| tolerances have been modified to meet balance read out capability.                  | ance read out capability.                 |

Calibration range is (+/-) 1% for top loading balances. The above tolerances have been rounded to meet balance read out capability.

5/7/2008 ERS QA-140T4

Balance # ID QA-045

THE LEADER IN ENVIRONMENTAL TESTING

## TestAmerica West Sacramento **Air Toxics**

Desiccator Humidity/Temperature Logbook

|  | <b>=</b>  | -5.        | T            | 1      | 1_    | <b>\_</b> | ₹≔   | 1       | بند      | 1        | T      | .1      | 23170FF  | -     | 1      | 1    | Т :            |
|--|-----------|------------|--------------|--------|-------|-----------|------|---------|----------|----------|--------|---------|----------|-------|--------|------|----------------|
| Ab<br>Lir<br>Fo  | /8/i0     | 710        | 1/5/10       | 1/5/10 | Vilio | 18/10     | hlio | 10/1/10 | 10/20/10 | 18/28/10 | ofethe | 0/zú/10 | 1271     | 10/24 | ofetho | Date | Desic          |
| Abbreviations:<br>Limits:<br>Foot Notes:   | 20x       | 8          | ECT.         | set    | 203   | 733       | 43   | 202     | 325      | 2004     | 202    | 502     | 2        | 2     | 200    | Init | Desiccator#    |
|  | 66        | B          | 72           | 69     | 68    | 65        | F    | S. 8    | 89       | S.       | 67     | 68      | 59       | ئے    | 70     | T    |                |
| T = Tempera<br>RH 33±5%<br>l = Desiccan  | 78        | ઝ          | 88           | 23     | 88    | 78        | 78   | 34      | 33       | 34       | 23     | 22      | 22       | 32    | 33     | RH   | <del>, '</del> |
| T = Temperature (°F) RH 33±5% 1 = Desiccant Changed                                      | -         | 1          | 7            | 1      | 7     | }         | ١    | 1       | 1        | 1        | 1      | 1       | ,        | ì     | (      | FZ   |                |
| e (°F)<br>hanged   | 66        | 70         | 72           | 69     | 60    | 62        | 66   | 20      | 6        | E.C.     | 83     | 63      | ্ব       |       | 17     | T    |                |
|  | 29        | <b>7</b> 9 | 27           | 22     | 36    | 34        | 32   | 8       | 229      | 22       | 28     | 28      | 26       | 32    | 28     | RH   | 2              |
| RH =<br>Ten:<br>2 =  | 1         | 1          | 0            | 1      | Co    | j         | 1    | ì       | ١        | 1        | 1      | 1       | •        | 1     | 1      | EZ.  |                |
| RH = Relative<br>Temperature<br>2 = Desiccate  | 67        | 旦          | 74           | 70     | 70    | 6         | 67   | 66      | 67       | 6        | 69     | 70      | 70       | 77    | 72     | 7    |                |
| ive Hur<br>re 22±<br>ator < 2  | 25        | 华          | 28           | 43     | 47    | T         | 7:   | 40      | 727      | 38       | 22     | 200     | 4        | 3     | 35     | RH   | ယ              |
| RH = Relative Humidity (%) Temperature 22±5 °C or 71.6±9°F 2 = Desiccator < 28% Humidity | i         | (10)       | 1            | (3)    |       |           |      | í       | ١        | )        | 1      | ١       | 1        | i     | 1      | FN   |                |
| %)<br>171.6±<br>midity   | 66        | 76         | 72           | 69     | 8     | 62        | 65   | 65      | eş.      | S        | 6.8    | S       | 63       | Ü,    | 7/     | Ţ    |                |
| F90F   | 32        | 3          | 79           | 8      | 53    | 29        | 8    | 29      | 29       | 29       | A      | 28      | 35       | Ē     | 37     | RH   | 4              |
| H  | 1         | ı          | 1            | 1      | }     | 1         | 1    | ĵ       | 1        | 1        | Ī      | ١       | ì        | (-)   | 1      | 7    |                |
| FN = Foot Note   | 67        | 70         | 73           | 8      | 69    | E         | 66   | 66      | R        | 63       | B      | 69      | <u>ئ</u> | 4     | 7)     | T    |                |
| ot Note  | 35        | ਨ੍ਹ        | 33           | 32     | 29    | 29        | 29   | 29      | 29       | 3        | 23     | 28      | Ž,       | 7     | 33     | RH   | 5              |
|  | 1         | ı          |              | ł      | 1     | 1         | 1    | 1       | ١        | 1        | 1      | 1       | ì        | 0     | 1      | FN   |                |
|  | 68        | 구          | 73           | 70     | 70    | 63        | 33   | 83      | 53       | 83       | 70     | 70      | 4        | نہ    | 7      | Ť    |                |
|  | 36        | 31         | 37           | 37     | 37    | 36        | 35   | 35      | 34       | 34       | 34     | S3      | 35       | 3     | 35     | RH   | 6              |
|  | 1         | 1          | İ            | )      | -     | 1         | 1    | j       |          | \        | İ      | 1       | *        | í     | 7      | EN   |                |
|  | 68        | 4          | $\mathbb{Z}$ | 07     | 70    | 66        | 68   | 66      | E        | 66       | Ø      | 70      | 4        | 4     | 77     | Ŧ    |                |
|  | 33        | 32         | 32           |        | 25    | 22        | 32   | 32      | 12       | 31       | 15     | 32      | 7        | 22    | 3)     | RH   | 7              |
|  | 1         | 1          |              | 1      | (     | 1         | )    | 1       | 1        | Ì        | 1      | 1       | -        | ,     | 1      | FN   |                |
| l  | 83        | t,         | 75           | 72     | 77    | 82        | 68   | 83      | CS       | 82       | 70     | 70      | 17       | 73    | 7:3    | Ţ    | A              |
| 37   | R         | 75         | 43           | 49     | 49    | 57        | 83   | 49      | 84       | E        | 30     | 48      | 3        | K     | F      | RH   | Amb            |
| •  | 38 20 W/V |            |              |        |       |           |      |         |          |          |        |         |          |       |        |      |                |
|  | 9/01      |            |              |        |       |           |      |         |          |          |        |         |          |       |        |      |                |

## TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# TestAmerica West Sacramento Air Toxics

Desiccator Humidity/Tempcrature Logbook

|                            |             |             |                |   |   | _ |                |   |             | _              | ·                |            | _         |             |      |   |
|----------------------------|-------------|-------------|----------------|---|---|---|----------------|---|-------------|----------------|------------------|------------|-----------|-------------|------|---|
| A١                         |             |             |                |   |   |   |                | : | 123 01/1/21 | 12/6/10        | D.8.10           | 17/2/10    | 12/1/10   | 11.20.10 Sy | Date | Desic   |
| Abbreviations:             |             | <br>        |                |   |   |   |                |   | 733         | 196/0 ECT 6732 | 2                | 9/2/10 ECf | 11/10 CCY | 2           | Init | Desiccator#                                   |
| ]                          |             |             |                |   |   |   |                |   | 2           | 4              | 5                | 20         | 64        | SS          | ĭ    |   |
| T = Ter                    |             |             |                |   |   |   |                |   | 66 34       | 32             | في               | 3          | 64 31     | 14          | RH   | <u>, , , , , , , , , , , , , , , , , , , </u> |
| T = Temperature (°F)       | <del></del> | <u> </u>    |                |   | } |   |                |   | 1           | 1              | 1                | 1          | i         | ,           | NE   |   |
| e (°F)                     |             |             |                |   |   |   | <br> <br> <br> |   | 67 36       | CG 37          | 68 33            | SA         | 65 33     | <b>S</b> 3  | H    |   |
|                            |             |             |                |   |   |   |                |   | 36          | 75             | 33               | 65 33      | 22        | क्ष         | RH   | 2   |
| RH =                       |             |             |                |   |   |   |                |   | 1           | \              | j                | )          | 7         | 3           | 3    |   |
| RH = Relative Humidity (%) |             |             |                |   |   |   |                |   | 68          | 6930           | 25               | 66         | E         | (3          | T    |   |
| ve Hun                     |             |             |                |   |   |   |                |   | 8           | 84             | to 57 (5) (2) 27 | 28         | 22        | X           | RH   | ယ   |
| nidity (                   |             |             |                |   |   | i |                |   | 1           | 1              | (b)              | )          | 1         | •           | FN   |   |
| 3                          |             |             |                |   |   |   |                |   | 67          | 8              | 57               | E          | 53        | 99          | Ţ    |   |
|                            |             |             |                |   |   |   |                |   | 36          | 30             | 724              | 23         | 33        | 33          | RH   | 4   |
| Ŋ                          |             | <del></del> | <del>-</del> - |   |   |   |                |   | ì           | ١              | 1                | 1          | 1         | 1           | SE.  |   |
| FN = Foo                   |             |             |                | - |   |   |                |   | 67 34       | 63             | 68               | CD<br>ES   | 66        | 66          | T    |   |
| Foot Note                  |             |             |                | } |   | , |                |   | 34          | 68 35          | 68 32            | 65 32      | 3         | C6 29       | RH   | Ω   |
|                            |             |             | -              |   |   |   |                |   | 1           | 1              | •                | ١          | Ĭ         | ŀ           | FZ   |   |
|                            |             |             |                |   |   |   |                |   | 70          | 70             | 7                | 83         | CV        | 89          | Ţ    |   |
|                            |             |             |                |   |   |   |                |   | 34          | 34             | $\mathcal{S}$    | 33         | 33        | 떦           | RH   | 6   |
|                            |             |             |                |   |   |   |                |   |             | 1              | 1                | 1          | )         | ٩           | FN   |   |
|                            |             |             |                |   |   |   |                |   | 63          | 70             | K)               | 68         | 68        | 68          | T    |   |
|                            |             |             |                |   |   |   |                |   | 32          | 32             | X                | 32         | 32        | 32          | RH   | 7   |
|                            |             |             |                |   |   |   |                |   | }           | 1              | ١                |            | Í         | 1           | FN   |   |
|                            |             |             |                |   |   |   | <br> <br>      |   | 76          | 0%             | ि                | 83         | 63        | 88          | Т    | Amb   |
|                            |             |             |                |   |   |   |                |   | 38          | 47             | 36               | 32         | જા        | ス           | RH   | пb  |

QA-374 RE 12/10/09

Limits:
Foot Notes:

RH 33±5% 1 = Desiccant Changed

Temperature 22±5 °C or 71.6±9°F 2 = Desiccator < 28% Humidity

LOGBOOK #3850

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RDR150

Analytical Results Batch Review/Release

12/07/10 16:16:02

Requested By: VALMORES

| Batch Lot | :/Sample ID | Analysis Cod | le W/O# | Group | Message               |
|-----------|-------------|--------------|---------|-------|-----------------------|
| 0341297   |             |              |         |       | Release Requested     |
| 0341297   |             |              |         |       | Successfully Released |